

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: P228086

Luminaire Tested: **ISS-AF-800-LED-E1-SL2-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228086  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29761)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-800-LED-E1-SL2-8030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

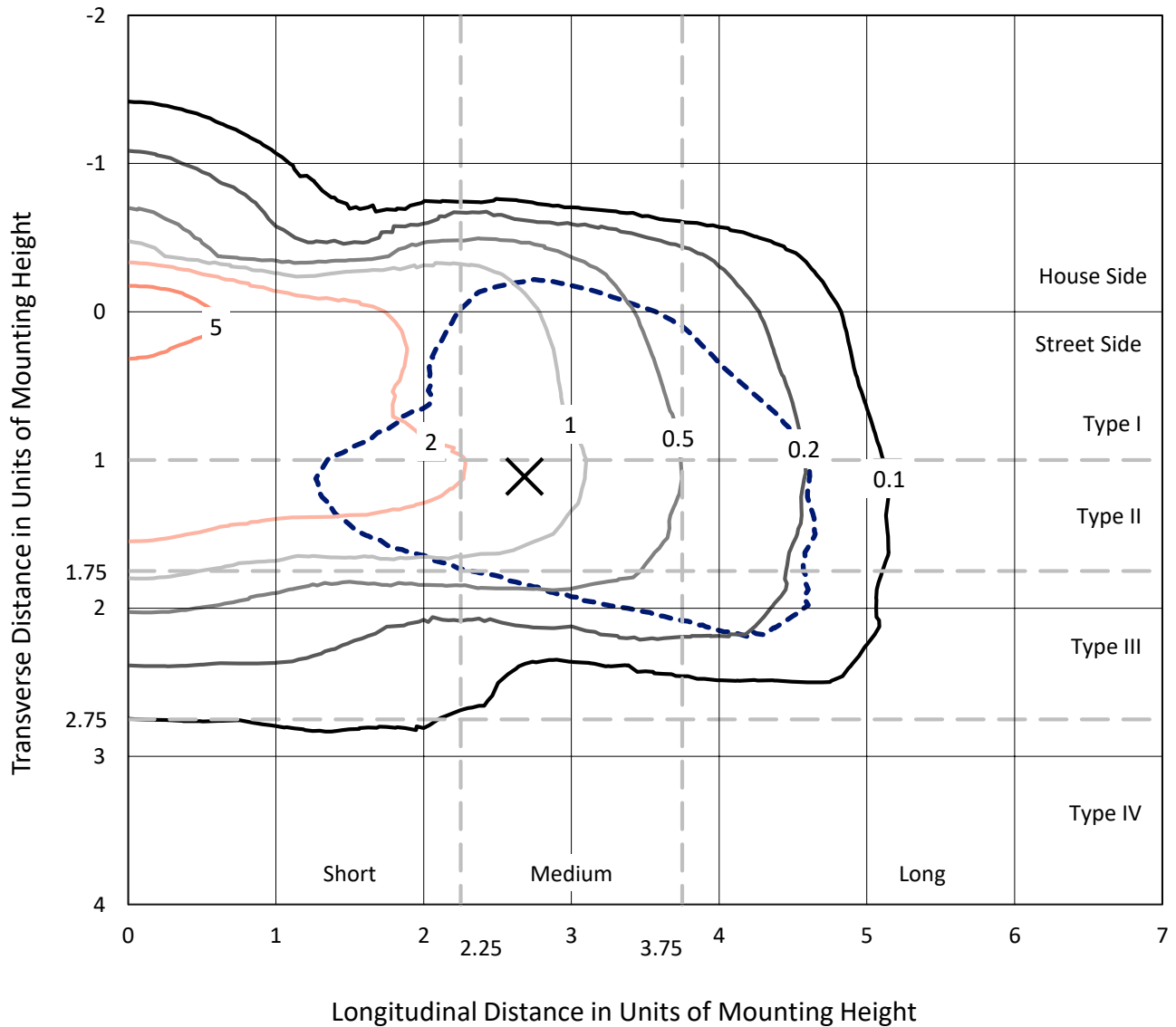
Lumens per Lamp: N/A  
Luminaire Lumens: 3776 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (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

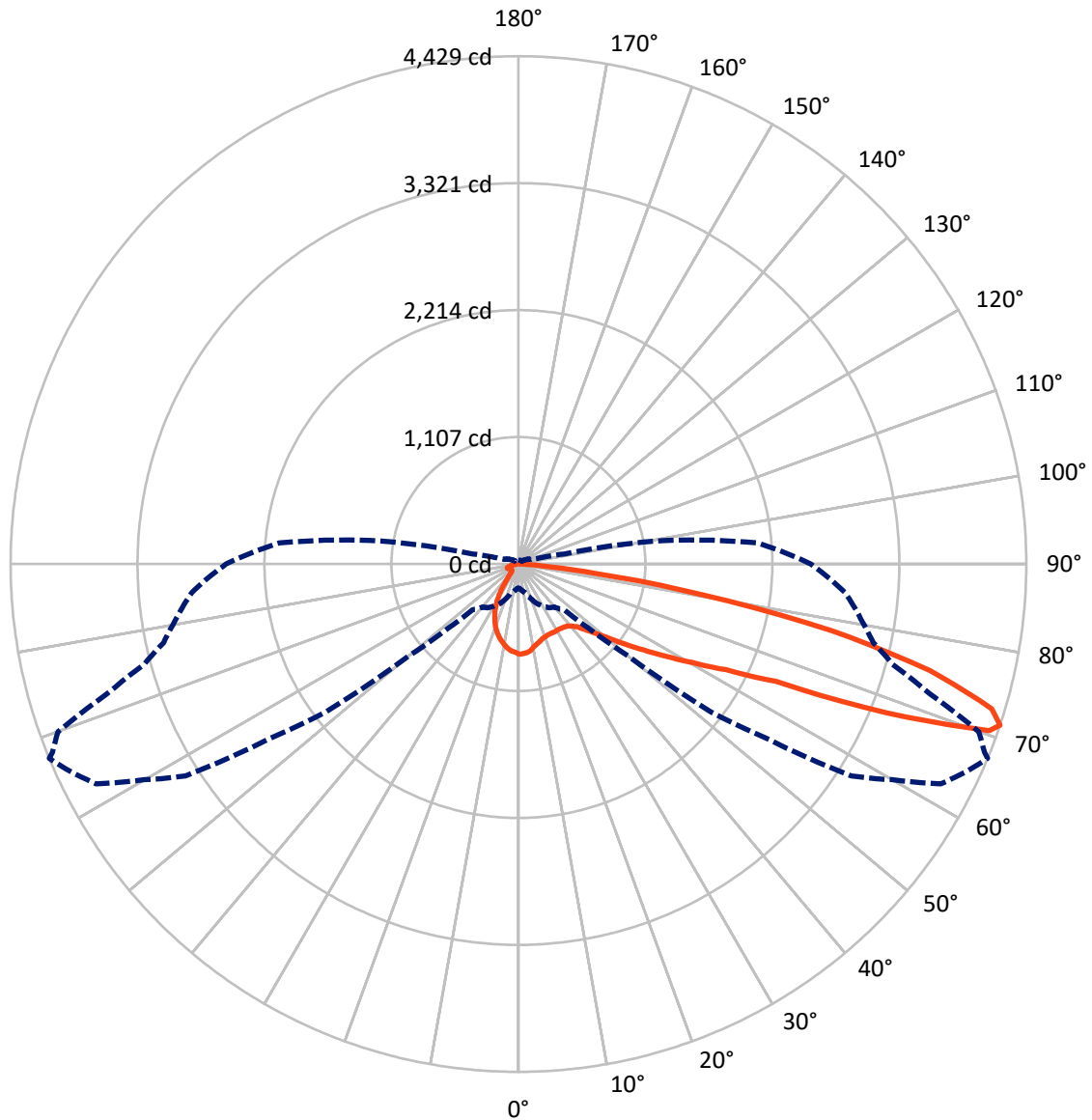
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.9 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	636.3	0.0	636.3
	% Fixture	16.9	0.0	16.9
<b>Street Side</b>	Lumens	3139.7	0.0	3139.7
	% Fixture	83.1	0.0	83.1
<b>Total</b>	Lumens	3776.0	0.0	3776.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.7	1.8
10°-20°	164.3	4.4
20°-30°	223.4	5.9
30°-40°	305.3	8.1
40°-50°	460.0	12.2
50°-60°	729.1	19.3
60°-70°	965.2	25.6
70°-80°	768.9	20.4
80°-90°	91.2	2.4
90°-100°	0.0	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°	3776.0	100.0
0°-180°	3776.0	100.0



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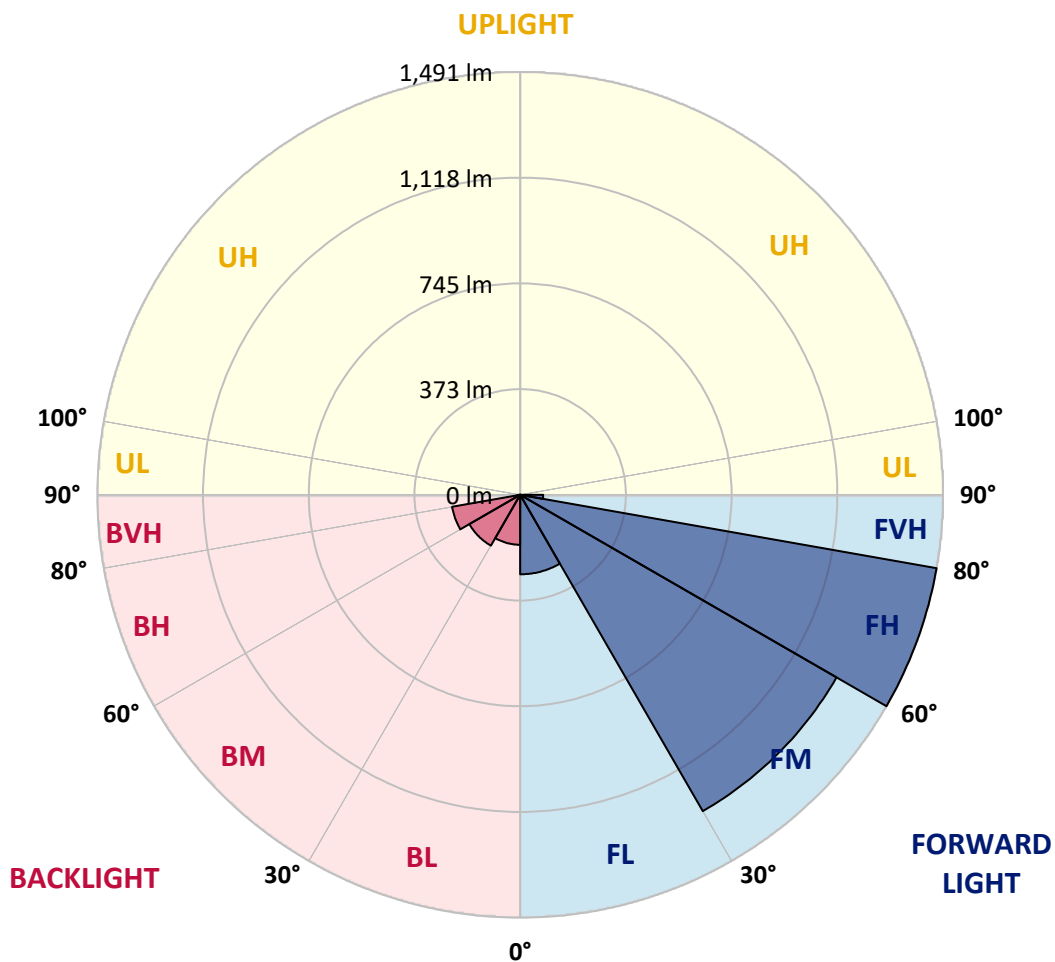
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	280.2	7.4			
FM (30°-60°)	1287.7	34.1			
FH (60°-80°)	1490.6	39.5			G1/1800
FVH (80°-90°)	81.3	2.2			G1/100
BL (0°-30°)	176.1	4.7	B1/500		
BM (30°-60°)	206.8	5.5	B0/220		
BH (60°-80°)	243.5	6.4	B1/500		G1/500
BVH (80°-90°)	9.9	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9
