

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: P191420

Luminaire Tested: **GLEON-AF-02-LED-E1-T2R-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191420  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)  
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-T2R-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14238.5 lumens  
Efficiency: N/A  
Efficacy: 110.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

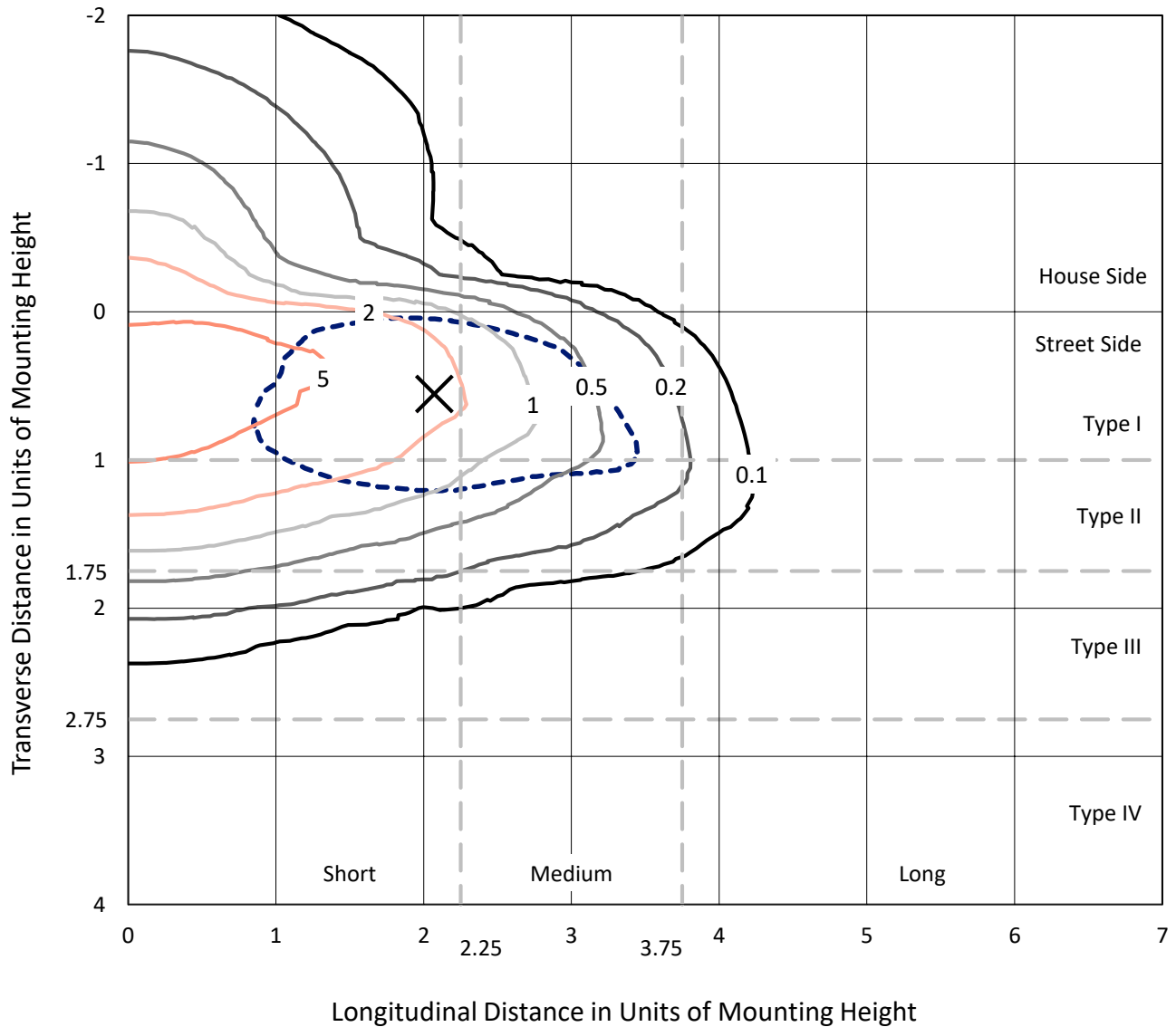
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

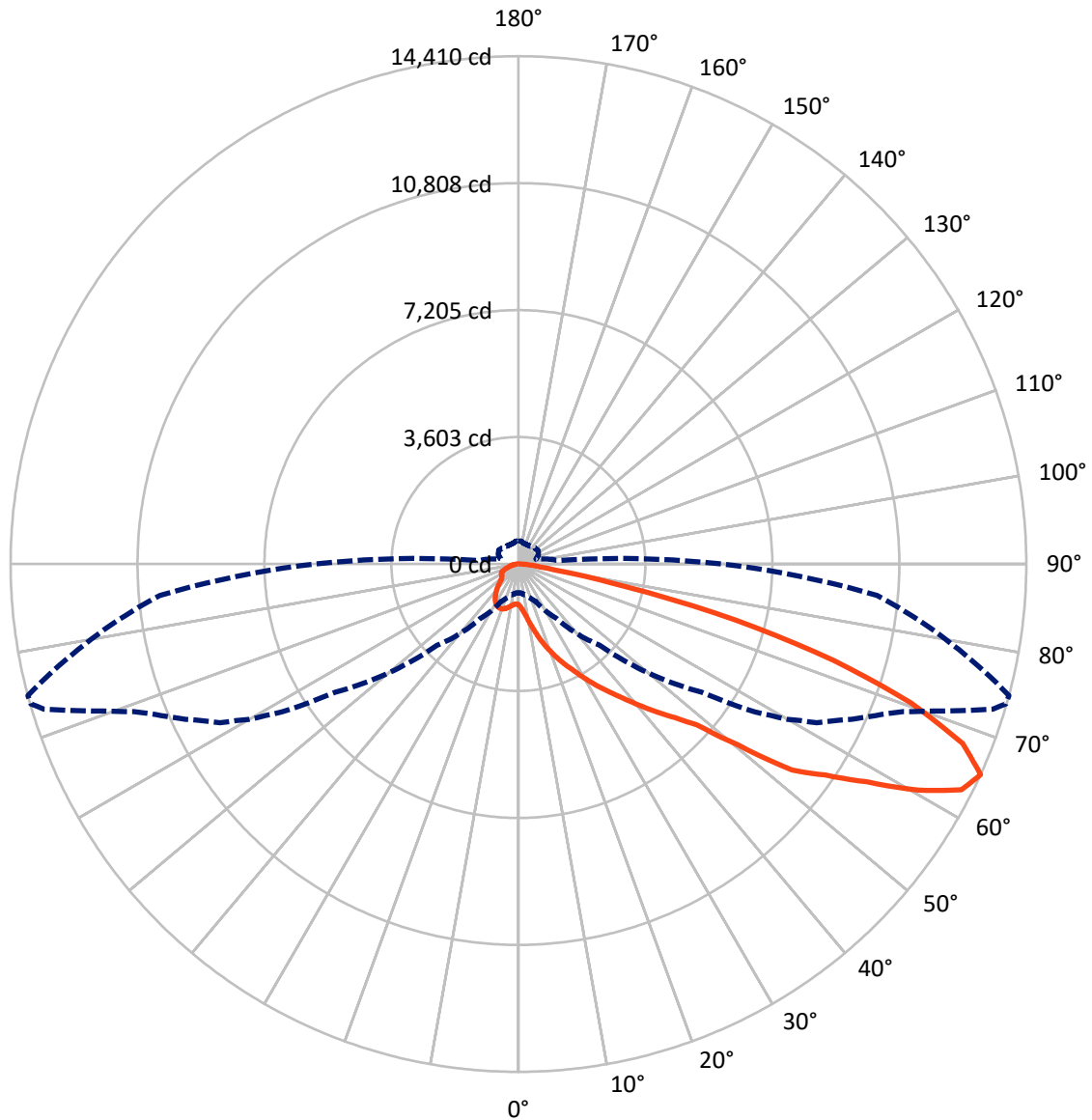
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2195.2	0.0	2195.2
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	12043.2	0.0	12043.2
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	14238.5	0.0	14238.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	1.0
10°-20°	558.8	3.9
20°-30°	1146.6	8.1
30°-40°	1929.0	13.5
40°-50°	2665.4	18.7
50°-60°	3327.2	23.4
60°-70°	2994.1	21.0
70°-80°	1255.1	8.8
80°-90°	219.3	1.5
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°	14238.5	100.0
0°-180°	14238.5	100.0



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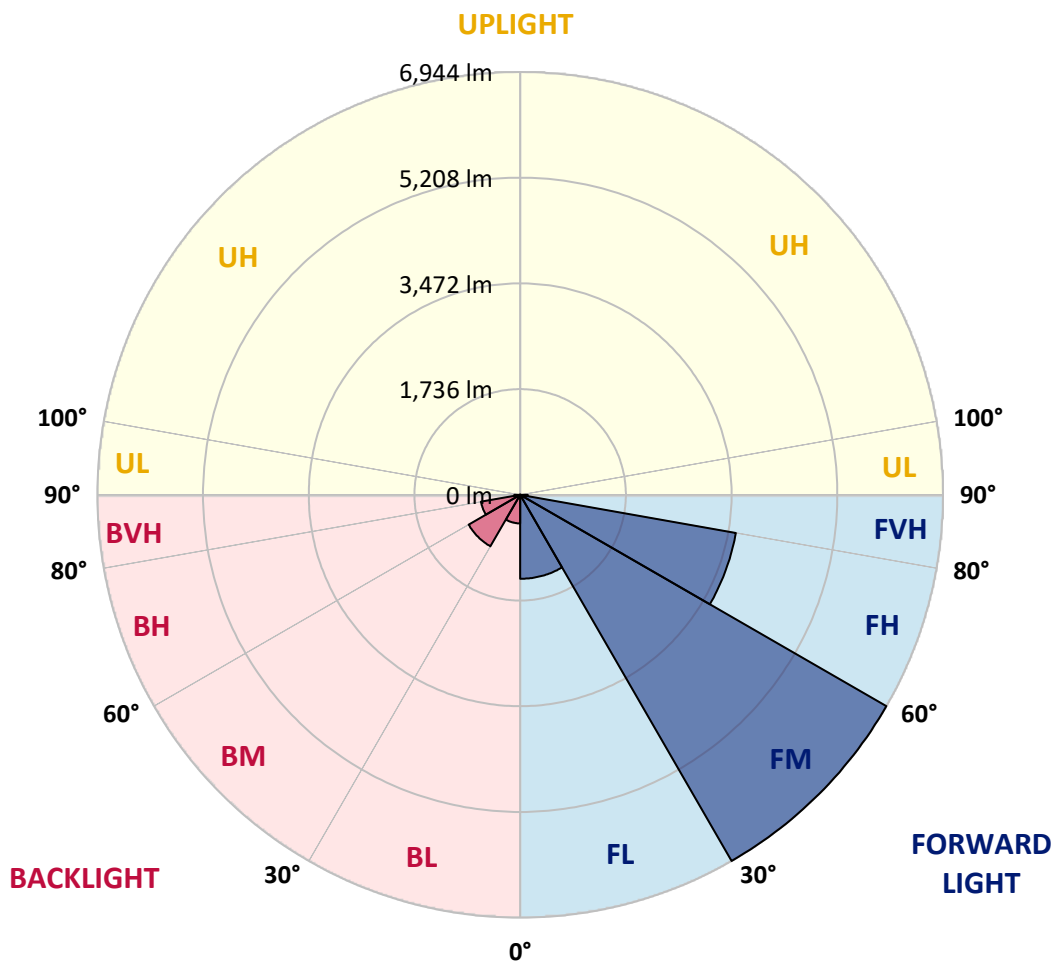
CATALOG NUMBER: GLEON-AF-02-LED-E1-T2R-1200

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1379.0	9.7			
FM	(30°-60°)	6944.4	48.8			
FH	(60°-80°)	3596.6	25.3			G2/5000
FVH	(80°-90°)	123.2	0.9			G2/225
BL	(0°-30°)	469.5	3.3	B1/500		
BM	(30°-60°)	977.1	6.9	B1/1000		
BH	(60°-80°)	652.6	4.6	B2/1000		G2/1000
BVH	(80°-90°)	96.0	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2
2.5°	1469.2	1453.0	1457.1	1430.1	1397.0	1354.0	1306.1	1305.4	1306.1	1301.4	1283.8
5°	2037.3	2017.8	2010.3	1949.7	1860.7	1734.0	1596.5	1581.7	1575.7	1560.2	1524.4
