

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: P228349

Luminaire Tested: **ISS-AF-800-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29763)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-800-LED-E1-SL4-7030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCUCLED OPTICS-TYPE IV W/SPILL CONTROL
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3829 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

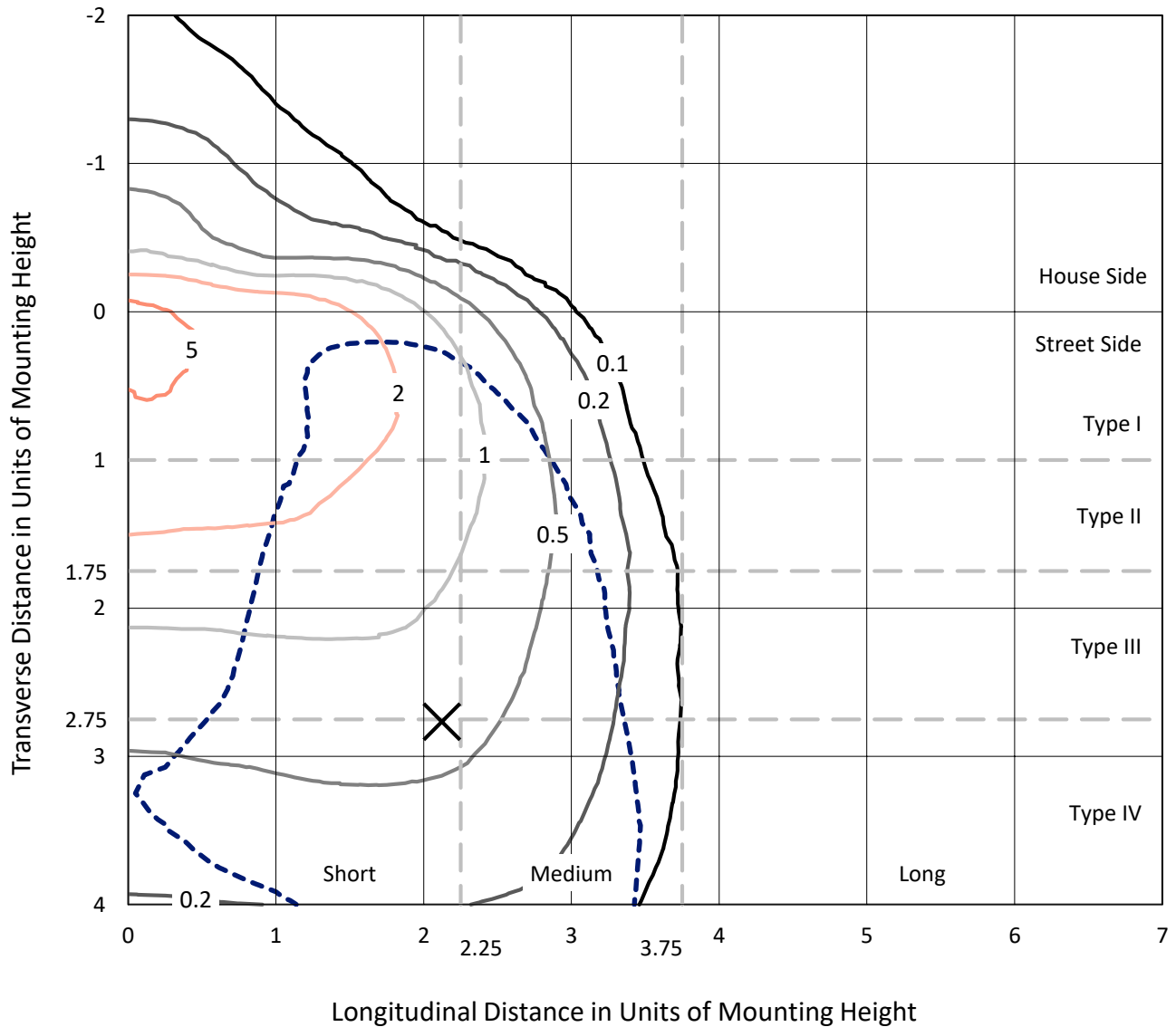
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

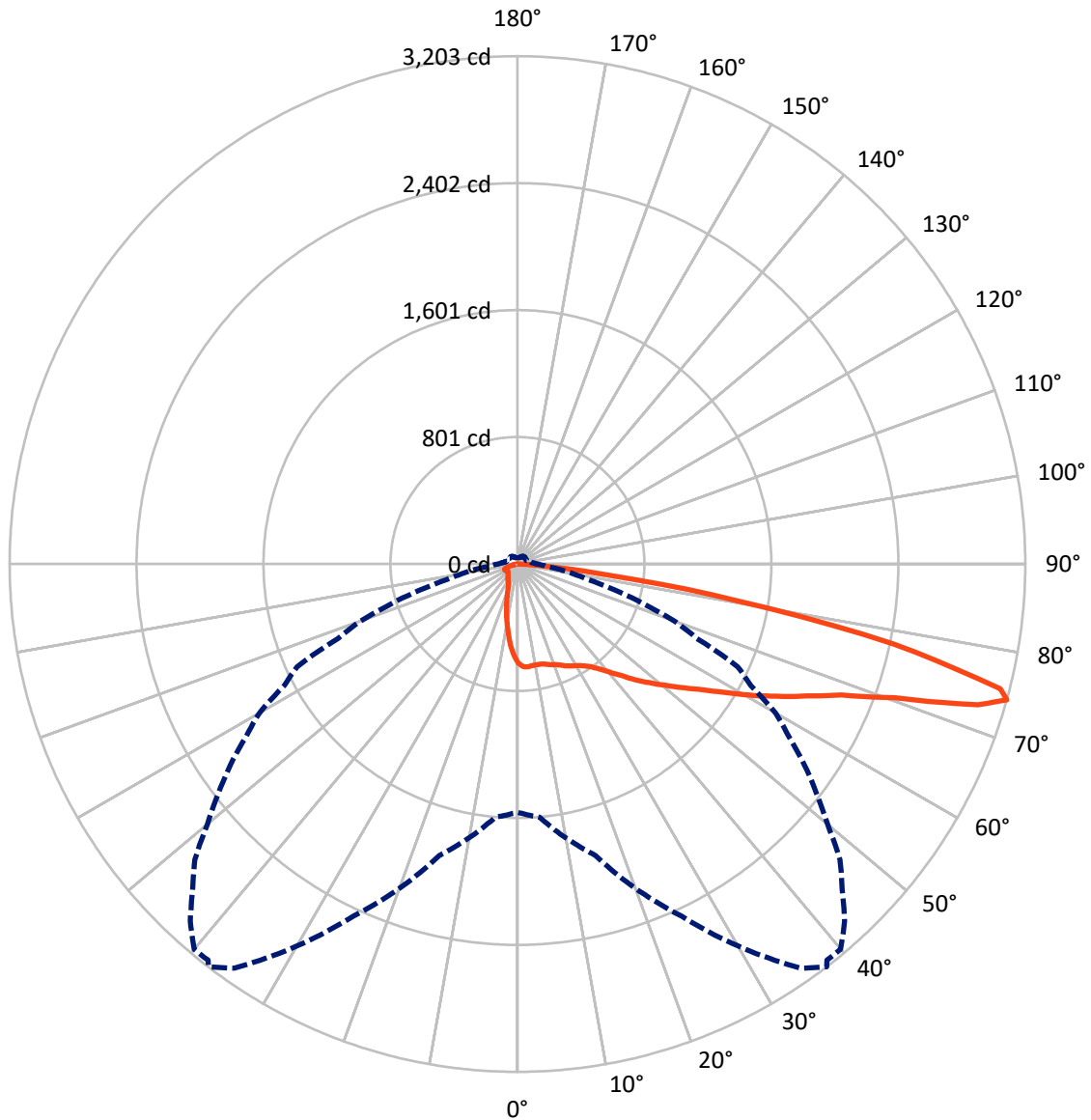
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 37.5-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	454.0	0.0	454.0
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	3375.0	0.0	3375.0
	% Fixture	88.1	0.0	88.1
Total	Lumens	3829.0	0.0	3829.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	1.4
10°-20°	138.6	3.6
20°-30°	214.8	5.6
30°-40°	318.5	8.3
40°-50°	490.0	12.8
50°-60°	724.3	18.9
60°-70°	965.5	25.2
70°-80°	833.4	21.8
80°-90°	89.6	2.3
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°	3829.0	100.0
0°-180°	3829.0	100.0



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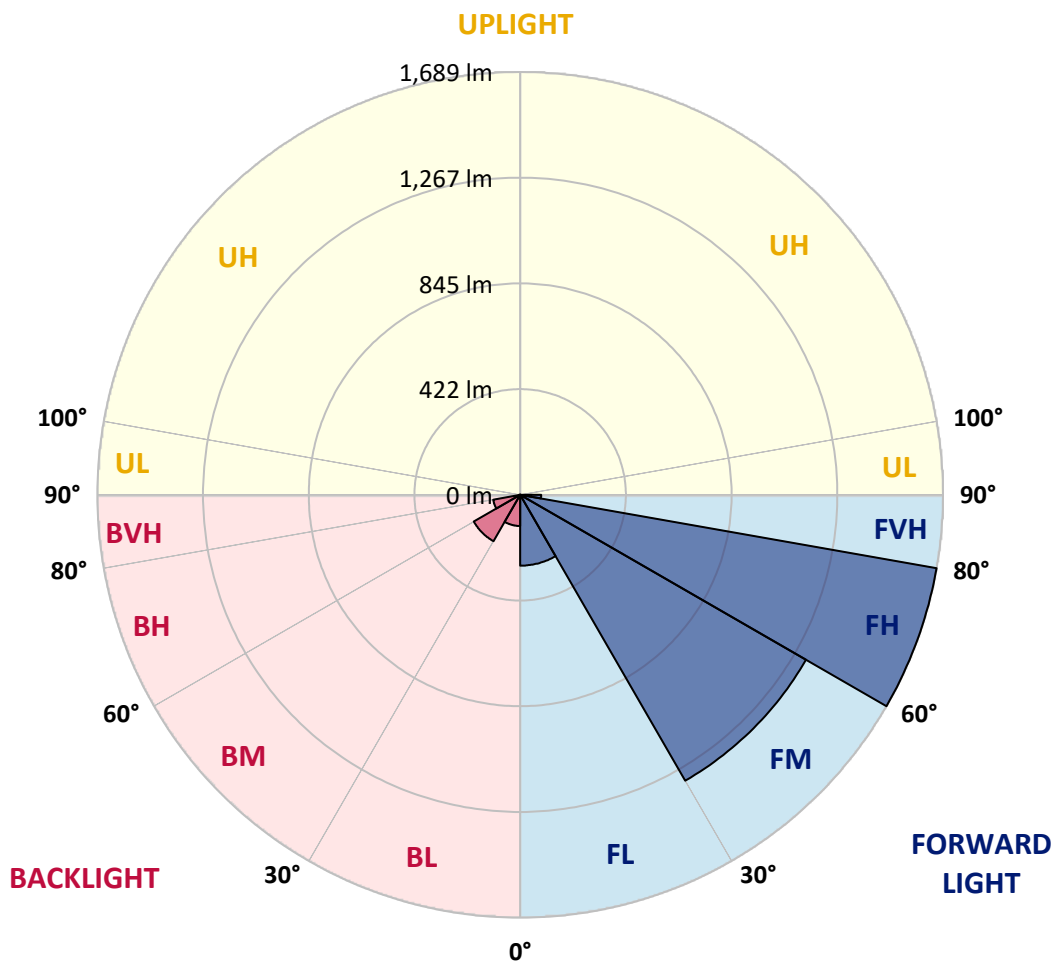
CATALOG NUMBER: ISS-AF-800-LED-E1-SL4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	283.1	7.4			
FM (30°-60°)	1318.8	34.4			
FH (60°-80°)	1689.4	44.1			G1/1800
FVH (80°-90°)	83.7	2.2			G1/100
BL (0°-30°)	124.7	3.3	B1/500		
BM (30°-60°)	214.0	5.6	B0/220		
BH (60°-80°)	109.5	2.9	B0/110		G0/110
BVH (80°-90°)	5.9	0.2			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
