

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: P522157

Luminaire Tested: **CST-CA10-630-750-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
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-EX180
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: 62144 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

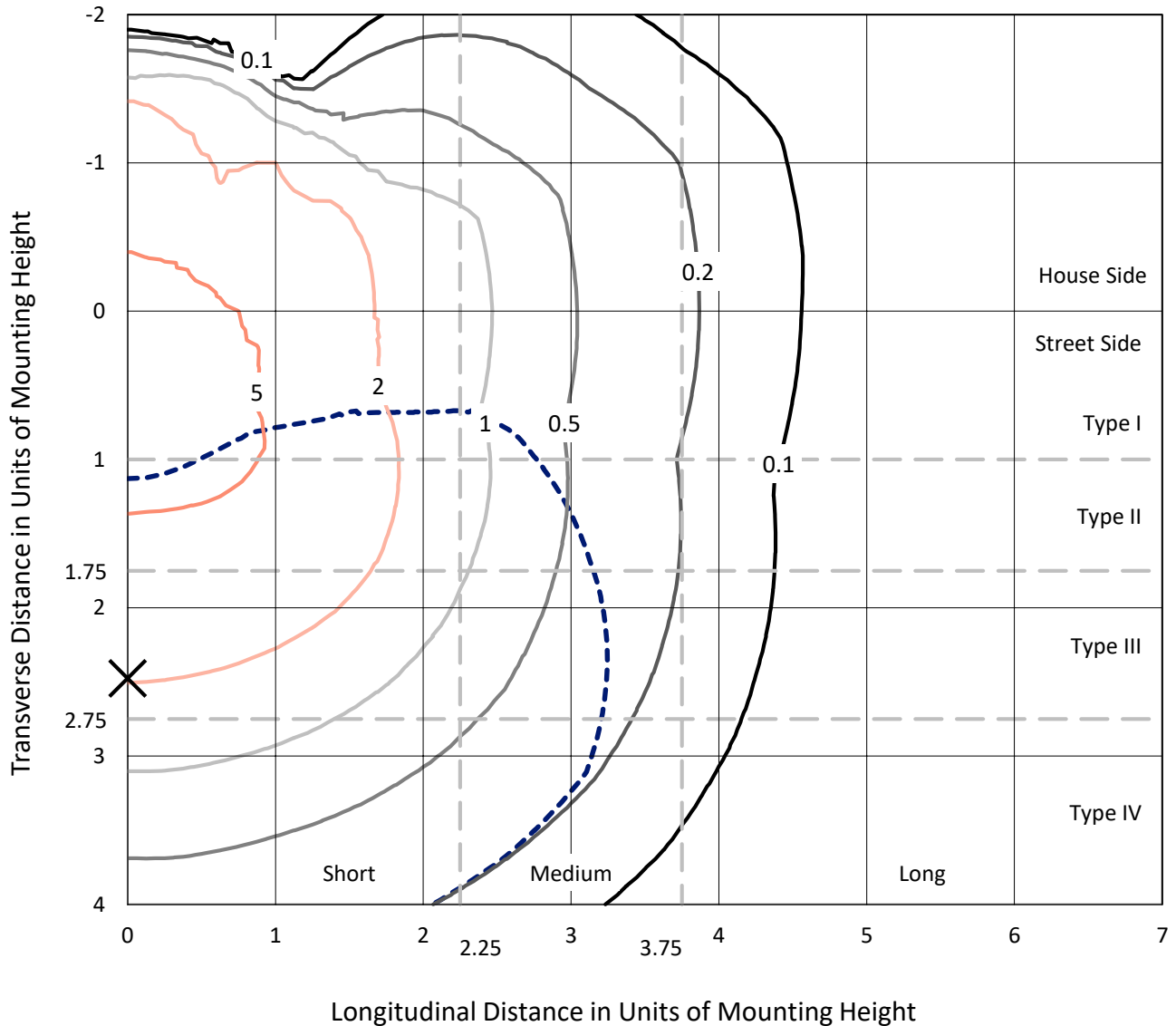
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

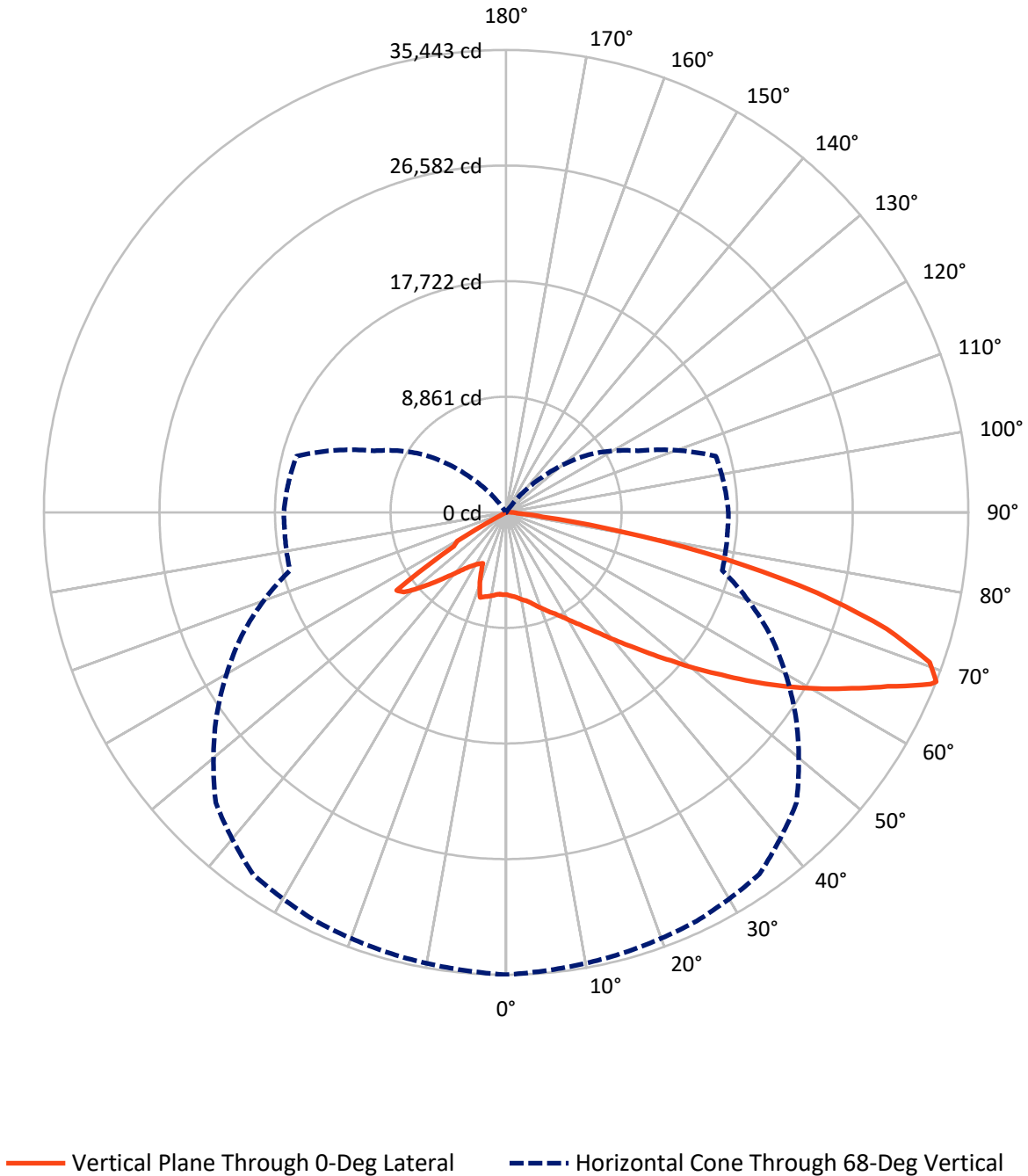
✕ Max cd
 - - - 1/2 Max cd



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



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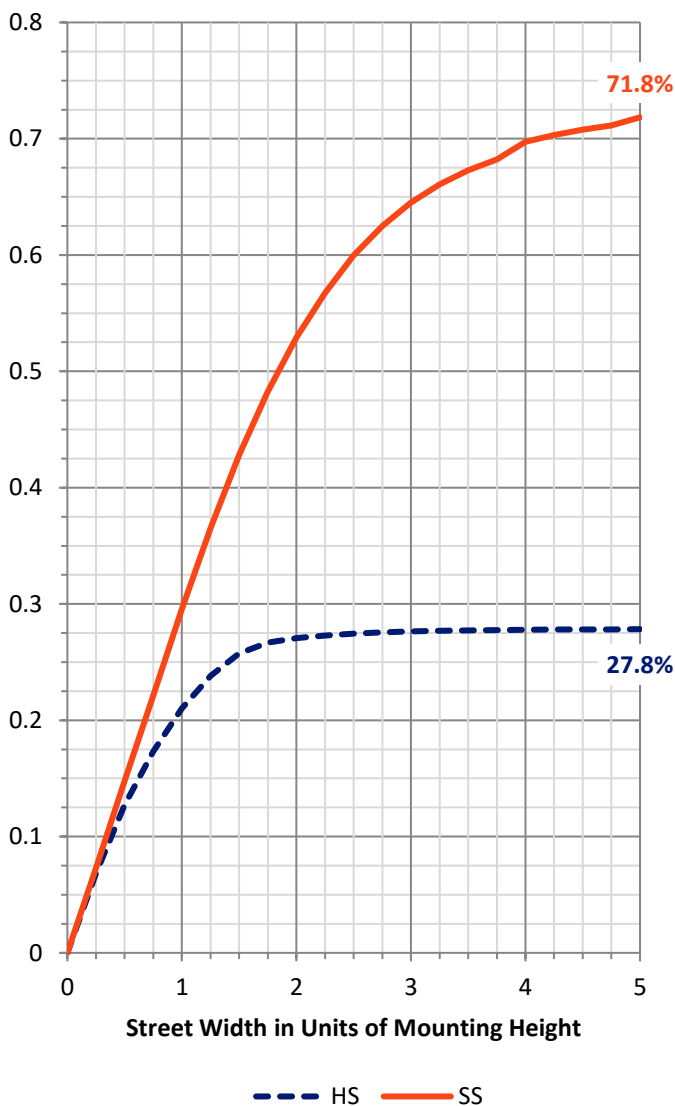
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17356.9	0.4	17357.3
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	44751.1	35.6	44786.7
	% Fixture	72.0	0.1	72.1
Total	Lumens	62108.0	36.0	62144.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	611.1	1.0
10°-20°	1936.2	3.1
20°-30°	3278.0	5.3
30°-40°	5193.2	8.4
40°-50°	8490.5	13.7
50°-60°	13005.3	20.9
60°-70°	15991.0	25.7
70°-80°	12356.1	19.9
80°-90°	1246.7	2.0
90°-100°	35.4	0.1
100°-110°	0.6	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°	62108.0	99.9
0°-180°	62144.0	100.0

Coefficient of Utilization

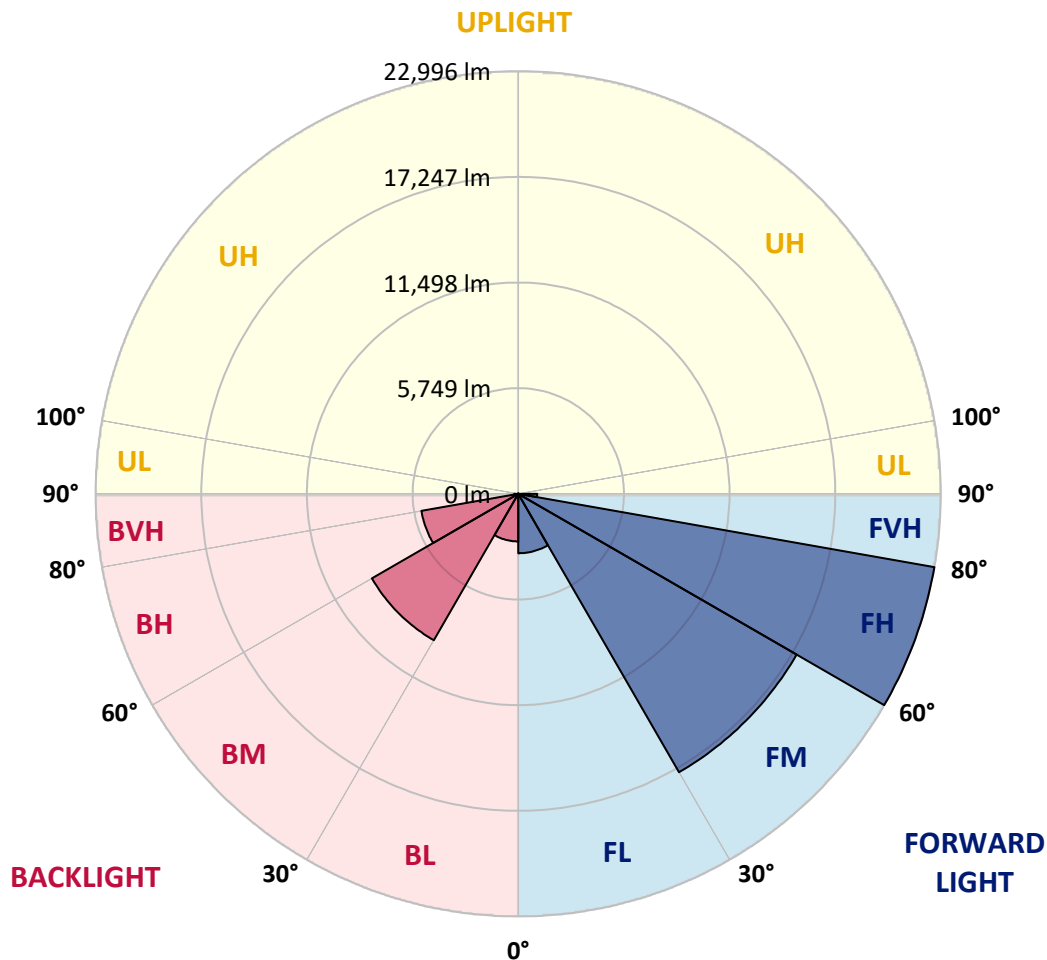


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3234.6	5.2			
