

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: P191221

Luminaire Tested: **GLEON-AF-03-LED-E1-SL4-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191221
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-03-LED-E1-SL4-1200-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K, 1200mA 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: 16551.3 lumens
Efficiency: N/A
Efficacy: 86.7 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): 191
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

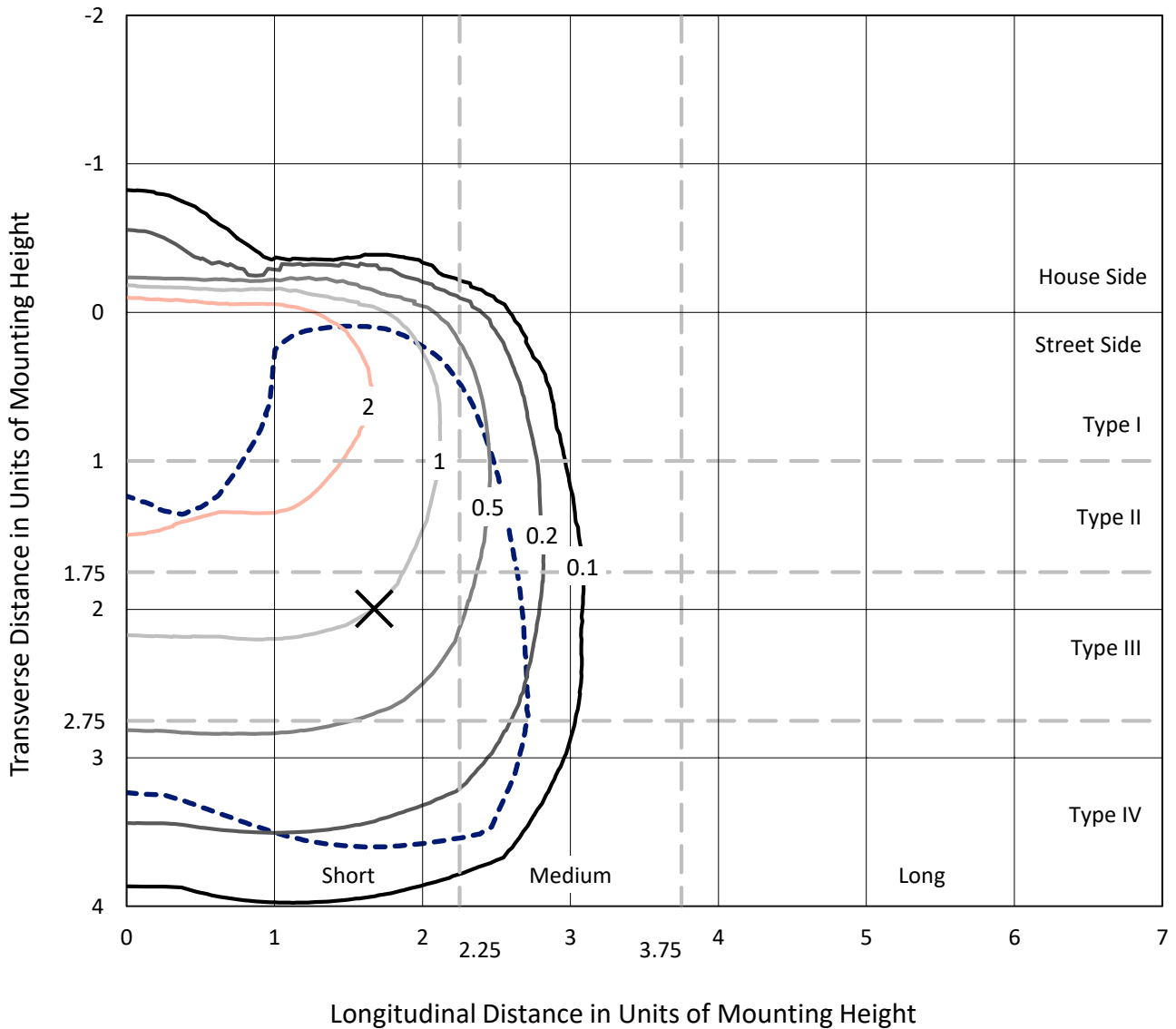


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

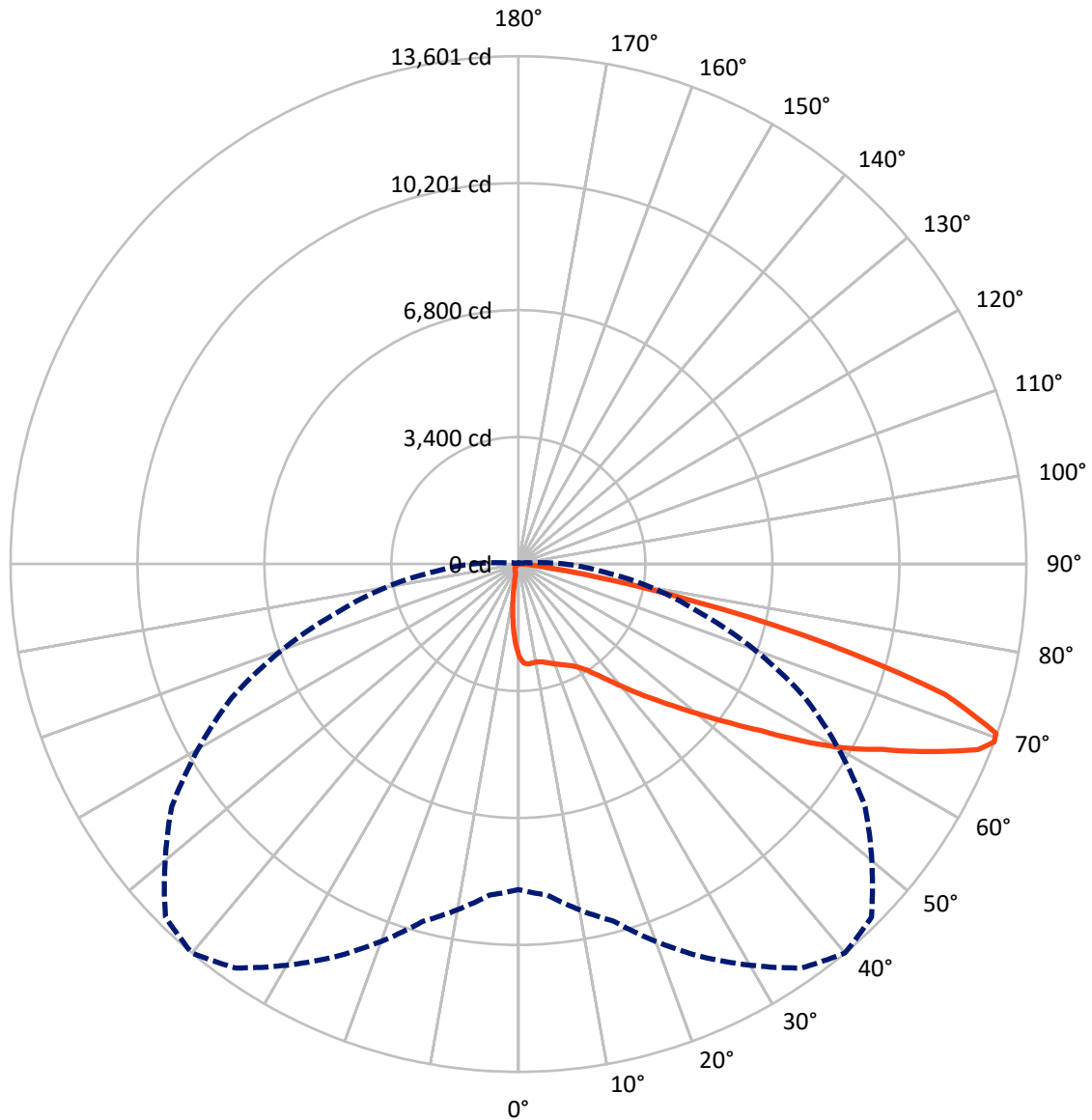


Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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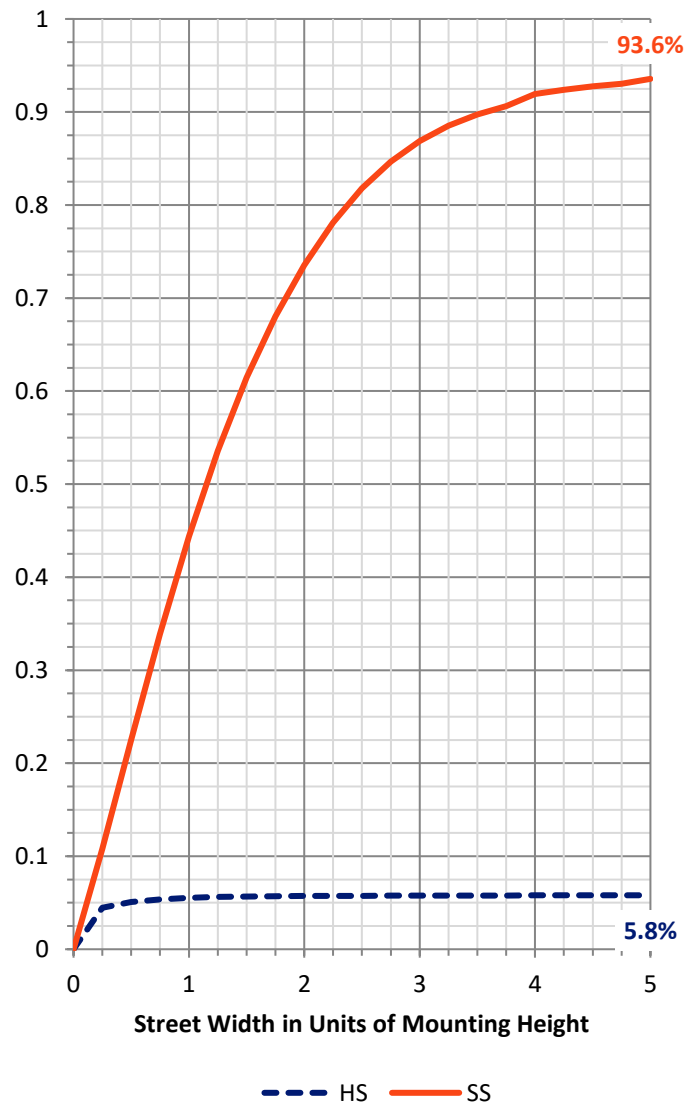
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	968.4	0.0	968.4
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	15583.0	0.0	15583.0
	% Fixture	94.1	0.0	94.1
Total	Lumens	16551.3	0.0	16551.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.5	1.2
10°-20°	493.1	3.0
20°-30°	830.5	5.0
30°-40°	1359.5	8.2
40°-50°	2354.0	14.2
50°-60°	3707.8	22.4
60°-70°	4842.2	29.3
70°-80°	2494.0	15.1
