

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: P652338

Luminaire Tested: **GALN-SA4B-840-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652338  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
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-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18530.6 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

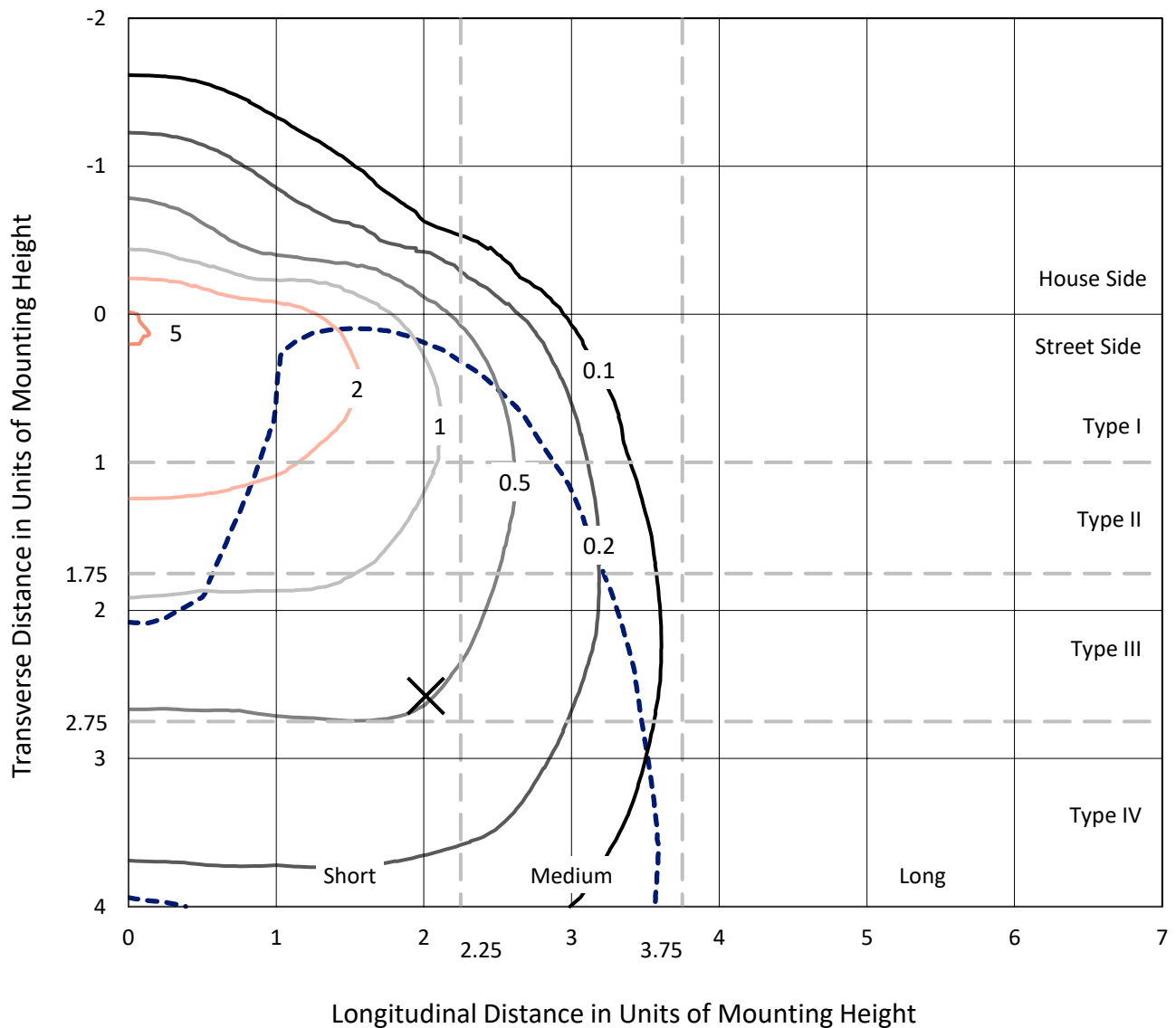
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

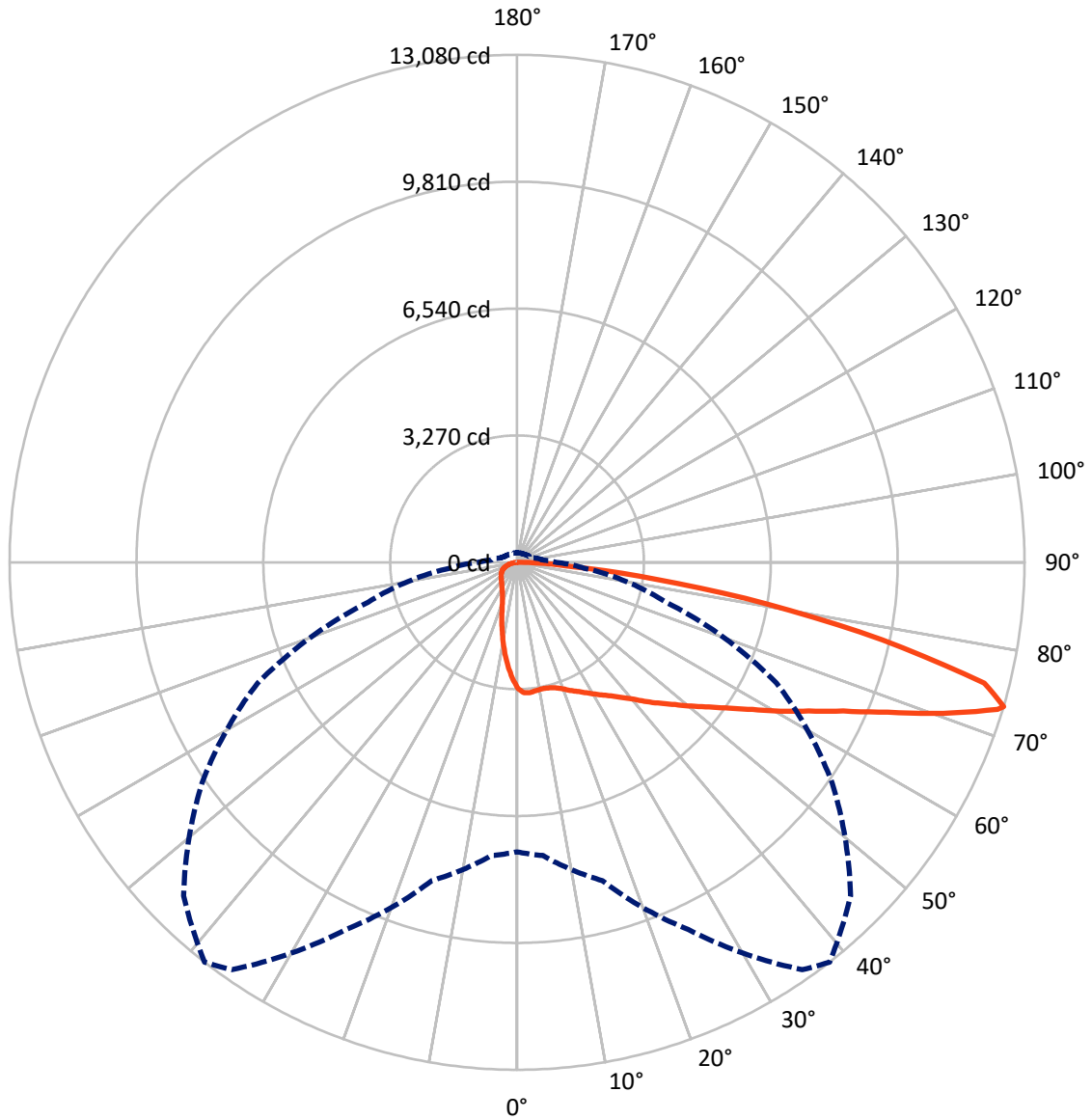
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral      - - - Horizontal Cone Through 73-Deg Vertical

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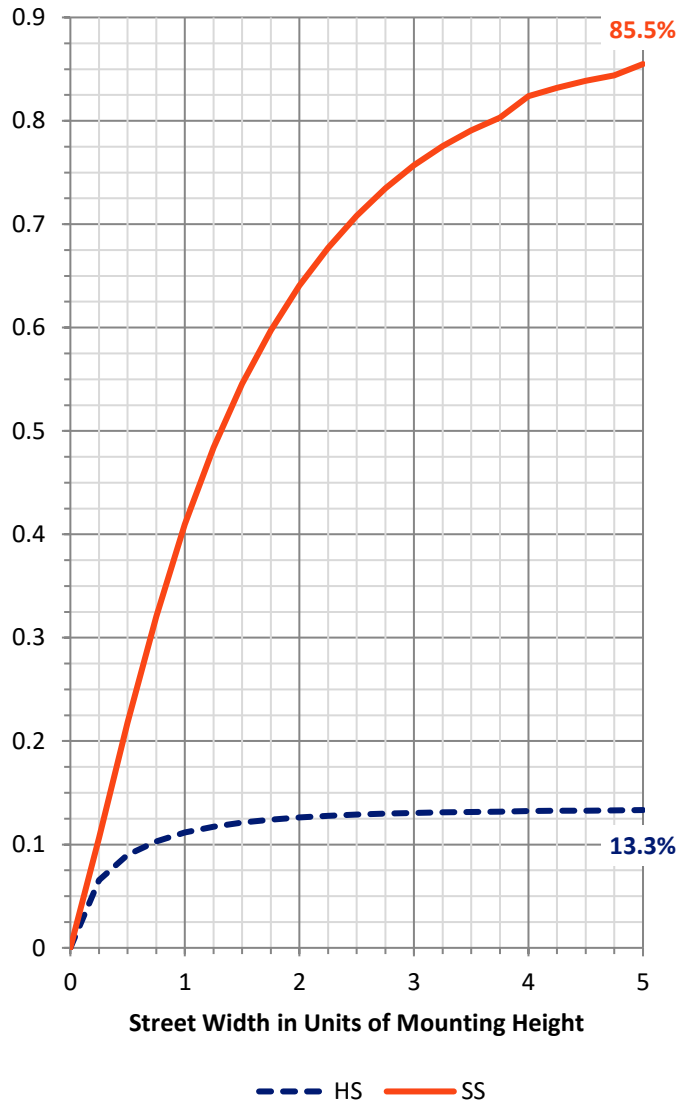
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2491.1	0.0	2491.1
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	16039.5	0.0	16039.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	18530.6	0.0	18530.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	284.2	1.5
10°-20°	728.7	3.9
20°-30°	1134.7	6.1
30°-40°	1664.4	9.0
40°-50°	2468.9	13.3
50°-60°	3498.0	18.9
60°-70°	4437.3	23.9
70°-80°	3693.7	19.9
80°-90°	620.6	3.3
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°	18530.6	100.0
0°-180°	18530.6	100.0

