

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: P228090

Luminaire Tested: **ISS-AF-600-LED-E1-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228090
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29761)
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-SL2
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3781.9 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

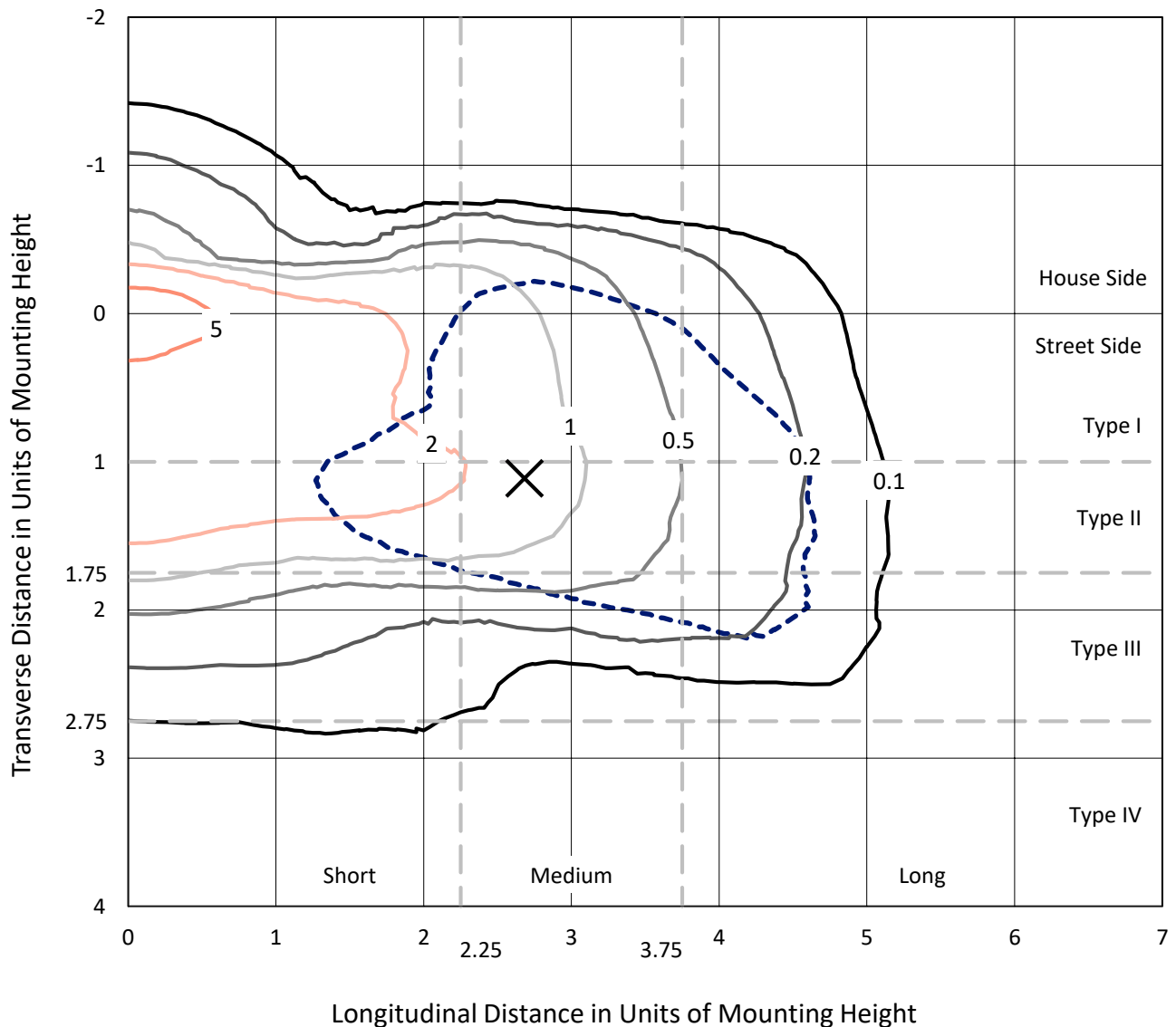
Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

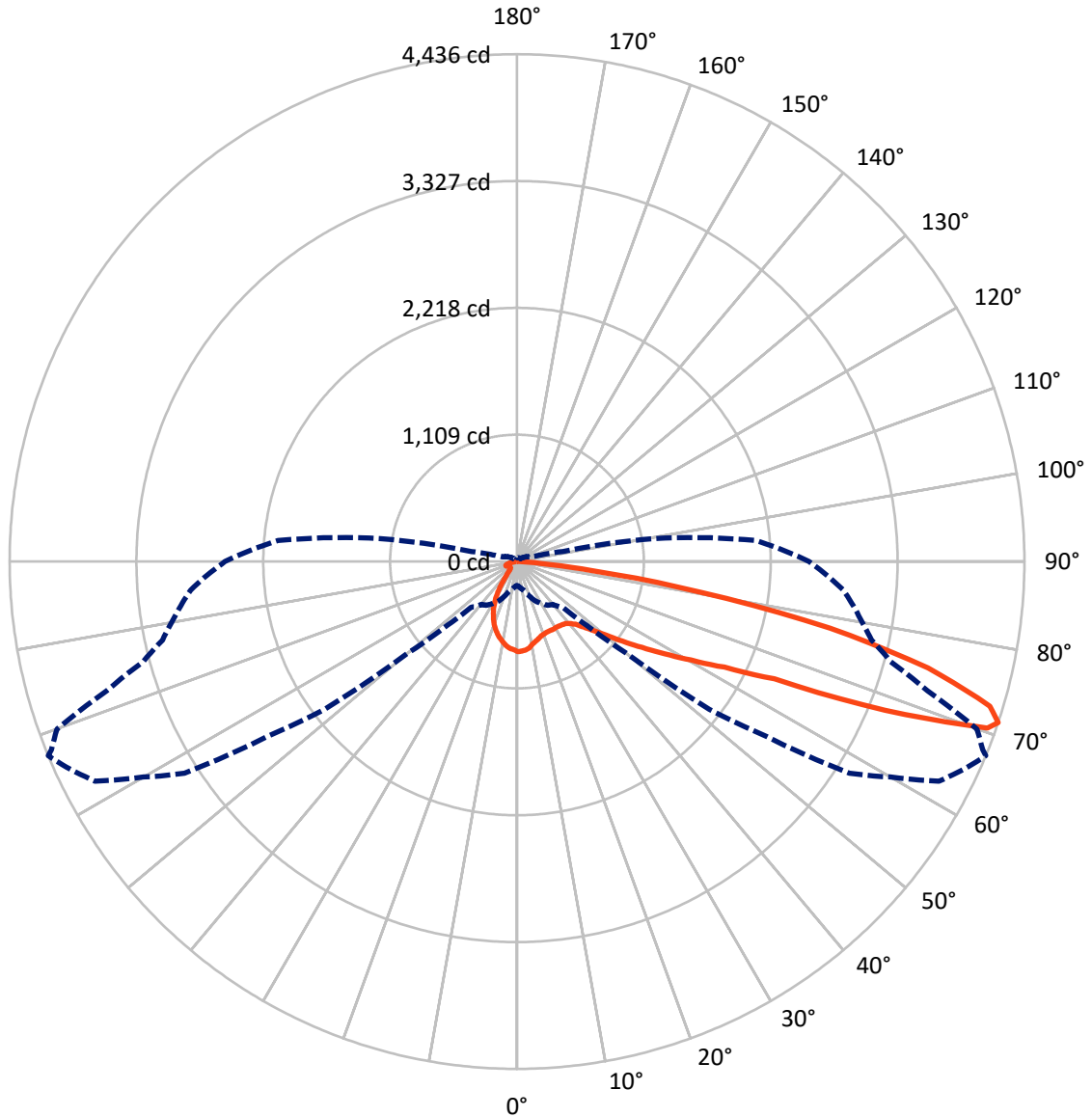
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	637.3	0.0	637.3
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	3144.6	0.0	3144.6
	% Fixture	83.1	0.0	83.1
Total	Lumens	3781.9	0.0	3781.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	1.8
10°-20°	164.5	4.4
20°-30°	223.7	5.9
30°-40°	305.8	8.1
40°-50°	460.8	12.2
50°-60°	730.2	19.3
60°-70°	966.7	25.6
70°-80°	770.1	20.4
80°-90°	91.3	2.4
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°	3781.9	100.0
0°-180°	3781.9	100.0

Coefficient of Utilization



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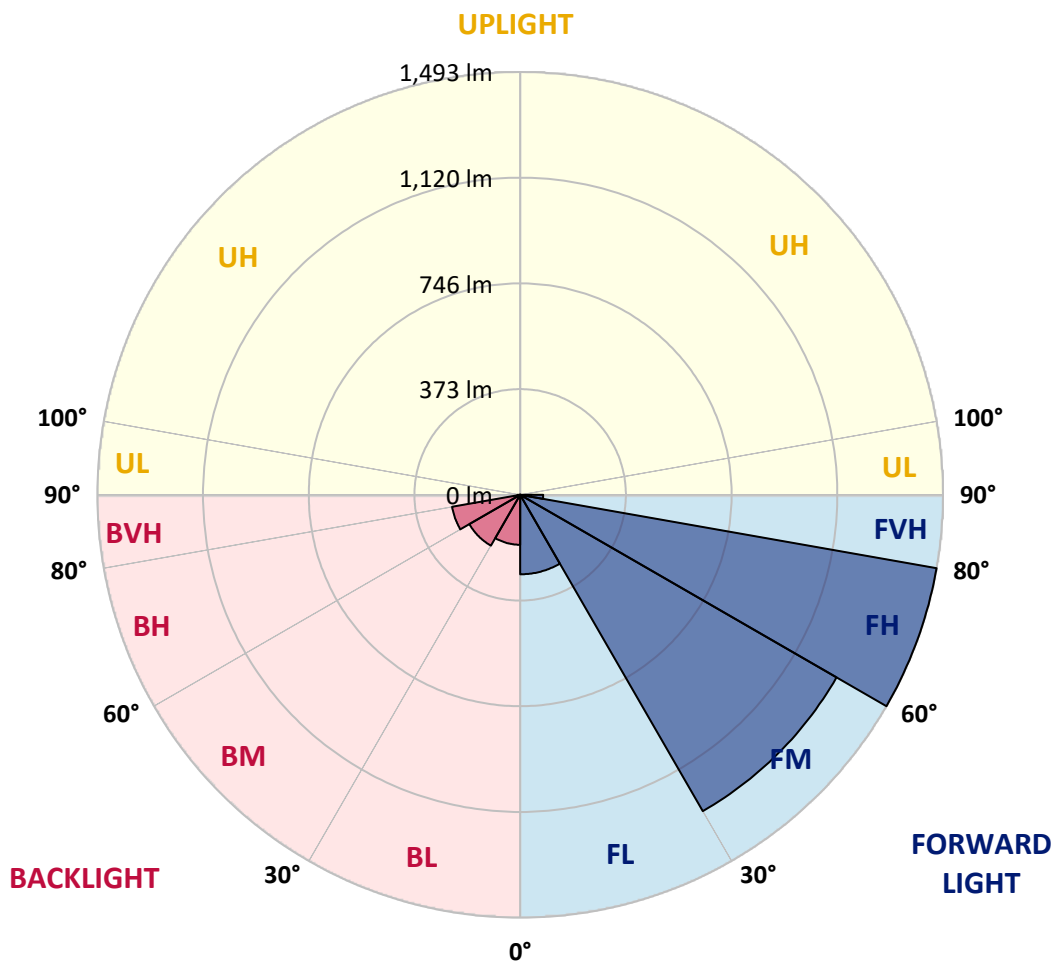
CATALOG NUMBER: ISS-AF-600-LED-E1-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	280.6	7.4			
FM (30°-60°)	1289.7	34.1			
FH (60°-80°)	1492.9	39.5			G1/1800
FVH (80°-90°)	81.4	2.2			G1/100
BL (0°-30°)	176.4	4.7	B1/500		
BM (30°-60°)	207.1	5.5	B0/220		
BH (60°-80°)	243.9	6.4	B1/500		G1/500
BVH (80°-90°)	9.9	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1
2.5°	773.6	770.9	770.9	774.9	781.5	776.2	780.2	780.2	781.5	785.4	786.8
