

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: P579478

Luminaire Tested: **CTN-CA10-310-740-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579478  
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-CA10-310-740-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35620 lumens  
Efficiency: N/A  
Efficacy: 114.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

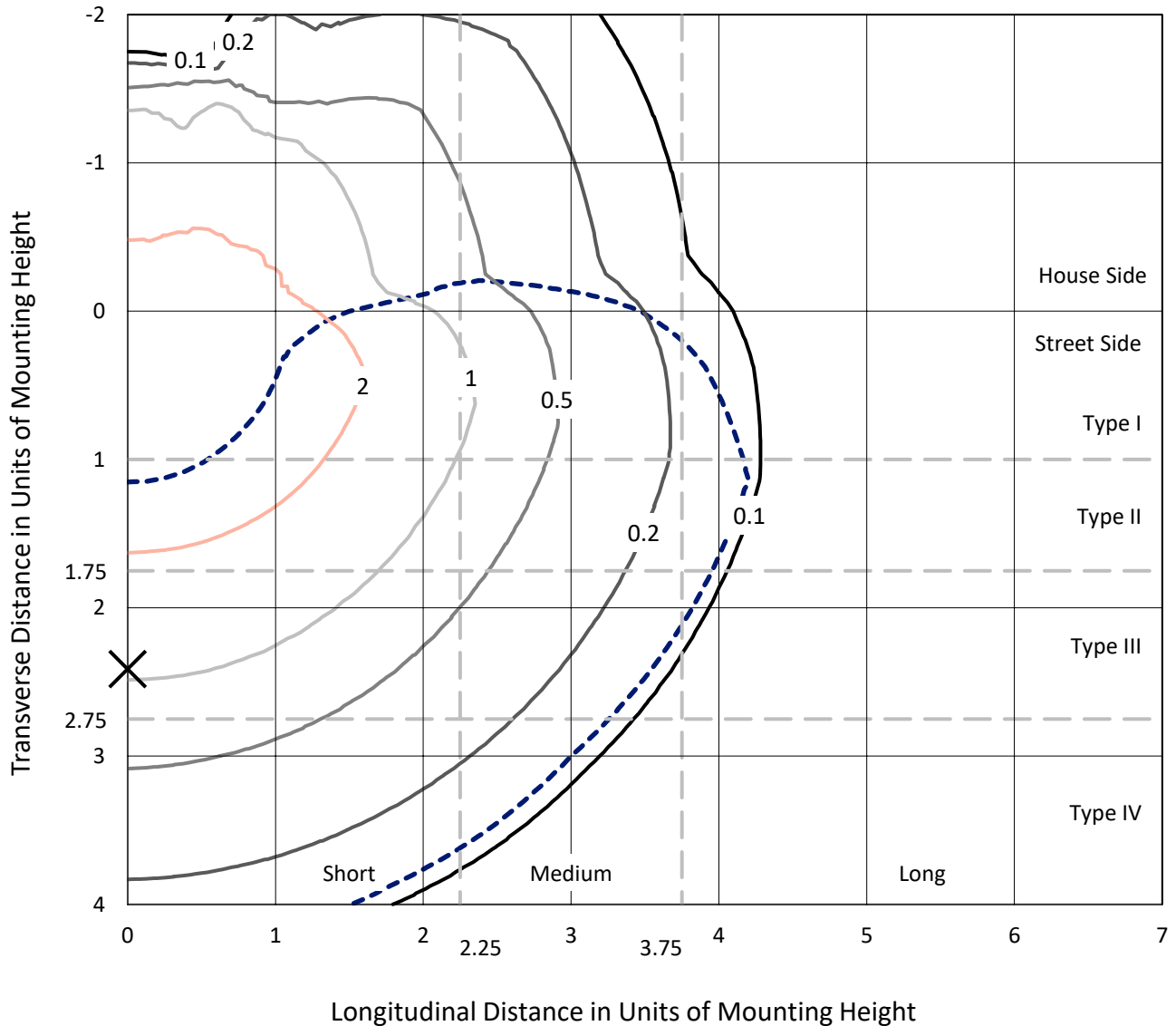
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

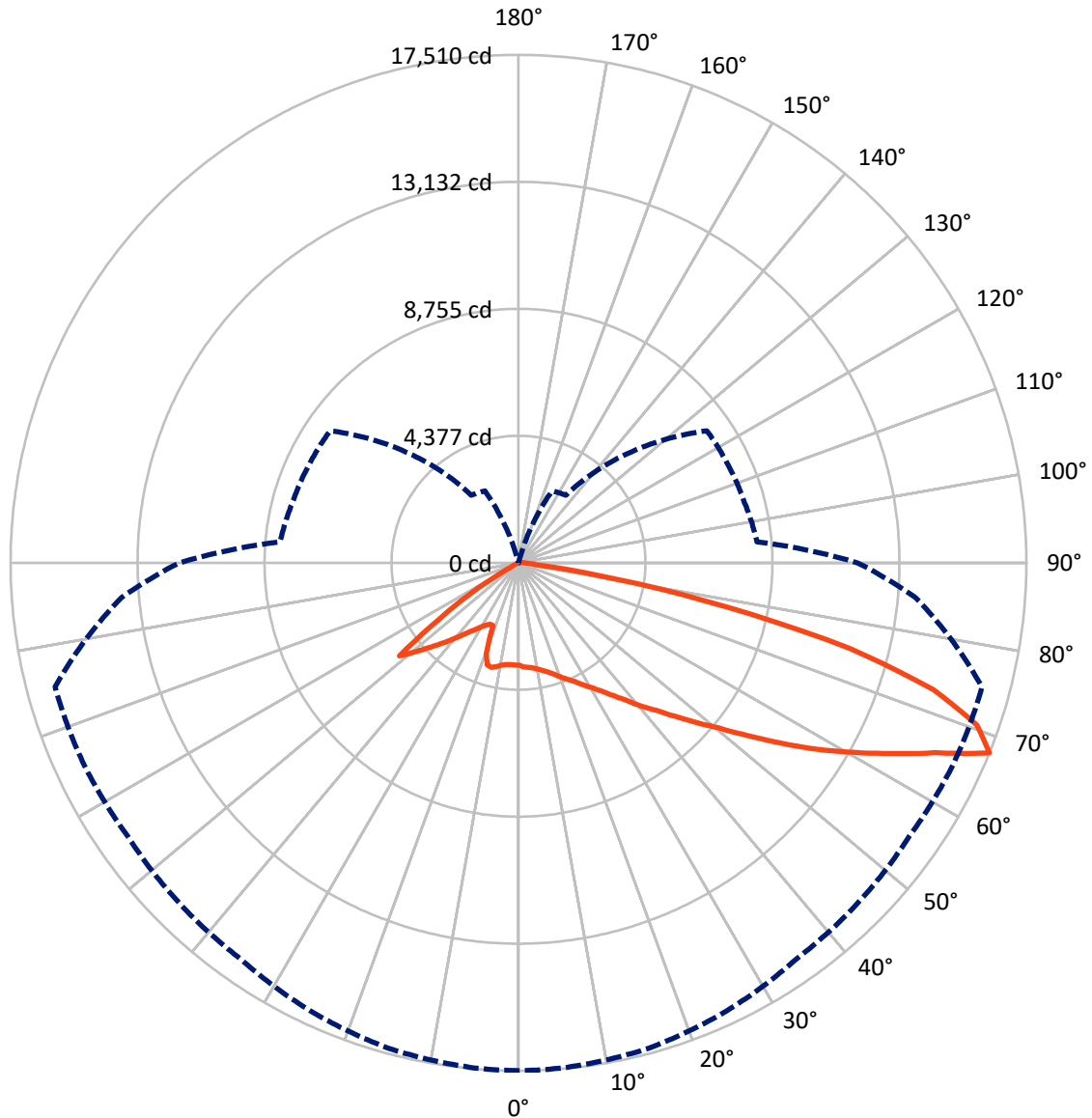
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4 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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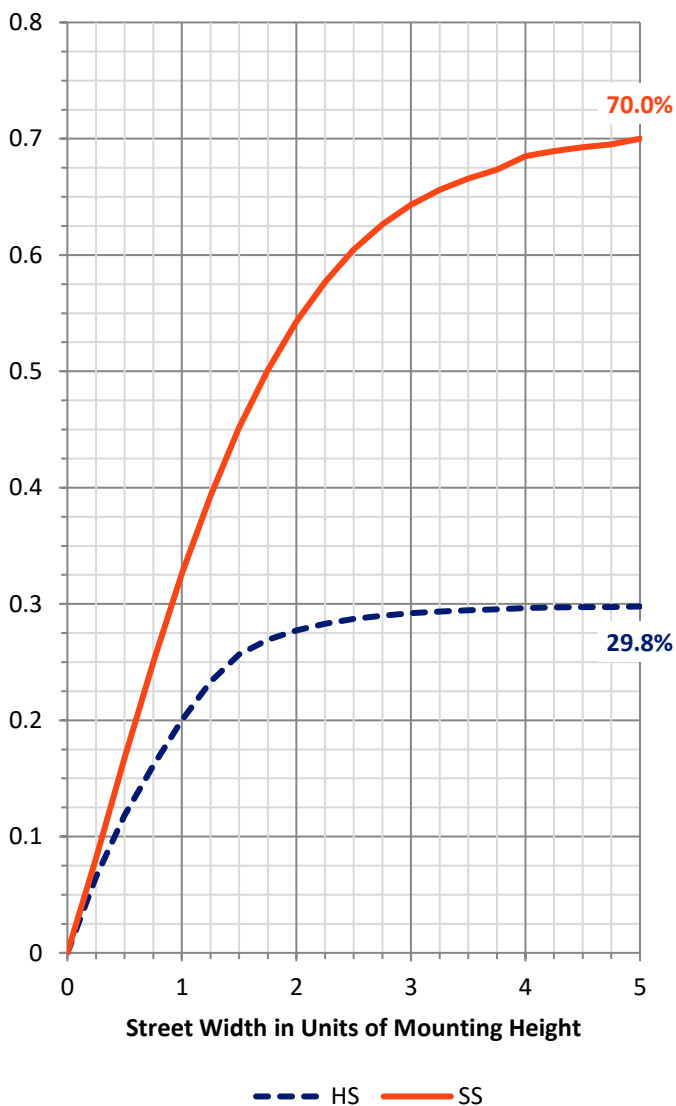
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10632.8	3.6	10636.3
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	24943.6	40.1	24983.7
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	35576.3	43.7	35620.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	340.3	1.0
10°-20°	1053.4	3.0
20°-30°	1767.9	5.0
30°-40°	2866.7	8.0
40°-50°	4684.5	13.2
50°-60°	7341.4	20.6
60°-70°	9832.4	27.6
70°-80°	7166.5	20.1
80°-90°	523.4	1.5
90°-100°	33.5	0.1
100°-110°	9.5	0.0
110°-120°	0.7	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°	35576.3	99.9
0°-180°	35620.0	100.0

**Coefficient of Utilization**

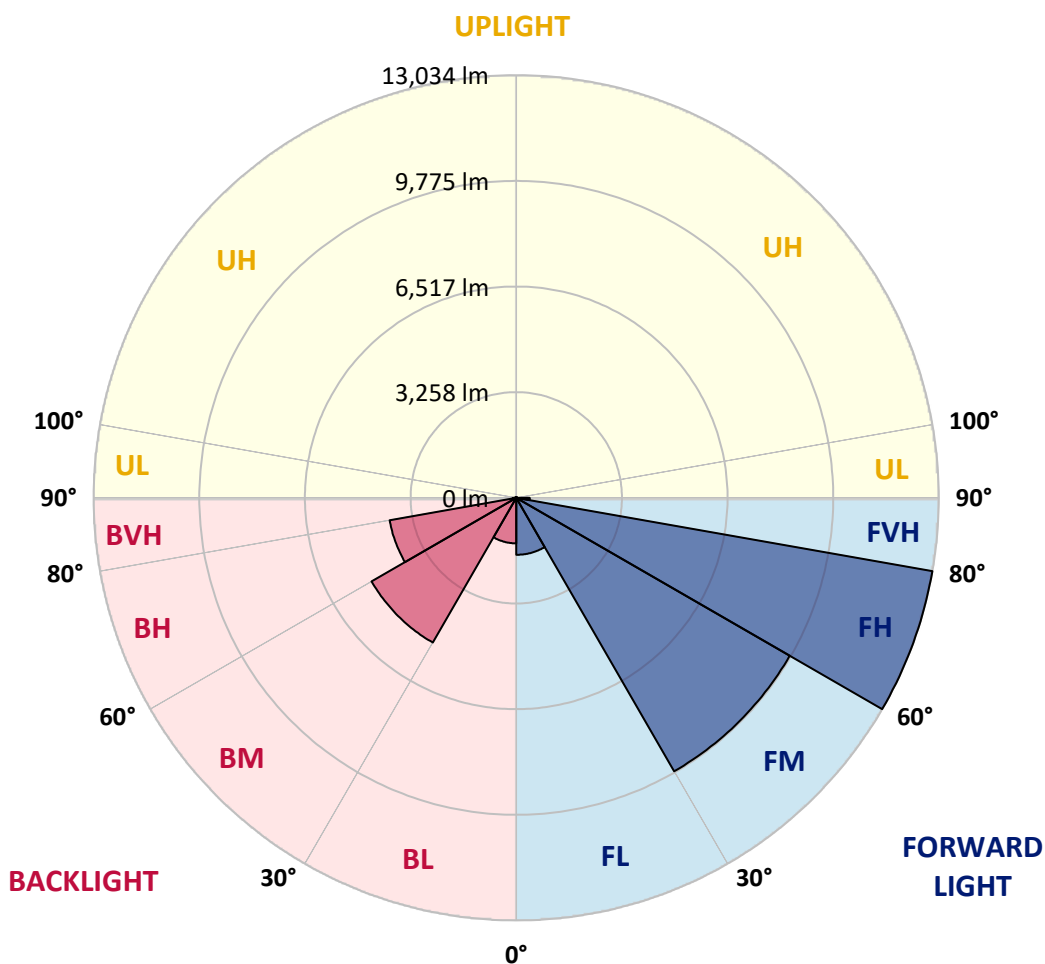


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1757.0	4.9			
