

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: P453593

Luminaire Tested: **GALN-SA4C-827-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453593  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4C-827-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 1050mA 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: 16817 lumens  
Efficiency: N/A  
Efficacy: 79.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

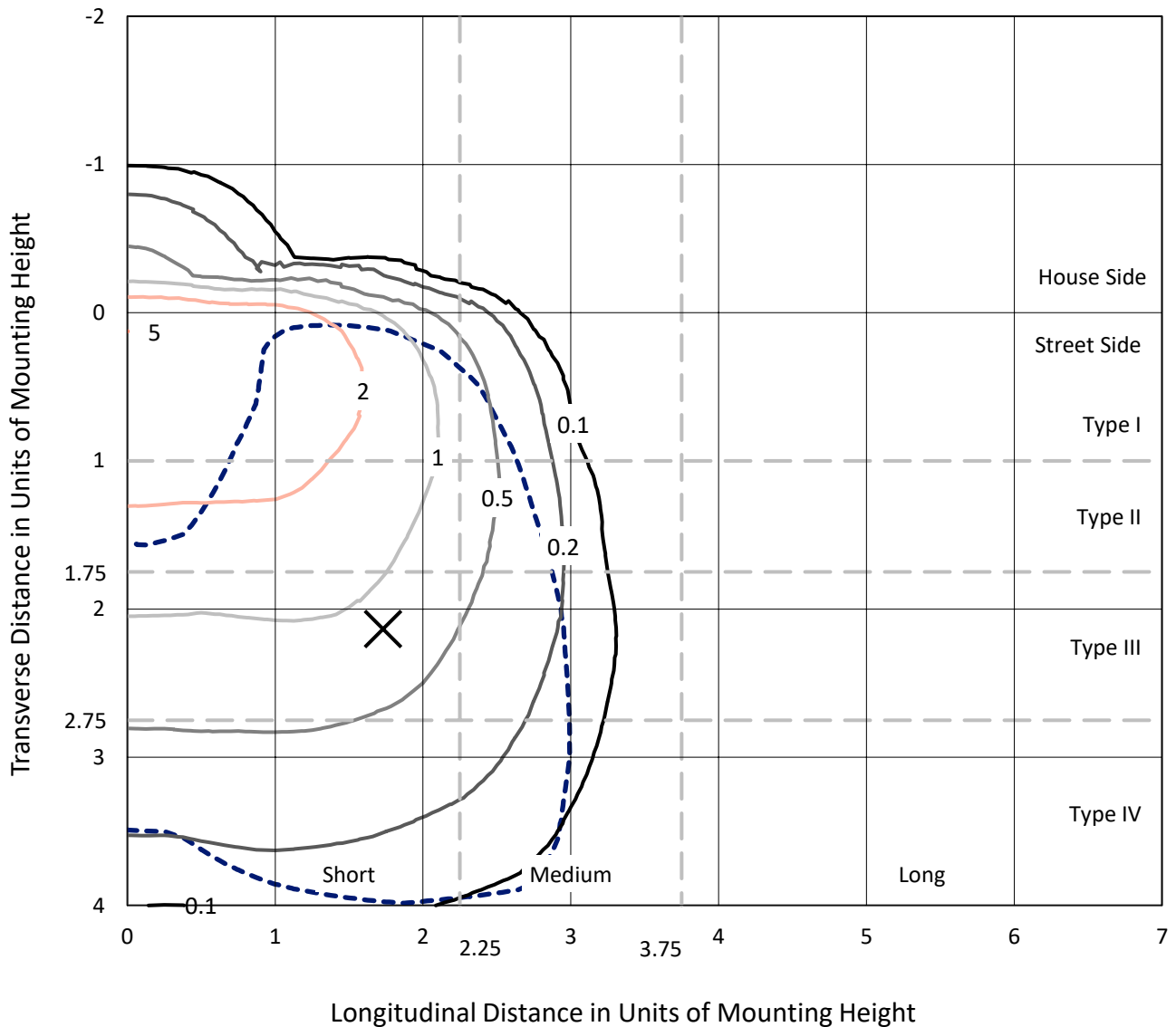
Input Watts (W): 213  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

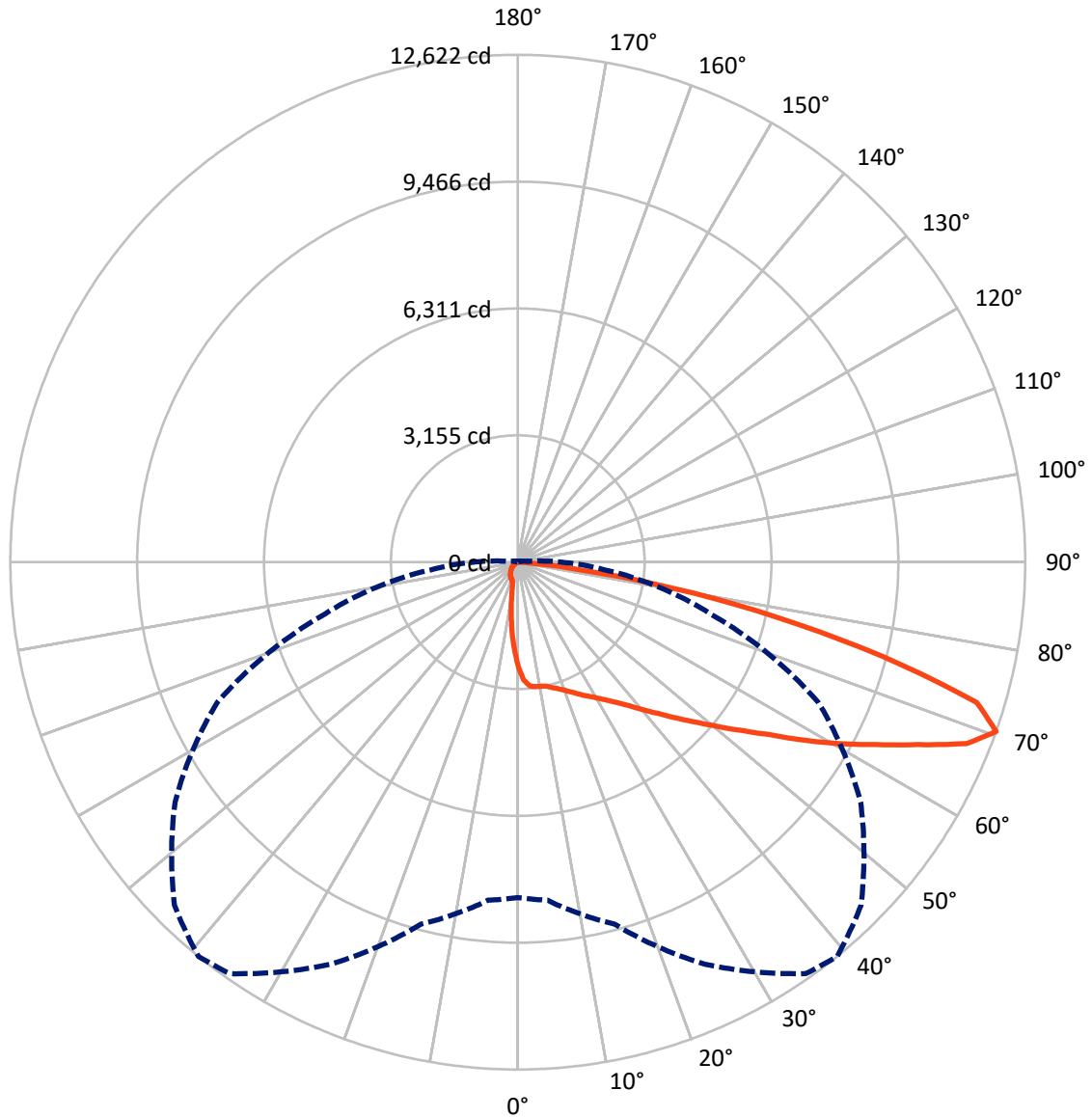
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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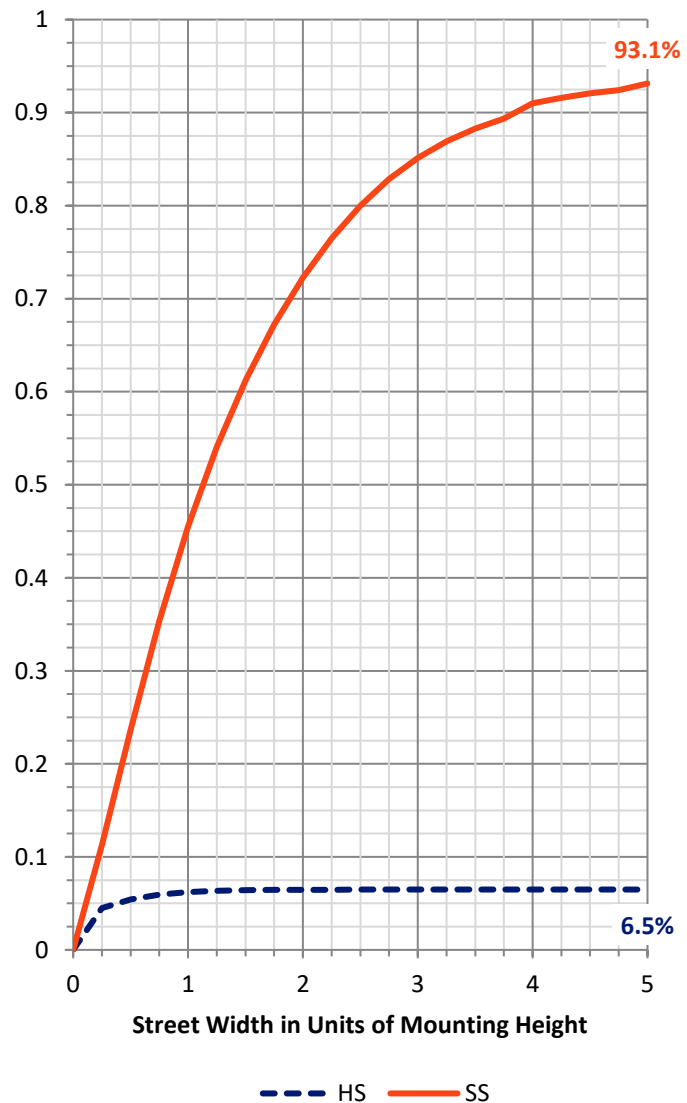
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1096.5	0.0	1096.5
	% Fixture	6.5	0.0	6.5
<b>Street Side</b>	Lumens	15720.4	0.0	15720.4
	% Fixture	93.5	0.0	93.5
<b>Total</b>	Lumens	16817.0	0.0	16817.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.8	1.3
10°-20°	581.6	3.5
20°-30°	974.4	5.8
30°-40°	1511.1	9.0
40°-50°	2394.7	14.2
50°-60°	3510.3	20.9
60°-70°	4499.3	26.8
70°-80°	2827.2	16.8
80°-90°	294.5	1.8
