

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: P459070

Luminaire Tested: **GALN-SA5D-735-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459070  
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-SA5D-735-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 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: 29536 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G4

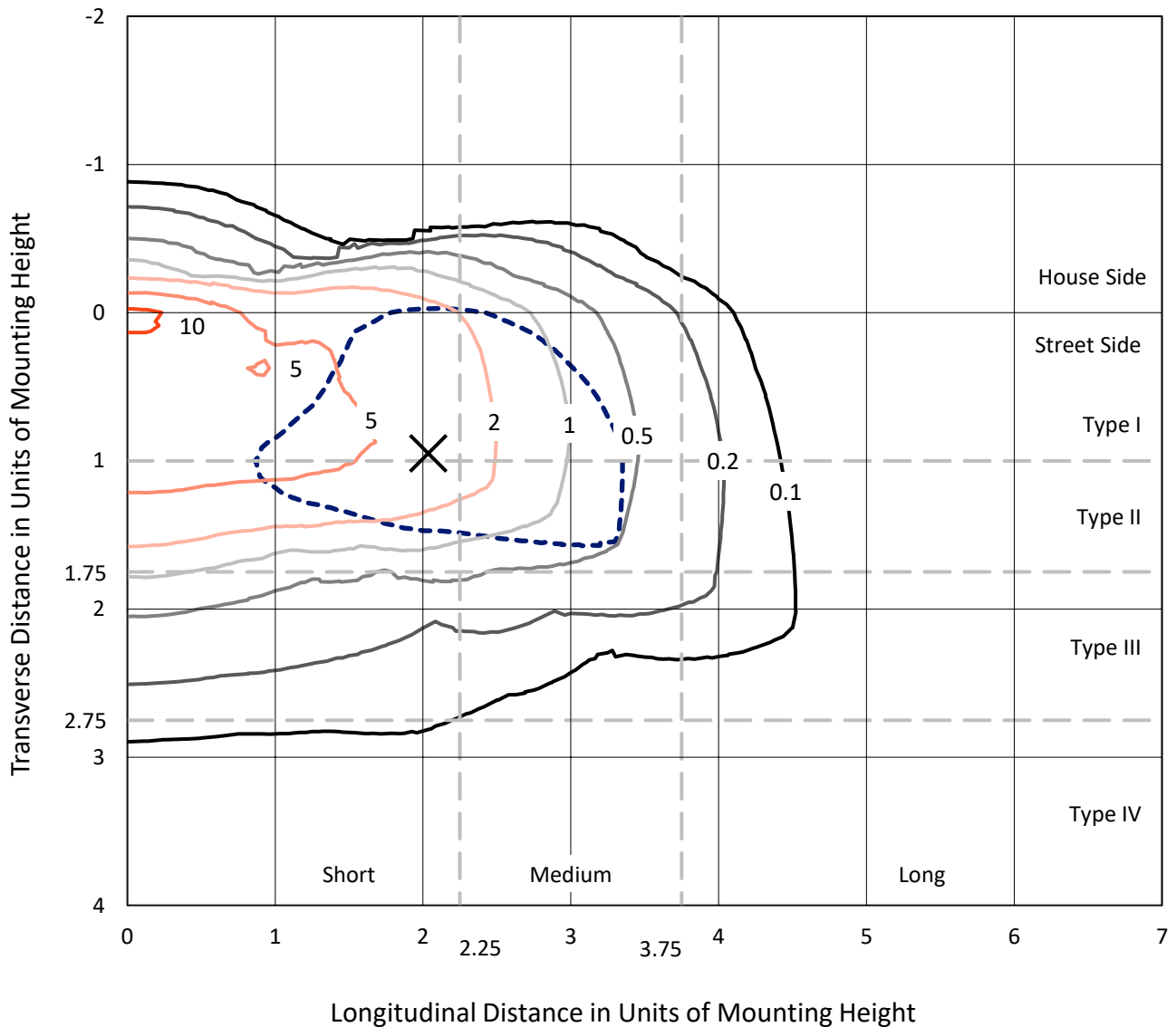
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

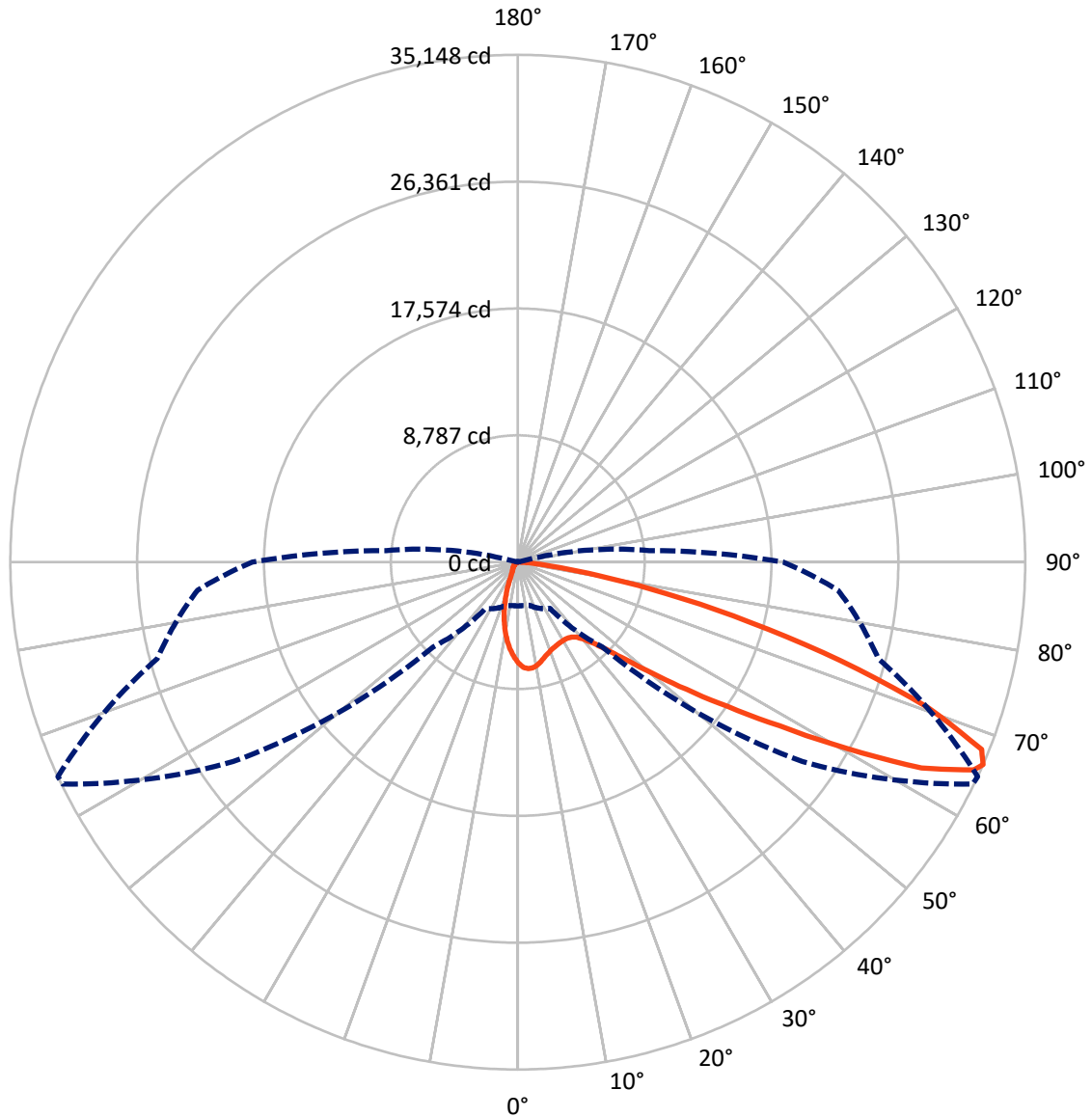
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 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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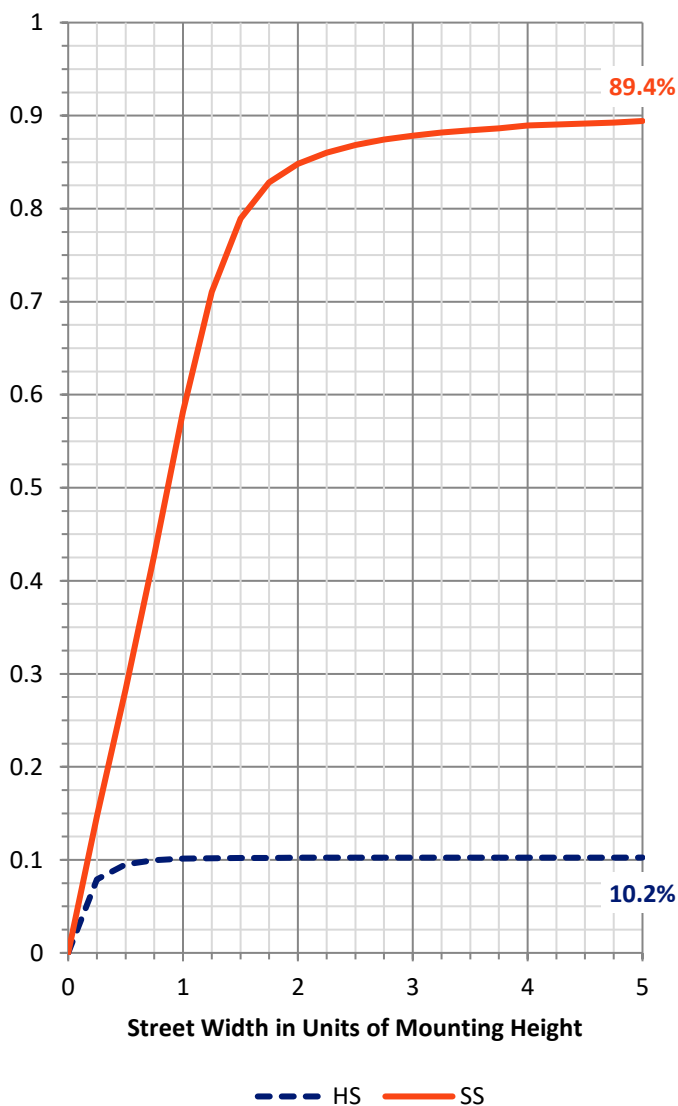
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3054.4	0.0	3054.4
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	26481.6	0.0	26481.6
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	29536.0	0.0	29536.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	572.8	1.9
10°-20°	1248.1	4.2
20°-30°	1787.9	6.1
30°-40°	2611.4	8.8
40°-50°	4378.9	14.8
50°-60°	7307.6	24.7
60°-70°	7756.8	26.3
70°-80°	3513.0	11.9
80°-90°	359.5	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°	29536.0	100.0
