

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: P579448

Luminaire Tested: **CTN-CA6-230-730-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579448  
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-CA6-230-730-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (6) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24871 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G4

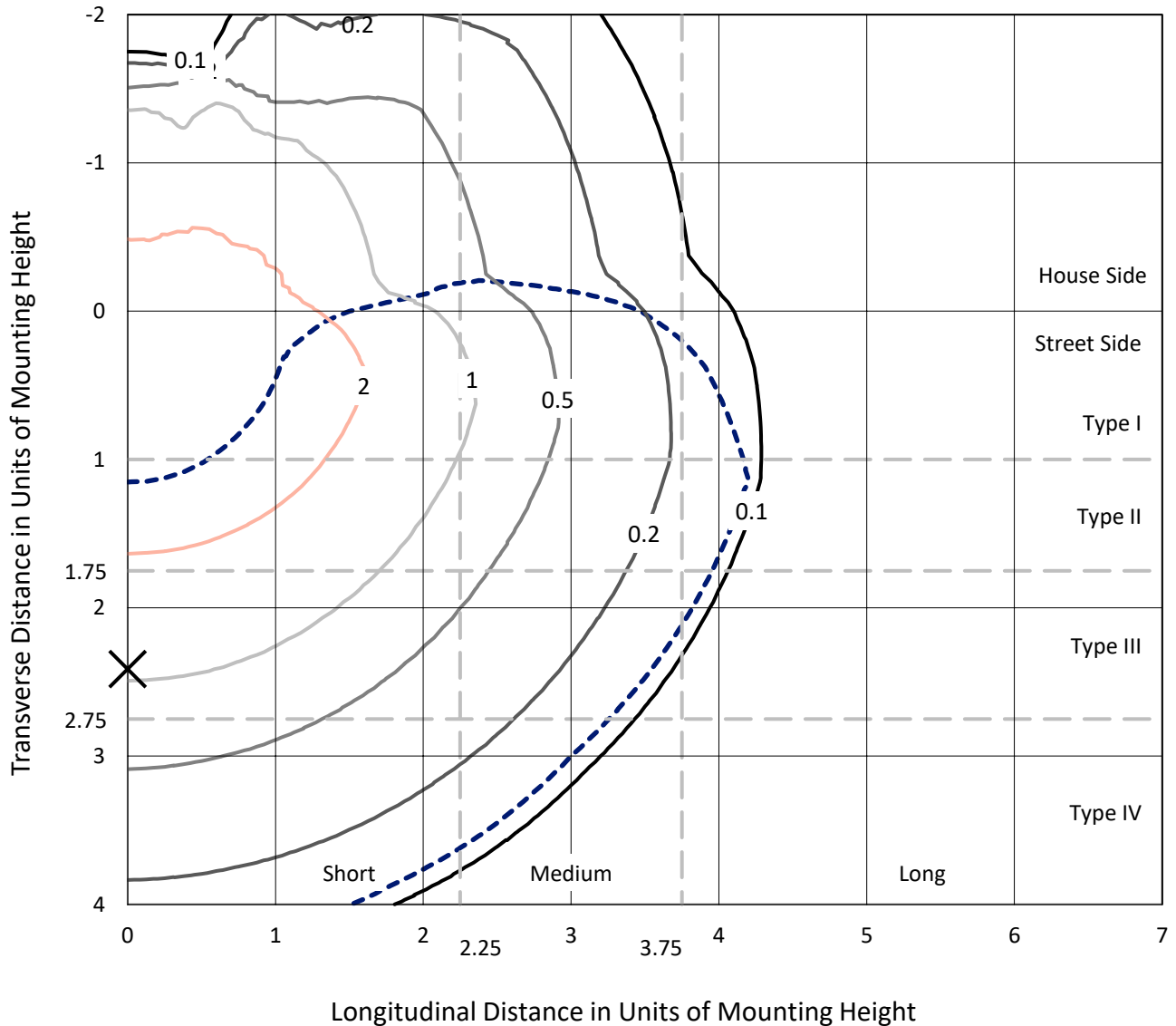
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

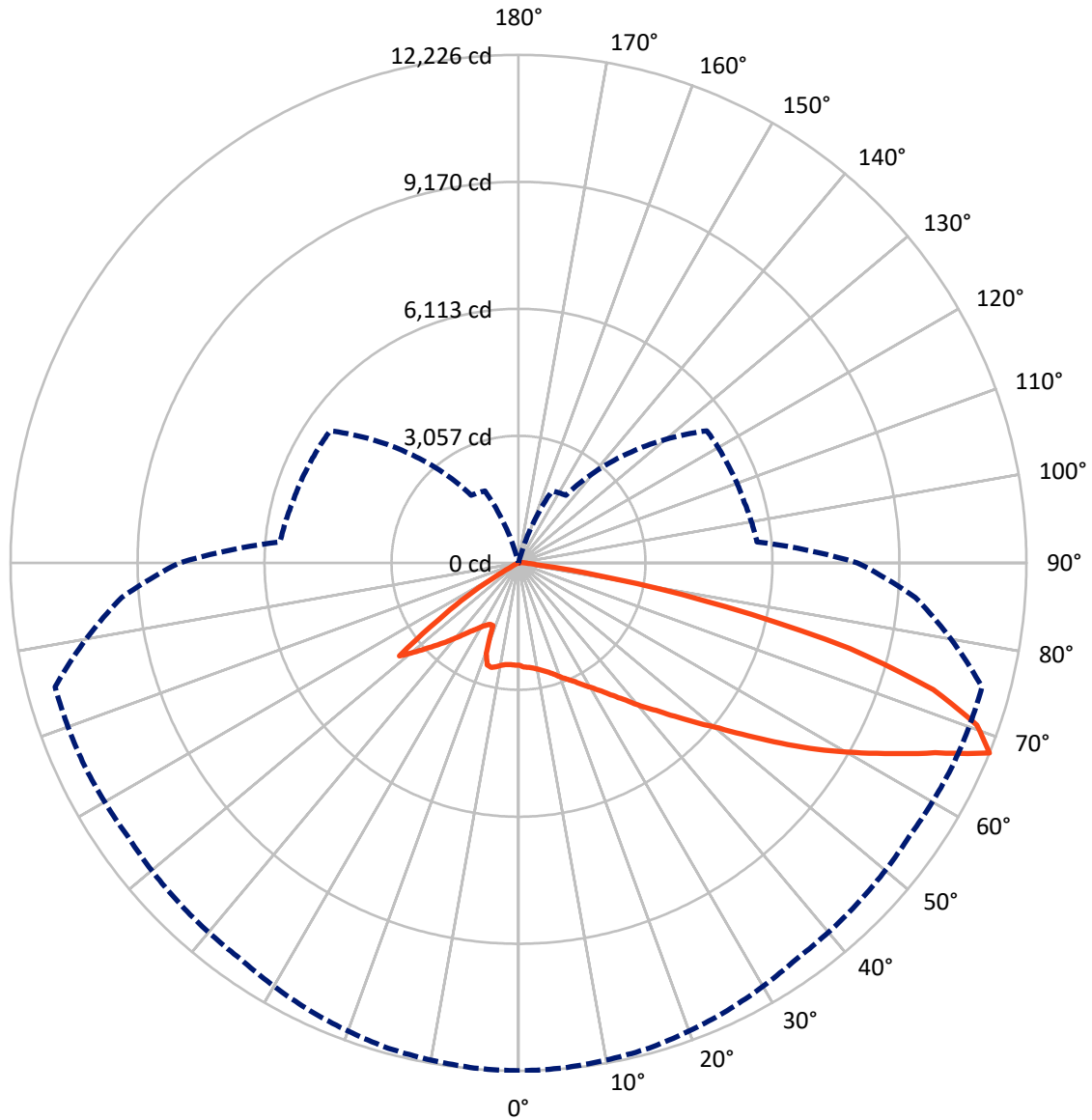
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 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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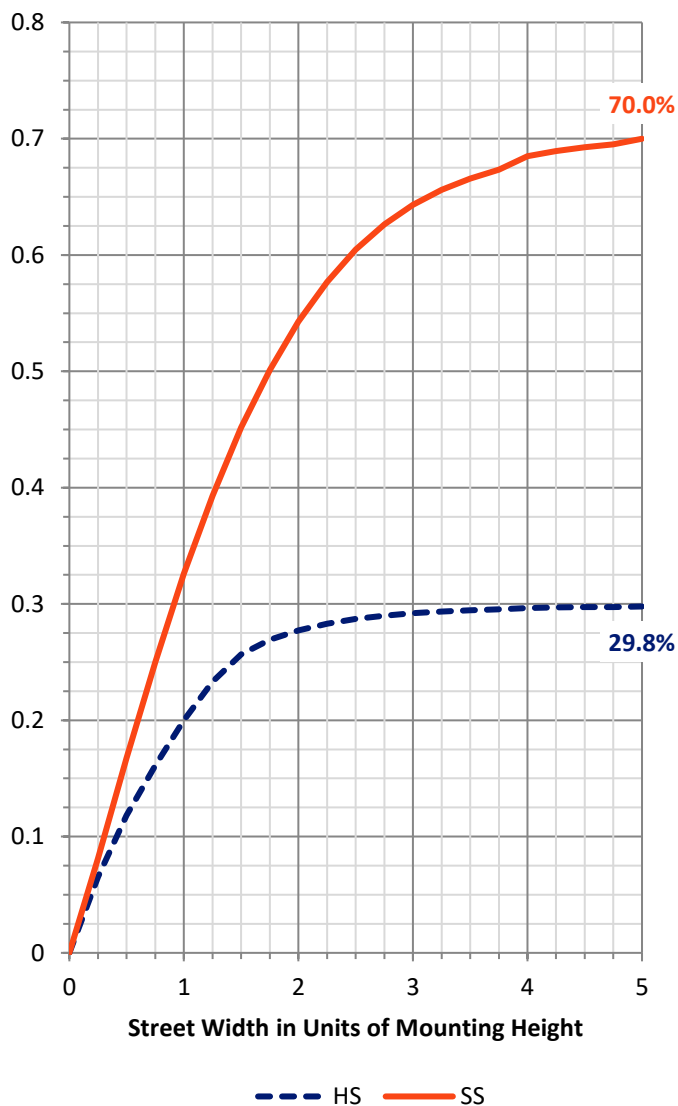
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7424.1	2.5	7426.6
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	17416.4	28.0	17444.4
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	24840.5	30.5	24871.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.6	1.0
10°-20°	735.5	3.0
20°-30°	1234.4	5.0
30°-40°	2001.6	8.0
40°-50°	3270.8	13.2
50°-60°	5126.0	20.6
60°-70°	6865.3	27.6
70°-80°	5003.9	20.1
80°-90°	365.4	1.5
90°-100°	23.4	0.1
100°-110°	6.6	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°	24840.5	99.9
0°-180°	24871.0	100.0

**Coefficient of Utilization**

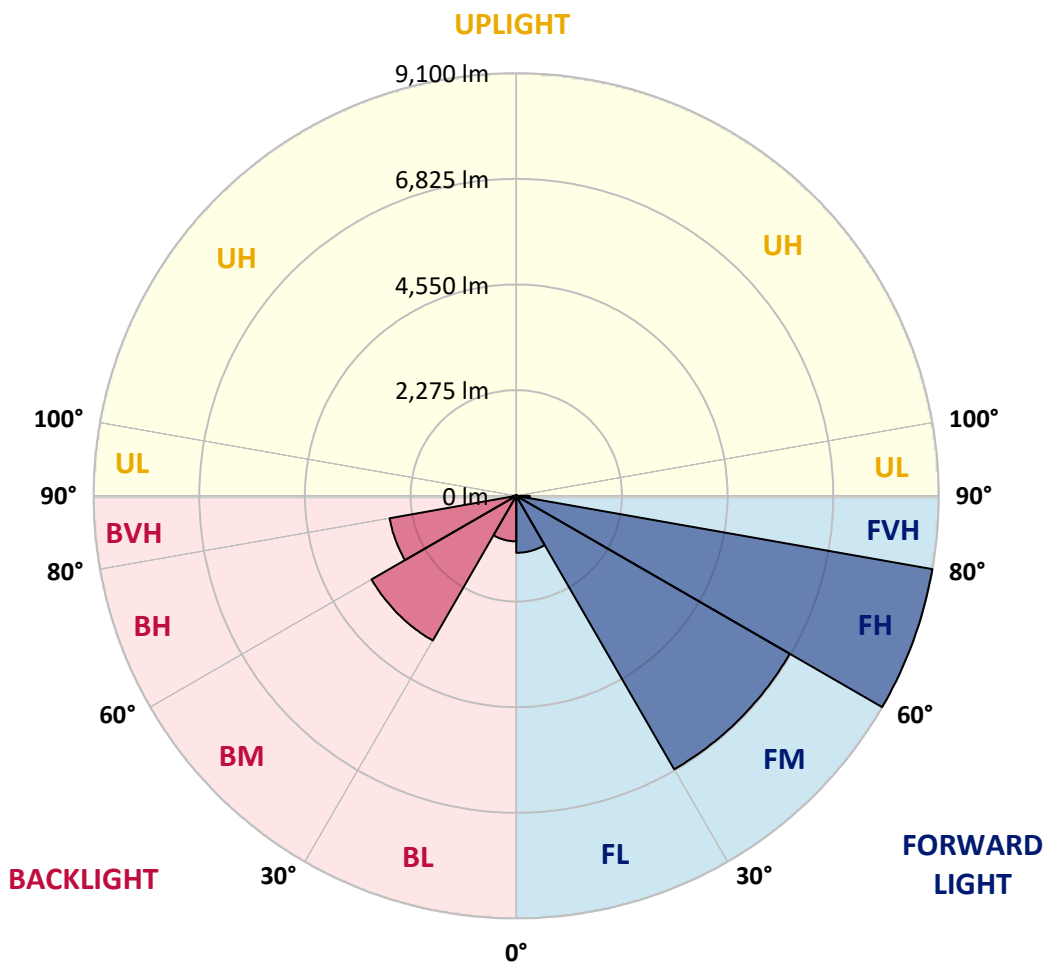


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1226.8	4.9			
