

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: P227591

Luminaire Tested: **ISS-AF-1200-LED-E1-T2-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227591  
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-T2-7030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II  
Light Source: (16) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5704 lumens  
Efficiency: N/A  
Efficacy: 86.4 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 - G2

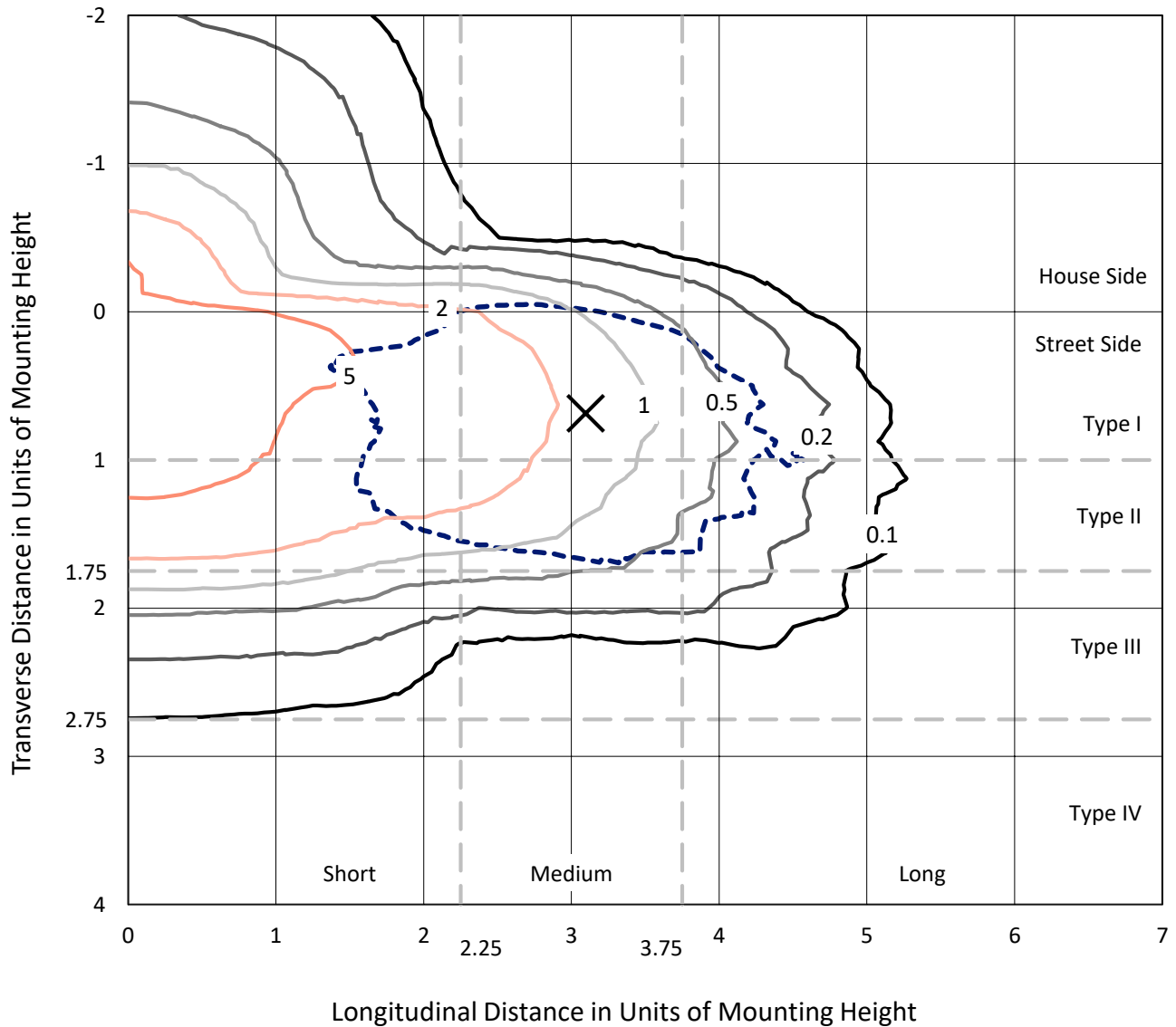
Input Watts (W): 66  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

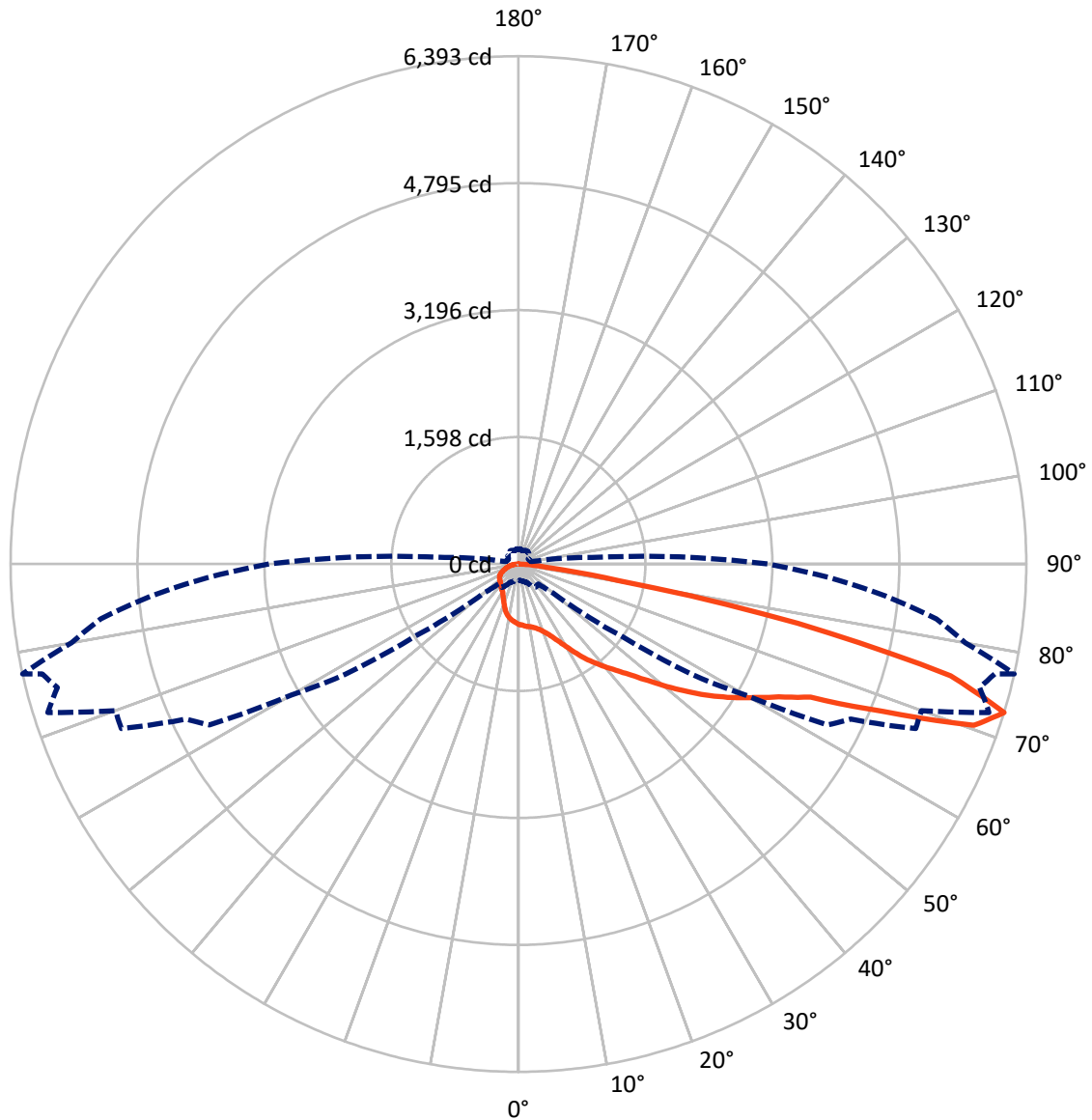
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 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
<b>House Side</b>	Lumens	945.1	0.0	945.1
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	4758.9	0.0	4758.9
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	5704.0	0.0	5704.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.7	1.2
10°-20°	216.9	3.8
20°-30°	385.1	6.8
30°-40°	610.1	10.7
40°-50°	915.2	16.0
50°-60°	1186.0	20.8
60°-70°	1347.6	23.6
70°-80°	894.2	15.7
80°-90°	78.2	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°	5704.0	100.0
0°-180°	5704.0	100.0



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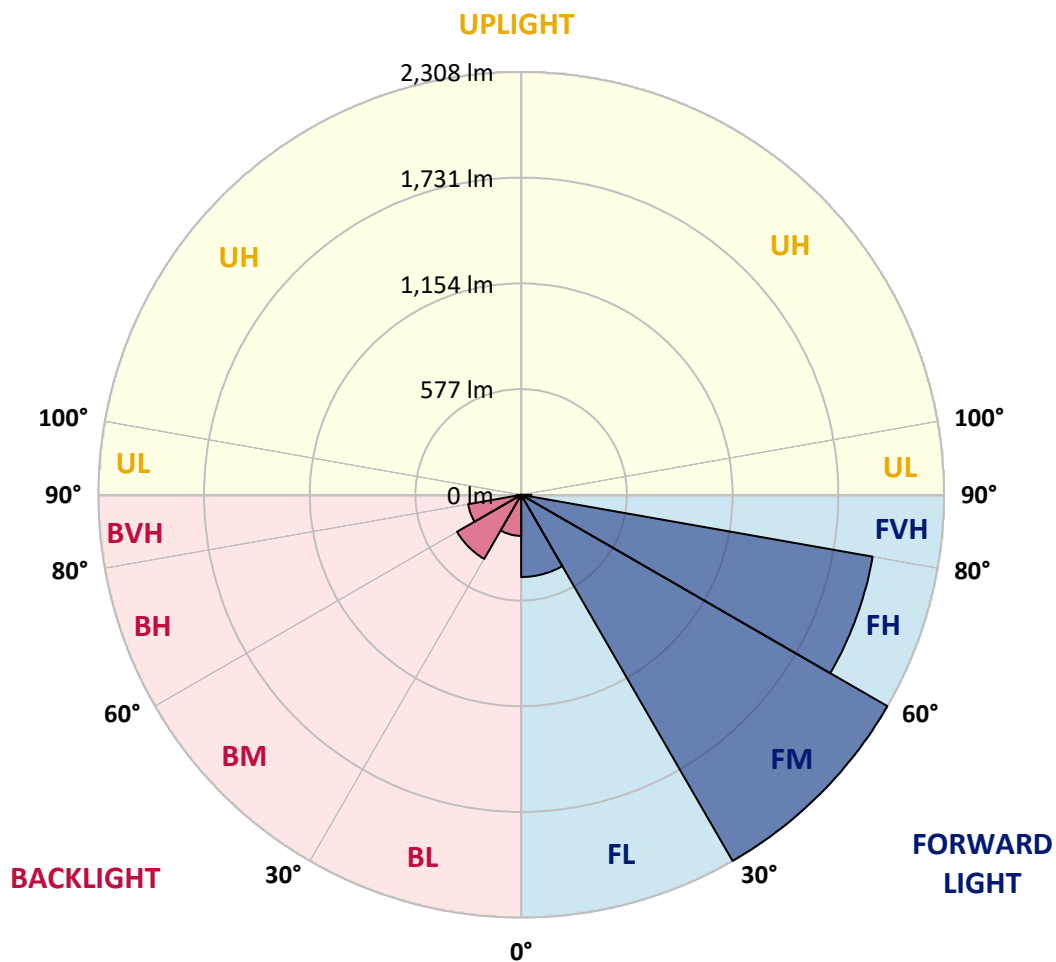
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	448.7	7.9			
FM (30°-60°)	2307.6	40.5			
FH (60°-80°)	1947.9	34.1			G2/5000
FVH (80°-90°)	54.7	1.0			G1/100
BL (0°-30°)	223.9	3.9	B1/500		
BM (30°-60°)	403.7	7.1	B1/1000		
BH (60°-80°)	293.9	5.2	B1/500		G1/500
BVH (80°-90°)	23.6	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-G2**

