

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: P227961

Luminaire Tested: **ISS-AF-600-LED-E1-T4W-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227961
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-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: 3189 lumens
Efficiency: N/A
Efficacy: 94.6 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

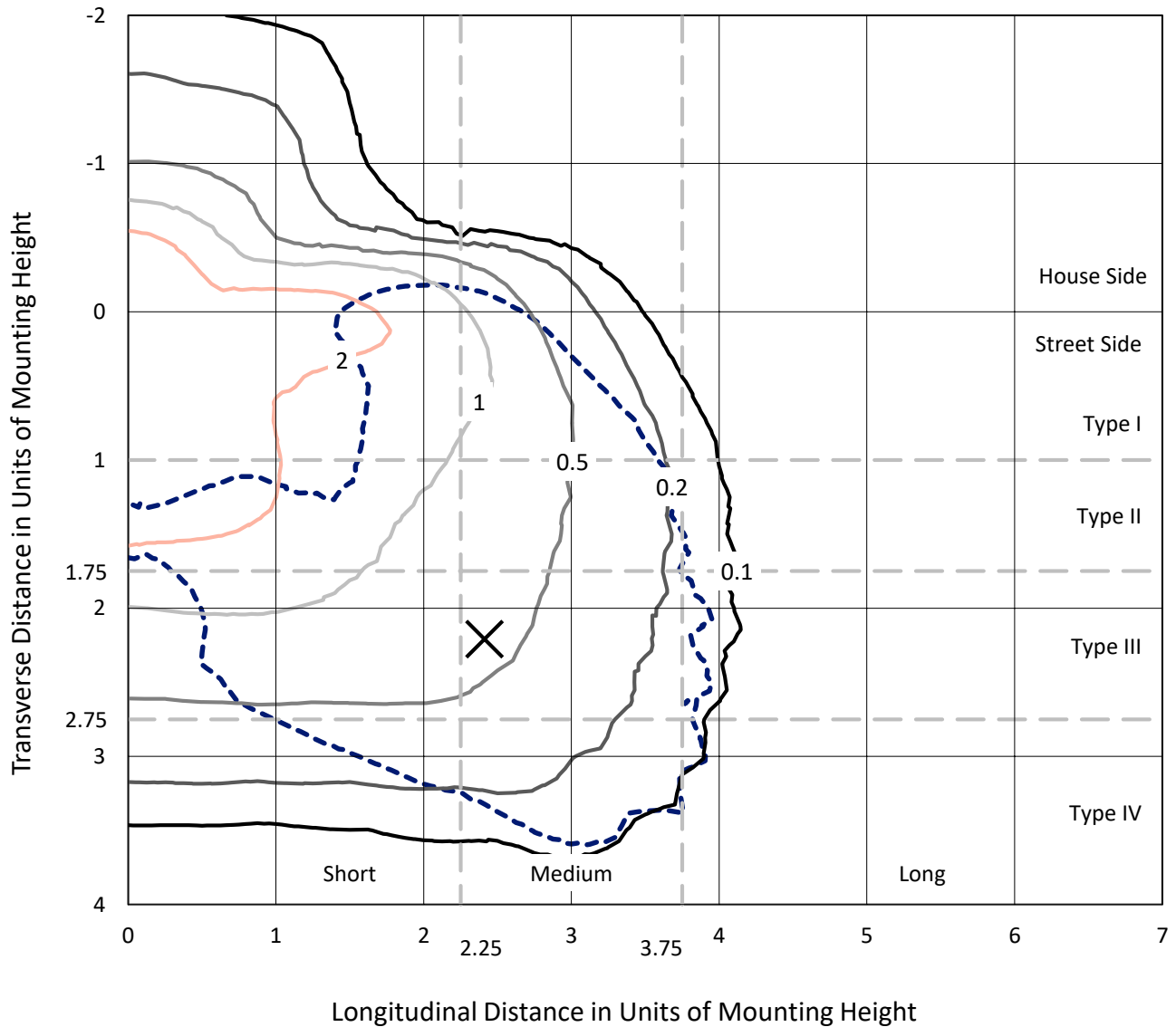
Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

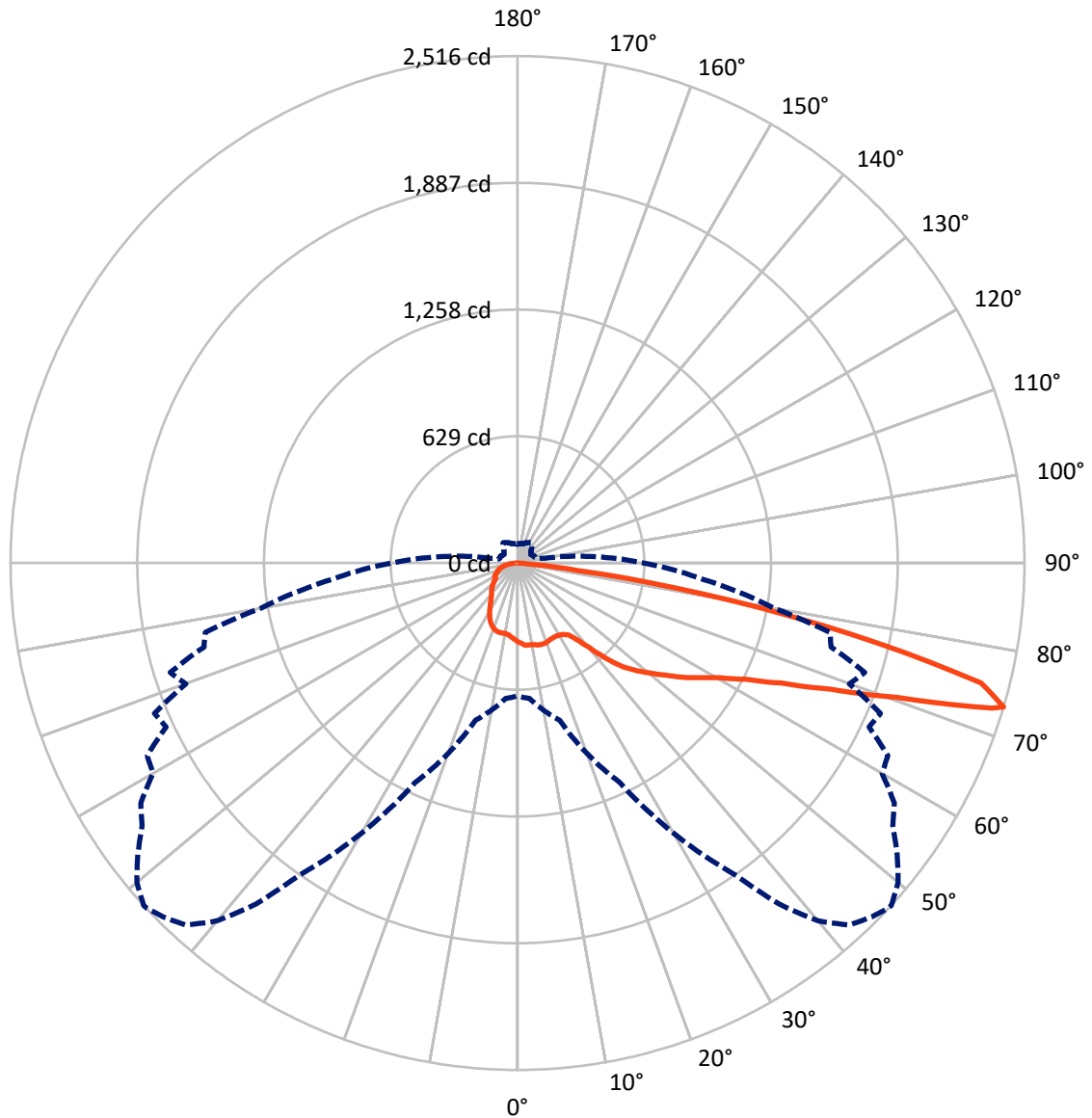
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 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	637.1	0.0	637.1
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	2551.9	0.0	2551.9
	% Fixture	80.0	0.0	80.0
Total	Lumens	3189.0	0.0	3189.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	1.2
10°-20°	111.0	3.5
20°-30°	170.6	5.3
30°-40°	248.8	7.8
40°-50°	410.3	12.9
50°-60°	642.4	20.1
60°-70°	871.4	27.3
70°-80°	645.3	20.2
80°-90°	52.1	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°	3189.0	100.0
0°-180°	3189.0	100.0



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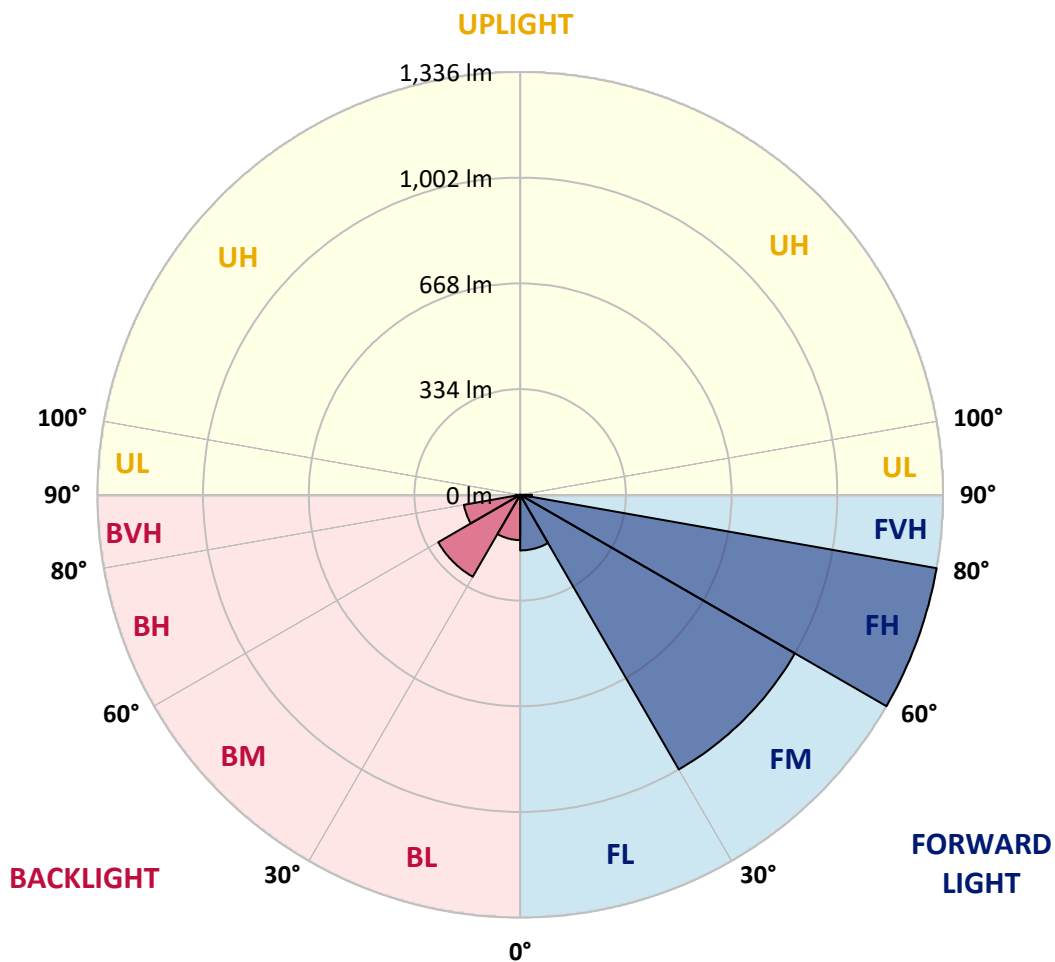
CATALOG NUMBER: ISS-AF-600-LED-E1-T4W-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	175.8	5.5			
FM	(30°-60°)	1002.3	31.4			
FH	(60°-80°)	1336.2	41.9			G1/1800
FVH	(80°-90°)	37.6	1.2			G1/100
BL	(0°-30°)	143.0	4.5	B1/500		
BM	(30°-60°)	299.2	9.4	B1/1000		
BH	(60°-80°)	180.4	5.7	B1/500		G1/500
BVH	(80°-90°)	14.5	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-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°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6