80°-90°	269.8	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°	16551.3	100.0
0°-180°	16551.3	100.0

Coefficient of Utilization



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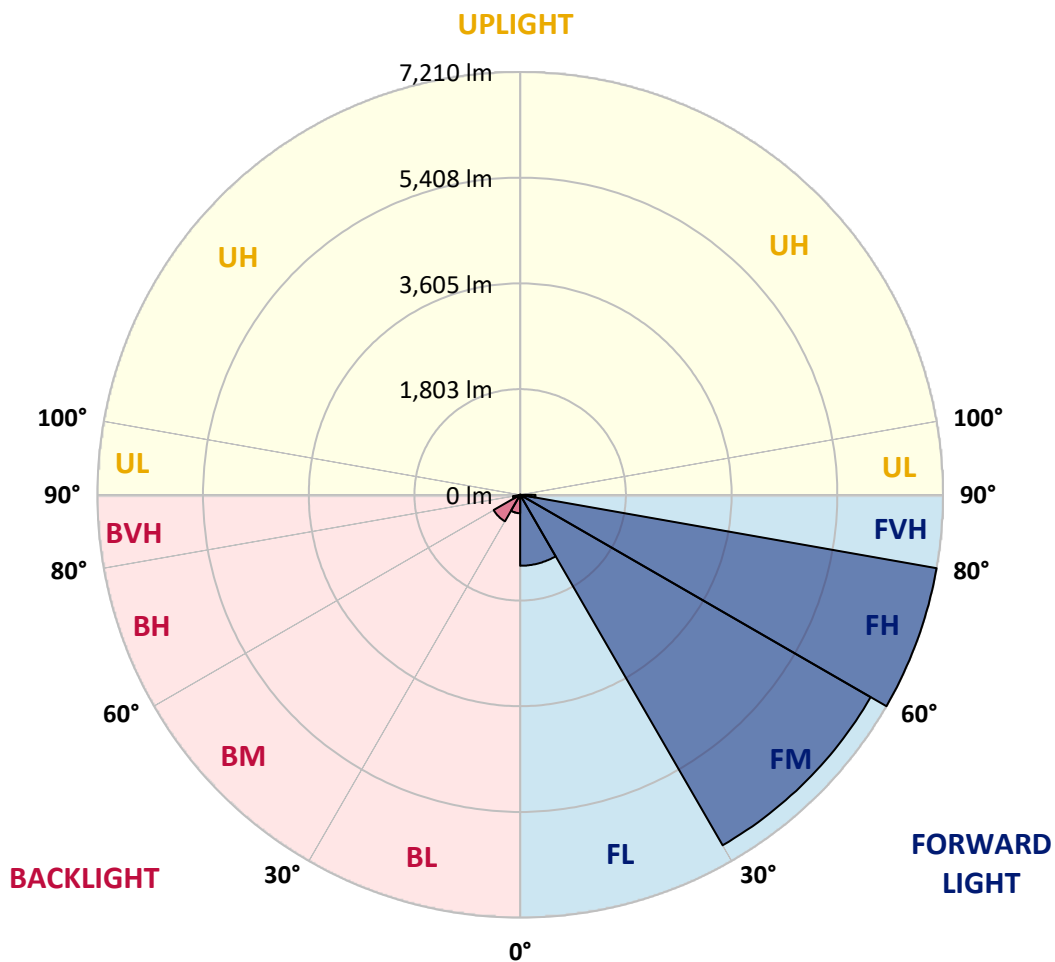
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1210.4	7.3			
FM	(30°-60°)	6900.9	41.7			
FH	(60°-80°)	7210.5	43.6			G3/7500
FVH	(80°-90°)	261.3	1.6			G3/500
BL	(0°-30°)	313.7	1.9	B1/500		
BM	(30°-60°)	520.5	3.1	B1/1000		
BH	(60°-80°)	125.7	0.8	B1/500		G1/500
BVH	(80°-90°)	8.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9
2.5°	2715.2	2700.5	2691.6	2679.7	2665.0	2652.2	2647.2	2610.8	2576.3	2529.0	2474.8
5°	2765.4	2760.5	2744.8	2729.0	2711.2	2691.6	2680.7	2637.4	2588.2	2519.1	2424.6
7.5°	2770.4	2764.5	2744.8	2723.1	2698.4	2674.8	2656.1	2612.7	2567.4	2497.5	2382.2
10°	2762.5	2755.6	2740.8	2717.2	2686.7	2664.0	2645.2	2603.9	2565.5	2502.4	2374.4
12.5°	2753.7	2746.7	2739.9	2728.0	2701.4	2685.7	2669.9	2630.5	2596.0	2542.9	2402.9
15°	2762.5	2758.6	2766.5	2761.6	2746.7	2732.9	2717.2	2681.8	2650.2	2605.9	2455.1
17.5°	2799.9	2799.9	2824.6	2827.5	2813.7	2794.0	2771.4	2735.9	2709.3	2671.8	2517.2
20°	2887.6	2884.7	2916.2	2922.1	2888.6	2858.0	2824.6	2781.2	2760.5	2736.9	2578.2
