





PBL G2 HD-2 | Premium LED Heavy Duty High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models - dimmable to <10% on all models, with most dimmable to 1%
- DALI drivers available based on configuration
- Field replaceable LED boards and drivers through Re-boardABILITY (more info on Page 3)
- 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
- Multiple controls options available
- The PBL G2's unibody design is surface mountable with easy access to the driver compartment from below
- Buy American Act compliant (All base luminaires are BAA compliant. Addition of options may change eligibility. Contact factory for details)

Applications:

Suitable for most commercial, industrial and institutional applications

- Gymnasiums
- Recreation Centers
- Manufacturing
- Warehouse
- Cold/Frozen Storage (cold temperature rules apply. Refer to warranty document at www.lumenfocus.com/support for details)

Ambient Operating Temp.:

• -30°C to 50°C

Construction:

- Housing is precision brake formed from heavy duty 0.063" 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/





Predicted Lifetime:

- L70: 174,000 hrs (calculated)
- L80: 108,000 hrs (calculated)
- L90: 49,000 hrs (reported)
- 86% lumen maintenance @ 72,000 hrs (based on LM-80, TM-21 and in-situ laboratory testing)

Warranty:

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













26

Orderi	ing G	uide:					€	example: PBL G2 2 MD	UV 850 HDW PN	1 ZOSD C6
Series	Length	Output	Voltage	Shielding	CRI/CCT	Gauge	Hanging	Controls	Options	Finish
PBL G2	2					HDW				
PBL G2 Gen 2 Premium High Bay	2 2'	MD Medium MH Medium High	UV 120-277 34 347V 48	Blank No Lenses FR Frosted Acrylic Diffusers	835 80 CRI/3500K 840 80 CRI/4000K 850	HDW Heavy Duty 0.063" Aluminum Wide-Body Housing	Blank None QC 10' Quick Hang Cable Kit	Blank No Controls ZOS Occupancy Sensor (On/Off)	Blank No Options EXT10 10-Year Extended Warranty ⁽⁵⁾	Blank White BK Matte Black
			480V		80 CRI/5000K		QC20 20' Quick Hang Cable Kit PM Pendant Mount ST(x) 3/4" Stem (Specify Length)	Cospancy Sensor (On/Off/Dim) ZOFD1 Leviton Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Sensor with Grouping (120-277V) ⁽¹⁾	C6 6' Single Circuit Cord C65W 6' Single Circuit Cord with Low Voltage Connections C10 10' Single Circuit Cord	Metallic Silver
(2) "_" = lens (3) 120-277V more det. (4) Max ceilir See Page (5) Not availa Consult fa	type. See Only. Ma ails. ng height f 6 for more able on all actory or s	Page 5 for le x ceiling heig	ens descrip ght is 50 fee Ruggedize advanced c tain conditi ntative for c	et. See page 5 ed sensor 50 fe controls. ions apply. details.	for			ZOFDU Leviton Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Sensor with Grouping, Scheduling (120-480V) ⁽¹⁾ Z221BL_ Wattstopper Programmable Photo/Motion Multi-Voltage Sensor (high/low/off) ⁽²⁾ Z321BL_ Wattstopper Bluetooth-	C105W 10' Single Circuit Cord with Low Voltage Connections D6 6' Dual Circuit Cord D10 10' Dual Circuit Cord P(NEMA) Plug (Specify NEMA configuration)	
WG(PBL2) WGE(PBL2	Wire () Extend	ded Wire Gu	ard for use	y) with end-mou				watstoppe indeboth- enabled Programmable Dimming/Occupancy/ Daylight Harvesting Multi- Voltage Sensor ⁽²⁾ ZOSMHB Leviton High Bay Microwave 0-10V Multi-Level Occupancy Sensor with Photocell ⁽³⁾ ZPC	SC Safety Cable F Fuse EM2 Emergency Pack ⁽⁶⁾ SDT(480V)	
	J.J / (C	2233011	(0/U	ci separat	ciy)				480V to 277V Step	

Ontrois Accessories (order separately)



For Enlighted Controls

Enlighted Remote Control Wall Switch WS-2-00 (for Enlighted Connected & IoT) Enlighted Remote Control Wall Switch WS-2-00-IL

(for Enlighted One)



For Z221BL_ Sensor

FSIR-100 Wireless Configuration Tool



For ZOSMHB Sensor

Wireless Configuration Tool **ZLSOR**



Down Transformer

CC

Conformal Coating

0-10V Dimming Leads for Easy Field Access

BAA Buy American Act Compliant

Photocell

ZENLO

Enlighted Ruggedized Sensor

with Dimming/Occupancy/ Daylight Harvesting and

Enlighted One System⁽⁴⁾

ZENLC

Enlighted Ruggedized Sensor with Dimming/Occupancy/

Daylight Harvesting and Enlighted Connected System⁽⁴⁾

ZENLI Enlighted Ruggedized Sensor with Dimming/Occupancy/ Daylight Harvesting and Enlighted IoT System⁽⁴⁾

