

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: P271550

Luminaire Tested: **ISS-AF-1200-LED-E1-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271550
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-7027
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 2700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5717.1 lumens
Efficiency: N/A
Efficacy: 86.6 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): 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

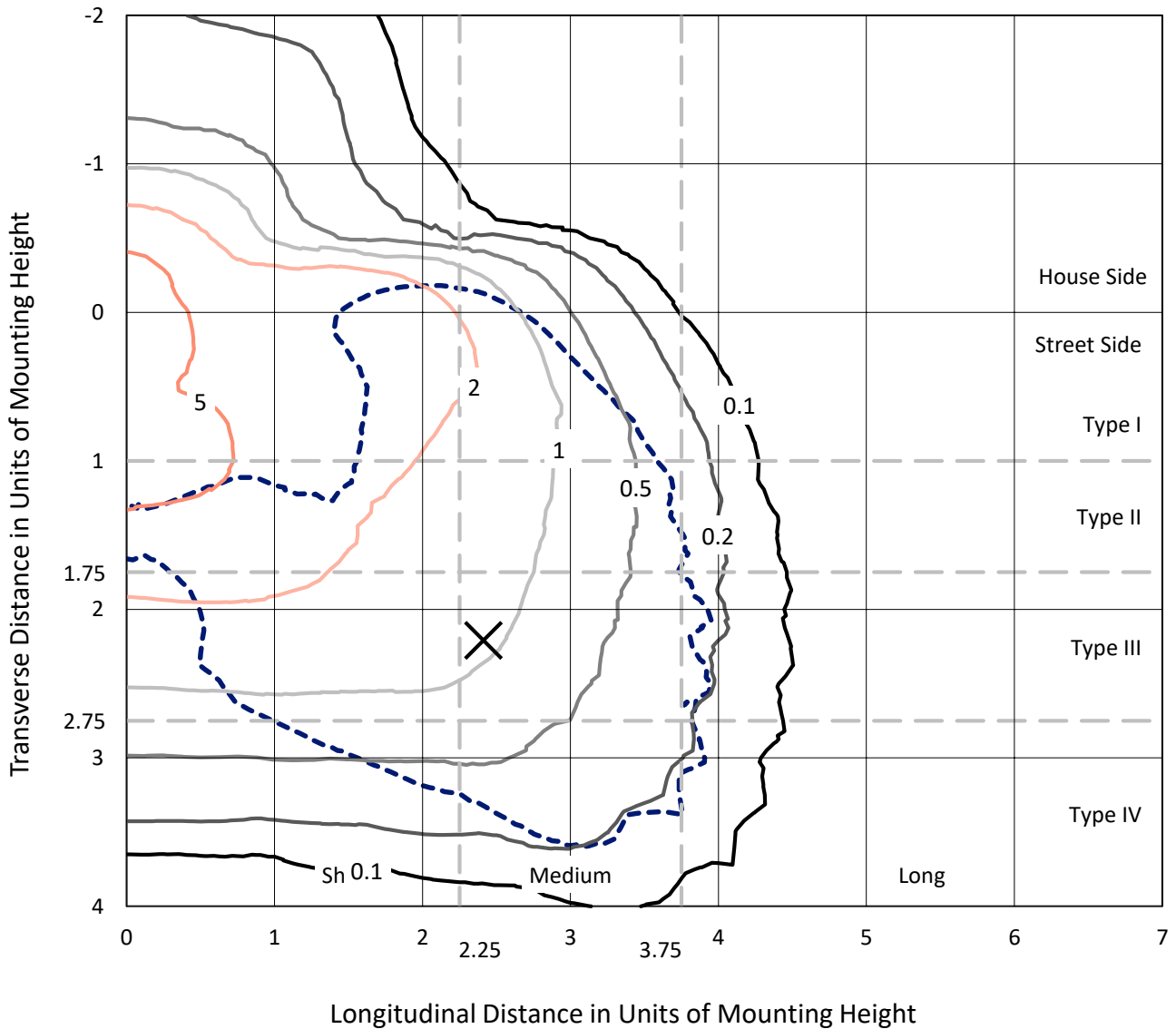


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Iso-Footcandle Lines of Horizontal Illumination

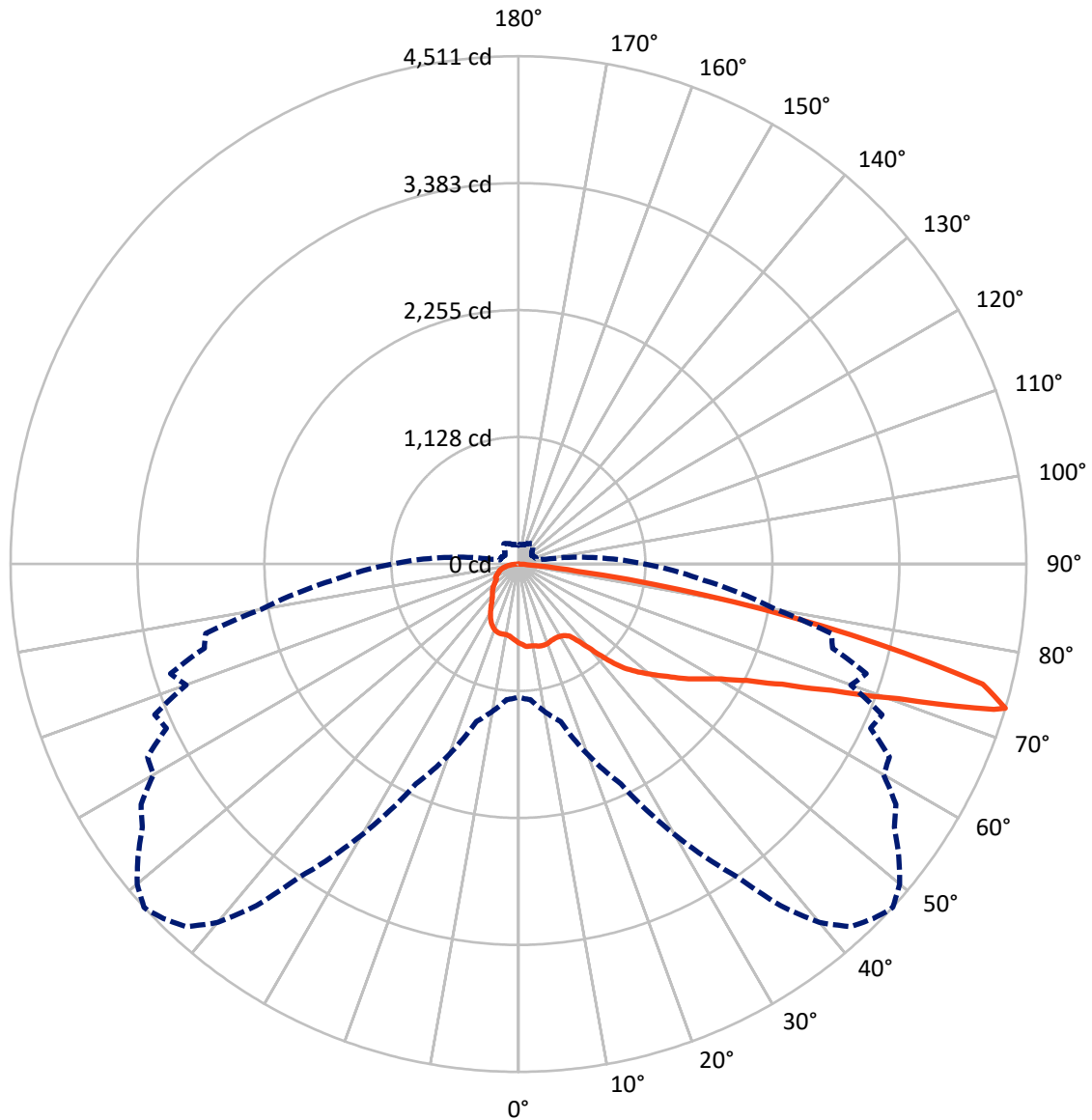
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.1 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	1142.2	0.0	1142.2
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	4574.9	0.0	4574.9
	% Fixture	80.0	0.0	80.0
Total	Lumens	5717.1	0.0	5717.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	1.2
10°-20°	198.9	3.5
20°-30°	305.8	5.3
30°-40°	446.1	7.8
40°-50°	735.5	12.9
50°-60°	1151.6	20.1
60°-70°	1562.2	27.3
70°-80°	1156.8	20.2
80°-90°	93.5	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°	5717.1	100.0
0°-180°	5717.1	100.0

Coefficient of Utilization



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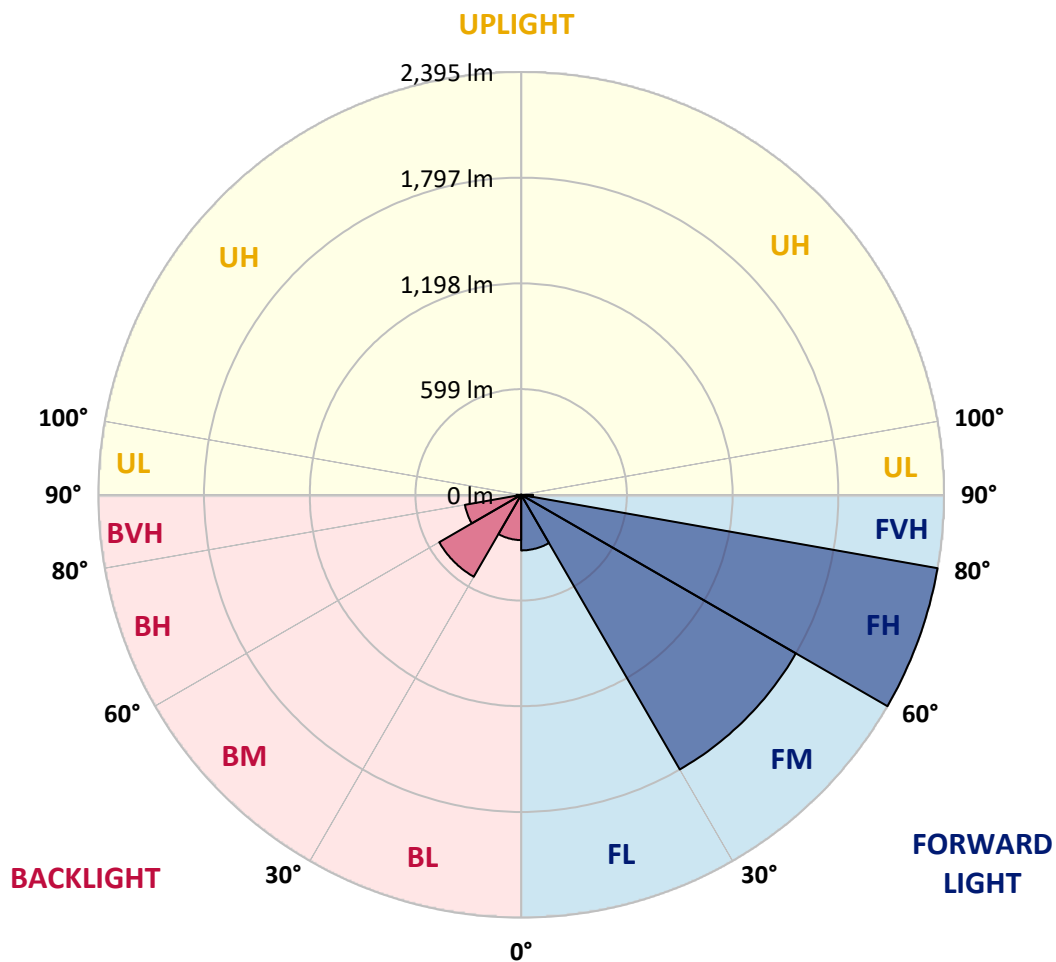
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	315.1	5.5			
FM	(30°-60°)	1796.8	31.4			
FH	(60°-80°)	2395.5	41.9			G2/5000
FVH	(80°-90°)	67.4	1.2			G1/100
BL	(0°-30°)	256.4	4.5	B1/500		
BM	(30°-60°)	536.4	9.4	B1/1000		
BH	(60°-80°)	323.5	5.7	B1/500		G1/500