5°	716.8	711.6	716.8	722.1	736.6	734.0	738.0	741.8	749.8	751.2	761.7
7.5°	665.3	662.7	666.7	677.2	695.7	690.4	695.7	700.9	710.2	714.1	724.8
10°	625.7	621.7	627.1	634.9	653.5	652.1	654.8	661.3	672.0	674.5	687.7
12.5°	596.7	596.7	599.3	609.9	625.7	624.4	632.3	636.3	645.5	648.1	662.7
15°	582.2	578.2	583.5	592.7	608.6	608.6	613.9	617.8	631.0	632.3	645.5
17.5°	569.0	570.3	571.6	582.2	596.7	594.0	600.7	603.2	617.8	615.2	631.0
20°	569.0	571.6	570.3	576.8	587.5	582.2	590.0	591.4	607.2	603.2	620.4
22.5°	584.8	587.5	583.5	582.2	586.2	582.2	586.2	588.8	600.7	598.0	613.9
25°	612.5	617.8	612.5	603.2	599.3	588.8	591.4	595.4	604.6	598.0	612.5
27.5°	656.1	660.0	650.8	641.6	623.1	611.2	607.2	605.9	616.5	605.9	617.8
30°	706.2	711.6	703.6	686.4	660.0	640.3	632.3	628.4	634.9	619.1	631.0
32.5°	760.4	765.7	760.4	747.2	711.6	682.5	672.0	662.7	668.0	646.8	652.1
35°	815.8	821.1	826.3	818.5	772.2	739.3	722.1	714.1	712.9	686.4	687.7
37.5°	864.7	869.9	887.1	895.0	852.7	807.9	792.1	774.9	776.2	739.3	739.3
40°	924.0	930.7	953.1	971.6	943.9	889.8	871.2	852.7	852.7	803.9	805.3
42.5°	1004.5	1012.5	1027.0	1052.1	1042.9	987.5	967.6	942.5	945.2	887.1	885.8
45°	1118.1	1123.4	1123.4	1139.3	1140.6	1087.7	1074.5	1049.4	1054.8	980.8	984.8
47.5°	1266.0	1259.4	1233.0	1242.2	1252.8	1197.4	1185.4	1169.6	1176.2	1097.0	1104.9
50°	1403.3	1398.0	1343.9	1346.5	1384.8	1328.0	1324.0	1304.3	1313.5	1234.3	1246.2
52.5°	1454.7	1445.5	1391.4	1420.4	1527.4	1495.7	1502.3	1493.0	1498.3	1413.8	1411.2
55°	1396.6	1396.6	1363.7	1416.5	1634.3	1651.5	1705.6	1726.6	1749.1	1664.6	1646.1
57.5°	1235.6	1246.2	1251.5	1345.2	1617.1	1691.0	1794.1	1883.8	1998.6	1993.3	2021.0
