

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: P226270

Luminaire Tested: **ISW-AF-450-LED-E1-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226270  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35937)  
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-T2  
Description: IMPACT ELITE LED WEDGE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II  
Light Source: (16) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3208.2 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Cutoff  
BUG Rating: B1 - U1 - G1

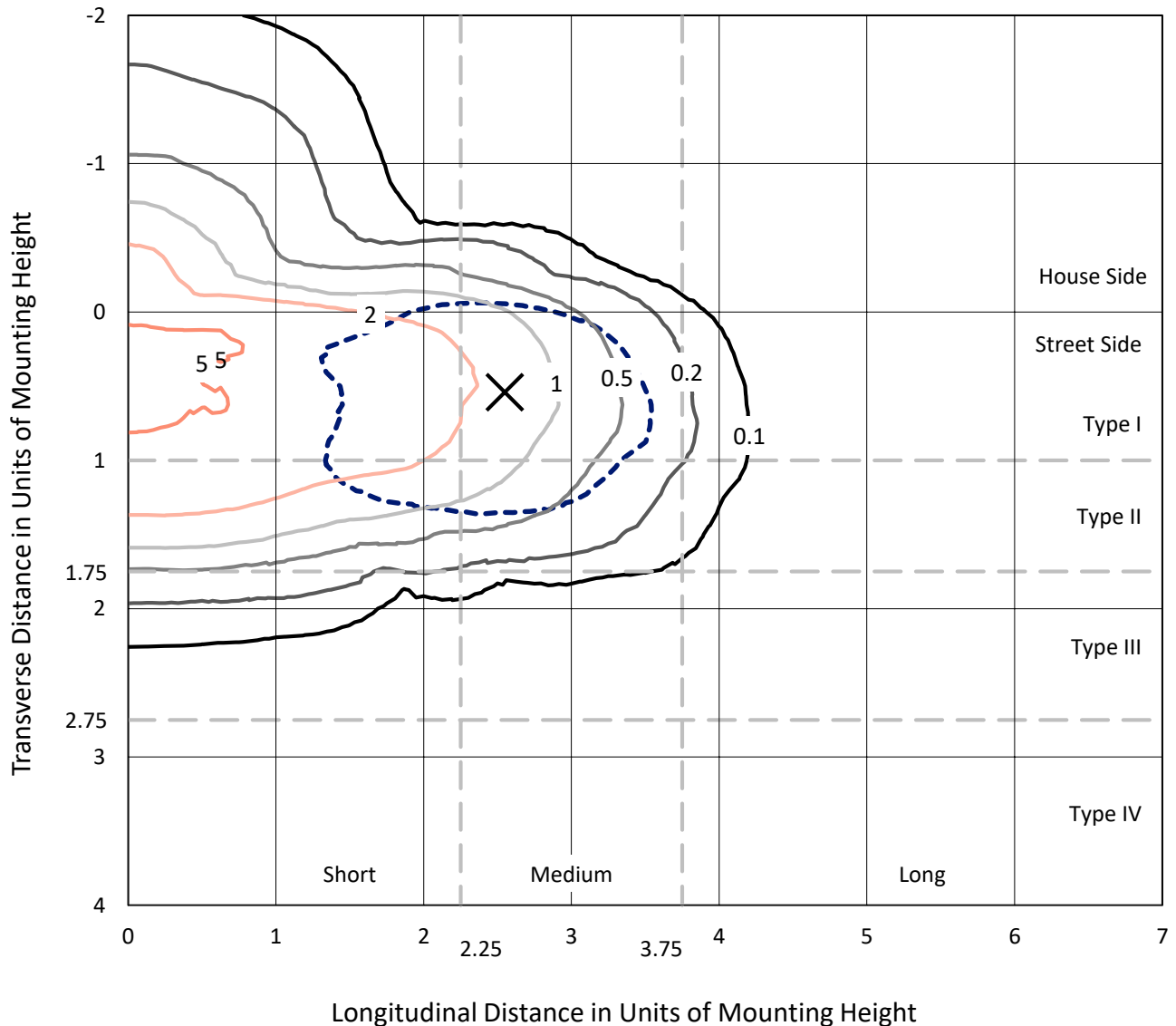
Input Watts (W): 25.31  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

