

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: P579514

Luminaire Tested: **CST-CA8-480-740-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579514
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-CA8-480-740-U-T5-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: 52246 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

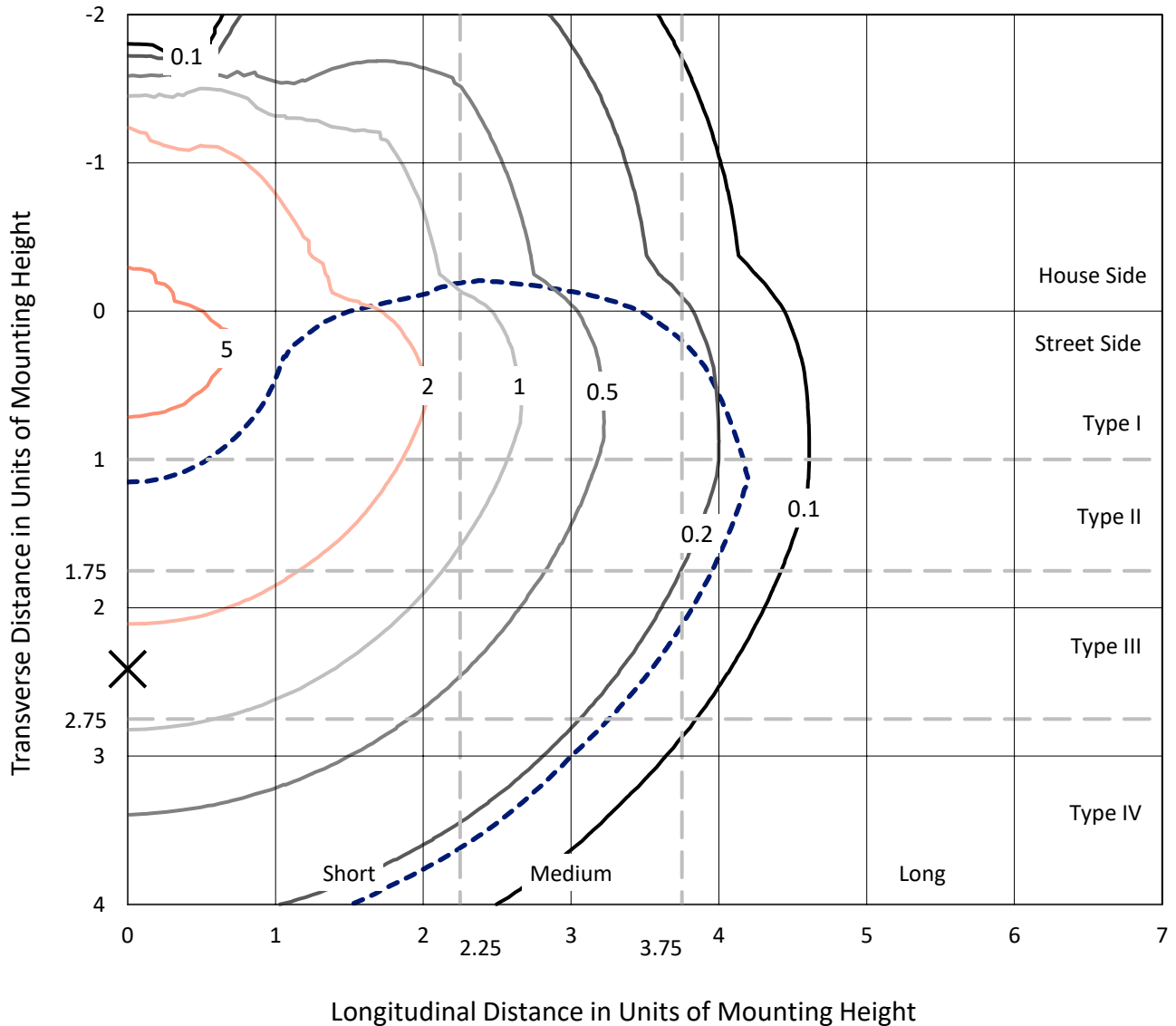
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

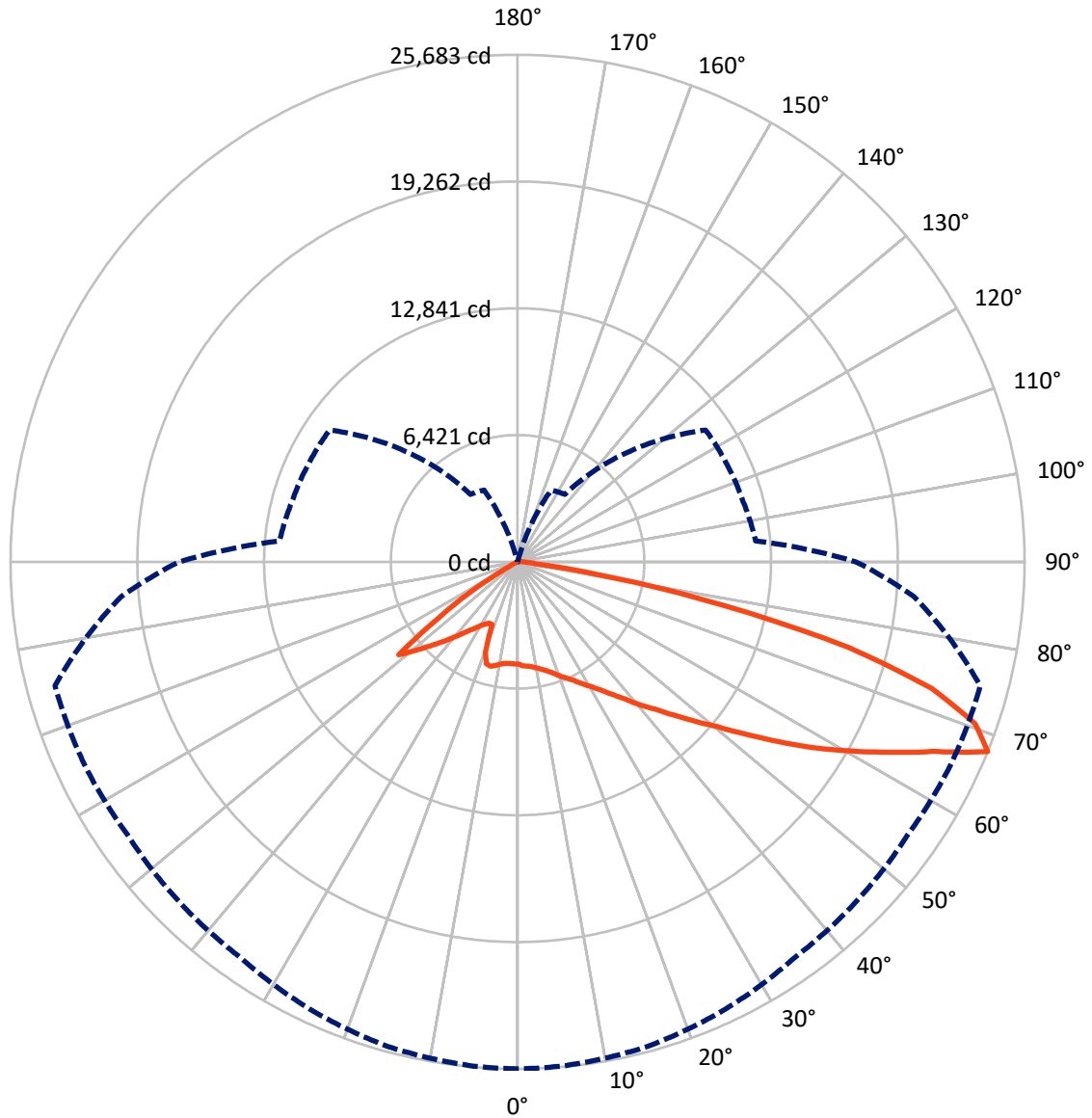
× Max cd
 - - - 1/2 Max cd



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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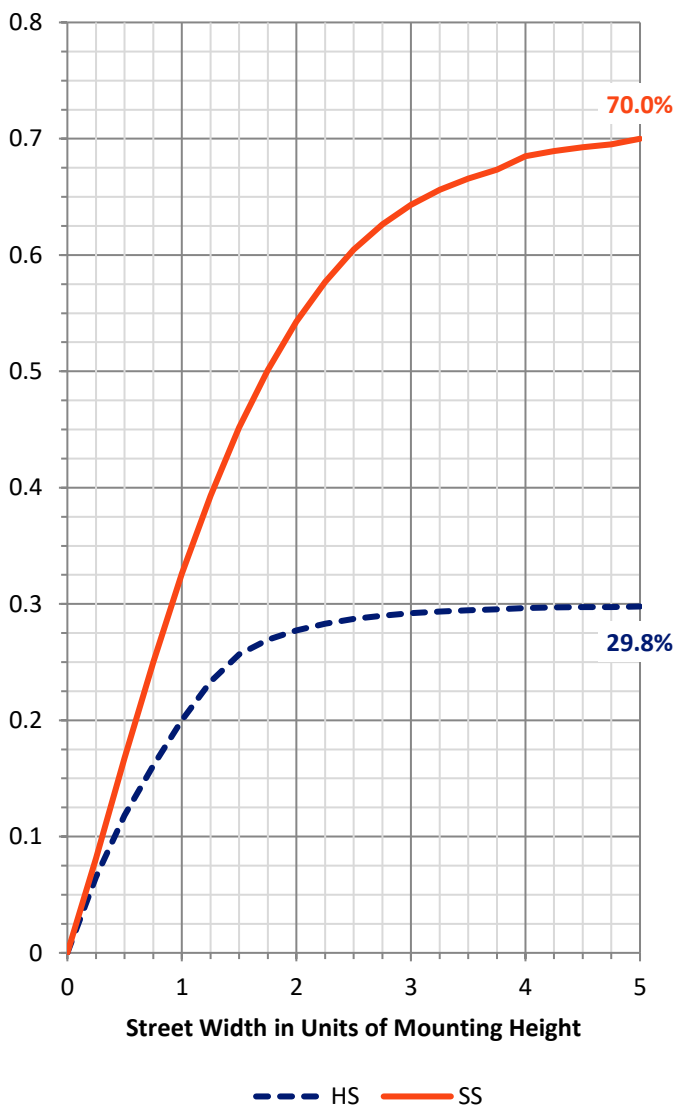
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15595.7	5.3	15601.0
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	36586.2	58.8	36645.1
	% Fixture	70.0	0.1	70.1
Total	Lumens	52182.0	64.1	52246.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	499.1	1.0
10°-20°	1545.1	3.0
20°-30°	2593.0	5.0
30°-40°	4204.8	8.0
40°-50°	6871.0	13.2
50°-60°	10768.1	20.6
60°-70°	14421.7	27.6
70°-80°	10511.5	20.1
80°-90°	767.6	1.5
90°-100°	49.1	0.1
100°-110°	14.0	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°	52182.0	99.9
0°-180°	52246.0	100.0

Coefficient of Utilization

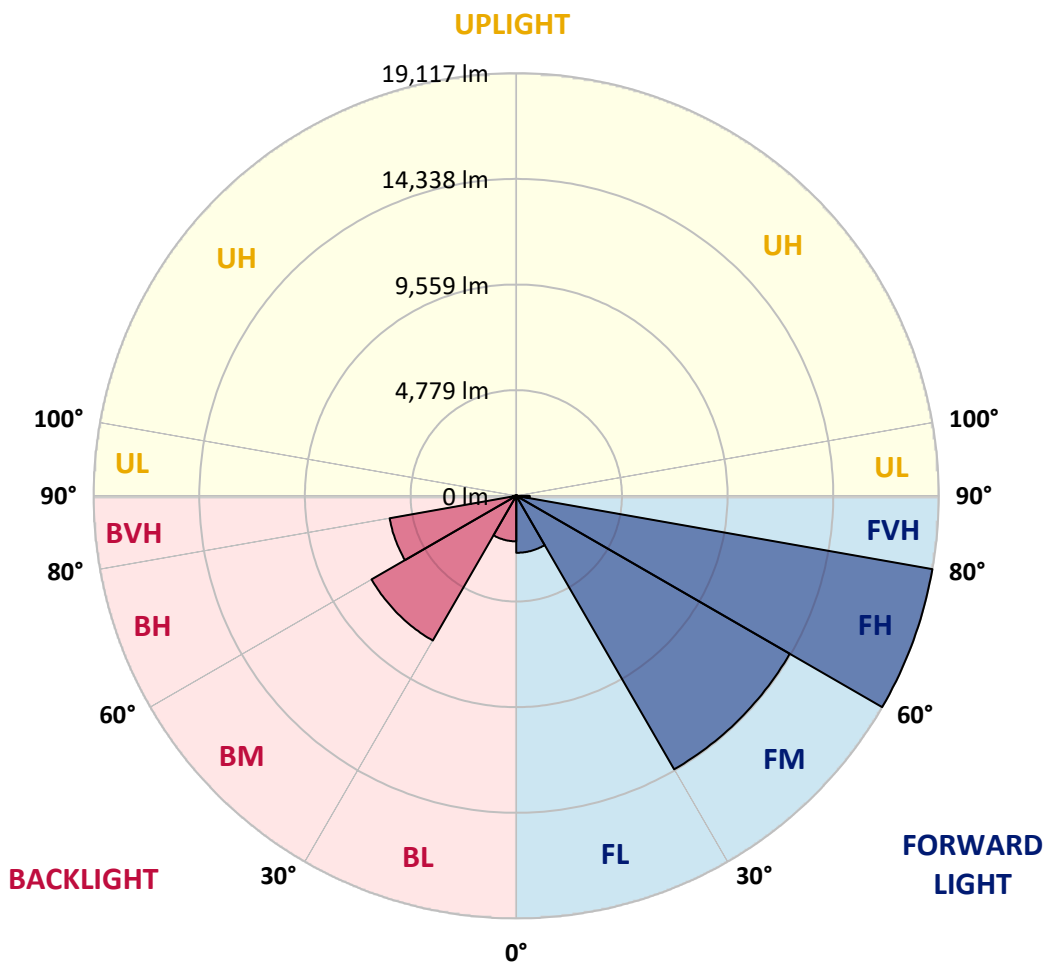


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2577.0	4.9			
