

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: P299995

Luminaire Tested: **GLNA-AF-03-LED-E1-SL3-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-SL3-7030-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

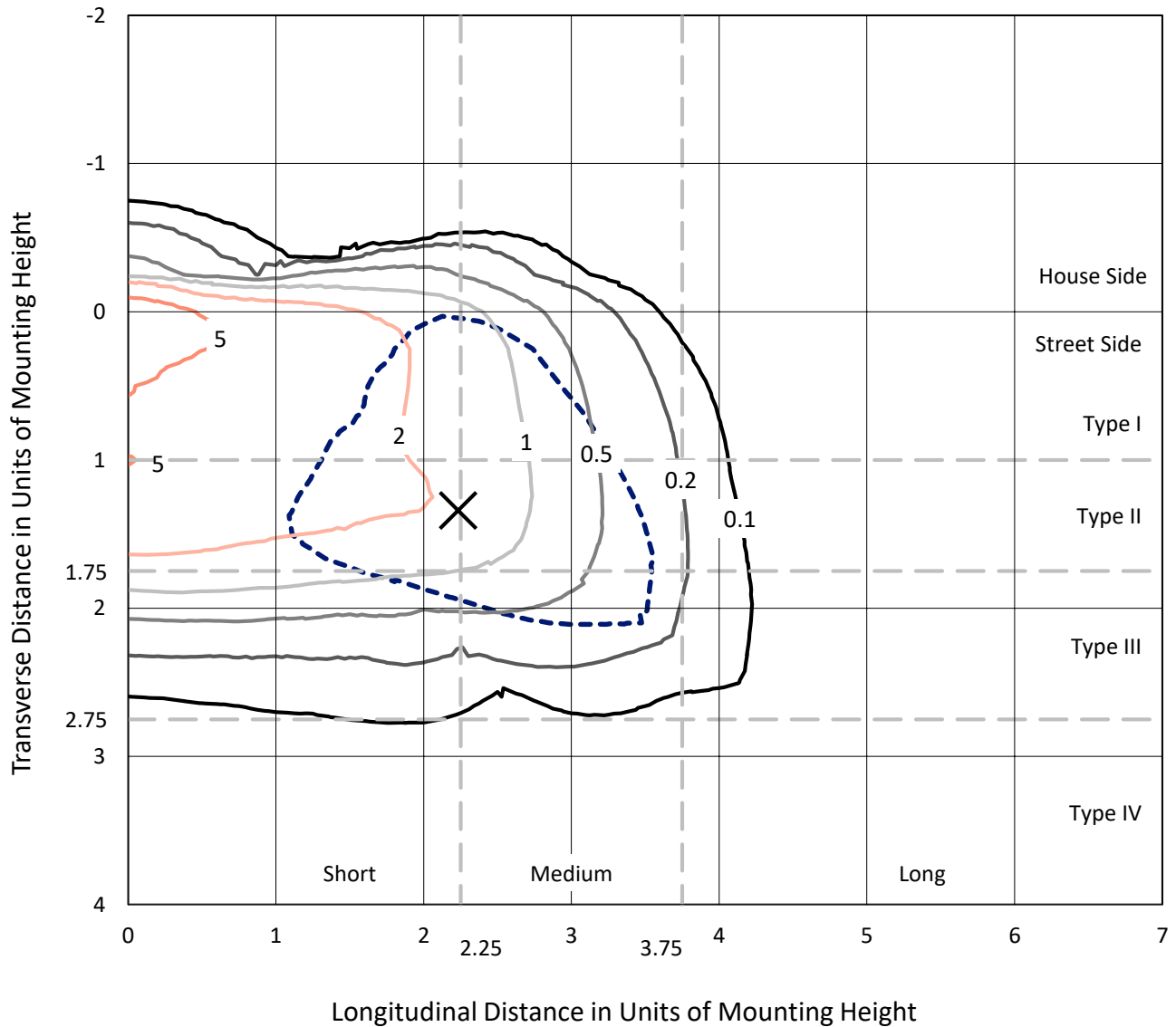
Lumens per Lamp: N/A  
Luminaire Lumens: 13640.9 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (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: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

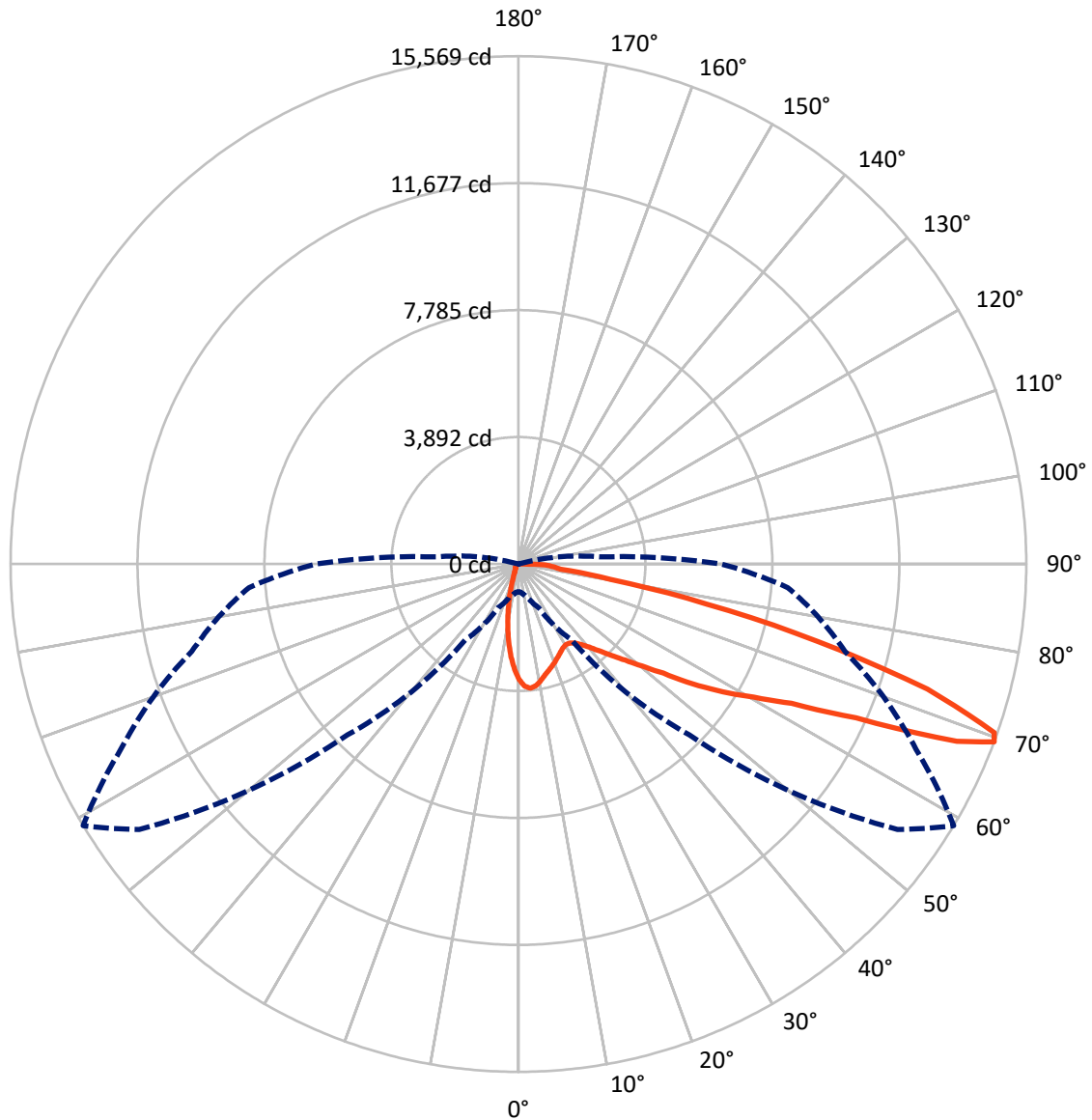


Based on 20 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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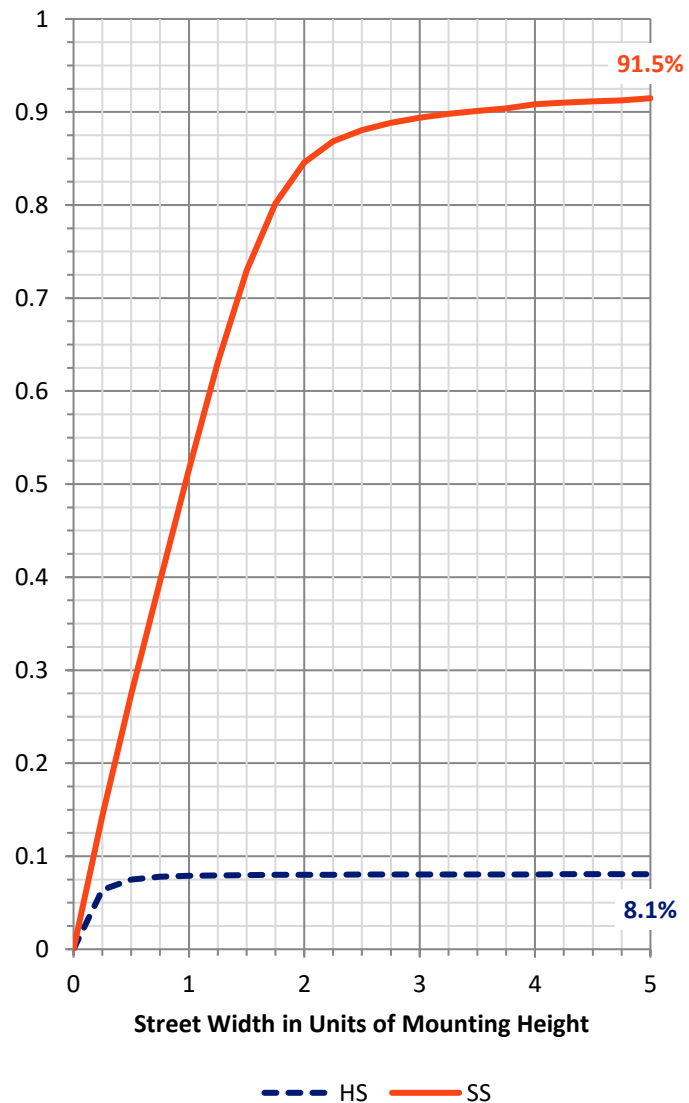
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1110.9	0.0	1110.9
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	12530.1	0.0	12530.1
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	13640.9	0.0	13640.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.2	2.1
10°-20°	595.5	4.4
20°-30°	801.3	5.9
30°-40°	1163.5	8.5
40°-50°	1937.2	14.2
50°-60°	3022.1	22.2
60°-70°	3739.6	27.4
70°-80°	1895.2	13.9
80°-90°	198.3	1.5
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°	13640.9	100.0