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°	16817.0	100.0
0°-180°	16817.0	100.0



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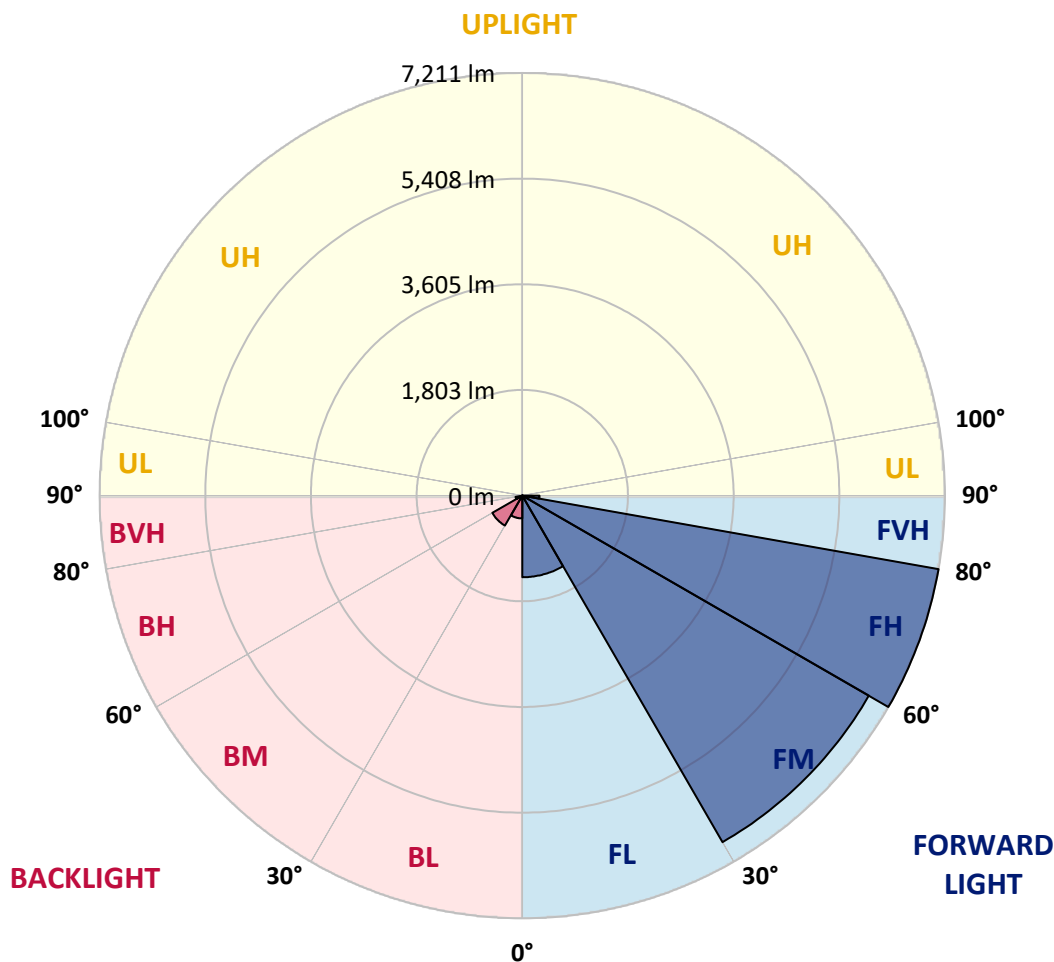
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1391.5	8.3			
FM (30°-60°)	6826.0	40.6			
FH (60°-80°)	7210.6	42.9			G3/7500
FVH (80°-90°)	292.4	1.7			G3/500
BL (0°-30°)	388.3	2.3	B1/500		
BM (30°-60°)	590.1	3.5	B1/1000		
BH (60°-80°)	116.0	0.7	B1/500		G1/500
BVH (80°-90°)	2.2	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-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0
2.5°	3032.0	3021.8	3008.3	2992.4	2947.2	2939.3	2912.2	2854.6	2785.6	2729.1	2651.2
5°	3175.5	3181.2	3171.0	3142.7	3110.0	3090.7	3056.8	2967.6	2878.3	2764.2	2636.5
7.5°	3208.3	3219.6	3207.1	3180.0	3148.4	3128.0	3100.9	3024.1	2920.1	2790.1	2615.0
10°	3204.9	3218.4	3210.5	3185.7	3159.7	3140.5	3111.1	3050.1	2966.4	2829.7	2621.8
12.5°	3199.2	3217.3	3216.2	3203.8	3182.3	3167.6	3149.5	3095.3	3017.3	2887.3	2659.1
15°	3183.4	3206.0	3226.4	3236.5	3237.7	3237.7	3215.1	3157.4	3082.8	2963.1	2707.7
17.5°	3190.2	3216.2	3267.0	3296.4	3316.8	3314.5	3290.8	3228.6	3146.1	3041.0	2758.5
20°	3232.0	3267.0	3338.2	3397.0	3417.3	3410.6	3378.9	3306.6	3212.8	3107.7	2808.2
