

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: P579382

Luminaire Tested: **CTN-CA10-310-722-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579382
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-CA10-310-722-U-T5-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29030 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

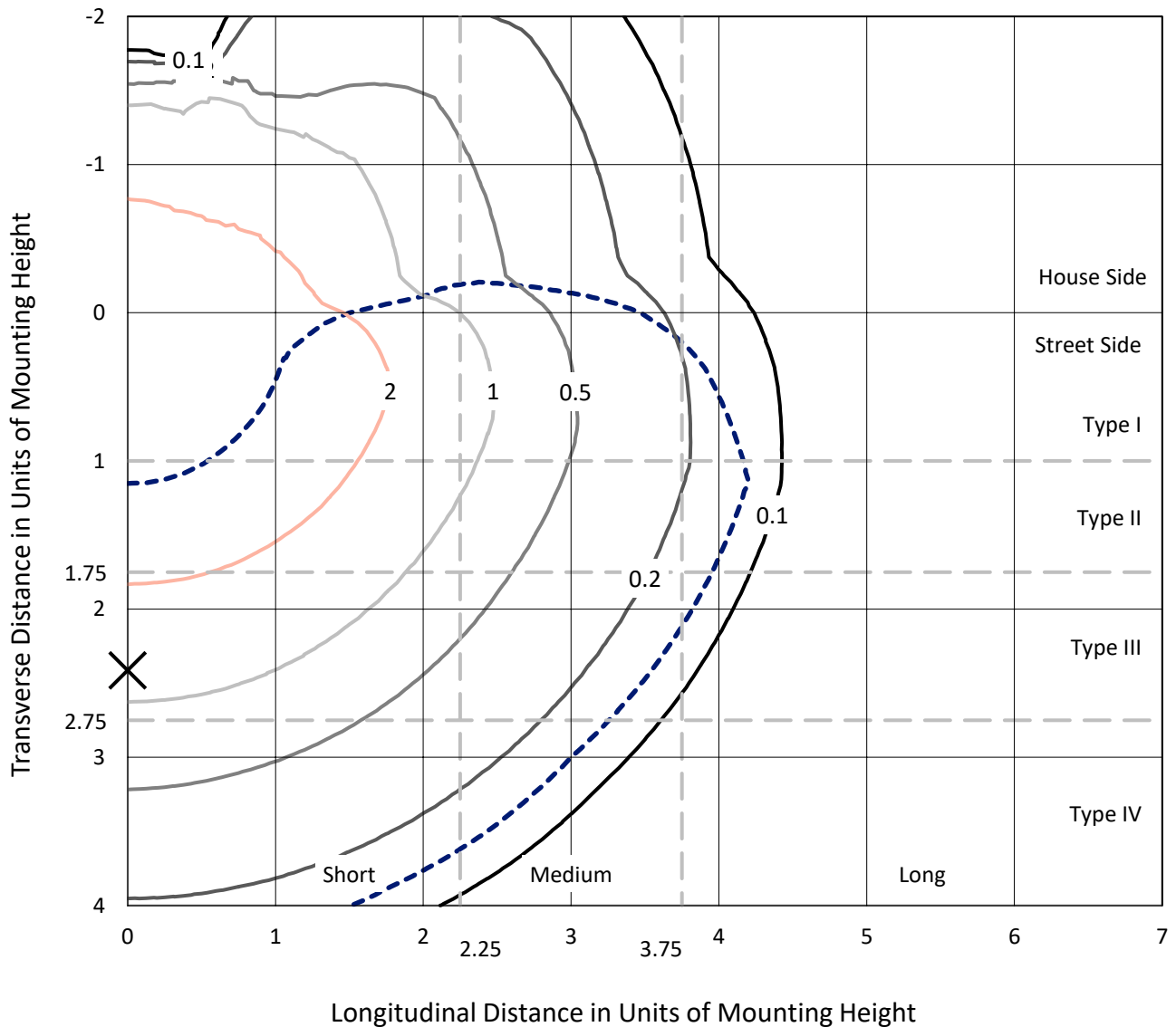
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

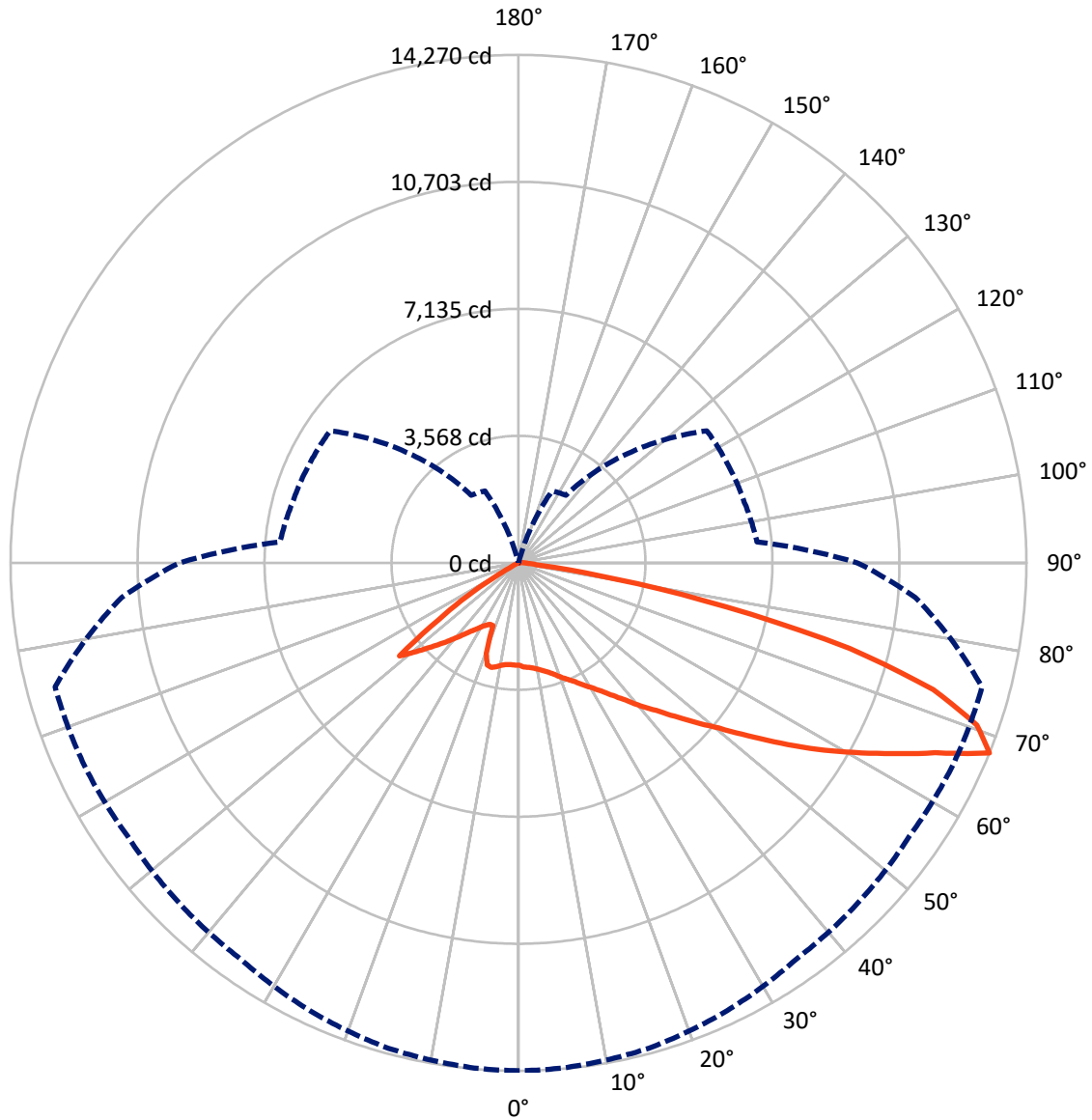
× Max cd
 - - - 1/2 Max cd



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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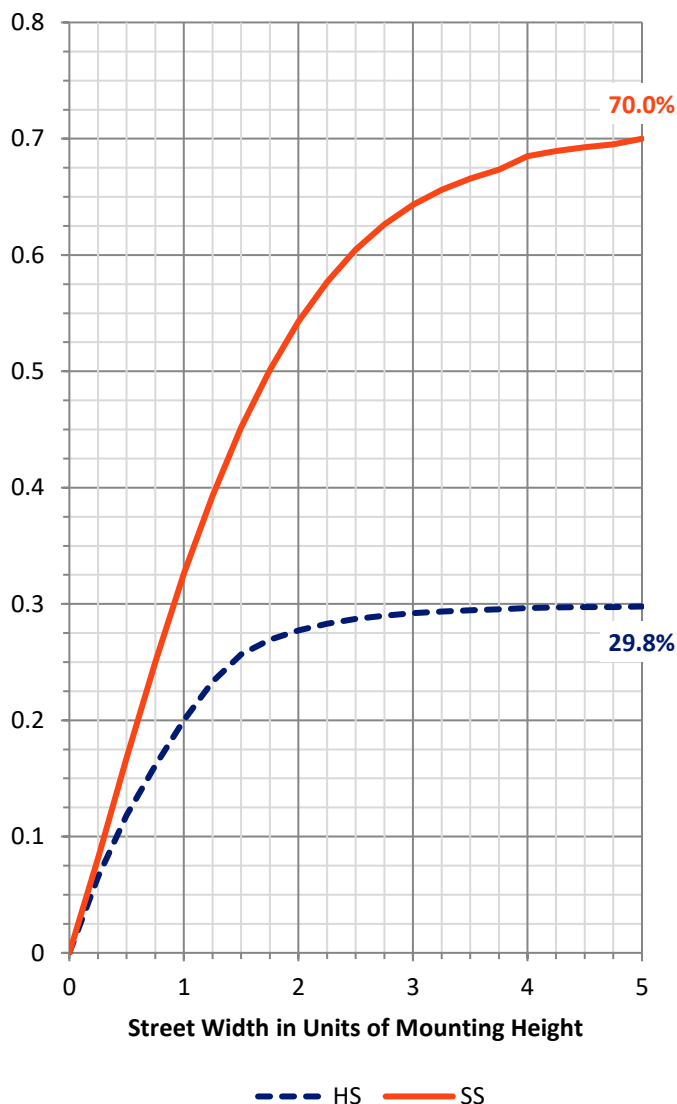
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8665.6	2.9	8668.5
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	20328.8	32.7	20361.5
	% Fixture	70.0	0.1	70.1
Total	Lumens	28994.4	35.6	29030.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.3	1.0
10°-20°	858.5	3.0
20°-30°	1440.8	5.0
30°-40°	2336.3	8.0
40°-50°	3817.8	13.2
50°-60°	5983.2	20.6
60°-70°	8013.3	27.6
70°-80°	5840.6	20.1
80°-90°	426.5	1.5
90°-100°	27.3	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°	28994.4	99.9
0°-180°	29030.0	100.0

Coefficient of Utilization

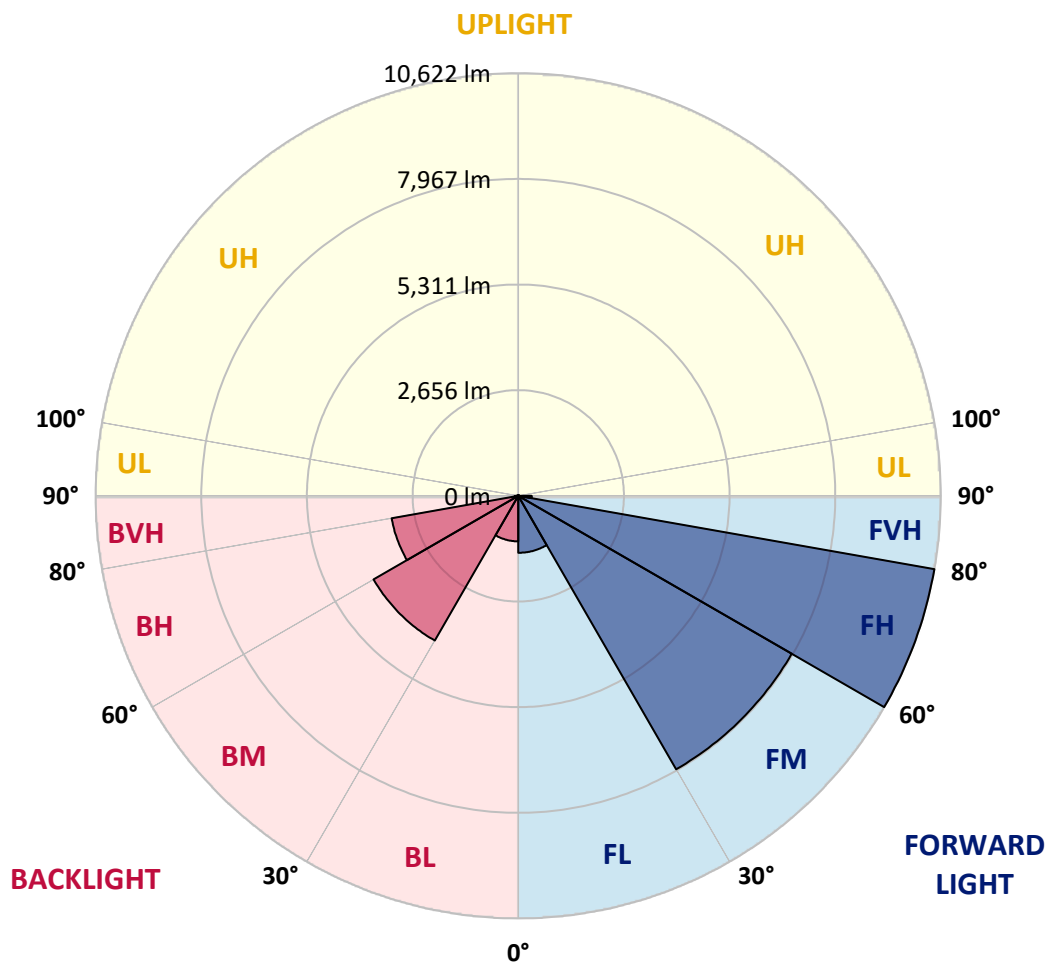


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1431.9	4.9			
FM (30°-60°)	7937.3	27.3			