0°-180°	13640.9	100.0



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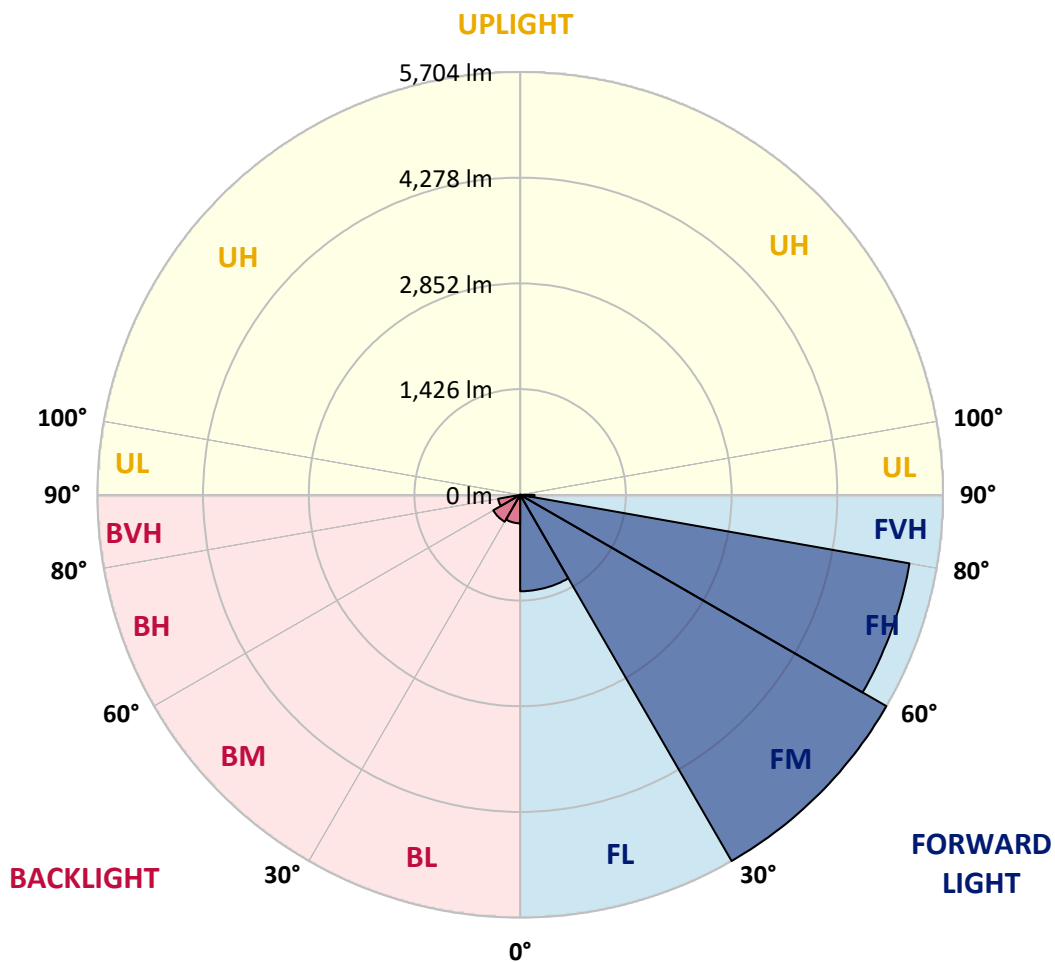
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1300.5	9.5			
FM	(30°-60°)	5704.2	41.8			
FH	(60°-80°)	5333.1	39.1			G3/7500
FVH	(80°-90°)	192.2	1.4			G2/225
BL	(0°-30°)	384.5	2.8	B1/500		
BM	(30°-60°)	418.6	3.1	B1/1000		
BH	(60°-80°)	301.7	2.2	B1/500		G1/500
BVH	(80°-90°)	6.1	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5
2.5°	3891.4	3890.0	3873.0	3865.3	3851.3	3822.1	3776.5	3752.7	3714.2	3646.9	3556.8
5°	3855.9	3874.6	3884.4	3885.4	3895.4	3884.4	3843.6	3823.7	3770.5	3662.3	3500.5
7.5°	3615.4	3622.2	3650.9	3675.4	3723.3	3768.8	3783.5	3774.9	3743.4	3627.8	3412.5
10°	3357.8	3364.6	3398.7	3430.9	3495.8	3565.9	3639.9	3655.6	3668.6	3578.3	3327.7
12.5°	3135.5	3142.5	3177.3	3219.6	3295.2	3381.6	3496.5	3522.0	3579.9	3531.3	3259.7
15°	2944.2	2947.2	2981.3	3033.7	3124.0	3235.0	3365.5	3406.4	3495.1	3498.2	3200.4
17.5°	2781.4	2789.1	2810.2	2860.1	2958.9	3096.2	3248.3	3306.9	3410.8	3470.4	3142.5
20°	2681.9	2689.7	2689.0	2716.7	2805.5	2951.9	3131.0	3201.1	3327.7	3441.9	3090.9
22.5°	2662.8	2662.8	2642.7	2638.7	2691.3	2813.9	3009.1	3094.6	3252.7	3429.5	3054.7