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°	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6
2.5°	825.0	821.2	819.3	815.4	811.6	809.7	803.9	800.0	805.8	803.9	803.9
5°	886.6	882.7	877.0	871.2	863.5	857.7	852.0	846.2	850.1	846.2	842.4
7.5°	936.6	932.7	925.1	919.3	911.6	903.9	896.2	894.3	890.4	884.7	882.7
10°	965.4	961.6	957.8	953.9	942.4	936.6	927.0	921.2	923.1	915.4	915.4
12.5°	992.4	988.5	986.6	986.6	977.0	971.2	967.4	961.6	965.4	953.9	950.1
15°	1017.4	1013.5	1007.8	1013.5	1011.6	1009.7	1007.8	1005.8	1011.6	1000.1	1002.0
17.5°	1057.8	1055.8	1044.3	1036.6	1038.5	1044.3	1048.1	1046.2	1046.2	1040.4	1042.4
20°	1121.2	1121.2	1105.8	1092.4	1071.2	1071.2	1073.1	1071.2	1075.1	1078.9	1084.7
22.5°	1169.3	1165.5	1159.7	1148.1	1125.1	1105.8	1105.8	1098.1	1103.9	1105.8	1117.4
25°	1230.8	1227.0	1213.5	1213.5	1190.5	1165.5	1161.6	1150.1	1163.5	1138.5	1157.8
27.5°	1305.8	1302.0	1284.7	1277.0	1265.5	1234.7	1227.0	1228.9	1242.4	1205.8	1225.1
30°	1400.1	1396.2	1375.1	1353.9	1334.7	1302.0	1298.2	1296.2	1327.0	1284.7	1309.7
32.5°	1519.3	1519.3	1496.2	1467.4	1428.9	1384.7	1369.3	1371.2	1413.5	1367.4	1409.7
35°	1700.1	1677.0	1634.7	1590.5	1550.1	1498.2	1477.0	1473.2	1511.6	1465.5	1513.6
37.5°	1815.5	1800.1	1761.6	1729.0	1684.7	1634.7	1619.3	1625.1	1657.8	1590.5	1659.7
40°	1919.3	1917.4	1892.4	1871.3	1827.0	1777.0	1796.3	1873.2	1959.7	1829.0	1830.9
42.5°	1988.6	1992.4	1990.5	1992.4	1967.4	1915.5	1948.2	2055.9	2204.0	2127.1	2055.9
45°	2000.1	2013.6	2019.4	2057.8	2082.8	2052.0	2069.4	2182.8	2479.0	2598.2	2277.1
47.5°	2029.0	2042.4	2030.9	2077.0	2192.4	2190.5	2259.8	2302.1	2342.4	2361.7	2604.0
50°	2067.4	2092.4	2080.9	2119.4	2213.6	2267.4	2327.1	2380.9	2348.2	2227.1	2292.4
52.5°	2069.4	2098.2	2161.7	2200.1	2292.4	2280.9	2321.3	2292.4	2342.4	2217.4	2280.9
