

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P226795

Luminaire Tested: **ISW-AF-450-LED-E1-SL2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226795  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35945)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISW-AF-450-LED-E1-SL2  
Description: IMPACT ELITE LED WEDGE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL  
Light Source: (16) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

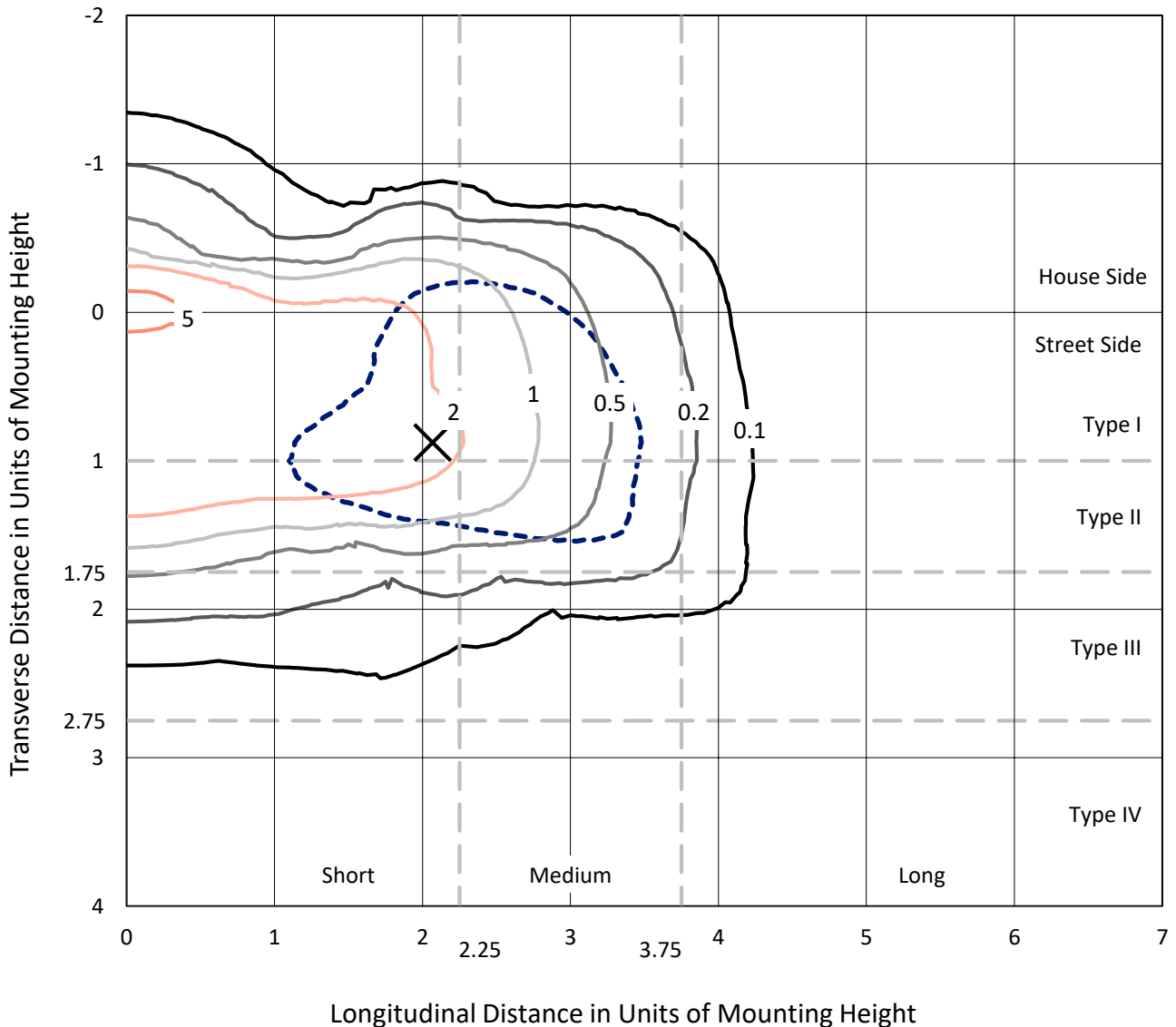
Lumens per Lamp: N/A  
Luminaire Lumens: 3099.7 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U1 - G1  
  
