

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: P579385

Luminaire Tested: **CTN-CA10-310-722-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579385
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)
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-T5N-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: 31019 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

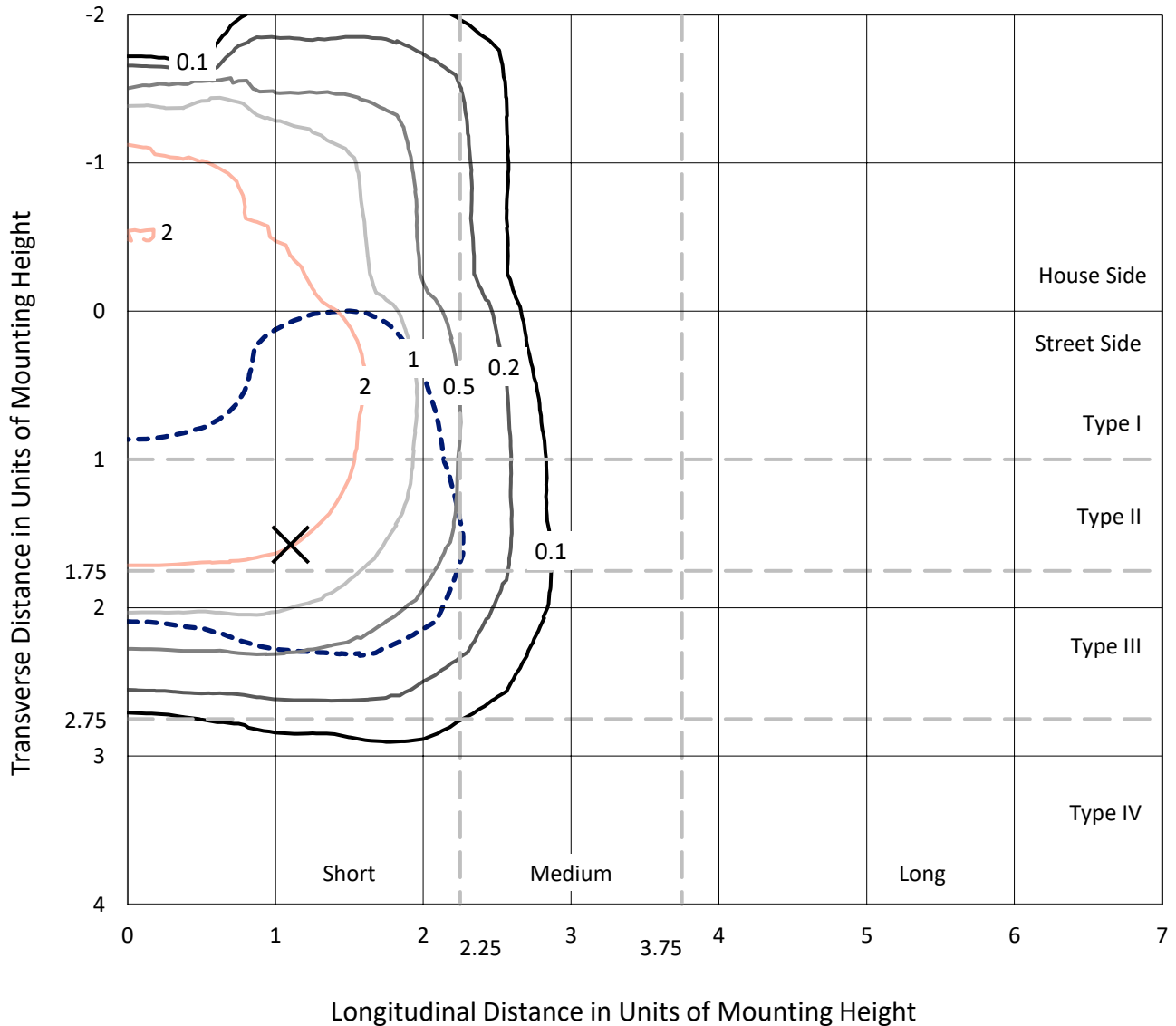
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

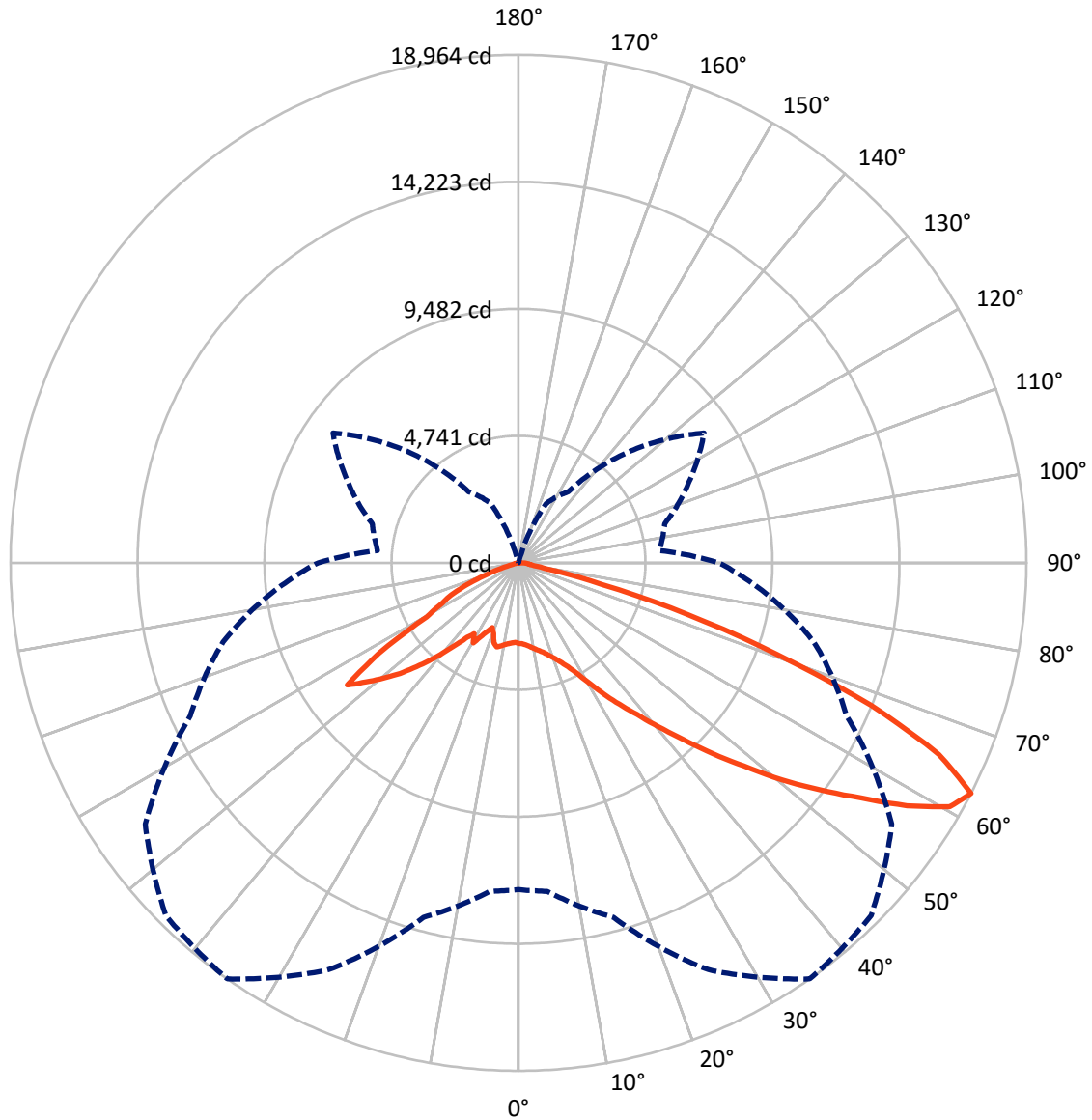
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.5 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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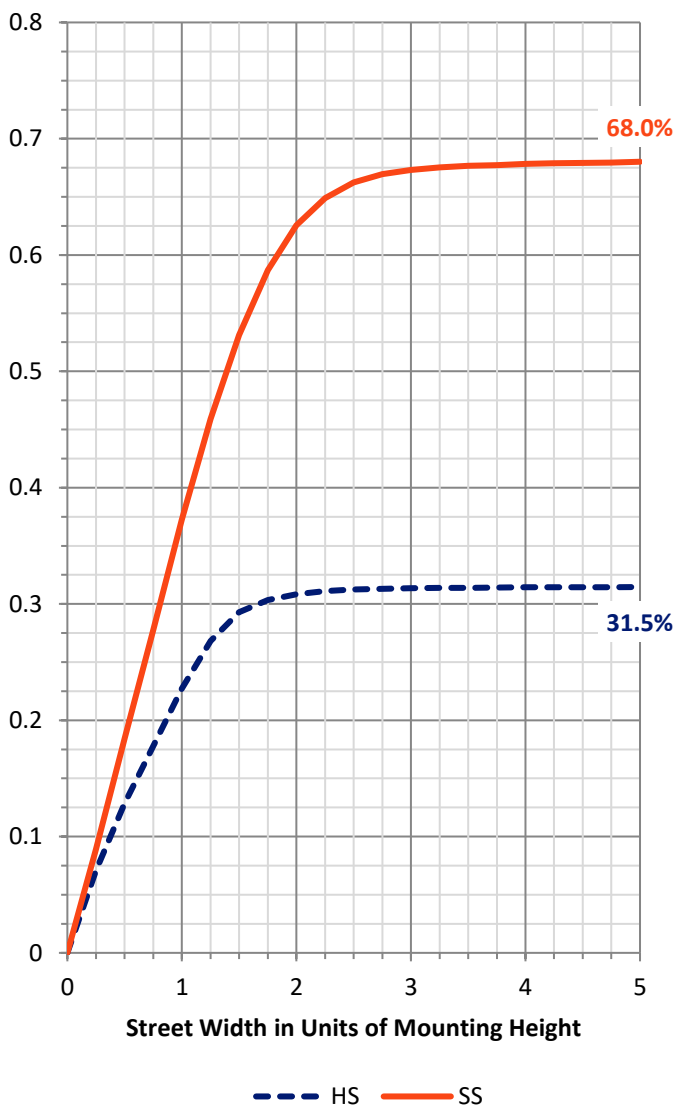
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9813.1	0.0	9813.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	21188.2	17.7	21205.9
	% Fixture	68.3	0.1	68.4
Total	Lumens	31001.3	17.7	31019.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.9	1.0
10°-20°	954.6	3.1
20°-30°	1772.6	5.7
30°-40°	3494.8	11.3
40°-50°	6273.5	20.2
50°-60°	9119.2	29.4
60°-70°	7494.5	24.2
70°-80°	1424.6	4.6
80°-90°	170.5	0.5
90°-100°	16.1	0.1
100°-110°	1.6	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°	31001.3	99.9
0°-180°	31019.0	100.0

Coefficient of Utilization



