

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: P159806

Luminaire Tested: **VST-F08-LED-E-U-T4-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159806
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-T4-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (56) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20169.6 lumens
Efficiency: N/A
Efficacy: 98.7 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



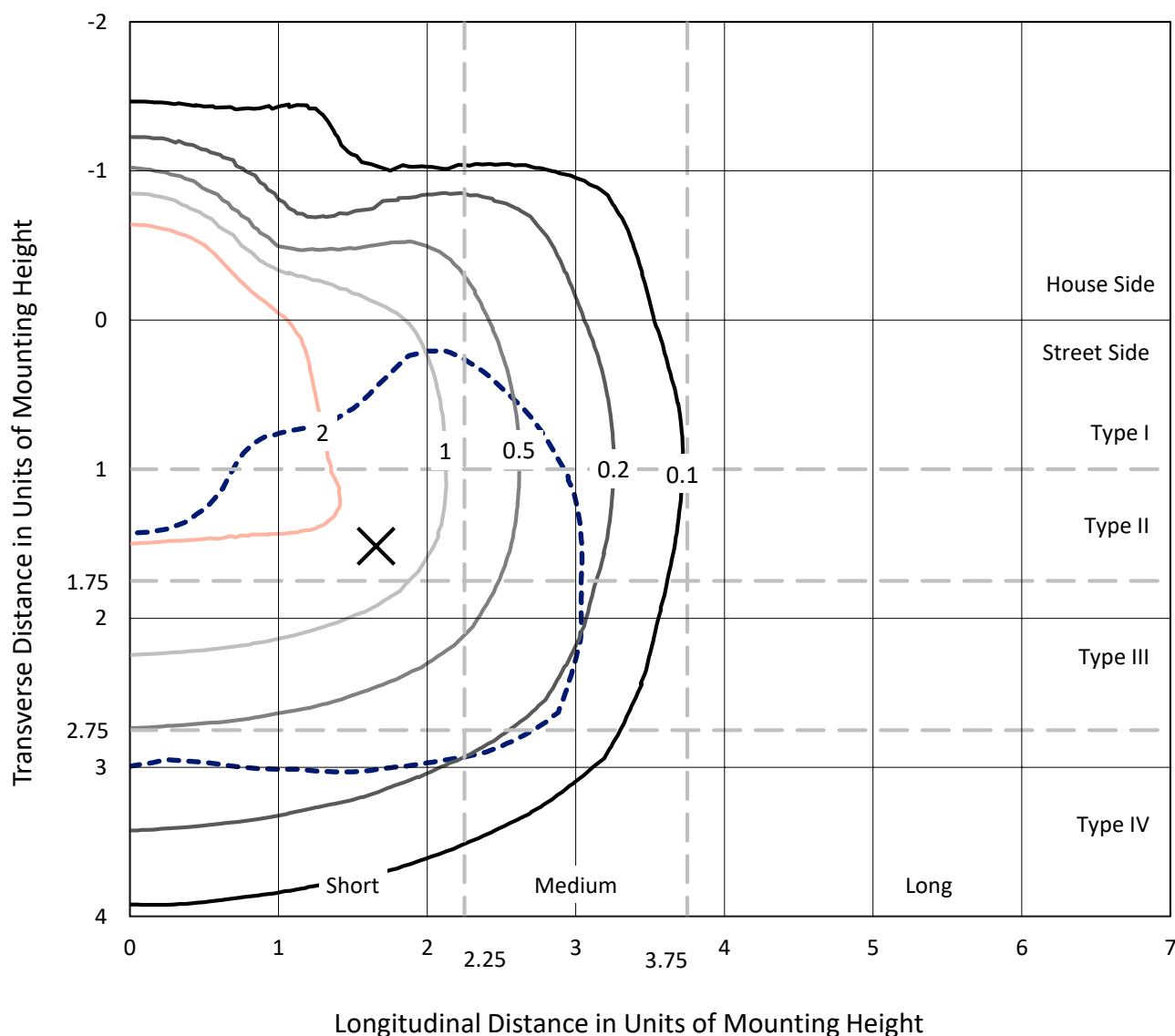
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

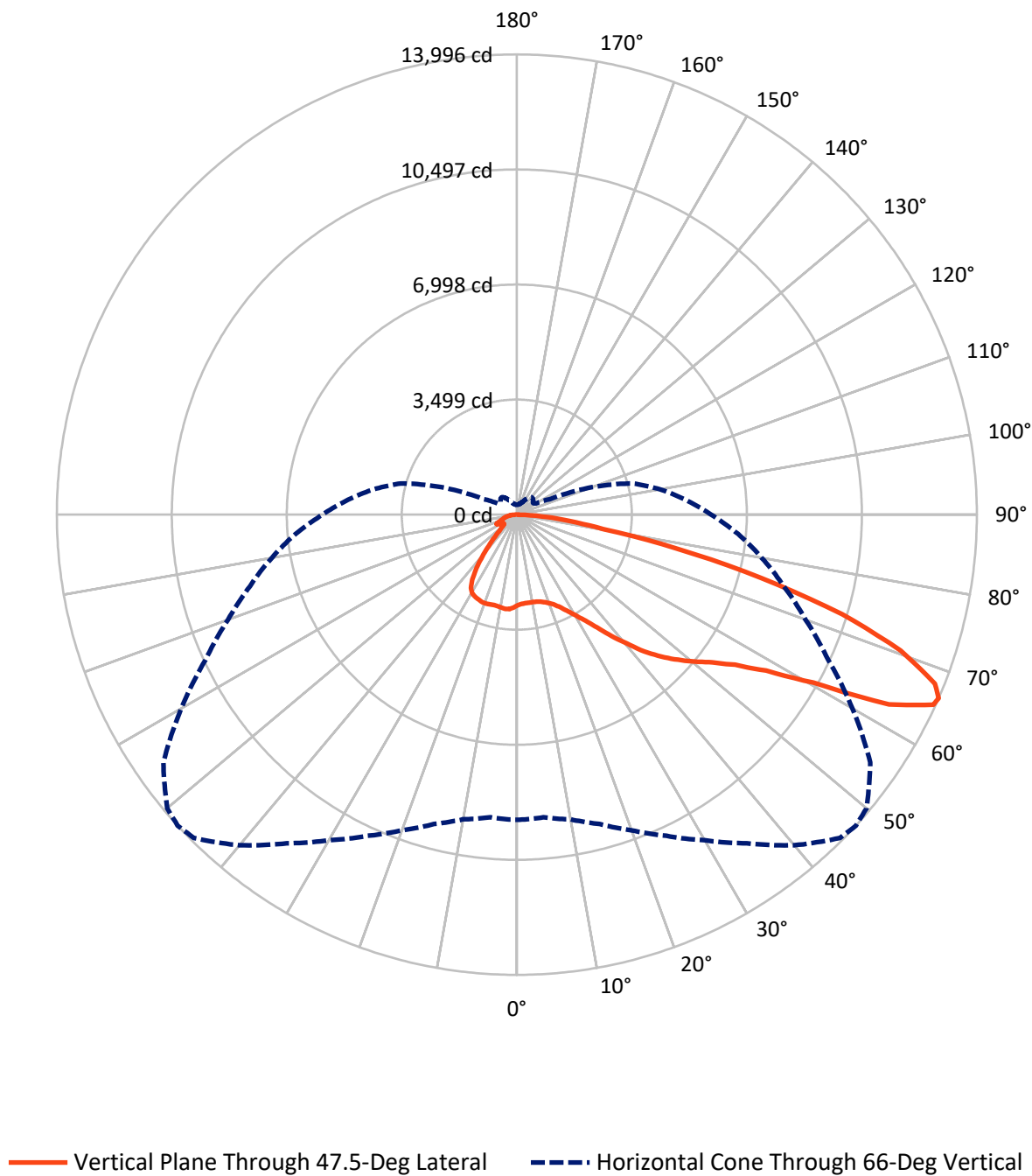


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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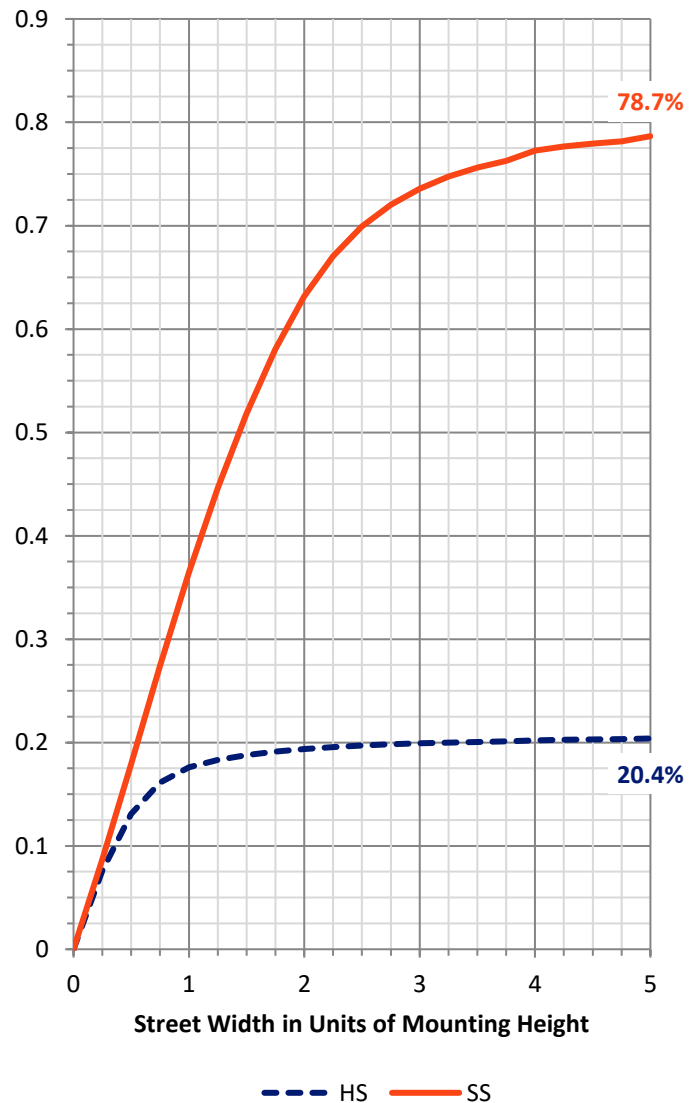
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4176.0	0.0	4176.0
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	15993.6	0.0	15993.6
	% Fixture	79.3	0.0	79.3
Total	Lumens	20169.6	0.0	20169.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.0	1.3
10°-20°	797.6	4.0
20°-30°	1360.8	6.7
30°-40°	2054.0	10.2
40°-50°	2669.7	13.2
50°-60°	3662.6	18.2
60°-70°	5634.2	27.9
70°-80°	3256.9	16.1
80°-90°	467.9	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°	20169.6	100.0
0°-180°	20169.6	100.0

Coefficient of Utilization



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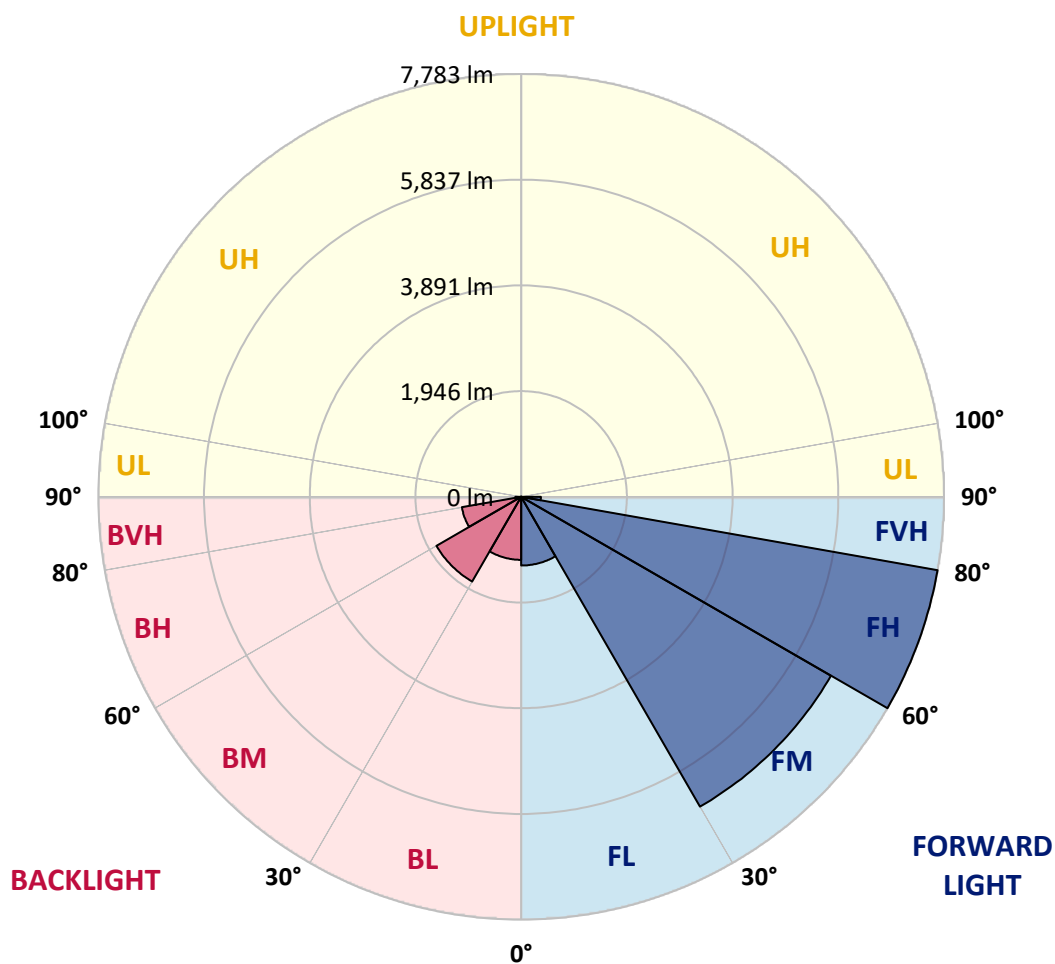
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1264.2	6.3			
FM	(30°-60°)	6584.5	32.6			
FH	(60°-80°)	7782.8	38.6			G4/12000
FVH	(80°-90°)	362.1	1.8			G3/500
