

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: P522156

Luminaire Tested: **CST-CA10-630-750-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-750-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 72387 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

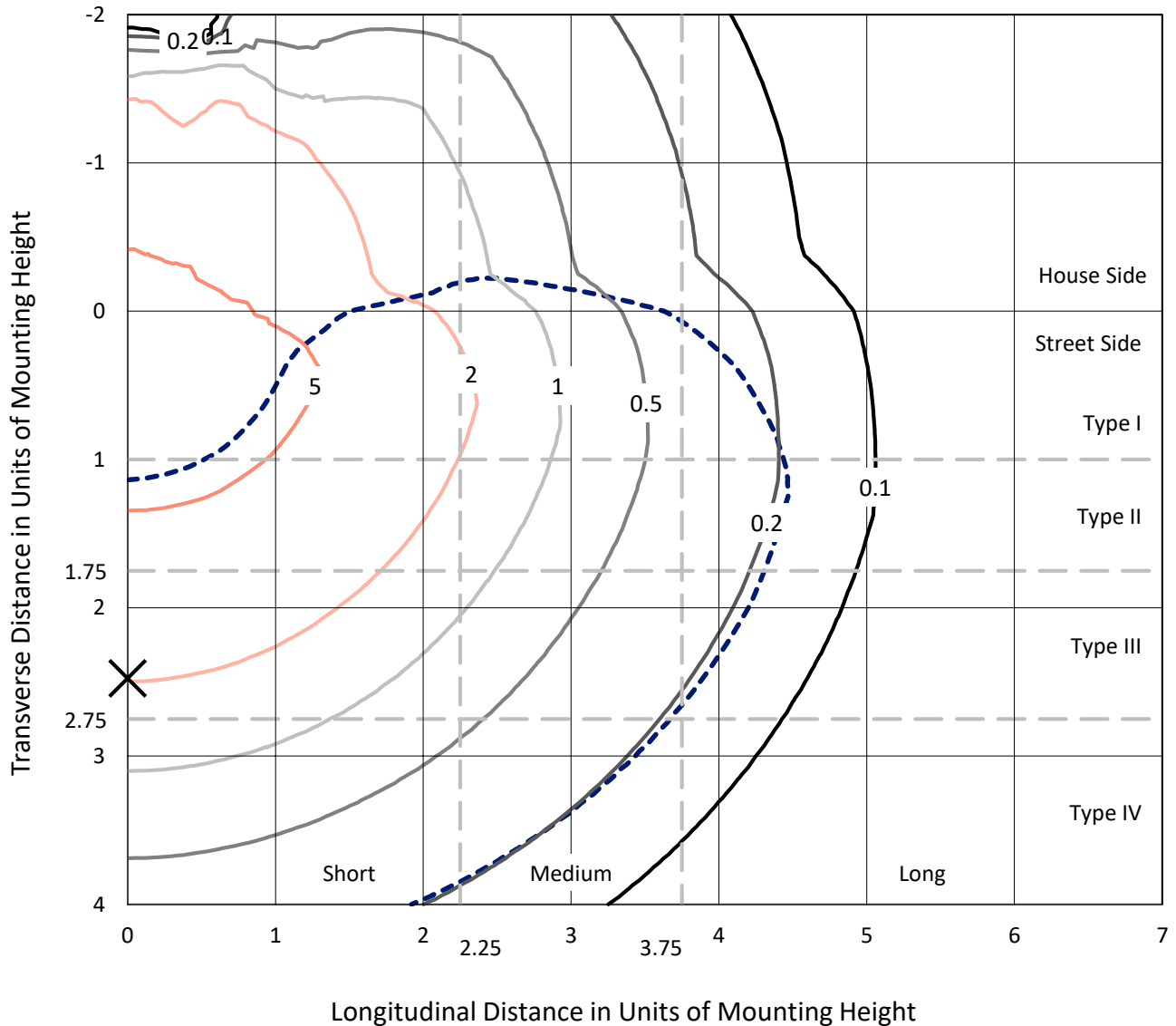
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

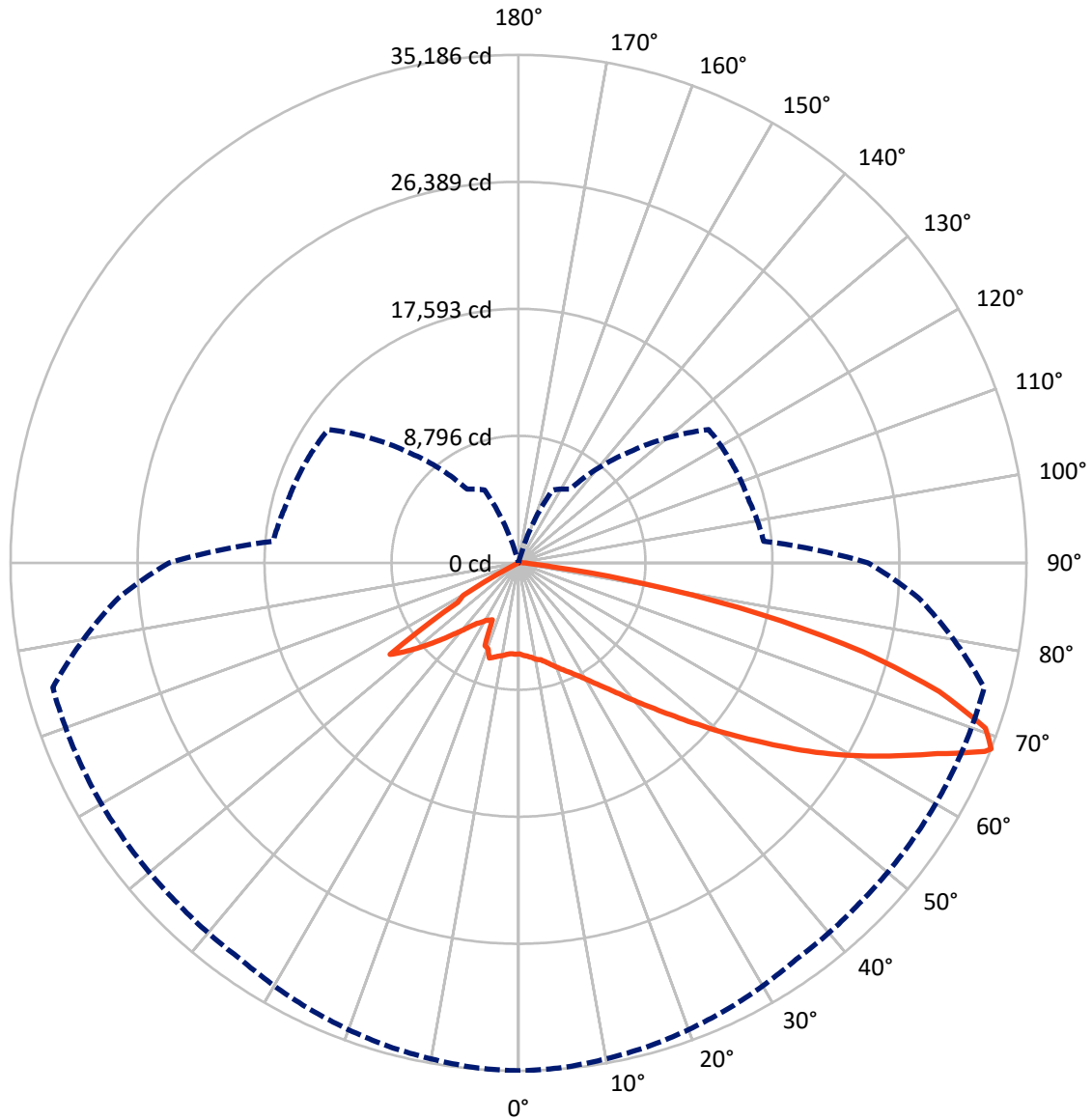
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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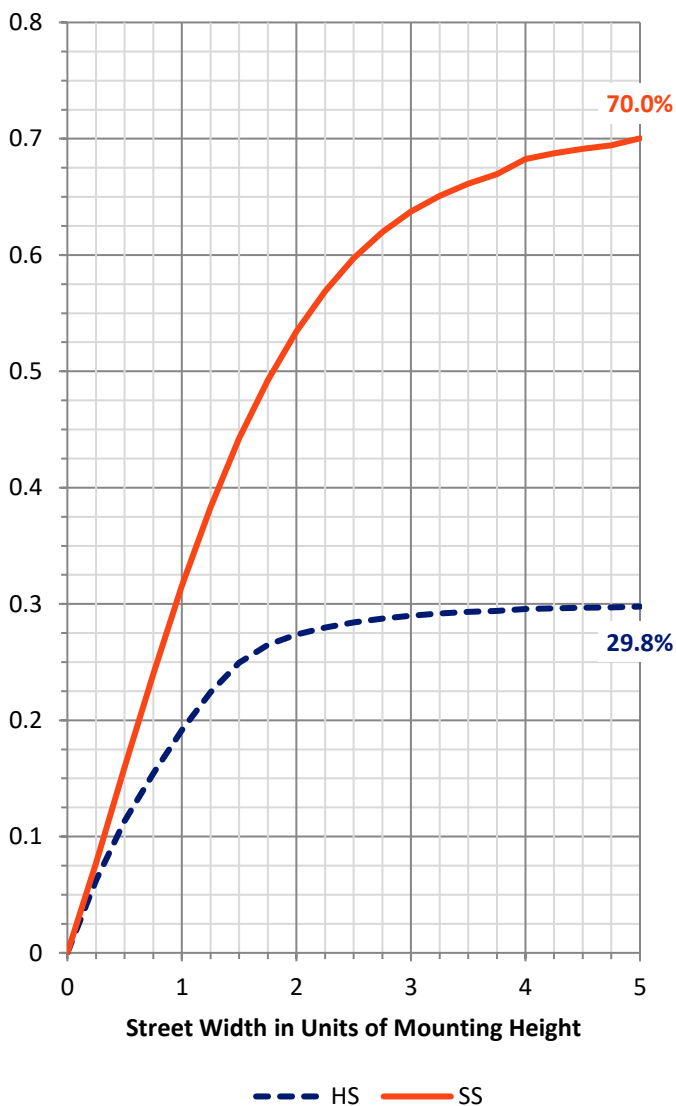
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21577.8	3.4	21581.1
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	50776.3	29.6	50805.9
	% Fixture	70.1	0.0	70.2
Total	Lumens	72354.0	33.0	72387.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	612.5	0.8
10°-20°	1949.4	2.7
20°-30°	3339.1	4.6
30°-40°	5416.8	7.5
40°-50°	9135.2	12.6
50°-60°	14890.6	20.6
60°-70°	19970.7	27.6
70°-80°	15512.1	21.4
80°-90°	1527.7	2.1
90°-100°	29.0	0.0
100°-110°	1.7	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°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	72354.0	100.0
0°-180°	72387.0	100.0

Coefficient of Utilization

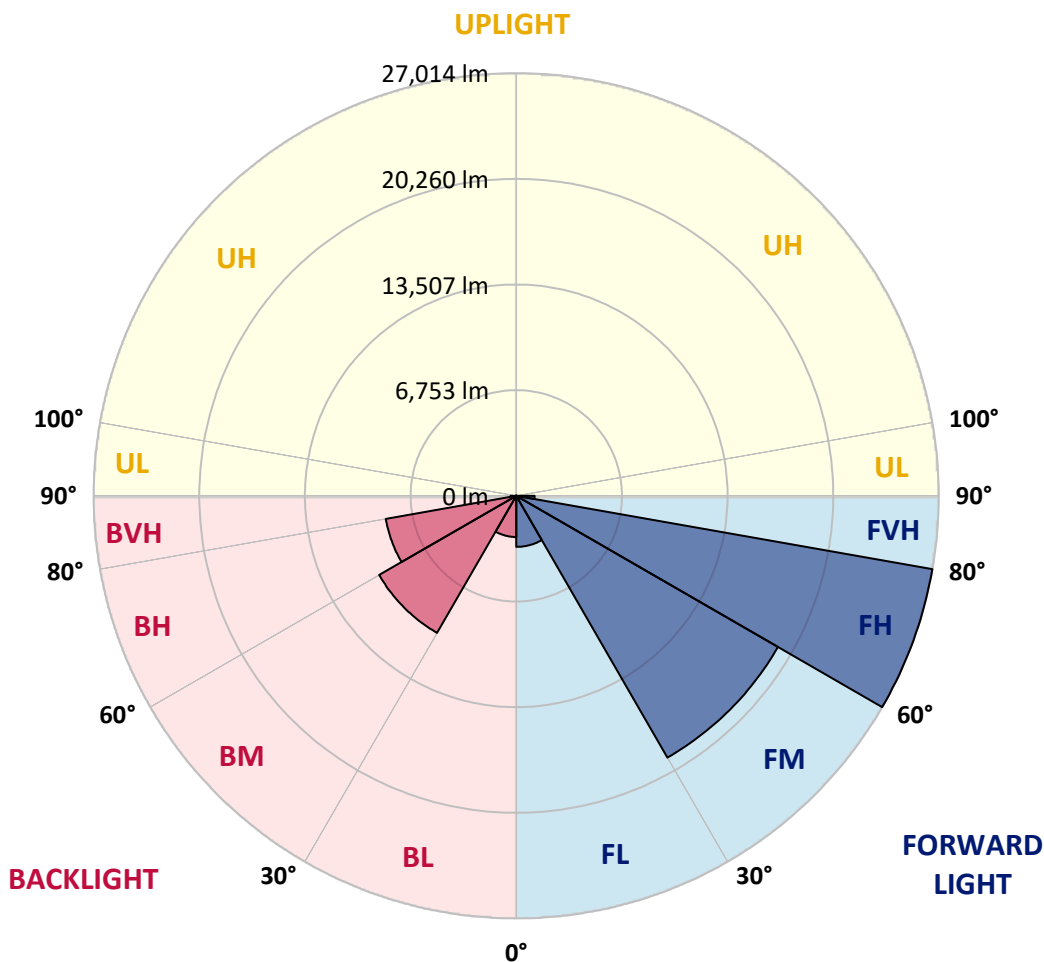


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3265.1	4.5			
FM (30°-60°)	19322.6	26.7			
FH (60°-80°)	27014.0	37.3			G5
FVH (80°-90°)	1174.6	1.6			G5
BL (0°-30°)	2636.0	3.6	B4/5000		
