

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: P227959

Luminaire Tested: **ISS-AF-800-LED-E1-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227959  
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: ISS-AF-800-LED-E1-T4W-7030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE  
Light Source: (16) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

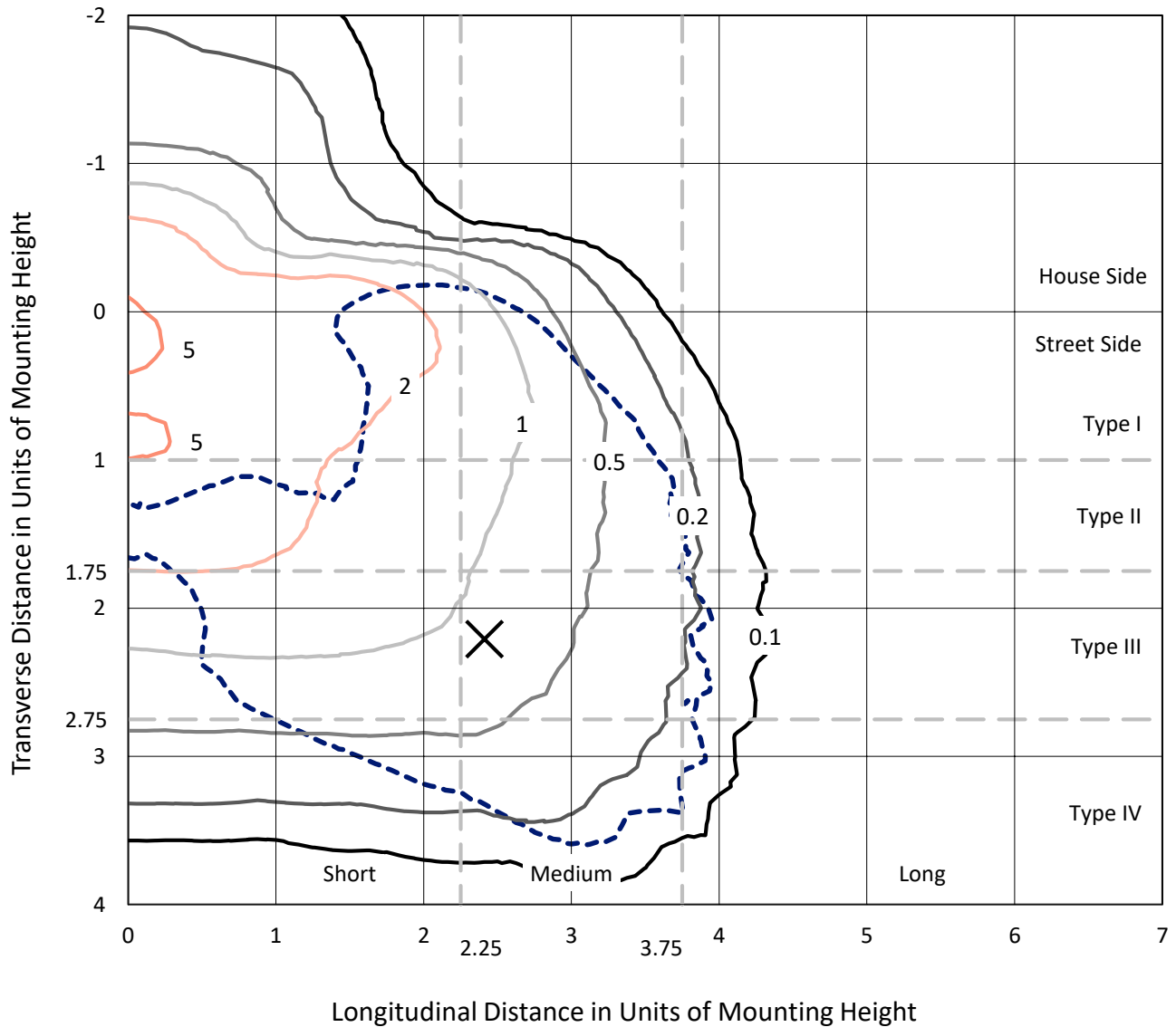
Lumens per Lamp: N/A  
Luminaire Lumens: 4331 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (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

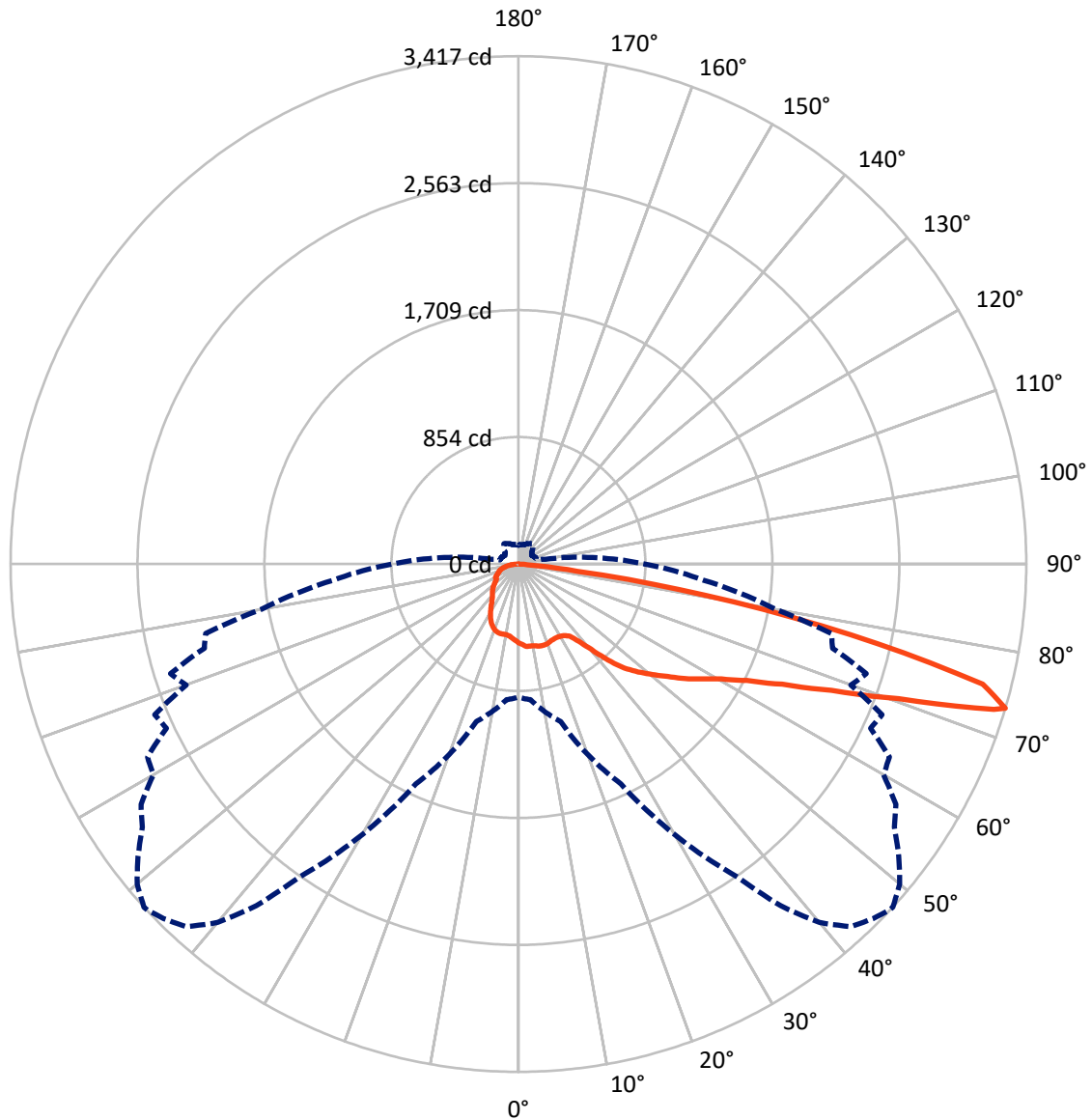
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 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
<b>House Side</b>	Lumens	865.3	0.0	865.3
	% Fixture	20.0	0.0	20.0
<b>Street Side</b>	Lumens	3465.7	0.0	3465.7
	% Fixture	80.0	0.0	80.0
<b>Total</b>	Lumens	4331.0	0.0	4331.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.6	1.2
10°-20°	150.7	3.5
20°-30°	231.6	5.3
30°-40°	337.9	7.8
40°-50°	557.2	12.9
50°-60°	872.4	20.1
60°-70°	1183.4	27.3
70°-80°	876.3	20.2
80°-90°	70.8	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°	4331.0	100.0
0°-180°	4331.0	100.0



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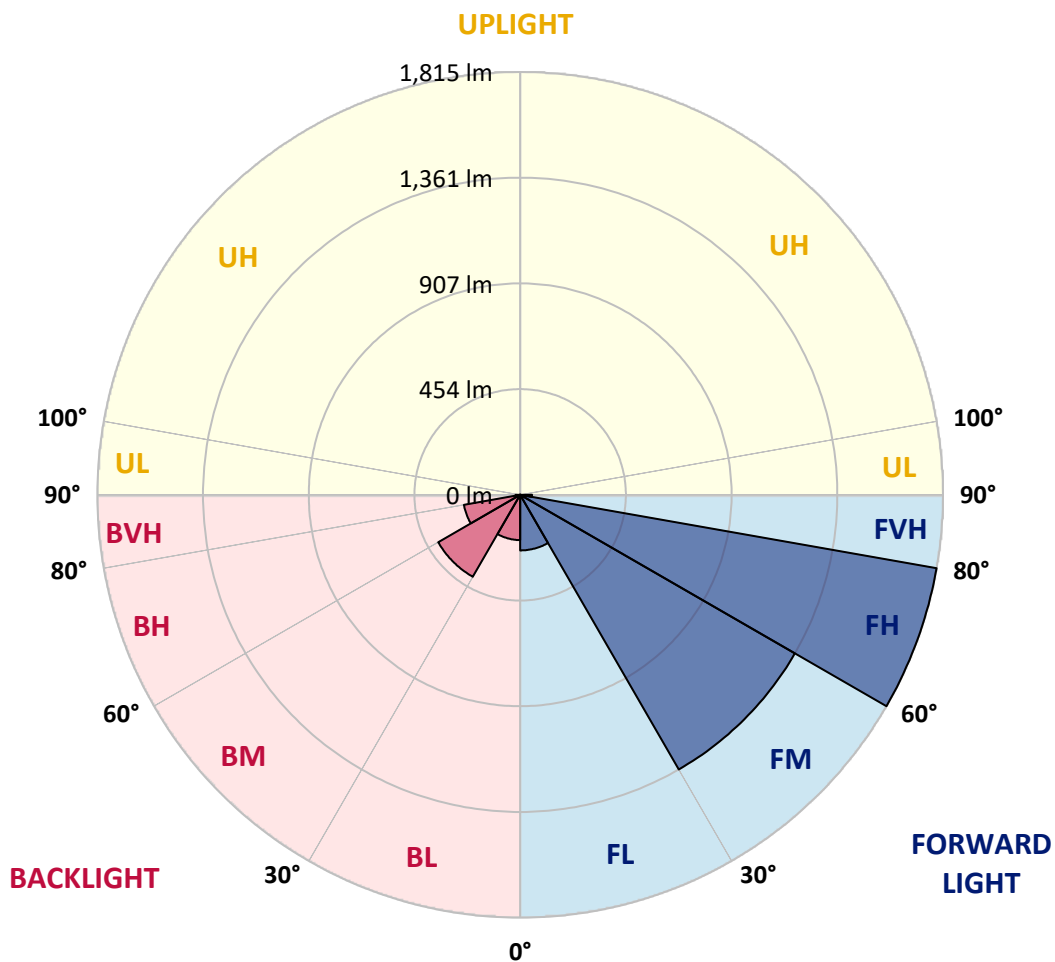
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	238.7	5.5			
FM	(30°-60°)	1361.2	31.4			
FH	(60°-80°)	1814.7	41.9			G2/5000
FVH	(80°-90°)	51.1	1.2			G1/100
BL	(0°-30°)	194.2	4.5	B1/500		
BM	(30°-60°)	406.3	9.4	B1/1000		
BH	(60°-80°)	245.0	5.7	B1/500		G1/500
BVH	(80°-90°)	19.7	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°	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8
