

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: P228021

Luminaire Tested: **ISC-AF-1200-LED-E1-T4W-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228021
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-1200-LED-E1-T4W-8030
Description: IMPACT ELITE LED CYLINDER 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: 5370 lumens
Efficiency: N/A
Efficacy: 81.4 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

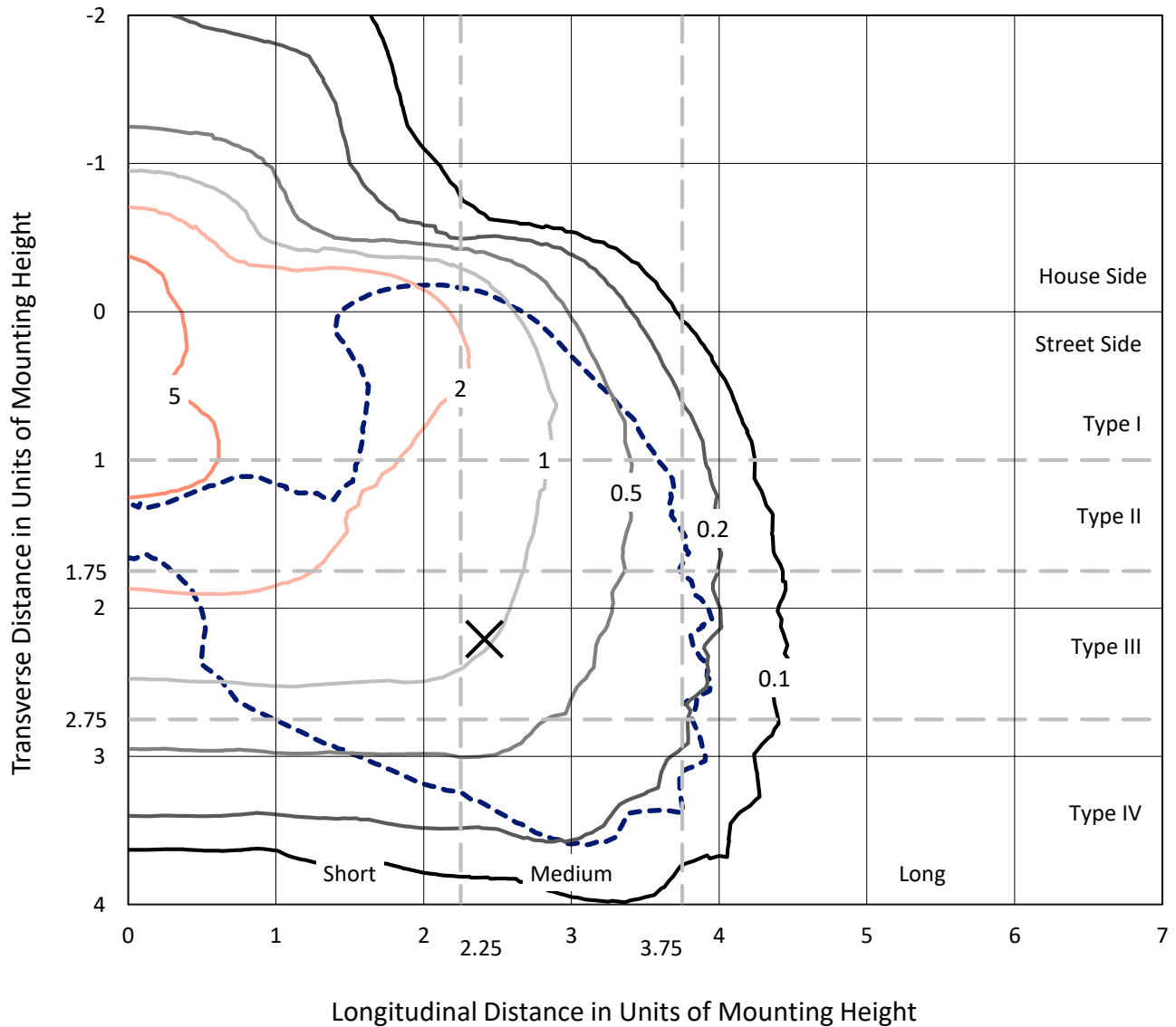
Input Watts (W): 66
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

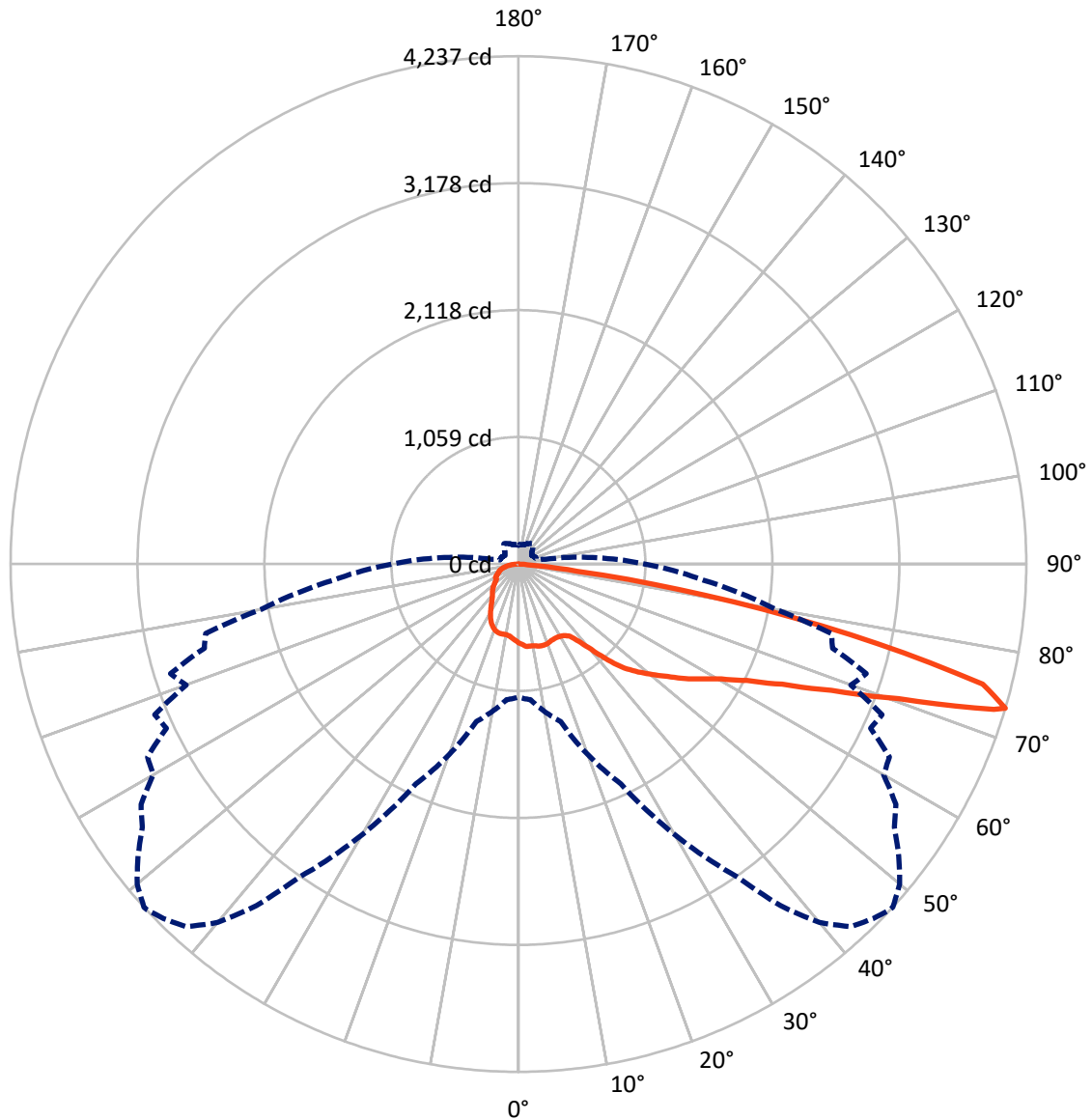
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 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	1072.9	0.0	1072.9
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	4297.1	0.0	4297.1
	% Fixture	80.0	0.0	80.0
Total	Lumens	5370.0	0.0	5370.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.8	1.2
10°-20°	186.8	3.5
20°-30°	287.2	5.3
30°-40°	419.0	7.8
40°-50°	690.9	12.9
50°-60°	1081.7	20.1
60°-70°	1467.3	27.3
70°-80°	1086.5	20.2
80°-90°	87.8	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°	5370.0	100.0
0°-180°	5370.0	100.0



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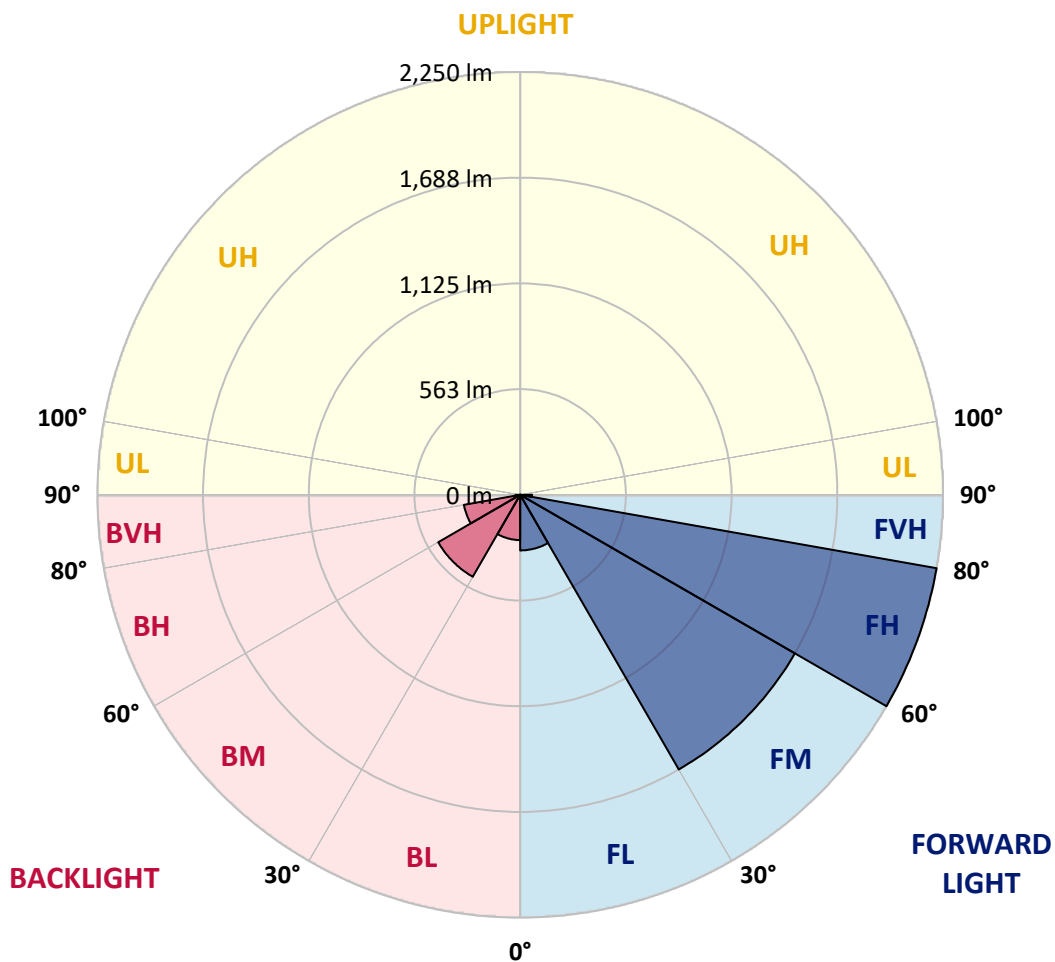
CATALOG NUMBER: ISC-AF-1200-LED-E1-T4W-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	296.0	5.5			
FM	(30°-60°)	1687.7	31.4			
FH	(60°-80°)	2250.1	41.9			G2/5000
FVH	(80°-90°)	63.3	1.2			G1/100
BL	(0°-30°)	240.8	4.5	B1/500		
BM	(30°-60°)	503.8	9.4	B1/1000		
BH	(60°-80°)	303.8	5.7	B1/500		G1/500
BVH	(80°-90°)	24.5	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°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
