

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: P158505

Luminaire Tested: **VST-F10-LED-E-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158505
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
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-SL3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (70) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24905 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

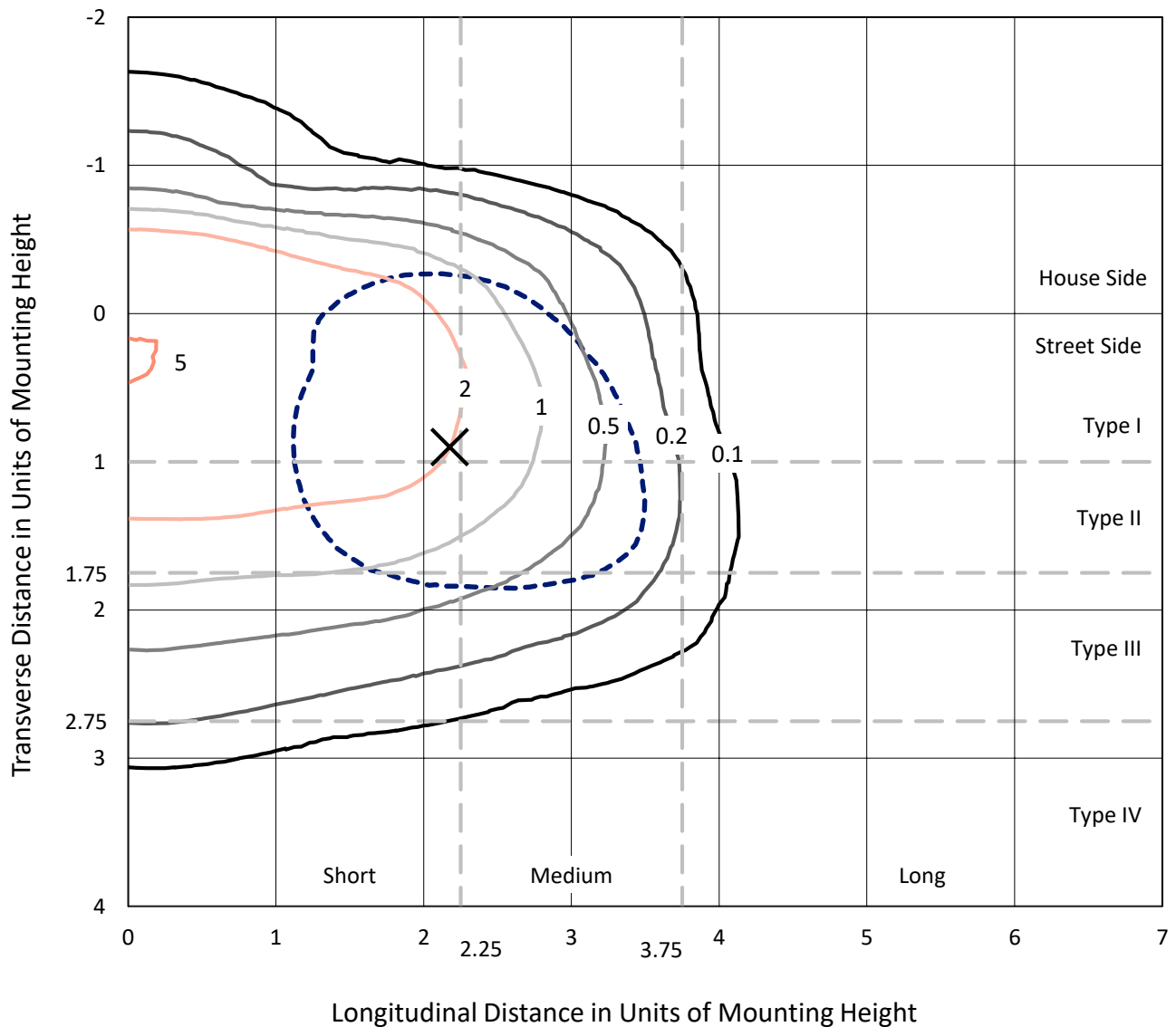
Input Watts (W): 258.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P158505
 CATALOG NUMBER: VST-F10-LED-E-U-SL3

