

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: P579439

Luminaire Tested: **CTN-CA10-630-730-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579439  
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-CA10-630-730-U-T5N-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: 71167 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G5

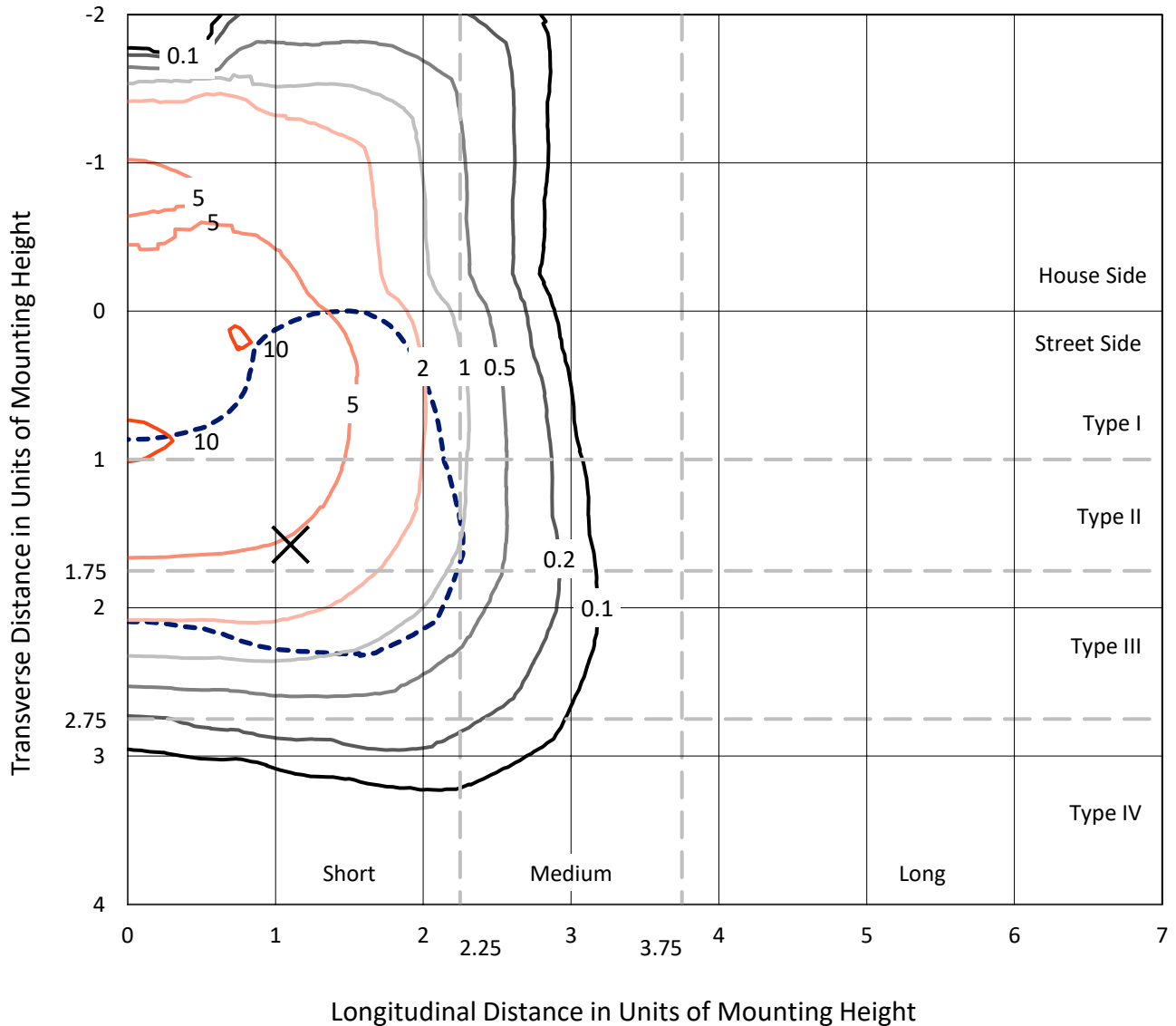
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

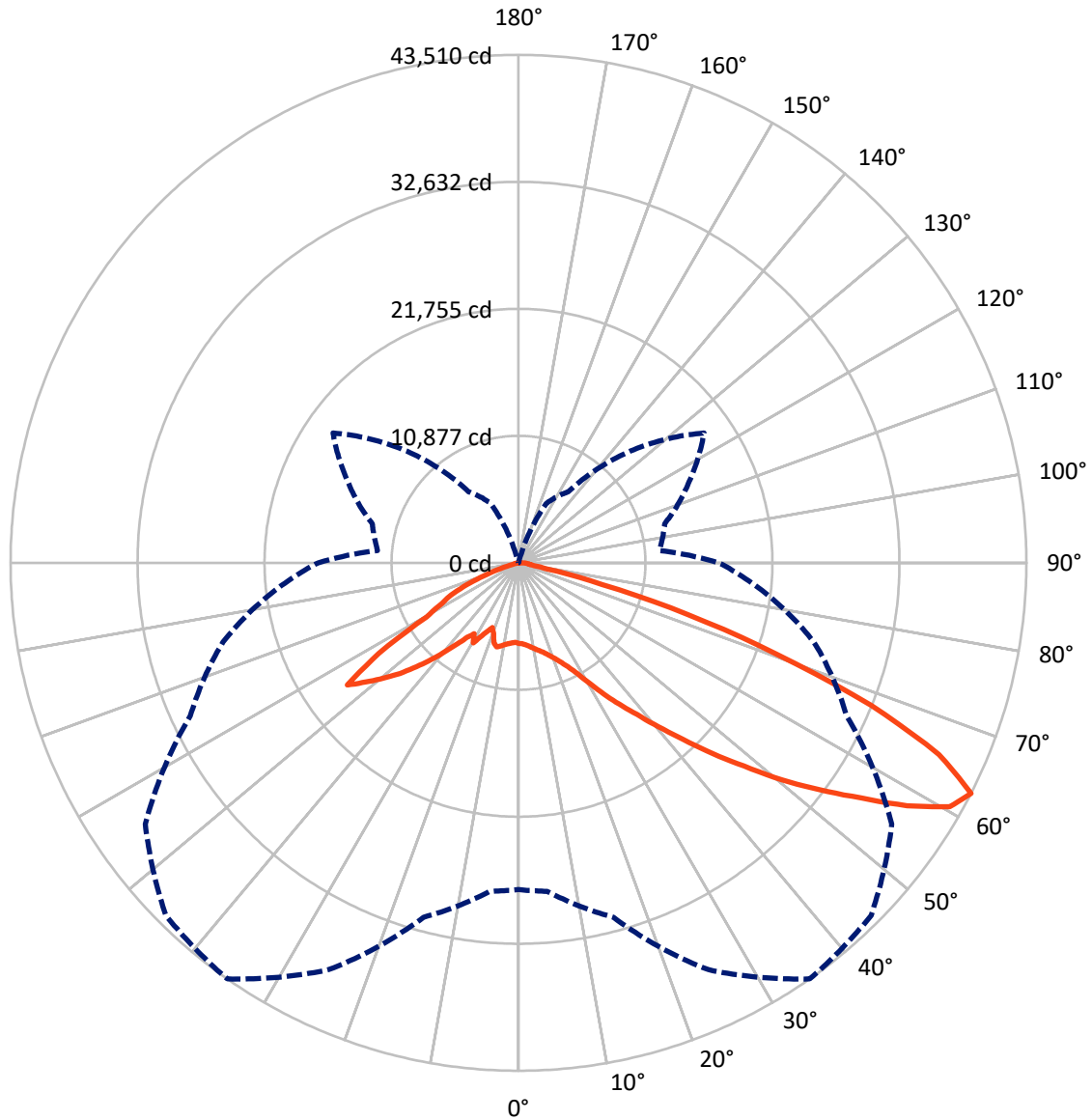
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.4 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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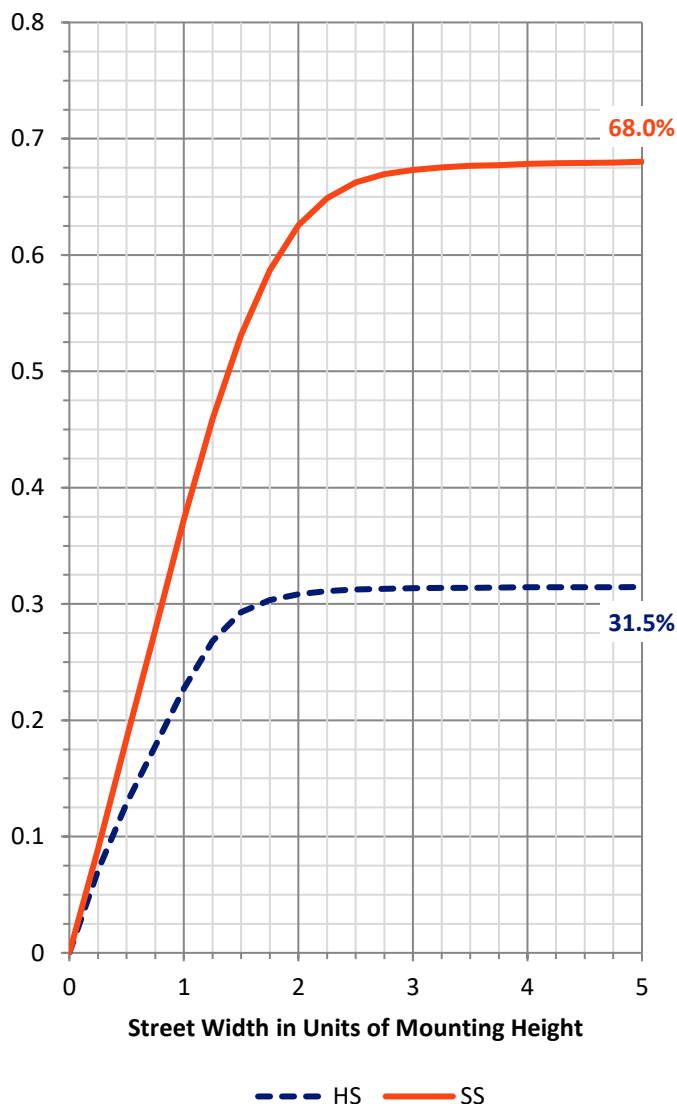
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	22514.2	0.0	22514.2
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	48612.2	40.6	48652.8
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	71126.3	40.7	71167.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	681.2	1.0
10°-20°	2190.2	3.1
20°-30°	4066.8	5.7
30°-40°	8018.1	11.3
40°-50°	14393.4	20.2
50°-60°	20922.3	29.4
60°-70°	17194.8	24.2
70°-80°	3268.4	4.6
80°-90°	391.3	0.5
90°-100°	37.0	0.1
100°-110°	3.6	0.0
110°-120°	0.1	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°	71126.3	99.9
0°-180°	71167.0	100.0

**Coefficient of Utilization**

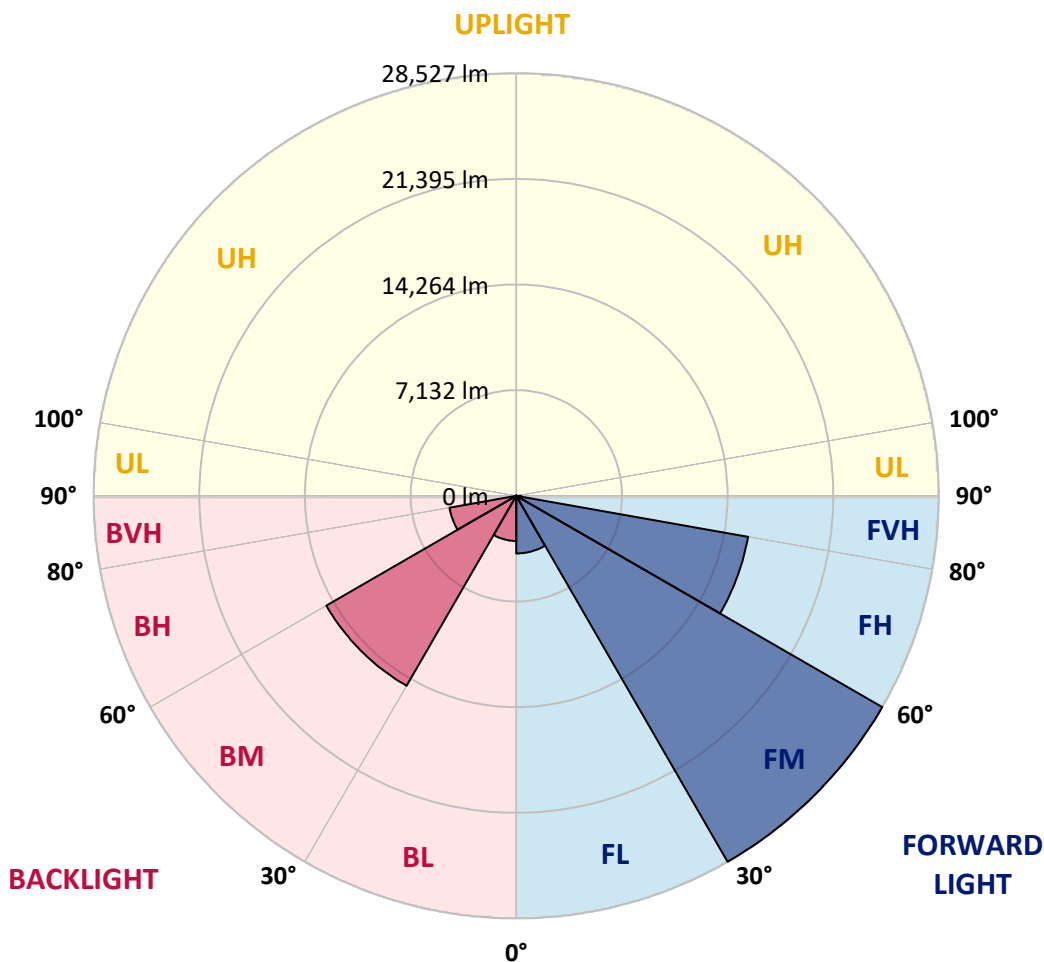


