

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: P227586

Luminaire Tested: **ISS-AF-1000-LED-E1-T2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227586
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-1000-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: 5013 lumens
Efficiency: N/A
Efficacy: 91.8 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 - G1

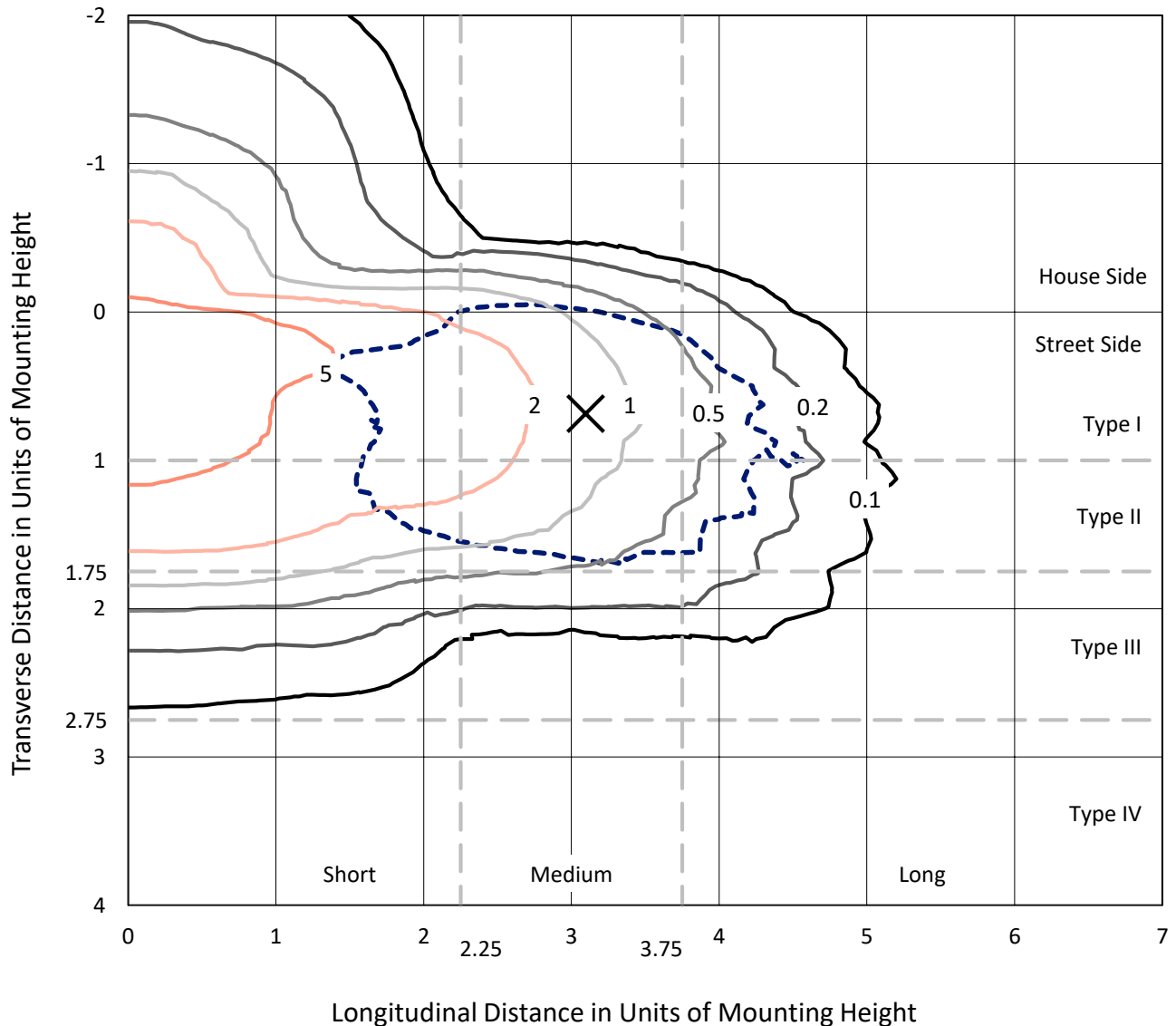
Input Watts (W): 54.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

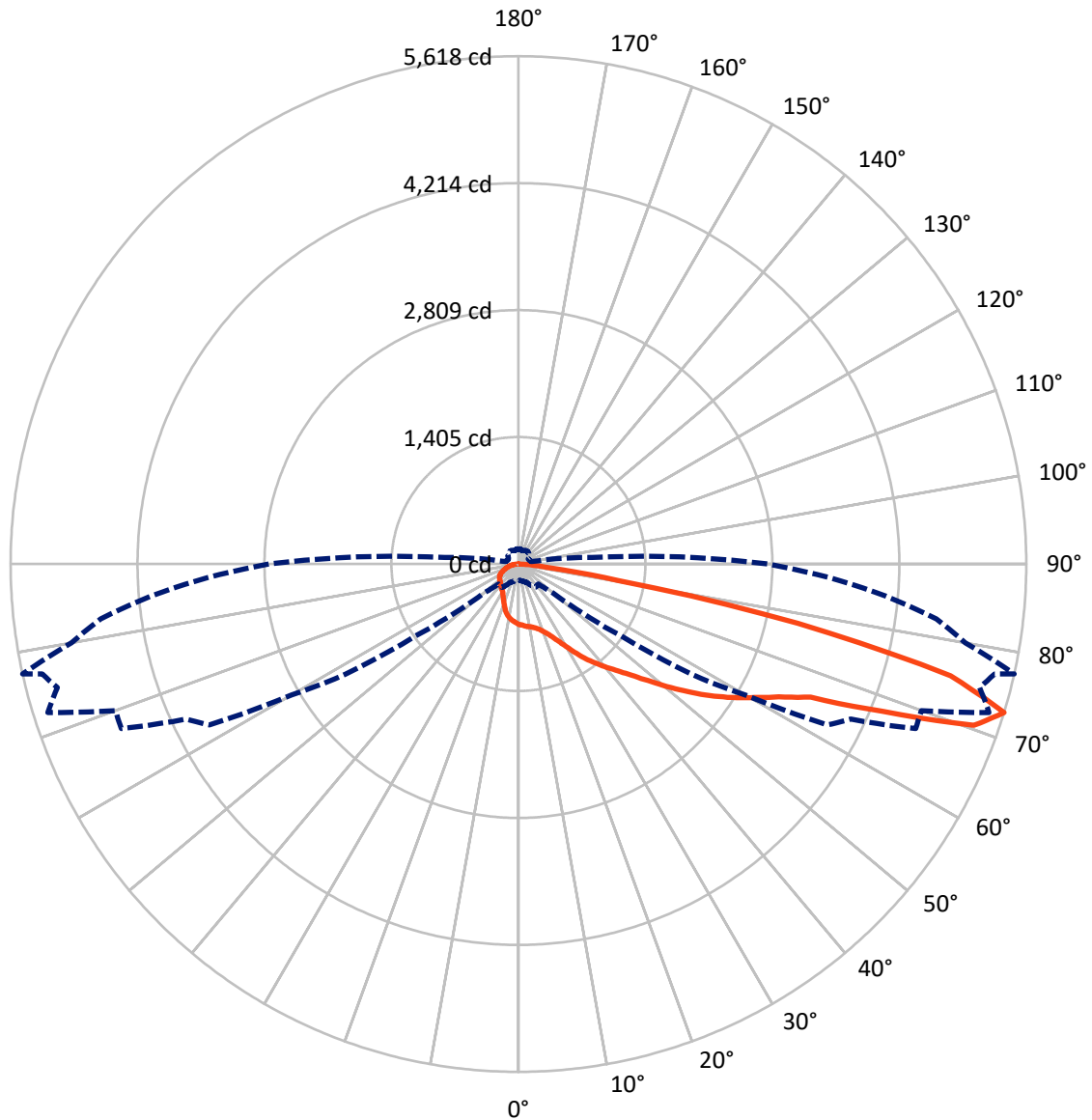
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 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
House Side	Lumens	830.6	0.0	830.6
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	4182.4	0.0	4182.4
	% Fixture	83.4	0.0	83.4
Total	Lumens	5013.0	0.0	5013.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	1.2
10°-20°	190.6	3.8
20°-30°	338.4	6.8
30°-40°	536.2	10.7
40°-50°	804.4	16.0
50°-60°	1042.3	20.8
60°-70°	1184.3	23.6
70°-80°	785.9	15.7
80°-90°	68.7	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°	5013.0	100.0
0°-180°	5013.0	100.0



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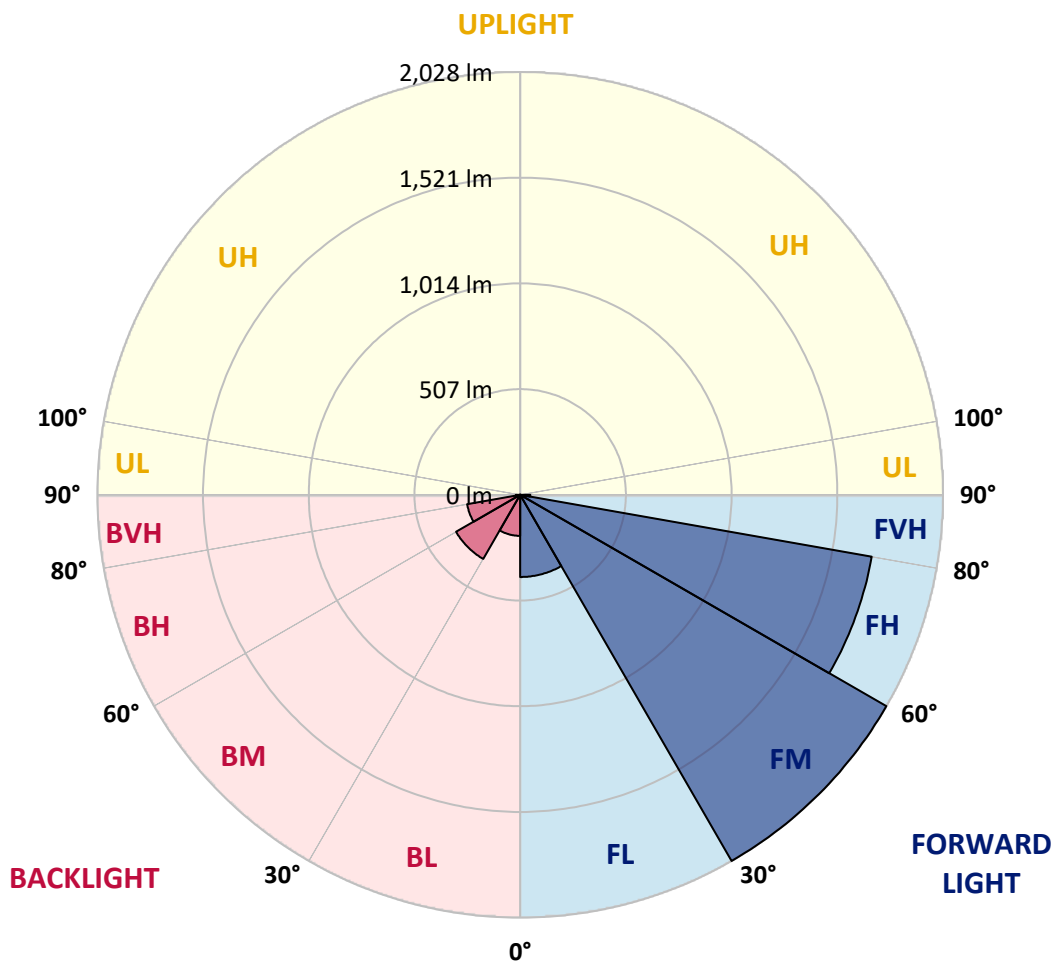
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	394.4	7.9			
FM	(30°-60°)	2028.0	40.5			
FH	(60°-80°)	1711.9	34.1			G1/1800
FVH	(80°-90°)	48.0	1.0			G1/100
BL	(0°-30°)	196.8	3.9	B1/500		
BM	(30°-60°)	354.8	7.1	B1/1000		
BH	(60°-80°)	258.3	5.2	B1/500		G1/500
BVH	(80°-90°)	20.7	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-G1

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°	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3
