

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: P191193

Luminaire Tested: **GLEON-AF-05-LED-E1-SL4-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191193  
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-05-LED-E1-SL4-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 615mA 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: 16274.1 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 162  
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

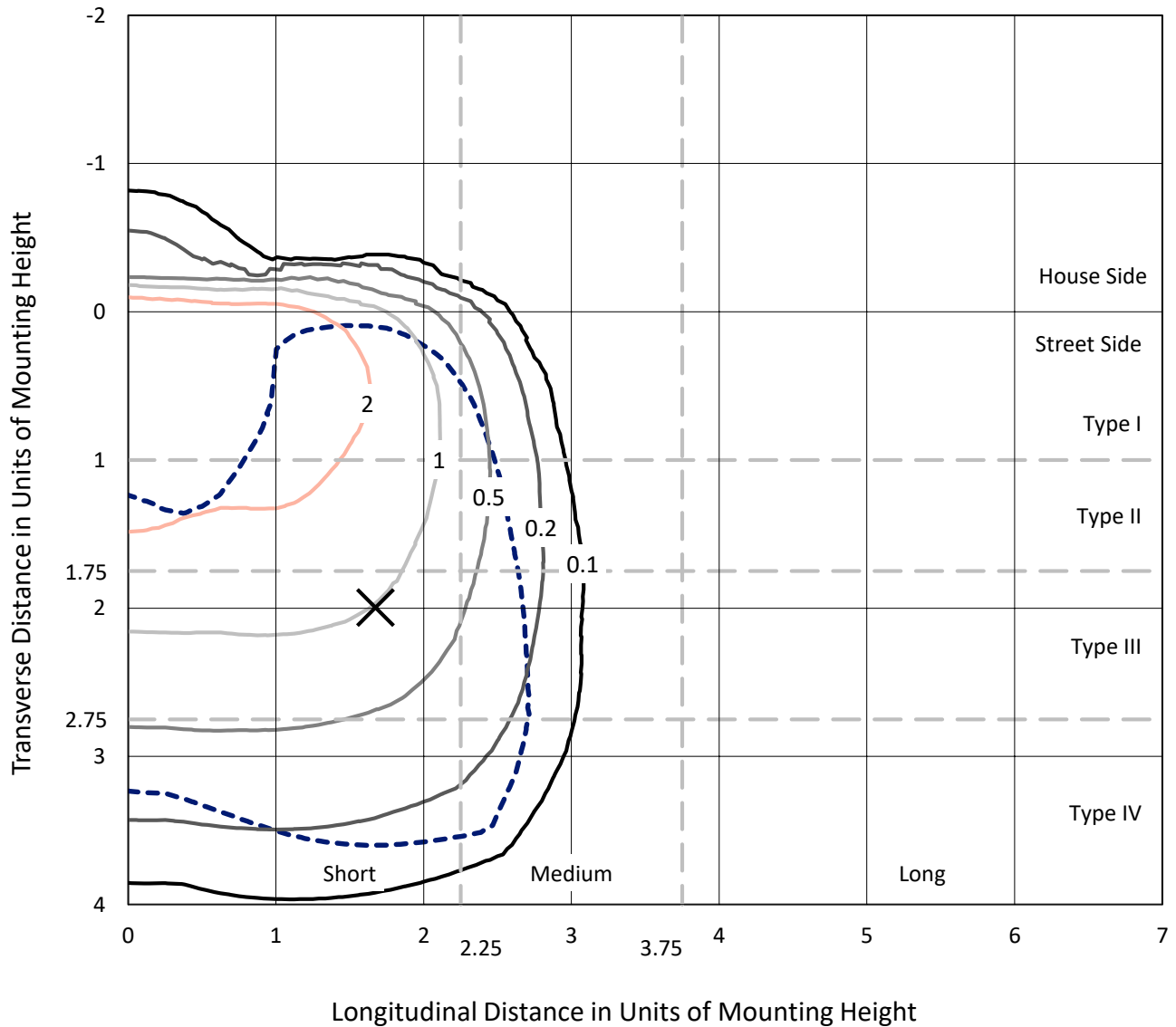


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### Iso-Footcandle Lines of Horizontal Illumination

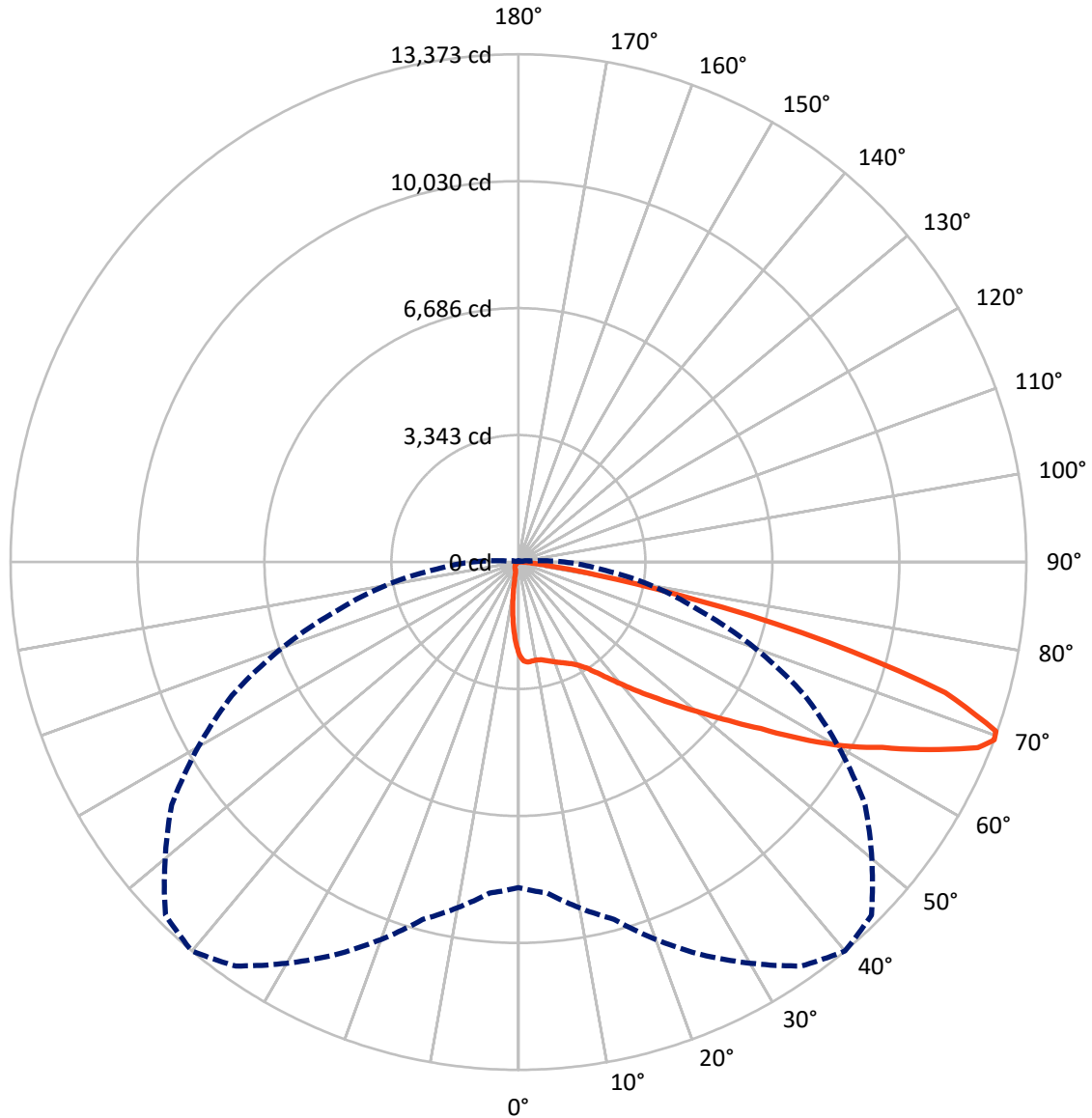
× Max cd  
 - - - 1/2 Max cd



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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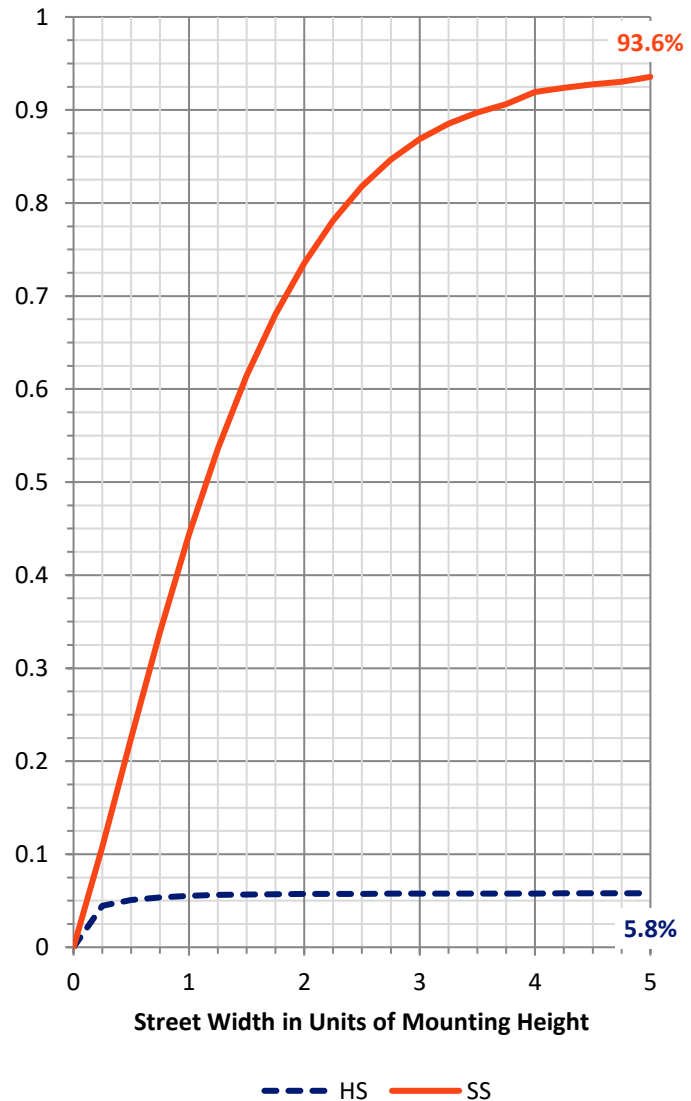
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	952.1	0.0	952.1
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	15322.0	0.0	15322.0
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	16274.1	0.0	16274.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.1	1.2
10°-20°	484.8	3.0
20°-30°	816.6	5.0
30°-40°	1336.8	8.2
40°-50°	2314.6	14.2
50°-60°	3645.7	22.4
60°-70°	4761.1	29.3