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3889.7	5.5			
FM	(30°-60°)	28527.0	40.1			
FH	(60°-80°)	15886.1	22.3			G5
FVH	(80°-90°)	309.4	0.4			G3/500
BL	(0°-30°)	3048.5	4.3	B4/5000		
BM	(30°-60°)	14806.7	20.8	B5		
BH	(60°-80°)	4577.1	6.4	B4/5000		G4/5000
BVH	(80°-90°)	81.9	0.1			G1/100
UL	(90°-100°)	37.0	0.1		U2/50	
UH	(100°-180°)	3.6	0.0		U1/10	

**BUG Rating: B5-U2-G5**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9
2.5°	7084.3	7026.5	7032.2	7075.6	6945.5	6988.9	6928.1	6980.2	6957.0	6980.2	6994.6
5°	7226.1	7153.7	7150.8	7194.2	7090.1	7116.1	7046.7	7081.4	7049.6	7078.5	7078.5
7.5°	7399.6	7338.9	7324.4	7359.1	7266.6	7278.1	7208.7	7223.2	7185.6	7223.2	7194.2
10°	7616.6	7561.6	7538.5	7555.8	7471.9	7477.7	7402.5	7408.3	7353.3	7385.2	7362.0
12.5°	7845.1	7769.9	7758.3	7787.2	7700.5	7688.9	7625.3	7631.0	7570.3	7599.2	7581.9
15°	8082.3	8004.2	8007.1	8036.0	7949.2	7955.0	7888.5	7900.1	7839.3	7868.2	7845.1
17.5°	8397.6	8319.5	8313.7	8365.8	8293.5	8316.6	8247.2	8261.7	8218.3	8224.1	8198.0
20°	8848.9	8747.6	8727.4	8802.6	8707.1	8736.1	8698.5	8747.6	8730.3	8715.8	8695.6
22.5°	9386.9	9308.8	9268.3	9326.2	9213.4	9268.3	9288.6	9389.8	9415.9	9398.5	9080.3
25°	10107.2	10066.7	10026.2	10000.2	9864.2	9951.0	10055.2	10222.9	10332.9	10376.2	9933.7
27.5°	11079.2	11099.4	10923.0	10894.0	10740.7	10876.7	11064.7	11336.6	11559.4	11640.4	11044.5
