

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: P159798

Luminaire Tested: **VST-E08-LED-E-U-T4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159798
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-E08-LED-E-U-T4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (168) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20096.2 lumens
Efficiency: N/A
Efficacy: 103.3 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): 194.5
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



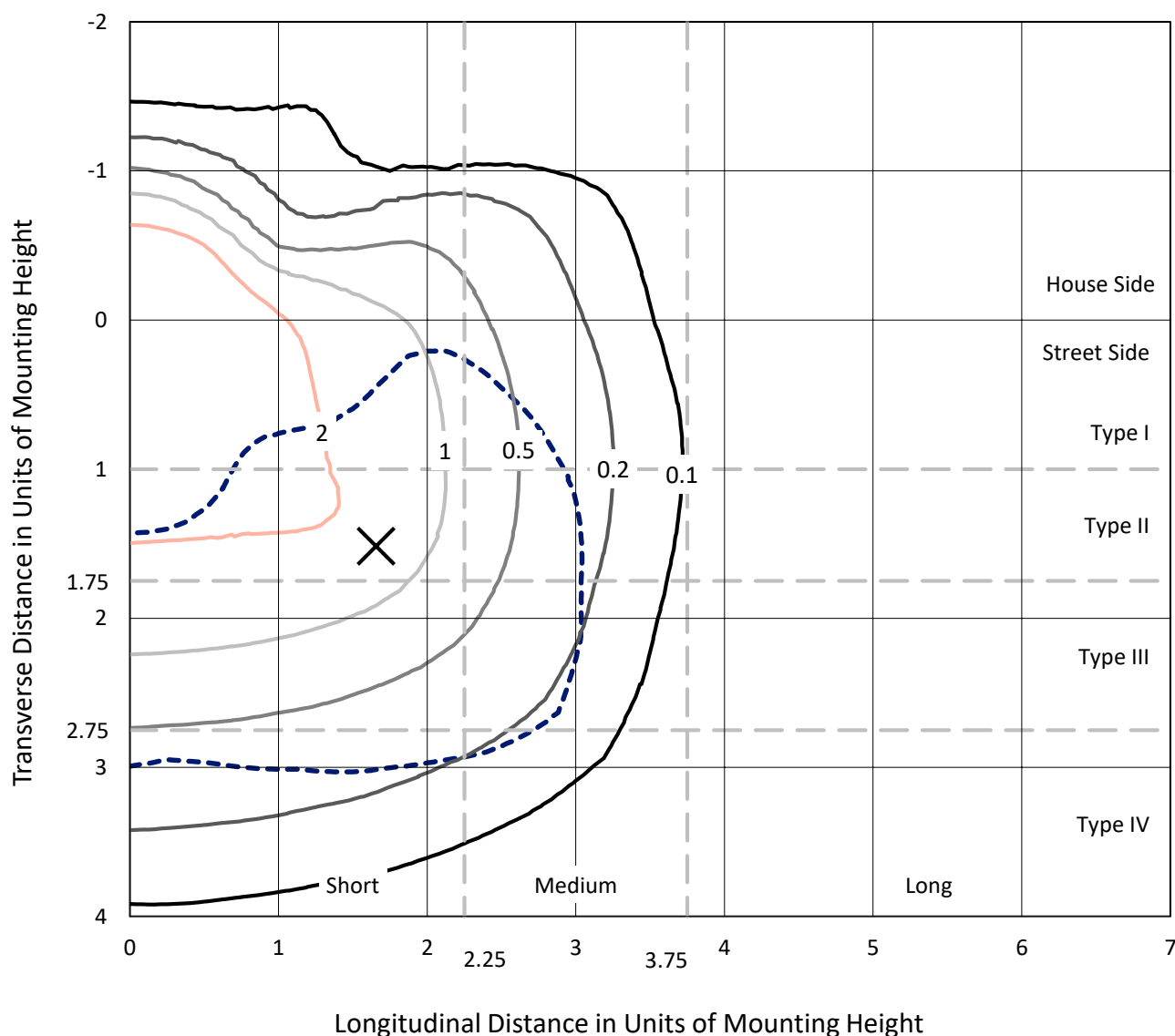
REPORT NUMBER: P159798

CATALOG NUMBER: VST-E08-LED-E-U-T4-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

