

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: P159606

Luminaire Tested: **VST-F10-LED-E-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159606
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F10-LED-E-U-T3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (70) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25906.6 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

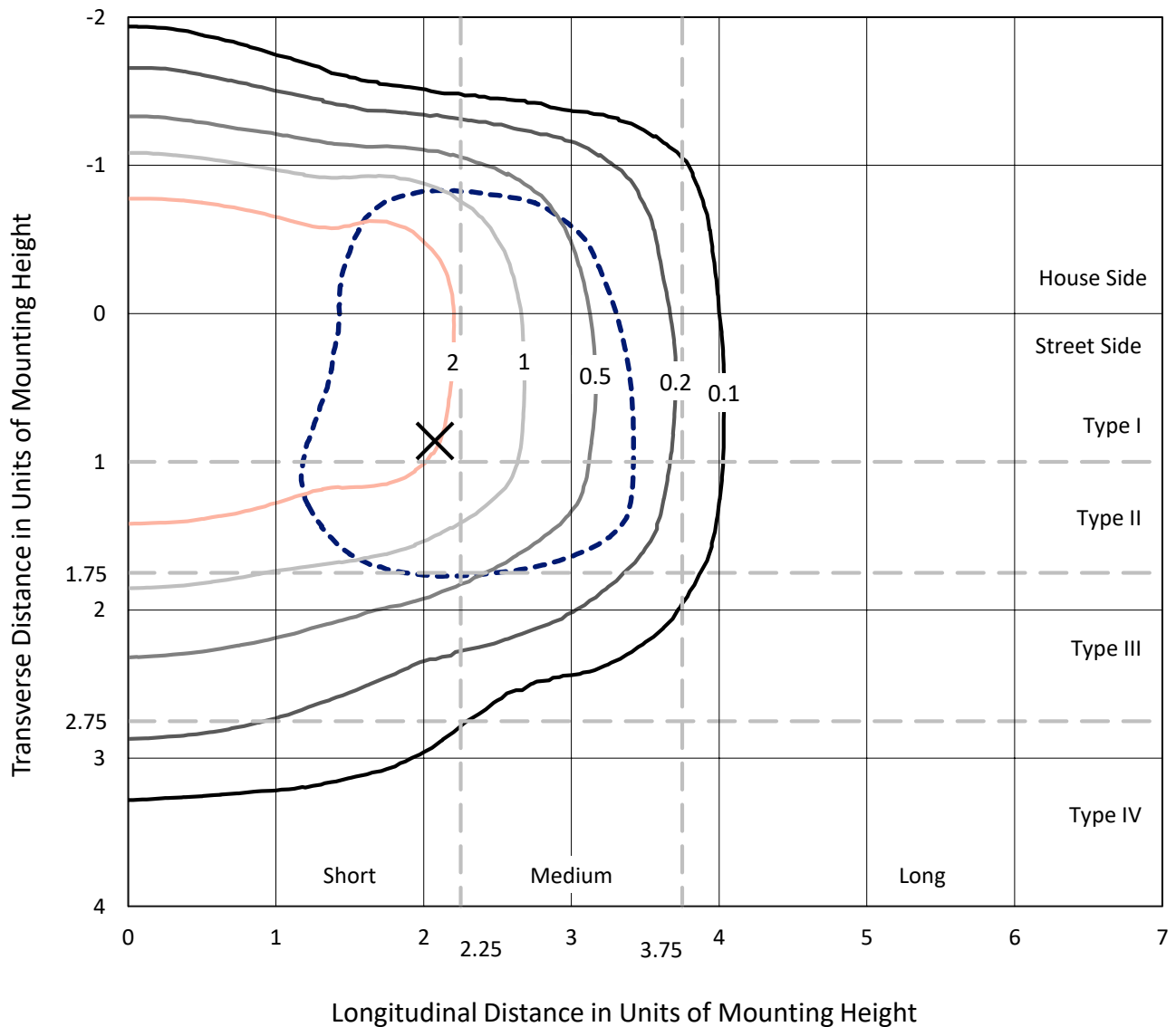
Input Watts (W): 258.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P159606
 CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

Iso-Footcandle Lines of Horizontal Illumination

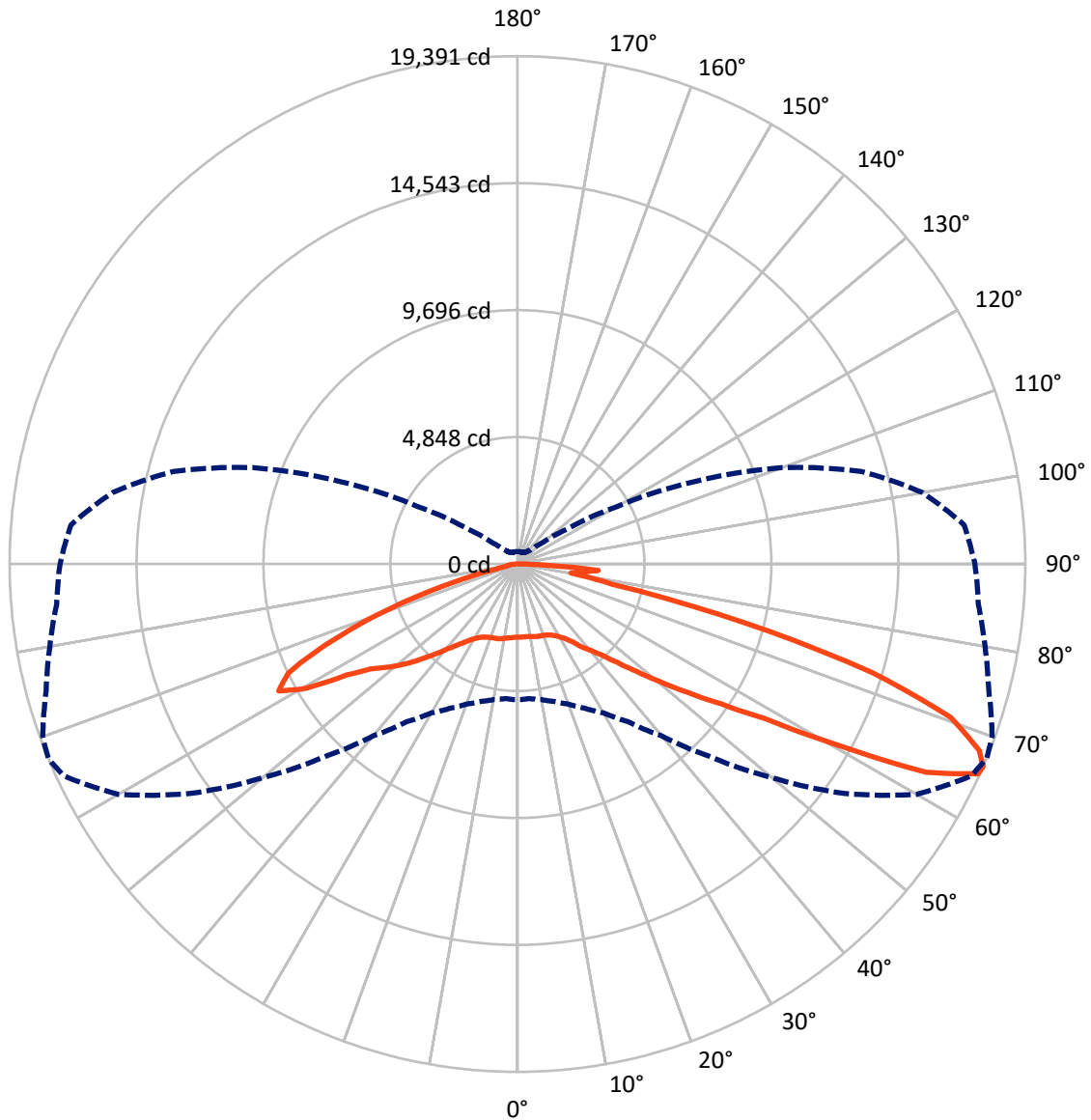
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P159606
CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P159606

CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

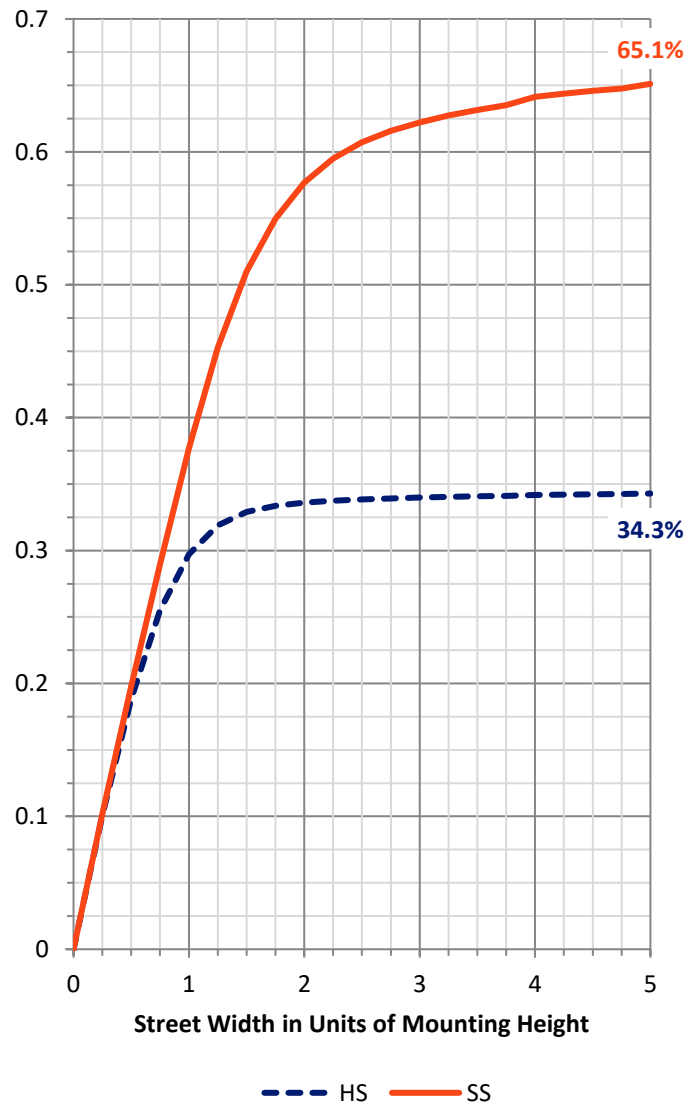
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8964.8	0.0	8964.8
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	16941.8	0.0	16941.8
	% Fixture	65.4	0.0	65.4
Total	Lumens	25906.6	0.0	25906.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.3	1.0
10°-20°	794.3	3.1
20°-30°	1365.4	5.3
30°-40°	2206.7	8.5
40°-50°	3657.1	14.1
50°-60°	5739.5	22.2
60°-70°	7847.0	30.3
70°-80°	3450.7	13.3
80°-90°	577.6	2.2
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°	25906.6	100.0
0°-180°	25906.6	100.0



REPORT NUMBER: P159606

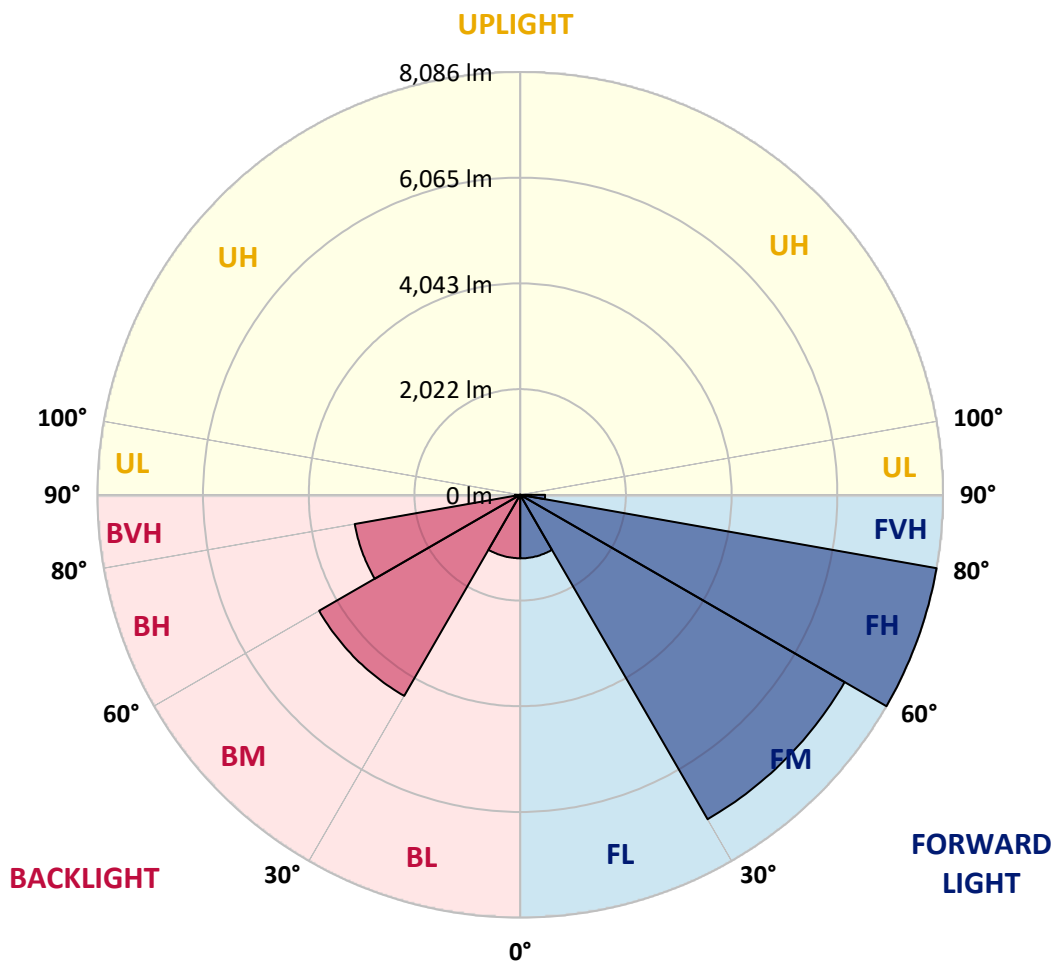
CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1215.2	4.7			
FM	(30°-60°)	7164.0	27.7			