BL	(0°-30°)	1160.1	5.8	B3/2500		
BM	(30°-60°)	1801.7	8.9	B2/2500		
BH	(60°-80°)	1108.3	5.5	B3/2500		G3/2500
BVH	(80°-90°)	105.8	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°	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4
2.5°	2689.0	2690.3	2691.7	2691.7	2695.7	2695.7	2702.5	2706.6	2707.9	2716.1	2721.5
5°	2638.8	2637.5	2638.8	2641.5	2648.3	2653.7	2667.3	2676.8	2684.9	2698.4	2705.2
7.5°	2617.1	2619.8	2622.5	2623.9	2629.3	2642.9	2655.1	2664.6	2680.8	2697.1	2703.9
10°	2645.6	2649.7	2645.6	2648.3	2648.3	2660.5	2665.9	2672.7	2684.9	2699.8	2703.9
12.5°	2712.0	2720.1	2712.0	2705.2	2699.8	2710.6	2707.9	2702.5	2709.3	2713.4	2713.4
15°	2821.8	2821.8	2816.4	2806.9	2793.3	2794.7	2782.5	2770.3	2764.9	2755.4	2748.6
17.5°	2928.8	2926.1	2913.9	2901.7	2892.3	2888.2	2870.6	2854.3	2835.3	2820.4	2804.2
20°	3033.2	3044.1	3029.1	3011.5	2996.6	2987.1	2973.6	2941.0	2918.0	2893.6	2877.3
22.5°	3213.5	3204.0	3187.7	3162.0	3147.1	3130.8	3102.3	3067.1	3031.9	3002.0	2981.7
25°	3399.1	3389.7	3366.6	3347.6	3326.0	3312.4	3281.2	3237.9	3204.0	3157.9	3130.8
27.5°	3598.4	3590.2	3563.1	3548.2	3533.3	3517.1	3490.0	3445.2	3414.1	3361.2	3332.7
30°	3823.4	3822.0	3785.4	3782.7	3761.0	3743.4	3724.4	3686.5	3655.3	3602.4	3568.6
32.5°	4063.3	4057.8	4032.1	4023.9	4038.9	4026.7	3999.6	3960.2	3919.6	3888.4	3850.5
35°	4404.8	4395.3	4380.4	4387.2	4396.7	4430.5	4388.5	4354.6	4305.9	4265.2	4212.3
37.5°	4654.2	4640.6	4658.2	4696.2	4750.4	4776.2	4812.7	4814.1	4791.1	4736.8	4690.8
40°	4883.2	4877.8	4918.5	4971.3	5071.6	5144.8	5213.9	5247.8	5255.9	5220.7	5151.6