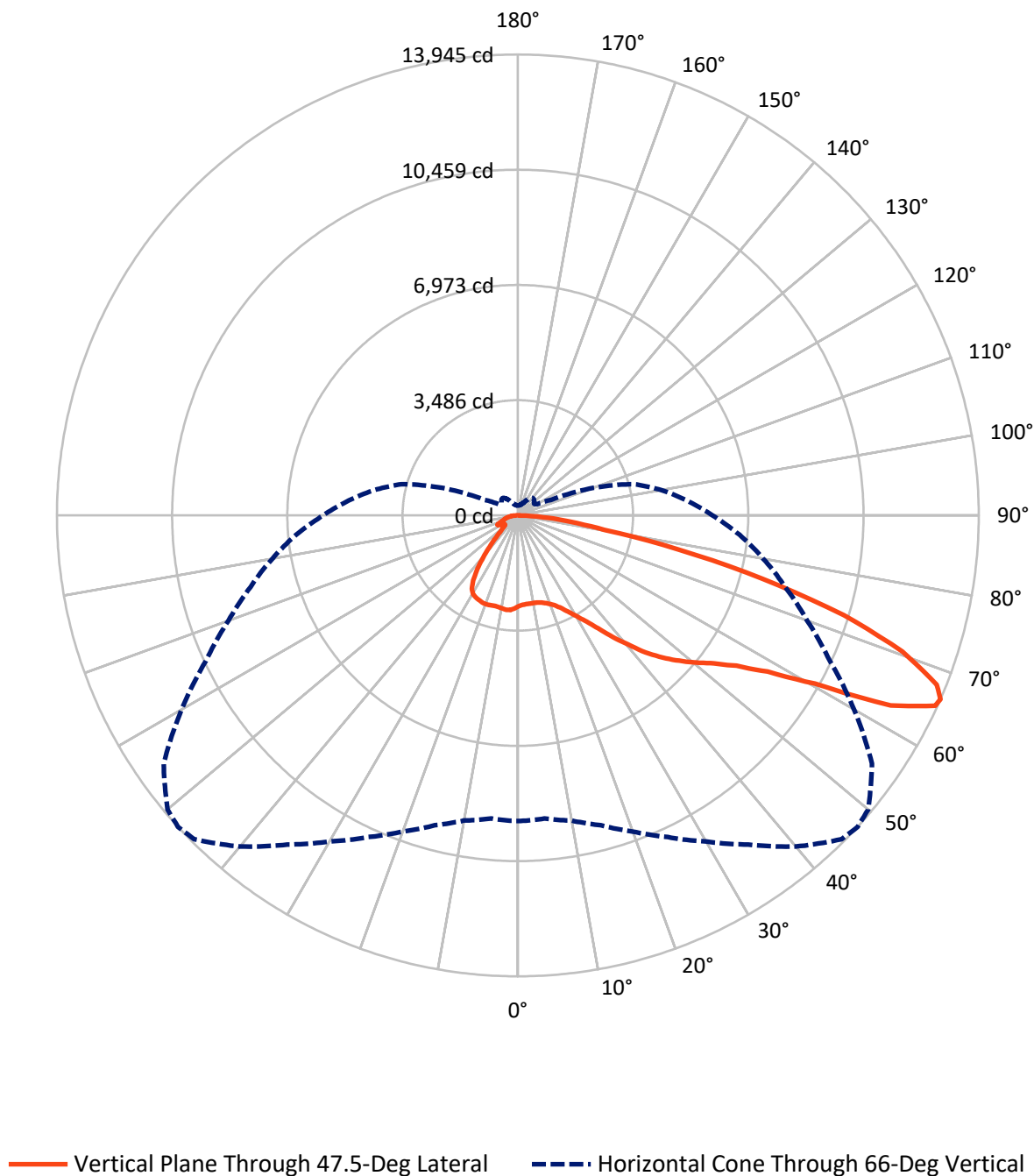


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P159798

CATALOG NUMBER: VST-E08-LED-E-U-T4-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P159798