BVH	(80°-90°)	26.0	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°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0
2.5°	743.5	741.7	736.0	734.2	728.4	724.8	722.9	720.9	726.5	722.9	717.2
5°	790.8	786.9	779.4	768.1	756.8	749.3	747.4	743.5	743.5	739.8	736.0
7.5°	824.7	822.8	811.5	794.6	775.7	762.4	754.9	749.3	751.2	747.4	736.0
10°	856.8	853.0	834.2	813.4	785.1	769.9	760.5	751.2	758.7	753.0	737.9
12.5°	881.3	877.6	851.1	824.7	792.7	775.7	766.3	760.5	768.1	764.4	747.4
15°	894.5	890.8	864.3	832.3	798.3	779.4	775.7	771.9	777.6	769.9	754.9
17.5°	887.1	887.1	862.6	828.5	800.2	781.3	775.7	771.9	779.4	771.9	754.9
20°	858.7	862.6	845.5	809.6	788.9	775.7	769.9	762.4	769.9	762.4	751.2
22.5°	822.8	826.6	817.2	785.1	769.9	760.5	758.7	751.2	756.8	751.2	739.8
25°	790.8	790.8	786.9	758.7	756.8	749.3	751.2	747.4	751.2	743.5	736.0
27.5°	792.7	792.7	777.6	749.3	747.4	747.4	747.4	747.4	749.3	743.5	736.0
30°	904.1	907.7	864.3	785.1	756.8	753.0	754.9	753.0	754.9	753.0	743.5
32.5°	1071.9	1071.9	1030.4	907.7	807.8	783.2	773.8	771.9	766.3	764.4	756.8
35°	1238.0	1236.2	1194.7	1058.7	932.4	885.1	855.0	826.6	813.4	800.2	786.9
37.5°	1377.7	1372.0	1366.4	1211.6	1079.5	1024.8	988.9	947.4	921.0	898.3	868.1
40°	1508.0	1517.3	1538.1	1353.2	1226.7	1175.8	1139.9	1087.1	1060.7	1032.3	996.5
42.5°	1687.3	1700.4	1702.3	1506.1	1360.8	1326.8	1298.4	1258.9	1230.5	1196.5	1164.5
45°	1860.9	1862.7	1868.5	1670.2	1525.0	1481.6	1460.7	1423.1	1387.2	1343.8	1317.4
47.5°	1979.8	1974.0	1998.5	1859.0	1717.4	1668.3	1638.1	1581.6	1526.8	1472.1	1432.4
50°	2125.1	2119.4	2119.4	2074.1	1940.1	1883.5	1830.7	1724.9	1666.4	1598.5	1541.9
52.5°	2253.4	2232.6	2245.9	2272.3	2174.2	2102.4	2010.0	1891.0	1813.7	1730.7	1658.9
