

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: P579497

Luminaire Tested: **CTN-CA6-230-740-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-740-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21248 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G4

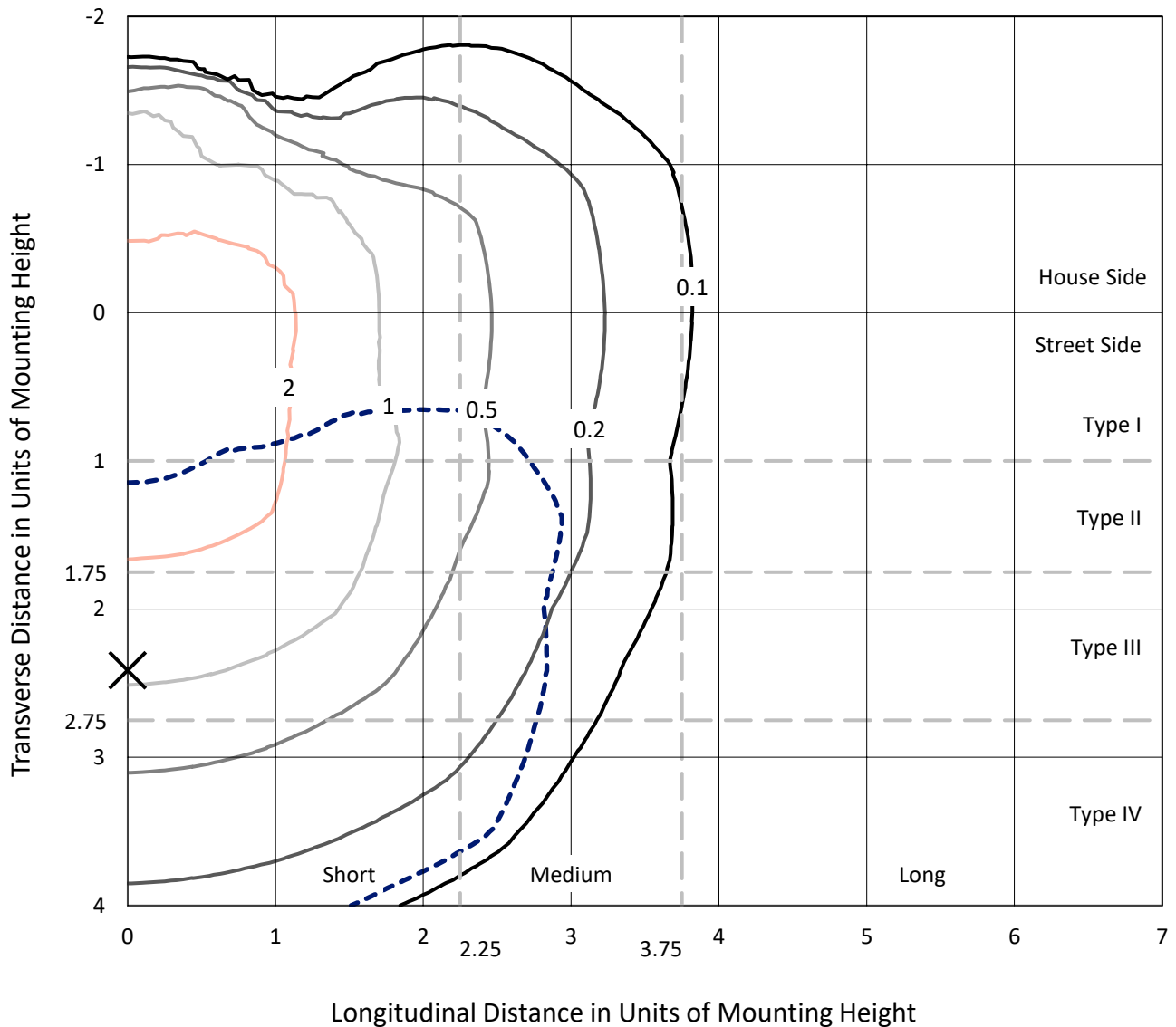
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

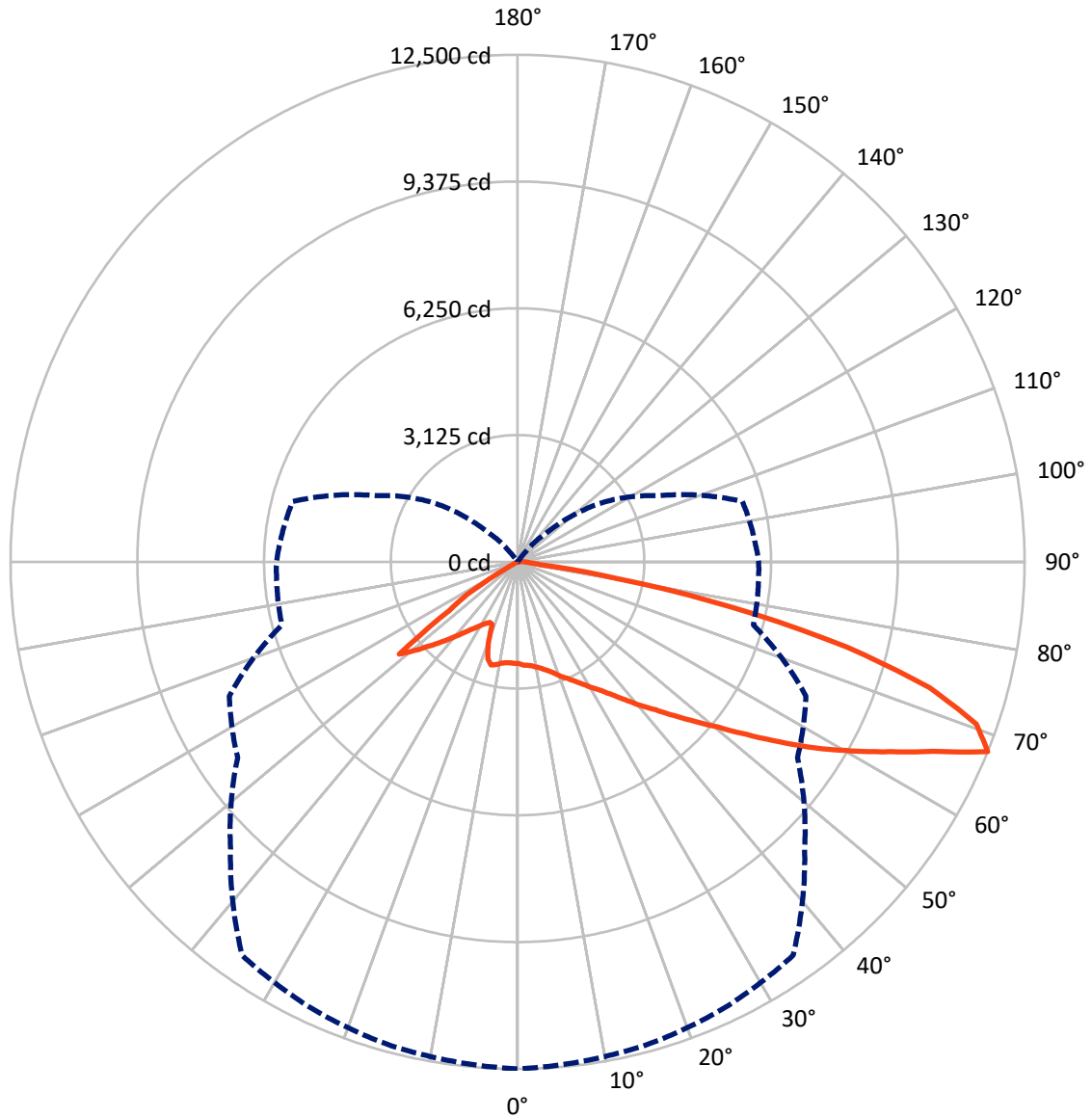
× Max cd
 - - - 1/2 Max cd



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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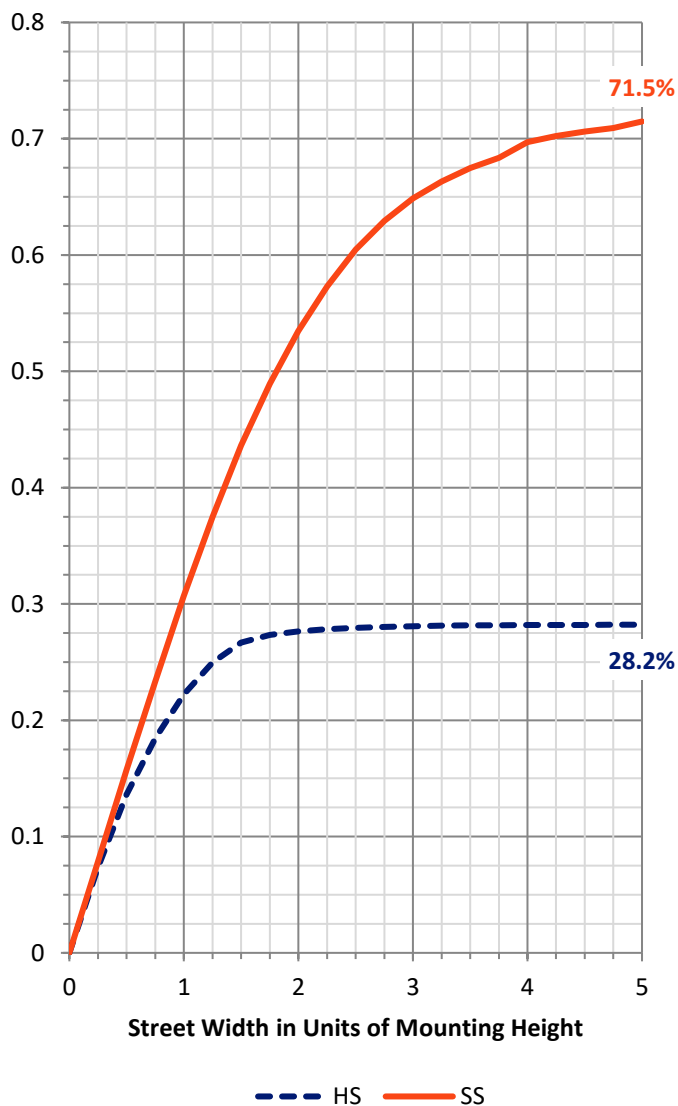
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6022.1	0.1	6022.2
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	15198.8	27.1	15225.8
	% Fixture	71.5	0.1	71.7
Total	Lumens	21220.8	27.1	21248.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.3	1.1
10°-20°	742.9	3.5
20°-30°	1230.2	5.8
30°-40°	1936.5	9.1
40°-50°	3030.6	14.3
50°-60°	4375.7	20.6
60°-70°	5420.8	25.5
70°-80°	3947.8	18.6
80°-90°	294.9	1.4
90°-100°	23.2	0.1
100°-110°	3.9	0.0
110°-120°	0.1	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°	21220.8	99.9
0°-180°	21248.0	100.0

Coefficient of Utilization

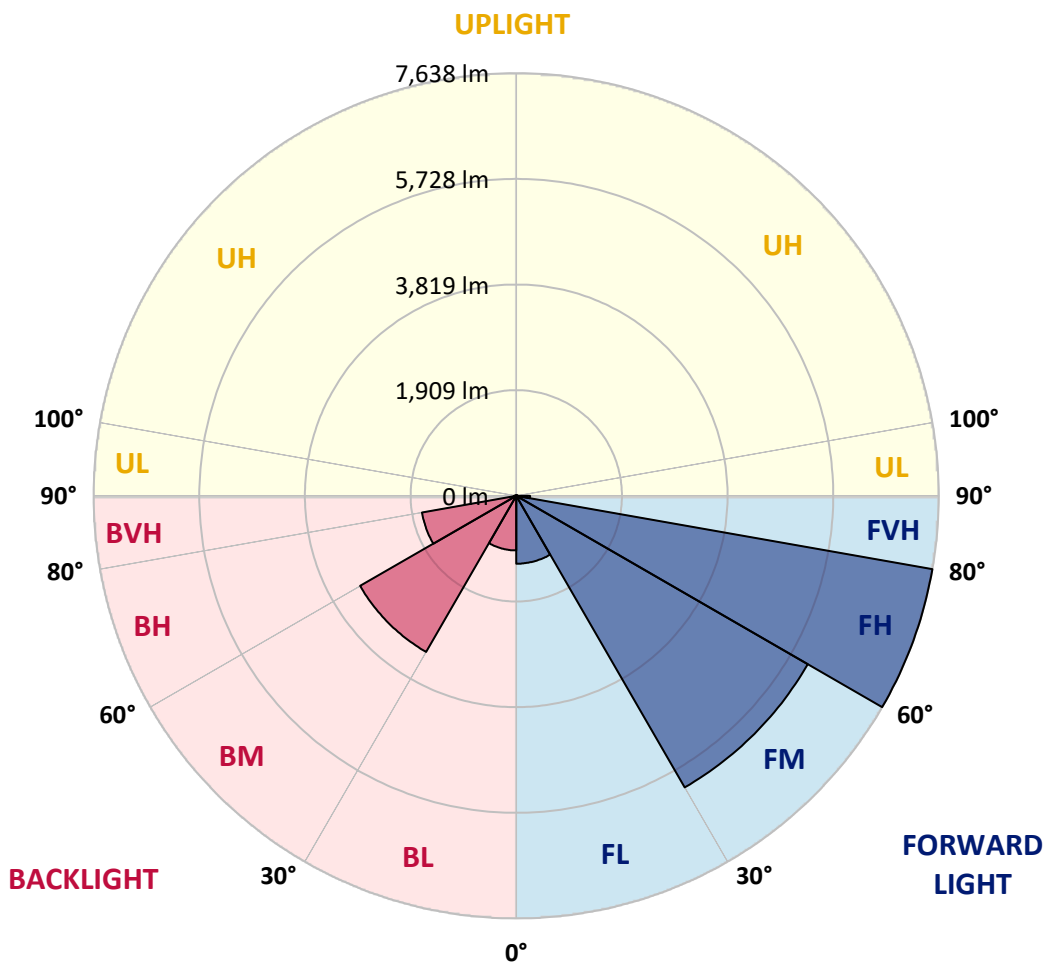


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1227.2	5.8			
