

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: P158001

Luminaire Tested: **VST-E04-LED-E-U-RW-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158001
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-E04-LED-E-U-RW-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12787 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type I - Medium - Full Cutoff
BUG Rating: B4 - U0 - G4

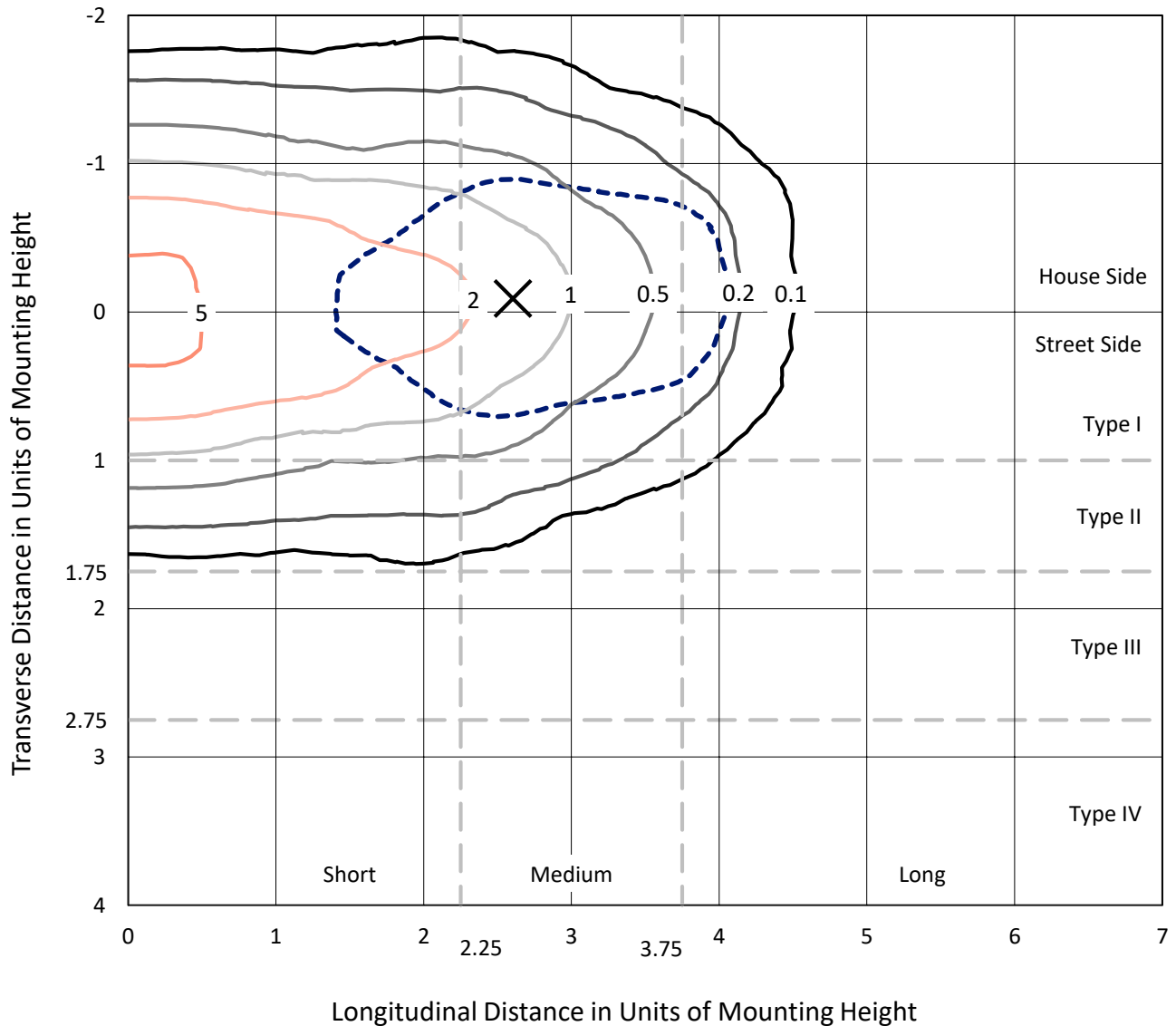
Input Watts (W): 97.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

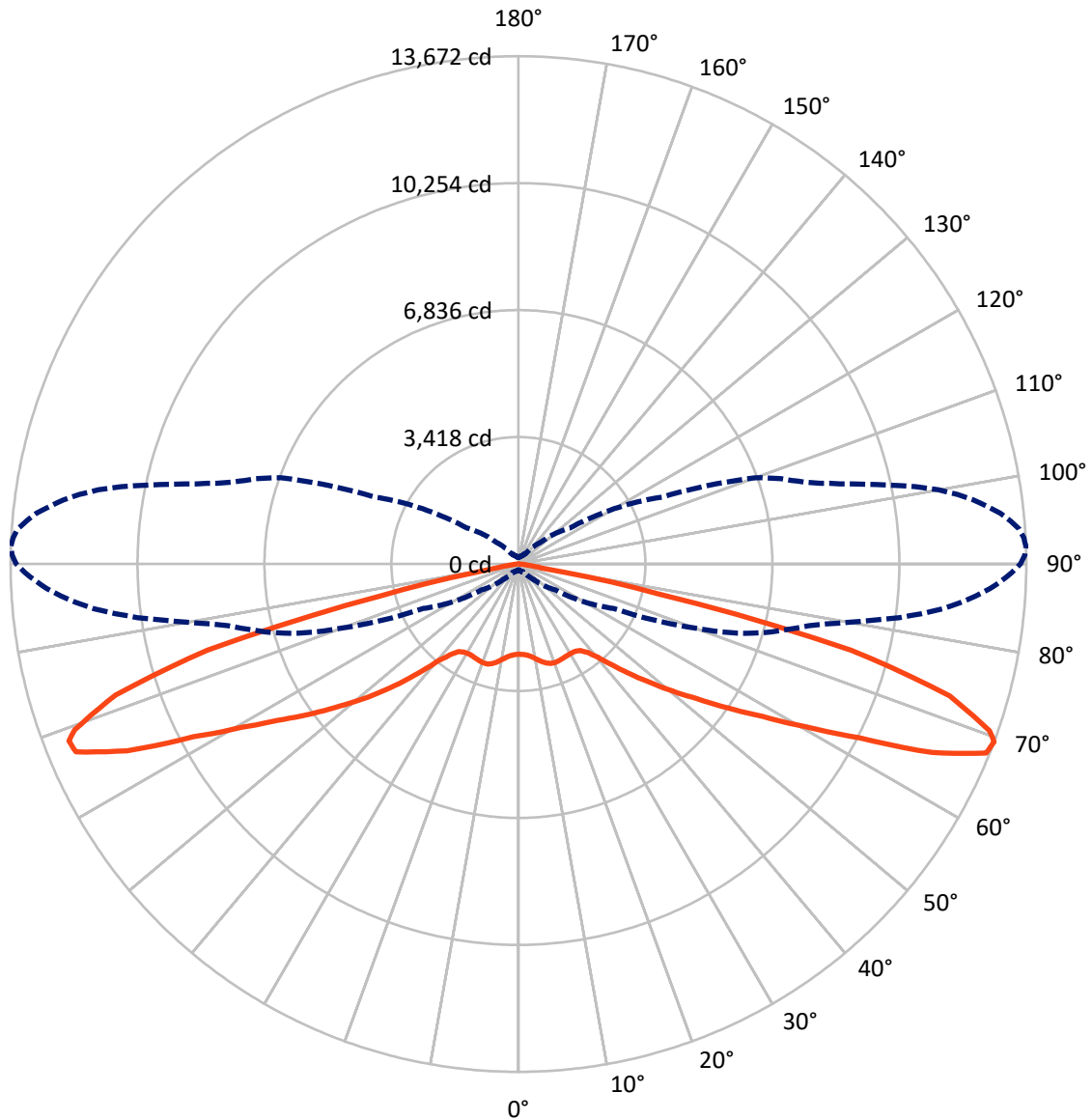
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.2 fc
 Type I - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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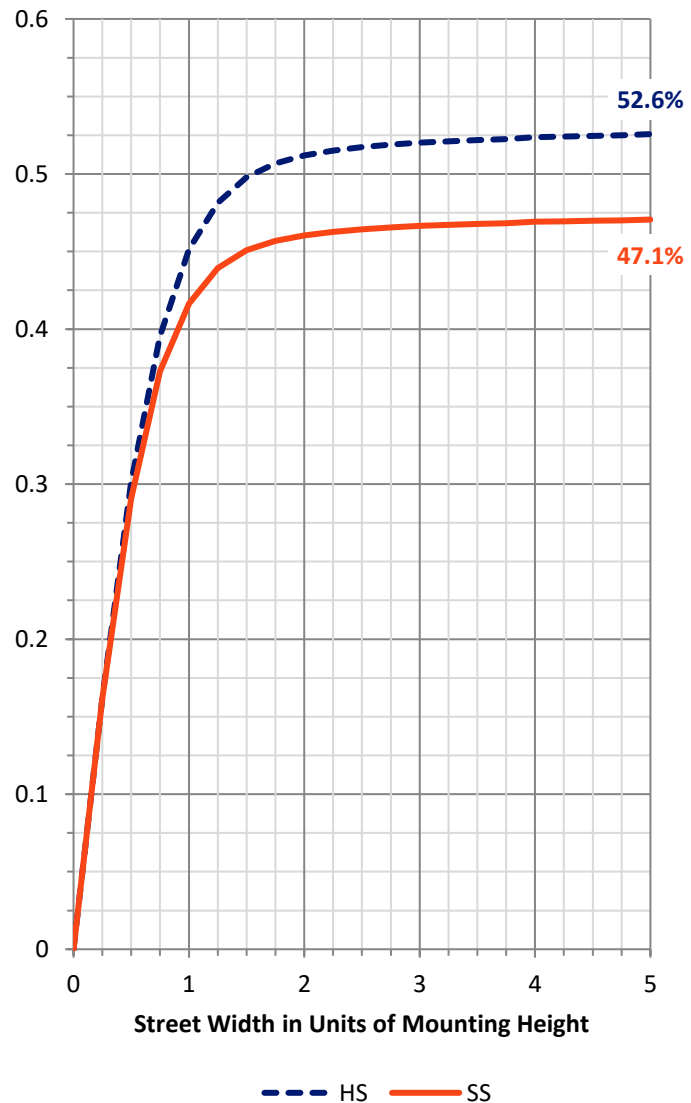
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6781.6	0.0	6781.6
	% Fixture	53.0	0.0	53.0
Street Side	Lumens	6005.4	0.0	6005.4
	% Fixture	47.0	0.0	47.0
Total	Lumens	12787.0	0.0	12787.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.7	1.9
10°-20°	750.8	5.9
20°-30°	1218.2	9.5
30°-40°	1518.2	11.9
40°-50°	1890.2	14.8
50°-60°	2331.2	18.2
60°-70°	2895.1	22.6
70°-80°	1778.9	13.9
80°-90°	166.7	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°	12787.0	100.0
0°-180°	12787.0	100.0



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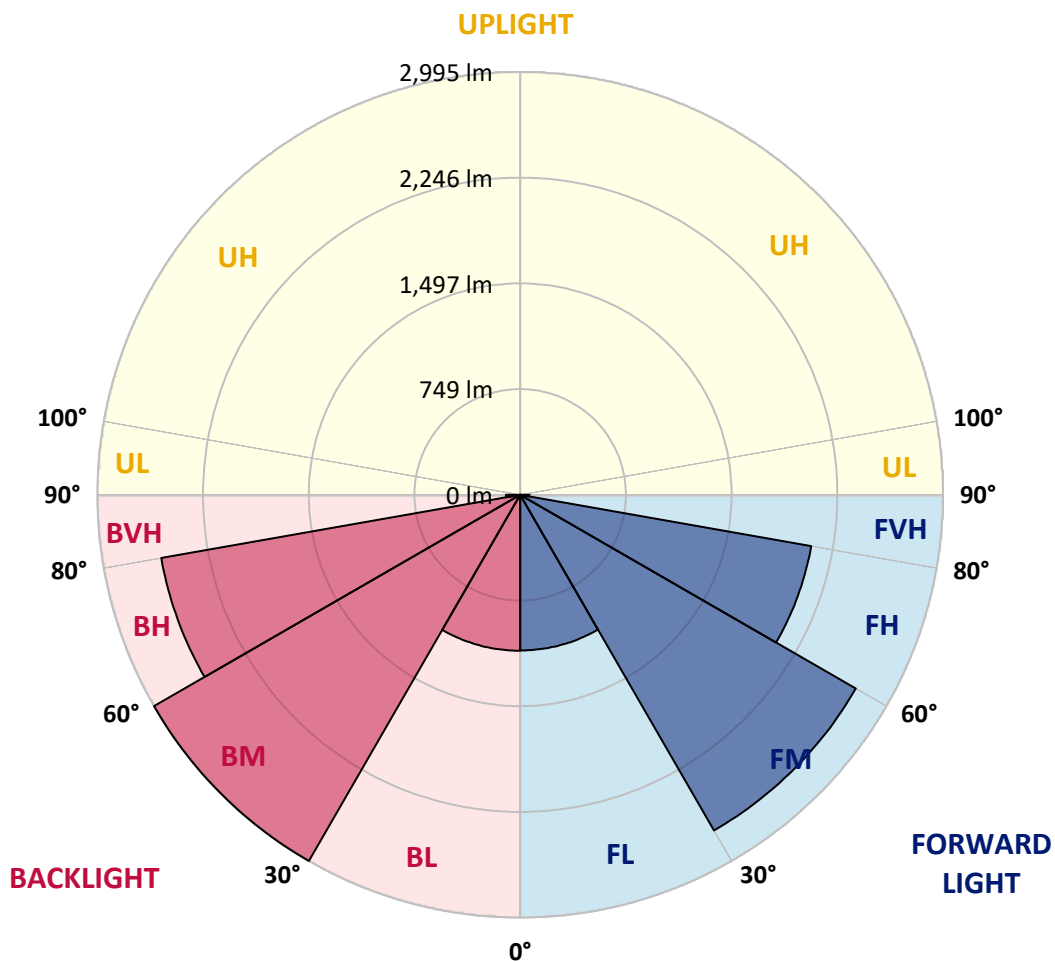
CATALOG NUMBER: VST-E04-LED-E-U-RW-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1102.2	8.6			
FM	(30°-60°)	2744.9	21.5			
FH	(60°-80°)	2093.1	16.4			G2/5000
FVH	(80°-90°)	65.3	0.5			G1/100
BL	(0°-30°)	1104.5	8.6	B3/2500		
BM	(30°-60°)	2994.7	23.4	B3/5000		
BH	(60°-80°)	2581.0	20.2	B4/5000		G4/5000
BVH	(80°-90°)	101.4	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°	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0
2.5°	2467.6	2461.0	2466.8	2467.6	2466.8	2466.8	2459.4	2457.7	2447.9	2450.3	2449.5
5°	2501.2	2498.8	2502.9	2504.5	2506.2	2502.9	2497.1	2494.7	2488.1	2485.6	2484.8
7.5°	2532.4	2528.3	2534.9	2540.6	2544.7	2545.6	2546.4	2542.3	2542.3	2539.0	2539.0
10°	2558.7	2555.4	2566.1	2573.5	2586.6	2594.0	2602.2	2607.9	2611.2	2612.1	2611.2
12.5°	2570.2	2567.7	2585.0	2607.1	2631.8	2649.0	2669.5	2684.3	2688.4	2687.6	2691.7
15°	2550.5	2552.1	2578.4	2621.9	2674.4	2717.9	2746.7	2759.0	2762.3	2763.9	2764.7
