

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: P157411

Luminaire Tested: **VST-E11-LED-E-U-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157411
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E11-LED-E-U-5MQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (231) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36106.1 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 269.7
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

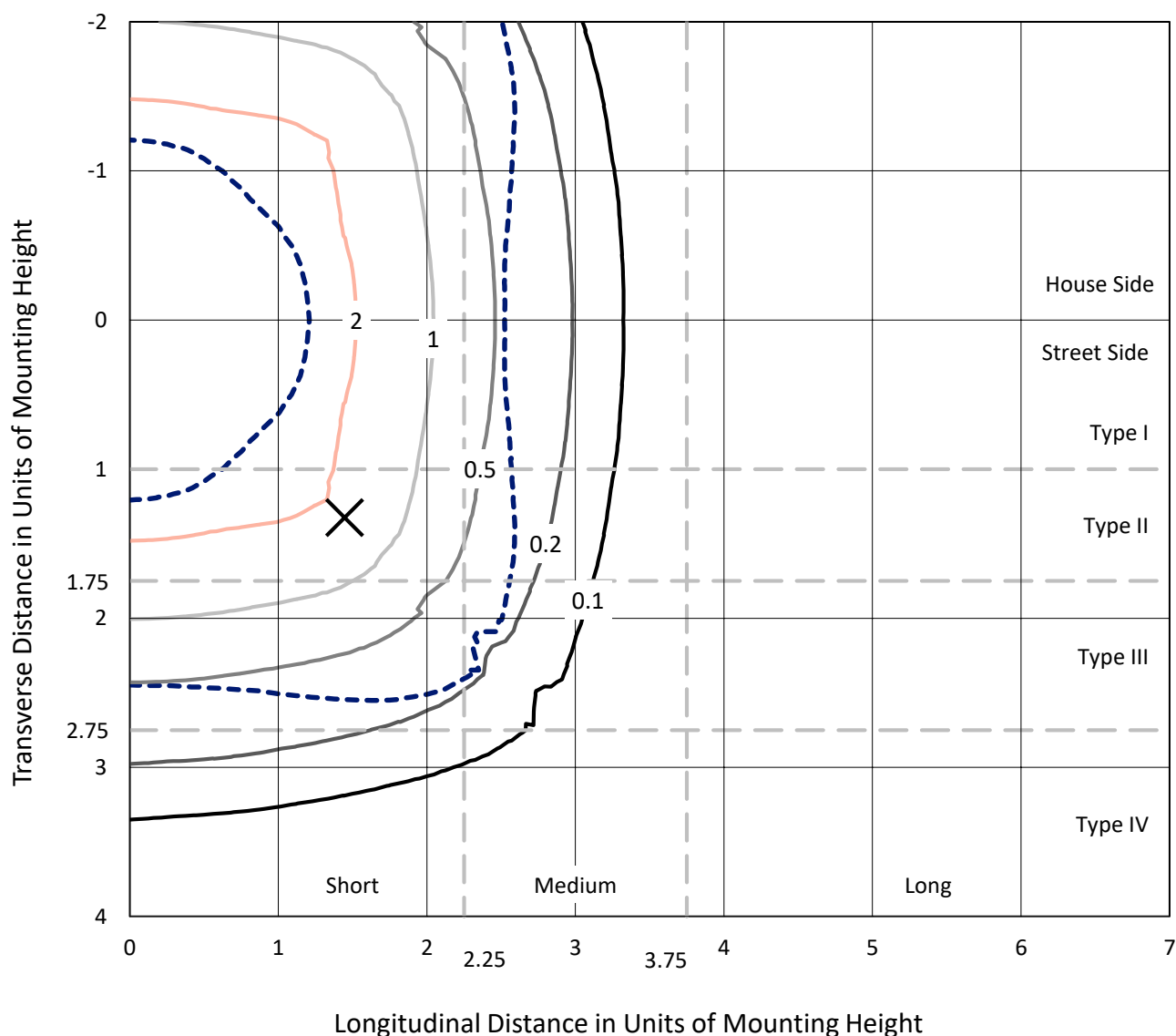


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

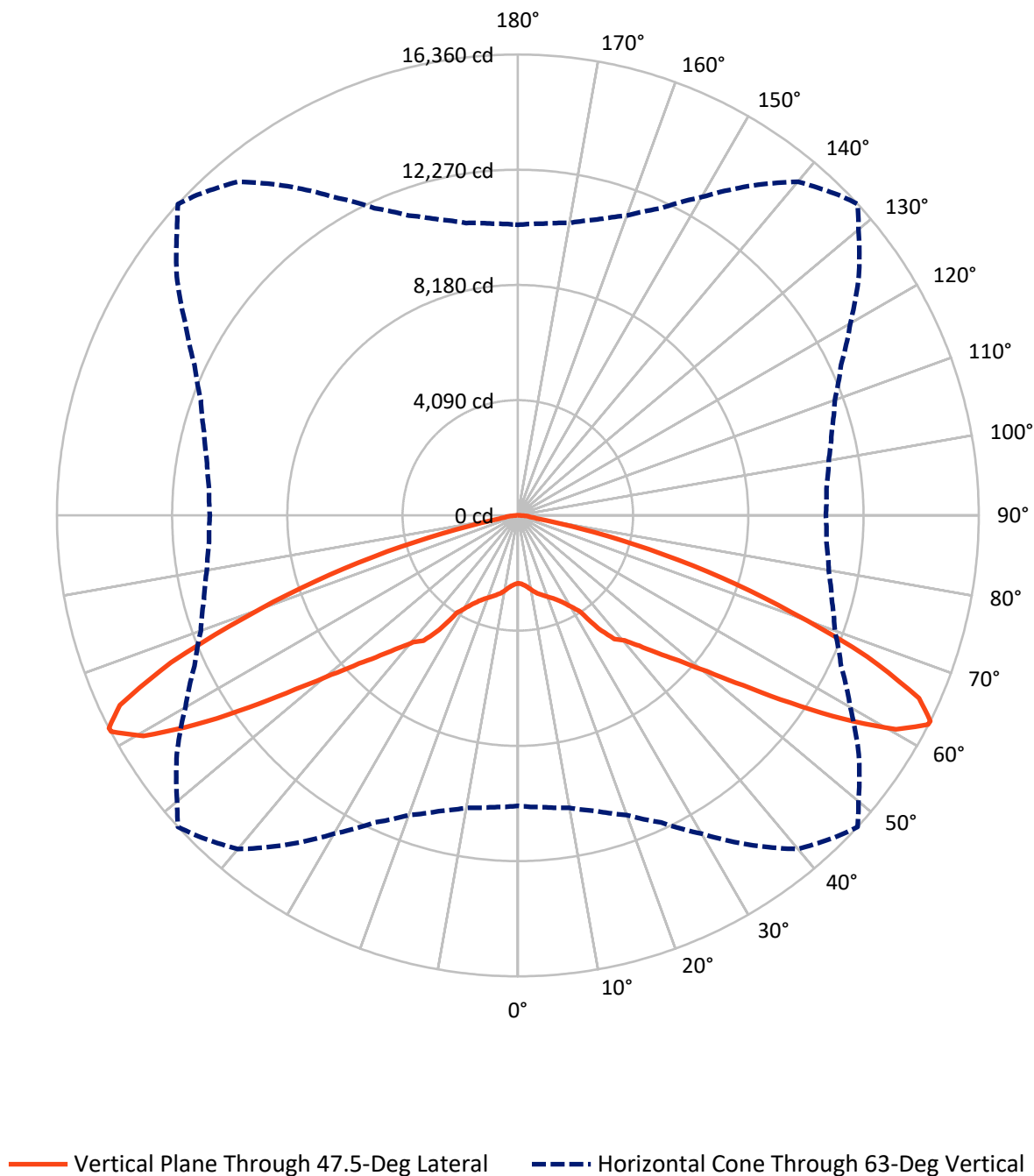


Based on 30 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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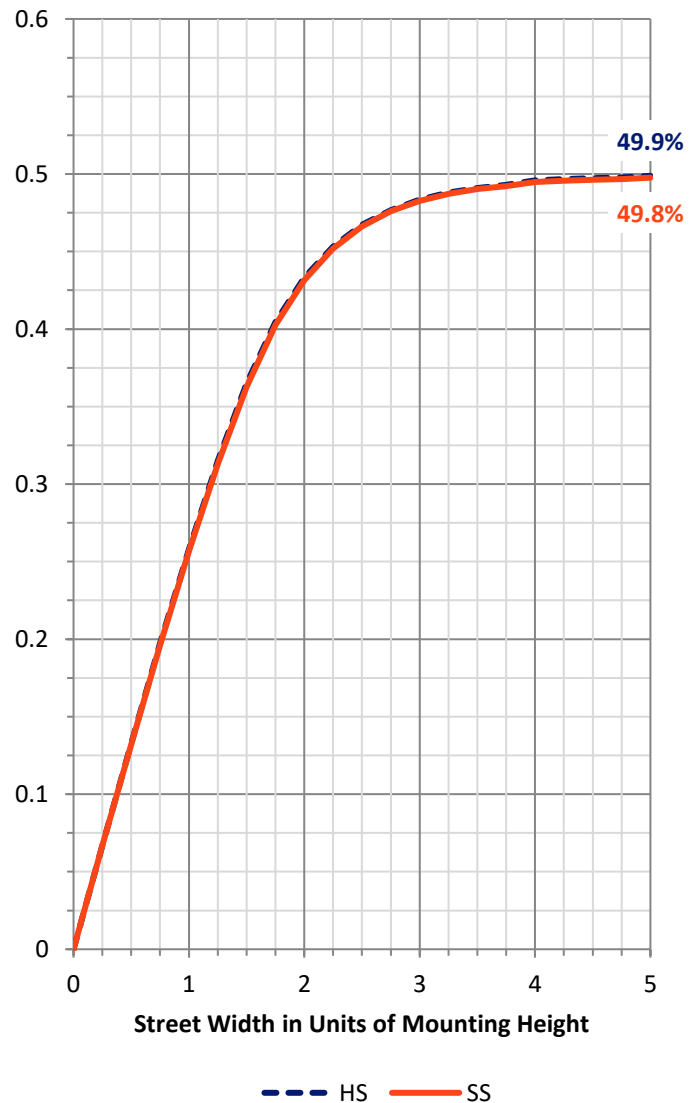
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18053.0	0.0	18053.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18053.0	0.0	18053.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	36106.1	0.0	36106.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.1	0.7
10°-20°	822.8	2.3
20°-30°	1573.8	4.4
30°-40°	3010.6	8.3
40°-50°	5209.3	14.4
50°-60°	9355.6	25.9
60°-70°	11376.5	31.5
70°-80°	4108.6	11.4
80°-90°	406.9	1.1
