

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: P228093

Luminaire Tested: **ISS-AF-600-LED-E1-SL2-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228093  
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-600-LED-E1-SL2-7050  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL  
Light Source: (16) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

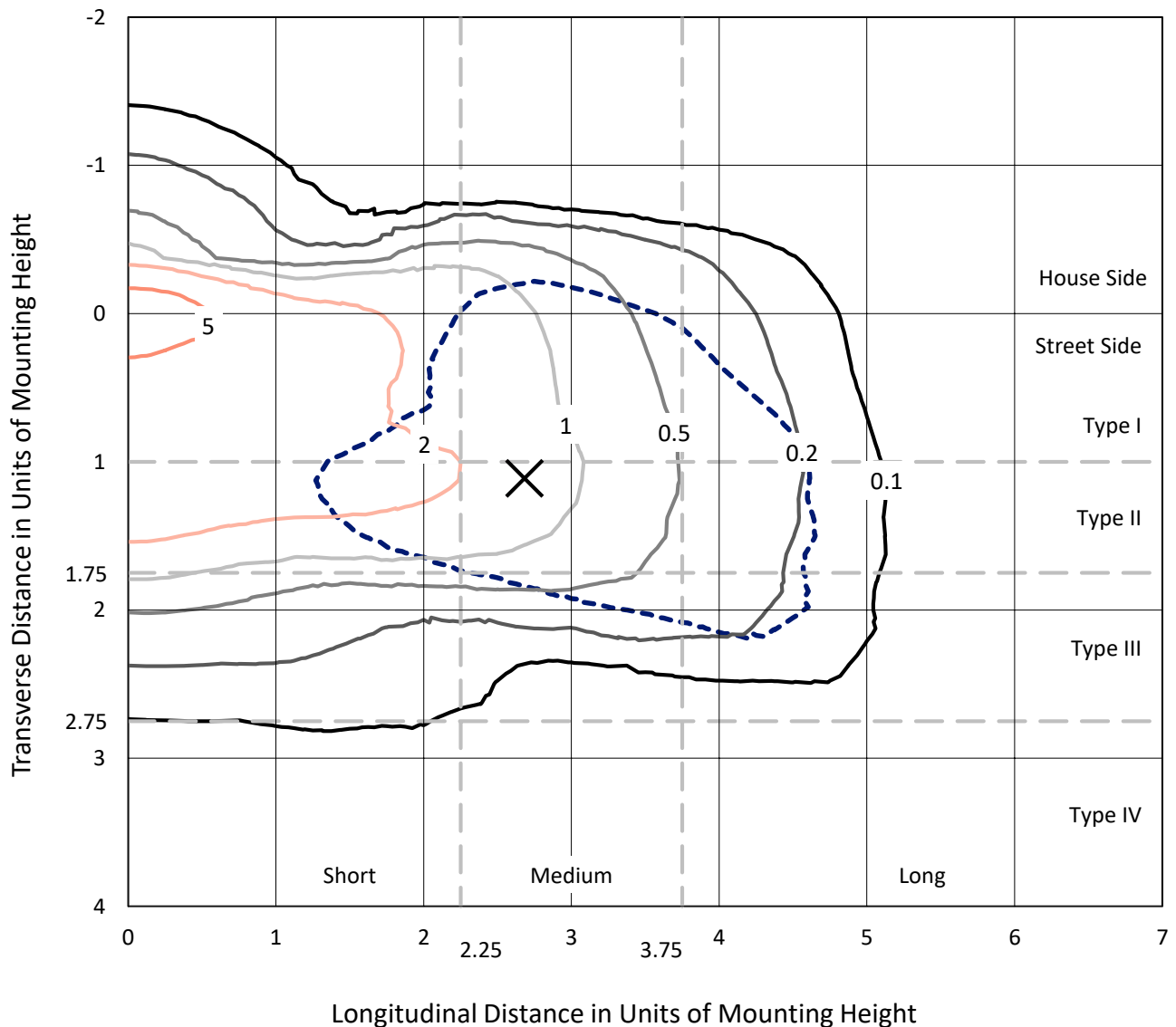
Lumens per Lamp: N/A  
Luminaire Lumens: 3697 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 33.7  
Input Voltage (V): 120  
Input Current (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

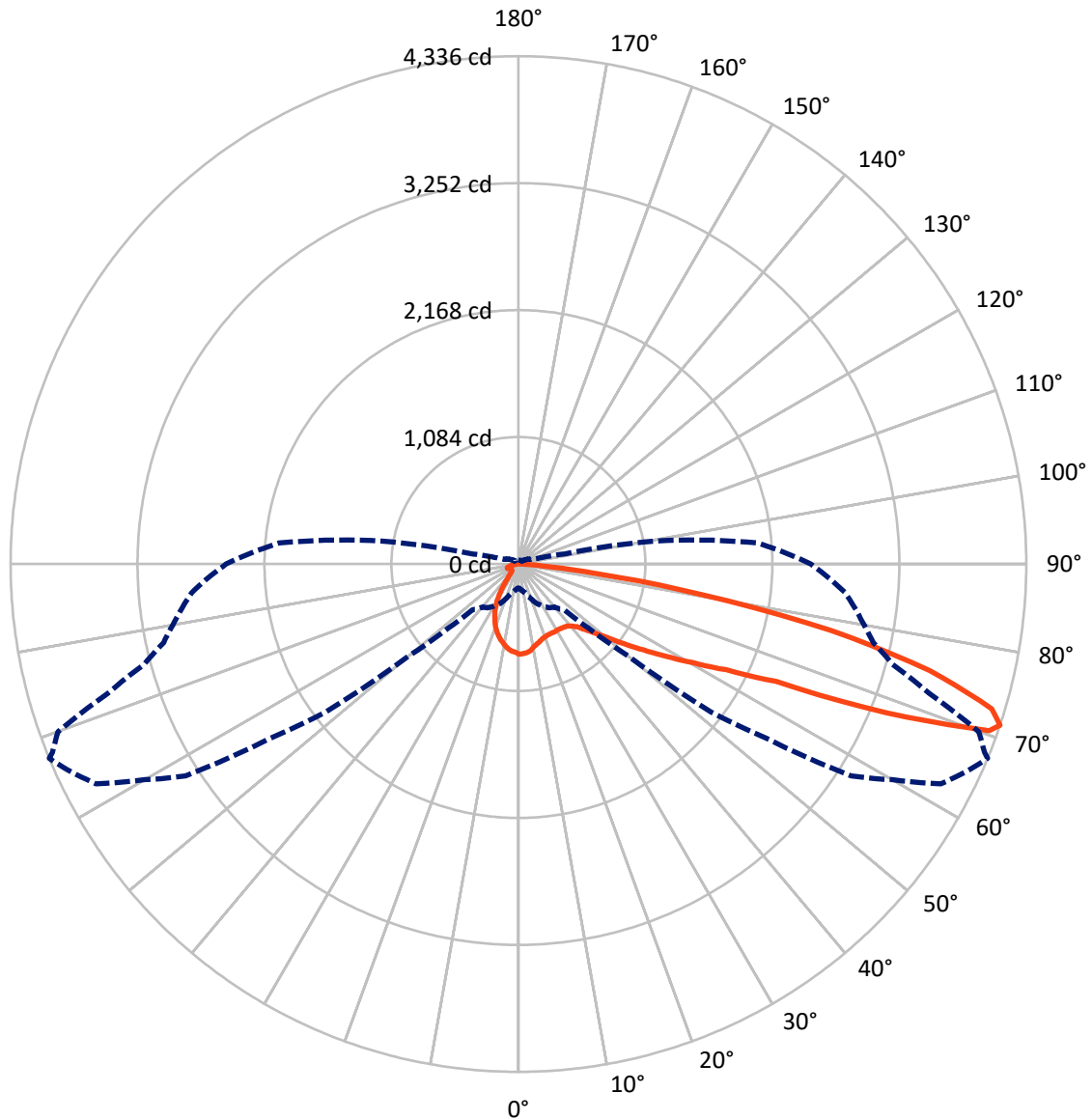
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.7 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	623.0	0.0	623.0
	% Fixture	16.9	0.0	16.9
<b>Street Side</b>	Lumens	3074.0	0.0	3074.0
	% Fixture	83.1	0.0	83.1
<b>Total</b>	Lumens	3697.0	0.0	3697.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	1.8
10°-20°	160.8	4.4
20°-30°	218.7	5.9
30°-40°	298.9	8.1
40°-50°	450.4	12.2
50°-60°	713.8	19.3
60°-70°	945.0	25.6
70°-80°	752.8	20.4
80°-90°	89.2	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°	3697.0	100.0
0°-180°	3697.0	100.0



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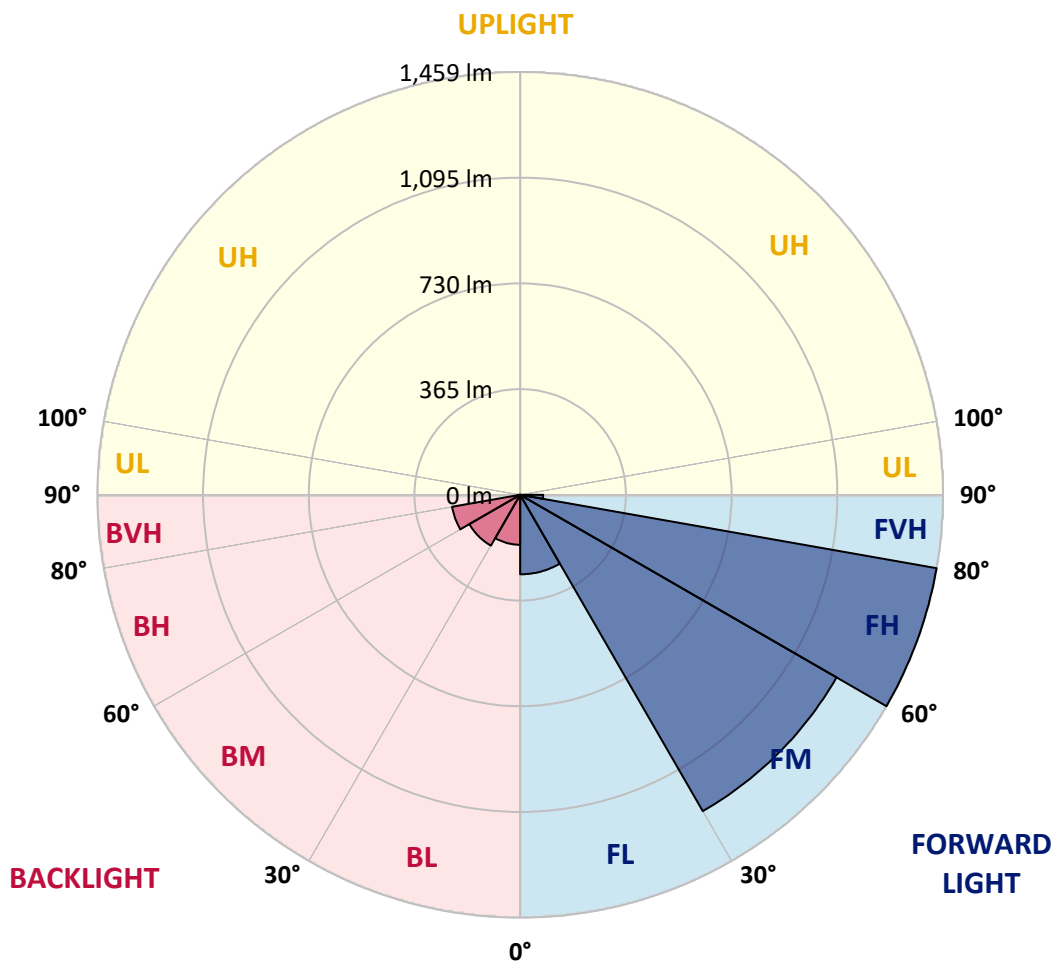
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	274.3	7.4			
FM	(30°-60°)	1260.7	34.1			
FH	(60°-80°)	1459.4	39.5			G1/1800
FVH	(80°-90°)	79.6	2.2			G1/100
BL	(0°-30°)	172.5	4.7	B1/500		
BM	(30°-60°)	202.4	5.5	B0/220		
BH	(60°-80°)	238.4	6.4	B1/500		G1/500
