

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: P459012

Luminaire Tested: **GALN-SA5B-735-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459012  
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-SA5B-735-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 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: 21725 lumens  
Efficiency: N/A  
Efficacy: 106.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G4

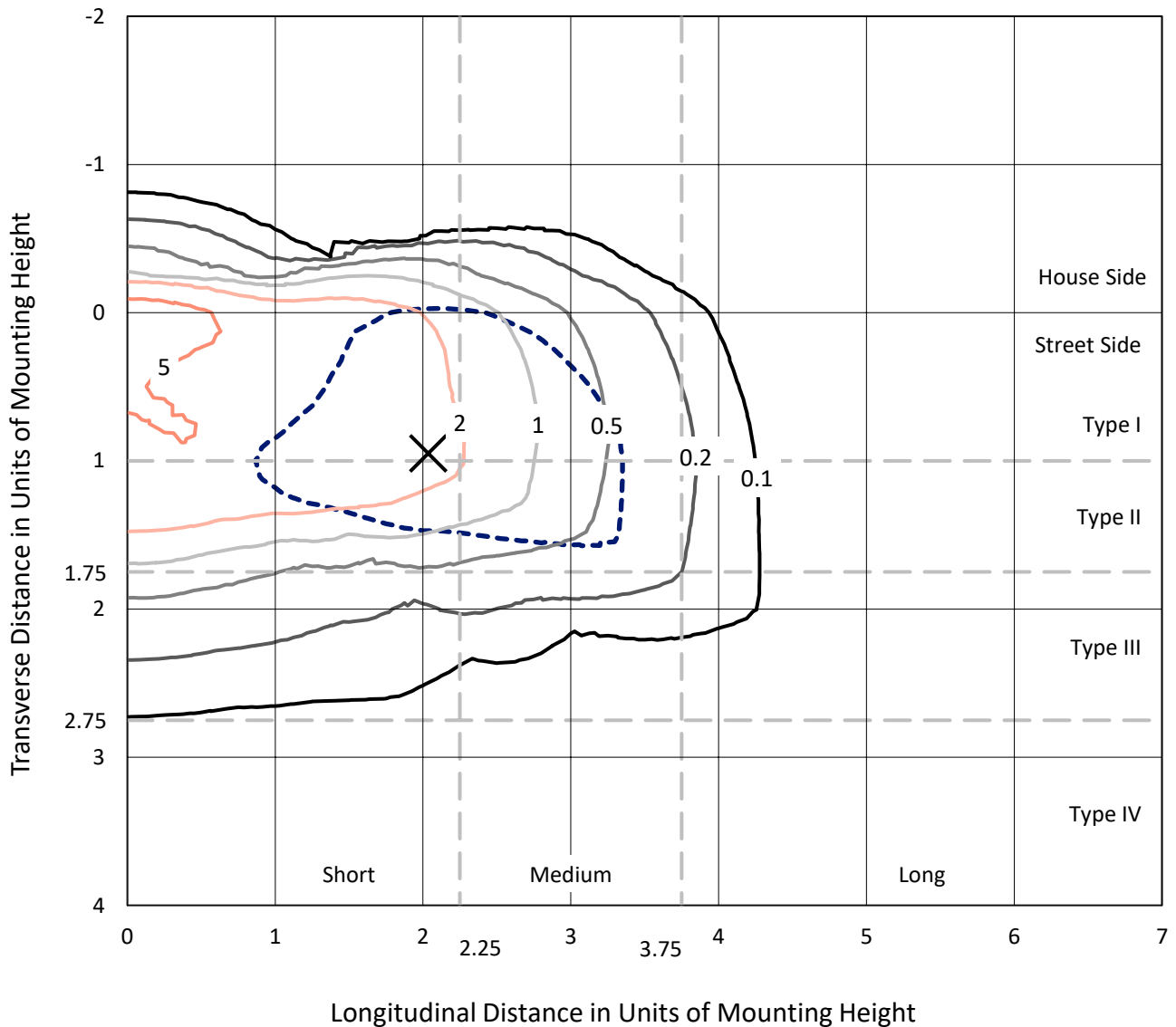
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

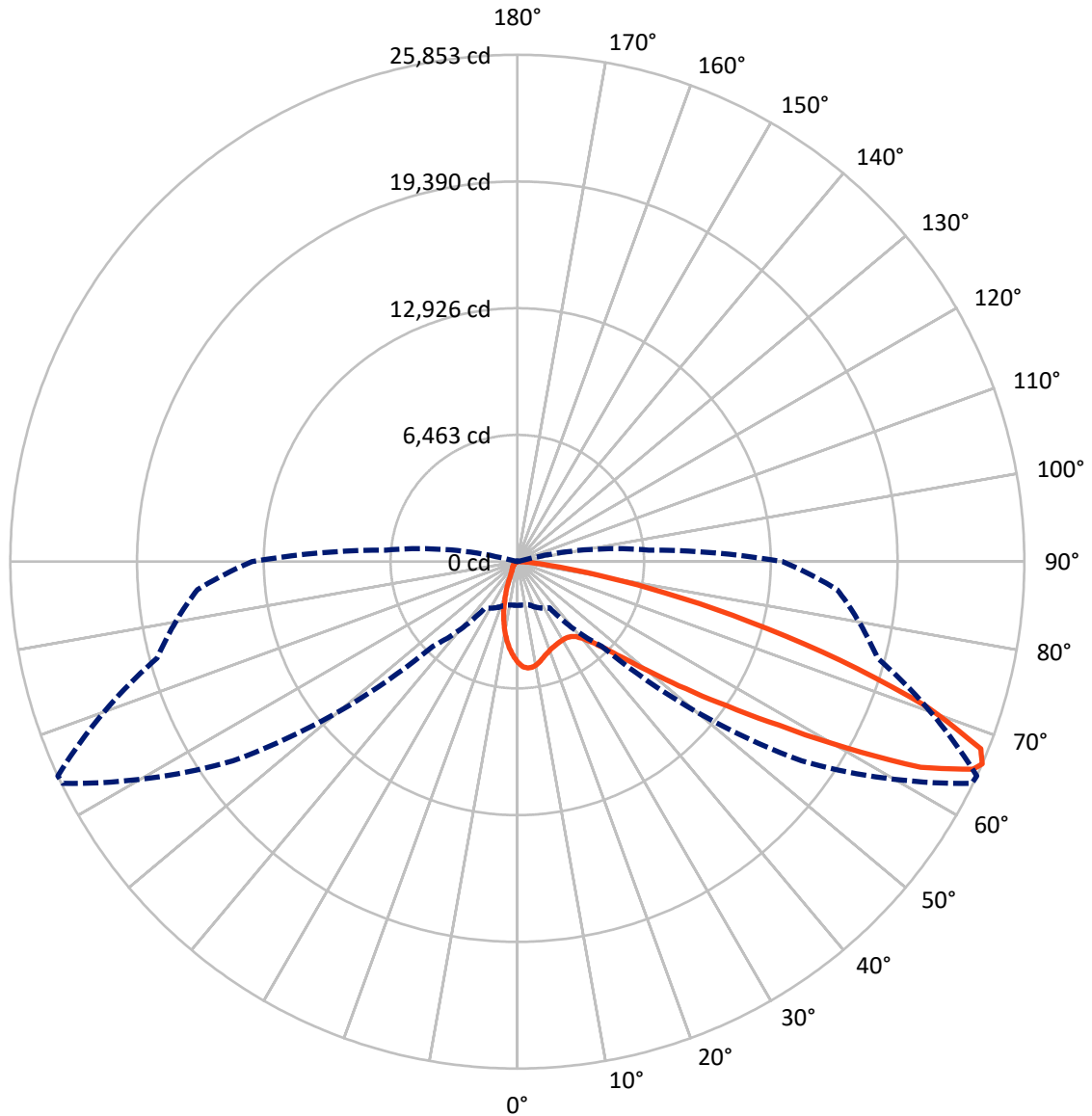
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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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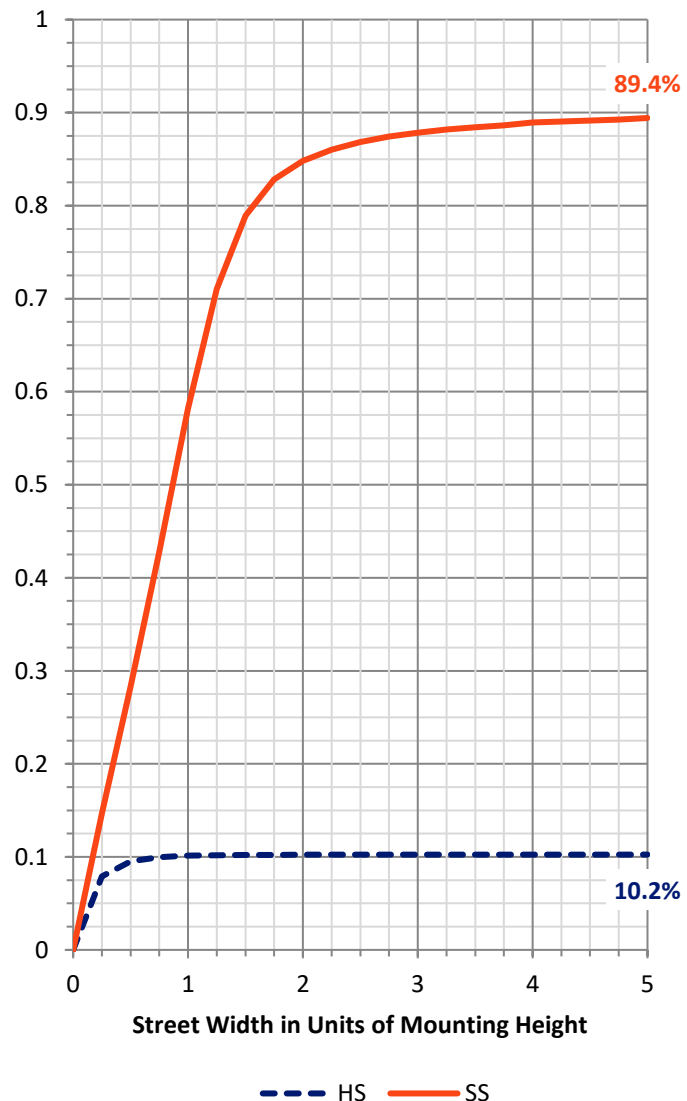
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2246.7	0.0	2246.7
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	19478.3	0.0	19478.3
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	21725.0	0.0	21725.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	421.3	1.9
10°-20°	918.0	4.2
20°-30°	1315.1	6.1
30°-40°	1920.8	8.8
40°-50°	3220.8	14.8
50°-60°	5375.1	24.7
60°-70°	5705.5	26.3
70°-80°	2584.0	11.9
