

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: P228047

Luminaire Tested: **ISC-AF-800-LED-E1-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228047
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29757)
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-T4W
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5004.3 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

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

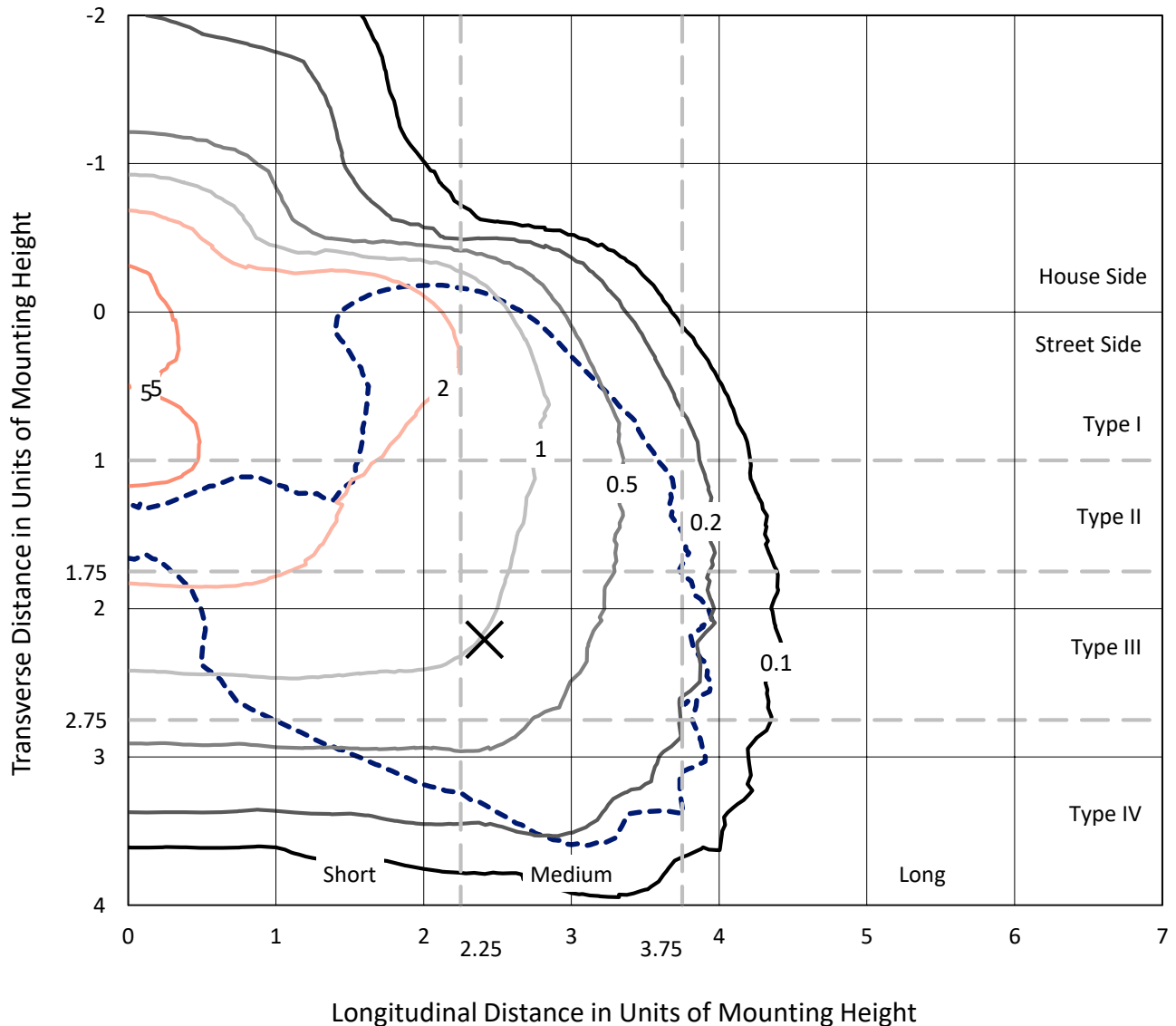


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Iso-Footcandle Lines of Horizontal Illumination

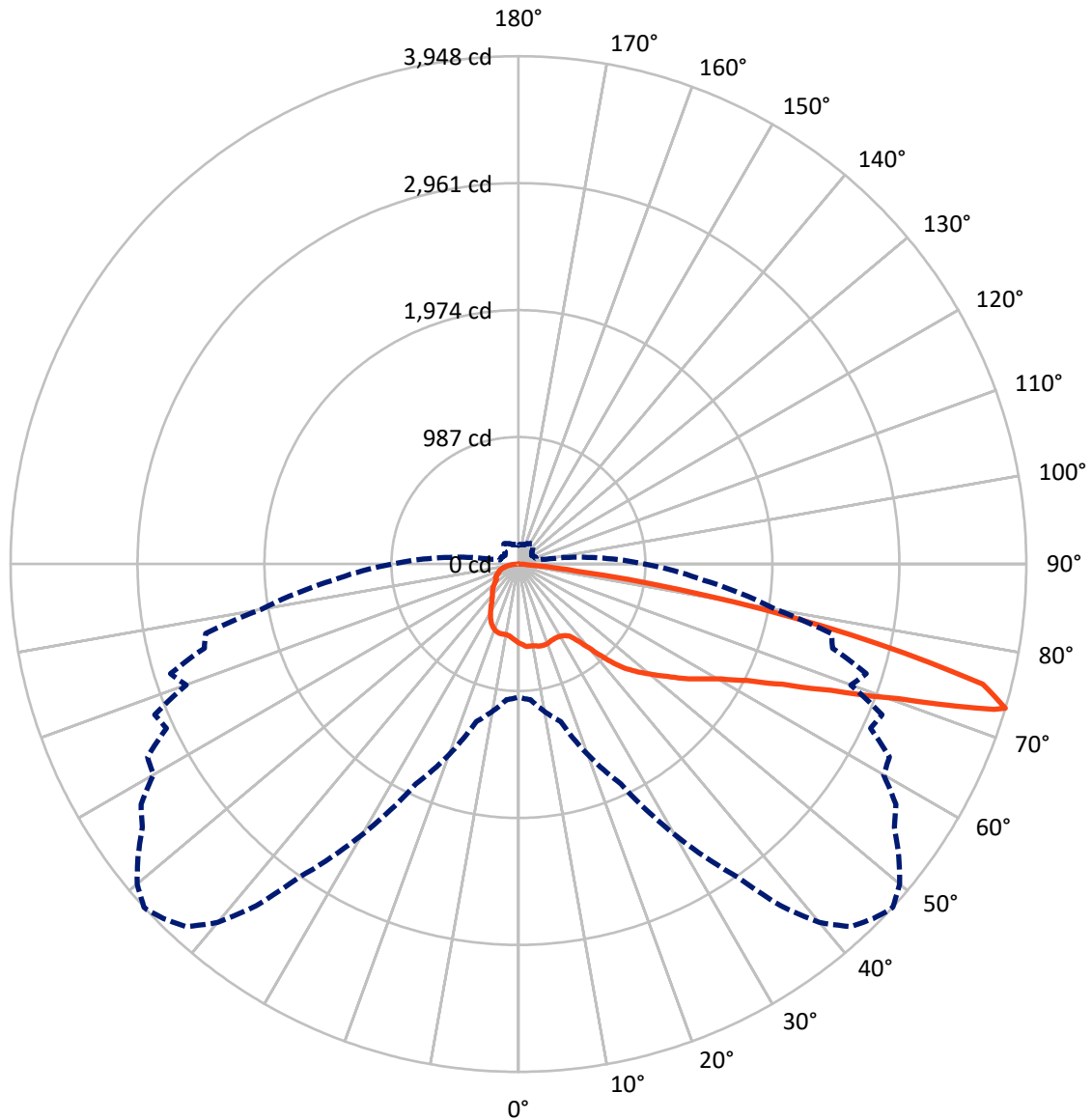
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	999.8	0.0	999.8
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	4004.5	0.0	4004.5
	% Fixture	80.0	0.0	80.0
Total	Lumens	5004.3	0.0	5004.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	1.2
10°-20°	174.1	3.5
20°-30°	267.7	5.3
30°-40°	390.5	7.8
40°-50°	643.8	12.9
50°-60°	1008.0	20.1
60°-70°	1367.4	27.3
70°-80°	1012.5	20.2
80°-90°	81.8	1.6
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°	5004.3	100.0
0°-180°	5004.3	100.0



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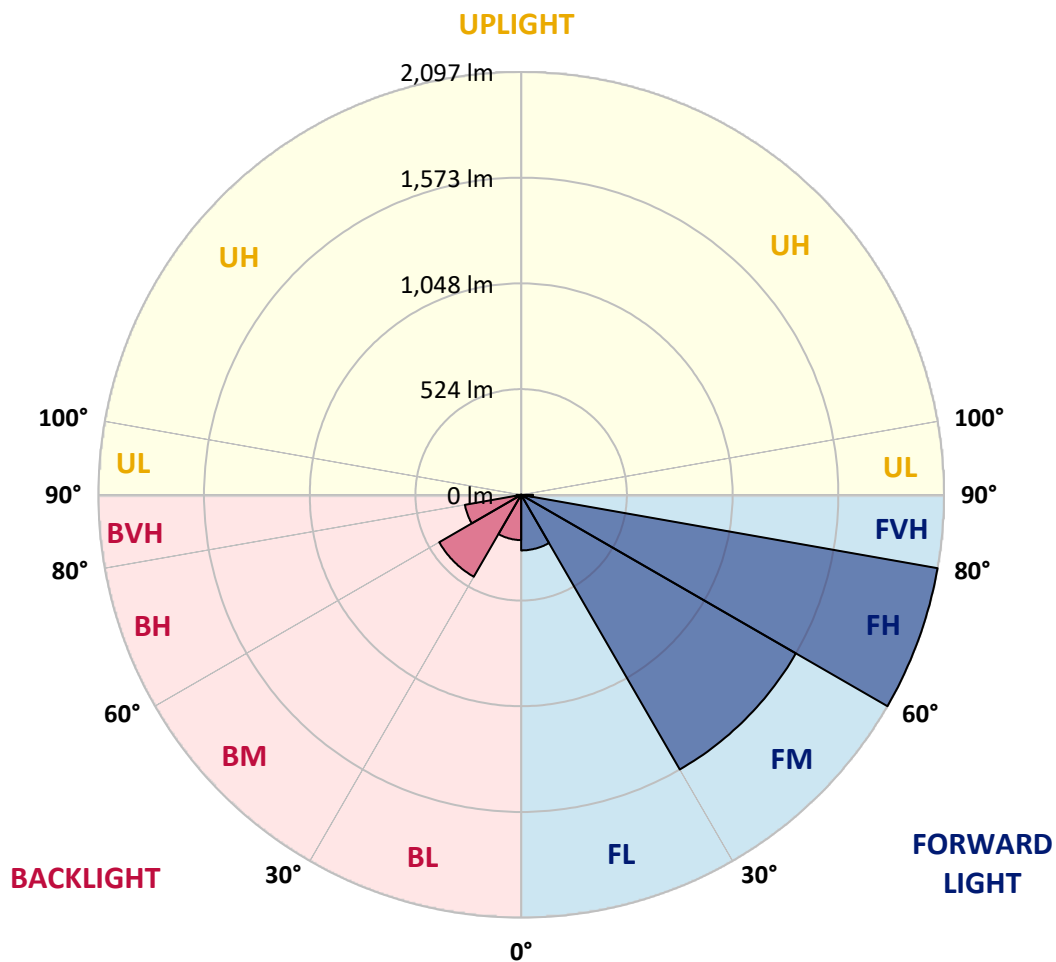
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	275.8	5.5			
FM	(30°-60°)	1572.8	31.4			
FH	(60°-80°)	2096.8	41.9			G2/5000
FVH	(80°-90°)	59.0	1.2			G1/100
BL	(0°-30°)	224.4	4.5	B1/500		
BM	(30°-60°)	469.5	9.4	B1/1000		
BH	(60°-80°)	283.1	5.7	B1/500		G1/500
BVH	(80°-90°)	22.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47°	47.5°
0°	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5