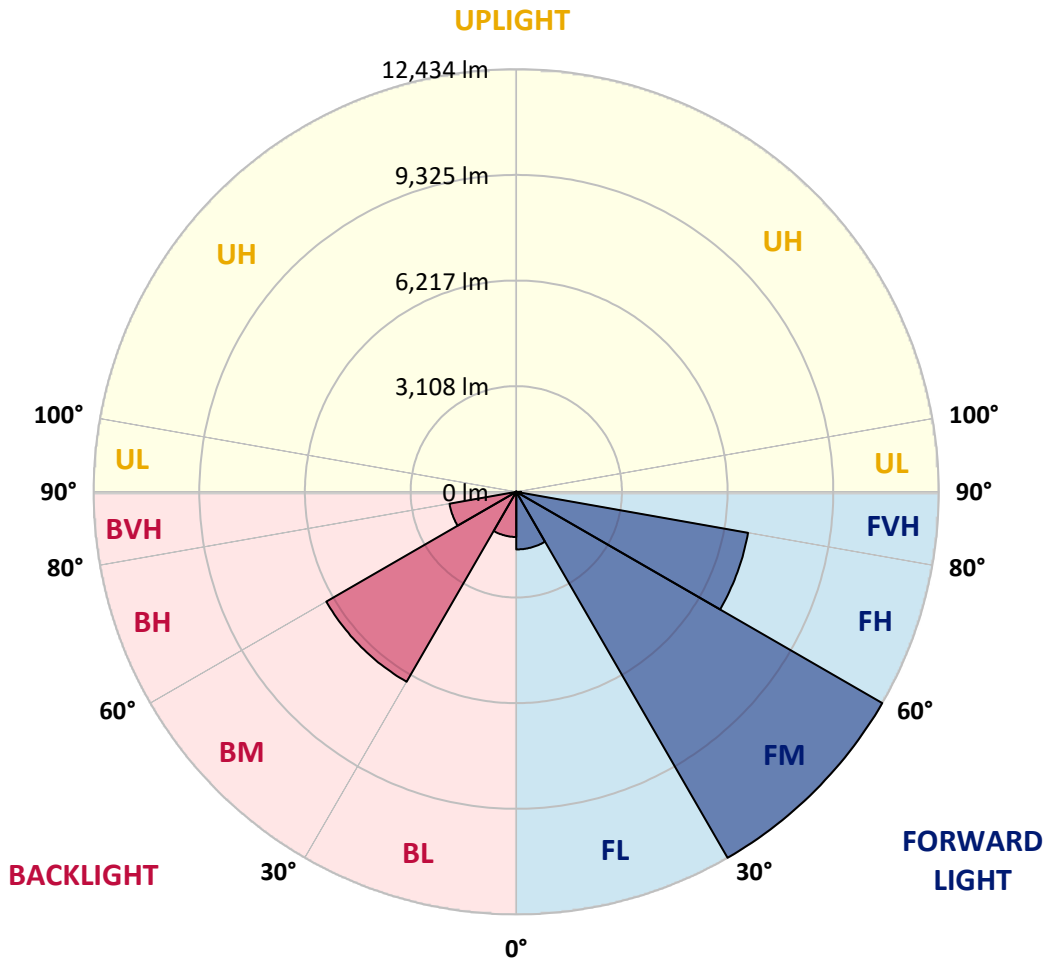
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1695.4	5.5			
FM	(30°-60°)	12433.8	40.1			
FH	(60°-80°)	6924.1	22.3			G3/7500
FVH	(80°-90°)	134.8	0.4			G2/225
BL	(0°-30°)	1328.7	4.3	B3/2500		
BM	(30°-60°)	6453.7	20.8	B4/8500		
BH	(60°-80°)	1995.0	6.4	B3/2500		G3/2500
BVH	(80°-90°)	35.7	0.1			G1/100
UL	(90°-100°)	16.1	0.1		U2/50	
UH	(100°-180°)	1.6	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°	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9
2.5°	3087.8	3062.6	3065.1	3084.0	3027.3	3046.2	3019.7	3042.4	3032.3	3042.4	3048.7
5°	3149.6	3118.0	3116.8	3135.7	3090.3	3101.7	3071.4	3086.5	3072.7	3085.3	3085.3
7.5°	3225.2	3198.7	3192.4	3207.6	3167.2	3172.3	3142.0	3148.3	3131.9	3148.3	3135.7
10°	3319.8	3295.8	3285.7	3293.3	3256.7	3259.3	3226.5	3229.0	3205.0	3218.9	3208.8
12.5°	3419.4	3386.6	3381.6	3394.2	3356.3	3351.3	3323.6	3326.1	3299.6	3312.2	3304.6
15°	3522.8	3488.7	3490.0	3502.6	3464.8	3467.3	3438.3	3443.3	3416.9	3429.5	3419.4
17.5°	3660.2	3626.2	3623.6	3646.3	3614.8	3624.9	3594.6	3600.9	3582.0	3584.6	3573.2
20°	3856.9	3812.8	3803.9	3836.7	3795.1	3807.7	3791.3	3812.8	3805.2	3798.9	3790.1
22.5°	4091.4	4057.4	4039.7	4064.9	4015.8	4039.7	4048.5	4092.7	4104.0	4096.5	3957.8
25°	4405.4	4387.7	4370.1	4358.7	4299.4	4337.3	4382.7	4455.8	4503.7	4522.6	4329.7