BVH	(80°-90°)	9.7	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°	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4
2.5°	756.2	753.6	753.6	757.5	764.0	758.8	762.7	762.7	764.0	767.8	769.1
5°	700.7	695.6	700.7	705.9	720.1	717.5	721.4	725.2	733.0	734.3	744.6
7.5°	650.4	647.8	651.7	662.0	680.1	674.9	680.1	685.2	694.3	698.1	708.5
10°	611.7	607.8	613.0	620.7	638.8	637.5	640.1	646.5	656.9	659.4	672.3
12.5°	583.3	583.3	585.9	596.2	611.7	610.4	618.1	622.0	631.0	633.6	647.8
15°	569.1	565.2	570.4	579.4	594.9	594.9	600.1	603.9	616.8	618.1	631.0
17.5°	556.2	557.5	558.8	569.1	583.3	580.7	587.2	589.7	603.9	601.4	616.8
20°	556.2	558.8	557.5	563.9	574.3	569.1	576.8	578.1	593.6	589.7	606.5
22.5°	571.7	574.3	570.4	569.1	573.0	569.1	573.0	575.6	587.2	584.6	600.1
25°	598.8	603.9	598.8	589.7	585.9	575.6	578.1	582.0	591.0	584.6	598.8
27.5°	641.4	645.2	636.2	627.2	609.1	597.5	593.6	592.3	602.7	592.3	603.9
30°	690.4	695.6	687.8	671.0	645.2	625.9	618.1	614.3	620.7	605.2	616.8
32.5°	743.3	748.5	743.3	730.4	695.6	667.2	656.9	647.8	653.0	632.3	637.5
35°	797.5	802.7	807.8	800.1	754.9	722.7	705.9	698.1	696.9	671.0	672.3
37.5°	845.3	850.4	867.2	874.9	833.6	789.8	774.3	757.5	758.8	722.7	722.7
40°	903.3	909.8	931.7	949.8	922.7	869.8	851.7	833.6	833.6	785.9	787.2
42.5°	982.0	989.8	1004.0	1028.5	1019.5	965.3	945.9	921.4	924.0	867.2	865.9
45°	1093.0	1098.2	1098.2	1113.7	1115.0	1063.3	1050.4	1025.9	1031.1	958.8	962.7
47.5°	1237.6	1231.1	1205.3	1214.3	1224.7	1170.5	1158.8	1143.4	1149.8	1072.4	1080.1
50°	1371.8	1366.6	1313.7	1316.3	1353.7	1298.2	1294.3	1275.0	1284.0	1206.6	1218.2
52.5°	1422.1	1413.1	1360.2	1388.5	1493.1	1462.1	1468.6	1459.5	1464.7	1382.1	1379.5
