

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: P227759

Luminaire Tested: **ISC-AF-800-LED-E1-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227759  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29759)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISC-AF-800-LED-E1-T3-8030  
Description: IMPACT ELITE LED CYLINDER LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

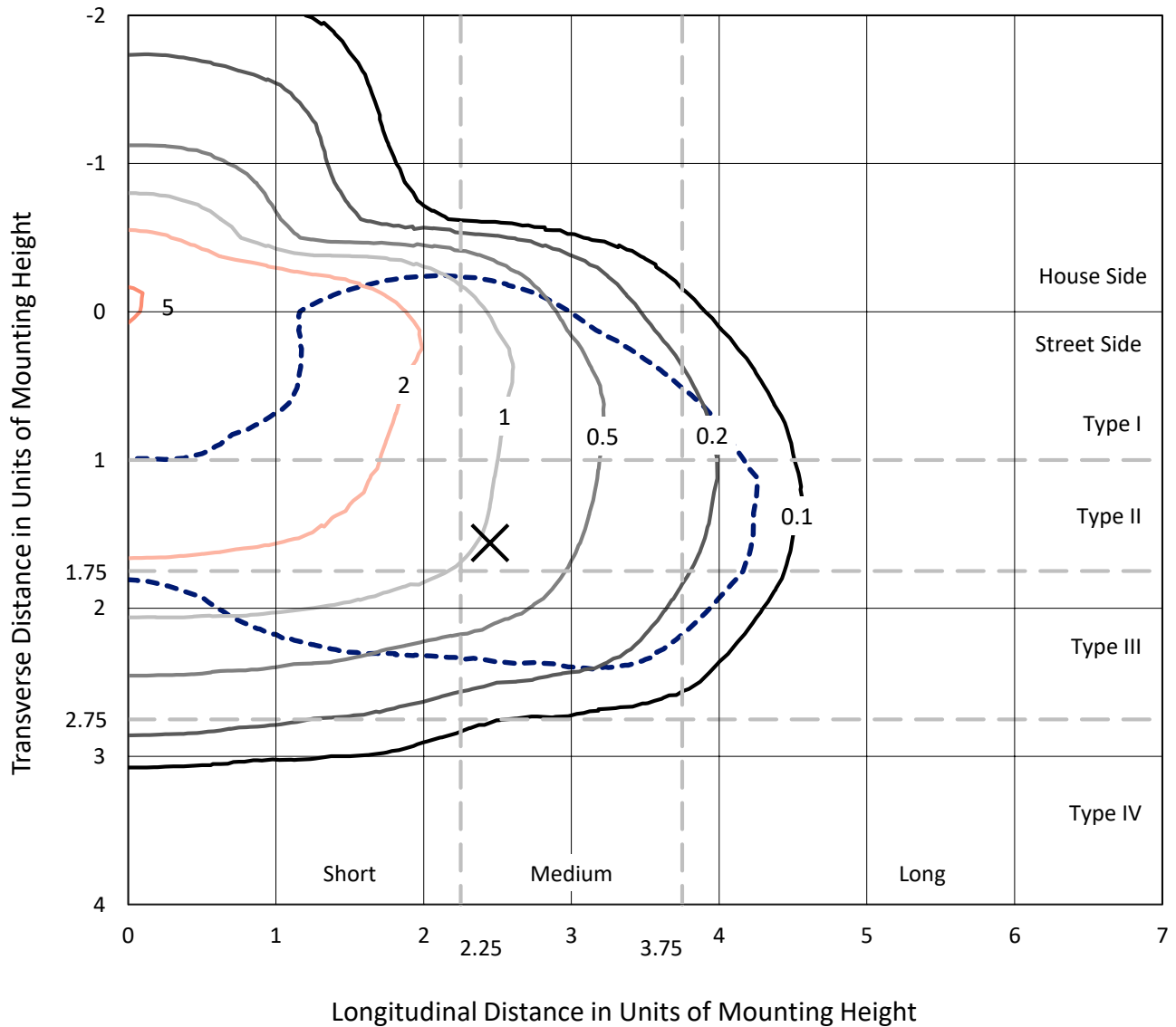
Lumens per Lamp: N/A  
Luminaire Lumens: 3990 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (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

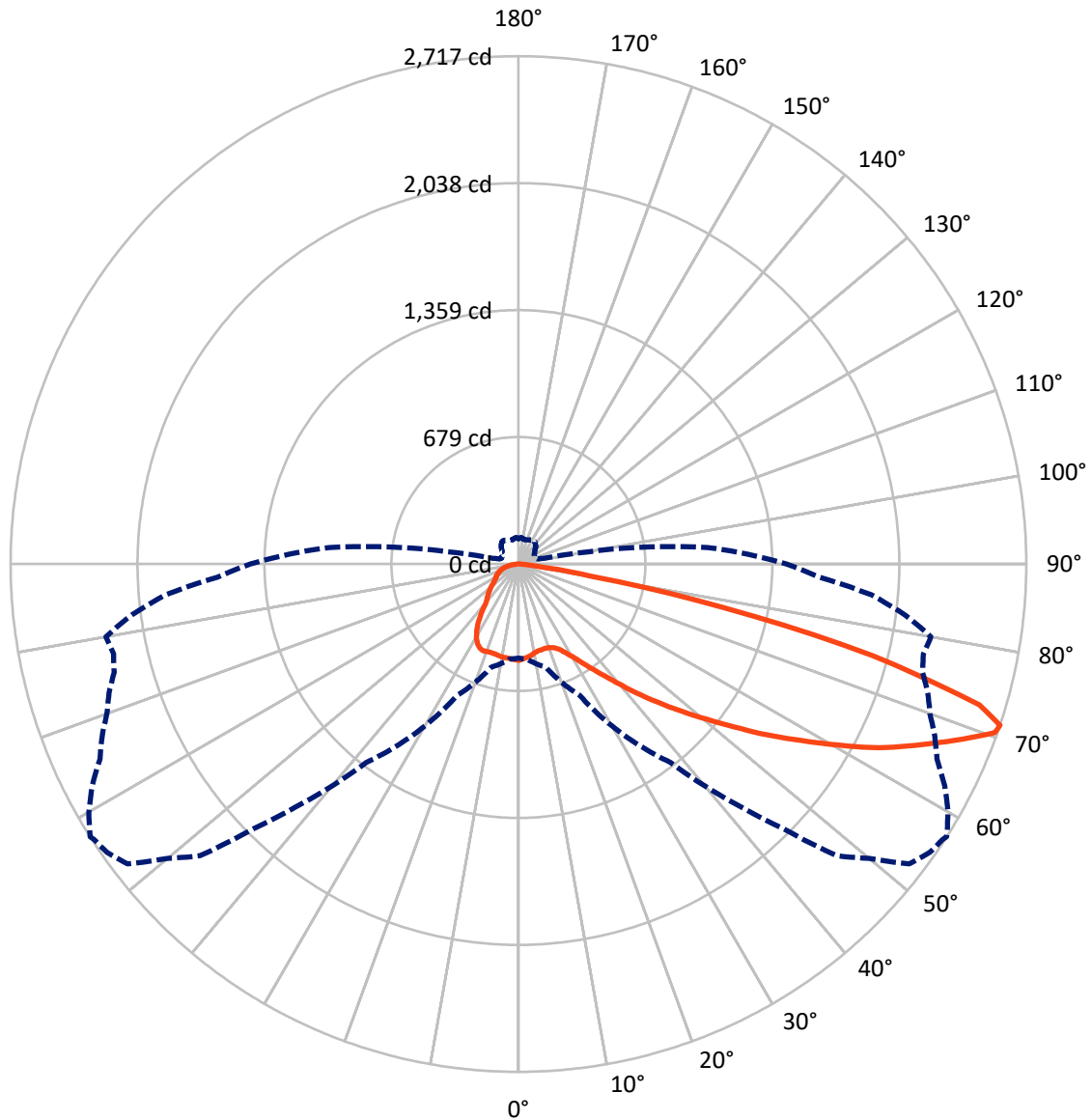
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	868.6	0.0	868.6
	% Fixture	21.8	0.0	21.8
<b>Street Side</b>	Lumens	3121.4	0.0	3121.4
	% Fixture	78.2	0.0	78.2
<b>Total</b>	Lumens	3990.0	0.0	3990.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	1.2
10°-20°	139.8	3.5
20°-30°	232.1	5.8
30°-40°	369.4	9.3
40°-50°	600.1	15.0
50°-60°	899.8	22.6
60°-70°	1073.4	26.9
70°-80°	579.7	14.5
80°-90°	47.2	1.2
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°	3990.0	100.0
0°-180°	3990.0	100.0



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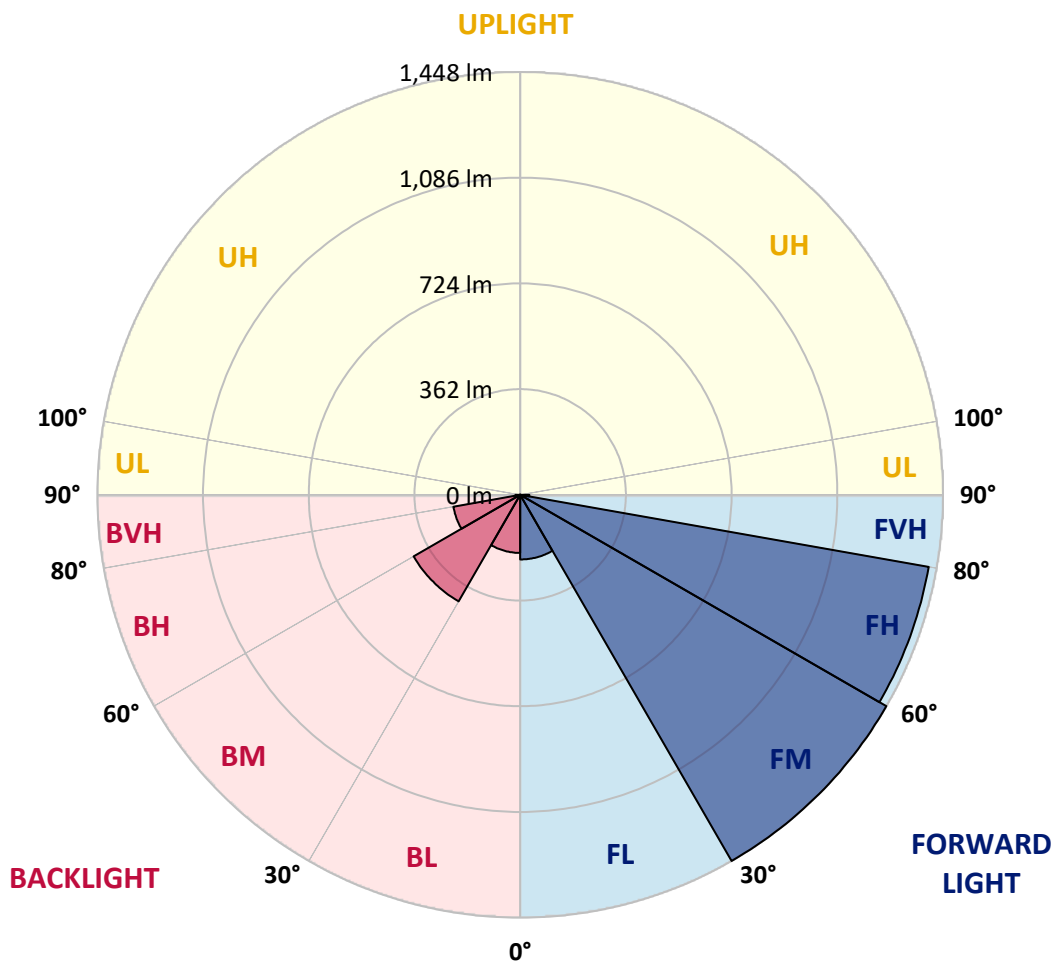
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	221.4	5.5			
FM	(30°-60°)	1448.1	36.3			
FH	(60°-80°)	1420.8	35.6			G1/1800
FVH	(80°-90°)	31.1	0.8			G1/100
BL	(0°-30°)	199.0	5.0	B1/500		
BM	(30°-60°)	421.2	10.6	B1/1000		
BH	(60°-80°)	232.4	5.8	B1/500		G1/500
BVH	(80°-90°)	16.1	0.4			G1/100
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°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	515.4	514.1	512.8	512.8	512.8	511.5	507.5	508.9	512.8	510.2	514.1
