

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: P158480

Luminaire Tested: **VST-E08-LED-E-U-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P158480  
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-E08-LED-E-U-SL3  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (168) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24134.9 lumens  
Efficiency: N/A  
Efficacy: 124.1 lumens/watt  
Luminous Opening: Rectangular (W 1.33' x L: 1' x H: 0')  
IES Classification: Type III - 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

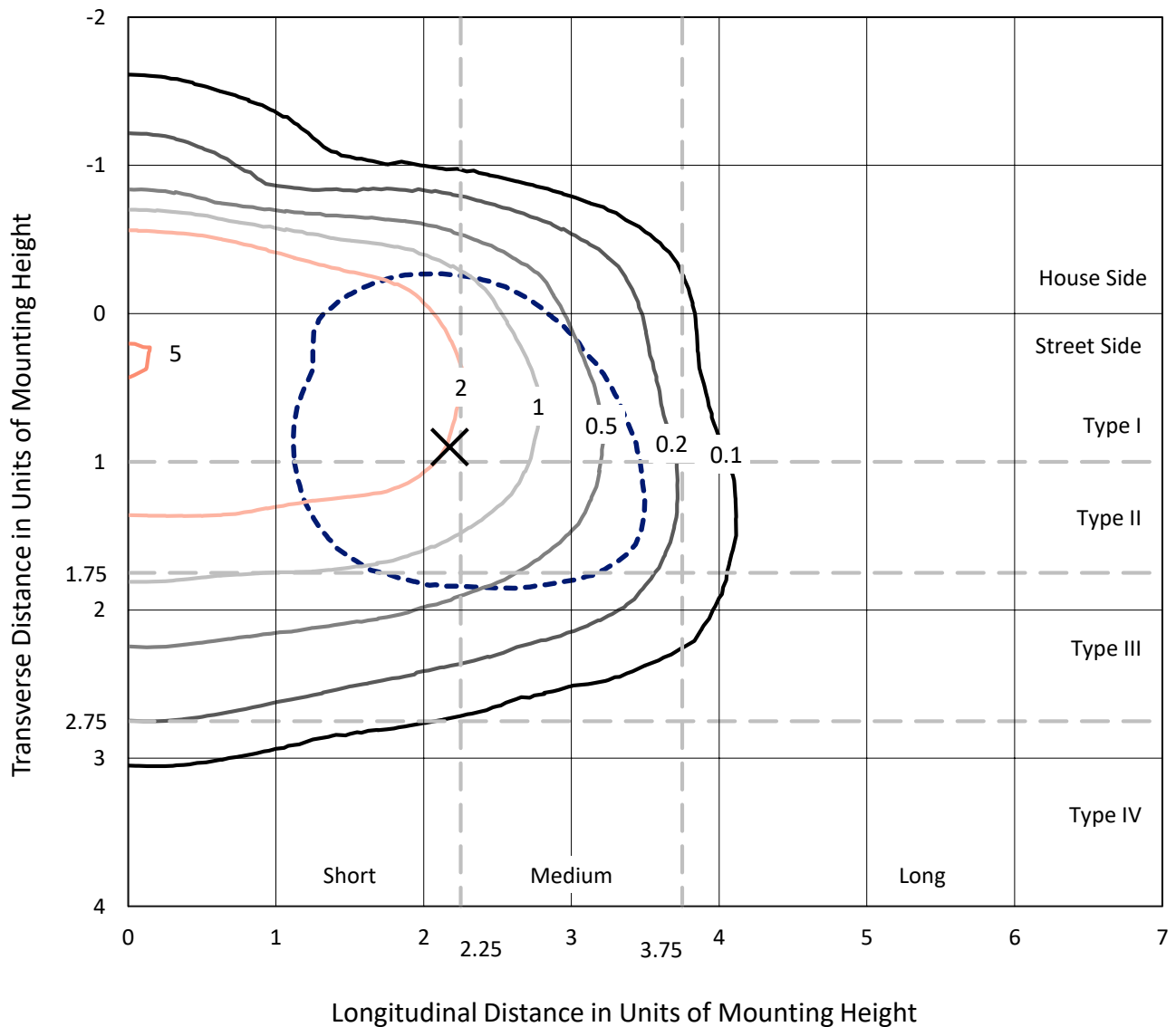


REPORT NUMBER: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

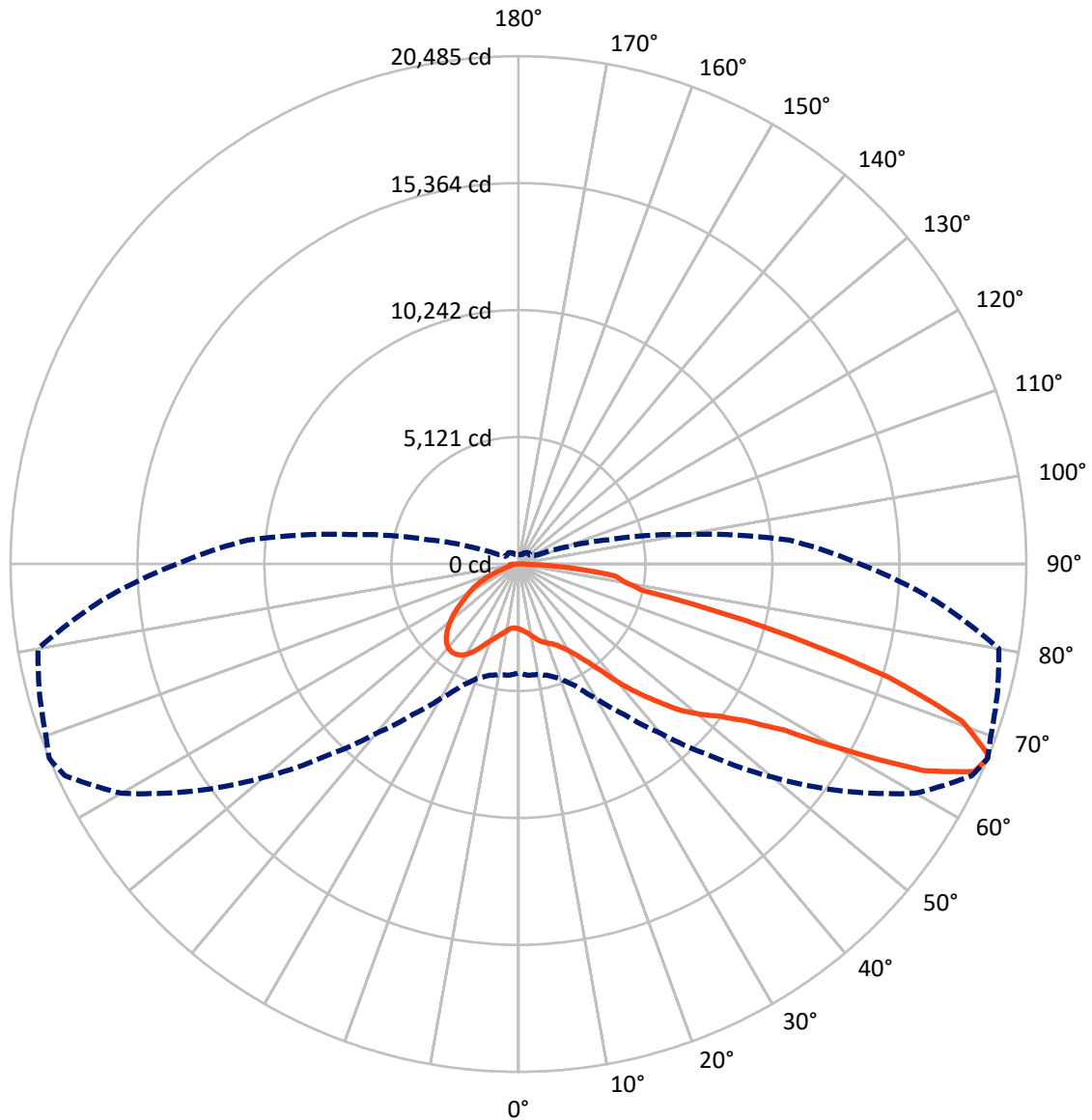