FM (30°-60°)	6084.8	28.6			
FH (60°-80°)	7638.0	35.9			G4/12000
FVH (80°-90°)	248.8	1.2			G3/500
BL (0°-30°)	987.2	4.6	B2/1000		
BM (30°-60°)	3258.1	15.3	B3/5000		
BH (60°-80°)	1730.7	8.1	B3/2500		G3/2500
BVH (80°-90°)	46.2	0.2			G1/100
UL (90°-100°)	23.2	0.1		U2/50	
UH (100°-180°)	4.0	0.0		U1/10	

BUG Rating: B3-U2-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5
2.5°	2548.3	2534.4	2534.4	2549.3	2507.8	2520.6	2503.5	2518.4	2509.9	2514.2	2519.5
5°	2563.2	2547.2	2548.3	2566.4	2529.1	2539.7	2519.5	2527.0	2519.5	2522.7	2522.7
7.5°	2590.9	2577.0	2577.0	2587.7	2550.4	2553.6	2535.5	2535.5	2525.9	2533.3	2527.0
10°	2643.0	2628.1	2620.7	2626.0	2593.0	2588.7	2564.2	2564.2	2549.3	2561.0	2551.5
12.5°	2705.9	2684.6	2682.4	2683.5	2646.2	2638.8	2611.1	2612.2	2584.5	2600.4	2588.7
15°	2781.5	2754.8	2752.7	2757.0	2717.6	2703.7	2672.8	2672.8	2642.0	2650.5	2634.5
17.5°	2878.4	2847.5	2842.2	2849.6	2810.2	2797.4	2761.2	2754.8	2720.8	2714.4	2700.5
20°	3006.2	2971.0	2960.4	2976.3	2926.3	2914.6	2870.9	2857.1	2811.3	2735.7	2636.6
22.5°	3121.2	3093.5	3087.1	3097.7	3051.9	3040.2	2997.6	2968.9	2858.1	2705.9	2614.3
25°	3252.1	3241.5	3238.3	3231.9	3190.4	3170.1	3129.7	3089.2	2837.9	2629.2	2627.1
27.5°	3414.0	3408.7	3393.8	3388.4	3342.7	3329.9	3276.6	3015.7	2765.5	2750.6	2742.1