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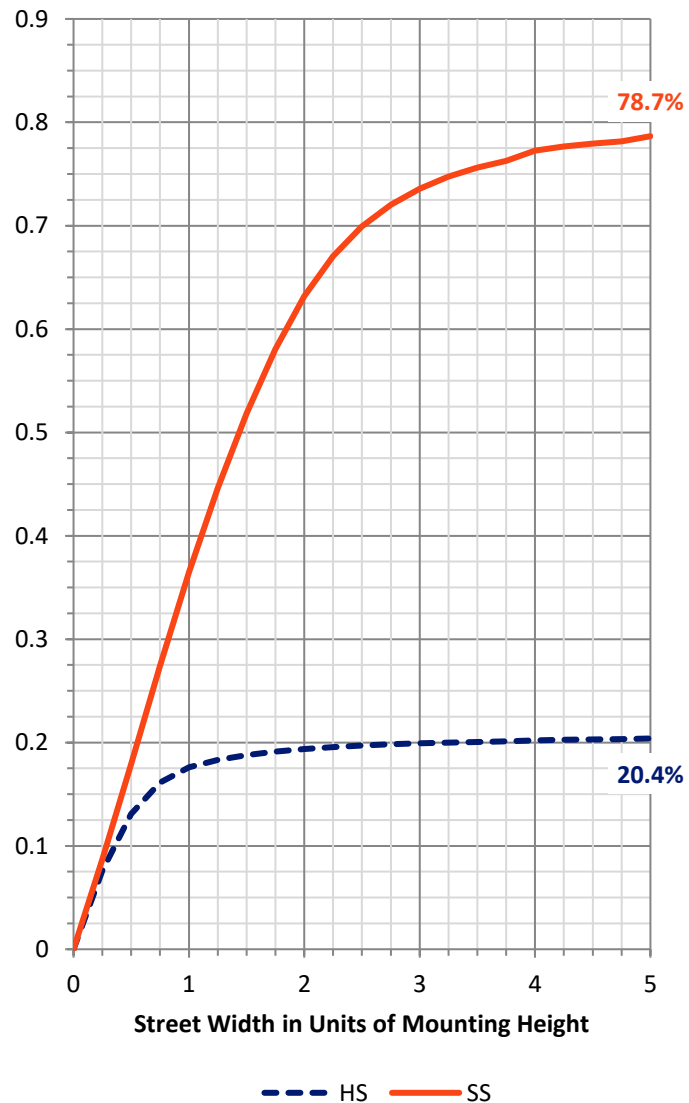
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4160.8	0.0	4160.8
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	15935.4	0.0	15935.4
	% Fixture	79.3	0.0	79.3
Total	Lumens	20096.2	0.0	20096.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.0	1.3
10°-20°	794.7	4.0
20°-30°	1355.9	6.7
30°-40°	2046.5	10.2
40°-50°	2660.0	13.2
50°-60°	3649.2	18.2
60°-70°	5613.7	27.9
70°-80°	3245.1	16.1
80°-90°	466.2	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°	20096.2	100.0
0°-180°	20096.2	100.0

