

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: P579502

Luminaire Tested: **CTN-CA8-230-740-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579502  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-230-740-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26352 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G4

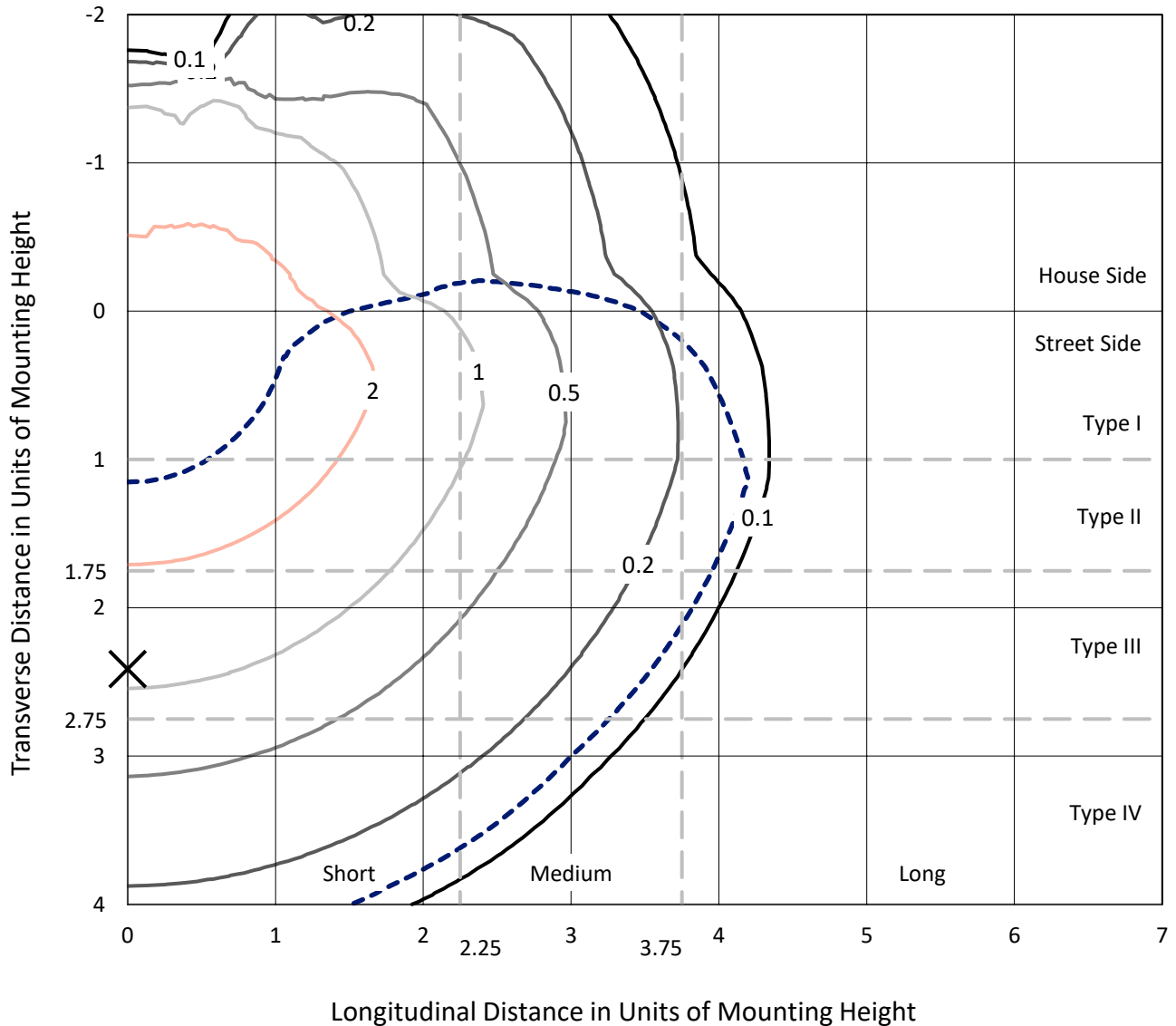
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

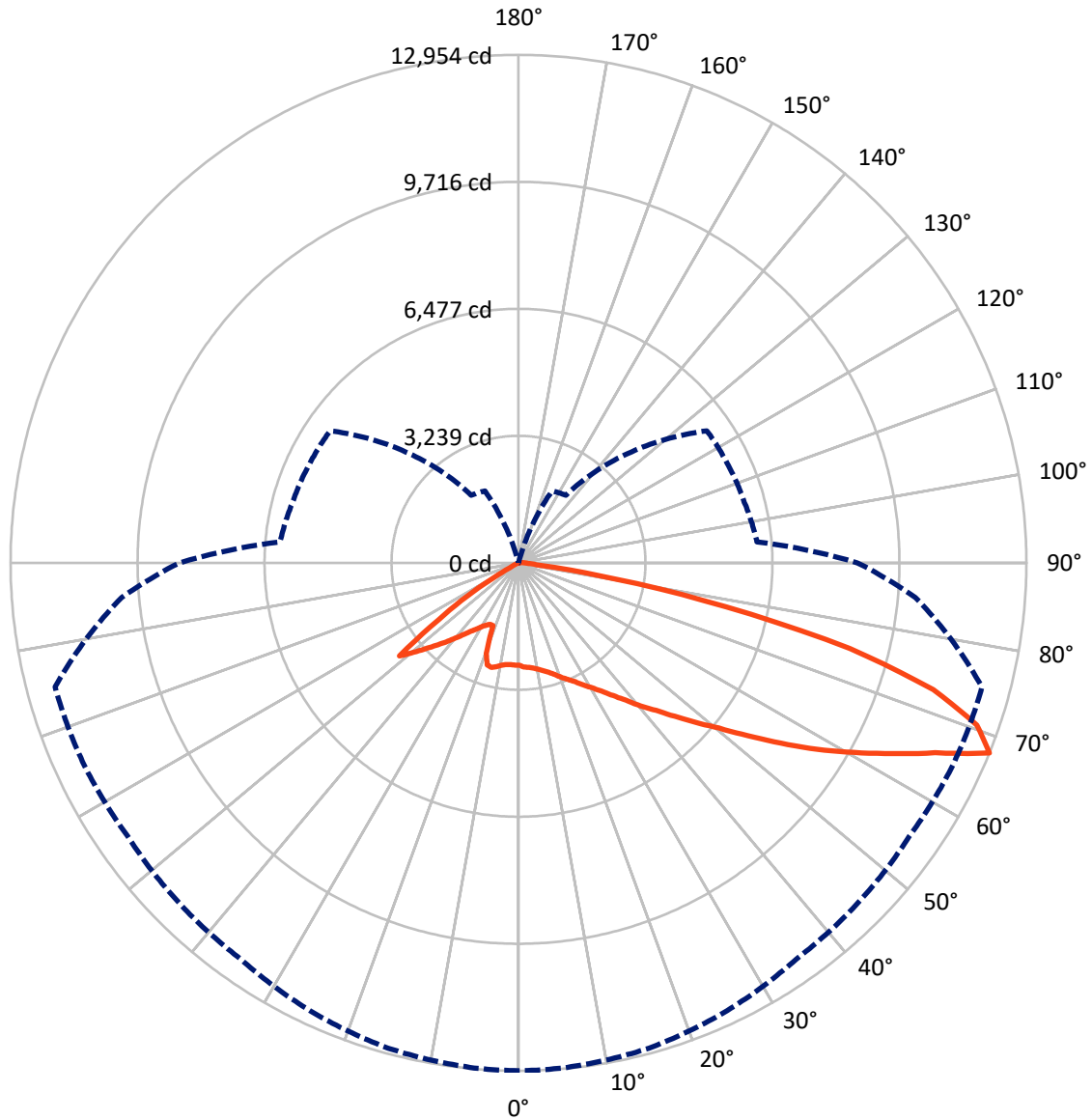
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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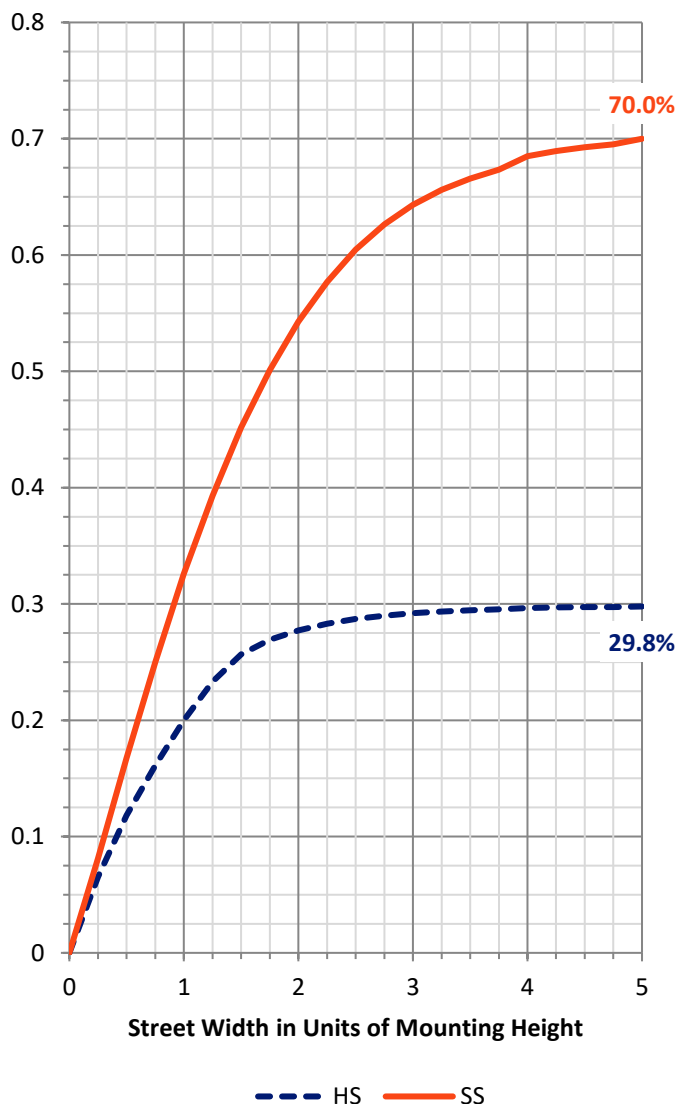
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7866.2	2.6	7868.8
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	18453.5	29.7	18483.1
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	26319.7	32.3	26352.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.7	1.0
10°-20°	779.3	3.0
20°-30°	1307.9	5.0
30°-40°	2120.8	8.0
40°-50°	3465.6	13.2
50°-60°	5431.2	20.6
60°-70°	7274.1	27.6
70°-80°	5301.8	20.1
80°-90°	387.2	1.5
90°-100°	24.8	0.1
100°-110°	7.0	0.0
110°-120°	0.5	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°	26319.7	99.9
0°-180°	26352.0	100.0

**Coefficient of Utilization**

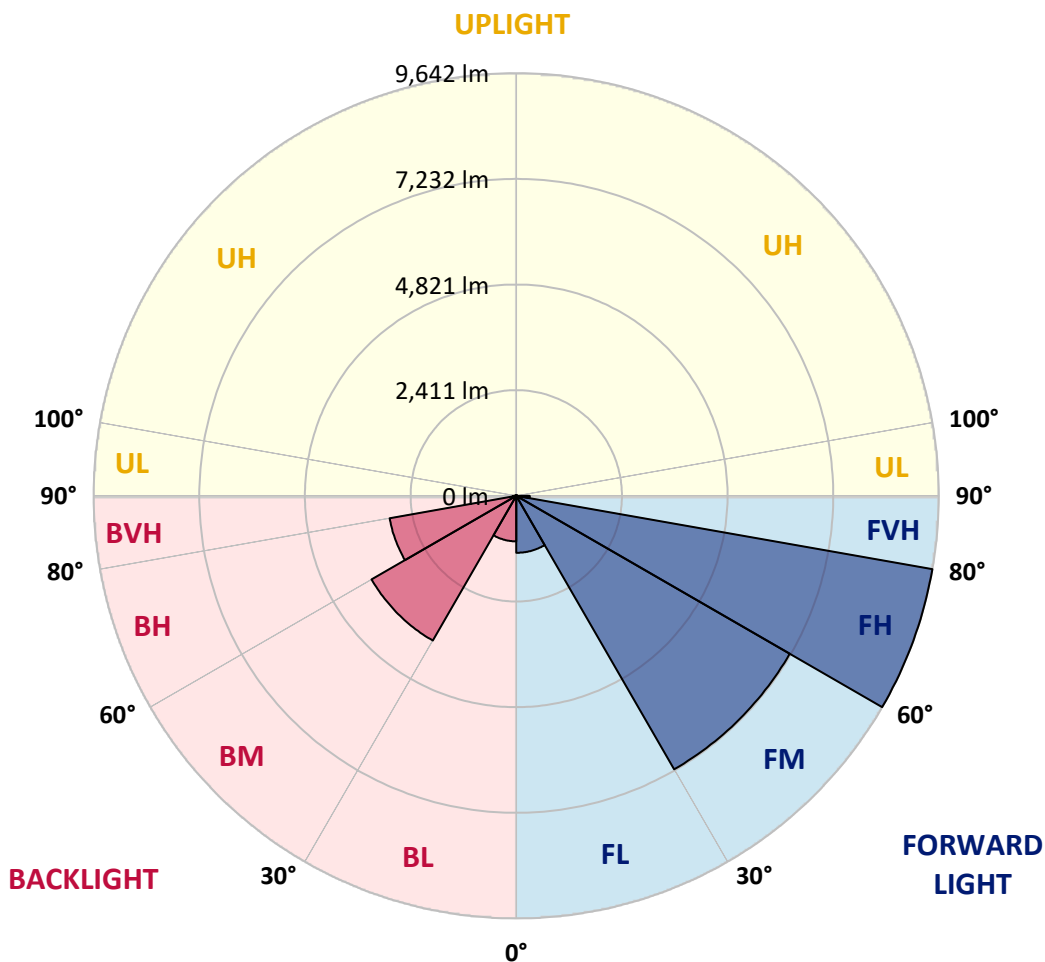


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1299.8	4.9			
FM (30°-60°)	7205.1	27.3			