70°-80°	2452.2	15.1
80°-90°	265.3	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°	16274.1	100.0
0°-180°	16274.1	100.0

**Coefficient of Utilization**



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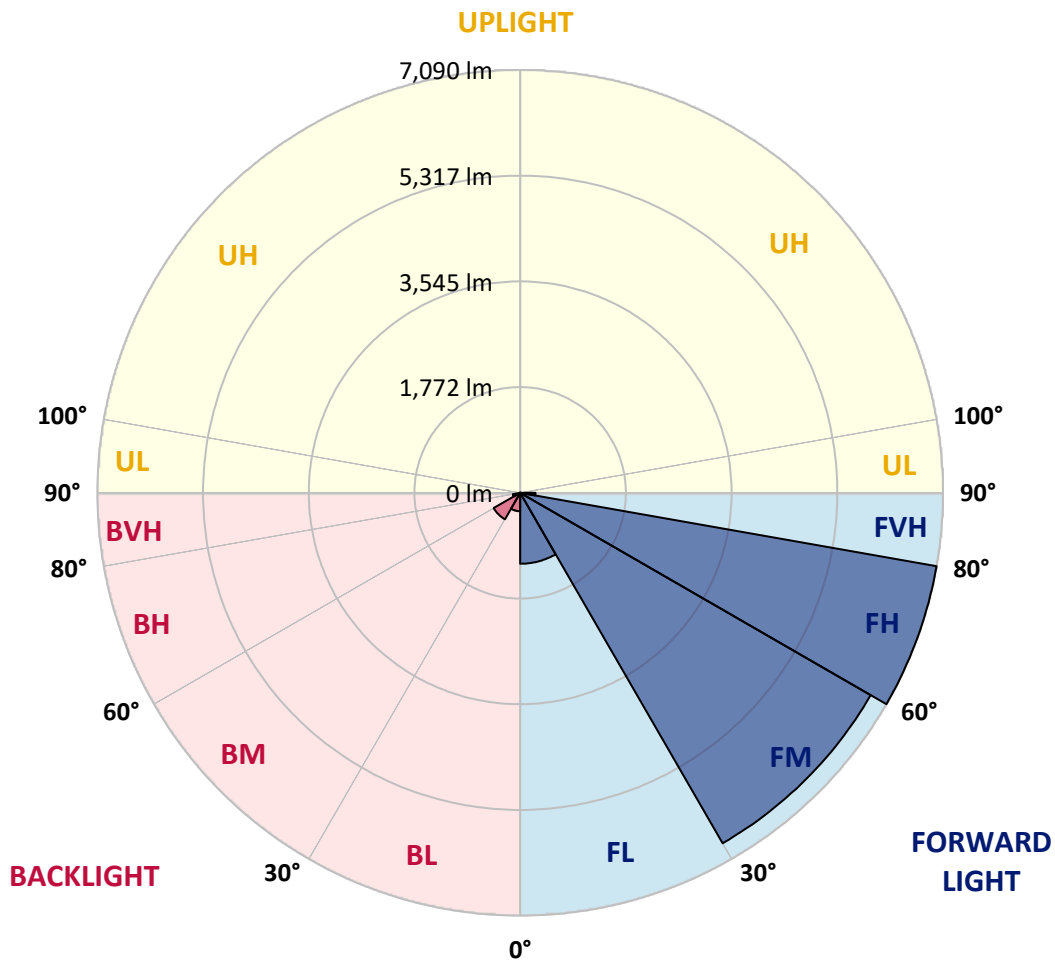
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1190.1	7.3			
FM	(30°-60°)	6785.3	41.7			
FH	(60°-80°)	7089.7	43.6			G3/7500
FVH	(80°-90°)	256.9	1.6			G3/500
BL	(0°-30°)	308.4	1.9	B1/500		
BM	(30°-60°)	511.7	3.1	B1/1000		
BH	(60°-80°)	123.6	0.8	B1/500		G1/500
BVH	(80°-90°)	8.3	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°	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5
2.5°	2669.7	2655.2	2646.5	2634.8	2620.3	2607.7	2602.9	2567.1	2533.1	2486.7	2433.4
5°	2719.1	2714.3	2698.7	2683.3	2665.9	2646.5	2635.8	2593.2	2544.8	2477.0	2384.0
7.5°	2724.0	2718.2	2698.7	2677.5	2653.2	2630.0	2611.6	2569.0	2524.4	2455.7	2342.4
10°	2716.2	2709.5	2695.0	2671.6	2641.7	2619.4	2601.0	2560.2	2522.5	2460.5	2334.6
12.5°	2707.5	2700.7	2693.9	2682.4	2656.2	2640.6	2625.2	2586.4	2552.6	2500.2	2362.7
15°	2716.2	2712.4	2720.1	2715.2	2700.7	2687.2	2671.6	2636.8	2605.8	2562.2	2414.0
17.5°	2753.1	2753.1	2777.3	2780.2	2766.6	2747.2	2724.9	2690.1	2664.0	2627.1	2475.0
