

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: P227979

Luminaire Tested: **ISS-AF-1200-LED-E1-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227979
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-1200-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: 5825 lumens
Efficiency: N/A
Efficacy: 88.3 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): 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

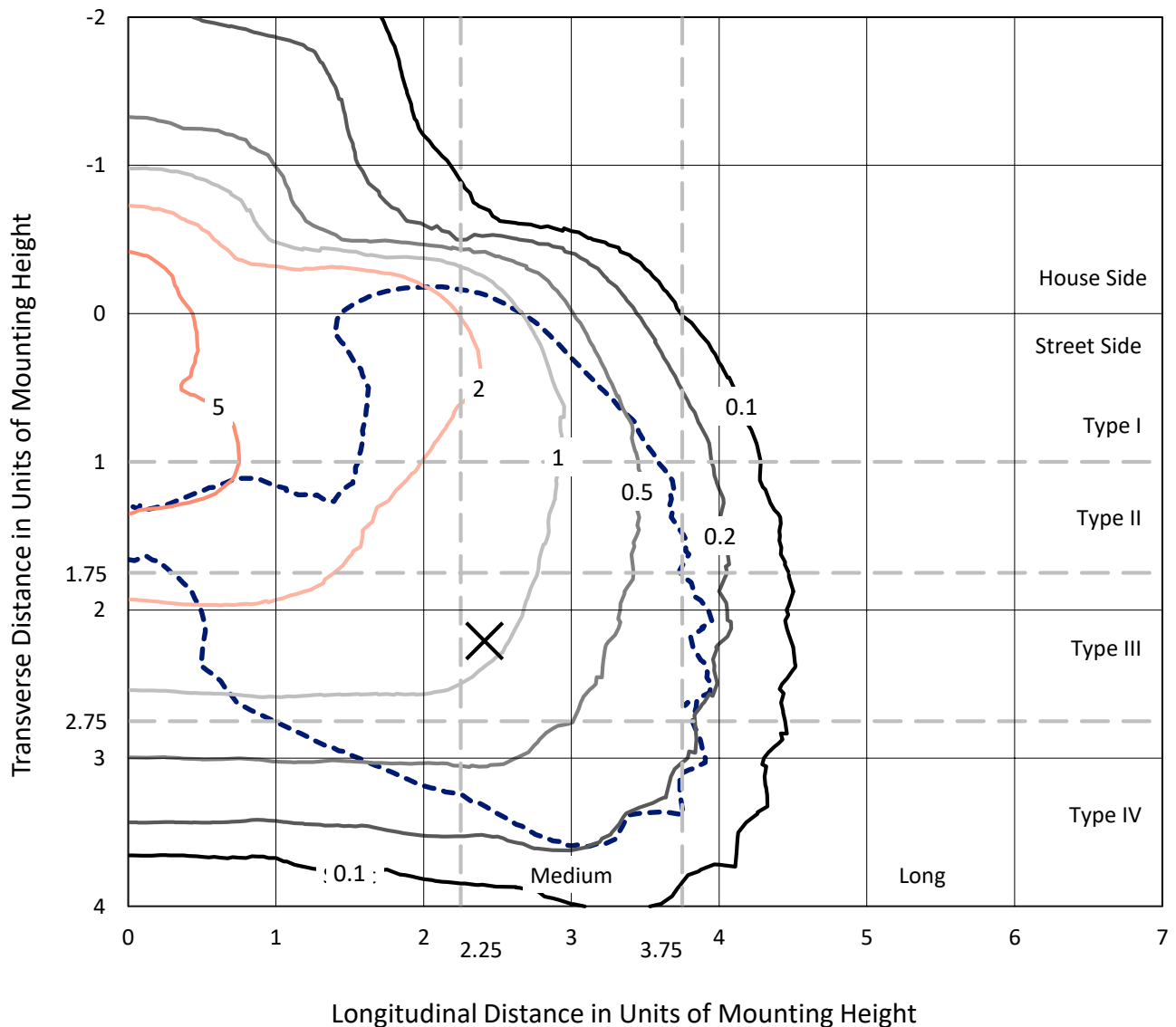


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Iso-Footcandle Lines of Horizontal Illumination

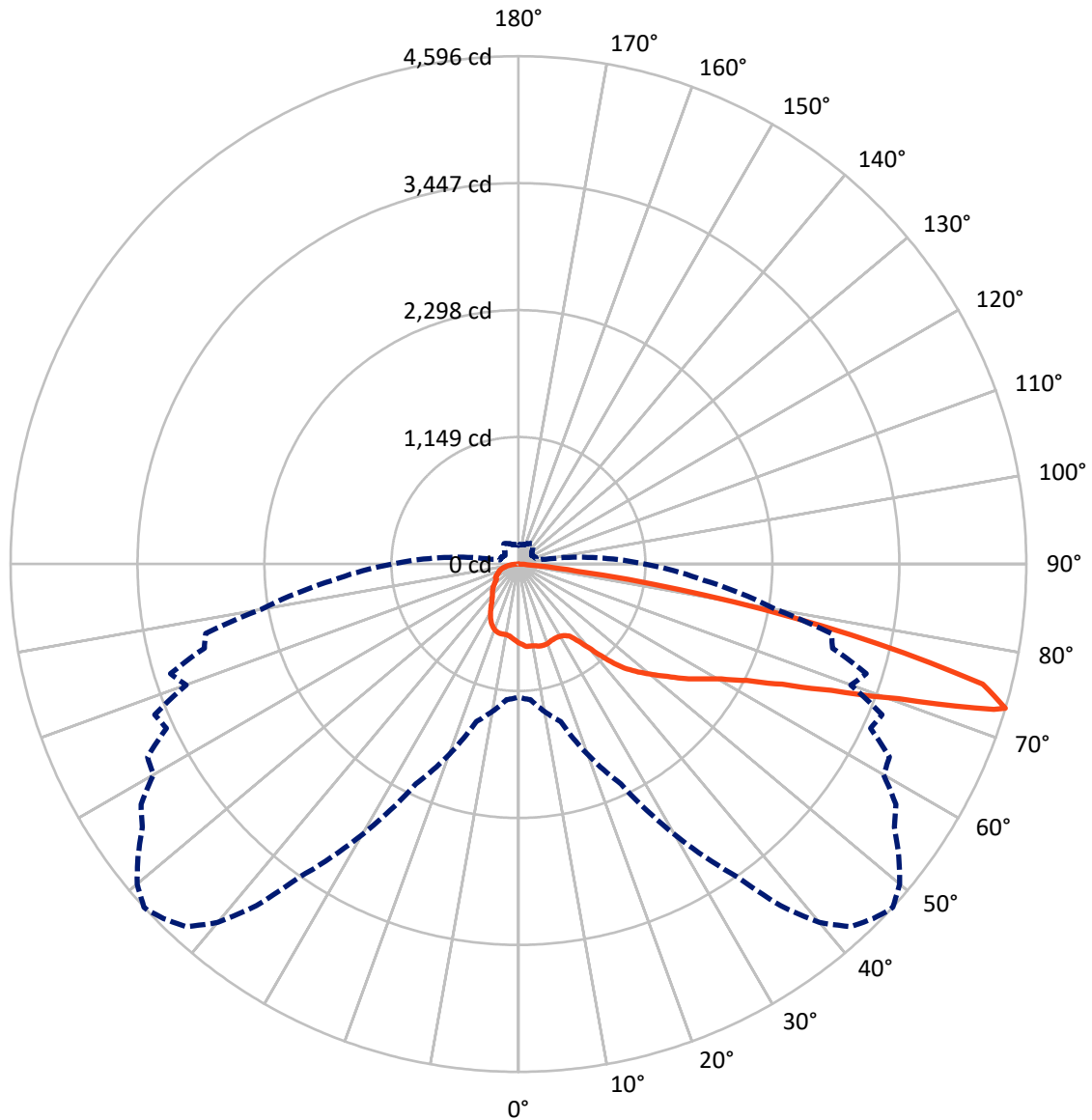
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.3 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
House Side	Lumens	1163.8	0.0	1163.8
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	4661.2	0.0	4661.2
	% Fixture	80.0	0.0	80.0
Total	Lumens	5825.0	0.0	5825.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	1.2
10°-20°	202.7	3.5
20°-30°	311.6	5.3
30°-40°	454.5	7.8
40°-50°	749.4	12.9
50°-60°	1173.3	20.1
60°-70°	1591.6	27.3
70°-80°	1178.6	20.2
80°-90°	95.2	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°	5825.0	100.0
0°-180°	5825.0	100.0



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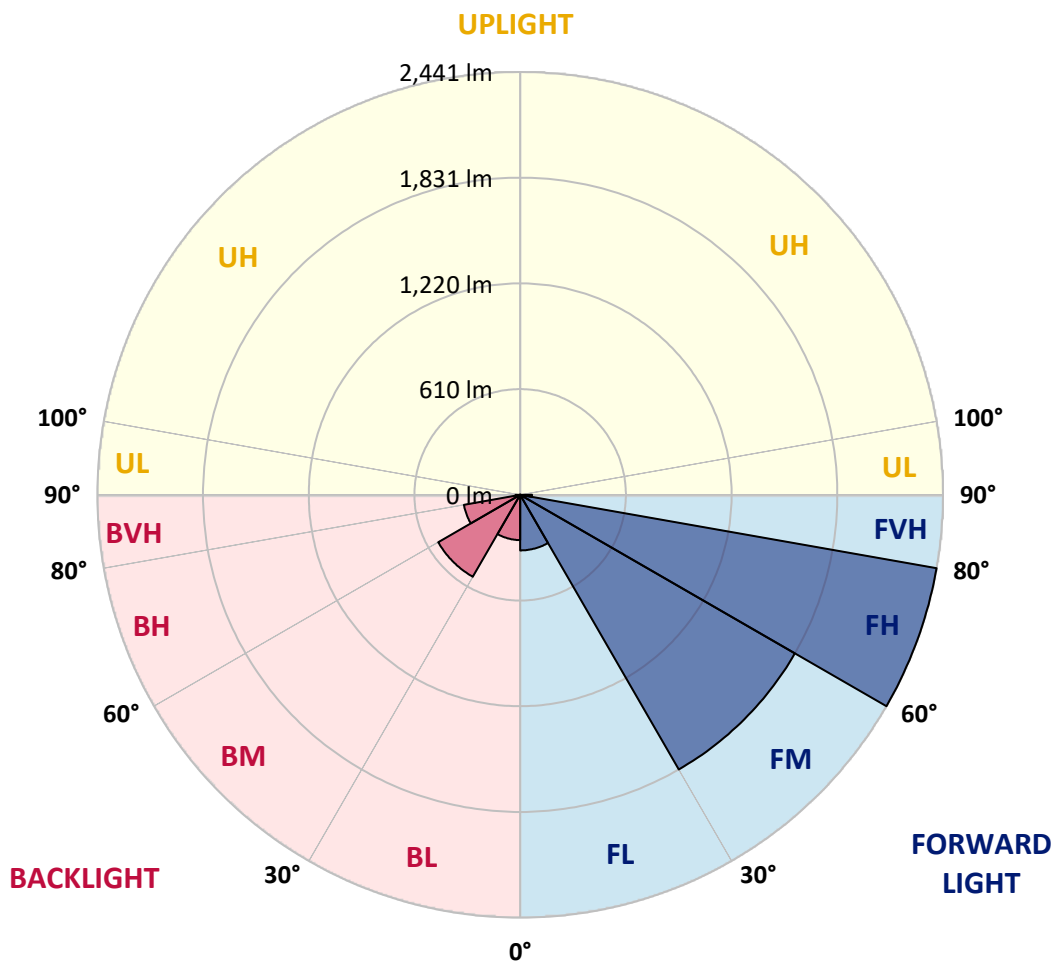
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	321.1	5.5			
FM	(30°-60°)	1830.7	31.4			
FH	(60°-80°)	2440.7	41.9			G2/5000
FVH	(80°-90°)	68.7	1.2			G1/100
BL	(0°-30°)	261.2	4.5	B1/500		
BM	(30°-60°)	546.5	9.4	B1/1000		
BH	(60°-80°)	329.6	5.7	B1/500		G1/500
BVH	(80°-90°)	26.5	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°	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3