Iso-Footcandle Lines of Horizontal Illumination

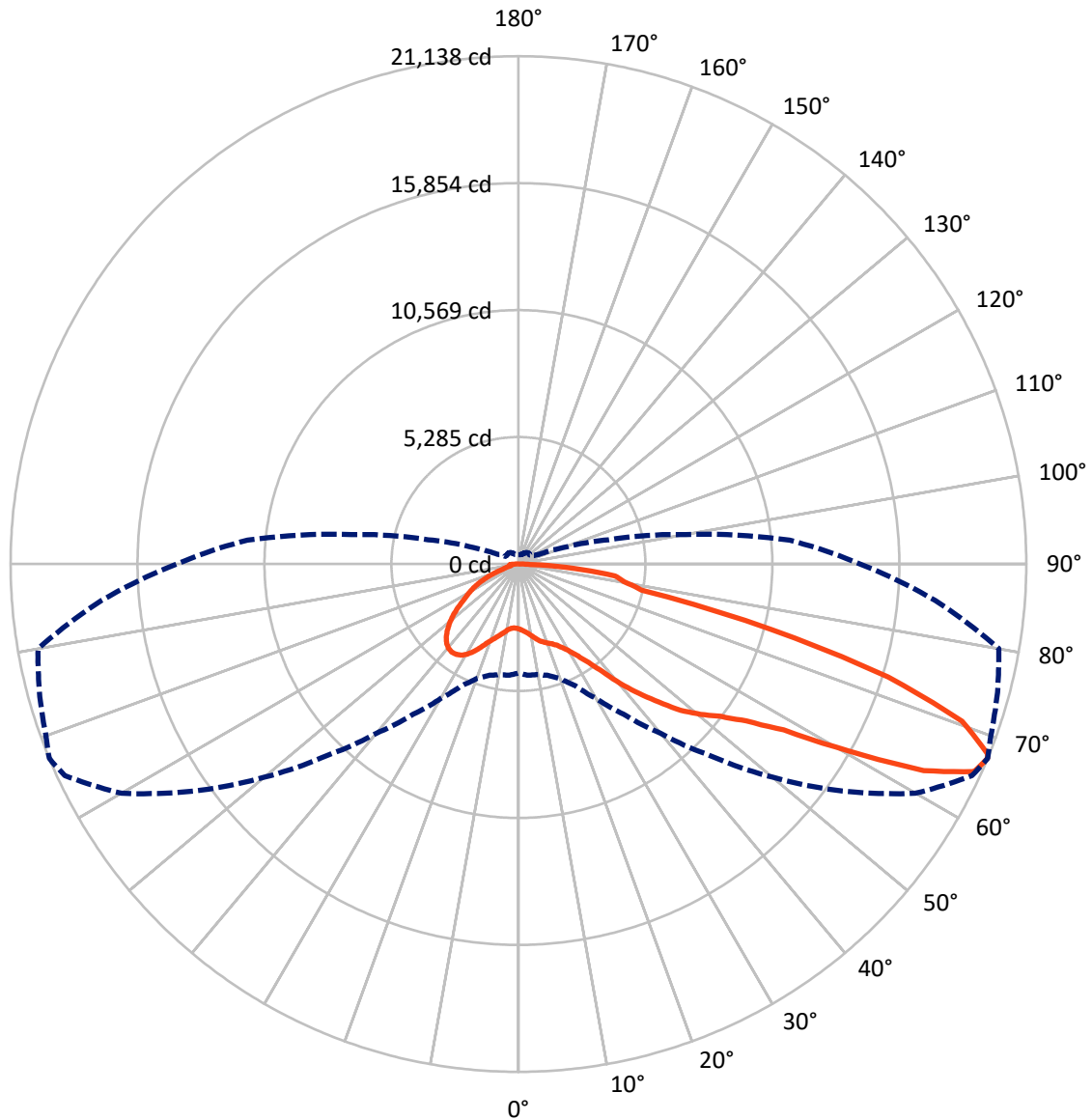
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158505
CATALOG NUMBER: VST-F10-LED-E-U-SL3

Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P158505

CATALOG NUMBER: VST-F10-LED-E-U-SL3

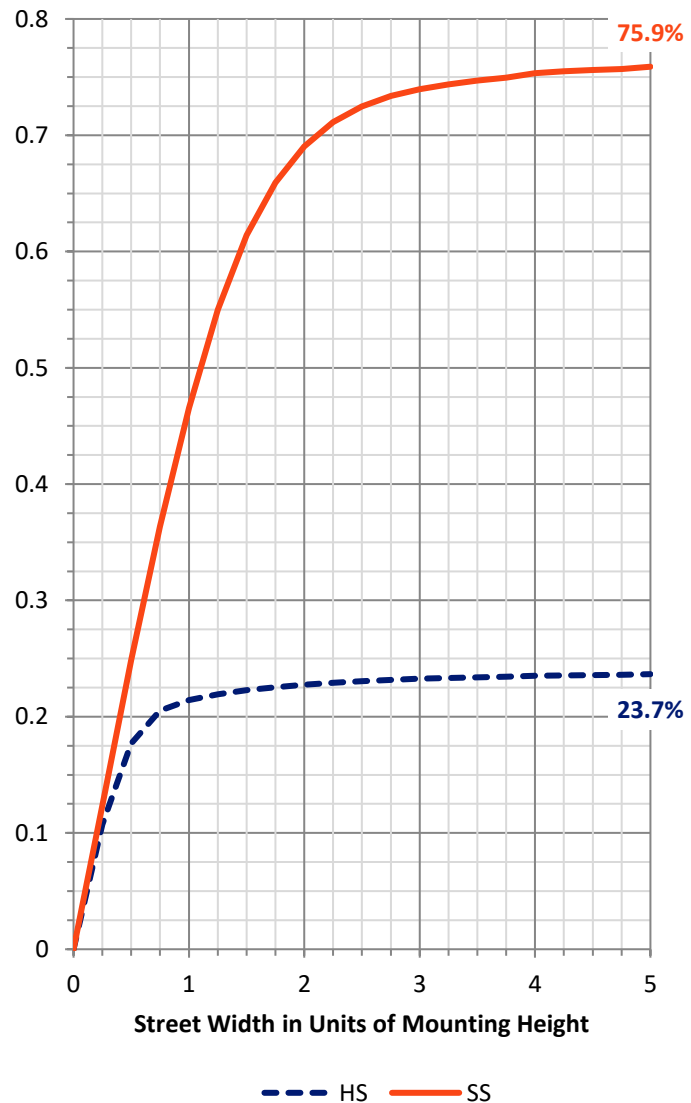
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5974.8	0.0	5974.8
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	18930.2	0.0	18930.2
	% Fixture	76.0	0.0	76.0
Total	Lumens	24905.0	0.0	24905.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.3	1.1
10°-20°	914.1	3.7
20°-30°	1631.9	6.6
30°-40°	2391.7	9.6
40°-50°	3695.5	14.8
50°-60°	5381.3	21.6
60°-70°	7010.0	28.1
70°-80°	3137.9	12.6
80°-90°	474.5	1.9
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°	24905.0	100.0
0°-180°	24905.0	100.0