BM (30°-60°)	10119.9	14.0	B5		
BH (60°-80°)	8468.8	11.7	B5		G5
BVH (80°-90°)	353.1	0.5			G3/500
UL (90°-100°)	29.0	0.0		U2/50	
UH (100°-180°)	4.0	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°	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8
2.5°	6415.6	6397.6	6394.6	6430.6	6316.8	6373.7	6322.8	6364.7	6337.8	6358.7	6361.7
5°	6502.4	6469.5	6448.5	6490.4	6418.6	6445.5	6388.6	6406.6	6331.8	6373.7	6379.7
7.5°	6628.1	6574.3	6568.3	6580.2	6517.4	6538.3	6445.5	6466.5	6412.6	6388.6	6409.6
10°	6798.8	6747.9	6709.0	6735.9	6652.1	6664.1	6565.3	6568.3	6529.4	6484.4	6520.4
12.5°	6894.6	6900.6	6882.6	6903.6	6834.7	6795.8	6726.9	6703.0	6664.1	6610.2	6592.2
15°	7134.1	7122.1	7086.2	7119.1	7110.1	7074.2	6990.4	6936.5	6852.7	6822.7	6792.8
17.5°	7427.5	7388.6	7358.6	7400.5	7445.4	7370.6	7289.8	7214.9	7104.2	7044.3	7008.4
20°	7735.8	7708.9	7678.9	7744.8	7759.8	7702.9	7643.0	7532.3	7403.5	7325.7	7250.8
22.5°	8080.1	8026.2	8035.2	8122.0	8095.1	8068.1	7990.3	7900.5	7744.8	7646.0	7430.5
25°	8436.4	8406.4	8448.3	8487.3	8466.3	8409.4	8370.5	8304.6	8131.0	8011.3	7696.9
27.5°	8879.4	8831.5	8885.4	8900.4	8882.4	8867.5	8813.6	8762.7	8574.1	8439.4	8047.2
30°	9400.4	9343.5	9430.3	9409.3	9391.4	9403.3	9370.4	9259.6	9092.0	8909.4	8517.2
32.5°	10020.1	9945.2	10044.0	9999.1	9957.2	10041.0	9963.2	9858.4	9660.8	9448.3	9065.1
35°	10738.6	10741.5	10792.4	10717.6	10702.6	10792.4	10741.5	10612.8	10430.2	10208.7	9663.8