25°	2731.5	2728.2	2678.2	2637.3	2639.7	2712.8	2891.0	2992.8	3189.7	3437.9	3035.3
27.5°	2876.5	2872.5	2809.2	2731.5	2668.9	2668.2	2801.5	2911.0	3139.4	3478.1	3043.0
30°	3076.9	3075.5	3006.8	2908.7	2795.4	2691.3	2770.7	2870.2	3107.0	3550.5	3060.7
32.5°	3295.9	3293.6	3242.0	3138.7	2995.1	2795.4	2803.2	2886.5	3116.3	3646.9	3104.0
35°	3528.3	3524.3	3501.9	3411.8	3253.6	2987.4	2909.6	2974.3	3174.9	3791.3	3188.7
37.5°	3779.6	3783.5	3799.7	3713.3	3547.4	3256.7	3087.8	3131.7	3292.9	3987.2	3326.7
40°	4150.7	4150.0	4155.3	4041.8	3882.3	3586.0	3336.8	3350.8	3490.5	4247.1	3536.7
42.5°	4824.0	4777.0	4634.3	4402.9	4242.4	3962.4	3650.9	3636.2	3731.9	4568.7	3830.5
45°	5728.9	5628.5	5258.3	4814.8	4609.6	4386.8	4037.2	3990.2	4051.2	4955.2	4193.2
47.5°	6507.1	6402.9	5879.3	5243.6	4999.1	4789.4	4490.0	4405.2	4425.3	5388.0	4652.8
50°	6771.7	6720.8	6263.5	5617.1	5376.3	5296.2	5015.5	4912.0	4883.5	5888.4	5185.7
52.5°	6679.9	6676.1	6371.4	5859.2	5721.9	5820.7	5676.4	5556.8	5451.9	6416.2	5728.0
55°	6532.5	6551.9	6415.3	6071.3	6066.6	6299.7	6580.4	6480.9	6177.1	6989.3	6195.5
57.5°	6126.2	6208.6	6390.8	6472.5	6662.1	6900.6	7333.3	7391.9	7032.5	7428.1	6583.4
60°	4970.6	5151.8	5747.4	6530.2	7429.8	8023.7	8242.0	8292.0	7734.3	7792.9	7107.3
