

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: P191416

Luminaire Tested: **GLEON-AF-08-LED-E1-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191416  
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-08-LED-E1-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 50839.6 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

Input Watts (W): 445  
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

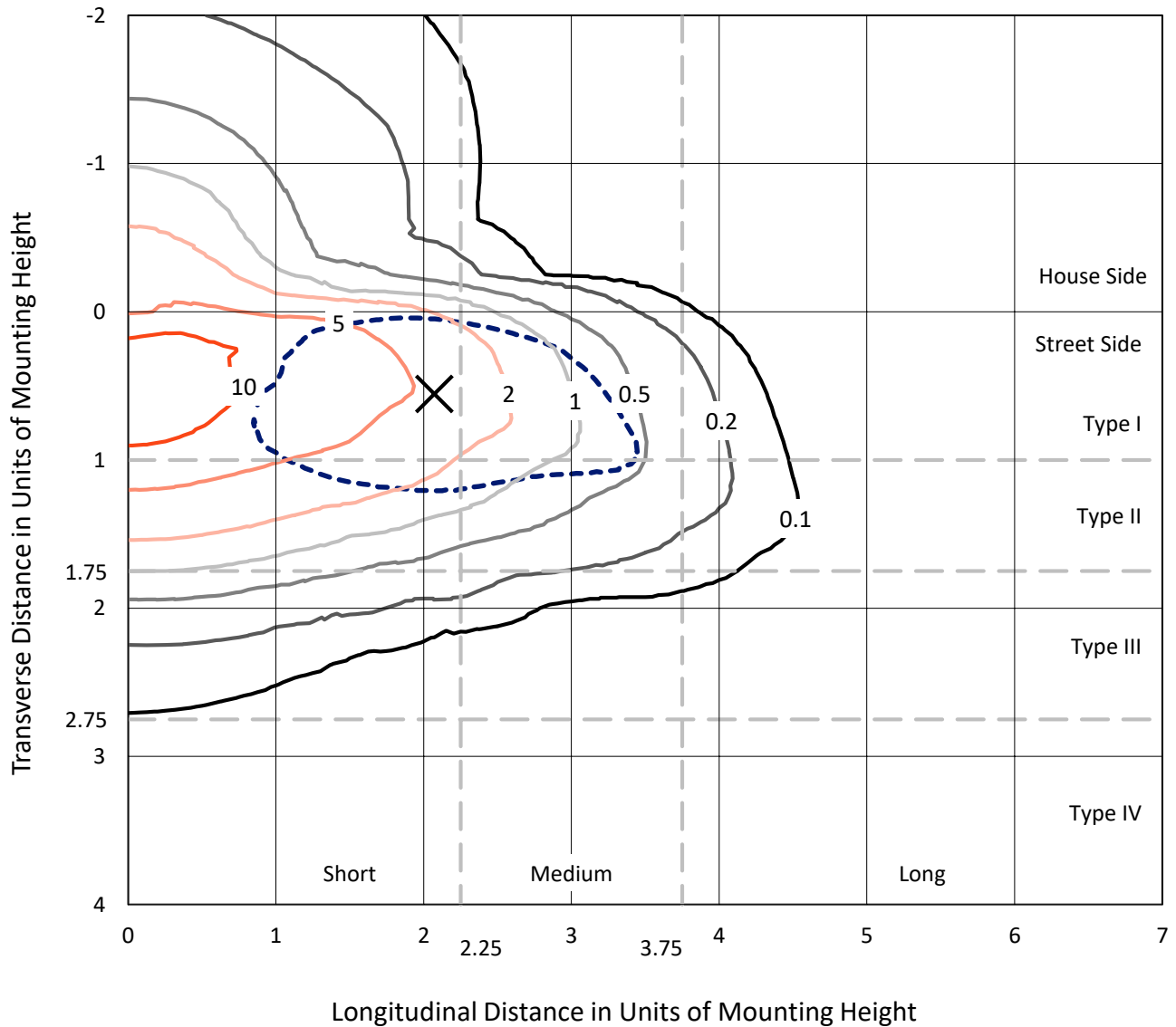


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### Iso-Footcandle Lines of Horizontal Illumination

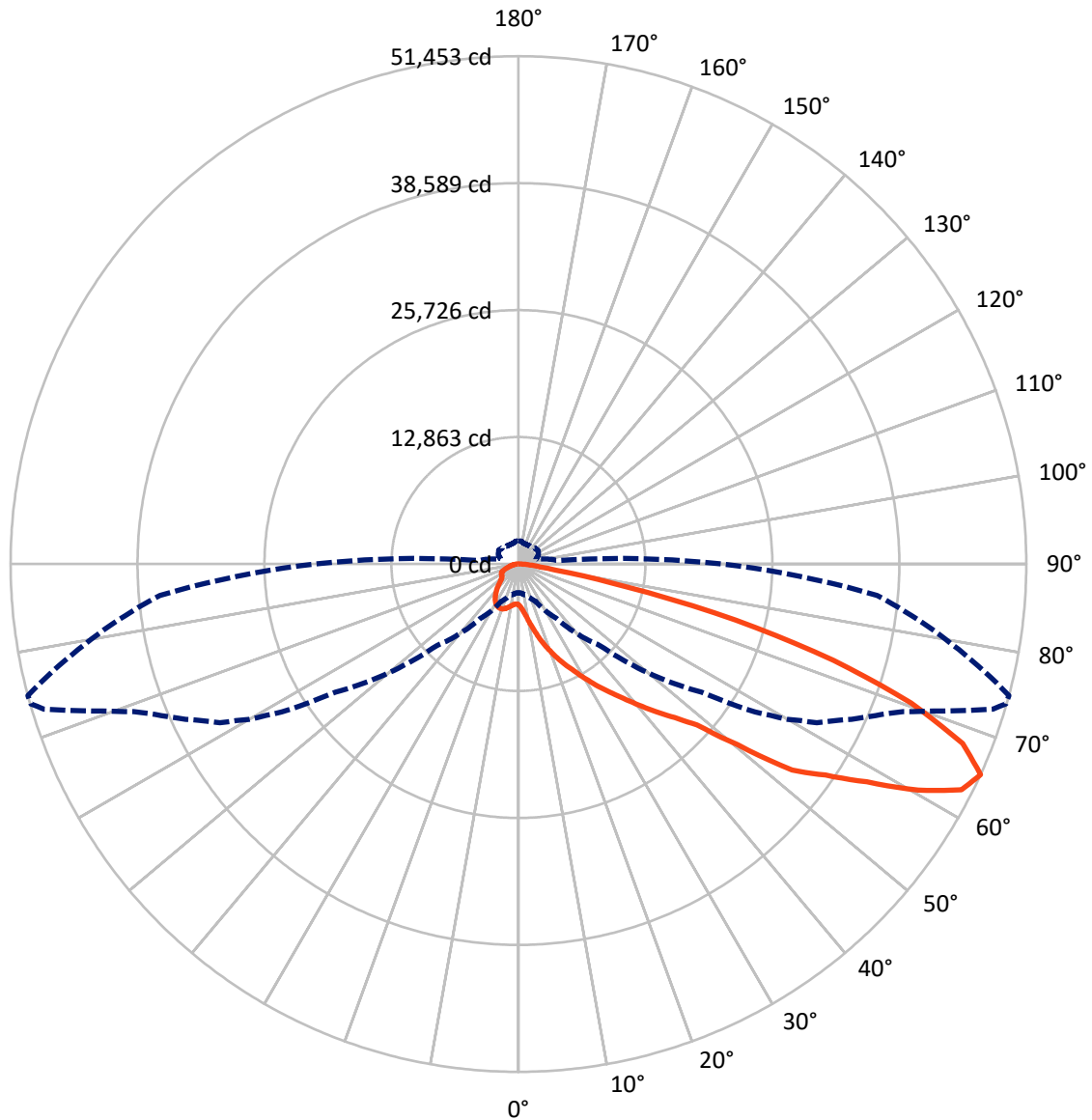
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.3 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	7838.3	0.0	7838.3
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	43001.4	0.0	43001.4
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	50839.6	0.0	50839.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	510.7	1.0
10°-20°	1995.4	3.9
20°-30°	4093.9	8.1
30°-40°	6887.7	13.5
40°-50°	9516.9	18.7
50°-60°	11880.0	23.4
60°-70°	10690.7	21.0
70°-80°	4481.4	8.8
80°-90°	782.9	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°	50839.6	100.0
0°-180°	50839.6	100.0



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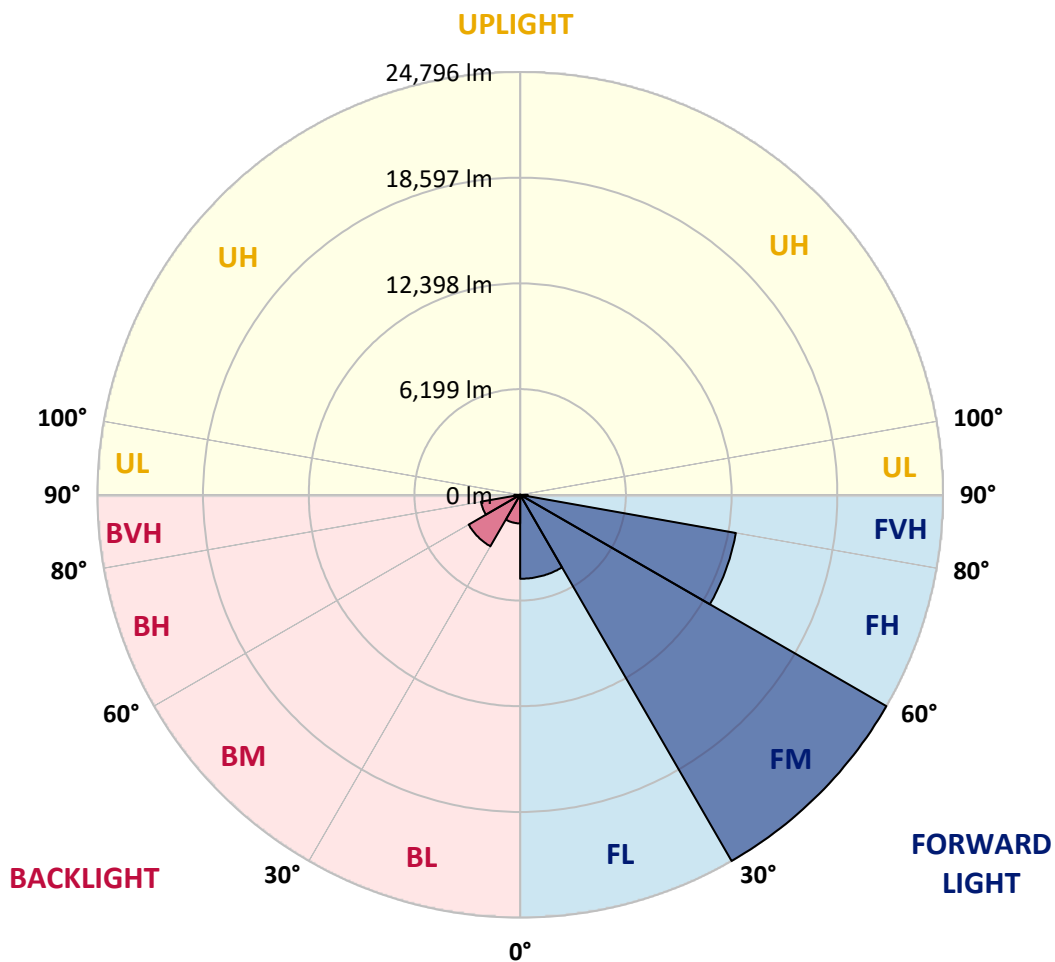
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4923.7	9.7			
FM (30°-60°)	24795.7	48.8			
FH (60°-80°)	12841.9	25.3			G5
FVH (80°-90°)	440.1	0.9			G3/500
BL (0°-30°)	1676.3	3.3	B3/2500		
BM (30°-60°)	3488.9	6.9	B3/5000		
BH (60°-80°)	2330.2	4.6	B3/2500		G3/2500
BVH (80°-90°)	342.9	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7