FH	(60°-80°)	8086.0	31.2			G4/12000
FVH	(80°-90°)	476.5	1.8			G3/500
BL	(0°-30°)	1212.7	4.7	B3/2500		
BM	(30°-60°)	4439.4	17.1	B3/5000		
BH	(60°-80°)	3211.7	12.4	B4/5000		G4/5000
BVH	(80°-90°)	101.1	0.4			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 II Short





REPORT NUMBER: P159606

CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3
2.5°	2790.3	2790.3	2792.0	2790.3	2790.3	2788.6	2795.3	2795.3	2795.3	2793.7	2798.7
5°	2783.5	2783.5	2785.2	2785.2	2786.9	2785.2	2790.3	2792.0	2792.0	2792.0	2797.0
7.5°	2766.5	2771.6	2768.2	2769.9	2771.6	2776.7	2783.5	2786.9	2790.3	2795.3	2797.0
10°	2731.0	2739.4	2737.7	2742.8	2744.5	2759.8	2764.9	2771.6	2783.5	2790.3	2795.3
12.5°	2681.8	2686.9	2688.6	2695.4	2702.2	2720.8	2734.4	2746.2	2763.2	2780.1	2797.0
15°	2642.9	2646.3	2646.3	2653.0	2663.2	2680.1	2697.1	2717.4	2742.8	2771.6	2798.7
17.5°	2654.7	2663.2	2656.4	2654.7	2658.1	2668.3	2683.5	2700.5	2731.0	2763.2	2795.3
20°	2732.7	2734.4	2731.0	2722.5	2715.7	2717.4	2717.4	2720.8	2739.4	2764.9	2790.3
22.5°	2797.0	2803.8	2802.1	2803.8	2802.1	2808.9	2805.5	2798.7	2792.0	2793.7	2805.5
25°	2853.0	2859.7	2859.7	2864.8	2873.3	2886.8	2897.0	2895.3	2885.1	2871.6	2866.5
27.5°	2944.4	2944.4	2944.4	2949.5	2961.4	2978.3	2995.3	3005.4	3013.9	3000.3	2971.5
30°	3088.4	3090.1	3085.0	3086.7	3095.2	3117.2	3137.6	3152.8	3169.8	3168.1	3130.8
32.5°	3246.0	3252.8	3251.1	3257.9	3269.7	3290.0	3312.1	3335.8	3357.8	3371.4	3347.6
35°	3449.3	3456.1	3457.8	3467.9	3481.5	3512.0	3542.5	3573.0	3596.7	3606.8	3601.8
37.5°	3783.0	3784.7	3778.0	3762.7	3767.8	3791.5	3827.1	3876.2	3891.5	3901.6	3925.3
