

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: P579412

Luminaire Tested: **CTN-CA8-330-722-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-722-U-T5-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29328 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

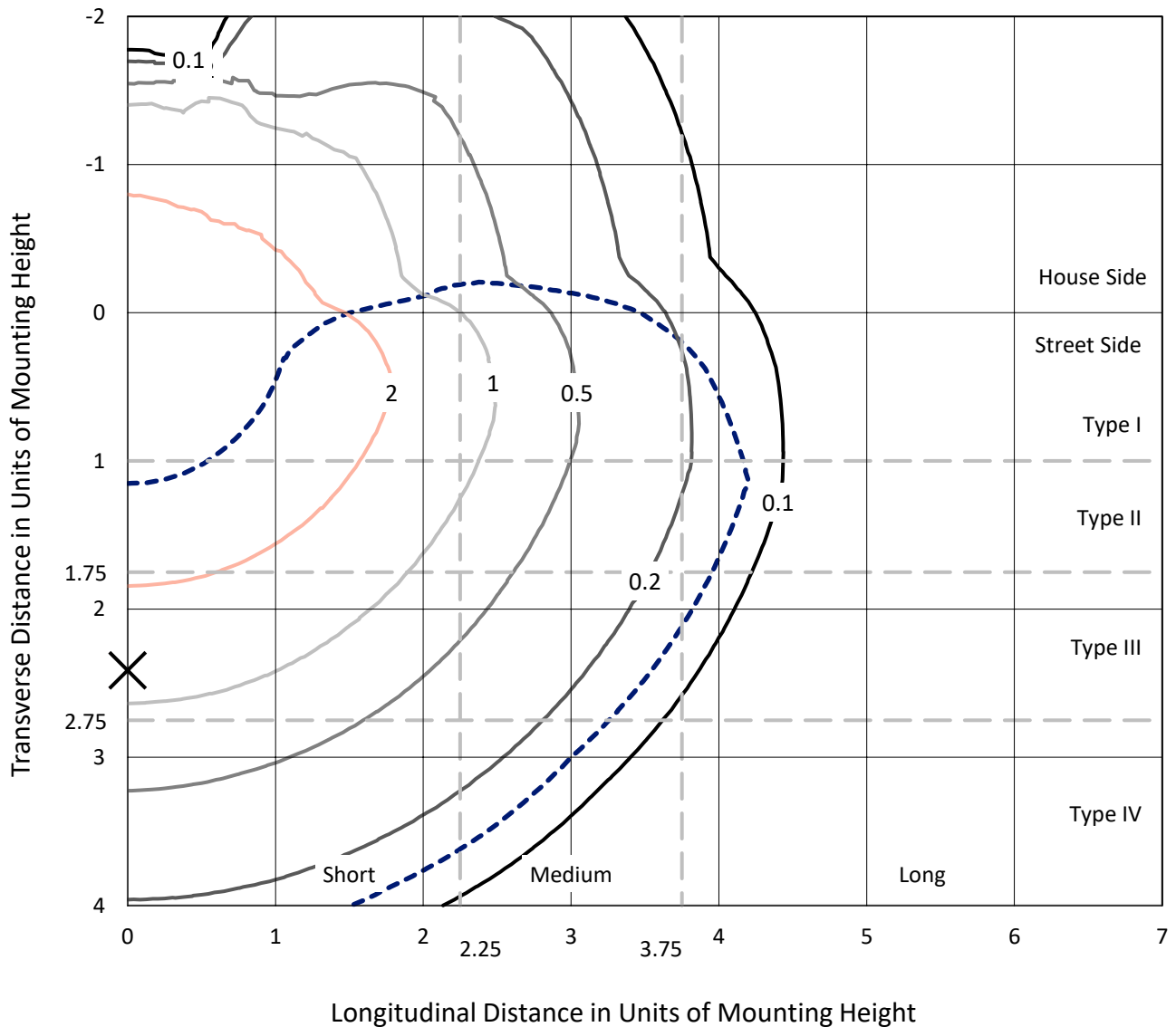
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

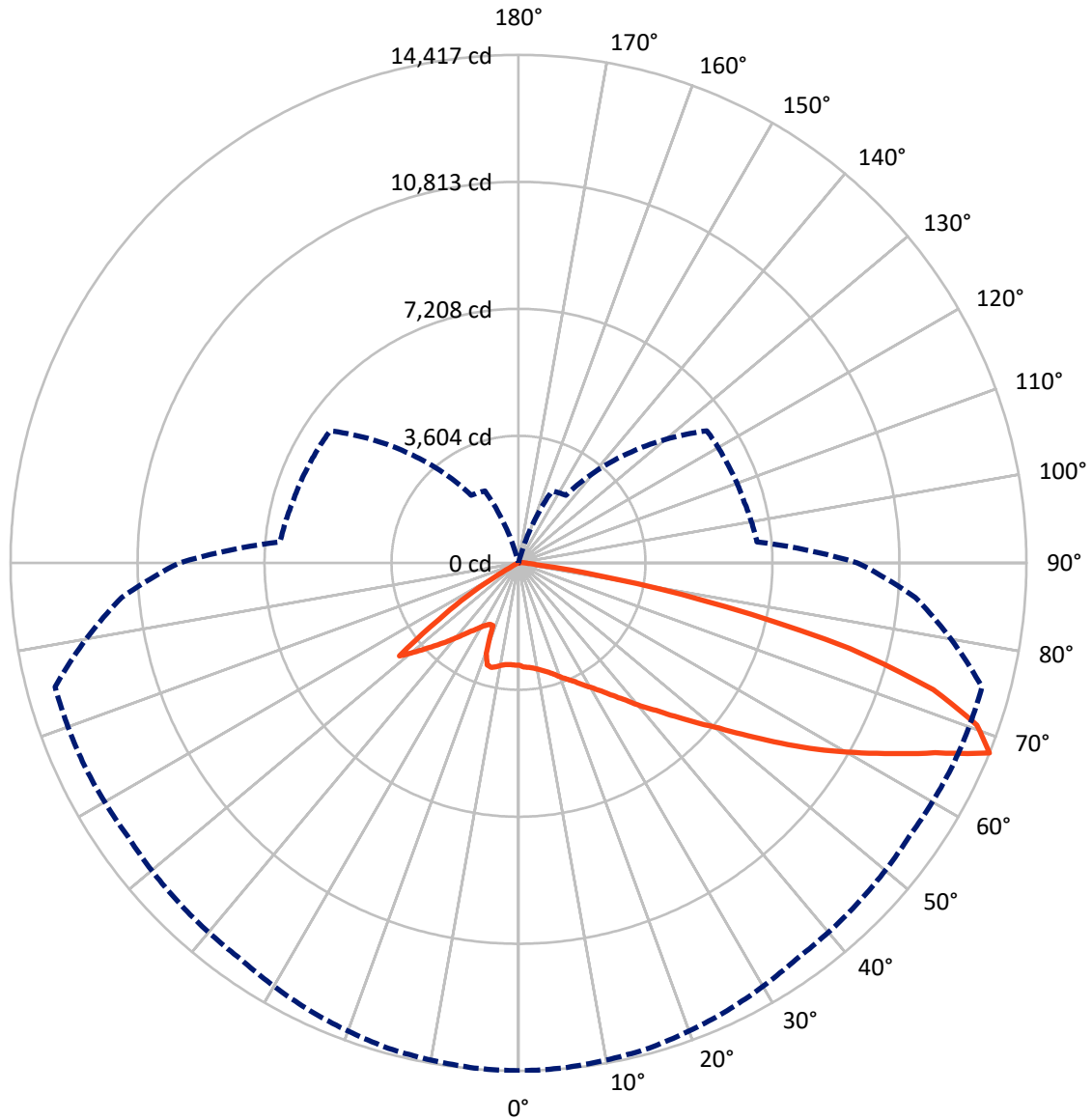
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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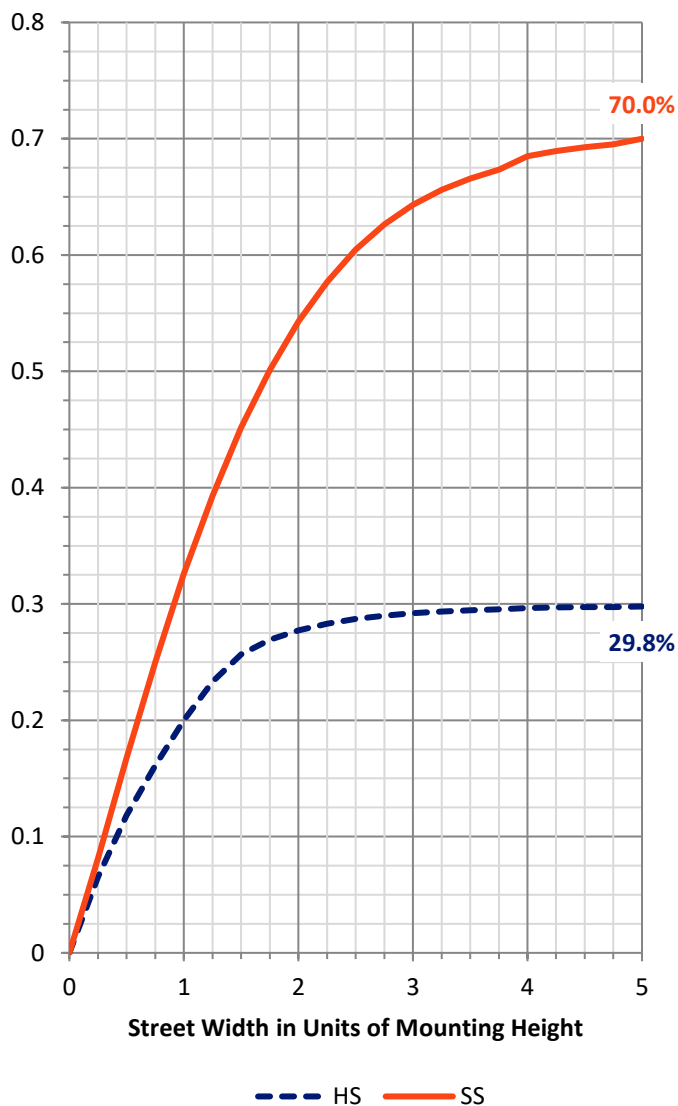
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8754.6	2.9	8757.5
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	20537.5	33.0	20570.5
	% Fixture	70.0	0.1	70.1
Total	Lumens	29292.0	36.0	29328.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.2	1.0
10°-20°	867.4	3.0
20°-30°	1455.6	5.0
30°-40°	2360.3	8.0
40°-50°	3857.0	13.2
50°-60°	6044.6	20.6
60°-70°	8095.6	27.6
70°-80°	5900.6	20.1
80°-90°	430.9	1.5
90°-100°	27.6	0.1
100°-110°	7.8	0.0
110°-120°	0.6	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°	29292.0	99.9
0°-180°	29328.0	100.0

Coefficient of Utilization



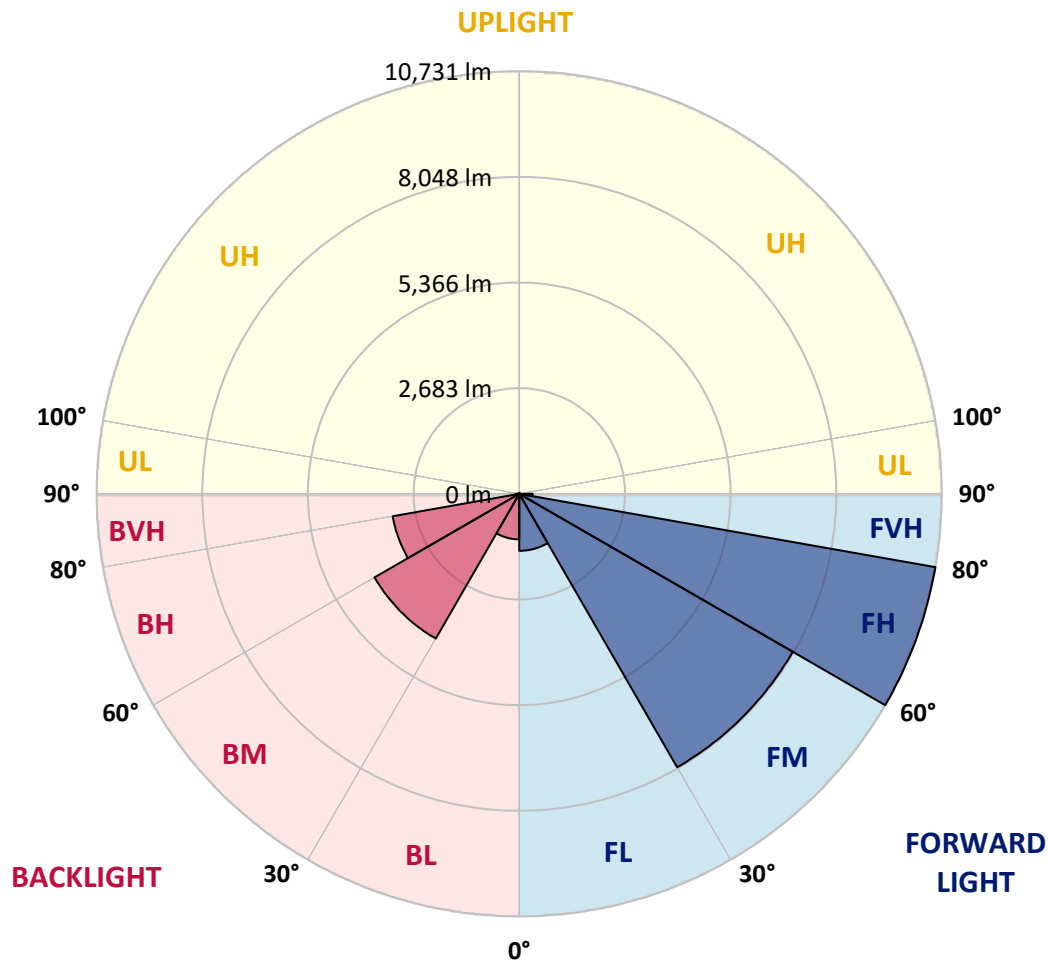
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1446.6	4.9			
FM (30°-60°)	8018.8	27.3			
FH (60°-80°)	10731.3	36.6			G4/12000
FVH (80°-90°)	340.7	1.2			G3/500
