

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: P579469

Luminaire Tested: **CTN-CA8-480-730-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579469  
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-CA8-480-730-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: 54814 lumens  
Efficiency: N/A  
Efficacy: 114.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G5

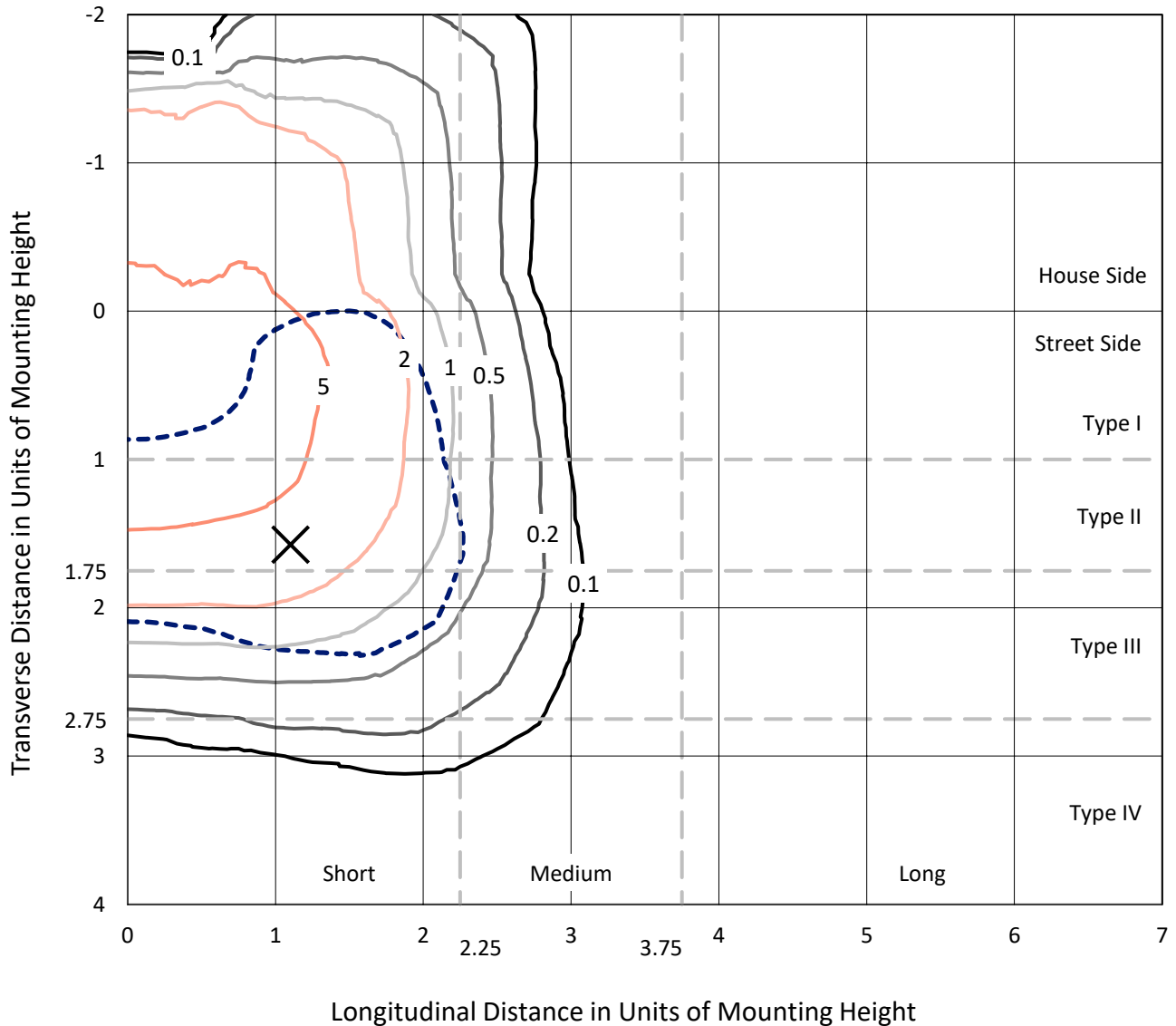
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

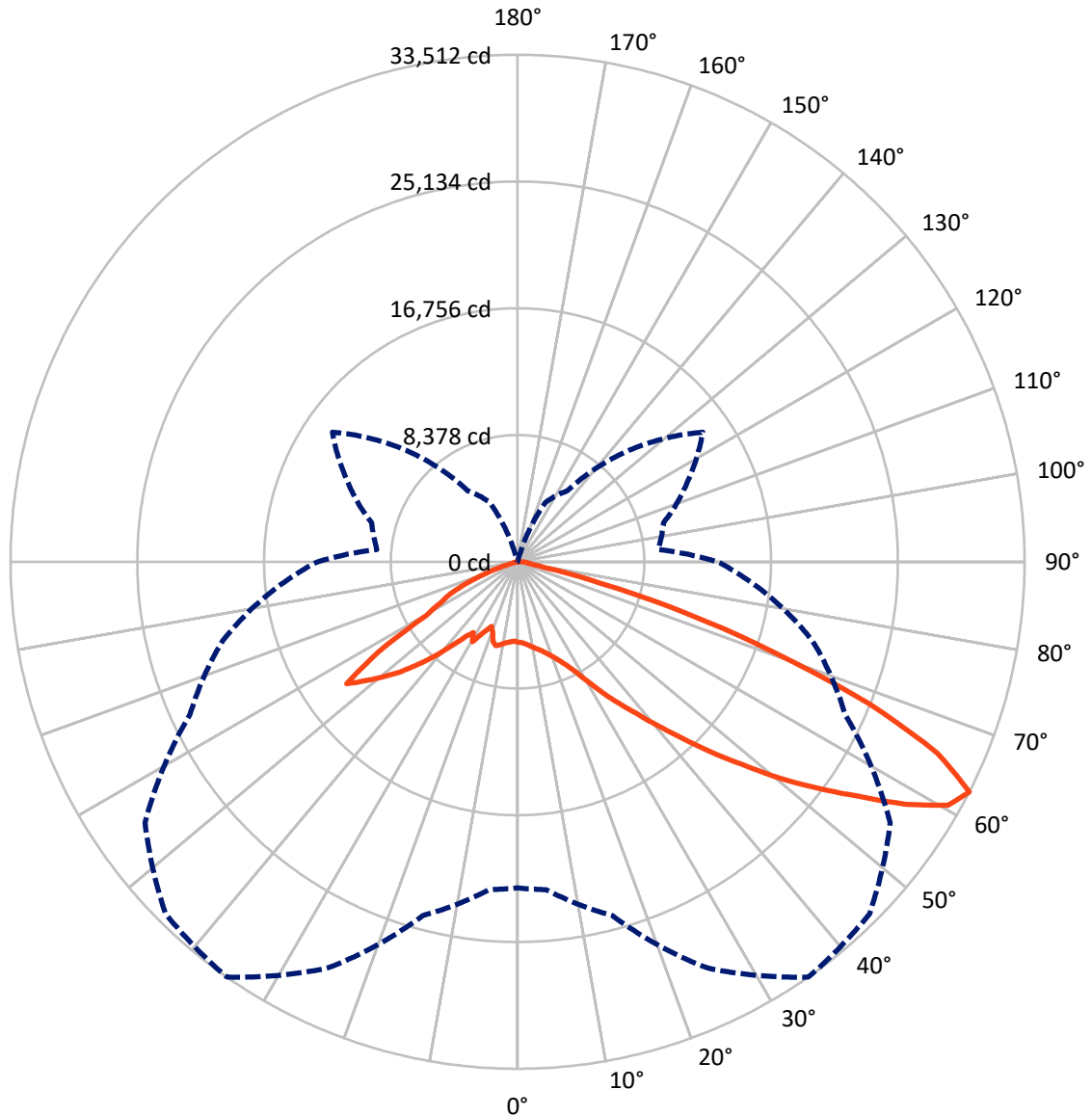
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 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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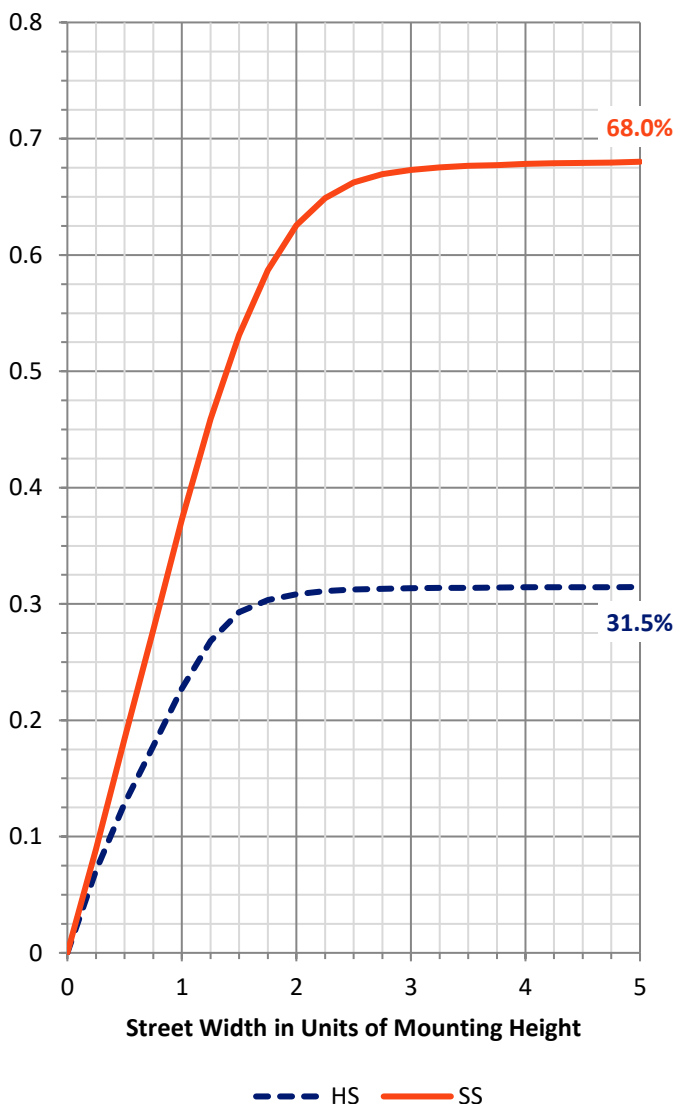
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17340.8	0.0	17340.8
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	37441.9	31.3	37473.2
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	54782.7	31.3	54814.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	524.7	1.0
10°-20°	1686.9	3.1
20°-30°	3132.4	5.7
30°-40°	6175.6	11.3
40°-50°	11086.0	20.2
50°-60°	16114.7	29.4
60°-70°	13243.7	24.2
70°-80°	2517.4	4.6
80°-90°	301.3	0.5
90°-100°	28.5	0.1
100°-110°	2.7	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°	54782.7	99.9
0°-180°	54814.0	100.0

**Coefficient of Utilization**

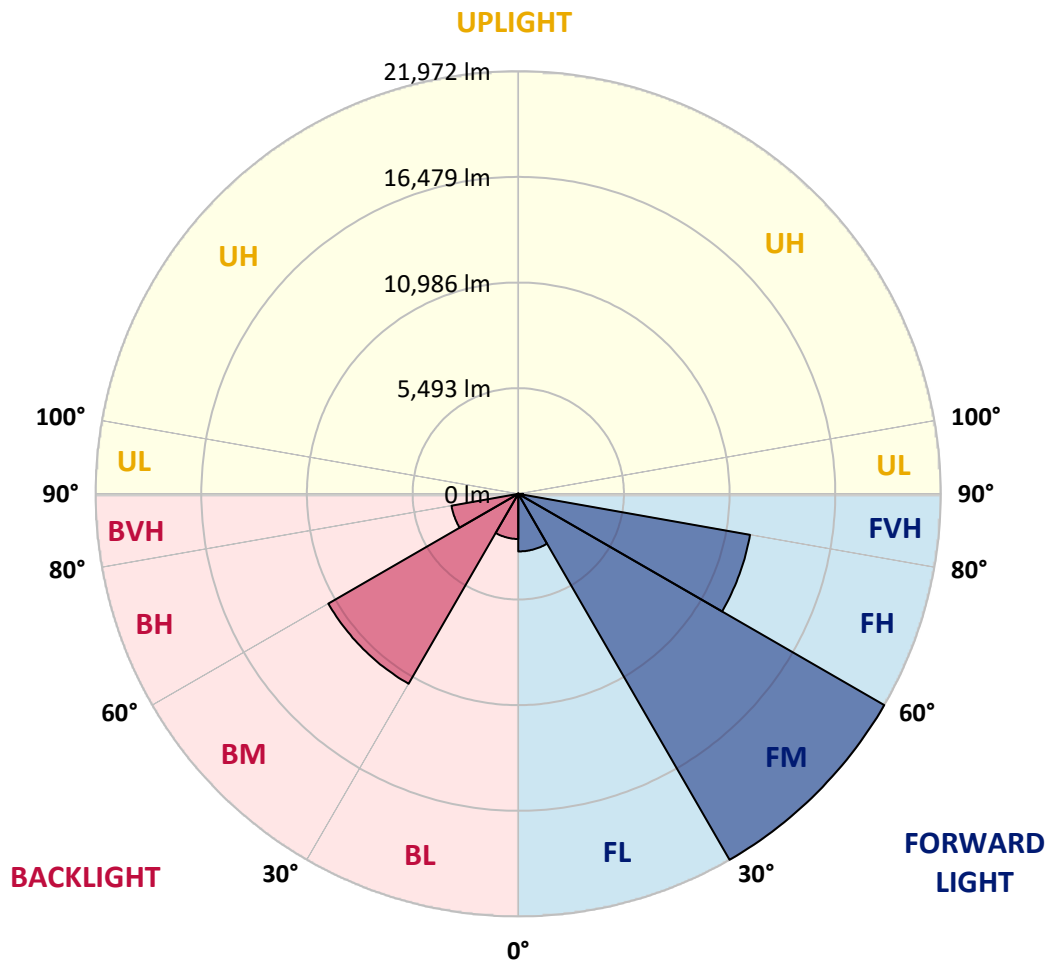


