

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: P191427

Luminaire Tested: **GLEON-AF-09-LED-E1-T2R-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191427
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-09-LED-E1-T2R-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 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: 62211.8 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B4 - U0 - G5

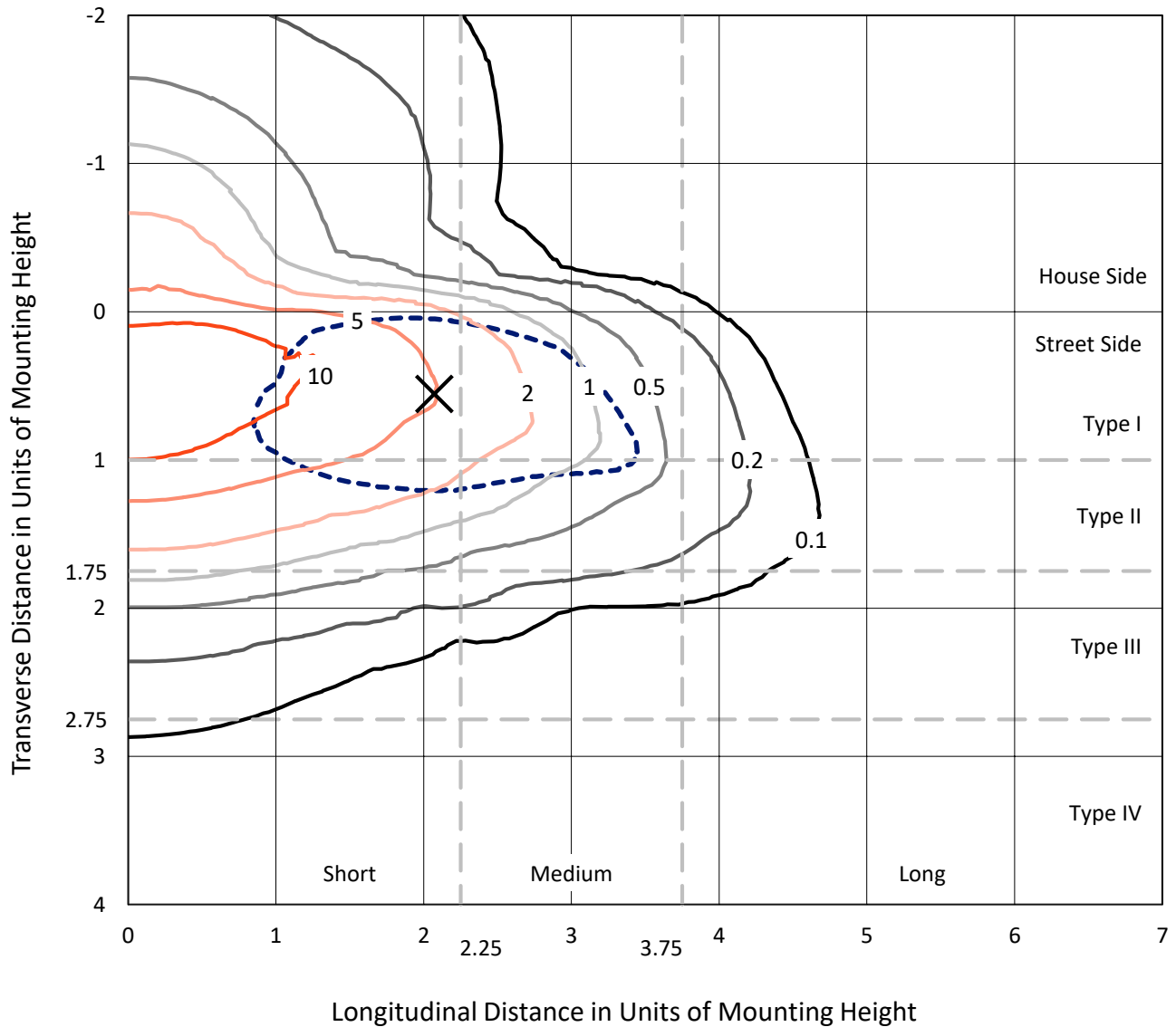
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

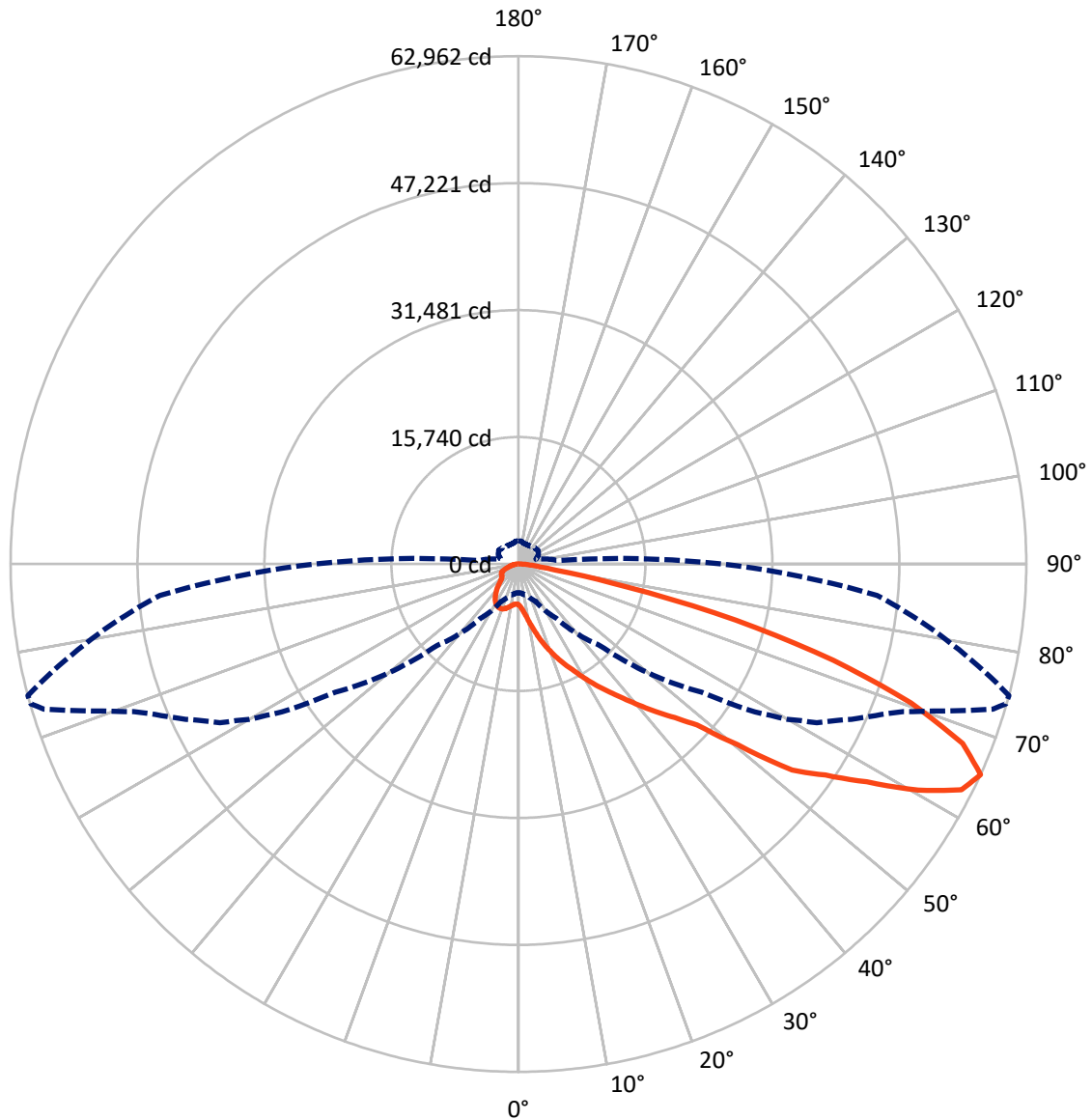
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.4 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
House Side	Lumens	9591.6	0.0	9591.6
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	52620.2	0.0	52620.2
	% Fixture	84.6	0.0	84.6
Total	Lumens	62211.8	0.0	62211.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	624.9	1.0
10°-20°	2441.7	3.9
20°-30°	5009.6	8.1
30°-40°	8428.4	13.5
40°-50°	11645.7	18.7
50°-60°	14537.4	23.4
60°-70°	13082.1	21.0
70°-80°	5483.9	8.8
80°-90°	958.0	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°	62211.8	100.0
0°-180°	62211.8	100.0



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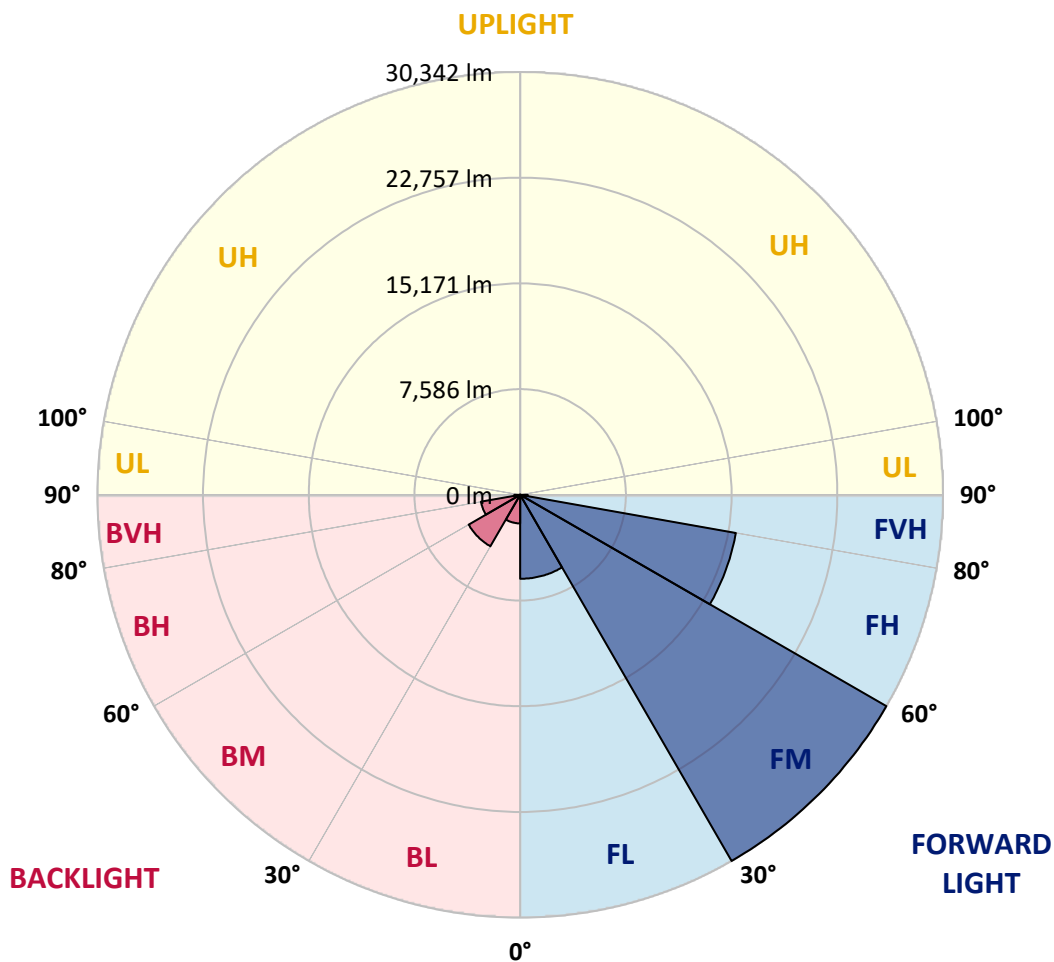
CATALOG NUMBER: GLEON-AF-09-LED-E1-T2R-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6025.0	9.7			
FM	(30°-60°)	30342.2	48.8			
FH	(60°-80°)	15714.5	25.3			G5
FVH	(80°-90°)	538.5	0.9			G4/750
BL	(0°-30°)	2051.3	3.3	B3/2500		
BM	(30°-60°)	4269.3	6.9	B3/5000		
BH	(60°-80°)	2851.5	4.6	B4/5000		G4/5000
BVH	(80°-90°)	419.6	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9
