

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: P191202

Luminaire Tested: **GLEON-AF-04-LED-E1-SL4-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191202
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-800-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16106.4 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 171
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

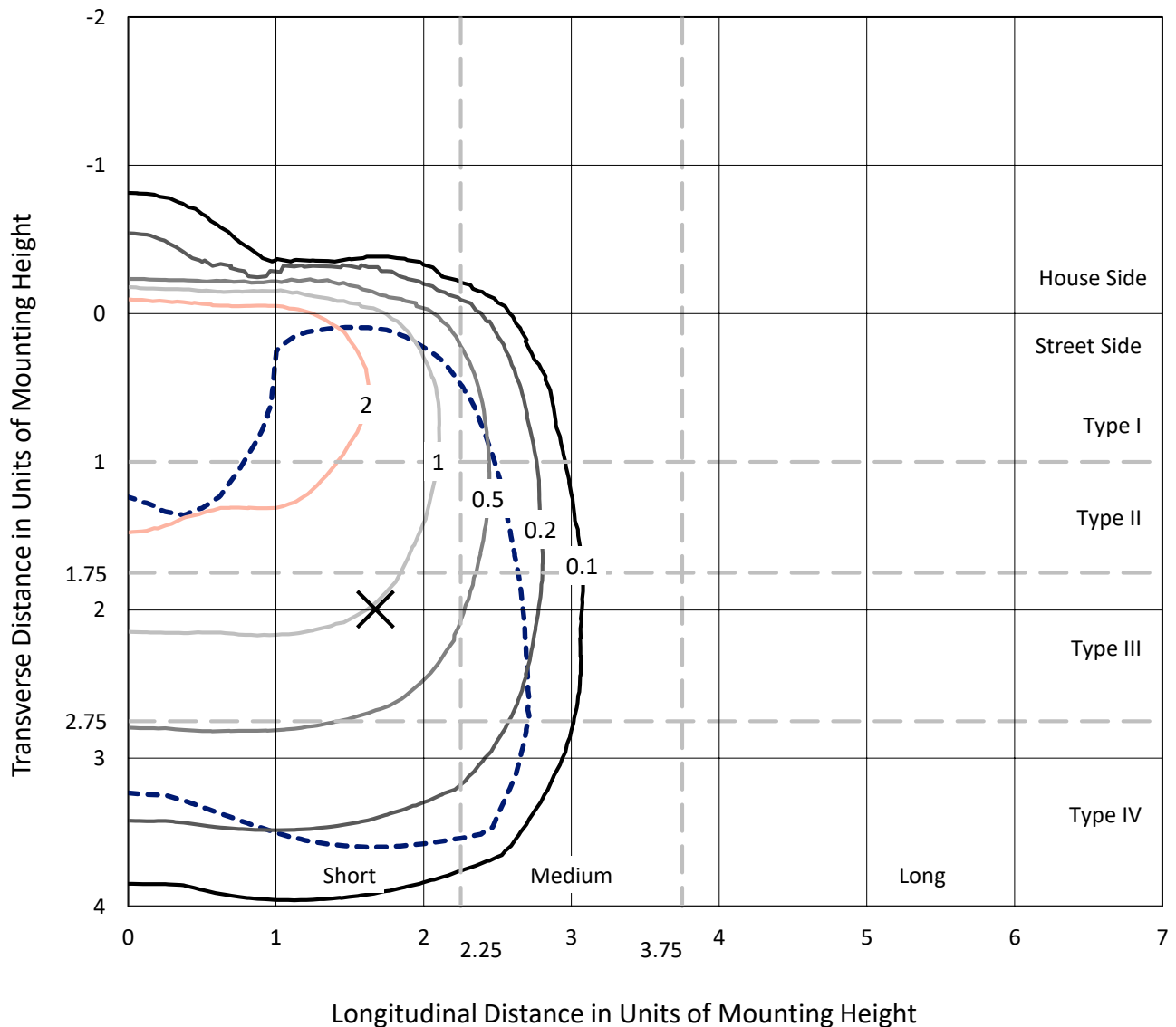


REPORT NUMBER: P191202

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL4-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

