

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: P652331

Luminaire Tested: **GALN-SA4B-840-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652331  
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-SA4B-840-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 800mA 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: 15493.7 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G3

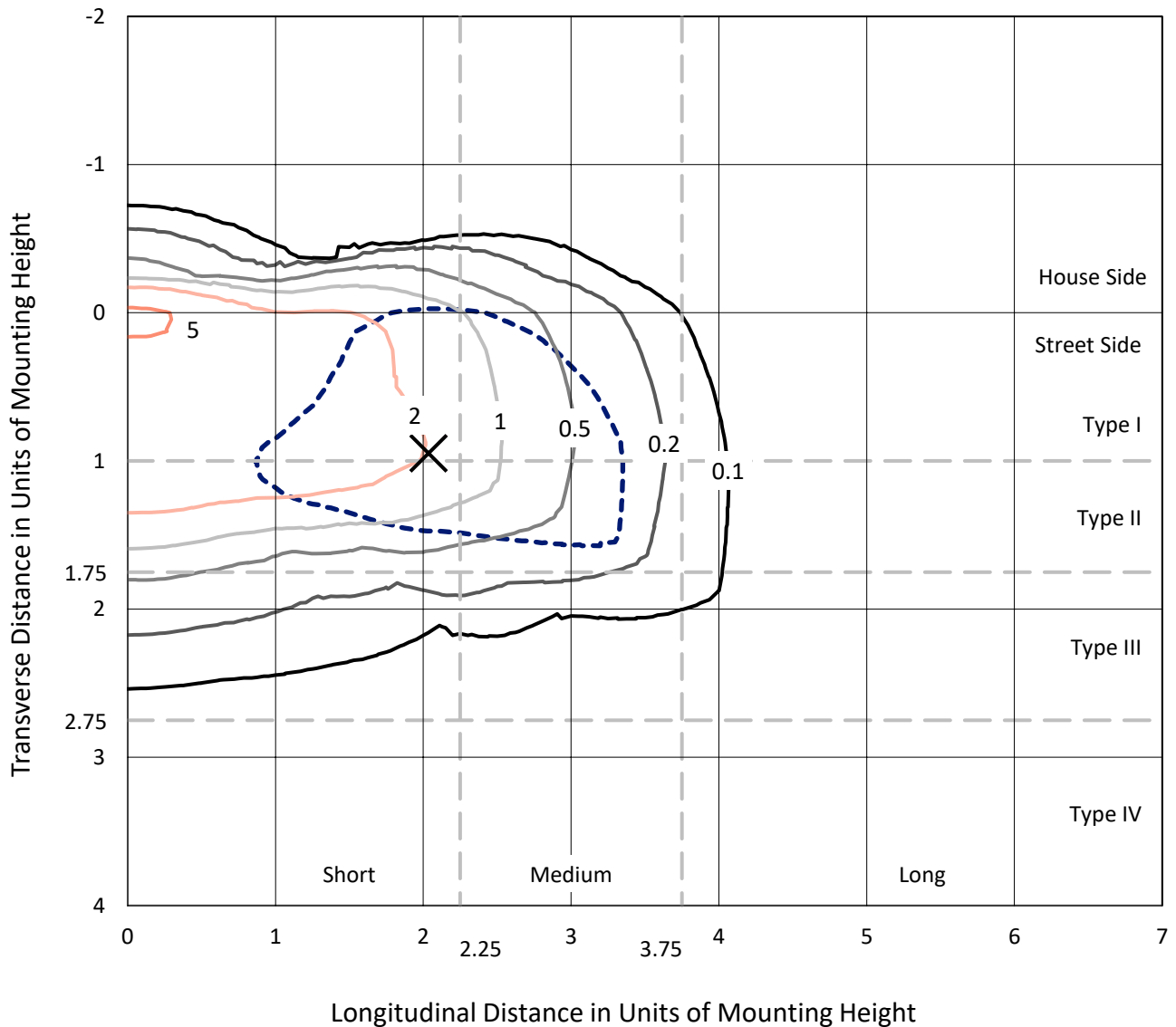
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

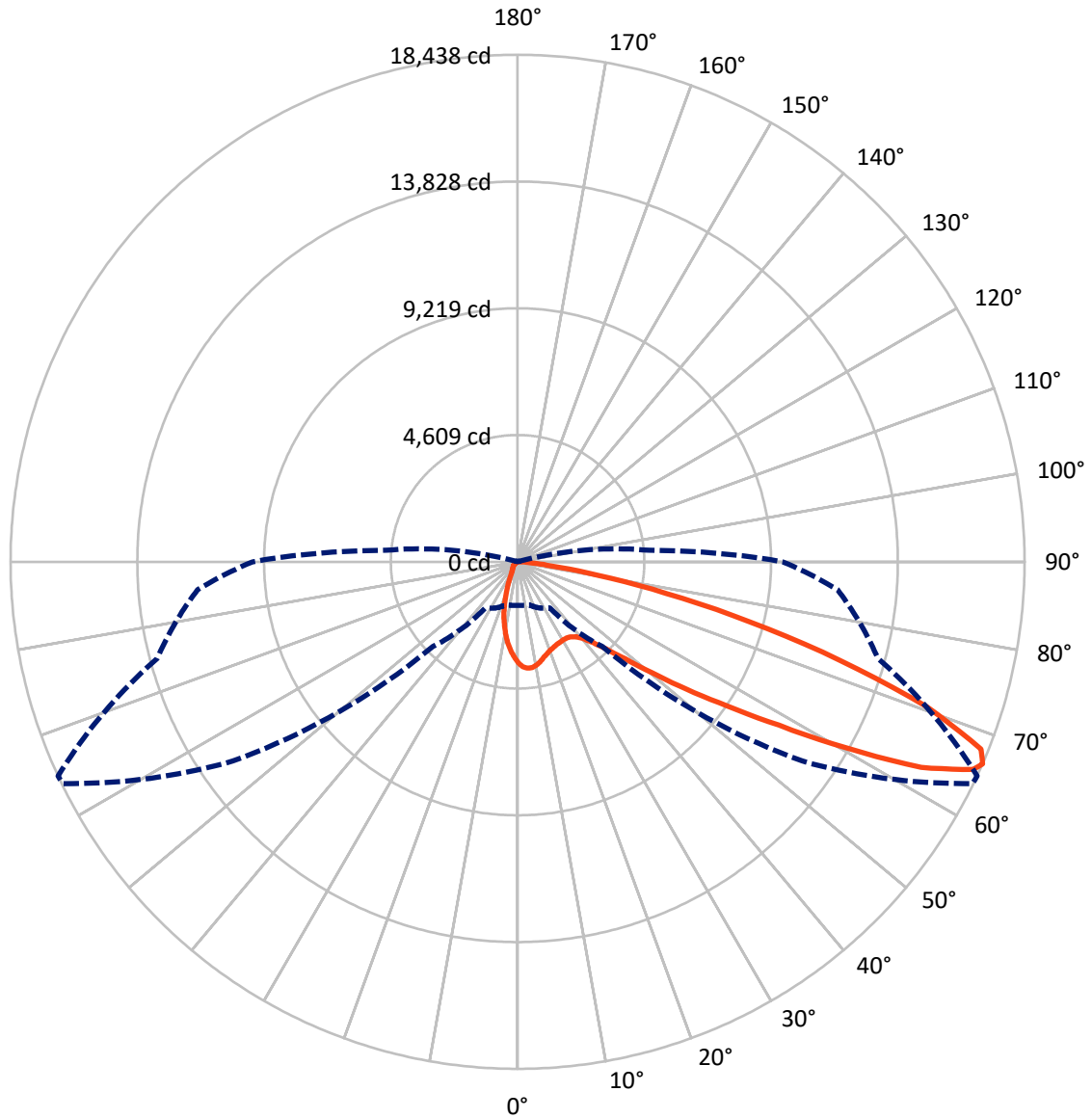
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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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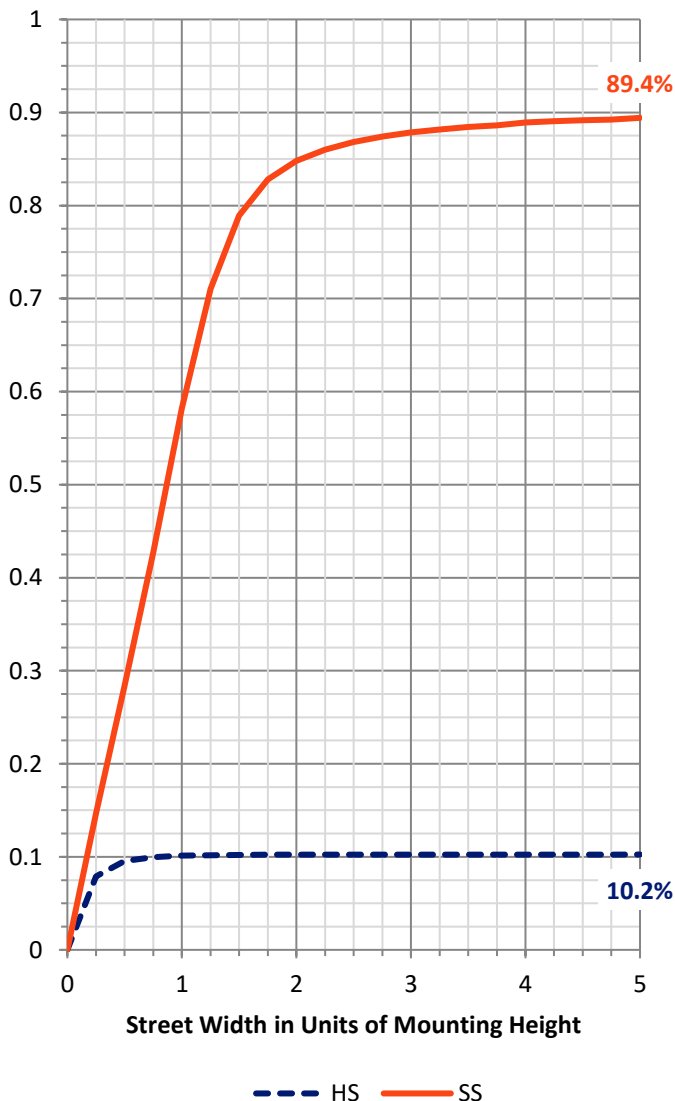
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1602.3	0.0	1602.3
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	13891.5	0.0	13891.5
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	15493.7	0.0	15493.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.5	1.9
10°-20°	654.7	4.2
20°-30°	937.9	6.1
30°-40°	1369.9	8.8
40°-50°	2297.0	14.8
50°-60°	3833.4	24.7
60°-70°	4069.0	26.3
70°-80°	1842.8	11.9
80°-90°	188.6	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°	15493.7	100.0