FM (30°-60°)	14285.0	27.3			
FH (60°-80°)	19117.2	36.6			G5
FVH (80°-90°)	607.0	1.2			G4/750
BL (0°-30°)	2060.2	3.9	B3/2500		
BM (30°-60°)	7558.8	14.5	B4/8500		
BH (60°-80°)	5816.1	11.1	B5		G5
BVH (80°-90°)	160.6	0.3			G2/225
UL (90°-100°)	49.1	0.1		U2/50	
UH (100°-180°)	15.0	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°	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0
2.5°	5275.8	5245.1	5247.3	5275.8	5190.2	5218.7	5181.4	5209.9	5190.2	5196.8	5209.9
5°	5308.8	5275.8	5278.0	5313.2	5236.3	5260.4	5209.9	5225.3	5207.7	5216.5	5216.5
7.5°	5374.7	5337.3	5335.1	5357.1	5278.0	5286.8	5240.7	5242.9	5216.5	5234.1	5225.3
10°	5473.5	5442.8	5420.8	5434.0	5363.7	5359.3	5300.0	5302.2	5269.2	5289.0	5273.6
12.5°	5594.3	5552.6	5548.2	5552.6	5475.7	5458.1	5396.6	5401.0	5341.7	5372.5	5354.9
15°	5748.1	5682.2	5682.2	5706.3	5607.5	5594.3	5519.6	5524.0	5462.5	5486.7	5469.1
17.5°	5936.9	5873.3	5862.3	5879.8	5794.2	5776.6	5699.7	5695.3	5627.3	5633.8	5618.5
20°	6180.8	6117.1	6090.7	6134.6	6027.0	6013.8	5921.6	5912.8	5840.3	5820.5	5811.8
22.5°	6407.0	6356.5	6343.3	6391.6	6279.6	6268.6	6180.8	6169.8	6101.7	6073.1	5899.6
25°	6661.8	6650.8	6646.4	6661.8	6556.3	6534.4	6466.3	6450.9	6393.8	6358.7	6147.8
27.5°	6991.2	6986.8	6973.7	6975.9	6879.2	6859.4	6795.8	6784.8	6725.5	6685.9	6415.8
30°	7336.1	7336.1	7307.5	7322.9	7274.6	7243.8	7193.3	7153.8	7116.4	7074.7	6734.3