2.5°	725.1	721.7	720.0	716.6	713.3	711.6	706.5	703.1	708.2	706.5	706.5
5°	779.2	775.8	770.7	765.7	758.9	753.8	748.8	743.7	747.1	743.7	740.3
7.5°	823.1	819.8	813.0	807.9	801.2	794.4	787.6	785.9	782.6	777.5	775.8
10°	848.5	845.1	841.7	838.3	828.2	823.1	814.7	809.6	811.3	804.5	804.5
12.5°	872.1	868.8	867.1	867.1	858.6	853.6	850.2	845.1	848.5	838.3	835.0
15°	894.1	890.7	885.7	890.7	889.1	887.4	885.7	884.0	889.1	878.9	880.6
17.5°	929.6	927.9	917.8	911.0	912.7	917.8	921.2	919.5	919.5	914.4	916.1
20°	985.4	985.4	971.9	960.0	941.4	941.4	943.1	941.4	944.8	948.2	953.3
22.5°	1027.6	1024.3	1019.2	1009.1	988.8	971.9	971.9	965.1	970.2	971.9	982.0
25°	1081.7	1078.4	1066.5	1066.5	1046.2	1024.3	1020.9	1010.7	1022.6	1000.6	1017.5
27.5°	1147.7	1144.3	1129.1	1122.3	1112.2	1085.1	1078.4	1080.0	1091.9	1059.8	1076.7
30°	1230.5	1227.1	1208.5	1189.9	1173.0	1144.3	1140.9	1139.2	1166.2	1129.1	1151.0
32.5°	1335.3	1335.3	1315.0	1289.6	1255.8	1217.0	1203.4	1205.1	1242.3	1201.7	1238.9
35°	1494.1	1473.9	1436.7	1397.8	1362.3	1316.7	1298.1	1294.7	1328.5	1287.9	1330.2
37.5°	1595.6	1582.0	1548.2	1519.5	1480.6	1436.7	1423.2	1428.2	1457.0	1397.8	1458.7
40°	1686.8	1685.1	1663.2	1644.6	1605.7	1561.8	1578.7	1646.3	1722.3	1607.4	1609.1
42.5°	1747.7	1751.1	1749.4	1751.1	1729.1	1683.5	1712.2	1806.8	1937.0	1869.4	1806.8
45°	1757.8	1769.7	1774.7	1808.5	1830.5	1803.5	1818.7	1918.4	2178.7	2283.5	2001.2
47.5°	1783.2	1795.0	1784.9	1825.4	1926.8	1925.2	1986.0	2023.2	2058.7	2075.6	2288.5
50°	1817.0	1838.9	1828.8	1862.6	1945.4	1992.8	2045.2	2092.5	2063.7	1957.3	2014.7
52.5°	1818.7	1844.0	1899.8	1933.6	2014.7	2004.6	2040.1	2014.7	2058.7	1948.8	2004.6
55°	1669.9	1675.0	1837.3	2008.0	2149.9	2121.2	2099.2	2041.8	2097.6	1960.6	2031.6
