

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: P158056

Luminaire Tested: **VST-F09-LED-E-U-RW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158056
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-F09-LED-E-U-RW-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23750.9 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

Input Watts (W): 234.8
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

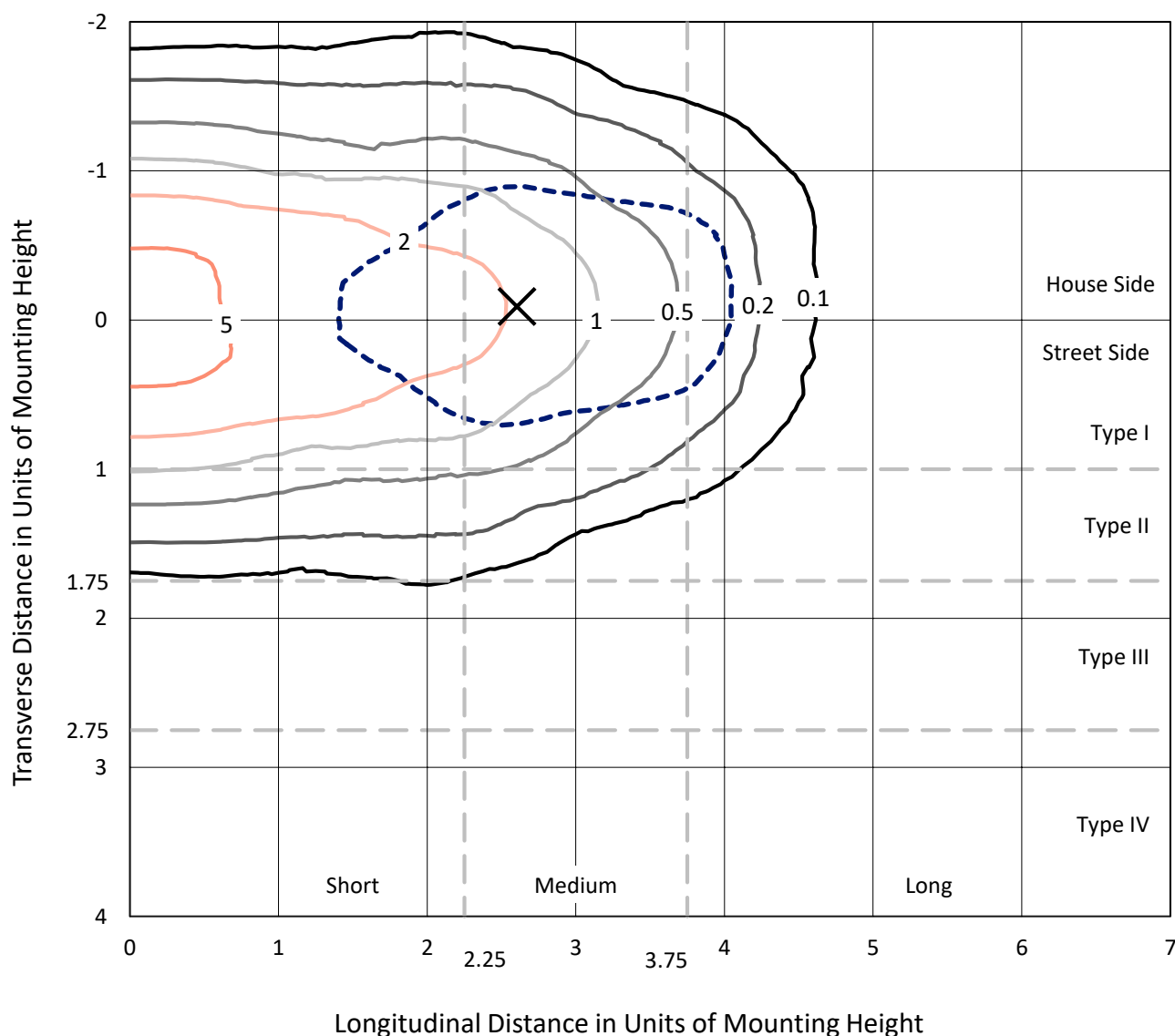


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

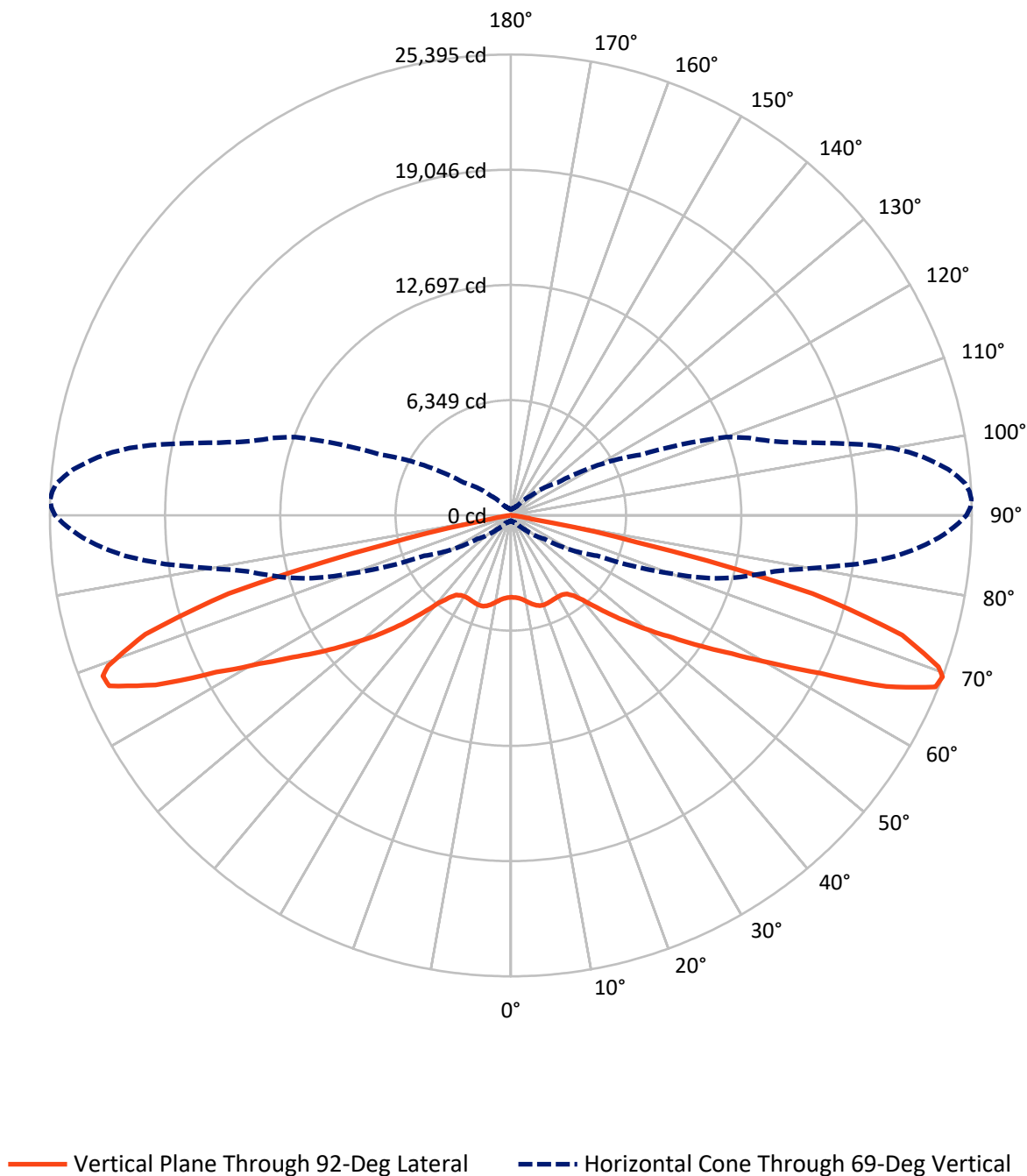


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12596.4	0.0	12596.4
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	11154.6	0.0	11154.6
	% Fixture	47.0	0.0	47.0
Total	Lumens	23750.9	0.0	23750.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.5	1.9
10°-20°	1394.6	5.9
20°-30°	2262.6	9.5
30°-40°	2819.9	11.9
40°-50°	3511.0	14.8
50°-60°	4330.0	18.2
60°-70°	5377.5	22.6
70°-80°	3304.2	13.9
80°-90°	309.7	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°	23750.9	100.0
0°-180°	23750.9	100.0

Coefficient of Utilization



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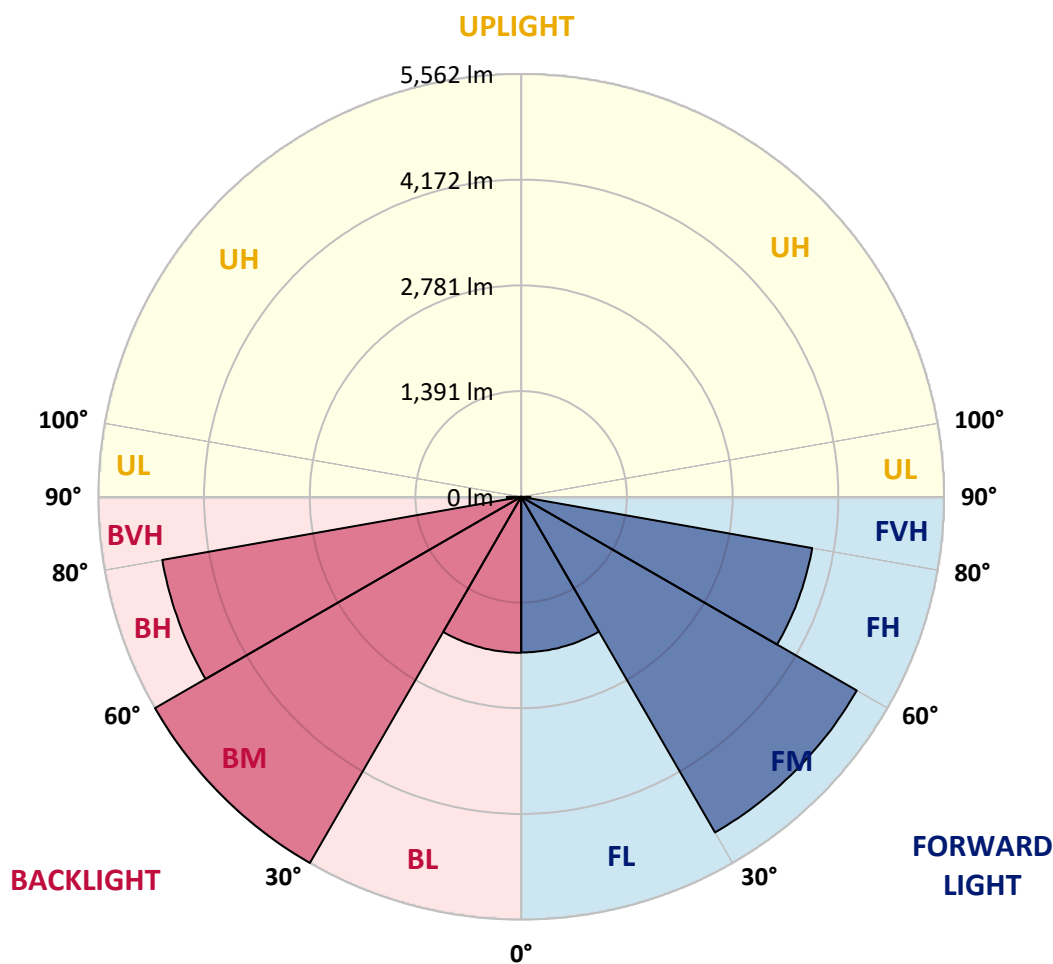
CATALOG NUMBER: VST-F09-LED-E-U-RW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2047.2	8.6			
FM	(30°-60°)	5098.4	21.5			
FH	(60°-80°)	3887.7	16.4			G2/5000
FVH	(80°-90°)	121.3	0.5			G2/225
BL	(0°-30°)	2051.5	8.6	B3/2500		
BM	(30°-60°)	5562.4	23.4	B4/8500		
BH	(60°-80°)	4794.0	20.2	B4/5000		G4/5000
BVH	(80°-90°)	188.4	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	71°	72°
0°	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7
2.5°	4583.4	4571.2	4581.8	4583.4	4581.8	4581.8	4568.1	4565.1	4546.8	4551.3	4549.8
5°	4645.9	4641.3	4648.9	4652.0	4655.0	4648.9	4638.2	4633.7	4621.5	4616.9	4615.4
7.5°	4703.8	4696.2	4708.4	4719.1	4726.7	4728.2	4729.7	4722.1	4722.1	4716.0	4716.0
10°	4752.6	4746.5	4766.3	4780.0	4804.4	4818.2	4833.4	4844.1	4850.2	4851.7	4850.2
12.5°	4773.9	4769.4	4801.4	4842.6	4888.3	4920.3	4958.4	4985.9	4993.5	4992.0	4999.6
15°	4737.4	4740.4	4789.2	4870.0	4967.6	5048.4	5101.8	5124.6	5130.7	5133.8	5135.3
17.5°	4638.2	4644.3	4714.5	4845.6	5016.4	5162.8	5242.0	5242.0	5229.8	5229.8	5228.3
