

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: P227981

Luminaire Tested: **ISS-AF-1000-LED-E1-T4W-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227981
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: ISS-AF-1000-LED-E1-T4W-8030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4719 lumens
Efficiency: N/A
Efficacy: 86.4 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): 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

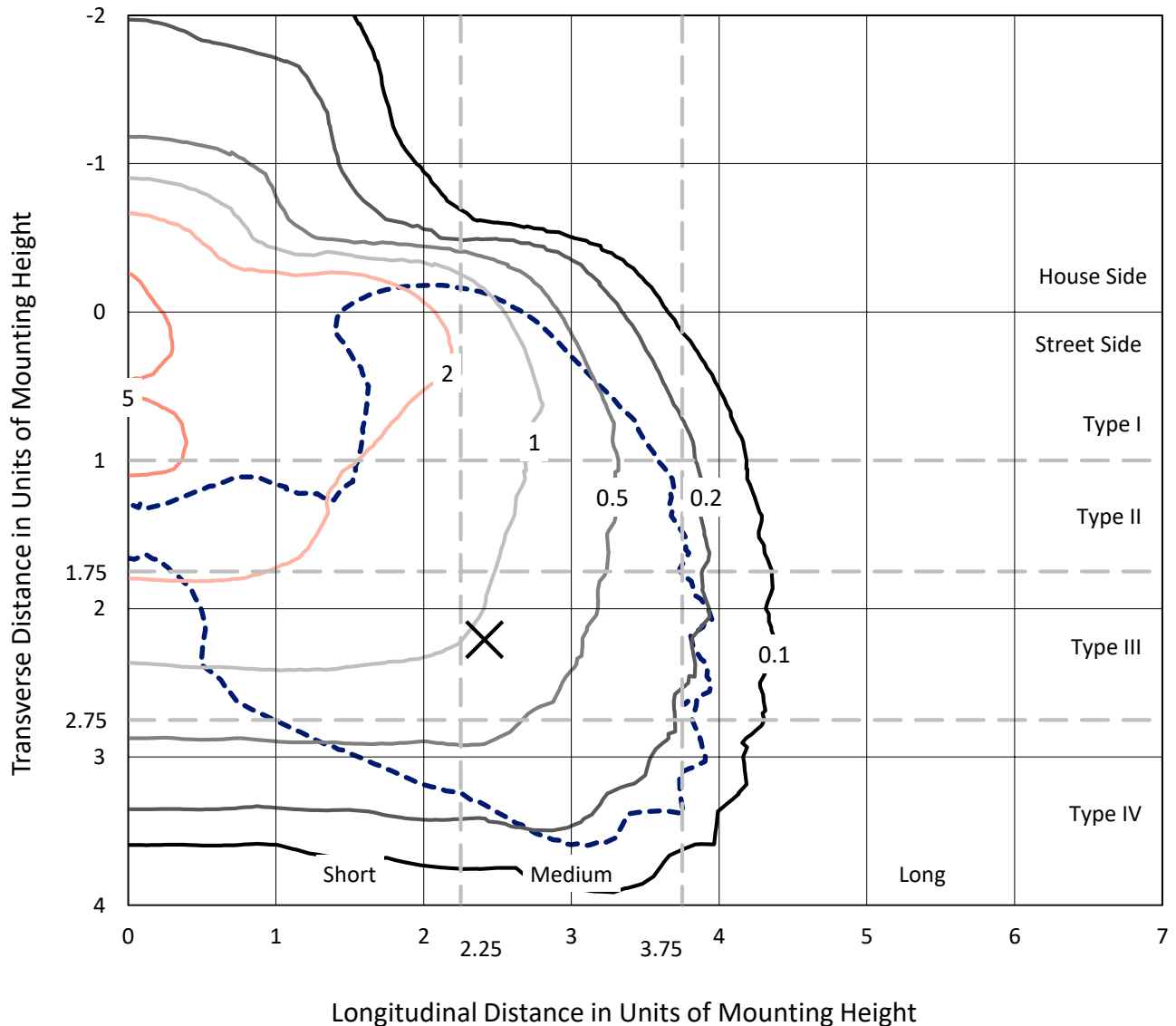


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Iso-Footcandle Lines of Horizontal Illumination

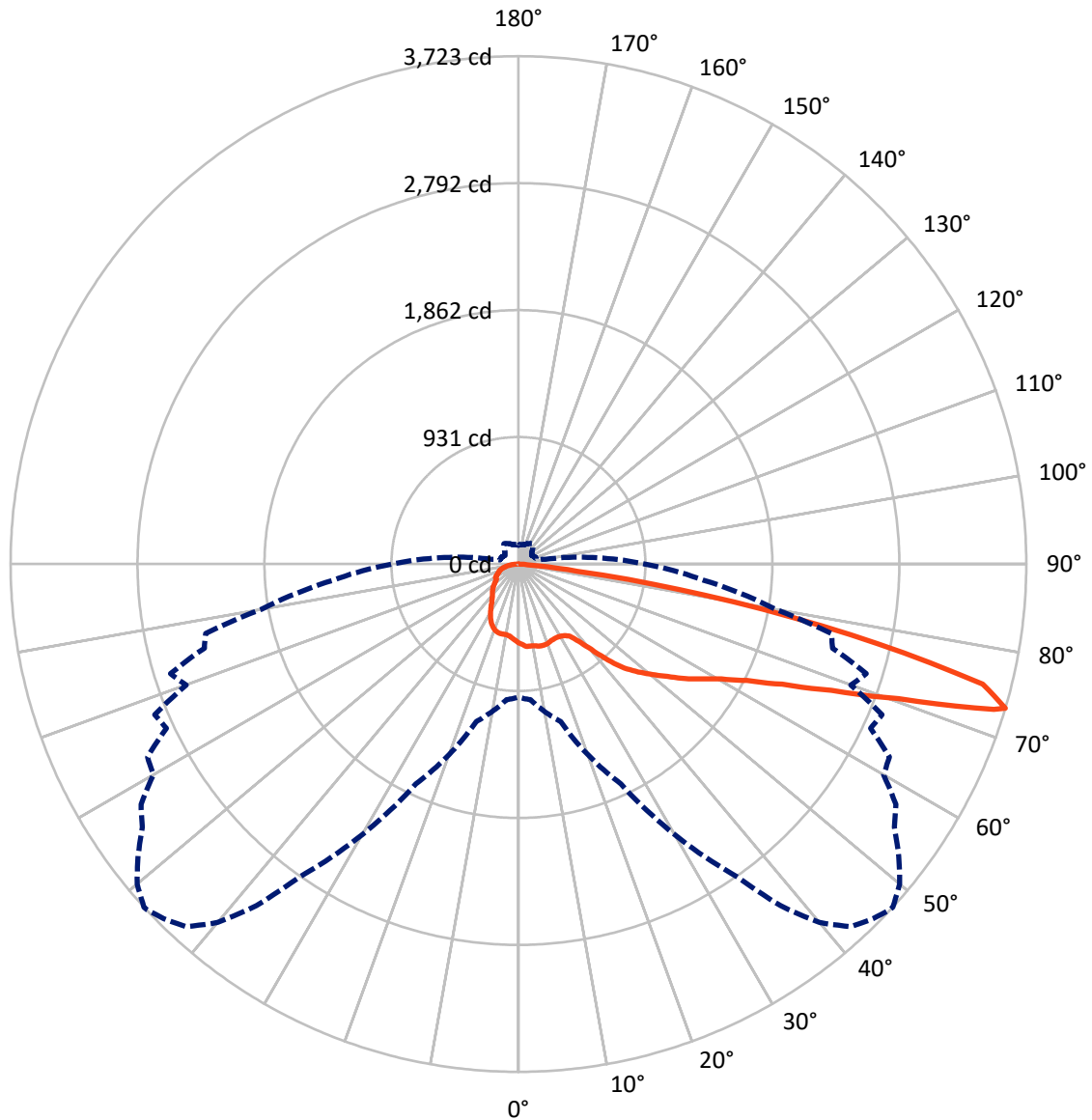
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.7 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	942.8	0.0	942.8
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	3776.2	0.0	3776.2
	% Fixture	80.0	0.0	80.0
Total	Lumens	4719.0	0.0	4719.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	1.2
10°-20°	164.2	3.5
20°-30°	252.4	5.3
30°-40°	368.2	7.8
40°-50°	607.1	12.9
50°-60°	950.5	20.1
60°-70°	1289.4	27.3
70°-80°	954.8	20.2
80°-90°	77.1	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°	4719.0	100.0
0°-180°	4719.0	100.0



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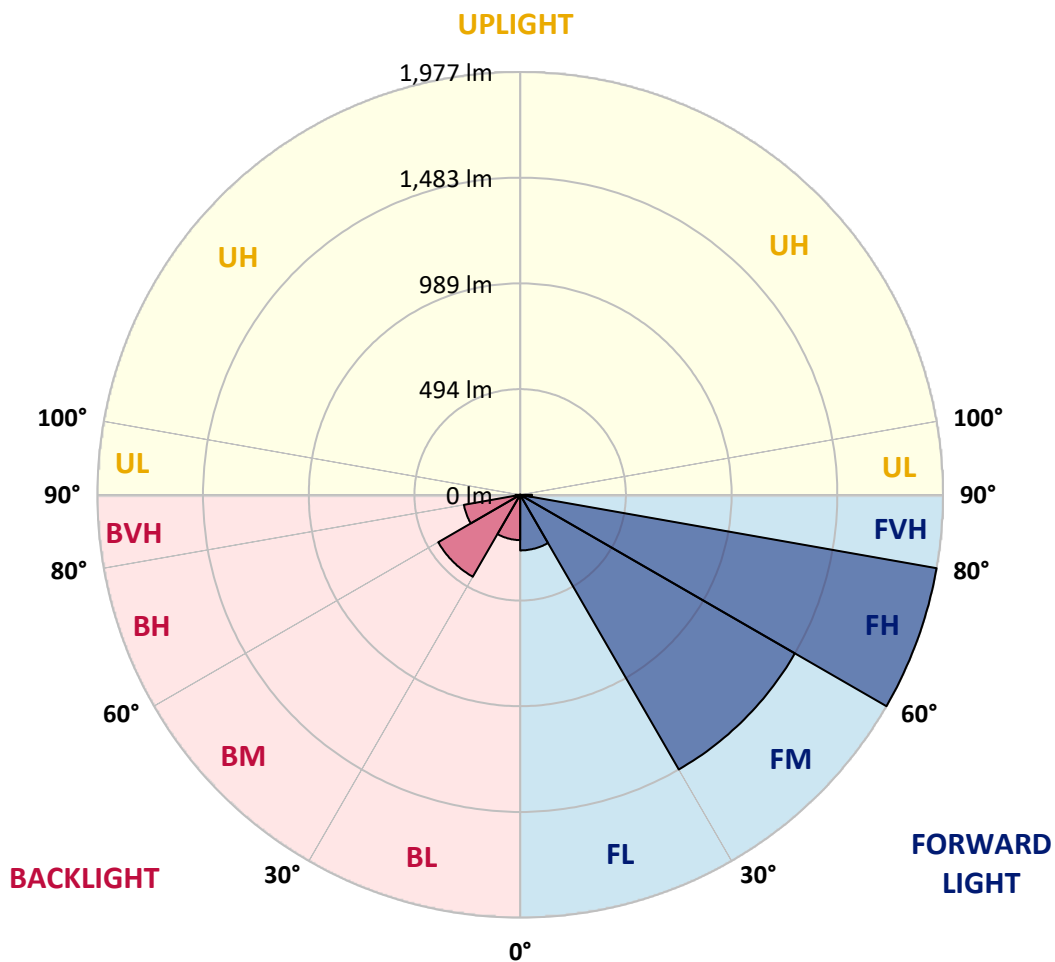
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	260.1	5.5			
FM	(30°-60°)	1483.1	31.4			
FH	(60°-80°)	1977.3	41.9			G2/5000
FVH	(80°-90°)	55.6	1.2			G1/100
BL	(0°-30°)	211.6	4.5	B1/500		
BM	(30°-60°)	442.7	9.4	B1/1000		
BH	(60°-80°)	267.0	5.7	B1/500		G1/500
BVH	(80°-90°)	21.5	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°	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5