5°	514.1	511.5	510.2	510.2	510.2	506.2	504.9	503.6	511.5	504.9	510.2
7.5°	499.6	499.6	497.0	499.6	502.3	498.3	495.7	497.0	503.6	497.0	503.6
10°	489.1	486.4	485.1	485.1	487.8	482.5	479.9	482.5	490.4	482.5	491.7
12.5°	485.1	486.4	482.5	482.5	481.2	474.6	474.6	474.6	481.2	474.6	482.5
15°	491.7	490.4	486.4	483.8	479.9	474.6	473.3	474.6	479.9	471.9	481.2
17.5°	500.9	500.9	494.4	487.8	483.8	478.5	478.5	475.9	479.9	474.6	481.2
20°	524.7	520.7	511.5	500.9	490.4	487.8	482.5	482.5	485.1	479.9	483.8
22.5°	565.5	561.6	545.8	526.0	508.9	502.3	499.6	498.3	495.7	493.0	493.0
25°	619.6	613.0	594.5	570.8	541.8	536.5	531.3	527.3	518.1	518.1	511.5
27.5°	677.6	671.0	651.2	624.9	589.3	581.4	574.8	569.5	553.7	553.7	541.8
30°	743.5	735.6	711.9	682.9	642.0	639.4	630.1	622.2	601.1	599.8	584.0
32.5°	820.0	809.4	785.7	747.5	704.0	705.3	690.8	685.5	657.8	659.1	638.0
35°	907.0	895.1	871.4	821.3	776.5	780.4	767.2	758.0	723.7	723.7	701.3
37.5°	999.3	999.3	968.9	910.9	856.9	866.1	850.3	841.1	806.8	812.1	776.5
40°	1102.1	1108.7	1075.7	1009.8	954.4	958.4	946.5	936.0	895.1	904.3	866.1
42.5°	1210.2	1222.0	1193.0	1124.5	1062.5	1075.7	1055.9	1045.4	1001.9	1021.7	976.8
45°	1367.1	1369.7	1315.6	1249.7	1198.3	1210.2	1182.5	1178.5	1124.5	1145.6	1100.8
47.5°	1465.9	1459.3	1419.8	1380.2	1349.9	1373.6	1348.6	1342.0	1280.1	1294.6	1231.3
50°	1533.2	1537.1	1506.8	1502.8	1508.1	1552.9	1549.0	1535.8	1462.0	1451.4	1372.3
52.5°	1593.8	1576.7	1571.4	1608.3	1665.0	1717.7	1738.8	1721.7	1641.3	1612.3	1535.8
55°	1583.3	1558.2	1585.9	1675.5	1787.6	1869.3	1872.0	1860.1	1787.6	1775.7	1692.7
57.5°	1512.1	1517.3	1574.0	1701.9	1891.7	1976.1	1990.6	1976.1	1916.8	1927.3	1858.8
60°	1413.2	1423.7	1513.4	1678.2	1974.8	2047.3	2053.9	2071.0	2031.5	2059.2	2011.7