FM (30°-60°)	17492.5	28.1			
FH (60°-80°)	22995.9	37.0			G5
FVH (80°-90°)	1028.1	1.7			G5
BL (0°-30°)	2590.7	4.2	B4/5000		
BM (30°-60°)	9196.5	14.8	B5		
BH (60°-80°)	5351.2	8.6	B5		G5
BVH (80°-90°)	218.6	0.4			G2/225
UL (90°-100°)	35.4	0.1		U2/50	
UH (100°-180°)	0.6	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°	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8
2.5°	6409.6	6397.6	6385.7	6412.6	6307.8	6352.7	6316.8	6349.7	6325.8	6352.7	6343.7
5°	6493.4	6481.5	6445.5	6475.5	6406.6	6424.6	6379.7	6391.6	6310.8	6358.7	6355.7
7.5°	6631.1	6598.2	6574.3	6574.3	6514.4	6511.4	6439.5	6442.5	6379.7	6373.7	6385.7
10°	6816.8	6792.8	6726.9	6732.9	6649.1	6637.1	6547.3	6544.3	6493.4	6463.5	6490.4
12.5°	6954.5	6978.4	6918.5	6918.5	6834.7	6774.8	6712.0	6670.1	6631.1	6586.2	6565.3
15°	7205.9	7229.9	7149.1	7146.1	7113.1	7041.3	6972.4	6882.6	6813.8	6792.8	6759.9
17.5°	7532.3	7517.3	7448.4	7451.4	7457.4	7340.7	7271.8	7155.1	7056.3	6984.4	6966.4
20°	7864.6	7864.6	7789.7	7813.7	7783.7	7676.0	7631.1	7469.4	7331.7	7253.8	7191.0
22.5°	8235.8	8220.8	8169.9	8220.8	8161.0	8053.2	7978.3	7816.7	7640.0	7200.0	7020.3
25°	8589.1	8580.1	8601.0	8616.0	8541.2	8406.4	8355.5	8184.9	7693.9	7116.1	6753.9
27.5°	9035.1	9005.2	9053.1	9083.0	9008.2	8891.4	8783.7	8592.1	7553.2	7098.2	7059.3
30°	9606.9	9541.1	9609.9	9624.9	9547.1	9475.2	9313.5	8355.5	7601.1	7469.4	7457.4