42.5°	5077.0	5093.3	5147.5	5228.8	5369.8	5480.9	5609.7	5689.6	5739.8	5720.8	5689.6
45°	5307.4	5315.6	5382.0	5485.0	5619.2	5803.5	5972.9	6108.4	6196.5	6195.2	6159.9
47.5°	5596.1	5597.5	5654.4	5775.0	5918.7	6105.7	6319.9	6500.1	6616.7	6622.1	6595.0
50°	5939.0	5936.3	5998.7	6112.5	6265.6	6445.9	6673.6	6898.6	7061.2	7061.2	7021.9
52.5°	6380.9	6375.4	6409.3	6509.6	6657.3	6847.1	7073.4	7333.6	7509.8	7547.8	7462.4
55°	6970.4	6978.5	6986.7	7074.8	7200.8	7351.3	7611.5	7851.4	8087.2	8108.9	8058.7
57.5°	7652.1	7625.0	7683.3	7827.0	7970.6	8159.0	8343.4	8626.6	8905.8	8953.3	8946.5
60°	8717.4	8682.2	8741.8	8924.8	9083.4	9380.2	9696.0	10061.9	10392.6	10490.2	10372.3
62.5°	9697.3	9740.7	9822.0	10034.8	10265.2	10661.0	11135.3	11762.8	12390.3	12731.9	12707.5
65°	9609.2	9568.6	9724.4	10014.5	10431.9	10936.1	11525.6	12281.9	13185.9	13871.7	13932.7
66°	9282.6	9240.6	9408.6	9740.7	10217.8	10778.9	11433.5	12203.3	13127.6	13902.9	13996.4
67.5°	8743.2	8701.2	8890.9	9193.1	9685.1	10391.2	11098.7	11940.4	12901.3	13644.0	13719.9
70°	7702.3	7645.4	7793.1	8134.6	8533.1	9216.2	9889.8	10781.6	11768.3	12361.9	12390.3
72.5°	6524.5	6391.7	6548.9	6811.8	7096.5	7661.6	8248.5	8858.4	9644.5	10193.4	10350.6
75°	4734.1	4803.3	4849.3	5022.8	5211.2	5678.8	6023.0	6534.0	7142.5	7539.7	7665.7
77.5°	2511.4	2615.8	2680.8	2854.3	3166.0	3522.5	3895.2	4211.0	4610.8	4833.1	4987.6
80°	1409.5	1482.7	1588.4	1725.3	1877.1	2150.9	2371.8	2534.5	2591.4	2630.7	2665.9
82.5°	775.2	960.9	1118.1	1213.0	1302.5	1412.2	1543.7	1679.2	1722.6	1657.6	1623.7