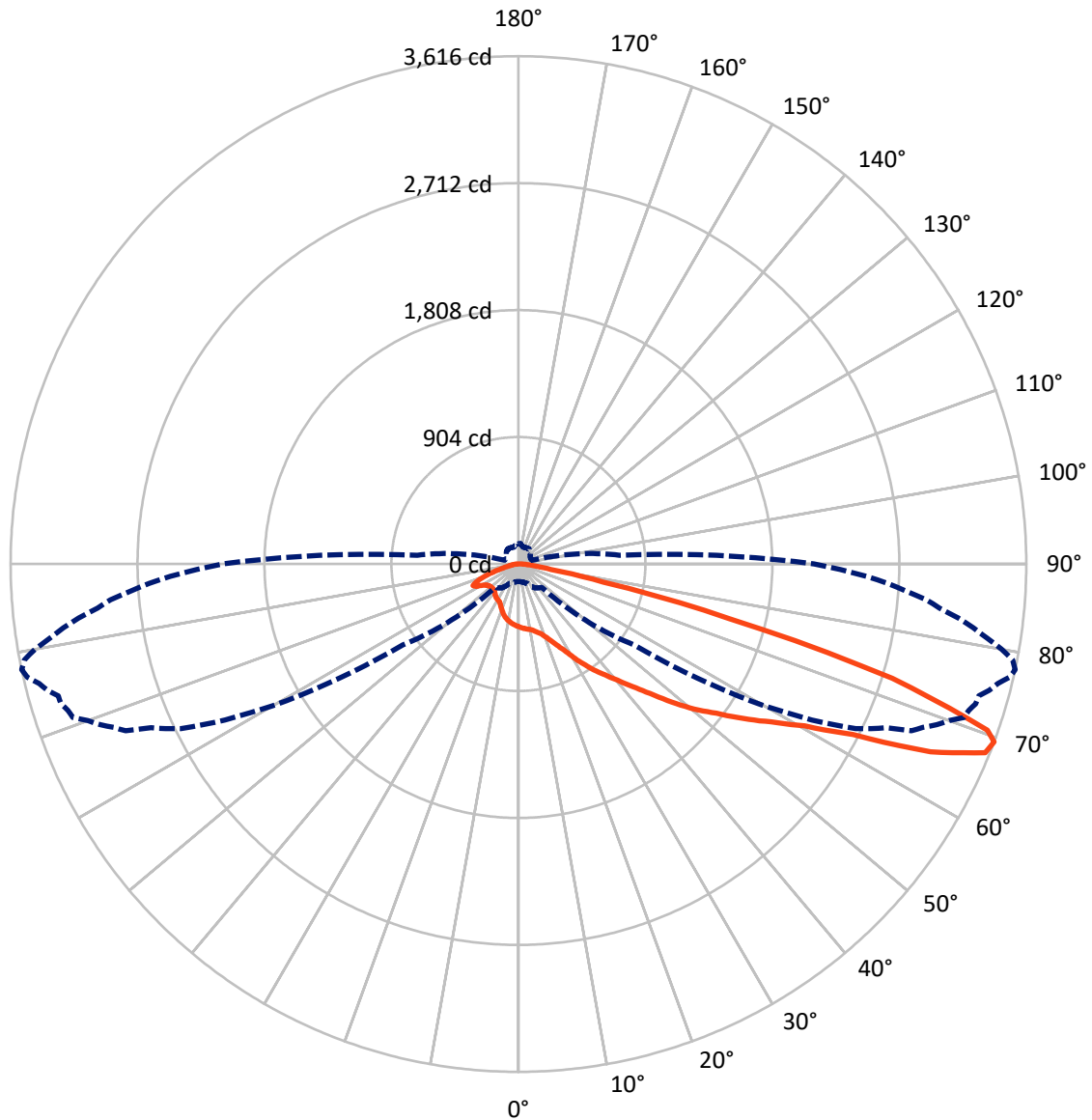
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type II - Medium - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	586.6	1.1	587.7
	% Fixture	18.3	0.0	18.3
<b>Street Side</b>	Lumens	2620.0	0.5	2620.5
	% Fixture	81.7	0.0	81.7
<b>Total</b>	Lumens	3206.6	1.6	3208.2
	% Fixture	99.9	0.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.4	1.3
10°-20°	125.1	3.9
20°-30°	224.3	7.0
30°-40°	366.1	11.4
40°-50°	541.5	16.9
50°-60°	707.1	22.0
60°-70°	790.8	24.6
70°-80°	355.0	11.1
80°-90°	55.4	1.7
90°-100°	1.6	0.1
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°	3206.6	99.9
0°-180°	3208.2	100.0



