



IES FLOOD REPORT

PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]ITL68902
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUE DATE]06/21/11
[MANUFAC] LumenFocus, LLC
[LUMCAT]LED R1 12 LED
[LUMINAIRE]MOLDED WHITE PLASTIC HOUSING, TWO MOLDED WHITE PLASTIC SWIVEL
[MORE]HEAD ASSEMBLIES, EACH HEAD ASSEMBLY CONSISTS OF: MOLDED WHITE
[MORE]PLASTIC HOUSING, ONE CIRCUIT BOARD WITH 12 LEDS, MOLDED
[MORE]PLASTIC REFLECTOR WITH SPECULAR FINISH AND ONE APERTURE PER
[MORE]LED, CLEAR PRISMATIC PLASTIC LENS. ONLY ONE HEAD ASSEMBLY
[MORE]ENERGIZED FOR THIS TEST.
[LAMP]TWELVE WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR
[MORE]CYLINDRICAL INTEGRAL LENS WITH HEMISPHERICAL END, VERTICAL
[MORE]BASE-UP POSITION.
[OTHER]TOTAL INPUT WATTS = 0.788 AT 3.60 VOLTS DC
[MOUNTING]SURFACE
[NOTE]DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT CLIENT
[MORE]REQUESTED INPUT VOLTAGE (3.6VDC) TO THE LAMP ASSEMBLY.
[OTHER]TEST PROCEDURE: IESNA LM-79-08
[OTHER]TEST DISTANCE = 25.25 FEET
[ABSOLUTE LUMENS]65.4

Note: Candela values converted from Type-C to Type-B

CHARACTERISTICS

NEMA Type	5 H x 5 V
Maximum Candela	106.4
Maximum Candela Angle	0H -7V
Horizontal Beam Angle (50%)	40.2
Vertical Beam Angle (50%)	39.2
Horizontal Field Angle (10%)	86.7
Vertical Field Angle (10%)	75.5
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	30
Beam Efficiency	N.A.
Field Lumens	58
Field Efficiency	N.A.
Spill Lumens	7
Luminaire Lumens	66
Total Efficiency	N.A.
Total Luminaire Watts	0.788
Ballast Factor	1.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	.2	90	0
85	.2	85	.1
75	.5	75	.3
65	1.2	65	.5
55	2.6	55	.8
47.5	6.6	47.5	1.5
42.5	11.5	42.5	3.1
37.5	22	37.5	11
33	24.6	33	15.8
29	33.6	29	21.7
25.5	37.1	25.5	31.8
22.5	41.4	22.5	40.6
19.5	57.8	19.5	53.6
17	75.8	17	62.5
15	86.7	15	65.9
13	88.9	13	74.2
11	93.7	11	89.7
9	94.6	9	103.1
7	90.8	7	106.4
5	88.6	5	100
3	90.7	3	104.6
1	95.4	1	97.4
0	95.7	0	95.7
-1	95.4	-1	97.4
-3	90.7	-3	104.6
-5	88.6	-5	100
-7	90.8	-7	106.4
-9	94.6	-9	103.1
-11	93.7	-11	89.7
-13	88.9	-13	74.2
-15	86.7	-15	65.9
-17	75.8	-17	62.5
-19.5	57.8	-19.5	53.6
-22.5	41.4	-22.5	40.6
-25.5	37.1	-25.5	31.8
-29	33.6	-29	21.7
-33	24.6	-33	15.8
-37.5	22	-37.5	11
-42.5	11.5	-42.5	3.1
-47.5	6.6	-47.5	1.5
-55	2.6	-55	.8
-65	1.2	-65	.5
-75	.5	-75	.3
-85	.2	-85	.1
-90	.2	-90	0

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

CANDELA TABULATION

Maximum Candela = 106.4

Beam Edge = 53.2 Cd (50% of Max.)

Field Edge = 10.64 Cd (10% of Max.)

* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	<u>-90.0</u>	<u>-85.0</u>	<u>-75.0</u>	<u>-65.0</u>	<u>-55.0</u>	<u>-47.5</u>	<u>-42.5</u>	<u>-37.5</u>	<u>-33.0</u>	<u>-29.0</u>
90.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
85.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.0	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
65.0	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.4
55.0	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.8
47.5	0.2	0.2	0.3	0.5	0.7	0.8	0.9	1.1	1.3	1.3
42.5	0.2	0.2	0.3	0.6	0.8	1.0	1.4	1.6	1.5	1.7
37.5	0.2	0.2	0.4	0.7	1.0	1.5	2.0	2.2	2.5	2.9
33.0	0.2	0.2	0.4	0.8	1.1	2.1	2.7	3.5	4.5	5.1
29.0	0.2	0.2	0.4	0.8	1.3	2.7	3.6	5.8	8.0	9.4
25.5	0.2	0.2	0.4	0.9	1.5	3.2	4.9	8.8	11.4 *	13.3 *
22.5	0.2	0.2	0.4	0.9	1.6	3.6	6.4	11.8 *	13.9 *	16.6 *
19.5	0.2	0.2	0.5	1.0	1.8	4.1	8.1	14.3 *	15.7 *	19.9 *
17.0	0.2	0.2	0.5	1.0	2.0	4.6	9.0	15.6 *	17.7 *	22.8 *
15.0	0.2	0.2	0.5	1.0	2.1	5.0	9.7	16.2 *	19.3 *	25.3 *
13.0	0.2	0.2	0.5	1.1	2.2	5.4	10.4	16.7 *	20.4 *	27.6 *
11.0	0.2	0.2	0.5	1.1	2.3	5.7	10.9 *	17.4 *	21.5 *	29.0 *
9.0	0.2	0.2	0.5	1.1	2.4	5.9	11.3 *	18.2 *	22.6 *	30.3 *
7.0	0.2	0.2	0.5	1.1	2.5	6.1	11.6 *	19.1 *	23.4 *	31.3 *
5.0	0.2	0.2	0.5	1.2	2.5	6.3	11.7 *	20.0 *	24.0 *	32.0 *
3.0	0.2	0.2	0.5	1.2	2.6	6.5	11.8 *	20.9 *	24.4 *	32.8 *
1.0	0.2	0.2	0.5	1.2	2.6	6.6	11.6 *	21.7 *	24.6 *	33.4 *
0.0	0.2	0.2	0.5	1.2	2.6	6.6	11.5 *	22.0 *	24.6 *	33.6 *
-1.0	0.2	0.2	0.5	1.2	2.6	6.6	11.6 *	21.7 *	24.6 *	33.4 *
-3.0	0.2	0.2	0.5	1.2	2.6	6.5	11.8 *	20.9 *	24.4 *	32.8 *
-5.0	0.2	0.2	0.5	1.2	2.5	6.3	11.7 *	20.0 *	24.0 *	32.0 *
-7.0	0.2	0.2	0.5	1.1	2.5	6.1	11.6 *	19.1 *	23.4 *	31.3 *
-9.0	0.2	0.2	0.5	1.1	2.4	5.9	11.3 *	18.2 *	22.6 *	30.3 *
-11.0	0.2	0.2	0.5	1.1	2.3	5.7	10.9 *	17.4 *	21.5 *	29.0 *
-13.0	0.2	0.2	0.5	1.1	2.2	5.4	10.4	16.7 *	20.4 *	27.6 *
-15.0	0.2	0.2	0.5	1.0	2.1	5.0	9.7	16.2 *	19.3 *	25.3 *
-17.0	0.2	0.2	0.5	1.0	2.0	4.6	9.0	15.6 *	17.7 *	22.8 *
-19.5	0.2	0.2	0.5	1.0	1.8	4.1	8.1	14.3 *	15.7 *	19.9 *
-22.5	0.2	0.2	0.4	0.9	1.6	3.6	6.4	11.8 *	13.9 *	16.6 *
-25.5	0.2	0.2	0.4	0.9	1.5	3.2	4.9	8.8	11.4 *	13.3 *
-29.0	0.2	0.2	0.4	0.8	1.3	2.7	3.6	5.8	8.0	9.4
-33.0	0.2	0.2	0.4	0.8	1.1	2.1	2.7	3.5	4.5	5.1
-37.5	0.2	0.2	0.4	0.7	1.0	1.5	2.0	2.2	2.5	2.9
-42.5	0.2	0.2	0.3	0.6	0.8	1.0	1.4	1.6	1.5	1.7
-47.5	0.2	0.2	0.3	0.5	0.7	0.8	0.9	1.1	1.3	1.3
-55.0	0.2	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.8
-65.0	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.4
-75.0	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
-85.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-90.0	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

CANDELA TABULATION - (Cont.)