40°	4282.8	4277.7	4250.6	4237.1	4228.6	4238.8	4232.0	4271.0	4306.5	4308.2	4306.5
42.5°	4889.3	4874.1	4848.7	4845.3	4841.9	4838.5	4819.9	4821.6	4853.7	4862.2	4852.0
45°	5492.4	5473.8	5455.2	5472.1	5451.8	5504.3	5519.5	5560.2	5565.3	5582.2	5556.8
47.5°	5987.1	5988.8	5988.8	6012.5	6053.2	6153.2	6242.9	6320.9	6349.7	6390.3	6395.4
50°	6361.5	6371.7	6403.9	6480.1	6566.5	6734.3	6885.0	7025.6	7152.7	7200.1	7325.5
52.5°	6580.1	6607.2	6675.0	6802.0	6956.2	7173.0	7410.2	7649.1	7869.3	8055.7	8204.8
55°	6541.1	6561.4	6680.0	6878.3	7118.8	7410.2	7742.3	8087.9	8431.8	8746.9	8990.9
57.5°	6290.4	6303.9	6422.5	6646.2	6946.0	7337.4	7806.6	8320.0	8802.8	9311.1	9727.8
60°	5961.7	5982.0	6092.2	6268.4	6581.8	6998.5	7542.4	8238.7	9009.5	9809.1	10588.4
62.5°	5751.6	5746.6	5843.1	6000.7	6236.2	6614.0	7137.5	7962.5	9029.8	10381.8	11921.7
65°	5402.6	5387.4	5487.4	5666.9	5922.8	6288.7	6785.1	7577.9	8816.4	10598.6	12782.4
66°	5185.8	5155.3	5255.3	5436.5	5692.3	6082.0	6558.1	7340.8	8557.2	10386.8	12690.9
67.5°	4806.3	4791.1	4838.5	4980.8	5170.5	5536.5	6032.9	6820.7	7943.9	9749.8	12020.0
70°	3906.7	3872.8	3910.1	3974.5	4047.3	4137.1	4442.1	5067.2	6017.6	7767.7	9683.8
72.5°	2661.5	2644.6	2714.0	2812.3	3007.1	3098.6	3218.9	3320.5	3656.0	4896.1	6754.6
75°	2024.5	2034.7	2122.8	2285.4	2536.1	2807.2	3071.5	3168.1	3056.2	2959.7	3833.9
77.5°	1135.1	1194.4	1301.1	1507.8	1773.8	2156.7	2617.5	3125.7	3379.8	3317.1	3102.0
80°	467.6	459.1	511.6	625.1	716.6	1030.0	1575.6	2212.6	2927.5	3379.8	3308.7
82.5°	130.4	133.8	172.8	221.9	286.3	364.2	569.2	914.8	1490.9	2319.3	3035.9
