

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: P158051

Luminaire Tested: **VST-E09-LED-E-U-RW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158051
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33711)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E09-LED-E-U-RW-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (189) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28770.7 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B5 - U0 - G5

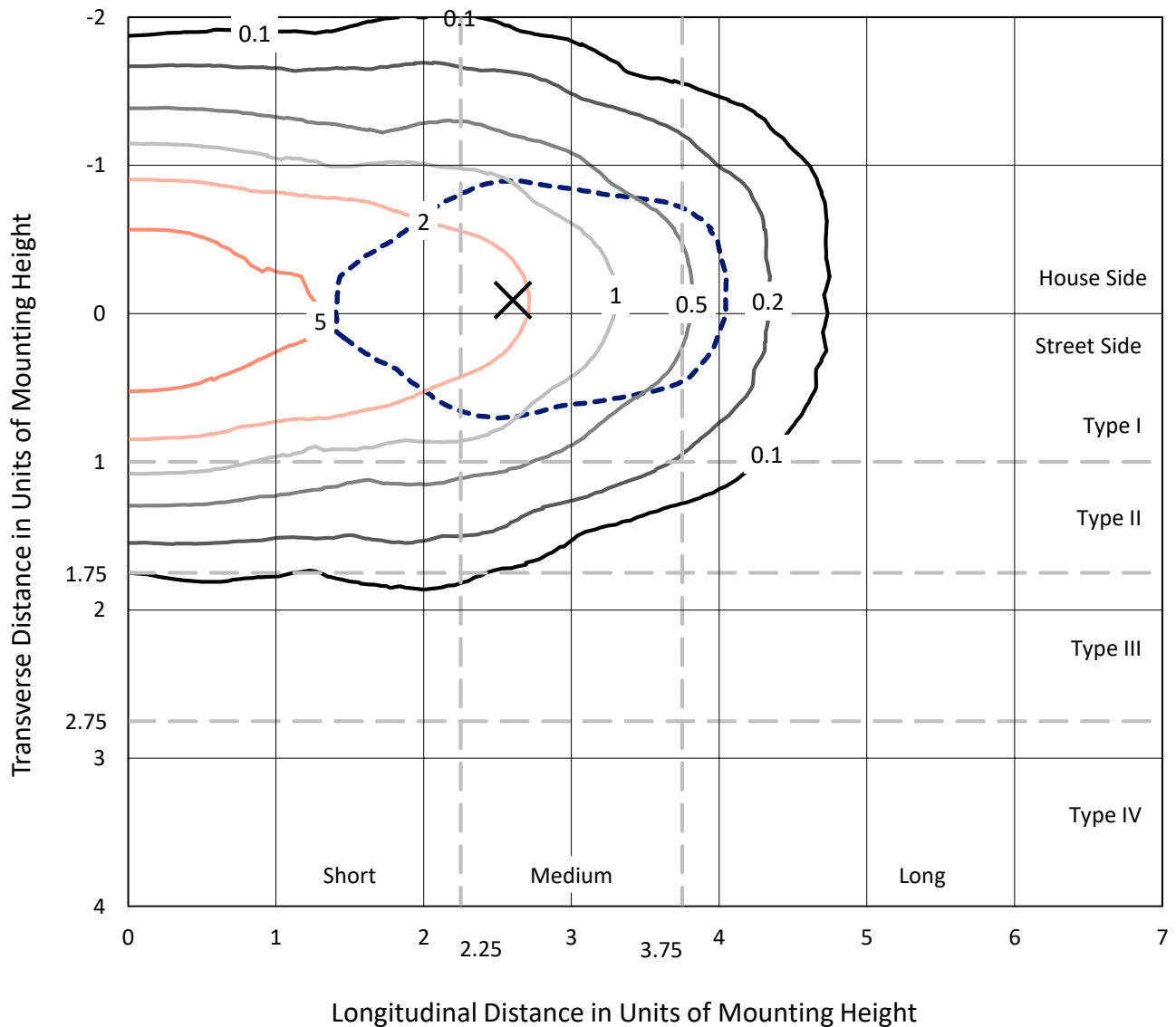
Input Watts (W): 225.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

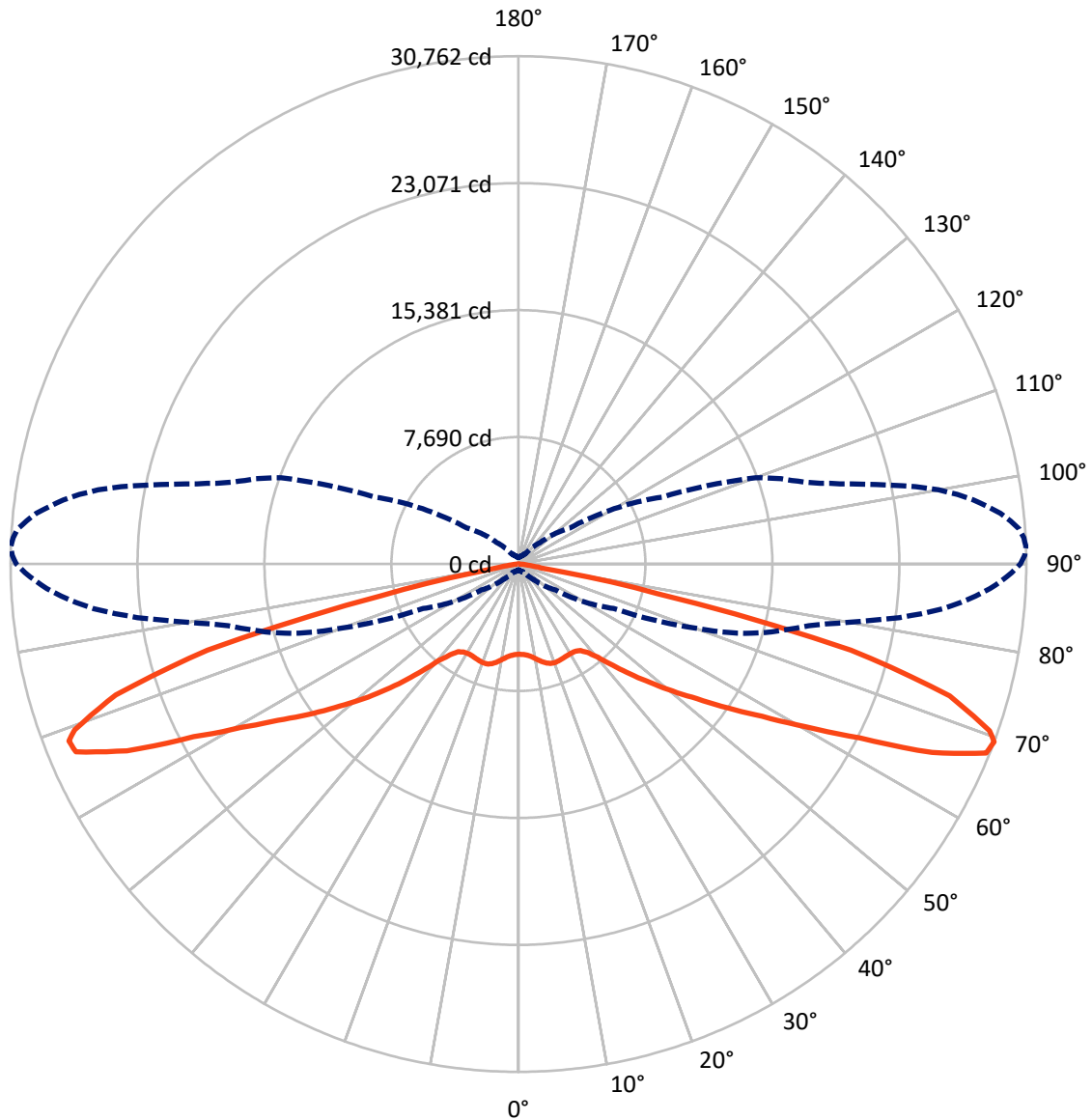
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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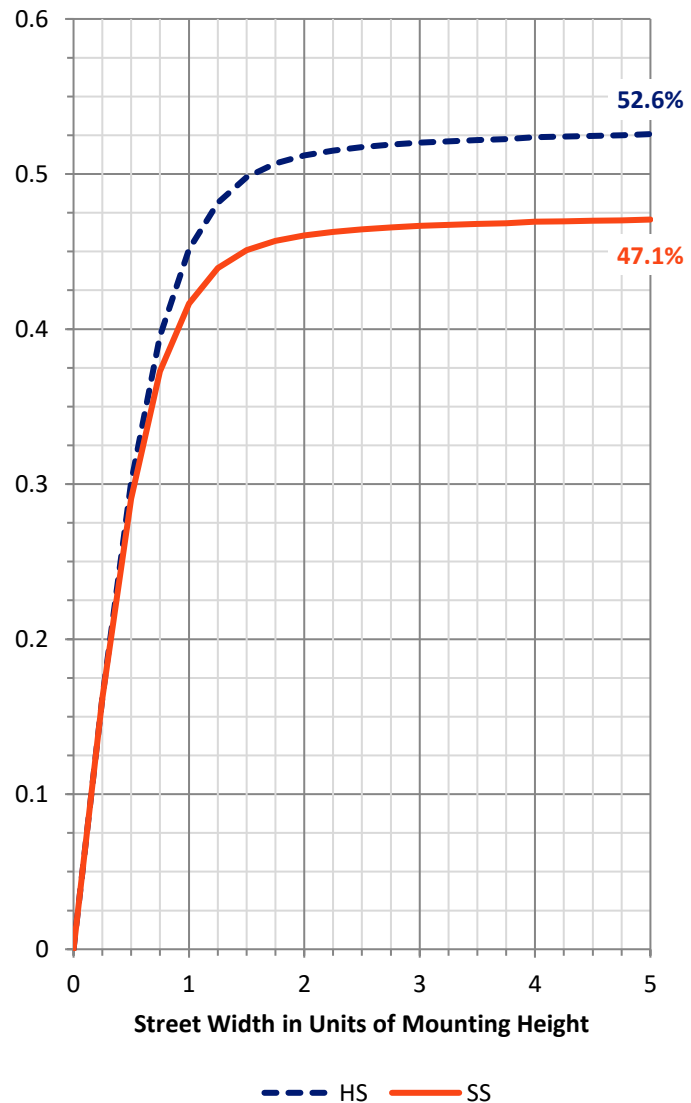
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15258.6	0.0	15258.6
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	13512.1	0.0	13512.1
	% Fixture	47.0	0.0	47.0
Total	Lumens	28770.7	0.0	28770.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	534.8	1.9
10°-20°	1689.4	5.9
20°-30°	2740.8	9.5
30°-40°	3415.9	11.9
40°-50°	4253.1	14.8
50°-60°	5245.1	18.2
60°-70°	6514.1	22.6
70°-80°	4002.5	13.9
80°-90°	375.1	1.3
90°-100°	0.0	0.0
100°-110°	0.0	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°	28770.7	100.0
0°-180°	28770.7	100.0



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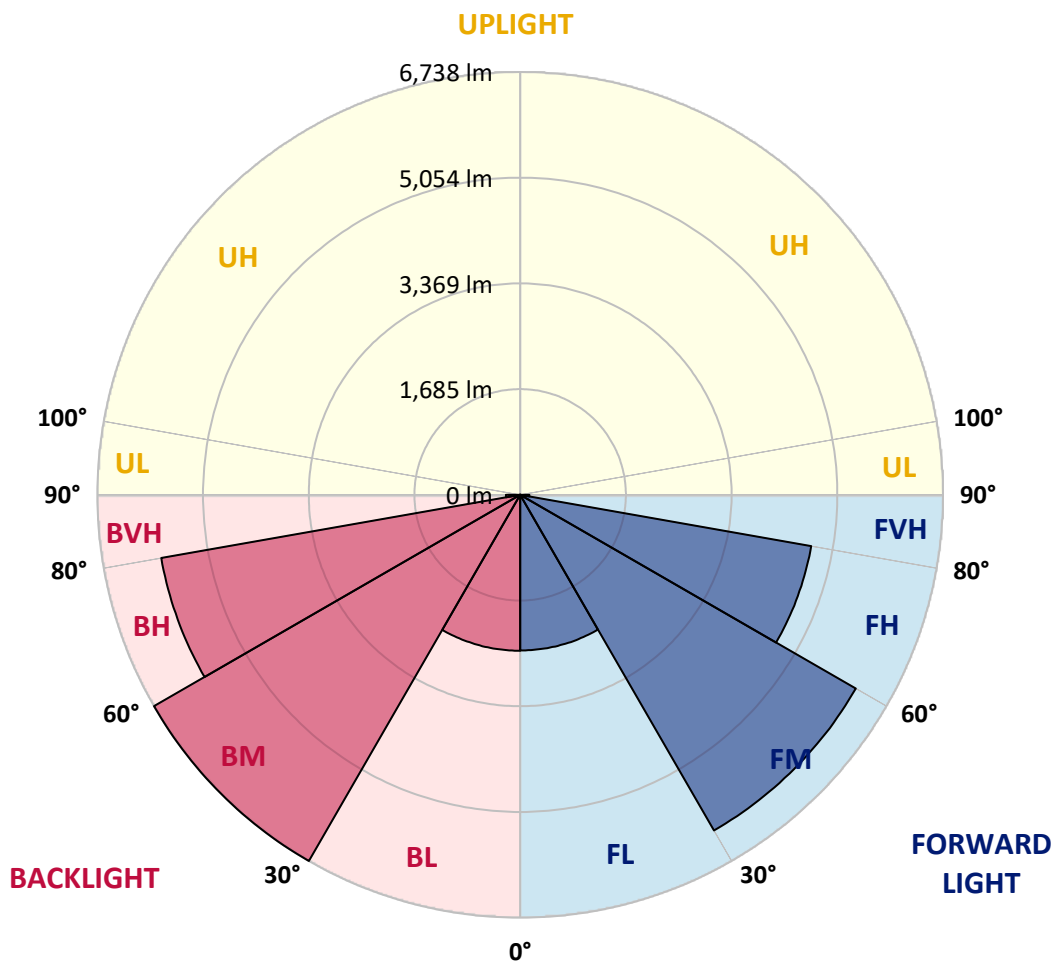
CATALOG NUMBER: VST-E09-LED-E-U-RW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2479.9	8.6			
FM	(30°-60°)	6176.0	21.5			
FH	(60°-80°)	4709.4	16.4			G2/5000
FVH	(80°-90°)	146.9	0.5			G2/225
BL	(0°-30°)	2485.1	8.6	B3/2500		
BM	(30°-60°)	6738.0	23.4	B4/8500		
BH	(60°-80°)	5807.2	20.2	B5		G5
BVH	(80°-90°)	228.2	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2
2.5°	5552.1	5537.3	5550.2	5552.1	5550.2	5550.2	5533.6	5529.9	5507.7	5513.3	5511.4
5°	5627.8	5622.2	5631.5	5635.2	5638.9	5631.5	5618.5	5613.0	5598.2	5592.7	5590.8
7.5°	5698.0	5688.7	5703.5	5716.4	5725.7	5727.5	5729.4	5720.1	5720.1	5712.7	5712.7
10°	5757.1	5749.7	5773.7	5790.3	5819.9	5836.5	5855.0	5867.9	5875.3	5877.1	5875.3
12.5°	5782.9	5777.4	5816.2	5866.0	5921.4	5960.2	6006.4	6039.7	6048.9	6047.0	6056.3
15°	5738.6	5742.3	5801.4	5899.3	6017.5	6115.4	6180.0	6207.7	6215.1	6218.8	6220.7
