

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: P228346

Luminaire Tested: **ISS-AF-800-LED-E1-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228346
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29763)
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-SL4-8030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV W/SPILL CONTROL
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3530 lumens
Efficiency: N/A
Efficacy: 81.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

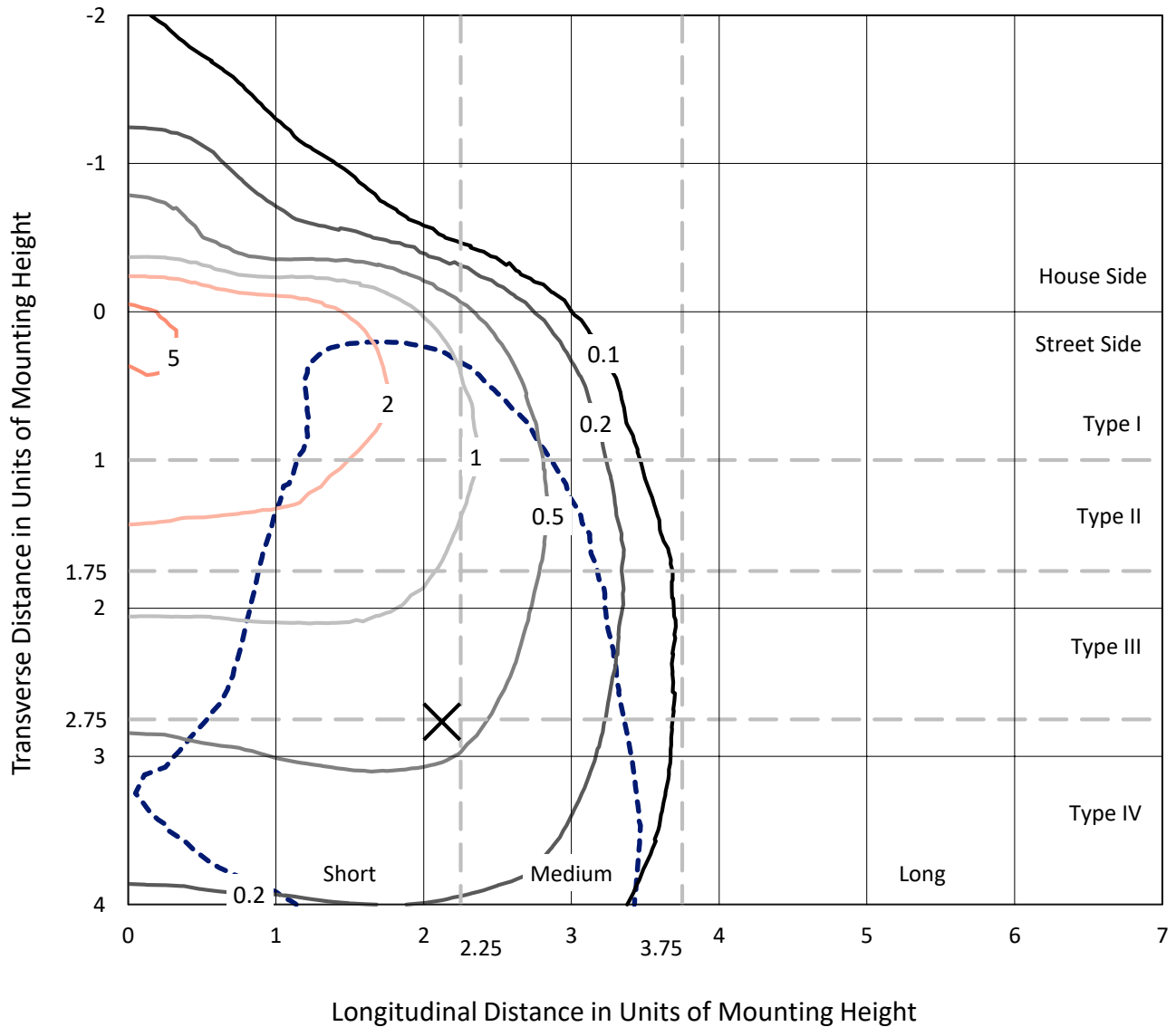
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

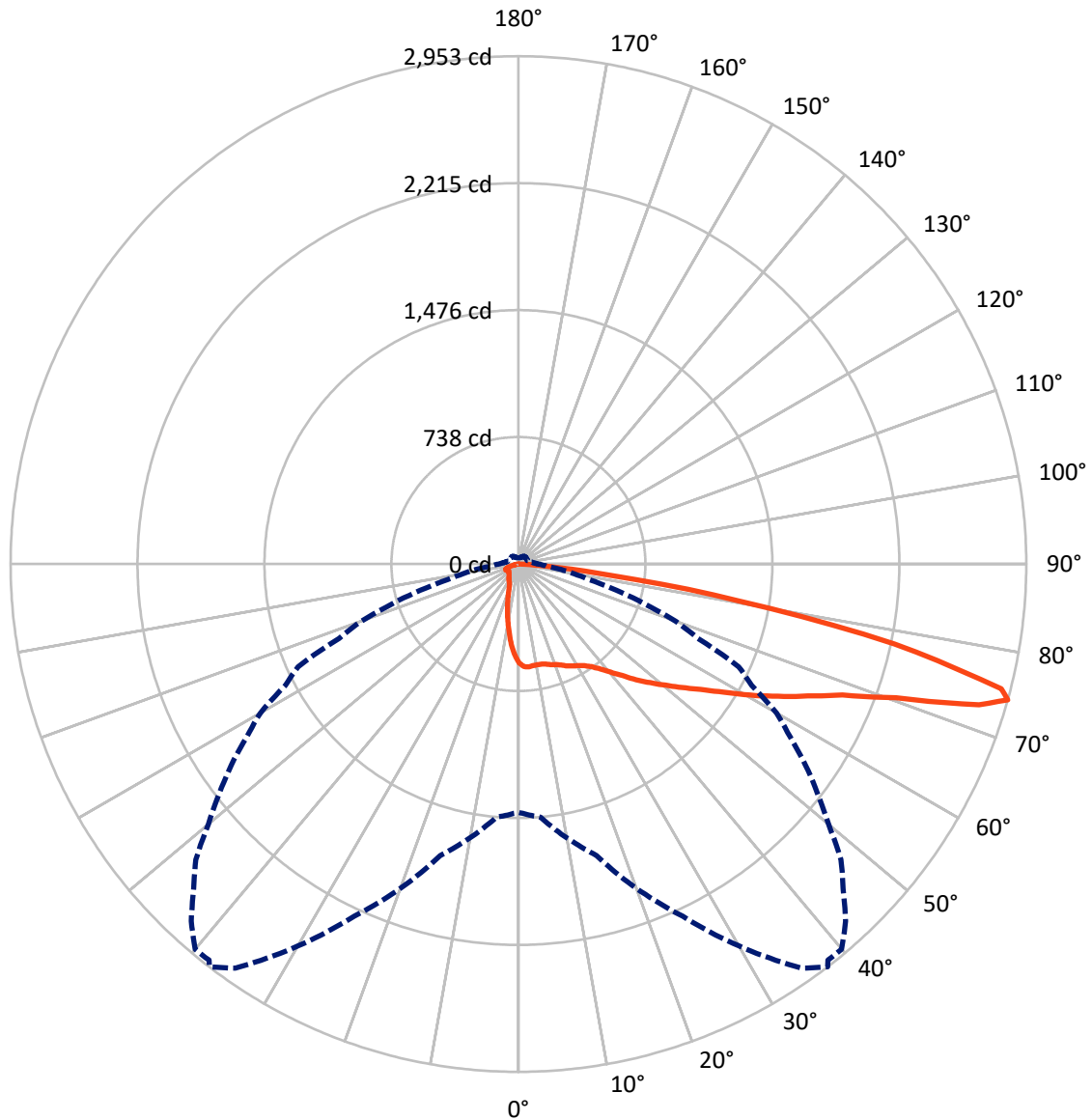
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 37.5-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	418.6	0.0	418.6
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	3111.4	0.0	3111.4
	% Fixture	88.1	0.0	88.1
Total	Lumens	3530.0	0.0	3530.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	1.4
10°-20°	127.8	3.6
20°-30°	198.0	5.6
30°-40°	293.7	8.3
40°-50°	451.7	12.8
50°-60°	667.7	18.9
60°-70°	890.1	25.2
70°-80°	768.3	21.8
80°-90°	82.6	2.3
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°	3530.0	100.0
0°-180°	3530.0	100.0



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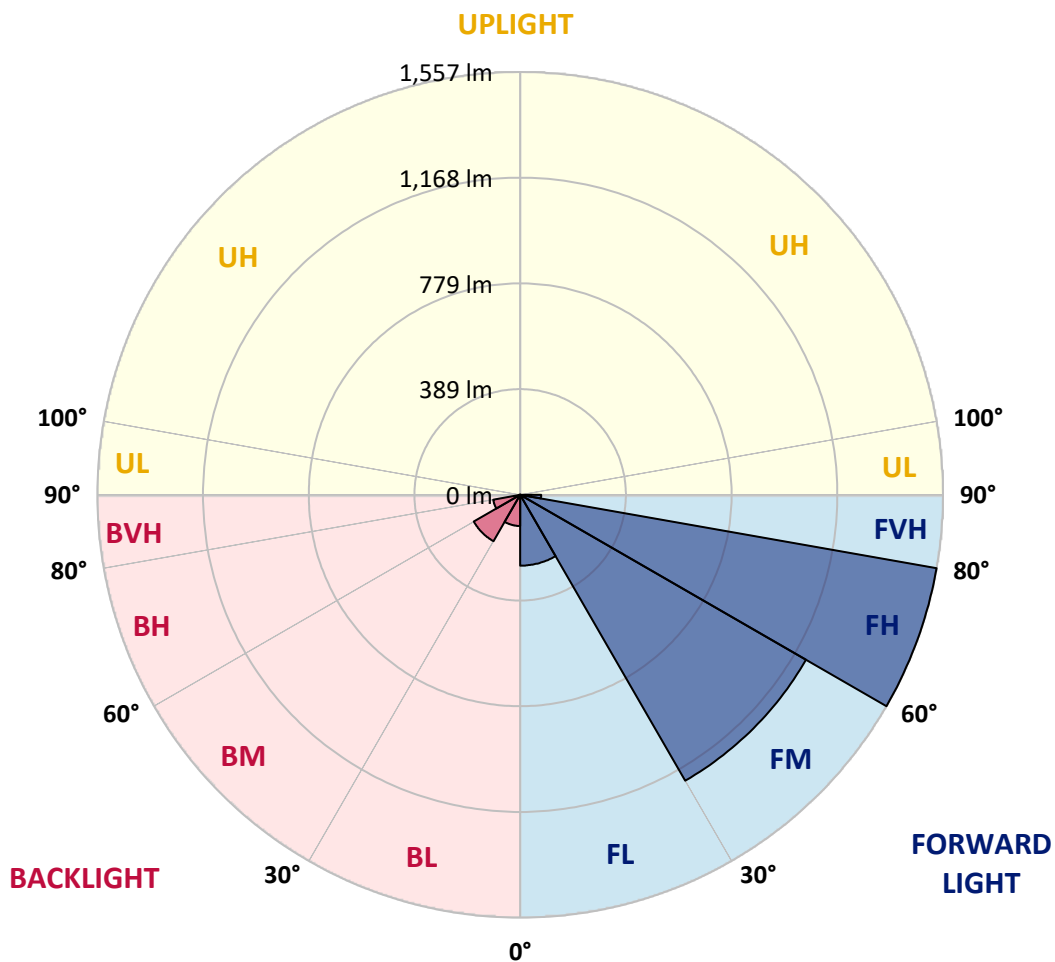
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	261.0	7.4			
FM	(30°-60°)	1215.8	34.4			
FH	(60°-80°)	1557.4	44.1			G1/1800
FVH	(80°-90°)	77.2	2.2			G1/100
BL	(0°-30°)	114.9	3.3	B1/500		
BM	(30°-60°)	197.3	5.6	B0/220		
BH	(60°-80°)	100.9	2.9	B0/110		G0/110
BVH	(80°-90°)	5.4	0.2			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