Based on 25 foot mounting height. Maximum calculated value = 5.3 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

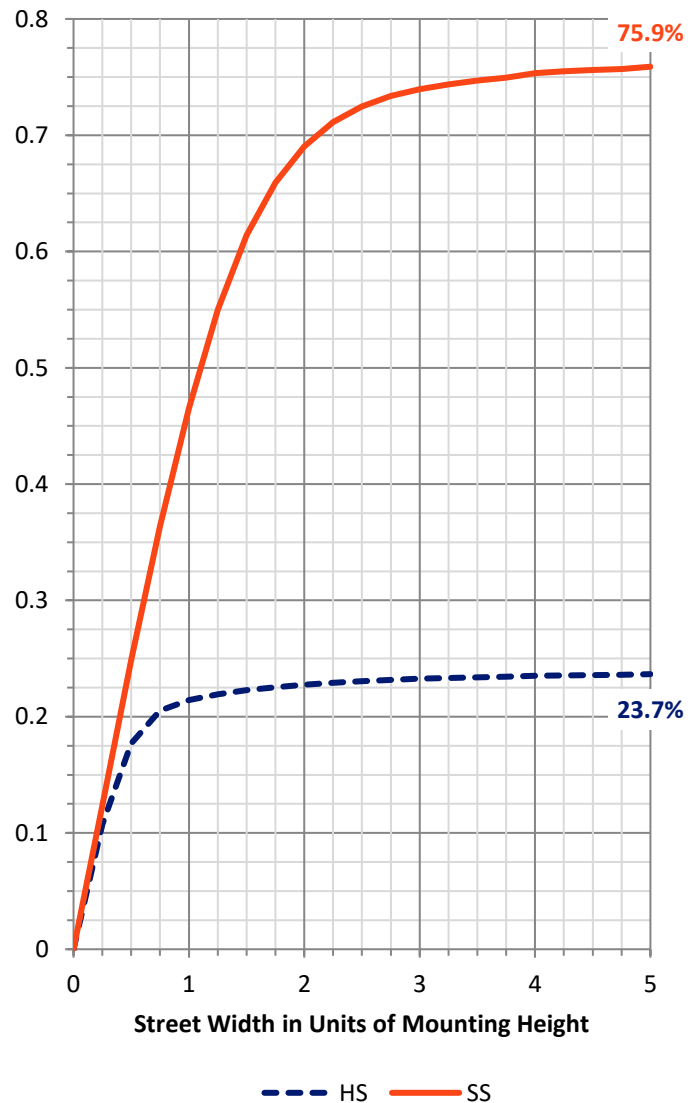
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5790.0	0.0	5790.0
	% Fixture	24.0	0.0	24.0
<b>Street Side</b>	Lumens	18344.9	0.0	18344.9
	% Fixture	76.0	0.0	76.0
<b>Total</b>	Lumens	24134.9	0.0	24134.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	260.0	1.1
10°-20°	885.8	3.7
20°-30°	1581.5	6.6
30°-40°	2317.7	9.6
40°-50°	3581.2	14.8
50°-60°	5214.9	21.6
60°-70°	6793.2	28.1
70°-80°	3040.9	12.6
80°-90°	459.8	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°	24134.9	100.0
0°-180°	24134.9	100.0



