

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: P651836

Luminaire Tested: **GALN-SA4A-840-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651836  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12451.8 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

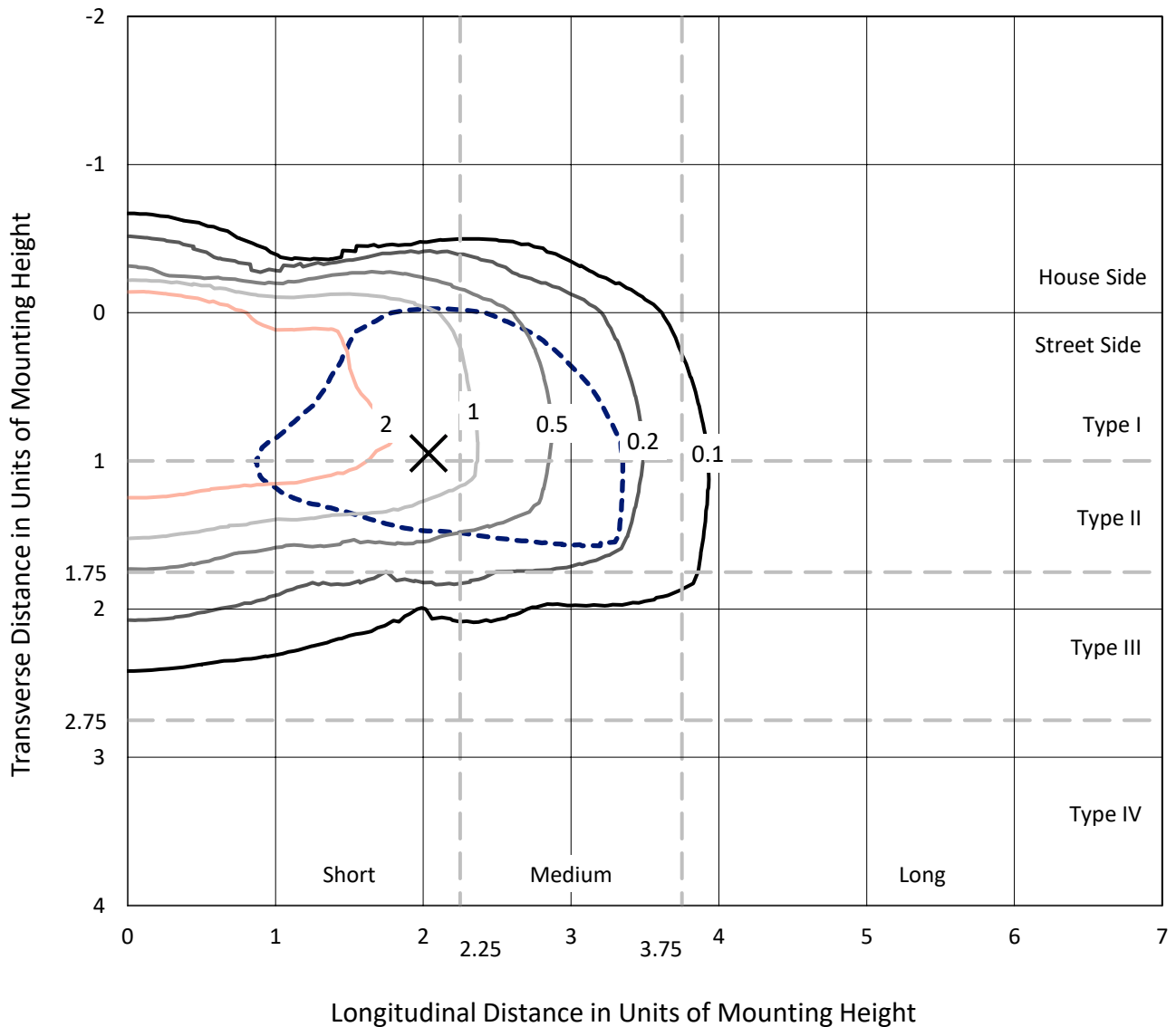
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

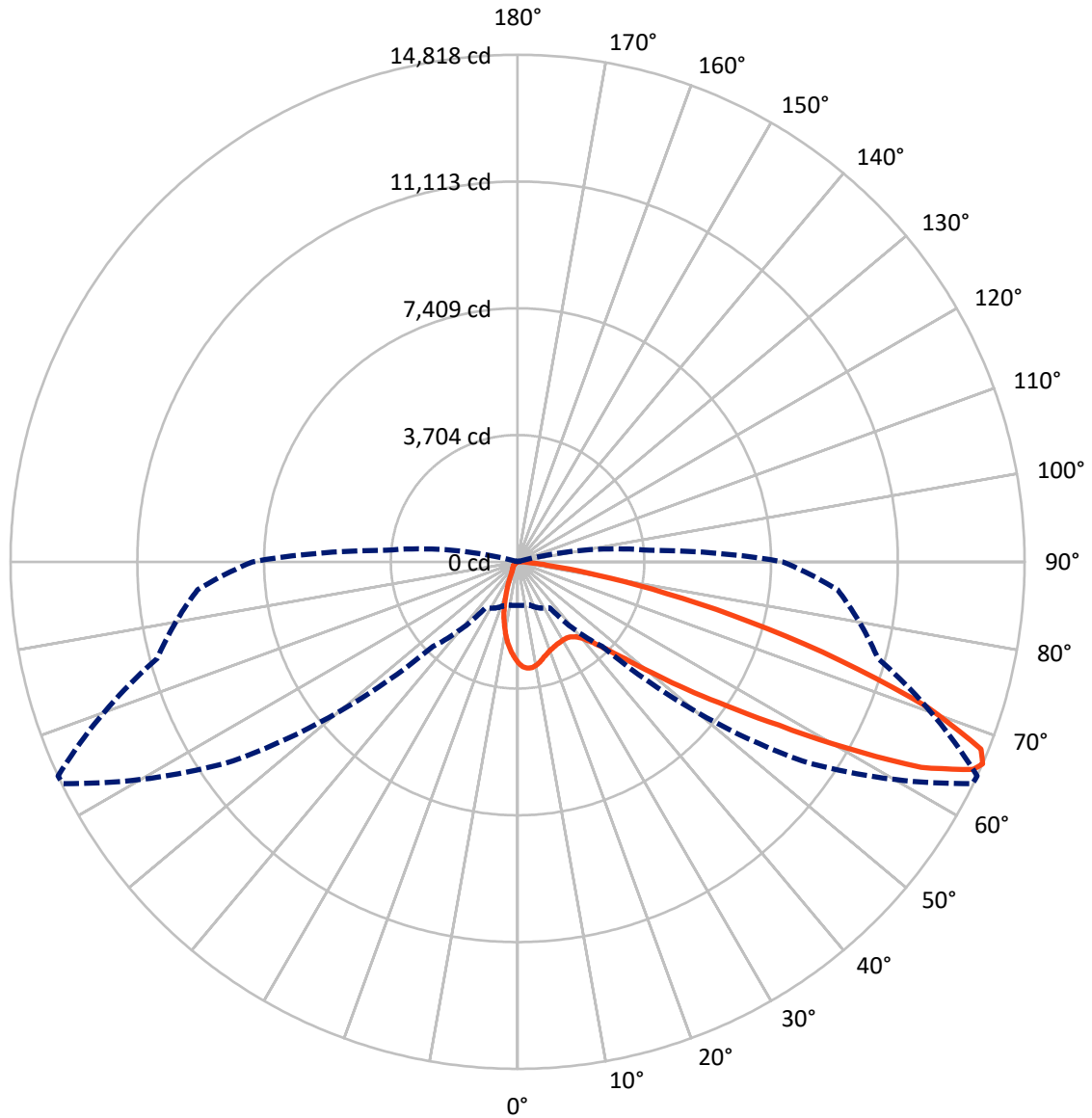
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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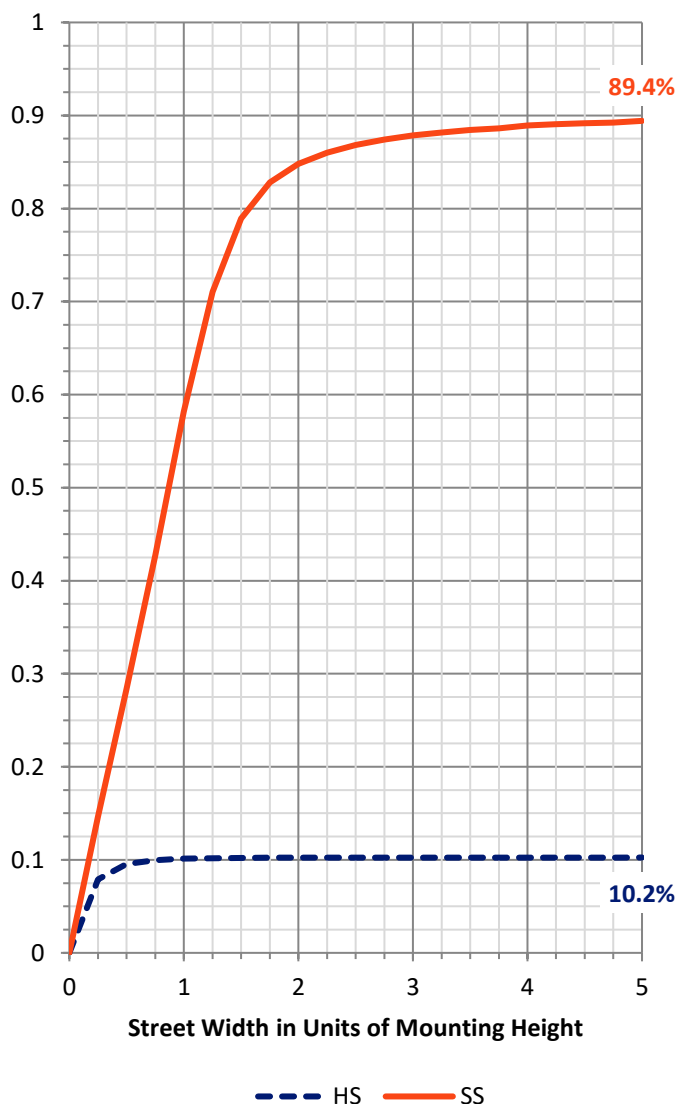
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1287.7	0.0	1287.7
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	11164.1	0.0	11164.1
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	12451.8	0.0	12451.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.5	1.9
10°-20°	526.2	4.2
20°-30°	753.7	6.1
30°-40°	1100.9	8.8
40°-50°	1846.1	14.8
50°-60°	3080.8	24.7
60°-70°	3270.1	26.3
70°-80°	1481.0	11.9
80°-90°	151.5	1.2
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°	12451.8	100.0
0°-180°	12451.8	100.0

**Coefficient of Utilization**

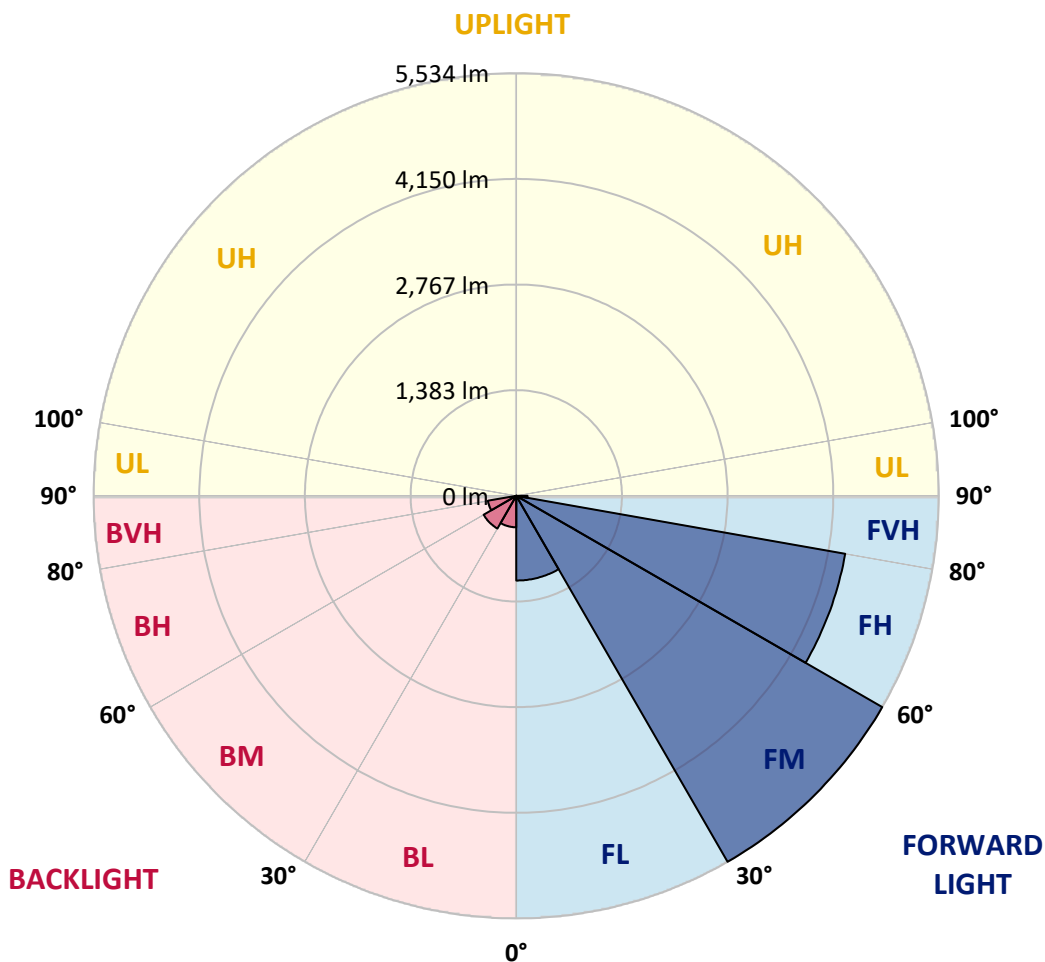