2.5°	698.4	696.7	691.3	689.6	684.3	680.7	678.9	677.2	682.5	678.9	673.6
5°	742.8	739.2	732.1	721.5	710.8	703.8	702.0	698.4	698.4	694.9	691.3
7.5°	774.7	772.9	762.3	746.3	728.6	716.2	709.1	703.8	705.5	702.0	691.3
10°	804.8	801.3	783.5	764.0	737.4	723.3	714.4	705.5	712.6	707.3	693.1
12.5°	827.8	824.3	799.5	774.7	744.5	728.6	719.7	714.4	721.5	717.9	702.0
15°	840.3	836.7	811.9	781.8	749.8	732.1	728.6	725.0	730.3	723.3	709.1
17.5°	833.2	833.2	810.1	778.2	751.6	733.9	728.6	725.0	732.1	725.0	709.1
20°	806.6	810.1	794.2	760.5	741.0	728.6	723.3	716.2	723.3	716.2	705.5
22.5°	772.9	776.4	767.6	737.4	723.3	714.4	712.6	705.5	710.8	705.5	694.9
25°	742.8	742.8	739.2	712.6	710.8	703.8	705.5	702.0	705.5	698.4	691.3
27.5°	744.5	744.5	730.3	703.8	702.0	702.0	702.0	702.0	703.8	698.4	691.3
30°	849.1	852.7	811.9	737.4	710.8	707.3	709.1	707.3	709.1	707.3	698.4
32.5°	1006.9	1006.9	967.9	852.7	758.7	735.7	726.8	725.0	719.7	717.9	710.8
35°	1162.9	1161.1	1122.1	994.5	875.7	831.4	803.0	776.4	764.0	751.6	739.2
37.5°	1294.1	1288.7	1283.4	1138.1	1014.0	962.6	928.9	889.9	865.1	843.8	815.4
40°	1416.4	1425.2	1444.7	1271.0	1152.2	1104.4	1070.7	1021.1	996.2	969.7	936.0
42.5°	1584.8	1597.2	1599.0	1414.6	1278.1	1246.2	1219.6	1182.4	1155.8	1123.9	1093.7
45°	1747.9	1749.6	1755.0	1568.8	1432.3	1391.6	1372.1	1336.6	1302.9	1262.1	1237.3
47.5°	1859.5	1854.2	1877.3	1746.1	1613.1	1567.0	1538.7	1485.5	1434.1	1382.7	1345.5
50°	1996.0	1990.7	1990.7	1948.2	1822.3	1769.1	1719.5	1620.2	1565.3	1501.5	1448.3
52.5°	2116.6	2097.1	2109.5	2134.3	2042.1	1974.8	1887.9	1776.2	1703.5	1625.5	1558.2
55°	2281.4	2180.4	2208.8	2295.6	2260.2	2155.6	2040.4	1921.6	1838.3	1749.6	1687.6