REPORT NUMBER: P158505

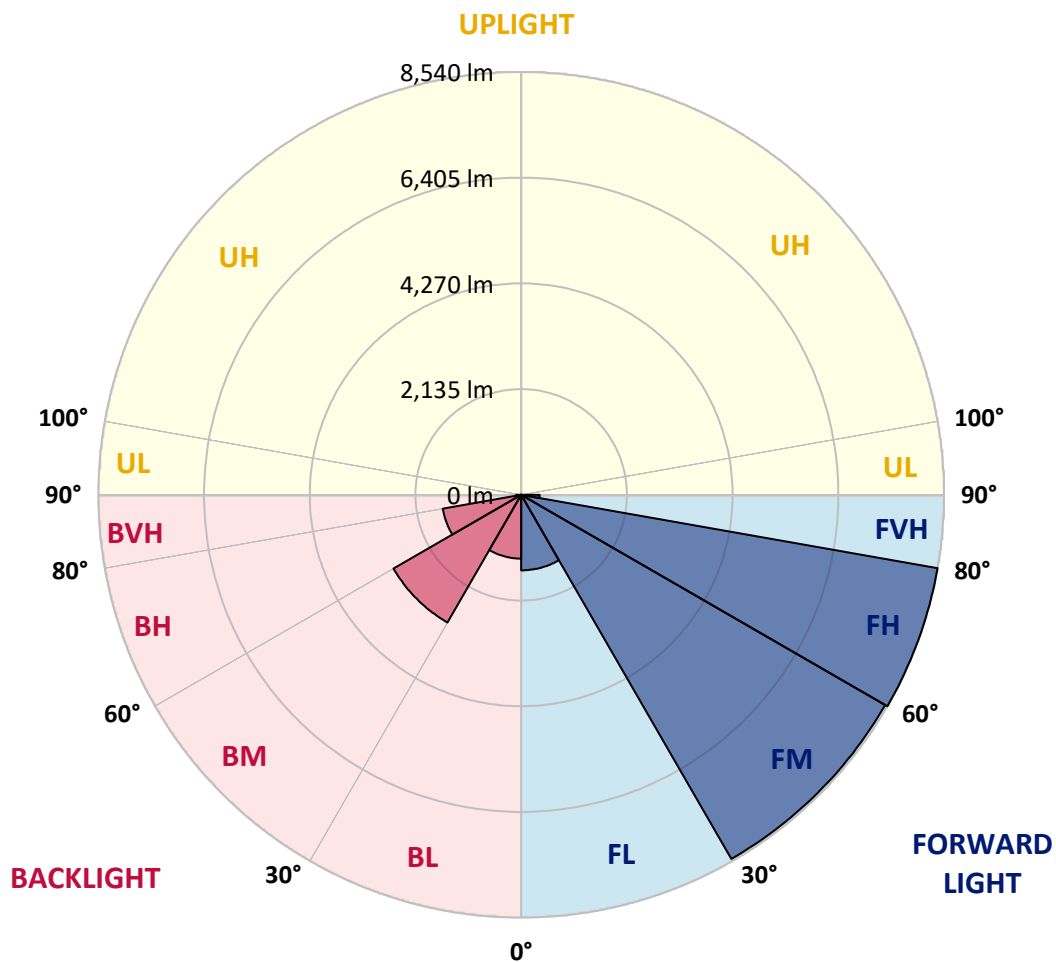
CATALOG NUMBER: VST-F10-LED-E-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1525.9	6.1			
FM	(30°-60°)	8491.3	34.1			
FH	(60°-80°)	8540.4	34.3			G4/12000
FVH	(80°-90°)	372.6	1.5			G3/500
BL	(0°-30°)	1288.3	5.2	B3/2500		
BM	(30°-60°)	2977.1	12.0	B3/5000		
BH	(60°-80°)	1607.4	6.5	B3/2500		G3/2500
BVH	(80°-90°)	101.9	0.4			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 III Short