0°-180°	29536.0	100.0

**Coefficient of Utilization**



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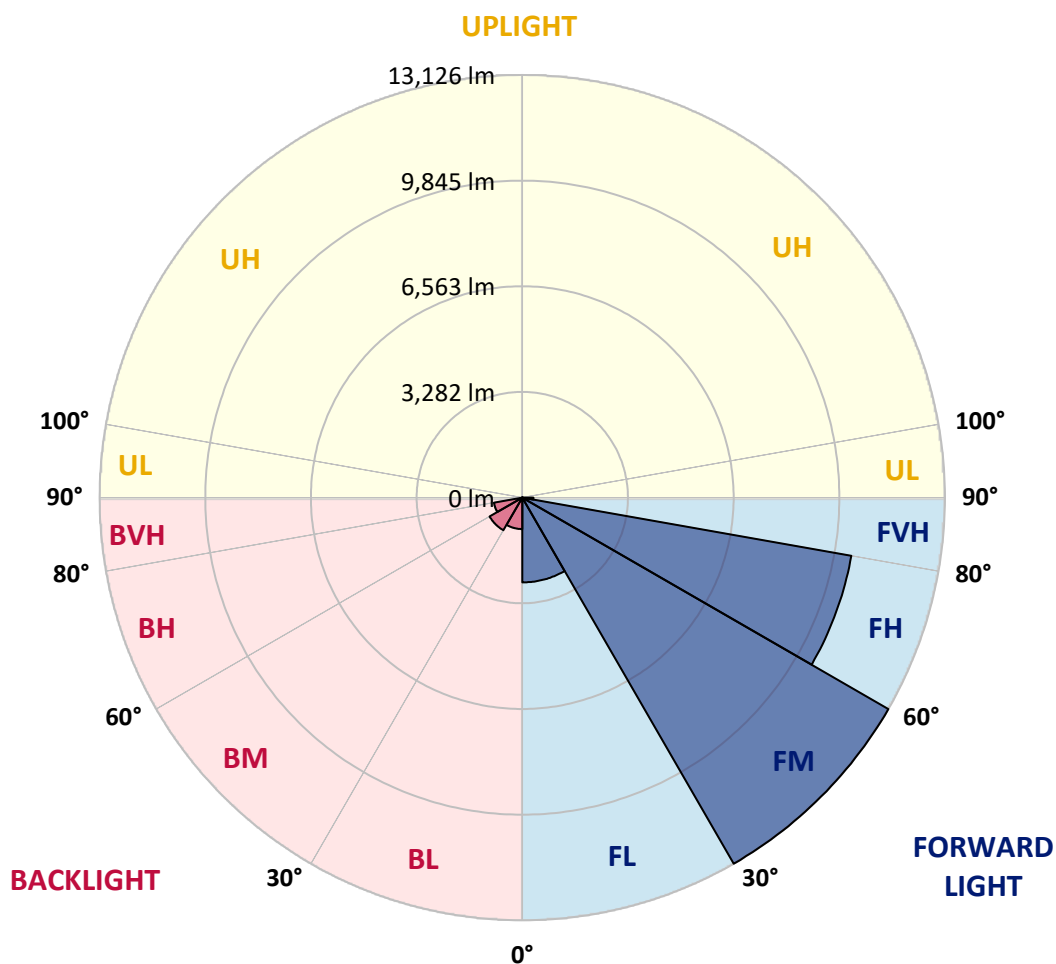
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2631.8	8.9			
FM (30°-60°)	13126.5	44.4			
FH (60°-80°)	10375.3	35.1			G4/12000
FVH (80°-90°)	348.0	1.2			G3/500
BL (0°-30°)	977.1	3.3	B2/1000		
BM (30°-60°)	1171.4	4.0	B2/2500		
BH (60°-80°)	894.5	3.0	B2/1000		G2/1000
BVH (80°-90°)	11.5	0.0			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1
2.5°	7381.1	7389.1	7399.1	7413.0	7423.0	7393.1	7351.2	7303.3	7293.3	7191.6	7067.9
5°	6986.1	6998.1	7085.9	7133.7	7241.5	7339.2	7401.1	7409.0	7405.0	7309.3	7111.8
7.5°	6423.6	6457.5	6543.3	6627.0	6828.5	7014.0	7233.5	7387.1	7397.1	7371.1	7125.8
10°	5966.7	5988.7	6032.6	6198.1	6365.7	6649.0	6956.2	7245.5	7269.4	7373.1	7113.8
12.5°	5609.6	5641.6	5695.4	5823.1	6024.6	6291.9	6641.0	7030.0	7079.9	7335.2	7079.9
15°	5360.3	5376.2	5430.1	5555.8	5751.3	5998.6	6351.7	6804.6	6848.5	7285.4	7073.9
17.5°	5242.6	5260.5	5298.4	5398.2	5559.8	5789.2	6134.3	6623.1	6678.9	7253.4	7095.8
20°	5274.5	5290.5	5292.5	5344.3	5454.0	5647.5	5974.7	6453.5	6525.3	7233.5	7131.7
22.5°	5456.0	5458.0	5434.1	5410.2	5448.1	5587.7	5877.0	6345.8	6419.6	7229.5	7173.6