85°	40.7	40.7	55.9	83.0	98.3	113.5	144.0	237.2	404.9	808.1	1638.2
87.5°	8.5	8.5	11.9	23.7	25.4	25.4	32.2	44.0	39.0	35.6	159.3
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: P159606

CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3
2.5°	2793.7	2790.3	2792.0	2793.7	2792.0	2792.0	2790.3	2788.6	2790.3	2790.3	2795.3
5°	2792.0	2790.3	2792.0	2792.0	2792.0	2793.7	2793.7	2793.7	2798.7	2798.7	2807.2
7.5°	2795.3	2795.3	2798.7	2798.7	2798.7	2798.7	2800.4	2803.8	2812.3	2810.6	2825.8
10°	2802.1	2805.5	2814.0	2815.7	2815.7	2820.8	2824.2	2830.9	2839.4	2842.8	2856.3
12.5°	2810.6	2827.5	2842.8	2846.2	2851.3	2859.7	2864.8	2868.2	2883.4	2888.5	2905.5
15°	2820.8	2844.5	2863.1	2869.9	2876.7	2886.8	2893.6	2898.7	2912.2	2919.0	2939.4
17.5°	2822.5	2849.6	2871.6	2881.8	2890.2	2902.1	2912.2	2922.4	2937.7	2947.8	2968.2
20°	2820.8	2856.3	2890.2	2903.8	2912.2	2934.3	2949.5	2963.1	2981.7	2991.9	3012.2
22.5°	2839.4	2880.1	2925.8	2942.7	2956.3	2986.8	3007.1	3029.1	3052.9	3059.6	3074.9
25°	2883.4	2925.8	2983.4	3007.1	3030.8	3071.5	3100.3	3132.5	3156.2	3159.6	3164.7
27.5°	2958.0	2997.0	3066.4	3102.0	3141.0	3198.6	3240.9	3273.1	3307.0	3307.0	3303.6
30°	3108.8	3117.2	3190.1	3235.8	3293.4	3378.1	3440.8	3476.4	3501.8	3501.8	3473.0
32.5°	3303.6	3293.4	3359.5	3408.6	3488.3	3606.8	3691.6	3718.7	3745.8	3737.3	3688.2
35°	3584.8	3556.0	3593.3	3667.8	3757.6	3920.3	4008.4	4069.4	4086.3	4062.6	3984.6
37.5°	3938.9	3935.5	3954.1	4037.2	4137.1	4347.2	4437.0	4475.9	4462.4	4420.0	4282.8
40°	4313.3	4303.1	4291.3	4347.2	4459.0	4711.4	4870.7	4891.0	4872.4	4809.7	4636.9
