

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: P579612

Luminaire Tested: **CST-CA8-480-760-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579612
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)
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-EX90
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: 57187 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

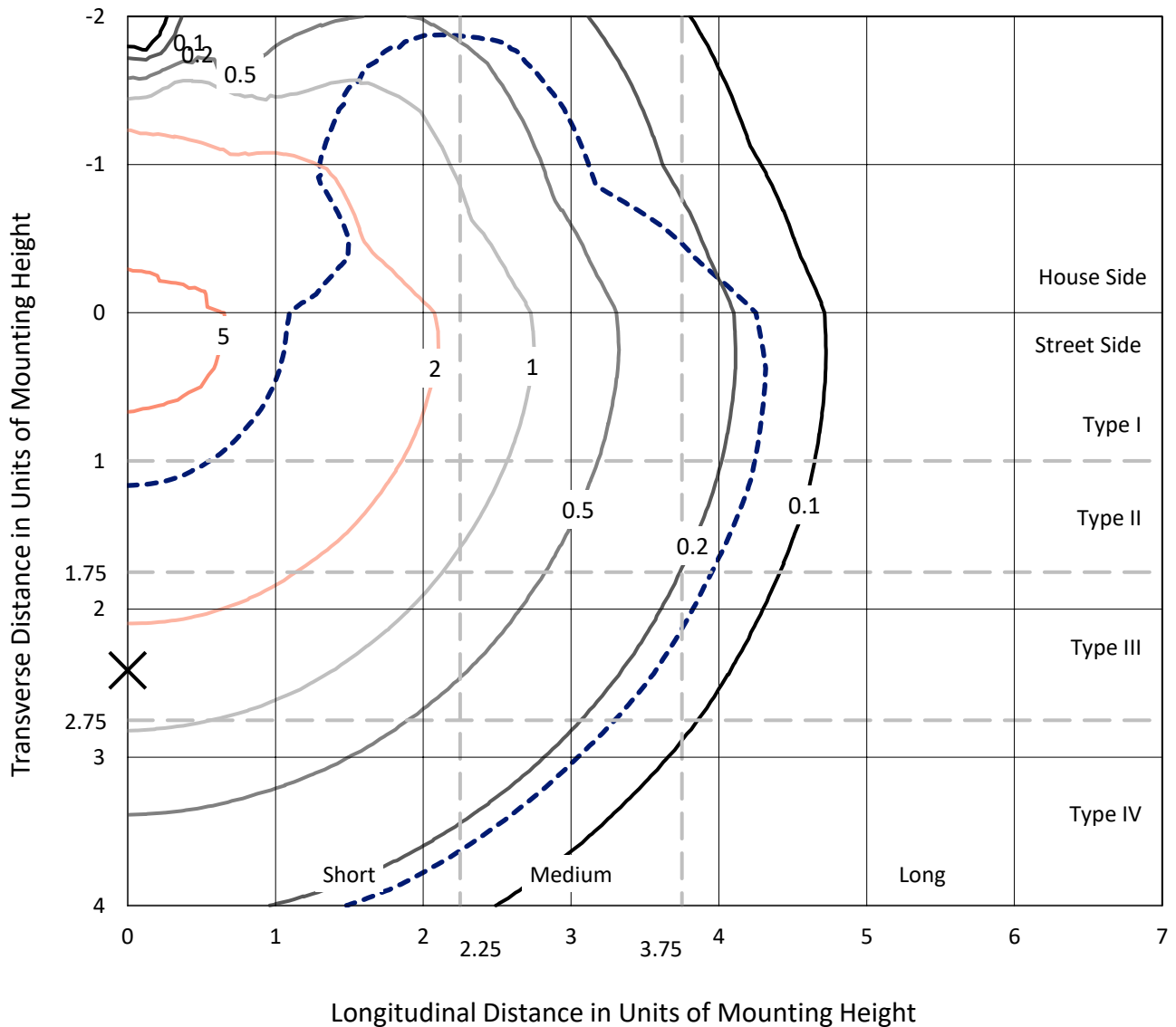
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

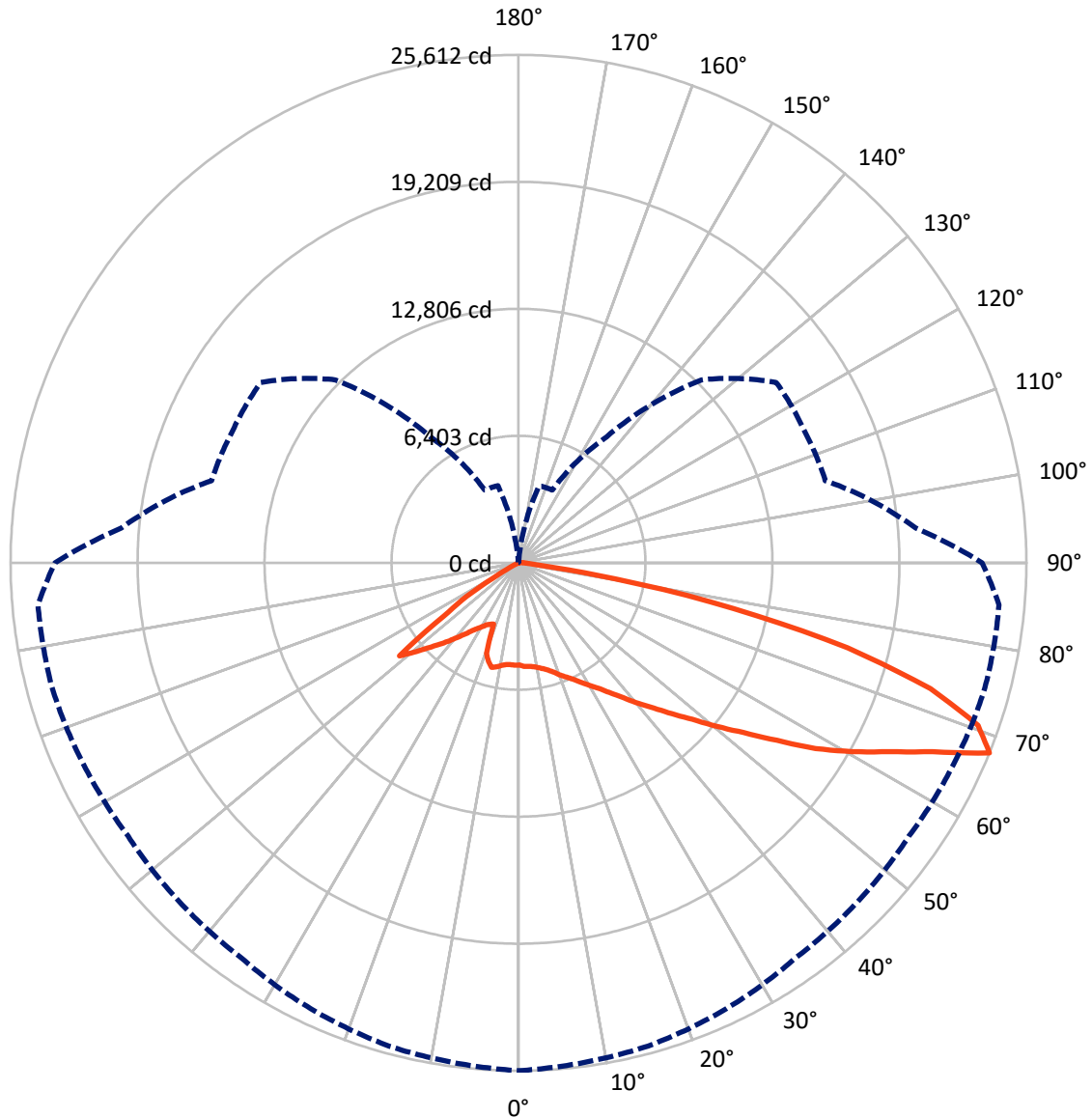
× Max cd
 - - - 1/2 Max cd



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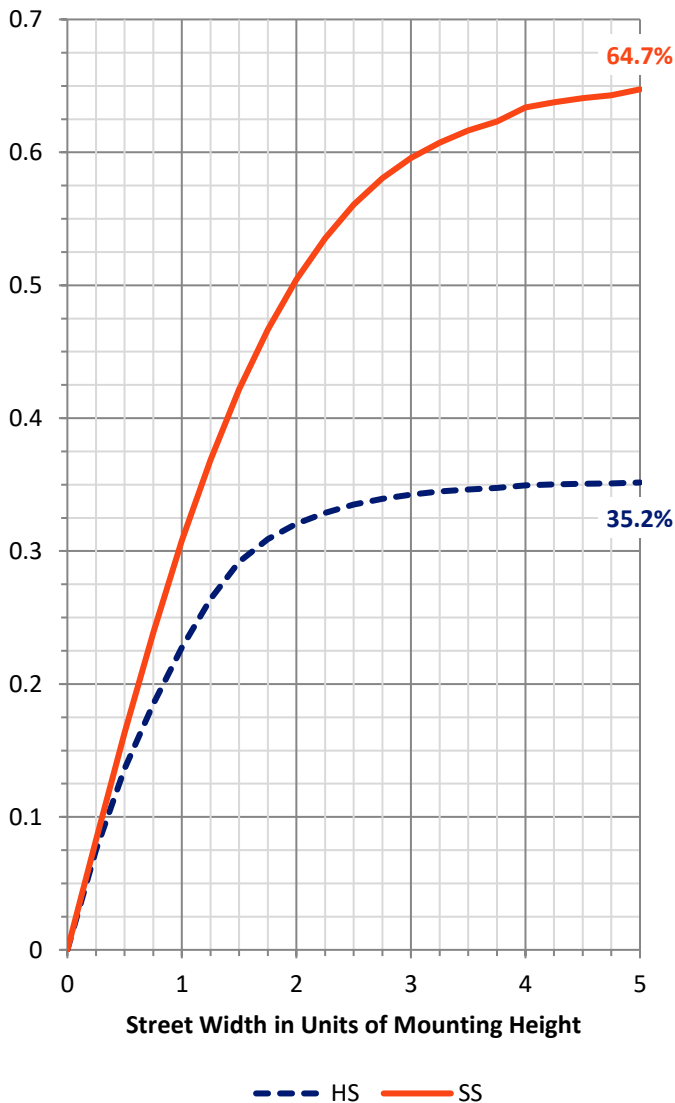
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20129.7	1.2	20130.9
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	37015.7	40.3	37056.1
	% Fixture	64.7	0.1	64.8
Total	Lumens	57145.5	41.5	57187.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	495.8	0.9
10°-20°	1540.2	2.7
20°-30°	2670.3	4.7
30°-40°	4381.6	7.7
40°-50°	7308.5	12.8
50°-60°	11827.9	20.7
60°-70°	16326.2	28.5
70°-80°	11778.7	20.6
80°-90°	816.4	1.4
90°-100°	35.4	0.1
100°-110°	5.9	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°	57145.5	99.9
0°-180°	57187.0	100.0

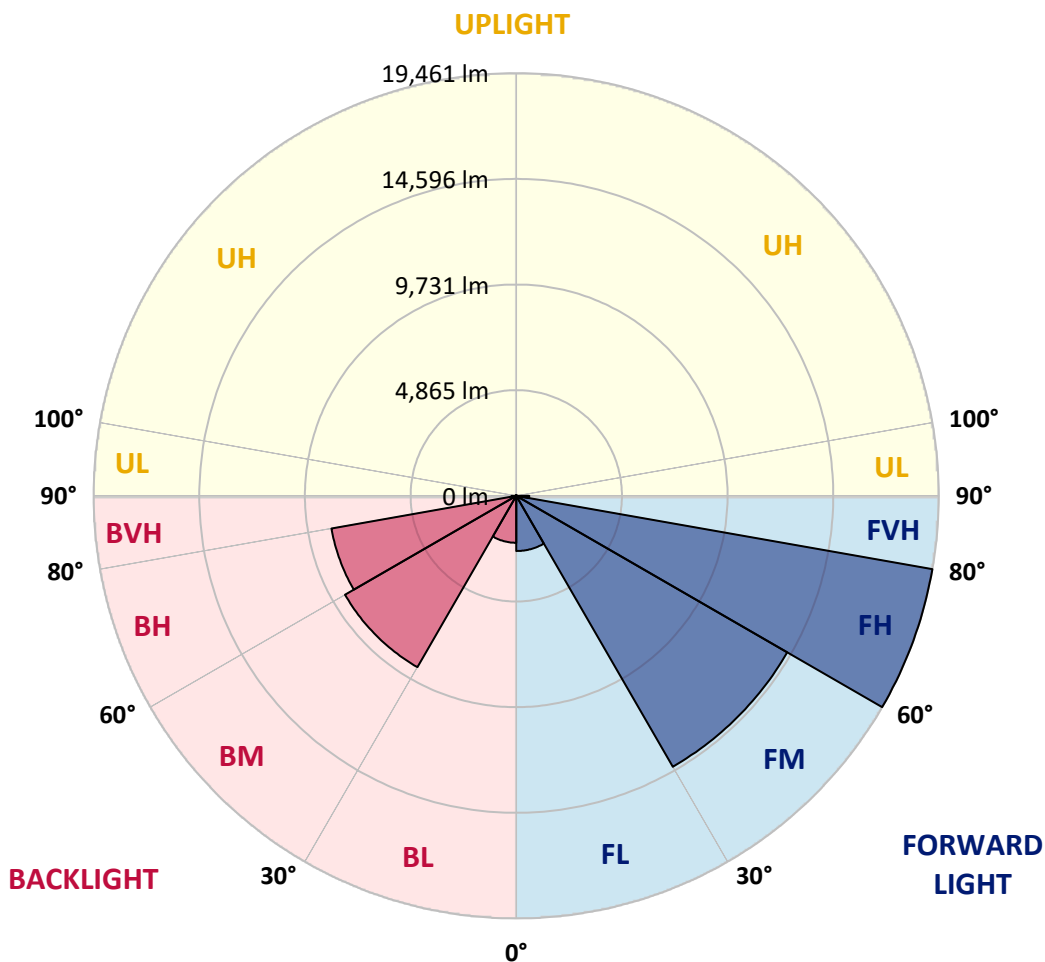


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2543.0	4.4			
FM (30°-60°)	14409.7	25.2			
FH (60°-80°)	19461.5	34.0			G5
