

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: P256734

Luminaire Tested: **CST-10-8-D-U-T5R-7050-HSS-HM-EX120**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256734
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-10-8-D-U-T5R-7050-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 5000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED
120 DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 63151 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B5 - U2 - G5

Input Watts (W): 631
Input Voltage (V): NR
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: 28.75 FT



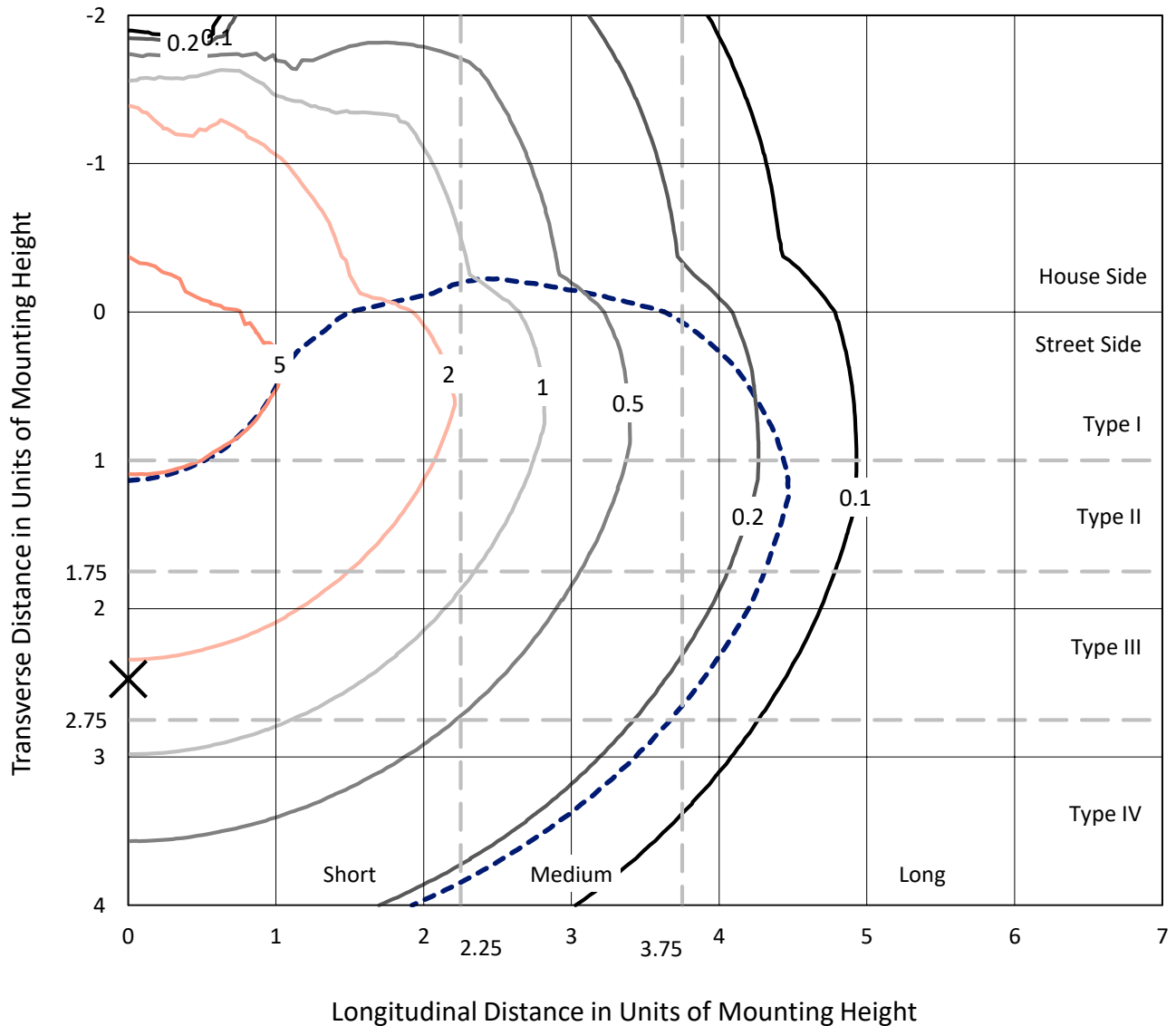


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

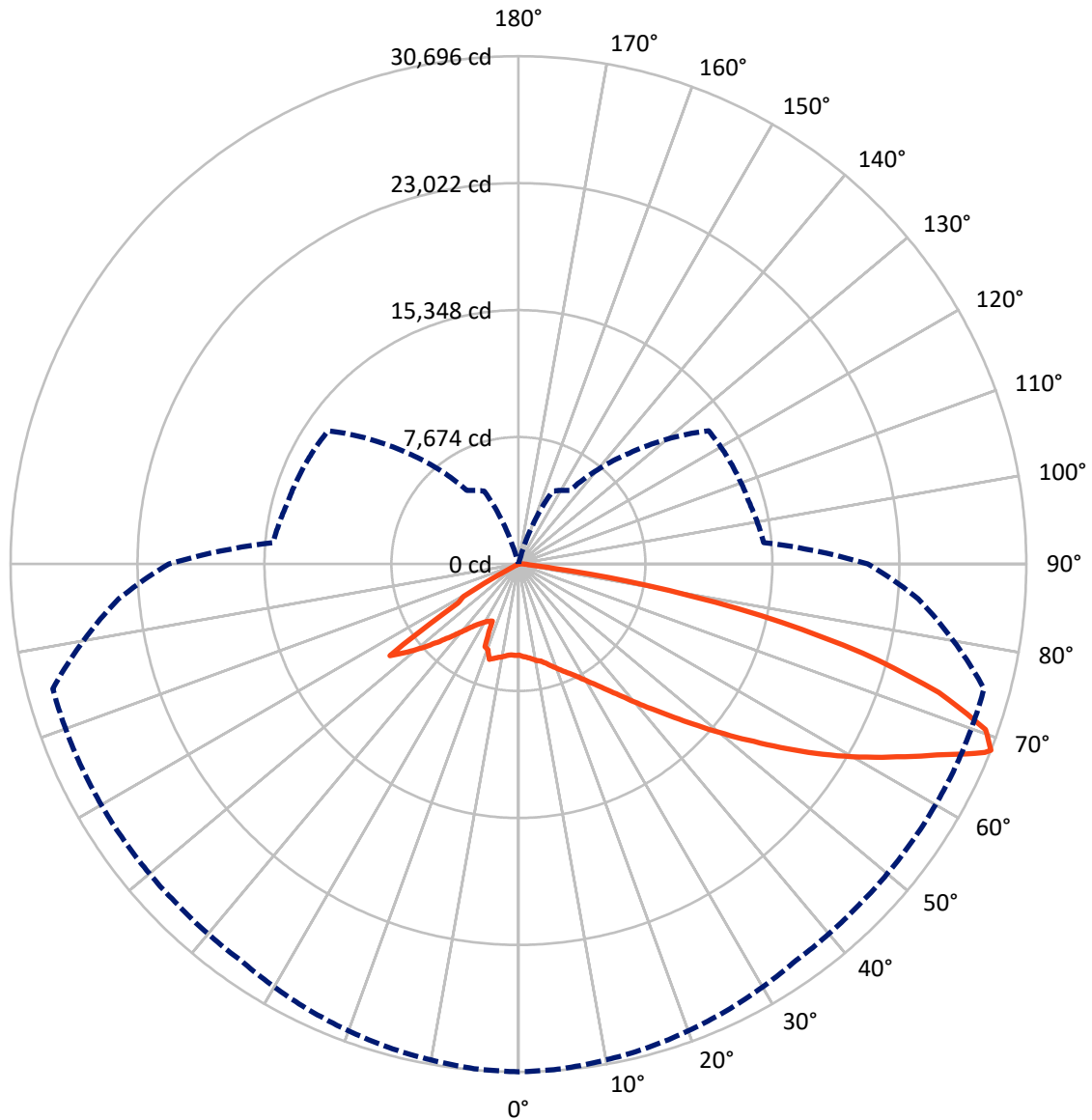


Based on 30 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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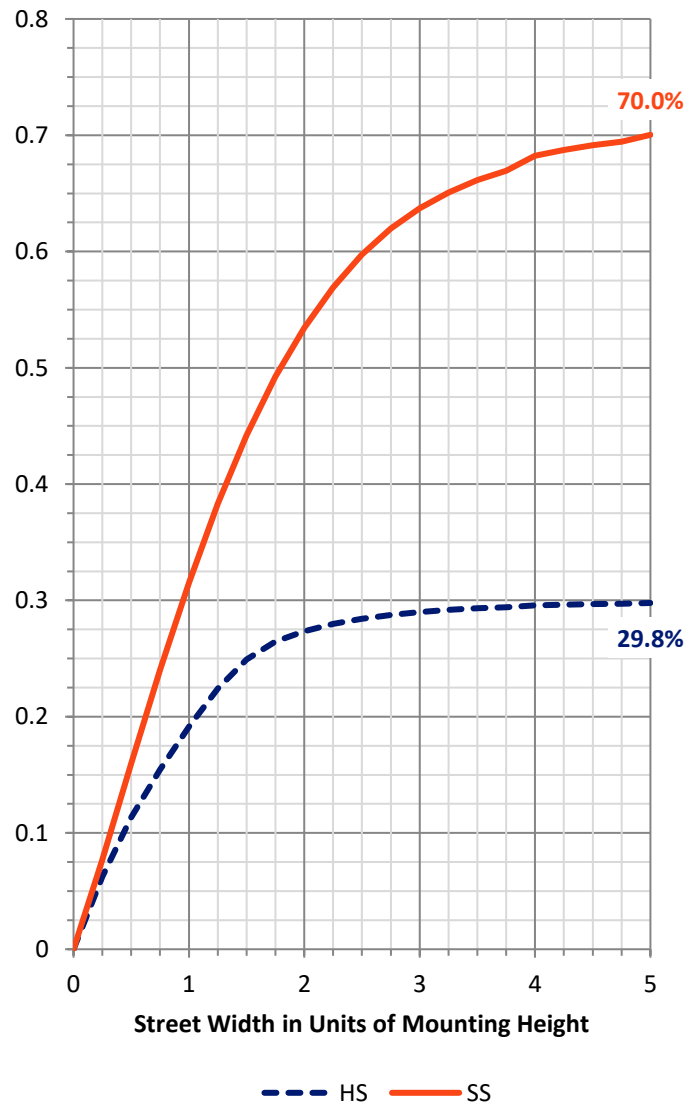
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18824.6	2.9	18827.5
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	44297.6	25.8	44323.5
	% Fixture	70.1	0.0	70.2
Total	Lumens	63122.2	28.8	63151.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	534.4	0.8
10°-20°	1700.7	2.7
20°-30°	2913.1	4.6
30°-40°	4725.7	7.5
40°-50°	7969.6	12.6
50°-60°	12990.7	20.6
60°-70°	17422.6	27.6
70°-80°	13532.8	21.4
80°-90°	1332.8	2.1
90°-100°	25.3	0.0
100°-110°	1.4	0.0
110°-120°	0.4	0.0
120°-130°	0.3	0.0
130°-140°	0.4	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	63122.2	100.0
