

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: P579429

Luminaire Tested: **CTN-CA10-210-730-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-730-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28255 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

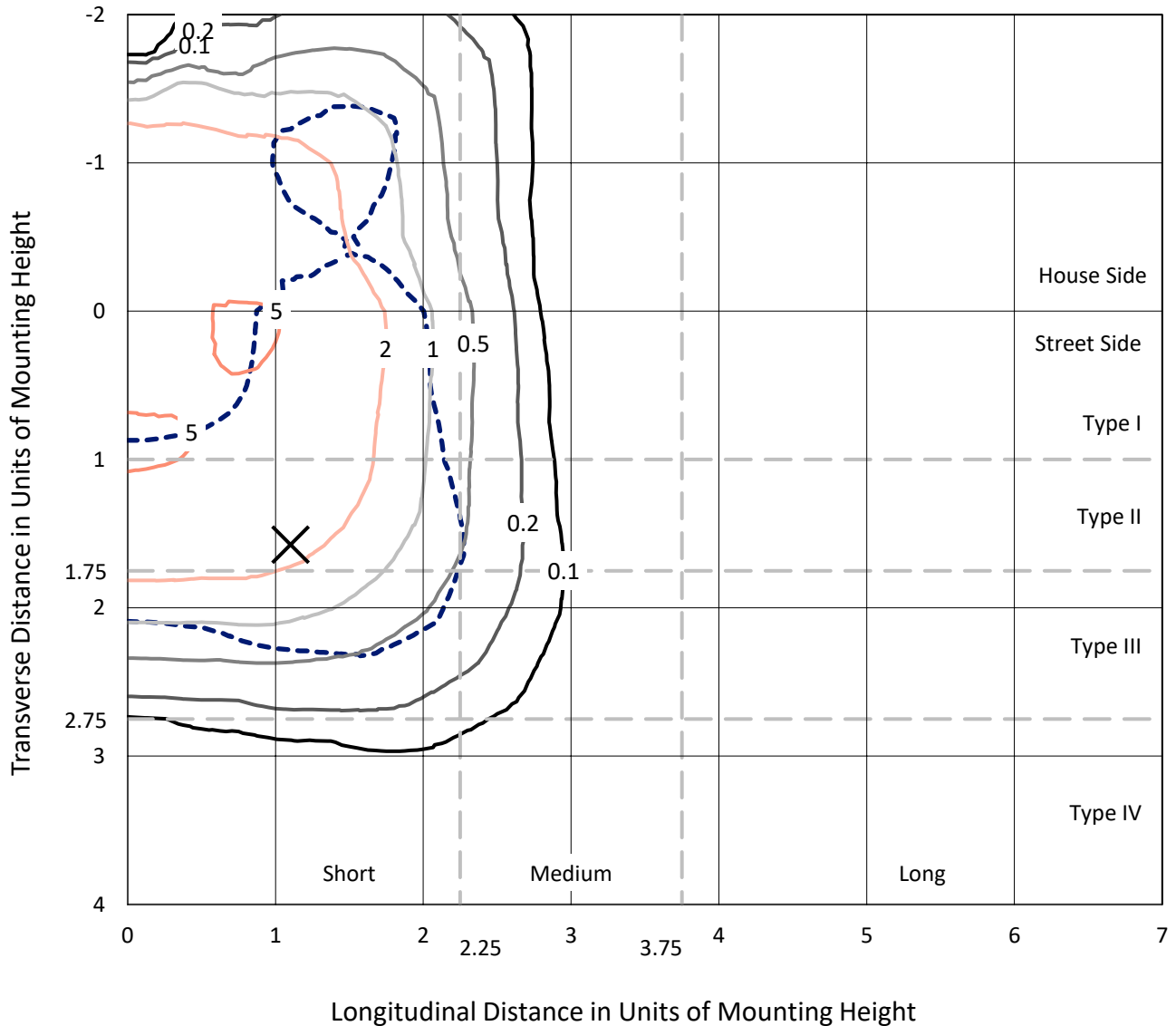
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

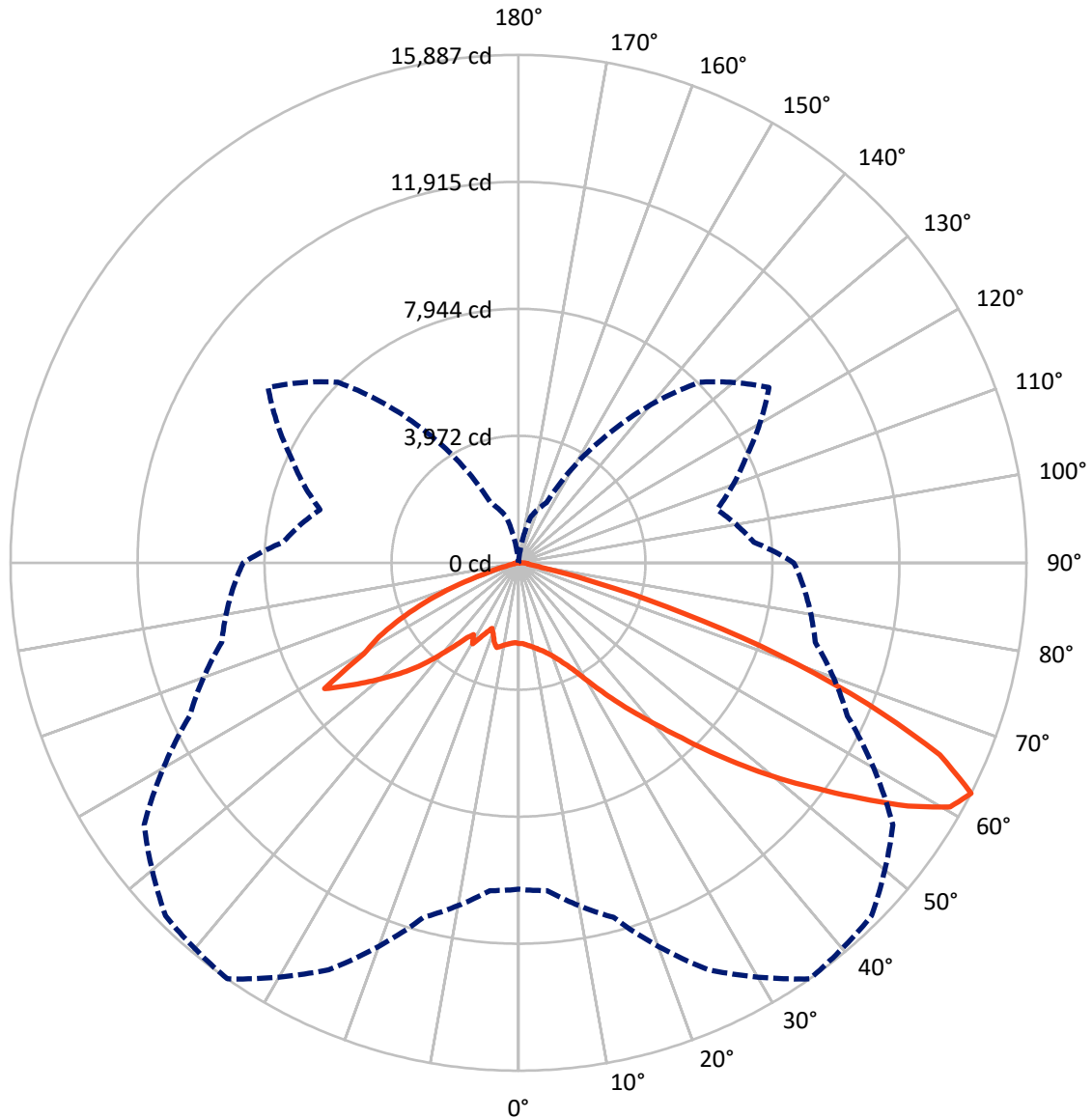
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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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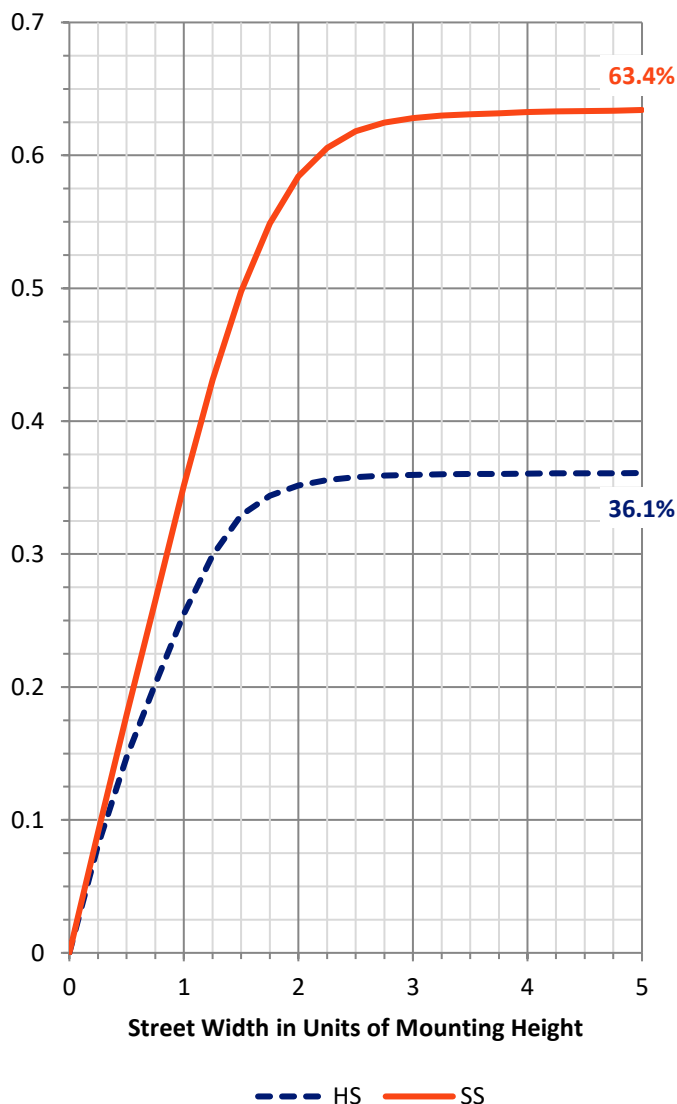
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10255.9	0.0	10255.9
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	17985.7	13.4	17999.1
	% Fixture	63.7	0.0	63.7
Total	Lumens	28241.6	13.4	28255.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.6	0.9
10°-20°	803.3	2.8
20°-30°	1545.4	5.5
30°-40°	3083.0	10.9
40°-50°	5629.4	19.9
50°-60°	8412.3	29.8
60°-70°	7048.7	24.9
70°-80°	1319.1	4.7
80°-90°	151.8	0.5
90°-100°	12.1	0.0
100°-110°	1.3	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°	28241.6	100.0
0°-180°	28255.0	100.0

Coefficient of Utilization



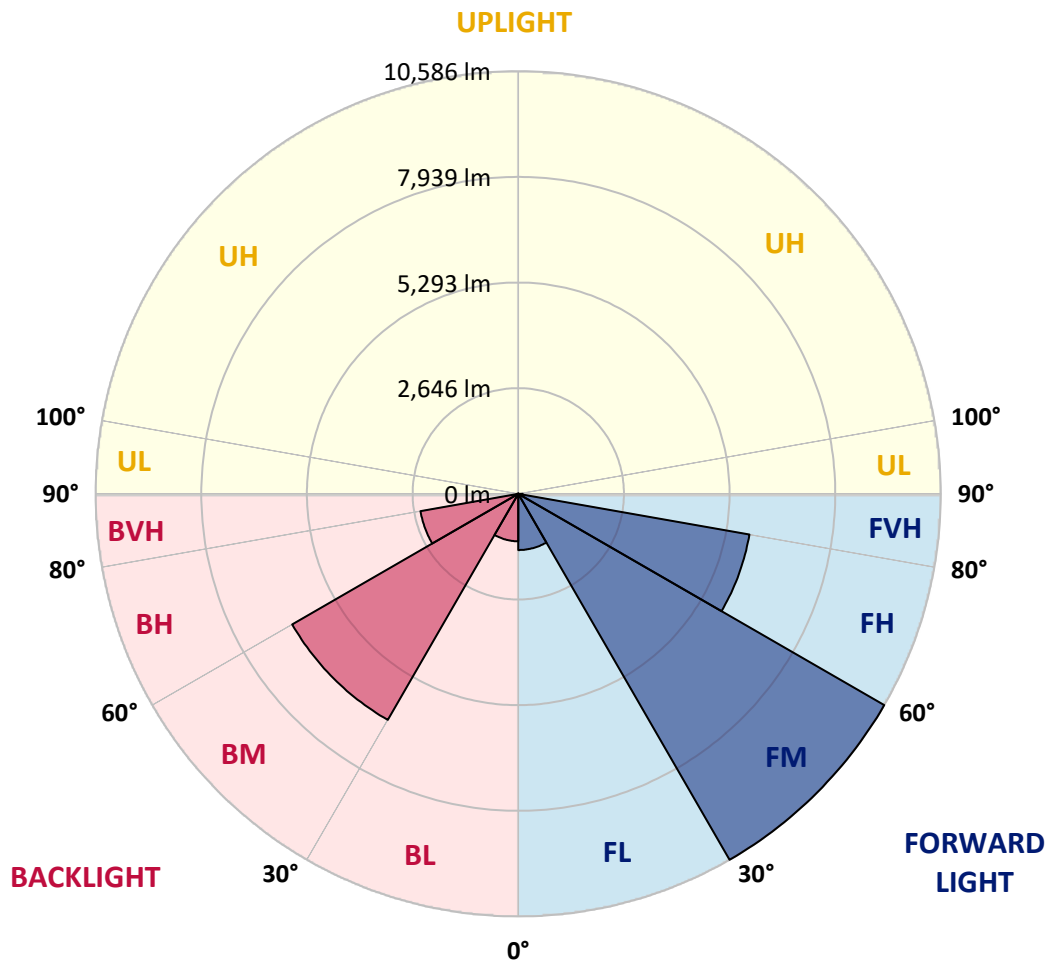
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1408.8	5.0			
