

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: P579467

Luminaire Tested: **CTN-CA8-480-730-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579467  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)  
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-T5-HSS-HM-EX180  
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: 43033 lumens  
Efficiency: N/A  
Efficacy: 89.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

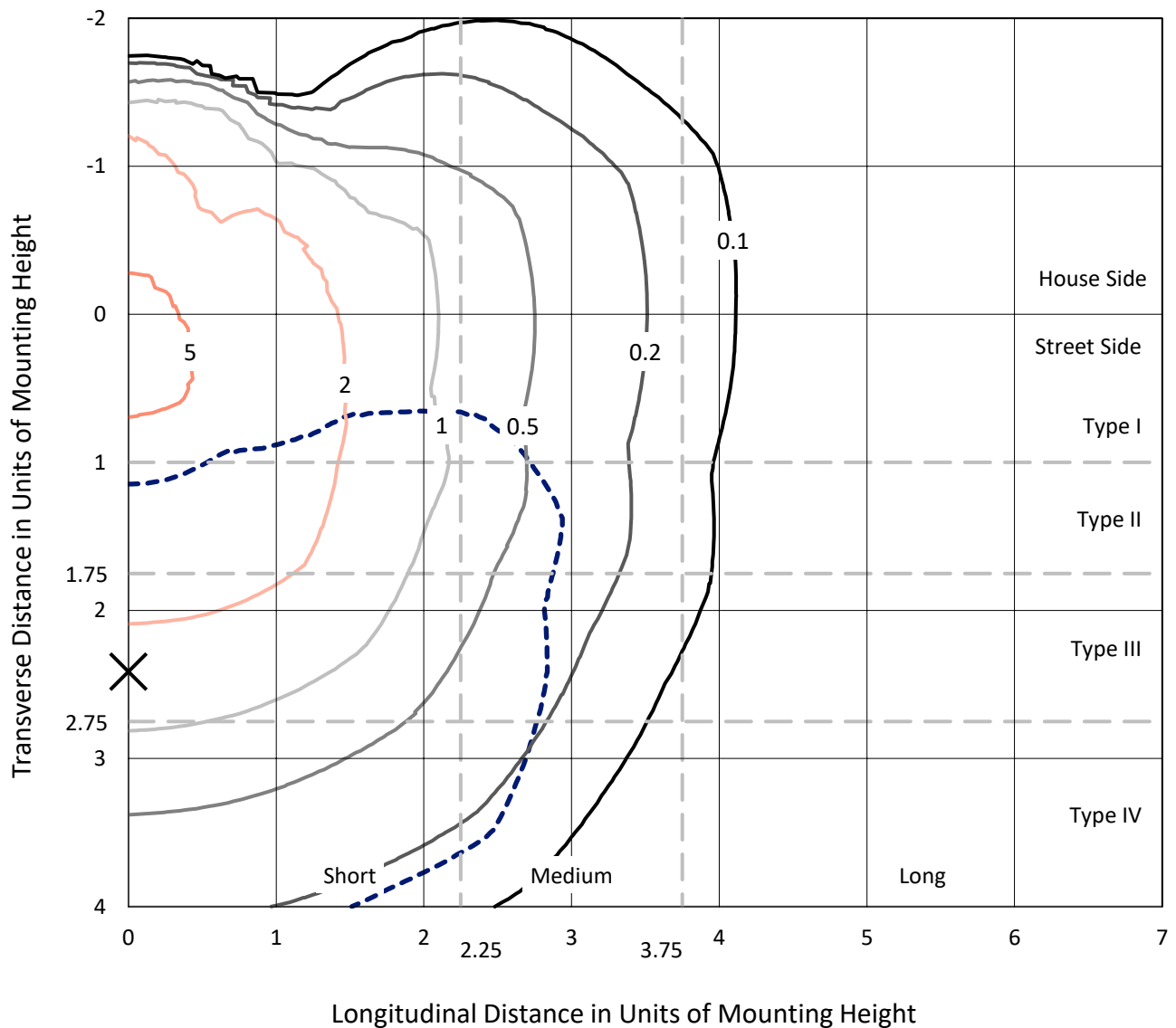
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

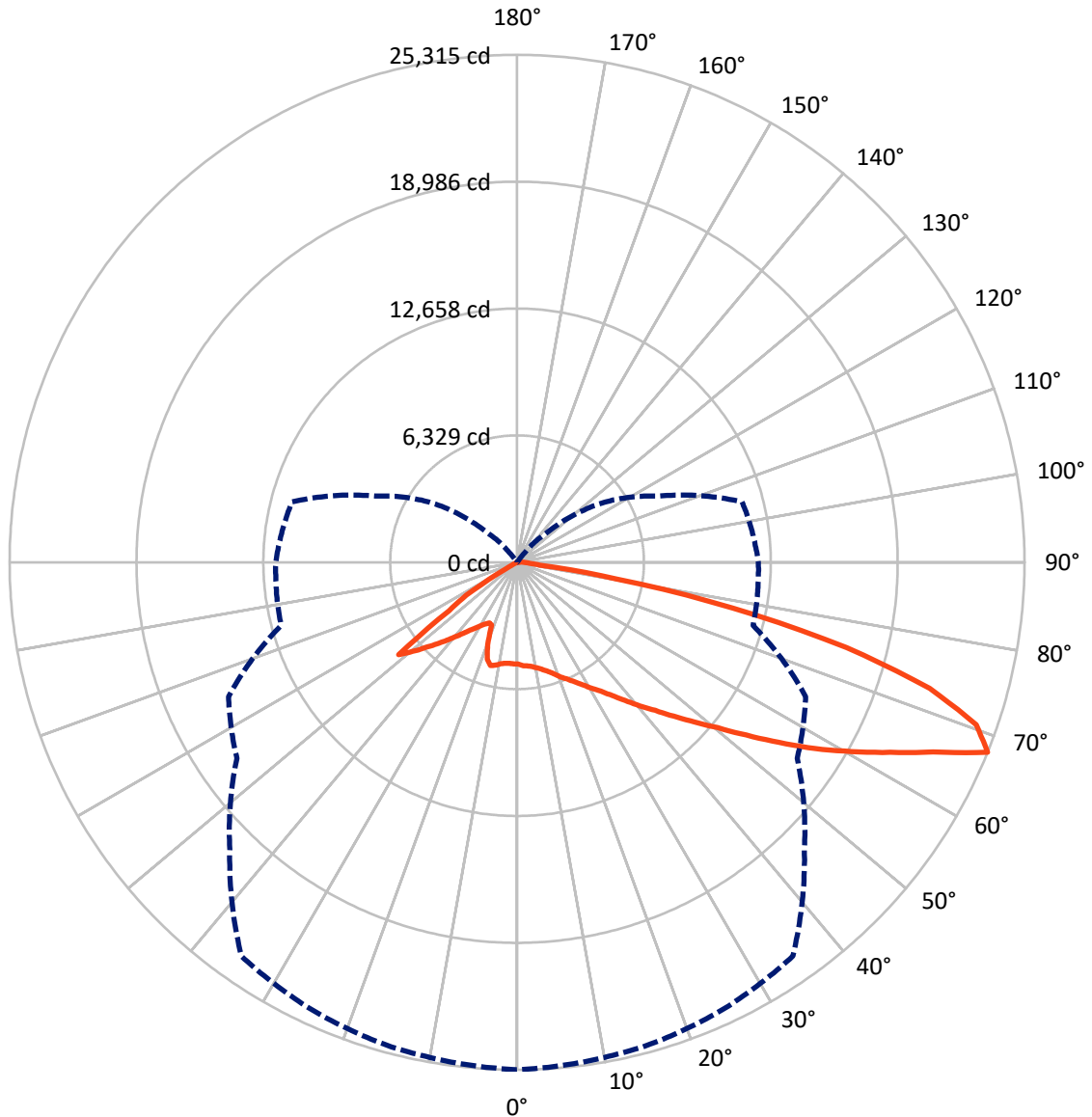
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 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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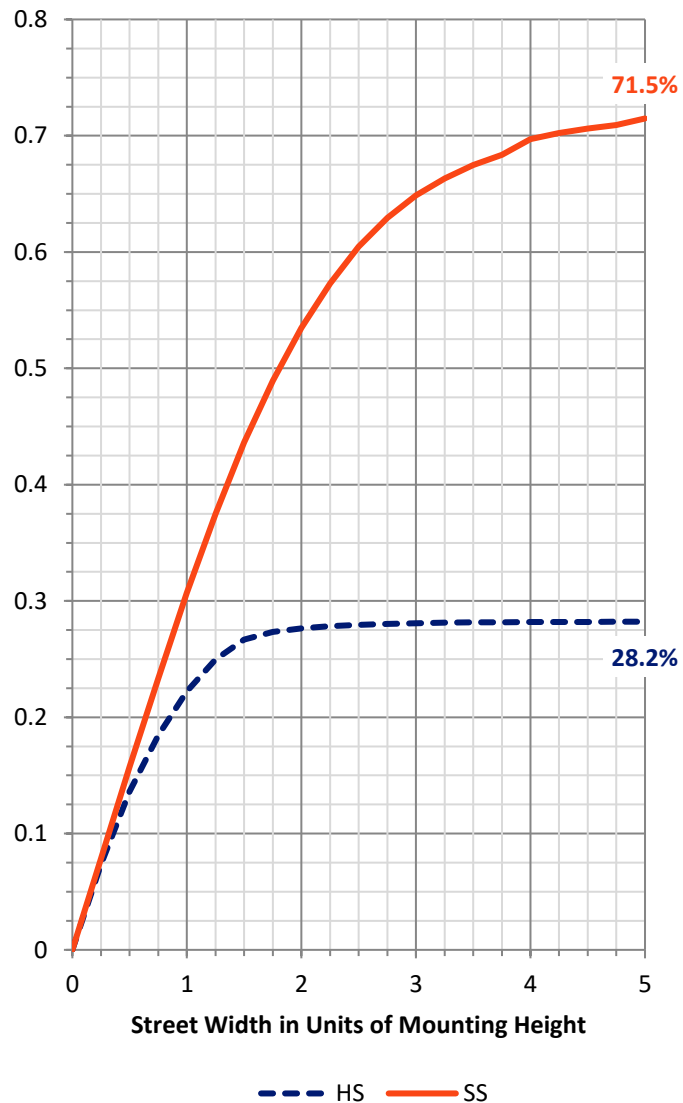
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12196.4	0.2	12196.5
	% Fixture	28.3	0.0	28.3
<b>Street Side</b>	Lumens	30781.7	54.8	30836.5
	% Fixture	71.5	0.1	71.7
<b>Total</b>	Lumens	42978.0	55.0	43033.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	488.8	1.1
10°-20°	1504.6	3.5
20°-30°	2491.4	5.8
30°-40°	3921.9	9.1
40°-50°	6137.9	14.3
50°-60°	8862.1	20.6
60°-70°	10978.6	25.5
70°-80°	7995.4	18.6
80°-90°	597.3	1.4
90°-100°	46.9	0.1
100°-110°	7.8	0.0
110°-120°	0.2	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°	42978.0	99.9
