

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: P192072

Luminaire Tested: **GLEON-AF-04-LED-E1-SLL-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P192072
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-04-LED-E1-SLL-7050-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5000K, 615mA 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: 13903 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

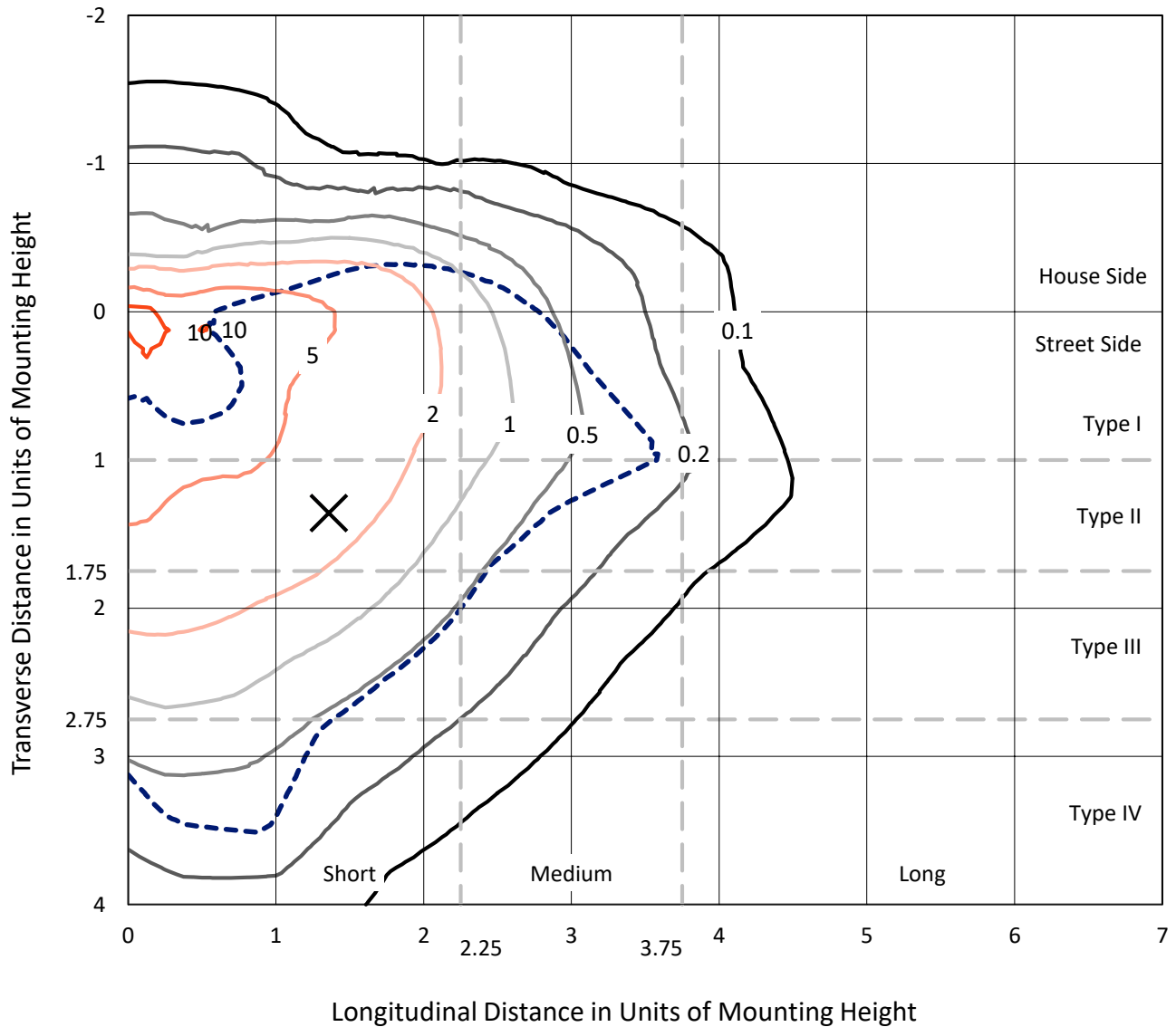
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

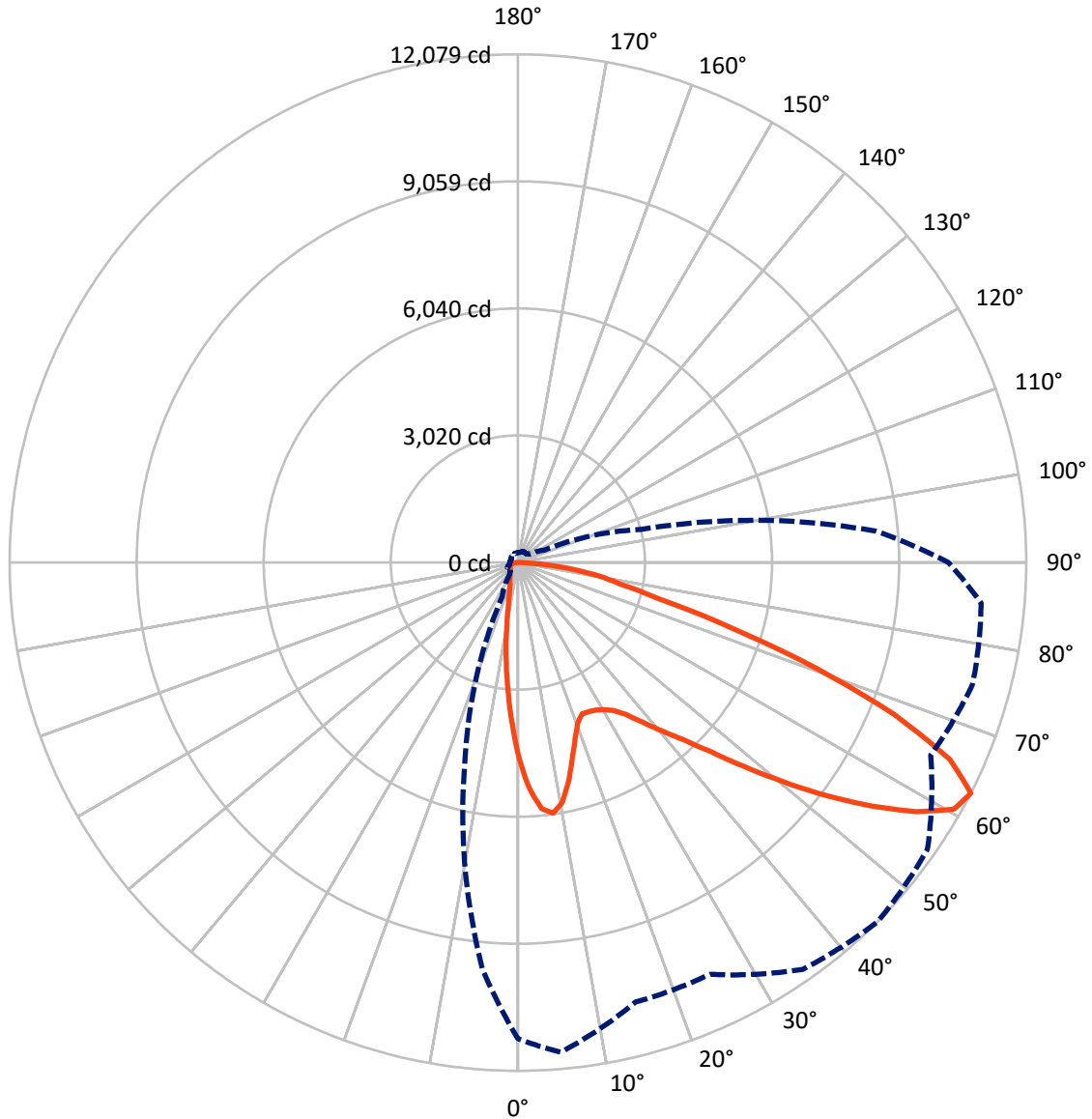
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 13.8 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	2300.8	0.0	2300.8
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	11602.2	0.0	11602.2
	% Fixture	83.5	0.0	83.5
Total	Lumens	13903.0	0.0	13903.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.9	2.5
10°-20°	627.0	4.5
20°-30°	914.2	6.6
30°-40°	1408.0	10.1
40°-50°	2072.2	14.9
50°-60°	3039.4	21.9
60°-70°	3397.6	24.4
70°-80°	1663.4	12.0
80°-90°	439.2	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°	13903.0	100.0
0°-180°	13903.0	100.0

Coefficient of Utilization



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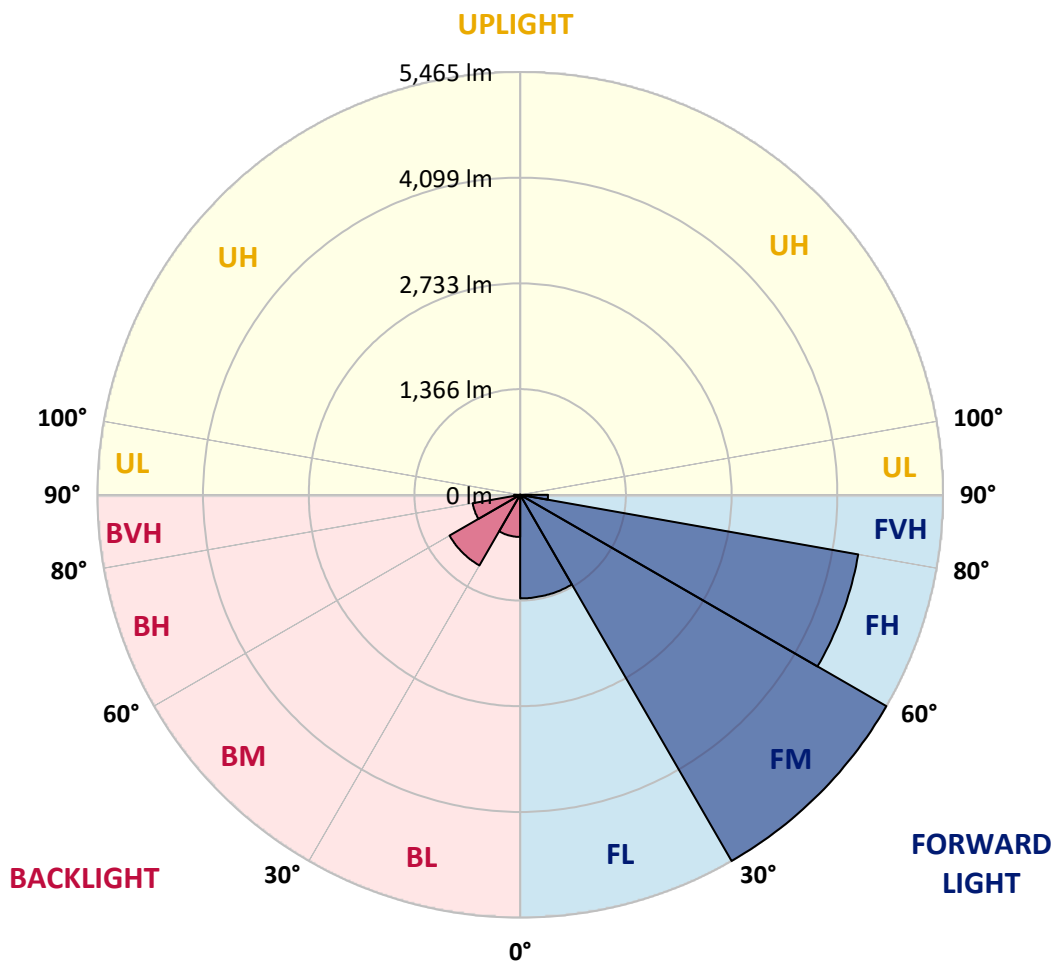
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLL-7050-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1338.8	9.6			
FM	(30°-60°)	5465.4	39.3			
FH	(60°-80°)	4437.4	31.9			G2/5000
FVH	(80°-90°)	360.7	2.6			G3/500
BL	(0°-30°)	544.3	3.9	B2/1000		
BM	(30°-60°)	1054.2	7.6	B2/2500		
BH	(60°-80°)	623.7	4.5	B2/1000		G2/1000
BVH	(80°-90°)	78.5	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2
2.5°	4880.6	4958.6	5110.7	5224.5	5362.9	5395.0	5439.3	5395.7	5318.5	5216.1	5182.5