FM (30°-60°)	6800.2	27.3			
FH (60°-80°)	9100.5	36.6			G4/12000
FVH (80°-90°)	289.0	1.2			G3/500
BL (0°-30°)	980.7	3.9	B2/1000		
BM (30°-60°)	3598.3	14.5	B3/5000		
BH (60°-80°)	2768.7	11.1	B4/5000		G4/5000
BVH (80°-90°)	76.5	0.3			G1/100
UL (90°-100°)	23.4	0.1		U2/50	
UH (100°-180°)	7.1	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°	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4
2.5°	2511.5	2496.8	2497.9	2511.5	2470.7	2484.3	2466.5	2480.1	2470.7	2473.8	2480.1
5°	2527.2	2511.5	2512.5	2529.3	2492.7	2504.2	2480.1	2487.4	2479.1	2483.3	2483.3
7.5°	2558.5	2540.8	2539.7	2550.2	2512.5	2516.7	2494.8	2495.8	2483.3	2491.6	2487.4
10°	2605.6	2590.9	2580.5	2586.8	2553.3	2551.2	2523.0	2524.0	2508.3	2517.8	2510.4
12.5°	2663.1	2643.2	2641.1	2643.2	2606.6	2598.3	2569.0	2571.1	2542.9	2557.5	2549.1
15°	2736.3	2704.9	2704.9	2716.4	2669.4	2663.1	2627.5	2629.6	2600.4	2611.9	2603.5
17.5°	2826.2	2795.9	2790.7	2799.0	2758.2	2749.9	2713.3	2711.2	2678.8	2681.9	2674.6
20°	2942.3	2911.9	2899.4	2920.3	2869.1	2862.8	2818.9	2814.7	2780.2	2770.8	2766.6
22.5°	3050.0	3025.9	3019.6	3042.6	2989.3	2984.1	2942.3	2937.0	2904.6	2891.0	2808.4
25°	3171.2	3166.0	3163.9	3171.2	3121.1	3110.6	3078.2	3070.9	3043.7	3027.0	2926.6
27.5°	3328.1	3326.0	3319.7	3320.8	3274.8	3265.3	3235.0	3229.8	3201.6	3182.7	3054.1
30°	3492.2	3492.2	3478.6	3486.0	3463.0	3448.3	3424.3	3405.5	3387.7	3367.8	3205.7