80°-90°	264.4	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°	21725.0	100.0
0°-180°	21725.0	100.0



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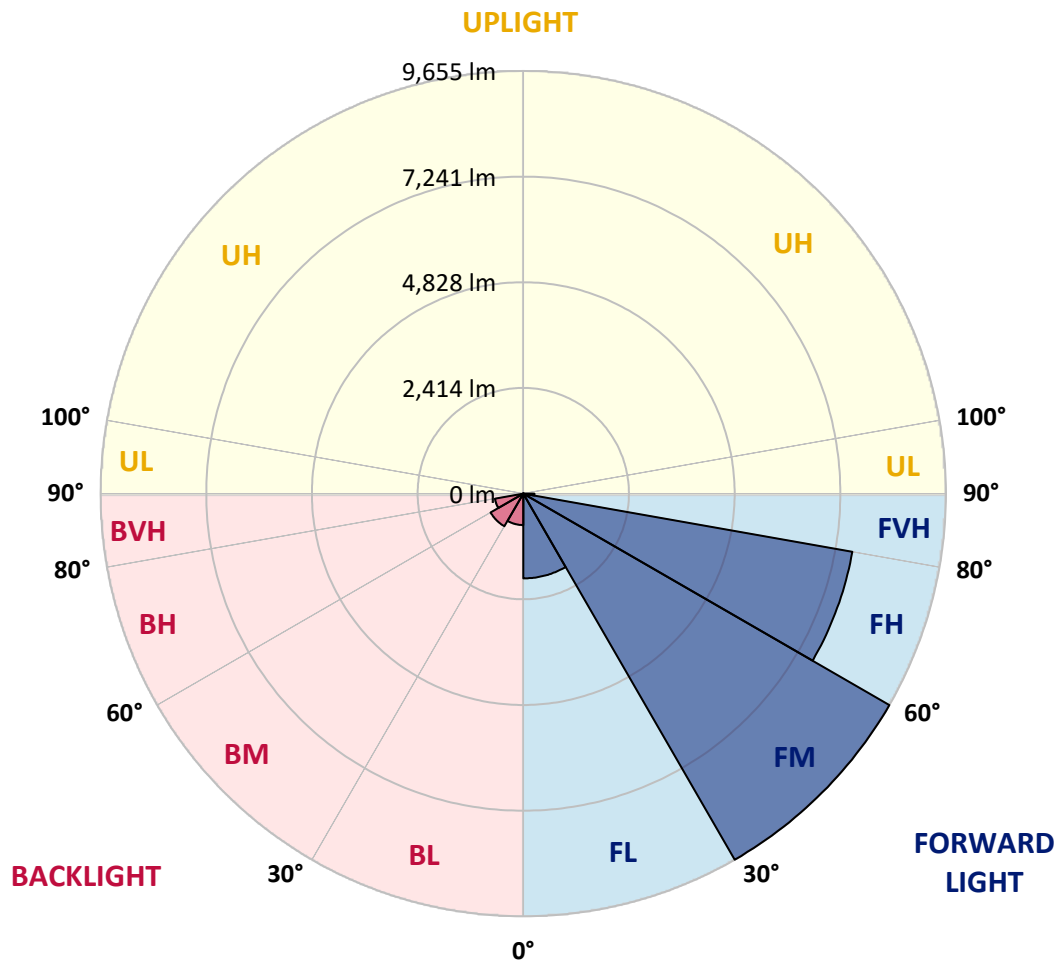
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1935.8	8.9			
FM (30°-60°)	9655.1	44.4			
FH (60°-80°)	7631.5	35.1			G4/12000
FVH (80°-90°)	256.0	1.2			G3/500
BL (0°-30°)	718.7	3.3	B2/1000		
BM (30°-60°)	861.6	4.0	B1/1000		
BH (60°-80°)	657.9	3.0	B2/1000		G2/1000
BVH (80°-90°)	8.4	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°	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8
2.5°	5429.1	5435.0	5442.3	5452.6	5459.9	5437.9	5407.1	5371.9	5364.6	5289.7	5198.8
5°	5138.6	5147.4	5212.0	5247.2	5326.4	5398.3	5443.8	5449.7	5446.7	5376.3	5231.0
7.5°	4724.8	4749.8	4812.8	4874.5	5022.7	5159.1	5320.5	5433.5	5440.9	5421.8	5241.3
10°	4388.8	4404.9	4437.2	4559.0	4682.3	4890.6	5116.6	5329.3	5347.0	5423.3	5232.5
12.5°	4126.1	4149.6	4189.2	4283.1	4431.3	4628.0	4884.7	5170.9	5207.6	5395.4	5207.6
15°	3942.7	3954.5	3994.1	4086.5	4230.3	4412.3	4672.0	5005.1	5037.3	5358.7	5203.2
17.5°	3856.1	3869.4	3897.2	3970.6	4089.5	4258.2	4512.0	4871.5	4912.6	5335.2	5219.3
20°	3879.6	3891.4	3892.8	3931.0	4011.7	4154.0	4394.7	4746.8	4799.6	5320.5	5245.7