85°	120.6	177.5	540.8	660.0	718.3	802.4	897.2	997.5	998.9	859.3	937.9
87.5°	33.9	37.9	77.3	116.6	113.8	92.2	113.8	207.4	122.0	61.0	70.5
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-F08-LED-E-U-T4-7050

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4
2.5°	2724.2	2726.9	2733.7	2740.5	2747.2	2754.0	2758.1	2764.9	2770.3	2778.4	2787.9
5°	2713.4	2720.1	2732.3	2747.2	2760.8	2773.0	2782.5	2796.0	2808.2	2819.1	2835.3
7.5°	2713.4	2726.9	2747.2	2763.5	2775.7	2790.6	2805.5	2819.1	2832.6	2843.5	2854.3
10°	2714.7	2728.3	2748.6	2767.6	2781.1	2797.4	2809.6	2821.8	2836.7	2843.5	2857.0
12.5°	2720.1	2725.6	2740.5	2759.4	2775.7	2792.0	2804.2	2816.4	2832.6	2835.3	2844.8
15°	2747.2	2739.1	2743.2	2756.7	2774.3	2787.9	2801.4	2810.9	2821.8	2819.1	2827.2
17.5°	2797.4	2777.1	2768.9	2770.3	2778.4	2787.9	2793.3	2794.7	2796.0	2783.8	2785.2
20°	2865.1	2836.7	2817.7	2808.2	2797.4	2787.9	2773.0	2755.4	2739.1	2714.7	2712.0
22.5°	2966.8	2924.8	2904.5	2878.7	2846.2	2805.5	2768.9	2725.6	2690.3	2653.7	2640.2
25°	3114.5	3071.2	3049.5	3008.8	2950.5	2892.3	2839.4	2781.1	2729.6	2686.2	2665.9
27.5°	3312.4	3269.0	3246.0	3204.0	3132.1	3073.9	3000.7	2938.3	2876.0	2812.3	2786.5
30°	3552.3	3514.3	3488.6	3454.7	3392.4	3328.7	3243.3	3147.1	3048.1	2946.5	2896.3
32.5°	3835.6	3793.5	3774.6	3735.3	3670.2	3603.8	3508.9	3385.6	3220.2	3060.3	2960.0
35°	4189.3	4141.9	4120.2	4068.7	3992.8	3895.2	3793.5	3628.2	3404.6	3182.3	3018.3
37.5°	4662.3	4556.6	4484.8	4366.8	4244.9	4108.0	3963.0	3793.5	3529.3	3254.1	3026.4
