

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: P191342

Luminaire Tested: **GLEON-AF-04-LED-E1-SLR-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191342  
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-SLR-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23679.3 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G4

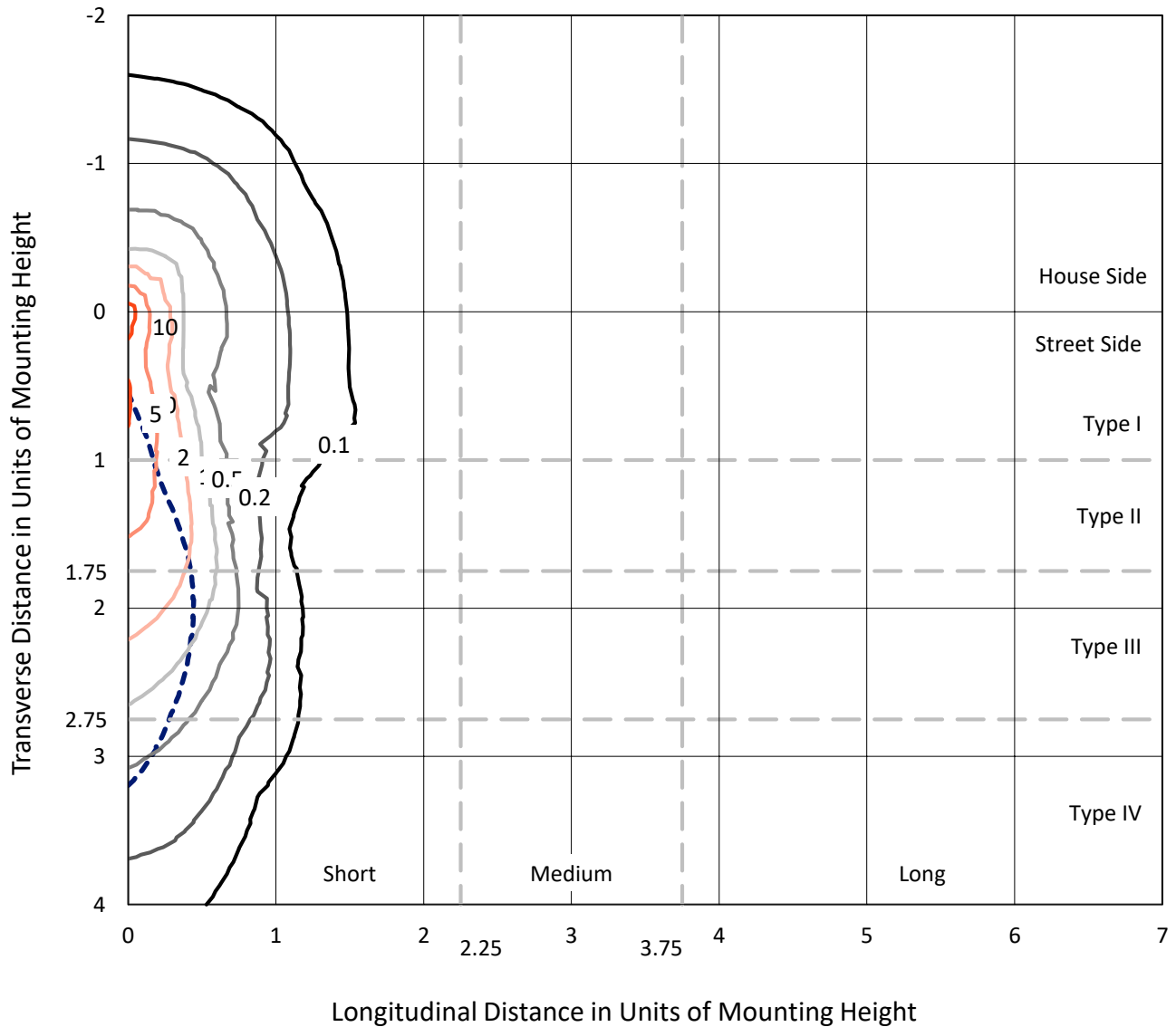
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

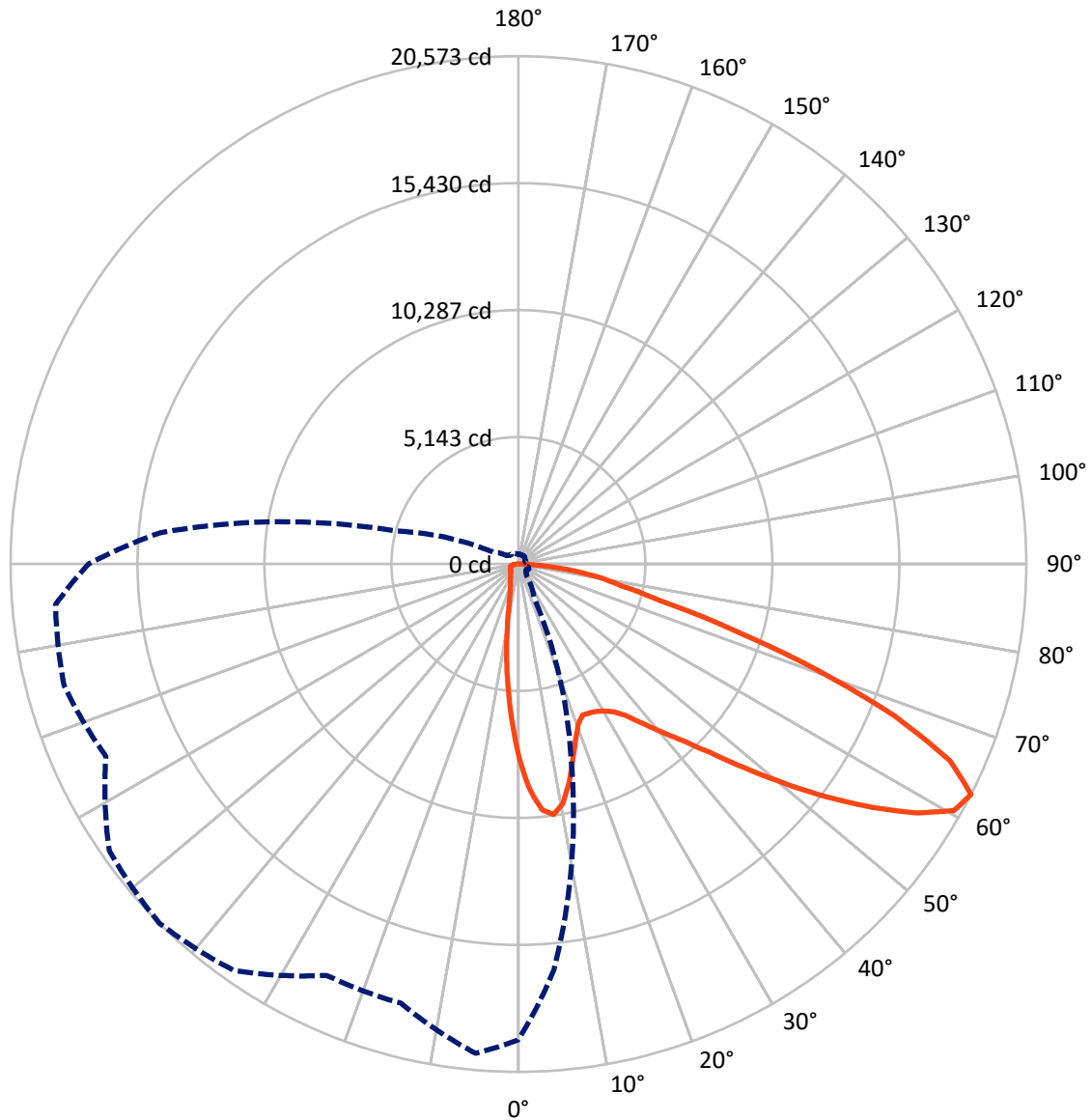
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3918.6	0.0	3918.6
	% Fixture	16.5	0.0	16.5
<b>Street Side</b>	Lumens	19760.7	0.0	19760.7
	% Fixture	83.5	0.0	83.5
<b>Total</b>	Lumens	23679.3	0.0	23679.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	582.4	2.5
10°-20°	1067.9	4.5
20°-30°	1557.0	6.6
30°-40°	2398.0	10.1
40°-50°	3529.3	14.9
50°-60°	5176.7	21.9
60°-70°	5786.8	24.4
70°-80°	2833.1	12.0
80°-90°	748.0	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°	23679.3	100.0
0°-180°	23679.3	100.0



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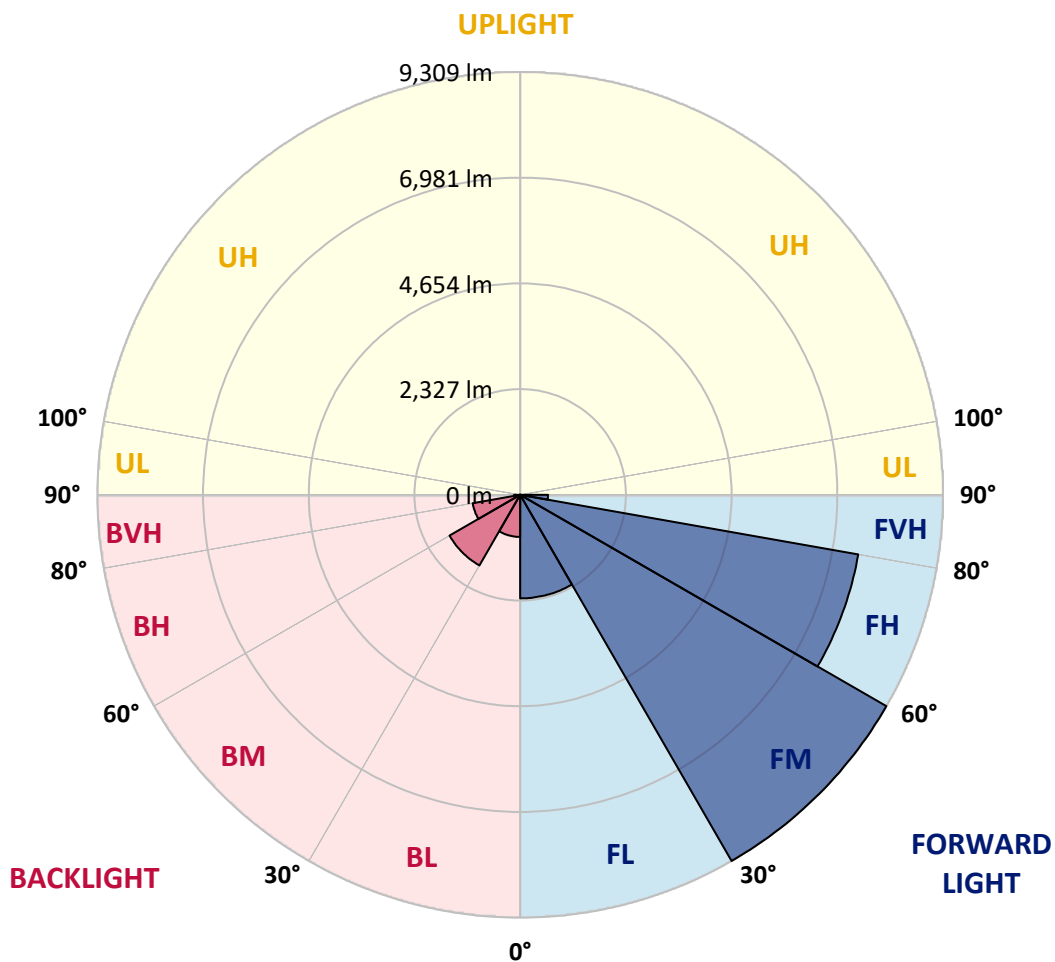
CATALOG NUMBER: GLEON-AF-04-LED-E1-SLR-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2280.2	9.6			
FM	(30°-60°)	9308.5	39.3			
FH	(60°-80°)	7557.6	31.9			G4/12000
FVH	(80°-90°)	614.3	2.6			G4/750
BL	(0°-30°)	927.1	3.9	B2/1000		
BM	(30°-60°)	1795.5	7.6	B2/2500		
BH	(60°-80°)	1062.3	4.5	B3/2500		G3/2500
BVH	(80°-90°)	133.7	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	8312.5	8143.3	7862.2	7569.3	7390.9	7182.6	7020.0	6876.8	6590.4	6534.4	6585.2
5°	7816.6	7476.8	6947.1	6413.4	6058.0	5676.7	5379.8	5141.7	4778.5	4714.7	4791.5
7.5°	7021.2	6615.1	5914.8	5234.0	4731.7	4255.2	3935.0	3679.9	3396.1	3273.7	3281.5