**Coefficient of Utilization**

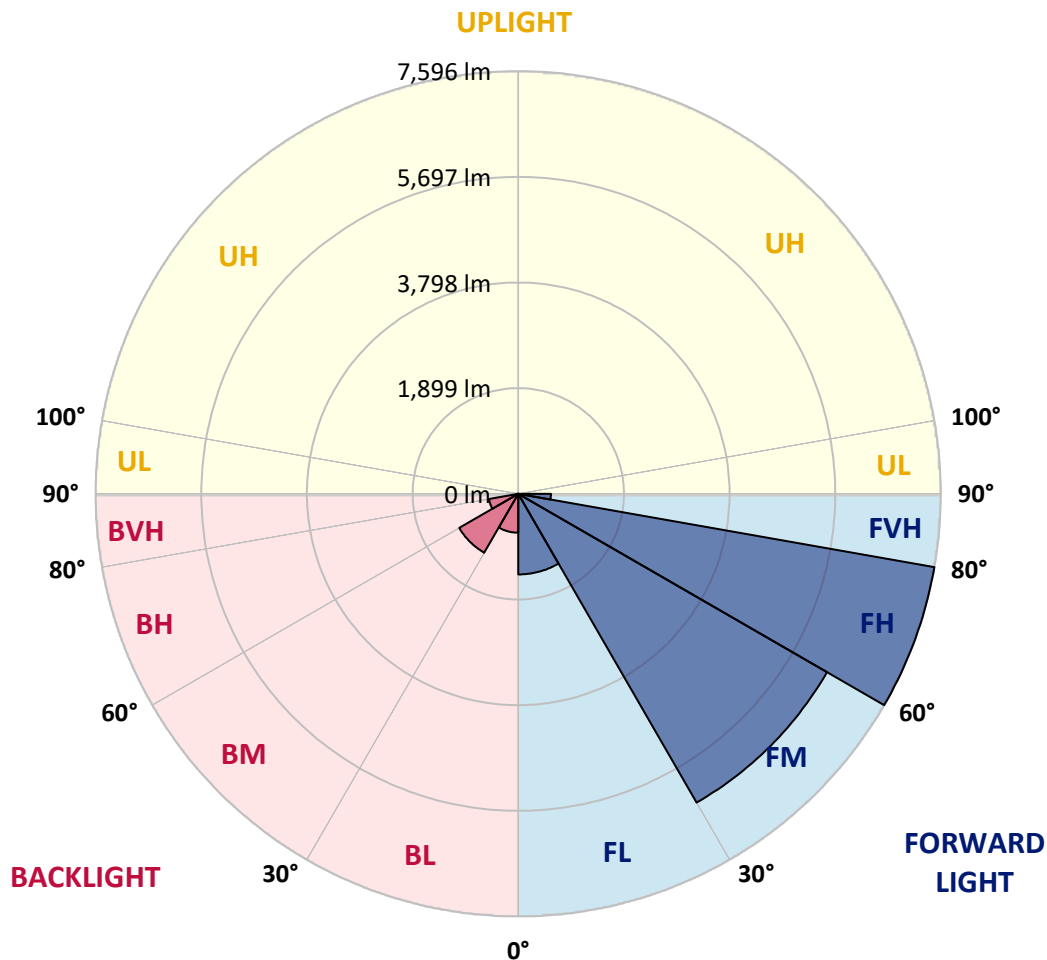


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1448.6	7.8			
FM (30°-60°)	6408.4	34.6			
FH (60°-80°)	7595.6	41.0			G4/12000
FVH (80°-90°)	586.9	3.2			G4/750
BL (0°-30°)	699.0	3.8	B2/1000		
BM (30°-60°)	1223.0	6.6	B2/2500		
BH (60°-80°)	535.4	2.9	B2/1000		G2/1000
BVH (80°-90°)	33.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5
2.5°	3386.3	3403.0	3394.7	3383.2	3375.9	3368.5	3358.0	3327.8	3303.6	3277.5	3236.7
5°	3411.4	3421.9	3414.5	3399.9	3383.2	3375.9	3356.0	3316.2	3277.5	3233.6	3172.8
7.5°	3396.8	3401.0	3392.6	3374.8	3360.1	3346.6	3323.5	3279.6	3232.5	3179.1	3099.6
10°	3344.5	3360.1	3360.1	3345.5	3330.9	3323.5	3300.5	3258.6	3215.7	3155.0	3060.9
12.5°	3301.5	3318.3	3331.9	3327.8	3326.7	3326.7	3308.9	3277.5	3227.3	3169.7	3057.7
15°	3272.2	3292.2	3321.4	3338.2	3348.6	3351.8	3344.5	3317.2	3265.9	3199.0	3070.3
17.5°	3265.9	3290.1	3343.4	3380.1	3407.2	3406.2	3404.1	3366.4	3309.9	3240.9	3086.0
20°	3294.2	3325.7	3399.9	3457.4	3497.2	3489.9	3478.4	3429.3	3363.3	3285.9	3100.6
22.5°	3379.0	3411.4	3493.1	3555.8	3594.6	3594.6	3560.0	3495.1	3425.1	3338.2	3120.5
25°	3500.4	3536.0	3622.8	3686.6	3704.4	3690.8	3656.3	3577.8	3497.2	3413.5	3162.4
