

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: P227960

Luminaire Tested: **ISS-AF-600-LED-E1-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227960
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-600-LED-E1-T4W
Description: IMPACT ELITE LED QUATER SPHERE 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: 3997.7 lumens
Efficiency: N/A
Efficacy: 118.6 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 - G1

Input Watts (W): 33.7
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

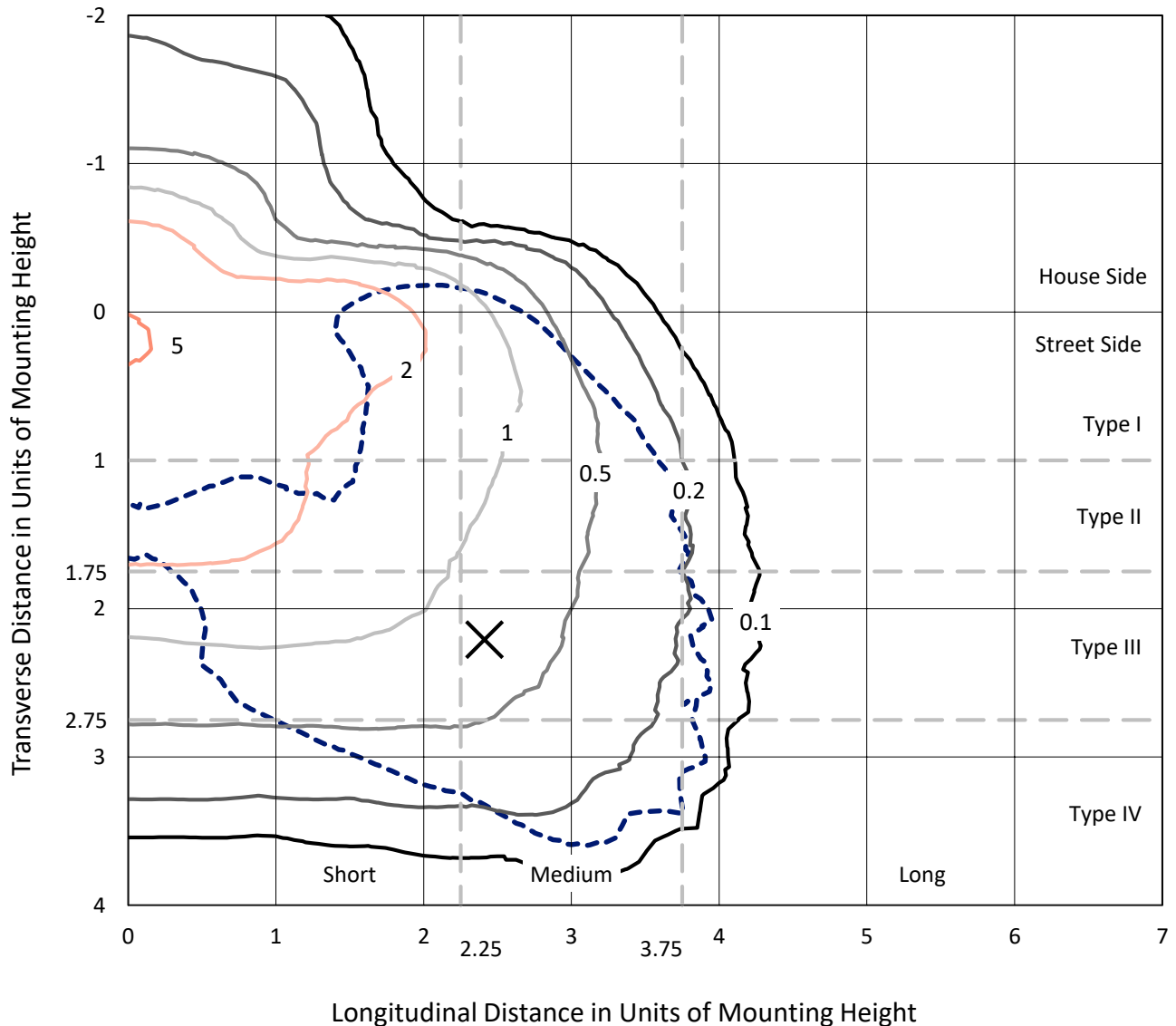


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Iso-Footcandle Lines of Horizontal Illumination

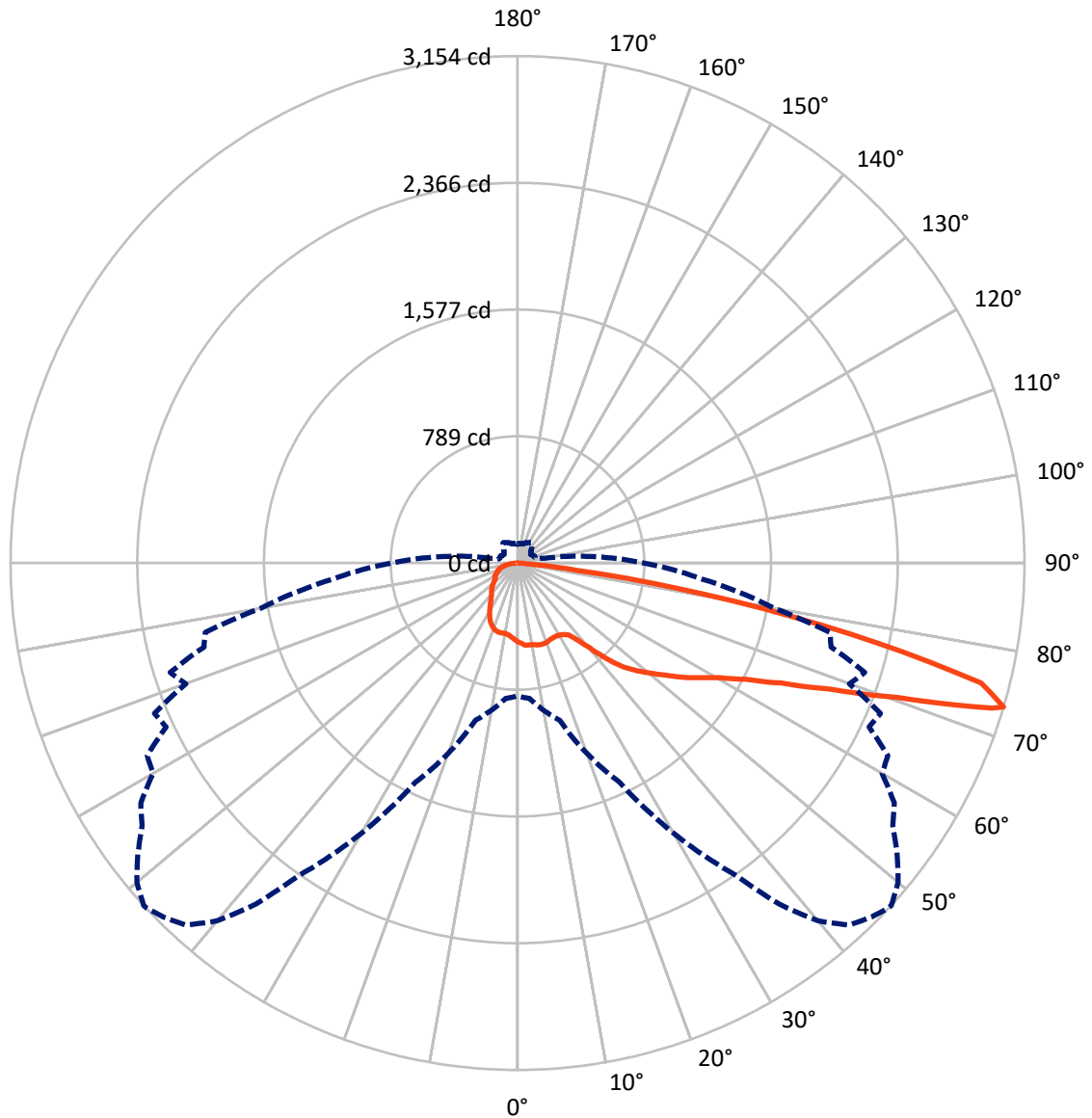
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 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	798.7	0.0	798.7
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	3199.0	0.0	3199.0
	% Fixture	80.0	0.0	80.0
Total	Lumens	3997.7	0.0	3997.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	1.2
10°-20°	139.1	3.5
20°-30°	213.8	5.3
30°-40°	311.9	7.8
40°-50°	514.3	12.9
50°-60°	805.2	20.1
60°-70°	1092.4	27.3
70°-80°	808.9	20.2
80°-90°	65.4	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°	3997.7	100.0
0°-180°	3997.7	100.0



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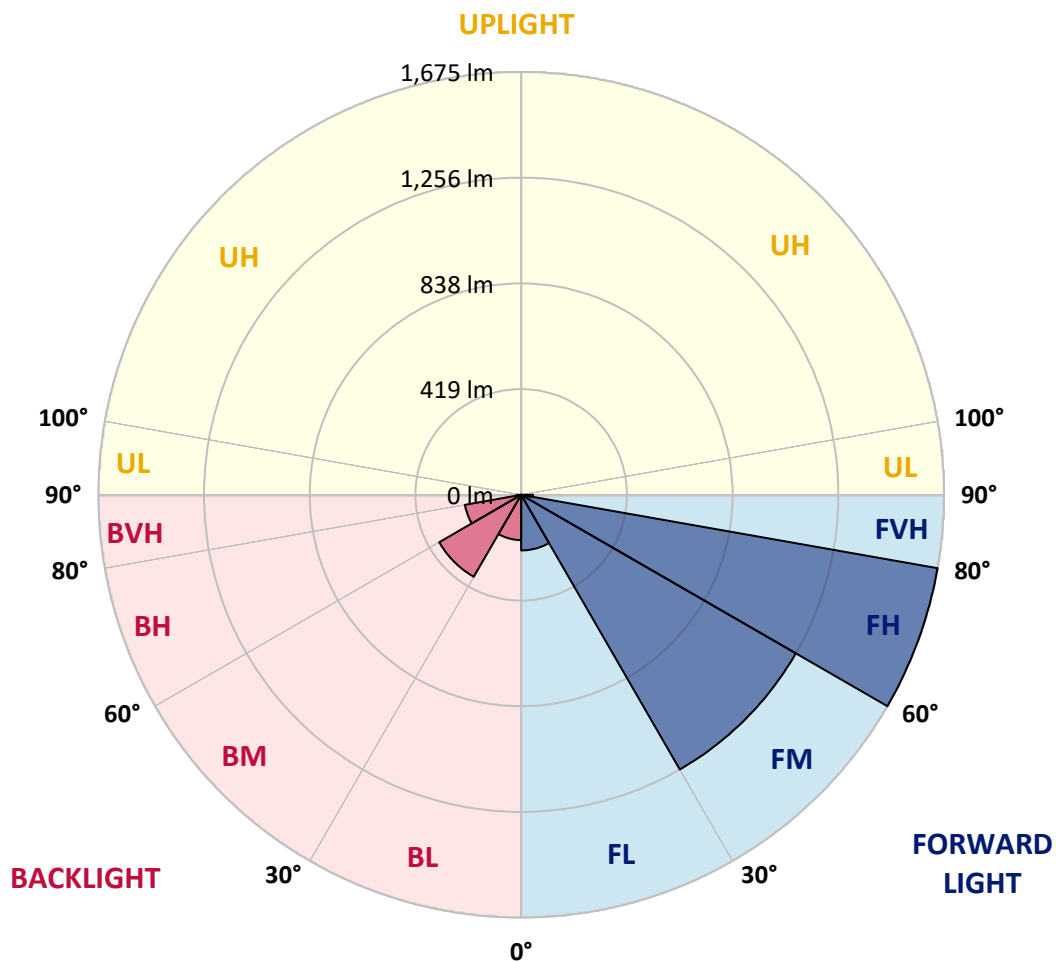
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	220.4	5.5			
FM	(30°-60°)	1256.4	31.4			
FH	(60°-80°)	1675.1	41.9			G1/1800
FVH	(80°-90°)	47.1	1.2			G1/100
BL	(0°-30°)	179.3	4.5	B1/500		
BM	(30°-60°)	375.1	9.4	B1/1000		
BH	(60°-80°)	226.2	5.7	B1/500		G1/500
BVH	(80°-90°)	18.2	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-G1