42.5°	4813.1	4813.1	4757.2	4772.4	4865.6	5148.5	5336.6	5401.0	5402.6	5311.2	5080.8
45°	5500.9	5494.1	5395.9	5372.2	5443.3	5721.1	5963.4	5999.0	5999.0	5878.7	5626.3
47.5°	6327.7	6319.2	6222.6	6139.6	6153.2	6453.0	6654.6	6708.8	6661.4	6571.6	6271.7
50°	7259.4	7244.2	7145.9	7068.0	7034.1	7337.4	7508.5	7533.9	7464.4	7357.7	7032.4
52.5°	8204.8	8250.5	8192.9	8150.6	8162.4	8358.9	8535.1	8414.8	8379.3	8264.1	7937.1
55°	9189.1	9329.7	9456.8	9419.5	9463.5	9655.0	9688.9	9529.6	9465.2	9382.2	9018.0
57.5°	10180.2	10590.1	11006.9	11123.8	11232.2	11506.7	11467.7	11206.8	11255.9	11379.6	10969.6
60°	11564.3	12748.5	13805.6	14000.5	14337.6	14571.4	14623.9	14573.1	14801.8	14737.4	14374.9
62.5°	13690.4	15664.1	17134.6	17500.6	17839.4	17827.6	17649.7	17466.7	17692.0	17692.0	16745.0
65°	15208.4	17448.1	19021.9	19325.2	19311.6	18903.3	18483.2	18117.3	18085.1	17834.3	16450.2
66°	15279.5	17585.3	19127.0	19391.3	19289.6	18632.3	18129.1	17664.9	17466.7	17117.7	15699.7
67.5°	14639.2	17197.3	18784.7	19015.2	18747.5	17805.5	17112.6	16490.9	16202.9	15615.0	14280.0
70°	12008.1	14779.8	17088.9	17559.9	17256.6	16063.9	15115.2	14274.9	13724.3	12875.5	11913.3
72.5°	8765.5	10912.0	13412.6	14178.4	14130.9	13033.1	12269.0	11499.9	10776.5	10004.0	9300.9
75°	5697.4	7098.5	8492.8	8940.0	8724.9	8089.6	7542.4	7093.4	6407.3	5870.2	5739.8
77.5°	3252.8	3974.5	3759.3	3703.4	3434.0	2771.6	1843.2	1292.6	1167.3	1457.0	1597.6
80°	3095.2	2805.5	2297.3	2071.9	1904.2	1297.7	681.0	479.4	420.1	430.3	462.5
82.5°	3490.0	3637.3	2974.9	2485.3	2163.4	1578.9	862.3	401.5	293.1	347.3	389.7
85°	2615.8	3683.1	3650.9	3093.5	2537.8	1819.5	1019.9	306.6	176.2	244.0	318.5