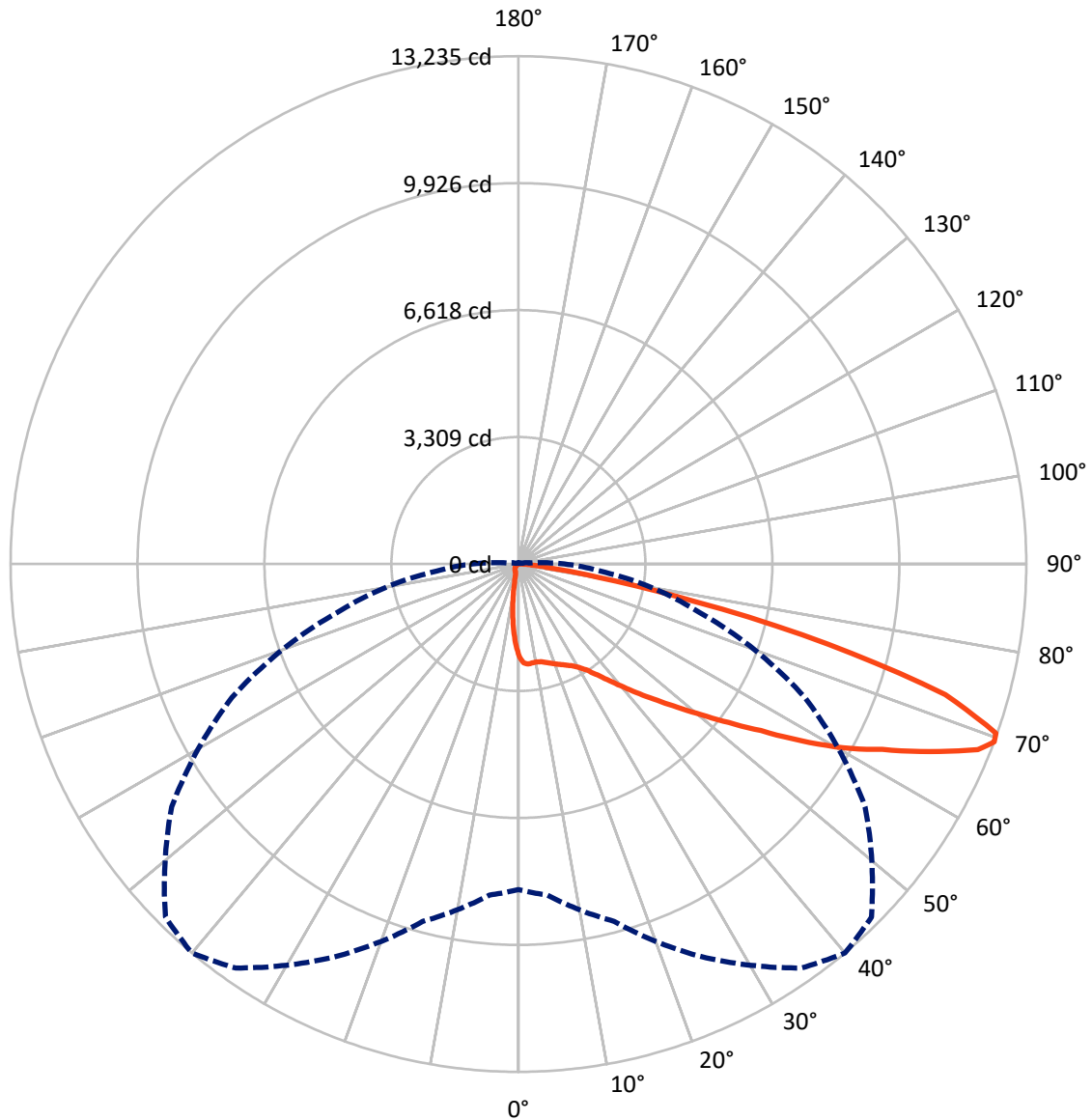
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P191202
CATALOG NUMBER: GLEON-AF-04-LED-E1-SL4-800-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P191202