FH (60°-80°)	10622.3	36.6			G4/12000
FVH (80°-90°)	337.3	1.2			G3/500
BL (0°-30°)	1144.7	3.9	B3/2500		
BM (30°-60°)	4200.0	14.5	B3/5000		
BH (60°-80°)	3231.7	11.1	B4/5000		G4/5000
BVH (80°-90°)	89.2	0.3			G1/100
UL (90°-100°)	27.3	0.1		U2/50	
UH (100°-180°)	8.3	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°	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5
2.5°	2931.5	2914.4	2915.6	2931.5	2883.9	2899.7	2879.0	2894.8	2883.9	2887.5	2894.8
5°	2949.8	2931.5	2932.7	2952.2	2909.5	2922.9	2894.8	2903.4	2893.6	2898.5	2898.5
7.5°	2986.4	2965.6	2964.4	2976.6	2932.7	2937.6	2911.9	2913.2	2898.5	2908.3	2903.4
10°	3041.3	3024.2	3012.0	3019.3	2980.3	2977.8	2944.9	2946.1	2927.8	2938.8	2930.2
12.5°	3108.4	3085.2	3082.8	3085.2	3042.5	3032.8	2998.6	3001.0	2968.1	2985.2	2975.4
15°	3193.9	3157.2	3157.2	3170.7	3115.7	3108.4	3066.9	3069.4	3035.2	3048.6	3038.9
17.5°	3298.8	3263.4	3257.3	3267.1	3219.5	3209.7	3167.0	3164.6	3126.7	3130.4	3121.8
20°	3434.3	3398.9	3384.2	3408.6	3348.8	3341.5	3290.3	3285.4	3245.1	3234.1	3229.2
22.5°	3560.0	3531.9	3524.6	3551.4	3489.2	3483.1	3434.3	3428.2	3390.3	3374.5	3278.1
25°	3701.5	3695.4	3693.0	3701.5	3643.0	3630.8	3592.9	3584.4	3552.7	3533.1	3416.0
27.5°	3884.6	3882.2	3874.8	3876.1	3822.4	3811.4	3776.0	3769.9	3736.9	3715.0	3564.9
30°	4076.2	4076.2	4060.4	4068.9	4042.0	4025.0	3996.9	3974.9	3954.2	3931.0	3741.8