87.5°	530.3	872.5	840.3	738.6	628.5	438.8	171.1	96.6	88.1	120.3	183.0
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: P159606

CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3	2795.3
2.5°	2798.7	2798.7	2802.1	2807.2	2808.9	2808.9	2812.3	2808.9	2815.7	2817.4	2819.1
5°	2814.0	2819.1	2822.5	2830.9	2836.0	2839.4	2844.5	2841.1	2847.9	2849.6	2853.0
7.5°	2830.9	2839.4	2846.2	2849.6	2856.3	2856.3	2858.0	2854.6	2853.0	2847.9	2846.2
10°	2861.4	2866.5	2875.0	2871.6	2868.2	2856.3	2846.2	2830.9	2822.5	2807.2	2798.7
12.5°	2910.6	2913.9	2913.9	2898.7	2876.7	2849.6	2824.2	2798.7	2778.4	2761.5	2751.3
15°	2944.4	2951.2	2942.7	2920.7	2888.5	2851.3	2817.4	2783.5	2756.4	2734.4	2720.8
17.5°	2969.8	2968.2	2952.9	2922.4	2891.9	2859.7	2829.2	2793.7	2759.8	2727.6	2707.3
20°	3008.8	2991.9	2964.8	2932.6	2900.4	2873.3	2849.6	2815.7	2780.1	2736.1	2705.6
22.5°	3061.3	3030.8	2991.9	2958.0	2927.5	2902.1	2875.0	2846.2	2808.9	2759.8	2717.4
25°	3135.9	3083.4	3039.3	3005.4	2978.3	2949.5	2919.0	2881.8	2844.5	2793.7	2742.8
27.5°	3249.4	3171.5	3115.5	3085.0	3059.6	3020.7	2981.7	2937.7	2890.2	2837.7	2780.1
30°	3386.6	3293.4	3229.1	3201.9	3171.5	3127.4	3085.0	3024.1	2958.0	2895.3	2824.2
32.5°	3547.6	3452.7	3388.3	3368.0	3318.8	3268.0	3208.7	3127.4	3041.0	2947.8	2863.1
35°	3791.5	3671.2	3611.9	3564.5	3496.7	3435.7	3335.8	3229.1	3105.4	2981.7	2876.7
37.5°	4042.2	3920.3	3859.3	3793.2	3705.1	3593.3	3459.5	3307.0	3142.7	2990.2	2861.4
40°	4377.7	4245.5	4167.6	4066.0	3923.7	3749.2	3550.9	3342.6	3142.7	2952.9	2797.0