Coefficient of Utilization



REPORT NUMBER: P159798

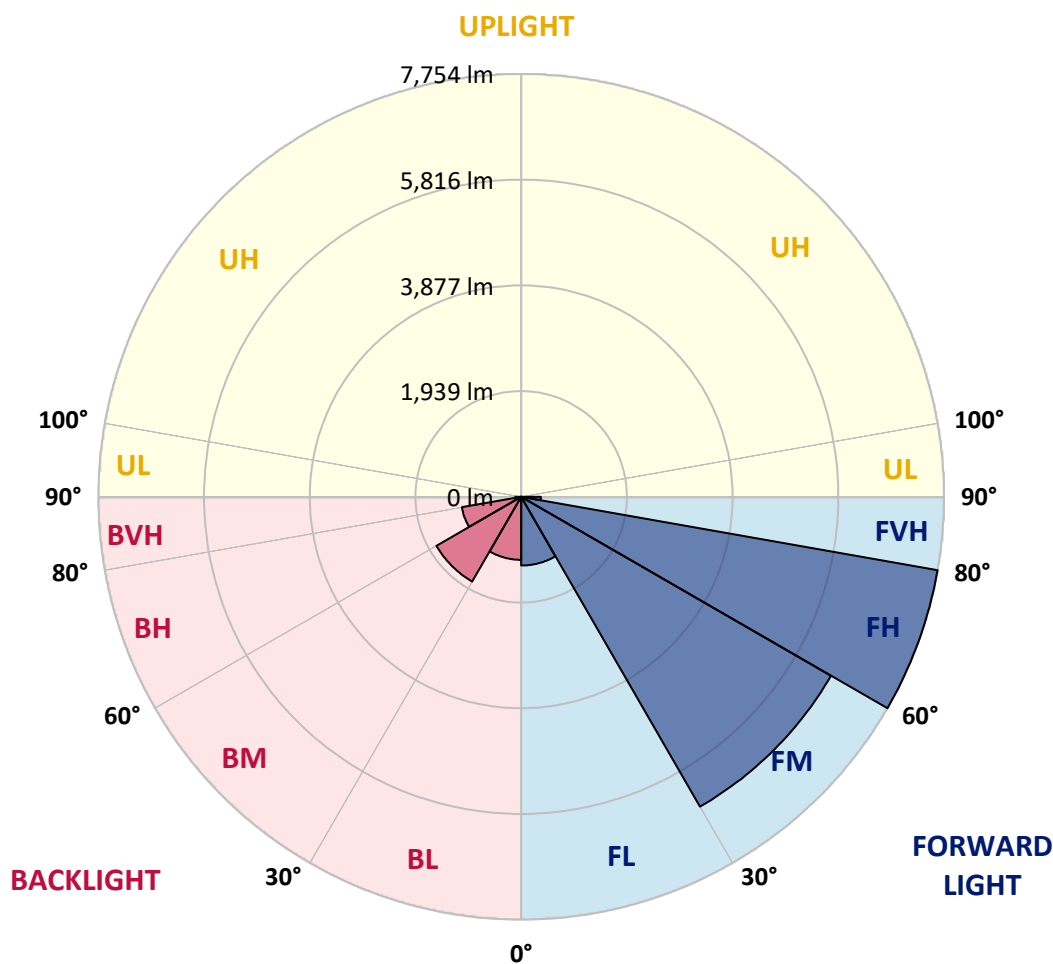
CATALOG NUMBER: VST-E08-LED-E-U-T4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1259.6	6.3			
FM	(30°-60°)	6560.5	32.6			
FH	(60°-80°)	7754.4	38.6			G4/12000
FVH	(80°-90°)	360.8	1.8			G3/500
BL	(0°-30°)	1155.9	5.8	B3/2500		
BM	(30°-60°)	1795.2	8.9	B2/2500		
BH	(60°-80°)	1104.3	5.5	B3/2500		G3/2500
BVH	(80°-90°)	105.4	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