17.5°	2497.1	2500.4	2538.2	2608.8	2700.7	2779.5	2822.2	2822.2	2815.6	2815.6	2814.8
20°	2411.8	2415.0	2464.3	2566.1	2701.5	2822.2	2882.9	2870.6	2846.0	2841.1	2836.2
22.5°	2293.6	2306.7	2360.9	2479.1	2666.2	2834.5	2920.7	2902.6	2864.1	2853.4	2846.0
25°	2159.7	2158.1	2223.0	2355.9	2580.9	2805.0	2931.4	2928.1	2887.1	2875.6	2862.4
27.5°	2007.1	2012.0	2071.9	2206.5	2450.3	2719.6	2913.3	2956.8	2923.2	2911.7	2899.4
30°	1850.3	1855.2	1911.8	2068.6	2301.8	2597.3	2876.4	2984.7	2971.6	2962.6	2954.4
32.5°	1692.7	1694.3	1761.6	1929.9	2176.2	2451.2	2820.6	3010.2	3028.2	3024.1	3020.9
35°	1544.9	1546.5	1619.6	1790.3	2052.2	2326.4	2753.2	3047.1	3105.4	3110.3	3113.6
37.5°	1401.2	1403.7	1478.4	1657.4	1929.9	2232.0	2678.5	3103.8	3213.8	3231.8	3235.1
40°	1258.4	1260.9	1332.3	1521.9	1805.9	2149.1	2621.1	3183.4	3359.9	3384.5	3410.0
42.5°	1122.1	1131.2	1191.9	1373.3	1668.0	2046.5	2596.5	3280.3	3533.1	3571.7	3600.4
45°	994.9	995.7	1064.7	1234.6	1504.7	1907.7	2580.0	3390.3	3726.8	3785.1	3824.5
47.5°	858.6	868.5	940.7	1105.7	1352.0	1736.2	2527.5	3519.1	3937.8	4005.9	4085.5
50°	726.5	740.4	810.2	973.6	1212.4	1558.9	2386.3	3670.2	4175.0	4263.7	4355.6
52.5°	599.2	598.4	672.3	842.2	1072.1	1408.6	2157.3	3828.6	4449.2	4544.4	4643.7
55°	453.1	453.1	526.2	681.3	920.2	1274.8	1911.8	3927.1	4703.7	4818.6	4926.9
57.5°	311.1	319.3	388.3	522.1	761.8	1152.5	1723.9	3870.5	4898.2	5041.1	5169.9
60°	230.7	238.9	289.8	375.1	596.0	1008.0	1582.7	3603.7	5015.6	5205.2	5372.7
62.5°	199.5	205.2	253.7	300.4	429.3	854.5	1457.9	3264.7	5184.7	5444.1	5677.2
65°	178.1	183.9	232.3	259.4	335.7	687.1	1388.1	3070.9	5386.6	5783.1	6121.3
67.5°	165.0	171.6	212.6	232.3	293.1	621.4	1333.9	3025.8	5385.0	5866.0	6297.8
69°	158.4	163.4	197.0	218.4	283.2	601.7	1216.6	2829.6	5029.6	5545.9	5979.3
70°	154.3	159.3	188.0	209.3	279.9	566.4	1108.2	2570.2	4624.9	5144.5	5584.5
72.5°	141.2	146.1	167.5	187.2	233.1	378.4	772.5	1645.1	3304.9	3675.9	4179.1
75°	124.8	130.5	146.9	163.4	176.5	219.2	445.7	853.7	1889.7	2171.2	2619.4
77.5°	101.8	107.5	124.8	151.0	149.4	166.6	289.8	524.5	884.9	1097.5	1263.3
80°	83.7	87.8	102.6	152.7	122.3	139.6	234.8	430.1	623.1	688.7	728.1
82.5°	55.8	61.6	79.6	119.8	93.6	99.3	175.7	402.2	527.0	577.9	625.5
85°	26.3	28.7	48.4	64.0	56.6	53.4	100.1	284.0	392.4	416.2	434.2
