

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: P579460

Luminaire Tested: **CTN-CA8-330-730-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579460  
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-CA8-330-730-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35333 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

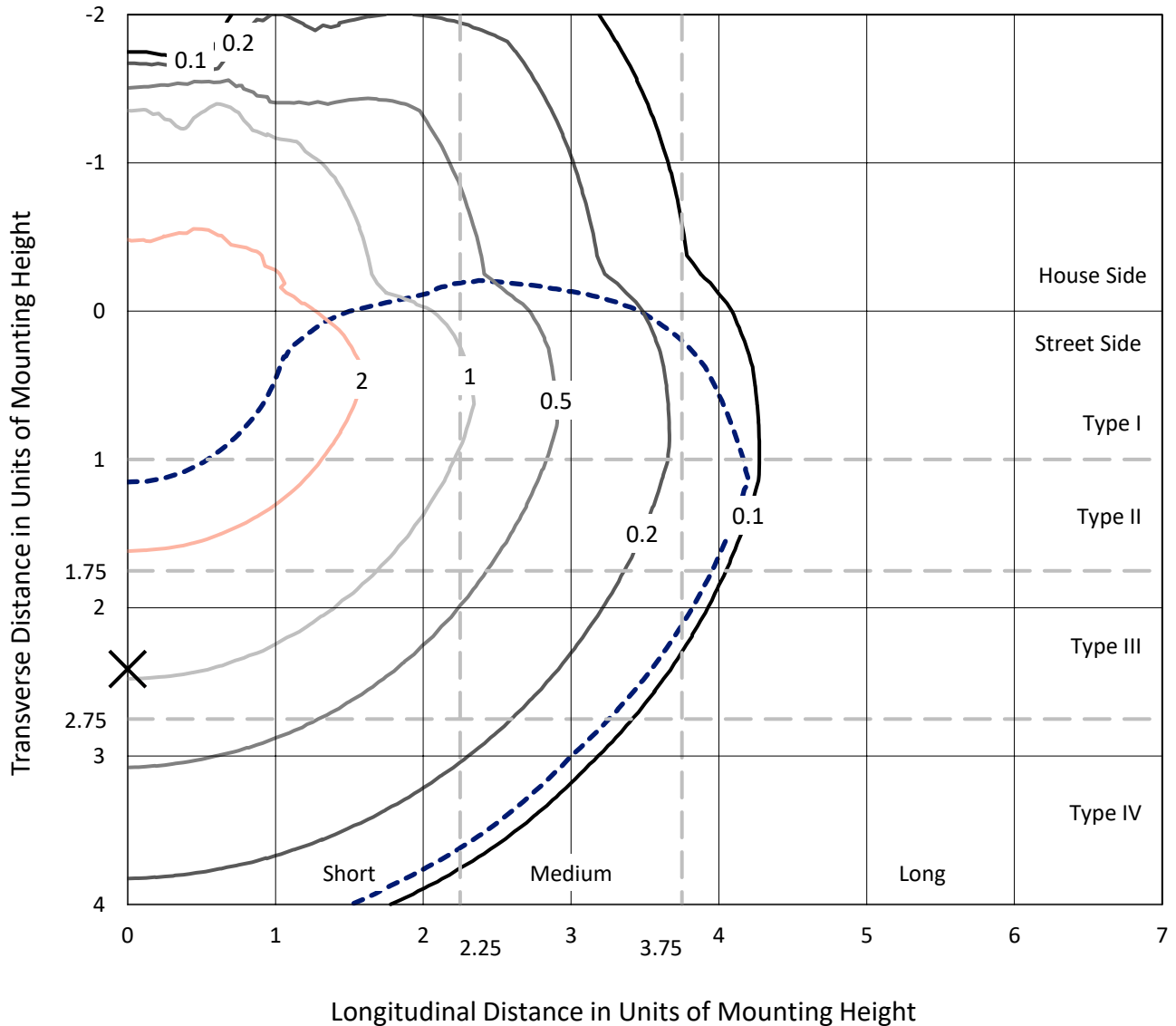
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

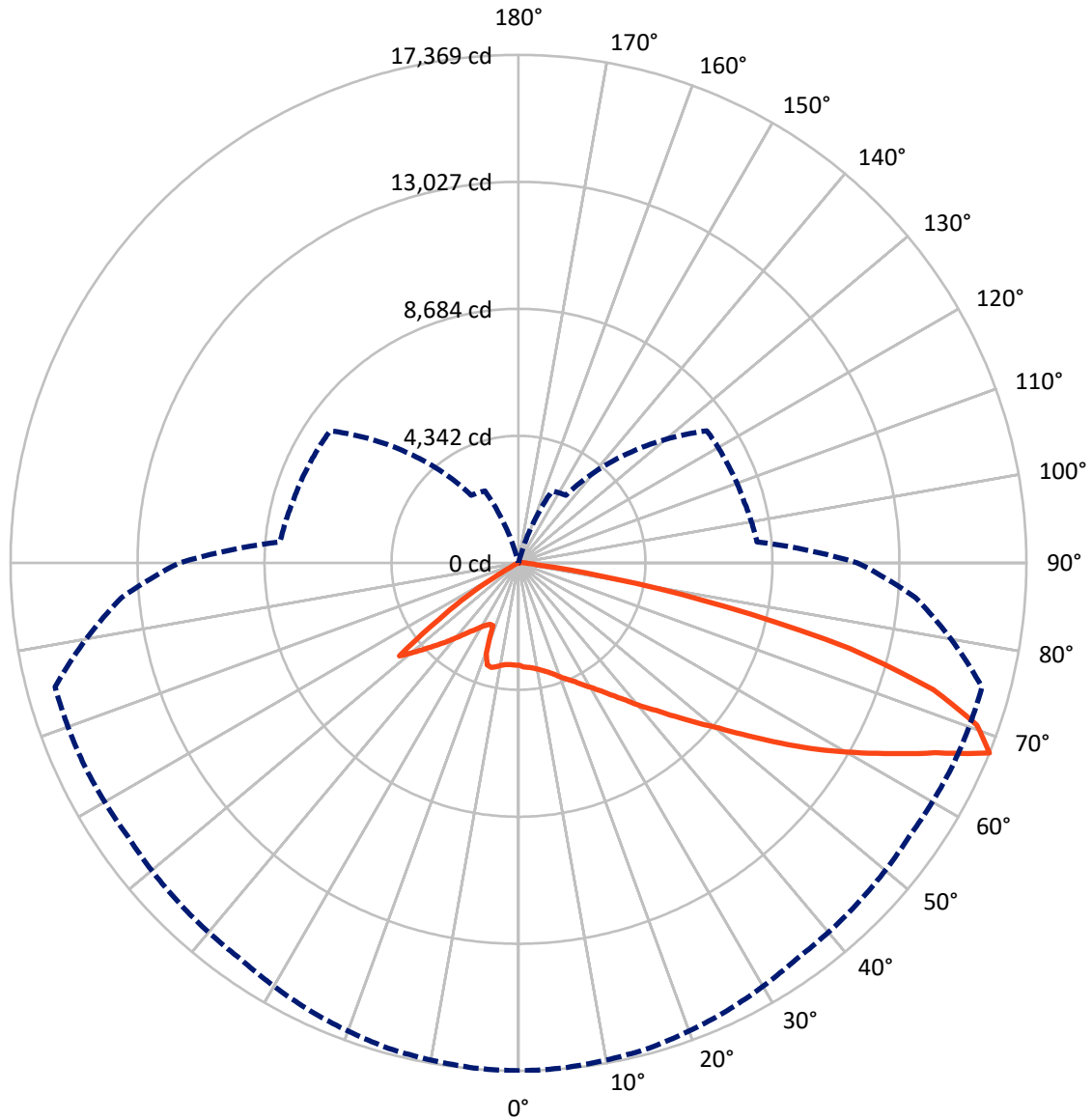
× Max cd  
 - - - 1/2 Max cd



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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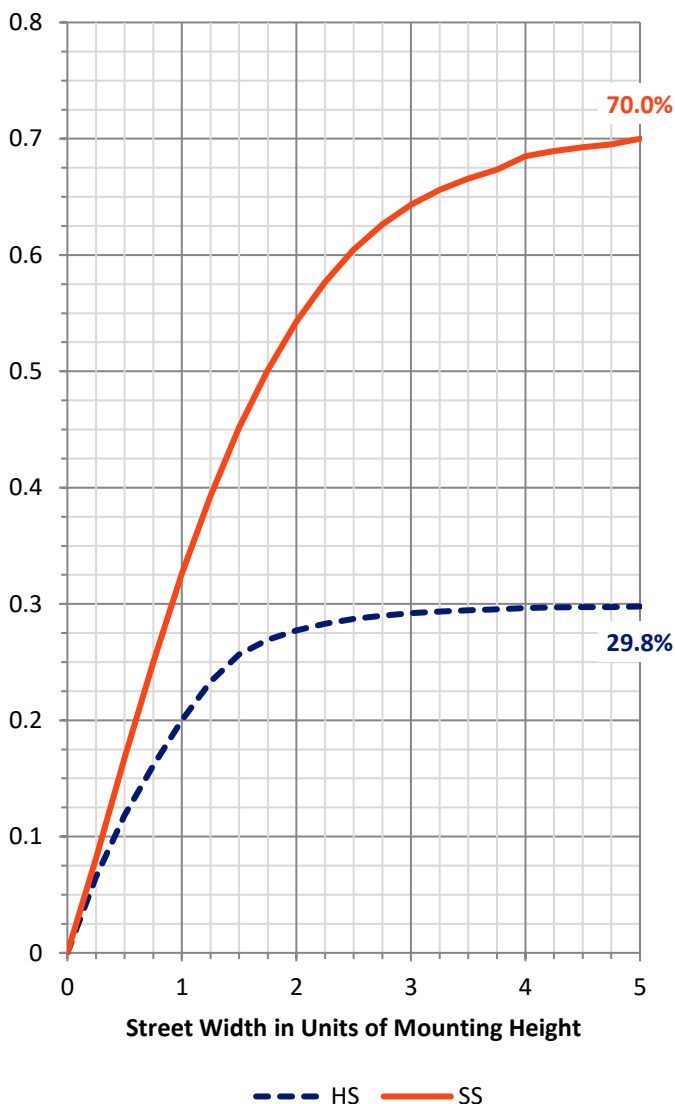
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10547.1	3.5	10550.6
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	24742.6	39.8	24782.3
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	35289.7	43.3	35333.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.5	1.0
10°-20°	1044.9	3.0
20°-30°	1753.6	5.0
30°-40°	2843.6	8.0
40°-50°	4646.7	13.2
50°-60°	7282.3	20.6
60°-70°	9753.2	27.6
70°-80°	7108.7	20.1
80°-90°	519.1	1.5
90°-100°	33.2	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°	35289.7	99.9
0°-180°	35333.0	100.0

**Coefficient of Utilization**

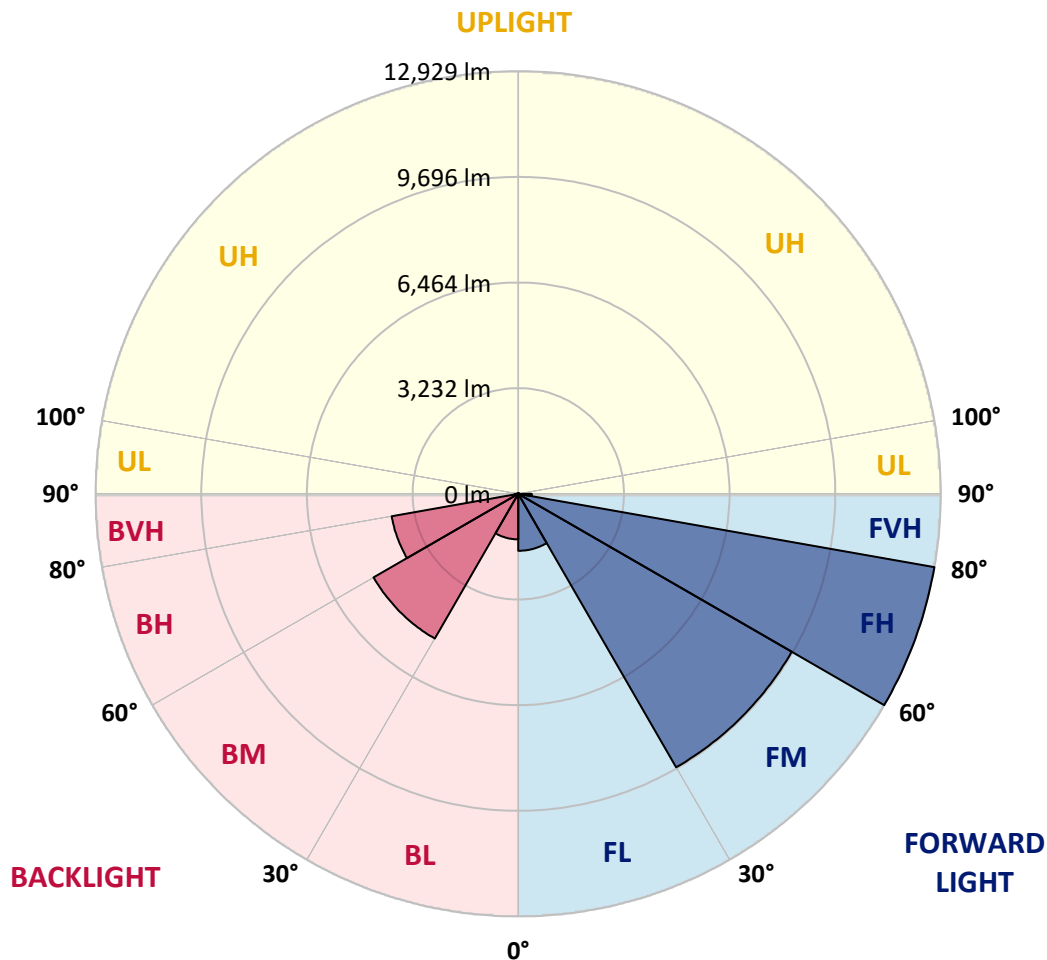


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1742.8	4.9			
FM (30°-60°)	9660.7	27.3			