FVH (80°-90°)	601.5	1.1			G4/750
BL (0°-30°)	2163.2	3.8	B3/2500		
BM (30°-60°)	9108.2	15.9	B5		
BH (60°-80°)	8643.5	15.1	B5		G5
BVH (80°-90°)	214.9	0.4			G2/225
UL (90°-100°)	35.4	0.1		U2/50	
UH (100°-180°)	6.1	0.0		U1/10	

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°	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5
2.5°	5232.4	5201.7	5203.9	5234.6	5151.4	5182.0	5147.0	5177.6	5162.3	5173.3	5186.4
5°	5247.7	5210.5	5214.8	5252.1	5186.4	5210.5	5168.9	5186.4	5173.3	5186.4	5188.6
7.5°	5287.1	5249.9	5252.1	5280.5	5212.7	5230.2	5190.8	5199.5	5177.6	5201.7	5195.1
10°	5370.3	5335.3	5322.1	5346.2	5287.1	5289.3	5243.3	5252.1	5219.2	5252.1	5238.9
12.5°	5481.9	5433.8	5438.2	5451.3	5379.0	5383.4	5328.7	5341.8	5287.1	5333.1	5317.7
15°	5617.7	5558.6	5565.1	5587.0	5517.0	5510.4	5460.0	5460.0	5411.9	5446.9	5431.6
17.5°	5806.0	5740.3	5735.9	5751.2	5694.3	5694.3	5637.4	5630.8	5582.6	5611.1	5606.7
20°	6051.2	5976.7	5963.6	5992.0	5919.8	5928.6	5856.3	5849.7	5797.2	5814.7	5816.9
22.5°	6272.3	6213.2	6211.0	6254.8	6169.4	6180.3	6114.6	6097.1	6053.3	6077.4	6084.0
25°	6526.2	6517.5	6510.9	6526.2	6440.8	6440.8	6394.9	6379.5	6351.1	6368.6	6386.1
27.5°	6845.9	6841.5	6824.0	6826.2	6753.9	6764.9	6714.5	6705.7	6692.6	6690.4	6681.7
30°	7198.3	7178.6	7154.5	7169.9	7137.0	7148.0	7104.2	7075.7	7071.4	7073.5	7060.4
