

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: P579500

Luminaire Tested: **CTN-CA6-230-740-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)
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-T5N-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: 23338 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U2 - G3

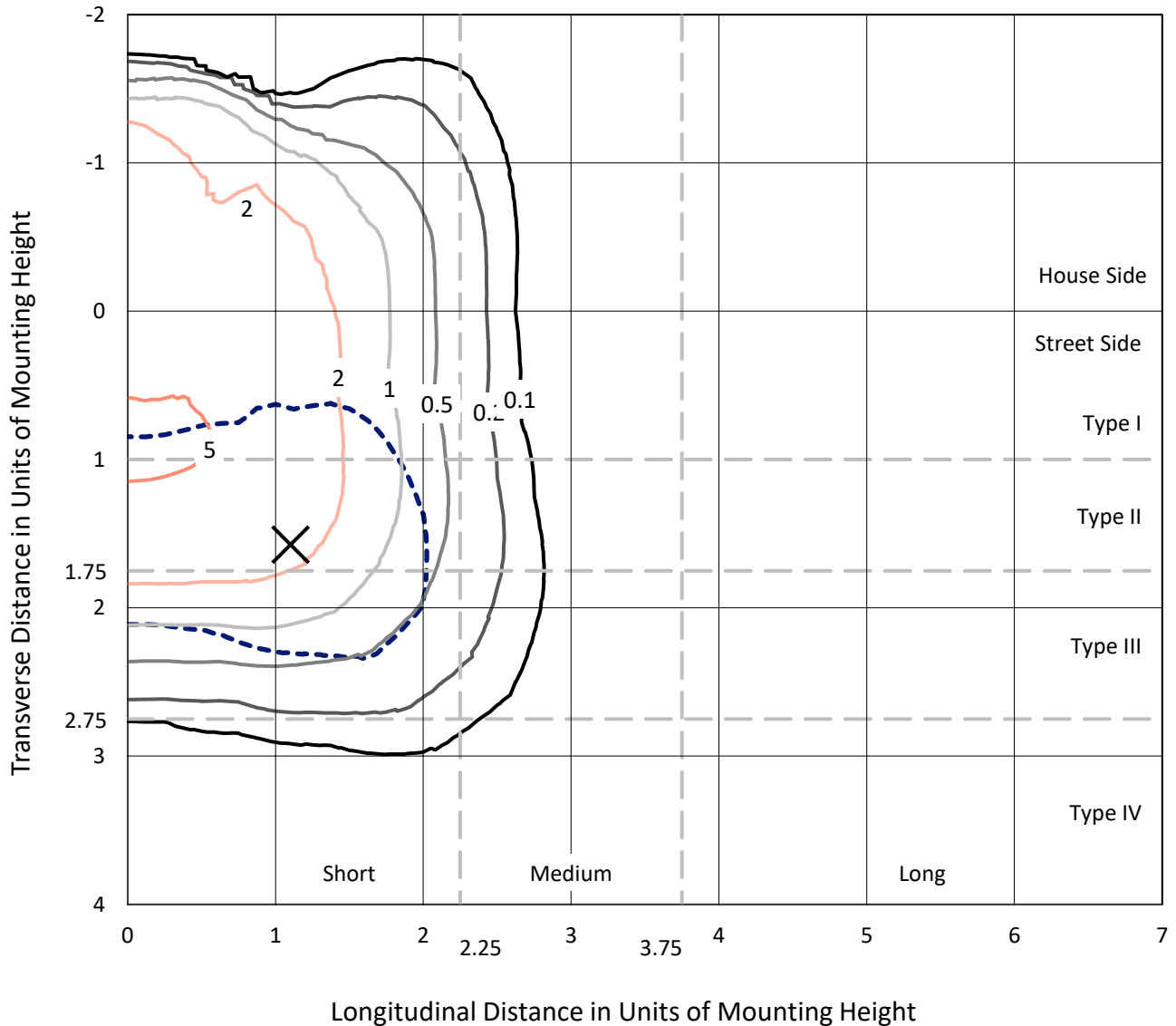
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

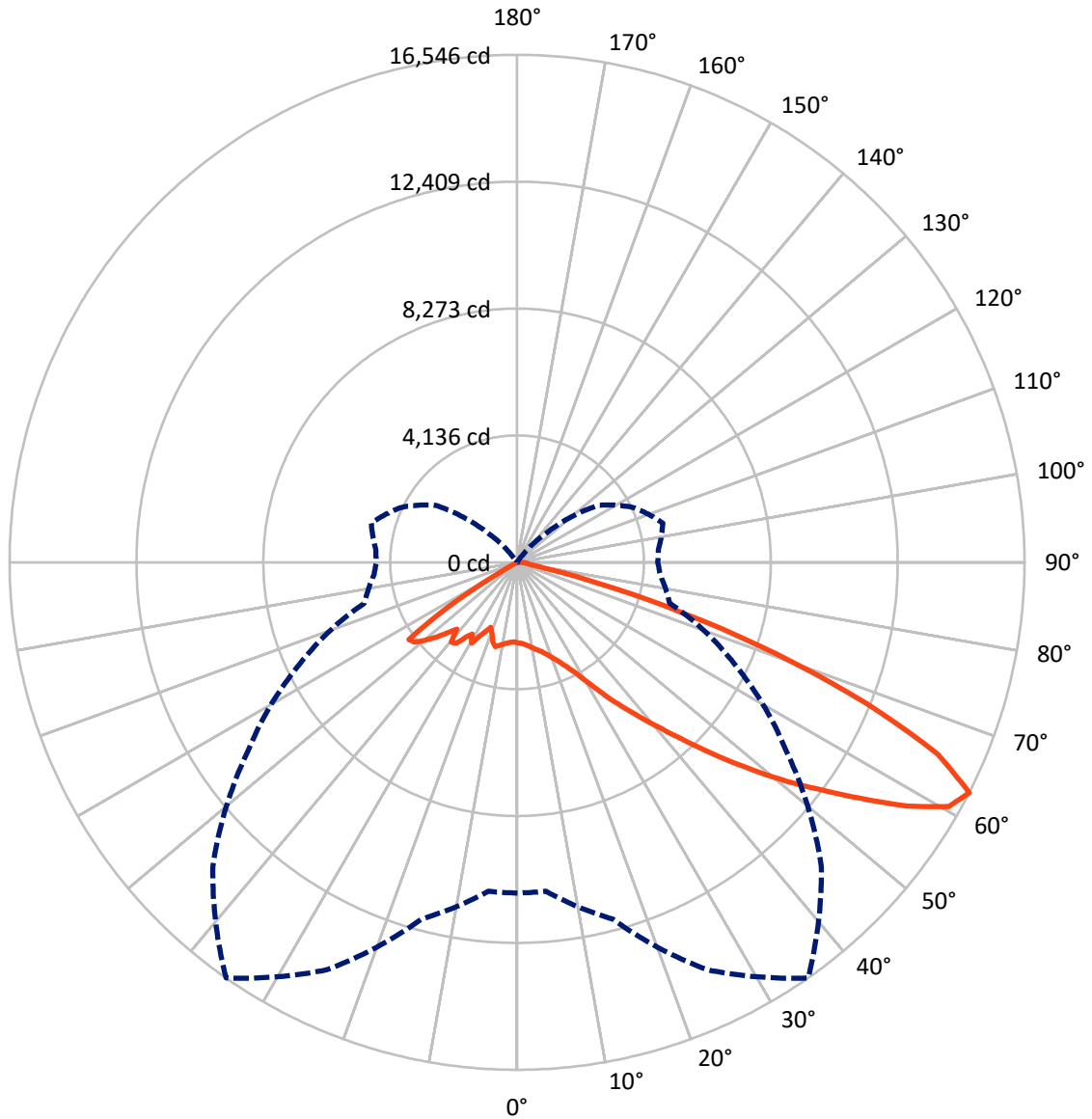
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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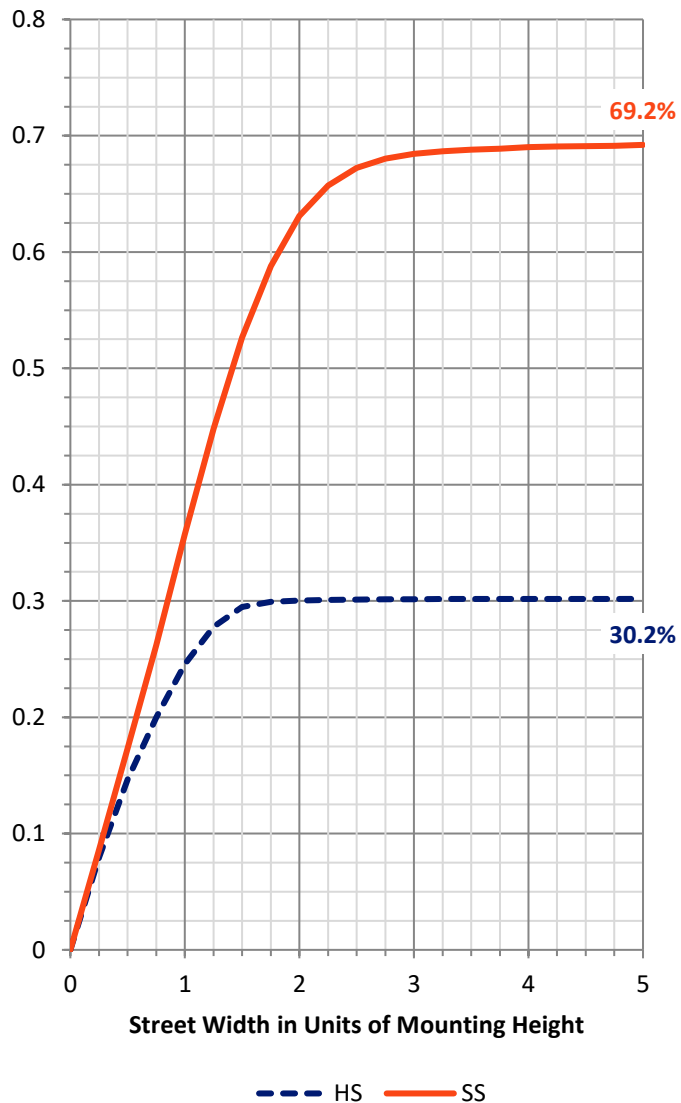
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7083.2	0.0	7083.2
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	16234.6	20.3	16254.8
	% Fixture	69.6	0.1	69.6
Total	Lumens	23317.7	20.3	23338.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.3	1.1
10°-20°	832.2	3.6
20°-30°	1521.1	6.5
30°-40°	2898.7	12.4
40°-50°	4975.5	21.3
50°-60°	6674.7	28.6
60°-70°	5074.1	21.7
70°-80°	960.8	4.1
80°-90°	121.3	0.5
90°-100°	17.8	0.1
100°-110°	2.4	0.0
110°-120°	0.0	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°	23317.7	99.9
0°-180°	23338.0	100.0

Coefficient of Utilization



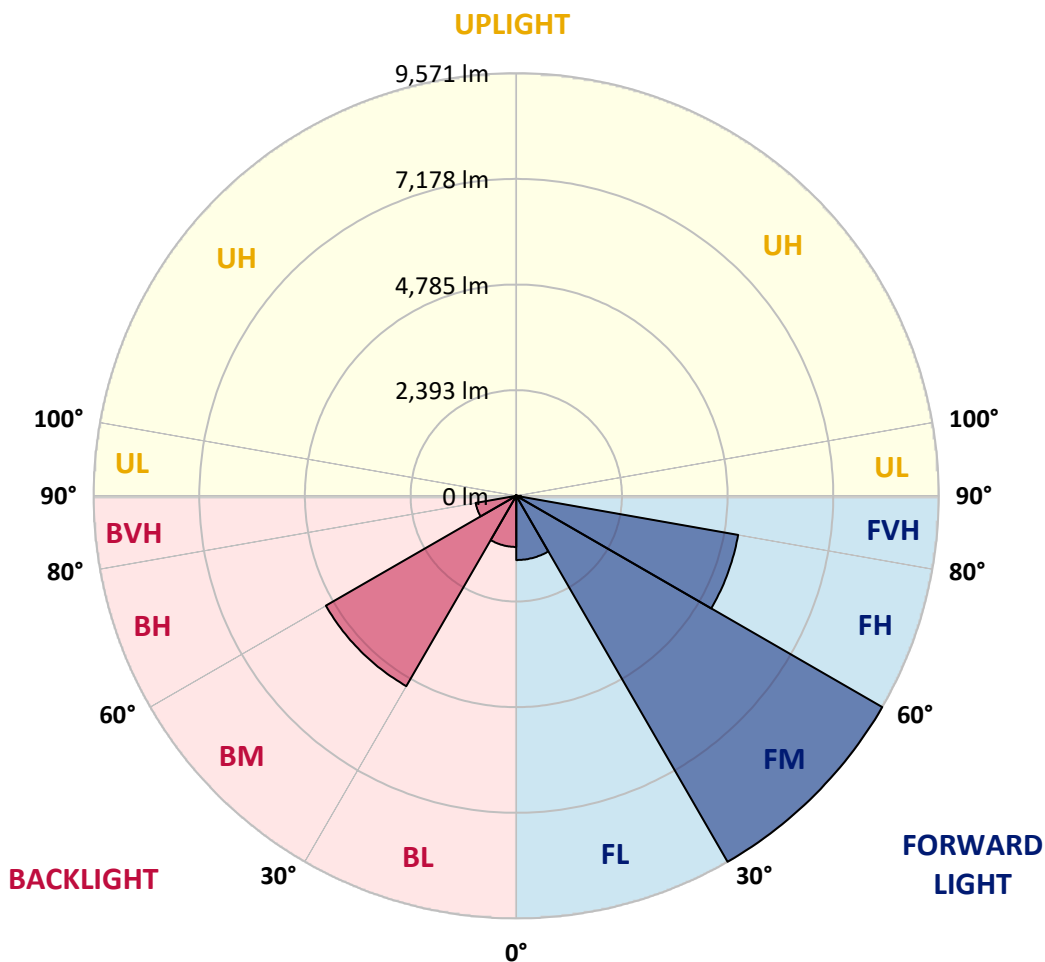