2.5°	613.8	612.2	607.5	606.0	601.3	598.2	596.6	595.1	599.7	596.6	592.0
5°	652.7	649.6	643.4	634.0	624.7	618.4	616.9	613.8	613.8	610.6	607.5
7.5°	680.7	679.2	669.8	655.8	640.2	629.3	623.1	618.4	620.0	616.9	607.5
10°	707.2	704.1	688.5	671.4	648.0	635.6	627.8	620.0	626.2	621.6	609.1
12.5°	727.5	724.4	702.6	680.7	654.3	640.2	632.5	627.8	634.0	630.9	616.9
15°	738.4	735.3	713.5	687.0	658.9	643.4	640.2	637.1	641.8	635.6	623.1
17.5°	732.2	732.2	711.9	683.9	660.5	644.9	640.2	637.1	643.4	637.1	623.1
20°	708.8	711.9	697.9	668.3	651.2	640.2	635.6	629.3	635.6	629.3	620.0
22.5°	679.2	682.3	674.5	648.0	635.6	627.8	626.2	620.0	624.7	620.0	610.6
25°	652.7	652.7	649.6	626.2	624.7	618.4	620.0	616.9	620.0	613.8	607.5
27.5°	654.3	654.3	641.8	618.4	616.9	616.9	616.9	616.9	618.4	613.8	607.5
30°	746.2	749.3	713.5	648.0	624.7	621.6	623.1	621.6	623.1	621.6	613.8
32.5°	884.8	884.8	850.5	749.3	666.7	646.5	638.7	637.1	632.5	630.9	624.7
35°	1021.9	1020.3	986.1	873.9	769.5	730.6	705.7	682.3	671.4	660.5	649.6
37.5°	1137.2	1132.5	1127.8	1000.1	891.0	845.9	816.3	782.0	760.2	741.5	716.6
40°	1244.7	1252.5	1269.6	1116.9	1012.6	970.5	940.9	897.3	875.5	852.1	822.5
42.5°	1392.7	1403.6	1405.1	1243.1	1123.2	1095.1	1071.8	1039.0	1015.7	987.6	961.2
45°	1536.0	1537.5	1542.2	1378.6	1258.7	1222.9	1205.7	1174.6	1145.0	1109.1	1087.3
47.5°	1634.1	1629.4	1649.7	1534.4	1417.6	1377.1	1352.2	1305.4	1260.2	1215.1	1182.4
50°	1754.1	1749.4	1749.4	1712.0	1601.4	1554.7	1511.0	1423.8	1375.5	1319.4	1272.7
52.5°	1860.0	1842.9	1853.8	1875.6	1794.6	1735.4	1659.0	1560.9	1497.0	1428.5	1369.3
55°	2004.9	1916.1	1941.0	2017.3	1986.2	1894.3	1793.0	1688.6	1615.4	1537.5	1483.0