32.5°	7590.2	7563.9	7548.6	7574.9	7588.0	7618.7	7616.5	7537.7	7537.7	7570.5	7511.4
35°	8076.2	8034.6	8047.8	8082.8	8109.1	8187.9	8174.7	8120.0	8137.5	8152.9	8082.8
37.5°	8647.6	8619.2	8678.3	8744.0	8746.1	8857.8	8831.5	8844.7	8842.5	8822.8	8776.8
40°	9332.9	9286.9	9348.2	9398.5	9367.9	9501.4	9497.1	9556.2	9595.6	9663.5	9637.2
42.5°	10013.7	9978.7	10037.8	10147.3	10129.8	10283.0	10304.9	10396.9	10451.6	10556.7	10495.4
45°	10852.2	10832.5	10887.3	10972.6	11031.7	11235.3	11316.4	11355.8	11493.7	11620.7	11478.4
47.5°	11791.4	11817.7	11808.9	11964.4	12095.7	12343.1	12376.0	12502.9	12623.3	12763.5	12625.5
50°	12960.5	12916.7	12956.1	13105.0	13319.5	13499.1	13667.6	13849.3	13967.6	14112.1	13858.1
52.5°	14219.3	14256.5	14344.1	14574.0	14731.6	14944.0	15097.2	15314.0	15430.0	15554.8	15224.2
55°	15806.6	15837.2	15933.5	16170.0	16281.6	16522.4	16627.5	16844.3	16955.9	17010.7	16588.1
57.5°	17667.4	17564.5	17643.4	17766.0	17938.9	18199.4	18227.9	18431.5	18431.5	18501.5	17963.0
60°	19329.1	19259.0	19342.2	19517.4	19585.2	19821.7	19797.6	19964.0	20007.8	19955.2	19311.6
62.5°	20966.7	20979.8	21087.1	21144.0	21117.7	21257.8	21314.8	21489.9	21417.7	21435.2	20693.0
65°	22954.5	22985.2	22974.2	22869.1	22632.7	22908.6	22893.2	23171.3	23188.8	23346.4	22483.8
67.5°	25612.3	25476.6	25229.2	24806.7	24338.1	24176.1	24033.8	24171.8	24349.1	24320.6	23374.9
