

LUMENFOCUS

PROVEN EXPERIENCE ▪ NEW PERSPECTIVE ▪ CUSTOMER FOCUSED

LED Luminaire Catalog

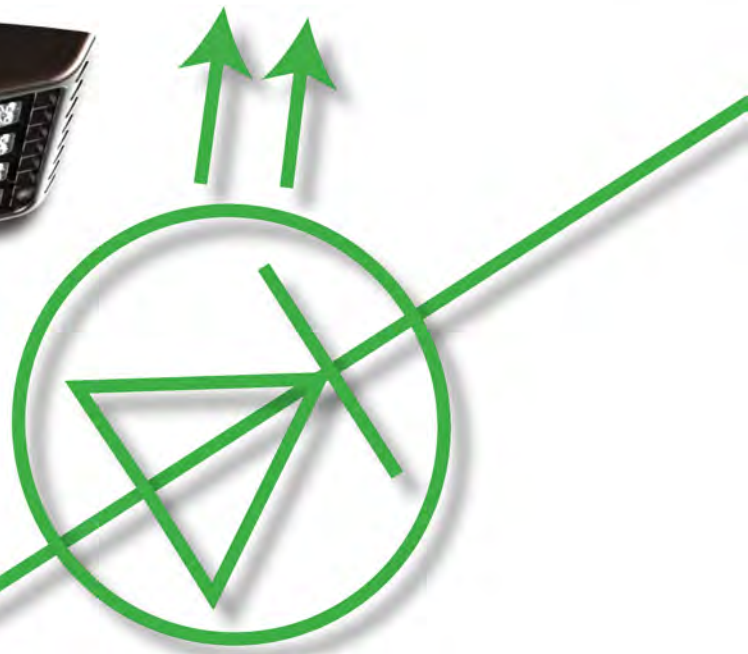


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High Bay

EBL Low Bay
 GAT Indirect High Bay
 PBL Premium High Bay
 PBL A Aisle High Bay
 PBL HD Heavy Duty High Bay
 PBL U Aesthetic Lensed High Bay
 PBL X Aesthetic Lensed High Bay

Strip / Wrap / Industrial

ECL Strip
 ECL N Aesthetic Narrow Strip
 EWL Wrap
 EVL Vanity Wrap
 FFLP Lensed Industrial
 RCL Strip Retrofit Kit
 RCL S Strip Slide-On Retrofit Kit
 RLK W2 Board/Driver Retrofit Kit
 RLK W4 Board/Driver Retrofit Kit
 FFRP Lensed Industrial Retrofit Kit
 FFRW Wrap Retrofit Kit

2x4, 2x2, 1x4 - Rec. / Surf.

ETL Lensed Troffer
 FFL FormFocus Premium Troffer
 FFL 2R FormFocus Premium Troffer
 FFL 2R HO FormFocus High Output Troffer
 FFR FormFocus Retrofit Kit
 FPL Flat Panel
 RTL Troffer Retrofit Kit
 RLK T22 Board/Driver Retrofit Kit
 RLK T24 Board/Driver Retrofit Kit

Vaportight

NVL Vaportight Strip
 WV L 2 Vaportight High Bay
 WV L 4 Vaportight High Bay
 NVL F Vaportight High Bay
 WV L F Vaportight High Bay
 EVT Extruded Vaportight

Outdoor

Area / Street

AFL Area/Flood Light
 AMx Multi-Purpose Area Light
 ALS Area Light (Small)
 ALM Area Light (Medium)
 ALL Area Light (Large)
 ALX Area Light (Extra Large)
 APx Premium Area Light
 BLx Barn Light
 FAX Area/Flood Light
 SLx Street Light

Canopy / Garage

CLS Low Profile Canopy Light
 CLP Low Profile Canopy Light
 CPE Canopy Light
 CPG2 Parking Garage Light
 CSx Square Canopy Light
 GSL Gas Station Canopy Light
 PGx Parking Garage Canopy Light

Flood

AFL Area/Flood Light
 AMx Multi-Purpose Area Light
 FAX Flood/Area Light
 FLx Flood/Spot Light
 FSx Flood/Wall Sconce
 PFX Flood/Spot Light
 PFXE Economy Flood Light
 FWS Flood/Wall Sconce
 FTS Twin Head Flood Light

Wall Mount

PPC Premium Cut-Off Wall Pack
 SPC Premium Cut-Off Wall Pack
 EPC Cut-Off Wall Pack
 EPM Mini Wall Pack
 WPM Wall Pack
 EPR Mini Wall Pack
 EPN Non-Cutoff Wall Pack
 EPP Non-Cutoff Wall Pack
 FSx Wall Sconce/Flood
 WCP Architectural Wall Cylinder
 WLP Architectural Wall Pack
 WPP Architectural Wall Pack
 WSP Wall Sconce
 FWS Flood/Wall Sconce
 FTS Twin Head Flood Light
 WSC Wall Sconce
 WSx Wall Sconce
 WSxE Economy Wall Sconce

Special Application

Exit / Emergency

DEM Decorative Emergency/AC Unit
 EDL Emergency Gimbal Downlight
 ELR Recessed Edgelit Exit Sign
 ELX Edgelit Exit Sign
 EME Exit/Emergency Combo
 EMX Exit/Lightpipe Emergency Combo
 LEM Emergency Unit
 LEX Exit Sign
 REH Remote Lamp Head
 WLE Wet Location Exit Sign

Grow Light

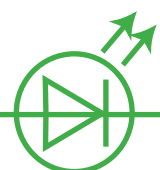
GLL Grow Light

Vaporproof

VPJE Vaporproof Light

Hazardous Location

HZL1 Hazardous Location Luminaire
 HZL2 Hazardous Location Luminaire
 HZL4 Hazardous Location Luminaire





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLA LED Architectural Down Light

Features:

- High performance LED technology
- 0-10V Dimming
- Works for retrofit and new construction applications
- Compatible with most 6" & 8" housings
- Compatible with insulated (6" *only*), non-insulated, and air-tight ceilings
- From 3000K to 5000K color temperature options

Applications:

- Suitable for most commercial, industrial and institutional retrofit & new construction applications
- Retail
 - Hospitality
 - Office

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Durable thermoplastic and aluminum construction
- Flex cable for easy install into junction box

Certifications:

- ETL Listed for wet locations (*new construction*)
- ETL Classified for wet locations (*retrofit*)
- RoHS compliant (8")

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

ETL CLASSIFIED



Intertek
(retrofit)



Intertek
(new construction)



Ordering Guide:

example: DLA 8 MD UV WB 835

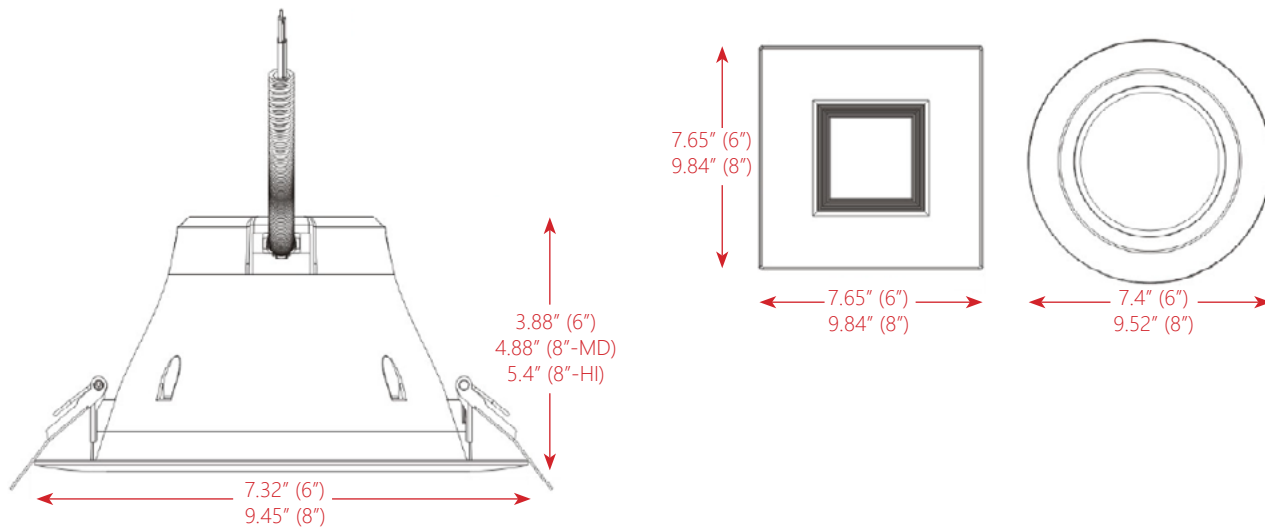
Series	Size	Output	Voltage	Reflector Trim	CRI/CCT
DLA			UV		
DLA	6	MD	UV	WB WA WBSQ	835
					840
	850				
8	MD	HI	835		
			840		
850					
8	HI	830			
		840			

Size:	6	6"
	8	8"
Output:	MD	Medium
	HI	High
Voltage:	UV	120V-277V
Reflector Trim:	WB	Round White Baffle
	WA	Round Silver & White Aluminum
	WBSQ	Square White Baffle
CRI/CCT:	830	80 CRI / 3000K
	835	80 CRI / 3500K
	840	80 CRI / 4000K
	850	80 CRI / 5000K

Performance Chart:

Catalog #	Lumens	Watts	LPW
DLA 6 MD UV WB 8xx	1500	17	88
DLA 8 MD UV WB 8xx	2000	27	74
DLA 8 HI UV WB 8xx	5000	54	92

Schematic:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLE 4 4" LED Down Light

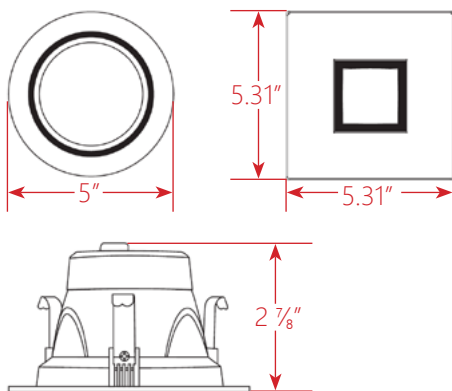
Features:

- High performance LED technology
- Dimmable to 10% with most dimmers
- Compatible with most 4" housings
- Compatible with insulated, non-insulated, and air-tight ceilings
- From 2700K to 5000K color temperature options

Applications:

- Suitable for most commercial, industrial and institutional applications
- Retail
 - Hospitality
 - Office
 - Residential

Schematic:



Construction:

- Durable thermoplastic construction
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Integral mounting clips for toolless installation in most 4" recessed cans

Certifications:

- ETL US and Canada Listed for wet locations
- Passes FCC Class B
- RoHS compliant

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



DLE 4 4" LED Down Light



Ordering Guide:

example: DLE 4 MD 12 WA 830-4ICNC

Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
DLE	4	MD	12			-	
DLE	4	MD	12	WB	827		Blank
				WA	830		4ICNC
				BK	835		4ICRM
				NK	840		
				BZ	850		
				WBSQ			

Size:	4	4"	CRI/CCT:	827	80 CRI / 2700K
				830	80 CRI / 3000K
Output:	MD	Medium		835	80 CRI / 3500K
				840	80 CRI / 4000K
Voltage:	12	120V		850	80 CRI / 5000K
Reflector Trim:	WB	White Baffle (Round)	Frame:	Blank	None
	WA	Silver with White Trim (Round)		4ICNC	4" IC New Construction Frame-in Kit
	BK	Black (Round)		4ICRM	4" IC Remodeler Frame-in Kit
	NK	Nickel (Round)			
	BZ	Bronze (Round)			
	WBSQ	White Baffle (Square)			

Performance Chart:

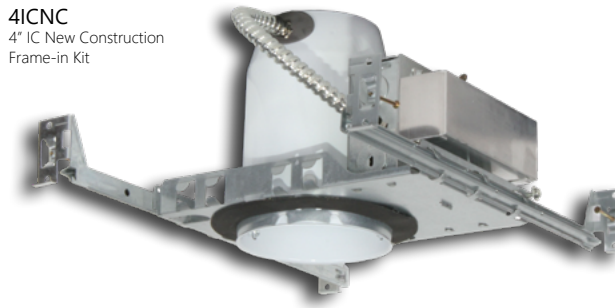
Catalog #	Lumens	Watts	LPW
DLE 4 MD 12 WB 827	550	8	69
DLE 4 MD 12 WB 830	570	8	71
DLE 4 MD 12 WB 835	580	8	73
DLE 4 MD 12 WB 840	590	8	74
DLE 4 MD 12 WB 850	610	8	76

DLE 4 4" LED Down Light



Frame-In Kits:

4ICNC
4" IC New Construction
Frame-in Kit



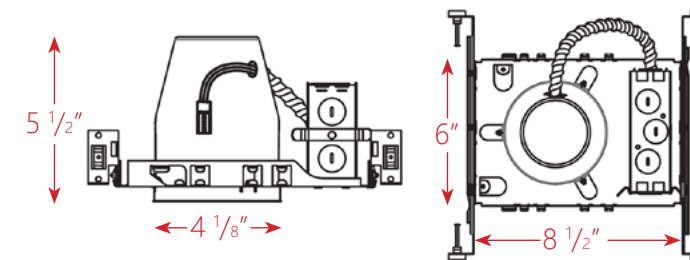
4ICRM
4" IC Remodeler
Frame-in Kit

New Construction Applications: 4ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 $\frac{5}{8}$ " - 25" and can be repositioned 90° on plaster frame
- Contains one 1 $\frac{1}{8}$ ", six $\frac{7}{8}$ " knockouts and four Romex pryouts with strain relief

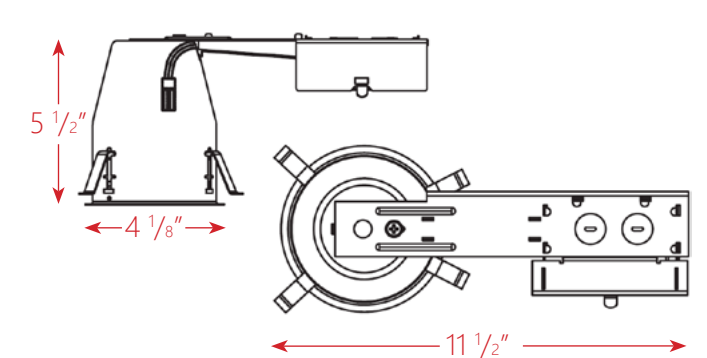


Remodel Applications: 4ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Housing adjusts from 5/8" to 1 $\frac{3}{8}$ " to accommodate various ceiling thicknesses
- Contains one 1 $\frac{1}{8}$ ", six $\frac{7}{8}$ " knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLE 56 5"/6" LED Down Light

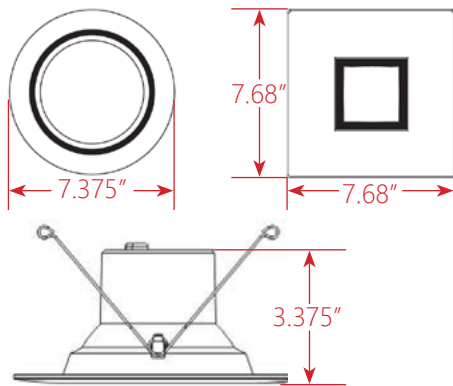
Features:

- High performance LED technology
- Dimmable to 10% with most dimmers
- Compatible with most 5" & 6" housings
- Compatible with insulated, non-insulated, and air-tight ceilings
- From 2700K to 5000K color temperature options

Applications:

- Suitable for most commercial, industrial and institutional applications
- Retail
 - Hospitality
 - Office
 - Residential

Schematic:



Construction:

- Durable thermoplastic construction
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Adjustable torsion spring designed to fit 5" or 6" housing allows for toolless installation

Certifications:

- ETL US and Canada Listed for wet locations
- Passes FCC Class B
- RoHS compliant

Predicted L70 Lifetime:

- 50,000 hrs (reported)
(based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



DLE 56 5"/6" LED Down Light



Ordering Guide:

example: DLE 56 MD 12 WBSQ 827-6ICNC

Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
DLE	56		12			-	
DLE	56	MD	12	WB WA BK NK BZ WBSQ	827 830 835 840 850		Blank 6ICNC 6ICRM

Size: 56 5" and 6"

CRI/CCT: 827 80 CRI / 2700K
830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

Output: MD Medium

Voltage: 12 120V

Reflector Trim: WB White Baffle (Round)
WA Silver with White Trim (Round)
BK Black (Round)
NK Nickel (Round)
BZ Bronze (Round)
WBSQ White Baffle (Square)

Frame: Blank None
6ICNC 6" IC New Construction Frame-in Kit
6ICRM 6" IC Remodeler Frame-in Kit

Performance Chart:

Catalog #	Lumens	Watts	LPW
DLE 56 MD 12 WB 827	800	12	67
DLE 56 MD 12 WB 830	820	12	68
DLE 56 MD 12 WB 835	830	12	69
DLE 56 MD 12 WB 840	840	12	70
DLE 56 MD 12 WB 850	860	12	72

DLE 56 5"/6" LED Down Light



Frame-In Kits:

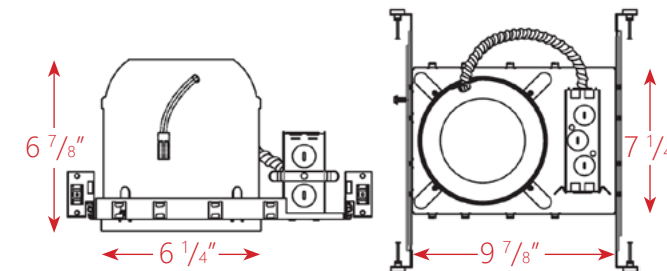


New Construction Applications: 6ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 5/8" - 25" and can be repositioned 90° on plaster frame
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief

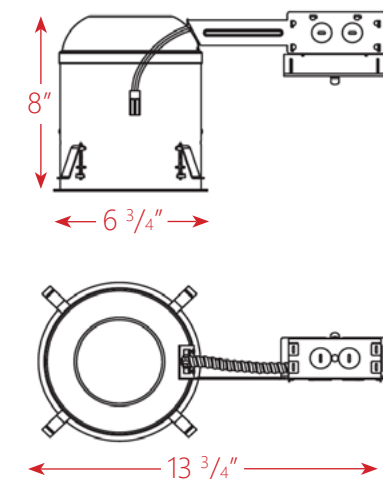


Remodel Applications: 6ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Housing adjusts from 5/8" to 1 3/8" to accommodate various ceiling thicknesses
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLG 4 4" LED Gimbal Down Light

Features:

- High performance LED technology
- Dimmable to 10% with most dimmers
- Compatible with most 4" housings.
- Compatible with insulated, non-insulated, and air-tight ceilings
- From 2700K to 4000K color temp.

Applications:

- Suitable for most commercial, industrial and institutional applications
- Retail
 - Hospitality
 - Office
 - Residential

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Durable thermoplastic construction
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Integral mounting clips for toolless installation in most 4" recessed cans

Certifications:

- ETL US and Canada Listed for damp locations
- Passes FCC Class B

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



DLG 4

4" LED Gimbal Down Light



Ordering Guide:

example: DLG 4 MD 12 WB 827-4ICNC

Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
DLG	4	MD	12	WB		-	
DLG	4	MD	12	WB	827 830 840		Blank 4ICNC 4ICRM

Size: 4 4"

Output: MD Medium

Voltage: 12 120V

Reflector Trim: WB White Baffle (Round)

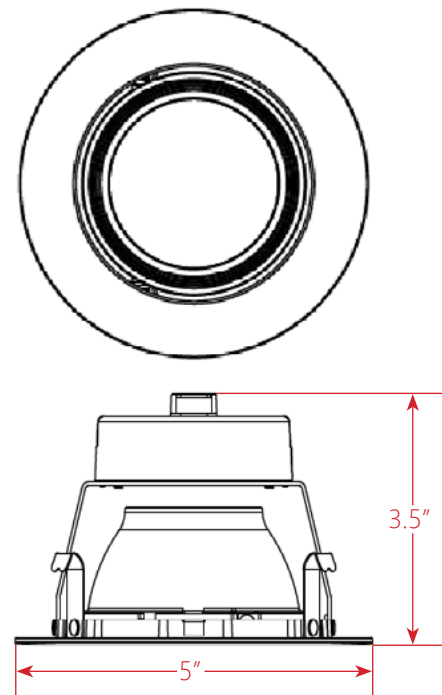
CRI/CCT: 827 80 CRI / 2700K
830 80 CRI / 3000K
840 80 CRI / 4000K

Frame: Blank None
4ICNC 4" IC New Construction Frame-in Kit
4ICRM 4" IC Remodeler Frame-in Kit

Performance Chart:

Catalog #	Lumens	Watts	LPW
DLG 4 MD 12 WB 827	675	10	68
DLG 4 MD 12 WB 830	675	10	68
DLG 4 MD 12 WB 840	750	10	75

Schematic:



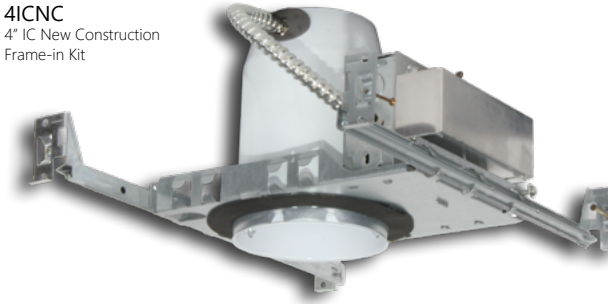
DLG 4

4" LED Gimbal Down Light



Frame-In Kits:

4ICNC
4" IC New Construction
Frame-in Kit



4ICRM
4" IC Remodeler
Frame-in Kit

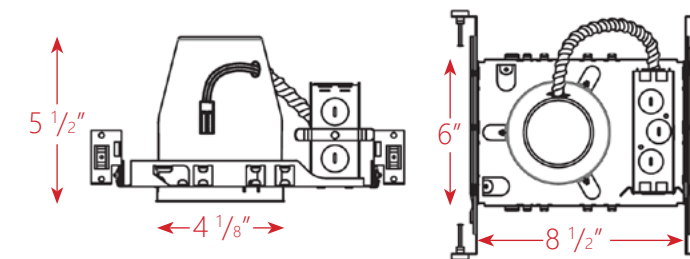


New Construction Applications: 4ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 3/8" - 25" and can be repositioned 90° on plaster frame
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief

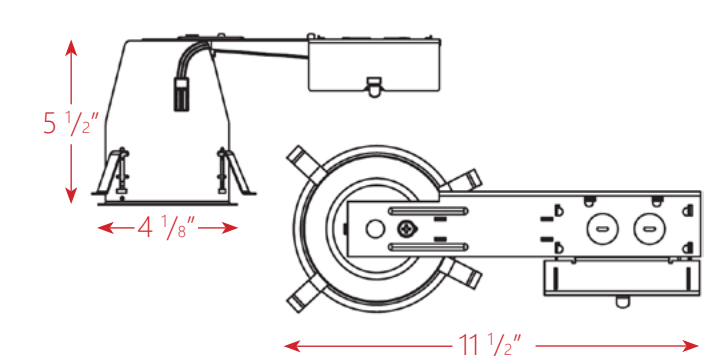


Remodel Applications: 4ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Housing adjusts from 3/8" to 1 3/8" to accommodate various ceiling thicknesses
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLG 56 5"/6" LED Gimbal Down Light

Features:

- High performance LED technology
- Dimmable to 10% with most dimmers
- Standard gimbal compatible with most 5" & 6" housings. Slope ceiling gimbal compatible with most 6" slope housings (30° max tilt)
- Compatible with insulated, non-insulated, and air-tight ceilings
- From 2700K to 4000K color temp.

Applications:

- Suitable for most commercial, industrial and institutional applications
- Retail
 - Hospitality
 - Office
 - Residential

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Durable thermoplastic construction
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Adjustable torsion spring designed to fit 5" or 6" housing allows for toolless installation

Certifications:

- ETL US and Canada Listed for damp locations
- Passes FCC Class B

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: DLG S 56 MD 12 WB 827-6ICNC

Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
	56	MD	12	WB		-	
DLG	56	MD	12	WB	827 830 840		Blank 6ICNC 6ICRM
DLG S					827 840		

Series: DLG Gimbal Down Light (flat ceiling)
DLG S Gimbal Down Light (sloped ceiling)

Size: 56 5" and 6"

Output: MD Medium

Voltage: 12 120V

Reflector Trim: WB White Baffle (Round)

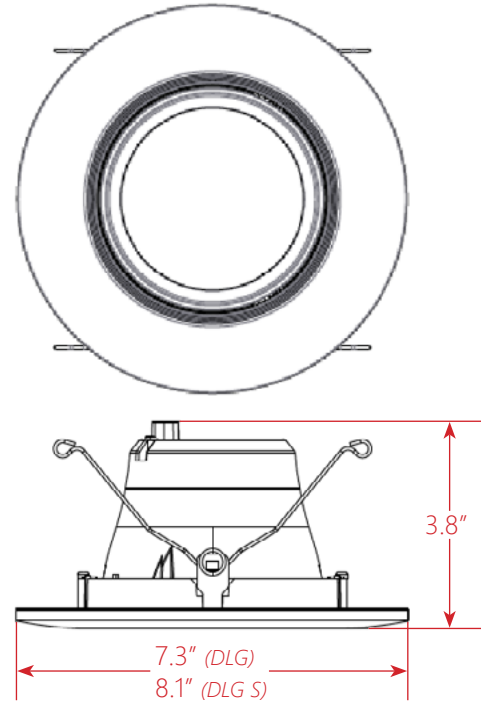
CRI/CCT: 827 80 CRI / 2700K
830 80 CRI / 3000K (available on DLG only, not DLG S)
840 80 CRI / 4000K

Frame: Blank None
6ICNC 6" IC New Construction Frame-in Kit
6ICRM 6" IC Remodeler Frame-in Kit

Performance Chart:

Catalog #	Lumens	Watts	LPW	Title 24, 2016	Energy Star
DLG 56 MD 12 WB 827	975	14	70	No	Yes
DLG 56 MD 12 WB 830	975	14	70	No	Yes
DLG 56 MD 12 WB 840	1050	14	75	No	Yes
DLG S 56 MD 12 WB 827	975	13	75	No	Yes
DLG S 56 MD 12 WB 840	975	13	75	No	Yes

Schematic:



Frame-In Kits:

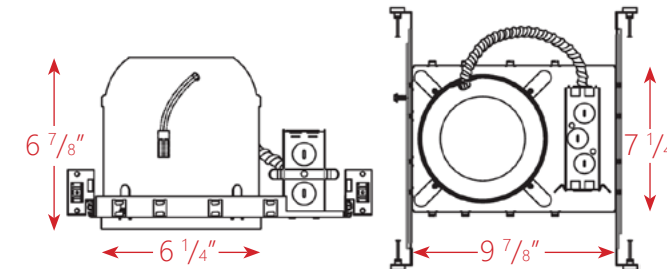


New Construction Applications: 6ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 3/8" - 25" and can be repositioned 90° on plaster frame
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief

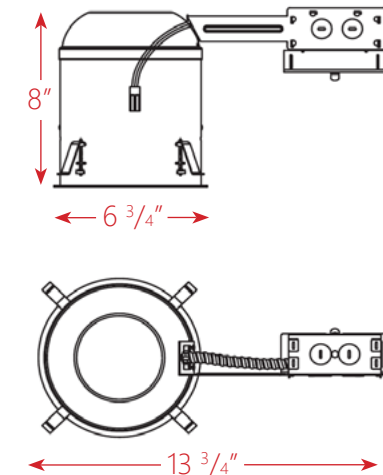


Remodel Applications: 6ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Housing adjusts from 5/8" to 1 3/8" to accommodate various ceiling thicknesses
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLL 3.5 3.5" LED Down Light

Features:

- High performance LED technology
- Dimmable to 5% with most dimmers
- Compatible with most 3.5" housings
- 90+ CRI - meets Title 24, 2016 requirements

Applications:

Suitable for most commercial, industrial and institutional applications

- Retail
- Hospitality
- Office
- Residential

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -30°C to 40°C

Construction:

- White painted diecast housing/trim ring
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Adjustable torsion spring for quick toolless installation designed to fit 3.5" housings automatically without changing mounting tab

Certifications:

- cULus Listed for damp and wet locations (*not suitable for coastal/salt water areas*)
- RoHS compliant
- Meets State of California Title 24, 2016 requirements

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



DLL 3.5 3.5" LED Down Light



Ordering Guide:

example: DLL 3.5 MD 12 WBSQ 830

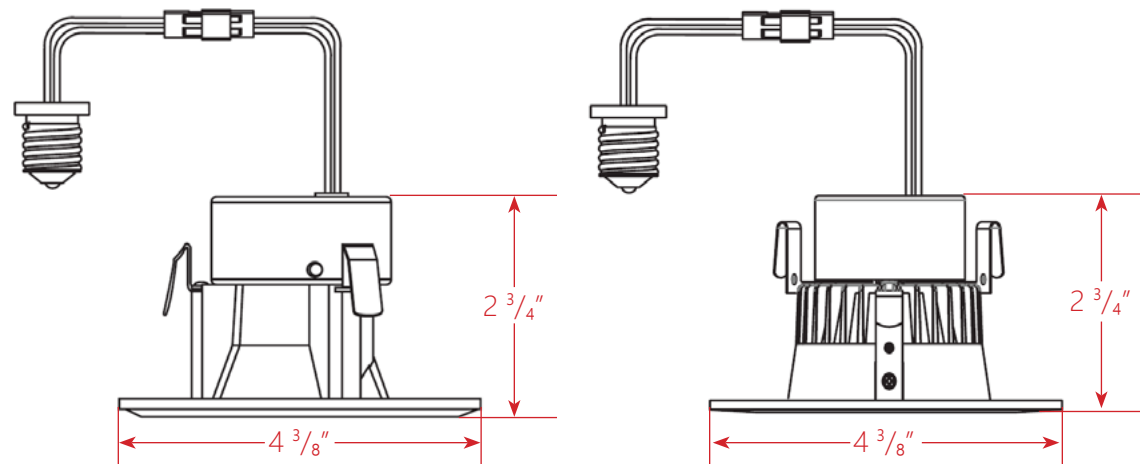
Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
DLL	3.5	MD	12		930	-	
DLL	3.5	MD	12	WB WBSQ	930		Blank 3.5ICNC 3.5ICRM

Size:	3.5	3.5"
Output:	MD	Medium
Voltage:	12	120V
Reflector Trim:	WB WBSQ	White Baffle (Round) White Baffle (Square)
CRI/CCT:	930	90 CRI / 3000K
Frame:	Blank 3.5ICNC 3.5ICRM	None 3.5" IC New Construction Frame-in Kit 3.5" IC Remodeler Frame-in Kit

Performance Chart:

Catalog #	Lumens	Watts	LPW
DLL 3.5 12 WB 930	560	9	62

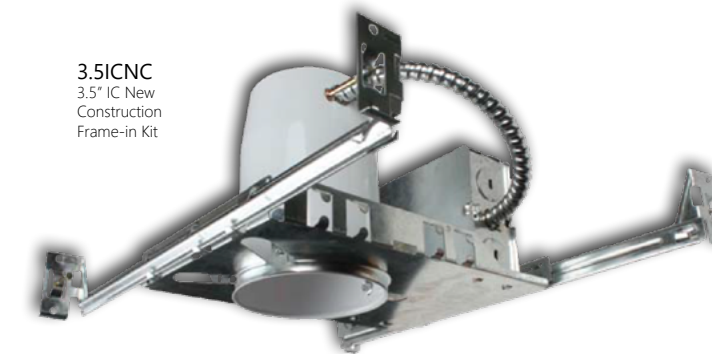
Schematic:



DLL 3.5 3.5" LED Down Light



Frame-In Kits:



New Construction Applications: 3.5ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 5/8" - 25" and can be repositioned 90° on plaster frame
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief

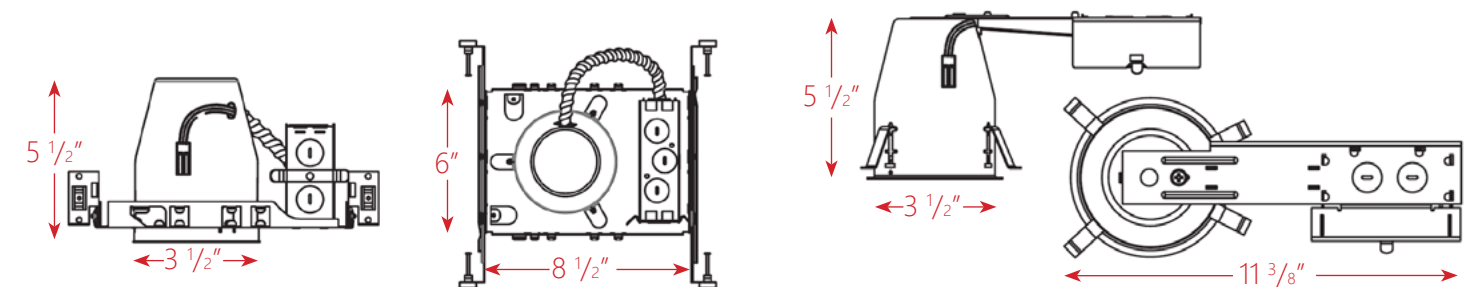


Remodel Applications: 3.5ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLL 4 4" LED Down Light

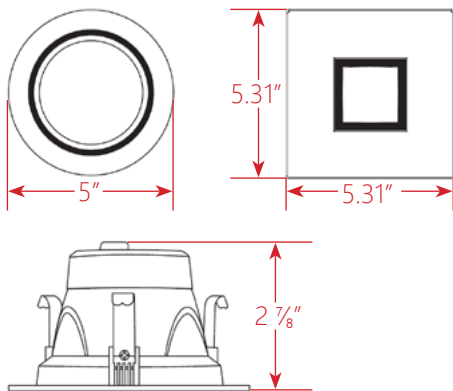
Features:

- High performance LED technology
- Dimmable to 10% with most dimmers
- Compatible with most 4" housings
- Compatible with insulated, non-insulated, and air-tight ceilings
- From 2700K to 5000K color temperature options
- 90 CRI available - meets Title 24, 2016 requirements

Applications:

- Suitable for most commercial, industrial and institutional applications
- Retail
 - Hospitality
 - Office
 - Residential

Schematic:



Construction:

- Durable thermoplastic construction
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Integral mounting clips for toolless installation in most 4" recessed cans

Certifications:

- ETL US and Canada Listed for wet locations
- Passes FCC Class B
- RoHS compliant
- Meets State of California Title 24, 2016 requirements (*90 CRI models*)

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



DLL 4 4" LED Down Light



Ordering Guide:

example: DLL 4 MD 12 WA 930-4ICNC

Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
DLL	4	MD	12			-	
DLL	4	MD	12	WB	827		Blank
				WA	830		4ICNC
				BK	835		4ICRM
				NK	840		
				BZ	850		
				WBSQ	927		
					930		
					940		

Size:	4	4"	CRI/CCT:	827	80 CRI / 2700K
				830	80 CRI / 3000K
Output:	MD	Medium		835	80 CRI / 3500K
				840	80 CRI / 4000K
Voltage:	12	120V		850	80 CRI / 5000K
				927	90 CRI / 2700K
Reflector Trim:	WB	White Baffle (Round)		930	90 CRI / 3000K
	WA	Silver with White Trim (Round)		940	90 CRI / 4000K
	BK	Black (Round)	Frame:	Blank	None
	NK	Nickel (Round)		4ICNC	4" IC New Construction Frame-in Kit
	BZ	Bronze (Round)		4ICRM	4" IC Remodeler Frame-in Kit
	WBSQ	White Baffle (Square)			

Performance Chart:

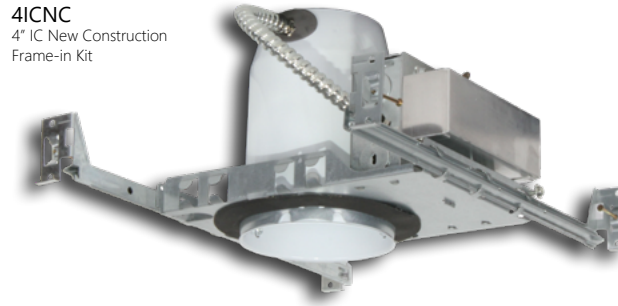
Catalog #	Lumens	Watts	LPW	Title 24, 2016
DLL 4 MD 12 WB 827	550	8	69	No
DLL 4 MD 12 WB 830	630	8	79	No
DLL 4 MD 12 WB 835	645	8	81	No
DLL 4 MD 12 WB 840	665	8	83	No
DLL 4 MD 12 WB 850	730	8	91	No
DLL 4 MD 12 WB 927	550	8	69	Yes
DLL 4 MD 12 WB 930	580	8	73	Yes
DLL 4 MD 12 WB 940	610	8	76	Yes

DLL 4 4" LED Down Light



Frame-In Kits:

4ICNC
4" IC New Construction
Frame-in Kit



4ICRM
4" IC Remodeler
Frame-in Kit

New Construction Applications: 4ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

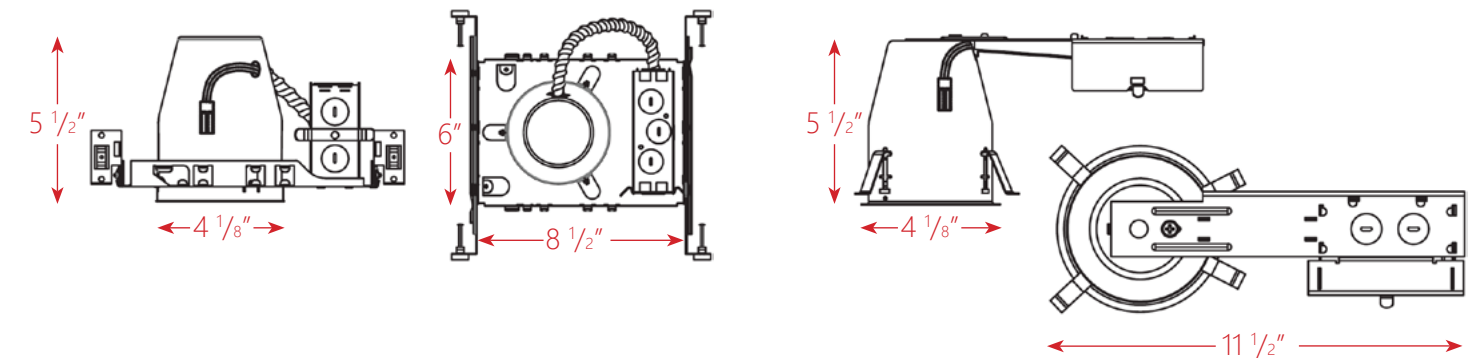
- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 5/8" - 25" and can be repositioned 90° on plaster frame
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief

Remodel Applications: 4ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Housing adjusts from 5/8" to 1 3/8" to accommodate various ceiling thicknesses
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DLL 56 5"/6" LED Down Light

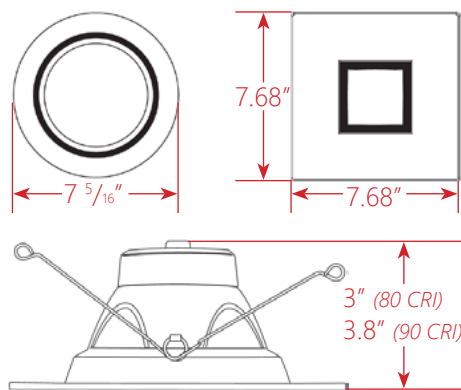
Features:

- High performance LED technology
- Dimmable to 10% with most dimmers
- Compatible with most 5" & 6" housings
- Compatible with insulated, non-insulated, and air-tight ceilings
- From 2700K to 5000K color temperature options
- 90 CRI available - meets Title 24, 2016 requirements

Applications:

- Suitable for most commercial, industrial and institutional applications
- Retail
 - Hospitality
 - Office
 - Residential

Schematic:



Construction:

- Durable thermoplastic construction
- E26 medium screw-base Edison connector allows for easy retrofit of incandescent housings
- Adjustable torsion spring designed to fit 5" or 6" housing allows for toolless installation

Certifications:

- ETL US and Canada Listed for wet locations
- Passes FCC Class B
- RoHS compliant
- Meets State of California Title 24, 2016 requirements (*90 CRI models*)

Predicted L70 Lifetime:

- 50,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



DLL 56 5"/6" LED Down Light



Ordering Guide:

example: DLL 56 MD 12 WB 827-6ICNC

Series	Size	Output	Voltage	Reflector Trim	CRI/CCT	-	Frame
DLL	56		12			-	
DLL	56	MD	12	WB WA BK NK BZ WBSQ	827 830 835 840 850 927 930 940		Blank 6ICNC 6ICRM
		HI			927 930 940		

Size: 56 5" and 6"

Output: MD Medium
HI High (available in 90 CRI only)

Voltage: 12 120V

Reflector Trim: WB White Baffle (Round)
WA Silver with White Trim (Round)
BK Black (Round)
NK Nickel (Round)
BZ Bronze (Round)
WBSQ White Baffle (Square)

CRI/CCT: 827 80 CRI / 2700K
830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K
927 90 CRI / 2700K
930 90 CRI / 3000K
940 90 CRI / 4000K

Frame: Blank None
6ICNC 6" IC New Construction Frame-in Kit
6ICRM 6" IC Remodeler Frame-in Kit

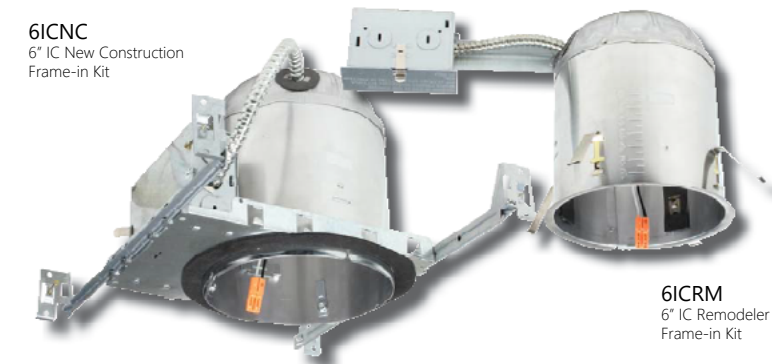
Performance Chart:

Catalog #	Lumens	Watts	LPW	Title 24, 2016	Energy Star
DLL 56 MD 12 WB 827	900	12	75	No	Yes
DLL 56 MD 12 WB 830	960	12	80	No	Yes
DLL 56 MD 12 WB 835	980	12	82	No	Yes
DLL 56 MD 12 WB 840	1000	12	83	No	Yes
DLL 56 MD 12 WB 850	1060	12	88	No	Yes
DLL 56 MD 12 WB 927	750	12	63	Yes	Yes
DLL 56 MD 12 WB 930	780	12	65	Yes	Yes
DLL 56 MD 12 WB 940	810	12	68	Yes	Yes
DLL 56 HI 12 WB 927	1200	16	75	Yes	No
DLL 56 HI 12 WB 930	1200	16	75	Yes	No
DLL 56 HI 12 WB 940	1200	16	75	Yes	No

DLL 56 5"/6" LED Down Light



Frame-In Kits:

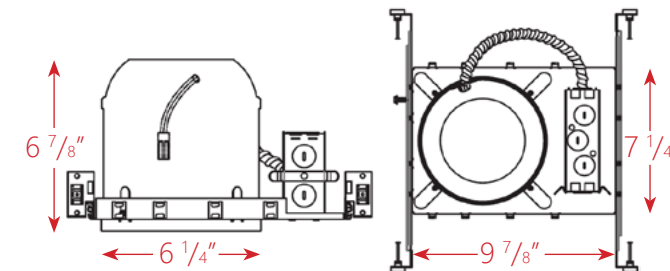


New Construction Applications: 6ICNC

Designed for new construction applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Pre-installed Real nail easily installs in regular and engineered lumber
- Adjustable bar hangers from 13 5/8" - 25" and can be repositioned 90° on plaster frame
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief

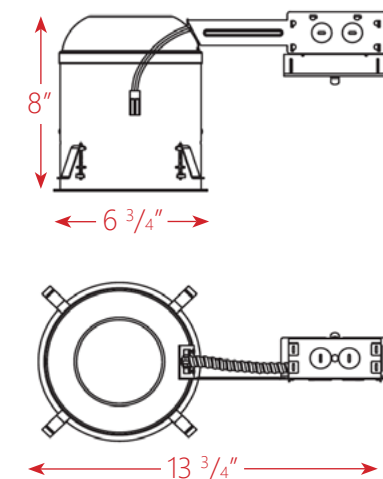


Remodel Applications: 6ICRM

Designed for remodel applications and in ceilings with direct contact with insulation. Air tight construction provides reduced energy costs.

Features:

- cULus Listed for damp locations
- Galvanized steel construction with removeable housing for easy access to the junction box
- Listed for through branch circuit wiring
- Four remodel clips secure housing and accommodates 1/2" and 5/8" ceiling materials
- Housing adjusts from 5/8" to 1 3/8" to accommodate various ceiling thicknesses
- Contains one 1 1/8", six 7/8" knockouts and four Romex pryouts with strain relief





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EBL LED Low Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Low cost and high efficiency help maximize return on investment

Applications:

- Suitable for most commercial, industrial and institutional applications
- General Areas
 - Warehouse
 - Manufacturing

Predicted L70 Lifetime:

- >72,000 hrs (reported)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- LED tray is precision brake formed from aluminum
- Pre-painted with a highly durable, highly reflective, white finish

Certifications:

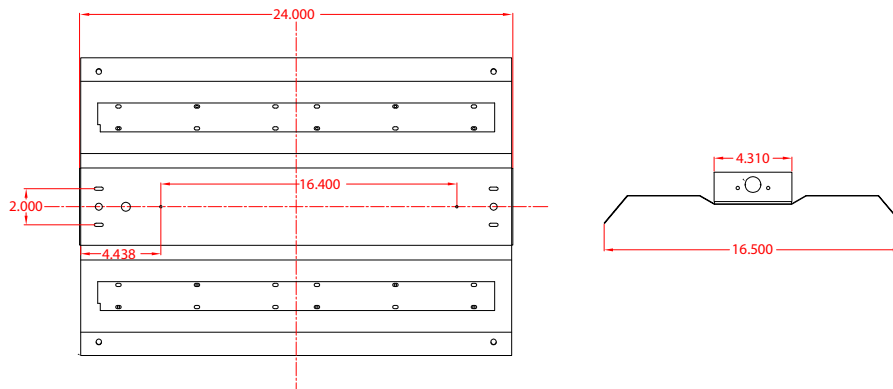
- UL 1598 listed for US and Canada, suitable for damp locations

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Powered by:
Universal
 Lighting Technologies

EVERLINE
 LED Technology

Ordering Guide:

example: EBL 2 HI UV 850-QC C6

Series	Length	Output	Voltage	CRI/CCT	Hanging	Options
EBL	2				-	
EBL	2	LW MD HI	UV 34	835 840 850	Blank VC QC QC20	Blank C6 C10 D6 D10 P(NEMA) OS OSD OSP PC SC F EM2 SDT(480V)

Length:	2	2'
Lumen Output:	LW MD HI	Low Medium High
Voltage:	UV 34	120-277V 347V
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K
Hanging:	Blank VC QC QC20	None V-Chain Hangers 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit

Options:	Blank C6 C10 D6 D10 P(NEMA) OS OSD OSP PC SC F EM2 SDT(480V)	None 6' Single Circuit Cord 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord Plug (Specify NEMA configuration) Occupany Sensor (on/off) Occupany Sensor (on/off/dim) Occupany Sensor (Programmable) Photocell Safety Cable Fuse Emergency Pack - up to 20W (120-277V / 0°C-50°C ambient) 480V to 277V Step Down Transformer
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Performance Chart:

Catalog #	Lumens	Watts	LPW
EBL 2 LW UV 835	8621	68	126.8
EBL 2 MD UV 835	10866	80	135.8
EBL 2 HI UV 835	13145	104	126.9

Catalog #	Lumens	Watts	LPW
EBL 2 LW UV 840	8888	68	130.7
EBL 2 MD UV 840	11202	80	140.0
EBL 2 HI UV 840	13551	104	130.8

Catalog #	Lumens	Watts	LPW
EBL 2 LW UV 850	9155	68	134.6
EBL 2 MD UV 850	11538	80	144.2
EBL 2 HI UV 850	13958	104	134.7

Photometric Data:

EBL 2 HI UV 840

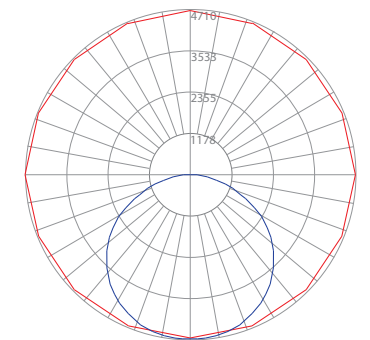
Test No.: LLIA000559-007
 Luminaire Lumens: 13,551 lm
 Luminaire Watts: 103.6W
 Efficacy: 130.8 LPW
 Spacing Criterion (0-180): 1.32
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	17183	15767	16122
55	16350	14727	15182
65	14706	12960	9956
75	11318	6719	4776
85	4223	1093	956

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89		
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75		
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63		
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46		
6	70	57	48	42	68	56	47	41	54	47	41	52	46	41		
7	65	51	43	37	63	51	42	36	49	42	36	48	41	36		
8	60	47	38	33	59	46	38	32	45	38	32	44	37	32		
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26		



Zone	Lumens	%Fixt
0-20	1721.92	12.70
0-30	3681.69	27.20
0-40	6082.04	44.90
0-60	10965.30	80.90
0-80	13422.94	99.10
0-90	13548.66	100.00
90-120	2.17	0.00
90-130	2.17	0.00
90-150	2.17	0.00
90-180	2.17	0.00
0-180	13550.83	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

GAT LED Indirect High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable drivers
- Glare free indirect lighting
- LED optics designed for even illumination of the ceiling, minimizing hot spots
- Light weight design for use in air dome structures - 17.6 lbs
- Active cooling allows for maximum performance and system life

Applications:

Suitable for applications where high output indirect light is needed

- Indoor Tennis Courts
- Gymnasiums
- Recreation Facilities
- Convention Centers
- Air Dome/Fabric Over Frame structures

Ambient Operating Temp:

- -40°C to 50°C

Predicted Lifetime:

- L80 >102,000 hrs (reported)
 - L90 = 51,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Housing and LED tray is precision brake formed from aluminum
- Pre-painted with a highly durable, highly reflective white finish
- 5 high output COBs
- 10' single circuit cord comes standard, other cord lengths/types available

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
 - see www.LumenFocus.com for complete warranty terms and conditions
 - Optional 10 year extended warranty on some models
- (Certain conditions apply. Consult factory or sales representative for details.)*



GAT LED Indirect High Bay



Ordering Guide:

example: GAT HI W UV 850-QC C6 WG

Series	Output	Optic	Voltage	CRI/CCT	-	Hanging	Options
GAT		W	UV		-		
GAT	HI VH SH	W	UV	835 840 850		Blank QC TR SM	C6 C10 (standard) D6 D10 P(NEMA) WG EXT10

Lumen Output: HI High
VH Very High
SH Super High

Optic: W Wide

Voltage: UV 120-277V

CRI/CCT: 835 >80 CRI / 3500K
840 >80 CRI / 4000K
850 >80 CRI / 5000K

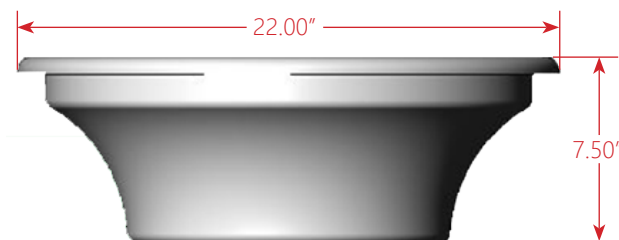
Hanging: Blank None
QC Quick Hang Cable Kit
TR Trunnion Mount
SM Strut Mount

Options: C6 6' Single Circuit Cord
C10 10' Single Circuit Cord (Standard)
D6 6' Dual Circuit Cord
D10 10' Dual Circuit Cord
P(NEMA) Plug (Specify NEMA configuration)
WG Wire Guard
EXT10 10 year extended warranty
(Certain conditions apply. Consult factory or sales representative for details.)

Mounting:



Schematics:



GAT LED Indirect High Bay



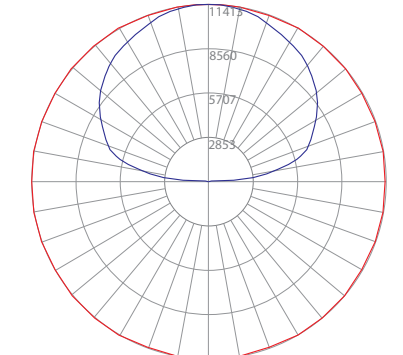
Photometric Data:

GAT HI W UV 850-C6

Test No.: LLIA000800-001A
Luminaire Lumens: 46,870 lm
Luminaire Watts: 404.3W
Efficacy: 115.9 LPW

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32		
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26		
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22		
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18		
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16		
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13		
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11		
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10		
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9		
9	43	32	25	20	37	28	22	18	19	15	13	11	9	8		
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7		



— Vert. Plane
— Horiz. Cone

Zone	Lumens	%Fixt
0-90	0.00	0.0
90-110	9048.83	19.3
90-120	16421.67	35.0
90-130	24085.10	51.4
90-150	37749.81	80.5
90-180	46869.63	100.0
110-180	37820.80	80.7
0-180	46869.63	100.0

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Performance Chart:

Catalog #	Watts	Lumens	LPW
GAT HI W UV 835	404	45,933	113.6
GAT VH W UV 835	452	49,447	109.4
GAT SH W UV 835	507	53,881	106.2

Catalog #	Watts	Lumens	LPW
GAT HI W UV 840	404	46,308	114.5
GAT VH W UV 840	452	49,850	110.3
GAT SH W UV 840	507	54,321	107.1

Catalog #	Watts	Lumens	LPW
GAT HI W UV 850	404	46,870	115.9
GAT VH W UV 850	452	50,456	111.6
GAT SH W UV 850	507	54,981	108.4



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PBL LED High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models
- Field replaceable LED boards and drivers
- Frosted diffusers available to help minimize glare and improve aesthetics
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings

Applications:

Suitable for most commercial, industrial and institutional applications

- Retail
- Warehouse
- Manufacturing
- Cold/Frozen Storage

Ambient Operating Temp:

- -30°C to 40°C

Predicted L70 Lifetime:

- 92,000 to 189,000 hrs (calculated)
- >72,000 hrs (reported)
(based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Housing and LED tray is precision brake formed from aluminum
- Pre-painted with a highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)



Powered by:



PBL LED High Bay



Ordering Guide:

example: PBL 4 HI UV 850-QC20 C6 OSD

Series	Length	Output	Performance	Voltage	Shielding	CRI/CCT	Hanging	Options	Finish
PBL									
PBL	2	LW MD	Blank HE	UV 34 48	Blank FR	835 840 850	Blank QC QC20 SM	Blank EXT10 C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx) OSP PC WG WG(OS) SC F EM2 SDT(480V) CC BAA	Blank BK SL
	2W	MH HI							
	4	SL VL LW MD HI							
	4W	LW MD HI VH SH							

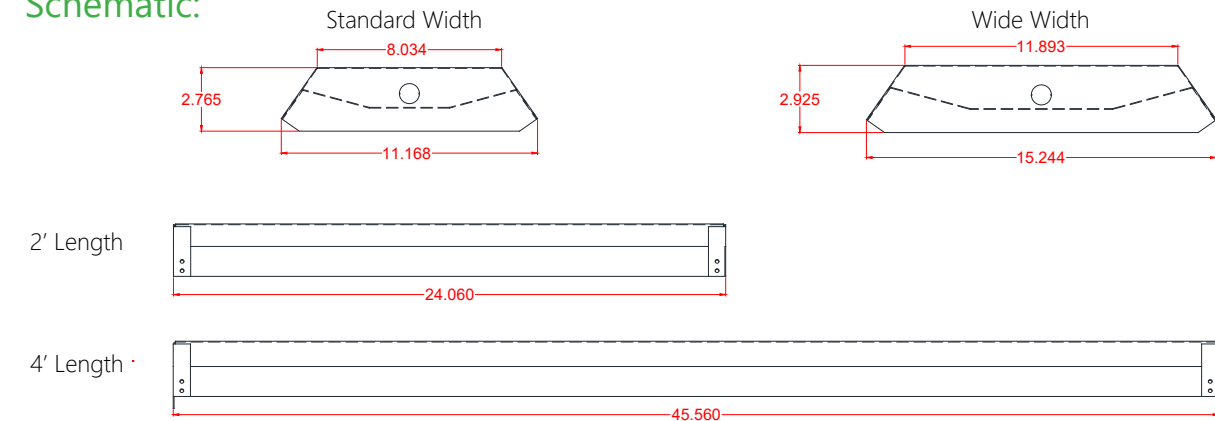
Length:	2 2W 4 4W	2' 2'-Wide 4' 4'-Wide	Options:	Blank EXT10	None 10 yr extended warranty (Not available on all models. Certain conditions apply. Consult factory or sales representative for details.) 6' Single Circuit Cord 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord Plug (Specify NEMA configuration) Occupancy Sensor (on/off) Occupancy Sensor (on/off/dim) Wattstopper Occupancy Sensor (on/off/dim) for 100-347V, or 208/230/480V (*x" = lens type. See Page 4 for lens type descriptions) Occupancy Sensor with Photocell Photocell Wire Guard Extended Wire Guard to protect end mounted sensor Safety Cable Fuse Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient) 480V to 277V Step Down Transformer Conformal Coating Buy American Act compliant
Lumen Output:	SL VL LW MD MH HI VH SH	Super Low Very Low Low Medium Medium High High Very High (Not available in HE) Super High (Not available in HE)		C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx)	
Performance:	Blank HE	Standard High Efficiency (Not available in VH, SH output)		OSP PC WG WGE SC F EM2	
Voltage:	UV 34 48	120-277V 347V* 480V*		SDT(480V) CC BAA	
Shielding:	Blank FR	None Frosted Acrylic			
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K			
Hanging:	Blank QC QC20 SM	None 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit Surface Mount	Finish:	Blank BK SL	White Matte black Metallic silver

*PBL 2W MH, PBL 2W MH HE, PBL 4 VL, PBL 4 VL HE currently only available in 120-277V, or with step-down transformer in an application where 347V-480V is needed.

PBL LED High Bay



Schematic:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
PBL 2 LW HE UV 835	8805	67	131.4	PBL 2 LW HE UV 840	9096	67	135.8	PBL 2 LW HE UV 850	9369	67	139.8
PBL 2 MD HE UV 835	11553	85	135.9	PBL 2 MD HE UV 840	11934	85	140.4	PBL 2 MD HE UV 850	12292	85	144.6
PBL 2W MH HE UV 835	13766	100	137.7	PBL 2W MH HE UV 840	14221	100	142.2	PBL 2W MH HE UV 850	14648	100	146.5
PBL 2W HI HE UV 835	16938	119	142.3	PBL 2W HI HE UV 840	17498	119	147.0	PBL 2W HI HE UV 850	18023	119	151.5
PBL 4 SL HE UV 835	12018	84	143.1	PBL 4 SL HE UV 840	12416	84	147.8	PBL 4 SL HE UV 850	12788	84	152.2
PBL 4 VL HE UV 835	13905	100	139.1	PBL 4 VL HE UV 840	14365	100	143.7	PBL 4 VL HE UV 850	14796	100	148.0
PBL 4 LW HE UV 835	15913	118	134.9	PBL 4 LW HE UV 840	16439	118	139.3	PBL 4 LW HE UV 850	16932	118	143.5
PBL 4 MD HE UV 835	19697	140	140.7	PBL 4 MD HE UV 840	20349	140	145.3	PBL 4 MD HE UV 850	20959	140	149.7
PBL 4 HI HE UV 835	23543	174	135.3	PBL 4 HI HE UV 840	24322	174	139.8	PBL 4 HI HE UV 850	25051	174	144.0
PBL 4W LW HE UV 835	28006	190	147.4	PBL 4W LW HE UV 840	28932	190	152.3	PBL 4W LW HE UV 850	29800	190	156.8
PBL 4W MD HE UV 835	34578	250	138.3	PBL 4W MD HE UV 840	35721	250	142.9	PBL 4W MD HE UV 850	36792	250	147.2
PBL 4W HI HE UV 835	39262	285	137.8	PBL 4W HI HE UV 840	40560	285	142.3	PBL 4W HI HE UV 850	41777	285	146.6
PBL 2 LW UV 835	9041	72	125.1	PBL 2 LW UV 840	9340	72	129.2	PBL 2 LW UV 850	9620	72	133.1
PBL 2 MD UV 835	11422	87	131.3	PBL 2 MD UV 840	11799	87	135.6	PBL 2 MD UV 850	12153	87	139.7
PBL 2W MH UV 835	13432	104	129.2	PBL 2W MH UV 840	13876	104	133.4	PBL 2W MH UV 850	14292	104	137.4
PBL 2W HI UV 835	17053	130	131.0	PBL 2W HI UV 840	17616	130	135.3	PBL 2W HI UV 850	18145	130	139.4
PBL 4 SL UV 835	11998	86	139.5	PBL 4 SL UV 840	12394	86	144.1	PBL 4 SL UV 850	12766	86	148.4
PBL 4 VL UV 835	13982	104	134.4	PBL 4 VL UV 840	14444	104	138.9	PBL 4 VL UV 850	14877	104	143.1
PBL 4 LW UV 835	17193	136	126.4	PBL 4 LW UV 840	17761	136	130.6	PBL 4 LW UV 850	18294	136	134.5
PBL 4 MD UV 835	20866	155	134.6	PBL 4 MD UV 840	21556	155	139.1	PBL 4 MD UV 850	22203	155	143.2
PBL 4 HI UV 835	22943	174	131.9	PBL 4 HI UV 840	23701	174	136.2	PBL 4 HI UV 850	24412	174	140.3
PBL 4W LW UV 835	29029	210	138.2	PBL 4W LW UV 840	29988	210	142.8	PBL 4W LW UV 850	30888	210	147.1
PBL 4W MD UV 835	35439	270	131.3	PBL 4W MD UV 840	36611	270	135.6	PBL 4W MD UV 850	37709	270	139.7
PBL 4W HI UV 835	38970	305	127.9	PBL 4W HI UV 840	40258	305	132.1	PBL 4W HI UV 850	41466	305	136.0
PBL 4W VH UV 835	48676	374	130.2	PBL 4W VH UV 840	50285	374	134.5	PBL 4W VH UV 850	51794	374	138.5
PBL 4W SH UV 835	64345	390	165.1	PBL 4W SH UV 840	66472	390	170.6	PBL 4W SH UV 850	68267	390	175.2

Lumen Adjustment Factors: FR lens: 0.93
WG: 0.90
FR w/ WG: 0.85

PBL LED High Bay



Controls available:



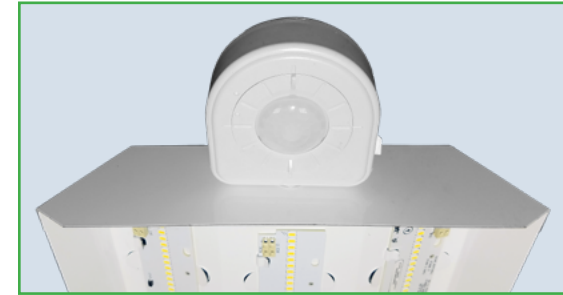
FSP-221B with L7 lens

Dimming Sensors OS(FSP-221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height
 - FSP-L7:** 360° lens, maximum coverage 100', diameter from 40' height



FSIR-100



On/Off Occupancy Sensors (OS)

An optional occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured), or an equivalent.

Occupancy Sensors with Photocell (OSP)

The OSP turns luminaire on or off based on occupancy or available natural light to help maximize energy savings. OSP used: Leviton OSFHP (pictured) or an equivalent.



Need another option?

If you need a different control system - such as Nedap, Daintree, or another IoT-based system - just contact us. We can incorporate it.

Advanced Controls Available

We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. Contact the factory for more info.

Other Options:



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



Shielding Frosted acrylic diffuser lenses minimize glare and improve aesthetics.



Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Hanging The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture.

PBL LED High Bay



Photometric Data:

PBL 2W HI UV 835

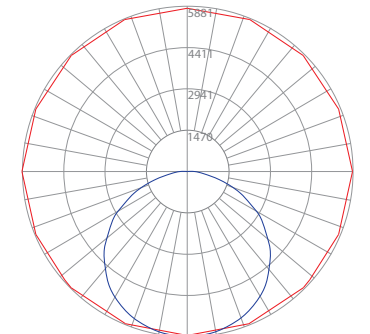
Test No.: LLIA000621-001
Luminaire Lumens: 17,053 lm
Luminaire Watts: 130.2W
Efficacy: 131.0 LPW
Spacing Criterion (0-180): 1.32
Spacing Criterion (90-270): 1.28

Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	25441	24725	24763
55	24834	24268	24498
65	23361	23138	21381
75	19268	14947	16254
85	9579	6721	7667

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74		
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26		



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	2136.96	12.50
0-30	4565.59	26.80
0-40	7540.00	44.20
0-60	13587.73	79.70
0-80	16853.12	98.80
0-90	17053.36	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	17053.36	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

PBL 4W HI UV 835

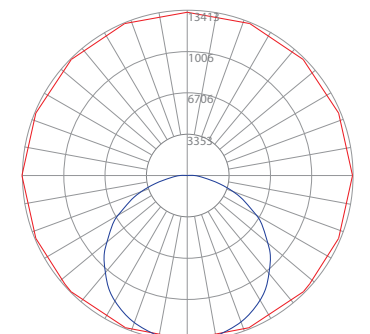
Test No.: LLIA000621-005
Luminaire Lumens: 38,970 lm
Luminaire Watts: 304.8W
Efficacy: 127.9 LPW
Spacing Criterion (0-180): 1.32
Spacing Criterion (90-270): 1.28

Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	29902	29118	29079
55	29470	28697	28730
65	27975	27414	25197
75	23601	17693	19047
85	12723	7585	8557

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74		
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35		
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26		



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	4871.84	12.50
0-30	10408.51	26.70
0-40	17189.85	44.10
0-60	31004.31	79.60
0-80	38509.13	98.80
0-90	38969.80	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	38969.80	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PBL A LED Aisle High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Enhanced specular reflector designed to provide even vertical illumination on shelving and maximize lighting in the aiseways
- Opening in driver compartment grants easy access, allowing for simple installation and maintenance in the field



Applications:

- Suitable for most commercial, industrial and institutional applications
- Warehouse aisles
 - Corridors

Ambient Operating Temp:

- -30°C to 40°C for 'LW' models
- -30°C to 35°C for 'MD' models
- -30°C to 25°C for 'HI' models

Construction:

- Housing is precision brake formed from heavy gauge cold rolled steel with highly durable white finish
- LED tray is precision brake formed from highly reflective aluminum

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Predicted L70 Lifetime:

- 92,000 to 146,000 hrs (calculated)
- >72,000 hrs (reported) (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



PBL A LED Aisle High Bay



Ordering Guide:

example: PBL A 4 HI UV 850-QC C6 OSD

Series	Distribution	Length	Output	Voltage	CRI/CCT	Hanging	Options
PBL	A					-	
PBL	A	4	VL LW MD HI	UV 34 48	835 840 850	Blank QC QC20	Blank C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx) OSP PC WG SC F EM2 SDT(480V) BAA
		8	VL LW MD				

Distribution: A Aisle

Length: 4 4'
8 8'

Lumen Output: VL Very Low
LW Low
MD Medium
HI High (available in 4' only)

Voltage: UV 120-277V
34 347V
48 480V

CRI/CCT: 835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

Hanging: Blank None
QC 10' Quick Hang Cable Kit
QC20 20' Quick Hang Cable Kit

Options: Blank None
C6 6' Single Circuit Cord
C10 10' Single Circuit Cord
D6 6' Dual Circuit Cord
D10 10' Dual Circuit Cord
P(NEMA) Plug (Specify NEMA configuration)
OS Occupancy Sensor (on/off)
OSD Occupancy Sensor (on/off/dim)
OS(FSP-221B-Lx) Wattstopper Occupancy Sensor (on/off/dim) for 100-347V, or 208/230/480V ("x" = lens type. See Page 4 for lens type descriptions)
OSP Occupancy Sensor with Photocell
PC Photocell
WG Wire Guard
SC Safety Cable
F Fuse
EM2 Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)
SDT(480V) 480V to 277V Step Down Transformer
BAA Buy American Act compliant

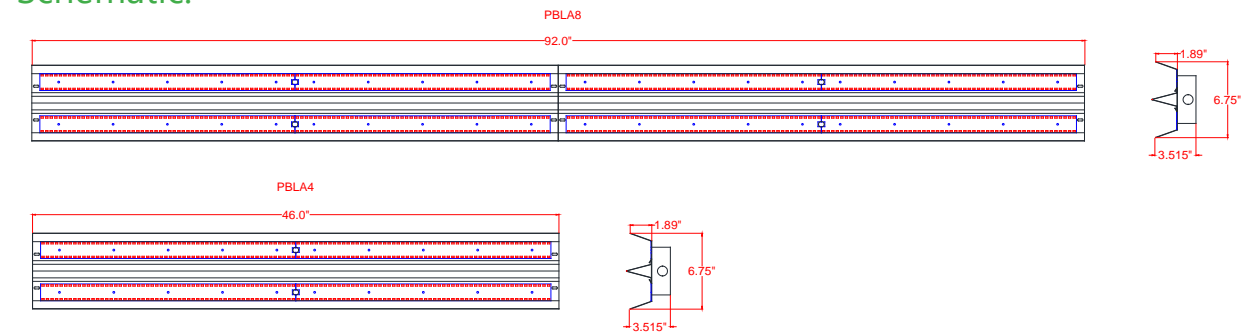
PBL A LED Aisle High Bay



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
PBL A 4 VL UV 835	11933	84.2	141.7	PBL A 4 VL UV 840	12302	84.2	146.1	PBL A 4 VL UV 850	12671	84.2	150.5
PBL A 4 LW UV 835	16033	120.2	133.4	PBL A 4 LW UV 840	16529	120.2	137.5	PBL A 4 LW UV 850	17025	120.2	141.6
PBL A 4 MD UV 835	19922	160	124.5	PBL A 4 MD UV 840	20538	160	128.4	PBL A 4 MD UV 850	21154	160	132.2
PBL A 4 HI UV 835	22574	188.8	119.6	PBL A 4 HI UV 840	23272	188.8	123.3	PBL A 4 HI UV 850	23970	188.8	127.0
PBL A 8 VL UV 835	23135	168	137.7	PBL A 8 VL UV 840	23850	168	142.0	PBL A 8 VL UV 850	24566	168	146.2
PBL A 8 LW UV 835	31550	240	131.5	PBL A 8 LW UV 840	32525	240	135.5	PBL A 8 LW UV 850	33501	240	139.6
PBL A 8 MD UV 835	39844	320	124.5	PBL A 8 MD UV 840	41076	320	128.4	PBL A 8 MD UV 850	42308	320	132.2

Schematic:



Photometric Data:

PBL A 4 LW UV 840

Test No.: LLIA000612-001
 Luminaire Lumens: 16,529 lm
 Luminaire Watts: 120.2W
 Efficacy: 137.5 LPW
 Spacing Criterion (0-180): 1.30
 Spacing Criterion (90-270): 1.02

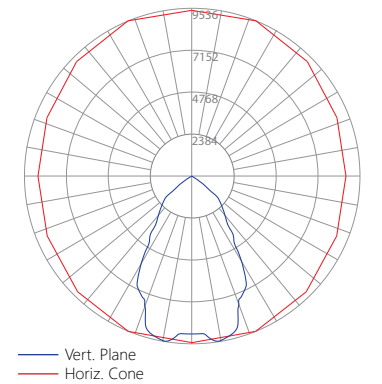
Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	42434	16246	12623
55	41069	11900	293
65	37809	188	0
75	29996	0	0
85	13028	0	0

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94		
2	103	97	92	87	101	95	90	86	92	88	84	89	85	82		
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72		
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64		
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57		
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52		
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47		
8	68	56	48	43	66	55	48	43	54	47	43	53	47	42		
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39		
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36		



Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	3399.74	20.60
0-30	6935.59	42.00
0-40	10500.32	63.50
0-60	15342.87	92.80
0-80	16463.07	99.60
0-90	16517.61	99.90
90-120	0.00	0.00
90-130	1.53	0.00
90-150	10.97	0.10
90-180	11.30	0.10
0-180	16528.91	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

PBL A LED Aisle High Bay

Controls available:



On/Off Occupancy Sensors (OS)

An optional occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured), or an equivalent.

Dimming Sensors OS(FSP-221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - **FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - **FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height
 - **FSP-L7:** 360° lens, maximum coverage 100', diameter from 40' height

Occupancy Sensors with Photocell (OSP)

The OSP turns luminaire on or off based on occupancy or available natural light to help maximize energy savings. OSP used: Leviton OSFHP (pictured) or an equivalent.



Need another option?
If you need a different control system - such as Nedap, Daintree, or another IoT-based system - just contact us. We can incorporate it.

Advanced Controls Available

We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. Contact the factory for more info.

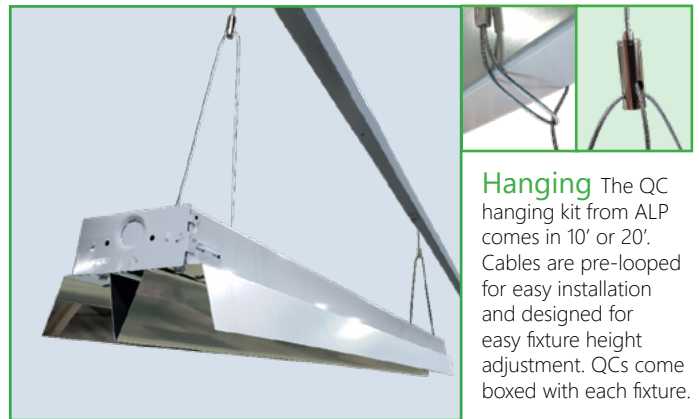
Other Options:



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



Safety cables affix directly to the luminaire and provide a sturdy cable hanging alternative.



Hanging The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture.



Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PBL HD LED Heavy Duty High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models except PBL 4W HI UV
- Field replaceable LED boards and drivers
- Frosted diffusers available to help minimize glare and improve aesthetics
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Pendant, surface, and cable mounting available

Applications:

- Suitable for most commercial, industrial and institutional applications
- Gymnasiums
 - Recreation Centers
 - Manufacturing
 - Warehouse
 - Cold/Frozen Storage

Ambient Operating Temp:

- -30°C to 40°C

Predicted L70 Lifetime:

- 92,000 to 146,000 hrs (calculated)
- >72,000 hrs (reported)
(based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Housing is precision brake formed from heavy duty 0.080" aluminum
- Pre-painted with a highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)



Powered by:



PBL HD LED Heavy Duty High Bay



Ordering Guide:

example: PBL 4 HI UV FR 850-HDW-PMS ST(18") WG OS

Series	Length	Output	Performance	Voltage	Shielding	CRI/CCT	Gauge	Hanging	Options
PBL							- HDW -		
PBL	2	LW MD	Blank HE	UV 34 48	Blank FR	835 840 850	HDW	Blank QC QC20 PM PMS ST(x)	Blank EXT10 C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx) OSP PC WG WG(OS) SC F EM2 SDT(480V) CC BAA
	2W	MH HI							
	4	SL VL LW MD HI							
	4W	LW MD HI VH							

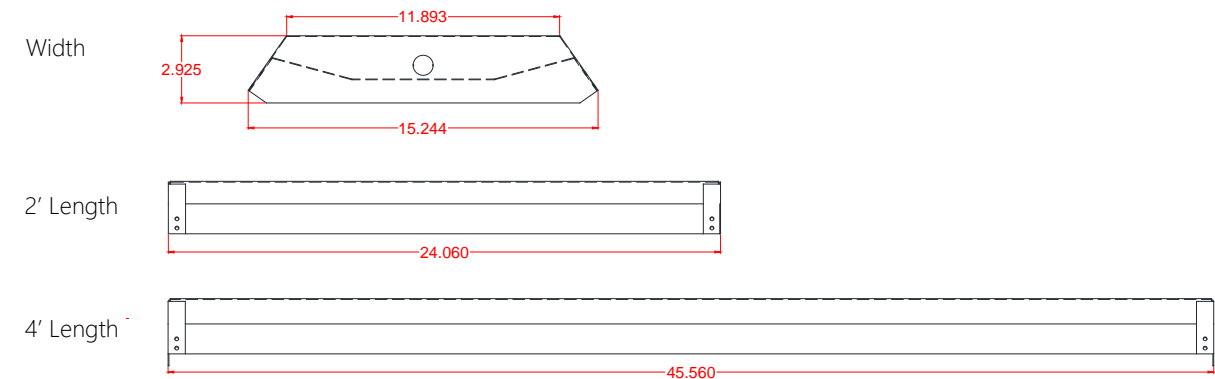
Length:	2' 2'	2W 2'	4' 4'	4W 4'
Lumen Output:	SL Super Low	VL Very Low	LW Low	MD Medium
	MH Medium High	HI High	VH Very High (Not available in HE)	
Performance:	Blank Standard	HE High Efficiency (Not available in VH output)		
Voltage:	UV 120-277V	34 347V*	48 480V*	
Shielding:	Blank None	FR Frosted Acrylic		
CRI/CCT:	835 80 CRI / 3500K	840 80 CRI / 4000K	850 80 CRI / 5000K	
Gauge:	HDW Heavy Duty 0.080" Aluminum-Wide Body Housing			

*PBL 2W MH, PBL 2W MH HE, PBL 4 VL, PBL 4 VL HE currently only available in 120-277V, or with step-down transformer in an application where 347V-480V is needed.

