

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: P579628

Luminaire Tested: **CTN-CA10-630-727-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579628  
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-CA10-630-727-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 57441 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U3 - G5

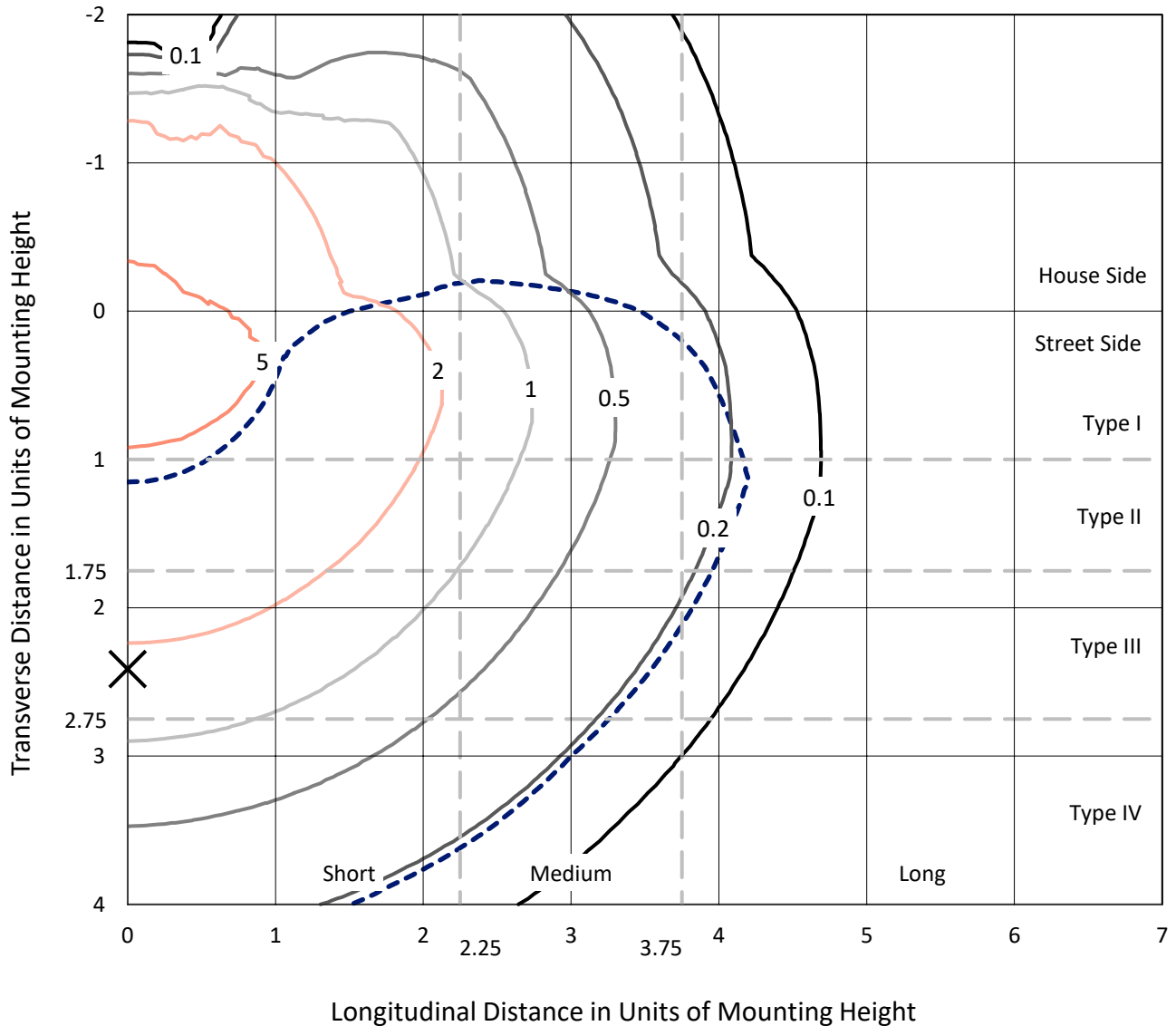
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

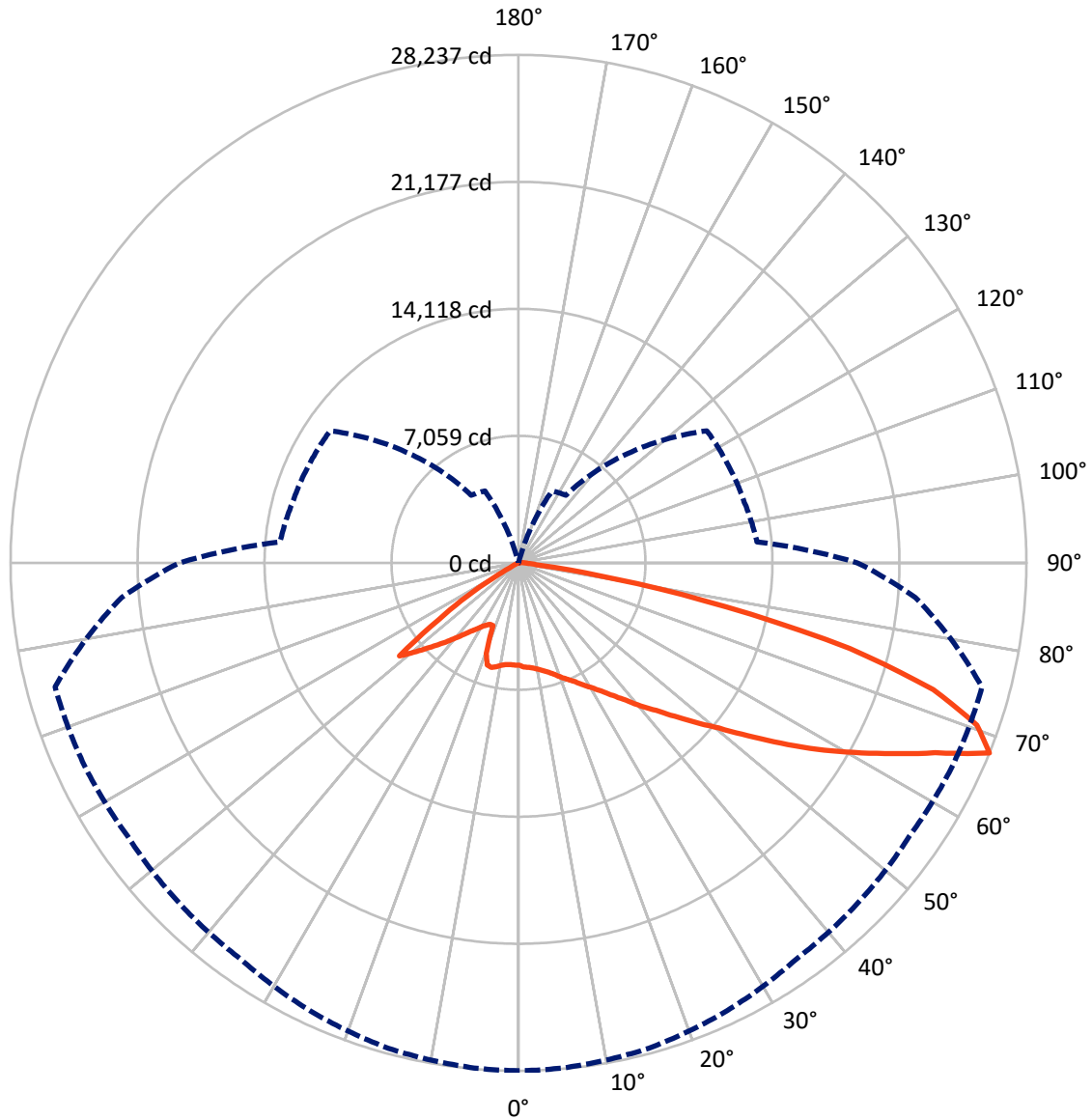
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.4 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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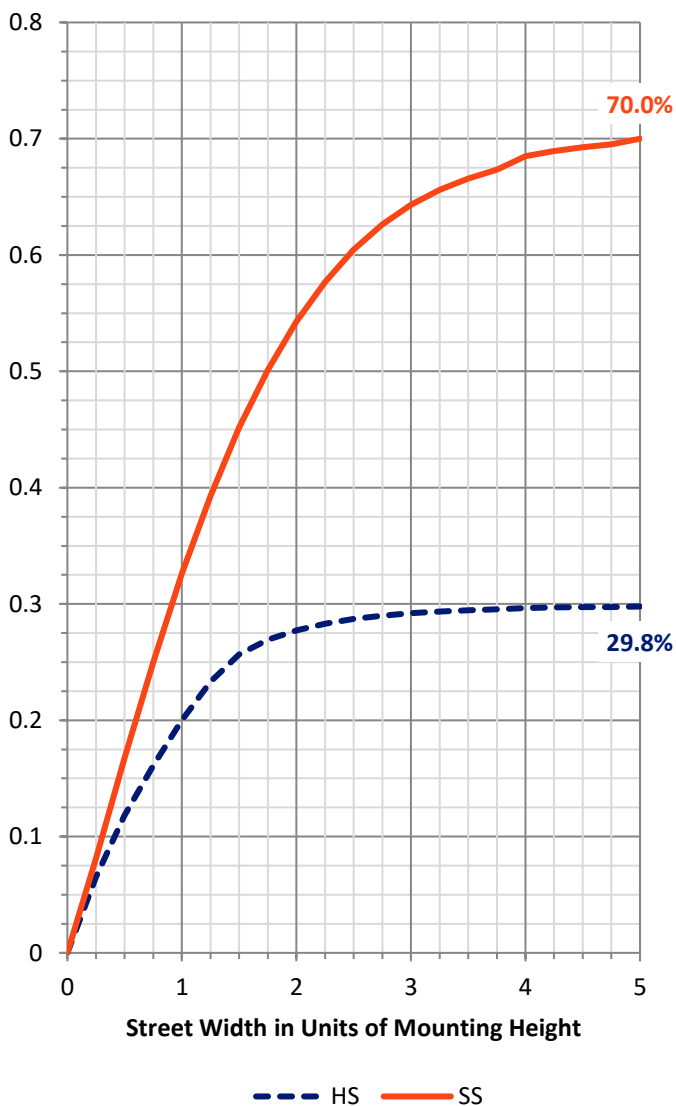
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17146.5	5.8	17152.2
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	40224.1	64.7	40288.8
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	57370.6	70.4	57441.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	548.7	1.0
10°-20°	1698.8	3.0
20°-30°	2850.9	5.0
30°-40°	4622.8	8.0
40°-50°	7554.2	13.2
50°-60°	11838.8	20.6
60°-70°	15855.7	27.6
70°-80°	11556.7	20.1
80°-90°	843.9	1.5
90°-100°	54.0	0.1
100°-110°	15.4	0.0
110°-120°	1.1	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°	57370.6	99.9
0°-180°	57441.0	100.0

**Coefficient of Utilization**



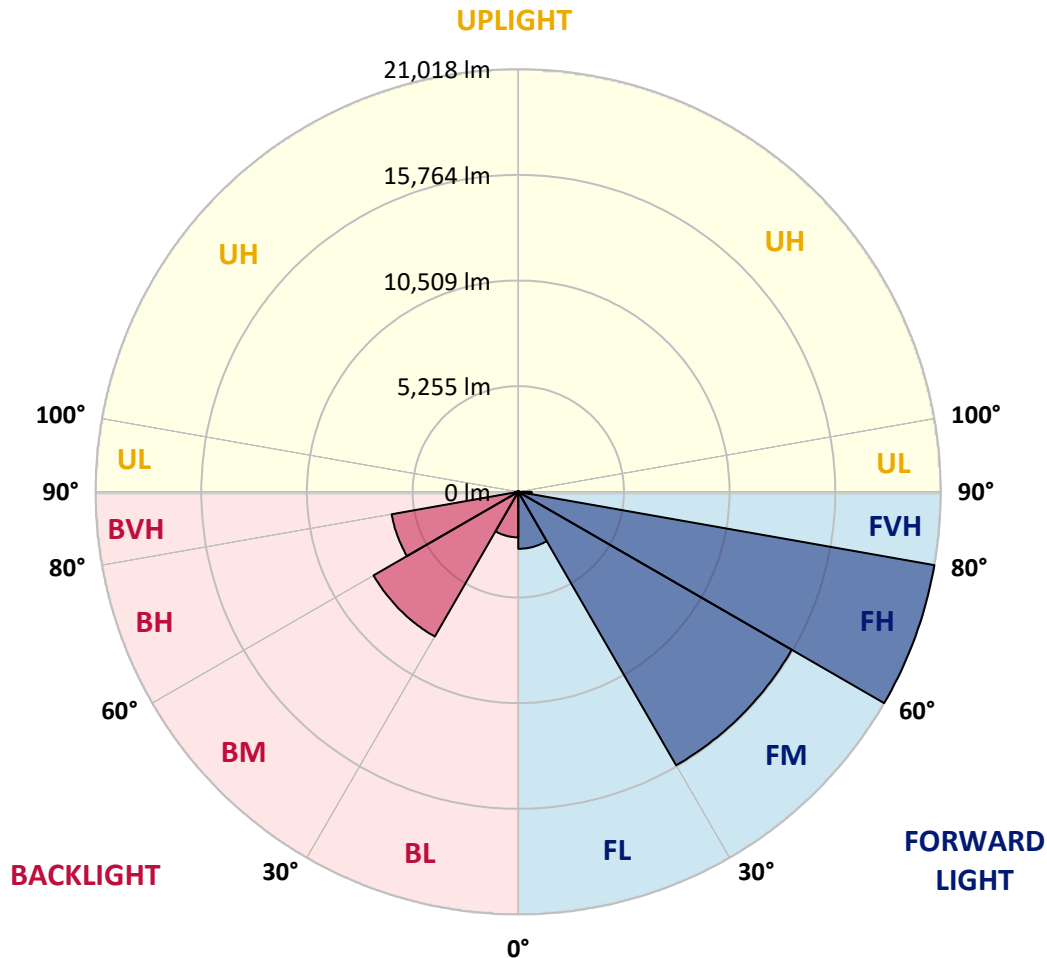
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2833.3	4.9			
