

## IES FLOOD REPORT

PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

[IESNA]LM-63-2002

[TEST]ITL68901

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]06/20/11

[MANUFAC] LumenFocus, LLC.

[LUMCAT]LED R1 8 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 8 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]EIGHT WHITE LIGHT EMITTING DIODES (LEDS) EACH WITH CLEAR

[MORE]CYLINDRICAL INTEGRAL LENS WITH HEMISpherical END, VERTICAL

[MORE]BASE-UP POSITION.

[OTHER]TOTAL INPUT WATTS = 0.549 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

[ABSOLUTELUMENS]44.6

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

### CHARACTERISTICS

NEMA Type	5 H x 5 V
Maximum Candela	75.7
Maximum Candela Angle	0H -3V
Horizontal Beam Angle (50%)	41.0
Vertical Beam Angle (50%)	39.9
Horizontal Field Angle (10%)	87.6
Vertical Field Angle (10%)	75.9
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	21
Beam Efficiency	N.A.
Field Lumens	40
Field Efficiency	N.A.
Spill Lumens	5
Luminaire Lumens	45
Total Efficiency	N.A.
Total Luminaire Watts	0.549
Ballast Factor	1.00

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**AXIAL CANDELA**

DEG.	HOR.	DEG.	VERT.
90	.1	90	0
85	.2	85	0
75	.3	75	.2
65	.8	65	.3
55	1.7	55	.6
47.5	4	47.5	1
42.5	8.7	42.5	2.1
37.5	13.5	37.5	8.1
33	16.4	33	11.1
29	22.8	29	13.4
25.5	25	25.5	20
22.5	29.4	22.5	28.7
19.5	41.2	19.5	39.5
17	52.3	17	43.8
15	57.2	15	46.9
13	60.6	13	49.8
11	66.5	11	57.8
9	68.5	9	64.8
7	65	7	69.1
5	62.9	5	69.9
3	63.5	3	75.7
1	68.2	1	70.9
0	68.9	0	68.9
-1	68.2	-1	70.9
-3	63.5	-3	75.7
-5	62.9	-5	69.9
-7	65	-7	69.1
-9	68.5	-9	64.8
-11	66.5	-11	57.8
-13	60.6	-13	49.8
-15	57.2	-15	46.9
-17	52.3	-17	43.8
-19.5	41.2	-19.5	39.5
-22.5	29.4	-22.5	28.7
-25.5	25	-25.5	20
-29	22.8	-29	13.4
-33	16.4	-33	11.1
-37.5	13.5	-37.5	8.1
-42.5	8.7	-42.5	2.1
-47.5	4	-47.5	1
-55	1.7	-55	.6
-65	.8	-65	.3
-75	.3	-75	.2
-85	.2	-85	0
-90	.1	-90	0









**IES FLOOD REPORT****PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES****CANDELA TABULATION - (Cont.)**

<b>7.0</b>	1.5	0.8	0.3	0.2	0.1
<b>5.0</b>	1.6	0.8	0.3	0.2	0.1
<b>3.0</b>	1.7	0.8	0.3	0.2	0.1
<b>1.0</b>	1.7	0.8	0.3	0.2	0.1
<b>0.0</b>	1.7	0.8	0.3	0.2	0.1
<b>-1.0</b>	1.7	0.8	0.3	0.2	0.1
<b>-3.0</b>	1.7	0.8	0.3	0.2	0.1
<b>-5.0</b>	1.6	0.8	0.3	0.2	0.1
<b>-7.0</b>	1.5	0.8	0.3	0.2	0.1
<b>-9.0</b>	1.5	0.8	0.3	0.2	0.1
<b>-11.0</b>	1.4	0.8	0.3	0.2	0.1
<b>-13.0</b>	1.3	0.7	0.3	0.2	0.1
<b>-15.0</b>	1.3	0.7	0.3	0.2	0.1
<b>-17.0</b>	1.2	0.7	0.3	0.2	0.1
<b>-19.5</b>	1.1	0.7	0.3	0.2	0.1
<b>-22.5</b>	1.0	0.7	0.3	0.2	0.1
<b>-25.5</b>	0.9	0.6	0.3	0.2	0.1
<b>-29.0</b>	0.8	0.6	0.3	0.2	0.1
<b>-33.0</b>	0.8	0.5	0.3	0.2	0.1
<b>-37.5</b>	0.7	0.5	0.2	0.2	0.1
<b>-42.5</b>	0.6	0.4	0.2	0.1	0.1
<b>-47.5</b>	0.5	0.3	0.2	0.1	0.1
<b>-55.0</b>	0.3	0.3	0.2	0.1	0.1
<b>-65.0</b>	0.2	0.2	0.2	0.1	0.1
<b>-75.0</b>	0.2	0.1	0.1	0.1	0.1
<b>-85.0</b>	0.1	0.1	0.1	0.1	0.1
<b>-90.0</b>	0.0	0.1	0.1	0.1	0.1

