

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: P579433

Luminaire Tested: **CTN-CA10-310-730-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579433
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-CA10-310-730-U-T5N-HSS-HM-EX120
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: 37371 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G4

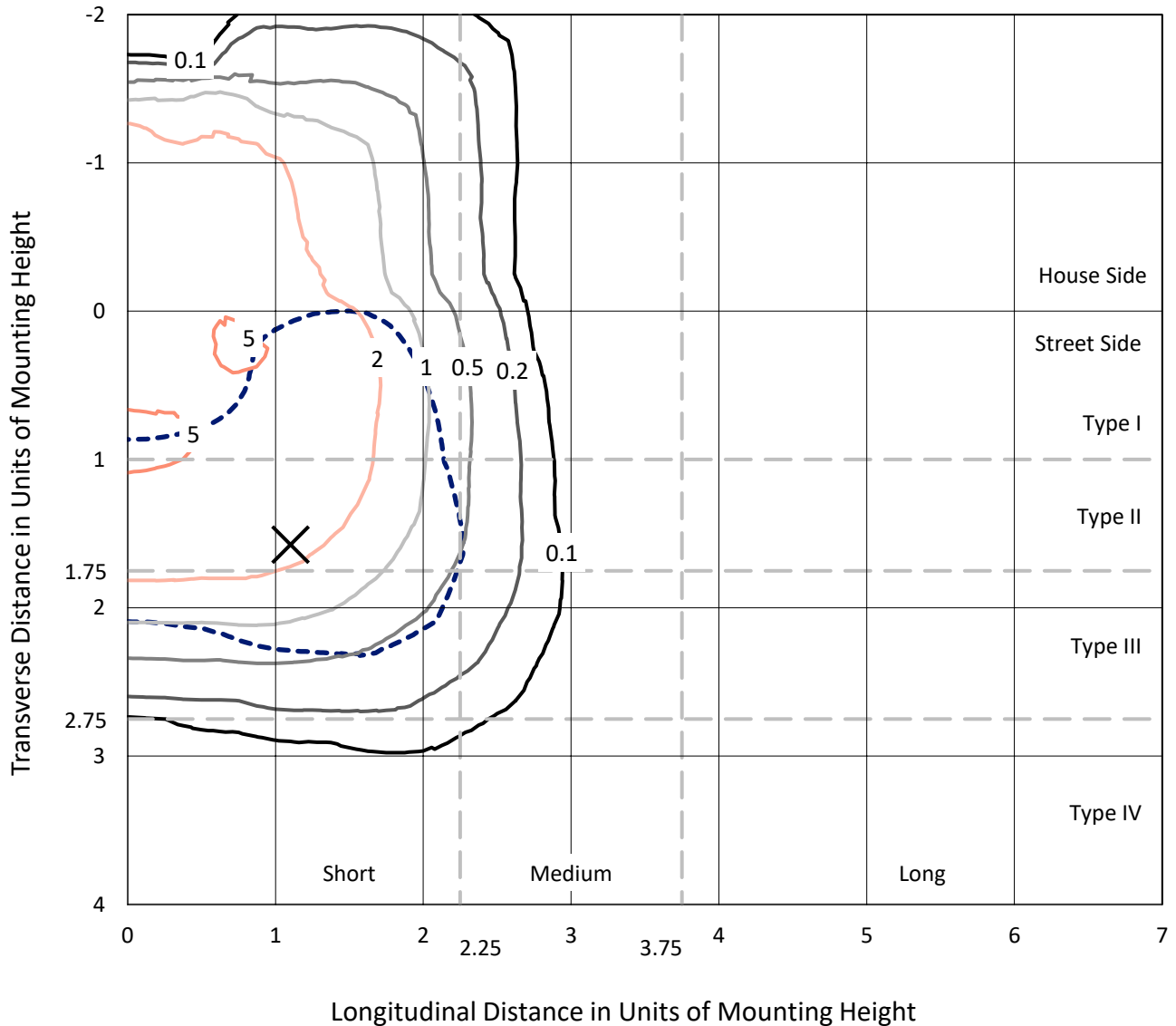
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

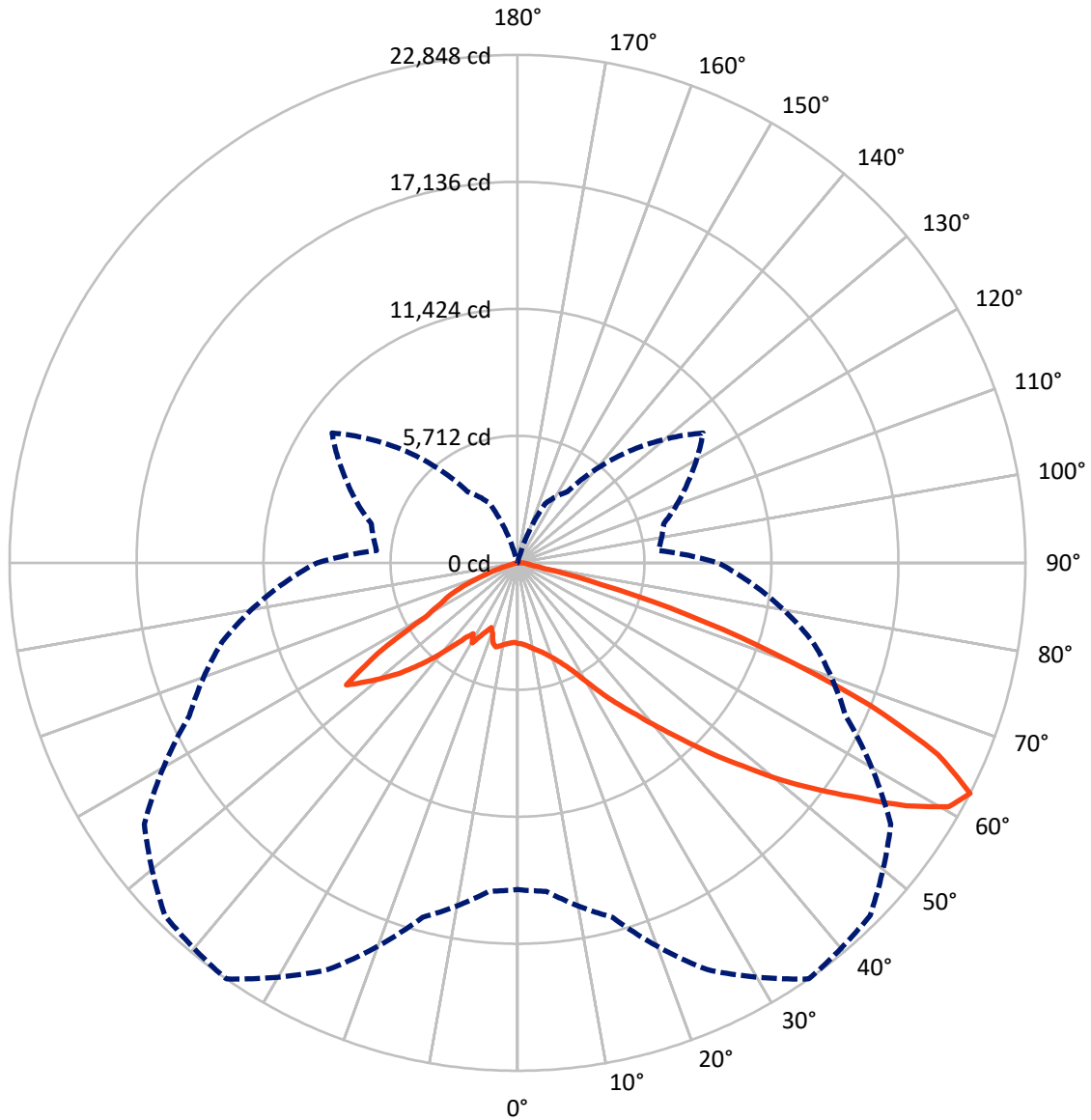
✕ Max cd
 - - - 1/2 Max cd



Based on 30 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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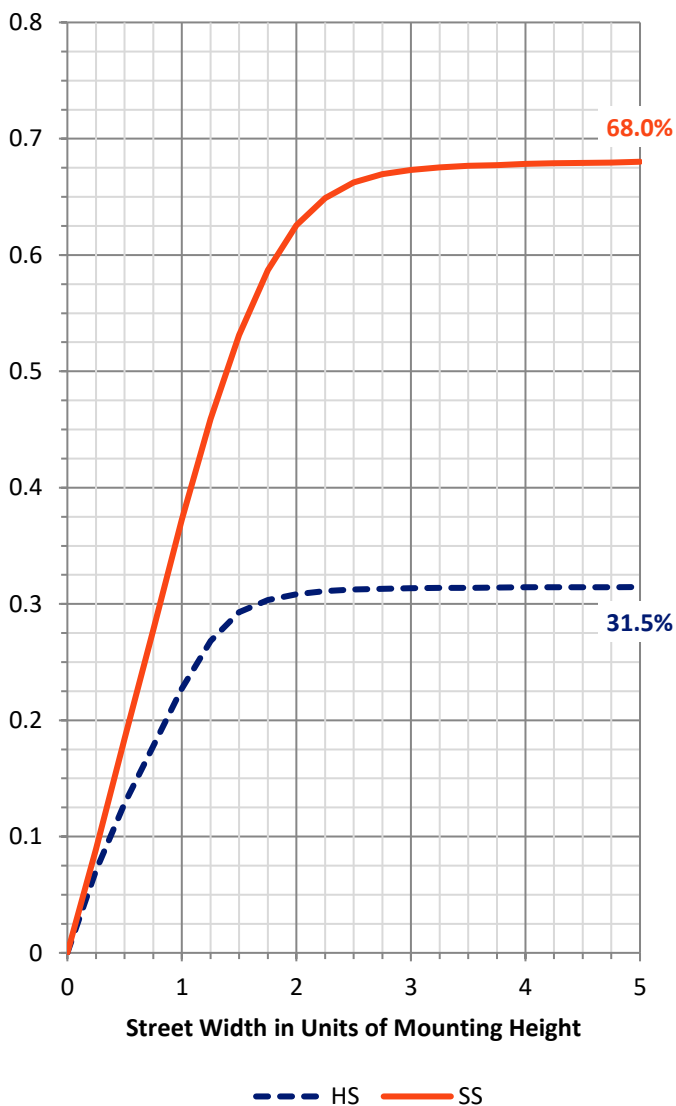
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11822.6	0.0	11822.6
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	25527.1	21.3	25548.4
	% Fixture	68.3	0.1	68.4
Total	Lumens	37349.6	21.3	37371.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.7	1.0
10°-20°	1150.1	3.1
20°-30°	2135.6	5.7
30°-40°	4210.4	11.3
40°-50°	7558.2	20.2
50°-60°	10986.7	29.4
60°-70°	9029.3	24.2
70°-80°	1716.3	4.6
80°-90°	205.4	0.5
90°-100°	19.5	0.1
100°-110°	1.9	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°	37349.6	99.9
0°-180°	37371.0	100.0

Coefficient of Utilization

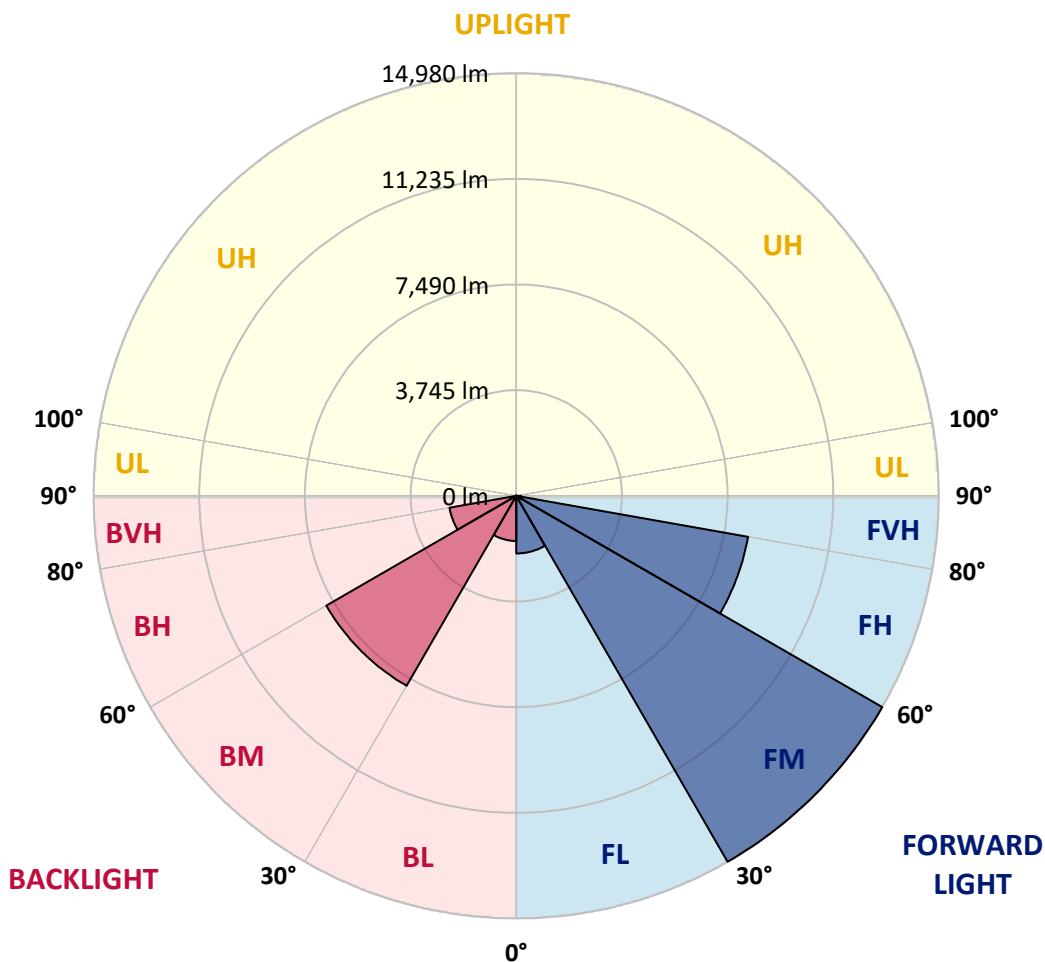