55°	2428.8	2321.3	2351.5	2444.0	2406.3	2294.9	2172.2	2045.8	1957.0	1862.7	1796.7
57.5°	2368.5	2294.9	2383.7	2546.0	2544.0	2440.2	2336.4	2181.6	2093.1	2004.3	1923.1
60°	2151.5	2189.2	2381.8	2615.8	2625.2	2544.0	2459.1	2315.7	2245.9	2153.3	2072.2
62.5°	1983.5	2038.3	2302.4	2610.0	2717.6	2642.2	2572.4	2487.5	2438.4	2360.9	2277.9
65°	1974.0	2006.2	2262.8	2604.5	2847.9	2808.2	2776.2	2736.6	2727.2	2670.5	2574.3
67.5°	2064.7	2094.8	2330.8	2749.7	3040.4	3023.4	3070.6	3063.0	3104.5	3076.2	2996.9
70°	1887.2	1904.2	2194.9	2800.7	3480.1	3555.6	3661.3	3655.7	3744.3	3676.4	3583.9
72.5°	1324.9	1358.9	1615.5	2313.8	3489.6	3893.4	4138.9	4346.4	4442.7	4459.6	4416.2
73°	1183.2	1209.7	1447.5	2155.2	3395.2	3825.5	4155.8	4369.1	4454.0	4506.8	4510.6
75°	411.4	424.6	632.2	1306.0	2713.9	3338.6	3763.2	3955.8	3934.9	4089.7	4259.5
77.5°	132.1	133.9	164.2	337.9	1309.8	2072.2	2546.0	2723.3	2621.4	2789.3	3015.9
80°	81.2	84.9	107.5	152.9	343.5	628.5	1064.4	1332.5	1277.7	1434.3	1675.9
82.5°	49.0	50.9	66.0	94.3	137.8	152.9	200.1	271.7	334.0	402.0	526.6
85°	22.6	24.5	32.1	43.4	56.6	58.5	56.6	52.8	60.4	69.8	81.2
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°	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0	702.0
2.5°	722.9	717.2	717.2	709.6	713.3	705.9	709.6	702.0	705.9	696.4	702.0
5°	734.2	724.8	724.8	713.3	715.3	702.0	707.8	692.6	700.2	683.3	694.5
7.5°	739.8	722.9	730.4	709.6	719.0	696.4	707.8	683.3	698.3	671.8	690.8
10°	747.4	722.9	736.0	713.3	724.8	698.3	713.3	683.3	702.0	670.0	686.9
12.5°	758.7	732.3	743.5	717.2	732.3	702.0	717.2	686.9	705.9	670.0	690.8
15°	766.3	739.8	751.2	724.8	736.0	702.0	720.9	685.0	705.9	668.1	690.8
17.5°	764.4	739.8	751.2	720.9	734.2	700.2	719.0	683.3	702.0	662.4	686.9