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1109.5	8.9			
FM (30°-60°)	5533.9	44.4			
FH (60°-80°)	4374.0	35.1			G2/5000
FVH (80°-90°)	146.7	1.2			G2/225
BL (0°-30°)	411.9	3.3	B1/500		
BM (30°-60°)	493.8	4.0	B1/1000		
BH (60°-80°)	377.1	3.0	B1/500		G1/500
BVH (80°-90°)	4.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8
2.5°	3111.8	3115.1	3119.4	3125.2	3129.4	3116.8	3099.2	3079.0	3074.8	3031.8	2979.7
5°	2945.2	2950.2	2987.2	3007.4	3052.9	3094.1	3120.2	3123.6	3121.9	3081.5	2998.2
7.5°	2708.0	2722.3	2758.5	2793.8	2878.7	2957.0	3049.6	3114.3	3118.5	3107.6	3004.1
10°	2515.4	2524.7	2543.2	2613.0	2683.6	2803.1	2932.6	3054.6	3064.7	3108.4	2999.0
12.5°	2364.9	2378.3	2401.1	2454.9	2539.8	2652.5	2799.7	2963.7	2984.7	3092.4	2984.7
15°	2259.8	2266.5	2289.2	2342.2	2424.6	2528.9	2677.7	2868.7	2887.2	3071.4	2982.2
17.5°	2210.1	2217.7	2233.7	2275.7	2343.9	2440.6	2586.1	2792.1	2815.7	3058.0	2991.4
20°	2223.6	2230.3	2231.2	2253.0	2299.3	2380.9	2518.8	2720.6	2750.9	3049.6	3006.6
22.5°	2300.1	2301.0	2290.9	2280.8	2296.8	2355.6	2477.6	2675.2	2706.3	3047.9	3024.2
25°	2414.5	2417.0	2400.2	2364.9	2332.9	2363.2	2468.3	2645.8	2673.5	3043.7	3035.3