2.5°	772.4	769.7	769.7	773.7	780.3	775.0	779.0	779.0	780.3	784.2	785.6
5°	715.7	710.4	715.7	721.0	735.5	732.8	736.8	740.7	748.7	750.0	760.5
7.5°	664.3	661.7	665.6	676.2	694.6	689.3	694.6	699.9	709.1	713.1	723.6
10°	624.8	620.8	626.1	634.0	652.4	651.1	653.8	660.3	670.9	673.5	686.7
12.5°	595.8	595.8	598.4	608.9	624.8	623.4	631.3	635.3	644.5	647.2	661.7
15°	581.3	577.3	582.6	591.8	607.6	607.6	612.9	616.8	630.0	631.3	644.5
17.5°	568.1	569.4	570.7	581.3	595.8	593.1	599.7	602.3	616.8	614.2	630.0
20°	568.1	570.7	569.4	576.0	586.5	581.3	589.2	590.5	606.3	602.3	619.5
22.5°	583.9	586.5	582.6	581.3	585.2	581.3	585.2	587.8	599.7	597.1	612.9
25°	611.6	616.8	611.6	602.3	598.4	587.8	590.5	594.4	603.7	597.1	611.6
27.5°	655.1	659.0	649.8	640.6	622.1	610.3	606.3	605.0	615.5	605.0	616.8
30°	705.2	710.4	702.5	685.4	659.0	639.3	631.3	627.4	634.0	618.2	630.0
32.5°	759.2	764.5	759.2	746.0	710.4	681.4	670.9	661.7	666.9	645.8	651.1
35°	814.6	819.8	825.1	817.2	771.1	738.1	721.0	713.1	711.7	685.4	686.7
37.5°	863.3	868.6	885.7	893.6	851.5	806.6	790.8	773.7	775.0	738.1	738.1
40°	922.6	929.2	951.6	970.1	942.4	888.4	869.9	851.5	851.5	802.7	804.0
42.5°	1003.0	1010.9	1025.4	1050.5	1041.3	985.9	966.1	941.1	943.7	885.7	884.4
45°	1116.4	1121.7	1121.7	1137.5	1138.8	1086.1	1072.9	1047.8	1053.1	979.3	983.3
47.5°	1264.0	1257.4	1231.1	1240.3	1250.8	1195.5	1183.6	1167.8	1174.4	1095.3	1103.2
50°	1401.1	1395.8	1341.8	1344.4	1382.6	1326.0	1322.0	1302.2	1311.5	1232.4	1244.2
52.5°	1452.5	1443.3	1389.2	1418.2	1525.0	1493.3	1499.9	1490.7	1496.0	1411.6	1409.0
55°	1394.5	1394.5	1361.5	1414.3	1631.7	1648.9	1702.9	1724.0	1746.4	1662.1	1643.6