25°	5727.3	5733.3	5693.4	5609.6	5533.8	5605.7	5855.0	6275.9	6341.8	7219.5	7199.6
27.5°	6102.4	6100.4	6088.4	5948.8	5733.3	5685.4	5873.0	6238.0	6293.9	7191.6	7209.5
30°	6627.0	6611.1	6585.1	6427.6	6098.4	5879.0	5948.8	6214.1	6266.0	7151.7	7183.6
32.5°	7143.7	7203.6	7199.6	7050.0	6639.0	6224.1	6106.4	6246.0	6283.9	7125.8	7145.7
35°	7746.2	7744.2	7897.8	7841.9	7361.2	6664.9	6375.7	6351.7	6381.7	7143.7	7127.8
37.5°	8304.7	8356.6	8596.0	8653.9	8215.0	7287.3	6756.7	6579.2	6589.1	7265.4	7171.6
40°	9001.0	9100.7	9457.8	9651.3	9264.3	8211.0	7319.3	6996.1	6998.1	7564.6	7337.2
42.5°	9898.7	10056.3	10389.4	10712.6	10505.1	9304.2	8163.1	7656.4	7652.4	8091.3	7716.3
45°	10989.9	11099.6	11478.6	11991.3	11859.6	10830.3	9392.0	8679.8	8627.9	8955.1	8388.5
47.5°	11931.5	12081.1	12466.1	13050.6	13649.1	12693.5	10860.2	10086.2	10052.3	10329.6	9541.6
50°	12342.4	12474.1	12879.0	13698.9	15149.2	15139.3	13046.6	12138.9	12081.1	12230.7	11325.0
52.5°	11891.6	12015.3	12424.2	13445.6	15855.4	18119.6	16214.5	14714.3	14644.5	14453.0	13455.6
55°	10347.5	10449.3	11053.7	12226.7	15584.1	20106.5	20579.3	17896.2	17624.9	16880.8	15867.4
57.5°	8238.9	8187.0	8562.1	9924.6	13992.2	20772.8	25059.9	21860.1	21375.3	18979.4	17908.2