2.5°	6419.2	6348.5	6366.2	6248.5	6104.2	5915.7	5706.6	5703.7	5706.6	5686.1	5609.5
5°	8901.5	8816.2	8783.8	8518.7	8130.1	7576.5	6975.8	6911.0	6884.5	6816.7	6660.7
7.5°	10712.4	10665.4	10615.4	10415.1	10061.7	9443.4	8636.6	8498.2	8365.6	8333.3	8156.6
10°	11881.5	11869.7	11763.7	11710.7	11489.9	10954.0	10167.7	10035.2	9890.9	9840.9	9655.4
12.5°	12806.1	12803.2	12753.1	12767.9	12576.5	12187.7	11510.4	11389.7	11283.8	11130.6	10998.2
15°	13445.1	13448.0	13521.7	13604.1	13574.7	13312.6	12676.5	12623.5	12532.3	12426.3	12270.2
17.5°	13969.2	13983.9	14060.6	14210.7	14372.7	14352.0	13848.5	13804.3	13724.8	13580.6	13498.1
20°	15153.0	15208.9	15061.7	15061.7	15079.3	15158.9	14917.4	14882.1	14770.2	14693.6	14628.8
22.5°	17152.3	17217.2	16884.4	16545.7	16213.1	15971.5	15730.1	15774.3	15697.7	15644.7	15606.4
25°	19749.5	19799.5	19260.7	18689.4	18012.2	17128.8	16531.1	16504.5	16463.4	16430.9	16413.2
27.5°	22193.5	22214.2	21704.8	20868.5	20082.3	18813.1	17343.7	17311.4	17261.3	17199.5	17146.5
30°	24284.2	24278.3	23754.1	22956.1	22114.0	20709.4	18577.5	18477.5	18330.2	18162.4	18032.8
32.5°	26095.2	26086.3	25512.1	24684.7	23801.3	22588.1	20267.7	20061.6	19831.9	19505.1	19307.8
35°	27520.3	27514.4	26972.7	26109.9	25096.9	24357.8	22205.3	21952.1	21660.6	21221.8	20918.5
37.5°	28059.2	28059.2	27755.9	27167.0	26271.8	25765.4	24357.8	24051.6	23739.4	23241.9	22900.3
40°	27744.2	27750.0	27814.7	27705.8	27270.0	26881.3	26366.0	26183.4	25915.5	25467.9	25111.6
42.5°	26687.0	26719.4	27149.3	27676.4	27894.3	27832.4	28147.5	28065.1	27876.6	27532.1	27249.5
45°	25347.2	25447.3	25918.5	26913.7	28068.0	28654.0	29640.4	29649.3	29613.9	29428.5	29210.6