10°	6335.2	5877.1	5049.2	4308.6	3897.2	3575.7	3306.3	3044.6	2757.0	2568.2	2516.2
12.5°	5951.3	5424.1	4470.0	3808.8	3427.3	3088.9	2798.6	2518.7	2211.5	2018.9	1964.3
15°	5884.9	5312.2	4252.6	3488.5	3010.7	2582.5	2240.2	1927.8	1611.5	1455.2	1422.7
17.5°	6172.6	5512.6	4182.3	3203.5	2619.0	2090.5	1670.1	1321.2	1063.5	985.4	978.9
20°	6724.5	5897.9	4173.2	2935.3	2232.4	1612.8	1163.7	909.9	796.7	774.5	775.8
22.5°	7498.9	6495.4	4285.1	2733.5	1877.0	1202.8	874.7	761.5	717.2	696.4	696.4
25°	8501.2	7318.1	4542.8	2586.4	1568.5	960.7	771.9	704.2	662.6	648.2	650.8
27.5°	9472.3	8118.5	4842.2	2470.6	1366.8	872.2	731.5	670.3	633.9	619.6	626.1
30°	10229.9	8829.3	5092.1	2313.1	1264.0	847.4	745.8	683.4	631.4	609.2	610.5
32.5°	10857.3	9451.6	5301.7	2199.9	1172.8	726.3	643.0	615.7	609.2	583.2	570.1
35°	11659.2	10129.7	5442.3	2202.4	1129.8	648.2	572.8	524.6	489.5	459.5	459.5
37.5°	12599.0	10908.1	5592.1	2232.4	1114.2	602.7	548.0	499.8	467.3	438.6	433.4
40°	13528.3	11670.8	5728.7	2261.0	1105.1	575.3	528.5	484.3	454.3	425.6	417.9
42.5°	14318.4	12298.3	5851.1	2275.3	1073.9	572.8	514.1	473.8	445.2	413.9	406.1
45°	14903.0	12824.1	5982.5	2297.4	1042.7	583.2	514.1	472.5	437.4	407.4	399.7
47.5°	15424.9	13441.2	6202.6	2297.4	1004.9	563.6	531.1	473.8	436.1	404.8	398.3
50°	16124.0	14287.2	6619.0	2244.0	951.5	542.8	559.8	468.6	424.3	399.7	391.8
52.5°	17087.2	15371.6	7280.3	2151.7	869.5	502.5	555.8	466.0	412.7	386.6	377.5
55°	18226.1	16532.6	8001.4	2043.7	747.2	473.8	536.3	459.5	399.7	371.0	361.8
57.5°	19115.2	17331.9	8509.1	1877.0	640.5	458.2	475.2	453.0	384.0	354.0	346.3
60°	19469.2	17300.7	8648.3	1654.4	588.4	445.2	415.2	507.7	371.0	341.1	331.9
62.5°	19277.9	16501.4	8257.9	1498.2	576.6	428.2	389.2	469.9	360.6	331.9	319.0