FM (30°-60°)	10585.6	37.5			
FH (60°-80°)	5880.7	20.8			G3/7500
FVH (80°-90°)	110.6	0.4			G2/225
BL (0°-30°)	1188.5	4.2	B3/2500		
BM (30°-60°)	6539.0	23.1	B4/8500		
BH (60°-80°)	2487.1	8.8	B3/2500		G3/2500
BVH (80°-90°)	41.3	0.1			G1/100
UL (90°-100°)	12.1	0.0		U2/50	
UH (100°-180°)	1.3	0.0		U1/10	

BUG Rating: B4-U2-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2
2.5°	2582.2	2561.0	2564.2	2579.0	2532.4	2551.5	2531.3	2550.4	2544.0	2552.5	2558.9
5°	2619.2	2592.8	2594.9	2611.8	2575.8	2591.7	2571.6	2584.3	2573.7	2585.4	2586.4
7.5°	2670.1	2647.8	2644.7	2661.6	2630.9	2644.7	2624.5	2630.9	2620.3	2634.1	2629.8
10°	2737.9	2717.7	2712.4	2724.1	2699.7	2707.2	2686.0	2694.4	2678.6	2694.4	2687.0
12.5°	2813.1	2786.6	2787.6	2800.4	2776.0	2781.3	2764.3	2773.9	2754.8	2771.8	2766.5
15°	2902.0	2863.9	2871.3	2885.1	2861.8	2877.7	2857.6	2871.3	2853.3	2871.3	2865.0
17.5°	3017.5	2974.1	2979.4	3001.6	2982.5	3007.9	2984.6	3001.6	2993.1	3004.8	3002.7
20°	3163.6	3135.0	3129.7	3157.3	3129.7	3161.5	3148.8	3178.5	3180.6	3192.2	3197.5
22.5°	3358.5	3339.5	3326.7	3345.8	3321.5	3343.7	3361.7	3412.5	3431.6	3462.3	3464.4
25°	3618.0	3617.0	3588.4	3589.4	3558.7	3588.4	3639.2	3718.6	3769.5	3808.7	3793.8
27.5°	3968.6	3974.9	3931.5	3914.6	3878.6	3923.0	4027.9	4126.4	4218.5	4273.6	4273.6