57.5°	1955.0	1894.3	1967.5	2101.4	2099.9	2014.2	1928.5	1800.8	1727.6	1654.4	1587.4
60°	1775.9	1807.0	1965.9	2159.1	2166.9	2099.9	2029.8	1911.4	1853.8	1777.4	1710.4
62.5°	1637.2	1682.4	1900.5	2154.4	2243.2	2180.9	2123.3	2053.2	2012.7	1948.8	1880.2
65°	1629.4	1655.9	1867.8	2149.7	2350.7	2318.0	2291.5	2258.8	2251.0	2204.3	2124.8
67.5°	1704.2	1729.1	1923.9	2269.7	2509.6	2495.6	2534.5	2528.3	2562.5	2539.2	2473.8
70°	1557.8	1571.8	1811.7	2311.7	2872.5	2934.9	3022.1	3017.4	3090.6	3034.6	2958.2
72.5°	1093.6	1121.6	1333.5	1909.8	2880.3	3213.7	3416.2	3587.6	3667.0	3681.0	3645.2
73°	976.7	998.5	1194.8	1779.0	2802.4	3157.6	3430.2	3606.3	3676.4	3720.0	3723.1
75°	339.6	350.5	521.9	1078.0	2240.1	2755.7	3106.2	3265.1	3248.0	3375.7	3515.9
77.5°	109.0	110.6	135.5	278.8	1081.1	1710.4	2101.4	2247.9	2163.8	2302.4	2489.3
80°	67.0	70.1	88.8	126.2	283.5	518.7	878.6	1099.8	1054.6	1183.9	1383.3
82.5°	40.5	42.1	54.5	77.9	113.7	126.2	165.1	224.3	275.7	331.8	434.6
85°	18.7	20.3	26.5	35.8	46.7	48.3	46.7	43.6	49.8	57.6	67.0
87.5°	0.0	0.0	1.6	3.1	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°	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5
2.5°	596.6	592.0	592.0	585.7	588.8	582.6	585.7	579.5	582.6	574.8	579.5
5°	606.0	598.2	598.2	588.8	590.4	579.5	584.2	571.7	577.9	563.9	573.3
7.5°	610.6	596.6	602.9	585.7	593.5	574.8	584.2	563.9	576.4	554.6	570.1
10°	616.9	596.6	607.5	588.8	598.2	576.4	588.8	563.9	579.5	553.0	567.0
12.5°	626.2	604.4	613.8	592.0	604.4	579.5	592.0	567.0	582.6	553.0	570.1
15°	632.5	610.6	620.0	598.2	607.5	579.5	595.1	565.5	582.6	551.5	570.1
17.5°	630.9	610.6	620.0	595.1	606.0	577.9	593.5	563.9	579.5	546.8	567.0