22.5°	4013.1	4014.6	3997.0	3979.4	4007.3	4110.0	4322.8	4667.6	4721.9	5317.6	5276.5
25°	4212.7	4217.1	4187.8	4126.1	4070.4	4123.2	4306.6	4616.2	4664.6	5310.3	5295.6
27.5°	4488.6	4487.1	4478.3	4375.6	4217.1	4181.9	4319.8	4588.3	4629.4	5289.7	5302.9
30°	4874.5	4862.7	4843.7	4727.7	4485.6	4324.2	4375.6	4570.7	4608.9	5260.4	5283.9
32.5°	5254.5	5298.5	5295.6	5185.5	4883.3	4578.1	4491.5	4594.2	4622.1	5241.3	5256.0
35°	5697.6	5696.2	5809.2	5768.1	5414.5	4902.4	4689.6	4672.0	4694.0	5254.5	5242.8
37.5°	6108.5	6146.6	6322.7	6365.3	6042.5	5360.2	4969.8	4839.3	4846.6	5344.0	5275.1
40°	6620.6	6694.0	6956.6	7098.9	6814.3	6039.5	5383.6	5145.9	5147.4	5564.1	5396.8
42.5°	7280.9	7396.8	7641.9	7879.6	7727.0	6843.6	6004.3	5631.6	5628.7	5951.5	5675.6
45°	8083.5	8164.2	8443.0	8820.1	8723.3	7966.1	6908.2	6384.4	6346.2	6586.8	6170.1
47.5°	8776.1	8886.2	9169.4	9599.3	10039.5	9336.6	7988.1	7418.8	7393.9	7597.8	7018.2
50°	9078.4	9175.2	9473.1	10076.2	11142.9	11135.6	9596.3	8928.7	8886.2	8996.2	8330.0
52.5°	8746.8	8837.7	9138.5	9889.8	11662.3	13327.8	11926.5	10823.0	10771.7	10630.8	9897.1
55°	7611.0	7685.9	8130.5	8993.3	11462.8	14789.2	15137.0	13163.4	12963.9	12416.6	11671.1
57.5°	6060.1	6021.9	6297.8	7300.0	10291.9	15279.3	18432.6	16079.0	15722.5	13960.2	13172.2