2.5°	757.6	755.7	749.9	748.0	742.2	738.4	736.5	734.5	740.3	736.5	730.7
5°	805.7	801.8	794.1	782.6	771.1	763.4	761.5	757.6	757.6	753.8	749.9
7.5°	840.3	838.4	826.8	809.5	790.3	776.8	769.2	763.4	765.3	761.5	749.9
10°	873.0	869.1	849.9	828.8	799.9	784.5	774.9	765.3	773.0	767.2	751.8
12.5°	898.0	894.1	867.2	840.3	807.6	790.3	780.7	774.9	782.6	778.8	761.5
15°	911.4	907.6	880.7	848.0	813.4	794.1	790.3	786.5	792.2	784.5	769.2
17.5°	903.8	903.8	878.8	844.1	815.3	796.1	790.3	786.5	794.1	786.5	769.2
20°	874.9	878.8	861.4	824.9	803.8	790.3	784.5	776.8	784.5	776.8	765.3
22.5°	838.4	842.2	832.6	799.9	784.5	774.9	773.0	765.3	771.1	765.3	753.8
25°	805.7	805.7	801.8	773.0	771.1	763.4	765.3	761.5	765.3	757.6	749.9
27.5°	807.6	807.6	792.2	763.4	761.5	761.5	761.5	761.5	763.4	757.6	749.9
30°	921.1	924.9	880.7	799.9	771.1	767.2	769.2	767.2	769.2	767.2	757.6
32.5°	1092.2	1092.2	1049.9	924.9	823.0	798.0	788.4	786.5	780.7	778.8	771.1
35°	1261.4	1259.5	1217.2	1078.7	949.9	901.8	871.1	842.2	828.8	815.3	801.8
37.5°	1403.7	1397.9	1392.2	1234.5	1099.9	1044.1	1007.6	965.3	938.4	915.3	884.5
40°	1536.4	1546.0	1567.1	1378.7	1249.9	1198.0	1161.4	1107.6	1080.7	1051.8	1015.3
42.5°	1719.1	1732.5	1734.4	1534.5	1386.4	1351.8	1322.9	1282.6	1253.7	1219.1	1186.4
45°	1896.0	1897.9	1903.7	1701.7	1553.7	1509.5	1488.3	1449.9	1413.3	1369.1	1342.2
47.5°	2017.1	2011.3	2036.3	1894.0	1749.8	1699.8	1669.1	1611.4	1555.6	1499.8	1459.5
50°	2165.2	2159.4	2159.4	2113.2	1976.7	1919.0	1865.2	1757.5	1697.9	1628.7	1571.0
52.5°	2295.9	2274.8	2288.2	2315.1	2215.2	2142.1	2047.9	1926.7	1847.9	1763.3	1690.2
55°	2474.7	2365.1	2395.9	2490.1	2451.7	2338.2	2213.2	2084.4	1994.0	1897.9	1830.6