2.5°	414.8	413.7	410.6	409.5	406.3	404.2	403.2	402.1	405.3	403.2	400.0
5°	441.1	439.0	434.8	428.5	422.1	417.9	416.9	414.8	414.8	412.7	410.6
7.5°	460.0	459.0	452.7	443.2	432.7	425.3	421.1	417.9	419.0	416.9	410.6
10°	477.9	475.8	465.3	453.7	437.9	429.5	424.2	419.0	423.2	420.0	411.6
12.5°	491.6	489.5	474.8	460.0	442.1	432.7	427.4	424.2	428.5	426.3	416.9
15°	499.0	496.9	482.1	464.2	445.3	434.8	432.7	430.6	433.7	429.5	421.1
17.5°	494.8	494.8	481.1	462.1	446.4	435.8	432.7	430.6	434.8	430.6	421.1
20°	479.0	481.1	471.6	451.6	440.0	432.7	429.5	425.3	429.5	425.3	419.0
22.5°	459.0	461.1	455.8	437.9	429.5	424.2	423.2	419.0	422.1	419.0	412.7
25°	441.1	441.1	439.0	423.2	422.1	417.9	419.0	416.9	419.0	414.8	410.6
27.5°	442.1	442.1	433.7	417.9	416.9	416.9	416.9	416.9	417.9	414.8	410.6
30°	504.3	506.4	482.1	437.9	422.1	420.0	421.1	420.0	421.1	420.0	414.8
32.5°	597.9	597.9	574.8	506.4	450.6	436.9	431.6	430.6	427.4	426.3	422.1
35°	690.6	689.5	666.4	590.6	520.0	493.7	476.9	461.1	453.7	446.4	439.0
37.5°	768.5	765.3	762.2	675.8	602.2	571.6	551.6	528.5	513.7	501.1	484.2
40°	841.1	846.4	858.0	754.8	684.3	655.8	635.8	606.4	591.6	575.8	555.8
42.5°	941.1	948.5	949.5	840.1	759.0	740.1	724.3	702.2	686.4	667.4	649.5
45°	1038.0	1039.0	1042.2	931.7	850.6	826.4	814.8	793.7	773.7	749.5	734.8
47.5°	1104.3	1101.1	1114.8	1036.9	958.0	930.6	913.8	882.2	851.6	821.1	799.0
50°	1185.4	1182.2	1182.2	1156.9	1082.2	1050.6	1021.1	962.2	929.5	891.6	860.1
52.5°	1256.9	1245.4	1252.7	1267.5	1212.7	1172.7	1121.1	1054.8	1011.7	965.3	925.3
55°	1354.8	1294.8	1311.7	1363.3	1342.2	1280.1	1211.7	1141.1	1091.7	1039.0	1002.2