32.5°	10217.7	10139.8	10229.6	10241.6	10139.8	10079.9	9672.8	8232.8	8071.1	7918.5	7933.4
35°	10942.1	10942.1	10987.1	10993.0	10918.2	10816.4	9265.6	8831.6	8687.9	8547.1	8544.2
37.5°	11825.3	11798.4	11918.1	11990.0	11909.1	11618.7	9858.4	9654.8	9433.3	9253.7	8882.4
40°	12891.1	12939.0	12971.9	13043.8	12965.9	12313.3	10723.6	10493.1	10319.4	9717.7	8780.7
42.5°	14040.7	14052.6	14124.5	14214.3	14214.3	13525.7	11735.5	11537.9	11313.4	9502.2	9080.0
45°	15414.8	15387.9	15525.6	15669.3	15630.4	14917.8	12912.0	12765.3	11714.5	10127.8	10130.8
47.5°	16974.5	16941.6	17139.2	17327.8	17133.2	16462.6	14205.3	14091.6	11307.4	11187.6	11163.7
50°	18776.8	18695.9	18923.5	19174.9	19016.3	18187.0	15777.0	13591.6	12442.0	12346.2	12331.2
52.5°	20701.8	20638.9	20776.6	21204.7	20995.1	19992.2	17264.9	14022.7	13756.3	13648.5	13621.5
55°	22875.2	22752.5	23048.9	23375.2	23132.7	21989.1	18731.9	15453.7	15178.3	14992.7	14723.2
57.5°	25159.4	24982.8	25135.5	25545.6	25312.1	24033.8	20623.9	16926.6	16600.3	13738.3	12645.6
60°	27434.7	27353.9	27413.7	27776.0	27488.6	26021.6	22396.2	18402.6	14049.7	13588.6	13642.5
62.5°	29721.9	29545.3	29599.2	29970.4	29602.2	27913.7	24075.7	19743.8	14786.1	14624.5	14681.3
65°	32173.8	31964.2	32012.1	32119.9	31664.9	29611.2	25560.6	21010.1	15893.8	15723.2	15786.0
67.5°	35128.6	34937.0	34676.6	34356.2	33727.6	31413.4	27036.5	22342.3	17139.2	17043.4	17064.4
