

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: P522135

Luminaire Tested: **CTN-CA10-310-740-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522135  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-310-740-U-T5R-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37326.9 lumens  
Efficiency: N/A  
Efficacy: 119.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

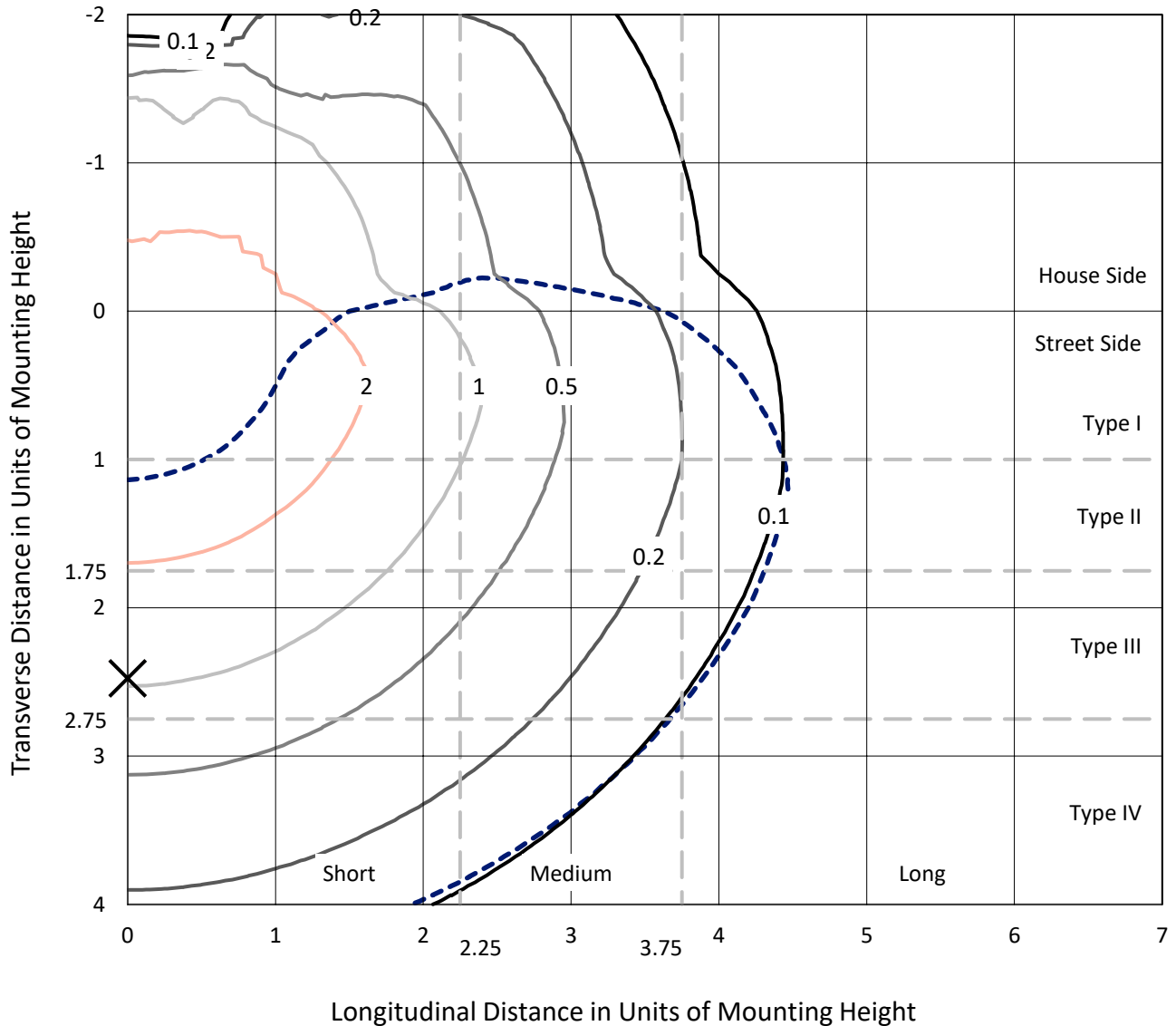
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

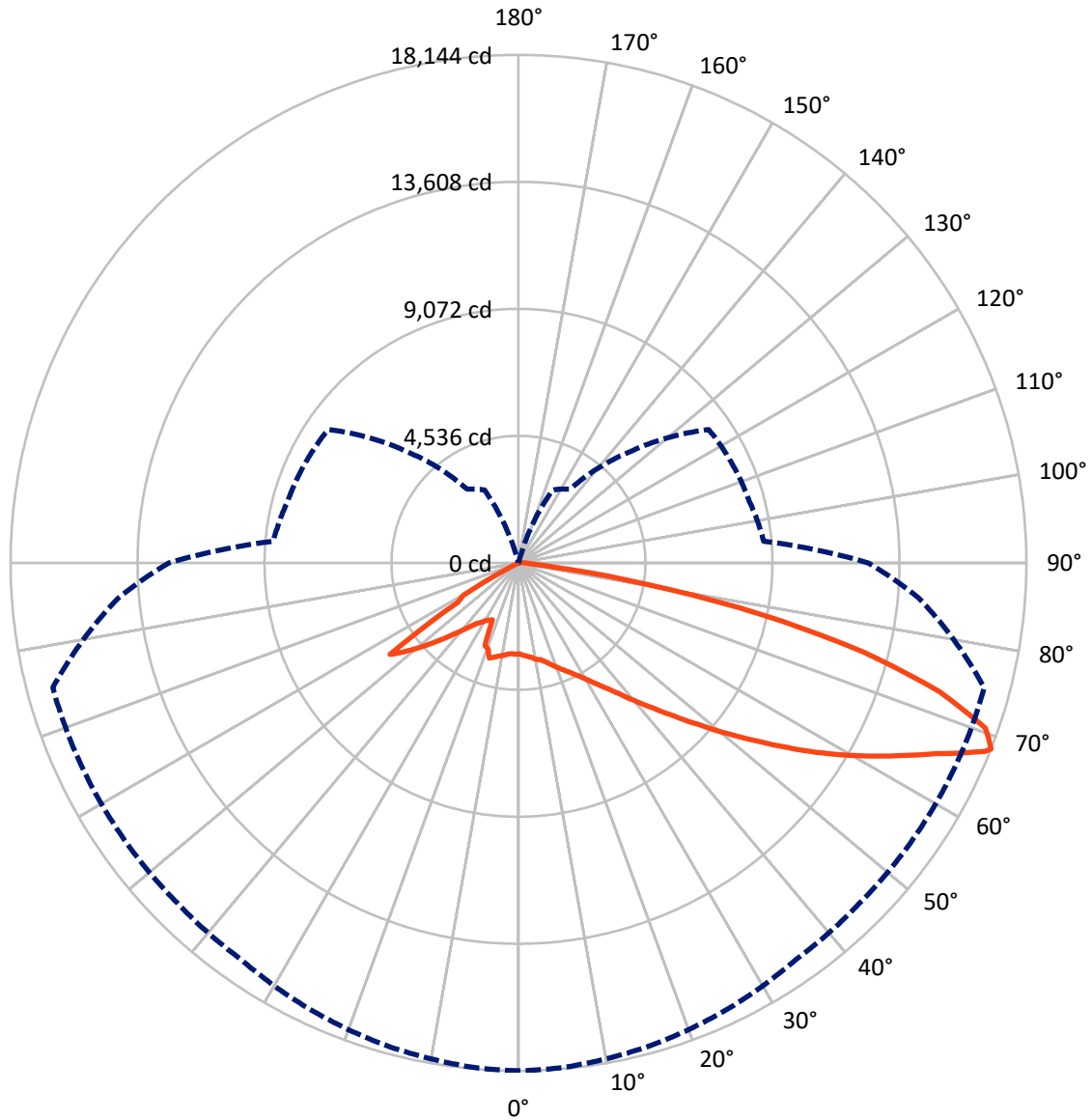
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical



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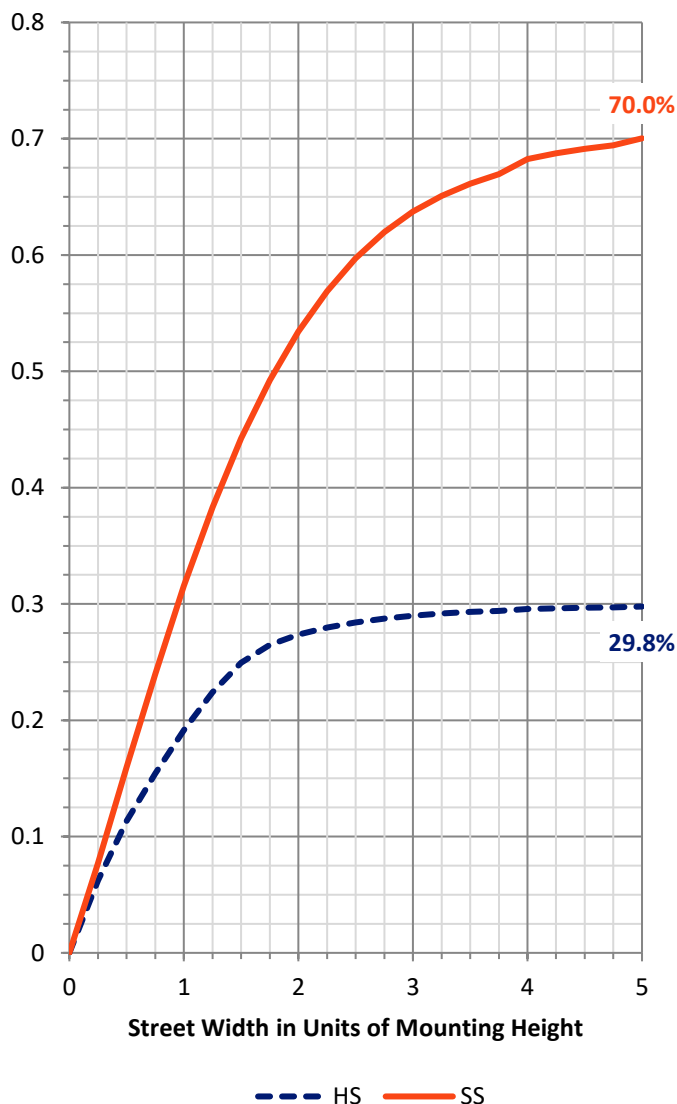
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11126.8	1.7	11128.5
	% Fixture	29.8	0.0	29.8
<b>Street Side</b>	Lumens	26183.2	15.3	26198.5
	% Fixture	70.1	0.0	70.2
<b>Total</b>	Lumens	37310.0	16.9	37326.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.8	0.8
10°-20°	1005.2	2.7
20°-30°	1721.8	4.6
30°-40°	2793.2	7.5
40°-50°	4710.6	12.6
50°-60°	7678.5	20.6
60°-70°	10298.1	27.6
70°-80°	7998.9	21.4
80°-90°	787.8	2.1
90°-100°	15.0	0.0
100°-110°	0.8	0.0
110°-120°	0.2	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	37310.0	100.0
0°-180°	37326.9	100.0

**Coefficient of Utilization**

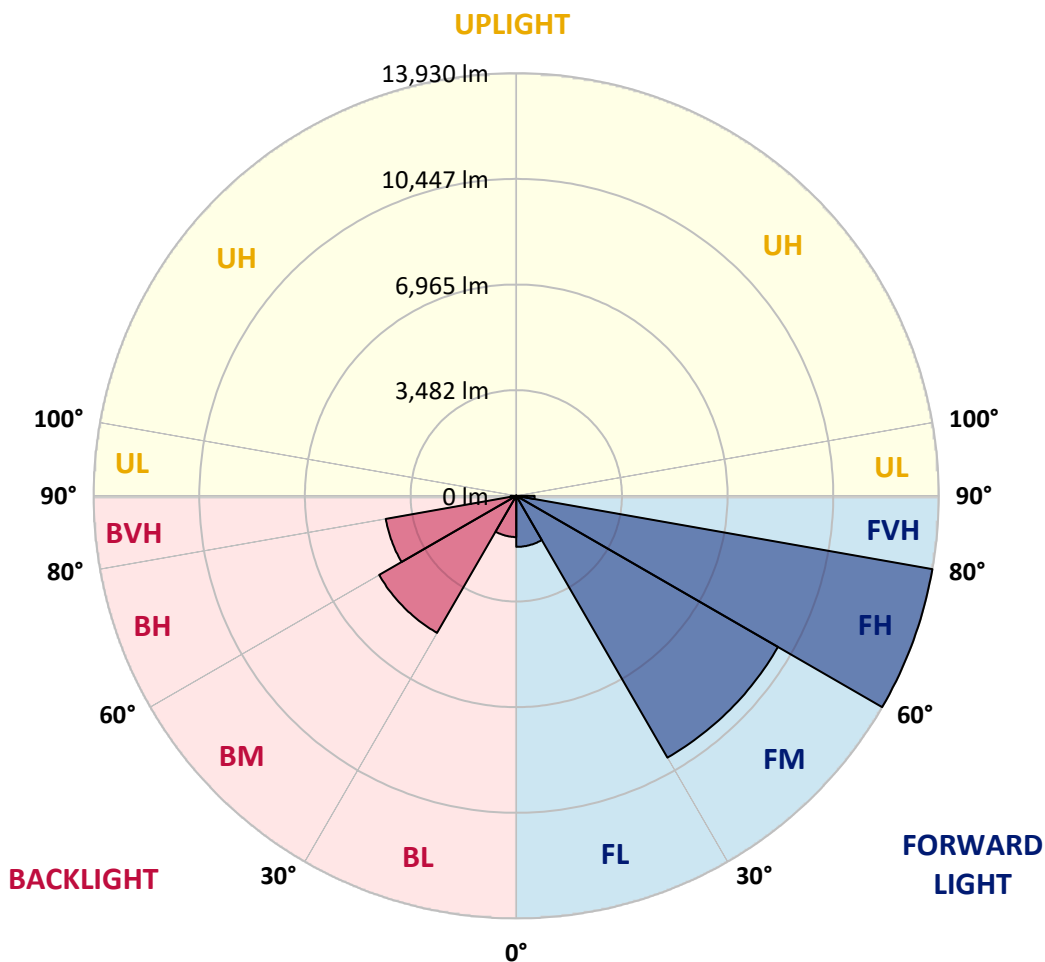


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1683.7	4.5			
