

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: P227594

Luminaire Tested: **ISS-AF-1200-LED-E1-T2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29758)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-1200-LED-E1-T2-8030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5258 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

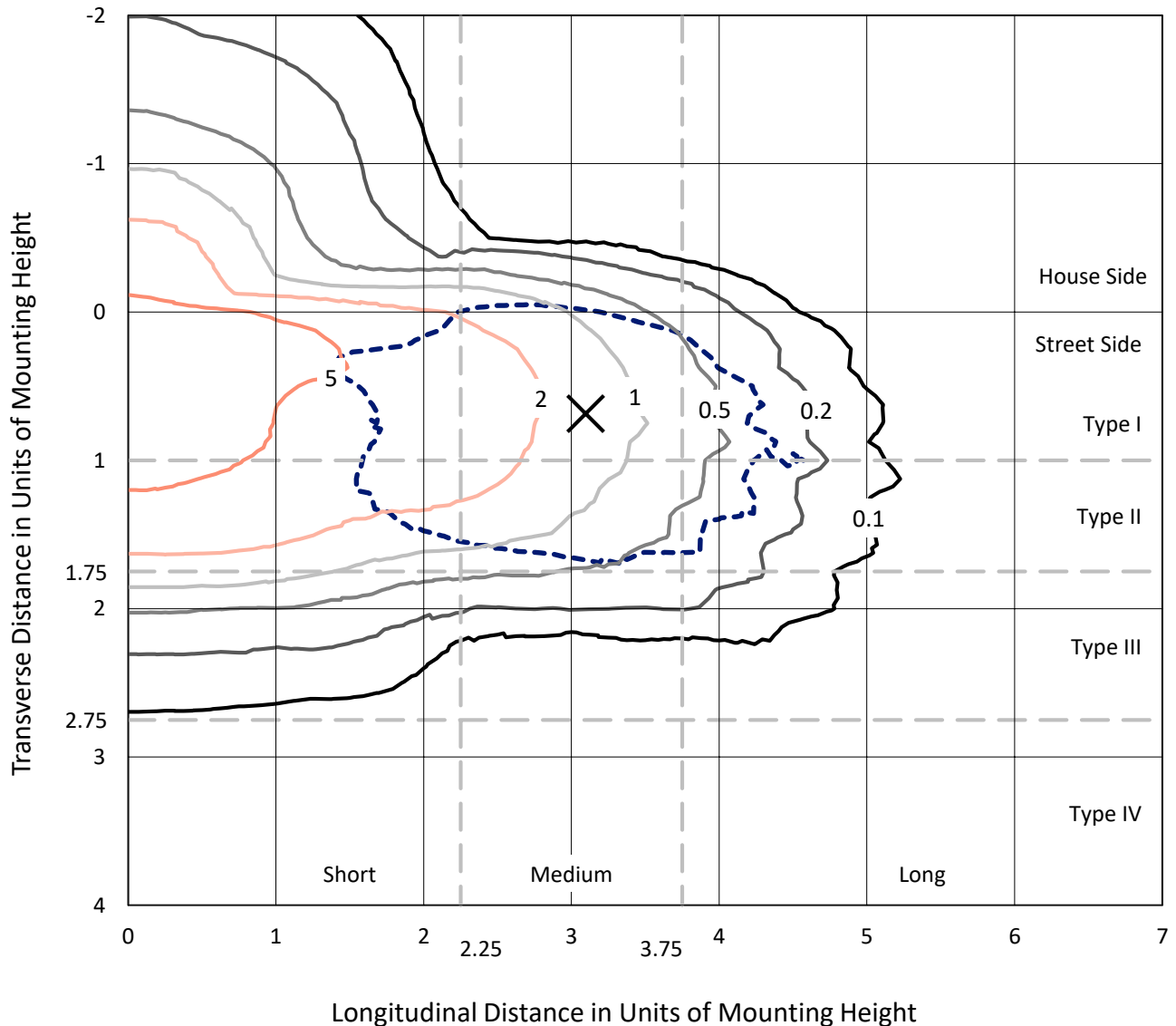
Input Watts (W): 66
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

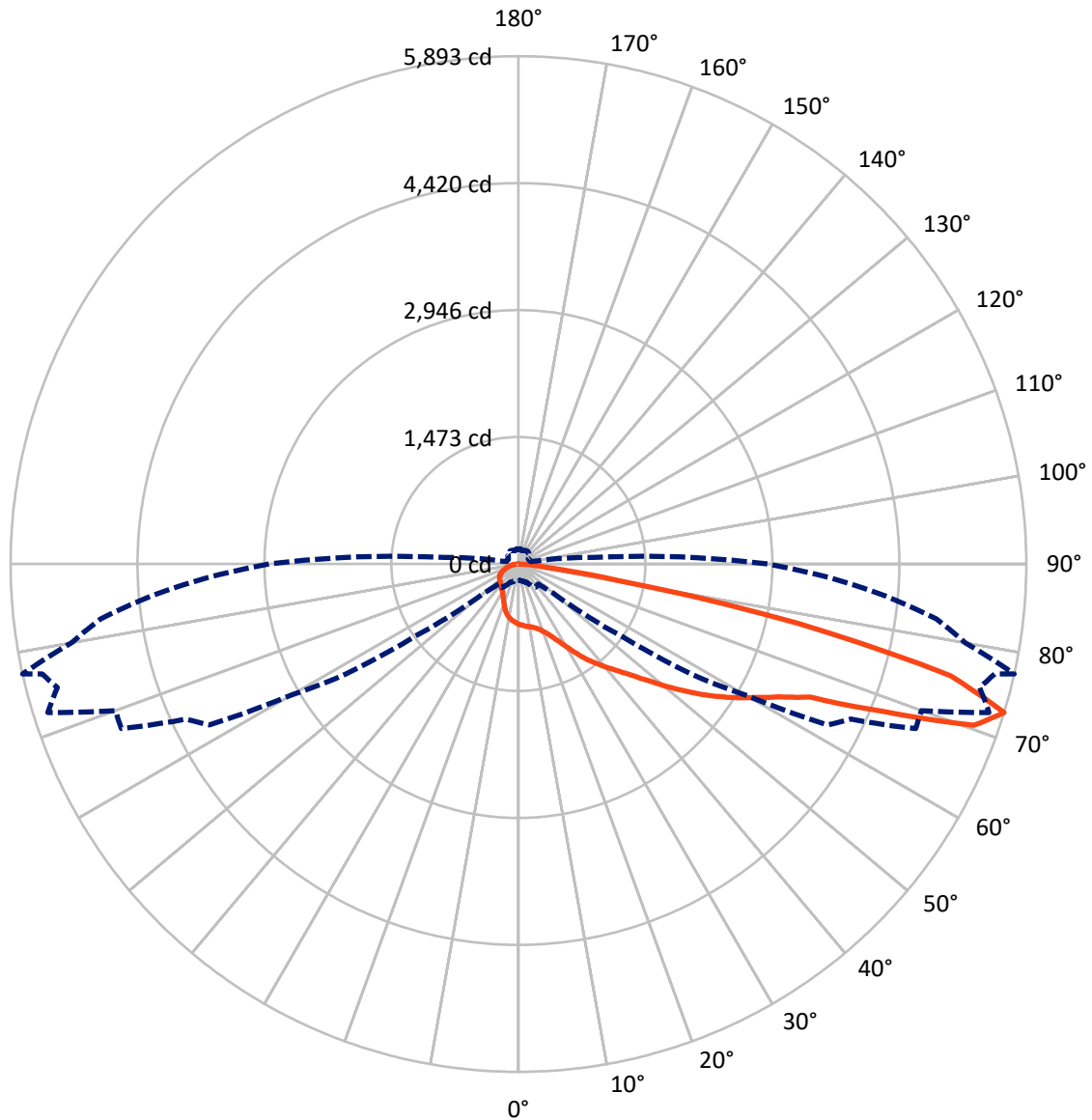
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	871.2	0.0	871.2
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	4386.8	0.0	4386.8
	% Fixture	83.4	0.0	83.4
Total	Lumens	5258.0	0.0	5258.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.2
10°-20°	199.9	3.8
20°-30°	354.9	6.8
30°-40°	562.4	10.7
40°-50°	843.7	16.0
50°-60°	1093.2	20.8
60°-70°	1242.2	23.6
70°-80°	824.3	15.7
80°-90°	72.1	1.4
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°	5258.0	100.0
0°-180°	5258.0	100.0



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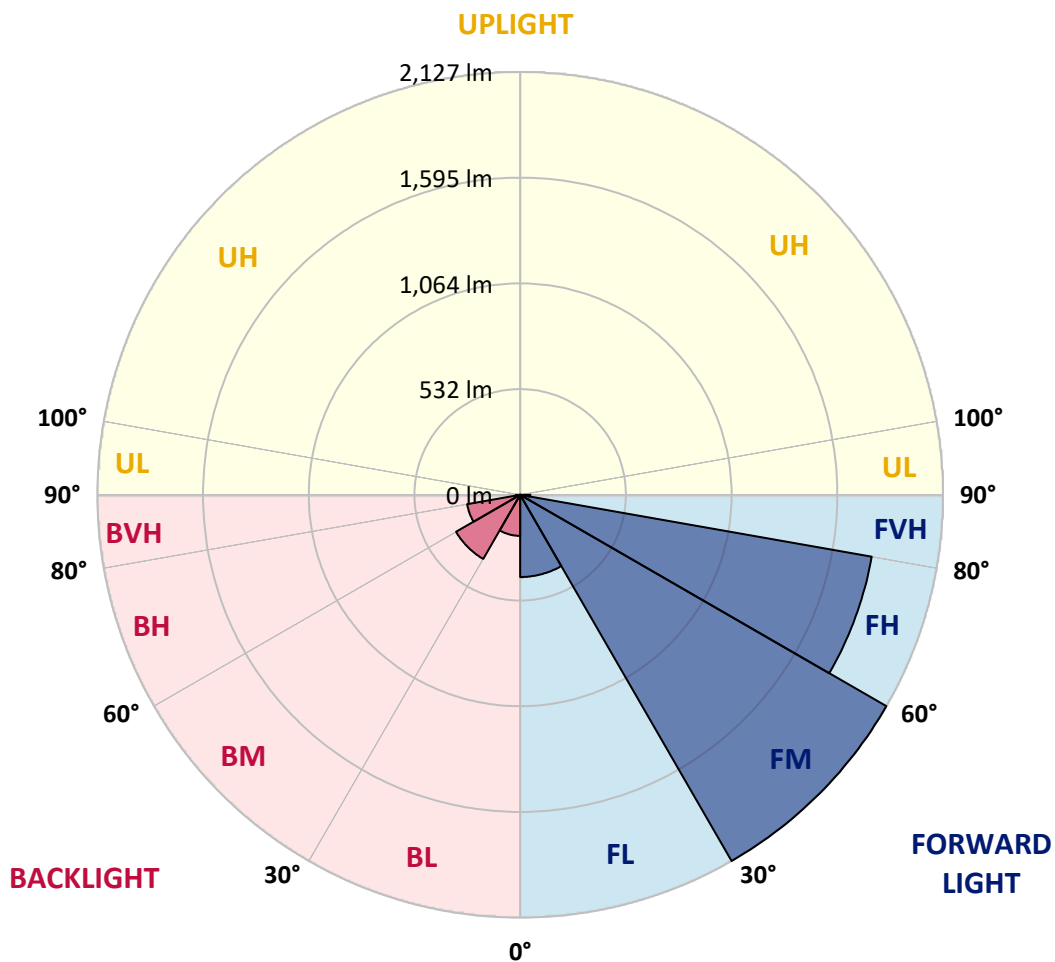
CATALOG NUMBER: ISS-AF-1200-LED-E1-T2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	413.7	7.9			
FM (30°-60°)	2127.1	40.5			
FH (60°-80°)	1795.6	34.1			G1/1800
FVH (80°-90°)	50.4	1.0			G1/100
BL (0°-30°)	206.4	3.9	B1/500		
BM (30°-60°)	372.2	7.1	B1/1000		
BH (60°-80°)	270.9	5.2	B1/500		G1/500
BVH (80°-90°)	21.7	0.4			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0
2.5°	760.5	757.0	755.2	751.7	748.1	746.4	741.0	737.5	742.8	741.0	741.0
5°	817.3	813.7	808.4	803.1	796.0	790.7	785.4	780.0	783.6	780.0	776.5
7.5°	863.4	859.8	852.7	847.4	840.3	833.2	826.1	824.4	820.8	815.5	813.7