5°	4589.4	4756.0	5125.2	5450.0	5738.9	5873.4	5910.8	5800.0	5576.1	5281.8	5102.2
7.5°	4122.5	4359.4	4859.2	5337.6	5763.3	6014.8	6008.7	5751.1	5339.2	4860.0	4571.8
10°	3719.7	3990.2	4563.4	5098.4	5550.1	5793.9	5699.9	5370.5	4879.1	4327.3	4014.7
12.5°	3494.2	3759.4	4341.0	4878.3	5255.9	5339.9	5268.1	4945.6	4482.4	3924.5	3650.9
15°	3455.2	3746.4	4252.4	4689.5	4901.2	4827.9	4742.3	4597.8	4270.7	3794.6	3509.5
17.5°	3624.2	3945.1	4354.0	4558.1	4522.2	4394.5	4370.1	4386.1	4307.4	3939.0	3610.4
20°	3948.2	4333.4	4596.3	4496.2	4234.0	4058.3	4064.4	4309.7	4542.8	4305.1	3929.9
22.5°	4402.9	4842.4	4945.6	4529.0	4112.5	3903.9	3954.3	4351.7	4918.1	4840.1	4360.9
25°	4991.4	5391.9	5317.8	4648.3	4124.7	3923.0	3963.5	4496.9	5361.3	5375.1	4894.4
27.5°	5561.6	5933.0	5630.4	4806.5	4175.2	3968.1	4021.6	4725.5	5784.7	5955.9	5504.2
30°	6006.4	6264.7	5754.2	4950.9	4274.5	4056.0	4122.5	4942.5	5977.3	6348.0	5973.5
32.5°	6374.7	6560.5	5951.3	5129.8	4457.2	4194.3	4311.2	5206.2	6254.8	6721.0	6432.8
35°	6845.5	6898.3	6196.7	5329.2	4739.2	4435.0	4580.2	5464.5	6519.2	7097.7	6885.3
37.5°	7397.3	7329.3	6428.2	5602.1	5103.8	4811.8	4931.8	5748.0	6737.0	7525.0	7347.7
40°	7943.0	7779.5	6718.7	6025.5	5635.7	5255.9	5398.0	6050.7	6940.3	7953.0	7799.3
42.5°	8406.9	8164.7	7005.3	6490.9	6130.9	5745.8	5915.4	6355.6	7134.4	8318.3	8191.4
45°	8750.1	8449.0	7278.1	6938.0	6813.4	6396.9	6477.2	6704.9	7344.6	8623.2	8513.9
47.5°	9056.6	8734.8	7586.9	7388.9	7410.3	7243.7	7114.6	7111.5	7592.2	8872.4	8818.9
50°	9467.0	9131.5	7918.6	7853.6	8306.0	8195.2	7910.2	7586.1	7905.6	9155.1	9149.0
52.5°	10032.5	9759.7	8323.6	8354.2	9142.2	9214.8	8861.7	8156.3	8396.2	9674.1	9637.4
55°	10701.3	10542.3	8875.4	8929.7	10167.8	10219.8	9869.0	8869.3	9117.7	10425.4	10323.7
