

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: P191290

Luminaire Tested: **GLEON-AF-02-LED-E1-SLL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191290
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24296)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-02-LED-E1-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10948.6 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G3

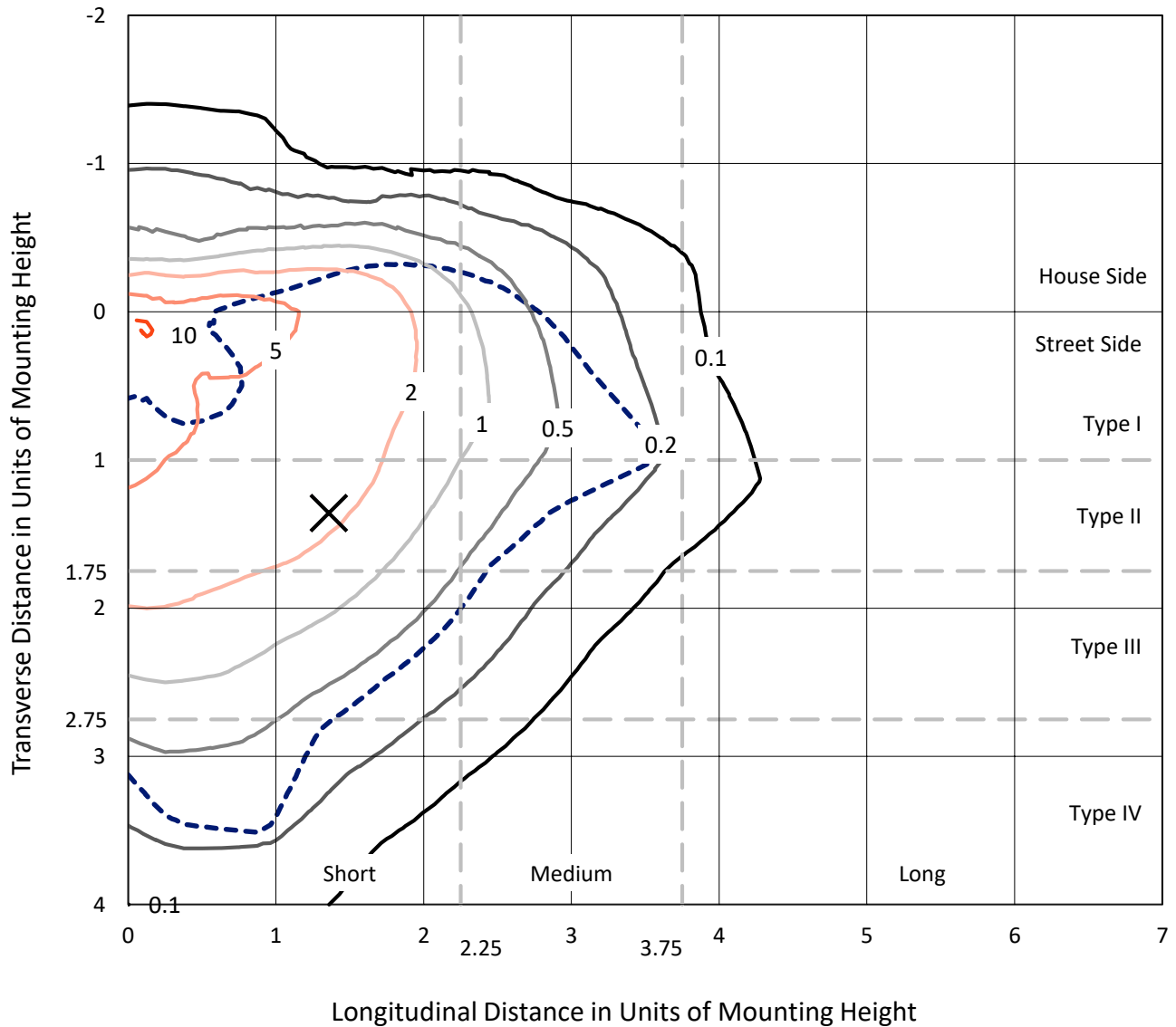
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

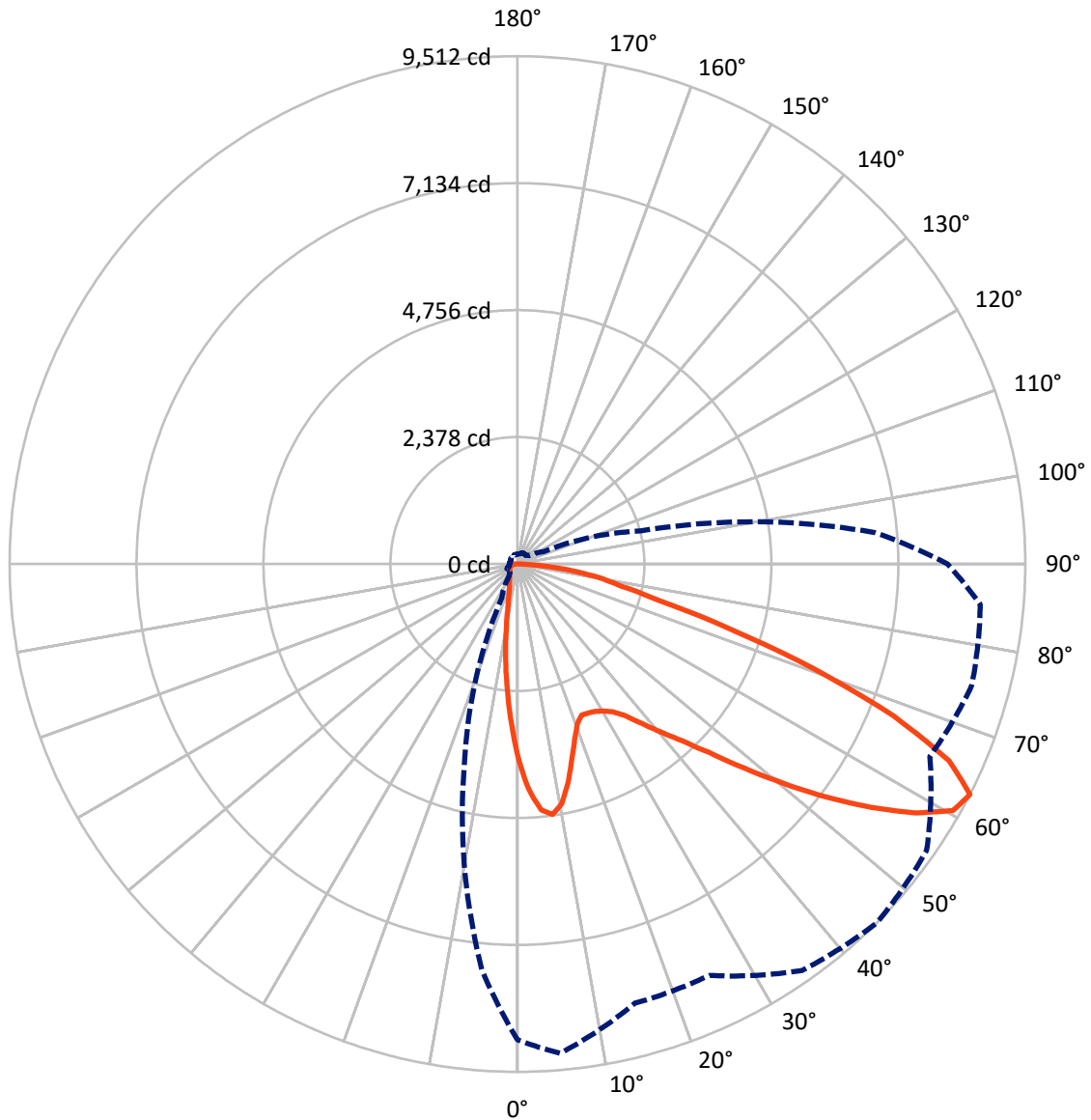
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1811.8	0.0	1811.8
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	9136.8	0.0	9136.8
	% Fixture	83.5	0.0	83.5
Total	Lumens	10948.6	0.0	10948.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.3	2.5
10°-20°	493.8	4.5
20°-30°	719.9	6.6
30°-40°	1108.8	10.1
40°-50°	1631.8	14.9
50°-60°	2393.6	21.9
60°-70°	2675.7	24.4
70°-80°	1310.0	12.0
80°-90°	345.9	3.2
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°	10948.6	100.0
0°-180°	10948.6	100.0

Coefficient of Utilization



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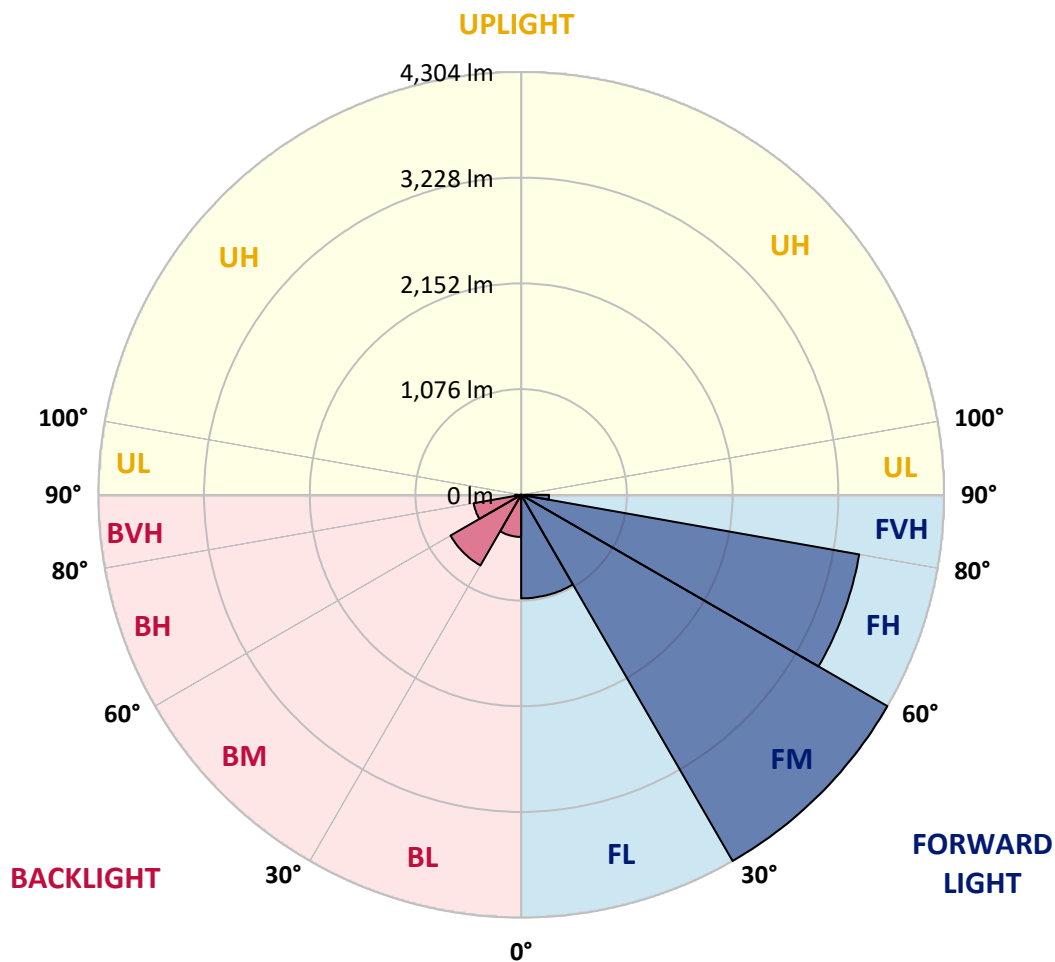
CATALOG NUMBER: GLEON-AF-02-LED-E1-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1054.3	9.6			
FM	(30°-60°)	4304.0	39.3			
FH	(60°-80°)	3494.4	31.9			G2/5000
FVH	(80°-90°)	284.0	2.6			G3/500
BL	(0°-30°)	428.7	3.9	B1/500		
BM	(30°-60°)	830.2	7.6	B1/1000		
BH	(60°-80°)	491.2	4.5	B1/500		G1/500
BVH	(80°-90°)	61.8	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0
2.5°	3843.5	3904.9	4024.7	4114.3	4223.3	4248.5	4283.4	4249.1	4188.4	4107.7	4081.3
5°	3614.2	3745.4	4036.1	4291.9	4519.4	4625.3	4654.8	4567.6	4391.2	4159.4	4018.0