60°	968.9	987.5	1017.8	1170.9	1543.2	1664.6	1797.9	1932.7	2091.0	2192.7	2343.2
62.5°	679.9	695.7	720.8	826.3	1328.0	1536.6	1729.3	1936.5	2138.6	2298.3	2496.3
65°	462.1	477.9	530.7	588.8	801.3	1104.9	1399.3	1742.5	2050.1	2347.2	2613.7
67.5°	332.7	341.9	382.8	480.5	533.4	588.8	698.4	1102.2	1481.1	2079.1	2468.6
70°	249.5	258.7	295.7	404.0	468.6	483.1	509.5	580.8	677.2	1168.3	1679.2
71°	208.6	221.8	266.7	380.2	466.0	477.9	489.8	532.0	563.6	826.3	1246.2
72.5°	146.5	155.8	198.0	351.2	447.5	475.3	503.0	501.7	499.0	563.6	753.8
75°	93.7	93.7	93.7	198.0	477.9	460.7	471.3	528.0	499.0	473.9	496.3
77.5°	74.0	72.6	68.6	99.0	373.6	467.3	495.0	509.5	537.3	495.0	472.6
80°	55.4	54.1	54.1	62.1	173.0	302.3	418.5	464.6	484.5	526.7	480.5
82.5°	29.1	29.1	31.7	36.9	64.7	105.6	216.5	356.4	398.6	401.3	405.3
85°	9.2	7.9	10.5	17.2	27.7	34.4	60.8	143.9	213.9	258.7	273.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.3	9.2	11.9
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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CANDELA DISTRIBUTION (continued):

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	68°	70°	72.5°	75°
0°	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1
2.5°	782.8	788.1	784.1	789.4	782.8	790.7	784.1	788.1	789.4	784.1	790.7
5°	755.0	770.9	765.7	777.5	772.2	782.8	777.5	788.1	788.1	784.1	793.4
7.5°	720.8	736.6	738.0	749.8	749.8	763.0	763.0	773.6	778.9	778.9	792.1
10°	686.4	700.9	703.6	716.8	719.4	735.3	735.3	749.8	760.4	764.3	780.2
12.5°	660.0	678.5	678.5	693.0	690.4	714.1	716.8	730.0	740.6	749.8	770.9
15°	644.3	661.3	661.3	675.9	673.2	697.0	700.9	714.1	730.0	735.3	764.3