20°	4479.7	4485.8	4577.3	4766.3	5017.9	5242.0	5354.9	5332.0	5286.3	5277.1	5268.0
22.5°	4260.1	4284.5	4385.1	4604.7	4952.3	5264.9	5425.0	5391.5	5319.8	5300.0	5286.3
25°	4011.6	4008.5	4129.0	4376.0	4793.8	5210.0	5444.8	5438.7	5362.5	5341.2	5316.8
27.5°	3728.0	3737.1	3848.4	4098.5	4551.3	5051.5	5411.3	5492.1	5429.6	5408.2	5385.4
30°	3436.8	3445.9	3551.1	3842.3	4275.4	4824.3	5342.7	5543.9	5519.5	5502.8	5487.5
32.5°	3144.0	3147.1	3272.1	3584.7	4042.1	4552.9	5239.0	5591.2	5624.8	5617.1	5611.0
35°	2869.6	2872.6	3008.3	3325.4	3811.8	4321.1	5114.0	5659.8	5768.1	5777.2	5783.3
37.5°	2602.7	2607.3	2746.0	3078.4	3584.7	4145.8	4975.2	5765.0	5969.3	6002.9	6009.0
40°	2337.4	2342.0	2474.6	2826.9	3354.4	3991.8	4868.5	5912.9	6240.7	6286.5	6333.8
42.5°	2084.3	2101.1	2213.9	2550.9	3098.3	3801.2	4822.7	6092.8	6562.5	6634.1	6687.5
45°	1848.0	1849.5	1977.6	2293.2	2794.8	3543.5	4792.2	6297.2	6922.3	7030.6	7103.7
47.5°	1594.9	1613.2	1747.3	2053.8	2511.2	3224.8	4694.7	6536.5	7314.2	7440.7	7588.6
50°	1349.4	1375.3	1504.9	1808.3	2252.0	2895.5	4432.4	6817.1	7754.8	7919.5	8090.2
52.5°	1113.1	1111.5	1248.8	1564.4	1991.3	2616.4	4007.0	7111.4	8264.1	8440.9	8625.4
55°	841.7	841.7	977.4	1265.5	1709.2	2367.9	3551.1	7294.3	8736.7	8950.2	9151.5
57.5°	577.9	593.1	721.2	969.7	1415.0	2140.7	3201.9	7189.1	9098.1	9363.4	9602.8
60°	428.5	443.7	538.2	696.8	1107.0	1872.4	2939.7	6693.6	9316.1	9668.4	9979.4
62.5°	370.5	381.2	471.1	558.1	797.4	1587.3	2707.9	6063.9	9630.2	10112.0	10545.1
65°	330.9	341.5	431.5	481.8	623.6	1276.2	2578.3	5704.0	10005.3	10741.8	11370.0
67.5°	306.5	318.7	394.9	431.5	544.3	1154.2	2477.7	5620.2	10002.3	10895.8	11697.8
69°	294.3	303.4	365.9	405.6	526.0	1117.6	2259.7	5255.8	9342.1	10301.1	11106.2
70°	286.7	295.8	349.2	388.8	519.9	1052.1	2058.4	4773.9	8590.4	9555.5	10372.8
72.5°	262.3	271.4	311.0	347.6	433.0	702.9	1434.8	3055.6	6138.6	6827.8	7762.4
75°	231.8	242.4	272.9	303.4	327.8	407.1	827.9	1585.7	3509.9	4032.9	4865.4
77.5°	189.1	199.7	231.8	280.6	277.5	309.5	538.2	974.3	1643.7	2038.6	2346.6
80°	155.5	163.1	190.6	283.6	227.2	259.2	436.1	799.0	1157.3	1279.3	1352.4
82.5°	103.7	114.4	147.9	222.6	173.8	184.5	326.3	747.1	978.9	1073.4	1161.8
85°	48.8	53.4	90.0	118.9	105.2	99.1	186.0	527.6	728.8	773.0	806.6