Vert. Angles	Horizontal Angles									
	<u>-25.5</u>	<u>-22.5</u>	<u>-19.5</u>	<u>-17.0</u>	<u>-15.0</u>	<u>-13.0</u>	<u>-11.0</u>	<u>-9.0</u>	<u>-7.0</u>	<u>-5.0</u>
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65.0	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
55.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
47.5	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.8	1.7
42.5	2.1	2.5	2.9	3.2	3.8	4.1	4.3	4.4	4.3	4.0
37.5	4.0	5.4	6.6	7.3	7.7	8.3	8.9	9.4	9.9	10.4
33.0	7.1	9.1	10.9 *	11.7 *	12.0 *	12.0 *	12.8 *	13.7 *	14.4 *	14.9 *
29.0	11.6 *	13.9 *	15.2 *	15.8 *	16.3 *	17.5 *	18.4 *	19.5 *	20.4 *	21.2 *
25.5	16.2 *	17.9 *	20.5 *	23.5 *	25.2 *	26.5 *	27.4 *	28.5 *	29.9 *	30.9 *
22.5	19.6 *	23.4 *	28.5 *	31.5 *	33.5 *	35.0 *	35.9 *	36.5 *	38.3 *	39.6 *
19.5	24.3 *	29.7 *	35.3 *	40.0 *	41.9 *	43.3 *	44.5 *	45.8 *	47.6 *	49.9 *
17.0	28.6 *	32.9 *	39.5 *	45.2 *	47.7 *	48.7 *	50.3 *	52.7 *	54.0 *	56.6 *
15.0	30.7 *	34.8 *	41.8 *	47.7 *	50.5 *	52.3 *	56.3 *	59.1 *	59.0 *	59.8 *
13.0	31.7 *	36.1 *	44.1 *	51.3 *	55.1 *	59.6 *	65.1 *	66.8 *	66.0 *	65.5 *
11.0	32.2 *	36.8 *	47.0 *	56.9 *	64.2 *	70.5 *	74.6 *	76.7 *	77.9 *	79.9 *
9.0	33.7 *	38.9 *	52.3 *	65.5 *	74.0 *	79.1 *	82.5 *	87.0 *	89.5 *	93.0 *
7.0	35.0 *	40.8 *	56.3 *	73.8 *	82.1 *	84.8 *	88.1 *	93.0 *	96.9 *	100.0 *
5.0	35.9 *	41.9 *	58.4 *	75.8 *	85.1 *	87.9 *	92.6 *	97.5 *	99.1 *	97.8 *
3.0	36.5 *	42.1 *	59.2 *	76.6 *	85.9 *	88.9 *	94.0 *	98.8 *	99.4 *	96.5 *
1.0	36.9 *	41.8 *	58.6 *	76.6 *	86.7 *	89.1 *	94.2 *	96.1 *	93.5 *	91.7 *
0.0	37.1 *	41.4 *	57.8 *	75.8 *	86.7 *	88.9 *	93.7 *	94.6 *	90.8 *	88.6 *
-1.0	36.9 *	41.8 *	58.6 *	76.6 *	86.7 *	89.1 *	94.2 *	96.1 *	93.5 *	91.7 *
-3.0	36.5 *	42.1 *	59.2 *	76.6 *	85.9 *	88.9 *	94.0 *	98.8 *	99.4 *	96.5 *
-5.0	35.9 *	41.9 *	58.4 *	75.8 *	85.1 *	87.9 *	92.6 *	97.5 *	99.1 *	97.8 *
-7.0	35.0 *	40.8 *	56.3 *	73.8 *	82.1 *	84.8 *	88.1 *	93.0 *	96.9 *	100.0 *
-9.0	33.7 *	38.9 *	52.3 *	65.5 *	74.0 *	79.1 *	82.5 *	87.0 *	89.5 *	93.0 *
-11.0	32.2 *	36.8 *	47.0 *	56.9 *	64.2 *	70.5 *	74.6 *	76.7 *	77.9 *	79.9 *
-13.0	31.7 *	36.1 *	44.1 *	51.3 *	55.1 *	59.6 *	65.1 *	66.8 *	66.0 *	65.5 *
-15.0	30.7 *	34.8 *	41.8 *	47.7 *	50.5 *	52.3 *	56.3 *	59.1 *	59.0 *	59.8 *
-17.0	28.6 *	32.9 *	39.5 *	45.2 *	47.7 *	48.7 *	50.3 *	52.7 *	54.0 *	56.6 *
-19.5	24.3 *	29.7 *	35.3 *	40.0 *	41.9 *	43.3 *	44.5 *	45.8 *	47.6 *	49.9 *
-22.5	19.6 *	23.4 *	28.5 *	31.5 *	33.5 *	35.0 *	35.9 *	36.5 *	38.3 *	39.6 *
-25.5	16.2 *	17.9 *	20.5 *	23.5 *	25.2 *	26.5 *	27.4 *	28.5 *	29.9 *	30.9 *
-29.0	11.6 *	13.9 *	15.2 *	15.8 *	16.3 *	17.5 *	18.4 *	19.5 *	20.4 *	21.2 *
-33.0	7.1	9.1	10.9 *	11.7 *	12.0 *	12.0 *	12.8 *	13.7 *	14.4 *	14.9 *
-37.5	4.0	5.4	6.6	7.3	7.7	8.3	8.9	9.4	9.9	10.4
-42.5	2.1	2.5	2.9	3.2	3.8	4.1	4.3	4.4	4.3	4.0
-47.5	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.8	1.8	1.7
-55.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-65.0	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
-75.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
-85.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Vert. Angles	Horizontal Angles									
	<u>-3.0</u>	<u>-1.0</u>	<u>0.0</u>	<u>1.0</u>	<u>3.0</u>	<u>5.0</u>	<u>7.0</u>	<u>9.0</u>	<u>11.0</u>	<u>13.0</u>
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

CANDELA TABULATION - (Cont.)

