

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: P522126

Luminaire Tested: **CTN-CA10-310-722-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522126  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-310-722-U-T5R-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30422 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G4

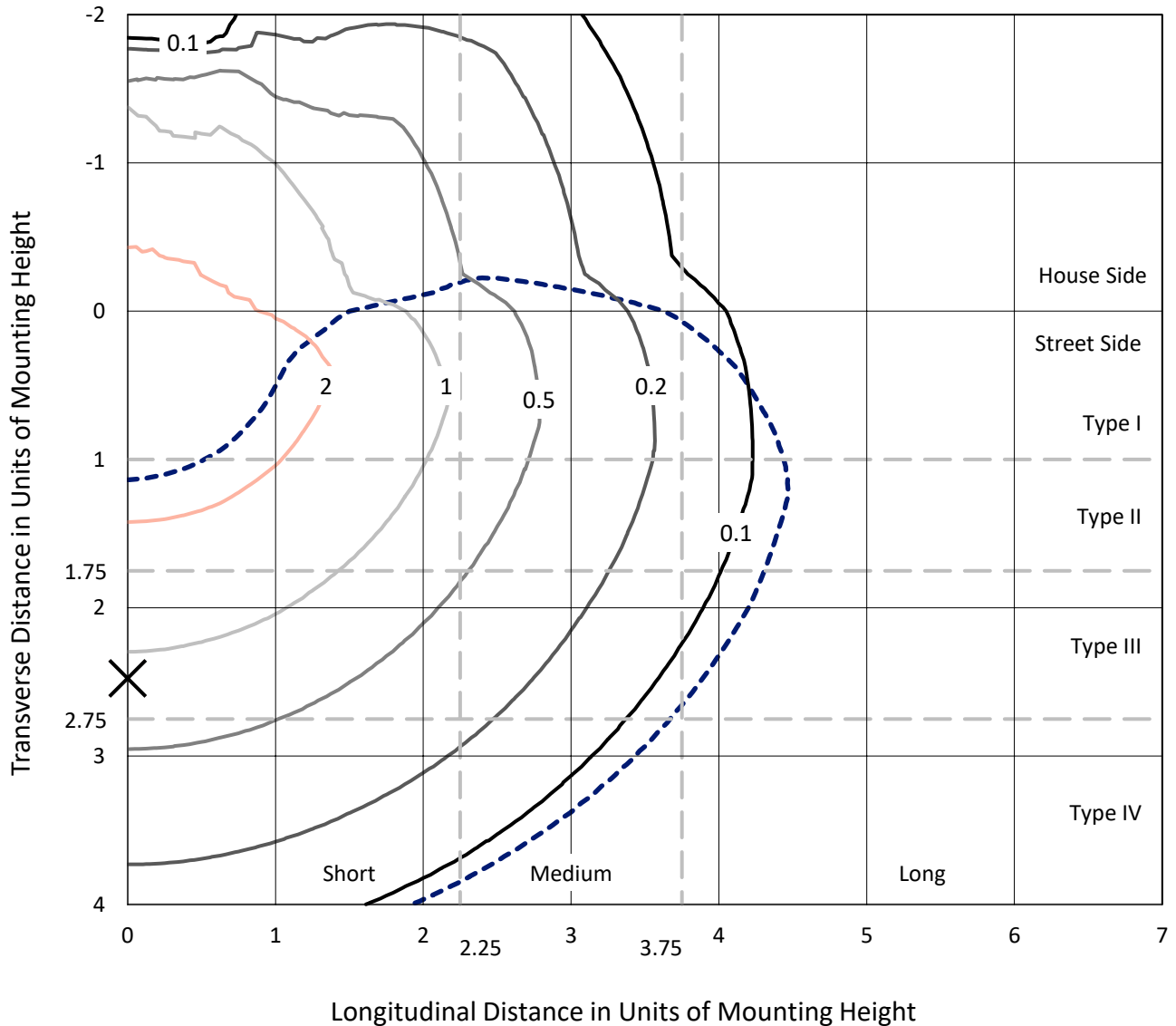
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

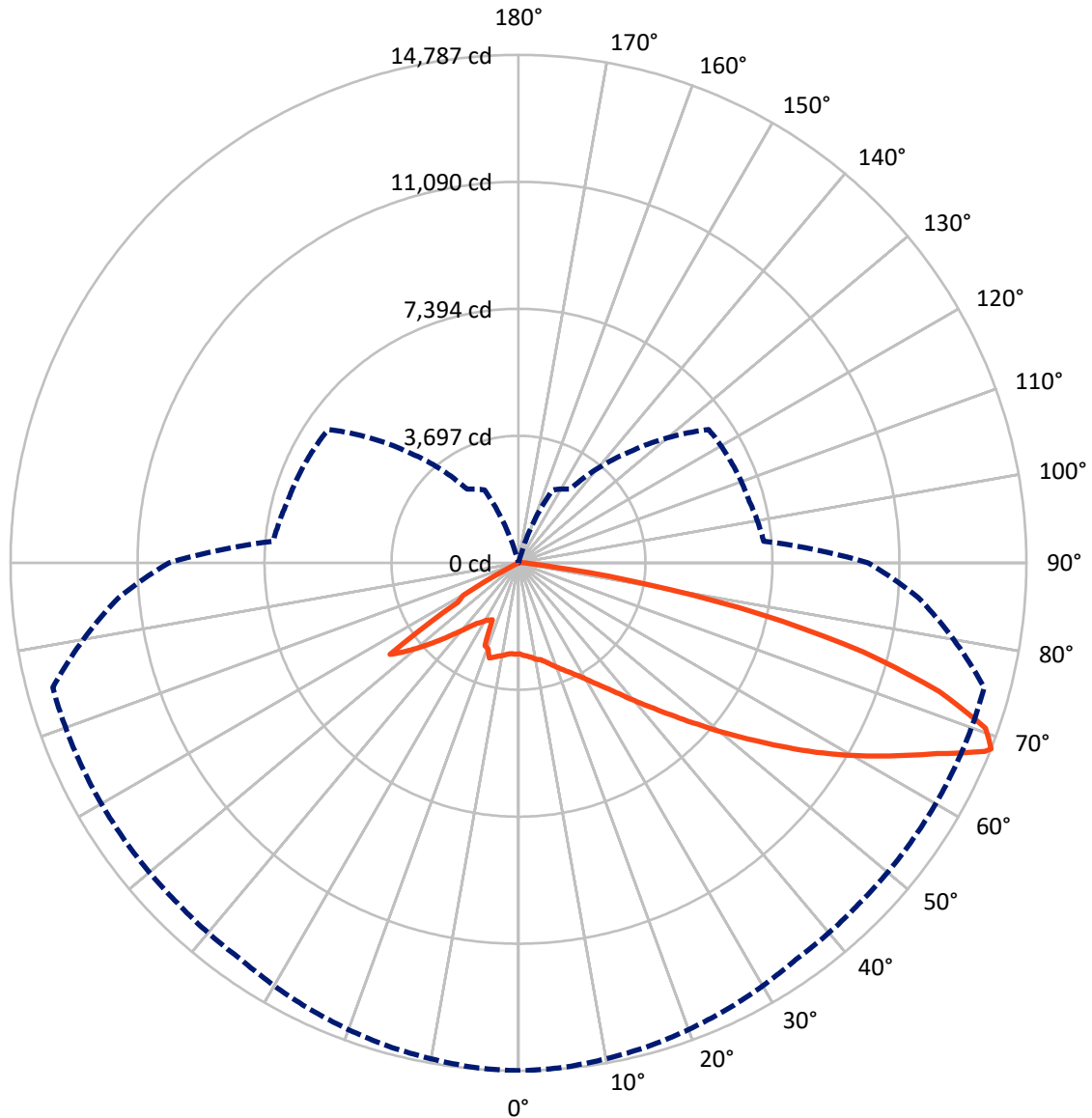
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical



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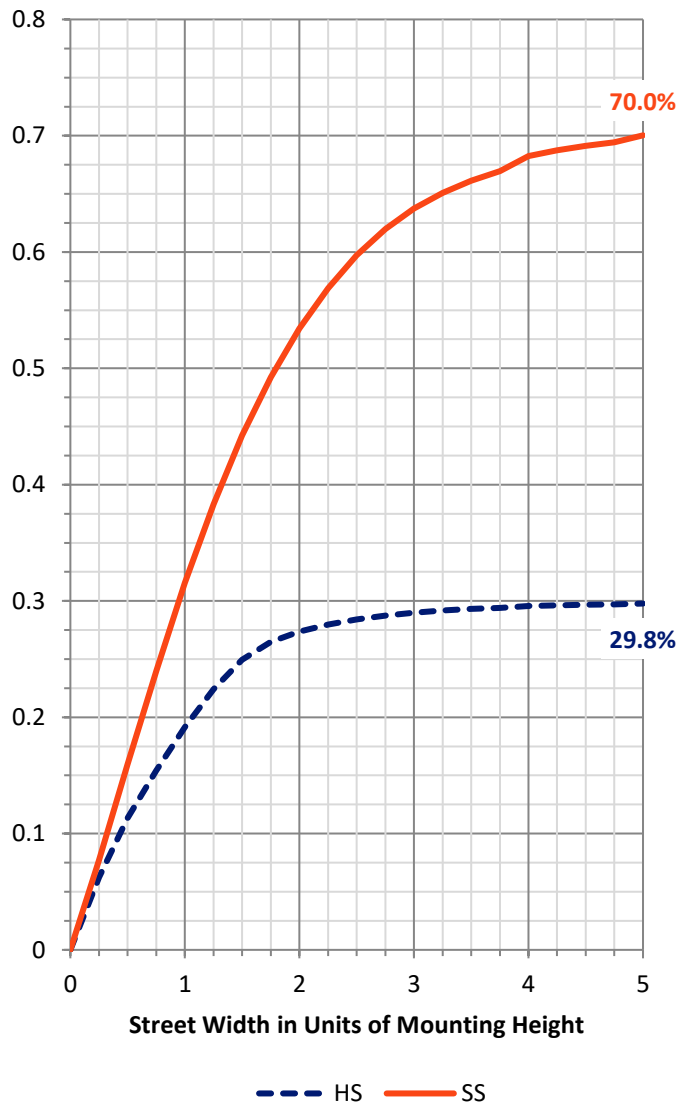
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9068.5	1.4	9069.9
	% Fixture	29.8	0.0	29.8
<b>Street Side</b>	Lumens	21339.7	12.5	21352.1
	% Fixture	70.1	0.0	70.2
<b>Total</b>	Lumens	30408.1	13.9	30422.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.4	0.8
10°-20°	819.3	2.7
20°-30°	1403.3	4.6
30°-40°	2276.5	7.5
40°-50°	3839.2	12.6
50°-60°	6258.0	20.6
60°-70°	8393.1	27.6
70°-80°	6519.2	21.4
80°-90°	642.0	2.1
90°-100°	12.2	0.0
100°-110°	0.7	0.0
110°-120°	0.2	0.0
120°-130°	0.1	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	30408.1	100.0
0°-180°	30422.0	100.0

**Coefficient of Utilization**



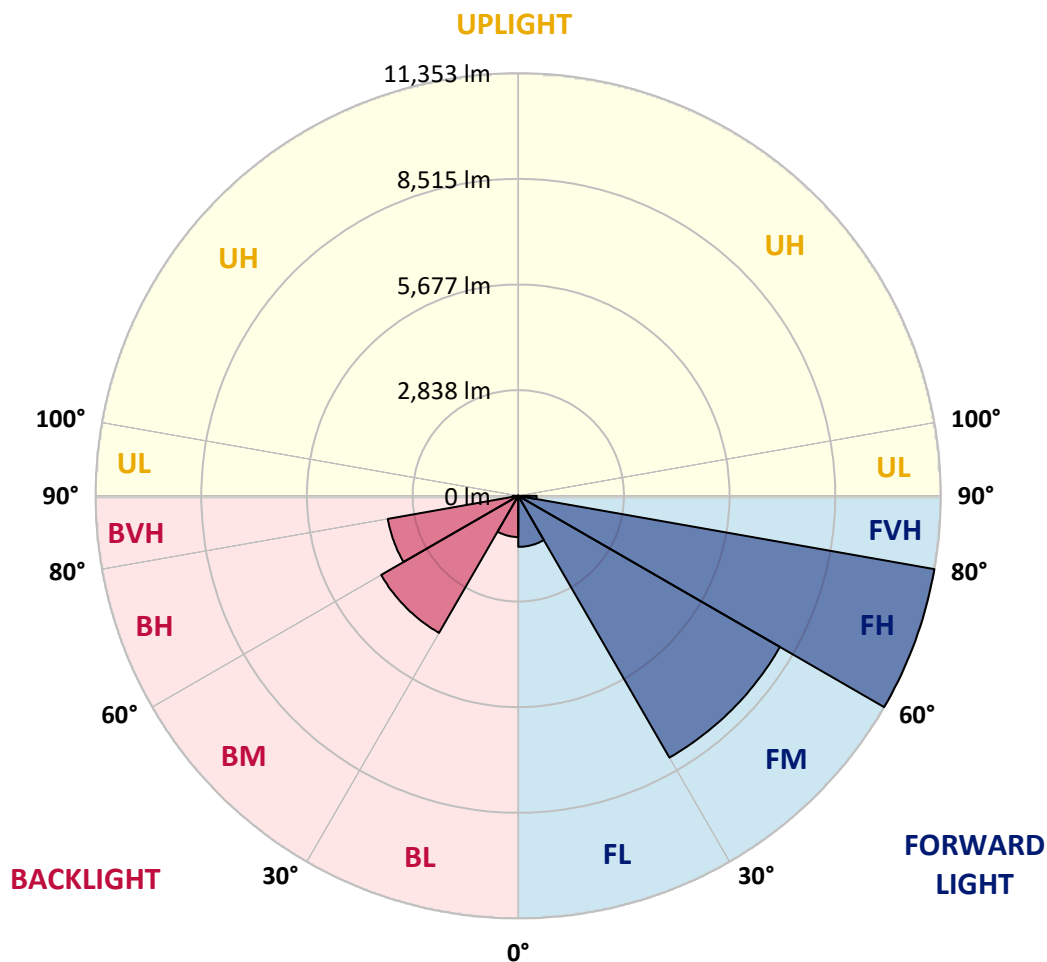
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1372.2	4.5			
