

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: P299594

Luminaire Tested: **GLNA-AF-04-LED-E1-SL2-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-04-LED-E1-SL2-7030-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17474.6 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

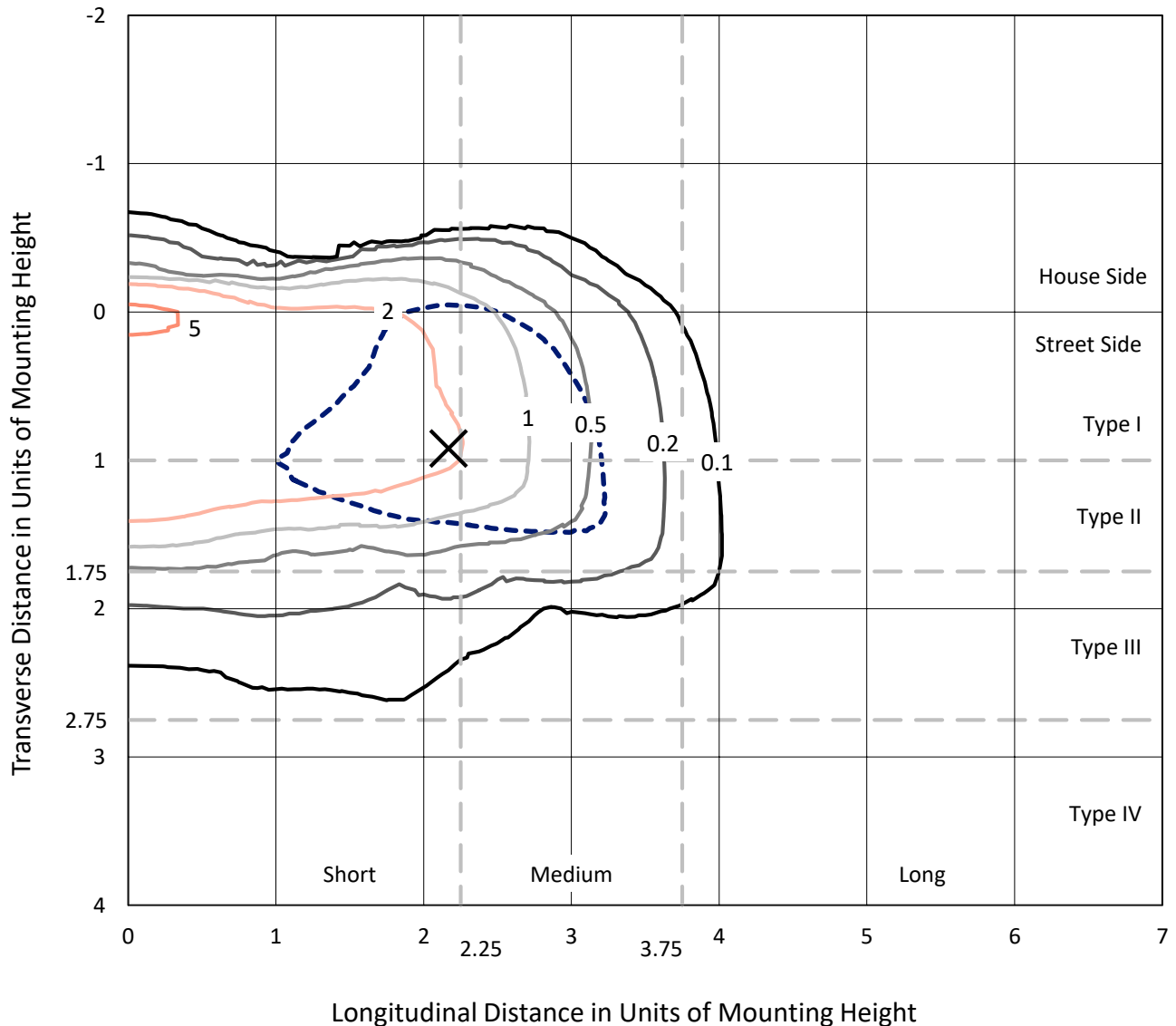
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

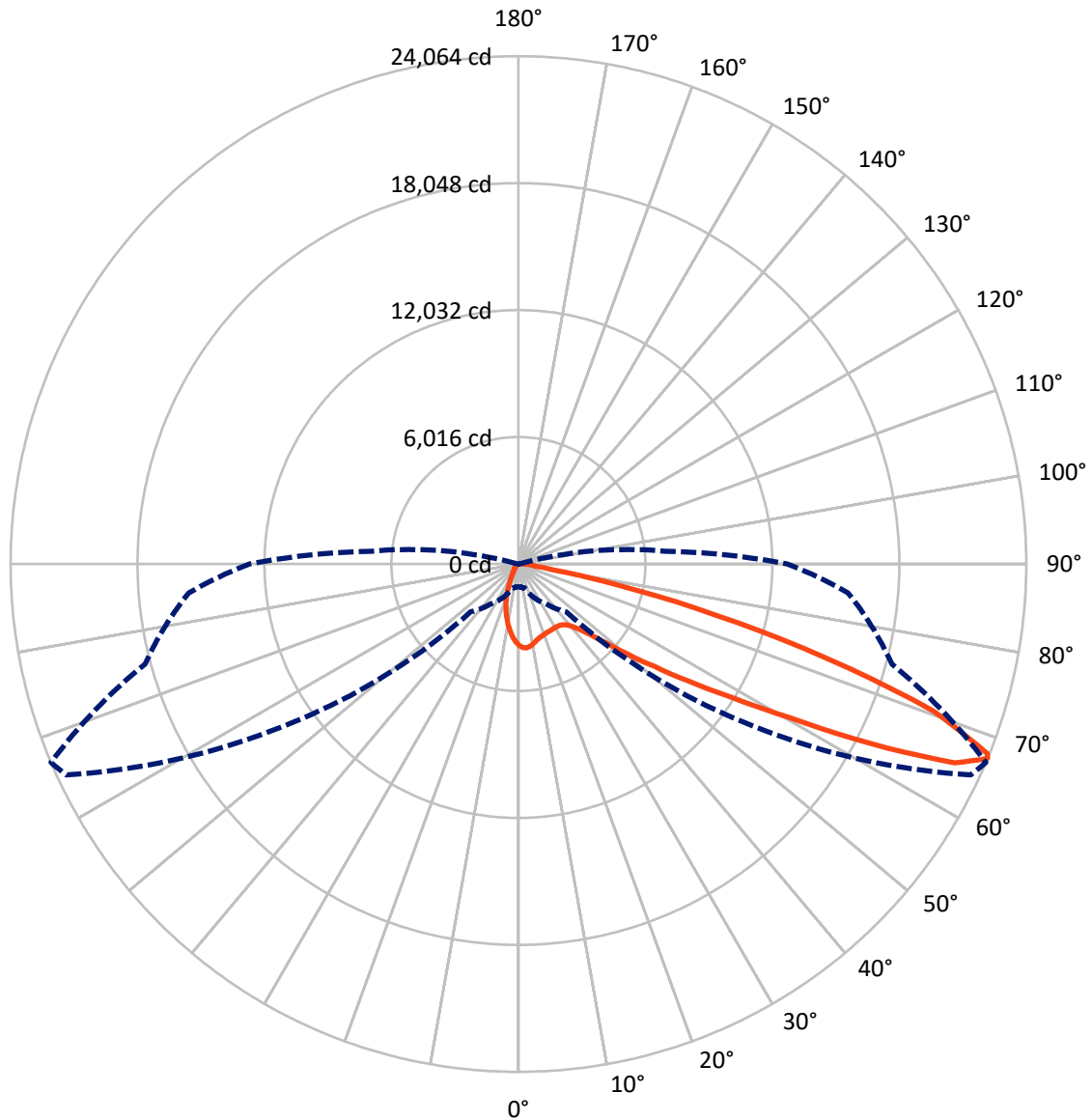
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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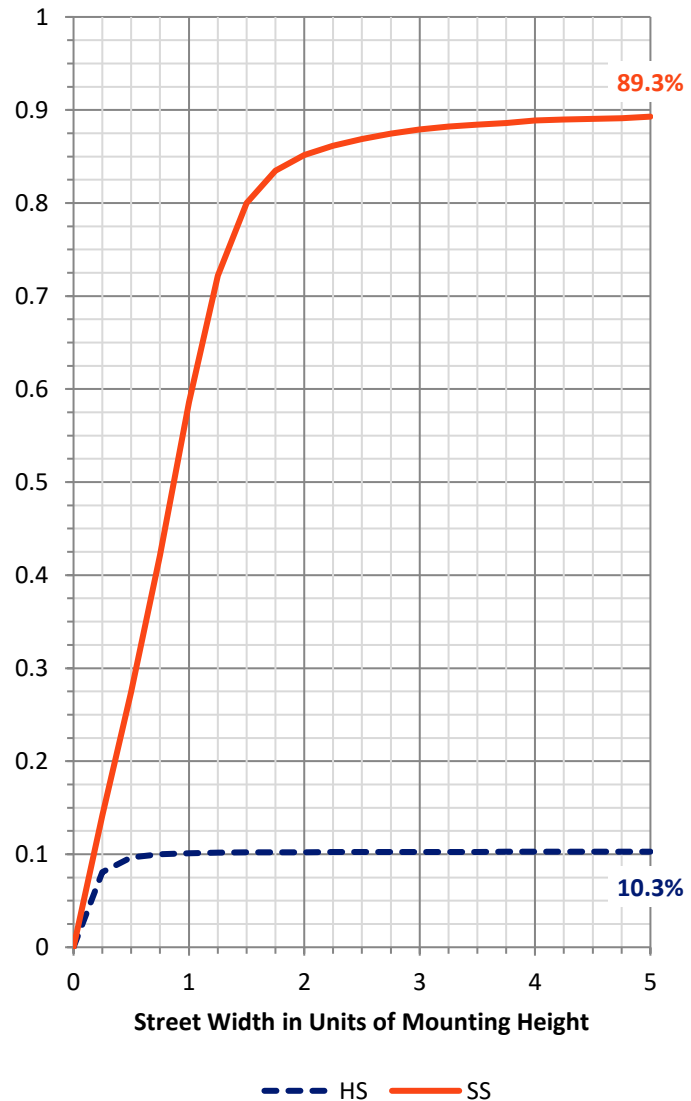
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1814.4	0.0	1814.4
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	15660.2	0.0	15660.2
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	17474.6	0.0	17474.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.6	1.8
10°-20°	667.4	3.8
20°-30°	970.4	5.6
30°-40°	1513.8	8.7
40°-50°	2681.6	15.3
50°-60°	4243.4	24.3
60°-70°	4860.2	27.8
70°-80°	2016.0	11.5
80°-90°	208.2	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°	17474.6	100.0
0°-180°	17474.6	100.0

**Coefficient of Utilization**



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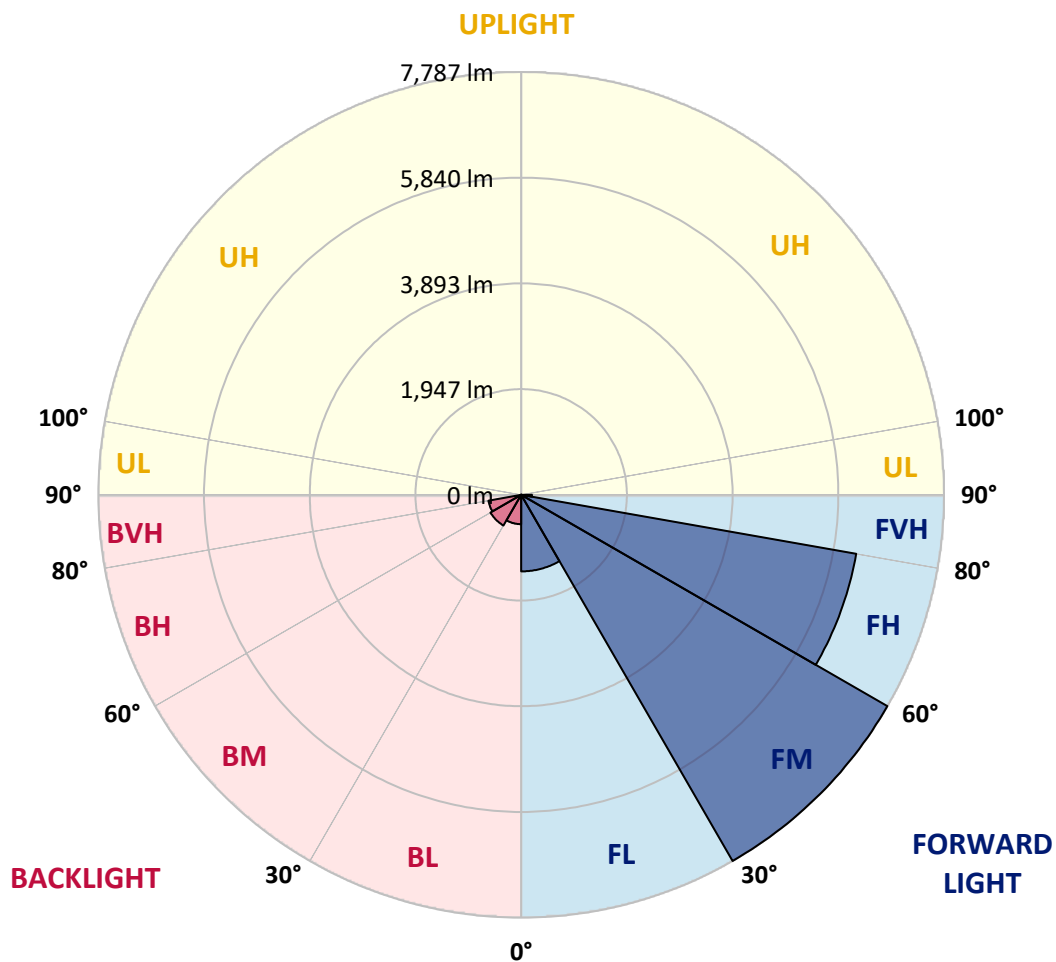