57.5°	1321.2	1280.1	1329.6	1420.1	1419.1	1361.2	1303.3	1216.9	1167.5	1118.0	1072.7
60°	1200.1	1221.1	1328.5	1459.1	1464.3	1419.1	1371.7	1291.7	1252.7	1201.1	1155.9
62.5°	1106.4	1136.9	1284.3	1455.9	1515.9	1473.8	1434.8	1387.5	1360.1	1316.9	1270.6
65°	1101.1	1119.0	1262.2	1452.7	1588.5	1566.4	1548.5	1526.4	1521.2	1489.6	1435.9
67.5°	1151.7	1168.5	1300.1	1533.8	1695.9	1686.4	1712.8	1708.6	1731.7	1715.9	1671.7
70°	1052.7	1062.2	1224.3	1562.2	1941.2	1983.3	2042.3	2039.1	2088.6	2050.7	1999.1
72.5°	739.0	758.0	901.1	1290.6	1946.5	2171.7	2308.6	2424.4	2478.1	2487.6	2463.4
73°	660.1	674.8	807.4	1202.2	1893.8	2133.9	2318.1	2437.0	2484.4	2513.9	2516.0
75°	229.5	236.9	352.7	728.5	1513.8	1862.3	2099.1	2206.5	2194.9	2281.2	2376.0
77.5°	73.7	74.7	91.6	188.4	730.6	1155.9	1420.1	1519.1	1462.2	1555.9	1682.2
80°	45.3	47.4	60.0	85.3	191.6	350.6	593.7	743.2	712.7	800.1	934.8
82.5°	27.4	28.4	36.8	52.6	76.8	85.3	111.6	151.6	186.3	224.2	293.7
85°	12.6	13.7	17.9	24.2	31.6	32.6	31.6	29.5	33.7	39.0	45.3
87.5°	0.0	0.0	1.1	2.1	1.1	0.0	0.0	0.0	0.0	1.1	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°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6
2.5°	403.2	400.0	400.0	395.8	397.9	393.7	395.8	391.6	393.7	388.5	391.6
5°	409.5	404.2	404.2	397.9	399.0	391.6	394.8	386.3	390.6	381.1	387.4
7.5°	412.7	403.2	407.4	395.8	401.1	388.5	394.8	381.1	389.5	374.8	385.3
10°	416.9	403.2	410.6	397.9	404.2	389.5	397.9	381.1	391.6	373.7	383.2
12.5°	423.2	408.5	414.8	400.0	408.5	391.6	400.0	383.2	393.7	373.7	385.3
15°	427.4	412.7	419.0	404.2	410.6	391.6	402.1	382.1	393.7	372.7	385.3