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2042.5	5.5			
FM	(30°-60°)	14980.0	40.1			
FH	(60°-80°)	8342.1	22.3			G4/12000
FVH	(80°-90°)	162.5	0.4			G2/225
BL	(0°-30°)	1600.8	4.3	B3/2500		
BM	(30°-60°)	7775.2	20.8	B4/8500		
BH	(60°-80°)	2403.5	6.4	B3/2500		G3/2500
BVH	(80°-90°)	43.0	0.1			G1/100
UL	(90°-100°)	19.5	0.1		U2/50	
UH	(100°-180°)	1.9	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4
2.5°	3720.1	3689.7	3692.8	3715.5	3647.2	3670.0	3638.1	3665.4	3653.3	3665.4	3673.0
5°	3794.5	3756.6	3755.0	3777.8	3723.1	3736.8	3700.3	3718.6	3701.9	3717.1	3717.1
7.5°	3885.7	3853.8	3846.2	3864.4	3815.8	3821.9	3785.4	3793.0	3773.3	3793.0	3777.8
10°	3999.6	3970.7	3958.6	3967.7	3923.6	3926.7	3887.2	3890.2	3861.4	3878.1	3865.9
12.5°	4119.6	4080.1	4074.0	4089.2	4043.6	4037.6	4004.2	4007.2	3975.3	3990.5	3981.4
15°	4244.2	4203.1	4204.7	4219.9	4174.3	4177.3	4142.4	4148.5	4116.6	4131.7	4119.6
17.5°	4409.7	4368.7	4365.7	4393.0	4355.0	4367.2	4330.7	4338.3	4315.6	4318.6	4304.9
20°	4646.7	4593.5	4582.9	4622.4	4572.3	4587.5	4567.7	4593.5	4584.4	4576.8	4566.2
22.5°	4929.2	4888.2	4867.0	4897.3	4838.1	4867.0	4877.6	4930.8	4944.4	4935.3	4768.2
25°	5307.5	5286.2	5264.9	5251.3	5179.9	5225.4	5280.1	5368.2	5426.0	5448.7	5216.3
27.5°	5817.9	5828.5	5735.8	5720.7	5640.1	5711.5	5810.3	5953.1	6070.0	6112.6	5799.6