57.5°	1233.7	1244.2	1249.5	1343.1	1614.6	1688.4	1791.2	1880.9	1995.5	1990.3	2017.9
60°	967.4	985.9	1016.2	1169.1	1540.8	1662.1	1795.2	1929.6	2087.8	2189.3	2339.5
62.5°	678.8	694.6	719.7	825.1	1326.0	1534.2	1726.6	1933.6	2135.2	2294.7	2492.4
65°	461.3	477.1	529.9	587.8	800.1	1103.2	1397.1	1739.8	2046.9	2343.5	2609.7
67.5°	332.1	341.4	382.2	479.8	532.5	587.8	697.2	1100.6	1478.8	2075.9	2464.7
70°	249.1	258.3	295.2	403.3	467.9	482.4	508.8	579.9	676.2	1166.5	1676.6
71°	208.3	221.4	266.2	379.6	465.3	477.1	489.0	531.2	562.8	825.1	1244.2
72.5°	146.3	155.5	197.7	350.6	446.8	474.5	502.2	500.9	498.2	562.8	752.6
75°	93.6	93.6	93.6	197.7	477.1	460.0	470.5	527.2	498.2	473.2	495.6
77.5°	73.8	72.5	68.5	98.9	373.0	466.6	494.3	508.8	536.4	494.3	471.9
80°	55.4	54.0	54.0	61.9	172.7	301.8	417.8	464.0	483.7	525.9	479.8
82.5°	29.0	29.0	31.6	36.9	64.6	105.4	216.2	355.9	398.1	400.7	404.6
85°	9.2	7.9	10.5	17.1	27.7	34.3	60.6	143.7	213.5	258.3	272.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.3	9.2	11.9
90°	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):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	68°	70°	72.5°	75°
0°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9
2.5°	781.6	786.9	782.9	788.2	781.6	789.5	782.9	786.9	788.2	782.9	789.5
5°	753.9	769.7	764.5	776.3	771.1	781.6	776.3	786.9	786.9	782.9	792.1
7.5°	719.7	735.5	736.8	748.7	748.7	761.8	761.8	772.4	777.6	777.6	790.8
10°	685.4	699.9	702.5	715.7	718.3	734.2	734.2	748.7	759.2	763.1	779.0
12.5°	659.0	677.5	677.5	692.0	689.3	713.1	715.7	728.9	739.4	748.7	769.7
15°	643.2	660.3	660.3	674.8	672.2	695.9	699.9	713.1	728.9	734.2	763.1
17.5°	627.4	644.5	640.6	660.3	659.0	685.4	682.7	702.5	715.7	723.6	756.6