20°	2839.3	2836.3	2867.3	2873.2	2840.2	2810.3	2777.3	2734.7	2714.3	2691.1	2535.1
22.5°	2987.4	2973.9	2992.3	2986.5	2921.6	2875.1	2834.4	2782.1	2771.5	2760.8	2602.0
25°	3180.3	3172.5	3185.1	3128.0	3013.6	2950.7	2902.2	2843.1	2843.1	2853.8	2677.5
27.5°	3460.2	3431.2	3388.5	3287.8	3116.3	3035.9	2983.6	2920.6	2937.1	2976.8	2777.3
30°	3747.0	3714.9	3617.2	3462.2	3241.3	3157.0	3096.0	3030.1	3068.9	3141.5	2910.9
32.5°	4029.8	3993.9	3855.4	3659.7	3420.4	3336.3	3277.1	3204.5	3269.4	3391.4	3106.6
35°	4304.0	4271.9	4112.2	3881.6	3658.8	3589.0	3534.8	3471.8	3555.2	3725.6	3382.7
37.5°	4612.0	4577.1	4382.4	4132.5	3948.4	3898.1	3858.4	3795.4	3940.7	4190.6	3767.3
40°	4990.8	4931.6	4669.2	4420.2	4283.6	4259.4	4232.3	4223.6	4449.2	4795.1	4279.7
42.5°	5424.7	5327.8	4969.4	4723.4	4651.7	4669.2	4662.4	4701.1	5085.7	5546.7	4903.5
45°	5858.7	5733.7	5303.6	5046.9	5056.7	5117.6	5155.5	5310.4	5882.9	6408.9	5574.9
47.5°	6226.8	6103.7	5624.3	5396.7	5512.9	5633.0	5735.7	6029.2	6702.5	7257.5	6097.0
50°	6541.7	6425.4	5964.3	5781.2	6042.8	6236.5	6403.1	6838.0	7584.0	7903.6	6463.2
52.5°	6799.3	6721.8	6316.9	6222.0	6648.2	6932.0	7176.1	7697.3	8364.8	8428.7	6748.0
55°	7050.2	6994.9	6695.6	6746.1	7359.2	7745.7	8054.7	8608.8	9037.1	8866.5	7021.1
57.5°	7338.9	7288.5	7127.7	7410.6	8294.0	8780.3	9117.5	9416.8	9628.8	9314.1	7278.8