0°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	609.0	607.7	605.0	603.7	601.1	597.1	601.1	595.8	593.2	595.8	590.5
5°	619.5	618.2	615.6	610.3	607.7	601.1	605.0	598.4	597.1	599.8	593.2
7.5°	620.9	618.2	614.3	607.7	605.0	597.1	599.8	591.9	589.2	591.9	587.9
10°	616.9	615.6	611.6	601.1	598.4	595.8	594.5	589.2	587.9	586.6	585.3
12.5°	610.3	610.3	607.7	603.7	602.4	597.1	598.4	593.2	594.5	591.9	589.2
15°	607.7	606.4	609.0	611.6	611.6	603.7	609.0	605.0	602.4	603.7	599.8
17.5°	605.0	606.4	615.6	620.9	623.5	615.6	623.5	615.6	610.3	616.9	610.3
20°	603.7	607.7	623.5	635.4	636.7	623.5	636.7	623.5	623.5	631.4	619.5
22.5°	610.3	616.9	639.3	652.5	655.1	638.0	653.8	636.7	636.7	643.3	631.4
25°	631.4	638.0	663.0	677.5	674.9	656.4	670.9	653.8	652.5	660.4	644.6
27.5°	659.1	668.3	692.0	705.2	696.0	670.9	692.0	667.0	667.0	678.9	657.8
30°	698.6	705.2	726.3	727.6	715.8	685.4	709.2	681.5	677.5	698.6	672.3
32.5°	742.1	747.4	763.2	754.0	736.9	705.2	732.9	699.9	698.6	721.0	690.7
35°	788.3	793.5	798.8	783.0	767.2	732.9	763.2	730.3	728.9	754.0	725.0
37.5°	835.7	835.7	835.7	817.3	806.7	773.8	801.4	775.1	772.4	798.8	771.1
40°	873.9	876.6	872.6	855.5	850.2	826.5	850.2	826.5	830.4	854.2	831.8
42.5°	905.6	908.2	909.5	895.0	900.3	887.1	905.6	888.4	889.8	916.1	902.9
45°	937.2	935.9	946.4	942.5	958.3	959.6	970.2	963.6	966.2	986.0	982.0
47.5°	970.2	963.6	975.4	992.6	1021.6	1030.8	1037.4	1040.0	1050.6	1059.8	1069.0
50°	1001.8	995.2	1003.1	1041.4	1087.5	1107.3	1108.6	1121.8	1133.6	1146.8	1165.3
52.5°	1034.8	1029.5	1037.4	1091.4	1165.3	1192.9	1189.0	1211.4	1228.5	1243.0	1273.4
