

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: P228410

Luminaire Tested: **ISC-AF-1000-LED-E1-SL4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228410
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: ISC-AF-1000-LED-E1-SL4-8030
Description: IMPACT ELITE LED CYLINDER 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: 4172 lumens
Efficiency: N/A
Efficacy: 76.4 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 - G2

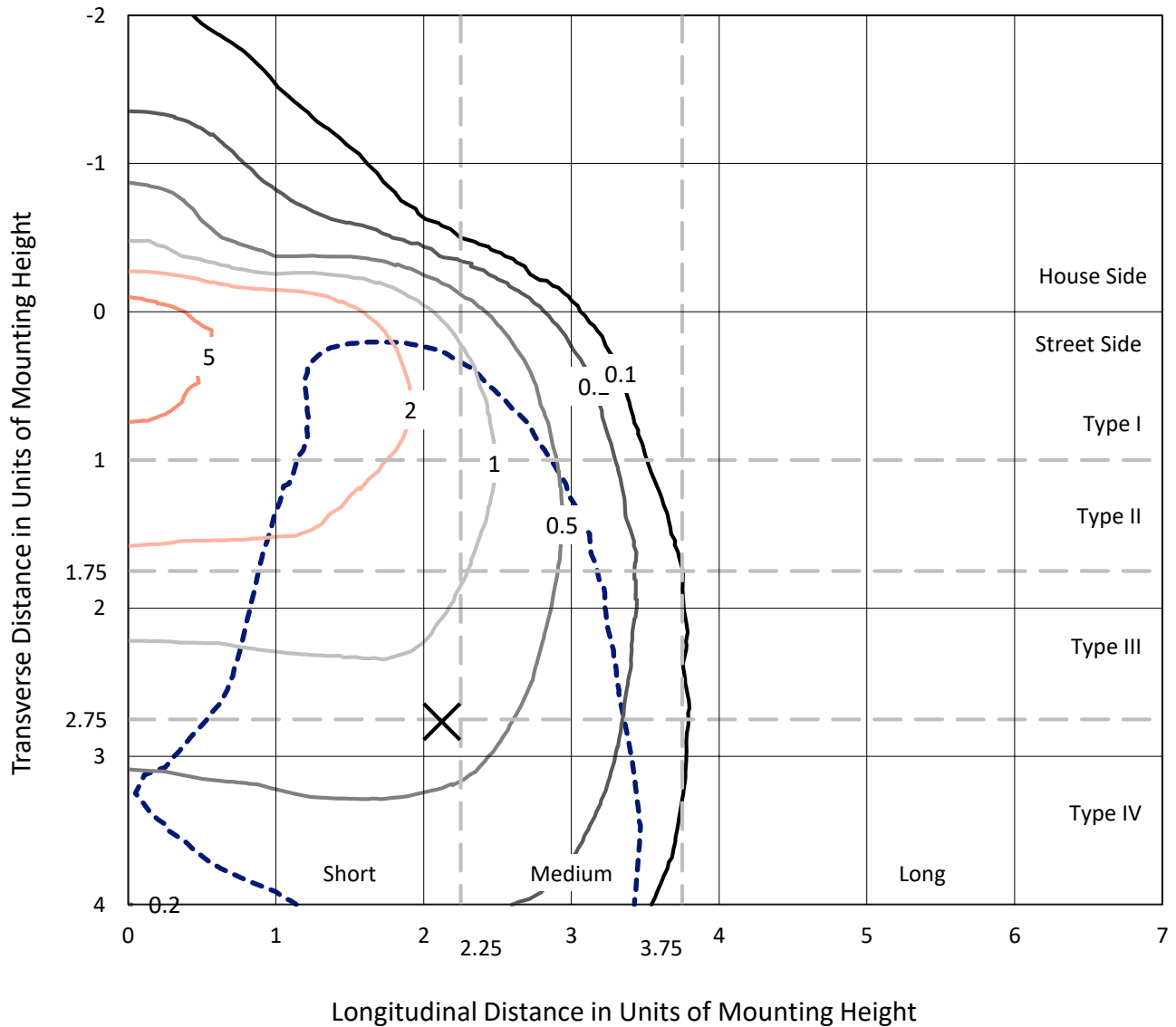
Input Watts (W): 54.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

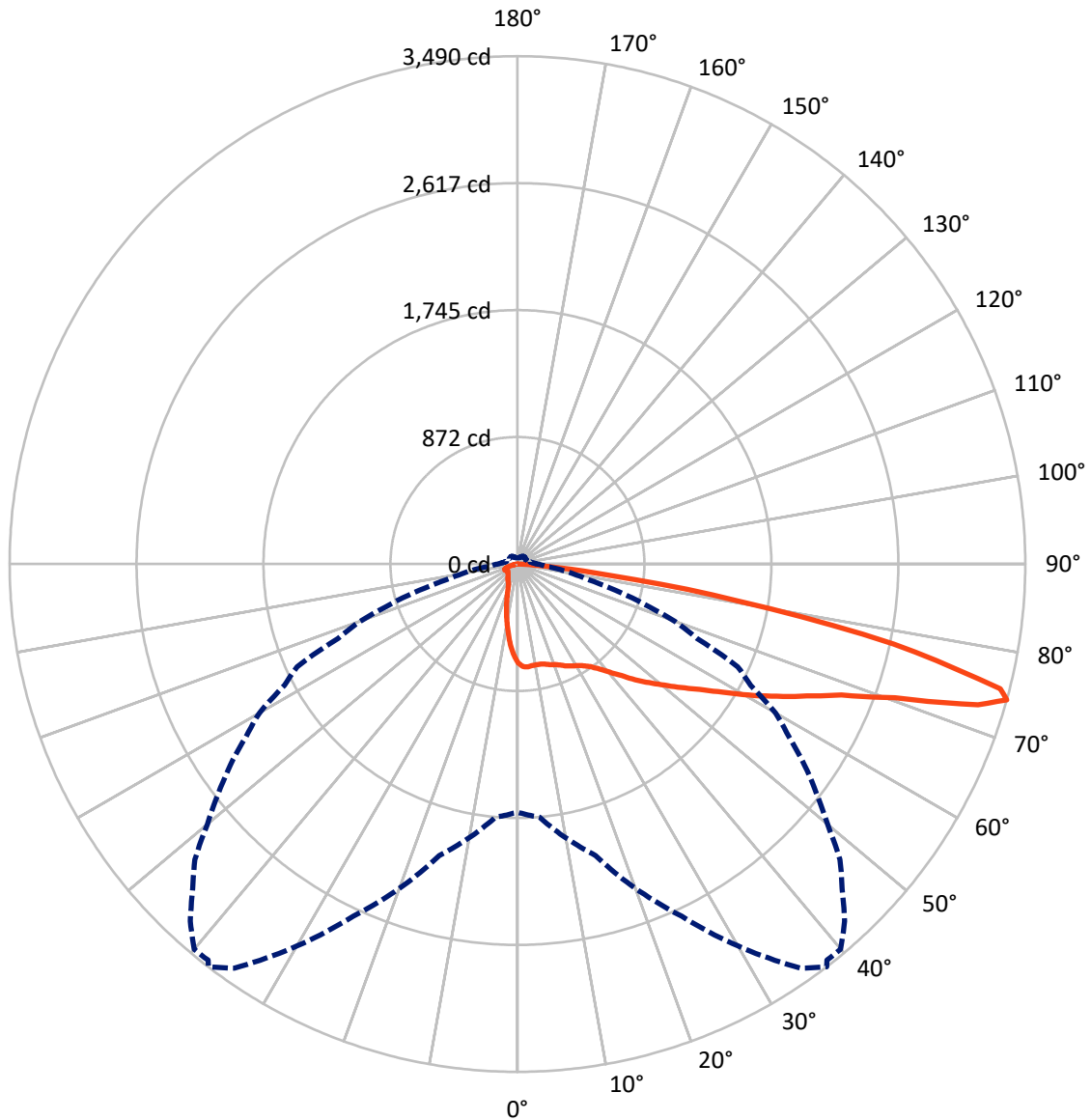
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 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	494.7	0.0	494.7
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	3677.3	0.0	3677.3
	% Fixture	88.1	0.0	88.1
Total	Lumens	4172.0	0.0	4172.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.3	1.4
10°-20°	151.0	3.6
20°-30°	234.0	5.6
30°-40°	347.1	8.3
40°-50°	533.9	12.8
50°-60°	789.2	18.9
60°-70°	1051.9	25.2
70°-80°	908.0	21.8
80°-90°	97.7	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°	4172.0	100.0
0°-180°	4172.0	100.0



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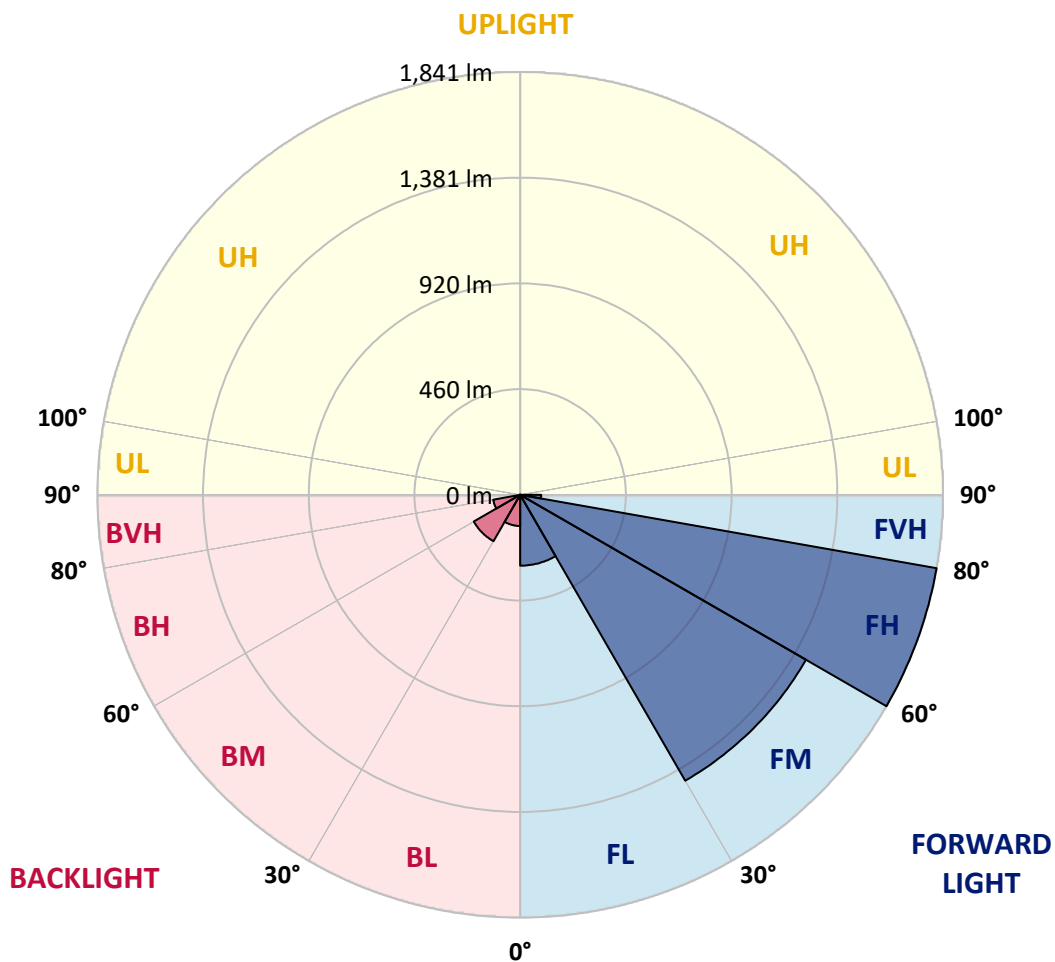
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	308.4	7.4			
FM (30°-60°)	1436.9	34.4			
FH (60°-80°)	1840.7	44.1			G2/5000
FVH (80°-90°)	91.2	2.2			G1/100
BL (0°-30°)	135.8	3.3	B1/500		
BM (30°-60°)	233.2	5.6	B1/1000		
BH (60°-80°)	119.3	2.9	B1/500		G1/500
BVH (80°-90°)	6.4	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-G2