37.5°	11609.7	11585.8	11714.5	11678.6	11624.7	11744.5	11759.4	11597.8	11268.4	11049.9	10406.2
40°	12669.5	12663.5	12705.4	12711.4	12696.5	12753.3	12780.3	12564.7	12352.2	12022.9	9819.5
42.5°	13801.2	13825.1	13899.9	13846.1	13917.9	13992.8	14001.7	13822.1	13516.7	11534.9	10430.2
45°	15160.3	15235.2	15286.0	15274.1	15307.0	15414.8	15423.8	15328.0	15028.6	12495.9	11537.9
47.5°	16720.1	16791.9	16806.9	16902.7	16872.7	17025.4	17004.5	17007.4	16687.1	13834.1	12744.4
50°	18513.3	18546.2	18669.0	18722.9	18648.0	18854.6	18800.7	18866.6	18471.4	15366.9	14040.7
52.5°	20417.3	20474.2	20525.1	20728.7	20632.9	20812.5	20740.6	20893.3	20435.3	16926.6	15480.6
55°	22581.8	22590.8	22677.6	22884.2	22758.4	22974.0	22869.2	22926.1	22560.8	18651.0	16980.5
57.5°	24875.0	24845.1	24878.0	25042.7	24928.9	25090.6	25048.6	25102.5	24761.2	20465.2	18076.2
60°	27144.3	27099.4	27147.3	27258.0	27102.3	27380.8	27231.1	27282.0	26913.7	22318.3	19638.9
62.5°	29425.5	29392.6	29338.7	29449.4	29221.9	29365.6	29428.5	29344.7	29021.3	23994.8	20998.1
65°	31874.4	31841.4	31643.9	31712.7	31305.6	31236.7	31260.7	31287.6	31072.1	25656.4	22489.0
67.5°	34850.2	34802.3	34431.0	33964.0	33377.2	33248.5	33260.5	33332.3	33362.3	27793.9	24234.3
68°	35185.5	35098.6	34685.5	34143.6	33529.9	33380.2	33365.3	33380.2	33395.2	27811.9	24216.4
70°	34329.2	34296.3	33982.0	33326.3	32697.7	32338.4	32027.1	32015.1	31871.4	26389.8	22878.2
72.5°	30464.3	30422.4	30048.2	29584.2	29195.0	28632.2	28228.0	28251.9	28015.4	23324.2	20025.1
