

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: P14207

Luminaire Tested: **GAR-080-LED-E1-3-SPUN-X**

Issue Date: 6/29/2020

Test Information

Test Method: LM-79-08
Report Number: P14207
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-SPUN-X
Description: McGRAW-EDISON GENERATIONS POST TOP WITH A TYPE III SOLID TOP PRISMATIC REFRACTOR
Light Source: [6] 4000K LEDS
Ballast/Driver: [2] ELECTRONIC DRIVERS

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13882.3 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.08' x H: 2.21')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U5 - G5

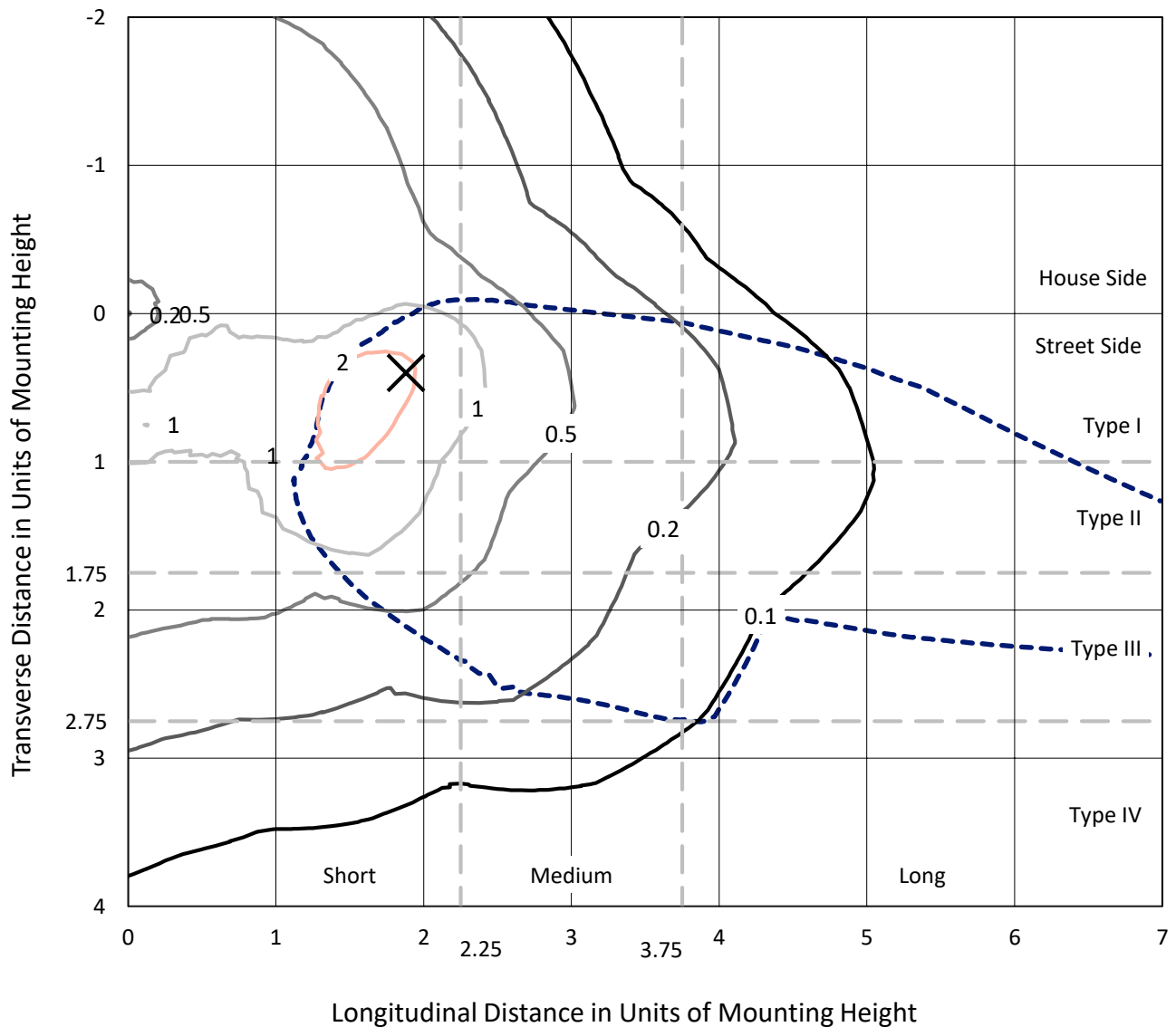
Input Watts (W): 101.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

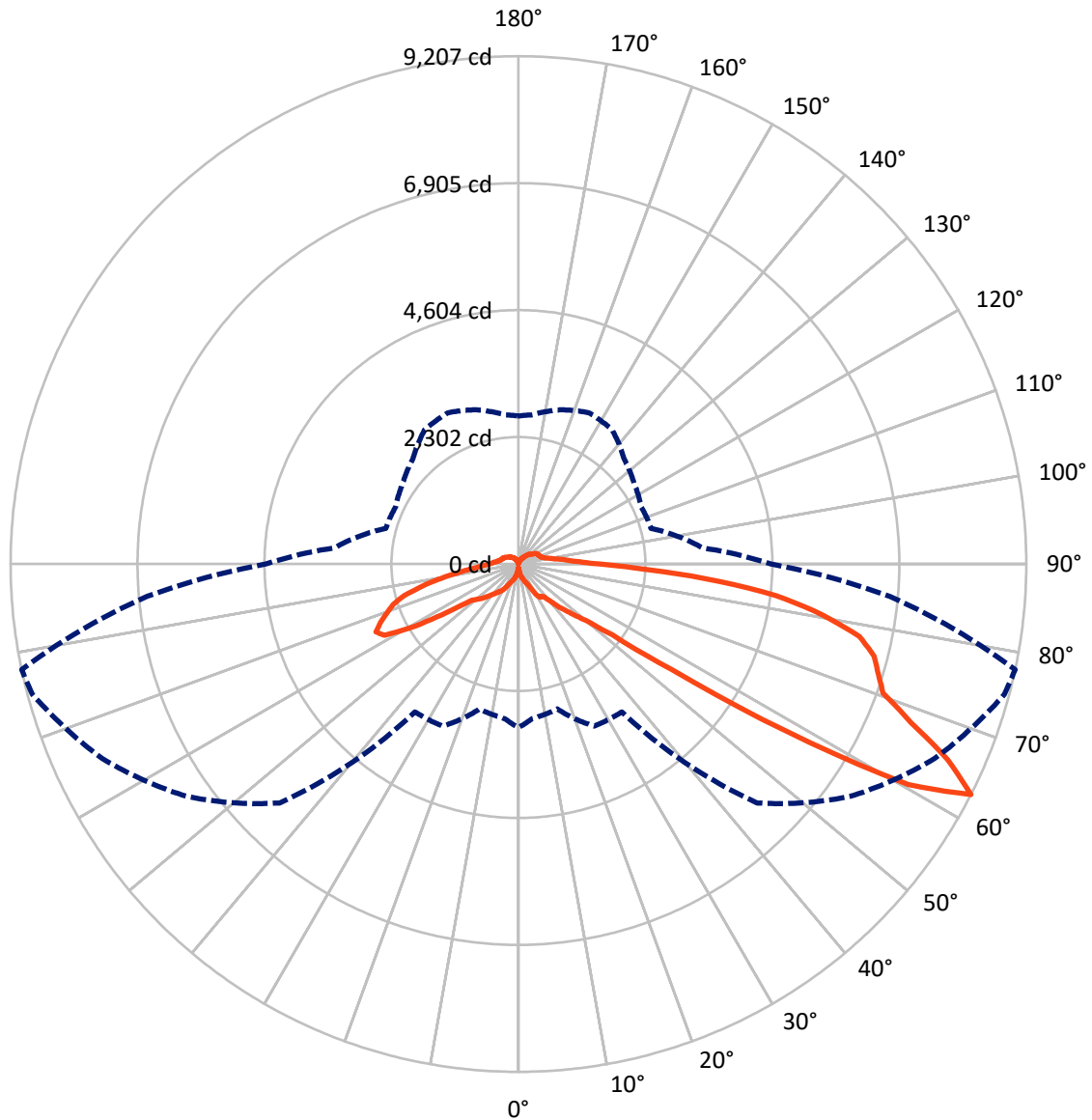
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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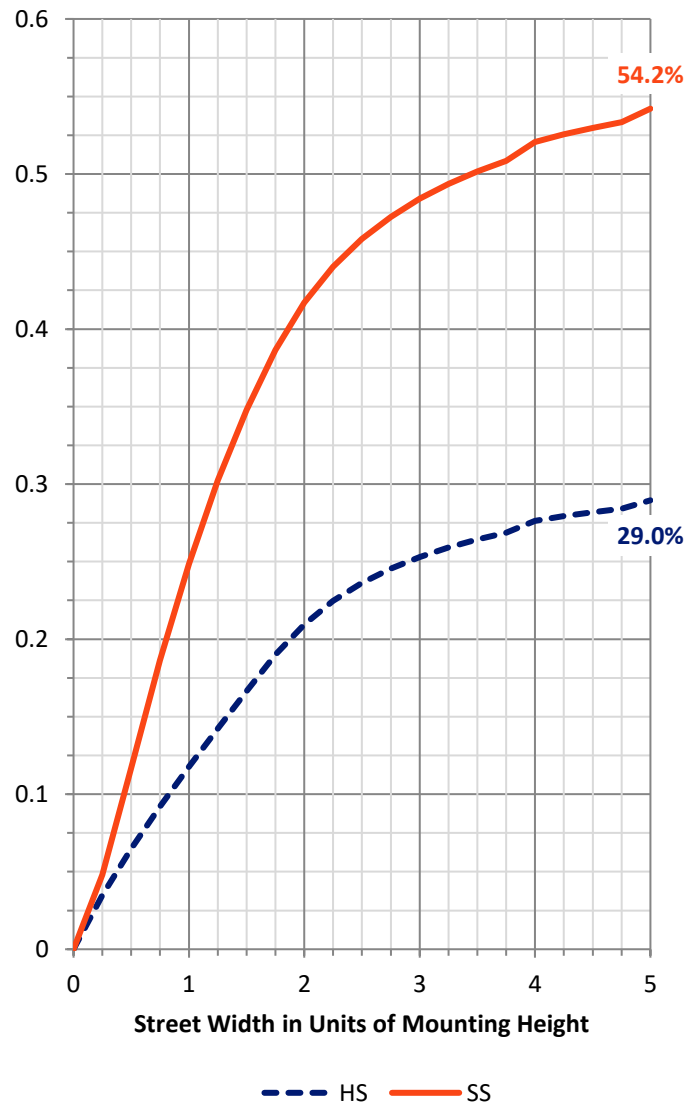
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4228.6	767.2	4995.8
	% Fixture	30.5	5.5	36.0
Street Side	Lumens	7920.2	966.3	8886.6
	% Fixture	57.1	7.0	64.0
Total	Lumens	12148.8	1733.5	13882.3
	% Fixture	87.5	12.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.1	0.1
10°-20°	78.8	0.6
20°-30°	219.5	1.6
30°-40°	468.0	3.4
40°-50°	833.9	6.0
50°-60°	1978.8	14.3
60°-70°	3894.8	28.1
70°-80°	3131.1	22.6
80°-90°	1529.9	11.0
90°-100°	570.2	4.1
100°-110°	370.4	2.7
110°-120°	306.9	2.2
120°-130°	216.3	1.6
130°-140°	140.2	1.0
140°-150°	81.2	0.6
150°-160°	36.7	0.3
160°-170°	10.5	0.1
170°-180°	1.0	0.0
0°-90°	12148.8	87.5
0°-180°	13882.3	100.0