FM (30°-60°)	9739.2	27.3			
FH (60°-80°)	13033.6	36.6			G5
FVH (80°-90°)	413.9	1.2			G3/500
BL (0°-30°)	1404.6	3.9	B3/2500		
BM (30°-60°)	5153.4	14.5	B4/8500		
BH (60°-80°)	3965.3	11.1	B4/5000		G4/5000
BVH (80°-90°)	109.5	0.3			G2/225
UL (90°-100°)	33.5	0.1		U2/50	
UH (100°-180°)	10.2	0.0		U2/50	

**BUG Rating: B4-U2-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5
2.5°	3596.9	3576.0	3577.5	3596.9	3538.5	3558.0	3532.5	3552.0	3538.5	3543.0	3552.0
5°	3619.4	3596.9	3598.4	3622.4	3570.0	3586.4	3552.0	3562.5	3550.5	3556.5	3556.5
7.5°	3664.3	3638.9	3637.4	3652.3	3598.4	3604.4	3573.0	3574.5	3556.5	3568.5	3562.5
10°	3731.7	3710.7	3695.8	3704.7	3656.8	3653.8	3613.4	3614.9	3592.4	3605.9	3595.4
12.5°	3814.1	3785.6	3782.6	3785.6	3733.2	3721.2	3679.3	3682.3	3641.8	3662.8	3650.8
15°	3918.9	3874.0	3874.0	3890.4	3823.0	3814.1	3763.1	3766.1	3724.2	3740.7	3728.7
17.5°	4047.7	4004.2	3996.7	4008.7	3950.3	3938.3	3885.9	3882.9	3836.5	3841.0	3830.5
20°	4213.9	4170.5	4152.5	4182.4	4109.1	4100.1	4037.2	4031.2	3981.8	3968.3	3962.3
22.5°	4368.1	4333.7	4324.7	4357.6	4281.3	4273.8	4213.9	4206.4	4160.0	4140.5	4022.2
25°	4541.8	4534.3	4531.3	4541.8	4469.9	4455.0	4408.5	4398.1	4359.1	4335.2	4191.4
27.5°	4766.4	4763.5	4754.5	4756.0	4690.1	4676.6	4633.2	4625.7	4585.3	4558.3	4374.1
30°	5001.5	5001.5	4982.1	4992.6	4959.6	4938.7	4904.2	4877.3	4851.8	4823.3	4591.2
32.5°	5272.6	5271.1	5253.1	5284.6	5260.6	5260.6	5239.6	5211.2	5166.3	5152.8	4871.3