PBL HD LED Heavy Duty High Bay



Schematic:

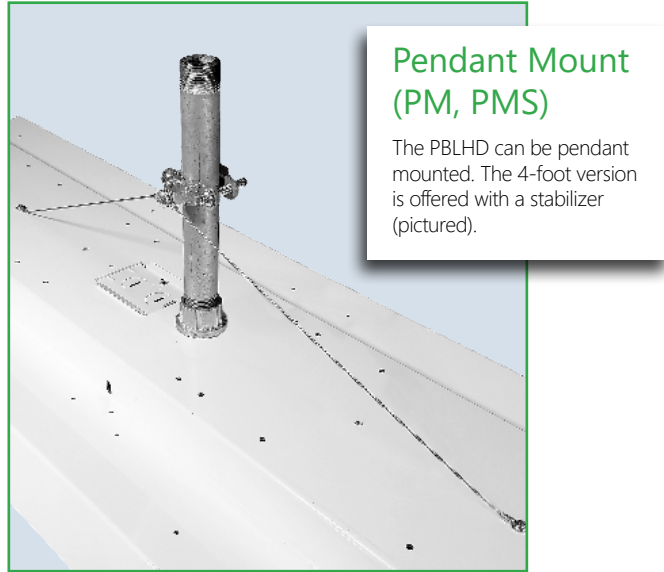


Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
PBL 2 LW HE UV 835	8805	67	131.4	PBL 2 LW HE UV 840	9096	67	135.8	PBL 2 LW HE UV 850	9369	67	139.8
PBL 2 MD HE UV 835	11553	85	135.9	PBL 2 MD HE UV 840	11934	85	140.4	PBL 2 MD HE UV 850	12292	85	144.6
PBL 2W MH HE UV 835	13766	100	137.7	PBL 2W MH HE UV 840	14221	100	142.2	PBL 2W MH HE UV 850	14648	100	146.5
PBL 2W HI HE UV 835	16938	119	142.3	PBL 2W HI HE UV 840	17498	119	147.0	PBL 2W HI HE UV 850	18023	119	151.5
PBL 4 SL HE UV 835	12018	84	143.1	PBL 4 SL HE UV 840	12416	84	147.8	PBL 4 SL HE UV 850	12788	84	152.2
PBL 4 VL HE UV 835	13905	100	139.1	PBL 4 VL HE UV 840	14365	100	143.7	PBL 4 VL HE UV 850	14796	100	148.0
PBL 4 LW HE UV 835	15913	118	134.9	PBL 4 LW HE UV 840	16439	118	139.3	PBL 4 LW HE UV 850	16932	118	143.5
PBL 4 MD HE UV 835	19697	140	140.7	PBL 4 MD HE UV 840	20349	140	145.3	PBL 4 MD HE UV 850	20959	140	149.7
PBL 4 HI HE UV 835	23543	174	135.3	PBL 4 HI HE UV 840	24322	174	139.8	PBL 4 HI HE UV 850	25051	174	144.0
PBL 4W LW HE UV 835	28006	190	147.4	PBL 4W LW HE UV 840	28932	190	152.3	PBL 4W LW HE UV 850	29800	190	156.8
PBL 4W MD HE UV 835	34578	250	138.3	PBL 4W MD HE UV 840	35721	250	142.9	PBL 4W MD HE UV 850	36792	250	147.2
PBL 4W HI HE UV 835	39262	285	137.8	PBL 4W HI HE UV 840	40560	285	142.3	PBL 4W HI HE UV 850	41777	285	146.6
PBL 2 LW UV 835	9041	72	125.1	PBL 2 LW UV 840	9340	72	129.2	PBL 2 LW UV 850	9620	72	133.1
PBL 2 MD UV 835	11422	87	131.3	PBL 2 MD UV 840	11799	87	135.6	PBL 2 MD UV 850	12153	87	139.7
PBL 2W MH UV 835	13432	104	129.2	PBL 2W MH UV 840	13876	104	133.4	PBL 2W MH UV 850	14292	104	137.4
PBL 2W HI UV 835	17053	130	131.0	PBL 2W HI UV 840	17616	130	135.3	PBL 2W HI UV 850	18145	130	139.4
PBL 4 SL UV 835	11998	86	139.5	PBL 4 SL UV 840	12394	86	144.1	PBL 4 SL UV 850	12766	86	148.4
PBL 4 VL UV 835	13982	104	134.4	PBL 4 VL UV 840	14444	104	138.9	PBL 4 VL UV 850	14877	104	143.1
PBL 4 LW UV 835	17193	136	126.4	PBL 4 LW UV 840	17761	136	130.6	PBL 4 LW UV 850	18294	136	134.5
PBL 4 MD UV 835	20866	155	134.6	PBL 4 MD UV 840	21556	155	139.1	PBL 4 MD UV 850	22203	155	143.2
PBL 4 HI UV 835	22943	174	131.9	PBL 4 HI UV 840	23701	174	136.2	PBL 4 HI UV 850	24412	174	140.3
PBL 4W LW UV 835	29029	210	138.2	PBL 4W LW UV 840	29988	210	142.8	PBL 4W LW UV 850	30888	210	147.1
PBL 4W MD UV 835	35439	270	131.3	PBL 4W MD UV 840	36611	270	135.6	PBL 4W MD UV 850	37709	270	139.7
PBL 4W HI UV 835	38970	305	127.9	PBL 4W HI UV 840	40258	305	132.1	PBL 4W HI UV 850	41466	305	136.0
PBL 4W VH UV 835	48676	374	130.2	PBL 4W VH UV 840	50285	374	134.5	PBL 4W VH UV 850	51794	374	138.5

Lumen Adjustment Factors:
FR lens: 0.93
WG: 0.90
FR w/ WG: 0.85

Hanging Options Available:

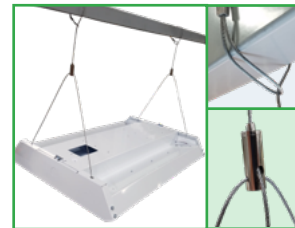
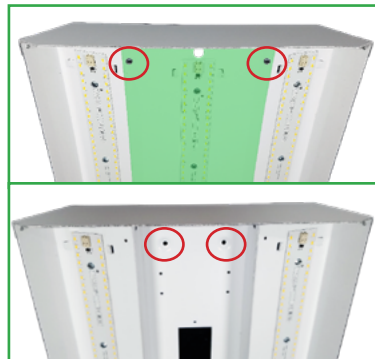


Pendant Mount (PM, PMS)

The PBLHD can be pendant mounted. The 4-foot version is offered with a stabilizer (pictured).

Surface Mount

The PBLHD is designed to be easily mounted to any sturdy surface. Simply remove the hex head screws holding the driver cover (top picture, in green) to access the bottom of the housing below. The housing can be mounted to the surface from the four holes in each corner of the channel (bottom picture, circled).



Cable Mount (QC, QC20)

The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture. A mechanically fastened safety cable (SC) is also optional.

Wireguard and shielding

Add an optional wireguard for added stability and protection - ideal for gymnasiums or other areas where the luminaire may be struck. Optional frosted acrylic diffuser lenses minimize glare and improve aesthetics.



Controls available:

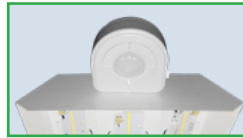


Dimming Sensors OS (FSP-221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and or/daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - FSP-L2: 360° lens, maximum coverage 48', diameter from 8' height
 - FSP-L3: 360° lens, maximum coverage 40', diameter from 20' height
 - FSP-L7: 360° lens, maximum coverage 100', diameter from 40' height

On/Off Occupancy Sensors (OS)

An occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured), or equivalent.



Occupancy Sensors with Photocell (OSP)

The OSP turns luminaire on or off based on occupancy or available natural light to help maximize energy savings. OSP used: Leviton OSFHP (pictured) or an equivalent.



Advanced Controls Available

We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. If you need a different control system - such as Nedap, Daintree, or another IoT-based system - just contact us. We can incorporate it.

Other Options:



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.

Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Photometric Data:

PBL 2W HI UV 835

Test No.: LLIA000621-001
Luminaire Lumens: 17,053 lm
Luminaire Watts: 130.2W
Efficacy: 131.0 LPW
Spacing Criterion (0-180): 1.32
Spacing Criterion (90-270): 1.28

Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	25441	24725	24763
55	24834	24268	24498
65	23361	23138	21381
75	19268	14947	16254
85	9579	6721	7667

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74		
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

PBL 4W HI UV 835

Test No.: LLIA000621-005
Luminaire Lumens: 38,970 lm
Luminaire Watts: 304.8W
Efficacy: 127.9 LPW
Spacing Criterion (0-180): 1.32
Spacing Criterion (90-270): 1.28

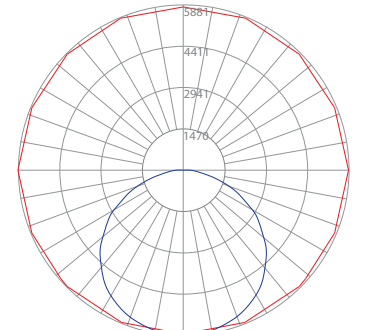
Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	29902	29118	29079
55	29470	28697	28730
65	27975	27414	25197
75	23601	17693	19047
85	12723	7585	8557

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74		
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35		
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26		

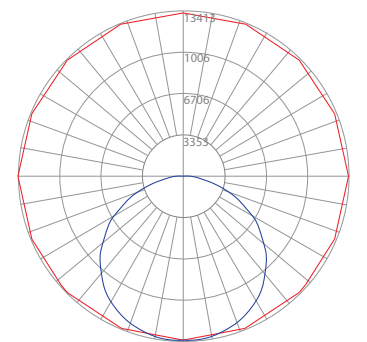
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	2136.96	12.50
0-30	4565.59	26.80
0-40	7540.00	44.20
0-60	13587.73	79.70
0-80	16853.12	98.80
0-90	17053.36	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	17053.36	100.00



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	4871.84	12.50
0-30	10408.51	26.70
0-40	17189.85	44.10
0-60	31004.31	79.60
0-80	38509.13	98.80
0-90	38969.80	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	38969.80	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PBL U LED Lensed High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Multiple shielding options available to help minimize glare and improve aesthetics
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings

Applications:

Suitable for most commercial, industrial and institutional applications

- Retail
- Warehouse
- Manufacturing
- Gymnasiums

Ambient Operating Temp:

- -30°C to 40°C

Predicted L70 Lifetime:

- >140,000 hrs (calculated)
- >72,000 hrs (reported)
- 84% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory)

Construction:

- Housing and LED tray is precision brake formed from aluminum
- Pre-painted with a highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)

10 YEAR
 EXTENDED
 WARRANTY
AVAILABLE ON
 CERTAIN MODELS



Powered by:



PBL U LED Lensed High Bay



Ordering Guide:

example: PBL U 4 HI UV 850-QC20 C6 OSD

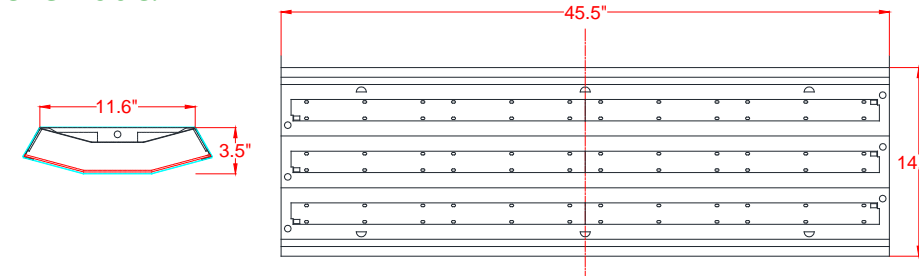
Series	Distribution	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Options
PBL	U						-	
PBL	U	2	LW MD	UV 34 48	A23 A23F L118	835 840 850	Blank QC QC20	Blank EXT10 C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx) OSP PC WG WG(OS) SC F EM2 SDT(480V) CC BAA
		4	VL LW MD HI					

Distribution: U	General with Up-Light	Options: Blank EXT10	None 10 yr extended warranty (Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)
Length: 2 4	2' (available in LW & MD only) 4'		
Lumen Output:	VL Very Low (available in 4' only) LW Low MD Medium HI High (available in 4' only)	C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx)	6' Single Circuit Cord 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord Plug (Specify NEMA configuration) Occupancy Sensor (on/off) Occupancy Sensor (on/off/dim) Wattstopper Occupancy Sensor (on/off/dim) for 100-347V, or 208/230/480V ("x" = lens type. See Page 4 for lens type descriptions)
Voltage: UV 34 48	120-277V 347V 480V (not available on 4' VL or 4' LW models)		
Shielding: A23 A23F L118	High Efficiency 23 Pattern Acrylic High Efficiency 23 Pattern Acrylic, Frosted 0.118" Impact Resistant Lexan	OSP PC WG WG(OS) SC F EM2	Occupancy Sensor with Photocell Photocell Wire Guard Wire Guard for Occupancy Sensor Safety Cable Fuse Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)
CRI/CCT: 835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K		480V to 277V Step Down Transformer
Hanging: Blank QC QC20	None 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit	SDT(480V) CC BAA	Conformal Coating Buy American Act compliant

PBL U LED Lensed High Bay



Schematic:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
PBL U 2 LW UV A23F 835	7827	60	130.5	PBL U 2 LW UV A23F 840	8086	60	134.8	PBL U 2 LW UV A23F 850	8328	60	138.8
PBL U 2 MD UV A23F 835	10869	87	124.9	PBL U 2 MD UV A23F 840	11228	87	129.1	PBL U 2 MD UV A23F 850	11565	87	132.9
PBL U 4 VL UV A23F 835	11693	91	128.9	PBL U 4 VL UV A23F 840	12080	91	133.2	PBL U 4 VL UV A23F 850	12442	91	137.2
PBL U 4 LW UV A23F 835	15132	123	122.9	PBL U 4 LW UV A23F 840	15633	123	127.0	PBL U 4 LW UV A23F 850	16101	123	130.8
PBL U 4 MD UV A23F 835	19755	160	123.5	PBL U 4 MD UV A23F 840	20408	160	127.5	PBL U 4 MD UV A23F 850	21020	160	131.4
PBL U 4 HI UV A23F 835	21738	174	124.9	PBL U 4 HI UV A23F 840	22456	174	129.1	PBL U 4 HI UV A23F 850	23130	174	132.9

Lumen Adjustment Factors:
WG: 0.95

Photometric Data:

PBL U 4 LW UV A23F 840

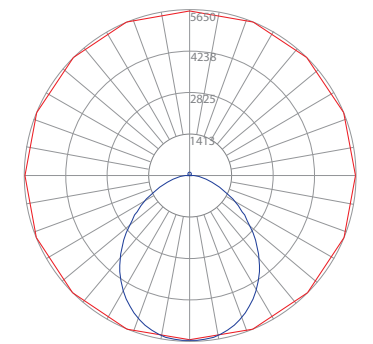
Test No.: LLIA000842-003
 Luminaire Lumens: 15,132 lm
 Luminaire Watts: 123.1W
 Efficacy: 122.9 LPW
 Spacing Criterion (0-180): 1.22
 Spacing Criterion (90-270): 1.22

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12142	10757	10448
55	10265	8731	8401
65	8251	6711	6604
75	6086	4883	5236
85	3264	3353	4571

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	118	118	118	118	114	114	114		108	108	108	102	102	102		
1	108	103	99	95	104	100	96	93	95	92	89	90	87	85		
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71		
3	90	80	72	65	87	78	70	64	74	68	63	70	65	61		
4	82	71	62	56	80	69	61	55	66	59	54	63	57	52		
5	76	64	55	48	74	62	54	48	59	52	47	57	51	46		
6	70	57	49	42	68	56	48	42	54	47	41	52	45	40		
7	65	52	44	38	63	51	43	37	49	42	37	47	41	36		
8	61	48	39	34	59	47	39	33	45	38	33	43	37	32		
9	57	44	36	30	55	43	35	30	41	35	30	40	34	29		
10	53	40	33	28	52	40	32	27	38	32	27	37	31	27		



Zone	Lumens	%Fixt
0-20	2046.0	13.5
0-30	4300.4	28.4
0-40	6921.0	45.7
0-60	11542.7	76.3
0-80	13878.6	91.7
0-90	14280.4	94.4
90-120	456.5	3.0
90-130	568.3	3.8
90-150	742.9	4.9
90-180	851.6	5.6
0-180	15132.0	100.0

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

PBL U LED Lensed High Bay

Controls available:



Dimming Sensors OS(FSP-221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - **FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - **FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height
 - **FSP-L7:** 360° lens, maximum coverage 100', diameter from 40' height



On/Off Occupancy Sensors (OS)

An optional occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured), or an equivalent.

Occupancy Sensors with Photocell (OSP)

The OSP turns luminaire on or off based on occupancy or available natural light to help maximize energy savings. OSP used: Leviton OSFHP (pictured) or an equivalent.



Need another option?
If you need a different control system - such as Nedap, Daintree, or another IoT-based system - just contact us. We can incorporate it.

Advanced Controls Available
We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. Contact the factory for more info.

Other Options:



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



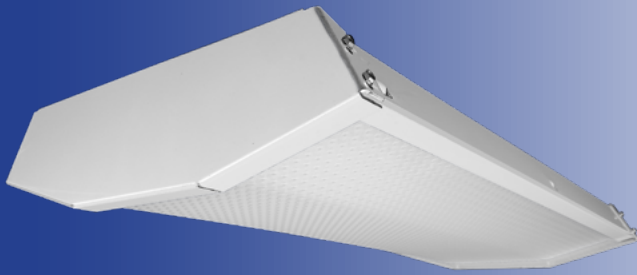
Shielding Available in a high efficiency 23 pattern acrylic lens (frosted or clear), and an impact resistant clear lexan lens



Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Hanging The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture.



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PBL X LED Lensed High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Multiple shielding options available to help minimize glare and improve aesthetics
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings

Applications:

Suitable for most commercial, industrial and institutional applications

- Retail
- Warehouse
- Manufacturing
- Gymnasiums

Predicted L70 Lifetime:

- >140,000 hrs (calculated)
- >72,000 hrs (reported)
- 84% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory)

Construction:

- Housing and LED tray is precision brake formed from aluminum
- Pre-painted with a highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations

Ambient Operating Temp:

- -30°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models

(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)

10 YEAR
 EXTENDED
 WARRANTY
AVAILABLE ON
 CERTAIN MODELS



Powered by:



PBL X LED Lensed High Bay



Ordering Guide:

example: PBL X 4 HI UV 850-QC20 C6 OSD

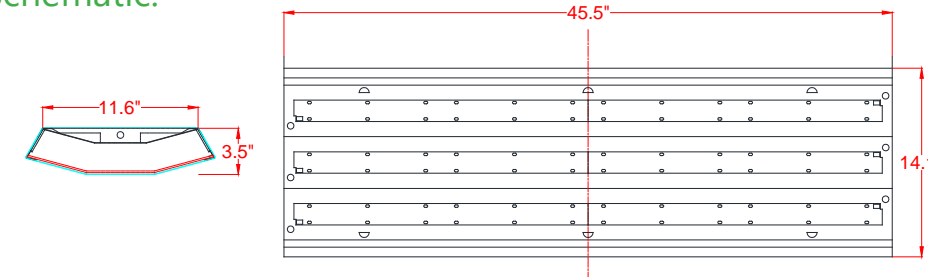
Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Options
PBL X						-	
PBL X	2	LW MD	UV 34 48	A23 A23F L118	835 840 850	Blank QC QC20	Blank EXT10 C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx) OSP PC WG WG(OS) SC F EM2 SDT(480V) CC BAA
	4	VL LW MD HI					

Length:	2 4	2' (available in LW & MD only) 4'	Options:	Blank EXT10	None 10 yr extended warranty (Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)
Lumen Output:	VL LW MD HI	Very Low (available in 4' only) Low Medium High (available in 4' only)		C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-221B-Lx)	6' Single Circuit Cord 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord Plug (Specify NEMA configuration) Occupancy Sensor (on/off) Occupancy Sensor (on/off/dim) Wattstopper Occupancy Sensor (on/off/dim) for 100-347V, or 208/230/480V ("x" = lens type. See Page 4 for lens type descriptions)
Voltage:	UV 34 48	120-277V 347V 480V (not available on 4' VL or 4' LW models)		OSP PC WG WG(OS) SC F EM2	Occupancy Sensor with Photocell Photocell Wire Guard Wire Guard for Occupancy Sensor Safety Cable Fuse Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)
Shielding:	A23 A23F L118	High Efficiency 23 Pattern Acrylic High Efficiency 23 Pattern Acrylic, Frosted 0.118" Impact Resistant Lexan		SDT(480V) CC BAA	480V to 277V Step Down Transformer Conformal Coating Buy American Act compliant
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K			
Hanging:	Blank QC QC20	None 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit			

PBL X LED Lensed High Bay



Schematic:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
PBL X 2 LW UV A23F 835	7827	60	130.5	PBL X 2 LW UV A23F 840	8086	60	134.8	PBL X 2 LW UV A23F 850	8328	60	138.8
PBL X 2 MD UV A23F 835	10869	87	124.9	PBL X 2 MD UV A23F 840	11228	87	129.1	PBL X 2 MD UV A23F 850	11565	87	132.9
PBL X 4 VL UV A23F 835	11693	91	128.9	PBL X 4 VL UV A23F 840	12080	91	133.2	PBL X 4 VL UV A23F 850	12442	91	137.2
PBL X 4 LW UV A23F 835	15132	123	122.9	PBL X 4 LW UV A23F 840	15633	123	127.0	PBL X 4 LW UV A23F 850	16101	123	130.8
PBL X 4 MD UV A23F 835	19755	160	123.5	PBL X 4 MD UV A23F 840	20408	160	127.5	PBL X 4 MD UV A23F 850	21020	160	131.4
PBL X 4 HI UV A23F 835	21738	174	124.9	PBL X 4 HI UV A23F 840	22456	174	129.1	PBL X 4 HI UV A23F 850	23130	174	132.9

Lumen Adjustment Factors:
WG: 0.95

PBL X LED Lensed High Bay

Controls available:



Dimming Sensors OS(FSP-221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - **FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - **FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height
 - **FSP-L7:** 360° lens, maximum coverage 100', diameter from 40' height



FSIR-100



On/Off Occupancy Sensors (OS)

An optional occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured), or an equivalent.

Occupancy Sensors with Photocell (OSP)

The OSP turns luminaire on or off based on occupancy or available natural light to help maximize energy savings. OSP used: Leviton OSFHP (pictured) or an equivalent.



Need another option?
If you need a different control system - such as Nedap, Daintree, or another IoT-based system - just contact us. We can incorporate it.



Advanced Controls Available

We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. Contact the factory for more info.



Other Options:



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



Shielding Available in a high efficiency 23 pattern acrylic lens (frosted or clear), and an impact resistant clear lexan lens



Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Hanging The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture.



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ECL LED Strip

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser available to help minimize glare and improve aesthetics
- A wide variety of lumen packages and lengths allows for flexibility in design and helps maximize energy savings

Applications:

Suitable for most commercial, industrial and institutional applications

- Office
- Retail
- Warehouse
- Coves
- Valences

Ambient Operating Temp:

- -30°C to 40°C

Predicted L70 Lifetime:

- ≥120,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Precision brake formed from heavy gauge cold rolled steel
- Highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)

10 YEAR
 EXTENDED
 WARRANTY
AVAILABLE ON
 CERTAIN MODELS



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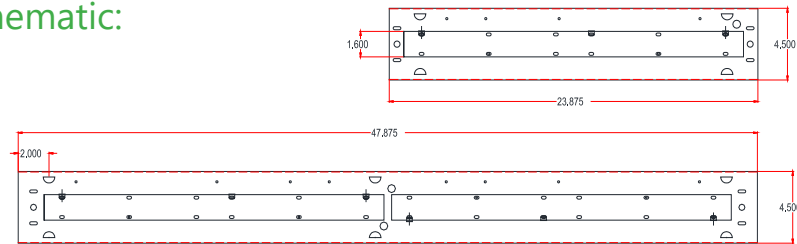
Ordering Guide:

example: ECL 4 MD UV CL 840-WG

Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Options
ECL							
ECL	2 3 4 6 8	LW ML MD MD HE MH HI VH	UV 34	Blank FR	835 840 850	Blank VC QC QC20 SH	Blank EXT10 C6 C10 D6 D10 P(NEMA) OS OSD OSP OSM PC WG WG(OS) SC F EM1 EM2 SDT(480V) CC BAA

Length:	2' 3' 4' 6' 8'	Options:	Blank EXT10	None 10 yr extended warranty <i>(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)</i>
Lumen Output:	LW Low ML Medium Low (8' model only) MD Medium MD HE Medium-High Efficiency (8' model only) MH Medium High (4' & 8' model only) HI High (not available in 3' model) VH Very High (not available in 3' model)		C6 C10 D6 D10 P(NEMA) OS OSD OSP OSM PC WG WG(OS) SC F EM1 EM2 SDT(480V) CC BAA	6' Single Circuit Cord 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord Plug (Specify NEMA configuration) Occupancy Sensor (on/off) Occupancy Sensor (on/off/dim) Occupancy Sensor with Photocell Microwave Occupancy Sensor Photocell Wire Guard Wire Guard for Occupancy Sensor Safety Cable Fuse Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient) Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient) 480V to 277V Step Down Transformer Conformal Coating Buy American Act Compliant
Voltage:	UV 120-277V 34 347V			
Shielding:	Blank None FR Frosted Acrylic			
CRI/CCT:	835 80 CRI / 3500K 840 80 CRI / 4000K 850 80 CRI / 5000K			
Hanging:	Blank None VC V-Chain Hangers QC 10' Quick Hang Cable Kit QC20 20' Quick Hang Cable Kit SH Slide Hanger			

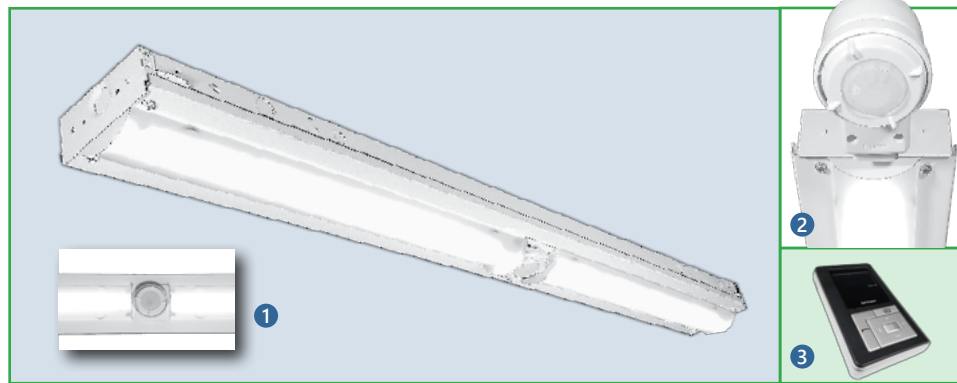
Schematic:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
ECL 2 LW UV 835	837	8	104.7	ECL 2 LW UV 840	863	8	107.9	ECL 2 LW UV 850	889	8	111.1
ECL 2 MD UV 835	1950	17.5	111.4	ECL 2 MD UV 840	2011	17.5	114.9	ECL 2 MD UV 850	2071	17.5	118.3
ECL 2 HI UV 835	3085	23	134.1	ECL 2 HI UV 840	3180	23	138.3	ECL 2 HI UV 850	3275	23	142.4
ECL 2 VH UV 835	3963	32	123.9	ECL 2 VH UV 840	4086	32	127.7	ECL 2 VH UV 850	4208	32	131.5
ECL 3 LW UV 835	1241	11	112.8	ECL 3 LW UV 840	1279	11	116.3	ECL 3 LW UV 850	1318	11	119.8
ECL 3 MD UV 835	3183	23	138.4	ECL 3 MD UV 840	3282	23	142.7	ECL 3 MD UV 850	3380	23	147.0
ECL 4 LW UV 835	2305	18	128.0	ECL 4 LW UV 840	2376	18	132.0	ECL 4 LW UV 850	2447	18	136.0
ECL 4 MD UV 835	3832	32	119.7	ECL 4 MD UV 840	3950	32	123.4	ECL 4 MD UV 850	4069	32	127.1
ECL 4 MH UV 835	4829	36	134.1	ECL 4 MH UV 840	4978	36	138.3	ECL 4 MH UV 850	5128	36	142.4
ECL 4 HI UV 835	6705	46	145.8	ECL 4 HI UV 840	6913	46	150.3	ECL 4 HI UV 850	7120	46	154.8
ECL 4 VH UV 835	8901	68	130.9	ECL 4 VH UV 840	9177	68	134.9	ECL 4 VH UV 850	9452	68	139.0
ECL 6 LW UV 835	3119	22	141.8	ECL 6 LW UV 840	3216	22	146.2	ECL 6 LW UV 850	3312	22	150.5
ECL 6 MD UV 835	6482	54	120.0	ECL 6 MD UV 840	6682	54	123.7	ECL 6 MD UV 850	6883	54	127.5
ECL 6 HI UV 835	9854	70	140.8	ECL 6 HI UV 840	10159	70	145.1	ECL 6 HI UV 850	10463	70	149.5
ECL 6 VH UV 835	12423	95	130.8	ECL 6 VH UV 840	12807	95	134.8	ECL 6 VH UV 850	13192	95	138.9
ECL 8 LW UV 835	4240	30	141.3	ECL 8 LW UV 840	4371	30	145.7	ECL 8 LW UV 850	4503	30	150.1
ECL 8 ML UV 835	6125	44	139.2	ECL 8 ML UV 840	6314	44	143.5	ECL 8 ML UV 850	6504	44	147.8
ECL 8 MD UV 835	8033	64	125.5	ECL 8 MD UV 840	8281	64	129.4	ECL 8 MD UV 850	8530	64	133.3
ECL 8 MD HE UV 835	8050	56	143.0	ECL 8 MD HE UV 840	8299	56	147.4	ECL 8 MD HE UV 850	8548	56	151.9
ECL 8 MH UV 835	10765	78	138.0	ECL 8 MH UV 840	11098	78	142.3	ECL 8 MH UV 850	11431	78	146.5
ECL 8 HI UV 835	12412	87	141.2	ECL 8 HI UV 840	12796	87	147.1	ECL 8 HI UV 850	13180	87	151.5
ECL 8 VH UV 835	17316	135	128.3	ECL 8 VH UV 840	17852	135	132.2	ECL 8 VH UV 850	18388	135	136.2
ECL 2 LW UV FR 835	804	8	100.5	ECL 2 LW UV FR 840	828	8	103.6	ECL 2 LW UV FR 850	853	8	106.7
ECL 2 MD UV FR 835	1852	17.5	105.8	ECL 2 MD UV FR 840	1910	17.5	109.1	ECL 2 MD UV FR 850	1967	17.5	112.4
ECL 2 HI UV FR 835	2960	23	128.7	ECL 2 HI UV FR 840	3052	23	132.7	ECL 2 HI UV FR 850	3143	23	136.7
ECL 2 VH UV FR 835	3804	32	118.9	ECL 2 VH UV FR 840	3921	32	122.5	ECL 2 VH UV FR 850	4039	32	126.2
ECL 3 LW UV FR 835	1191	11	108.3	ECL 3 LW UV FR 840	1228	11	111.6	ECL 3 LW UV FR 850	1265	11	115.0
ECL 3 MD UV FR 835	3055	23	132.8	ECL 3 MD UV FR 840	3150	23	136.9	ECL 3 MD UV FR 850	3244	23	141.1
ECL 4 LW UV FR 835	2212	18	122.9	ECL 4 LW UV FR 840	2280	18	126.7	ECL 4 LW UV FR 850	2349	18	130.5
ECL 4 MD UV FR 835	3640	32	115.5	ECL 4 MD UV FR 840	3752	32	119.1	ECL 4 MD UV FR 850	3865	32	122.7
ECL 4 MH UV FR 835	4635	36	128.7	ECL 4 MH UV FR 840	4778	36	132.7	ECL 4 MH UV FR 850	4921	36	136.7
ECL 4 HI UV FR 835	6436	46	139.9	ECL 4 HI UV FR 840	6635	46	144.2	ECL 4 HI UV FR 850	6834	46	148.6
ECL 4 VH UV FR 835	8543	68	125.6	ECL 4 VH UV FR 840	8807	68	129.5	ECL 4 VH UV FR 850	9071	68	133.4
ECL 6 LW UV FR 835	2994	22	136.1	ECL 6 LW UV FR 840	3086	22	140.3	ECL 6 LW UV FR 850	3179	22	144.5
ECL 6 MD UV FR 835	6221	54	115.2	ECL 6 MD UV FR 840	6413	54	118.8	ECL 6 MD UV FR 850	6606	54	122.3
ECL 6 HI UV FR 835	9457	70	135.1	ECL 6 HI UV FR 840	9750	70	139.3	ECL 6 HI UV FR 850	10042	70	143.5
ECL 6 VH UV FR 835	11923	95	125.5	ECL 6 VH UV FR 840	12292	95	129.4	ECL 6 VH UV FR 850	12660	95	133.3
ECL 8 LW UV FR 835	4070	30	135.7	ECL 8 LW UV FR 840	4195	30	139.8	ECL 8 LW UV FR 850	4321	30	144.0
ECL 8 ML UV FR 835	5878	44	133.6	ECL 8 ML UV FR 840	6060	44	137.7	ECL 8 ML UV FR 850	6242	44	141.9
ECL 8 MD UV FR 835	7709	64	120.5	ECL 8 MD UV FR 840	7948	64	124.2	ECL 8 MD UV FR 850	8186	64	127.9
ECL 8 MD HE UV FR 835	7726	56	137.3	ECL 8 MD HE UV FR 840	7965	56	141.5	ECL 8 MD HE UV FR 850	8204	56	145.7
ECL 8 MH UV FR 835	10331	78	132.5	ECL 8 MH UV FR 840	10651	78	136.6	ECL 8 MH UV FR 850	10971	78	140.6
ECL 8 HI UV FR 835	11912	87	136.9	ECL 8 HI UV FR 840	12281	87	141.2	ECL 8 HI UV FR 850	12649	87	145.4
ECL 8 VH UV FR 835	16619	135	123.1	ECL 8 VH UV FR 840	17133	135	126.9	ECL 8 VH UV FR 850	17647	135	130.7

Controls available:



1) The Wattstopper FSP sensor mounted on the LED tray. 2) The Wattstopper FSP sensor mounted on the end cap. 3) The FSIR-100 wireless configuration tool.

Occupancy Sensors (on/off/dim)

- The Wattstopper FSP sensor provides multi-level control based on motion and or/daylight contribution
- Comes either pre-installed on the end cap or on the LED tray (in the center of a 4' fixture, staggered to one side on an 8' fixture)
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Two lenses available for the end-mounted sensor, tailored for the ideal detection area and mounting height:
 - **FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - **FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height

Microwave Occupancy Sensor (OSM)

The Leviton OSM3D-V1W (or equivalent) detects motion through low density materials using high frequency electromagnetic waves. This means it can sit discretely behind the ECL's frosted lens. The OSM features automatic switching based on motion and ambient light level.



Need another option?
If you need a different control system - such as Nedap, Daintree, or another IoT-based system, just contact us. We can incorporate it.

Photometric Data:

ECL 4 MD UV 835

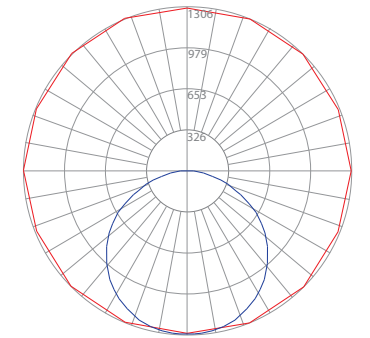
Test No.: LLIA000584-035
Luminaire Lumens: 3,832 lm
Luminaire Watts: 32.0W
Efficacy: 119.7 LPW
Spacing Criterion (0-180): 1.30
Spacing Criterion (90-270): 1.28

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9235	9059	8867
55	8996	8731	8490
65	8454	8006	7741
75	7075	6525	6317
85	3661	3475	3231

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88		
2	99	90	83	78	96	88	82	77	85	80	75	82	77	73		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62		
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52		
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45		
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40		
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35		
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31		
9	56	42	34	29	55	42	34	29	41	33	28	40	33	28		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26		



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	477.46	12.50
0-30	1019.39	26.60
0-40	1681.25	43.90
0-60	3014.67	78.70
0-80	3768.32	98.30
0-90	3831.59	100.00
90-120	0.41	0.00
90-130	0.41	0.00
90-150	0.41	0.00
90-180	0.41	0.00
0-180	3832.00	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

ECL 4 MD UV FR 835

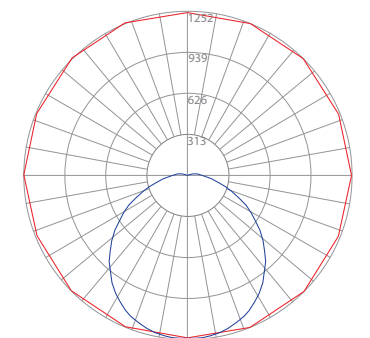
Test No.: LLIA000614-007
Luminaire Lumens: 3,683 lm
Luminaire Watts: 31.5W
Efficacy: 116.9 LPW
Spacing Criterion (0-180): 1.26
Spacing Criterion (90-270): 1.28

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7819	7539	7456
55	6856	6841	6847
65	5573	5936	6015
75	4180	5033	4992
85	3378	4593	4238

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105		
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86		
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71		
3	89	78	70	63	86	77	69	63	73	67	61	70	65	60		
4	82	69	60	54	79	68	60	53	65	58	52	62	56	51		
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39		
7	64	51	42	36	62	50	41	35	48	40	35	46	40	35		
8	60	46	38	32	58	45	37	31	44	36	31	42	36	31		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28		
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25		



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	457.01	12.40
0-30	972.24	26.40
0-40	1591.93	43.20
0-60	2792.60	75.80
0-80	3480.09	94.50
0-90	3611.53	98.10
90-120	71.49	1.90
90-130	71.50	1.90
90-150	71.50	1.90
90-180	71.50	1.90
0-180	3683.03	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Advanced Controls Available

We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. Contact the factory for more info.



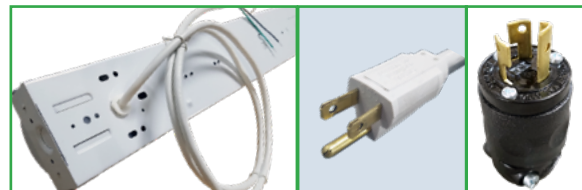
Other Options:



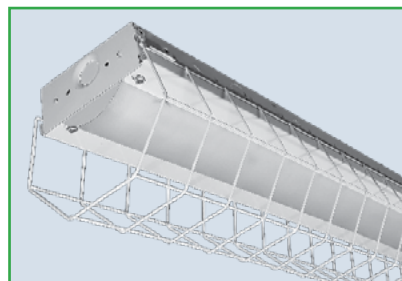
Shielding Frosted acrylic diffuser lenses minimize glare and improve aesthetics.



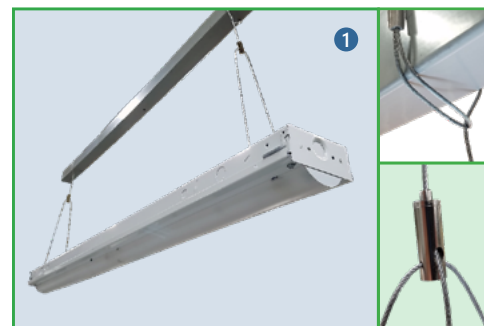
Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



Wireguards are available for added protection (shipped separately).



Hanging The QC hanging kit (1) comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture. V-hangers (2) and slide hangers (3) are also optional.



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ECL N LED Narrow Strip

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser helps minimize glare and improve aesthetics
- Optional integral track head receptacles - compatible with all Juno and A-Line style track heads (*track heads not included*)

Applications:

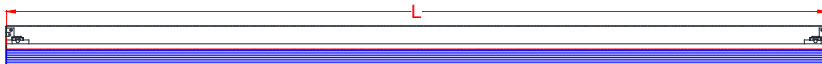
Suitable for most commercial and institutional applications

- Office
- Retail
- Coves
- Valences

Ambient Operating Temp:

- -30°C to 40°C

Schematic:



Length (L):

- 2' = 24"
- 3' = 36"
- 4' = 46" (48" optional)
- 6' = 72"
- 8' = 92" (96" optional)
- 12' = 138" (144" optional)
- 16' = 184" (192" optional)

Width (W) = 2.500"

Height (H) = 2.165"

With track head options:

Width (W) = 3.18"
 Height (H) = 2.54"



Construction:

- Precision brake formed from cold rolled steel
- Highly durable white finish. Matte white or matte black finish optional.

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations

Predicted L70 Lifetime:

- ≥120,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



ECL N LED Narrow Strip



Ordering Guide:

example: ECL N 8 MD UV FR 840-MW-QC TR1E QMH(A)

Series	Width	Length	Output	Voltage	Shielding	CRI/CCT	Finish	Mounting	Options
ECL	N								
ECL	N	2	LW MD HI VH	UV 34	Blank FR	835 840 850	Blank MW MB	Blank QC	Blank C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-211B-Lx) OS(FSP-221B-Lx) OSP OSM PC CC BAA 48" 96" 144" 192" EM1 EM2 TR1E 2TR1E TR2E TR1M TR2M QWH(*)
		3	LW MD						
		4	LW LW HE ML HE MD MD HE MH MH HE HI HI HE VH VH HE						
		6	LW MD HI VH						
		8	LW LW HE ML ML HE MD MD HE MH MH HE HI HI HE VH VH HE						
		12	LW HE ML HE MD HE						
		16	LW HE ML HE						

Width:	N	Narrow	Mounting:	Blank QC	None 10' Quick Hang Cable Kit
Length:	2 3 4 6 8 12 16	24" 36" 46" (48" optional) 72" 92" (96" optional) 138" (144" optional) 184" (192" optional)	Options:	Blank C6 C10 D6 D10 P(NEMA) OS OSD OS(FSP-211B-Lx) OS(FSP-221B-Lx) OSP OSM PC CC BAA 48" 96" 144" 192" EM1 EM2	None 6' Single Circuit Cord 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord Plug (Specify NEMA configuration) End-Mounted Occupancy Sensor (on/off) End-Mounted Occupancy Sensor (on/off/dim) Wattstopper Occupancy Sensor (on/off/dim) for 120/277V (*x" = lens type. See Page 4 for lens type descriptions) Wattstopper Occupancy Sensor (on/off/dim) for 100-347V, or 208/230/480V (*x" = lens type. See Page 4 for lens type descriptions) End-Mounted Occupancy Sensor with Photocell Microwave Sensor (not available in 2', 3' or standard 4') Photocell Conformal Coating Buy American Act Compliant 48" length (available on 4' model only - standard is 46" length) 96" length (available on 8' model only - standard is 92" length) 144" length (available on 12' model only - standard is 138" length) 192" length (available on 16' model only - standard is 184" length) Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient) Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient) Single Track Head Receptacle on One End Single Track Head Receptacle on Each End (8' model only) Double Track Head Receptacles on One End (8' model only) Single Track Head Receptacle in Middle (8' model only) Double Track Head Receptacles in Middle (8' model only) Quick Wire Harness *(for 2 circuit wiring, specify circuit A or B)
Lumen Output:	LW LW HE ML ML HE MD MD HE MH MH HE HI HI HE VH VH HE	Low (2', 3', 4', 6', 8' models only) Low - High Efficiency (4', 8', 12', 16' models only) Medium Low (8' model only) Medium Low - High Efficiency (4', 8', 12', 16' models only) Medium (2', 3', 4', 6', 8' models only) Medium - High Efficiency (4', 8', 12' models only) Medium High (4' & 8' models only) Medium High - High Efficiency (4' & 8' models only) High (2', 4', 6', 8' models only) High - High Efficiency (4' & 8' models only) Very High (2', 4', 6', 8' models only) Very High - High Efficiency (4' & 8' models only)	CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K
Voltage:	UV 34	120-277V 347V	Finish:	Blank MW MB	White Matte White Matte Black

Notes: (1) 120V only - track head not included - compatible with all Juno and A-Line style track heads

ECL N LED Narrow Strip



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
ECL N 2 LW UV FR 835	882	8	110.3	ECL N 2 LW UV FR 840	911	8	113.9	ECL N 2 LW UV FR 850	939	8	117.3
ECL N 2 MD UV FR 835	1852	18	105.8	ECL N 2 MD UV FR 840	1913	18	109.3	ECL N 2 MD UV FR 850	1971	18	112.6
ECL N 2 HI UV FR 835	2831	23	123.1	ECL N 2 HI UV FR 840	2925	23	127.2	ECL N 2 HI UV FR 850	3012	23	131.0
ECL N 2 VH UV FR 835	3754	32	117.3	ECL N 2 VH UV FR 840	3879	32	121.2	ECL N 2 VH UV FR 850	3995	32	124.8
ECL N 3 LW UV FR 835	1365	11	124.1	ECL N 3 LW UV FR 840	1410	11	128.2	ECL N 3 LW UV FR 850	1452	11	132.0
ECL N 3 MD UV FR 835	2906	23	126.3	ECL N 3 MD UV FR 840	3002	23	130.5	ECL N 3 MD UV FR 850	3092	23	134.4
ECL N 4 LW UV FR 835	2199	18	122.2	ECL N 4 LW UV FR 840	2272	18	126.2	ECL N 4 LW UV FR 850	2340	18	130.0
ECL N 4 MD UV FR 835	3605	32	114.4	ECL N 4 MD UV FR 840	3724	32	118.2	ECL N 4 MD UV FR 850	3836	32	121.8
ECL N 4 MH UV FR 835	4498	36	124.9	ECL N 4 MH UV FR 840	4647	36	129.1	ECL N 4 MH UV FR 850	4786	36	133.0
ECL N 4 HI UV FR 835	5762	46	125.3	ECL N 4 HI UV FR 840	5953	46	129.4	ECL N 4 HI UV FR 850	6131	46	133.3
ECL N 4 VH UV FR 835	7951	68	116.9	ECL N 4 VH UV FR 840	8214	68	120.8	ECL N 4 VH UV FR 850	8461	68	124.4
ECL N 6 LW UV FR 835	2864	22	130.2	ECL N 6 LW UV FR 840	2958	22	134.5	ECL N 6 LW UV FR 850	3047	22	138.5
ECL N 6 MD UV FR 835	6021	54	111.5	ECL N 6 MD UV FR 840	6220	54	115.2	ECL N 6 MD UV FR 850	6407	54	118.6
ECL N 6 HI UV FR 835	8896	70	127.1	ECL N 6 HI UV FR 840	9190	70	131.3	ECL N 6 HI UV FR 850	9466	70	135.2
ECL N 6 VH UV FR 835	11174	95	117.6	ECL N 6 VH UV FR 840	11544	95	121.5	ECL N 6 VH UV FR 850	11890	95	125.2
ECL N 8 LW UV FR 835	3938	30	131.3	ECL N 8 LW UV FR 840	4068	30	135.6	ECL N 8 LW UV FR 850	4190	30	139.7
ECL N 8 ML UV FR 835	5424	44	123.3	ECL N 8 ML UV FR 840	5604	44	127.4	ECL N 8 ML UV FR 850	5772	44	131.2
ECL N 8 MD UV FR 835	7339	64	114.7	ECL N 8 MD UV FR 840	7581	64	118.5	ECL N 8 MD UV FR 850	7809	64	122.0
ECL N 8 MH UV FR 835	9703	78	124.4	ECL N 8 MH UV FR 840	10024	78	128.5	ECL N 8 MH UV FR 850	10324	78	132.4
ECL N 8 HI UV FR 835	11203	87	128.8	ECL N 8 HI UV FR 840	11573	87	133.0	ECL N 8 HI UV FR 850	11920	87	137.0
ECL N 8 VH UV FR 835	15815	135	117.1	ECL N 8 VH UV FR 840	16337	135	121.0	ECL N 8 VH UV FR 850	16827	135	124.6
ECL N 4 LW HE UV FR 835	2194	15	146.3	ECL N 4 LW HE UV FR 840	2262	15	150.8	ECL N 4 LW HE UV FR 850	2330	15	155.3
ECL N 4 ML HE UV FR 835	2914	20	145.7	ECL N 4 ML HE UV FR 840	3004	20	150.2	ECL N 4 ML HE UV FR 850	3094	20	154.7
ECL N 4 MD HE UV FR 835	4000	28	145.5	ECL N 4 MD HE UV FR 840	4124	28	150.0	ECL N 4 MD HE UV FR 850	4248	28	154.5
ECL N 4 MH HE UV FR 835	4850	34	142.7	ECL N 4 MH HE UV FR 840	5000	34	147.1	ECL N 4 MH HE UV FR 850	5150	34	151.5
ECL N 4 HI HE UV FR 835	6087	44	138.3	ECL N 4 HI HE UV FR 840	6275	44	142.6	ECL N 4 HI HE UV FR 850	6464	44	146.9
ECL N 4 VH HE UV FR 835	7887	60	131.4	ECL N 4 VH HE UV FR 840	8131	60	135.5	ECL N 4 VH HE UV FR 850	8374	60	139.6
ECL N 8 LW HE UV FR 835	3945	26	151.7	ECL N 8 LW HE UV FR 840	4067	26	156.4	ECL N 8 LW HE UV FR 850	4189	26	161.1
ECL N 8 ML HE UV FR 835	5948	40	148.7	ECL N 8 ML HE UV FR 840	6132	40	153.3	ECL N 8 ML HE UV FR 850	6316	40	157.9
ECL N 8 MD HE UV FR 835	7867	54	145.7	ECL N 8 MD HE UV FR 840	8110	54	150.2	ECL N 8 MD HE UV FR 850	8353	54	154.7
ECL N 8 MH HE UV FR 835	9701	68	142.7	ECL N 8 MH HE UV FR 840	10001	68	147.1	ECL N 8 MH HE UV FR 850	10301	68	151.5
ECL N 8 HI HE UV FR 835	11814	85	139.0	ECL N 8 HI HE UV FR 840	12180	85	143.3	ECL N 8 HI HE UV FR 850	12545	85	147.6
ECL N 8 VH HE UV FR 835	15773	120	131.4	ECL N 8 VH HE UV FR 840	16261	120	135.5	ECL N 8 VH HE UV FR 850	16749	120	139.6
ECL N 12 LW HE UV FR 835	5771	38	151.9	ECL N 12 LW HE UV FR 840	5949	38	156.6	ECL N 12 LW HE UV FR 850	6128	38	161.3
ECL N 12 ML HE UV FR 835	8922	60	148.7	ECL N 12 ML HE UV FR 840	9198	60	153.3	ECL N 12 ML HE UV FR 850	9474	60	157.9
ECL N 12 MD HE UV FR 835	11666	80	145.8	ECL N 12 MD HE UV FR 840	12027	80	150.3	ECL N 12 MD HE UV FR 850	12387	80	154.8
ECL N 16 LW HE UV FR 835	7889	52	151.7	ECL N 16 LW HE UV FR 840	8133	52	156.4	ECL N 16 LW HE UV FR 850	8377	52	161.1
ECL N 16 ML HE UV FR 835	11896	80	148.7	ECL N 16 ML HE UV FR 840	12264	80	153.3	ECL N 16 ML HE UV FR 850	12632	80	157.9

Scaling Factor:
No lens: 1.05

Controls available:



FSIR-100

FSP-211B with L7 lens

Dimming Sensors OS(FSP-211B/221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - **FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - **FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height
 - **FSP-L7:** 360° lens, maximum coverage 100', diameter from 40' height

On/Off Occupancy Sensors (OS)

An optional occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured right), or an equivalent.



Occupancy Sensors with Photocell (OSP)

The OSP turns luminaire on or off based on occupancy or available natural light to help maximize energy savings. OSP used: Leviton OSFHP (pictured left) or an equivalent.

Microwave Occupancy Sensor (OSM)

The Leviton OSM3D-V1W (or equivalent) detects motion through low density materials using high frequency electromagnetic waves. This means it can sit discretely behind the ECLN's frosted lens. The OSM features automatic switching based on motion and ambient light level.



Need another option?

If you need a different control system - such as Nedap, Daintree, or another IoT-based system, just contact us. We can incorporate it.



Advanced Controls Available

We offer robust network control options and IoT compatibility with products from Magnum Energy Solutions and Leviton. Contact the factory for more info.



Other Options:



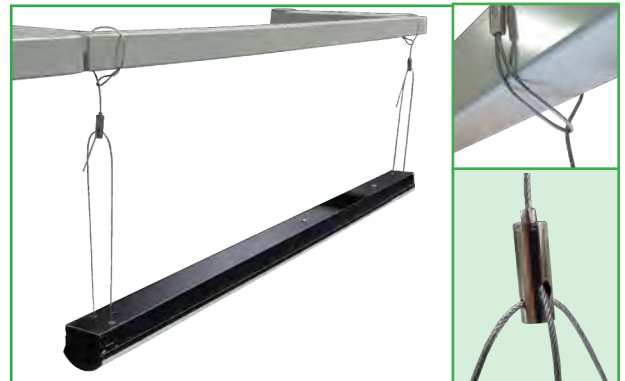
Shielding Frosted acrylic diffuser lenses minimize glare and improve aesthetics.



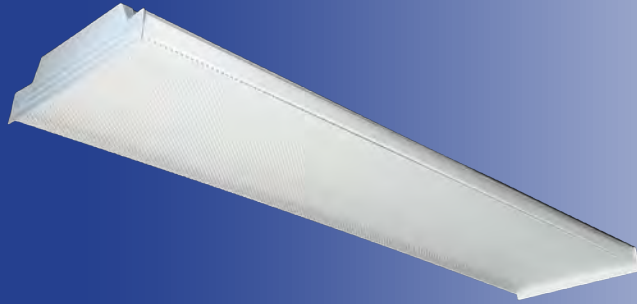
Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments.



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



Hanging The QC hanging kit from ALP comes in 10' or 20'. Cables are pre-looped for easy installation and designed for easy fixture height adjustment. When ordered, QCs come boxed with each fixture.



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EWL LED Wrap

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Can be surface, stem, or cable mounted as individual units or in continuous rows.

Applications:

- Suitable for industrial, retail, and institutional applications
- Warehouse
 - Manufacturing Facility
 - Stock Room
 - Classroom

Ambient Operating Temp:

- -30°C to 40°C

Construction:

- Die-formed heavy-gauge cold rolled steel
- Pre-painted with a highly durable, highly reflective white finish
- Clear Prismatic Acrylic Lens

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
 - >72,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: EWL 2 MD UV PH 840-QC

Series	Length	Output	Voltage	Shielding	CRI/CCT	Width	Hanging	Options
EWL				CPA				
EWL	2 4	LW MD HI	UV 34	CPA	835 840 850	9" 11" 16"	Blank VC QC QC15 QC20	Blank OS OS(FSP-211B-Lx) OS(FSP-221B-Lx) OSP OSM PC F EM1 EM2 CC BAA

Length:	2 2' 4 4'	Hanging:	Blank VC QC QC15 QC20	None V-Chain Hangers 10' Quick Hang Cable Kit 15' Quick Hang Cable Kit 20' Quick Hang Cable Kit
Lumen Output:	LW Low MD Medium HI High	Options:	Blank OS OS(FSP-211B-Lx) OS(FSP-221B-Lx)	None Occupancy Sensor (on/off) Wattstopper Occupancy Sensor (on/off/dim) for 120/277V ("x" = lens type. See bottom of page for lens type descriptions) Wattstopper Occupancy Sensor (on/off/dim) for 100-347V, or 208/230/480V ("x" = lens type. See bottom of page for lens type descriptions)
Voltage:	UV 120-277V 34 347V			
Shielding:	CPA Clear Prismatic Acrylic			
CRI/CCT:	835 80 CRI / 3500K 840 80 CRI / 4000K 850 80 CRI / 5000K			
Width:	9" 9.25" 11" 11.25" 16" 16.00"			

Dimming Sensors OS(FSP-211B/221B)

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - **FSP-L2:** 360° lens, maximum coverage 48', diameter from 8' height
 - **FSP-L3:** 360° lens, maximum coverage 40', diameter from 20' height
 - **FSP-L7:** 360° lens, maximum coverage 100', diameter from 40' height



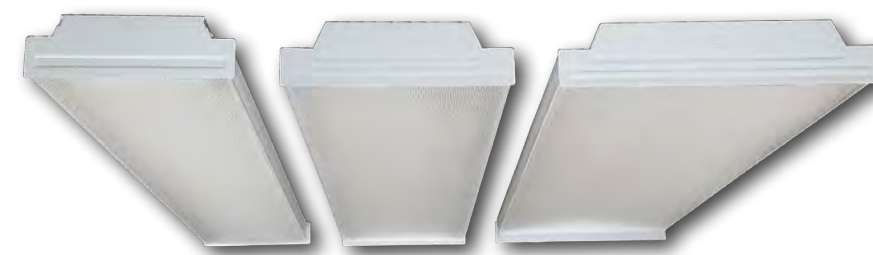
FSIR-100

Performance Chart:

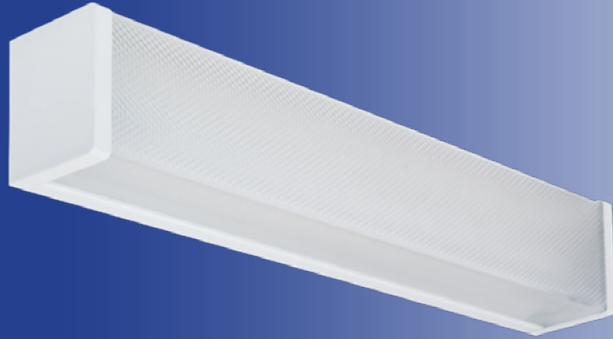
Catalog #	Lumens	Watts	LPW
EWL 2 LW UV CPA 835	2041	17	121.2
EWL 2 MD UV CPA 835	3031	25	120.1
EWL 2 HI UV CPA 835	3930	33	117.3
EWL 4 LW UV CPA 835	4190	33	126.9
EWL 4 MD UV CPA 835	6062	49	123.0
EWL 4 HI UV CPA 835	7859	67	117.3

Catalog #	Lumens	Watts	LPW
EWL 2 LW UV CPA 840	2108	17	125.3
EWL 2 MD UV CPA 840	3131	25	124.1
EWL 2 HI UV CPA 840	4060	33	121.2
EWL 4 LW UV CPA 840	4328	33	131.1
EWL 4 MD UV CPA 840	6263	49	127.0
EWL 4 HI UV CPA 840	8119	67	121.2

Catalog #	Lumens	Watts	LPW
EWL 2 LW UV CPA 850	2171	17	129.0
EWL 2 MD UV CPA 850	3225	25	127.8
EWL 2 HI UV CPA 850	4181	33	124.9
EWL 4 LW UV CPA 850	4458	33	135.0
EWL 4 MD UV CPA 850	6451	49	130.8
EWL 4 HI UV CPA 850	8363	67	124.9



The EWL is available in three widths: 9", 11", and 16".



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EVL LED Vanity Wrap

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Optional Motion/Sound sensor available
- Slide-on and mouse hole ends available as ends with tapped holes to accommodate tamper-proof screws

Applications:

- Suitable for wall and ceiling mount applications
- Bathrooms
 - Corridors
 - Stairwells

Ambient Operating Temp:

- -30°C to 40°C

Construction:

- Heavy-gauge cold rolled steel housing and end caps
- Clear prismatic acrylic lens
- White powder coat finish

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
 - >72,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: EVL 2 MD UV CPA 840-MSS

Series	Length	Output	Voltage	Shielding	CRI/CCT	-	Options
EVL				CPA		-	
EVL	2 3 4	LW MD	UV 34	CPA	835 840 850		Blank MSS SO MH TH CC BAA

Length: 2 2'
3 3'
4 4'

CRI/CCT: 835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

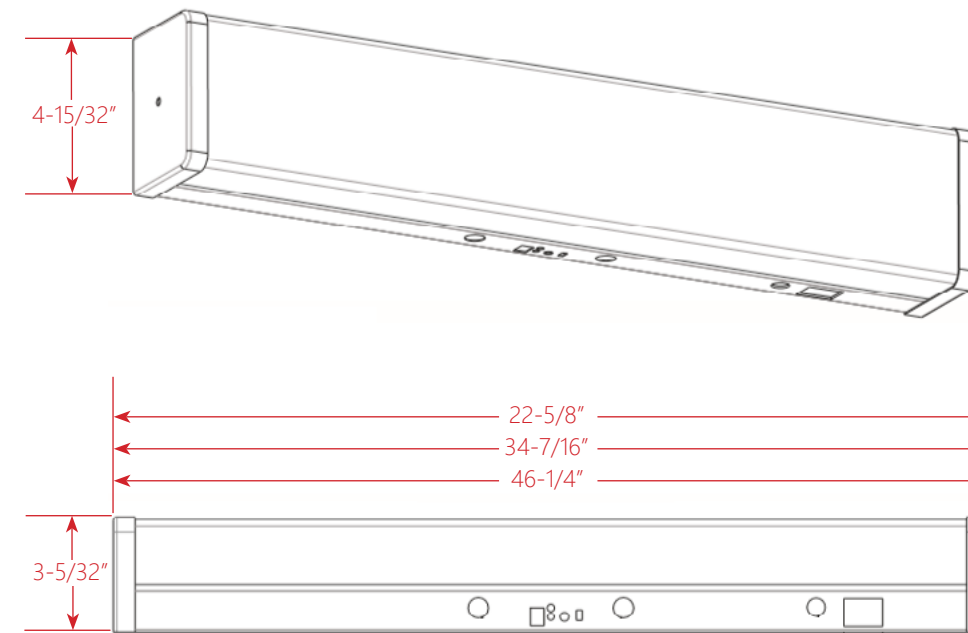
Lumen Output: LW Low
MD Medium

Options: Blank None
MSS Motion/Sound Sensor
SO Slide-on End Caps
MH Mouse Hole End Caps
TH Tapped Hole End Caps
CC Conformal Coating
BAA Buy American Act Compliant

Voltage: UV 120-277V
34 347V

Shielding: CPA Clear Prismatic Acrylic

Schematic:



Motion/Sound Sensors



Mouse Hole End Cap



Tapped Hole End Cap

Performance Chart:

Catalog #	Lumens	Watts	LPW
EVL 2 LW UV CPA 835	1080	9	122.1
EVL 2 MD UV CPA 835	1878	15	122.7
EVL 3 LW UV CPA 835	1565	13	118.8
EVL 3 MD UV CPA 835	2956	26	115.9
EVL 4 LW UV CPA 835	2161	17	126.8
EVL 4 MD UV CPA 835	3757	30	127.2

Catalog #	Lumens	Watts	LPW
EVL 2 LW UV CPA 840	1116	9	126.2
EVL 2 MD UV CPA 840	1940	15	126.8
EVL 3 LW UV CPA 840	1616	13	122.7
EVL 3 MD UV CPA 840	3054	26	119.8
EVL 4 LW UV CPA 840	2232	17	131.0
EVL 4 MD UV CPA 840	3881	30	131.4

Catalog #	Lumens	Watts	LPW
EVL 2 LW UV CPA 850	1149	9	129.9
EVL 2 MD UV CPA 850	1999	15	130.6
EVL 3 LW UV CPA 850	1665	13	126.4
EVL 3 MD UV CPA 850	3145	26	123.3
EVL 4 LW UV CPA 850	2299	17	134.9
EVL 4 MD UV CPA 850	3997	30	135.4



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFL P LED Lensed Industrial

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Available in 4-foot and 8-foot variations, and a wide variety of lumen outputs for maximum flexibility

Applications:

- Suitable for most indoor industrial, commercial and institutional applications
- Office
 - Retail
 - Warehouse
 - Classrooms

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Precision brake formed from cold rolled steel
- Frosted acrylic diffuser
- Matte white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: FFL P 8 MD UV FA 840-EM1

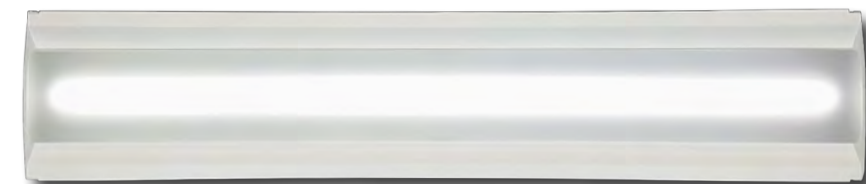
Series	Size	Output	Performance	Voltage	Shielding	CRI/CCT	Hanging	Options
FFL P					FA		-	
FFL P	4 8	VL LW MD HI VH SH	Blank HE	UV 34	FA	830 835 840 850	Blank VC QC QC20	Blank C6 C10 P(NEMA) OSM OSMD EM1 EM2

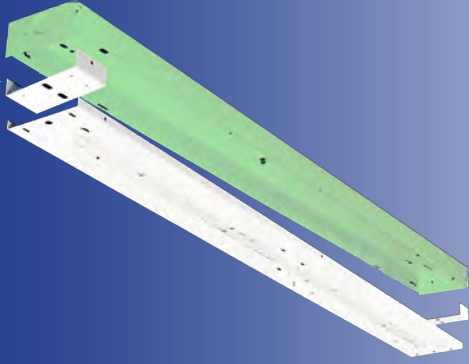
Size:	4 8	4' 8'		CRI/CCT:	830 835 840 850	80 CRI / 3000K 80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K
Lumen Output:	VL LW MD HI VH SH	Very Low Low Medium High High SH		Hanging:	Blank VC QC QC20	None (surface or pendant mount) V-Chain Hangers 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit
Performance:	Blank HE	Standard High Efficiency (<i>not available on VL models</i>)		Options:	Blank C6 C10 P(NEMA) OSM OSMD EM1 EM2	None 6' Single Circuit Cord 10' Single Circuit Cord Plug (Specify NEMA configuration) Microwave Occupancy Sensor (On/Off) Microwave Occupancy Sensor (On/Off/Dim) w/ Photocell Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient) Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)
Voltage:	UV 34	120-277V 347V				
Shielding:	FA	Frosted Acrylic Diffuser				



Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFL P 4 VL UV FA 8xx	18	2523	140.2	2565	142.5	2650	147.2	2730	151.7
FFL P 4 LW UV FA 8xx	29	3805	131.2	3869	133.4	3997	137.8	4117	142.0
FFL P 4 MD UV FA 8xx	34	4319	127.0	4392	129.2	4537	133.4	4673	137.4
FFL P 4 HI UV FA 8xx	39	4958	127.1	5042	129.3	5208	133.6	5365	137.6
FFL P 4 VH UV FA 8xx	48	5846	121.8	5945	123.8	6141	127.9	6325	131.8
FFL P 4 SH UV FA 8xx	63	7760	123.2	7890	125.2	8151	129.4	8395	133.3
FFL P 8 VL UV FA 8xx	35	5091	145.5	5176	147.9	5348	152.8	5508	157.4
FFL P 8 LW UV FA 8xx	57	7721	135.5	7851	137.7	8110	142.3	8354	146.6
FFL P 8 MD UV FA 8xx	65	8670	133.4	8816	135.6	9107	140.1	9381	144.3
FFL P 8 HI UV FA 8xx	74	9618	130.0	9779	132.2	10102	136.5	10406	140.6
FFL P 8 VH UV FA 8xx	86	11474	133.4	11667	135.7	12053	140.1	12414	144.4
FFL P 8 SH UV FA 8xx	128	15706	122.7	15970	124.8	16498	128.9	16993	132.8
FFL P 4 LW HE UV FA 8xx	27	3756	139.1	3819	141.4	3945	146.1	4063	150.5
FFL P 4 MD HE UV FA 8xx	32	4367	136.5	4440	138.8	4587	143.3	4725	147.6
FFL P 4 HI HE UV FA 8xx	36	4840	134.4	4921	136.7	5084	141.2	5236	145.4
FFL P 4 VH HE UV FA 8xx	43	5795	134.8	5892	137.0	6087	141.6	6270	145.8
FFL P 4 SH HE UV FA 8xx	60	7624	127.1	7752	129.2	8009	133.5	8249	137.5
FFL P 8 LW HE UV FA 8xx	54	7726	143.1	7856	145.5	8116	150.3	8359	154.8
FFL P 8 MD HE UV FA 8xx	60	8486	141.4	8629	143.8	8914	148.6	9182	153.0
FFL P 8 HI HE UV FA 8xx	70	9829	140.4	9994	142.8	10324	147.5	10634	151.9
FFL P 8 VH HE UV FA 8xx	86	11725	136.3	11922	138.6	12316	143.2	12686	147.5
FFL P 8 SH HE UV FA 8xx	120	15426	128.5	15685	130.7	16203	135.0	16689	139.1





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RCL LED Channel Retrofit Kit

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser available to help minimize glare and improve aesthetics
- A wide variety of lumen packages and lengths allows for flexibility in design and helps maximize energy savings
- Saves on installation cost, material cost, and waste

Applications:

Suitable for most commercial, industrial and institutional applications

- Office
- Retail
- Warehouse
- Coves
- Valences

Ambient Operating Temp:

- -30°C to 40°C

Predicted L70 Lifetime:

- ≥120,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Precision brake formed from heavy gauge cold rolled steel
- Highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)

10 YEAR
 EXTENDED
 WARRANTY
AVAILABLE ON
 CERTAIN MODELS



Powered by:



Ordering Guide:

example: RCL 8 MH UV 840-4.25"-EM1

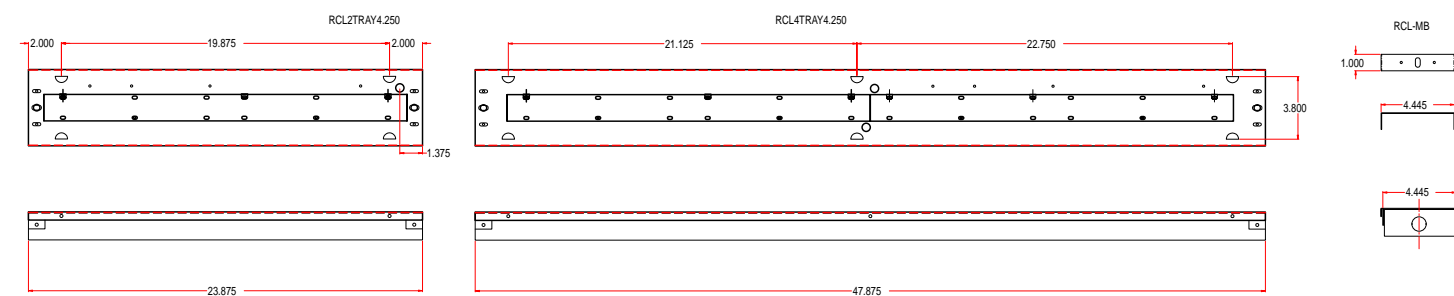
Series	Length	Output	Voltage	Shielding	CRI/CCT	Channel Width	Options
RCL						-	-
RCL	2 3 4 6 8	LW ML MD MD HE MH HI VH	UV 34	Blank FR	835 840 850	X.XX" VAR	EXT10 OSM EM1 EM2 CC BAA

Accessories (Order separately):
SDT(480V) - 480V to 277V Step Down Transformer

Length:	2	2'
	3	3'
	4	4'
	6	6'
	8	8'
Lumen Output:	LW	Low
	ML	Medium Low (8' model only)
	MD	Medium
	MD HE	Medium-High Efficiency (8' model only)
	MH	Medium High (4' & 8' model only)
	HI	High (not available in 3' model)
	VH	Very High (not available in 3' model)
Voltage:	UV	120-277V
	34	347V

Shielding:	Blank FR	None Frosted Acrylic
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K
Channel Width:	X.XX" VAR	Specify Channel Width (in Inches) Variable - adjusts to fit channel widths 4.00" to 5.00"
Options:	EXT10 OSM EM1 EM2 CC BAA	10 yr extended warranty (Not available on all models. Certain conditions apply. Consult factory or sales representative for details.) Microwave Occupancy Sensor Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient) Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient) Conformal Coating Buy American Act Compliant

Schematic:



Performance Chart:

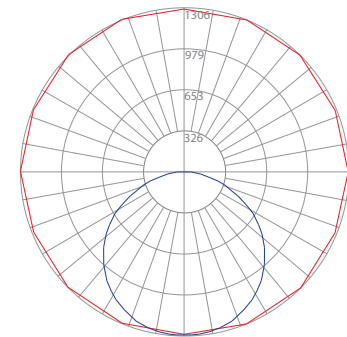
Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
RCL 2 LW UV 835	837	8	104.7	RCL 2 LW UV 840	863	8	107.9	RCL 2 LW UV 850	889	8	111.1
RCL 2 MD UV 835	1950	17.5	111.4	RCL 2 MD UV 840	2011	17.5	114.9	RCL 2 MD UV 850	2071	17.5	118.3
RCL 2 HI UV 835	3085	23	134.1	RCL 2 HI UV 840	3180	23	138.3	RCL 2 HI UV 850	3275	23	142.4
RCL 2 VH UV 835	3963	32	123.9	RCL 2 VH UV 840	4086	32	127.7	RCL 2 VH UV 850	4208	32	131.5
RCL 3 LW UV 835	1241	11	112.8	RCL 3 LW UV 840	1279	11	116.3	RCL 3 LW UV 850	1318	11	119.8
RCL 3 MD UV 835	3183	23	138.4	RCL 3 MD UV 840	3282	23	142.7	RCL 3 MD UV 850	3380	23	147.0
RCL 4 LW UV 835	2305	18	128.0	RCL 4 LW UV 840	2376	18	132.0	RCL 4 LW UV 850	2447	18	136.0
RCL 4 MD UV 835	3832	32	119.7	RCL 4 MD UV 840	3950	32	123.4	RCL 4 MD UV 850	4069	32	127.1
RCL 4 MH UV 835	4829	36	134.1	RCL 4 MH UV 840	4978	36	138.3	RCL 4 MH UV 850	5128	36	142.4
RCL 4 HI UV 835	6705	46	145.8	RCL 4 HI UV 840	6913	46	150.3	RCL 4 HI UV 850	7120	46	154.8
RCL 4 VH UV 835	8901	68	130.9	RCL 4 VH UV 840	9177	68	134.9	RCL 4 VH UV 850	9452	68	139.0
RCL 6 LW UV 835	3119	22	141.8	RCL 6 LW UV 840	3216	22	146.2	RCL 6 LW UV 850	3312	22	150.5
RCL 6 MD UV 835	6482	54	120.0	RCL 6 MD UV 840	6682	54	123.7	RCL 6 MD UV 850	6883	54	127.5
RCL 6 HI UV 835	9854	70	140.8	RCL 6 HI UV 840	10159	70	145.1	RCL 6 HI UV 850	10463	70	149.5
RCL 6 VH UV 835	12423	95	130.8	RCL 6 VH UV 840	12807	95	134.8	RCL 6 VH UV 850	13192	95	138.9
RCL 8 LW UV 835	4240	30	141.3	RCL 8 LW UV 840	4371	30	145.7	RCL 8 LW UV 850	4503	30	150.1
RCL 8 ML UV 835	6125	44	139.2	RCL 8 ML UV 840	6314	44	143.5	RCL 8 ML UV 850	6504	44	147.8
RCL 8 MD UV 835	8033	64	125.5	RCL 8 MD UV 840	8281	64	129.4	RCL 8 MD UV 850	8530	64	133.3
RCL 8 MD HE UV 835	8050	56	143.0	RCL 8 MD HE UV 840	8299	56	147.4	RCL 8 MD HE UV 850	8548	56	151.9
RCL 8 MH UV 835	10765	78	138.0	RCL 8 MH UV 840	11098	78	142.3	RCL 8 MH UV 850	11431	78	146.5
RCL 8 HI UV 835	12988	92	141.2	RCL 8 HI UV 840	13389	92	145.5	RCL 8 HI UV 850	13791	92	149.9
RCL 8 VH UV 835	17316	135	128.3	RCL 8 VH UV 840	17852	135	132.2	RCL 8 VH UV 850	18388	135	136.2
RCL 2 LW UV FR 835	804	8	100.5	RCL 2 LW UV FR 840	828	8	103.6	RCL 2 LW UV FR 850	853	8	106.7
RCL 2 MD UV FR 835	1852	17.5	105.8	RCL 2 MD UV FR 840	1910	17.5	109.1	RCL 2 MD UV FR 850	1967	17.5	112.4
RCL 2 HI UV FR 835	2960	23	128.7	RCL 2 HI UV FR 840	3052	23	132.7	RCL 2 HI UV FR 850	3143	23	136.7
RCL 2 VH UV FR 835	3804	32	118.9	RCL 2 VH UV FR 840	3921	32	122.5	RCL 2 VH UV FR 850	4039	32	126.2
RCL 3 LW UV FR 835	1191	11	108.3	RCL 3 LW UV FR 840	1228	11	111.6	RCL 3 LW UV FR 850	1265	11	115.0
RCL 3 MD UV FR 835	3055	23	132.8	RCL 3 MD UV FR 840	3150	23	136.9	RCL 3 MD UV FR 850	3244	23	141.1
RCL 4 LW UV FR 835	2212	18	122.9	RCL 4 LW UV FR 840	2280	18	126.7	RCL 4 LW UV FR 850	2349	18	130.5
RCL 4 MD UV FR 835	3640	32	115.5	RCL 4 MD UV FR 840	3752	32	119.1	RCL 4 MD UV FR 850	3865	32	122.7
RCL 4 MH UV FR 835	4635	36	128.7	RCL 4 MH UV FR 840	4778	36	132.7	RCL 4 MH UV FR 850	4921	36	136.7
RCL 4 HI UV FR 835	6436	46	139.9	RCL 4 HI UV FR 840	6635	46	144.2	RCL 4 HI UV FR 850	6834	46	148.6
RCL 4 VH UV FR 835	8543	68	125.6	RCL 4 VH UV FR 840	8807	68	129.5	RCL 4 VH UV FR 850	9071	68	133.4
RCL 6 LW UV FR 835	2994	22	136.1	RCL 6 LW UV FR 840	3086	22	140.3	RCL 6 LW UV FR 850	3179	22	144.5
RCL 6 MD UV FR 835	6221	54	115.2	RCL 6 MD UV FR 840	6413	54	118.8	RCL 6 MD UV FR 850	6606	54	122.3
RCL 6 HI UV FR 835	9457	70	135.1	RCL 6 HI UV FR 840	9750	70	139.3	RCL 6 HI UV FR 850	10042	70	143.5
RCL 6 VH UV FR 835	11923	95	125.5	RCL 6 VH UV FR 840	12292	95	129.4	RCL 6 VH UV FR 850	12660	95	133.3
RCL 8 LW UV FR 835	4070	30	135.7	RCL 8 LW UV FR 840	4195	30	139.8	RCL 8 LW UV FR 850	4321	30	144.0
RCL 8 ML UV FR 835	5878	44	133.6	RCL 8 ML UV FR 840	6060	44	137.7	RCL 8 ML UV FR 850	6242	44	141.9
RCL 8 MD UV FR 835	7709	64	120.5	RCL 8 MD UV FR 840	7948	64	124.2	RCL 8 MD UV FR 850	8186	64	127.9
RCL 8 MD HE UV FR 835	7726	56	137.3	RCL 8 MD HE UV FR 840	7965	56	141.5	RCL 8 MD HE UV FR 850	8204	56	145.7
RCL 8 MH UV FR 835	10331	78	132.5	RCL 8 MH UV FR 840	10651	78	136.6	RCL 8 MH UV FR 850	10971	78	140.6
RCL 8 HI UV FR 835	12465	92	135.5	RCL 8 HI UV FR 840	12850	92	139.7	RCL 8 HI UV FR 850	13236	92	143.9
RCL 8 VH UV FR 835	16619	135	123.1	RCL 8 VH UV FR 840	17133	135	126.9	RCL 8 VH UV FR 850	17647	135	130.7

Photometric Data:

RCL 4 MD UV 835

Test No.: LLIA000584-016
Luminaire Lumens: 3,832 lm
Luminaire Watts: 32.0W
Efficacy: 119.7 LPW
Spacing Criterion (0-180): 1.30
Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9235	9059	8867
55	8996	8731	8490
65	8454	8006	7741
75	7075	6525	6317
85	3661	3475	3231



— Vert. Plane
— Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0		119	119	119	119	116	116	116	116	111	111	111	106	106	106	
1		109	104	100	96	106	102	98	94	97	94	91	93	91	88	
2		99	90	83	78	96	88	82	77	85	80	75	82	77	73	
3		90	79	71	64	87	78	70	64	75	68	63	72	66	62	
4		82	70	61	54	80	69	60	54	66	59	53	64	58	52	
5		75	62	53	47	73	61	53	46	59	52	46	57	51	45	
6		70	56	47	41	68	55	47	40	53	46	40	52	45	40	
7		65	51	42	36	63	50	42	36	48	41	35	47	40	35	
8		60	46	38	32	58	46	37	32	44	37	32	43	36	31	
9		56	42	34	29	55	42	34	29	41	33	28	40	33	28	
10		53	39	31	26	51	39	31	26	38	31	26	37	30	26	

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

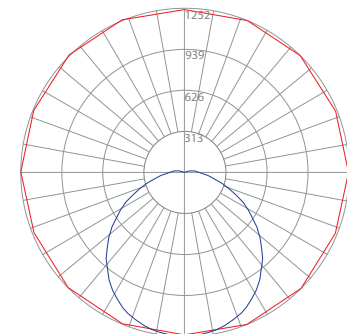
Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	477.46	12.50
0-30	1019.39	26.60
0-40	1681.25	43.90
0-60	3014.67	78.70
0-80	3768.32	98.30
0-90	3831.59	100.00
90-120	0.41	0.00
90-130	0.41	0.00
90-150	0.41	0.00
90-180	0.41	0.00
0-180	3832.00	100.00

RCL 4 MD UV FR 835

Test No.: LLIA000614-009
Luminaire Lumens: 3,683 lm
Luminaire Watts: 31.5W
Efficacy: 116.9 LPW
Spacing Criterion (0-180): 1.26
Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7819	7539	7456
55	6856	6841	6847
65	5573	5936	6015
75	4180	5033	4992
85	3378	4593	4238



— Vert. Plane
— Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method

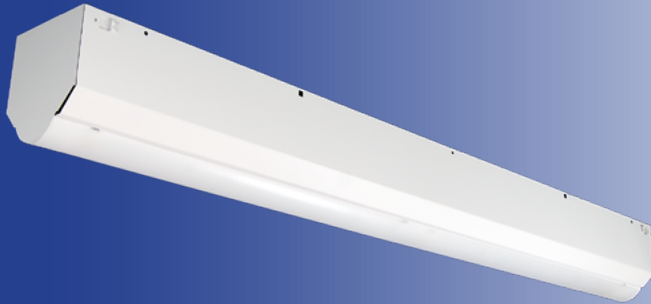
Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0		119	119	119	119	116	116	116	116	110	110	110	105	105	105	
1		108	103	98	94	105	100	96	92	95	92	89	91	88	86	
2		98	89	82	76	95	87	81	75	83	78	73	80	75	71	
3		89	78	70	63	86	77	69	63	73	67	61	70	65	60	
4		82	69	60	54	79	68	60	53	65	58	52	62	56	51	
5		75	62	53	46	73	61	52	46	58	51	45	56	50	44	
6		69	56	47	40	67	55	46	40	53	45	39	51	44	39	
7		64	51	42	36	62	50	41	35	48	40	35	46	40	35	
8		60	46	38	32	58	45	37	31	44	36	31	42	36	31	
9		56	42	34	28	54	42	34	28	40	33	28	39	33	28	
10		52	39	31	26	51	38	31	26	37	30	25	36	30	25	

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	457.01	12.40
0-30	972.24	26.40
0-40	1591.93	43.20
0-60	2792.60	75.80
0-80	3480.09	94.50
0-90	3611.53	98.10
90-120	71.49	1.90
90-130	71.50	1.90
90-150	71.50	1.90
90-180	71.50	1.90
0-180	3683.03	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RCL S LED Slide-on Strip Retrofit Kit

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser helps minimize glare and improve aesthetics
- Quick, easy installation - slips on over existing 4-1/4" wide strip fixture
- All kits prewired with necessary branch circuit wiring and quick-connect to plug into previous kit in continuous row.
- Saves on installation cost, material cost, and waste

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail

Ambient Operating Temp:

- -30°C to 40°C

Construction:

- Precision brake formed from cold rolled steel
- Highly durable matte white finish

Certifications:

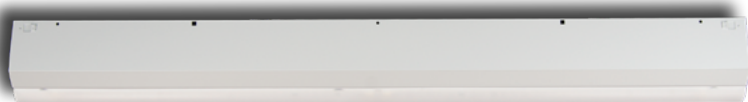
- UL 1598 listed for US and Canada, suitable for damp locations

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Predicted L70 Lifetime:

- ≥120,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)



Powered by:



Ordering Guide:

example: RCL S 8 MD UV FR 840-QWH(A)

Series	Mounting	Length	Output	Voltage	Shielding	CRI/CCT	Wiring	Options
RCL	S				FR		- QWH()	
RCL	S	4	LW	UV	FR	835	QWH(*) <i>*(for 2 circuit wiring, specify circuit A or B)</i>	Blank
			ML			840		OSM
			MD			850		EM1
		12	MH			EM2		
			HI			BAA		
			VH					
16	LW							
	ML							
	MD							

Mounting: S Slide-On over existing fixture

Shielding: FR Frosted Acrylic

Length: 4 4'
8 8'
12 12'
16 16'

CRI/CCT: 835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

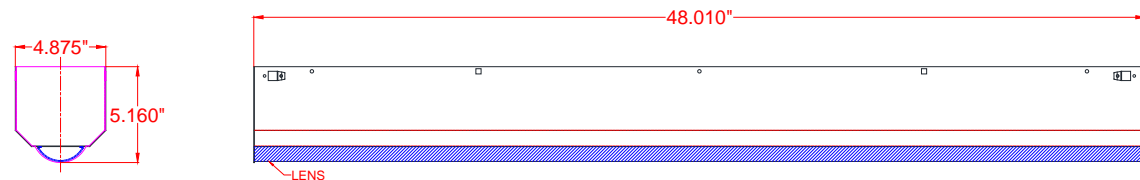
Lumen Output: LW Low
ML Medium Low
MD Medium (*4', 8', 12' only*)
MH Medium High (*4', 8' only*)
HI High (*4', 8' only*)
VH Very High (*4', 8' only*)

Wiring: QWH(*) Quick Wire Harness
**(for 2 circuit wiring, specify circuit A or B)*

Options: Blank None
OSM Microwave Occupancy Sensor (120-277V / 0°C-50°C ambient)
EM1 Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient)
EM2 Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)
BAA Buy American Act Compliant

Voltage: UV 120-277V
34 347V

Schematic:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
RCL S 4 LW UV FR 835	2416	17	142.1	RCL S 4 LW UV FR 840	2496	17	146.8	RCL S 4 LW UV FR 850	2571	17	151.2
RCL S 4 ML UV FR 835	2917	20	145.9	RCL S 4 ML UV FR 840	3014	20	150.7	RCL S 4 ML UV FR 850	3104	20	155.2
RCL S 4 MD UV FR 835	3992	28	142.2	RCL S 4 MD UV FR 840	4124	28	150.0	RCL S 4 MD UV FR 850	4248	28	154.5
RCL S 4 MH UV FR 835	4815	34	141.6	RCL S 4 MH UV FR 840	4974	34	146.3	RCL S 4 MH UV FR 850	5124	34	150.7
RCL S 4 HI UV FR 835	6006	44	136.5	RCL S 4 HI UV FR 840	6205	44	141.0	RCL S 4 HI UV FR 850	6391	44	145.3
RCL S 4 VH UV FR 835	7750	60	129.2	RCL S 4 VH UV FR 840	8007	60	133.4	RCL S 4 VH UV FR 850	8247	60	137.4
RCL S 8 LW UV FR 835	3996	26	153.7	RCL S 8 LW UV FR 840	4128	26	158.8	RCL S 8 LW UV FR 850	4252	26	163.5
RCL S 8 ML UV FR 835	5979	40	149.5	RCL S 8 ML UV FR 840	6176	40	154.4	RCL S 8 ML UV FR 850	6362	40	159.0
RCL S 8 MD UV FR 835	7854	54	145.4	RCL S 8 MD UV FR 840	8114	54	150.3	RCL S 8 MD UV FR 850	8357	54	154.8
RCL S 8 MH UV FR 835	9630	68	141.6	RCL S 8 MH UV FR 840	9949	68	146.3	RCL S 8 MH UV FR 850	10247	68	150.7
RCL S 8 HI UV FR 835	11666	85	137.3	RCL S 8 HI UV FR 840	12052	85	141.8	RCL S 8 HI UV FR 850	12413	85	146.0
RCL S 8 VH UV FR 835	15501	120	129.2	RCL S 8 VH UV FR 840	16013	120	133.4	RCL S 8 VH UV FR 850	16494	120	137.4
RCL S 12 LW UV FR 835	5555	36	154.3	RCL S 12 LW UV FR 840	5739	36	159.4	RCL S 12 LW UV FR 850	5911	36	164.2
RCL S 12 ML UV FR 835	8968	60	149.5	RCL S 12 ML UV FR 840	9265	60	154.4	RCL S 12 ML UV FR 850	9543	60	159.0
RCL S 12 MD UV FR 835	11651	80	145.6	RCL S 12 MD UV FR 840	12036	80	150.4	RCL S 12 MD UV FR 850	12397	80	155.0
RCL S 16 LW UV FR 835	7992	52	153.7	RCL S 16 LW UV FR 840	8256	52	158.8	RCL S 16 LW UV FR 850	8504	52	163.5
RCL S 16 ML UV FR 835	11957	80	149.5	RCL S 16 ML UV FR 840	12353	80	154.4	RCL S 16 ML UV FR 850	12723	80	159.0

Photometric Data:

RCL S 4 MD UV FR 850

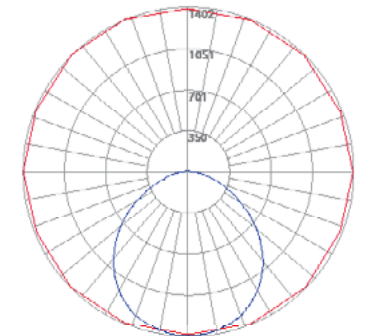
Test No.: LLIA000730-001
Luminaire Lumens: 4,248 lm
Luminaire Watts: 27.5W
Efficacy: 154.5 LPW
Spacing Criterion (0-180): 1.26
Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13128	12232	11965
55	11467	10941	10862
65	9358	9382	9441
75	7152	7786	7738
85	5878	6695	6230

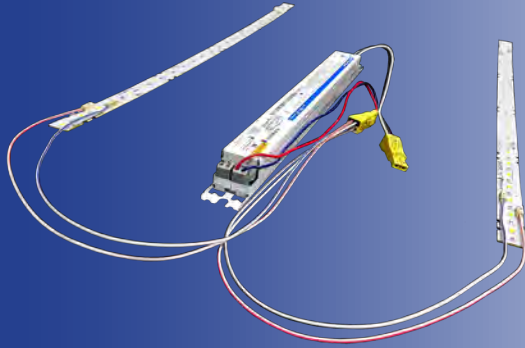
Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	70	50	30	10	70	50	30	10	50	30	10	50	30	10
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104
1	107	102	97	93	104	99	95	92	95	91	88	90	87	85
2	97	89	82	76	94	86	80	74	82	77	72	79	74	70
3	89	78	69	63	86	76	68	62	72	66	60	69	64	59
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50
5	75	61	52	46	72	60	52	45	58	50	44	55	49	44
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25



Zonal Lumen Summary	Lumens	%Fixt
0-20	513.14	12.10
0-30	1093.36	25.70
0-40	1792.71	42.20
0-60	3152.42	74.20
0-80	3952.05	93.00
0-90	4114.36	96.90
90-120	124.84	2.90
90-130	129.51	3.00
90-150	132.43	3.10
90-180	133.70	3.10
0-180	4248.06	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RLK W2 LED Board/Driver 2' Wrap Retrofit Kit

Features:

- High performance, long life LED technology
- 0-10V dimming drivers standard
- Up to 140 lumens per watt
- Pre-wired components and driver quick-disconnect allows for quick and easy installation, saving on labor costs
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Replaces up to 4 lamp F17 T8 systems

Applications:

For use in most existing 2' wrap luminaires. For dry/indoor use only.