60°	4199.5	4316.9	4428.4	5088.7	7738.7	14429.7	20482.5	19744.4	19274.9	15478.9	14610.2
62.5°	3087.3	3165.0	3238.4	3543.6	4865.7	11521.5	20844.9	23509.6	23092.9	17091.5	15982.2
65°	2441.6	2447.5	2476.9	2777.7	3206.1	7492.2	19103.2	25632.8	25525.7	18643.9	16538.3
66°	2224.5	2225.9	2271.4	2594.2	2877.4	6101.2	17707.7	25794.2	25852.9	19016.6	16375.4
67.5°	1944.2	1938.3	2004.4	2331.6	2620.7	4399.1	15210.4	25139.8	25487.5	19302.7	15789.9
70°	1506.9	1499.6	1580.3	1956.0	2413.8	2934.7	10109.9	21585.9	22146.4	18717.3	13970.5
72.5°	1003.7	1009.5	1147.5	1543.6	2303.7	2584.0	6082.1	16420.9	17213.3	15456.9	10990.3
75°	585.5	595.7	752.7	1147.5	2000.0	2463.6	3442.4	11709.3	12215.5	10673.4	6846.6
77.5°	306.7	311.1	421.1	757.1	1533.4	2287.6	2293.4	7480.5	7718.2	5187.0	2710.2
80°	162.9	158.5	226.0	456.3	1055.0	2008.8	1860.6	3960.3	4117.3	1540.7	685.2
82.5°	61.6	67.5	120.3	299.3	623.6	1442.4	1602.3	1750.5	1696.2	339.0	287.6
85°	11.7	14.7	51.4	177.5	314.0	603.1	1181.2	858.4	795.3	127.7	165.8
87.5°	1.5	2.9	14.7	42.6	45.5	204.0	349.2	237.7	205.4	47.0	69.0
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°	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8	5151.8
2.5°	5154.7	5115.1	4983.1	4852.5	4718.9	4598.6	4516.4	4382.9	4349.2	4300.7	4272.9