40°	5081.1	4974.0	4835.8	4666.4	4476.6	4288.2	4122.9	3930.4	3643.1	3305.6	3000.7
42.5°	5601.5	5411.8	5190.9	4961.8	4709.7	4478.0	4281.5	4055.1	3720.4	3319.2	2928.8
45°	6077.3	5850.9	5555.5	5250.5	4937.4	4646.0	4425.1	4173.0	3786.8	3319.2	2842.1
47.5°	6511.0	6239.9	5886.2	5506.7	5142.1	4823.6	4572.9	4293.7	3880.3	3361.2	2816.4
50°	6912.1	6600.4	6197.9	5757.4	5348.1	5007.9	4738.2	4448.2	4022.6	3469.6	2878.7
52.5°	7335.0	7004.3	6513.7	6046.1	5594.8	5230.2	4942.9	4639.3	4206.9	3640.4	2988.5
55°	7889.3	7501.7	6944.7	6429.6	5933.6	5531.1	5204.4	4868.3	4408.9	3832.8	3122.7
57.5°	8763.5	8201.0	7644.0	6974.5	6506.9	5977.0	5619.2	5232.9	4736.8	4083.6	3324.6
60°	10293.7	9602.4	8932.9	8163.1	7585.7	7031.4	6490.6	5986.5	5388.8	4650.1	3767.8
62.5°	12478.4	11776.4	10724.7	9782.7	8911.2	8176.7	7471.9	6830.8	6063.7	5255.9	4314.0
65°	13783.6	12979.9	11726.2	10460.4	9401.9	8491.1	7684.7	6899.9	6071.8	5284.4	4479.3
66°	13888.0	13127.6	11788.6	10450.9	9351.7	8407.1	7568.1	6756.3	5907.8	5154.3	4425.1
67.5°	13694.2	13039.5	11661.2	10266.6	9143.0	8122.4	7260.5	6409.3	5556.8	4858.8	4244.9
70°	12326.6	11853.6	10671.8	9365.3	8244.4	7344.5	6435.1	5616.5	4808.7	4221.8	3766.4
72.5°	10105.3	9506.2	8679.5	7801.2	6918.9	6120.6	5293.9	4597.2	3919.6	3492.7	3170.1
75°	7423.1	6883.7	5972.9	5425.3	4842.6	4341.1	3784.1	3124.0	2642.9	2428.7	2350.1
77.5°	4705.7	4120.2	3351.7	2747.2	2362.3	2030.3	1600.6	1272.6	1019.2	1061.2	1175.1
80°	2377.2	2047.9	1532.9	1210.3	1046.3	870.1	688.5	521.8	380.8	435.1	492.0