57.5°	1435.0	1451.9	1620.9	1908.2	2212.5	2237.8	2231.1	2226.0	2270.0	2087.4	2165.2
60°	1176.4	1196.7	1357.2	1695.3	2082.3	2148.3	2239.5	2295.3	2408.6	2335.9	2464.3
62.5°	733.6	748.8	926.2	1348.8	1837.3	1967.4	2100.9	2166.9	2330.8	2364.6	2582.6
65°	349.9	354.9	424.2	733.6	1335.3	1580.3	1778.1	1918.4	2119.5	2271.6	2565.7
67.5°	272.1	273.8	299.2	390.4	684.5	848.5	1073.3	1259.2	1473.9	1889.7	2254.7
70°	218.0	218.0	238.3	287.3	424.2	446.2	503.7	566.2	657.5	992.2	1287.9
72.5°	182.5	182.5	196.1	226.5	314.4	319.4	316.1	311.0	311.0	392.1	500.3
75°	153.8	152.1	160.6	180.9	233.2	240.0	236.6	224.8	211.3	211.3	238.3
77.5°	125.1	125.1	131.8	142.0	169.0	172.4	172.4	162.3	150.4	152.1	164.0
80°	98.0	98.0	103.1	109.9	118.3	116.6	116.6	106.5	98.0	96.3	103.1
82.5°	71.0	72.7	84.5	79.4	76.1	71.0	71.0	69.3	62.5	57.5	60.8
85°	22.0	23.7	40.6	47.3	38.9	32.1	30.4	25.4	27.0	22.0	25.4
87.5°	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	1.7	0.0	1.7
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°	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3
2.5°	698.1	701.4	694.7	694.7	686.2	691.3	682.8	684.5	676.1	679.5	679.5
5°	731.9	733.6	725.1	721.7	713.3	713.3	704.8	704.8	693.0	696.4	693.0
7.5°	764.0	764.0	755.5	748.8	740.3	736.9	726.8	721.7	711.6	709.9	704.8
10°	791.0	791.0	779.2	772.4	762.3	757.2	743.7	738.6	726.8	718.3	713.3
12.5°	824.8	821.4	807.9	801.2	784.3	782.6	762.3	758.9	742.0	736.9	728.5
15°	865.4	868.8	846.8	845.1	821.4	819.8	792.7	791.0	765.7	764.0	752.1
17.5°	909.3	916.1	897.5	895.8	867.1	867.1	835.0	833.3	799.5	797.8	782.6
20°	948.2	956.7	944.8	948.2	922.9	924.5	889.1	889.1	841.7	838.3	824.8
22.5°	983.7	1000.6	990.5	1009.1	983.7	995.5	948.2	956.7	900.9	894.1	873.8
