

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: P228111

Luminaire Tested: **ISS-AF-1000-LED-E1-SL2-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228111  
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-1000-LED-E1-SL2-8030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

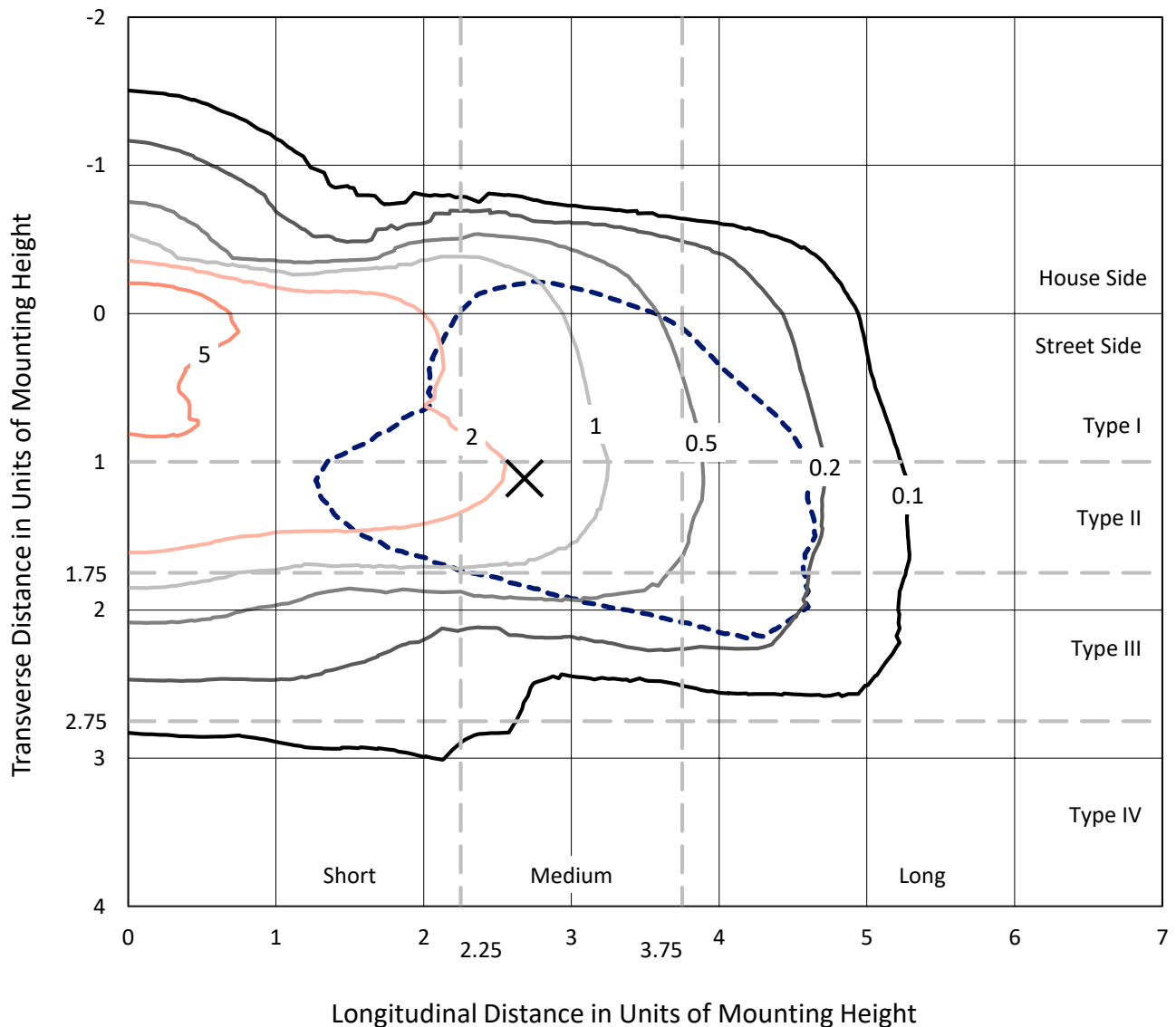
Lumens per Lamp: N/A  
Luminaire Lumens: 4463 lumens  
Efficiency: N/A  
Efficacy: 81.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 54.6  
Input Voltage (V): 120  
Input Current (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

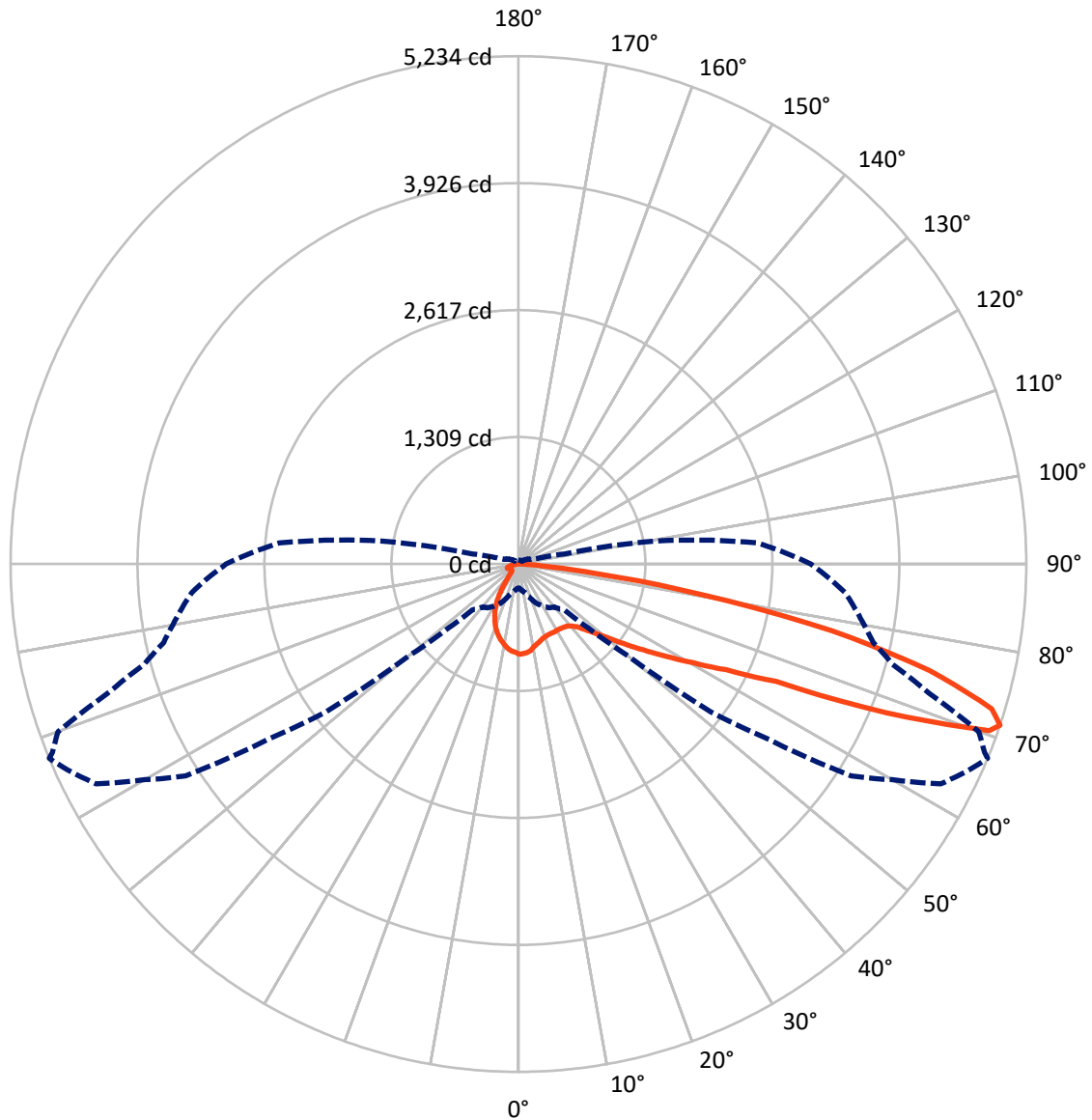
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 fc  
 Type 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
<b>House Side</b>	Lumens	752.1	0.0	752.1
	% Fixture	16.9	0.0	16.9
<b>Street Side</b>	Lumens	3710.9	0.0	3710.9
	% Fixture	83.1	0.0	83.1
<b>Total</b>	Lumens	4463.0	0.0	4463.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.2	1.8
10°-20°	194.2	4.4
20°-30°	264.0	5.9
30°-40°	360.9	8.1
40°-50°	543.7	12.2
50°-60°	861.7	19.3
60°-70°	1140.8	25.6
70°-80°	908.8	20.4
80°-90°	107.7	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°	4463.0	100.0
0°-180°	4463.0	100.0

**Coefficient of Utilization**



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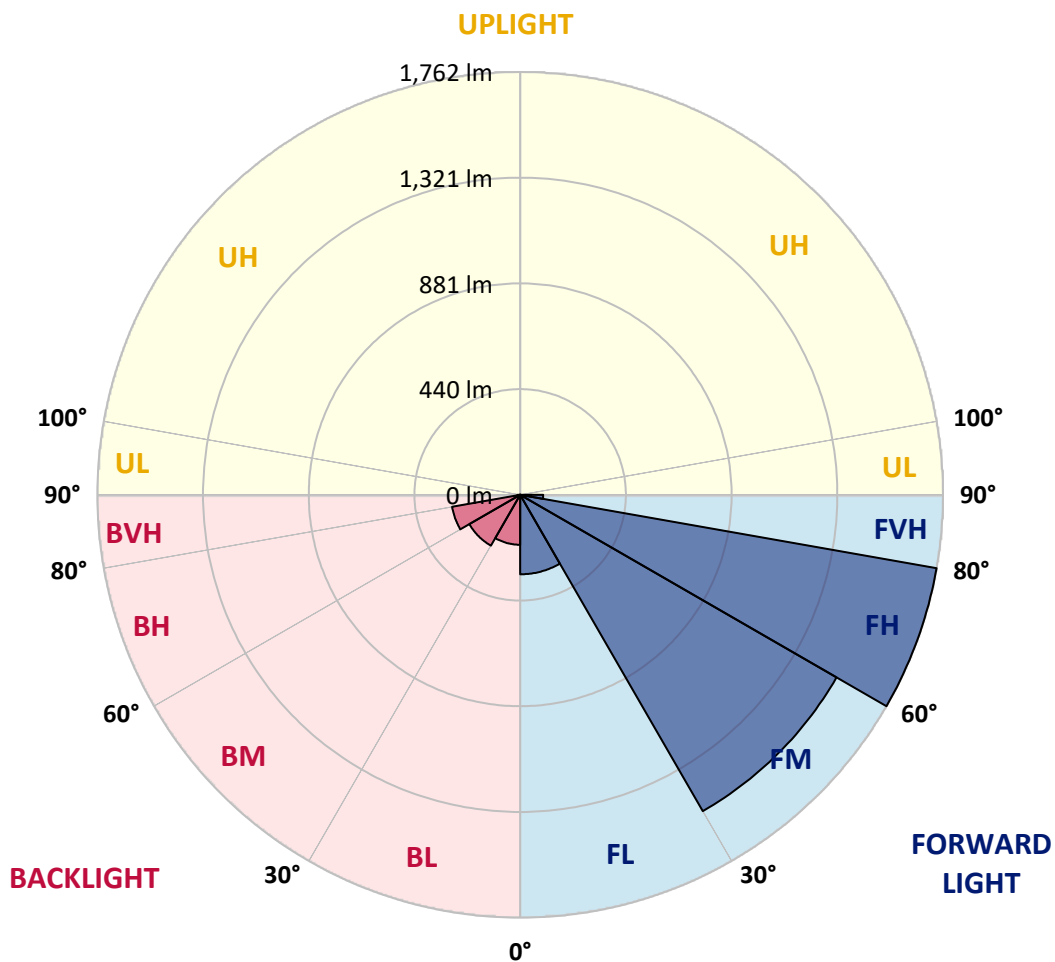
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	331.1	7.4			
FM	(30°-60°)	1522.0	34.1			
FH	(60°-80°)	1761.7	39.5			G1/1800
FVH	(80°-90°)	96.1	2.2			G1/100
BL	(0°-30°)	208.2	4.7	B1/500		
BM	(30°-60°)	244.4	5.5	B1/1000		
BH	(60°-80°)	287.9	6.4	B1/500		G1/500