32.5°	4297.1	4295.9	4281.3	4306.9	4287.4	4287.4	4270.3	4247.1	4210.5	4199.5	3970.0
35°	4581.5	4563.2	4557.1	4598.6	4592.5	4603.4	4597.3	4572.9	4542.4	4516.8	4238.5
37.5°	4896.3	4891.5	4909.8	4935.4	4948.8	4978.1	4959.8	4958.6	4953.7	4889.0	4166.5
40°	5284.4	5263.7	5289.3	5302.7	5293.0	5340.6	5324.7	5338.1	5374.8	4854.9	4161.6
42.5°	5671.3	5653.0	5671.3	5737.2	5722.6	5779.9	5772.6	5825.1	5845.8	4926.9	4499.7
45°	6147.3	6126.5	6141.2	6219.3	6226.6	6296.2	6334.0	6384.0	6393.8	5393.1	4907.3
47.5°	6694.0	6659.9	6687.9	6724.5	6835.6	6901.5	6938.1	6999.1	7061.4	5954.5	5371.1
50°	7296.9	7294.5	7325.0	7388.5	7515.4	7581.3	7644.7	7708.2	7810.7	6580.5	5891.0
52.5°	8063.3	8047.5	8100.0	8159.8	8272.0	8373.3	8449.0	8514.9	8624.7	7213.9	6453.6
55°	8939.6	8884.7	8984.8	9086.1	9133.7	9253.3	9305.7	9360.7	9465.6	7880.3	6781.9
57.5°	9885.4	9872.0	9941.6	9978.2	10080.7	10155.2	10183.2	10243.0	10241.8	8573.5	7340.9
60°	10816.6	10802.0	10883.7	10905.7	10987.5	11054.6	11044.8	11098.5	11118.1	9224.0	7888.8
62.5°	11796.6	11772.2	11847.9	11852.8	11804.0	11912.6	11901.6	11946.7	11929.7	9859.8	8428.3
65°	12868.2	12886.5	12910.9	12810.8	12693.6	12787.6	12785.2	12870.6	12931.6	10748.3	9150.7
67.5°	14270.4	14247.2	14121.5	13879.9	13595.5	13500.3	13399.0	13461.3	13478.4	11190.1	9520.5
70°	13665.1	13613.8	13557.7	13311.2	12968.2	12726.6	12569.2	12635.1	12704.6	10575.0	8942.1