55.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
47.5	1.6	1.5	1.5	1.5	1.6	1.7	1.8	1.8	1.8	1.7
42.5	3.8	3.3	3.1	3.3	3.8	4.0	4.3	4.4	4.3	4.1
37.5	10.7 *	10.9 *	11.0 *	10.9 *	10.7 *	10.4	9.9	9.4	8.9	8.3
33.0	15.3 *	15.7 *	15.8 *	15.7 *	15.3 *	14.9 *	14.4 *	13.7 *	12.8 *	12.0 *
29.0	21.7 *	21.8 *	21.7 *	21.8 *	21.7 *	21.2 *	20.4 *	19.5 *	18.4 *	17.5 *
25.5	31.6 *	31.9 *	31.8 *	31.9 *	31.6 *	30.9 *	29.9 *	28.5 *	27.4 *	26.5 *
22.5	40.4 *	40.7 *	40.6 *	40.7 *	40.4 *	39.6 *	38.3 *	36.5 *	35.9 *	35.0 *
19.5	51.8 *	53.2 *	53.6 *	53.2 *	51.8 *	49.9 *	47.6 *	45.8 *	44.5 *	43.3 *
17.0	59.2 *	61.6 *	62.5 *	61.6 *	59.2 *	56.6 *	54.0 *	52.7 *	50.3 *	48.7 *
15.0	62.6 *	65.0 *	65.9 *	65.0 *	62.6 *	59.8 *	59.0 *	59.1 *	56.3 *	52.3 *
13.0	70.5 *	73.6 *	74.2 *	73.6 *	70.5 *	65.5 *	66.0 *	66.8 *	65.1 *	59.6 *
11.0	84.5 *	89.0 *	89.7 *	89.0 *	84.5 *	79.9 *	77.9 *	76.7 *	74.6 *	70.5 *
9.0	97.8 *	102.2 *	103.1 *	102.2 *	97.8 *	93.0 *	89.5 *	87.0 *	82.5 *	79.1 *
7.0	103.5 *	105.3 *	106.4 *	105.3 *	103.5 *	100.0 *	96.9 *	93.0 *	88.1 *	84.8 *
5.0	98.6 *	99.3 *	100.0 *	99.3 *	98.6 *	97.8 *	99.1 *	97.5 *	92.6 *	87.9 *
3.0	98.1 *	103.2 *	104.6 *	103.2 *	98.1 *	96.5 *	99.4 *	98.8 *	94.0 *	88.9 *
1.0	93.3 *	97.4 *	97.4 *	97.4 *	93.3 *	91.7 *	93.5 *	96.1 *	94.2 *	89.1 *
0.0	90.7 *	95.4 *	95.7 *	95.4 *	90.7 *	88.6 *	90.8 *	94.6 *	93.7 *	88.9 *
-1.0	93.3 *	97.4 *	97.4 *	97.4 *	93.3 *	91.7 *	93.5 *	96.1 *	94.2 *	89.1 *
-3.0	98.1 *	103.2 *	104.6 *	103.2 *	98.1 *	96.5 *	99.4 *	98.8 *	94.0 *	88.9 *
-5.0	98.6 *	99.3 *	100.0 *	99.3 *	98.6 *	97.8 *	99.1 *	97.5 *	92.6 *	87.9 *
-7.0	103.5 *	105.3 *	106.4 *	105.3 *	103.5 *	100.0 *	96.9 *	93.0 *	88.1 *	84.8 *
-9.0	97.8 *	102.2 *	103.1 *	102.2 *	97.8 *	93.0 *	89.5 *	87.0 *	82.5 *	79.1 *
-11.0	84.5 *	89.0 *	89.7 *	89.0 *	84.5 *	79.9 *	77.9 *	76.7 *	74.6 *	70.5 *
-13.0	70.5 *	73.6 *	74.2 *	73.6 *	70.5 *	65.5 *	66.0 *	66.8 *	65.1 *	59.6 *
-15.0	62.6 *	65.0 *	65.9 *	65.0 *	62.6 *	59.8 *	59.0 *	59.1 *	56.3 *	52.3 *
-17.0	59.2 *	61.6 *	62.5 *	61.6 *	59.2 *	56.6 *	54.0 *	52.7 *	50.3 *	48.7 *
-19.5	51.8 *	53.2 *	53.6 *	53.2 *	51.8 *	49.9 *	47.6 *	45.8 *	44.5 *	43.3 *
-22.5	40.4 *	40.7 *	40.6 *	40.7 *	40.4 *	39.6 *	38.3 *	36.5 *	35.9 *	35.0 *
-25.5	31.6 *	31.9 *	31.8 *	31.9 *	31.6 *	30.9 *	29.9 *	28.5 *	27.4 *	26.5 *
-29.0	21.7 *	21.8 *	21.7 *	21.8 *	21.7 *	21.2 *	20.4 *	19.5 *	18.4 *	17.5 *
-33.0	15.3 *	15.7 *	15.8 *	15.7 *	15.3 *	14.9 *	14.4 *	13.7 *	12.8 *	12.0 *
-37.5	10.7 *	10.9 *	11.0 *	10.9 *	10.7 *	10.4	9.9	9.4	8.9	8.3
-42.5	3.8	3.3	3.1	3.3	3.8	4.0	4.3	4.4	4.3	4.1
-47.5	1.6	1.5	1.5	1.5	1.6	1.7	1.8	1.8	1.8	1.7
-55.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
-65.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
-75.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
-85.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Vert. Angles	Horizontal Angles									
	<u>15.0</u>	<u>17.0</u>	<u>19.5</u>	<u>22.5</u>	<u>25.5</u>	<u>29.0</u>	<u>33.0</u>	<u>37.5</u>	<u>42.5</u>	<u>47.5</u>
90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
85.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65.0	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4
55.0	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6
47.5	1.6	1.5	1.4	1.3	1.2	1.3	1.3	1.1	0.9	0.8
42.5	3.8	3.2	2.9	2.5	2.1	1.7	1.5	1.6	1.4	1.0
37.5	7.7	7.3	6.6	5.4	4.0	2.9	2.5	2.2	2.0	1.5
33.0	12.0 *	11.7 *	10.9 *	9.1	7.1	5.1	4.5	3.5	2.7	2.1
29.0	16.3 *	15.8 *	15.2 *	13.9 *	11.6 *	9.4	8.0	5.8	3.6	2.7
25.5	25.2 *	23.5 *	20.5 *	17.9 *	16.2 *	13.3 *	11.4 *	8.8	4.9	3.2

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

CANDELA TABULATION - (Cont.)