2.5°	563.3	561.9	557.6	556.2	551.9	549.0	547.6	546.1	550.4	547.6	543.3
5°	599.0	596.2	590.5	581.9	573.3	567.6	566.2	563.3	563.3	560.4	557.6
7.5°	624.8	623.3	614.8	601.9	587.6	577.6	571.9	567.6	569.0	566.2	557.6
10°	649.1	646.2	631.9	616.2	594.8	583.3	576.2	569.0	574.7	570.4	559.0
12.5°	667.7	664.8	644.8	624.8	600.5	587.6	580.5	576.2	581.9	579.0	566.2
15°	677.7	674.8	654.8	630.5	604.8	590.5	587.6	584.7	589.0	583.3	571.9
17.5°	672.0	672.0	653.4	627.6	606.2	591.9	587.6	584.7	590.5	584.7	571.9
20°	650.5	653.4	640.5	613.3	597.6	587.6	583.3	577.6	583.3	577.6	569.0
22.5°	623.3	626.2	619.1	594.8	583.3	576.2	574.7	569.0	573.3	569.0	560.4
25°	599.0	599.0	596.2	574.7	573.3	567.6	569.0	566.2	569.0	563.3	557.6
27.5°	600.5	600.5	589.0	567.6	566.2	566.2	566.2	566.2	567.6	563.3	557.6
30°	684.8	687.7	654.8	594.8	573.3	570.4	571.9	570.4	571.9	570.4	563.3
32.5°	812.1	812.1	780.6	687.7	611.9	593.3	586.2	584.7	580.5	579.0	573.3
35°	937.9	936.5	905.0	802.1	706.3	670.5	647.7	626.2	616.2	606.2	596.2
37.5°	1043.7	1039.4	1035.1	917.9	817.8	776.3	749.2	717.7	697.7	680.5	657.7
40°	1142.3	1149.5	1165.2	1025.1	929.3	890.7	863.5	823.5	803.5	782.0	754.9
42.5°	1278.1	1288.2	1289.6	1140.9	1030.8	1005.1	983.6	953.6	932.2	906.4	882.1
45°	1409.7	1411.1	1415.4	1265.3	1155.2	1122.3	1106.6	1078.0	1050.8	1017.9	997.9
47.5°	1499.8	1495.5	1514.0	1408.3	1301.0	1263.9	1241.0	1198.1	1156.6	1115.2	1085.1
50°	1609.8	1605.6	1605.6	1571.2	1469.7	1426.8	1386.8	1306.7	1262.4	1211.0	1168.1
52.5°	1707.1	1691.3	1701.3	1721.4	1647.0	1592.7	1522.6	1432.6	1373.9	1311.0	1256.7
55°	1840.0	1758.5	1781.4	1851.5	1822.9	1738.5	1645.6	1549.8	1482.6	1411.1	1361.1
