

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: P579463

Luminaire Tested: **CTN-CA8-330-730-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579463  
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-CA8-330-730-U-T5N-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: 37754 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G4

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

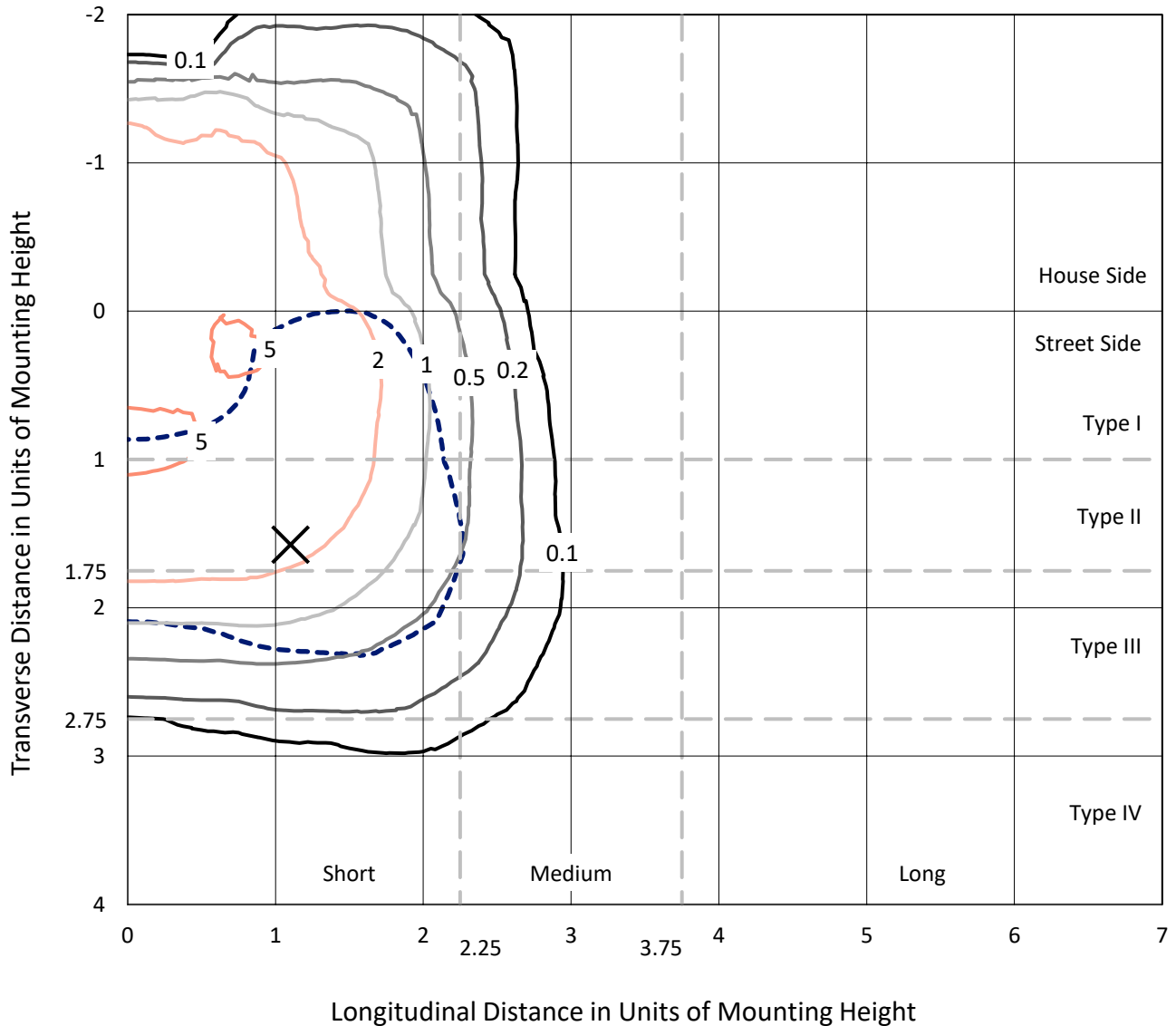




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### Iso-Footcandle Lines of Horizontal Illumination

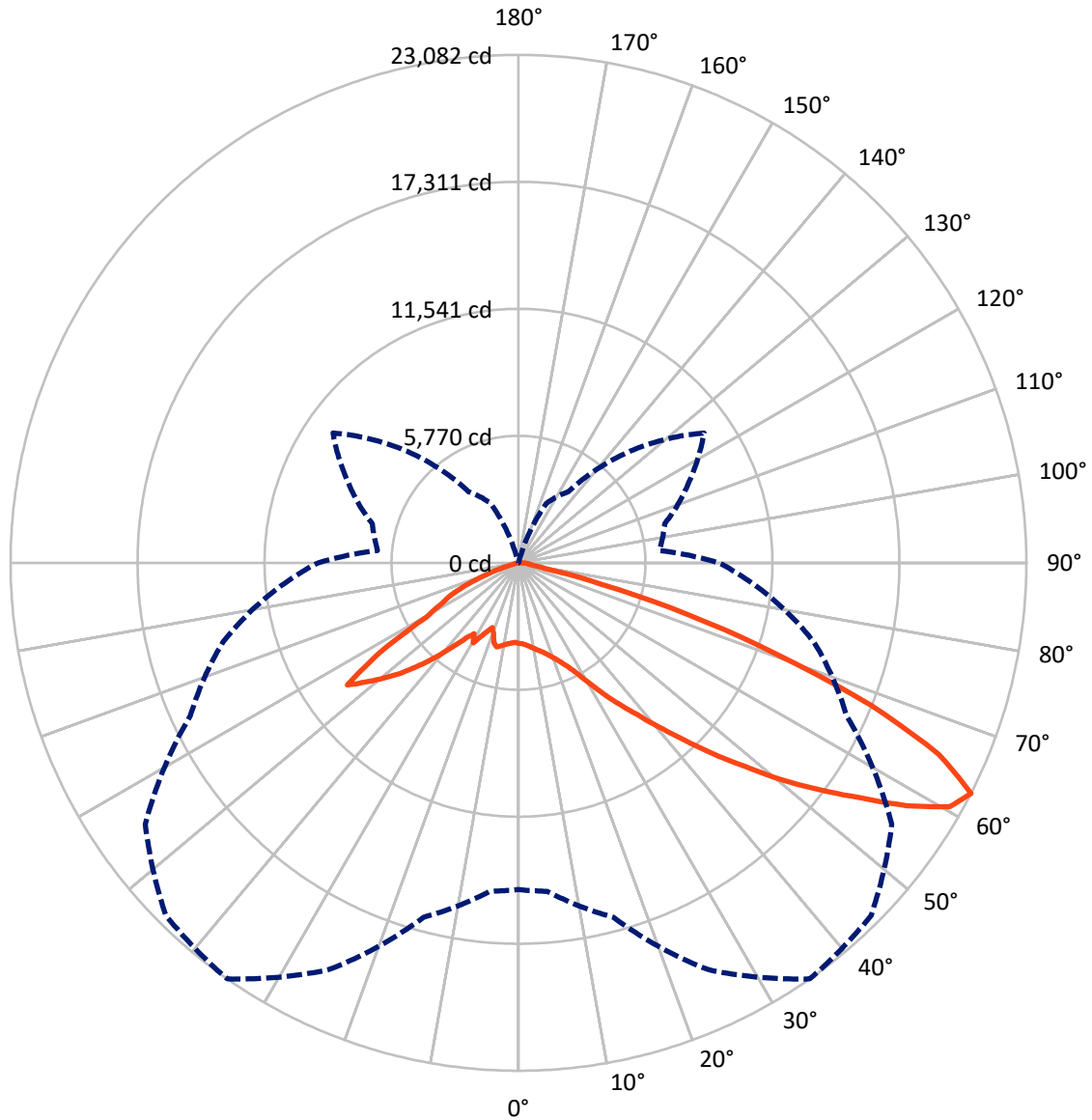
✕ Max cd  
 - - - 1/2 Max cd



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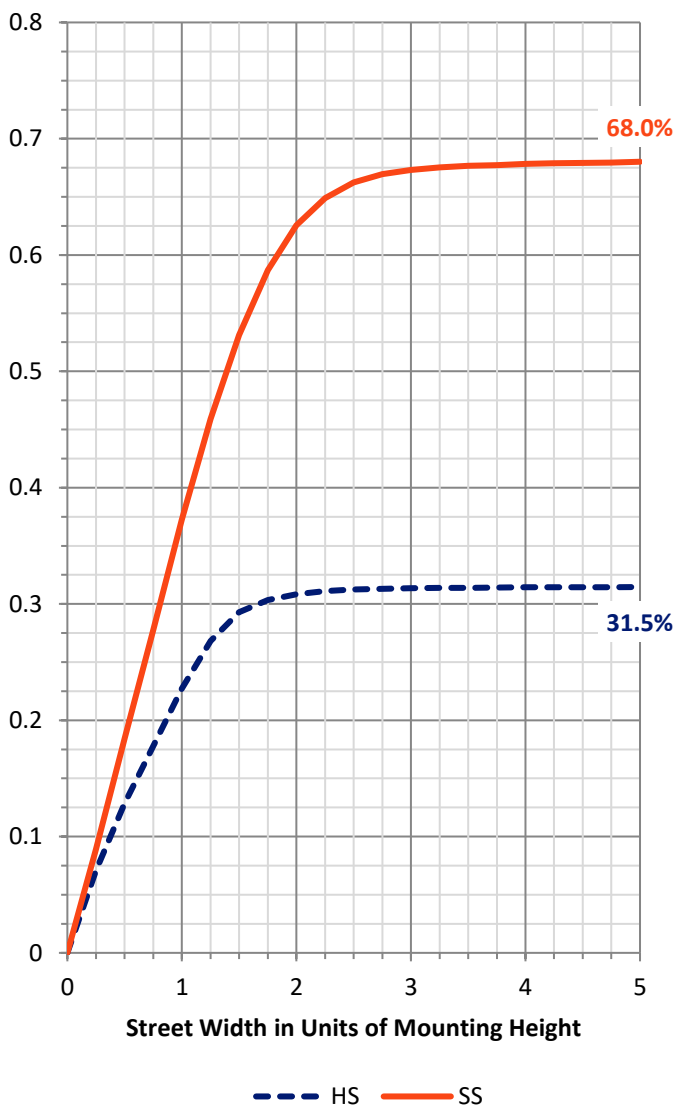
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11943.7	0.0	11943.8
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	25788.7	21.5	25810.2
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	37732.4	21.6	37754.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	361.4	1.0
10°-20°	1161.9	3.1
20°-30°	2157.5	5.7
30°-40°	4253.6	11.3
40°-50°	7635.7	20.2
50°-60°	11099.3	29.4
60°-70°	9121.8	24.2
70°-80°	1733.9	4.6
80°-90°	207.6	0.5
90°-100°	19.6	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°	37732.4	99.9
0°-180°	37754.0	100.0