0°-180°	63151.0	100.0



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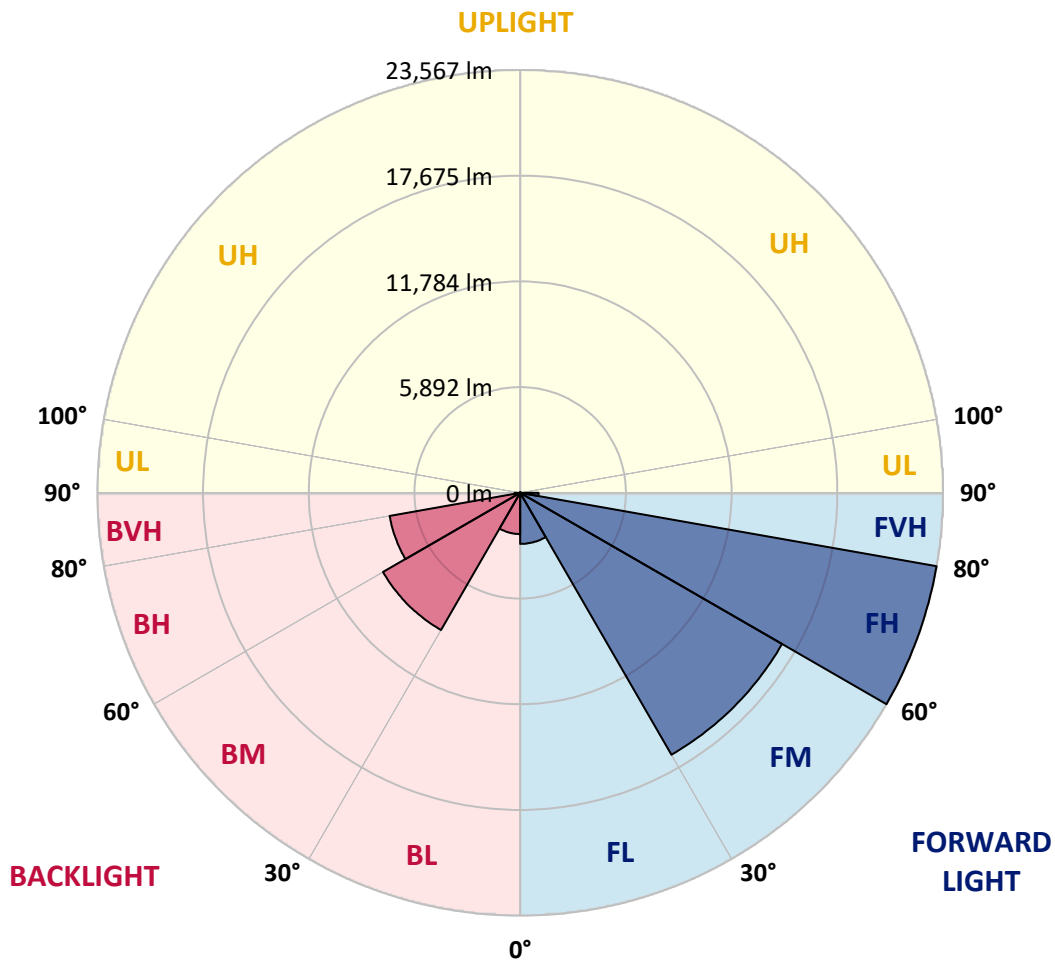
CATALOG NUMBER: CST-10-8-D-U-T5R-7050-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2848.5	4.5			
FM	(30°-60°)	16857.2	26.7			
FH	(60°-80°)	23567.2	37.3			G5
FVH	(80°-90°)	1024.7	1.6			G5
BL	(0°-30°)	2299.6	3.6	B3/2500		
BM	(30°-60°)	8828.7	14.0	B5		
BH	(60°-80°)	7388.2	11.7	B5		G5
BVH	(80°-90°)	308.0	0.5			G3/500
UL	(90°-100°)	25.3	0.0		U2/50	
UH	(100°-180°)	2.9	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°	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6
2.5°	5597.0	5581.3	5578.7	5610.1	5510.8	5560.4	5516.0	5552.6	5529.1	5547.4	5550.0
5°	5672.8	5644.0	5625.7	5662.3	5599.6	5623.1	5573.5	5589.2	5523.9	5560.4	5565.7
7.5°	5782.4	5735.4	5730.2	5740.7	5685.8	5704.1	5623.1	5641.4	5594.4	5573.5	5591.8
10°	5931.3	5886.9	5853.0	5876.5	5803.3	5813.8	5727.6	5730.2	5696.3	5657.1	5688.4
12.5°	6014.9	6020.1	6004.4	6022.7	5962.7	5928.7	5868.6	5847.7	5813.8	5766.8	5751.1
15°	6223.8	6213.4	6182.0	6210.8	6202.9	6171.6	6098.5	6051.5	5978.3	5952.2	5926.1
17.5°	6479.8	6445.8	6419.7	6456.3	6495.5	6430.2	6359.6	6294.4	6197.7	6145.5	6114.1
20°	6748.8	6725.3	6699.2	6756.6	6769.7	6720.1	6667.8	6571.2	6458.9	6391.0	6325.7
22.5°	7049.2	7002.1	7010.0	7085.7	7062.2	7038.7	6970.8	6892.4	6756.6	6670.4	6482.4
25°	7360.0	7333.8	7370.4	7404.4	7386.1	7336.4	7302.5	7245.0	7093.6	6989.1	6714.8