Note: Contractor/engineer must ensure proper fit in existing luminaire housing.

Ambient Operating Temp:

- -30°C to 40°C

Certifications:

- UL 1598c listed for US and Canada, suitable for damp locations
- RoHS compliant

Predicted Lifetime:

- L70 > 160,000hrs (calculated)
- L90 > 60,000hrs (reported)
- 90.6% lumen maint. @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

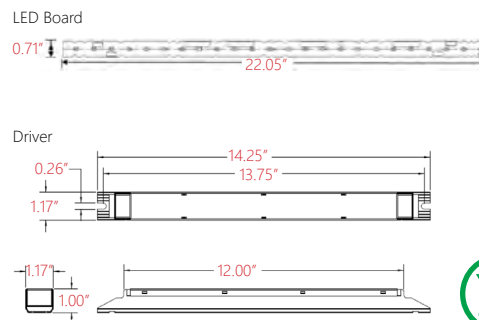
Construction:

- Pre-wired boards and 0-10V driver
- Kit comes with (1 or 2) 2' LED boards wired for (1 or 2) 2' rows of LEDs
- Magnetic fasteners come standard and allow for easy application and adjustment of boards onto existing housing

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Schematic:



Powered by:
Universal
 Lighting Technologies

EVERLINE
 LED Technology

Ordering Guide:

example: RLK W2 1 HI UV 840

Series	Retrofit Type	# of Rows*	Output	Voltage	CRI/CCT	Options
RLK	W2			UV		-
RLK	W2	1	MD HI	UV	830 835 840 850	Blank BAA
		2	SL VL LW MD HI VH			

* 1 row kits should be used to retrofit 1 lamp wraps
2 row kits should be used to retrofit 2, 3, or 4 lamp wraps

Retrofit Type: W2 2' Wrap

of Rows: 1 (1) 2' Row of LEDs
2 (2) 2' Rows of LEDs

Lumen Output: SL Super Low (2 row only)
VL Very Low (2 row only)
LW Low (2 row only)
MD Medium
HI High
VH Very High (2 row only)

Voltage: UV 120-277V

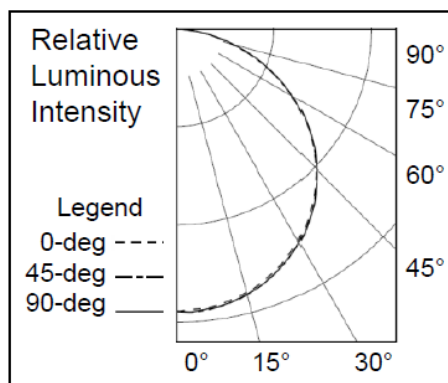
CRI/CCT: 830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

Options: Blank None
BAA Buy American Act compliant

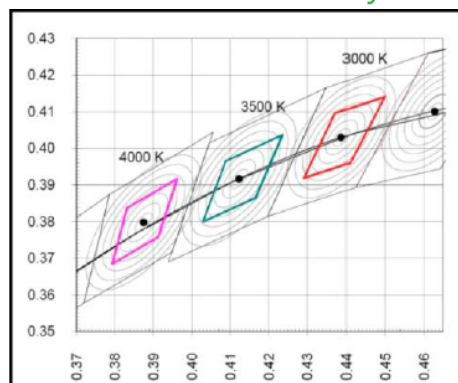
Performance Chart:

Catalog #	Lumens (3000K)	Watts (3000K)	LPW (3000K)	Lumens (3500K)	Watts (3500K)	LPW (3500K)	Lumens (4000K)	Watts (4000K)	LPW (4000K)	Lumens (5000K)	Watts (5000K)	LPW (5000K)
RLK W2 2 SL UV 8xx	1512	12	126.0	1518	12	126.5	1562	12	130.2	1578	12	131.5
RLK W2 2 VL UV 8xx	1864	15	124.3	1872	15	124.8	1926	15	128.4	1945	15	129.7
RLK W2 2 LW UV 8xx	2441	20	122.1	2451	20	122.6	2522	20	126.1	2547	20	127.4
RLK W2 2 MD UV 8xx	3307	25	132.3	3320	25	132.8	3416	25	136.6	3450	25	138.0
RLK W2 2 HI UV 8xx	3589	27	132.9	3604	27	133.5	3708	27	137.3	3745	27	138.7
RLK W2 2 VH UV 8xx	4212	32	131.6	4230	32	132.2	4351	32	136.0	4395	32	137.3
RLK W2 1 MD UV 8xx	1511	12	125.9	1517	12	126.4	1561	12	130.0	1576	12	131.3
RLK W2 1 HI UV 8xx	1795	15	119.6	1802	15	120.1	1854	15	123.6	1873	15	124.8

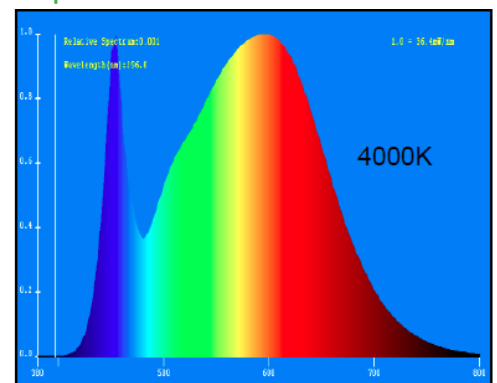
Photometric Distribution

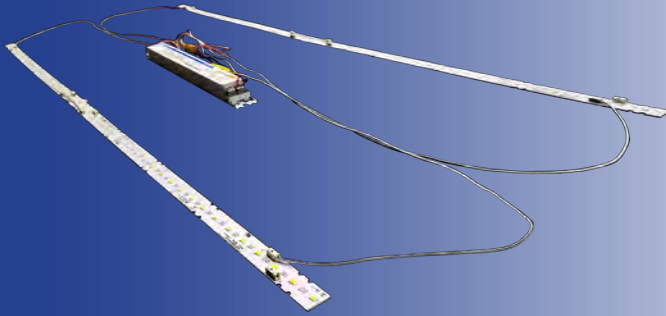


Color Consistency



Spectral Power Distribution





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RLK W4 LED Board/Driver 4' Wrap Retrofit Kit

Features:

- High performance, long life LED technology
- 0-10V dimming drivers standard
- Up to over 140 lumens per watt
- Pre-wired components and driver quick-disconnect allows for quick and easy installation, saving on labor costs
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Replaces up to 4 lamp T8 systems

Applications:

For use in most existing 4' wrap luminaires. For dry/indoor use only.

Note: Contractor/engineer must ensure proper fit in existing luminaire housing.

Ambient Operating Temp:

- -30°C to 40°C

Predicted Lifetime:

- L70 > 160,000hrs (calculated)
- L90 > 60,000hrs (reported)
- 90.6% lumen maint. @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

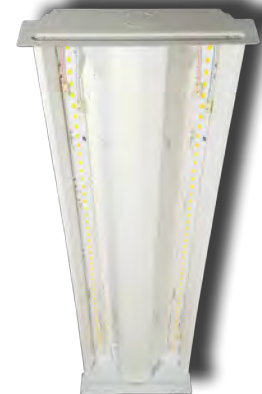
- Pre-wired boards and 0-10V driver
- Kit comes with (2 or 4) 2' LED boards wired for (1 or 2) 4' rows of LEDs
- Magnetic fasteners come standard and allow for easy application and adjustment of boards onto existing housing

Certifications:

- UL 1598c listed for US and Canada, suitable for damp locations
- RoHS compliant

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: RLK W4 2 VL UV 840

Series	Retrofit Type	# of Rows*	Output	Voltage	CRI/CCT	Options	
RLK	W4			UV		-	
RLK	W4	1	SL	UV	830	-	Blank BAA
			VL		835		
			LW		840		
			MD		850		
			HI				
			VH				
		2	SL				
			VL				
			LW				
			ML				
			MD				
			MH				
			SH				

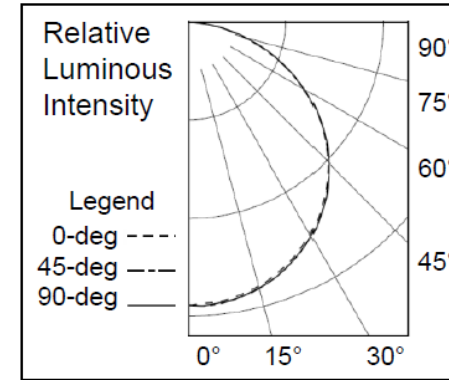
* 1 row kits should be used to retrofit 1 lamp wraps
2 row kits should be used to retrofit 2, 3, or 4 lamp wraps

- Retrofit Type:** W4 4' Wrap
- # of Rows:** 1 (1) 4' Row of LEDs
2 (2) 4' Rows of LEDs
- Lumen Output:** SL Super Low
VL Very Low
LW Low
ML Medium Low (2 row only)
MD Medium
MH Medium High (2 row only)
HI High
VH Very High
SH Super High (2 row only)
- Voltage:** UV 120-277V
- CRI/CCT:** 830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K
- Options:** Blank None
BAA Buy American Act compliant

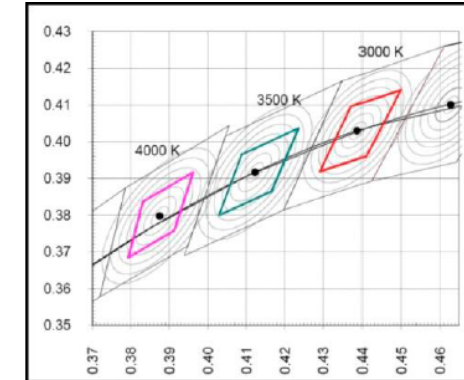
Performance Chart:

Catalog #	Lumens (3000K)	Watts (3000K)	LPW (3000K)	Lumens (3500K)	Watts (3500K)	LPW (3500K)	Lumens (4000K)	Watts (4000K)	LPW (4000K)	Lumens (5000K)	Watts (5000K)	LPW (5000K)
RLK W4 2 SL UV 8xx	2590	19	136.3	2601	19	136.9	2676	19	140.8	2703	19	142.3
RLK W4 2 VL UV 8xx	3379	25	135.1	3393	25	135.7	3490	25	139.6	3525	25	141.0
RLK W4 2 LW UV 8xx	3867	28	138.1	3883	28	138.7	3995	28	142.7	4035	28	144.1
RLK W4 2 ML UV 8xx	4210	31	135.8	4228	31	136.4	4350	31	140.3	4393	31	141.7
RLK W4 2 MD UV 8xx	4683	35	133.8	4702	35	134.3	4838	35	138.2	4886	35	139.6
RLK W4 2 MH UV 8xx	5406	42	128.7	5428	42	129.2	5584	42	133.0	5640	42	134.3
RLK W4 2 HI UV 8xx	6471	47	137.7	6498	47	138.3	6685	47	142.2	6752	47	143.7
RLK W4 2 VH UV 8xx	7318	53	138.1	7348	53	138.6	7560	53	142.6	7636	53	144.1
RLK W4 2 SH UV 8xx	8771	64	137.1	8807	64	137.6	9061	64	141.6	9152	64	143.0
RLK W4 1 SL UV 8xx	1512	12	126.0	1518	12	126.5	1562	12	130.2	1578	12	131.5
RLK W4 1 VL UV 8xx	1864	15	124.3	1872	15	124.8	1926	15	128.4	1945	15	129.7
RLK W4 1 LW UV 8xx	2441	20	122.1	2451	20	122.6	2522	20	126.1	2547	20	127.4
RLK W4 1 MD UV 8xx	3307	25	132.3	3320	25	132.8	3416	25	136.6	3450	25	138.0
RLK W4 1 HI UV 8xx	3589	27	132.9	3604	27	133.5	3708	27	137.3	3745	27	138.7
RLK W4 1 VH UV 8xx	4212	32	131.6	4230	32	132.2	4351	32	136.0	4395	32	137.3

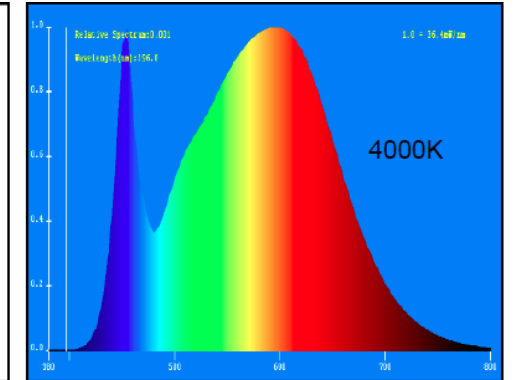
Photometric Distribution



Color Consistency



Spectral Power Distribution

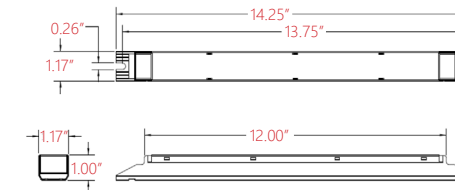


Schematic:

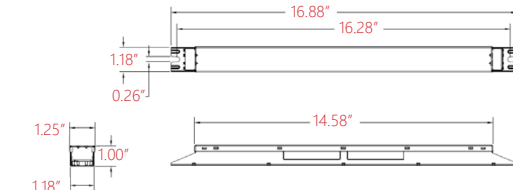
LED Board



Driver for SL through VH models



Driver for SH models





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFR P LED Industrial Retrofit Kit

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Available in 4-foot and 8-foot variations, and a wide variety of lumen outputs for maximum flexibility

Applications:

Custom fit for 4' or 8' industrial-style louvered luminaires. Specifications of existing fixture required to ensure proper fit.

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Precision brake formed from cold rolled steel
- Frosted acrylic diffuser
- Matte white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: FFR P 8 MD UV FA 840

Series	Size	Output	Performance	Voltage	Shielding	CRI/CCT
FFR P					FA	
FFR P	4 8	VL LW MD HI VH SH	Blank HE	UV 34	FA	830 835 840 850

Size:	4	4'	CRI/CCT:	830	80 CRI / 3000K
	8	8'		835	80 CRI / 3500K
				840	80 CRI / 4000K
				850	80 CRI / 5000K
Lumen Output:	VL	Very Low	Voltage:	UV	120-277V
	LW	Low		34	347V
	MD	Medium	Shielding:	FA	Frosted Acrylic Diffuser
	HI	High			
	VH	VH			
	SH	SH			
Performance:	Blank	Standard			
	HE	High Efficiency <i>(not available on VL models)</i>			

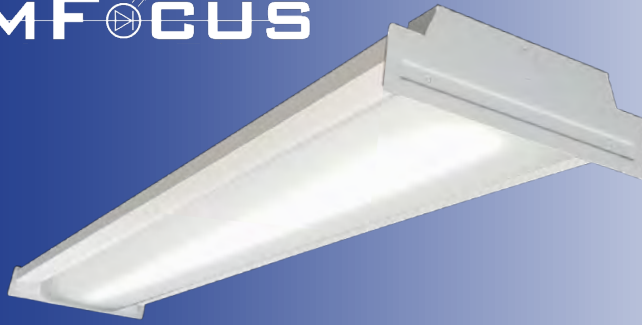


Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFR P 4 VL UV FA 8xx	18	2523	140.2	2565	142.5	2650	147.2	2730	151.7
FFR P 4 LW UV FA 8xx	29	3805	131.2	3869	133.4	3997	137.8	4117	142.0
FFR P 4 MD UV FA 8xx	34	4319	127.0	4392	129.2	4537	133.4	4673	137.4
FFR P 4 HI UV FA 8xx	39	4958	127.1	5042	129.3	5208	133.6	5365	137.6
FFR P 4 VH UV FA 8xx	48	5846	121.8	5945	123.8	6141	127.9	6325	131.8
FFR P 4 SH UV FA 8xx	63	7760	123.2	7890	125.2	8151	129.4	8395	133.3
FFR P 8 VL UV FA 8xx	35	5091	145.5	5176	147.9	5348	152.8	5508	157.4
FFR P 8 LW UV FA 8xx	57	7721	135.5	7851	137.7	8110	142.3	8354	146.6
FFR P 8 MD UV FA 8xx	65	8670	133.4	8816	135.6	9107	140.1	9381	144.3
FFR P 8 HI UV FA 8xx	74	9618	130.0	9779	132.2	10102	136.5	10406	140.6
FFR P 8 VH UV FA 8xx	86	11474	133.4	11667	135.7	12053	140.1	12414	144.4
FFR P 8 SH UV FA 8xx	128	15706	122.7	15970	124.8	16498	128.9	16993	132.8
FFR P 4 LW HE UV FA 8xx	27	3756	139.1	3819	141.4	3945	146.1	4063	150.5
FFR P 4 MD HE UV FA 8xx	32	4367	136.5	4440	138.8	4587	143.3	4725	147.6
FFR P 4 HI HE UV FA 8xx	36	4840	134.4	4921	136.7	5084	141.2	5236	145.4
FFR P 4 VH HE UV FA 8xx	43	5795	134.8	5892	137.0	6087	141.6	6270	145.8
FFR P 4 SH HE UV FA 8xx	60	7624	127.1	7752	129.2	8009	133.5	8249	137.5
FFR P 8 LW HE UV FA 8xx	54	7726	143.1	7856	145.5	8116	150.3	8359	154.8
FFR P 8 MD HE UV FA 8xx	60	8486	141.4	8629	143.8	8914	148.6	9182	153.0
FFR P 8 HI HE UV FA 8xx	70	9829	140.4	9994	142.8	10324	147.5	10634	151.9
FFR P 8 VH HE UV FA 8xx	86	11725	136.3	11922	138.6	12316	143.2	12686	147.5
FFR P 8 SH HE UV FA 8xx	120	15426	128.5	15685	130.7	16203	135.0	16689	139.1



FORMFOCUS



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFR W LED Wrap Retrofit Kit

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Quick and easy lift and shift installation helps save on labor costs

Applications:

Custom fit for 4' wrap luminaires 9" or wider. Specifications of existing fixture required to ensure proper fit. **Please see form on Page 3. This form must be completed before manufacturing can begin.**

Ambient Operating Temp:

- -30°C to 40°C

Construction:

- Precision brake formed from cold rolled steel
- Frosted acrylic diffuser
- Matte white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



FFR W LED Wrap Retrofit Kit



Ordering Guide:

example: FFR W 4 MD UV FA 840-9.0"-OSM

Series	Size	Output	Voltage	Shielding	CRI/CCT	Lens Width	Options
FFR W	4			FA		-	
FFR W	4	LW MD HI	UV 34	FA	830 835 840 850	x.xx"	Blank SD OSM CC BAA

Size: 4 4'

Lumen Output: LW Low
MD Medium
HI High

Voltage: UV 120-277V
34 347V

Shielding: FA Frosted Acrylic Diffuser

CRI/CCT: 830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

Lens Width: x.xx" Specify Existing Lens Width (9" minimum)

Options: Blank None
SD Step Dimming
OSM Microwave Occupancy Sensor
CC Conformal Coating
BAA Buy American Act Compliant

Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFR W 4 LW UV FA 8xx	32	4194	133.3	4265	135.5	4406	140.0	4538	144.2
FFR W 4 MD UV FA 8xx	47	5855	126.0	5954	128.1	6151	132.4	6335	136.3
FFR W 4 HI UV FA 8xx	62	7497	121.6	7624	123.6	7876	127.7	8112	131.6



FFR W LED Wrap Retrofit Kit

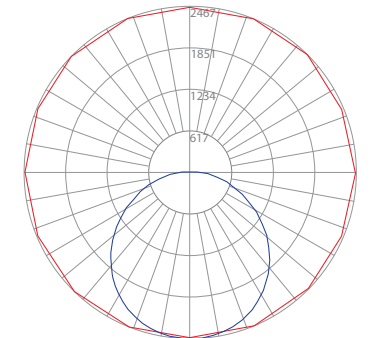


Photometric Data:

FFR W 4 HI UV FA 830

Test No.: LLIA001060-003A
Luminaire Lumens: 7,498 lm
Luminaire Watts: 61.7W
Efficacy: 121.6 LPW
Spacing Criterion (0-180): 1.22
Spacing Criterion (90-270): 1.32

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7532	7737	8047
55	6686	7140	7746
65	5686	6424	7461
75	4380	5612	7141
85	2073	4765	6937



Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105		
1	107	102	97	93	104	100	95	91	95	91	88	91	88	85		
2	97	88	81	75	94	86	80	74	82	77	72	79	74	70		
3	88	77	69	62	86	76	68	61	72	66	60	69	64	59		
4	81	69	59	53	78	67	59	52	64	57	51	62	55	50		
5	74	61	52	45	72	60	51	45	57	50	44	55	49	43		
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38		
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34		
8	59	45	37	31	57	45	36	31	43	36	30	42	35	30		
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27		
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25		

Zone	Lumens	%Fixt
0-20	901.36	12.00
0-30	1917.43	25.60
0-40	3140.56	41.90
0-60	5547.46	74.00
0-80	7049.24	94.00
0-90	7339.83	97.90
90-120	157.69	2.10
90-130	157.69	2.10
90-150	157.69	2.10
90-180	157.69	2.10
0-180	7497.52	100.00

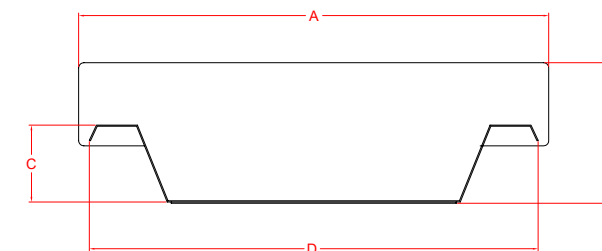
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Dimensions of Existing Fixture (Required)

Please fill in the information to the right so we can ensure a proper fit for your FFRWs.

**DIMENSIONS NEEDED TO ORDER
FFRW4WRAP**

A: LENGTH OF END CAP =
B: HEIGHT OF END CAP =
C: DEPTH OF FIXTURE =
D: WIDTH OF FIXTURE =
E: LENS LENGTH =
WHEN POSSIBLE PLEASE PROVIDE
LENS FROM FIXTURE





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ETL LED Lensed Troffer

Features:

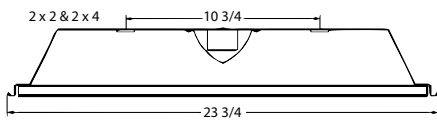
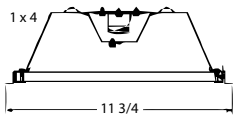
- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Multiple shielding options optimized to balance efficiency and aesthetics
- Available in 2x2, 2x4, and 1x4 for maximum flexibility

Applications:

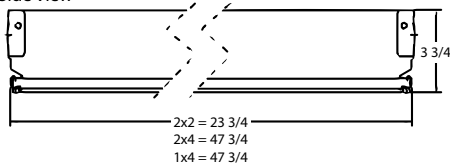
- Suitable for most commercial and institutional applications
- Office
 - Retail
 - Classrooms
 - Healthcare Facilities

Schematic:

Cross Section



Side View



Construction:

- Die-formed heavy-gauge cold rolled steel
- LED tray is precision brake formed from aluminum
- White enamel finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Predicted L70 Lifetime:

- >140,000 hrs (calculated)
- >72,000 hrs (reported)
- 84% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: ETL 24 LW UV A12 840-W6

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Options
ETL						-	
ETL	22 24 14	VL LW MD HI VH SH	UV 34	A12 PW A23F	835 840 850		Blank W6 EM F GC RLY SC

Size:	22	2'x2'	Shielding:	A12	Pattern 12 Prismatic Acrylic Lens
	24	2'x4'		PW	Prismatic White Acrylic Lens
	14	1'x4'		A23F	Frosted High Efficiency Pattern 23 Acrylic Lens
Lumen Output:	VL	Very Low (2'x4' model only)	CRI/CCT:	835	80 CRI / 3500K
	LW	Low		840	80 CRI / 4000K
	MD	Medium		850	80 CRI / 5000K
	HI	High	Options:	Blank	None
	VH	Very High		W6	6' Whip
	SH	Super High (2'x4' model only)		EM	Emergency Pack - up to 12W (120-277V / 0°C-50°C ambient)
Voltage:	UV	120-277V		F	Fuse
	34	347V		GC	Grid Clips
				RLY	Relay
				SC	Safety Cable

Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
ETL 22 LW UV A12 835	2211	20	110.6	ETL 22 LW UV A12 840	2280	20	114.0	ETL 22 LW UV A12 850	2348	20	117.4
ETL 22 MD UV A12 835	3731	30	124.4	ETL 22 MD UV A12 840	3847	30	128.2	ETL 22 MD UV A12 850	3962	30	132.1
ETL 22 HI UV A12 835	4318	36	119.9	ETL 22 HI UV A12 840	4452	36	123.7	ETL 22 HI UV A12 850	4585	36	127.4
ETL 22 VH UV A12 835	5178	46	112.6	ETL 22 VH UV A12 840	5338	46	116.1	ETL 22 VH UV A12 850	5499	46	119.5
ETL 24 VL UV A12 835	3399	26	130.7	ETL 24 VL UV A12 840	3504	26	134.8	ETL 24 VL UV A12 850	3609	26	138.8
ETL 24 LW UV A12 835	3819	30	127.3	ETL 24 LW UV A12 840	3937	30	131.2	ETL 24 LW UV A12 850	4056	30	135.2
ETL 24 MD UV A12 835	5241	44	119.1	ETL 24 MD UV A12 840	5403	44	122.8	ETL 24 MD UV A12 850	5565	44	126.5
ETL 24 HI UV A12 835	6197	55	112.7	ETL 24 HI UV A12 840	6388	55	116.2	ETL 24 HI UV A12 850	6580	55	119.6
ETL 24 VH UV A12 835	6873	64	107.4	ETL 24 VH UV A12 840	7086	64	110.7	ETL 24 VH UV A12 850	7299	64	114.0
ETL 24 SH UV A12 835	8859	67	131.6	ETL 24 SH UV A12 840	9133	67	135.7	ETL 24 SH UV A12 850	9407	67	139.8
ETL 14 LW UV A12 835	2211	20	110.6	ETL 14 LW UV A12 840	2280	20	114.0	ETL 14 LW UV A12 850	2348	20	117.4
ETL 14 MD UV A12 835	3731	30	124.4	ETL 14 MD UV A12 840	3847	30	128.2	ETL 14 MD UV A12 850	3962	30	132.1
ETL 14 HI UV A12 835	4318	36	119.9	ETL 14 HI UV A12 840	4452	36	123.7	ETL 14 HI UV A12 850	4585	36	127.4
ETL 14 VH UV A12 835	5178	46	112.6	ETL 14 VH UV A12 840	5338	46	116.1	ETL 14 VH UV A12 850	5499	46	119.5

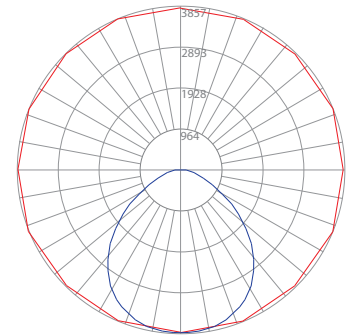
Photometric Data:

ETL 24 SH UV A12 850

Test No.: LLIA000673-001
 Luminaire Lumens: 9,407 lm
 Luminaire Watts: 67.3W
 Efficacy: 139.8 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.24

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4998	5031	5072
55	3984	4086	4195
65	3083	2812	3139
75	2617	2199	2956
85	3038	3269	4097



Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65			
4	85	73	65	59	83	72	64	58	70	63	58	67	61	57			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32			
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1408.51	15.00
0-30	2987.79	31.80
0-40	4837.54	51.40
0-60	7933.27	84.30
0-80	9199.35	97.80
0-90	9402.18	99.90
90-120	4.95	0.10
90-130	4.95	0.10
90-150	4.95	0.10
90-180	4.95	0.10
0-180	9407.14	100.00

FORMFOCUS



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFL LED Lay-In

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Available in 2x2, 2x4, 1x4 and a wide variety of lumen outputs for maximum flexibility
- Low profile and lightweight housing allows for easy installation

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Classrooms
- Healthcare Facilities

Predicted L70 Lifetime:

- >90,000 hrs (calculated)
- >72,000 hrs (reported)
- 76% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Die-formed heavy-gauge cold rolled steel ballast housing with precision brake formed aluminum LED tray
- Frosted Acrylic Diffuser
- White enamel finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)



Powered by:



Ordering Guide:

example: FFL 24 MD UV FA 835-EM1

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Options
FFL				FA		-	
FFL	24 22 14	SL VL LW ML MD HI VH SH	UV 34	FA	830 835 840 850		Blank EXT10 SD ES2SR ES3SR W6 W10 EM1 F GC SDT(347V) AR BAA

Accessories:
FIK24 - 2'x4' Frame-In Kit **SMK24** - 2'x4' Surface Mount Kit
FIK22 - 2'x2' Frame-In Kit **SMK22** - 2'x2' Surface Mount Kit
FIK14 - 1'x4' Frame-In Kit **SMK14** - 1'x4' Surface Mount Kit

CRI/CCT: 830 80 CRI / 3000K
 835 80 CRI / 3500K
 840 80 CRI / 4000K
 850 80 CRI / 5000K

Options: Blank None
 EXT10 10 yr extended warranty
 (Not available on all models. Certain conditions apply.
 Consult factory or sales representative for details.)
 SD Step Dimming
 ES2SR Philips EasySense Occupancy/Daylight sensor with
 advanced grouping (120-277V only)
 ES3SR Philips EasySense Occupancy/Daylight sensor for
 Zigbee networks (120-277V only)
 W6 6' Whip
 W10 10' Whip
 EM1 Emergency Kit - 12W 1200 nominal lumens
 (120-277V / 0°C-50°C ambient)
 F Fuse
 GC Grid Clip
 SDT(347V) 347V to 277V Step Down Transformer
 AR Plenum Ceiling Air Return
 BAA Buy American Act Compliant

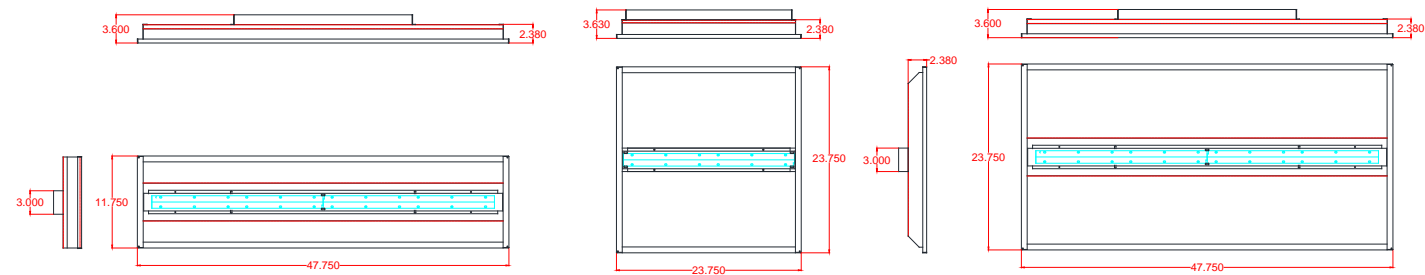
Size: 24 2'x4'
 22 2'x2'
 14 1'x4'

Lumen Output: SL Super Low
 VL Very Low
 LW Low
 ML Medium Low (available in 2x4 only)
 MD Medium
 HI High
 VH Very High (available in 2x4 only)
 SH Super High (available in 2x4 only)

Voltage: UV 120-277V
 34 347V

Shielding: FA Frosted Acrylic

Schematic:



Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFL 24 SL UV FA xxx	25	3069	121.3	3117	123.2	3223	127.4	3352	132.5
FFL 24 VL UV FA xxx	28	3720	132.9	3779	134.9	3907	139.6	4064	145.1
FFL 24 LW UV FA xxx	33	4256	129.0	4323	131.0	4470	135.5	4649	140.9
FFL 24 ML UV FA xxx	36	4559	126.6	4630	128.6	4788	133.0	4980	138.3
FFL 24 MD UV FA xxx	46	5753	125.1	5844	127.0	6043	131.4	6285	136.6
FFL 24 HI UV FA xxx	52	6778	130.3	6884	132.4	7119	136.9	7404	142.4
FFL 24 VH UV FA xxx	60	7547	125.8	7666	127.8	7928	132.1	8245	137.4
FFL 24 SH UV FA xxx	69	8681	125.1	8818	127.1	9119	131.4	9484	136.7
FFL 22 SL UV FA xxx	18	2219	122.6	2254	124.5	2331	128.8	2424	133.9
FFL 22 VL UV FA xxx	25	2894	116.2	2940	118.1	3040	122.1	3162	127.0
FFL 22 LW UV FA xxx	32	3769	117.8	3828	119.6	3959	123.7	4117	128.7
FFL 22 MD UV FA xxx	37	4578	124.7	4655	126.8	4809	131.0	4953	135.0
FFL 22 HI UV FA xxx	50	5751	114.8	5842	116.6	6041	120.6	6283	125.4
FFL 14 SL UV FA xxx	18	2247	124.8	2283	126.8	2360	131.1	2455	136.4
FFL 14 VL UV FA xxx	25	2949	120.4	2996	122.3	3098	126.5	3222	131.5
FFL 14 LW UV FA xxx	28	3663	130.8	3721	132.9	3848	137.4	4002	142.9
FFL 14 MD UV FA xxx	36	4489	124.7	4559	126.7	4715	131.0	4904	136.2
FFL 14 HI UV FA xxx	50	6045	121.9	6140	123.8	6350	128.0	6604	133.1



Photometric Data:

FFL 24 SL UV FA 830

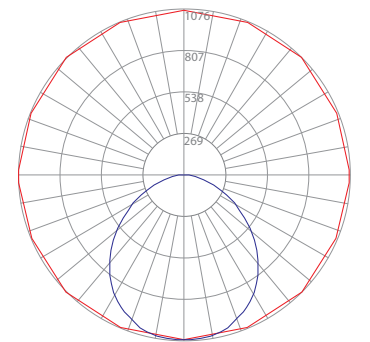
Test No.: LLIA000690-002
Luminaire Lumens: 3,069 lm
Luminaire Watts: 25.3W
Efficacy: 121.3 LPW
Spacing Criterion (0-180): 1.26
Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1426	1543	1604
55	1256	1475	1573
65	1043	1385	1526
75	805	1347	1532
85	561	1592	1088

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30		
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	
2	98	90	83	77	96	88	82	76	85	79	75	81	77	73	
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	



Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	392.22	12.80
0-30	833.42	27.20
0-40	1364.28	44.50
0-60	2396.40	78.10
0-80	2992.48	97.50
0-90	3069.12	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	3069.12	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

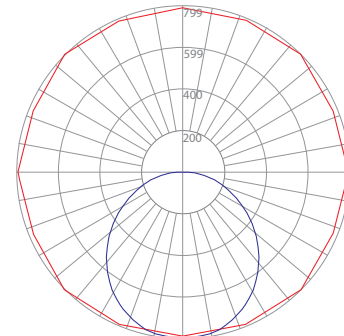
Photometric Data:

FFL 22 SL UV FA 830

Test No.: LLIA000686-001A-R01
 Luminaire Lumens: 2,219 lm
 Luminaire Watts: 18.1W
 Efficacy: 122.6 LPW
 Spacing Criterion (0-180): 1.22
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2110	2302	2473
55	1843	2189	2433
65	1527	2060	2375
75	1198	1993	2404
85	857	1972	1413



Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	288.34	13.00
0-30	610.73	27.50
0-40	996.34	44.90
0-60	1740.86	78.40
0-80	2170.05	97.80
0-90	2219.40	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	2219.40	100.00

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	106	106	106
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	93	91	88
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	82	77	73
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	72	66	62
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	64	58	53
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	57	51	46
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	52	45	40
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	47	41	36
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	43	37	32
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	40	33	29
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	37	31	26

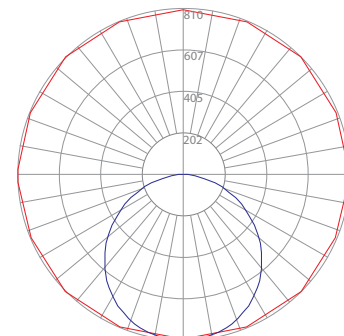
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFL 14 SL UV FA 830

Test No.: LLIA000690-004
 Luminaire Lumens: 2,247 lm
 Luminaire Watts: 18.0W
 Efficacy: 124.8 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2377	2561	2655
55	2105	2440	2577
65	1759	2258	2428
75	1369	2011	1396
85	929	961	547



Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	295.36	13.10
0-30	627.90	27.90
0-40	1028.43	45.80
0-60	1806.01	80.40
0-80	2217.45	98.70
0-90	2246.91	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	2246.91	100.00

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	106	106	106
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	94	91	89
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	82	78	74
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	73	67	63
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	65	59	54
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	58	52	47
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	53	46	41
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	48	41	36
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	44	37	32
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	41	34	29
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	38	31	27

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

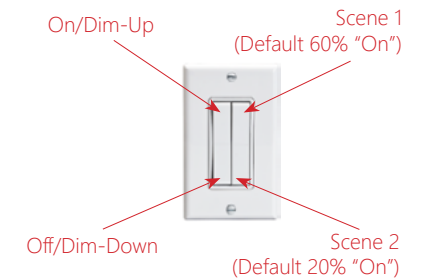
FormFocus available with Philips EasySense Sensors:

- Simple, cost effective way to add controls to every luminaire in order to maximize energy savings and address code-compliance strategies
- Occupancy sensing, daylight harvesting, and task tuning in one device
- Reduces installation time and eliminates the need to wire sensors outside the fixture in the ceiling
- Title 20 compliant
- Enables auto-off/manual-on and auto-off/partial-on application
- Easy field configuration from floor via smartphone with Easysense App
- Factory can pre-set max light levels



ES2SR (EasySense Fixture-Mount Sensor SNS200 with Philips SR Xitanium driver)

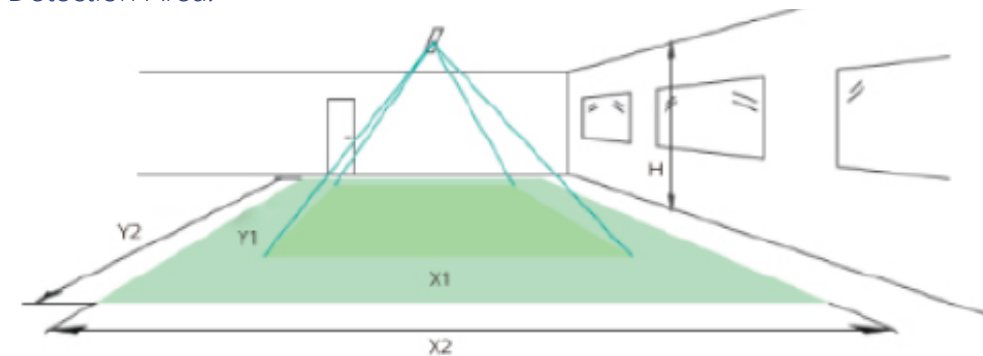
- Independent per-fixture control: Occupancy, Daylight Harvesting, Task Tuning
- Occupancy Sharing
 - Fixtures within a group can be programmed to remain at prescribed light levels so long as occupancy is detected anywhere in the group
- Scene Setting
- Advanced grouping to Illumra #ZBT-S2AWH wireless wall switch
 - Dual Rocker Self-Powered Light Switch
 - Up to 40 sensors can be grouped to a single switch
 - Functions: On/Off, Dim-Up/Dim-Down, Scene 1, Scene 2
- DLC listed



ES3SR (EasySense Fixture-Mount Sensor for Networks SNS300 with Philips SR Xitanium driver)

- Occupancy & daylight sensing in one device
- Designed for applications with centralized lighting control through Zigbee wireless technology
 - Compatible with qualified third-party lighting control systems or building management systems (BMS)
 - Provides a simple solution to actively manage and control energy usage, while remotely adjusting light settings and determining service needs
 - Provides fixture-specific information into networks for centralized control and enables functionality such as energy monitoring, scheduling, and load shedding.
 - **Note:** SNS300 does not provide stand-alone operation based on occupancy or daylight. Status is provided to the network system for centralized control and command.

Detection Area:



Height	Minor Movement		Major Movement	
H	X1	Y1	X2	Y2
10'	12'	9'	18'	12'

- Minor movement (person moving $\leq 3.0'$ per second)
- Major movement (person moving $\geq 3.0'$ per second)

Longer dimension of detection area (X1, X2) is parallel to longer dimension of EasySense

FORMFOCUS



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFL 2R LED Lay-In

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Available in 2x2 & 2x4 and a wide array of lumen outputs for maximum flexibility
- Low profile and lightweight housing allows for easy installation

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Classrooms
- Healthcare Facilities

Predicted L70 Lifetime:

- >95,000 hrs (calculated)
- >72,000 hrs (reported)
- 77% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Die-formed heavy-gauge cold rolled steel ballast housing with precision brake formed aluminum LED tray
- Frosted Acrylic Diffuser
- White enamel finish

Certifications:

- UL 1598 listed for US and Canada
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



Ordering Guide:

example: FFL 2R 24 MD UV FA 840-EM1

Series	# of Rows	Size	Output	Voltage	Shielding	CRI/CCT	-	Options
FFL	2R				FA		-	
FFL	2R	24 22	SL VL LW ML MD HI VH SH	UV 34	FA	830 835 840 850		Blank SD ES2SR ES3SR W6 W10 EM1 F GC SDT(347V) AR BAA

Accessories:

FIK24 - 2'x4' Frame-In Kit	SMK24 - 2'x4' Surface Mount Kit
FIK22 - 2'x2' Frame-In Kit	SMK22 - 2'x2' Surface Mount Kit
FIK14 - 1'x4' Frame-In Kit	SMK14 - 1'x4' Surface Mount Kit

Shielding: FA	Frosted Acrylic
CRI/CCT: 830	80 CRI / 3000K
835	80 CRI / 3500K
840	80 CRI / 4000K
850	80 CRI / 5000K
Options: Blank	None
SD	Step Dimming
ES2SR	Philips EasySense Occupancy/Daylight sensor with advanced grouping (120-277V only)
ES3SR	Philips EasySense Occupancy/Daylight sensor for Zigbee networks (120-277V only)
W6	6' Whip
W10	10' Whip
EM1	Emergency Pack - up to 10W (120-277V / 0°C-50°C ambient)
F	Fuse
GC	Grid Clip
SDT(347V)	347V to 277V Step Down Transformer
AR	Plenum Ceiling Air Return
BAA	Buy American Act Compliant

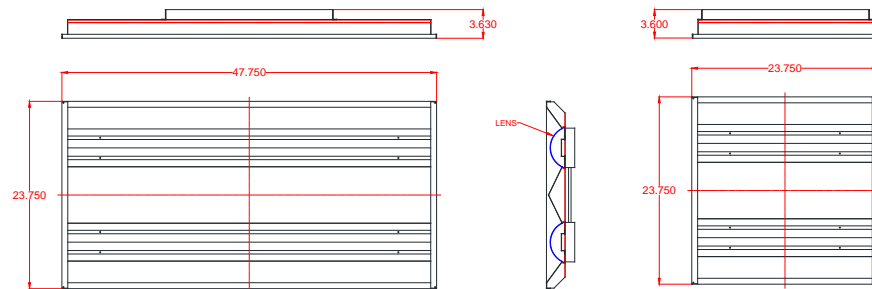
of Rows: 2R 2 rows of LEDs

Size: 24 2'x4'
22 2'x2'

Lumen Output: SL Super Low
VL Very Low
LW Low
ML Medium Low
MD Medium
HI High
VH Very High
SH Super High

Voltage: UV 120-277V
34 347V

Schematic:



Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFL 2R 24 SL UV FA 8xx	23	3145	136.8	3198	139.1	3304	143.7	3403	148.0
FFL 2R 24 VL UV FA 8xx	28	3784	135.1	3848	137.4	3975	142.0	4094	146.2
FFL 2R 24 LW UV FA 8xx	32	4237	132.4	4308	134.6	4451	139.1	4584	143.3
FFL 2R 24 ML UV FA 8xx	36	4672	129.8	4751	132.0	4908	136.3	5055	140.4
FFL 2R 24 MD UV FA 8xx	43	6163	143.3	6266	145.7	6473	150.5	6667	155.1
FFL 2R 24 HI UV FA 8xx	50	6946	138.9	7062	141.2	7296	145.9	7515	150.3
FFL 2R 24 VH UV FA 8xx	60	8025	133.8	8160	136.0	8430	140.5	8683	144.7
FFL 2R 24 SH UV FA 8xx	68	8866	130.4	9015	132.6	9313	137.0	9593	141.1
FFL 2R 22 SL UV FA 8xx	18	2258	125.4	2296	127.6	2372	131.8	2443	135.7
FFL 2R 22 VL UV FA 8xx	26	3089	118.8	3141	120.8	3244	124.8	3342	128.5
FFL 2R 22 LW UV FA 8xx	32	4124	128.9	4194	131.1	4332	135.4	4462	139.4
FFL 2R 22 MD UV FA 8xx	36	4531	125.9	4607	128.0	4760	132.2	4903	136.2
FFL 2R 22 HI UV FA 8xx	46	6105	132.7	6208	134.9	6413	139.4	6605	143.6

FFL 2R LED Lay-In

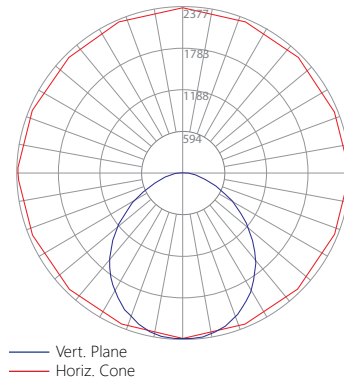


Photometric Data:

FFL 2R 22 HI UV FA 840

Test No.: LLIA000850-004A(s)
 Luminaire Lumens: 6,413 lm
 Luminaire Watts: 46W
 Efficacy: 139.4 LPW
 Spacing Criterion (0-180): 1.24
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6151	6547	6970
55	5366	6206	6818
65	4413	5758	6521
75	3404	5190	4421
85	2287	2742	1626



Zonal Lumen Summary		
Zone	Lumens	%Fixt
0-20	854.32	13.30
0-30	1809.45	28.20
0-40	2952.02	46.00
0-60	5150.77	80.30
0-80	6326.31	98.70
0-90	6412.63	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	6412.63	100.00

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

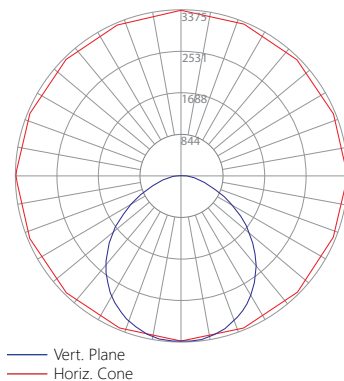
RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	65	65	65	65	63	63	63	63	61	61	61	58	58	58	58	58	58
1	59	57	55	53	58	56	54	52	53	52	50	51	50	49	49	49	49
2	54	50	46	43	53	49	45	42	47	44	41	45	43	41	41	41	41
3	49	44	39	36	48	43	39	35	41	38	35	40	37	34	34	34	34
4	45	39	34	30	44	38	34	30	37	33	30	35	32	29	29	29	29
5	42	35	30	26	40	34	29	26	33	29	26	32	28	25	25	25	25
6	38	31	26	23	37	31	26	23	30	26	23	29	25	22	22	22	22
7	36	28	24	20	35	28	23	20	27	23	20	26	23	20	20	20	20
8	33	26	21	18	32	25	21	18	25	21	18	24	20	18	18	18	18
9	31	24	19	16	30	23	19	16	23	19	16	22	19	16	16	16	16
10	29	22	18	15	28	22	17	15	21	17	15	21	17	15	15	15	15

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFL 2R 24 SH UV FA 840

Test No.: LLIA000860-002A(s)
 Luminaire Lumens: 9,314 lm
 Luminaire Watts: 68W
 Efficacy: 137.0 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4461	4715	4860
55	3936	4503	4748
65	3264	4204	4560
75	2493	3845	3120
85	1647	2044	1155



Zonal Lumen Summary		
Zone	Lumens	%Fixt
0-20	1221.41	13.10
0-30	2594.69	27.90
0-40	4247.03	45.60
0-60	7450.95	80.00
0-80	9182.05	98.60
0-90	9313.56	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	9313.56	100.00

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	106	106	106
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	89	89	89
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	74	74	74
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	63	63	63
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	54	54	54
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	46	46	46
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	41	41	41
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	36	36	36
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	32	32	32
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	29	29	29
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	26	26	26

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFL 2R LED Lay-In



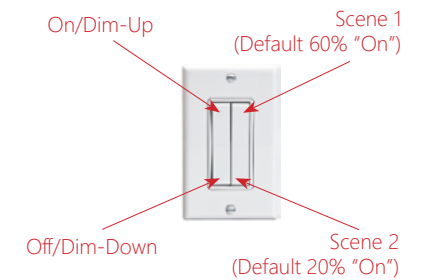
FormFocus available with Philips EasySense Sensors:

- Simple, cost effective way to add controls to every luminaire in order to maximize energy savings and address code-compliance strategies
- Occupancy sensing, daylight harvesting, and task tuning in one device
- Reduces installation time and eliminates the need to wire sensors outside the fixture in the ceiling
- Title 20 compliant
- Enables auto-off/manual-on and auto-off/partial-on application
- Easy field configuration from floor via smartphone with Easysense App
- Factory can pre-set max light levels



ES2SR (EasySense Fixture-Mount Sensor SNS200 with Philips SR Xitanium driver)

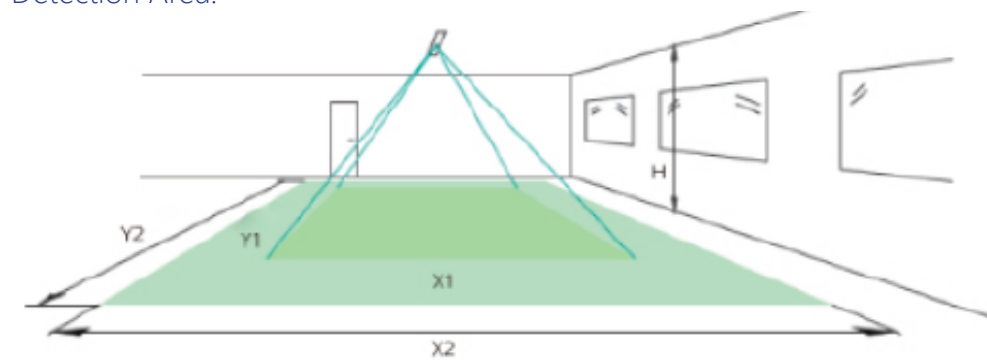
- Independent per-fixture control: Occupancy, Daylight Harvesting, Task Tuning
- Occupancy Sharing
 - Fixtures within a group can be programmed to remain at prescribed light levels so long as occupancy is detected anywhere in the group
- Scene Setting
- Advanced grouping to Illumra #ZBT-S2AWH wireless wall switch
 - Dual Rocker Self-Powered Light Switch
 - Up to 40 sensors can be grouped to a single switch
 - Functions: On/Off, Dim-Up/Dim-Down, Scene 1, Scene 2
- DLC listed



ES3SR (EasySense Fixture-Mount Sensor for Networks SNS300 with Philips SR Xitanium driver)

- Occupancy & daylight sensing in one device
- Designed for applications with centralized lighting control through Zigbee wireless technology
 - Compatible with qualified third-party lighting control systems or building management systems (BMS)
 - Provides a simple solution to actively manage and control energy usage, while remotely adjusting light settings and determining service needs
 - Provides fixture-specific information into networks for centralized control and enables functionality such as energy monitoring, scheduling, and load shedding.
 - **Note:** SNS300 does not provide stand-alone operation based on occupancy or daylight. Status is provided to the network system for centralized control and command.

Detection Area:



Height	Minor Movement		Major Movement	
H	X1	Y1	X2	Y2
10'	12'	9'	18'	12'

- Minor movement (person moving $\leq 3.0'$ per second)
- Major movement (person moving $\geq 3.0'$ per second)

Longer dimension of detection area (X1, X2) is parallel to longer dimension of EasySense



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFL 2R HO LED High Output Lay-In

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Available in 2x2 & 2x4 and a wide array of lumen outputs for maximum flexibility
- Low profile and lightweight housing allows for easy installation

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Classrooms
- Healthcare Facilities

Predicted L70 Lifetime:

- >95,000 hrs (calculated)
- >72,000 hrs (reported)
- 77% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Die-formed heavy-gauge cold rolled steel ballast housing with precision brake formed aluminum LED tray
- Frosted Acrylic Diffuser
- White enamel finish

Certifications:

- UL 1598 listed for US and Canada
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



FFL 2R HO LED High Output Lay-In



Ordering Guide:

example: FFL 2R 24 MD HO UV FA 840

Series	# of Rows	Size	Output	Performance	Voltage	Shielding	CRI/CCT	-	Options
FFL	2R			HO		FA		-	
FFL	2R	24 22	LW MD HI VH	HO	UV 34	FA	830 835 840 850		Blank SD ES2SR ES3SR W6 W10 EM1 F GC SDT(347V) AR BAA

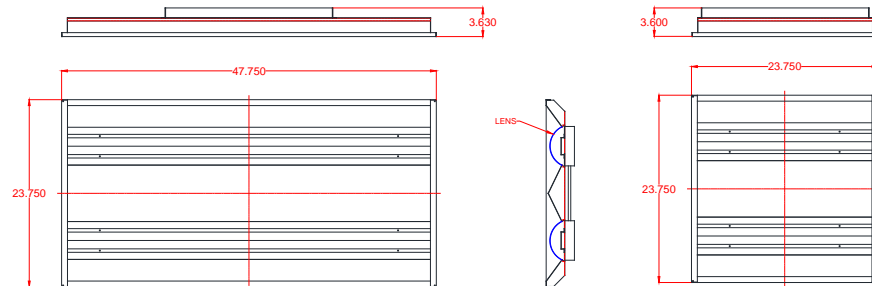
Accessories:

FIK24 - 2'x4' Frame-In Kit	SMK24 - 2'x4' Surface Mount Kit
FIK22 - 2'x2' Frame-In Kit	SMK22 - 2'x2' Surface Mount Kit
FIK14 - 1'x4' Frame-In Kit	SMK14 - 1'x4' Surface Mount Kit

CRI/CCT:	830	80 CRI / 3000K
	835	80 CRI / 3500K
	840	80 CRI / 4000K
	850	80 CRI / 5000K
Options:	Blank	None
	SD	Step Dimming
	ES2SR	Philips EasySense Occupancy/Daylight sensor with advanced grouping (120-277V only)
	ES3SR	Philips EasySense Occupancy/Daylight sensor for Zigbee networks (120-277V only)
	W6	6' Whip
	W10	10' Whip
	EM1	Emergency Pack - up to 10W (120-277V / 0°C-50°C ambient)
	F	Fuse
	GC	Grid Clip
	SDT(347V)	347V to 277V Step Down Transformer
	AR	Plenum Ceiling Air Return
	BAA	Buy American Act Compliant

# of Rows:	2R	2 rows of LEDs
Size:	24 22	2'x4' 2'x2'
Lumen Output:	LW MD HI VH	Low Medium High Very High
Performance:	HO	High Output
Voltage:	UV 34	120-277V 347V
Shielding:	FA	Frosted Acrylic

Schematic:



FFL 2R HO LED High Output Lay-In



Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFL 2R 24 LW HO UV FA 8xx	94	11479	122.1	11672	124.2	12058	128.3	12420	132.1
FFL 2R 24 MD HO UV FA 8xx	104	13190	126.8	13412	129.0	13855	133.2	14271	137.2
FFL 2R 24 HI HO UV FA 8xx	120	14748	122.9	14995	125.0	15491	129.1	15956	133.0
FFL 2R 24 VH HO UV FA 8xx	141	16699	118.1	16979	120.1	17541	124.0	18067	127.8
FFL 2R 22 LW HO UV FA 8xx	50	6146	122.9	6250	125.0	6456	129.1	6650	133.0
FFL 2R 22 MD HO UV FA 8xx	64	7910	123.6	8043	125.7	8309	129.8	8558	133.7
FFL 2R 22 HI HO UV FA 8xx	80	9741	121.8	9904	123.8	10232	127.9	10539	131.7
FFL 2R 22 VH HO UV FA 8xx	102	11755	115.1	11952	117.1	12348	120.9	12718	124.6

FFL 2R HO LED High Output Lay-In

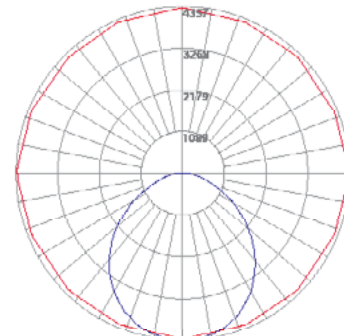


Photometric Data:

FFL 2R 22 VH HO UV FA 830

Test No.: LLIA000850-004A
 Luminaire Lumens: 11,755 lm
 Luminaire Watts: 102.1W
 Efficacy: 115.1 LPW
 Spacing Criterion (0-180): 1.24
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11275	12000	12777
55	9836	11376	12497
65	8090	10555	11954
75	6239	9513	8104
85	4192	5026	2981



Zonal Lumen Summary		
Zone	Lumens	%Fixt
0-20	1566.01	13.30
0-30	3316.80	28.20
0-40	5411.18	46.00
0-60	9441.59	80.30
0-80	11596.41	98.70
0-90	11754.65	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	11754.65	100.00

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

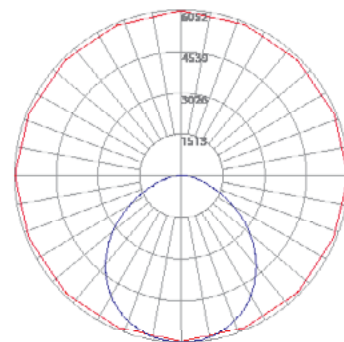
RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54			
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47			
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41			
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33			
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFL 2R 24 VH HO UV FA 830

Test No.: LLIA000860-002A
 Luminaire Lumens: 16,699 lm
 Luminaire Watts: 141.4W
 Efficacy: 118.1 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7999	8454	8713
55	7058	8073	8512
65	5853	7537	8177
75	4469	6893	5595
85	2952	3665	2071



Zonal Lumen Summary		
Zone	Lumens	%Fixt
0-20	2189.96	13.10
0-30	4652.24	27.90
0-40	7614.84	45.60
0-60	13359.42	80.00
0-80	16463.24	98.60
0-90	16699.04	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	16699.04	100.00

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63			
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54			
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46			
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36			
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32			
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFL 2R HO LED High Output Lay-In



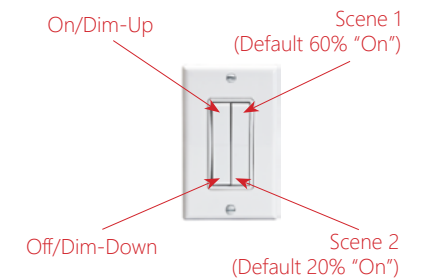
FormFocus available with Philips EasySense Sensors:

- Simple, cost effective way to add controls to every luminaire in order to maximize energy savings and address code-compliance strategies
- Occupancy sensing, daylight harvesting, and task tuning in one device
- Reduces installation time and eliminates the need to wire sensors outside the fixture in the ceiling
- Title 20 compliant
- Enables auto-off/manual-on and auto-off/partial-on application
- Easy field configuration from floor via smartphone with Easysense App
- Factory can pre-set max light levels



ES2SR (EasySense Fixture-Mount Sensor SNS200 with Philips SR Xitanium driver)

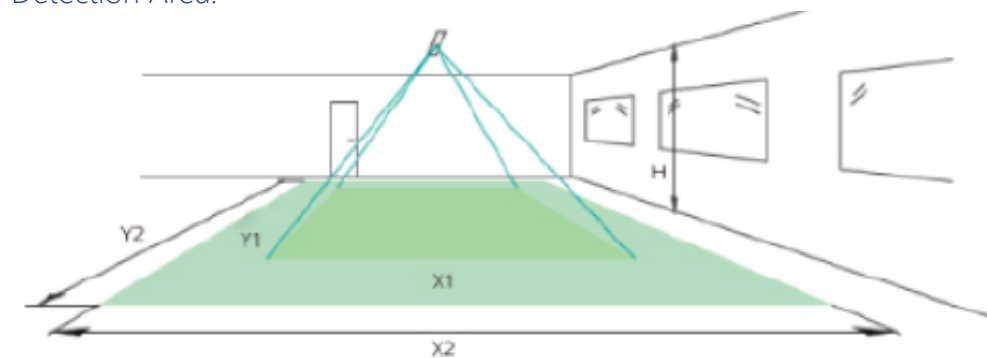
- Independent per-fixture control: Occupancy, Daylight Harvesting, Task Tuning
- Occupancy Sharing
 - Fixtures within a group can be programmed to remain at prescribed light levels so long as occupancy is detected anywhere in the group
- Scene Setting
- Advanced grouping to Illumra #ZBT-S2AWH wireless wall switch
 - Dual Rocker Self-Powered Light Switch
 - Up to 40 sensors can be grouped to a single switch
 - Functions: On/Off, Dim-Up/Dim-Down, Scene 1, Scene 2
- DLC listed



ES3SR (EasySense Fixture-Mount Sensor for Networks SNS300 with Philips SR Xitanium driver)

- Occupancy & daylight sensing in one device
- Designed for applications with centralized lighting control through Zigbee wireless technology
 - Compatible with qualified third-party lighting control systems or building management systems (BMS)
 - Provides a simple solution to actively manage and control energy usage, while remotely adjusting light settings and determining service needs
 - Provides fixture-specific information into networks for centralized control and enables functionality such as energy monitoring, scheduling, and load shedding.
 - **Note:** SNS300 does not provide stand-alone operation based on occupancy or daylight. Status is provided to the network system for centralized control and command.

Detection Area:



Height	Minor Movement		Major Movement	
	X1	Y1	X2	Y2
10'	12'	9'	18'	12'

- Minor movement (person moving $\leq 3.0'$ per second)
- Major movement (person moving $\geq 3.0'$ per second)

Longer dimension of detection area (X1, X2) is parallel to longer dimension of EasySense

FORMFOCUS



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FFR LED Lay-In Retrofit Kit

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser optimized to balance efficiency and aesthetics
- Available in 2x2, 2x4, 1x4 & 1x8, and a wide variety of lumen outputs for maximum flexibility
- Quick and easy installation helps save on labor costs

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Classrooms
- Healthcare Facilities

Predicted L70 Lifetime:

- >95,000 hrs (calculated)
- >72,000 hrs (reported)
- 77% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)



Construction:

- Die-formed heavy-gauge cold rolled steel ballast housing with precision brake formed aluminum LED tray
- Frosted Acrylic Diffuser
- white enamel finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models
(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)

10 YEAR
EXTENDED
WARRANTY
AVAILABLE ON CERTAIN MODELS



Powered by:



Ordering Guide:

example: FFR 24 MD UV FA 835-ES2SR

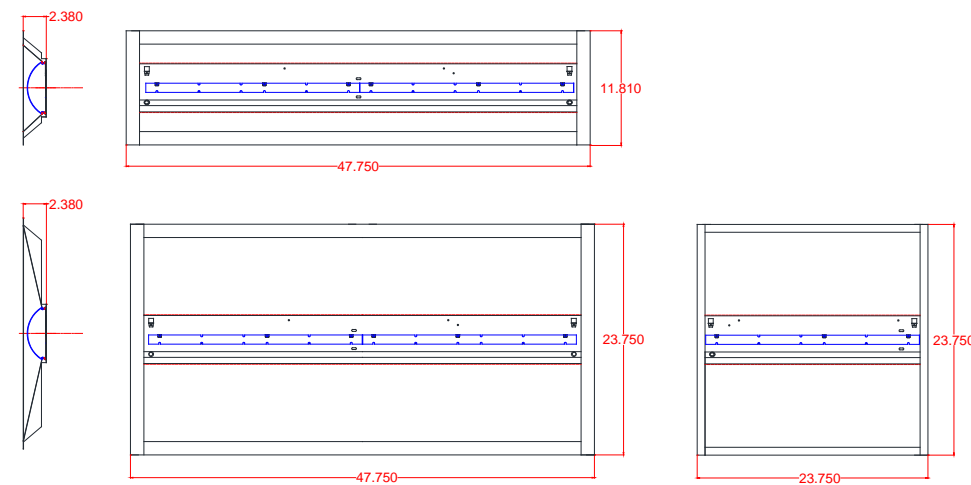
Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Options
FFR				FA		-	
FFR	24 22 14 14T	SL VL LW ML MD HI VH SH	UV 34	FA	830 835 840 850		Blank EXT10 SD ES2SR ES3SR EM1 F SM BAA

Accessories (Order separately):
SDT(347V) - 347V to 277V Step Down Transformer

Shielding FA	Frosted Acrylic Diffuser
CRI/CCT: 830	80 CRI / 3000K
835	80 CRI / 3500K
840	80 CRI / 4000K
850	80 CRI / 5000K
Options: Blank	None
EXT10	10 yr extended warranty <i>(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)</i>
SD	Step Dimming
ES2SR	Philips EasySense Occupancy/Daylight sensor with advanced grouping <i>(120-277V only)</i>
ES3SR	Philips EasySense Occupancy/Daylight sensor for Zigbee networks <i>(120-277V only)</i>
EM1	Emergency Pack - 12W, 1200 nominal lumen output <i>(120-277V / 0°C-50°C ambient)</i>
F	Fuse
SM	Easy access side mounted driver
BAA	Buy American Act Compliant

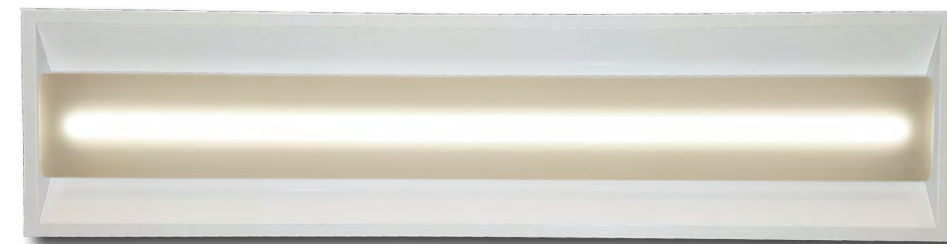
Size:	24	2'x4'
	22	2'x2'
	14	1'x4'
	14T	1'x8'
Lumen Output:	SL	Super Low
	VL	Very Low
	LW	Low
	ML	Medium Low <i>(available in 2x4 only)</i>
	MD	Medium
	HI	High <i>(not available in 1x8)</i>
	VH	Very High <i>(available in 2x4 only)</i>
	SH	Super High <i>(available in 2x4 only)</i>
Voltage:	UV	120-277V
	34	347V

Schematic:



Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
FFR 24 SL UV FA xxx	26	3108	120.5	3160	122.5	3264	126.5	3362	130.3
FFR 24 VL UV FA xxx	28	3714	132.6	3763	134.4	3888	138.8	4004	143.0
FFR 24 LW UV FA xxx	33	4249	128.8	4288	129.9	4430	134.2	4563	138.3
FFR 24 ML UV FA xxx	36	4551	126.4	4597	127.7	4749	131.9	4891	135.9
FFR 24 MD UV FA xxx	46	5805	126.9	5903	129.1	6098	133.3	6281	137.3
FFR 24 HI UV FA xxx	52	6870	132.1	6929	133.2	7158	137.6	7372	141.8
FFR 24 VH UV FA xxx	60	7650	127.5	7747	129.1	8003	133.4	8243	137.4
FFR 24 SH UV FA xxx	68	8763	128.3	8911	130.4	9205	134.8	9481	138.8
FFR 22 SL UV FA xxx	18	2227	123.0	2264	125.1	2339	129.2	2409	133.1
FFR 22 VL UV FA xxx	25	2894	116.2	2951	118.5	3049	122.4	3140	126.1
FFR 22 LW UV FA xxx	32	3769	117.8	3810	119.1	3936	123.0	4054	126.7
FFR 22 MD UV FA xxx	37	4552	124.0	4628	126.1	4781	130.3	4925	134.2
FFR 22 HI UV FA xxx	50	5731	114.2	5828	116.2	6020	120.0	6201	123.6
FFR 14 SL UV FA xxx	18	2238	125.7	2275	127.8	2350	132.0	2421	136.0
FFR 14 VL UV FA xxx	24	2939	121.5	2988	123.5	3087	127.5	3179	131.4
FFR 14 LW UV FA xxx	28	3663	130.8	3741	133.6	3864	138.0	3980	142.2
FFR 14 MD UV FA xxx	36	4489	124.7	4570	126.9	4721	131.1	4862	135.1
FFR 14 HI UV FA xxx	49	6023	122.3	6124	124.3	6327	128.4	6516	132.3
FFR 14T SL UV FA 8xx	36	4518	125.5	4712	130.9	4867	135.2	5013	139.3
FFR 14T VL UV FA 8xx	50	6024	120.5	6406	128.1	6617	132.3	6816	136.3
FFR 14T LW UV FA 8xx	56	7368	131.6	7818	139.6	8077	144.2	8319	148.6
FFR 14T MD UV FA 8xx	72	9029	125.4	9897	137.5	10224	142.0	10531	146.3



FFR LED Lay-In Retrofit Kit

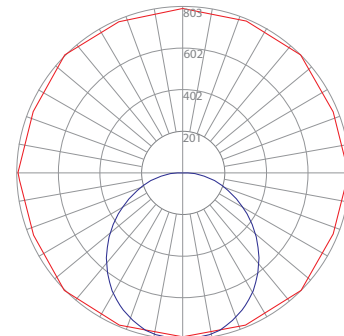


Photometric Data:

FFR 22 SL UV FA 830

Test No.: LLIA000691-009A
 Luminaire Lumens: 2,228 lm
 Luminaire Watts: 18.1W
 Efficacy: 123.0 LPW
 Spacing Criterion (0-180): 1.22
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2057	2268	2454
55	1795	2157	2422
65	1487	2024	2371
75	1172	1935	2377
85	856	1501	857



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	290.46	13.00
0-30	615.41	27.60
0-40	1004.08	45.10
0-60	1755.05	78.80
0-80	2185.89	98.10
0-90	2227.52	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	2227.52	100.00

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

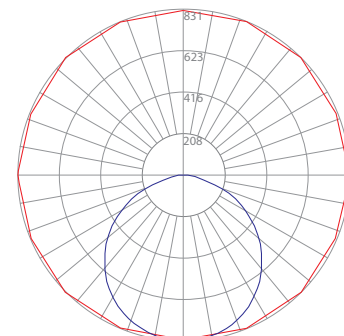
RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73			
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62			
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40			
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36			
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32			
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFR 14 SL UV FA 830

Test No.: LLIA000691-004
 Luminaire Lumens: 2,238 lm
 Luminaire Watts: 17.8W
 Efficacy: 125.7 LPW
 Spacing Criterion (0-180): 1.24
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2920	3174	3315
55	2592	3012	3183
65	2177	2721	2251
75	1704	1757	929
85	1177	800	539



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	303.48	13.60
0-30	645.32	28.80
0-40	1056.79	47.20
0-60	1852.02	82.80
0-80	2214.41	99.00
0-90	2237.67	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	2237.67	100.00

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90			
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64			
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48			
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30			
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FFR LED Lay-In Retrofit Kit

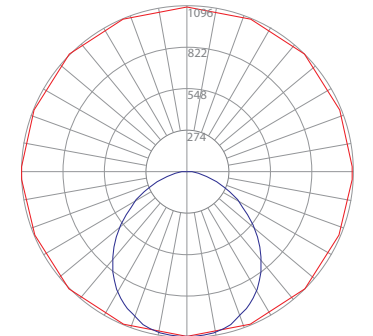


Photometric Data:

FFR 24 SL UV FA 830

Test No.: LLIA000691-002
 Luminaire Lumens: 3,108 lm
 Luminaire Watts: 25.8W
 Efficacy: 120.5 LPW
 Spacing Criterion (0-180): 1.24
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1544	1693	1785
55	1360	1620	1761
65	1130	1528	1719
75	877	1478	1698
85	620	1084	529



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	399.88	12.90
0-30	849.70	27.30
0-40	1390.60	44.70
0-60	2443.96	78.60
0-80	3051.15	98.20
0-90	3108.29	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	3108.29	100.00

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88			
2	99	90	84	78	96	88	82	77	85	80	75	82	77	73			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46			
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Installation Instructions:

- 1) Turn off power to luminaire, remove all fluorescent components, dispose of properly.
- 2) Insert endcaps between ceiling grid and troffer.
- 3) Slide LED panel between grid and troffer, fasten with provided quarter turns.