**Coefficient of Utilization**



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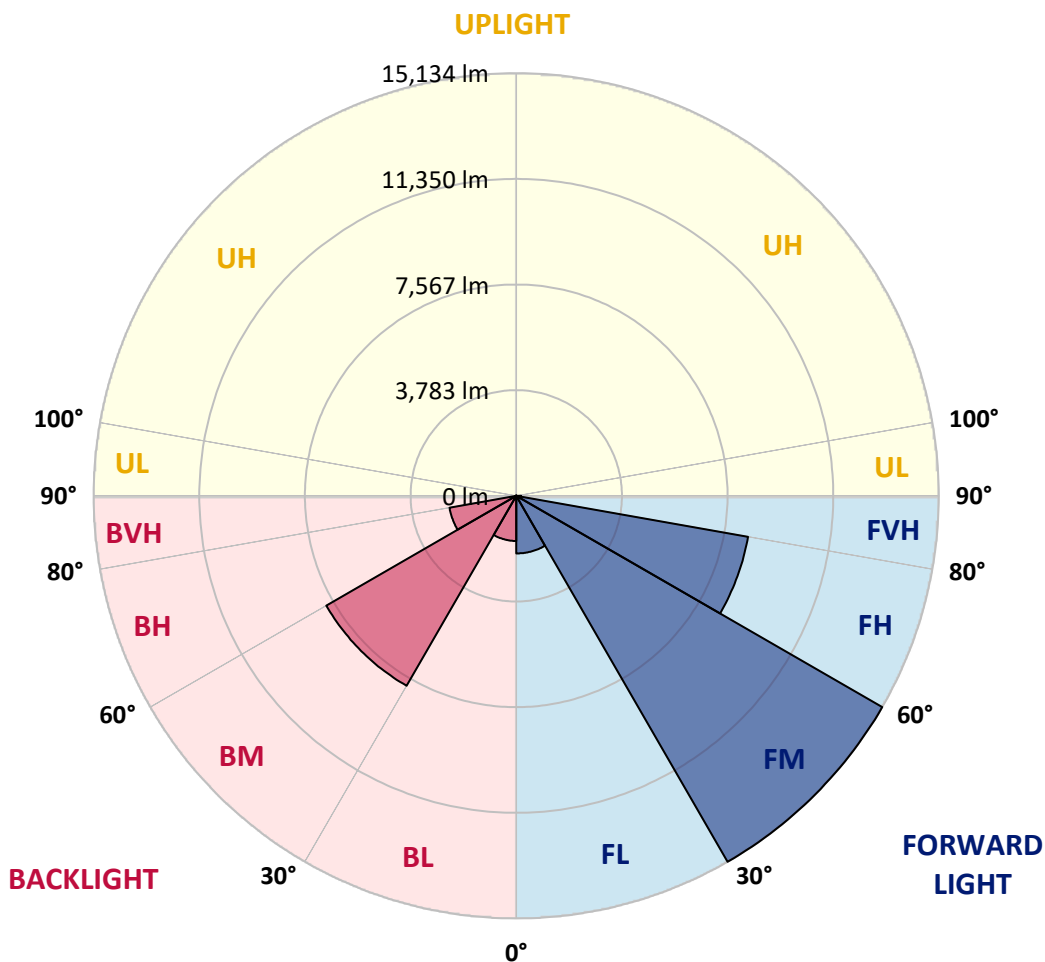
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2063.5	5.5			
FM (30°-60°)	15133.5	40.1			
FH (60°-80°)	8427.6	22.3			G4/12000
FVH (80°-90°)	164.1	0.4			G2/225
BL (0°-30°)	1617.2	4.3	B3/2500		
BM (30°-60°)	7854.9	20.8	B4/8500		
BH (60°-80°)	2428.1	6.4	B3/2500		G3/2500
BVH (80°-90°)	43.4	0.1			G1/100
UL (90°-100°)	19.6	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°	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6
2.5°	3758.2	3727.5	3730.6	3753.6	3684.6	3707.6	3675.4	3703.0	3690.7	3703.0	3710.6
5°	3833.4	3795.0	3793.5	3816.5	3761.3	3775.1	3738.3	3756.7	3739.8	3755.2	3755.2
7.5°	3925.5	3893.3	3885.6	3904.0	3854.9	3861.0	3824.2	3831.9	3811.9	3831.9	3816.5
10°	4040.6	4011.4	3999.2	4008.4	3963.9	3966.9	3927.0	3930.1	3900.9	3917.8	3905.5
12.5°	4161.8	4121.9	4115.8	4131.1	4085.1	4078.9	4045.2	4048.3	4016.0	4031.4	4022.2
15°	4287.7	4246.2	4247.8	4263.1	4217.1	4220.1	4184.8	4191.0	4158.7	4174.1	4161.8
17.5°	4454.9	4413.5	4410.4	4438.0	4399.7	4412.0	4375.1	4382.8	4359.8	4362.8	4349.0
20°	4694.3	4640.6	4629.9	4669.8	4619.1	4634.5	4614.5	4640.6	4631.4	4623.7	4613.0
22.5°	4979.8	4938.3	4916.8	4947.5	4887.7	4916.8	4927.6	4981.3	4995.1	4985.9	4817.1
