

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: P579517

Luminaire Tested: **CST-CA8-480-740-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579517
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: STREETWORKS
Catalog Number: CST-CA8-480-740-U-T5N-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55824 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G5

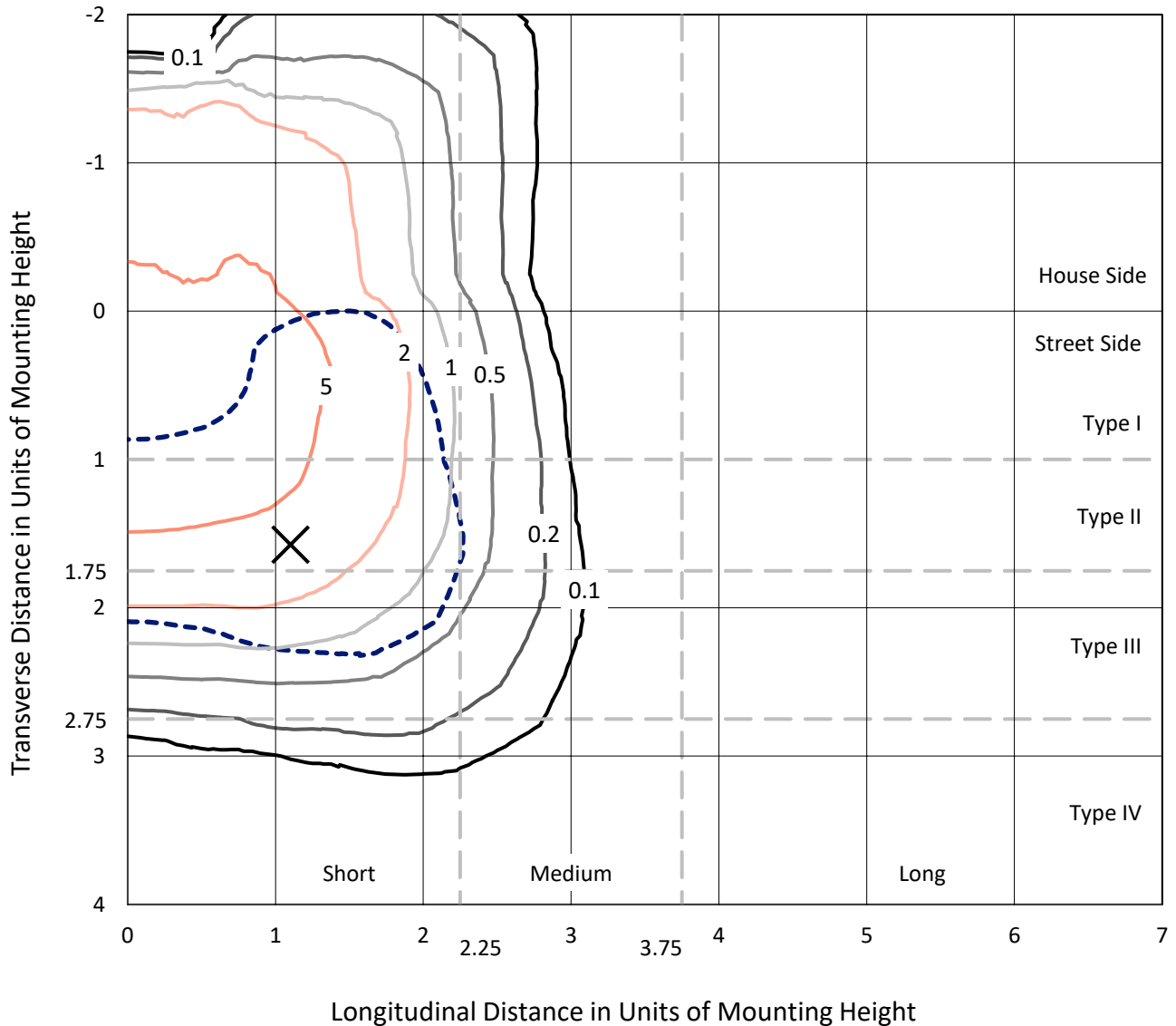
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

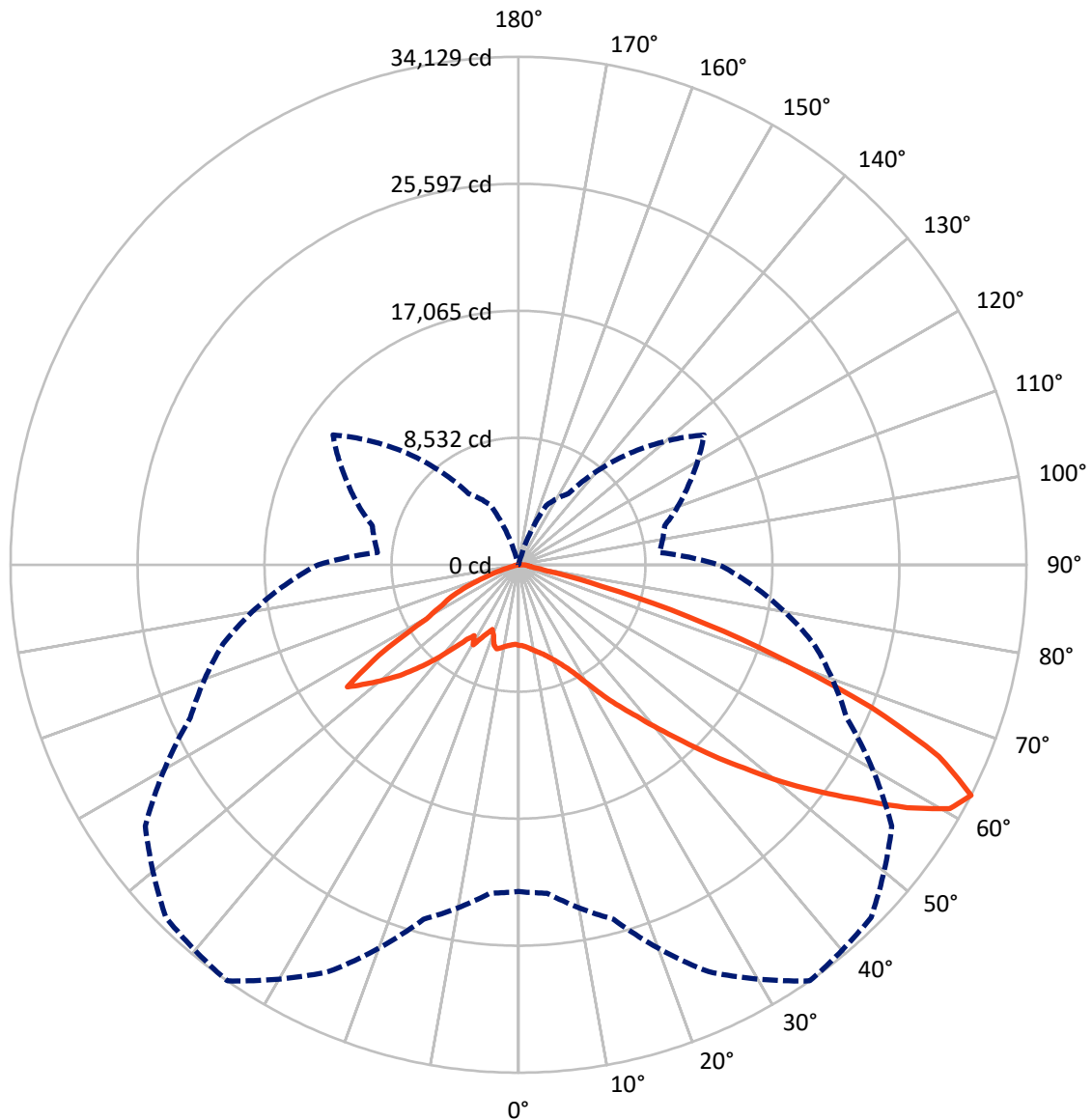
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.2 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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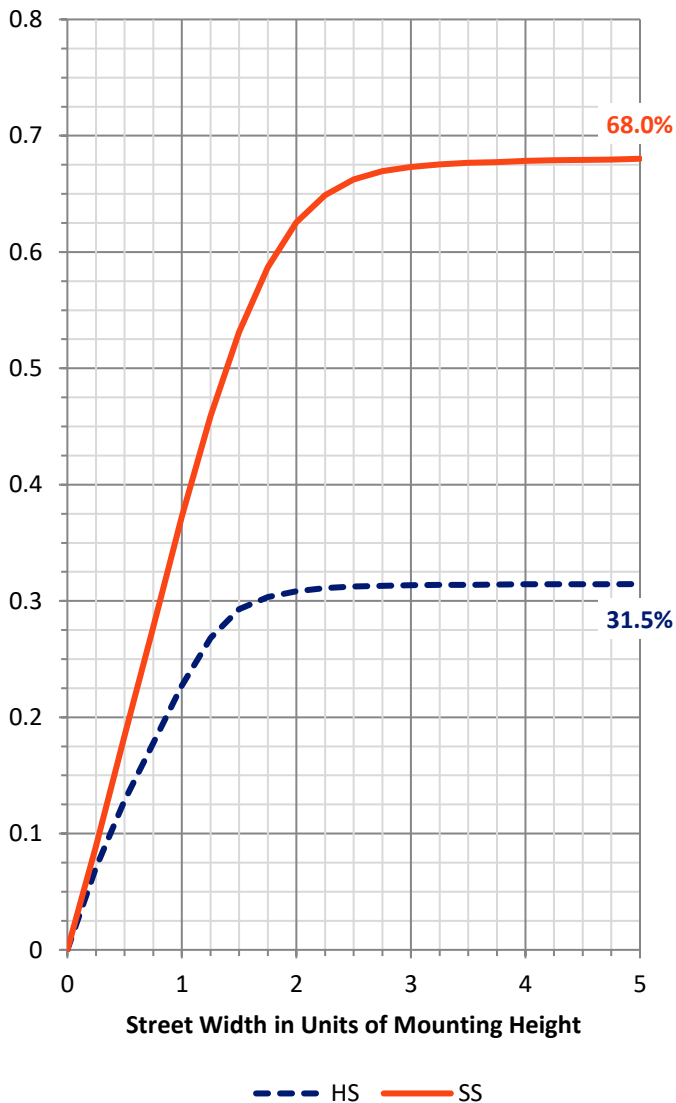
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17660.3	0.0	17660.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	38131.8	31.9	38163.7
	% Fixture	68.3	0.1	68.4
Total	Lumens	55792.1	31.9	55824.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	534.3	1.0
10°-20°	1718.0	3.1
20°-30°	3190.1	5.7
30°-40°	6289.4	11.3
40°-50°	11290.3	20.2
50°-60°	16411.6	29.4
60°-70°	13487.7	24.2
70°-80°	2563.8	4.6
80°-90°	306.9	0.5
90°-100°	29.1	0.1
100°-110°	2.8	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°	55792.1	99.9
0°-180°	55824.0	100.0

Coefficient of Utilization

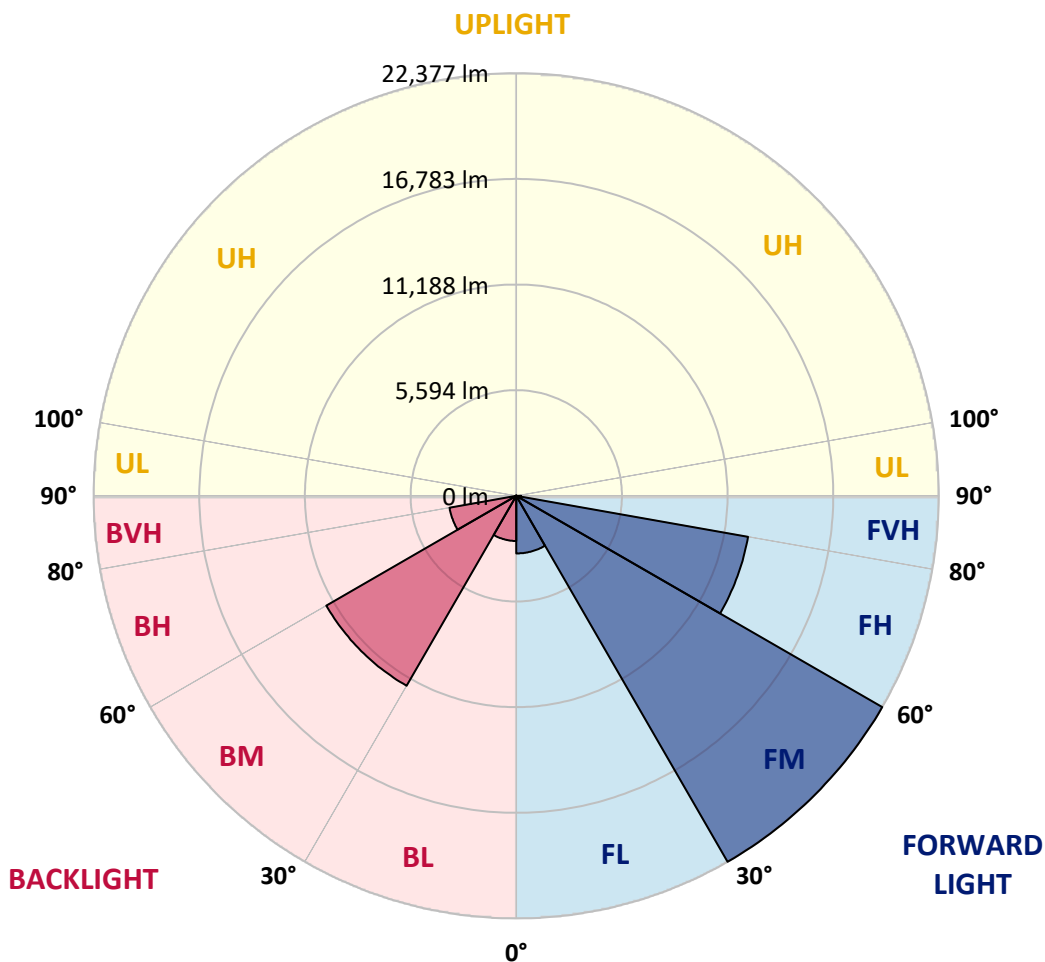