2.5°	650.9	649.3	644.3	642.6	637.6	634.3	632.7	631.1	636.0	632.7	627.8
5°	692.1	688.9	682.2	672.4	662.5	655.8	654.2	650.9	650.9	647.5	644.3
7.5°	721.9	720.3	710.3	695.5	678.9	667.4	660.8	655.8	657.5	654.2	644.3
10°	750.0	746.7	730.2	712.0	687.2	674.0	665.7	657.5	664.1	659.1	645.9
12.5°	771.5	768.1	745.0	721.9	693.9	678.9	670.6	665.7	672.4	669.0	654.2
15°	783.1	779.7	756.6	728.5	698.8	682.2	678.9	675.7	680.6	674.0	660.8
17.5°	776.4	776.4	754.9	725.2	700.4	683.9	678.9	675.7	682.2	675.7	660.8
20°	751.7	754.9	740.1	708.7	690.5	678.9	674.0	667.4	674.0	667.4	657.5
22.5°	720.3	723.5	715.2	687.2	674.0	665.7	664.1	657.5	662.5	657.5	647.5
25°	692.1	692.1	688.9	664.1	662.5	655.8	657.5	654.2	657.5	650.9	644.3
27.5°	693.9	693.9	680.6	655.8	654.2	654.2	654.2	654.2	655.8	650.9	644.3
30°	791.3	794.6	756.6	687.2	662.5	659.1	660.8	659.1	660.8	659.1	650.9
32.5°	938.4	938.4	901.9	794.6	707.1	685.6	677.3	675.7	670.6	669.0	662.5
35°	1083.7	1082.1	1045.7	926.8	816.1	774.8	748.3	723.5	712.0	700.4	688.9
37.5°	1206.0	1200.9	1196.0	1060.6	944.9	897.0	865.6	829.3	806.2	786.3	759.8
40°	1319.9	1328.2	1346.3	1184.5	1073.8	1029.2	997.8	951.5	928.4	903.6	872.3
42.5°	1476.8	1488.4	1490.0	1318.3	1191.0	1161.4	1136.5	1101.8	1077.1	1047.3	1019.3
45°	1628.8	1630.5	1635.4	1462.0	1334.7	1296.8	1278.6	1245.5	1214.1	1176.2	1153.1
47.5°	1732.9	1728.0	1749.5	1627.2	1503.2	1460.4	1433.9	1384.4	1336.4	1288.5	1253.8
50°	1860.1	1855.1	1855.1	1815.5	1698.2	1648.7	1602.4	1509.9	1458.6	1399.2	1349.7
52.5°	1972.5	1954.2	1965.8	1988.9	1903.1	1840.3	1759.4	1655.2	1587.5	1514.9	1452.1
55°	2126.1	2031.9	2058.4	2139.3	2106.3	2008.8	1901.4	1790.7	1713.0	1630.5	1572.7
57.5°	2073.2	2008.8	2086.4	2228.5	2226.9	2136.0	2045.1	1909.6	1832.0	1754.4	1683.4