BVH	(80°-90°)	11.7	0.3			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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0
2.5°	912.9	909.8	909.8	914.5	922.2	916.0	920.7	920.7	922.2	926.9	928.5
5°	845.9	839.7	845.9	852.1	869.3	866.2	870.8	875.5	884.9	886.4	898.9
7.5°	785.2	782.0	786.7	799.2	821.0	814.8	821.0	827.2	838.1	842.8	855.3
10°	738.4	733.7	740.0	749.3	771.1	769.6	772.7	780.5	792.9	796.1	811.6
12.5°	704.1	704.1	707.3	719.7	738.4	736.9	746.2	750.9	761.8	764.9	782.0
15°	687.0	682.3	688.6	699.5	718.2	718.2	724.4	729.1	744.7	746.2	761.8
17.5°	671.4	673.0	674.5	687.0	704.1	701.0	708.8	711.9	729.1	726.0	744.7
20°	671.4	674.5	673.0	680.8	693.2	687.0	696.4	697.9	716.6	711.9	732.2
22.5°	690.1	693.2	688.6	687.0	691.7	687.0	691.7	694.8	708.8	705.7	724.4
25°	722.8	729.1	722.8	711.9	707.3	694.8	697.9	702.6	713.5	705.7	722.8
27.5°	774.3	778.9	768.0	757.1	735.3	721.3	716.6	715.1	727.5	715.1	729.1
30°	833.5	839.7	830.3	810.1	778.9	755.6	746.2	741.5	749.3	730.6	744.7
32.5°	897.3	903.6	897.3	881.7	839.7	805.4	792.9	782.0	788.3	763.3	769.6
35°	962.8	969.0	975.2	965.9	911.3	872.4	852.1	842.8	841.2	810.1	811.6
37.5°	1020.4	1026.6	1046.9	1056.2	1006.4	953.4	934.7	914.5	916.0	872.4	872.4
40°	1090.5	1098.3	1124.8	1146.6	1113.9	1050.0	1028.2	1006.4	1006.4	948.7	950.3
42.5°	1185.5	1194.9	1212.0	1241.6	1230.7	1165.3	1141.9	1112.3	1115.4	1046.9	1045.3
45°	1319.5	1325.7	1325.7	1344.4	1346.0	1283.7	1268.1	1238.5	1244.7	1157.5	1162.2
47.5°	1494.0	1486.2	1455.0	1465.9	1478.4	1413.0	1399.0	1380.3	1388.0	1294.6	1303.9
50°	1656.0	1649.8	1585.9	1589.0	1634.2	1567.2	1562.5	1539.2	1550.1	1456.6	1470.6
52.5°	1716.8	1705.8	1642.0	1676.2	1802.4	1765.0	1772.8	1761.9	1768.2	1668.5	1665.3