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3051.1	5.5			
FM	(30°-60°)	22376.8	40.1			
FH	(60°-80°)	12461.2	22.3			G5
FVH	(80°-90°)	242.7	0.4			G3/500
BL	(0°-30°)	2391.3	4.3	B3/2500		
BM	(30°-60°)	11614.5	20.8	B5		
BH	(60°-80°)	3590.3	6.4	B4/5000		G4/5000
BVH	(80°-90°)	64.2	0.1			G1/100
UL	(90°-100°)	29.1	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°	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6
2.5°	5557.0	5511.6	5516.2	5550.2	5448.1	5482.1	5434.5	5475.3	5457.2	5475.3	5486.7
5°	5668.2	5611.5	5609.2	5643.2	5561.5	5582.0	5527.5	5554.7	5529.8	5552.5	5552.5
7.5°	5804.3	5756.7	5745.3	5772.6	5699.9	5709.0	5654.6	5665.9	5636.4	5665.9	5643.2
10°	5974.5	5931.4	5913.2	5926.9	5861.1	5865.6	5806.6	5811.1	5768.0	5793.0	5774.8
12.5°	6153.8	6094.8	6085.7	6108.4	6040.3	6031.2	5981.3	5985.9	5938.2	5960.9	5947.3
15°	6339.8	6278.6	6280.8	6303.5	6235.5	6240.0	6187.8	6196.9	6149.2	6171.9	6153.8
17.5°	6587.2	6525.9	6521.4	6562.2	6505.5	6523.6	6469.2	6480.5	6446.5	6451.0	6430.6
20°	6941.1	6861.7	6845.8	6904.8	6830.0	6852.6	6823.1	6861.7	6848.1	6836.8	6820.9
22.5°	7363.2	7301.9	7270.2	7315.5	7227.0	7270.2	7286.0	7365.5	7385.9	7372.3	7122.7
25°	7928.2	7896.4	7864.7	7844.2	7737.6	7805.7	7887.3	8019.0	8105.2	8139.2	7792.0
27.5°	8690.6	8706.5	8568.1	8545.4	8425.1	8531.8	8679.3	8892.6	9067.3	9130.8	8663.4