75°	24653.5	24650.5	24201.4	23812.2	23818.2	23776.3	23641.6	23878.1	23632.6	19782.6	17079.3
77.5°	17181.1	17241.0	17211.0	16983.5	17303.8	17746.9	18228.9	18683.9	18543.2	15627.3	13618.5
80°	8975.2	9142.9	9735.6	9762.6	9987.1	10418.2	10747.5	11052.9	11073.9	8867.5	7867.6
82.5°	2386.0	2436.9	2637.5	2580.6	2562.6	2649.5	2721.3	2730.3	2736.3	2311.2	2158.5
85°	742.4	763.4	739.5	706.5	655.6	598.7	583.8	476.0	377.2	311.3	272.4
87.5°	526.9	562.8	508.9	479.0	425.1	404.2	362.2	284.4	221.5	155.7	104.8
90°	272.4	278.4	248.5	212.6	197.6	185.6	158.7	113.8	56.9	29.9	26.9
92.5°	137.7	140.7	122.7	104.8	89.8	77.8	59.9	32.9	18.0	9.0	3.0
95°	53.9	56.9	50.9	44.9	35.9	26.9	23.9	18.0	12.0	6.0	3.0
97.5°	18.0	18.0	18.0	15.0	15.0	15.0	15.0	12.0	9.0	6.0	3.0
100°	0.0	0.0	0.0	3.0	6.0	9.0	9.0	9.0	6.0	3.0	3.0
102.5°	0.0	0.0	0.0	0.0	0.0	3.0	6.0	6.0	6.0	3.0	3.0
105°	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0



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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	3.0	3.0	3.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
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	3.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0
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°	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8	6310.8
2.5°	6346.7	6328.8	6337.8	6262.9	6280.9	6233.0	6334.8	6307.8	6295.8	6337.8