65°	18394.1	15085.1	7223.1	1456.6	610.5	411.3	372.3	368.4	346.3	319.0	305.9
67.5°	16468.9	12968.7	5783.4	1460.5	653.5	394.4	355.4	337.2	326.7	304.6	292.9
70°	13413.9	10253.3	4311.1	1470.9	675.6	374.9	337.2	317.6	305.9	283.8	276.0
72.5°	9862.9	7902.5	3131.9	1403.2	679.4	352.7	312.4	295.5	283.8	260.3	253.8
75°	6747.9	6045.0	2172.5	1162.4	592.3	321.5	285.1	269.4	261.7	233.0	229.1
77.5°	4929.5	4537.7	1390.2	863.1	456.8	282.4	251.2	239.5	234.3	203.1	197.8
80°	3955.9	3590.0	869.5	591.0	334.5	236.9	210.8	204.4	199.2	167.9	164.0
82.5°	2744.0	2404.2	558.4	384.0	251.2	183.5	166.6	164.0	156.2	127.6	123.7
85°	1447.5	1305.6	354.0	261.7	182.2	126.2	115.9	115.9	111.9	84.6	82.0
87.5°	184.8	300.6	179.6	136.7	100.2	56.0	56.0	54.6	58.6	48.2	41.6
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	6465.5	6528.0	6468.0	6472.0	6538.4	6736.2	6826.0	6900.2	6979.6	7031.7	7055.1
5°	4686.0	4831.8	4881.3	4985.5	5139.0	5391.6	5491.8	5564.6	5612.8	5641.5	5653.2
7.5°	3204.7	3293.3	3392.2	3560.1	3894.7	4043.0	4109.4	4092.5	4037.8	4018.3	3998.7
10°	2415.9	2380.8	2362.5	2455.0	2725.8	2875.4	2922.3	2876.7	2846.8	2853.3	2885.8
12.5°	1871.8	1810.6	1736.5	1726.0	1904.3	2038.4	2068.4	2071.0	2125.7	2173.8	2245.4
15°	1364.2	1357.7	1321.2	1299.0	1400.6	1510.0	1523.0	1546.4	1595.9	1631.0	1693.5
17.5°	962.0	997.1	1025.7	1040.0	1116.9	1194.9	1180.6	1168.9	1159.8	1159.8	1189.7
20°	775.8	799.2	835.6	877.3	955.4	1010.1	975.0	928.1	894.3	883.8	887.7
22.5°	699.0	717.2	738.1	774.5	844.8	882.5	844.8	811.0	777.1	765.4	761.5
25°	659.9	683.4	702.9	730.3	782.4	808.3	771.9	747.2	726.3	712.0	701.6
27.5°	637.8	658.7	663.9	676.9	721.2	744.6	726.3	716.0	702.9	689.9	676.9
30°	614.4	610.5	601.4	602.7	637.8	661.2	659.9	662.6	661.2	657.3	654.8
32.5°	561.0	553.2	545.4	553.2	585.7	606.6	607.8	613.1	613.1	611.8	622.2
