

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: P579430

Luminaire Tested: **CTN-CA10-310-730-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579430  
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-CA10-310-730-U-T5-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: 34975 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

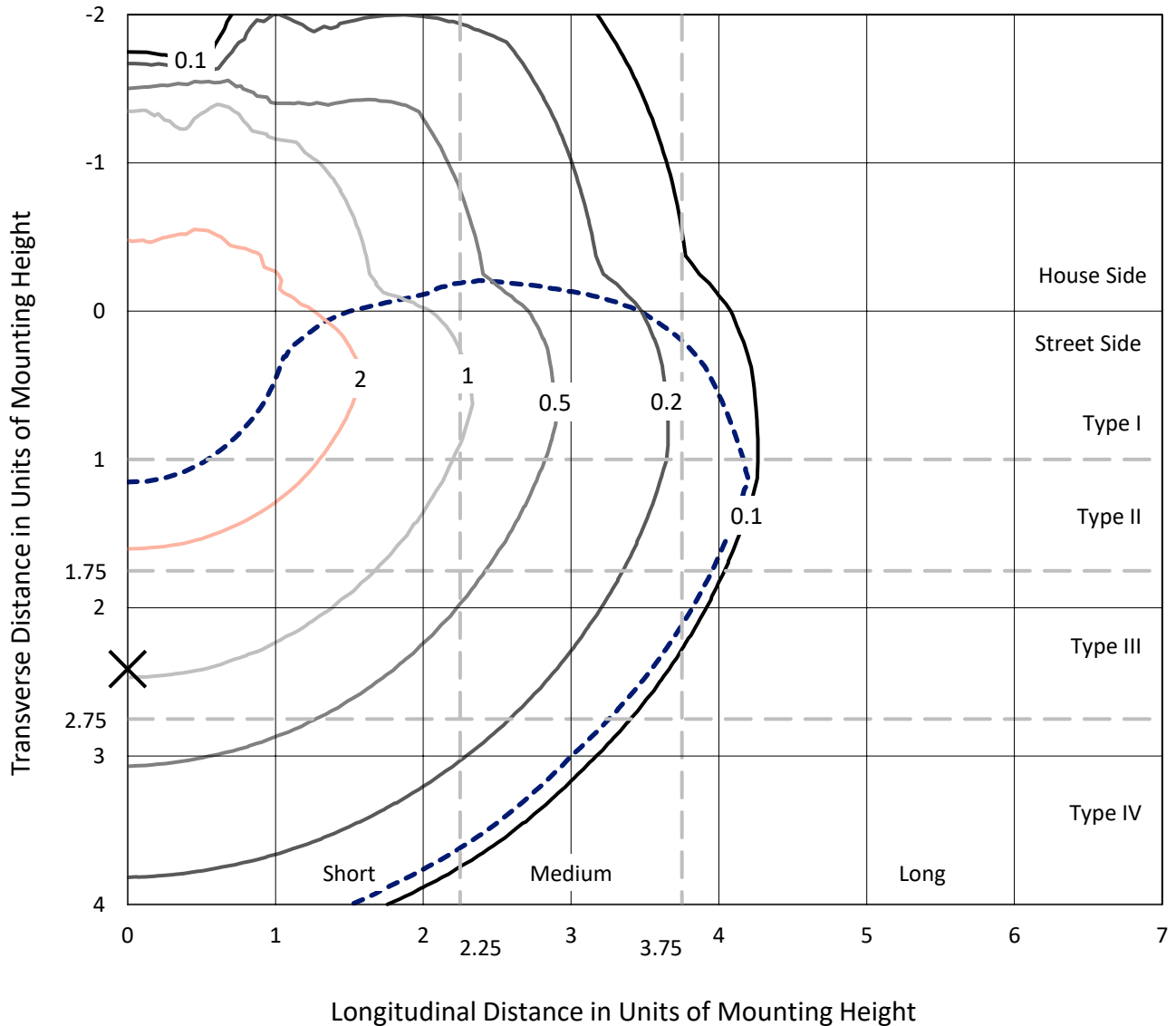
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

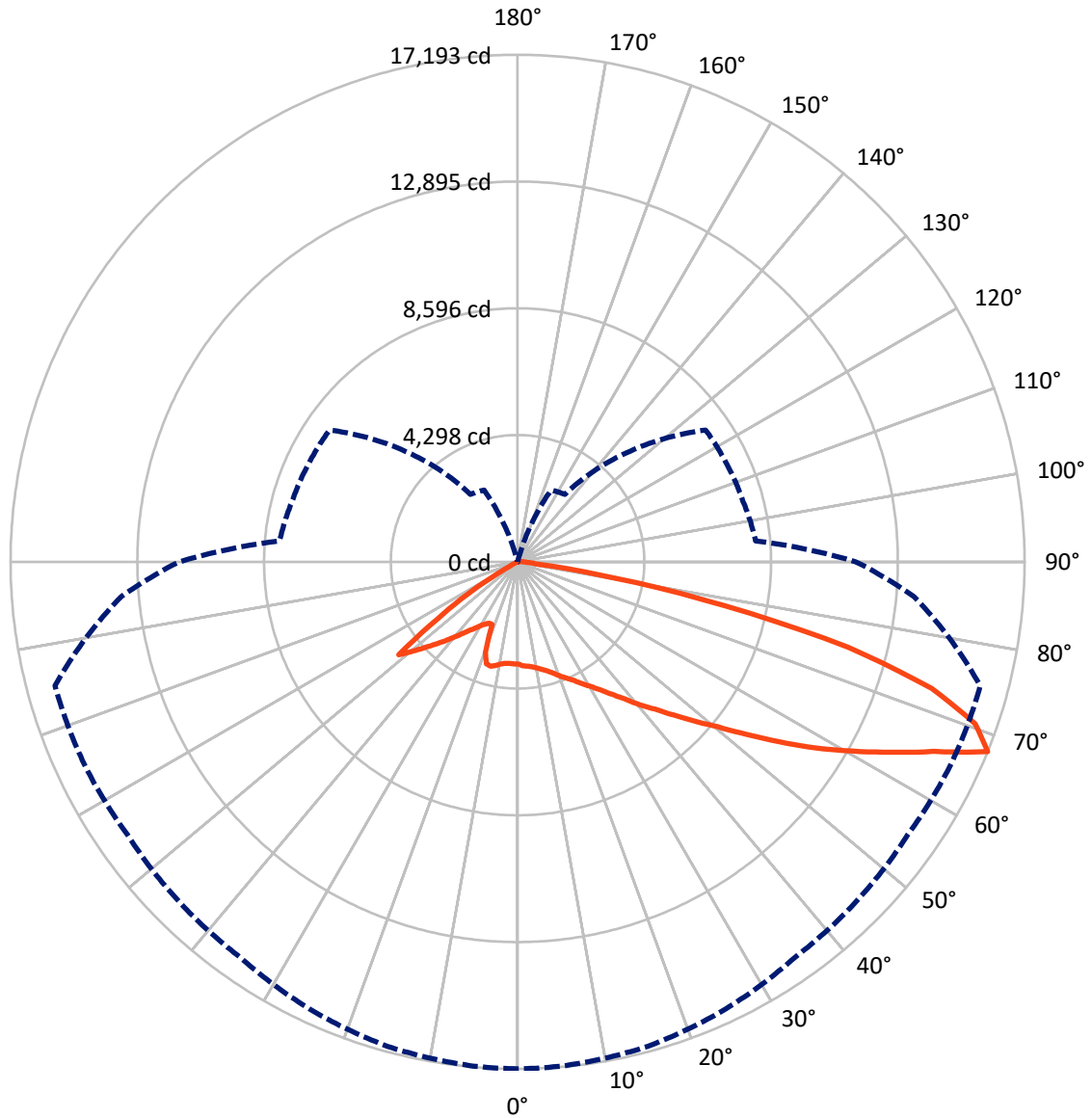
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.9 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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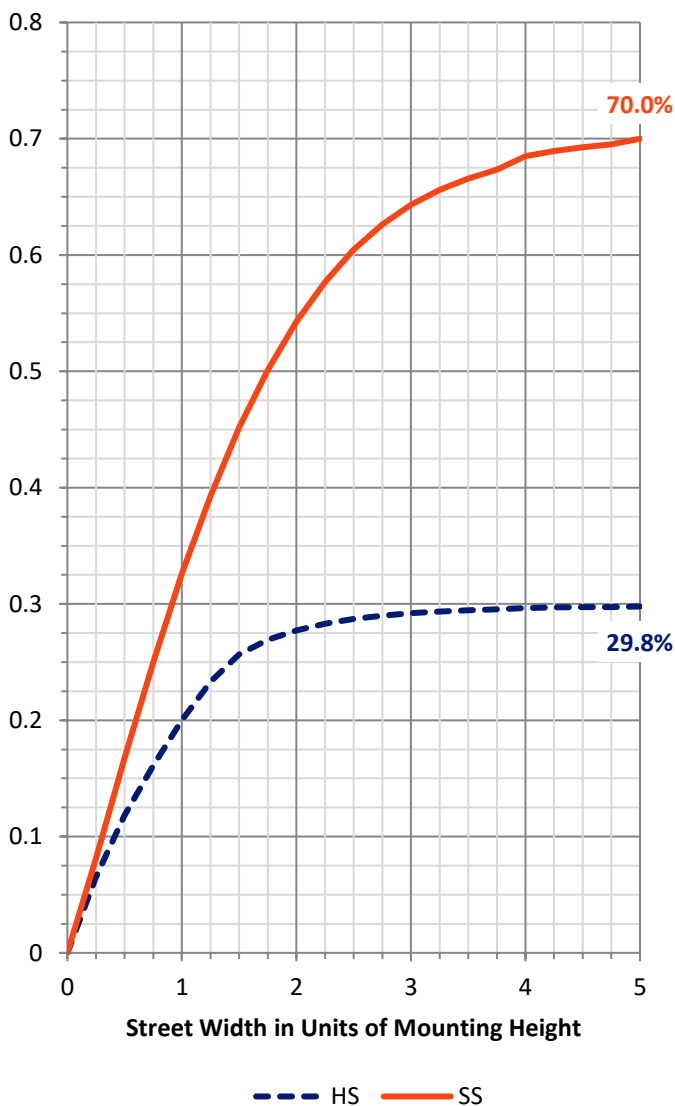
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10440.2	3.5	10443.7
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	24491.9	39.4	24531.3
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	34932.1	42.9	34975.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	334.1	1.0
10°-20°	1034.4	3.0
20°-30°	1735.9	5.0
30°-40°	2814.8	8.0
40°-50°	4599.6	13.2
50°-60°	7208.5	20.6
60°-70°	9654.3	27.6
70°-80°	7036.7	20.1
80°-90°	513.9	1.5
90°-100°	32.9	0.1
100°-110°	9.4	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°	34932.1	99.9
0°-180°	34975.0	100.0

**Coefficient of Utilization**

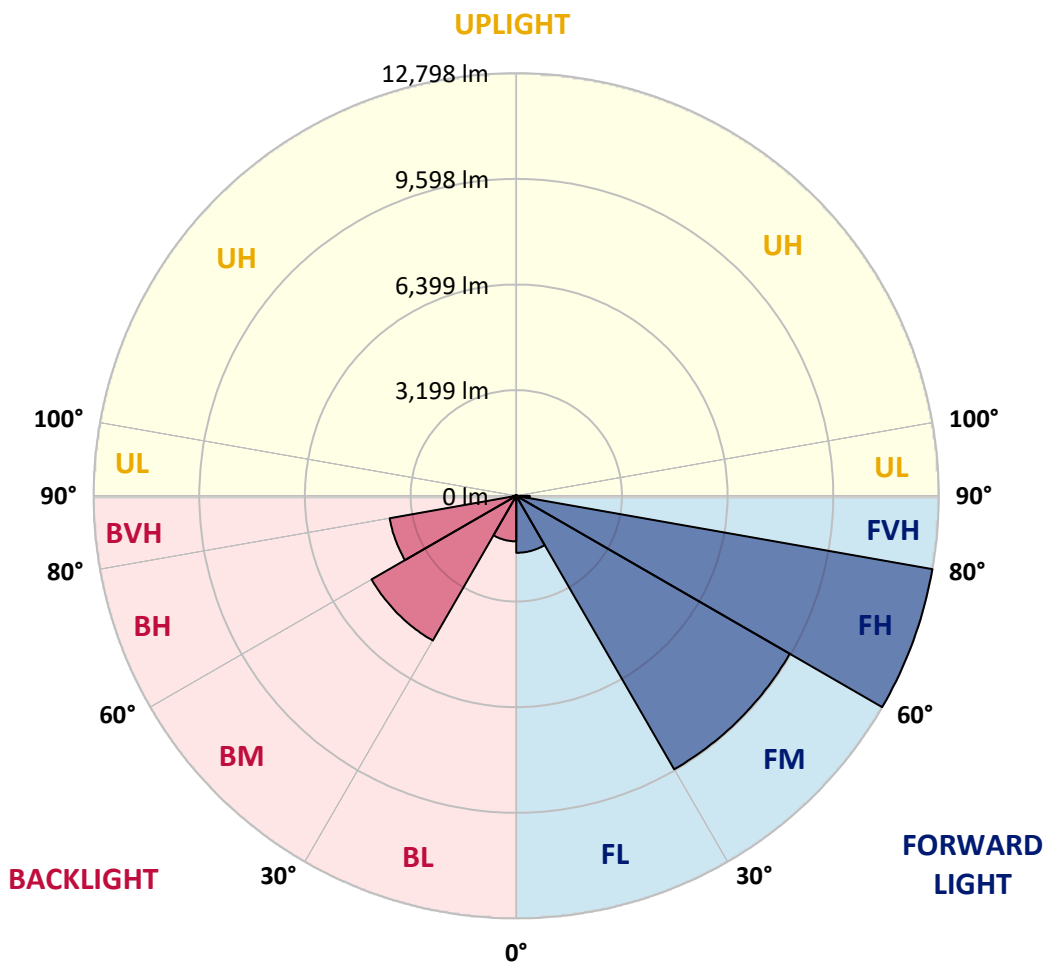


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1725.1	4.9			
FM (30°-60°)	9562.8	27.3			