57.5°	2224.7	2155.6	2238.9	2391.3	2389.6	2292.1	2194.6	2049.2	1965.9	1882.6	1806.4
60°	2020.9	2056.3	2237.1	2456.9	2465.8	2389.6	2309.8	2175.1	2109.5	2022.6	1946.4
62.5°	1863.1	1914.5	2162.7	2451.6	2552.7	2481.8	2416.2	2336.4	2290.3	2217.6	2139.6
65°	1854.2	1884.4	2125.4	2446.3	2675.0	2637.7	2607.6	2570.4	2561.5	2508.3	2417.9
67.5°	1939.3	1967.7	2189.3	2582.8	2855.8	2839.8	2884.2	2877.1	2916.1	2889.5	2815.0
70°	1772.7	1788.6	2061.6	2630.7	3268.8	3339.7	3439.0	3433.7	3517.0	3453.2	3366.3
72.5°	1244.4	1276.3	1517.4	2173.3	3277.7	3657.0	3887.5	4082.5	4172.9	4188.8	4148.1
73°	1111.5	1136.3	1359.6	2024.4	3189.1	3593.2	3903.4	4103.8	4183.5	4233.2	4236.7
75°	386.4	398.9	593.8	1226.7	2549.1	3135.9	3534.7	3715.5	3696.0	3841.4	4000.9
77.5°	124.1	125.9	154.2	317.3	1230.2	1946.4	2391.3	2558.0	2462.3	2620.0	2832.7
80°	76.2	79.8	101.0	143.6	322.6	590.3	999.8	1251.5	1200.1	1347.2	1574.1
82.5°	46.1	47.9	62.0	88.6	129.4	143.6	187.9	255.3	313.8	377.6	494.6
85°	21.3	23.0	30.1	40.8	53.2	55.0	53.2	49.6	56.7	65.6	76.2
87.5°	0.0	0.0	1.8	3.5	1.8	0.0	0.0	0.0	0.0	1.8	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°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
2.5°	678.9	673.6	673.6	666.5	670.1	663.0	666.5	659.4	663.0	654.1	659.4
5°	689.6	680.7	680.7	670.1	671.8	659.4	664.8	650.6	657.7	641.7	652.3
7.5°	694.9	678.9	686.0	666.5	675.4	654.1	664.8	641.7	655.9	631.1	648.8
10°	702.0	678.9	691.3	670.1	680.7	655.9	670.1	641.7	659.4	629.3	645.3
12.5°	712.6	687.8	698.4	673.6	687.8	659.4	673.6	645.3	663.0	629.3	648.8
15°	719.7	694.9	705.5	680.7	691.3	659.4	677.2	643.5	663.0	627.5	648.8
17.5°	717.9	694.9	705.5	677.2	689.6	657.7	675.4	641.7	659.4	622.2	645.3