17.5°	426.3	412.7	419.0	402.1	409.5	390.6	401.1	381.1	391.6	369.5	383.2
20°	422.1	410.6	414.8	400.0	406.3	387.4	396.9	376.9	388.5	366.3	380.0
22.5°	416.9	405.3	410.6	396.9	403.2	384.2	392.7	374.8	386.3	364.2	376.9
25°	413.7	404.2	407.4	393.7	402.1	385.3	393.7	373.7	386.3	364.2	379.0
27.5°	412.7	404.2	410.6	397.9	405.3	390.6	399.0	381.1	391.6	368.5	383.2
30°	419.0	411.6	416.9	406.3	412.7	397.9	406.3	389.5	400.0	377.9	394.8
32.5°	426.3	419.0	424.2	414.8	424.2	409.5	420.0	403.2	415.8	393.7	409.5
35°	442.1	433.7	441.1	430.6	441.1	429.5	441.1	423.2	439.0	416.9	433.7
37.5°	483.2	460.0	467.4	455.8	466.4	451.6	471.6	453.7	471.6	450.6	473.7
40°	548.5	507.4	514.8	490.6	506.4	484.2	508.5	494.8	519.0	492.7	522.1
42.5°	633.7	594.8	587.4	550.6	564.3	537.9	562.1	537.9	570.6	545.3	582.2
45°	711.6	670.6	659.0	623.2	632.7	597.9	628.5	594.8	637.9	608.5	654.8
47.5°	775.9	727.4	718.0	676.9	693.7	661.1	699.0	663.2	715.8	686.4	740.1
50°	834.8	774.8	772.7	728.5	756.9	724.3	778.0	753.7	805.3	775.9	839.0
52.5°	902.2	826.4	836.9	796.9	842.2	814.8	876.9	842.2	909.5	878.0	947.4
55°	973.8	893.8	921.1	896.9	950.6	932.7	985.3	953.8	1020.1	988.5	1062.2
57.5°	1052.7	984.3	1032.7	1021.1	1068.5	1046.4	1105.4	1076.9	1143.2	1116.9	1190.6
60°	1155.9	1110.6	1158.0	1156.9	1198.0	1196.9	1234.8	1218.0	1281.2	1269.6	1336.9
62.5°	1289.6	1253.8	1304.3	1290.6	1340.1	1331.7	1378.0	1378.0	1423.3	1439.1	1506.4
65°	1469.6	1422.2	1482.2	1461.2	1510.6	1512.8	1542.2	1547.5	1602.2	1620.1	1678.0
67.5°	1713.8	1659.1	1706.5	1666.4	1723.3	1720.1	1745.4	1755.9	1763.3	1806.5	1812.8
70°	2065.4	1983.3	2026.5	1971.7	1982.3	1989.6	1942.3	1977.0	1892.8	1961.2	1868.6