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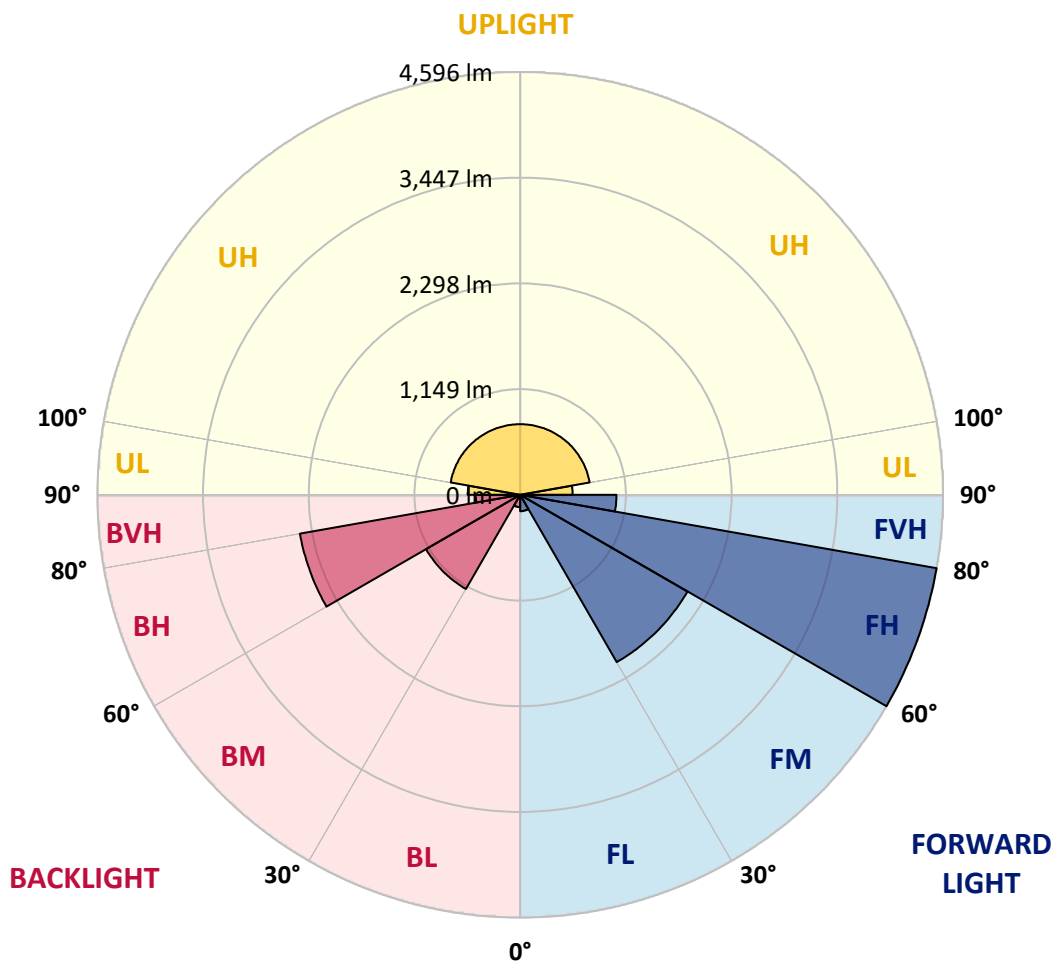
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	178.4	1.3			
FM (30°-60°)	2099.6	15.1			
FH (60°-80°)	4595.7	33.1			G2/5000
FVH (80°-90°)	1046.5	7.5			G5
BL (0°-30°)	134.0	1.0	B1/500		
BM (30°-60°)	1181.0	8.5	B2/2500		
BH (60°-80°)	2430.2	17.5	B3/2500		G3/2500
BVH (80°-90°)	483.4	3.5			G3/500
UL (90°-100°)	570.2	4.1		U4/1000	
UH (100°-180°)	767.2	5.5		U4/1000	

BUG Rating: B3-U5-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
2.5°	91.8	91.8	93.5	91.8	90.2	90.2	88.6	86.9	86.9	85.3	88.6
5°	124.6	124.6	126.3	124.6	124.6	124.6	119.7	116.4	116.4	116.4	121.4
7.5°	173.8	173.8	177.1	172.2	175.5	173.8	173.8	167.3	160.7	160.7	159.1
10°	229.6	228.0	229.6	231.2	226.3	223.0	216.5	213.2	208.3	209.9	203.4
12.5°	265.7	269.0	269.0	269.0	264.0	257.5	247.6	244.4	237.8	236.2	236.2
15°	300.1	301.8	300.1	303.4	301.8	288.6	282.1	273.9	269.0	265.7	264.0
17.5°	339.5	346.0	339.5	344.4	349.3	352.6	355.9	326.4	306.7	301.8	301.8
20°	370.6	369.0	375.6	385.4	411.6	408.4	388.7	377.2	354.2	349.3	344.4
22.5°	426.4	423.1	423.1	434.6	485.4	523.2	477.2	424.8	385.4	378.8	370.6
25°	464.1	455.9	469.0	510.0	542.8	580.6	528.1	474.0	429.7	428.0	423.1
27.5°	572.4	570.7	559.2	603.5	729.8	798.7	759.3	675.7	544.5	523.2	475.6
30°	729.8	724.9	692.1	736.4	875.8	1026.6	1146.4	949.6	703.6	657.6	559.2
32.5°	790.5	788.8	764.2	800.3	939.7	1095.5	1275.9	1013.5	754.4	720.0	644.5
35°	797.0	782.3	769.2	818.4	862.6	998.8	1212.0	966.0	741.3	718.3	692.1
37.5°	790.5	788.8	798.7	879.0	959.4	1007.0	1180.8	1028.3	783.9	754.4	729.8