57.5°	1794.3	1738.5	1805.7	1928.7	1927.2	1848.6	1770.0	1652.7	1585.5	1518.3	1456.9
60°	1629.9	1658.4	1804.3	1981.6	1988.7	1927.2	1862.9	1754.2	1701.3	1631.3	1569.8
62.5°	1502.6	1544.1	1744.2	1977.3	2058.8	2001.6	1948.7	1884.3	1847.2	1788.6	1725.6
65°	1495.5	1519.8	1714.2	1973.0	2157.4	2127.4	2103.1	2073.1	2065.9	2023.0	1950.1
67.5°	1564.1	1587.0	1765.7	2083.1	2303.2	2290.4	2326.1	2320.4	2351.9	2330.4	2270.4
70°	1429.7	1442.6	1662.7	2121.7	2636.4	2693.6	2773.6	2769.3	2836.5	2785.1	2715.0
72.5°	1003.6	1029.4	1223.8	1752.8	2643.5	2949.5	3135.3	3292.6	3365.5	3378.4	3345.5
73°	896.4	916.4	1096.6	1632.7	2572.0	2898.0	3148.2	3309.8	3374.1	3414.1	3417.0
75°	311.7	321.7	478.9	989.4	2055.9	2529.1	2850.8	2996.6	2980.9	3098.2	3226.8
77.5°	100.1	101.5	124.4	255.9	992.2	1569.8	1928.7	2063.1	1985.9	2113.1	2284.7
80°	61.5	64.3	81.5	115.8	260.2	476.1	806.3	1009.4	967.9	1086.6	1269.6
82.5°	37.2	38.6	50.0	71.5	104.4	115.8	151.5	205.9	253.1	304.5	398.9
85°	17.2	18.6	24.3	32.9	42.9	44.3	42.9	40.0	45.8	52.9	61.5
87.5°	0.0	0.0	1.4	2.9	1.4	0.0	0.0	0.0	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):**

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8
2.5°	547.6	543.3	543.3	537.6	540.4	534.7	537.6	531.8	534.7	527.6	531.8
5°	556.2	549.0	549.0	540.4	541.9	531.8	536.1	524.7	530.4	517.6	526.1
7.5°	560.4	547.6	553.3	537.6	544.7	527.6	536.1	517.6	529.0	509.0	523.3
10°	566.2	547.6	557.6	540.4	549.0	529.0	540.4	517.6	531.8	507.5	520.4
12.5°	574.7	554.7	563.3	543.3	554.7	531.8	543.3	520.4	534.7	507.5	523.3
15°	580.5	560.4	569.0	549.0	557.6	531.8	546.1	519.0	534.7	506.1	523.3