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**LUMEN TABULATION**

Average Of Right And Left Sides

Total Luminaire Lumens (one side of beam only) = 22.37

Total Field Lumens (one side of beam only) = 19.89

\* Indicates Values Inside Field Edge

Vert. Angles	Horizontal Angles									
	0	1	3	5	7	9	11	13	15	17
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47.5	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
42.5	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
37.5	0.01 *	0.03 *	0.03 *	0.02 *	0.02 *	0.02 *	0.02 *	0.02	0.02	0.02
33	0.01 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *	0.02 *	0.02 *	0.02 *	0.02 *
29	0.02 *	0.04 *	0.04 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *
25.5	0.02 *	0.05 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *
22.5	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *
19.5	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *
17	0.03 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *	0.04 *	0.04 *	0.04 *	0.04 *
15	0.03 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *	0.04 *	0.04 *	0.05 *
13	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *
11	0.04 *	0.07 *	0.07 *	0.07 *	0.07 *	0.07 *	0.06 *	0.06 *	0.05 *	0.06 *
9	0.04 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *	0.06 *	0.06 *	0.06 *
7	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.06 *	0.07 *
5	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.06 *	0.07 *
3	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.06 *	0.07 *
1	0.02 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.03 *	0.03 *	0.03 *
0	0.02 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.03 *	0.03 *	0.03 *
-1	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.06 *	0.07 *
-3	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.06 *	0.07 *

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**LUMENS TABULATION - (Cont.)**

-5	0.04 *	0.08 *	0.08 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.06 *	0.07 *
-7	0.04 *	0.08 *	0.08 *	0.08 *	0.07 *	0.07 *	0.07 *	0.06 *	0.06 *	0.06 *
-9	0.04 *	0.07 *	0.07 *	0.07 *	0.07 *	0.07 *	0.06 *	0.06 *	0.05 *	0.06 *
-11	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *
-13	0.03 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *	0.04 *	0.04 *	0.05 *
-15	0.03 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *	0.04 *	0.04 *	0.04 *	0.04 *
-17	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *
-19.5	0.03 *	0.06 *	0.06 *	0.06 *	0.06 *	0.05 *	0.05 *	0.05 *	0.05 *	0.05 *
-22.5	0.02 *	0.05 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *	0.04 *
-25.5	0.02 *	0.04 *	0.04 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *
-29	0.01 *	0.03 *	0.03 *	0.03 *	0.03 *	0.03 *	0.02 *	0.02 *	0.02 *	0.02 *
-33	0.01 *	0.03 *	0.03 *	0.02 *	0.02 *	0.02 *	0.02 *	0.02	0.02	0.02
-37.5	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
-42.5	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
-47.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-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
<b>Total</b>	0.93	1.82	1.76	1.73	1.71	1.65	1.56	1.46	1.37	1.50

Vert. Angles	Horizontal Angles									
	19.5	22.5	25.5	29	33	37.5	42.5	47.5	55	65
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47.5	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**LUMENS TABULATION - (Cont.)**

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

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**LUMENS TABULATION - (Cont.)**

<b>-25.5</b>	0.03 *	0.03 *	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00
<b>-29</b>	0.03 *	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00
<b>-33</b>	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
<b>-37.5</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00
<b>-42.5</b>	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>-47.5</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>-55</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>-65</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>-75</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>-85</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>-90</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	1.44	1.11	1.06	0.97	0.83	0.65	0.37	0.26	0.15	0.06

**Vert. Angles**      **Horizontal Angles**

<b>75</b>	<b>85</b>	<b>90</b>	<b>Total</b>
<b>90</b>	0.00	0.00	0.00
<b>85</b>	0.00	0.00	0.02
<b>75</b>	0.00	0.00	0.04
<b>65</b>	0.00	0.00	0.07
<b>55</b>	0.00	0.00	0.08
<b>47.5</b>	0.00	0.00	0.09
<b>42.5</b>	0.00	0.00	0.20
<b>37.5</b>	0.00	0.00	0.31
<b>33</b>	0.00	0.00	0.38
<b>29</b>	0.00	0.00	0.47
<b>25.5</b>	0.00	0.00	0.58
<b>22.5</b>	0.00	0.00	0.77
<b>19.5</b>	0.00	0.00	0.76
<b>17</b>	0.00	0.00	0.66
<b>15</b>	0.00	0.00	0.70

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**LUMENS TABULATION - (Cont.)**