REPORT NUMBER: P159798

CATALOG NUMBER: VST-E08-LED-E-U-T4-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4
2.5°	2679.2	2680.5	2681.9	2681.9	2685.9	2685.9	2692.7	2696.7	2698.1	2706.2	2711.6
5°	2629.2	2627.9	2629.2	2631.9	2638.7	2644.1	2657.6	2667.0	2675.1	2688.6	2695.4
7.5°	2607.6	2610.3	2613.0	2614.3	2619.7	2633.3	2645.4	2654.9	2671.1	2687.3	2694.0
10°	2636.0	2640.0	2636.0	2638.7	2638.7	2650.8	2656.2	2663.0	2675.1	2690.0	2694.0
12.5°	2702.1	2710.2	2702.1	2695.4	2690.0	2700.8	2698.1	2692.7	2699.4	2703.5	2703.5
15°	2811.5	2811.5	2806.1	2796.6	2783.1	2784.5	2772.3	2760.2	2754.8	2745.3	2738.6
17.5°	2918.2	2915.5	2903.3	2891.2	2881.7	2877.7	2860.1	2843.9	2825.0	2810.2	2793.9
20°	3022.2	3033.0	3018.1	3000.6	2985.7	2976.2	2962.7	2930.3	2907.4	2883.1	2866.9
22.5°	3201.8	3192.3	3176.1	3150.4	3135.6	3119.4	3091.0	3055.9	3020.8	2991.1	2970.8
25°	3386.8	3377.3	3354.4	3335.5	3313.8	3300.3	3269.3	3226.1	3192.3	3146.4	3119.4
27.5°	3585.3	3577.2	3550.2	3535.3	3520.5	3504.3	3477.2	3432.7	3401.6	3349.0	3320.6
30°	3809.4	3808.1	3771.6	3768.9	3747.3	3729.8	3710.9	3673.0	3642.0	3589.3	3555.6
32.5°	4048.5	4043.1	4017.4	4009.3	4024.1	4012.0	3985.0	3945.8	3905.3	3874.3	3836.4
35°	4388.8	4379.3	4364.4	4371.2	4380.7	4414.4	4372.5	4338.8	4290.2	4249.7	4197.0
37.5°	4637.2	4623.7	4641.3	4679.1	4733.1	4758.8	4795.2	4796.6	4773.6	4719.6	4673.7
40°	4865.4	4860.0	4900.5	4953.2	5053.1	5126.1	5194.9	5228.7	5236.8	5201.7	5132.8
42.5°	5058.5	5074.7	5128.8	5209.8	5350.2	5461.0	5589.2	5668.9	5718.9	5700.0	5668.9
45°	5288.1	5296.2	5362.4	5465.0	5598.7	5782.4	5951.1	6086.2	6174.0	6172.6	6137.5
47.5°	5575.7	5577.1	5633.8	5754.0	5897.1	6083.5	6296.8	6476.4	6592.6	6598.0	6571.0
50°	5917.4	5914.7	5976.8	6090.2	6242.8	6422.4	6649.3	6873.5	7035.5	7035.5	6996.3
52.5°	6357.6	6352.2	6386.0	6485.9	6633.1	6822.1	7047.7	7306.9	7482.5	7520.3	7435.2
55°	6945.0	6953.1	6961.2	7049.0	7174.6	7324.5	7583.8	7822.8	8057.8	8079.4	8029.4
57.5°	7624.3	7597.3	7655.3	7798.5	7941.6	8129.3	8313.0	8595.2	8873.4	8920.6	8913.9
60°	8685.7	8650.6	8710.0	8892.3	9050.3	9346.0	9660.7	10025.3	10354.8	10452.0	10334.5
62.5°	9662.0	9705.2	9786.2	9998.3	10227.8	10622.1	11094.8	11720.0	12345.2	12685.5	12661.2
65°	9574.2	9533.7	9689.0	9978.0	10393.9	10896.3	11483.7	12237.2	13137.9	13821.2	13882.0
66°	9248.8	9206.9	9374.4	9705.2	10180.6	10739.6	11391.9	12158.9	13079.8	13852.3	13945.4
67.5°	8711.3	8669.5	8858.5	9159.7	9649.9	10353.4	11058.3	11896.9	12854.3	13594.3	13670.0
70°	7674.2	7617.5	7764.7	8105.0	8502.0	9182.6	9853.8	10742.3	11725.4	12316.9	12345.2
72.5°	6500.8	6368.4	6525.1	6787.0	7070.6	7633.7	8218.4	8826.1	9609.3	10156.2	10312.9
75°	4716.9	4785.8	4831.7	5004.5	5192.2	5658.1	6001.1	6510.2	7116.5	7512.2	7637.8
77.5°	2502.3	2606.2	2671.1	2843.9	3154.5	3509.7	3881.0	4195.6	4594.0	4815.5	4969.4
80°	1404.4	1477.3	1582.7	1719.0	1870.3	2143.1	2363.2	2525.2	2581.9	2621.1	2656.2
82.5°	772.4	957.4	1114.1	1208.6	1297.7	1407.1	1538.1	1673.1	1716.3	1651.5	1617.8
85°	120.2	176.9	538.8	657.6	715.7	799.4	894.0	993.9	995.2	856.1	934.5
87.5°	33.8	37.8	77.0	116.1	113.4	91.8	113.4	206.6	121.5	60.8	70.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159798