FM (30°-60°)	9963.9	26.7			
FH (60°-80°)	13930.0	37.3			G5
FVH (80°-90°)	605.7	1.6			G4/750
BL (0°-30°)	1359.3	3.6	B3/2500		
BM (30°-60°)	5218.4	14.0	B4/8500		
BH (60°-80°)	4367.0	11.7	B4/5000		G4/5000
BVH (80°-90°)	182.1	0.5			G2/225
UL (90°-100°)	15.0	0.0		U2/50	
UH (100°-180°)	2.0	0.0		U1/10	

**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°	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2
2.5°	3308.3	3299.0	3297.4	3316.0	3257.3	3286.6	3260.4	3282.0	3268.1	3278.9	3280.5
5°	3353.0	3336.0	3325.2	3346.8	3309.8	3323.7	3294.4	3303.6	3265.0	3286.6	3289.7
7.5°	3417.9	3390.1	3387.0	3393.2	3360.7	3371.5	3323.7	3334.5	3306.7	3294.4	3305.2
10°	3505.9	3479.6	3459.5	3473.4	3430.2	3436.4	3385.4	3387.0	3366.9	3343.8	3362.3
12.5°	3555.3	3558.3	3549.1	3559.9	3524.4	3504.3	3468.8	3456.5	3436.4	3408.6	3399.3
15°	3678.8	3672.6	3654.1	3671.0	3666.4	3647.9	3604.7	3576.9	3533.6	3518.2	3502.8
17.5°	3830.0	3810.0	3794.5	3816.1	3839.3	3800.7	3759.0	3720.4	3663.3	3632.4	3613.9
20°	3989.0	3975.2	3959.7	3993.7	4001.4	3972.1	3941.2	3884.1	3817.7	3777.6	3739.0
22.5°	4166.6	4138.8	4143.4	4188.2	4174.3	4160.4	4120.3	4074.0	3993.7	3942.7	3831.6
25°	4350.3	4334.8	4356.5	4376.5	4365.7	4336.4	4316.3	4282.4	4192.8	4131.1	3969.0
27.5°	4578.8	4554.1	4581.8	4589.6	4580.3	4572.6	4544.8	4518.6	4421.3	4351.8	4149.6
30°	4847.4	4818.0	4862.8	4852.0	4842.7	4848.9	4831.9	4774.8	4688.4	4594.2	4392.0