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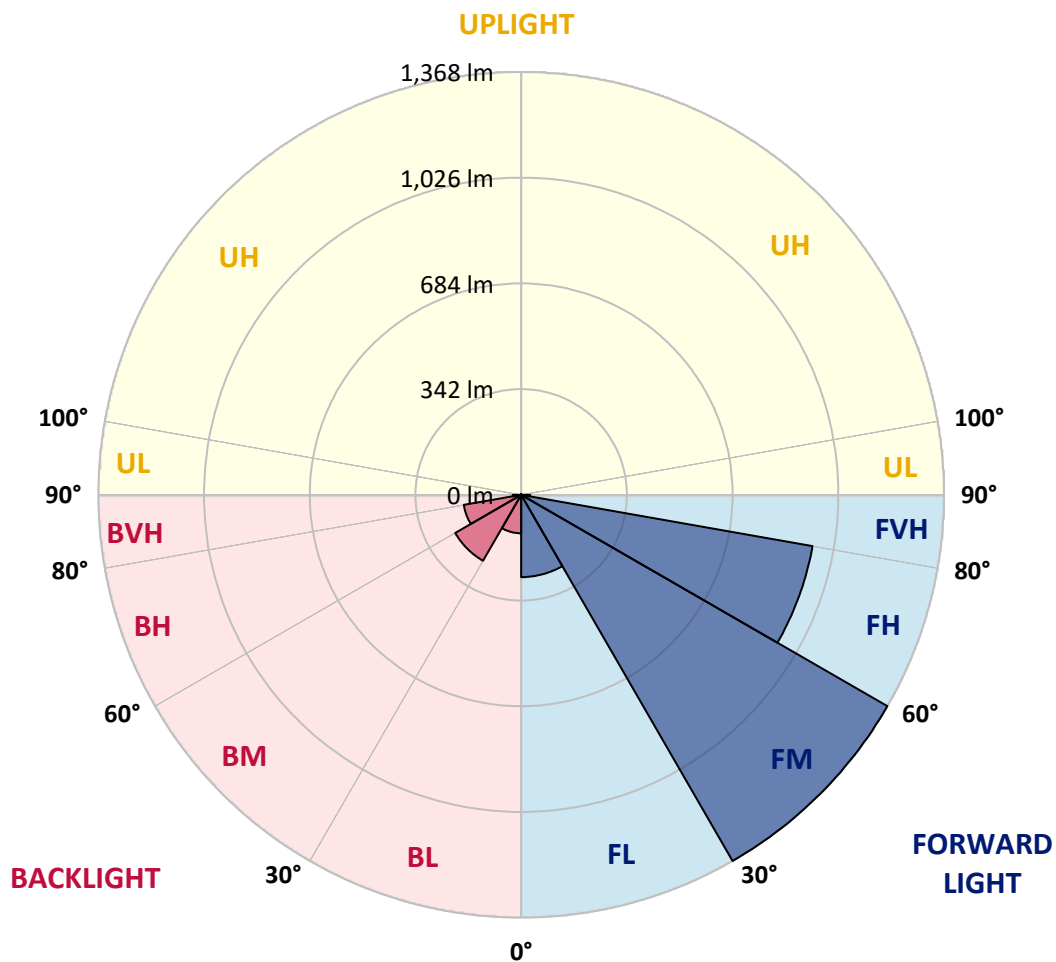
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	266.3	8.3			
FM	(30°-60°)	1368.2	42.6			
FH	(60°-80°)	957.2	29.8			G1/1800
FVH	(80°-90°)	28.3	0.9			G1/100
BL	(0°-30°)	124.5	3.9	B1/500		
BM	(30°-60°)	246.5	7.7	B1/1000		
BH	(60°-80°)	188.5	5.9	B1/500		G1/500
BVH	(80°-90°)	27.1	0.8			G1/100
UL	(90°-100°)	1.6	0.1		U1/10	
UH	(100°-180°)	1.1	0.0		U1/10	