CATALOG NUMBER: VST-E08-LED-E-U-T4-8030

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4
2.5°	2714.3	2717.0	2723.7	2730.5	2737.2	2744.0	2748.0	2754.8	2760.2	2768.3	2777.7
5°	2703.5	2710.2	2722.4	2737.2	2750.7	2762.9	2772.3	2785.8	2798.0	2808.8	2825.0
7.5°	2703.5	2717.0	2737.2	2753.4	2765.6	2780.4	2795.3	2808.8	2822.3	2833.1	2843.9
10°	2704.8	2718.3	2738.6	2757.5	2771.0	2787.2	2799.3	2811.5	2826.4	2833.1	2846.6
12.5°	2710.2	2715.6	2730.5	2749.4	2765.6	2781.8	2793.9	2806.1	2822.3	2825.0	2834.5
15°	2737.2	2729.1	2733.2	2746.7	2764.2	2777.7	2791.2	2800.7	2811.5	2808.8	2816.9
17.5°	2787.2	2766.9	2758.8	2760.2	2768.3	2777.7	2783.1	2784.5	2785.8	2773.7	2775.0
20°	2854.7	2826.4	2807.5	2798.0	2787.2	2777.7	2762.9	2745.3	2729.1	2704.8	2702.1
22.5°	2956.0	2914.1	2893.9	2868.2	2835.8	2795.3	2758.8	2715.6	2680.5	2644.1	2630.6
25°	3103.2	3060.0	3038.4	2997.9	2939.8	2881.7	2829.1	2771.0	2719.7	2676.5	2656.2
27.5°	3300.3	3257.1	3234.2	3192.3	3120.7	3062.7	2989.8	2927.6	2865.5	2802.0	2776.4
30°	3539.4	3501.5	3475.9	3442.1	3380.0	3316.5	3231.5	3135.6	3037.0	2935.7	2885.8
32.5°	3821.6	3779.7	3760.8	3721.7	3656.8	3590.7	3496.1	3373.3	3208.5	3049.2	2949.2
35°	4174.0	4126.8	4105.2	4053.9	3978.2	3881.0	3779.7	3615.0	3392.2	3170.7	3007.3
37.5°	4645.3	4540.0	4468.4	4350.9	4229.4	4093.0	3948.5	3779.7	3516.4	3242.3	3015.4
40°	5062.6	4955.9	4818.2	4649.4	4460.3	4272.6	4107.9	3916.1	3629.8	3293.6	2989.8
42.5°	5581.1	5392.1	5172.0	4943.8	4692.6	4461.7	4265.9	4040.4	3706.8	3307.1	2918.2
45°	6055.1	5829.6	5535.2	5231.4	4919.5	4629.1	4409.0	4157.8	3773.0	3307.1	2831.8
47.5°	6487.3	6217.2	5864.7	5486.6	5123.4	4806.0	4556.2	4278.0	3866.2	3349.0	2806.1
50°	6887.0	6576.4	6175.3	5736.4	5328.6	4989.7	4720.9	4432.0	4007.9	3457.0	2868.2
52.5°	7308.3	6978.8	6490.0	6024.1	5574.4	5211.1	4924.9	4622.4	4191.6	3627.1	2977.6
55°	7860.6	7474.4	6919.4	6406.2	5912.0	5510.9	5185.5	4850.6	4392.8	3818.9	3111.3
57.5°	8731.6	8171.2	7616.2	6949.1	6483.2	5955.2	5598.7	5213.8	4719.6	4068.7	3312.5
60°	10256.2	9567.5	8900.4	8133.4	7558.1	7005.8	6467.0	5964.7	5369.1	4633.2	3754.1
62.5°	12433.0	11733.5	10685.6	9747.1	8878.8	8146.9	7444.7	6805.9	6041.6	5236.8	4298.3
65°	13733.4	12932.6	11683.5	10422.3	9367.6	8460.2	7656.7	6874.8	6049.7	5265.2	4463.0
66°	13837.4	13079.8	11745.7	10412.8	9317.7	8376.4	7540.6	6731.7	5886.3	5135.5	4409.0
67.5°	13644.3	12992.1	11618.7	10229.2	9109.7	8092.9	7234.0	6386.0	5536.6	4841.1	4229.4
70°	12281.8	11810.5	10632.9	9331.2	8214.4	7317.7	6411.6	5596.0	4791.2	4206.5	3752.7
72.5°	10068.5	9471.6	8647.9	7772.8	6893.7	6098.3	5274.6	4580.5	3905.3	3479.9	3158.6
75°	7396.1	6858.6	5951.1	5405.6	4824.9	4325.3	3770.3	3112.6	2633.3	2419.9	2341.6
77.5°	4688.5	4105.2	3339.5	2737.2	2353.7	2022.9	1594.8	1268.0	1015.5	1057.4	1170.8
80°	2368.6	2040.4	1527.3	1205.9	1042.5	866.9	686.0	519.9	379.5	433.5	490.2
82.5°	1520.5	1269.4	1011.4	796.7	672.5	592.8	474.0	344.3	256.6	289.0	353.8
85°	915.6	773.8	617.1	505.0	438.9	366.0	268.7	190.4	189.1	202.6	249.8