- 4) Connect LED panel with provided disconnect. Insert blank side panel between grid and troffer, fasten with provided quarter turns.



- 5) Insert lens material into track, turn on power.



Total install time less than 5 minutes!



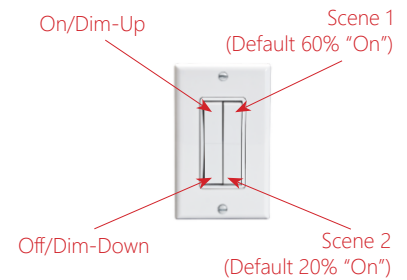
FormFocus available with Philips EasySense Sensors:

- Simple, cost effective way to add controls to every luminaire in order to maximize energy savings and address code-compliance strategies
- Occupancy sensing, daylight harvesting, and task tuning in one device
- Reduces installation time and eliminates the need to wire sensors outside the fixture in the ceiling
- Title 20 compliant
- Enables auto-off/manual-on and auto-off/partial-on application
- Easy field configuration from floor via smartphone with Easysense App
- Factory can pre-set max light levels



ES2SR (EasySense Fixture-Mount Sensor SNS200 with Philips SR Xitanium driver)

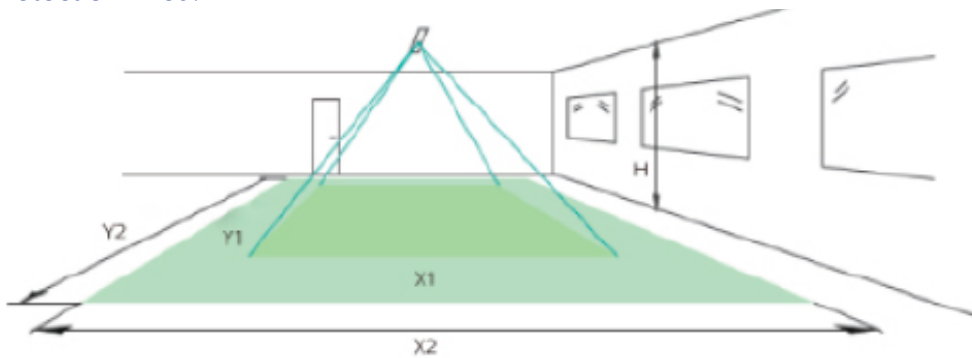
- Independent per-fixture control: Occupancy, Daylight Harvesting, Task Tuning
- Occupancy Sharing
 - Fixtures within a group can be programmed to remain at prescribed light levels so long as occupancy is detected anywhere in the group
- Scene Setting
- Advanced grouping to Illumra #ZBT-S2AWH wireless wall switch
 - Dual Rocker Self-Powered Light Switch
 - Up to 40 sensors can be grouped to a single switch
 - Functions: On/Off, Dim-Up/Dim-Down, Scene 1, Scene 2
- DLC listed



ES3SR (EasySense Fixture-Mount Sensor for Networks SNS300 with Philips SR Xitanium driver)

- Occupancy & daylight sensing in one device
- Designed for applications with centralized lighting control through Zigbee wireless technology
 - Compatible with qualified third-party lighting control systems or building management systems (BMS)
 - Provides a simple solution to actively manage and control energy usage, while remotely adjusting light settings and determining service needs
 - Provides fixture-specific information into networks for centralized control and enables functionality such as energy monitoring, scheduling, and load shedding.
 - **Note:** SNS300 does not provide stand-alone operation based on occupancy or daylight. Status is provided to the network system for centralized control and command.

Detection Area:



Height	Minor Movement		Major Movement	
H	X1	Y1	X2	Y2
10'	12'	9'	18'	12'

- Minor movement (person moving $\leq 3.0'$ per second)
- Major movement (person moving $\geq 3.0'$ per second)

Longer dimension of detection area (X1, X2) is parallel to longer dimension of EasySense



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FPL LED Flat Panel

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Available in 2x2, 2x4, and 1x4 configurations
- Uniform illumination with no visible LED pixilation
- Standard mounting includes recessed mounting in grid ceilings or suspended mounting using attached mounting clips. Optional surface mounting kit available.

Applications:

Suitable for most commercial and institutional applications

- Office
- Retail
- Classrooms
- Healthcare Facilities
- Some clean room applications (recess mount only)



Construction:

- Aluminum housing
- Acrylic lens with light guide panels for optimal light distribution and efficiency

Certifications:

- UL listed for US and Canada, suitable for damp locations (*HE models*)
- ETL listed for US and Canada, suitable for damp locations (*non-HE models*)
- IC-rated
- RoHS Compliant

Predicted L70 Lifetime:

- Up to over 100,000 hrs (calculated)
 - see *performance chart for L70 on specific models*
- (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 50°C (*HE models*)
- -25°C to 45°C (*non-HE models*)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



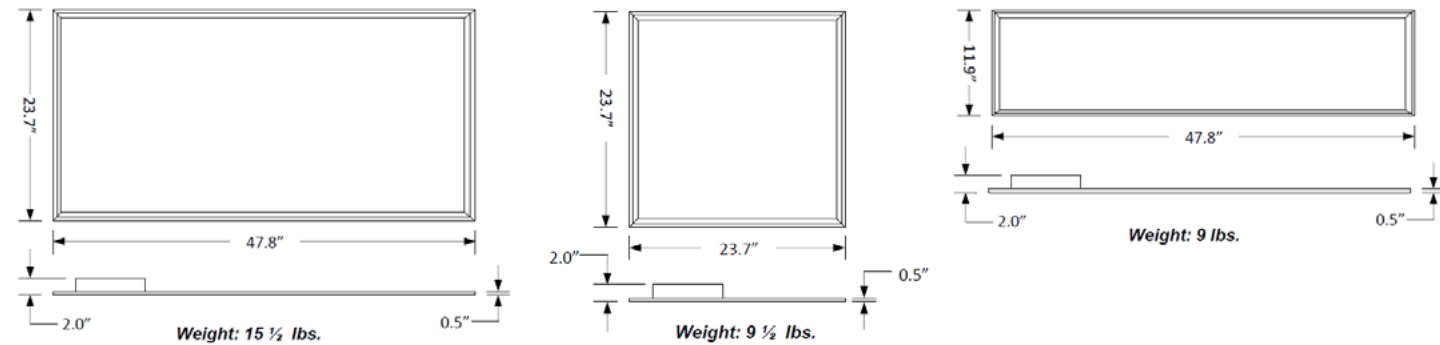
Ordering Guide:

example: FPL 24 MD HE UV FR 840-SM

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Options
FPL			UV	FR		-		
FPL	22	LW HE	UV	FR	830		Blank	Blank
		MD						
	MD HE							
24	MD	EMBR						
	MD HE							
14	HI	EM						
	MD							
		MD HE			840		FM	
		MD HE			850		CM	

Size:	22	2'x2'	CRI/CCT:	830	80 CRI / 3000K
	24	2'x4'		835	80 CRI / 3500K
	14	1'x4'		840	80 CRI / 4000K
				850	80 CRI / 5000K
Lumen Output:	LW HE	Low-High Efficiency <i>(available in 2x2 only)</i>	Mounting:	Blank	Recessed or Suspended Mounting
	MD	Medium		SM	Surface Mount Kit
	MD HE	Medium-High Efficiency		FM	Flange Mount Kit
	HI	High <i>(available in 2x4 only)</i>		CM	Cable Mount Kit
Voltage:	UV	120-277V	Options:	Blank	None
Shielding:	FR	Frosted Acrylic Lens		EMB	Bracket for emergency battery back-up
				EM	7.8W Emergency Battery Back-up

Schematic:



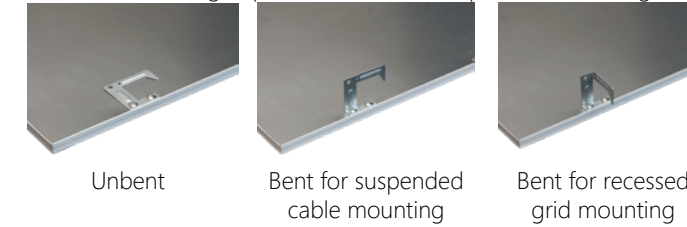
Performance Chart:

Catalog #	Watts	Lumens (830)	LPW (830)	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)	L70 * (hours)
FPL 22 LW HE UV FR xxx	22	2730	124	2754	125	2769	126	2799	127	> 100,000
FPL 22 MD UV FR xxx	40	4078	102	4134	103	4134	103	4480	112	56,000
FPL 22 MD HE UV FR xxx	32	4016	126	4079	127	4109	128	4170	130	> 100,000
FPL 24 MD UV FR xxx	47	4652	99	4652	99	4652	99	5062	108	63,000
FPL 24 MD HE UV FR xxx	35	4508	129	4590	131	4672	133	4836	138	> 100,000
FPL 24 HI UV FR xxx	68	6567	97	6645	98	6645	98	7325	108	63,000
FPL 14 MD UV FR xxx	40	4070	102	4149	104	4149	104	4600	115	56,000
FPL 14 MD HE UV FR xxx	32	4011	125	4051	127	4075	127	4122	129	> 100,000

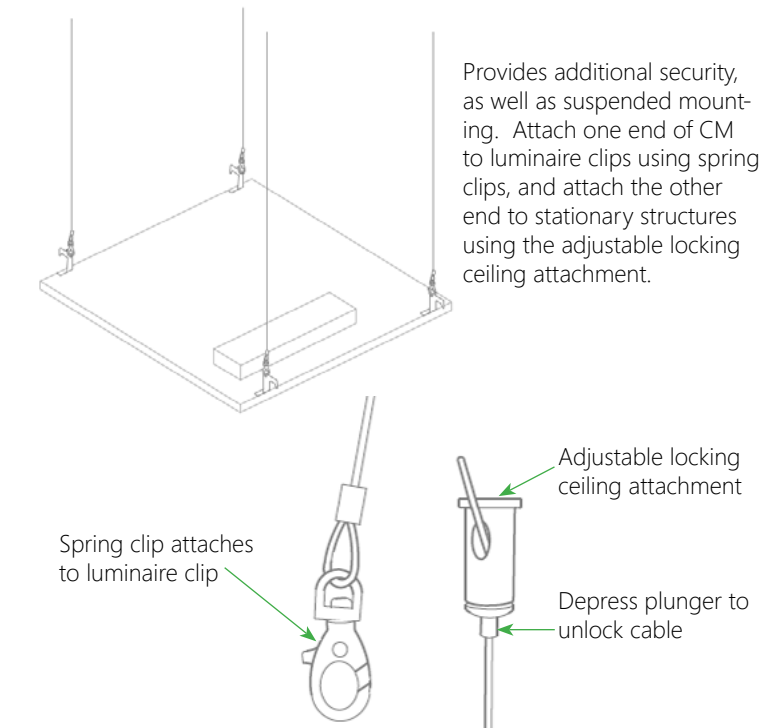
*Calculated hours based on IES TM-21-11

Mounting:

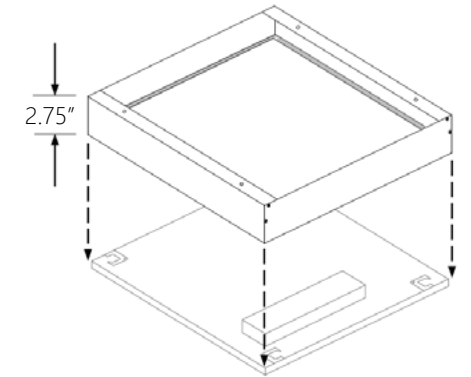
Standard Mounting Clips for recessed or suspension mounting



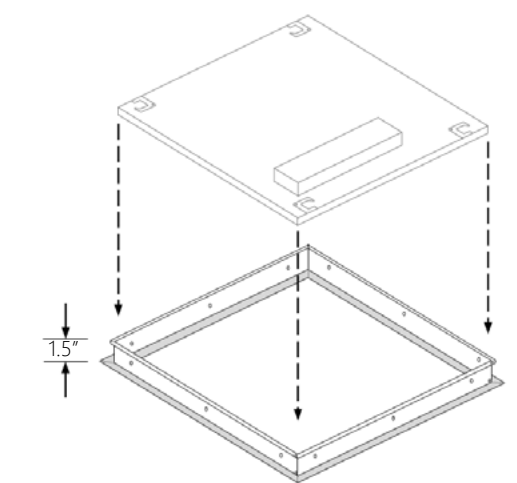
Optional **CM** cable mount kit



Optional **SM** surface mount kit



Optional **FM** flange mount kit



For installation in plaster or other hard ceiling surfaces. Attach FM to ceiling joists or other stationary structures and the panel is mounted flush to the ceiling.

Photometric Data:

FPL 24 MD HE UV FR 830

Luminaire Lumens: 4,495 lm

Luminaire Watts: 34.2W

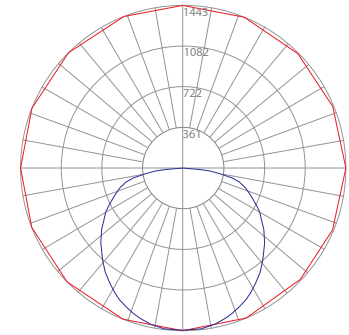
Efficacy: 131.4 LPW

Spacing Criterion (0-180): 1.26

Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1854	1897	1977
55	1764	1892	2075
65	1615	1975	2317
75	1326	2260	2853
85	730	1659	1717



— Vert. Plane
— Horiz. Cone

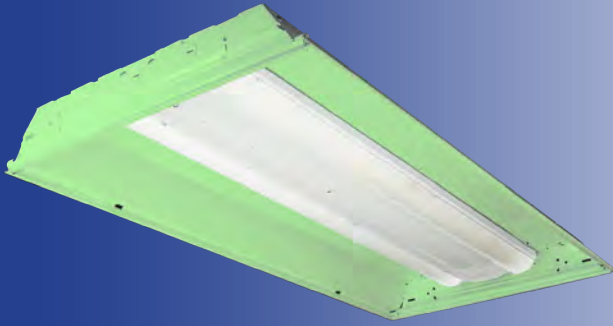
Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	527.44	11.70
0-30	1121.18	24.90
0-40	1840.80	41.00
0-60	3316.16	73.80
0-80	4356.84	96.90
0-90	4487.38	99.80
90-120	3.68	0.10
90-130	4.67	0.10
90-150	6.36	0.10
90-180	7.73	0.20
0-180	4495.11	100.00

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	108	102	98	93	105	100	96	92	96	92	89	92	89	86		
2	97	88	81	75	94	86	80	74	83	77	72	79	75	70		
3	88	77	68	61	86	75	67	61	72	65	60	69	64	59		
4	81	68	59	52	78	67	58	51	64	56	50	62	55	50		
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43		
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37		
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33		
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30		
9	55	41	33	27	53	40	32	27	39	32	27	38	31	27		
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RTL LED Troffer Retrofit Kit

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Frosted diffuser available to help minimize glare and improve aesthetics
- Available in 2x2, 2x4, and 1x4 for maximum flexibility
- Easy lift and shift installation saves on labor costs

Applications:

For use in existing 2x2, 2x4, and 1x4 troffer luminaires.

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions
- 10 year extended warranty available on specific models

(40°C max ambient / Max 5,000 annual operating hours / see below for eligible models)

10 YEAR
EXTENDED
WARRANTY
AVAILABLE ON CERTAIN MODELS

Eligible models:

- RTL 24 LW UV 8xx-EXT10
- RTL 24 LW UV FR 8xx-EXT10
- RTL 24 MD UV 8xx-EXT10
- RTL 24 MD UV FR 8xx-EXT10
- RTL 24 VH UV 8xx-EXT10
- RTL 22 LW UV 8xx-EXT10
- RTL 14 MD UV 8xx-EXT10
- RTL 14 MD UV FR 8xx-EXT10

Consult factory for additional models

Construction:

- Precision brake formed from heavy gauge cold rolled steel
- Highly durable, highly reflective white finish

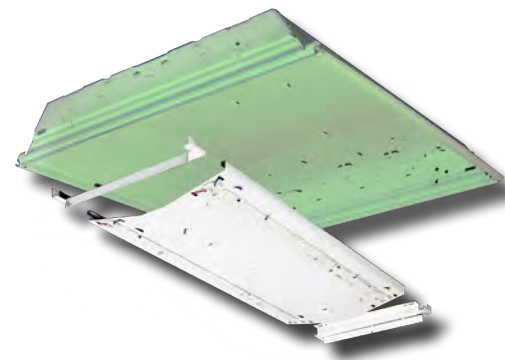
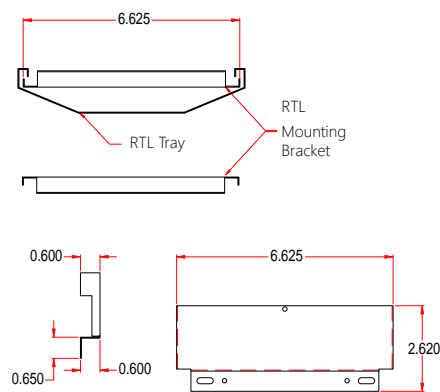
Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Predicted L70 Lifetime:

- >140,000 hrs (calculated)
- >72,000 hrs (reported)
- 84% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Schematic:



Powered by:



RTL LED Troffer Retrofit Kit



Ordering Guide:

example: RTL 24 LW UV 840

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Options
RTL						-	
RTL	22 24 14	VL LW MD HI VH SH	UV 34	Blank FR	835 840 850		EM EXT10

Accessories: (order separately)

- **A12(x)** Pattern 12 Prismatic Acrylic Lens (x = specify exact dimensions)
- **PW(x)** Prismatic White Acrylic Lens (x = specify exact dimensions)
- **A23F(x)** Frosted High Efficiency Pattern 23 Prismatic Acrylic Lens (x = specify exact dimensions)

Size:	22 2'x2'	Shielding:	Blank None
	24 2'x4'		FR Frosted Acrylic
	14 1'x4'		
Lumen Output:	VL Very Low (2'x4' model only)	CRI/CCT:	835 80 CRI / 3500K
	LW Low		840 80 CRI / 4000K
	MD Medium		850 80 CRI / 5000K
	HI High	Options:	EM Emergency Pack - up to 12W (120-277V / 0°C-50°C ambient)
	VH Very High		EXT10 10 yr extended warranty (40°C max ambient / Max 5,000 annual operating hours)
	SH Super High (2'x4' model only)		
Voltage:	UV 120-277V	Eligible models:	• RTL 24 VH UV 8xx-EXT10
	34 347V		• RTL 24 LW UV 8xx-EXT10
			• RTL 22 LW UV 8xx-EXT10
			• RTL 24 LW UV FR 8xx-EXT10
			• RTL 14 MD UV 8xx-EXT10
			• RTL 24 MD UV 8xx-EXT10
			• RTL 14 MD UV FR 8xx-EXT10
			Consult factory for additional models

Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
RTL 22 LW UV 835	2506	20	125.3	RTL 22 LW UV 840	2583	20	129.2	RTL 22 LW UV 850	2661	20	133.0
RTL 22 MD UV 835	4228	30	140.9	RTL 22 MD UV 840	4359	30	145.3	RTL 22 MD UV 850	4489	30	149.6
RTL 22 HI UV 835	4893	36	135.9	RTL 22 HI UV 840	5044	36	140.1	RTL 22 HI UV 850	5196	36	144.3
RTL 22 VH UV 835	5868	46	127.6	RTL 22 VH UV 840	6049	46	131.5	RTL 22 VH UV 850	6231	46	135.4
RTL 24 VL UV 835	3820	26	146.9	RTL 24 VL UV 840	3938	26	151.5	RTL 24 VL UV 850	4056	26	156.0
RTL 24 LW UV 835	4328	30	144.3	RTL 24 LW UV 840	4462	30	148.7	RTL 24 LW UV 850	4595	30	153.2
RTL 24 MD UV 835	5939	44	135.0	RTL 24 MD UV 840	6122	44	139.1	RTL 24 MD UV 850	6306	44	143.3
RTL 24 HI UV 835	6930	54	128.3	RTL 24 HI UV 840	7144	54	132.3	RTL 24 HI UV 850	7359	54	136.6
RTL 24 VH UV 835	7789	64	121.7	RTL 24 VH UV 840	8029	64	125.5	RTL 24 VH UV 850	8270	64	129.2
RTL 24 SH UV 835	10041	68	148.8	RTL 24 SH UV 840	10351	68	153.4	RTL 24 SH UV 850	10662	68	158.0
RTL 14 LW UV 835	2506	20	125.3	RTL 14 LW UV 840	2583	20	129.2	RTL 14 LW UV 850	2661	20	133.0
RTL 14 MD UV 835	4228	30	140.9	RTL 14 MD UV 840	4359	30	145.3	RTL 14 MD UV 850	4489	30	149.6
RTL 14 HI UV 835	4893	36	135.9	RTL 14 HI UV 840	5044	36	140.1	RTL 14 HI UV 850	5196	36	144.3
RTL 14 VH UV 835	5868	46	127.6	RTL 14 VH UV 840	6049	46	131.5	RTL 14 VH UV 850	6231	46	135.4

Adjustment Factor: FR diffuser = 0.958

RTL LED Troffer Retrofit Kit



Photometric Data:

RTL 24 SH UV 850

Test No.: LLIA000673-002
 Luminaire Lumens: 10,662 lm
 Luminaire Watts: 67.5W
 Efficacy: 158.0 LPW
 Spacing Criterion (0-180): 1.30
 Spacing Criterion (90-270): 1.32

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5059	5118	5111
55	4908	5043	5082
65	4533	4783	5000
75	3672	4422	5331
85	1594	616	665

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89		
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73		
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61		
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35		
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

RTL 24 SH UV 850 w/ A12 lens

Test No.: LLIA000673-001
 Luminaire Lumens: 9,407 lm
 Luminaire Watts: 67.3W
 Efficacy: 139.8 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.24

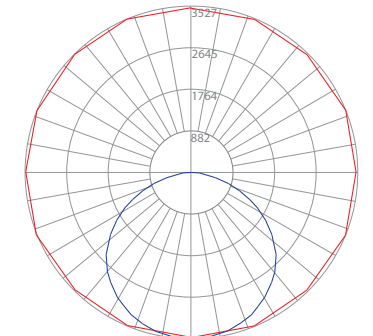
Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4998	5031	5072
55	3984	4086	4195
65	3083	2812	3139
75	2617	2199	2956
85	3038	3269	4097

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76		
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65		
4	85	73	65	59	83	72	64	58	70	63	58	67	61	57		
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50		
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44		
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39		
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35		
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32		
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29		

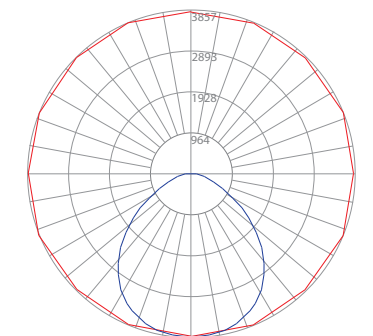
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

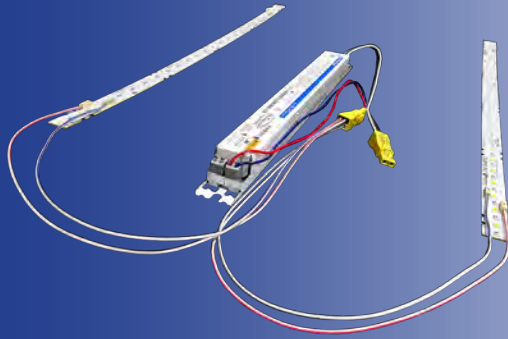
Zone	Lumens	%Fixt
0-20	1293.18	12.10
0-30	2774.19	26.00
0-40	4600.68	43.10
0-60	8341.49	78.20
0-80	10560.01	99.00
0-90	10662.46	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	10662.46	100.00



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1408.51	15.00
0-30	2987.79	31.80
0-40	4837.54	51.40
0-60	7933.27	84.30
0-80	9199.35	97.80
0-90	9402.18	99.90
90-120	4.95	0.00
90-130	4.95	0.10
90-150	4.95	0.10
90-180	4.95	0.10
0-180	9407.14	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RLK T22 LED Board/Driver 2x2 Prismatic Retrofit Kit

Features:

- High performance, long life LED technology
- 0-10V dimming drivers standard
- Up to over 135 lumens per watt
- Pre-wired components and driver quick-disconnect allows for quick and easy installation, saving on labor costs
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Replaces up to 4 lamp F17 T8 or 2 lamp FB32 T8 systems

Applications:

For use in most existing 2x2 prismatic troffer & surface box luminaires.
 For dry/indoor use only.

Note: Contractor/engineer must ensure proper fit in existing luminaire housing.

Ambient Operating Temp:

- -30°C to 40°C

Predicted Lifetime:

- L90 > 60,000hrs (reported)
- L70 > 200,000hrs (calculated)
- 92.1% lumen maint. @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Pre-wired boards and 0-10V driver
- Kit comes with (2) 2' LED boards wired for (2) 2' rows of LEDs
- Magnetic fasteners come standard and allow for easy application and adjustment of boards onto existing housing

Certifications:

- UL 1598c listed for US and Canada, suitable for damp locations
- RoHS compliant
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:
Universal
 Lighting Technologies

EVERLINE
 LED Technology

RLK T22

LED Board/Driver
2x2 Prismatic Retrofit Kit



Ordering Guide:

example: RLK T22 2 HI UV 840

Series	Retrofit Type	# of Rows	Output	Voltage	CRI/CCT	Options
RLK	T22	2		UV		-
RLK	T22	2	SL VL LW MD HI VH	UV	830 835 840 850	Blank BAA

Retrofit Type: T22 2x2 prismatic troffer/surface box

of Rows: 2 (2) 2' Rows of LEDs

Lumen Output: SL Super Low
VL Very Low
LW Low
MD Medium
HI High
VH Very High

Voltage: UV 120-277V

CRI/CCT: 830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

Options: Blank None
BAA Buy American Act compliant

Performance Chart:

Catalog #	Nominal Lumens (3000K)	Watts (3000K)	LPW (3000K)	Nominal Lumens (3500K)	Watts (3500K)	LPW (3500K)	Nominal Lumens (4000K)	Watts (4000K)	LPW (4000K)	Nominal Lumens (5000K)	Watts (5000K)	LPW (5000K)
RLK T22 2 SL UV 8xx	1430	11	125.4	1436	11	126.0	1477	11	129.6	1492	11	130.9
RLK T22 2 VL UV 8xx	1807	15	120.5	1815	15	121.0	1867	15	124.5	1886	15	125.7
RLK T22 2 LW UV 8xx	2361	20	118.7	2371	20	119.1	2439	20	122.6	2464	20	123.8
RLK T22 2 MD UV 8xx	3218	25	128.7	3231	25	129.3	3324	25	133.0	3358	25	134.3
RLK T22 2 HI UV 8xx	3485	27	129.1	3500	27	129.6	3600	27	133.4	3636	27	134.7
RLK T22 2 VH UV 8xx	4180	32	130.6	4197	32	131.2	4318	32	134.9	4361	32	136.3

Scaling Factor:

Pattern 12 Prismatic Acrylic lens = 0.85

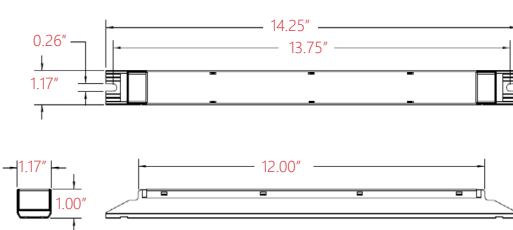
Performance may vary depending on existing luminaire/lens characteristics and condition.

Schematic:

LED Board



Driver



RLK T22

LED Board/Driver
2x2 Prismatic Retrofit Kit



Photometric Data:

RLK T22 2 LW UV 830

Test No.: LLIA000933-009

Luminaire Lumens: 2,362 lm

Luminaire Watts: 19.9W

Efficacy: 118.7 LPW

Spacing Criterion (0-180): 1.26

Spacing Criterion (90-270): 1.28

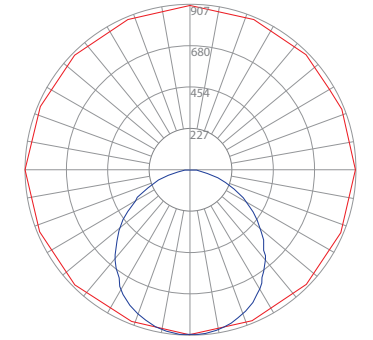
Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2332	2424	2548
55	2268	2248	2530
65	1964	2038	1347
75	1356	967	316
85	721	506	326

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76		
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65		
4	84	72	64	58	82	71	63	57	69	62	56	66	60	56		
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48		
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42		
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38		
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34		
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30		
10	54	41	33	28	53	40	33	28	39	33	28	38	32	28		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	325.91	13.80
0-30	689.88	29.20
0-40	1126.58	47.70
0-60	1983.00	84.00
0-80	2345.52	99.30
0-90	2361.52	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	2361.52	100.00

RLK T22 2 LW UV 830 w/ A12 lens

Test No.: LLIA000933-006

Luminaire Lumens: 2,010 lm

Luminaire Watts: 19.9W

Efficacy: 101.0 LPW

Spacing Criterion (0-180): 1.18

Spacing Criterion (90-270): 1.22

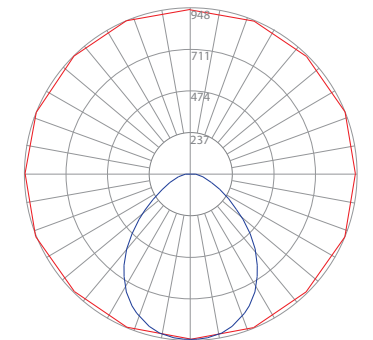
Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2254	2252	2241
55	1640	1587	1573
65	1228	1024	1205
75	1372	955	1109
85	1710	1360	1372

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91		
2	101	94	88	82	99	92	86	81	88	84	80	85	81	78		
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67		
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52		
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47		
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42		
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38		
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34		
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32		

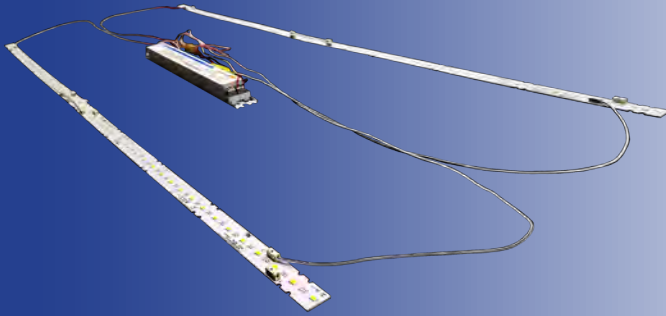
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	338.81	16.90
0-30	708.81	35.30
0-40	1125.08	56.00
0-60	1733.41	86.20
0-80	1970.35	98.00
0-90	2010.44	100.00
90-120	0.05	0.00
90-130	0.05	0.00
90-150	0.05	0.00
90-180	0.05	0.00
0-180	2010.49	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

RLK T24 LED Board/Driver 2x4 Prismatic Retrofit Kit

Features:

- High performance, long life LED technology
- 0-10V dimming drivers standard
- Up to over 140 lumens per watt
- Pre-wired components and driver quick-disconnect allows for quick and easy installation, saving on labor costs
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Replaces up to 4 lamp T8 systems

Applications:

For use in most existing 2x4 prismatic troffer & surface box luminaires. For dry/indoor use only.

Note: Contractor/engineer must ensure proper fit in existing luminaire housing.

Ambient Operating Temp:

- -30°C to 40°C

Predicted Lifetime:

- L90 > 60,000hrs (reported)
- L70 > 200,000hrs (calculated)
- 90.6% lumen maint. @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Pre-wired boards and 0-10V driver
- Kit comes with (4) 2' LED boards wired for (2) 4' rows of LEDs
- Magnetic fasteners come standard and allow for easy application and adjustment of boards onto existing housing

Certifications:

- UL 1598c listed for US and Canada, suitable for damp locations
- RoHS compliant
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:
Universal
 Lighting Technologies

EVERLINE
 LED Technology

RLK T24

LED Board/Driver
2x4 Prismatic Retrofit Kit



Ordering Guide:

example: RLK T24 2 MD UV 840

Series	Retrofit Type	# of Rows	Output	Voltage	CRI/CCT	Options
RLK	T24	2		UV		-
RLK	T24	2	SL VL LW ML MD MH HI VH SH	UV	830 835 840 850	Blank BAA

Retrofit Type: T24 2x4 prismatic troffer/surface box

of Rows: 2 (2) 4' Rows of LEDs

Lumen Output: SL Super Low
VL Very Low
LW Low
ML Medium Low
MD Medium
MH Medium High
HI High
VH Very High
SH Super High

Voltage: UV 120-277V

CRI/CCT: 830 80 CRI / 3000K
835 80 CRI / 3500K
840 80 CRI / 4000K
850 80 CRI / 5000K

Options: Blank None
BAA Buy American Act compliant

Performance Chart:

Catalog #	Nominal Lumens (3000K)	Watts (3000K)	LPW (3000K)	Nominal Lumens (3500K)	Watts (3500K)	LPW (3500K)	Nominal Lumens (4000K)	Watts (4000K)	LPW (4000K)	Nominal Lumens (5000K)	Watts (5000K)	LPW (5000K)
RLK T24 2 SL UV 8xx	2600	20	132.6	2610	20	133.2	2686	20	137.0	2712	20	138.4
RLK T24 2 VL UV 8xx	3352	25	134.1	3366	25	134.6	3463	25	138.5	3498	25	139.9
RLK T24 2 LW UV 8xx	3736	28	133.4	3751	28	134.0	3859	28	137.8	3898	28	139.2
RLK T24 2 ML UV 8xx	4117	31	132.8	4134	31	133.3	4253	31	137.2	4295	31	138.6
RLK T24 2 MD UV 8xx	4551	35	130.0	4570	35	130.6	4701	35	134.3	4748	35	135.7
RLK T24 2 MH UV 8xx	5256	41	127.6	5278	41	128.1	5430	41	131.8	5484	41	133.1
RLK T24 2 HI UV 8xx	6546	47	139.3	6573	47	139.9	6763	47	143.9	6830	47	145.3
RLK T24 2 VH UV 8xx	7278	53	137.3	7308	53	137.9	7519	53	141.9	7594	53	143.3
RLK T24 2 SH UV 8xx	8559	64	133.7	8595	64	134.3	8842	64	138.2	8931	64	139.5

Scaling Factor:

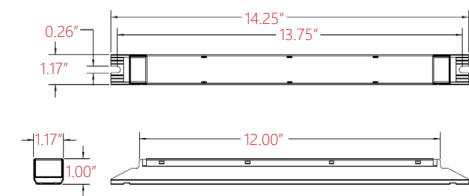
Pattern 12 Prismatic Acrylic lens = 0.88

Performance may vary depending on existing luminaire/lens characteristics and condition.

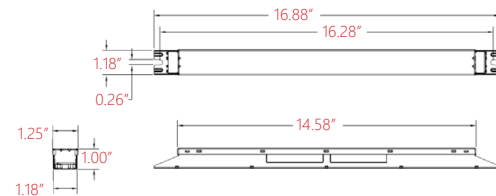
Schematic:



Driver for SL through VH



Driver for SH models



RLK T24

LED Board/Driver
2x4 Prismatic Retrofit Kit



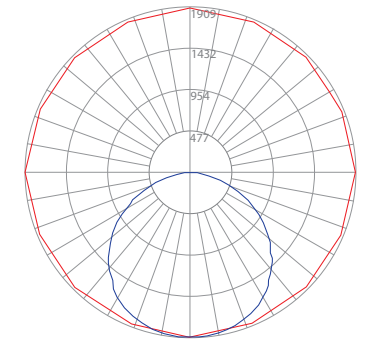
Photometric Data:

RLK T24 2 MH UV 830

Test No.: LLIA000933-008
Luminaire Lumens: 5,256 lm
Luminaire Watts: 41.2W
Efficacy: 127.6 LPW
Spacing Criterion (0-180): 1.32
Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2664	2680	2620
55	2597	2527	2603
65	2356	2381	1303
75	1861	1056	281
85	574	399	354



— Vert. Plane
— Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90			
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76			
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64			
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55			
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48			
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42			
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30			
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27			

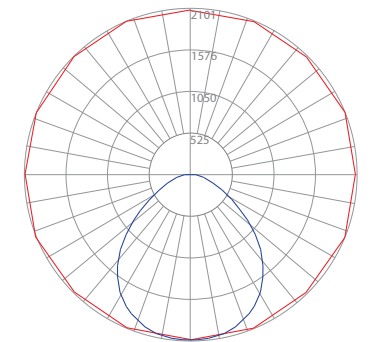
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

RLK T24 2 MH UV 830 w/ A12 lens

Test No.: LLIA000933-005A
Luminaire Lumens: 4,620 lm
Luminaire Watts: 41.2W
Efficacy: 112.1 LPW
Spacing Criterion (0-180): 1.24
Spacing Criterion (90-270): 1.20

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2584	2476	2316
55	1926	1762	1623
65	1419	1111	1275
75	1295	1034	1474
85	1586	1544	1960



— Vert. Plane
— Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91			
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77			
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67			
4	86	75	67	61	84	74	66	60	71	65	59	69	63	59			
5	80	68	59	53	78	67	59	53	64	58	52	63	57	52			
6	74	61	53	47	72	60	53	47	59	52	47	57	51	46			
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41			
8	64	51	43	38	63	51	43	38	50	43	38	48	42	37			
9	60	47	40	34	59	47	39	34	46	39	34	45	39	34			
10	57	44	36	31	55	43	36	31	43	36	31	42	35	31			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	760.67	16.50
0-30	1600.39	34.60
0-40	2554.48	55.30
0-60	3970.97	85.90
0-80	4522.46	97.90
0-90	4619.38	100.00
90-120	1.06	0.00
90-130	1.06	0.00
90-150	1.06	0.00
90-180	1.06	0.00
0-180	4620.44	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

NVL LED Vaportight

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Multiple hanging options, including surface, chain, and aircraft cable, for easy installation
- Durable materials and craftsmanship allows the NVL to withstand some of the harshest environments

Applications:

- Most industrial, retail, and recreational low bay and high bay applications
- Warehouse
 - Manufacturing Facility
 - Food Processing
 - Freezer
 - Gymnasium
 - Car Wash

Predicted L70 Lifetime:

- >72,000 hrs (reported)
- ≥74% lumen maint. @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -30°C to 30°C for SH output
- -30°C to 35°C for VH output
- -30°C to 40°C for LW, MD, HI output

Construction:

- UL 5VA fiberglass housing (will not melt or burn)
- Impact resistant acrylic and UV stabilized polycarbonate lenses
- Pre-painted cold rolled steel board trays
- Acetal copolymer secure locking plastic latches (stainless steel latches optional)
- Stainless steel mounting hardware

Certifications:

- UL 1598, suitable for wet locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>
- IP65
- IP66
- IP67
- NEMA 4X
- NSF
- PSI 1500
- RoHS

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:
Universal
 Lighting Technologies

EVERLINE
 LED Technology

Ordering Guide:

example: NVL 4 HI UV FDA 840-SM

Series	Length	Output	Voltage	Shielding	CRI/CCT	-	Hanging	Options
NVL						-		
NVL	2	LW MD HI VH SH	UV 34	CRP FRP CRA FRA CDA FDA	835 840 850		Blank SMBB SMBBQC SMBBQC20 SM45	Blank C6 C10 D6 D10 P(NEMA) OS OSD PC EM1 EM1C EM2 SSL SC F SDT(480V)
	4	LW MD HI VH SH		CRP FRP CRA FRA CDA FDA CSA FSA				
	8	SL VL LW MD HI VH SH		CRA FRA CDA FDA				

Length:	2	2'						
	4	4'						
	8	8'						
Lumen Output:	SL	Super Low (available in 8' only)						
	VL	Very Low (available in 8' only)						
	LW	Low						
	MD	Medium						
	HI	High						
	VH	Very High						
	SH	Super High						
Voltage:	UV	120-277V						
	34	347V						
Shielding:	CRP	Clear Ribbed Polycarbonate (not available in 8')						
	FRP	Frosted Ribbed Polycarbonate (not available in 8')						
	CRA	Clear Ribbed Acrylic						
	FRA	Frosted Ribbed Acrylic						
	CDA	Clear Deep Acrylic						
	FDA	Frosted Deep Acrylic						
	CSA	Clear Shallow Acrylic (available in 4' only)						
	FSA	Frosted Shallow Acrylic (available in 4' only)						
CRI/CCT:	835	80 CRI / 3500K						
	840	80 CRI / 4000K						
	850	80 CRI / 5000K						
Hanging:	Blank	Surface Mounting Bracket (comes standard)						
	SMBB	Mounting Bracket Bail						
		(for chain or cable mounting)						
	SMBBQC	Bracket Bail w/ 10' Quick Hang Cable Kit						
	SMBBQC20	Bracket Bail w/ 20' Quick Hang Cable Kit						
	SM45	45° Mounting Bracket						
Options:	Blank	None						
	C6	6' Single Circuit Cord						
	C10	10' Single Circuit Cord						
	D6	6' Dual Circuit Cord						
	D10	10' Dual Circuit Cord						
	P(NEMA)	Plug (Specify NEMA configuration)						
	OS	Occupany Sensor (on/off)						
	OSD	Occupany Sensor (on/off/dim)						
	PC	Photocell						
	EM1	Emergency Pack - up to 8W (120-277V / 10°C-50°C ambient)						
	EM1C	Emergency Pack - up to 14W (120-277V / -20°C-50°C ambient / adds 30W to system wattage)						
	EM2	Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)						
	SSL	Stainless Steel Latches						
	SC	Safety Cable						
	F	Fuse						
	SDT(480V)	480V to 277V Step Down Transformer						
	BAA	Buy American Act compliant						

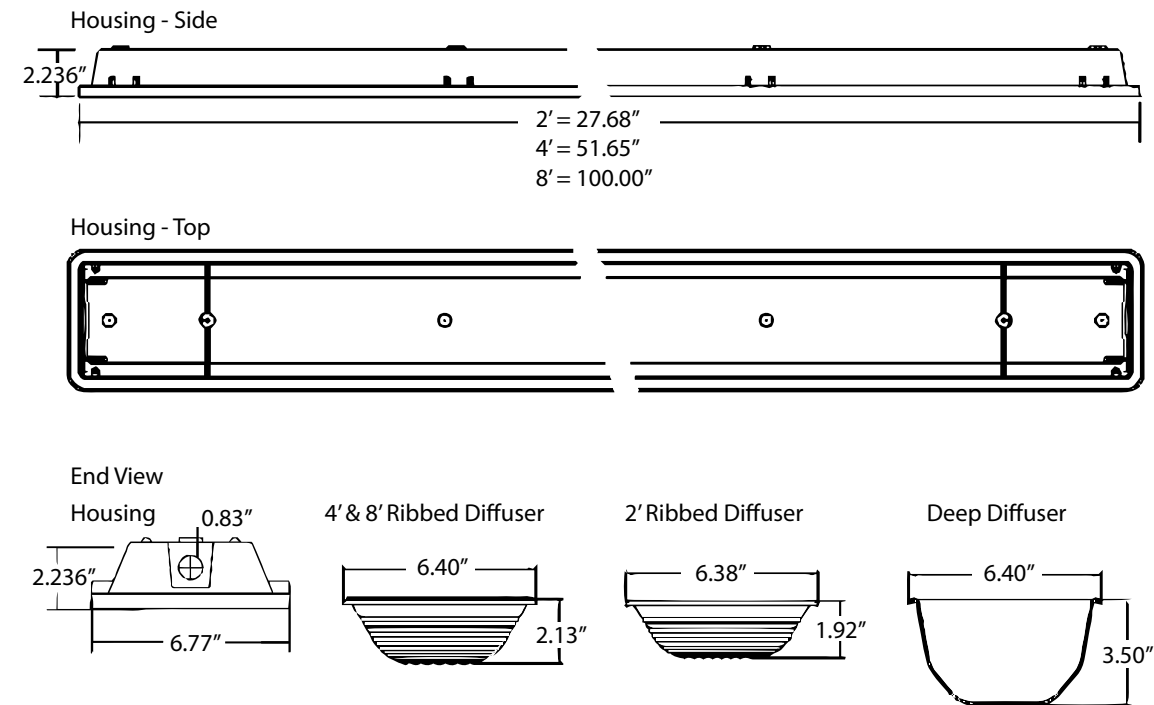
Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
NVL 2 LW UV FRA 835	1248	10	124.8	NVL 2 LW UV FRA 840	1290	10	129.0	NVL 2 LW UV FRA 850	1328	10	132.8
NVL 2 MD UV FRA 835	2232	18	123.3	NVL 2 MD UV FRA 840	2306	18	127.4	NVL 2 MD UV FRA 850	2375	18	131.2
NVL 2 HI UV FRA 835	3276	26	126.0	NVL 2 HI UV FRA 840	3384	26	130.2	NVL 2 HI UV FRA 850	3486	26	134.1
NVL 2 VH UV FRA 835	4270	35	122.0	NVL 2 VH UV FRA 840	4412	35	126.0	NVL 2 VH UV FRA 850	4544	35	129.8
NVL 2 SH UV FRA 835	5578	46	121.8	NVL 2 SH UV FRA 840	5763	46	125.8	NVL 2 SH UV FRA 850	5936	46	129.6
NVL 4 LW UV FRA 835	2297	18	125.9	NVL 4 LW UV FRA 840	2373	18	130.1	NVL 4 LW UV FRA 850	2444	18	134.0
NVL 4 MD UV FRA 835	4403	34	129.5	NVL 4 MD UV FRA 840	4549	34	133.8	NVL 4 MD UV FRA 850	4685	34	137.8
NVL 4 HI UV FRA 835	7078	55	128.7	NVL 4 HI UV FRA 840	7312	55	132.9	NVL 4 HI UV FRA 850	7531	55	136.9
NVL 4 VH UV FRA 835	8429	66	127.7	NVL 4 VH UV FRA 840	8707	66	131.9	NVL 4 VH UV FRA 850	8969	66	135.9
NVL 4 SH UV FRA 835	10478	87	120.0	NVL 4 SH UV FRA 840	10824	87	124.0	NVL 4 SH UV FRA 850	11149	87	127.7
NVL 8 SL UV FRA 835	4082	30	136.1	NVL 8 SL UV FRA 840	4217	30	140.6	NVL 8 SL UV FRA 850	4344	30	144.8
NVL 8 VL UV FRA 835	5987	46	130.2	NVL 8 VL UV FRA 840	6185	46	134.5	NVL 8 VL UV FRA 850	6371	46	138.5
NVL 8 LW UV FRA 835	8890	66	134.7	NVL 8 LW UV FRA 840	9184	66	139.1	NVL 8 LW UV FRA 850	9459	66	143.3
NVL 8 MD UV FRA 835	11176	82	136.3	NVL 8 MD UV FRA 840	11545	82	140.8	NVL 8 MD UV FRA 850	11892	82	145.0
NVL 8 HI UV FRA 835	13129	100	131.3	NVL 8 HI UV FRA 840	13563	100	135.6	NVL 8 HI UV FRA 850	13970	100	139.7
NVL 8 VH UV FRA 835	17059	134	127.3	NVL 8 VH UV FRA 840	17623	134	131.5	NVL 8 VH UV FRA 850	18152	134	135.5
NVL 8 SH UV FRA 835	20901	174	120.1	NVL 8 SH UV FRA 840	21592	174	124.1	NVL 8 SH UV FRA 850	22239	174	127.8

Lumen Adjustment Factors:

FDA: 1.045 FSA: 1.039 CDA: 1.053 CRA: 1.051 CSA: 1.058

Schematic:



Mounting:



SM



SMBB

Photometric Data:

NVL 4 SH UV FRA 835

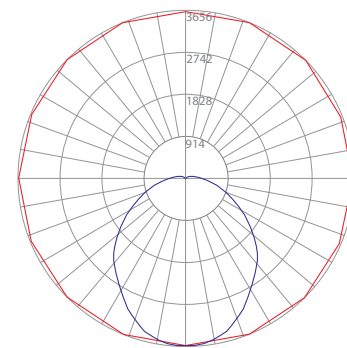
Test No.: LLIA000743-004
 Luminaire Lumens: 10,478 lm
 Luminaire Watts: 87.3W
 Efficacy: 120.0 LPW
 Spacing Criterion (0-180): 1.24
 Spacing Criterion (90-270): 1.16

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15261	12828	12502
55	13127	11084	11313
65	10561	9418	10276
75	8012	8072	9333
85	5207	7011	8098

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	115	115	115	115	108	108	108	103	103	103			
1	107	101	97	93	103	99	94	91	93	90	87	89	86	83			
2	97	88	81	75	94	86	79	74	81	76	71	77	73	69			
3	88	77	69	62	85	75	68	61	72	65	60	68	63	58			
4	81	68	60	53	78	67	58	52	64	56	51	61	55	50			
5	74	61	52	45	72	60	51	45	57	50	44	55	48	43			
6	69	55	46	40	66	54	45	39	52	44	39	49	43	38			
7	64	50	41	35	62	49	41	35	47	40	34	45	39	34			
8	59	46	37	31	57	45	37	31	43	36	31	41	35	30			
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27			
10	52	39	31	26	50	38	30	25	37	30	25	35	29	25			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1301.50	12.40
0-30	2705.36	25.80
0-40	4367.30	41.70
0-60	7548.88	72.00
0-80	9507.98	90.70
0-90	9955.81	95.00
90-120	477.05	4.60
90-130	508.71	4.90
90-150	519.22	5.00
90-180	522.02	5.00
0-180	10477.83	100.00

Photometric Data:

NVL 4 SH UV FDA 835

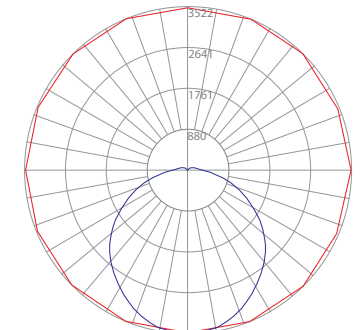
Test No.: LLIA000743-006
 Luminaire Lumens: 10,948 lm
 Luminaire Watts: 87.3W
 Efficacy: 125.4 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15309	12208	11873
55	13635	10721	10510
65	11555	8889	8880
75	8967	6798	6371
85	5622	4413	3613

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103			
1	107	102	97	93	104	99	95	91	94	90	87	89	86	84			
2	97	88	81	75	94	86	79	74	82	76	71	78	73	69			
3	88	77	69	62	85	75	67	61	72	65	59	68	63	58			
4	80	68	59	52	78	66	58	52	63	56	50	61	54	49			
5	74	61	52	45	71	59	51	44	57	49	43	54	48	43			
6	68	55	45	39	66	53	45	39	51	44	38	49	42	37			
7	63	49	41	34	61	48	40	34	46	39	33	45	38	33			
8	59	45	36	31	57	44	36	30	42	35	30	41	34	29			
9	55	41	33	27	53	41	33	27	39	32	27	38	31	26			
10	51	38	30	25	50	37	30	25	36	29	24	35	29	24			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1275.09	11.60
0-30	2699.96	24.70
0-40	4432.30	40.50
0-60	7916.61	72.30
0-80	10083.03	92.10
0-90	10487.86	95.80
90-120	393.90	3.60
90-130	431.74	3.90
90-150	457.16	4.20
90-180	460.46	4.20
0-180	10948.32	100.00

NVL 4 SH UV FSA 835

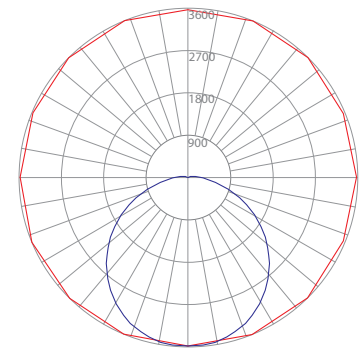
Test No.: LLIA000743-008A
 Luminaire Lumens: 10,884 lm
 Luminaire Watts: 87.3W
 Efficacy: 124.7 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	15775	14292	14132
55	14127	12912	12831
65	12156	11033	10795
75	9796	8625	8056
85	5906	6270	5336

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	115	115	115	115	110	110	110	105	105	105			
1	107	102	98	94	104	100	96	92	95	92	89	91	88	85			
2	97	89	82	76	95	87	80	75	83	77	73	79	75	71			
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59			
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51			
5	75	61	52	46	72	60	52	45	58	50	44	56	49	44			
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38			
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34			
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30			
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27			
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
 — Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1313.02	12.10
0-30	2794.41	25.70
0-40	4587.12	42.10
0-60	8144.17	74.80
0-80	10261.17	94.30
0-90	10638.61	97.70
90-120	224.35	2.10
90-130	234.36	2.20
90-150	242.18	2.20
90-180	245.09	2.30
0-180	10883.70	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WVL 2 LED Vaportight High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models except WVL 2 MD UV
- Field replaceable LED boards and drivers
- Multiple hanging options, including surface, chain, aircraft cable, and pendant for easy installation
- Durable materials and craftsmanship allows the WVL to withstand some of the harshest environments

Applications:

- Most industrial, retail, and recreational low bay and high bay applications
- Warehouse
 - Manufacturing Facility
 - Food Processing
 - Freezer
 - Gymnasium
 - Parking Garage
 - Car Wash

Ambient Operating Temp:

- -30°C to 40°C for LW & HI models
- -30°C to 35°C for MD models

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- UL 5VA fiberglass housing (will not melt or burn)
- Impact resistant acrylic and UV stabilized polycarbonate lenses
- Pre-painted cold rolled steel board trays
- Acetal copolymer secure locking plastic latches (Stainless steel lens clips or stainless steel captive latches optional)
- Stainless steel mounting hardware

Certifications:

- UL 1598 listed for US and Canada, suitable for wet locations
- IP65
- IP66
- IP67 (optional)
- IP69
- NEMA 4X
- NSF
- PSI 1500
- RoHS
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Powered by:



WVL 2 LED Vaportight Low Bay



Ordering Guide:

example: WVL 2 HI UV FA 840-FCM

Series	Length	Output	Voltage	Shielding	CRI/CCT	-	Hanging	Options
WVL	2					-		
WVL	2	LW MD HI	UV 34 48	CP CA FA	835 840 850		Blank RBS RBZ FCM QC QC20 HUB	Blank C6 C10 D6 D10 P(NEMA) OS OSD PC EM1 EM1C EM2 SCL SSC SC F IP67 SDT(480V) BAA

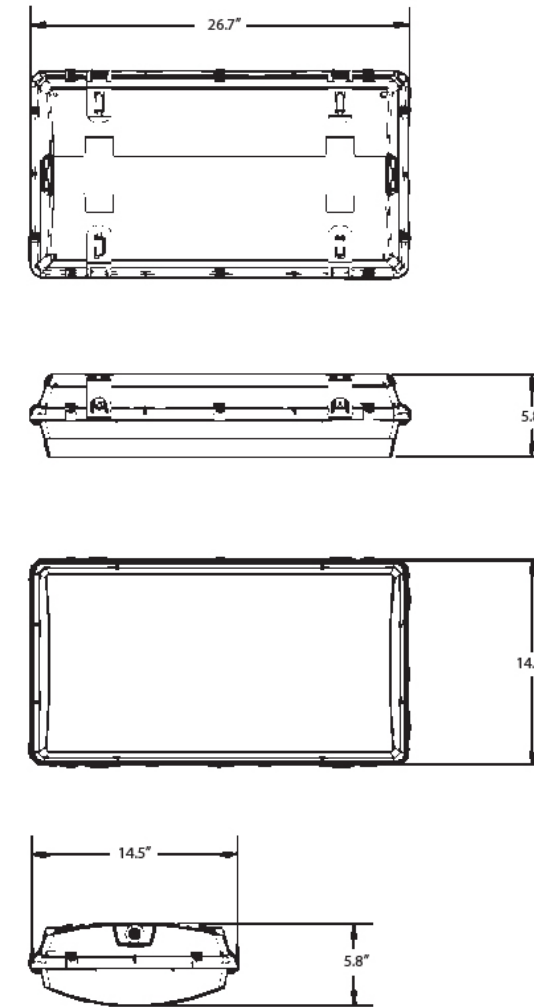
Length:	2	2'		
Lumen Output:	LW MD HI	Low Medium High		
Voltage:	UV 34 48	120-277V 347V 480V		
Shielding:	CP CA FA	Clear Polycarbonate Clear Acrylic Frosted Acrylic		
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K		
Hanging:	Blank RBS RBZ FCM QC QC20 HUB	V-Hook (for chain or cable mount) Rigid Mounting Beam-Stainless Steel Rigid Mounting Beam-Zinc Plated Flexible Ceiling Mount 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit Hub for pendant mounting (stem not included)		

Options:	Blank	None
	C6	6' Single Circuit Cord
	C10	10' Single Circuit Cord
	D6	6' Dual Circuit Cord
	D10	10' Dual Circuit Cord
	P(NEMA)	Plug (Specify NEMA configuration)
	OS	Occupany Sensor (on/off)
	OSD	Occupany Sensor (on/off/dim)
	PC	Photocell
	EM1	Emergency Pack - up to 8W (120-277V / 0°C-50°C ambient)
	EM1C	Emergency Pack - up to 10W (120-277V / -20°C-50°C ambient / adds 30W to system wattage)
	EM2	Emergency Pack - up to 16W (120-277V / 0°C-50°C ambient)
	SCL	Stainless Steel Captive Latches
	SSC	Stainless Steel Lens Clips
	SC	Safety Cable
	F	Fuse
	IP67	IP67 rating
	SDT(480V)	480V to 277V Step Down Transformer
	BAA	Buy American Act Compliant

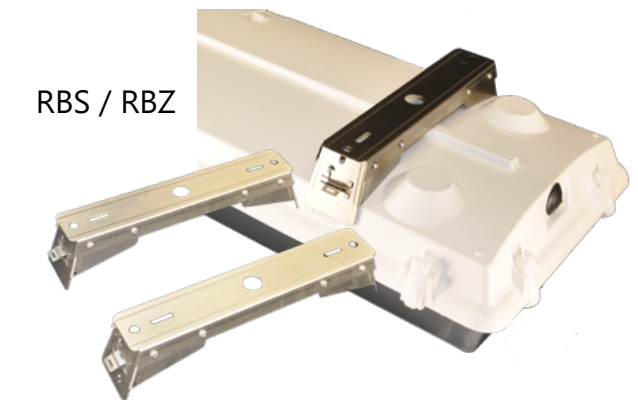
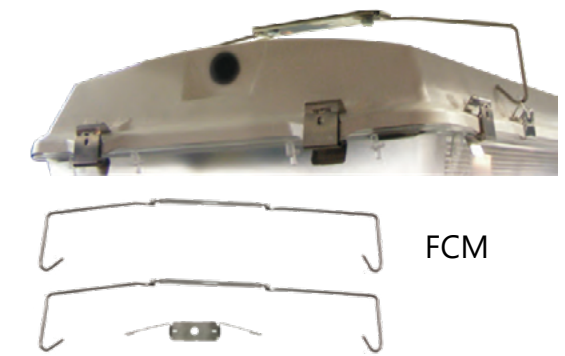
WVL 2 LED Vaportight Low Bay



Schematic:



Mounting:



WVL 2 LED Vaportight Low Bay

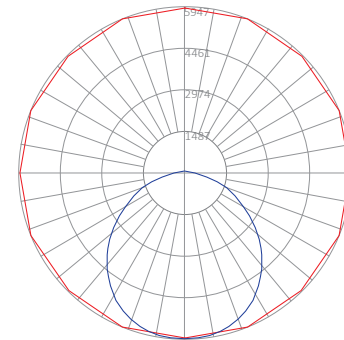


Photometric Data:

WVL 2 HI UV FA 850

Test No.: LLIA000678-001
 Luminaire Lumens: 17,705 lm
 Luminaire Watts: 128.8W
 Efficacy: 137.5 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	19883	18521	19019
55	17625	16271	17407
65	14995	13746	15092
75	12193	10769	12179
85	7945	7426	8583



— Vert. Plane
 — Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

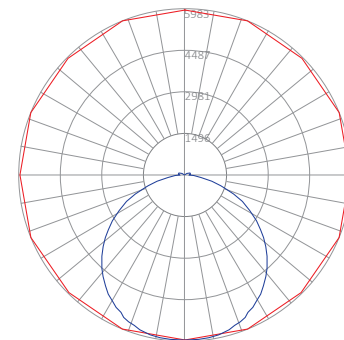
RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104		
1	107	102	98	94	104	100	96	92	95	92	89	91	88	85		
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71		
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59		
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51		
5	75	62	53	46	72	60	52	46	58	51	45	56	49	44		
6	69	56	47	40	67	54	46	40	52	45	39	50	44	39		
7	64	50	42	35	62	49	41	35	48	40	35	46	39	34		
8	60	46	37	32	58	45	37	31	44	36	31	42	35	31		
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28		
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

WVL 2 HI UV CA 850

Test No.: LLIA000678-002
 Luminaire Lumens: 18,119 lm
 Luminaire Watts: 128.8W
 Efficacy: 140.7 LPW
 Spacing Criterion (0-180): 1.30
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	21776	19893	17329
55	20257	15362	18803
65	17263	15630	16623
75	12157	11376	11661
85	5659	3415	3587



— Vert. Plane
 — Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	110	110	110	106	106	106		
1	108	104	99	95	105	101	97	94	97	93	90	93	90	87		
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72		
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52		
5	75	62	53	46	73	61	52	46	59	51	45	56	50	45		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39		
7	64	50	42	35	62	50	41	35	48	40	35	46	40	35		
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31		
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

WVL 2 LED Vaportight Low Bay

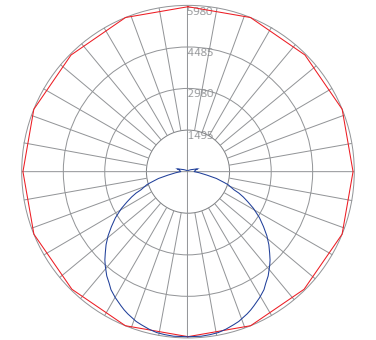


Photometric Data:

WVL 2 HI UV CP 850

Test No.: LLIA000678-003
 Luminaire Lumens: 18,018 lm
 Luminaire Watts: 128.8W
 Efficacy: 139.9 LPW
 Spacing Criterion (0-180): 1.30
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	21766	19816	16989
55	20203	15323	18574
65	17057	15374	16078
75	11926	10943	11517
85	5509	3410	3411



— Vert. Plane
 — Horiz. Cone

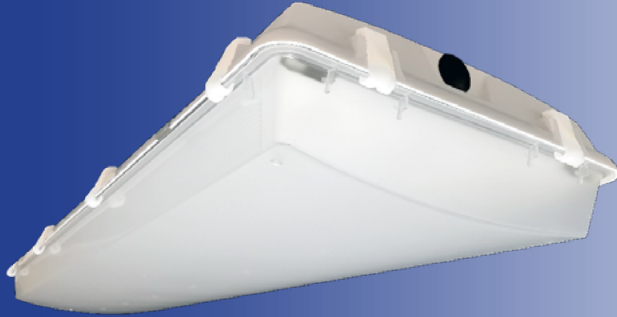
Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	110	110	110	106	106	106		
1	108	104	99	95	106	101	97	94	97	93	90	93	90	88		
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72		
3	90	79	71	64	87	77	70	63	74	67	62	71	66	61		
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39		
7	64	51	42	35	62	50	41	35	48	40	35	46	40	35		
8	60	46	37	32	58	45	37	31	44	36	31	43	36	31		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28		
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
WVL 2 LW UV FA 835	8601	64	133.9	WVL 2 LW UV FA 840	8867	64	138.0	WVL 2 LW UV FA 850	9133	64	142.1
WVL 2 MD UV FA 835	12471	102	122.6	WVL 2 MD UV FA 840	12857	102	126.4	WVL 2 MD UV FA 850	13242	102	130.2
WVL 2 HI UV FA 835	16673	129	129.4	WVL 2 HI UV FA 840	17189	129	133.5	WVL 2 HI UV FA 850	17704	129	137.5
WVL 2 LW UV CA 835	8803	64	137.0	WVL 2 LW UV CA 840	9075	64	141.2	WVL 2 LW UV CA 850	9347	64	145.5
WVL 2 MD UV CA 835	12763	102	125.5	WVL 2 MD UV CA 840	13158	102	129.4	WVL 2 MD UV CA 850	13552	102	133.3
WVL 2 HI UV CA 835	17063	129	132.5	WVL 2 HI UV CA 840	17591	129	136.6	WVL 2 HI UV CA 850	18119	129	140.7
WVL 2 LW UV CP 835	8753	64	136.2	WVL 2 LW UV CP 840	9024	64	140.4	WVL 2 LW UV CP 850	9295	64	144.6
WVL 2 MD UV CP 835	12691	102	124.8	WVL 2 MD UV CP 840	13084	102	128.7	WVL 2 MD UV CP 850	13476	102	132.5
WVL 2 HI UV CP 835	16968	129	131.7	WVL 2 HI UV CP 840	17492	129	135.8	WVL 2 HI UV CP 850	18017	129	139.9



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WVL 4 LED Vaportight High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Heat management system helps maximize efficacy and system life
- Multiple hanging options, including surface, chain, and aircraft cable, for easy installation
- Durable materials and craftsmanship allows the WVL to withstand some of the harshest environments

Applications:

- Most industrial, retail, and recreational low bay and high bay applications
- Warehouse
 - Manufacturing Facility
 - Food Processing
 - Freezer
 - Gymnasium
 - Parking Garage
 - Car Wash

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- UL 5VA fiberglass housing (will not melt or burn)
- Impact resistant acrylic and UV stabilized polycarbonate lenses
- Pre-painted cold rolled steel board trays
- Acetal copolymer secure locking plastic latches (stainless steel latches optional)
- Stainless steel mounting hardware

Certifications:

- UL 1598, suitable for wet locations
- IP65, IP66, IP67
- NEMA 4X
- NSF
- PSI 1500
- RoHS
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Ambient Operating Temp:

-30°C to 40°C (for LW, MD, HI models)
 -30°C to 35°C (for SH models)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



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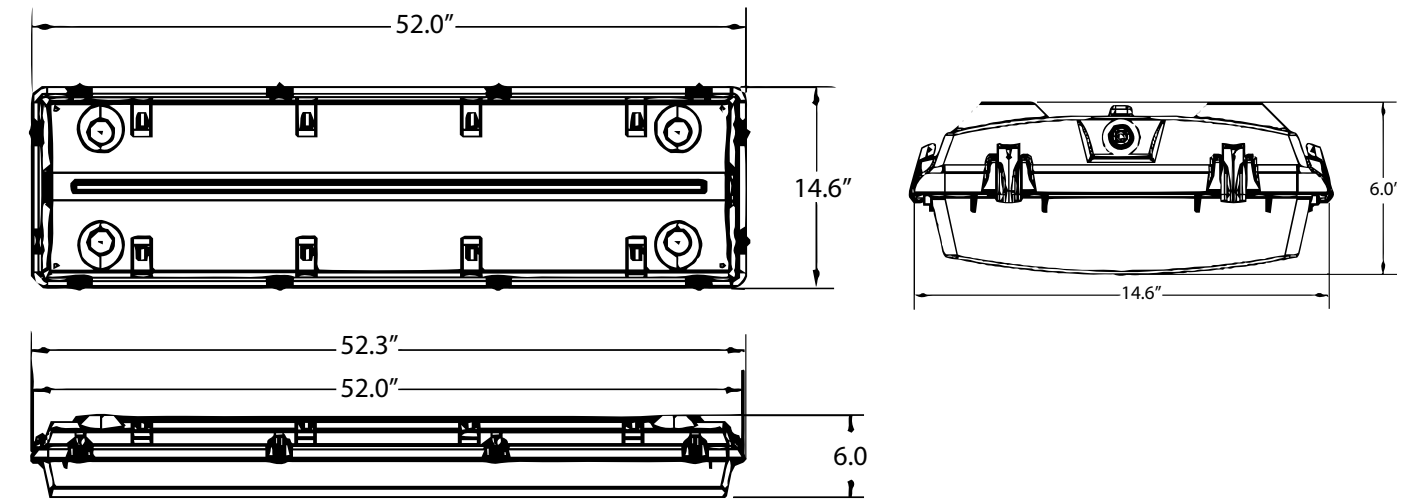
Ordering Guide:

example: WVL 4 HI UV FA 840-RBS C6

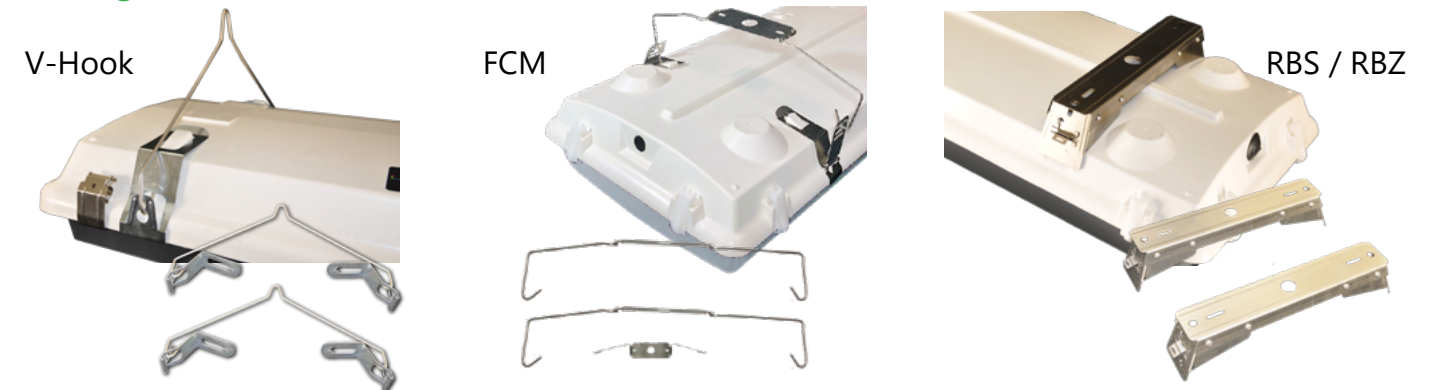
Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Options
WVL	4						
WVL	4	LW MD HI SH	UV 34 48	CP CA FA	835 840 850	Blank RBS RBZ FCM QC QC20	Blank C6 C10 D6 D10 P(NEMA) OS OSD PC EM1 EM1C EM2 SSL SC F SDT(480V)

Length:	4	4'	Options:	Blank	None
Lumen Output:	LW MD HI SH	Low Medium High Super High		C6	6' Single Circuit Cord
Voltage:	UV 34 48	120-277V 347V 480V		C10	10' Single Circuit Cord
Shielding:	CP CA FA	Clear Polycarbonate w/ Frosted Ends Clear Acrylic w/ Frosted Ends Frosted Acrylic		D6	6' Dual Circuit Cord
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K		D10	10' Dual Circuit Cord
Hanging:	Blank RBS RBZ FCM QC QC20	V-Hook (for chain or cable mount) Rigid Mounting Beam-Stainless Steel Rigid Mounting Beam-Zinc Plated Flexible Ceiling Mount 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit		P(NEMA)	Plug (Specify NEMA configuration)
				OS	Occupany Sensor (on/off)
				OSD	Occupany Sensor (on/off/dim)
				PC	Photocell
				EM1	Emergency Pack - up to 10W <i>(120-277V / 0°C-50°C ambient)</i>
				EM1C	Emergency Pack - up to 10W <i>(120-277V / -20°C-50°C ambient / adds 30W to system wattage)</i>
				EM2	Emergency Pack - up to 20W <i>(120-277V / 0°C-50°C ambient)</i>
				SSL	Stainless Steel Latches
				SC	Safety Cable
				F	Fuse
				SDT(480V)	480V to 277V Step Down Transformer

Schematic:



Mounting:



Performance Chart:

Catalog #	Lumens	Watts	LPW
WVL 4 LW UV FA 835	16534	122	135.9
WVL 4 MD UV FA 835	20051	156	128.9
WVL 4 HI UV FA 835	23196	168	138.1
WVL 4 SH UV FA 835	30326	227	133.7
WVL 4 LW UV CA 835	16790	122	138.0
WVL 4 MD UV CA 835	20371	156	130.9
WVL 4 HI UV CA 835	23554	168	140.2
WVL 4 SH UV CA 835	30795	227	135.7
WVL 4 LW UV CP 835	16487	122	135.5
WVL 4 MD UV CP 835	20004	156	128.6
WVL 4 HI UV CP 835	23130	168	137.7
WVL 4 SH UV CP 835	30241	227	133.3
WVL 4 LW UV FA 840	17045	122	140.1
WVL 4 MD UV FA 840	20671	156	132.9
WVL 4 HI UV FA 840	23913	168	142.3
WVL 4 SH UV FA 840	31264	227	137.8
WVL 4 LW UV CA 840	17309	122	142.2
WVL 4 MD UV CA 840	21001	156	135.0
WVL 4 HI UV CA 840	24283	168	144.5
WVL 4 SH UV CA 840	31748	227	139.9
WVL 4 LW UV CP 840	16997	122	139.7
WVL 4 MD UV CP 840	20623	156	132.5
WVL 4 HI UV CP 840	23846	168	141.9
WVL 4 SH UV CP 840	31176	227	137.4
WVL 4 LW UV FA 850	17557	122	144.3
WVL 4 MD UV FA 850	21291	156	136.9
WVL 4 HI UV FA 850	24630	168	146.6
WVL 4 SH UV FA 850	32202	227	141.9
WVL 4 LW UV CA 850	17828	122	146.5
WVL 4 MD UV CA 850	21631	156	139.0
WVL 4 HI UV CA 850	25011	168	148.9
WVL 4 SH UV CA 850	32700	227	144.1
WVL 4 LW UV CP 850	17507	122	143.9
WVL 4 MD UV CP 850	21242	156	136.5
WVL 4 HI UV CP 850	24561	168	146.2
WVL 4 SH UV CP 850	32111	227	141.5

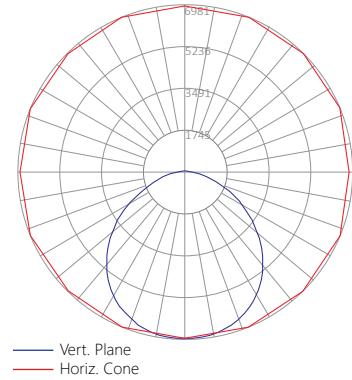
WVL 4 LED Vaportight High Bay

Photometric Data:

WVL 4 MD UV FA 835

Test No.: LLIA000744-002
 Luminaire Lumens: 20,051 lm
 Luminaire Watts: 155.5W
 Efficacy: 128.9 LPW
 Spacing Criterion (0-180): 1.26
 Spacing Criterion (90-270): 1.26

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12328	11333	11070
55	10848	9700	9317
65	8988	7629	7598
75	7016	5959	6910
85	4401	4486	5616



Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	2549.5	12.7
0-30	5423.4	27.0
0-40	8874.7	44.3
0-60	15344.8	76.5
0-80	18814.5	93.8
0-90	19425.3	96.9
90-120	490.1	2.4
90-130	565.7	2.8
90-150	619.4	3.1
90-180	625.7	3.1
0-180	20051.0	100.0

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

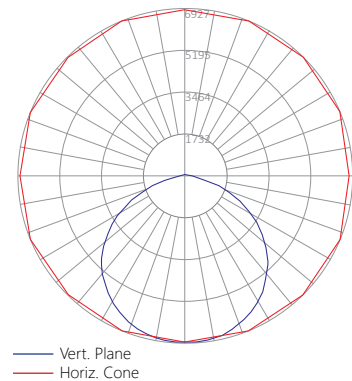
RC	80				70				50				30				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104			
1	108	103	98	94	105	100	96	93	95	92	89	91	88	86			
2	98	90	83	77	95	88	81	76	83	78	74	80	75	71			
3	89	79	71	64	87	77	70	63	74	67	62	70	65	60			
4	82	70	61	55	79	68	60	54	66	58	53	63	57	52			
5	75	63	54	47	73	61	53	47	59	51	46	57	50	45			
6	70	56	48	41	68	55	47	41	53	46	40	51	45	40			
7	65	51	42	36	63	50	42	36	48	41	36	47	40	35			
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31			
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28			
10	53	40	32	26	51	39	31	26	38	31	26	37	30	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

WVL 4 MD UV CA 835

Test No.: LLIA000744-003
 Luminaire Lumens: 20,371 lm
 Luminaire Watts: 155.6W
 Efficacy: 130.9 LPW
 Spacing Criterion (0-180): 1.28
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)			
Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13074	11991	11840
55	12207	11038	11183
65	10522	9357	5121
75	7153	4126	5583
85	3170	4177	4225



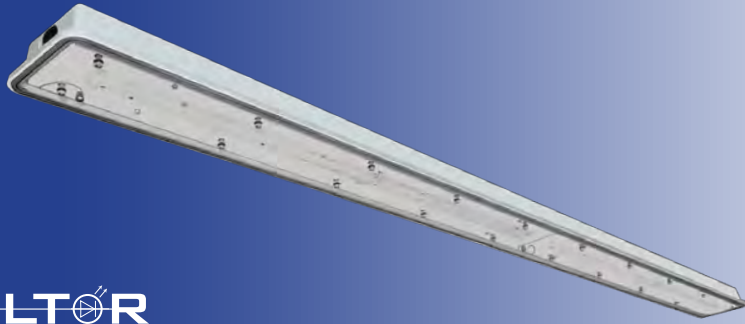
Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	2539.3	12.5
0-30	5427.6	26.6
0-40	8958.2	44.0
0-60	16109.1	79.1
0-80	19618.7	96.3
0-90	20104.1	98.7
90-120	183.9	0.9
90-130	220.1	1.1
90-150	260.7	1.3
90-180	266.9	1.3
0-180	20371.0	100.0

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105			
1	108	104	99	95	106	101	97	94	97	93	90	93	90	87			
2	99	90	84	78	96	88	82	77	85	79	75	81	77	73			
3	90	79	71	65	87	78	70	64	74	68	63	72	66	61			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53			
5	76	63	54	47	73	62	53	47	59	52	46	57	51	45			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35			
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31			
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