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

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2
2.5°	477.8	477.8	476.5	475.5	474.1	470.4	464.8	463.9	463.4	462.5	461.6
5°	512.8	509.0	509.9	507.7	502.6	496.0	485.8	480.7	477.8	477.4	475.5
7.5°	541.1	541.7	540.2	535.6	528.7	520.7	506.8	498.8	496.4	495.1	491.8
10°	561.7	560.3	559.3	558.4	552.8	546.4	528.7	518.8	517.0	513.2	509.5
12.5°	576.5	576.5	576.5	575.6	572.3	567.2	553.3	543.5	541.1	536.0	532.8
15°	592.9	591.1	589.1	587.8	588.2	588.2	578.0	570.5	566.8	564.1	557.5
17.5°	627.8	623.6	619.4	613.9	605.0	602.6	602.2	601.7	596.6	596.2	589.6
20°	657.7	653.9	650.2	644.6	632.0	618.5	625.5	632.0	631.1	631.6	628.3
22.5°	694.4	691.6	684.1	677.6	661.3	645.1	646.0	659.9	661.8	663.7	664.6
25°	744.7	743.3	731.2	718.6	700.0	684.7	670.2	687.4	691.1	695.3	703.7
27.5°	795.4	792.2	779.2	768.0	744.7	728.4	708.4	717.7	723.3	731.2	744.2
30°	861.1	852.3	847.6	822.5	801.1	777.3	760.1	762.9	761.9	771.3	791.3
32.5°	956.2	942.1	918.9	893.8	868.6	837.0	822.5	822.0	819.7	830.4	841.6
35°	1007.4	1004.1	989.7	964.5	937.0	907.3	897.9	889.0	890.5	896.1	900.3
37.5°	1062.8	1060.0	1048.8	1034.8	1013.9	1030.2	978.6	965.5	959.4	956.7	958.0
40°	1087.0	1089.3	1095.4	1097.7	1085.7	1163.9	1061.9	1019.1	1017.1	1012.9	1008.8
42.5°	1092.1	1098.2	1110.3	1136.9	1148.5	1319.0	1130.8	1079.1	1071.6	1068.4	1068.9
45°	1110.8	1120.1	1122.4	1146.6	1201.6	1326.9	1208.6	1132.2	1126.6	1126.2	1123.4
47.5°	1155.9	1168.5	1168.5	1179.3	1231.4	1342.2	1235.1	1185.3	1181.6	1179.7	1187.1
50°	1162.5	1179.3	1212.8	1247.3	1284.9	1354.8	1265.4	1243.1	1244.4	1248.6	1270.5
52.5°	1052.1	1068.9	1157.4	1258.8	1381.8	1389.3	1311.0	1319.9	1329.2	1349.7	1389.8
55°	902.1	914.2	1019.1	1181.6	1385.6	1520.2	1425.6	1450.3	1469.9	1475.9	1538.8
57.5°	710.2	727.0	833.7	1044.6	1293.8	1557.4	1689.2	1700.5	1678.6	1698.5	1721.3
60°	384.7	382.8	531.4	755.4	1101.0	1488.5	1943.5	2135.4	2140.0	2170.8	2134.0
62.5°	215.1	215.1	258.0	388.0	708.4	1259.4	2065.5	2511.8	2570.0	2618.9	2726.4
65°	162.5	164.0	179.3	233.8	397.7	795.0	1976.1	2640.2	2752.0	2864.3	3052.9
67.5°	135.0	135.0	146.3	174.2	248.7	360.9	1454.9	2382.2	2522.0	2656.1	2916.9
69°	125.3	125.7	134.1	153.2	208.2	234.8	1005.0	2019.9	2179.6	2365.5	2672.9
70°	120.6	119.3	127.2	143.0	188.6	185.4	736.3	1756.3	1880.2	2046.9	2400.4
72.5°	107.1	105.8	109.9	122.0	148.5	132.3	300.4	945.0	1131.7	1318.5	1600.3
75°	95.4	94.1	97.4	102.9	115.5	101.1	150.9	395.9	479.3	619.4	854.7
77.5°	84.3	81.5	84.3	88.0	90.8	75.5	102.5	183.0	224.4	275.7	389.3
80°	76.4	73.6	76.8	75.0	71.3	58.2	68.0	106.7	118.3	141.6	185.4
82.5°	54.5	54.0	73.1	75.5	56.8	42.4	48.4	68.4	76.4	80.6	97.8
85°	33.6	32.1	42.4	54.0	57.8	26.6	31.2	40.5	42.4	46.1	54.5
87.5°	17.2	17.7	22.8	27.9	37.7	15.9	18.6	23.7	23.7	23.7	27.0
90°	4.2	5.1	7.0	9.8	7.9	4.2	7.0	5.6	6.5	5.6	6.5
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°	64°
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):**