32.5°	3681.5	3680.4	3667.9	3689.9	3673.1	3673.1	3658.5	3638.6	3607.3	3597.8	3401.3
35°	3925.1	3909.4	3904.2	3939.7	3934.5	3943.9	3938.7	3917.8	3891.6	3869.7	3631.3
37.5°	4194.9	4190.7	4206.4	4228.3	4239.8	4264.9	4249.2	4248.2	4244.0	4188.6	3569.6
40°	4527.4	4509.6	4531.5	4543.0	4534.7	4575.5	4561.9	4573.4	4604.7	4159.3	3565.4
42.5°	4858.8	4843.1	4858.8	4915.3	4902.7	4951.9	4945.6	4990.6	5008.3	4221.0	3855.1
45°	5266.6	5248.8	5261.4	5328.3	5334.5	5394.1	5426.6	5469.4	5477.8	4620.4	4204.3
47.5°	5735.0	5705.7	5729.8	5761.1	5856.3	5912.8	5944.1	5996.4	6049.7	5101.4	4601.6
50°	6251.5	6249.4	6275.6	6329.9	6438.7	6495.1	6549.5	6603.9	6691.7	5637.8	5047.0
52.5°	6908.1	6894.6	6939.5	6990.7	7086.9	7173.7	7238.6	7295.0	7389.1	6180.4	5529.0
55°	7658.9	7611.8	7697.6	7784.3	7825.1	7927.6	7972.5	8019.6	8109.5	6751.3	5810.3
57.5°	8469.2	8457.7	8517.3	8548.7	8636.5	8700.3	8724.3	8775.6	8774.5	7345.2	6289.2
60°	9267.0	9254.4	9324.5	9343.3	9413.4	9470.9	9462.5	9508.5	9525.2	7902.5	6758.6
62.5°	10106.6	10085.7	10150.5	10154.7	10112.9	10205.9	10196.5	10235.2	10220.5	8447.2	7220.8
65°	11024.6	11040.3	11061.2	10975.5	10875.1	10955.6	10953.5	11026.7	11079.0	9208.4	7839.8
67.5°	12226.0	12206.1	12098.4	11891.4	11647.8	11566.2	11479.4	11532.7	11547.4	9586.9	8156.6
70°	11707.4	11663.4	11615.3	11404.1	11110.3	10903.3	10768.4	10824.9	10884.5	9060.0	7661.0
72.5°	10443.3	10334.5	10110.8	9924.6	9755.3	9553.5	9389.3	9487.6	9618.3	8036.3	6783.7
