

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: P157401

Luminaire Tested: **VST-E10-LED-E-U-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157401
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-E10-LED-E-U-5MQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (210) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32823.7 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 247.7
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

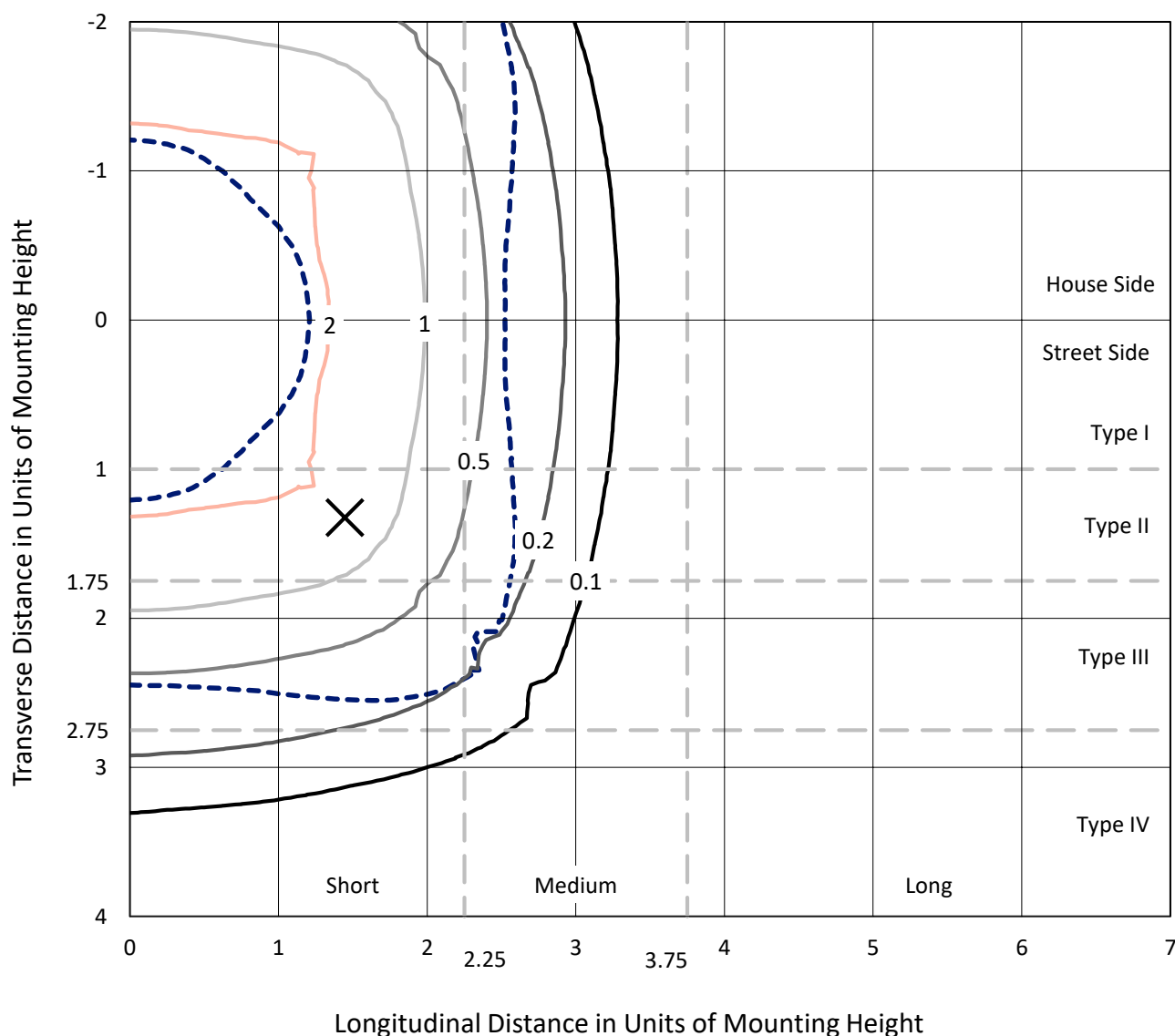


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

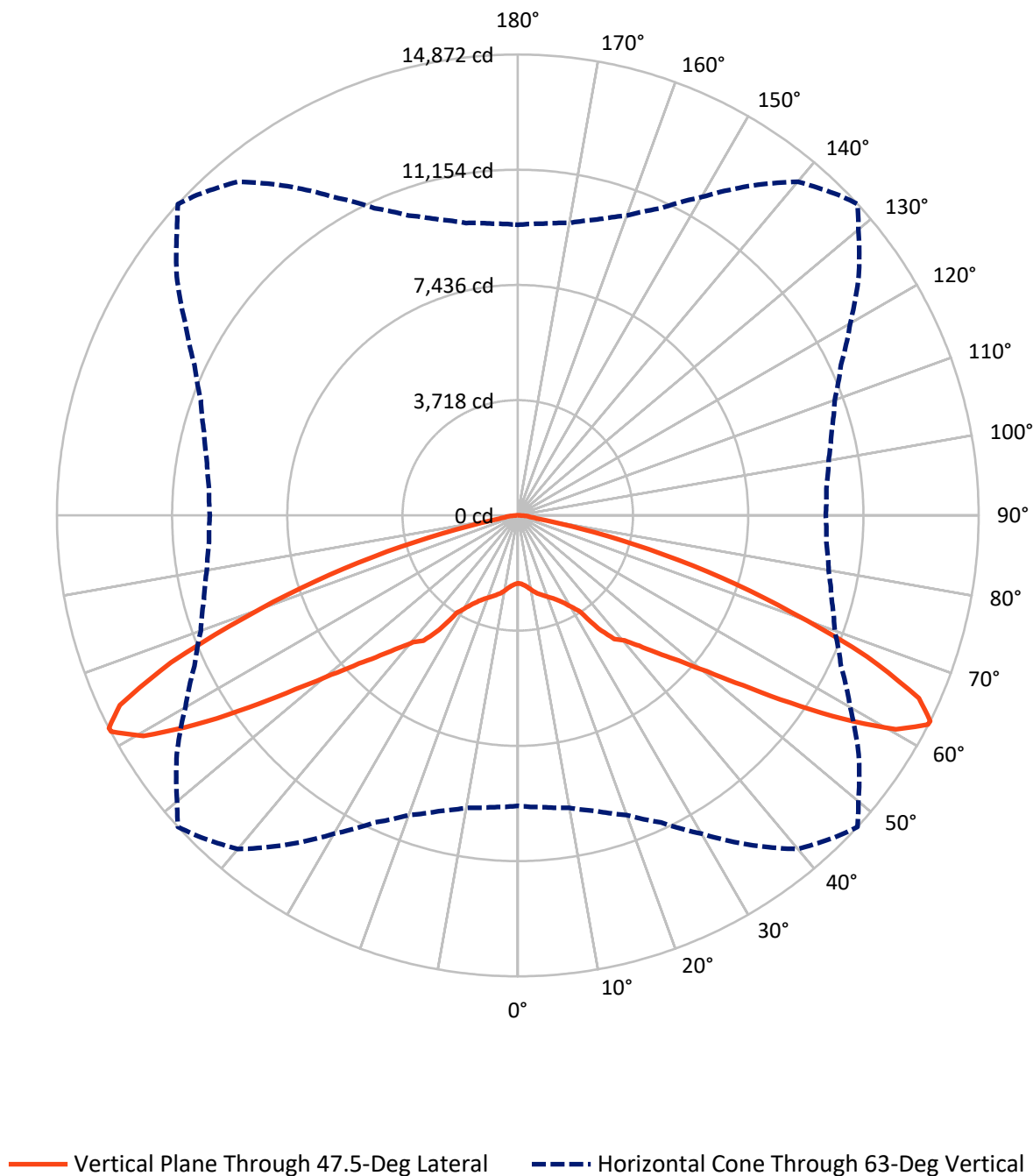


Based on 30 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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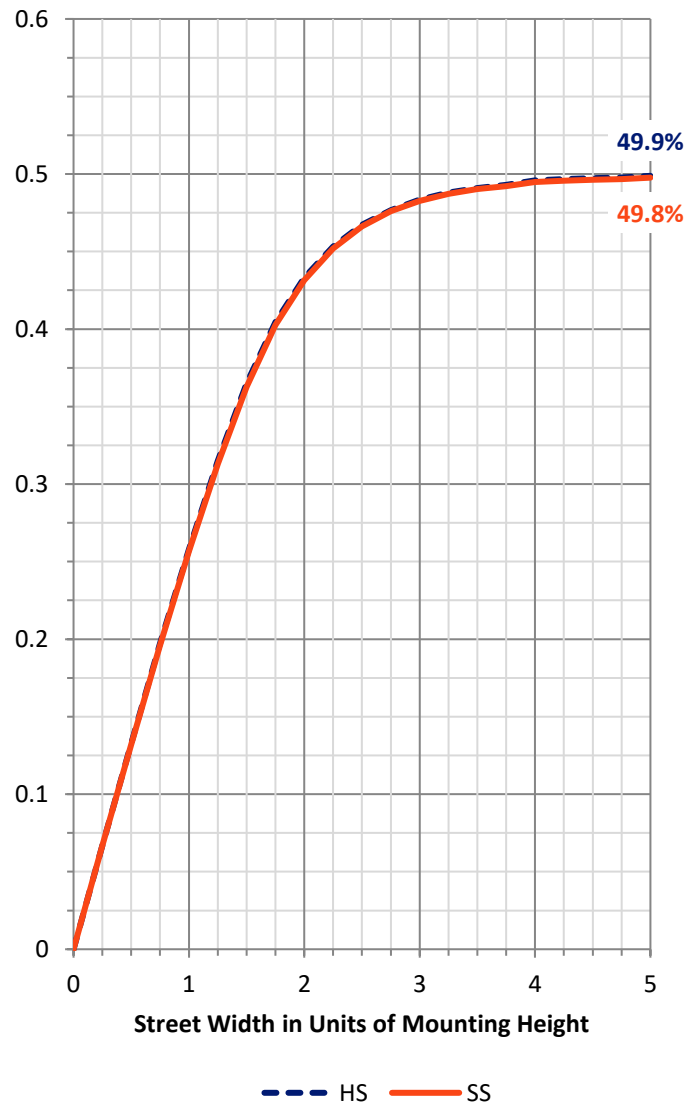
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16411.8	0.0	16411.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16411.8	0.0	16411.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	32823.7	0.0	32823.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.0	0.7
10°-20°	748.0	2.3
20°-30°	1430.8	4.4
30°-40°	2736.9	8.3
40°-50°	4735.7	14.4
50°-60°	8505.0	25.9
60°-70°	10342.3	31.5
70°-80°	3735.1	11.4
80°-90°	369.9	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°	32823.7	100.0
