

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: P14204

Luminaire Tested: **GAR-080-LED-E1-3-GLOW-X-5700**

Issue Date: 6/29/2020

Test Information

Test Method: LM-79-08
Report Number: P14204
Test Lab: INNOVATION CENTER-P1
Issue Date: 6/29/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GAR-080-LED-E1-3-GLOW-X-5700
Description: MCGRAW-EDISON POST TOP WITH A TYPE III PRISMATIC REFRACTOR
Light Source: [6] 5700K LEDS
Ballast/Driver: [2] ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17557.8 lumens
Efficiency: N/A
Efficacy: 173.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.08' x H: 2.21')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B4 - U5 - G5

Input Watts (W): 101.3
Input Voltage (V): NR
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: 28.75 FT

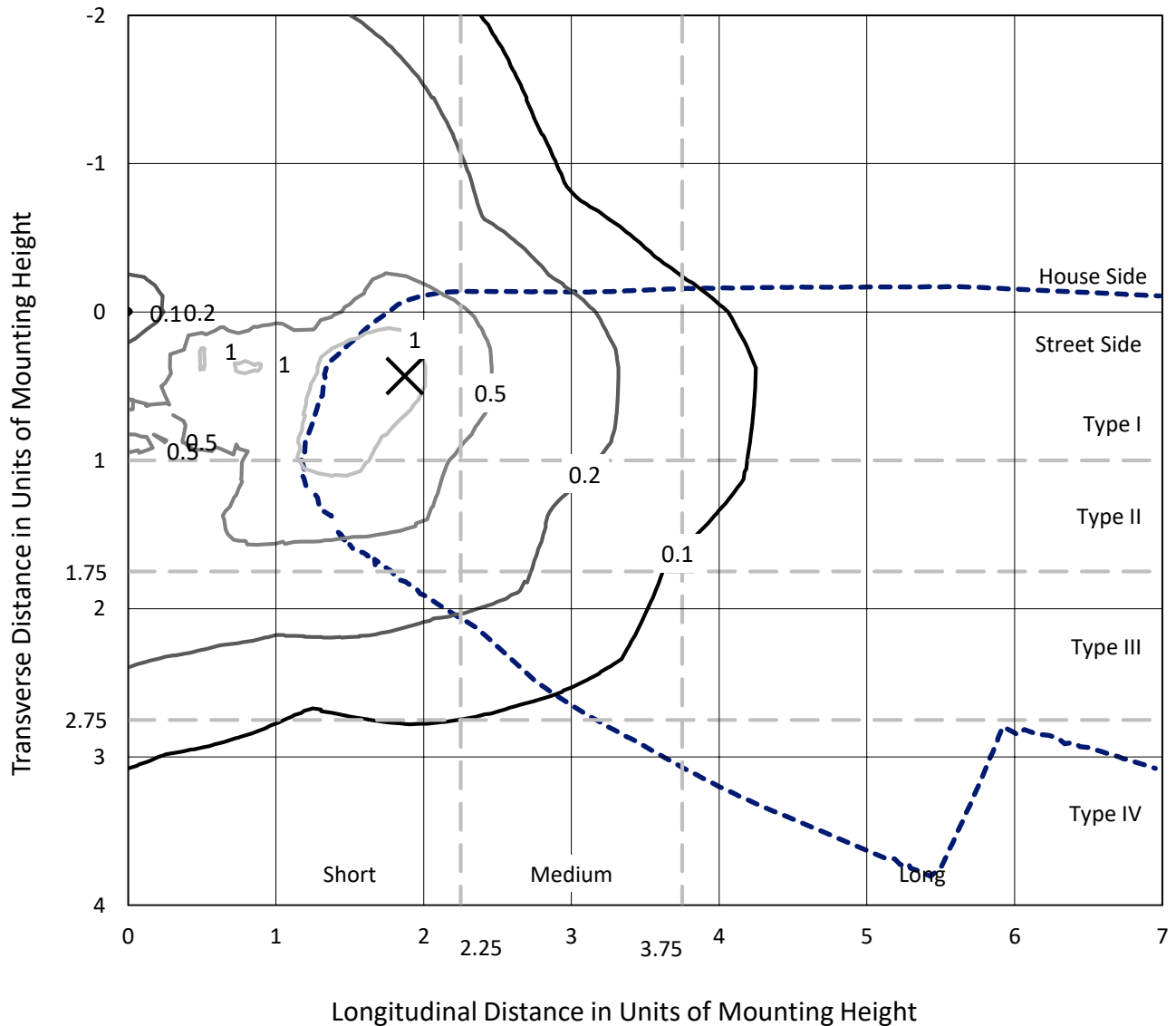


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

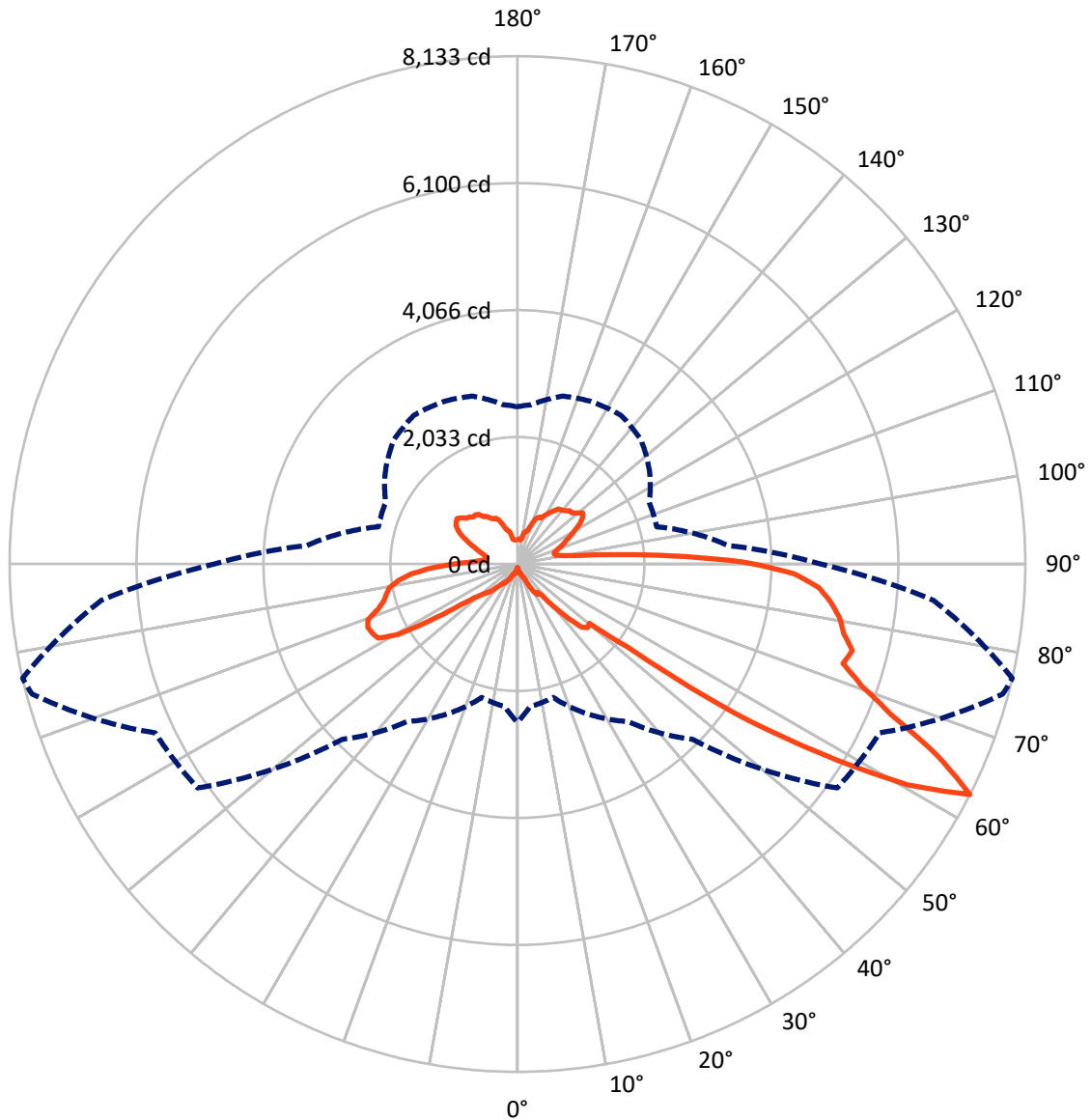


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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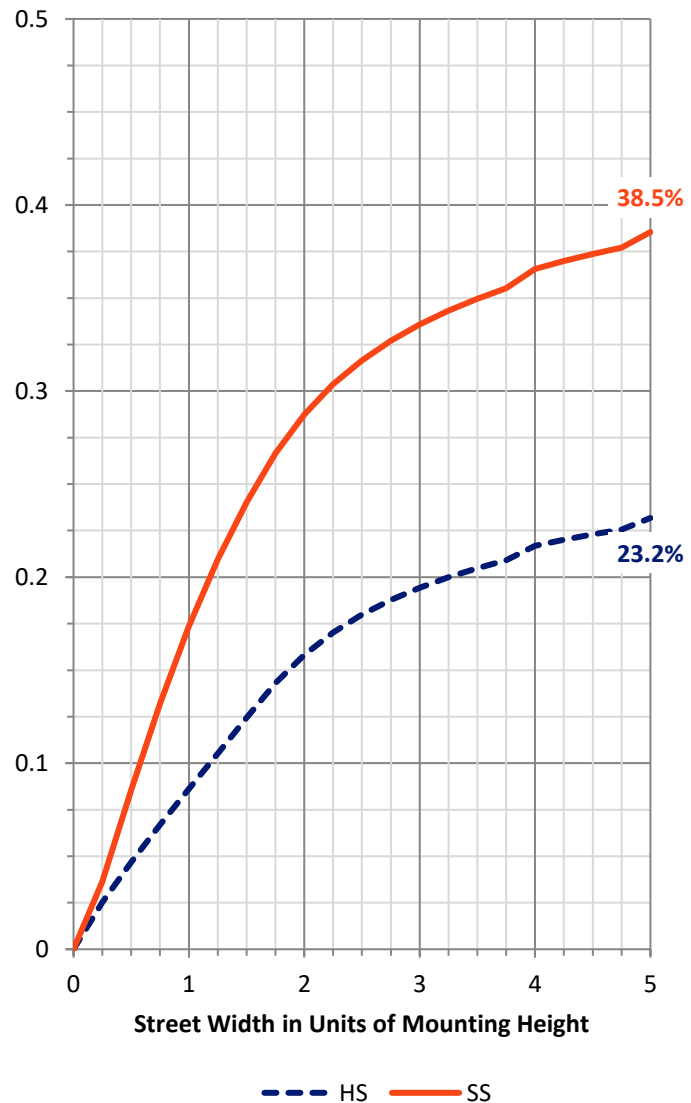
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4551.6	2619.9	7171.5
	% Fixture	25.9	14.9	40.8
Street Side	Lumens	7507.4	2878.9	10386.3
	% Fixture	42.8	16.4	59.2
Total	Lumens	12059.0	5498.8	17557.8
	% Fixture	68.7	31.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.0	0.1
10°-20°	46.3	0.3
20°-30°	148.8	0.8
30°-40°	341.7	1.9
40°-50°	662.2	3.8
50°-60°	1789.1	10.2
60°-70°	3428.8	19.5
70°-80°	3096.4	17.6
80°-90°	2536.7	14.4
90°-100°	1020.6	5.8
100°-110°	587.7	3.3
110°-120°	851.5	4.8
120°-130°	1019.3	5.8
130°-140°	847.4	4.8
140°-150°	606.3	3.5