Input Watts (W): 25.31  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

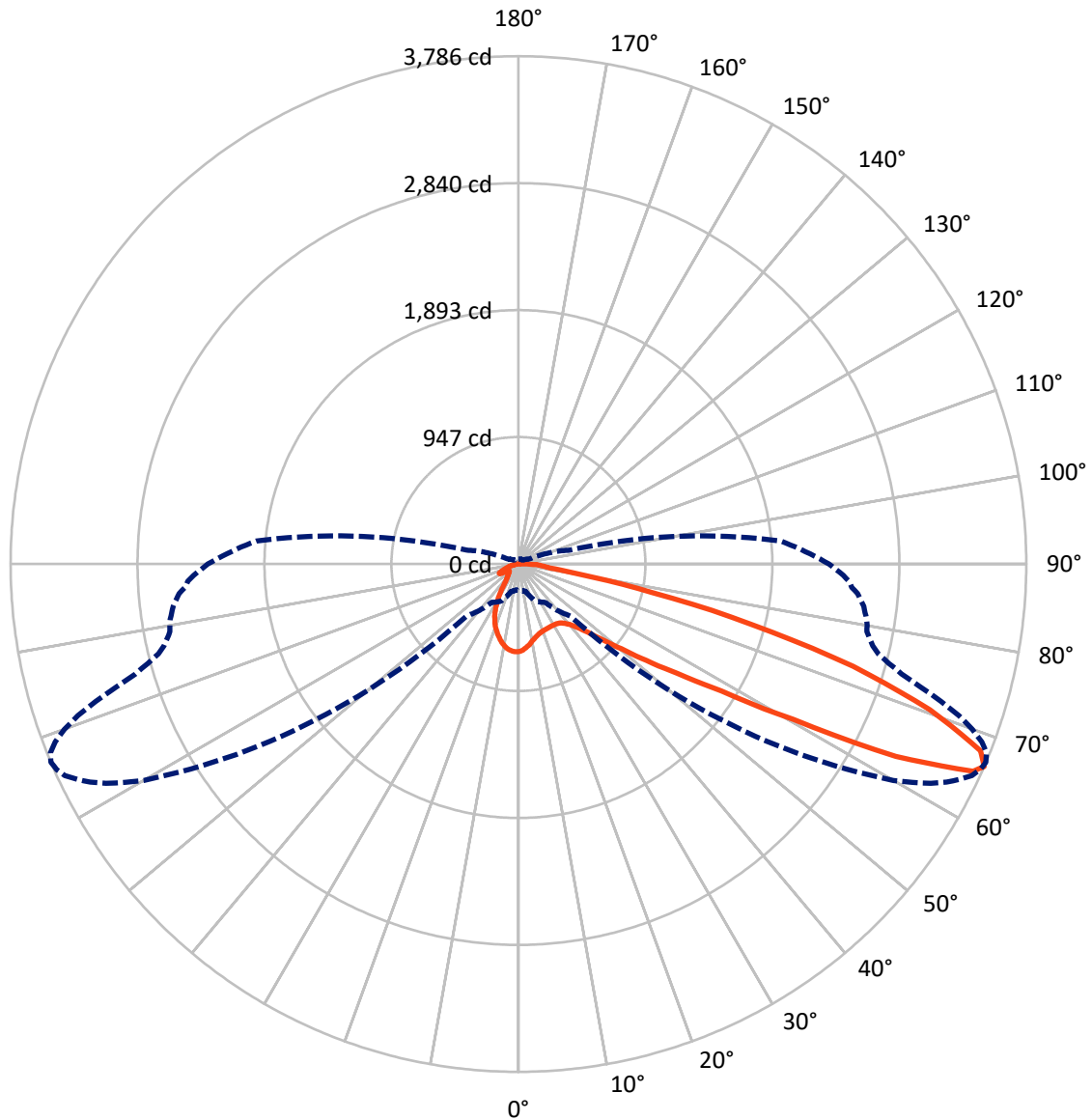


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P226795

CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P226795

CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

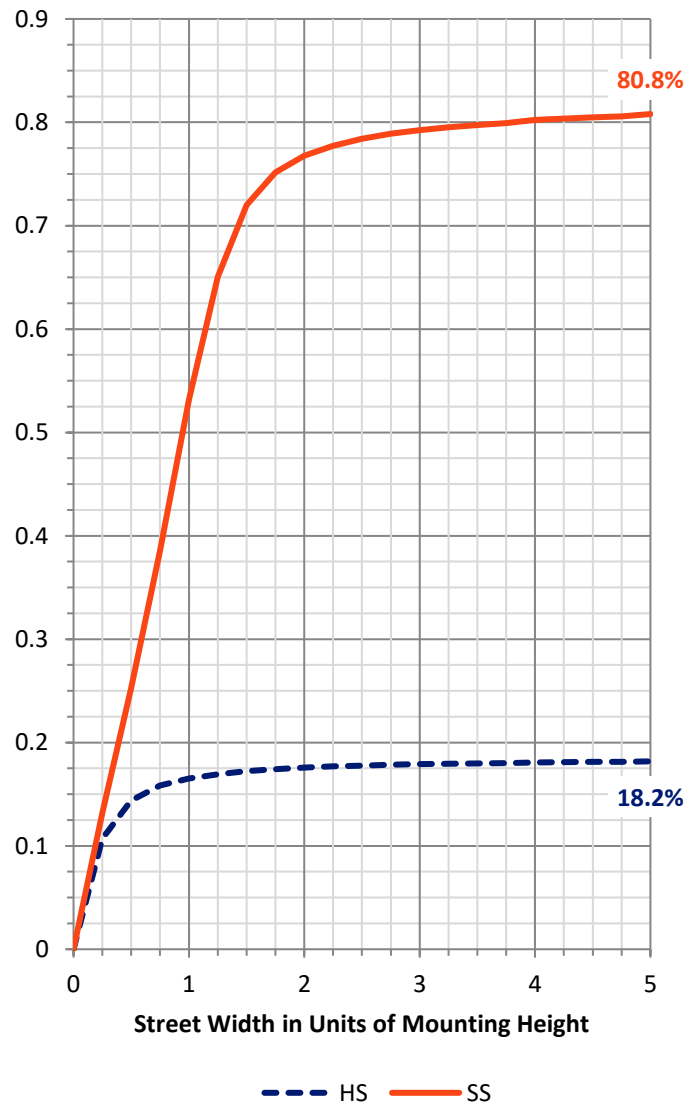
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	572.3	0.2	572.6
	% Fixture	18.5	0.0	18.5
<b>Street Side</b>	Lumens	2526.3	0.9	2527.2
	% Fixture	81.5	0.0	81.5
<b>Total</b>	Lumens	3098.6	1.1	3099.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.6	1.8
10°-20°	134.7	4.3
20°-30°	184.7	6.0
30°-40°	263.8	8.5
40°-50°	427.8	13.8
50°-60°	677.7	21.9
60°-70°	858.8	27.7
70°-80°	426.9	13.8
80°-90°	67.6	2.2
90°-100°	1.1	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3098.6	100.0
0°-180°	3099.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P226795