FH (60°-80°)	12928.6	36.6			G5
FVH (80°-90°)	410.5	1.2			G3/500
BL (0°-30°)	1393.3	3.9	B3/2500		
BM (30°-60°)	5111.9	14.5	B4/8500		
BH (60°-80°)	3933.3	11.1	B4/5000		G4/5000
BVH (80°-90°)	108.6	0.3			G2/225
UL (90°-100°)	33.2	0.1		U2/50	
UH (100°-180°)	10.1	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°	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1
2.5°	3567.9	3547.1	3548.6	3567.9	3510.0	3529.3	3504.1	3523.4	3510.0	3514.5	3523.4
5°	3590.2	3567.9	3569.4	3593.2	3541.2	3557.5	3523.4	3533.8	3521.9	3527.8	3527.8
7.5°	3634.8	3609.5	3608.0	3622.9	3569.4	3575.4	3544.2	3545.7	3527.8	3539.7	3533.8
10°	3701.6	3680.8	3666.0	3674.9	3627.4	3624.4	3584.3	3585.8	3563.5	3576.9	3566.5
12.5°	3783.3	3755.1	3752.1	3755.1	3703.1	3691.2	3649.6	3652.6	3612.5	3633.3	3621.4
15°	3887.3	3842.7	3842.7	3859.1	3792.2	3783.3	3732.8	3735.8	3694.2	3710.5	3698.7
17.5°	4015.0	3972.0	3964.5	3976.4	3918.5	3906.6	3854.6	3851.7	3805.6	3810.1	3799.7
20°	4179.9	4136.8	4119.0	4148.7	4075.9	4067.0	4004.6	3998.7	3949.7	3936.3	3930.4
22.5°	4332.9	4298.8	4289.8	4322.5	4246.8	4239.3	4179.9	4172.5	4126.5	4107.1	3989.8
25°	4505.2	4497.8	4494.8	4505.2	4433.9	4419.1	4373.0	4362.6	4324.0	4300.2	4157.6
27.5°	4728.0	4725.1	4716.2	4717.6	4652.3	4638.9	4595.8	4588.4	4548.3	4521.6	4338.9
30°	4961.2	4961.2	4941.9	4952.3	4919.7	4898.9	4864.7	4838.0	4812.7	4784.5	4554.2