55°	1365.3	1365.3	1333.1	1384.7	1597.6	1614.4	1667.3	1687.9	1709.9	1627.3	1609.2
57.5°	1207.9	1218.2	1223.4	1315.0	1580.8	1653.1	1753.8	1841.5	1953.8	1948.6	1975.7
60°	947.2	965.3	995.0	1144.6	1508.6	1627.3	1757.6	1889.3	2044.1	2143.5	2290.6
62.5°	664.6	680.1	704.6	807.8	1298.2	1502.1	1690.5	1893.1	2090.6	2246.7	2440.3
65°	451.7	467.2	518.8	575.6	783.3	1080.1	1367.9	1703.4	2004.1	2294.5	2555.1
67.5°	325.2	334.2	374.2	469.7	521.4	575.6	682.7	1077.5	1447.9	2032.5	2413.2
70°	243.9	252.9	289.1	394.9	458.1	472.3	498.1	567.8	662.0	1142.1	1641.5
71°	203.9	216.8	260.7	371.7	455.5	467.2	478.8	520.1	551.0	807.8	1218.2
72.5°	143.2	152.3	193.6	343.3	437.5	464.6	491.7	490.4	487.8	551.0	736.9
75°	91.6	91.6	91.6	193.6	467.2	450.4	460.7	516.2	487.8	463.3	485.2
77.5°	72.3	71.0	67.1	96.8	365.2	456.8	483.9	498.1	525.2	483.9	462.0
80°	54.2	52.9	52.9	60.7	169.1	295.5	409.1	454.2	473.6	514.9	469.7
82.5°	28.4	28.4	31.0	36.1	63.2	103.2	211.6	348.4	389.7	392.3	396.2
85°	9.0	7.7	10.3	16.8	27.1	33.6	59.4	140.7	209.1	252.9	267.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	5.2	9.0	11.6
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):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	68°	70°	72.5°	75°
0°	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4
2.5°	765.2	770.4	766.5	771.7	765.2	773.0	766.5	770.4	771.7	766.5	773.0
5°	738.1	753.6	748.5	760.1	754.9	765.2	760.1	770.4	770.4	766.5	775.6
7.5°	704.6	720.1	721.4	733.0	733.0	745.9	745.9	756.2	761.4	761.4	774.3
10°	671.0	685.2	687.8	700.7	703.3	718.8	718.8	733.0	743.3	747.2	762.7
12.5°	645.2	663.3	663.3	677.5	674.9	698.1	700.7	713.6	724.0	733.0	753.6
