

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: P579519

Luminaire Tested: **CST-CA8-480-740-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579519
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
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-EX90
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: 58595 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G5

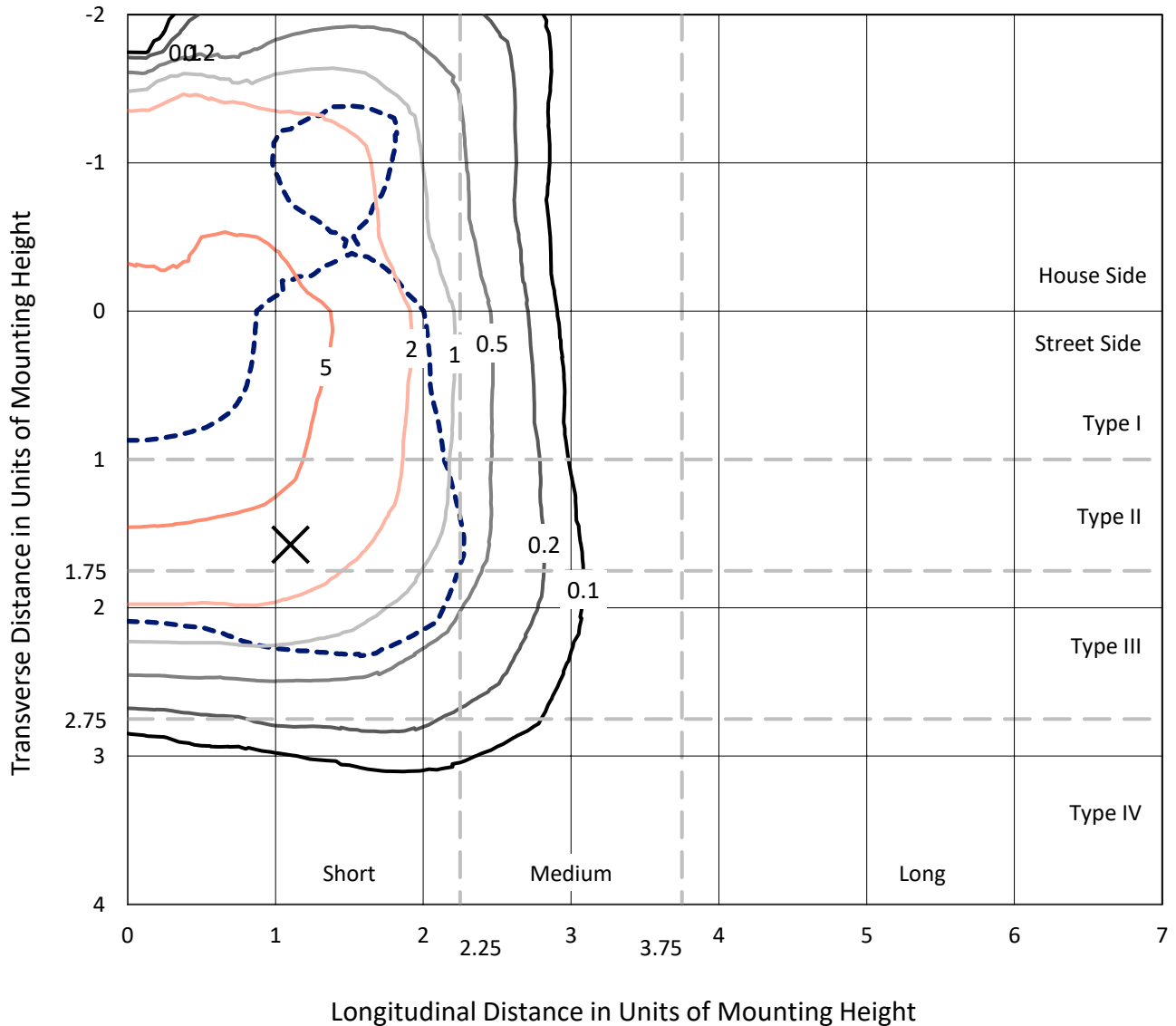
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

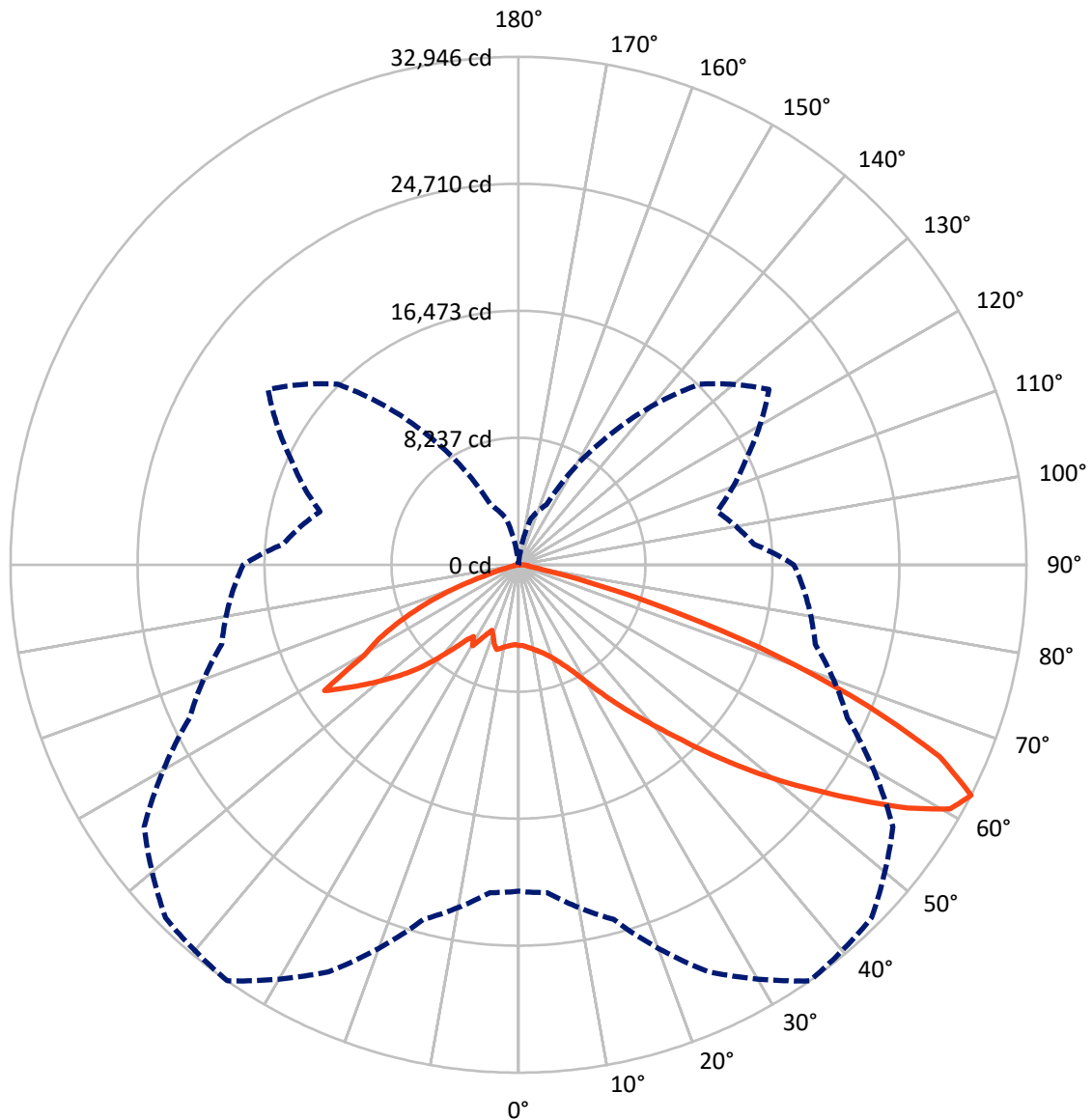
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 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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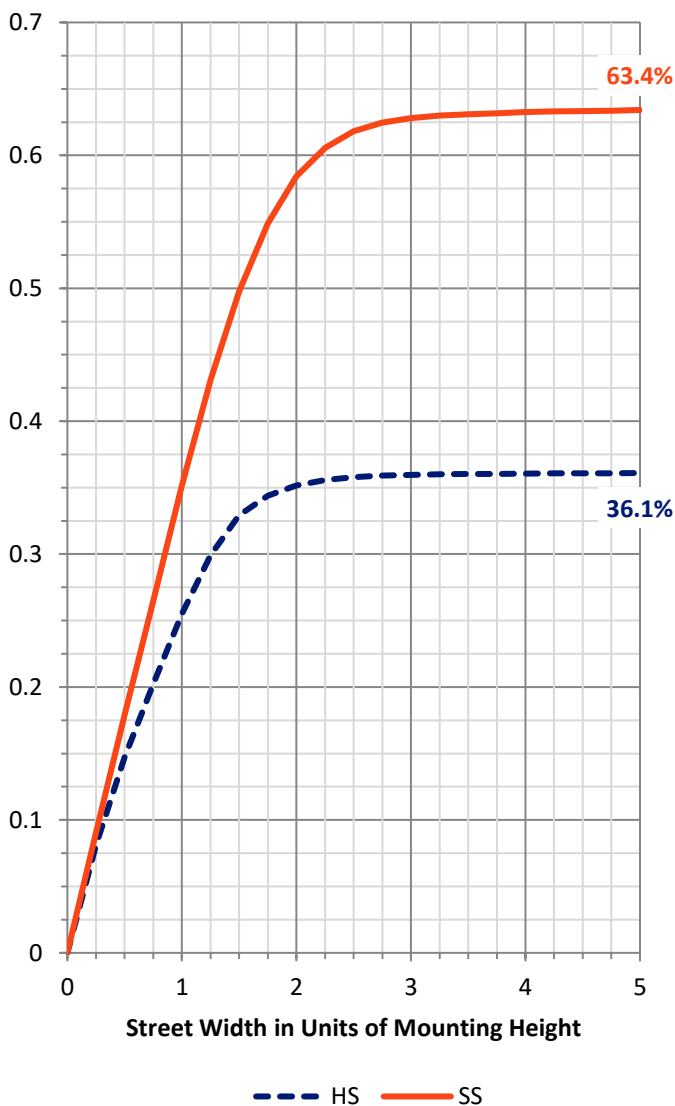
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21268.6	0.0	21268.6
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	37298.6	27.8	37326.4
	% Fixture	63.7	0.0	63.7
Total	Lumens	58567.2	27.8	58595.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.4	0.9
10°-20°	1665.9	2.8
20°-30°	3204.9	5.5
30°-40°	6393.5	10.9
40°-50°	11674.2	19.9
50°-60°	17445.3	29.8
60°-70°	14617.5	24.9
70°-80°	2735.5	4.7
80°-90°	314.9	0.5
90°-100°	25.1	0.0
100°-110°	2.7	0.0
110°-120°	0.1	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°	58567.2	100.0
0°-180°	58595.0	100.0

Coefficient of Utilization