60°	1883.3	1916.3	2084.8	2289.6	2297.9	2226.9	2152.5	2027.0	1965.8	1884.9	1813.8
62.5°	1736.2	1784.1	2015.4	2284.7	2378.8	2312.7	2251.6	2177.2	2134.3	2066.6	1993.9
65°	1728.0	1756.0	1980.7	2279.6	2492.8	2458.2	2430.0	2395.3	2387.1	2337.5	2253.3
67.5°	1807.2	1833.6	2040.2	2406.9	2661.3	2646.5	2687.7	2681.2	2717.5	2692.7	2623.3
70°	1652.0	1666.8	1921.2	2451.5	3046.2	3112.2	3204.8	3199.8	3277.4	3218.0	3137.1
72.5°	1159.7	1189.4	1414.0	2025.3	3054.4	3408.0	3622.8	3804.5	3888.6	3903.6	3865.5
73°	1035.7	1058.9	1267.0	1886.5	2971.9	3348.5	3637.6	3824.3	3898.6	3944.9	3948.2
75°	360.1	371.6	553.4	1143.1	2375.5	2922.3	3294.0	3462.5	3444.3	3579.8	3728.5
77.5°	115.6	117.3	143.7	295.7	1146.4	1813.8	2228.5	2383.8	2294.6	2441.6	2639.8
80°	71.0	74.4	94.1	133.8	300.6	550.1	931.7	1166.3	1118.4	1255.5	1466.9
82.5°	43.0	44.6	57.8	82.6	120.6	133.8	175.1	237.8	292.4	351.9	460.9
85°	19.8	21.5	28.1	38.0	49.5	51.2	49.5	46.2	52.9	61.2	71.0
87.5°	0.0	0.0	1.6	3.3	1.6	0.0	0.0	0.0	0.0	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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CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5
2.5°	632.7	627.8	627.8	621.1	624.4	617.9	621.1	614.5	617.9	609.6	614.5
5°	642.6	634.3	634.3	624.4	626.0	614.5	619.5	606.3	612.8	598.0	607.9
7.5°	647.5	632.7	639.3	621.1	629.4	609.6	619.5	598.0	611.2	588.1	604.6
10°	654.2	632.7	644.3	624.4	634.3	611.2	624.4	598.0	614.5	586.5	601.3
12.5°	664.1	641.0	650.9	627.8	641.0	614.5	627.8	601.3	617.9	586.5	604.6
15°	670.6	647.5	657.5	634.3	644.3	614.5	631.1	599.7	617.9	584.8	604.6
17.5°	669.0	647.5	657.5	631.1	642.6	612.8	629.4	598.0	614.5	579.8	601.3