20°	624.7	607.5	613.8	592.0	601.3	573.3	587.3	557.7	574.8	542.1	562.4
22.5°	616.9	599.7	607.5	587.3	596.6	568.6	581.1	554.6	571.7	539.0	557.7
25°	612.2	598.2	602.9	582.6	595.1	570.1	582.6	553.0	571.7	539.0	560.8
27.5°	610.6	598.2	607.5	588.8	599.7	577.9	590.4	563.9	579.5	545.2	567.0
30°	620.0	609.1	616.9	601.3	610.6	588.8	601.3	576.4	592.0	559.2	584.2
32.5°	630.9	620.0	627.8	613.8	627.8	606.0	621.6	596.6	615.3	582.6	606.0
35°	654.3	641.8	652.7	637.1	652.7	635.6	652.7	626.2	649.6	616.9	641.8
37.5°	715.0	680.7	691.7	674.5	690.1	668.3	697.9	671.4	697.9	666.7	701.0
40°	811.6	750.8	761.8	725.9	749.3	716.6	752.4	732.2	768.0	729.0	772.7
42.5°	937.8	880.1	869.2	814.7	835.0	796.0	831.9	796.0	844.3	806.9	861.5
45°	1053.1	992.3	975.2	922.2	936.2	884.8	930.0	880.1	944.0	900.4	968.9
47.5°	1148.1	1076.4	1062.4	1001.7	1026.6	978.3	1034.4	981.4	1059.3	1015.7	1095.1
50°	1235.3	1146.5	1143.4	1078.0	1120.0	1071.8	1151.2	1115.4	1191.7	1148.1	1241.6
52.5°	1335.0	1222.9	1238.4	1179.2	1246.2	1205.7	1297.6	1246.2	1345.9	1299.2	1402.0
55°	1440.9	1322.6	1363.1	1327.2	1406.7	1380.2	1458.1	1411.3	1509.5	1462.8	1571.8
57.5°	1557.8	1456.5	1528.2	1511.0	1581.1	1548.4	1635.7	1593.6	1691.7	1652.8	1761.8
60°	1710.4	1643.5	1713.6	1712.0	1772.8	1771.2	1827.3	1802.4	1895.8	1878.7	1978.4
62.5°	1908.3	1855.3	1930.1	1909.8	1983.1	1970.6	2039.1	2039.1	2106.1	2129.5	2229.2
65°	2174.7	2104.6	2193.4	2162.2	2235.4	2238.5	2282.1	2289.9	2370.9	2397.4	2483.1
67.5°	2536.1	2455.1	2525.2	2466.0	2550.1	2545.4	2582.8	2598.4	2609.3	2673.1	2682.5
70°	3056.4	2934.9	2998.7	2917.7	2933.3	2944.2	2874.1	2925.5	2800.9	2902.1	2765.1
72.5°	3618.7	3480.1	3369.5	3288.5	3128.0	3104.7	2900.6	2944.2	2679.4	2766.6	2489.3