22.5	33.5 *	31.5 *	28.5 *	23.4 *	19.6 *	16.6 *	13.9 *	11.8 *	6.4	3.6
19.5	41.9 *	40.0 *	35.3 *	29.7 *	24.3 *	19.9 *	15.7 *	14.3 *	8.1	4.1
17.0	47.7 *	45.2 *	39.5 *	32.9 *	28.6 *	22.8 *	17.7 *	15.6 *	9.0	4.6
15.0	50.5 *	47.7 *	41.8 *	34.8 *	30.7 *	25.3 *	19.3 *	16.2 *	9.7	5.0
13.0	55.1 *	51.3 *	44.1 *	36.1 *	31.7 *	27.6 *	20.4 *	16.7 *	10.4	5.4
11.0	64.2 *	56.9 *	47.0 *	36.8 *	32.2 *	29.0 *	21.5 *	17.4 *	10.9 *	5.7
9.0	74.0 *	65.5 *	52.3 *	38.9 *	33.7 *	30.3 *	22.6 *	18.2 *	11.3 *	5.9
7.0	82.1 *	73.8 *	56.3 *	40.8 *	35.0 *	31.3 *	23.4 *	19.1 *	11.6 *	6.1
5.0	85.1 *	75.8 *	58.4 *	41.9 *	35.9 *	32.0 *	24.0 *	20.0 *	11.7 *	6.3
3.0	85.9 *	76.6 *	59.2 *	42.1 *	36.5 *	32.8 *	24.4 *	20.9 *	11.8 *	6.5
1.0	86.7 *	76.6 *	58.6 *	41.8 *	36.9 *	33.4 *	24.6 *	21.7 *	11.6 *	6.6
0.0	86.7 *	75.8 *	57.8 *	41.4 *	37.1 *	33.6 *	24.6 *	22.0 *	11.5 *	6.6
-1.0	86.7 *	76.6 *	58.6 *	41.8 *	36.9 *	33.4 *	24.6 *	21.7 *	11.6 *	6.6
-3.0	85.9 *	76.6 *	59.2 *	42.1 *	36.5 *	32.8 *	24.4 *	20.9 *	11.8 *	6.5
-5.0	85.1 *	75.8 *	58.4 *	41.9 *	35.9 *	32.0 *	24.0 *	20.0 *	11.7 *	6.3
-7.0	82.1 *	73.8 *	56.3 *	40.8 *	35.0 *	31.3 *	23.4 *	19.1 *	11.6 *	6.1
-9.0	74.0 *	65.5 *	52.3 *	38.9 *	33.7 *	30.3 *	22.6 *	18.2 *	11.3 *	5.9
-11.0	64.2 *	56.9 *	47.0 *	36.8 *	32.2 *	29.0 *	21.5 *	17.4 *	10.9 *	5.7
-13.0	55.1 *	51.3 *	44.1 *	36.1 *	31.7 *	27.6 *	20.4 *	16.7 *	10.4	5.4
-15.0	50.5 *	47.7 *	41.8 *	34.8 *	30.7 *	25.3 *	19.3 *	16.2 *	9.7	5.0
-17.0	47.7 *	45.2 *	39.5 *	32.9 *	28.6 *	22.8 *	17.7 *	15.6 *	9.0	4.6
-19.5	41.9 *	40.0 *	35.3 *	29.7 *	24.3 *	19.9 *	15.7 *	14.3 *	8.1	4.1
-22.5	33.5 *	31.5 *	28.5 *	23.4 *	19.6 *	16.6 *	13.9 *	11.8 *	6.4	3.6
-25.5	25.2 *	23.5 *	20.5 *	17.9 *	16.2 *	13.3 *	11.4 *	8.8	4.9	3.2
-29.0	16.3 *	15.8 *	15.2 *	13.9 *	11.6 *	9.4	8.0	5.8	3.6	2.7
-33.0	12.0 *	11.7 *	10.9 *	9.1	7.1	5.1	4.5	3.5	2.7	2.1
-37.5	7.7	7.3	6.6	5.4	4.0	2.9	2.5	2.2	2.0	1.5
-42.5	3.8	3.2	2.9	2.5	2.1	1.7	1.5	1.6	1.4	1.0
-47.5	1.6	1.5	1.4	1.3	1.2	1.3	1.3	1.1	0.9	0.8
-55.0	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6
-65.0	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4
-75.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
-85.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1

Vert. Angles	Horizontal Angles				
	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>85.0</u>	<u>90.0</u>
90.0	0.1	0.1	0.1	0.2	0.2
85.0	0.1	0.1	0.1	0.2	0.2
75.0	0.2	0.2	0.2	0.2	0.2
65.0	0.4	0.3	0.2	0.2	0.2
55.0	0.5	0.4	0.3	0.2	0.2
47.5	0.7	0.5	0.3	0.2	0.2
42.5	0.8	0.6	0.3	0.2	0.2
37.5	1.0	0.7	0.4	0.2	0.2
33.0	1.1	0.8	0.4	0.2	0.2
29.0	1.3	0.8	0.4	0.2	0.2
25.5	1.5	0.9	0.4	0.2	0.2
22.5	1.6	0.9	0.4	0.2	0.2
19.5	1.8	1.0	0.5	0.2	0.2
17.0	2.0	1.0	0.5	0.2	0.2
15.0	2.1	1.0	0.5	0.2	0.2
13.0	2.2	1.1	0.5	0.2	0.2
11.0	2.3	1.1	0.5	0.2	0.2
9.0	2.4	1.1	0.5	0.2	0.2

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

CANDELA TABULATION - (Cont.)

7.0	2.5	1.1	0.5	0.2	0.2
5.0	2.5	1.2	0.5	0.2	0.2
3.0	2.6	1.2	0.5	0.2	0.2
1.0	2.6	1.2	0.5	0.2	0.2
0.0	2.6	1.2	0.5	0.2	0.2
-1.0	2.6	1.2	0.5	0.2	0.2
-3.0	2.6	1.2	0.5	0.2	0.2
-5.0	2.5	1.2	0.5	0.2	0.2
-7.0	2.5	1.1	0.5	0.2	0.2
-9.0	2.4	1.1	0.5	0.2	0.2
-11.0	2.3	1.1	0.5	0.2	0.2
-13.0	2.2	1.1	0.5	0.2	0.2
-15.0	2.1	1.0	0.5	0.2	0.2
-17.0	2.0	1.0	0.5	0.2	0.2
-19.5	1.8	1.0	0.5	0.2	0.2
-22.5	1.6	0.9	0.4	0.2	0.2
-25.5	1.5	0.9	0.4	0.2	0.2
-29.0	1.3	0.8	0.4	0.2	0.2
-33.0	1.1	0.8	0.4	0.2	0.2
-37.5	1.0	0.7	0.4	0.2	0.2
-42.5	0.8	0.6	0.3	0.2	0.2
-47.5	0.7	0.5	0.3	0.2	0.2
-55.0	0.5	0.4	0.3	0.2	0.2
-65.0	0.4	0.3	0.2	0.2	0.2
-75.0	0.2	0.2	0.2	0.2	0.2
-85.0	0.1	0.1	0.1	0.2	0.2
-90.0	0.1	0.1	0.1	0.2	0.2