10°	890.0	886.4	882.9	879.3	868.7	863.4	854.5	849.2	851.0	843.9	843.9
12.5°	914.8	911.2	909.5	909.5	900.6	895.3	891.7	886.4	890.0	879.3	875.8
15°	937.8	934.3	929.0	934.3	932.5	930.7	929.0	927.2	932.5	921.9	923.6
17.5°	975.0	973.3	962.6	955.5	957.3	962.6	966.2	964.4	964.4	959.1	960.9
20°	1033.6	1033.6	1019.4	1007.0	987.5	987.5	989.2	987.5	991.0	994.6	999.9
22.5°	1077.9	1074.3	1069.0	1058.4	1037.1	1019.4	1019.4	1012.3	1017.6	1019.4	1030.0
25°	1134.6	1131.1	1118.6	1118.6	1097.4	1074.3	1070.8	1060.1	1072.6	1049.5	1067.2
27.5°	1203.7	1200.2	1184.2	1177.2	1166.5	1138.1	1131.1	1132.8	1145.2	1111.6	1129.3
30°	1290.6	1287.1	1267.6	1248.1	1230.3	1200.2	1196.7	1194.9	1223.2	1184.2	1207.3
32.5°	1400.5	1400.5	1379.3	1352.7	1317.2	1276.4	1262.2	1264.0	1303.0	1260.5	1299.5
35°	1567.2	1545.9	1506.9	1466.1	1428.9	1381.0	1361.5	1358.0	1393.4	1350.9	1395.2
37.5°	1673.5	1659.4	1623.9	1593.8	1553.0	1506.9	1492.7	1498.0	1528.2	1466.1	1529.9
40°	1769.3	1767.5	1744.5	1725.0	1684.2	1638.1	1655.8	1726.7	1806.5	1685.9	1687.7
42.5°	1833.1	1836.6	1834.9	1836.6	1813.6	1765.7	1795.9	1895.1	2031.6	1960.7	1895.1
45°	1843.7	1856.1	1861.5	1896.9	1920.0	1891.6	1907.6	2012.1	2285.2	2395.1	2099.0
47.5°	1870.3	1882.7	1872.1	1914.6	2021.0	2019.2	2083.1	2122.1	2159.3	2177.0	2400.4
50°	1905.8	1928.8	1918.2	1953.6	2040.5	2090.2	2145.1	2194.7	2164.6	2052.9	2113.2
52.5°	1907.6	1934.1	1992.6	2028.1	2113.2	2102.6	2139.8	2113.2	2159.3	2044.1	2102.6
55°	1751.5	1756.9	1927.1	2106.1	2255.0	2224.9	2201.8	2141.6	2200.1	2056.5	2130.9
57.5°	1505.1	1522.8	1700.1	2001.5	2320.6	2347.2	2340.1	2334.8	2380.9	2189.4	2271.0
60°	1233.9	1255.2	1423.6	1778.1	2184.1	2253.3	2349.0	2407.5	2526.3	2450.0	2584.8