62.5°	1265.5	1280.1	1394.7	1618.8	1916.8	2024.9	2085.5	2125.1	2117.2	2180.4	2155.4
65°	1162.7	1162.7	1274.8	1550.3	1860.1	2002.5	2093.4	2167.3	2177.8	2278.0	2268.8
67.5°	971.6	978.2	1074.4	1359.1	1791.5	1952.4	2089.5	2214.7	2278.0	2436.2	2444.1
70°	672.3	677.6	740.9	970.3	1447.5	1584.6	1786.3	1990.6	2180.4	2419.0	2543.0
71°	503.6	510.2	572.1	773.8	1226.0	1339.4	1549.0	1761.2	1999.8	2309.6	2449.4
72.5°	246.5	250.5	311.1	497.0	852.9	997.9	1119.2	1322.2	1575.3	1930.0	2127.7
75°	114.7	116.0	129.2	179.3	325.6	387.6	441.6	572.1	729.0	1040.1	1280.1
77.5°	84.4	84.4	92.3	117.3	168.7	171.4	168.7	172.7	208.3	297.9	448.2
80°	62.0	62.0	67.2	79.1	112.1	112.1	108.1	109.4	105.5	109.4	123.9
82.5°	40.9	40.9	43.5	47.5	68.6	68.6	65.9	65.9	63.3	62.0	67.2
85°	23.7	25.0	26.4	22.4	29.0	27.7	25.0	27.7	26.4	23.7	29.0
87.5°	0.0	0.0	0.0	0.0	1.3	0.0	0.0	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):**

	52.5°	55°	57°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	508.9	512.8	512.8	507.5	511.5	507.5	510.2	506.2	510.2	503.6	511.5
5°	504.9	508.9	508.9	500.9	508.9	500.9	507.5	498.3	507.5	497.0	507.5
7.5°	494.4	503.6	503.6	493.0	502.3	494.4	502.3	493.0	500.9	489.1	502.3
10°	482.5	491.7	493.0	482.5	493.0	483.8	495.7	483.8	495.7	482.5	497.0
12.5°	474.6	485.1	487.8	475.9	489.1	477.2	491.7	478.5	491.7	477.2	494.4
15°	473.3	482.5	485.1	474.6	486.4	473.3	490.4	474.6	491.7	475.9	495.7
17.5°	474.6	482.5	485.1	473.3	485.1	474.6	489.1	475.9	491.7	477.2	495.7
20°	478.5	483.8	483.8	477.2	486.4	477.2	489.1	475.9	493.0	479.9	497.0
22.5°	490.4	491.7	491.7	486.4	491.7	485.1	494.4	485.1	497.0	486.4	502.3
25°	510.2	508.9	506.2	504.9	506.2	502.3	507.5	500.9	512.8	503.6	519.4