35°	5621.5	5599.0	5591.6	5642.5	5635.0	5648.5	5641.0	5611.0	5573.6	5542.1	5200.7
37.5°	6007.8	6001.9	6024.3	6055.8	6072.2	6108.2	6085.7	6084.2	6078.2	5998.9	5112.4
40°	6484.0	6458.6	6490.0	6506.5	6494.5	6552.9	6533.5	6549.9	6594.9	5956.9	5106.4
42.5°	6958.7	6936.3	6958.7	7039.6	7021.6	7092.0	7083.0	7147.4	7172.9	6045.3	5521.2
45°	7542.8	7517.3	7535.3	7631.1	7640.1	7725.4	7771.9	7833.3	7845.2	6617.3	6021.3
47.5°	8213.6	8171.7	8206.1	8251.1	8387.3	8468.2	8513.1	8588.0	8664.4	7306.2	6590.4
50°	8953.4	8950.4	8987.8	9065.7	9221.4	9302.3	9380.1	9458.0	9583.8	8074.4	7228.3
52.5°	9893.8	9874.3	9938.7	10012.1	10149.8	10274.1	10367.0	10447.8	10582.6	8851.5	7918.6
55°	10969.0	10901.6	11024.4	11148.7	11207.1	11353.8	11418.2	11485.6	11614.4	9669.2	8321.4
57.5°	12129.5	12113.0	12198.4	12243.3	12369.1	12460.4	12494.9	12568.3	12566.8	10519.7	9007.3
60°	13272.1	13254.1	13354.4	13381.4	13481.7	13564.1	13552.1	13618.0	13641.9	11317.9	9679.6
62.5°	14474.5	14444.6	14537.4	14543.4	14483.5	14616.8	14603.3	14658.7	14637.8	12098.1	10341.5
65°	15789.3	15811.8	15841.7	15718.9	15575.2	15690.5	15687.5	15792.3	15867.2	13188.2	11228.0
67.5°	17509.9	17481.5	17327.2	17030.7	16681.8	16565.0	16440.7	16517.1	16538.1	13730.3	11681.8
70°	16767.2	16704.3	16635.4	16332.9	15912.1	15615.6	15422.4	15503.3	15588.7	12975.6	10972.0
72.5°	14956.7	14801.0	14480.5	14214.0	13971.4	13682.4	13447.3	13588.0	13775.2	11509.5	9715.6
