

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: P458954

Luminaire Tested: **GALN-SA4D-735-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458954  
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-SA4D-735-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 1200mA 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: 23332 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G4

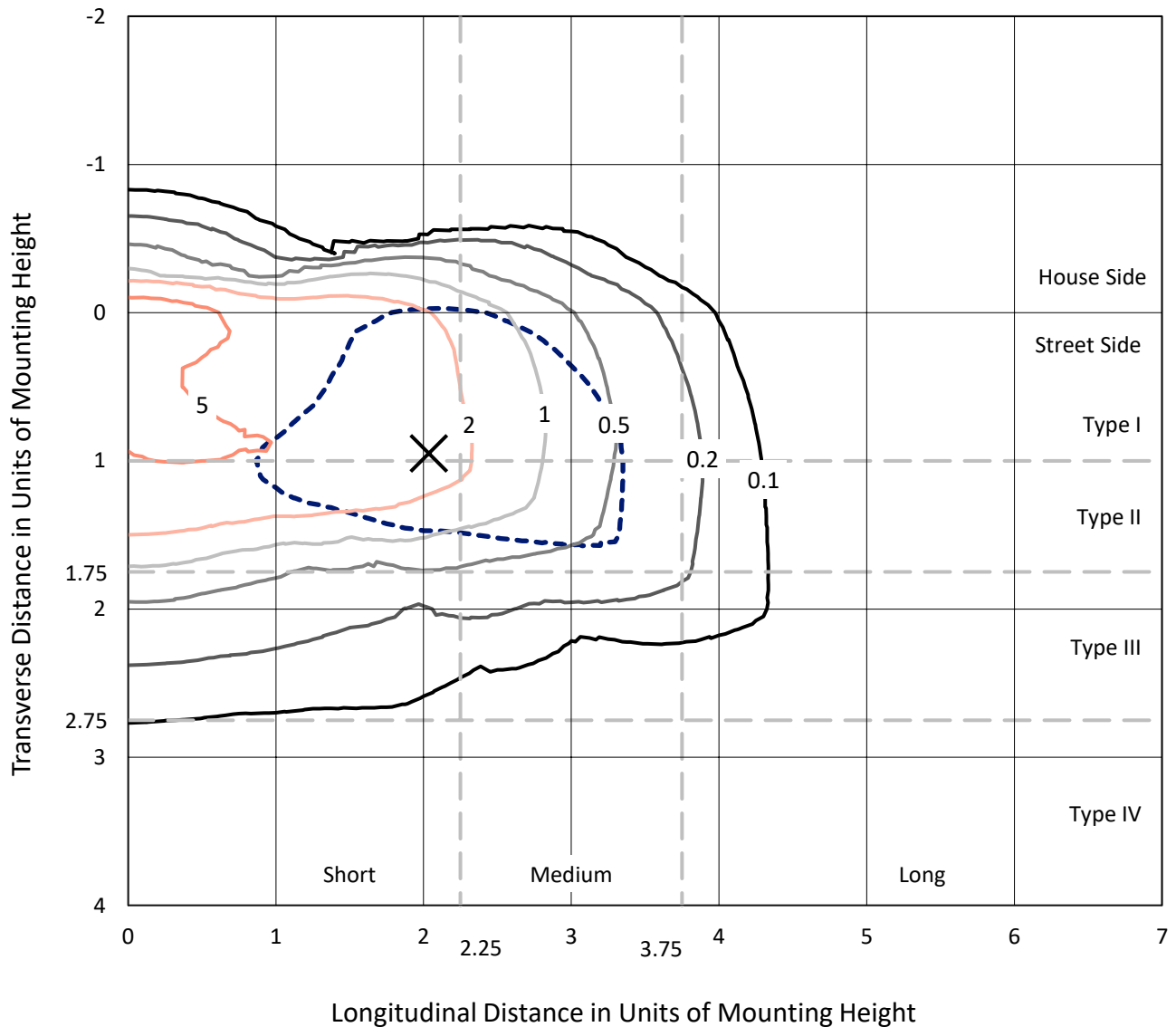
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

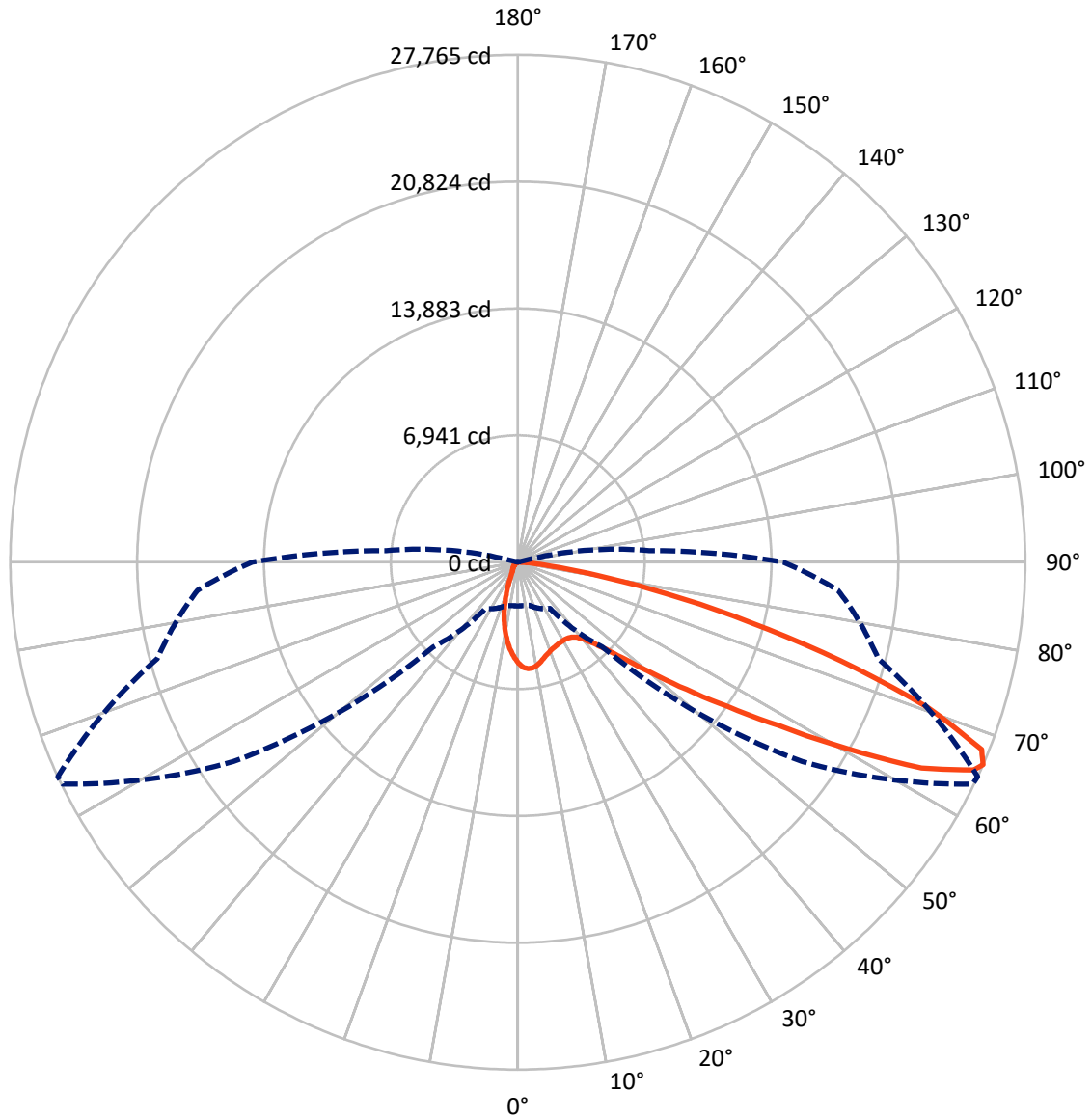
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 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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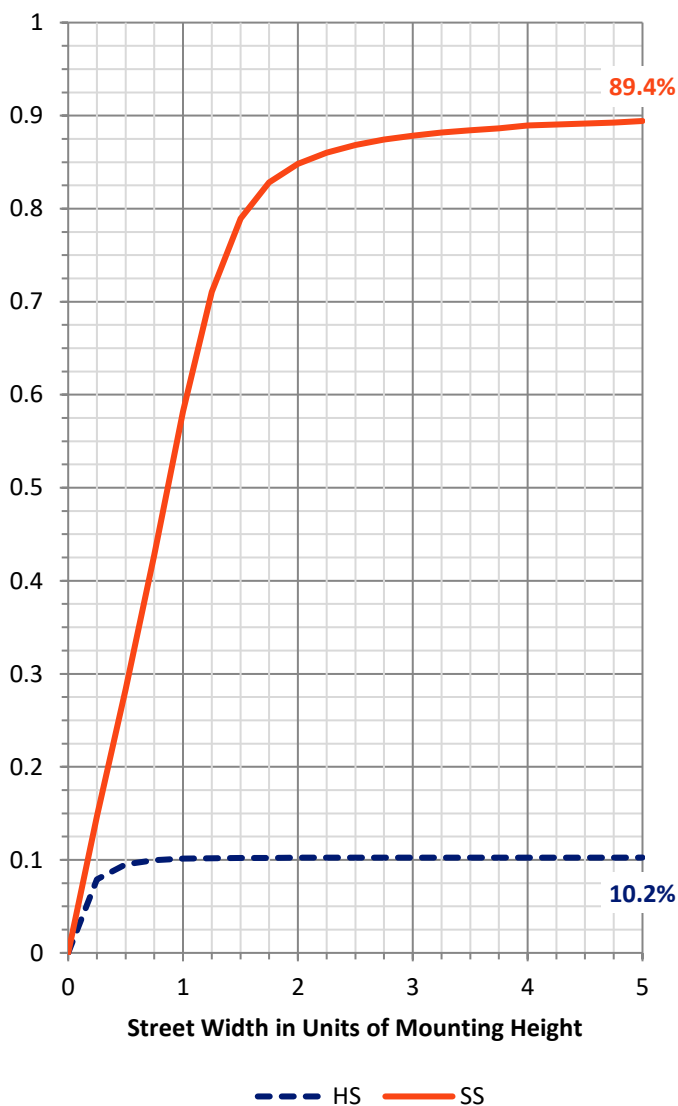
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2412.9	0.0	2412.9
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	20919.2	0.0	20919.2
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	23332.0	0.0	23332.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	452.5	1.9
10°-20°	985.9	4.2
20°-30°	1412.4	6.1
30°-40°	2062.9	8.8
40°-50°	3459.1	14.8
50°-60°	5772.7	24.7
60°-70°	6127.5	26.3
70°-80°	2775.1	11.9
80°-90°	284.0	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°	23332.0	100.0