0°-180°	43033.0	100.0

**Coefficient of Utilization**

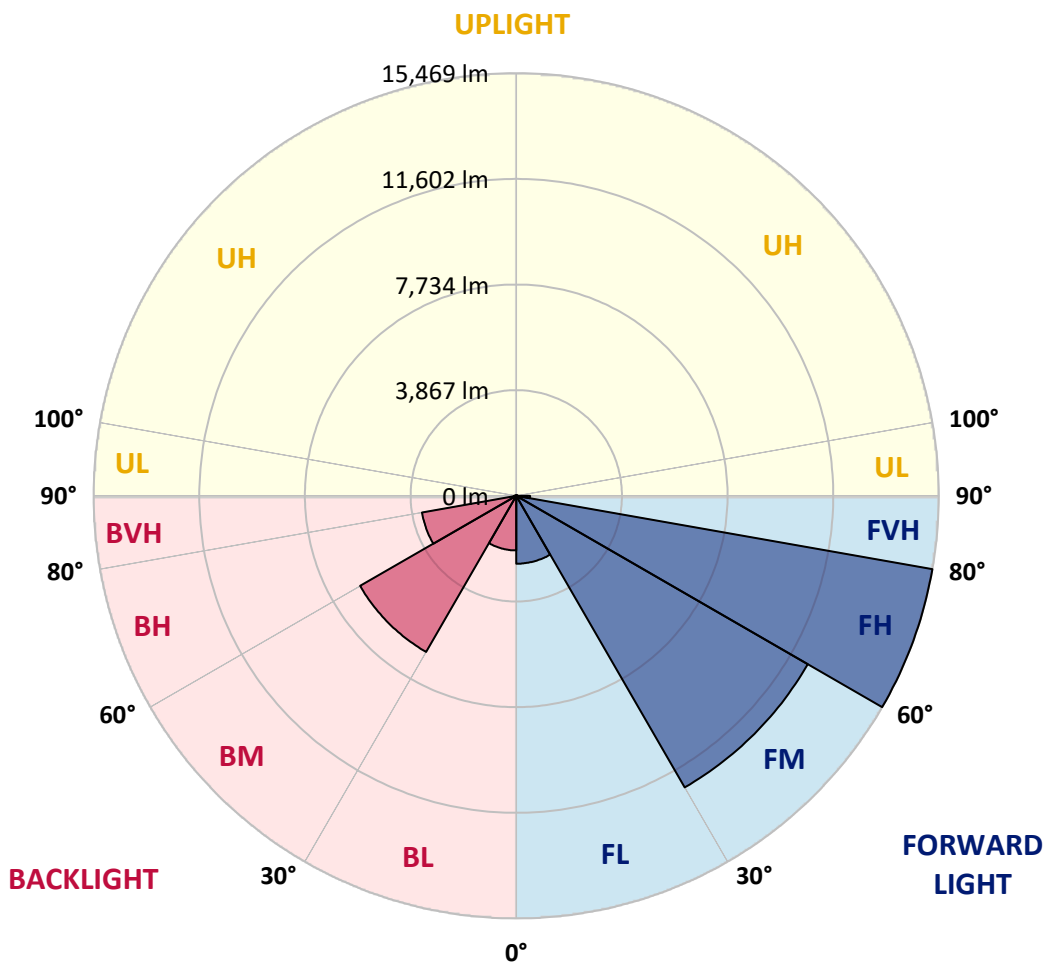


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2485.5	5.8			
FM	(30°-60°)	12323.4	28.6			
FH	(60°-80°)	15468.9	35.9			G5
FVH	(80°-90°)	503.8	1.2			G4/750
BL	(0°-30°)	1999.3	4.6	B3/2500		
BM	(30°-60°)	6598.5	15.3	B4/8500		
BH	(60°-80°)	3505.1	8.1	B4/5000		G4/5000
BVH	(80°-90°)	93.5	0.2			G1/100
UL	(90°-100°)	46.9	0.1		U2/50	
UH	(100°-180°)	8.1	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°	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2
2.5°	5160.9	5132.9	5132.9	5163.1	5079.0	5104.8	5070.3	5100.5	5083.3	5091.9	5102.7
5°	5191.1	5158.8	5160.9	5197.6	5122.1	5143.7	5102.7	5117.8	5102.7	5109.2	5109.2
7.5°	5247.2	5219.1	5219.1	5240.7	5165.2	5171.7	5135.0	5135.0	5115.6	5130.7	5117.8
10°	5352.9	5322.7	5307.6	5318.4	5251.5	5242.9	5193.3	5193.3	5163.1	5186.8	5167.4
12.5°	5480.1	5437.0	5432.7	5434.8	5359.3	5344.2	5288.2	5290.3	5234.2	5266.6	5242.9
15°	5633.2	5579.3	5575.0	5583.6	5503.8	5475.8	5413.2	5413.2	5350.7	5368.0	5335.6
17.5°	5829.5	5766.9	5756.2	5771.3	5691.5	5665.6	5592.3	5579.3	5510.3	5497.4	5469.3
20°	6088.3	6017.1	5995.5	6027.9	5926.5	5902.8	5814.4	5786.4	5693.6	5540.5	5339.9
22.5°	6321.2	6265.1	6252.2	6273.8	6181.0	6157.3	6071.0	6012.8	5788.5	5480.1	5294.6
25°	6586.5	6564.9	6558.4	6545.5	6461.4	6420.4	6338.5	6256.5	5747.5	5324.8	5320.5