CATALOG NUMBER: GLEON-AF-04-LED-E1-SL4-800-HSS

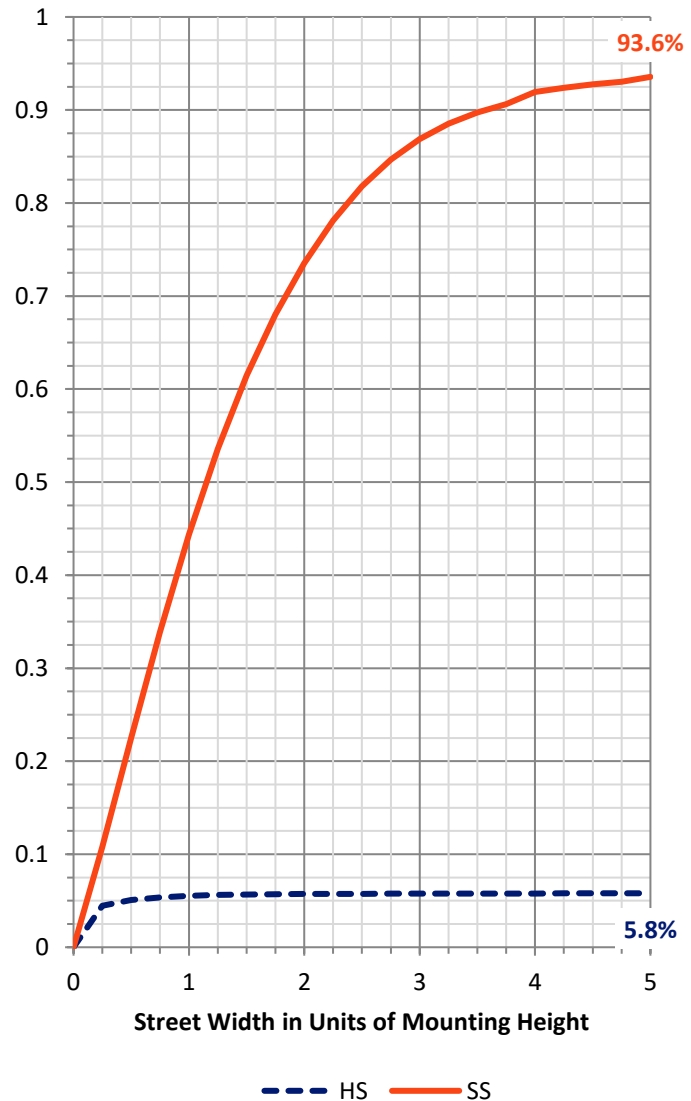
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	942.3	0.0	942.3
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	15164.1	0.0	15164.1
	% Fixture	94.1	0.0	94.1
Total	Lumens	16106.4	0.0	16106.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.1	1.2
10°-20°	479.8	3.0
20°-30°	808.2	5.0
30°-40°	1323.0	8.2
40°-50°	2290.7	14.2
50°-60°	3608.1	22.4
60°-70°	4712.0	29.3
70°-80°	2426.9	15.1
80°-90°	262.5	1.6
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°	16106.4	100.0
0°-180°	16106.4	100.0



