

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: P510405

Luminaire Tested: **CST-CA10-210-727-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510405
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-727-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30710 lumens
Efficiency: N/A
Efficacy: 144.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

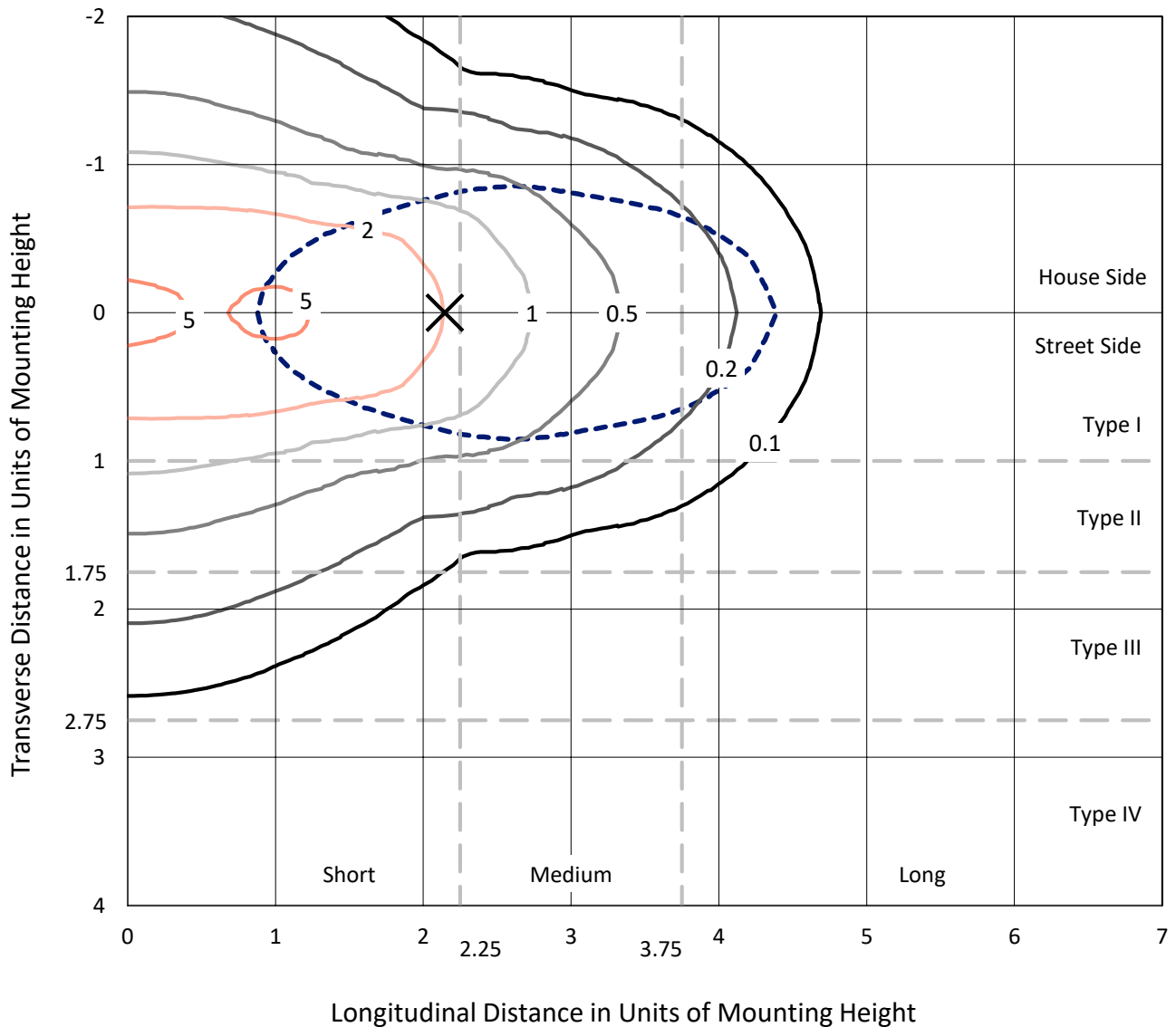
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

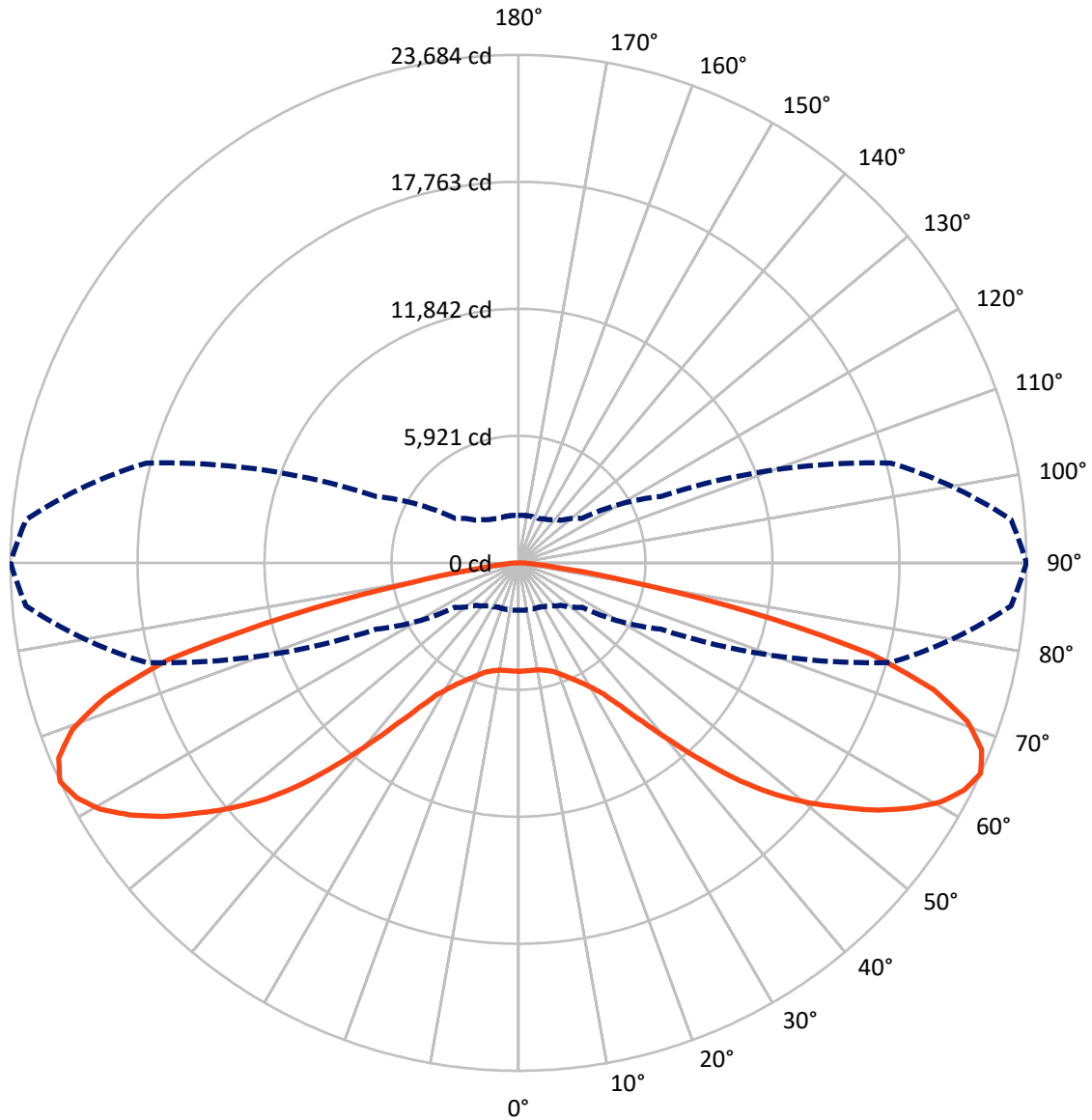
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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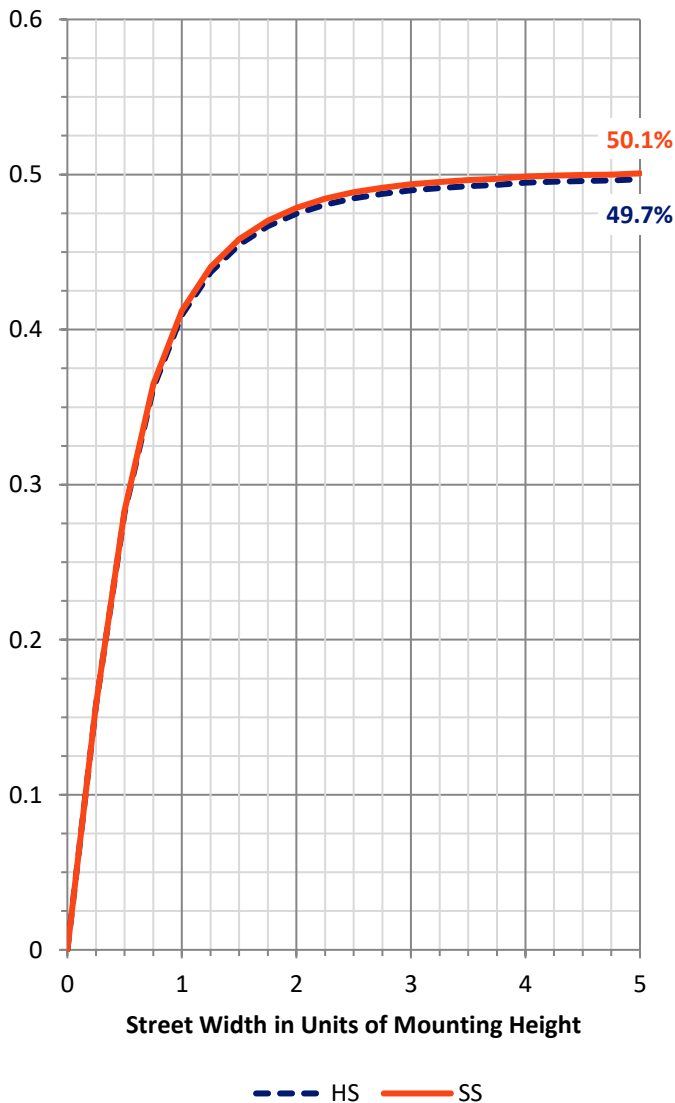
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15355.0	0.0	15355.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15355.0	0.0	15355.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	30710.0	0.0	30710.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.1	1.6
10°-20°	1416.8	4.6
20°-30°	2333.9	7.6
30°-40°	3419.4	11.1
40°-50°	5056.0	16.5
50°-60°	6632.2	21.6
60°-70°	6919.2	22.5
70°-80°	3978.2	13.0
80°-90°	474.2	1.5
90°-100°	0.0	0.0
100°-110°	0.0	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°	30710.0	100.0
0°-180°	30710.0	100.0