72.5°	12189.6	12062.7	11801.5	11584.3	11386.6	11151.0	10959.4	11074.1	11226.7	9380.2	7918.1
75°	9616.9	9498.6	9308.2	9160.5	9054.3	9051.9	9043.3	9132.4	9110.5	7616.7	6437.7
77.5°	5955.7	6203.4	6379.2	6253.5	6297.4	6207.1	6406.0	6523.2	6629.3	5460.2	4586.4
80°	2749.6	2813.1	3124.3	3043.7	2979.1	2960.8	2973.0	3176.8	3236.6	2450.6	2052.8
82.5°	627.3	601.7	623.6	578.5	576.0	549.2	552.9	552.9	533.3	451.6	378.3
85°	317.3	324.6	327.1	313.6	277.0	249.0	230.7	195.3	168.4	144.0	122.0
87.5°	212.4	218.5	222.1	203.8	183.1	159.9	145.2	118.4	94.0	58.6	45.2
90°	145.2	144.0	140.3	130.6	117.2	100.1	80.5	56.1	33.0	12.2	8.5
92.5°	103.7	101.3	100.1	91.5	81.8	68.3	52.5	35.4	18.3	8.5	4.9
95°	68.3	67.1	67.1	62.2	54.9	45.2	35.4	23.2	13.4	7.3	4.9
97.5°	47.6	46.4	46.4	43.9	39.1	33.0	24.4	15.9	11.0	7.3	4.9
100°	33.0	33.0	33.0	30.5	28.1	23.2	18.3	12.2	9.8	7.3	4.9
102.5°	22.0	22.0	23.2	22.0	19.5	15.9	12.2	9.8	8.5	6.1	4.9
105°	14.6	14.6	14.6	14.6	13.4	11.0	9.8	8.5	7.3	6.1	4.9
107.5°	9.8	9.8	9.8	9.8	8.5	7.3	7.3	7.3	6.1	6.1	4.9
110°	6.1	6.1	6.1	7.3	6.1	6.1	6.1	6.1	6.1	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°	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5	2876.5
2.5°	2888.7	2871.7	2880.2	2863.1	2855.8	2839.9	2870.4	2872.9	2870.4	2875.3
5°	2892.4	2872.9	2882.6	2863.1	2859.5	2841.1	2871.7	2871.7	2864.3	2868.0
7.5°	2901.0	2880.2	2887.5	2864.3	2864.3	2842.4	2879.0	2876.5	2870.4	2879.0