57.5°	2413.2	2338.2	2428.6	2594.0	2592.0	2486.3	2380.5	2222.8	2132.5	2042.1	1959.4
60°	2192.1	2230.5	2426.7	2665.1	2674.7	2592.0	2505.5	2359.4	2288.2	2194.0	2111.3
62.5°	2020.9	2076.7	2345.9	2659.3	2768.9	2692.0	2620.9	2534.4	2484.4	2405.5	2320.9
65°	2011.3	2044.0	2305.5	2653.6	2901.6	2861.2	2828.6	2788.2	2778.6	2720.9	2622.8
67.5°	2103.6	2134.4	2374.8	2801.6	3097.8	3080.5	3128.5	3120.8	3163.1	3134.3	3053.5
70°	1922.9	1940.2	2236.3	2853.6	3545.8	3622.7	3730.4	3724.6	3815.0	3745.8	3651.5
72.5°	1349.9	1384.5	1646.0	2357.4	3555.4	3966.9	4216.9	4428.4	4526.5	4543.8	4499.5
73°	1205.6	1232.6	1474.8	2195.9	3459.3	3897.7	4234.2	4451.5	4538.0	4591.8	4595.7
75°	419.2	432.6	644.2	1330.6	2765.1	3401.6	3834.2	4030.4	4009.2	4166.9	4339.9
77.5°	134.6	136.5	167.3	344.2	1334.5	2111.3	2594.0	2774.7	2670.9	2842.0	3072.8
80°	82.7	86.5	109.6	155.8	350.0	640.3	1084.5	1357.6	1301.8	1461.4	1707.5
82.5°	50.0	51.9	67.3	96.1	140.4	155.8	203.8	276.9	340.3	409.6	536.5
85°	23.1	25.0	32.7	44.2	57.7	59.6	57.7	53.8	61.5	71.1	82.7
87.5°	0.0	0.0	1.9	3.8	1.9	0.0	0.0	0.0	0.0	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):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3
2.5°	736.5	730.7	730.7	723.0	726.8	719.2	723.0	715.3	719.2	709.5	715.3
5°	748.0	738.4	738.4	726.8	728.8	715.3	721.1	705.7	713.4	696.1	707.6
7.5°	753.8	736.5	744.2	723.0	732.6	709.5	721.1	696.1	711.5	684.5	703.8
10°	761.5	736.5	749.9	726.8	738.4	711.5	726.8	696.1	715.3	682.6	699.9
12.5°	773.0	746.1	757.6	730.7	746.1	715.3	730.7	699.9	719.2	682.6	703.8
15°	780.7	753.8	765.3	738.4	749.9	715.3	734.5	698.0	719.2	680.7	703.8
17.5°	778.8	753.8	765.3	734.5	748.0	713.4	732.6	696.1	715.3	674.9	699.9