62.5°	3528.3	3713.3	4468.5	5792.9	7441.2	9499.2	9595.6	9399.0	8507.3	8333.8	8010.6
65°	1872.7	2015.7	2632.7	4181.5	6451.7	9841.8	11963.0	11376.8	9870.9	9397.3	9177.6
67.5°	958.0	1001.2	1246.6	2046.5	4435.4	8741.8	14084.9	14497.6	12221.3	10452.7	9121.3
69°	847.7	873.2	1036.0	1479.5	2840.1	7404.3	14188.4	15569.0	13451.8	10364.6	8289.0
70°	820.7	843.1	991.1	1339.1	2220.0	6209.3	13792.5	15474.9	13766.4	10030.0	7667.3
72.5°	696.6	715.8	882.5	1183.3	1804.3	3082.2	11204.0	13113.1	12353.2	8355.3	5549.8
75°	465.9	529.2	847.0	1109.3	1678.4	1751.1	7386.6	9476.0	8802.7	5635.5	2891.0
77.5°	111.9	120.3	239.1	882.5	1535.0	1541.1	3799.0	5890.8	4804.8	2008.7	683.3
80°	60.3	57.9	67.0	175.2	1429.3	1446.3	1710.2	2859.4	1715.6	333.3	225.1
82.5°	42.5	40.2	43.2	73.3	449.8	1317.4	1237.3	1294.3	711.1	128.0	101.1
85°	15.4	14.7	23.8	66.3	141.1	757.4	1271.1	1067.5	576.1	58.6	74.0
87.5°	5.4	4.7	9.3	36.2	43.2	322.5	784.5	806.9	226.8	35.5	34.8
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°	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5	3550.5
2.5°	3518.9	3471.1	3383.3	3292.9	3209.5	3109.3	3059.1	3009.8	2989.1	2981.3	2945.1