20°	614.2	634.0	631.3	651.1	645.8	674.8	674.8	694.6	707.8	714.4	752.6
22.5°	607.6	628.7	623.4	643.2	639.3	668.3	668.3	688.0	702.5	713.1	751.3
25°	607.6	626.1	620.8	643.2	636.6	668.3	666.9	686.7	701.2	710.4	752.6
27.5°	610.3	628.7	624.8	645.8	640.6	668.3	670.9	688.0	702.5	713.1	755.2
30°	619.5	636.6	627.4	647.2	643.2	669.6	668.3	686.7	701.2	714.4	755.2
32.5°	639.3	648.5	636.6	653.8	645.8	672.2	672.2	685.4	702.5	718.3	755.2
35°	666.9	673.5	655.1	666.9	652.4	678.8	677.5	692.0	705.2	718.3	757.9
37.5°	706.5	714.4	685.4	695.9	672.2	693.3	688.0	705.2	718.3	726.2	771.1
40°	765.8	768.4	730.2	738.1	705.2	723.6	710.4	734.2	740.7	746.0	790.8
42.5°	838.3	840.9	792.1	797.4	755.2	771.1	748.7	773.7	782.9	781.6	830.4
45°	927.9	929.2	873.9	877.8	829.1	842.2	814.6	835.6	842.2	838.3	888.4
47.5°	1025.4	1036.0	974.0	979.3	927.9	934.5	900.2	924.0	924.0	920.0	971.4
50°	1154.6	1170.4	1097.9	1105.8	1046.5	1051.8	1012.3	1037.3	1034.7	1024.1	1082.1
52.5°	1315.4	1329.9	1253.5	1264.0	1200.7	1203.4	1154.6	1183.6	1175.7	1158.6	1225.8
55°	1511.8	1513.1	1441.9	1451.2	1387.9	1384.0	1323.3	1358.9	1347.0	1323.3	1385.3
57.5°	1826.8	1788.6	1671.3	1668.6	1600.1	1594.8	1517.1	1560.6	1540.8	1490.7	1572.4
60°	2334.3	2346.1	2046.9	2000.8	1872.9	1849.2	1746.4	1796.5	1772.8	1691.1	1771.5
62.5°	2620.3	2808.8	2790.3	2624.2	2294.7	2205.1	2031.1	2090.4	2028.5	1908.5	1983.7
65°	2832.5	3088.2	3235.8	3395.3	3247.7	2881.3	2470.0	2553.1	2401.5	2173.5	2246.0
67.5°	2911.6	3220.0	3531.0	3757.8	3912.0	3939.6	3463.8	3486.2	3113.2	2657.2	2666.4
70°	2497.7	2952.4	3561.4	3848.7	4154.5	4304.7	4354.8	4331.1	4089.9	3444.1	3197.6