150°-160°	368.7	2.1
160°-170°	159.0	0.9
170°-180°	38.2	0.2
0°-90°	12059.0	68.7
0°-180°	17557.8	100.0



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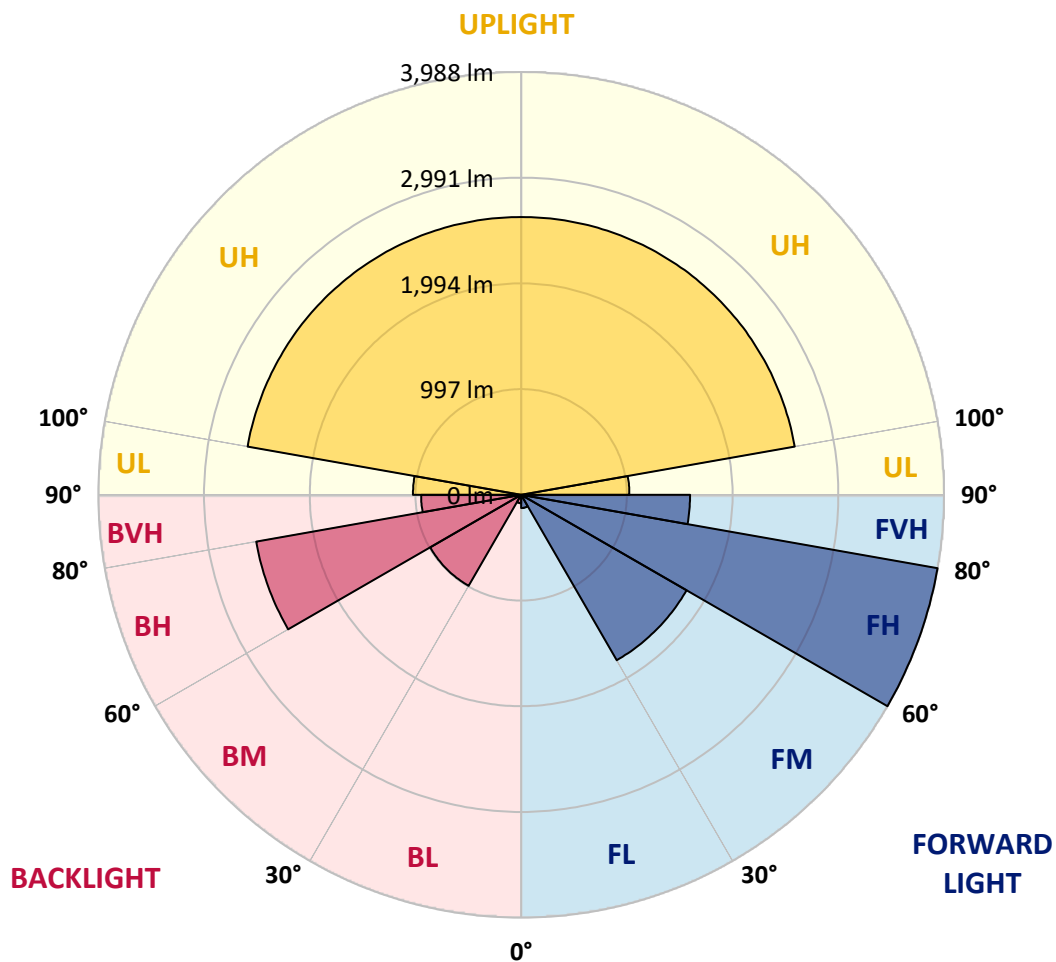
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	124.9	0.7			
FM (30°-60°)	1801.4	10.3			
FH (60°-80°)	3987.8	22.7			G2/5000
FVH (80°-90°)	1593.3	9.1			G5
BL (0°-30°)	79.2	0.5	B0/110		
BM (30°-60°)	991.5	5.6	B1/1000		
BH (60°-80°)	2537.5	14.5	B4/5000		G4/5000
BVH (80°-90°)	943.5	5.4			G5
UL (90°-100°)	1020.6	5.8		U5	
UH (100°-180°)	2619.9	14.9		U5	

BUG Rating: B4-U5-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
2.5°	69.9	71.5	69.9	71.5	71.5	71.5	66.7	65.1	65.1	66.7	66.7
5°	82.6	81.0	82.6	82.6	81.0	79.3	77.8	76.2	76.2	79.3	77.8
7.5°	98.4	101.7	101.7	104.7	109.5	109.5	104.7	101.7	98.4	98.4	96.9
10°	125.4	125.4	128.6	131.8	136.6	133.4	131.8	128.6	127.1	125.4	122.3
12.5°	139.7	141.3	149.3	154.0	157.3	150.8	144.5	136.6	134.9	133.4	131.8
15°	165.1	163.6	169.9	182.5	190.5	182.5	168.3	158.8	147.7	150.8	147.7
17.5°	196.9	192.1	185.8	204.9	230.3	239.8	227.0	204.9	171.4	166.7	157.3
20°	198.5	201.6	209.6	241.4	295.3	308.1	285.9	260.5	209.6	200.1	196.9
22.5°	233.4	235.0	233.4	239.8	285.9	355.7	344.6	273.1	236.6	235.0	209.6
25°	268.3	258.8	252.5	303.3	365.2	419.1	436.7	368.4	254.0	242.9	233.4
27.5°	449.3	436.7	387.4	400.2	538.3	679.6	879.7	736.7	408.0	368.4	281.1
30°	559.0	547.7	500.1	497.0	644.6	795.5	1202.0	1044.8	574.8	512.9	377.8
32.5°	535.1	531.9	520.8	557.3	719.3	790.8	1100.4	1089.3	660.5	581.1	446.2
35°	451.0	452.5	477.9	533.5	646.3	651.1	728.8	892.3	614.4	560.5	469.9
37.5°	541.4	535.1	519.2	617.7	827.3	776.5	795.5	1146.4	709.8	628.7	500.1