73°	3648.3	3514.4	3364.8	3280.7	3090.6	3065.7	2847.6	2885.0	2592.1	2674.7	2383.4
75°	3316.5	3352.3	2992.5	3026.8	2696.5	2735.5	2394.3	2437.9	2078.1	2140.4	1765.0
77.5°	2235.4	2355.4	1951.9	2103.0	1693.3	1844.4	1381.8	1395.8	1018.8	951.8	646.5
80°	1107.6	1210.4	858.3	937.8	629.3	618.4	377.0	313.1	266.4	272.6	280.4
82.5°	319.3	359.8	222.8	221.2	157.3	149.5	149.5	158.9	162.0	180.7	176.0
85°	60.8	73.2	63.9	85.7	76.3	84.1	77.9	90.4	84.1	104.4	90.4
87.5°	1.6	0.0	1.6	4.7	4.7	10.9	7.8	12.5	12.5	21.8	20.3
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°	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5
2.5°	573.3	581.1	577.9	574.8	571.7	570.1	563.9	567.0	559.2	565.5	559.2
5°	560.8	570.1	565.5	559.2	556.1	553.0	542.1	549.9	537.4	548.3	539.0
7.5°	546.8	562.4	557.7	551.5	545.2	542.1	520.3	537.4	518.7	534.3	518.7
10°	542.1	559.2	553.0	545.2	539.0	535.9	509.4	529.6	509.4	526.5	506.3
12.5°	539.0	559.2	549.9	542.1	535.9	531.2	501.6	526.5	500.0	525.0	501.6
15°	535.9	559.2	546.8	537.4	531.2	526.5	495.4	523.4	493.8	521.9	495.4
17.5°	532.8	554.6	543.7	532.8	526.5	523.4	489.1	518.7	487.6	518.7	492.3
20°	528.1	549.9	537.4	526.5	520.3	515.6	481.4	512.5	479.8	511.0	481.4
22.5°	521.9	545.2	534.3	523.4	517.2	509.4	472.0	504.7	470.4	501.6	473.6
25°	523.4	548.3	534.3	523.4	514.1	506.3	465.8	501.6	462.7	493.8	462.7
27.5°	531.2	553.0	539.0	529.6	517.2	507.8	465.8	498.5	459.5	486.0	453.3
30°	546.8	568.6	556.1	542.1	531.2	518.7	473.6	500.0	459.5	476.7	444.0
32.5°	573.3	593.5	581.1	570.1	557.7	539.0	489.1	507.8	462.7	470.4	436.2
35°	607.5	632.5	626.2	618.4	602.9	570.1	515.6	518.7	468.9	464.2	425.3