17.5°	5618.5	5625.9	5710.9	5869.7	6076.6	6253.9	6350.0	6350.0	6335.2	6335.2	6333.3
20°	5426.5	5433.8	5544.7	5773.7	6078.4	6350.0	6486.6	6458.9	6403.5	6392.4	6381.3
22.5°	5160.5	5190.0	5311.9	5577.9	5999.0	6377.7	6571.6	6531.0	6444.1	6420.1	6403.5
25°	4859.4	4855.7	5001.6	5300.9	5806.9	6311.2	6595.6	6588.2	6495.9	6470.0	6440.5
27.5°	4515.9	4527.0	4661.8	4964.7	5513.3	6119.1	6555.0	6652.9	6577.1	6551.3	6523.6
30°	4163.1	4174.2	4301.6	4654.4	5179.0	5843.9	6471.9	6715.7	6686.1	6665.8	6647.3
32.5°	3808.5	3812.2	3963.6	4342.3	4896.4	5515.1	6346.3	6772.9	6813.5	6804.3	6796.9
35°	3476.0	3479.7	3644.1	4028.3	4617.5	5234.4	6194.8	6856.0	6987.2	6998.2	7005.6
37.5°	3152.8	3158.4	3326.4	3729.1	4342.3	5022.0	6026.7	6983.5	7231.0	7271.6	7279.0
40°	2831.4	2837.0	2997.7	3424.3	4063.4	4835.4	5897.4	7162.6	7559.7	7615.1	7672.4
42.5°	2524.8	2545.2	2681.8	3090.0	3753.1	4604.5	5842.0	7380.6	7949.4	8036.3	8100.9
45°	2238.6	2240.4	2395.5	2777.9	3385.5	4292.4	5805.1	7628.1	8385.3	8516.5	8605.1
47.5°	1932.0	1954.1	2116.7	2487.9	3042.0	3906.4	5686.9	7918.0	8860.0	9013.3	9192.5
50°	1634.6	1666.0	1823.0	2190.5	2728.0	3507.4	5369.2	8257.9	9393.8	9593.3	9800.1
52.5°	1348.3	1346.5	1512.7	1895.0	2412.2	3169.4	4853.9	8614.4	10010.7	10224.9	10448.4
55°	1019.5	1019.5	1183.9	1533.0	2070.5	2868.4	4301.6	8836.0	10583.3	10841.8	11085.6
57.5°	700.0	718.5	873.6	1174.7	1714.0	2593.2	3878.7	8708.6	11021.0	11342.4	11632.3
60°	519.0	537.5	652.0	844.1	1340.9	2268.1	3561.0	8108.3	11285.1	11711.8	12088.5
62.5°	448.8	461.7	570.7	676.0	966.0	1922.7	3280.3	7345.5	11665.6	12249.2	12773.8
65°	400.8	413.7	522.7	583.6	755.4	1545.9	3123.3	6909.6	12119.9	13012.0	13773.0
67.5°	371.2	386.0	478.4	522.7	659.4	1398.2	3001.4	6808.0	12116.3	13198.6	14170.1
69°	356.5	367.6	443.3	491.3	637.2	1353.8	2737.2	6366.6	11316.5	12478.3	13453.5
70°	347.2	358.3	423.0	471.0	629.8	1274.4	2493.4	5782.9	10405.9	11575.1	12565.1
72.5°	317.7	328.8	376.8	421.1	524.5	851.5	1738.0	3701.4	7436.0	8270.8	9403.0
75°	280.7	293.7	330.6	367.6	397.1	493.1	1002.9	1920.9	4251.8	4885.3	5893.7
77.5°	229.0	242.0	280.7	339.8	336.2	374.9	652.0	1180.2	1991.1	2469.4	2842.5
80°	188.4	197.6	230.9	343.5	275.2	314.0	528.2	967.8	1401.9	1549.6	1638.3
82.5°	125.6	138.5	179.2	269.7	210.6	223.5	395.3	905.0	1185.8	1300.3	1407.4