82.5°	1526.1	1274.0	1015.1	799.6	674.9	595.0	475.7	345.6	257.5	290.0	355.1
85°	918.9	776.6	619.4	506.9	440.5	367.3	269.7	191.1	189.7	203.3	250.7
87.5°	139.6	199.2	115.2	123.3	130.1	139.6	123.3	104.4	90.8	117.9	149.1
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4	2759.4
2.5°	2797.4	2800.1	2805.5	2812.3	2810.9	2820.4	2825.8	2820.4	2832.6	2832.6	2839.4
5°	2848.9	2853.0	2862.4	2869.2	2871.9	2880.1	2882.8	2881.4	2884.1	2885.5	2888.2
7.5°	2863.8	2874.6	2878.7	2882.8	2884.1	2886.8	2886.8	2884.1	2884.1	2882.8	2885.5
10°	2859.7	2863.8	2866.5	2865.1	2865.1	2862.4	2861.1	2859.7	2859.7	2857.0	2861.1
12.5°	2846.2	2846.2	2846.2	2843.5	2843.5	2842.1	2842.1	2842.1	2844.8	2846.2	2853.0
15°	2819.1	2819.1	2821.8	2820.4	2824.5	2831.3	2839.4	2844.8	2851.6	2853.0	2857.0
17.5°	2777.1	2778.4	2786.5	2804.2	2821.8	2842.1	2857.0	2861.1	2855.7	2842.1	2832.6
20°	2703.9	2721.5	2754.0	2796.0	2835.3	2861.1	2867.9	2851.6	2825.8	2790.6	2771.6
22.5°	2638.8	2674.0	2732.3	2801.4	2850.2	2867.9	2847.5	2809.6	2763.5	2722.8	2694.4
25°	2664.6	2705.2	2766.2	2825.8	2857.0	2847.5	2806.9	2752.7	2703.9	2656.4	2610.3
27.5°	2773.0	2813.6	2857.0	2874.6	2863.8	2828.6	2771.6	2713.4	2648.3	2580.5	2523.6
30°	2876.0	2899.0	2901.7	2884.1	2844.8	2787.9	2721.5	2653.7	2571.0	2489.7	2417.9
32.5°	2908.5	2881.4	2832.6	2782.5	2728.3	2670.0	2592.7	2503.3	2415.2	2323.0	2243.1
35°	2899.0	2789.3	2668.6	2561.6	2496.5	2430.1	2359.6	2240.3	2141.4	2062.8	2011.3
37.5°	2813.6	2613.1	2427.4	2271.5	2169.9	2091.3	1986.9	1888.0	1802.6	1767.3	1725.3