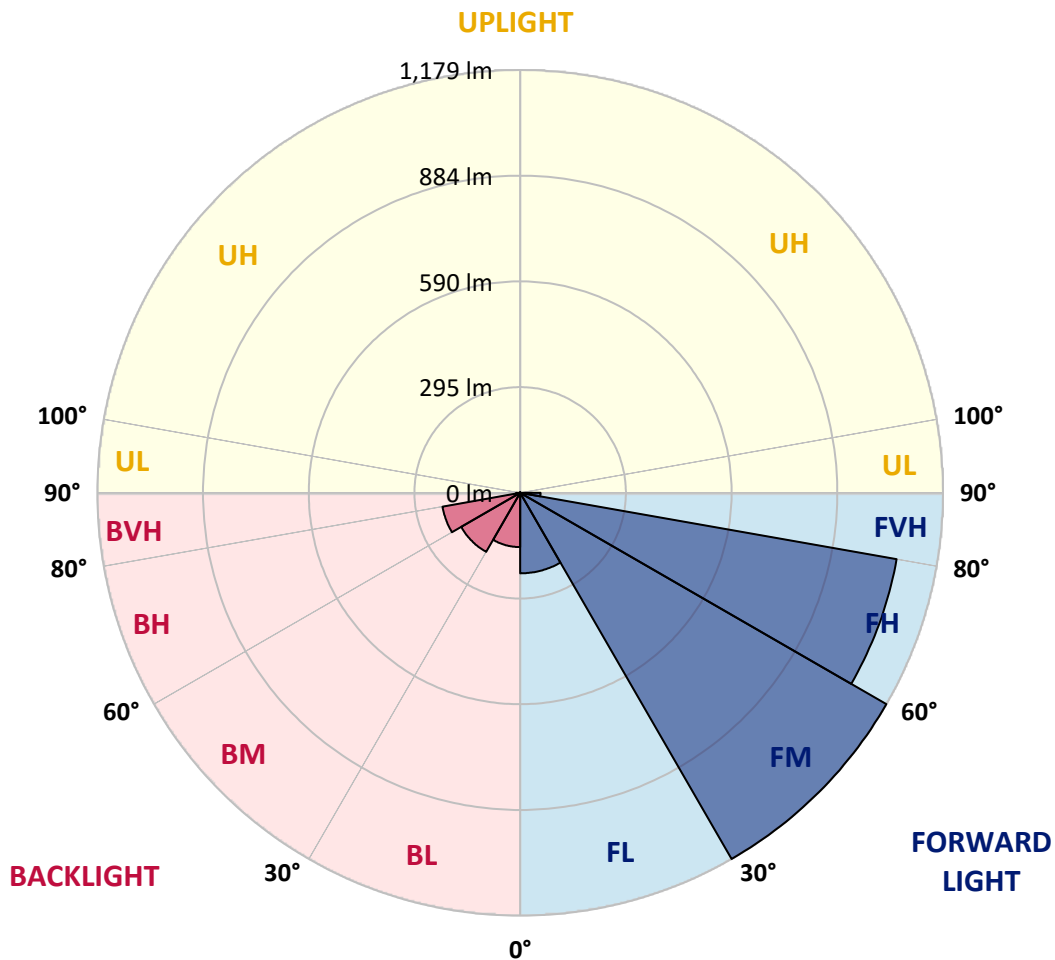
CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	224.6	7.2			
FM (30°-60°)	1179.2	38.0			
FH (60°-80°)	1065.8	34.4			G1/1800
FVH (80°-90°)	56.7	1.8			G1/100
BL (0°-30°)	151.3	4.9	B1/500		
BM (30°-60°)	190.1	6.1	B0/220		
BH (60°-80°)	219.9	7.1	B1/500		G1/500
BVH (80°-90°)	10.9	0.4			G1/100
UL (90°-100°)	1.1	0.0		U1/10	
UH (100°-180°)	0.2	0.0		U1/10	