72.5°	2445.5	2351.8	2277.0	2222.3	2113.9	2098.1	1960.2	1989.6	1810.7	1869.6	1682.2
73°	2465.5	2374.9	2273.9	2217.0	2088.6	2071.7	1924.4	1949.6	1751.7	1807.5	1610.7
75°	2241.2	2265.4	2022.3	2045.4	1822.2	1848.6	1618.0	1647.5	1404.3	1446.4	1192.7
77.5°	1510.6	1591.7	1319.1	1421.2	1144.3	1246.4	933.8	943.2	688.5	643.2	436.9
80°	748.5	818.0	580.0	633.7	425.3	417.9	254.8	211.6	180.0	184.2	189.5
82.5°	215.8	243.2	150.5	149.5	106.3	101.1	101.1	107.4	109.5	122.1	119.0
85°	41.1	49.5	43.2	57.9	51.6	56.8	52.6	61.1	56.8	70.5	61.1
87.5°	1.1	0.0	1.1	3.2	3.2	7.4	5.3	8.4	8.4	14.7	13.7
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°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6
2.5°	387.4	392.7	390.6	388.5	386.3	385.3	381.1	383.2	377.9	382.1	377.9
5°	379.0	385.3	382.1	377.9	375.8	373.7	366.3	371.6	363.2	370.6	364.2
7.5°	369.5	380.0	376.9	372.7	368.5	366.3	351.6	363.2	350.6	361.1	350.6
10°	366.3	377.9	373.7	368.5	364.2	362.1	344.2	357.9	344.2	355.8	342.1
12.5°	364.2	377.9	371.6	366.3	362.1	359.0	339.0	355.8	337.9	354.8	339.0
15°	362.1	377.9	369.5	363.2	359.0	355.8	334.8	353.7	333.7	352.7	334.8
17.5°	360.0	374.8	367.4	360.0	355.8	353.7	330.6	350.6	329.5	350.6	332.7
20°	356.9	371.6	363.2	355.8	351.6	348.4	325.3	346.3	324.2	345.3	325.3
22.5°	352.7	368.5	361.1	353.7	349.5	344.2	319.0	341.1	317.9	339.0	320.0
25°	353.7	370.6	361.1	353.7	347.4	342.1	314.8	339.0	312.7	333.7	312.7
27.5°	359.0	373.7	364.2	357.9	349.5	343.2	314.8	336.9	310.6	328.4	306.3
30°	369.5	384.2	375.8	366.3	359.0	350.6	320.0	337.9	310.6	322.1	300.0
32.5°	387.4	401.1	392.7	385.3	376.9	364.2	330.6	343.2	312.7	317.9	294.8