32.5°	7733.6	7731.4	7705.1	7751.2	7716.1	7716.1	7685.3	7643.6	7577.7	7557.9	7145.0
35°	8245.4	8212.4	8201.5	8276.1	8265.2	8284.9	8273.9	8230.0	8175.1	8129.0	7628.2
37.5°	8812.1	8803.3	8836.2	8882.4	8906.5	8959.2	8926.3	8924.1	8915.3	8798.9	7498.6
40°	9510.5	9473.2	9519.3	9543.5	9525.9	9611.6	9583.0	9607.2	9673.1	8737.4	7489.8
42.5°	10206.8	10173.9	10206.8	10325.4	10299.1	10402.3	10389.1	10483.6	10520.9	8867.0	8098.2
45°	11063.4	11026.1	11052.4	11193.0	11206.2	11331.4	11399.5	11489.5	11507.1	9706.0	8831.8
47.5°	12047.4	11985.9	12036.4	12102.3	12302.2	12420.8	12486.7	12596.5	12708.5	10716.4	9666.5
50°	13132.4	13128.1	13183.0	13297.2	13525.6	13644.2	13758.4	13872.6	14057.1	11843.1	10602.2
52.5°	14511.8	14483.3	14577.7	14685.3	14887.4	15069.7	15205.9	15324.5	15522.2	12983.1	11614.7
55°	16088.8	15990.0	16170.1	16352.4	16438.1	16653.3	16747.8	16846.6	17035.5	14182.3	12205.6
57.5°	17791.1	17766.9	17892.1	17958.0	18142.5	18276.5	18327.0	18434.6	18432.4	15429.9	13211.5
60°	19466.9	19440.6	19587.8	19627.3	19774.4	19895.3	19877.7	19974.3	20009.5	16600.6	14197.7
62.5°	21230.7	21186.8	21322.9	21331.7	21243.9	21439.3	21419.6	21500.8	21470.1	17744.9	15168.5
65°	23159.1	23192.1	23236.0	23055.9	22845.1	23014.2	23009.8	23163.5	23273.4	19343.9	16468.8
67.5°	25682.8	25641.1	25414.9	24980.0	24468.2	24296.9	24114.6	24226.6	24257.4	20139.1	17134.3
