

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: P159805

Luminaire Tested: **VST-F08-LED-E-U-T4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159805
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F08-LED-E-U-T4
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (56) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19656.5 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Luminous Opening: Rectangular (W 1.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 204.4
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



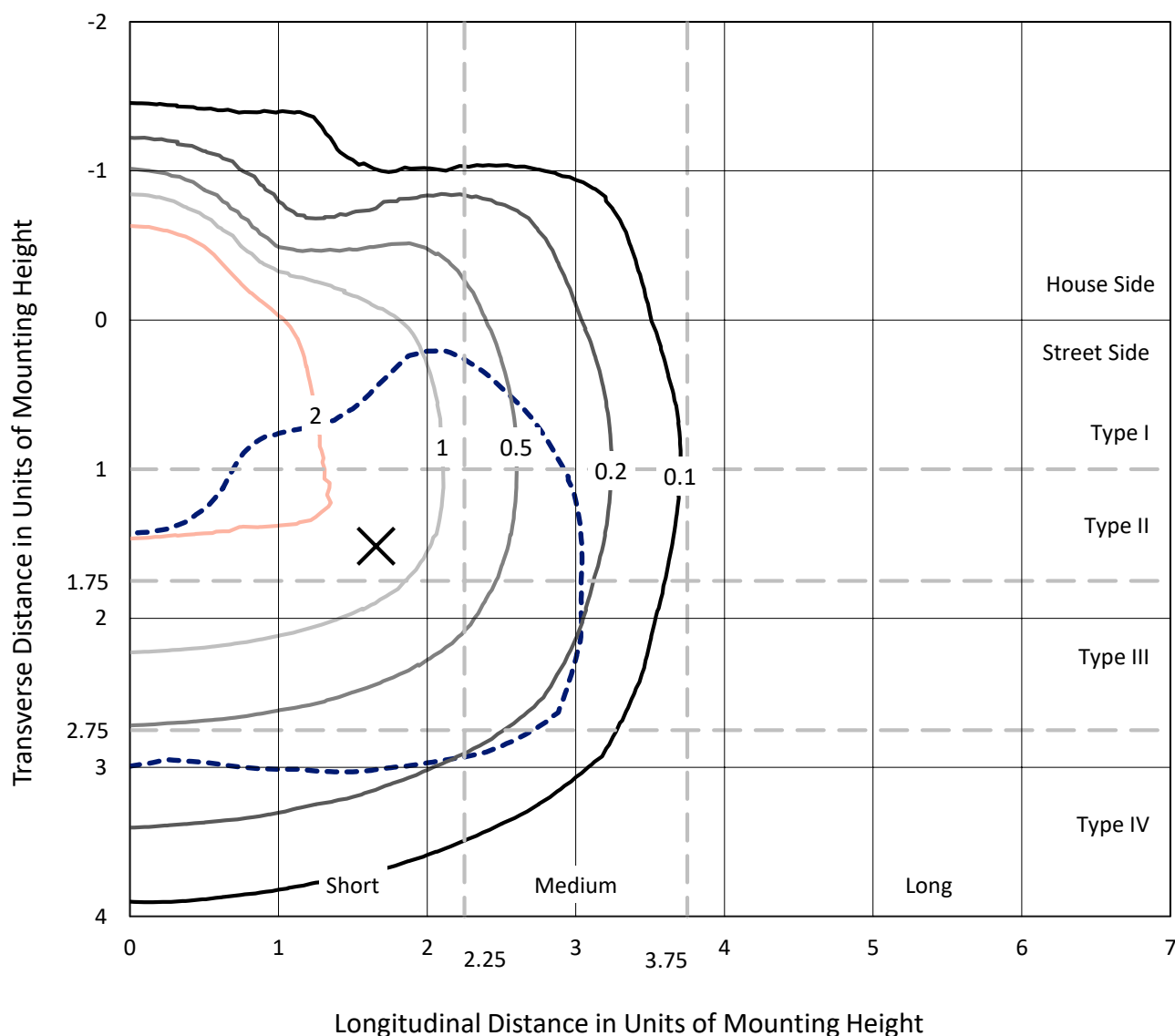
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

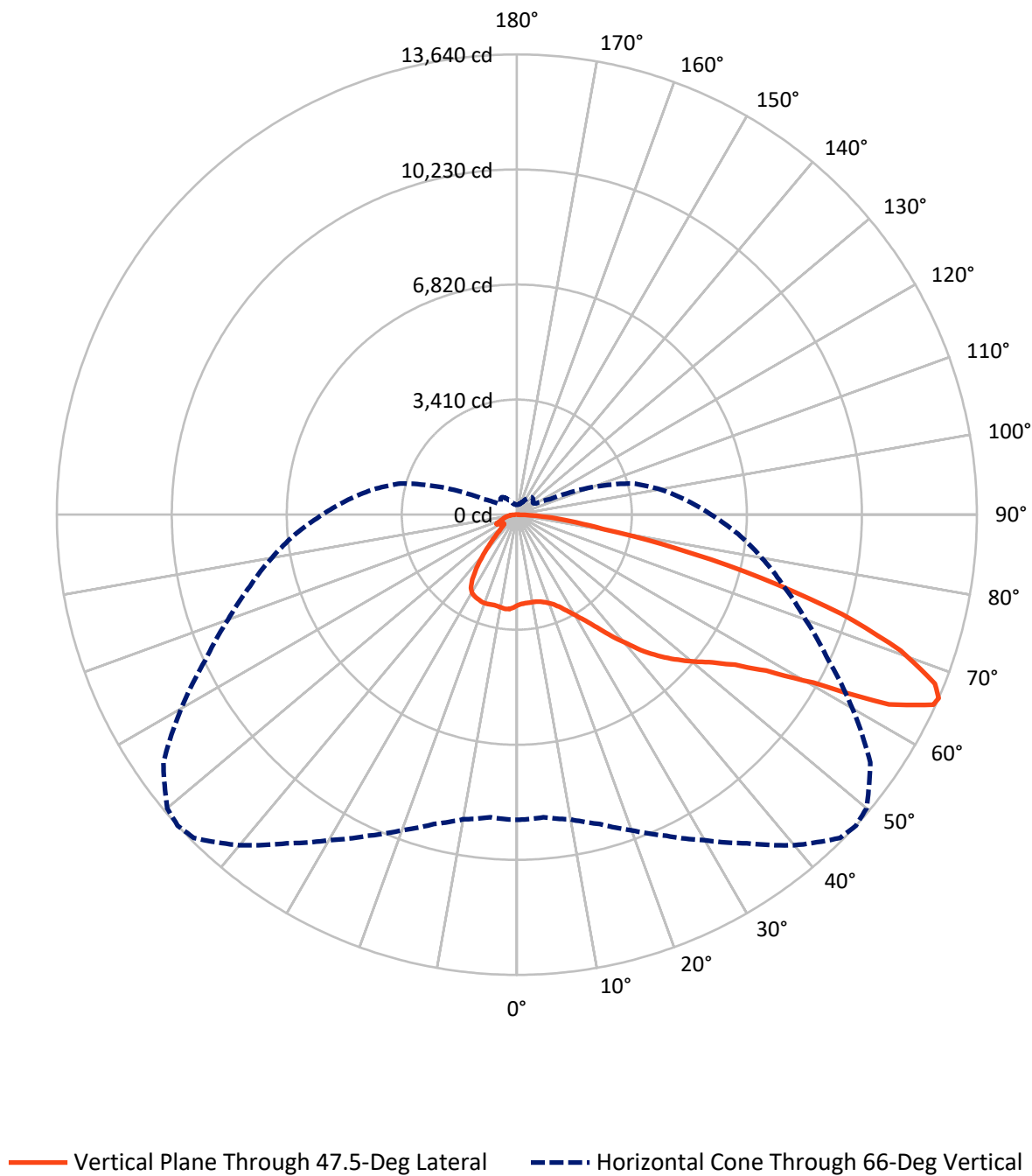


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4069.8	0.0	4069.8
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	15586.7	0.0	15586.7
	% Fixture	79.3	0.0	79.3
Total	Lumens	19656.5	0.0	19656.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.2	1.3
10°-20°	777.3	4.0
20°-30°	1326.2	6.7
30°-40°	2001.7	10.2
40°-50°	2601.8	13.2
50°-60°	3569.4	18.2
60°-70°	5490.9	27.9
70°-80°	3174.1	16.1
80°-90°	456.0	2.3
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°	19656.5	100.0
0°-180°	19656.5	100.0

Coefficient of Utilization



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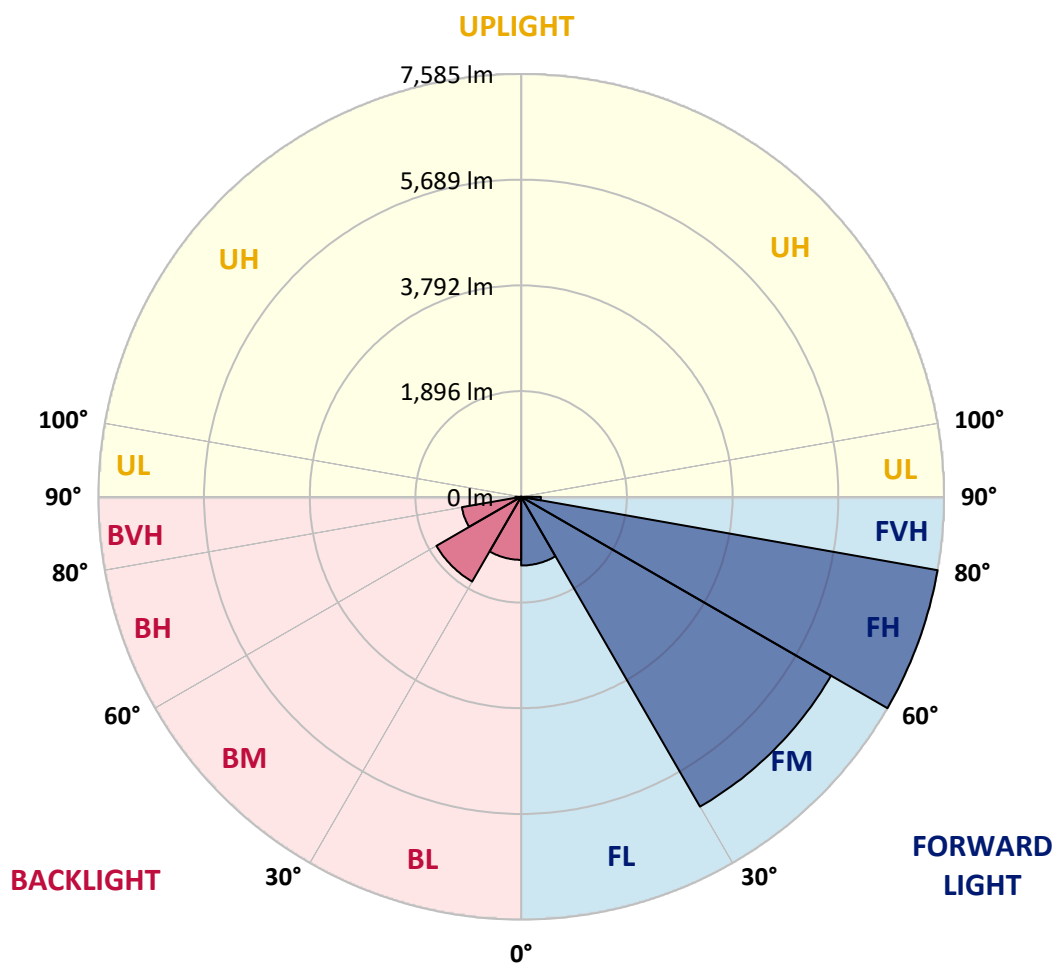
CATALOG NUMBER: VST-F08-LED-E-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1232.1	6.3			
FM	(30°-60°)	6417.0	32.6			
FH	(60°-80°)	7584.8	38.6			G4/12000
FVH	(80°-90°)	352.9	1.8			G3/500
BL	(0°-30°)	1130.6	5.8	B3/2500		
BM	(30°-60°)	1755.9	8.9	B2/2500		
BH	(60°-80°)	1080.1	5.5	B3/2500		G3/2500
BVH	(80°-90°)	103.1	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2