22.5°	3334.8	3366.5	3455.8	3524.7	3539.4	3521.3	3476.1	3377.8	3293.0	3180.0	2868.1
25°	3488.5	3525.8	3608.3	3660.3	3660.3	3650.1	3586.9	3471.6	3383.4	3280.6	2946.1
27.5°	3675.0	3706.6	3788.0	3834.3	3807.2	3777.8	3714.5	3575.6	3490.8	3407.2	3039.9
30°	3863.7	3884.1	3969.9	3990.3	3962.0	3924.7	3856.9	3717.9	3643.4	3578.9	3175.5
32.5°	4042.3	4086.3	4157.5	4153.0	4114.6	4096.5	4034.4	3886.3	3844.5	3837.7	3365.4
35°	4220.8	4254.7	4318.0	4333.8	4299.9	4296.5	4251.3	4141.7	4142.8	4186.9	3661.4
37.5°	4374.5	4405.0	4479.6	4514.6	4521.4	4538.4	4520.3	4448.0	4550.8	4671.7	4053.6
40°	4503.3	4546.3	4641.2	4702.2	4772.3	4834.5	4837.8	4853.7	5060.5	5268.4	4565.5
42.5°	4603.9	4663.8	4801.7	4914.7	5075.2	5154.3	5217.5	5304.6	5652.6	5963.4	5169.0
45°	4735.0	4803.9	4975.7	5153.1	5404.0	5534.0	5622.1	5854.9	6348.7	6772.5	5788.2
47.5°	4952.0	4988.1	5163.3	5422.1	5752.1	5937.4	6109.2	6461.8	7095.7	7475.4	6303.5
50°	5231.1	5254.8	5387.1	5746.4	6173.6	6417.7	6730.7	7145.4	7871.0	8058.5	6595.1
52.5°	5539.6	5547.5	5647.0	6103.5	6646.0	6953.3	7303.7	7815.6	8502.7	8474.4	6788.3
55°	5897.8	5886.5	5971.3	6491.1	7205.3	7556.8	7964.8	8501.5	9050.8	8769.4	6899.1