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

LUMEN TABULATION

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 32.75

Total Field Lumens (one side of beam only) = 29.15

* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>1</u>	<u>3</u>	<u>5</u>	<u>7</u>	<u>9</u>	<u>11</u>	<u>13</u>	<u>15</u>	<u>17</u>
90										
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
47.5	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
42.5	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
37.5	0.02 *	0.04 *	0.04 *	0.03 *	0.03 *	0.03 *	0.03	0.03	0.03	0.03
33	0.02 *	0.05 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.03 *	0.03 *	0.04 *
29	0.03 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.04 *	0.04 *	0.05 *
25.5	0.03 *	0.07 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.06 *
22.5	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *	0.06 *	0.07 *
19.5	0.04 *	0.09 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *	0.06 *	0.07 *
17	0.04 *	0.08 *	0.07 *	0.07 *	0.07 *	0.07 *	0.06 *	0.06 *	0.06 *	0.06 *
15	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.06 *	0.06 *	0.07 *
13	0.05 *	0.10 *	0.09 *	0.09 *	0.09 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *
11	0.06 *	0.11 *	0.11 *	0.10 *	0.10 *	0.10 *	0.09 *	0.09 *	0.08 *	0.08 *
9	0.06 *	0.12 *	0.12 *	0.11 *	0.11 *	0.11 *	0.10 *	0.09 *	0.09 *	0.09 *
7	0.06 *	0.12 *	0.12 *	0.12 *	0.12 *	0.11 *	0.11 *	0.10 *	0.09 *	0.10 *
5	0.06 *	0.12 *	0.12 *	0.12 *	0.12 *	0.11 *	0.11 *	0.10 *	0.09 *	0.10 *
3	0.06 *	0.12 *	0.12 *	0.12 *	0.12 *	0.11 *	0.11 *	0.10 *	0.10 *	0.10 *
1	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *
0	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *
-1	0.06 *	0.12 *	0.12 *	0.12 *	0.12 *	0.11 *	0.11 *	0.10 *	0.10 *	0.10 *
-3	0.06 *	0.12 *	0.12 *	0.12 *	0.12 *	0.11 *	0.11 *	0.10 *	0.09 *	0.10 *

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

LUMENS TABULATION - (Cont.)

-5	0.06 *	0.12 *	0.12 *	0.12 *	0.12 *	0.11 *	0.11 *	0.10 *	0.09 *	0.10 *
-7	0.06 *	0.12 *	0.12 *	0.11 *	0.11 *	0.11 *	0.10 *	0.09 *	0.09 *	0.09 *
-9	0.06 *	0.11 *	0.11 *	0.10 *	0.10 *	0.10 *	0.09 *	0.09 *	0.08 *	0.08 *
-11	0.05 *	0.10 *	0.09 *	0.09 *	0.09 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *
-13	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.06 *	0.06 *	0.07 *
-15	0.04 *	0.08 *	0.07 *	0.07 *	0.07 *	0.07 *	0.06 *	0.06 *	0.06 *	0.06 *
-17	0.04 *	0.09 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *	0.06 *	0.07 *
-19.5	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *	0.06 *	0.07 *
-22.5	0.03 *	0.07 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.06 *
-25.5	0.03 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.04 *	0.04 *	0.05 *
-29	0.02 *	0.05 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.03 *	0.03 *	0.04 *
-33	0.02 *	0.04 *	0.04 *	0.03 *	0.03 *	0.03 *	0.03	0.03	0.03	0.03
-37.5	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
-42.5	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
-47.5	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.36	2.67	2.58	2.51	2.46	2.38	2.26	2.14	1.98	2.14

Vert. Horizontal Angles

	<u>19.5</u>	<u>22.5</u>	<u>25.5</u>	<u>29</u>	<u>33</u>	<u>37.5</u>	<u>42.5</u>	<u>47.5</u>	<u>55</u>	<u>65</u>
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
55	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
47.5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

LUMENS TABULATION - (Cont.)

42.5										
	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
37.5										
	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00
33										
	0.04 *	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.00
29										
	0.05 *	0.04 *	0.04 *	0.04	0.03	0.02	0.01	0.01	0.01	0.00
25.5										
	0.06 *	0.05 *	0.05 *	0.04 *	0.04 *	0.03	0.01	0.01	0.01	0.00
22.5										
	0.07 *	0.06 *	0.06 *	0.05 *	0.05 *	0.04	0.02	0.01	0.01	0.00
19.5										
	0.07 *	0.06 *	0.06 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.01	0.00
17										
	0.06 *	0.05 *	0.05 *	0.04 *	0.04 *	0.03 *	0.02	0.01	0.00	0.00
15										
	0.07 *	0.06 *	0.05 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.00	0.00
13										
	0.07 *	0.06 *	0.06 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.01	0.00
11										
	0.07 *	0.06 *	0.06 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.01	0.00
9										
	0.08 *	0.06 *	0.06 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
7										
	0.08 *	0.06 *	0.06 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
5										
	0.09 *	0.07 *	0.07 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
3										
	0.09 *	0.07 *	0.07 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
1										
	0.04 *	0.03 *	0.03 *	0.03 *	0.03 *	0.02 *	0.01	0.01	0.00	0.00
0										
	0.04 *	0.03 *	0.03 *	0.03 *	0.03 *	0.02 *	0.01	0.01	0.00	0.00
-1										
	0.09 *	0.07 *	0.07 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
-3										
	0.09 *	0.07 *	0.07 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
-5										
	0.08 *	0.06 *	0.06 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
-7										
	0.08 *	0.06 *	0.06 *	0.06 *	0.05 *	0.04 *	0.02	0.01	0.01	0.00
-9										
	0.07 *	0.06 *	0.06 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.01	0.00
-11										
	0.07 *	0.06 *	0.06 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.01	0.00
-13										
	0.07 *	0.06 *	0.05 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.00	0.00
-15										
	0.06 *	0.05 *	0.05 *	0.04 *	0.04 *	0.03 *	0.02	0.01	0.00	0.00
-17										
	0.07 *	0.06 *	0.06 *	0.05 *	0.04 *	0.03 *	0.02	0.01	0.01	0.00
-19.5										
	0.07 *	0.06 *	0.06 *	0.05 *	0.05 *	0.04	0.02	0.01	0.01	0.00
-22.5										
	0.06 *	0.05 *	0.05 *	0.04 *	0.04 *	0.03	0.01	0.01	0.01	0.00

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

LUMENS TABULATION - (Cont.)

