

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: STREETWORKS

Report Number: P579610

Luminaire Tested: **CST-CA8-480-760-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579610  
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: STREETWORKS  
Catalog Number: CST-CA8-480-760-U-T5-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 52076 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U2 - G5

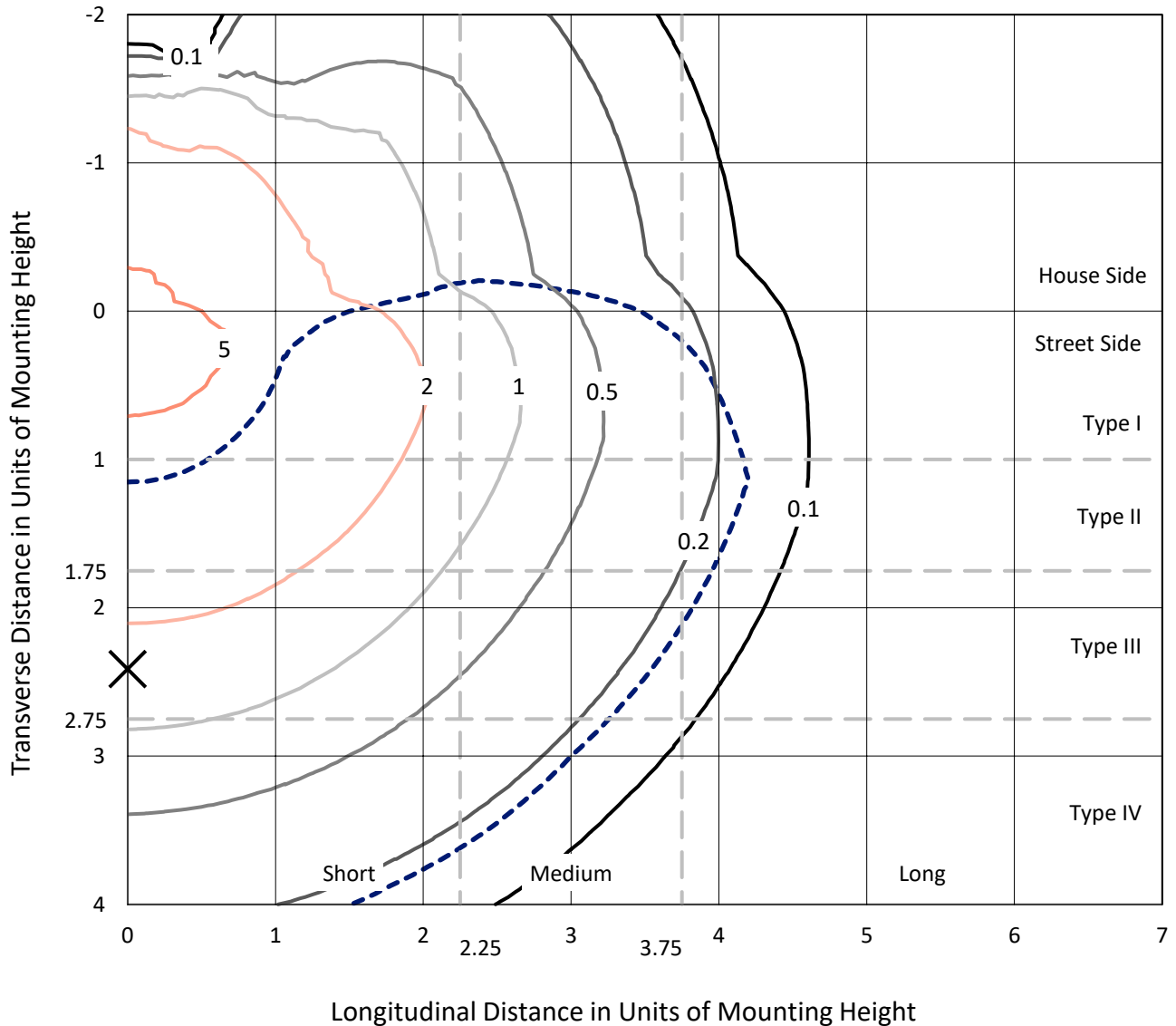
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

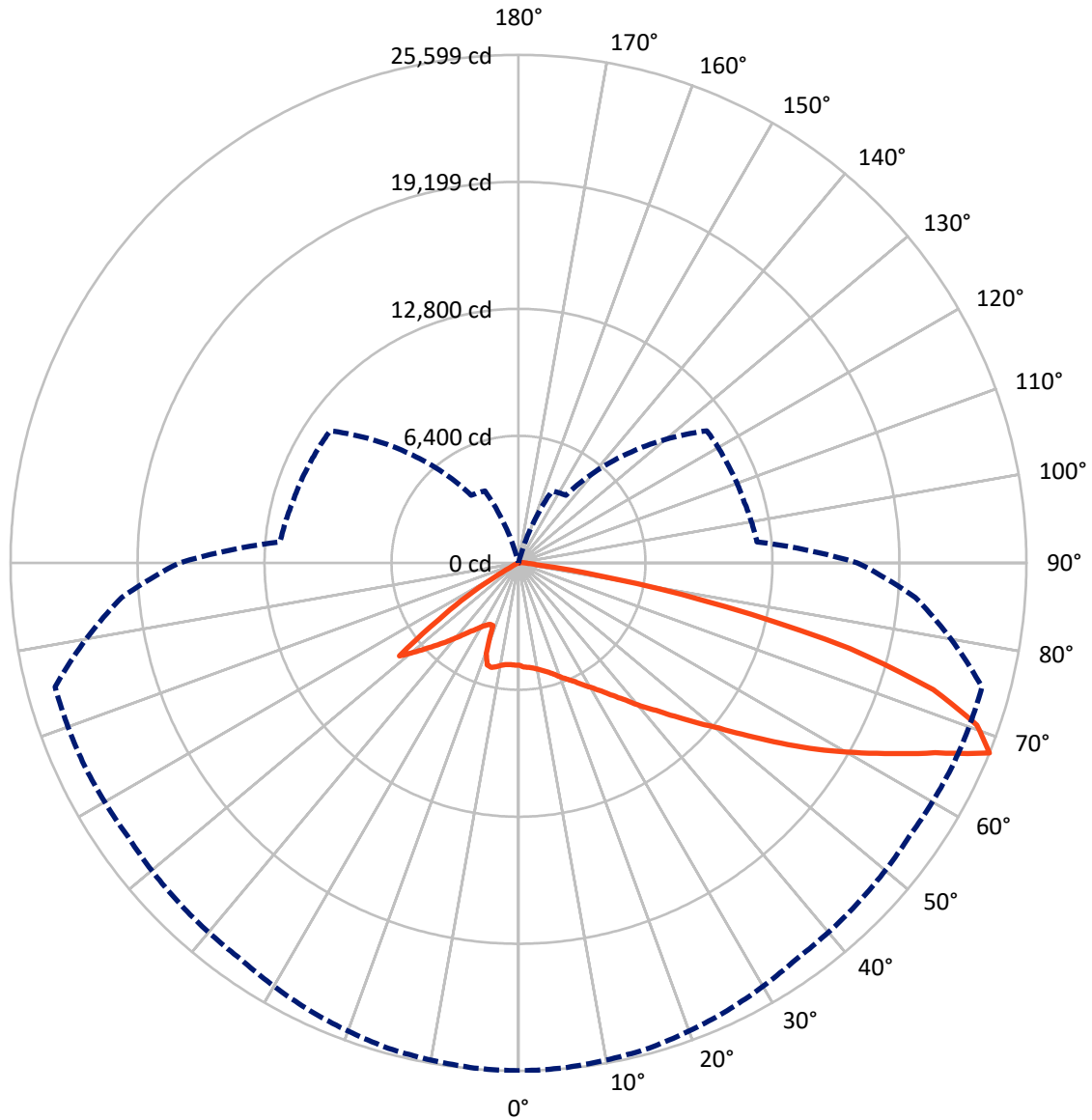
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 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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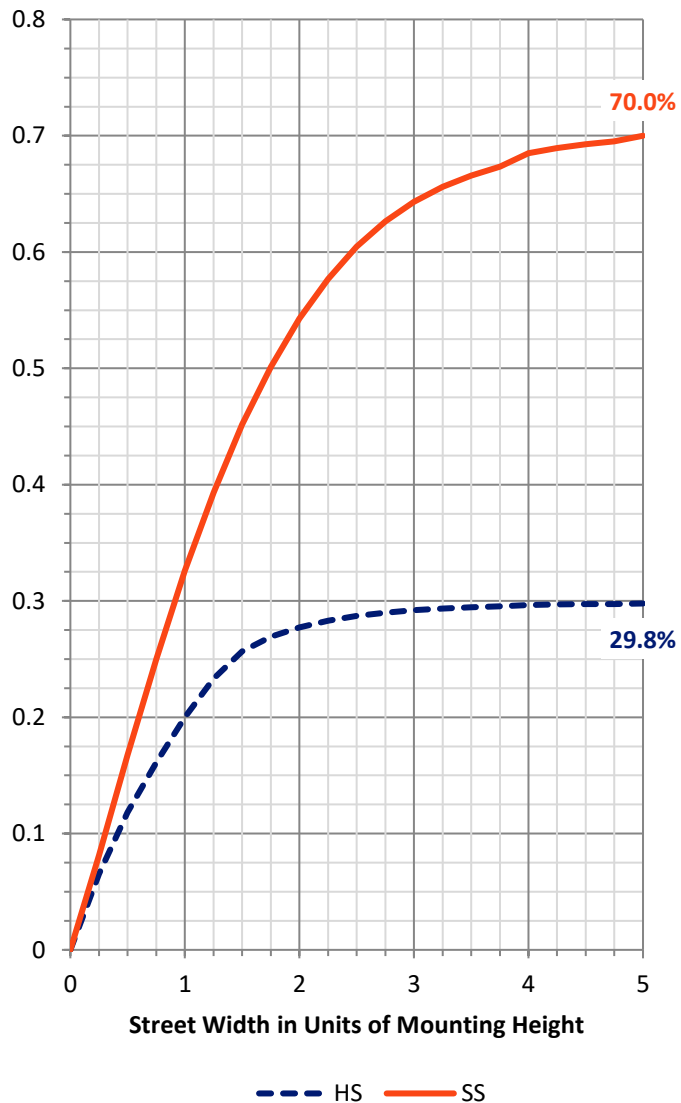
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15545.0	5.2	15550.2
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	36467.2	58.6	36525.8
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	52012.2	63.9	52076.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	497.5	1.0
10°-20°	1540.1	3.0
20°-30°	2584.6	5.0
30°-40°	4191.1	8.0
40°-50°	6848.6	13.2
50°-60°	10733.0	20.6
60°-70°	14374.8	27.6
70°-80°	10477.3	20.1
80°-90°	765.1	1.5
90°-100°	48.9	0.1
100°-110°	13.9	0.0
110°-120°	1.0	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°	52012.2	99.9
0°-180°	52076.0	100.0

**Coefficient of Utilization**

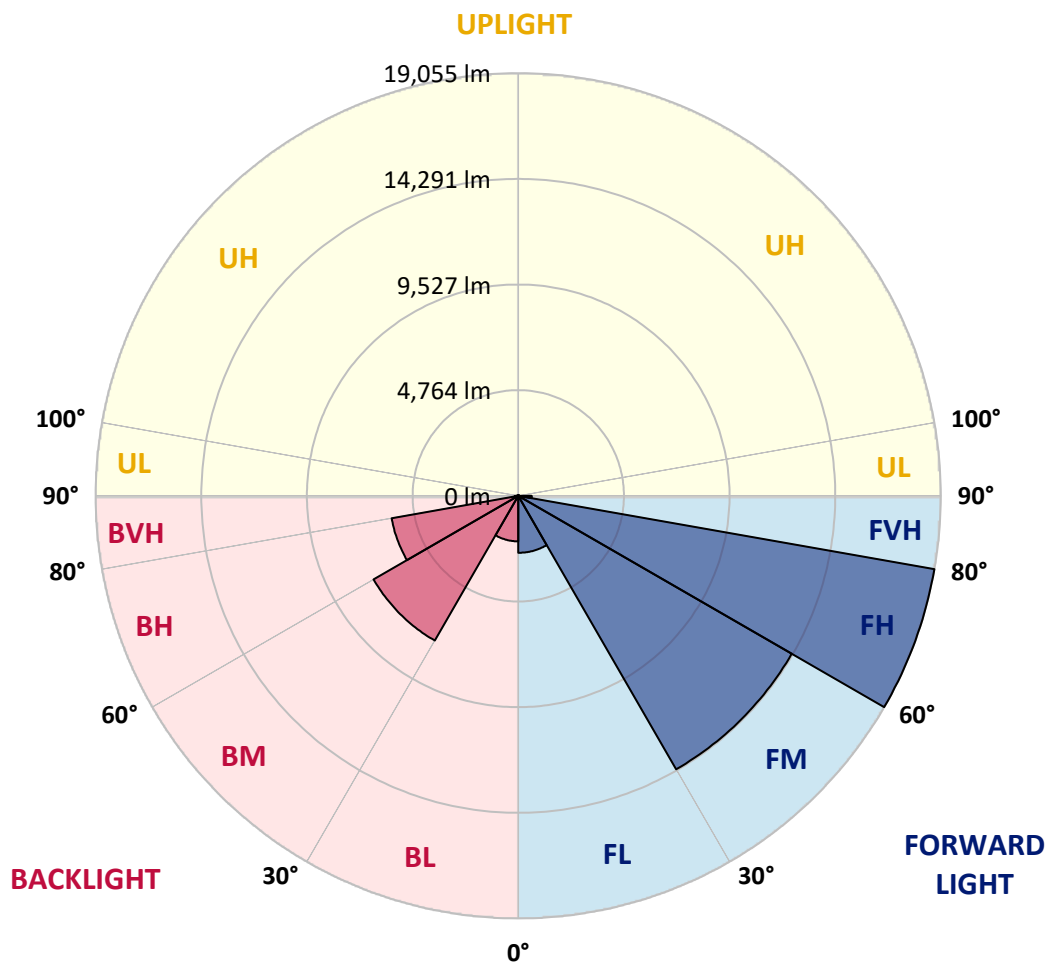


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2568.7	4.9			