30°	9670.9	9691.3	9502.9	9448.5	9375.9	9466.6	9741.2	9974.9	10233.6	10340.2	9716.2
32.5°	10973.3	10955.2	10678.3	10573.9	10508.1	10544.5	10832.6	11152.6	11443.0	11683.5	10916.6
35°	12563.9	12507.2	12212.2	11924.1	11663.1	11774.3	11985.3	12373.3	12813.5	13167.5	12101.0
37.5°	14411.0	14356.5	13907.2	13437.5	12922.5	12970.1	13158.4	13791.5	14358.8	14451.8	11899.1
40°	16319.3	16296.6	15872.3	15275.5	14474.5	14249.9	14499.5	15271.0	15870.0	14247.6	12368.8
42.5°	18225.3	18116.4	17878.1	17281.4	16214.9	15720.2	16056.1	16827.6	17472.0	14937.4	13458.0
45°	20147.2	20036.0	19834.1	19396.2	18286.6	17567.3	17664.8	18520.3	19103.5	16230.8	14592.5
47.5°	21853.6	21771.9	21626.7	21381.6	20392.3	19741.1	19552.7	20151.8	20548.9	17281.4	15463.8
50°	23324.0	23253.6	23310.3	23228.7	22938.2	22255.2	21633.5	21594.9	21785.5	18216.2	16264.8
52.5°	24617.3	24522.0	24764.8	25053.0	25320.8	25168.7	23664.3	22963.2	22790.7	18917.4	16802.6
55°	25686.1	25652.0	26069.5	26847.8	27866.7	28266.0	25835.8	24227.1	23689.3	19511.9	16852.5
57.5°	26326.0	26407.6	27290.3	28797.0	30789.3	30977.6	28377.2	25570.4	24481.2	19872.7	17090.8
60°	25232.3	25509.1	27097.4	30258.3	33276.2	33357.9	30203.8	25838.1	23444.2	18574.8	15817.8
62.5°	21955.7	22155.4	24653.6	30165.3	34129.3	33507.6	30612.3	24326.9	20546.6	15756.5	13453.4