15°	629.8	646.5	646.5	660.7	658.1	681.4	685.2	698.1	713.6	718.8	747.2
17.5°	614.3	631.0	627.2	646.5	645.2	671.0	668.5	687.8	700.7	708.5	740.7
20°	601.4	620.7	618.1	637.5	632.3	660.7	660.7	680.1	693.0	699.4	736.9
22.5°	594.9	615.6	610.4	629.8	625.9	654.3	654.3	673.6	687.8	698.1	735.6
25°	594.9	613.0	607.8	629.8	623.3	654.3	653.0	672.3	686.5	695.6	736.9
27.5°	597.5	615.6	611.7	632.3	627.2	654.3	656.9	673.6	687.8	698.1	739.4
30°	606.5	623.3	614.3	633.6	629.8	655.6	654.3	672.3	686.5	699.4	739.4
32.5°	625.9	634.9	623.3	640.1	632.3	658.1	658.1	671.0	687.8	703.3	739.4
35°	653.0	659.4	641.4	653.0	638.8	664.6	663.3	677.5	690.4	703.3	742.0
37.5°	691.7	699.4	671.0	681.4	658.1	678.8	673.6	690.4	703.3	711.1	754.9
40°	749.8	752.3	714.9	722.7	690.4	708.5	695.6	718.8	725.2	730.4	774.3
42.5°	820.7	823.3	775.6	780.7	739.4	754.9	733.0	757.5	766.5	765.2	813.0
45°	908.5	909.8	855.6	859.5	811.7	824.6	797.5	818.2	824.6	820.7	869.8
47.5°	1004.0	1014.3	953.7	958.8	908.5	914.9	881.4	904.6	904.6	900.7	951.1
50°	1130.5	1145.9	1075.0	1082.7	1024.6	1029.8	991.1	1015.6	1013.0	1002.7	1059.5
52.5°	1287.9	1302.1	1227.2	1237.6	1175.6	1178.2	1130.5	1158.8	1151.1	1134.3	1200.1
55°	1480.2	1481.5	1411.8	1420.8	1358.9	1355.0	1295.6	1330.5	1318.9	1295.6	1356.3
57.5°	1788.6	1751.2	1636.3	1633.7	1566.6	1561.5	1485.3	1527.9	1508.6	1459.5	1539.5
60°	2285.4	2297.0	2004.1	1958.9	1833.8	1810.5	1709.9	1758.9	1735.7	1655.7	1734.4
62.5°	2565.5	2750.0	2731.9	2569.3	2246.7	2159.0	1988.6	2046.7	1986.0	1868.6	1942.2
65°	2773.2	3023.6	3168.1	3324.3	3179.7	2821.0	2418.3	2499.6	2351.2	2128.0	2199.0