20°	710.8	691.3	698.4	673.6	684.3	652.3	668.3	634.6	654.1	616.9	639.9
22.5°	702.0	682.5	691.3	668.3	678.9	647.0	661.2	631.1	650.6	613.3	634.6
25°	696.7	680.7	686.0	663.0	677.2	648.8	663.0	629.3	650.6	613.3	638.2
27.5°	694.9	680.7	691.3	670.1	682.5	657.7	671.8	641.7	659.4	620.4	645.3
30°	705.5	693.1	702.0	684.3	694.9	670.1	684.3	655.9	673.6	636.4	664.8
32.5°	717.9	705.5	714.4	698.4	714.4	689.6	707.3	678.9	700.2	663.0	689.6
35°	744.5	730.3	742.8	725.0	742.8	723.3	742.8	712.6	739.2	702.0	730.3
37.5°	813.7	774.7	787.1	767.6	785.3	760.5	794.2	764.0	794.2	758.7	797.7
40°	923.6	854.4	866.8	826.1	852.7	815.4	856.2	833.2	873.9	829.6	879.2
42.5°	1067.2	1001.6	989.2	927.1	950.2	905.8	946.6	905.8	960.8	918.2	980.3
45°	1198.3	1129.2	1109.7	1049.4	1065.4	1006.9	1058.3	1001.6	1074.2	1024.6	1102.6
47.5°	1306.5	1224.9	1209.0	1139.8	1168.2	1113.2	1177.1	1116.8	1205.4	1155.8	1246.2
50°	1405.7	1304.7	1301.1	1226.7	1274.6	1219.6	1310.0	1269.2	1356.1	1306.5	1412.8
52.5°	1519.2	1391.6	1409.3	1341.9	1418.1	1372.1	1476.6	1418.1	1531.6	1478.4	1595.4
55°	1639.7	1505.0	1551.1	1510.3	1600.7	1570.6	1659.2	1606.0	1717.7	1664.5	1788.6
57.5°	1772.7	1657.5	1739.0	1719.5	1799.3	1762.0	1861.3	1813.5	1925.1	1880.8	2004.9
60°	1946.4	1870.2	1949.9	1948.2	2017.3	2015.5	2079.4	2051.0	2157.4	2137.9	2251.3
62.5°	2171.5	2111.3	2196.4	2173.3	2256.6	2242.4	2320.4	2320.4	2396.7	2423.3	2536.7
65°	2474.7	2394.9	2495.9	2460.5	2543.8	2547.3	2597.0	2605.8	2698.0	2728.2	2825.7
67.5°	2885.9	2793.7	2873.5	2806.2	2901.9	2896.6	2939.1	2956.8	2969.2	3041.9	3052.6
70°	3478.0	3339.7	3412.4	3320.2	3338.0	3350.4	3270.6	3329.1	3187.3	3302.5	3146.5