5°	5144.5	5052.0	4798.2	4520.8	4262.6	3983.8	3771.0	3565.6	3455.6	3399.8	3379.3
7.5°	5115.1	4968.4	4572.2	4137.9	3724.1	3307.4	2944.9	2669.1	2491.5	2369.7	2287.6
10°	5056.4	4853.9	4309.6	3712.3	3087.3	2537.0	2077.7	1728.5	1458.5	1373.4	1376.4
12.5°	4996.3	4726.3	4016.1	3239.9	2465.1	1771.1	1283.9	1008.1	878.9	836.4	827.6
15°	4940.5	4604.5	3728.5	2782.1	1835.6	1147.5	827.6	730.7	695.5	688.2	686.7
17.5°	4911.2	4491.5	3421.8	2258.2	1281.0	779.2	663.2	636.8	626.6	619.2	616.3
20°	4886.2	4393.2	3128.3	1768.1	876.0	638.3	594.3	569.3	551.7	544.4	540.0
22.5°	4868.6	4291.9	2824.6	1369.0	670.6	566.4	526.8	494.5	469.5	460.7	454.9
25°	4842.2	4180.4	2517.9	1000.7	564.9	503.3	457.8	419.7	387.4	371.2	368.3
27.5°	4804.0	4054.2	2181.9	741.0	504.8	447.5	391.8	344.8	312.5	294.9	296.4
30°	4742.4	3922.2	1845.9	588.4	456.3	390.3	330.1	284.7	253.8	240.6	239.2
32.5°	4669.0	3762.2	1537.8	504.8	412.3	339.0	275.9	236.2	212.8	202.5	201.0
35°	4600.1	3600.8	1223.8	453.4	366.8	292.0	231.8	198.1	180.5	171.7	173.1
37.5°	4561.9	3457.0	953.8	412.3	330.1	250.9	199.6	170.2	154.1	146.7	145.3
40°	4586.9	3339.6	758.6	375.6	289.1	215.7	171.7	146.7	130.6	120.3	120.3
42.5°	4704.3	3288.3	611.9	340.4	250.9	186.4	149.7	126.2	108.6	98.3	99.8