5°	3417.1	3336.1	3149.5	2962.0	2789.1	2605.6	2484.6	2387.5	2330.2	2302.4	2258.5
7.5°	3286.8	3154.2	2870.9	2581.8	2312.5	2047.2	1850.6	1699.2	1595.1	1545.1	1499.5
10°	3160.2	2983.7	2581.1	2186.8	1821.1	1469.4	1197.8	1001.2	875.5	817.6	780.7
12.5°	3047.0	2817.9	2301.0	1802.0	1342.8	931.1	654.8	498.4	420.4	393.3	380.2
15°	2945.8	2665.1	2036.4	1436.3	909.4	532.2	358.0	304.8	292.4	292.4	290.8
17.5°	2850.1	2515.4	1781.0	1093.0	570.8	325.6	272.3	265.3	265.3	268.3	268.3
20°	2758.3	2372.7	1534.1	784.5	359.4	258.3	246.1	244.5	246.1	249.9	249.9
22.5°	2679.6	2243.1	1303.6	538.3	266.9	232.8	226.8	224.4	225.1	227.5	229.1
25°	2621.0	2133.6	1086.2	364.8	229.8	212.1	205.3	201.3	198.3	198.3	199.7
27.5°	2584.1	2041.1	875.5	265.3	206.7	192.9	181.9	175.9	168.8	165.1	166.5
30°	2557.0	1953.1	678.0	216.7	185.2	171.2	157.4	147.4	137.3	132.6	134.3
32.5°	2547.0	1882.1	506.8	191.3	165.8	150.4	133.4	120.3	109.5	105.6	106.5
35°	2574.1	1825.8	371.1	172.8	150.4	131.0	111.9	97.2	88.7	86.4	87.1
37.5°	2645.0	1795.7	277.7	157.4	136.6	114.9	93.4	79.4	74.0	74.0	74.7
40°	2779.1	1795.0	223.0	146.7	124.2	99.5	77.1	67.0	64.0	65.6	66.3
42.5°	2975.0	1835.8	194.3	136.6	113.5	84.8	64.0	57.0	56.3	57.9	58.6
45°	3242.7	1910.6	178.9	128.0	101.8	71.0	53.9	49.3	49.3	51.6	52.5