FM (30°-60°)	8120.7	26.7			
FH (60°-80°)	11353.1	37.3			G4/12000
FVH (80°-90°)	493.6	1.6			G3/500
BL (0°-30°)	1107.8	3.6	B3/2500		
BM (30°-60°)	4253.1	14.0	B3/5000		
BH (60°-80°)	3559.2	11.7	B4/5000		G4/5000
BVH (80°-90°)	148.4	0.5			G2/225
UL (90°-100°)	12.2	0.0		U2/50	
UH (100°-180°)	1.7	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°	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2
2.5°	2696.3	2688.7	2687.5	2702.6	2654.8	2678.7	2657.3	2674.9	2663.6	2672.4	2673.6
5°	2732.8	2718.9	2710.1	2727.7	2697.5	2708.9	2684.9	2692.5	2661.0	2678.7	2681.2
7.5°	2785.6	2763.0	2760.4	2765.5	2739.1	2747.9	2708.9	2717.7	2695.0	2684.9	2693.8
10°	2857.3	2835.9	2819.6	2830.9	2795.7	2800.7	2759.2	2760.4	2744.1	2725.2	2740.3
12.5°	2897.6	2900.1	2892.5	2901.4	2872.4	2856.1	2827.1	2817.1	2800.7	2778.1	2770.5
15°	2998.2	2993.2	2978.1	2991.9	2988.2	2973.1	2937.8	2915.2	2880.0	2867.4	2854.8
17.5°	3121.5	3105.2	3092.6	3110.2	3129.1	3097.6	3063.7	3032.2	2985.7	2960.5	2945.4
20°	3251.1	3239.8	3227.2	3254.9	3261.2	3237.3	3212.1	3165.6	3111.5	3078.8	3047.3
22.5°	3395.8	3373.2	3376.9	3413.4	3402.1	3390.8	3358.1	3320.3	3254.9	3213.4	3122.8
25°	3545.5	3533.0	3550.6	3566.9	3558.1	3534.2	3517.9	3490.2	3417.2	3366.9	3234.8
27.5°	3731.8	3711.6	3734.3	3740.6	3733.0	3726.7	3704.1	3682.7	3603.4	3546.8	3382.0
30°	3950.7	3926.8	3963.3	3954.4	3946.9	3951.9	3938.1	3891.5	3821.1	3744.3	3579.5
