

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: P651423

Luminaire Tested: **GALN-SA5D-840-U-T3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651423  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-T3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23920.6 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

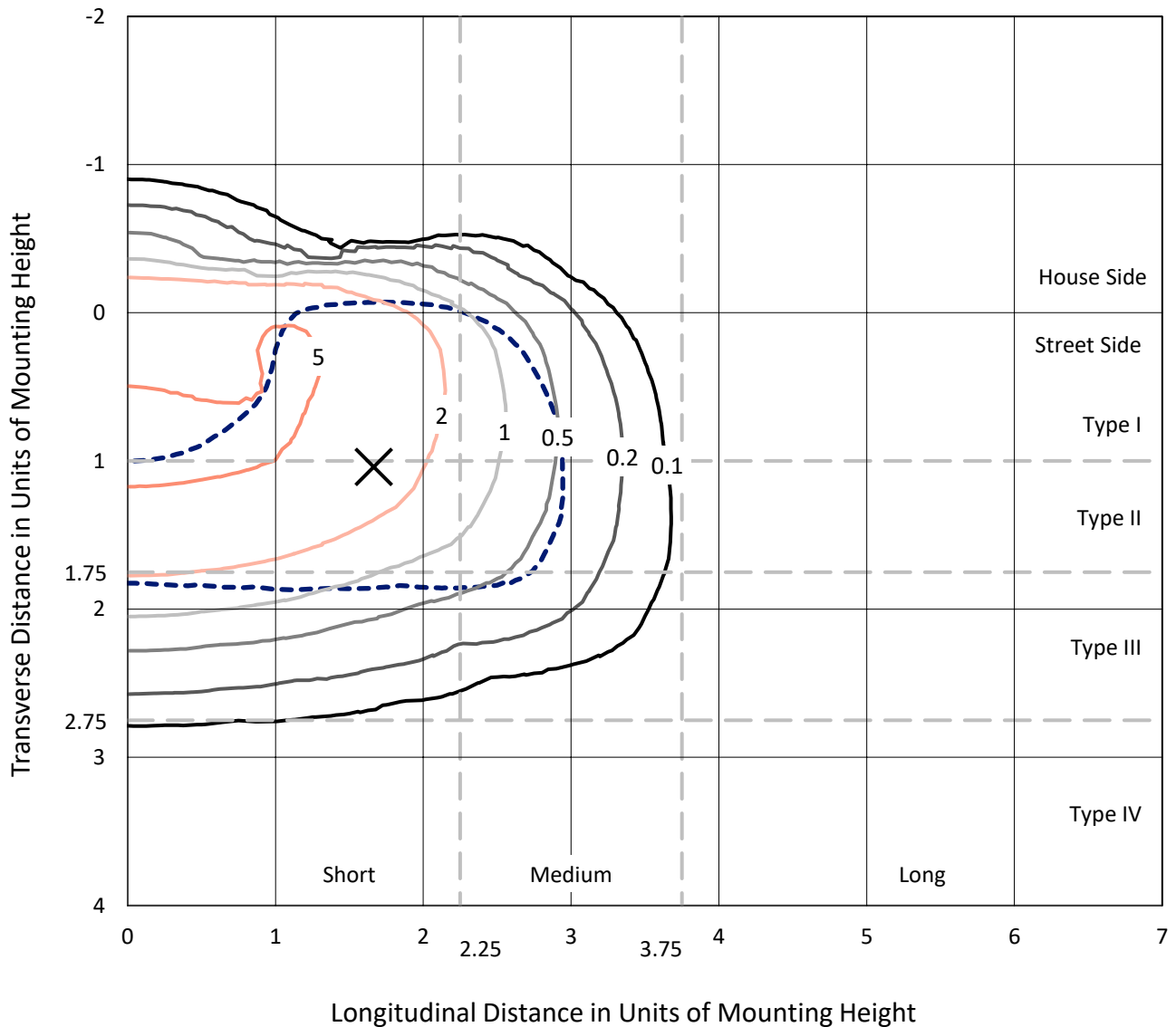
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

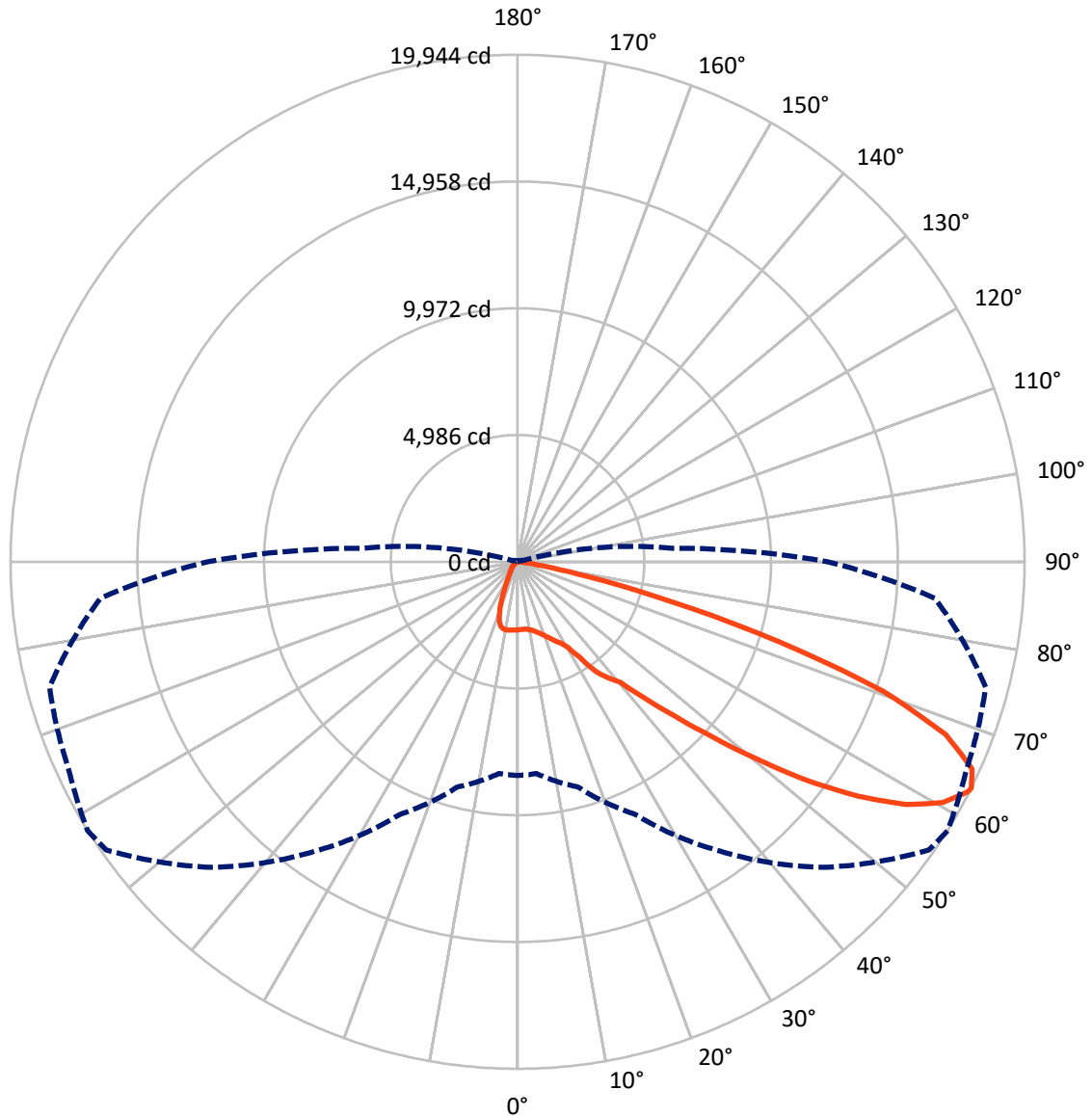
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 63-Deg Vertical

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 CATALOG NUMBER: GALN-SA5D-840-U-T3-HSS

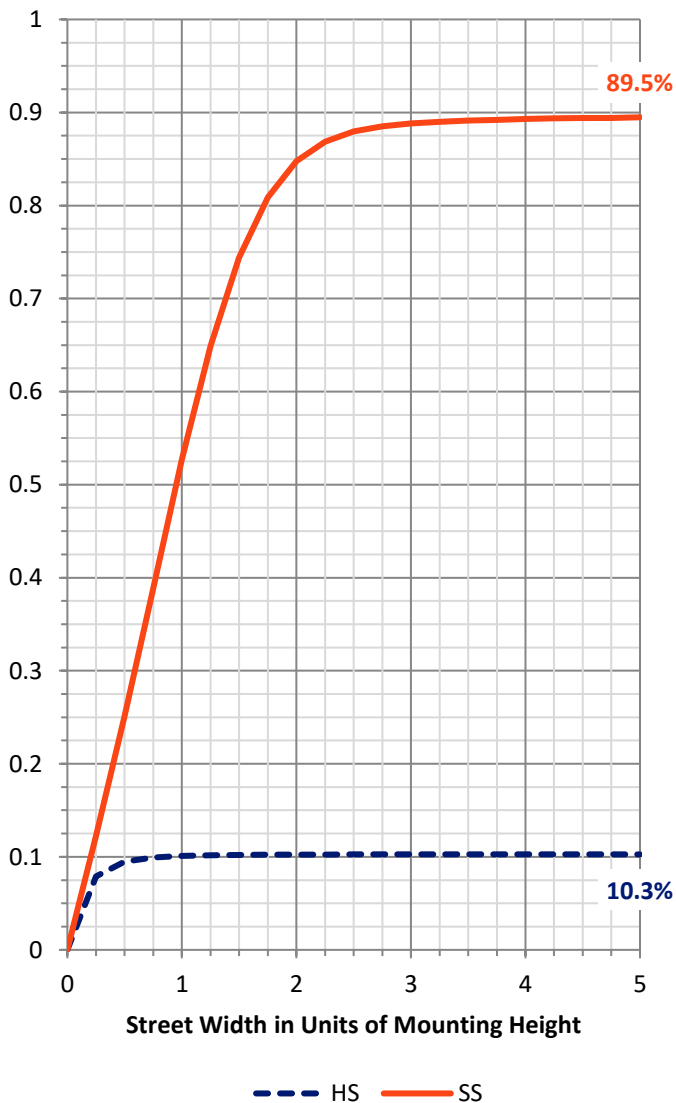
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2476.8	0.0	2476.8
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	21443.7	0.0	21443.7
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	23920.6	0.0	23920.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.7	1.0
10°-20°	682.8	2.9
20°-30°	1185.0	5.0
30°-40°	2177.7	9.1
40°-50°	4099.4	17.1
50°-60°	7011.7	29.3
60°-70°	6713.7	28.1
70°-80°	1712.0	7.2
80°-90°	87.5	0.4
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°	23920.6	100.0
0°-180°	23920.6	100.0