32.5°	5230.1	5228.6	5210.8	5242.0	5218.2	5218.2	5197.4	5169.2	5124.6	5111.3	4832.0
35°	5576.2	5553.9	5546.5	5597.0	5589.6	5602.9	5595.5	5565.8	5528.7	5497.5	5158.8
37.5°	5959.4	5953.5	5975.8	6007.0	6023.3	6059.0	6036.7	6035.2	6029.3	5950.5	5071.2
40°	6431.8	6406.5	6437.7	6454.1	6442.2	6500.1	6480.8	6497.2	6541.7	5908.9	5065.2
42.5°	6902.7	6880.4	6902.7	6982.9	6965.1	7034.9	7026.0	7089.8	7115.1	5996.6	5476.7
45°	7482.0	7456.7	7474.6	7569.6	7578.5	7663.2	7709.2	7770.1	7782.0	6564.0	5972.8
47.5°	8147.4	8105.8	8140.0	8184.6	8319.7	8400.0	8444.5	8518.8	8594.5	7247.3	6537.3
50°	8881.2	8878.3	8915.4	8992.6	9147.1	9227.3	9304.6	9381.8	9506.6	8009.3	7170.0
52.5°	9814.1	9794.8	9858.6	9931.4	10068.1	10191.4	10283.5	10363.7	10497.3	8780.2	7854.8
55°	10880.6	10813.7	10935.5	11058.8	11116.8	11262.3	11326.2	11393.0	11520.8	9591.3	8254.4
57.5°	12031.8	12015.4	12100.1	12144.7	12269.4	12360.0	12394.2	12467.0	12465.5	10435.0	8934.7
60°	13165.1	13147.3	13246.8	13273.6	13373.1	13454.8	13442.9	13508.3	13532.0	11226.7	9601.7
62.5°	14357.9	14328.2	14420.3	14426.2	14366.8	14499.0	14485.7	14540.6	14519.8	12000.6	10258.2
65°	15662.1	15684.4	15714.1	15592.3	15449.7	15564.1	15561.1	15665.1	15739.3	13082.0	11137.6
67.5°	17368.8	17340.6	17187.6	16893.5	16547.4	16431.5	16308.2	16384.0	16404.8	13619.7	11587.6
70°	16632.1	16569.7	16501.4	16201.3	15783.9	15489.8	15298.2	15378.4	15463.1	12871.0	10883.6