27.5°	2572.6	2571.8	2566.7	2507.9	2417.0	2396.8	2475.9	2629.8	2653.4	3031.8	3039.5
30°	2793.8	2787.1	2776.1	2709.7	2570.9	2478.4	2507.9	2619.7	2641.6	3015.0	3028.4
32.5°	3011.6	3036.9	3035.3	2972.1	2798.8	2623.9	2574.3	2633.2	2649.2	3004.1	3012.5
35°	3265.7	3264.8	3329.6	3306.1	3103.4	2809.8	2687.8	2677.7	2690.4	3011.6	3004.9
37.5°	3501.2	3523.0	3624.0	3648.3	3463.3	3072.3	2848.5	2773.6	2777.8	3063.0	3023.4
40°	3794.7	3836.7	3987.3	4068.8	3905.7	3461.6	3085.7	2949.4	2950.2	3189.2	3093.3
42.5°	4173.1	4239.6	4380.0	4516.3	4428.8	3922.5	3441.5	3227.8	3226.2	3411.2	3253.1
45°	4633.2	4679.4	4839.2	5055.3	4999.8	4565.9	3959.5	3659.3	3637.4	3775.3	3536.5
47.5°	5030.1	5093.2	5255.5	5501.9	5754.2	5351.4	4578.5	4252.2	4237.9	4354.8	4022.6
50°	5203.4	5258.9	5429.6	5775.2	6386.6	6382.4	5500.2	5117.6	5093.2	5156.3	4774.4
52.5°	5013.3	5065.4	5237.8	5668.4	6684.4	7638.9	6835.7	6203.3	6173.9	6093.1	5672.6
55°	4362.4	4405.2	4660.1	5154.6	6570.0	8476.5	8675.8	7544.7	7430.3	7116.6	6689.4
57.5°	3473.4	3451.5	3609.7	4184.1	5898.9	8757.4	10564.8	9215.8	9011.4	8001.4	7549.7
60°	2406.9	2474.2	2538.1	2916.6	4435.5	8270.5	11739.7	11316.7	11047.5	8871.8	8373.9