87.5°	139.1	198.5	114.8	122.9	129.6	139.1	122.9	104.0	90.5	117.5	148.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4	2749.4
2.5°	2787.2	2789.9	2795.3	2802.0	2800.7	2810.2	2815.6	2810.2	2822.3	2822.3	2829.1
5°	2838.5	2842.6	2852.0	2858.8	2861.5	2869.6	2872.3	2870.9	2873.6	2875.0	2877.7
7.5°	2853.4	2864.2	2868.2	2872.3	2873.6	2876.3	2876.3	2873.6	2873.6	2872.3	2875.0
10°	2849.3	2853.4	2856.1	2854.7	2854.7	2852.0	2850.7	2849.3	2849.3	2846.6	2850.7
12.5°	2835.8	2835.8	2835.8	2833.1	2833.1	2831.8	2831.8	2831.8	2834.5	2835.8	2842.6
15°	2808.8	2808.8	2811.5	2810.2	2814.2	2821.0	2829.1	2834.5	2841.2	2842.6	2846.6
17.5°	2766.9	2768.3	2776.4	2793.9	2811.5	2831.8	2846.6	2850.7	2845.3	2831.8	2822.3
20°	2694.0	2711.6	2744.0	2785.8	2825.0	2850.7	2857.4	2841.2	2815.6	2780.4	2761.5
22.5°	2629.2	2664.3	2722.4	2791.2	2839.9	2857.4	2837.2	2799.3	2753.4	2712.9	2684.6
25°	2654.9	2695.4	2756.1	2815.6	2846.6	2837.2	2796.6	2742.6	2694.0	2646.8	2600.8
27.5°	2762.9	2803.4	2846.6	2864.2	2853.4	2818.3	2761.5	2703.5	2638.7	2571.1	2514.4
30°	2865.5	2888.5	2891.2	2873.6	2834.5	2777.7	2711.6	2644.1	2561.7	2480.7	2409.1
32.5°	2897.9	2870.9	2822.3	2772.3	2718.3	2660.3	2583.3	2494.2	2406.4	2314.6	2234.9
35°	2888.5	2779.1	2658.9	2552.2	2487.4	2421.2	2351.0	2232.2	2133.6	2055.3	2004.0
37.5°	2803.4	2603.5	2418.5	2263.2	2162.0	2083.6	1979.7	1881.1	1796.0	1760.9	1719.0
40°	2684.6	2379.4	2122.8	1905.4	1800.1	1700.1	1584.0	1508.4	1484.1	1451.7	1453.0
42.5°	2514.4	2117.4	1786.6	1536.7	1422.0	1312.6	1230.2	1185.6	1187.0	1160.0	1165.4
45°	2334.8	1854.1	1438.2	1189.7	1076.3	983.1	937.2	923.7	925.0	926.4	918.3
47.5°	2225.4	1648.8	1153.2	902.1	802.1	749.5	725.2	718.4	719.8	721.1	711.7
50°	2209.2	1542.1	962.8	690.0	625.2	595.5	583.4	576.6	576.6	571.2	563.1
52.5°	2255.1	1515.1	869.6	598.2	536.1	509.1	499.6	494.2	486.1	475.3	460.5
55°	2328.1	1539.4	841.3	567.2	506.4	479.4	467.2	464.5	451.0	430.8	406.5
57.5°	2463.1	1627.2	860.2	575.3	511.8	487.5	479.4	476.7	457.8	426.7	395.7
60°	2850.7	1882.4	954.7	621.2	551.0	530.7	530.7	526.7	501.0	456.4	411.9
62.5°	3385.4	2256.5	1083.0	684.6	605.0	602.3	625.2	626.6	580.7	509.1	438.9
65°	3643.3	2432.0	1127.6	698.1	619.8	650.9	696.8	696.8	632.0	533.4	442.9
66°	3644.7	2428.0	1114.1	681.9	603.6	644.1	691.4	691.4	623.9	526.7	436.2
67.5°	3551.5	2352.4	1069.5	652.2	567.2	605.0	646.8	645.5	584.7	499.6	417.3
70°	3185.6	2080.9	942.6	603.6	523.9	525.3	540.2	530.7	490.2	432.1	379.5
72.5°	2746.7	1740.6	817.0	572.6	490.2	464.5	452.4	444.3	418.6	383.5	351.1
75°	2106.6	1351.7	711.7	544.2	460.5	415.9	399.7	393.0	375.4	355.2	329.5
77.5°	1291.0	926.4	603.6	498.3	426.7	386.2	368.7	355.2	337.6	318.7	301.1
80°	556.4	559.1	483.4	422.7	371.4	324.1	301.1	284.9	275.5	268.7	259.3
82.5°	388.9	401.1	368.7	328.1	283.6	249.8	229.6	225.5	226.9	226.9	224.2
85°	291.7	286.3	257.9	235.0	214.7	193.1	176.9	175.6	181.0	181.0	176.9
87.5°	168.8	170.1	145.8	136.4	141.8	121.5	110.7	112.1	125.6	124.2	121.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P159798