30°	12328.8	12354.9	12114.8	12045.4	11952.8	12068.5	12418.5	12716.5	13046.2	13182.2	12386.7
32.5°	13989.3	13966.1	13613.2	13480.2	13396.3	13442.6	13809.9	14217.8	14588.1	14894.7	13917.0
35°	16017.1	15944.8	15568.7	15201.3	14868.7	15010.4	15279.4	15774.1	16335.3	16786.6	15427.0
37.5°	18371.8	18302.3	17729.6	17130.8	16474.1	16534.9	16775.0	17582.1	18305.2	18423.8	15169.5
40°	20804.6	20775.6	20234.7	19473.9	18452.8	18166.4	18484.6	19468.1	20231.8	18163.5	15768.3
42.5°	23234.5	23095.6	22791.9	22031.1	20671.5	20040.9	20469.0	21452.5	22274.1	19042.9	17156.8
45°	25684.6	25542.9	25285.4	24727.1	23312.6	22395.6	22520.0	23610.5	24354.0	20691.8	18603.2
47.5°	27860.0	27755.8	27570.7	27258.3	25997.0	25166.8	24926.7	25690.4	26196.6	22031.1	19714.0
50°	29734.4	29644.8	29717.1	29613.0	29242.7	28372.0	27579.4	27530.2	27773.2	23222.9	20735.1
52.5°	31383.3	31261.8	31571.3	31938.7	32280.1	32086.2	30168.4	29274.5	29054.7	24116.8	21420.7
55°	32745.8	32702.4	33234.7	34226.9	35525.7	36034.8	32936.7	30885.8	30200.2	24874.6	21484.4
57.5°	33561.5	33665.7	34791.0	36711.7	39251.6	39491.7	36176.6	32598.3	31209.7	25334.6	21788.1
60°	32167.2	32520.2	34545.1	38574.7	42422.0	42526.1	38505.2	32939.6	29887.8	23679.9	20165.3
62.5°	27990.1	28244.7	31429.6	38456.1	43509.7	42717.1	39025.9	31013.0	26193.7	20087.2	17151.0