FH (60°-80°)	12797.6	36.6			G5
FVH (80°-90°)	406.4	1.2			G3/500
BL (0°-30°)	1379.2	3.9	B3/2500		
BM (30°-60°)	5060.1	14.5	B4/8500		
BH (60°-80°)	3893.5	11.1	B4/5000		G4/5000
BVH (80°-90°)	107.5	0.3			G2/225
UL (90°-100°)	32.9	0.1		U2/50	
UH (100°-180°)	10.0	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°	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6
2.5°	3531.8	3511.2	3512.7	3531.8	3474.4	3493.6	3468.6	3487.7	3474.4	3478.9	3487.7
5°	3553.8	3531.8	3533.3	3556.8	3505.3	3521.5	3487.7	3498.0	3486.2	3492.1	3492.1
7.5°	3598.0	3573.0	3571.5	3586.2	3533.3	3539.1	3508.3	3509.7	3492.1	3503.9	3498.0
10°	3664.1	3643.5	3628.8	3637.7	3590.6	3587.7	3548.0	3549.4	3527.4	3540.6	3530.3
12.5°	3745.0	3717.1	3714.1	3717.1	3665.6	3653.8	3612.7	3615.6	3575.9	3596.5	3584.7
15°	3847.9	3803.8	3803.8	3820.0	3753.8	3745.0	3695.0	3697.9	3656.8	3672.9	3661.2
17.5°	3974.4	3931.7	3924.4	3936.1	3878.8	3867.0	3815.6	3812.6	3767.0	3771.5	3761.2
20°	4137.6	4094.9	4077.3	4106.7	4034.7	4025.8	3964.1	3958.2	3909.7	3896.4	3890.6
22.5°	4289.0	4255.2	4246.4	4278.7	4203.7	4196.4	4137.6	4130.2	4084.6	4065.5	3949.4
25°	4459.6	4452.2	4449.3	4459.6	4389.0	4374.3	4328.7	4318.4	4280.2	4256.7	4115.5
27.5°	4680.1	4677.2	4668.4	4669.8	4605.1	4591.9	4549.3	4541.9	4502.2	4475.8	4294.9
30°	4911.0	4911.0	4891.9	4902.2	4869.8	4849.2	4815.4	4788.9	4763.9	4736.0	4508.1
32.5°	5177.1	5175.6	5158.0	5188.9	5165.4	5165.4	5144.8	5116.8	5072.7	5059.5	4783.1