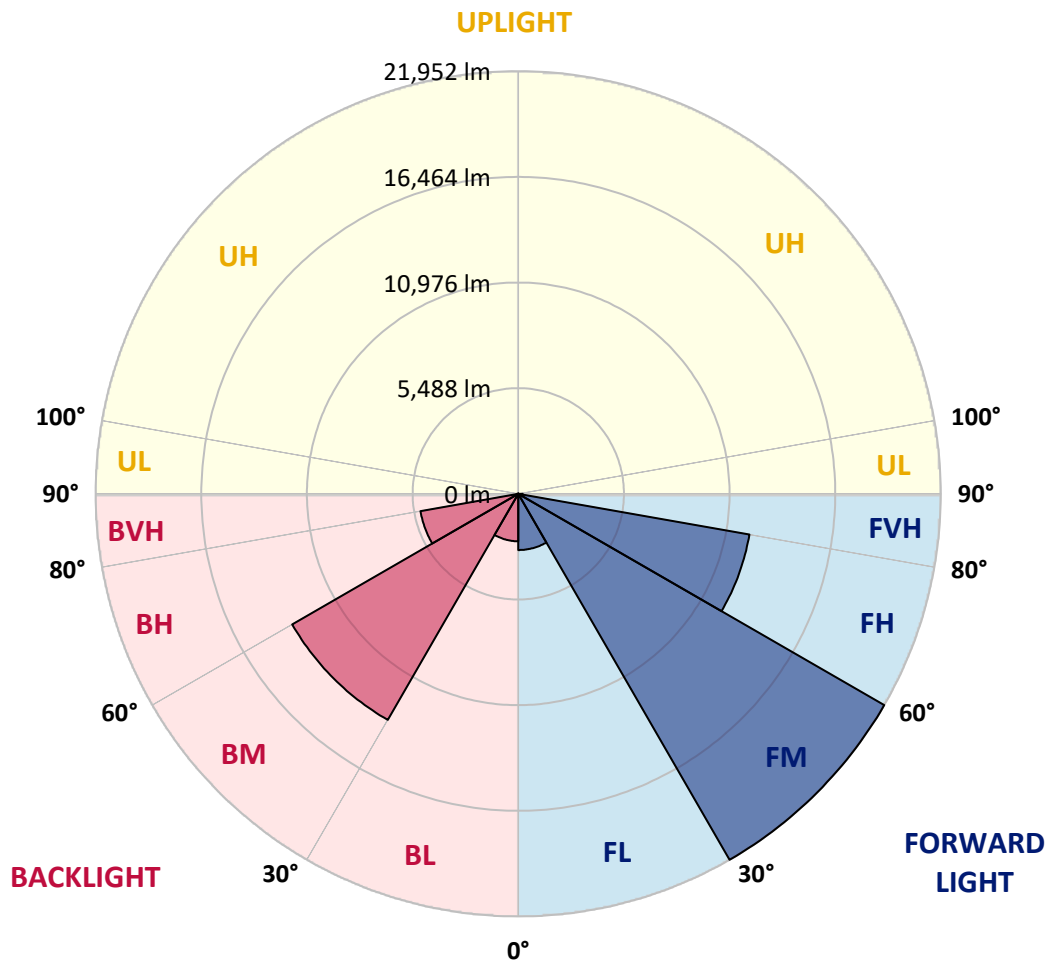


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2921.7	5.0			
FM (30°-60°)	21952.4	37.5			
FH (60°-80°)	12195.3	20.8			G5
FVH (80°-90°)	229.3	0.4			G3/500
BL (0°-30°)	2464.6	4.2	B3/2500		
BM (30°-60°)	13560.6	23.1	B5		
BH (60°-80°)	5157.8	8.8	B5		G5
BVH (80°-90°)	85.6	0.1			G1/100
UL (90°-100°)	25.1	0.0		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°	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9
2.5°	5354.9	5311.0	5317.6	5348.3	5251.7	5291.2	5249.5	5289.0	5275.8	5293.4	5306.6
5°	5431.8	5376.9	5381.3	5416.4	5341.7	5374.7	5332.9	5359.3	5337.3	5361.5	5363.7
7.5°	5537.2	5491.1	5484.5	5519.6	5455.9	5484.5	5442.8	5455.9	5434.0	5462.5	5453.7
10°	5677.8	5636.0	5625.1	5649.2	5598.7	5614.1	5570.1	5587.7	5554.8	5587.7	5572.3
12.5°	5833.7	5778.8	5781.0	5807.4	5756.8	5767.8	5732.7	5752.4	5712.9	5748.1	5737.1
15°	6018.2	5939.1	5954.5	5983.1	5934.8	5967.7	5926.0	5954.5	5917.2	5954.5	5941.3
17.5°	6257.6	6167.6	6178.6	6224.7	6185.1	6237.9	6189.5	6224.7	6207.1	6231.3	6226.9
20°	6560.7	6501.4	6490.4	6547.6	6490.4	6556.3	6530.0	6591.5	6595.9	6620.0	6631.0
22.5°	6964.9	6925.3	6899.0	6938.5	6888.0	6934.1	6971.5	7076.9	7116.4	7180.1	7184.5
25°	7503.0	7500.8	7441.5	7443.7	7380.0	7441.5	7546.9	7711.7	7817.1	7898.4	7867.6
27.5°	8230.0	8243.2	8153.1	8118.0	8043.3	8135.6	8353.0	8557.3	8748.4	8862.6	8862.6