62.5°	769.4	785.4	971.5	1414.7	1927.1	2063.6	2203.6	2272.8	2444.7	2480.2	2708.9
65°	367.0	372.3	445.0	769.4	1400.5	1657.6	1865.0	2012.1	2223.1	2382.7	2691.1
67.5°	285.4	287.2	313.8	409.5	718.0	890.0	1125.7	1320.7	1545.9	1982.0	2364.9
70°	228.7	228.7	250.0	301.4	445.0	468.0	528.3	593.9	689.6	1040.6	1350.9
72.5°	191.5	191.5	205.6	237.6	329.7	335.1	331.5	326.2	326.2	411.3	524.8
75°	161.3	159.6	168.4	189.7	244.6	251.7	248.2	235.8	221.6	221.6	250.0
77.5°	131.2	131.2	138.3	148.9	177.3	180.8	180.8	170.2	157.8	159.6	172.0
80°	102.8	102.8	108.1	115.2	124.1	122.3	122.3	111.7	102.8	101.1	108.1
82.5°	74.5	76.2	88.6	83.3	79.8	74.5	74.5	72.7	65.6	60.3	63.8
85°	23.0	24.8	42.5	49.6	40.8	33.7	31.9	26.6	28.4	23.0	26.6
87.5°	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	1.8	0.0	1.8
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°	70°	72.5°	75°	77°
0°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0
2.5°	732.2	735.7	728.6	728.6	719.8	725.1	716.2	718.0	709.1	712.7	712.7
5°	767.6	769.4	760.5	757.0	748.1	748.1	739.3	739.3	726.9	730.4	726.9
7.5°	801.3	801.3	792.4	785.4	776.5	772.9	762.3	757.0	746.4	744.6	739.3
10°	829.7	829.7	817.3	810.2	799.5	794.2	780.0	774.7	762.3	753.4	748.1
12.5°	865.1	861.6	847.4	840.3	822.6	820.8	799.5	796.0	778.3	772.9	764.1
15°	907.7	911.2	888.2	886.4	861.6	859.8	831.5	829.7	803.1	801.3	788.9
17.5°	953.8	960.9	941.4	939.6	909.5	909.5	875.8	874.0	838.5	836.8	820.8
20°	994.6	1003.4	991.0	994.6	968.0	969.7	932.5	932.5	882.9	879.3	865.1
22.5°	1031.8	1049.5	1038.9	1058.4	1031.8	1044.2	994.6	1003.4	944.9	937.8	916.5
25°	1069.0	1092.1	1088.5	1120.4	1100.9	1122.2	1070.8	1088.5	1012.3	1017.6	989.2