0°	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8
2.5°	660.6	659.1	656.3	654.9	652.0	647.7	652.0	646.3	643.4	646.3	640.6
5°	672.0	670.6	667.7	662.0	659.1	652.0	656.3	649.1	647.7	650.6	643.4
7.5°	673.4	670.6	666.3	659.1	656.3	647.7	650.6	642.0	639.1	642.0	637.7
10°	669.2	667.7	663.4	652.0	649.1	646.3	644.8	639.1	637.7	636.3	634.8
12.5°	662.0	662.0	659.1	654.9	653.4	647.7	649.1	643.4	644.8	642.0	639.1
15°	659.1	657.7	660.6	663.4	663.4	654.9	660.6	656.3	653.4	654.9	650.6
17.5°	656.3	657.7	667.7	673.4	676.3	667.7	676.3	667.7	662.0	669.2	662.0
20°	654.9	659.1	676.3	689.2	690.6	676.3	690.6	676.3	676.3	684.9	672.0
22.5°	662.0	669.2	693.5	707.8	710.6	692.0	709.2	690.6	690.6	697.8	684.9
25°	684.9	692.0	719.2	734.9	732.1	712.1	727.8	709.2	707.8	716.3	699.2
27.5°	714.9	724.9	750.7	765.0	754.9	727.8	750.7	723.5	723.5	736.4	713.5
30°	757.8	765.0	787.8	789.3	776.4	743.5	769.2	739.2	734.9	757.8	729.2
32.5°	805.0	810.7	827.9	817.9	799.3	765.0	795.0	759.2	757.8	782.1	749.2
35°	855.0	860.8	866.5	849.3	832.2	795.0	827.9	792.1	790.7	817.9	786.4
37.5°	906.5	906.5	906.5	886.5	875.1	839.3	869.3	840.7	837.9	866.5	836.4
40°	948.0	950.8	946.5	928.0	922.2	896.5	922.2	896.5	900.8	926.5	902.2
42.5°	982.3	985.1	986.6	970.8	976.6	962.3	982.3	963.7	965.1	993.7	979.4
45°	1016.6	1015.2	1026.6	1022.3	1039.5	1040.9	1052.3	1045.2	1048.1	1069.5	1065.2
47.5°	1052.3	1045.2	1058.1	1076.7	1108.1	1118.1	1125.3	1128.1	1139.6	1149.6	1159.6
50°	1086.7	1079.5	1088.1	1129.6	1179.6	1201.1	1202.5	1216.8	1229.6	1243.9	1264.0
52.5°	1122.4	1116.7	1125.3	1183.9	1264.0	1294.0	1289.7	1314.0	1332.6	1348.3	1381.2
55°	1159.6	1153.9	1162.4	1249.7	1354.0	1395.5	1391.2	1425.5	1461.3	1467.0	1504.2