30°	9178.9	9192.1	9060.3	8990.0	8921.9	9082.2	9341.4	9607.2	9879.5	10044.3	10006.9
32.5°	10435.2	10393.5	10204.6	10077.2	9960.8	10145.3	10444.0	10744.9	11116.1	11353.3	11324.8
35°	11959.6	11808.0	11619.1	11381.9	11131.5	11276.5	11557.6	11935.4	12451.6	12807.4	12717.3
37.5°	13729.9	13580.5	13257.6	12849.1	12412.0	12429.6	12651.4	13306.0	13951.7	14241.6	14180.1
40°	15568.3	15451.9	15155.4	14630.4	13839.7	13657.4	14022.0	14810.5	15427.7	15792.3	15689.1
42.5°	17441.8	17323.2	17099.2	16572.1	15524.4	15085.1	15465.1	16323.9	16982.8	17340.8	17222.2
45°	19311.0	19174.8	18996.9	18531.3	17531.9	16888.3	17101.4	17889.9	18491.7	18898.1	18654.3
47.5°	20953.9	20863.9	20743.1	20554.2	19680.0	18968.4	18953.0	19473.5	19888.7	20156.6	19857.9
50°	22383.8	22320.1	22388.2	22348.7	22030.2	21382.2	20984.7	20949.5	21083.5	21279.0	20852.9
52.5°	23666.5	23554.5	23807.1	24121.2	24356.2	24224.4	22937.3	22214.7	22067.5	22133.4	21650.2
55°	24716.4	24663.7	25087.6	25876.1	26963.4	27253.3	24942.7	23444.7	22902.2	22867.0	22317.9
57.5°	25357.8	25432.5	26280.3	27782.6	29777.0	29869.2	27404.8	24760.3	23714.8	23337.1	22704.5
60°	24336.4	24624.2	26071.6	29170.8	32164.5	32221.6	29212.5	25002.0	22700.1	21854.5	21070.3
62.5°	21178.0	21349.3	23811.5	29124.7	32946.4	32388.5	29643.0	23543.5	19930.4	18581.8	17857.0