87.5°	0.0	0.0	4.6	9.1	13.7	13.7	33.5	111.3	204.3	247.0	244.0
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7
2.5°	4543.7	4545.2	4543.7	4543.7	4542.2	4539.1	4539.1	4536.1	4537.6	4536.1	4539.1
5°	4613.9	4613.9	4609.3	4606.2	4610.8	4606.2	4607.8	4600.1	4600.1	4595.6	4589.5
7.5°	4714.5	4714.5	4716.0	4706.9	4713.0	4714.5	4709.9	4706.9	4703.8	4696.2	4697.7
10°	4848.7	4848.7	4853.2	4841.0	4847.1	4850.2	4851.7	4851.7	4848.7	4834.9	4836.5
12.5°	4998.1	4995.0	4996.6	4990.5	4996.6	4999.6	5002.7	4999.6	4999.6	4996.6	4995.0
15°	5133.8	5132.3	5135.3	5130.7	5132.3	5135.3	5144.5	5142.9	5141.4	5132.3	5132.3
17.5°	5226.8	5222.2	5219.2	5217.6	5217.6	5216.1	5217.6	5217.6	5213.1	5211.5	5211.5
20°	5261.9	5249.7	5242.0	5237.5	5231.4	5228.3	5225.3	5226.8	5223.7	5219.2	5220.7
22.5°	5268.0	5251.2	5235.9	5222.2	5210.0	5202.4	5194.8	5191.7	5184.1	5179.5	5179.5
25°	5296.9	5271.0	5246.6	5223.7	5205.4	5188.7	5171.9	5159.7	5150.6	5139.9	5136.8
27.5°	5361.0	5333.5	5304.6	5275.6	5251.2	5217.6	5194.8	5170.4	5149.0	5132.3	5120.1
30°	5460.1	5432.6	5403.7	5370.1	5338.1	5303.0	5264.9	5235.9	5205.4	5171.9	5153.6
32.5°	5591.2	5572.9	5543.9	5511.9	5483.0	5446.4	5400.6	5356.4	5327.4	5287.8	5258.8
35°	5778.7	5757.4	5748.3	5734.5	5705.6	5682.7	5632.4	5591.2	5563.8	5508.9	5487.5
37.5°	6034.9	6033.4	6041.0	6036.4	6041.0	6012.0	5989.2	5987.6	5948.0	5894.6	5842.8
40°	6384.1	6402.4	6443.5	6472.5	6500.0	6503.0	6535.0	6501.5	6506.0	6498.4	6445.1
42.5°	6782.0	6844.5	6893.3	6978.7	7044.3	7105.3	7146.4	7202.9	7245.5	7283.7	7292.8
45°	7225.7	7318.7	7431.6	7507.8	7635.9	7738.0	7878.3	7986.6	8099.4	8210.7	8250.3
47.5°	7707.5	7823.4	7948.4	8090.2	8251.9	8412.0	8628.5	8794.7	8976.1	9127.1	9261.2
50°	8239.7	8360.1	8527.8	8691.0	8913.6	9098.1	9381.7	9599.7	9892.5	10093.8	10267.6
52.5°	8794.7	8945.6	9133.2	9313.1	9540.3	9776.6	10092.2	10413.9	10766.2	11071.1	11324.2
55°	9337.5	9523.5	9703.4	9913.8	10165.4	10439.9	10796.7	11220.5	11659.7	12008.8	12344.3
57.5°	9820.8	10035.8	10247.8	10461.2	10718.9	11037.6	11438.6	11896.0	12399.2	12864.2	13324.7
60°	10269.1	10526.8	10786.0	11052.8	11348.6	11742.0	12223.8	12786.4	13437.5	14073.3	14675.6
62.5°	10978.1	11316.6	11638.3	11982.9	12339.7	12801.7	13370.4	14108.4	14855.5	15649.9	16267.4