7.5°	3246.4	3433.0	3826.7	4203.4	4538.6	4736.7	4731.9	4529.0	4204.6	3827.3	3600.4
10°	2929.2	3142.3	3593.7	4015.0	4370.8	4562.7	4488.7	4229.3	3842.3	3407.8	3161.5
12.5°	2751.7	2960.5	3418.6	3841.7	4139.0	4205.2	4148.7	3894.7	3529.9	3090.5	2875.1
15°	2721.0	2950.3	3348.7	3693.1	3859.7	3802.0	3734.6	3620.8	3363.2	2988.2	2763.7
17.5°	2854.0	3106.8	3428.8	3589.5	3561.2	3460.7	3441.4	3454.1	3392.1	3102.0	2843.2
20°	3109.3	3412.6	3619.6	3540.7	3334.3	3195.9	3200.7	3393.9	3577.5	3390.3	3094.7
22.5°	3467.3	3813.4	3894.7	3566.6	3238.7	3074.3	3114.1	3427.0	3873.0	3811.6	3434.3
25°	3930.8	4246.2	4187.8	3660.5	3248.3	3089.3	3121.2	3541.4	4222.0	4232.9	3854.3
27.5°	4379.8	4672.2	4433.9	3785.1	3288.0	3124.9	3167.0	3721.3	4555.5	4690.3	4334.7
30°	4730.0	4933.5	4531.4	3898.9	3366.2	3194.1	3246.4	3892.2	4707.2	4999.1	4704.1
32.5°	5020.1	5166.4	4686.6	4039.7	3510.1	3303.0	3395.1	4099.9	4925.6	5292.7	5065.9
35°	5390.8	5432.4	4879.9	4196.8	3732.1	3492.6	3606.9	4303.3	5133.9	5589.5	5422.2
37.5°	5825.4	5771.9	5062.3	4411.7	4019.3	3789.3	3883.8	4526.6	5305.4	5926.0	5786.3
40°	6255.1	6126.4	5291.0	4745.1	4438.2	4139.0	4251.0	4764.9	5465.5	6263.0	6142.0
42.5°	6620.4	6429.7	5516.7	5111.6	4828.1	4524.8	4658.4	5005.1	5618.4	6550.7	6450.7
45°	6890.7	6653.6	5731.5	5463.7	5365.6	5037.6	5100.7	5280.2	5783.9	6790.8	6704.7
47.5°	7132.0	6878.6	5974.6	5818.7	5835.6	5704.5	5602.7	5600.3	5978.9	6987.1	6944.9
50°	7455.3	7191.0	6235.9	6184.8	6541.1	6453.8	6229.3	5974.0	6225.7	7209.7	7204.8
52.5°	7900.7	7685.7	6554.9	6578.9	7199.4	7256.6	6978.6	6423.1	6612.0	7618.3	7589.5
55°	8427.3	8302.1	6989.4	7032.2	8007.1	8048.1	7771.9	6984.6	7180.2	8210.0	8129.9