ALTOR

LED

NVL F LED Vaportight High/Low Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Multiple hanging options, including surface, chain, and aircraft cable, for easy installation
- Pre-wired 6' single circuit cord comes standard. Other cord options available
- Durable materials and craftsmanship allows the NVL F to withstand some of the harshest environments

Applications:

- Most industrial, retail, and recreational low bay and high bay applications
- Warehouse
 - Manufacturing Facility
 - Food Processing
 - Freezer

Ambient Operating Temp:

- -30°C to 35°C



Construction:

- UL 5VA fiberglass housing (will not melt or burn)
- Clear or frosted polycarbonate lens
- Pre-painted aluminum board trays
- Stainless steel mounting hardware

Certifications:

- UL 1598 listed for US and Canada, suitable for wet locations
- IP66
- NEMA 4X
- NSF
- PSI 1500
- RoHS

Predicted L70 Lifetime:

- >72,000 hrs (reported)
(based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



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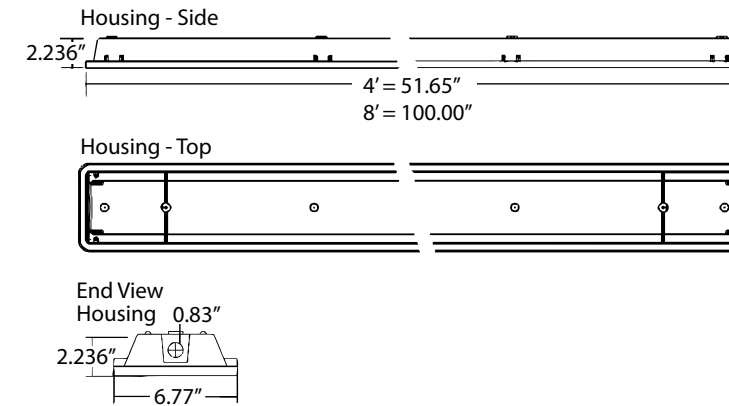
Ordering Guide:

example: NVL 4 F HI UV CFP 840-SM C6

Series	Length	Profile	Output	Voltage	Shielding	CRI/CCT	-	Hanging	Cord	Options
NVL		F					-			
NVL	4 8	F	LW MD HI VH	UV 34	CFP FFP	835 840 850		Blank SMBB SMBBQC SMBBQC20	C6 (std) C10 D6 D10	Blank P(NEMA) OS OSD PC SC F SDT(480V)

Length:	4 8	4' 8'		Hanging:	Blank SMBB SMBBQC SMBBQC20	Surface Mounting Bracket (comes standard) Mounting Bracket Bail (for chain or cable mount) Bracket Bail w/ 10' Quick Hang Cable Kit Bracket Bail w/ 20' Quick Hang Cable Kit
Profile:	F	Flat Bottom		Cord:	C6 C10 D6 D10	6' Single Circuit Cord (Standard) 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord
Lumen Output:	LW MD HI VH	LW Medium High Very High		Options:	Blank P(NEMA) OS OSD PC SC F SDT(480V)	None Plug (Specify NEMA configuration) Occupany Sensor (on/off) Occupany Sensor (on/off/dim) Photocell Safety Cable Fuse 480V to 277V Step Down Transformer
Voltage:	UV 34	120-277V 347V				
Shielding:	CFP FFP	Clear Flat Polycarbonate Frosted Flat Polycarbonate				
CRI/CCT:	835 840 850	80 CRI / 3500K 80 CRI / 4000K 80 CRI / 5000K				

Schematic:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
NVL 4 F LW UV CFP 835	2292	18	127.3	NVL 4 F LW UV CFP 840	2363	18	131.3	NVL 4 F LW UV CFP 850	2434	18	135.2
NVL 4 F MD UV CFP 835	4259	34	125.3	NVL 4 F MD UV CFP 840	4391	34	129.1	NVL 4 F MD UV CFP 850	4523	34	133.0
NVL 4 F HI UV CFP 835	6572	55	119.5	NVL 4 F HI UV CFP 840	6776	55	123.2	NVL 4 F HI UV CFP 850	6979	55	126.9
NVL 4 F VH UV CFP 835	8059	66	122.1	NVL 4 F VH UV CFP 840	8308	66	125.9	NVL 4 F VH UV CFP 850	8557	66	129.7
NVL 8 F LW UV CFP 835	8318	66	126.0	NVL 8 F LW UV CFP 840	8576	66	129.9	NVL 8 F LW UV CFP 850	8833	66	133.8
NVL 8 F MD UV CFP 835	10405	82	126.9	NVL 8 F MD UV CFP 840	10727	82	130.8	NVL 8 F MD UV CFP 850	11049	82	134.7
NVL 8 F HI UV CFP 835	12214	100	122.1	NVL 8 F HI UV CFP 840	12592	100	125.9	NVL 8 F HI UV CFP 850	12969	100	129.7
NVL 8 F VH UV CFP 835	16307	134	121.7	NVL 8 F VH UV CFP 840	16811	134	125.5	NVL 8 F VH UV CFP 850	17315	134	129.2

Mounting:



SM - Surface Mount Bracket



SMBB - Surface Mount Bracket w/ Bracket Bail



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ALTOR

WVL F LED Vaportight High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models except WVL 2 F MD UV
- Field replaceable LED boards and drivers
- Multiple hanging options, including surface, chain, and aircraft cable, for easy installation
- Pre-wired 6' single circuit cord comes standard. Other cord options available
- Durable materials and craftsmanship allows the WVL F to withstand some of the harshest environments

Applications:

Most industrial, retail, and recreational low bay and high bay applications

- Warehouse
- Manufacturing Facility
- Food Processing
- Freezer

Ambient Operating Temp:

- -30°C to 35°C



Construction:

- UL 5VA fiberglass housing (will not melt or burn)
- Clear or frosted polycarbonate lens
- Pre-painted aluminum board trays
- Stainless steel mounting hardware

Certifications:

- UL 1598 listed for US and Canada, suitable for wet locations
- IP66
- NEMA 4X
- NSF
- PSI 1500
- RoHS
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Predicted L70 Lifetime:

- ≥99,000 hrs (calculated)
- >72,000 hrs (reported)
- 77% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



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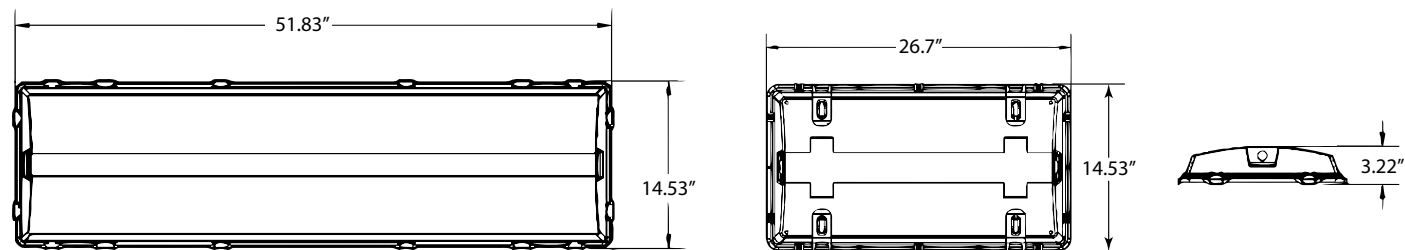
Ordering Guide:

example: WVL 2 F HI UV CFP 840-RBS C6

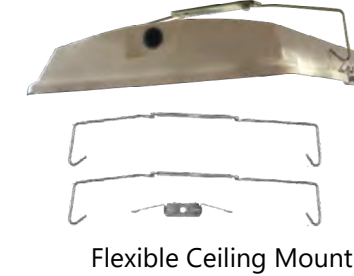
Series	Length	Profile	Output	Voltage	Shielding	CRI/CCT	Hanging	Cord	Options
WVL		F					-		
WVL	2 4	F	LW MD HI	UV 34 48	CFP FFP	835 840 850	Blank RBS RBZ FCM QC QC20 HUB	C6 (std) C10 D6 D10	Blank P(NEMA) OS OSD PC SC F SDT(480V)

Length:	2 4	2' 4'	Hanging:	Blank RBS RBZ FCM QC QC20 HUB	V-Hook (for chain or cable mount) Rigid Mounting Beam-Stainless Steel (available in 2' version only) Rigid Mounting Beam-Zinc Plated (available in 2' version only) Flexible Ceiling Mount 10' Quick Hang Cable Kit 20' Quick Hang Cable Kit Hub for pendant mounting (available in 2' version only - pendant not included)
Profile:	F	Flat Bottom	Cord:	C6 C10 D6 D10	6' Single Circuit Cord (Standard) 10' Single Circuit Cord 6' Dual Circuit Cord 10' Dual Circuit Cord
Lumen Output:	LW MD HI	Low Medium High	Options:	Blank P(NEMA) OS OSD PC SC F SDT(480V)	None Plug (Specify NEMA configuration) Occupany Sensor (on/off) Occupany Sensor (on/off/dim) Photocell Safety Cable Fuse 480V to 277V Step Down Transformer
Shielding:	CFP FFP	Clear Flat Polycarbonate Frosted Flat Polycarbonate	CRI/CCT:	835 840	80 CRI / 3500K 80 CRI / 4000K

Schematic:



Mounting:



Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
WVL 2 F LW UV CFP 835	8241	63.3	130.2	WVL 2 F LW UV CFP 840	8496	63.3	134.2	WVL 2 F LW UV CFP 850	8751	63.3	138.2
WVL 2 F MD UV CFP 835	11996	102.4	117.1	WVL 2 F MD UV CFP 840	12367	102.4	120.8	WVL 2 F MD UV CFP 850	12738	102.4	124.4
WVL 2 F HI UV CFP 835	15735	126.7	124.2	WVL 2 F HI UV CFP 840	16222	126.7	128.0	WVL 2 F HI UV CFP 850	16709	126.7	131.9
WVL 4 F LW UV CFP 835	15213	120	126.8	WVL 4 F LW UV CFP 840	15684	120	130.7	WVL 4 F LW UV CFP 850	16154	120	134.6
WVL 4 F MD UV CFP 835	19195	161	119	WVL 4 F MD UV CFP 840	19788	161	122.7	WVL 4 F MD UV CFP 850	20382	161	126.4
WVL 4 F HI UV CFP 835	22206	174	127.6	WVL 4 F HI UV CFP 840	22893	174	131.6	WVL 4 F HI UV CFP 850	23579	174	135.5

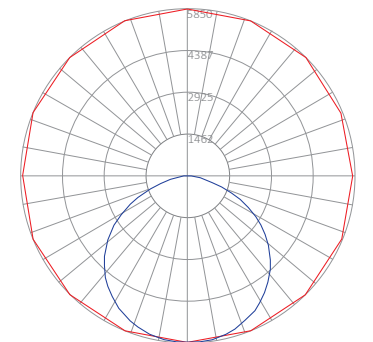
Photometric Data:

WVL 2F HI UV CFP 850

Test No.: LLIA000703-001-R02
 Luminaire Lumens: 16,709 lm
 Luminaire Watts: 126.7W
 Efficacy: 131.9 LPW
 Spacing Criterion (0-180): 1.30
 Spacing Criterion (90-270): 1.30

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23053	23163	23274
55	22248	22189	22504
65	19846	19656	19947
75	13710	13175	13643
85	2778	2196	1733



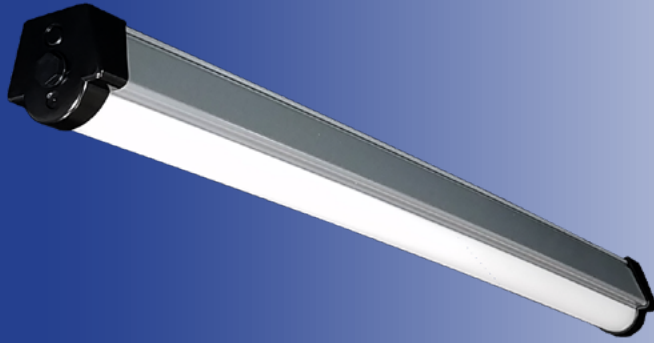
Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106			
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90			
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75			
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54			
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47			
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41			
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36			
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32			
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	2148.17	12.90
0-30	4597.11	27.50
0-40	7598.39	45.50
0-60	13607.81	81.40
0-80	16606.43	99.40
0-90	16708.90	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	16708.90	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EVT LED Extruded Vaportight

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Multiple hanging options, including surface, chain/cable, or pendant for easy installation
- Available in 2', 4', and 8' lengths
- UL approved and evaluated for daisy chaining

Applications:

- Suitable for most commercial, industrial and institutional applications
- Warehouse
 - Manufacturing Facility
 - Food Processing
 - Stairwells
 - Car Wash

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >72,000 hrs (reported)
- 80% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Dimensions:

- Length: 2', 4', 8'
- Width: 3.86"
- Depth: 3.75"

Construction:

- (f1) rated acrylic co-extruded lens and housing - lens and housing is all one piece
- Pre-painted cold rolled steel board trays
- Gasketed end caps
- Stainless steel mounting hardware

Certifications:

- UL 1598 listed for US and Canada, suitable for wet locations
- IP65
- IP66
- NSF
- RoHS
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Ambient Operating Temp:

- -30°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



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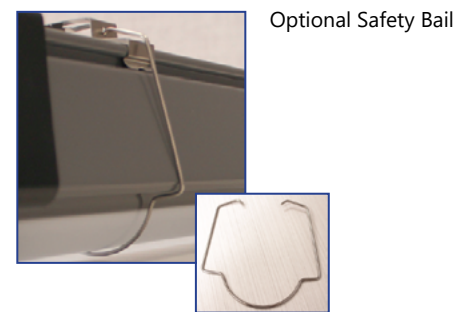
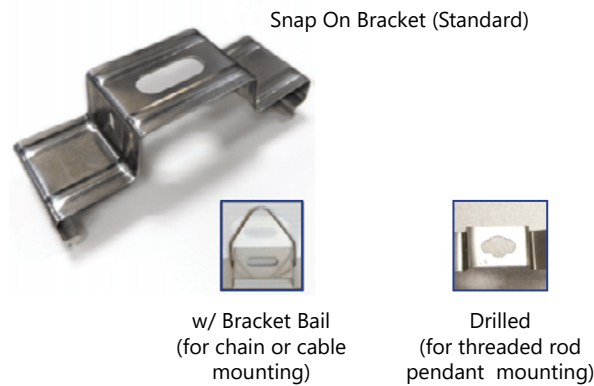
Ordering Guide:

example: EVT 4 MD UV FA 840-SB OSMD

Series	Length	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Options
EVT			UV	FA		-		
EVT	2 4 8	VL LW MD	UV	FA	835 840 850		Blank SMBB SMBBQC SMBBQC20 SMD	Blank SB OSM OSMD

Length:	2' 2' 4' 4' 8' 8'	CRI/CCT:	835 80 CRI / 3500K 840 80 CRI / 4000K 850 80 CRI / 5000K
Lumen Output:	VL Very Low LW Low MD Medium	Mounting:	Blank Snap On Mounting Bracket (for surface mounting) SMBB Snap on Mount with Bracket Bail (for chain or cable mounting) SMBBQC Snap on Mount with Bracket Bail w/ 10' Quick Hang Cable Kit SMBBQC20 Snap on Mount with Bracket Bail w/ 20' Quick Hang Cable Kit SMD Snap on Mount Drilled (for threaded rod pendant, not included)
Voltage:	UV 120-277V	Options:	Blank None SB Safety Bail OSM Microwave Occupancy Sensor OSMD 0-10V Dimming Microwave Occupancy Sensor
Shielding:	FA Frosted Acrylic		

Mounting:



Performance Data:

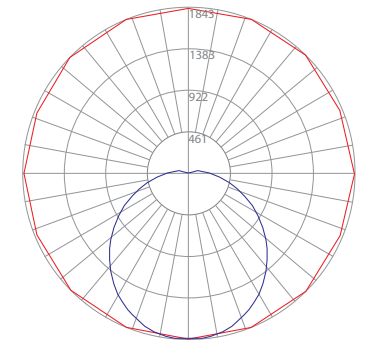
Catalog #	Watts	Lumens (835)	LPW (835)	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
EVT 2 VL UV FA 8xx	18	1930	109.4	1993	113.0	2053	116.4
EVT 2 LW UV FA 8xx	23	2588	111.4	2673	115.1	2754	118.5
EVT 2 MD UV FA 8xx	33	3504	106.4	3620	109.9	3728	113.2
EVT 4 VL UV FA 8xx	31	3603	117.1	3722	121.0	3834	124.6
EVT 4 LW UV FA 8xx	41	4558	111.0	4709	114.7	4850	118.1
EVT 4 MD UV FA 8xx	52	5650	109.4	5837	113.0	6012	116.4
EVT 8 VL UV FA 8xx	36	4499	126.4	4648	130.6	4788	134.5
EVT 8 LW UV FA 8xx	50	6164	122.7	6368	126.7	6559	130.5
EVT 8 MD UV FA 8xx	69	8073	117.2	8339	121.0	8590	124.7

Photometric Data:

EVT 4 MD UV FA 850

Test No.: LLIA001045-001A
 Luminaire Lumens: 6,012 lm
 Luminaire Watts: 51.7W
 Efficacy: 116.4 LPW
 Spacing Criterion (0-180): 1.22
 Spacing Criterion (90-270): 1.32

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	20478	17177	17153
55	18733	15201	15423
65	16480	13076	13589
75	12701	11014	11805
85	5133	9349	10347



Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	114	114	114		108	108	108	102	102	102			
1	106	100	95	91	102	98	93	89	92	89	85	87	84	82			
2	96	87	79	73	92	84	77	72	80	74	69	76	71	67			
3	87	76	67	60	84	74	66	59	70	63	57	66	61	56			
4	79	67	58	51	77	65	57	50	62	55	49	59	53	47			
5	73	60	50	43	70	58	49	43	55	48	42	53	46	41			
6	67	54	44	38	65	52	44	37	50	42	37	48	41	36			
7	62	48	39	33	60	47	39	33	45	38	32	43	37	32			
8	58	44	35	30	56	43	35	29	41	34	29	40	33	28			
9	54	41	32	27	52	40	32	26	38	31	26	37	30	25			
10	51	37	29	24	49	37	29	24	35	28	23	34	28	23			

Zone	Lumens	%Fixt
0-20	669.65	11.10
0-30	1420.45	23.60
0-40	2325.85	38.70
0-60	4147.60	69.00
0-80	5378.96	89.50
0-90	5694.83	94.70
90-120	311.71	5.20
90-130	316.92	5.30
90-150	316.93	5.30
90-180	316.93	5.30
0-180	6011.76	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

AFL LED Area/Flood Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Photocell standard
- 10kV Surge Protection

Applications:

- Suitable for exterior site lighting applications
- Parking Lots
 - Loading Docks
 - Roadways
 - Sign Lighting

Mounting:

The AFL comes standard with 2 mounts:

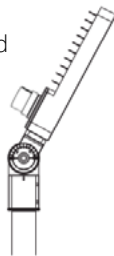
EA - Extension Arm

For direct mounting to square poles or walls.
 For round poles, use included adapter plate.



SK - Slipfitter Knuckle

Fits 2-3/8" to 2-1/2" O.D. round tenons.



Construction:

- Precision die cast aluminum housing
- UV-stabilized polycarbonate lens
- Chip & fade resistant textured polyester powdercoat finish in dark bronze

Certifications:

- cULus listed for wet locations
- IP66

Predicted L70 Lifetime:

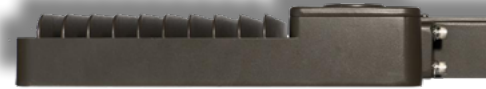
- > 50,000 hrs

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



AFL LED Area/Flood Light



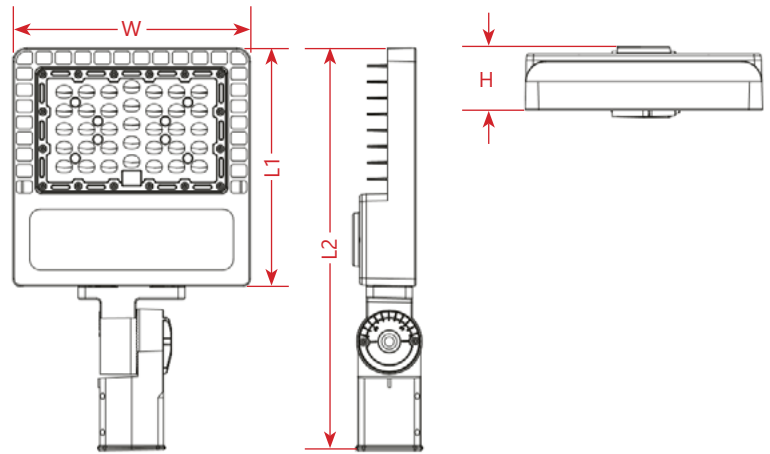
Ordering Guide:

example: AFL MD F UV 840-EA/SK PC BZ

Series	Output	Optic	Voltage	CRI/CCT	-	Mounting	Options	Finish
AFL		F	UV	840	-	EA/SK	PC	BZ
AFL	LW MD	F	UV	840		EA/SK	PC	BZ

- Series:** AFL Area/Flood Light
- Lumen Output:** LW Low
MD Medium
- Optic:** F Forward
- Voltage:** UV 120-277V
- CRI/CCT:** 840 80 CRI / 4000K
- Mounting:** EA/SK Extension Arm / Slipfitter Knuckle
- Options:** PC Photocell
- Finish:** BZ Bronze

Schematic:



Catalog #	L1	L2	W	H	WT
AFL LW F UV 840	10.82"	18.30"	10.82"	2.88"	15 lb.
AFL MD F UV 840	13.58"	21.06"	13.58"	2.88"	23 lb.

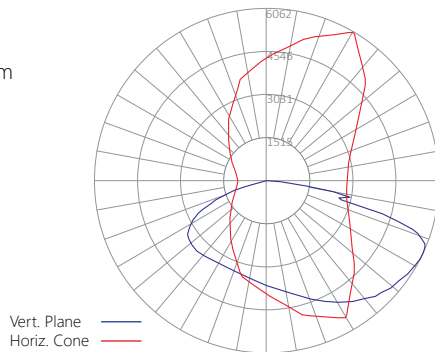
Performance Chart:

Catalog #	Lumens	Watts	LPW
AFL LW F UV 840	12071	98	123
AFL MD F UV 840	18345	147	125

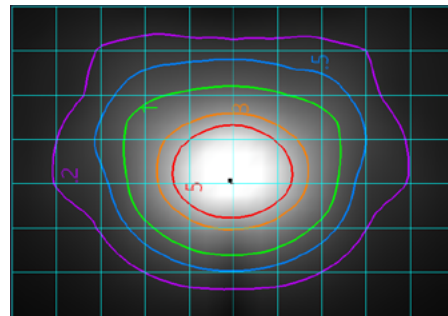
Photometric Data:

AFL MD F UV 840

Test No.: 2010607
Luminaire Lumens: 18,345 lm
Luminaire Watts: 147W
Efficacy: 124.8 LPW



Vert. Plane — blue
 Horiz. Cone — red



Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Mounting Height = 15'
 Grid: 15' x 15' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



AMx LED Multi-Purpose Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Multiple mounting options for maximum versatility - yoke, trunnion, arm, slipfitter
- Multiple roadway and floodlight optics available making it suitable for many applications

Applications:

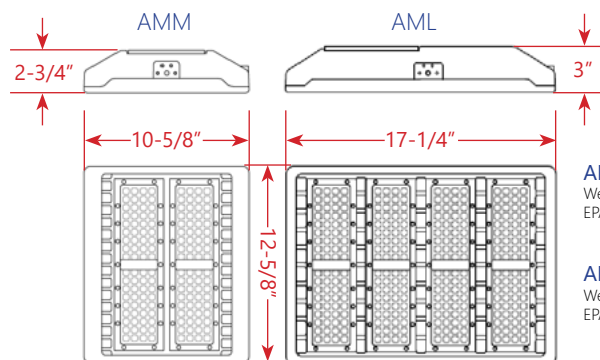
Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts
- Sign lighting
- Building facades

Ambient Operating Temp:

- -20°C to 45°C

Schematics:



AMM:

Weight: 8.2 lbs. (LW), 10.8 lbs. (MD), 11 lbs. (HI)
 EPA: 0.24 ft² (front), 0.29 ft² (side), 1.10 ft² (face)

AML:

Weight: 11.7 lbs. (MD), 11.9 lbs. (HI)
 EPA: 0.33 ft² (front), 0.49 ft² (side), 2.14 ft² (face)

Construction:

- Die cast aluminum housing
- Heat-resistant polycarbonate lens
- Durable dark bronze powder coat finish
- 6kV surge protection

Certifications:

- cULus listed for wet locations
- IP66
- Rated for 3G vibration

Predicted L70 Lifetime:

- >300,000 hrs (calculated)
- >54,000 hrs (reported)
- 94% lumen maintenance @ 54,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



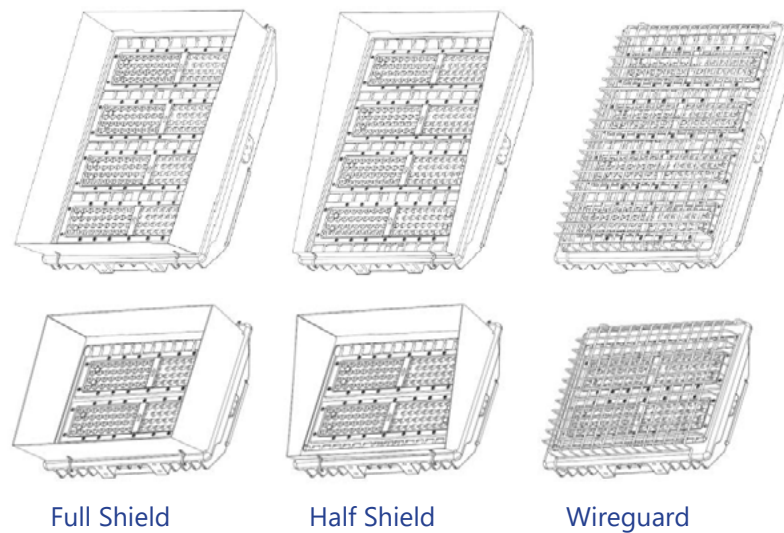
Ordering Guide:

example: AMM MD 5 UV 840-AM RC3 PC(277V) BZ

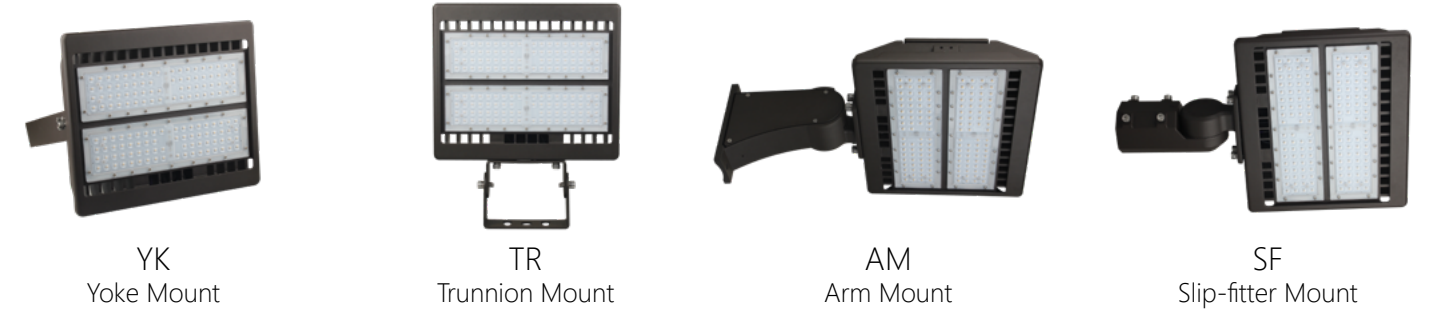
Series	Output	Optic	Voltage	CRI/CCT	-	Mounting	Options	Finish
			UV		-			
AMM	LW MD HI	2 3 4 5	UV	840 850		YK TR AM SF	Blank RC3 PC(xxxV) SC HS FS WG	BZ
AML	MD HI	SN SM FM						

Series:	AMM AML	Area Light - Medium Area Light - Large
Lumen Output:	LW MD HI	Low (available on AMM only) Medium High
Optic:	2 3 4 5 SN SM FM	Type II Type III Type IV Type V Narrow Spot (NEMA 3H x 3V) Medium Spot (NEMA 4H x 4V) Medium Flood (NEMA 5H x 5V)
Voltage:	UV	120-277V
CRI/CCT:	840 850	80 CRI / 4000K 80 CRI / 5000K

Mounting:	YK TR AM SF	Yoke Mount Trunnion Mount Adjustable Arm Mount (for square or round poles) Adjustable Slip-fitter Mount
Options:	Blank RC3 PC(xxxV) SC HS FS WG	None 3-pin Photocell Receptacle (requires photocell or shorting cap for luminaire operation) Photocell (specify voltage) Shorting Cap House Side Shield Full Shield Wireguard
Finish:	BZ	Bronze



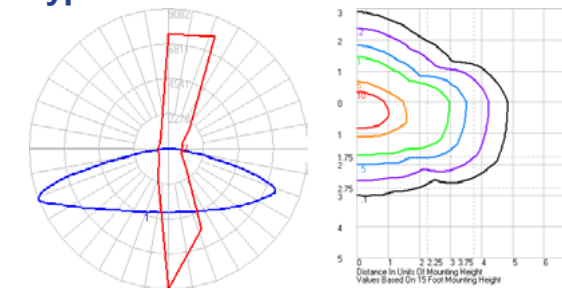
Mounting:



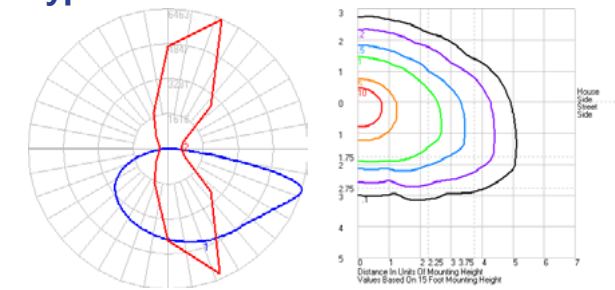
Mounting shown on AMM luminaire. All mounting accessories are adjustable up to 90° in both directions.

Photometric Data:

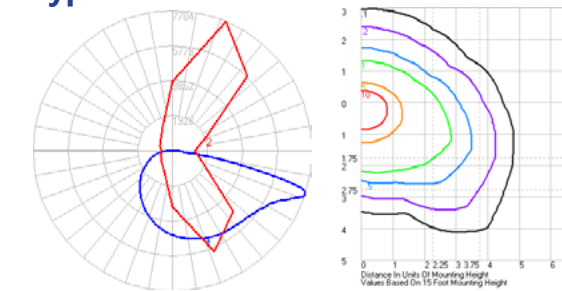
Type II



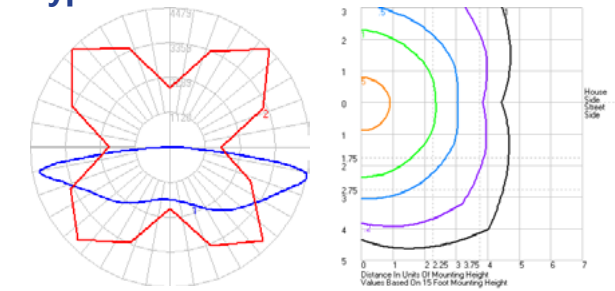
Type III



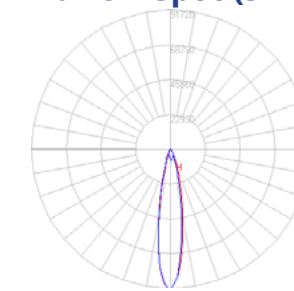
Type IV



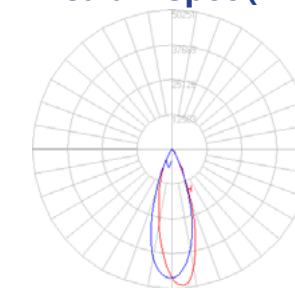
Type V



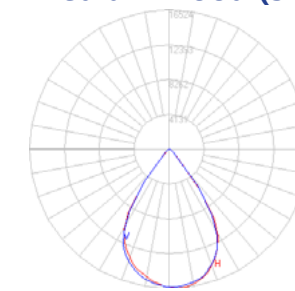
Narrow Spot (3H x 3V)



Medium Spot (4H x 4V)



Medium Flood (5H x 5V)



Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
AMM LW 2 UV 840	10407	78	133.3	B3-U0-G3
AMM LW 3 UV 840	10382	80	129.5	B2-U0-G2
AMM LW 4 UV 840	10339	78	132.4	B2-U0-G3
AMM LW 5 UV 840	9775	78	125.6	B3-U0-G3
AMM LW SN UV 840	10130	78	129.6	
AMM LW SM UV 840	10054	78	128.8	
AMM LW FM UV 840	10051	78	129.0	
AMM MD 2 UV 840	12821	100	128.2	B3-U0-G3
AMM MD 3 UV 840	12444	99	125.3	B3-U0-G3
AMM MD 4 UV 840	12522	99	126.6	B3-U0-G3
AMM MD 5 UV 840	11773	97	121.9	B4-U0-G3
AMM MD SN UV 840	12822	99	129.3	
AMM MD SM UV 840	12761	99	128.5	
AMM MD FM UV 840	12753	99	128.6	
AMM HI 2 UV 840	17695	138	128.5	B3-U0-G3
AMM HI 3 UV 840	17142	137	124.9	B3-U0-G3
AMM HI 4 UV 840	17775	139	127.6	B3-U0-G3
AMM HI 5 UV 840	16270	137	119.1	B4-U0-G4
AMM HI SN UV 840	17968	139	129.2	
AMM HI SM UV 840	17963	139	129.2	
AMM HI FM UV 840	17882	139	128.9	
AML MD 2 UV 840	30906	232	133.3	B4-U0-G4
AML MD 3 UV 840	29784	237	125.6	B4-U0-G4
AML MD 4 UV 840	30418	240	126.8	B4-U0-G5
AML MD 5 UV 840	27712	223	124.0	B5-U0-G5
AML MD SN UV 840	30518	239	127.5	
AML MD SM UV 840	30688	238	128.8	
AML MD FM UV 840	30761	239	128.8	
AML HI 2 UV 840	35169	278	126.3	B4-U0-G4
AML HI 3 UV 840	34546	278	124.4	B4-U0-G4
AML HI 4 UV 840	35266	278	126.8	B4-U0-G5
AML HI 5 UV 840	32475	271	119.7	B5-U0-G5
AML HI SN UV 840	35703	276	129.2	
AML HI SM UV 840	35322	276	127.8	
AML HI FM UV 840	35853	277	129.3	

Scaling Factor:
5000K: 1.01





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ALS LED Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Multiple optics and mounting options available making it suitable for many applications

Applications:

Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >60,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Die cast aluminum housing with integral heat sink
- Clear flat glass lens
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP66

Ambient Operating Temp:

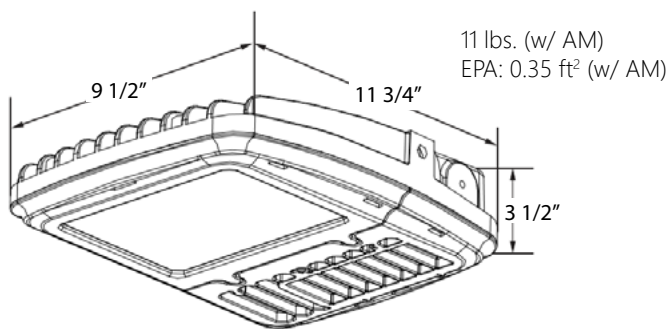
-40°C to 50°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Schematics:



ALS LED Area Light



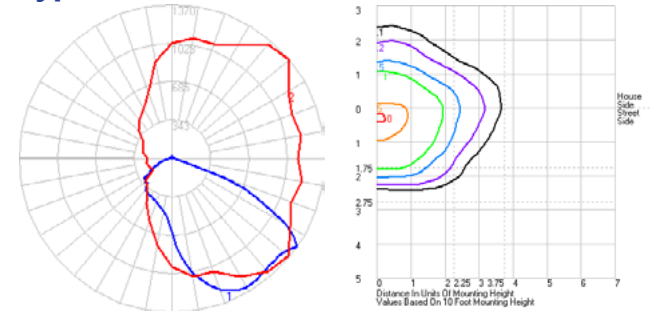
Ordering Guide:

example: ALS HI 3 UV 850-AK BZ

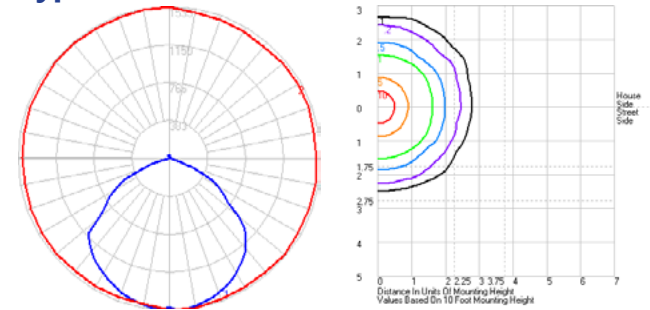
Series	Output	Optic	Voltage	CRI/CCT	Mounting	Options	Finish
ALS					-		
ALS	MD HI	3 5M S	UV 34	840 850	KN TS AM AMR AK UB YK WM	Blank SF DF SP PCUV M1 M2 EHS	BZ Custom Colors Available Upon Request

- Series:** ALS Area Light - Small
- Lumen Output:** MD Medium
HI High
- Optic:** 3 Type III
5M Type V Medium
S Spot (available in 5000K only)
- Voltage:** UV 120-277V
34 347V (not available for MD output)
- CRI/CCT:** 840 80 CRI / 4000K
850 80 CRI / 5000K
- Mounting:** KN 1/2" NPS Knuckle
TS Tenon Slipfitter
AM Arm Mount
AMR Arm Mount w/ Round Pole Adapter
AK Adjustable Knuckle Slipfitter
UB U-Bracket
YK Yoke
WM Easy Hang Wall Mount
- Options:** Blank None
SF Single Fuse
DF Double Fuse
SP 10kV Surge Protection
PCUV 120-277V Push Button Photocell
M1 Motion Sensor for heights 20'-35'
M2 Motion Sensor for heights < 20'
EHS External House Side Shield
- Finish:** BZ Bronze
(Custom Colors Available Upon Request)

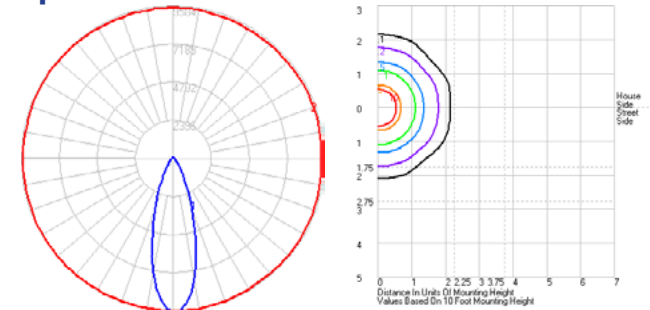
Type III



Type VM



Spot - NEMA 4Hx4V



ALS LED Area Light



Mounting:



TS - Tenon Slipfitter
Die-Cast slipfitter for 2-3/8" ø tenons. Hardware included.



AM - Arm Mount
Die-Cast mounting arm. Mounts directly to square poles. Hardware included.



AK - Adjustable Knuckle Slipfitter
Die-Cast adjustable slipfitter for 2-3/8" ø tenons. Hardware included.



AMR - Arm Mount
Die-Cast mounting arm. Uses adapter to mount **AM** directly to round poles. Hardware included. Fits 3" to 4" ø poles

UB - Adjustable U-Bracket
Two-piece stamped steel adjustable bracket. Hardware included.



WM - Easy Hang Wall Mount
Die-Cast easy-hang wall mount. Hardware included.



KN - Adjustable Knuckle
Die-Cast adjustable knuckle with 1/2" NPS threads. Hardware included.



YK - Yoke Mount
Stamped, heavy-duty steel yoke bracket. Hardware included.

Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating	Catalog #	Lumens	Wattage	LPW	BUG Rating
ALS MD 3 UV 840	2680	25	107.7	B1-U0-G1	ALS MD 3 UV 850	2875	25	115.5	B1-U0-G1
ALS MD 5M UV 840	2557	25	102.8	B1-U0-G0	ALS MD 5M UV 850	2742	25	110.2	B1-U0-G0
ALS MD S UV 840	-	-	-	-	ALS MD S UV 850	2682	24	111.8	-
ALS HI 3 UV 840	4508	41	110.2	B1-U0-G1	ALS HI 3 UV 850	4834	41	118.2	B1-U0-G1
ALS HI 5M UV 840	4300	41	105.1	B2-U0-G0	ALS HI 5M UV 850	4612	41	112.8	B2-U0-G0
ALS HI S UV 840	-	-	-	-	ALS HI S UV 850	4512	43	106.2	-



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ALM LED Area Light

Features:

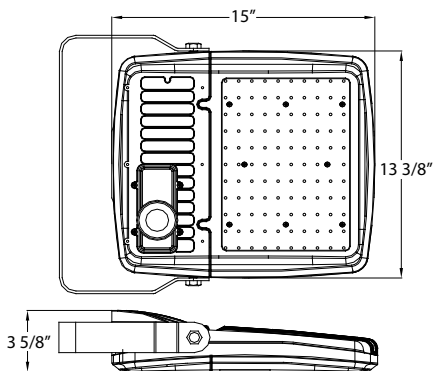
- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Multiple optics and mounting options available making it suitable for many applications

Applications:

Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts

Schematics:



15 lbs. (w/ AM)
 EPA: 0.60 ft² (w/ AM)

Construction:

- Die cast aluminum housing with integral heat sink
- Clear flat glass lens
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP66

Ambient Operating Temp:

-40°C to 50°C

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >60,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



ALM LED Area Light



Ordering Guide:

example: ALM HI 3 UV 850-AK BZ

Series	Output	Optic	Voltage	CRI/CCT	Mounting	Options	Finish
ALM					-		
ALM	MD HI	1 2 3 4 5M S	UV 34 48	840 850	TS AM AMR AK UB YK WM	Blank SF DF SP R3 R7 PCUV PC34 PC48 M1 M2 MSD EHS	BZ Custom Colors Available Upon Request

Series: ALM Area Light - Medium

Lumen Output: MD Medium
HI High

Optic: 1 Type I
2 Type II
3 Type III
4 Type IV
5M Type V Medium
S Spot (available in 5000K only)

Voltage: UV 120-277V
34 347V (not available for HI output)
48 480V (not available for HI output)

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Mounting: TS Tenon Slipfitter
AM Arm Mount
AMR Arm Mount w/ Round Pole Adapter
AK Adjustable Slipfitter Knuckle
UB U-Bracket
YK Yoke
WM Easy Hang Wall Mount

Options: Blank None
SF Single Fuse
DF Double Fuse
SP 10kV Surge Protection
R3 3 Pin Twist Lock Receptacle
R7 7 Pin Twist Lock Receptacle
PCUV 120-277V Twist Lock Photocell
PC34 347V Twist Lock Photocell
PC48 480V Twist Lock Photocell
M1 Motion Sensor for heights 20'-35'
M2 Motion Sensor for heights < 20'
MSD Microwave Sensor w/ Dimming (120-277V)
EHS External House Side Shield

Finish: BZ Bronze
(Custom Colors Available Upon Request)

MSD - Microwave Sensor:



- Internally Mounted Behind Lens
- Motion & Daylight Sensor
- 5 Light Level Setting for Daylight Harvesting
- Detects Motion Speed 2 to 10 ft per sec.
- Stand-by Dim Settings: 10%, 20%, 30%, 50%
- Vacant Stand-by Delay: 5s, 5min, 10min, 30min, 60min
- Up to 35' Mounting Height
- 120-277V

ALM LED Area Light



Mounting:



TS - Tenon Slipfitter
Die-Cast slipfitter for 2-3/8" ø tenons. Hardware included.



AM - Arm Mount
Die-Cast mounting arm. Mounts directly to square poles. Hardware included.



AK - Adjustable Knuckle
Die-Cast adjustable slipfitter for 2-3/8" ø tenons. Hardware included.



AMR - Arm Mount
Die-Cast mounting arm. Uses adapter to mount AM directly to round poles. Hardware included. Fits 3" to 4" ø poles



YK - Yoke Mount
Stamped, heavy-duty steel yoke bracket. Hardware included.

UB - Adjustable U-Bracket
Two-piece stamped steel adjustable bracket. Hardware included.



WM - Easy Hang Wall Mount
Die-Cast easy-hang wall mount. Hardware included.

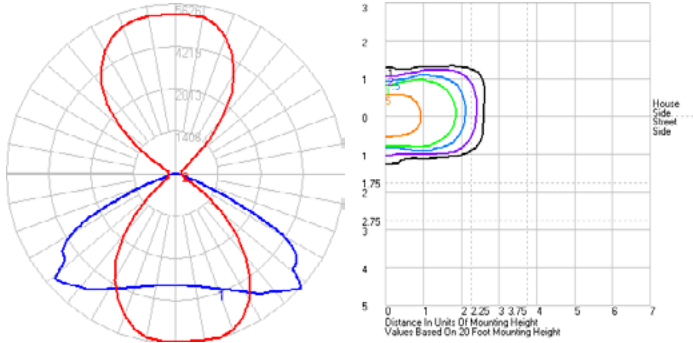
Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
ALM MD 1 UV 840	9418	84	111.8	B3-U0-G1
ALM MD 2 UV 840	8984	84	106.7	B2-U0-G1
ALM MD 3 UV 840	9869	84	117.2	B2-U0-G2
ALM MD 4 UV 840	9269	84	110.1	B1-U1-G2
ALM MD 5M UV 840	9414	84	111.8	B3-U0-G1
ALM MD S UV 840	-	-	-	-
ALM HI 1 UV 840	13641	121	112.7	B3-U0-G2
ALM HI 2 UV 840	13013	121	107.5	B2-U0-G2
ALM HI 3 UV 840	14296	121	118.1	B3-U0-G3
ALM HI 4 UV 840	12588	121	104.0	B2-U1-G2
ALM HI 5M UV 840	13637	121	112.7	B3-U0-G1
ALM HI S UV 840	-	-	-	-

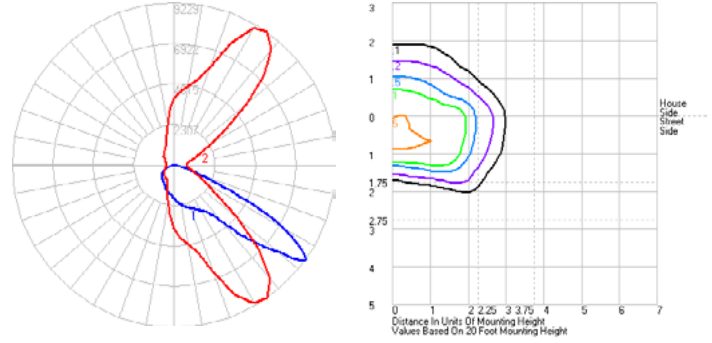
Catalog #	Lumens	Wattage	LPW	BUG Rating
ALM MD 1 UV 850	10099	84	119.9	B3-U0-G1
ALM MD 2 UV 850	9634	84	114.4	B2-U0-G2
ALM MD 3 UV 850	10583	84	125.7	B2-U0-G2
ALM MD 4 UV 850	9940	84	118.1	B1-U1-G2
ALM MD 5M UV 850	10095	84	119.9	B3-U0-G1
ALM MD S UV 850	9526	87	109.5	-
ALM HI 1 UV 850	14629	121	120.9	B3-U0-G2
ALM HI 2 UV 850	13955	121	115.3	B2-U0-G2
ALM HI 3 UV 850	15331	121	126.7	B3-U0-G3
ALM HI 4 UV 850	13499	121	111.5	B2-U1-G3
ALM HI 5M UV 850	14624	121	120.9	B3-U0-G1
ALM HI S UV 850	13348	125	106.9	-

Photometric Data:

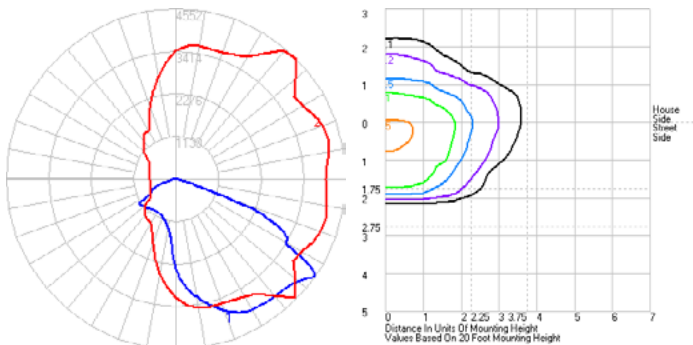
Type I



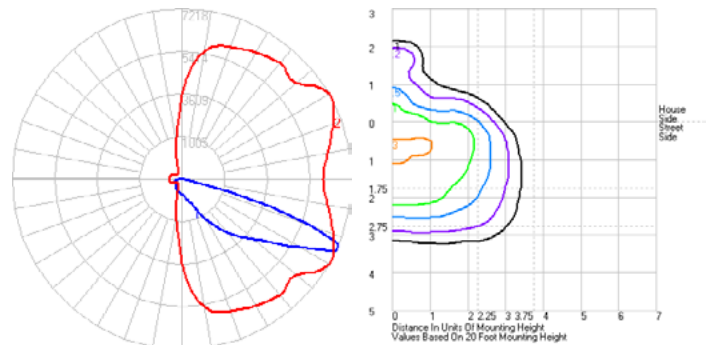
Type II



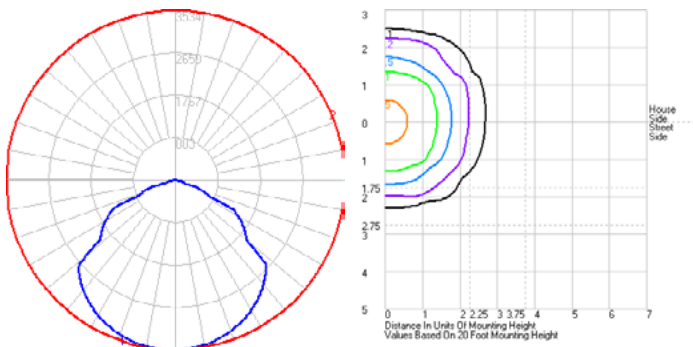
Type III



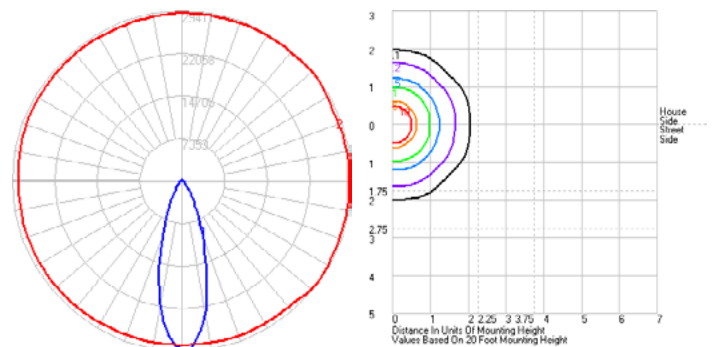
Type IV



Type VM



Spot - NEMA 4Hx4V





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ALL LED Area Light

Features:

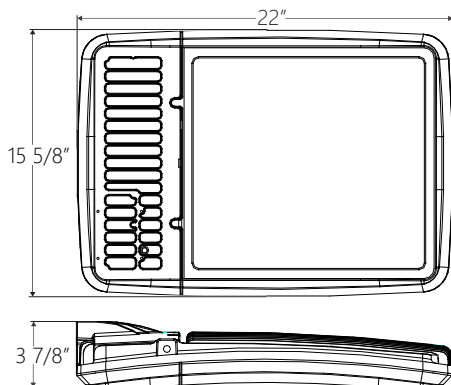
- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Multiple optics and mounting options available making it suitable for many applications

Applications:

Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts

Schematics:



33 lbs. (w/ AM)
 EPA: 1.00 ft² (w/ AM)

Construction:

- Die cast aluminum housing with integral heat sink
- Clear flat glass lens
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP66

Ambient Operating Temp:

-40°C to 50°C

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >60,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

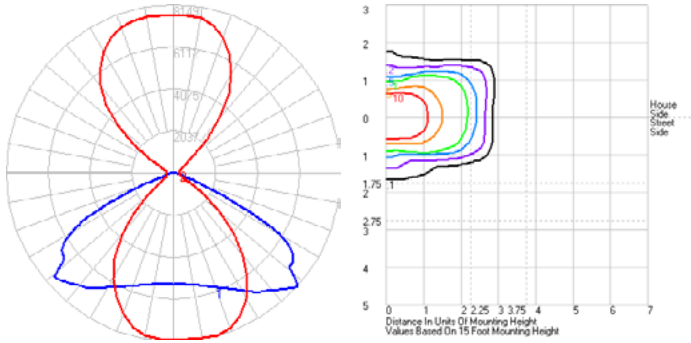
Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

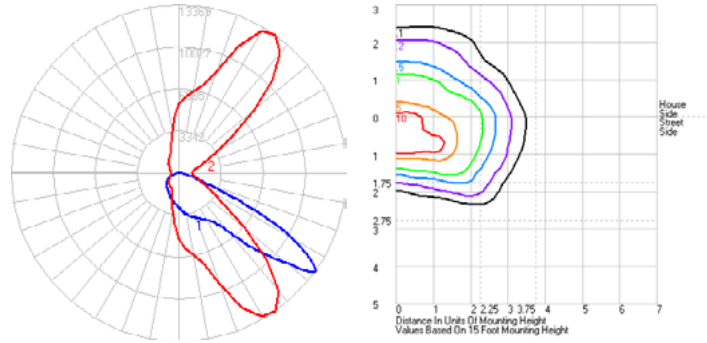


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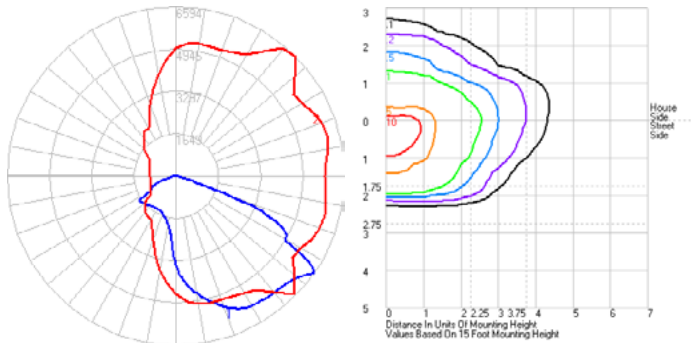
Type I



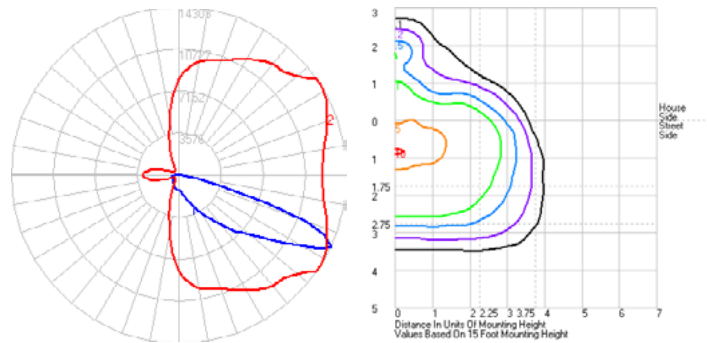
Type II



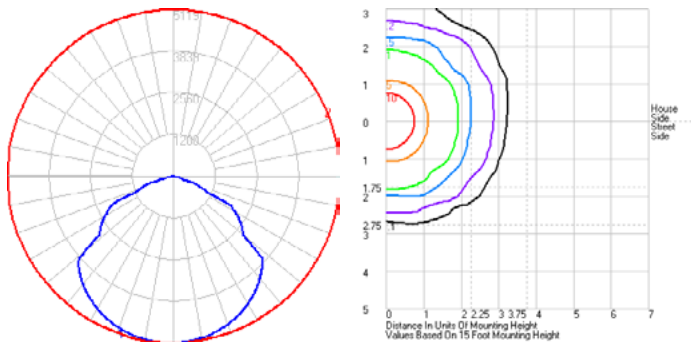
Type III



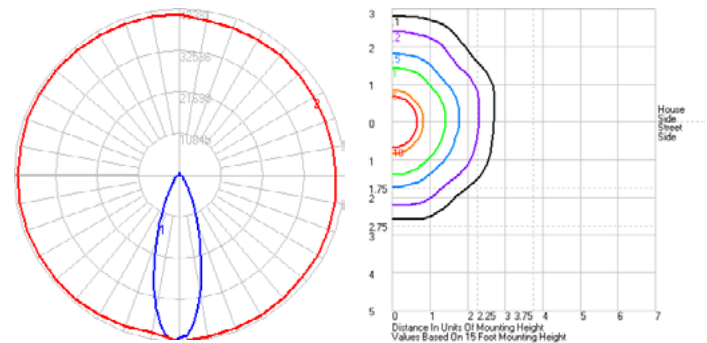
Type IV

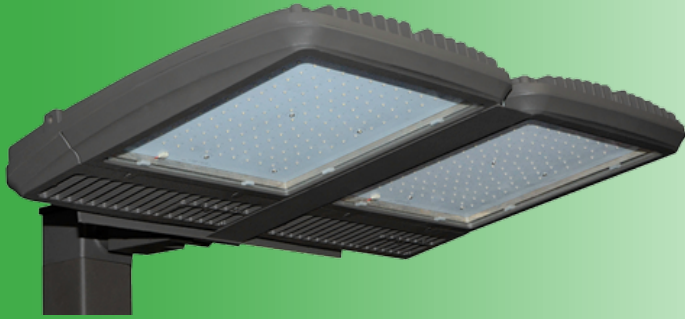


Type VM



Spot - NEMA 4Hx4V





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ALX LED Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Multiple optics available making it suitable for many applications

Applications:

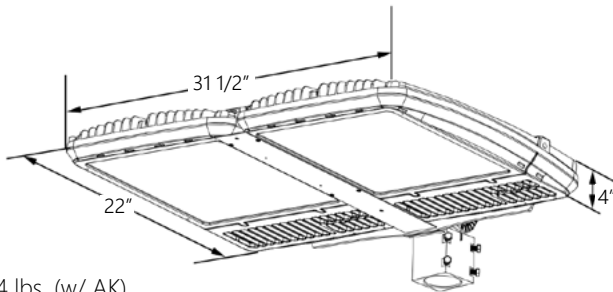
Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >60,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Schematics:



74 lbs. (w/ AK)
 EPA: 1.20 ft² (w/ AK)

Construction:

- Die cast aluminum housing with integral heat sink
- Clear flat glass lens
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP66

Ambient Operating Temp:

-40°C to 50°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: ALX HI 3 UV 850-AK BZ

Series	Output	Optic	Voltage	CRI/CCT	-	Mounting	Options	Finish
ALX					-	AK		
ALX	MD HI	1 2 3 4 5M S	UV 34 48	840 850		AK	Blank SF DF SP R3 R7 PCUV PC34 PC48 MSD EHS	BZ Custom Colors Available Upon Request

Series: ALX Area Light - Extra Large

Lumen Output: MD Medium
HI High

Optic: 1 Type I
2 Type II
3 Type III
4 Type IV
5M Type V Medium
S Spot (available in 5000K only)

Voltage: UV 120-277V
34 347V
48 480V

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Mounting: AK Adjustable Slipfitter Knuckle

Options: Blank None
SF Single Fuse
DF Double Fuse
SP 10kV Surge Protection
R3 3 Pin Twist Lock Receptacle
R7 7 Pin Twist Lock Receptacle
PCUV 120-277V Twist Lock Photocell
PC34 347V Twist Lock Photocell
PC48 480V Twist Lock Photocell
MSD Microwave Sensor w/ Dimming (120-277V)
EHS External House Side Shield

Finish: BZ Bronze
(Custom Colors Available Upon Request)

MSD - Microwave Sensor:



- Internally Mounted Behind Lens
- Motion & Daylight Sensor
- 5 Light Level Setting for Daylight Harvesting
- Detects Motion Speed 2 to 10 ft per sec.
- Stand-by Dim Settings: 10%, 20%, 30%, 50%
- Vacant Stand-by Delay: 5s, 5min, 10min, 30min, 60min
- Up to 35' Mounting Height
- 120-277V

Mounting:



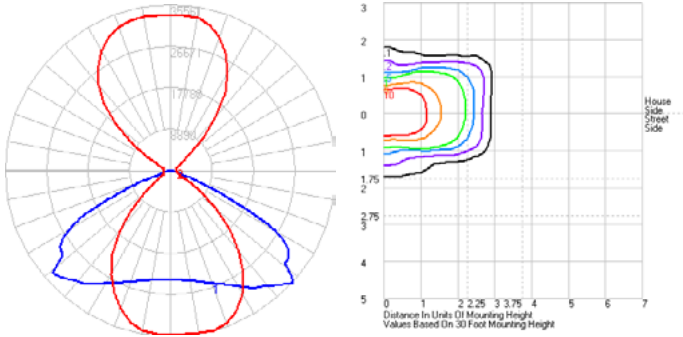
AK - Adjustable Knuckle
Die-Cast adjustable slipfitter for 2-3/8" ø tenons.

Performance Chart:

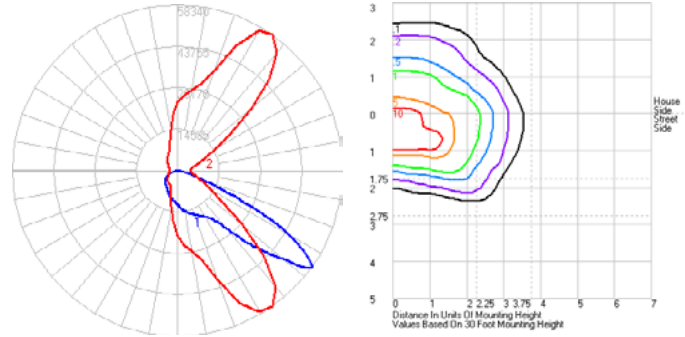
Catalog #	Lumens	Wattage	LPW	BUG Rating
ALX MD 1 UV 840	38831	354	109.7	B5-U0-G3
ALX MD 2 UV 840	37044	354	104.6	B4-U0-G3
ALX MD 3 UV 840	40695	354	115.0	B4-U0-G4
ALX MD 4 UV 840	41251	354	116.5	B4-U1-G5
ALX MD 5M UV 840	38818	354	109.7	B5-U0-G2
ALX MD S UV 840	-	-	-	-
ALX HI 1 UV 840	59526	549	108.3	B5-U0-G4
ALX HI 2 UV 840	56787	549	103.4	B4-U0-G4
ALX HI 3 UV 840	62383	549	113.5	B5-U0-G5
ALX HI 4 UV 840	52221	549	95.1	B3-U1-G5
ALX HI 5M UV 840	59506	549	108.3	B5-U0-G2
ALX HI S UV 840	-	-	-	-
ALX MD 1 UV 850	41642	354	117.6	B5-U0-G3
ALX MD 2 UV 850	39726	354	112.2	B4-U0-G3
ALX MD 3 UV 850	43641	354	123.3	B4-U0-G4
ALX MD 4 UV 850	44237	354	125.0	B4-U1-G5
ALX MD 5M UV 850	41628	354	117.6	B5-U0-G2
ALX MD S UV 850	41368	354	116.9	-
ALX HI 1 UV 850	63835	549	116.2	B5-U0-G4
ALX HI 2 UV 850	60897	549	110.8	B4-U0-G4
ALX HI 3 UV 850	66898	549	121.8	B5-U0-G5
ALX HI 4 UV 850	56001	549	101.9	B3-U1-G5
ALX HI 5M UV 850	63813	549	116.2	B5-U0-G3
ALX HI S UV 850	63418	549	115.4	-

Photometric Data:

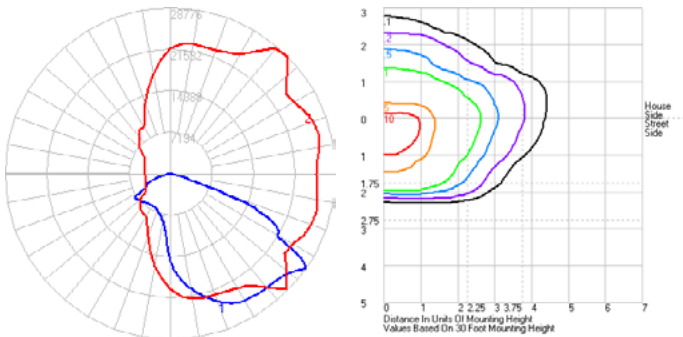
Type I



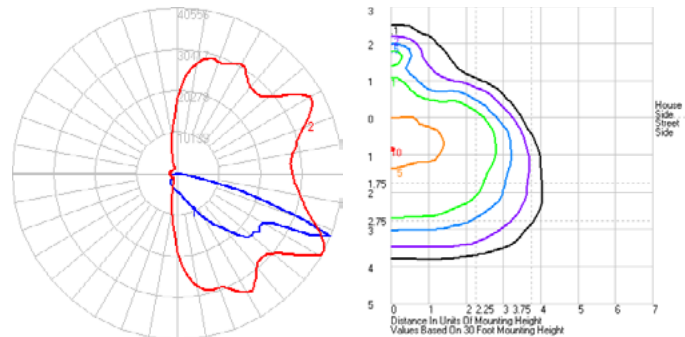
Type II



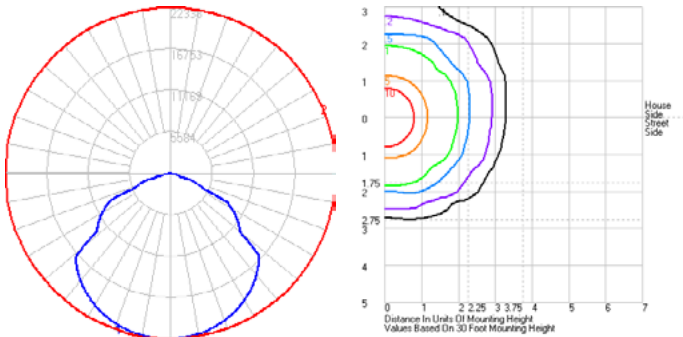
Type III



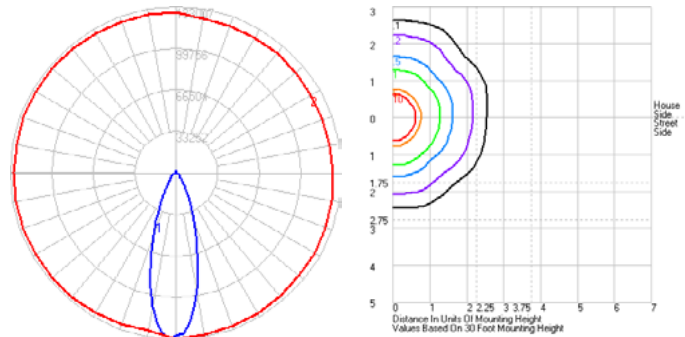
Type IV



Type VM



Spot - NEMA 4Hx4V





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

APM/APL LED Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers optional
- Easy access driver compartment
- Multiple mounting configurations for maximum versatility
- Industrial grade 3 or 5 pin photocell receptacle

Applications:

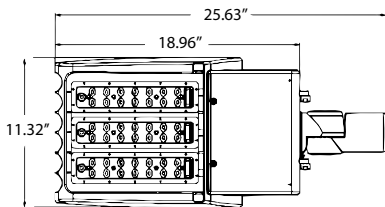
Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts

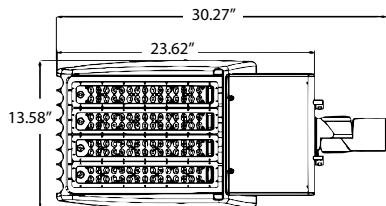
Ambient Operating Temp:

- -30°C to 40°C

Schematics:



APM 15 lbs.
 EPA: 0.79 ft² (w/ PM)
 EPA: 0.77 ft² (w/ SK)



APL 22.04 lbs
 EPA: 0.94 ft² (w/ PM)
 EPA: 0.92 ft² (w/ SK)



Construction:

- Die cast aluminum housing with integral heat sink
- UV stabilized polycarbonate lens
- Chip & fade resistant powder coat finish

Certifications:

- UL listed for wet locations
- IP65

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Predicted L70 Lifetime:

- >200,000 hrs (calculated)
- >72,000 hrs (reported)
- 90% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)



APM/APL LED Area Light



Ordering Guide:

example: APM MD 4 UV D 740-PM(4") PC BK

Series	Output	Optic	Voltage	Dimming	CRI/CCT	Mounting	Options	Finish
			UV			-		
APM	LW	2	UV	Blank	740	SK	Blank	BZ
APL	MD	3		D	750	TR	PC	Custom Colors Available Upon Request
	HI	4				WK	MS	
		5				PM(x) EA6 EA12		

Series: APM Area Light - Medium
APL Area Light - Large

Lumen Output: LW Low
MD Medium
HI High

Optic: 2 Type II
3 Type III
4 Type IV
5 Type V

Voltage: UV 120-277V

Dimming: Blank None
D 0-10V Dimming

CRI/CCT: 740 70 CRI / 4000K
750 70 CRI / 5000K

Mounting: SK Slipfitter Knuckle
TR Trunnion Mount
WK Wall Mount Knuckle
PM(x) Pole Mount Bracket (x=specify pole o.d. for round pole, or enter "s" for square pole)
EA6 6" Extension Arm for square pole
EA12 12" Extension Arm for square pole

Options: Blank None
PC Photocell
MS Motion Sensor (can be set to 10%/20%/30% low when paired with dimming driver)

Finish: BZ Bronze
Custom Colors Available Upon Request

Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
APL HI 2 UV 740	28522	243.5	117.1	B2-U1-G2
APL HI 3 UV 740	26422	247.8	106.6	B2-U2-G2
APL HI 4 UV 740	24880	243.3	102.3	B2-U2-G2
APL HI 5 UV 740	28041	240.7	116.5	B3-U2-G2
APL MD 2 UV 740	23224	192.1	120.9	B3-U2-G3
APL MD 3 UV 740	21116	193.6	109.1	B3-U2-G3
APL MD 4 UV 740	20386	191.7	106.3	B2-U2-G2
APL MD 5 UV 740	22862	191.7	119.3	B4-U2-G2
APL LW 2 UV 740	17552	143.6	122.2	B3-U2-G3
APL LW 3 UV 740	16931	142.8	118.6	B3-U2-G3
APL LW 4 UV 740	16550.0	146.4	113.0	B2-U2-G3
APL LW 5 UV 740	18428.0	146.4	125.9	B4-U2-G2
APM HI 2 UV 740	12568.0	117.8	106.7	B3-U2-G3
APM HI 3 UV 740	11486.0	117.3	97.9	B3-U2-G3
APM HI 4 UV 740	11159.0	118.5	94.2	B3-U2-G3
APM HI 5 UV 740	12522.0	118.2	105.9	B4-U2-G2
APM MD 2 UV 740	10924.0	97.9	111.6	B3-U2-G3
APM MD 3 UV 740	10251.0	98.3	104.3	B3-U3-G4
APM MD 4 UV 740	9606.0	100.5	95.6	B3-U2-G4
APM MD 5 UV 740	11059.0	98.8	111.9	B5-U2-G3
APM LW 2 UV 740	7408.0	67.3	110.1	B4-U3-G4
APM LW 3 UV 740	6599.0	66.3	99.5	B4-U3-G4
APM LW 4 UV 740	6495	66.4	97.8	B3-U2-G4
APM LW 5 UV 740	7362	67.9	108.4	B5-U3-G3

APM/APL LED Area Light

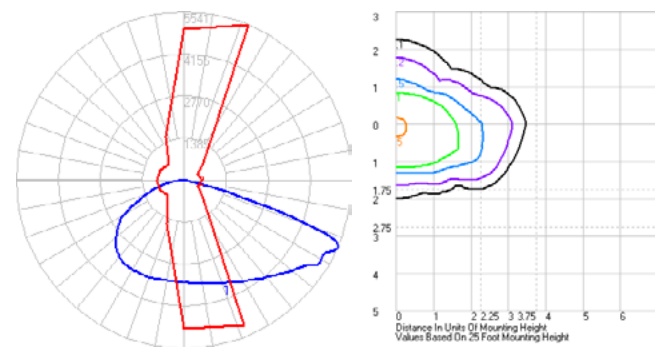


Mounting:

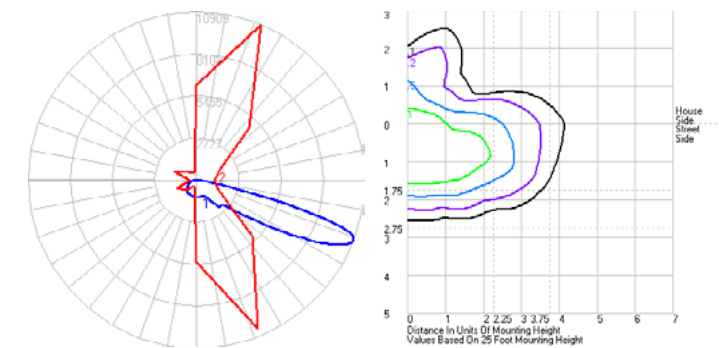


Photometric Data:

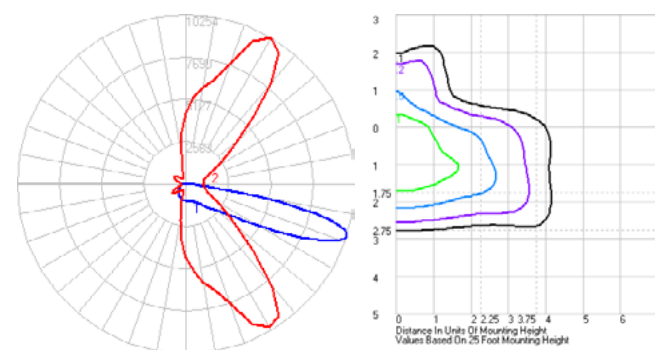
Type II



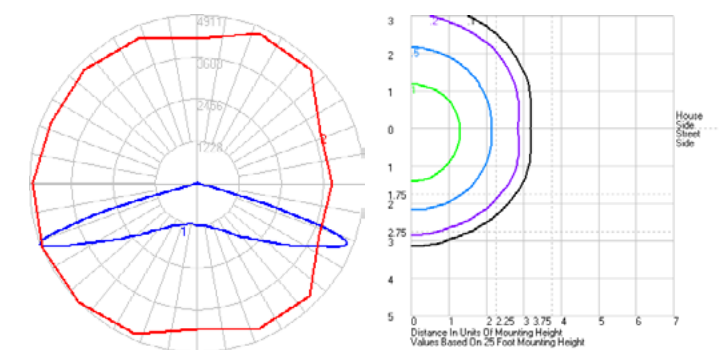
Type III

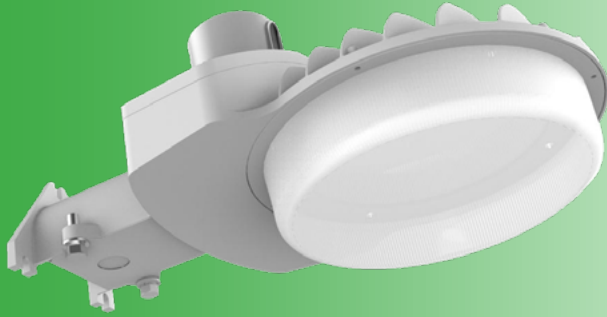


Type IV



Type V





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

BLx LED Barn Light

Features:

- High performance LED technology
- Photocell standard

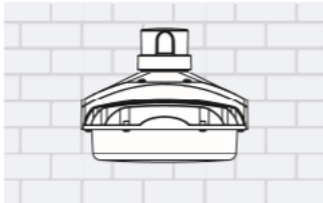
Applications:

Suitable for exterior site lighting applications

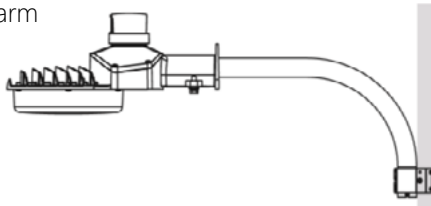
- Parking Lots
- Loading Docks
- Roadways
- Barns

Mounting:

The BLx mounts to wall using 1/4" lag bolts



or easily fits onto 1-1/2" O.D. mounting arm



Mounting hardware comes standard. Extension mounting arm available separately

Construction:

- Precision die cast aluminum housing with integral arm mounting hub
- Refractive, frosted UV-stabilized polycarbonate lens

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

- > 50,000 hrs

Ambient Operating Temp:

- -30°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: BLM MD 5S UV FPC 740-PC GY

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
	MD	5S	UV	FPC	740	-	PC	GY
BLS BLM BLL	MD	5S	UV	FPC	740		PC	GY

Series: BLS Barn Light - Small
BLM Barn Light - Medium
BLL Barn Light - Large

Lumen Output: MD Medium

Optic: 5S Type 5 Short

Voltage: UV 120-277V

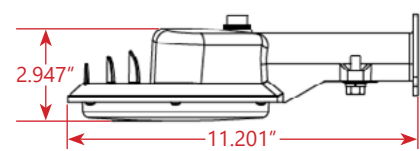
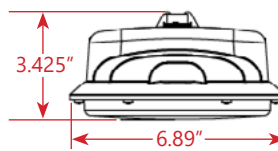
CRI/CCT: 740 70+ CRI / 4000K

Options: PC Photocell

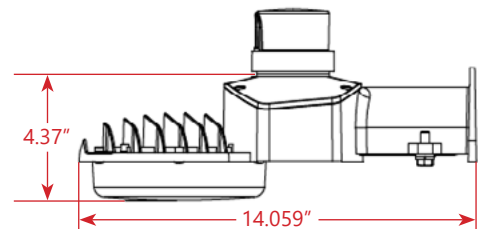
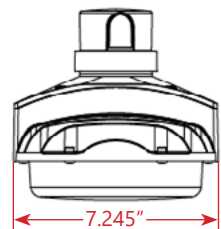
Finish: GY Gray

Schematic:

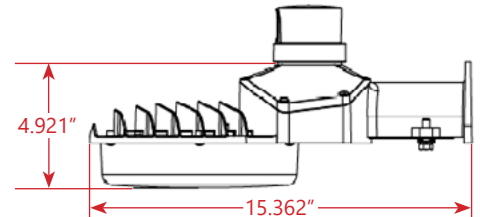
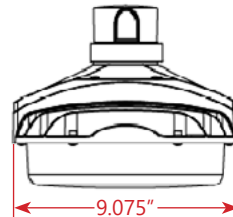
BLS
2.2 lbs



BLM
3.7 lbs



BLL
5.31 lbs



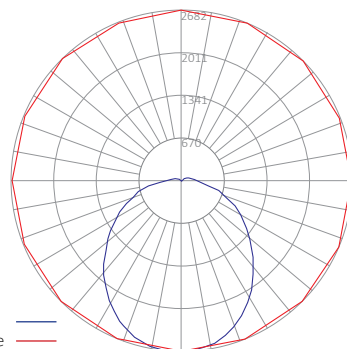
Performance Chart:

Catalog #	Lumens	Watts	LPW
BLS MD 5S UV FPC 740	2392	21	116.7
BLM MD 5S UV FPC 740	4780	41	116.9
BLL MD 5S UV FPC 740	8284	69	120.2

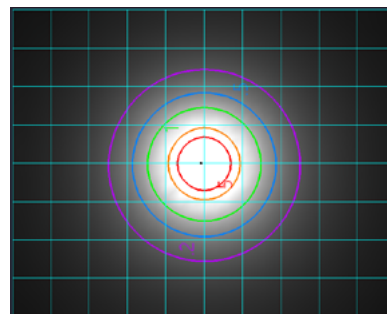
Photometric Data:

BL MD 5S UV FPC 740

Test No.: 15122017
Luminaire Lumens: 8,284 lm
Luminaire Watts: 68.9W
Efficacy: 120.2 LPW