57.5°	11223.3	11189.6	9480.7	9620.6	10933.6	11167.5	10844.9	9694.7	9930.9	11058.2	10802.9
60°	11431.1	11593.9	10125.0	10317.6	11642.1	11901.2	11618.4	10420.0	10651.6	11320.3	10770.0
62.5°	11318.8	11682.6	10811.3	10795.3	11800.3	12079.2	11880.5	10823.5	11185.8	11049.8	10225.1
65°	10799.9	11363.9	11209.5	10672.2	11259.2	11282.1	11217.9	10643.2	11311.9	10194.6	9172.0
67.5°	9669.5	10481.2	10685.2	9617.5	9799.4	9650.4	9542.6	9655.7	10654.6	8912.9	7708.4
70°	7875.8	9097.1	9194.9	7692.3	7609.8	7509.7	7294.9	7916.3	9357.7	7304.9	6116.4
72.5°	5790.8	7074.8	7375.2	5641.8	5259.7	5280.3	5110.7	5965.9	7608.3	5426.3	4566.5
75°	3962.0	5122.9	5770.2	3936.7	3478.2	3486.6	3465.2	4227.2	6059.9	3774.7	3417.0
77.5°	2894.3	3660.1	4351.7	2646.7	2569.5	2522.1	2510.6	2957.7	4646.0	2740.7	2653.5
80°	2322.6	2704.0	2923.3	1834.2	1972.6	1968.8	1905.3	2033.7	3034.1	2004.7	1984.8
82.5°	1611.1	2078.0	2368.5	1437.6	1331.4	1309.2	1324.5	1514.8	2144.5	1370.3	1303.1
85°	849.9	1380.3	2345.5	1274.0	790.3	630.5	784.1	1240.4	1857.9	726.1	635.9
87.5°	108.5	398.9	1553.0	508.2	311.8	168.1	372.2	698.5	1193.0	148.3	129.2
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2
2.5°	5096.1	4994.5	4861.5	4738.5	4610.8	4484.0	4318.1	4214.2	4142.3	4128.6	4098.0
5°	4972.3	4634.5	4379.2	4158.4	3958.1	3675.4	3518.7	3388.8	3319.2	3312.3	3295.5
7.5°	4401.4	3935.2	3590.5	3277.9	2994.4	2765.9	2513.7	2396.0	2347.8	2359.3	2370.8
10°	3807.6	3286.3	2890.5	2571.0	2321.1	2128.5	1926.0	1789.1	1694.4	1675.3	1671.5
12.5°	3373.5	2801.8	2417.4	2191.9	1998.6	1817.4	1602.7	1441.4	1318.4	1276.3	1248.0
15°	3190.0	2564.9	2162.1	1919.1	1705.8	1475.8	1276.3	1107.4	994.3	957.6	937.0
17.5°	3229.0	2499.2	1986.3	1675.3	1402.4	1162.4	911.0	766.6	698.5	681.0	681.0