0°-180°	23332.0	100.0

**Coefficient of Utilization**



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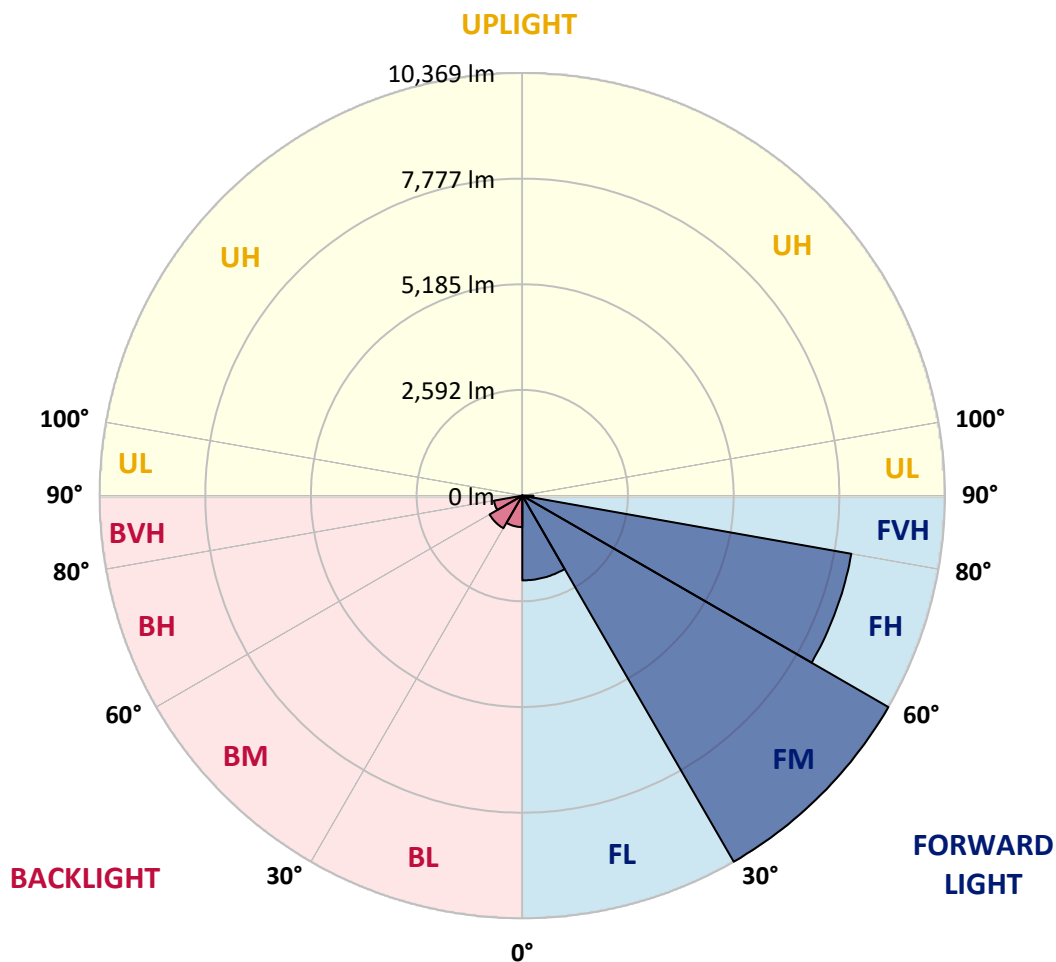
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2079.0	8.9			
FM (30°-60°)	10369.3	44.4			
FH (60°-80°)	8196.0	35.1			G4/12000
FVH (80°-90°)	274.9	1.2			G3/500
BL (0°-30°)	771.8	3.3	B2/1000		
BM (30°-60°)	925.4	4.0	B1/1000		
BH (60°-80°)	706.6	3.0	B2/1000		G2/1000
BVH (80°-90°)	9.0	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-G4**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9
2.5°	5830.7	5837.0	5844.9	5855.9	5863.8	5840.2	5807.1	5769.3	5761.4	5681.0	5583.3
5°	5518.7	5528.2	5597.5	5635.3	5720.4	5797.6	5846.5	5852.8	5849.6	5774.0	5618.0
7.5°	5074.3	5101.1	5168.9	5235.0	5394.2	5540.8	5714.1	5835.4	5843.3	5822.8	5629.0
10°	4713.4	4730.8	4765.4	4896.2	5028.6	5252.4	5495.1	5723.6	5742.5	5824.4	5619.6
12.5°	4431.3	4456.6	4499.1	4600.0	4759.1	4970.3	5246.1	5553.4	5592.8	5794.5	5592.8
15°	4234.4	4247.0	4289.5	4388.8	4543.2	4738.6	5017.6	5375.3	5410.0	5755.1	5588.0
17.5°	4141.4	4155.6	4185.5	4264.3	4391.9	4573.2	4845.8	5231.9	5276.0	5729.9	5605.4
20°	4166.6	4179.2	4180.8	4221.8	4308.4	4461.3	4719.7	5097.9	5154.7	5714.1	5633.7