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°	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9
2.5°	520.0	518.6	514.6	513.3	509.4	506.8	505.4	504.1	508.1	505.4	501.5
5°	552.9	550.3	545.0	537.2	529.2	524.0	522.6	520.0	520.0	517.3	514.6
7.5°	576.7	575.4	567.4	555.6	542.4	533.2	527.8	524.0	525.2	522.6	514.6
10°	599.1	596.5	583.3	568.8	549.0	538.4	531.8	525.2	530.5	526.5	516.0
12.5°	616.3	613.7	595.2	576.7	554.2	542.4	535.8	531.8	537.2	534.5	522.6
15°	625.5	622.9	604.4	582.0	558.2	545.0	542.4	539.7	543.7	538.4	527.8
17.5°	620.2	620.2	603.1	579.3	559.6	546.4	542.4	539.7	545.0	539.7	527.8
20°	600.5	603.1	591.2	566.1	551.6	542.4	538.4	533.2	538.4	533.2	525.2
22.5°	575.4	578.0	571.4	549.0	538.4	531.8	530.5	525.2	529.2	525.2	517.3
25°	552.9	552.9	550.3	530.5	529.2	524.0	525.2	522.6	525.2	520.0	514.6
27.5°	554.2	554.2	543.7	524.0	522.6	522.6	522.6	522.6	524.0	520.0	514.6
30°	632.1	634.7	604.4	549.0	529.2	526.5	527.8	526.5	527.8	526.5	520.0
32.5°	749.6	749.6	720.6	634.7	564.8	547.7	541.0	539.7	535.8	534.5	529.2
35°	865.7	864.4	835.3	740.3	651.9	618.9	597.8	578.0	568.8	559.6	550.3
37.5°	963.3	959.4	955.4	847.2	754.8	716.6	691.5	662.5	644.0	628.2	607.0
40°	1054.5	1061.0	1075.5	946.2	857.7	822.1	797.1	760.2	741.6	721.9	696.8
42.5°	1179.8	1189.0	1190.3	1053.1	951.4	927.7	908.0	880.2	860.4	836.7	814.3
45°	1301.2	1302.5	1306.5	1167.9	1066.3	1035.9	1021.4	995.0	970.0	939.6	921.2
47.5°	1384.4	1380.4	1397.6	1299.9	1200.9	1166.6	1145.5	1105.9	1067.7	1029.3	1001.7
50°	1485.9	1481.9	1481.9	1450.3	1356.6	1317.0	1280.1	1206.2	1165.2	1117.8	1078.2
52.5°	1575.7	1561.1	1570.4	1588.8	1520.3	1470.1	1405.4	1322.3	1268.2	1210.2	1160.0