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°	36106.1	100.0
0°-180°	36106.1	100.0

Coefficient of Utilization



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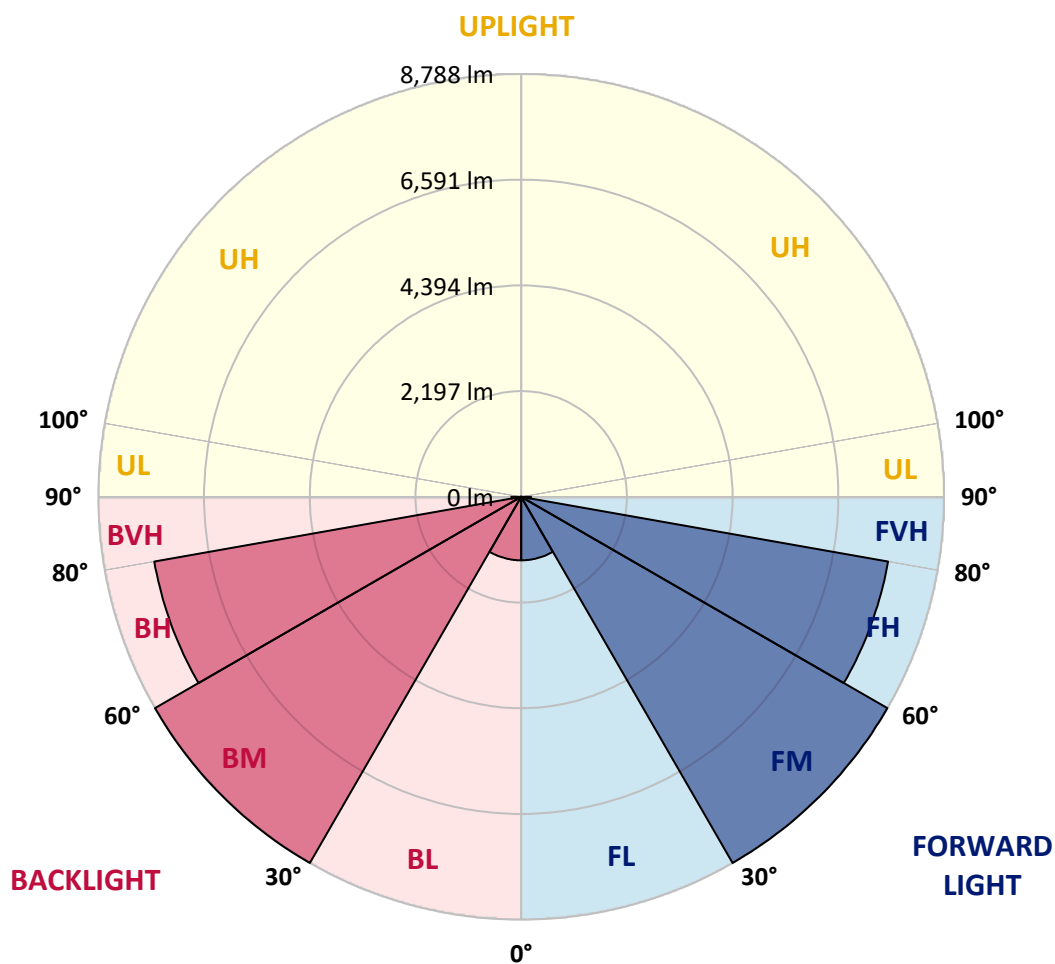
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1319.3	3.7			
FM	(30°-60°)	8787.7	24.3			
FH	(60°-80°)	7742.6	21.4			G4/12000
FVH	(80°-90°)	203.5	0.6			G2/225
BL	(0°-30°)	1319.3	3.7	B3/2500		
BM	(30°-60°)	8787.7	24.3	B5		
BH	(60°-80°)	7742.6	21.4	B5		G4/12000
BVH	(80°-90°)	203.5	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9
2.5°	2426.7	2422.2	2424.5	2426.7	2424.5	2422.2	2422.2	2422.2	2426.7	2422.2	2433.5
5°	2474.1	2469.6	2471.9	2471.9	2471.9	2467.4	2467.4	2467.4	2465.1	2467.4	2492.2
7.5°	2564.4	2557.7	2555.4	2559.9	2555.4	2553.2	2550.9	2550.9	2546.4	2546.4	2578.0
10°	2672.8	2663.8	2668.3	2670.5	2663.8	2659.3	2659.3	2659.3	2652.5	2650.2	2690.9
12.5°	2792.4	2787.9	2787.9	2783.4	2781.2	2776.6	2774.4	2776.6	2767.6	2767.6	2808.2
15°	2907.6	2898.5	2900.8	2894.0	2889.5	2885.0	2882.7	2880.5	2876.0	2876.0	2900.8
17.5°	3013.7	3006.9	3004.6	2997.9	2991.1	2984.3	2979.8	2977.6	2970.8	2970.8	2993.4
20°	3124.3	3117.5	3113.0	3101.7	3090.4	3083.7	3074.6	3070.1	3061.1	3063.3	3088.2