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2
2.5°	462.0	460.6	458.8	459.2	458.3	456.8	457.4	456.8	457.4	456.4	455.5
5°	475.5	474.5	471.8	471.4	470.4	469.4	468.1	466.7	466.2	465.2	463.4
7.5°	490.9	488.0	486.7	484.9	482.5	478.7	478.3	476.5	475.1	474.1	471.8
10°	506.8	503.5	501.6	499.3	496.9	494.6	492.2	489.1	485.8	484.9	482.0
12.5°	530.5	526.3	522.5	518.8	516.5	512.3	509.0	504.8	501.6	500.2	495.5
15°	556.6	551.0	547.3	544.4	540.7	536.9	532.8	529.1	524.0	519.8	515.6
17.5°	587.3	582.2	579.4	574.3	569.6	565.4	562.1	557.5	553.3	545.8	542.2
20°	627.8	623.6	620.3	614.8	609.7	605.5	602.6	592.9	587.3	580.7	574.7
22.5°	665.5	666.0	662.8	659.0	655.7	650.2	645.5	638.5	631.6	623.6	615.2
25°	706.6	710.2	710.7	709.8	707.9	701.4	699.1	692.1	686.5	673.4	669.7
27.5°	752.2	756.4	761.5	768.0	769.4	762.4	765.7	758.7	748.9	743.3	731.2
30°	796.4	808.0	818.8	826.2	830.8	834.1	831.8	829.5	823.0	813.7	802.9
32.5°	853.2	865.3	876.1	892.3	900.7	910.9	909.1	910.0	907.8	898.4	885.9
35°	910.5	921.3	935.2	945.9	966.4	977.5	986.9	986.4	986.4	980.8	968.7
37.5°	961.3	967.3	979.0	996.7	1010.2	1027.9	1042.8	1048.8	1058.7	1059.1	1046.1
40°	1014.4	1020.4	1029.3	1042.3	1057.2	1078.2	1098.2	1117.8	1127.1	1136.9	1131.7
42.5°	1071.6	1078.2	1084.7	1093.1	1114.5	1130.8	1157.8	1184.4	1203.5	1223.4	1221.2
45°	1128.5	1135.9	1145.3	1157.8	1176.9	1203.5	1229.6	1259.4	1303.1	1326.9	1343.1
47.5°	1192.8	1204.8	1222.1	1242.1	1257.5	1284.9	1318.1	1364.1	1408.4	1449.4	1475.0
50°	1289.6	1294.2	1322.3	1341.8	1371.2	1399.1	1432.1	1472.6	1529.9	1571.9	1612.9
52.5°	1403.7	1421.4	1449.4	1471.7	1495.0	1523.0	1556.9	1593.2	1650.1	1697.2	1750.3
55°	1550.9	1576.1	1600.3	1612.4	1645.0	1670.2	1697.6	1733.5	1794.5	1845.7	1908.1
57.5°	1726.4	1751.6	1763.3	1781.0	1795.0	1822.9	1860.1	1884.4	1938.4	1991.5	2057.7
60°	2086.9	2071.2	2085.1	2057.7	2053.5	2055.7	2063.7	2082.3	2112.6	2161.9	2231.8
62.5°	2737.6	2714.8	2654.3	2632.4	2589.9	2532.6	2478.6	2471.2	2455.4	2492.6	2536.4
65°	3117.6	3200.5	3209.4	3232.6	3216.0	3171.1	3107.8	3087.4	3036.1	3000.3	2998.0
67.5°	3026.4	3150.7	3228.4	3326.7	3381.3	3434.4	3448.3	3466.5	3433.4	3417.1	3421.8
69°	2772.5	2864.8	3038.9	3106.0	3192.1	3262.9	3356.1	3372.4	3404.5	3409.2	3471.2
70°	2521.1	2656.6	2756.2	2856.8	2976.1	3053.8	3095.8	3164.7	3244.3	3283.5	3350.5
72.5°	1812.7	1856.9	1927.6	2058.1	2091.1	2171.7	2254.2	2312.9	2406.5	2472.6	2630.5
75°	978.0	1004.6	1115.9	1190.0	1209.5	1236.0	1296.6	1311.0	1346.0	1367.4	1519.2
77.5°	446.6	487.1	501.6	542.2	519.2	530.5	544.9	541.7	551.5	598.0	651.1
80°	205.8	213.8	219.3	236.1	237.0	233.3	234.8	232.4	230.6	238.0	243.6
82.5°	100.1	112.2	112.2	122.4	127.6	126.2	129.0	128.1	129.9	128.1	134.1
85°	58.7	58.7	63.3	68.9	68.0	69.9	69.9	73.6	74.1	75.0	75.0
87.5°	27.5	30.3	31.7	34.0	34.9	36.3	37.2	37.2	37.7	36.8	37.7
90°	7.0	7.0	11.7	11.7	12.6	14.0	12.1	13.0	16.3	12.1	15.3
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: P226270