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1454.8	6.2			
FM (30°-60°)	9570.5	41.0			
FH (60°-80°)	5102.1	21.9			G3/7500
FVH (80°-90°)	107.1	0.5			G2/225
BL (0°-30°)	1157.8	5.0	B3/2500		
BM (30°-60°)	4978.4	21.3	B3/5000		
BH (60°-80°)	932.7	4.0	B2/1000		G2/1000
BVH (80°-90°)	14.2	0.1			G1/100
UL (90°-100°)	17.8	0.1		U2/50	
UH (100°-180°)	2.4	0.0		U1/10	

BUG Rating: B3-U2-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1
2.5°	2693.1	2673.2	2674.3	2692.0	2641.3	2660.0	2638.0	2660.0	2647.9	2656.7	2661.1
5°	2740.4	2720.6	2718.4	2737.1	2694.2	2707.4	2685.4	2700.8	2684.3	2695.3	2695.3
7.5°	2811.9	2792.1	2785.5	2799.8	2760.2	2770.1	2747.0	2755.8	2737.1	2751.4	2743.7
10°	2896.6	2874.6	2866.9	2874.6	2840.5	2846.0	2818.5	2828.4	2800.9	2817.4	2806.4
12.5°	2986.8	2958.2	2958.2	2964.8	2928.5	2929.6	2904.3	2909.8	2882.3	2899.9	2886.7
15°	3084.7	3052.8	3057.2	3063.8	3025.3	3031.9	3005.5	3014.3	2985.7	3003.3	2990.1
17.5°	3214.5	3180.4	3176.0	3195.8	3159.5	3171.6	3141.9	3152.9	3127.6	3133.1	3126.5
20°	3393.8	3350.9	3341.0	3367.4	3326.7	3335.5	3313.5	3335.5	3309.1	3269.5	3158.4
22.5°	3608.3	3570.9	3554.4	3572.0	3523.6	3539.0	3537.9	3573.1	3500.5	3250.8	3139.7
25°	3891.1	3865.8	3833.9	3836.1	3777.8	3800.9	3842.7	3870.2	3561.0	3342.1	3344.3