65°	15513.8	15745.2	18756.3	27201.8	31050.2	31072.9	28041.4	21036.7	16423.7	12198.6	10387.9
67.5°	9357.7	9732.1	12584.4	19747.9	25565.8	26031.0	23394.3	15926.7	11753.9	7964.5	6723.3
70°	3070.1	3412.7	5745.3	11688.1	18429.5	20421.8	17569.5	10349.3	6137.9	3367.3	2711.6
72.5°	1216.2	1372.8	2024.0	5169.0	11876.4	13634.9	10825.8	5001.1	2060.3	894.0	778.3
75°	812.3	828.2	934.9	1760.8	5811.1	7456.2	5218.9	1454.5	764.7	558.2	490.1
77.5°	708.0	710.2	757.9	928.1	1892.4	2859.1	1502.1	780.6	633.1	458.4	406.2
80°	649.0	658.0	687.5	791.9	866.8	971.2	742.0	651.2	549.1	422.1	383.5
82.5°	621.7	628.5	646.7	717.0	701.1	728.4	599.0	517.4	462.9	388.0	367.6
85°	567.3	578.6	590.0	633.1	576.3	499.2	462.9	347.2	331.3	292.7	270.0
87.5°	428.9	426.6	415.2	422.1	385.7	315.4	260.9	195.1	158.8	131.6	108.9
90°	179.3	181.5	174.7	165.6	145.2	120.3	90.8	54.5	27.2	9.1	4.5
92.5°	136.1	138.4	133.9	120.3	104.4	84.0	61.3	31.8	18.2	6.8	2.3
95°	84.0	86.2	81.7	72.6	63.5	47.7	31.8	20.4	11.3	4.5	0.0
97.5°	49.9	52.2	47.7	43.1	34.0	22.7	18.2	13.6	9.1	4.5	0.0
100°	29.5	29.5	27.2	22.7	15.9	13.6	11.3	9.1	6.8	2.3	0.0
102.5°	13.6	13.6	13.6	9.1	6.8	6.8	6.8	6.8	6.8	2.3	0.0
105°	4.5	4.5	2.3	2.3	2.3	4.5	4.5	4.5	4.5	2.3	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	4.5	4.5	2.3	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	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°	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6	5418.6