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2995.9	5.5			
FM (30°-60°)	21972.0	40.1			
FH (60°-80°)	12235.7	22.3			G5
FVH (80°-90°)	238.3	0.4			G3/500
BL (0°-30°)	2348.0	4.3	B3/2500		
BM (30°-60°)	11404.4	20.8	B5		
BH (60°-80°)	3525.4	6.4	B4/5000		G4/5000
BVH (80°-90°)	63.1	0.1			G1/100
UL (90°-100°)	28.5	0.1		U2/50	
UH (100°-180°)	2.8	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°	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5
2.5°	5456.5	5411.9	5416.4	5449.8	5349.5	5382.9	5336.1	5376.2	5358.4	5376.2	5387.4
5°	5565.6	5509.9	5507.7	5541.1	5460.9	5481.0	5427.5	5454.2	5429.7	5452.0	5452.0
7.5°	5699.3	5652.5	5641.4	5668.1	5596.8	5605.7	5552.3	5563.4	5534.4	5563.4	5541.1
10°	5866.4	5824.1	5806.3	5819.6	5755.0	5759.5	5701.5	5706.0	5663.7	5688.2	5670.3
12.5°	6042.4	5984.5	5975.6	5997.9	5931.0	5922.1	5873.1	5877.6	5830.8	5853.0	5839.7
15°	6225.1	6165.0	6167.2	6189.5	6122.6	6127.1	6075.8	6084.8	6038.0	6060.3	6042.4
17.5°	6468.0	6407.8	6403.4	6443.5	6387.8	6405.6	6352.1	6363.3	6329.8	6334.3	6314.2
20°	6815.6	6737.6	6722.0	6779.9	6706.4	6728.7	6699.7	6737.6	6724.2	6713.1	6697.5
22.5°	7230.0	7169.8	7138.6	7183.2	7096.3	7138.6	7154.2	7232.2	7252.3	7238.9	6993.8
25°	7784.8	7753.6	7722.4	7702.3	7597.6	7664.4	7744.6	7873.9	7958.5	7992.0	7651.1