70°	24593.4	24501.2	24400.1	23956.4	23339.3	22904.4	22621.0	22739.6	22864.8	19032.1	16093.2
72.5°	21937.9	21709.5	21239.5	20848.5	20492.7	20068.8	19723.9	19930.4	20204.9	16881.8	14250.4
75°	17307.9	17094.8	16752.2	16486.4	16295.3	16290.9	16275.5	16435.9	16396.3	13707.9	11586.2
77.5°	10718.6	11164.4	11480.7	11254.5	11333.6	11171.0	11529.1	11739.9	11931.0	9826.8	8254.2
80°	4948.6	5062.8	5622.9	5477.9	5361.5	5328.5	5350.5	5717.3	5824.9	4410.4	3694.4
82.5°	1129.0	1082.8	1122.4	1041.1	1036.7	988.4	995.0	995.0	959.8	812.7	680.9
85°	571.1	584.3	588.6	564.5	498.6	448.1	415.1	351.4	303.1	259.2	219.6
87.5°	382.2	393.2	399.8	366.8	329.5	287.7	261.4	213.1	169.1	105.4	81.3
90°	261.4	259.2	252.6	235.0	210.9	180.1	145.0	101.0	59.3	22.0	15.4
92.5°	186.7	182.3	180.1	164.7	147.2	123.0	94.4	63.7	32.9	15.4	8.8
95°	123.0	120.8	120.8	112.0	98.8	81.3	63.7	41.7	24.2	13.2	8.8
97.5°	85.7	83.5	83.5	79.1	70.3	59.3	43.9	28.6	19.8	13.2	8.8
100°	59.3	59.3	59.3	54.9	50.5	41.7	32.9	22.0	17.6	13.2	8.8
102.5°	39.5	39.5	41.7	39.5	35.1	28.6	22.0	17.6	15.4	11.0	8.8
105°	26.4	26.4	26.4	26.4	24.2	19.8	17.6	15.4	13.2	11.0	8.8
107.5°	17.6	17.6	17.6	17.6	15.4	13.2	13.2	13.2	11.0	11.0	8.8
110°	11.0	11.0	11.0	13.2	11.0	11.0	11.0	11.0	11.0	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°	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0	5177.0
2.5°	5198.9	5168.2	5183.6	5152.8	5139.6	5111.1	5166.0	5170.4	5166.0	5174.8
