

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: P459083

Luminaire Tested: **GALN-SA5D-735-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459083  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-735-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28894 lumens  
Efficiency: N/A  
Efficacy: 93.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G3

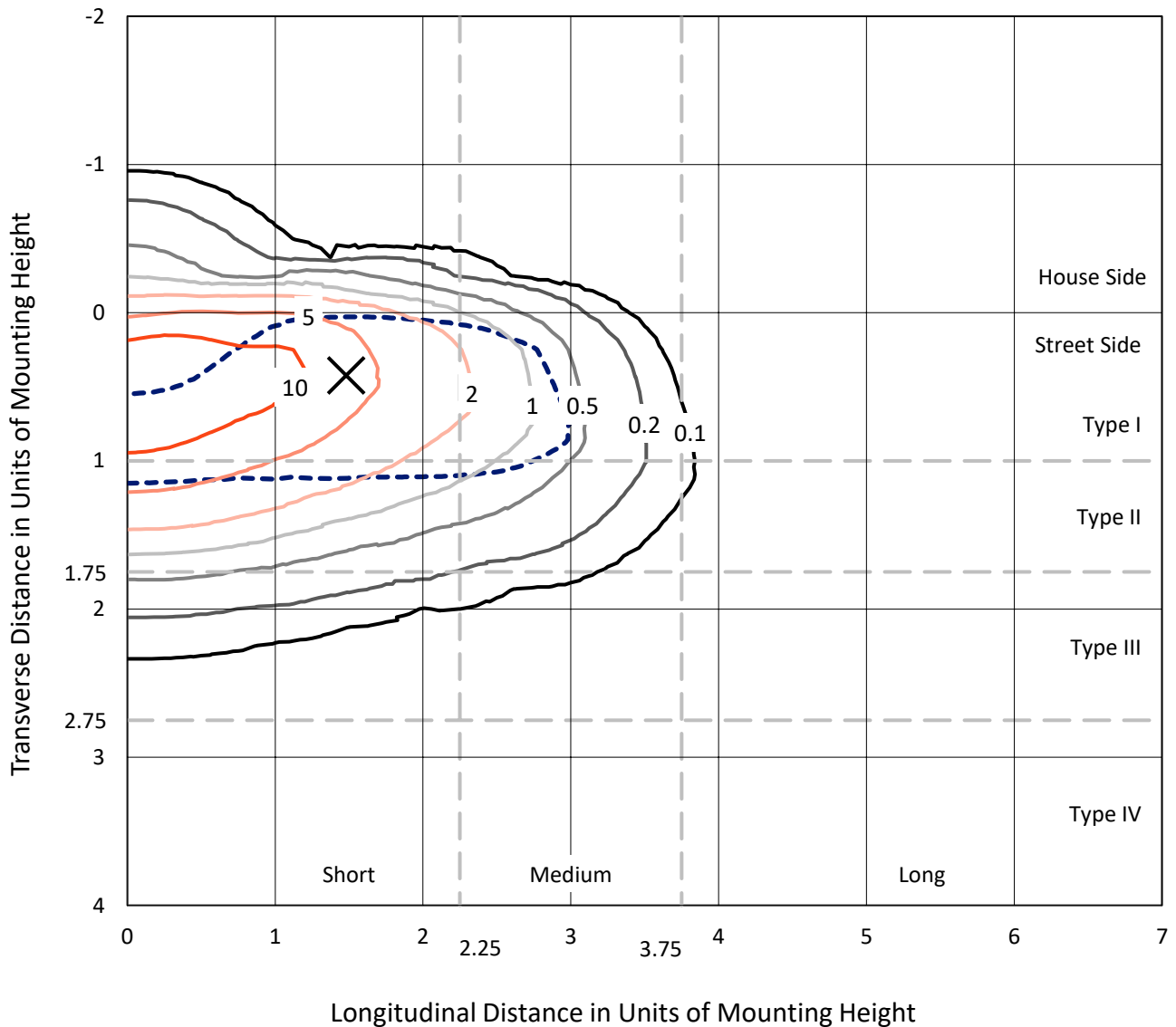
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P459083  
 CATALOG NUMBER: GALN-SA5D-735-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

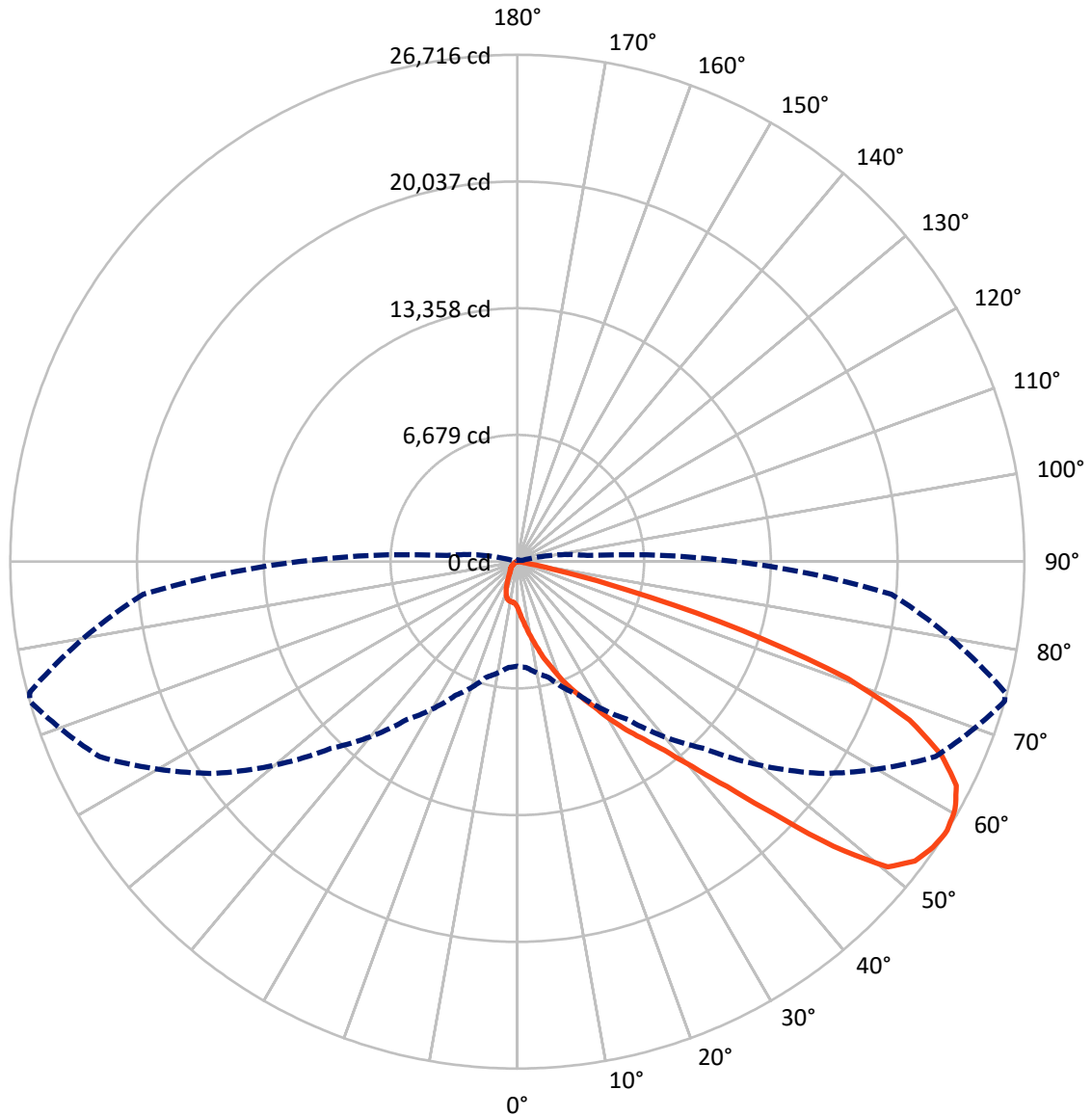
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P459083  
CATALOG NUMBER: GALN-SA5D-735-U-T2R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 57-Deg Vertical

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 CATALOG NUMBER: GALN-SA5D-735-U-T2R-HSS

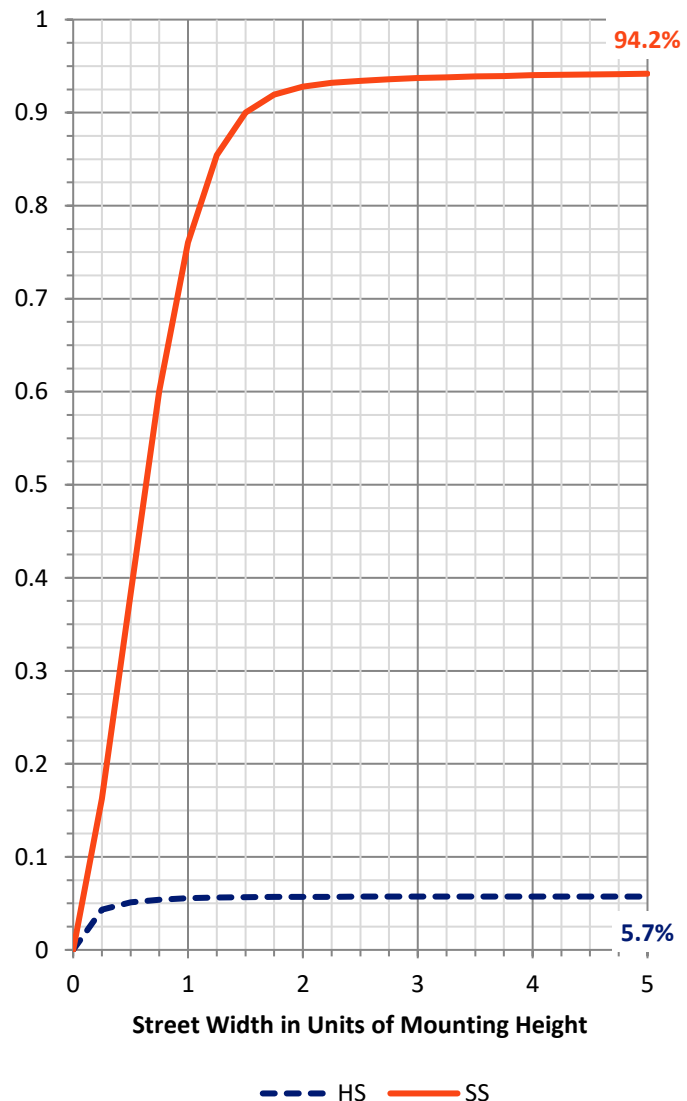
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1666.5	0.0	1666.5
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	27227.5	0.0	27227.5
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	28894.0	0.0	28894.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	292.1	1.0
10°-20°	1151.3	4.0
20°-30°	2463.4	8.5
30°-40°	4527.7	15.7
40°-50°	6941.1	24.0
50°-60°	7342.7	25.4