25°	1019.2	1041.2	1037.8	1068.2	1049.6	1069.9	1020.9	1037.8	965.1	970.2	943.1
27.5°	1054.7	1083.4	1080.0	1124.0	1117.2	1157.8	1115.5	1134.1	1054.7	1059.8	1029.3
30°	1113.8	1146.0	1134.1	1179.8	1179.8	1245.7	1213.6	1242.3	1154.4	1164.6	1129.1
32.5°	1193.3	1230.5	1195.0	1254.1	1250.8	1337.0	1311.6	1360.6	1274.4	1287.9	1244.0
35°	1279.5	1338.6	1281.2	1347.1	1337.0	1426.5	1409.6	1489.1	1397.8	1413.0	1369.1
37.5°	1392.7	1463.7	1387.7	1445.1	1399.5	1502.6	1492.5	1600.6	1507.7	1546.5	1494.1
40°	1526.3	1582.0	1487.4	1536.4	1460.3	1566.8	1549.9	1698.7	1612.5	1675.0	1627.7
42.5°	1649.6	1688.5	1563.4	1624.3	1533.0	1641.2	1610.8	1789.9	1715.6	1811.9	1759.5
45°	1761.2	1805.1	1639.5	1707.1	1605.7	1724.0	1671.6	1877.8	1827.1	1972.5	1920.1
47.5°	1920.1	1855.9	1708.8	1796.7	1683.5	1813.6	1744.3	1980.9	1962.3	2168.5	2107.7
50°	1867.7	1909.9	1766.3	1857.5	1754.4	1913.3	1837.3	2104.3	2109.4	2381.5	2346.0
52.5°	1872.8	1943.7	1810.2	1937.0	1837.3	2051.9	1972.5	2253.1	2276.7	2587.7	2538.7
55°	1903.2	2008.0	1876.1	2046.8	1953.9	2205.7	2149.9	2413.6	2454.2	2782.1	2753.4
57.5°	1979.2	2124.6	1989.4	2212.5	2116.1	2381.5	2330.8	2579.3	2635.0	2976.5	2968.0
60°	2271.6	2444.0	2207.4	2454.2	2325.7	2581.0	2513.3	2753.4	2809.1	3162.4	3184.4
62.5°	2597.9	2897.0	2756.7	3013.6	2673.9	2932.5	2733.1	2968.0	2971.4	3361.8	3431.1
65°	2682.4	3142.1	3262.1	3740.4	3563.0	3828.3	3295.9	3453.1	3250.3	3725.2	3824.9
67.5°	2650.3	3213.1	3546.1	4085.2	4286.4	4749.5	4659.9	4605.8	4135.9	4477.4	4597.4
70°	1945.4	2542.1	3356.8	3904.4	4484.1	4788.4	5270.1	5319.1	5298.8	5251.5	5330.9
72.5°	885.7	1389.4	2271.6	2897.0	3853.7	4058.2	4756.3	4742.7	5459.4	5281.9	5407.0