40°	735.2	728.8	665.3	647.8	879.7	951.1	989.2	1575.1	1046.3	890.7	539.9
42.5°	882.9	865.3	781.2	798.6	1094.0	1116.2	1170.2	1727.6	1351.3	1159.1	705.0
45°	822.5	835.1	836.8	876.4	1195.6	1327.4	1297.2	1764.1	1678.3	1446.5	849.5
47.5°	881.2	841.6	771.7	801.9	1022.6	1267.0	1284.6	1603.7	1687.8	1517.9	951.1
50°	673.3	720.9	755.8	865.3	1081.3	1144.7	1125.8	1390.9	1573.5	1492.5	1055.9
52.5°	878.1	882.9	863.8	1132.1	1330.6	1517.9	1867.3	2372.2	2419.8	2208.6	1386.1
55°	1427.4	1390.9	1278.1	1573.5	1692.6	2626.2	3375.7	4206.0	4580.8	4202.9	2327.7
57.5°	2002.2	1872.0	1738.7	2053.0	2273.8	3583.6	5073.1	5247.7	5979.7	5725.7	3785.4
60°	2416.7	2208.6	2084.8	2486.5	2885.1	3764.7	6070.2	5863.8	7251.5	7180.0	5466.8
62.5°	2534.1	2294.4	2211.8	2646.8	3080.4	3971.1	6251.2	6398.9	8047.0	8132.8	6691.0
65°	2396.0	2191.2	2172.1	2450.0	3015.2	4163.2	6133.7	6011.4	7311.8	7389.6	6490.9
67.5°	2157.8	1999.0	1973.7	2157.8	3013.7	3945.7	5908.2	5303.3	6435.4	6460.8	5863.8
70°	2184.9	2005.4	1949.8	1907.0	2870.8	3745.6	5582.7	4814.3	5816.1	5847.8	5377.9
72.5°	2092.8	1924.4	1879.9	1805.4	2758.0	3569.4	5001.6	4457.0	5439.8	5450.9	5206.4
75°	2159.5	1962.5	1910.1	1806.9	2775.4	3640.9	4834.9	4495.1	5566.9	5541.5	5324.0
77.5°	2149.9	1949.8	1905.3	1814.9	2729.4	3588.4	4399.8	4317.2	5416.1	5341.4	5225.5
80°	2151.5	1945.1	1884.7	1776.7	2627.9	3555.1	4110.8	4158.4	5347.7	5233.4	5177.8
82.5°	2105.4	1879.9	1791.0	1678.3	2453.2	3356.6	3906.0	3837.8	5196.9	5060.3	4980.9
85°	2048.3	1814.9	1686.3	1595.7	2238.8	3051.8	3728.2	3532.9	4990.5	4844.3	4577.7
87.5°	1914.9	1695.8	1524.3	1483.0	2062.6	2604.0	3453.5	3245.5	4590.3	4433.2	3902.8