20°	662.5	644.3	650.9	627.8	637.6	607.9	622.8	591.4	609.6	574.9	596.4
22.5°	654.2	636.0	644.3	622.8	632.7	602.9	616.2	588.1	606.3	571.6	591.4
25°	649.3	634.3	639.3	617.9	631.1	604.6	617.9	586.5	606.3	571.6	594.7
27.5°	647.5	634.3	644.3	624.4	636.0	612.8	626.0	598.0	614.5	578.2	601.3
30°	657.5	645.9	654.2	637.6	647.5	624.4	637.6	611.2	627.8	593.0	619.5
32.5°	669.0	657.5	665.7	650.9	665.7	642.6	659.1	632.7	652.5	617.9	642.6
35°	693.9	680.6	692.1	675.7	692.1	674.0	692.1	664.1	688.9	654.2	680.6
37.5°	758.2	721.9	733.5	715.2	731.8	708.7	740.1	712.0	740.1	707.1	743.4
40°	860.7	796.3	807.8	769.8	794.6	759.8	797.9	776.4	814.4	773.1	819.4
42.5°	994.5	933.3	921.8	864.0	885.5	844.1	882.2	844.1	895.4	855.7	913.5
45°	1116.8	1052.3	1034.1	977.9	992.8	938.4	986.2	933.3	1001.1	954.8	1027.6
47.5°	1217.5	1141.5	1126.7	1062.2	1088.6	1037.4	1096.9	1040.8	1123.3	1077.1	1161.4
50°	1310.0	1215.9	1212.5	1143.1	1187.7	1136.5	1220.8	1182.8	1263.8	1217.5	1316.6
52.5°	1415.8	1296.8	1313.3	1250.6	1321.6	1278.6	1376.1	1321.6	1427.3	1377.7	1486.8
55°	1528.1	1402.5	1445.4	1407.5	1491.7	1463.6	1546.2	1496.7	1600.7	1551.2	1666.8
57.5°	1652.0	1544.6	1620.6	1602.4	1676.7	1642.0	1734.5	1689.9	1794.1	1752.7	1868.3
60°	1813.8	1742.8	1817.2	1815.5	1879.9	1878.2	1937.8	1911.3	2010.4	1992.3	2098.0
62.5°	2023.6	1967.4	2046.7	2025.3	2103.0	2089.7	2162.4	2162.4	2233.4	2258.3	2363.9
65°	2306.1	2231.8	2326.0	2292.9	2370.6	2373.9	2420.1	2428.4	2514.3	2542.3	2633.2
67.5°	2689.3	2603.5	2677.8	2615.1	2704.3	2699.3	2739.0	2755.4	2767.0	2834.7	2844.6
70°	3241.1	3112.2	3180.0	3094.1	3110.6	3122.1	3047.9	3102.4	2970.2	3077.5	2932.2
72.5°	3837.5	3690.5	3573.2	3487.2	3317.1	3292.4	3075.9	3122.1	2841.3	2933.8	2639.8