57.5°	1195.3	1188.2	1212.5	1326.9	1461.3	1524.2	1504.2	1557.1	1591.4	1588.5	1640.0
60°	1233.9	1228.2	1266.8	1421.2	1595.7	1677.2	1647.2	1717.2	1741.5	1731.5	1780.1
62.5°	1271.1	1269.7	1334.0	1531.3	1758.7	1837.3	1810.2	1871.6	1888.8	1875.9	1900.2
65°	1305.4	1314.0	1406.9	1641.4	1916.0	2006.0	1968.9	2030.3	2050.4	2040.4	2081.8
67.5°	1362.6	1372.6	1497.0	1781.6	2110.4	2203.4	2171.9	2236.2	2266.3	2263.4	2309.2
70°	1447.0	1465.6	1630.0	1980.3	2406.4	2525.1	2507.9	2586.5	2659.5	2653.7	2699.5
72.5°	1594.3	1624.3	1848.8	2289.1	2892.5	3036.9	3016.9	3061.2	3048.4	2944.0	2859.6
74°	1565.7	1602.8	1903.1	2450.7	3111.3	3202.8	3169.9	3171.3	3054.1	2895.4	2759.6
75°	1461.3	1499.9	1824.5	2430.7	3095.6	3145.6	3098.4	3039.8	2898.2	2736.7	2569.4
77.5°	1002.3	1052.3	1341.2	1963.1	2492.2	2423.5	2412.1	2300.6	2113.3	1931.7	1717.2
80°	513.3	549.1	693.5	1026.6	1478.4	1409.8	1432.7	1342.6	1186.8	1055.2	836.4
82.5°	123.0	131.5	204.5	397.5	640.6	586.2	594.8	526.2	436.1	356.0	276.0
85°	64.3	72.9	100.1	110.1	168.7	174.4	170.1	164.4	134.4	113.0	98.7
87.5°	0.0	0.0	0.0	2.9	1.4	0.0	1.4	0.0	0.0	1.4	2.9
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):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8
2.5°	644.8	642.0	644.8	636.3	640.6	633.4	636.3	629.1	632.0	626.3	627.7
5°	647.7	640.6	644.8	637.7	639.1	633.4	632.0	629.1	627.7	623.4	620.5
7.5°	640.6	634.8	633.4	630.6	626.3	627.7	622.0	620.5	616.3	616.3	607.7
10°	633.4	634.8	626.3	629.1	622.0	623.4	613.4	616.3	609.1	614.8	602.0
12.5°	639.1	640.6	633.4	637.7	624.8	627.7	619.1	623.4	613.4	620.5	604.8
15°	652.0	650.6	647.7	647.7	634.8	640.6	630.6	633.4	623.4	632.0	614.8