90°	1487.8	1344.8	1221.0	1259.2	1692.6	2000.7	2675.5	2662.7	3767.8	3613.8	2947.0
92.5°	1041.5	963.8	901.8	973.3	1238.5	1416.3	1776.7	1856.2	2584.9	2467.5	1973.7
95°	700.2	662.2	651.1	701.8	844.7	949.6	1128.9	1179.7	1602.1	1541.8	1241.6
97.5°	554.2	531.9	528.8	557.3	636.7	706.5	803.4	816.2	992.4	955.9	859.0
100°	500.1	485.8	485.8	503.4	547.7	595.5	647.8	641.5	747.8	733.6	698.7
102.5°	458.9	449.3	463.6	489.0	508.1	527.1	554.2	563.7	633.5	628.7	625.6
105°	460.4	455.8	476.4	506.5	519.2	517.7	530.3	536.6	608.1	611.3	624.0
107.5°	473.2	471.6	503.4	536.6	551.0	544.6	527.1	535.1	617.7	630.4	662.2
110°	501.8	508.1	544.6	609.7	635.1	605.0	568.4	574.8	681.1	695.4	731.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
112.5°	617.7	616.1	636.7	711.3	711.3	674.8	641.5	660.5	766.9	786.0	824.1
115°	765.4	754.3	790.8	806.6	806.6	755.8	720.9	735.2	843.1	862.2	903.5
117.5°	787.5	789.1	865.3	870.1	884.4	852.7	805.0	805.0	936.8	963.8	1040.0
120°	765.4	776.5	863.8	944.8	962.2	933.6	887.5	894.0	1035.2	1068.6	1154.3
122.5°	898.7	922.5	967.0	1089.3	1097.1	1055.9	992.4	1022.6	1170.2	1198.8	1225.8
125°	1055.9	1070.2	1111.5	1221.0	1206.8	1168.6	1116.2	1154.3	1259.2	1279.8	1271.8
127.5°	1167.1	1179.7	1222.7	1279.8	1273.4	1262.3	1189.3	1227.4	1314.8	1330.6	1333.7
130°	1154.3	1165.4	1219.4	1281.4	1303.5	1270.3	1168.6	1182.9	1240.1	1260.7	1284.6
132.5°	1100.4	1106.7	1173.4	1246.4	1257.5	1195.6	1127.3	1124.1	1178.2	1195.6	1211.4
135°	1128.9	1130.6	1171.8	1233.8	1225.8	1168.6	1124.1	1138.4	1186.2	1195.6	1221.0
137.5°	1124.1	1136.9	1165.4	1213.1	1189.3	1146.4	1098.8	1101.9	1143.2	1149.5	1165.4
140°	1098.8	1103.5	1136.9	1135.3	1113.0	1089.3	1108.2	1130.6	1122.6	1116.2	1094.0
