

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: P522114

Luminaire Tested: **CTN-CA10-210-730-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522114  
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-CA10-210-730-U-T5R-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26401 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G4

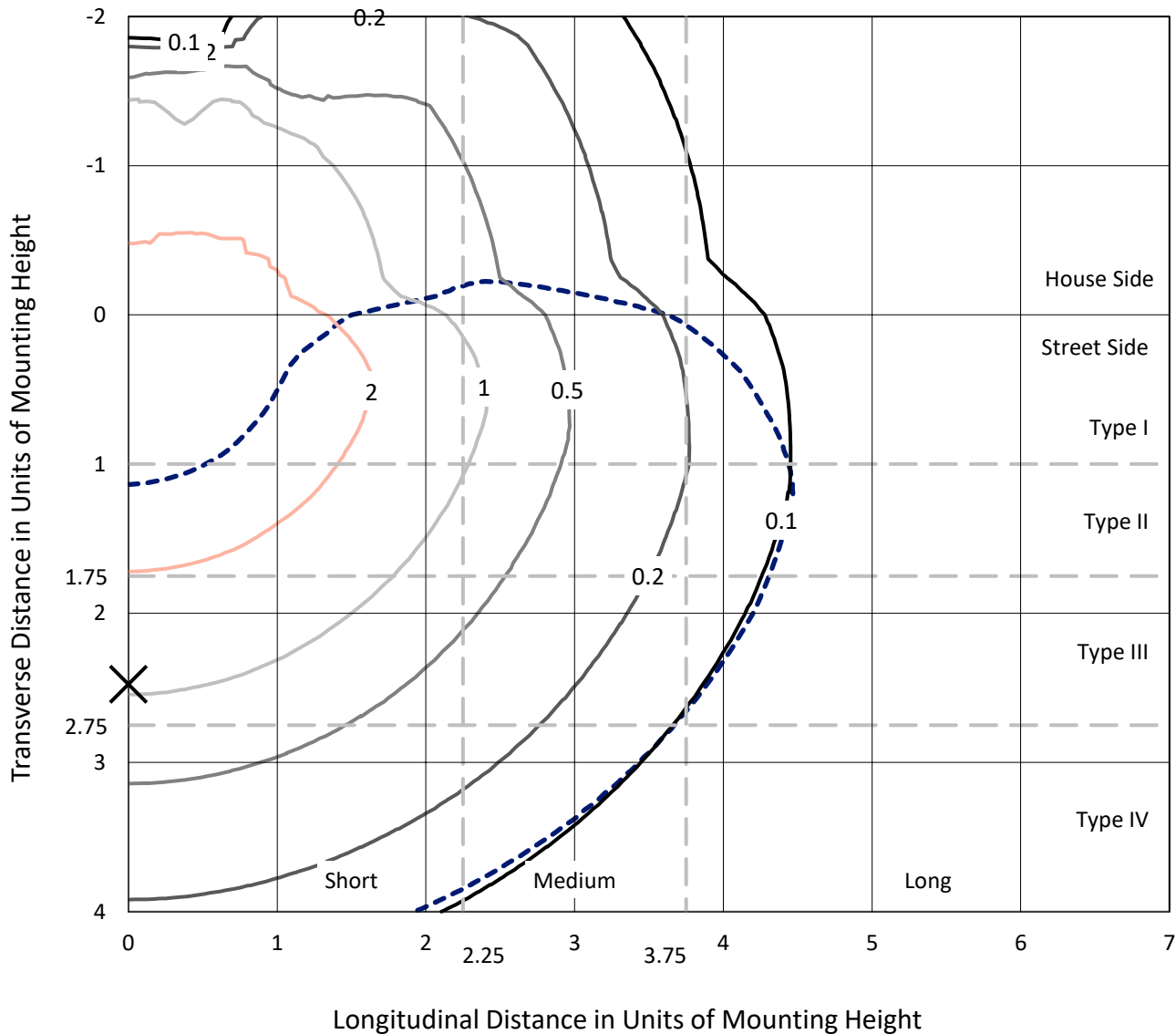
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

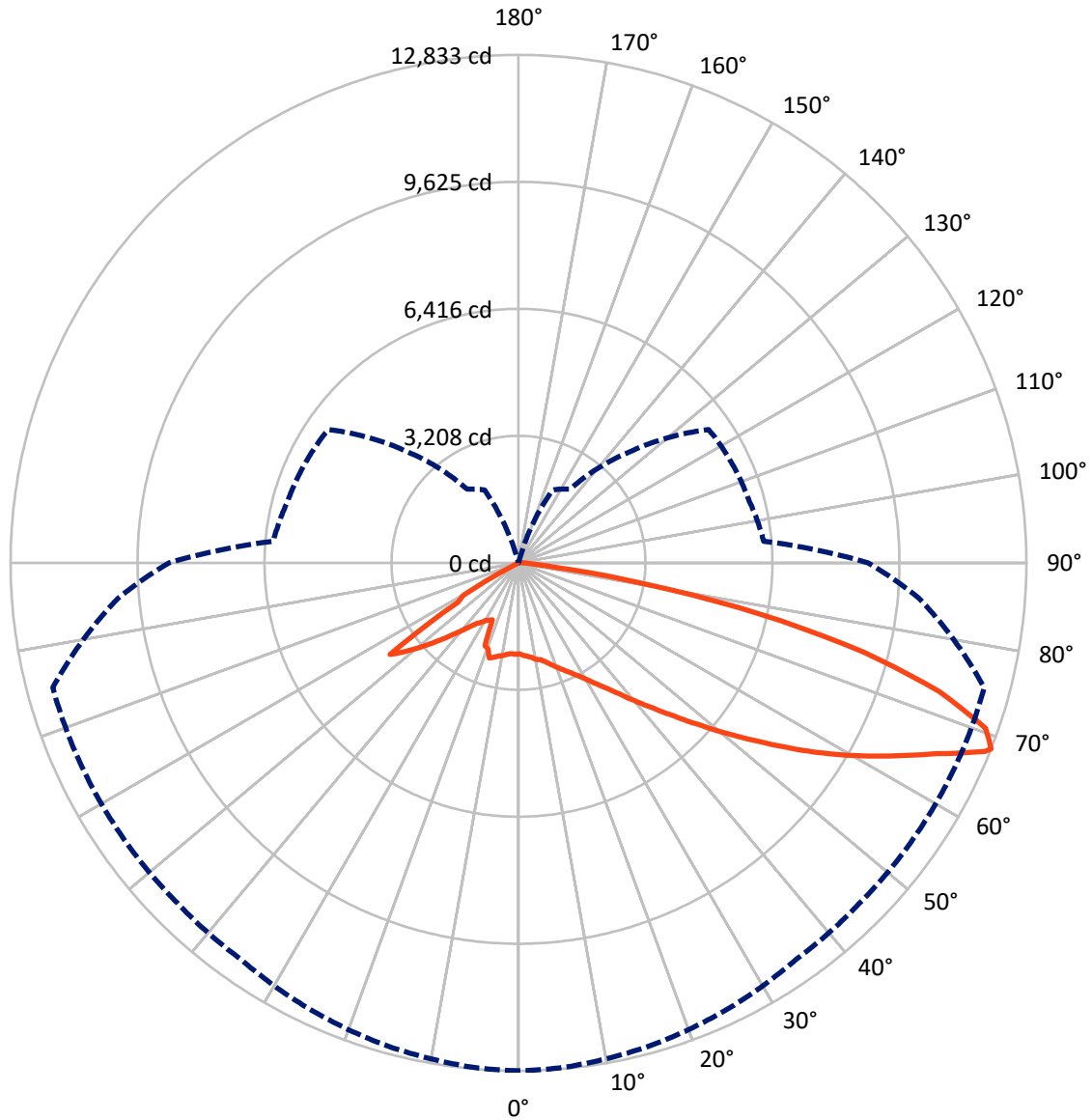
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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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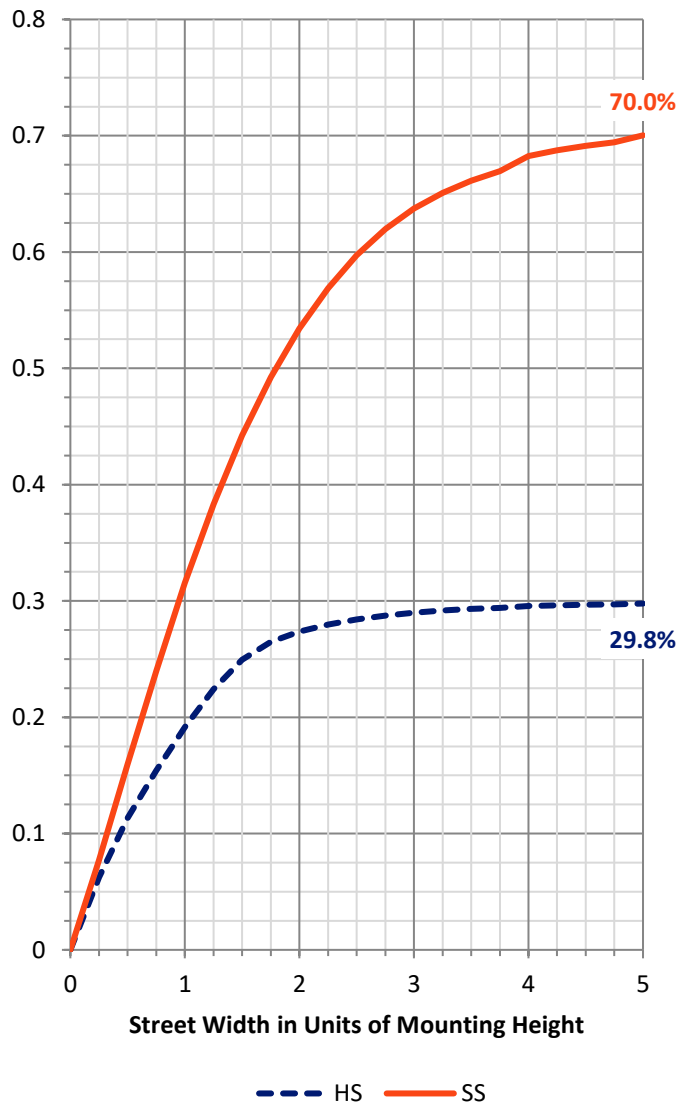
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7869.8	1.2	7871.1
	% Fixture	29.8	0.0	29.8
<b>Street Side</b>	Lumens	18519.1	10.8	18530.0
	% Fixture	70.1	0.0	70.2
<b>Total</b>	Lumens	26389.0	12.0	26401.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.4	0.8
10°-20°	711.0	2.7
20°-30°	1217.8	4.6
30°-40°	1975.6	7.5
40°-50°	3331.8	12.6
50°-60°	5430.9	20.6
60°-70°	7283.7	27.6
70°-80°	5657.6	21.4
80°-90°	557.2	2.1
90°-100°	10.6	0.0
100°-110°	0.6	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°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	26389.0	100.0
0°-180°	26401.0	100.0

**Coefficient of Utilization**

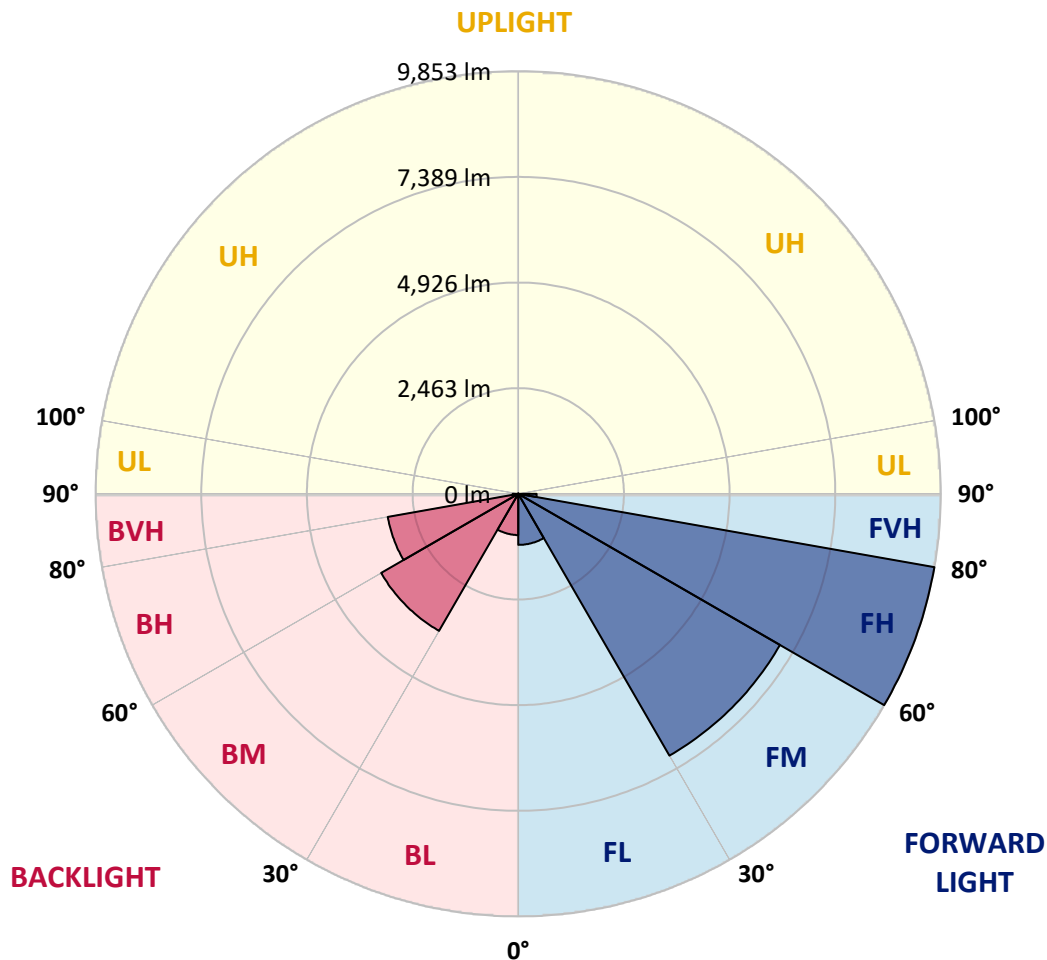


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1190.8	4.5			