22.5°	4310.0	4311.6	4292.7	4273.8	4303.7	4414.0	4642.5	5012.8	5071.1	5711.0	5666.8
25°	4524.3	4529.0	4497.5	4431.3	4371.5	4428.2	4625.2	4957.7	5009.7	5703.1	5687.3
27.5°	4820.6	4819.0	4809.6	4699.2	4529.0	4491.2	4639.4	4927.7	4971.9	5681.0	5695.2
30°	5235.0	5222.4	5201.9	5077.5	4817.4	4644.1	4699.2	4908.8	4949.8	5649.5	5674.7
32.5°	5643.2	5690.5	5687.3	5569.1	5244.5	4916.7	4823.7	4934.0	4964.0	5629.0	5644.8
35°	6119.1	6117.5	6238.9	6194.7	5815.0	5265.0	5036.5	5017.6	5041.2	5643.2	5630.6
37.5°	6560.3	6601.3	6790.4	6836.1	6489.4	5756.7	5337.5	5197.2	5205.1	5739.3	5665.3
40°	7110.3	7189.1	7471.2	7624.1	7318.3	6486.3	5781.9	5526.6	5528.2	5975.7	5796.0
42.5°	7819.5	7944.0	8207.1	8462.4	8298.5	7349.9	6448.5	6048.2	6045.0	6391.7	6095.5
45°	8681.5	8768.1	9067.6	9472.6	9368.5	8555.4	7419.2	6856.6	6815.6	7074.1	6626.5
47.5°	9425.3	9543.5	9847.6	10309.3	10782.1	10027.3	8579.0	7967.6	7940.8	8159.9	7537.4
50°	9749.9	9853.9	10173.8	10821.5	11967.2	11959.3	10306.2	9589.2	9543.5	9661.7	8946.2
52.5°	9393.8	9491.5	9814.5	10621.4	12525.0	14313.6	12808.7	11623.6	11568.5	11417.2	10629.2
55°	8174.0	8254.4	8731.9	9658.5	12310.7	15883.2	16256.7	14137.1	13922.8	13335.0	12534.5
57.5°	6508.3	6467.4	6763.6	7840.0	11053.1	16409.5	19796.1	17268.4	16885.4	14992.8	14146.6