35°	410.6	427.4	423.2	417.9	407.4	385.3	348.4	350.6	316.9	313.7	287.4
37.5°	448.5	471.6	470.6	469.5	457.9	417.9	368.5	365.3	321.1	310.6	277.9
40°	497.9	525.3	532.7	540.0	515.8	456.9	391.6	380.0	323.2	304.2	263.2
42.5°	555.8	592.7	614.8	628.5	584.3	500.0	417.9	396.9	323.2	294.8	246.3
45°	627.4	670.6	712.7	727.4	660.1	546.4	445.3	410.6	319.0	280.0	224.2
47.5°	714.8	765.3	823.2	830.6	742.2	595.8	464.2	420.0	305.3	260.0	204.2
50°	811.6	872.7	958.0	952.7	829.5	647.4	476.9	426.3	281.1	236.9	180.0
52.5°	920.1	996.9	1118.0	1093.8	935.9	711.6	488.5	434.8	251.6	209.5	155.8
55°	1055.9	1147.5	1299.0	1247.5	1053.8	782.2	505.3	435.8	212.6	176.9	137.9
57.5°	1202.2	1300.1	1493.8	1400.1	1164.3	836.9	497.9	402.1	173.7	149.5	124.2
60°	1378.0	1497.0	1688.6	1542.2	1256.9	855.9	446.4	331.6	148.4	134.7	117.9
62.5°	1574.9	1692.8	1848.6	1641.2	1309.6	824.3	331.6	229.5	127.4	120.0	108.4
65°	1784.4	1895.9	1925.4	1649.6	1274.8	685.3	205.3	150.5	110.5	107.4	100.0
67.5°	1977.0	1987.5	1852.8	1512.8	1106.4	477.9	140.0	120.0	102.1	101.1	96.8
70°	2026.5	1844.4	1540.1	1178.0	799.0	284.2	113.7	104.2	97.9	97.9	94.7
72.5°	1692.8	1404.3	1029.6	713.7	435.8	151.6	96.8	94.7	92.6	92.6	90.5
73°	1587.5	1293.8	922.2	623.2	368.5	135.8	94.7	92.6	91.6	90.5	89.5
75°	1054.8	812.7	523.2	315.8	171.6	97.9	84.2	84.2	83.2	84.2	83.2
77.5°	406.3	306.3	202.1	135.8	97.9	76.8	71.6	72.6	71.6	73.7	72.6
80°	179.0	176.9	133.7	95.8	71.6	57.9	57.9	57.9	59.0	60.0	60.0
82.5°	122.1	103.2	79.0	59.0	43.2	42.1	43.2	43.2	44.2	45.3	44.2
85°	67.4	56.8	42.1	26.3	23.2	28.4	28.4	28.4	27.4	27.4	26.3
87.5°	21.1	15.8	11.6	3.2	5.3	5.3	7.4	6.3	6.3	7.4	7.4