7.5°	2451.8	2441.0	2429.5	2383.7	2302.9	2161.3	1976.6	1944.9	1914.7	1907.2	1866.8
10°	2719.3	2716.7	2692.4	2680.2	2629.7	2507.0	2327.1	2296.7	2263.8	2252.3	2209.9
12.5°	2931.0	2930.2	2918.8	2922.2	2878.4	2789.4	2634.4	2606.8	2582.5	2547.5	2517.2
15°	3077.1	3077.9	3094.7	3113.6	3106.8	3046.9	2901.3	2889.1	2868.3	2844.0	2808.3
17.5°	3197.1	3200.5	3218.0	3252.4	3289.5	3284.8	3169.5	3159.4	3141.2	3108.2	3089.3
20°	3468.1	3480.9	3447.1	3447.1	3451.2	3469.4	3414.2	3406.0	3380.4	3363.0	3348.1
22.5°	3925.7	3940.5	3864.3	3786.9	3710.7	3655.4	3600.2	3610.3	3592.7	3580.6	3571.8
25°	4520.1	4531.6	4408.2	4277.5	4122.5	3920.3	3783.5	3777.5	3767.9	3760.6	3756.5
27.5°	5079.5	5084.2	4967.6	4776.2	4596.2	4305.8	3969.5	3962.1	3950.6	3936.4	3924.3
30°	5557.9	5556.6	5436.7	5254.0	5061.3	4739.7	4251.9	4229.0	4195.2	4156.9	4127.2
32.5°	5972.4	5970.4	5839.0	5649.6	5447.4	5169.8	4638.7	4591.5	4538.9	4464.2	4418.9
35°	6298.6	6297.3	6173.2	5975.8	5744.0	5574.8	5082.1	5024.2	4957.4	4857.1	4787.6
37.5°	6421.9	6421.9	6352.5	6217.7	6012.8	5896.9	5574.8	5504.7	5433.3	5319.3	5241.2
40°	6349.9	6351.2	6366.0	6341.1	6241.3	6152.3	6034.4	5992.7	5931.3	5828.9	5747.3
42.5°	6107.8	6115.3	6213.7	6334.3	6384.2	6370.0	6442.1	6423.3	6380.1	6301.3	6236.6
45°	5801.3	5824.2	5932.0	6159.8	6423.9	6558.0	6783.8	6785.8	6777.8	6735.3	6685.4
47.5°	5380.0	5412.3	5554.6	5862.5	6330.9	6740.7	7130.9	7149.1	7166.0	7138.4	7115.4
50°	4820.7	4859.1	5072.0	5480.5	6141.6	6930.1	7786.6	7868.8	7945.7	7936.3	7951.8
52.5°	4221.5	4266.7	4527.5	4982.4	5816.1	6973.9	8205.8	8339.9	8474.0	8583.9	8700.5
55°	3681.0	3656.7	3917.6	4396.7	5281.0	6776.4	8582.6	8744.3	8893.9	9028.7	9167.6