40°	956.1	946.3	898.7	926.6	1049.6	1097.2	1374.3	1382.5	954.5	875.8	764.2
42.5°	1079.1	1079.1	1029.9	1069.3	1253.0	1295.6	1558.0	1736.8	1156.2	1046.3	872.5
45°	1146.4	1156.2	1108.6	1156.2	1377.6	1382.5	1549.8	1999.2	1348.1	1195.6	972.5
47.5°	1231.6	1223.4	1166.0	1226.7	1518.6	1584.2	1684.3	2442.0	1638.4	1400.6	1092.2
50°	1144.7	1133.2	1133.2	1175.9	1418.6	1530.1	1569.5	2214.0	1879.4	1633.4	1231.6
52.5°	1161.1	1197.2	1230.0	1377.6	1651.5	1959.8	1950.0	2548.6	2483.0	2130.4	1485.8
55°	1513.7	1549.8	1515.4	1707.2	2028.7	2937.2	3122.6	4159.0	3993.4	3365.3	2040.2
57.5°	2159.9	2186.1	2028.7	2251.7	2415.7	4455.9	5259.5	6925.7	6722.4	5710.5	3143.9
60°	2706.0	2620.7	2481.3	2809.3	2906.1	5438.2	6797.8	8203.3	8723.2	8122.9	4869.2
62.5°	2966.8	2814.2	2720.8	3243.9	3271.8	6125.4	7343.9	8332.8	9123.3	9207.0	6760.1
65°	2792.9	2632.2	2574.8	3112.7	3150.4	6433.7	7153.7	7291.4	8280.4	8547.7	7412.8
67.5°	2560.0	2420.6	2356.7	2860.2	2997.9	6269.7	6919.2	6341.9	7503.0	7676.8	6945.4
70°	2455.1	2289.4	2191.0	2565.0	2812.6	5536.6	6256.6	5549.8	6819.1	7012.6	6199.2
72.5°	2368.2	2197.6	2104.1	2440.3	2683.0	4823.2	5539.9	5049.6	6527.2	6822.4	6005.7
75°	2420.6	2204.2	2076.2	2396.0	2568.2	4423.1	5067.6	4820.0	6287.8	6658.4	5866.3
77.5°	2351.8	2125.4	1941.8	2227.1	2279.6	3844.2	4723.2	4646.1	6072.9	6323.8	5279.2
80°	2099.2	1915.5	1723.6	1976.2	1887.6	3120.9	4063.9	4206.6	5507.1	5587.5	4270.6
82.5°	1754.8	1644.9	1443.2	1656.4	1520.3	2356.7	3362.0	3680.2	4841.3	4711.7	3180.0
85°	1216.9	1198.8	1062.7	1244.8	1139.8	1623.6	2218.9	2645.3	3614.6	3404.6	2054.9