17.5°	663.4	662.0	657.7	656.3	647.7	649.1	639.1	644.8	633.4	640.6	623.4
20°	676.3	669.2	667.7	666.3	656.3	656.3	649.1	652.0	640.6	649.1	629.1
22.5°	686.3	680.6	679.2	673.4	666.3	669.2	659.1	660.6	649.1	657.7	640.6
25°	702.0	694.9	694.9	686.3	682.0	680.6	674.9	679.2	667.7	673.4	657.7
27.5°	723.5	707.8	713.5	704.9	702.0	700.6	697.8	700.6	692.0	696.3	680.6
30°	743.5	723.5	732.1	720.6	726.3	720.6	724.9	720.6	720.6	720.6	713.5
32.5°	770.7	746.4	763.5	746.4	757.8	749.2	763.5	754.9	760.7	759.2	756.4
35°	809.3	780.7	805.0	782.1	802.1	790.7	810.7	806.4	817.9	812.1	817.9
37.5°	860.8	830.7	859.3	837.9	862.2	845.0	873.6	870.8	895.1	886.5	895.1
40°	925.1	903.6	925.1	909.4	935.1	928.0	958.0	959.4	986.6	982.3	992.3
42.5°	996.6	980.9	1002.3	993.7	1019.5	1025.2	1059.5	1068.1	1093.8	1101.0	1102.4
45°	1073.8	1070.9	1088.1	1096.7	1122.4	1139.6	1169.6	1191.0	1219.6	1235.4	1232.5
47.5°	1163.9	1175.3	1186.8	1208.2	1231.1	1266.8	1296.8	1324.0	1356.9	1366.9	1371.2
50°	1265.4	1285.4	1295.4	1325.4	1348.3	1392.6	1434.1	1468.4	1504.2	1499.9	1502.7
52.5°	1372.6	1398.4	1412.7	1448.4	1478.4	1529.9	1565.7	1598.5	1642.9	1631.4	1627.1
55°	1491.3	1529.9	1541.3	1581.4	1607.1	1660.0	1691.5	1748.7	1767.3	1755.8	1731.5
57.5°	1617.1	1662.9	1675.8	1730.1	1743.0	1800.1	1827.3	1865.9	1881.6	1863.1	1831.6
60°	1760.1	1801.6	1811.6	1860.2	1877.4	1930.3	1950.3	1984.6	1996.0	1950.3	1906.0
62.5°	1903.1	1946.0	1951.7	1994.6	2011.8	2057.5	2080.4	2100.4	2094.7	2027.5	1971.7
65°	2066.1	2107.6	2121.9	2164.8	2174.8	2209.1	2227.7	2204.8	2191.9	2090.4	2027.5
67.5°	2324.9	2369.2	2374.9	2384.9	2383.5	2366.4	2357.8	2279.1	2221.9	2034.6	1944.6