FM (30°-60°)	7047.4	26.7			
FH (60°-80°)	9852.5	37.3			G4/12000
FVH (80°-90°)	428.4	1.6			G3/500
BL (0°-30°)	961.4	3.6	B2/1000		
BM (30°-60°)	3690.9	14.0	B3/5000		
BH (60°-80°)	3088.7	11.7	B4/5000		G4/5000
BVH (80°-90°)	128.8	0.5			G2/225
UL (90°-100°)	10.6	0.0		U2/50	
UH (100°-180°)	1.5	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°	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7
2.5°	2339.9	2333.3	2332.3	2345.4	2303.9	2324.6	2306.0	2321.3	2311.5	2319.1	2320.2
5°	2371.6	2359.5	2351.9	2367.2	2341.0	2350.8	2330.1	2336.6	2309.3	2324.6	2326.8
7.5°	2417.4	2397.8	2395.6	2399.9	2377.0	2384.7	2350.8	2358.5	2338.8	2330.1	2337.7
10°	2479.7	2461.1	2446.9	2456.7	2426.2	2430.5	2394.5	2395.6	2381.4	2365.0	2378.1
12.5°	2514.6	2516.8	2510.2	2517.9	2492.8	2478.6	2453.5	2444.7	2430.5	2410.9	2404.3
15°	2601.9	2597.6	2584.5	2596.5	2593.2	2580.1	2549.5	2529.9	2499.3	2488.4	2477.5
17.5°	2708.9	2694.8	2683.8	2699.1	2715.5	2688.2	2658.7	2631.4	2591.0	2569.2	2556.1
20°	2821.4	2811.6	2800.7	2824.7	2830.1	2809.4	2787.6	2747.2	2700.2	2671.8	2644.5
22.5°	2947.0	2927.3	2930.6	2962.3	2952.4	2942.6	2914.2	2881.5	2824.7	2788.7	2710.0
25°	3076.9	3066.0	3081.3	3095.5	3087.8	3067.1	3052.9	3028.9	2965.5	2921.9	2807.2
27.5°	3238.5	3221.0	3240.7	3246.2	3239.6	3234.1	3214.5	3195.9	3127.1	3078.0	2935.0
30°	3428.5	3407.8	3439.4	3431.8	3425.2	3429.6	3417.6	3377.2	3316.0	3249.4	3106.4