20°	756.8	736.0	743.5	717.2	728.4	694.5	711.5	675.6	696.4	656.8	681.4
22.5°	747.4	726.5	736.0	711.5	722.9	688.9	703.9	671.8	692.6	653.0	675.6
25°	741.7	724.8	730.4	705.9	720.9	690.8	705.9	670.0	692.6	653.0	679.4
27.5°	739.8	724.8	736.0	713.3	726.5	700.2	715.3	683.3	702.0	660.5	686.9
30°	751.2	737.9	747.4	728.4	739.8	713.3	728.4	698.3	717.2	677.5	707.8
32.5°	764.4	751.2	760.5	743.5	760.5	734.2	753.0	722.9	745.4	705.9	734.2
35°	792.7	777.6	790.8	771.9	790.8	769.9	790.8	758.7	786.9	747.4	777.6
37.5°	866.2	824.7	838.0	817.2	836.1	809.6	845.5	813.4	845.5	807.8	849.3
40°	983.3	909.6	922.9	879.5	907.7	868.1	911.6	887.1	930.5	883.2	936.0
42.5°	1136.2	1066.3	1053.2	987.1	1011.6	964.4	1007.8	964.4	1022.9	977.6	1043.7
45°	1275.9	1202.2	1181.5	1117.2	1134.3	1071.9	1126.7	1066.3	1143.7	1090.8	1173.8
47.5°	1390.9	1304.1	1287.1	1213.5	1243.7	1185.2	1253.1	1189.0	1283.4	1230.5	1326.8
50°	1496.6	1389.0	1385.3	1306.0	1357.0	1298.4	1394.7	1351.3	1443.8	1390.9	1504.1
52.5°	1617.4	1481.6	1500.3	1428.7	1509.8	1460.7	1572.1	1509.8	1630.6	1574.0	1698.5
55°	1745.8	1602.3	1651.4	1608.0	1704.3	1672.1	1766.4	1709.8	1828.8	1772.2	1904.2
57.5°	1887.2	1764.6	1851.4	1830.7	1915.5	1875.9	1981.6	1930.6	2049.6	2002.4	2134.6
60°	2072.2	1991.0	2076.1	2074.1	2147.7	2145.8	2213.7	2183.6	2296.8	2276.0	2396.9
62.5°	2311.9	2247.6	2338.3	2313.8	2402.4	2387.3	2470.4	2470.4	2551.5	2579.9	2700.7
65°	2634.5	2549.7	2657.3	2619.5	2708.2	2712.1	2764.8	2774.2	2872.4	2904.5	3008.3
67.5°	3072.5	2974.4	3059.3	2987.5	3089.5	3083.8	3129.1	3148.0	3161.1	3238.6	3249.9
70°	3702.8	3555.6	3632.9	3534.9	3553.8	3566.9	3482.0	3544.4	3393.3	3516.0	3349.9
72.5°	4384.1	4216.1	4082.2	3984.1	3789.6	3761.3	3514.1	3566.9	3246.1	3351.8	3015.9