75°	348.2	535.8	1081.7	1617.5	2665.5	2917.3	3708.3	3512.3	4406.4	4146.1	4413.1
77.5°	191.0	240.0	405.7	694.7	1455.3	1588.8	2270.0	1942.1	2733.1	2281.8	2371.4
80°	114.9	143.7	185.9	263.7	618.6	654.1	968.5	780.9	1117.2	848.5	823.1
82.5°	62.5	77.7	93.0	130.1	229.9	255.2	334.7	300.9	358.3	305.9	299.2
85°	25.4	33.8	35.5	52.4	76.1	87.9	106.5	114.9	140.3	128.5	125.1
87.5°	0.0	1.7	0.0	3.4	0.0	3.4	0.0	5.1	5.1	8.5	10.1
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°	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3
2.5°	674.4	679.5	672.7	672.7	664.3	669.3	664.3	659.2	650.7	652.4	640.6
5°	686.2	689.6	681.2	677.8	672.7	671.0	660.9	650.7	638.9	638.9	625.4
7.5°	698.1	698.1	686.2	686.2	674.4	671.0	655.8	638.9	622.0	620.3	600.0
10°	704.8	703.1	687.9	687.9	671.0	669.3	650.7	625.4	601.7	595.0	566.2
12.5°	718.3	716.6	698.1	694.7	672.7	672.7	645.7	611.9	578.1	566.2	525.7
15°	735.2	736.9	715.0	709.9	684.5	682.8	645.7	595.0	549.3	530.7	481.7
17.5°	762.3	764.0	733.6	728.5	698.1	693.0	647.4	574.7	510.4	490.2	446.2
20°	797.8	792.7	752.1	750.5	709.9	704.8	645.7	544.2	471.6	451.3	412.4
22.5°	841.7	836.7	784.3	779.2	731.9	723.4	644.0	512.1	436.1	414.1	388.7
25°	902.6	895.8	831.6	824.8	765.7	752.1	642.3	478.3	405.7	388.7	373.5
27.5°	978.6	965.1	887.4	880.6	801.2	784.3	635.5	439.5	375.2	363.4	356.6
30°	1069.9	1058.1	958.3	948.2	848.5	826.5	628.8	404.0	353.3	348.2	343.1
32.5°	1178.1	1166.2	1044.6	1032.7	909.3	877.2	616.9	375.2	339.7	339.7	333.0
35°	1291.3	1281.2	1137.5	1129.1	976.9	934.7	601.7	349.9	327.9	327.9	321.1
37.5°	1392.7	1401.2	1238.9	1232.2	1044.6	992.2	584.8	333.0	317.8	314.4	307.6
40°	1502.6	1522.9	1333.6	1338.6	1115.5	1053.0	564.5	319.4	305.9	302.5	300.9