32.5°	3654.5	3627.2	3663.3	3646.9	3631.6	3662.2	3633.8	3595.6	3523.5	3446.0	3306.2
35°	3916.6	3917.7	3936.2	3908.9	3903.5	3936.2	3917.7	3870.7	3804.1	3723.3	3524.6
37.5°	4234.3	4225.6	4272.5	4259.4	4239.8	4283.4	4288.9	4229.9	4109.8	4030.1	3795.4
40°	4620.8	4618.6	4633.9	4636.1	4630.7	4651.4	4661.2	4582.6	4505.1	4385.0	3581.4
42.5°	5033.6	5042.3	5069.6	5049.9	5076.1	5103.4	5106.7	5041.2	4929.8	4207.0	3804.1
45°	5529.3	5556.6	5575.1	5570.8	5582.8	5622.1	5625.4	5590.4	5481.2	4557.5	4208.1
47.5°	6098.1	6124.3	6129.8	6164.7	6153.8	6209.5	6201.9	6203.0	6086.1	5045.6	4648.1
50°	6752.2	6764.2	6809.0	6828.6	6801.3	6876.6	6857.0	6881.0	6736.9	5604.6	5120.9
52.5°	7446.6	7467.4	7485.9	7560.2	7525.2	7590.7	7564.5	7620.2	7453.2	6173.5	5646.1
55°	8236.0	8239.3	8271.0	8346.3	8300.5	8379.1	8340.9	8361.6	8228.4	6802.4	6193.1
57.5°	9072.4	9061.5	9073.5	9133.6	9092.1	9151.0	9135.7	9155.4	9030.9	7464.1	6592.8
60°	9900.1	9883.7	9901.2	9941.6	9884.8	9986.3	9931.7	9950.3	9816.0	8140.0	7162.7
62.5°	10732.1	10720.1	10700.4	10740.8	10657.8	10710.2	10733.2	10702.6	10584.7	8751.4	7658.4
65°	11625.2	11613.2	11541.2	11566.3	11417.8	11392.7	11401.4	11411.2	11332.6	9357.4	8202.2
67.5°	12710.6	12693.1	12557.7	12387.4	12173.4	12126.4	12130.8	12157.0	12167.9	10137.0	8838.8
68°	12832.8	12801.2	12650.5	12452.9	12229.0	12174.4	12169.0	12174.4	12179.9	10143.5	8832.2
70°	12520.6	12508.6	12393.9	12154.8	11925.5	11794.5	11680.9	11676.5	11624.1	9624.9	8344.1