0°-180°	32823.7	100.0

Coefficient of Utilization



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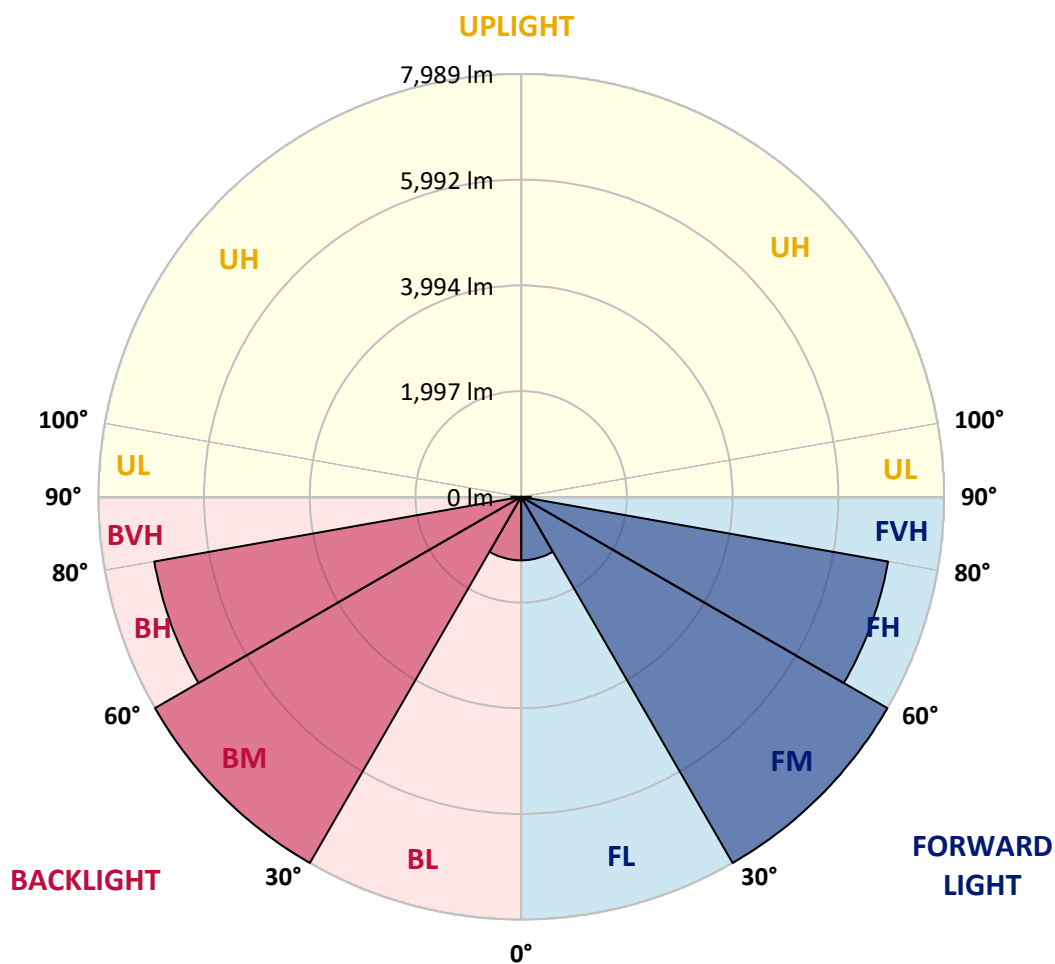
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1199.4	3.7			
FM	(30°-60°)	7988.8	24.3			
FH	(60°-80°)	7038.7	21.4			G3/7500
FVH	(80°-90°)	185.0	0.6			G2/225
BL	(0°-30°)	1199.4	3.7	B3/2500		
BM	(30°-60°)	7988.8	24.3	B4/8500		
BH	(60°-80°)	7038.7	21.4	B5		G3/7500
BVH	(80°-90°)	185.0	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-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8
2.5°	2206.1	2202.0	2204.1	2206.1	2204.1	2202.0	2202.0	2202.0	2206.1	2202.0	2212.3
5°	2249.2	2245.1	2247.2	2247.2	2247.2	2243.1	2243.1	2243.1	2241.0	2243.1	2265.6
7.5°	2331.3	2325.2	2323.1	2327.2	2323.1	2321.1	2319.0	2319.0	2314.9	2314.9	2343.6
10°	2429.8	2421.6	2425.7	2427.8	2421.6	2417.5	2417.5	2417.5	2411.3	2409.3	2446.2
12.5°	2538.6	2534.5	2534.5	2530.4	2528.3	2524.2	2522.2	2524.2	2516.0	2516.0	2553.0
15°	2643.2	2635.0	2637.1	2630.9	2626.8	2622.7	2620.7	2618.6	2614.5	2614.5	2637.1
17.5°	2739.7	2733.5	2731.5	2725.3	2719.2	2713.0	2708.9	2706.9	2700.7	2700.7	2721.2
20°	2840.3	2834.1	2830.0	2819.7	2809.5	2803.3	2795.1	2791.0	2782.8	2784.9	2807.4