27.5°	4268.4	4243.1	4199.1	4182.6	4097.9	4154.0	4218.9	3950.5	3707.3	3763.5	3732.6
30°	4750.2	4745.8	4656.7	4628.1	4535.7	4606.1	4550.0	4090.2	4173.8	4251.9	4204.6
32.5°	5391.6	5360.8	5232.1	5180.4	5083.6	5124.3	4629.2	4563.2	4687.5	4793.1	4743.6
35°	6167.2	6073.7	5942.8	5840.4	5672.1	5445.5	4930.7	5059.4	5245.3	5390.5	5150.7
37.5°	7068.2	6966.9	6762.3	6578.6	6313.5	5607.2	5385.0	5642.4	5875.6	5718.3	5165.0
40°	7995.5	7905.3	7712.8	7476.3	7028.6	6108.9	5936.2	6244.2	6509.3	5608.3	5333.3
42.5°	8916.3	8839.3	8684.2	8451.0	7874.5	6706.2	6540.1	6871.2	6621.5	5822.8	5814.0
45°	9844.8	9806.3	9630.3	9431.2	8876.7	7470.8	7216.7	7475.2	6371.8	6336.6	6315.7
47.5°	10597.3	10603.9	10542.3	10438.9	9946.0	8310.2	7979.0	7212.3	6675.4	6713.9	6723.8
50°	11372.9	11323.4	11320.1	11326.7	11120.9	9391.6	8498.3	7093.5	7072.6	7069.3	7060.5
52.5°	11994.4	11931.7	12061.5	12164.9	12287.0	10598.4	8420.2	7496.1	7376.2	7334.4	7078.1
55°	12500.5	12476.3	12687.5	13037.3	13580.8	11876.7	9111.0	7888.8	7649.0	6672.1	6018.7
57.5°	12807.4	12842.6	13278.2	13965.8	14983.4	12936.1	9915.2	8287.1	6548.9	5876.7	5834.9
60°	12219.9	12405.9	13147.3	14656.7	16169.3	13932.8	10513.7	8367.4	5893.2	5533.5	5449.9
62.5°	10782.1	10764.5	12038.4	14656.7	16545.5	14031.8	10702.9	7798.6	5148.5	4679.8	4586.3