60°	4510.1	4636.2	4756.0	5465.1	8311.1	15497.1	21997.6	21204.9	20700.6	16623.8	15690.9
62.5°	3315.6	3399.2	3477.9	3805.7	5225.6	12373.7	22386.8	25248.6	24801.0	18355.7	17164.4
65°	2622.2	2628.6	2660.1	2983.1	3443.3	8046.4	20516.2	27528.9	27413.8	20023.0	17761.6
66°	2389.0	2390.6	2439.4	2786.1	3090.3	6552.5	19017.6	27702.2	27765.2	20423.3	17586.7
67.5°	2088.0	2081.7	2152.6	2504.1	2814.5	4724.5	16335.5	26999.4	27372.9	20730.6	16957.9
70°	1618.4	1610.5	1697.2	2100.6	2592.3	3151.7	10857.7	23182.6	23784.6	20101.8	15003.9
72.5°	1077.9	1084.2	1232.3	1657.8	2474.1	2775.1	6532.0	17635.6	18486.5	16600.2	11803.3
75°	628.8	639.8	808.4	1232.3	2147.9	2645.9	3697.0	12575.4	13119.1	11462.9	7353.0
77.5°	329.4	334.1	452.3	813.1	1646.8	2456.8	2463.1	8033.8	8289.1	5570.7	2910.6
80°	174.9	170.2	242.7	490.1	1133.1	2157.4	1998.2	4253.3	4421.9	1654.7	735.9
82.5°	66.2	72.5	129.2	321.5	669.7	1549.1	1720.8	1880.0	1821.7	364.0	308.9
85°	12.6	15.8	55.2	190.7	337.2	647.7	1268.6	921.9	854.1	137.1	178.1
87.5°	1.6	3.2	15.8	45.7	48.9	219.0	375.1	255.3	220.6	50.4	74.1
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°	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9	5532.9
2.5°	5536.0	5493.5	5351.7	5211.4	5068.0	4938.8	4850.5	4707.1	4670.9	4618.9	4588.9