27.5°	4829.0	4837.8	4760.9	4748.3	4681.5	4740.7	4822.7	4941.2	5038.3	5073.6	4813.9
30°	5373.7	5385.0	5280.4	5250.1	5209.8	5260.2	5412.8	5542.6	5686.4	5745.6	5398.9
32.5°	6097.4	6087.3	5933.5	5875.5	5838.9	5859.1	6019.2	6197.0	6358.4	6492.0	6065.9
35°	6981.2	6949.7	6785.8	6625.7	6480.7	6542.5	6659.7	6875.3	7119.9	7316.6	6724.0
37.5°	8007.6	7977.3	7727.7	7466.7	7180.5	7206.9	7311.6	7663.4	7978.6	8030.3	6611.8
40°	9067.9	9055.3	8819.5	8487.9	8042.9	7918.0	8056.7	8485.4	8818.3	7916.8	6872.8
42.5°	10127.0	10066.5	9934.1	9602.5	9009.9	8735.1	8921.7	9350.3	9708.4	8300.1	7478.0
45°	11195.0	11133.2	11021.0	10777.6	10161.1	9761.4	9815.6	10290.9	10615.0	9018.8	8108.4
47.5°	12143.1	12097.7	12017.0	11880.8	11331.1	10969.3	10864.6	11197.5	11418.1	9602.5	8592.6
50°	12960.1	12921.0	12952.6	12907.2	12745.8	12366.3	12020.8	11999.4	12105.3	10122.0	9037.7
52.5°	13678.8	13625.8	13760.7	13920.9	14069.7	13985.2	13149.2	12759.6	12663.8	10511.6	9336.5
55°	14272.6	14253.7	14485.7	14918.2	15484.3	15706.2	14355.9	13461.9	13163.1	10841.9	9364.2
57.5°	14628.2	14673.6	15164.1	16001.3	17108.3	17212.9	15768.0	14208.3	13603.1	11042.4	9496.6
60°	14020.5	14174.3	15056.9	16813.2	18490.1	18535.5	16783.0	14357.1	13026.9	10321.2	8789.3
62.5°	12199.8	12310.8	13699.0	16761.5	18964.2	18618.7	17009.9	13517.4	11416.9	8755.2	7475.5