67.5°	2850.7	3152.6	3457.2	3679.1	3830.1	3857.2	3391.4	3413.3	3048.1	2601.6	2610.6
70°	2445.4	2890.7	3486.9	3768.2	4067.6	4214.7	4263.7	4240.5	4004.3	3372.0	3130.7
71°	2072.5	2611.9	3368.1	3681.7	4065.0	4206.9	4336.0	4292.1	4182.4	3677.8	3307.5
72.5°	1404.0	2081.5	3021.0	3418.5	3929.5	4032.7	4226.3	4148.9	4125.6	3906.3	3472.7
75°	660.7	1037.5	1965.4	2566.7	3325.5	3424.9	3627.5	3532.0	3471.4	3546.2	3303.6
77.5°	486.5	566.5	1078.8	1595.0	2418.3	2559.0	2733.2	2615.8	2538.4	2613.2	2444.2
80°	442.6	445.2	558.8	841.4	1442.7	1526.6	1592.4	1496.9	1379.5	1374.4	1218.2
82.5°	407.8	385.9	362.6	445.2	739.4	703.3	650.4	602.7	468.4	375.5	271.0
85°	259.4	283.9	258.1	243.9	294.2	242.6	192.3	184.5	130.3	87.8	81.3
87.5°	18.1	20.6	24.5	28.4	34.8	28.4	18.1	21.9	12.9	0.0	6.5
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°	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4
2.5°	764.0	770.4	773.0	771.7	769.1	766.5	757.5	764.0	754.9	761.4	753.6
5°	767.8	776.9	778.2	775.6	773.0	767.8	752.3	761.4	751.1	756.2	744.6
7.5°	766.5	780.7	782.0	779.4	774.3	765.2	749.8	756.2	739.4	743.3	727.8
10°	760.1	780.7	782.0	775.6	767.8	753.6	735.6	738.1	721.4	721.4	700.7
12.5°	753.6	778.2	784.6	775.6	762.7	743.3	722.7	720.1	700.7	699.4	676.2
15°	753.6	780.7	789.8	778.2	758.8	731.7	707.2	702.0	680.1	673.6	647.8
17.5°	752.3	780.7	793.6	778.2	754.9	720.1	689.1	684.0	655.6	645.2	615.6
20°	751.1	783.3	796.2	775.6	743.3	705.9	671.0	660.7	629.8	613.0	578.1
22.5°	749.8	788.5	798.8	773.0	735.6	687.8	651.7	633.6	597.5	575.6	534.3
25°	756.2	794.9	800.1	770.4	724.0	668.5	629.8	605.2	565.2	536.8	487.8
27.5°	758.8	801.4	802.7	765.2	709.8	647.8	606.5	573.0	527.8	493.0	437.5