27.5°	3649.0	3691.9	3772.5	3825.8	3820.6	3810.2	3774.6	3674.1	3593.5	3517.1	3233.6
30°	3834.2	3865.6	3949.3	3961.9	3943.0	3940.9	3890.7	3790.2	3714.9	3656.3	3335.1
32.5°	4009.0	4037.2	4104.2	4109.4	4075.9	4080.1	4033.0	3940.9	3898.0	3877.1	3505.6
35°	4194.2	4208.9	4266.4	4260.1	4238.1	4235.0	4216.2	4128.2	4141.8	4179.5	3747.3
37.5°	4349.1	4378.3	4410.8	4416.0	4415.0	4425.4	4438.0	4396.2	4474.6	4592.9	4064.4
40°	4491.4	4516.5	4564.6	4581.3	4622.1	4643.1	4686.1	4687.1	4868.1	5062.7	4454.8
42.5°	4587.7	4630.5	4720.5	4750.9	4850.3	4913.1	4977.0	5044.9	5307.6	5557.7	4915.2
45°	4671.3	4727.8	4877.5	4971.7	5106.7	5183.1	5318.1	5460.4	5838.1	6165.7	5383.0
47.5°	4798.0	4848.2	5019.8	5186.2	5390.3	5478.2	5680.1	5892.6	6386.5	6745.4	5830.8
50°	4973.8	5004.1	5178.9	5449.9	5710.5	5823.5	6090.4	6397.0	6972.5	7317.9	6224.3
52.5°	5198.8	5211.3	5350.5	5711.6	6054.8	6195.0	6548.7	6906.5	7485.2	7814.9	6536.2
55°	5464.6	5443.6	5552.5	5988.8	6448.2	6631.4	7011.2	7422.5	8061.8	8216.7	6763.2
57.5°	5727.2	5694.8	5781.6	6325.8	6933.8	7154.6	7597.3	7954.1	8576.7	8592.4	6922.3
60°	6005.6	5981.5	6085.1	6721.4	7529.2	7790.9	8200.0	8505.5	9074.8	8854.0	6947.4
62.5°	6291.3	6252.6	6400.1	7166.1	8200.0	8437.5	8834.1	9091.5	9563.5	8951.4	6705.6