68°	35443.0	35257.4	34943.0	34562.8	33856.3	31488.2	27099.4	22381.3	17157.2	17037.4	17043.4
70°	34464.0	34574.8	34218.5	33580.9	32991.1	30392.5	26072.5	21519.1	16393.8	16217.1	16172.2
72.5°	30521.2	30763.7	30272.8	30165.0	29440.5	27075.4	22815.3	18672.0	14259.2	14316.1	14154.4
75°	24641.5	24997.8	24402.0	24435.0	24021.8	22584.8	19121.1	15546.5	11708.5	11969.0	12016.9
77.5°	17136.2	17648.1	17387.7	17648.1	17444.6	16926.6	14798.1	11972.0	8933.3	9232.7	9349.5
80°	8936.3	9544.1	9888.3	9996.1	10062.0	10041.0	9011.2	7185.0	5164.2	5275.0	5269.0
82.5°	2826.1	2679.4	2766.2	2742.3	2667.4	2697.4	2430.9	1901.0	1317.2	1452.0	1389.1
85°	853.2	859.2	835.3	829.3	766.4	673.6	550.8	317.3	155.7	182.6	170.6
87.5°	628.7	634.7	586.8	556.8	520.9	452.1	350.3	197.6	74.8	71.8	56.9
90°	347.3	335.3	311.3	287.4	272.4	233.5	176.6	74.8	26.9	21.0	18.0
92.5°	188.6	179.6	167.6	158.7	137.7	110.8	71.8	23.9	12.0	3.0	0.0
95°	86.8	80.8	77.8	68.9	59.9	41.9	23.9	15.0	9.0	3.0	0.0
97.5°	38.9	35.9	32.9	26.9	21.0	12.0	12.0	9.0	6.0	3.0	0.0
100°	9.0	9.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	3.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0



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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	0.0	0.0	0.0