2.5°	5245.8	5188.1	5202.5	5106.3	4988.3	4834.4	4663.5	4661.1	4663.5	4646.7	4584.0
5°	7274.4	7204.6	7178.1	6961.6	6644.0	6191.5	5700.6	5647.7	5626.0	5570.7	5443.1
7.5°	8754.3	8715.7	8674.8	8511.3	8222.5	7717.1	7057.8	6944.7	6836.4	6810.0	6665.5
10°	9709.6	9699.9	9613.4	9570.0	9389.6	8951.6	8309.1	8200.8	8082.9	8042.0	7890.4
12.5°	10465.2	10462.7	10421.9	10433.9	10277.5	9959.9	9406.4	9307.7	9221.1	9096.0	8987.6
15°	10987.4	10989.8	11049.9	11117.3	11093.3	10879.1	10359.3	10315.9	10241.4	10154.7	10027.3
17.5°	11415.7	11427.7	11490.3	11613.0	11745.3	11728.5	11317.0	11280.9	11215.9	11098.1	11030.7
20°	12383.0	12428.8	12308.5	12308.5	12322.9	12387.8	12190.5	12161.7	12070.2	12007.7	11954.7
22.5°	14017.0	14069.9	13798.0	13521.3	13249.4	13052.0	12854.7	12890.8	12828.2	12784.9	12753.6
25°	16139.3	16180.2	15739.9	15273.1	14719.6	13997.8	13509.2	13487.6	13453.8	13427.4	13412.9
27.5°	18136.6	18153.5	17737.1	17053.7	16411.3	15374.1	14173.4	14146.9	14106.0	14055.4	14012.2
30°	19845.1	19840.3	19412.0	18759.9	18071.7	16923.8	15181.6	15099.8	14979.5	14842.3	14736.4
32.5°	21325.0	21317.8	20848.6	20172.4	19450.5	18459.0	16562.9	16394.4	16206.7	15939.6	15778.4
35°	22489.7	22484.9	22042.1	21337.0	20509.2	19905.3	18146.2	17939.3	17701.0	17342.5	17094.6
37.5°	22930.1	22930.1	22682.2	22200.9	21469.4	21055.5	19905.3	19655.0	19400.0	18993.2	18714.2
40°	22672.6	22677.4	22730.4	22641.3	22285.2	21967.6	21546.4	21397.2	21178.3	20812.4	20521.3
42.5°	21808.7	21835.2	22186.5	22617.2	22795.3	22744.8	23002.3	22934.9	22780.8	22499.3	22268.3