FH (60°-80°)	9642.4	36.6			G4/12000
FVH (80°-90°)	306.2	1.2			G3/500
BL (0°-30°)	1039.1	3.9	B3/2500		
BM (30°-60°)	3812.5	14.5	B3/5000		
BH (60°-80°)	2933.5	11.1	B4/5000		G4/5000
BVH (80°-90°)	81.0	0.3			G1/100
UL (90°-100°)	24.8	0.1		U2/50	
UH (100°-180°)	7.5	0.0		U1/10	

**BUG Rating: B4-U2-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2
2.5°	2661.0	2645.5	2646.6	2661.0	2617.8	2632.2	2613.4	2627.8	2617.8	2621.2	2627.8
5°	2677.7	2661.0	2662.1	2679.9	2641.1	2653.3	2627.8	2635.6	2626.7	2631.1	2631.1
7.5°	2710.9	2692.1	2690.9	2702.0	2662.1	2666.6	2643.3	2644.4	2631.1	2640.0	2635.6
10°	2760.7	2745.2	2734.2	2740.8	2705.3	2703.1	2673.2	2674.3	2657.7	2667.7	2659.9
12.5°	2821.7	2800.6	2798.4	2800.6	2761.8	2753.0	2722.0	2724.2	2694.3	2709.8	2700.9
15°	2899.2	2866.0	2866.0	2878.2	2828.3	2821.7	2784.0	2786.2	2755.2	2767.4	2758.5
17.5°	2994.5	2962.4	2956.8	2965.7	2922.5	2913.6	2874.8	2872.6	2838.3	2841.6	2833.9
20°	3117.5	3085.3	3072.0	3094.2	3039.9	3033.3	2986.7	2982.3	2945.8	2935.8	2931.3
22.5°	3231.6	3206.1	3199.4	3223.8	3167.3	3161.8	3117.5	3111.9	3077.6	3063.2	2975.7
25°	3360.1	3354.5	3352.3	3360.1	3306.9	3295.8	3261.5	3253.7	3224.9	3207.2	3100.8
27.5°	3526.3	3524.0	3517.4	3518.5	3469.8	3459.8	3427.7	3422.1	3392.2	3372.3	3236.0
30°	3700.2	3700.2	3685.8	3693.5	3669.2	3653.7	3628.2	3608.2	3589.4	3568.4	3396.6
32.5°	3900.7	3899.6	3886.3	3909.6	3891.8	3891.8	3876.3	3855.3	3822.1	3812.1	3603.8