57.5°	6308.1	6277.6	6360.0	7005.3	7921.8	8342.2	8756.9	9093.7	9475.7	9016.9	6952.2
60°	6737.5	6676.5	6774.8	7582.8	8766.0	9164.9	9509.6	9600.0	9923.2	9213.5	6860.7
62.5°	7079.9	7081.0	7264.1	8197.5	9633.9	9983.1	10166.1	10247.5	10308.5	9170.5	6379.3
65°	7614.4	7632.5	7925.2	9050.8	10638.5	10941.4	11066.8	10802.4	10325.5	8637.1	5656.0
67.5°	8165.9	8223.5	8759.2	10226.0	11799.1	12043.2	11881.6	10909.7	9864.4	7420.1	4288.6
70°	8345.6	8440.5	9323.1	11035.2	12495.2	12621.8	12074.8	10409.1	8246.1	4961.0	2158.4
72.5°	7647.2	7800.9	8998.8	10740.2	12051.1	11941.5	10803.5	8729.8	5242.4	1883.8	658.8
75°	5392.7	5460.5	7478.8	8909.5	9692.6	9381.9	8217.9	5627.8	2156.2	528.9	226.0
77.5°	2784.5	2751.7	4448.0	5911.4	6912.7	6590.6	5381.4	2913.3	817.0	220.4	140.1
80°	1439.7	1463.4	1924.5	3097.5	4219.7	3882.9	2869.3	1350.4	435.1	122.0	107.4
82.5°	806.9	757.1	1106.3	1352.7	1973.1	1547.1	1100.7	956.0	189.9	73.5	101.7
85°	146.9	153.7	606.8	731.2	684.8	435.1	354.8	638.5	55.4	40.7	71.2
87.5°	2.3	2.3	117.5	210.2	133.3	61.0	111.9	91.5	11.3	15.8	12.4
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°	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0	2624.0
2.5°	2611.6	2568.7	2488.4	2409.3	2308.7	2226.2	2170.9	2113.2	2054.5	2059.0	2072.6