BL (0°-30°)	1156.5	3.9	B3/2500		
BM (30°-60°)	4243.1	14.5	B3/5000		
BH (60°-80°)	3264.8	11.1	B4/5000		G4/5000
BVH (80°-90°)	90.2	0.3			G1/100
UL (90°-100°)	27.6	0.1		U2/50	
UH (100°-180°)	8.4	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°	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1
2.5°	2961.6	2944.3	2945.5	2961.6	2913.5	2929.5	2908.5	2924.6	2913.5	2917.2	2924.6
5°	2980.0	2961.6	2962.8	2982.5	2939.4	2952.9	2924.6	2933.2	2923.3	2928.3	2928.3
7.5°	3017.0	2996.1	2994.8	3007.2	2962.8	2967.7	2941.8	2943.1	2928.3	2938.1	2933.2
10°	3072.5	3055.3	3042.9	3050.3	3010.9	3008.4	2975.1	2976.3	2957.9	2969.0	2960.3
12.5°	3140.3	3116.9	3114.4	3116.9	3073.8	3063.9	3029.4	3031.8	2998.5	3015.8	3005.9
15°	3226.6	3189.6	3189.6	3203.2	3147.7	3140.3	3098.4	3100.9	3066.4	3079.9	3070.1
17.5°	3332.7	3296.9	3290.8	3300.6	3252.5	3242.7	3199.5	3197.0	3158.8	3162.5	3153.9
20°	3469.5	3433.8	3419.0	3443.6	3383.2	3375.8	3324.0	3319.1	3278.4	3267.3	3262.4
22.5°	3596.5	3568.2	3560.8	3587.9	3525.0	3518.8	3469.5	3463.4	3425.1	3409.1	3311.7
25°	3739.5	3733.4	3730.9	3739.5	3680.4	3668.0	3629.8	3621.2	3589.1	3569.4	3451.0
27.5°	3924.5	3922.0	3914.6	3915.9	3861.6	3850.5	3814.8	3808.6	3775.3	3753.1	3601.5
30°	4118.1	4118.1	4102.0	4110.7	4083.5	4066.3	4037.9	4015.7	3994.8	3971.3	3780.2
32.5°	4341.2	4340.0	4325.2	4351.1	4331.4	4331.4	4314.1	4290.7	4253.7	4242.6	4010.8