65°	7631.4	7677.6	9038.4	13207.8	15072.5	13051.6	9872.3	6630.3	4106.7	3676.5	3550.0
67.5°	4722.7	4719.4	6051.7	9727.1	12269.4	10927.3	8311.3	5082.5	2850.4	2444.4	2306.9
70°	1631.5	1677.7	2721.7	5691.9	9031.8	8561.0	6220.0	3209.0	1502.7	1071.5	904.3
72.5°	649.1	664.5	976.9	2537.9	5642.4	5719.4	3780.0	1558.8	449.9	286.0	268.4
75°	424.6	426.8	468.6	916.4	2738.2	3077.0	1755.8	447.7	209.0	191.4	187.0
77.5°	366.3	367.4	389.4	464.2	892.2	1196.9	499.4	265.1	174.9	157.3	152.9
80°	339.9	341.0	352.0	399.3	430.1	408.1	266.2	213.4	147.4	139.7	138.6
82.5°	321.2	325.6	331.1	359.7	347.6	306.9	221.1	172.7	113.3	121.0	124.3
85°	295.9	300.3	303.6	320.1	290.4	224.4	171.6	129.8	72.6	79.2	78.1
87.5°	222.2	224.4	220.0	217.8	202.4	157.3	113.3	82.5	28.6	26.4	24.2
90°	106.7	105.6	101.2	93.5	81.4	63.8	47.3	26.4	12.1	5.5	2.2
92.5°	84.7	83.6	81.4	73.7	63.8	47.3	34.1	18.7	11.0	4.4	1.1
95°	57.2	55.0	52.8	47.3	39.6	28.6	19.8	13.2	8.8	3.3	1.1
97.5°	37.4	36.3	33.0	28.6	22.0	15.4	12.1	9.9	7.7	3.3	1.1
100°	23.1	23.1	20.9	16.5	11.0	8.8	7.7	7.7	5.5	2.2	0.0
102.5°	14.3	13.2	12.1	7.7	5.5	5.5	5.5	5.5	4.4	2.2	0.0
105°	7.7	7.7	5.5	4.4	3.3	2.2	3.3	4.4	3.3	1.1	0.0
107.5°	2.2	2.2	2.2	1.1	1.1	0.0	1.1	2.2	2.2	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	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°	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1	2628.1