2.5°	2620.5	2621.9	2623.2	2623.2	2627.2	2627.2	2633.8	2637.7	2639.0	2647.0	2652.2
5°	2571.7	2570.4	2571.7	2574.3	2580.9	2586.2	2599.4	2608.7	2616.6	2629.8	2636.4
7.5°	2550.5	2553.2	2555.8	2557.1	2562.4	2575.6	2587.5	2596.8	2612.6	2628.5	2635.1
10°	2578.3	2582.2	2578.3	2580.9	2580.9	2592.8	2598.1	2604.7	2616.6	2631.1	2635.1
12.5°	2643.0	2650.9	2643.0	2636.4	2631.1	2641.7	2639.0	2633.8	2640.4	2644.3	2644.3
15°	2750.0	2750.0	2744.7	2735.5	2722.3	2723.6	2711.7	2699.8	2694.5	2685.3	2678.7
17.5°	2854.3	2851.7	2839.8	2827.9	2818.7	2814.7	2797.5	2781.7	2763.2	2748.7	2732.8
20°	2956.0	2966.6	2952.1	2934.9	2920.4	2911.1	2897.9	2866.2	2843.8	2820.0	2804.1
22.5°	3131.7	3122.5	3106.6	3081.5	3067.0	3051.1	3023.4	2989.1	2954.7	2925.7	2905.8
25°	3312.7	3303.4	3281.0	3262.5	3241.3	3228.1	3197.8	3155.5	3122.5	3077.6	3051.1
27.5°	3506.8	3498.9	3472.5	3458.0	3443.4	3427.6	3401.2	3357.6	3327.2	3275.7	3247.9
30°	3726.1	3724.8	3689.1	3686.5	3665.3	3648.2	3629.7	3592.7	3562.3	3510.8	3477.8
32.5°	3959.9	3954.6	3929.5	3921.6	3936.1	3924.2	3897.8	3859.5	3819.9	3789.5	3752.5
35°	4292.7	4283.5	4269.0	4275.6	4284.8	4317.8	4276.9	4243.9	4196.3	4156.7	4105.2
37.5°	4535.8	4522.6	4539.7	4576.7	4629.5	4654.6	4690.3	4691.6	4669.2	4616.3	4571.4
40°	4759.0	4753.7	4793.3	4844.8	4942.6	5013.9	5081.3	5114.3	5122.2	5087.9	5020.5
42.5°	4947.9	4963.7	5016.5	5095.8	5233.2	5341.5	5467.0	5544.9	5593.8	5575.3	5544.9
45°	5172.4	5180.3	5245.1	5345.4	5476.2	5655.8	5820.9	5953.0	6038.9	6037.6	6003.2
47.5°	5453.7	5455.1	5510.5	5628.1	5768.1	5950.4	6159.1	6334.7	6448.3	6453.6	6427.2
50°	5787.9	5785.3	5846.0	5957.0	6106.2	6281.9	6503.8	6723.1	6881.6	6881.6	6843.3
52.5°	6218.5	6213.2	6246.3	6344.0	6488.0	6672.9	6893.5	7147.1	7318.8	7355.8	7272.5
55°	6793.1	6801.0	6808.9	6894.8	7017.6	7164.2	7417.8	7651.6	7881.5	7902.6	7853.7