35°	5519.7	5497.7	5490.3	5540.3	5532.9	5546.2	5538.8	5509.4	5472.7	5441.8	5106.5
37.5°	5899.1	5893.2	5915.2	5946.1	5962.3	5997.6	5975.5	5974.0	5968.2	5890.2	5019.8
40°	6366.6	6341.6	6372.5	6388.7	6376.9	6434.3	6415.2	6431.3	6475.4	5849.1	5013.9
42.5°	6832.7	6810.7	6832.7	6912.1	6894.5	6963.6	6954.8	7018.0	7043.0	5935.8	5421.2
45°	7406.2	7381.2	7398.8	7492.9	7501.7	7585.6	7631.1	7691.4	7703.2	6497.5	5912.3
47.5°	8064.9	8023.7	8057.5	8101.6	8235.5	8314.8	8359.0	8432.5	8507.5	7173.9	6471.0
50°	8791.2	8788.3	8825.1	8901.5	9054.4	9133.8	9210.3	9286.8	9410.3	7928.1	7097.4
52.5°	9714.6	9695.5	9758.7	9830.8	9966.1	10088.1	10179.3	10258.7	10391.0	8691.3	7775.2
55°	10770.3	10704.2	10824.7	10946.8	11004.1	11148.2	11211.4	11277.6	11404.1	9494.1	8170.8
57.5°	11909.9	11893.7	11977.5	12021.6	12145.1	12234.8	12268.6	12340.7	12339.2	10329.2	8844.2
60°	13031.7	13014.1	13112.6	13139.1	13237.6	13318.5	13306.7	13371.4	13394.9	11112.9	9504.4
62.5°	14212.4	14183.0	14274.2	14280.1	14221.3	14352.1	14338.9	14393.3	14372.7	11879.0	10154.3
65°	15503.4	15525.5	15554.9	15434.3	15293.1	15406.4	15403.4	15506.3	15579.9	12949.4	11024.7
67.5°	17192.8	17164.9	17013.5	16722.3	16379.7	16265.1	16143.0	16218.0	16238.6	13481.7	11470.2
70°	16463.5	16401.8	16334.2	16037.1	15624.0	15332.8	15143.2	15222.6	15306.4	12740.6	10773.3
72.5°	14685.9	14533.0	14218.3	13956.6	13718.4	13434.6	13203.8	13342.0	13525.8	11301.1	9539.7