35°	4628.5	4610.0	4603.8	4645.8	4639.6	4650.7	4644.5	4619.9	4589.1	4563.2	4282.0
37.5°	4946.6	4941.7	4960.2	4986.1	4999.6	5029.2	5010.7	5009.5	5004.6	4939.2	4209.3
40°	5338.7	5317.7	5343.6	5357.2	5347.3	5395.4	5379.4	5392.9	5429.9	4904.7	4204.4
42.5°	5729.5	5711.0	5729.5	5796.1	5781.3	5839.3	5831.9	5884.9	5905.8	4977.4	4545.9
45°	6210.4	6189.4	6204.2	6283.1	6290.5	6360.8	6399.0	6449.6	6459.4	5448.4	4957.7
47.5°	6762.7	6728.2	6756.6	6793.6	6905.8	6972.3	7009.3	7071.0	7133.9	6015.6	5426.2
50°	7371.8	7369.4	7400.2	7464.3	7592.5	7659.1	7723.2	7787.3	7890.9	6648.1	5951.5
52.5°	8146.1	8130.1	8183.1	8243.5	8357.0	8459.3	8535.7	8602.3	8713.3	7288.0	6519.9
55°	9031.4	8975.9	9077.0	9179.3	9227.4	9348.2	9401.3	9456.7	9562.8	7961.2	6851.5
57.5°	9986.9	9973.4	10043.6	10080.6	10184.2	10259.4	10287.8	10348.2	10346.9	8661.5	7416.2
60°	10927.7	10912.9	10995.5	11017.7	11100.3	11168.1	11158.2	11212.5	11232.2	9318.7	7969.8
62.5°	11917.7	11893.1	11969.5	11974.4	11925.1	12034.9	12023.8	12069.4	12052.1	9961.0	8514.8
65°	13000.3	13018.7	13043.4	12942.3	12823.9	12918.9	12916.4	13002.7	13064.4	10858.6	9244.7
67.5°	14416.9	14393.5	14266.5	14022.4	13735.1	13638.9	13536.6	13599.5	13616.7	11304.9	9618.3
70°	13805.4	13753.6	13696.9	13447.8	13101.4	12857.2	12698.2	12764.8	12835.0	10683.5	9033.8
72.5°	12314.7	12186.5	11922.7	11703.2	11503.5	11265.5	11071.9	11187.8	11341.9	9476.5	7999.4