20°	771.1	749.9	757.6	730.7	742.2	707.6	724.9	688.4	709.5	669.2	694.2
22.5°	761.5	740.3	749.9	724.9	736.5	701.9	717.2	684.5	705.7	665.3	688.4
25°	755.7	738.4	744.2	719.2	734.5	703.8	719.2	682.6	705.7	665.3	692.2
27.5°	753.8	738.4	749.9	726.8	740.3	713.4	728.8	696.1	715.3	673.0	699.9
30°	765.3	751.8	761.5	742.2	753.8	726.8	742.2	711.5	730.7	690.3	721.1
32.5°	778.8	765.3	774.9	757.6	774.9	748.0	767.2	736.5	759.5	719.2	748.0
35°	807.6	792.2	805.7	786.5	805.7	784.5	805.7	773.0	801.8	761.5	792.2
37.5°	882.6	840.3	853.8	832.6	851.8	824.9	861.4	828.8	861.4	823.0	865.3
40°	1001.8	926.8	940.3	896.1	924.9	884.5	928.8	903.8	948.0	899.9	953.7
42.5°	1157.6	1086.4	1073.0	1005.7	1030.7	982.6	1026.8	982.6	1042.2	996.1	1063.4
45°	1299.9	1224.9	1203.7	1138.3	1155.7	1092.2	1148.0	1086.4	1165.3	1111.4	1196.0
47.5°	1417.2	1328.7	1311.4	1236.4	1267.2	1207.6	1276.8	1211.4	1307.6	1253.7	1351.8
50°	1524.8	1415.2	1411.4	1330.6	1382.6	1322.9	1421.0	1376.8	1471.0	1417.2	1532.5
52.5°	1647.9	1509.5	1528.7	1455.6	1538.3	1488.3	1601.8	1538.3	1661.4	1603.7	1730.6
55°	1778.7	1632.5	1682.5	1638.3	1736.4	1703.7	1799.8	1742.1	1863.3	1805.6	1940.2
57.5°	1922.9	1797.9	1886.3	1865.2	1951.7	1911.3	2019.0	1967.1	2088.2	2040.2	2174.8
60°	2111.3	2028.6	2115.2	2113.2	2188.2	2186.3	2255.5	2224.8	2340.1	2319.0	2442.1
62.5°	2355.5	2290.1	2382.4	2357.4	2447.8	2432.4	2517.0	2517.0	2599.7	2628.6	2751.6
65°	2684.3	2597.8	2707.4	2669.0	2759.3	2763.2	2817.0	2826.6	2926.6	2959.3	3065.1
67.5°	3130.4	3030.5	3117.0	3043.9	3147.8	3142.0	3188.1	3207.4	3220.8	3299.7	3311.2
70°	3772.7	3622.7	3701.5	3601.6	3620.8	3634.2	3547.7	3611.2	3457.3	3582.3	3413.1