55°	1069.0	1063.8	1071.7	1152.1	1248.3	1286.5	1282.6	1314.2	1347.2	1352.4	1386.7
57.5°	1102.0	1095.4	1117.8	1223.3	1347.2	1405.2	1386.7	1435.5	1467.1	1464.5	1511.9
60°	1137.6	1132.3	1167.9	1310.3	1471.1	1546.2	1518.5	1583.1	1605.5	1596.3	1641.1
62.5°	1171.9	1170.5	1229.9	1411.8	1621.3	1693.8	1668.8	1725.5	1741.3	1729.4	1751.8
65°	1203.5	1211.4	1297.1	1513.3	1766.3	1849.4	1815.1	1871.8	1890.3	1881.0	1919.3
67.5°	1256.2	1265.4	1380.1	1642.4	1945.6	2031.3	2002.3	2061.6	2089.3	2086.7	2128.8
70°	1334.0	1351.1	1502.7	1825.7	2218.5	2327.9	2312.1	2384.6	2451.8	2446.5	2488.7
72.5°	1469.8	1497.4	1704.4	2110.4	2666.7	2799.8	2781.3	2822.2	2810.3	2714.1	2636.3
74°	1443.4	1477.7	1754.5	2259.3	2868.3	2952.7	2922.4	2923.7	2815.6	2669.3	2544.1
75°	1347.2	1382.8	1682.0	2240.9	2853.8	2900.0	2856.5	2802.4	2671.9	2523.0	2368.8
77.5°	924.0	970.2	1236.4	1809.8	2297.6	2234.3	2223.8	2120.9	1948.3	1780.8	1583.1
80°	473.2	506.2	639.3	946.4	1363.0	1299.7	1320.8	1237.8	1094.1	972.8	771.1
82.5°	113.4	121.3	188.5	366.5	590.5	540.4	548.4	485.1	402.0	328.2	254.4
85°	59.3	67.2	92.3	101.5	155.5	160.8	156.9	151.6	123.9	104.1	91.0
87.5°	0.0	0.0	0.0	2.6	1.3	0.0	1.3	0.0	0.0	1.3	2.6
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):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	594.5	591.9	594.5	586.6	590.5	583.9	586.6	580.0	582.6	577.4	578.7
5°	597.1	590.5	594.5	587.9	589.2	583.9	582.6	580.0	578.7	574.7	572.1
7.5°	590.5	585.3	583.9	581.3	577.4	578.7	573.4	572.1	568.1	568.1	560.2
10°	583.9	585.3	577.4	580.0	573.4	574.7	565.5	568.1	561.5	566.8	554.9
12.5°	589.2	590.5	583.9	587.9	576.0	578.7	570.8	574.7	565.5	572.1	557.6