75°	9715.7	9596.1	9403.7	9254.5	9147.3	9144.8	9136.2	9226.2	9204.0	7694.9	6503.8
77.5°	6016.8	6267.1	6444.6	6317.7	6362.0	6270.8	6471.8	6590.1	6697.4	5516.2	4633.4
80°	2777.8	2842.0	3156.4	3075.0	3009.6	2991.1	3003.5	3209.4	3269.8	2475.8	2073.8
82.5°	633.7	607.8	630.0	584.4	582.0	554.8	558.5	558.5	538.8	456.2	382.2
85°	320.6	328.0	330.4	316.9	279.9	251.5	233.0	197.3	170.1	145.5	123.3
87.5°	214.5	220.7	224.4	205.9	184.9	161.5	146.7	119.6	94.9	59.2	45.6
90°	146.7	145.5	141.8	131.9	118.4	101.1	81.4	56.7	33.3	12.3	8.6
92.5°	104.8	102.3	101.1	92.5	82.6	69.0	53.0	35.8	18.5	8.6	4.9
95°	69.0	67.8	67.8	62.9	55.5	45.6	35.8	23.4	13.6	7.4	4.9
97.5°	48.1	46.9	46.9	44.4	39.5	33.3	24.7	16.0	11.1	7.4	4.9
100°	33.3	33.3	33.3	30.8	28.4	23.4	18.5	12.3	9.9	7.4	4.9
102.5°	22.2	22.2	23.4	22.2	19.7	16.0	12.3	9.9	8.6	6.2	4.9
105°	14.8	14.8	14.8	14.8	13.6	11.1	9.9	8.6	7.4	6.2	4.9
107.5°	9.9	9.9	9.9	9.9	8.6	7.4	7.4	7.4	6.2	6.2	4.9
110°	6.2	6.2	6.2	7.4	6.2	6.2	6.2	6.2	6.2	4.9	4.9



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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°	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1	2906.1
2.5°	2918.4	2901.1	2909.8	2892.5	2885.1	2869.1	2899.9	2902.4	2899.9	2904.8
5°	2922.1	2902.4	2912.2	2892.5	2888.8	2870.3	2901.1	2901.1	2893.7	2897.4
7.5°	2930.7	2909.8	2917.2	2893.7	2893.7	2871.5	2908.5	2906.1	2899.9	2908.5