<b>13</b>	0.00	0.00	0.77
<b>11</b>	0.00	0.00	0.86
<b>9</b>	0.00	0.00	0.93
<b>7</b>	0.00	0.00	0.97
<b>5</b>	0.00	0.00	1.00
<b>3</b>	0.00	0.00	1.01
<b>1</b>	0.00	0.00	0.50
<b>0</b>	0.00	0.00	0.50
<b>-1</b>	0.00	0.00	1.01
<b>-3</b>	0.00	0.00	1.00
<b>-5</b>	0.00	0.00	0.97
<b>-7</b>	0.00	0.00	0.93
<b>-9</b>	0.00	0.00	0.86
<b>-11</b>	0.00	0.00	0.77
<b>-13</b>	0.00	0.00	0.70
<b>-15</b>	0.00	0.00	0.66
<b>-17</b>	0.00	0.00	0.76
<b>-19.5</b>	0.00	0.00	0.77
<b>-22.5</b>	0.00	0.00	0.58
<b>-25.5</b>	0.00	0.00	0.47
<b>-29</b>	0.00	0.00	0.38
<b>-33</b>	0.00	0.00	0.31
<b>-37.5</b>	0.00	0.00	0.20
<b>-42.5</b>	0.00	0.00	0.09
<b>-47.5</b>	0.00	0.00	0.08
<b>-55</b>	0.00	0.00	0.07
<b>-65</b>	0.00	0.00	0.04
<b>-75</b>	0.00	0.00	0.02

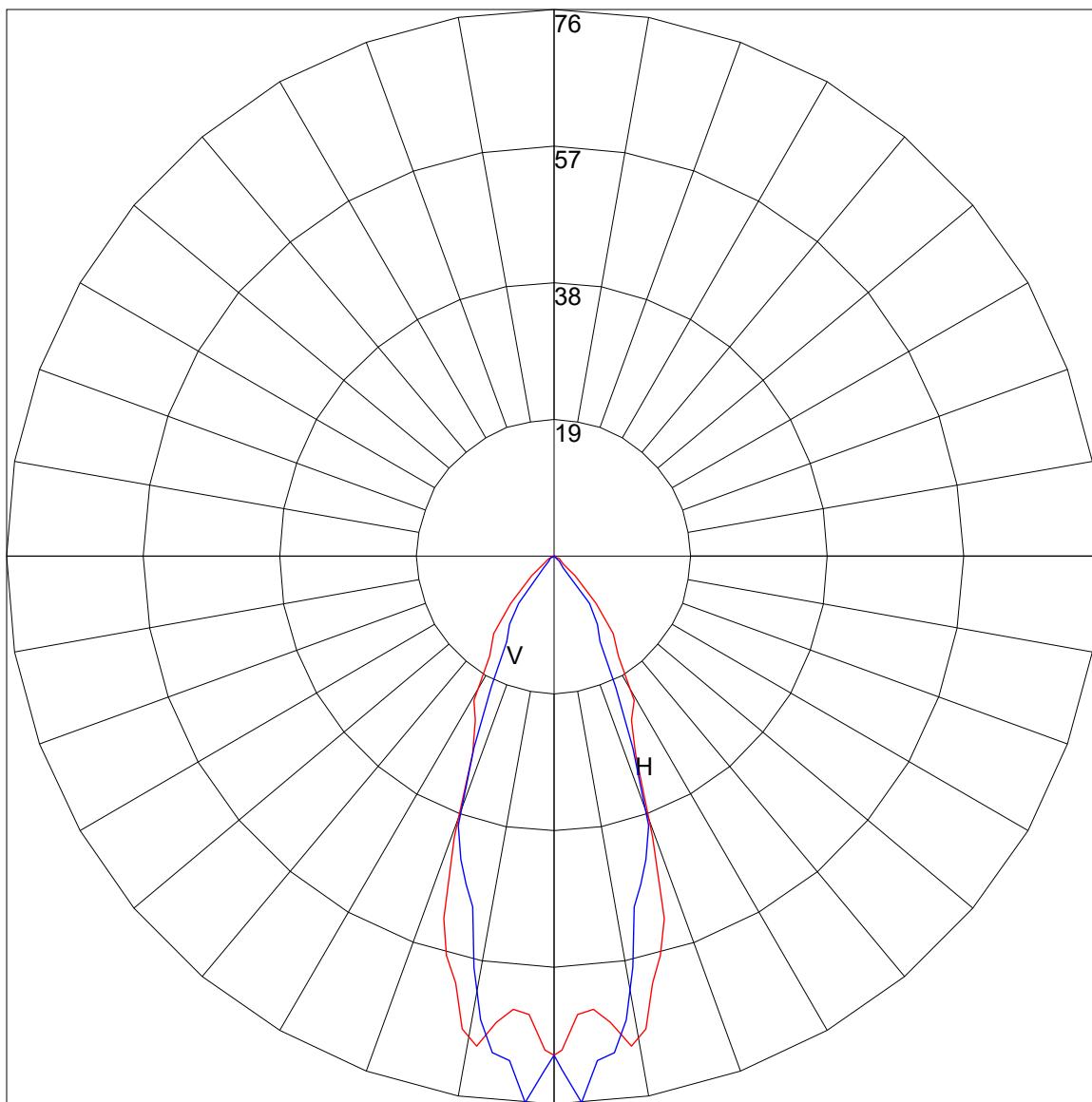
**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**LUMENS TABULATION - (Cont.)**