20°	3433.8	2486.9	1841.1	1450.6	1110.5	832.3	625.9	543.4	521.2	518.9	525.1
22.5°	3721.2	2529.7	1732.6	1255.7	862.9	607.6	487.6	457.0	447.1	449.4	456.3
25°	4149.2	2674.2	1653.9	1082.2	677.1	497.5	434.9	416.5	411.9	418.1	426.5
27.5°	4656.7	2818.6	1605.0	951.5	571.7	454.7	413.5	394.4	397.4	405.1	412.7
30°	5102.2	2937.1	1527.8	858.3	538.8	457.0	413.5	387.5	384.4	386.0	388.2
32.5°	5502.0	3017.3	1437.6	769.6	464.7	405.8	386.0	382.1	365.3	359.2	360.0
35°	5846.6	3017.3	1383.3	717.6	416.5	360.0	327.9	308.8	300.4	301.1	309.5
37.5°	6179.1	2956.9	1356.6	688.6	390.5	342.4	314.1	297.3	285.8	283.5	285.1
40°	6472.6	2869.1	1326.0	676.4	370.7	331.7	304.9	291.2	279.0	275.1	275.9
42.5°	6708.0	2798.0	1292.4	660.3	358.4	324.0	298.8	286.6	272.8	269.0	268.3
45°	6962.5	2774.3	1248.0	628.2	364.6	324.8	297.3	284.3	270.6	266.0	264.4
47.5°	7298.0	2848.4	1202.2	590.0	377.5	328.6	299.6	284.3	269.8	266.0	264.4
50°	7720.6	3022.7	1144.1	534.2	364.6	339.3	298.8	282.0	269.8	266.0	262.9
52.5°	8263.3	3258.1	1067.7	470.0	356.9	365.3	297.3	277.4	266.0	260.6	255.3
55°	8922.8	3450.7	976.7	417.3	339.3	358.4	295.0	272.1	259.9	252.2	247.6
57.5°	9405.8	3520.2	859.8	382.9	314.9	347.0	291.9	265.2	252.2	246.1	240.0
60°	9310.3	3385.7	761.2	361.5	300.4	313.3	289.7	259.1	245.3	240.7	235.4
62.5°	8545.3	3034.1	697.8	351.6	291.2	285.8	291.9	253.0	239.2	234.6	233.1
65°	7398.1	2515.2	672.6	349.3	283.5	269.8	271.3	246.1	232.3	228.5	227.0
67.5°	6102.7	2029.9	650.4	356.9	273.6	258.3	250.7	236.9	225.5	221.6	218.6
70°	4812.6	1688.3	640.5	352.3	261.4	246.9	238.5	227.0	217.1	213.2	210.9
72.5°	3875.6	1426.1	635.1	347.7	245.3	231.6	223.9	214.0	203.3	201.8	199.5
75°	3279.5	1121.2	581.6	333.2	227.0	213.2	207.9	198.7	188.0	188.0	186.5