17.5°	628.4	645.5	641.6	661.3	660.0	686.4	683.8	703.6	716.8	724.8	757.7
20°	615.2	634.9	632.3	652.1	646.8	675.9	675.9	695.7	708.9	715.5	753.8
22.5°	608.6	629.7	624.4	644.3	640.3	669.3	669.3	689.1	703.6	714.1	752.5
25°	608.6	627.1	621.7	644.3	637.6	669.3	668.0	687.7	702.3	711.6	753.8
27.5°	611.2	629.7	625.7	646.8	641.6	669.3	672.0	689.1	703.6	714.1	756.4
30°	620.4	637.6	628.4	648.1	644.3	670.6	669.3	687.7	702.3	715.5	756.4
32.5°	640.3	649.5	637.6	654.8	646.8	673.2	673.2	686.4	703.6	719.4	756.4
35°	668.0	674.5	656.1	668.0	653.5	679.9	678.5	693.0	706.2	719.4	759.0
37.5°	707.6	715.5	686.4	697.0	673.2	694.4	689.1	706.2	719.4	727.4	772.2
40°	767.0	769.6	731.3	739.3	706.2	724.8	711.6	735.3	741.8	747.2	792.1
42.5°	839.5	842.2	793.4	798.6	756.4	772.2	749.8	774.9	784.1	782.8	831.7
45°	929.4	930.7	875.2	879.2	830.3	843.5	815.8	837.0	843.5	839.5	889.8
47.5°	1027.0	1037.6	975.6	980.8	929.4	935.9	901.6	925.4	925.4	921.4	972.9
50°	1156.4	1172.2	1099.7	1107.5	1048.1	1053.4	1013.8	1038.9	1036.2	1025.7	1083.8
52.5°	1317.5	1332.0	1255.4	1266.0	1202.6	1205.2	1156.4	1185.4	1177.5	1160.3	1227.6
55°	1514.2	1515.5	1444.2	1453.4	1390.1	1386.1	1325.3	1361.0	1349.2	1325.3	1387.4
57.5°	1829.6	1791.4	1673.9	1671.2	1602.6	1597.3	1519.4	1563.0	1543.2	1493.0	1574.8
60°	2337.9	2349.7	2050.1	2003.9	1875.9	1852.1	1749.1	1799.3	1775.5	1693.7	1774.2
62.5°	2624.4	2813.1	2794.6	2628.3	2298.3	2208.6	2034.2	2093.7	2031.6	1911.5	1986.8
65°	2836.8	3093.0	3240.8	3400.6	3252.7	2885.7	2473.8	2557.0	2405.2	2176.8	2249.5
67.5°	2916.1	3225.0	3536.5	3763.5	3918.0	3945.7	3469.2	3491.6	3118.1	2661.3	2670.5