72.5°	4117.9	3960.2	3834.3	3742.1	3559.5	3533.0	3300.7	3350.4	3049.0	3148.3	2832.7
73°	4151.6	3999.2	3829.0	3733.3	3517.0	3488.6	3240.5	3283.0	2949.7	3043.7	2712.2
75°	3774.0	3814.8	3405.3	3444.3	3068.5	3112.8	2724.6	2774.2	2364.8	2435.7	2008.4
77.5°	2543.8	2680.3	2221.2	2393.1	1926.9	2098.9	1572.4	1588.3	1159.3	1083.1	735.7
80°	1260.4	1377.4	976.7	1067.2	716.2	703.8	429.0	356.3	303.1	310.2	319.1
82.5°	363.4	409.5	253.5	251.7	179.0	170.2	170.2	180.8	184.4	205.6	200.3
85°	69.1	83.3	72.7	97.5	86.9	95.7	88.6	102.8	95.7	118.8	102.8
87.5°	1.8	0.0	1.8	5.3	5.3	12.4	8.9	14.2	14.2	24.8	23.0
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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
2.5°	652.3	661.2	657.7	654.1	650.6	648.8	641.7	645.3	636.4	643.5	636.4
5°	638.2	648.8	643.5	636.4	632.8	629.3	616.9	625.8	611.6	624.0	613.3
7.5°	622.2	639.9	634.6	627.5	620.4	616.9	592.1	611.6	590.3	608.0	590.3
10°	616.9	636.4	629.3	620.4	613.3	609.8	579.7	602.7	579.7	599.2	576.1
12.5°	613.3	636.4	625.8	616.9	609.8	604.5	570.8	599.2	569.0	597.4	570.8
15°	609.8	636.4	622.2	611.6	604.5	599.2	563.7	595.6	561.9	593.8	563.7
17.5°	606.3	631.1	618.7	606.3	599.2	595.6	556.6	590.3	554.8	590.3	560.2
20°	600.9	625.8	611.6	599.2	592.1	586.8	547.8	583.2	546.0	581.4	547.8
22.5°	593.8	620.4	608.0	595.6	588.5	579.7	537.1	574.3	535.3	570.8	538.9
25°	595.6	624.0	608.0	595.6	585.0	576.1	530.0	570.8	526.5	561.9	526.5
27.5°	604.5	629.3	613.3	602.7	588.5	577.9	530.0	567.3	522.9	553.1	515.8
30°	622.2	647.0	632.8	616.9	604.5	590.3	538.9	569.0	522.9	542.4	505.2
32.5°	652.3	675.4	661.2	648.8	634.6	613.3	556.6	577.9	526.5	535.3	496.4
35°	691.3	719.7	712.6	703.8	686.0	648.8	586.8	590.3	533.6	528.3	483.9