15°	601.1	599.8	597.1	597.1	585.3	590.5	581.3	583.9	574.7	582.6	566.8
17.5°	611.6	610.3	606.4	605.0	597.1	598.4	589.2	594.5	583.9	590.5	574.7
20°	623.5	616.9	615.6	614.3	605.0	605.0	598.4	601.1	590.5	598.4	580.0
22.5°	632.7	627.4	626.1	620.9	614.3	616.9	607.7	609.0	598.4	606.4	590.5
25°	647.2	640.6	640.6	632.7	628.8	627.4	622.2	626.1	615.6	620.9	606.4
27.5°	667.0	652.5	657.8	649.9	647.2	645.9	643.3	645.9	638.0	641.9	627.4
30°	685.4	667.0	674.9	664.4	669.6	664.4	668.3	664.4	664.4	664.4	657.8
32.5°	710.5	688.1	703.9	688.1	698.6	690.7	703.9	696.0	701.3	699.9	697.3
35°	746.1	719.7	742.1	721.0	739.5	728.9	747.4	743.4	754.0	748.7	754.0
37.5°	793.5	765.9	792.2	772.4	794.9	779.0	805.4	802.8	825.2	817.3	825.2
40°	852.9	833.1	852.9	838.4	862.1	855.5	883.2	884.5	909.5	905.6	914.8
42.5°	918.8	904.3	924.0	916.1	939.9	945.1	976.8	984.7	1008.4	1015.0	1016.3
45°	989.9	987.3	1003.1	1011.0	1034.8	1050.6	1078.3	1098.0	1124.4	1138.9	1136.3
47.5°	1073.0	1083.5	1094.1	1113.9	1134.9	1167.9	1195.6	1220.6	1250.9	1260.2	1264.1
50°	1166.6	1185.0	1194.3	1221.9	1243.0	1283.9	1322.1	1353.8	1386.7	1382.8	1385.4
52.5°	1265.4	1289.2	1302.4	1335.3	1363.0	1410.4	1443.4	1473.7	1514.6	1504.0	1500.1
55°	1374.9	1410.4	1421.0	1457.9	1481.6	1530.4	1559.4	1612.1	1629.3	1618.7	1596.3
57.5°	1490.8	1533.0	1544.9	1595.0	1606.8	1659.6	1684.6	1720.2	1734.7	1717.6	1688.6
60°	1622.7	1660.9	1670.1	1714.9	1730.8	1779.5	1798.0	1829.6	1840.2	1798.0	1757.1
62.5°	1754.5	1794.0	1799.3	1838.8	1854.7	1896.8	1917.9	1936.4	1931.1	1869.2	1817.8
65°	1904.8	1943.0	1956.2	1995.7	2004.9	2036.6	2053.7	2032.6	2020.8	1927.2	1869.2
67.5°	2143.3	2184.2	2189.5	2198.7	2197.4	2181.6	2173.7	2101.2	2048.4	1875.8	1792.7