55°	1900.1	1905.9	2090.5	2284.8	2446.3	2413.6	2388.6	2323.2	2386.7	2230.9	2311.7
57.5°	1632.8	1652.0	1844.3	2171.3	2517.5	2546.3	2538.6	2532.8	2582.8	2375.1	2463.6
60°	1338.5	1361.6	1544.3	1929.0	2369.4	2444.4	2548.2	2611.7	2740.5	2657.9	2804.0
62.5°	834.7	852.0	1053.9	1534.7	2090.5	2238.6	2390.5	2465.5	2652.1	2690.5	2938.6
65°	398.1	403.9	482.7	834.7	1519.3	1798.2	2023.2	2182.8	2411.7	2584.8	2919.4
67.5°	309.6	311.6	340.4	444.3	778.9	965.4	1221.2	1432.8	1677.0	2150.1	2565.5
70°	248.1	248.1	271.2	326.9	482.7	507.7	573.1	644.3	748.1	1128.9	1465.5
72.5°	207.7	207.7	223.1	257.7	357.7	363.5	359.6	353.9	353.9	446.2	569.3
75°	175.0	173.1	182.7	205.8	265.4	273.1	269.2	255.8	240.4	240.4	271.2
77.5°	142.3	142.3	150.0	161.5	192.3	196.2	196.2	184.6	171.2	173.1	186.5
80°	111.5	111.5	117.3	125.0	134.6	132.7	132.7	121.2	111.5	109.6	117.3
82.5°	80.8	82.7	96.2	90.4	86.5	80.8	80.8	78.9	71.2	65.4	69.2
85°	25.0	26.9	46.2	53.8	44.2	36.5	34.6	28.8	30.8	25.0	28.8
87.5°	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	1.9	0.0	1.9
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°	70°	72.5°	75°	77°
0°	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6
2.5°	794.3	798.1	790.4	790.4	780.8	786.6	777.0	778.9	769.3	773.1	773.1
5°	832.7	834.7	825.0	821.2	811.6	811.6	802.0	802.0	788.5	792.4	788.5
7.5°	869.3	869.3	859.7	852.0	842.4	838.5	827.0	821.2	809.7	807.7	802.0
10°	900.1	900.1	886.6	878.9	867.4	861.6	846.2	840.4	827.0	817.4	811.6
12.5°	938.5	934.7	919.3	911.6	892.4	890.4	867.4	863.5	844.3	838.5	828.9
15°	984.7	988.5	963.5	961.6	934.7	932.7	902.0	900.1	871.2	869.3	855.8
17.5°	1034.7	1042.4	1021.2	1019.3	986.6	986.6	950.1	948.1	909.7	907.7	890.4