35°	4158.8	4142.2	4136.7	4174.3	4168.8	4178.8	4173.2	4151.1	4123.4	4100.1	3847.5
37.5°	4444.7	4440.2	4456.8	4480.1	4492.3	4518.9	4502.3	4501.2	4496.7	4438.0	3782.2
40°	4797.0	4778.1	4801.4	4813.6	4804.7	4847.9	4833.5	4845.7	4878.9	4407.0	3777.7
42.5°	5148.1	5131.5	5148.1	5208.0	5194.7	5246.7	5240.1	5287.7	5306.6	4472.4	4084.6
45°	5580.2	5561.4	5574.7	5645.6	5652.2	5715.4	5749.7	5795.1	5804.0	4895.6	4454.6
47.5°	6076.5	6045.5	6071.0	6104.2	6205.0	6264.8	6298.1	6353.5	6410.0	5405.2	4875.6
50°	6623.8	6621.6	6649.3	6706.9	6822.1	6881.9	6939.5	6997.1	7090.2	5973.5	5347.6
52.5°	7319.5	7305.1	7352.7	7407.0	7508.9	7600.9	7669.6	7729.4	7829.1	6548.5	5858.3
55°	8114.9	8065.1	8155.9	8247.9	8291.1	8399.7	8447.3	8497.1	8592.4	7153.3	6156.3
57.5°	8973.5	8961.3	9024.5	9057.7	9150.8	9218.3	9243.8	9298.1	9297.0	7782.6	6663.7
60°	9818.8	9805.5	9879.7	9899.7	9973.9	10034.8	10026.0	10074.7	10092.4	8373.1	7161.1
62.5°	10708.4	10686.2	10754.9	10759.4	10715.0	10813.6	10803.7	10844.7	10829.2	8950.3	7650.8
65°	11681.1	11697.7	11719.9	11629.0	11522.7	11608.0	11605.7	11683.3	11738.7	9756.8	8306.6
67.5°	12954.0	12932.9	12818.8	12599.5	12341.4	12254.9	12163.0	12219.5	12235.0	10157.8	8642.3
70°	12404.5	12358.0	12307.0	12083.2	11771.9	11552.6	11409.7	11469.5	11532.6	9599.4	8117.2
72.5°	11065.1	10949.9	10712.8	10515.6	10336.2	10122.3	9948.4	10052.6	10191.0	8514.9	7187.7