FM (30°-60°)	14238.5	27.3			
FH (60°-80°)	19055.0	36.6			G5
FVH (80°-90°)	605.0	1.2			G4/750
BL (0°-30°)	2053.5	3.9	B3/2500		
BM (30°-60°)	7534.2	14.5	B4/8500		
BH (60°-80°)	5797.2	11.1	B5		G5
BVH (80°-90°)	160.1	0.3			G2/225
UL (90°-100°)	48.9	0.1		U2/50	
UH (100°-180°)	14.9	0.0		U2/50	

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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1
2.5°	5258.7	5228.0	5230.2	5258.7	5173.3	5201.7	5164.5	5193.0	5173.3	5179.8	5193.0
5°	5291.5	5258.7	5260.8	5295.9	5219.2	5243.3	5193.0	5208.3	5190.8	5199.5	5199.5
7.5°	5357.2	5320.0	5317.8	5339.7	5260.8	5269.6	5223.6	5225.8	5199.5	5217.1	5208.3
10°	5455.7	5425.0	5403.1	5416.3	5346.2	5341.8	5282.7	5284.9	5252.1	5271.8	5256.5
12.5°	5576.1	5534.5	5530.1	5534.5	5457.9	5440.4	5379.1	5383.4	5324.3	5355.0	5337.5
15°	5729.4	5663.7	5663.7	5687.8	5589.2	5576.1	5501.7	5506.0	5444.7	5468.8	5451.3
17.5°	5917.6	5854.1	5843.2	5860.7	5775.3	5757.8	5681.2	5676.8	5608.9	5615.5	5600.2
20°	6160.6	6097.1	6070.9	6114.7	6007.4	5994.3	5902.3	5893.5	5821.3	5801.6	5792.8
22.5°	6386.1	6335.8	6322.6	6370.8	6259.2	6248.2	6160.6	6149.7	6081.8	6053.4	5880.4
25°	6640.1	6629.1	6624.8	6640.1	6535.0	6513.1	6445.2	6429.9	6373.0	6338.0	6127.8
27.5°	6968.5	6964.1	6951.0	6953.2	6856.8	6837.1	6773.6	6762.7	6703.6	6664.2	6394.9
30°	7312.2	7312.2	7283.7	7299.1	7250.9	7220.3	7169.9	7130.5	7093.3	7051.7	6712.3