72.5°	4466.8	4295.7	4159.2	4059.2	3861.1	3832.3	3580.4	3634.2	3307.4	3415.0	3072.8
73°	4503.4	4338.0	4153.4	4049.6	3815.0	3784.2	3515.0	3561.2	3199.7	3301.6	2942.0
75°	4093.8	4138.0	3693.9	3736.2	3328.5	3376.6	2955.5	3009.3	2565.1	2642.0	2178.6
77.5°	2759.3	2907.4	2409.4	2595.9	2090.2	2276.7	1705.6	1722.9	1257.6	1174.9	798.0
80°	1367.2	1494.1	1059.5	1157.6	776.8	763.4	465.3	386.5	328.8	336.5	346.1
82.5°	394.2	444.2	275.0	273.0	194.2	184.6	184.6	196.1	200.0	223.1	217.3
85°	75.0	90.4	78.8	105.8	94.2	103.8	96.1	111.5	103.8	128.8	111.5
87.5°	1.9	0.0	1.9	5.8	5.8	13.5	9.6	15.4	15.4	26.9	25.0
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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3
2.5°	707.6	717.2	713.4	709.5	705.7	703.8	696.1	699.9	690.3	698.0	690.3
5°	692.2	703.8	698.0	690.3	686.5	682.6	669.2	678.8	663.4	676.9	665.3
7.5°	674.9	694.2	688.4	680.7	673.0	669.2	642.2	663.4	640.3	659.5	640.3
10°	669.2	690.3	682.6	673.0	665.3	661.5	628.8	653.8	628.8	649.9	624.9
12.5°	665.3	690.3	678.8	669.2	661.5	655.7	619.2	649.9	617.2	648.0	619.2
15°	661.5	690.3	674.9	663.4	655.7	649.9	611.5	646.1	609.6	644.2	611.5
17.5°	657.6	684.5	671.1	657.6	649.9	646.1	603.8	640.3	601.9	640.3	607.6
20°	651.9	678.8	663.4	649.9	642.2	636.5	594.2	632.6	592.2	630.7	594.2
22.5°	644.2	673.0	659.5	646.1	638.4	628.8	582.6	623.0	580.7	619.2	584.6
25°	646.1	676.9	659.5	646.1	634.6	624.9	574.9	619.2	571.1	609.6	571.1
27.5°	655.7	682.6	665.3	653.8	638.4	626.9	574.9	615.3	567.2	599.9	559.6
30°	674.9	701.9	686.5	669.2	655.7	640.3	584.6	617.2	567.2	588.4	548.0
32.5°	707.6	732.6	717.2	703.8	688.4	665.3	603.8	626.9	571.1	580.7	538.4
35°	749.9	780.7	773.0	763.4	744.2	703.8	636.5	640.3	578.8	573.0	524.9
