

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: P227780

Luminaire Tested: **ISC-AF-800-LED-E1-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227780
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-T3-7050
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III
Light Source: (16) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4889 lumens
Efficiency: N/A
Efficacy: 112.4 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

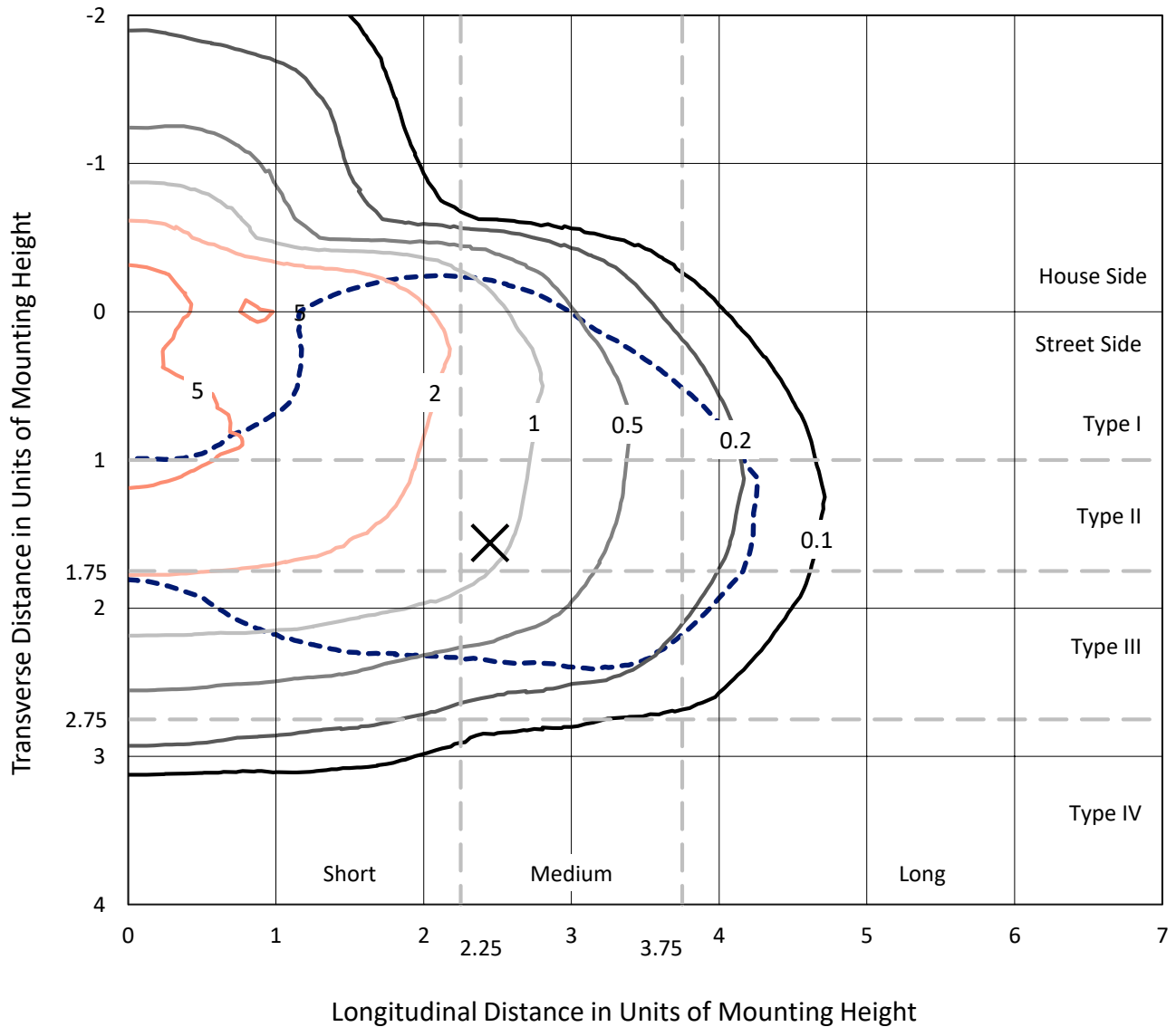
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

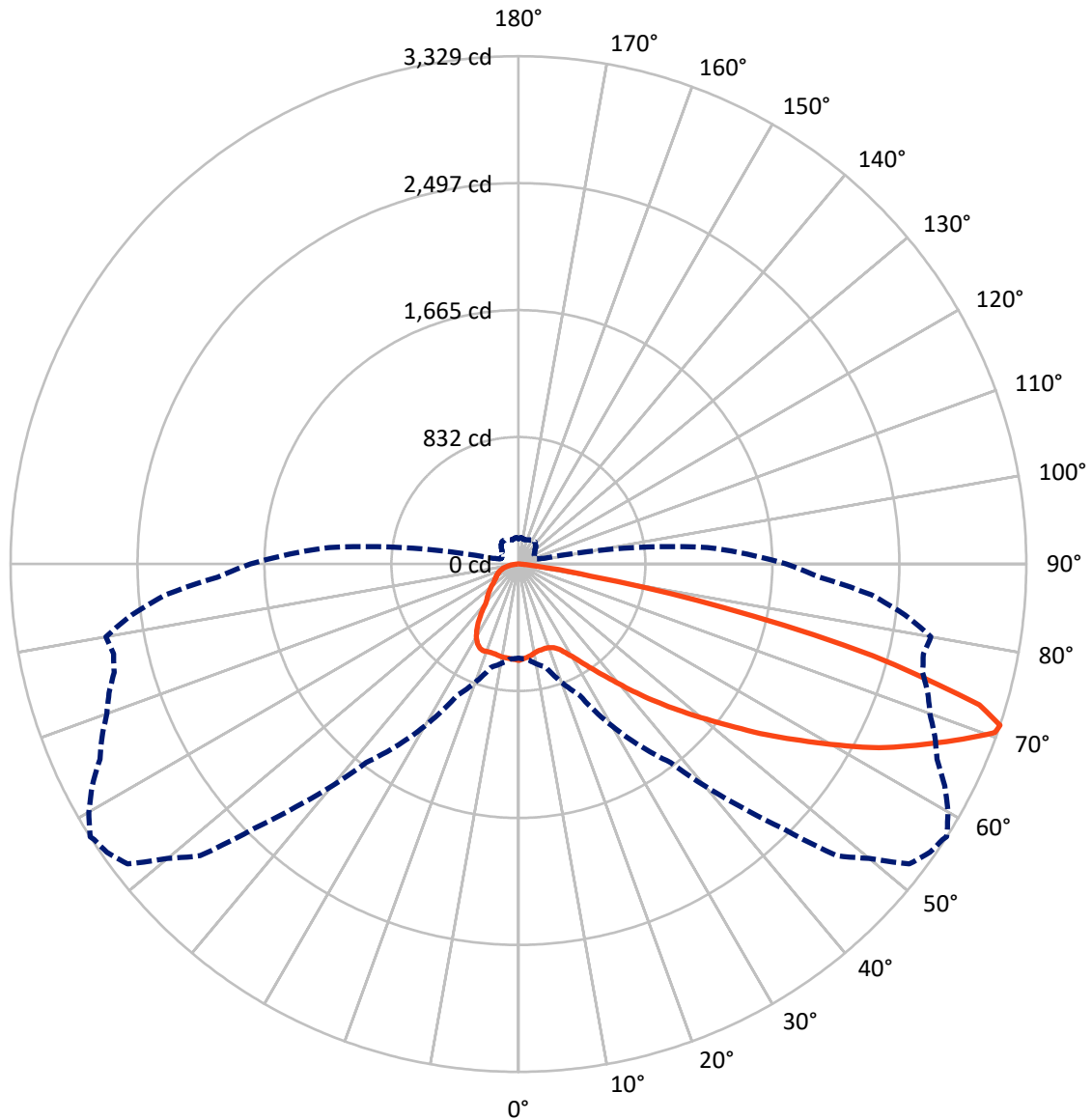
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 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
House Side	Lumens	1064.4	0.0	1064.4
	% Fixture	21.8	0.0	21.8
Street Side	Lumens	3824.6	0.0	3824.6
	% Fixture	78.2	0.0	78.2
Total	Lumens	4889.0	0.0	4889.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	1.2
10°-20°	171.3	3.5
20°-30°	284.3	5.8
30°-40°	452.6	9.3
40°-50°	735.3	15.0
50°-60°	1102.5	22.6
60°-70°	1315.3	26.9
70°-80°	710.4	14.5
80°-90°	57.8	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°	4889.0	100.0
0°-180°	4889.0	100.0



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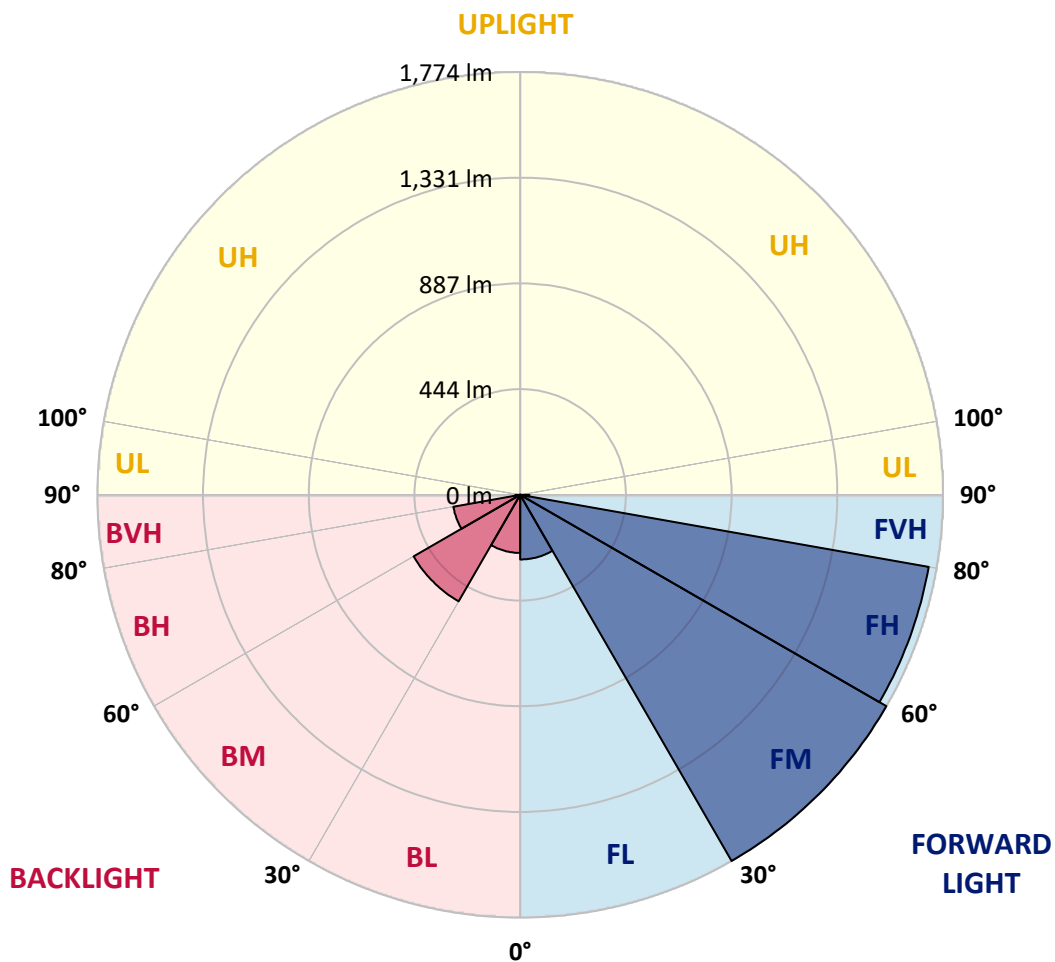
CATALOG NUMBER: ISC-AF-800-LED-E1-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	271.2	5.5			
FM	(30°-60°)	1774.4	36.3			
FH	(60°-80°)	1740.9	35.6			G1/1800
FVH	(80°-90°)	38.1	0.8			G1/100
BL	(0°-30°)	243.8	5.0	B1/500		
BM	(30°-60°)	516.1	10.6	B1/1000		
BH	(60°-80°)	284.7	5.8	B1/500		G1/500
BVH	(80°-90°)	19.7	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°	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6
2.5°	631.6	630.0	628.4	628.4	628.4	626.7	621.9	623.5	628.4	625.1	630.0