5°	5205.5	5170.4	5188.0	5152.8	5146.2	5113.3	5168.2	5168.2	5155.0	5161.6
7.5°	5220.9	5183.6	5196.8	5155.0	5155.0	5115.5	5181.4	5177.0	5166.0	5181.4
10°	5273.6	5229.7	5229.7	5190.2	5194.6	5152.8	5234.1	5234.1	5225.3	5251.7
12.5°	5354.9	5300.0	5302.2	5247.3	5256.1	5223.1	5321.9	5326.3	5326.3	5370.3
15°	5460.3	5376.9	5385.6	5326.3	5343.9	5304.4	5392.2	5387.8	5398.8	5462.5
17.5°	5589.9	5497.7	5420.8	5227.5	5113.3	5117.7	5379.1	5499.9	5359.3	5401.0
20°	5644.8	5196.8	4952.9	4882.7	4867.3	4623.5	4124.9	4201.8	4671.8	4876.1
22.5°	5275.8	5133.1	5108.9	5018.8	4353.3	4168.8	4199.6	4155.6	3694.4	3433.0
25°	5455.9	5361.5	5306.6	4513.7	4364.3	4331.4	4309.4	3892.1	3391.3	3415.4
27.5°	5710.7	5587.7	4928.8	4533.4	4562.0	4511.5	4384.1	3501.1	3485.7	3525.3
30°	6011.6	5701.9	4803.6	4766.3	4799.2	4733.3	3685.6	3650.5	3650.5	3690.0
32.5°	6380.6	5172.6	5097.9	5102.3	5080.3	4333.6	3878.9	3870.1	3896.5	3929.4
35°	6277.4	5517.4	5524.0	5561.4	5510.8	4239.1	4182.0	4149.1	4171.0	4184.2
37.5°	6075.3	6035.8	6035.8	5994.1	4704.8	4570.8	4509.3	4504.9	4502.7	4502.7
40°	6584.9	6547.6	6501.4	6428.9	4922.2	4957.3	4865.1	4854.1	4860.7	4884.9
42.5°	7164.8	7149.4	7145.0	5517.4	5374.7	5401.0	5302.2	5273.6	5273.6	5328.5
45°	7847.8	7828.1	7342.7	5897.4	5873.3	5904.0	5794.2	5726.1	5763.4	5803.0
47.5°	8632.0	8632.0	6501.4	6466.3	6466.3	6483.9	6374.0	6281.8	6319.1	6332.3