5°	5525.0	5425.7	5153.1	4855.3	4577.9	4278.5	4050.0	3829.4	3711.2	3651.3	3629.2
7.5°	5493.5	5335.9	4910.4	4444.0	3999.6	3552.0	3162.8	2866.5	2675.8	2545.0	2456.8
10°	5430.4	5213.0	4628.3	3986.9	3315.6	2724.7	2231.4	1856.4	1566.4	1475.0	1478.2
12.5°	5365.8	5075.9	4313.2	3479.5	2647.5	1902.1	1378.9	1082.6	943.9	898.2	888.8
15°	5306.0	4945.1	4004.3	2987.8	1971.4	1232.3	888.8	784.8	747.0	739.1	737.5
17.5°	5274.4	4823.7	3674.9	2425.3	1375.7	836.8	712.3	683.9	672.9	665.0	661.9
20°	5247.6	4718.2	3359.8	1898.9	940.8	685.5	638.2	611.4	592.5	584.6	579.9
22.5°	5228.7	4609.4	3033.5	1470.3	720.2	608.3	565.7	531.1	504.3	494.8	488.5
25°	5200.4	4489.7	2704.2	1074.7	606.7	540.5	491.7	450.7	416.0	398.7	395.5
27.5°	5159.4	4354.1	2343.3	795.8	542.1	480.6	420.8	370.3	335.7	316.7	318.3
30°	5093.2	4212.3	1982.4	631.9	490.1	419.2	354.6	305.7	272.6	258.4	256.9
32.5°	5014.4	4040.5	1651.5	542.1	442.8	364.0	296.3	253.7	228.5	217.5	215.9
35°	4940.4	3867.2	1314.3	486.9	394.0	313.6	249.0	212.7	193.8	184.4	186.0
37.5°	4899.4	3712.7	1024.3	442.8	354.6	269.5	214.3	182.8	165.5	157.6	156.0
40°	4926.2	3586.7	814.7	403.4	310.4	231.7	184.4	157.6	140.3	129.2	129.2
42.5°	5052.2	3531.5	657.1	365.6	269.5	200.1	160.7	135.5	116.6	105.6	107.2