0°-180°	15493.7	100.0

**Coefficient of Utilization**

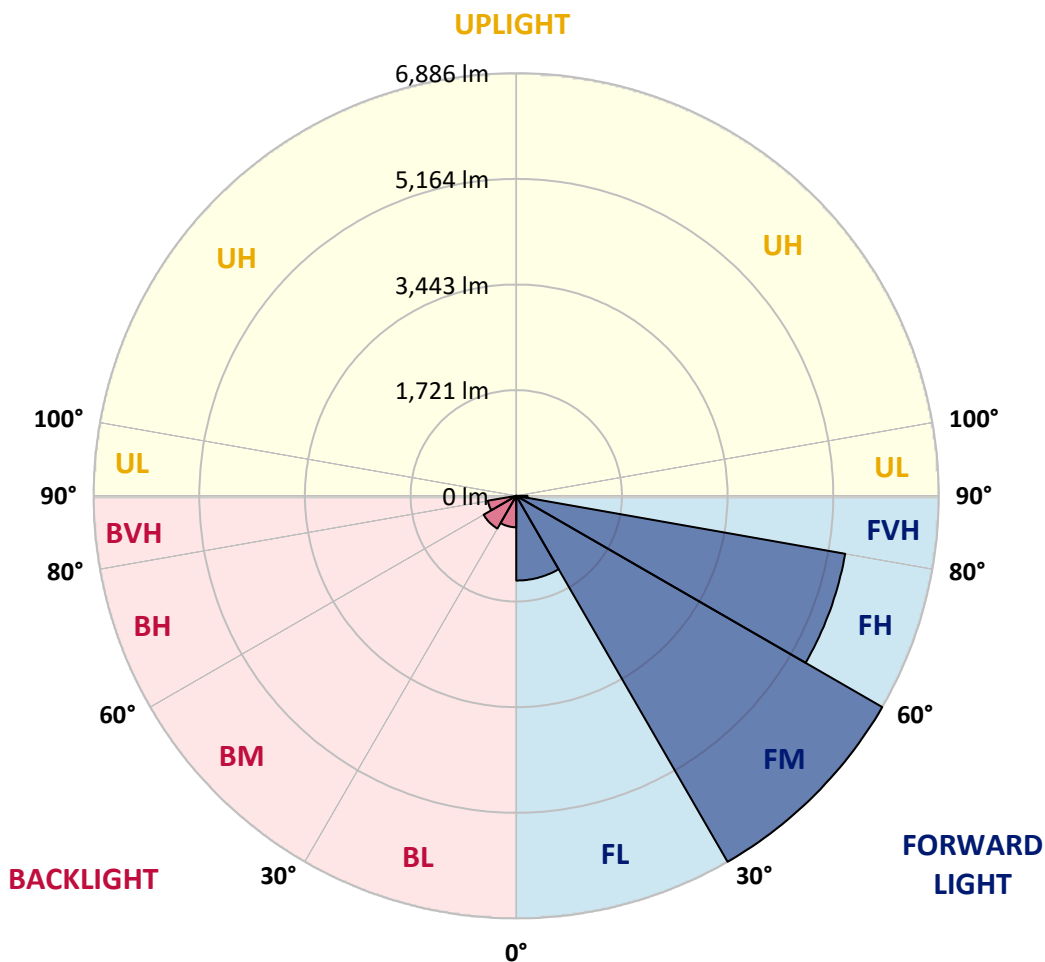


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1380.5	8.9			
FM (30°-60°)	6885.8	44.4			
FH (60°-80°)	5442.6	35.1			G3/7500
FVH (80°-90°)	182.6	1.2			G2/225
BL (0°-30°)	512.5	3.3	B2/1000		
BM (30°-60°)	614.5	4.0	B1/1000		
BH (60°-80°)	469.2	3.0	B1/500		G1/500
BVH (80°-90°)	6.0	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-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2
2.5°	3871.9	3876.1	3881.3	3888.7	3893.9	3878.2	3856.2	3831.1	3825.9	3772.5	3707.6
5°	3664.7	3671.0	3717.1	3742.2	3798.6	3849.9	3882.4	3886.6	3884.5	3834.3	3730.7
7.5°	3369.6	3387.4	3432.4	3476.4	3582.1	3679.4	3794.5	3875.1	3880.3	3866.7	3738.0
10°	3129.9	3141.5	3164.5	3251.4	3339.3	3487.9	3649.0	3800.7	3813.3	3867.8	3731.7
12.5°	2942.7	2959.4	2987.7	3054.6	3160.3	3300.6	3483.7	3687.7	3713.9	3847.8	3713.9
15°	2811.9	2820.2	2848.5	2914.4	3016.9	3146.7	3332.0	3569.5	3592.5	3821.7	3710.7
17.5°	2750.1	2759.5	2779.4	2831.7	2916.5	3036.9	3217.9	3474.3	3503.6	3804.9	3722.3
20°	2766.9	2775.2	2776.3	2803.5	2861.0	2962.5	3134.2	3385.3	3423.0	3794.5	3741.1