32.5°	7708.5	7706.3	7680.0	7726.0	7690.9	7690.9	7660.3	7618.7	7553.0	7533.3	7121.7
35°	8218.6	8185.7	8174.8	8249.2	8238.3	8258.0	8247.0	8203.2	8148.5	8102.5	7603.4
37.5°	8783.4	8774.6	8807.5	8853.5	8877.5	8930.1	8897.2	8895.1	8886.3	8770.3	7474.2
40°	9479.6	9442.4	9488.3	9512.4	9494.9	9580.3	9551.8	9575.9	9641.6	8709.0	7465.5
42.5°	10173.6	10140.8	10173.6	10291.8	10265.5	10368.4	10355.3	10449.4	10486.7	8838.1	8071.9
45°	11027.4	10990.2	11016.5	11156.6	11169.7	11294.5	11362.4	11452.1	11469.6	9674.4	8803.1
47.5°	12008.2	11946.9	11997.3	12062.9	12262.2	12380.4	12446.1	12555.5	12667.2	10681.5	9635.0
50°	13089.7	13085.3	13140.1	13253.9	13481.6	13599.8	13713.7	13827.5	14011.4	11804.6	10567.7
52.5°	14464.6	14436.1	14530.3	14637.5	14839.0	15020.7	15156.4	15274.6	15471.7	12940.8	11576.9
55°	16036.5	15938.0	16117.5	16299.2	16384.6	16599.1	16693.3	16791.8	16980.1	14136.2	12165.8
57.5°	17733.2	17709.1	17833.9	17899.6	18083.5	18217.0	18267.4	18374.6	18372.5	15379.7	13168.5
60°	19403.6	19377.3	19524.0	19563.4	19710.1	19830.5	19813.0	19909.3	19944.4	16546.6	14151.5
62.5°	21161.6	21117.8	21253.5	21262.3	21174.7	21369.6	21349.9	21430.9	21400.2	17687.2	15119.2
65°	23083.8	23116.6	23160.4	22980.9	22770.7	22939.3	22934.9	23088.2	23197.6	19281.0	16415.2
67.5°	25599.3	25557.7	25332.2	24898.7	24388.6	24217.8	24036.1	24147.8	24178.4	20073.5	17078.6
70°	24513.4	24421.4	24320.7	23878.5	23263.3	22829.8	22547.4	22665.6	22790.4	18970.1	16040.9
72.5°	21866.5	21638.9	21170.4	20780.7	20426.0	20003.5	19659.8	19865.5	20139.2	16826.8	14204.1