87.5°	0.0	0.0	2.5	4.9	7.4	7.4	18.1	59.9	110.0	133.0	131.3
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):

	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°	83°
0°	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0
2.5°	2446.2	2447.1	2446.2	2446.2	2445.4	2443.8	2443.8	2442.1	2443.0	2442.1	2443.8
5°	2484.0	2484.0	2481.5	2479.9	2482.4	2479.9	2480.7	2476.6	2476.6	2474.1	2470.9
7.5°	2538.2	2538.2	2539.0	2534.1	2537.4	2538.2	2535.7	2534.1	2532.4	2528.3	2529.1
10°	2610.4	2610.4	2612.9	2606.3	2609.6	2611.2	2612.1	2612.1	2610.4	2603.0	2603.8
12.5°	2690.9	2689.2	2690.0	2686.8	2690.0	2691.7	2693.3	2691.7	2691.7	2690.0	2689.2
15°	2763.9	2763.1	2764.7	2762.3	2763.1	2764.7	2769.7	2768.8	2768.0	2763.1	2763.1
17.5°	2814.0	2811.5	2809.9	2809.1	2809.1	2808.2	2809.1	2809.1	2806.6	2805.8	2805.8
20°	2832.9	2826.3	2822.2	2819.7	2816.5	2814.8	2813.2	2814.0	2812.3	2809.9	2810.7
22.5°	2836.2	2827.1	2818.9	2811.5	2805.0	2800.9	2796.8	2795.1	2791.0	2788.5	2788.5
25°	2851.8	2837.8	2824.7	2812.3	2802.5	2793.5	2784.4	2777.9	2772.9	2767.2	2765.6
27.5°	2886.2	2871.5	2855.9	2840.3	2827.1	2809.1	2796.8	2783.6	2772.1	2763.1	2756.5
30°	2939.6	2924.8	2909.2	2891.2	2873.9	2855.0	2834.5	2818.9	2802.5	2784.4	2774.6
32.5°	3010.2	3000.3	2984.7	2967.5	2951.9	2932.2	2907.6	2883.8	2868.2	2846.8	2831.2
35°	3111.2	3099.7	3094.7	3087.3	3071.7	3059.4	3032.3	3010.2	2995.4	2965.9	2954.4
37.5°	3249.1	3248.2	3252.3	3249.9	3252.3	3236.7	3224.4	3223.6	3202.3	3173.5	3145.6
40°	3437.0	3446.9	3469.1	3484.7	3499.4	3501.1	3518.3	3500.3	3502.7	3498.6	3469.9
42.5°	3651.3	3684.9	3711.2	3757.2	3792.5	3825.3	3847.5	3877.9	3900.8	3921.4	3926.3
45°	3890.2	3940.2	4001.0	4042.0	4111.0	4166.0	4241.5	4299.8	4360.5	4420.5	4441.8
47.5°	4149.6	4212.0	4279.3	4355.6	4442.6	4528.8	4645.4	4734.9	4832.5	4913.8	4986.1
50°	4436.1	4500.9	4591.2	4679.0	4798.9	4898.2	5050.9	5168.3	5325.9	5434.3	5527.8
52.5°	4734.9	4816.1	4917.1	5014.0	5136.3	5263.5	5433.4	5606.6	5796.3	5960.4	6096.7
55°	5027.1	5127.2	5224.1	5337.4	5472.8	5620.6	5812.7	6040.9	6277.3	6465.3	6645.9
57.5°	5287.3	5403.1	5517.2	5632.1	5770.8	5942.4	6158.3	6404.5	6675.4	6925.8	7173.7
60°	5528.7	5667.4	5806.9	5950.6	6109.8	6321.6	6581.0	6883.9	7234.5	7576.8	7901.0