70°	24579.0	24357.9	24228.7	23860.9	23234.8	22910.7	22615.2	22639.3	22897.6	22921.7	21954.0
72.5°	21728.5	21616.9	21119.9	20798.1	20369.0	20119.4	19762.6	19843.6	20180.7	20237.6	19467.0
75°	17139.8	17036.9	16588.1	16483.0	16270.7	16393.3	16305.7	16338.5	16610.0	16360.4	15898.5
77.5°	11093.0	11117.1	11047.1	11285.7	11276.9	11283.5	11603.1	11636.0	11900.9	11747.6	11301.0
80°	4974.0	5046.3	5217.0	5562.9	5352.8	5466.6	5589.2	5552.0	5819.1	5214.8	5431.6
82.5°	1007.1	1042.1	983.0	1026.8	958.9	993.9	1044.3	967.7	958.9	888.8	825.4
85°	518.9	525.4	523.2	512.3	451.0	416.0	400.6	337.1	304.3	297.7	275.8
87.5°	337.1	341.5	330.6	328.4	289.0	264.9	236.4	199.2	166.4	116.0	96.3
90°	205.8	205.8	194.8	183.9	164.2	146.7	118.2	85.4	50.4	19.7	10.9
92.5°	137.9	137.9	133.5	127.0	113.8	98.5	76.6	50.4	24.1	8.8	4.4
95°	87.6	87.6	85.4	83.2	74.4	63.5	48.2	30.6	15.3	6.6	2.2
97.5°	56.9	56.9	56.9	54.7	50.4	43.8	32.8	19.7	10.9	4.4	2.2
100°	35.0	37.2	35.0	35.0	32.8	28.5	21.9	13.1	8.8	4.4	2.2
102.5°	19.7	19.7	21.9	21.9	19.7	17.5	13.1	10.9	6.6	4.4	2.2
105°	8.8	8.8	10.9	10.9	10.9	8.8	8.8	6.6	4.4	4.4	2.2
107.5°	2.2	2.2	2.2	4.4	6.6	6.6	6.6	6.6	4.4	2.2	2.2
110°	0.0	0.0	0.0	2.2	2.2	4.4	4.4	4.4	4.4	2.2	2.2



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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°	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5	5153.5
2.5°	5173.3	5147.0	5166.7	5133.8	5125.1	5096.6	5151.4	5160.1	5155.7	5164.5