5°	2566.4	2491.8	2333.6	2166.3	2005.9	1861.2	1718.8	1591.1	1539.2	1491.7	1494.0
7.5°	2521.2	2416.1	2184.4	1922.3	1679.3	1432.9	1254.4	1107.5	1029.5	970.7	953.8
10°	2500.9	2361.9	2047.7	1687.2	1342.5	1073.6	844.2	724.4	631.7	602.3	610.2
12.5°	2509.9	2334.7	1924.5	1474.7	1064.5	748.1	587.6	526.6	506.3	502.9	500.6
15°	2526.8	2315.5	1803.6	1239.7	782.0	556.0	493.8	482.5	480.3	478.0	479.2
17.5°	2549.4	2298.6	1674.8	1019.3	600.1	485.9	467.9	462.2	461.1	461.1	461.1
20°	2572.0	2279.4	1531.2	822.7	500.6	458.8	447.5	444.1	443.0	443.0	441.9
22.5°	2598.0	2262.4	1385.5	646.4	461.1	439.6	429.4	427.2	426.0	424.9	424.9
25°	2635.3	2240.9	1230.6	528.9	436.2	421.5	411.3	409.1	408.0	403.4	404.6
27.5°	2685.1	2225.1	1071.3	456.5	413.6	398.9	392.1	388.7	386.5	383.1	384.2
30°	2752.9	2211.6	901.8	417.0	387.6	375.2	368.4	366.1	363.9	360.5	360.5
32.5°	2870.4	2217.2	723.2	385.4	363.9	349.2	342.4	340.2	337.9	334.5	334.5
35°	3046.7	2250.0	578.6	358.2	335.6	320.9	314.2	314.2	310.8	306.2	305.1
37.5°	3334.8	2333.6	464.5	332.2	308.5	294.9	287.0	284.8	281.4	274.6	273.5
40°	3675.0	2463.6	391.0	306.2	283.6	270.1	263.3	256.5	247.5	240.7	239.6
42.5°	4102.2	2596.9	339.0	280.3	259.9	247.5	239.6	228.3	214.7	205.7	204.5