22.5°	2955.2	2944.9	2936.7	2928.5	2910.0	2897.7	2887.5	2879.3	2875.1	2875.1	2905.9
25°	3109.1	3102.9	3090.6	3064.0	3041.4	3022.9	3006.5	2998.3	2990.1	2986.0	3033.2
27.5°	3297.9	3291.7	3275.3	3248.6	3217.9	3187.1	3168.6	3154.2	3144.0	3137.8	3205.6
30°	3548.3	3538.0	3523.6	3480.5	3453.9	3406.7	3386.1	3365.6	3343.1	3349.2	3429.2
32.5°	4038.8	4024.4	3979.2	3932.0	3849.9	3786.3	3720.7	3671.4	3624.2	3618.0	3704.2
35°	4484.1	4477.9	4469.7	4436.9	4406.1	4367.1	4336.3	4285.0	4241.9	4231.7	4473.8
37.5°	4724.2	4738.6	4726.2	4722.1	4722.1	4740.6	4798.1	4855.5	4896.6	4921.2	5056.6
40°	5091.5	5091.5	5077.2	5069.0	5052.5	5077.2	5101.8	5144.9	5163.4	5165.4	5302.9
42.5°	5508.1	5510.2	5495.8	5471.2	5463.0	5485.6	5518.4	5559.4	5584.1	5590.2	5750.3
45°	5971.9	5965.8	5953.5	5945.3	5951.4	5971.9	6010.9	6091.0	6127.9	6156.6	6331.1
47.5°	6474.7	6515.8	6480.9	6487.0	6487.0	6550.7	6638.9	6704.6	6764.1	6819.5	7004.2
50°	7133.5	7139.6	7145.8	7164.3	7176.6	7260.7	7371.5	7449.5	7535.7	7607.5	7909.2
52.5°	8013.9	8001.6	8032.4	8052.9	8122.7	8167.8	8352.5	8451.0	8570.0	8662.4	9103.6
55°	9066.7	9060.5	9105.7	9122.1	9214.4	9325.2	9530.5	9745.9	9949.1	10062.0	10665.3
57.5°	9821.9	9838.3	9916.3	10025.1	10205.6	10441.6	10747.4	11223.5	11609.4	11732.5	12397.4