27.5°	6914.3	6903.5	6873.3	6862.5	6769.8	6743.9	6636.1	6107.7	5600.9	5570.7	5553.4
30°	7272.3	7250.7	7220.5	7222.7	7160.2	7112.7	6856.1	5976.1	5883.4	5883.4	5838.1
32.5°	7669.1	7645.4	7615.2	7621.7	7595.8	7554.8	6782.7	6323.4	6252.2	6271.6	6215.5
35°	8160.8	8122.0	8111.2	8137.1	8139.3	7874.0	6912.1	6795.7	6739.6	6726.7	6515.3
37.5°	8734.5	8702.2	8741.0	8801.4	8732.4	7956.0	7427.6	7390.9	7334.8	7022.1	6521.8
40°	9422.5	9364.3	9411.7	9450.5	9405.2	8443.4	7968.9	7981.8	7932.2	7004.9	6450.6
42.5°	10104.0	10047.9	10088.9	10186.0	10168.7	9047.2	8628.8	8656.9	8156.5	7045.8	7002.7
45°	10947.3	10927.9	10914.9	10994.7	11061.6	9769.7	9411.7	9409.6	7996.9	7697.2	7658.3
47.5°	11902.7	11876.8	11883.3	11984.6	12086.0	10632.4	10336.9	9469.9	8408.9	8439.1	8404.6
50°	12968.1	12940.0	13024.1	13170.8	13222.6	11600.7	11238.4	9306.0	9267.2	9299.6	9241.3
52.5°	14320.3	14257.8	14387.2	14544.6	14611.5	12745.9	11288.0	10274.4	10209.7	10216.2	10030.7
55°	15858.0	15808.4	15924.9	16101.7	16200.9	14024.8	12318.9	11216.9	11178.0	10078.1	9075.3
57.5°	17529.4	17473.4	17628.6	17680.4	17706.3	15346.9	13356.3	12239.1	10442.6	9202.5	9146.4
60°	19168.5	19108.1	19304.4	19313.0	19388.5	16666.8	14341.9	13224.7	10060.9	9897.0	9849.5
62.5°	20889.5	20814.0	20986.6	20980.1	20831.3	17874.5	15318.8	14171.5	10742.4	10613.0	10539.7