75°	8239.2	8137.7	7974.6	7848.1	7757.2	7755.1	7747.7	7824.1	7805.3	6525.5	5515.4
77.5°	5102.4	5314.7	5465.2	5357.6	5395.2	5317.8	5488.2	5588.6	5679.6	4677.9	3929.3
80°	2355.7	2410.1	2676.7	2607.7	2552.3	2536.6	2547.0	2721.6	2772.9	2099.5	1758.7
82.5°	537.4	515.5	534.3	495.6	493.5	470.5	473.6	473.6	456.9	386.9	324.1
85°	271.9	278.1	280.2	268.7	237.3	213.3	197.6	167.3	144.3	123.4	104.6
87.5°	181.9	187.2	190.3	174.6	156.8	137.0	124.4	101.4	80.5	50.2	38.7
90°	124.4	123.4	120.2	111.9	100.4	85.7	69.0	48.1	28.2	10.5	7.3
92.5°	88.9	86.8	85.7	78.4	70.1	58.6	45.0	30.3	15.7	7.3	4.2
95°	58.6	57.5	57.5	53.3	47.1	38.7	30.3	19.9	11.5	6.3	4.2
97.5°	40.8	39.7	39.7	37.6	33.5	28.2	20.9	13.6	9.4	6.3	4.2
100°	28.2	28.2	28.2	26.1	24.0	19.9	15.7	10.5	8.4	6.3	4.2
102.5°	18.8	18.8	19.9	18.8	16.7	13.6	10.5	8.4	7.3	5.2	4.2
105°	12.5	12.5	12.5	12.5	11.5	9.4	8.4	7.3	6.3	5.2	4.2
107.5°	8.4	8.4	8.4	8.4	7.3	6.3	6.3	6.3	5.2	5.2	4.2
110°	5.2	5.2	5.2	6.3	5.2	5.2	5.2	5.2	5.2	4.2	4.2



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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°	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4	2464.4
2.5°	2474.9	2460.2	2467.6	2452.9	2446.7	2433.1	2459.2	2461.3	2459.2	2463.4
5°	2478.0	2461.3	2469.7	2452.9	2449.8	2434.1	2460.2	2460.2	2454.0	2457.1
7.5°	2485.3	2467.6	2473.8	2454.0	2454.0	2435.2	2466.5	2464.4	2459.2	2466.5
10°	2510.4	2489.5	2489.5	2470.7	2472.8	2452.9	2491.6	2491.6	2487.4	2500.0