17.5°	579.0	560.4	569.0	546.1	556.2	530.4	544.7	517.6	531.8	501.8	520.4
20°	573.3	557.6	563.3	543.3	551.9	526.1	539.0	511.8	527.6	497.5	516.1
22.5°	566.2	550.4	557.6	539.0	547.6	521.8	533.3	509.0	524.7	494.7	511.8
25°	561.9	549.0	553.3	534.7	546.1	523.3	534.7	507.5	524.7	494.7	514.7
27.5°	560.4	549.0	557.6	540.4	550.4	530.4	541.9	517.6	531.8	500.4	520.4
30°	569.0	559.0	566.2	551.9	560.4	540.4	551.9	529.0	543.3	513.3	536.1
32.5°	579.0	569.0	576.2	563.3	576.2	556.2	570.4	547.6	564.7	534.7	556.2
35°	600.5	589.0	599.0	584.7	599.0	583.3	599.0	574.7	596.2	566.2	589.0
37.5°	656.2	624.8	634.8	619.1	633.4	613.3	640.5	616.2	640.5	611.9	643.4
40°	744.9	689.1	699.1	666.2	687.7	657.7	690.5	672.0	704.8	669.1	709.1
42.5°	860.7	807.8	797.8	747.7	766.3	730.6	763.5	730.6	774.9	740.6	790.6
45°	966.5	910.7	895.0	846.4	859.2	812.1	853.5	807.8	866.4	826.4	889.3
47.5°	1053.7	987.9	975.1	919.3	942.2	897.9	949.3	900.7	972.2	932.2	1005.1
50°	1133.8	1052.3	1049.4	989.4	1028.0	983.6	1056.5	1023.7	1093.7	1053.7	1139.5
52.5°	1225.3	1122.3	1136.6	1082.3	1143.8	1106.6	1190.9	1143.8	1235.3	1192.4	1286.7
55°	1322.5	1213.8	1251.0	1218.1	1291.0	1266.7	1338.2	1295.3	1385.4	1342.5	1442.6
57.5°	1429.7	1336.8	1402.5	1386.8	1451.1	1421.1	1501.2	1462.6	1552.7	1516.9	1617.0
60°	1569.8	1508.3	1572.7	1571.2	1627.0	1625.6	1677.0	1654.2	1739.9	1724.2	1815.7
62.5°	1751.4	1702.8	1771.4	1752.8	1820.0	1808.6	1871.5	1871.5	1933.0	1954.4	2045.9
65°	1995.9	1931.5	2013.0	1984.4	2051.6	2054.5	2094.5	2101.7	2176.0	2200.3	2278.9
67.5°	2327.5	2253.2	2317.5	2263.2	2340.4	2336.1	2370.4	2384.7	2394.7	2453.4	2461.9
70°	2805.1	2693.6	2752.2	2677.8	2692.1	2702.1	2637.8	2685.0	2570.6	2663.5	2537.7