45°	20713.8	20795.7	21180.6	21994.0	22937.3	23416.2	24222.2	24229.5	24200.6	24049.0	23871.0
47.5°	19209.9	19325.4	19833.1	20932.7	22605.2	24068.3	25461.6	25526.5	25586.7	25487.9	25406.2
50°	17212.6	17349.8	18110.1	19568.4	21929.0	24744.5	27802.9	28096.5	28370.8	28337.1	28392.4
52.5°	15073.4	15234.6	16165.8	17790.1	20766.7	24900.9	29299.7	29778.5	30257.4	30649.7	31065.9
55°	13143.5	13056.8	13988.0	15699.0	18856.2	24195.8	30644.7	31222.3	31756.5	32237.8	32733.5
57.5°	10527.8	10669.7	11603.4	13295.1	16327.0	22205.7	31571.2	32415.9	33183.5	33980.0	34682.6
60°	7695.5	7837.4	8850.6	10568.6	13581.4	19188.2	30863.8	32144.0	33373.6	34593.6	35546.5
62.5°	4646.7	4752.5	5645.3	7281.6	10472.5	15609.9	27711.4	29391.1	31200.6	32658.9	34119.5
65°	2892.4	2952.5	3282.2	4182.2	6725.7	11654.0	22641.3	24472.6	26421.7	28272.1	29790.6
67.5°	2367.8	2389.5	2449.7	2642.2	3693.8	7599.2	16851.6	18473.5	20232.5	22022.9	23712.1
70°	2129.6	2115.2	2115.2	2127.2	2367.8	4086.0	11033.1	12089.4	13554.9	15111.8	16656.7
72.5°	1922.6	1908.2	1881.7	1845.7	1932.3	2492.9	5703.1	6499.5	7555.9	8939.6	10419.5
75°	1727.8	1708.5	1677.2	1631.5	1691.7	1881.7	2738.4	3072.9	3587.9	4324.2	5149.5
77.5°	1525.6	1501.6	1472.6	1439.0	1516.0	1463.0	1605.0	1725.3	1922.6	2158.5	2468.9
80°	1297.0	1275.3	1265.7	1248.9	1340.4	1114.1	1133.4	1208.0	1323.5	1451.1	1595.4
82.5°	1015.5	1015.5	1053.9	1061.2	1162.3	801.3	847.0	912.0	972.2	1039.5	1106.9
85°	669.0	673.8	803.7	854.3	916.8	539.0	635.3	656.9	705.0	743.6	772.4
87.5°	209.4	226.2	490.9	543.8	527.0	305.6	389.8	399.5	433.1	459.6	483.7
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):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7