25°	5361.9	5340.4	5318.9	5305.1	5233.0	5279.0	5334.2	5423.3	5481.6	5504.6	5269.8
27.5°	5877.5	5888.2	5794.6	5779.3	5697.9	5770.1	5869.8	6014.1	6132.2	6175.2	5859.1
30°	6540.4	6554.2	6426.9	6390.0	6340.9	6402.3	6588.0	6746.1	6921.0	6993.1	6571.1
32.5°	7421.3	7409.0	7221.8	7151.2	7106.7	7131.3	7326.1	7542.5	7739.0	7901.6	7382.9
35°	8497.0	8458.7	8259.2	8064.3	7887.8	7963.0	8105.7	8368.1	8665.8	8905.2	8184.0
37.5°	9746.2	9709.4	9405.5	9087.9	8739.5	8771.7	8899.1	9327.3	9710.9	9773.8	8047.4
40°	11036.8	11021.4	10734.5	10330.9	9789.2	9637.2	9806.1	10327.8	10732.9	9635.7	8365.1
42.5°	12325.9	12252.2	12091.1	11687.5	10966.2	10631.7	10858.8	11380.5	11816.4	10102.2	9101.7
45°	13625.7	13550.5	13413.9	13117.7	12367.3	11880.8	11946.8	12525.4	12919.7	10976.9	9869.0
47.5°	14779.7	14724.4	14626.2	14460.5	13791.4	13351.0	13223.6	13628.7	13897.3	11687.5	10458.3
50°	15774.1	15726.5	15764.9	15709.6	15513.2	15051.3	14630.8	14604.7	14733.6	12319.7	11000.0
52.5°	16648.8	16584.4	16748.6	16943.4	17124.5	17021.7	16004.3	15530.1	15413.5	12793.9	11363.7
55°	17371.6	17348.6	17630.9	18157.3	18846.3	19116.4	17472.9	16384.9	16021.2	13196.0	11397.4
57.5°	17804.4	17859.6	18456.6	19475.5	20822.9	20950.3	19191.6	17293.3	16556.7	13440.0	11558.6
60°	17064.7	17251.9	18326.1	20463.8	22504.8	22560.1	20427.0	17474.4	15855.4	12562.2	10697.7