65°	22800.3	22744.3	22865.0	22670.9	22375.5	19123.2	16332.5	15202.4	11536.0	11512.3	11495.1
67.5°	25315.0	25205.0	24961.3	24547.2	23982.2	20268.4	17057.1	15881.7	12180.9	12070.9	12036.4
70°	24303.5	24174.1	23988.7	23533.6	22957.8	19192.2	15892.5	14855.2	11389.4	11393.7	11311.7
72.5°	21519.3	21295.0	21120.3	20481.9	20164.9	16761.7	13848.0	12892.6	9851.7	10035.0	9996.2
75°	16975.2	16746.6	16459.7	16209.5	16175.0	13595.7	11165.1	10477.1	7854.6	7988.3	8085.4
77.5°	11003.3	10919.2	11281.6	11044.3	11257.8	9362.1	7975.4	7384.4	5413.2	5751.8	5706.6
80°	5035.8	4938.8	5521.1	5357.2	5437.0	4598.0	3897.1	3744.0	2450.0	2467.2	2519.0
82.5°	1138.7	1099.9	1140.9	1048.1	1022.3	864.8	761.3	690.1	433.5	459.4	483.1
85°	623.3	623.3	614.7	571.5	489.6	403.3	319.2	245.9	133.7	146.7	144.5
87.5°	437.8	427.0	424.9	379.6	325.7	276.1	220.0	157.4	75.5	51.8	47.4
90°	299.8	295.5	280.4	252.3	217.8	179.0	133.7	77.6	32.4	15.1	10.8
92.5°	217.8	213.5	202.7	179.0	148.8	120.8	88.4	51.8	25.9	10.8	2.2
95°	144.5	142.3	135.9	116.5	97.1	77.6	56.1	32.4	21.6	8.6	2.2
97.5°	99.2	97.1	90.6	77.6	62.5	49.6	34.5	23.7	17.3	6.5	2.2
100°	66.9	64.7	60.4	49.6	38.8	30.2	21.6	17.3	12.9	6.5	2.2
102.5°	43.1	41.0	36.7	30.2	21.6	17.3	15.1	12.9	8.6	4.3	2.2
105°	25.9	23.7	19.4	15.1	12.9	10.8	10.8	8.6	6.5	2.2	2.2
107.5°	12.9	10.8	8.6	8.6	8.6	6.5	6.5	6.5	4.3	2.2	0.0