5°	630.0	626.7	625.1	625.1	625.1	620.3	618.7	617.0	626.7	618.7	625.1
7.5°	612.2	612.2	609.0	612.2	615.4	610.6	607.4	609.0	617.0	609.0	617.0
10°	599.3	596.0	594.4	594.4	597.7	591.2	588.0	591.2	600.9	591.2	602.5
12.5°	594.4	596.0	591.2	591.2	589.6	581.5	581.5	581.5	589.6	581.5	591.2
15°	602.5	600.9	596.0	592.8	588.0	581.5	579.9	581.5	588.0	578.3	589.6
17.5°	613.8	613.8	605.7	597.7	592.8	586.4	586.4	583.1	588.0	581.5	589.6
20°	642.9	638.0	626.7	613.8	600.9	597.7	591.2	591.2	594.4	588.0	592.8
22.5°	693.0	688.1	668.7	644.5	623.5	615.4	612.2	610.6	607.4	604.1	604.1
25°	759.2	751.1	728.5	699.4	663.9	657.4	651.0	646.1	634.8	634.8	626.7
27.5°	830.3	822.2	798.0	765.7	722.0	712.4	704.3	697.8	678.4	678.4	663.9
30°	911.0	901.3	872.3	836.7	786.7	783.4	772.1	762.4	736.6	735.0	715.6
32.5°	1004.7	991.8	962.7	915.9	862.6	864.2	846.4	840.0	806.0	807.7	781.8
35°	1111.3	1096.8	1067.7	1006.3	951.4	956.3	940.1	928.8	886.8	886.8	859.3
37.5°	1224.4	1224.4	1187.3	1116.2	1049.9	1061.3	1041.9	1030.6	988.6	995.0	951.4
40°	1350.4	1358.5	1318.1	1237.3	1169.5	1174.3	1159.8	1146.9	1096.8	1108.1	1061.3
42.5°	1482.9	1497.4	1461.9	1377.9	1301.9	1318.1	1293.9	1280.9	1227.6	1251.9	1196.9
45°	1675.1	1678.3	1612.1	1531.3	1468.3	1482.9	1448.9	1444.1	1377.9	1403.7	1348.8
47.5°	1796.2	1788.1	1739.7	1691.2	1654.1	1683.1	1652.5	1644.4	1568.5	1586.2	1508.7
50°	1878.6	1883.4	1846.3	1841.4	1847.9	1902.8	1898.0	1881.8	1791.4	1778.5	1681.5
52.5°	1952.9	1931.9	1925.4	1970.7	2040.1	2104.7	2130.6	2109.6	2011.1	1975.5	1881.8
55°	1940.0	1909.3	1943.2	2053.1	2190.4	2290.5	2293.7	2279.2	2190.4	2175.8	2074.1
57.5°	1852.8	1859.2	1928.7	2085.4	2318.0	2421.3	2439.1	2421.3	2348.7	2361.6	2277.6