73°	3868.9	3726.8	3568.3	3479.1	3277.4	3251.0	3019.8	3059.4	2748.9	2836.4	2527.5
75°	3517.0	3555.0	3173.4	3209.7	2859.6	2900.8	2539.1	2585.3	2203.7	2269.8	1871.7
77.5°	2370.6	2497.7	2069.9	2230.1	1795.7	1955.9	1465.3	1480.1	1080.3	1009.3	685.6
80°	1174.6	1283.6	910.2	994.5	667.4	655.8	399.8	332.0	282.4	289.1	297.4
82.5°	338.7	381.6	236.2	234.6	166.8	158.6	158.6	168.5	171.8	191.6	186.7
85°	64.4	77.6	67.7	90.8	80.9	89.2	82.6	95.9	89.2	110.7	95.9
87.5°	1.6	0.0	1.6	4.9	4.9	11.6	8.3	13.2	13.2	23.1	21.5
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°	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5
2.5°	607.9	616.2	612.8	609.6	606.3	604.6	598.0	601.3	593.0	599.7	593.0
5°	594.7	604.6	599.7	593.0	589.7	586.5	574.9	583.2	569.9	581.4	571.6
7.5°	579.8	596.4	591.4	584.8	578.2	574.9	551.8	569.9	550.1	566.6	550.1
10°	574.9	593.0	586.5	578.2	571.6	568.2	540.2	561.7	540.2	558.3	536.8
12.5°	571.6	593.0	583.2	574.9	568.2	563.3	531.9	558.3	530.3	556.7	531.9
15°	568.2	593.0	579.8	569.9	563.3	558.3	525.3	555.1	523.6	553.4	525.3
17.5°	565.0	588.1	576.5	565.0	558.3	555.1	518.7	550.1	517.1	550.1	522.0
20°	560.0	583.2	569.9	558.3	551.8	546.8	510.5	543.5	508.8	541.9	510.5
22.5°	553.4	578.2	566.6	555.1	548.4	540.2	500.5	535.2	498.9	531.9	502.2
25°	555.1	581.4	566.6	555.1	545.1	536.8	494.0	531.9	490.6	523.6	490.6
27.5°	563.3	586.5	571.6	561.7	548.4	538.6	494.0	528.7	487.3	515.4	480.7
30°	579.8	602.9	589.7	574.9	563.3	550.1	502.2	530.3	487.3	505.5	470.8
32.5°	607.9	629.4	616.2	604.6	591.4	571.6	518.7	538.6	490.6	498.9	462.6
35°	644.3	670.6	664.1	655.8	639.3	604.6	546.8	550.1	497.3	492.2	451.0