47.5°	23506.8	23648.2	24269.5	25615.2	27661.7	29452.0	31156.9	31236.4	31310.1	31189.4	31089.2
50°	21062.8	21230.6	22161.1	23945.5	26834.3	30279.4	34022.0	34381.3	34717.0	34675.8	34743.5
52.5°	18445.0	18642.4	19781.9	21769.5	25412.0	30470.8	35853.6	36439.6	37025.5	37505.5	38014.9
55°	16083.4	15977.5	17117.0	19210.6	23074.0	29608.1	37499.6	38206.3	38860.1	39449.0	40055.6
57.5°	12882.6	13056.4	14198.9	16269.0	19979.2	27172.8	38633.3	39666.9	40606.1	41580.8	42440.7
60°	9416.9	9590.6	10830.3	12932.8	16619.4	23480.3	37767.5	39334.1	40838.9	42331.8	43497.8
62.5°	5686.1	5815.6	6908.1	8910.4	12814.9	19101.7	33910.1	35965.5	38179.8	39964.2	41751.6
65°	3539.4	3613.1	4016.4	5117.7	8230.2	14260.8	27705.8	29946.7	32331.8	34596.2	36454.3
67.5°	2897.5	2924.0	2997.7	3233.1	4520.0	9299.0	20621.2	22605.8	24758.3	26949.1	29016.2
70°	2606.0	2588.3	2588.3	2603.0	2897.5	5000.0	13501.0	14793.7	16586.9	18492.2	20382.6
72.5°	2352.8	2335.1	2302.7	2258.5	2364.6	3050.6	6978.8	7953.4	9246.0	10939.2	12750.2
75°	2114.2	2090.7	2052.3	1996.5	2070.0	2302.7	3351.0	3760.3	4390.4	5291.4	6301.5
77.5°	1866.9	1837.4	1802.1	1760.9	1855.1	1790.4	1964.1	2111.3	2352.8	2641.4	3021.2
80°	1587.1	1560.6	1548.8	1528.3	1640.2	1363.4	1386.9	1478.2	1619.5	1775.6	1952.3
82.5°	1242.6	1242.6	1289.7	1298.5	1422.2	980.6	1036.5	1116.0	1189.6	1272.0	1354.5
85°	818.6	824.5	983.5	1045.4	1121.9	659.6	777.3	803.8	862.8	909.9	945.2
87.5°	256.1	276.8	600.7	665.5	644.9	374.0	477.0	488.8	530.0	562.4	591.9
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):

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9