70°	2457.1	2426.8	2367.4	2298.9	2248.8	2159.2	2106.4	1957.5	1846.8	1653.0	1513.3
72.5°	2513.7	2414.9	2268.6	2151.3	2030.0	1888.9	1775.6	1550.2	1394.6	1191.6	1044.0
74°	2352.9	2192.1	2037.9	1873.1	1733.4	1527.8	1413.1	1128.4	974.1	768.5	589.2
75°	2159.2	1970.7	1796.7	1587.1	1456.6	1210.1	1102.0	794.9	640.6	456.1	307.1
77.5°	1377.5	1152.1	986.0	743.4	641.9	442.9	324.3	201.7	149.0	130.5	113.4
80°	618.2	440.3	349.3	241.2	201.7	154.2	130.5	105.5	96.2	84.4	80.4
82.5°	197.7	158.2	150.3	134.5	134.5	108.1	92.3	72.5	65.9	56.7	51.4
85°	85.7	80.4	83.0	76.5	77.8	59.3	47.5	35.6	35.6	25.0	22.4
87.5°	2.6	0.0	1.3	0.0	2.6	0.0	1.3	0.0	1.3	0.0	1.3
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°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	573.4	576.0	574.7	569.4	568.1	564.2	554.9	556.3	551.0	554.9	548.4
5°	568.1	566.8	561.5	554.9	548.4	540.4	533.9	531.2	525.9	523.3	519.4
7.5°	560.2	554.9	545.7	535.2	525.9	515.4	510.1	500.9	498.3	489.0	487.7
10°	557.6	548.4	537.8	524.6	508.8	493.0	491.7	475.9	474.5	460.0	456.1
12.5°	562.9	551.0	537.8	522.0	503.5	481.1	481.1	457.4	456.1	436.3	429.7
15°	573.4	558.9	541.8	523.3	499.6	471.9	470.6	442.9	440.3	416.5	408.6
17.5°	582.6	562.9	547.0	522.0	494.3	462.7	456.1	428.4	423.1	395.5	384.9
20°	589.2	566.8	548.4	519.4	485.1	448.2	439.0	410.0	398.1	370.4	355.9
22.5°	597.1	576.0	551.0	518.0	479.8	436.3	416.5	390.2	373.0	344.0	324.3
25°	609.0	590.5	560.2	522.0	475.9	424.5	398.1	370.4	346.7	317.7	288.7
27.5°	627.4	609.0	573.4	527.3	474.5	412.6	383.6	349.3	320.3	288.7	255.7
30°	653.8	634.0	595.8	541.8	475.9	403.4	367.8	330.9	296.6	259.7	225.4