57.5°	7457.5	7431.0	7487.8	7627.9	7767.9	7951.5	8131.1	8407.1	8679.2	8725.5	8718.9
60°	8495.6	8461.3	8519.4	8697.7	8852.3	9141.5	9449.3	9805.9	10128.2	10223.3	10108.4
62.5°	9450.6	9492.9	9572.1	9779.5	10004.0	10389.7	10852.0	11463.6	12075.1	12408.0	12384.2
65°	9364.8	9325.1	9477.0	9759.7	10166.5	10657.9	11232.4	11969.5	12850.5	13518.8	13578.2
66°	9046.4	9005.5	9169.3	9492.9	9957.8	10504.6	11142.6	11892.8	12793.7	13549.2	13640.3
67.5°	8520.7	8479.8	8664.7	8959.3	9438.7	10126.9	10816.4	11636.6	12573.1	13296.9	13370.9
70°	7506.3	7450.9	7594.8	7927.7	8316.0	8981.7	9638.2	10507.3	11468.9	12047.4	12075.1
72.5°	6358.5	6229.1	6382.3	6638.5	6915.9	7466.7	8038.6	8633.0	9399.1	9934.0	10087.3
75°	4613.7	4681.1	4726.0	4895.0	5078.6	5534.3	5869.8	6367.8	6960.8	7347.8	7470.7
77.5°	2447.5	2549.2	2612.6	2781.7	3085.5	3432.9	3796.1	4103.8	4493.5	4710.1	4860.7
80°	1373.7	1445.0	1548.0	1681.4	1829.4	2096.2	2311.5	2470.0	2525.4	2563.8	2598.1
82.5°	755.5	936.5	1089.7	1182.2	1269.3	1376.3	1504.4	1636.5	1678.8	1615.4	1582.4
85°	117.6	173.0	527.0	643.2	700.0	781.9	874.4	972.1	973.5	837.4	914.0
87.5°	33.0	37.0	75.3	113.6	111.0	89.8	111.0	202.1	118.9	59.4	68.7
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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CATALOG NUMBER: VST-F08-LED-E-U-T4

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2
2.5°	2654.9	2657.5	2664.1	2670.7	2677.3	2683.9	2687.9	2694.5	2699.8	2707.7	2717.0
5°	2644.3	2650.9	2662.8	2677.3	2690.6	2702.4	2711.7	2724.9	2736.8	2747.3	2763.2
7.5°	2644.3	2657.5	2677.3	2693.2	2705.1	2719.6	2734.1	2747.3	2760.6	2771.1	2781.7
10°	2645.6	2658.9	2678.7	2697.2	2710.4	2726.2	2738.1	2750.0	2764.5	2771.1	2784.3