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°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	719.8	718.2	715.1	713.5	710.4	705.7	710.4	704.2	701.1	704.2	697.9
5°	732.2	730.7	727.5	721.3	718.2	710.4	715.1	707.3	705.7	708.8	701.1
7.5°	733.8	730.7	726.0	718.2	715.1	705.7	708.8	699.5	696.4	699.5	694.8
10°	729.1	727.5	722.9	710.4	707.3	704.2	702.6	696.4	694.8	693.3	691.7
12.5°	721.3	721.3	718.2	713.5	712.0	705.7	707.3	701.1	702.6	699.5	696.4
15°	718.2	716.6	719.8	722.9	722.9	713.5	719.8	715.1	712.0	713.5	708.8
17.5°	715.1	716.6	727.5	733.8	736.9	727.5	736.9	727.5	721.3	729.1	721.3
20°	713.5	718.2	736.9	750.9	752.5	736.9	752.5	736.9	736.9	746.2	732.2
22.5°	721.3	729.1	755.6	771.2	774.3	754.0	772.7	752.5	752.5	760.3	746.2
25°	746.2	754.0	783.6	800.8	797.6	775.8	793.0	772.7	771.2	780.5	761.8
27.5°	779.0	789.9	817.9	833.5	822.6	793.0	817.9	788.3	788.3	802.3	777.4
30°	825.7	833.5	858.4	860.0	845.9	810.1	838.2	805.4	800.8	825.7	794.5
32.5°	877.1	883.3	902.0	891.1	870.9	833.5	866.2	827.2	825.7	852.2	816.3
35°	931.6	937.9	944.1	925.4	906.7	866.2	902.0	863.1	861.5	891.1	856.8
37.5°	987.7	987.7	987.7	965.9	953.4	914.5	947.2	916.0	912.9	944.1	911.4
40°	1032.9	1036.0	1031.3	1011.1	1004.8	976.8	1004.8	976.8	981.5	1009.5	983.0
42.5°	1070.3	1073.4	1075.0	1057.8	1064.0	1048.5	1070.3	1050.0	1051.6	1082.7	1067.2
45°	1107.7	1106.1	1118.6	1113.9	1132.6	1134.2	1146.6	1138.8	1141.9	1165.3	1160.6
47.5°	1146.6	1138.8	1152.8	1173.1	1207.4	1218.3	1226.1	1229.2	1241.7	1252.6	1263.5
50°	1184.0	1176.2	1185.6	1230.7	1285.3	1308.6	1310.2	1325.8	1339.8	1355.4	1377.2
52.5°	1223.0	1216.7	1226.1	1289.9	1377.2	1409.9	1405.2	1431.7	1452.0	1469.1	1504.9