22.5°	2862.1	2863.1	2850.6	2838.0	2857.9	2931.1	3082.9	3328.8	3367.5	3792.4	3763.1
25°	3004.4	3007.5	2986.6	2942.7	2902.9	2940.6	3071.4	3292.2	3326.7	3787.2	3776.7
27.5°	3201.1	3200.1	3193.8	3120.5	3007.5	2982.4	3080.8	3272.3	3301.6	3772.5	3781.9
30°	3476.4	3467.9	3454.4	3371.7	3199.1	3083.9	3120.5	3259.7	3287.0	3751.6	3768.4
32.5°	3747.4	3778.8	3776.7	3698.2	3482.7	3264.9	3203.2	3276.5	3296.4	3738.0	3748.4
35°	4063.5	4062.4	4142.9	4113.7	3861.5	3496.2	3344.5	3332.0	3347.6	3747.4	3739.0
37.5°	4356.5	4383.6	4509.2	4539.5	4309.4	3822.8	3544.4	3451.2	3456.5	3811.2	3762.0
40°	4721.6	4773.9	4961.3	5062.8	4859.8	4307.3	3839.5	3670.0	3671.0	3968.2	3848.9
42.5°	5192.6	5275.3	5450.0	5619.5	5510.7	4880.7	4282.1	4016.4	4014.3	4244.4	4047.7
45°	5765.0	5822.5	6021.4	6290.3	6221.2	5681.3	4926.7	4553.2	4525.9	4697.6	4400.4
47.5°	6258.9	6337.4	6539.4	6846.0	7159.9	6658.6	5696.9	5290.9	5273.2	5418.6	5005.2
50°	6474.4	6543.6	6756.0	7186.1	7946.9	7941.6	6843.9	6367.7	6337.4	6415.9	5940.7
52.5°	6237.9	6302.9	6517.4	7053.2	8317.3	9505.1	8505.7	7718.7	7682.1	7581.6	7058.4
55°	5428.0	5481.4	5798.4	6413.8	8175.0	10547.3	10795.3	9387.8	9245.5	8855.2	8323.5
57.5°	4321.9	4294.7	4491.4	5206.1	7339.9	10896.8	13145.7	11467.2	11212.9	9956.1	9394.1