27.5°	1106.2	1136.4	1132.8	1178.9	1171.8	1214.4	1170.1	1189.6	1106.2	1111.6	1079.6
30°	1168.3	1202.0	1189.6	1237.4	1237.4	1306.6	1272.9	1303.0	1210.8	1221.5	1184.2
32.5°	1251.6	1290.6	1253.4	1315.4	1311.9	1402.3	1375.7	1427.1	1336.7	1350.9	1304.8
35°	1342.0	1404.1	1343.8	1412.9	1402.3	1496.3	1478.5	1561.9	1466.1	1482.1	1436.0
37.5°	1460.8	1535.3	1455.5	1515.8	1467.9	1576.0	1565.4	1678.9	1581.4	1622.1	1567.2
40°	1600.9	1659.4	1560.1	1611.5	1531.7	1643.4	1625.7	1781.7	1691.3	1756.9	1707.2
42.5°	1730.3	1771.0	1639.9	1703.7	1607.9	1721.4	1689.5	1877.4	1799.4	1900.5	1845.5
45°	1847.3	1893.4	1719.6	1790.5	1684.2	1808.3	1753.3	1969.6	1916.4	2068.9	2013.9
47.5°	2013.9	1946.6	1792.3	1884.5	1765.7	1902.2	1829.5	2077.7	2058.2	2274.5	2210.7
50°	1959.0	2003.3	1852.6	1948.3	1840.2	2006.8	1927.1	2207.2	2212.5	2497.9	2460.7
52.5°	1964.3	2038.7	1898.7	2031.6	1927.1	2152.2	2068.9	2363.2	2388.0	2714.2	2662.8
55°	1996.2	2106.1	1967.8	2146.9	2049.4	2313.5	2255.0	2531.6	2574.1	2918.1	2887.9
57.5°	2076.0	2228.4	2086.6	2320.6	2219.6	2497.9	2444.7	2705.3	2763.8	3121.9	3113.1
60°	2382.7	2563.5	2315.3	2574.1	2439.4	2707.1	2636.2	2887.9	2946.4	3316.9	3340.0
62.5°	2724.8	3038.6	2891.5	3160.9	2804.6	3075.8	2866.6	3113.1	3116.6	3526.1	3598.8
65°	2813.5	3295.7	3421.5	3923.2	3737.1	4015.4	3457.0	3621.9	3409.1	3907.3	4011.9
67.5°	2779.8	3370.1	3719.4	4284.9	4495.9	4981.6	4887.7	4830.9	4338.1	4696.2	4822.1
70°	2040.5	2666.3	3520.8	4095.2	4703.3	5022.4	5527.6	5579.1	5557.8	5508.1	5591.5
72.5°	929.0	1457.3	2382.7	3038.6	4042.0	4256.5	4988.7	4974.5	5726.2	5540.1	5671.2
75°	365.2	562.0	1134.6	1696.6	2795.7	3059.9	3889.6	3683.9	4621.7	4348.7	4628.8