30°	6474.1	6487.8	6361.7	6325.2	6276.6	6337.4	6521.2	6677.6	6850.8	6922.2	6504.5
32.5°	7346.0	7333.9	7148.5	7078.7	7034.6	7058.9	7251.8	7466.0	7660.4	7821.5	7308.0
35°	8410.8	8372.9	8175.4	7982.5	7807.8	7882.2	8023.5	8283.2	8577.9	8814.9	8101.0
37.5°	9647.3	9610.9	9310.1	8995.7	8650.9	8682.7	8808.8	9232.6	9612.4	9674.7	7965.8
40°	10924.8	10909.6	10625.6	10226.1	9689.9	9539.5	9706.6	10223.0	10624.1	9538.0	8280.2
42.5°	12200.8	12127.9	11968.4	11568.9	10855.0	10523.8	10748.6	11265.1	11696.5	9999.7	9009.3
45°	13487.4	13413.0	13277.8	12984.6	12241.8	11760.3	11825.6	12398.3	12788.7	10865.6	9768.9
47.5°	14629.7	14575.0	14477.8	14313.8	13651.5	13215.5	13089.4	13490.5	13756.3	11568.9	10352.2
50°	15614.1	15567.0	15604.9	15550.3	15355.8	14898.6	14482.4	14456.6	14584.2	12194.7	10888.4
52.5°	16479.9	16416.1	16578.6	16771.6	16950.8	16849.0	15841.9	15372.5	15257.1	12664.1	11248.4
55°	17195.4	17172.6	17452.1	17973.1	18655.2	18922.5	17295.6	16218.6	15858.6	13062.1	11281.8
57.5°	17623.7	17678.4	18269.3	19278.0	20611.7	20737.7	18996.9	17117.9	16388.8	13303.6	11441.3
60°	16891.6	17076.9	18140.2	20256.2	22276.5	22331.2	20219.7	17297.1	15694.6	12434.7	10589.1
62.5°	14698.1	14831.8	16504.2	20193.9	22847.7	22431.4	20493.2	16285.5	13754.8	10548.1	9006.3