77.5°	2529.7	810.9	483.8	295.0	207.9	192.6	188.0	181.1	168.9	171.2	170.4
80°	1868.6	528.9	378.3	244.6	184.2	169.7	167.4	160.5	147.5	150.6	150.6
82.5°	1280.1	347.0	272.1	200.2	157.4	143.7	143.7	136.8	122.3	123.8	128.4
85°	642.7	238.5	203.3	155.1	122.3	115.4	115.4	110.1	95.5	96.3	102.4
87.5°	195.7	143.7	134.5	110.8	87.9	86.4	82.5	78.7	69.5	68.8	72.6
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°	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2
2.5°	4051.4	4007.8	3955.1	3838.9	3799.9	3797.6	3832.8	3796.1	3866.4	3836.6	3869.5
5°	3267.2	3224.4	3165.6	3017.3	2927.1	2866.0	2837.0	2751.4	2813.3	2768.2	2805.6
7.5°	2402.9	2412.8	2373.8	2286.7	2090.3	1991.7	1933.6	1881.6	1926.7	1922.1	1994.0
10°	1689.0	1715.8	1688.3	1600.4	1441.4	1387.1	1397.8	1418.5	1477.3	1507.9	1618.7
12.5°	1215.9	1214.4	1196.8	1118.1	1013.4	1019.5	1063.1	1099.0	1153.3	1185.4	1298.5
15°	907.9	894.2	886.5	822.4	762.7	775.7	797.1	801.0	835.3	854.5	946.2
17.5°	686.3	693.2	701.6	655.7	610.6	602.2	585.4	564.8	574.7	578.5	624.4
20°	544.9	572.4	593.1	561.0	515.1	490.7	469.3	455.5	455.5	454.7	467.7
22.5°	476.1	496.0	518.2	496.0	454.7	433.3	421.1	410.4	408.9	408.9	421.1
25°	438.7	453.2	474.6	459.3	428.8	412.7	401.2	387.5	382.1	380.6	389.0
27.5°	420.3	426.5	437.2	423.4	397.4	389.8	386.7	374.5	367.6	363.8	372.2
30°	389.0	387.5	388.2	374.5	353.9	353.1	358.4	360.7	358.4	357.7	370.7
32.5°	360.0	356.9	356.1	343.9	324.8	320.2	324.8	329.4	334.7	342.4	357.7
35°	323.3	330.9	335.5	324.8	301.9	288.1	282.8	274.4	269.8	269.8	287.4
37.5°	294.2	311.8	318.7	308.8	283.5	264.4	255.3	253.7	254.5	257.6	274.4
40°	284.3	297.3	303.4	293.5	268.3	250.7	245.3	243.8	245.3	249.9	266.7
42.5°	278.2	287.4	286.6	274.4	253.7	241.5	238.5	236.9	238.5	243.0	261.4