77.5°	200.3	251.7	425.5	728.6	1526.4	1666.4	2380.9	2037.0	2866.6	2393.3	2487.3
80°	120.6	150.7	195.0	276.6	648.9	686.1	1015.8	819.0	1171.8	890.0	863.4
82.5°	65.6	81.5	97.5	136.5	241.1	267.7	351.0	315.6	375.8	320.9	313.8
85°	26.6	35.5	37.2	55.0	79.8	92.2	111.7	120.6	147.1	134.7	131.2
87.5°	0.0	1.8	0.0	3.5	0.0	3.5	0.0	5.3	5.3	8.9	10.6
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°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0
2.5°	707.4	712.7	705.6	705.6	696.7	702.0	696.7	691.4	682.5	684.3	671.9
5°	719.8	723.3	714.4	710.9	705.6	703.8	693.2	682.5	670.1	670.1	655.9
7.5°	732.2	732.2	719.8	719.8	707.4	703.8	687.9	670.1	652.4	650.6	629.4
10°	739.3	737.5	721.5	721.5	703.8	702.0	682.5	655.9	631.1	624.0	593.9
12.5°	753.4	751.7	732.2	728.6	705.6	705.6	677.2	641.8	606.3	593.9	551.3
15°	771.2	772.9	749.9	744.6	718.0	716.2	677.2	624.0	576.2	556.7	505.3
17.5°	799.5	801.3	769.4	764.1	732.2	726.9	679.0	602.8	535.4	514.1	468.0
20°	836.8	831.5	788.9	787.1	744.6	739.3	677.2	570.8	494.6	473.3	432.6
22.5°	882.9	877.5	822.6	817.3	767.6	758.8	675.4	537.2	457.4	434.3	407.7
25°	946.7	939.6	872.2	865.1	803.1	788.9	673.7	501.7	425.5	407.7	391.8
27.5°	1026.5	1012.3	930.7	923.6	840.3	822.6	666.6	460.9	393.6	381.2	374.1
30°	1122.2	1109.8	1005.2	994.6	890.0	866.9	659.5	423.7	370.5	365.2	359.9
32.5°	1235.7	1223.2	1095.6	1083.2	953.8	920.1	647.1	393.6	356.3	356.3	349.2
35°	1354.4	1343.8	1193.1	1184.2	1024.7	980.4	631.1	367.0	343.9	343.9	336.8
37.5°	1460.8	1469.7	1299.5	1292.4	1095.6	1040.6	613.4	349.2	333.3	329.7	322.7
40°	1576.0	1597.3	1398.8	1404.1	1170.1	1104.5	592.1	335.1	320.9	317.3	315.6
42.5°	1693.0	1733.8	1503.3	1522.8	1244.5	1170.1	576.2	326.2	315.6	308.5	306.7