65°	14918.1	15238.8	17876.7	26203.4	30023.0	30093.3	27194.0	20356.5	15915.3	14424.0	13956.1
67.5°	9009.8	9317.3	12126.5	18915.6	24406.7	25195.2	22684.7	15412.3	11412.6	9528.1	9055.9
70°	2925.6	3259.5	5526.2	11149.1	17953.6	19844.7	17070.6	10031.1	5976.5	4186.4	3679.0
72.5°	1111.4	1212.4	1798.9	4869.5	11182.0	13248.9	10558.2	5032.0	1851.6	1102.6	968.6
75°	722.6	738.0	841.2	1706.6	5392.2	7294.3	5089.1	1473.8	742.4	658.9	610.6
77.5°	621.6	632.6	676.5	850.0	1717.6	2789.5	1460.6	753.4	619.4	549.1	516.2
80°	586.4	590.8	619.4	720.4	803.9	931.3	702.9	630.4	540.3	516.2	492.0
82.5°	555.7	571.1	586.4	654.5	652.3	669.9	564.5	494.2	459.1	483.2	474.4
85°	518.4	527.1	538.1	584.3	531.5	450.3	434.9	340.4	331.7	353.6	331.7
87.5°	364.6	386.6	373.4	393.2	369.0	287.7	243.8	193.3	153.8	127.4	123.0
90°	149.4	151.6	142.8	131.8	116.4	96.6	76.9	48.3	22.0	11.0	4.4
92.5°	116.4	116.4	112.0	101.0	87.9	72.5	54.9	30.8	15.4	6.6	2.2
95°	72.5	74.7	70.3	63.7	54.9	43.9	32.9	17.6	11.0	4.4	2.2
97.5°	46.1	46.1	41.7	37.3	30.8	22.0	15.4	13.2	8.8	4.4	0.0
100°	26.4	26.4	24.2	19.8	15.4	11.0	11.0	8.8	6.6	2.2	0.0
102.5°	15.4	15.4	11.0	8.8	6.6	6.6	6.6	6.6	4.4	2.2	0.0
105°	6.6	6.6	4.4	4.4	2.2	2.2	4.4	4.4	4.4	2.2	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.4	4.4	2.2	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	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°	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9	5242.9