55°	1648.2	1648.2	1609.3	1671.6	1928.6	1948.9	2012.7	2037.7	2064.2	1964.5	1942.6
57.5°	1458.1	1470.6	1476.8	1587.5	1908.4	1995.6	2117.1	2223.1	2358.6	2352.4	2385.1
60°	1143.5	1165.3	1201.1	1381.8	1821.1	1964.5	2121.8	2280.7	2467.6	2587.6	2765.2
62.5°	802.3	821.0	850.6	975.2	1567.2	1813.3	2040.8	2285.4	2523.7	2712.2	2945.9
65°	545.2	563.9	626.3	694.8	945.6	1303.9	1651.3	2056.4	2419.3	2769.9	3084.5
67.5°	392.6	403.5	451.8	567.1	629.4	694.8	824.1	1300.8	1747.9	2453.6	2913.2
70°	294.4	305.3	349.0	476.7	553.0	570.2	601.3	685.5	799.2	1378.7	1981.6
71°	246.1	261.7	314.7	448.7	549.9	563.9	578.0	627.8	665.2	975.2	1470.6
72.5°	172.9	183.8	233.7	414.4	528.1	560.8	593.5	592.0	588.9	665.2	889.5
75°	110.6	110.6	110.6	233.7	563.9	543.7	556.2	623.1	588.9	559.3	585.8
77.5°	87.2	85.7	81.0	116.8	440.9	551.5	584.2	601.3	634.0	584.2	557.7
80°	65.4	63.9	63.9	73.2	204.1	356.7	493.8	548.4	571.7	621.6	567.1
82.5°	34.3	34.3	37.4	43.6	76.3	124.6	255.5	420.6	470.5	473.6	478.3
85°	10.9	9.3	12.5	20.3	32.7	40.5	71.7	169.8	252.4	305.3	322.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	6.2	10.9	14.0
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):**

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	68°	70°	72.5°	75°
0°	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0
2.5°	923.8	930.0	925.4	931.6	923.8	933.2	925.4	930.0	931.6	925.4	933.2
5°	891.1	909.8	903.6	917.6	911.3	923.8	917.6	930.0	930.0	925.4	936.3
7.5°	850.6	869.3	870.8	884.9	884.9	900.4	900.4	912.9	919.1	919.1	934.7
10°	810.1	827.2	830.3	845.9	849.0	867.7	867.7	884.9	897.3	902.0	920.7