57.5°	2948.5	2988.2	3249.7	3723.5	4572.7	6219.0	8842.1	9078.6	9293.6	9516.6	9713.4
60°	2155.3	2195.0	2478.7	2959.9	3803.7	5374.0	8643.9	9002.4	9346.8	9688.5	9955.4
62.5°	1301.4	1331.1	1581.1	2039.4	2933.0	4371.8	7761.0	8231.5	8738.3	9146.6	9555.7
65°	810.1	827.0	919.2	1171.3	1883.7	3263.8	6341.1	6853.9	7399.8	7918.0	8343.3
67.5°	663.2	669.2	686.1	740.0	1034.5	2128.2	4719.6	5173.8	5666.4	6167.9	6641.0
70°	596.5	592.4	592.4	595.8	663.2	1144.4	3090.0	3385.9	3796.3	4232.4	4665.0
72.5°	538.5	534.4	527.0	516.9	541.1	698.2	1597.2	1820.3	2116.2	2503.7	2918.2
75°	483.9	478.5	469.7	457.0	473.7	527.0	766.9	860.6	1004.8	1211.1	1442.3
77.5°	427.3	420.5	412.5	403.0	424.6	409.8	449.5	483.2	538.5	604.6	691.4
80°	363.2	357.2	354.5	349.7	375.4	312.0	317.4	338.3	370.6	406.4	446.8
82.5°	284.4	284.4	295.2	297.2	325.5	224.4	237.2	255.4	272.3	291.1	310.1
85°	187.4	188.7	225.0	239.3	256.8	151.0	177.9	184.0	197.4	208.3	216.4
87.5°	58.6	63.3	137.5	152.3	147.6	85.6	109.1	111.9	121.3	128.7	135.4
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):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2
2.5°	1283.8	1275.7	1268.4	1267.6	1262.3	1254.9	1257.5	1246.1	1246.8	1240.7	1234.0
5°	1509.6	1504.2	1477.2	1469.9	1449.6	1436.8	1434.8	1407.9	1404.5	1389.0	1372.1
7.5°	1834.5	1817.0	1779.2	1761.0	1726.6	1701.0	1688.9	1653.2	1635.6	1595.2	1577.0
10°	2174.8	2152.6	2106.1	2080.5	2047.4	2006.3	1984.1	1932.1	1912.0	1874.9	1830.4
12.5°	2490.2	2468.0	2420.1	2400.6	2356.8	2313.0	2288.6	2230.0	2203.7	2144.4	2109.4
15°	2782.0	2759.7	2718.0	2697.7	2653.9	2618.2	2585.9	2527.9	2496.9	2441.7	2395.9
17.5°	3065.1	3041.4	3005.1	2986.9	2944.5	2908.0	2873.0	2818.4	2786.7	2731.5	2690.4
20°	3327.9	3310.4	3284.1	3259.8	3217.4	3184.3	3142.6	3095.3	3049.5	3009.1	2970.0