55°	1263.5	1257.2	1266.6	1361.6	1475.3	1520.5	1515.8	1553.2	1592.2	1598.4	1638.9
57.5°	1302.4	1294.6	1321.1	1445.7	1592.2	1660.7	1638.9	1696.6	1733.9	1730.8	1786.9
60°	1344.5	1338.2	1380.3	1548.6	1738.6	1827.4	1794.7	1871.0	1897.5	1886.6	1939.6
62.5°	1385.0	1383.4	1453.5	1668.5	1916.2	2001.9	1972.3	2039.3	2058.0	2044.0	2070.5
65°	1422.4	1431.7	1533.0	1788.5	2087.6	2185.7	2145.2	2212.2	2234.0	2223.1	2268.3
67.5°	1484.7	1495.6	1631.1	1941.1	2299.5	2400.7	2366.5	2436.6	2469.3	2466.2	2516.0
70°	1576.6	1596.9	1776.0	2157.7	2622.0	2751.3	2732.6	2818.2	2897.7	2891.5	2941.3
72.5°	1737.1	1769.8	2014.4	2494.2	3151.6	3309.0	3287.2	3335.5	3321.5	3207.7	3115.8
74°	1705.9	1746.4	2073.6	2670.2	3390.0	3489.7	3453.9	3455.4	3327.7	3154.8	3006.8
75°	1592.2	1634.2	1987.9	2648.4	3372.9	3427.4	3376.0	3312.1	3157.9	2981.8	2799.6
77.5°	1092.1	1146.6	1461.3	2139.0	2715.4	2640.6	2628.2	2506.7	2302.6	2104.7	1871.0
80°	559.3	598.2	755.6	1118.6	1610.9	1536.1	1561.0	1462.9	1293.1	1149.7	911.4
82.5°	134.0	143.3	222.8	433.1	697.9	638.7	648.1	573.3	475.2	387.9	300.7
85°	70.1	79.5	109.1	120.0	183.8	190.1	185.4	179.2	146.4	123.1	107.5
87.5°	0.0	0.0	0.0	3.1	1.6	0.0	1.6	0.0	0.0	1.6	3.1
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°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	702.6	699.5	702.6	693.3	697.9	690.2	693.3	685.5	688.6	682.4	683.9
5°	705.7	697.9	702.6	694.8	696.4	690.2	688.6	685.5	683.9	679.2	676.1
7.5°	697.9	691.7	690.2	687.0	682.4	683.9	677.7	676.1	671.5	671.5	662.1
10°	690.2	691.7	682.4	685.5	677.7	679.2	668.3	671.5	663.7	669.9	655.9
12.5°	696.4	697.9	690.2	694.8	680.8	683.9	674.6	679.2	668.3	676.1	659.0