87.5°	808.5	816.7	747.8	854.4	829.8	1090.6	1307.1	1576.0	2279.6	2107.4	1328.4
90°	621.6	613.4	580.6	649.4	672.4	852.8	961.0	1016.8	1366.1	1308.7	974.2
92.5°	544.5	533.0	505.1	557.6	582.2	728.2	811.8	795.4	1011.9	993.8	775.7
95°	498.6	487.1	465.8	511.7	516.6	634.7	718.3	685.5	833.1	826.6	670.8
97.5°	446.1	436.2	416.6	451.0	454.3	556.0	618.3	583.8	664.2	662.6	552.7
100°	403.4	398.5	380.5	406.7	408.4	488.7	544.5	506.8	562.5	569.1	493.6
102.5°	364.1	360.8	347.7	367.4	369.0	428.0	475.6	436.2	485.4	492.0	439.5
105°	337.8	331.3	321.4	342.8	344.4	396.9	429.7	390.3	442.8	452.6	406.7
107.5°	313.2	310.0	308.3	334.6	329.6	372.3	392.0	359.2	408.4	419.8	385.4
110°	295.2	291.9	293.6	313.2	313.2	359.2	372.3	354.2	401.8	408.4	382.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
112.5°	282.1	280.4	277.2	295.2	296.8	362.4	372.3	360.8	403.4	411.6	382.1
115°	277.2	270.6	262.4	278.8	272.2	344.4	351.0	346.0	383.8	388.7	357.5
117.5°	260.8	259.1	255.8	264.0	267.3	336.2	342.8	342.8	380.5	388.7	359.2
120°	242.7	244.4	242.7	257.5	254.2	319.8	323.1	328.0	365.7	377.2	351.0
122.5°	229.6	228.0	226.3	236.2	239.4	293.6	296.8	308.3	341.1	346.0	321.4
125°	211.6	209.9	209.9	213.2	226.3	270.6	272.2	280.4	308.3	311.6	287.0
127.5°	201.7	200.1	200.1	206.6	216.5	257.5	259.1	262.4	283.7	288.6	273.9
130°	191.9	190.2	188.6	193.5	208.3	247.6	246.0	252.6	272.2	277.2	255.8
132.5°	178.8	178.8	175.5	183.7	198.4	232.9	228.0	236.2	255.8	252.6	234.5
135°	165.6	167.3	165.6	168.9	182.0	208.3	208.3	213.2	229.6	224.7	209.9
137.5°	150.9	149.2	149.2	150.9	162.4	183.7	187.0	191.9	196.8	191.9	182.0