5°	6361.7	6295.8	6349.7	6298.8	6307.8	6239.0	6322.8	6289.9	6286.9	6310.8
7.5°	6367.7	6334.8	6385.7	6301.8	6328.8	6301.8	6364.7	6331.8	6361.7	6382.7
10°	6451.5	6433.6	6427.6	6397.6	6418.6	6358.7	6436.5	6436.5	6451.5	6508.4
12.5°	6574.3	6550.3	6535.3	6481.5	6502.4	6484.4	6547.3	6559.3	6586.2	6610.2
15°	6741.9	6700.0	6685.0	6637.1	6652.1	6649.1	6694.0	6697.0	6756.9	6753.9
17.5°	6957.5	6897.6	6915.5	6879.6	6882.6	6858.7	6834.7	6834.7	6888.6	6900.6
20°	7214.9	6873.6	6424.6	6173.1	6128.2	6161.1	6289.9	6502.4	6236.0	6310.8
22.5°	6750.9	6442.5	6421.6	6364.7	6328.8	5526.4	5319.9	5254.0	5598.3	6191.1
25°	6810.8	6679.0	6640.1	6568.3	5508.5	5499.5	5439.6	5340.8	4364.9	4343.9
27.5°	7128.1	6999.4	6936.5	5754.0	5730.0	5727.0	5637.2	4646.3	4421.8	4451.7
30°	7499.3	7349.6	6224.0	6044.4	6023.4	5975.5	5460.6	4589.4	4586.4	4589.4
32.5°	7927.4	7430.5	6403.6	6394.6	6406.6	6259.9	4837.9	4819.9	4816.9	4846.9
35°	8514.2	6894.6	6852.7	6897.6	6834.7	5412.7	5128.3	5119.3	5122.3	5107.3
37.5°	8125.0	7433.5	7424.5	7424.5	7277.8	5538.4	5481.5	5523.5	5517.5	5496.5
40°	8289.7	8086.1	8032.2	8014.2	6152.1	5975.5	5942.6	5996.5	6005.4	6020.4
42.5°	9089.0	8903.4	8876.4	8663.9	6694.0	6637.1	6535.3	6592.2	6586.2	6604.2
45°	10070.9	9945.2	9828.5	7511.3	7424.5	7352.6	7247.8	7313.7	7331.7	7319.7
47.5°	11214.6	11076.8	10232.6	8259.7	8256.7	8199.9	8083.1	8137.0	8128.0	8128.0
50°	12364.2	12214.5	9295.6	9211.7	9181.8	9092.0	8996.2	9005.2	9008.2	9038.1