71°	2116.8	2667.7	3440.1	3760.4	4151.9	4296.8	4428.6	4383.8	4271.8	3756.4	3378.2
72.5°	1434.0	2126.0	3085.5	3491.5	4013.5	4118.9	4316.6	4237.5	4213.8	3989.7	3546.9
75°	674.8	1059.7	2007.4	2621.6	3396.6	3498.1	3705.0	3607.5	3545.5	3622.0	3374.2
77.5°	496.9	578.6	1101.9	1629.1	2470.0	2613.7	2791.6	2671.7	2592.6	2669.0	2496.4
80°	452.1	454.7	570.7	859.4	1473.6	1559.3	1626.5	1528.9	1409.0	1403.7	1244.2
82.5°	416.5	394.1	370.4	454.7	755.2	718.3	664.3	615.5	478.5	383.6	276.8
85°	264.9	290.0	263.6	249.1	300.5	247.8	196.4	188.5	133.1	89.6	83.0
87.5°	18.5	21.1	25.0	29.0	35.6	29.0	18.5	22.4	13.2	0.0	6.6
90°	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):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9
2.5°	780.3	786.9	789.5	788.2	785.6	782.9	773.7	780.3	771.1	777.6	769.7
5°	784.2	793.5	794.8	792.1	789.5	784.2	768.4	777.6	767.1	772.4	760.5
7.5°	782.9	797.4	798.7	796.1	790.8	781.6	765.8	772.4	755.2	759.2	743.4
10°	776.3	797.4	798.7	792.1	784.2	769.7	751.3	753.9	736.8	736.8	715.7
12.5°	769.7	794.8	801.4	792.1	779.0	759.2	738.1	735.5	715.7	714.4	690.7
15°	769.7	797.4	806.6	794.8	775.0	747.3	722.3	717.0	694.6	688.0	661.7
17.5°	768.4	797.4	810.6	794.8	771.1	735.5	703.8	698.6	669.6	659.0	628.7
20°	767.1	800.1	813.2	792.1	759.2	721.0	685.4	674.8	643.2	626.1	590.5
22.5°	765.8	805.3	815.9	789.5	751.3	702.5	665.6	647.2	610.3	587.8	545.7
25°	772.4	811.9	817.2	786.9	739.4	682.7	643.2	618.2	577.3	548.3	498.2
27.5°	775.0	818.5	819.8	781.6	724.9	661.7	619.5	585.2	539.1	503.5	446.8
30°	782.9	819.8	815.9	771.1	707.8	635.3	591.8	549.6	498.2	452.1	384.9
32.5°	785.6	823.8	813.2	759.2	690.7	608.9	560.2	511.4	449.5	395.4	313.7