65°	19777.6	20072.7	23911.4	34678.1	39584.2	39613.1	35748.4	26818.6	20937.6	15551.4	13243.0
67.5°	11929.6	12407.0	16043.1	25175.5	32592.5	33185.5	29824.1	20304.1	14984.4	10153.5	8571.2
70°	3913.9	4350.7	7324.4	14900.5	23494.8	26034.6	22398.5	13193.8	7824.9	4292.8	3456.8
72.5°	1550.5	1750.1	2580.3	6589.7	15140.6	17382.5	13801.3	6375.6	2626.6	1139.7	992.2
75°	1035.6	1055.8	1191.8	2244.8	7408.3	9505.5	6653.3	1854.2	974.9	711.6	624.8
77.5°	902.5	905.4	966.2	1183.1	2412.5	3644.8	1915.0	995.1	807.1	584.3	517.8
80°	827.3	838.9	876.5	1009.6	1105.0	1238.1	945.9	830.2	700.0	538.0	488.9
82.5°	792.6	801.3	824.4	914.1	893.9	928.6	763.7	659.5	590.1	494.7	468.6
85°	723.2	737.6	752.1	807.1	734.8	636.4	590.1	442.6	422.3	373.2	344.2
87.5°	546.7	543.8	529.4	538.0	491.8	402.1	332.7	248.8	202.5	167.8	138.9
90°	228.5	231.4	222.7	211.2	185.1	153.3	115.7	69.4	34.7	11.6	5.8
92.5°	173.6	176.5	170.7	153.3	133.1	107.0	78.1	40.5	23.1	8.7	2.9
95°	107.0	109.9	104.1	92.6	81.0	60.7	40.5	26.0	14.5	5.8	0.0
97.5°	63.6	66.5	60.7	55.0	43.4	28.9	23.1	17.4	11.6	5.8	0.0
100°	37.6	37.6	34.7	28.9	20.2	17.4	14.5	11.6	8.7	2.9	0.0
102.5°	17.4	17.4	17.4	11.6	8.7	8.7	8.7	8.7	8.7	2.9	0.0
105°	5.8	5.8	2.9	2.9	2.9	5.8	5.8	5.8	5.8	2.9	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	5.8	5.8	2.9	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	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°	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9	6907.9