37.5°	663.6	697.9	696.3	694.8	677.6	618.4	545.2	540.5	475.1	459.5	411.3
40°	736.8	777.3	788.2	799.1	763.3	676.1	579.5	562.4	478.2	450.2	389.4
42.5°	822.5	877.0	909.7	930.0	864.6	739.9	618.4	587.3	478.2	436.2	364.5
45°	928.4	992.3	1054.6	1076.4	976.7	808.5	658.9	607.5	472.0	414.4	331.8
47.5°	1057.7	1132.5	1218.2	1229.1	1098.2	881.7	687.0	621.6	451.8	384.8	302.2
50°	1201.0	1291.4	1417.6	1409.8	1227.5	958.0	705.7	630.9	415.9	350.5	266.4
52.5°	1361.5	1475.2	1654.4	1618.5	1384.9	1053.1	722.8	643.4	372.3	310.0	230.6
55°	1562.5	1698.0	1922.3	1846.0	1559.3	1157.4	747.7	644.9	314.7	261.7	204.1
57.5°	1779.0	1923.9	2210.5	2071.8	1722.9	1238.4	736.8	595.1	257.0	221.2	183.8
60°	2039.1	2215.2	2498.7	2282.1	1860.0	1266.5	660.5	490.7	219.6	199.4	174.5
62.5°	2330.4	2504.9	2735.5	2428.6	1937.9	1219.7	490.7	339.6	188.5	177.6	160.5
65°	2640.4	2805.6	2849.2	2441.0	1886.5	1014.1	303.8	222.8	163.6	158.9	148.0
67.5°	2925.5	2941.1	2741.7	2238.5	1637.2	707.2	207.2	177.6	151.1	149.5	143.3
70°	2998.7	2729.2	2279.0	1743.2	1182.4	420.6	168.2	154.2	144.9	144.9	140.2
72.5°	2504.9	2078.1	1523.5	1056.2	644.9	224.3	143.3	140.2	137.1	137.1	134.0
73°	2349.1	1914.5	1364.6	922.2	545.2	201.0	140.2	137.1	135.5	134.0	132.4
75°	1560.9	1202.6	774.2	467.3	253.9	144.9	124.6	124.6	123.1	124.6	123.1
77.5°	601.3	453.3	299.1	201.0	144.9	113.7	105.9	107.5	105.9	109.0	107.5
80°	264.8	261.7	197.8	141.8	105.9	85.7	85.7	85.7	87.2	88.8	88.8
82.5°	180.7	152.7	116.8	87.2	63.9	62.3	63.9	63.9	65.4	67.0	65.4
85°	99.7	84.1	62.3	38.9	34.3	42.1	42.1	42.1	40.5	40.5	38.9
87.5°	31.2	23.4	17.1	4.7	7.8	7.8	10.9	9.3	9.3	10.9	10.9
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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CATALOG NUMBER: ISS-AF-1000-LED-E1-T4W-8030