70°	2665.2	2632.3	2568.0	2493.6	2439.3	2342.0	2284.9	2123.3	2003.2	1793.0	1641.4
72.5°	2726.7	2619.4	2460.7	2333.5	2201.9	2048.9	1926.0	1681.5	1512.8	1292.6	1132.4
74°	2552.2	2377.8	2210.5	2031.8	1880.2	1657.2	1532.8	1223.9	1056.6	833.6	639.1
75°	2342.0	2137.6	1948.8	1721.5	1580.0	1312.6	1195.3	862.2	694.9	494.7	333.1
77.5°	1494.2	1249.7	1069.5	806.4	696.3	480.4	351.7	218.8	161.6	141.6	123.0
80°	670.6	477.6	378.9	261.7	218.8	167.3	141.6	114.4	104.4	91.5	87.2
82.5°	214.5	171.6	163.0	145.8	145.8	117.2	100.1	78.6	71.5	61.5	55.8
85°	92.9	87.2	90.1	82.9	84.4	64.3	51.5	38.6	38.6	27.2	24.3
87.5°	2.9	0.0	1.4	0.0	2.9	0.0	1.4	0.0	1.4	0.0	1.4
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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CANDELA DISTRIBUTION (continued):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8
2.5°	622.0	624.8	623.4	617.7	616.3	612.0	602.0	603.4	597.7	602.0	594.8
5°	616.3	614.8	609.1	602.0	594.8	586.2	579.1	576.2	570.5	567.6	563.3
7.5°	607.7	602.0	591.9	580.5	570.5	559.1	553.3	543.3	540.5	530.5	529.0
10°	604.8	594.8	583.4	569.1	551.9	534.8	533.3	516.2	514.7	499.0	494.7
12.5°	610.5	597.7	583.4	566.2	546.2	521.9	521.9	496.1	494.7	473.3	466.1
15°	622.0	606.2	587.7	567.6	541.9	511.9	510.4	480.4	477.6	451.8	443.2
17.5°	632.0	610.5	593.4	566.2	536.2	501.9	494.7	464.7	459.0	428.9	417.5
20°	639.1	614.8	594.8	563.3	526.2	486.1	476.1	444.7	431.8	401.8	386.1
22.5°	647.7	624.8	597.7	561.9	520.5	473.3	451.8	423.2	404.6	373.2	351.7
25°	660.6	640.6	607.7	566.2	516.2	460.4	431.8	401.8	376.0	344.6	313.1
27.5°	680.6	660.6	622.0	571.9	514.7	447.5	416.1	378.9	347.4	313.1	277.4