10°	2930.2	2905.8	2905.8	2883.9	2886.3	2863.1	2908.3	2908.3	2903.4	2918.0
12.5°	2975.4	2944.9	2946.1	2915.6	2920.5	2902.2	2957.1	2959.5	2959.5	2983.9
15°	3034.0	2987.6	2992.5	2959.5	2969.3	2947.3	2996.1	2993.7	2999.8	3035.2
17.5°	3106.0	3054.7	3012.0	2904.6	2841.1	2843.6	2988.8	3055.9	2977.8	3001.0
20°	3136.5	2887.5	2752.1	2713.0	2704.5	2569.0	2292.0	2334.7	2595.8	2709.3
22.5°	2931.5	2852.1	2838.7	2788.7	2418.9	2316.4	2333.5	2309.0	2052.8	1907.5
25°	3031.5	2979.1	2948.5	2508.0	2425.0	2406.7	2394.5	2162.6	1884.3	1897.8
27.5°	3173.1	3104.8	2738.6	2519.0	2534.8	2506.8	2436.0	1945.4	1936.8	1958.8
30°	3340.3	3168.2	2669.1	2648.3	2666.6	2630.0	2047.9	2028.3	2028.3	2050.3
32.5°	3545.3	2874.1	2832.6	2835.0	2822.8	2407.9	2155.3	2150.4	2165.0	2183.3
35°	3488.0	3065.7	3069.4	3090.1	3062.0	2355.4	2323.7	2305.4	2317.6	2324.9
37.5°	3375.7	3353.7	3353.7	3330.5	2614.2	2539.7	2505.5	2503.1	2501.9	2501.9
40°	3658.8	3638.1	3612.5	3572.2	2735.0	2754.5	2703.2	2697.1	2700.8	2714.2
42.5°	3981.0	3972.5	3970.0	3065.7	2986.4	3001.0	2946.1	2930.2	2930.2	2960.8
45°	4360.6	4349.6	4079.9	3276.8	3263.4	3280.5	3219.5	3181.6	3202.4	3224.4
47.5°	4796.3	4796.3	3612.5	3592.9	3592.9	3602.7	3541.7	3490.4	3511.2	3518.5
50°	5273.5	4527.8	3974.9	3956.6	3973.7	3968.8	3905.4	3429.4	3870.0	3873.6
52.5°	5406.5	4403.3	4372.8	4352.0	4372.8	4369.1	4303.2	2860.7	4186.1	4245.9