2.5°	2655.6	2634.7	2640.2	2619.3	2616.0	2594.0	2631.4	2633.6	2623.7	2634.7
5°	2689.8	2664.4	2674.3	2649.0	2644.6	2616.0	2645.7	2642.4	2634.7	2643.5
7.5°	2738.2	2712.9	2718.4	2688.7	2683.2	2651.2	2679.8	2668.8	2658.9	2671.0
10°	2805.3	2776.7	2781.1	2745.9	2741.5	2704.1	2737.1	2720.6	2706.3	2722.8
12.5°	2887.8	2850.4	2846.0	2808.6	2805.3	2770.1	2804.2	2787.7	2773.4	2799.8
15°	2982.4	2932.9	2926.3	2879.0	2873.5	2837.2	2870.2	2846.0	2835.0	2869.1
17.5°	3108.9	2934.0	2836.1	2766.8	2727.2	2707.4	2766.8	2847.1	2822.9	2824.0
20°	3057.2	2869.1	2738.2	2678.7	2635.8	2444.4	2180.4	2256.3	2410.3	2486.2
22.5°	3041.8	2975.8	2921.9	2821.8	2396.0	2288.2	2303.6	2286.0	1995.6	1884.5
25°	3336.6	3260.7	3144.1	2619.3	2496.1	2471.9	2480.7	2177.1	1958.2	1990.1
27.5°	3713.9	3635.8	3060.5	2766.8	2742.6	2710.7	2536.8	2157.3	2187.0	2217.8
30°	4189.2	3778.9	3191.4	3101.2	3056.1	3023.1	2378.4	2409.2	2458.7	2497.2
32.5°	4652.3	3766.8	3566.5	3454.3	3398.2	2758.0	2687.6	2759.1	2809.7	2839.4
35°	4657.8	4198.0	3986.8	3842.7	3486.2	2964.8	3029.7	3149.6	3273.9	3297.0
37.5°	4784.3	4686.4	4444.4	4262.9	2592.9	3309.1	3452.1	3589.6	3713.9	3721.6
40°	5288.2	5182.6	4956.0	4556.6	2863.6	3375.1	3917.5	4072.6	4177.1	4171.6