72.5°	11111.0	11095.7	10959.2	10789.9	10648.0	10442.7	10295.3	10304.1	10217.8	8506.8	7303.6
75°	8991.6	8990.5	8826.7	8684.8	8687.0	8671.7	8622.6	8708.8	8619.3	7215.1	6229.2
77.5°	6266.3	6288.1	6277.2	6194.2	6311.1	6472.7	6648.4	6814.4	6763.1	5699.6	4967.0
80°	3273.5	3334.6	3550.8	3560.6	3642.5	3799.7	3919.8	4031.2	4038.9	3234.1	2869.5
82.5°	870.2	888.8	961.9	941.2	934.6	966.3	992.5	995.8	998.0	842.9	787.2
85°	270.8	278.4	269.7	257.7	239.1	218.4	212.9	173.6	137.6	113.6	99.4
87.5°	192.2	205.3	185.6	174.7	155.0	147.4	132.1	103.7	80.8	56.8	38.2
90°	99.4	101.5	90.6	77.5	72.1	67.7	57.9	41.5	20.7	10.9	9.8
92.5°	50.2	51.3	44.8	38.2	32.8	28.4	21.8	12.0	6.6	3.3	1.1
95°	19.7	20.7	18.6	16.4	13.1	9.8	8.7	6.6	4.4	2.2	1.1
97.5°	6.6	6.6	6.6	5.5	5.5	5.5	5.5	4.4	3.3	2.2	1.1
100°	0.0	0.0	0.0	1.1	2.2	3.3	3.3	3.3	2.2	1.1	1.1
102.5°	0.0	0.0	0.0	0.0	0.0	1.1	2.2	2.2	2.2	1.1	1.1
105°	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	1.1
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1



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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	1.1	1.1	1.1
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
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	1.1
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1
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°	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7	2301.7