73°	4420.0	4257.7	4076.5	3974.6	3744.3	3714.1	3449.9	3495.2	3140.5	3240.5	2887.5
75°	4018.0	4061.3	3625.5	3667.0	3266.9	3314.0	2900.8	2953.5	2517.6	2593.0	2138.2
77.5°	2708.2	2853.6	2364.8	2547.9	2051.5	2234.5	1674.0	1691.0	1234.3	1153.2	783.2
80°	1341.9	1466.4	1039.9	1136.2	762.4	749.3	456.7	379.4	322.7	330.3	339.6
82.5°	386.9	435.9	269.9	268.0	190.6	181.2	181.2	192.5	196.3	219.0	213.3
85°	73.6	88.8	77.3	103.8	92.4	101.9	94.3	109.4	101.9	126.4	109.4
87.5°	1.9	0.0	1.9	5.7	5.7	13.3	9.4	15.1	15.1	26.4	24.5
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°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
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°	694.5	703.9	700.2	696.4	692.6	690.8	683.3	686.9	677.5	685.0	677.5
5°	679.4	690.8	685.0	677.5	673.8	670.0	656.8	666.3	651.1	664.4	653.0
7.5°	662.4	681.4	675.6	668.1	660.5	656.8	630.3	651.1	628.5	647.3	628.5
10°	656.8	677.5	670.0	660.5	653.0	649.3	617.1	641.7	617.1	637.9	613.4
12.5°	653.0	677.5	666.3	656.8	649.3	643.5	607.7	637.9	605.7	636.0	607.7
15°	649.3	677.5	662.4	651.1	643.5	637.9	600.2	634.1	598.3	632.2	600.2
17.5°	645.4	671.8	658.6	645.4	637.9	634.1	592.6	628.5	590.7	628.5	596.4
20°	639.9	666.3	651.1	637.9	630.3	624.7	583.2	620.9	581.2	619.0	583.2
22.5°	632.2	660.5	647.3	634.1	626.6	617.1	571.8	611.5	570.0	607.7	573.7
25°	634.1	664.4	647.3	634.1	622.9	613.4	564.2	607.7	560.5	598.3	560.5
27.5°	643.5	670.0	653.0	641.7	626.6	615.2	564.2	603.9	556.7	588.7	549.2
30°	662.4	688.9	673.8	656.8	643.5	628.5	573.7	605.7	556.7	577.5	537.8
32.5°	694.5	719.0	703.9	690.8	675.6	653.0	592.6	615.2	560.5	570.0	528.5
35°	736.0	766.3	758.7	749.3	730.4	690.8	624.7	628.5	568.1	562.4	515.2