45°	1838.4	1896.9	1632.8	1670.0	1331.4	1249.8	570.8	315.6	299.6	290.7	285.4
47.5°	2019.2	2097.2	1792.3	1834.9	1446.6	1345.6	581.5	312.0	289.0	278.3	267.7
50°	2233.7	2308.2	1982.0	1999.7	1576.0	1450.2	604.5	317.3	285.4	269.5	253.5
52.5°	2460.7	2517.4	2182.3	2162.8	1710.8	1553.0	631.1	319.1	276.6	260.6	241.1
55°	2694.7	2726.6	2368.5	2317.1	1833.1	1655.8	666.6	317.3	269.5	251.7	226.9
57.5°	2923.4	2934.0	2533.4	2483.7	1953.6	1778.1	710.9	312.0	258.8	241.1	214.5
60°	3146.8	3164.5	2716.0	2669.9	2084.8	1935.9	774.7	303.2	244.6	232.2	203.9
62.5°	3391.4	3449.9	2934.0	2941.1	2265.7	2182.3	895.3	292.5	230.5	216.3	187.9
65°	3724.7	3948.1	3293.9	3460.5	2613.1	2646.8	1125.7	262.4	211.0	193.2	173.7
67.5°	4559.7	4804.3	4167.9	4235.3	3426.9	3226.5	1271.1	223.4	186.1	173.7	161.3
70°	5605.6	5430.1	4978.1	4570.3	3902.0	3316.9	1118.6	187.9	164.9	157.8	150.7
72.5°	5892.8	5263.5	4891.2	4279.6	3607.7	2893.2	856.3	161.3	147.1	143.6	138.3
75°	5178.4	4267.2	4288.4	3400.3	2990.7	2205.4	585.0	138.3	127.6	125.9	124.1
77.5°	3311.6	2193.0	2669.9	1680.6	1726.7	1021.1	285.4	115.2	109.9	109.9	106.4
80°	1177.2	730.4	826.1	530.1	482.2	324.4	154.2	92.2	88.6	90.4	88.6
82.5°	352.8	280.1	274.8	214.5	166.6	136.5	85.1	70.9	67.4	69.1	65.6
85°	141.8	109.9	92.2	70.9	58.5	53.2	46.1	47.9	42.5	46.1	40.8
87.5°	8.9	7.1	5.3	7.1	0.0	3.5	8.9	7.1	1.8	7.1	5.3
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):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0
2.5°	680.8	668.4	673.7	668.4	671.9	661.3	664.8	655.9	655.9	654.2	645.3
5°	657.7	645.3	643.5	631.1	632.9	618.7	616.9	601.0	601.0	586.8	560.2
7.5°	625.8	606.3	604.5	579.7	577.9	558.4	551.3	533.6	531.8	515.9	499.9