60°-70°	4795.0	16.6
70°-80°	1310.2	4.5
80°-90°	70.5	0.2
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°	28894.0	100.0
0°-180°	28894.0	100.0



REPORT NUMBER: P459083

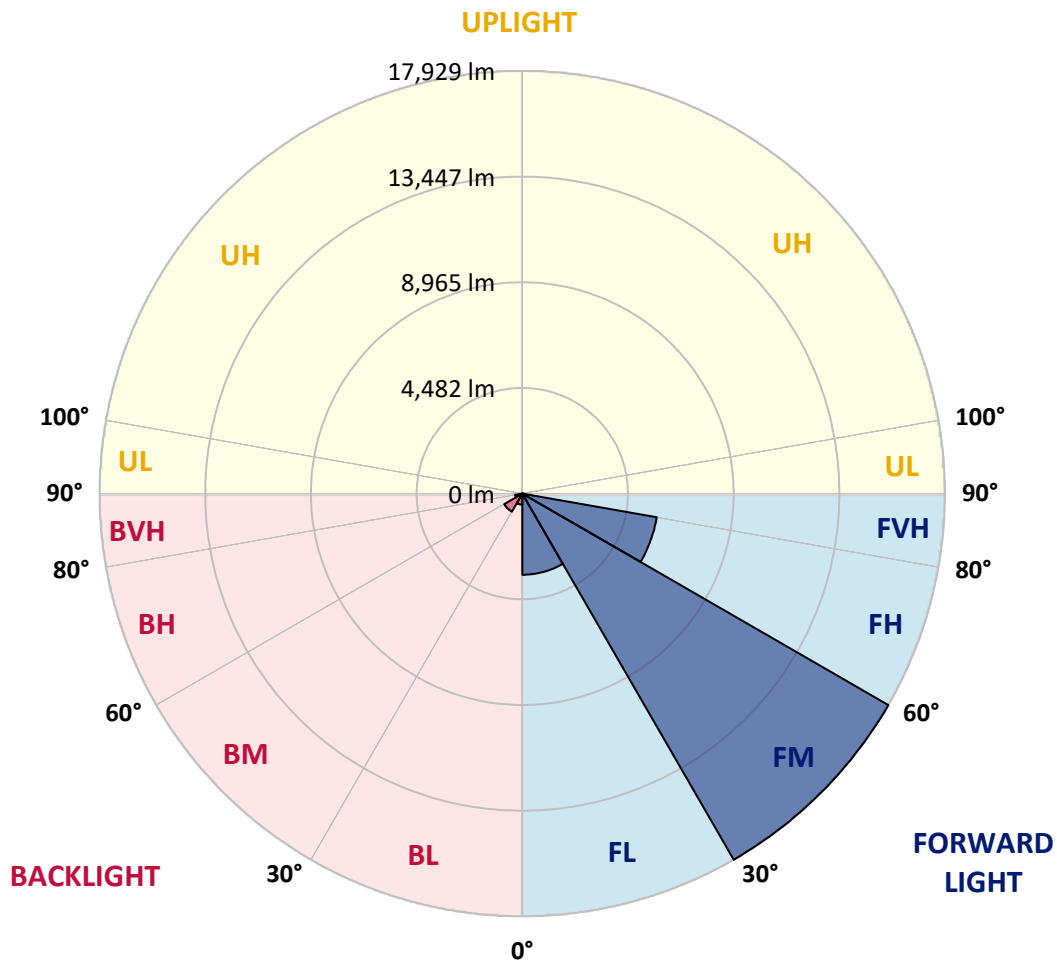
CATALOG NUMBER: GALN-SA5D-735-U-T2R-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3441.2	11.9			
FM	(30°-60°)	17929.3	62.1			
FH	(60°-80°)	5792.3	20.0			G3/7500
FVH	(80°-90°)	64.7	0.2			G1/100
BL	(0°-30°)	465.5	1.6	B1/500		
BM	(30°-60°)	882.3	3.1	B1/1000		
BH	(60°-80°)	312.9	1.1	B1/500		G1/500
BVH	(80°-90°)	5.8	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 II Short





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CATALOG NUMBER: GALN-SA5D-735-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8
2.5°	3541.0	3509.1	3445.2	3423.3	3329.5	3183.9	3056.2	2884.7	2749.0	2735.0	2571.4
5°	4741.9	4670.1	4640.2	4496.5	4271.1	4059.7	3696.6	3421.3	3104.1	3080.2	2751.0
7.5°	5899.0	5799.2	5769.3	5633.6	5370.3	5037.2	4566.4	4065.6	3562.9	3517.0	2992.4
10°	6736.8	6750.8	6696.9	6607.2	6393.7	6054.6	5474.1	4789.8	4073.6	4015.8	3263.7
12.5°	7337.3	7335.3	7345.3	7343.3	7229.6	6972.2	6361.8	5573.8	4636.2	4522.5	3574.9
15°	7728.3	7734.3	7764.2	7868.0	7879.9	7720.3	7211.6	6323.9	5288.5	5146.9	3912.0
17.5°	8123.3	8165.2	8213.1	8310.8	8398.6	8334.8	7975.7	7105.9	5879.0	5773.3	4273.1