Coefficient of Utilization

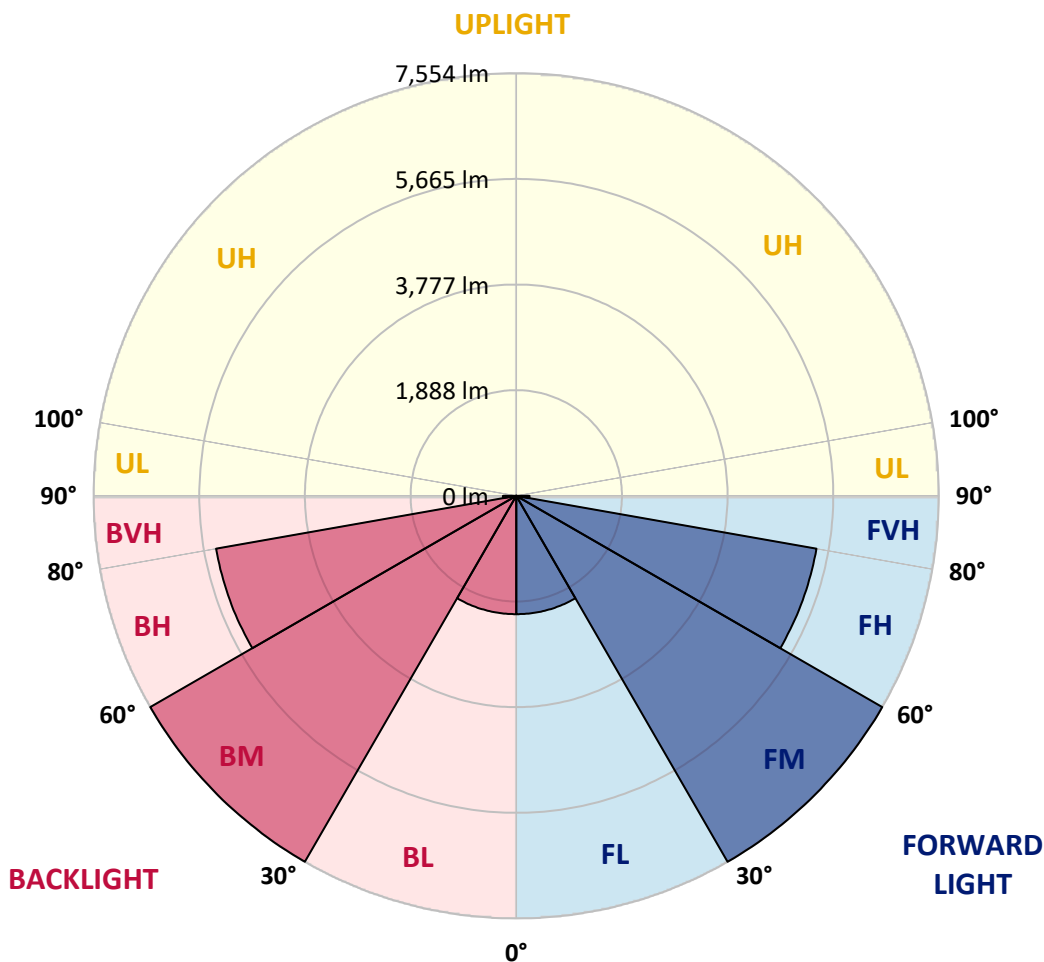


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2115.4	6.9			
FM (30°-60°)	7553.8	24.6			
FH (60°-80°)	5448.7	17.7			G3/7500
FVH (80°-90°)	237.1	0.8			G3/500
BL (0°-30°)	2115.4	6.9	B3/2500		
BM (30°-60°)	7553.8	24.6	B4/8500		
BH (60°-80°)	5448.7	17.7	B5		G5
BVH (80°-90°)	237.1	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4
2.5°	5058.2	5054.6	5053.4	5051.6	5054.6	5057.0	5063.0	5068.4	5067.2	5066.0	5067.2
5°	5030.0	5031.8	5032.4	5033.0	5035.4	5037.2	5045.6	5054.0	5052.8	5051.6	5057.6
7.5°	4990.4	4990.4	4989.2	4988.0	4992.8	4997.0	5005.4	5013.8	5020.4	5026.4	5036.0
10°	4932.7	4930.3	4929.7	4929.1	4934.5	4939.3	4954.9	4970.5	4983.8	4996.4	5012.6
12.5°	4862.5	4861.9	4863.1	4864.3	4875.7	4887.1	4913.5	4939.9	4966.3	4992.8	5016.2
15°	4779.1	4771.9	4777.9	4783.3	4801.9	4819.9	4870.9	4921.9	4962.1	5001.8	5047.4
17.5°	4651.8	4644.6	4653.6	4662.0	4699.2	4736.5	4808.5	4879.9	4955.5	5031.2	5096.6
20°	4459.1	4459.1	4482.0	4504.8	4567.8	4630.8	4729.9	4828.3	4930.3	5032.4	5127.2
22.5°	4253.9	4247.9	4296.5	4345.1	4420.7	4495.8	4620.6	4745.5	4880.5	5015.0	5145.2
25°	4022.2	4032.4	4093.6	4154.2	4260.5	4366.1	4519.8	4672.8	4842.7	5012.6	5193.2