70°	2501.5	2957.0	3566.9	3854.7	4161.0	4311.4	4361.6	4337.8	4096.2	3449.4	3202.6
71°	2120.1	2671.8	3445.4	3766.2	4158.3	4303.5	4435.5	4390.6	4278.4	3762.2	3383.4
72.5°	1436.2	2129.3	3090.3	3497.0	4019.7	4125.3	4323.3	4244.1	4220.3	3996.0	3552.4
75°	675.9	1061.3	2010.5	2625.6	3401.8	3503.5	3710.8	3613.1	3551.1	3627.6	3379.4
77.5°	497.7	579.5	1103.6	1631.6	2473.8	2617.7	2795.9	2675.8	2596.7	2673.2	2500.3
80°	452.8	455.4	571.6	860.7	1475.8	1561.6	1628.9	1531.3	1411.2	1405.9	1246.2
82.5°	417.2	394.8	370.9	455.4	756.4	719.4	665.3	616.5	479.2	384.1	277.2
85°	265.4	290.4	264.0	249.5	301.0	248.2	196.7	188.7	133.3	89.8	83.2
87.5°	18.5	21.1	25.1	29.1	35.6	29.1	18.5	22.4	13.2	0.0	6.6
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°	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1
2.5°	781.5	788.1	790.7	789.4	786.8	784.1	774.9	781.5	772.2	778.9	770.9
5°	785.4	794.7	796.1	793.4	790.7	785.4	769.6	778.9	768.3	773.6	761.7
7.5°	784.1	798.6	799.9	797.3	792.1	782.8	767.0	773.6	756.4	760.4	744.5
10°	777.5	798.6	799.9	793.4	785.4	770.9	752.5	755.0	738.0	738.0	716.8
12.5°	770.9	796.1	802.6	793.4	780.2	760.4	739.3	736.6	716.8	715.5	691.7
15°	770.9	798.6	807.9	796.1	776.2	748.5	723.4	718.1	695.7	689.1	662.7
17.5°	769.6	798.6	811.8	796.1	772.2	736.6	704.9	699.7	670.6	660.0	629.7
20°	768.3	801.3	814.5	793.4	760.4	722.1	686.4	675.9	644.3	627.1	591.4
22.5°	767.0	806.6	817.1	790.7	752.5	703.6	666.7	648.1	611.2	588.8	546.6
25°	773.6	813.1	818.5	788.1	740.6	683.8	644.3	619.1	578.2	549.1	499.0
27.5°	776.2	819.8	821.1	782.8	726.1	662.7	620.4	586.2	539.9	504.3	447.5