72.5°	14836.2	14681.7	14363.9	14099.5	13858.8	13572.1	13338.9	13478.6	13664.2	11416.8	9637.3
75°	11705.0	11560.9	11329.2	11149.4	11020.2	11017.2	11006.8	11115.3	11088.5	9270.4	7835.5
77.5°	7248.8	7550.3	7764.2	7611.2	7664.7	7554.8	7796.9	7939.5	8068.7	6645.7	5582.1
80°	3346.6	3423.9	3802.6	3704.6	3625.9	3603.6	3618.4	3866.5	3939.3	2982.7	2498.4
82.5°	763.5	732.3	759.0	704.1	701.1	668.4	672.9	672.9	649.1	549.6	460.5
85°	386.2	395.1	398.1	381.7	337.2	303.0	280.7	237.7	205.0	175.3	148.5
87.5°	258.5	265.9	270.3	248.1	222.8	194.6	176.8	144.1	114.4	71.3	55.0
90°	176.8	175.3	170.8	158.9	142.6	121.8	98.0	68.3	40.1	14.9	10.4
92.5°	126.3	123.3	121.8	111.4	99.5	83.2	63.9	43.1	22.3	10.4	5.9
95°	83.2	81.7	81.7	75.8	66.8	55.0	43.1	28.2	16.3	8.9	5.9
97.5°	57.9	56.4	56.4	53.5	47.5	40.1	29.7	19.3	13.4	8.9	5.9
100°	40.1	40.1	40.1	37.1	34.2	28.2	22.3	14.9	11.9	8.9	5.9
102.5°	26.7	26.7	28.2	26.7	23.8	19.3	14.9	11.9	10.4	7.4	5.9
105°	17.8	17.8	17.8	17.8	16.3	13.4	11.9	10.4	8.9	7.4	5.9
107.5°	11.9	11.9	11.9	11.9	10.4	8.9	8.9	8.9	7.4	7.4	5.9
110°	7.4	7.4	7.4	8.9	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°	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1	3501.1
2.5°	3516.0	3495.2	3505.6	3484.8	3475.8	3456.5	3493.7	3496.6	3493.7	3499.6
5°	3520.4	3496.6	3508.5	3484.8	3480.3	3458.0	3495.2	3495.2	3486.2	3490.7
7.5°	3530.8	3505.6	3514.5	3486.2	3486.2	3459.5	3504.1	3501.1	3493.7	3504.1