35°	467.3	481.6	490.7	514.1	553.2	571.4	563.6	550.7	527.2	512.9	511.6
37.5°	432.2	434.8	450.4	482.9	525.9	542.8	531.1	501.1	485.5	482.9	486.8
40°	415.2	417.9	427.0	456.8	499.8	516.8	506.4	484.3	469.9	468.6	475.2
42.5°	403.6	406.1	411.3	432.2	467.3	488.2	489.5	473.8	456.8	458.2	464.7
45°	397.0	398.3	397.0	407.4	440.0	464.7	475.2	464.7	450.4	453.0	460.8
47.5°	395.7	391.8	386.6	389.2	423.1	447.7	460.8	456.8	450.4	453.0	459.5
50°	390.5	381.4	374.9	373.6	407.4	433.4	445.2	445.2	447.7	453.0	459.5
52.5°	374.9	364.5	364.5	360.6	397.0	421.8	429.5	430.9	434.8	443.9	453.0
55°	355.4	351.5	355.4	348.8	389.2	412.7	416.5	419.1	421.8	429.5	442.5
57.5°	338.4	333.3	342.4	339.7	382.7	403.6	403.6	408.8	408.8	419.1	429.5
60°	329.3	319.0	322.8	325.4	373.6	395.7	393.1	398.3	400.9	410.0	417.9
62.5°	317.6	308.5	308.5	315.0	363.1	384.0	382.7	386.6	397.0	399.7	407.4
65°	303.3	299.4	295.5	303.3	352.7	371.0	372.3	377.5	386.6	389.2	395.7
67.5°	289.0	290.3	282.4	290.3	343.6	357.9	357.9	368.4	372.3	377.5	384.0
70°	273.3	274.7	268.1	277.2	337.2	343.6	342.4	356.7	359.3	363.1	369.7
72.5°	253.8	253.8	251.2	264.2	326.7	329.3	326.7	338.4	339.7	343.6	346.3
75°	233.0	233.0	230.4	248.6	320.2	313.7	305.9	315.0	317.6	320.2	320.2
77.5°	205.7	208.3	208.3	230.4	298.1	307.2	281.2	286.3	290.3	291.5	287.7
80°	171.9	178.3	181.0	209.6	249.9	283.8	251.2	255.1	256.5	256.5	251.2
82.5°	131.4	143.2	149.7	181.0	191.4	238.2	218.7	222.6	218.7	210.8	208.3
85°	91.1	106.7	114.6	138.0	144.4	183.5	182.2	182.2	174.4	164.0	162.8
87.5°	49.5	58.6	63.8	82.0	98.9	123.7	134.1	130.1	123.7	117.1	118.5
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°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	7177.4	7354.5	7636.9	7853.1	8070.5	8280.0	8506.4	8679.6	8826.7	8884.0	9058.4