60°	5709.4	5869.0	6020.6	6918.3	10521.1	19617.8	27846.7	26843.3	26204.9	21044.1	19863.2
62.5°	4197.3	4303.0	4402.7	4817.7	6615.1	15663.9	28339.5	31962.2	31395.7	23236.5	21728.4
65°	3319.5	3327.5	3367.4	3776.3	4358.8	10185.9	25971.5	34848.8	34703.2	25347.1	22484.5
66°	3024.3	3026.3	3088.1	3527.0	3912.0	8294.8	24074.4	35068.3	35148.0	25853.8	22263.0
67.5°	2643.2	2635.3	2725.0	3169.9	3562.9	5980.7	20679.1	34178.5	34651.3	26242.8	21467.1
70°	2048.8	2038.8	2148.5	2659.2	3281.6	3989.8	13744.8	29346.9	30108.9	25446.9	18993.4
72.5°	1364.5	1372.5	1560.0	2098.6	3132.0	3513.0	8268.8	22324.9	23402.1	21014.2	14941.8
75°	796.0	809.9	1023.4	1560.0	2719.0	3349.4	4680.0	15919.3	16607.5	14510.9	9308.2
77.5°	416.9	422.9	572.5	1029.4	2084.7	3110.0	3118.0	10170.0	10493.1	7052.0	3684.6
80°	221.4	215.4	307.2	620.4	1434.3	2731.0	2529.5	5384.2	5597.7	2094.6	931.6
82.5°	83.8	91.8	163.6	407.0	847.8	1961.0	2178.4	2379.9	2306.1	460.8	391.0
85°	16.0	19.9	69.8	241.4	426.9	819.9	1605.9	1167.0	1081.2	173.6	225.4
87.5°	2.0	4.0	19.9	57.9	61.8	277.3	474.8	323.2	279.3	63.8	93.8
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°	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1	7004.1
2.5°	7008.1	6954.2	6774.7	6597.1	6415.6	6252.0	6140.3	5958.8	5912.9	5847.0	5809.1