55°	1698.4	1623.2	1644.3	1708.9	1682.5	1604.7	1519.0	1430.5	1368.5	1302.5	1256.3
57.5°	1656.2	1604.7	1666.7	1780.2	1778.9	1706.4	1633.8	1525.5	1463.5	1401.4	1344.8
60°	1504.5	1530.8	1665.5	1829.0	1835.7	1778.9	1719.6	1619.2	1570.4	1505.8	1449.0
62.5°	1387.0	1425.3	1610.0	1825.1	1900.3	1847.6	1798.8	1739.3	1705.1	1650.9	1592.8
65°	1380.4	1402.8	1582.3	1821.2	1991.4	1963.7	1941.3	1913.5	1906.9	1867.3	1800.0
67.5°	1443.7	1464.9	1629.8	1922.7	2126.0	2114.1	2147.1	2141.9	2170.9	2151.1	2095.6
70°	1319.7	1331.6	1534.7	1958.4	2433.5	2486.3	2560.1	2556.3	2618.2	2570.7	2506.0
72.5°	926.4	950.1	1129.6	1617.9	2440.0	2722.5	2894.0	3039.2	3106.5	3118.4	3088.0
73°	827.5	845.9	1012.2	1507.1	2374.1	2675.0	2905.9	3055.0	3114.4	3151.4	3154.0
75°	287.7	297.0	442.1	913.2	1897.7	2334.5	2631.4	2766.1	2751.5	2859.8	2978.5
77.5°	92.4	93.7	114.8	236.2	915.8	1449.0	1780.2	1904.3	1833.0	1950.5	2108.8
80°	56.8	59.4	75.2	106.9	240.2	439.5	744.3	931.7	893.4	1002.9	1171.9
82.5°	34.3	35.6	46.2	66.0	96.4	106.9	139.8	190.1	233.5	281.1	368.2
85°	15.9	17.2	22.4	30.4	39.6	40.9	39.6	36.9	42.2	48.8	56.8
87.5°	0.0	0.0	1.3	2.7	1.3	0.0	0.0	0.0	0.0	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):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9
2.5°	505.4	501.5	501.5	496.2	498.8	493.6	496.2	490.9	493.6	486.9	490.9
5°	513.3	506.8	506.8	498.8	500.1	490.9	494.9	484.4	489.6	477.7	485.6
7.5°	517.3	505.4	510.8	496.2	502.8	486.9	494.9	477.7	488.3	469.8	483.0
10°	522.6	505.4	514.6	498.8	506.8	488.3	498.8	477.7	490.9	468.5	480.4
12.5°	530.5	512.0	520.0	501.5	512.0	490.9	501.5	480.4	493.6	468.5	483.0