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°	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8	6295.8
2.5°	6334.8	6316.8	6307.8	6250.9	6268.9	6218.0	6316.8	6292.9	6277.9	6319.8
5°	6340.8	6277.9	6316.8	6283.9	6295.8	6224.0	6301.8	6268.9	6265.9	6283.9
7.5°	6355.7	6313.8	6352.7	6286.9	6316.8	6286.9	6343.7	6310.8	6337.8	6355.7
10°	6436.6	6412.6	6394.6	6379.7	6400.6	6340.8	6412.6	6415.6	6424.6	6478.5
12.5°	6550.3	6526.4	6496.4	6457.5	6478.5	6454.5	6508.4	6523.4	6556.3	6583.2
15°	6709.0	6664.1	6652.1	6616.2	6637.1	6625.2	6637.1	6628.2	6691.0	6682.0
17.5°	6927.5	6876.6	6706.0	6532.4	6421.6	6454.5	6592.2	6771.9	6816.8	6822.7
20°	7008.4	6649.1	6631.1	6433.6	6343.7	6337.8	6053.4	5628.2	5757.0	6059.3
22.5°	6912.6	6421.6	6370.7	6331.8	5948.6	5319.9	5260.0	5197.1	5182.2	5227.1
25°	6697.0	6640.1	6595.2	6086.3	5481.6	5484.5	5397.7	4984.6	4340.9	4287.0
27.5°	7026.3	6948.5	6514.4	5730.0	5718.1	5712.1	5583.3	4523.6	4385.8	4418.8
30°	7400.5	7271.8	6137.2	6035.4	6032.4	5978.5	5005.5	4562.5	4562.5	4568.5
32.5°	7831.6	7032.3	6352.7	6400.6	6397.6	6143.2	4834.9	4805.0	4793.0	4822.9
35°	8161.0	6840.7	6816.8	6903.6	6843.7	5212.1	5137.3	5110.3	5098.4	5083.4
37.5°	8059.2	7391.6	7391.6	7445.4	6963.5	5550.4	5514.5	5514.5	5490.5	5478.6
40°	8214.8	8077.1	8008.3	8029.2	5059.4	5960.5	5987.5	5981.5	5978.5	5999.5
42.5°	9035.1	8912.4	8849.5	8107.1	5664.2	5924.6	6583.2	6580.3	6589.2	6580.3