27.5°	3826.5	3828.3	3902.1	3976.0	4109.2	4241.9	4428.5	4615.2	4822.3	5029.4	5256.9
30°	3624.2	3657.2	3735.3	3812.7	3961.6	4110.4	4336.1	4561.2	4806.7	5052.2	5329.5
32.5°	3468.8	3476.6	3564.8	3652.4	3807.9	3963.4	4225.7	4488.0	4782.7	5077.4	5414.7
35°	3322.3	3334.9	3417.1	3499.4	3661.4	3822.9	4110.4	4397.3	4749.7	5101.4	5507.2
37.5°	3192.1	3207.7	3285.7	3363.7	3519.8	3675.8	3980.8	4285.7	4698.6	5111.6	5608.6
40°	3096.6	3109.8	3175.8	3241.9	3382.9	3523.4	3842.7	4161.4	4627.2	5093.0	5688.4
42.5°	3027.6	3033.6	3087.0	3140.4	3266.5	3392.5	3708.9	4024.6	4534.2	5043.8	5750.3
45°	2933.9	2947.2	3000.0	3052.2	3165.6	3278.5	3567.8	3857.1	4396.1	4934.5	5750.9
47.5°	2864.3	2872.7	2922.5	2971.8	3077.4	3183.0	3442.9	3702.9	4240.1	4776.7	5686.0
50°	2813.3	2809.1	2855.3	2900.9	2990.4	3079.2	3310.9	3542.0	4046.8	4551.6	5524.0
52.5°	2740.7	2745.5	2782.7	2819.9	2897.3	2974.2	3181.8	3388.9	3832.5	4275.5	5261.1
55°	2643.4	2665.6	2696.9	2727.5	2795.3	2863.1	3049.8	3236.5	3618.2	3999.4	4922.5
57.5°	2548.0	2564.2	2590.6	2617.0	2670.4	2723.3	2899.1	3075.0	3392.5	3710.1	4495.2
60°	2470.0	2474.2	2491.0	2507.2	2548.0	2588.8	2734.1	2879.3	3156.6	3433.3	4069.0