30°	4426.1	4432.5	4368.9	4335.0	4302.2	4379.5	4504.5	4632.7	4764.0	4843.4	4825.4
32.5°	5032.0	5011.8	4920.7	4859.3	4803.2	4892.2	5036.2	5181.3	5360.3	5474.7	5460.9
35°	5767.0	5693.9	5602.8	5488.4	5367.7	5437.6	5573.2	5755.3	6004.2	6175.8	6132.4
37.5°	6620.7	6548.6	6392.9	6195.9	5985.2	5993.7	6100.6	6416.2	6727.6	6867.4	6837.8
40°	7507.2	7451.0	7308.0	7054.9	6673.6	6585.7	6761.5	7141.8	7439.4	7615.2	7565.4
42.5°	8410.6	8353.4	8245.4	7991.2	7486.0	7274.2	7457.4	7871.5	8189.2	8361.9	8304.7
45°	9311.9	9246.3	9160.5	8935.9	8454.0	8143.7	8246.4	8626.7	8916.9	9112.8	8995.2
47.5°	10104.2	10060.7	10002.5	9911.4	9489.9	9146.7	9139.3	9390.3	9590.5	9719.7	9575.7
50°	10793.7	10762.9	10795.8	10776.7	10623.1	10310.7	10119.0	10102.0	10166.7	10260.9	10055.4
52.5°	11412.2	11358.2	11480.0	11631.4	11744.8	11681.2	11060.6	10712.1	10641.1	10672.9	10439.9
55°	11918.5	11893.0	12097.5	12477.7	13002.0	13141.8	12027.6	11305.2	11043.6	11026.7	10761.9
57.5°	12227.7	12263.7	12672.6	13397.0	14358.7	14403.2	13214.8	11939.6	11435.5	11253.3	10948.3
60°	11735.2	11874.0	12572.0	14066.4	15510.0	15537.5	14086.5	12056.2	10946.2	10538.4	10160.3
62.5°	10212.2	10294.8	11482.1	14044.2	15887.0	15618.0	14294.1	11352.9	9610.6	8960.3	8610.8
65°	7193.7	7348.3	8620.3	12635.5	14477.3	14511.2	13113.2	9816.1	7674.5	6955.3	6729.8