20°	1078.9	1088.5	1075.1	1078.9	1050.1	1052.0	1011.6	1011.6	957.8	953.9	938.5
22.5°	1119.3	1138.5	1127.0	1148.1	1119.3	1132.8	1078.9	1088.5	1025.1	1017.4	994.3
25°	1159.7	1184.7	1180.8	1215.5	1194.3	1217.4	1161.6	1180.8	1098.1	1103.9	1073.1
27.5°	1200.1	1232.8	1228.9	1278.9	1271.2	1317.4	1269.3	1290.5	1200.1	1205.8	1171.2
30°	1267.4	1303.9	1290.5	1342.4	1342.4	1417.4	1380.9	1413.5	1313.5	1325.1	1284.7
32.5°	1357.8	1400.1	1359.7	1427.0	1423.2	1521.2	1492.4	1548.2	1450.1	1465.5	1415.5
35°	1455.9	1523.2	1457.8	1532.8	1521.2	1623.2	1603.9	1694.3	1590.5	1607.8	1557.8
37.5°	1584.7	1665.5	1578.9	1644.3	1592.4	1709.7	1698.2	1821.3	1715.5	1759.7	1700.1
40°	1736.6	1800.1	1692.4	1748.2	1661.6	1782.8	1763.6	1932.8	1834.7	1905.9	1852.0
42.5°	1877.0	1921.3	1779.0	1848.2	1744.3	1867.4	1832.8	2036.7	1952.0	2061.7	2002.0
45°	2004.0	2054.0	1865.5	1942.4	1827.0	1961.7	1902.0	2136.7	2079.0	2244.4	2184.7
47.5°	2184.7	2111.7	1944.3	2044.4	1915.5	2063.6	1984.7	2254.0	2232.8	2467.5	2398.2
50°	2125.1	2173.2	2009.7	2113.6	1996.3	2177.1	2090.5	2394.4	2400.1	2709.8	2669.4
52.5°	2130.9	2211.7	2059.7	2204.0	2090.5	2334.8	2244.4	2563.6	2590.5	2944.4	2888.6
55°	2165.5	2284.8	2134.7	2329.0	2223.2	2509.8	2446.3	2746.3	2792.5	3165.6	3132.9
57.5°	2252.1	2417.5	2263.6	2517.5	2407.8	2709.8	2652.1	2934.8	2998.3	3386.7	3377.1
60°	2584.8	2780.9	2511.7	2792.5	2646.3	2936.7	2859.8	3132.9	3196.3	3598.3	3623.3
62.5°	2955.9	3296.4	3136.7	3429.1	3042.5	3336.7	3109.8	3377.1	3381.0	3825.2	3904.1
65°	3052.1	3575.2	3711.8	4256.0	4054.1	4356.0	3750.2	3929.1	3698.3	4238.7	4352.2
67.5°	3015.6	3656.0	4034.9	4648.4	4877.2	5404.2	5302.2	5240.7	4706.1	5094.5	5231.1
70°	2213.6	2892.5	3819.5	4442.6	5102.2	5448.4	5996.5	6052.3	6029.2	5975.4	6065.8