REPORT NUMBER: P191202

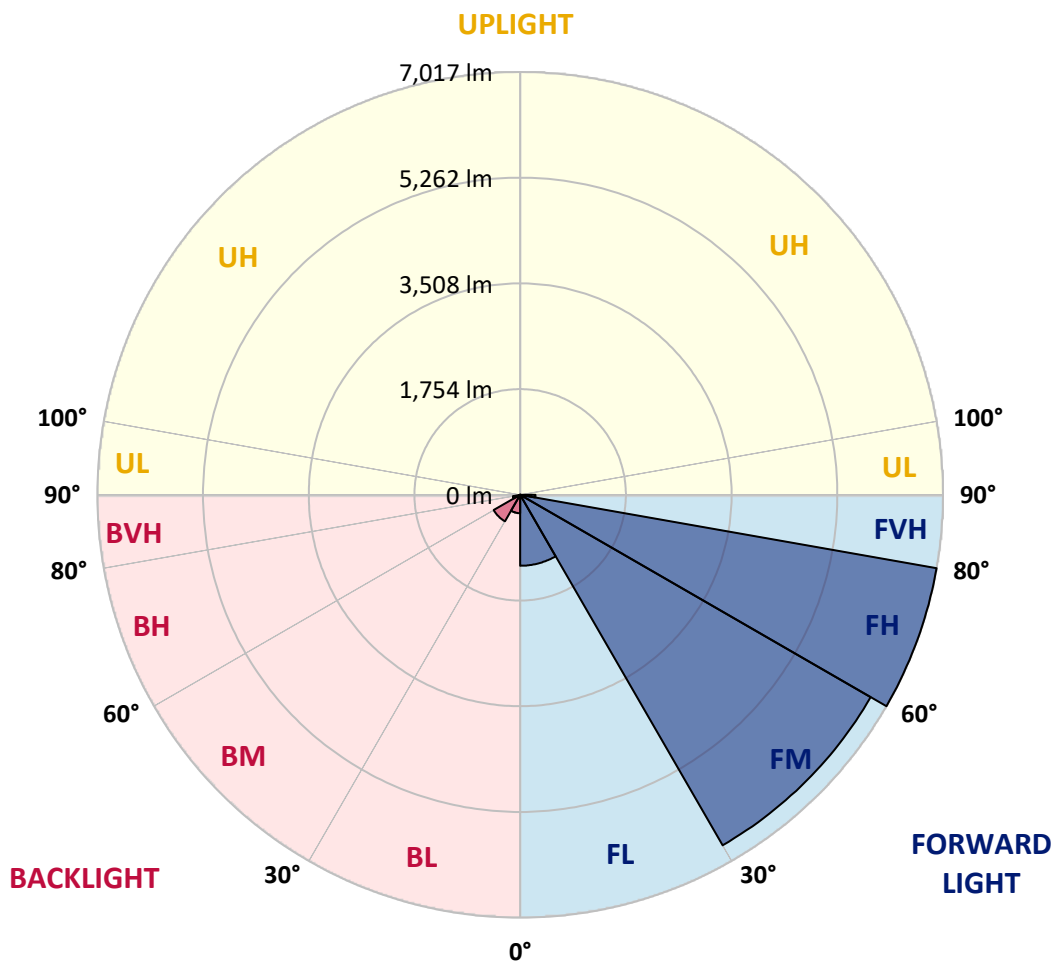
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1177.8	7.3			
FM	(30°-60°)	6715.3	41.7			
FH	(60°-80°)	7016.6	43.6			G3/7500
FVH	(80°-90°)	254.3	1.6			G3/500
BL	(0°-30°)	305.2	1.9	B1/500		
BM	(30°-60°)	506.5	3.1	B1/1000		
BH	(60°-80°)	122.4	0.8	B1/500		G1/500
BVH	(80°-90°)	8.2	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