60°	7633.4	7604.3	7608.2	8148.7	9367.4	9834.2	10020.2	10097.8	10210.1	9735.4	7293.3
62.5°	7914.3	7969.5	8157.4	8970.2	10395.1	10753.6	10847.5	10924.0	10792.3	9802.3	6738.3
65°	8389.9	8480.0	8928.5	10069.6	11525.6	11909.2	12006.1	11743.6	10884.3	8938.2	5480.9
67.5°	8622.5	8787.0	9587.2	11094.5	12622.2	13048.4	13012.5	11796.9	9767.4	6815.8	3517.3
69°	8574.0	8749.3	9739.3	11408.4	12986.4	13372.9	13145.2	11144.9	8321.1	4937.5	2159.2
70°	8382.2	8559.4	9660.8	11396.8	13032.9	13339.0	12899.2	10339.9	7035.7	3610.3	1350.4
72.5°	6999.8	7152.9	8576.8	10301.1	12006.1	11757.1	10791.3	7163.5	3428.2	983.3	304.1
75°	4308.8	4394.0	6154.2	7760.3	9068.0	8428.7	7189.7	3563.9	1021.9	278.0	168.6
77.5°	2276.5	2315.2	3369.2	4574.2	5748.3	4756.3	3685.0	1390.1	470.8	174.4	122.0
80°	1345.5	1374.5	1814.4	2091.4	2487.6	2077.8	1473.4	853.4	337.1	109.5	108.5
82.5°	770.1	788.5	1315.5	1162.5	980.3	837.0	733.4	808.8	202.4	73.7	112.3
85°	282.8	286.7	740.1	884.4	583.2	346.8	364.3	670.3	54.2	46.5	88.2
87.5°	131.8	128.8	380.7	541.6	340.9	219.9	283.9	147.2	21.3	30.1	24.2
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°	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5	2431.5
2.5°	2402.4	2366.5	2301.6	2234.8	2167.0	2114.6	2063.3	2022.7	2009.1	1983.9	1985.9