62.5°	2369.1	2370.3	2381.7	2393.1	2418.3	2443.0	2557.0	2670.4	2906.9	3143.4	3645.2
65°	2211.3	2220.9	2231.7	2241.9	2258.7	2274.9	2361.9	2449.0	2626.0	2803.1	3207.7
67.5°	2051.6	2043.2	2055.8	2068.4	2070.8	2073.2	2139.2	2205.3	2350.5	2495.8	2821.1
70°	1791.7	1798.3	1797.1	1795.3	1785.1	1774.3	1820.5	1866.7	1943.6	2019.8	2255.1
72.5°	1373.9	1364.9	1342.1	1318.7	1307.9	1297.1	1351.1	1404.6	1461.0	1517.4	1687.3
75°	839.7	865.5	913.0	959.8	977.8	995.8	992.8	989.2	984.4	979.6	1191.5
77.5°	569.0	582.8	593.6	603.8	630.2	656.1	686.1	716.1	715.5	714.9	848.1
80°	361.9	351.1	355.9	360.7	375.7	390.8	436.4	481.4	494.0	506.0	597.8
82.5°	226.9	228.7	234.7	240.1	223.3	206.5	241.9	276.7	306.7	336.1	378.7
85°	147.1	166.9	163.9	160.9	141.1	121.2	152.5	183.7	198.1	211.9	228.1
87.5°	47.4	55.2	57.0	58.2	58.2	57.6	64.2	70.8	73.2	75.0	81.0
90°	0.0	0.0	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	0.0
95°	0.0	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	0.0
100°	0.0	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	0.0
105°	0.0	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	0.0
110°	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):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4	5059.4