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1409.9	8.1			
FM (30°-60°)	7786.7	44.6			
FH (60°-80°)	6264.7	35.9			G3/7500
FVH (80°-90°)	198.9	1.1			G2/225
BL (0°-30°)	541.4	3.1	B2/1000		
BM (30°-60°)	652.1	3.7	B1/1000		
BH (60°-80°)	611.5	3.5	B2/1000		G2/1000
BVH (80°-90°)	9.4	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8
2.5°	3984.3	3992.4	3991.4	3997.5	4011.8	4012.8	3998.5	3971.0	3964.9	3929.2	3867.0
5°	3674.4	3697.8	3712.1	3770.2	3835.4	3913.9	3973.0	3994.4	3991.4	3965.9	3872.1
7.5°	3320.7	3344.2	3360.5	3428.8	3515.4	3649.9	3803.8	3930.2	3941.4	3969.0	3868.1
10°	3085.3	3089.4	3111.8	3177.0	3267.7	3405.3	3588.8	3810.0	3843.6	3944.5	3857.9
12.5°	2891.6	2894.7	2924.2	2994.6	3091.4	3230.0	3422.6	3678.5	3730.5	3913.9	3855.8
15°	2754.0	2765.2	2791.7	2865.1	2968.1	3105.7	3303.4	3581.6	3643.8	3902.7	3874.2
17.5°	2708.2	2720.4	2728.5	2781.5	2875.3	3009.8	3212.7	3518.5	3588.8	3908.8	3909.8
20°	2756.1	2765.2	2746.9	2760.1	2818.2	2938.5	3136.2	3464.4	3548.0	3916.0	3955.7
22.5°	2934.4	2938.5	2888.6	2830.5	2820.3	2886.5	3076.1	3421.6	3511.3	3935.3	4009.7
25°	3240.2	3233.1	3151.5	3026.2	2907.9	2877.3	3040.4	3395.1	3493.0	3955.7	4065.8