85°	59.1	64.6	109.0	144.1	127.4	120.1	225.3	639.1	882.9	936.4	977.1
87.5°	0.0	0.0	5.5	11.1	16.6	16.6	40.6	134.8	247.5	299.2	295.5
90°	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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CATALOG NUMBER: VST-E09-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2
2.5°	5504.0	5505.9	5504.0	5504.0	5502.2	5498.5	5498.5	5494.8	5496.6	5494.8	5498.5
5°	5589.0	5589.0	5583.5	5579.8	5585.3	5579.8	5581.6	5572.4	5572.4	5566.8	5559.4
7.5°	5710.9	5710.9	5712.7	5701.7	5709.0	5710.9	5705.4	5701.7	5698.0	5688.7	5690.6
10°	5873.4	5873.4	5879.0	5864.2	5871.6	5875.3	5877.1	5877.1	5873.4	5856.8	5858.7
12.5°	6054.4	6050.7	6052.6	6045.2	6052.6	6056.3	6060.0	6056.3	6056.3	6052.6	6050.7
15°	6218.8	6217.0	6220.7	6215.1	6217.0	6220.7	6231.7	6229.9	6228.0	6217.0	6217.0
17.5°	6331.5	6325.9	6322.2	6320.4	6320.4	6318.6	6320.4	6320.4	6314.9	6313.0	6313.0
20°	6374.0	6359.2	6350.0	6344.4	6337.0	6333.3	6329.6	6331.5	6327.8	6322.2	6324.1
22.5°	6381.3	6361.0	6342.6	6325.9	6311.2	6301.9	6292.7	6289.0	6279.8	6274.2	6274.2
25°	6416.4	6385.0	6355.5	6327.8	6305.6	6285.3	6265.0	6250.2	6239.1	6226.2	6222.5
27.5°	6494.0	6460.8	6425.7	6390.6	6361.0	6320.4	6292.7	6263.1	6237.3	6217.0	6202.2
30°	6614.1	6580.8	6545.7	6505.1	6466.3	6423.8	6377.7	6342.6	6305.6	6265.0	6242.8
32.5°	6772.9	6750.7	6715.7	6676.9	6641.8	6597.4	6542.0	6488.5	6453.4	6405.4	6370.3
35°	7000.1	6974.2	6963.2	6946.5	6911.4	6883.7	6822.8	6772.9	6739.7	6673.2	6647.3
37.5°	7310.4	7308.5	7317.8	7312.2	7317.8	7282.7	7255.0	7253.1	7205.1	7140.5	7077.7
40°	7733.3	7755.5	7805.4	7840.5	7873.7	7877.4	7916.2	7875.6	7881.1	7871.9	7807.2
42.5°	8215.4	8291.1	8350.2	8453.7	8533.1	8607.0	8656.8	8725.2	8776.9	8823.1	8834.2
45°	8752.9	8865.6	9002.2	9094.6	9249.7	9373.5	9543.4	9674.5	9811.2	9946.0	9994.1
47.5°	9336.5	9476.9	9628.4	9800.1	9995.9	10189.8	10452.1	10653.4	10873.2	11056.1	11218.6
50°	9981.1	10127.0	10330.2	10527.8	10797.5	11021.0	11364.5	11628.6	11983.3	12227.1	12437.6
52.5°	10653.4	10836.3	11063.5	11281.4	11556.6	11842.9	12225.2	12614.9	13041.6	13411.0	13717.6
55°	11311.0	11536.3	11754.2	12009.1	12313.9	12646.3	13078.5	13592.0	14123.9	14546.9	14953.2
57.5°	11896.5	12156.9	12413.6	12672.2	12984.3	13370.4	13856.1	14410.2	15019.7	15583.1	16140.8