62.5°	5910.4	6092.6	6265.8	6451.3	6643.4	6892.1	7198.3	7595.6	7997.9	8425.6	8758.0
65°	6427.5	6683.6	6910.2	7150.7	7399.5	7731.9	8098.0	8573.3	9149.6	9587.9	10121.5
67.5°	6684.5	7021.8	7313.3	7580.9	7888.7	8224.4	8659.5	9221.8	9836.7	10472.0	11067.2
69°	6382.4	6730.4	7053.0	7352.7	7663.8	7989.7	8444.4	9021.5	9671.7	10358.7	10939.9
70°	5990.8	6338.9	6682.8	7024.3	7308.3	7626.0	8082.4	8677.6	9326.9	10041.1	10617.3
72.5°	4589.6	5008.2	5319.3	5639.5	5968.7	6237.9	6764.9	7266.5	7942.9	8667.7	9302.3
75°	2936.3	3321.3	3661.1	3933.7	4255.5	4578.1	4967.2	5524.6	5948.1	6543.3	7058.0
77.5°	1508.8	1622.9	1950.4	2048.1	2271.4	2447.1	2661.3	2800.9	3145.6	3218.7	3522.4
80°	715.0	644.4	606.6	572.2	582.0	577.9	560.7	537.7	566.4	554.1	549.2
82.5°	623.1	555.7	443.3	376.8	325.9	276.6	238.1	218.4	220.8	227.4	229.8
85°	436.7	410.4	320.1	243.0	189.6	146.9	118.2	113.3	116.6	125.6	122.3
87.5°	126.4	132.2	116.6	81.3	56.6	41.0	32.0	36.1	34.5	33.7	35.3
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):

	84°	85°	86°	87°	88°	89°	90°	91°	92°	93°	94°
0°	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0
2.5°	2443.8	2443.0	2440.5	2438.0	2438.0	2436.4	2438.0	2438.8	2438.0	2438.0	2436.4
5°	2471.7	2472.5	2475.0	2470.0	2469.2	2470.0	2466.8	2465.9	2463.5	2465.9	2462.7
7.5°	2525.0	2527.5	2527.5	2524.2	2523.4	2525.9	2520.9	2519.3	2516.8	2516.0	2515.2
10°	2604.7	2607.1	2603.0	2600.6	2598.1	2601.4	2597.3	2597.3	2594.8	2592.4	2591.5
12.5°	2693.3	2691.7	2690.0	2691.7	2689.2	2689.2	2686.8	2685.1	2684.3	2683.5	2681.8
15°	2762.3	2768.0	2768.0	2769.7	2768.0	2768.0	2764.7	2765.6	2763.9	2763.1	2763.9
17.5°	2806.6	2808.2	2812.3	2814.8	2814.8	2815.6	2814.0	2815.6	2814.0	2814.0	2817.3
20°	2812.3	2814.0	2818.1	2822.2	2824.7	2826.3	2826.3	2828.8	2830.4	2832.1	2836.2
22.5°	2789.4	2791.8	2796.8	2804.1	2808.2	2809.9	2813.2	2817.3	2821.4	2824.7	2830.4
25°	2765.6	2766.4	2771.3	2778.7	2783.6	2787.7	2793.5	2798.4	2804.1	2810.7	2817.3
27.5°	2752.4	2751.6	2755.7	2763.1	2767.2	2772.9	2777.9	2785.3	2791.8	2800.0	2805.8
30°	2763.9	2757.4	2758.2	2761.5	2764.7	2768.8	2774.6	2781.2	2788.5	2795.9	2802.5
32.5°	2814.8	2800.0	2790.2	2787.7	2788.5	2789.4	2792.6	2796.8	2802.5	2808.2	2810.7
35°	2924.8	2899.4	2886.2	2875.6	2866.5	2859.1	2860.8	2860.0	2860.0	2864.9	2859.1
37.5°	3134.1	3102.1	3088.2	3069.3	3058.6	3031.5	3024.1	3022.5	3011.8	3011.8	2999.5