5°	2328.7	2262.9	2127.2	1989.7	1846.3	1728.2	1616.8	1526.7	1483.1	1438.5	1438.5
7.5°	2264.8	2169.0	1956.8	1733.0	1501.5	1306.8	1131.5	999.7	927.0	868.9	868.0
10°	2240.6	2110.8	1814.4	1493.7	1171.2	905.7	697.4	563.7	495.0	450.4	448.5
12.5°	2251.3	2090.5	1705.0	1272.9	868.0	582.2	404.0	317.7	288.7	275.1	275.1
15°	2282.3	2084.7	1595.5	1056.8	613.2	364.3	268.3	245.1	243.2	243.2	243.2
17.5°	2320.1	2086.6	1483.1	846.6	417.5	260.5	231.5	228.6	230.6	230.6	230.6
20°	2358.8	2087.5	1362.0	651.9	294.5	226.7	218.0	217.0	218.9	218.9	219.9
22.5°	2406.3	2092.3	1240.9	487.2	243.2	214.1	207.4	207.4	208.3	208.3	207.4
25°	2460.5	2102.1	1115.0	361.3	221.9	205.4	199.6	198.6	199.6	198.6	197.6
27.5°	2528.3	2115.7	974.5	282.8	212.2	196.6	191.8	191.8	190.9	189.9	188.9
30°	2613.5	2131.1	816.6	240.2	202.4	188.9	184.0	183.1	182.1	180.1	180.1
32.5°	2743.3	2165.1	660.6	218.0	191.8	178.2	174.4	174.4	172.5	170.5	169.5
35°	2942.9	2231.9	521.2	204.4	180.1	166.6	161.7	161.7	159.8	158.9	157.9
37.5°	3219.0	2333.6	404.9	191.8	168.6	154.1	149.1	148.2	146.3	144.3	143.4
40°	3586.2	2459.5	318.8	180.1	156.9	141.5	137.6	135.6	131.8	128.8	128.8
42.5°	4047.2	2602.9	258.6	167.6	143.4	129.8	126.9	124.0	117.2	114.3	113.3