2.5°	5609.5	5574.2	5541.7	5538.8	5515.2	5482.9	5494.7	5444.6	5447.5	5421.0	5391.6
5°	6595.9	6572.4	6454.6	6422.2	6333.9	6278.0	6269.1	6151.3	6136.6	6068.9	5995.2
7.5°	8015.2	7938.7	7773.8	7694.2	7544.1	7432.1	7379.2	7223.2	7146.5	6969.9	6890.4
10°	9502.3	9405.1	9202.0	9090.0	8945.7	8766.1	8668.9	8442.2	8353.8	8191.9	7997.5
12.5°	10880.3	10783.1	10574.1	10488.7	10297.3	10105.9	9999.9	9743.7	9628.8	9369.7	9216.6
15°	12155.3	12058.1	11875.6	11787.3	11595.9	11439.9	11298.5	11045.2	10909.8	10668.4	10468.1
17.5°	13392.1	13289.1	13130.0	13050.5	12865.0	12706.0	12552.8	12314.4	12176.0	11934.5	11754.9
20°	14540.5	14463.9	14349.1	14243.1	14057.6	13913.3	13730.8	13524.6	13324.3	13147.7	12976.9
22.5°	15541.7	15512.2	15388.6	15341.4	15182.4	15058.8	14899.7	14696.5	14552.3	14328.5	14169.5
25°	16404.4	16395.5	16336.7	16322.0	16210.1	16092.3	16057.0	15889.1	15756.6	15559.3	15394.4
27.5°	17146.5	17155.3	17140.6	17181.8	17152.3	17099.3	17102.3	17046.4	16969.8	16804.9	16660.6
30°	17971.0	17923.8	17950.3	18009.3	18027.0	18032.8	18130.0	18162.4	18156.5	18047.5	17976.8
32.5°	19137.1	19025.1	18922.0	18913.2	18972.2	18995.7	19160.6	19246.0	19319.6	19346.0	19357.9
35°	20624.0	20400.3	20185.3	20070.5	19970.4	19996.8	20114.6	20253.0	20415.0	20526.8	20659.4
37.5°	22496.8	22223.0	21843.2	21572.2	21504.5	21357.3	21433.8	21542.7	21701.8	21875.5	22105.1
40°	24767.1	24352.0	23925.0	23565.7	23371.4	23100.5	23097.5	23077.0	23174.1	23336.1	23659.9
42.5°	26952.0	26583.9	26130.5	25753.6	25500.3	25138.1	25064.5	24873.2	24917.3	25058.6	25373.7
45°	28998.5	28695.2	28418.4	27982.6	27767.7	27376.0	27252.3	27025.6	26899.0	26963.8	27278.8