15°	710.4	708.8	705.7	705.7	691.7	697.9	687.0	690.2	679.2	688.6	669.9
17.5°	722.9	721.3	716.6	715.1	705.7	707.3	696.4	702.6	690.2	697.9	679.2
20°	736.9	729.1	727.5	726.0	715.1	715.1	707.3	710.4	697.9	707.3	685.5
22.5°	747.8	741.6	740.0	733.8	726.0	729.1	718.2	719.8	707.3	716.6	697.9
25°	764.9	757.1	757.1	747.8	743.1	741.6	735.3	740.0	727.5	733.8	716.6
27.5°	788.3	771.2	777.4	768.0	764.9	763.4	760.3	763.4	754.0	758.7	741.6
30°	810.1	788.3	797.6	785.2	791.4	785.2	789.9	785.2	785.2	785.2	777.4
32.5°	839.7	813.2	831.9	813.2	825.7	816.3	831.9	822.6	828.8	827.2	824.1
35°	881.8	850.6	877.1	852.2	874.0	861.5	883.3	878.7	891.1	884.9	891.1
37.5°	937.9	905.1	936.3	912.9	939.4	920.7	951.9	948.8	975.2	965.9	975.2
40°	1008.0	984.6	1008.0	990.8	1018.9	1011.1	1043.8	1045.4	1075.0	1070.3	1081.2
42.5°	1085.9	1068.7	1092.1	1082.7	1110.8	1117.0	1154.4	1163.8	1191.8	1199.6	1201.1
45°	1170.0	1166.9	1185.6	1194.9	1223.0	1241.7	1274.4	1297.7	1328.9	1346.0	1342.9
47.5°	1268.1	1280.6	1293.1	1316.4	1341.4	1380.3	1413.0	1442.6	1478.5	1489.4	1494.0
50°	1378.7	1400.6	1411.5	1444.2	1469.1	1517.4	1562.6	1600.0	1638.9	1634.2	1637.4
52.5°	1495.6	1523.6	1539.2	1578.2	1610.9	1667.0	1705.9	1741.7	1790.0	1777.6	1772.9
55°	1624.9	1667.0	1679.4	1723.0	1751.1	1808.7	1843.0	1905.3	1925.6	1913.1	1886.6
57.5°	1762.0	1811.8	1825.9	1885.1	1899.1	1961.4	1991.0	2033.1	2050.2	2030.0	1995.7
60°	1917.8	1963.0	1973.9	2026.8	2045.5	2103.2	2125.0	2162.4	2174.8	2125.0	2076.7
62.5°	2073.6	2120.3	2126.5	2173.3	2192.0	2241.8	2266.8	2288.6	2282.3	2209.1	2148.4
65°	2251.2	2296.4	2311.9	2358.7	2369.6	2407.0	2427.2	2402.3	2388.3	2277.7	2209.1