27.5°	7746.5	7704.7	7751.7	7764.8	7749.1	7736.0	7689.0	7644.6	7480.1	7362.6	7020.4
30°	8200.9	8151.3	8227.1	8208.8	8193.1	8203.6	8174.8	8078.2	7931.9	7772.6	7430.5
32.5°	8741.6	8676.3	8762.5	8723.3	8686.7	8759.9	8692.0	8600.5	8428.2	8242.7	7908.4
35°	9368.4	9371.0	9415.4	9350.1	9337.1	9415.4	9371.0	9258.7	9099.4	8906.1	8430.8
37.5°	10128.4	10107.5	10219.8	10188.5	10141.5	10246.0	10259.0	10118.0	9830.7	9640.0	9078.5
40°	11053.0	11047.8	11084.3	11089.6	11076.5	11126.1	11149.6	10961.6	10776.1	10488.8	8566.6
42.5°	12040.2	12061.1	12126.4	12079.4	12142.1	12207.4	12215.2	12058.5	11792.1	10063.1	9099.4
45°	13226.0	13291.3	13335.7	13325.2	13354.0	13448.0	13455.8	13372.2	13111.1	10901.5	10065.7
47.5°	14586.7	14649.4	14662.4	14746.0	14719.9	14853.1	14834.8	14837.4	14558.0	12069.0	11118.3
50°	16151.2	16179.9	16287.0	16334.0	16268.7	16448.9	16401.9	16459.3	16114.6	13406.2	12249.2
52.5°	17812.2	17861.9	17906.3	18083.9	18000.3	18157.0	18094.3	18227.5	17827.9	14766.9	13505.4
55°	19700.5	19708.4	19784.1	19964.3	19854.6	20042.7	19951.3	20000.9	19682.3	16271.3	14813.9
57.5°	21701.2	21675.0	21703.8	21847.4	21748.2	21889.2	21852.6	21899.6	21601.9	17854.0	15769.8
60°	23680.9	23641.7	23683.5	23780.1	23644.3	23887.2	23756.6	23801.0	23479.8	19470.7	17133.2
62.5°	25671.0	25642.3	25595.3	25691.9	25493.4	25618.8	25673.6	25600.5	25318.4	20933.3	18318.9
65°	27807.5	27778.7	27606.4	27666.4	27311.2	27251.2	27272.0	27295.6	27107.5	22382.8	19619.6