65°	11938.7	12414.4	12835.2	13282.0	13744.0	14361.5	15041.5	15924.3	16994.7	17808.9	18800.0
67.5°	12415.9	13042.6	13583.9	14080.9	14652.7	15276.3	16084.4	17128.9	18270.9	19451.1	20556.5
69°	11854.8	12501.3	13100.5	13657.1	14234.9	14840.3	15685.0	16756.8	17964.4	19240.6	20320.2
70°	11127.5	11774.0	12412.9	13047.2	13574.7	14164.8	15012.6	16118.0	17324.1	18650.6	19720.9
72.5°	8524.8	9302.4	9880.3	10474.9	11086.4	11586.5	12565.4	13497.0	14753.3	16099.7	17278.3
75°	5454.0	6169.1	6800.3	7306.5	7904.2	8503.5	9226.2	10261.5	11048.2	12153.7	13109.7
77.5°	2802.5	3014.4	3622.8	3804.2	4218.9	4545.2	4943.2	5202.4	5842.8	5978.5	6542.6
80°	1328.0	1196.9	1126.8	1062.7	1081.0	1073.4	1041.4	998.7	1052.1	1029.2	1020.0
82.5°	1157.3	1032.2	823.4	699.9	605.3	513.8	442.2	405.6	410.2	422.4	426.9
85°	811.2	762.4	594.6	451.3	352.2	272.9	219.6	210.4	216.5	233.3	227.2
87.5°	234.8	245.5	216.5	150.9	105.2	76.2	59.5	67.1	64.0	62.5	65.6
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°	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7
2.5°	4539.1	4537.6	4533.0	4528.5	4528.5	4525.4	4528.5	4530.0	4528.5	4528.5	4525.4
5°	4591.0	4592.5	4597.1	4587.9	4586.4	4587.9	4581.8	4580.3	4575.7	4580.3	4574.2
7.5°	4690.1	4694.7	4694.7	4688.6	4687.0	4691.6	4682.5	4679.4	4674.8	4673.3	4671.8
10°	4838.0	4842.6	4834.9	4830.4	4825.8	4831.9	4824.3	4824.3	4819.7	4815.1	4813.6
12.5°	5002.7	4999.6	4996.6	4999.6	4995.0	4995.0	4990.5	4987.4	4985.9	4984.4	4981.3
15°	5130.7	5141.4	5141.4	5144.5	5141.4	5141.4	5135.3	5136.8	5133.8	5132.3	5133.8
17.5°	5213.1	5216.1	5223.7	5228.3	5228.3	5229.8	5226.8	5229.8	5226.8	5226.8	5232.9
20°	5223.7	5226.8	5234.4	5242.0	5246.6	5249.7	5249.7	5254.2	5257.3	5260.3	5268.0
22.5°	5181.1	5185.6	5194.8	5208.5	5216.1	5219.2	5225.3	5232.9	5240.5	5246.6	5257.3
25°	5136.8	5138.4	5147.5	5161.2	5170.4	5178.0	5188.7	5197.8	5208.5	5220.7	5232.9
27.5°	5112.4	5110.9	5118.5	5132.3	5139.9	5150.6	5159.7	5173.4	5185.6	5200.9	5211.5
30°	5133.8	5121.6	5123.1	5129.2	5135.3	5142.9	5153.6	5165.8	5179.5	5193.3	5205.4
32.5°	5228.3	5200.9	5182.6	5178.0	5179.5	5181.1	5187.2	5194.8	5205.4	5216.1	5220.7
35°	5432.6	5385.4	5361.0	5341.2	5324.4	5310.7	5313.7	5312.2	5312.2	5321.3	5310.7