32.5°	5166.9	5128.3	5179.3	5156.1	5134.5	5177.7	5137.6	5083.6	4981.7	4872.1	4674.5
35°	5537.4	5539.0	5565.2	5526.6	5518.9	5565.2	5539.0	5472.6	5378.4	5264.2	4983.2
37.5°	5986.7	5974.3	6040.7	6022.2	5994.4	6056.1	6063.8	5980.5	5810.7	5698.0	5366.1
40°	6533.1	6530.1	6551.7	6554.8	6547.0	6576.4	6590.3	6479.1	6369.5	6199.7	5063.5
42.5°	7116.7	7129.0	7167.6	7139.8	7176.9	7215.5	7220.1	7127.5	6970.0	5948.1	5378.4
45°	7817.5	7856.1	7882.4	7876.2	7893.2	7948.8	7953.4	7904.0	7749.6	6443.6	5949.6
47.5°	8621.8	8658.9	8666.6	8716.0	8700.6	8779.3	8768.5	8770.0	8604.9	7133.7	6571.7
50°	9546.5	9563.5	9626.8	9654.6	9616.0	9722.5	9694.7	9728.7	9524.9	7924.1	7240.2
52.5°	10528.4	10557.7	10583.9	10688.9	10639.5	10732.1	10695.1	10773.8	10537.6	8728.4	7982.7
55°	11644.5	11649.1	11693.9	11800.4	11735.6	11846.7	11792.7	11822.0	11633.7	9617.6	8756.1
57.5°	12827.0	12811.6	12828.6	12913.5	12854.8	12938.2	12916.6	12944.3	12768.4	10553.1	9321.2
60°	13997.2	13974.0	13998.7	14055.8	13975.6	14119.1	14041.9	14068.2	13878.3	11508.7	10127.0
62.5°	15173.5	15156.5	15128.7	15185.9	15068.5	15142.6	15175.1	15131.8	14965.1	12373.2	10827.9
65°	16436.3	16419.3	16317.4	16352.9	16143.0	16107.5	16119.8	16133.7	16022.6	13229.9	11596.6
67.5°	17970.8	17946.1	17754.7	17513.8	17211.3	17144.9	17151.1	17188.1	17203.5	14332.2	12496.7
68°	18143.7	18098.9	17885.9	17606.5	17290.0	17212.8	17205.1	17212.8	17220.5	14341.4	12487.4