37.5°	819.1	861.4	859.5	857.6	836.5	763.4	673.0	667.2	586.5	567.2	507.6
40°	909.5	959.5	973.0	986.4	942.2	834.5	715.3	694.2	590.3	555.7	480.7
42.5°	1015.3	1082.6	1123.0	1148.0	1067.2	913.4	763.4	724.9	590.3	538.4	450.0
45°	1146.0	1224.9	1301.8	1328.7	1205.6	998.0	813.4	749.9	582.6	511.5	409.6
47.5°	1305.6	1397.9	1503.7	1517.2	1355.6	1088.3	848.0	767.2	557.6	475.0	373.0
50°	1482.5	1594.1	1749.8	1740.2	1515.2	1182.6	871.1	778.8	513.4	432.6	328.8
52.5°	1680.6	1821.0	2042.1	1997.9	1709.4	1299.9	892.2	794.1	459.6	382.7	284.6
55°	1928.6	2095.9	2372.8	2278.6	1924.8	1428.7	923.0	796.1	388.4	323.0	251.9
57.5°	2195.9	2374.8	2728.6	2557.4	2126.7	1528.7	909.5	734.5	317.3	273.0	226.9
60°	2517.0	2734.3	3084.3	2817.0	2295.9	1563.3	815.3	605.7	271.1	246.1	215.4
62.5°	2876.6	3092.0	3376.6	2997.8	2392.1	1505.6	605.7	419.2	232.7	219.2	198.1
65°	3259.3	3463.1	3516.9	3013.2	2328.6	1251.8	375.0	275.0	201.9	196.1	182.7
67.5°	3611.2	3630.4	3384.3	2763.2	2020.9	873.0	255.7	219.2	186.5	184.6	176.9
70°	3701.5	3368.9	2813.2	2151.7	1459.5	519.2	207.7	190.4	178.8	178.8	173.1
72.5°	3092.0	2565.1	1880.6	1303.7	796.1	276.9	176.9	173.1	169.2	169.2	165.4
73°	2899.7	2363.2	1684.4	1138.3	673.0	248.1	173.1	169.2	167.3	165.4	163.4
75°	1926.7	1484.5	955.7	576.9	313.4	178.8	153.8	153.8	151.9	153.8	151.9
77.5°	742.2	559.6	369.2	248.1	178.8	140.4	130.8	132.7	130.8	134.6	132.7
80°	326.9	323.0	244.2	175.0	130.8	105.8	105.8	105.8	107.7	109.6	109.6
82.5°	223.1	188.4	144.2	107.7	78.8	76.9	78.8	78.8	80.8	82.7	80.8
85°	123.1	103.8	76.9	48.1	42.3	51.9	51.9	51.9	50.0	50.0	48.1
87.5°	38.5	28.8	21.2	5.8	9.6	9.6	13.5	11.5	11.5	13.5	13.5