57.5°	8838.3	8811.9	7466.1	7576.3	8610.3	8794.4	8540.4	7634.6	7820.6	8708.4	8507.3
60°	9002.1	9130.2	7973.5	8125.1	9168.2	9372.2	9149.5	8205.8	8388.1	8914.8	8481.4
62.5°	8913.6	9200.0	8513.9	8501.3	9292.8	9512.4	9355.9	8523.5	8808.8	8701.7	8052.3
65°	8504.9	8949.1	8827.6	8404.4	8866.6	8884.6	8834.1	8381.5	8908.2	8028.2	7223.0
67.5°	7614.7	8253.9	8414.6	7573.8	7717.0	7599.7	7514.8	7603.9	8390.5	7018.9	6070.4
70°	6202.2	7163.9	7241.0	6057.7	5992.8	5913.9	5744.8	6234.1	7369.2	5752.6	4816.7
72.5°	4560.3	5571.4	5808.0	4443.0	4142.0	4158.3	4024.7	4698.1	5991.5	4273.2	3596.1
75°	3120.0	4034.3	4544.0	3100.2	2739.1	2745.7	2728.8	3328.9	4772.2	2972.6	2690.9
77.5°	2279.2	2882.3	3427.0	2084.3	2023.5	1986.2	1977.2	2329.2	3658.7	2158.3	2089.7
80°	1829.0	2129.4	2302.2	1444.5	1553.5	1550.4	1500.5	1601.5	2389.4	1578.7	1563.1
82.5°	1268.8	1636.4	1865.1	1132.1	1048.4	1031.0	1043.0	1192.9	1688.8	1079.1	1026.2
85°	669.3	1087.0	1847.1	1003.3	622.4	496.5	617.6	976.8	1463.1	571.7	500.7
87.5°	85.4	314.1	1222.9	400.3	245.6	132.4	293.1	550.1	939.5	116.7	101.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0
2.5°	4013.2	3933.1	3828.4	3731.5	3631.1	3531.1	3400.5	3318.7	3262.1	3251.2	3227.2
5°	3915.8	3649.7	3448.7	3274.8	3117.0	2894.3	2771.0	2668.7	2613.8	2608.4	2595.2
7.5°	3466.2	3099.0	2827.5	2581.4	2358.1	2178.2	1979.5	1886.8	1848.9	1858.0	1867.0
10°	2998.5	2588.0	2276.3	2024.6	1827.8	1676.2	1516.7	1408.9	1334.3	1319.3	1316.2
12.5°	2656.6	2206.4	1903.7	1726.1	1573.9	1431.2	1262.1	1135.1	1038.2	1005.2	982.9
15°	2512.2	2019.8	1702.7	1511.3	1343.3	1162.2	1005.2	872.1	783.1	754.1	737.9
17.5°	2542.9	1968.1	1564.2	1319.3	1104.4	915.4	717.4	603.6	550.1	536.2	536.2