42.5°	1614.2	1653.0	1433.3	1451.9	1186.5	1115.5	549.3	311.0	300.9	294.1	292.4
45°	1752.7	1808.5	1556.7	1592.2	1269.3	1191.6	544.2	300.9	285.6	277.2	272.1
47.5°	1925.2	1999.5	1708.8	1749.4	1379.2	1282.9	554.4	297.5	275.5	265.4	255.2
50°	2129.7	2200.7	1889.7	1906.6	1502.6	1382.6	576.4	302.5	272.1	256.9	241.7
52.5°	2346.0	2400.1	2080.7	2062.1	1631.1	1480.6	601.7	304.2	263.7	248.5	229.9
55°	2569.1	2599.5	2258.1	2209.1	1747.7	1578.7	635.5	302.5	256.9	240.0	216.3
57.5°	2787.2	2797.3	2415.3	2368.0	1862.6	1695.3	677.8	297.5	246.8	229.9	204.5
60°	3000.1	3017.0	2589.4	2545.5	1987.7	1845.7	738.6	289.0	233.2	221.4	194.4
62.5°	3233.4	3289.2	2797.3	2804.1	2160.1	2080.7	853.6	278.9	219.7	206.2	179.2
65°	3551.1	3764.1	3140.4	3299.3	2491.4	2523.5	1073.3	250.2	201.1	184.2	165.6
67.5°	4347.2	4580.5	3973.7	4037.9	3267.2	3076.2	1211.9	213.0	177.5	165.6	153.8
70°	5344.4	5177.1	4746.1	4357.4	3720.2	3162.4	1066.5	179.2	157.2	150.4	143.7
72.5°	5618.3	5018.2	4663.3	4080.2	3439.6	2758.4	816.4	153.8	140.3	136.9	131.8
75°	4937.1	4068.3	4088.6	3241.8	2851.4	2102.6	557.8	131.8	121.7	120.0	118.3
77.5°	3157.3	2090.8	2545.5	1602.3	1646.3	973.6	272.1	109.9	104.8	104.8	101.4
80°	1122.3	696.4	787.6	505.4	459.7	309.3	147.0	87.9	84.5	86.2	84.5
82.5°	336.4	267.1	262.0	204.5	158.9	130.1	81.1	67.6	64.2	65.9	62.5
85°	135.2	104.8	87.9	67.6	55.8	50.7	43.9	45.6	40.6	43.9	38.9
87.5°	8.5	6.8	5.1	6.8	0.0	3.4	8.5	6.8	1.7	6.8	5.1
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°	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3	669.3
2.5°	649.0	637.2	642.3	637.2	640.6	630.4	633.8	625.4	625.4	623.7	615.2
5°	627.1	615.2	613.5	601.7	603.4	589.9	588.2	573.0	573.0	559.5	534.1
7.5°	596.6	578.1	576.4	552.7	551.0	532.4	525.7	508.8	507.1	491.9	476.6