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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3	715.3
2.5°	698.0	692.2	698.0	688.4	696.1	688.4	694.2	694.2	692.2	692.2	692.2
5°	674.9	665.3	674.9	669.2	674.9	667.2	673.0	674.9	676.9	682.6	680.7
7.5°	657.6	638.4	659.5	640.3	657.6	640.3	655.7	657.6	663.4	671.1	676.9
10°	649.9	624.9	649.9	626.9	648.0	628.8	648.0	649.9	655.7	665.3	674.9
12.5°	646.1	619.2	646.1	623.0	646.1	626.9	646.1	651.9	655.7	663.4	674.9
15°	642.2	615.3	646.1	621.1	646.1	626.9	648.0	651.9	657.6	665.3	674.9
17.5°	640.3	609.6	642.2	619.2	642.2	623.0	646.1	646.1	653.8	663.4	669.2
20°	632.6	603.8	632.6	609.6	632.6	615.3	634.6	634.6	642.2	646.1	655.7
22.5°	621.1	590.3	617.2	596.1	617.2	599.9	615.3	615.3	621.1	626.9	632.6
25°	603.8	574.9	598.0	578.8	594.2	578.8	590.3	588.4	592.2	596.1	599.9
27.5°	584.6	555.7	574.9	553.8	563.4	548.0	555.7	551.9	553.8	555.7	557.6
30°	563.4	534.6	544.2	524.9	526.9	511.5	515.3	509.6	507.6	505.7	501.9
32.5°	540.3	509.6	509.6	490.3	486.5	473.0	473.0	465.3	459.6	451.9	444.2
35°	511.5	484.6	471.1	455.7	448.0	434.6	432.6	423.0	409.6	396.1	388.4
37.5°	482.6	451.9	432.6	417.3	409.6	400.0	398.0	390.3	375.0	359.6	348.0
40°	444.2	413.4	392.3	386.5	380.7	373.0	375.0	365.3	350.0	332.7	323.0
42.5°	405.7	378.8	361.5	359.6	355.7	353.8	355.7	348.0	330.7	315.4	303.8
45°	373.0	346.1	328.8	326.9	325.0	332.7	334.6	332.7	313.4	298.0	282.7
47.5°	340.3	307.7	296.1	292.3	294.2	305.7	309.6	315.4	298.0	280.7	259.6
50°	301.9	271.1	267.3	263.4	265.4	275.0	284.6	296.1	280.7	255.7	226.9
52.5°	267.3	240.4	242.3	238.4	242.3	250.0	257.7	276.9	257.7	232.7	219.2
55°	240.4	219.2	223.1	219.2	223.1	232.7	238.4	253.8	253.8	248.1	236.5