65°	10385.6	10540.5	12556.3	18210.1	20786.3	20801.5	18772.1	14082.9	10994.7	8166.3	6954.1
67.5°	6264.5	6515.1	8424.5	13220.1	17114.9	17426.3	15661.2	10662.0	7868.6	5331.8	4500.9
70°	2055.2	2284.6	3846.2	7824.5	12337.5	13671.2	11761.8	6928.3	4109.0	2254.2	1815.2
72.5°	814.2	919.0	1355.0	3460.3	7950.6	9127.8	7247.3	3347.9	1379.3	598.5	521.0
75°	543.8	554.4	625.8	1178.8	3890.2	4991.5	3493.8	973.7	511.9	373.7	328.1
77.5°	473.9	475.5	507.4	621.3	1266.9	1914.0	1005.6	522.5	423.8	306.8	271.9
80°	434.4	440.5	460.3	530.1	580.3	650.1	496.7	436.0	367.6	282.5	256.7
82.5°	416.2	420.8	432.9	480.0	469.4	487.6	401.0	346.3	309.9	259.8	246.1
85°	379.8	387.4	394.9	423.8	385.8	334.2	309.9	232.4	221.8	196.0	180.8
87.5°	287.1	285.6	278.0	282.5	258.2	211.1	174.7	130.6	106.3	88.1	72.9
90°	120.0	121.5	117.0	110.9	97.2	80.5	60.8	36.5	18.2	6.1	3.0
92.5°	91.1	92.7	89.6	80.5	69.9	56.2	41.0	21.3	12.2	4.6	1.5
95°	56.2	57.7	54.7	48.6	42.5	31.9	21.3	13.7	7.6	3.0	0.0
97.5°	33.4	34.9	31.9	28.9	22.8	15.2	12.2	9.1	6.1	3.0	0.0
100°	19.7	19.7	18.2	15.2	10.6	9.1	7.6	6.1	4.6	1.5	0.0
102.5°	9.1	9.1	9.1	6.1	4.6	4.6	4.6	4.6	4.6	1.5	0.0
105°	3.0	3.0	1.5	1.5	1.5	3.0	3.0	3.0	3.0	1.5	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.0	3.0	1.5	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	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°	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4	3627.4