32.5°	4211.1	4179.7	4221.2	4202.3	4184.7	4219.9	4187.2	4143.2	4060.1	3970.8	3809.8
35°	4513.1	4514.3	4535.7	4504.3	4498.0	4535.7	4514.3	4460.2	4383.5	4290.4	4061.4
37.5°	4879.2	4869.1	4923.2	4908.1	4885.5	4935.8	4942.1	4874.2	4735.8	4643.9	4373.4
40°	5324.6	5322.1	5339.7	5342.2	5335.9	5359.8	5371.2	5280.6	5191.2	5052.8	4126.8
42.5°	5800.2	5810.3	5841.7	5819.1	5849.3	5880.7	5884.5	5809.0	5680.7	4847.8	4383.5
45°	6371.4	6402.9	6424.2	6419.2	6433.1	6478.4	6482.1	6441.9	6316.0	5251.6	4849.0
47.5°	7026.9	7057.1	7063.4	7103.7	7091.1	7155.2	7146.4	7147.7	7013.1	5814.0	5356.1
50°	7780.6	7794.4	7846.0	7868.6	7837.2	7924.0	7901.3	7929.0	7762.9	6458.2	5900.8
52.5°	8580.8	8604.7	8626.1	8711.6	8671.4	8746.8	8716.6	8780.8	8588.3	7113.7	6506.0
55°	9490.4	9494.2	9530.7	9617.5	9564.7	9655.2	9611.2	9635.1	9481.6	7838.4	7136.4
57.5°	10454.2	10441.6	10455.4	10524.6	10476.8	10544.8	10527.2	10549.8	10406.4	8600.9	7596.9
60°	11407.9	11389.0	11409.1	11455.7	11390.3	11507.3	11444.4	11465.8	11311.0	9379.7	8253.6
62.5°	12366.6	12352.8	12330.1	12376.7	12281.1	12341.5	12367.9	12332.6	12196.8	10084.3	8824.9
65°	13395.8	13382.0	13298.9	13327.9	13156.8	13127.8	13137.9	13149.2	13058.6	10782.6	9451.4
67.5°	14646.4	14626.3	14470.3	14274.0	14027.4	13973.3	13978.3	14008.5	14021.1	11680.9	10184.9
68°	14787.3	14750.9	14577.2	14349.5	14091.6	14028.7	14022.4	14028.7	14035.0	11688.5	10177.4