22.5°	3038.4	3024.6	3043.3	3037.3	2971.4	2924.1	2882.7	2829.5	2818.6	2807.8	2646.3
25°	3234.4	3226.5	3239.4	3181.2	3065.0	3000.9	2951.6	2891.6	2891.6	2902.4	2723.1
27.5°	3519.2	3489.6	3446.2	3343.8	3169.4	3087.6	3034.4	2970.3	2987.1	3027.5	2824.6
30°	3810.8	3778.3	3678.7	3521.1	3296.5	3210.7	3148.7	3081.7	3121.1	3195.0	2960.5
32.5°	4098.5	4062.0	3921.1	3722.1	3478.7	3393.0	3333.0	3259.0	3325.1	3449.2	3159.6
35°	4377.2	4344.8	4182.1	3947.7	3721.1	3650.2	3595.0	3530.9	3615.7	3789.1	3440.3
37.5°	4690.5	4655.0	4457.1	4202.9	4015.7	3964.4	3924.0	3860.0	4007.8	4262.0	3831.5
40°	5075.8	5015.6	4748.6	4495.5	4356.5	4331.9	4304.4	4295.5	4525.0	4876.7	4352.7
42.5°	5517.1	5418.6	5054.1	4803.9	4730.9	4748.6	4741.8	4781.2	5172.3	5641.3	4987.1
45°	5958.5	5831.4	5394.0	5132.9	5142.8	5204.8	5243.2	5400.9	5983.1	6518.1	5669.8
47.5°	6332.9	6207.8	5720.0	5488.5	5606.8	5728.9	5833.4	6131.9	6816.6	7381.1	6200.8
50°	6653.1	6534.8	6065.9	5879.7	6145.7	6342.7	6512.2	6954.5	7713.2	8038.2	6573.3
52.5°	6915.1	6836.3	6424.5	6328.0	6761.4	7050.1	7298.3	7828.4	8507.2	8572.2	6862.9
55°	7170.3	7114.1	6809.7	6860.9	7484.6	7877.6	8192.0	8755.4	9190.9	9017.5	7140.7
57.5°	7463.9	7412.6	7249.1	7536.8	8435.3	8929.8	9272.7	9577.2	9792.9	9472.7	7402.8