40°	3462.5	3443.6	3432.9	3415.7	3364.0	3370.6	3333.6	3334.4	3304.1	3307.3	3286.0
42.5°	3929.6	3932.0	3918.9	3907.4	3867.2	3849.1	3814.6	3765.4	3726.8	3726.0	3683.3
45°	4469.7	4499.3	4457.4	4472.2	4436.9	4388.4	4348.2	4285.0	4225.1	4206.2	4162.7
47.5°	5034.5	5082.9	5050.9	5056.6	5039.4	4970.5	4916.3	4838.3	4760.3	4707.8	4681.5
50°	5637.8	5669.8	5669.0	5653.4	5645.2	5577.9	5490.9	5431.8	5374.3	5303.7	5280.7
52.5°	6184.5	6259.2	6309.3	6297.8	6274.0	6233.8	6156.6	6105.7	6021.2	6011.3	6021.2
55°	6769.8	6866.7	6917.6	6979.2	6980.0	6972.6	6940.6	6921.7	6842.9	6851.9	6840.4
57.5°	7323.9	7465.9	7543.9	7675.3	7720.4	7780.3	7758.2	7782.8	7735.2	7766.4	7757.4
60°	8075.0	8272.1	8401.8	8581.5	8665.3	8815.5	8845.0	8863.1	8889.4	8953.4	8917.3
62.5°	9019.9	9308.8	9578.1	9822.7	9903.1	10128.9	10165.8	10307.0	10314.4	10357.9	10278.3
65°	10566.4	10918.6	11214.9	11508.0	11677.1	11941.4	12048.1	12322.3	12238.6	12273.9	12103.9
67.5°	11579.4	11989.0	12386.3	12663.8	12944.5	13214.6	13409.1	13586.5	13584.8	13550.3	13399.3
69°	11489.9	11946.3	12337.9	12709.8	13005.3	13282.7	13516.7	13631.6	13671.8	13621.8	13514.2
70°	11180.4	11649.2	12128.6	12434.8	12756.5	13061.1	13302.4	13428.0	13455.9	13420.6	13327.9
72.5°	9750.5	10200.3	10729.0	11007.2	11396.3	11616.3	11948.8	12111.3	12140.1	12094.9	12034.2
75°	7609.6	7690.9	8229.4	8406.7	8689.1	8942.7	9149.6	9097.0	9244.0	9215.2	9192.3
77.5°	3584.8	3368.1	3717.0	3879.5	3794.1	3566.7	3897.6	3658.7	3817.1	4023.2	3970.6
80°	591.0	589.4	605.0	639.5	598.4	635.4	634.5	616.5	618.1	662.5	639.5
82.5°	227.4	232.3	234.8	241.3	241.3	242.2	246.3	251.2	247.1	255.3	253.7
85°	123.1	131.3	124.0	118.2	122.3	124.8	128.1	132.2	128.1	140.4	133.8
87.5°	32.0	33.7	29.6	29.6	28.7	26.3	26.3	27.9	30.4	36.1	39.4
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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CATALOG NUMBER: VST-E04-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	95°	96°	97°	98°	99°	100°	101°	102°	103°	104°	105°
0°	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0
2.5°	2433.1	2433.9	2434.7	2432.3	2430.6	2430.6	2429.8	2428.2	2427.4	2427.4	2427.4
5°	2461.0	2462.7	2458.5	2457.7	2456.1	2454.4	2454.4	2452.8	2453.6	2453.6	2449.5
7.5°	2516.8	2514.4	2509.4	2506.2	2509.4	2503.7	2501.2	2502.9	2501.2	2502.1	2500.4