15°	535.8	517.3	525.2	506.8	514.6	490.9	504.1	479.0	493.6	467.2	483.0
17.5°	534.5	517.3	525.2	504.1	513.3	489.6	502.8	477.7	490.9	463.2	480.4
20°	529.2	514.6	520.0	501.5	509.4	485.6	497.6	472.4	486.9	459.2	476.4
22.5°	522.6	508.1	514.6	497.6	505.4	481.7	492.2	469.8	484.4	456.6	472.4
25°	518.6	506.8	510.8	493.6	504.1	483.0	493.6	468.5	484.4	456.6	475.1
27.5°	517.3	506.8	514.6	498.8	508.1	489.6	500.1	477.7	490.9	461.9	480.4
30°	525.2	516.0	522.6	509.4	517.3	498.8	509.4	488.3	501.5	473.7	494.9
32.5°	534.5	525.2	531.8	520.0	531.8	513.3	526.5	505.4	521.3	493.6	513.3
35°	554.2	543.7	552.9	539.7	552.9	538.4	552.9	530.5	550.3	522.6	543.7
37.5°	605.7	576.7	585.9	571.4	584.6	566.1	591.2	568.8	591.2	564.8	593.8
40°	687.5	636.1	645.3	615.0	634.7	607.0	637.4	620.2	650.6	617.6	654.6
42.5°	794.4	745.6	736.4	690.2	707.4	674.3	704.7	674.3	715.2	683.6	729.8
45°	892.1	840.7	826.1	781.2	793.1	749.6	787.9	745.6	799.7	762.8	820.8
47.5°	972.6	911.9	900.0	848.5	869.7	828.8	876.3	831.4	897.3	860.4	927.7
50°	1046.5	971.3	968.6	913.2	948.9	908.0	975.3	944.9	1009.6	972.6	1051.8
52.5°	1131.0	1035.9	1049.1	999.0	1055.7	1021.4	1099.3	1055.7	1140.2	1100.6	1187.7
55°	1220.7	1120.4	1154.7	1124.3	1191.6	1169.2	1235.2	1195.6	1278.8	1239.2	1331.6
57.5°	1319.7	1233.9	1294.6	1280.1	1339.5	1311.7	1385.7	1350.0	1433.2	1400.2	1492.6
60°	1449.0	1392.2	1451.7	1450.3	1501.8	1500.5	1547.9	1526.9	1606.0	1591.5	1676.0
62.5°	1616.6	1571.8	1635.1	1617.9	1679.9	1669.4	1727.5	1727.5	1784.2	1804.0	1888.5
65°	1842.2	1782.9	1858.1	1831.7	1893.7	1896.3	1933.3	1939.9	2008.6	2031.0	2103.6
67.5°	2148.4	2079.8	2139.2	2089.1	2160.3	2156.4	2188.0	2201.2	2210.5	2264.5	2272.5