35°	790.8	826.4	810.6	752.6	672.2	581.3	527.2	471.9	400.7	332.1	238.6
37.5°	798.7	838.3	817.2	750.0	663.0	557.5	490.3	431.0	342.7	262.3	158.2
40°	818.5	862.0	829.1	753.9	656.4	537.8	454.7	388.8	276.8	193.8	109.4
42.5°	858.0	902.9	859.4	773.7	660.3	520.6	417.8	344.0	209.6	138.4	90.9
45°	917.4	955.6	909.5	806.6	676.2	511.4	383.6	297.9	150.3	110.7	83.0
47.5°	1004.4	1041.3	983.3	859.4	703.8	507.4	348.0	249.1	116.0	100.2	80.4
50°	1119.0	1162.5	1090.0	942.4	755.2	511.4	309.7	203.0	101.5	97.5	79.1
52.5°	1260.1	1302.2	1229.7	1065.0	839.6	533.8	268.9	176.6	96.2	96.2	77.8
55°	1419.5	1478.8	1407.7	1235.0	970.1	582.6	243.8	167.4	96.2	97.5	76.4
57.5°	1608.0	1658.1	1594.8	1398.4	1126.9	663.0	246.5	176.6	96.2	97.5	75.1
60°	1792.5	1854.5	1782.0	1606.7	1306.2	784.2	300.5	224.1	100.2	101.5	75.1
62.5°	1985.0	2032.4	1973.1	1788.6	1509.2	934.5	408.6	324.2	116.0	119.9	80.4
65°	2195.9	2273.6	2211.7	2060.1	1796.5	1174.4	614.2	486.4	171.3	139.7	88.3
67.5°	2561.0	2592.6	2562.3	2423.9	2132.6	1372.1	731.5	494.3	171.3	135.8	98.9
70°	3055.2	2984.1	2848.3	2590.0	2168.2	1231.1	524.6	301.8	146.3	129.2	104.1
71°	3169.9	3060.5	2860.2	2549.1	2094.4	1111.1	407.3	238.6	137.1	126.5	104.1
72.5°	3239.8	3076.3	2773.2	2429.2	1949.4	875.2	268.9	187.2	125.2	119.9	100.2
75°	3148.8	2847.0	2448.9	2102.3	1596.2	454.7	168.7	142.3	106.8	104.1	87.0
77.5°	2500.3	2235.4	1807.0	1527.6	1026.8	201.7	121.3	108.1	84.4	81.7	67.2
80°	1166.5	935.8	548.3	470.5	322.9	118.6	83.0	73.8	60.6	58.0	47.4
82.5°	212.2	159.5	123.9	119.9	108.1	69.9	48.8	44.8	38.2	36.9	30.3
85°	72.5	69.9	52.7	52.7	54.0	36.9	27.7	26.4	19.8	19.8	13.2
87.5°	1.3	6.6	6.6	9.2	7.9	6.6	2.6	4.0	1.3	4.0	0.0