62.5°	14848.7	14983.8	16673.4	20400.9	23081.8	22661.3	20703.2	16452.4	13895.7	10656.2	9098.6
65°	10492.0	10648.5	12684.9	18396.7	20999.4	21014.7	18964.5	14227.2	11107.4	8250.0	7025.4
67.5°	6328.7	6581.9	8510.9	13355.6	17290.3	17604.9	15821.7	10771.3	7949.2	5386.4	4547.0
70°	2076.3	2308.0	3885.6	7904.7	12464.0	13811.3	11882.4	6999.3	4151.1	2277.3	1833.8
72.5°	822.5	928.4	1368.9	3495.8	8032.1	9221.4	7321.5	3382.2	1393.4	604.6	526.4
75°	549.4	560.1	632.3	1190.8	3930.1	5042.7	3529.6	983.7	517.2	377.5	331.5
77.5°	478.8	480.3	512.6	627.6	1279.9	1933.6	1015.9	527.9	428.2	310.0	274.7
80°	438.9	445.0	465.0	535.6	586.2	656.8	501.8	440.4	371.4	285.4	259.3
82.5°	420.5	425.1	437.4	484.9	474.2	492.6	405.1	349.9	313.1	262.4	248.6
85°	383.6	391.3	399.0	428.2	389.8	337.6	313.1	234.8	224.1	198.0	182.6
87.5°	290.0	288.5	280.8	285.4	260.9	213.3	176.5	132.0	107.4	89.0	73.7
90°	121.2	122.8	118.2	112.0	98.2	81.3	61.4	36.8	18.4	6.1	3.1
92.5°	92.1	93.6	90.5	81.3	70.6	56.8	41.4	21.5	12.3	4.6	1.5
95°	56.8	58.3	55.2	49.1	43.0	32.2	21.5	13.8	7.7	3.1	0.0
97.5°	33.8	35.3	32.2	29.2	23.0	15.3	12.3	9.2	6.1	3.1	0.0
100°	19.9	19.9	18.4	15.3	10.7	9.2	7.7	6.1	4.6	1.5	0.0
102.5°	9.2	9.2	9.2	6.1	4.6	4.6	4.6	4.6	4.6	1.5	0.0
105°	3.1	3.1	1.5	1.5	1.5	3.1	3.1	3.1	3.1	1.5	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.1	3.1	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°	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6	3664.6