142.5°	1092.4	1090.8	1078.2	1086.1	1082.8	1073.4	1071.7	1078.2	1098.8	1103.5	1100.4
145°	954.2	965.4	1005.0	1028.9	1040.0	1040.0	984.4	1013.0	1032.1	1032.1	1013.0
147.5°	906.6	914.6	911.4	906.6	912.9	940.0	949.6	993.9	971.8	968.5	933.6
150°	886.0	879.7	890.7	917.7	947.9	901.8	878.1	870.1	890.7	894.0	900.3
152.5°	790.8	806.6	825.6	874.9	882.9	844.7	801.9	833.6	825.6	824.1	847.9
155°	819.3	817.7	832.0	808.2	817.7	836.8	843.1	855.8	833.6	824.1	795.5
157.5°	790.8	797.1	808.2	765.4	774.9	822.5	821.0	789.1	789.1	781.2	752.6
160°	682.8	673.3	666.9	697.0	705.0	685.9	673.3	655.7	652.6	658.9	678.0
162.5°	552.5	552.5	579.6	614.4	627.2	589.0	559.0	549.4	557.3	565.3	598.6
165°	605.0	598.6	593.8	590.7	584.4	603.3	585.9	547.7	531.9	531.9	538.3
167.5°	524.0	520.8	527.1	514.5	509.7	508.1	512.9	509.7	516.0	514.5	508.1
170°	435.1	433.4	439.8	444.5	444.5	438.2	430.3	416.0	409.7	408.0	406.5
172.5°	406.5	406.5	408.0	409.7	412.8	412.8	404.9	398.5	390.6	390.6	387.4
175°	382.6	384.3	401.7	416.0	416.0	403.3	385.8	385.8	398.5	400.2	408.0
177.5°	389.1	389.1	392.2	398.5	400.2	395.4	395.4	395.4	392.2	393.8	393.8
180°	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
2.5°	66.7	66.7	69.9	68.2	68.2	66.7	66.7	68.2	68.2	68.2	68.2
5°	77.8	77.8	81.0	82.6	79.3	77.8	74.7	79.3	79.3	81.0	81.0
7.5°	95.3	95.3	95.3	96.9	96.9	96.9	93.7	95.3	93.7	95.3	92.1
10°	122.3	117.5	116.0	112.7	116.0	114.3	112.7	111.2	112.7	112.7	111.2
12.5°	131.8	125.4	128.6	127.1	122.3	123.8	122.3	120.6	123.8	122.3	122.3
15°	146.0	144.5	144.5	142.9	141.3	141.3	141.3	142.9	144.5	144.5	144.5
17.5°	158.8	155.6	157.3	155.6	158.8	157.3	154.0	155.6	158.8	160.3	158.8