5°	5177.6	5144.8	5168.9	5136.0	5133.8	5103.2	5160.1	5162.3	5147.0	5153.5
7.5°	5190.8	5160.1	5177.6	5140.4	5144.8	5107.6	5173.3	5171.1	5162.3	5177.6
10°	5238.9	5203.9	5210.5	5171.1	5182.0	5142.6	5223.6	5228.0	5219.2	5247.7
12.5°	5322.1	5274.0	5289.3	5243.3	5252.1	5212.7	5311.2	5317.7	5317.7	5363.7
15°	5436.0	5385.6	5418.5	5359.3	5361.5	5302.4	5376.9	5376.9	5385.6	5449.1
17.5°	5602.3	5541.1	5584.8	5530.1	5188.6	5059.4	5313.4	5468.8	5210.5	5188.6
20°	5808.1	5779.7	5803.8	5714.0	5160.1	4569.0	4109.3	4085.2	4595.3	4849.2
22.5°	6059.9	6031.4	6042.4	5928.6	4606.2	4190.3	4183.7	4139.9	3502.8	3327.7
25°	6355.5	6340.1	6316.1	5361.5	4761.7	4363.2	4310.7	3739.3	3373.7	3406.5
27.5°	6672.9	6626.9	5814.7	5569.5	5000.3	4536.2	4238.4	3491.9	3478.8	3509.4
30°	7027.6	6784.6	5952.6	5869.4	5278.3	4750.7	3688.9	3645.1	3645.1	3693.3
32.5°	7478.6	6335.8	6335.8	6292.0	5622.1	4170.6	3883.8	3857.5	3888.1	3907.9
35°	7410.7	6815.2	6885.3	6865.6	6088.4	4247.2	4196.8	4153.1	4159.6	4159.6
37.5°	7432.6	7456.7	7539.9	7454.5	5311.2	4580.0	4499.0	4490.2	4496.8	4512.1
40°	8120.0	8133.1	8163.8	7975.5	5707.4	4967.5	4855.8	4833.9	4855.8	4888.6
42.5°	8860.0	8897.2	8932.2	7253.1	6261.3	5407.5	5295.9	5254.3	5293.7	5328.7
45°	9735.7	9792.6	9256.2	7894.5	6887.5	5908.8	5790.6	5740.3	5764.4	5795.0
47.5°	10720.9	10810.6	8728.6	8711.1	7623.0	6502.1	6366.4	6270.1	6307.3	6305.1