47.5°	30980.3	30785.9	30497.3	30214.7	30049.8	29699.3	29540.4	29378.4	29216.4	29210.6	29540.4
50°	34843.5	34740.5	34399.0	34104.5	34183.9	33754.1	33780.6	33344.8	33542.0	33565.6	34257.6
52.5°	38474.3	38833.6	39086.7	39396.0	39596.2	39634.4	39767.0	39964.2	40202.8	40674.0	41315.9
55°	40553.1	41003.8	41265.7	41501.3	41890.0	41972.5	42193.3	42455.4	42664.5	43194.5	43739.2
57.5°	43023.7	43859.9	44266.4	44640.3	45164.4	45364.7	45732.8	46018.4	46289.2	46916.5	47576.1
60°	44546.0	45564.9	46392.4	46984.2	47640.9	48112.0	48668.5	49116.1	49752.1	50503.0	51486.5
62.5°	43335.9	44831.7	45930.1	46946.0	47838.2	48739.2	49537.2	50373.5	51339.2	52475.9	54001.3
65°	38515.5	40037.9	41919.5	42973.7	44154.4	45544.3	46757.4	48112.0	49428.3	51083.1	53338.7
67.5°	31006.8	32776.5	34890.7	35953.7	37311.2	38862.9	40223.3	41878.3	43415.4	45420.7	48209.2
70°	22349.6	24637.6	26416.1	27526.2	29110.4	30709.4	32022.7	33948.5	35220.5	37275.8	40158.6
72.5°	14151.8	15956.8	18135.9	19534.6	20942.1	22561.6	23904.3	25565.1	26751.8	28624.5	31236.4
75°	7608.9	8939.9	10853.8	12181.8	13689.5	15073.5	16645.9	17758.9	18636.4	20117.6	22237.7
77.5°	3565.9	4375.7	5344.5	6366.2	7388.1	8454.0	9490.5	10391.5	10768.4	11616.5	12867.9
80°	2164.3	2426.3	2709.1	3024.1	3451.1	3795.6	4252.0	4581.8	4605.3	4873.3	5256.1
82.5°	1445.8	1543.0	1628.3	1707.9	1816.9	1902.2	1999.4	2114.2	2161.4	2223.2	2346.9
85°	986.4	1033.6	1051.2	1101.3	1089.5	1118.9	1157.3	1195.5	1216.1	1213.2	1269.2
87.5°	606.6	630.1	641.9	653.7	644.9	633.1	650.8	671.4	677.3	659.6	665.5
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):

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9