72.5°	1007.8	1580.9	2584.8	3296.4	4384.9	4617.6	5411.9	5396.5	6211.9	6010.0	6152.3
75°	396.2	609.7	1230.8	1840.5	3032.9	3319.4	4219.5	3996.4	5013.8	4717.6	5021.5
77.5°	217.3	273.1	461.6	790.4	1655.9	1807.8	2582.8	2209.7	3109.8	2596.3	2698.2
80°	130.8	163.5	211.6	300.0	703.9	744.3	1102.0	888.5	1271.2	965.4	936.6
82.5°	71.2	88.5	105.8	148.1	261.6	290.4	380.8	342.3	407.7	348.1	340.4
85°	28.8	38.5	40.4	59.6	86.5	100.0	121.2	130.8	159.6	146.2	142.3
87.5°	0.0	1.9	0.0	3.8	0.0	3.8	0.0	5.8	5.8	9.6	11.5
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°	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6
2.5°	767.4	773.1	765.4	765.4	755.8	761.6	755.8	750.0	740.4	742.4	728.9
5°	780.8	784.7	775.0	771.2	765.4	763.5	752.0	740.4	727.0	727.0	711.6
7.5°	794.3	794.3	780.8	780.8	767.4	763.5	746.2	727.0	707.7	705.8	682.7
10°	802.0	800.0	782.7	782.7	763.5	761.6	740.4	711.6	684.7	677.0	644.3
12.5°	817.4	815.4	794.3	790.4	765.4	765.4	734.7	696.2	657.7	644.3	598.1
15°	836.6	838.5	813.5	807.7	778.9	777.0	734.7	677.0	625.0	603.9	548.1
17.5°	867.4	869.3	834.7	828.9	794.3	788.5	736.6	653.9	580.8	557.7	507.7
20°	907.7	902.0	855.8	853.9	807.7	802.0	734.7	619.3	536.6	513.5	469.3
22.5°	957.8	952.0	892.4	886.6	832.7	823.1	732.7	582.7	496.2	471.2	442.3
25°	1027.0	1019.3	946.2	938.5	871.2	855.8	730.8	544.3	461.6	442.3	425.0
27.5°	1113.5	1098.1	1009.7	1002.0	911.6	892.4	723.1	500.0	426.9	413.5	405.8
30°	1217.4	1203.9	1090.5	1078.9	965.4	940.4	715.4	459.6	401.9	396.2	390.4
32.5°	1340.5	1327.0	1188.5	1175.1	1034.7	998.1	702.0	426.9	386.6	386.6	378.9
35°	1469.3	1457.8	1294.3	1284.7	1111.6	1063.5	684.7	398.1	373.1	373.1	365.4
37.5°	1584.7	1594.3	1409.7	1402.0	1188.5	1128.9	665.4	378.9	361.6	357.7	350.0