22.5°	3250.7	3239.4	3230.4	3221.4	3201.0	3187.5	3176.2	3167.2	3162.7	3162.7	3196.5
25°	3420.0	3413.2	3399.7	3370.3	3345.5	3325.2	3307.1	3298.1	3289.1	3284.6	3336.5
27.5°	3627.7	3620.9	3602.9	3573.5	3539.7	3505.8	3485.5	3469.7	3458.4	3451.6	3526.1
30°	3903.1	3891.8	3876.0	3828.6	3799.3	3747.3	3724.8	3702.2	3677.4	3684.1	3772.2
32.5°	4442.6	4426.8	4377.2	4325.2	4234.9	4165.0	4092.7	4038.5	3986.6	3979.9	4074.7
35°	4932.5	4925.7	4916.7	4880.6	4846.7	4803.8	4770.0	4713.5	4666.1	4654.8	4921.2
37.5°	5196.6	5212.4	5198.9	5194.4	5194.4	5214.7	5277.9	5341.1	5386.2	5413.3	5562.3
40°	5600.7	5600.7	5584.9	5575.9	5557.8	5584.9	5612.0	5659.4	5679.7	5682.0	5833.2
42.5°	6058.9	6061.2	6045.4	6018.3	6009.3	6034.1	6070.2	6115.4	6142.5	6149.2	6325.3
45°	6569.1	6562.4	6548.8	6539.8	6546.6	6569.1	6612.0	6700.1	6740.7	6772.3	6964.2
47.5°	7122.2	7167.3	7129.0	7135.7	7135.7	7205.7	7302.8	7375.0	7440.5	7501.4	7704.6
50°	7846.8	7853.6	7860.4	7880.7	7894.2	7986.8	8108.7	8194.5	8289.3	8368.3	8700.1
52.5°	8815.3	8801.7	8835.6	8858.2	8934.9	8984.6	9187.7	9296.1	9427.0	9528.6	10014.0
55°	9973.3	9966.6	10016.2	10034.3	10135.9	10257.8	10483.5	10720.5	10944.0	11068.2	11731.9
57.5°	10804.1	10822.1	10907.9	11027.6	11226.2	11485.8	11822.2	12345.9	12770.3	12905.7	13637.1