30°	709.2	687.7	646.3	587.7	516.2	437.5	398.9	358.9	321.7	281.7	244.5
32.5°	746.4	729.2	677.7	604.8	521.9	428.9	383.2	337.4	291.7	253.1	220.2
35°	797.8	786.4	722.1	637.7	536.2	424.7	367.5	317.4	265.9	227.3	191.6
37.5°	873.6	857.9	786.4	684.9	559.1	421.8	356.0	293.1	244.5	203.0	173.0
40°	969.4	948.0	862.2	742.1	594.8	423.2	346.0	274.5	225.9	181.6	157.3
42.5°	1083.8	1052.3	955.1	812.1	630.6	426.1	340.3	257.4	211.6	164.4	145.8
45°	1212.5	1176.7	1065.2	899.4	682.0	433.2	336.0	243.1	198.7	151.6	138.7
47.5°	1338.3	1302.6	1178.2	986.6	734.9	446.1	338.9	234.5	190.2	144.4	130.1
50°	1461.3	1424.1	1278.3	1065.2	780.7	463.3	350.3	235.9	188.7	141.6	125.8
52.5°	1569.9	1524.2	1364.1	1126.7	813.6	474.7	360.3	240.2	190.2	140.1	124.4
55°	1678.6	1620.0	1432.7	1175.3	833.6	476.1	360.3	241.6	191.6	140.1	123.0
57.5°	1760.1	1692.9	1485.6	1203.9	840.7	469.0	351.7	234.5	183.0	138.7	120.1
60°	1811.6	1740.1	1522.8	1222.5	830.7	439.0	306.0	207.3	161.6	128.7	111.5
62.5°	1854.5	1781.6	1534.2	1191.0	746.4	348.9	238.8	168.7	134.4	114.4	102.9
65°	1864.5	1777.3	1454.1	1052.3	583.4	241.6	173.0	133.0	110.1	101.5	92.9
67.5°	1712.9	1608.5	1222.5	823.6	397.5	165.9	128.7	108.7	94.4	90.1	87.2
70°	1392.6	1278.3	895.1	539.0	221.6	115.8	98.7	90.1	81.5	81.5	77.2
72.5°	897.9	779.3	459.0	230.2	113.0	88.6	80.1	77.2	70.1	71.5	67.2
74°	459.0	357.5	187.3	121.5	92.9	78.6	71.5	70.1	62.9	64.3	60.1
75°	233.1	184.4	131.5	101.5	85.8	74.4	65.8	65.8	57.2	58.6	54.3
77.5°	108.7	104.4	90.1	80.1	72.9	62.9	54.3	52.9	44.3	47.2	41.5
80°	75.8	75.8	70.1	67.2	60.1	51.5	41.5	41.5	32.9	34.3	30.0
82.5°	42.9	40.0	40.0	45.8	47.2	38.6	30.0	28.6	24.3	24.3	20.0