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5	579.5
2.5°	565.5	560.8	565.5	557.7	563.9	557.7	562.4	562.4	560.8	560.8	560.8
5°	546.8	539.0	546.8	542.1	546.8	540.5	545.2	546.8	548.3	553.0	551.5
7.5°	532.8	517.2	534.3	518.7	532.8	518.7	531.2	532.8	537.4	543.7	548.3
10°	526.5	506.3	526.5	507.8	525.0	509.4	525.0	526.5	531.2	539.0	546.8
12.5°	523.4	501.6	523.4	504.7	523.4	507.8	523.4	528.1	531.2	537.4	546.8
15°	520.3	498.5	523.4	503.2	523.4	507.8	525.0	528.1	532.8	539.0	546.8
17.5°	518.7	493.8	520.3	501.6	520.3	504.7	523.4	523.4	529.6	537.4	542.1
20°	512.5	489.1	512.5	493.8	512.5	498.5	514.1	514.1	520.3	523.4	531.2
22.5°	503.2	478.2	500.0	482.9	500.0	486.0	498.5	498.5	503.2	507.8	512.5
25°	489.1	465.8	484.5	468.9	481.4	468.9	478.2	476.7	479.8	482.9	486.0
27.5°	473.6	450.2	465.8	448.6	456.4	444.0	450.2	447.1	448.6	450.2	451.8
30°	456.4	433.1	440.9	425.3	426.8	414.4	417.5	412.8	411.3	409.7	406.6
32.5°	437.7	412.8	412.8	397.2	394.1	383.2	383.2	377.0	372.3	366.1	359.8
35°	414.4	392.6	381.7	369.2	363.0	352.1	350.5	342.7	331.8	320.9	314.7
37.5°	391.0	366.1	350.5	338.0	331.8	324.0	322.5	316.2	303.8	291.3	282.0
40°	359.8	334.9	317.8	313.1	308.4	302.2	303.8	296.0	283.5	269.5	261.7
42.5°	328.7	306.9	292.9	291.3	288.2	286.6	288.2	282.0	267.9	255.5	246.1
45°	302.2	280.4	266.4	264.8	263.3	269.5	271.1	269.5	253.9	241.5	229.0
47.5°	275.7	249.2	239.9	236.8	238.3	247.7	250.8	255.5	241.5	227.4	210.3
50°	244.6	219.6	216.5	213.4	215.0	222.8	230.6	239.9	227.4	207.2	183.8
52.5°	216.5	194.7	196.3	193.2	196.3	202.5	208.7	224.3	208.7	188.5	177.6
55°	194.7	177.6	180.7	177.6	180.7	188.5	193.2	205.6	205.6	201.0	191.6