75°	17251.5	17039.2	16697.7	16432.7	16242.3	16237.9	16222.6	16382.4	16343.0	13663.3	11548.5
77.5°	10683.7	11128.1	11443.4	11217.9	11296.7	11134.7	11491.5	11701.7	11892.2	9794.8	8227.3
80°	4932.5	5046.3	5604.6	5460.1	5344.0	5311.2	5333.1	5698.7	5806.0	4396.1	3682.4
82.5°	1125.3	1079.3	1118.7	1037.7	1033.3	985.2	991.7	991.7	956.7	810.0	678.7
85°	569.2	582.3	586.7	562.6	497.0	446.6	413.8	350.3	302.1	258.3	218.9
87.5°	380.9	391.9	398.4	365.6	328.4	286.8	260.5	212.4	168.6	105.1	81.0
90°	260.5	258.3	251.8	234.3	210.2	179.5	144.5	100.7	59.1	21.9	15.3
92.5°	186.1	181.7	179.5	164.2	146.7	122.6	94.1	63.5	32.8	15.3	8.8
95°	122.6	120.4	120.4	111.7	98.5	81.0	63.5	41.6	24.1	13.1	8.8
97.5°	85.4	83.2	83.2	78.8	70.1	59.1	43.8	28.5	19.7	13.1	8.8
100°	59.1	59.1	59.1	54.7	50.4	41.6	32.8	21.9	17.5	13.1	8.8
102.5°	39.4	39.4	41.6	39.4	35.0	28.5	21.9	17.5	15.3	10.9	8.8
105°	26.3	26.3	26.3	26.3	24.1	19.7	17.5	15.3	13.1	10.9	8.8
107.5°	17.5	17.5	17.5	17.5	15.3	13.1	13.1	13.1	10.9	10.9	8.8
110°	10.9	10.9	10.9	13.1	10.9	10.9	10.9	10.9	10.9	8.8	8.8



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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°	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1	5160.1
2.5°	5182.0	5151.4	5166.7	5136.1	5122.9	5094.5	5149.2	5153.6	5149.2	5157.9
5°	5188.6	5153.6	5171.1	5136.1	5129.5	5096.6	5151.4	5151.4	5138.2	5144.8
7.5°	5203.9	5166.7	5179.8	5138.2	5138.2	5098.8	5164.5	5160.1	5149.2	5164.5