75°	11800.1	11654.8	11421.2	11240.0	11109.7	11106.7	11096.2	11205.6	11178.6	9345.7	7899.2
77.5°	7307.7	7611.6	7827.3	7673.0	7726.9	7616.1	7860.2	8004.0	8134.3	6699.7	5627.5
80°	3373.8	3451.7	3833.5	3734.7	3655.3	3632.9	3647.8	3897.9	3971.3	3006.9	2518.7
82.5°	769.7	738.3	765.2	709.8	706.8	673.9	678.4	678.4	654.4	554.1	464.2
85°	389.3	398.3	401.3	384.8	339.9	305.5	283.0	239.6	206.7	176.7	149.7
87.5°	260.6	268.0	272.5	250.1	224.6	196.2	178.2	145.3	115.3	71.9	55.4
90°	178.2	176.7	172.2	160.2	143.8	122.8	98.8	68.9	40.4	15.0	10.5
92.5°	127.3	124.3	122.8	112.3	100.3	83.9	64.4	43.4	22.5	10.5	6.0
95°	83.9	82.4	82.4	76.4	67.4	55.4	43.4	28.5	16.5	9.0	6.0
97.5°	58.4	56.9	56.9	53.9	47.9	40.4	29.9	19.5	13.5	9.0	6.0
100°	40.4	40.4	40.4	37.4	34.4	28.5	22.5	15.0	12.0	9.0	6.0
102.5°	27.0	27.0	28.5	27.0	24.0	19.5	15.0	12.0	10.5	7.5	6.0
105°	18.0	18.0	18.0	18.0	16.5	13.5	12.0	10.5	9.0	7.5	6.0
107.5°	12.0	12.0	12.0	12.0	10.5	9.0	9.0	9.0	7.5	7.5	6.0
110°	7.5	7.5	7.5	9.0	7.5	7.5	7.5	7.5	7.5	6.0	6.0



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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°	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5	3529.5
2.5°	3544.5	3523.5	3534.0	3513.1	3504.1	3484.6	3522.0	3525.0	3522.0	3528.0
5°	3549.0	3525.0	3537.0	3513.1	3508.6	3486.1	3523.5	3523.5	3514.6	3519.1
7.5°	3559.5	3534.0	3543.0	3514.6	3514.6	3487.6	3532.5	3529.5	3522.0	3532.5