45°	4547.4	2719.0	304.0	256.5	237.3	227.1	218.1	200.0	183.1	171.8	170.6
47.5°	4879.7	2741.6	275.7	233.9	218.1	207.9	195.5	172.9	150.3	140.1	136.7
50°	5036.7	2631.9	246.4	211.3	198.9	187.6	171.8	145.8	120.9	108.5	106.2
52.5°	5092.1	2442.1	222.6	191.0	179.7	166.1	146.9	117.5	94.9	82.5	81.4
55°	5069.5	2202.5	201.2	171.8	157.1	141.3	122.0	93.8	70.1	59.9	57.6
57.5°	4950.8	1897.4	179.7	152.6	134.5	118.7	97.2	70.1	47.5	38.4	37.3
60°	4631.0	1481.5	158.2	131.1	114.1	97.2	76.8	49.7	29.4	21.5	21.5
62.5°	4090.9	1099.6	137.9	109.6	96.1	78.0	54.2	31.6	15.8	11.3	10.2
65°	3418.5	811.4	115.3	92.7	80.2	61.0	38.4	19.2	7.9	3.4	2.3
67.5°	2385.6	500.6	96.1	75.7	65.5	44.1	23.7	7.9	3.4	0.0	0.0
70°	1083.7	238.4	73.5	57.6	49.7	31.6	12.4	4.5	2.3	0.0	0.0
72.5°	336.8	125.4	52.0	41.8	33.9	20.3	6.8	3.4	2.3	0.0	0.0
75°	156.0	80.2	32.8	22.6	19.2	10.2	4.5	2.3	1.1	0.0	0.0
77.5°	116.4	62.2	19.2	12.4	10.2	6.8	3.4	2.3	1.1	0.0	0.0
80°	101.7	31.6	11.3	7.9	5.7	4.5	2.3	1.1	0.0	0.0	0.0
82.5°	91.5	15.8	6.8	4.5	3.4	2.3	1.1	1.1	0.0	0.0	0.0
85°	49.7	9.0	4.5	3.4	2.3	1.1	1.1	0.0	0.0	0.0	0.0
87.5°	9.0	4.5	3.4	2.3	2.3	1.1	1.1	1.1	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)