2.5°	4584.0	4555.2	4528.7	4526.4	4507.1	4480.6	4490.2	4449.3	4451.8	4430.1	4406.1
5°	5390.2	5371.0	5274.7	5248.2	5176.0	5130.3	5123.1	5026.9	5014.8	4959.5	4899.3
7.5°	6550.1	6487.6	6352.7	6287.8	6165.0	6073.6	6030.3	5902.7	5840.2	5695.8	5630.8
10°	7765.3	7685.8	7519.8	7428.4	7310.5	7163.7	7084.2	6899.0	6826.8	6694.5	6535.6
12.5°	8891.5	8812.0	8641.2	8571.4	8415.0	8258.6	8171.9	7962.5	7868.7	7657.0	7531.9
15°	9933.4	9854.0	9704.7	9632.6	9476.2	9348.6	9233.2	9026.2	8915.5	8718.2	8554.5
17.5°	10944.0	10859.9	10729.9	10664.9	10513.3	10383.4	10258.3	10063.4	9950.2	9752.9	9606.1
20°	11882.5	11820.0	11726.1	11639.4	11487.8	11370.0	11220.7	11052.4	10888.7	10744.4	10604.7
22.5°	12700.7	12676.6	12575.5	12537.1	12407.1	12306.0	12176.1	12010.1	11892.1	11709.3	11579.3
25°	13405.8	13398.5	13350.4	13338.4	13246.9	13150.6	13121.8	12984.6	12876.4	12715.1	12580.4
27.5°	14012.2	14019.3	14007.4	14041.0	14017.0	13973.6	13976.1	13930.3	13867.7	13733.0	13615.1
30°	14685.9	14647.4	14669.1	14717.2	14731.6	14736.4	14815.9	14842.3	14837.5	14748.5	14690.7
32.5°	15638.9	15547.4	15463.1	15456.0	15504.0	15523.3	15658.1	15727.9	15788.0	15809.7	15819.3
35°	16854.0	16671.1	16495.5	16401.7	16319.9	16341.4	16437.7	16550.8	16683.2	16774.7	16882.9
37.5°	18384.5	18160.7	17850.3	17628.9	17573.6	17453.2	17515.8	17604.8	17734.8	17876.7	18064.4
40°	20239.8	19900.5	19551.6	19258.0	19099.1	18877.7	18875.4	18858.5	18937.9	19070.3	19335.0
42.5°	22025.3	21724.5	21353.9	21045.9	20838.9	20543.0	20482.9	20326.3	20362.4	20477.9	20735.4
45°	23697.7	23449.8	23223.6	22867.5	22691.8	22371.7	22270.8	22085.4	21982.0	22034.9	22292.3