37.5°	5821.4	5762.0	5736.1	5701.0	5681.2	5630.9	5617.1	5614.1	5594.3	5594.3	5571.4
40°	6431.3	6396.3	6376.4	6344.4	6248.4	6260.6	6192.0	6193.5	6137.1	6143.2	6103.5
42.5°	7298.9	7303.5	7279.1	7257.7	7183.0	7149.5	7085.4	6994.0	6922.3	6920.8	6841.5
45°	8302.2	8357.1	8279.3	8306.8	8241.2	8151.2	8076.5	7959.1	7847.8	7812.7	7731.9
47.5°	9351.2	9441.2	9381.7	9392.4	9360.4	9232.3	9131.6	8986.8	8841.9	8744.4	8695.6
50°	10471.9	10531.4	10529.8	10500.9	10485.6	10360.6	10199.0	10089.2	9982.4	9851.3	9808.6
52.5°	11487.4	11626.1	11719.1	11697.8	11653.6	11578.8	11435.5	11341.0	11183.9	11165.6	11183.9
55°	12574.5	12754.4	12849.0	12963.3	12964.8	12951.1	12891.6	12856.6	12710.2	12727.0	12705.6
57.5°	13603.7	13867.5	14012.3	14256.3	14340.1	14451.4	14410.3	14456.0	14367.6	14425.5	14408.8
60°	14998.8	15364.8	15605.7	15939.6	16095.1	16374.1	16429.0	16462.6	16511.4	16630.3	16563.2
62.5°	16753.8	17290.5	17790.6	18245.0	18394.4	18813.7	18882.3	19144.6	19158.3	19239.1	19091.2
65°	19626.4	20280.5	20830.9	21375.3	21689.4	22180.3	22378.6	22887.8	22732.3	22797.9	22482.2
67.5°	21507.9	22268.8	23006.7	23522.1	24043.6	24545.2	24906.6	25235.9	25232.9	25168.8	24888.3
69°	21341.7	22189.5	22916.8	23607.5	24156.4	24671.8	25106.3	25319.8	25394.5	25301.5	25101.7
70°	20766.9	21637.5	22528.0	23096.7	23694.4	24260.1	24708.3	24941.6	24993.5	24927.9	24755.6
72.5°	18110.8	18946.4	19928.3	20445.2	21167.9	21576.5	22194.1	22496.0	22549.3	22465.5	22352.6
75°	14134.3	14285.3	15285.5	15614.8	16139.3	16610.5	16994.7	16897.1	17170.1	17116.7	17074.0
77.5°	6658.5	6256.0	6904.0	7205.9	7047.3	6625.0	7239.4	6795.7	7090.0	7472.7	7375.1
80°	1097.8	1094.8	1123.7	1187.8	1111.5	1180.1	1178.6	1145.1	1148.1	1230.5	1187.8
82.5°	422.4	431.5	436.1	448.3	448.3	449.8	457.4	466.6	458.9	474.2	471.1
85°	228.7	244.0	230.2	219.6	227.2	231.8	237.9	245.5	237.9	260.7	248.5
87.5°	59.5	62.5	54.9	54.9	53.4	48.8	48.8	51.8	56.4	67.1	73.2
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°	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7
2.5°	4519.3	4520.8	4522.4	4517.8	4514.7	4514.7	4513.2	4510.2	4508.6	4508.6	4508.6
5°	4571.2	4574.2	4566.6	4565.1	4562.0	4559.0	4559.0	4555.9	4557.4	4557.4	4549.8
7.5°	4674.8	4670.3	4661.1	4655.0	4661.1	4650.4	4645.9	4648.9	4645.9	4647.4	4644.3