60°	2995.0	3078.7	3158.2	3629.2	5519.1	10290.9	14607.6	14081.2	13746.4	11039.1	10419.7
62.5°	2201.7	2257.2	2309.6	2527.2	3470.1	8216.8	14866.1	16766.4	16469.3	12189.2	11398.1
65°	1741.3	1745.5	1766.4	1981.0	2286.5	5343.2	13623.9	18280.7	18204.3	13296.4	11794.7
66°	1586.5	1587.5	1619.9	1850.1	2052.1	4351.2	12628.7	18395.8	18437.7	13562.2	11678.5
67.5°	1386.6	1382.4	1429.4	1662.8	1869.0	3137.3	10847.6	17929.1	18177.1	13766.2	11261.0
70°	1074.7	1069.5	1127.0	1395.0	1721.4	2092.9	7210.1	15394.5	15794.3	13348.7	9963.4
72.5°	715.8	720.0	818.4	1100.9	1643.0	1842.8	4337.6	11711.0	12276.1	11023.5	7838.0
75°	417.6	424.9	536.8	818.4	1426.3	1757.0	2455.0	8350.8	8711.8	7612.0	4882.8
77.5°	218.7	221.9	300.3	540.0	1093.6	1631.5	1635.7	5334.9	5504.4	3699.2	1932.8
80°	116.1	113.0	161.1	325.5	752.4	1432.6	1326.9	2824.4	2936.4	1098.8	488.7
82.5°	44.0	48.1	85.8	213.4	444.7	1028.7	1142.8	1248.5	1209.7	241.7	205.1
85°	8.4	10.4	36.7	126.7	224.0	430.1	842.4	612.2	567.2	91.1	118.2
87.5°	1.0	2.1	10.4	30.4	32.5	145.5	249.0	169.5	146.5	33.5	49.2
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°	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2	3674.2
2.5°	3676.3	3648.0	3553.8	3460.6	3365.4	3279.6	3221.0	3125.8	3101.7	3067.2	3047.3