70°	17702.2	17685.2	17523.1	17185.0	16860.8	16675.6	16515.0	16508.9	16434.8	13608.2	11797.3
72.5°	15709.2	15687.6	15494.6	15255.3	15054.6	14764.4	14556.0	14568.4	14446.4	12027.4	10326.1
75°	12712.8	12711.2	12479.7	12279.0	12282.1	12260.5	12191.0	12312.9	12186.4	10201.1	8807.1
77.5°	8859.6	8890.5	8875.0	8757.7	8922.9	9151.3	9399.9	9634.5	9562.0	8058.4	7022.5
80°	4628.2	4714.6	5020.3	5034.2	5149.9	5372.2	5542.1	5699.5	5710.3	4572.6	4057.0
82.5°	1230.4	1256.6	1360.0	1330.7	1321.4	1366.2	1403.3	1407.9	1411.0	1191.8	1113.0
85°	382.8	393.7	381.3	364.3	338.1	308.7	301.0	245.5	194.5	160.5	140.5
87.5°	271.7	290.2	262.4	247.0	219.2	208.4	186.8	146.7	114.2	80.3	54.0
90°	140.5	143.6	128.1	109.6	101.9	95.7	81.8	58.7	29.3	15.4	13.9
92.5°	71.0	72.6	63.3	54.0	46.3	40.1	30.9	17.0	9.3	4.6	1.5
95°	27.8	29.3	26.2	23.2	18.5	13.9	12.3	9.3	6.2	3.1	1.5
97.5°	9.3	9.3	9.3	7.7	7.7	7.7	7.7	6.2	4.6	3.1	1.5
100°	0.0	0.0	0.0	1.5	3.1	4.6	4.6	4.6	3.1	1.5	1.5
102.5°	0.0	0.0	0.0	0.0	0.0	1.5	3.1	3.1	3.1	1.5	1.5
105°	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
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	1.5
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
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°	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2	3254.2
2.5°	3272.7	3263.5	3268.1	3229.5	3238.8	3214.1	3266.6	3252.7	3246.5	3268.1