60°	1731.6	1744.5	1854.4	2056.3	2419.7	2508.6	2516.6	2537.6	2489.2	2523.1	2465.0
62.5°	1550.7	1568.5	1709.0	1983.6	2348.7	2481.1	2555.4	2603.9	2594.2	2671.7	2641.0
65°	1424.7	1424.7	1562.0	1899.6	2279.2	2453.7	2565.1	2655.6	2668.5	2791.2	2779.9
67.5°	1190.5	1198.6	1316.5	1665.4	2195.2	2392.3	2560.3	2713.7	2791.2	2985.1	2994.8
70°	823.8	830.3	907.8	1188.9	1773.6	1941.6	2188.7	2439.1	2671.7	2964.1	3115.9
71°	617.0	625.1	701.0	948.2	1502.2	1641.2	1898.0	2158.0	2450.4	2830.0	3001.2
72.5°	302.1	306.9	381.2	609.0	1045.1	1222.8	1371.4	1620.2	1930.3	2364.8	2607.1
75°	140.5	142.1	158.3	219.7	399.0	474.9	541.1	701.0	893.3	1274.5	1568.5
77.5°	103.4	103.4	113.1	143.8	206.8	210.0	206.8	211.6	255.2	365.1	549.2
80°	75.9	75.9	82.4	96.9	137.3	137.3	132.5	134.1	129.2	134.1	151.8
82.5°	50.1	50.1	53.3	58.2	84.0	84.0	80.8	80.8	77.5	75.9	82.4
85°	29.1	30.7	32.3	27.5	35.5	33.9	30.7	33.9	32.3	29.1	35.5
87.5°	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	1.6	0.0	1.6
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°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6
2.5°	623.5	628.4	628.4	621.9	626.7	621.9	625.1	620.3	625.1	617.0	626.7
5°	618.7	623.5	623.5	613.8	623.5	613.8	621.9	610.6	621.9	609.0	621.9
7.5°	605.7	617.0	617.0	604.1	615.4	605.7	615.4	604.1	613.8	599.3	615.4
10°	591.2	602.5	604.1	591.2	604.1	592.8	607.4	592.8	607.4	591.2	609.0
12.5°	581.5	594.4	597.7	583.1	599.3	584.7	602.5	586.4	602.5	584.7	605.7
15°	579.9	591.2	594.4	581.5	596.0	579.9	600.9	581.5	602.5	583.1	607.4
17.5°	581.5	591.2	594.4	579.9	594.4	581.5	599.3	583.1	602.5	584.7	607.4
20°	586.4	592.8	592.8	584.7	596.0	584.7	599.3	583.1	604.1	588.0	609.0
22.5°	600.9	602.5	602.5	596.0	602.5	594.4	605.7	594.4	609.0	596.0	615.4
25°	625.1	623.5	620.3	618.7	620.3	615.4	621.9	613.8	628.4	617.0	636.4