27.5°	8533.4	8549.0	8413.1	8390.8	8272.7	8377.4	8522.2	8731.7	8903.2	8965.6	8506.6
30°	9495.9	9515.9	9331.0	9277.5	9206.2	9295.4	9565.0	9794.4	10048.4	10153.2	9540.4
32.5°	10774.8	10756.9	10485.1	10382.6	10318.0	10353.7	10636.6	10950.8	11236.0	11472.1	10719.1
35°	12336.6	12280.9	11991.3	11708.3	11452.1	11561.3	11768.5	12149.5	12581.7	12929.3	11882.1
37.5°	14150.2	14096.8	13655.6	13194.4	12688.7	12735.4	12920.4	13542.0	14099.0	14190.3	11683.8
40°	16024.0	16001.7	15585.1	14999.1	14212.6	13992.1	14237.1	14994.7	15582.9	13989.8	12145.0
42.5°	17895.6	17788.6	17554.7	16968.7	15921.5	15435.8	15765.6	16523.1	17155.9	14667.1	13214.5
45°	19782.7	19673.5	19475.2	19045.2	17955.7	17249.4	17345.2	18185.2	18757.8	15937.1	14328.5
47.5°	21458.2	21378.0	21235.4	20994.8	20023.3	19383.9	19199.0	19787.2	20177.1	16968.7	15184.1
50°	22902.0	22832.9	22888.6	22808.4	22523.2	21852.6	21242.1	21204.2	21391.4	17886.7	15970.5
52.5°	24171.9	24078.4	24316.8	24599.7	24862.6	24713.4	23236.2	22547.7	22378.4	18575.1	16498.6
55°	25221.3	25187.9	25597.9	26362.1	27362.5	27754.6	25368.4	23788.7	23260.7	19158.9	16547.6
57.5°	25849.7	25929.9	26796.6	28276.0	30232.2	30417.1	27863.8	25107.7	24038.3	19513.1	16781.6
60°	24775.7	25047.6	26607.2	29710.8	32674.1	32754.3	29657.4	25370.6	23020.0	18238.7	15531.6
62.5°	21558.5	21754.5	24207.6	29619.5	33511.9	32901.4	30058.4	23886.8	20174.8	15471.5	13210.0