45°	4529.6	2731.7	218.9	153.0	129.8	118.2	116.2	111.4	102.7	99.7	99.7
47.5°	4877.4	2761.8	192.7	139.5	117.2	105.6	104.6	95.9	88.2	86.2	85.2
50°	5094.4	2702.6	171.4	125.9	105.6	94.0	91.0	80.4	75.6	73.7	72.6
52.5°	5240.7	2597.1	154.1	114.3	94.9	83.3	76.5	68.7	64.9	63.0	63.0
55°	5357.9	2447.9	136.6	103.6	86.2	74.6	64.9	59.1	55.2	53.3	53.3
57.5°	5390.8	2245.5	119.2	94.9	77.5	65.9	55.2	51.4	46.5	45.5	45.5
60°	5151.6	1880.3	105.6	84.3	69.8	57.2	48.4	43.6	38.8	37.7	36.8
62.5°	4520.9	1454.9	93.0	74.6	61.1	49.4	41.6	35.8	31.9	31.9	31.9
65°	3448.6	975.5	81.3	64.9	53.3	41.6	35.8	29.1	27.1	27.1	28.1
67.5°	2064.3	530.8	69.8	55.2	45.5	34.9	30.1	25.2	24.2	25.2	25.2
69°	1209.9	311.9	63.0	49.4	39.7	31.0	26.2	22.3	24.2	25.2	25.2
70°	746.9	210.2	58.1	44.6	35.8	28.1	24.2	21.3	23.2	24.2	24.2
72.5°	208.3	108.5	46.5	34.9	29.1	23.2	19.3	19.3	22.3	23.2	23.2
75°	135.6	80.4	35.8	26.2	22.3	18.4	16.5	18.4	21.3	22.3	22.3
77.5°	112.3	65.9	29.1	21.3	18.4	17.4	15.5	16.5	19.3	20.4	20.4
80°	102.7	46.5	23.2	19.3	16.5	15.5	14.5	13.6	17.4	18.4	18.4
82.5°	97.8	36.8	20.4	17.4	15.5	13.6	12.6	13.6	15.5	16.5	17.4
85°	61.1	24.2	18.4	16.5	13.6	12.6	12.6	12.6	14.5	15.5	15.5
87.5°	22.3	19.3	16.5	13.6	11.7	11.7	11.7	11.7	12.6	14.5	14.5
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)