70°	2589.2	2486.3	2540.4	2471.8	2485.0	2494.2	2434.8	2478.3	2372.7	2458.6	2342.5
72.5°	3065.6	2948.1	2854.4	2785.8	2649.9	2630.1	2457.2	2494.2	2269.8	2343.8	2108.8
73°	3090.6	2977.2	2850.5	2779.3	2618.2	2597.1	2412.3	2444.0	2196.0	2265.8	2019.1
75°	2809.5	2839.9	2535.1	2564.1	2284.4	2317.3	2028.3	2065.2	1760.4	1813.2	1495.1
77.5°	1893.7	1995.4	1653.5	1781.6	1434.5	1562.5	1170.6	1182.4	863.1	806.3	547.7
80°	938.3	1025.4	727.1	794.4	533.2	524.0	319.4	265.3	225.7	231.0	237.5
82.5°	270.6	304.8	188.7	187.4	133.3	126.6	126.6	134.6	137.3	153.0	149.1
85°	51.5	62.0	54.1	72.6	64.7	71.3	66.0	76.5	71.3	88.4	76.5
87.5°	1.3	0.0	1.3	4.0	4.0	9.2	6.6	10.5	10.5	18.5	17.2
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°	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9
2.5°	485.6	492.2	489.6	486.9	484.4	483.0	477.7	480.4	473.7	479.0	473.7
5°	475.1	483.0	479.0	473.7	471.2	468.5	459.2	465.9	455.3	464.5	456.6
7.5°	463.2	476.4	472.4	467.2	461.9	459.2	440.8	455.3	439.5	452.7	439.5
10°	459.2	473.7	468.5	461.9	456.6	454.0	431.6	448.7	431.6	446.0	428.9
12.5°	456.6	473.7	465.9	459.2	454.0	450.0	424.9	446.0	423.6	444.8	424.9
15°	454.0	473.7	463.2	455.3	450.0	446.0	419.6	443.4	418.3	442.1	419.6
17.5°	451.3	469.8	460.5	451.3	446.0	443.4	414.4	439.5	413.1	439.5	417.1
20°	447.3	465.9	455.3	446.0	440.8	436.8	407.7	434.1	406.4	432.8	407.7
22.5°	442.1	461.9	452.7	443.4	438.1	431.6	399.9	427.6	398.5	424.9	401.2
25°	443.4	464.5	452.7	443.4	435.5	428.9	394.6	424.9	391.9	418.3	391.9
27.5°	450.0	468.5	456.6	448.7	438.1	430.3	394.6	422.3	389.3	411.7	384.0
30°	463.2	481.7	471.2	459.2	450.0	439.5	401.2	423.6	389.3	403.9	376.1
32.5°	485.6	502.8	492.2	483.0	472.4	456.6	414.4	430.3	391.9	398.5	369.5