2.5°	3703.0	3673.8	3678.4	3652.3	3646.2	3618.6	3667.7	3672.3	3658.5	3672.3
5°	3749.0	3713.7	3722.9	3693.8	3686.1	3647.7	3687.6	3684.6	3673.8	3687.6
7.5°	3816.5	3776.6	3781.2	3747.5	3739.8	3696.8	3733.7	3722.9	3710.6	3727.5
10°	3902.5	3864.1	3865.6	3819.6	3815.0	3765.9	3813.5	3793.5	3775.1	3799.7
12.5°	4022.2	3968.5	3963.9	3913.2	3911.7	3861.0	3910.1	3893.3	3868.7	3907.1
15°	4160.3	4088.2	4069.7	4005.3	4003.8	3950.0	3999.2	3973.1	3960.8	4006.8
17.5°	4339.8	4249.3	4109.6	3890.2	3790.4	3807.3	3980.7	4043.7	3879.5	3904.0
20°	4448.8	4009.9	3805.8	3715.3	3667.7	3394.5	3024.7	3055.4	3419.1	3592.5
22.5°	4264.6	4134.2	4059.0	3931.6	3268.7	3175.1	3196.6	3190.4	2720.8	2581.2
25°	4648.3	4525.5	4388.9	3603.2	3466.6	3426.7	3437.5	2997.1	2740.8	2751.5
27.5°	5200.7	5042.7	4177.2	3836.5	3808.9	3750.5	3538.8	3009.3	3041.6	3063.0
30°	5899.0	5337.3	4448.8	4299.9	4244.7	4181.8	3284.0	3362.3	3422.1	3488.1
32.5°	6574.2	5191.5	4969.0	4814.0	4728.1	3796.6	3704.5	3848.8	3908.6	3965.4
35°	6512.8	5816.1	5527.6	5331.2	5170.0	4097.4	4178.7	4398.1	4556.2	4554.7
37.5°	6681.6	6495.9	6162.9	5914.3	4487.2	4590.0	4760.3	5010.4	5202.3	5200.7
40°	7386.0	7185.0	6871.9	6337.9	4972.1	5211.5	5444.7	5679.5	5817.6	5828.4