5°	5771.7	5993.0	6259.7	6741.5	7082.4	7458.6	7893.4	8468.7	8690.1	8995.9	9497.1
7.5°	4080.8	4281.3	4710.8	5100.0	5583.0	6115.3	6702.4	7496.4	7786.7	8277.4	9093.5
10°	3047.3	3280.2	3625.1	3953.2	4378.8	4923.0	5597.2	6485.0	6837.7	7370.2	8309.9
12.5°	2455.0	2729.6	3095.3	3403.9	3733.3	4117.2	4772.0	5745.6	6218.1	6684.2	7634.4
15°	1886.1	2173.8	2513.6	2905.4	3268.5	3682.4	4368.4	5433.2	5977.3	6462.8	7273.8
17.5°	1305.6	1551.6	1979.8	2388.6	2853.3	3383.1	4256.5	5499.6	6149.2	6708.8	7336.3
20°	925.5	1066.1	1417.5	1891.3	2470.6	3135.8	4235.6	5848.4	6693.3	7332.4	7737.2
22.5°	778.4	830.4	1034.8	1469.6	2138.7	2950.9	4308.6	6337.9	7427.4	8243.6	8376.3
25°	709.4	740.6	847.4	1153.3	1843.2	2816.8	4554.6	7066.9	8335.9	9154.7	9131.3
27.5°	671.7	704.2	774.5	973.6	1620.6	2733.5	4800.6	7931.1	9374.7	10144.0	9852.4
30°	659.9	704.2	778.4	917.7	1461.8	2602.1	5002.3	8690.1	10174.0	10811.8	10180.4
32.5°	650.8	657.3	691.2	791.5	1310.8	2448.4	5139.0	9370.8	10956.2	11447.0	10652.9
35°	525.9	558.4	613.1	709.4	1222.3	2356.1	5139.0	9957.8	11726.8	12088.7	11103.3
37.5°	506.4	535.0	583.2	665.1	1172.8	2310.4	5036.2	10524.1	12514.4	12816.3	11474.3
40°	495.9	519.4	565.0	631.4	1151.9	2258.4	4886.5	11023.9	13283.6	13545.3	11820.6
42.5°	488.2	508.9	551.9	610.5	1124.6	2201.2	4765.4	11424.8	13951.4	14167.5	12151.2
45°	484.3	506.4	553.2	620.9	1070.0	2125.7	4725.1	11858.4	14500.7	14686.9	12509.2
47.5°	484.3	510.2	559.8	643.0	1004.9	2047.5	4851.3	12429.8	15020.1	15111.2	12930.9
50°	480.3	508.9	578.0	620.9	909.9	1948.6	5148.1	13149.6	15582.4	15592.8	13464.6
52.5°	472.5	506.4	622.2	607.8	800.6	1818.4	5549.1	14073.8	16414.2	16476.7	14300.2
55°	463.4	502.5	610.5	578.0	710.7	1663.5	5877.1	15197.2	17583.1	17756.3	15529.0