60°	7763.4	7733.8	7737.8	8287.5	9526.9	10001.8	10190.9	10269.7	10384.0	9901.2	7417.6
62.5°	8049.1	8105.2	8296.3	9123.0	10572.2	10936.7	11032.3	11110.2	10976.2	9969.3	6853.1
65°	8532.8	8624.5	9080.6	10241.2	11721.9	12112.0	12210.6	11943.6	11069.8	9090.5	5574.3
67.5°	8769.2	8936.8	9750.6	11283.6	12837.2	13270.6	13234.2	11997.8	9933.8	6931.9	3577.3
69°	8720.0	8898.3	9905.2	11602.7	13207.6	13600.7	13369.1	11334.7	8462.9	5021.6	2196.0
70°	8525.0	8705.2	9825.4	11590.9	13254.9	13566.3	13118.9	10516.0	7155.5	3671.9	1373.4
72.5°	7119.0	7274.7	8723.0	10476.7	12210.6	11957.4	10975.1	7285.6	3486.6	999.9	309.3
75°	4382.2	4468.9	6259.0	7892.5	9222.5	8572.2	7312.2	3624.5	1039.4	282.7	171.4
77.5°	2315.2	2354.6	3426.6	4652.1	5846.2	4837.3	3747.7	1413.7	478.8	177.4	124.2
80°	1368.4	1398.0	1845.3	2127.0	2530.0	2113.2	1498.5	868.0	342.9	111.3	110.4
82.5°	783.3	802.0	1337.9	1182.2	997.1	851.2	745.8	822.7	205.9	74.9	114.3
85°	287.7	291.6	752.7	899.5	593.1	352.7	370.4	681.8	55.1	47.3	89.6
87.5°	134.0	131.0	387.2	550.8	346.8	223.6	288.7	149.8	21.7	30.6	24.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9	2472.9
2.5°	2443.3	2406.8	2340.8	2272.9	2203.8	2150.7	2098.5	2057.1	2043.3	2017.7	2019.7