22.5°	3557.0	3550.3	3522.0	3511.2	3474.8	3446.5	3410.1	3363.6	3330.6	3279.4	3243.0
25°	3754.5	3752.5	3739.0	3735.6	3710.0	3683.0	3675.0	3636.6	3606.2	3561.1	3523.3
27.5°	3924.3	3926.4	3923.0	3932.4	3925.7	3913.5	3914.2	3901.4	3883.8	3846.2	3813.2
30°	4113.0	4102.2	4108.3	4121.8	4125.9	4127.2	4149.4	4156.9	4155.5	4130.6	4114.4
32.5°	4379.9	4354.3	4330.7	4328.7	4342.1	4347.5	4385.3	4404.8	4421.7	4427.7	4430.4
35°	4720.2	4669.1	4619.9	4593.6	4570.6	4576.7	4603.7	4635.3	4672.4	4698.0	4728.3
37.5°	5148.8	5086.2	4999.3	4937.3	4921.7	4888.1	4905.6	4930.5	4966.9	5006.6	5059.2
40°	5668.5	5573.4	5475.8	5393.5	5349.0	5287.0	5286.3	5281.6	5303.9	5340.9	5415.1
42.5°	6168.5	6084.3	5980.5	5894.2	5836.2	5753.4	5736.5	5692.7	5702.8	5735.2	5807.3
45°	6636.9	6567.5	6504.1	6404.4	6355.2	6265.6	6237.2	6185.4	6156.4	6171.3	6243.4
47.5°	7090.5	7046.0	6979.9	6915.2	6877.5	6797.3	6760.9	6723.9	6686.8	6685.4	6760.9
50°	7974.7	7951.1	7872.9	7805.5	7823.7	7725.3	7731.4	7631.6	7676.8	7682.2	7840.6
52.5°	8805.7	8887.8	8945.8	9016.6	9062.4	9071.1	9101.5	9146.6	9201.2	9309.1	9456.0
55°	9281.4	9384.6	9444.5	9498.4	9587.4	9606.2	9656.9	9716.8	9764.7	9886.0	10010.6
57.5°	9846.8	10038.2	10131.3	10216.8	10336.8	10382.6	10466.9	10532.3	10594.3	10737.8	10888.8
60°	10195.3	10428.5	10617.8	10753.3	10903.6	11011.5	11138.8	11241.2	11386.8	11558.6	11783.8
62.5°	9918.3	10260.7	10512.0	10744.6	10948.7	11155.0	11337.6	11529.0	11750.0	12010.2	12359.3
65°	8815.1	9163.5	9594.2	9835.4	10105.6	10423.8	10701.4	11011.5	11312.7	11691.4	12207.7
67.5°	7096.5	7501.6	7985.5	8228.7	8539.4	8894.6	9205.9	9584.7	9936.5	10395.4	11033.6
70°	5115.2	5638.8	6045.8	6299.9	6662.5	7028.5	7329.0	7769.8	8061.0	8531.3	9191.1