10°	585.0	554.9	549.6	517.7	519.4	498.2	496.4	484.0	484.0	476.9	476.9
12.5°	538.9	505.3	501.7	476.9	478.7	464.5	466.3	459.2	462.7	466.3	478.7
15°	496.4	469.8	466.3	450.3	452.1	448.5	453.8	453.8	459.2	468.0	489.3
17.5°	460.9	437.9	439.7	432.6	439.7	437.9	448.5	446.7	457.4	468.0	494.6
20°	429.0	416.6	421.9	420.2	429.0	429.0	437.9	439.7	448.5	462.7	492.8
22.5°	407.7	404.2	409.5	409.5	416.6	418.4	427.2	432.6	437.9	452.1	478.7
25°	395.3	393.6	398.9	400.7	406.0	407.7	416.6	416.6	425.5	434.3	448.5
27.5°	377.6	374.1	381.2	381.2	388.2	386.5	397.1	393.6	402.4	406.0	409.5
30°	365.2	359.9	365.2	363.4	368.7	363.4	368.7	363.4	368.7	368.7	363.4
32.5°	352.8	347.5	349.2	342.2	347.5	340.4	342.2	335.1	338.6	335.1	336.8
35°	340.4	333.3	333.3	324.4	324.4	315.6	319.1	312.0	319.1	324.4	322.7
37.5°	322.7	317.3	317.3	310.2	313.8	310.2	317.3	313.8	315.6	308.5	296.1
40°	312.0	315.6	313.8	319.1	315.6	310.2	304.9	294.3	292.5	289.0	281.9
42.5°	296.1	299.6	290.7	297.8	292.5	294.3	290.7	285.4	281.9	278.3	271.2
45°	273.0	273.0	265.9	276.6	271.2	281.9	278.3	278.3	274.8	269.5	264.1
47.5°	253.5	255.3	248.2	257.1	253.5	267.7	265.9	271.2	271.2	267.7	253.5
50°	241.1	237.6	232.2	241.1	239.3	251.7	253.5	264.1	262.4	264.1	251.7
52.5°	230.5	223.4	218.1	223.4	223.4	234.0	237.6	250.0	251.7	255.3	248.2
55°	218.1	209.2	205.6	209.2	209.2	219.8	225.1	234.0	239.3	250.0	246.4
57.5°	207.4	195.0	191.5	195.0	196.8	207.4	212.7	221.6	228.7	242.9	241.1
60°	195.0	184.4	180.8	186.1	187.9	198.6	203.9	212.7	218.1	234.0	234.0
62.5°	180.8	172.0	172.0	173.7	177.3	187.9	191.5	203.9	205.6	225.1	226.9
65°	168.4	163.1	163.1	164.9	168.4	177.3	179.1	191.5	193.2	212.7	218.1
67.5°	157.8	154.2	154.2	156.0	157.8	164.9	166.6	179.1	182.6	200.3	209.2