REPORT NUMBER: P158505

CATALOG NUMBER: VST-F10-LED-E-U-SL3

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5
2.5°	2805.1	2811.7	2813.4	2811.7	2813.4	2806.8	2805.1	2795.2	2800.2	2787.0	2783.7
5°	2957.0	2962.0	2965.3	2952.1	2955.4	2948.8	2940.5	2930.6	2917.4	2899.2	2887.7
7.5°	3105.6	3113.9	3112.2	3107.3	3095.7	3089.1	3072.6	3057.7	3034.6	3013.2	2998.3
10°	3305.4	3303.8	3303.8	3275.7	3259.2	3244.3	3214.6	3191.5	3168.4	3137.0	3120.5
12.5°	3536.5	3525.0	3520.0	3500.2	3465.6	3439.1	3396.2	3351.6	3310.4	3277.3	3250.9
15°	3759.4	3759.4	3746.2	3714.9	3681.8	3647.2	3586.1	3521.7	3454.0	3401.2	3374.7
17.5°	3962.5	3944.4	3932.8	3891.5	3856.9	3800.7	3733.0	3663.7	3579.5	3505.2	3454.0
20°	4111.1	4096.3	4071.5	4020.3	3960.9	3894.8	3815.6	3734.7	3643.9	3563.0	3505.2
22.5°	4197.0	4178.8	4140.8	4073.1	3992.2	3899.8	3807.3	3731.4	3648.8	3587.7	3539.9
25°	4241.5	4223.4	4172.2	4083.0	3974.1	3851.9	3746.2	3671.9	3624.1	3609.2	3602.6
27.5°	4239.9	4225.0	4170.6	4068.2	3927.8	3787.5	3673.6	3610.8	3605.9	3663.7	3706.6
30°	4197.0	4187.1	4137.5	4035.2	3888.2	3741.3	3635.6	3602.6	3653.8	3776.0	3881.6
32.5°	4154.0	4149.1	4114.4	4022.0	3896.5	3772.6	3700.0	3703.3	3809.0	3997.2	4167.2
35°	4159.0	4165.6	4160.6	4111.1	4031.9	3967.5	3932.8	4005.4	4170.6	4398.4	4626.2
37.5°	4201.9	4226.7	4258.1	4263.0	4264.7	4254.8	4327.4	4480.9	4722.0	5019.2	5375.8
40°	4296.0	4324.1	4414.9	4494.2	4596.5	4718.7	4865.6	5078.6	5377.5	5744.0	6181.5
42.5°	4588.3	4627.9	4740.2	4887.1	5075.3	5266.8	5486.4	5777.0	6143.6	6529.9	6988.9
45°	4969.7	5052.2	5176.0	5339.5	5621.8	5890.9	6174.9	6500.2	6889.8	7373.6	7835.9
47.5°	5445.2	5527.7	5707.7	5882.7	6216.2	6551.4	6861.8	7201.9	7624.5	8119.9	8631.7
50°	5861.2	5955.3	6115.5	6351.6	6737.9	7149.0	7492.5	7860.6	8215.6	8737.4	9254.1
52.5°	6188.1	6255.8	6409.4	6625.7	7056.6	7507.3	7941.5	8351.0	8772.0	9293.8	9772.6
55°	6229.4	6292.2	6442.4	6690.1	7127.6	7627.9	8128.1	8613.5	9209.6	9779.2	10413.2
57.5°	6051.1	6102.3	6254.2	6475.4	6901.4	7471.0	8103.4	8725.8	9488.6	10258.0	11032.3
60°	5798.5	5849.7	5968.5	6145.2	6529.9	7144.1	7882.1	8734.1	9747.8	10859.0	11998.2
62.5°	5521.1	5565.7	5661.4	5786.9	6125.4	6691.7	7537.0	8679.6	9959.1	11456.6	13213.4
65°	5053.9	5161.2	5202.5	5331.2	5669.7	6204.6	7064.8	8311.4	9873.3	11722.5	13976.1
67°	4537.1	4646.1	4667.5	4798.0	5068.7	5582.2	6457.3	7629.5	9193.0	11263.5	13807.7
67.5°	4372.0	4464.4	4497.5	4627.9	4883.8	5367.6	6198.0	7383.5	8985.0	11012.5	13604.7
70°	3214.6	3317.0	3353.3	3407.8	3591.0	3993.9	4543.7	5572.3	7163.9	8986.7	11476.4
72.5°	1720.4	1802.9	1837.6	1918.5	2012.6	2232.2	2653.2	3391.3	4396.7	6013.1	8164.4
75°	1164.0	1197.0	1221.8	1277.9	1375.3	1550.3	1735.3	1994.5	2602.1	3392.9	4646.1
77.5°	663.7	678.6	681.9	691.8	769.4	936.1	1239.9	1679.1	2153.0	2458.4	2971.9
80°	287.3	317.0	340.1	325.3	320.3	355.0	444.1	662.1	1297.7	2060.5	2445.2
82.5°	155.2	168.4	188.2	189.9	199.8	211.3	229.5	272.4	383.0	772.7	1685.7
85°	80.9	84.2	112.3	128.8	137.0	143.6	146.9	163.5	188.2	239.4	419.4
87.5°	11.6	16.5	19.8	26.4	29.7	31.4	36.3	46.2	54.5	66.0	112.3
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: P158505