10°	5256.5	5212.7	5212.7	5173.3	5177.7	5136.1	5217.1	5217.1	5208.3	5234.6
12.5°	5337.5	5282.7	5284.9	5230.2	5239.0	5206.1	5304.6	5309.0	5309.0	5352.8
15°	5442.6	5359.4	5368.1	5309.0	5326.5	5287.1	5374.7	5370.3	5381.3	5444.7
17.5°	5571.7	5479.8	5403.1	5210.5	5096.6	5101.0	5361.6	5482.0	5341.8	5383.4
20°	5626.5	5179.8	4936.8	4866.8	4851.4	4608.4	4111.5	4188.1	4656.6	4860.2
22.5°	5258.7	5116.4	5092.3	5002.5	4339.2	4155.3	4185.9	4142.1	3682.4	3421.8
25°	5438.2	5344.0	5289.3	4499.0	4350.1	4317.3	4295.4	3879.4	3380.3	3404.3
27.5°	5692.1	5569.5	4912.7	4518.7	4547.1	4496.8	4369.8	3489.7	3474.4	3513.8
30°	5992.1	5683.4	4788.0	4750.7	4783.6	4717.9	3673.6	3638.6	3638.6	3678.0
32.5°	6359.9	5155.8	5081.3	5085.7	5063.8	4319.5	3866.3	3857.5	3883.8	3916.6
35°	6257.0	5499.5	5506.0	5543.3	5492.9	4225.3	4168.4	4135.6	4157.4	4170.6
37.5°	6055.6	6016.1	6016.1	5974.5	4689.4	4555.9	4494.6	4490.2	4488.0	4488.0
40°	6563.5	6526.2	6480.3	6408.0	4906.2	4941.2	4849.3	4838.3	4844.9	4869.0
42.5°	7141.4	7126.1	7121.7	5499.5	5357.2	5383.4	5284.9	5256.5	5256.5	5311.2
45°	7822.3	7802.6	7318.8	5878.2	5854.1	5884.8	5775.3	5707.5	5744.7	5784.1
47.5°	8603.9	8603.9	6480.3	6445.2	6445.2	6462.8	6353.3	6261.3	6298.6	6311.7
50°	9459.9	8122.2	7130.5	7097.7	7128.3	7119.5	7005.7	6151.9	6942.2	6948.8
52.5°	9698.5	7898.9	7844.2	7807.0	7844.2	7837.6	7719.4	5131.7	7509.2	7616.5
55°	8597.3	8603.9	8592.9	8538.2	8577.6	8562.3	8446.2	5602.4	5536.7	4934.6