12.5°	2549.1	2523.0	2524.0	2497.9	2502.1	2486.4	2533.4	2535.5	2535.5	2556.4
15°	2599.3	2559.6	2563.8	2535.5	2543.9	2525.1	2566.9	2564.8	2570.0	2600.4
17.5°	2661.0	2617.1	2580.5	2488.5	2434.1	2436.2	2560.6	2618.1	2551.2	2571.1
20°	2687.1	2473.8	2357.8	2324.3	2317.0	2200.9	1963.6	2000.2	2223.9	2321.2
22.5°	2511.5	2443.5	2432.0	2389.2	2072.3	1984.5	1999.1	1978.2	1758.7	1634.2
25°	2597.2	2552.3	2526.1	2148.7	2077.6	2061.9	2051.4	1852.8	1614.4	1625.9
27.5°	2718.5	2660.0	2346.3	2158.1	2171.7	2147.6	2087.0	1666.7	1659.3	1678.2
30°	2861.8	2714.3	2286.7	2268.9	2284.6	2253.2	1754.5	1737.8	1737.8	1756.6
32.5°	3037.4	2462.3	2426.8	2428.9	2418.4	2062.9	1846.5	1842.3	1854.9	1870.5
35°	2988.3	2626.5	2629.6	2647.4	2623.4	2018.0	1990.8	1975.1	1985.6	1991.8
37.5°	2892.1	2873.3	2873.3	2853.4	2239.6	2175.9	2146.6	2144.5	2143.4	2143.4
40°	3134.6	3116.9	3094.9	3060.4	2343.1	2359.9	2316.0	2310.7	2313.9	2325.4
42.5°	3410.7	3403.4	3401.3	2626.5	2558.5	2571.1	2524.0	2510.4	2510.4	2536.6
45°	3735.9	3726.4	3495.4	2807.4	2795.9	2810.5	2758.2	2725.8	2743.6	2762.4
47.5°	4109.1	4109.1	3094.9	3078.2	3078.2	3086.6	3034.3	2990.4	3008.1	3014.4
50°	4518.0	3879.1	3405.5	3389.8	3404.4	3400.2	3345.9	2938.1	3315.5	3318.7
52.5°	4631.9	3772.5	3746.3	3728.5	3746.3	3743.2	3686.7	2450.8	3586.3	3637.6
55°	4106.0	4109.1	4103.9	4077.8	4096.6	4089.3	4033.8	2675.6	2644.3	2356.7
57.5°	4439.5	4443.7	4441.6	4437.4	4454.2	3236.1	4178.1	2417.4	1476.4	1477.4