2.5°	5067.8	5061.8	5055.8	5054.0	5052.2	5051.0	5049.8	5048.6
5°	5063.0	5061.8	5060.6	5055.8	5051.0	5050.4	5049.8	5051.6
7.5°	5045.6	5045.6	5045.6	5051.0	5056.4	5054.0	5051.0	5054.6
10°	5028.2	5042.6	5057.0	5061.2	5065.4	5068.4	5071.4	5074.4
12.5°	5039.6	5064.2	5088.2	5102.0	5115.8	5123.0	5129.6	5131.4
15°	5093.0	5124.2	5155.4	5174.0	5192.0	5204.0	5216.0	5219.0
17.5°	5162.0	5210.0	5257.5	5284.5	5311.5	5325.3	5338.5	5334.3
20°	5221.4	5287.5	5353.5	5411.1	5468.7	5500.6	5531.8	5535.4
22.5°	5274.9	5385.9	5497.0	5571.4	5645.2	5701.6	5758.1	5764.1
25°	5373.3	5518.6	5663.8	5782.7	5901.5	5953.1	6004.2	6034.2
27.5°	5483.7	5678.2	5872.7	6031.8	6190.8	6269.5	6347.5	6351.7
30°	5606.2	5852.9	6099.0	6312.7	6525.8	6621.8	6717.2	6767.7
32.5°	5751.5	6064.8	6377.5	6658.4	6939.3	7085.2	7231.0	7282.1
35°	5912.3	6318.7	6724.4	7111.6	7498.1	7777.2	8056.4	8190.8
37.5°	6105.6	6623.0	7140.4	7722.0	8303.7	8779.6	9255.0	9390.7
40°	6283.9	6949.5	7614.6	8422.5	9230.4	9985.5	10740.0	10887.1
42.5°	6456.7	7262.2	8067.8	9169.8	10271.8	11282.6	12293.4	12675.8
45°	6566.6	7540.8	8514.3	9967.5	11420.7	12808.4	14195.6	14516.7
47.5°	6594.8	7739.4	8884.1	10684.2	12484.3	14117.5	15750.2	16162.5
50°	6496.3	7842.7	9189.0	11564.7	13939.9	15603.1	17265.8	17604.3