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-8030

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6	391.6
2.5°	382.1	379.0	382.1	376.9	381.1	376.9	380.0	380.0	379.0	379.0	379.0
5°	369.5	364.2	369.5	366.3	369.5	365.3	368.5	369.5	370.6	373.7	372.7
7.5°	360.0	349.5	361.1	350.6	360.0	350.6	359.0	360.0	363.2	367.4	370.6
10°	355.8	342.1	355.8	343.2	354.8	344.2	354.8	355.8	359.0	364.2	369.5
12.5°	353.7	339.0	353.7	341.1	353.7	343.2	353.7	356.9	359.0	363.2	369.5
15°	351.6	336.9	353.7	340.0	353.7	343.2	354.8	356.9	360.0	364.2	369.5
17.5°	350.6	333.7	351.6	339.0	351.6	341.1	353.7	353.7	357.9	363.2	366.3
20°	346.3	330.6	346.3	333.7	346.3	336.9	347.4	347.4	351.6	353.7	359.0
22.5°	340.0	323.2	337.9	326.3	337.9	328.4	336.9	336.9	340.0	343.2	346.3
25°	330.6	314.8	327.4	316.9	325.3	316.9	323.2	322.1	324.2	326.3	328.4
27.5°	320.0	304.2	314.8	303.2	308.4	300.0	304.2	302.1	303.2	304.2	305.3
30°	308.4	292.7	297.9	287.4	288.4	280.0	282.1	279.0	277.9	276.9	274.8
32.5°	295.8	279.0	279.0	268.4	266.3	259.0	259.0	254.8	251.6	247.4	243.2
35°	280.0	265.3	257.9	249.5	245.3	237.9	236.9	231.6	224.2	216.9	212.6
37.5°	264.2	247.4	236.9	228.4	224.2	219.0	217.9	213.7	205.3	196.9	190.5
40°	243.2	226.3	214.8	211.6	208.4	204.2	205.3	200.0	191.6	182.1	176.9
42.5°	222.1	207.4	197.9	196.9	194.8	193.7	194.8	190.5	181.1	172.6	166.3
45°	204.2	189.5	180.0	179.0	177.9	182.1	183.2	182.1	171.6	163.2	154.7
47.5°	186.3	168.4	162.1	160.0	161.1	167.4	169.5	172.6	163.2	153.7	142.1
50°	165.3	148.4	146.3	144.2	145.3	150.5	155.8	162.1	153.7	140.0	124.2
52.5°	146.3	131.6	132.6	130.5	132.6	136.9	141.1	151.6	141.1	127.4	120.0