10°	2591.5	2591.5	2585.8	2589.1	2585.0	2578.4	2580.9	2578.4	2576.8	2571.0	2574.3
12.5°	2684.3	2681.8	2678.5	2671.2	2668.7	2667.9	2660.5	2661.3	2658.8	2657.2	2654.7
15°	2765.6	2764.7	2757.4	2753.2	2752.4	2749.1	2745.9	2744.2	2740.1	2739.3	2737.6
17.5°	2819.7	2817.3	2814.0	2809.9	2809.9	2805.0	2803.3	2799.2	2798.4	2795.9	2793.5
20°	2837.8	2838.6	2835.3	2832.1	2830.4	2827.1	2824.7	2821.4	2819.7	2816.5	2814.0
22.5°	2833.7	2833.7	2830.4	2829.6	2826.3	2821.4	2818.1	2814.0	2809.9	2805.8	2800.9
25°	2820.6	2819.7	2817.3	2813.2	2809.1	2801.7	2795.1	2788.5	2782.8	2777.9	2770.5
27.5°	2809.1	2807.4	2802.5	2796.8	2788.5	2780.3	2768.0	2759.0	2751.6	2745.0	2736.8
30°	2805.0	2799.2	2791.8	2782.8	2772.9	2760.6	2747.5	2736.0	2727.8	2721.2	2717.9
32.5°	2809.9	2802.5	2791.0	2779.5	2767.2	2752.4	2739.3	2729.4	2722.1	2720.4	2720.4
35°	2855.0	2842.7	2827.1	2810.7	2795.1	2782.8	2773.8	2772.9	2768.0	2773.8	2782.8
37.5°	2987.2	2976.5	2952.7	2931.4	2920.7	2915.0	2906.8	2908.4	2896.9	2915.0	2929.7
40°	3267.9	3254.8	3226.9	3209.7	3188.3	3167.8	3184.2	3179.3	3187.5	3184.2	3199.8
42.5°	3677.6	3664.4	3620.1	3613.5	3604.5	3596.3	3596.3	3589.7	3586.4	3597.9	3584.8
45°	4175.8	4149.6	4133.2	4152.9	4125.8	4134.0	4162.7	4124.1	4133.2	4079.8	4030.5
47.5°	4693.0	4690.5	4686.4	4710.2	4714.3	4726.7	4742.2	4702.8	4631.4	4591.2	4491.1
50°	5288.1	5313.6	5323.4	5346.4	5356.3	5365.3	5340.7	5282.4	5161.7	5055.0	4936.8
52.5°	6011.3	5967.0	6027.8	6049.9	6040.1	6003.9	5915.3	5843.9	5677.2	5523.7	5340.7
55°	6853.6	6864.2	6821.5	6804.3	6770.7	6670.5	6548.2	6387.3	6176.3	5976.0	5744.5
57.5°	7711.4	7707.3	7640.8	7547.2	7433.1	7312.4	7130.2	6899.5	6653.3	6384.0	6104.1
60°	8754.7	8750.6	8616.0	8455.9	8293.4	8098.8	7813.2	7535.7	7205.7	6851.9	6518.6
62.5°	10125.6	9949.1	9817.0	9578.1	9326.9	9072.4	8685.8	8317.2	7876.4	7429.8	7040.7
65°	11882.3	11591.7	11441.5	11095.1	10706.0	10308.7	9915.5	9431.1	8837.6	8297.5	7822.2
67.5°	13181.8	12915.8	12640.8	12295.2	11868.3	11425.1	10886.6	10276.7	9602.7	8996.9	8478.9
69°	13295.9	13047.1	12717.1	12370.7	11966.9	11485.0	10897.2	10214.3	9531.3	8918.1	8408.3
70°	13122.7	12858.3	12511.1	12150.7	11699.2	11244.5	10628.8	9917.1	9233.3	8618.5	8121.0
72.5°	11830.6	11572.8	11203.4	10772.5	10309.5	9920.4	9335.9	8593.8	7850.1	7282.1	6894.6