30°	3590.8	3580.1	3565.2	3566.3	3535.4	3512.0	3385.3	2950.8	2905.0	2905.0	2882.6
32.5°	3786.7	3775.0	3760.1	3763.3	3750.5	3730.3	3349.0	3122.2	3087.1	3096.7	3069.0
35°	4029.5	4010.3	4005.0	4017.8	4018.9	3887.9	3412.9	3355.4	3327.7	3321.4	3217.0
37.5°	4312.8	4296.8	4316.0	4345.8	4311.7	3928.3	3667.4	3649.3	3621.7	3467.2	3220.2
40°	4652.5	4623.7	4647.1	4666.3	4643.9	4169.0	3934.7	3941.1	3916.6	3458.7	3185.1
42.5°	4989.0	4961.3	4981.5	5029.4	5020.9	4467.2	4260.6	4274.4	4027.4	3479.0	3457.7
45°	5405.3	5395.7	5389.4	5428.8	5461.8	4823.9	4647.1	4646.1	3948.6	3800.6	3781.4
47.5°	5877.1	5864.3	5867.5	5917.5	5967.6	5249.9	5104.0	4675.9	4152.0	4166.9	4149.8
50°	6403.1	6389.3	6430.8	6503.2	6528.8	5728.0	5549.1	4595.0	4575.8	4591.8	4563.0
52.5°	7070.8	7039.9	7103.8	7181.5	7214.6	6293.4	5573.6	5073.1	5041.1	5044.3	4952.8
55°	7830.1	7805.6	7863.1	7950.4	7999.4	6924.9	6082.6	5538.4	5519.3	4976.2	4481.0
57.5°	8655.3	8627.7	8704.3	8729.9	8742.7	7577.7	6594.8	6043.2	5156.1	4543.8	4516.2
60°	9464.7	9434.8	9531.7	9536.0	9573.3	8229.4	7081.5	6529.8	4967.7	4886.7	4863.3
62.5°	10314.4	10277.2	10362.3	10359.2	10285.7	8825.7	7563.8	6997.3	5304.2	5240.3	5204.1
65°	11257.9	11230.2	11289.9	11194.0	11048.1	9442.3	8064.3	7506.3	5696.0	5684.3	5675.8
67.5°	12499.6	12445.2	12324.9	12120.5	11841.5	10007.7	8422.1	7841.8	6014.4	5960.1	5943.1