57.5°	451.6	497.3	591.0	536.3	652.1	1464.4	5995.5	16019.8	18399.3	18834.1	16914.1
60°	441.3	493.4	533.7	511.6	615.7	1296.5	5766.5	15857.1	18343.2	19280.5	18141.5
62.5°	430.9	497.3	486.8	495.9	598.7	1188.5	5167.6	14554.1	17415.2	18819.7	19051.4
65°	419.1	462.1	459.5	482.9	594.8	1145.5	4283.8	12600.3	15621.5	17363.2	19266.2
67.5°	403.6	427.0	440.0	466.0	607.8	1107.8	3457.3	10393.9	13128.8	15180.2	18146.7
70°	386.6	406.1	420.4	445.2	600.1	1090.8	2875.4	8196.7	10417.3	12441.4	15937.8
72.5°	364.5	381.4	394.4	417.9	592.3	1081.7	2428.9	6600.8	7777.5	9242.0	12958.2
75°	338.4	354.0	363.1	386.6	567.5	990.6	1909.5	5585.5	5819.8	6429.0	10321.1
77.5°	308.5	320.2	328.1	354.0	502.5	824.0	1381.1	4308.6	4519.4	4667.8	7912.9
80°	273.3	285.1	289.0	313.7	416.5	644.4	900.8	3182.6	3380.4	3414.3	5167.6
82.5°	233.0	244.7	244.7	268.1	341.1	463.4	591.0	2180.3	2219.4	2334.0	3652.5
85°	187.4	196.5	196.5	208.3	264.2	346.3	406.1	1094.8	1083.0	1236.6	3164.4
87.5°	134.1	140.6	147.1	149.7	188.7	229.1	244.7	333.3	219.9	252.6	2031.9
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°	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1	8000.1
2.5°	9189.9	9264.0	9188.6	9133.9	8898.3	8704.4	8445.3	8312.5
5°	9878.4	10067.2	10003.4	9774.3	9282.3	8729.0	8100.3	7816.6
7.5°	9795.2	10233.8	10244.2	9815.9	9091.0	8276.1	7424.8	7021.2
10°	9146.9	9707.9	9868.0	9452.8	8683.5	7772.4	6796.1	6335.2
12.5°	8423.2	8972.5	9094.9	8951.6	8308.6	7393.6	6403.0	5951.3
15°	7830.9	8076.9	8222.7	8347.7	7987.1	7242.6	6380.9	5884.9
17.5°	7470.3	7443.0	7484.6	7702.0	7763.3	7415.7	6719.3	6172.6
20°	7340.2	6922.3	6912.0	7211.3	7657.8	7828.3	7380.5	6724.5
22.5°	7411.8	6734.9	6649.0	7004.3	7713.8	8423.2	8247.4	7498.9