2.5°	2314.8	2308.2	2311.5	2284.2	2290.8	2273.3	2310.4	2300.6	2296.2	2311.5
5°	2320.2	2296.2	2315.9	2297.3	2300.6	2275.5	2306.0	2294.0	2292.9	2301.7
7.5°	2322.4	2310.4	2329.0	2298.4	2308.2	2298.4	2321.3	2309.3	2320.2	2327.9
10°	2353.0	2346.4	2344.3	2333.3	2341.0	2319.1	2347.5	2347.5	2353.0	2373.7
12.5°	2397.8	2389.0	2383.6	2363.9	2371.6	2365.0	2387.9	2392.3	2402.1	2410.9
15°	2458.9	2443.6	2438.2	2420.7	2426.2	2425.1	2441.4	2442.5	2464.4	2463.3
17.5°	2537.5	2515.7	2522.2	2509.1	2510.2	2501.5	2492.8	2492.8	2512.4	2516.8
20°	2631.4	2507.0	2343.2	2251.5	2235.1	2247.1	2294.0	2371.6	2274.4	2301.7
22.5°	2462.2	2349.7	2342.1	2321.3	2308.2	2015.6	1940.3	1916.2	2041.8	2258.0
25°	2484.0	2436.0	2421.8	2395.6	2009.1	2005.8	1983.9	1947.9	1592.0	1584.3
27.5°	2599.8	2552.8	2529.9	2098.6	2089.9	2088.8	2056.0	1694.6	1612.7	1623.6
30°	2735.2	2680.6	2270.0	2204.5	2196.9	2179.4	1991.6	1673.8	1672.8	1673.8
32.5°	2891.3	2710.0	2335.5	2332.3	2336.6	2283.1	1764.5	1757.9	1756.8	1767.8
35°	3105.3	2514.6	2499.3	2515.7	2492.8	1974.1	1870.4	1867.1	1868.2	1862.7
37.5°	2963.4	2711.1	2707.9	2707.9	2654.4	2020.0	1999.2	2014.5	2012.3	2004.7
40°	3023.4	2949.2	2929.5	2923.0	2243.8	2179.4	2167.4	2187.0	2190.3	2195.8
42.5°	3314.9	3247.2	3237.4	3159.9	2441.4	2420.7	2383.6	2404.3	2402.1	2408.7
45°	3673.1	3627.2	3584.6	2739.5	2707.9	2681.7	2643.4	2667.5	2674.0	2669.6
47.5°	4090.2	4039.9	3732.0	3012.5	3011.4	2990.7	2948.1	2967.7	2964.4	2964.4