40°	2694.4	2388.1	2130.6	1912.4	1806.6	1706.3	1589.8	1513.9	1489.5	1457.0	1458.3
42.5°	2523.6	2125.1	1793.1	1542.4	1427.2	1317.4	1234.7	1190.0	1191.3	1164.2	1169.6
45°	2343.3	1860.9	1443.4	1194.0	1080.2	986.7	940.6	927.0	928.4	929.8	921.6
47.5°	2233.6	1654.8	1157.4	905.4	805.1	752.2	727.8	721.0	722.4	723.7	714.3
50°	2217.3	1547.8	966.3	692.6	627.5	597.7	585.5	578.7	578.7	573.3	565.2
52.5°	2263.4	1520.7	872.8	600.4	538.1	511.0	501.5	496.0	487.9	477.1	462.2
55°	2336.6	1545.1	844.4	569.2	508.2	481.1	468.9	466.2	452.7	432.3	408.0
57.5°	2472.1	1633.2	863.3	577.4	513.7	489.3	481.1	478.4	459.5	428.3	397.1
60°	2861.1	1889.3	958.2	623.4	553.0	532.6	532.6	528.6	502.8	458.1	413.4
62.5°	3397.8	2264.7	1087.0	687.1	607.2	604.5	627.5	628.9	582.8	511.0	440.5
65°	3656.7	2440.9	1131.7	700.7	622.1	653.3	699.3	699.3	634.3	535.4	444.5
66°	3658.0	2436.9	1118.1	684.4	605.8	646.5	693.9	693.9	626.2	528.6	437.8
67.5°	3564.5	2361.0	1073.4	654.6	569.2	607.2	649.2	647.8	586.9	501.5	418.8
70°	3197.2	2088.5	946.0	605.8	525.9	527.2	542.1	532.6	492.0	433.7	380.8
72.5°	2756.7	1747.0	820.0	574.7	492.0	466.2	454.0	445.9	420.1	384.9	352.4
75°	2114.3	1356.7	714.3	546.2	462.2	417.4	401.2	394.4	376.8	356.4	330.7
77.5°	1295.7	929.8	605.8	500.1	428.3	387.6	370.0	356.4	338.8	319.9	302.2
80°	558.4	561.1	485.2	424.2	372.7	325.3	302.2	286.0	276.5	269.7	260.2
82.5°	390.3	402.5	370.0	329.3	284.6	250.7	230.4	226.3	227.7	227.7	225.0
85°	292.7	287.3	258.9	235.8	215.5	193.8	177.5	176.2	181.6	181.6	177.5
87.5°	169.4	170.8	146.4	136.9	142.3	122.0	111.1	112.5	126.0	124.7	122.0