50°	9490.8	8148.8	7153.8	7120.8	7151.6	7142.8	7028.6	6172.0	6964.9	6971.5
52.5°	9730.2	7924.7	7869.8	7832.5	7869.8	7863.2	7744.6	5148.4	7533.8	7641.4
55°	8625.4	8632.0	8621.0	8566.1	8605.6	8590.2	8473.8	5620.7	5554.8	4950.8
57.5°	9326.0	9334.8	9330.4	9321.6	9356.8	6797.9	8776.9	5078.1	3101.4	3103.6
60°	10088.2	10044.3	10031.1	10011.3	8484.8	4819.0	3657.1	353.6	1212.4	1194.9
62.5°	10780.1	10764.7	10718.6	10707.6	7199.9	3795.4	3707.6	81.3	63.7	61.5
65°	11742.1	11605.9	11568.6	11452.2	7674.3	4041.4	3958.0	24.2	2.2	0.0
67.5°	12100.1	11823.4	11689.4	11627.9	7808.3	4168.8	4008.5	24.2	2.2	0.0
70°	11423.6	11081.0	10911.9	10843.8	7296.5	3896.5	3738.3	24.2	2.2	0.0
72.5°	10129.9	9877.3	9809.3	9591.8	6433.3	3419.8	3281.5	24.2	0.0	0.0
75°	8309.1	8216.8	8133.4	7902.8	5229.7	2717.0	2594.0	22.0	0.0	0.0
77.5°	6046.8	5910.6	5756.8	5506.4	3529.7	1774.7	1711.0	19.8	0.0	0.0
80°	2725.8	2613.8	2576.4	2185.4	1252.0	577.7	509.6	17.6	0.0	0.0
82.5°	529.3	476.6	452.5	434.9	281.1	155.9	136.2	13.2	0.0	0.0
85°	180.1	199.9	232.8	257.0	158.1	94.4	79.1	8.8	0.0	0.0
87.5°	70.3	94.4	114.2	118.6	59.3	39.5	22.0	4.4	0.0	0.0
90°	13.2	17.6	15.4	11.0	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	11.0	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
107.5°	8.8	11.0	8.8	6.6	4.4	2.2	0.0	0.0	0.0	0.0
110°	8.8	11.0	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)