12.5°	778.9	800.7	800.7	817.9	814.8	842.8	845.9	861.5	874.0	884.9	909.8
15°	760.2	780.5	780.5	797.6	794.5	822.5	827.2	842.8	861.5	867.7	902.0
17.5°	741.5	761.8	757.1	780.5	778.9	810.1	807.0	830.3	845.9	855.3	894.2
20°	726.0	749.3	746.2	769.6	763.3	797.6	797.6	821.0	836.6	844.4	889.5
22.5°	718.2	743.1	736.9	760.2	755.6	789.8	789.8	813.2	830.3	842.8	888.0
25°	718.2	740.0	733.7	760.2	752.4	789.8	788.3	811.6	828.8	839.7	889.5
27.5°	721.3	743.1	738.4	763.3	757.1	789.8	792.9	813.2	830.3	842.8	892.6
30°	732.2	752.4	741.5	764.9	760.2	791.4	789.8	811.6	828.8	844.4	892.6
32.5°	755.6	766.5	752.4	772.7	763.3	794.5	794.5	810.1	830.3	849.0	892.6
35°	788.3	796.1	774.3	788.3	771.1	802.3	800.7	817.9	833.5	849.0	895.8
37.5°	835.0	844.4	810.1	822.5	794.5	819.4	813.2	833.5	849.0	858.4	911.3
40°	905.1	908.2	863.0	872.4	833.5	855.3	839.7	867.7	875.5	881.7	934.7
42.5°	990.8	993.9	936.3	942.5	892.6	911.3	884.9	914.5	925.4	923.8	981.4
45°	1096.7	1098.3	1032.9	1037.5	979.9	995.5	962.8	987.7	995.5	990.8	1050.0
47.5°	1212.0	1224.5	1151.3	1157.5	1096.7	1104.5	1064.0	1092.1	1092.1	1087.4	1148.1
50°	1364.7	1383.4	1297.7	1307.0	1236.9	1243.2	1196.4	1226.0	1222.9	1210.5	1279.0
52.5°	1554.7	1571.9	1481.5	1494.0	1419.2	1422.3	1364.7	1399.0	1389.6	1369.4	1448.8
55°	1786.9	1788.4	1704.3	1715.2	1640.4	1635.7	1564.1	1606.1	1592.1	1564.1	1637.3
57.5°	2159.2	2114.0	1975.4	1972.2	1891.2	1885.0	1793.1	1844.5	1821.1	1761.9	1858.5
60°	2759.0	2773.0	2419.3	2364.8	2213.7	2185.7	2064.2	2123.4	2095.3	1998.7	2093.8
62.5°	3097.0	3319.8	3298.0	3101.7	2712.2	2606.3	2400.6	2470.8	2397.5	2255.8	2344.6
65°	3347.8	3650.0	3824.5	4013.0	3838.5	3405.5	2919.4	3017.6	2838.4	2568.9	2654.6