32.5°	688.1	672.3	624.8	557.6	481.1	395.5	353.3	311.1	268.9	233.3	203.0
35°	735.5	725.0	665.7	587.9	494.3	391.5	338.8	292.6	245.2	209.6	176.6
37.5°	805.4	790.9	725.0	631.4	515.4	388.9	328.2	270.2	225.4	187.2	159.5
40°	893.7	873.9	794.9	684.1	548.4	390.2	319.0	253.1	208.3	167.4	145.0
42.5°	999.2	970.2	880.5	748.7	581.3	392.8	313.7	237.3	195.1	151.6	134.5
45°	1117.8	1084.9	982.0	829.1	628.8	399.4	309.8	224.1	183.2	139.7	127.9
47.5°	1233.8	1200.9	1086.2	909.5	677.5	411.3	312.4	216.2	175.3	133.1	120.0
50°	1347.2	1312.9	1178.4	982.0	719.7	427.1	323.0	217.5	174.0	130.5	116.0
52.5°	1447.4	1405.2	1257.5	1038.7	750.0	437.6	332.2	221.5	175.3	129.2	114.7
55°	1547.5	1493.5	1320.8	1083.5	768.5	439.0	332.2	222.8	176.6	129.2	113.4
57.5°	1622.7	1560.7	1369.6	1109.9	775.1	432.4	324.3	216.2	168.7	127.9	110.7
60°	1670.1	1604.2	1403.9	1127.0	765.9	404.7	282.1	191.1	149.0	118.6	102.8
62.5°	1709.7	1642.4	1414.4	1098.0	688.1	321.6	220.1	155.5	123.9	105.5	94.9
65°	1718.9	1638.5	1340.6	970.2	537.8	222.8	159.5	122.6	101.5	93.6	85.7
67.5°	1579.2	1482.9	1127.0	759.3	366.5	152.9	118.6	100.2	87.0	83.0	80.4
70°	1283.9	1178.4	825.2	496.9	204.3	106.8	91.0	83.0	75.1	75.1	71.2
72.5°	827.8	718.4	423.1	212.2	104.1	81.7	73.8	71.2	64.6	65.9	62.0
74°	423.1	329.5	172.7	112.0	85.7	72.5	65.9	64.6	58.0	59.3	55.4
75°	214.9	170.0	121.3	93.6	79.1	68.5	60.6	60.6	52.7	54.0	50.1
77.5°	100.2	96.2	83.0	73.8	67.2	58.0	50.1	48.8	40.9	43.5	38.2
80°	69.9	69.9	64.6	62.0	55.4	47.5	38.2	38.2	30.3	31.6	27.7
82.5°	39.5	36.9	36.9	42.2	43.5	35.6	27.7	26.4	22.4	22.4	18.5
85°	17.1	19.8	23.7	29.0	31.6	27.7	19.8	18.5	11.9	11.9	6.6