70°	12000.1	11936.2	11844.7	11620.0	11335.6	9476.4	7847.1	7334.9	5623.6	5625.8	5585.3
72.5°	10625.4	10514.6	10428.4	10113.2	9956.6	8276.2	6837.6	6365.9	4864.4	4954.9	4935.7
75°	8381.7	8268.8	8127.2	8003.6	7986.6	6713.0	5512.9	5173.2	3878.3	3944.3	3992.2
77.5°	5433.0	5391.5	5570.4	5453.2	5558.7	4622.6	3937.9	3646.1	2672.8	2840.0	2817.7
80°	2486.5	2438.6	2726.1	2645.2	2684.6	2270.3	1924.2	1848.6	1209.7	1218.2	1243.8
82.5°	562.3	543.1	563.3	517.5	504.8	427.0	375.9	340.8	214.0	226.8	238.5
85°	307.8	307.8	303.5	282.2	241.7	199.1	157.6	121.4	66.0	72.4	71.3
87.5°	216.2	210.8	209.8	187.4	160.8	136.3	108.6	77.7	37.3	25.6	23.4
90°	148.0	145.9	138.4	124.6	107.6	88.4	66.0	38.3	16.0	7.5	5.3
92.5°	107.6	105.4	100.1	88.4	73.5	59.6	43.7	25.6	12.8	5.3	1.1
95°	71.3	70.3	67.1	57.5	47.9	38.3	27.7	16.0	10.6	4.3	1.1
97.5°	49.0	47.9	44.7	38.3	30.9	24.5	17.0	11.7	8.5	3.2	1.1
100°	33.0	31.9	29.8	24.5	19.2	14.9	10.6	8.5	6.4	3.2	1.1
102.5°	21.3	20.2	18.1	14.9	10.6	8.5	7.5	6.4	4.3	2.1	1.1
105°	12.8	11.7	9.6	7.5	6.4	5.3	5.3	4.3	3.2	1.1	1.1
107.5°	6.4	5.3	4.3	4.3	4.3	3.2	3.2	3.2	2.1	1.1	0.0
110°	1.1	1.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.1	0.0



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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°	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5	2502.5