27.5°	3609.2	3619.4	3507.2	3324.8	3099.5	2938.5	3035.3	3383.9	3484.8	3970.0	4114.7
30°	4057.6	4071.9	3943.5	3714.2	3391.0	3089.4	3082.2	3381.9	3479.7	3960.8	4118.8
32.5°	4515.3	4532.6	4431.7	4195.2	3780.4	3342.1	3188.2	3404.3	3489.9	3929.2	4095.4
35°	4994.3	5018.8	4951.5	4748.7	4308.4	3707.0	3374.7	3472.6	3537.8	3926.2	4071.9
37.5°	5655.8	5678.3	5551.9	5336.8	4947.4	4196.3	3674.4	3601.0	3651.0	3975.1	4078.0
40°	6643.5	6640.4	6314.3	5985.0	5649.7	4818.0	4095.4	3833.4	3858.9	4122.9	4153.5
42.5°	7719.8	7714.7	7232.6	6732.2	6429.4	5583.5	4648.8	4235.0	4217.7	4395.0	4349.1
45°	8549.5	8548.5	8155.0	7591.4	7368.2	6462.1	5364.3	4793.5	4767.0	4837.4	4710.0
47.5°	8903.2	8909.3	8711.5	8315.1	8408.8	7650.5	6266.4	5602.8	5563.1	5534.5	5340.9
50°	8628.0	8640.2	8656.5	8579.0	9172.2	9247.7	7476.2	6743.4	6724.0	6596.6	6293.9
52.5°	7729.0	7791.2	7982.8	8228.4	9437.3	10780.6	9373.0	8160.1	8056.2	7920.6	7587.3
55°	6214.4	6282.7	6646.5	7242.8	9042.8	11787.6	12031.2	9986.6	9813.4	9408.7	8927.6
57.5°	4112.7	4218.7	4746.7	5505.0	7897.2	11949.7	14683.3	12521.5	11918.1	10810.2	10267.9
60°	2265.8	2367.7	2940.5	3627.5	5703.7	11148.6	16467.0	15821.8	14755.7	12376.8	11895.7