5°	2368.4	2301.4	2163.5	2023.6	1877.8	1757.6	1644.3	1552.6	1508.3	1463.0	1463.0
7.5°	2303.4	2205.9	1990.2	1762.5	1527.1	1329.0	1150.7	1016.7	942.9	883.7	882.7
10°	2278.7	2146.8	1845.3	1519.2	1191.1	921.2	709.3	573.4	503.4	458.1	456.1
12.5°	2289.6	2126.1	1734.0	1294.5	882.7	592.1	410.8	323.2	293.6	279.8	279.8
15°	2321.2	2120.2	1622.6	1074.8	623.6	370.4	272.9	249.3	247.2	247.2	247.2
17.5°	2359.5	2122.1	1508.3	861.0	424.6	265.0	235.5	232.5	234.5	234.5	234.5
20°	2398.9	2123.1	1385.2	663.1	299.5	230.6	221.7	220.7	222.7	222.7	223.6
22.5°	2447.2	2128.0	1262.0	495.5	247.2	217.7	210.8	210.8	211.9	211.9	210.8
25°	2502.4	2137.9	1133.9	367.4	225.6	208.9	203.0	201.9	203.0	201.9	201.0
27.5°	2571.4	2151.7	991.1	287.7	215.7	200.0	195.1	195.1	194.1	193.1	192.1
30°	2658.0	2167.4	830.5	244.3	205.9	192.1	187.2	186.2	185.3	183.2	183.2
32.5°	2790.1	2201.9	671.9	221.7	195.1	181.3	177.4	177.4	175.3	173.4	172.4
35°	2993.1	2269.9	530.0	207.9	183.2	169.5	164.5	164.5	162.5	161.5	160.6
37.5°	3273.9	2373.3	411.8	195.1	171.4	156.6	151.7	150.8	148.7	146.8	145.8
40°	3647.2	2501.4	324.2	183.2	159.6	143.8	139.9	137.9	134.0	131.0	131.0
42.5°	4116.1	2647.2	263.0	170.4	145.8	132.1	129.1	126.1	119.2	116.2	115.3
45°	4606.8	2778.2	222.7	155.7	132.1	120.2	118.3	113.3	104.4	101.5	101.5