2.5°	3665.4	3636.5	3641.1	3615.3	3609.2	3581.9	3630.5	3635.0	3621.4	3635.0
5°	3711.0	3676.0	3685.2	3656.3	3648.7	3610.7	3650.2	3647.2	3636.5	3650.2
7.5°	3777.8	3738.3	3742.9	3709.5	3701.9	3659.3	3695.8	3685.2	3673.0	3689.7
10°	3862.9	3824.9	3826.4	3780.9	3776.3	3727.7	3774.8	3755.0	3736.8	3761.1
12.5°	3981.4	3928.2	3923.6	3873.5	3872.0	3821.9	3870.5	3853.8	3829.5	3867.4
15°	4118.1	4046.7	4028.5	3964.7	3963.1	3910.0	3958.6	3932.8	3920.6	3966.2
17.5°	4295.8	4206.2	4068.0	3850.7	3752.0	3768.7	3940.4	4002.6	3840.1	3864.4
20°	4403.7	3969.2	3767.2	3677.6	3630.5	3360.1	2994.0	3024.4	3384.4	3556.0
22.5°	4221.4	4092.3	4017.8	3891.7	3235.5	3142.9	3164.1	3158.1	2693.2	2555.0
25°	4601.1	4479.6	4344.4	3566.7	3431.5	3392.0	3402.6	2966.7	2713.0	2723.6
27.5°	5148.0	4991.5	4134.8	3797.6	3770.2	3712.5	3502.9	2978.8	3010.7	3032.0
30°	5839.1	5283.2	4403.7	4256.3	4201.6	4139.3	3250.7	3328.2	3387.4	3452.7
32.5°	6507.5	5138.9	4918.6	4765.2	4680.1	3758.1	3666.9	3809.7	3869.0	3925.2
35°	6446.7	5757.1	5471.5	5277.1	5117.6	4055.8	4136.3	4353.5	4510.0	4508.5
37.5°	6613.8	6430.0	6100.4	5854.3	4441.6	4543.4	4712.0	4959.6	5149.5	5148.0
40°	7311.1	7112.1	6802.2	6273.6	4921.6	5158.6	5389.5	5621.9	5758.6	5769.3