37.5°	755.2	794.2	792.4	790.6	771.1	703.8	620.4	615.1	540.7	522.9	468.0
40°	838.5	884.6	897.0	909.4	868.6	769.3	659.4	639.9	544.2	512.3	443.2
42.5°	936.0	998.0	1035.2	1058.3	983.8	842.0	703.8	668.3	544.2	496.4	414.8
45°	1056.5	1129.2	1200.1	1224.9	1111.5	920.0	749.8	691.3	537.1	471.5	377.6
47.5°	1203.6	1288.7	1386.2	1398.6	1249.7	1003.3	781.8	707.3	514.1	437.9	343.9
50°	1366.7	1469.6	1613.1	1604.3	1396.9	1090.2	803.0	717.9	473.3	398.9	303.1
52.5°	1549.3	1678.7	1882.6	1841.8	1575.9	1198.3	822.5	732.1	423.7	352.8	262.4
55°	1778.0	1932.2	2187.5	2100.6	1774.5	1317.1	850.9	733.9	358.1	297.8	232.2
57.5°	2024.4	2189.3	2515.4	2357.7	1960.6	1409.3	838.5	677.2	292.5	251.7	209.2
60°	2320.4	2520.8	2843.4	2597.0	2116.6	1441.2	751.6	558.4	249.9	226.9	198.5
62.5°	2651.9	2850.5	3112.8	2763.6	2205.2	1388.0	558.4	386.4	214.5	202.1	182.6
65°	3004.7	3192.6	3242.2	2777.8	2146.7	1154.0	345.7	253.5	186.1	180.8	168.4
67.5°	3329.1	3346.8	3119.9	2547.3	1863.1	804.8	235.8	202.1	171.9	170.2	163.1
70°	3412.4	3105.7	2593.4	1983.6	1345.5	478.6	191.4	175.5	164.9	164.9	159.5
72.5°	2850.5	2364.8	1733.7	1201.9	733.9	255.3	163.1	159.5	156.0	156.0	152.5
73°	2673.2	2178.6	1552.9	1049.4	620.4	228.7	159.5	156.0	154.2	152.5	150.7
75°	1776.2	1368.5	881.0	531.8	288.9	164.9	141.8	141.8	140.0	141.8	140.0
77.5°	684.3	515.8	340.4	228.7	164.9	129.4	120.5	122.3	120.5	124.1	122.3
80°	301.4	297.8	225.1	161.3	120.5	97.5	97.5	97.5	99.3	101.0	101.0
82.5°	205.6	173.7	133.0	99.3	72.7	70.9	72.7	72.7	74.5	76.2	74.5
85°	113.5	95.7	70.9	44.3	39.0	47.9	47.9	47.9	46.1	46.1	44.3
87.5°	35.5	26.6	19.5	5.3	8.9	8.9	12.4	10.6	10.6	12.4	12.4
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: ISC-AF-1200-LED-E1-T4W-8030

CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4	659.4
2.5°	643.5	638.2	643.5	634.6	641.7	634.6	639.9	639.9	638.2	638.2	638.2
5°	622.2	613.3	622.2	616.9	622.2	615.1	620.4	622.2	624.0	629.3	627.5
7.5°	606.3	588.5	608.0	590.3	606.3	590.3	604.5	606.3	611.6	618.7	624.0
10°	599.2	576.1	599.2	577.9	597.4	579.7	597.4	599.2	604.5	613.3	622.2
12.5°	595.6	570.8	595.6	574.3	595.6	577.9	595.6	600.9	604.5	611.6	622.2
15°	592.1	567.3	595.6	572.6	595.6	577.9	597.4	600.9	606.3	613.3	622.2
17.5°	590.3	561.9	592.1	570.8	592.1	574.3	595.6	595.6	602.7	611.6	616.9
20°	583.2	556.6	583.2	561.9	583.2	567.3	585.0	585.0	592.1	595.6	604.5
22.5°	572.6	544.2	569.0	549.5	569.0	553.1	567.3	567.3	572.6	577.9	583.2
25°	556.6	530.0	551.3	533.6	547.8	533.6	544.2	542.4	546.0	549.5	553.1
27.5°	538.9	512.3	530.0	510.5	519.4	505.2	512.3	508.8	510.5	512.3	514.1
30°	519.4	492.8	501.7	483.9	485.7	471.5	475.1	469.8	468.0	466.2	462.7
32.5°	498.1	469.8	469.8	452.0	448.5	436.1	436.1	429.0	423.7	416.6	409.5
35°	471.5	446.7	434.3	420.1	413.0	400.6	398.9	390.0	377.6	365.2	358.1
37.5°	444.9	416.6	398.9	384.7	377.6	368.7	366.9	359.9	345.7	331.5	320.9
40°	409.5	381.1	361.6	356.3	351.0	343.9	345.7	336.8	322.6	306.7	297.8
42.5°	374.0	349.2	333.3	331.5	327.9	326.2	327.9	320.9	304.9	290.7	280.1
45°	343.9	319.1	303.1	301.4	299.6	306.7	308.4	306.7	288.9	274.8	260.6
47.5°	313.8	283.6	273.0	269.4	271.2	281.9	285.4	290.7	274.8	258.8	239.3
50°	278.3	249.9	246.4	242.9	244.6	253.5	262.4	273.0	258.8	235.8	209.2
52.5°	246.4	221.6	223.4	219.8	223.4	230.4	237.5	255.3	237.5	214.5	202.1
55°	221.6	202.1	205.6	202.1	205.6	214.5	219.8	234.0	234.0	228.7	218.0