65°	6568.5	6550.8	6778.9	7694.6	8963.9	9233.9	9619.0	9793.8	9954.9	8804.8	6106.1
67.5°	6863.7	6899.2	7263.4	8399.9	9960.1	10299.1	10714.6	10550.3	10066.9	8111.0	5142.3
70°	7313.7	7336.6	7899.7	9323.9	11244.1	11653.3	11854.2	10819.3	9526.9	6793.6	3865.6
72.5°	7507.3	7608.8	8467.9	10293.9	12702.9	12953.0	12237.2	10219.7	7936.3	4614.8	2031.2
73°	7464.4	7585.7	8494.0	10441.5	12816.9	13079.6	12155.6	9910.9	7377.5	3974.4	1741.3
75°	6929.6	7079.3	8153.9	10318.0	12595.1	12438.1	10843.3	8446.9	4985.3	1807.2	793.2
77.5°	5467.7	5510.7	6460.8	8331.9	9918.2	9627.3	8115.2	5279.4	2036.4	671.8	449.9
80°	2742.8	2900.8	3641.6	4772.8	6632.4	6537.2	5122.4	2496.8	848.7	394.5	298.2
82.5°	1319.6	1431.6	1773.8	2327.3	3664.7	3577.8	2536.6	1364.6	538.9	230.2	175.8
85°	849.7	933.4	1129.1	1110.3	1506.9	1438.9	1139.6	1032.8	319.2	120.3	122.4
87.5°	560.9	614.3	736.7	589.1	548.3	496.0	503.3	581.8	62.8	46.0	16.7
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°	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5	3255.5
2.5°	3219.9	3206.3	3161.3	3117.4	3075.5	3035.8	3009.6	2975.0	2952.1	2958.3	2967.7
5°	3139.4	3109.0	3029.5	2952.1	2878.8	2792.0	2721.8	2665.3	2622.4	2606.7	2603.6
7.5°	3054.6	3003.3	2889.3	2756.4	2631.8	2524.0	2399.5	2337.8	2265.6	2240.4	2232.1