37.5°	803.9	845.5	843.6	841.7	821.1	749.3	660.5	654.9	575.6	556.7	498.2
40°	892.6	941.7	955.0	968.1	924.7	819.1	702.0	681.4	579.4	545.5	471.8
42.5°	996.5	1062.5	1102.2	1126.7	1047.4	896.5	749.3	711.5	579.4	528.5	441.7
45°	1124.8	1202.2	1277.7	1304.1	1183.2	979.5	798.3	736.0	571.8	502.1	402.0
47.5°	1281.4	1372.0	1475.8	1489.1	1330.5	1068.2	832.3	753.0	547.2	466.2	366.1
50°	1455.1	1564.6	1717.4	1707.9	1487.1	1160.7	855.0	764.4	503.9	424.6	322.7
52.5°	1649.5	1787.3	2004.3	1960.9	1677.8	1275.9	875.7	779.4	451.1	375.6	279.4
55°	1892.9	2057.1	2328.9	2236.4	1889.1	1402.3	905.9	781.3	381.2	317.0	247.2
57.5°	2155.2	2330.8	2678.0	2510.0	2087.3	1500.3	892.6	720.9	311.4	268.0	222.7
60°	2470.4	2683.7	3027.2	2764.8	2253.4	1534.3	800.2	594.5	266.1	241.6	211.4
62.5°	2823.4	3034.7	3314.0	2942.3	2347.8	1477.7	594.5	411.4	228.3	215.1	194.4
65°	3199.0	3399.0	3451.7	2957.4	2285.5	1228.6	368.0	269.9	198.2	192.5	179.3
67.5°	3544.4	3563.1	3321.7	2712.1	1983.5	856.8	251.0	215.1	183.1	181.2	173.6
70°	3632.9	3306.5	2761.1	2111.8	1432.4	509.6	203.8	186.8	175.5	175.5	169.9
72.5°	3034.7	2517.6	1845.7	1279.5	781.3	271.7	173.6	169.9	166.1	166.1	162.3
73°	2846.0	2319.4	1653.2	1117.2	660.5	243.5	169.9	166.1	164.2	162.3	160.3
75°	1891.0	1457.1	938.0	566.2	307.6	175.5	150.9	150.9	149.1	150.9	149.1
77.5°	728.4	549.2	362.4	243.5	175.5	137.8	128.4	130.3	128.4	132.1	130.3
80°	320.9	317.0	239.7	171.8	128.4	103.8	103.8	103.8	105.7	107.5	107.5
82.5°	219.0	184.9	141.6	105.7	77.3	75.5	77.3	77.3	79.3	81.2	79.3
85°	120.8	101.9	75.5	47.3	41.5	50.9	50.9	50.9	49.0	49.0	47.3
87.5°	37.8	28.3	20.8	5.7	9.4	9.4	13.3	11.3	11.3	13.3	13.3