85°	18.6	21.4	25.7	31.5	34.3	30.0	21.4	20.0	12.9	12.9	7.1
87.5°	0.0	1.4	1.4	2.9	5.7	5.7	0.0	2.9	0.0	1.4	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°	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8	624.8
2.5°	597.7	590.5	594.8	587.7	590.5	583.4	586.2	581.9	577.6	571.9	570.5
5°	559.1	553.3	551.9	544.8	546.2	540.5	534.8	527.6	519.0	507.6	503.3
7.5°	516.2	514.7	504.7	500.4	494.7	489.0	479.0	467.6	450.4	434.7	424.7
10°	479.0	474.7	460.4	453.3	444.7	437.5	423.2	407.5	383.2	358.9	346.0
12.5°	447.5	441.8	423.2	414.6	401.8	393.2	376.0	356.0	321.7	287.4	271.7
15°	421.8	413.2	391.8	378.9	361.7	353.2	334.6	306.0	264.5	228.8	207.3
17.5°	391.8	380.3	357.5	341.7	324.6	308.8	290.3	260.2	213.0	180.2	158.7
20°	358.9	344.6	320.3	298.8	280.2	265.9	247.4	217.3	170.1	144.4	133.0
22.5°	324.6	301.7	280.2	261.7	240.2	225.9	207.3	180.2	144.4	130.1	125.8
25°	288.8	263.1	241.6	223.1	203.0	190.2	174.4	153.0	131.5	127.3	127.3
27.5°	253.1	227.3	207.3	188.7	171.6	163.0	148.7	134.4	124.4	125.8	127.3
30°	220.2	194.5	175.9	161.6	145.8	140.1	128.7	120.1	118.7	123.0	124.4
32.5°	191.6	168.7	151.6	140.1	127.3	124.4	114.4	110.1	114.4	120.1	118.7
35°	167.3	148.7	131.5	124.4	113.0	111.5	104.4	101.5	107.2	114.4	114.4
37.5°	148.7	131.5	118.7	113.0	104.4	102.9	97.2	94.4	98.7	108.7	111.5
40°	133.0	123.0	110.1	104.4	98.7	95.8	92.9	90.1	91.5	104.4	105.8
42.5°	123.0	115.8	104.4	101.5	94.4	92.9	88.6	85.8	87.2	97.2	101.5
45°	115.8	110.1	100.1	98.7	91.5	90.1	85.8	82.9	84.4	92.9	97.2
47.5°	110.1	104.4	95.8	92.9	88.6	87.2	84.4	81.5	81.5	90.1	94.4
50°	107.2	101.5	92.9	90.1	85.8	84.4	81.5	78.6	80.1	87.2	90.1