-25.5	0.05 *	0.04 *	0.04 *	0.04	0.03	0.02	0.01	0.01	0.01	0.00
-29	0.04 *	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.00
-33	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00
-37.5	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
-42.5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
-47.5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
-55	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.05	1.65	1.61	1.46	1.26	0.97	0.54	0.40	0.22	0.09

Vert. Angles	Horizontal Angles			
	<u>75</u>	<u>85</u>	<u>90</u>	<u>Total</u>
90	0.00	0.00	0.01	
85	0.00	0.00	0.03	
75	0.00	0.00	0.06	
65	0.00	0.00	0.10	
55	0.00	0.00	0.12	
47.5	0.00	0.00	0.15	
42.5	0.00	0.00	0.29	
37.5	0.00	0.00	0.45	
33	0.00	0.00	0.59	
29	0.00	0.00	0.74	
25.5	0.00	0.00	0.86	
22.5	0.00	0.00	1.08	
19.5	0.00	0.00	1.07	
17	0.00	0.00	0.94	
15	0.00	0.00	1.02	

IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

LUMENS TABULATION - (Cont.)

13			
	0.00	0.00	1.14
11			
	0.00	0.00	1.27
9			
	0.00	0.00	1.39
7			
	0.00	0.00	1.44
5			
	0.00	0.00	1.46
3			
	0.00	0.00	1.46
1			
	0.00	0.00	0.72
0			
	0.00	0.00	0.72
-1			
	0.00	0.00	1.46
-3			
	0.00	0.00	1.46
-5			
	0.00	0.00	1.44
-7			
	0.00	0.00	1.39
-9			
	0.00	0.00	1.27
-11			
	0.00	0.00	1.14
-13			
	0.00	0.00	1.02
-15			
	0.00	0.00	0.94
-17			
	0.00	0.00	1.07
-19.5			
	0.00	0.00	1.08
-22.5			
	0.00	0.00	0.86
-25.5			
	0.00	0.00	0.74
-29			
	0.00	0.00	0.59
-33			
	0.00	0.00	0.45
-37.5			
	0.00	0.00	0.29
-42.5			
	0.00	0.00	0.15
-47.5			
	0.00	0.00	0.12
-55			
	0.00	0.00	0.10
-65			
	0.00	0.00	0.06
-75			
	0.00	0.00	0.03

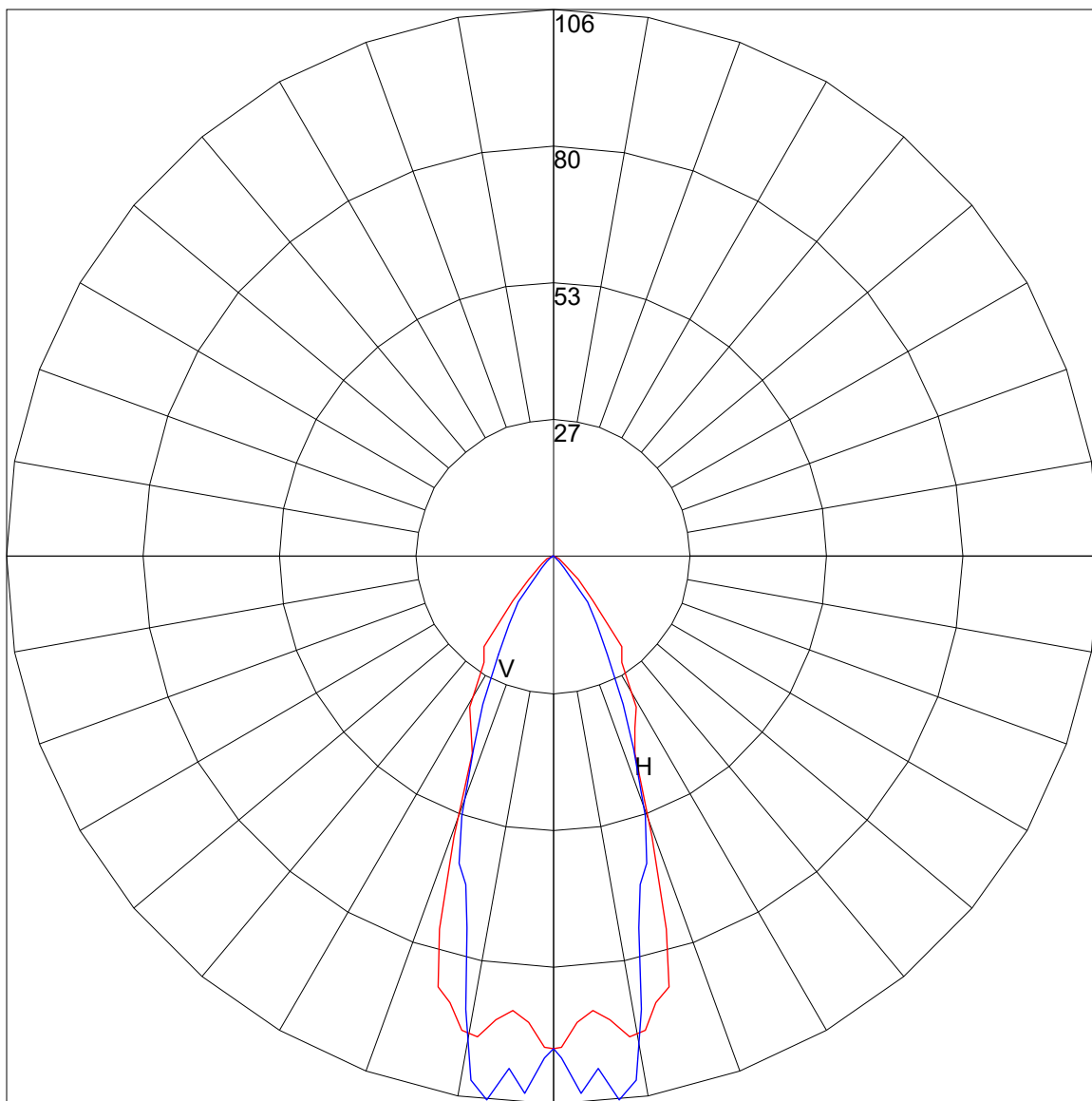
IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