FM (30°-60°)	15705.4	27.3			
FH (60°-80°)	21018.0	36.6			G5
FVH (80°-90°)	667.4	1.2			G4/750
BL (0°-30°)	2265.1	3.9	B3/2500		
BM (30°-60°)	8310.4	14.5	B4/8500		
BH (60°-80°)	6394.4	11.1	B5		G5
BVH (80°-90°)	176.6	0.3			G2/225
UL (90°-100°)	54.0	0.1		U3/500	
UH (100°-180°)	16.5	0.0		U2/50	

**BUG Rating: B5-U3-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7
2.5°	5800.4	5766.6	5769.0	5800.4	5706.2	5737.6	5696.6	5728.0	5706.2	5713.5	5728.0
5°	5836.6	5800.4	5802.8	5841.5	5756.9	5783.5	5728.0	5744.9	5725.6	5735.2	5735.2
7.5°	5909.1	5868.0	5865.6	5889.8	5802.8	5812.5	5761.8	5764.2	5735.2	5754.5	5744.9
10°	6017.7	5983.9	5959.8	5974.3	5897.0	5892.2	5827.0	5829.4	5793.2	5814.9	5798.0
12.5°	6150.6	6104.7	6099.9	6104.7	6020.2	6000.8	5933.2	5938.1	5872.9	5906.7	5887.3
15°	6319.6	6247.2	6247.2	6273.7	6165.1	6150.6	6068.5	6073.3	6005.7	6032.2	6012.9
17.5°	6527.3	6457.2	6445.2	6464.5	6370.3	6351.0	6266.5	6261.6	6186.8	6194.0	6177.1
20°	6795.3	6725.3	6696.3	6744.6	6626.3	6611.8	6510.4	6500.7	6421.0	6399.3	6389.6
22.5°	7044.1	6988.5	6974.0	7027.1	6904.0	6891.9	6795.3	6783.2	6708.4	6677.0	6486.2
25°	7324.2	7312.1	7307.3	7324.2	7208.3	7184.1	7109.3	7092.3	7029.6	6990.9	6759.1
27.5°	7686.4	7681.6	7667.1	7669.5	7563.2	7541.5	7471.5	7459.4	7394.2	7350.7	7053.7
30°	8065.5	8065.5	8034.1	8051.0	7997.9	7964.1	7908.6	7865.1	7824.0	7778.2	7403.9
32.5°	8502.6	8500.2	8471.2	8521.9	8483.3	8483.3	8449.5	8403.6	8331.2	8309.4	7855.4