CATALOG NUMBER: VST-F10-LED-E-U-SL3

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5
2.5°	2768.8	2765.5	2755.6	2749.0	2742.4	2735.8	2727.5	2720.9	2709.4	2701.1	2691.2
5°	2871.2	2851.4	2838.2	2820.0	2816.7	2795.2	2773.8	2763.9	2744.0	2727.5	2707.7
7.5°	2975.2	2952.1	2930.6	2915.8	2907.5	2877.8	2856.3	2831.6	2808.4	2787.0	2763.9
10°	3097.4	3074.3	3051.1	3041.2	3026.4	2998.3	2980.1	2948.8	2925.7	2899.2	2867.9
12.5°	3224.5	3208.0	3191.5	3178.3	3171.7	3158.5	3132.0	3105.6	3074.3	3047.8	3011.5
15°	3336.8	3325.2	3318.6	3315.3	3315.3	3307.1	3282.3	3257.5	3224.5	3194.8	3155.2
17.5°	3416.0	3411.1	3416.0	3421.0	3427.6	3421.0	3416.0	3388.0	3366.5	3330.2	3290.5
20°	3462.3	3472.2	3496.9	3513.4	3528.3	3539.9	3544.8	3521.7	3493.6	3467.2	3440.8
22.5°	3511.8	3539.9	3582.8	3607.5	3632.3	3673.6	3683.5	3667.0	3645.5	3629.0	3600.9
25°	3594.3	3635.6	3709.9	3749.5	3784.2	3845.3	3853.6	3856.9	3851.9	3838.7	3804.0
27.5°	3723.1	3804.0	3903.1	3954.3	3992.2	4071.5	4102.9	4102.9	4089.7	4104.5	4104.5
30°	3947.7	4055.0	4183.8	4213.5	4272.9	4342.3	4393.4	4400.0	4401.7	4433.1	4479.3
32.5°	4292.7	4395.1	4538.7	4571.8	4622.9	4689.0	4746.8	4740.2	4755.0	4822.7	4883.8
35°	4794.6	4898.7	4992.8	5037.4	5060.5	5119.9	5141.4	5177.7	5222.3	5306.5	5298.2
37.5°	5537.6	5630.1	5643.3	5671.4	5643.3	5654.8	5671.4	5714.3	5833.2	5909.1	5786.9
40°	6432.5	6586.0	6571.2	6538.2	6475.4	6391.2	6420.9	6487.0	6615.8	6549.7	6221.2
42.5°	7276.2	7434.7	7405.0	7367.0	7228.3	7196.9	7193.6	7248.1	7317.5	7129.2	6561.3
45°	8106.7	8268.5	8217.3	8195.8	8103.4	8035.7	8091.8	8095.1	8076.9	7674.1	6858.5
47.5°	8963.5	9112.1	9079.1	9097.3	9001.5	8956.9	8961.9	8938.8	8768.7	8136.4	7089.6
50°	9655.3	9855.1	9874.9	9833.7	9782.5	9714.8	9888.1	9825.4	9447.3	8585.5	7312.5
52.5°	10193.6	10462.7	10565.1	10538.7	10497.4	10505.6	10830.9	10901.9	10276.1	9151.8	7558.5
55°	10830.9	11255.2	11422.0	11521.0	11478.1	11643.2	12387.8	12424.2	11428.6	9891.4	7878.8
57.5°	11750.5	12358.1	12884.8	13025.1	13160.5	13697.1	14905.7	14537.5	12924.4	11010.9	8285.0
60°	13149.0	14479.7	15335.0	15784.0	16101.0	16850.6	17999.7	17066.9	14788.5	12343.2	8795.1
62.5°	15107.1	17052.0	18481.9	18932.6	19063.0	19493.9	20326.1	18541.3	15803.8	12940.9	8839.7
65°	16565.0	18897.9	20610.1	20841.2	20686.0	20694.3	20912.2	18463.7	15425.8	12419.2	8073.6
67°	16469.2	19081.2	20834.6	21138.4	20923.8	20641.4	20301.3	17412.0	14210.6	11326.2	7069.8
67.5°	16322.3	18904.5	20737.2	21057.5	20861.0	20539.1	20042.1	17004.2	13832.5	10986.1	6865.1
70°	14109.9	16674.0	19142.3	19593.0	19675.6	19381.7	17986.5	14337.7	11230.4	8937.1	5331.2
72.5°	10982.8	13266.2	15708.1	16099.4	16416.4	15569.4	13091.2	9903.0	8185.9	6440.7	3860.2
75°	7251.4	9574.4	10806.1	10863.9	10459.4	8890.9	6396.2	4959.8	4565.2	3785.9	2389.1
77.5°	3880.0	5630.1	5664.8	5245.4	5053.9	3767.7	1528.9	843.7	939.4	1066.6	951.0
80°	2894.3	3586.1	4155.7	4467.7	4560.2	3231.1	790.9	447.4	391.3	356.6	351.7
82.5°	2610.3	3463.9	3883.3	4053.3	4010.4	2658.2	444.1	300.5	249.3	270.8	308.7
85°	1023.7	1849.2	2432.0	2354.4	1978.0	990.6	242.7	161.8	161.8	234.4	303.8