50°	4509.5	4454.9	3390.3	3359.7	3348.8	3316.0	3281.1	3284.4	3285.5	3296.4
52.5°	4977.9	3978.8	3752.8	3691.6	3700.4	3678.5	3644.7	2759.2	3628.3	3638.1
55°	4652.5	4164.4	4151.3	4070.5	4091.3	4062.9	4041.0	2722.1	3608.7	3987.5
57.5°	4600.1	4565.1	4554.2	4471.2	4497.4	4227.8	4429.7	2978.6	2496.0	1823.4
60°	5000.8	4963.7	4957.1	4884.0	4881.8	3359.7	4026.8	2042.9	1596.3	1607.2
62.5°	5389.5	5329.5	5345.8	5259.6	3708.0	2047.3	1804.9	45.9	73.2	77.5
65°	5823.0	5722.5	5738.9	5659.2	3824.8	2158.6	1951.2	24.0	20.7	19.7
67.5°	6240.1	6064.3	5980.2	5896.1	3972.3	2273.3	2033.1	6.6	0.0	0.0
68°	6219.3	6033.7	5947.5	5867.8	3957.0	2270.0	2028.7	6.6	0.0	0.0
70°	5868.8	5701.8	5619.9	5558.8	3777.9	2192.5	1946.8	6.6	0.0	0.0
72.5°	5130.7	5037.9	4985.5	4932.0	3356.4	1961.0	1745.9	6.6	0.0	0.0
75°	4359.9	4333.7	4300.9	4183.0	2797.4	1605.1	1434.7	6.6	0.0	0.0
77.5°	3454.7	3453.6	3373.9	3235.2	2106.2	1178.1	1058.0	5.5	0.0	0.0
80°	1868.2	2036.4	1975.2	1904.2	1194.5	640.9	610.4	4.4	0.0	0.0
82.5°	525.2	496.8	477.2	446.6	251.1	139.8	136.5	4.4	0.0	0.0
85°	73.2	80.8	89.5	101.5	57.9	37.1	32.8	2.2	0.0	0.0
87.5°	41.5	47.0	57.9	60.1	21.8	17.5	5.5	0.0	0.0	0.0
90°	8.7	9.8	10.9	10.9	4.4	4.4	0.0	0.0	0.0	0.0
92.5°	0.0	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.1	1.1	1.1	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°	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.1	1.1	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)