60°	9988.1	10041.5	10158.4	10376.0	10685.9	11125.0	11726.3	12454.9	13160.8	13396.8	14020.7
62.5°	9522.3	9583.8	9756.2	10016.8	10421.1	11071.7	11939.8	12967.9	14016.6	14542.0	14856.0
63°	9374.5	9450.4	9579.7	9881.4	10291.8	10934.2	11857.7	12965.9	14053.5	14626.1	14872.4
65°	8680.9	8695.2	8888.1	9189.8	9651.5	10318.5	11250.2	12530.8	13737.5	14398.3	14228.0
67.5°	7470.0	7529.6	7691.7	7995.4	8444.8	9138.5	10150.2	11334.4	12395.4	12922.8	12161.4
70°	6035.6	6031.4	6232.6	6476.8	6872.9	7482.4	8368.9	9438.1	10279.5	10663.3	9388.9
72.5°	4311.7	4205.0	4352.7	4623.6	4947.9	5434.3	6136.1	6967.3	7720.4	8052.9	6864.6
75°	1964.0	1935.2	2066.6	2335.4	2663.8	3096.8	3673.5	4391.7	5114.1	5504.0	4373.3
77.5°	660.8	669.0	720.3	816.8	993.3	1210.8	1569.9	2029.6	2614.5	3000.3	2052.2
80°	443.3	455.6	472.0	486.4	506.9	539.7	617.7	736.7	917.3	1110.2	648.5
82.5°	363.2	377.6	414.5	431.0	443.3	453.5	459.7	467.9	467.9	472.0	410.4
85°	260.6	285.3	334.5	365.3	377.6	385.8	396.1	408.4	389.9	373.5	318.1
87.5°	90.3	123.1	180.6	199.1	213.4	215.5	229.8	254.5	242.2	197.0	96.5
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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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8	2191.8