60°	12439.5	12751.6	13065.6	13388.8	13747.1	14223.7	14807.3	15488.9	16277.5	17047.7	17777.3
62.5°	13298.3	13708.4	14098.1	14515.5	14947.7	15507.3	16196.3	17090.2	17995.2	18957.5	19705.5
65°	14461.9	15038.2	15548.0	16089.1	16648.8	17396.8	18220.6	19290.0	20586.5	21572.8	22773.4
67.5°	15040.0	15799.2	16454.8	17057.0	17749.6	18505.0	19483.9	20749.1	22132.5	23562.0	24901.1
69°	14360.3	15143.5	15869.3	16543.5	17243.5	17976.8	19000.0	20298.4	21761.2	23307.2	24614.8
70°	13479.3	14262.5	15036.3	15804.7	16443.8	17158.5	18185.5	19524.5	20985.5	22592.4	23889.0
72.5°	10326.5	11268.5	11968.5	12688.8	13429.5	14035.3	15221.0	16349.6	17871.5	19502.4	20930.1
75°	6606.7	7472.9	8237.6	8850.8	9574.8	10300.7	11176.1	12430.2	13383.3	14722.4	15880.4
77.5°	3394.8	3651.5	4388.4	4608.2	5110.6	5505.9	5987.9	6301.9	7077.7	7242.0	7925.4
80°	1608.7	1449.9	1364.9	1287.4	1309.5	1300.3	1261.5	1209.8	1274.4	1246.7	1235.6
82.5°	1401.9	1250.4	997.4	847.8	733.3	622.4	535.6	491.3	496.8	511.6	517.2
85°	982.6	923.5	720.3	546.7	426.7	330.6	266.0	254.9	262.3	282.6	275.2
87.5°	284.4	297.4	262.3	182.9	127.4	92.3	72.0	81.3	77.6	75.7	79.4
90°	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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2
2.5°	5498.5	5496.6	5491.1	5485.6	5485.6	5481.9	5485.6	5487.4	5485.6	5485.6	5481.9
5°	5561.3	5563.1	5568.7	5557.6	5555.7	5557.6	5550.2	5548.4	5542.8	5548.4	5541.0
7.5°	5681.3	5686.9	5686.9	5679.5	5677.6	5683.2	5672.1	5668.4	5662.9	5661.0	5659.2
10°	5860.5	5866.0	5856.8	5851.3	5845.7	5853.1	5843.9	5843.9	5838.3	5832.8	5830.9
12.5°	6060.0	6056.3	6052.6	6056.3	6050.7	6050.7	6045.2	6041.5	6039.7	6037.8	6034.1
15°	6215.1	6228.0	6228.0	6231.7	6228.0	6228.0	6220.7	6222.5	6218.8	6217.0	6218.8
17.5°	6314.9	6318.6	6327.8	6333.3	6333.3	6335.2	6331.5	6335.2	6331.5	6331.5	6338.9
20°	6327.8	6331.5	6340.7	6350.0	6355.5	6359.2	6359.2	6364.7	6368.4	6372.1	6381.3
22.5°	6276.1	6281.6	6292.7	6309.3	6318.6	6322.2	6329.6	6338.9	6348.1	6355.5	6368.4
25°	6222.5	6224.4	6235.4	6252.1	6263.1	6272.4	6285.3	6296.4	6309.3	6324.1	6338.9
27.5°	6193.0	6191.1	6200.3	6217.0	6226.2	6239.1	6250.2	6266.8	6281.6	6300.1	6313.0
30°	6218.8	6204.0	6205.9	6213.3	6220.7	6229.9	6242.8	6257.6	6274.2	6290.8	6305.6
32.5°	6333.3	6300.1	6277.9	6272.4	6274.2	6276.1	6283.5	6292.7	6305.6	6318.6	6324.1