75°	11586.4	11443.8	11214.4	11036.5	10908.6	10905.6	10895.3	11002.7	10976.2	9176.5	7756.1
77.5°	7175.3	7473.8	7685.5	7534.1	7587.0	7478.2	7717.9	7859.0	7987.0	6578.4	5525.6
80°	3312.7	3389.2	3764.1	3667.1	3589.1	3567.1	3581.8	3827.3	3899.4	2952.5	2473.1
82.5°	755.8	724.9	751.4	696.9	694.0	661.7	666.1	666.1	642.5	544.0	455.8
85°	382.3	391.1	394.1	377.9	333.8	300.0	277.9	235.3	202.9	173.5	147.0
87.5°	255.8	263.2	267.6	245.5	220.6	192.6	175.0	142.6	113.2	70.6	54.4
90°	175.0	173.5	169.1	157.3	141.2	120.6	97.0	67.6	39.7	14.7	10.3
92.5°	125.0	122.0	120.6	110.3	98.5	82.3	63.2	42.6	22.1	10.3	5.9
95°	82.3	80.9	80.9	75.0	66.2	54.4	42.6	27.9	16.2	8.8	5.9
97.5°	57.3	55.9	55.9	52.9	47.1	39.7	29.4	19.1	13.2	8.8	5.9
100°	39.7	39.7	39.7	36.8	33.8	27.9	22.1	14.7	11.8	8.8	5.9
102.5°	26.5	26.5	27.9	26.5	23.5	19.1	14.7	11.8	10.3	7.4	5.9
105°	17.6	17.6	17.6	17.6	16.2	13.2	11.8	10.3	8.8	7.4	5.9
107.5°	11.8	11.8	11.8	11.8	10.3	8.8	8.8	8.8	7.4	7.4	5.9
110°	7.4	7.4	7.4	8.8	7.4	7.4	7.4	7.4	7.4	5.9	5.9



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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°	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6	3465.6
2.5°	3480.3	3459.7	3470.0	3449.4	3440.6	3421.5	3458.3	3461.2	3458.3	3464.2
5°	3484.7	3461.2	3473.0	3449.4	3445.0	3423.0	3459.7	3459.7	3450.9	3455.3
7.5°	3495.0	3470.0	3478.9	3450.9	3450.9	3424.5	3468.6	3465.6	3458.3	3468.6