REPORT NUMBER: P191202

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4
2.5°	2642.2	2627.9	2619.2	2607.7	2593.3	2580.9	2576.1	2540.6	2507.0	2461.0	2408.3
5°	2691.1	2686.3	2671.0	2655.7	2638.4	2619.2	2608.6	2566.5	2518.5	2451.4	2359.4
7.5°	2695.9	2690.2	2671.0	2649.9	2625.9	2602.9	2584.7	2542.5	2498.5	2430.3	2318.2
10°	2688.2	2681.6	2667.1	2644.1	2614.5	2592.4	2574.2	2533.8	2496.5	2435.1	2310.5
12.5°	2679.6	2672.9	2666.2	2654.7	2628.8	2613.4	2598.1	2559.7	2526.2	2474.4	2338.3
15°	2688.2	2684.4	2692.1	2687.3	2672.9	2659.5	2644.1	2609.6	2579.0	2535.8	2389.1
17.5°	2724.6	2724.6	2748.7	2751.5	2738.1	2718.9	2696.9	2662.3	2636.5	2600.0	2449.6
20°	2809.9	2807.1	2837.8	2843.5	2811.0	2781.2	2748.7	2706.4	2686.3	2663.4	2509.0
22.5°	2956.6	2943.2	2961.4	2955.7	2891.5	2845.4	2805.2	2753.5	2742.8	2732.3	2575.1
25°	3147.4	3139.7	3152.2	3095.7	2982.5	2920.2	2872.3	2813.8	2813.8	2824.4	2649.9
27.5°	3424.5	3395.8	3353.5	3253.9	3084.2	3004.6	2952.8	2890.6	2906.8	2946.1	2748.7
30°	3708.3	3676.7	3579.8	3426.5	3207.9	3124.5	3064.0	2998.9	3037.2	3109.2	2880.9
32.5°	3988.3	3952.8	3815.7	3622.1	3385.3	3301.8	3243.4	3171.5	3235.7	3356.5	3074.6
35°	4259.6	4228.0	4069.7	3841.6	3621.0	3552.0	3498.4	3436.0	3518.4	3687.2	3347.8
37.5°	4564.4	4529.9	4337.2	4089.9	3907.7	3857.9	3818.6	3756.3	3900.0	4147.3	3728.5
40°	4939.3	4880.8	4621.0	4374.6	4239.4	4215.5	4188.6	4180.0	4403.4	4745.7	4235.6
42.5°	5368.8	5272.9	4918.2	4674.7	4603.8	4621.0	4614.3	4652.7	5033.2	5489.6	4853.0
45°	5798.3	5674.6	5249.0	4994.9	5004.5	5064.9	5102.3	5255.7	5822.2	6342.8	5517.4
47.5°	6162.7	6040.8	5566.3	5341.0	5456.0	5574.9	5676.6	5967.1	6633.3	7182.6	6034.2
50°	6474.2	6359.2	5902.8	5721.6	5980.5	6172.2	6337.1	6767.5	7505.8	7822.2	6396.5
52.5°	6729.2	6652.6	6251.8	6157.9	6579.6	6860.5	7102.1	7617.9	8278.5	8341.8	6678.4
55°	6977.5	6922.9	6626.7	6676.5	7283.3	7665.9	7971.8	8520.1	8943.9	8775.1	6948.8
57.5°	7263.3	7213.3	7054.3	7334.1	8208.5	8689.8	9023.4	9319.7	9529.6	9218.0	7203.8
60°	7554.7	7526.0	7529.7	8064.7	9270.8	9732.9	9916.9	9993.6	10104.8	9635.1	7218.1
62.5°	7832.7	7887.4	8073.3	8877.7	10287.9	10642.7	10735.7	10811.5	10681.0	9701.3	6668.8
65°	8303.4	8392.6	8836.5	9965.8	11406.8	11786.4	11882.3	11622.5	10772.1	8846.1	5424.4
67.5°	8533.6	8696.5	9488.4	10980.1	12492.1	12913.8	12878.4	11675.2	9666.7	6745.5	3481.1
69°	8485.6	8659.1	9639.0	11290.8	12852.6	13235.0	13009.8	11030.0	8235.4	4886.5	2136.9
70°	8295.7	8471.2	9561.2	11279.3	12898.6	13201.5	12766.2	10233.3	6963.1	3573.2	1336.5
72.5°	6927.6	7079.1	8488.4	10194.9	11882.3	11636.0	10680.1	7089.7	3392.9	973.1	301.1
75°	4264.4	4348.8	6090.8	7680.2	8974.6	8341.8	7115.5	3527.1	1011.5	275.2	166.8
77.5°	2252.9	2291.3	3334.4	4527.1	5689.0	4707.3	3646.9	1375.8	466.0	172.6	120.8
80°	1331.7	1360.4	1795.7	2069.8	2461.9	2056.4	1458.2	844.7	333.6	108.3	107.4
82.5°	762.2	780.4	1301.9	1150.4	970.3	828.3	725.8	800.6	200.4	72.8	111.2
85°	280.0	283.8	732.4	875.3	577.1	343.2	360.5	663.4	53.7	46.0	87.3
87.5°	130.4	127.5	376.8	535.9	337.5	217.6	280.9	145.8	21.1	29.8	23.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P191202