67.5°	2533.2	2581.4	2587.7	2598.6	2597.0	2578.3	2569.0	2483.3	2421.0	2216.9	2118.8
70°	2903.9	2868.1	2798.0	2717.0	2657.8	2551.8	2489.5	2313.5	2182.6	1953.6	1788.5
72.5°	2970.9	2854.1	2681.2	2542.5	2399.2	2232.5	2098.5	1832.1	1648.3	1408.3	1233.9
74°	2780.9	2590.8	2408.5	2213.8	2048.6	1805.6	1670.1	1333.6	1151.3	908.3	696.4
75°	2551.8	2329.1	2123.4	1875.7	1721.5	1430.2	1302.4	939.4	757.1	539.0	363.0
77.5°	1628.0	1361.6	1165.3	878.7	758.7	523.5	383.2	238.4	176.0	154.2	134.0
80°	730.7	520.3	412.8	285.1	238.4	182.3	154.2	124.6	113.7	99.7	95.0
82.5°	233.7	186.9	177.6	158.9	158.9	127.7	109.1	85.7	77.9	67.0	60.8
85°	101.3	95.0	98.1	90.4	91.9	70.1	56.1	42.1	42.1	29.6	26.5
87.5°	3.1	0.0	1.6	0.0	3.1	0.0	1.6	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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	677.7	680.8	679.2	673.0	671.5	666.8	655.9	657.4	651.2	655.9	648.1
5°	671.5	669.9	663.7	655.9	648.1	638.7	631.0	627.8	621.6	618.5	613.8
7.5°	662.1	655.9	645.0	632.5	621.6	609.1	602.9	592.0	588.9	578.0	576.4
10°	659.0	648.1	635.6	620.0	601.4	582.7	581.1	562.4	560.8	543.7	539.0
12.5°	665.2	651.2	635.6	616.9	595.1	568.6	568.6	540.6	539.0	515.7	507.9
15°	677.7	660.6	640.3	618.5	590.4	557.7	556.2	523.5	520.3	492.3	483.0
17.5°	688.6	665.2	646.5	616.9	584.2	546.8	539.0	506.3	500.1	467.4	454.9
20°	696.4	669.9	648.1	613.8	573.3	529.7	518.8	484.5	470.5	437.8	420.6
22.5°	705.7	680.8	651.2	612.3	567.1	515.7	492.3	461.1	440.9	406.6	383.2
25°	719.8	697.9	662.1	616.9	562.4	501.6	470.5	437.8	409.7	375.5	341.2
27.5°	741.6	719.8	677.7	623.2	560.8	487.6	453.4	412.8	378.6	341.2	302.2
30°	772.7	749.4	704.2	640.3	562.4	476.7	434.7	391.0	350.5	306.9	266.4