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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
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°	685.0	679.4	685.0	675.6	683.3	675.6	681.4	681.4	679.4	679.4	679.4
5°	662.4	653.0	662.4	656.8	662.4	654.9	660.5	662.4	664.4	670.0	668.1
7.5°	645.4	626.6	647.3	628.5	645.4	628.5	643.5	645.4	651.1	658.6	664.4
10°	637.9	613.4	637.9	615.2	636.0	617.1	636.0	637.9	643.5	653.0	662.4
12.5°	634.1	607.7	634.1	611.5	634.1	615.2	634.1	639.9	643.5	651.1	662.4
15°	630.3	603.9	634.1	609.6	634.1	615.2	636.0	639.9	645.4	653.0	662.4
17.5°	628.5	598.3	630.3	607.7	630.3	611.5	634.1	634.1	641.7	651.1	656.8
20°	620.9	592.6	620.9	598.3	620.9	603.9	622.9	622.9	630.3	634.1	643.5
22.5°	609.6	579.4	605.7	585.1	605.7	588.7	603.9	603.9	609.6	615.2	620.9
25°	592.6	564.2	587.0	568.1	583.2	568.1	579.4	577.5	581.2	585.1	588.7
27.5°	573.7	545.5	564.2	543.6	553.0	537.8	545.5	541.7	543.6	545.5	547.2
30°	553.0	524.7	534.1	515.2	517.2	502.1	505.7	500.2	498.2	496.3	492.6
32.5°	530.3	500.2	500.2	481.2	477.4	464.2	464.2	456.7	451.1	443.5	435.9
35°	502.1	475.7	462.4	447.3	439.7	426.5	424.6	415.2	402.0	388.8	381.2
37.5°	473.7	443.5	424.6	409.5	402.0	392.6	390.7	383.0	368.0	352.9	341.5
40°	435.9	405.8	385.0	379.4	373.7	366.1	368.0	358.5	343.5	326.5	317.0
42.5°	398.2	371.8	354.8	352.9	349.1	347.3	349.1	341.5	324.6	309.6	298.1
45°	366.1	339.6	322.7	320.9	319.0	326.5	328.4	326.5	307.6	292.5	277.5
47.5°	334.0	302.0	290.6	286.9	288.7	300.0	303.9	309.6	292.5	275.5	254.8
50°	296.4	266.1	262.3	258.5	260.5	269.9	279.4	290.6	275.5	251.0	222.7
52.5°	262.3	236.0	237.8	234.0	237.8	245.3	253.0	271.7	253.0	228.3	215.1
55°	236.0	215.1	219.0	215.1	219.0	228.3	234.0	249.1	249.1	243.5	232.1