27.5°	544.4	539.2	536.5	536.5	535.2	536.5	536.5	533.9	539.2	536.5	547.1
30°	586.6	577.4	573.5	577.4	572.1	577.4	576.1	574.8	580.0	577.4	586.6
32.5°	642.0	626.2	623.5	631.5	620.9	630.1	622.2	626.2	630.1	632.8	638.0
35°	706.6	688.1	685.5	693.4	681.6	694.7	685.5	690.8	693.4	700.0	704.0
37.5°	783.1	760.6	756.7	767.2	751.4	765.9	752.7	768.6	764.6	773.8	777.8
40°	875.3	849.0	839.7	854.2	835.8	847.7	834.5	851.6	847.7	866.1	870.1
42.5°	988.7	950.5	941.3	955.8	928.1	932.0	921.5	941.3	938.6	963.7	967.6
45°	1106.0	1059.9	1046.7	1061.2	1029.6	1037.5	1021.7	1042.8	1041.4	1061.2	1077.0
47.5°	1236.5	1179.9	1162.7	1178.5	1140.3	1149.5	1133.7	1156.1	1157.5	1179.9	1195.7
50°	1372.3	1313.0	1290.6	1305.1	1269.5	1276.1	1260.3	1288.0	1286.6	1317.0	1328.8
52.5°	1520.0	1459.3	1442.2	1448.8	1406.6	1414.5	1401.3	1435.6	1427.7	1446.2	1469.9
55°	1683.4	1613.6	1593.8	1613.6	1563.5	1574.0	1556.9	1588.5	1575.3	1599.1	1605.7
57.5°	1850.9	1782.3	1766.5	1781.0	1733.5	1741.4	1719.0	1745.4	1734.9	1750.7	1761.2
60°	2028.8	1966.9	1951.1	1966.9	1920.7	1922.1	1883.8	1911.5	1895.7	1915.5	1911.5
62.5°	2198.9	2146.2	2142.2	2164.6	2106.6	2100.0	2053.9	2073.7	2051.2	2064.4	2048.6
65°	2343.9	2313.6	2318.9	2337.3	2285.9	2270.1	2217.3	2227.9	2194.9	2194.9	2175.2
67.5°	2533.7	2500.8	2500.8	2516.6	2452.0	2411.1	2338.6	2329.4	2275.4	2264.8	2218.7
70°	2691.9	2701.2	2690.6	2703.8	2627.3	2544.3	2448.0	2401.9	2330.7	2296.4	2242.4
71°	2635.2	2688.0	2706.4	2717.0	2653.7	2570.6	2470.5	2411.1	2342.6	2296.4	2238.4
72.5°	2378.2	2506.1	2578.6	2578.6	2586.5	2533.7	2437.5	2372.9	2295.1	2234.5	2180.4
75°	1666.3	1874.6	1968.2	1957.6	2026.2	2049.9	2057.8	2030.2	1986.6	1899.6	1861.4
77.5°	742.2	978.2	1119.2	1120.5	1194.4	1259.0	1310.4	1364.4	1344.6	1302.5	1299.8