10°	3566.5	3536.7	3536.7	3510.0	3513.0	3484.8	3539.7	3539.7	3533.8	3551.6
12.5°	3621.4	3584.3	3585.8	3548.6	3554.6	3532.3	3599.1	3602.1	3602.1	3631.8
15°	3692.7	3636.3	3642.2	3602.1	3614.0	3587.3	3646.7	3643.7	3651.1	3694.2
17.5°	3780.4	3718.0	3666.0	3535.3	3458.0	3461.0	3637.8	3719.5	3624.4	3652.6
20°	3817.5	3514.5	3349.6	3302.1	3291.7	3126.8	2789.6	2841.6	3159.5	3297.6
22.5°	3567.9	3471.4	3455.0	3394.1	2944.1	2819.3	2840.1	2810.4	2498.4	2321.7
25°	3689.7	3625.9	3588.7	3052.5	2951.5	2929.2	2914.4	2632.1	2293.5	2309.8
27.5°	3862.1	3778.9	3333.2	3065.9	3085.2	3051.0	2964.9	2367.7	2357.3	2384.1
30°	4065.6	3856.1	3248.6	3223.3	3245.6	3201.0	2492.5	2468.7	2468.7	2495.5
32.5°	4315.1	3498.1	3447.6	3450.6	3435.7	2930.7	2623.2	2617.3	2635.1	2657.4
35°	4245.3	3731.3	3735.8	3761.0	3726.9	2866.8	2828.2	2805.9	2820.8	2829.7
37.5°	4108.6	4081.9	4081.9	4053.7	3181.7	3091.1	3049.5	3046.6	3045.1	3045.1
40°	4453.2	4428.0	4396.8	4347.8	3328.8	3352.6	3290.2	3282.7	3287.2	3303.5
42.5°	4845.4	4835.0	4832.0	3731.3	3634.8	3652.6	3585.8	3566.5	3566.5	3603.6
45°	5307.3	5294.0	4965.7	3988.3	3972.0	3992.8	3918.5	3872.4	3897.7	3924.4
47.5°	5837.6	5837.6	4396.8	4373.0	4373.0	4384.9	4310.6	4248.3	4273.5	4282.4
50°	6418.4	5510.8	4838.0	4815.7	4836.5	4830.5	4753.3	4174.0	4710.2	4714.7
52.5°	6580.3	5359.3	5322.2	5297.0	5322.2	5317.7	5237.5	3481.8	5094.9	5167.7