62.5°	1769.5	1814.0	1856.1	2031.0	2788.8	6603.6	11947.4	13474.7	13235.8	9796.1	9160.3
65°	1399.4	1402.8	1419.6	1592.0	1837.6	4294.2	10949.1	14691.6	14630.2	10685.9	9479.1
66°	1275.0	1275.8	1301.9	1486.9	1649.2	3497.0	10149.4	14784.1	14817.7	10899.5	9385.7
67.5°	1114.3	1111.0	1148.8	1336.3	1502.0	2521.3	8717.9	14409.0	14608.3	11063.5	9050.1
70°	863.7	859.5	905.8	1121.1	1383.4	1682.0	5794.6	12372.1	12693.4	10728.0	8007.2
72.5°	575.2	578.6	657.7	884.7	1320.4	1481.0	3486.0	9411.8	9865.9	8859.2	6299.2
75°	335.6	341.4	431.4	657.7	1146.3	1412.0	1973.0	6711.3	7001.4	6117.5	3924.2
77.5°	175.8	178.3	241.4	434.0	878.8	1311.1	1314.5	4287.5	4423.7	2972.9	1553.3
80°	93.4	90.8	129.5	261.6	604.7	1151.3	1066.4	2269.9	2359.8	883.0	392.7
82.5°	35.3	38.7	69.0	171.6	357.4	826.7	918.4	1003.3	972.2	194.3	164.8
85°	6.7	8.4	29.4	101.8	180.0	345.7	677.0	492.0	455.8	73.2	95.0
87.5°	0.8	1.7	8.4	24.4	26.1	116.9	200.2	136.2	117.7	26.9	39.5
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8	2952.8
2.5°	2954.4	2931.7	2856.0	2781.2	2704.7	2635.7	2588.6	2512.1	2492.7	2465.0	2449.0
5°	2948.5	2895.6	2750.1	2591.1	2443.1	2283.3	2161.4	2043.6	1980.6	1948.6	1936.8