10°	3530.3	3500.9	3500.9	3474.4	3477.4	3449.4	3503.9	3503.9	3498.0	3515.6
12.5°	3584.7	3548.0	3549.4	3512.7	3518.6	3496.5	3562.7	3565.6	3565.6	3595.0
15°	3655.3	3599.4	3605.3	3565.6	3577.4	3550.9	3609.7	3606.8	3614.1	3656.8
17.5°	3742.0	3680.3	3628.8	3499.4	3423.0	3425.9	3600.9	3681.8	3587.7	3615.6
20°	3778.8	3478.9	3315.6	3268.6	3258.3	3095.1	2761.3	2812.8	3127.4	3264.2
22.5°	3531.8	3436.2	3420.0	3359.8	2914.2	2790.7	2811.3	2781.9	2473.1	2298.2
25°	3652.4	3589.1	3552.4	3021.6	2921.6	2899.5	2884.8	2605.5	2270.2	2286.4
27.5°	3822.9	3740.6	3299.5	3034.8	3053.9	3020.1	2934.8	2343.7	2333.5	2359.9
30°	4024.4	3817.0	3215.7	3190.7	3212.7	3168.6	2467.3	2443.7	2443.7	2470.2
32.5°	4271.4	3462.7	3412.7	3415.6	3400.9	2901.0	2596.6	2590.8	2608.4	2630.5
35°	4202.3	3693.5	3697.9	3722.9	3689.1	2837.8	2799.6	2777.5	2792.2	2801.0
37.5°	4067.0	4040.5	4040.5	4012.6	3149.5	3059.8	3018.6	3015.7	3014.2	3014.2
40°	4408.1	4383.1	4352.2	4303.7	3295.1	3318.6	3256.8	3249.5	3253.9	3270.1
42.5°	4796.3	4786.0	4783.1	3693.5	3598.0	3615.6	3549.4	3530.3	3530.3	3567.1
45°	5253.6	5240.3	4915.4	3947.9	3931.7	3952.3	3878.8	3833.2	3858.2	3884.7
47.5°	5778.5	5778.5	4352.2	4328.7	4328.7	4340.5	4267.0	4205.2	4230.2	4239.0
50°	6353.4	5455.0	4788.9	4766.9	4787.5	4781.6	4705.1	4131.7	4662.5	4666.9
52.5°	6513.7	5305.0	5268.3	5243.3	5268.3	5263.9	5184.5	3446.5	5043.3	5115.4
55°	5774.1	5778.5	5771.1	5734.4	5760.8	5750.6	5672.6	3762.6	3718.5	3314.2