Vert. Plane — blue
Horiz. Cone — red



Mounting Height = 15'
Grid: 15' x 15' squares

Isolines at:
5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



FAM/FAL LED Flood/Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Up to 45,000 lumens

Applications:

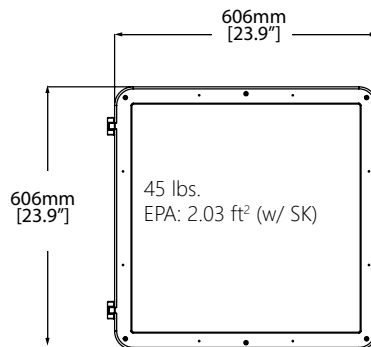
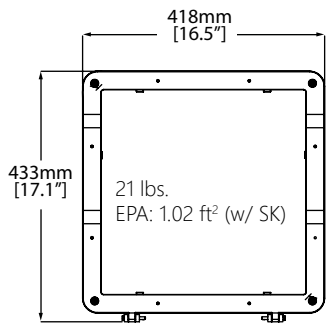
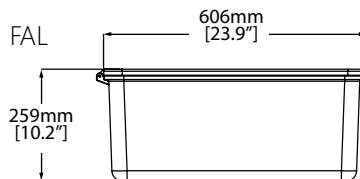
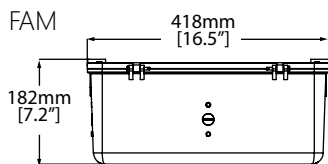
Suitable for most exterior flood or area light applications

- Parking Lots
- Exterior sport courts

Certifications:

- UL listed for wet locations

Schematics:



Construction:

- Die cast aluminum housing with integral heat sink
- UV stabilized polycarbonate lens
- Chip & fade resistant powder coat finish

Predicted L70 Lifetime:

- >66,000 hrs (*calculated*)
- >36,000 hrs (*reported*)
- 73% lumen maintenance @ 54,000 hrs (*based on LM-80, TM-21 and in-situ laboratory testing*)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Ordering Guide:

example: FAL HI F UV 840-TR PC BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	-	Mounting	Options	Finish
	HI	F	UV	D	840	-			
FAM FAL	HI	F	UV	D	840		SK TR	Blank PC	BZ Custom Colors Available Upon Request

- Series:** FAM Flood/Area Light - Medium
FAL Flood/Area Light - Large
- Lumen Output:** HI High
- Optic:** F Forward
- Voltage:** UV 120-277V
- Dimming:** D 0-10V Dimming
- CRI/CCT:** 840 80 CRI / 4000K
- Mounting:** SK Slipfitter Knuckle
TR Trunnion Mount
- Options:** Blank None
PC Photocell
- Finish:** BZ Bronze
(Custom Colors Available Upon Request)

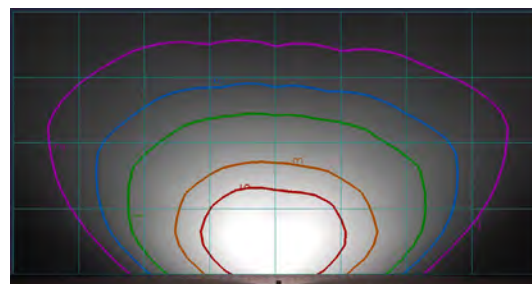
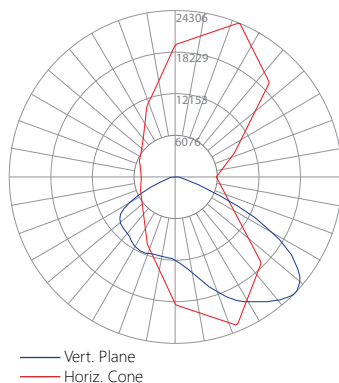
Performance Chart:

Catalog #	Lumens	Wattage	LPW
FAM HI F UV 840	20769	191.7	108.3
FAL HI F UV 840	44740	386.2	115.8

Photometric Data:

FAL HI F UV 840

Test No.: STD150820NB-AE
Luminaire Lumens: 44,740 lm
Luminaire Watts: 386.2W
Efficacy: 115.8 LPW



Mounting Height = 30'
 Tilt = 30°
 Grid: 30' x 30' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

SLM/SLL LED Street Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Includes twist lock photocell receptacle

Applications:

Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Construction:

- Die cast aluminum housing with integral heat sink
- Clear flat glass lens
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP66

Predicted L70 Lifetime:

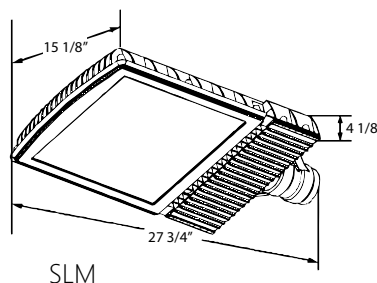
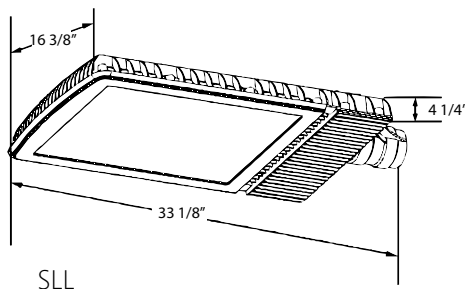
- >100,000 hrs (calculated)
- >60,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

-40°C to 50°C



Schematics:



SLM/SLL LED Street Light



Ordering Guide:

example: SLM HI 3 UV 750-AK BZ

Series	Output	Optic	Voltage	CRI/CCT	Mounting	Options	Finish
	HI				-		
SLM	HI	2	UV	740	TS	Blank	BZ
SLL		3	34	750	AK	SF	Custom Colors Available Upon Request
		4	48		UB	DF	
		5				SP	
						PCUV PC34 PC48 R7 EHS	

Series: SLM Street Light - Medium
SLL Street Light - Large

Options: Blank None
SF Single Fuse
DF Double Fuse
SP Surge Protection
PCUV 120-277V Photocell
PC34 347V Photocell
PC48 480V Photocell
R7 7 Pin Twist Lock Receptacle
EHS External House Side Shield

Finish: BZ Bronze
(Custom Colors Available Upon Request)

Lumen Output: HI High

Optic: 2 Type II
3 Type III
4 Type IV
5 Type V

Voltage: UV 120-277V
34 347V
48 480V

CRI/CCT: 740 70 CRI / 4000K
750 70 CRI / 5000K

Mounting: TS Tenon Slipfitter
AK Adjustable Knuckle
UB U-Bracket

Mounting:



SLM/SLL LED Street Light



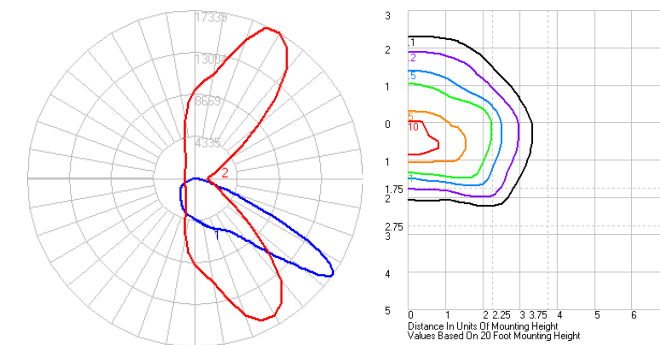
Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
SLM HI 2 UV 740	17,965	185	97.1	B3-U0-G2
SLM HI 3 UV 740	19,292	184	105.0	B3-U0-G3
SLM HI 4 UV 740	17,347	186	93.5	B3-U0-G4
SLM HI 5 UV 740	18,782	185	101.5	B4-U0-G1
SLL HI 2 UV 740	30,003	309	97.1	B3-U0-G3
SLL HI 3 UV 740	32,219	307	104.9	B4-U0-G4
SLL HI 4 UV 740	28,970	310	93.5	B3-U0-G5
SLL HI 5 UV 740	31,367	309	101.5	B5-U0-G2

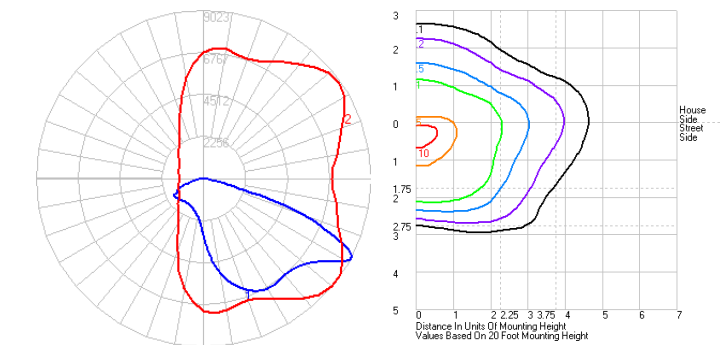
Catalog #	Lumens	Wattage	LPW	BUG Rating
SLM HI 2 UV 750	19,634	185	106.1	B3-U0-G3
SLM HI 3 UV 750	21,084	184	114.7	B3-U0-G3
SLM HI 4 UV 750	18,958	186	102.2	B3-U0-G4
SLM HI 5 UV 750	20,527	185	110.9	B4-U0-G1
SLL HI 2 UV 750	32,789	309	106.1	B3-U0-G3
SLL HI 3 UV 750	35,210	307	114.7	B4-U0-G4
SLL HI 4 UV 750	31,660	310	102.2	B3-U0-G5
SLL HI 5 UV 750	34,280	309	110.9	B5-U0-G2

Photometric Data:

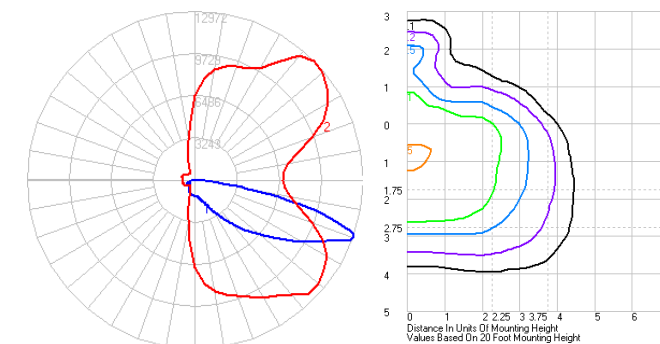
Type II



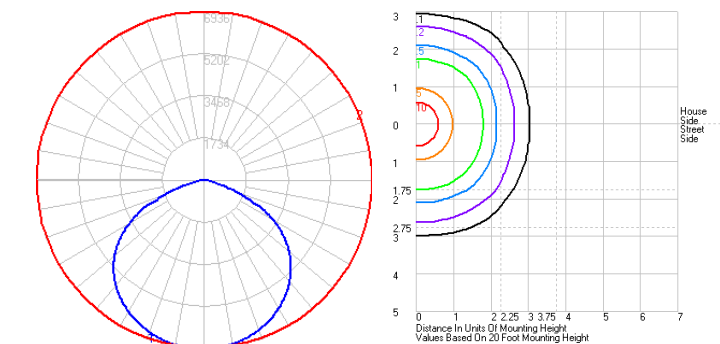
Type III



Type IV



Type V





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

CLS LED Low Profile Canopy Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Surface or pendant mounting - Junction box mounting plate comes standard. Threaded hole on back of luminaire for 3/4" rigid electrical conduit and pendant mounting
- Removable threaded plugs on side accommodate 1/2" rigid electrical conduit or motion/photo sensors
- 4kV surge protection standard

Applications:

For use in surface or pendant mount applications. Suitable for indoor or outdoor use

- Canopy
- Security
- Stairwell
- Corridors

Predicted L70 Lifetime:

- ≥ 60,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 40°C

Construction:

- Die cast aluminum housing
- Impact resistant polycarbonate drop lens
- Durable dark bronze powder coat finish

Certifications:

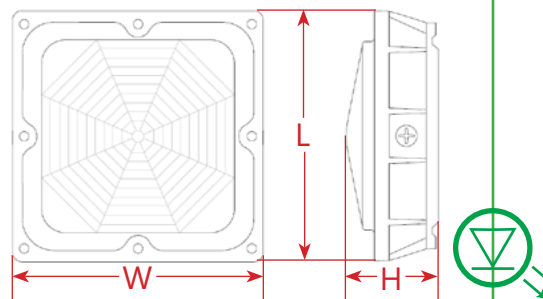
- cULus listed for wet locations
- IP65

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Model	Length (L)	Width (W)	Height (H)	Weight
CLS 10	10"	10"	3 5/8"	5.6 lbs.
CLS 14	14"	14"	4"	10.0 lbs

Ordering Guide:

example: CLS 14 HI UV PCD 850-BZ

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Options	Finish
CLS			UV	PCD	850	-		BZ
CLS	10	MD	UV	PCD	850		Blank MSD	BZ
	14	HI						

Size: 10 10" Square
14 14" Square

Options: Blank None
MSD Microwave Dimming Motion/Daylight Sensor

Lumen Output: MD Medium
HI High

Finish: BZ Bronze Finish

Voltage: UV 120-277V

Shielding: PCD Polycarbonate Drop Lens

Performance

Catalog #	Watts	Lumens	LPW
CLS 10 MD UV PCD 850	44	4948	112
CLS 14 HI UV PCD 850	80	9548	120

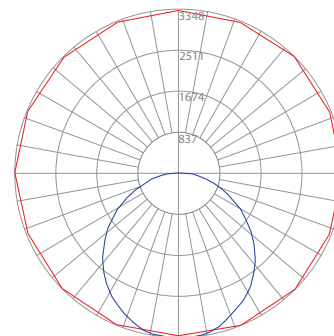
Photometric Data:

CLS 14 HI UV PCD 850

Test No.: TN20160723a
Luminaire Lumens: 9,548 lm
Luminaire Watts: 79.6W
Efficacy: 120.0 LPW
Spacing Criterion (0-180): 1.24
Spacing Criterion (90-270): 1.26

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	25256	24364	25576
55	23037	21982	23476
65	20030	18665	20473
75	15910	14337	16605
85	11885	9980	13787



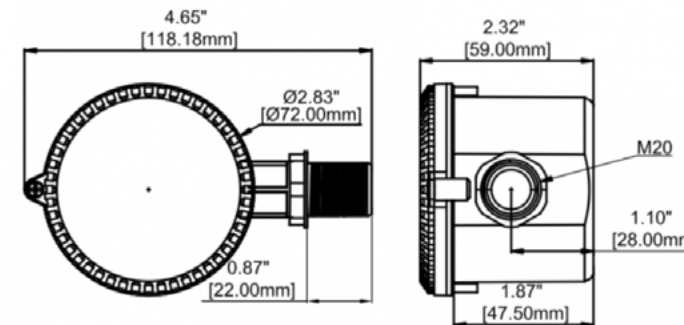
— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

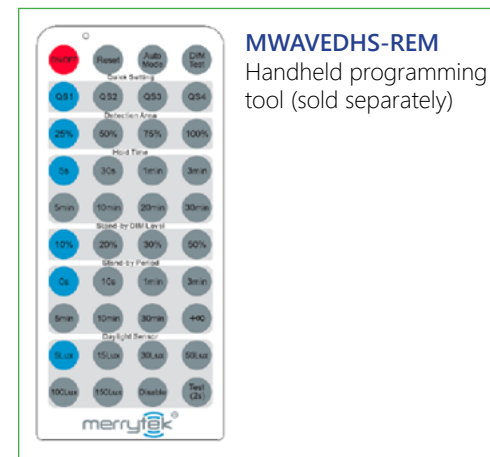
Zone	Lumens	%Fixt
0-20	1221.57	12.80
0-30	2585.89	27.10
0-40	4212.61	44.10
0-60	7388.73	77.40
0-80	9216.04	96.50
0-90	9513.52	99.60
90-120	22.22	0.20
90-130	25.19	0.30
90-150	30.80	0.30
90-180	34.93	0.40
0-180	9548.45	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

MSD - Microwave Sensor:



Operating Voltage	120-277VAC, 50Hz/60Hz
Rated Load	400W@120VAC, 800W@220-277VAC (inductive) 800W@120VAC, 1200W@220-277VAC (resistive)
HF System	5.8GHz±75MHz, ISM wave band
Transmitting Power	<0.5mW
Power Consumption	≤ 0.8W(standby), <1.5W(operation)
Detection Zone	Max.(D x H): 16m x 15m
Detection Sensitivity	100% / 50%
Hold Time	5s / 30s / 90s / 3min / 20min / 30min
Daylight Sensor	50lux / 100lux / 200lux / Disable
Stand-by Period	5s / 5min / 10min / 30min / 1h / Disable
Stand-by Dimming Level	10% / 20% / 30% / 50%
Mounting Height	15m Max.
Motion Detection	0.5 - 3m/s
Detection Angle	360°
Operating Temperature	-35°C - 70°C
IP Rating	IP65



MWAVEDHS-REM

Handheld programming tool (sold separately)



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

CLP LED Low Profile Canopy Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Over 100 lumens per watt
- Available Quick Mount Bracket (QMB) for easy installation. QMB also allows for pendant mounting.
- 1/2" coin plugs with O-rings for conduit and photocell located on two sides and back

Applications:

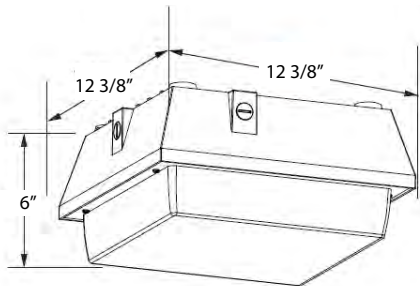
Suitable for most exterior canopy applications

- Industrial
- Retail
- Commercial

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Schematics:



Construction:

- Die cast aluminum housing
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations (*damp locations when used with QMB*)
- IP65

Predicted L70 Lifetime:

- > 100,000hrs @ 25°C ambient (calc.)
- > 60,000hrs @ 25°C ambient (reported)
- 78% lumen maintenance @ 60,000hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 40°C
- 0°C to 40°C with EM option

Mounting:

The QMB hinged quick-mount bracket allows for quick and easy installation. The stamped steel bracket can mount over recessed electrical box, or be used with 3/4" NPS pendant (supplied by others). CSA listed for damp location mounting.



QMB



Ordering Guide:

example: CLP MD UV PAD 850-SP BZ

Series	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
CLP	MD		PAD		-			
CLP	MD	UV 34 48	PAD	840 850		Blank QMB	Blank SF DF SP EM	BZ Custom Colors Available Upon Request

Accessories: (order separately)

- **CLP-PAD** Replacement PAD lens for CSM
- **PPC120** 1/2" CdS Pencil Photocell, 110V-130V, 0-200°
- **PPC277** 1/2" CdS Pencil Photocell, 208V-277V, 0-200°
- **SPC120** 1/2" CdS Swivel Photocell, 110V-130V, 0-200°
- **SPC277** 1/2" CdS Swivel Photocell, 208V-277V, 0-200°
- **BPC120** Button Photocell, 110V-130V
- **BPC277** Button Photocell, 208-277V

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Mounting: Blank None
QMB Quick Mount Bracket

Options: Blank None
SF Single Fuse
DF Double Fuse
SP Surge Protection
EM 4500 mAh Ni-MH Battery Back-up
(90 min; 120-277V only)

Lumen Output: MD Medium

Voltage: UV 120-277V
34 347V
48 480V

Shielding: PAD Prismatic Acrylic Drop Lens

Finish: BZ Bronze

Photometric Data:

CLP MD UV PAD 850

Test No.: 7732

Luminaire Lumens: 5,427 lm

Luminaire Watts: 51.7W

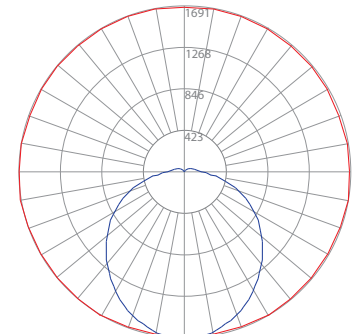
Efficacy: 104.9 LPW

Spacing Criterion (0-180): 1.20

Spacing Criterion (90-270): 1.18

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	13239	12673	12911
55	12180	11590	11776
65	10919	10333	10499
75	8952	8519	8558
85	6447	6284	6145



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	609.24	11.20
0-30	1279.74	23.60
0-40	2078.33	38.30
0-60	3703.35	68.20
0-80	4816.40	88.80
0-90	5062.09	93.30
90-120	302.20	5.60
90-130	339.93	6.30
90-150	361.22	6.70
90-180	364.71	6.70
0-180	5426.80	100.00

Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101		
1	106	100	96	91	102	97	93	89	92	88	85	87	84	81		
2	96	87	79	73	92	84	78	72	80	74	69	75	71	66		
3	87	76	67	60	84	74	66	59	70	63	57	66	60	56		
4	79	67	58	51	76	65	57	50	62	54	49	59	52	47		
5	73	60	50	43	70	58	49	43	55	48	42	52	46	41		
6	67	54	44	38	65	52	44	37	50	42	37	47	41	36		
7	62	49	40	33	60	47	39	33	45	38	32	43	37	32		
8	58	44	36	30	56	43	35	29	41	34	29	40	33	28		
9	54	41	32	27	52	40	32	26	38	31	26	36	30	25		
10	51	37	29	24	49	37	29	24	35	28	23	34	27	23		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

CPE LED Canopy Light

Features:

- High performance LED technology
- 0-10V dimming on CPE 12 MD model

Applications:

For use in canopy applications. Suitable for indoor or outdoor use.

- Loading Docks
- Entryways
- Stairwells
- Corridors

Mounting:

- Fits to any standard junction box or direct to any surface via detachable mounting plate.
- Multiple 1/2" conduit entry plugs
- Included hook for hands-free installation while making electrical connections



Construction:

- Die cast aluminum housing
- Impact resistant, UV-stabilized polycarbonate prismatic lens
- Fade, weather, and abrasion resistant textured polyester powdercoat finish in dark bronze.

Certifications:

- cULus listed for wet locations
- IP65

Ambient Operating Temp:

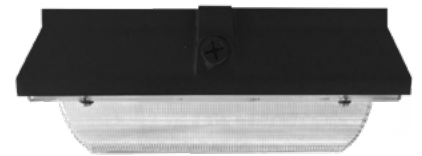
- -20°C to 40°C

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: CPE 12 MD UV PPD 840-BZ

Series	Size	Output	Voltage	Shielding	CRI/CCT	-	Finish
CPE			UV	PPD	840	-	BZ
CPE	9	LW	UV	PPD	840		BZ
	12	MD					

Size: 9 9" square
12 12" square

Lumen Output: LW Low (available on 9" only)
MD Medium (available on 12" only)

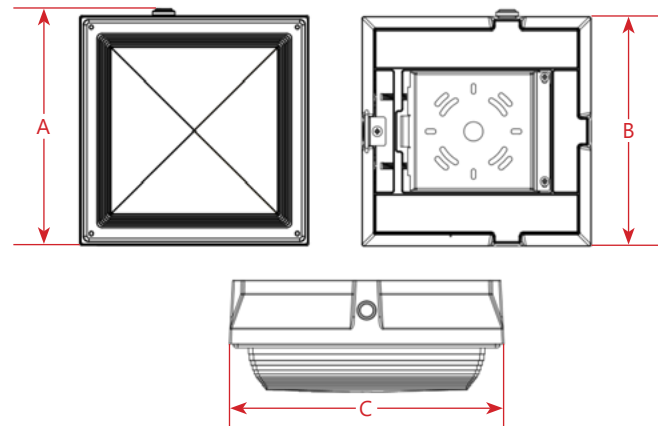
Voltage: UV 120-277V

Shielding: PPD Prismatic Polycarbonate Drop Lens

CRI/CCT: 840 80 CRI / 4000K

Finish: BZ Bronze

Schematic:

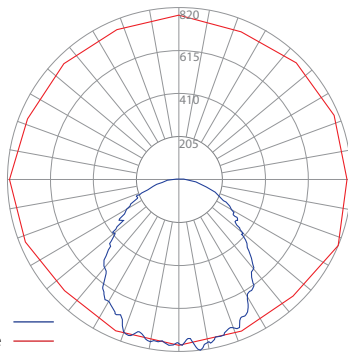


Model	A	B	C	Weight
CPE 9	9.13"	8.86"	4.65"	4.4 lbs.
CPE 12	12.48"	12.2"	4.92"	7.6 lbs

Photometric Data:

CPE 9 LW UV PPD 840

Test No.: 20160514
Luminaire Lumens: 2219 lm
Luminaire Watts: 23.6W
Efficacy: 94.2 LPW



Vert. Plane — blue
Horiz. Cone — red

Performance:

Catalog #	Watts	Lumens	LPW
CPE 9 LW UV PPD 840	24	2219	94.2
CPE 12 MD UV PPD 840	54	5298	98.8



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

CPG2 LED Parking Garage Canopy Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Included easy-hang bracket fits standard 4" electrical box, allowing 1 person installation. Optional Quick-Mount Pendant Bracket available.
- Multi-level control based on motion and/or daylight detection allows for maximum energy savings with optional built-in microwave sensor.

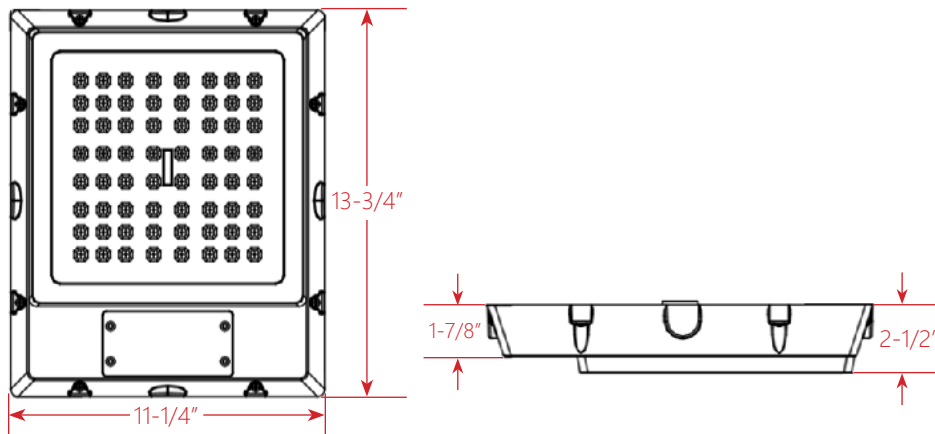
Applications:

Suitable for most parking garage applications.

Ambient Operating Temp:

- -40°C to 50°C
- 0°C to 50°C with EM option

Schematics:



Construction:

- Low profile aluminum housing
- UV stabilized clear acrylic lens
- Bronze or white powdercoat finish

Certifications:

- CSA listed for wet locations (*damp locations when used with QMB*)
- IP66

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
- >60,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (*based on LM-80, TM-21 and in-situ laboratory testing*)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: CPG2 HI 5S UV CA 850-MSD WH

Series	Output	Optic	Voltage	Shielding	CRI/CCT	Mounting	Options	Finish
CPG2		5S	UV	CA				
CPG2	LW MD	5S	UV	CA	840	Blank QMB	SF DF SP MSD EM	BZ WH
	HI				840 850			Custom Colors Available Upon Request

Lumen Output: LW Low
MD Medium
HI High

Optic: 5S Type V Square

Voltage: UV 120-277V

Shielding: CA Clear Acrylic Lens

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K (available on HI output only)

Mounting: Blank None
QMB Quick-Mount Bracket (damp location rated)

Options: SF Single Fuse
DF Double Fuse
SP 10kV Surge Protection
MSD Microwave Daylight/Motion Sensor with Dimming
EM 4500 mAh Ni-MH Battery Back-up (90 min; 120-277V only)

Finish: BZ Bronze
WH White
(Custom Colors Available Upon Request)

QMB - Quick Mount Bracket:



The QMB hinged quick-mount bracket allows for quick and easy installation. The stamped steel bracket can mount over recessed electrical box, or be used with 3/4" NPS pendant (supplied by others). CSA listed for damp location mounting.

MSD - Microwave Sensor with Dimming:



- Internally Mounted Behind Lens
- Motion & Daylight Sensor
- 5 Light Level Setting for Daylight Harvesting
- Detects Motion Speed 2 to 10 ft per sec.
- Stand-by Dim Settings: 10%, 20%, 30%, 50%
- Vacant Stand-by Delay: 5s, 5min, 10min, 30min, 60min
- For 8' to 35' Mounting Heights
- 120-277V

Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
CPG2 LW 5S UV CA 840	3630	31	119	B2-U2-G1
CPG2 MD 5S UV CA 840	4713	41	115	B2-U0-G1
CPG2 HI 5S UV CA 840	6203	54	115	B2-U0-G1

Catalog #	Lumens	Wattage	LPW	BUG Rating
CPG2 LW 5S UV CA 850	-	-	-	-
CPG2 MD 5S UV CA 850	-	-	-	-
CPG2 HI 5S UV CA 850	6444	54	120	B3-U0-G1

Photometric Data:

CPG2 HI 5S UV CA 850

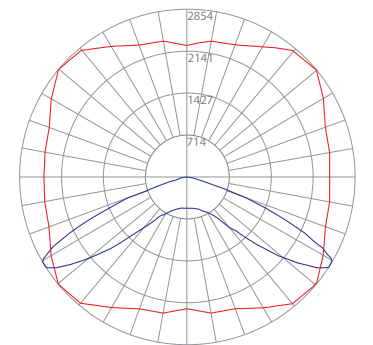
Test No.: Q2017101302
Luminaire Lumens: 6,444 lm
Luminaire Watts: 53.9W
Efficacy: 119.6 LPW
Spacing Criterion (0-180): 3.56
Spacing Criterion (90-270): 3.60

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	39374	40802	31164
55	78522	86370	67459
65	68612	93830	84720
75	6175	25309	21306
85	4874	9928	7342

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	107	102	97	92	104	99	95	91	95	91	88	91	88	85		
2	95	85	77	70	92	83	76	69	79	73	68	76	71	66		
3	84	71	61	54	81	70	60	53	66	58	52	63	57	51		
4	75	60	50	41	72	59	49	41	56	47	40	53	46	40		
5	67	51	41	33	64	50	40	32	48	39	32	46	38	32		
6	60	44	34	26	58	43	33	26	41	32	26	40	32	25		
7	55	39	29	21	53	38	28	21	36	28	21	35	27	21		
8	50	35	25	18	49	34	24	18	32	24	18	31	23	17		
9	46	31	21	15	45	30	21	15	29	21	15	28	20	15		
10	43	28	19	13	42	27	19	13	26	18	13	25	18	13		



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	208.01	3.20
0-30	503.34	7.80
0-40	1042.71	16.20
0-60	4349.64	67.50
0-80	6396.35	99.30
0-90	6444.46	100.00
90-120	0.00	0.00
90-130	0.00	0.00
90-150	0.00	0.00
90-180	0.00	0.00
0-180	6444.46	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

CSM/CSL LED Canopy Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Up to 100 lumens per watt
- Available Quick Mount Bracket (QMB) for easy installation. QMB also allows for pendant mounting. *(CSL only)*
- 1/2" coin plugs with O-rings for conduit and photocell located on two sides and back

Applications:

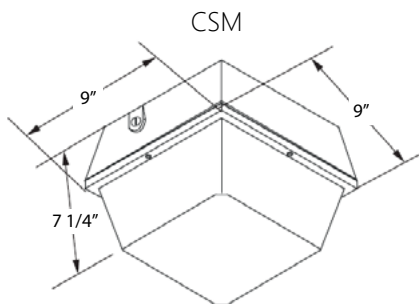
Suitable for most exterior canopy applications

- Industrial
- Retail
- Commercial

Ambient Operating Temp:

- -40°C to 40°C
- 0°C to 40°C with EM option

Schematics:



Construction:

- Die cast aluminum housing
- Textured powdercoat finish over a chromate conversion coating

Certifications:

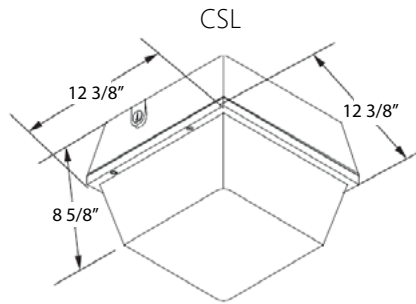
- CSA listed for wet locations *(damp locations when used with QMB)*
- IP65

Predicted L70 Lifetime:

- > 100,000hrs @ 25°C ambient (calc.)
- > 60,000hrs @ 25°C ambient (reported)
- 78% lumen maintenance @ 60,000hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: CSL MD UV PPD 850-SP BZ

Series	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
	MD		PPD		-			
CSM CSL	MD	UV 34 48	PPD	840 850		Blank QMB	Blank SF DF SP EM	BZ Custom Colors Available Upon Request

Accessories: (order separately)

- **CSM-PPD** Replacement PPD lens for CSM
- **CSL-PPD** Replacement PPD lens for CSL
- **PPC120** 1/2" CdS Pencil Photocell, 110V-130V, 0-200°
- **PPC277** 1/2" CdS Pencil Photocell, 208V-277V, 0-200°
- **SPC120** 1/2" CdS Swivel Photocell, 110V-130V, 0-200°
- **SPC277** 1/2" CdS Swivel Photocell, 208V-277V, 0-200°
- **BPC120** Button Photocell, 110V-130V

Series: CSM Canopy Square Medium
CSL Canopy Square Large

Lumen Output: MD Medium

Voltage: UV 120-277V
34 347V (CSL only)
48 480V (CSL only)

Shielding: PPD Prismatic Polycarbonate Drop Lens

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Mounting: Blank None
QMB Quick Mount Bracket (available on CSL only)

Options: Blank None
SF Single Fuse
DF Double Fuse
SP Surge Protection
EM 4500 mAh Ni-MH Battery Back-up (90 min; 120-277V only)

Finish: BZ Bronze

Performance Chart:

Catalog #	Lumens	Wattage	LPW
CSM MD UV PPD 840	3211	26.2	122.4
CSM MD UV PPD 850	3344	26.2	127.5
CSL MD UV PPD 840	6016	51.9	116.0
CSL MD UV PPD 850	6267	51.9	120.8

Mounting: (CSL only)



The QMB hinged quick-mount bracket allows for quick and easy installation. The stamped steel bracket can mount over recessed electrical box, or be used with 3/4" NPS pendant (supplied by others). CSA listed for damp location mounting.

Photometric Data:

CSM MD UV PPD 850

Test No.: s17030051a-01
Luminaire Lumens: 3,344 lm
Luminaire Watts: 26.2W
Efficacy: 127.5 LPW
Spacing Criterion (0-180): 1.42
Spacing Criterion (90-270): 1.44

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11801	11037	11325
55	11406	10262	11240
65	9585	9038	8858
75	6451	5649	6794
85	3030	2676	3045

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100		
1	105	100	95	90	101	97	92	88	91	87	84	85	82	80		
2	95	86	78	72	91	83	76	70	78	72	67	73	68	64		
3	86	74	65	58	82	72	64	57	68	61	55	64	58	53		
4	78	65	56	49	75	63	54	48	59	52	46	56	50	44		
5	71	58	48	41	68	56	47	40	53	45	39	50	43	38		
6	65	51	42	35	63	50	41	35	47	40	34	45	38	33		
7	60	46	37	31	58	45	36	30	43	35	30	40	34	29		
8	56	42	33	27	54	41	33	27	39	31	26	37	30	25		
9	52	38	30	24	50	37	29	24	36	28	23	34	27	23		
10	49	35	27	22	47	34	27	21	33	26	21	31	25	20		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

CSL MD UV PPD 850

Test No.: s17030051b-01
Luminaire Lumens: 6,267 lm
Luminaire Watts: 51.9W
Efficacy: 120.8 LPW
Spacing Criterion (0-180): 1.42
Spacing Criterion (90-270): 1.40

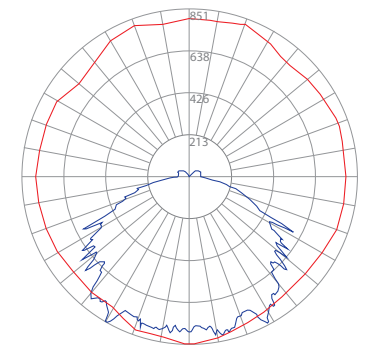
Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11430	11601	12217
55	11326	10960	9661
65	9887	9216	9503
75	7318	6768	6836
85	3630	3380	3517

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101		
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80		
2	95	85	78	71	91	83	76	70	78	72	67	73	69	64		
3	85	74	65	58	82	72	63	57	68	61	55	64	58	53		
4	78	65	55	48	75	63	54	47	59	52	46	56	50	44		
5	71	57	48	41	68	56	47	40	53	45	39	50	43	38		
6	65	51	42	35	63	50	41	34	47	39	34	45	38	33		
7	60	46	37	30	58	45	36	30	43	35	29	40	34	29		
8	56	42	33	27	54	41	32	26	39	31	26	37	30	25		
9	52	38	30	24	50	37	29	24	36	28	23	34	27	23		
10	49	35	27	21	47	34	26	21	33	26	21	31	25	20		

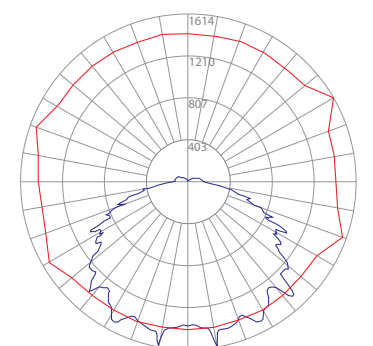
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	294.05	8.80
0-30	647.32	19.40
0-40	1121.98	33.50
0-60	2168.06	64.80
0-80	2915.84	87.20
0-90	3043.88	91.00
90-120	216.05	6.50
90-130	265.00	7.90
90-150	299.11	8.90
90-180	300.58	9.00
0-180	3344.46	100.00



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	545.46	8.70
0-30	1217.56	19.40
0-40	2076.12	33.10
0-60	4058.17	64.80
0-80	5536.82	88.40
0-90	5799.91	92.60
90-120	358.05	5.70
90-130	420.52	6.70
90-150	464.61	7.40
90-180	466.68	7.40
0-180	6266.58	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

GSL LED Gas Station Canopy Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Over 100 lumens per watt
- 6kV standard internal surge protection
- mounting system designed for typical canopy steel pan structures

Applications:

Suitable for most gas station canopy applications. Designed for typical canopy steel pan structures.

Predicted L70 Lifetime:

- > 100,000hrs @ 25°C ambient (calc.)
- > 60,000hrs @ 25°C ambient (reported) (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 50°C

Construction:

- Die cast aluminum housing
- Textured powdercoat finish over a chromate conversion coating
- Tempered clear flat glass lens

Certifications:

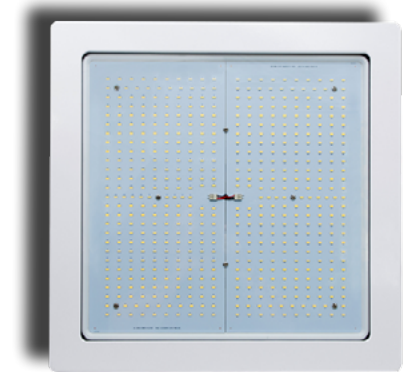
- CSA listed for wet locations
- IP66

Mounting:

The fixture housing is designed to emulate legacy HID canopy lights that mount through a 4" minimum diameter cut hole in the canopy. A galvanized steel back plate is provided to allow for installation over larger holes. Driver and power connection are made in an IP66 rated powder coated die cast mounting box above the canopy.

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: GSL MD 5 UV CL 850-SP WT

Series	Output	Optics	Voltage	Shielding	CRI/CCT	-	Options	Finish
GSL		5		CL	850	-		
GSL	MD HI	5	UV 34 48	CL	850		Blank SF DF SP	WT Custom Colors Available Upon Request

Lumen Output: MD Medium
HI High

CRI/CCT: 850 80 CRI / 5000K

Optics: 5 Type 5

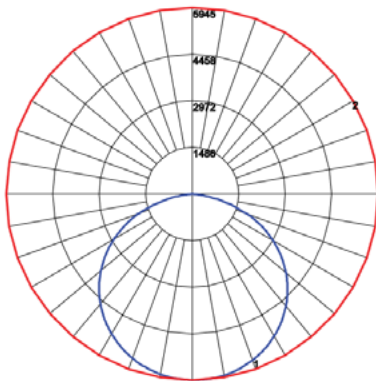
Options: Blank None
SF Single Fuse
DF Double Fuse
SP 10kV Surge Protection

Voltage: UV 120-277V
34 347V
48 480V

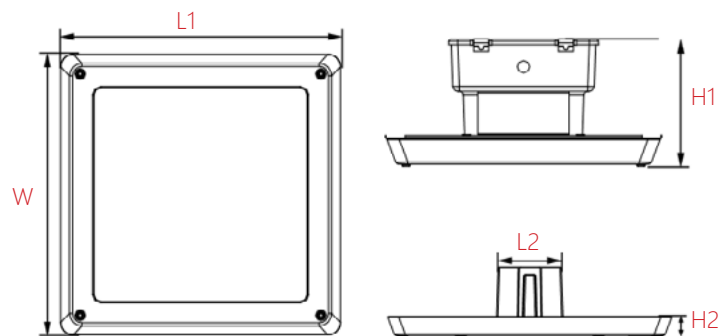
Finish: WT White

Shielding: CL Clear Tempered Glass

Photometric Data:



Schematics:



Catalog #	L1	L2	W	H1	H2
GSL MD 5 UV CL 850	16.5"	4"	16.5"	7.75"	1.25"
GSL HI 5 UV CL 850	19.875"	4"	19.875"	7.75"	1.25"

Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
GSL MD 5 UV CL 850	17,904	127	141	B3-U2-G2
GSL HI 5 UV CL 850	29,677	207	144	B4-U2-G2



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PGS/PGM LED Parking Garage Canopy Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models except PGS LW
- 2kV surge protection on PGS LW, 4kV surge protection on all other models. 10kV surge protection optional.
- Can be surface or pendant mounted for added flexibility
- Multi-level control based on motion and/or daylight detection allows for maximum energy savings with optional microwave sensor.

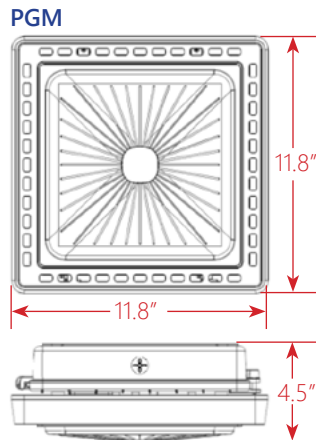
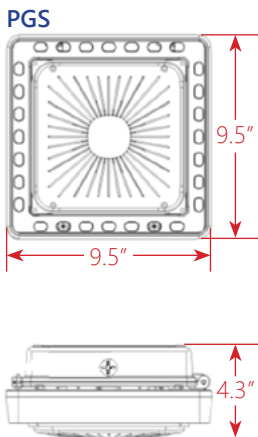
Applications:

Suitable for most parking garage and canopy applications.

Ambient Operating Temp:

- -20°C to 55°C

Schematics:



Construction:

- Die cast aluminum housing
- Polycarbonate lens
- Bronze or white powdercoat finish

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

- >150,000 hrs (calculated)
- (based on LM-80, TM-21 and in-situ laboratory testing)*

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: PGS MD 5 UV CP 850-MSD WH

Series	Output	Optic	Voltage	Shielding	CRI/CCT	Options	Finish
		5	UV	CP		-	
PGS	LW MD HI	5	UV	CP	840 850	SP MSD	BZ WH
PGM	VH						

Series: PGS 9.5" x 9.5" Housing
PGM 11.8" x 11.8" Housing

Shielding: CP Clear Polycarbonate Lens

Lumen Output: LW Low (available in PGS only)
MD Medium (available in PGS only)
HI High (available in PGS only)
VH Very High (available in PGM only)

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Options: SP 10kV Surge Protection
MSD Microwave Daylight/Motion Sensor with Dimming

Optic: 5 Type V

Finish: BZ Bronze
WH White

Voltage: UV 120-277V

Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
PGS LW 5 UV CP 840	3137	24	131	B2-U2-G1
PGS MD 5 UV CP 840	4943	40	124	B2-U2-G1
PGS HI 5 UV CP 840	7002	56	125	B3-U2-G1
PGM VH 5 UV CP 840	12516	102	123	B3-U3-G2

Catalog #	Lumens	Wattage	LPW	BUG Rating
PGS LW 5 UV CP 850	3149	24	131	B2-U2-G1
PGS MD 5 UV CP 850	5024	40	126	B2-U2-G1
PGS HI 5 UV CP 850	7077	56	126	B3-U2-G1
PGM VH 5 UV CP 850	12708	102	125	B3-U3-G2

Photometric Data:

PGS HI 5 UV CP 840

Test No.: T2018619 1034
Luminaire Lumens: 7,002 lm
Luminaire Watts: 55.6W
Efficacy: 126.0 LPW
Spacing Criterion (0-180): 1.88
Spacing Criterion (90-270): 1.92

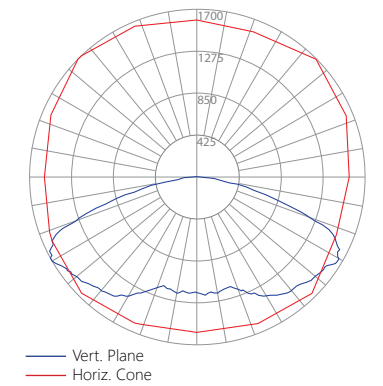
Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	67228	66876	68282
55	80086	84827	81348
65	95273	108431	101723
75	56526	77157	62892
85	37061	33090	43061

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106		
1	106	101	96	91	104	98	94	90	94	90	87	90	87	84		
2	95	85	77	70	92	83	76	69	79	73	67	76	70	66		
3	85	72	63	55	82	71	62	55	67	60	54	64	58	52		
4	76	63	52	45	74	61	52	44	58	50	43	56	49	43		
5	69	55	44	37	67	53	44	37	51	43	36	49	41	35		
6	63	48	38	31	61	47	38	31	45	37	30	43	36	30		
7	58	43	33	26	56	42	33	26	40	32	26	39	31	26		
8	54	39	29	23	52	38	29	23	37	28	23	35	28	22		
9	50	35	26	20	48	35	26	20	33	25	20	32	25	20		
10	47	32	24	18	45	32	23	18	30	23	18	29	22	17		

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	443.88	6.30
0-30	1047.94	15.00
0-40	1966.38	28.10
0-60	4571.83	65.30
0-80	6774.42	96.80
0-90	6946.39	99.20
90-120	42.13	0.60
90-130	46.21	0.70
90-150	52.06	0.70
90-180	55.41	0.80
0-180	7001.80	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

AFL LED Area/Flood Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Photocell standard
- 10kV Surge Protection

Applications:

- Suitable for exterior site lighting applications
- Parking Lots
 - Loading Docks
 - Roadways
 - Sign Lighting

Mounting:

The AFL comes standard with 2 mounts:

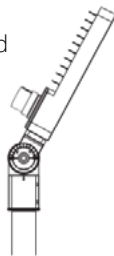
EA - Extension Arm

For direct mounting to square poles or walls.
 For round poles, use included adapter plate.



SK - Slipfitter Knuckle

Fits 2-3/8" to 2-1/2" O.D. round tenons.



Construction:

- Precision die cast aluminum housing
- UV-stabilized polycarbonate lens
- Chip & fade resistant textured polyester powdercoat finish in dark bronze

Certifications:

- cULus listed for wet locations
- IP66

Predicted L70 Lifetime:

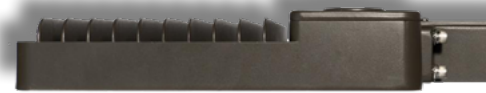
- > 50,000 hrs

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



AFL LED Area/Flood Light

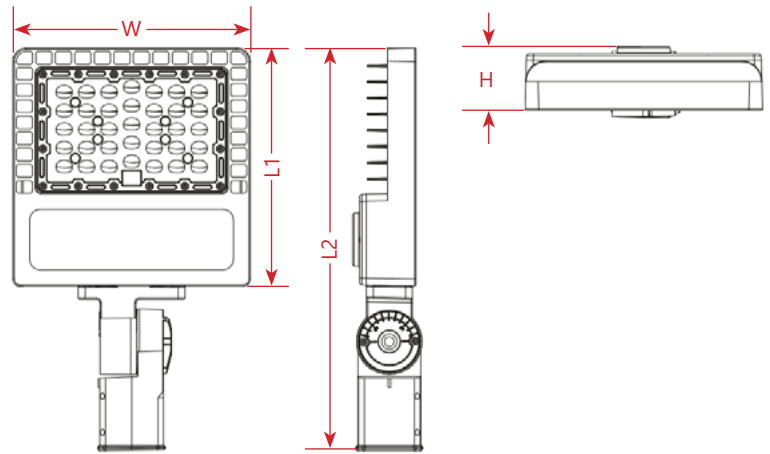
Ordering Guide:

example: AFL MD F UV 840-EA/SK PC BZ

Series	Output	Optic	Voltage	CRI/CCT	-	Mounting	Options	Finish
AFL		F	UV	840	-	EA/SK	PC	BZ
AFL	LW MD	F	UV	840		EA/SK	PC	BZ

- Series:** AFL Area/Flood Light
- Lumen Output:** LW Low, MD Medium
- Optic:** F Forward
- Voltage:** UV 120-277V
- CRI/CCT:** 840 80 CRI / 4000K
- Mounting:** EA/SK Extension Arm / Slipfitter Knuckle
- Options:** PC Photocell
- Finish:** BZ Bronze

Schematic:



Catalog #	L1	L2	W	H	WT
AFL LW F UV 840	10.82"	18.30"	10.82"	2.88"	15 lb.
AFL MD F UV 840	13.58"	21.06"	13.58"	2.88"	23 lb.

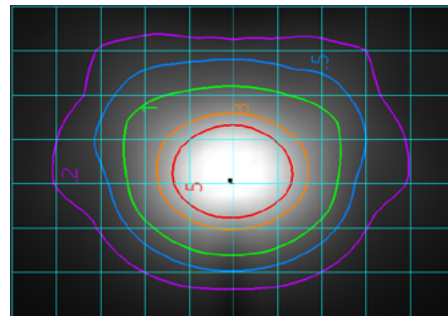
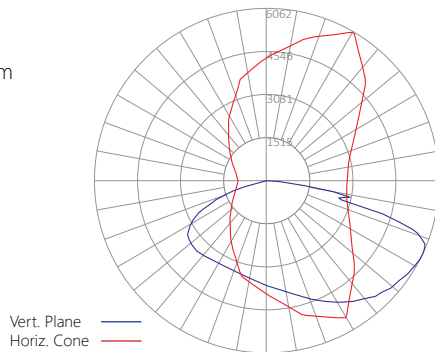
Performance Chart:

Catalog #	Lumens	Watts	LPW
AFL LW F UV 840	12071	98	123
AFL MD F UV 840	18345	147	125

Photometric Data:

AFL MD F UV 840

Test No.: 2010607
Luminaire Lumens: 18,345 lm
Luminaire Watts: 147W
Efficacy: 124.8 LPW



Mounting Height = 15'
 Grid: 15' x 15' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

AMx LED Multi-Purpose Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Multiple mounting options for maximum versatility - yoke, trunnion, arm, slipfitter
- Multiple roadway and floodlight optics available making it suitable for many applications

Applications:

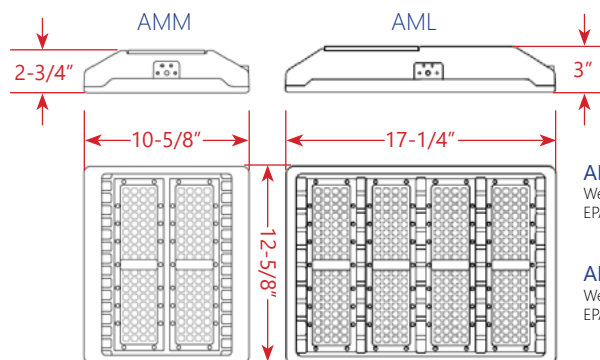
Suitable for most exterior street or area light applications

- Street Lighting
- Parking Lots
- Exterior sport courts
- Sign lighting
- Building facades

Ambient Operating Temp:

- -20°C to 45°C

Schematics:



AMM:

Weight: 8.2 lbs. (LW), 10.8 lbs. (MD), 11 lbs. (HI)
 EPA: 0.24 ft² (front), 0.29 ft² (side), 1.10 ft² (face)

AML:

Weight: 11.7 lbs. (MD), 11.9 lbs. (HI)
 EPA: 0.33 ft² (front), 0.49 ft² (side), 2.14 ft² (face)

Construction:

- Die cast aluminum housing
- Heat-resistant polycarbonate lens
- Durable dark bronze powder coat finish
- 6kV surge protection

Certifications:

- cULus listed for wet locations
- IP66
- Rated for 3G vibration

Predicted L70 Lifetime:

- >300,000 hrs (calculated)
- >54,000 hrs (reported)
- 94% lumen maintenance @ 54,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



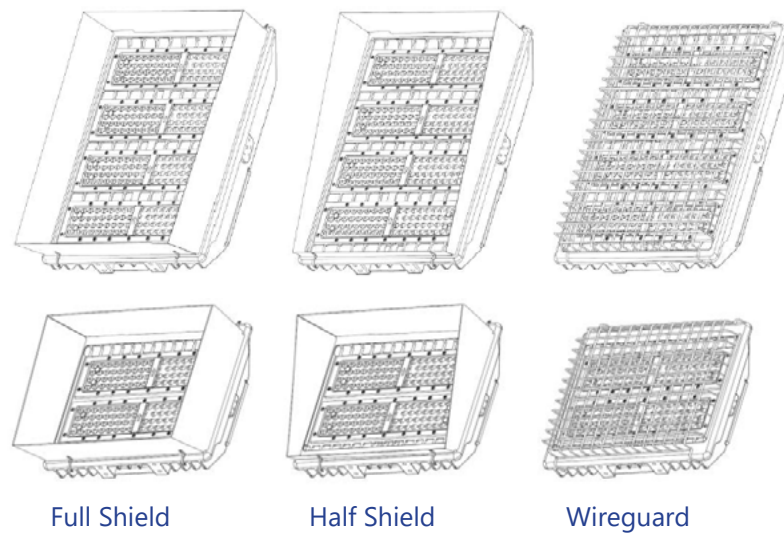
Ordering Guide:

example: AMM MD 5 UV 840-AM RC3 PC(277V) BZ

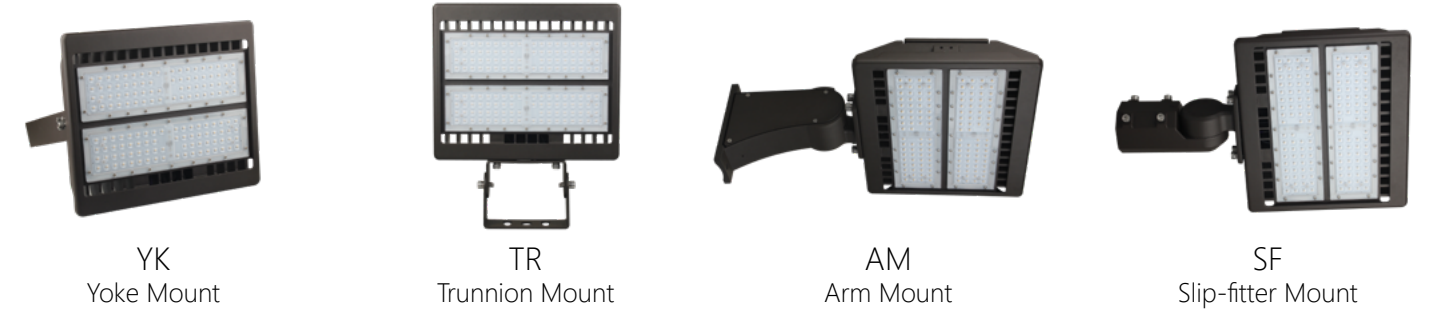
Series	Output	Optic	Voltage	CRI/CCT	-	Mounting	Options	Finish
			UV		-			
AMM	LW MD HI	2 3 4 5	UV	840 850		YK TR AM SF	Blank RC3 PC(xxxV) SC HS FS WG	BZ
AML	MD HI	SN SM FM						

Series:	AMM AML	Area Light - Medium Area Light - Large
Lumen Output:	LW MD HI	Low (available on AMM only) Medium High
Optic:	2 3 4 5 SN SM FM	Type II Type III Type IV Type V Narrow Spot (NEMA 3H x 3V) Medium Spot (NEMA 4H x 4V) Medium Flood (NEMA 5H x 5V)
Voltage:	UV	120-277V
CRI/CCT:	840 850	80 CRI / 4000K 80 CRI / 5000K

Mounting:	YK TR AM SF	Yoke Mount Trunnion Mount Adjustable Arm Mount (for square or round poles) Adjustable Slip-fitter Mount
Options:	Blank RC3 PC(xxxV) SC HS FS WG	None 3-pin Photocell Receptacle (requires photocell or shorting cap for luminaire operation) Photocell (specify voltage) Shorting Cap House Side Shield Full Shield Wireguard
Finish:	BZ	Bronze



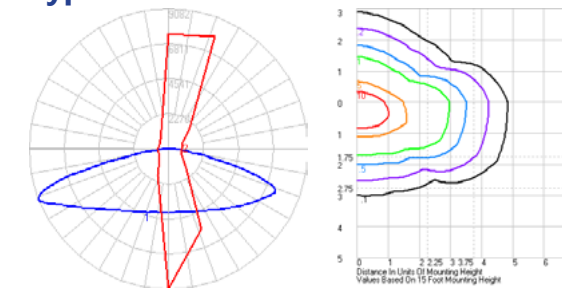
Mounting:



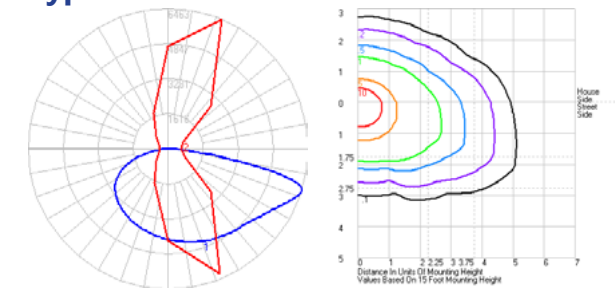
Mounting shown on AMM luminaire. All mounting accessories are adjustable up to 90° in both directions.

Photometric Data:

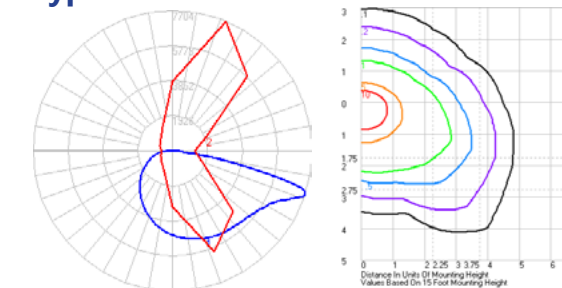
Type II



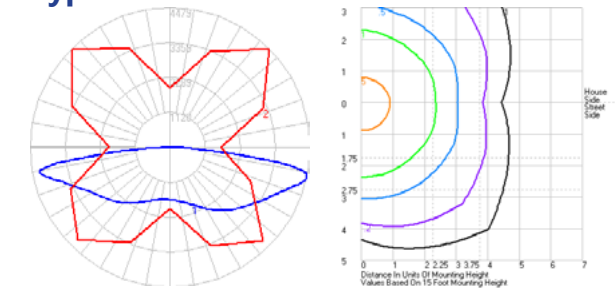
Type III



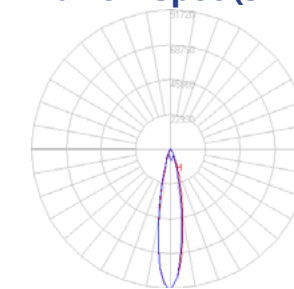
Type IV



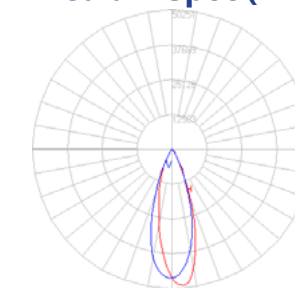
Type V



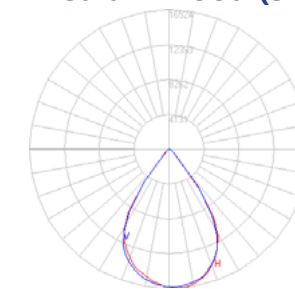
Narrow Spot (3H x 3V)



Medium Spot (4H x 4V)



Medium Flood (5H x 5V)



Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
AMM LW 2 UV 840	10407	78	133.3	B3-U0-G3
AMM LW 3 UV 840	10382	80	129.5	B2-U0-G2
AMM LW 4 UV 840	10339	78	132.4	B2-U0-G3
AMM LW 5 UV 840	9775	78	125.6	B3-U0-G3
AMM LW SN UV 840	10130	78	129.6	
AMM LW SM UV 840	10054	78	128.8	
AMM LW FM UV 840	10051	78	129.0	
AMM MD 2 UV 840	12821	100	128.2	B3-U0-G3
AMM MD 3 UV 840	12444	99	125.3	B3-U0-G3
AMM MD 4 UV 840	12522	99	126.6	B3-U0-G3
AMM MD 5 UV 840	11773	97	121.9	B4-U0-G3
AMM MD SN UV 840	12822	99	129.3	
AMM MD SM UV 840	12761	99	128.5	
AMM MD FM UV 840	12753	99	128.6	
AMM HI 2 UV 840	17695	138	128.5	B3-U0-G3
AMM HI 3 UV 840	17142	137	124.9	B3-U0-G3
AMM HI 4 UV 840	17775	139	127.6	B3-U0-G3
AMM HI 5 UV 840	16270	137	119.1	B4-U0-G4
AMM HI SN UV 840	17968	139	129.2	
AMM HI SM UV 840	17963	139	129.2	
AMM HI FM UV 840	17882	139	128.9	
AML MD 2 UV 840	30906	232	133.3	B4-U0-G4
AML MD 3 UV 840	29784	237	125.6	B4-U0-G4
AML MD 4 UV 840	30418	240	126.8	B4-U0-G5
AML MD 5 UV 840	27712	223	124.0	B5-U0-G5
AML MD SN UV 840	30518	239	127.5	
AML MD SM UV 840	30688	238	128.8	
AML MD FM UV 840	30761	239	128.8	
AML HI 2 UV 840	35169	278	126.3	B4-U0-G4
AML HI 3 UV 840	34546	278	124.4	B4-U0-G4
AML HI 4 UV 840	35266	278	126.8	B4-U0-G5
AML HI 5 UV 840	32475	271	119.7	B5-U0-G5
AML HI SN UV 840	35703	276	129.2	
AML HI SM UV 840	35322	276	127.8	
AML HI FM UV 840	35853	277	129.3	

Scaling Factor:
5000K: 1.01





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



FAM/FAL LED Flood/Area Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Easy access driver compartment
- Up to 45,000 lumens

Applications:

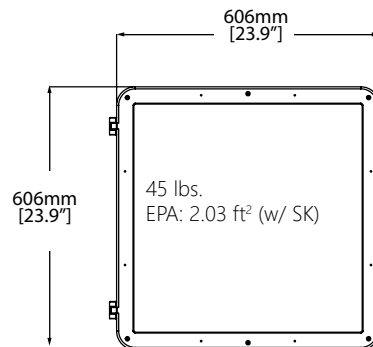
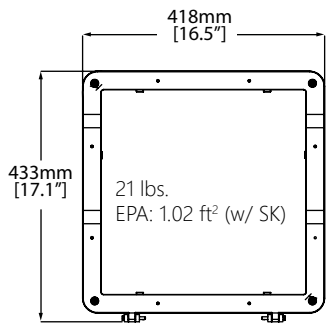
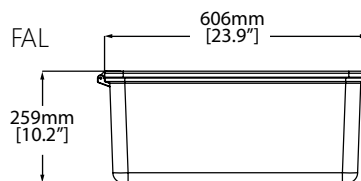
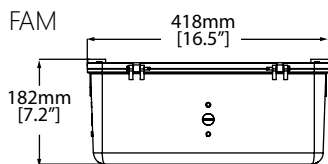
Suitable for most exterior flood or area light applications

- Parking Lots
- Exterior sport courts

Certifications:

- UL listed for wet locations

Schematics:



Construction:

- Die cast aluminum housing with integral heat sink
- UV stabilized polycarbonate lens
- Chip & fade resistant powder coat finish

Predicted L70 Lifetime:

- >66,000 hrs (*calculated*)
- >36,000 hrs (*reported*)
- 73% lumen maintenance @ 54,000 hrs (*based on LM-80, TM-21 and in-situ laboratory testing*)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Ordering Guide:

example: FAL HI F UV 840-TR PC BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	-	Mounting	Options	Finish
	HI	F	UV	D	840	-			
FAM FAL	HI	F	UV	D	840		SK TR	Blank PC	BZ Custom Colors Available Upon Request

- Series:** FAM Flood/Area Light - Medium
FAL Flood/Area Light - Large
- Lumen Output:** HI High
- Optic:** F Forward
- Voltage:** UV 120-277V
- Dimming:** D 0-10V Dimming
- CRI/CCT:** 840 80 CRI / 4000K
- Mounting:** SK Slipfitter Knuckle
TR Trunnion Mount
- Options:** Blank None
PC Photocell
- Finish:** BZ Bronze
(Custom Colors Available Upon Request)

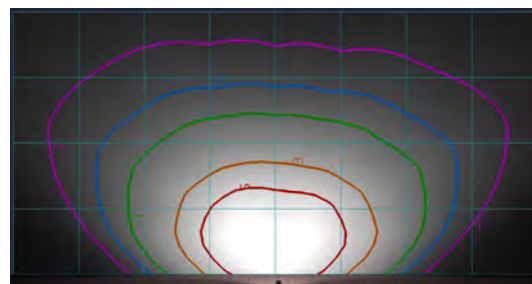
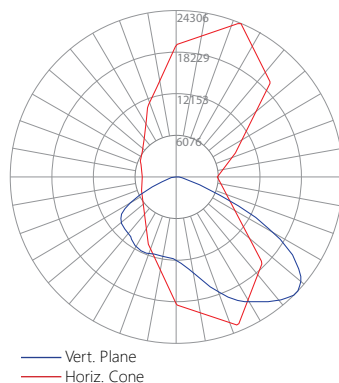
Performance Chart:

Catalog #	Lumens	Wattage	LPW
FAM HI F UV 840	20769	191.7	108.3
FAL HI F UV 840	44740	386.2	115.8

Photometric Data:

FAL HI F UV 840

Test No.: STD150820NB-AE
Luminaire Lumens: 44,740 lm
Luminaire Watts: 386.2W
Efficacy: 115.8 LPW



Mounting Height = 30'
 Tilt = 30°
 Grid: 30' x 30' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



FLX LED Flood Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Multiple mounting configurations for maximum versatility
- From 2,000 lumens up to 12,000 lumens

Applications:

Suitable for most exterior floodlight applications

Construction:

- Precision die cast aluminum housing with integral heat sink
- Tempered glass lens
- Chip & fade resistant powder coat finish

Ambient Operating Temp:

- -30°C to 40°C

Certifications:

- UL listed for wet locations
- IP66

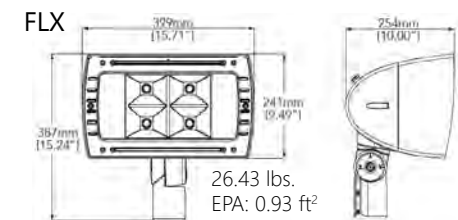
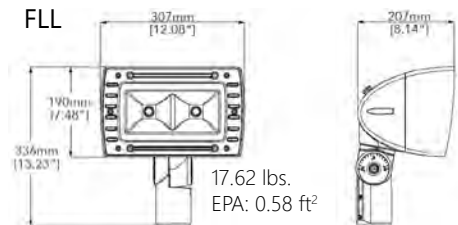
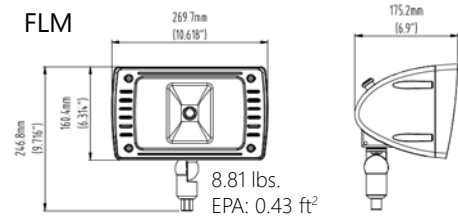
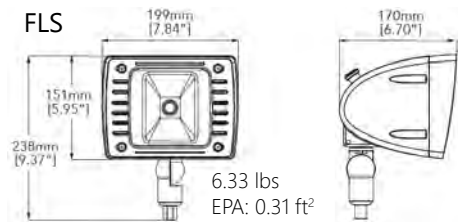
Predicted L70 Lifetime:

- 88,000 hrs (*calculated*)
- >54,000 hrs (*reported*)
- 80% lumen maintenance @ 54,000 hrs (*based on LM-80, TM-21 and in-situ laboratory testing*)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Schematics:



Ordering Guide:

example: FLM 2 MD F UV D 740-TR PC BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	-	Mounting	Options	Finish
			UV	D	740	-			
FLS 1	MD	F S	UV	D	740		SK TR	Blank PC	BZ Custom Colors Available Upon Request
FLM 2	MD								
FLL 2	HI								
FLX 3	HI								

- Series:** FLS 1 Small Flood, 1 COB
FLM 2 Medium Flood, 2 COB
FLL 2 Large Flood, 2 COB
FLX 3 Extra Large Flood, 3 COB
- Lumen Output:** MD Medium
HI High
- Optic:** F Flood
S Spot
- Voltage:** UV 120-277V
- Dimming:** D 0-10V Dimming
- CRI/CCT:** 740 70 CRI / 4000K
- Mounting:** SK Slipfitter Knuckle
TR Trunnion Mount
- Options:** Blank None
PC Photocell
- Finish:** BZ Bronze
(Custom Colors Available Upon Request)

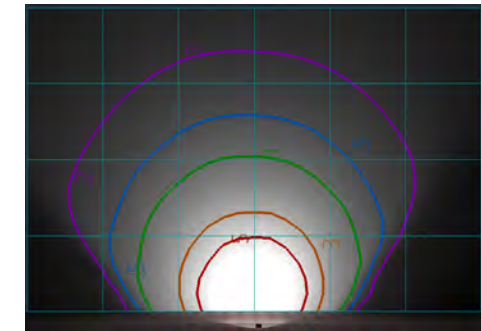
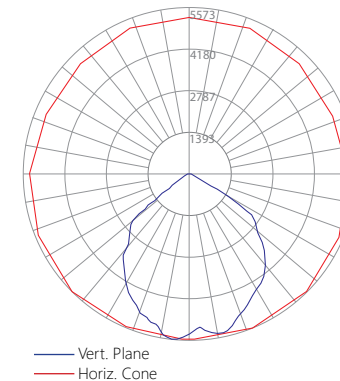
Performance Chart:

Catalog #	Lumens	Wattage	LPW
FLS 1 MD F UV 740	2316	19.6	118.2
FLM 2 MD F UV 740	4789	39.9	120.0
FLL 2 HI F UV 740	8074	75.3	107.2
FLX 3 HI F UV 740	12006	113.6	105.7

Photometric Data:

FLX 3 HI F UV 740

Test No.: STD150706NB-B2
Luminaire Lumens: 12,006 lm
Luminaire Watts: 113.6W
Efficacy: 105.7 LPW



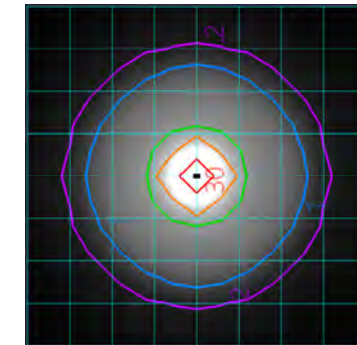
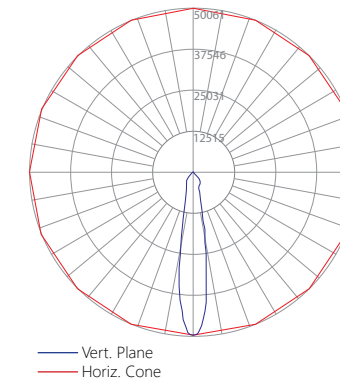
Mounting Height = 20'
Tilt = 30°
Grid: 20' x 20' squares

Isolines at:
5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

FLX 3 HI S UV 740

Test No.: 4786665164-13a(s)
Luminaire Lumens: 11,107 lm
Luminaire Watts: 113.6W
Efficacy: 97.8 LPW



Mounting Height = 30'
Grid: 10' x 10' squares

Isolines at:
30fc/10fc/5fc/1fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FSS/FSM LED Flood/Wall Sconce

Features:

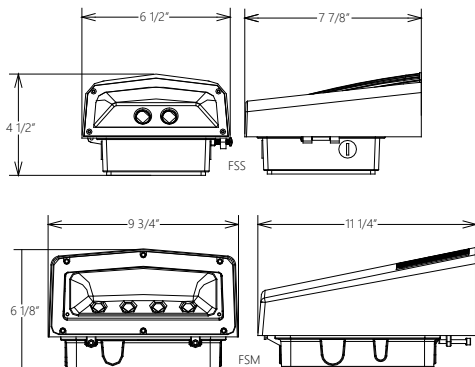
- High performance LED technology
- 0-10V dimming drivers standard
- Up to 100 lumens per watt
- Works as both a flood light and a wall sconce
- Multiple mounting methods and 4 available lumen outputs adds to the versatility of this luminaire, making it suitable for many applications

Applications:

Suitable for most exterior wall mount and flood applications

- Industrial
- Retail
- Commercial

Schematics:



Construction:

- Die cast aluminum housing
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP65

Predicted L70 Lifetime:

> 76,000hrs @ 25°C ambient (calculated)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

-40°C to 50°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: FSS HI F UV CFG 840-AKT BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
FSS FSM	MD HI	F	UV	CFG	840	-	Blank AKT AKS AUB	Blank SF DF SP	BZ Custom Colors Available Upon Request

Accessories: (order separately)

- **PPC120** 1/2" CdS Pencil Photocell, 110V-130V, 0-200°
- **PPC277** 1/2" CdS Pencil Photocell, 208V-277V, 0-200°

Series:	FSS Flood/Sconce Small FSM Flood/Sconce Medium	Mounting:	Blank None / Wall Mount AKT Adjustable Knuckle w/ 1/2" NPS Threads AKS Adjustable Knuckle Slipfitter <i>(for FSM only)</i> AUB Adjustable U-Bracket <i>(for FSM only)</i>
Lumen Output:	MD Medium HI High	Options:	Blank None SF Single Fuse DF Double Fuse SP Surge Protection
Optic:	F Flood	Finish:	BZ Bronze
Voltage:	UV 120-277V		
Shielding:	CFG Clear Flat Glass		
CRI/CCT:	840 80 CRI / 4000K		

Performance Chart:

Catalog #	Lumens	Wattage	LPW
FSS MD F UV CFG 840	2300	21.1	114.1
FSS HI F UV CFG 840	4025	41.7	96.6
FSM MD F UV CFG 840	6508	52.9	123.0
FSM HI F UV CFG 840	8212	80.7	101.7

Mounting:



FSS with 'BLANK' - Wall Mount



FSS with AKT - Knuckle



FSM with AKS - Slipfitter

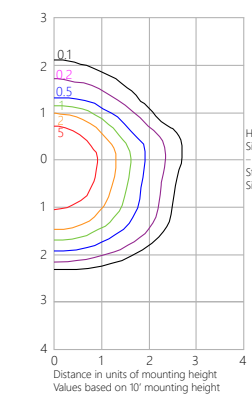
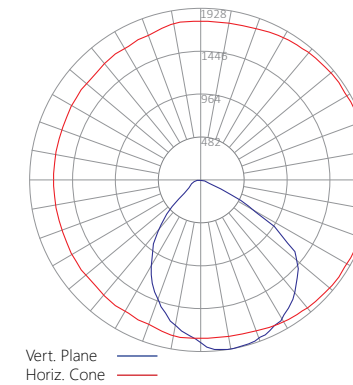


FSM with AUB - U-Bracket

Photometric Data:

FSS HI F UV CFG 840

Test No.: 2,859
 Luminaire Lumens: 4,025 lm
 Luminaire Watts: 41.7W
 Efficacy: 96.6 LPW



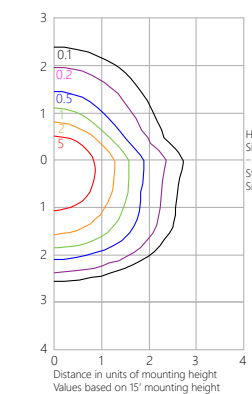
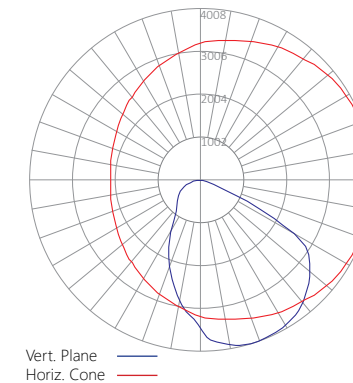
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	754.7	18.8
FM (30-60)	1457.9	36.2
FH (60-80)	220.1	5.5
FVH (80-90)	0.2	0.0
BL (0-30)	634.5	15.8
BM (30-60)	823.0	20.4
BH (60-80)	129.6	3.2
BVH (80-90)	5.0	0.1
UL (90-100)	< 0.05	0.0
UH (100-180)	0.0	0.0
Total	4025.0	100.0

BUG Rating B2-U1-G1

FSM HI F UV CFG 840

Test No.: 2,860
 Luminaire Lumens: 8,212 lm
 Luminaire Watts: 80.7W
 Efficacy: 101.7 LPW



Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	1536.5	18.7
FM (30-60)	3310.1	40.3
FH (60-80)	705.1	8.6
FVH (80-90)	2.7	0.0
BL (0-30)	1052.1	12.8
BM (30-60)	1250.6	15.2
BH (60-80)	335.5	4.1
BVH (80-90)	19.5	0.2
UL (90-100)	0.1	0.0
UH (100-180)	0.0	0.0
Total	8212.2	100.0

BUG Rating B3-U1-G1



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PFX LED Power Flood Light

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Multiple mounting configurations for maximum versatility
- From 2,000 lumens up to 30,000 lumens

Applications:

Suitable for most exterior floodlight applications

Construction:

- Die cast aluminum housing with integral heat sink
- Chip & fade resistant powder coat finish

Ambient Operating Temp:

- -30°C to 40°C

Certifications:

- UL listed for wet locations
- IP66

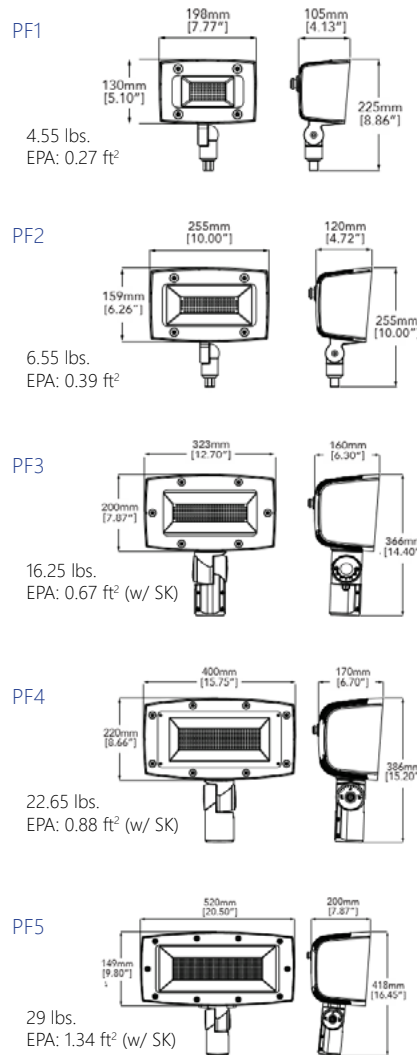
Predicted L70 Lifetime:

- 52,000 hrs
(based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Schematics:



PFx LED Power Flood Light

Ordering Guide:

example: PF3 HI F UV D 840-TR PC BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	-	Mounting	Options	Finish
			UV	D	840	-			BZ
PF1 PF2	MD	F S	UV	D	840		KN	Blank PC	BZ
PF3 PF4 PF5	HI						SK TR		Custom Colors Available Upon Request

Lumen Output: MD Medium (available on PF1 & PF2 only)
HI High (available on PF3, PF4, & PF5 only)

Optic: F Flood
S Spot (available on PF5 only)

Voltage: UV 120-277V

Dimming: D 0-10V Dimming

CRI/CCT: 840 80 CRI / 4000K

Mounting: KN 1/2" NPS Locking Swivel Knuckle (standard on PF1 & PF2)
SK Slipfitter Knuckle (available on PF3, PF4 & PF5 only)
TR Trunnion Mount (available on PF3, PF4 & PF5 only)

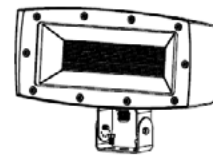
Options: Blank None
PC Photocell

Finish: BZ Bronze
(Custom Colors Available Upon Request)

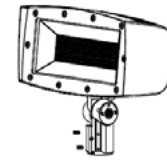
Performance Chart:

Catalog #	Lumens	Wattage	LPW
PF1 MD F UV 840	2030	20	102.5
PF2 MD F UV 840	4107	40	101.9
PF3 HI F UV 840	10523	102	103.6
PF4 HI F UV 840	16390	149	110.2
PF5 HI F UV 840	32942	305	107.9

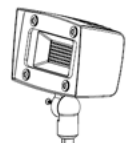
Mounting:



TR
Trunnion Mount



SK
Slipfitter Knuckle

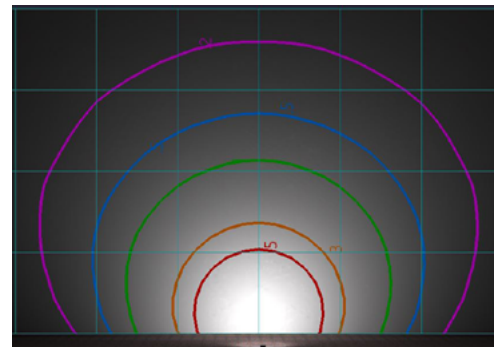
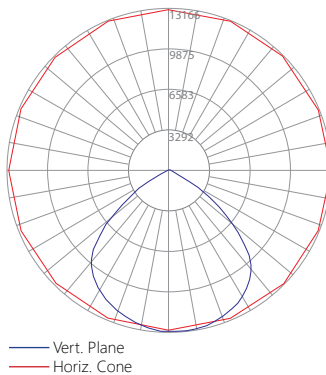


KN
1/2" NPS Knuckle

Photometric Data:

PF5 HI F UV 840

Test No.: STD160803NB-R
Luminaire Lumens: 32,942 lm
Luminaire Watts: 305.2W
Efficacy: 107.9 LPW



Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Mounting Height = 30'
Tilt = 30°
Grid: 30' x 30' squares

Isolines at:
5fc/3fc/1fc/0.5fc/0.2fc



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



PFxE LED Flood Light

Features:

- High performance LED technology
- Wide beam flood distribution provides even illumination over the target area
- Integral 1/2" NPS Locking Swivel Knuckle

Construction:

- Die cast aluminum housing with integral heat sink
- Chip & fade resistant textured polyester powdercoat finish in dark bronze

Applications:

Suitable for most exterior floodlight applications

Certifications:

- UL listed for wet locations
- IP66

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Predicted L70 Lifetime:

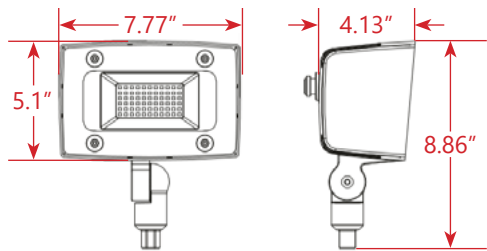
- > 50,000 hrs

Schematics:

PF1E

WT:
4.55 lbs.