67.5°	3441.3	3805.8	4173.5	4441.4	4623.7	4656.4	4094.0	4120.5	3679.6	3140.6	3151.5
70°	2952.1	3489.6	4209.3	4548.9	4910.3	5087.9	5147.1	5119.1	4834.0	4070.7	3779.3
71°	2501.9	3153.1	4066.0	4444.6	4907.2	5078.6	5234.4	5181.4	5049.0	4439.9	3992.8
72.5°	1694.9	2512.8	3646.9	4126.7	4743.7	4868.3	5102.0	5008.5	4980.5	4715.6	4192.2
75°	797.6	1252.5	2372.6	3098.6	4014.6	4134.5	4379.1	4263.8	4190.6	4281.0	3988.1
77.5°	587.3	683.9	1302.4	1925.5	2919.4	3089.2	3299.5	3157.8	3064.3	3154.6	2950.6
80°	534.3	537.5	674.5	1015.7	1741.7	1842.9	1922.4	1807.1	1665.3	1659.1	1470.6
82.5°	492.3	465.8	437.8	537.5	892.6	849.0	785.2	727.5	565.5	453.3	327.1
85°	313.1	342.7	311.6	294.4	355.2	292.9	232.1	222.8	157.3	105.9	98.1
87.5°	21.8	24.9	29.6	34.3	42.1	34.3	21.8	26.5	15.6	0.0	7.8
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):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0
2.5°	922.2	930.0	933.2	931.6	928.5	925.4	914.5	922.2	911.3	919.1	909.8
5°	926.9	937.8	939.4	936.3	933.2	926.9	908.2	919.1	906.7	912.9	898.9
7.5°	925.4	942.5	944.1	940.9	934.7	923.8	905.1	912.9	892.6	897.3	878.6
10°	917.6	942.5	944.1	936.3	926.9	909.8	888.0	891.1	870.8	870.8	845.9
12.5°	909.8	939.4	947.2	936.3	920.7	897.3	872.4	869.3	845.9	844.4	816.3
15°	909.8	942.5	953.4	939.4	916.0	883.3	853.7	847.5	821.0	813.2	782.0
17.5°	908.2	942.5	958.1	939.4	911.3	869.3	831.9	825.7	791.4	778.9	743.1
20°	906.7	945.6	961.2	936.3	897.3	852.1	810.1	797.6	760.2	740.0	697.9
22.5°	905.1	951.8	964.3	933.2	888.0	830.3	786.7	764.9	721.3	694.8	645.0
25°	912.9	959.6	965.9	930.0	874.0	807.0	760.2	730.6	682.3	648.1	588.9
27.5°	916.0	967.4	969.0	923.8	856.8	782.0	732.2	691.7	637.2	595.1	528.1