45°	272.8	279.0	272.8	258.3	239.2	233.1	233.9	233.1	234.6	239.2	256.8
47.5°	268.3	270.6	262.9	248.4	228.5	227.0	230.0	232.3	233.9	237.7	256.0
50°	261.4	261.4	254.5	239.2	219.3	220.1	223.9	229.3	230.0	234.6	249.2
52.5°	253.0	252.2	247.6	233.1	211.7	214.0	214.0	220.1	221.6	227.0	242.3
55°	246.1	244.6	242.3	228.5	204.8	208.6	206.4	208.6	212.5	217.8	234.6
57.5°	240.0	236.9	236.9	224.7	199.5	201.0	195.7	198.7	203.3	207.9	225.5
60°	233.9	230.8	232.3	219.3	191.1	189.5	187.2	193.4	194.9	200.2	217.8
62.5°	227.0	224.7	225.5	213.2	185.0	181.1	181.1	186.5	187.2	194.9	211.7
65°	221.6	218.6	217.8	207.1	178.1	173.5	175.8	178.1	179.6	187.2	203.3
67.5°	216.3	210.2	210.2	201.8	170.4	165.8	170.4	169.7	172.0	178.8	191.8
70°	209.4	201.0	201.8	197.9	162.8	157.4	161.3	160.5	162.0	166.6	179.6
72.5°	198.7	191.8	193.4	191.8	155.1	147.5	149.0	149.0	149.0	152.9	166.6
75°	185.0	179.6	184.2	188.0	146.0	135.3	136.8	136.8	134.5	136.8	153.6
77.5°	168.1	165.1	180.4	175.0	135.3	122.3	122.3	120.8	116.2	119.2	137.6
80°	149.8	147.5	166.6	146.7	123.0	106.2	104.7	100.9	96.3	98.6	116.9
82.5°	130.7	128.4	139.9	112.3	106.2	87.9	84.1	77.2	72.6	74.9	91.7
85°	107.0	107.0	107.8	84.8	81.0	67.3	62.7	53.5	48.1	49.7	65.7
87.5°	76.4	78.7	72.6	58.1	48.1	37.4	34.4	29.0	24.5	28.3	34.4
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°	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2	4697.2
2.5°	4037.6	4121.7	4217.2	4339.5	4444.2	4616.2	4781.3	4880.6
5°	3018.9	3158.7	3333.0	3556.9	3765.5	4078.9	4389.9	4589.4
7.5°	2160.6	2310.4	2498.4	2778.1	3073.1	3472.8	3884.0	4122.5
10°	1787.6	1941.2	2099.4	2288.2	2529.7	2964.6	3450.7	3719.7
12.5°	1478.9	1643.2	1813.6	2012.3	2236.2	2624.5	3184.7	3494.2
15°	1131.9	1315.3	1516.3	1767.7	2048.2	2496.9	3119.0	3455.2