2.5°	5397.5	5371.0	5344.5	5326.8	5320.9	5164.9	5097.2	5053.0	4958.8	4882.1	4820.3
5°	5954.0	5898.0	5853.8	5800.8	5771.4	5376.8	5232.6	5132.5	4967.6	4870.4	4782.1
7.5°	6849.2	6693.1	6601.8	6498.8	6410.4	5697.8	5459.3	5303.3	5073.5	4944.0	4843.9
10°	7865.1	7703.1	7558.8	7399.8	7261.4	6124.8	5777.3	5535.9	5232.6	5064.7	4932.3
12.5°	8998.7	8839.7	8657.1	8454.0	8277.3	6666.6	6183.6	5839.2	5424.0	5200.2	5014.7
15°	10338.6	10058.8	9837.9	9602.3	9396.2	7314.4	6657.8	6180.8	5627.2	5323.8	5076.5
17.5°	11584.1	11289.6	10989.3	10783.1	10544.7	8041.7	7134.8	6528.2	5795.0	5403.3	5088.3
20°	12800.2	12479.3	12220.2	11943.4	11693.0	8795.5	7644.2	6834.4	5904.0	5406.3	5014.7
22.5°	13872.0	13671.8	13383.3	13082.9	12829.6	9549.3	8121.2	7093.6	5945.2	5338.6	4885.1
25°	15091.1	14879.1	14525.8	14272.5	13989.9	10317.9	8589.4	7293.8	5921.7	5211.9	4684.9
27.5°	16392.7	16157.1	15794.9	15529.9	15188.3	11115.9	9019.4	7438.1	5833.3	5005.8	4416.9
30°	17750.1	17535.1	17178.8	16910.9	16566.4	11961.1	9499.3	7535.3	5656.6	4720.2	4104.8
32.5°	19207.7	19028.1	18674.7	18395.0	18027.0	12876.8	9946.9	7564.7	5388.6	4381.6	3775.0
35°	20591.7	20468.0	20170.5	19908.5	19525.7	13742.5	10421.0	7550.0	5070.7	4010.6	3474.7
37.5°	22149.3	22075.8	21928.5	21595.8	21127.6	14917.4	10989.3	7488.1	4681.9	3642.5	3245.0
40°	23810.1	23816.0	23657.0	23430.3	22994.5	16342.6	11666.5	7367.4	4257.9	3318.6	3035.9
42.5°	25568.0	25659.3	25582.8	25420.8	25002.7	17779.6	12476.3	7220.2	3845.7	3003.5	2829.8
45°	27582.1	27694.0	27811.9	27573.3	27167.0	19675.8	13542.2	7028.8	3401.0	2741.4	2688.4
47.5°	29905.5	30082.1	30188.2	30191.1	29784.7	22025.7	15273.7	6913.9	3006.5	2564.7	2620.7