**Coefficient of Utilization**



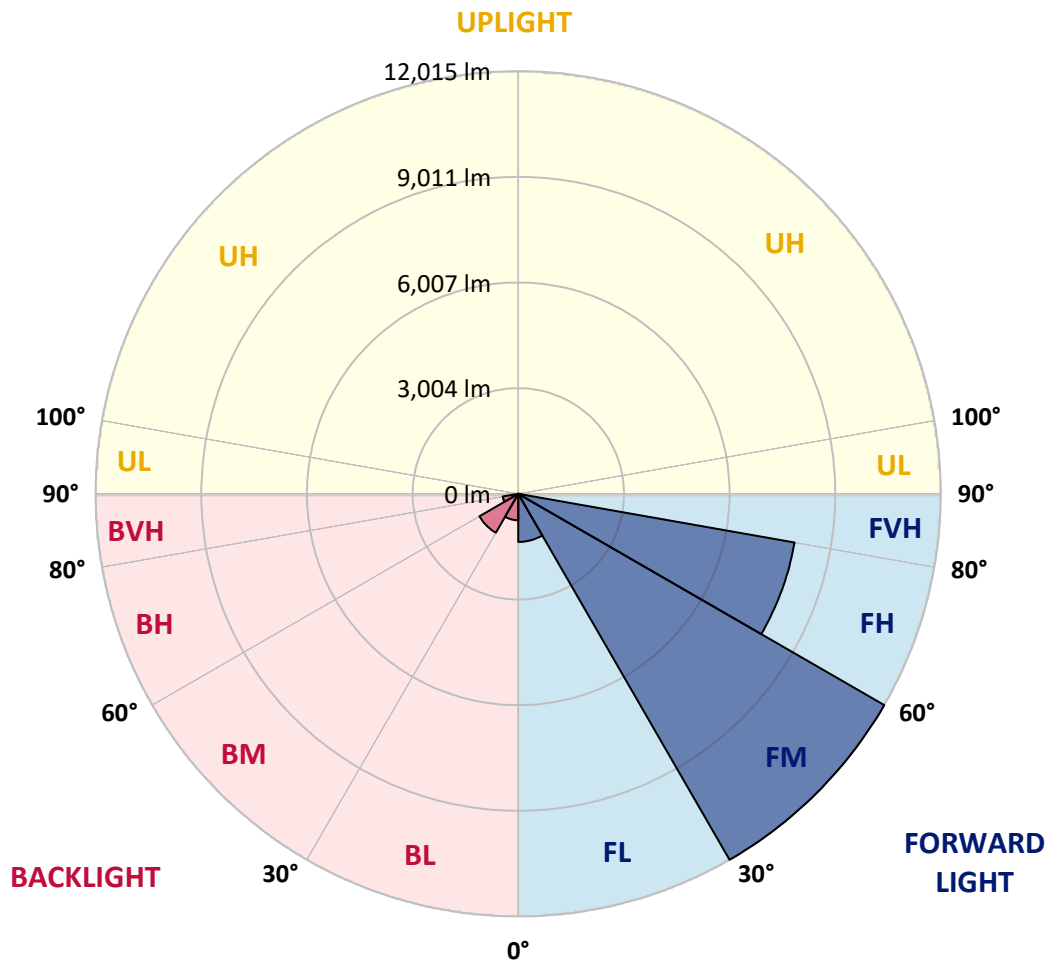
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 CATALOG NUMBER: GALN-SA5D-840-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1367.4	5.7			
FM (30°-60°)	12014.8	50.2			
FH (60°-80°)	7977.4	33.3			G4/12000
FVH (80°-90°)	84.1	0.4			G1/100
BL (0°-30°)	751.1	3.1	B2/1000		
BM (30°-60°)	1273.9	5.3	B2/2500		
BH (60°-80°)	448.3	1.9	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0
2.5°	2611.4	2620.4	2629.4	2633.0	2645.6	2658.1	2667.2	2665.4	2679.8	2687.0	2687.0
5°	2506.9	2506.9	2530.3	2551.9	2587.9	2624.0	2658.1	2665.4	2692.4	2717.6	2726.6
7.5°	2418.6	2424.1	2442.1	2481.7	2530.3	2593.4	2661.8	2678.0	2724.8	2780.7	2804.1
10°	2377.3	2380.9	2404.3	2445.7	2506.9	2593.4	2688.8	2719.5	2791.4	2879.7	2912.1
12.5°	2368.3	2373.6	2397.0	2443.9	2514.1	2618.5	2748.2	2780.7	2885.1	2998.6	3047.2
15°	2384.5	2388.0	2411.5	2461.9	2539.3	2663.6	2827.4	2872.5	2996.7	3128.3	3191.3
17.5°	2442.1	2438.5	2454.7	2496.1	2582.5	2719.5	2922.9	2977.0	3122.8	3302.9	3344.3
20°	2687.0	2663.6	2649.2	2613.2	2647.4	2798.7	3038.2	3117.4	3297.6	3481.2	3510.0
22.5°	3214.6	3162.4	3059.8	2919.4	2811.3	2906.7	3176.9	3268.7	3501.0	3681.1	3681.1