62.5°	1395.4	1450.4	1873.4	2512.5	3420.6	8799.2	16836.0	19969.2	18734.9	14393.9	13861.8
65°	1111.0	1134.4	1341.3	2053.8	2452.3	5233.9	15644.5	23130.9	22719.1	16836.0	15622.1
67°	1078.4	1087.5	1185.4	1763.3	2311.7	3208.6	13106.6	23645.6	24063.5	18313.9	15677.1
67.5°	1085.5	1095.7	1188.4	1682.8	2307.6	2948.7	12232.0	23442.8	23970.8	18431.1	15433.5
70°	1046.8	1078.4	1360.7	1681.8	2194.4	2450.3	7325.4	20311.6	20861.0	17125.5	13095.3
72.5°	371.0	373.0	588.1	1360.7	2386.1	2476.8	3678.5	14890.2	15296.9	13100.4	9441.3
75°	220.2	187.5	195.7	387.3	2280.1	2405.4	2122.1	9514.7	9666.6	7506.8	4781.3
77.5°	151.9	132.5	136.6	171.2	868.4	2371.8	1685.8	4961.7	4799.7	2632.7	1018.2
80°	86.6	76.4	81.5	149.8	316.0	2212.8	1590.0	2012.0	1715.4	446.4	281.3
82.5°	45.9	38.7	46.9	123.3	220.2	1379.0	1593.1	972.4	770.6	150.8	191.6
85°	16.3	13.3	22.4	84.6	146.8	423.0	1476.9	817.4	642.1	73.4	145.8
87.5°	3.1	3.1	9.2	34.7	59.1	129.4	873.5	485.2	325.1	43.8	99.9
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°	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8	3853.8
2.5°	3841.6	3797.7	3738.6	3666.2	3580.6	3505.2	3449.1	3391.0	3378.8	3358.4	3355.4
5°	3816.1	3740.7	3593.9	3425.7	3246.3	3084.3	2952.8	2835.6	2783.6	2738.7	2733.6