35°	9065.3	9029.0	9017.0	9099.1	9087.0	9108.7	9096.7	9048.4	8988.0	8937.3	8386.7
37.5°	9688.3	9678.6	9714.8	9765.6	9792.1	9850.1	9813.9	9811.4	9801.8	9673.8	8244.2
40°	10456.2	10415.1	10465.9	10492.4	10473.1	10567.3	10535.9	10562.5	10634.9	9606.2	8234.6
42.5°	11221.7	11185.5	11221.7	11352.1	11323.1	11436.6	11422.1	11526.0	11567.0	9748.7	8903.5
45°	12163.5	12122.4	12151.4	12306.0	12320.4	12458.1	12533.0	12632.0	12651.3	10671.1	9710.0
47.5°	13245.3	13177.7	13233.3	13305.7	13525.4	13655.8	13728.3	13849.0	13972.2	11781.9	10627.7
50°	14438.3	14433.4	14493.8	14619.4	14870.5	15000.9	15126.5	15252.0	15454.9	13020.7	11656.4
52.5°	15954.8	15923.4	16027.2	16145.5	16367.7	16568.1	16717.8	16848.2	17065.6	14274.0	12769.6
55°	17688.6	17579.9	17778.0	17978.4	18072.6	18309.2	18413.1	18521.7	18729.4	15592.5	13419.2
57.5°	19560.1	19533.5	19671.2	19743.6	19946.5	20093.8	20149.3	20267.6	20265.2	16964.2	14525.2
60°	21402.6	21373.6	21535.4	21578.9	21740.7	21873.5	21854.2	21960.4	21999.1	18251.3	15609.4
62.5°	23341.7	23293.4	23443.1	23452.8	23356.2	23571.1	23549.4	23638.7	23604.9	19509.4	16676.8
65°	25461.9	25498.2	25546.5	25348.4	25116.6	25302.6	25297.7	25466.8	25587.5	21267.4	18106.4
67.5°	28236.6	28190.7	27942.0	27463.8	26901.2	26712.8	26512.4	26635.5	26669.3	22141.5	18838.1
70°	27038.8	26937.4	26826.3	26338.5	25660.0	25181.8	24870.3	25000.7	25138.3	20924.5	17693.4