67.5°	30403.6	30361.8	30037.9	29630.5	29118.6	29006.3	29016.7	29079.4	29105.5	24247.6	21142.2
68°	30696.1	30620.3	30259.9	29787.2	29251.8	29121.2	29108.1	29121.2	29134.2	24263.3	21126.6
70°	29949.1	29920.4	29646.1	29074.2	28525.7	28212.3	27940.7	27930.2	27804.8	23022.7	19959.1
72.5°	26577.3	26540.8	26214.3	25809.5	25469.9	24978.9	24626.3	24647.2	24440.9	20348.3	17470.1
75°	21507.9	21505.3	21113.5	20774.0	20779.2	20742.6	20625.1	20831.4	20617.3	17258.5	14900.1
77.5°	14988.9	15041.2	15015.0	14816.5	15096.0	15482.5	15903.0	16300.0	16177.3	13633.4	11880.9
80°	7830.1	7976.3	8493.5	8517.0	8712.8	9088.9	9376.2	9642.6	9660.9	7736.0	6863.7
82.5°	2081.6	2126.0	2301.0	2251.3	2235.7	2311.4	2374.1	2381.9	2387.2	2016.3	1883.1
85°	647.7	666.0	645.1	616.4	572.0	522.4	509.3	415.3	329.1	271.6	237.7
87.5°	459.7	491.0	444.0	417.9	370.9	352.6	316.0	248.1	193.3	135.8	91.4
90°	237.7	242.9	216.8	185.4	172.4	161.9	138.4	99.2	49.6	26.1	23.5
92.5°	120.1	122.8	107.1	91.4	78.4	67.9	52.2	28.7	15.7	7.8	2.6
95°	47.0	49.6	44.4	39.2	31.3	23.5	20.9	15.7	10.4	5.2	2.6
97.5°	15.7	15.7	15.7	13.1	13.1	13.1	13.1	10.4	7.8	5.2	2.6
100°	0.0	0.0	0.0	2.6	5.2	7.8	7.8	7.8	5.2	2.6	2.6
102.5°	0.0	0.0	0.0	0.0	0.0	2.6	5.2	5.2	5.2	2.6	2.6
105°	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
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	2.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	2.6
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°	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6	5505.6