27.5°	667.1	660.7	657.4	657.4	655.8	657.4	657.4	654.2	660.7	657.4	670.4
30°	718.8	707.5	702.7	707.5	701.0	707.5	705.9	704.3	710.7	707.5	718.8
32.5°	786.7	767.3	764.0	773.7	760.8	772.1	762.4	767.3	772.1	775.3	781.8
35°	865.8	843.2	840.0	849.7	835.1	851.3	840.0	846.4	849.7	857.7	862.6
37.5°	959.5	932.0	927.2	940.1	920.7	938.5	922.3	941.7	936.9	948.2	953.0
40°	1072.6	1040.3	1029.0	1046.7	1024.1	1038.6	1022.5	1043.5	1038.6	1061.3	1066.1
42.5°	1211.5	1164.6	1153.3	1171.1	1137.2	1142.0	1129.1	1153.3	1150.1	1180.8	1185.6
45°	1355.2	1298.7	1282.6	1300.3	1261.6	1271.2	1251.9	1277.7	1276.1	1300.3	1319.7
47.5°	1515.2	1445.7	1424.7	1444.1	1397.2	1408.5	1389.2	1416.6	1418.2	1445.7	1465.1
50°	1681.5	1608.8	1581.4	1599.2	1555.5	1563.6	1544.2	1578.2	1576.5	1613.7	1628.2
52.5°	1862.4	1788.1	1767.1	1775.2	1723.5	1733.2	1717.1	1759.1	1749.4	1772.0	1801.1
55°	2062.7	1977.1	1952.9	1977.1	1915.8	1928.7	1907.7	1946.4	1930.3	1959.4	1967.4
57.5°	2267.9	2183.9	2164.5	2182.3	2124.1	2133.8	2106.4	2138.7	2125.7	2145.1	2158.0
60°	2486.0	2410.0	2390.7	2410.0	2353.5	2355.1	2308.3	2342.2	2322.8	2347.0	2342.2
62.5°	2694.3	2629.7	2624.9	2652.3	2581.3	2573.2	2516.6	2540.9	2513.4	2529.6	2510.2
65°	2872.0	2834.9	2841.3	2863.9	2800.9	2781.6	2716.9	2729.9	2689.5	2689.5	2665.3
67.5°	3104.6	3064.2	3064.2	3083.6	3004.5	2954.4	2865.6	2854.2	2788.0	2775.1	2718.6
70°	3298.5	3309.8	3296.8	3313.0	3219.3	3117.5	2999.6	2943.1	2855.9	2813.9	2747.6
71°	3229.0	3293.6	3316.2	3329.1	3251.6	3149.8	3027.1	2954.4	2870.4	2813.9	2742.8
72.5°	2914.0	3070.7	3159.5	3159.5	3169.2	3104.6	2986.7	2907.6	2812.2	2737.9	2671.7
75°	2041.7	2297.0	2411.7	2398.7	2482.7	2511.8	2521.5	2487.6	2434.3	2327.7	2280.8