72.5°	3239.0	3652.0	4150.7	4470.9	4793.0	5163.7	5471.0	5851.1	6122.7	6551.3	7149.1
75°	1741.5	2046.1	2484.1	2788.1	3133.1	3449.9	3809.8	4064.5	4265.3	4604.3	5089.6
77.5°	816.1	1001.5	1223.1	1457.1	1690.9	1934.9	2172.1	2378.4	2464.6	2658.6	2945.1
80°	495.3	555.4	620.0	692.1	789.8	868.7	973.1	1048.6	1054.0	1115.3	1203.0
82.5°	330.9	353.1	372.7	390.9	415.8	435.4	457.6	483.9	494.7	508.8	537.2
85°	225.8	236.5	240.6	252.1	249.4	256.0	264.8	273.6	278.3	277.6	290.4
87.5°	138.8	144.2	146.9	149.7	147.6	144.8	148.9	153.6	155.0	151.0	152.3
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):**

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2
2.5°	1235.3	1229.3	1223.1	1219.2	1217.8	1182.1	1166.6	1156.4	1134.9	1117.4	1103.3
5°	1362.7	1349.9	1339.8	1327.7	1320.9	1230.6	1197.6	1174.7	1136.9	1114.7	1094.5
7.5°	1567.6	1531.9	1511.0	1487.4	1467.1	1304.1	1249.4	1213.7	1161.2	1131.6	1108.7
10°	1800.1	1763.1	1730.0	1693.6	1661.9	1401.7	1322.3	1267.0	1197.6	1159.2	1128.8
12.5°	2059.5	2023.2	1981.4	1934.9	1894.4	1525.8	1415.3	1336.4	1241.4	1190.2	1147.8
15°	2366.2	2302.2	2251.6	2197.7	2150.5	1674.1	1523.8	1414.6	1287.9	1218.4	1161.9
17.5°	2651.3	2583.9	2515.1	2468.0	2413.3	1840.5	1632.9	1494.1	1326.3	1236.6	1164.5
20°	2929.6	2856.2	2796.8	2733.5	2676.2	2013.1	1749.6	1564.2	1351.2	1237.4	1147.8
22.5°	3174.9	3129.1	3063.0	2994.3	2936.4	2185.5	1858.7	1623.5	1360.6	1221.8	1118.1
25°	3453.9	3405.4	3324.5	3266.6	3201.8	2361.5	1965.9	1669.4	1355.3	1192.9	1072.3
27.5°	3751.8	3697.9	3615.0	3554.3	3476.2	2544.1	2064.2	1702.4	1335.1	1145.7	1010.9
30°	4062.4	4013.2	3931.7	3870.4	3791.6	2737.5	2174.1	1724.6	1294.6	1080.3	939.5
32.5°	4396.0	4355.0	4274.1	4210.1	4125.9	2947.1	2276.6	1731.3	1233.3	1002.8	864.0