**BUG Rating: B1-U1-G1**

Type II Short





REPORT NUMBER: P226795

CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	606.3	607.7	615.7	619.9	625.9	627.8	634.7	637.6	639.9	639.4	639.4
5°	551.9	556.1	559.8	568.1	577.0	587.7	601.2	611.5	613.4	615.7	617.0
7.5°	510.5	513.2	519.8	525.8	536.9	551.9	570.9	584.0	586.8	587.7	591.0
10°	481.1	482.9	488.6	496.4	509.5	524.0	543.9	557.4	561.6	563.5	566.3
12.5°	458.3	461.0	466.2	474.5	488.6	503.4	524.4	537.9	540.7	543.0	547.2
15°	443.9	445.7	450.3	459.6	472.2	487.1	507.6	524.0	525.8	528.1	531.8
17.5°	441.0	442.4	445.2	452.2	462.0	476.4	497.4	510.9	514.1	517.4	521.1
20°	452.2	453.2	454.1	455.0	460.6	469.9	490.4	504.8	507.6	510.5	515.1
22.5°	476.4	477.8	475.5	472.2	468.0	469.9	487.1	502.1	503.9	506.7	510.5
25°	518.3	516.9	509.9	504.8	489.9	477.8	488.0	500.6	503.0	505.7	509.9
27.5°	567.7	565.8	561.6	547.7	523.0	498.3	493.7	503.0	504.3	506.7	510.5
30°	620.8	621.2	617.6	602.2	570.5	529.1	506.3	508.5	509.5	511.4	513.7
32.5°	668.8	675.8	675.2	674.3	629.2	570.5	530.4	521.1	519.8	521.1	522.0
35°	724.1	725.6	738.6	745.1	708.3	631.1	565.8	545.3	539.7	540.2	539.3
37.5°	783.8	785.6	808.0	819.2	790.7	700.0	612.8	581.2	576.1	570.9	567.2
40°	870.4	877.9	889.5	902.0	888.1	792.7	674.8	632.0	618.9	618.0	610.5
42.5°	999.8	997.6	992.0	1002.2	985.4	896.5	749.8	703.7	693.9	680.9	670.6
45°	1127.0	1132.1	1108.0	1112.6	1113.5	1016.6	858.3	793.6	788.5	773.0	761.9
47.5°	1212.7	1207.1	1174.6	1198.3	1256.5	1156.9	984.1	916.1	905.3	897.4	890.5
50°	1217.3	1212.7	1191.7	1233.7	1358.0	1405.9	1159.1	1079.9	1064.6	1050.7	1046.5
52.5°	1103.8	1097.2	1104.2	1189.4	1394.8	1614.6	1406.5	1283.5	1270.9	1259.3	1243.0
55°	901.1	908.6	941.6	1064.2	1338.4	1762.7	1893.1	1597.8	1543.8	1543.3	1503.3
57.5°	672.9	665.5	690.2	805.2	1195.9	1815.3	2340.2	2267.1	2146.5	2064.9	1966.7
60°	454.1	455.9	478.7	537.9	832.2	1758.0	2639.6	2894.3	2852.0	2834.8	2808.2
62.5°	314.9	317.6	338.6	393.9	486.6	1414.3	2727.2	3246.0	3321.9	3384.7	3369.4
65°	220.2	220.8	241.7	327.3	364.7	726.5	2534.0	3292.6	3405.7	3513.7	3610.6
66°	194.2	194.7	211.9	304.5	349.7	548.1	2366.3	3227.8	3356.8	3482.5	3582.7
67.5°	166.2	169.1	182.6	258.9	335.3	422.9	1954.6	3034.6	3169.6	3307.9	3440.2
70°	114.1	115.0	127.2	210.0	313.8	371.1	1114.0	2369.1	2555.8	2798.9	2939.6
72.5°	81.5	80.6	81.9	129.9	322.2	368.9	585.4	1559.2	1820.4	2033.7	2186.0
75°	72.6	70.3	64.2	80.6	235.2	402.8	392.1	917.9	1116.8	1311.0	1467.0
77.5°	64.8	61.0	57.8	61.9	116.4	379.5	352.1	525.8	627.3	772.1	892.3
80°	49.4	47.1	48.9	53.6	69.9	349.2	349.7	349.7	377.3	424.7	472.2
82.5°	32.6	29.8	34.0	44.2	52.6	263.1	361.4	308.7	303.6	301.8	305.0
85°	20.5	17.7	23.7	33.0	40.5	137.4	370.7	326.0	302.3	279.5	256.6
87.5°	7.5	8.4	12.1	19.1	26.5	59.6	325.1	287.3	271.1	242.6	216.0
90°	1.8	1.4	2.4	5.6	6.0	11.2	49.8	79.6	47.5	23.7	19.1