10°	3003.3	2934.2	2774.1	2588.9	2401.6	2222.7	2087.7	1977.8	1878.4	1859.5	1850.1
12.5°	2988.7	2897.7	2682.0	2443.4	2194.4	1974.7	1774.8	1630.4	1534.1	1512.1	1479.7
15°	2980.3	2867.3	2596.3	2296.9	1980.9	1713.0	1502.7	1334.2	1246.4	1187.7	1188.8
17.5°	2972.9	2832.7	2500.0	2136.8	1796.8	1488.1	1255.8	1104.0	1023.4	992.0	988.9
20°	2962.5	2792.0	2389.0	1968.4	1586.5	1282.9	1072.6	959.6	905.2	879.0	878.0
22.5°	2958.3	2752.2	2280.2	1796.8	1400.2	1124.9	951.3	871.7	837.1	819.4	819.4
25°	2968.8	2723.9	2166.2	1633.5	1234.8	989.9	867.5	813.1	793.2	783.8	780.6
27.5°	3001.2	2711.4	2053.1	1470.2	1083.0	897.9	811.0	773.3	758.7	751.3	752.4
30°	3063.0	2710.3	1942.2	1309.1	970.1	827.7	766.0	739.8	728.3	724.2	723.1
32.5°	3162.4	2733.3	1833.4	1176.2	874.8	769.2	724.2	705.3	700.0	696.9	695.9
35°	3330.9	2798.2	1725.6	1054.8	801.6	716.8	684.4	675.0	667.7	670.8	671.8
37.5°	3557.9	2910.2	1623.0	959.6	746.1	678.1	650.9	642.5	638.3	641.5	644.6
40°	3862.5	3071.3	1537.3	883.2	706.4	645.6	621.6	614.3	610.1	615.3	616.4
42.5°	4198.4	3257.6	1466.1	823.6	673.9	618.5	595.4	587.0	583.9	587.0	588.1
45°	4543.7	3474.3	1429.4	780.6	646.7	598.5	574.5	565.1	557.8	555.6	558.8
47.5°	4883.8	3662.6	1428.4	754.5	624.7	580.8	554.6	544.1	534.7	529.5	528.5