35°	4712.8	4684.5	4616.5	4556.4	4468.9	3145.3	2385.0	1728.0	1160.5	917.9	795.2
37.5°	5069.3	5052.5	5018.8	4942.6	4835.5	3414.2	2515.1	1713.9	1071.5	833.7	742.7
40°	5449.5	5450.8	5414.4	5362.5	5262.8	3740.3	2670.1	1686.2	974.5	759.5	694.8
42.5°	5851.8	5872.7	5855.2	5818.0	5722.4	4069.2	2855.5	1652.5	880.1	687.4	647.6
45°	6312.7	6338.4	6365.3	6310.7	6217.7	4503.2	3099.4	1608.7	778.4	627.5	615.3
47.5°	6844.5	6885.0	6909.2	6909.8	6816.8	5041.0	3495.7	1582.4	688.0	587.0	599.8
50°	7966.5	7979.4	8036.7	8136.4	8064.9	6285.8	4187.9	1566.2	626.8	562.1	588.3
52.5°	9583.3	9724.2	9823.3	9816.5	9719.5	7076.4	4569.3	1482.7	590.3	552.6	583.0
55°	10241.8	10417.7	10601.0	10649.5	10574.0	7750.9	4929.8	1399.1	572.9	559.3	585.0
57.5°	11119.3	11415.8	11667.2	11772.9	11663.8	8614.3	5404.2	1355.3	567.4	577.6	597.8
60°	12144.3	12510.9	12841.2	13031.2	13031.2	9606.2	5896.3	1337.1	560.1	604.6	619.4
62.5°	12802.7	13341.2	13839.9	14118.3	14110.2	10297.0	6114.6	1275.1	543.2	623.4	649.0
65°	12805.4	13445.7	14081.2	14393.9	14410.1	10212.1	5754.1	1126.2	512.2	626.0	678.6
67.5°	11738.0	12420.7	13161.3	13511.0	13591.9	9400.7	4981.1	926.0	461.7	599.1	689.5
70°	9913.6	10580.1	11336.2	11680.0	11823.5	8013.8	4011.9	713.7	396.9	539.8	667.2
72.5°	7810.2	8464.0	8990.3	9241.6	9353.6	6125.4	2921.5	539.2	325.5	454.9	607.2
75°	5529.7	6020.3	6299.9	6355.9	6373.4	3692.4	1775.1	401.0	268.2	353.8	512.9
77.5°	3121.0	3331.2	3308.3	3333.3	3125.7	1425.4	773.0	287.1	221.1	268.9	397.6
80°	1218.4	1256.2	1180.1	1156.4	1060.8	530.4	341.1	200.2	176.6	203.6	278.3
82.5°	537.2	554.6	538.5	542.5	518.9	273.6	204.2	144.8	134.8	148.9	184.6
85°	295.8	301.3	299.9	308.6	295.8	109.1	97.1	89.0	94.3	101.1	118.7
87.5°	144.2	145.6	140.9	148.2	143.5	55.2	47.9	50.5	55.2	56.6	56.6