CATALOG NUMBER: ISW-AF-450-LED-E1-T2

**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
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: P226270

CATALOG NUMBER: ISW-AF-450-LED-E1-T2

**CANDELA DISTRIBUTION (continued):**

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2
2.5°	454.6	455.5	455.0	453.2	452.7	452.7	451.7	451.3	450.4	449.9	450.8
5°	463.0	463.0	461.6	459.7	457.8	457.4	456.8	454.6	453.6	452.7	451.7
7.5°	470.9	469.9	468.1	464.8	463.0	462.5	460.6	458.3	455.9	454.1	453.2
10°	479.3	478.3	474.5	472.3	468.5	468.1	464.8	462.0	459.7	457.4	455.5
12.5°	491.3	490.4	486.2	480.7	477.8	476.0	471.8	468.5	465.2	462.5	459.2
15°	509.9	506.3	503.5	497.9	493.7	490.0	484.9	480.2	475.5	470.9	468.1
17.5°	536.0	530.9	523.4	520.3	514.6	508.6	501.6	498.4	492.2	486.7	481.1
20°	570.1	565.0	553.3	549.1	541.1	532.3	526.7	519.8	514.6	505.7	499.7
22.5°	607.7	603.1	592.0	580.7	573.4	566.3	557.5	548.6	538.9	530.5	524.0
25°	656.7	649.7	640.0	628.7	617.6	607.7	595.7	583.1	574.7	563.0	553.7
27.5°	723.3	711.2	694.9	682.8	673.9	659.0	644.2	632.9	619.9	604.6	594.2
30°	795.4	781.9	769.9	755.9	741.0	726.5	706.0	689.8	675.8	659.5	642.7
32.5°	875.5	864.0	846.7	828.6	812.2	794.1	779.2	761.9	737.8	720.5	702.8
35°	956.2	942.6	925.0	909.6	891.0	872.4	855.6	832.8	810.9	786.1	761.5
37.5°	1033.9	1022.3	1002.7	979.5	963.1	943.2	925.9	901.6	875.5	848.1	829.5
40°	1120.5	1101.9	1088.4	1061.4	1044.6	1022.3	997.6	979.0	953.8	924.0	897.4
42.5°	1219.8	1206.7	1192.2	1170.4	1152.7	1126.2	1095.0	1071.2	1047.9	1012.5	975.7
45°	1345.5	1337.1	1313.4	1295.7	1271.9	1244.0	1217.0	1188.1	1151.3	1110.3	1076.8
47.5°	1496.4	1489.9	1468.4	1443.3	1412.1	1374.4	1349.3	1309.7	1278.5	1227.2	1187.1
50°	1633.3	1636.6	1625.0	1586.3	1558.4	1520.6	1481.0	1446.6	1398.6	1345.5	1294.2
52.5°	1796.8	1793.5	1764.2	1742.8	1709.8	1664.0	1620.8	1576.5	1523.9	1469.0	1405.1
55°	1953.3	1963.0	1942.6	1912.3	1872.3	1808.5	1764.7	1707.4	1652.0	1591.4	1517.9
57.5°	2105.1	2136.3	2120.5	2084.7	2043.7	1997.5	1939.8	1875.5	1818.2	1739.0	1656.2
60°	2294.2	2335.7	2342.1	2318.9	2274.2	2220.6	2144.7	2094.4	2015.7	1942.6	1878.8
62.5°	2585.3	2679.4	2673.8	2684.9	2653.3	2620.2	2531.3	2477.3	2374.8	2322.2	2233.2
65°	3071.5	3141.0	3224.3	3221.5	3199.6	3120.4	3028.2	2937.8	2870.3	2766.5	2673.8
67.5°	3479.5	3536.8	3586.2	3560.6	3510.3	3421.3	3313.2	3187.5	3084.6	2970.0	2848.4
69°	3517.7	3587.6	3616.4	3584.7	3494.4	3378.4	3272.7	3155.8	3014.2	2916.0	2767.9
70°	3415.2	3484.2	3542.4	3460.8	3378.0	3264.8	3149.3	3027.7	2901.1	2795.3	2645.9
72.5°	2712.9	2790.7	2782.7	2773.9	2707.8	2594.6	2488.4	2423.3	2334.3	2206.6	2098.6
75°	1577.5	1613.3	1550.4	1616.6	1537.4	1423.3	1438.2	1364.6	1299.4	1225.8	1169.0
77.5°	619.4	651.1	618.1	607.3	571.9	564.1	504.8	511.9	482.5	424.7	398.2
80°	234.8	239.0	233.3	221.7	219.3	205.8	202.1	189.0	183.0	164.0	156.9
82.5°	126.2	128.6	124.8	121.1	118.3	110.4	105.3	95.4	89.9	83.9	83.4
85°	72.6	70.8	68.9	67.1	62.9	58.2	54.5	50.7	46.5	43.3	40.1
87.5°	38.2	38.7	39.1	37.2	34.5	30.7	28.4	27.0	23.7	22.4	21.0
90°	12.6	9.3	10.7	13.5	12.6	10.2	9.8	8.4	7.0	7.0	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: P226270  
 CATALOG NUMBER: ISW-AF-450-LED-E1-T2