55°	4792.6	4796.3	4790.2	4759.7	4781.6	4773.1	4708.4	3123.1	3086.5	2750.8
57.5°	5181.9	5186.8	5184.4	5179.5	5199.0	3777.2	4876.8	2821.6	1723.2	1724.5
60°	5605.4	5581.0	5573.7	5562.7	4714.5	2677.6	2032.0	196.5	673.7	663.9
62.5°	5989.8	5981.3	5955.7	5949.6	4000.6	2108.9	2060.1	45.2	35.4	34.2
65°	6524.4	6448.7	6428.0	6363.3	4264.2	2245.6	2199.2	13.4	1.2	0.0
67.5°	6723.3	6569.5	6495.1	6460.9	4338.6	2316.4	2227.3	13.4	1.2	0.0
70°	6347.4	6157.0	6063.1	6025.2	4054.3	2165.0	2077.2	13.4	1.2	0.0
72.5°	5628.6	5488.3	5450.4	5329.6	3574.6	1900.2	1823.3	13.4	0.0	0.0
75°	4616.9	4565.6	4519.2	4391.1	2905.8	1509.7	1441.3	12.2	0.0	0.0
77.5°	3359.8	3284.2	3198.7	3059.6	1961.2	986.1	950.7	11.0	0.0	0.0
80°	1514.5	1452.3	1431.6	1214.3	695.6	321.0	283.1	9.8	0.0	0.0
82.5°	294.1	264.8	251.4	241.6	156.2	86.7	75.7	7.3	0.0	0.0
85°	100.1	111.1	129.4	142.8	87.9	52.5	43.9	4.9	0.0	0.0
87.5°	39.1	52.5	63.5	65.9	33.0	22.0	12.2	2.4	0.0	0.0
90°	7.3	9.8	8.5	6.1	3.7	1.2	0.0	0.0	0.0	0.0
92.5°	3.7	4.9	3.7	3.7	2.4	1.2	0.0	0.0	0.0	0.0
95°	4.9	4.9	4.9	3.7	2.4	1.2	0.0	0.0	0.0	0.0
97.5°	4.9	4.9	4.9	3.7	2.4	1.2	0.0	0.0	0.0	0.0
100°	4.9	4.9	4.9	3.7	2.4	1.2	0.0	0.0	0.0	0.0
102.5°	4.9	4.9	4.9	3.7	2.4	1.2	0.0	0.0	0.0	0.0
105°	4.9	6.1	4.9	3.7	2.4	1.2	0.0	0.0	0.0	0.0
107.5°	4.9	6.1	4.9	3.7	2.4	1.2	0.0	0.0	0.0	0.0
110°	4.9	6.1	4.9	3.7	2.4	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)