12.5°	2650.9	2656.2	2670.7	2689.2	2705.1	2720.9	2732.8	2744.7	2760.6	2763.2	2772.4
15°	2677.3	2669.4	2673.4	2686.6	2703.8	2717.0	2730.2	2739.4	2750.0	2747.3	2755.3
17.5°	2726.2	2706.4	2698.5	2699.8	2707.7	2717.0	2722.3	2723.6	2724.9	2713.0	2714.3
20°	2792.3	2764.5	2746.0	2736.8	2726.2	2717.0	2702.4	2685.3	2669.4	2645.6	2643.0
22.5°	2891.3	2850.4	2830.6	2805.5	2773.8	2734.1	2698.5	2656.2	2621.9	2586.2	2573.0
25°	3035.3	2993.0	2971.9	2932.3	2875.5	2818.7	2767.2	2710.4	2660.2	2617.9	2598.1
27.5°	3228.1	3185.9	3163.4	3122.5	3052.5	2995.7	2924.3	2863.6	2802.8	2740.7	2715.6
30°	3461.9	3424.9	3399.8	3366.8	3306.1	3244.0	3160.8	3067.0	2970.6	2871.5	2822.6
32.5°	3738.0	3697.0	3678.5	3640.2	3576.8	3512.1	3419.7	3299.5	3138.3	2982.5	2884.7
35°	4082.7	4036.5	4015.4	3965.2	3891.2	3796.1	3697.0	3535.9	3317.9	3101.3	2941.5
37.5°	4543.7	4440.7	4370.7	4255.7	4136.9	4003.5	3862.1	3697.0	3439.5	3171.3	2949.4
40°	4951.8	4847.5	4712.8	4547.7	4362.7	4179.1	4018.0	3830.4	3550.4	3221.5	2924.3
42.5°	5459.0	5274.1	5058.8	4835.6	4589.9	4364.1	4172.5	3952.0	3625.7	3234.7	2854.3
45°	5922.6	5702.1	5414.1	5116.9	4811.8	4527.8	4312.5	4066.9	3690.4	3234.7	2769.8
47.5°	6345.3	6081.1	5736.4	5366.6	5011.3	4700.9	4456.5	4184.4	3781.6	3275.7	2744.7
50°	6736.3	6432.5	6040.2	5610.9	5212.0	4880.5	4617.7	4335.0	3920.3	3381.4	2805.5
52.5°	7148.4	6826.1	6348.0	5892.3	5452.4	5097.1	4817.1	4521.2	4099.9	3547.8	2912.5
55°	7688.6	7310.8	6768.0	6266.1	5782.6	5390.3	5072.0	4744.5	4296.7	3735.3	3043.2
57.5°	8540.6	7992.4	7449.5	6797.0	6341.4	5824.9	5476.2	5099.8	4616.3	3979.7	3240.0
60°	10031.8	9358.2	8705.7	7955.4	7392.7	6852.5	6325.5	5834.1	5251.7	4531.8	3671.9
62.5°	12161.0	11476.8	10451.8	9533.8	8684.5	7968.6	7281.8	6657.0	5909.4	5122.2	4204.2