72.5°	3321.2	3193.9	3092.4	3018.1	2870.8	2849.4	2662.1	2702.1	2459.1	2539.1	2284.7
73°	3348.4	3225.4	3088.1	3010.9	2836.5	2813.6	2613.5	2647.8	2379.0	2454.8	2187.4
75°	3043.8	3076.7	2746.4	2777.9	2474.8	2510.5	2197.4	2237.5	1907.2	1964.4	1619.8
77.5°	2051.6	2161.7	1791.4	1930.1	1554.1	1692.8	1268.1	1281.0	935.0	873.5	593.3
80°	1016.5	1110.9	787.8	860.7	577.6	567.6	346.0	287.4	244.5	250.2	257.3
82.5°	293.1	330.3	204.4	203.0	144.4	137.3	137.3	145.8	148.7	165.8	161.6
85°	55.8	67.2	58.6	78.6	70.1	77.2	71.5	82.9	77.2	95.8	82.9
87.5°	1.4	0.0	1.4	4.3	4.3	10.0	7.1	11.4	11.4	20.0	18.6
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°	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8
2.5°	526.1	533.3	530.4	527.6	524.7	523.3	517.6	520.4	513.3	519.0	513.3
5°	514.7	523.3	519.0	513.3	510.4	507.5	497.5	504.7	493.2	503.3	494.7
7.5°	501.8	516.1	511.8	506.1	500.4	497.5	477.5	493.2	476.1	490.4	476.1
10°	497.5	513.3	507.5	500.4	494.7	491.8	467.5	486.1	467.5	483.2	464.7
12.5°	494.7	513.3	504.7	497.5	491.8	487.5	460.4	483.2	458.9	481.8	460.4
15°	491.8	513.3	501.8	493.2	487.5	483.2	454.6	480.4	453.2	478.9	454.6
17.5°	489.0	509.0	499.0	489.0	483.2	480.4	448.9	476.1	447.5	476.1	451.8
20°	484.7	504.7	493.2	483.2	477.5	473.2	441.8	470.4	440.3	468.9	441.8
22.5°	478.9	500.4	490.4	480.4	474.7	467.5	433.2	463.2	431.8	460.4	434.6
25°	480.4	503.3	490.4	480.4	471.8	464.7	427.5	460.4	424.6	453.2	424.6
27.5°	487.5	507.5	494.7	486.1	474.7	466.1	427.5	457.5	421.8	446.1	416.0
30°	501.8	521.8	510.4	497.5	487.5	476.1	434.6	458.9	421.8	437.5	407.5
32.5°	526.1	544.7	533.3	523.3	511.8	494.7	448.9	466.1	424.6	431.8	400.3