35°	514.6	535.8	530.5	524.0	510.8	483.0	436.8	439.5	397.2	393.2	360.3
37.5°	562.2	591.2	589.9	588.6	574.1	524.0	461.9	458.0	402.5	389.3	348.4
40°	624.2	658.5	667.8	677.0	646.6	572.8	490.9	476.4	405.1	381.4	329.9
42.5°	696.8	743.0	770.7	787.9	732.4	626.9	524.0	497.6	405.1	369.5	308.8
45°	786.5	840.7	893.4	911.9	827.5	684.9	558.2	514.6	399.9	351.1	281.1
47.5°	896.1	959.4	1032.0	1041.3	930.4	747.0	582.0	526.5	382.7	325.9	256.0
50°	1017.4	1094.0	1200.9	1194.3	1039.9	811.6	597.8	534.5	352.3	297.0	225.7
52.5°	1153.4	1249.7	1401.4	1371.2	1173.2	892.1	612.3	545.0	315.4	262.6	195.3
55°	1323.6	1438.5	1628.4	1563.8	1321.0	980.5	633.4	546.4	266.6	221.7	172.9
57.5°	1507.1	1629.8	1872.6	1755.2	1459.5	1049.1	624.2	504.1	217.8	187.4	155.7
60°	1727.5	1876.6	2116.8	1933.3	1575.7	1072.9	559.6	415.7	186.1	168.9	147.8
62.5°	1974.2	2122.0	2317.3	2057.4	1641.6	1033.3	415.7	287.7	159.7	150.5	136.0
65°	2236.9	2376.7	2413.7	2067.9	1598.2	859.1	257.4	188.7	138.6	134.6	125.4
67.5°	2478.3	2491.5	2322.6	1896.3	1387.0	599.1	175.5	150.5	128.0	126.6	121.4
70°	2540.4	2312.1	1930.7	1476.7	1001.7	356.3	142.5	130.6	122.8	122.8	118.8
72.5°	2122.0	1760.4	1290.7	894.8	546.4	190.1	121.4	118.8	116.1	116.1	113.4
73°	1990.0	1621.9	1156.0	781.2	461.9	170.2	118.8	116.1	114.8	113.4	112.2
75°	1322.3	1018.8	655.9	395.9	215.1	122.8	105.6	105.6	104.2	105.6	104.2
77.5°	509.4	384.0	253.4	170.2	122.8	96.4	89.7	91.0	89.7	92.4	91.0
80°	224.3	221.7	167.6	120.1	89.7	72.6	72.6	72.6	73.9	75.2	75.2
82.5°	153.0	129.3	99.0	73.9	54.1	52.8	54.1	54.1	55.4	56.8	55.4
85°	84.5	71.3	52.8	33.0	29.1	35.6	35.6	35.6	34.3	34.3	33.0
87.5°	26.4	19.8	14.5	4.0	6.6	6.6	9.2	7.9	7.9	9.2	9.2