140°	147.6	150.9	146.0	147.6	157.4	175.5	178.8	183.7	182.0	178.8	167.3
142.5°	141.0	137.8	132.8	134.5	146.0	162.4	167.3	167.3	160.7	155.8	147.6
145°	123.0	123.0	121.4	124.6	137.8	147.6	154.2	150.9	141.0	136.1	132.8
147.5°	111.5	108.2	108.2	116.4	126.3	137.8	137.8	132.8	123.0	121.4	118.1
150°	100.0	100.0	98.4	106.6	116.4	123.0	123.0	121.4	111.5	106.6	103.3
152.5°	88.6	90.2	90.2	100.0	105.0	114.8	108.2	101.7	95.1	90.2	86.9
155°	77.1	73.8	75.4	83.6	90.2	88.6	86.9	80.4	75.4	73.8	73.8
157.5°	70.5	67.2	70.5	77.1	80.4	80.4	75.4	70.5	65.6	64.0	67.2
160°	57.4	59.0	60.7	65.6	67.2	65.6	64.0	59.0	54.1	55.8	55.8
162.5°	47.6	49.2	49.2	52.5	54.1	50.8	49.2	44.3	42.6	45.9	42.6
165°	37.7	39.4	39.4	41.0	42.6	37.7	34.4	31.2	32.8	31.2	32.8
167.5°	27.9	27.9	29.5	29.5	29.5	26.2	21.3	23.0	23.0	21.3	23.0
170°	18.0	19.7	19.7	18.0	18.0	14.8	13.1	11.5	13.1	11.5	13.1
172.5°	13.1	11.5	13.1	11.5	11.5	9.8	9.8	9.8	8.2	8.2	8.2
175°	14.8	13.1	11.5	13.1	11.5	11.5	8.2	8.2	8.2	9.8	8.2
177.5°	13.1	9.8	11.5	11.5	9.8	8.2	8.2	6.6	6.6	8.2	8.2
180°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
2.5°	85.3	88.6	86.9	86.9	86.9	83.6	85.3	86.9	85.3	83.6	88.6
5°	116.4	119.7	118.1	118.1	118.1	114.8	113.2	111.5	111.5	113.2	111.5
7.5°	157.4	155.8	154.2	150.9	149.2	147.6	146.0	146.0	144.3	144.3	147.6
10°	201.7	196.8	195.2	190.2	187.0	185.3	183.7	183.7	183.7	185.3	180.4
12.5°	231.2	226.3	224.7	219.8	214.8	211.6	209.9	209.9	209.9	211.6	213.2
15°	262.4	260.8	255.8	249.3	242.7	242.7	239.4	239.4	242.7	244.4	241.1
17.5°	295.2	293.6	288.6	280.4	277.2	273.9	273.9	272.2	275.5	278.8	278.8