65°	13432.9	12649.7	11427.9	10194.2	9162.7	8275.1	7489.2	6724.4	5917.4	5150.0	4365.4
66°	13534.6	12793.7	11488.7	10185.0	9113.8	8193.2	7375.6	6584.4	5757.5	5023.2	4312.5
67.5°	13345.8	12707.8	11364.5	10005.4	8910.4	7915.8	7075.7	6246.3	5415.4	4735.2	4136.9
70°	12013.0	11552.1	10400.3	9127.0	8034.7	7157.6	6271.3	5473.6	4686.3	4114.4	3670.6
72.5°	9848.2	9264.4	8458.7	7602.8	6742.9	5964.9	5159.2	4480.3	3819.9	3403.8	3089.4
75°	7234.2	6708.5	5820.9	5287.3	4719.4	4230.7	3687.8	3044.5	2575.6	2366.9	2290.3
77.5°	4586.0	4015.4	3266.4	2677.3	2302.2	1978.6	1559.9	1240.3	993.3	1034.2	1145.2
80°	2316.8	1995.8	1493.9	1179.5	1019.7	848.0	671.0	508.5	371.2	424.0	479.5
82.5°	1487.3	1241.6	989.3	779.3	657.8	579.8	463.6	336.8	251.0	282.7	346.1
85°	895.5	756.8	603.6	494.0	429.3	357.9	262.8	186.2	184.9	198.1	244.4
87.5°	136.0	194.2	112.3	120.2	126.8	136.0	120.2	101.7	88.5	114.9	145.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2	2689.2
2.5°	2726.2	2728.9	2734.1	2740.7	2739.4	2748.7	2754.0	2748.7	2760.6	2760.6	2767.2
5°	2776.4	2780.4	2789.6	2796.2	2798.9	2806.8	2809.4	2808.1	2810.7	2812.1	2814.7
7.5°	2790.9	2801.5	2805.5	2809.4	2810.7	2813.4	2813.4	2810.7	2810.7	2809.4	2812.1
10°	2787.0	2790.9	2793.6	2792.3	2792.3	2789.6	2788.3	2787.0	2787.0	2784.3	2788.3
12.5°	2773.8	2773.8	2773.8	2771.1	2771.1	2769.8	2769.8	2769.8	2772.4	2773.8	2780.4
15°	2747.3	2747.3	2750.0	2748.7	2752.6	2759.2	2767.2	2772.4	2779.0	2780.4	2784.3
17.5°	2706.4	2707.7	2715.6	2732.8	2750.0	2769.8	2784.3	2788.3	2783.0	2769.8	2760.6
20°	2635.1	2652.2	2683.9	2724.9	2763.2	2788.3	2794.9	2779.0	2754.0	2719.6	2701.1
22.5°	2571.7	2606.0	2662.8	2730.2	2777.7	2794.9	2775.1	2738.1	2693.2	2653.6	2625.8
25°	2596.8	2636.4	2695.8	2754.0	2784.3	2775.1	2735.5	2682.6	2635.1	2588.8	2543.9