80°	168.7	305.8	391.5	395.5	462.7	522.0	557.6	611.7	618.3	557.6	523.4
82.5°	72.5	85.7	97.6	96.2	118.6	142.4	168.7	183.2	176.6	146.3	138.4
85°	30.3	39.5	42.2	39.5	48.8	54.0	63.3	64.6	75.1	67.2	71.2
87.5°	0.0	1.3	1.3	0.0	2.6	0.0	2.6	1.3	6.6	2.6	7.9
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):**

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	506.2	512.8	506.2	512.8	508.9	512.8	511.5	512.8	506.2	512.8	504.9
5°	497.0	507.5	498.3	506.2	498.3	507.5	507.5	507.5	498.3	508.9	499.6
7.5°	489.1	500.9	489.1	500.9	493.0	502.3	502.3	506.2	495.7	507.5	494.4
10°	481.2	495.7	481.2	498.3	485.1	499.6	500.9	503.6	489.1	504.9	491.7
12.5°	477.2	495.7	478.5	495.7	479.9	499.6	500.9	503.6	487.8	507.5	490.4
15°	477.2	497.0	478.5	497.0	479.9	499.6	502.3	504.9	487.8	508.9	490.4
17.5°	477.2	497.0	481.2	498.3	482.5	500.9	503.6	506.2	490.4	508.9	493.0
20°	481.2	499.6	483.8	502.3	486.4	504.9	506.2	510.2	493.0	510.2	495.7
22.5°	490.4	506.2	493.0	510.2	498.3	512.8	514.1	518.1	504.9	519.4	507.5
25°	506.2	523.4	512.8	526.0	519.4	531.3	533.9	533.9	528.6	537.9	533.9
27.5°	539.2	552.4	544.4	556.3	552.4	561.6	561.6	562.9	566.9	569.5	573.5
30°	581.4	590.6	588.0	594.5	595.9	601.1	601.1	609.0	624.9	609.0	607.7
32.5°	638.0	643.3	644.6	647.3	652.5	656.5	661.8	671.0	684.2	647.3	635.4
35°	707.9	709.2	713.2	717.1	726.4	729.0	746.1	739.6	739.6	681.6	656.5
37.5°	784.4	784.4	794.9	794.9	817.3	818.7	835.8	801.5	781.7	706.6	669.7
40°	880.6	879.3	891.2	893.8	924.1	925.4	922.8	847.7	805.5	713.2	663.1
42.5°	982.1	986.1	1001.9	1007.2	1029.6	1037.5	1004.5	879.3	816.0	709.2	640.7
45°	1092.9	1100.8	1120.5	1135.0	1158.8	1149.5	1070.4	893.8	804.2	685.5	597.2