20°	8775.6	8833.5	8805.6	8865.4	8911.3	8917.3	8640.0	7828.1	6595.2	6417.6	4686.1
22.5°	9819.0	9817.0	9745.2	9637.4	9547.7	9543.7	9292.3	8570.2	7245.5	7074.0	5101.0
25°	11137.6	11143.6	11004.0	10696.7	10473.3	10200.0	9910.7	9220.5	7941.8	7730.3	5537.9
27.5°	12649.8	12611.9	12400.4	11977.5	11534.6	11067.8	10650.9	9976.6	8679.9	8504.3	6038.6
30°	14008.3	13994.3	13747.0	13230.3	12647.8	12179.0	11574.5	10924.2	9635.5	9420.0	6599.2
32.5°	15273.1	15293.0	14949.9	14415.3	13852.7	13312.1	12673.7	11829.9	10573.1	10267.8	7209.6
35°	16260.6	16280.5	15925.4	15480.6	14902.0	14453.2	13844.7	12795.4	11498.7	11241.4	7911.8
37.5°	16787.2	16813.2	16607.7	16272.5	15911.5	15686.0	15119.5	14038.2	12623.8	12468.2	8741.7
40°	16887.0	16916.9	16827.1	16737.4	16717.4	16879.0	16713.4	15502.5	14183.9	13940.5	9978.6
42.5°	16587.7	16627.6	16667.5	16867.0	17274.0	17866.5	18443.0	17489.4	16192.7	15865.6	11490.7
45°	15801.7	15797.8	15955.3	16472.0	17383.7	18648.5	20250.4	19977.1	18929.8	18540.8	13627.3
47.5°	14457.2	14437.2	14778.3	15514.5	16934.9	18792.1	21724.7	22997.4	22422.9	22063.8	15923.4
50°	12408.4	12506.1	13042.8	14070.2	15819.7	18357.2	22179.5	24978.4	25289.6	24908.5	17778.7
52.5°	10008.5	10004.5	10846.4	12240.8	14167.9	17399.7	21862.3	25337.4	26221.2	25929.9	18692.4