65°	8620.3	8748.9	10422.1	15114.9	17253.3	17265.9	15581.4	11689.2	9125.9	6778.2	5772.1
67.5°	5199.7	5407.7	6992.6	10973.0	14205.8	14464.3	12999.2	8849.8	6531.1	4425.5	3735.9
70°	1705.9	1896.3	3192.4	6494.6	10240.5	11347.5	9762.6	5750.7	3410.6	1871.1	1506.7
72.5°	675.8	762.8	1124.7	2872.2	6599.2	7576.4	6015.4	2778.9	1144.8	496.8	432.5
75°	451.4	460.2	519.5	978.4	3229.0	4143.1	2899.9	808.2	424.9	310.2	272.3
77.5°	393.4	394.6	421.1	515.7	1051.5	1588.7	834.7	433.7	351.8	254.7	225.7
80°	360.6	365.6	382.0	440.0	481.6	539.6	412.3	361.9	305.1	234.5	213.1
82.5°	345.5	349.3	359.3	398.4	389.6	404.7	332.9	287.5	257.2	215.6	204.3
85°	315.2	321.5	327.8	351.8	320.3	277.4	257.2	192.9	184.1	162.6	150.0
87.5°	238.3	237.0	230.7	234.5	214.3	175.3	145.0	108.4	88.3	73.1	60.5
90°	99.6	100.9	97.1	92.0	80.7	66.8	50.4	30.3	15.1	5.0	2.5
92.5°	75.7	76.9	74.4	66.8	58.0	46.7	34.0	17.7	10.1	3.8	1.3
95°	46.7	47.9	45.4	40.3	35.3	26.5	17.7	11.3	6.3	2.5	0.0
97.5°	27.7	29.0	26.5	24.0	18.9	12.6	10.1	7.6	5.0	2.5	0.0
100°	16.4	16.4	15.1	12.6	8.8	7.6	6.3	5.0	3.8	1.3	0.0
102.5°	7.6	7.6	7.6	5.0	3.8	3.8	3.8	3.8	3.8	1.3	0.0
105°	2.5	2.5	1.3	1.3	1.3	2.5	2.5	2.5	2.5	1.3	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.5	2.5	1.3	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	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°	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9	3010.9