30°	766.5	802.7	798.8	754.9	693.0	622.0	579.4	538.1	487.8	442.6	376.8
32.5°	769.1	806.5	796.2	743.3	676.2	596.2	548.5	500.7	440.1	387.1	307.1
35°	774.3	809.1	793.6	736.9	658.1	569.1	516.2	462.0	392.3	325.2	233.6
37.5°	782.0	820.7	800.1	734.3	649.1	545.9	480.1	422.0	335.5	256.8	154.9
40°	801.4	844.0	811.7	738.1	642.7	526.5	445.2	380.7	271.0	189.7	107.1
42.5°	840.1	884.0	841.4	757.5	646.5	509.7	409.1	336.8	205.2	135.5	89.0
45°	898.2	935.6	890.4	789.8	662.0	500.7	375.5	291.6	147.1	108.4	81.3
47.5°	983.3	1019.5	962.7	841.4	689.1	496.8	340.7	243.9	113.6	98.1	78.7
50°	1095.6	1138.2	1067.2	922.7	739.4	500.7	303.3	198.7	99.4	95.5	77.4
52.5°	1233.7	1275.0	1204.0	1042.7	822.0	522.6	263.3	172.9	94.2	94.2	76.1
55°	1389.8	1447.9	1378.2	1209.2	949.8	570.4	238.7	163.9	94.2	95.5	74.8
57.5°	1574.4	1623.4	1561.5	1369.2	1103.4	649.1	241.3	172.9	94.2	95.5	73.6
60°	1755.0	1815.7	1744.7	1573.1	1278.9	767.8	294.2	219.4	98.1	99.4	73.6
62.5°	1943.5	1989.9	1931.8	1751.2	1477.6	914.9	400.0	317.5	113.6	117.4	78.7
65°	2149.9	2226.1	2165.4	2017.0	1758.9	1149.8	601.4	476.2	167.8	136.8	86.5
67.5°	2507.4	2538.4	2508.7	2373.2	2088.0	1343.4	716.2	483.9	167.8	132.9	96.8
70°	2991.3	2921.6	2788.7	2535.8	2122.8	1205.3	513.6	295.5	143.2	126.5	101.9
71°	3103.6	2996.5	2800.3	2495.8	2050.6	1087.9	398.8	233.6	134.2	123.9	101.9
72.5°	3172.0	3012.0	2715.2	2378.3	1908.6	856.9	263.3	183.2	122.6	117.4	98.1
75°	3082.9	2787.4	2397.7	2058.3	1562.8	445.2	165.2	139.4	104.5	101.9	85.2
77.5°	2448.0	2188.6	1769.2	1495.7	1005.3	197.4	118.7	105.8	82.6	80.0	65.8
80°	1142.1	916.2	536.8	460.7	316.2	116.1	81.3	72.3	59.4	56.8	46.5