45°	10079.9	9966.2	9801.5	7586.2	6430.6	5194.2	7256.8	7289.8	7292.8	7289.8
47.5°	11175.7	11103.8	9418.3	8397.5	7262.8	5574.4	6936.5	8101.1	8086.1	8104.1
50°	12334.2	12010.9	9370.4	9358.5	8149.0	6203.0	6206.0	8810.6	8963.3	9011.2
52.5°	13624.5	10888.3	10385.3	9475.2	9047.1	6849.7	6783.8	7807.7	9891.3	9939.2
55°	12654.6	11502.0	11493.0	8433.4	9412.3	7472.4	7481.4	7409.5	9071.1	10310.5
57.5°	12591.7	12618.6	12597.7	9409.3	6867.7	7005.4	8152.0	8089.1	5873.7	4760.1
60°	13678.4	13717.3	12238.4	10160.8	7424.5	4308.0	5020.5	4266.1	4323.0	4367.9
62.5°	14717.3	14729.2	9954.2	6661.1	3679.3	173.6	83.8	68.9	65.9	65.9
65°	15866.9	15866.9	10669.7	7265.8	3553.6	65.9	12.0	9.0	32.9	32.9
67.5°	16977.5	16732.1	11193.6	7714.9	3616.4	9.0	0.0	0.0	0.0	0.0
68°	16914.7	16645.2	11145.7	7702.9	3607.5	6.0	0.0	0.0	0.0	0.0
70°	15974.6	15714.2	10573.9	7352.6	3472.7	6.0	0.0	0.0	0.0	0.0
72.5°	14100.5	13861.0	9364.4	6481.5	3131.5	3.0	0.0	0.0	0.0	0.0
75°	11936.1	11903.1	8089.1	5469.6	2685.4	3.0	0.0	0.0	0.0	0.0
77.5°	9603.9	9454.3	6322.8	4287.0	2164.5	0.0	0.0	0.0	0.0	0.0
80°	5349.8	5571.4	3700.3	2520.7	1362.2	0.0	0.0	0.0	0.0	0.0
82.5°	1446.0	1353.2	808.3	547.9	260.5	0.0	0.0	0.0	0.0	0.0
85°	185.6	203.6	92.8	74.8	18.0	0.0	0.0	0.0	0.0	0.0
87.5°	95.8	113.8	29.9	23.9	6.0	0.0	0.0	0.0	0.0	0.0
90°	18.0	21.0	9.0	3.0	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)