70°	14427.5	14413.7	14281.6	14006.0	13741.8	13590.8	13460.0	13454.9	13394.5	11090.8	9615.0
72.5°	12803.2	12785.6	12628.3	12433.3	12269.7	12033.2	11863.3	11873.4	11774.0	9802.5	8415.9
75°	10361.1	10359.8	10171.1	10007.5	10010.1	9992.4	9935.8	10035.2	9932.0	8314.0	7177.9
77.5°	7220.7	7245.8	7233.3	7137.6	7272.3	7458.5	7661.0	7852.3	7793.1	6567.7	5723.4
80°	3772.0	3842.5	4091.6	4102.9	4197.3	4378.5	4516.9	4645.2	4654.0	3726.7	3306.5
82.5°	1002.8	1024.2	1108.5	1084.5	1077.0	1113.5	1143.7	1147.5	1150.0	971.3	907.1
85°	312.0	320.8	310.8	296.9	275.5	251.6	245.3	200.1	158.5	130.9	114.5
87.5°	221.4	236.5	213.9	201.3	178.7	169.9	152.2	119.5	93.1	65.4	44.0
90°	114.5	117.0	104.4	89.3	83.0	78.0	66.7	47.8	23.9	12.6	11.3
92.5°	57.9	59.1	51.6	44.0	37.7	32.7	25.2	13.8	7.5	3.8	1.3
95°	22.6	23.9	21.4	18.9	15.1	11.3	10.1	7.5	5.0	2.5	1.3
97.5°	7.5	7.5	7.5	6.3	6.3	6.3	6.3	5.0	3.8	2.5	1.3
100°	0.0	0.0	0.0	1.3	2.5	3.8	3.8	3.8	2.5	1.3	1.3
102.5°	0.0	0.0	0.0	0.0	0.0	1.3	2.5	2.5	2.5	1.3	1.3
105°	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
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	1.3
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.3
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°	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2	2652.2
2.5°	2667.3	2659.8	2663.6	2632.1	2639.7	2619.5	2662.3	2651.0	2645.9	2663.6