30°	925.4	969.0	964.3	911.3	836.6	750.9	699.5	649.6	588.9	534.3	454.9
32.5°	928.5	973.7	961.2	897.3	816.3	719.7	662.1	604.4	531.2	467.4	370.8
35°	934.7	976.8	958.1	889.5	794.5	687.0	623.1	557.7	473.6	392.6	282.0
37.5°	944.1	990.8	965.9	886.4	783.6	659.0	579.5	509.4	405.0	310.0	186.9
40°	967.4	1018.8	979.9	891.1	775.8	635.6	537.5	459.6	327.1	229.0	129.3
42.5°	1014.2	1067.1	1015.7	914.5	780.5	615.4	493.8	406.6	247.7	163.6	107.5
45°	1084.3	1129.4	1074.9	953.4	799.2	604.4	453.3	352.1	177.6	130.9	98.1
47.5°	1187.1	1230.7	1162.2	1015.7	831.9	599.8	411.3	294.4	137.1	118.4	95.0
50°	1322.6	1374.0	1288.3	1113.9	892.6	604.4	366.1	239.9	120.0	115.3	93.5
52.5°	1489.3	1539.2	1453.5	1258.7	992.4	630.9	317.8	208.8	113.7	113.7	91.9
55°	1677.8	1747.9	1663.8	1459.7	1146.6	688.6	288.2	197.8	113.7	115.3	90.4
57.5°	1900.6	1959.8	1885.0	1652.9	1332.0	783.6	291.3	208.8	113.7	115.3	88.8
60°	2118.7	2191.9	2106.2	1899.0	1543.8	926.9	355.2	264.8	118.4	120.0	88.8
62.5°	2346.1	2402.2	2332.1	2114.0	1783.7	1104.5	482.9	383.2	137.1	141.8	95.0
65°	2595.4	2687.3	2614.1	2434.9	2123.4	1388.0	726.0	574.8	202.5	165.1	104.4
67.5°	3026.9	3064.3	3028.5	2864.9	2520.6	1621.7	864.6	584.2	202.5	160.5	116.8
70°	3611.1	3527.0	3366.5	3061.2	2562.7	1455.0	620.0	356.7	172.9	152.7	123.1
71°	3746.6	3617.3	3380.5	3012.9	2475.4	1313.3	481.4	282.0	162.0	149.6	123.1
72.5°	3829.2	3636.0	3277.7	2871.1	2304.1	1034.4	317.8	221.2	148.0	141.8	118.4
75°	3721.7	3365.0	2894.5	2484.8	1886.6	537.5	199.4	168.2	126.2	123.1	102.8
77.5°	2955.2	2642.1	2135.8	1805.5	1213.6	238.4	143.3	127.7	99.7	96.6	79.5
80°	1378.7	1106.1	648.1	556.2	381.7	140.2	98.1	87.2	71.7	68.5	56.1