35°	557.6	580.5	574.7	567.6	553.3	523.3	473.2	476.1	430.3	426.0	390.3
37.5°	609.1	640.5	639.1	637.6	621.9	567.6	500.4	496.1	436.1	421.8	377.4
40°	676.2	713.4	723.4	733.4	700.6	620.5	531.8	516.1	438.9	413.2	357.4
42.5°	754.9	804.9	834.9	853.5	793.5	679.1	567.6	539.0	438.9	400.3	334.5
45°	852.1	910.7	967.9	987.9	896.4	742.0	604.8	557.6	433.2	380.3	304.5
47.5°	970.8	1039.4	1118.0	1128.0	1007.9	809.2	630.5	570.4	414.6	353.1	277.4
50°	1102.3	1185.2	1301.0	1293.9	1126.6	879.3	647.7	579.0	381.7	321.7	244.5
52.5°	1249.6	1353.9	1518.3	1485.5	1271.0	966.5	663.4	590.5	341.7	284.5	211.6
55°	1434.0	1558.4	1764.2	1694.2	1431.1	1062.3	686.3	591.9	288.8	240.2	187.3
57.5°	1632.7	1765.7	2028.7	1901.5	1581.2	1136.6	676.2	546.1	235.9	203.0	168.7
60°	1871.5	2033.0	2293.2	2094.5	1707.1	1162.3	606.2	450.4	201.6	183.0	160.1
62.5°	2138.8	2299.0	2510.5	2228.9	1778.5	1119.5	450.4	311.7	173.0	163.0	147.3
65°	2423.3	2574.9	2614.9	2240.3	1731.4	930.7	278.8	204.4	150.1	145.8	135.8
67.5°	2685.0	2699.3	2516.3	2054.5	1502.6	649.1	190.1	163.0	138.7	137.3	131.5
70°	2752.2	2504.8	2091.6	1599.8	1085.1	386.0	154.4	141.5	133.0	133.0	128.7
72.5°	2299.0	1907.2	1398.2	969.3	591.9	205.9	131.5	128.7	125.8	125.8	123.0
73°	2156.0	1757.1	1252.4	846.4	500.4	184.4	128.7	125.8	124.4	123.0	121.5
75°	1432.6	1103.7	710.6	428.9	233.0	133.0	114.4	114.4	112.9	114.4	112.9
77.5°	551.9	416.0	274.5	184.4	133.0	104.4	97.2	98.6	97.2	100.1	98.6
80°	243.0	240.2	181.6	130.1	97.2	78.6	78.6	78.6	80.1	81.5	81.5
82.5°	165.8	140.1	107.2	80.1	58.6	57.2	58.6	58.6	60.0	61.5	60.0
85°	91.5	77.2	57.2	35.7	31.5	38.6	38.6	38.6	37.2	37.2	35.7
87.5°	28.6	21.4	15.7	4.3	7.1	7.1	10.0	8.6	8.6	10.0	10.0