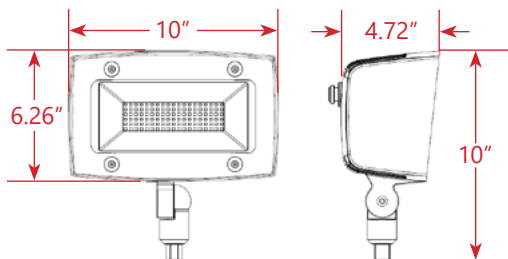
EPA:
 0° aim - 0.238 ft²
 45° aim - 0.271 ft²
 90° aim - 0.316 ft²



PF2E

WT:
6.6 lbs.

EPA:
 0° aim - 0.351 ft²
 45° aim - 0.415 ft²
 90° aim - 0.500 ft²



PFxE LED Flood Light

Ordering Guide:

example: PF2E HI F UV D 840-KN PC BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	-	Mounting	Options	Finish
		F	UV		840	-	KN		BZ
PF1E	MD	F	UV	Blank	840		KN	Blank	BZ
PF2E	HI	F	UV	D	840		KN	PC	BZ

- Lumen Output:** MD Medium (available on PF1 only)
 HI High (available on PF2 only)
- Optic:** F Flood
- Voltage:** UV 120-277V
- Dimming:** Blank No Dimming
 D 0-10V Dimming
- CRI/CCT:** 840 80 CRI / 4000K
- Mounting:** KN 1/2" NPS Locking Swivel Knuckle
- Options:** Blank None (available on PF1 only)
 PC Photocell (available on PF2 only)
- Finish:** BZ Bronze

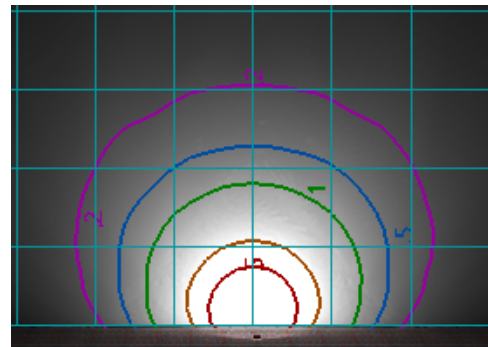
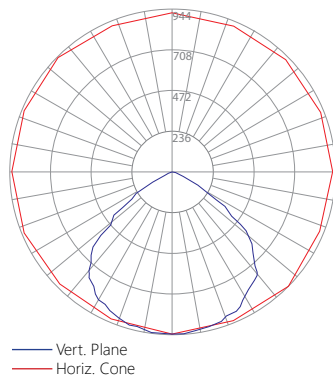
Performance Chart:

Catalog #	Lumens	Wattage	LPW
PF1E MD F UV 840	2148	20	108.5
PF2E HI F UV 840	5006	50	100.9

Photometric Data:

PF1E MD F UV 840

Test No.: 310816
 Luminaire Lumens: 2,148 lm
 Luminaire Watts: 19.8W
 Efficacy: 108.5 LPW



Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Mounting Height = 10'
 Tilt = 30°
 Grid: 10' x 10' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FWS LED Flood / Wall Sconce

Features:

- High performance LED technology
- Attractive architectural styling
- Comes with 2 mounts for added flexibility

Applications:

- Suitable for commercial or residential exterior ground, wall, or eave mount applications
- Entryways
 - Perimeter/Security Lighting
 - Landscape Lighting

Mounting:

- Knuckle Mount: 1/2" swivel NPS knuckle for ground, wall, or eave mounting
- Wall Mount: Comes with detachable mounting plate with hanging wire that allows for hands-free installation when making electrical connections.



Construction:

- Die cast aluminum housing
- Impact resistant, UV-stabilized polycarbonate lens
- Fade, weather, and abrasion resistant textured polyester powdercoat finish in bronze

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

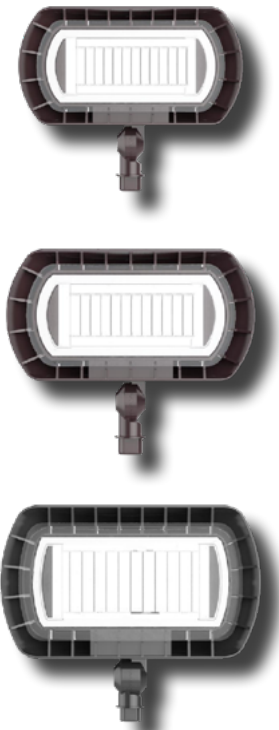
- > 50,000 hrs

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



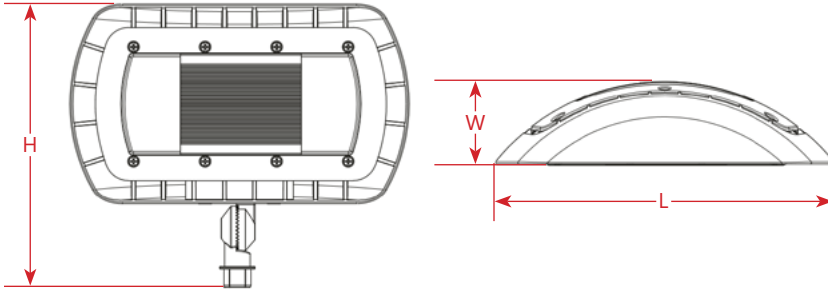
Ordering Guide:

example: FWS MD F UV FP 740-BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
FWS		F	UV	FP	740	-	KN/WM		BZ
FWS	LW MD	F	UV	FP	740		KN/WM	Blank	BZ
	HI							PC	

Lumen Output:	LW	Low		CRI/CCT:	740	70+ CRI / 4000K
	MD	Medium		Mounting:	KN/WM	1/2" NPS Knuckle and Wall Mount
	HI	High		Options:	Blank	None (available on LW & MD models only)
Optic:	F	Flood			PC	Photocell (available on HI model only)
Voltage:	UV	120-277V		Finish:	BZ	Bronze
Shielding:	FP	Frosted Polycarbonate				

Schematic:

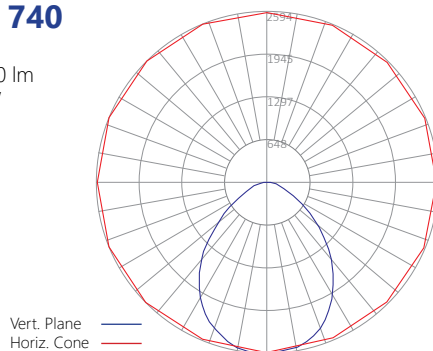


Model	L	W	H	WT. (lbs.)
FWS LW	5.83"	1.69"	5.51"	1.10
FWS MD	7.80"	2.00"	6.46"	1.65
FWS HI	9.69"	2.40"	8.07"	2.65

Photometric Data:

FWS HI F UV FP 740

Test No.: 20171218
 Luminaire Lumens: 5,470 lm
 Luminaire Watts: 49.3W
 Efficacy: 111.0 LPW



Performance Chart:

Catalog #	Lumens	Wattage	LPW
FWS LW F UV FP 740	1510	15.1	100.0
FWS MD F UV FP 740	3168	28.3	111.9
FWS HI F UV FP 740	5470	49.3	111.0



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FTS LED Twin Head Flood Light

Features:

- High performance LED technology
- Integral Photocell
- Attractive architectural styling
- Frosted lenses help provide comfortable, glare-free illumination
- Detachable mounting plate with hanging wire that allows for hands-free installation when making electrical connections.

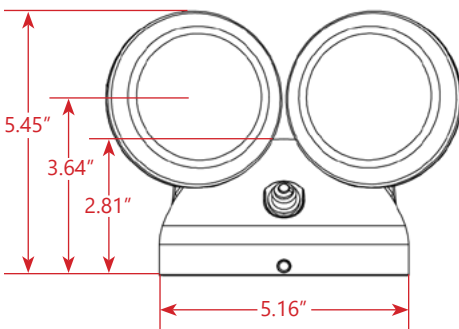
Applications:

- Suitable for commercial or residential exterior wall or eave mount applications
- Entryways
 - Perimeter/Security Lighting

Ambient Operating Temp:

- -20°C to 40°C

Schematic:



Construction:

- Impact resistant, UV-stabilized polycarbonate housing in bronze or white finish
- Impact resistant, UV-stabilized polycarbonate frosted white lens

Certifications:

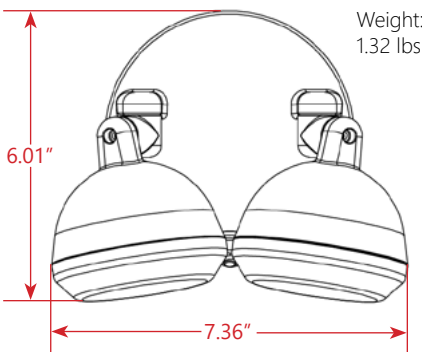
- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: FTS MD F 12 FP 830-PC WH

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
FTS	MD	F	12	FP	830	-	PC	
FTS	MD	F	12	FP	830		PC	BZ WH

Series: FTS Twin Head Flood Light

Lumen Output: MD Medium

Optic: F Flood

Voltage: 12 120V

Shielding: FP Frosted Polycarbonate

CRI/CCT: 830 80 CRI / 3000K

Options: PC Photocell

Finish: BZ Bronze
WH White

Photometric Data:

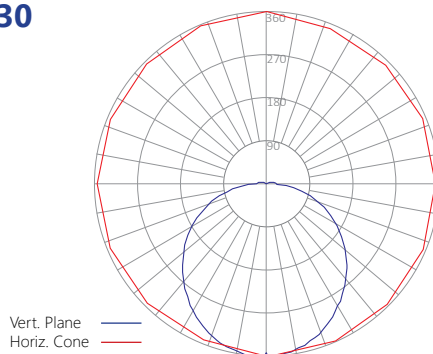
FTS MD F 12 FP 830

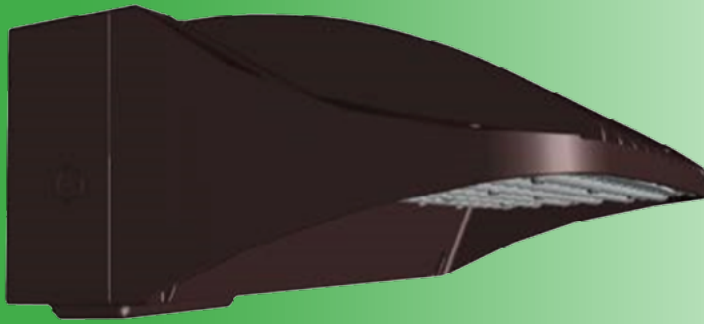
Test No.: 20180711

Luminaire Lumens: 1,191 lm

Luminaire Watts: 12.1W

Efficacy: 98.7 LPW





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PPC LED Premium Cutoff Wall Pack

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- 6kV internal surge protection standard
- Up to 20,000 lm, over 100 LPW
- Mounts directly over 4" recessed outlet box using included hands free "Easy-Hang" wall mount bracket with built-in level.
- Optional trim plate available to help cover wall surface blemishes
- Available Microwave sensor
- Available 3 pin or 7 pin twist lock receptacle for photocell or smart controls

Applications:

Suitable for most exterior wall mount applications

- Industrial
- Retail
- Commercial

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Construction:

- Die cast aluminum housing with full cutoff front frame and integral heat sink
- Vandal resistant Polycarbonate lens
- Textured powdercoat finish over a chromate conversion coating
- Nickel-plated stainless steel hardware

Certifications:

- CSA listed for wet locations
- IP66

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
 - >60,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 50°C
- 0°C to 50°C with EM option



Ordering Guide:

example: PPC MD 3 UV CP 840-SP BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
PPC		F		CP		-		
PPC	LW MD HI	F	UV 34 48	CP	840 850		Blank SF DF SP EM MSD R3 R7 SC PC(xxxV)	BZ Custom Colors Available Upon Request

Lumen Output: LW Low
MD Medium
HI High

Optic: F Forward

Voltage: UV 120-277V
34 347V
48 480V

Shielding: CP Clear Polycarbonate

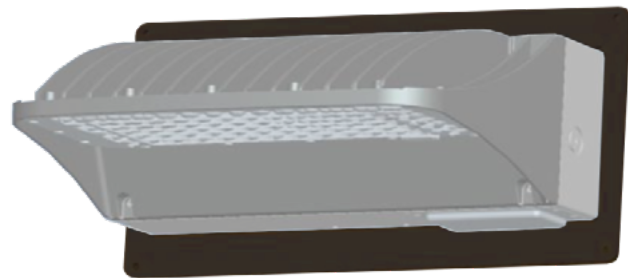
CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Options: Blank None
SF Single Fuse
DF Double Fuse
SP Surge Protection (120-277V)
EM Ni-MH Battery Back-up (90 min.) (120-277V, LW & MD models only)
MSD Microwave Sensor w/ Dimming (120-277V)
R3 3-Pin Twist Lock Photocell Receptacle (requires photocell or shorting cap for luminaire operation)
R7 7-Pin Twist Lock Photocell Receptacle (requires photocell or shorting cap for luminaire operation)
SC Shorting Cap
PC(xxxV) Twist Lock Photocell (specify voltage)

Finish: BZ Bronze

Accessories: (order separately)

• PPC-TP-BZ Aluminum trim plate, bronze powdercoat finish



MSD - Microwave Sensor:



- Internally Mounted Behind Lens
- Motion & Daylight Sensor
- 5 Light Level Setting for Daylight Harvesting
- Detects Motion Speed 2 to 10 ft per sec.
- Stand-by Dim Settings: 10%, 20%, 30%, 50%
- Vacant Stand-by Delay: 5s, 5min, 10min, 30min, 60min
- Up to 35' Mounting Height
- 120-277V

Performance Chart:

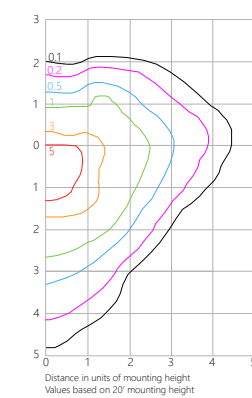
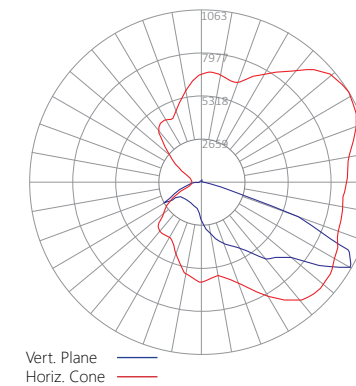
Catalog #	Lumens	Wattage	LPW	BUG Rating
PPC LW F UV CP 840	9700	93	104.3	B3-U3-G3
PPC MD F UV CP 840	13697	131	104.6	B3-U3-G3
PPC HI F UV CP 840	19931	188	106.0	B3-U3-G3

Catalog #	Lumens	Wattage	LPW	BUG Rating
PPC LW F UV CP 850	10402	93	111.8	B3-U3-G3
PPC MD F UV CP 850	14689	131	112.1	B3-U3-G3
PPC HI F UV CP 850	21374	188	113.7	B3-U3-G3

Photometric Data:

PPC HI F UV CP 850

Test No.: Q2017081601
Luminaire Lumens: 21,374 lm
Luminaire Watts: 187.5W
Efficacy: 114.0 LPW

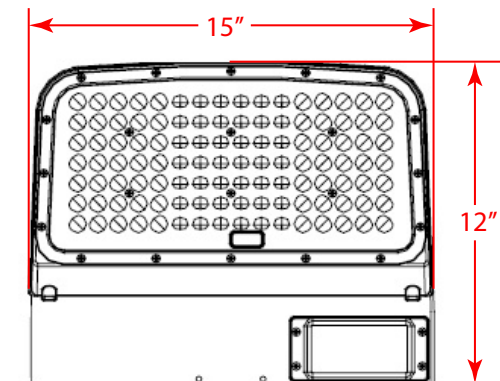
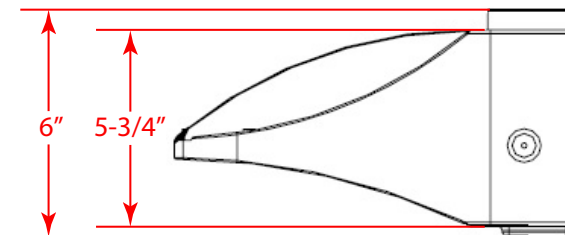


Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	1578.8	7.4
FM (30-60)	7485.7	35
FH (60-80)	6160	28.8
FVH (80-90)	266.9	1.2
BL (0-30)	729.2	3.4
BM (30-60)	2599.3	12.2
BH (60-80)	2301.2	10.8
BVH (80-90)	112.1	0.5
UL (90-100)	24.5	0.1
UH (100-180)	116	0.5
Total	21373.7	100

BUG Rating B3-U3-G3

Schematics:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

SPC LED Premium Cutoff Wall Pack

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- 2kV (LW), 6kV (MD, HI) internal surge protection standard
- Up to 9,000 lm, over 100 LPW
- Mounts directly over 4" recessed outlet box using included hands free "Easy-Hang" wall mount bracket with built-in level.
- Optional trim plate available to help cover wall surface blemishes
- Available Microwave sensor
- Available 3 pin or 7 pin twist lock receptacle for photocell or smart controls

Applications:

Suitable for most exterior wall mount applications

- Industrial
- Retail
- Commercial

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Construction:

- Die cast aluminum housing with full cutoff front frame and integral heat sink
- Vandal resistant Polycarbonate lens
- Textured powdercoat finish over a chromate conversion coating
- Nickel-plated stainless steel hardware

Certifications:

- CSA listed for wet locations
- IP66

Predicted L70 Lifetime:

- >100,000 hrs (calculated)
 - >60,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 50°C
- 0°C to 50°C with EM option



Ordering Guide:

example: SPC MD 3 UV CP 840-SP BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
SPC		F	UV	CP		-		
SPC	LW MD HI	F	UV	CP	840 850		Blank SF DF SP EM MSD R3 R7 SC PC(xxxV)	BZ Custom Colors Available Upon Request

Lumen Output: LW Low, MD Medium, HI High

Optic: F Forward

Voltage: UV 120-277V

Shielding: CP Clear Polycarbonate

CRI/CCT: 840 80 CRI / 4000K, 850 80 CRI / 5000K

Options: Blank, None; SF Single Fuse; DF Double Fuse; SP Surge Protection (120-277V); EM Ni-MH Battery Back-up (90 min.) (120-277V, LW & MD models only); MSD Microwave Sensor w/ Dimming (120-277V); R3 3-Pin Twist Lock Photocell Receptacle (requires photocell or shorting cap for luminaire operation); R7 7-Pin Twist Lock Photocell Receptacle (requires photocell or shorting cap for luminaire operation); SC Shorting Cap; PC(xxxV) Twist Lock Photocell (specify voltage)

Finish: BZ Bronze

Accessories: (order separately)

• SPC-TP-BZ Aluminum trim plate, bronze powdercoat finish



MSD - Microwave Sensor:



- Internally Mounted Behind Lens
- Motion & Daylight Sensor
- 5 Light Level Setting for Daylight Harvesting
- Detects Motion Speed 2 to 10 ft per sec.
- Stand-by Dim Settings: 10%, 20%, 30%, 50%
- Vacant Stand-by Delay: 5s, 5min, 10min, 30min, 60min
- Up to 25' Mounting Height
- 120-277V

Performance Chart:

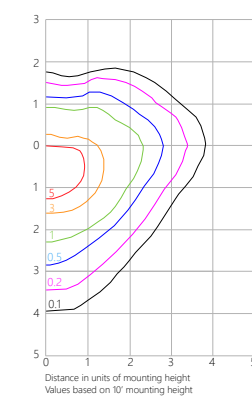
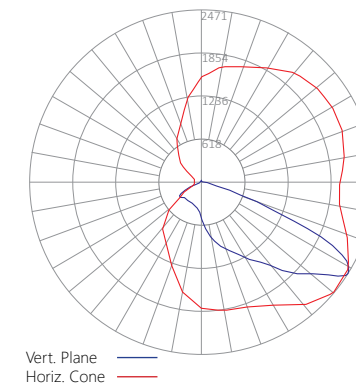
Catalog #	Lumens	Wattage	LPW	BUG Rating
SPC LW F UV CP 840	3151	28	111.9	B1-U1-G1
SPC MD F UV CP 840	4459	42	106.3	B1-U1-G1
SPC HI F UV CP 840	9166	84	109.6	B2-U1-G2

Catalog #	Lumens	Wattage	LPW	BUG Rating
SPC LW F UV CP 850	3424	28	119.9	B1-U1-G1
SPC MD F UV CP 850	4604	42	110.7	B1-U1-G1
SPC HI F UV CP 850	9278	84	110.8	B2-U1-G2

Photometric Data:

SPC MD F UV CP 850

Test No.: s18020023b-02
 Luminaire Lumens: 4,604.3 lm
 Luminaire Watts: 41.6W
 Efficacy: 110.7 LPW

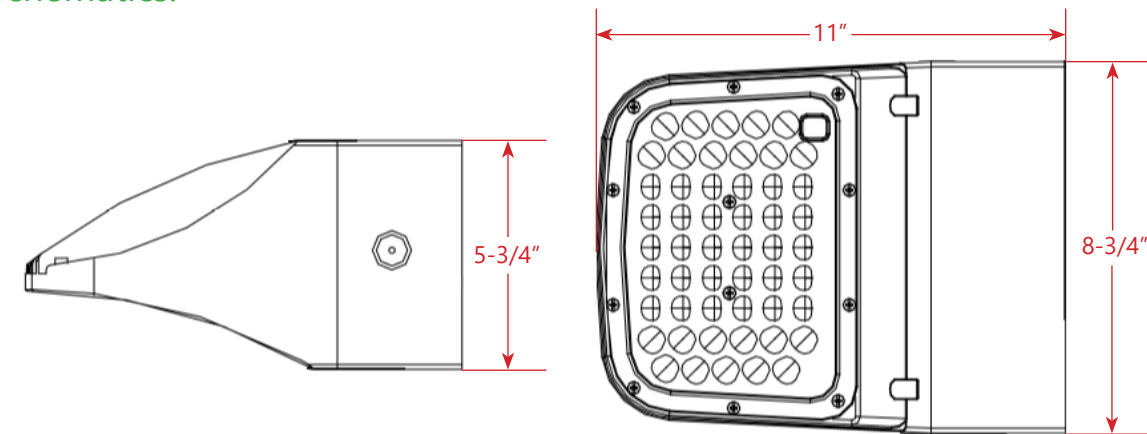


Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	385.9	8.4
FM (30-60)	1958.9	42.5
FH (60-80)	1049.1	22.8
FVH (80-90)	26.8	0.6
BL (0-30)	177.8	3.9
BM (30-60)	655.4	14.2
BH (60-80)	341.0	7.4
BVH (80-90)	4.0	0.1
UL (90-100)	0.9	0.0
UH (100-180)	4.5	0.1
Total	4604.3	100.0

BUG Rating B1-U1-G1

Schematics:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EPC LED Cutoff Wall Pack

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Field replaceable LED boards and drivers
- Cast-in template for mounting directly over 4" recessed outlet box, or use 1/2" surface conduit

Applications:

Suitable for most exterior wall mount applications

- Industrial
- Retail
- Commercial

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Schematics:

Model	A	B	C
EPC LW	8-5/8"	9-1/2"	8-3/4"
EPC MD	9-1/8"	11-3/8"	14-1/4"
EPC HI	9-1/8"	13-3/4"	18-1/4"

Construction:

- Die cast aluminum housing
- Hinged cutoff front frame
- 1/2" coin plugs with o-rings for conduit and photocell
- Textured powdercoat finish over a chromate conversion coating

Certifications:

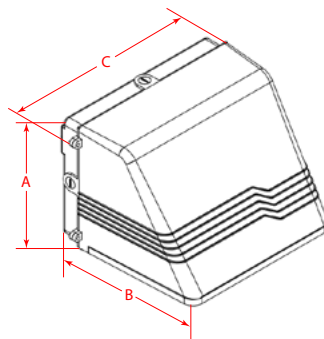
- CSA listed for wet locations
- IP55

Predicted L70 Lifetime:

- >190,000 hrs (calculated)
 - >60,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 40°C
- 0°C to 40°C with EM option



Ordering Guide:

example: EPC MD 3 UV CFG 840-SP BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
EPC		3		CFG		-		
EPC	LW MD HI	3	UV 34 48	CFG	840 850		Blank SF DF SP EM PC PPC MSD	BZ Custom Colors Available Upon Request

Accessories: (order separately - not available for LW model)

- EPCxx-VG Clear polycarbonate vandal resistant guard (xx = select model - MD, HI)
- EPCxx-WG Stainless steel wire guard (xx = select model - MD, HI)

Lumen Output: LW Low
MD Medium
HI High

Optic: 3 Type 3

Voltage: UV 120-277V
34 347V (not available in MD units)
48 480V (not available in MD units)

Shielding: CFG Clear Flat Glass

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Options: Blank None
SF Single Fuse
DF Double Fuse
SP Surge Protection
EM Ni-MH Battery Back-up (90 min.)
PC Button Photocell, 120-277V (available on MD & HI units only)
PPC Pencil Photocell, 120-277V (available on LW units only)
MSD Motion/Daylight Microwave Dimming Sensor, 120-277V (available on MD & HI units only)

Finish: BZ Bronze

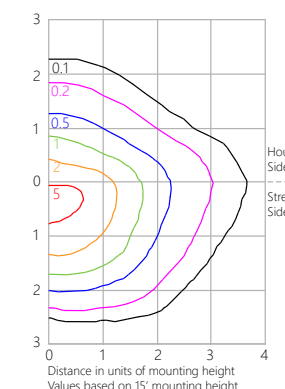
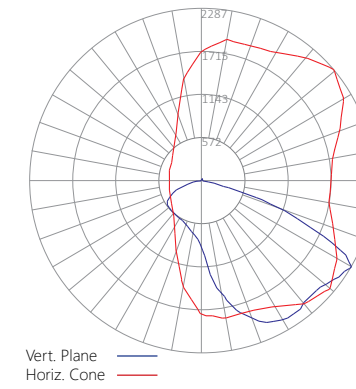
Performance Chart:

Catalog #	Lumens	Wattage	LPW	BUG Rating
EPC LW 3 UV CFG 840	1925	25	76.1	B1-U2-G1
EPC LW 3 UV CFG 850	2005	25	79.2	B1-U2-G1
EPC MD 3 UV CFG 840	3801	41	91.8	B1-U2-G1
EPC MD 3 UV CFG 850	3959	41	95.6	B1-U2-G1
EPC HI 3 UV CFG 840	5659	61	92.6	B1-U2-G1
EPC HI 3 UV CFG 850	5895	61	96.5	B2-U2-G2

Photometric Data:

EPC HI 3 UV CFG 850

Test No.: Q2016030803
Luminaire Lumens: 5,895 lm
Luminaire Watts: 61.1W
Efficacy: 96.5 LPW



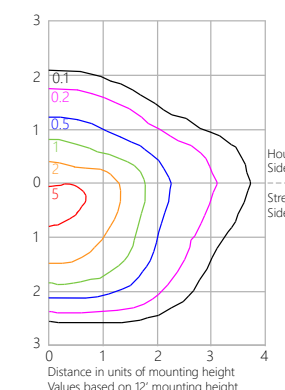
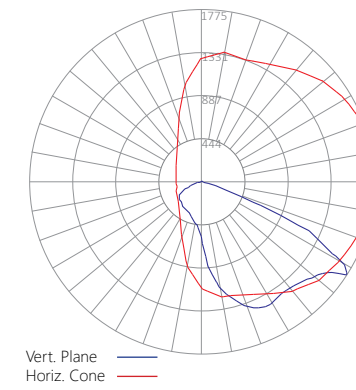
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	745.3	12.6
FM (30-60)	2369.5	40.2
FH (60-80)	1027	17.4
FVH (80-90)	28.3	0.5
BL (0-30)	300.5	5.1
BM (30-60)	853.9	14.5
BH (60-80)	504.3	8.6
BVH (80-90)	31.6	0.5
UL (90-100)	4.4	0.1
UH (100-180)	30.1	0.5
Total	5894.9	100.0

BUG Rating B2-U2-G2

EPC MD 3 UV CFG 850

Test No.: Q2016030801
Luminaire Lumens: 3,959 lm
Luminaire Watts: 41.4W
Efficacy: 95.6 LPW



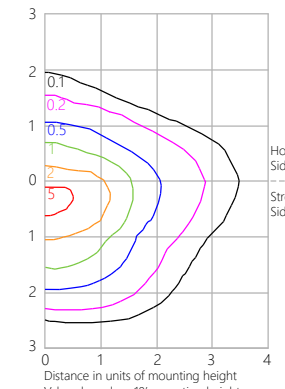
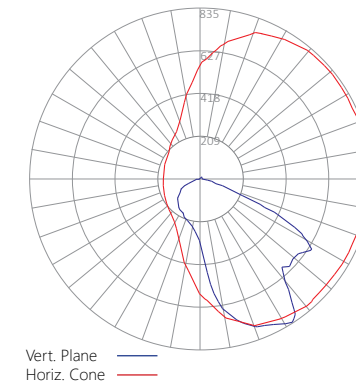
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	501.7	12.7
FM (30-60)	1635.1	41.3
FH (60-80)	737.8	18.6
FVH (80-90)	16.9	0.4
BL (0-30)	190.1	4.8
BM (30-60)	546.4	13.8
BH (60-80)	295.2	7.5
BVH (80-90)	13.0	0.3
UL (90-100)	2.8	0.1
UH (100-180)	20.4	0.5
Total	3959.4	100.0

BUG Rating B1-U2-G1

EPC LW 3 UV CFG 850

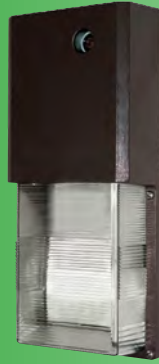
Test No.: Q2016030802
Luminaire Lumens: 2,005 lm
Luminaire Watts: 25.3W
Efficacy: 79.3 LPW



Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	285.7	14.2
FM (30-60)	801.8	40.0
FH (60-80)	329.1	16.4
FVH (80-90)	7.3	0.4
BL (0-30)	110.7	5.5
BM (30-60)	301.0	15.0
BH (60-80)	150.5	7.5
BVH (80-90)	6.2	0.3
UL (90-100)	1.5	0.1
UH (100-180)	11.4	0.6
Total	2005.2	100.0

BUG Rating B1-U2-G1



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EPM LED Mini Wall Pack

Features:

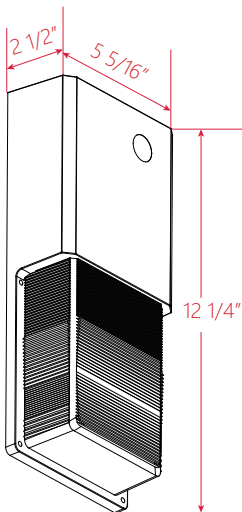
- High performance LED technology
- Dimmable drivers
- Integral 120V photocell included
- Mount directly over a 4" recessed outlet box. Threaded stem and nut included

Applications:

Suitable for most exterior wall mount applications

- Industrial
- Retail
- Commercial

Schematics:



Construction:

- Stamped galvanized back plate with white powdercoat finish
- Molded polycarbonate front housing in bronze finish
- Clear polycarbonate prismatic lens

Certifications:

- CSA listed for wet locations
- IP54

Predicted L70 Lifetime:

- 50,000 hrs
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -40°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: EPM LW F UV CPP 850-PC120 BZ

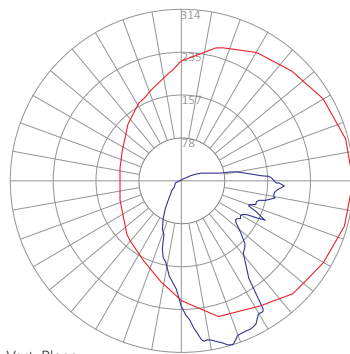
Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
EPM	LW	F	UV	CPP	850	-		BZ
EPM	LW	F	UV	CPP	850		PC120 (standard) PC277 SF DF	BZ

Lumen Output:	LW	Low	CRI/CCT:	850	80 CRI / 5000K
Optic:	F	Foward	Options:	PC120	Photocell, 120V (comes standard)
				PC277	Photocell, 277V
Voltage:	UV	120-277V		SF	Single Fuse
				DF	Double Fuse
Shielding:	CPP	Clear Prismatic Polycarbonate	Finish:	BZ	Bronze

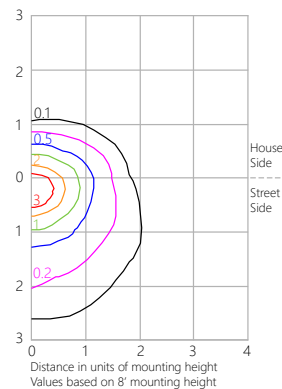
Photometric Data:

EPM LW F UV CPP 850

Test No.: Q2014092001
Luminaire Lumens: 780 lm
Luminaire Watts: 10.3W
Efficacy: 75.8 LPW



Vert. Plane ————
 Horiz. Cone ————



Distance in units of mounting height
 Values based on 8' mounting height

Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	113.2	14.5
FM (30-60)	174.8	22.4
FH (60-80)	118.4	15.2
FVH (80-90)	75.7	9.7
BL (0-30)	58.8	7.5
BM (30-60)	63.5	8.1
BH (60-80)	26	3.3
BVH (80-90)	11.8	1.5
UL (90-100)	69.2	8.9
UH (100-180)	69.1	8.9
Total	780.5	100.0

BUG Rating **B0-U3-G1**



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WPM LED Wall Pack

Features:

- High performance LED technology
- Integral Photocell
- 0-10V dimming driver standard

Applications:

- Suitable for commercial or residential exterior wall mount applications
- Entryways
 - Perimeter/Security Lighting

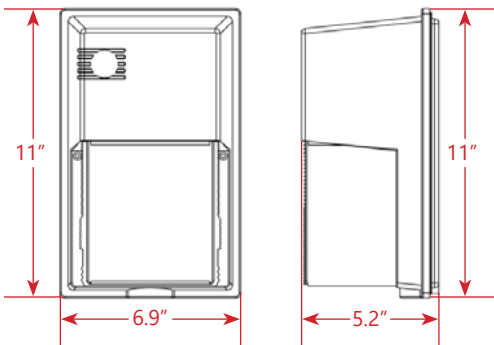
Ambient Operating Temp:

- -20°C to 40°C

Predicted L70 Lifetime:

- > 50,000 hrs

Schematic:



Construction:

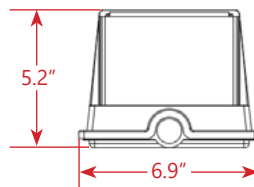
- Die-cast aluminum rear housing with impact resistant, UV-stabilized polycarbonate front housing
- Impact resistant, UV-stabilized prismatic polycarbonate lens
- Chip and fade resistant powder coat finish in dark bronze

Certifications:

- cULus listed for wet locations
- IP65

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Weight:
5.5 lbs

Ordering Guide:

example: WPM HI F UV CPP 740-PC BZ

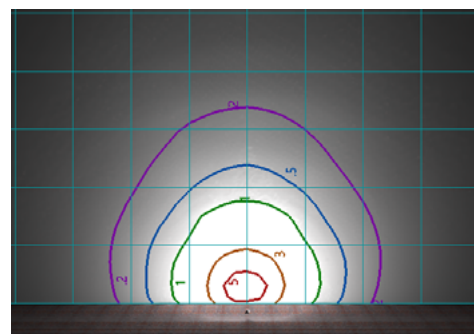
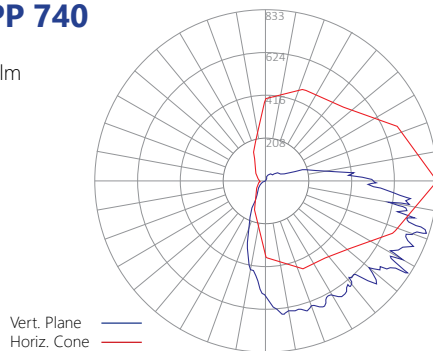
Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
WPM	HI	F	UV	CPP	740	-	PC	BZ
WPM	HI	F	UV	CPP	740		PC	BZ

- Series:** WPM Wall Pack
- Lumen Output:** HI High
- Optic:** F Forward
- Voltage:** UV 120-277V
- Shielding:** CPP Clear Prismatic Polycarbonate
- CRI/CCT:** 740 70 CRI / 4000K
- Options:** PC Photocell
- Finish:** BZ Bronze

Photometric Data:

WPM HI F UV CPP 740

Test No.: 20180106
Luminaire Lumens: 2,468 lm
Luminaire Watts: 20.6W
Efficacy: 119.8 LPW



Mounting Height = 10'
 Grid: 10' x 10' squares
 Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EPR LED Non-Cutoff Wall Pack

Features:

- High performance LED technology
- Uniform illumination with no visible LED pixilation
- Removable threaded plugs for side attachment of 1/2" rigid electrical conduit, or for button photocells

Applications:

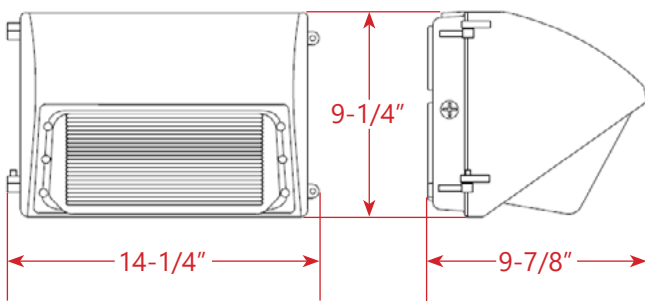
Suitable for most exterior wall mount applications

- Industrial
- Retail
- Commercial

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Schematics:



Construction:

- Die cast aluminum housing
- Clear polycarbonate lens with seamless silicone gasket to prevent leaks
- Dark Bronze powder coat finish

Certifications:

- UL listed for wet locations
- IP65

Predicted L70 Lifetime:

- 141,000 hrs (*calculated*)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -20°C to 45°C



Model	Weight
EPR VL	7.0 lbs.
EPR LW	7.3 lbs
EPR MD	8.0 lbs
EPR HI	8.3 lbs
EPR VH	8.3 lbs



EPR LED Non-Cutoff Wall Pack

Ordering Guide:

example: EPR MD F UV CPC 840-BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Finish
EPR		F	UV	CPC		-	BZ
EPR	VL LW MD HI VH	F	UV	CPC	840 850		BZ

Accessories:

PPC(UV) - Pencil Photocell (120-277V)

Lumen Output: VL Very Low
LW Low
MD Medium
HI High
VH Very High

Voltage: UV 120-277V

Shielding: CPC Clear Polycarbonate

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

Optic: F Forward

Finish: BZ Bronze

Performance Chart:

Catalog #	Watts	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
EPR VL F UV CPC xxx	36	4632	129	4726	131
EPR LW F UV CPC xxx	57	7588	133	7728	136
EPR MD F UV CPC xxx	77	9486	123	9680	126
EPR HI F UV CPC xxx	101	13065	129	13295	132
EPR VH F UV CPC xxx	119	15523	130	15787	133

Photometric Data:

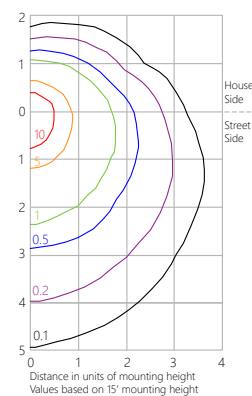
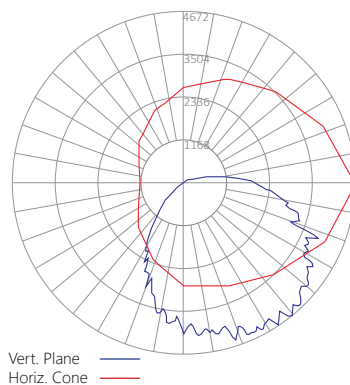
EPR HI F UV CPC 840

Test No.: TN20171110a

Luminaire Lumens: 13,065 lm

Luminaire Watts: 30W

Efficacy: 130 LPW



Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	1633.8	12.5
FM (30-60)	3917.1	30.0
FH (60-80)	2450.2	18.8
FVH (80-90)	778.9	6.0
BL (0-30)	1300.7	10.0
BM (30-60)	1583.9	12.1
BH (60-80)	401.8	3.1
BVH (80-90)	61.9	0.5
UL (90-100)	484.0	3.7
UH (100-180)	452.8	3.5
Total	13065.1	100.0

BUG Rating

B3-U3-G5



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EPN LED Non-Cutoff Wall Pack

Features:

- High performance LED technology
- Uniform illumination with no visible LED pixilation
- Removable threaded plugs for side attachment of 1/2" rigid electrical conduit, or for button photocells

Applications:

Suitable for most exterior wall mount applications

- Industrial
- Retail
- Commercial

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Construction:

- Die cast aluminum housing
- Tempered borosilicate glass lens with seamless, silicone gasket to prevent leaks
- Dark Bronze powder coat finish

Certifications:

- UL listed for wet locations
- IP65

Predicted L70 Lifetime:

- 69,000 hrs (*LW output model*)
 - 59,000 hrs (*MD output model*)
 - 57,000 hrs (*HI output model*)
 - 56,000 hrs (*VH output model*)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

- -30°C to 40°C



Performance Chart:

Catalog #	Watts	Lumens (4000K)	LPW (4000K)	Lumens (5000K)	LPW (5000K)
EPN LW F UV TBG 7xx	30	3243	108	3316	111
EPN MD F UV TBG 7xx	61	6990	115	7231	119
EPN HI F UV TBG 7xx	78	9803	126	9953	128
EPN VH F UV TBG 8xx	120	12146	101	12146	101



Ordering Guide:

example: EPN MD F UV TBG 740-BZ

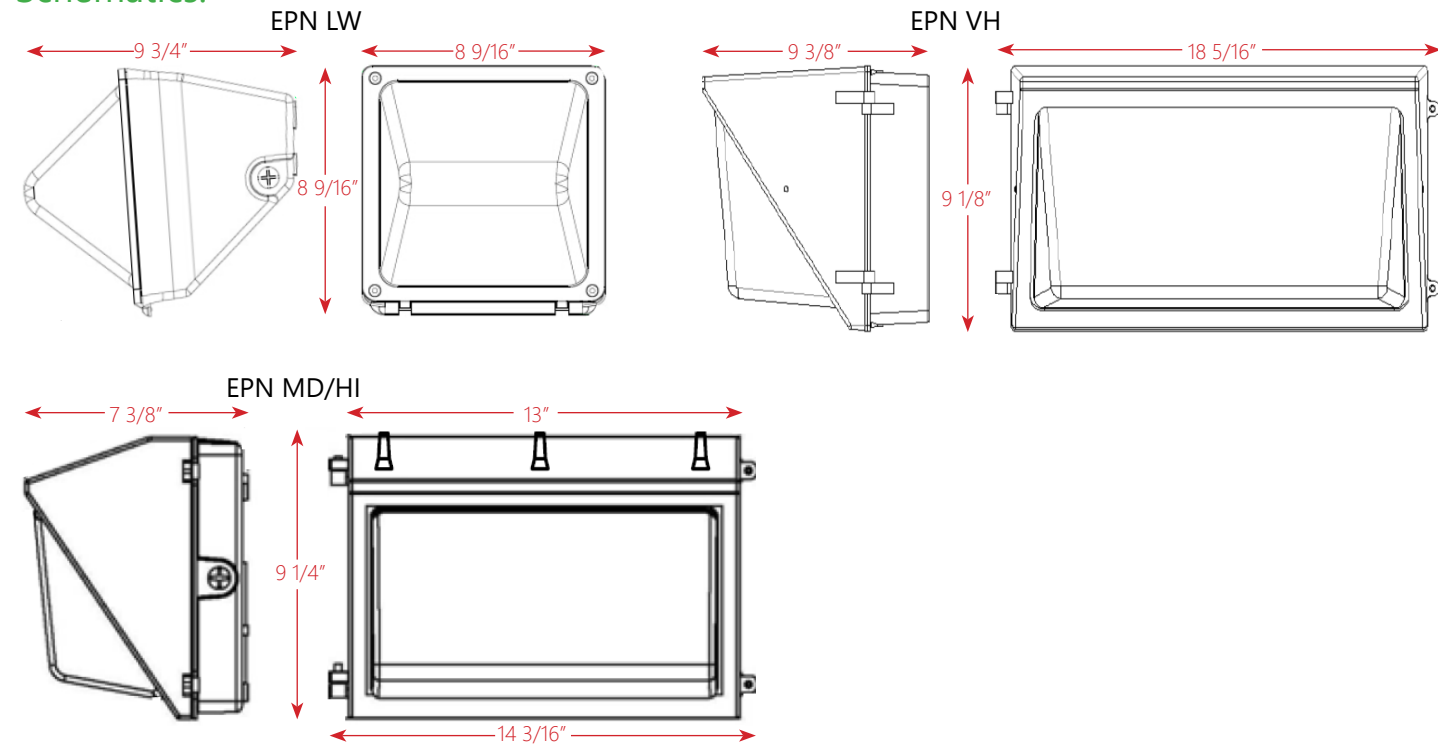
Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Finish
EPN		F	UV	TBG		-	BZ
EPN	LW MD HI VH	F	UV	TBG	740 750 840 850		BZ

Accessories: (order separately)

- **BPC120** Button Photocell, 120V
- **BPC277** Button Photocell, 277V

Lumen Output:	LW Low MD Medium HI High VH Very High	Shielding: TBG Tempered borosilicate glass
Optic:	F Forward	CRI/CCT: 740 70 CRI / 4000K (not available on VH model) 750 70 CRI / 5000K (not available on VH model) 840 80 CRI / 4000K (VH model only) 850 80 CRI / 5000K (VH model only)
Voltage:	UV 120-277V	Finish: BZ Bronze

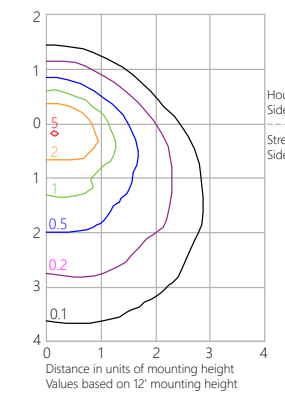
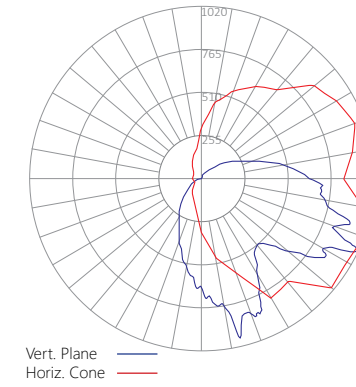
Schematics:



Photometric Data:

EPN LW F UV TBG 740

Test No.: s15110041i-01(s)
Luminaire Lumens: 3,243 lm
Luminaire Watts: 30W
Efficacy: 108 LPW



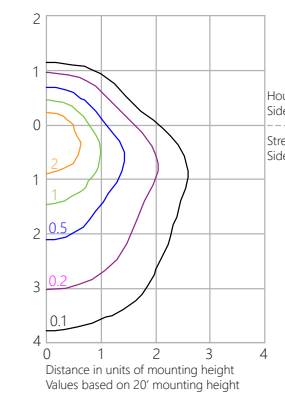
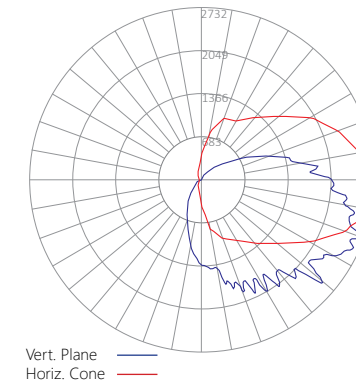
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	338.5	10.4
FM (30-60)	787.1	24.3
FH (60-80)	700.2	21.6
FVH (80-90)	270.5	8.3
BL (0-30)	210	6.5
BM (30-60)	277.7	8.6
BH (60-80)	85.5	2.6
BVH (80-90)	20.6	0.6
UL (90-100)	217.5	6.7
UH (100-180)	336.1	10.4
Total	3243.7	100.0

BUG Rating B1-U3-G3

EPN MD F UV TBG 740

Test No.: s16030029a-03(s)
Luminaire Lumens: 6,990 lm
Luminaire Watts: 61W
Efficacy: 115 LPW



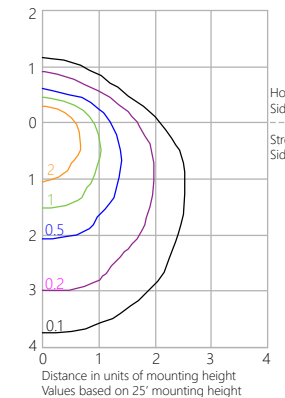
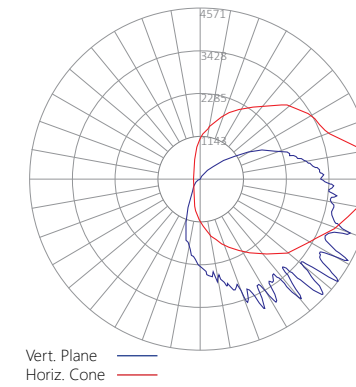
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	641.2	9.2
FM (30-60)	1813.1	25.9
FH (60-80)	1567.1	22.4
FVH (80-90)	693.4	9.9
BL (0-30)	358.7	5.1
BM (30-60)	385.5	5.5
BH (60-80)	109.4	1.6
BVH (80-90)	23.8	0.3
UL (90-100)	562.4	8.0
UH (100-180)	835.5	12.0
Total	6990.1	100.0

BUG Rating B1-U4-G4

EPN VH F UV TBG 840

Test No.: s15120039f-01(s)
Luminaire Lumens: 12,146 lm
Luminaire Watts: 120W
Efficacy: 101 LPW



Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	1175.0	9.7
FM (30-60)	3212.3	26.4
FH (60-80)	2585.9	21.3
FVH (80-90)	1159.0	9.5
BL (0-30)	630.9	5.2
BM (30-60)	602.4	5.0
BH (60-80)	160.4	1.3
BVH (80-90)	31.2	0.3
UL (90-100)	997.1	8.2
UH (100-180)	1591.5	13.1
Total	12145.7	100.0

BUG Rating B2-U5-G5



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EPP LED Non-Cutoff Wall Pack

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Photocell standard

Mounting:

Easy knock-outs on back box allows mounting to any standard 3-1/2" to 4" square or octagonal, or 4" round junction box.

Applications:

Suitable for exterior wall mount applications

Ambient Operating Temp:

- -20°C to 40°C

Construction:

- Precision die cast aluminum housing
- UV-stabilized borosilicate prismatic glass lens
- Chip & fade resistant textured polyester powdercoat finish in dark bronze

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

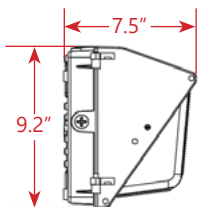
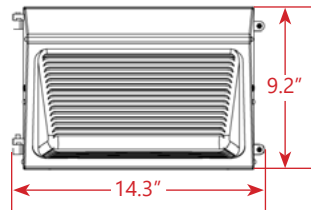
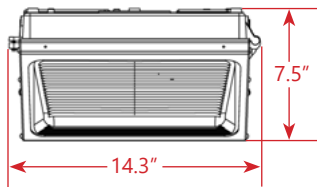
- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Weight:
12.12 lbs



Ordering Guide:

example: EPP MD F UV TBG 740-PC BZ

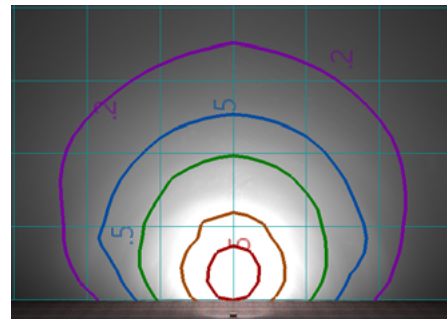
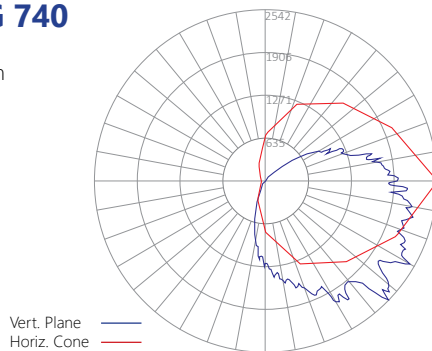
Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
EPP	MD	F	UV	TBG	740	-	PC	BZ
EPP	MD	F	UV	TBG	740		PC	BZ

- Series:** EPP Non-Cutoff Wall Pack
- Lumen Output:** MD Medium
- Optic:** F Forward
- Voltage:** UV 120-277V
- Shielding:** TBG Tempered Borosilicate Glass
- CRI/CCT:** 740 70 CRI / 4000K
- Options:** PC Photocell
- Finish:** BZ Bronze

Photometric Data:

EPP MD F UV TBG 740

Test No.: 14122017
Luminaire Lumens: 6,650 lm
Luminaire Watts: 50.3W
Efficacy: 132.2 LPW



Mounting Height = 15'
 Grid: 15' x 15' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FSS/FSM LED Flood/Wall Sconce

Features:

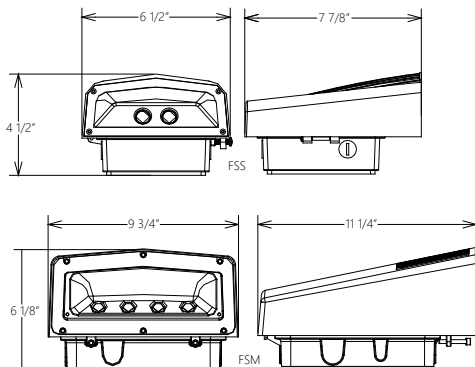
- High performance LED technology
- 0-10V dimming drivers standard
- Up to 100 lumens per watt
- Works as both a flood light and a wall sconce
- Multiple mounting methods and 4 available lumen outputs adds to the versatility of this luminaire, making it suitable for many applications

Applications:

Suitable for most exterior wall mount and flood applications

- Industrial
- Retail
- Commercial

Schematics:



Construction:

- Die cast aluminum housing
- Textured powdercoat finish over a chromate conversion coating

Certifications:

- CSA listed for wet locations
- IP65

Predicted L70 Lifetime:

> 76,000hrs @ 25°C ambient (calculated)
 (based on LM-80, TM-21 and in-situ laboratory testing)

Ambient Operating Temp:

-40°C to 50°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: FSS HI F UV CFG 840-AKT BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
FSS FSM	MD HI	F	UV	CFG	840	-	Blank AKT AKS AUB	Blank SF DF SP	BZ Custom Colors Available Upon Request

Accessories: (order separately)

- **PPC120** 1/2" CdS Pencil Photocell, 110V-130V, 0-200°
- **PPC277** 1/2" CdS Pencil Photocell, 208V-277V, 0-200°

Series:	FSS Flood/Sconce Small FSM Flood/Sconce Medium	Mounting:	Blank None / Wall Mount AKT Adjustable Knuckle w/ 1/2" NPS Threads AKS Adjustable Knuckle Slipfitter <i>(for FSM only)</i> AUB Adjustable U-Bracket <i>(for FSM only)</i>
Lumen Output:	MD Medium HI High	Options:	Blank None SF Single Fuse DF Double Fuse SP Surge Protection
Optic:	F Flood	Finish:	BZ Bronze
Voltage:	UV 120-277V		
Shielding:	CFG Clear Flat Glass		
CRI/CCT:	840 80 CRI / 4000K		

Performance Chart:

Catalog #	Lumens	Wattage	LPW
FSS MD F UV CFG 840	2300	21.1	114.1
FSS HI F UV CFG 840	4025	41.7	96.6
FSM MD F UV CFG 840	6508	52.9	123.0
FSM HI F UV CFG 840	8212	80.7	101.7

Mounting:



FSS with 'BLANK' - Wall Mount



FSS with AKT - Knuckle



FSM with AKS - Slipfitter

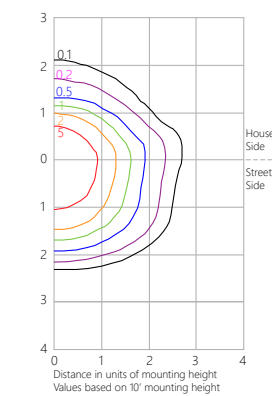
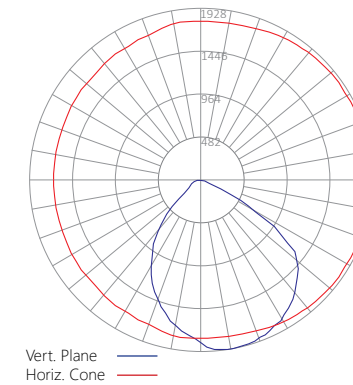


FSM with AUB - U-Bracket

Photometric Data:

FSS HI F UV CFG 840

Test No.: 2,859
 Luminaire Lumens: 4,025 lm
 Luminaire Watts: 41.7W
 Efficacy: 96.6 LPW



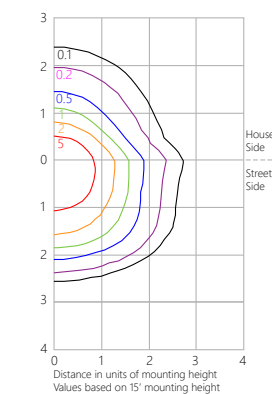
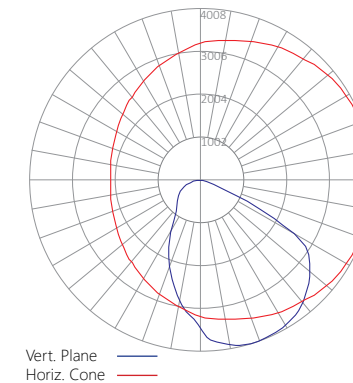
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	754.7	18.8
FM (30-60)	1457.9	36.2
FH (60-80)	220.1	5.5
FVH (80-90)	0.2	0.0
BL (0-30)	634.5	15.8
BM (30-60)	823.0	20.4
BH (60-80)	129.6	3.2
BVH (80-90)	5.0	0.1
UL (90-100)	< 0.05	0.0
UH (100-180)	0.0	0.0
Total	4025.0	100.0

BUG Rating B2-U1-G1

FSM HI F UV CFG 840

Test No.: 2,860
 Luminaire Lumens: 8,212 lm
 Luminaire Watts: 80.7W
 Efficacy: 101.7 LPW



Lum. Classification System (LCS)

LCS Zone	Lumens	%Lum
FL (0-30)	1536.5	18.7
FM (30-60)	3310.1	40.3
FH (60-80)	705.1	8.6
FVH (80-90)	2.7	0.0
BL (0-30)	1052.1	12.8
BM (30-60)	1250.6	15.2
BH (60-80)	335.5	4.1
BVH (80-90)	19.5	0.2
UL (90-100)	0.1	0.0
UH (100-180)	0.0	0.0
Total	8212.2	100.0

BUG Rating B3-U1-G1



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WCP LED Architectural Wall Cylinder

Features:

- High performance LED technology
- 2 light sources - up and down light
- Sleek architectural styling
- Detachable mounting plate with hanging wire allows for simple hands-free installation when making electrical connections

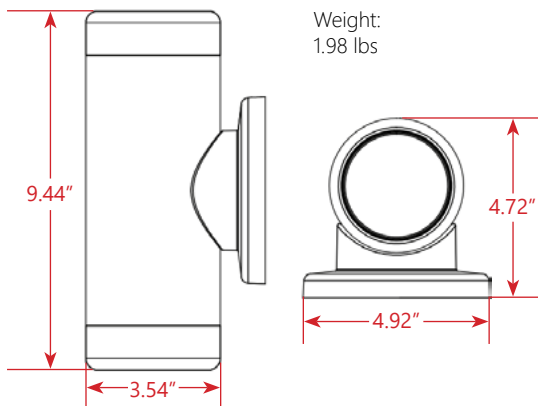
Applications:

- Suitable for commercial or residential exterior wall mount applications
- Wall Grazing
 - Perimeter/Security Lighting

Ambient Operating Temp:

- -20°C to 40°C

Schematic:



Construction:

- Extruded aluminum housing
- UV-stabilized polycarbonate "halo" end caps
- Chip & fade resistant textured polyester powdercoat finish in dark bronze

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: WCP MD NF 12 830-BZ

Series	Output	Optic	Voltage	CRI/CCT	-	Finish
WCP	MD	NF	12	830	-	BZ
WCP	MD	NF	12	830		BZ

Series: WCP Architectural Wall Cylinder

Lumen Output: MD Medium

Optic: NF Narrow Flood

Voltage: 12 120V

CRI/CCT: 830 80 CRI / 3000K

Finish: BZ Bronze

Photometric Data:

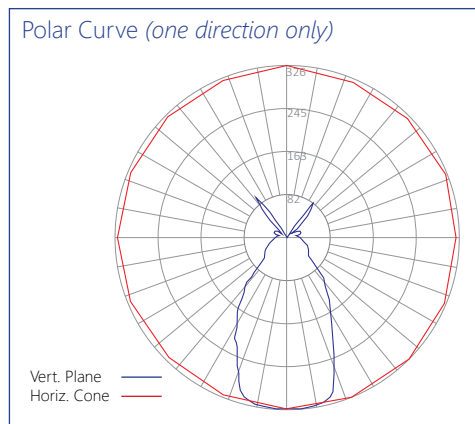
WCP MD NF 12 830

Test No.: 20180711

Luminaire Lumens: 1312 lm

Luminaire Watts: 20.1W

Efficacy: 65.3 LPW





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WLP LED Wall Pack

Features:

- High performance LED technology
- Integral Photocell
- Attractive architectural styling
- Detachable mounting plate with hanging wire allows for simple hands-free installation when making electrical connections

Applications:

- Suitable for commercial or residential exterior wall mount applications
- Entryways
 - Perimeter/Security Lighting

Ambient Operating Temp:

- -20°C to 40°C

Construction:

- Impact resistant, UV-stabilized polycarbonate housing in bronze finish
- Impact resistant, UV-stabilized polycarbonate frosted white lens

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

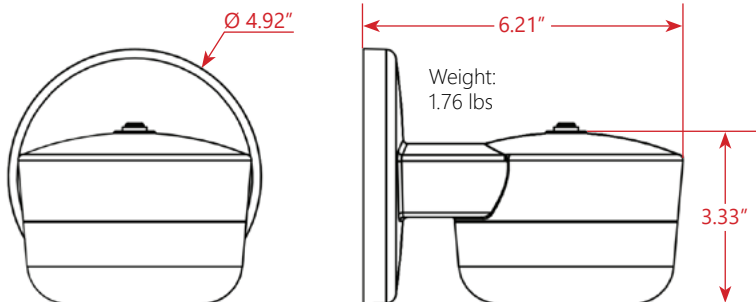
- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Ordering Guide:

example: WLP MD G 12 FP 830-PC BZ

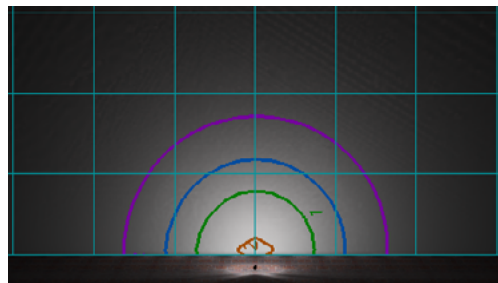
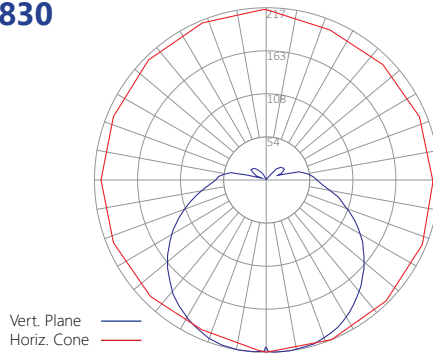
Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
WLP	MD	G	12	FP	830	-	PC	BZ
WLP	MD	G	12	FP	830		PC	BZ

- Series:** WLP Wall Pack
- Lumen Output:** MD Medium
- Optic:** G General Area Distribution
- Voltage:** 12 120V
- Shielding:** FP Frosted Polycarbonate
- CRI/CCT:** 830 80 CRI / 3000K
- Options:** PC Photocell
- Finish:** BZ Bronze

Photometric Data:

WLP MD G 12 FP 830

Test No.: 20180712
Luminaire Lumens: 932 lm
Luminaire Watts: 11.7W
Efficacy: 79.5 LPW



Mounting Height = 10'
 Grid: 10' x 10' squares
 Isolines at:
 2fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WPP LED Wall Pack

Features:

- High performance LED technology
- Integral Photocell
- Attractive architectural styling
- Detachable mounting plate with hanging wire allows for simple hands-free installation when making electrical connections

Applications:

- Suitable for commercial or residential exterior wall mount applications
- Entryways
 - Perimeter/Security Lighting

Ambient Operating Temp:

- -20°C to 40°C

Construction:

- Impact resistant, UV-stabilized polycarbonate housing in bronze finish
- Impact resistant, UV-stabilized polycarbonate frosted white lens

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

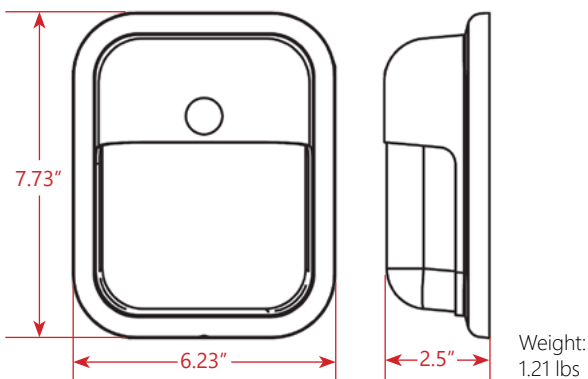
- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Ordering Guide:

example: WPP MD F 12 FP 830-PC BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
WPP	MD	F	12	FP	830	-	PC	BZ
WPP	MD	F	12	FP	830		PC	BZ

Series: WPP Wall Pack

Lumen Output: MD Medium

Optic: F Forward

Voltage: 12 120V

Shielding: FP Frosted Polycarbonate

CRI/CCT: 830 80 CRI / 3000K

Options: PC Photocell

Finish: BZ Bronze

Photometric Data:

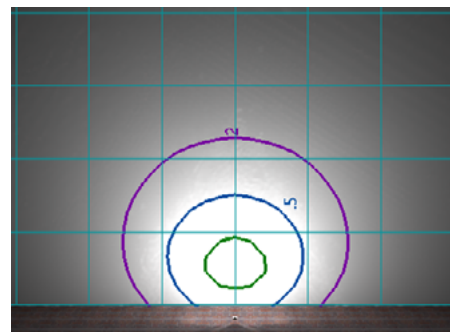
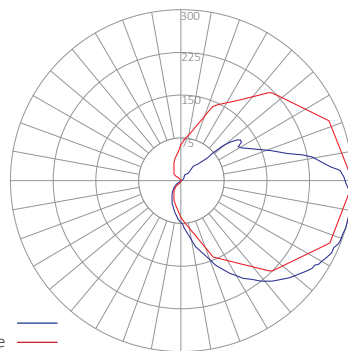
WPP MD F 12 FP 830

Test No.: 20180711

Luminaire Lumens: 958 lm

Luminaire Watts: 11.8W

Efficacy: 81.2 LPW



Mounting Height = 10'
Grid: 10' x 10' squares

Isolines at:
1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WSP LED Wall Sconce

Features:

- High performance LED technology
- Integral Photocell
- Attractive architectural styling
- Dual control enabled allows for dusk to dawn operation or manual switch control

Applications:

- Suitable for commercial or residential exterior wall mount applications
- Entryways
 - Perimeter/Security Lighting

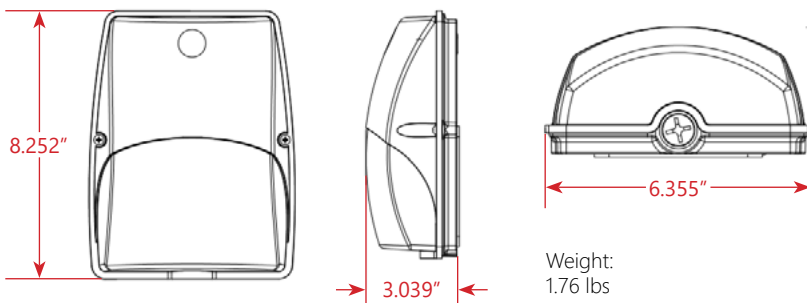
Ambient Operating Temp:

- -20°C to 40°C

Predicted L70 Lifetime:

- > 50,000 hrs

Schematic:



Construction:

- Impact resistant, UV-stabilized polycarbonate front housing with die cast aluminum back plate in bronze finish
- Impact resistant, UV-stabilized polycarbonate frosted white lens

Certifications:

- cULus listed for wet locations
- IP65

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: WSP MD F UV FP 840-PC BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
WSP	MD	F	UV	FP	840	-	PC	BZ
WSP	MD	F	UV	FP	840		PC	BZ

Series: WSP Wall Sconce

Lumen Output: MD Medium

Optic: F Forward

Voltage: UV 120-277V

Shielding: FP Frosted Polycarbonate

CRI/CCT: 840 80 CRI / 4000K

Options: PC Photocell

Finish: BZ Bronze

Photometric Data:

WSP MD F UV FP 840

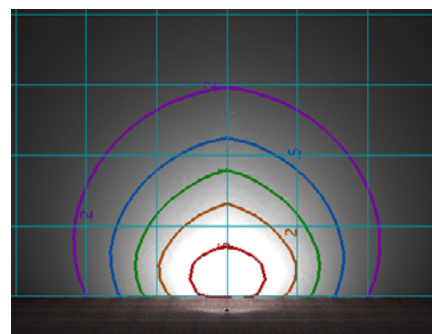
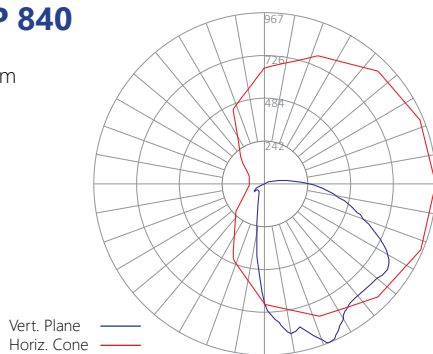
Test No.: 20170223

Luminaire Lumens: 2030 lm

Luminaire Watts: 20.5W

Efficacy: 99.0 LPW

BUG Rating: B1-U3-G2



Mounting Height = 10'
 Grid: 10' x 10' squares

Isolines at:
 5fc/2fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FWS LED Flood / Wall Sconce

Features:

- High performance LED technology
- Attractive architectural styling
- Comes with 2 mounts for added flexibility

Applications:

- Suitable for commercial or residential exterior ground, wall, or eave mount applications
- Entryways
 - Perimeter/Security Lighting
 - Landscape Lighting

Mounting:

- Knuckle Mount: 1/2" swivel NPS knuckle for ground, wall, or eave mounting
- Wall Mount: Comes with detachable mounting plate with hanging wire that allows for hands-free installation when making electrical connections.



Construction:

- Die cast aluminum housing
- Impact resistant, UV-stabilized polycarbonate lens
- Fade, weather, and abrasion resistant textured polyester powdercoat finish in bronze

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

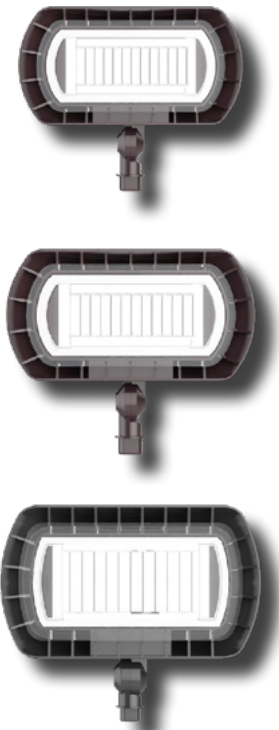
- > 50,000 hrs

Ambient Operating Temp:

- -20°C to 40°C

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



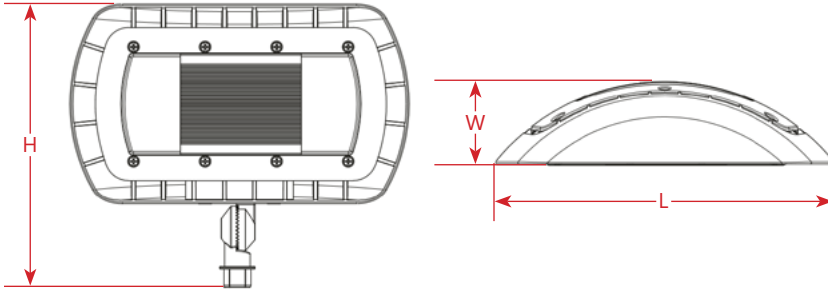
Ordering Guide:

example: FWS MD F UV FP 740-BZ

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
FWS		F	UV	FP	740	-	KN/WM		BZ
FWS	LW MD	F	UV	FP	740		KN/WM	Blank	BZ
	HI							PC	

Lumen Output:	LW Low MD Medium HI High	CRI/CCT:	740	70+ CRI / 4000K
Optic:	F Flood	Mounting:	KN/WM	1/2" NPS Knuckle and Wall Mount
Voltage:	UV 120-277V	Options:	Blank PC	None (available on LW & MD models only) Photocell (available on HI model only)
Shielding:	FP Frosted Polycarbonate	Finish:	BZ	Bronze

Schematic:

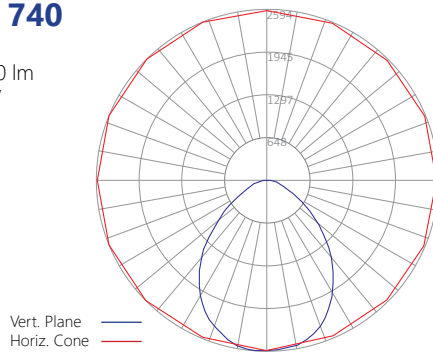


Model	L	W	H	WT. (lbs.)
FWS LW	5.83"	1.69"	5.51"	1.10
FWS MD	7.80"	2.00"	6.46"	1.65
FWS HI	9.69"	2.40"	8.07"	2.65

Photometric Data:

FWS HI F UV FP 740

Test No.: 20171218
 Luminaire Lumens: 5,470 lm
 Luminaire Watts: 49.3W
 Efficacy: 111.0 LPW



Performance Chart:

Catalog #	Lumens	Wattage	LPW
FWS LW F UV FP 740	1510	15.1	100.0
FWS MD F UV FP 740	3168	28.3	111.9
FWS HI F UV FP 740	5470	49.3	111.0



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

FTS LED Twin Head Flood Light

Features:

- High performance LED technology
- Integral Photocell
- Attractive architectural styling
- Frosted lenses help provide comfortable, glare-free illumination
- Detachable mounting plate with hanging wire that allows for hands-free installation when making electrical connections.

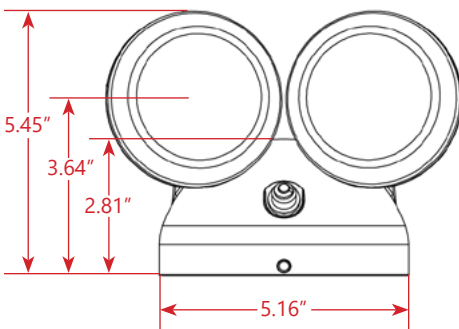
Applications:

- Suitable for commercial or residential exterior wall or eave mount applications
- Entryways
 - Perimeter/Security Lighting

Ambient Operating Temp:

- -20°C to 40°C

Schematic:



Construction:

- Impact resistant, UV-stabilized polycarbonate housing in bronze or white finish
- Impact resistant, UV-stabilized polycarbonate frosted white lens

Certifications:

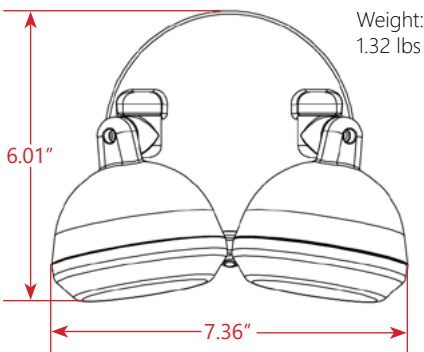
- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: FTS MD F 12 FP 830-PC WH

Series	Output	Optic	Voltage	Shielding	CRI/CCT	-	Options	Finish
FTS	MD	F	12	FP	830	-	PC	
FTS	MD	F	12	FP	830		PC	BZ WH

Series: FTS Twin Head Flood Light

Lumen Output: MD Medium

Optic: F Flood

Voltage: 12 120V

Shielding: FP Frosted Polycarbonate

CRI/CCT: 830 80 CRI / 3000K

Options: PC Photocell

Finish: BZ Bronze
WH White

Photometric Data:

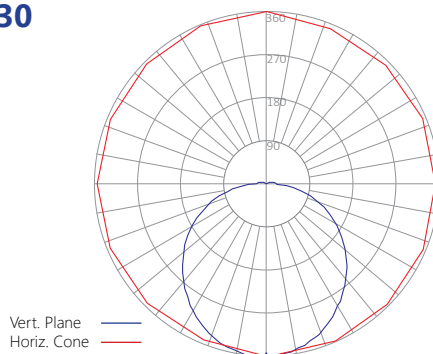
FTS MD F 12 FP 830

Test No.: 20180711

Luminaire Lumens: 1,191 lm

Luminaire Watts: 12.1W

Efficacy: 98.7 LPW





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WSC LED Wall Sconce

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Photocell standard

Mounting:

Detachable mounting plate on back box with built-in bubble level. Mounts to any standard 3-1/2" to 4" square or octagonal, or 4" round junction box.