60°	4802.3	4781.4	4775.2	4765.8	4039.1	2294.0	1740.9	168.3	577.2	568.8
62.5°	5131.7	5124.4	5102.4	5097.2	3427.4	1806.8	1764.9	38.7	30.3	29.3
65°	5589.7	5524.8	5507.1	5451.7	3653.3	1923.9	1884.1	11.5	1.0	0.0
67.5°	5760.1	5628.4	5564.6	5535.3	3717.0	1984.5	1908.2	11.5	1.0	0.0
70°	5438.1	5275.0	5194.4	5162.0	3473.4	1854.9	1779.6	11.5	1.0	0.0
72.5°	4822.2	4702.0	4669.6	4566.0	3062.5	1628.0	1562.1	11.5	0.0	0.0
75°	3955.4	3911.5	3871.8	3762.0	2489.5	1293.4	1234.8	10.5	0.0	0.0
77.5°	2878.5	2813.7	2740.5	2621.3	1680.2	844.8	814.5	9.4	0.0	0.0
80°	1297.6	1244.2	1226.5	1040.4	596.0	275.0	242.6	8.4	0.0	0.0
82.5°	252.0	226.9	215.4	207.0	133.8	74.2	64.8	6.3	0.0	0.0
85°	85.7	95.1	110.8	122.3	75.3	45.0	37.6	4.2	0.0	0.0
87.5°	33.5	45.0	54.4	56.5	28.2	18.8	10.5	2.1	0.0	0.0
90°	6.3	8.4	7.3	5.2	3.1	1.0	0.0	0.0	0.0	0.0
92.5°	3.1	4.2	3.1	3.1	2.1	1.0	0.0	0.0	0.0	0.0
95°	4.2	4.2	4.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
97.5°	4.2	4.2	4.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
100°	4.2	4.2	4.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
102.5°	4.2	4.2	4.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
105°	4.2	5.2	4.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
107.5°	4.2	5.2	4.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
110°	4.2	5.2	4.2	3.1	2.1	1.0	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°
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)