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°	
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	67.5°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°



NUMBER: P226270  
 NUMBER: ISW-AF-450-LED-E1-T2

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°	110°	87°
446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	446.2	110°	0.0
449.5	449.5	448.1	447.1	443.9	438.2	432.7	427.6	420.5	417.8	414.0	112.5°	0.0
450.8	449.9	448.5	446.6	440.1	427.1	413.6	399.2	384.2	370.7	354.9	115°	0.0
451.7	449.9	448.1	445.7	436.4	416.3	389.3	360.9	334.4	314.4	306.0	117.5°	0.0
452.2	450.8	448.5	445.3	432.2	402.4	359.1	318.1	294.8	286.9	285.5	120°	0.0
457.4	455.0	451.3	447.5	430.4	387.0	325.1	285.9	276.6	280.4	286.9	122.5°	0.0
463.9	461.0	456.4	452.7	429.4	367.0	292.1	267.8	271.1	281.3	292.1	125°	0.0
475.5	470.9	465.7	462.0	431.3	342.3	265.5	258.5	268.2	281.3	295.7	127.5°	0.0
492.8	486.2	480.2	473.6	434.0	311.6	249.6	252.5	264.0	278.0	293.9	130°	0.0
514.1	506.8	498.4	488.6	437.3	285.0	240.8	245.9	256.7	268.7	281.7	132.5°	0.0
543.1	532.8	522.1	509.9	442.0	256.1	232.8	238.4	245.0	252.0	258.5	135°	0.0
579.4	565.4	553.7	537.5	446.6	236.6	226.4	228.2	229.7	230.6	230.1	137.5°	0.0
627.8	606.4	592.9	572.9	451.7	226.4	218.9	216.6	214.2	210.9	207.2	140°	0.0
679.0	661.3	640.0	614.3	455.0	219.3	212.0	204.5	197.9	194.7	194.7	142.5°	0.0
738.7	716.8	689.8	657.7	450.8	212.0	202.5	192.8	189.0	193.2	191.9	145°	0.0
798.3	768.0	738.2	701.4	440.6	203.6	192.3	187.2	190.1	184.4	181.2	147.5°	0.0
864.0	830.4	789.0	746.1	425.6	194.7	187.2	190.1	180.2	173.7	176.6	150°	0.0
937.5	897.9	853.2	795.0	415.9	189.0	179.3	181.7	173.3	168.6	167.2	152.5°	0.0
1037.7	981.3	926.8	858.4	423.4	180.2	164.0	173.3	168.6	164.4	160.7	155°	0.0
1135.9	1075.8	1011.6	931.0	436.4	173.7	151.8	164.4	167.7	160.7	153.6	157.5°	0.0
1234.7	1170.9	1095.9	1006.0	452.2	169.5	142.5	153.6	165.3	156.9	151.4	160°	0.0
1338.5	1257.9	1181.1	1084.2	472.7	165.3	135.0	144.3	161.1	156.9	148.5	162.5°	0.0
1447.5	1352.5	1275.6	1170.9	508.6	159.3	125.7	137.0	156.9	156.5	145.8	165°	0.0
1574.2	1489.4	1390.7	1284.0	558.4	152.3	117.3	131.3	153.2	154.7	142.5	167.5°	0.0
1789.9	1702.3	1583.0	1481.5	657.1	143.0	112.2	125.7	147.2	150.9	139.7	170°	0.0
2139.6	2020.3	1910.9	1815.9	826.2	129.9	108.5	119.7	140.7	146.3	137.4	172.5°	0.0
2540.6	2424.2	2291.9	2132.1	920.2	117.8	103.4	112.2	134.1	141.6	135.0	175°	0.0
2711.0	2558.7	2398.1	2208.6	830.4	108.0	97.8	105.3	126.6	135.0	131.8	177.5°	0.0
2632.8	2478.6	2291.9	2106.1	722.3	102.9	94.5	101.6	121.1	130.8	128.6	180°	0.0
2496.8	2341.7	2175.0	1951.9	645.1	100.1	92.2	99.2	118.8	128.6	126.6		
1974.7	1836.4	1682.8	1512.7	439.7	90.8	84.8	92.2	109.5	120.2	119.7		
1046.5	1006.0	892.3	792.7	227.7	81.0	76.8	84.3	101.1	112.2	112.2		
376.8	341.9	326.9	271.5	121.1	70.8	68.9	74.5	91.8	102.5	102.0		
142.5	138.8	124.4	116.4	76.8	57.8	58.2	63.8	80.6	90.8	90.3		
80.6	73.1	70.8	68.4	48.9	45.6	48.0	53.6	68.9	77.7	79.2		
38.7	35.9	34.9	32.6	32.1	34.9	37.7	42.4	54.9	65.7	64.2		
18.6	17.7	17.2	16.8	22.8	22.4	27.5	29.4	36.8	52.2	47.1		
6.0	6.0	5.6	4.7	6.5	7.5	8.9	12.6	15.3	30.3	24.7		