10°	3595.4	3565.5	3565.5	3538.5	3541.5	3513.1	3568.5	3568.5	3562.5	3580.4
12.5°	3650.8	3613.4	3614.9	3577.5	3583.4	3561.0	3628.4	3631.4	3631.4	3661.3
15°	3722.7	3665.8	3671.8	3631.4	3643.3	3616.4	3676.3	3673.3	3680.8	3724.2
17.5°	3811.1	3748.2	3695.8	3564.0	3486.1	3489.1	3667.3	3749.7	3653.8	3682.3
20°	3848.5	3543.0	3376.8	3328.9	3318.4	3152.2	2812.2	2864.7	3185.1	3324.4
22.5°	3596.9	3499.6	3483.1	3421.7	2968.0	2842.2	2863.2	2833.2	2518.7	2340.5
25°	3719.7	3655.3	3617.9	3077.3	2975.5	2953.0	2938.0	2653.5	2312.1	2328.6
27.5°	3893.4	3809.6	3360.3	3090.8	3110.2	3075.8	2988.9	2387.0	2376.5	2403.4
30°	4098.6	3887.4	3275.0	3249.5	3272.0	3227.0	2512.8	2488.8	2488.8	2515.7
32.5°	4350.1	3526.5	3475.6	3478.6	3463.6	2954.5	2644.5	2638.5	2656.5	2679.0
35°	4279.8	3761.6	3766.1	3791.6	3757.2	2890.1	2851.2	2828.7	2843.7	2852.7
37.5°	4142.0	4115.0	4115.0	4086.6	3207.6	3116.2	3074.3	3071.3	3069.8	3069.8
40°	4489.4	4464.0	4432.5	4383.1	3355.8	3379.8	3316.9	3309.4	3313.9	3330.4
42.5°	4884.7	4874.3	4871.3	3761.6	3664.3	3682.3	3614.9	3595.4	3595.4	3632.9
45°	5350.5	5337.0	5006.0	4020.7	4004.2	4025.2	3950.3	3903.9	3929.4	3956.3
47.5°	5885.1	5885.1	4432.5	4408.5	4408.5	4420.5	4345.7	4282.8	4308.2	4317.2
50°	6470.6	5555.6	4877.3	4854.8	4875.8	4869.8	4791.9	4207.9	4748.5	4753.0
52.5°	6633.8	5402.9	5365.4	5340.0	5365.4	5360.9	5280.1	3510.1	5136.3	5209.7
55°	5880.6	5885.1	5877.6	5840.1	5867.1	5856.6	5777.2	3832.0	3787.1	3375.3