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-600-LED-E1-T4W

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9
2.5°	479.0	475.1	479.0	472.4	477.7	472.4	476.4	476.4	475.1	475.1	475.1
5°	463.2	456.6	463.2	459.2	463.2	458.0	461.9	463.2	464.5	468.5	467.2
7.5°	451.3	438.1	452.7	439.5	451.3	439.5	450.0	451.3	455.3	460.5	464.5
10°	446.0	428.9	446.0	430.3	444.8	431.6	444.8	446.0	450.0	456.6	463.2
12.5°	443.4	424.9	443.4	427.6	443.4	430.3	443.4	447.3	450.0	455.3	463.2
15°	440.8	422.3	443.4	426.3	443.4	430.3	444.8	447.3	451.3	456.6	463.2
17.5°	439.5	418.3	440.8	424.9	440.8	427.6	443.4	443.4	448.7	455.3	459.2
20°	434.1	414.4	434.1	418.3	434.1	422.3	435.5	435.5	440.8	443.4	450.0
22.5°	426.3	405.1	423.6	409.1	423.6	411.7	422.3	422.3	426.3	430.3	434.1
25°	414.4	394.6	410.4	397.2	407.7	397.2	405.1	403.9	406.4	409.1	411.7
27.5°	401.2	381.4	394.6	380.0	386.7	376.1	381.4	378.7	380.0	381.4	382.7
30°	386.7	366.8	373.5	360.3	361.6	351.1	353.6	349.7	348.4	347.1	344.4
32.5°	370.8	349.7	349.7	336.6	333.9	324.7	324.7	319.4	315.4	310.2	304.8
35°	351.1	332.6	323.4	312.7	307.5	298.3	297.0	290.3	281.1	271.9	266.6
37.5°	331.2	310.2	297.0	286.3	281.1	274.5	273.1	267.9	257.4	246.7	238.9
40°	304.8	283.8	269.2	265.3	261.3	256.0	257.4	250.7	240.2	228.3	221.7
42.5°	278.4	259.9	248.1	246.7	244.2	242.8	244.2	238.9	227.0	216.5	208.5
45°	256.0	237.5	225.7	224.3	223.0	228.3	229.7	228.3	215.1	204.6	194.0
47.5°	233.5	211.1	203.3	200.6	201.9	209.8	212.5	216.5	204.6	192.6	178.2
50°	207.1	186.1	183.4	180.8	182.1	188.7	195.3	203.3	192.6	175.5	155.7
52.5°	183.4	165.0	166.2	163.7	166.2	171.5	176.9	190.1	176.9	159.7	150.5
55°	165.0	150.5	153.0	150.5	153.0	159.7	163.7	174.2	174.2	170.2	162.3