10°	557.8	529.0	524.0	493.5	495.2	474.9	473.3	461.4	461.4	454.7	454.7
12.5°	513.8	481.7	478.3	454.7	456.4	442.8	444.5	437.8	441.1	444.5	456.4
15°	473.3	447.9	444.5	429.3	431.0	427.6	432.7	432.7	437.8	446.2	466.5
17.5°	439.5	417.5	419.2	412.4	419.2	417.5	427.6	425.9	436.1	446.2	471.6
20°	409.0	397.2	402.3	400.6	409.0	409.0	417.5	419.2	427.6	441.1	469.9
22.5°	388.7	385.4	390.4	390.4	397.2	398.9	407.3	412.4	417.5	431.0	456.4
25°	376.9	375.2	380.3	382.0	387.1	388.7	397.2	397.2	405.7	414.1	427.6
27.5°	360.0	356.6	363.4	363.4	370.2	368.5	378.6	375.2	383.7	387.1	390.4
30°	348.2	343.1	348.2	346.5	351.6	346.5	351.6	346.5	351.6	351.6	346.5
32.5°	336.4	331.3	333.0	326.2	331.3	324.5	326.2	319.4	322.8	319.4	321.1
35°	324.5	317.8	317.8	309.3	309.3	300.9	304.2	297.5	304.2	309.3	307.6
37.5°	307.6	302.5	302.5	295.8	299.2	295.8	302.5	299.2	300.9	294.1	282.3
40°	297.5	300.9	299.2	304.2	300.9	295.8	290.7	280.6	278.9	275.5	268.7
42.5°	282.3	285.6	277.2	284.0	278.9	280.6	277.2	272.1	268.7	265.4	258.6
45°	260.3	260.3	253.5	263.7	258.6	268.7	265.4	265.4	262.0	256.9	251.8
47.5°	241.7	243.4	236.6	245.1	241.7	255.2	253.5	258.6	258.6	255.2	241.7
50°	229.9	226.5	221.4	229.9	228.2	240.0	241.7	251.8	250.2	251.8	240.0
52.5°	219.7	213.0	207.9	213.0	213.0	223.1	226.5	238.3	240.0	243.4	236.6
55°	207.9	199.4	196.1	199.4	199.4	209.6	214.7	223.1	228.2	238.3	234.9
57.5°	197.8	185.9	182.5	185.9	187.6	197.8	202.8	211.3	218.0	231.6	229.9
60°	185.9	175.8	172.4	177.5	179.2	189.3	194.4	202.8	207.9	223.1	223.1
62.5°	172.4	164.0	164.0	165.6	169.0	179.2	182.5	194.4	196.1	214.7	216.3
65°	160.6	155.5	155.5	157.2	160.6	169.0	170.7	182.5	184.2	202.8	207.9