10°	4813.6	4813.6	4802.9	4809.0	4801.4	4789.2	4793.8	4789.2	4786.1	4775.5	4781.6
12.5°	4985.9	4981.3	4975.2	4961.5	4956.9	4955.4	4941.7	4943.2	4938.6	4935.6	4931.0
15°	5136.8	5135.3	5121.6	5114.0	5112.4	5106.3	5100.2	5097.2	5089.6	5088.0	5085.0
17.5°	5237.5	5232.9	5226.8	5219.2	5219.2	5210.0	5207.0	5199.4	5197.8	5193.3	5188.7
20°	5271.0	5272.5	5266.4	5260.3	5257.3	5251.2	5246.6	5240.5	5237.5	5231.4	5226.8
22.5°	5263.4	5263.4	5257.3	5255.8	5249.7	5240.5	5234.4	5226.8	5219.2	5211.5	5202.4
25°	5239.0	5237.5	5232.9	5225.3	5217.6	5203.9	5191.7	5179.5	5168.9	5159.7	5146.0
27.5°	5217.6	5214.6	5205.4	5194.8	5179.5	5164.3	5141.4	5124.6	5110.9	5098.7	5083.5
30°	5210.0	5199.4	5185.6	5168.9	5150.6	5127.7	5103.3	5081.9	5066.7	5054.5	5048.4
32.5°	5219.2	5205.4	5184.1	5162.8	5139.9	5112.4	5088.0	5069.7	5056.0	5053.0	5053.0
35°	5303.0	5280.2	5251.2	5220.7	5191.7	5168.9	5152.1	5150.6	5141.4	5152.1	5168.9
37.5°	5548.5	5528.7	5484.5	5444.8	5425.0	5414.3	5399.1	5402.1	5380.8	5414.3	5441.8
40°	6070.0	6045.6	5993.7	5961.7	5922.1	5884.0	5914.5	5905.3	5920.6	5914.5	5943.4
42.5°	6830.8	6806.4	6724.1	6711.9	6695.1	6679.9	6679.9	6667.7	6661.6	6682.9	6658.5
45°	7756.3	7707.5	7677.0	7713.6	7663.3	7678.6	7731.9	7660.3	7677.0	7577.9	7486.5
47.5°	8716.9	8712.3	8704.7	8748.9	8756.6	8779.4	8808.4	8735.2	8602.6	8527.8	8341.8
50°	9822.4	9869.6	9887.9	9930.6	9948.9	9965.7	9919.9	9811.7	9587.5	9389.3	9169.8
52.5°	11165.6	11083.3	11196.1	11237.3	11219.0	11151.9	10987.2	10854.6	10545.1	10259.9	9919.9
55°	12730.0	12749.8	12670.6	12638.5	12576.0	12390.0	12162.8	11864.0	11472.1	11100.1	10670.1
57.5°	14323.4	14315.7	14192.2	14018.4	13806.5	13582.3	13243.9	12815.4	12358.0	11857.9	11337.9
60°	16261.3	16253.7	16003.6	15706.3	15404.4	15043.0	14512.4	13997.1	13384.1	12727.0	12107.9
62.5°	18807.6	18479.8	18234.3	17790.6	17324.1	16851.4	16133.2	15448.6	14629.8	13800.4	13077.7
65°	22070.6	21530.8	21251.8	20608.3	19885.6	19147.6	18417.3	17517.7	16415.3	15412.0	14529.2
67.5°	24484.2	23990.2	23479.4	22837.5	22044.6	21221.3	20221.1	19088.2	17836.4	16711.1	15749.0
69°	24696.2	24234.2	23621.2	22977.8	22227.6	21332.6	20240.9	18972.3	17703.7	16564.7	15617.9