57.5°	6243.1	6249.0	6246.1	6240.2	6263.7	4550.7	5875.5	3399.5	2076.1	2077.6
60°	6753.3	6723.9	6715.1	6701.9	5680.0	3226.0	2448.1	236.7	811.6	799.9
62.5°	7216.5	7206.2	7175.3	7168.0	4819.8	2540.8	2482.0	54.4	42.6	41.2
65°	7860.5	7769.3	7744.4	7666.4	5137.4	2705.5	2649.6	16.2	1.5	0.0
67.5°	8100.2	7914.9	7825.2	7784.1	5227.1	2790.7	2683.4	16.2	1.5	0.0
70°	7647.3	7417.9	7304.7	7259.1	4884.5	2608.4	2502.5	16.2	1.5	0.0
72.5°	6781.3	6612.2	6566.6	6421.0	4306.7	2289.3	2196.7	16.2	0.0	0.0
75°	5562.3	5500.6	5444.7	5290.3	3500.9	1818.8	1736.5	14.7	0.0	0.0
77.5°	4047.9	3956.7	3853.8	3686.2	2362.9	1188.0	1145.4	13.2	0.0	0.0
80°	1824.7	1749.7	1724.7	1463.0	838.1	386.7	341.1	11.8	0.0	0.0
82.5°	354.4	319.1	302.9	291.1	188.2	104.4	91.2	8.8	0.0	0.0
85°	120.6	133.8	155.9	172.0	105.9	63.2	52.9	5.9	0.0	0.0
87.5°	47.1	63.2	76.5	79.4	39.7	26.5	14.7	2.9	0.0	0.0
90°	8.8	11.8	10.3	7.4	4.4	1.5	0.0	0.0	0.0	0.0
92.5°	4.4	5.9	4.4	4.4	2.9	1.5	0.0	0.0	0.0	0.0
95°	5.9	5.9	5.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0
97.5°	5.9	5.9	5.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0
100°	5.9	5.9	5.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0
102.5°	5.9	5.9	5.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0
105°	5.9	7.4	5.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0
107.5°	5.9	7.4	5.9	4.4	2.9	1.5	0.0	0.0	0.0	0.0
110°	5.9	7.4	5.9	4.4	2.9	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)