2.5°	5297.8	5258.3	5264.8	5227.5	5220.9	5183.6	5258.3	5267.0	5245.1	5264.8
5°	5359.3	5311.0	5326.3	5284.6	5278.0	5227.5	5293.4	5289.0	5271.4	5291.2
7.5°	5451.5	5401.0	5409.8	5363.7	5354.9	5300.0	5361.5	5341.7	5324.1	5348.3
10°	5581.1	5524.0	5528.4	5469.1	5475.7	5403.2	5477.9	5442.8	5420.8	5453.7
12.5°	5737.1	5673.4	5675.6	5614.1	5611.9	5541.6	5607.5	5587.7	5554.8	5605.3
15°	5939.1	5866.7	5860.1	5778.8	5756.8	5677.8	5739.3	5701.9	5680.0	5752.4
17.5°	6222.5	6141.2	6117.1	6018.2	5607.5	5370.3	5699.7	5811.8	5675.6	5653.6
20°	6600.3	6532.2	6477.3	6327.9	5638.2	4898.0	4351.1	4355.5	4931.0	5196.8
22.5°	7112.0	7030.8	6927.5	6714.5	5172.6	4588.3	4590.5	4583.9	3933.8	3659.3
25°	7812.7	7713.9	7503.0	6299.4	5491.1	4950.8	4937.6	4294.0	3936.0	3955.8
27.5°	8759.4	8557.3	7322.9	6824.3	6057.8	5420.8	5104.5	4322.6	4366.5	4397.3
30°	9963.0	9150.3	7913.7	7617.2	6738.6	6044.6	4720.1	4827.8	4915.6	4935.4
32.5°	11197.4	9176.7	8858.2	8544.1	7577.7	5499.9	5319.8	5524.0	5616.3	5627.3
35°	11186.4	10301.3	9890.5	9536.9	8355.2	5884.2	5998.4	6312.5	6547.6	6536.6
37.5°	11838.8	11542.2	11052.4	10604.4	7520.6	6628.8	6833.1	7188.9	7474.4	7465.7
40°	13202.7	12860.1	12341.7	11401.7	8326.7	7481.0	7766.6	8148.8	8350.8	8361.8
42.5°	14492.0	14208.7	13679.4	10652.7	9334.8	8506.8	8765.9	9022.9	9148.1	9187.7