55°	7407.1	7459.0	8334.8	9741.2	12023.4	15652.1	20826.9	24968.4	26576.3	26370.8	19294.8
57°	5510.0	5601.7	6303.9	7792.1	10156.1	13922.5	19448.5	24308.1	26715.9	26604.2	19795.6
57.5°	5142.9	5146.9	5831.1	7183.7	9609.5	13258.2	19053.5	24032.8	26711.9	26650.1	19877.4
60°	3165.9	3265.7	3738.5	4855.6	7034.1	10347.6	16406.2	22450.8	26504.5	26594.2	20226.5
62.5°	1895.2	1937.1	2244.3	2926.5	4534.4	7552.8	13425.8	20426.0	25963.9	26237.2	20202.5
65°	1218.9	1228.9	1368.5	1771.5	2834.8	5105.0	10345.6	17750.8	24565.4	25068.1	19412.5
67.5°	941.6	957.6	1013.4	1163.0	1643.8	3179.9	7317.4	14896.0	22303.2	22951.5	17497.4
70°	835.9	843.9	863.8	911.7	1087.2	1795.4	4552.4	11636.4	18494.9	18678.4	13693.1
72.5°	682.3	704.2	766.0	782.0	861.8	1121.1	2533.5	7810.1	12426.3	12472.2	7660.5
75°	528.7	532.6	624.4	670.3	726.1	772.0	1131.1	3938.0	5968.8	5649.6	2952.5
77.5°	395.0	412.9	454.8	512.7	592.5	552.6	506.7	1484.2	1853.3	1819.4	857.8
80°	253.4	263.3	317.2	385.0	460.8	361.1	285.3	434.9	407.0	418.9	205.5
82.5°	127.7	129.7	203.5	313.2	293.3	181.5	179.5	177.5	151.6	149.6	95.8
85°	14.0	29.9	131.7	179.5	131.7	59.8	83.8	81.8	79.8	81.8	55.9
87.5°	2.0	2.0	21.9	25.9	18.0	19.9	23.9	25.9	31.9	29.9	23.9
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°	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8	2419.8