10°	2960.3	2935.7	2935.7	2913.5	2915.9	2892.5	2938.1	2938.1	2933.2	2948.0
12.5°	3005.9	2975.1	2976.3	2945.5	2950.5	2932.0	2987.4	2989.9	2989.9	3014.6
15°	3065.1	3018.3	3023.2	2989.9	2999.8	2977.6	3026.9	3024.4	3030.6	3066.4
17.5°	3137.9	3086.1	3042.9	2934.4	2870.3	2872.8	3019.5	3087.3	3008.4	3031.8
20°	3168.7	2917.2	2780.3	2740.9	2732.2	2595.4	2315.5	2358.6	2622.5	2737.2
22.5°	2961.6	2881.4	2867.8	2817.3	2443.7	2340.1	2357.4	2332.7	2073.8	1927.1
25°	3062.7	3009.6	2978.8	2533.7	2449.9	2431.4	2419.1	2184.8	1903.7	1917.2
27.5°	3205.7	3136.6	2766.7	2544.8	2560.8	2532.5	2461.0	1965.3	1956.7	1978.9
30°	3374.6	3200.7	2696.5	2675.5	2694.0	2657.0	2068.9	2049.2	2049.2	2071.4
32.5°	3581.7	2903.6	2861.7	2864.1	2851.8	2432.6	2177.4	2172.5	2187.3	2205.8
35°	3523.8	3097.2	3100.9	3121.8	3093.5	2379.6	2347.5	2329.0	2341.4	2348.8
37.5°	3410.3	3388.2	3388.2	3364.7	2641.0	2565.8	2531.3	2528.8	2527.6	2527.6
40°	3696.4	3675.4	3649.5	3608.9	2763.0	2782.8	2731.0	2724.8	2728.5	2742.1
42.5°	4021.9	4013.3	4010.8	3097.2	3017.0	3031.8	2976.3	2960.3	2960.3	2991.1
45°	4405.3	4394.2	4121.8	3310.5	3296.9	3314.2	3252.5	3214.3	3235.3	3257.5
47.5°	4845.5	4845.5	3649.5	3629.8	3629.8	3639.7	3578.0	3526.2	3547.2	3554.6
50°	5327.6	4574.3	4015.7	3997.2	4014.5	4009.6	3945.4	3464.6	3909.7	3913.4
52.5°	5462.0	4448.5	4417.7	4396.7	4417.7	4414.0	4347.4	2890.0	4229.0	4289.4