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°	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8	531.8
2.5°	519.0	514.7	519.0	511.8	517.6	511.8	516.1	516.1	514.7	514.7	514.7
5°	501.8	494.7	501.8	497.5	501.8	496.1	500.4	501.8	503.3	507.5	506.1
7.5°	489.0	474.7	490.4	476.1	489.0	476.1	487.5	489.0	493.2	499.0	503.3
10°	483.2	464.7	483.2	466.1	481.8	467.5	481.8	483.2	487.5	494.7	501.8
12.5°	480.4	460.4	480.4	463.2	480.4	466.1	480.4	484.7	487.5	493.2	501.8
15°	477.5	457.5	480.4	461.8	480.4	466.1	481.8	484.7	489.0	494.7	501.8
17.5°	476.1	453.2	477.5	460.4	477.5	463.2	480.4	480.4	486.1	493.2	497.5
20°	470.4	448.9	470.4	453.2	470.4	457.5	471.8	471.8	477.5	480.4	487.5
22.5°	461.8	438.9	458.9	443.2	458.9	446.1	457.5	457.5	461.8	466.1	470.4
25°	448.9	427.5	444.6	430.3	441.8	430.3	438.9	437.5	440.3	443.2	446.1
27.5°	434.6	413.2	427.5	411.8	418.9	407.5	413.2	410.3	411.8	413.2	414.6
30°	418.9	397.5	404.6	390.3	391.7	380.3	383.2	378.9	377.4	376.0	373.2
32.5°	401.7	378.9	378.9	364.6	361.7	351.7	351.7	346.0	341.7	336.0	330.3
35°	380.3	360.3	350.3	338.8	333.1	323.1	321.7	314.5	304.5	294.5	288.8
37.5°	358.9	336.0	321.7	310.2	304.5	297.4	295.9	290.2	278.8	267.4	258.8
40°	330.3	307.4	291.7	287.4	283.1	277.4	278.8	271.6	260.2	247.3	240.2
42.5°	301.7	281.7	268.8	267.4	264.5	263.1	264.5	258.8	245.9	234.5	225.9
45°	277.4	257.3	244.5	243.0	241.6	247.3	248.8	247.3	233.0	221.6	210.2
47.5°	253.1	228.8	220.2	217.3	218.7	227.3	230.2	234.5	221.6	208.7	193.0
50°	224.5	201.6	198.7	195.9	197.3	204.4	211.6	220.2	208.7	190.1	168.7
52.5°	198.7	178.7	180.1	177.3	180.1	185.9	191.6	205.9	191.6	173.0	163.0
55°	178.7	163.0	165.8	163.0	165.8	173.0	177.3	188.7	188.7	184.4	175.9