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	63°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	639.9	642.2	643.1	642.2	642.7	645.5	644.6	645.9	645.9	646.9	646.9
5°	618.9	620.8	624.5	624.0	627.8	629.2	630.5	632.4	634.7	636.2	638.9
7.5°	594.2	598.0	601.2	603.1	605.4	610.1	611.5	615.7	619.4	623.1	625.9
10°	570.5	575.6	579.3	580.7	585.8	588.2	593.3	596.6	601.2	605.9	610.1
12.5°	550.4	555.2	557.0	561.6	566.3	570.9	573.3	579.3	584.0	590.0	595.7
15°	535.5	540.2	543.9	547.2	551.9	556.5	560.3	566.3	571.9	578.0	583.1
17.5°	526.2	529.1	533.7	536.5	542.1	547.7	551.9	558.8	564.9	570.0	577.0
20°	519.2	522.5	526.7	530.9	536.0	543.0	546.8	554.2	560.7	566.8	573.3
22.5°	515.6	518.8	523.0	527.2	532.8	538.4	544.4	551.0	557.9	564.5	570.9
25°	514.1	516.9	520.7	524.9	530.9	536.9	542.1	549.5	555.6	562.6	570.5
27.5°	514.6	516.5	520.7	524.4	530.4	536.0	541.1	548.6	555.6	562.1	570.0
30°	516.5	517.8	522.0	525.3	530.4	536.0	540.7	548.6	554.6	561.6	570.0
32.5°	523.0	524.9	526.7	529.1	533.7	537.9	543.5	550.4	556.1	563.0	570.0
35°	538.4	536.9	538.4	539.3	542.6	546.8	551.0	557.0	562.1	568.1	575.6
37.5°	562.6	559.8	560.7	560.3	560.3	563.0	567.2	571.4	575.6	581.6	589.1
40°	607.3	600.3	598.4	593.3	591.9	594.2	597.0	597.5	602.6	610.5	613.8
42.5°	665.0	655.7	657.1	648.8	646.4	643.6	647.3	645.0	648.2	653.4	660.4
45°	756.3	747.5	738.2	724.7	727.4	717.2	714.4	715.3	714.8	716.7	725.1
47.5°	865.3	853.7	847.6	842.5	832.7	826.6	818.7	807.1	809.9	813.6	821.0
50°	1024.6	1020.8	1009.1	992.5	990.1	981.2	979.0	968.6	964.9	964.4	964.0
52.5°	1237.4	1213.2	1208.5	1192.7	1180.6	1172.2	1169.4	1154.9	1140.5	1148.9	1148.0
55°	1496.8	1476.7	1451.2	1437.1	1427.4	1407.4	1402.3	1384.1	1375.7	1371.1	1359.4
57.5°	1932.7	1862.4	1809.7	1783.6	1746.9	1709.7	1696.6	1659.3	1630.5	1609.9	1611.4
60°	2692.7	2567.4	2419.8	2353.7	2200.5	2178.1	2072.9	2047.2	1983.9	1942.0	1917.8
62.5°	3358.7	3324.7	3253.9	3157.5	3003.8	2826.8	2747.2	2588.9	2465.0	2411.0	2336.0
65°	3676.8	3724.8	3744.3	3726.1	3664.6	3556.6	3461.6	3307.0	3099.3	2981.9	2836.1
66°	3660.4	3731.7	3767.5	3786.2	3763.8	3700.0	3600.4	3473.2	3312.6	3133.7	2970.2
67.5°	3541.3	3610.6	3660.4	3717.3	3717.3	3697.3	3656.7	3571.9	3458.4	3302.3	3155.6
70°	3054.1	3148.2	3236.2	3253.4	3301.9	3286.9	3319.1	3265.1	3238.0	3172.9	3094.1
72.5°	2379.3	2458.0	2533.4	2608.9	2596.4	2580.0	2576.8	2588.0	2533.0	2552.6	2532.0
75°	1582.5	1718.0	1795.3	1787.8	1792.9	1797.1	1762.7	1685.8	1745.5	1670.1	1695.1
77.5°	961.7	1024.6	1045.6	1022.2	992.0	952.9	890.0	853.1	800.6	804.8	769.8
80°	504.3	512.3	495.5	448.5	422.9	399.6	327.9	295.7	266.0	254.7	229.6
82.5°	289.2	270.2	249.6	233.7	203.5	183.0	155.1	137.4	118.3	101.5	95.4
85°	234.3	208.7	189.6	171.9	151.4	133.2	109.9	91.8	77.7	67.5	65.2
87.5°	193.2	175.5	156.0	139.2	119.2	100.6	77.7	60.6	48.0	38.7	35.9
90°	17.2	23.3	16.8	9.3	14.0	7.5	4.2	4.7	3.7	3.7	4.2
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226795

CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

**CANDELA DISTRIBUTION (continued):**

	64°	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226795

CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

**CANDELA DISTRIBUTION (continued):**

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°
0°	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4	652.4
2.5°	648.2	648.2	649.2	650.1	650.6	650.6	650.6	651.5	652.0	650.6	652.0
5°	640.4	642.7	644.6	645.9	646.4	647.8	649.2	650.1	651.5	651.5	652.4
7.5°	629.6	633.8	636.2	638.5	640.8	643.1	645.9	647.8	648.8	650.6	652.0
10°	616.1	621.2	625.9	629.6	632.9	637.6	641.3	644.0	648.2	648.8	652.0
12.5°	601.7	609.2	612.8	619.9	624.5	631.5	635.3	639.4	644.0	646.4	650.1
15°	591.5	598.0	605.0	611.5	618.9	627.3	632.0	637.6	644.0	649.2	653.9
17.5°	583.5	592.4	600.3	608.7	618.0	626.9	633.8	639.9	648.2	651.1	655.7
20°	581.2	591.0	598.9	607.7	617.6	629.2	637.6	644.0	652.4	657.1	661.3
22.5°	580.3	589.6	598.9	609.6	620.3	632.4	641.3	649.7	658.1	662.3	665.5
25°	579.3	589.1	599.3	611.5	623.1	635.7	645.9	653.9	661.7	665.9	668.8
27.5°	579.3	589.6	600.8	612.8	625.4	639.4	649.2	656.6	663.6	667.4	668.3
30°	578.9	589.6	600.3	613.8	627.3	641.7	652.4	659.4	665.5	667.8	666.9
32.5°	579.8	591.0	602.6	616.1	630.1	644.0	655.3	663.2	666.5	665.9	665.5
35°	584.5	594.7	608.2	621.7	636.2	649.2	659.9	665.5	668.3	667.4	665.0
37.5°	597.0	607.3	620.8	635.7	646.9	661.7	671.6	675.8	676.2	673.4	667.8
40°	623.1	633.4	645.5	661.7	675.2	685.5	694.8	699.5	696.7	691.6	685.5
42.5°	664.6	677.6	692.0	705.1	720.9	734.9	737.2	740.0	735.4	725.6	718.1
45°	731.2	739.1	757.7	767.5	788.0	794.9	800.0	801.5	791.3	783.3	770.3
47.5°	827.1	842.5	855.5	864.8	879.7	889.0	899.3	894.7	886.7	873.2	856.0
50°	977.9	987.8	1004.5	1021.3	1037.2	1043.6	1043.6	1039.0	1033.9	1007.8	986.8
52.5°	1163.3	1164.2	1188.5	1208.5	1222.0	1212.2	1223.9	1212.2	1209.0	1190.8	1173.6
55°	1378.0	1369.2	1398.5	1416.2	1428.3	1440.0	1437.7	1436.2	1424.2	1403.7	1382.7
57.5°	1582.0	1607.7	1621.6	1647.7	1653.7	1661.7	1658.4	1653.7	1646.7	1635.1	1625.8
60°	1876.3	1893.6	1906.2	1911.3	1928.5	1930.8	1942.5	1923.4	1928.1	1914.6	1885.2
62.5°	2276.9	2258.3	2268.0	2268.0	2262.9	2244.8	2254.5	2261.9	2249.4	2238.2	2233.5
65°	2725.3	2665.2	2607.5	2597.7	2571.2	2565.2	2557.7	2539.1	2531.1	2511.5	2495.7
66°	2859.5	2766.3	2711.8	2678.3	2646.2	2639.2	2628.9	2609.3	2593.5	2566.1	2539.5
67.5°	3009.8	2889.7	2807.8	2760.2	2720.6	2694.6	2674.1	2646.2	2621.0	2580.0	2537.6
70°	3000.1	2900.9	2802.2	2729.9	2670.4	2616.8	2585.1	2525.1	2473.8	2415.2	2366.7
72.5°	2520.9	2503.2	2445.9	2405.4	2332.2	2303.9	2220.0	2181.9	2111.1	2035.2	2011.8
75°	1752.4	1683.1	1653.7	1637.4	1605.3	1516.8	1459.0	1471.6	1388.8	1314.7	1272.3
77.5°	766.1	780.1	699.0	662.7	634.7	586.8	542.1	511.4	493.7	482.0	429.3
80°	211.9	184.8	182.6	169.5	166.7	148.5	150.9	137.9	129.0	127.2	123.0
82.5°	92.7	90.8	88.0	86.6	85.2	83.4	81.0	80.6	77.7	75.5	75.9
85°	61.5	61.0	59.6	58.2	55.9	52.6	50.3	48.4	48.9	46.5	46.1
87.5°	35.9	34.9	34.5	32.6	32.1	29.4	29.8	27.5	27.0	26.5	25.2
90°	5.1	5.6	7.0	6.5	4.7	8.8	7.5	6.5	7.0	5.6	5.6
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226795  
 CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	75°	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°