60°	10986.9	11045.6	11174.3	11413.6	11754.4	12237.5	12899.0	13700.4	14476.9	14736.5	15422.8
62.5°	10474.5	10542.2	10731.8	11018.5	11463.2	12178.8	13133.7	14264.7	15418.3	15996.2	16341.6
63°	10311.9	10395.5	10537.7	10869.5	11321.0	12027.6	13043.4	14262.5	15458.9	16088.7	16359.6
65°	9548.9	9564.7	9776.9	10108.8	10616.7	11350.4	12375.2	13783.9	15111.2	15838.1	15650.8
67.5°	8217.1	8282.5	8460.9	8795.0	9289.3	10052.3	11165.3	12467.8	13634.9	14215.0	13377.5
70°	6639.1	6634.6	6855.8	7124.5	7560.1	8230.6	9205.8	10381.9	11307.5	11729.6	10327.8
72.5°	4742.9	4625.5	4788.0	5086.0	5442.7	5977.7	6749.7	7664.0	8492.5	8858.2	7551.1
75°	2160.4	2128.8	2273.2	2569.0	2930.1	3406.5	4040.8	4830.9	5625.5	6054.4	4810.6
77.5°	726.9	735.9	792.4	898.5	1092.6	1331.9	1726.9	2232.6	2876.0	3300.4	2257.4
80°	487.6	501.1	519.2	535.0	557.6	593.7	679.5	810.4	1009.1	1221.3	713.3
82.5°	399.6	415.4	456.0	474.1	487.6	498.9	505.7	514.7	514.7	519.2	451.5
85°	286.7	313.8	368.0	401.8	415.4	424.4	435.7	449.2	428.9	410.9	349.9
87.5°	99.3	135.4	198.7	219.0	234.8	237.0	252.8	279.9	266.4	216.7	106.1
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9	2410.9
2.5°	2422.2	2420.0	2422.2	2424.5	2424.5	2424.5	2426.7	2429.0	2429.0