20°	185.8	176.2	171.4	176.2	176.2	176.2	179.4	174.7	176.2	176.2	176.2
22.5°	198.5	193.8	190.5	200.1	200.1	196.9	193.8	195.3	198.5	198.5	196.9
25°	230.3	214.4	204.9	211.2	217.5	209.6	219.2	215.9	212.7	212.7	212.7
27.5°	249.2	246.1	250.9	262.0	271.5	265.2	260.5	262.0	268.3	271.5	273.1
30°	311.1	297.0	301.7	319.1	331.8	323.9	312.8	315.9	336.6	343.0	341.3
32.5°	379.5	352.6	333.5	333.5	344.6	349.3	354.1	360.4	370.0	371.5	371.5
35°	417.6	384.3	358.9	333.5	336.6	355.7	374.7	385.8	379.5	363.7	358.9
37.5°	447.8	422.3	387.4	366.7	387.4	412.8	431.9	438.2	417.6	400.2	393.8
40°	465.2	451.0	438.2	447.8	477.9	490.6	481.0	476.4	492.3	500.1	503.4
42.5°	566.8	536.6	512.9	539.9	565.3	549.4	543.1	552.5	563.7	605.0	611.3
45°	701.8	654.2	605.0	601.8	622.4	624.0	627.2	641.5	651.1	643.1	646.3
47.5°	771.7	716.1	663.7	673.3	692.3	676.3	654.2	654.2	678.0	679.6	689.1
50°	876.4	828.8	738.3	708.2	711.3	744.7	758.9	763.7	706.5	649.4	641.5
52.5°	1094.0	992.4	847.9	843.1	887.5	938.3	951.1	932.0	898.7	851.0	852.7
55°	1538.6	1238.5	1127.3	1251.2	1337.0	1335.4	1292.5	1306.8	1381.3	1413.2	1424.3
57.5°	2435.6	1808.5	1600.5	1748.2	1781.5	1710.0	1692.6	1806.9	1954.6	1932.4	1935.5
60°	3802.8	2756.5	2086.3	2127.6	2148.4	2218.2	2394.4	2502.3	2504.0	2262.7	2235.6
62.5°	4850.8	3390.0	2307.0	2329.4	2581.8	2802.5	2901.0	2861.2	2783.4	2561.2	2518.2
65°	5076.3	3551.9	2329.4	2456.3	2756.5	2827.9	2734.2	2664.4	2639.0	2575.5	2545.3
67.5°	4879.3	3504.3	2373.7	2475.4	2577.0	2562.7	2496.0	2451.5	2484.9	2504.0	2486.5
70°	4652.3	3486.9	2322.9	2226.2	2284.8	2337.2	2288.1	2346.8	2389.6	2380.2	2356.3
72.5°	4550.6	3394.8	2084.8	1972.0	2108.6	2226.2	2232.5	2292.8	2305.5	2276.8	2262.7