2.5°	6980.2	6925.2	6933.9	6884.7	6873.1	6821.1	6913.6	6922.3	6896.3	6922.3
5°	7067.0	7000.4	7017.8	6962.8	6948.4	6876.0	6951.2	6945.5	6925.2	6951.2
7.5°	7194.2	7119.0	7127.7	7064.1	7049.6	6968.6	7038.0	7017.8	6994.6	7026.5
10°	7356.2	7283.9	7286.8	7200.0	7191.3	7098.8	7188.5	7150.8	7116.1	7162.4
12.5°	7581.9	7480.6	7471.9	7376.5	7373.6	7278.1	7370.7	7338.9	7292.6	7364.9
15°	7842.2	7706.3	7671.5	7550.0	7547.2	7445.9	7538.5	7489.3	7466.2	7552.9
17.5°	8180.7	8010.0	7746.8	7333.1	7145.1	7176.9	7503.8	7622.4	7312.8	7359.1
20°	8386.0	7558.7	7174.0	7003.3	6913.6	6398.7	5701.6	5759.4	6445.0	6771.9
22.5°	8038.9	7793.0	7651.3	7411.2	6161.5	5985.1	6025.6	6014.0	5128.8	4865.6
25°	8762.1	8530.7	8273.2	6792.1	6534.7	6459.5	6479.7	5649.5	5166.4	5186.7
27.5°	9803.5	9505.5	7874.0	7231.8	7179.8	7069.9	6670.7	5672.7	5733.4	5773.9
30°	11119.7	10060.9	8386.0	8105.5	8001.3	7882.7	6190.5	6338.0	6450.8	6575.2
32.5°	12392.5	9786.1	9366.7	9074.5	8912.5	7156.6	6983.1	7255.0	7367.8	7474.8
35°	12276.8	10963.5	10419.6	10049.4	9745.6	7723.6	7876.9	8290.6	8588.5	8585.6
37.5°	12595.0	12245.0	11617.2	11148.6	8458.4	8652.2	8973.3	9444.8	9806.4	9803.5
40°	13922.7	13543.8	12953.7	11947.0	9372.5	9823.7	10263.4	10706.0	10966.4	10986.6
42.5°	15241.8	14949.7	14417.4	10552.7	10492.0	11116.8	11576.7	11857.3	12016.4	12071.4