87.5°	209.7	379.7	515.1	492.0	442.5	191.5	118.9	97.4	99.1	189.9	287.3
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°	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5	2699.5
2.5°	2681.3	2671.4	2664.8	2658.2	2651.6	2648.3	2643.3	2643.3	2633.4	2630.1	2626.8
5°	2692.9	2676.4	2664.8	2649.9	2638.4	2628.5	2615.3	2612.0	2600.4	2592.1	2588.8
7.5°	2742.4	2717.6	2692.9	2674.7	2658.2	2636.7	2621.9	2608.7	2597.1	2588.8	2578.9
10°	2836.5	2810.1	2775.4	2742.4	2720.9	2687.9	2664.8	2641.7	2628.5	2618.6	2605.4
12.5°	2975.2	2937.2	2895.9	2856.3	2820.0	2777.1	2754.0	2725.9	2709.4	2701.1	2691.2
15°	3117.2	3075.9	3024.7	2986.7	2945.5	2912.5	2891.0	2866.2	2853.0	2843.1	2836.5
17.5°	3262.5	3214.6	3178.3	3140.3	3120.5	3095.7	3067.7	3036.3	2998.3	2975.2	2943.8
20°	3411.1	3374.7	3353.3	3331.8	3308.7	3274.0	3217.9	3153.5	3082.5	3014.8	2950.4
22.5°	3584.4	3563.0	3559.7	3539.9	3492.0	3409.4	3305.4	3184.9	3064.3	2952.1	2864.6
25°	3828.8	3828.8	3812.3	3731.4	3619.1	3470.5	3295.5	3122.1	2962.0	2808.4	2692.9
27.5°	4135.9	4124.3	4043.4	3876.7	3675.2	3444.1	3209.6	2990.1	2785.3	2616.9	2468.3
30°	4474.3	4393.4	4220.1	3957.6	3655.4	3358.2	3071.0	2816.7	2575.6	2369.3	2194.2
32.5°	4826.0	4629.5	4317.5	3957.6	3586.1	3229.5	2897.6	2585.5	2309.8	2078.7	1870.6
35°	5144.7	4786.4	4340.6	3893.2	3450.7	3039.6	2654.9	2301.6	1971.4	1722.0	1494.2
37.5°	5433.6	4890.4	4315.8	3767.7	3254.2	2772.1	2321.4	1931.7	1558.6	1317.5	1122.7
40°	5621.8	4911.9	4213.5	3571.2	2973.5	2410.5	1911.9	1476.0	1180.5	960.9	830.5
42.5°	5739.0	4870.6	4048.4	3302.1	2595.5	1956.5	1434.8	1058.3	838.7	716.6	667.0
45°	5805.1	4763.3	3804.0	2933.9	2138.1	1487.6	1018.7	764.4	645.6	602.6	586.1
47.5°	5801.8	4589.9	3498.6	2507.9	1632.9	1036.9	721.5	596.0	563.0	549.8	546.5
50°	5767.1	4376.9	3140.3	2045.7	1178.8	723.2	571.3	534.9	526.7	518.4	515.1
52.5°	5719.2	4112.8	2744.0	1594.9	837.1	577.9	518.4	508.5	501.9	493.7	490.4
55°	5630.1	3787.5	2314.8	1200.3	655.5	521.7	500.3	497.0	488.7	477.2	470.5
57.5°	5521.1	3457.3	1903.7	937.8	579.5	508.5	497.0	492.0	480.5	467.2	454.0
60°	5481.5	3184.9	1581.7	790.9	561.4	513.5	505.2	498.6	482.1	462.3	447.4
62.5°	5233.8	2877.8	1350.6	733.1	571.3	534.9	531.6	521.7	497.0	473.9	450.7
65°	4593.2	2433.6	1144.2	693.4	591.1	571.3	574.6	559.7	534.9	503.6	462.3
67°	3884.9	1984.6	952.7	655.5	605.9	609.2	620.8	609.2	577.9	533.3	477.2
67.5°	3696.7	1870.6	904.8	643.9	609.2	619.1	632.4	624.1	592.7	541.5	483.8
70°	2747.3	1317.5	675.3	582.8	609.2	648.9	678.6	686.8	652.2	581.2	497.0
72.5°	1935.0	850.3	518.4	505.2	553.1	605.9	662.1	690.1	650.5	572.9	478.8
75°	1162.3	531.6	421.0	429.3	465.6	520.1	564.7	576.2	526.7	477.2	414.4
77.5°	538.2	353.3	330.2	341.8	376.4	401.2	401.2	378.1	340.1	310.4	297.2
80°	317.0	288.9	287.3	308.7	331.9	313.7	285.6	254.3	234.4	224.5	219.6
82.5°	297.2	308.7	328.6	333.5	315.4	270.8	236.1	204.7	194.8	189.9	184.9
85°	350.0	374.8	341.8	315.4	279.0	227.8	184.9	158.5	153.5	148.6	142.0
87.5°	323.6	308.7	269.1	231.1	191.5	138.7	100.7	90.8	97.4	95.8	92.5
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: P158505