52.5°	105.8	98.7	91.5	87.2	84.4	81.5	78.6	75.8	77.2	84.4	87.2
55°	105.8	97.2	91.5	87.2	82.9	78.6	77.2	72.9	75.8	81.5	85.8
57.5°	105.8	97.2	91.5	87.2	84.4	80.1	77.2	74.4	75.8	81.5	85.8
60°	102.9	95.8	92.9	88.6	87.2	82.9	81.5	78.6	78.6	85.8	92.9
62.5°	98.7	94.4	92.9	90.1	90.1	87.2	87.2	84.4	84.4	92.9	100.1
65°	92.9	90.1	91.5	90.1	90.1	90.1	88.6	88.6	88.6	95.8	104.4
67.5°	87.2	85.8	87.2	87.2	88.6	87.2	88.6	87.2	87.2	94.4	102.9
70°	78.6	78.6	80.1	78.6	80.1	80.1	81.5	81.5	81.5	85.8	94.4
72.5°	68.6	67.2	68.6	67.2	70.1	67.2	70.1	71.5	70.1	71.5	75.8
74°	61.5	60.1	61.5	60.1	62.9	60.1	61.5	61.5	60.1	48.6	41.5
75°	55.8	54.3	55.8	54.3	57.2	54.3	57.2	55.8	52.9	35.7	34.3
77.5°	44.3	40.0	44.3	40.0	42.9	38.6	41.5	35.7	27.2	25.7	25.7
80°	32.9	28.6	31.5	27.2	25.7	20.0	21.4	20.0	18.6	20.0	20.0
82.5°	20.0	14.3	17.2	12.9	15.7	11.4	14.3	12.9	11.4	11.4	11.4
85°	10.0	7.1	10.0	5.7	8.6	5.7	7.1	7.1	4.3	4.3	4.3
87.5°	1.4	0.0	2.9	0.0	2.9	0.0	1.4	1.4	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°	624.8	624.8
2.5°	566.2	567.6
5°	496.1	500.4
7.5°	418.9	421.8
10°	337.4	340.3
12.5°	260.2	263.1
15°	195.9	193.0
17.5°	150.1	147.3
20°	127.3	127.3
22.5°	124.4	123.0
25°	125.8	124.4
27.5°	125.8	124.4
30°	123.0	121.5
32.5°	118.7	117.2
35°	114.4	114.4
37.5°	111.5	113.0
40°	107.2	108.7
42.5°	102.9	104.4
45°	98.7	100.1
47.5°	94.4	94.4
50°	88.6	88.6
52.5°	87.2	87.2
55°	87.2	87.2
57.5°	90.1	90.1
60°	98.7	100.1
62.5°	115.8	117.2
65°	133.0	135.8
67.5°	134.4	138.7
70°	130.1	134.4
72.5°	90.1	90.1
74°	40.0	38.6
75°	34.3	32.9
77.5°	25.7	25.7
80°	18.6	17.2
82.5°	10.0	10.0
85°	2.9	2.9
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)