20°	331.3	321.4	314.9	310.0	306.7	301.8	303.4	301.8	306.7	308.3	306.7
22.5°	367.4	362.4	352.6	346.0	344.4	334.6	334.6	336.2	339.5	342.8	344.4
25°	408.4	396.9	387.0	380.5	369.0	367.4	370.6	370.6	377.2	377.2	373.9
27.5°	457.6	452.6	446.1	437.9	428.0	424.8	423.1	428.0	431.3	429.7	429.7
30°	518.2	511.7	515.0	510.0	503.5	485.4	480.5	487.1	495.3	500.2	498.6
32.5°	595.3	583.8	562.5	552.7	539.6	534.6	531.4	536.3	546.1	556.0	556.0
35°	647.8	629.8	601.9	564.2	549.4	549.4	560.9	569.1	577.3	575.6	578.9
37.5°	695.4	682.2	641.2	592.0	582.2	592.0	615.0	626.5	624.8	608.4	603.5
40°	744.6	734.7	692.1	656.0	654.4	656.0	660.9	677.3	687.2	692.1	692.1
42.5°	818.4	803.6	747.8	721.6	721.6	713.4	721.6	739.6	765.9	785.6	787.2
45°	908.6	892.2	810.2	764.2	764.2	764.2	790.5	818.4	834.8	829.8	826.6
47.5°	1008.6	987.3	885.6	846.2	852.8	834.8	861.0	885.6	923.3	929.9	934.8
50°	1103.7	1069.3	944.6	882.3	872.5	882.3	925.0	952.8	961.0	956.1	957.8
52.5°	1271.0	1190.6	1010.2	961.0	969.2	1007.0	1061.1	1084.0	1080.8	1057.8	1056.2
55°	1626.9	1444.8	1261.2	1264.4	1295.6	1349.7	1413.7	1433.4	1462.9	1438.3	1458.0
57.5°	2263.2	1913.9	1690.8	1787.6	1827.0	1830.2	1876.2	1931.9	2033.6	2082.8	2100.8
60°	3281.6	2594.5	2150.0	2228.8	2278.0	2309.1	2460.0	2556.8	2563.3	2510.8	2510.8
62.5°	4577.2	3348.9	2489.5	2455.1	2558.4	2704.4	2966.8	3025.8	2894.6	2712.6	2683.0
65°	5300.5	3719.5	2494.4	2474.8	2666.6	2845.4	3075.0	3025.8	2868.4	2707.6	2686.3
67.5°	5228.3	3657.2	2307.5	2346.8	2560.0	2669.9	2794.6	2720.8	2663.4	2535.4	2546.9
70°	4816.7	3452.2	2159.9	2164.8	2253.4	2309.1	2428.8	2414.1	2445.2	2305.8	2314.0