5°	2467.4	2469.6	2467.4	2469.6	2469.6	2471.9	2471.9	2476.4	2476.4
7.5°	2544.1	2548.6	2546.4	2550.9	2550.9	2555.4	2553.2	2559.9	2559.9
10°	2648.0	2652.5	2657.0	2659.3	2657.0	2661.5	2666.0	2668.3	2666.0
12.5°	2765.4	2767.6	2765.4	2769.9	2769.9	2774.4	2774.4	2781.2	2781.2
15°	2873.7	2871.5	2869.2	2876.0	2880.5	2882.7	2887.3	2894.0	2887.3
17.5°	2970.8	2973.0	2968.5	2975.3	2984.3	2991.1	2995.6	3004.6	3002.4
20°	3067.9	3063.3	3067.9	3079.1	3088.2	3097.2	3106.2	3119.8	3117.5
22.5°	3162.7	3167.2	3178.5	3187.5	3203.3	3216.8	3228.1	3246.2	3253.0
25°	3295.9	3295.9	3313.9	3325.2	3347.8	3365.8	3390.7	3411.0	3422.3
27.5°	3465.2	3465.2	3485.5	3510.3	3544.2	3575.8	3602.9	3630.0	3625.4
30°	3695.4	3706.7	3724.8	3756.4	3801.5	3839.9	3876.0	3903.1	3905.4
32.5°	3997.9	4011.5	4065.6	4146.9	4241.7	4314.0	4368.1	4433.6	4442.6
35°	4684.2	4718.0	4788.0	4853.5	4891.9	4934.7	4961.8	4964.1	4968.6
37.5°	5406.5	5347.9	5293.7	5244.0	5221.4	5216.9	5216.9	5226.0	5230.5
40°	5670.7	5641.3	5616.5	5584.9	5593.9	5591.7	5607.5	5621.0	5630.0
42.5°	6122.2	6099.6	6077.0	6036.4	6058.9	6052.2	6074.7	6095.1	6106.4
45°	6752.0	6682.0	6632.3	6566.9	6589.4	6575.9	6575.9	6600.7	6605.2
47.5°	7447.3	7366.0	7264.4	7183.1	7156.1	7131.2	7153.8	7153.8	7129.0