87.5°	0.0	1.3	1.3	2.6	5.3	5.3	0.0	2.6	0.0	1.3	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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	551.0	544.4	548.4	541.8	544.4	537.8	540.4	536.5	532.5	527.3	525.9
5°	515.4	510.1	508.8	502.2	503.5	498.3	493.0	486.4	478.5	468.0	464.0
7.5°	475.9	474.5	465.3	461.4	456.1	450.8	441.6	431.0	415.2	400.7	391.5
10°	441.6	437.6	424.5	417.9	410.0	403.4	390.2	375.7	353.3	330.9	319.0
12.5°	412.6	407.3	390.2	382.3	370.4	362.5	346.7	328.2	296.6	265.0	250.5
15°	388.9	381.0	361.2	349.3	333.5	325.6	308.5	282.1	243.9	210.9	191.1
17.5°	361.2	350.6	329.5	315.0	299.2	284.7	267.6	239.9	196.4	166.1	146.3
20°	330.9	317.7	295.3	275.5	258.4	245.2	228.0	200.4	156.9	133.1	122.6
22.5°	299.2	278.1	258.4	241.2	221.5	208.3	191.1	166.1	133.1	120.0	116.0
25°	266.3	242.5	222.8	205.6	187.2	175.3	160.8	141.0	121.3	117.3	117.3
27.5°	233.3	209.6	191.1	174.0	158.2	150.3	137.1	123.9	114.7	116.0	117.3
30°	203.0	179.3	162.1	149.0	134.5	129.2	118.6	110.7	109.4	113.4	114.7
32.5°	176.6	155.5	139.7	129.2	117.3	114.7	105.5	101.5	105.5	110.7	109.4
35°	154.2	137.1	121.3	114.7	104.1	102.8	96.2	93.6	98.9	105.5	105.5
37.5°	137.1	121.3	109.4	104.1	96.2	94.9	89.6	87.0	91.0	100.2	102.8
40°	122.6	113.4	101.5	96.2	91.0	88.3	85.7	83.0	84.4	96.2	97.5
42.5°	113.4	106.8	96.2	93.6	87.0	85.7	81.7	79.1	80.4	89.6	93.6
45°	106.8	101.5	92.3	91.0	84.4	83.0	79.1	76.5	77.8	85.7	89.6
47.5°	101.5	96.2	88.3	85.7	81.7	80.4	77.8	75.1	75.1	83.0	87.0
50°	98.9	93.6	85.7	83.0	79.1	77.8	75.1	72.5	73.8	80.4	83.0
52.5°	97.5	91.0	84.4	80.4	77.8	75.1	72.5	69.9	71.2	77.8	80.4
55°	97.5	89.6	84.4	80.4	76.5	72.5	71.2	67.2	69.9	75.1	79.1