72.5°	4544.4	3227.5	2036.9	1989.3	1997.5	2074.6	2235.3	2276.3	2317.3	2166.4	2163.2
75°	4250.9	2886.4	1833.5	1774.5	1805.6	1868.0	2009.0	2061.5	2125.4	2002.4	2002.4
77.5°	3508.0	2294.4	1569.5	1592.4	1638.4	1643.3	1695.8	1766.3	1854.8	1787.6	1782.7
80°	2630.6	1722.0	1297.2	1361.2	1415.3	1346.4	1341.5	1395.6	1495.7	1484.2	1492.4
82.5°	1849.9	1218.5	1018.4	1102.1	1162.8	1072.6	1041.4	1056.2	1133.2	1146.4	1152.9
85°	1236.6	890.5	779.0	811.8	838.0	788.8	775.7	779.0	798.7	783.9	785.6
87.5°	916.8	700.3	621.6	626.5	619.9	595.3	597.0	601.9	600.2	580.6	577.3
90°	708.5	564.2	531.4	531.4	516.6	503.5	505.1	513.3	511.7	500.2	501.8
92.5°	588.8	483.8	475.6	472.3	454.3	447.7	457.6	464.1	460.8	451.0	446.1
95°	528.1	446.1	433.0	423.1	406.7	403.4	410.0	414.9	414.9	405.1	405.1
97.5°	455.9	395.2	385.4	373.9	352.6	352.6	357.5	359.2	360.8	355.9	351.0
100°	406.7	362.4	359.2	342.8	328.0	328.0	332.9	336.2	336.2	328.0	326.4
102.5°	375.6	337.8	336.2	321.4	310.0	308.3	313.2	316.5	313.2	308.3	313.2
105°	355.9	321.4	319.8	308.3	300.1	298.5	303.4	305.0	305.0	296.8	295.2
107.5°	342.8	313.2	305.0	300.1	290.3	290.3	300.1	301.8	301.8	290.3	290.3
110°	336.2	306.7	296.8	295.2	295.2	296.8	308.3	314.9	318.2	306.7	308.3



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	339.5	306.7	293.6	301.8	306.7	316.5	329.6	337.8	342.8	331.3	329.6
115°	316.5	280.4	272.2	282.1	301.8	310.0	319.8	318.2	321.4	313.2	313.2
117.5°	310.0	275.5	262.4	272.2	287.0	287.0	290.3	287.0	288.6	280.4	280.4
120°	298.5	270.6	244.4	250.9	254.2	255.8	255.8	254.2	254.2	247.6	244.4