2.5°	2514.2	2497.1	2506.7	2491.8	2488.6	2472.7	2498.2	2501.4	2499.3	2503.5
5°	2517.4	2499.3	2509.9	2491.8	2491.8	2474.8	2499.3	2499.3	2492.9	2495.0
7.5°	2525.9	2507.8	2515.2	2495.0	2496.1	2475.8	2505.7	2502.5	2497.1	2504.6
10°	2550.4	2530.2	2529.1	2509.9	2514.2	2492.9	2530.2	2530.2	2524.8	2538.7
12.5°	2589.8	2560.0	2554.6	2531.2	2539.7	2521.6	2567.4	2569.6	2570.6	2593.0
15°	2631.3	2595.1	2600.4	2572.7	2569.6	2560.0	2601.5	2599.4	2598.3	2629.2
17.5°	2689.9	2519.5	2491.8	2472.7	2468.4	2445.0	2483.3	2556.8	2518.4	2497.1
20°	2597.2	2507.8	2398.1	2360.8	2353.4	2150.0	1989.2	2061.6	2159.6	2168.1
22.5°	2513.1	2481.2	2472.7	2414.1	2089.3	2021.1	2027.5	2000.9	1768.8	1667.6
25°	2617.5	2589.8	2553.6	2195.8	2119.1	2094.6	2087.2	1814.6	1631.4	1643.1
27.5°	2733.5	2702.7	2387.5	2201.1	2218.1	2184.1	2015.8	1693.2	1682.5	1702.7
30°	2878.4	2631.3	2330.0	2319.3	2335.3	2291.6	1791.1	1767.7	1764.5	1785.8
32.5°	3043.4	2537.6	2483.3	2483.3	2475.8	2004.1	1887.0	1871.0	1879.5	1901.9
35°	2981.7	2684.6	2678.2	2704.8	2525.9	2056.3	2040.3	2012.6	2019.0	2026.5
37.5°	2913.5	2926.3	2929.5	2915.6	1842.2	2205.4	2192.6	2187.3	2180.9	2183.0
40°	3167.0	3175.5	3172.3	3045.6	1988.1	2234.1	2365.1	2355.5	2354.4	2367.2
42.5°	3463.0	3486.4	3468.3	2686.7	2183.0	1878.4	2564.2	2558.9	2556.8	2583.4