82.5°	250.8	188.5	146.4	141.8	127.7	82.6	57.6	53.0	45.2	43.6	35.8
85°	85.7	82.6	62.3	62.3	63.9	43.6	32.7	31.2	23.4	23.4	15.6
87.5°	1.6	7.8	7.8	10.9	9.3	7.8	3.1	4.7	1.6	4.7	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°	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0	930.0
2.5°	917.6	905.1	916.0	905.1	911.3	898.9	906.7	902.0	902.0	897.3	894.2
5°	903.6	888.0	895.8	883.3	889.5	870.8	875.5	867.7	852.1	842.8	830.3
7.5°	883.3	859.9	866.2	847.5	852.1	827.2	831.9	817.9	788.3	769.6	750.9
10°	847.5	825.7	827.2	803.9	802.3	777.4	772.7	754.0	710.4	679.2	654.3
12.5°	811.6	786.7	783.6	755.6	750.9	721.3	715.1	685.5	621.6	560.8	521.9
15°	774.3	743.1	733.7	704.1	687.0	662.1	645.0	601.3	509.4	430.0	378.6
17.5°	732.2	691.7	677.7	643.4	618.5	581.1	556.2	497.0	378.6	292.9	257.0
20°	677.7	634.0	609.1	565.5	532.8	487.6	456.5	380.1	252.4	208.8	204.1
22.5°	616.9	565.5	534.3	479.8	439.3	391.0	341.2	257.0	179.2	169.8	176.0
25°	553.0	489.2	448.7	381.7	327.1	271.1	224.3	171.4	146.4	144.9	154.2
27.5°	476.7	403.5	345.8	266.4	216.5	172.9	152.7	135.5	124.6	126.2	135.5
30°	392.6	297.5	236.8	166.7	144.9	126.2	123.1	116.8	112.2	115.3	121.5
32.5°	292.9	190.1	152.7	120.0	118.4	107.5	110.6	107.5	105.9	107.5	112.2
35°	197.8	126.2	120.0	102.8	105.9	98.1	102.8	101.3	99.7	99.7	102.8
37.5°	137.1	104.4	107.5	95.0	99.7	93.5	98.1	96.6	95.0	93.5	95.0
40°	113.7	95.0	99.7	90.4	95.0	88.8	93.5	91.9	90.4	87.2	87.2
42.5°	104.4	90.4	95.0	85.7	91.9	84.1	90.4	87.2	84.1	81.0	82.6
45°	101.3	87.2	91.9	82.6	88.8	81.0	85.7	84.1	77.9	76.3	77.9
47.5°	98.1	85.7	90.4	81.0	85.7	77.9	82.6	79.5	73.2	71.7	73.2