2.5°	3042.4	3018.4	3022.2	3000.8	2995.7	2973.0	3013.4	3017.2	3005.8	3017.2
5°	3080.2	3051.2	3058.8	3034.8	3028.5	2997.0	3029.8	3027.3	3018.4	3029.8
7.5°	3135.7	3102.9	3106.7	3079.0	3072.7	3037.4	3067.6	3058.8	3048.7	3062.6
10°	3206.3	3174.8	3176.0	3138.2	3134.4	3094.1	3133.2	3116.8	3101.7	3121.8
12.5°	3304.6	3260.5	3256.7	3215.1	3213.9	3172.3	3212.6	3198.7	3178.6	3210.1
15°	3418.1	3358.9	3343.7	3290.8	3289.5	3245.4	3285.7	3264.3	3254.2	3292.0
17.5°	3565.6	3491.3	3376.5	3196.2	3114.3	3128.1	3270.6	3322.3	3187.4	3207.6
20°	3655.2	3294.6	3126.9	3052.5	3013.4	2789.0	2485.1	2510.3	2809.1	2951.6
22.5°	3503.9	3396.7	3334.9	3230.3	2685.6	2608.7	2626.3	2621.3	2235.5	2120.7
25°	3819.1	3718.2	3606.0	2960.4	2848.2	2815.4	2824.3	2462.4	2251.9	2260.7
27.5°	4273.0	4143.1	3432.0	3152.1	3129.4	3081.5	2907.5	2472.5	2499.0	2516.6
30°	4846.6	4385.2	3655.2	3532.9	3487.5	3435.8	2698.2	2762.5	2811.7	2865.9
32.5°	5401.4	4265.4	4082.6	3955.2	3884.6	3119.3	3043.7	3162.2	3211.3	3258.0
35°	5351.0	4778.6	4541.5	4380.1	4247.8	3366.4	3433.3	3613.6	3743.4	3742.2
37.5°	5489.7	5337.1	5063.5	4859.3	3686.7	3771.2	3911.1	4116.6	4274.2	4273.0
40°	6068.4	5903.2	5646.0	5207.2	4085.1	4281.8	4473.4	4666.3	4779.8	4788.7