35°	6580.8	6523.6	6494.0	6470.0	6449.7	6433.1	6436.8	6434.9	6434.9	6446.0	6433.1
37.5°	7051.8	6979.8	6948.4	6905.9	6881.9	6820.9	6804.3	6800.6	6776.6	6776.6	6748.9
40°	7790.6	7748.1	7724.1	7685.3	7569.0	7583.7	7500.6	7502.5	7434.1	7441.5	7393.5
42.5°	8841.5	8847.1	8817.5	8791.7	8701.2	8660.5	8583.0	8472.1	8385.3	8383.5	8287.4
45°	10056.9	10123.4	10029.2	10062.4	9983.0	9874.0	9783.5	9641.3	9506.5	9464.0	9366.1
47.5°	11327.6	11436.6	11364.5	11377.5	11338.7	11183.5	11061.6	10886.2	10710.7	10592.5	10533.4
50°	12685.1	12757.2	12755.3	12720.2	12701.7	12550.3	12354.5	12221.5	12092.2	11933.4	11881.7
52.5°	13915.2	14083.3	14196.0	14170.1	14116.5	14026.0	13852.4	13737.9	13547.7	13525.5	13547.7
55°	15232.1	15450.1	15564.6	15703.1	15705.0	15688.3	15616.3	15573.8	15396.5	15416.8	15391.0
57.5°	16478.8	16798.4	16973.8	17269.4	17370.9	17505.8	17455.9	17511.3	17404.2	17474.4	17454.1
60°	18168.8	18612.1	18903.9	19308.4	19496.8	19834.8	19901.3	19941.9	20001.1	20145.1	20063.9
62.5°	20294.7	20944.9	21550.7	22101.1	22282.1	22790.0	22873.1	23190.8	23207.4	23305.3	23126.2
65°	23774.5	24566.8	25233.6	25892.9	26273.4	26868.2	27108.3	27725.2	27536.8	27616.2	27233.9
67.5°	26053.6	26975.3	27869.2	28493.5	29125.2	29732.8	30170.6	30569.5	30565.8	30488.3	30148.4
69°	25852.3	26879.2	27760.3	28596.9	29261.9	29886.1	30412.5	30671.1	30761.6	30648.9	30407.0
70°	25156.0	26210.6	27289.3	27978.2	28702.2	29387.5	29930.5	30213.1	30275.9	30196.4	29987.7
72.5°	21938.5	22950.7	24140.2	24766.3	25641.8	26136.8	26884.8	27250.5	27315.1	27213.5	27076.9
75°	17121.6	17304.4	18516.1	18915.0	19550.4	20121.1	20586.5	20468.3	20799.0	20734.3	20682.6
77.5°	8065.8	7578.2	8363.2	8728.9	8536.8	8025.2	8769.5	8232.0	8588.5	9052.1	8933.9
80°	1329.8	1326.1	1361.2	1438.8	1346.5	1429.6	1427.7	1387.1	1390.8	1490.5	1438.8
82.5°	511.6	522.7	528.2	543.0	543.0	544.9	554.1	565.2	555.9	574.4	570.7
85°	277.0	295.5	278.9	266.0	275.2	280.7	288.1	297.4	288.1	315.8	301.1
87.5°	72.0	75.7	66.5	66.5	64.6	59.1	59.1	62.8	68.3	81.3	88.7
90°	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°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2
2.5°	5474.5	5476.3	5478.2	5472.6	5468.9	5468.9	5467.1	5463.4	5461.5	5461.5	5461.5
5°	5537.3	5541.0	5531.7	5529.9	5526.2	5522.5	5522.5	5518.8	5520.7	5520.7	5511.4