45°	15774.8	15572.7	13811.1	11772.9	10553.8	9539.1	9710.4	9758.7	9890.5	9875.1
47.5°	16815.9	16591.8	13279.6	13178.6	12032.0	10518.7	10505.5	10441.8	10490.1	10501.1
50°	17766.9	15067.5	14347.1	14683.1	13582.7	11518.1	11267.7	11138.1	11072.2	11043.6
52.5°	18518.1	15071.9	15344.3	16238.2	15333.3	12603.1	12065.0	11700.4	10244.1	11384.1
55°	19157.3	15693.5	16288.7	17900.9	16842.2	13738.7	12785.4	12135.3	6837.5	5482.3
57.5°	19524.1	16165.7	17224.4	19458.2	18160.1	15001.6	11770.7	10178.3	3865.7	3861.3
60°	18107.4	15317.9	17198.0	20275.2	17780.1	11636.7	4792.6	4010.7	731.4	751.2
62.5°	15328.9	13325.7	16310.7	19827.2	16558.9	10237.6	4298.4	3088.2	24.2	19.8
65°	11876.1	10630.7	13734.3	17439.6	15065.3	8541.9	3204.6	2225.0	6.6	0.0
67.5°	7768.8	7492.0	10134.3	14461.3	12286.8	6617.8	2150.3	1065.3	4.4	0.0
70°	3312.2	3837.2	6420.2	10485.8	9405.1	4553.2	1036.7	384.4	2.2	0.0
72.5°	926.9	1227.8	2857.6	6143.4	5915.0	2394.1	404.1	162.5	2.2	0.0
75°	549.1	472.2	819.3	2451.2	2879.5	841.2	186.7	125.2	2.2	0.0
77.5°	456.9	369.0	470.0	626.0	872.0	303.1	158.1	112.0	0.0	0.0
80°	428.3	327.3	406.3	437.1	430.5	252.6	155.9	112.0	0.0	0.0
82.5°	406.3	285.5	336.1	336.1	360.2	232.8	147.2	109.8	0.0	0.0
85°	305.3	199.9	224.0	289.9	259.2	164.7	107.6	87.9	0.0	0.0
87.5°	116.4	72.5	87.9	92.3	74.7	37.3	8.8	8.8	0.0	0.0
90°	2.2	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)