57.5°	221.1	205.7	209.6	205.7	211.5	219.2	225.0	257.7	276.9	261.5	238.4
60°	209.6	196.1	198.1	194.2	198.1	209.6	221.1	259.6	290.4	259.6	242.3
62.5°	192.3	180.8	178.8	178.8	182.7	201.9	207.7	242.3	286.5	257.7	244.2
65°	180.8	171.1	169.2	167.3	171.1	184.6	190.4	225.0	276.9	244.2	221.1
67.5°	175.0	167.3	163.4	159.6	163.4	175.0	180.8	211.5	261.5	232.7	207.7
70°	169.2	161.5	159.6	155.8	157.7	165.4	173.1	194.2	248.1	219.2	194.2
72.5°	161.5	153.8	151.9	146.1	148.1	155.8	159.6	182.7	230.7	205.7	180.8
73°	159.6	151.9	150.0	144.2	146.1	151.9	155.8	178.8	226.9	203.8	178.8
75°	150.0	142.3	140.4	136.5	138.4	138.4	142.3	163.4	215.4	192.3	167.3
77.5°	132.7	126.9	125.0	121.1	119.2	117.3	123.1	144.2	196.1	173.1	134.6
80°	109.6	103.8	101.9	94.2	94.2	94.2	101.9	123.1	146.1	125.0	103.8
82.5°	80.8	76.9	76.9	71.1	69.2	67.3	73.1	84.6	115.4	98.1	80.8
85°	48.1	46.1	48.1	42.3	44.2	42.3	48.1	59.6	63.5	50.0	38.5
87.5°	11.5	13.5	13.5	13.5	11.5	11.5	9.6	7.7	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°	715.3	715.3
2.5°	690.3	688.4
5°	680.7	680.7
7.5°	676.9	676.9
10°	678.8	678.8
12.5°	678.8	682.6
15°	684.5	682.6
17.5°	678.8	678.8
20°	663.4	667.2
22.5°	642.2	642.2
25°	607.6	609.6
27.5°	561.5	565.3
30°	503.8	507.6
32.5°	438.4	442.3
35°	386.5	388.4
37.5°	351.9	351.9
40°	323.0	323.0
42.5°	296.1	294.2
45°	269.2	265.4
47.5°	242.3	240.4
50°	219.2	219.2
52.5°	223.1	223.1
55°	240.4	240.4
57.5°	242.3	240.4
60°	263.4	261.5
62.5°	275.0	280.7
65°	240.4	232.7
67.5°	228.8	217.3
70°	205.7	188.4
72.5°	182.7	173.1
73°	176.9	169.2
75°	157.7	153.8
77.5°	119.2	117.3
80°	100.0	98.1
82.5°	67.3	63.5
85°	28.8	26.9
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)