47.5°	25317.1	25158.4	24922.5	24691.5	24556.8	24270.4	24140.4	24008.1	23875.8	23871.0	24140.4
50°	28474.2	28390.1	28110.9	27870.3	27935.3	27584.0	27605.6	27249.5	27410.7	27429.9	27995.4
52.5°	31441.3	31734.9	31941.8	32194.5	32358.1	32389.4	32497.7	32658.9	32853.8	33238.8	33763.4
55°	33140.1	33508.4	33722.5	33915.0	34232.6	34300.1	34480.5	34694.7	34865.5	35298.7	35743.8
57.5°	35159.1	35842.5	36174.6	36480.2	36908.5	37072.1	37372.9	37606.3	37827.7	38340.3	38879.3
60°	36403.1	37235.7	37912.0	38395.6	38932.3	39317.2	39772.0	40137.8	40657.6	41271.2	42074.9
62.5°	35414.1	36636.6	37534.1	38364.3	39093.5	39829.8	40481.9	41165.3	41954.6	42883.4	44129.9
65°	31475.0	32719.1	34256.7	35118.2	36083.2	37218.9	38210.4	39317.2	40392.8	41745.3	43588.5
67.5°	25338.8	26785.0	28512.8	29381.5	30490.8	31758.9	32870.7	34223.0	35479.1	37117.9	39396.7
70°	18264.2	20133.9	21587.3	22494.5	23789.1	25095.7	26169.0	27742.7	28782.3	30461.9	32817.7
72.5°	11564.9	13040.0	14820.7	15963.7	17114.0	18437.4	19534.7	20891.9	21861.6	23392.0	25526.5
75°	6218.0	7305.7	8869.8	9955.1	11187.1	12318.1	13603.1	14512.7	15229.8	16440.1	18172.7
77.5°	2914.1	3575.8	4367.5	5202.5	6037.6	6908.6	7755.6	8492.0	8800.0	9493.0	10515.7
80°	1768.7	1982.8	2213.9	2471.3	2820.3	3101.8	3474.8	3744.3	3763.5	3982.4	4295.4
82.5°	1181.5	1260.9	1330.8	1395.7	1484.7	1554.5	1633.9	1727.8	1766.2	1816.8	1917.8
85°	806.1	844.7	859.1	900.0	890.4	914.4	945.7	977.0	993.8	991.4	1037.2
87.5°	495.7	515.0	524.6	534.2	527.0	517.4	531.8	548.6	553.4	539.0	543.8
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°	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7