52.5°	6246.6	7809.7	9372.7	12247.2	15121.7	16882.2	18642.7	18950.0
55°	5845.7	7609.2	9372.7	12809.0	16244.8	18070.7	19896.0	20363.0
57.5°	5280.3	7226.2	9172.2	13184.2	17196.1	19179.3	21162.5	21582.1
60°	4704.6	6770.7	8836.1	13391.2	17946.4	20047.3	22148.1	22637.9
62.5°	4146.4	6151.8	8156.6	13174.0	18191.3	20409.2	22626.5	23331.1
65°	3612.2	5464.5	7316.9	12644.0	17970.4	20511.8	23052.6	23684.1
67.5°	3146.4	4890.1	6633.8	11755.6	16877.4	19690.1	22502.2	23289.1
70°	2490.4	4094.8	5699.2	10180.6	14661.9	17956.0	21250.1	22221.3
72.5°	1857.1	3217.9	4578.0	8008.3	11438.7	15226.8	19014.2	20236.3
75°	1402.7	2570.2	3737.7	6330.1	8922.5	12129.6	15336.6	16972.2
77.5°	981.4	1857.1	2732.3	4666.2	6600.2	8375.7	10151.2	11022.7
80°	689.1	1174.7	1659.6	2590.0	3519.8	4307.3	5094.2	5031.8
82.5°	420.8	624.8	828.3	1123.6	1419.0	1609.2	1799.5	1791.1
85°	244.3	297.1	349.3	432.8	516.2	610.4	704.7	626.6
87.5°	86.4	86.4	86.4	99.0	111.6	153.7	195.7	206.5
90°	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
95°	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
100°	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
105°	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)