50°	11833.0	10331.2	9643.7	9632.8	8444.0	7163.3	7023.2	6935.6	6964.1	6942.2
52.5°	13034.9	10613.6	10635.5	10633.3	9302.2	7874.8	7745.6	7636.2	7410.7	7618.7
55°	14265.3	11590.0	11673.2	11660.1	10202.0	8610.4	8472.5	8369.6	5468.8	4619.4
57.5°	15489.1	12610.2	12636.5	12667.1	11134.6	9319.7	8713.3	8004.0	3119.7	3104.4
60°	16697.6	13582.3	13634.8	13652.3	11638.2	7715.0	3561.9	3627.6	943.6	1127.5
62.5°	17949.9	14541.2	14589.3	14574.0	12139.5	7174.2	3741.5	3667.0	87.6	81.0
65°	19548.0	15743.1	15675.2	15624.8	12929.8	7655.9	4019.5	3999.8	28.5	19.7
67.5°	20108.5	16016.7	15878.8	15861.3	13043.7	7758.8	4041.4	4026.1	28.5	19.7
70°	18838.7	14976.8	14740.4	14746.9	12137.3	7257.4	3769.9	3748.0	26.3	19.7
72.5°	16498.4	13227.6	13129.1	12608.0	10510.7	6383.9	3343.0	3259.8	26.3	17.5
75°	13545.0	10685.8	10466.9	9882.4	8365.2	5074.7	2624.9	2517.7	24.1	15.3
77.5°	9402.9	7493.9	7075.7	6480.2	5595.8	3364.9	1764.6	1626.6	21.9	15.3
80°	4262.5	3075.9	3091.3	2368.8	1898.1	1140.6	560.5	507.9	19.7	13.1
82.5°	742.2	547.3	514.5	497.0	413.8	280.2	170.8	146.7	17.5	8.8
85°	258.3	208.0	229.9	271.5	240.8	168.6	105.1	100.7	10.9	4.4
87.5°	87.6	91.9	107.3	129.2	113.8	65.7	39.4	28.5	2.2	0.0
90°	8.8	10.9	10.9	10.9	6.6	0.0	0.0	0.0	0.0	0.0
92.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	2.2	2.2	2.2	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)