67.5°	4344.6	4492.9	5847.5	9121.3	11769.1	12149.4	10938.8	7432.0	5503.3	4594.5	4366.8
70°	1410.8	1571.8	2664.8	5376.2	8657.4	9569.3	8231.6	4837.1	2881.9	2018.7	1774.1
72.5°	535.9	584.6	867.4	2348.1	5392.1	6388.7	5091.3	2426.5	892.9	531.7	467.1
75°	348.5	355.9	405.6	822.9	2600.2	3517.4	2454.0	710.7	358.0	317.7	294.4
77.5°	299.7	305.0	326.2	409.9	828.2	1345.1	704.3	363.3	298.7	264.8	248.9
80°	282.8	284.9	298.7	347.4	387.6	449.1	338.9	304.0	260.5	248.9	237.2
82.5°	268.0	275.4	282.8	315.6	314.6	323.0	272.2	238.3	221.4	233.0	228.8
85°	250.0	254.2	259.5	281.7	256.3	217.1	209.7	164.2	159.9	170.5	159.9
87.5°	175.8	186.4	180.1	189.6	177.9	138.7	117.6	93.2	74.1	61.4	59.3
90°	72.0	73.1	68.8	63.5	56.1	46.6	37.1	23.3	10.6	5.3	2.1
92.5°	56.1	56.1	54.0	48.7	42.4	35.0	26.5	14.8	7.4	3.2	1.1
95°	35.0	36.0	33.9	30.7	26.5	21.2	15.9	8.5	5.3	2.1	1.1
97.5°	22.2	22.2	20.1	18.0	14.8	10.6	7.4	6.4	4.2	2.1	0.0
100°	12.7	12.7	11.7	9.5	7.4	5.3	5.3	4.2	3.2	1.1	0.0
102.5°	7.4	7.4	5.3	4.2	3.2	3.2	3.2	3.2	2.1	1.1	0.0
105°	3.2	3.2	2.1	2.1	1.1	1.1	2.1	2.1	2.1	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1	2.1	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.1	1.1	1.1



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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°	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2	2528.2