72.5°	24119.3	23868.2	23351.4	22921.5	22530.3	22064.3	21685.1	21912.1	22214.0	18560.4	15667.4
75°	19028.8	18794.6	18417.9	18125.7	17915.6	17910.8	17893.9	18070.2	18026.7	15070.9	12738.2
77.5°	11784.4	12274.6	12622.3	12373.6	12460.5	12281.8	12675.4	12907.3	13117.3	10803.9	9074.9
80°	5440.6	5566.2	6182.0	6022.6	5894.6	5858.4	5882.5	6285.8	6404.1	4849.0	4061.7
82.5°	1241.2	1190.5	1234.0	1144.6	1139.8	1086.7	1093.9	1093.9	1055.3	893.5	748.6
85°	627.9	642.3	647.2	620.6	548.2	492.6	456.4	386.4	333.2	284.9	241.5
87.5°	420.2	432.3	439.5	403.3	362.2	316.3	287.4	234.2	185.9	115.9	89.3
90°	287.4	284.9	277.7	258.4	231.8	198.0	159.4	111.1	65.2	24.1	16.9
92.5°	205.3	200.4	198.0	181.1	161.8	135.2	103.8	70.0	36.2	16.9	9.7
95°	135.2	132.8	132.8	123.2	108.7	89.3	70.0	45.9	26.6	14.5	9.7
97.5°	94.2	91.8	91.8	86.9	77.3	65.2	48.3	31.4	21.7	14.5	9.7
100°	65.2	65.2	65.2	60.4	55.5	45.9	36.2	24.1	19.3	14.5	9.7
102.5°	43.5	43.5	45.9	43.5	38.6	31.4	24.1	19.3	16.9	12.1	9.7
105°	29.0	29.0	29.0	29.0	26.6	21.7	19.3	16.9	14.5	12.1	9.7
107.5°	19.3	19.3	19.3	19.3	16.9	14.5	14.5	14.5	12.1	12.1	9.7
110°	12.1	12.1	12.1	14.5	12.1	12.1	12.1	12.1	12.1	9.7	9.7



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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°	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7	5691.7
2.5°	5715.9	5682.1	5699.0	5665.2	5650.7	5619.3	5679.7	5684.5	5679.7	5689.3
5°	5723.1	5684.5	5703.8	5665.2	5657.9	5621.7	5682.1	5682.1	5667.6	5674.8