2.5°	5475.3	5432.2	5439.0	5400.4	5391.4	5350.5	5423.1	5429.9	5409.5	5429.9
5°	5543.4	5491.2	5504.8	5461.7	5450.3	5393.6	5452.6	5448.1	5432.2	5452.6
7.5°	5643.2	5584.2	5591.0	5541.1	5529.8	5466.2	5520.7	5504.8	5486.7	5511.6
10°	5770.3	5713.6	5715.8	5647.8	5641.0	5568.3	5638.7	5609.2	5582.0	5618.3
12.5°	5947.3	5867.9	5861.1	5786.2	5783.9	5709.0	5781.6	5756.7	5720.4	5777.1
15°	6151.5	6044.8	6017.6	5922.3	5920.1	5840.6	5913.2	5874.7	5856.5	5924.6
17.5°	6417.0	6283.1	6076.6	5752.1	5604.6	5629.6	5886.0	5979.0	5736.3	5772.6
20°	6578.1	5929.1	5627.3	5493.5	5423.1	5019.2	4472.4	4517.8	5055.5	5311.9
22.5°	6305.8	6112.9	6001.7	5813.4	4833.2	4694.7	4726.5	4717.4	4023.1	3816.6
25°	6873.1	6691.5	6489.6	5327.8	5125.9	5066.9	5082.8	4431.5	4052.6	4068.5
27.5°	7689.9	7456.2	6176.5	5672.7	5631.9	5545.7	5232.5	4449.7	4497.3	4529.1
30°	8722.4	7891.9	6578.1	6358.0	6276.3	6183.3	4855.8	4971.6	5060.1	5157.6
32.5°	9720.8	7676.3	7347.3	7118.1	6991.1	5613.7	5477.6	5690.9	5779.4	5863.3
35°	9630.0	8599.8	8173.3	7882.8	7644.6	6058.5	6178.7	6503.2	6736.9	6734.7
37.5°	9879.6	9605.0	9112.7	8745.1	6634.8	6786.8	7038.7	7408.6	7692.2	7689.9
40°	10921.1	10623.9	10161.0	9371.3	7351.8	7705.8	8050.7	8397.9	8602.1	8618.0
42.5°	11955.8	11726.6	11309.1	8277.6	8230.0	8720.1	9080.9	9301.0	9425.8	9468.9