47.5°	3570.6	2020.1	165.8	119.6	90.1	59.3	46.2	43.2	43.9	46.2	46.9
50°	3965.5	2158.4	152.7	110.2	81.7	49.3	40.2	37.8	38.5	41.6	42.5
52.5°	4415.3	2344.3	142.0	101.8	71.0	40.9	33.9	32.5	33.9	37.1	37.8
55°	4800.8	2510.8	128.9	94.8	57.0	33.9	27.8	27.8	29.4	33.2	33.9
57.5°	5171.9	2685.0	117.2	81.7	44.8	27.1	23.1	23.8	26.2	30.1	30.8
60°	5716.5	2980.4	103.5	68.7	33.9	21.5	19.4	20.1	23.1	27.1	27.8
62.5°	6641.3	3430.2	89.4	57.0	26.2	17.0	15.4	17.0	20.8	25.5	26.2
65°	7476.0	3613.1	73.3	47.9	20.1	13.1	13.1	15.4	20.1	24.8	25.5
67.5°	7010.8	3041.4	57.0	37.8	15.4	10.0	10.7	14.7	19.4	24.8	25.5
69°	6200.2	2486.9	48.6	30.1	13.1	9.3	10.0	14.7	19.4	23.8	24.8
70°	5568.5	2099.7	43.2	25.5	11.7	9.3	10.0	13.8	19.4	23.8	24.8
72.5°	3729.6	1133.8	34.8	18.4	10.7	8.4	8.4	13.8	18.4	23.1	23.8
75°	1602.8	313.2	27.8	13.1	9.3	7.7	7.7	13.1	17.7	22.4	23.8
77.5°	293.1	79.4	22.4	11.7	9.3	7.7	7.0	12.4	17.0	21.5	22.4
80°	116.5	39.2	17.7	10.0	8.4	7.0	6.1	11.7	16.1	20.8	21.5
82.5°	70.3	22.4	14.7	9.3	8.4	6.1	5.4	10.0	15.4	20.1	20.8
85°	57.0	15.4	11.7	9.3	7.7	6.1	4.7	9.3	13.8	19.4	20.1
87.5°	27.8	10.7	10.7	8.4	7.7	6.1	4.7	8.4	13.1	18.4	19.4
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)