2.5°	4410.9	4389.2	4367.5	4353.1	4348.3	4220.7	4165.4	4129.2	4052.3	3989.7	3939.2
5°	4865.7	4819.9	4783.8	4740.5	4716.4	4394.0	4276.0	4194.3	4059.5	3980.1	3907.9
7.5°	5597.2	5469.6	5395.0	5310.8	5238.6	4656.3	4461.4	4333.8	4146.1	4040.2	3958.4
10°	6427.3	6295.0	6177.1	6047.2	5934.0	5005.2	4721.2	4523.9	4276.0	4139.0	4030.6
12.5°	7353.8	7223.9	7074.6	6908.6	6764.3	5447.9	5053.3	4771.8	4432.4	4249.6	4098.0
15°	8448.7	8220.0	8039.6	7847.1	7678.7	5977.4	5440.8	5050.9	4598.6	4350.7	4148.6
17.5°	9466.6	9225.9	8980.5	8812.0	8617.1	6571.7	5830.6	5334.9	4735.6	4415.7	4158.2
20°	10460.4	10198.1	9986.4	9760.2	9555.6	7187.8	6246.9	5585.1	4824.7	4418.0	4098.0
22.5°	11336.2	11172.7	10936.9	10691.4	10484.4	7803.8	6636.7	5796.9	4858.4	4362.7	3992.2
25°	12332.5	12159.3	11870.5	11663.6	11432.5	8431.9	7019.3	5960.5	4839.2	4259.3	3828.5
27.5°	13396.2	13203.6	12907.6	12691.0	12411.9	9083.9	7370.7	6078.5	4767.0	4090.8	3609.5
30°	14505.4	14329.8	14038.6	13819.7	13538.1	9774.6	7762.9	6157.9	4622.6	3857.3	3354.5
32.5°	15696.6	15549.8	15261.0	15032.5	14731.6	10523.0	8128.7	6181.9	4403.6	3580.6	3084.9
35°	16827.5	16726.5	16483.4	16269.3	15956.5	11230.4	8516.1	6169.8	4143.8	3277.4	2839.5
37.5°	18100.5	18040.4	17920.1	17648.2	17265.6	12190.5	8980.5	6119.3	3826.0	2976.7	2651.8
40°	19457.6	19462.6	19332.5	19147.3	18791.1	13355.2	9533.9	6020.7	3479.6	2711.9	2481.0
42.5°	20894.3	20968.9	20906.4	20774.0	20432.3	14529.5	10195.6	5900.4	3142.7	2454.5	2312.5
45°	22540.2	22631.7	22727.9	22533.0	22200.9	16079.2	11066.8	5744.0	2779.4	2240.3	2197.0
47.5°	24438.8	24583.2	24669.8	24672.2	24340.2	17999.4	12481.7	5650.1	2456.9	2095.9	2141.6