47.5°	1214.1	1222.0	1237.9	1265.5	1276.1	1265.5	1124.5	899.1	785.7	648.6	533.9
50°	1336.7	1349.9	1372.3	1411.9	1417.2	1390.8	1190.4	918.8	771.2	610.4	461.4
52.5°	1475.2	1488.3	1514.7	1580.6	1567.4	1513.4	1268.2	955.8	775.1	586.6	399.4
55°	1621.5	1639.9	1691.4	1755.9	1726.9	1642.6	1353.9	1009.8	791.0	561.6	330.9
57.5°	1775.7	1795.5	1862.7	1939.2	1882.5	1769.1	1440.9	1052.0	798.9	510.2	255.7
60°	1928.6	1956.3	2043.3	2106.6	2018.3	1877.2	1518.7	1079.7	777.8	412.6	197.7
62.5°	2068.4	2113.2	2210.8	2245.0	2104.0	1945.8	1560.8	1059.9	692.1	284.7	159.5
65°	2167.3	2225.3	2288.5	2284.6	2088.2	1923.4	1529.2	968.9	515.4	188.5	135.8
67.5°	2209.4	2263.5	2278.0	2210.8	1974.8	1824.5	1415.8	780.4	296.6	141.1	118.6
70°	2225.3	2271.4	2189.7	2027.5	1753.3	1581.9	1157.5	497.0	162.1	114.7	102.8
71°	2218.7	2241.1	2085.5	1895.7	1612.3	1433.0	1015.1	378.3	138.4	106.8	97.6
72.5°	2129.0	2097.4	1857.5	1646.5	1367.1	1185.1	789.6	238.6	113.4	96.2	91.0
75°	1740.1	1597.8	1367.1	1168.0	930.7	744.8	428.4	122.6	91.0	83.1	79.1
77.5°	1137.7	1013.8	823.9	669.7	508.9	386.3	175.3	84.4	72.5	69.9	68.6
80°	406.0	325.6	246.5	216.2	163.5	134.5	85.7	64.6	56.7	58.0	56.7
82.5°	114.7	105.5	91.0	84.4	73.8	72.5	55.4	48.8	44.8	47.5	46.1
85°	56.7	48.8	35.6	34.3	26.4	30.3	27.7	33.0	29.0	30.3	27.7
87.5°	4.0	5.3	1.3	4.0	0.0	4.0	5.3	6.6	1.3	5.3	4.0
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: ISC-AF-800-LED-E1-T3-8030

**CANDELA DISTRIBUTION (continued):**

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4	515.4
2.5°	514.1	508.9	515.4	508.9	515.4	511.5	515.4	511.5	515.4	518.1	518.1
5°	511.5	502.3	514.1	507.5	515.4	508.9	514.1	510.2	516.8	519.4	522.0
7.5°	510.2	500.9	512.8	503.6	515.4	506.2	514.1	508.9	516.8	519.4	524.7