7.5°	5662.9	5657.3	5646.2	5638.9	5646.2	5633.3	5627.8	5631.5	5627.8	5629.6	5625.9
10°	5830.9	5830.9	5818.0	5825.4	5816.2	5801.4	5806.9	5801.4	5797.7	5784.8	5792.2
12.5°	6039.7	6034.1	6026.7	6010.1	6004.6	6002.7	5986.1	5987.9	5982.4	5978.7	5973.2
15°	6222.5	6220.7	6204.0	6194.8	6193.0	6185.6	6178.2	6174.5	6165.3	6163.4	6159.7
17.5°	6344.4	6338.9	6331.5	6322.2	6322.2	6311.2	6307.5	6298.2	6296.4	6290.8	6285.3
20°	6385.0	6386.9	6379.5	6372.1	6368.4	6361.0	6355.5	6348.1	6344.4	6337.0	6331.5
22.5°	6375.8	6375.8	6368.4	6366.6	6359.2	6348.1	6340.7	6331.5	6322.2	6313.0	6301.9
25°	6346.3	6344.4	6338.9	6329.6	6320.4	6303.8	6289.0	6274.2	6261.3	6250.2	6233.6
27.5°	6320.4	6316.7	6305.6	6292.7	6274.2	6255.8	6228.0	6207.7	6191.1	6176.3	6157.9
30°	6311.2	6298.2	6281.6	6261.3	6239.1	6211.4	6181.9	6156.0	6137.5	6122.8	6115.4
32.5°	6322.2	6305.6	6279.8	6253.9	6226.2	6193.0	6163.4	6141.2	6124.6	6120.9	6120.9
35°	6423.8	6396.1	6361.0	6324.1	6289.0	6261.3	6241.0	6239.1	6228.0	6241.0	6261.3
37.5°	6721.2	6697.2	6643.6	6595.6	6571.6	6558.7	6540.2	6543.9	6518.0	6558.7	6591.9
40°	7352.9	7323.3	7260.5	7221.7	7173.7	7127.5	7164.5	7153.4	7171.9	7164.5	7199.6
42.5°	8274.5	8245.0	8145.2	8130.4	8110.1	8091.7	8091.7	8076.9	8069.5	8095.4	8065.8
45°	9395.6	9336.5	9299.6	9343.9	9283.0	9301.4	9366.1	9279.3	9299.6	9179.5	9068.7
47.5°	10559.2	10553.7	10544.5	10598.0	10607.3	10635.0	10670.1	10581.4	10420.7	10330.2	10104.9
50°	11898.3	11955.6	11977.7	12029.4	12051.6	12071.9	12016.5	11885.4	11613.9	11373.8	11107.8
52.5°	13525.5	13425.8	13562.4	13612.3	13590.2	13508.9	13309.4	13148.7	12773.8	12428.4	12016.5
55°	15420.5	15444.5	15348.5	15309.7	15234.0	15008.6	14733.4	14371.4	13896.8	13446.1	12925.2
57.5°	17350.6	17341.4	17191.8	16981.2	16724.5	16453.0	16043.0	15523.9	14969.9	14364.0	13734.2
60°	19698.1	19688.9	19386.0	19025.8	18660.1	18222.4	17579.6	16955.4	16212.9	15416.8	14666.9
62.5°	22782.6	22385.5	22088.2	21550.7	20985.5	20412.9	19543.0	18713.7	17721.9	16717.1	15841.6
65°	26735.2	26081.3	25743.3	24963.9	24088.4	23194.5	22309.8	21220.1	19884.7	18669.4	17600.0
67.5°	29659.0	29060.5	28441.8	27664.2	26703.8	25706.4	24494.8	23122.5	21606.1	20243.0	19077.6
69°	29915.7	29356.1	28613.6	27834.1	26925.4	25841.2	24518.8	22982.1	21445.4	20065.7	18918.7