75°	4598.3	3337.6	1940.3	1881.6	2080.0	2227.7	2254.7	2264.2	2318.3	2302.3	2307.0
77.5°	4517.3	3277.2	1873.6	1781.5	1970.5	2137.1	2184.9	2192.7	2272.2	2245.1	2256.2
80°	4426.8	3156.5	1816.4	1711.7	1872.0	2011.8	2064.1	2110.2	2218.2	2207.1	2221.4
82.5°	4141.0	2872.3	1691.1	1595.7	1719.6	1821.2	1872.0	1937.1	2056.3	2059.4	2067.4
85°	3667.9	2458.0	1530.6	1491.0	1589.4	1599.0	1606.8	1691.1	1843.4	1884.7	1887.9
87.5°	2991.4	1962.5	1275.0	1306.8	1400.4	1359.1	1332.2	1392.6	1543.4	1616.4	1611.6
90°	2157.8	1410.0	979.6	1017.8	1098.8	1067.0	1055.9	1092.4	1186.2	1249.6	1246.4
92.5°	1410.0	981.3	733.6	749.5	806.6	798.6	816.2	847.9	882.9	906.6	905.1
95°	957.4	730.4	598.6	597.0	625.6	633.5	651.1	674.8	674.8	685.9	679.6
97.5°	720.9	590.7	519.2	524.0	536.6	547.7	565.3	565.3	547.7	551.0	552.5
100°	622.4	535.1	490.6	498.6	509.7	516.0	539.9	525.5	485.8	485.8	487.5
102.5°	589.0	528.8	490.6	487.5	490.6	508.1	536.6	533.5	477.9	473.2	465.2
105°	600.2	563.7	525.5	509.7	509.7	535.1	559.0	568.4	530.3	504.9	497.0
107.5°	655.7	627.2	595.5	574.8	566.8	589.0	614.4	619.2	598.6	584.4	571.6
110°	725.6	703.4	668.5	644.6	643.1	671.7	714.5	717.6	685.9	693.9	690.7



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	819.3	806.6	763.7	720.9	722.4	808.2	895.5	890.7	859.0	821.0	813.0
115°	914.6	900.3	874.9	849.5	868.6	955.9	1048.0	1055.9	1046.3	952.7	947.9
117.5°	1051.1	1020.9	995.5	984.4	1000.3	1065.4	1151.2	1187.7	1173.4	1109.9	1113.0
120°	1167.1	1124.1	1081.3	1062.2	1087.6	1128.9	1211.4	1232.1	1225.8	1156.0	1156.0
122.5°	1219.4	1192.5	1151.2	1133.7	1159.1	1195.6	1232.1	1187.7	1140.1	1100.4	1114.7
125°	1238.5	1211.4	1181.4	1170.2	1154.3	1168.6	1187.7	1138.4	1065.4	1009.8	1009.8