2.5°	2554.6	2535.6	2538.8	2520.7	2517.6	2499.6	2535.6	2539.8	2529.2	2538.8
5°	2584.3	2561.0	2568.4	2548.3	2545.1	2520.7	2552.5	2550.4	2541.9	2551.5
7.5°	2628.8	2604.4	2608.7	2586.4	2582.2	2555.7	2585.4	2575.8	2567.3	2579.0
10°	2691.3	2663.7	2665.8	2637.3	2640.4	2605.5	2641.5	2624.5	2613.9	2629.8
12.5°	2766.5	2735.7	2736.8	2707.2	2706.1	2672.2	2704.0	2694.4	2678.6	2702.9
15°	2863.9	2829.0	2825.8	2786.6	2776.0	2737.9	2767.5	2749.5	2738.9	2773.9
17.5°	3000.5	2961.3	2949.7	2902.0	2704.0	2589.6	2748.5	2802.5	2736.8	2726.2
20°	3182.7	3149.9	3123.4	3051.4	2718.8	2361.9	2098.1	2100.3	2377.8	2505.9
22.5°	3429.5	3390.3	3340.5	3237.8	2494.3	2212.5	2213.6	2210.4	1896.9	1764.5
25°	3767.3	3719.7	3618.0	3037.6	2647.8	2387.3	2380.9	2070.6	1898.0	1907.5
27.5°	4223.8	4126.4	3531.2	3290.7	2921.1	2613.9	2461.4	2084.4	2105.6	2120.4
30°	4804.2	4412.4	3816.1	3673.1	3249.4	2914.7	2276.1	2328.0	2370.3	2379.9
32.5°	5399.5	4425.1	4271.5	4120.0	3654.0	2652.1	2565.2	2663.7	2708.2	2713.5
35°	5394.2	4967.4	4769.3	4598.8	4029.0	2837.4	2892.5	3044.0	3157.3	3152.0
37.5°	5708.7	5565.8	5329.6	5113.5	3626.5	3196.5	3295.0	3466.6	3604.2	3600.0
40°	6366.5	6201.2	5951.3	5498.0	4015.2	3607.4	3745.1	3929.4	4026.8	4032.1
42.5°	6988.2	6851.6	6596.3	5136.8	4501.3	4102.0	4227.0	4350.9	4411.3	4430.4