42.5°	8085.8	7930.8	7648.4	5598.2	5566.0	5897.4	6141.4	6290.3	6374.7	6403.9
45°	8782.5	8636.7	7514.9	6192.1	6290.3	6618.7	6767.6	6796.7	6887.3	6884.2
47.5°	9336.5	9212.2	6913.3	6898.0	7142.0	7369.1	7321.5	7284.7	7307.7	7320.0
50°	9847.5	8019.8	7453.5	7677.6	8048.9	8076.6	7878.6	6241.2	7726.7	7700.6
52.5°	9147.7	7826.4	7956.9	8481.7	9114.0	8793.2	8406.5	5470.8	7246.3	7935.4
55°	8004.4	8136.4	8431.1	9311.9	9936.5	9555.9	8909.8	5633.5	4809.4	3914.7
57.5°	8164.0	8372.7	8932.9	10149.8	10694.6	7568.6	8316.0	3971.5	2688.6	2687.1
60°	7602.4	7918.5	8922.1	10525.8	8656.6	4849.3	3331.6	90.5	521.8	517.2
62.5°	6426.9	6876.5	8512.4	10287.9	7171.2	3940.8	2967.9	7.7	3.1	3.1
65°	4970.5	5500.0	7097.5	8908.3	6353.2	3394.5	2203.7	0.0	0.0	0.0
67.5°	3259.5	3750.5	5329.6	7399.8	5274.4	2565.8	1480.9	0.0	0.0	0.0
70°	1358.1	1964.3	3311.7	5348.1	3879.5	1680.4	702.8	0.0	0.0	0.0
72.5°	392.9	598.5	1491.6	3193.5	2407.8	879.3	260.9	0.0	0.0	0.0
75°	259.3	273.2	451.2	1284.5	1170.9	322.3	105.9	0.0	0.0	0.0
77.5°	217.9	224.1	287.0	359.1	376.0	127.4	85.9	0.0	0.0	0.0
80°	201.0	202.6	257.8	267.0	201.0	105.9	84.4	0.0	0.0	0.0
82.5°	187.2	182.6	219.4	211.8	167.3	92.1	78.3	0.0	0.0	0.0
85°	128.9	132.0	148.9	188.8	101.3	46.0	55.2	0.0	0.0	0.0
87.5°	39.9	46.0	58.3	59.8	18.4	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)