75°	8996.1	8939.4	8677.6	8426.4	8061.9	7627.7	7093.3	6594.2	5984.2	5383.4	5022.2
77.5°	3838.5	3969.0	4105.2	4124.9	4138.1	4004.3	3921.4	3795.8	3387.8	3202.3	3011.0
80°	709.2	633.7	676.4	681.3	709.2	724.0	778.2	922.7	939.1	974.4	1017.9
82.5°	252.0	256.1	262.7	265.1	267.6	277.5	314.4	376.8	433.4	507.3	605.8
85°	142.8	145.3	151.0	156.0	159.3	169.1	189.6	226.6	282.4	366.9	497.5
87.5°	43.5	49.3	52.5	59.1	61.6	63.2	72.2	96.9	124.8	184.7	269.3
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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CATALOG NUMBER: VST-E04-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	106°	107°	108°	109°	110°	115°	125°	135°	145°	155°	165°
0°	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0	2429.0
2.5°	2427.4	2426.5	2424.9	2423.3	2424.1	2422.4	2417.5	2415.9	2410.1	2406.0	2402.7
5°	2449.5	2448.7	2445.4	2446.2	2445.4	2437.2	2431.5	2421.6	2415.9	2406.8	2403.5
7.5°	2495.5	2494.7	2488.9	2491.4	2489.7	2477.4	2467.6	2452.0	2443.8	2432.3	2423.3
10°	2564.4	2564.4	2557.9	2558.7	2558.7	2542.3	2525.0	2498.8	2479.9	2461.8	2446.2
12.5°	2648.2	2644.9	2644.1	2640.0	2636.7	2618.6	2592.4	2557.1	2521.8	2492.2	2470.9
15°	2732.7	2727.8	2725.3	2720.4	2716.3	2699.9	2664.6	2621.1	2573.5	2525.9	2490.6
17.5°	2787.7	2784.4	2779.5	2777.9	2772.1	2755.7	2731.1	2687.6	2628.5	2562.0	2508.6
20°	2808.2	2802.5	2799.2	2795.9	2792.6	2781.2	2781.2	2753.2	2687.6	2594.0	2512.7
22.5°	2795.1	2791.8	2786.9	2784.4	2781.2	2782.8	2814.8	2810.7	2735.2	2601.4	2483.2
25°	2764.7	2760.6	2756.5	2756.5	2755.7	2772.9	2850.1	2860.8	2749.1	2565.3	2418.3
27.5°	2733.5	2727.8	2729.4	2730.3	2734.4	2771.3	2888.7	2873.9	2711.4	2478.2	2306.7
30°	2714.7	2714.7	2718.8	2725.3	2733.5	2798.4	2919.1	2844.4	2613.7	2346.9	2158.9
32.5°	2722.9	2731.1	2740.1	2756.5	2768.8	2858.3	2929.7	2768.0	2471.7	2184.4	2004.6
35°	2795.9	2805.8	2823.0	2848.5	2863.2	2944.5	2929.7	2656.4	2306.7	2044.8	1845.3
37.5°	2955.2	2965.0	2985.6	3005.3	3020.0	3052.9	2917.4	2514.4	2168.8	1900.3	1702.5
40°	3211.3	3225.3	3240.0	3236.7	3226.9	3194.9	2892.8	2382.2	2041.5	1773.9	1562.1
42.5°	3571.7	3558.5	3556.9	3524.9	3492.0	3355.0	2874.7	2296.0	1932.4	1640.9	1422.6
45°	3987.9	3934.5	3879.5	3836.8	3786.7	3530.6	2869.8	2226.2	1811.7	1493.2	1270.7