55°	131.6	120.0	122.1	120.0	122.1	127.4	130.5	139.0	139.0	135.8	129.5
57.5°	121.1	112.6	114.7	112.6	115.8	120.0	123.2	141.1	151.6	143.2	130.5
60°	114.7	107.4	108.4	106.3	108.4	114.7	121.1	142.1	159.0	142.1	132.6
62.5°	105.3	99.0	97.9	97.9	100.0	110.5	113.7	132.6	156.9	141.1	133.7
65°	99.0	93.7	92.6	91.6	93.7	101.1	104.2	123.2	151.6	133.7	121.1
67.5°	95.8	91.6	89.5	87.4	89.5	95.8	99.0	115.8	143.2	127.4	113.7
70°	92.6	88.4	87.4	85.3	86.3	90.5	94.7	106.3	135.8	120.0	106.3
72.5°	88.4	84.2	83.2	80.0	81.1	85.3	87.4	100.0	126.3	112.6	99.0
73°	87.4	83.2	82.1	79.0	80.0	83.2	85.3	97.9	124.2	111.6	97.9
75°	82.1	77.9	76.8	74.7	75.8	75.8	77.9	89.5	117.9	105.3	91.6
77.5°	72.6	69.5	68.4	66.3	65.3	64.2	67.4	79.0	107.4	94.7	73.7
80°	60.0	56.8	55.8	51.6	51.6	51.6	55.8	67.4	80.0	68.4	56.8
82.5°	44.2	42.1	42.1	39.0	37.9	36.8	40.0	46.3	63.2	53.7	44.2
85°	26.3	25.3	26.3	23.2	24.2	23.2	26.3	32.6	34.7	27.4	21.1
87.5°	6.3	7.4	7.4	7.4	6.3	6.3	5.3	4.2	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°	391.6	391.6
2.5°	377.9	376.9
5°	372.7	372.7
7.5°	370.6	370.6
10°	371.6	371.6
12.5°	371.6	373.7
15°	374.8	373.7
17.5°	371.6	371.6
20°	363.2	365.3
22.5°	351.6	351.6
25°	332.7	333.7
27.5°	307.4	309.5
30°	275.8	277.9
32.5°	240.0	242.1
35°	211.6	212.6
37.5°	192.6	192.6
40°	176.9	176.9
42.5°	162.1	161.1
45°	147.4	145.3
47.5°	132.6	131.6
50°	120.0	120.0
52.5°	122.1	122.1
55°	131.6	131.6
57.5°	132.6	131.6
60°	144.2	143.2
62.5°	150.5	153.7
65°	131.6	127.4
67.5°	125.3	119.0
70°	112.6	103.2
72.5°	100.0	94.7
73°	96.8	92.6
75°	86.3	84.2
77.5°	65.3	64.2
80°	54.7	53.7
82.5°	36.8	34.7
85°	15.8	14.7
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)