7.5°	5740.0	5699.0	5713.5	5667.6	5667.6	5624.1	5696.6	5691.7	5679.7	5696.6
10°	5798.0	5749.7	5749.7	5706.2	5711.1	5665.2	5754.5	5754.5	5744.9	5773.9
12.5°	5887.3	5827.0	5829.4	5769.0	5778.7	5742.5	5851.1	5856.0	5856.0	5904.3
15°	6003.3	5911.5	5921.2	5856.0	5875.3	5831.8	5928.4	5923.6	5935.6	6005.7
17.5°	6145.7	6044.3	5959.8	5747.3	5621.7	5626.5	5913.9	6046.7	5892.2	5938.1
20°	6206.1	5713.5	5445.4	5368.2	5351.3	5083.2	4535.0	4619.6	5136.3	5360.9
22.5°	5800.4	5643.5	5616.9	5517.9	4786.2	4583.3	4617.1	4568.9	4061.7	3774.4
25°	5998.4	5894.6	5834.2	4962.5	4798.3	4762.0	4737.9	4279.1	3728.5	3755.1
27.5°	6278.6	6143.3	5418.9	4984.2	5015.6	4960.1	4820.0	3849.2	3832.3	3875.8
30°	6609.4	6268.9	5281.2	5240.2	5276.4	5204.0	4052.1	4013.4	4013.4	4056.9
32.5°	7015.1	5686.9	5604.8	5609.6	5585.5	4764.5	4264.6	4254.9	4283.9	4320.1
35°	6901.6	6066.0	6073.3	6114.3	6058.8	4660.6	4597.8	4561.6	4585.8	4600.2
37.5°	6679.4	6635.9	6635.9	6590.1	5172.6	5025.3	4957.6	4952.8	4950.4	4950.4
40°	7239.7	7198.6	7147.9	7068.2	5411.6	5450.3	5348.8	5336.8	5344.0	5370.6
42.5°	7877.2	7860.3	7855.4	6066.0	5909.1	5938.1	5829.4	5798.0	5798.0	5858.4
45°	8628.2	8606.4	8072.8	6483.8	6457.2	6491.1	6370.3	6295.5	6336.5	6380.0
47.5°	9490.3	9490.3	7147.9	7109.3	7109.3	7128.6	7007.8	6906.4	6947.5	6961.9
50°	10434.5	8959.0	7865.1	7828.9	7862.7	7853.0	7727.4	6785.7	7657.4	7664.7
52.5°	10697.7	8712.7	8652.3	8611.3	8652.3	8645.1	8514.7	5660.4	8282.9	8401.2