50°	28445.4	28491.1	28695.6	29051.8	28796.7	22444.0	14953.0	5592.4	2237.9	2006.9	2100.7
52.5°	34218.2	34721.1	35074.8	35050.8	34704.3	25266.6	16315.0	5294.0	2108.0	1973.2	2081.5
55°	36569.2	37197.3	37851.8	38025.0	37755.6	27675.3	17602.4	4995.6	2045.4	1997.3	2088.7
57.5°	39702.3	40761.1	41658.6	42036.4	41646.6	30757.9	19296.4	4839.2	2026.2	2062.3	2134.4
60°	43362.3	44671.3	45850.5	46529.0	46529.0	34300.1	21053.1	4774.2	1999.7	2158.5	2211.4
62.5°	45713.3	47636.0	49416.7	50410.5	50381.7	36766.5	21832.7	4552.8	1939.5	2225.8	2317.3
65°	45722.9	48008.9	50278.1	51394.7	51452.5	36463.3	20545.4	4021.0	1828.8	2235.5	2423.2
67.5°	41911.3	44348.9	46993.5	48242.4	48531.1	33566.1	17785.3	3306.3	1648.4	2139.2	2461.7
70°	35397.3	37777.2	40477.1	41704.4	42216.9	28613.9	14325.0	2548.3	1417.3	1927.4	2382.2
72.5°	27887.1	30221.2	32100.6	32998.2	33397.6	21871.3	10431.5	1925.1	1162.3	1624.2	2168.1
75°	19744.1	21495.9	22494.5	22694.3	22756.8	13184.4	6338.3	1431.8	957.7	1263.3	1831.2
77.5°	11143.8	11894.6	11812.7	11901.8	11160.6	5089.4	2760.1	1025.1	789.3	960.1	1419.8
80°	4350.7	4485.4	4213.5	4129.2	3787.6	1893.8	1217.6	714.6	630.4	726.7	993.8
82.5°	1917.8	1980.4	1922.6	1937.1	1852.9	977.0	729.2	517.4	481.3	531.8	659.3
85°	1056.4	1075.6	1070.8	1102.1	1056.4	389.8	346.5	317.6	336.9	361.0	423.5
87.5°	515.0	519.8	502.9	529.4	512.6	197.3	170.8	180.4	197.3	202.1	202.1
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):**

	135°	145°	155°	165°	175°	180°
0°	4131.7	4131.7	4131.7	4131.7	4131.7	4131.7
2.5°	3903.1	3883.8	3886.3	3881.4	3871.8	3871.8
5°	3869.4	3850.2	3850.2	3845.4	3833.3	3835.8