32.5°	813.2	794.5	738.4	659.0	568.6	467.4	417.5	367.7	317.8	275.7	239.9
35°	869.3	856.8	786.7	694.8	584.2	462.7	400.4	345.9	289.8	247.7	208.8
37.5°	951.9	934.7	856.8	746.2	609.1	459.6	387.9	319.4	266.4	221.2	188.5
40°	1056.3	1032.9	939.4	808.6	648.1	461.1	377.0	299.1	246.1	197.9	171.4
42.5°	1180.9	1146.6	1040.7	884.9	687.0	464.3	370.8	280.4	230.6	179.2	158.9
45°	1321.1	1282.2	1160.6	979.9	743.1	472.0	366.1	264.8	216.5	165.1	151.1
47.5°	1458.2	1419.3	1283.7	1075.0	800.8	486.1	369.2	255.5	207.2	157.3	141.8
50°	1592.2	1551.7	1392.8	1160.6	850.6	504.8	381.7	257.1	205.6	154.2	137.1
52.5°	1710.6	1660.7	1486.2	1227.6	886.4	517.2	392.6	261.7	207.2	152.7	135.5
55°	1829.0	1765.1	1561.0	1280.6	908.3	518.8	392.6	263.3	208.8	152.7	134.0
57.5°	1917.8	1844.6	1618.7	1311.8	916.0	511.0	383.2	255.5	199.4	151.1	130.9
60°	1973.9	1896.0	1659.2	1332.0	905.1	478.3	333.4	225.9	176.0	140.2	121.5
62.5°	2020.6	1941.1	1671.6	1297.7	813.2	380.1	260.2	183.8	146.4	124.6	112.2
65°	2031.5	1936.5	1584.4	1146.6	635.6	263.3	188.5	144.9	120.0	110.6	101.3
67.5°	1866.4	1752.6	1332.0	897.4	433.1	180.7	140.2	118.4	102.8	98.1	95.0
70°	1517.4	1392.8	975.2	587.3	241.5	126.2	107.5	98.1	88.8	88.8	84.1
72.5°	978.4	849.1	500.1	250.8	123.1	96.6	87.2	84.1	76.3	77.9	73.2
74°	500.1	389.5	204.1	132.4	101.3	85.7	77.9	76.3	68.5	70.1	65.4
75°	253.9	201.0	143.3	110.6	93.5	81.0	71.7	71.7	62.3	63.9	59.2
77.5°	118.4	113.7	98.1	87.2	79.5	68.5	59.2	57.6	48.3	51.4	45.2
80°	82.6	82.6	76.3	73.2	65.4	56.1	45.2	45.2	35.8	37.4	32.7
82.5°	46.7	43.6	43.6	49.9	51.4	42.1	32.7	31.2	26.5	26.5	21.8
85°	20.3	23.4	28.0	34.3	37.4	32.7	23.4	21.8	14.0	14.0	7.8