75°	8729.8	8622.3	8449.5	8315.5	8219.1	8216.9	8209.1	8290.0	8270.0	6914.0	5843.9
77.5°	5406.3	5631.2	5790.7	5676.6	5716.5	5634.5	5815.1	5921.4	6017.8	4956.5	4163.3
80°	2496.0	2553.6	2836.1	2763.0	2704.2	2687.6	2698.7	2883.7	2938.0	2224.5	1863.4
82.5°	569.4	546.2	566.1	525.1	522.9	498.5	501.9	501.9	484.1	409.9	343.4
85°	288.0	294.7	296.9	284.7	251.5	226.0	209.4	177.3	152.9	130.7	110.8
87.5°	192.8	198.3	201.6	185.0	166.2	145.1	131.8	107.5	85.3	53.2	41.0
90°	131.8	130.7	127.4	118.5	106.4	90.8	73.1	51.0	29.9	11.1	7.8
92.5°	94.2	92.0	90.8	83.1	74.2	62.0	47.6	32.1	16.6	7.8	4.4
95°	62.0	60.9	60.9	56.5	49.9	41.0	32.1	21.0	12.2	6.6	4.4
97.5°	43.2	42.1	42.1	39.9	35.5	29.9	22.2	14.4	10.0	6.6	4.4
100°	29.9	29.9	29.9	27.7	25.5	21.0	16.6	11.1	8.9	6.6	4.4
102.5°	19.9	19.9	21.0	19.9	17.7	14.4	11.1	8.9	7.8	5.5	4.4
105°	13.3	13.3	13.3	13.3	12.2	10.0	8.9	7.8	6.6	5.5	4.4
107.5°	8.9	8.9	8.9	8.9	7.8	6.6	6.6	6.6	5.5	5.5	4.4
110°	5.5	5.5	5.5	6.6	5.5	5.5	5.5	5.5	5.5	4.4	4.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2	2611.2
2.5°	2622.3	2606.8	2614.5	2599.0	2592.3	2577.9	2605.6	2607.9	2605.6	2610.1
5°	2625.6	2607.9	2616.7	2599.0	2595.7	2579.1	2606.8	2606.8	2600.1	2603.4
7.5°	2633.3	2614.5	2621.2	2600.1	2600.1	2580.2	2613.4	2611.2	2605.6	2613.4
10°	2659.9	2637.8	2637.8	2617.8	2620.0	2599.0	2640.0	2640.0	2635.6	2648.8