65°	15233.1	15460.3	18416.9	26709.7	30488.4	30510.7	27534.0	20656.1	16126.5	11977.9	10199.9
67.5°	9188.4	9556.0	12356.7	19390.6	25103.3	25560.0	22971.0	15638.6	11541.2	7820.4	6601.7
70°	3014.5	3351.0	5641.4	11476.6	18096.1	20052.3	17251.7	10162.1	6026.8	3306.4	2662.5
72.5°	1194.2	1348.0	1987.4	5075.5	11661.5	13388.3	10630.0	4910.6	2023.1	877.8	764.2
75°	797.6	813.2	918.0	1729.0	5706.0	7321.3	5124.5	1428.2	750.8	548.1	481.3
77.5°	695.1	697.4	744.2	911.3	1858.2	2807.3	1475.0	766.4	621.6	450.1	398.8
80°	637.2	646.1	675.1	777.6	851.1	953.6	728.6	639.4	539.2	414.4	376.5
82.5°	610.5	617.2	635.0	704.1	688.5	715.2	588.2	508.0	454.5	381.0	360.9
85°	557.0	568.1	579.3	621.6	565.9	490.2	454.5	340.9	325.3	287.4	265.1
87.5°	421.1	418.9	407.7	414.4	378.8	309.7	256.2	191.6	156.0	129.2	106.9
90°	176.0	178.2	171.6	162.6	142.6	118.1	89.1	53.5	26.7	8.9	4.5
92.5°	133.7	135.9	131.5	118.1	102.5	82.4	60.2	31.2	17.8	6.7	2.2
95°	82.4	84.7	80.2	71.3	62.4	46.8	31.2	20.1	11.1	4.5	0.0
97.5°	49.0	51.2	46.8	42.3	33.4	22.3	17.8	13.4	8.9	4.5	0.0
100°	29.0	29.0	26.7	22.3	15.6	13.4	11.1	8.9	6.7	2.2	0.0
102.5°	13.4	13.4	13.4	8.9	6.7	6.7	6.7	6.7	6.7	2.2	0.0
105°	4.5	4.5	2.2	2.2	2.2	4.5	4.5	4.5	4.5	2.2	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.5	4.5	2.2	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	2.2	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°	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5	5320.5