45°	5062.3	3342.6	512.1	308.1	215.7	161.4	129.1	104.2	88.0	80.7	79.2
47.5°	5656.6	3546.5	443.1	274.4	184.9	137.9	108.6	86.6	70.4	64.6	63.1
50°	6695.4	3967.7	391.8	240.6	157.0	117.4	89.5	69.0	55.8	49.9	49.9
52.5°	8124.6	4886.2	355.1	202.5	132.1	99.8	73.4	55.8	44.0	39.6	38.2
55°	9618.4	5854.7	336.0	170.2	110.0	82.2	58.7	44.0	33.7	29.3	27.9
57.5°	11054.9	6614.7	314.0	137.9	88.0	63.1	45.5	33.7	23.5	20.5	19.1
60°	12432.7	7229.5	267.1	110.0	69.0	45.5	33.7	23.5	16.1	13.2	13.2
62.5°	13665.3	7587.6	209.8	88.0	52.8	32.3	22.0	17.6	11.7	8.8	8.8
65°	13809.1	7122.4	158.5	67.5	38.2	20.5	13.2	13.2	8.8	5.9	5.9
66°	13520.0	6727.7	139.4	61.6	33.7	17.6	11.7	10.3	7.3	4.4	4.4
67.5°	12874.4	6054.2	120.3	52.8	27.9	13.2	8.8	8.8	5.9	2.9	2.9
70°	11123.8	4944.9	95.4	39.6	20.5	10.3	5.9	5.9	4.4	2.9	2.9
72.5°	8478.2	3691.8	77.8	29.3	14.7	7.3	4.4	4.4	4.4	2.9	2.9
75°	5113.6	1988.2	60.2	22.0	13.2	5.9	2.9	4.4	5.9	4.4	2.9
77.5°	1884.1	676.4	47.0	17.6	10.3	5.9	2.9	2.9	5.9	4.4	4.4
80°	462.2	176.1	33.7	14.7	10.3	5.9	2.9	2.9	5.9	5.9	5.9
82.5°	214.2	74.8	23.5	13.2	10.3	5.9	2.9	2.9	4.4	5.9	5.9
85°	123.3	35.2	19.1	14.7	10.3	5.9	2.9	2.9	4.4	5.9	5.9
87.5°	49.9	17.6	17.6	14.7	11.7	7.3	2.9	2.9	2.9	4.4	4.4
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)