37.5°	703.7	740.1	738.5	736.7	718.6	655.8	578.2	573.3	503.8	487.3	436.1
40°	781.3	824.3	835.9	847.4	809.5	717.0	614.5	596.4	507.2	477.4	413.0
42.5°	872.3	930.1	964.7	986.2	916.9	784.7	655.8	622.8	507.2	462.6	386.6
45°	984.6	1052.3	1118.4	1141.5	1035.7	857.3	698.8	644.3	500.5	439.5	351.9
47.5°	1121.7	1200.9	1291.8	1303.3	1164.6	935.0	728.5	659.1	479.0	408.1	320.5
50°	1273.7	1369.4	1503.2	1495.0	1301.7	1016.0	748.3	669.0	441.1	371.6	282.4
52.5°	1443.8	1564.4	1754.4	1716.4	1468.5	1116.8	766.5	682.2	394.9	328.8	244.5
55°	1656.9	1800.6	2038.5	1957.5	1653.6	1227.4	792.9	683.9	333.7	277.5	216.5
57.5°	1886.5	2040.2	2344.1	2197.1	1827.1	1313.3	781.3	631.1	272.6	234.6	195.0
60°	2162.4	2349.1	2649.7	2420.1	1972.5	1343.0	700.4	520.4	232.9	211.4	185.1
62.5°	2471.3	2656.3	2900.8	2575.4	2055.0	1293.5	520.4	360.1	199.9	188.3	170.1
65°	2800.0	2975.2	3021.4	2588.6	2000.5	1075.4	322.1	236.2	173.5	168.5	156.9
67.5°	3102.4	3118.9	2907.4	2373.9	1736.2	750.0	219.7	188.3	160.2	158.6	152.0
70°	3180.0	2894.2	2416.8	1848.6	1253.8	446.0	178.4	163.6	153.6	153.6	148.6
72.5°	2656.3	2203.7	1615.6	1120.0	683.9	237.8	152.0	148.6	145.4	145.4	142.1
73°	2491.2	2030.3	1447.1	977.9	578.2	213.1	148.6	145.4	143.7	142.1	140.5
75°	1655.2	1275.3	821.0	495.6	269.2	153.6	132.2	132.2	130.5	132.2	130.5
77.5°	637.6	480.7	317.2	213.1	153.6	120.6	112.3	114.0	112.3	115.6	114.0
80°	280.8	277.5	209.8	150.4	112.3	90.8	90.8	90.8	92.5	94.1	94.1
82.5°	191.6	161.9	123.9	92.5	67.7	66.1	67.7	67.7	69.4	71.0	69.4
85°	105.8	89.2	66.1	41.3	36.3	44.6	44.6	44.6	43.0	43.0	41.3
87.5°	33.0	24.8	18.2	4.9	8.3	8.3	11.6	9.9	9.9	11.6	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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CATALOG NUMBER: ISC-AF-800-LED-E1-T4W