122.5°	283.7	255.8	232.9	237.8	237.8	236.2	237.8	236.2	236.2	229.6	226.3
125°	262.4	237.8	216.5	221.4	221.4	218.1	216.5	216.5	216.5	213.2	216.5
127.5°	249.3	226.3	205.0	203.4	206.6	206.6	206.6	205.0	203.4	201.7	201.7
130°	237.8	216.5	193.5	193.5	191.9	193.5	191.9	190.2	190.2	188.6	188.6
132.5°	221.4	203.4	178.8	178.8	178.8	177.1	177.1	175.5	173.8	173.8	172.2
135°	203.4	187.0	167.3	165.6	167.3	165.6	164.0	162.4	162.4	160.7	162.4
137.5°	173.8	165.6	150.9	146.0	144.3	146.0	144.3	142.7	144.3	141.0	141.0
140°	165.6	157.4	147.6	141.0	139.4	139.4	137.8	141.0	139.4	141.0	141.0
142.5°	146.0	146.0	136.1	131.2	131.2	132.8	126.3	126.3	126.3	126.3	126.3
145°	136.1	136.1	129.6	121.4	119.7	116.4	114.8	114.8	114.8	113.2	118.1
147.5°	119.7	121.4	118.1	111.5	105.0	101.7	101.7	100.0	100.0	101.7	100.0
150°	106.6	108.2	105.0	98.4	93.5	90.2	90.2	86.9	88.6	86.9	88.6
152.5°	90.2	91.8	90.2	85.3	83.6	80.4	78.7	77.1	78.7	75.4	75.4
155°	72.2	73.8	75.4	72.2	67.2	64.0	62.3	62.3	64.0	62.3	62.3
157.5°	65.6	65.6	67.2	65.6	62.3	59.0	60.7	59.0	57.4	59.0	59.0
160°	55.8	54.1	57.4	55.8	54.1	50.8	54.1	50.8	49.2	47.6	50.8
162.5°	44.3	42.6	44.3	44.3	44.3	42.6	41.0	39.4	39.4	37.7	36.1
165°	32.8	32.8	34.4	34.4	34.4	32.8	31.2	29.5	31.2	31.2	29.5
167.5°	21.3	23.0	23.0	23.0	23.0	21.3	23.0	19.7	21.3	19.7	19.7
170°	13.1	13.1	14.8	14.8	14.8	13.1	13.1	11.5	11.5	11.5	11.5
172.5°	8.2	8.2	11.5	13.1	11.5	9.8	8.2	6.6	8.2	8.2	9.8
175°	9.8	11.5	13.1	11.5	13.1	11.5	8.2	8.2	8.2	8.2	9.8
177.5°	6.6	9.8	8.2	9.8	11.5	9.8	8.2	6.6	8.2	6.6	6.6
180°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8

(END OF REPORT)