82.5°	207.8	156.1	121.3	117.4	105.8	68.4	47.7	43.9	37.4	36.1	29.7
85°	71.0	68.4	51.6	51.6	52.9	36.1	27.1	25.8	19.4	19.4	12.9
87.5°	1.3	6.5	6.5	9.0	7.7	6.5	2.6	3.9	1.3	3.9	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-600-LED-E1-SL2-7050

**CANDELA DISTRIBUTION (continued):**

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4	770.4
2.5°	760.1	749.8	758.8	749.8	754.9	744.6	751.1	747.2	747.2	743.3	740.7
5°	748.5	735.6	742.0	731.7	736.9	721.4	725.2	718.8	705.9	698.1	687.8
7.5°	731.7	712.3	717.5	702.0	705.9	685.2	689.1	677.5	653.0	637.5	622.0
10°	702.0	684.0	685.2	665.9	664.6	643.9	640.1	624.6	588.5	562.6	542.0
12.5°	672.3	651.7	649.1	625.9	622.0	597.5	592.3	567.8	514.9	464.6	432.3
15°	641.4	615.6	607.8	583.3	569.1	548.5	534.3	498.1	422.0	356.2	313.6
17.5°	606.5	573.0	561.4	533.0	512.3	481.3	460.7	411.7	313.6	242.6	212.9
20°	561.4	525.2	504.6	468.4	441.3	403.9	378.1	314.9	209.1	172.9	169.1
22.5°	511.0	468.4	442.6	397.5	363.9	323.9	282.6	212.9	148.4	140.7	145.8
25°	458.1	405.2	371.7	316.2	271.0	224.5	185.8	142.0	121.3	120.0	127.8
27.5°	394.9	334.2	286.5	220.7	179.4	143.2	126.5	112.3	103.2	104.5	112.3
30°	325.2	246.5	196.2	138.1	120.0	104.5	101.9	96.8	92.9	95.5	100.7
32.5°	242.6	157.4	126.5	99.4	98.1	89.0	91.6	89.0	87.8	89.0	92.9
35°	163.9	104.5	99.4	85.2	87.8	81.3	85.2	83.9	82.6	82.6	85.2
37.5°	113.6	86.5	89.0	78.7	82.6	77.4	81.3	80.0	78.7	77.4	78.7
40°	94.2	78.7	82.6	74.8	78.7	73.6	77.4	76.1	74.8	72.3	72.3
42.5°	86.5	74.8	78.7	71.0	76.1	69.7	74.8	72.3	69.7	67.1	68.4
45°	83.9	72.3	76.1	68.4	73.6	67.1	71.0	69.7	64.5	63.2	64.5
47.5°	81.3	71.0	74.8	67.1	71.0	64.5	68.4	65.8	60.7	59.4	60.7