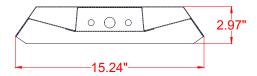


Performance Chart:

Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW	Catalog #	Lumens	Watts	LPW
PBL G2 2 MD UV 835	11706	71	164.2	PBL G2 2 MD UV 840	12126	71	170.1	PBL G2 2 MD UV 850	12126	71	170.1
PBL G2 2 MH UV 835	13674	85	160.7	PBL G2 2 MH UV 840	14164	85	166.5	PBL G2 2 MH UV 850	14164	85	166.5
PBL G2 2 MD UV FR 835	11005	71	154.3	PBL G2 2 MD UV FR 840	11399	71	159.9	PBL G2 2 MD UV FR 850	11399	71	159.9
PBL G2 2 MH UV FR 835	12789	85	150.5	PBL G2 2 MH UV FR 840	13247	85	155.9	PBL G2 2 MH UV FR 850	13247	85	155.9

<u>Lumen Adjustment Factors:</u> WG: 0.95

Schematic:







The PBL G2 HD features field replaceable boards and drivers. This allows you to upgrade to more efficient technology in the future. Or, in the rare event of a failure, you can rapidly replace defective components. Re-boardABILITY helps to ensure you won't get stuck with an obsolete light fixture. Learn more about Re-boardABILITY here.





<u>Click here for a video demonstration of the re-boarding process on a PBL.</u>

Note: Exact time varies depending on the model.





Photometric Data:

PBL G2 2 MH UV 835

Test No.: LLIA001249-009-R01 Luminaire Lumens: 13,674 lm Luminaire Watts: 85.1W Efficacy: 160.7 LPW Spacing Criterion (0-180): 1.30 Spacing Criterion (90-270): 1.28

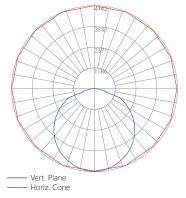
Average Angle In Áverage Average Degrees 0-Deg 45-Deg 90-Deg 27663 26763 24655 27058 26395 27033 26671 26403 45 55 65 75 85 24988 16470 19869 21636 4777 7602 5786

Luminance Data (cd/sq.m)

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	97	106	102	98	95	98	95	92	94	92	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	63	72	67	62
4	83	71	62	55	80	69	61	55	67	60	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	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	39	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 $\,$



Zonal Lume	n Summary	
Zone	Lumens	%Fixt
0-20	1729.2	12.6
0-30	3686.1	27.0
0-40	6078.9	44.5
0-60	10908.7	79.8
0-80	13544.3	99.0
0-90	13670.3	100.0
90-120	3.9	0.0
90-130	3.9	0.0
90-150	3.9	0.0
90-180	3.9	0.0
0-180	13674.2	100.0

PBL G2 2 MH UV FR 835

Test No.: LLIA001249-007A Luminaire Lumens: 12,789 lm Luminaire Watts: 85.0W Efficacy: 150.5 LPW Spacing Criterion (0-180): 12

Spacing Criterion (0-180): 1.24 Spacing Criterion (90-270): 1.28

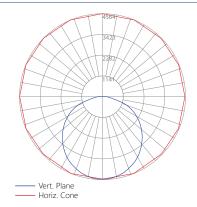
Luminance Data (cd/sq.m)

Average Áverage Average Angle In 0-Deg 45-Deg Degrees 90-Deg 24877 25922 25803 26028 45 55 65 23385 23973 22990 20405 16649 21409 75 85 12551 18759 7535 16214 14061

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	88
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62
4	83	70	62	55	80	69	61	55	67	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



Zonal Lumen	Summary	
Zone	Lumens	%Fixt
0-20	1661.5	13.0
0-30	3523.7	27.6
0-40	5759.9	45.0
0-60	10112.5	79.1
0-80	12549.2	98.1
0-90	12785.2	100.0
90-120	3.9	0.0
90-130	3.9	0.0
90-150	3.9	0.0
90-180	3.9	0.0
0-180	12789.0	100.0





Controls Summary:

Control Code	Туре	Capabilities	Communication
zos	Motion (PIR)	On/Off	Wired
ZOSD	Motion (PIR), Photosensor	On/Low/Off	Wired 1-10V
ZOFD1	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZOFDU	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
Z221BLx	Motion (PIR), Photosensor	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via IR remote (sold separately)
Z321BLx	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)
ZOSMHB	Motion (Microwave), Photosensor	On/Low/Off	Wired 0-10V, Programmable via ZLSOR IR remote (sold separately)
ZPC	Photosensor	On/Off	Wired
ZENLO	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Upgradable to Connected (ZENLC) or IoT (ZENLI)	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted Room Controller WS-2-00-IL (sold separately)
ZENLC	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, Upgradable to IoT (ZENLI), LLLC (Enlighted IoT)*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software
ZENLI	MoMotion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, LLLC (Enlighted IoT)*, Space - Building Utilization*, Where - Real Time Location Services*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software

LLLC = Luminaire Level Lighting Control

Programmable Dimming Sensors:

ZOFDx Sensor Option

- Leviton Smart IP66 passive infrared (PIR) sensors
- Features mesh grouping (16 devices per group), occupancy sensing, daylight harvesting, scheduling (for ZOSFDU only), single-level switching
- Comes pre-installed on the end cap
- Rated for cold locations
- Configurable through the Leviton Smart Sensor App using a smartphone or other Bluetooth-enabled iOS or Android device



The ZOFD option includes four sensor lenses that can easily be installed or swapped out in the field. From left: the high bay lens (20'-40' mounting), the high bay lens with aisleway mask, the low bay lens (8'-20' mounting), and the low bay lens with aisleway mask.



FSIR-100

Z221B, Z321B Sensor Options

- 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 for Bluetooth-enabled Z321B adjustable via phone app iOS or Android
- Parameters for Z221B adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
 - **L2:** 360° lens, maximum coverage 48′, diameter from 8′ height
 - L3: 360° lens, maximum coverage 40′, diameter from 20′ height
 - L7: 360° lens, maximum coverage 100′, diameter from 40′ height

ZOSMHB Sensor Option

- Provides occupancy detection and multi-level control with adjustable time-outs
- Tri-level dimming control
- Comes pre-installed on the end cap
- Suitable for cold storage locations
- Built-in photocell reads brightness values. Sensor does not switch luminaire on if there is suffcient ambient light
- Control parameters selected manually via DIP switches, or using the optional ZLSOR remote (sold separately) adjustable parameters include sensitivity, hold time, lux level, stand-by light level, stand-by hold time
- Maximum mounting height of 50 feet, with adjustable coverage radius up to 30 feet





^{*} Additional equipment required. Contact LumenFocus representative for details



Enlighted: All-in-one sensors, upgradeable systems

Enlighted's IP65-rated Ruggedized Sensor is an all-inone unit: task tuning, high-end trimming, daylight harvesting, and occupancy/vacancy detection. Max installation height is 50 feet.

Enlighted sensors come standard with the Enlighted
One system (the "ZENLO" option). Enlighted
Connected ("ZENLC") offers even more options.
The Enlighted IoT ("ZENLI") option allows the full
implementation of Enlighted's services. Each system
can be fully upgraded to the next tier in the future. So if
you start with Enlighted One but want to add energy reporting
or building management systems integration in the future, you can.

Enlighted Capabilities*	Enlighted One (ZENLO)	Enlighted Connected (ZENLC)	Enlighted IoT (ZENLI)
Motion and Switch Groups	✓	✓	✓
Daylight Harvesting	✓	✓	✓
Schedule Lighting		✓	✓
Energy Reporting & Optimization		✓	✓
Environment Data & Lighting Controls API		✓	✓
Building Management System Integration		✓	✓
Where & Space Applications			✓
Location & Occupancy APIs & Beaconing			✓
Future App & API Ready			✓

Note: Additional equipment required for ZENLC and ZENLI

Real-time data analytics

Enlighted's control units compile data in real-time, which can be viewed via the Energy Manager. The Energy Manager is part of the Enlighted Connected and Enlighted IoT configurations.

- Real-time measurements and verification of energy savings
- Space analytics data can be compiled into motion trails and heat maps
- Analyze traffic density and congestion in a space



Learn more about our available advanced controls options here:

www.lumenfocus.com/controls-overview

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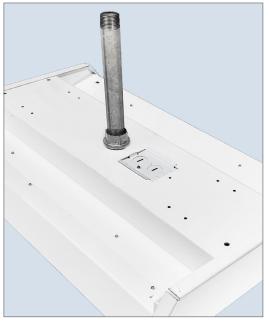
Mounting:



Surface Mount

The PBL G2 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).





Pendant Mount The PBL G2 HD can be pendant mounted with optional 3/4" hub. Stem also available as an option.

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

are other NEMA configurations

circuit or dual circuit, 6' or 10'.

Standard plug is optional, as

if specified.

Finish

In addition to the standard white finish, the PBL G2 is also available in matte black (BK) and metallic silver (SL).