'226795  
 ISW-AF-450-LED-E1-SL2

REPORT NUMBER: P226795  
 CATALOG NUMBER: ISW-AF-450-LED-E1-SL2

**TION (continued):**

**CANDELA DISTRIBUTION (con**

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°		155°	165°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	652.4	652.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	647.8	644.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	611.0	602.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	557.9	547.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	497.4	482.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	420.0	389.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	330.6	290.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	227.7	195.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	159.8	147.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	123.4	123.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	102.5	107.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	90.3	95.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	82.9	87.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	77.7	79.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	71.7	72.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	66.6	66.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	61.9	61.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	57.8	57.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	53.6	54.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	51.2	51.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	48.9	49.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	47.1	47.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	45.2	44.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	43.8	42.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	42.4	41.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	41.4	40.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	40.5	39.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66°	40.1	39.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	39.6	38.7
										70°	37.7	36.8
										72.5°	34.9	34.5
										75°	32.1	31.2
										77.5°	28.4	27.9
										80°	24.2	23.7
										82.5°	20.5	19.5
										85°	16.3	15.3
										87.5°	11.2	10.2
										90°	2.8	3.3
										92.5°	0.0	0.0
										95°	0.0	0.0
										97.5°	0.0	0.0
										100°	0.0	0.0
										102.5°	0.0	0.0
										105°	0.0	0.0
										107.5°	0.0	0.0



REPORT NUMBER: P226795

CATALOG NUMBER: ISW-AF-450-LED-E1-

50-LED-E1-SL2

**tinued):**

175°	180°
652.4	652.4
641.7	645.9
599.3	598.0
539.3	539.7
466.7	467.6
372.6	366.9
266.9	269.1
185.8	185.4
149.0	150.0
127.6	127.6
113.6	113.6
100.1	100.6
90.8	91.8
82.4	82.9
74.1	74.5
67.1	67.1
62.4	62.9
59.1	59.1
55.9	55.9
53.1	54.0
50.3	50.7
47.5	48.0
44.7	44.7
42.4	42.4
40.5	40.1
39.1	38.2
37.7	37.2
37.2	36.8
36.8	36.3
35.9	35.4
34.5	34.0
31.7	30.7
28.8	27.9
26.5	25.2
22.4	21.4
16.3	15.3
9.8	9.8
2.4	2.4
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0
0.0	0.0

**CANDELA DISTRIBUTION (continued):**

	155°	165°	175°
110°	0.0	0.0	0.0
112.5°	0.0	0.0	0.0
115°	0.0	0.0	0.0
117.5°	0.0	0.0	0.0
120°	0.0	0.0	0.0
122.5°	0.0	0.0	0.0
125°	0.0	0.0	0.0
127.5°	0.0	0.0	0.0
130°	0.0	0.0	0.0
132.5°	0.0	0.0	0.0
135°	0.0	0.0	0.0
137.5°	0.0	0.0	0.0
140°	0.0	0.0	0.0
142.5°	0.0	0.0	0.0
145°	0.0	0.0	0.0
147.5°	0.0	0.0	0.0
150°	0.0	0.0	0.0
152.5°	0.0	0.0	0.0
155°	0.0	0.0	0.0
157.5°	0.0	0.0	0.0
160°	0.0	0.0	0.0
162.5°	0.0	0.0	0.0
165°	0.0	0.0	0.0
167.5°	0.0	0.0	0.0
170°	0.0	0.0	0.0
172.5°	0.0	0.0	0.0
175°	0.0	0.0	0.0
177.5°	0.0	0.0	0.0
180°	0.0	0.0	0.0