40°	1709.7	1732.8	1517.4	1523.2	1269.3	1198.1	642.3	363.5	348.1	344.3	342.3
42.5°	1836.6	1880.9	1630.9	1652.0	1350.1	1269.3	625.0	353.9	342.3	334.6	332.7
45°	1994.4	2057.8	1771.3	1811.6	1444.3	1355.9	619.3	342.3	325.0	315.4	309.6
47.5°	2190.5	2275.1	1944.3	1990.5	1569.3	1459.7	630.8	338.5	313.5	301.9	290.4
50°	2423.2	2504.0	2150.1	2169.4	1709.7	1573.2	655.8	344.3	309.6	292.3	275.0
52.5°	2669.4	2730.9	2367.5	2346.3	1855.9	1684.7	684.7	346.2	300.0	282.7	261.6
55°	2923.3	2957.9	2569.4	2513.6	1988.6	1796.3	723.1	344.3	292.3	273.1	246.2
57.5°	3171.3	3182.9	2748.2	2694.4	2119.4	1929.0	771.2	338.5	280.8	261.6	232.7
60°	3413.7	3432.9	2946.3	2896.3	2261.7	2100.1	840.4	328.9	265.4	251.9	221.2
62.5°	3679.1	3742.5	3182.9	3190.6	2457.8	2367.5	971.2	317.3	250.0	234.6	203.9
65°	4040.6	4283.0	3573.3	3754.1	2834.8	2871.3	1221.2	284.6	228.9	209.6	188.5
67.5°	4946.5	5211.9	4521.4	4594.5	3717.5	3500.2	1378.9	242.3	201.9	188.5	175.0
70°	6081.1	5890.7	5400.3	4958.0	4232.9	3598.3	1213.5	203.9	178.9	171.2	163.5
72.5°	6392.7	5710.0	5306.1	4642.6	3913.7	3138.7	928.9	175.0	159.6	155.8	150.0
75°	5617.6	4629.1	4652.2	3688.7	3244.4	2392.5	634.7	150.0	138.5	136.5	134.6
77.5°	3592.5	2379.0	2896.3	1823.2	1873.2	1107.8	309.6	125.0	119.2	119.2	115.4
80°	1277.0	792.4	896.2	575.0	523.1	351.9	167.3	100.0	96.2	98.1	96.2
82.5°	382.7	303.9	298.1	232.7	180.8	148.1	92.3	76.9	73.1	75.0	71.2
85°	153.9	119.2	100.0	76.9	63.5	57.7	50.0	51.9	46.2	50.0	44.2
87.5°	9.6	7.7	5.8	7.7	0.0	3.8	9.6	7.7	1.9	7.7	5.8
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):**

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6	761.6
2.5°	738.5	725.0	730.8	725.0	728.9	717.4	721.2	711.6	711.6	709.7	700.0
5°	713.5	700.0	698.1	684.7	686.6	671.2	669.3	652.0	652.0	636.6	607.7