50°	8280.3	8183.2	8063.5	7932.6	7887.5	7862.6	7871.7	7883.0	7813.0
52.5°	9411.2	9302.9	9133.6	8934.9	8892.0	8871.7	8867.2	8851.4	8833.3
55°	10944.0	10740.9	10533.2	10271.3	10192.3	10169.7	10172.0	10153.9	10196.8
57.5°	12752.2	12454.3	11975.7	11657.4	11467.8	11395.5	11330.1	11303.0	11305.2
60°	14542.4	13935.1	13219.5	12664.2	12266.9	12014.1	11815.4	11704.8	11673.2
62.5°	15695.9	14741.0	13666.5	12765.8	12113.4	11695.8	11382.0	11183.3	11120.1
63°	15786.2	14774.9	13625.9	12659.7	11973.4	11535.5	11205.9	11000.5	10932.7
65°	15589.8	14434.0	13095.4	11944.1	11192.3	10707.0	10350.3	10156.2	10104.3
67.5°	14063.8	13102.1	11738.6	10549.0	9790.5	9298.4	8889.8	8704.7	8646.0
70°	11440.7	10781.5	9664.1	8648.2	7941.6	7467.6	7054.5	6901.0	6898.7
72.5°	8481.2	7625.6	6959.7	6214.7	5598.4	5221.4	4862.5	4690.9	4605.2
75°	5609.7	4693.2	3948.2	3320.7	2706.7	2368.0	1964.0	1790.1	1688.6
77.5°	2826.3	2094.9	1501.2	1040.7	808.2	663.7	607.2	577.9	575.6
80°	941.3	706.6	607.2	568.9	557.6	559.8	553.1	541.8	528.2
82.5°	521.5	548.6	553.1	537.3	537.3	528.2	519.2	476.3	453.7
85°	447.0	492.1	496.6	487.6	485.3	471.8	456.0	397.3	363.4
87.5°	279.9	322.8	316.0	282.2	311.5	291.2	275.4	178.3	130.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)