70°	147.1	143.6	141.8	141.8	147.1	152.5	156.0	168.4	170.2	186.1	196.8
72.5°	134.7	131.2	131.2	129.4	134.7	138.3	145.4	152.5	156.0	172.0	179.1
75°	122.3	118.8	118.8	117.0	120.6	127.6	129.4	136.5	138.3	152.5	159.6
77.5°	106.4	102.8	102.8	102.8	106.4	108.1	109.9	117.0	120.6	133.0	140.1
80°	88.6	85.1	86.9	85.1	90.4	83.3	88.6	95.7	99.3	106.4	102.8
82.5°	67.4	62.0	63.8	63.8	65.6	60.3	63.8	67.4	70.9	76.2	74.5
85°	42.5	37.2	40.8	37.2	40.8	35.5	39.0	39.0	42.5	39.0	37.2
87.5°	8.9	3.5	8.9	3.5	10.6	0.0	5.3	0.0	3.5	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):

	155°	165°	175°	180°
0°	702.0	702.0	702.0	702.0
2.5°	636.4	629.4	625.8	624.0
5°	546.0	533.6	530.1	526.5
7.5°	491.1	487.5	487.5	485.8
10°	480.4	485.8	487.5	487.5
12.5°	492.8	501.7	508.8	508.8
15°	508.8	524.8	533.6	533.6
17.5°	521.2	542.5	551.3	553.1
20°	523.0	544.3	556.7	558.4
22.5°	507.0	521.2	530.1	530.1
25°	466.3	473.3	478.7	478.7
27.5°	414.8	413.1	411.3	418.4
30°	361.7	358.1	351.0	358.1
32.5°	342.2	329.7	312.0	317.3
35°	312.0	308.5	299.6	301.4
37.5°	301.4	331.5	329.7	331.5
40°	289.0	326.2	324.4	328.0
42.5°	278.3	299.6	278.3	280.1
45°	258.8	267.7	250.0	250.0
47.5°	250.0	246.4	239.3	237.6
50°	242.9	242.9	239.3	235.8
52.5°	237.6	234.0	246.4	244.6
55°	230.5	226.9	235.8	235.8
57.5°	225.1	216.3	230.5	230.5
60°	219.8	211.0	225.1	225.1
62.5°	216.3	205.6	223.4	221.6
65°	211.0	200.3	223.4	219.8
67.5°	203.9	189.7	219.8	214.5
70°	189.7	177.3	207.4	193.2
72.5°	175.5	161.3	177.3	164.9
75°	154.2	141.8	143.6	141.8
77.5°	129.4	115.2	111.7	113.5
80°	97.5	88.6	85.1	85.1
82.5°	70.9	60.3	62.0	51.4
85°	31.9	23.0	17.7	17.7
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)