57.5°	179.1	166.7	169.8	166.7	171.4	177.6	182.3	208.7	224.3	211.9	193.2
60°	169.8	158.9	160.5	157.3	160.5	169.8	179.1	210.3	235.2	210.3	196.3
62.5°	155.8	146.4	144.9	144.9	148.0	163.6	168.2	196.3	232.1	208.7	197.8
65°	146.4	138.6	137.1	135.5	138.6	149.5	154.2	182.3	224.3	197.8	179.1
67.5°	141.8	135.5	132.4	129.3	132.4	141.8	146.4	171.4	211.9	188.5	168.2
70°	137.1	130.9	129.3	126.2	127.7	134.0	140.2	157.3	201.0	177.6	157.3
72.5°	130.9	124.6	123.1	118.4	119.9	126.2	129.3	148.0	186.9	166.7	146.4
73°	129.3	123.1	121.5	116.8	118.4	123.1	126.2	144.9	183.8	165.1	144.9
75°	121.5	115.3	113.7	110.6	112.2	112.2	115.3	132.4	174.5	155.8	135.5
77.5°	107.5	102.8	101.3	98.1	96.6	95.0	99.7	116.8	158.9	140.2	109.0
80°	88.8	84.1	82.6	76.3	76.3	76.3	82.6	99.7	118.4	101.3	84.1
82.5°	65.4	62.3	62.3	57.6	56.1	54.5	59.2	68.5	93.5	79.4	65.4
85°	38.9	37.4	38.9	34.3	35.8	34.3	38.9	48.3	51.4	40.5	31.2
87.5°	9.3	10.9	10.9	10.9	9.3	9.3	7.8	6.2	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°	579.5	579.5
2.5°	559.2	557.7
5°	551.5	551.5
7.5°	548.3	548.3
10°	549.9	549.9
12.5°	549.9	553.0
15°	554.6	553.0
17.5°	549.9	549.9
20°	537.4	540.5
22.5°	520.3	520.3
25°	492.3	493.8
27.5°	454.9	458.0
30°	408.1	411.3
32.5°	355.2	358.3
35°	313.1	314.7
37.5°	285.1	285.1
40°	261.7	261.7
42.5°	239.9	238.3
45°	218.1	215.0
47.5°	196.3	194.7
50°	177.6	177.6
52.5°	180.7	180.7
55°	194.7	194.7
57.5°	196.3	194.7
60°	213.4	211.9
62.5°	222.8	227.4
65°	194.7	188.5
67.5°	185.4	176.0
70°	166.7	152.7
72.5°	148.0	140.2
73°	143.3	137.1
75°	127.7	124.6
77.5°	96.6	95.0
80°	81.0	79.4
82.5°	54.5	51.4
85°	23.4	21.8
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)