5°	2673.6	2645.9	2668.6	2647.2	2651.0	2622.0	2657.3	2643.4	2642.2	2652.2
7.5°	2676.1	2662.3	2683.7	2648.5	2659.8	2648.5	2674.9	2661.0	2673.6	2682.4
10°	2711.4	2703.8	2701.3	2688.7	2697.5	2672.4	2705.1	2705.1	2711.4	2735.3
12.5°	2763.0	2752.9	2746.6	2724.0	2732.8	2725.2	2751.6	2756.7	2768.0	2778.1
15°	2833.4	2815.8	2809.5	2789.4	2795.7	2794.4	2813.3	2814.5	2839.7	2838.4
17.5°	2924.0	2898.8	2906.4	2891.3	2892.5	2882.5	2872.4	2872.4	2895.1	2900.1
20°	3032.2	2888.8	2700.0	2594.4	2575.5	2589.3	2643.4	2732.8	2620.8	2652.2
22.5°	2837.2	2707.6	2698.8	2674.9	2659.8	2322.6	2235.8	2208.1	2352.8	2601.9
25°	2862.4	2807.0	2790.6	2760.4	2315.0	2311.3	2286.1	2244.6	1834.4	1825.6
27.5°	2995.7	2941.6	2915.2	2418.2	2408.1	2406.9	2369.1	1952.7	1858.3	1870.9
30°	3151.7	3088.8	2615.7	2540.3	2531.5	2511.3	2294.9	1928.8	1927.5	1928.8
32.5°	3331.7	3122.8	2691.2	2687.5	2692.5	2630.8	2033.2	2025.7	2024.4	2037.0
35°	3578.3	2897.6	2880.0	2898.8	2872.4	2274.8	2155.3	2151.5	2152.7	2146.4
37.5°	3414.7	3124.1	3120.3	3120.3	3058.6	2327.6	2303.7	2321.3	2318.8	2310.0
40°	3483.9	3398.3	3375.7	3368.1	2585.6	2511.3	2497.5	2520.1	2523.9	2530.2
42.5°	3819.8	3741.8	3730.5	3641.2	2813.3	2789.4	2746.6	2770.5	2768.0	2775.5
45°	4232.5	4179.7	4130.6	3156.8	3120.3	3090.1	3046.0	3073.7	3081.3	3076.2
47.5°	4713.1	4655.3	4300.4	3471.3	3470.1	3446.1	3397.1	3419.7	3415.9	3415.9
50°	5196.3	5133.4	3906.6	3871.4	3858.8	3821.1	3780.8	3784.6	3785.9	3798.4