CATALOG NUMBER: VST-F10-LED-E-U-SL3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	2699.5	2699.5	2699.5	2699.5	2699.5
2.5°	2628.5	2628.5	2621.9	2618.6	2626.8
5°	2582.2	2583.9	2578.9	2577.3	2578.9
7.5°	2572.3	2570.7	2567.4	2564.1	2567.4
10°	2602.1	2600.4	2595.5	2598.8	2593.8
12.5°	2691.2	2701.1	2699.5	2702.8	2709.4
15°	2836.5	2834.9	2829.9	2833.2	2838.2
17.5°	2919.1	2905.8	2894.3	2889.3	2889.3
20°	2899.2	2861.3	2841.5	2829.9	2826.6
22.5°	2782.0	2727.5	2686.3	2676.4	2668.1
25°	2590.5	2522.8	2470.0	2458.4	2436.9
27.5°	2367.6	2276.8	2214.1	2200.8	2189.3
30°	2075.4	1971.4	1898.7	1852.5	1867.3
32.5°	1718.7	1619.7	1535.5	1461.2	1449.6
35°	1327.4	1218.5	1144.2	1111.2	1089.7
37.5°	990.6	899.8	850.3	818.9	820.6
40°	757.8	710.0	683.5	662.1	663.7
42.5°	632.4	610.9	604.3	594.4	589.4
45°	572.9	566.3	568.0	558.1	554.8
47.5°	539.9	534.9	536.6	530.0	528.3
50°	513.5	510.2	511.8	506.9	505.2
52.5°	487.1	488.7	487.1	483.8	483.8
55°	463.9	462.3	465.6	460.6	460.6
57.5°	445.8	444.1	444.1	442.5	442.5
60°	435.9	429.3	427.6	427.6	429.3
62.5°	430.9	419.4	417.7	417.7	419.4
65°	432.6	414.4	407.8	406.2	404.5
67°	434.2	407.8	394.6	388.0	386.3
67.5°	435.9	404.5	389.6	383.0	379.7
70°	426.0	381.4	359.9	348.4	345.1
72.5°	401.2	353.3	326.9	312.0	308.7
75°	356.6	320.3	297.2	280.7	274.1
77.5°	275.7	259.2	251.0	241.1	237.8
80°	214.6	206.4	203.1	196.5	194.8
82.5°	178.3	170.1	165.1	156.8	151.9
85°	138.7	128.8	125.5	118.9	115.6
87.5°	90.8	85.9	84.2	75.9	72.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)