7.5°	3903.1	3871.8	3859.8	3842.9	3826.0	3826.0
10°	3941.6	3886.3	3852.5	3823.7	3802.0	3802.0
12.5°	3970.5	3883.8	3828.5	3790.0	3768.3	3768.3
15°	3980.1	3867.0	3790.0	3744.3	3725.0	3722.6
17.5°	3948.8	3802.0	3708.2	3655.2	3631.2	3623.9
20°	3852.5	3684.2	3571.0	3510.9	3477.2	3465.1
22.5°	3708.2	3515.7	3383.3	3320.8	3277.4	3270.3
25°	3506.1	3299.1	3169.2	3109.0	3084.9	3077.8
27.5°	3270.3	3077.8	2967.1	2928.5	2906.8	2904.5
30°	3046.4	2882.8	2800.9	2772.1	2745.6	2740.8
32.5°	2837.1	2733.6	2702.3	2661.4	2598.8	2591.6
35°	2687.9	2678.3	2656.6	2565.2	2488.1	2466.5
37.5°	2596.5	2685.5	2574.8	2394.3	2339.0	2334.2
40°	2543.5	2610.9	2420.8	2358.2	2363.0	2358.2
42.5°	2423.2	2492.9	2425.6	2396.7	2416.0	2420.8
45°	2302.9	2379.9	2461.7	2442.4	2488.1	2488.1
47.5°	2235.5	2351.0	2459.3	2459.3	2526.7	2550.7
50°	2158.5	2326.9	2420.8	2454.5	2507.5	2488.1
52.5°	2153.7	2286.0	2365.5	2425.6	2449.7	2428.0
55°	2160.9	2252.3	2310.1	2377.4	2406.4	2408.7
57.5°	2170.5	2233.1	2271.6	2302.9	2389.5	2389.5
60°	2194.5	2216.2	2237.9	2254.8	2367.8	2370.3
62.5°	2233.1	2199.4	2194.5	2211.4	2355.9	2346.1
65°	2293.3	2175.3	2139.2	2156.1	2343.8	2314.9
67.5°	2375.1	2139.2	2069.4	2081.5	2334.2	2271.6
70°	2449.7	2081.5	1982.8	1970.8	2242.7	2132.0
72.5°	2456.9	2014.1	1862.5	1826.4	1949.1	1843.3
75°	2336.5	1968.4	1730.1	1624.2	1609.8	1595.4
77.5°	2105.5	1942.0	1576.2	1410.1	1381.3	1390.9
80°	1761.4	1843.3	1390.9	1193.6	1350.0	1333.1
82.5°	1316.2	1626.7	1181.5	1056.4	1053.9	931.3
85°	731.5	1268.2	962.5	791.7	551.1	534.2
87.5°	204.6	705.0	673.8	447.5	305.6	317.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)