27.5°	2702.4	2742.1	2784.3	2801.5	2790.9	2756.6	2701.1	2644.3	2580.9	2514.9	2459.4
30°	2802.8	2825.3	2827.9	2810.7	2772.4	2717.0	2652.2	2586.2	2505.6	2426.4	2356.4
32.5°	2834.5	2808.1	2760.6	2711.7	2658.9	2602.1	2526.8	2439.6	2353.7	2263.9	2186.0
35°	2825.3	2718.3	2600.7	2496.4	2433.0	2368.3	2299.6	2183.3	2086.9	2010.3	1960.1
37.5°	2742.1	2546.6	2365.6	2213.7	2114.7	2038.1	1936.4	1839.9	1756.7	1722.4	1681.4
40°	2625.8	2327.3	2076.4	1863.7	1760.7	1662.9	1549.3	1475.4	1451.6	1419.9	1421.2
42.5°	2459.4	2071.1	1747.5	1503.1	1390.8	1283.9	1203.3	1159.7	1161.0	1134.6	1139.9
45°	2283.7	1813.5	1406.7	1163.7	1052.7	961.6	916.7	903.5	904.8	906.1	898.2
47.5°	2176.7	1612.7	1128.0	882.3	784.6	733.1	709.3	702.7	704.0	705.3	696.1
50°	2160.9	1508.4	941.8	674.9	611.5	582.5	570.6	564.0	564.0	558.7	550.8
52.5°	2205.8	1482.0	850.6	585.1	524.4	498.0	488.7	483.4	475.5	464.9	450.4
55°	2277.1	1505.8	822.9	554.8	495.3	468.9	457.0	454.4	441.2	421.3	397.6
57.5°	2409.2	1591.6	841.4	562.7	500.6	476.8	468.9	466.3	447.8	417.4	387.0
60°	2788.3	1841.3	933.8	607.6	538.9	519.1	519.1	515.1	490.0	446.4	402.9
62.5°	3311.3	2207.1	1059.3	669.7	591.7	589.1	611.5	612.9	568.0	498.0	429.3
65°	3563.6	2378.8	1102.9	682.9	606.3	636.6	681.6	681.6	618.2	521.7	433.2
66°	3564.9	2374.9	1089.7	667.0	590.4	630.0	676.3	676.3	610.2	515.1	426.6
67.5°	3473.8	2300.9	1046.1	638.0	554.8	591.7	632.7	631.4	571.9	488.7	408.1
70°	3115.9	2035.4	921.9	590.4	512.5	513.8	528.3	519.1	479.5	422.7	371.2
72.5°	2686.6	1702.6	799.1	560.0	479.5	454.4	442.5	434.6	409.5	375.1	343.4
75°	2060.5	1322.2	696.1	532.3	450.4	406.8	391.0	384.4	367.2	347.4	322.3
77.5°	1262.7	906.1	590.4	487.4	417.4	377.8	360.6	347.4	330.2	311.7	294.5
80°	544.2	546.8	472.9	413.4	363.2	317.0	294.5	278.7	269.5	262.8	253.6