2.5°	5536.9	5521.3	5529.1	5463.8	5479.5	5437.7	5526.5	5503.0	5492.5	5529.1
5°	5550.0	5492.5	5539.6	5495.2	5503.0	5442.9	5516.0	5487.3	5484.7	5505.6
7.5°	5555.2	5526.5	5570.9	5497.8	5521.3	5497.8	5552.6	5523.9	5550.0	5568.3
10°	5628.4	5612.7	5607.5	5581.3	5599.6	5547.4	5615.3	5615.3	5628.4	5678.0
12.5°	5735.4	5714.5	5701.5	5654.5	5672.8	5657.1	5711.9	5722.4	5745.9	5766.8
15°	5881.7	5845.1	5832.1	5790.3	5803.3	5800.7	5839.9	5842.5	5894.8	5892.1
17.5°	6069.7	6017.5	6033.2	6001.8	6004.4	5983.6	5962.7	5962.7	6009.7	6020.1
20°	6294.4	5996.6	5604.8	5385.5	5346.3	5375.0	5487.3	5672.8	5440.3	5505.6
22.5°	5889.5	5620.5	5602.2	5552.6	5521.3	4821.3	4641.1	4583.6	4884.0	5401.1
25°	5941.8	5826.8	5792.9	5730.2	4805.6	4797.8	4745.6	4659.4	3808.0	3789.7
27.5°	6218.6	6106.3	6051.5	5019.8	4998.9	4996.3	4918.0	4053.5	3857.6	3883.7
30°	6542.5	6411.9	5429.9	5273.2	5254.9	5213.1	4763.9	4003.8	4001.2	4003.8
32.5°	6916.0	6482.4	5586.6	5578.7	5589.2	5461.2	4220.6	4204.9	4202.3	4228.4
35°	7427.9	6014.9	5978.3	6017.5	5962.7	4722.1	4474.0	4466.1	4468.7	4455.7
37.5°	7088.3	6485.0	6477.2	6477.2	6349.2	4831.8	4782.1	4818.7	4813.5	4795.2
40°	7232.0	7054.4	7007.4	6991.7	5367.2	5213.1	5184.4	5231.4	5239.2	5252.3
42.5°	7929.3	7767.4	7743.9	7558.4	5839.9	5790.3	5701.5	5751.1	5745.9	5761.6
45°	8786.0	8676.3	8574.4	6552.9	6477.2	6414.5	6323.1	6380.5	6396.2	6385.8
47.5°	9783.7	9663.5	8927.0	7205.9	7203.2	7153.6	7051.8	7098.8	7090.9	7090.9
50°	10786.6	10656.0	8109.5	8036.4	8010.3	7931.9	7848.4	7856.2	7858.8	7884.9