30°	784.1	821.1	817.1	772.2	708.9	636.3	592.7	550.4	499.0	452.8	385.4
32.5°	786.8	825.0	814.5	760.4	691.7	609.9	561.1	512.2	450.2	396.0	314.1
35°	792.1	827.7	811.8	753.8	673.2	582.2	528.0	472.6	401.3	332.7	239.0
37.5°	799.9	839.5	818.5	751.2	664.0	558.4	491.1	431.7	343.2	262.7	158.5
40°	819.8	863.4	830.3	755.0	657.5	538.6	455.4	389.4	277.2	194.1	109.6
42.5°	859.4	904.3	860.7	774.9	661.3	521.4	418.5	344.5	209.9	138.6	91.0
45°	918.8	957.1	910.8	807.9	677.2	512.2	384.1	298.3	150.5	110.9	83.2
47.5°	1005.9	1042.9	984.8	860.7	704.9	508.2	348.5	249.5	116.2	100.4	80.5
50°	1120.7	1164.3	1091.7	943.9	756.4	512.2	310.3	203.3	101.7	97.7	79.2
52.5°	1262.0	1304.3	1231.6	1066.6	840.9	534.6	269.3	176.9	96.4	96.4	77.8
55°	1421.7	1481.1	1409.8	1237.0	971.6	583.5	244.2	167.7	96.4	97.7	76.5
57.5°	1610.5	1660.7	1597.3	1400.6	1128.7	664.0	246.8	176.9	96.4	97.7	75.3
60°	1795.3	1857.4	1784.7	1609.2	1308.3	785.4	301.0	224.4	100.4	101.7	75.3
62.5°	1988.1	2035.6	1976.1	1791.4	1511.5	935.9	409.2	324.8	116.2	120.1	80.5
65°	2199.2	2277.2	2215.1	2063.3	1799.3	1176.2	615.2	487.1	171.7	139.9	88.5
67.5°	2564.9	2596.7	2566.3	2427.7	2135.9	1374.2	732.6	495.0	171.7	136.0	99.0
70°	3060.0	2988.7	2852.7	2594.0	2171.5	1233.0	525.4	302.3	146.5	129.4	104.2
71°	3174.8	3065.3	2864.6	2553.1	2097.7	1112.9	408.0	239.0	137.3	126.7	104.2
72.5°	3244.8	3081.1	2777.5	2432.9	1952.4	876.6	269.3	187.4	125.4	120.1	100.4
75°	3153.7	2851.4	2452.7	2105.5	1598.7	455.4	169.0	142.6	106.9	104.2	87.2
77.5°	2504.2	2238.8	1809.8	1530.0	1028.4	201.9	121.4	108.2	84.5	81.8	67.3
80°	1168.3	937.2	549.1	471.3	323.5	118.8	83.2	74.0	60.8	58.1	47.6