55°	5833.2	5837.6	5830.2	5793.1	5819.8	5809.4	5730.7	3801.1	3756.6	3348.1
57.5°	6307.0	6313.0	6310.0	6304.1	6327.8	4597.3	5935.7	3434.3	2097.4	2098.9
60°	6822.5	6792.8	6783.8	6770.5	5738.1	3259.0	2473.2	239.2	819.9	808.1
62.5°	7290.4	7280.0	7248.8	7241.3	4869.2	2566.8	2507.4	55.0	43.1	41.6
65°	7941.0	7848.9	7823.6	7744.9	5190.0	2733.1	2676.7	16.3	1.5	0.0
67.5°	8183.1	7995.9	7905.3	7863.7	5280.6	2819.3	2710.9	16.3	1.5	0.0
70°	7725.6	7493.9	7379.5	7333.4	4934.5	2635.1	2528.2	16.3	1.5	0.0
72.5°	6850.7	6679.9	6633.8	6486.8	4350.7	2312.8	2219.2	16.3	0.0	0.0
75°	5619.3	5556.9	5500.5	5344.5	3536.7	1837.4	1754.3	14.9	0.0	0.0
77.5°	4089.3	3997.2	3893.2	3723.9	2387.0	1200.2	1157.1	13.4	0.0	0.0
80°	1843.4	1767.6	1742.4	1478.0	846.7	390.7	344.6	11.9	0.0	0.0
82.5°	358.0	322.3	306.0	294.1	190.1	105.5	92.1	8.9	0.0	0.0
85°	121.8	135.2	157.5	173.8	106.9	63.9	53.5	5.9	0.0	0.0
87.5°	47.5	63.9	77.2	80.2	40.1	26.7	14.9	3.0	0.0	0.0
90°	8.9	11.9	10.4	7.4	4.5	1.5	0.0	0.0	0.0	0.0
92.5°	4.5	5.9	4.5	4.5	3.0	1.5	0.0	0.0	0.0	0.0
95°	5.9	5.9	5.9	4.5	3.0	1.5	0.0	0.0	0.0	0.0
97.5°	5.9	5.9	5.9	4.5	3.0	1.5	0.0	0.0	0.0	0.0
100°	5.9	5.9	5.9	4.5	3.0	1.5	0.0	0.0	0.0	0.0
102.5°	5.9	5.9	5.9	4.5	3.0	1.5	0.0	0.0	0.0	0.0
105°	5.9	7.4	5.9	4.5	3.0	1.5	0.0	0.0	0.0	0.0
107.5°	5.9	7.4	5.9	4.5	3.0	1.5	0.0	0.0	0.0	0.0
110°	5.9	7.4	5.9	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)