77.5°	909.4	1198.6	1371.4	1373.0	1463.5	1542.6	1605.6	1671.8	1647.6	1595.9	1592.7
80°	206.8	374.8	479.7	484.6	567.0	639.7	683.3	749.5	757.6	683.3	641.3
82.5°	88.8	105.0	119.5	117.9	145.4	174.5	206.8	224.5	216.5	179.3	169.6
85°	37.2	48.5	51.7	48.5	59.8	66.2	77.5	79.2	92.1	82.4	87.2
87.5°	0.0	1.6	1.6	0.0	3.2	0.0	3.2	1.6	8.1	3.2	9.7
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°	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6
2.5°	620.3	628.4	620.3	628.4	623.5	628.4	626.7	628.4	620.3	628.4	618.7
5°	609.0	621.9	610.6	620.3	610.6	621.9	621.9	621.9	610.6	623.5	612.2
7.5°	599.3	613.8	599.3	613.8	604.1	615.4	615.4	620.3	607.4	621.9	605.7
10°	589.6	607.4	589.6	610.6	594.4	612.2	613.8	617.0	599.3	618.7	602.5
12.5°	584.7	607.4	586.4	607.4	588.0	612.2	613.8	617.0	597.7	621.9	600.9
15°	584.7	609.0	586.4	609.0	588.0	612.2	615.4	618.7	597.7	623.5	600.9
17.5°	584.7	609.0	589.6	610.6	591.2	613.8	617.0	620.3	600.9	623.5	604.1
20°	589.6	612.2	592.8	615.4	596.0	618.7	620.3	625.1	604.1	625.1	607.4
22.5°	600.9	620.3	604.1	625.1	610.6	628.4	630.0	634.8	618.7	636.4	621.9
25°	620.3	641.3	628.4	644.5	636.4	651.0	654.2	654.2	647.7	659.0	654.2
27.5°	660.7	676.8	667.1	681.7	676.8	688.1	688.1	689.7	694.6	697.8	702.7
30°	712.4	723.7	720.4	728.5	730.1	736.6	736.6	746.3	765.7	746.3	744.7
32.5°	781.8	788.3	789.9	793.1	799.6	804.4	810.9	822.2	838.3	793.1	778.6
35°	867.4	869.0	873.9	878.7	890.0	893.3	914.3	906.2	906.2	835.1	804.4
37.5°	961.1	961.1	974.0	974.0	1001.5	1003.1	1024.1	982.1	957.9	865.8	820.6
40°	1079.0	1077.4	1091.9	1095.2	1132.3	1133.9	1130.7	1038.6	987.0	873.9	812.5
42.5°	1203.4	1208.2	1227.6	1234.1	1261.6	1271.2	1230.9	1077.4	999.9	869.0	785.0
45°	1339.1	1348.8	1373.0	1390.8	1419.9	1408.5	1311.6	1095.2	985.3	840.0	731.7