82.5°	212.6	159.7	124.1	120.1	108.2	70.0	48.8	44.9	38.3	36.9	30.4
85°	72.6	70.0	52.8	52.8	54.1	36.9	27.7	26.4	19.8	19.8	13.2
87.5°	1.3	6.6	6.6	9.2	7.9	6.6	2.7	4.0	1.3	4.0	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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1	788.1
2.5°	777.5	767.0	776.2	767.0	772.2	761.7	768.3	764.3	764.3	760.4	757.7
5°	765.7	752.5	759.0	748.5	753.8	738.0	741.8	735.3	722.1	714.1	703.6
7.5°	748.5	728.6	734.0	718.1	722.1	700.9	704.9	693.0	668.0	652.1	636.3
10°	718.1	699.7	700.9	681.2	679.9	658.7	654.8	638.9	602.0	575.5	554.4
12.5°	687.7	666.7	664.0	640.3	636.3	611.2	605.9	580.8	526.7	475.3	442.2
15°	656.1	629.7	621.7	596.7	582.2	561.1	546.6	509.5	431.7	364.4	320.8
17.5°	620.4	586.2	574.3	545.2	524.1	492.3	471.3	421.1	320.8	248.2	217.8
20°	574.3	537.3	516.2	479.2	451.4	413.2	386.8	322.1	213.9	176.9	173.0
22.5°	522.7	479.2	452.8	406.6	372.3	331.3	289.1	217.8	151.8	143.9	149.1
25°	468.6	414.5	380.2	323.5	277.2	229.7	190.1	145.3	124.1	122.8	130.7
27.5°	404.0	341.9	293.1	225.8	183.5	146.5	129.4	114.9	105.6	106.9	114.9
30°	332.7	252.2	200.7	141.3	122.8	106.9	104.2	99.0	95.0	97.7	103.0
32.5°	248.2	161.0	129.4	101.7	100.4	91.0	93.7	91.0	89.8	91.0	95.0
35°	167.7	106.9	101.7	87.2	89.8	83.2	87.2	85.8	84.5	84.5	87.2
37.5°	116.2	88.5	91.0	80.5	84.5	79.2	83.2	81.8	80.5	79.2	80.5
40°	96.4	80.5	84.5	76.5	80.5	75.3	79.2	77.8	76.5	74.0	74.0
42.5°	88.5	76.5	80.5	72.6	77.8	71.3	76.5	74.0	71.3	68.6	70.0
45°	85.8	74.0	77.8	70.0	75.3	68.6	72.6	71.3	66.0	64.7	66.0
47.5°	83.2	72.6	76.5	68.6	72.6	66.0	70.0	67.3	62.1	60.8	62.1
50°	81.8	70.0	74.0	66.0	70.0	64.7	67.3	64.7	59.4	58.1	58.1