50°	96.6	82.6	87.2	77.9	82.6	76.3	79.5	76.3	70.1	68.5	68.5
52.5°	95.0	81.0	85.7	74.8	79.5	70.1	74.8	71.7	65.4	63.9	63.9
55°	95.0	79.5	82.6	71.7	76.3	67.0	70.1	67.0	63.9	60.8	60.8
57.5°	93.5	76.3	81.0	68.5	71.7	63.9	67.0	63.9	59.2	57.6	57.6
60°	93.5	74.8	79.5	67.0	70.1	60.8	63.9	60.8	56.1	54.5	54.5
62.5°	98.1	77.9	81.0	68.5	70.1	60.8	62.3	57.6	53.0	53.0	51.4
65°	107.5	87.2	87.2	71.7	71.7	60.8	62.3	56.1	49.9	49.9	49.9
67.5°	116.8	96.6	95.0	76.3	74.8	60.8	60.8	53.0	46.7	46.7	46.7
70°	123.1	101.3	98.1	77.9	74.8	59.2	57.6	49.9	43.6	43.6	43.6
71°	121.5	101.3	96.6	76.3	71.7	56.1	56.1	48.3	42.1	42.1	40.5
72.5°	115.3	95.0	90.4	71.7	68.5	53.0	53.0	45.2	38.9	38.9	37.4
75°	98.1	81.0	76.3	60.8	57.6	46.7	45.2	37.4	34.3	32.7	32.7
77.5°	76.3	63.9	59.2	48.3	46.7	37.4	35.8	31.2	28.0	28.0	26.5
80°	54.5	45.2	42.1	32.7	29.6	24.9	26.5	23.4	21.8	21.8	20.3
82.5°	32.7	23.4	23.4	18.7	20.3	15.6	17.1	17.1	15.6	12.5	12.5
85°	17.1	10.9	14.0	7.8	10.9	4.7	7.8	6.2	6.2	4.7	4.7
87.5°	3.1	0.0	1.6	0.0	1.6	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°	930.0	930.0
2.5°	884.9	886.4
5°	824.1	827.2
7.5°	736.9	741.5
10°	632.5	635.6
12.5°	498.5	498.5
15°	349.0	352.1
17.5°	244.6	246.1
20°	205.6	207.2
22.5°	183.8	185.4
25°	163.6	165.1
27.5°	141.8	143.3
30°	127.7	129.3
32.5°	115.3	116.8
35°	104.4	104.4
37.5°	96.6	96.6
40°	88.8	88.8
42.5°	84.1	84.1
45°	79.5	79.5
47.5°	74.8	74.8
50°	70.1	71.7
52.5°	65.4	65.4
55°	60.8	60.8
57.5°	56.1	57.6
60°	53.0	53.0
62.5°	49.9	49.9
65°	48.3	48.3
67.5°	45.2	45.2
70°	42.1	42.1
71°	40.5	40.5
72.5°	37.4	37.4
75°	32.7	31.2
77.5°	26.5	26.5
80°	20.3	18.7
82.5°	12.5	10.9
85°	4.7	3.1
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)