50°	80.0	68.4	72.3	64.5	68.4	63.2	65.8	63.2	58.1	56.8	56.8
52.5°	78.7	67.1	71.0	61.9	65.8	58.1	61.9	59.4	54.2	52.9	52.9
55°	78.7	65.8	68.4	59.4	63.2	55.5	58.1	55.5	52.9	50.3	50.3
57.5°	77.4	63.2	67.1	56.8	59.4	52.9	55.5	52.9	49.0	47.7	47.7
60°	77.4	61.9	65.8	55.5	58.1	50.3	52.9	50.3	46.5	45.2	45.2
62.5°	81.3	64.5	67.1	56.8	58.1	50.3	51.6	47.7	43.9	43.9	42.6
65°	89.0	72.3	72.3	59.4	59.4	50.3	51.6	46.5	41.3	41.3	41.3
67.5°	96.8	80.0	78.7	63.2	61.9	50.3	50.3	43.9	38.7	38.7	38.7
70°	101.9	83.9	81.3	64.5	61.9	49.0	47.7	41.3	36.1	36.1	36.1
71°	100.7	83.9	80.0	63.2	59.4	46.5	46.5	40.0	34.8	34.8	33.6
72.5°	95.5	78.7	74.8	59.4	56.8	43.9	43.9	37.4	32.3	32.3	31.0
75°	81.3	67.1	63.2	50.3	47.7	38.7	37.4	31.0	28.4	27.1	27.1
77.5°	63.2	52.9	49.0	40.0	38.7	31.0	29.7	25.8	23.2	23.2	21.9
80°	45.2	37.4	34.8	27.1	24.5	20.6	21.9	19.4	18.1	18.1	16.8
82.5°	27.1	19.4	19.4	15.5	16.8	12.9	14.2	14.2	12.9	10.3	10.3
85°	14.2	9.0	11.6	6.5	9.0	3.9	6.5	5.2	5.2	3.9	3.9
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°	770.4	770.4
2.5°	733.0	734.3
5°	682.7	685.2
7.5°	610.4	614.3
10°	523.9	526.5
12.5°	413.0	413.0
15°	289.1	291.6
17.5°	202.6	203.9
20°	170.3	171.6
22.5°	152.3	153.6
25°	135.5	136.8
27.5°	117.4	118.7
30°	105.8	107.1
32.5°	95.5	96.8
35°	86.5	86.5
37.5°	80.0	80.0
40°	73.6	73.6
42.5°	69.7	69.7
45°	65.8	65.8
47.5°	61.9	61.9
50°	58.1	59.4
52.5°	54.2	54.2
55°	50.3	50.3
57.5°	46.5	47.7
60°	43.9	43.9
62.5°	41.3	41.3
65°	40.0	40.0
67.5°	37.4	37.4
70°	34.8	34.8
71°	33.6	33.6
72.5°	31.0	31.0
75°	27.1	25.8
77.5°	21.9	21.9
80°	16.8	15.5
82.5°	10.3	9.0
85°	3.9	2.6
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)