52.5°	5736.0	4584.8	4324.4	4253.9	4264.0	4238.8	4199.8	3179.4	4180.9	4192.2
55°	5361.1	4798.7	4783.6	4690.5	4714.4	4681.7	4656.5	3136.6	4158.3	4594.9
57.5°	5300.7	5260.4	5247.9	5152.2	5182.4	4871.7	5104.4	3432.3	2876.2	2101.2
60°	5762.4	5719.7	5712.1	5627.8	5625.3	3871.4	4640.2	2354.0	1839.5	1852.0
62.5°	6210.4	6141.2	6160.0	6060.6	4272.8	2359.1	2079.8	52.8	84.3	89.3
65°	6709.9	6594.1	6613.0	6521.1	4407.4	2487.4	2248.4	27.7	23.9	22.6
67.5°	7190.5	6987.9	6891.0	6794.2	4577.2	2619.5	2342.7	7.5	0.0	0.0
68°	7166.6	6952.7	6853.3	6761.4	4559.6	2615.7	2337.7	7.5	0.0	0.0
70°	6762.7	6570.2	6475.8	6405.4	4353.3	2526.4	2243.3	7.5	0.0	0.0
72.5°	5912.2	5805.2	5744.8	5683.2	3867.6	2259.7	2011.8	7.5	0.0	0.0
75°	5023.9	4993.7	4956.0	4820.1	3223.4	1849.5	1653.2	7.5	0.0	0.0
77.5°	3980.9	3979.6	3887.8	3728.0	2427.0	1357.6	1219.2	6.3	0.0	0.0
80°	2152.7	2346.5	2276.0	2194.3	1376.4	738.5	703.3	5.0	0.0	0.0
82.5°	605.2	572.5	549.8	514.6	289.4	161.0	157.3	5.0	0.0	0.0
85°	84.3	93.1	103.2	117.0	66.7	42.8	37.7	2.5	0.0	0.0
87.5°	47.8	54.1	66.7	69.2	25.2	20.1	6.3	0.0	0.0	0.0
90°	10.1	11.3	12.6	12.6	5.0	5.0	0.0	0.0	0.0	0.0
92.5°	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.3	1.3	1.3	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°
110°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.3	1.3	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)