5°	3280.5	3246.5	3274.3	3248.0	3252.7	3217.2	3260.4	3243.4	3241.9	3254.2
7.5°	3283.6	3266.6	3292.8	3249.6	3263.5	3249.6	3282.0	3265.0	3280.5	3291.3
10°	3326.8	3317.5	3314.4	3299.0	3309.8	3278.9	3319.1	3319.1	3326.8	3356.1
12.5°	3390.1	3377.7	3370.0	3342.2	3353.0	3343.8	3376.2	3382.4	3396.2	3408.6
15°	3476.5	3454.9	3447.2	3422.5	3430.2	3428.7	3451.8	3453.4	3484.2	3482.7
17.5°	3587.7	3556.8	3566.1	3547.5	3549.1	3536.7	3524.4	3524.4	3552.2	3558.3
20°	3720.4	3544.4	3312.9	3183.2	3160.1	3177.0	3243.4	3353.0	3215.6	3254.2
22.5°	3481.2	3322.1	3311.3	3282.0	3263.5	2849.8	2743.2	2709.3	2886.8	3192.5
25°	3512.0	3444.1	3424.0	3387.0	2840.5	2835.9	2805.0	2754.0	2250.8	2240.0
27.5°	3675.7	3609.3	3576.9	2967.1	2954.7	2953.2	2906.9	2395.9	2280.1	2295.6
30°	3867.1	3789.9	3209.5	3116.8	3106.0	3081.3	2815.8	2366.6	2365.0	2366.6
32.5°	4087.8	3831.6	3302.1	3297.4	3303.6	3228.0	2494.7	2485.4	2483.9	2499.3
35°	4390.4	3555.3	3533.6	3556.8	3524.4	2791.1	2644.4	2639.8	2641.4	2633.6
37.5°	4189.7	3833.1	3828.5	3828.5	3752.9	2855.9	2826.6	2848.2	2845.1	2834.3
40°	4274.6	4169.7	4141.9	4132.6	3172.4	3081.3	3064.3	3092.1	3096.8	3104.5
42.5°	4686.8	4591.1	4577.2	4467.6	3451.8	3422.5	3370.0	3399.3	3396.2	3405.5
45°	5193.2	5128.3	5068.1	3873.3	3828.5	3791.4	3737.4	3771.4	3780.6	3774.5
47.5°	5782.9	5711.9	5276.5	4259.2	4257.7	4228.3	4168.1	4195.9	4191.3	4191.3
50°	6375.7	6298.5	4793.3	4750.1	4734.7	4688.4	4639.0	4643.6	4645.1	4660.6