20°	2704.2	1958.4	1449.9	1142.3	874.5	655.4	493.0	427.9	410.5	408.7	413.5
22.5°	2930.4	1992.2	1364.4	988.9	679.5	478.4	384.0	359.9	352.1	353.9	359.3
25°	3267.5	2105.9	1302.4	852.2	533.3	391.8	342.5	328.1	324.4	329.2	335.8
27.5°	3667.2	2219.7	1264.0	749.3	450.2	358.1	325.6	310.6	312.9	319.0	325.0
30°	4018.0	2313.0	1203.1	675.9	424.3	359.9	325.6	305.1	302.7	303.9	305.8
32.5°	4332.8	2376.1	1132.1	606.1	365.9	319.6	303.9	301.0	287.7	282.8	283.5
35°	4604.2	2376.1	1089.3	565.2	328.1	283.5	258.2	243.2	236.5	237.1	243.8
37.5°	4866.1	2328.6	1068.3	542.3	307.6	269.6	247.3	234.2	225.0	223.3	224.5
40°	5097.2	2259.4	1044.2	532.7	292.0	261.2	240.2	229.3	219.7	216.7	217.3
42.5°	5282.5	2203.4	1017.7	520.0	282.2	255.2	235.3	225.7	214.8	211.9	211.2
45°	5482.9	2184.7	982.9	494.7	287.0	255.8	234.2	223.9	213.1	209.4	208.3
47.5°	5747.1	2243.1	946.7	464.6	297.3	258.8	235.9	223.9	212.5	209.4	208.3
50°	6080.0	2380.4	901.0	420.7	287.0	267.2	235.3	222.1	212.5	209.4	207.0
52.5°	6507.3	2565.8	840.8	370.1	281.1	287.7	234.2	218.5	209.4	205.2	201.0
55°	7026.8	2717.4	769.2	328.6	267.2	282.2	232.3	214.3	204.6	198.7	195.0
57.5°	7407.1	2772.2	677.1	301.6	248.0	273.2	230.0	208.9	198.7	193.8	188.9
60°	7331.9	2666.2	599.4	284.7	236.5	246.7	228.1	204.1	193.2	189.6	185.4
62.5°	6729.4	2389.4	549.5	276.8	229.3	225.0	230.0	199.2	188.4	184.7	183.5
65°	5826.0	1980.7	529.7	275.1	223.3	212.5	213.7	193.8	183.0	179.9	178.7
67.5°	4805.8	1598.6	512.2	281.1	215.4	203.5	197.4	186.6	177.6	174.5	172.2
70°	3789.9	1329.5	504.3	277.4	205.8	194.4	187.8	178.7	170.9	168.0	166.1
72.5°	3052.1	1123.1	500.1	273.8	193.2	182.4	176.4	168.5	160.1	158.9	157.1
75°	2582.5	882.9	458.0	262.4	178.7	168.0	163.7	156.5	148.0	148.0	146.9