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5	614.5
2.5°	599.7	594.7	599.7	591.4	598.0	591.4	596.4	596.4	594.7	594.7	594.7
5°	579.8	571.6	579.8	574.9	579.8	573.3	578.2	579.8	581.4	586.5	584.8
7.5°	565.0	548.4	566.6	550.1	565.0	550.1	563.3	565.0	569.9	576.5	581.4
10°	558.3	536.8	558.3	538.6	556.7	540.2	556.7	558.3	563.3	571.6	579.8
12.5°	555.1	531.9	555.1	535.2	555.1	538.6	555.1	560.0	563.3	569.9	579.8
15°	551.8	528.7	555.1	533.6	555.1	538.6	556.7	560.0	565.0	571.6	579.8
17.5°	550.1	523.6	551.8	531.9	551.8	535.2	555.1	555.1	561.7	569.9	574.9
20°	543.5	518.7	543.5	523.6	543.5	528.7	545.1	545.1	551.8	555.1	563.3
22.5°	533.6	507.2	530.3	512.1	530.3	515.4	528.7	528.7	533.6	538.6	543.5
25°	518.7	494.0	513.7	497.3	510.5	497.3	507.2	505.5	508.8	512.1	515.4
27.5°	502.2	477.4	494.0	475.8	484.1	470.8	477.4	474.1	475.8	477.4	479.0
30°	484.1	459.2	467.5	451.0	452.7	439.5	442.7	437.7	436.1	434.4	431.2
32.5°	464.2	437.7	437.7	421.3	418.0	406.4	406.4	399.8	394.9	388.2	381.6
35°	439.5	416.3	404.7	391.5	384.9	373.4	371.6	363.5	351.9	340.3	333.7
37.5°	414.6	388.2	371.6	358.4	351.9	343.6	342.0	335.3	322.1	308.9	299.0
40°	381.6	355.2	337.0	332.0	327.0	320.5	322.1	313.8	300.6	285.8	277.5
42.5°	348.5	325.4	310.6	308.9	305.7	303.9	305.7	299.0	284.2	270.9	261.1
45°	320.5	297.4	282.4	280.8	279.2	285.8	287.4	285.8	269.2	256.0	242.8
47.5°	292.4	264.3	254.4	251.1	252.8	262.7	266.0	270.9	256.0	241.2	223.0
50°	259.3	232.9	229.7	226.3	228.0	236.2	244.5	254.4	241.2	219.7	195.0
52.5°	229.7	206.5	208.2	204.8	208.2	214.7	221.4	237.8	221.4	199.9	188.3
55°	206.5	188.3	191.6	188.3	191.6	199.9	204.8	218.1	218.1	213.1	203.2