52.5°	13648.5	10909.2	10289.5	10121.8	10145.8	10085.9	9993.1	7565.2	9948.2	9975.1
55°	12756.3	11418.1	11382.2	11160.7	11217.6	11139.7	11079.8	7463.4	9894.3	10933.1
57.5°	12612.6	12516.8	12486.9	12259.4	12331.2	11591.8	12145.6	8166.9	6843.7	4999.5
60°	13711.3	13609.6	13591.6	13391.0	13385.0	9211.7	11040.9	5601.3	4376.9	4406.8
62.5°	14777.1	14612.5	14657.4	14420.9	10166.7	5613.3	4948.7	125.7	200.6	212.6
65°	15965.6	15690.2	15735.1	15516.6	10487.1	5918.6	5349.8	65.9	56.9	53.9
67.5°	17109.2	16627.2	16396.7	16166.2	10891.2	6233.0	5574.3	18.0	0.0	0.0
68°	17052.4	16543.4	16306.9	16088.4	10849.3	6224.0	5562.4	18.0	0.0	0.0
70°	16091.4	15633.3	15408.8	15241.1	10358.3	6011.4	5337.8	18.0	0.0	0.0
72.5°	14067.6	13813.1	13669.4	13522.7	9202.8	5376.8	4787.0	18.0	0.0	0.0
75°	11954.0	11882.2	11792.4	11469.0	7670.0	4400.8	3933.8	18.0	0.0	0.0
77.5°	9472.2	9469.2	9250.7	8870.5	5774.9	3230.2	2900.9	15.0	0.0	0.0
80°	5122.3	5583.3	5415.7	5221.1	3275.2	1757.3	1673.5	12.0	0.0	0.0
82.5°	1440.0	1362.2	1308.3	1224.4	688.6	383.2	374.2	12.0	0.0	0.0
85°	200.6	221.5	245.5	278.4	158.7	101.8	89.8	6.0	0.0	0.0
87.5°	113.8	128.7	158.7	164.7	59.9	47.9	15.0	0.0	0.0	0.0
90°	23.9	26.9	29.9	29.9	12.0	12.0	0.0	0.0	0.0	0.0
92.5°	0.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	3.0	3.0	3.0	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°
110°	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	3.0	3.0	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)