70°	24374.4	23883.5	23238.5	22569.1	21730.5	20885.8	19742.3	18420.3	17150.2	16008.2	15084.2
72.5°	21974.5	21495.7	20809.6	20009.1	19149.2	18426.4	17340.8	15962.5	14581.1	13525.9	12806.3
75°	16709.6	16604.4	16118.0	15651.4	14974.4	14167.8	13175.2	12248.2	11115.3	9999.2	9328.3
77.5°	7129.7	7372.1	7625.2	7661.8	7686.2	7437.7	7283.7	7050.4	6292.6	5948.0	5592.7
80°	1317.4	1177.1	1256.4	1265.5	1317.4	1344.8	1445.4	1713.8	1744.3	1809.9	1890.7
82.5°	468.1	475.7	487.9	492.5	497.1	515.4	584.0	699.9	805.1	942.3	1125.3
85°	265.3	269.9	280.6	289.7	295.8	314.1	352.2	420.8	524.5	681.6	924.0
87.5°	80.8	91.5	97.6	109.8	114.4	117.4	134.2	179.9	231.8	343.1	500.1
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°	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7	4511.7
2.5°	4508.6	4507.1	4504.1	4501.0	4502.5	4499.5	4490.3	4487.3	4476.6	4469.0	4462.9
5°	4549.8	4548.3	4542.2	4543.7	4542.2	4526.9	4516.3	4498.0	4487.3	4470.5	4464.4
7.5°	4635.2	4633.7	4623.0	4627.6	4624.5	4601.7	4583.4	4554.4	4539.1	4517.8	4501.0
10°	4763.3	4763.3	4751.1	4752.6	4752.6	4722.1	4690.1	4641.3	4606.2	4572.7	4543.7
12.5°	4918.8	4912.7	4911.2	4903.6	4897.5	4863.9	4815.1	4749.6	4684.0	4629.1	4589.5
15°	5075.8	5066.7	5062.1	5053.0	5045.4	5014.9	4949.3	4868.5	4780.0	4691.6	4626.0
17.5°	5178.0	5171.9	5162.8	5159.7	5149.0	5118.5	5072.8	4992.0	4882.2	4758.7	4659.6
20°	5216.1	5205.4	5199.4	5193.3	5187.2	5165.8	5165.8	5114.0	4992.0	4818.2	4667.2
22.5°	5191.7	5185.6	5176.5	5171.9	5165.8	5168.9	5228.3	5220.7	5080.4	4831.9	4612.3
25°	5135.3	5127.7	5120.1	5120.1	5118.5	5150.6	5293.9	5313.7	5106.3	4764.8	4491.9
27.5°	5077.4	5066.7	5069.7	5071.3	5078.9	5147.5	5365.5	5338.1	5036.2	4603.2	4284.5
30°	5042.3	5042.3	5049.9	5062.1	5077.4	5197.8	5422.0	5283.2	4854.8	4359.2	4010.1
32.5°	5057.5	5072.8	5089.6	5120.1	5142.9	5309.1	5441.8	5141.4	4591.0	4057.3	3723.4
35°	5193.3	5211.5	5243.6	5290.8	5318.3	5469.2	5441.8	4934.0	4284.5	3798.1	3427.6
37.5°	5489.1	5507.3	5545.5	5582.1	5609.5	5670.5	5418.9	4670.3	4028.4	3529.8	3162.3
40°	5964.8	5990.7	6018.1	6012.0	5993.7	5934.3	5373.2	4424.8	3792.0	3295.0	2901.6
42.5°	6634.1	6609.7	6606.7	6547.2	6486.2	6231.6	5339.6	4264.7	3589.2	3047.9	2642.4
45°	7407.2	7308.1	7205.9	7126.6	7033.6	6557.9	5330.5	4135.1	3365.1	2773.5	2360.3