12.5°	2700.9	2673.2	2674.3	2646.6	2651.1	2634.4	2684.3	2686.5	2686.5	2708.7
15°	2754.1	2712.0	2716.4	2686.5	2695.4	2675.4	2719.8	2717.5	2723.1	2755.2
17.5°	2819.5	2772.9	2734.2	2636.7	2579.1	2581.3	2713.1	2774.0	2703.1	2724.2
20°	2847.2	2621.2	2498.2	2462.7	2455.0	2332.0	2080.5	2119.3	2356.4	2459.4
22.5°	2661.0	2589.0	2576.8	2531.4	2195.7	2102.7	2118.2	2096.0	1863.4	1731.6
25°	2751.9	2704.2	2676.5	2276.6	2201.3	2184.7	2173.6	1963.1	1710.5	1722.7
27.5°	2880.4	2818.3	2486.0	2286.6	2301.0	2275.5	2211.3	1765.9	1758.1	1778.1
30°	3032.2	2876.0	2422.8	2404.0	2420.6	2387.4	1859.0	1841.2	1841.2	1861.2
32.5°	3218.3	2609.0	2571.3	2573.5	2562.4	2185.8	1956.4	1952.0	1965.3	1981.9
35°	3166.2	2782.9	2786.2	2805.1	2779.6	2138.1	2109.3	2092.7	2103.8	2110.4
37.5°	3064.3	3044.3	3044.3	3023.3	2373.0	2305.4	2274.4	2272.2	2271.1	2271.1
40°	3321.3	3302.5	3279.2	3242.7	2482.7	2500.4	2453.9	2448.3	2451.7	2463.8
42.5°	3613.8	3606.0	3603.8	2782.9	2710.9	2724.2	2674.3	2659.9	2659.9	2687.6
45°	3958.3	3948.3	3703.5	2974.6	2962.4	2977.9	2922.5	2888.1	2907.0	2926.9
47.5°	4353.8	4353.8	3279.2	3261.5	3261.5	3270.3	3215.0	3168.4	3187.3	3193.9
50°	4787.0	4110.1	3608.2	3591.6	3607.1	3602.7	3545.1	3113.0	3513.0	3516.3
52.5°	4907.7	3997.1	3969.4	3950.6	3969.4	3966.1	3906.2	2596.8	3799.9	3854.2
55°	4350.5	4353.8	4348.3	4320.6	4340.5	4332.8	4274.1	2835.0	2801.7	2497.1
57.5°	4703.9	4708.3	4706.1	4701.7	4719.4	3428.8	4426.9	2561.3	1564.3	1565.4