25°	3886.4	3819.8	3717.1	3411.0	3146.3	3085.0	3333.6	3448.8	3722.5	3904.4	3845.0
27.5°	4727.4	4675.2	4475.3	4118.7	3713.5	3396.5	3515.5	3621.7	3918.8	4138.6	4014.3
30°	5411.8	5386.6	5222.7	4904.0	4457.3	3994.5	3854.1	3924.3	4180.0	4433.9	4306.1
32.5°	5989.9	5989.9	5822.4	5525.3	5107.5	4696.8	4428.5	4478.9	4723.9	5017.4	4779.7
35°	6625.7	6604.0	6469.0	6186.2	5718.0	5356.0	5246.2	5314.6	5536.1	5754.0	5168.7
37.5°	7293.8	7286.6	7146.1	6872.4	6490.6	6034.9	5777.4	5795.4	5908.9	6042.2	5624.4
40°	8019.6	8030.4	7846.7	7677.4	7317.2	6850.8	6357.3	6243.8	6350.1	6726.5	6465.4
42.5°	8876.8	8851.6	8772.4	8541.9	8251.9	7972.8	7380.3	7338.8	7432.5	7835.9	7553.2
45°	9872.8	9908.7	9771.9	9644.0	9449.6	9217.2	8721.9	8649.9	8752.5	9379.3	8977.7
47.5°	10870.5	10836.3	10924.5	10901.1	11005.6	10832.7	10395.0	10247.3	10494.1	11088.4	10497.7
50°	11630.4	11668.3	11852.0	12120.3	12568.7	12666.0	12246.4	12196.0	12305.8	12687.7	11857.4
52.5°	12123.9	12250.0	12538.1	13227.9	14036.5	14665.1	14346.3	14319.3	14274.3	14376.9	13157.7
55°	12446.3	12574.2	12950.6	13966.3	15358.4	16379.6	16395.8	16280.5	15983.4	15909.5	14373.3
57.5°	12248.2	12273.4	12810.1	14168.0	16091.4	17602.4	18131.9	18016.6	17467.3	17188.2	15446.6