2.5°	2202.0	2200.0	2202.0	2204.1	2204.1	2204.1	2206.1	2208.2	2208.2
5°	2243.1	2245.1	2243.1	2245.1	2245.1	2247.2	2247.2	2251.3	2251.3
7.5°	2312.8	2316.9	2314.9	2319.0	2319.0	2323.1	2321.1	2327.2	2327.2
10°	2407.2	2411.3	2415.5	2417.5	2415.5	2419.6	2423.7	2425.7	2423.7
12.5°	2514.0	2516.0	2514.0	2518.1	2518.1	2522.2	2522.2	2528.3	2528.3
15°	2612.5	2610.4	2608.4	2614.5	2618.6	2620.7	2624.8	2630.9	2624.8
17.5°	2700.7	2702.8	2698.7	2704.8	2713.0	2719.2	2723.3	2731.5	2729.4
20°	2789.0	2784.9	2789.0	2799.2	2807.4	2815.6	2823.8	2836.2	2834.1
22.5°	2875.1	2879.3	2889.5	2897.7	2912.1	2924.4	2934.7	2951.1	2957.2
25°	2996.2	2996.2	3012.6	3022.9	3043.4	3059.8	3082.4	3100.9	3111.2
27.5°	3150.1	3150.1	3168.6	3191.2	3222.0	3250.7	3275.3	3300.0	3295.9
30°	3359.5	3369.7	3386.1	3414.9	3455.9	3490.8	3523.6	3548.3	3550.3
32.5°	3634.5	3646.8	3696.0	3769.9	3856.1	3921.8	3971.0	4030.5	4038.8
35°	4258.3	4289.1	4352.7	4412.3	4447.1	4486.1	4510.8	4512.8	4516.9
37.5°	4915.0	4861.7	4812.4	4767.3	4746.8	4742.7	4742.7	4750.9	4755.0
40°	5155.2	5128.5	5105.9	5077.2	5085.4	5083.3	5097.7	5110.0	5118.2
42.5°	5565.6	5545.1	5524.6	5487.6	5508.1	5502.0	5522.5	5541.0	5551.2
45°	6138.2	6074.5	6029.4	5969.9	5990.4	5978.1	5978.1	6000.7	6004.8
47.5°	6770.2	6696.4	6604.0	6530.1	6505.5	6482.9	6503.5	6503.5	6480.9