77.5°	1992.2	638.5	380.9	232.3	163.7	151.7	148.0	142.6	133.0	134.8	134.2
80°	1471.5	416.4	297.9	192.6	145.1	133.6	131.9	126.4	116.2	118.6	118.6
82.5°	1008.1	273.2	214.3	157.6	124.0	113.1	113.1	107.7	96.3	97.5	101.1
85°	506.2	187.8	160.1	122.1	96.3	90.8	90.8	86.6	75.2	75.8	80.6
87.5°	154.1	113.1	106.0	87.3	69.3	68.0	65.0	62.0	54.7	54.2	57.2
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0
2.5°	3190.5	3156.2	3114.7	3023.1	2992.4	2990.7	3018.3	2989.5	3044.8	3021.4	3047.3
5°	2572.9	2539.3	2492.9	2376.1	2305.1	2256.9	2234.1	2166.7	2215.4	2179.9	2209.5
7.5°	1892.3	1900.0	1869.3	1800.8	1646.1	1568.5	1522.7	1481.7	1517.3	1513.7	1570.2
10°	1330.1	1351.2	1329.5	1260.3	1135.1	1092.4	1100.8	1117.1	1163.4	1187.4	1274.7
12.5°	957.6	956.4	942.5	880.6	798.1	802.9	837.2	865.5	908.2	933.4	1022.5
15°	715.0	704.2	698.2	647.6	600.7	610.9	627.8	630.8	657.9	672.9	745.1
17.5°	540.4	545.8	552.5	516.4	480.9	474.2	461.0	444.8	452.6	455.6	491.7
20°	429.1	450.8	467.1	441.8	405.7	386.4	369.6	358.7	358.7	358.1	368.4
22.5°	374.9	390.6	408.1	390.6	358.1	341.3	331.6	323.2	322.0	322.0	331.6
25°	345.5	356.9	373.8	361.7	337.7	325.0	316.0	305.1	301.0	299.7	306.4
27.5°	331.0	335.8	344.2	333.5	312.9	307.0	304.5	294.9	289.5	286.5	293.1
30°	306.4	305.1	305.8	294.9	278.7	278.0	282.2	284.1	282.2	281.7	292.0
32.5°	283.5	281.1	280.5	270.9	255.8	252.2	255.8	259.4	263.6	269.6	281.7
35°	254.6	260.6	264.2	255.8	237.7	226.9	222.7	216.0	212.5	212.5	226.3
37.5°	231.7	245.6	250.9	243.2	223.3	208.3	201.0	199.8	200.4	202.9	216.0
40°	223.9	234.2	239.0	231.1	211.2	197.4	193.2	192.0	193.2	196.8	210.0
42.5°	219.1	226.3	225.7	216.0	199.8	190.2	187.8	186.6	187.8	191.4	205.8