60°	11009.2	11061.4	11808.7	13404.4	15772.6	18002.2	19282.7	19230.5	18628.9	18313.8	16282.3
62.5°	8813.8	8965.1	9734.1	11513.5	14290.4	17328.6	19749.1	19896.8	19428.5	18994.5	16545.2
63°	8410.4	8361.8	9174.0	10962.4	13897.9	16995.5	19756.4	19943.6	19464.6	19059.3	16473.2
65°	6225.8	6371.8	6899.4	8644.6	11565.7	15444.9	19311.5	19642.9	19331.3	18773.0	15675.4
67.5°	3495.6	3488.4	4072.0	5656.7	8095.2	12114.9	17461.9	18162.5	18097.6	16846.0	12993.8
70°	1710.9	1737.9	1977.4	2931.9	4695.1	8358.2	14510.2	15266.6	15290.0	13231.5	8984.9
72.5°	774.4	787.0	958.1	1428.2	2413.2	4450.2	9998.8	10721.0	10587.8	8432.0	4961.6
75°	408.8	435.8	527.6	718.6	1163.4	1835.1	5438.8	6137.6	5858.5	3852.2	1826.1
77.5°	302.6	311.6	358.4	457.4	623.1	714.9	2346.6	2791.4	2615.0	1394.0	605.1
80°	221.5	228.8	266.5	324.2	392.6	363.8	884.2	1013.9	909.5	473.7	185.5
82.5°	135.1	136.8	194.5	241.4	246.7	203.5	291.7	313.4	327.7	266.5	100.8
85°	48.6	61.2	131.4	174.7	145.9	102.7	122.4	135.1	147.7	169.3	59.5
87.5°	5.4	7.2	63.0	84.6	41.5	37.8	45.0	50.5	54.0	63.0	28.8
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0	2678.0
2.5°	2694.2	2701.4	2696.0	2687.0	2685.2	2679.8	2669.0	2669.0	2669.0	2672.6	2669.0
5°	2733.8	2739.2	2726.6	2708.6	2688.8	2663.6	2636.6	2620.4	2618.5	2615.0	2605.9