10°	508.9	497.0	512.8	499.6	514.1	504.9	514.1	506.2	515.4	518.1	519.4
12.5°	508.9	495.7	512.8	498.3	514.1	500.9	512.8	500.9	514.1	512.8	508.9
15°	510.2	493.0	512.8	495.7	512.8	497.0	511.5	495.7	508.9	504.9	502.3
17.5°	510.2	493.0	511.5	494.4	510.2	495.7	507.5	493.0	504.9	503.6	499.6
20°	512.8	495.7	511.5	499.6	511.5	497.0	506.2	493.0	502.3	494.4	478.5
22.5°	520.7	508.9	520.7	508.9	514.1	500.9	504.9	489.1	487.8	474.6	449.5
25°	539.2	533.9	531.3	516.8	512.8	495.7	490.4	471.9	465.4	445.6	411.3
27.5°	562.9	551.0	535.2	518.1	500.9	479.9	465.4	450.9	436.4	411.3	367.8
30°	578.7	561.6	528.6	504.9	473.3	456.1	431.1	415.3	394.2	362.5	320.3
32.5°	589.3	562.9	512.8	485.1	442.9	420.5	387.6	370.4	340.1	309.8	279.5
35°	591.9	557.6	491.7	461.4	406.0	381.0	337.5	319.0	290.0	268.9	257.1
37.5°	581.4	539.2	458.8	419.2	358.6	329.6	288.7	275.5	258.4	250.5	245.2
40°	560.3	503.6	407.3	361.2	299.2	276.8	255.7	255.7	246.5	242.6	233.3
42.5°	522.0	450.9	341.4	296.6	254.4	250.5	238.6	243.9	237.3	234.7	221.5
45°	462.7	375.7	275.5	249.2	229.4	232.0	224.1	229.4	225.4	224.1	208.3
47.5°	386.3	299.2	232.0	222.8	209.6	213.6	207.0	213.6	209.6	210.9	199.1
50°	308.5	242.6	205.7	200.4	191.2	193.8	189.8	196.4	195.1	200.4	193.8
52.5°	246.5	207.0	183.2	179.3	174.0	175.3	174.0	180.6	181.9	192.5	192.5
55°	204.3	178.0	164.8	163.5	158.2	159.5	160.8	167.4	172.7	185.9	192.5
57.5°	175.3	159.5	150.3	149.0	146.3	147.6	150.3	158.2	163.5	180.6	195.1
60°	154.2	145.0	138.4	138.4	135.8	138.4	141.1	149.0	155.6	175.3	189.8
62.5°	138.4	131.8	127.9	129.2	127.9	130.5	133.1	141.1	149.0	167.4	181.9
65°	123.9	120.0	117.3	118.6	118.6	122.6	125.2	133.1	139.7	156.9	175.3
67.5°	112.1	109.4	108.1	109.4	110.7	114.7	118.6	123.9	129.2	145.0	166.1