52.5°	11907.0	9517.3	8976.6	8830.4	8851.3	8799.0	8718.1	6599.9	8678.9	8702.4
55°	11128.7	9961.3	9929.9	9736.7	9786.3	9718.4	9666.1	6511.1	8631.9	9538.2
57.5°	11003.4	10919.8	10893.7	10695.2	10757.9	10112.8	10595.9	7124.9	5970.5	4361.6
60°	11961.9	11873.1	11857.4	11682.4	11677.2	8036.4	9632.2	4886.6	3818.4	3844.5
62.5°	12891.7	12748.0	12787.2	12580.9	8869.6	4897.1	4317.2	109.7	175.0	185.4
65°	13928.5	13688.3	13727.4	13536.8	9149.0	5163.5	4667.2	57.5	49.6	47.0
67.5°	14926.2	14505.7	14304.6	14103.5	9501.6	5437.7	4863.1	15.7	0.0	0.0
68°	14876.6	14432.6	14226.3	14035.6	9465.0	5429.9	4852.7	15.7	0.0	0.0
70°	14038.2	13638.6	13442.8	13296.5	9036.7	5244.4	4656.8	15.7	0.0	0.0
72.5°	12272.7	12050.7	11925.3	11797.3	8028.6	4690.7	4176.2	15.7	0.0	0.0
75°	10428.8	10366.1	10287.7	10005.7	6691.3	3839.3	3431.9	15.7	0.0	0.0
77.5°	8263.6	8261.0	8070.4	7738.7	5038.1	2818.1	2530.8	13.1	0.0	0.0
80°	4468.7	4870.9	4724.7	4554.9	2857.3	1533.1	1460.0	10.4	0.0	0.0
82.5°	1256.3	1188.4	1141.3	1068.2	600.7	334.3	326.5	10.4	0.0	0.0
85°	175.0	193.3	214.2	242.9	138.4	88.8	78.4	5.2	0.0	0.0
87.5°	99.2	112.3	138.4	143.6	52.2	41.8	13.1	0.0	0.0	0.0
90°	20.9	23.5	26.1	26.1	10.4	10.4	0.0	0.0	0.0	0.0
92.5°	0.0	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.6	2.6	2.6	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°
110°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.6	2.6	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)