52.5°	7038.0	5625.4	5305.9	5219.4	5231.8	5200.9	5153.0	3901.1	5129.9	5143.8
55°	6577.9	5887.9	5869.3	5755.1	5784.4	5744.3	5713.4	3848.6	5102.1	5637.8
57.5°	6503.8	6454.4	6439.0	6321.7	6358.7	5977.4	6263.0	4211.3	3529.0	2578.1
60°	7070.4	7017.9	7008.6	6905.2	6902.1	4750.1	5693.3	2888.4	2257.0	2272.4
62.5°	7619.9	7535.0	7558.2	7436.2	5242.6	2894.5	2551.8	64.8	103.4	109.6
65°	8232.8	8090.8	8113.9	8001.3	5407.8	3052.0	2758.7	34.0	29.3	27.8
67.5°	8822.5	8574.0	8455.1	8336.2	5616.2	3214.1	2874.5	9.3	0.0	0.0
68°	8793.2	8530.8	8408.8	8296.1	5594.5	3209.5	2868.3	9.3	0.0	0.0
70°	8297.7	8061.5	7945.7	7859.2	5341.4	3099.8	2752.5	9.3	0.0	0.0
72.5°	7254.1	7122.9	7048.8	6973.1	4745.5	2772.6	2468.5	9.3	0.0	0.0
75°	6164.2	6127.1	6080.8	5914.1	3955.1	2269.3	2028.5	9.3	0.0	0.0
77.5°	4884.4	4882.9	4770.2	4574.1	2977.9	1665.7	1495.9	7.7	0.0	0.0
80°	2641.4	2879.1	2792.6	2692.3	1688.9	906.2	863.0	6.2	0.0	0.0
82.5°	742.5	702.4	674.6	631.4	355.1	197.6	193.0	6.2	0.0	0.0
85°	103.4	114.2	126.6	143.6	81.8	52.5	46.3	3.1	0.0	0.0
87.5°	58.7	66.4	81.8	84.9	30.9	24.7	7.7	0.0	0.0	0.0
90°	12.3	13.9	15.4	15.4	6.2	6.2	0.0	0.0	0.0	0.0
92.5°	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.5	1.5	1.5	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°
110°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.5	1.5	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)