47.5°	4960.5	2808.8	196.1	141.9	119.2	107.4	106.4	97.5	89.6	87.7	86.7
50°	5181.1	2748.7	174.4	128.1	107.4	95.5	92.6	81.7	76.8	74.9	73.9
52.5°	5330.0	2641.4	156.6	116.2	96.6	84.7	77.8	70.0	66.0	64.0	64.0
55°	5449.2	2489.6	138.9	105.5	87.7	75.9	66.0	60.0	56.2	54.2	54.2
57.5°	5482.6	2283.7	121.2	96.6	78.8	67.0	56.2	52.2	47.3	46.3	46.3
60°	5239.3	1912.3	107.4	85.7	70.9	58.1	49.3	44.3	39.4	38.5	37.4
62.5°	4598.0	1479.8	94.6	75.9	62.1	50.2	42.4	36.4	32.5	32.5	32.5
65°	3507.3	992.1	82.8	66.0	54.2	42.4	36.4	29.6	27.6	27.6	28.5
67.5°	2099.5	539.9	70.9	56.2	46.3	35.5	30.6	25.6	24.7	25.6	25.6
69°	1230.5	317.2	64.0	50.2	40.4	31.5	26.6	22.7	24.7	25.6	25.6
70°	759.5	213.8	59.1	45.3	36.4	28.5	24.7	21.7	23.6	24.7	24.7
72.5°	211.9	110.4	47.3	35.5	29.6	23.6	19.7	19.7	22.7	23.6	23.6
75°	137.9	81.7	36.4	26.6	22.7	18.7	16.8	18.7	21.7	22.7	22.7
77.5°	114.3	67.0	29.6	21.7	18.7	17.7	15.8	16.8	19.7	20.7	20.7
80°	104.4	47.3	23.6	19.7	16.8	15.8	14.7	13.8	17.7	18.7	18.7
82.5°	99.5	37.4	20.7	17.7	15.8	13.8	12.8	13.8	15.8	16.8	17.7
85°	62.1	24.7	18.7	16.8	13.8	12.8	12.8	12.8	14.7	15.8	15.8
87.5°	22.7	19.7	16.8	13.8	11.9	11.9	11.9	11.9	12.8	14.7	14.7
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)