47.5°	4406.5	4321.1	4214.4	4147.9	4066.7	3717.8	2884.6	2132.7	1656.5	1332.3	1128.7
50°	4816.9	4677.4	4545.2	4465.6	4373.7	3932.9	2908.4	1975.0	1471.0	1186.2	999.0
52.5°	5197.0	5017.2	4881.8	4788.2	4675.8	4183.2	2887.1	1768.2	1310.1	1045.8	875.9
55°	5558.2	5359.6	5219.2	5120.7	4988.5	4434.4	2732.7	1580.2	1156.6	908.7	737.2
57.5°	5874.2	5683.8	5537.7	5403.9	5292.2	4652.8	2428.2	1425.1	1008.9	751.9	586.9
60°	6243.6	6029.4	5856.2	5713.4	5582.0	4765.2	2086.7	1287.1	851.3	582.0	424.4
62.5°	6741.9	6495.7	6295.4	6132.0	5960.4	4789.9	1853.6	1149.2	675.6	421.1	308.7
65°	7480.7	7177.0	6926.6	6701.7	6469.4	4688.1	1738.6	999.0	502.4	312.8	258.6
67.5°	8067.7	7752.4	7462.7	7173.7	6876.5	4499.3	1713.2	860.3	385.8	266.0	232.3
69°	7996.2	7695.8	7429.8	7117.1	6787.9	4262.0	1687.7	806.9	352.2	247.1	220.0
70°	7721.2	7436.4	7166.3	6911.8	6508.8	3997.7	1620.4	777.4	339.0	238.1	211.0
72.5°	6524.4	6194.4	5932.5	5615.7	5191.3	2970.8	1228.9	628.8	311.1	217.5	190.4
75°	4758.7	4485.3	4224.3	3873.8	3460.8	1718.9	765.1	359.5	228.2	197.0	172.4
77.5°	2778.7	2717.1	2465.1	2234.4	1825.6	875.1	439.2	215.1	177.3	179.0	151.9
80°	1045.8	1113.9	1139.4	1059.8	979.3	604.2	319.3	174.8	154.3	176.5	128.9
82.5°	762.6	884.9	899.7	861.9	802.0	563.1	255.3	140.4	125.6	189.6	110.8
85°	636.2	704.3	715.0	675.6	655.9	476.9	178.1	98.5	91.9	136.3	82.9
87.5°	321.8	339.0	348.1	315.2	316.9	222.5	71.4	41.9	50.1	58.3	46.0
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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CATALOG NUMBER: VST-E04-LED-E-U-RW-7050

CANDELA DISTRIBUTION (continued):

	175°	180°
0°	2429.0	2429.0
2.5°	2395.3	2400.3
5°	2398.6	2398.6
7.5°	2417.5	2417.5
10°	2438.0	2438.8
12.5°	2456.9	2456.1
15°	2471.7	2469.2
17.5°	2480.7	2478.2
20°	2471.7	2467.6
22.5°	2425.7	2414.2
25°	2342.0	2327.2
27.5°	2231.2	2221.3
30°	2086.7	2071.9
32.5°	1917.6	1910.2
35°	1755.9	1746.8
37.5°	1608.1	1605.6
40°	1483.3	1470.2
42.5°	1337.2	1331.5
45°	1188.6	1185.4
47.5°	1049.1	1045.8
50°	920.2	913.6
52.5°	793.8	783.1
55°	653.4	646.0
57.5°	501.6	495.0
60°	353.0	345.6
62.5°	251.2	243.0
65°	209.3	202.8
67.5°	189.6	182.2
69°	180.6	174.0
70°	174.8	169.9
72.5°	162.5	159.3
75°	148.6	146.1
77.5°	130.5	126.4
80°	109.2	105.1
82.5°	91.9	87.8
85°	61.6	55.8
87.5°	27.9	24.6
90°	0.0	0.0

(END OF REPORT)