57.5°	190.0	176.8	180.0	176.8	181.7	188.3	193.2	221.4	237.8	224.6	204.8
60°	180.0	168.5	170.1	166.8	170.1	180.0	190.0	223.0	249.4	223.0	208.2
62.5°	165.2	155.3	153.6	153.6	156.9	173.5	178.4	208.2	246.1	221.4	209.8
65°	155.3	147.0	145.4	143.7	147.0	158.6	163.6	193.2	237.8	209.8	190.0
67.5°	150.4	143.7	140.5	137.1	140.5	150.4	155.3	181.7	224.6	199.9	178.4
70°	145.4	138.8	137.1	133.8	135.4	142.1	148.6	166.8	213.1	188.3	166.8
72.5°	138.8	132.2	130.5	125.5	127.2	133.8	137.1	156.9	198.2	176.8	155.3
73°	137.1	130.5	128.9	123.9	125.5	130.5	133.8	153.6	195.0	175.1	153.6
75°	128.9	122.2	120.6	117.3	119.0	119.0	122.2	140.5	185.1	165.2	143.7
77.5°	114.0	109.0	107.4	104.0	102.4	100.8	105.8	123.9	168.5	148.6	115.6
80°	94.1	89.2	87.6	80.9	80.9	80.9	87.6	105.8	125.5	107.4	89.2
82.5°	69.4	66.1	66.1	61.2	59.4	57.8	62.8	72.7	99.1	84.3	69.4
85°	41.3	39.7	41.3	36.3	38.0	36.3	41.3	51.2	54.5	43.0	33.0
87.5°	9.9	11.6	11.6	11.6	9.9	9.9	8.3	6.6	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°	614.5	614.5
2.5°	593.0	591.4
5°	584.8	584.8
7.5°	581.4	581.4
10°	583.2	583.2
12.5°	583.2	586.5
15°	588.1	586.5
17.5°	583.2	583.2
20°	569.9	573.3
22.5°	551.8	551.8
25°	522.0	523.6
27.5°	482.3	485.7
30°	432.8	436.1
32.5°	376.7	379.9
35°	332.0	333.7
37.5°	302.3	302.3
40°	277.5	277.5
42.5°	254.4	252.8
45°	231.3	228.0
47.5°	208.2	206.5
50°	188.3	188.3
52.5°	191.6	191.6
55°	206.5	206.5
57.5°	208.2	206.5
60°	226.3	224.6
62.5°	236.2	241.2
65°	206.5	199.9
67.5°	196.6	186.7
70°	176.8	161.9
72.5°	156.9	148.6
73°	152.0	145.4
75°	135.4	132.2
77.5°	102.4	100.8
80°	85.9	84.3
82.5°	57.8	54.5
85°	24.8	23.1
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)