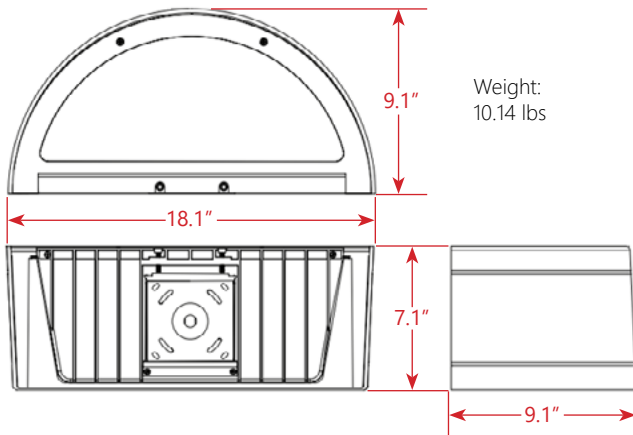
Applications:

Suitable for exterior wall mount applications

Ambient Operating Temp:

- -20°C to 40°C

Schematic:



Construction:

- Precision die cast aluminum housing
- Frosted glass lens
- Chip & fade resistant textured polyester powdercoat finish in dark bronze

Certifications:

- cULus listed for wet locations
- IP65

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: WSC MD F UV 840-PC BZ

Series	Output	Optic	Voltage	CRI/CCT	-	Options	Finish
WSC	MD	F	UV	840	-	PC	BZ
WSC	MD	F	UV	840		PC	BZ

Series: WSC Wall Sconce

Lumen Output: MD Medium

Optic: F Forward

Voltage: UV 120-277V

CRI/CCT: 840 80 CRI / 4000K

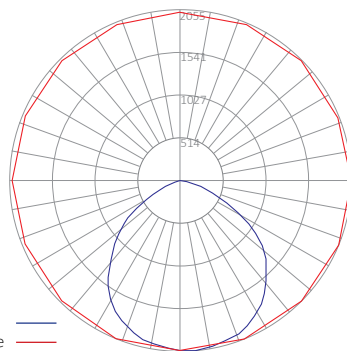
Options: PC Photocell

Finish: BZ Bronze

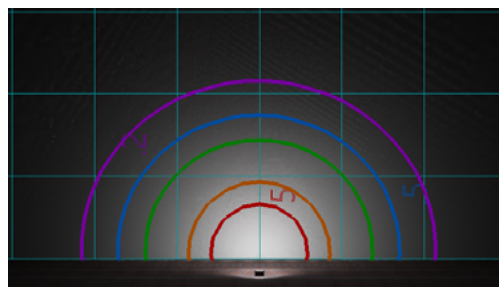
Photometric Data:

WSC MD F UV 840

Test No.: 20150901
Luminaire Lumens: 5126 lm
Luminaire Watts: 49.4W
Efficacy: 103.8 LPW



Vert. Plane ————
 Horiz. Cone ————



Mounting Height = 15'
 Grid: 15' x 15' squares

Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WSx LED Wall Sconce

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Mounts to standard 4" square electrical junction box. Alternate junction box mounting possible via universal mounting ring.

Applications:

Suitable for exterior wall mount applications

Ambient Operating Temp:

- -30°C to 40°C

Predicted L70 Lifetime:

- > 60,000 hrs (*calculated*)
- > 54,000 hrs (*reported*)
- 73% lumen maintenance @ 54,000 hrs (*based on LM-80, TM-21 and in-situ laboratory testing*)

Construction:

- Precision die cast aluminum housing
- UV stabilized polycarbonate lens
- Chip & fade resistant powder coat finish

Certifications:

- UL listed for wet locations
- IP65

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: WSL HI F UV D 840-PC BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	Options	Finish
		F	UV	D	840	-	
WSS	MD	F	UV	D	840	Blank PC	BZ <small>Custom Colors Available Upon Request</small>
WSM	HI						
WSL	HI						
WSX	HI						

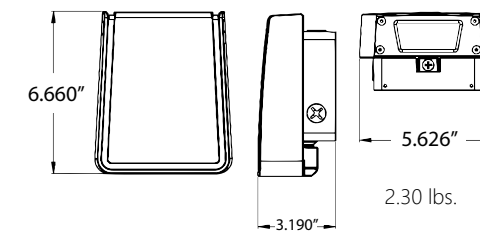
- Series:** WSS Wall Sconce - Small
WSM Wall Sconce - Medium
WSL Wall Sconce - Large
WSX Wall Sconce - Extra Large
- Lumen Output:** MD Medium
HI High
- Optic:** F Forward
- Voltage:** UV 120-277V
- Dimming:** D 0-10V Dimming
- CRI/CCT:** 840 80 CRI / 4000K
- Options:** Blank None
PC Photocell
- Finish:** BZ Bronze
(Custom Colors Available Upon Request)

Performance Chart:

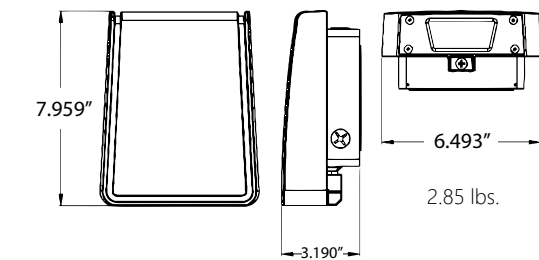
Catalog #	Lumens	Wattage	LPW
WSS MD F UV 840	1646	14.9	110.5
WSM HI F UV 840	3175	30.8	103.1
WSL HI F UV 840	4994	49.7	100.5
WSX HI F UV 840	7804	77.6	100.6

Schematics:

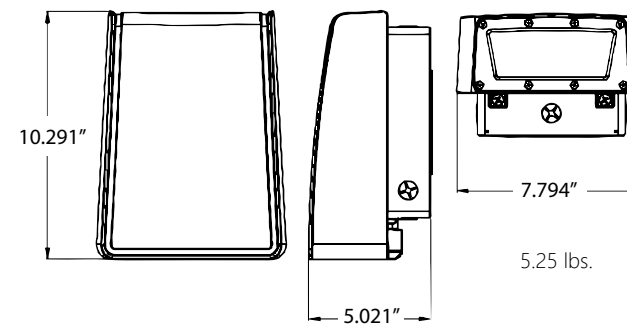
WSS



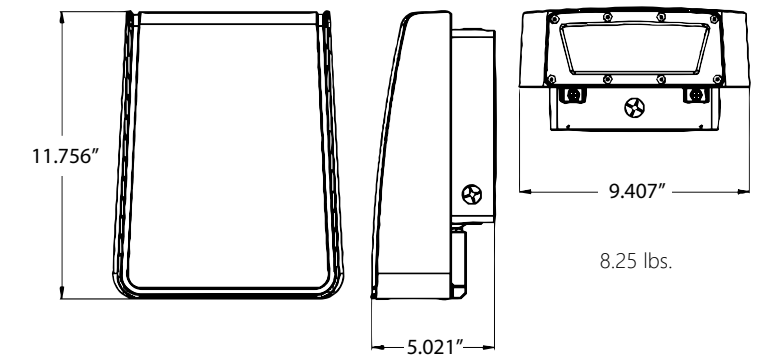
WSM



WSL



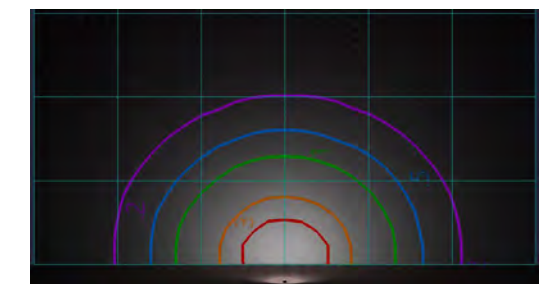
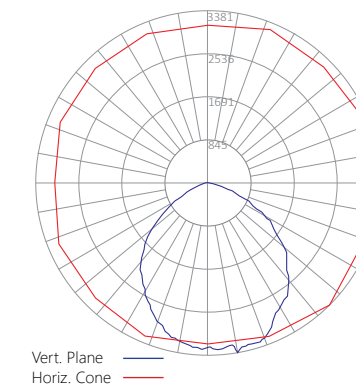
WSX



Photometric Data:

WSX HI F UV 840

Test No.: STD160111NB-F
Luminaire Lumens: 7,804 lm
Luminaire Watts: 77.6W
Efficacy: 100.6 LPW



Mounting Height = 20'
 Tilt = 30°
 Grid: 20' x 20' squares
 Isolines at:
 5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WSxE LED Wall Sconce

Features:

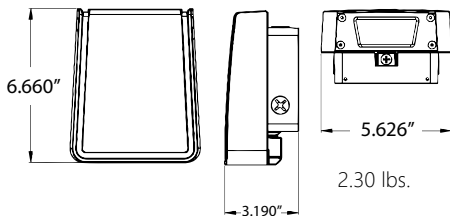
- High performance LED technology
- 0-10V dimming drivers standard
- Mounts to standard 3-1/2" to 4" square electrical junction box. Alternate junction box mounting possible via universal mounting ring.
- Can be mounted in upward or downward orientation

Applications:

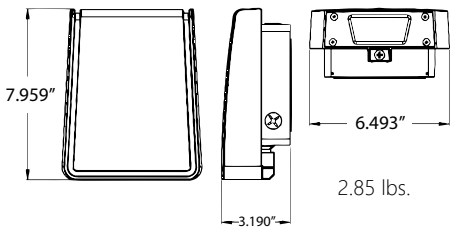
Suitable for exterior wall mount applications

Schematics:

WSSE



WSME



Construction:

- Precision die cast aluminum housing
- UV stabilized polycarbonate lens
- Chip & fade resistant powder coat finish

Certifications:

- UL listed for wet locations
- IP65

Ambient Operating Temp:

- -20°C to 40°C

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: WSSE MD F UV D 840-BZ

Series	Output	Optic	Voltage	Dimming	CRI/CCT	-	Finish
	MD	F	UV	D	840	-	BZ
WSSE WSME	MD	F	UV	D	840		BZ

Series: WSSE Wall Sconce - Small
WSME Wall Sconce - Medium

Lumen Output: MD Medium

Optic: F Forward

Voltage: UV 120-277V

Dimming: D 0-10V Dimming

CRI/CCT: 840 80 CRI / 4000K

Options: Blank None

Finish: BZ Bronze

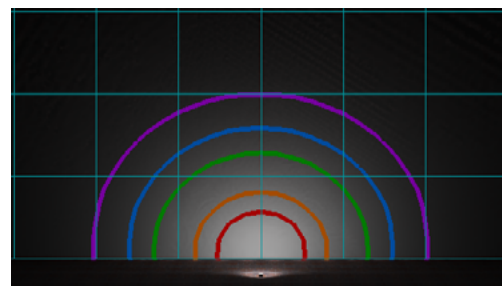
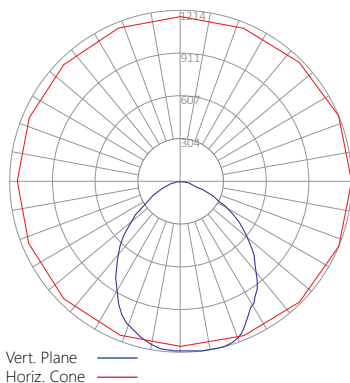
Performance Chart:

Catalog #	Lumens	Wattage	LPW
WSSE MD F UV 840	1646	14.9	110.5
WSME MD F UV 840	2880	27.6	104.4

Photometric Data:

WSME MD F UV 840

Test No.: 20180511
Luminaire Lumens: 2,880 lm
Luminaire Watts: 27.6W
Efficacy: 104.4 LPW



Mounting Height = 12'
Grid: 12' x 12' squares

Isolines at:
5fc/3fc/1fc/0.5fc/0.2fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

DEM LED Decorative Emergency Unit

Features:

- Ultra-bright, long life white LED
- 2 LEDs per head (6 watts total per unit)
- Universal 120-277VAC voltage
- Charge rate/power "ON" LED indicator light and push to test switch for mandated code compliance testing
- 4.8V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board and LED lamp heads for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Self-diagnostic test feature continually diagnoses performance and tests system to ensure reliable operation and to meet electrical and life safety codes
- Field-selectable wiring allows for "AC" operation of the unit to be controlled using a wall-switch or a photocell or any other switching mechanism

Applications:

Suitable for indoor or outdoor use where emergency lighting is needed

Construction:

- Die-cast aluminum housing
- Durable powder-coat finish
- Prismatic polycarbonate refractor
- Sealed and gasketed

Mounting:

- Surface mount via quick-connect back plate; fits most standard size junction boxes
- Universal K/O pattern on back plate for wall mount
- Threaded opening at the top of the enclosure for conduit mount

Certifications:

- UL listed for wet locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:

- 0°C to 50°C
- -20°C to 50°C with CW option

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions



DEM LED Decorative Emergency Unit



Ordering Guide:

example: DEM UV BZ SD-CW

Series	Voltage	Housing Color	Diagnostics	-	Options
DEM	UV		SD	-	
DEM	UV	WT BK BZ NC	SD		Blank CW PC

Voltage: UV 120-277V

Diagnostics: SD Self-Diagnostics

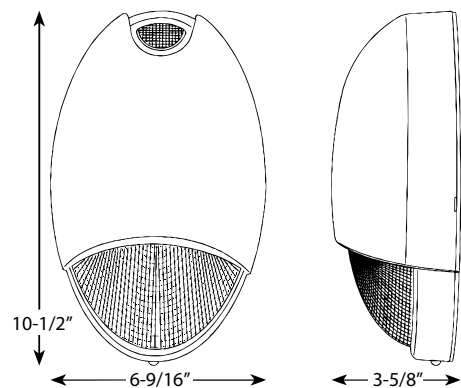
Housing Color: WT White
BK Black
BZ Bronze
NC Nickel

Options: Blank None
CW Cold Weather (-20°C to 50°C)
PC Photocell

Electrical Chart:

Catalog #	Input Watts (W)		Input Amps (A)	
	120V	277V	120V	277V
DEM (w/ AC on)	9.0	8.89	0.131	0.068
DEM (w/ AC off)	2.04	2.15	0.035	0.022
DEM-CW (w/ AC on)	18.47	58.89	0.210	0.248
DEM-CW (w/ AC off)	11.51	52.15	0.114	0.202
DEM-PC (w/ AC on)	9.0	8.89	0.131	0.068
DEM-PC (w/ AC off)	2.04	2.15	0.035	0.022
DEM-CW PC (w/ AC on)	18.47	58.9	0.210	0.248
DEM-CW PC (w/ AC off)	11.51	52.15	0.114	0.202

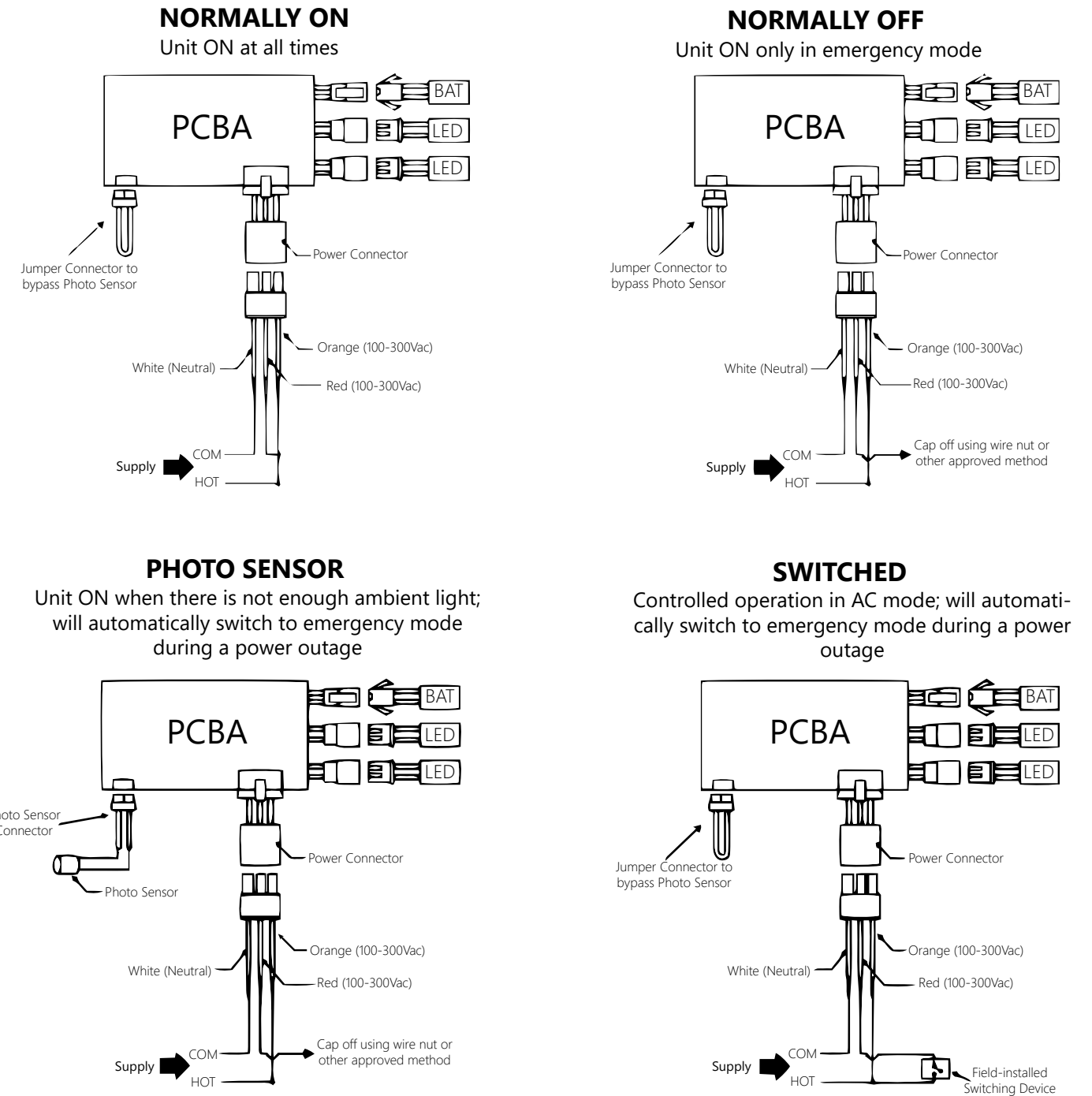
Schematic:



DEM LED Decorative Emergency Unit



Wiring Diagram:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



EDL Emergency Gimbal Downlight

Features:

- Ultra-bright, long life 1.5W LED lamp
- Dual 120/277V
- Charge rate/power "ON" LED indicator light and push to test switch for mandated code compliance testing
- 6V maintenance-free, rechargeable sealed lead acid battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board and LED lamp heads for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours

Mounting:

- Compatible with drop ceiling mount installations. Bar hangers included.

Applications:

Suitable for recessed ceiling mount applications where emergency lighting is needed

Construction:

- 6" recessed housing with mounting bar hangers
- Impact resistant thermoplastic adjustable gimbal trim
- Junction box with 3/4" knockouts for AC input
- White or black trim securely attached to housing with spring clips

Certifications:

- UL listed for dry locations (25°C)
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 2 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions



EDL Emergency Gimbal Downlight

Ordering Guide: example: EDL DV W

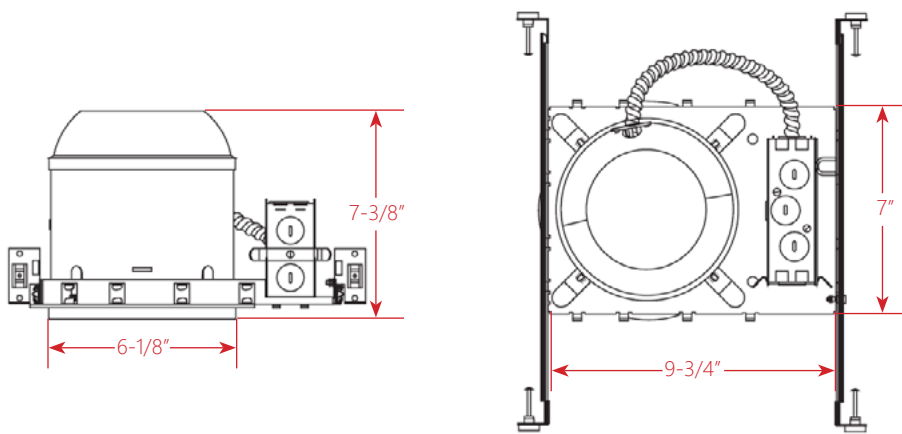
Series	Voltage	Housing Color
EDL	DV	
EDL	DV	W B

Series: EDL Emergency Gimbal Downlight

Voltage: DV Dual 120/277V

Housing Color: W White
B Black

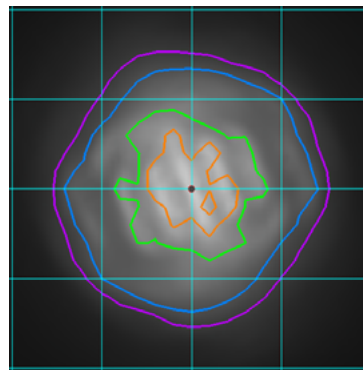
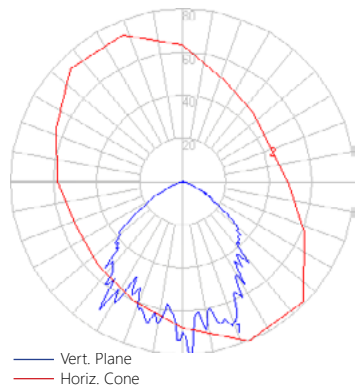
Schematic:



Photometric Data:

EDL DV W

Test No.: STC-20170724
Luminaire Lumens: 116 lm
Luminaire Watts: 1.5W
Efficacy: 77 LPW
Spacing Criterion (0-180): 0.14
Spacing Criterion (90-270): 0.5



Mounting Height = 8'
Grid: 8' x 8' squares

Isolines at:
1fc/0.5fc/0.3fc/0.1fc/0.05fc

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ELR LED Recessed Edgelit Exit Sign

Features:

- Ultra-bright, long life Red or Green LED
- Dual 120/277V
- 4.8V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Charge rate power "ON" LED indicator light and push-to-test switch for mandated code compliance testing
- Dual-circuit option on the AC-only unit enables it to be connected to two different supplies at the same time, one acting as a back-up to the other
- Self-adhesive Chevron appliques and guide template provided for directional indication
- Custom signs available with custom wording



Applications:

For use in dry or damp locations where exit signage is needed.

Construction:

- Premium-grade, extruded aluminum housing (*also available in black or white powder-coat finishes*)
- Trim assembly is detachable from below, providing easy access for service or maintenance
- UV-stabilized ultra-clear acrylic edgelit panel
- Double face utilizes factory installed silver or white mylar background panel

Mounting:

- Compatible with drywall or drop ceiling mount installations. Bar hangers included

Certifications:

- UL listed for damp locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:
 0°C to 50°C

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and



ELR LED Recessed Edgelit Exit Sign

Ordering Guide:

example: ELR 1 R C A-EM US

Series	# of Faces	Letter Color	Voltage	Panel Color	Housing Color	Battery	Options
ELR			DV			-	
ELR	1 2	R G	DV	C M W	A W B	Blank EM	Blank SD 2C US Custom()

of Faces: 1 Single Face
2 Double Face

Letter Color: R Red
G Green

Voltage: DV Dual 120/277V

Panel Color: C Clear (Single Face Only)
M Mirror
W White

Housing Color: A Aluminum
W White
B Black

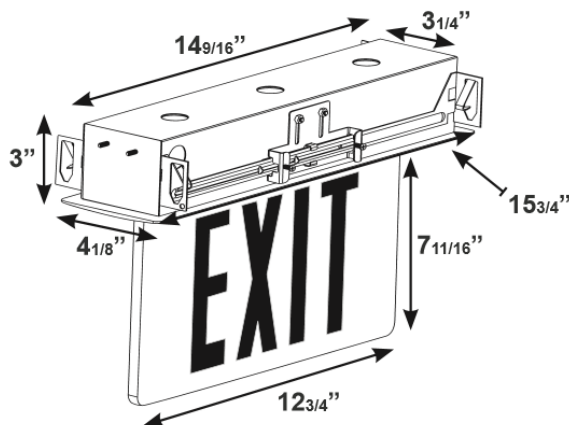
Battery: Blank AC Only
EM Battery Backup

Options: Blank None
SD Self-Diagnostics (available on EM units only)
2C Dual Circuit (available on AC units only)
US Assembled in the USA

Electrical Chart:

Catalog #	Input Watts (W)	Input Watts (W)	Input Amps (A)	Input Amps (A)
	120V	277V	120V	277V
ELR-RED/GREEN/EM/SD/2C	3.8	4.5	0.030	0.020

Schematic:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

ELX LED Edgelit Exit Sign

Features:

- Ultra-bright, long life Red or Green LED
- Dual 120/277V
- 4.8V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Charge rate power "ON" LED indicator light and push-to-test switch for mandated code compliance testing
- Dual-circuit option on the AC-only unit enables it to be connected to two different supplies at the same time, one acting as a back-up to the other
- Self-adhesive Chevron appliques and guide template provided for directional indication
- Custom signs available with custom wording



Applications:

For use in dry or damp locations where exit signage is needed.

Construction:

- Premium-grade, extruded aluminum housing (*also available in black or white powder-coat finishes*)
- UV-stabilized ultra-clear acrylic edgelit panel
- Double face utilizes factory installed silver or white mylar background panel

Mounting:

- Aluminum mounting canopy included for top, end, or back mount

Certifications:

- UL listed for damp locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:

0°C to 50°C

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and



ELX LED Edgelit Exit Sign

Ordering Guide:

example: ELX 1 R C A-EM US

Series	# of Faces	Letter Color	Voltage	Panel Color	Housing Color	Battery	Options
ELX			DV			-	
ELX	1 2	R G	DV	C M W	A W B	Blank EM	Blank SD 2C US Custom()

of Faces: 1 Single Face
2 Double Face

Letter Color: R Red
G Green

Voltage: DV Dual 120/277V

Panel Color: C Clear *(Single Face Only)*
M Mirror
W White

Housing Color: A Aluminum
W White
B Black

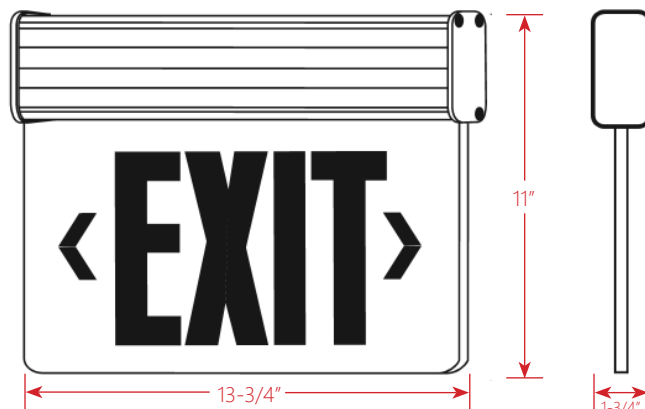
Battery: Blank AC Only
EM Battery Backup

Options: Blank None
SD Self-Diagnostics *(available on EM units only)*
2C Dual Circuit *(available on AC units only)*
US Assembled in the USA

Electrical Chart:

Catalog #	Input Watts (W)	Input Watts (W)	Input Amps (A)	Input Amps (A)
	120V	277V	120V	277V
ELX-RED/GREEN/EM/SD/2C	3.8	4.5	0.030	0.020

Schematic:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EME LED Exit/Emergency Combo

Features:

- Energy efficient, long life red or green LED exit sign illumination
- Ultra-bright, long life white LED lamp heads
- 8 LEDs per head (1 watt total per head)
- Adjustable LED lamp heads allow for optimal center to center spacing.
- Optional high-lumen heads available for increased center to center spacing
- Dual 120/277V
- Charge rate/power "ON" LED indicator light and push to test switch for mandated code compliance testing
- 9.6V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board and LED lamp heads for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Easy snap-out chevron directional indicators

Construction:

- Injection molded 5VA flame retardant, high-impact resistant thermoplastic housing

Mounting:

- Easy snap mounting canopy included for top or end mount
- Universal K/O pattern on back plate for wall mount

Certifications:

- UL listed for damp locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:

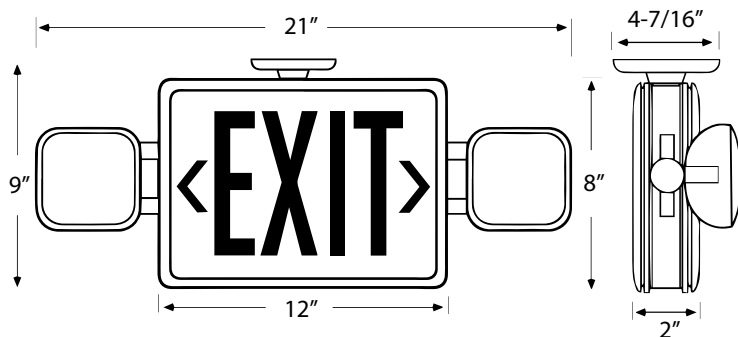
0°C to 40°C

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Ordering Guide:

example: EME 2 R DV W-SD HL

Series	# of Faces	Letter Color	Voltage	Housing Color	-	Options
EME			DV		-	
EME	1 2	R G	DV	W B		Blank RC SD HL

of Faces: 1 Single Face
2 Universal Single/Double Face

Housing Color: W White
B Black

Letter Color: R Red
G Green

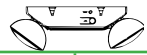
Options:
Blank None
RC Remote Capacity (*maximum 3W allowed - consult factory for remote lamp compatibility*)
SD Self-Diagnostics
HL High Lumen 12-LED heads (1.5W per head)

Voltage: DV Dual 120/277V

Electrical Chart:

Catalog #	Input Watts (W)	Input Watts (W)	Input Amps (A)	Input Amps (A)
	120V	277V	120V	277V
EME-RED	3.7	3.8	0.040	0.020
EME-GREEN/RC	3.0	3.2	0.030	0.014
EME-RED-RC	3.4	3.6	0.033	0.015
EME-RED/GREEN-SD/RC-SD	5.2	5.7	0.046	0.022

Center to Center Spacing Guide: (for reference use only)



	7'	6'	5'	4'	3'	2'	1'	0	1'	2'	3'	4'	5'	6'	7'	8'
1'	0.2	0.3	0.5	0.4	0.4	0.5	0.6	0.8	1	0.8	0.9	0.8	0.4	0.2	0.2	
2'	0.3	0.5	0.7	0.8	0.9	0.8	0.9	1	1.1	1.4	1.1	0.8	0.5	0.3	0.2	
3'	0.4	0.7	1	1	1.1	1.1	1.1	1.3	1.4	1.1	0.9	0.9	0.7	0.5	0.2	
4'	0.5	0.7	0.9	1.1	1.2	1.2	1	1.1	1.1	1	1.1	0.8	0.6	0.3	0.2	
5'	0.5	0.7	0.8	0.8	1	1.1	0.8	0.8	1	0.9	0.6	0.5	0.4	0.3	0.2	
6'	0.4	0.5	0.7	0.7	0.8	0.8	0.6	0.5	0.6	0.5	0.4	0.4	0.3	0.2	0.2	

Meets NFPA 101 requirements for: 10' center-to-center spacing - 3' path of egress 1' from wall - 7-1/2" mounting height



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

EMX LED Exit/Lightpipe Emergency Combo

Features:

- Energy efficient, long life red or green LED exit sign illumination
- 4.5W (36 LEDs) per light pipe
- Adjustable high-performance, smooth, chrome-plated, metallized reflector and acrylic, UV-stabilized "light pipe" lens for optimal light distribution
- Dual 120/277V
- Charge rate/power "ON" LED indicator light and push to test switch for mandated code compliance testing
- 4.8V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board and LED lamp heads for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Remote capable standard (max 3W) - compatible with REH LED remote lamp head

Construction:

- Injection molded 5VA flame retardant, high-impact resistant thermoplastic housing

Mounting:

- Easy snap mounting canopy included for top or end mount
- Universal K/O pattern on back plate for wall mount

Certifications:

- UL listed for damp locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:

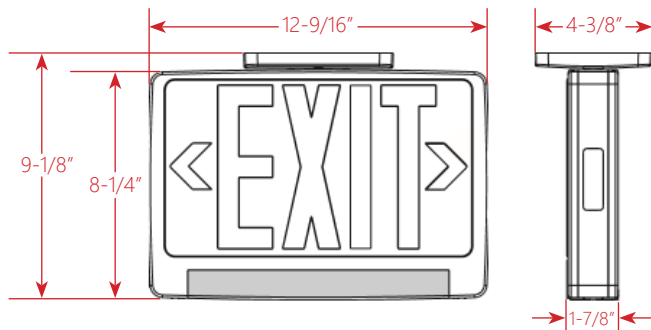
0°C to 50°C

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions



Schematic:



Ordering Guide:

example: EMX 2 R DV W-RC SD

Series	# of Faces	Letter Color	Voltage	Housing Color	- Remote Capacity	Options
EMX			DV		- RC	
EMX	1 2	R G	DV	W B	RC	Blank SD

of Faces: 1 Single Face
2 Universal Single/Double Face

Housing Color: W White
B Black

Letter Color: R Red
G Green

Remote Capacity: RC Remote Capacity (maximum 3W allowed - consult factory for remote lamp compatibility)

Voltage: DV Dual 120/277V

Options: Blank None
SD Self-Diagnostics

Electrical Chart:

Catalog #	Input Watts (W)	Input Watts (W)	Input Amps (A)	Input Amps (A)
	120V	277V	120V	277V
EMX-RED/GREEN-RC	4.5	4.5	0.040	0.020
EMX-RED/GREEN-RC SD	5.0	5.0	0.047	0.023

Center to Center Spacing Guide: (for reference use only)



1'	0.12	0.15	0.18	0.25	0.33	0.43	0.56	0.75	0.93	1.15	1.36	1.51	1.53	1.45	1.27	1.05	0.83	0.65	0.50	0.37	0.28	0.21	0.16	0.12	
2'	0.13	0.15	0.19	0.26	0.32	0.43	0.56	0.72	0.91	1.09	1.28	1.40	1.44	1.36	1.21	1.01	0.82	0.64	0.50	0.38	0.29	0.21	0.16	0.12	
3'	0.14	0.16	0.21	0.26	0.34	0.44	0.58	0.71	0.89	1.07	1.22	1.33	1.35	1.28	1.14	0.94	0.77	0.62	0.47	0.37	0.28	0.21	0.17	0.13	
4'	0.15	0.18	0.22	0.28	0.36	0.47	0.59	0.72	0.89	1.06	1.19	1.29	1.32	1.24	1.12	0.95	0.80	0.65	0.50	0.38	0.29	0.23	0.18	0.13	
5'	0.13	0.16	0.22	0.27	0.34	0.42	0.53	0.64	0.77	0.89	1.02	1.17	1.12	1.09	1.00	0.86	0.73	0.61	0.48	0.39	0.30	0.24	0.19	0.15	
6'	0.08	0.11	0.14	0.18	0.23	0.28	0.35	0.42	0.52	0.63	0.70	0.77	0.80	0.74	0.77	0.64	0.56	0.50	0.40	0.32	0.26	0.21	0.17	0.13	
	12'	11'	10'	9'	8'	7'	6'	5'	4'	3'	2'	1'	0	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'	11'	12'

Meets NFPA 101 requirements for: 12' center-to-center spacing - 3' path of egress 1' from wall - 7-1/2" mounting height



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

LEM LED Emergency Unit

Features:

- Ultra-bright, long life white LED lamp heads
- 8 LEDs per head (1 watt total per head)
- Adjustable LED lamp heads allow for optimal center to center spacing.
- Optional high-lumen heads available for increased center to center spacing
- Dual 120/277V
- Charge rate/power "ON" LED indicator light and push to test switch for mandated code compliance testing
- 3.6V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board and LED lamp heads for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours

Applications:

Suitable for wall or ceiling mount in dry or damp locations where emergency lighting is needed

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions

Construction:

- Injection molded 5VA flame retardant, high-impact resistant thermoplastic housing

Mounting:

- Surface mount via quick-connect back plate; fits most standard size junction boxes and snaps into place to make internal electrical connections
- Top and side knockout for conduit applications

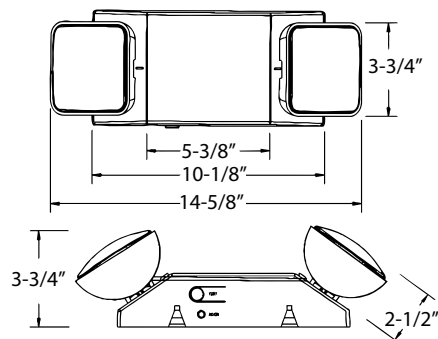
Certifications:

- UL listed for damp locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:

0°C to 50°C

Schematic:



Ordering Guide:

example: LEM DV B-SD HL

Series	Voltage	Housing Color	-	Options
LEM			-	
LEM	DV MT	W B		Blank SD HL RC

Voltage: DV Dual 120/277V
MT Multi-tap 208/220/240V

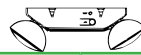
Options: Blank None
SD Self-Diagnostics *(not available in MT 208/220/240V)*
HL High Lumen 12-LED heads (1.5W per head)
RC Remote Capacity *(maximum 3W allowed - consult factory for remote lamp compatibility)*

Housing Color: W White
B Black

Electrical Chart:

Catalog #	Input Watts (W) 120V	Input Watts (W) 277V	Input Watts (W) 208V	Input Watts (W) 220V	Input Watts (W) 240V	Input Amps (A) 120V	Input Amps (A) 277V	Input Amps (A) 208V	Input Amps (A) 220V	Input Amps (A) 240V
LEM	1.8	1.8	2.6	3.5	3.1	0.022	0.010	0.024	0.029	0.025
LEM-SD	1.6	1.6	-	-	-	0.020	0.010	-	-	-

Center to Center Spacing Guide: (for reference use only)



	0.2	0.3	0.5	0.4	0.4	0.5	0.6	0.8	1	0.8	0.9	0.8	0.4	0.2	0.2	
1'	0.3	0.5	0.7	0.8	0.9	0.8	0.9	1	1.1	1.4	1.1	0.8	0.5	0.3	0.2	
2'	0.4	0.7	1	1	1.1	1.1	1.1	1.3	1.4	1.1	0.9	0.9	0.7	0.5	0.2	
3'	0.5	0.7	0.9	1.1	1.2	1.2	1	1.1	1.1	1	1.1	0.8	0.6	0.3	0.2	
4'	0.5	0.7	0.8	0.8	1	1.1	0.8	0.8	1	0.9	0.6	0.5	0.4	0.3	0.2	
5'	0.4	0.5	0.7	0.7	0.8	0.8	0.6	0.5	0.6	0.5	0.4	0.4	0.3	0.2	0.2	
6'	7'	6'	5'	4'	3'	2'	1'	0	1'	2'	3'	4'	5'	6'	7'	8'

Meets NFPA 101 requirements for: 10' center-to-center spacing - 3' path of egress 1' from wall - 7-1/2" mounting height



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

LEX LED Exit

Features:

- Ultra-bright, long life Red or Green LED
- Dual 120/277V
- 4.8V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Easy snap-out chevron directional indicators
- Dual-circuit option on the AC-only unit enables it to be connected to two different supplies at the same time, one acting as a back-up to the other
- Custom signs available with custom wording



Applications:

For use in dry or damp locations where exit signage is needed.

Construction:

- Injection molded 5VA flame retardant, high-impact resistant thermoplastic housing

Mounting:

- Easy snap mounting canopy included for top or end mount
- Universal K/O pattern on back plate for wall mount

Certifications:

- UL listed for damp locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Ambient Operating Temp:

0°C to 50°C

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: LEX 2 R DV W-EM SD US

Series	# of Faces	Letter Color	Voltage	Housing Color	Battery	Options
LEX	2		DV		-	
LEX	2	R G	DV	W B	Blank EM	Blank SD 2C US Custom()

of Faces: 2 Universal Single/Double Face

Letter Color: R Red
G Green

Voltage: DV Dual 120/277V

Housing Color: W White
B Black

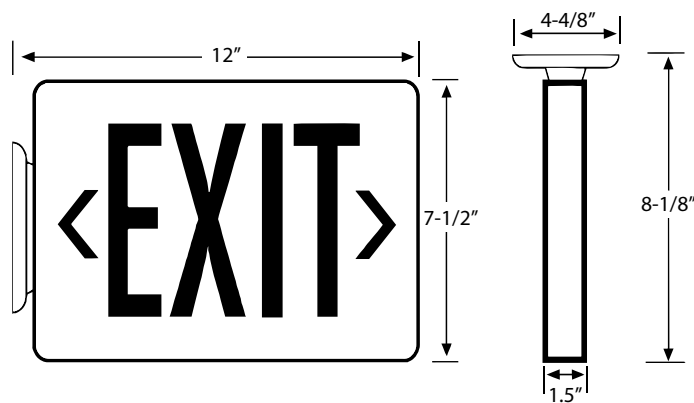
Battery: Blank AC Only
EM Battery Backup

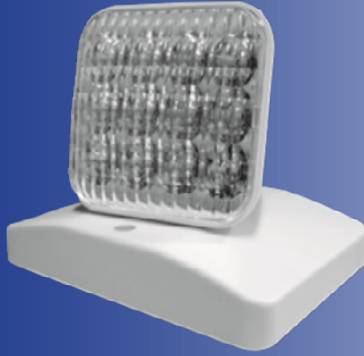
Options: Blank None
SD Self-Diagnostics (*available on EM units only*)
2C Dual Circuit (*available on AC units only*)
US Assembled in the USA
Custom() Custom Wording (specify wording)

Electrical Chart:

Catalog #	Input Watts (W)	Input Watts (W)	Input Amps (A)	Input Amps (A)
	120V	277V	120V	277V
LEX-RED/GREEN/EM/SD/2C	3.8	3.8	0.034	0.020

Schematic:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

REH LED Remote Lamp Head

Features:

- Ultra-bright, long life white LED lamp heads
- 8 LEDs per head (1 watt total per head)
- Adjustable LED lamp heads allow for optimal center to center spacing.
- Powered from low voltage 9.6V power source with low voltage wiring (not provided)
- Compatible with LumenFocus EME, EMX, and LEM exit/emergency units with RC option

Applications:

Suitable for most indoor and outdoor (with WP option) applications

Mounting:

- Universal mounting base mounts to single-gang switch box
- Suitable for wall or ceiling mount
- Distance of maximum run is determined by system voltage, wire gauge, and total maximum wattage on the run

Construction:

- Indoor Model: Injection molded 5VA flame retardant, high-impact resistant thermoplastic housing with plastic lens
- Outdoor 'WP' Model: Die-cast aluminum, sealed and gasketed with glass lens

Certifications:

- UL listed with approved LumenFocus products
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA

Warranty:

- 5 year limited warranty on housing and electronics.
- see www.LumenFocus.com for complete warranty terms and conditions



REH LED Remote Lamp Head

Ordering Guide:

example: REH 2 9.6-WP HL

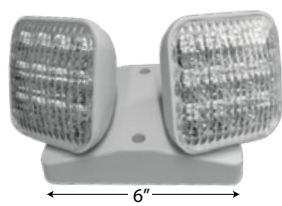
Series	# of Heads	Voltage	-	Options
REH		9.6	-	
REH	1 2	9.6		Blank WP SD HL

of Heads: 1 1 Lamp Head
2 2 Lamp Heads

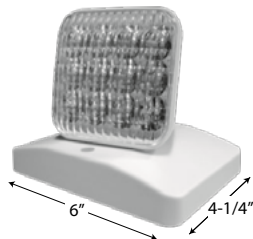
Voltage: 9.6 9.6 Volt

Options: Blank None
WP Weather-Proof (*Outdoor*)
SD Self-Diagnostics
HL High Lumen 12-LED heads (*1.5W per head*)

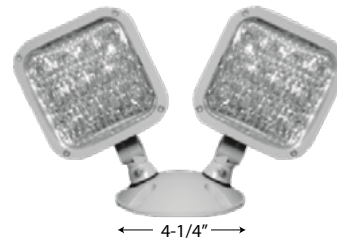
Schematic:



REH 2 9.6



REH 1 9.6

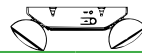


REH 2 9.6-WP



REH 1 9.6-WP

Center to Center Spacing Guide: (for reference use only)



	0.2	0.3	0.5	0.4	0.4	0.5	0.6	0.8	1	0.8	0.9	0.8	0.4	0.2	0.2	
1'	0.3	0.5	0.7	0.8	0.9	0.8	0.9	1	1.1	1.4	1.1	0.8	0.5	0.3	0.2	
2'	0.4	0.7	1	1	1.1	1.1	1.1	1.3	1.4	1.1	0.9	0.9	0.7	0.5	0.2	
3'	0.5	0.7	0.9	1.1	1.2	1.2	1	1.1	1.1	1	1.1	0.8	0.6	0.3	0.2	
4'	0.5	0.7	0.8	0.8	1	1.1	0.8	0.8	1	0.9	0.6	0.5	0.4	0.3	0.2	
5'	0.4	0.5	0.7	0.7	0.8	0.8	0.6	0.5	0.6	0.5	0.4	0.4	0.3	0.2	0.2	
6'	7'	6'	5'	4'	3'	2'	1'	0	1'	2'	3'	4'	5'	6'	7'	8'

Meets NFPA 101 requirements for: 10' center-to-center spacing - 3' path of egress 1' from wall - 7-1/2" mounting height



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

WLE LED Wet Location Exit

Features:

- Ultra-bright, long life Red or Green LED
- Dual 120/277V
- Unique bi-color LED indicator light alerts occupant on battery condition
 - Green - Normal
 - Red - Check Battery
- 4.8V long life, maintenance free, rechargeable NiCd battery
- Internal solid-state transfer switch automatically connects the internal battery to LED board for minimum 90-minute emergency illumination
- Fully automated solid-state, two rate charger initiates battery charging to recharge a discharged battery in 24 hours
- Easy snap-out chevron directional indicators
- Custom signs available with custom wording



Applications:

For use in damp or wet locations where exit signage is needed.

Ambient Operating Temp:

-20°C - 50°C

Construction:

- 5VA flame retardant, UV-stabilized polycarbonate housing
- Impact resistant, UV-stabilized polycarbonate clear lens
- Corrosion-resistant enclosure with engineering grade silicone gasket
- Top and side K/O's for conduit feed

Mounting:

- Polycarbonate mounting canopy included for top or end mount
- Universal K/O pattern on back plate for wall mount

Certifications:

- UL listed for wet locations
- UL924
- NFPA 101 Life Safety Code
- NEC
- OSHA
- Local and State Codes

Warranty:

- 5 year limited warranty on housing and electronics. Battery pro rated for 5 yrs.
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: WLE 2 R DV W CW-EM SD

Series	# of Faces	Letter Color	Voltage	Housing Color	Ambient Temp	Battery	Options
WLE			DV		CW	-	
WLE	1 2	R G	DV	W B G	CW	Blank EM	Blank SD TP 2C Custom()

of Faces: 1 Single Face
2 Double Face

Letter Color: R Red
G Green

Voltage: DV Dual 120/277V

Housing Color: W White w/ White Faceplate
B Black w/ Black Faceplate
G Gray w/ White Faceplate

Ambient Temp: CW Cold Weather

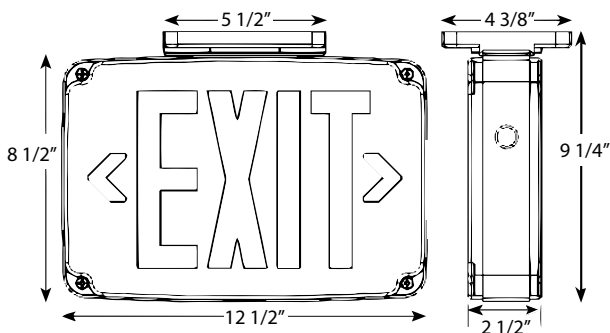
Battery: Blank AC Only
EM Battery Backup

Options: Blank None
SD Self-Diagnostics (*available on EM units only*)
TP Tamper-Proof
2C Dual Circuit (*available on AC units only*)
Custom() Custom Wording (specify wording)

Electrical Chart:

Catalog #	Input Watts (W)	Input Watts (W)	Input Amps (A)	Input Amps (A)
	120V	277V	120V	277V
WLE-RED/GREEN	2.7	2.7	0.025	0.011
WLE-RED/GREEN/EM/SD	3.3	3.4	0.030	0.014
WLE-RED/GREEN/2C	2.4	2.4	0.023	0.011

Schematic:



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED



GLL LED Grow Light

Features:

- Improved plant growth with higher yields
- Runs cool for easier ambient air temperature control
- High performance LED technology
- 0-10V dimming drivers standard
- 120V cord set included
- V-hangers included for easy mounting
- Lightweight design for easy installation and relocation

Applications:

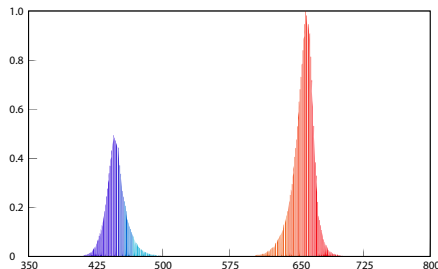
Suitable for most agricultural applications

Recommended growing area:

- GLL MD = 4' long x 3' wide
- GLL HI = 6' long x 4' wide

Spectrum:

- Red (600-699nm): 77.1%
- Green (500-599nm): 0.3%
- Blue (400-499nm): 22.6%



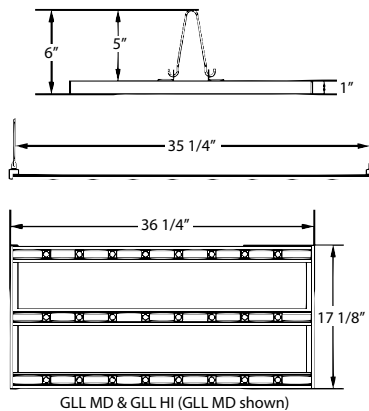
Construction:

- All aluminum construction
- LED chips potted with high temperature silicone epoxy

Certifications:

- CSA listed for wet locations

Schematic:



Ordering Guide:

ex: GLL MD 12

Series	Output	Voltage
GLL		12
GLL	MD HI	12

Output: MD Medium (120W)
 HI High (240W)

Voltage: 12 120V

GLL HI 12



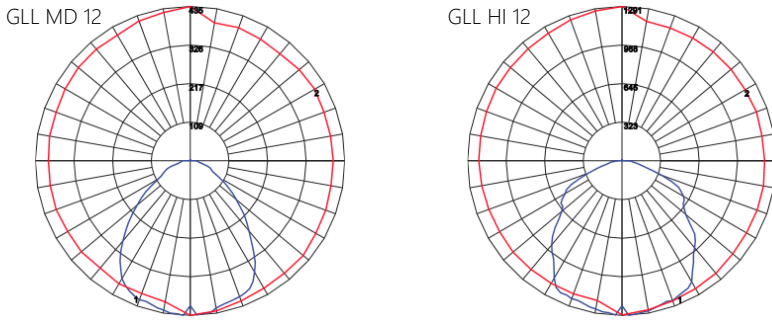
GLL MD 12



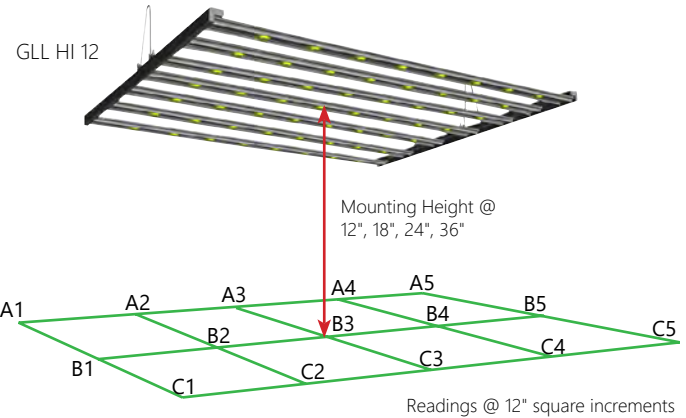
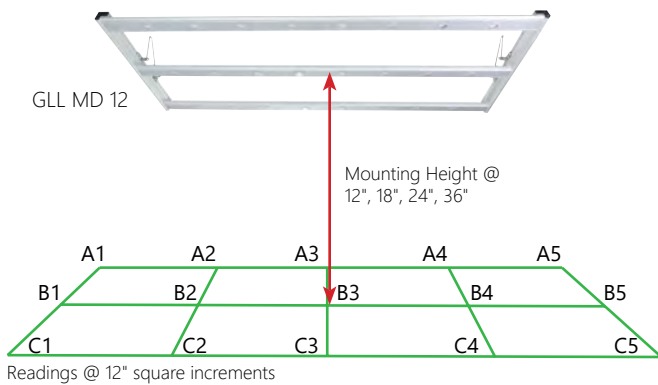
Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions

Photometric Distribution:



Photosynthetically Active Radiation (PAR):



PPF ($\mu\text{mol/s}$)

36" MH	1	2	3	4	5
A	24	36	42	37	25
B	28	39	47	40	27
C	26	34	40	33	22

24" MH	1	2	3	4	5
A	26	46	58	43	24
B	32	61	78	59	31
C	26	46	56	43	22

18" MH	1	2	3	4	5
A	20	52	65	49	21
B	34	80	104	75	39
C	23	50	64	47	20

12" MH	1	2	3	4	5
A	14	61	73	60	17
B	28	112	136	109	23
C	16	56	75	59	16

PPF ($\mu\text{mol/s}$)

36" MH	1	2	3	4	5
A	66	90	98	85	61
B	70	98	113	93	63
C	67	91	106	87	58

24" MH	1	2	3	4	5
A	60	106	134	108	66
B	81	144	186	150	85
C	65	109	140	113	67

18" MH	1	2	3	4	5
A	56	117	141	115	53
B	84	199	258	190	77
C	67	135	169	127	60

12" MH	1	2	3	4	5
A	50	130	153	128	76
B	97	318	409	284	69
C	62	154	210	152	53



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

VPJE LED Vaporproof Light

Features:

- High performance LED technology
- Shields against dust, moisture, and vapor from entering into luminaire

Applications:

Suitable for most indoor or outdoor applications where moisture or debris are an issue.

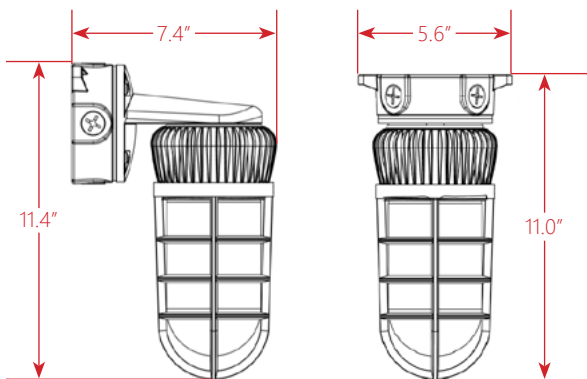
Mounting:

- Built in junction box with 5" mounting flanges and 1/2" NPT for threaded conduit on the sides
- Available in wall or ceiling mount options

Ambient Operating Temp:

- -30°C to 40°C

Schematics:



Construction:

- Die-cast aluminum back plate, junction box, and heat sink
- Thermal impact-resistant frosted polycarbonate globe
- Die-cast threaded cage guard secured with stainless steel hardware.
- Shot blasted aluminum finish

Certifications:

- cULus listed for wet locations

Predicted L70 Lifetime:

- > 50,000 hrs

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: VPJE HI UV FP 740-WM GY

Series	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Finish
VPJE	HI	UV	FP	740	-		GY
VPJE	HI	UV	FP	740		CM WM	GY

Lumen Output:	HI	High		Mounting:	CM	Ceiling Mount
					WM	Wall Mount
Voltage:	UV	120-277V		Finish:	GY	Gray
Shielding:	FP	Frosted Polycarbonate				
CRI/CCT:	740	70 CRI / 4000K				

Photometric Data:

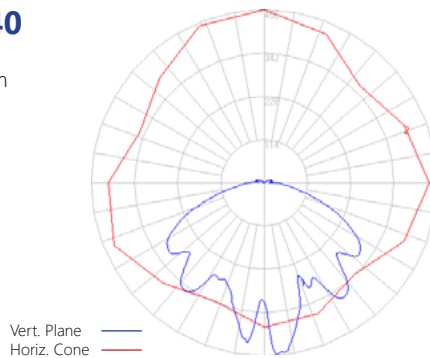
VPJE HI UV FP 740

Test No.: 20171207

Luminaire Lumens: 1420 lm

Luminaire Watts: 13.4W

Efficacy: 106.0 LPW





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

HZL 1 LED Hazardous Location

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Class 1, Division 2 Hazardous Location rated
- Available with clear or frosted lens, and with horizontal hood, vertical hood, or no hood
- Suitable for ceiling or wall mounting

Applications:

- Suitable for most interior or exterior Class 1, Division 2 hazardous location applications
- Industrial
 - Manufacturing

Ambient Operating Temp:

- -25°C to 40°C

Predicted L70 Lifetime:

- > 100,000 hrs (calculated)
 - > 60,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Heavy-duty die cast aluminum housing and top frame
- 1/2" tapped coin plug openings for wiring entrance conduits
- Vandal resistant polycarbonate lens available in clear or frosted
- Powdercoat finish over a chromate conversion coating

Certifications:

- ETL listed for Hazardous Locations per UL844
- Class 1, Division 2, Groups A,B,C,D
- T4 Temperature Rating
- IP66

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



Ordering Guide:

example: HZL 1 H MD UV CP 840-PT

Series	Length	Hood	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Finish
HZL	1			UV			-		PT
HZL	1	Blank H V	LW MD	UV	CP FP	840 850		Blank AB YK	PT

Length: 1 1'

Hood: Blank None
H Horizontal Hood
V Vertical Hood

Lumen Output: LW Low
MD Medium

Voltage: UV 120-277V

Shielding: CP Clear Polycarbonate
FP Frosted Polycarbonate

CRI/CCT: 840 80 CRI / 4000K
850 80 CRI / 5000K

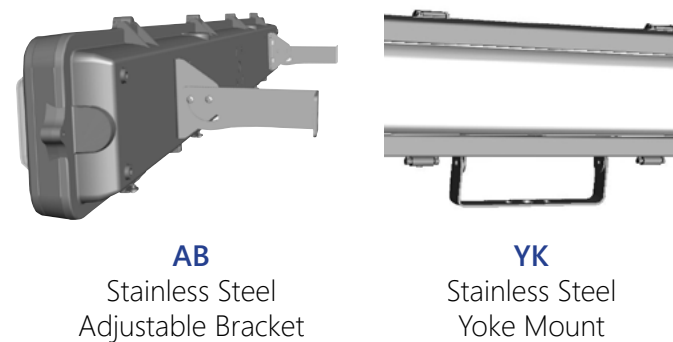
Mounting: Blank None - Surface Mount
AB Adjustable Bracket
YK Yoke Mount

Finish: PT Platinum

Performance Chart:

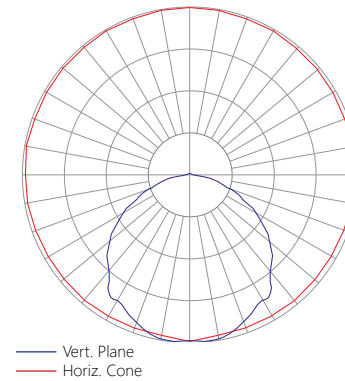
Catalog #	Watts	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
HZL 1 LW UV CP xxx	26	3199	123.0	3332	128.2
HZL 1 LW UV FP xxx	26	2828	108.8	2945	113.3
HZL 1 H LW UV CP xxx	26	3001	115.4	3126	120.2
HZL 1 H LW UV FP xxx	26	2274	87.5	2369	91.1
HZL 1 V LW UV CP xxx	26	3172	122.0	3305	127.1
HZL 1 V LW UV FP xxx	26	2597	99.9	2705	104.0
HZL 1 MD UV CP xxx	43	5316	123.6	5538	128.8
HZL 1 MD UV FP xxx	43	4750	110.5	4948	115.1
HZL 1 H MD UV CP xxx	43	4684	108.9	4879	113.5
HZL 1 H MD UV FP xxx	43	3908	90.9	4071	94.7
HZL 1 V MD UV CP xxx	43	5081	118.2	5292	123.1
HZL 1 V MD UV FP xxx	43	4223	98.2	4399	102.3

Mounting:

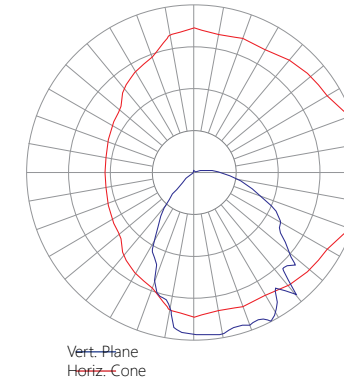


Photometric Data: Relative Luminous Intensity

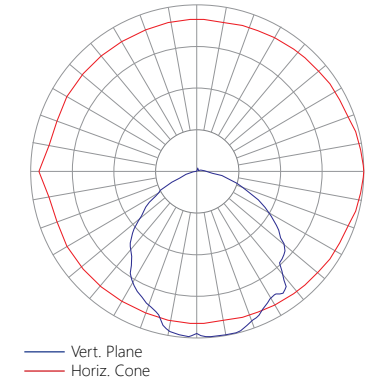
No Hood, Clear Lens



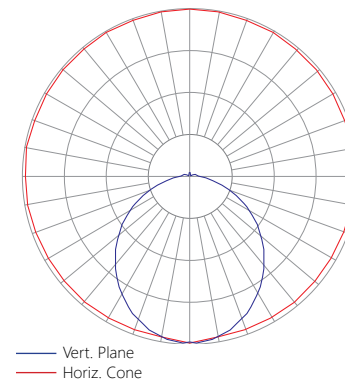
Horizontal Hood, Clear Lens



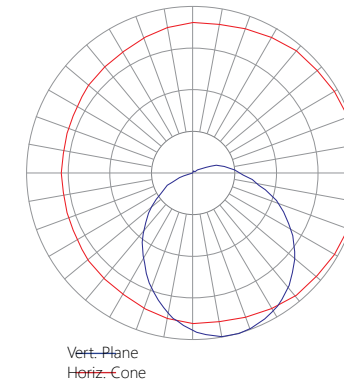
Vertical Hood, Clear Lens



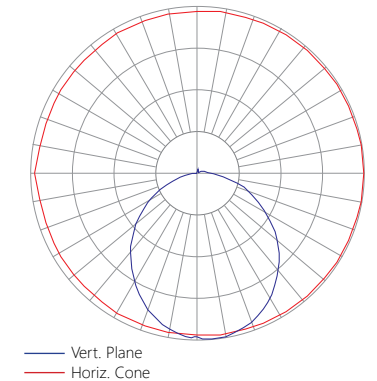
No Hood, Frosted Lens



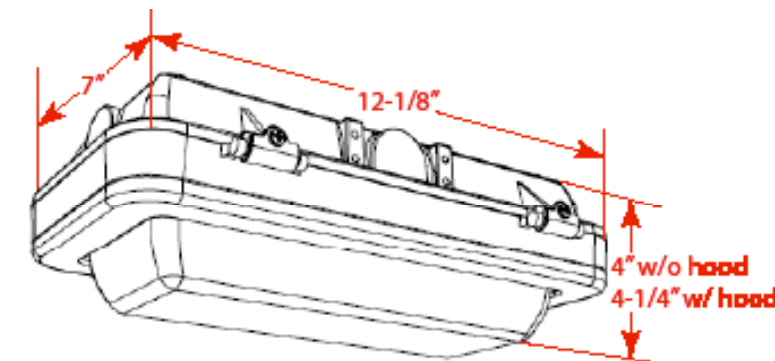
Horizontal Hood, Frosted Lens



Vertical Hood, Frosted Lens



Schematic:





Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

HZL 2 LED Hazardous Location

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Class 1, Division 2 Hazardous Location rated
- Available with clear or frosted lens
- Suitable for ceiling or wall mounting

Applications:

- Suitable for most interior or exterior Class 1, Division 2 hazardous location applications
- Industrial
 - Manufacturing

Ambient Operating Temp:

- -25°C to 40°C

Predicted L70 Lifetime:

- > 100,000 hrs (calculated)
- > 60,000 hrs (reported)
(based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Heavy-duty die cast aluminum housing and top frame
- 1/2" tapped coin plug openings for wiring entrance conduits
- Vandal resistant polycarbonate lens available in clear or frosted
- Powdercoat finish over a chromate conversion coating

Certifications:

- ETL listed for Hazardous Locations per UL844
- Class 1, Division 2, Groups A,B,C,D
- T4 Temperature Rating
- IP66

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



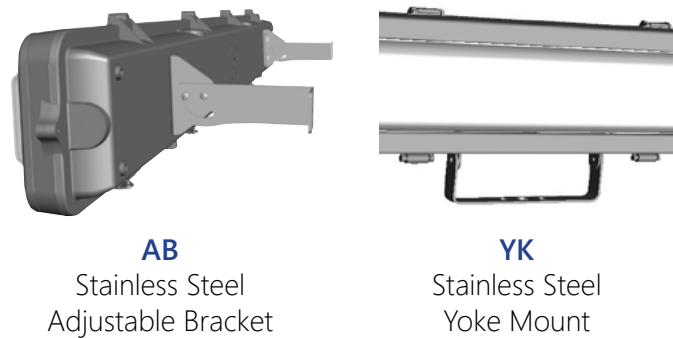
Ordering Guide:

example: HZL 2 MD UV CP 840-AB PT

Series	Length	Output	Voltage	Shielding	CRI/CCT	Mounting	Options	Finish
HZL	2							PT
HZL	2	LW MD	UV 34 48	CP FP	840 850	Blank AB YK	Blank EM	PT

- Length:** 2 2'
- Lumen Output:** LW Low, MD Medium
- Voltage:** UV 120-277V, 34 347V, 48 480V
- Shielding:** CP Clear Polycarbonate, FP Frosted Polycarbonate
- CRI/CCT:** 840 80 CRI / 4000K, 850 80 CRI / 5000K
- Mounting:** Blank None - Surface Mount, AB Adjustable Bracket, YK Yoke Mount
- Options:** Blank None, EM 4000mAH rechargeable Ni-MH battery back-up (available in 120-277V only)
- Finish:** PT Platinum

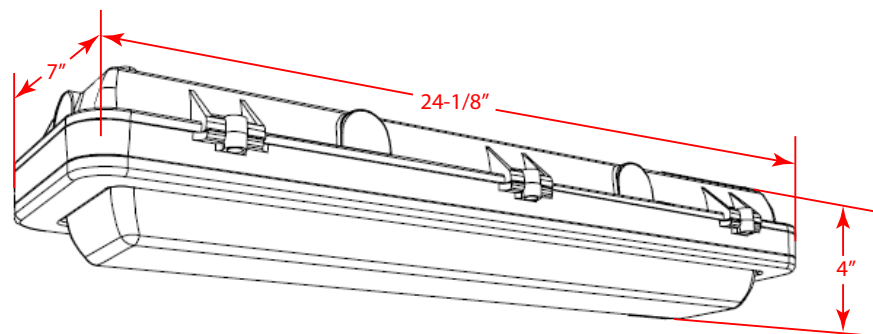
Mounting:



Performance Chart:

Catalog #	Watts	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
HZL 2 LW UV CP xxx	58	7017	121.4	7309	126.4
HZL 2 LW UV FP xxx	58	5695	99.9	5932	104.1
HZL 2 MD UV CP xxx	77	9882	127.8	10294	133.2
HZL 2 MD UV FP xxx	77	8021	103.9	8356	108.2

Schematic:

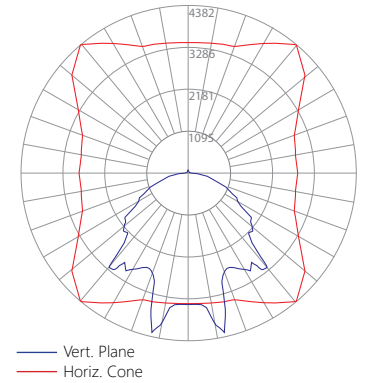


Photometric Data:

HZL 2 MD UV CP 850

Test No.: Q2016121601
 Luminaire Lumens: 10,294 lm
 Luminaire Watts: 77.3W
 Efficacy: 133.2 LPW
 Spacing Criterion (0-180): 1.22
 Spacing Criterion (90-270): 1.32

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	37037	39466	54384
55	32471	35967	49746
65	26878	28283	41183
75	20464	19689	25761
85	6560	6931	9342



Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

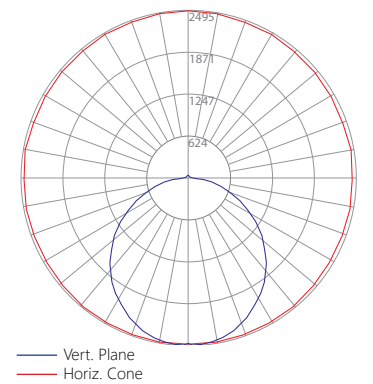
RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105			
1	108	104	99	95	105	101	97	94	96	93	90	92	90	87			
2	98	90	83	78	96	88	82	77	84	79	74	81	76	72			
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61			
4	82	70	61	55	80	69	60	54	66	59	53	63	57	52			
5	75	63	54	47	73	61	53	47	59	52	46	57	50	45			
6	70	56	47	41	68	55	47	41	53	46	40	51	45	40			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35			
8	60	47	38	32	58	46	38	32	44	37	32	43	36	31			
9	56	43	34	29	55	42	34	29	41	34	29	39	33	28			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

HZL 2 MD UV FP 850

Test No.: Q2016121501
 Luminaire Lumens: 8,356 lm
 Luminaire Watts: 77.2W
 Efficacy: 108.2 LPW
 Spacing Criterion (0-180): 1.30
 Spacing Criterion (90-270): 1.26

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	29653	29220	33395
55	27958	27323	31149
65	26159	24915	28002
75	23392	21601	23113
85	20573	17424	14182



Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102			
1	106	100	95	91	102	97	93	89	92	88	85	87	84	81			
2	95	86	79	73	92	84	77	71	79	74	69	75	70	66			
3	87	75	67	60	83	73	65	59	69	62	57	66	60	55			
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47			
5	72	59	50	43	70	58	49	42	55	47	41	52	45	40			
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35			
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31			
8	58	44	35	29	56	43	34	29	41	33	28	39	32	28			
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25			
10	50	37	29	24	49	36	28	23	35	28	23	33	27	23			

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	897.78	10.70
0-30	1905.64	22.80
0-40	3131.01	37.50
0-60	5660.91	67.80
0-80	7420.38	88.80
0-90	7838.60	93.80
90-120	467.93	5.60
90-130	476.28	5.70
90-150	489.20	5.90
90-180	516.91	6.20
0-180	8355.51	100.00



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

HZL 4 LED Hazardous Location

Features:

- High performance LED technology
- 0-10V dimming drivers standard
- Class 1, Division 2 Hazardous Location rated
- Available with clear or frosted lens
- Suitable for ceiling or wall mounting

Applications:

- Suitable for most interior or exterior Class 1, Division 2 hazardous location applications
- Industrial
 - Manufacturing

Ambient Operating Temp:

- -25°C to 40°C

Predicted L70 Lifetime:

- > 100,000 hrs (calculated)
- > 60,000 hrs (reported)
(based on LM-80, TM-21 and in-situ laboratory testing)

Construction:

- Heavy-duty die cast aluminum housing and top frame
- 1/2" tapped coin plug openings for wiring entrance conduits
- Vandal resistant polycarbonate lens available in clear or frosted
- Powdercoat finish over a chromate conversion coating

Certifications:

- ETL listed for Hazardous Locations per UL844
- Class 1, Division 2, Groups A,B,C,D
- T4 Temperature Rating
- IP66

Warranty:

- 5 year limited system warranty
- see www.LumenFocus.com for complete warranty terms and conditions



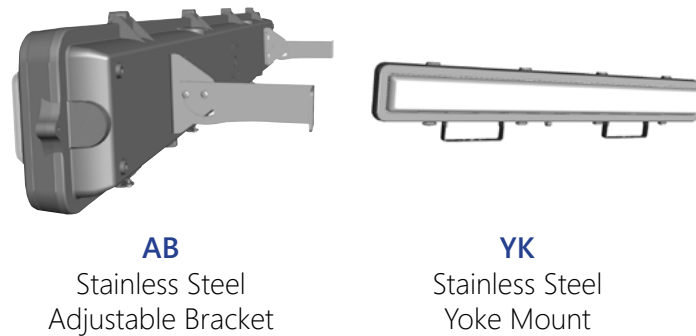
Ordering Guide:

example: HZL 4 MD UV CP 840-AB PT

Series	Length	Output	Voltage	Shielding	CRI/CCT	-	Mounting	Options	Finish
HZL	4					-			PT
HZL	4	LW MD	UV 34 48	CP FP	840 850		Blank AB YK	Blank EM	PT

- Length:** 4 4'
- Lumen Output:** LW Low, MD Medium
- Voltage:** UV 120-277V, 34 347V, 48 480V
- Shielding:** CP Clear Polycarbonate, FP Frosted Polycarbonate
- CRI/CCT:** 840 80 CRI / 4000K, 850 80 CRI / 5000K
- Mounting:** Blank None - Surface Mount, AB Adjustable Bracket, YK Yoke Mount
- Options:** Blank None, EM 4000mAh rechargeable Ni-MH battery back-up (available in 120-277V, LW models only)
- Finish:** PT Platinum

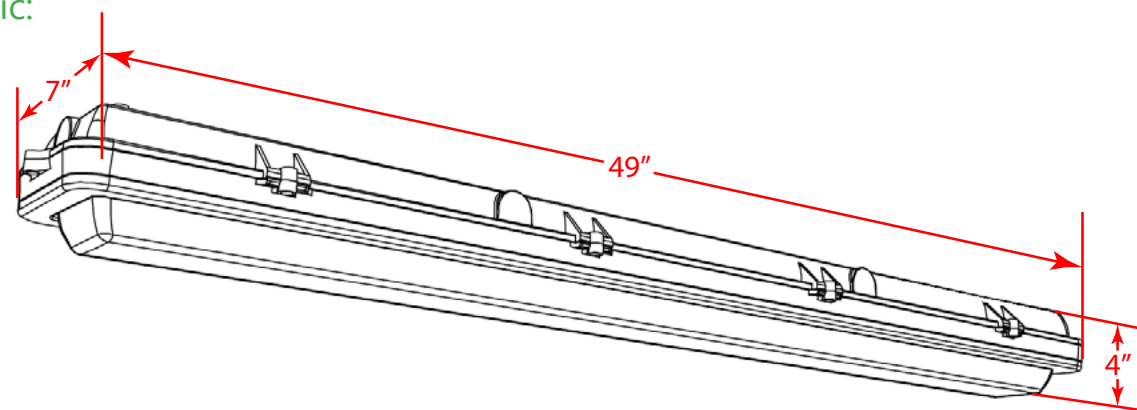
Mounting:



Performance Chart:

Catalog #	Watts	Lumens (840)	LPW (840)	Lumens (850)	LPW (850)
HZL 4 LW UV CP xxx	126	15636	122.7	16287	127.8
HZL 4 LW UV FP xxx	126	13172	105.3	13720	109.7
HZL 4 MD UV CP xxx	152	18982	124.9	19773	130.1
HZL 4 MD UV FP xxx	152	15930	105.4	16594	109.7

Schematic:

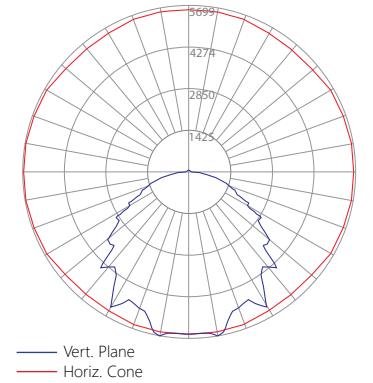


Photometric Data:

HZL 4 LW UV CP 850

Test No.: Q2016031103
 Luminaire Lumens: 16,287 lm
 Luminaire Watts: 127.4W
 Efficacy: 127.8 LPW
 Spacing Criterion (0-180): 1.32
 Spacing Criterion (90-270): 1.32

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	36130	31019	31000
55	35384	27939	26537
65	29151	20834	20627
75	29296	15340	11501
85	18121	5697	2225



Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105		
1	108	104	99	96	106	101	97	94	97	94	91	93	90	88		
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73		
3	90	79	71	65	87	78	70	64	74	68	63	71	66	61		
4	82	70	61	55	80	69	61	54	66	59	53	64	57	52		
5	76	63	54	47	73	61	53	47	59	52	46	57	50	45		
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40		
7	65	51	42	36	63	50	42	36	48	41	36	47	40	35		
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31		
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26		

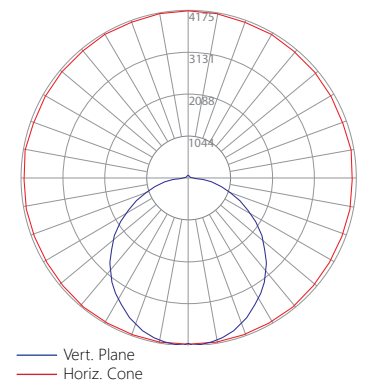
Zone	Lumens	%Fixt
0-20	2036.45	12.50
0-30	4320.92	26.50
0-40	7140.93	43.80
0-60	12777.31	78.40
0-80	15757.79	96.70
0-90	16073.99	98.70
90-120	133.33	0.80
90-130	143.03	0.90
90-150	169.88	1.00
90-180	213.38	1.30
0-180	16287.37	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

HZL 4 LW UV FP 850

Test No.: Q2016121401
 Luminaire Lumens: 13,720 lm
 Luminaire Watts: 125.1W
 Efficacy: 109.7 LPW
 Spacing Criterion (0-180): 1.28
 Spacing Criterion (90-270): 1.28

Angle In Degrees	Luminance Data (cd/sq.m)		
	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	29413	22643	21421
55	29955	20852	18669
65	31123	18757	15309
75	34544	16110	10398
85	52190	12581	4053



Coefficients Of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80				70				50				30			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10		
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102		
1	106	100	96	91	102	97	93	89	92	88	85	87	84	81		
2	96	87	79	73	92	84	77	72	80	74	69	75	71	67		
3	87	76	67	60	84	74	66	59	70	63	57	66	60	55		
4	79	67	57	50	76	65	56	50	62	54	48	59	52	47		
5	73	59	50	43	70	58	49	43	55	47	42	52	46	41		
6	67	53	44	37	65	52	43	37	50	42	36	47	41	35		
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31		
8	58	44	35	29	56	43	35	29	41	34	28	39	33	28		
9	54	40	32	26	52	39	31	26	38	31	26	36	30	25		
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23		

Zone	Lumens	%Fixt
0-20	1497.10	10.90
0-30	3175.88	23.10
0-40	5212.94	38.00
0-60	9400.52	68.50
0-80	12256.67	89.30
0-90	12913.25	94.10
90-120	731.33	5.30
90-130	745.09	5.40
90-150	765.71	5.60
90-180	807.13	5.90
0-180	13720.38	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08