67.5°	150.4	147.0	147.0	148.7	150.4	157.2	158.9	170.7	174.1	191.0	199.4
70°	140.3	136.9	135.2	135.2	140.3	145.4	148.7	160.6	162.3	177.5	187.6
72.5°	128.5	125.1	125.1	123.4	128.5	131.8	138.6	145.4	148.7	164.0	170.7
75°	116.6	113.2	113.2	111.6	114.9	121.7	123.4	130.1	131.8	145.4	152.1
77.5°	101.4	98.0	98.0	98.0	101.4	103.1	104.8	111.6	114.9	126.8	133.5
80°	84.5	81.1	82.8	81.1	86.2	79.4	84.5	91.3	94.7	101.4	98.0
82.5°	64.2	59.2	60.8	60.8	62.5	57.5	60.8	64.2	67.6	72.7	71.0
85°	40.6	35.5	38.9	35.5	38.9	33.8	37.2	37.2	40.6	37.2	35.5
87.5°	8.5	3.4	8.5	3.4	10.1	0.0	5.1	0.0	3.4	1.7	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):

	155°	165°	175°	180°
0°	669.3	669.3	669.3	669.3
2.5°	606.8	600.0	596.6	595.0
5°	520.6	508.8	505.4	502.0
7.5°	468.2	464.8	464.8	463.1
10°	458.0	463.1	464.8	464.8
12.5°	469.9	478.3	485.1	485.1
15°	485.1	500.3	508.8	508.8
17.5°	496.9	517.2	525.7	527.3
20°	498.6	518.9	530.7	532.4
22.5°	483.4	496.9	505.4	505.4
25°	444.5	451.3	456.4	456.4
27.5°	395.5	393.8	392.1	398.9
30°	344.8	341.4	334.7	341.4
32.5°	326.2	314.4	297.5	302.5
35°	297.5	294.1	285.6	287.3
37.5°	287.3	316.1	314.4	316.1
40°	275.5	311.0	309.3	312.7
42.5°	265.4	285.6	265.4	267.1
45°	246.8	255.2	238.3	238.3
47.5°	238.3	234.9	228.2	226.5
50°	231.6	231.6	228.2	224.8
52.5°	226.5	223.1	234.9	233.2
55°	219.7	216.3	224.8	224.8
57.5°	214.7	206.2	219.7	219.7
60°	209.6	201.1	214.7	214.7
62.5°	206.2	196.1	213.0	211.3
65°	201.1	191.0	213.0	209.6
67.5°	194.4	180.9	209.6	204.5
70°	180.9	169.0	197.8	184.2
72.5°	167.3	153.8	169.0	157.2
75°	147.0	135.2	136.9	135.2
77.5°	123.4	109.9	106.5	108.2
80°	93.0	84.5	81.1	81.1
82.5°	67.6	57.5	59.2	49.0
85°	30.4	22.0	16.9	16.9
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)