47.5°	8184.8	8026.2	7828.0	7704.5	7553.5	6905.5	5357.9	3961.3	3076.9	2474.6	2096.5
50°	8947.2	8687.9	8442.5	8294.6	8123.8	7305.0	5402.1	3668.5	2732.3	2203.2	1855.6
52.5°	9653.1	9319.2	9067.6	8893.8	8684.9	7770.1	5362.5	3284.3	2433.5	1942.5	1626.9
55°	10324.0	9955.0	9694.3	9511.3	9265.8	8236.6	5075.8	2935.1	2148.4	1687.9	1369.2
57.5°	10911.0	10557.3	10285.9	10037.3	9830.0	8642.2	4510.2	2646.9	1873.9	1396.7	1090.2
60°	11597.1	11199.2	10877.5	10612.2	10368.2	8851.1	3875.9	2390.8	1581.2	1081.0	788.3
62.5°	12522.7	12065.2	11693.2	11389.8	11071.1	8896.8	3442.9	2134.6	1254.9	782.2	573.3
65°	13894.9	13330.8	12865.7	12447.9	12016.4	8707.8	3229.4	1855.6	933.1	580.9	480.3
67.5°	14985.1	14399.6	13861.4	13324.7	12772.7	8357.1	3182.1	1597.9	716.6	494.0	431.5
69°	14852.5	14294.4	13800.4	13219.5	12608.0	7916.4	3134.9	1498.8	654.1	458.9	408.6
70°	14341.7	13812.6	13310.9	12838.3	12089.6	7425.5	3009.8	1443.9	629.7	442.2	391.9
72.5°	12118.6	11505.7	11019.3	10430.7	9642.4	5518.0	2282.5	1167.9	577.9	404.1	353.7
75°	8838.9	8331.2	7846.3	7195.2	6428.3	3192.8	1421.1	667.8	423.9	365.9	320.2
77.5°	5161.2	5046.9	4578.8	4150.3	3391.0	1625.4	815.7	399.5	329.3	332.4	282.1
80°	1942.5	2069.1	2116.3	1968.4	1819.0	1122.2	593.1	324.8	286.7	327.8	239.4
82.5°	1416.5	1643.7	1671.1	1601.0	1489.7	1046.0	474.2	260.7	233.3	352.2	205.8
85°	1181.7	1308.2	1328.0	1254.9	1218.3	885.9	330.9	183.0	170.8	253.1	154.0
87.5°	597.7	629.7	646.5	585.5	588.5	413.2	132.7	77.8	93.0	108.3	85.4
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°	4511.7	4511.7
2.5°	4449.2	4458.3
5°	4455.3	4455.3
7.5°	4490.3	4490.3
10°	4528.5	4530.0
12.5°	4563.5	4562.0
15°	4591.0	4586.4
17.5°	4607.8	4603.2
20°	4591.0	4583.4
22.5°	4505.6	4484.2
25°	4350.1	4322.6
27.5°	4144.2	4125.9
30°	3875.9	3848.4
32.5°	3561.8	3548.1
35°	3261.4	3244.6
37.5°	2987.0	2982.4
40°	2755.2	2730.8
42.5°	2483.8	2473.1
45°	2207.8	2201.7
47.5°	1948.6	1942.5
50°	1709.2	1697.0
52.5°	1474.4	1454.6
55°	1213.7	1200.0
57.5°	931.6	919.4
60°	655.6	641.9
62.5°	466.6	451.3
65°	388.8	376.6
67.5°	352.2	338.5
69°	335.4	323.2
70°	324.8	315.6
72.5°	301.9	295.8
75°	276.0	271.4
77.5°	242.4	234.8
80°	202.8	195.2
82.5°	170.8	163.1
85°	114.4	103.7
87.5°	51.8	45.7
90°	0.0	0.0

(END OF REPORT)