CATALOG NUMBER: VST-E08-LED-E-U-T4-8030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2749.4	2749.4	2749.4	2749.4	2749.4
2.5°	2829.1	2833.1	2831.8	2835.8	2831.8
5°	2881.7	2880.4	2879.0	2884.4	2877.7
7.5°	2873.6	2875.0	2875.0	2875.0	2873.6
10°	2853.4	2858.8	2861.5	2866.9	2865.5
12.5°	2846.6	2854.7	2862.8	2870.9	2872.3
15°	2848.0	2853.4	2857.4	2861.5	2862.8
17.5°	2812.9	2811.5	2807.5	2804.8	2802.0
20°	2741.3	2734.5	2727.8	2717.0	2722.4
22.5°	2652.2	2633.3	2611.6	2594.1	2592.7
25°	2548.2	2513.1	2478.0	2455.0	2446.9
27.5°	2456.4	2414.5	2378.0	2357.8	2352.4
30°	2347.0	2309.2	2276.7	2259.2	2248.4
32.5°	2184.9	2155.2	2114.7	2101.2	2099.8
35°	1959.4	1936.5	1908.1	1902.7	1895.9
37.5°	1704.2	1696.1	1682.6	1666.4	1663.7
40°	1431.4	1436.8	1432.8	1423.3	1408.5
42.5°	1168.1	1177.5	1178.9	1185.6	1192.4
45°	930.4	938.5	938.5	945.3	953.4
47.5°	714.4	709.0	713.0	719.8	723.8
50°	540.2	536.1	529.4	523.9	518.5
52.5°	434.8	426.7	407.8	402.4	397.0
55°	383.5	368.7	355.2	349.7	349.7
57.5°	368.7	349.7	334.9	328.1	325.4
60°	371.4	344.3	325.4	314.6	310.6
62.5°	383.5	345.7	320.0	307.9	303.8
65°	382.2	343.0	318.7	305.2	301.1
66°	375.4	338.9	316.0	303.8	301.1
67.5°	364.6	333.5	313.3	302.5	298.4
70°	343.0	322.7	307.9	298.4	294.4
72.5°	325.4	311.9	298.4	287.6	284.9
75°	309.2	295.7	283.6	278.2	274.1
77.5°	284.9	272.8	266.0	260.6	257.9
80°	252.5	244.4	236.3	230.9	226.9
82.5°	220.1	209.3	201.2	197.2	194.5
85°	179.6	172.8	160.7	152.6	151.2
87.5°	120.2	113.4	109.4	102.6	95.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)