45°	7606.7	7509.3	6659.9	5677.0	5089.2	4599.8	4682.4	4705.7	4769.3	4761.9
47.5°	8108.7	8000.7	6403.5	6354.8	5802.0	5072.2	5065.9	5035.1	5058.4	5063.7
50°	8567.4	7265.7	6918.3	7080.3	6549.7	5554.1	5433.4	5370.9	5339.1	5325.3
52.5°	8929.6	7267.8	7399.1	7830.2	7393.8	6077.3	5817.8	5642.0	4939.8	5489.5
55°	9237.8	7567.5	7854.6	8632.0	8121.5	6624.9	6165.2	5851.7	3297.1	2643.6
57.5°	9414.7	7795.2	8305.7	9382.9	8756.9	7233.9	5675.9	4908.0	1864.1	1862.0
60°	8731.5	7386.4	8293.0	9776.9	8573.7	5611.3	2311.0	1934.0	352.7	362.2
62.5°	7391.7	6425.8	7865.1	9560.8	7984.8	4936.6	2072.7	1489.1	11.7	9.5
65°	5726.8	5126.2	6622.8	8409.5	7264.6	4119.0	1545.3	1072.9	3.2	0.0
67.5°	3746.2	3612.7	4886.9	6973.4	5924.8	3191.2	1036.9	513.7	2.1	0.0
70°	1597.2	1850.3	3095.9	5056.3	4535.2	2195.6	499.9	185.3	1.1	0.0
72.5°	447.0	592.1	1377.9	2962.4	2852.3	1154.5	194.9	78.4	1.1	0.0
75°	264.8	227.7	395.1	1182.0	1388.5	405.6	90.0	60.4	1.1	0.0
77.5°	220.3	177.9	226.7	301.9	420.5	146.2	76.3	54.0	0.0	0.0
80°	206.5	157.8	195.9	210.8	207.6	121.8	75.2	54.0	0.0	0.0
82.5°	195.9	137.7	162.0	162.0	173.7	112.3	71.0	53.0	0.0	0.0
85°	147.2	96.4	108.0	139.8	125.0	79.4	51.9	42.4	0.0	0.0
87.5°	56.1	35.0	42.4	44.5	36.0	18.0	4.2	4.2	0.0	0.0
90°	1.1	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)