2.5°	5376.2	5333.9	5340.6	5302.7	5293.8	5253.7	5325.0	5331.7	5311.6	5331.7
5°	5443.1	5391.8	5405.2	5362.9	5351.7	5296.0	5354.0	5349.5	5333.9	5354.0
7.5°	5541.1	5483.2	5489.9	5440.9	5429.7	5367.3	5420.8	5405.2	5387.4	5411.9
10°	5665.9	5610.2	5612.4	5545.6	5538.9	5467.6	5536.7	5507.7	5481.0	5516.6
12.5°	5839.7	5761.7	5755.0	5681.5	5679.3	5605.7	5677.0	5652.5	5616.9	5672.6
15°	6040.2	5935.5	5908.7	5815.2	5812.9	5735.0	5806.3	5768.4	5750.6	5817.4
17.5°	6300.9	6169.4	5966.7	5648.1	5503.2	5527.8	5779.5	5870.9	5632.5	5668.1
20°	6459.1	5821.9	5525.5	5394.1	5325.0	4928.4	4391.5	4436.0	4964.1	5215.8
22.5°	6191.7	6002.3	5893.2	5708.2	4745.7	4609.8	4641.0	4632.1	3950.3	3747.6
25°	6748.7	6570.5	6372.2	5231.4	5033.1	4975.2	4990.8	4351.4	3979.3	3994.9
27.5°	7550.8	7321.3	6064.7	5570.1	5530.0	5445.3	5137.8	4369.2	4416.0	4447.2
30°	8564.6	7749.1	6459.1	6243.0	6162.7	6071.4	4768.0	4881.6	4968.5	5064.3
32.5°	9544.9	7537.4	7214.4	6989.3	6864.6	5512.2	5378.5	5587.9	5674.8	5757.2
35°	9455.8	8444.2	8025.4	7740.2	7506.2	5948.9	6066.9	6385.5	6615.0	6612.8
37.5°	9700.9	9431.3	8947.8	8586.8	6514.8	6664.1	6911.4	7274.5	7553.0	7550.8
40°	10723.5	10431.7	9977.1	9201.8	7218.8	7566.4	7905.1	8246.0	8446.5	8462.1
42.5°	11739.5	11514.5	11104.5	8127.9	8081.1	8562.3	8916.6	9132.7	9255.3	9297.6