57.5°	97.5	89.6	84.4	80.4	77.8	73.8	71.2	68.5	69.9	75.1	79.1
60°	94.9	88.3	85.7	81.7	80.4	76.5	75.1	72.5	72.5	79.1	85.7
62.5°	91.0	87.0	85.7	83.0	83.0	80.4	80.4	77.8	77.8	85.7	92.3
65°	85.7	83.0	84.4	83.0	83.0	83.0	81.7	81.7	81.7	88.3	96.2
67.5°	80.4	79.1	80.4	80.4	81.7	80.4	81.7	80.4	80.4	87.0	94.9
70°	72.5	72.5	73.8	72.5	73.8	73.8	75.1	75.1	75.1	79.1	87.0
72.5°	63.3	62.0	63.3	62.0	64.6	62.0	64.6	65.9	64.6	65.9	69.9
74°	56.7	55.4	56.7	55.4	58.0	55.4	56.7	56.7	55.4	44.8	38.2
75°	51.4	50.1	51.4	50.1	52.7	50.1	52.7	51.4	48.8	33.0	31.6
77.5°	40.9	36.9	40.9	36.9	39.5	35.6	38.2	33.0	25.0	23.7	23.7
80°	30.3	26.4	29.0	25.0	23.7	18.5	19.8	18.5	17.1	18.5	18.5
82.5°	18.5	13.2	15.8	11.9	14.5	10.5	13.2	11.9	10.5	10.5	10.5
85°	9.2	6.6	9.2	5.3	7.9	5.3	6.6	6.6	4.0	4.0	4.0
87.5°	1.3	0.0	2.6	0.0	2.6	0.0	1.3	1.3	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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CATALOG NUMBER: ISS-AF-800-LED-E1-SL4-8030

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	576.0	576.0
2.5°	522.0	523.3
5°	457.4	461.4
7.5°	386.2	388.9
10°	311.1	313.7
12.5°	239.9	242.5
15°	180.6	178.0
17.5°	138.4	135.8
20°	117.3	117.3
22.5°	114.7	113.4
25°	116.0	114.7
27.5°	116.0	114.7
30°	113.4	112.0
32.5°	109.4	108.1
35°	105.5	105.5
37.5°	102.8	104.1
40°	98.9	100.2
42.5°	94.9	96.2
45°	91.0	92.3
47.5°	87.0	87.0
50°	81.7	81.7
52.5°	80.4	80.4
55°	80.4	80.4
57.5°	83.0	83.0
60°	91.0	92.3
62.5°	106.8	108.1
65°	122.6	125.2
67.5°	123.9	127.9
70°	120.0	123.9
72.5°	83.0	83.0
74°	36.9	35.6
75°	31.6	30.3
77.5°	23.7	23.7
80°	17.1	15.8
82.5°	9.2	9.2
85°	2.6	2.6
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)