57.5°	203.9	189.7	193.2	189.7	195.0	202.1	207.4	237.5	255.3	241.1	219.8
60°	193.2	180.8	182.6	179.0	182.6	193.2	203.9	239.3	267.7	239.3	223.4
62.5°	177.3	166.6	164.9	164.9	168.4	186.1	191.4	223.4	264.1	237.5	225.1
65°	166.6	157.8	156.0	154.2	157.8	170.2	175.5	207.4	255.3	225.1	203.9
67.5°	161.3	154.2	150.7	147.1	150.7	161.3	166.6	195.0	241.1	214.5	191.4
70°	156.0	148.9	147.1	143.6	145.4	152.5	159.5	179.0	228.7	202.1	179.0
72.5°	148.9	141.8	140.0	134.7	136.5	143.6	147.1	168.4	212.7	189.7	166.6
73°	147.1	140.0	138.3	133.0	134.7	140.0	143.6	164.9	209.2	187.9	164.9
75°	138.3	131.2	129.4	125.9	127.6	127.6	131.2	150.7	198.5	177.3	154.2
77.5°	122.3	117.0	115.2	111.7	109.9	108.1	113.5	133.0	180.8	159.5	124.1
80°	101.0	95.7	94.0	86.9	86.9	86.9	94.0	113.5	134.7	115.2	95.7
82.5°	74.5	70.9	70.9	65.6	63.8	62.0	67.4	78.0	106.4	90.4	74.5
85°	44.3	42.5	44.3	39.0	40.8	39.0	44.3	55.0	58.5	46.1	35.5
87.5°	10.6	12.4	12.4	12.4	10.6	10.6	8.9	7.1	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°	659.4	659.4
2.5°	636.4	634.6
5°	627.5	627.5
7.5°	624.0	624.0
10°	625.8	625.8
12.5°	625.8	629.3
15°	631.1	629.3
17.5°	625.8	625.8
20°	611.6	615.1
22.5°	592.1	592.1
25°	560.2	561.9
27.5°	517.6	521.2
30°	464.4	468.0
32.5°	404.2	407.7
35°	356.3	358.1
37.5°	324.4	324.4
40°	297.8	297.8
42.5°	273.0	271.2
45°	248.2	244.6
47.5°	223.4	221.6
50°	202.1	202.1
52.5°	205.6	205.6
55°	221.6	221.6
57.5°	223.4	221.6
60°	242.9	241.1
62.5°	253.5	258.8
65°	221.6	214.5
67.5°	210.9	200.3
70°	189.7	173.7
72.5°	168.4	159.5
73°	163.1	156.0
75°	145.4	141.8
77.5°	109.9	108.1
80°	92.2	90.4
82.5°	62.0	58.5
85°	26.6	24.8
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)