87.5°	0.0	1.6	1.6	3.1	6.2	6.2	0.0	3.1	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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CATALOG NUMBER: ISC-AF-1000-LED-E1-SL4-8030

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	651.2	643.4	648.1	640.3	643.4	635.6	638.7	634.1	629.4	623.2	621.6
5°	609.1	602.9	601.4	593.6	595.1	588.9	582.7	574.9	565.5	553.1	548.4
7.5°	562.4	560.8	549.9	545.3	539.0	532.8	521.9	509.4	490.7	473.6	462.7
10°	521.9	517.2	501.6	493.9	484.5	476.7	461.1	444.0	417.5	391.0	377.0
12.5°	487.6	481.4	461.1	451.8	437.8	428.4	409.7	387.9	350.5	313.1	296.0
15°	459.6	450.2	426.9	412.8	394.1	384.8	364.5	333.4	288.2	249.3	225.9
17.5°	426.9	414.4	389.5	372.3	353.6	336.5	316.3	283.5	232.1	196.3	172.9
20°	391.0	375.5	349.0	325.6	305.3	289.8	269.5	236.8	185.4	157.3	144.9
22.5°	353.6	328.7	305.3	285.1	261.7	246.1	225.9	196.3	157.3	141.8	137.1
25°	314.7	286.7	263.3	243.0	221.2	207.2	190.1	166.7	143.3	138.7	138.7
27.5°	275.7	247.7	225.9	205.6	186.9	177.6	162.0	146.4	135.5	137.1	138.7
30°	239.9	211.9	191.6	176.0	158.9	152.7	140.2	130.9	129.3	134.0	135.5
32.5°	208.8	183.8	165.1	152.7	138.7	135.5	124.6	120.0	124.6	130.9	129.3
35°	182.3	162.0	143.3	135.5	123.1	121.5	113.7	110.6	116.8	124.6	124.6
37.5°	162.0	143.3	129.3	123.1	113.7	112.2	105.9	102.8	107.5	118.4	121.5
40°	144.9	134.0	120.0	113.7	107.5	104.4	101.3	98.1	99.7	113.7	115.3
42.5°	134.0	126.2	113.7	110.6	102.8	101.3	96.6	93.5	95.0	105.9	110.6
45°	126.2	120.0	109.1	107.5	99.7	98.1	93.5	90.4	91.9	101.3	105.9
47.5°	120.0	113.7	104.4	101.3	96.6	95.0	91.9	88.8	88.8	98.1	102.8
50°	116.8	110.6	101.3	98.1	93.5	91.9	88.8	85.7	87.2	95.0	98.1