5°	6994.1	6868.4	6523.3	6146.3	5795.2	5416.1	5126.9	4847.6	4698.0	4622.2	4594.2
7.5°	6954.2	6754.7	6216.1	5625.6	5063.0	4496.5	4003.8	3628.7	3387.3	3221.8	3110.0
10°	6874.4	6599.1	5859.0	5047.1	4197.3	3449.2	2824.8	2350.0	1982.9	1867.2	1871.2
12.5°	6792.6	6425.6	5460.0	4404.7	3351.4	2407.8	1745.5	1370.5	1194.9	1137.1	1125.1
15°	6716.8	6260.0	5069.0	3782.3	2495.6	1560.0	1125.1	993.5	945.6	935.6	933.6
17.5°	6676.9	6106.4	4652.1	3070.1	1741.5	1059.3	901.7	865.8	851.8	841.8	837.9
20°	6643.0	5972.7	4253.1	2403.8	1191.0	867.8	807.9	774.0	750.1	740.1	734.1
22.5°	6619.1	5835.1	3840.2	1861.2	911.7	770.0	716.2	672.3	638.4	626.4	618.4
25°	6583.2	5683.5	3423.2	1360.5	768.0	684.2	622.4	570.5	526.7	504.7	500.7
27.5°	6531.3	5511.9	2966.4	1007.4	686.2	608.4	532.6	468.8	424.9	401.0	403.0
30°	6447.5	5332.4	2509.6	800.0	620.4	530.6	448.9	387.0	345.1	327.2	325.2
32.5°	6347.8	5114.9	2090.6	686.2	560.6	460.8	375.0	321.2	289.3	275.3	273.3
35°	6254.0	4895.5	1663.7	616.4	498.7	397.0	315.2	269.3	245.4	233.4	235.4
37.5°	6202.1	4700.0	1296.7	560.6	448.9	341.1	271.3	231.4	209.5	199.5	197.5
40°	6236.0	4540.4	1031.4	510.7	393.0	293.2	233.4	199.5	177.5	163.6	163.6
42.5°	6395.6	4470.6	831.9	462.8	341.1	253.4	203.5	171.6	147.6	133.7	135.7