127.5°	1294.0	1271.8	1195.6	1113.0	1082.8	1090.8	1130.6	1105.1	1032.1	952.7	941.6
130°	1270.3	1244.9	1141.6	1049.5	1020.9	1044.8	1054.3	1016.1	989.2	965.4	971.8
132.5°	1187.7	1159.1	1079.7	1035.2	1019.4	1067.0	1070.2	1024.1	967.0	912.9	906.6
135°	1203.6	1162.3	1054.3	1009.8	963.8	1017.8	1057.5	1036.9	930.5	838.4	811.4
137.5°	1152.7	1114.7	1009.8	944.8	951.1	965.4	987.6	992.4	963.8	912.9	903.5
140°	1070.2	1062.2	1027.4	974.9	987.6	997.2	986.1	979.6	1005.0	1022.6	1028.9
142.5°	1071.7	1049.5	997.2	952.7	941.6	965.4	990.8	993.9	978.1	936.8	935.2
145°	1000.3	981.3	917.7	852.7	832.0	881.2	922.5	911.4	889.2	841.6	836.8
147.5°	925.7	927.3	906.6	839.9	811.4	855.8	857.5	825.6	835.1	846.2	844.7
150°	895.5	889.2	841.6	836.8	803.4	817.7	851.0	852.7	816.2	773.2	765.4
152.5°	846.2	843.1	811.4	781.2	774.9	795.5	813.0	795.5	782.8	776.5	773.2
155°	793.9	795.5	814.5	822.5	795.5	790.8	774.9	762.1	779.7	801.9	806.6
157.5°	752.6	754.3	774.9	803.4	762.1	757.4	735.2	728.8	751.0	747.8	743.0
160°	690.7	695.4	670.0	639.8	633.5	654.2	673.3	687.6	665.3	643.1	643.1
162.5°	609.7	600.2	577.9	581.1	576.4	570.1	581.1	603.3	600.2	605.0	609.7
165°	546.2	549.4	560.5	543.1	559.0	589.0	570.1	560.5	565.3	566.8	565.3
167.5°	506.5	512.9	527.1	516.0	489.0	490.6	487.5	474.7	463.6	447.8	443.0
170°	404.9	404.9	411.3	417.6	381.1	420.8	414.5	409.7	404.9	401.7	401.7
172.5°	390.6	390.6	393.8	393.8	398.5	396.9	390.6	392.2	390.6	387.4	387.4
175°	409.7	404.9	390.6	376.3	371.5	382.6	389.1	385.8	373.2	360.4	357.2
177.5°	392.2	389.1	385.8	389.1	389.1	385.8	384.3	382.6	382.6	384.3	385.8
180°	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8

(END OF REPORT)