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4	2406.4
2.5°	2377.6	2342.1	2277.9	2211.7	2144.6	2092.9	2042.0	2001.8	1988.4	1963.5	1965.4
5°	2304.7	2239.5	2105.3	1969.2	1827.3	1710.4	1600.1	1510.9	1467.8	1423.6	1423.6
7.5°	2241.5	2146.6	1936.7	1715.2	1486.0	1293.3	1119.8	989.4	917.5	860.0	859.0
10°	2217.6	2089.1	1795.7	1478.4	1159.1	896.4	690.3	558.0	489.9	445.8	443.9
12.5°	2228.1	2068.9	1687.4	1259.8	859.0	576.2	399.8	314.5	285.7	272.3	272.3
15°	2258.8	2063.2	1579.0	1046.0	606.9	360.5	265.6	242.5	240.6	240.6	240.6
17.5°	2296.1	2065.0	1467.8	837.9	413.2	257.9	229.1	226.3	228.2	228.2	228.2
20°	2334.5	2066.1	1347.9	645.2	291.4	224.3	215.7	214.7	216.7	216.7	217.6
22.5°	2381.4	2070.9	1228.2	482.2	240.6	211.9	205.2	205.2	206.1	206.1	205.2
25°	2435.1	2080.4	1103.5	357.6	219.5	203.3	197.5	196.5	197.5	196.5	195.6
27.5°	2502.2	2093.9	964.4	280.0	209.9	194.7	189.9	189.9	188.8	187.9	187.0
30°	2586.6	2109.2	808.2	237.7	200.4	187.0	182.2	181.2	180.2	178.3	178.3
32.5°	2715.1	2142.8	653.9	215.7	189.9	176.4	172.6	172.6	170.6	168.7	167.8
35°	2912.5	2208.9	515.8	202.3	178.3	164.9	160.1	160.1	158.1	157.2	156.3
37.5°	3185.8	2309.5	400.8	189.9	166.8	152.4	147.6	146.7	144.7	142.8	141.9
40°	3549.1	2434.2	315.4	178.3	155.3	139.9	136.2	134.2	130.4	127.5	127.5
42.5°	4005.5	2576.1	255.9	165.8	141.9	128.5	125.6	122.8	116.0	113.1	112.2
45°	4483.0	2703.6	216.7	151.5	128.5	116.9	115.1	110.3	101.6	98.7	98.7
47.5°	4827.1	2733.3	190.8	138.1	116.0	104.5	103.5	94.9	87.3	85.3	84.4
50°	5041.9	2674.8	169.7	124.6	104.5	93.0	90.1	79.6	74.8	72.8	71.9
52.5°	5186.7	2570.3	152.4	113.1	93.9	82.4	75.7	68.0	64.2	62.3	62.3
55°	5302.7	2422.7	135.1	102.6	85.3	73.9	64.2	58.5	54.6	52.7	52.7
57.5°	5335.2	2222.3	117.9	93.9	76.7	65.2	54.6	50.8	46.0	45.0	45.0
60°	5098.5	1860.8	104.5	83.4	69.0	56.6	48.0	43.2	38.4	37.4	36.4
62.5°	4474.3	1440.0	92.1	73.9	60.4	48.9	41.2	35.5	31.6	31.6	31.6
65°	3413.0	965.5	80.5	64.2	52.7	41.2	35.5	28.7	26.8	26.8	27.8
67.5°	2043.0	525.4	69.0	54.6	45.0	34.5	29.8	25.0	23.9	25.0	25.0
69°	1197.5	308.7	62.3	48.9	39.3	30.7	25.9	22.1	23.9	25.0	25.0
70°	739.2	208.1	57.5	44.1	35.5	27.8	23.9	21.1	23.0	23.9	23.9
72.5°	206.1	107.4	46.0	34.5	28.7	23.0	19.1	19.1	22.1	23.0	23.0
75°	134.2	79.6	35.5	25.9	22.1	18.2	16.3	18.2	21.1	22.1	22.1
77.5°	111.2	65.2	28.7	21.1	18.2	17.3	15.3	16.3	19.1	20.2	20.2
80°	101.6	46.0	23.0	19.1	16.3	15.3	14.4	13.4	17.3	18.2	18.2
82.5°	96.9	36.4	20.2	17.3	15.3	13.4	12.5	13.4	15.3	16.3	17.3
85°	60.4	23.9	18.2	16.3	13.4	12.5	12.5	12.5	14.4	15.3	15.3
87.5°	22.1	19.1	16.3	13.4	11.5	11.5	11.5	11.5	12.5	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)