45°	16555.1	16280.3	14165.7	11672.2	11857.3	12476.4	12757.0	12811.9	12982.6	12976.8
47.5°	17599.4	17365.1	13031.8	13002.9	13462.8	13890.9	13801.3	13731.8	13775.2	13798.4
50°	18562.7	15117.4	14050.0	14472.4	15172.4	15224.5	14851.3	11764.8	14564.9	14515.8
52.5°	17243.6	14753.0	14998.8	15988.2	17180.0	16575.4	15846.4	10312.6	13659.5	14958.3
55°	15088.5	15337.3	15892.7	17553.1	18730.5	18013.1	16795.2	10619.2	9065.8	7379.4
57.5°	15389.4	15782.8	16838.6	19132.6	20159.5	14267.0	15675.7	7486.4	5068.1	5065.2
60°	14330.6	14926.5	16818.4	19841.3	16317.9	9141.1	6280.1	170.7	983.5	974.9
62.5°	12114.8	12962.4	16046.0	19392.9	13517.8	7428.5	5594.6	14.5	5.8	5.8
65°	9369.6	10367.6	13378.9	16792.3	11975.9	6398.7	4154.0	0.0	0.0	0.0
67.5°	6144.2	7069.9	10046.5	13948.8	9942.3	4836.7	2791.5	0.0	0.0	0.0
70°	2560.1	3702.7	6242.5	10081.2	7312.8	3167.5	1324.9	0.0	0.0	0.0
72.5°	740.5	1128.2	2811.7	6019.8	4538.7	1657.5	491.8	0.0	0.0	0.0
75°	488.9	514.9	850.5	2421.2	2207.2	607.5	199.6	0.0	0.0	0.0
77.5°	410.8	422.3	540.9	676.9	708.7	240.1	162.0	0.0	0.0	0.0
80°	378.9	381.8	486.0	503.3	378.9	199.6	159.1	0.0	0.0	0.0
82.5°	352.9	344.2	413.7	399.2	315.3	173.6	147.5	0.0	0.0	0.0
85°	243.0	248.8	280.6	355.8	190.9	86.8	104.1	0.0	0.0	0.0
87.5°	75.2	86.8	109.9	112.8	34.7	11.6	0.0	0.0	0.0	0.0
90°	2.9	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)