70°	29526.0	28931.2	28150.0	27339.1	26323.3	25300.1	23914.8	22313.5	20774.9	19391.5	18272.3
72.5°	26618.8	26038.9	25207.7	24238.0	23196.3	22320.9	21005.8	19336.1	17662.8	16384.6	15512.9
75°	20241.2	20113.7	19524.5	18959.4	18139.3	17162.2	15959.8	14836.9	13464.6	12112.6	11299.9
77.5°	8636.5	8930.2	9236.8	9281.1	9310.7	9009.6	8823.1	8540.5	7622.5	7205.1	6774.8
80°	1595.8	1425.9	1521.9	1533.0	1595.8	1629.0	1750.9	2076.0	2113.0	2192.4	2290.3
82.5°	567.0	576.3	591.0	596.6	602.1	624.3	707.4	847.8	975.2	1141.4	1363.1
85°	321.4	326.9	339.8	350.9	358.3	380.5	426.7	509.8	635.4	825.6	1119.3
87.5°	97.9	110.8	118.2	133.0	138.5	142.2	162.5	217.9	280.7	415.6	605.8
90°	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):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2	5465.2
2.5°	5461.5	5459.7	5456.0	5452.3	5454.2	5450.5	5439.4	5435.7	5422.8	5413.5	5406.1
5°	5511.4	5509.6	5502.2	5504.0	5502.2	5483.7	5470.8	5448.6	5435.7	5415.4	5408.0
7.5°	5614.8	5613.0	5600.1	5605.6	5601.9	5574.2	5552.1	5517.0	5498.5	5472.6	5452.3
10°	5770.0	5770.0	5755.2	5757.1	5757.1	5720.1	5681.3	5622.2	5579.8	5539.1	5504.0
12.5°	5958.4	5951.0	5949.2	5939.9	5932.5	5891.9	5832.8	5753.4	5674.0	5607.5	5559.4
15°	6148.6	6137.5	6132.0	6120.9	6111.7	6074.7	5995.3	5897.4	5790.3	5683.2	5603.8
17.5°	6272.4	6265.0	6253.9	6250.2	6237.3	6200.3	6144.9	6047.0	5914.1	5764.5	5644.4
20°	6318.6	6305.6	6298.2	6290.8	6283.5	6257.6	6257.6	6194.8	6047.0	5836.5	5653.6
22.5°	6289.0	6281.6	6270.5	6265.0	6257.6	6261.3	6333.3	6324.1	6154.2	5853.1	5587.1
25°	6220.7	6211.4	6202.2	6202.2	6200.3	6239.1	6412.7	6436.8	6185.6	5771.8	5441.2
27.5°	6150.5	6137.5	6141.2	6143.1	6152.3	6235.4	6499.6	6466.3	6100.6	5576.1	5190.0
30°	6108.0	6108.0	6117.2	6132.0	6150.5	6296.4	6567.9	6399.8	5880.8	5280.5	4857.6
32.5°	6126.5	6144.9	6165.3	6202.2	6229.9	6431.2	6591.9	6228.0	5561.3	4914.8	4510.3
35°	6290.8	6313.0	6351.8	6409.1	6442.3	6625.2	6591.9	5976.9	5190.0	4600.9	4152.0
37.5°	6649.2	6671.3	6717.5	6761.8	6795.1	6869.0	6564.2	5657.3	4879.7	4275.8	3830.7
40°	7225.4	7256.8	7290.1	7282.7	7260.5	7188.5	6508.8	5360.0	4593.5	3991.3	3514.8
42.5°	8036.3	8006.7	8003.0	7931.0	7857.1	7548.6	6468.2	5166.0	4347.8	3692.1	3200.8
45°	8972.7	8852.6	8728.9	8632.8	8520.2	7943.9	6457.1	5009.0	4076.3	3359.7	2859.1