70°	102.8	100.2	100.2	100.2	101.5	105.5	110.7	113.4	118.6	135.8	155.6
71°	97.6	96.2	96.2	96.2	97.6	101.5	106.8	109.4	114.7	131.8	150.3
72.5°	91.0	91.0	92.3	91.0	93.6	94.9	100.2	102.8	109.4	126.6	143.7
75°	80.4	80.4	81.7	81.7	84.4	84.4	88.3	91.0	98.9	113.4	129.2
77.5°	71.2	71.2	73.8	72.5	72.5	69.9	75.1	77.8	84.4	98.9	114.7
80°	60.6	59.3	62.0	58.0	56.7	54.0	58.0	62.0	72.5	81.7	84.4
82.5°	47.5	43.5	44.8	40.9	40.9	38.2	42.2	43.5	50.1	59.3	64.6
85°	29.0	23.7	26.4	22.4	25.0	22.4	23.7	25.0	30.3	36.9	35.6
87.5°	6.6	4.0	5.3	1.3	4.0	0.0	4.0	1.3	4.0	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):**

	155°	165°	175°	180°
0°	515.4	515.4	515.4	515.4
2.5°	520.7	519.4	520.7	519.4
5°	527.3	527.3	528.6	529.9
7.5°	528.6	531.3	533.9	532.6
10°	519.4	516.8	519.4	516.8
12.5°	504.9	502.3	504.9	504.9
15°	503.6	502.3	503.6	503.6
17.5°	494.4	487.8	485.1	483.8
20°	468.0	456.1	453.5	449.5
22.5°	431.1	413.9	408.7	404.7
25°	386.3	362.5	353.3	348.0
27.5°	337.5	313.8	304.5	304.5
30°	299.2	280.8	271.6	271.6
32.5°	271.6	261.0	254.4	255.7
35°	249.2	242.6	238.6	239.9
37.5°	234.7	224.1	214.9	214.9
40°	220.2	207.0	195.1	195.1
42.5°	207.0	193.8	185.9	184.6
45°	193.8	184.6	178.0	176.6
47.5°	187.2	179.3	172.7	171.4
50°	184.6	176.6	167.4	167.4
52.5°	187.2	180.6	163.5	163.5
55°	192.5	188.5	163.5	160.8
57.5°	187.2	180.6	164.8	160.8
60°	175.3	164.8	162.1	159.5
62.5°	167.4	156.9	162.1	160.8
65°	160.8	152.9	164.8	162.1
67.5°	154.2	146.3	164.8	159.5
70°	146.3	138.4	150.3	141.1
71°	142.4	133.1	142.4	134.5
72.5°	135.8	125.2	127.9	122.6
75°	122.6	112.1	109.4	108.1
77.5°	101.5	89.6	85.7	84.4
80°	77.8	69.9	69.9	65.9
82.5°	58.0	51.4	50.1	43.5
85°	30.3	23.7	19.8	19.8
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)