45°	3796.3	3818.7	3438.5	2877.3	2390.7	1944.5	2578.1	2776.1	2792.1	2815.5
47.5°	4157.3	4153.0	3173.3	3170.1	2634.5	2127.6	2143.6	3036.0	3062.6	3071.1
50°	4572.6	3890.0	3474.7	3357.6	2910.3	2333.2	2272.5	2785.7	3373.5	3382.1
52.5°	4484.2	3848.5	3820.8	2945.5	3157.4	2560.0	2500.3	2484.4	3497.1	3702.6
55°	4179.7	4211.6	4172.2	3231.9	2315.0	2762.3	2725.0	2709.1	2601.5	2059.5
57.5°	4518.3	4527.9	4493.8	3494.9	2354.4	1721.9	2682.4	2301.2	1495.1	1487.6
60°	4869.7	4885.7	3346.9	2567.4	1508.9	576.1	137.4	144.8	413.2	363.1
62.5°	5205.1	5221.1	3542.9	2345.9	953.1	42.6	27.7	19.2	21.3	21.3
65°	5642.8	5649.2	3792.0	2483.3	990.3	10.6	3.2	0.0	0.0	0.0
67.5°	5869.6	5738.6	3854.9	2546.1	1017.0	6.4	2.1	0.0	0.0	0.0
70°	5526.7	5386.2	3588.6	2386.4	947.7	5.3	1.1	0.0	0.0	0.0
72.5°	4869.7	4801.5	3221.3	2115.9	839.1	3.2	1.1	0.0	0.0	0.0
75°	4035.9	3945.4	2670.7	1763.4	694.3	2.1	0.0	0.0	0.0	0.0
77.5°	2870.9	2881.6	1861.4	1285.3	472.8	2.1	0.0	0.0	0.0	0.0
80°	1256.6	1285.3	815.7	589.9	167.2	1.1	0.0	0.0	0.0	0.0
82.5°	239.6	220.4	106.5	84.1	21.3	0.0	0.0	0.0	0.0	0.0
85°	78.8	86.3	39.4	31.9	9.6	0.0	0.0	0.0	0.0	0.0
87.5°	27.7	35.1	11.7	9.6	2.1	0.0	0.0	0.0	0.0	0.0
90°	4.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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°
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)