45°	12986.0	12770.4	11111.7	9155.8	9301.0	9786.6	10006.7	10049.8	10183.7	10179.1
47.5°	13805.1	13621.3	10222.2	10199.5	10560.3	10896.2	10825.8	10771.4	10805.4	10823.5
50°	14560.7	11858.3	11021.0	11352.2	11901.4	11942.2	11649.5	9228.4	11424.9	11386.3
52.5°	13526.0	11572.3	11765.2	12541.2	13476.1	13001.9	12430.1	8089.3	10714.6	11733.5
55°	11835.6	12030.7	12466.4	13768.8	14692.3	14129.6	13174.3	8329.8	7111.3	5788.4
57.5°	12071.5	12380.1	13208.4	15007.7	15813.3	11191.1	12296.2	5872.4	3975.4	3973.2
60°	11241.1	11708.5	13192.5	15563.7	12799.9	7170.3	4926.2	133.9	771.5	764.7
62.5°	9502.9	10167.8	12586.6	15212.0	10603.4	5827.0	4388.4	11.3	4.5	4.5
65°	7349.6	8132.4	10494.5	13172.1	9394.0	5019.2	3258.4	0.0	0.0	0.0
67.5°	4819.5	5545.7	7880.5	10941.5	7798.9	3793.9	2189.7	0.0	0.0	0.0
70°	2008.1	2904.4	4896.7	7907.8	5736.3	2484.7	1039.2	0.0	0.0	0.0
72.5°	580.9	884.9	2205.6	4722.0	3560.2	1300.2	385.7	0.0	0.0	0.0
75°	383.5	403.9	667.1	1899.2	1731.3	476.5	156.6	0.0	0.0	0.0
77.5°	322.2	331.3	424.3	531.0	555.9	188.3	127.1	0.0	0.0	0.0
80°	297.3	299.5	381.2	394.8	297.3	156.6	124.8	0.0	0.0	0.0
82.5°	276.8	270.0	324.5	313.1	247.3	136.1	115.7	0.0	0.0	0.0
85°	190.6	195.1	220.1	279.1	149.8	68.1	81.7	0.0	0.0	0.0
87.5°	59.0	68.1	86.2	88.5	27.2	9.1	0.0	0.0	0.0	0.0
90°	2.3	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)