45°	5436.7	3589.8	550.0	330.9	231.7	173.3	138.7	111.9	94.6	86.7	85.1
47.5°	6075.0	3808.9	475.9	294.7	198.6	148.1	116.6	93.0	75.6	69.3	67.8
50°	7190.7	4261.2	420.8	258.4	168.6	126.1	96.1	74.1	59.9	53.6	53.6
52.5°	8725.6	5247.6	381.4	217.5	141.8	107.2	78.8	59.9	47.3	42.5	41.0
55°	10329.8	6287.7	360.9	182.8	118.2	88.2	63.0	47.3	36.2	31.5	29.9
57.5°	11872.6	7104.0	337.2	148.1	94.6	67.8	48.9	36.2	25.2	22.1	20.5
60°	13352.3	7764.3	286.8	118.2	74.1	48.9	36.2	25.2	17.3	14.2	14.2
62.5°	14676.1	8148.8	225.3	94.6	56.7	34.7	23.6	18.9	12.6	9.5	9.5
65°	14830.5	7649.3	170.2	72.5	41.0	22.1	14.2	14.2	9.5	6.3	6.3
66°	14520.1	7225.4	149.7	66.2	36.2	18.9	12.6	11.0	7.9	4.7	4.7
67.5°	13826.7	6502.0	129.2	56.7	29.9	14.2	9.5	9.5	6.3	3.2	3.2
70°	11946.7	5310.7	102.4	42.5	22.1	11.0	6.3	6.3	4.7	3.2	3.2
72.5°	9105.4	3964.9	83.5	31.5	15.8	7.9	4.7	4.7	4.7	3.2	3.2
75°	5491.9	2135.3	64.6	23.6	14.2	6.3	3.2	4.7	6.3	4.7	3.2
77.5°	2023.4	726.5	50.4	18.9	11.0	6.3	3.2	3.2	6.3	4.7	4.7
80°	496.4	189.1	36.2	15.8	11.0	6.3	3.2	3.2	6.3	6.3	6.3
82.5°	230.1	80.4	25.2	14.2	11.0	6.3	3.2	3.2	4.7	6.3	6.3
85°	132.4	37.8	20.5	15.8	11.0	6.3	3.2	3.2	4.7	6.3	6.3
87.5°	53.6	18.9	18.9	15.8	12.6	7.9	3.2	3.2	3.2	4.7	4.7
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)