<b>-85</b>	0.00	0.00	0.00
<b>-90</b>			
<b>Total</b>	0.02	0.00	22.37

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**AXIAL CANDELA DISPLAY**



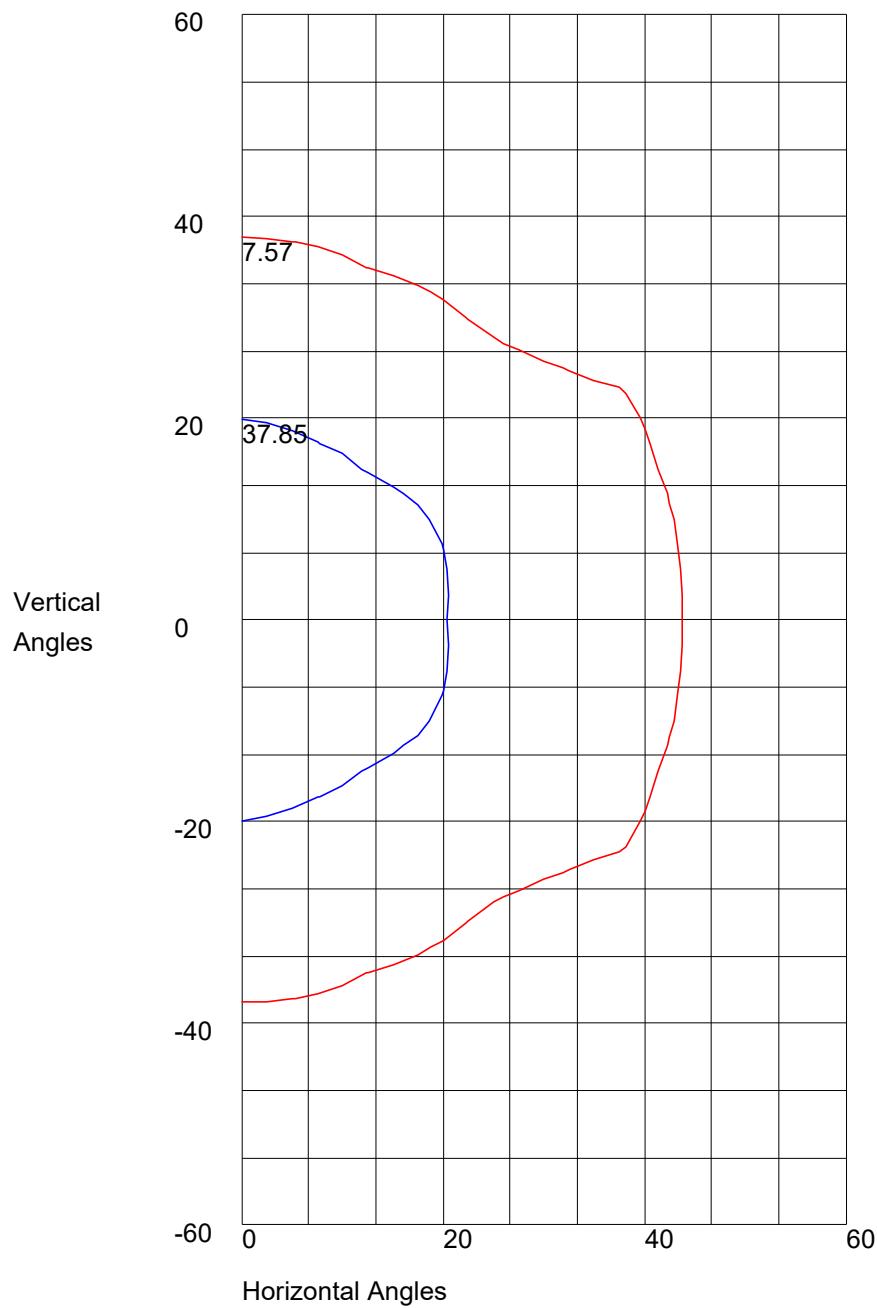
Maximum Candela = 75.7 Located At Horizontal Angle = 0, Vertical Angle = -3

H - Horizontal Axial Candela

V - Vertical Axial Candela

**IES FLOOD REPORT**  
**PHOTOMETRIC FILENAME : 8 LED SQ HEAD.IES**

**ISOCANDELA CURVES**



Maximum Candela = 75.7 Located At Horizontal Angle = 0, Vertical Angle = -3  
50% Maximum Candela = 37.85  
10% Maximum Candela = 7.57