57.5°	164.4	153.0	155.8	153.0	157.3	163.0	167.3	191.6	205.9	194.4	177.3
60°	155.8	145.8	147.3	144.4	147.3	155.8	164.4	193.0	215.9	193.0	180.1
62.5°	143.0	134.4	133.0	133.0	135.8	150.1	154.4	180.1	213.0	191.6	181.6
65°	134.4	127.2	125.8	124.4	127.2	137.3	141.5	167.3	205.9	181.6	164.4
67.5°	130.1	124.4	121.5	118.7	121.5	130.1	134.4	157.3	194.4	173.0	154.4
70°	125.8	120.1	118.7	115.8	117.2	123.0	128.7	144.4	184.4	163.0	144.4
72.5°	120.1	114.4	112.9	108.7	110.1	115.8	118.7	135.8	171.6	153.0	134.4
73°	118.7	112.9	111.5	107.2	108.7	112.9	115.8	133.0	168.7	151.5	133.0
75°	111.5	105.8	104.4	101.5	102.9	102.9	105.8	121.5	160.1	143.0	124.4
77.5°	98.6	94.4	92.9	90.1	88.6	87.2	91.5	107.2	145.8	128.7	100.1
80°	81.5	77.2	75.8	70.1	70.1	70.1	75.8	91.5	108.7	92.9	77.2
82.5°	60.0	57.2	57.2	52.9	51.5	50.0	54.3	62.9	85.8	72.9	60.0
85°	35.7	34.3	35.7	31.5	32.9	31.5	35.7	44.3	47.2	37.2	28.6
87.5°	8.6	10.0	10.0	10.0	8.6	8.6	7.1	5.7	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°	531.8	531.8
2.5°	513.3	511.8
5°	506.1	506.1
7.5°	503.3	503.3
10°	504.7	504.7
12.5°	504.7	507.5
15°	509.0	507.5
17.5°	504.7	504.7
20°	493.2	496.1
22.5°	477.5	477.5
25°	451.8	453.2
27.5°	417.5	420.3
30°	374.6	377.4
32.5°	326.0	328.8
35°	287.4	288.8
37.5°	261.6	261.6
40°	240.2	240.2
42.5°	220.2	218.7
45°	200.2	197.3
47.5°	180.1	178.7
50°	163.0	163.0
52.5°	165.8	165.8
55°	178.7	178.7
57.5°	180.1	178.7
60°	195.9	194.4
62.5°	204.4	208.7
65°	178.7	173.0
67.5°	170.1	161.6
70°	153.0	140.1
72.5°	135.8	128.7
73°	131.5	125.8
75°	117.2	114.4
77.5°	88.6	87.2
80°	74.3	72.9
82.5°	50.0	47.2
85°	21.4	20.0
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)