52.5°	115.3	107.5	99.7	95.0	91.9	88.8	85.7	82.6	84.1	91.9	95.0
55°	115.3	105.9	99.7	95.0	90.4	85.7	84.1	79.5	82.6	88.8	93.5
57.5°	115.3	105.9	99.7	95.0	91.9	87.2	84.1	81.0	82.6	88.8	93.5
60°	112.2	104.4	101.3	96.6	95.0	90.4	88.8	85.7	85.7	93.5	101.3
62.5°	107.5	102.8	101.3	98.1	98.1	95.0	95.0	91.9	91.9	101.3	109.1
65°	101.3	98.1	99.7	98.1	98.1	98.1	96.6	96.6	96.6	104.4	113.7
67.5°	95.0	93.5	95.0	95.0	96.6	95.0	96.6	95.0	95.0	102.8	112.2
70°	85.7	85.7	87.2	85.7	87.2	87.2	88.8	88.8	88.8	93.5	102.8
72.5°	74.8	73.2	74.8	73.2	76.3	73.2	76.3	77.9	76.3	77.9	82.6
74°	67.0	65.4	67.0	65.4	68.5	65.4	67.0	67.0	65.4	53.0	45.2
75°	60.8	59.2	60.8	59.2	62.3	59.2	62.3	60.8	57.6	38.9	37.4
77.5°	48.3	43.6	48.3	43.6	46.7	42.1	45.2	38.9	29.6	28.0	28.0
80°	35.8	31.2	34.3	29.6	28.0	21.8	23.4	21.8	20.3	21.8	21.8
82.5°	21.8	15.6	18.7	14.0	17.1	12.5	15.6	14.0	12.5	12.5	12.5
85°	10.9	7.8	10.9	6.2	9.3	6.2	7.8	7.8	4.7	4.7	4.7
87.5°	1.6	0.0	3.1	0.0	3.1	0.0	1.6	1.6	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°	680.8	680.8
2.5°	616.9	618.5
5°	540.6	545.3
7.5°	456.5	459.6
10°	367.7	370.8
12.5°	283.5	286.7
15°	213.4	210.3
17.5°	163.6	160.5
20°	138.7	138.7
22.5°	135.5	134.0
25°	137.1	135.5
27.5°	137.1	135.5
30°	134.0	132.4
32.5°	129.3	127.7
35°	124.6	124.6
37.5°	121.5	123.1
40°	116.8	118.4
42.5°	112.2	113.7
45°	107.5	109.1
47.5°	102.8	102.8
50°	96.6	96.6
52.5°	95.0	95.0
55°	95.0	95.0
57.5°	98.1	98.1
60°	107.5	109.1
62.5°	126.2	127.7
65°	144.9	148.0
67.5°	146.4	151.1
70°	141.8	146.4
72.5°	98.1	98.1
74°	43.6	42.1
75°	37.4	35.8
77.5°	28.0	28.0
80°	20.3	18.7
82.5°	10.9	10.9
85°	3.1	3.1
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)