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):**

	135°	145°	155°	165°	175°	180°
0°	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2
2.5°	1093.1	1087.7	1088.4	1087.1	1084.3	1084.3
5°	1083.7	1078.3	1078.3	1077.0	1073.6	1074.3
7.5°	1093.1	1084.3	1081.0	1076.2	1071.5	1071.5
10°	1103.9	1088.4	1079.0	1070.9	1064.8	1064.8
12.5°	1111.9	1087.7	1072.3	1061.4	1055.4	1055.4
15°	1114.7	1083.0	1061.4	1048.6	1043.2	1042.6
17.5°	1105.9	1064.8	1038.5	1023.7	1017.0	1015.0
20°	1079.0	1031.7	1000.1	983.3	973.8	970.5
22.5°	1038.5	984.6	947.6	930.1	917.9	915.8
25°	981.9	923.9	887.6	870.7	864.0	861.9
27.5°	915.8	861.9	830.9	820.2	814.1	813.5
30°	853.2	807.4	784.5	776.4	769.0	767.6
32.5°	794.5	765.6	756.8	745.3	727.8	725.8
35°	752.8	750.1	744.0	718.4	696.8	690.8
37.5°	727.2	752.1	721.1	670.5	655.1	653.8
40°	712.4	731.2	678.0	660.4	661.8	660.4
42.5°	678.6	698.2	679.3	671.3	676.7	678.0
45°	645.0	666.6	689.5	684.0	696.8	696.8
47.5°	626.0	658.5	688.8	688.8	707.7	714.3
50°	604.6	651.7	678.0	687.4	702.3	696.8
52.5°	603.1	640.3	662.5	679.3	686.1	680.0
55°	605.2	630.9	647.0	665.8	673.9	674.6
57.5°	607.9	625.4	636.2	645.0	669.2	669.2
60°	614.6	620.7	626.8	631.5	663.2	663.8
62.5°	625.4	616.0	614.6	619.4	659.8	657.0
65°	642.3	609.3	599.1	603.8	656.4	648.3
67.5°	665.2	599.1	579.6	583.0	653.8	636.2
70°	686.1	583.0	555.4	552.0	628.1	597.1
72.5°	688.0	564.1	521.6	511.5	545.8	516.3
75°	654.4	551.3	484.6	454.9	450.8	446.8
77.5°	589.7	543.9	441.4	395.0	386.9	389.5
80°	493.4	516.3	389.5	334.3	378.1	373.4
82.5°	368.7	455.6	330.9	295.8	295.2	260.9
85°	204.9	355.2	269.5	221.8	154.4	149.7
87.5°	57.3	197.4	188.7	125.3	85.6	89.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)