42.5°	5790.9	5718.3	5482.9	4049.5	3226.6	2924.1	4405.9	4508.2	4574.2	4620.4
45°	6297.0	6224.4	5429.0	4446.6	3658.9	3202.4	4287.1	4866.9	4939.5	4962.6
47.5°	6691.9	6512.6	4974.7	4973.6	4199.1	3558.8	3540.1	5190.3	5254.1	5237.6
50°	7057.2	5814.0	5377.3	5146.3	4757.9	3894.4	3764.6	4367.4	5539.0	5514.8
52.5°	6421.3	5642.4	5722.7	4680.9	5206.8	4227.7	4017.6	3916.4	5033.0	5680.9
55°	5742.5	5852.5	6075.9	5143.0	3777.8	4335.5	4232.1	4030.8	3396.0	2858.1
57.5°	5860.2	6024.2	6035.2	5570.9	3909.8	2708.5	3468.6	3036.3	1918.6	1923.0
60°	5467.5	5680.9	4411.4	3713.9	2102.3	564.4	55.0	48.4	334.4	407.0
62.5°	4622.6	4919.7	4211.2	3235.4	1348.7	20.9	5.5	1.1	0.0	0.0
65°	3579.7	3937.3	3558.8	2792.1	1196.9	6.6	0.0	0.0	0.0	0.0
67.5°	2360.8	2683.2	2704.1	2335.5	997.8	3.3	0.0	0.0	0.0	0.0
70°	989.0	1392.7	1683.2	1736.0	784.4	1.1	0.0	0.0	0.0	0.0
72.5°	286.0	442.2	809.7	1042.9	498.3	0.0	0.0	0.0	0.0	0.0
75°	190.3	203.5	234.3	469.7	248.6	0.0	0.0	0.0	0.0	0.0
77.5°	157.3	160.6	134.2	128.7	71.5	0.0	0.0	0.0	0.0	0.0
80°	143.0	140.8	107.8	75.9	26.4	0.0	0.0	0.0	0.0	0.0
82.5°	132.0	125.4	78.1	39.6	17.6	0.0	0.0	0.0	0.0	0.0
85°	89.1	88.0	35.2	24.2	3.3	0.0	0.0	0.0	0.0	0.0
87.5°	24.2	30.8	7.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	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)