42.5°	4769.0	4647.1	4526.8	4359.1	4130.3	3876.2	3598.4	3330.7	3088.4	2869.9	2705.6
45°	5311.2	5102.8	4911.3	4642.0	4308.2	3950.8	3603.5	3274.8	2995.3	2753.0	2570.0
47.5°	5921.1	5651.7	5312.9	4891.0	4435.3	3979.6	3554.3	3169.8	2847.9	2585.3	2385.4
50°	6624.1	6210.8	5690.7	5089.2	4499.7	3940.6	3437.4	2993.6	2644.6	2343.0	2129.5
52.5°	7428.9	6798.6	6032.9	5229.8	4489.5	3822.0	3244.3	2761.5	2371.8	2051.6	1841.5
55°	8321.7	7439.0	6359.8	5319.6	4398.0	3591.6	2941.0	2434.5	2033.0	1717.9	1533.2
57.5°	9895.5	8562.2	6983.3	5439.9	4206.6	3242.6	2556.5	2021.1	1658.6	1390.9	1214.7
60°	12819.6	10525.8	8164.1	5722.8	3918.6	2805.5	2071.9	1585.7	1282.5	1087.6	957.2
62.5°	14629.0	11908.2	8740.1	5682.2	3451.0	2207.5	1538.3	1175.7	936.9	808.1	726.8
65°	14200.4	11366.1	8037.1	4880.8	2685.2	1565.4	1018.2	769.1	643.8	577.7	538.7
66°	13617.6	10759.6	7442.4	4370.9	2339.6	1307.9	840.3	645.5	554.0	504.9	484.5
67.5°	12396.1	9651.6	6419.1	3500.1	1753.4	974.1	620.1	506.6	450.6	425.2	411.7
70°	10375.0	7776.2	4540.3	2066.9	950.4	528.6	396.4	352.4	338.8	330.4	325.3
72.5°	8021.8	5629.7	2653.0	1016.5	479.4	342.2	301.6	282.9	277.8	277.8	279.5
75°	5053.7	3235.8	1187.6	489.6	325.3	276.1	257.5	249.0	250.7	252.4	250.7
77.5°	1678.9	1116.4	494.7	347.3	282.9	250.7	235.5	232.1	235.5	237.2	237.2
80°	482.8	421.8	357.5	306.6	259.2	233.8	220.2	218.5	227.0	228.7	225.3
82.5°	371.0	347.3	323.6	296.5	249.0	220.2	215.2	216.9	221.9	218.5	203.3
85°	340.5	337.1	242.3	240.6	216.9	210.1	205.0	206.7	201.6	183.0	166.0
87.5°	191.4	177.9	137.2	138.9	160.9	166.0	137.2	145.7	135.5	118.6	108.4
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: P159606