45°	12751.0	12539.4	10910.7	8990.1	9132.7	9609.5	9825.6	9868.0	9999.4	9995.0
47.5°	13555.4	13374.9	10037.3	10015.0	10369.3	10699.0	10630.0	10576.5	10609.9	10627.7
50°	14297.3	11643.7	10821.6	11146.9	11686.0	11726.1	11438.7	9061.4	11218.2	11180.3
52.5°	13281.3	11363.0	11552.4	12314.3	13232.3	12766.6	12205.2	7942.9	10520.8	11521.2
55°	11621.4	11813.0	12240.8	13519.7	14426.5	13874.0	12936.0	8179.1	6982.7	5683.7
57.5°	11853.1	12156.2	12969.4	14736.2	15527.2	10988.7	12073.7	5766.2	3903.5	3901.3
60°	11037.7	11496.7	12953.8	15282.1	12568.3	7040.6	4837.1	131.5	757.5	750.8
62.5°	9331.0	9983.8	12358.9	14936.7	10411.6	5721.6	4309.0	11.1	4.5	4.5
65°	7216.6	7985.3	10304.7	12933.7	9224.1	4928.4	3199.5	0.0	0.0	0.0
67.5°	4732.3	5445.3	7738.0	10743.6	7657.8	3725.3	2150.1	0.0	0.0	0.0
70°	1971.8	2851.9	4808.1	7764.7	5632.5	2439.7	1020.4	0.0	0.0	0.0
72.5°	570.4	868.9	2165.6	4636.5	3495.8	1276.7	378.8	0.0	0.0	0.0
75°	376.5	396.6	655.0	1864.9	1700.0	467.9	153.7	0.0	0.0	0.0
77.5°	316.4	325.3	416.6	521.4	545.9	184.9	124.8	0.0	0.0	0.0
80°	291.9	294.1	374.3	387.7	291.9	153.7	122.5	0.0	0.0	0.0
82.5°	271.8	265.1	318.6	307.5	242.9	133.7	113.6	0.0	0.0	0.0
85°	187.2	191.6	216.1	274.0	147.1	66.8	80.2	0.0	0.0	0.0
87.5°	57.9	66.8	84.7	86.9	26.7	8.9	0.0	0.0	0.0	0.0
90°	2.2	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)