47.5°	1487.7	1497.4	1516.8	1550.7	1563.6	1550.7	1377.9	1101.6	962.7	794.7	654.2
50°	1637.9	1654.1	1681.5	1730.0	1736.5	1704.1	1458.6	1125.9	945.0	747.9	565.4
52.5°	1807.5	1823.7	1856.0	1936.8	1920.6	1854.4	1553.9	1171.1	949.8	718.8	489.4
55°	1986.8	2009.4	2072.4	2151.6	2116.1	2012.7	1658.9	1237.3	969.2	688.1	405.4
57.5°	2175.8	2200.0	2282.4	2376.1	2306.7	2167.7	1765.5	1289.0	978.9	625.1	313.4
60°	2363.2	2397.1	2503.7	2581.3	2473.0	2300.2	1860.8	1322.9	953.0	505.6	242.3
62.5°	2534.4	2589.3	2708.9	2750.9	2578.0	2384.2	1912.5	1298.7	848.0	348.9	195.5
65°	2655.6	2726.6	2804.2	2799.3	2558.6	2356.7	1873.8	1187.3	631.6	231.0	166.4
67.5°	2707.3	2773.5	2791.2	2708.9	2419.7	2235.6	1734.8	956.3	363.4	172.8	145.4
70°	2726.6	2783.2	2683.0	2484.3	2148.4	1938.4	1418.2	609.0	198.7	140.5	126.0
71°	2718.6	2746.0	2555.4	2322.8	1975.5	1755.8	1243.8	463.6	169.6	130.8	119.5
72.5°	2608.7	2570.0	2276.0	2017.5	1675.1	1452.2	967.6	292.4	138.9	117.9	111.5
75°	2132.2	1957.8	1675.1	1431.2	1140.4	912.6	525.0	150.2	111.5	101.8	96.9
77.5°	1394.0	1242.2	1009.6	820.6	623.5	473.3	214.8	103.4	88.8	85.6	84.0
80°	497.5	399.0	302.1	264.9	200.3	164.8	105.0	79.2	69.5	71.1	69.5
82.5°	140.5	129.2	111.5	103.4	90.5	88.8	67.8	59.8	54.9	58.2	56.5
85°	69.5	59.8	43.6	42.0	32.3	37.2	33.9	40.4	35.5	37.2	33.9
87.5°	4.8	6.5	1.6	4.8	0.0	4.8	6.5	8.1	1.6	6.5	4.8
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):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6	631.6
2.5°	630.0	623.5	631.6	623.5	631.6	626.7	631.6	626.7	631.6	634.8	634.8
5°	626.7	615.4	630.0	621.9	631.6	623.5	630.0	625.1	633.2	636.4	639.7
7.5°	625.1	613.8	628.4	617.0	631.6	620.3	630.0	623.5	633.2	636.4	642.9
10°	623.5	609.0	628.4	612.2	630.0	618.7	630.0	620.3	631.6	634.8	636.4