17.5°	775.7	980.6	1227.4	1537.7	1880.9	2455.6	3236.7	3624.2
20°	534.2	683.3	946.9	1310.7	1723.4	2450.2	3462.9	3948.2
22.5°	447.1	513.6	706.2	1102.1	1605.0	2516.0	3813.7	4402.9
25°	413.5	453.2	564.0	920.9	1518.6	2667.3	4296.7	4991.4
27.5°	393.6	429.5	512.1	802.5	1450.6	2843.1	4766.7	5561.6
30°	401.2	437.9	497.5	742.1	1358.1	2989.8	5184.0	6006.4
32.5°	361.5	377.5	426.5	688.6	1291.6	3112.9	5549.3	6374.7
35°	308.0	336.3	380.6	663.4	1293.1	3195.4	5947.5	6845.5
37.5°	293.5	321.8	353.9	654.2	1310.7	3283.3	6404.6	7397.3
40°	284.3	310.3	337.8	648.9	1327.5	3363.5	6852.4	7943.0
42.5°	278.2	301.9	336.3	630.5	1335.9	3435.4	7220.8	8406.9
45°	277.4	301.9	342.4	612.2	1348.9	3512.6	7529.6	8750.1
47.5°	278.2	311.8	330.9	590.0	1348.9	3641.7	7891.8	9056.6
50°	275.1	328.6	318.7	558.7	1317.6	3886.3	8388.6	9467.0
52.5°	273.6	326.3	295.0	510.5	1263.3	4274.5	9025.2	10032.5
55°	269.8	314.9	278.2	438.7	1199.9	4697.9	9706.9	10701.3
57.5°	266.0	279.0	269.0	376.0	1102.1	4996.0	10176.2	11223.3
60°	298.1	243.8	261.4	345.4	971.4	5077.8	10157.9	11431.1
62.5°	275.9	228.5	251.4	338.6	879.7	4848.5	9688.6	11318.8
65°	216.3	218.6	241.5	358.4	855.2	4240.9	8857.1	10799.9
67.5°	197.9	208.6	231.6	383.7	857.5	3395.6	7614.4	9669.5
70°	186.5	197.9	220.1	396.7	863.6	2531.3	6020.1	7875.8
72.5°	173.5	183.4	207.1	398.9	823.9	1838.8	4639.9	5790.8
75°	158.2	167.4	188.8	347.7	682.5	1275.6	3549.3	3962.0
77.5°	140.6	147.5	165.8	268.3	506.7	816.2	2664.2	2894.3
80°	120.0	123.8	139.1	196.4	347.0	510.5	2107.8	2322.6
82.5°	96.3	97.8	107.8	147.5	225.5	327.9	1411.6	1611.1
85°	68.0	68.0	74.1	107.0	153.6	207.9	766.6	849.9
87.5°	32.1	32.9	32.9	58.8	80.2	105.5	176.5	108.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)