7.5°	3778.4	3665.2	3415.5	3144.4	2864.1	2609.3	2393.2	2240.3	2099.7	2032.4	2022.2
10°	3734.5	3572.5	3214.7	2838.6	2451.3	2091.5	1770.4	1501.4	1338.3	1241.4	1229.2
12.5°	3693.8	3481.8	3009.8	2521.6	2006.9	1525.8	1113.0	856.2	684.9	615.6	607.5
15°	3674.4	3408.4	2818.2	2197.5	1542.1	971.3	608.5	470.9	414.8	398.5	397.5
17.5°	3672.4	3346.2	2630.7	1862.2	1080.4	564.7	396.5	361.8	350.6	346.5	346.5
20°	3671.3	3287.1	2443.1	1514.6	686.0	376.1	330.2	322.1	313.9	308.8	308.8
22.5°	3682.6	3234.1	2247.4	1159.9	432.2	304.8	290.5	282.3	272.1	265.0	264.0
25°	3693.8	3193.3	2047.7	825.6	312.9	265.0	250.7	239.5	225.3	216.1	215.1
27.5°	3695.8	3142.4	1833.6	552.4	261.9	231.4	213.0	195.7	179.4	170.2	169.2
30°	3665.2	3056.7	1596.1	373.0	231.4	200.8	176.3	158.0	142.7	135.6	135.6
32.5°	3605.1	2950.7	1335.2	281.3	205.9	172.3	145.8	128.4	118.2	115.2	114.2
35°	3551.1	2836.6	1067.2	238.5	184.5	145.8	119.3	108.0	101.9	100.9	99.9
37.5°	3519.5	2744.8	815.4	216.1	164.1	122.3	100.9	92.8	89.7	87.7	88.7
40°	3543.9	2668.4	602.4	197.7	143.7	101.9	85.6	81.5	78.5	77.5	77.5
42.5°	3651.0	2655.2	447.5	181.4	124.3	84.6	74.4	71.3	69.3	68.3	69.3
45°	3932.3	2736.7	347.6	166.1	105.0	71.3	63.2	62.2	61.2	61.2	61.2