110°	2.2	2.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	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°	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2	5068.2
2.5°	5091.9	5057.4	5076.8	5046.6	5040.1	5007.8	5059.6	5066.0	5061.7	5070.3
5°	5098.4	5061.7	5083.3	5046.6	5046.6	5012.1	5061.7	5061.7	5048.8	5053.1
7.5°	5115.6	5079.0	5094.1	5053.1	5055.2	5014.3	5074.6	5068.2	5057.4	5072.5
10°	5165.2	5124.3	5122.1	5083.3	5091.9	5048.8	5124.3	5124.3	5113.5	5141.5
12.5°	5245.0	5184.6	5173.9	5126.4	5143.7	5107.0	5199.7	5204.0	5206.2	5251.5
15°	5329.1	5255.8	5266.6	5210.5	5204.0	5184.6	5268.8	5264.4	5262.3	5324.8
17.5°	5447.8	5102.7	5046.6	5007.8	4999.2	4951.7	5029.4	5178.2	5100.5	5057.4
20°	5260.1	5079.0	4856.8	4781.3	4766.2	4354.3	4028.7	4175.3	4373.7	4391.0
22.5°	5089.7	5025.0	5007.8	4889.2	4231.4	4093.4	4106.3	4052.4	3582.2	3377.3
25°	5301.1	5245.0	5171.7	4447.1	4291.8	4242.2	4227.1	3675.0	3304.0	3327.7
27.5°	5536.2	5473.6	4835.3	4457.8	4492.3	4423.3	4082.6	3429.1	3407.5	3448.5
30°	5829.5	5329.1	4718.8	4697.2	4729.6	4641.2	3627.5	3580.1	3573.6	3616.7
32.5°	6163.8	5139.3	5029.4	5029.4	5014.3	4058.9	3821.6	3789.3	3806.5	3851.8
35°	6038.7	5437.0	5424.0	5477.9	5115.6	4164.5	4132.2	4076.1	4089.1	4104.1
37.5°	5900.7	5926.5	5933.0	5905.0	3731.0	4466.5	4440.6	4429.8	4416.9	4421.2
40°	6413.9	6431.2	6424.7	6168.1	4026.5	4524.7	4790.0	4770.6	4768.4	4794.3