42.5°	8003.7	7850.3	7570.8	5541.4	5509.5	5837.6	6079.1	6226.5	6310.0	6338.9
45°	8693.4	8549.1	7438.7	6129.3	6226.5	6551.6	6698.9	6727.8	6817.4	6814.3
47.5°	9241.8	9118.7	6843.2	6828.0	7069.5	7294.4	7247.3	7210.8	7233.6	7245.8
50°	9747.6	7938.4	7377.9	7599.7	7967.3	7994.6	7798.7	6177.9	7648.3	7622.5
52.5°	9054.9	7747.0	7876.1	8395.7	9021.5	8704.0	8321.2	5415.3	7172.8	7854.9
55°	7923.2	8053.9	8345.5	9217.4	9835.7	9459.0	8819.5	5576.3	4760.6	3875.0
57.5°	8081.2	8287.8	8842.2	10046.8	10586.1	7491.8	8231.6	3931.2	2661.3	2659.8
60°	7525.3	7838.2	8831.6	10419.0	8568.8	4800.1	3297.8	89.6	516.5	511.9
62.5°	6361.7	6806.8	8426.0	10183.5	7098.4	3900.9	2937.8	7.6	3.0	3.0
65°	4920.1	5444.2	7025.5	8817.9	6288.8	3360.1	2181.3	0.0	0.0	0.0
67.5°	3226.4	3712.5	5275.6	7324.7	5220.9	2539.8	1465.9	0.0	0.0	0.0
70°	1344.3	1944.4	3278.1	5293.8	3840.1	1663.3	695.7	0.0	0.0	0.0
72.5°	388.9	592.4	1476.5	3161.1	2383.4	870.4	258.2	0.0	0.0	0.0
75°	256.7	270.4	446.6	1271.4	1159.0	319.0	104.8	0.0	0.0	0.0
77.5°	215.7	221.8	284.1	355.5	372.2	126.1	85.1	0.0	0.0	0.0
80°	199.0	200.5	255.2	264.3	199.0	104.8	83.5	0.0	0.0	0.0
82.5°	185.3	180.8	217.2	209.6	165.6	91.1	77.5	0.0	0.0	0.0
85°	127.6	130.6	147.3	186.8	100.3	45.6	54.7	0.0	0.0	0.0
87.5°	39.5	45.6	57.7	59.2	18.2	6.1	0.0	0.0	0.0	0.0
90°	1.5	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)