5°	3668.9	3603.0	3421.9	3224.1	3040.0	2841.2	2689.4	2542.9	2464.5	2424.7	2410.0
7.5°	3648.0	3543.3	3260.8	2951.1	2656.0	2358.8	2100.2	1903.5	1776.9	1690.1	1631.5
10°	3606.1	3461.7	3073.4	2647.6	2201.7	1809.3	1481.8	1232.7	1040.1	979.5	981.6
12.5°	3563.2	3370.6	2864.2	2310.6	1758.0	1263.1	915.7	718.9	626.8	596.5	590.2
15°	3523.5	3283.8	2659.1	1984.1	1309.1	818.4	590.2	521.2	496.0	490.8	489.7
17.5°	3502.5	3203.2	2440.3	1610.5	913.6	555.6	473.0	454.1	446.8	441.6	439.5
20°	3484.8	3133.1	2231.1	1261.0	624.8	455.2	423.8	406.0	393.5	388.2	385.1
22.5°	3472.2	3060.9	2014.4	976.3	478.2	403.9	375.7	352.6	334.9	328.6	324.4
25°	3453.3	2981.3	1795.7	713.7	402.9	358.9	326.5	299.3	276.3	264.7	262.6
27.5°	3426.1	2891.4	1556.1	528.5	359.9	319.2	279.4	245.9	222.9	210.3	211.4
30°	3382.2	2797.2	1316.4	419.7	325.5	278.4	235.5	203.0	181.1	171.6	170.6
32.5°	3329.9	2683.1	1096.7	359.9	294.1	241.7	196.7	168.5	151.7	144.4	143.4
35°	3280.7	2568.0	872.8	323.4	261.6	208.2	165.3	141.3	128.8	122.4	123.5
37.5°	3253.5	2465.5	680.2	294.1	235.5	179.0	142.3	121.4	109.9	104.6	103.6
40°	3271.2	2381.7	541.0	267.9	206.1	153.8	122.4	104.6	93.1	85.8	85.8
42.5°	3355.0	2345.1	436.4	242.8	179.0	132.9	106.7	90.0	77.5	70.1	71.1