42.5°	6643.3	6516.0	6284.0	4599.5	4573.0	4845.4	5045.9	5168.2	5237.5	5261.5
45°	7215.8	7096.0	6174.3	5087.5	5168.2	5438.0	5560.3	5584.2	5658.6	5656.1
47.5°	7670.9	7568.8	5680.1	5667.5	5867.9	6054.5	6015.4	5985.2	6004.1	6014.2
50°	8090.8	6589.1	6123.9	6308.0	6613.1	6635.8	6473.1	5127.8	6348.3	6326.9
52.5°	7515.8	6430.3	6537.4	6968.6	7488.1	7224.6	6906.9	4494.9	5953.7	6519.8
55°	6576.5	6684.9	6927.0	7650.7	8163.9	7851.2	7320.4	4628.5	3951.5	3216.4
57.5°	6707.6	6879.1	7339.3	8339.2	8786.8	6218.4	6832.5	3263.0	2209.0	2207.7
60°	6246.2	6505.9	7330.5	8648.1	7112.4	3984.2	2737.3	74.4	428.7	424.9
62.5°	5280.4	5649.8	6993.8	8452.6	5891.9	3237.8	2438.5	6.3	2.5	2.5
65°	4083.8	4518.8	5831.4	7319.1	5219.9	2789.0	1810.6	0.0	0.0	0.0
67.5°	2678.0	3081.5	4378.9	6079.7	4333.5	2108.1	1216.7	0.0	0.0	0.0
70°	1115.8	1613.9	2720.9	4394.0	3187.4	1380.6	577.5	0.0	0.0	0.0
72.5°	322.8	491.7	1225.5	2623.8	1978.2	722.5	214.3	0.0	0.0	0.0
75°	213.1	224.4	370.7	1055.3	962.0	264.8	87.0	0.0	0.0	0.0
77.5°	179.0	184.1	235.8	295.0	308.9	104.6	70.6	0.0	0.0	0.0
80°	165.2	166.4	211.8	219.4	165.2	87.0	69.3	0.0	0.0	0.0
82.5°	153.8	150.0	180.3	174.0	137.4	75.7	64.3	0.0	0.0	0.0
85°	105.9	108.4	122.3	155.1	83.2	37.8	45.4	0.0	0.0	0.0
87.5°	32.8	37.8	47.9	49.2	15.1	5.0	0.0	0.0	0.0	0.0
90°	1.3	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)