50°	34808.3	34864.2	35114.5	35550.3	35238.2	27464.4	18297.8	6843.2	2738.4	2455.8	2570.7
52.5°	41872.3	42487.8	42920.7	42891.2	42467.2	30918.4	19964.4	6478.1	2579.5	2414.6	2547.0
55°	44749.3	45517.8	46318.7	46530.8	46201.0	33866.0	21539.9	6113.1	2503.0	2444.0	2555.9
57.5°	48583.1	49878.8	50977.1	51439.4	50962.4	37638.0	23612.9	5921.7	2479.3	2523.5	2611.9
60°	53061.9	54663.7	56106.6	56937.0	56937.0	41972.5	25762.4	5842.1	2447.0	2641.4	2706.1
62.5°	55938.7	58291.5	60470.5	61686.7	61651.3	44990.7	26716.4	5571.2	2373.3	2723.8	2835.6
65°	55950.6	58748.0	61524.7	62891.0	62961.7	44619.7	25141.1	4920.5	2237.9	2735.6	2965.2
67.5°	51286.3	54269.2	57505.3	59033.6	59386.9	41074.3	21763.6	4045.9	2017.1	2617.7	3012.4
70°	43315.2	46227.5	49531.3	51033.1	51660.2	35014.4	17529.3	3118.4	1734.4	2358.6	2915.2
72.5°	34125.1	36981.4	39281.1	40379.4	40868.2	26763.6	12764.9	2355.7	1422.2	1987.6	2653.1
75°	24160.6	26304.3	27526.2	27770.7	27847.2	16133.6	7756.1	1752.0	1172.0	1545.9	2240.9
77.5°	13636.4	14555.3	14455.1	14564.1	13657.1	6227.8	3377.5	1254.4	965.9	1174.9	1737.3
80°	5323.8	5488.7	5156.0	5053.0	4634.8	2317.4	1489.9	874.5	771.5	889.3	1216.1
82.5°	2346.9	2423.4	2352.8	2370.4	2267.4	1195.5	892.2	633.1	588.9	650.8	806.8
85°	1292.7	1316.2	1310.4	1348.7	1292.7	477.0	424.0	388.7	412.2	441.7	518.2
87.5°	630.1	636.1	615.4	647.8	627.2	241.4	209.1	220.9	241.4	247.3	247.3
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):

	135°	145°	155°	165°	175°	180°
0°	5055.9	5055.9	5055.9	5055.9	5055.9	5055.9
2.5°	4776.2	4752.6	4755.6	4749.7	4737.9	4737.9
5°	4734.9	4711.4	4711.4	4705.5	4690.7	4693.7