7.5°	2931.7	2847.6	2620.6	2371.6	2134.5	1895.6	1687.9	1529.8	1428.0	1358.2	1311.1
10°	2898.1	2782.0	2470.0	2127.7	1769.5	1454.1	1190.9	990.7	836.0	787.2	788.9
12.5°	2863.6	2708.9	2301.8	1856.9	1412.9	1015.1	735.9	577.8	503.8	479.4	474.3
15°	2831.6	2639.1	2137.0	1594.5	1052.1	657.7	474.3	418.8	398.6	394.4	393.6
17.5°	2814.8	2574.3	1961.2	1294.3	734.2	446.6	380.1	365.0	359.1	354.9	353.2
20°	2800.5	2518.0	1793.0	1013.4	502.1	365.8	340.6	326.3	316.2	312.0	309.5
22.5°	2790.4	2459.9	1618.9	784.7	384.3	324.6	301.9	283.4	269.1	264.1	260.7
25°	2775.3	2396.0	1443.2	573.6	323.8	288.5	262.4	240.5	222.0	212.8	211.1
27.5°	2753.4	2323.7	1250.6	424.7	289.3	256.5	224.5	197.6	179.1	169.0	169.9
30°	2718.1	2248.0	1058.0	337.2	261.6	223.7	189.2	163.2	145.5	137.9	137.1
32.5°	2676.1	2156.3	881.4	289.3	236.3	194.3	158.1	135.4	121.9	116.1	115.2
35°	2636.5	2063.8	701.4	259.9	210.2	167.4	132.9	113.5	103.4	98.4	99.2
37.5°	2614.7	1981.4	546.6	236.3	189.2	143.8	114.4	97.6	88.3	84.1	83.3
40°	2629.0	1914.1	434.8	215.3	165.7	123.6	98.4	84.1	74.8	69.0	69.0
42.5°	2696.2	1884.7	350.7	195.1	143.8	106.8	85.8	72.3	62.2	56.3	57.2
45°	2901.4	1915.8	293.5	176.6	123.6	92.5	74.0	59.7	50.5	46.3	45.4