CATALOG NUMBER: VST-F10-LED-E-U-T3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2795.3	2795.3	2795.3	2795.3	2795.3
2.5°	2822.5	2820.8	2820.8	2825.8	2819.1
5°	2854.6	2853.0	2853.0	2858.0	2853.0
7.5°	2839.4	2834.3	2830.9	2829.2	2829.2
10°	2788.6	2783.5	2773.3	2769.9	2766.5
12.5°	2736.1	2731.0	2719.1	2719.1	2715.7
15°	2703.9	2697.1	2688.6	2683.5	2680.1
17.5°	2686.9	2676.8	2666.6	2661.5	2658.1
20°	2680.1	2666.6	2654.7	2646.3	2646.3
22.5°	2681.8	2664.9	2651.3	2641.2	2637.8
25°	2698.8	2673.4	2656.4	2646.3	2642.9
27.5°	2722.5	2692.0	2670.0	2656.4	2651.3
30°	2754.7	2712.3	2681.8	2664.9	2658.1
32.5°	2776.7	2717.4	2678.5	2654.7	2646.3
35°	2775.0	2698.8	2651.3	2620.9	2610.7
37.5°	2744.5	2654.7	2592.1	2554.8	2537.8
40°	2676.8	2573.4	2507.3	2471.8	2451.4
42.5°	2578.5	2466.7	2407.4	2368.4	2346.4
45°	2424.3	2314.2	2241.4	2210.9	2182.1
47.5°	2210.9	2099.1	2036.4	1992.3	1973.7
50°	1960.1	1848.3	1782.2	1746.7	1729.7
52.5°	1685.7	1578.9	1531.5	1497.6	1473.9
55°	1401.1	1302.8	1282.5	1245.2	1223.2
57.5°	1133.4	1075.8	1057.2	1019.9	1001.2
60°	886.0	867.4	847.1	823.4	813.2
62.5°	686.1	669.2	664.1	648.9	647.2
65°	523.5	525.2	521.8	518.4	515.0
66°	476.1	474.4	476.1	472.7	471.0
67.5°	404.9	411.7	416.8	415.1	415.1
70°	328.7	333.7	340.5	338.8	338.8
72.5°	281.2	289.7	293.1	291.4	291.4
75°	254.1	262.6	262.6	259.2	257.5
77.5°	237.2	240.6	237.2	233.8	230.4
80°	220.2	216.9	211.8	206.7	203.3
82.5°	191.4	183.0	177.9	169.4	169.4
85°	154.2	147.4	135.5	127.1	118.6
87.5°	100.0	96.6	88.1	66.1	52.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)