55°	9483.0	9490.3	9478.2	9417.8	9461.3	9444.4	9316.4	6179.5	6107.1	5443.0
57.5°	10253.4	10263.0	10258.2	10248.5	10287.2	7473.9	9649.6	5583.1	3409.7	3412.2
60°	11091.3	11043.0	11028.5	11006.8	9328.5	5298.1	4020.7	388.8	1333.0	1313.7
62.5°	11852.0	11835.1	11784.4	11772.3	7915.8	4172.8	4076.2	89.3	70.0	67.6
65°	12909.7	12759.9	12718.9	12590.9	8437.4	4443.3	4351.5	26.6	2.4	0.0
67.5°	13303.3	12999.0	12851.7	12784.1	8584.7	4583.3	4407.1	26.6	2.4	0.0
70°	12559.5	12182.8	11996.9	11922.0	8022.1	4283.9	4110.0	26.6	2.4	0.0
72.5°	11137.2	10859.5	10784.6	10545.5	7073.0	3759.9	3607.8	26.6	0.0	0.0
75°	9135.3	9033.9	8942.1	8688.5	5749.7	2987.1	2851.9	24.1	0.0	0.0
77.5°	6648.0	6498.3	6329.3	6054.0	3880.6	1951.2	1881.2	21.7	0.0	0.0
80°	2996.8	2873.6	2832.6	2402.8	1376.5	635.1	560.2	19.3	0.0	0.0
82.5°	582.0	524.0	497.5	478.1	309.1	171.5	149.7	14.5	0.0	0.0
85°	198.0	219.7	256.0	282.5	173.9	103.8	86.9	9.7	0.0	0.0
87.5°	77.3	103.8	125.6	130.4	65.2	43.5	24.1	4.8	0.0	0.0
90°	14.5	19.3	16.9	12.1	7.2	2.4	0.0	0.0	0.0	0.0
92.5°	7.2	9.7	7.2	7.2	4.8	2.4	0.0	0.0	0.0	0.0
95°	9.7	9.7	9.7	7.2	4.8	2.4	0.0	0.0	0.0	0.0
97.5°	9.7	9.7	9.7	7.2	4.8	2.4	0.0	0.0	0.0	0.0
100°	9.7	9.7	9.7	7.2	4.8	2.4	0.0	0.0	0.0	0.0
102.5°	9.7	9.7	9.7	7.2	4.8	2.4	0.0	0.0	0.0	0.0
105°	9.7	12.1	9.7	7.2	4.8	2.4	0.0	0.0	0.0	0.0
107.5°	9.7	12.1	9.7	7.2	4.8	2.4	0.0	0.0	0.0	0.0
110°	9.7	12.1	9.7	7.2	4.8	2.4	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)