50°	5161.1	3812.3	1453.5	742.9	605.9	560.9	534.7	524.3	511.7	501.2	503.3
52.5°	5370.4	3909.6	1465.0	737.7	595.4	540.0	513.8	504.3	489.7	476.2	476.2
55°	5505.4	3932.6	1436.8	732.5	587.0	518.0	489.7	481.4	466.8	453.1	453.1
57.5°	5551.4	3861.4	1335.3	720.0	578.7	499.1	465.7	458.3	446.8	433.2	431.1
60°	5444.7	3620.8	1157.4	682.3	562.0	479.3	439.5	436.4	432.2	420.7	419.7
62.5°	5033.5	3110.0	963.8	633.1	533.7	458.3	415.5	420.7	423.8	417.6	416.5
65°	4349.1	2525.1	823.6	565.1	496.0	429.1	389.3	402.9	411.2	411.2	409.1
67.5°	3527.6	1939.1	693.8	506.5	448.9	389.3	359.9	370.5	376.7	374.7	379.9
70°	2507.3	1313.3	565.1	439.5	389.3	344.3	322.3	322.3	318.2	316.0	316.0
72.5°	1216.0	750.3	458.3	367.3	331.7	294.0	276.3	269.0	260.5	259.5	254.3
73°	1016.1	672.9	437.4	353.7	318.2	286.7	266.8	255.3	250.1	245.9	244.9
75°	618.5	510.7	365.2	298.2	271.1	247.0	229.2	218.7	213.4	210.3	209.3
77.5°	407.0	380.9	283.6	228.2	207.2	192.6	185.2	174.8	171.6	167.4	167.4
80°	303.4	290.9	203.0	161.1	148.6	136.1	134.0	131.9	123.5	118.2	116.1
82.5°	195.7	207.2	138.1	107.8	94.2	83.7	84.8	87.9	79.6	72.2	70.1
85°	139.2	149.6	83.7	49.2	39.8	34.6	38.7	34.6	35.6	28.3	23.0
87.5°	23.0	39.8	14.6	6.3	3.1	2.1	0.0	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)