12.5°	623.5	607.4	628.4	610.6	630.0	613.8	628.4	613.8	630.0	628.4	623.5
15°	625.1	604.1	628.4	607.4	628.4	609.0	626.7	607.4	623.5	618.7	615.4
17.5°	625.1	604.1	626.7	605.7	625.1	607.4	621.9	604.1	618.7	617.0	612.2
20°	628.4	607.4	626.7	612.2	626.7	609.0	620.3	604.1	615.4	605.7	586.4
22.5°	638.0	623.5	638.0	623.5	630.0	613.8	618.7	599.3	597.7	581.5	550.8
25°	660.7	654.2	651.0	633.2	628.4	607.4	600.9	578.3	570.2	546.0	504.0
27.5°	689.7	675.2	655.8	634.8	613.8	588.0	570.2	552.4	534.7	504.0	450.7
30°	709.1	688.1	647.7	618.7	579.9	558.9	528.2	508.8	483.0	444.2	392.5
32.5°	722.0	689.7	628.4	594.4	542.7	515.3	474.9	453.9	416.7	379.6	342.4
35°	725.3	683.3	602.5	565.4	497.5	466.8	413.5	390.9	355.4	329.5	315.0
37.5°	712.4	660.7	562.1	513.7	439.4	403.8	353.8	337.6	316.6	306.9	300.4
40°	686.5	617.0	499.1	442.6	366.7	339.2	313.4	313.4	302.1	297.2	285.9
42.5°	639.7	552.4	418.4	363.4	311.8	306.9	292.4	298.8	290.8	287.5	271.4
45°	567.0	460.4	337.6	305.3	281.1	284.3	274.6	281.1	276.2	274.6	255.2
47.5°	473.3	366.7	284.3	273.0	256.8	261.7	253.6	261.7	256.8	258.4	243.9
50°	378.0	297.2	252.0	245.5	234.2	237.5	232.6	240.7	239.1	245.5	237.5
52.5°	302.1	253.6	224.5	219.7	213.2	214.8	213.2	221.3	222.9	235.8	235.8
55°	250.4	218.1	201.9	200.3	193.8	195.5	197.1	205.1	211.6	227.8	235.8
57.5°	214.8	195.5	184.1	182.5	179.3	180.9	184.1	193.8	200.3	221.3	239.1
60°	189.0	177.7	169.6	169.6	166.4	169.6	172.8	182.5	190.6	214.8	232.6
62.5°	169.6	161.5	156.7	158.3	156.7	159.9	163.1	172.8	182.5	205.1	222.9
65°	151.8	147.0	143.8	145.4	145.4	150.2	153.5	163.1	171.2	192.2	214.8
67.5°	137.3	134.1	132.5	134.1	135.7	140.5	145.4	151.8	158.3	177.7	203.5
70°	126.0	122.8	122.8	122.8	124.4	129.2	135.7	138.9	145.4	166.4	190.6