57.5°	151.8	141.2	143.8	141.2	145.2	150.5	154.4	176.9	190.1	179.4	163.7
60°	143.8	134.6	136.0	133.3	136.0	143.8	151.8	178.2	199.3	178.2	166.2
62.5°	132.0	124.1	122.8	122.8	125.4	138.6	142.5	166.2	196.6	176.9	167.6
65°	124.1	117.4	116.1	114.8	117.4	126.6	130.6	154.4	190.1	167.6	151.8
67.5°	120.1	114.8	112.2	109.6	112.2	120.1	124.1	145.2	179.4	159.7	142.5
70°	116.1	110.9	109.6	106.9	108.2	113.4	118.8	133.3	170.2	150.5	133.3
72.5°	110.9	105.6	104.2	100.2	101.6	106.9	109.6	125.4	158.4	141.2	124.1
73°	109.6	104.2	102.9	99.0	100.2	104.2	106.9	122.8	155.7	139.8	122.8
75°	102.9	97.7	96.4	93.7	95.0	95.0	97.7	112.2	147.8	132.0	114.8
77.5°	91.0	87.1	85.8	83.2	81.8	80.5	84.5	99.0	134.6	118.8	92.4
80°	75.2	71.3	70.0	64.7	64.7	64.7	70.0	84.5	100.2	85.8	71.3
82.5°	55.4	52.8	52.8	48.8	47.5	46.2	50.1	58.1	79.2	67.3	55.4
85°	33.0	31.7	33.0	29.1	30.4	29.1	33.0	40.9	43.6	34.3	26.4
87.5°	7.9	9.2	9.2	9.2	7.9	7.9	6.6	5.3	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°	490.9	490.9
2.5°	473.7	472.4
5°	467.2	467.2
7.5°	464.5	464.5
10°	465.9	465.9
12.5°	465.9	468.5
15°	469.8	468.5
17.5°	465.9	465.9
20°	455.3	458.0
22.5°	440.8	440.8
25°	417.1	418.3
27.5°	385.3	388.0
30°	345.8	348.4
32.5°	300.8	303.5
35°	265.3	266.6
37.5°	241.5	241.5
40°	221.7	221.7
42.5°	203.3	201.9
45°	184.7	182.1
47.5°	166.2	165.0
50°	150.5	150.5
52.5°	153.0	153.0
55°	165.0	165.0
57.5°	166.2	165.0
60°	180.8	179.4
62.5°	188.7	192.6
65°	165.0	159.7
67.5°	157.0	149.1
70°	141.2	129.3
72.5°	125.4	118.8
73°	121.4	116.1
75°	108.2	105.6
77.5°	81.8	80.5
80°	68.6	67.3
82.5°	46.2	43.6
85°	19.8	18.5
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)