7.5°	678.9	657.7	655.8	628.9	627.0	605.8	598.1	578.9	577.0	559.6	542.3
10°	634.7	602.0	596.2	561.6	563.5	540.4	538.5	525.0	525.0	517.3	517.3
12.5°	584.7	548.1	544.3	517.3	519.3	503.9	505.8	498.1	502.0	505.8	519.3
15°	538.5	509.6	505.8	488.5	490.4	486.6	492.3	492.3	498.1	507.7	530.8
17.5°	500.0	475.0	477.0	469.3	477.0	475.0	486.6	484.6	496.2	507.7	536.6
20°	465.4	452.0	457.7	455.8	465.4	465.4	475.0	477.0	486.6	502.0	534.6
22.5°	442.3	438.5	444.3	444.3	452.0	453.9	463.5	469.3	475.0	490.4	519.3
25°	428.9	426.9	432.7	434.6	440.4	442.3	452.0	452.0	461.6	471.2	486.6
27.5°	409.6	405.8	413.5	413.5	421.2	419.3	430.8	426.9	436.6	440.4	444.3
30°	396.2	390.4	396.2	394.3	400.0	394.3	400.0	394.3	400.0	400.0	394.3
32.5°	382.7	376.9	378.9	371.2	376.9	369.3	371.2	363.5	367.3	363.5	365.4
35°	369.3	361.6	361.6	351.9	351.9	342.3	346.2	338.5	346.2	351.9	350.0
37.5°	350.0	344.3	344.3	336.6	340.4	336.6	344.3	340.4	342.3	334.6	321.2
40°	338.5	342.3	340.4	346.2	342.3	336.6	330.8	319.3	317.3	313.5	305.8
42.5°	321.2	325.0	315.4	323.1	317.3	319.3	315.4	309.6	305.8	301.9	294.2
45°	296.2	296.2	288.5	300.0	294.2	305.8	301.9	301.9	298.1	292.3	286.6
47.5°	275.0	276.9	269.2	278.9	275.0	290.4	288.5	294.2	294.2	290.4	275.0
50°	261.6	257.7	251.9	261.6	259.6	273.1	275.0	286.6	284.6	286.6	273.1
52.5°	250.0	242.3	236.6	242.3	242.3	253.9	257.7	271.2	273.1	276.9	269.2
55°	236.6	226.9	223.1	226.9	226.9	238.5	244.2	253.9	259.6	271.2	267.3
57.5°	225.0	211.6	207.7	211.6	213.5	225.0	230.8	240.4	248.1	263.5	261.6
60°	211.6	200.0	196.2	201.9	203.9	215.4	221.2	230.8	236.6	253.9	253.9
62.5°	196.2	186.5	186.5	188.5	192.3	203.9	207.7	221.2	223.1	244.2	246.2
65°	182.7	176.9	176.9	178.9	182.7	192.3	194.2	207.7	209.6	230.8	236.6