7.5°	4776.2	4737.9	4723.2	4702.5	4681.9	4681.9
10°	4823.3	4755.6	4714.4	4679.0	4652.5	4652.5
12.5°	4858.6	4752.6	4684.9	4637.8	4611.3	4611.3
15°	4870.4	4732.0	4637.8	4581.8	4558.3	4555.3
17.5°	4832.1	4652.5	4537.6	4472.9	4443.4	4434.6
20°	4714.4	4508.2	4369.8	4296.2	4255.0	4240.2
22.5°	4537.6	4302.1	4140.1	4063.6	4010.6	4001.7
25°	4290.3	4037.1	3878.0	3804.5	3775.0	3766.2
27.5°	4001.7	3766.2	3630.7	3583.6	3557.1	3554.1
30°	3727.8	3527.6	3427.5	3392.2	3359.8	3353.9
32.5°	3471.7	3345.0	3306.8	3256.8	3180.1	3171.4
35°	3289.1	3277.3	3250.8	3138.9	3044.7	3018.2
37.5°	3177.3	3286.2	3150.7	2929.9	2862.1	2856.3
40°	3112.4	3194.9	2962.3	2885.7	2891.6	2885.7
42.5°	2965.2	3050.6	2968.2	2932.8	2956.4	2962.3
45°	2818.0	2912.2	3012.4	2988.8	3044.7	3044.7
47.5°	2735.6	2876.8	3009.4	3009.4	3091.9	3121.3
50°	2641.4	2847.5	2962.3	3003.5	3068.2	3044.7
52.5°	2635.4	2797.4	2894.5	2968.2	2997.7	2971.2
55°	2644.2	2756.1	2826.8	2909.3	2944.6	2947.5
57.5°	2656.0	2732.6	2779.7	2818.0	2924.0	2924.0
60°	2685.5	2711.9	2738.4	2759.1	2897.5	2900.5
62.5°	2732.6	2691.4	2685.5	2706.1	2882.8	2871.0
65°	2806.3	2661.9	2617.7	2638.4	2868.0	2832.8
67.5°	2906.3	2617.7	2532.3	2547.0	2856.3	2779.7
70°	2997.7	2547.0	2426.3	2411.6	2744.4	2608.9
72.5°	3006.5	2464.6	2279.1	2234.9	2385.1	2255.6
75°	2859.2	2408.7	2117.2	1987.6	1969.9	1952.3
77.5°	2576.5	2376.3	1928.7	1725.5	1690.2	1702.0
80°	2155.5	2255.6	1702.0	1460.6	1652.0	1631.3
82.5°	1610.7	1990.6	1445.8	1292.7	1289.7	1139.6
85°	895.2	1551.8	1177.8	968.7	674.3	653.7
87.5°	250.3	862.8	824.5	547.7	374.0	388.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)