71°	119.5	117.9	117.9	117.9	119.5	124.4	130.8	134.1	140.5	161.5	184.1
72.5°	111.5	111.5	113.1	111.5	114.7	116.3	122.8	126.0	134.1	155.1	176.1
75°	98.5	98.5	100.1	100.1	103.4	103.4	108.2	111.5	121.1	138.9	158.3
77.5°	87.2	87.2	90.5	88.8	88.8	85.6	92.1	95.3	103.4	121.1	140.5
80°	74.3	72.7	75.9	71.1	69.5	66.2	71.1	75.9	88.8	100.1	103.4
82.5°	58.2	53.3	54.9	50.1	50.1	46.8	51.7	53.3	61.4	72.7	79.2
85°	35.5	29.1	32.3	27.5	30.7	27.5	29.1	30.7	37.2	45.2	43.6
87.5°	8.1	4.8	6.5	1.6	4.8	0.0	4.8	1.6	4.8	1.6	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: ISC-AF-800-LED-E1-T3-7050

CANDELA DISTRIBUTION (continued):

	155°	165°	175°	180°
0°	631.6	631.6	631.6	631.6
2.5°	638.0	636.4	638.0	636.4
5°	646.1	646.1	647.7	649.4
7.5°	647.7	651.0	654.2	652.6
10°	636.4	633.2	636.4	633.2
12.5°	618.7	615.4	618.7	618.7
15°	617.0	615.4	617.0	617.0
17.5°	605.7	597.7	594.4	592.8
20°	573.4	558.9	555.7	550.8
22.5°	528.2	507.2	500.7	495.9
25°	473.3	444.2	432.9	426.4
27.5°	413.5	384.4	373.1	373.1
30°	366.7	344.1	332.8	332.8
32.5°	332.8	319.8	311.8	313.4
35°	305.3	297.2	292.4	294.0
37.5°	287.5	274.6	263.3	263.3
40°	269.8	253.6	239.1	239.1
42.5°	253.6	237.5	227.8	226.1
45°	237.5	226.1	218.1	216.5
47.5°	229.4	219.7	211.6	210.0
50°	226.1	216.5	205.1	205.1
52.5°	229.4	221.3	200.3	200.3
55°	235.8	231.0	200.3	197.1
57.5°	229.4	221.3	201.9	197.1
60°	214.8	201.9	198.7	195.5
62.5°	205.1	192.2	198.7	197.1
65°	197.1	187.4	201.9	198.7
67.5°	189.0	179.3	201.9	195.5
70°	179.3	169.6	184.1	172.8
71°	174.5	163.1	174.5	164.8
72.5°	166.4	153.5	156.7	150.2
75°	150.2	137.3	134.1	132.5
77.5°	124.4	109.8	105.0	103.4
80°	95.3	85.6	85.6	80.8
82.5°	71.1	63.0	61.4	53.3
85°	37.2	29.1	24.2	24.2
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)