55°	4841.8	4845.5	4839.3	4808.5	4830.7	4822.1	4756.7	3155.1	3118.1	2779.1
57.5°	5235.1	5240.0	5237.6	5232.7	5252.4	3816.0	4926.9	2850.6	1740.9	1742.2
60°	5663.0	5638.3	5630.9	5619.8	4762.9	2705.1	2052.9	198.5	680.6	670.7
62.5°	6051.3	6042.7	6016.8	6010.6	4041.6	2130.5	2081.2	45.6	35.8	34.5
65°	6591.4	6514.9	6494.0	6428.6	4307.9	2268.6	2221.8	13.6	1.2	0.0
67.5°	6792.3	6637.0	6561.8	6527.3	4383.1	2340.1	2250.1	13.6	1.2	0.0
70°	6412.6	6220.2	6125.3	6087.1	4095.9	2187.3	2098.5	13.6	1.2	0.0
72.5°	5686.4	5544.6	5506.4	5384.3	3611.3	1919.7	1842.0	13.6	0.0	0.0
75°	4664.3	4612.5	4565.6	4436.2	2935.7	1525.2	1456.1	12.3	0.0	0.0
77.5°	3394.3	3317.9	3231.6	3091.0	1981.4	996.2	960.5	11.1	0.0	0.0
80°	1530.1	1467.2	1446.3	1226.8	702.8	324.3	286.0	9.9	0.0	0.0
82.5°	297.1	267.6	254.0	244.1	157.8	87.5	76.4	7.4	0.0	0.0
85°	101.1	112.2	130.7	144.3	88.8	53.0	44.4	4.9	0.0	0.0
87.5°	39.5	53.0	64.1	66.6	33.3	22.2	12.3	2.5	0.0	0.0
90°	7.4	9.9	8.6	6.2	3.7	1.2	0.0	0.0	0.0	0.0
92.5°	3.7	4.9	3.7	3.7	2.5	1.2	0.0	0.0	0.0	0.0
95°	4.9	4.9	4.9	3.7	2.5	1.2	0.0	0.0	0.0	0.0
97.5°	4.9	4.9	4.9	3.7	2.5	1.2	0.0	0.0	0.0	0.0
100°	4.9	4.9	4.9	3.7	2.5	1.2	0.0	0.0	0.0	0.0
102.5°	4.9	4.9	4.9	3.7	2.5	1.2	0.0	0.0	0.0	0.0
105°	4.9	6.2	4.9	3.7	2.5	1.2	0.0	0.0	0.0	0.0
107.5°	4.9	6.2	4.9	3.7	2.5	1.2	0.0	0.0	0.0	0.0
110°	4.9	6.2	4.9	3.7	2.5	1.2	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)