2.5°	2491.7	2411.9	2264.2	2122.6	2016.9	1949.0	1861.3	1829.3	1783.5	1777.5	1755.5
5°	2599.4	2447.8	2190.4	1986.9	1823.4	1699.7	1591.9	1502.2	1430.4	1414.4	1422.4
7.5°	2753.0	2527.6	2168.5	1891.2	1663.8	1452.3	1280.7	1175.0	1099.2	1071.3	1075.3
10°	2926.5	2633.3	2164.5	1789.4	1442.3	1183.0	995.5	901.7	857.8	841.9	823.9
12.5°	3132.0	2755.0	2154.5	1631.8	1198.9	943.6	809.9	754.1	712.2	700.2	700.2
15°	3363.4	2884.7	2106.6	1436.3	973.5	780.0	690.2	646.4	632.4	620.4	620.4
17.5°	3604.8	3012.3	2006.9	1195.0	807.9	668.3	612.4	586.5	566.6	552.6	552.6
20°	3880.1	3138.0	1847.3	981.5	682.3	596.5	552.6	522.7	506.7	494.7	490.7
22.5°	4141.4	3239.7	1643.8	805.9	594.5	536.6	496.7	464.8	448.9	442.9	442.9
25°	4412.8	3301.6	1398.4	666.3	542.6	486.8	442.9	416.9	403.0	399.0	397.0
27.5°	4676.1	3337.5	1183.0	582.5	494.7	440.9	399.0	379.0	365.1	361.1	363.1
30°	4995.3	3343.5	973.5	522.7	452.8	397.0	359.1	341.1	333.2	329.2	327.2
32.5°	5318.4	3335.5	817.9	486.8	412.9	359.1	327.2	313.2	307.2	301.2	301.2
35°	5681.5	3293.6	696.2	450.9	375.0	327.2	299.2	287.3	279.3	273.3	271.3
37.5°	6132.4	3271.7	626.4	411.0	341.1	297.2	271.3	259.3	253.4	245.4	243.4
40°	6842.6	3369.4	604.5	375.0	307.2	269.3	245.4	231.4	223.4	215.5	213.5
42.5°	7728.3	3541.0	568.6	339.1	277.3	243.4	219.4	203.5	189.5	179.5	175.6