90°	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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CATALOG NUMBER: ISS-AF-800-LED-E1-SL2-8030

**CANDELA DISTRIBUTION (continued):**

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9
2.5°	776.3	765.8	775.0	765.8	771.1	760.5	767.1	763.1	763.1	759.2	756.6
5°	764.5	751.3	757.9	747.3	752.6	736.8	740.7	734.2	721.0	713.1	702.5
7.5°	747.3	727.6	732.8	717.0	721.0	699.9	703.8	692.0	666.9	651.1	635.3
10°	717.0	698.6	699.9	680.1	678.8	657.7	653.8	637.9	601.0	574.7	553.6
12.5°	686.7	665.6	663.0	639.3	635.3	610.3	605.0	579.9	525.9	474.5	441.5
15°	655.1	628.7	620.8	595.8	581.3	560.2	545.7	508.8	431.0	363.8	320.3
17.5°	619.5	585.2	573.4	544.4	523.3	491.6	470.5	420.5	320.3	247.8	217.5
20°	573.4	536.4	515.4	478.5	450.8	412.5	386.2	321.6	213.5	176.6	172.7
22.5°	521.9	478.5	452.1	406.0	371.7	330.8	288.7	217.5	151.6	143.7	148.9
25°	467.9	413.9	379.6	322.9	276.8	229.3	189.8	145.0	123.9	122.6	130.5
27.5°	403.3	341.4	292.6	225.4	183.2	146.3	129.2	114.7	105.4	106.8	114.7
30°	332.1	251.7	200.3	141.0	122.6	106.8	104.1	98.9	94.9	97.5	102.8
32.5°	247.8	160.8	129.2	101.5	100.2	90.9	93.6	90.9	89.6	90.9	94.9
35°	167.4	106.8	101.5	87.0	89.6	83.0	87.0	85.7	84.4	84.4	87.0
37.5°	116.0	88.3	90.9	80.4	84.4	79.1	83.0	81.7	80.4	79.1	80.4
40°	96.2	80.4	84.4	76.4	80.4	75.1	79.1	77.8	76.4	73.8	73.8
42.5°	88.3	76.4	80.4	72.5	77.8	71.2	76.4	73.8	71.2	68.5	69.9
45°	85.7	73.8	77.8	69.9	75.1	68.5	72.5	71.2	65.9	64.6	65.9
47.5°	83.0	72.5	76.4	68.5	72.5	65.9	69.9	67.2	61.9	60.6	61.9
50°	81.7	69.9	73.8	65.9	69.9	64.6	67.2	64.6	59.3	58.0	58.0