47.5°	9914.6	9722.6	9482.4	9332.8	9150.0	8365.0	6490.3	4798.5	3727.2	2997.7	2539.6
50°	10838.1	10524.1	10226.8	10047.6	9840.8	8848.9	6543.9	4443.9	3309.8	2668.9	2247.8
52.5°	11693.3	11288.8	10984.0	10773.5	10520.5	9412.3	6495.9	3978.4	2947.8	2353.1	1970.7
55°	12506.0	12059.0	11743.2	11521.5	11224.2	9977.4	6148.6	3555.5	2602.4	2044.6	1658.6
57.5°	13217.1	12788.6	12459.8	12158.7	11907.5	10468.7	5463.4	3206.4	2270.0	1691.8	1320.6
60°	14048.2	13566.1	13176.4	12855.0	12559.5	10721.8	4695.0	2896.1	1915.3	1309.5	954.9
62.5°	15169.3	14615.2	14164.6	13797.0	13411.0	10777.2	4170.5	2585.8	1520.1	947.5	694.5
65°	16831.6	16148.2	15584.9	15078.8	14556.1	10548.2	3911.9	2247.8	1130.4	703.7	581.8
67.5°	18152.2	17443.0	16791.0	16140.8	15472.2	10123.4	3854.7	1935.6	868.1	598.4	522.7
69°	17991.5	17315.5	16717.1	16013.4	15272.8	9589.6	3797.4	1815.6	792.4	555.9	495.0
70°	17372.8	16731.9	16124.2	15551.7	14644.8	8994.8	3646.0	1749.1	762.8	535.6	474.7
72.5°	14679.9	13937.4	13348.2	12635.3	11680.4	6684.3	2764.9	1414.8	700.0	489.5	428.5
75°	10707.0	10092.0	9504.6	8715.9	7786.9	3867.6	1721.4	809.0	513.5	443.3	387.9
77.5°	6252.1	6113.5	5546.5	5027.5	4107.7	1968.9	988.1	483.9	398.9	402.6	341.7
80°	2353.1	2506.4	2563.6	2384.5	2203.5	1359.4	718.5	393.4	347.2	397.1	290.0
82.5°	1715.9	1991.1	2024.3	1939.3	1804.5	1267.0	574.4	315.8	282.6	426.7	249.3
85°	1431.4	1584.7	1608.7	1520.1	1475.7	1073.1	400.8	221.6	206.9	306.6	186.5
87.5°	724.0	762.8	783.1	709.2	712.9	500.5	160.7	94.2	112.7	131.1	103.4
90°	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):

	175°	180°
0°	5465.2	5465.2
2.5°	5389.5	5400.6
5°	5396.9	5396.9
7.5°	5439.4	5439.4
10°	5485.6	5487.4
12.5°	5528.0	5526.2
15°	5561.3	5555.7
17.5°	5581.6	5576.1
20°	5561.3	5552.1
22.5°	5457.9	5432.0
25°	5269.5	5236.2
27.5°	5020.1	4998.0
30°	4695.0	4661.8
32.5°	4314.6	4297.9
35°	3950.7	3930.4
37.5°	3618.3	3612.7
40°	3337.5	3308.0
42.5°	3008.7	2995.8
45°	2674.4	2667.1
47.5°	2360.5	2353.1
50°	2070.5	2055.7
52.5°	1786.0	1762.0
55°	1470.2	1453.6
57.5°	1128.5	1113.7
60°	794.2	777.6
62.5°	565.2	546.7
65°	471.0	456.2
67.5°	426.7	410.0
69°	406.3	391.6
70°	393.4	382.3
72.5°	365.7	358.3
75°	334.3	328.8
77.5°	293.7	284.4
80°	245.6	236.4
82.5°	206.9	197.6
85°	138.5	125.6
87.5°	62.8	55.4
90°	0.0	0.0

(END OF REPORT)