47.5°	3242.1	2032.7	254.0	157.3	106.0	79.1	62.2	49.6	40.4	37.0	36.2
50°	3837.6	2274.1	224.5	137.9	90.0	67.3	51.3	39.5	32.0	28.6	28.6
52.5°	4656.7	2800.5	203.5	116.1	75.7	57.2	42.0	32.0	25.2	22.7	21.9
55°	5512.8	3355.7	192.6	97.6	63.1	47.1	33.6	25.2	19.3	16.8	16.0
57.5°	6336.2	3791.3	180.0	79.1	50.5	36.2	26.1	19.3	13.5	11.8	10.9
60°	7125.9	4143.7	153.1	63.1	39.5	26.1	19.3	13.5	9.3	7.6	7.6
62.5°	7832.3	4348.9	120.3	50.5	30.3	18.5	12.6	10.1	6.7	5.0	5.0
65°	7914.7	4082.3	90.8	38.7	21.9	11.8	7.6	7.6	5.0	3.4	3.4
66°	7749.1	3856.1	79.9	35.3	19.3	10.1	6.7	5.9	4.2	2.5	2.5
67.5°	7379.0	3470.1	69.0	30.3	16.0	7.6	5.0	5.0	3.4	1.7	1.7
70°	6375.7	2834.2	54.7	22.7	11.8	5.9	3.4	3.4	2.5	1.7	1.7
72.5°	4859.4	2116.0	44.6	16.8	8.4	4.2	2.5	2.5	2.5	1.7	1.7
75°	2930.9	1139.6	34.5	12.6	7.6	3.4	1.7	2.5	3.4	2.5	1.7
77.5°	1079.8	387.7	26.9	10.1	5.9	3.4	1.7	1.7	3.4	2.5	2.5
80°	264.9	100.9	19.3	8.4	5.9	3.4	1.7	1.7	3.4	3.4	3.4
82.5°	122.8	42.9	13.5	7.6	5.9	3.4	1.7	1.7	2.5	3.4	3.4
85°	70.6	20.2	10.9	8.4	5.9	3.4	1.7	1.7	2.5	3.4	3.4
87.5°	28.6	10.1	10.1	8.4	6.7	4.2	1.7	1.7	1.7	2.5	2.5
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)