45°	214.8	219.7	214.8	203.5	188.4	183.5	184.1	183.5	184.7	188.4	202.2
47.5°	211.2	213.1	207.0	195.6	179.9	178.7	181.2	183.0	184.1	187.2	201.6
50°	205.8	205.8	200.4	188.4	172.8	173.3	176.4	180.6	181.2	184.7	196.2
52.5°	199.2	198.7	195.0	183.5	166.7	168.5	168.5	173.3	174.5	178.7	190.8
55°	193.8	192.6	190.8	179.9	161.3	164.3	162.5	164.3	167.4	171.5	184.7
57.5°	188.9	186.6	186.6	177.0	157.1	158.3	154.1	156.5	160.1	163.7	177.6
60°	184.1	181.8	183.0	172.8	150.5	149.2	147.4	152.3	153.4	157.6	171.5
62.5°	178.7	177.0	177.6	168.0	145.7	142.6	142.6	146.9	147.4	153.4	166.7
65°	174.5	172.2	171.5	163.1	140.2	136.7	138.4	140.2	141.5	147.4	160.1
67.5°	170.3	165.5	165.5	158.9	134.2	130.6	134.2	133.6	135.4	140.9	151.1
70°	164.9	158.3	158.9	155.9	128.2	124.0	126.9	126.4	127.6	131.2	141.5
72.5°	156.5	151.1	152.3	151.1	122.1	116.2	117.3	117.3	117.3	120.4	131.2
75°	145.7	141.5	145.1	148.0	115.0	106.5	107.7	107.7	106.0	107.7	121.0
77.5°	132.4	130.0	142.1	137.8	106.5	96.3	96.3	95.1	91.5	93.9	108.3
80°	117.9	116.2	131.2	115.6	96.9	83.7	82.4	79.5	75.8	77.6	92.1
82.5°	102.9	101.1	110.2	88.5	83.7	69.3	66.2	60.8	57.2	59.0	72.2
85°	84.3	84.3	84.9	66.8	63.8	53.0	49.3	42.1	38.0	39.1	51.8
87.5°	60.1	62.0	57.2	45.7	38.0	29.5	27.1	22.9	19.2	22.3	27.1
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0	3699.0
2.5°	3179.6	3245.8	3321.1	3417.4	3499.8	3635.3	3765.3	3843.5
5°	2377.3	2487.5	2624.7	2801.0	2965.3	3212.2	3457.1	3614.2
7.5°	1701.5	1819.4	1967.4	2187.8	2420.1	2734.9	3058.6	3246.4
10°	1407.8	1528.7	1653.3	1801.9	1992.2	2334.6	2717.4	2929.2
12.5°	1164.6	1294.0	1428.2	1584.7	1761.0	2066.8	2508.0	2751.7
15°	891.4	1035.8	1194.1	1392.1	1613.0	1966.3	2456.2	2721.0
17.5°	610.9	772.2	966.6	1211.0	1481.1	1933.8	2548.9	2854.0