42.5°	7013.5	7060.9	7024.3	5441.3	4421.2	3804.4	5193.3	5182.5	5178.2	5232.1
45°	7688.5	7733.8	6963.9	5827.3	4841.7	3938.1	5221.3	5622.4	5654.8	5702.2
47.5°	8419.6	8411.0	6426.9	6420.4	5335.6	4309.0	4341.4	6148.7	6202.6	6219.8
50°	9260.8	7878.3	7037.2	6800.0	5894.2	4725.3	4602.3	5641.9	6832.3	6849.6
52.5°	9081.7	7794.2	7738.1	5965.4	6394.5	5184.6	5063.9	5031.5	7082.5	7498.7
55°	8464.9	8529.6	8449.8	6545.5	4688.6	5594.4	5518.9	5486.6	5268.8	4171.0
57.5°	9150.8	9170.2	9101.2	7078.2	4768.4	3487.3	5432.7	4660.6	3028.0	3012.9
60°	9862.5	9894.8	6778.4	5199.7	3056.0	1166.8	278.2	293.3	836.8	735.4
62.5°	10541.8	10574.2	7175.2	4751.1	1930.2	86.3	56.1	38.8	43.1	43.1
65°	11428.2	11441.1	7679.9	5029.4	2005.7	21.6	6.5	0.0	0.0	0.0
67.5°	11887.6	11622.3	7807.2	5156.6	2059.6	12.9	4.3	0.0	0.0	0.0
70°	11193.1	10908.4	7268.0	4833.1	1919.4	10.8	2.2	0.0	0.0	0.0
72.5°	9862.5	9724.4	6523.9	4285.3	1699.5	6.5	2.2	0.0	0.0	0.0
75°	8173.8	7990.5	5408.9	3571.4	1406.2	4.3	0.0	0.0	0.0	0.0
77.5°	5814.4	5836.0	3769.9	2603.1	957.6	4.3	0.0	0.0	0.0	0.0
80°	2544.9	2603.1	1652.0	1194.8	338.6	2.2	0.0	0.0	0.0	0.0
82.5°	485.3	446.4	215.7	170.4	43.1	0.0	0.0	0.0	0.0	0.0
85°	159.6	174.7	79.8	64.7	19.4	0.0	0.0	0.0	0.0	0.0
87.5°	56.1	71.2	23.7	19.4	4.3	0.0	0.0	0.0	0.0	0.0
90°	8.6	8.6	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)