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	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	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	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	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	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	0.0	0.0		

'226270  
 ISW-AF-450-LED-E1-T2

REPORT NUMBER: P226270  
 CATALOG NUMBER: ISW-AF-4!

**TION (continued):**

**CANDELA DISTRIBUTION (con**

88°	89°	90°	95°	105°	115°	125°	135°	145°	155°		165°	175°
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0°	446.2	446.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5°	410.8	404.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5°	343.2	342.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5°	300.8	294.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10°	286.9	286.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.5°	293.0	294.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15°	300.8	303.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5°	306.0	311.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20°	304.6	310.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°	289.2	292.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°	261.8	262.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°	228.6	227.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°	205.4	199.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°	194.7	191.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°	187.2	181.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°	194.3	193.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°	200.7	199.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°	189.6	181.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°	169.1	159.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°	155.1	149.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°	148.5	146.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°	146.7	151.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°	145.8	150.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°	139.2	148.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°	134.6	145.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°	131.8	143.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°	129.5	144.8
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°	125.7	147.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69°	123.9	147.2
										70°	122.0	145.8
										72.5°	115.5	134.6
										75°	107.6	118.8
										77.5°	97.4	102.0
										80°	86.1	89.0
										82.5°	75.0	85.7
										85°	58.7	72.6
										87.5°	43.3	40.1
										90°	24.7	18.2
										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: P226270

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

50-LED-E1-T2

**tinued):**

180°
446.2
405.7
339.5
295.3
287.9
293.4
304.6
313.0
312.0
294.3
263.6
231.5
204.0
195.2
183.9
196.1
201.6
183.0
159.3
148.5
145.8
152.7
150.5
148.5
145.8
143.4
143.0
143.9
142.1
139.7
125.7
113.1
102.0
89.9
75.9
56.8
43.3
15.3
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0

**CANDELA DISTRIBUTION (continued):**

	165°	175°	180°
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

(END OF F

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report