LUMENS TABULATION - (Cont.)

-85	0.00	0.00	0.01
-90			
Total	0.02	0.00	32.75

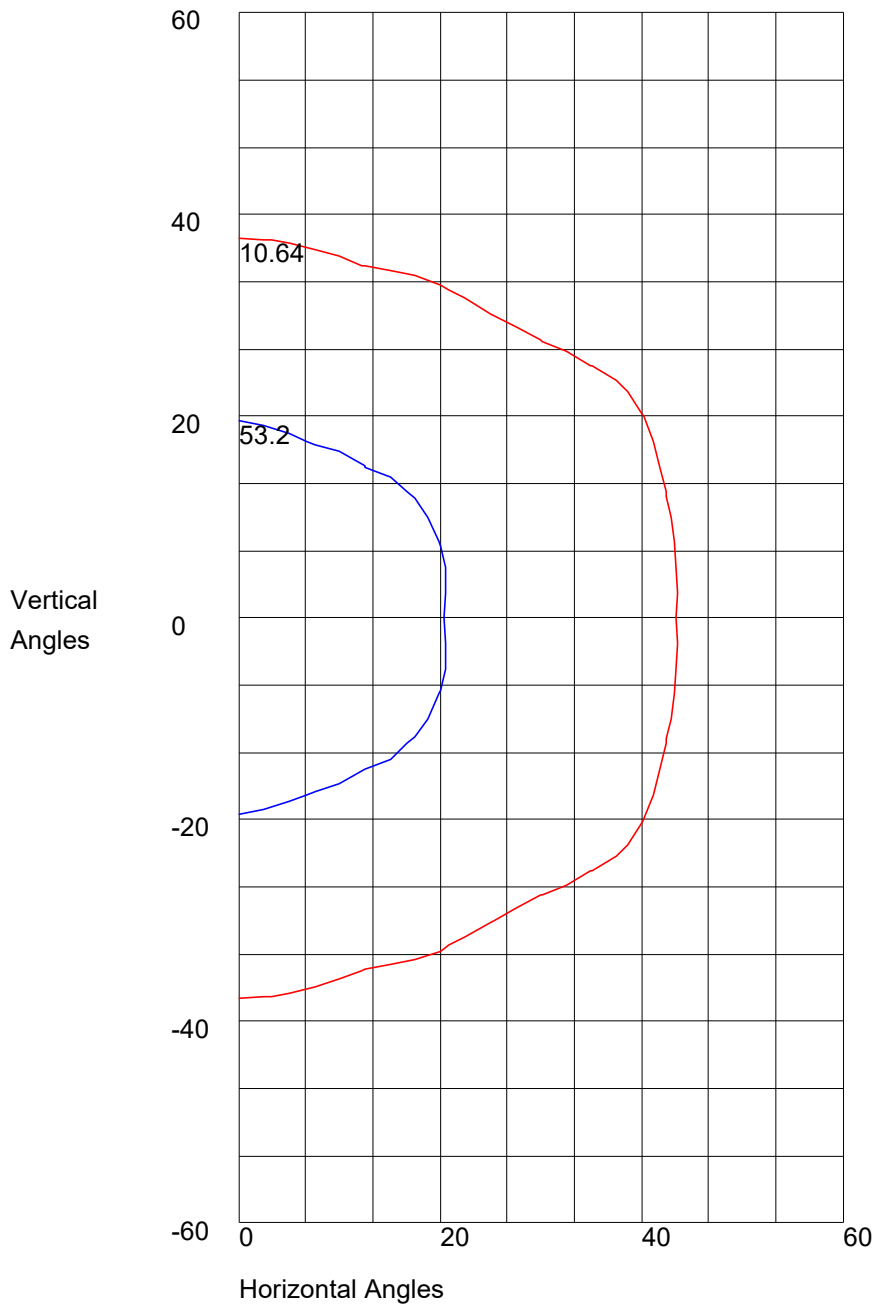
IES FLOOD REPORT
PHOTOMETRIC FILENAME : 12 LED SQ HEAD (HL).IES

AXIAL CANDELA DISPLAY



Maximum Candela = 106.4 Located At Horizontal Angle = 0, Vertical Angle = -7
H - Horizontal Axial Candela
V - Vertical Axial Candela

ISOCANDELA CURVES



Maximum Candela = 106.4 Located At Horizontal Angle = 0, Vertical Angle = -7
50% Maximum Candela = 53.2
10% Maximum Candela = 10.64