67.5°	171.2	167.3	167.3	169.2	171.2	178.9	180.8	194.2	198.1	217.3	226.9
70°	159.6	155.8	153.9	153.9	159.6	165.4	169.2	182.7	184.6	201.9	213.5
72.5°	146.2	142.3	142.3	140.4	146.2	150.0	157.7	165.4	169.2	186.5	194.2
75°	132.7	128.9	128.9	126.9	130.8	138.5	140.4	148.1	150.0	165.4	173.1
77.5°	115.4	111.5	111.5	111.5	115.4	117.3	119.2	126.9	130.8	144.2	151.9
80°	96.2	92.3	94.2	92.3	98.1	90.4	96.2	103.9	107.7	115.4	111.5
82.5°	73.1	67.3	69.2	69.2	71.2	65.4	69.2	73.1	76.9	82.7	80.8
85°	46.2	40.4	44.2	40.4	44.2	38.5	42.3	42.3	46.2	42.3	40.4
87.5°	9.6	3.8	9.6	3.8	11.5	0.0	5.8	0.0	3.8	1.9	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°	761.6	761.6	761.6	761.6
2.5°	690.4	682.7	678.9	677.0
5°	592.3	578.9	575.0	571.2
7.5°	532.7	528.9	528.9	527.0
10°	521.2	527.0	528.9	528.9
12.5°	534.6	544.3	552.0	552.0
15°	552.0	569.3	578.9	578.9
17.5°	565.4	588.5	598.1	600.0
20°	567.3	590.4	603.9	605.8
22.5°	550.0	565.4	575.0	575.0
25°	505.8	513.5	519.3	519.3
27.5°	450.0	448.1	446.2	453.9
30°	392.3	388.5	380.8	388.5
32.5°	371.2	357.7	338.5	344.3
35°	338.5	334.6	325.0	326.9
37.5°	326.9	359.6	357.7	359.6
40°	313.5	353.9	351.9	355.8
42.5°	301.9	325.0	301.9	303.9
45°	280.8	290.4	271.2	271.2
47.5°	271.2	267.3	259.6	257.7
50°	263.5	263.5	259.6	255.8
52.5°	257.7	253.9	267.3	265.4
55°	250.0	246.2	255.8	255.8
57.5°	244.2	234.6	250.0	250.0
60°	238.5	228.9	244.2	244.2
62.5°	234.6	223.1	242.3	240.4
65°	228.9	217.3	242.3	238.5
67.5°	221.2	205.8	238.5	232.7
70°	205.8	192.3	225.0	209.6
72.5°	190.4	175.0	192.3	178.9
75°	167.3	153.9	155.8	153.9
77.5°	140.4	125.0	121.2	123.1
80°	105.8	96.2	92.3	92.3
82.5°	76.9	65.4	67.3	55.8
85°	34.6	25.0	19.2	19.2
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)