45°	3610.3	2383.8	365.2	219.8	153.8	115.1	92.1	74.3	62.8	57.5	56.5
47.5°	4034.1	2529.3	316.0	195.7	131.9	98.4	77.5	61.7	50.2	46.0	45.0
50°	4775.0	2829.6	279.4	171.6	111.9	83.7	63.8	49.2	39.8	35.6	35.6
52.5°	5794.2	3484.8	253.2	144.4	94.2	71.1	52.3	39.8	31.4	28.3	27.2
55°	6859.6	4175.4	239.6	121.4	78.5	58.6	41.9	31.4	24.1	20.9	19.8
57.5°	7884.0	4717.4	224.0	98.4	62.8	45.0	32.5	24.1	16.7	14.6	13.6
60°	8866.7	5155.9	190.5	78.5	49.2	32.5	24.1	16.7	11.5	9.4	9.4
62.5°	9745.8	5411.2	149.6	62.8	37.7	23.0	15.7	12.5	8.4	6.3	6.3
65°	9848.3	5079.6	113.0	48.1	27.2	14.6	9.4	9.4	6.3	4.2	4.2
66°	9642.1	4798.1	99.4	44.0	24.1	12.5	8.4	7.3	5.2	3.1	3.1
67.5°	9181.7	4317.7	85.8	37.7	19.8	9.4	6.3	6.3	4.2	2.1	2.1
70°	7933.2	3526.6	68.0	28.3	14.6	7.3	4.2	4.2	3.1	2.1	2.1
72.5°	6046.5	2632.9	55.4	20.9	10.4	5.2	3.1	3.1	3.1	2.1	2.1
75°	3646.9	1417.9	42.9	15.7	9.4	4.2	2.1	3.1	4.2	3.1	2.1
77.5°	1343.7	482.4	33.5	12.5	7.3	4.2	2.1	2.1	4.2	3.1	3.1
80°	329.7	125.6	24.1	10.4	7.3	4.2	2.1	2.1	4.2	4.2	4.2
82.5°	152.8	53.4	16.7	9.4	7.3	4.2	2.1	2.1	3.1	4.2	4.2
85°	87.9	25.1	13.6	10.4	7.3	4.2	2.1	2.1	3.1	4.2	4.2
87.5°	35.6	12.5	12.5	10.4	8.4	5.2	2.1	2.1	2.1	3.1	3.1
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)