57.5°	217.0	201.8	205.7	201.8	207.6	215.1	220.8	253.0	271.7	256.6	234.0
60°	205.7	192.5	194.4	190.6	194.4	205.7	217.0	254.8	285.0	254.8	237.8
62.5°	188.7	177.4	175.5	175.5	179.3	198.2	203.8	237.8	281.2	253.0	239.7
65°	177.4	167.9	166.1	164.2	167.9	181.2	186.8	220.8	271.7	239.7	217.0
67.5°	171.8	164.2	160.3	156.7	160.3	171.8	177.4	207.6	256.6	228.3	203.8
70°	166.1	158.6	156.7	152.9	154.8	162.3	169.9	190.6	243.5	215.1	190.6
72.5°	158.6	150.9	149.1	143.4	145.3	152.9	156.7	179.3	226.5	201.8	177.4
73°	156.7	149.1	147.2	141.6	143.4	149.1	152.9	175.5	222.7	200.1	175.5
75°	147.2	139.7	137.8	133.9	135.8	135.8	139.7	160.3	211.4	188.7	164.2
77.5°	130.3	124.5	122.7	118.8	117.0	115.2	120.8	141.6	192.5	169.9	132.1
80°	107.5	101.9	100.0	92.4	92.4	92.4	100.0	120.8	143.4	122.7	101.9
82.5°	79.3	75.5	75.5	69.8	67.9	66.0	71.8	83.0	113.3	96.3	79.3
85°	47.3	45.3	47.3	41.5	43.4	41.5	47.3	58.5	62.3	49.0	37.8
87.5°	11.3	13.3	13.3	13.3	11.3	11.3	9.4	7.5	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°	702.0	702.0
2.5°	677.5	675.6
5°	668.1	668.1
7.5°	664.4	664.4
10°	666.3	666.3
12.5°	666.3	670.0
15°	671.8	670.0
17.5°	666.3	666.3
20°	651.1	654.9
22.5°	630.3	630.3
25°	596.4	598.3
27.5°	551.1	554.8
30°	494.4	498.2
32.5°	430.3	434.2
35°	379.4	381.2
37.5°	345.4	345.4
40°	317.0	317.0
42.5°	290.6	288.7
45°	264.2	260.5
47.5°	237.8	236.0
50°	215.1	215.1
52.5°	219.0	219.0
55°	236.0	236.0
57.5°	237.8	236.0
60°	258.5	256.6
62.5°	269.9	275.5
65°	236.0	228.3
67.5°	224.6	213.3
70°	201.8	184.9
72.5°	179.3	169.9
73°	173.6	166.1
75°	154.8	150.9
77.5°	117.0	115.2
80°	98.2	96.3
82.5°	66.0	62.3
85°	28.3	26.4
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)