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):

	160°	165°	170°	175°	180°
0°	2759.4	2759.4	2759.4	2759.4	2759.4
2.5°	2839.4	2843.5	2842.1	2846.2	2842.1
5°	2892.3	2890.9	2889.5	2895.0	2888.2
7.5°	2884.1	2885.5	2885.5	2885.5	2884.1
10°	2863.8	2869.2	2871.9	2877.3	2876.0
12.5°	2857.0	2865.1	2873.3	2881.4	2882.8
15°	2858.4	2863.8	2867.9	2871.9	2873.3
17.5°	2823.1	2821.8	2817.7	2815.0	2812.3
20°	2751.3	2744.5	2737.7	2726.9	2732.3
22.5°	2661.9	2642.9	2621.2	2603.6	2602.2
25°	2557.5	2522.3	2487.0	2464.0	2455.8
27.5°	2465.3	2423.3	2386.7	2366.4	2361.0
30°	2355.5	2317.6	2285.1	2267.5	2256.6
32.5°	2192.9	2163.1	2122.4	2108.9	2107.5
35°	1966.6	1943.5	1915.1	1909.6	1902.9
37.5°	1710.4	1702.3	1688.7	1672.5	1669.8
40°	1436.6	1442.1	1438.0	1428.5	1413.6
42.5°	1172.4	1181.8	1183.2	1190.0	1196.7
45°	933.8	941.9	941.9	948.7	956.9
47.5°	717.0	711.5	715.6	722.4	726.5
50°	542.1	538.1	531.3	525.9	520.4
52.5°	436.4	428.3	409.3	403.9	398.5
55°	384.9	370.0	356.4	351.0	351.0
57.5°	370.0	351.0	336.1	329.3	326.6
60°	372.7	345.6	326.6	315.8	311.7
62.5°	384.9	347.0	321.2	309.0	304.9
65°	383.6	344.3	319.9	306.3	302.2
66°	376.8	340.2	317.1	304.9	302.2
67.5°	365.9	334.8	314.4	303.6	299.5
70°	344.3	323.9	309.0	299.5	295.5
72.5°	326.6	313.1	299.5	288.7	286.0
75°	310.4	296.8	284.6	279.2	275.1
77.5°	286.0	273.8	267.0	261.6	258.9
80°	253.4	245.3	237.2	231.8	227.7
82.5°	220.9	210.1	201.9	197.9	195.2
85°	180.3	173.5	161.3	153.2	151.8
87.5°	120.6	113.8	109.8	103.0	96.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)