50°	7527.5	7439.3	7330.5	7211.5	7170.4	7147.9	7156.1	7166.3	7102.7
52.5°	8555.7	8457.2	8303.2	8122.7	8083.7	8065.2	8061.1	8046.7	8030.3
55°	9949.1	9764.4	9575.6	9337.6	9265.7	9245.2	9247.3	9230.8	9269.8
57.5°	11592.9	11322.0	10887.0	10597.6	10425.2	10359.6	10300.0	10275.4	10277.5
60°	13220.3	12668.3	12017.7	11512.9	11151.7	10921.9	10741.3	10640.7	10612.0
62.5°	14269.0	13400.9	12424.1	11605.3	11012.2	10632.5	10347.2	10166.7	10109.2
63°	14351.1	13431.7	12387.1	11508.8	10884.9	10486.8	10187.2	10000.4	9938.9
65°	14172.6	13121.8	11904.9	10858.2	10174.9	9733.6	9409.4	9232.9	9185.7
67.5°	12785.3	11911.0	10671.5	9590.0	8900.4	8453.1	8081.6	7913.3	7860.0
70°	10400.6	9801.4	8785.5	7862.0	7219.7	6788.7	6413.2	6273.6	6271.6
72.5°	7710.2	6932.4	6327.0	5649.7	5089.5	4746.8	4420.5	4264.5	4186.5
75°	5099.7	4266.5	3589.3	3018.8	2460.6	2152.8	1785.4	1627.4	1535.1
77.5°	2569.4	1904.5	1364.7	946.1	734.7	603.4	552.0	525.4	523.3
80°	855.8	642.3	552.0	517.2	506.9	508.9	502.8	492.5	480.2
82.5°	474.1	498.7	502.8	488.4	488.4	480.2	472.0	433.0	412.5
85°	406.3	447.4	451.5	443.3	441.2	428.9	414.5	361.2	330.4
87.5°	254.5	293.5	287.3	256.5	283.2	264.7	250.4	162.1	119.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)