7.5°	2809.4	2816.7	2787.8	2744.6	2690.6	2629.4	2571.8	2517.7	2492.5	2472.7	2472.7
10°	2919.4	2926.5	2868.9	2791.4	2683.4	2559.2	2422.2	2298.0	2200.7	2155.7	2144.9
12.5°	3050.8	3054.4	2959.0	2823.9	2645.6	2406.0	2114.3	1842.4	1653.2	1566.8	1557.8
15°	3194.9	3169.6	3043.6	2836.4	2537.5	2090.9	1586.6	1253.4	1057.1	999.5	1021.1
17.5°	3340.7	3293.9	3108.4	2816.7	2294.4	1586.6	1066.1	855.5	794.2	778.0	778.0
20°	3477.6	3412.8	3155.3	2730.2	1873.0	1093.1	790.6	740.2	729.4	718.6	720.4
22.5°	3614.4	3515.5	3196.6	2537.5	1395.7	781.6	707.8	691.6	677.2	662.7	660.9
25°	3747.7	3610.9	3212.9	2181.0	950.9	671.8	646.6	624.9	596.1	579.9	576.3
27.5°	3886.4	3726.1	3202.1	1730.7	693.3	601.5	576.3	545.7	511.5	482.6	482.6
30°	4152.9	3945.9	3164.3	1244.4	583.5	529.5	497.0	448.4	410.6	381.8	380.0
32.5°	4516.8	4232.2	3034.6	875.2	518.6	466.4	417.8	363.8	324.2	302.6	302.6
35°	4841.0	4520.4	2791.4	644.7	466.4	405.2	345.8	293.6	262.9	248.5	243.1
37.5°	5334.4	4941.8	2456.5	524.1	416.0	351.2	290.0	241.4	216.1	205.3	205.3
40°	6074.5	5456.8	2045.9	459.3	367.4	299.0	241.4	203.5	183.7	171.1	171.1
42.5°	6993.1	6087.2	1629.9	412.4	322.4	257.5	201.7	172.9	154.9	145.9	144.1
45°	8149.3	6751.7	1255.3	369.2	286.4	219.8	171.1	145.9	127.8	122.4	124.3