52.5°	80.5	68.6	72.6	63.3	67.3	59.4	63.3	60.8	55.4	54.1	54.1
55°	80.5	67.3	70.0	60.8	64.7	56.8	59.4	56.8	54.1	51.5	51.5
57.5°	79.2	64.7	68.6	58.1	60.8	54.1	56.8	54.1	50.1	48.8	48.8
60°	79.2	63.3	67.3	56.8	59.4	51.5	54.1	51.5	47.6	46.2	46.2
62.5°	83.2	66.0	68.6	58.1	59.4	51.5	52.8	48.8	44.9	44.9	43.6
65°	91.0	74.0	74.0	60.8	60.8	51.5	52.8	47.6	42.2	42.2	42.2
67.5°	99.0	81.8	80.5	64.7	63.3	51.5	51.5	44.9	39.6	39.6	39.6
70°	104.2	85.8	83.2	66.0	63.3	50.1	48.8	42.2	36.9	36.9	36.9
71°	103.0	85.8	81.8	64.7	60.8	47.6	47.6	40.9	35.6	35.6	34.4
72.5°	97.7	80.5	76.5	60.8	58.1	44.9	44.9	38.3	33.0	33.0	31.7
75°	83.2	68.6	64.7	51.5	48.8	39.6	38.3	31.7	29.1	27.7	27.7
77.5°	64.7	54.1	50.1	40.9	39.6	31.7	30.4	26.4	23.7	23.7	22.4
80°	46.2	38.3	35.6	27.7	25.1	21.1	22.4	19.8	18.5	18.5	17.2
82.5°	27.7	19.8	19.8	15.9	17.2	13.2	14.5	14.5	13.2	10.5	10.5
85°	14.5	9.2	11.9	6.6	9.2	4.0	6.6	5.3	5.3	4.0	4.0
87.5°	2.7	0.0	1.3	0.0	1.3	0.0	0.0	0.0	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°	788.1	788.1
2.5°	749.8	751.2
5°	698.4	700.9
7.5°	624.4	628.4
10°	535.9	538.6
12.5°	422.5	422.5
15°	295.7	298.3
17.5°	207.2	208.6
20°	174.2	175.5
22.5°	155.8	157.1
25°	138.6	139.9
27.5°	120.1	121.4
30°	108.2	109.6
32.5°	97.7	99.0
35°	88.5	88.5
37.5°	81.8	81.8
40°	75.3	75.3
42.5°	71.3	71.3
45°	67.3	67.3
47.5°	63.3	63.3
50°	59.4	60.8
52.5°	55.4	55.4
55°	51.5	51.5
57.5°	47.6	48.8
60°	44.9	44.9
62.5°	42.2	42.2
65°	40.9	40.9
67.5°	38.3	38.3
70°	35.6	35.6
71°	34.4	34.4
72.5°	31.7	31.7
75°	27.7	26.4
77.5°	22.4	22.4
80°	17.2	15.9
82.5°	10.5	9.2
85°	4.0	2.7
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)