47.5°	4355.3	2904.9	289.5	148.8	87.7	61.2	55.0	54.0	53.0	54.0	54.0
50°	5071.8	3212.7	258.9	131.5	72.4	52.0	46.9	46.9	46.9	46.9	47.9
52.5°	6161.4	3818.1	238.5	114.2	59.1	43.8	39.8	39.8	40.8	40.8	41.8
55°	7375.3	4621.3	220.2	96.8	49.9	36.7	32.6	33.6	34.7	35.7	35.7
57.5°	8692.2	5511.1	204.9	79.5	42.8	29.6	27.5	28.5	29.6	31.6	31.6
60°	10281.2	6474.3	182.4	62.2	35.7	23.4	21.4	23.4	26.5	28.5	29.6
62.5°	12026.1	7405.9	153.9	48.9	29.6	18.3	17.3	21.4	25.5	27.5	28.5
65°	13218.7	7698.4	118.2	39.8	22.4	13.3	14.3	19.4	24.5	27.5	27.5
67°	12735.5	6979.8	96.8	33.6	18.3	10.2	13.3	19.4	24.5	26.5	27.5
67.5°	12400.2	6698.5	92.8	32.6	17.3	10.2	13.3	19.4	24.5	27.5	27.5
70°	10089.6	5032.0	77.5	24.5	14.3	9.2	11.2	18.3	23.4	26.5	26.5
72.5°	7010.4	3102.6	69.3	17.3	12.2	8.2	10.2	17.3	22.4	25.5	26.5
75°	3333.0	1123.2	59.1	13.3	11.2	7.1	9.2	17.3	22.4	25.5	25.5
77.5°	679.8	260.9	47.9	11.2	9.2	7.1	8.2	16.3	21.4	24.5	24.5
80°	223.2	100.9	35.7	10.2	9.2	7.1	8.2	15.3	21.4	23.4	24.5
82.5°	161.0	51.0	23.4	10.2	9.2	7.1	7.1	15.3	20.4	23.4	23.4
85°	123.3	35.7	15.3	10.2	9.2	7.1	7.1	14.3	19.4	22.4	22.4
87.5°	81.5	14.3	12.2	10.2	9.2	7.1	7.1	14.3	18.3	21.4	22.4
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)