25°	7659.1	6750.6	6681.5	7025.2	7916.8	9057.1	9183.3	8501.2
27.5°	8048.3	6849.5	6758.3	7111.0	8186.3	9589.4	10104.9	9472.3
30°	8418.0	7021.2	6908.0	7280.3	8432.3	9800.4	10669.9	10229.9
32.5°	8867.0	7342.7	7143.7	7591.4	8736.9	10136.2	11173.6	10857.3
35°	9307.0	7801.0	7553.7	8071.7	9076.6	10554.0	11749.0	11659.2
37.5°	9789.9	8399.8	8195.4	8692.6	9541.4	10948.4	12483.2	12599.0
40°	10305.4	9193.8	8951.6	9598.6	10262.4	11443.0	13249.8	13528.3
42.5°	10824.8	10075.0	9786.1	10442.1	11055.1	11931.2	13905.9	14318.4
45°	11419.6	11031.7	10895.0	11604.5	11816.6	12395.9	14390.1	14903.0
47.5°	12112.1	12117.4	12337.3	12621.1	12584.6	12921.8	14876.9	15424.9
50°	12920.5	13472.4	13958.0	14146.7	13376.1	13486.7	15552.5	16124.0
52.5°	13891.6	15093.0	15694.4	15570.7	14228.6	14176.6	16622.4	17087.2
55°	15106.0	16808.6	17406.1	17317.5	15208.8	15116.5	17955.3	18226.1
57.5°	16511.9	18470.8	19020.1	18621.9	16385.5	16147.4	19057.9	19115.2
60°	17747.1	19788.2	20269.8	19828.5	17572.7	17244.7	19746.5	19469.2
62.5°	18434.4	20234.6	20573.1	20097.9	18386.2	18413.6	19897.5	19277.9
65°	18127.2	19106.1	19215.4	19176.3	18176.7	19091.7	19354.7	18394.1
67.5°	16445.5	16252.7	16436.4	16690.2	16380.3	18198.8	17851.2	16468.9
70°	13482.8	12424.6	12790.4	12960.8	13101.4	15660.6	15493.9	13413.9
72.5°	10161.0	8704.4	8993.3	8958.2	9609.0	12561.2	12049.6	9862.9
75°	7199.6	5901.8	5938.2	5923.9	6704.9	9827.7	8725.2	6747.9
77.5°	5037.5	4276.0	4295.6	4376.3	4507.7	7411.8	6233.8	4929.5
80°	3463.8	3245.1	3353.1	3359.7	3124.0	4978.9	4605.3	3955.9
82.5°	2579.9	2255.8	2229.8	2267.6	2448.4	4033.9	3539.3	2744.0
85°	2112.6	1335.6	1073.9	1345.9	2169.9	3994.8	2350.8	1447.5
87.5°	1189.7	633.9	286.3	531.1	865.6	2645.0	679.4	184.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)