57.5°	6358.3	6364.2	6361.2	6355.3	6379.2	4634.7	5983.9	3462.1	2114.4	2115.9
60°	6877.9	6847.9	6838.9	6825.5	5784.7	3285.4	2493.3	241.1	826.6	814.6
62.5°	7349.6	7339.1	7307.7	7300.2	4908.7	2587.6	2527.7	55.4	43.4	41.9
65°	8005.5	7912.6	7887.2	7807.8	5232.2	2755.3	2698.4	16.5	1.5	0.0
67.5°	8249.6	8060.9	7969.5	7927.6	5323.5	2842.2	2732.9	16.5	1.5	0.0
70°	7788.3	7554.7	7439.4	7393.0	4974.6	2656.5	2548.7	16.5	1.5	0.0
72.5°	6906.3	6734.1	6687.7	6539.4	4386.1	2331.6	2237.2	16.5	0.0	0.0
75°	5664.9	5602.0	5545.1	5387.9	3565.5	1852.4	1768.5	15.0	0.0	0.0
77.5°	4122.5	4029.7	3924.9	3754.2	2406.4	1210.0	1166.5	13.5	0.0	0.0
80°	1858.4	1782.0	1756.5	1490.0	853.6	393.8	347.4	12.0	0.0	0.0
82.5°	360.9	325.0	308.5	296.5	191.7	106.3	92.8	9.0	0.0	0.0
85°	122.8	136.3	158.7	175.2	107.8	64.4	53.9	6.0	0.0	0.0
87.5°	47.9	64.4	77.9	80.9	40.4	27.0	15.0	3.0	0.0	0.0
90°	9.0	12.0	10.5	7.5	4.5	1.5	0.0	0.0	0.0	0.0
92.5°	4.5	6.0	4.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
95°	6.0	6.0	6.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0
97.5°	6.0	6.0	6.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0
100°	6.0	6.0	6.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0
102.5°	6.0	6.0	6.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0
105°	6.0	7.5	6.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0
107.5°	6.0	7.5	6.0	4.5	3.0	1.5	0.0	0.0	0.0	0.0
110°	6.0	7.5	6.0	4.5	3.0	1.5	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)