45°	6882.4	4544.4	696.2	418.9	293.2	219.4	175.6	141.6	119.7	109.7	107.7
47.5°	7690.3	4821.7	602.5	373.0	251.4	187.5	147.6	117.7	95.8	87.8	85.8
50°	9102.7	5394.2	532.6	327.2	213.5	159.6	121.7	93.8	75.8	67.8	67.8
52.5°	11045.7	6643.0	482.8	275.3	179.5	135.7	99.7	75.8	59.8	53.9	51.9
55°	13076.5	7959.6	456.8	231.4	149.6	111.7	79.8	59.8	45.9	39.9	37.9
57.5°	15029.5	8993.0	426.9	187.5	119.7	85.8	61.8	45.9	31.9	27.9	25.9
60°	16902.7	9828.8	363.1	149.6	93.8	61.8	45.9	31.9	21.9	18.0	18.0
62.5°	18578.5	10315.6	285.3	119.7	71.8	43.9	29.9	23.9	16.0	12.0	12.0
65°	18774.0	9683.2	215.4	91.8	51.9	27.9	18.0	18.0	12.0	8.0	8.0
66°	18381.0	9146.6	189.5	83.8	45.9	23.9	16.0	14.0	10.0	6.0	6.0
67.5°	17503.2	8230.9	163.6	71.8	37.9	18.0	12.0	12.0	8.0	4.0	4.0
70°	15123.3	6722.8	129.7	53.9	27.9	14.0	8.0	8.0	6.0	4.0	4.0
72.5°	11526.5	5019.2	105.7	39.9	19.9	10.0	6.0	6.0	6.0	4.0	4.0
75°	6952.2	2703.1	81.8	29.9	18.0	8.0	4.0	6.0	8.0	6.0	4.0
77.5°	2561.4	919.6	63.8	23.9	14.0	8.0	4.0	4.0	8.0	6.0	6.0
80°	628.4	239.4	45.9	19.9	14.0	8.0	4.0	4.0	8.0	8.0	8.0
82.5°	291.3	101.7	31.9	18.0	14.0	8.0	4.0	4.0	6.0	8.0	8.0
85°	167.6	47.9	25.9	19.9	14.0	8.0	4.0	4.0	6.0	8.0	8.0
87.5°	67.8	23.9	23.9	19.9	16.0	10.0	4.0	4.0	4.0	6.0	6.0
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)