20°	420.7	538.1	745.7	1032.2	1357.1	1929.6	2727.1	3109.3
22.5°	352.1	404.5	556.1	867.9	1264.0	1981.4	3003.3	3467.3
25°	325.6	356.9	444.2	725.3	1195.9	2100.5	3383.7	3930.8
27.5°	310.0	338.3	403.2	632.0	1142.3	2238.9	3753.8	4379.8
30°	316.0	344.8	391.8	584.4	1069.5	2354.5	4082.4	4730.0
32.5°	284.7	297.3	335.8	542.3	1017.1	2451.4	4370.1	5020.1
35°	242.5	264.8	299.7	522.4	1018.3	2516.4	4683.7	5390.8
37.5°	231.1	253.4	278.7	515.2	1032.2	2585.6	5043.6	5825.4
40°	223.9	244.4	266.1	511.0	1045.5	2648.8	5396.3	6255.1
42.5°	219.1	237.7	264.8	496.5	1052.1	2705.4	5686.4	6620.4
45°	218.5	237.7	269.6	482.1	1062.3	2766.2	5929.5	6890.7
47.5°	219.1	245.6	260.6	464.6	1062.3	2867.8	6214.8	7132.0
50°	216.7	258.8	250.9	440.0	1037.6	3060.5	6606.0	7455.3
52.5°	215.4	257.0	232.3	402.0	994.9	3366.2	7107.4	7900.7
55°	212.5	248.0	219.1	345.5	944.9	3699.6	7644.2	8427.3
57.5°	209.4	219.7	211.9	296.1	867.9	3934.4	8013.8	8838.3
60°	234.8	192.0	205.8	272.0	765.0	3998.8	7999.4	9002.1
62.5°	217.3	179.9	198.0	266.6	692.7	3818.2	7629.8	8913.6
65°	170.3	172.2	190.2	282.2	673.5	3339.7	6975.0	8504.9
67.5°	155.9	164.3	182.4	302.2	675.2	2674.1	5996.3	7614.7
70°	146.9	155.9	173.3	312.4	680.1	1993.3	4740.9	6202.2
72.5°	136.7	144.4	163.1	314.1	648.9	1448.1	3653.9	4560.3
75°	124.6	131.9	148.6	273.8	537.5	1004.5	2795.0	3120.0
77.5°	110.8	116.2	130.6	211.2	399.1	642.8	2098.1	2279.2
80°	94.5	97.5	109.6	154.7	273.2	402.0	1659.9	1829.0
82.5°	75.8	77.0	84.9	116.2	177.6	258.2	1111.6	1268.8
85°	53.6	53.6	58.4	84.3	121.0	163.7	603.6	669.3
87.5°	25.3	25.9	25.9	46.3	63.2	83.1	139.0	85.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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