82.5°	380.4	392.3	360.6	321.0	277.4	244.4	224.5	220.6	221.9	221.9	219.3
85°	285.3	280.0	252.3	229.8	210.0	188.9	173.0	171.7	177.0	177.0	173.0
87.5°	165.1	166.4	142.7	133.4	138.7	118.9	108.3	109.6	122.8	121.5	118.9
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):

	160°	165°	170°	175°	180°
0°	2689.2	2689.2	2689.2	2689.2	2689.2
2.5°	2767.2	2771.1	2769.8	2773.8	2769.8
5°	2818.7	2817.4	2816.0	2821.3	2814.7
7.5°	2810.7	2812.1	2812.1	2812.1	2810.7
10°	2790.9	2796.2	2798.9	2804.1	2802.8
12.5°	2784.3	2792.3	2800.2	2808.1	2809.4
15°	2785.7	2790.9	2794.9	2798.9	2800.2
17.5°	2751.3	2750.0	2746.0	2743.4	2740.7
20°	2681.3	2674.7	2668.1	2657.5	2662.8
22.5°	2594.1	2575.6	2554.5	2537.3	2536.0
25°	2492.4	2458.1	2423.7	2401.3	2393.4
27.5°	2402.6	2361.7	2326.0	2306.2	2300.9
30°	2295.6	2258.6	2226.9	2209.8	2199.2
32.5°	2137.1	2108.1	2068.4	2055.2	2053.9
35°	1916.5	1894.1	1866.3	1861.1	1854.5
37.5°	1666.9	1659.0	1645.8	1629.9	1627.3
40°	1400.1	1405.4	1401.4	1392.2	1377.6
42.5°	1142.5	1151.8	1153.1	1159.7	1166.3
45°	910.1	918.0	918.0	924.6	932.5
47.5°	698.7	693.4	697.4	704.0	708.0
50°	528.3	524.4	517.8	512.5	507.2
52.5°	425.3	417.4	398.9	393.6	388.3
55°	375.1	360.6	347.4	342.1	342.1
57.5°	360.6	342.1	327.6	321.0	318.3
60°	363.2	336.8	318.3	307.8	303.8
62.5°	375.1	338.1	313.0	301.2	297.2
65°	373.8	335.5	311.7	298.5	294.5
66°	367.2	331.5	309.1	297.2	294.5
67.5°	356.6	326.2	306.4	295.9	291.9
70°	335.5	315.7	301.2	291.9	287.9
72.5°	318.3	305.1	291.9	281.3	278.7
75°	302.5	289.3	277.4	272.1	268.1
77.5°	278.7	266.8	260.2	254.9	252.3
80°	247.0	239.1	231.1	225.9	221.9
82.5°	215.3	204.7	196.8	192.8	190.2
85°	175.7	169.1	157.2	149.3	147.9
87.5°	117.6	111.0	107.0	100.4	93.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)