57.5°	9295.7	9304.4	9300.1	9291.3	9326.3	6775.8	8748.4	5061.6	3091.3	3093.5
60°	10055.4	10011.6	9998.4	9978.7	8457.2	4803.3	3645.2	352.5	1208.5	1191.0
62.5°	10745.0	10729.7	10683.7	10672.7	7176.5	3783.1	3695.5	81.0	63.5	61.3
65°	11703.9	11568.2	11530.9	11414.9	7649.4	4028.3	3945.1	24.1	2.2	0.0
67.5°	12060.8	11784.9	11651.4	11590.1	7782.9	4155.3	3995.4	24.1	2.2	0.0
70°	11386.5	11044.9	10876.4	10808.5	7272.8	3883.8	3726.2	24.1	2.2	0.0
72.5°	10097.0	9845.2	9777.3	9560.6	6412.4	3408.7	3270.8	24.1	0.0	0.0
75°	8282.1	8190.1	8106.9	7877.0	5212.7	2708.1	2585.5	21.9	0.0	0.0
77.5°	6027.1	5891.4	5738.1	5488.5	3518.2	1768.9	1705.5	19.7	0.0	0.0
80°	2716.9	2605.2	2568.0	2178.3	1247.9	575.8	507.9	17.5	0.0	0.0
82.5°	527.6	475.1	451.0	433.5	280.2	155.4	135.7	13.1	0.0	0.0
85°	179.5	199.2	232.1	256.1	157.6	94.1	78.8	8.8	0.0	0.0
87.5°	70.1	94.1	113.8	118.2	59.1	39.4	21.9	4.4	0.0	0.0
90°	13.1	17.5	15.3	10.9	6.6	2.2	0.0	0.0	0.0	0.0
92.5°	6.6	8.8	6.6	6.6	4.4	2.2	0.0	0.0	0.0	0.0
95°	8.8	8.8	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
97.5°	8.8	8.8	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
100°	8.8	8.8	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
102.5°	8.8	8.8	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
105°	8.8	10.9	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
107.5°	8.8	10.9	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
110°	8.8	10.9	8.8	6.6	4.4	2.2	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)