47.5°	9355.9	7337.1	972.5	331.4	248.5	185.5	145.9	126.1	113.5	106.2	106.2
50°	10386.0	7740.5	738.4	288.1	219.8	156.7	127.8	113.5	102.7	99.1	97.2
52.5°	11246.9	7857.5	565.5	250.4	192.7	135.1	113.5	102.7	93.7	88.2	88.2
55°	11979.9	7754.9	443.0	210.7	162.1	117.1	100.8	91.8	81.1	75.6	73.8
57.5°	12408.5	7425.3	338.6	174.7	131.4	97.2	88.2	77.5	64.8	55.8	55.8
60°	12624.6	6946.2	259.4	144.1	100.8	77.5	72.1	57.6	45.0	37.8	36.0
62.5°	12365.2	6310.5	196.3	113.5	75.6	57.6	48.6	41.5	28.8	21.6	21.6
63°	12205.0	6126.8	189.1	108.1	70.2	54.0	45.0	37.8	25.2	19.8	18.0
65°	11126.2	5325.4	154.9	86.5	55.8	37.8	30.6	27.0	18.0	9.0	7.2
67.5°	8835.4	4073.7	122.4	64.8	39.6	27.0	18.0	16.2	5.4	0.0	0.0
70°	5973.7	2631.2	95.5	46.8	27.0	16.2	9.0	7.2	1.8	0.0	0.0
72.5°	3115.7	1348.9	73.8	34.2	16.2	10.8	5.4	1.8	0.0	0.0	0.0
75°	1102.2	459.3	54.0	21.6	10.8	5.4	1.8	0.0	0.0	0.0	0.0
77.5°	333.2	171.1	34.2	16.2	7.2	3.6	0.0	0.0	0.0	0.0	0.0
80°	117.1	63.0	19.8	10.8	5.4	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	57.6	30.6	12.6	9.0	5.4	1.8	0.0	0.0	0.0	0.0	0.0
85°	32.4	19.8	10.8	9.0	5.4	3.6	0.0	0.0	0.0	0.0	0.0
87.5°	23.4	14.4	10.8	9.0	7.2	3.6	1.8	0.0	0.0	0.0	0.0
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)