52.5°	80.4	68.5	72.5	63.3	67.2	59.3	63.3	60.6	55.4	54.0	54.0
55°	80.4	67.2	69.9	60.6	64.6	56.7	59.3	56.7	54.0	51.4	51.4
57.5°	79.1	64.6	68.5	58.0	60.6	54.0	56.7	54.0	50.1	48.8	48.8
60°	79.1	63.3	67.2	56.7	59.3	51.4	54.0	51.4	47.4	46.1	46.1
62.5°	83.0	65.9	68.5	58.0	59.3	51.4	52.7	48.8	44.8	44.8	43.5
65°	90.9	73.8	73.8	60.6	60.6	51.4	52.7	47.4	42.2	42.2	42.2
67.5°	98.9	81.7	80.4	64.6	63.3	51.4	51.4	44.8	39.5	39.5	39.5
70°	104.1	85.7	83.0	65.9	63.3	50.1	48.8	42.2	36.9	36.9	36.9
71°	102.8	85.7	81.7	64.6	60.6	47.4	47.4	40.9	35.6	35.6	34.3
72.5°	97.5	80.4	76.4	60.6	58.0	44.8	44.8	38.2	33.0	33.0	31.6
75°	83.0	68.5	64.6	51.4	48.8	39.5	38.2	31.6	29.0	27.7	27.7
77.5°	64.6	54.0	50.1	40.9	39.5	31.6	30.3	26.4	23.7	23.7	22.4
80°	46.1	38.2	35.6	27.7	25.0	21.1	22.4	19.8	18.5	18.5	17.1
82.5°	27.7	19.8	19.8	15.8	17.1	13.2	14.5	14.5	13.2	10.5	10.5
85°	14.5	9.2	11.9	6.6	9.2	4.0	6.6	5.3	5.3	4.0	4.0
87.5°	2.6	0.0	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
90°	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):**

	175°	180°
0°	786.9	786.9
2.5°	748.7	750.0
5°	697.2	699.9
7.5°	623.4	627.4
10°	535.1	537.8
12.5°	421.8	421.8
15°	295.2	297.9
17.5°	206.9	208.3
20°	174.0	175.3
22.5°	155.5	156.8
25°	138.4	139.7
27.5°	119.9	121.3
30°	108.1	109.4
32.5°	97.5	98.9
35°	88.3	88.3
37.5°	81.7	81.7
40°	75.1	75.1
42.5°	71.2	71.2
45°	67.2	67.2
47.5°	63.3	63.3
50°	59.3	60.6
52.5°	55.4	55.4
55°	51.4	51.4
57.5°	47.4	48.8
60°	44.8	44.8
62.5°	42.2	42.2
65°	40.9	40.9
67.5°	38.2	38.2
70°	35.6	35.6
71°	34.3	34.3
72.5°	31.6	31.6
75°	27.7	26.4
77.5°	22.4	22.4
80°	17.1	15.8
82.5°	10.5	9.2
85°	4.0	2.6
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)