45°	8875.4	3766.4	512.7	301.2	251.4	215.5	193.5	173.6	155.6	147.6	145.6
47.5°	10078.3	3983.9	462.8	271.3	223.4	191.5	167.6	145.6	129.7	123.7	121.7
50°	10816.4	4027.7	430.9	237.4	195.5	165.6	141.6	121.7	111.7	105.7	105.7
52.5°	11153.6	3957.9	387.0	207.5	169.6	145.6	121.7	105.7	99.7	95.8	93.8
55°	11389.0	3850.2	329.2	179.5	145.6	123.7	107.7	95.8	87.8	83.8	81.8
57°	11526.6	3704.6	285.3	157.6	125.7	107.7	95.8	85.8	77.8	69.8	69.8
57.5°	11532.6	3648.7	273.3	155.6	119.7	103.7	93.8	83.8	73.8	65.8	63.8
60°	11355.1	3265.7	219.4	131.7	95.8	87.8	77.8	65.8	51.9	43.9	41.9
62.5°	10784.5	2778.9	181.5	111.7	77.8	67.8	55.9	49.9	35.9	25.9	25.9
65°	9920.7	2254.3	155.6	89.8	63.8	49.9	37.9	35.9	21.9	12.0	10.0
67.5°	8671.9	1755.5	131.7	73.8	53.9	35.9	25.9	23.9	12.0	4.0	0.0
70°	6607.2	1197.0	109.7	59.8	39.9	25.9	18.0	14.0	8.0	2.0	0.0
72.5°	3808.3	658.3	91.8	45.9	29.9	19.9	14.0	8.0	8.0	0.0	0.0
75°	1360.5	283.3	69.8	33.9	23.9	16.0	10.0	4.0	6.0	2.0	0.0
77.5°	432.9	151.6	45.9	25.9	19.9	12.0	8.0	4.0	4.0	2.0	0.0
80°	127.7	79.8	27.9	21.9	14.0	10.0	6.0	2.0	4.0	2.0	0.0
82.5°	69.8	39.9	21.9	16.0	14.0	8.0	6.0	2.0	2.0	2.0	0.0
85°	35.9	23.9	18.0	16.0	14.0	8.0	6.0	2.0	0.0	2.0	2.0
87.5°	19.9	18.0	18.0	16.0	14.0	10.0	6.0	2.0	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)