60°	5088.3	5066.2	5059.5	5049.5	4279.6	2430.6	1844.6	178.4	611.5	602.7
62.5°	5437.3	5429.5	5406.3	5400.7	3631.5	1914.4	1870.0	41.0	32.1	31.0
65°	5922.5	5853.8	5835.0	5776.3	3870.8	2038.4	1996.3	12.2	1.1	0.0
67.5°	6103.1	5963.5	5895.9	5864.9	3938.4	2102.7	2021.8	12.2	1.1	0.0
70°	5761.9	5589.1	5503.8	5469.4	3680.2	1965.3	1885.5	12.2	1.1	0.0
72.5°	5109.4	4982.0	4947.6	4837.9	3244.9	1724.9	1655.1	12.2	0.0	0.0
75°	4191.0	4144.4	4102.3	3986.0	2637.8	1370.4	1308.4	11.1	0.0	0.0
77.5°	3049.9	2981.2	2903.7	2777.4	1780.3	895.1	863.0	10.0	0.0	0.0
80°	1374.8	1318.3	1299.5	1102.3	631.5	291.4	257.0	8.9	0.0	0.0
82.5°	267.0	240.4	228.2	219.4	141.8	78.7	68.7	6.6	0.0	0.0
85°	90.8	100.8	117.4	129.6	79.8	47.6	39.9	4.4	0.0	0.0
87.5°	35.5	47.6	57.6	59.8	29.9	19.9	11.1	2.2	0.0	0.0
90°	6.6	8.9	7.8	5.5	3.3	1.1	0.0	0.0	0.0	0.0
92.5°	3.3	4.4	3.3	3.3	2.2	1.1	0.0	0.0	0.0	0.0
95°	4.4	4.4	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
97.5°	4.4	4.4	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
100°	4.4	4.4	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
102.5°	4.4	4.4	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
105°	4.4	5.5	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
107.5°	4.4	5.5	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0
110°	4.4	5.5	4.4	3.3	2.2	1.1	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)