REPORT NUMBER: P158480

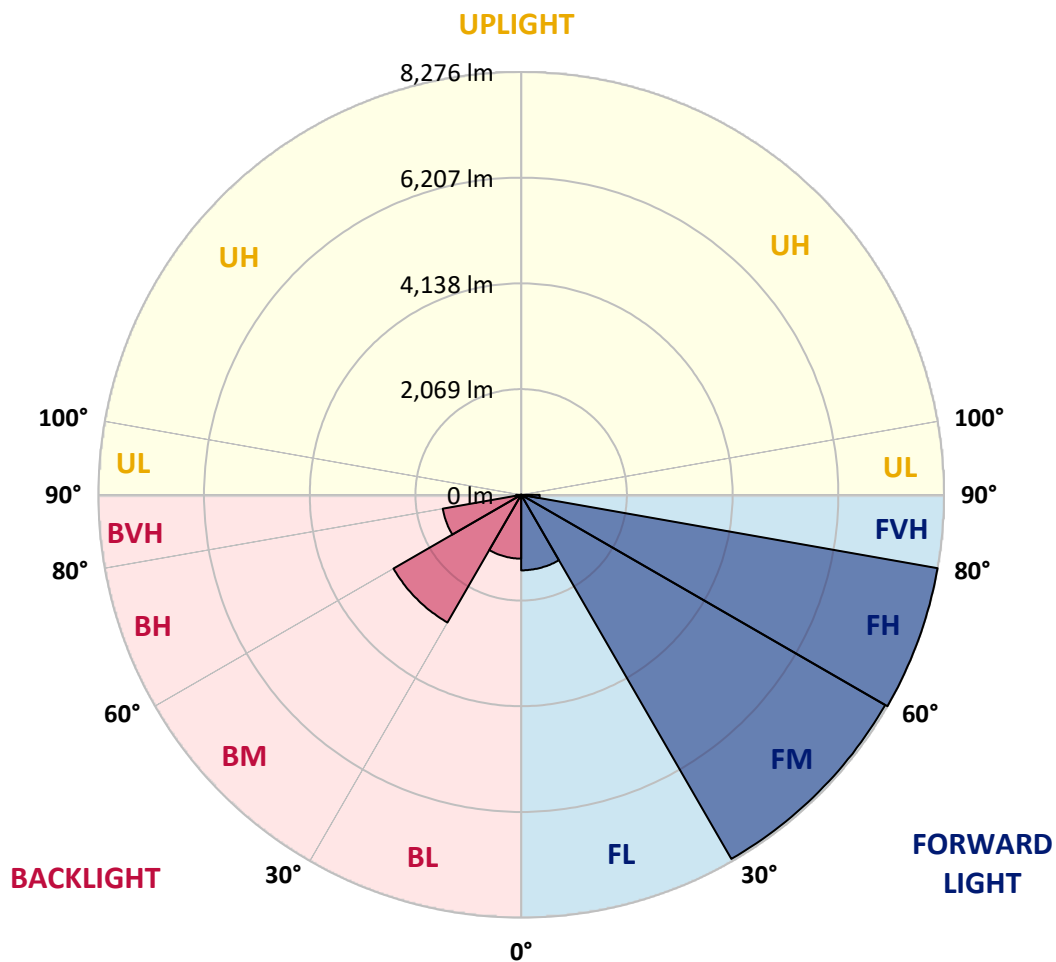
CATALOG NUMBER: VST-E08-LED-E-U-SL3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1478.8	6.1			
FM	(30°-60°)	8228.8	34.1			
FH	(60°-80°)	8276.3	34.3			G4/12000
FVH	(80°-90°)	361.1	1.5			G3/500
BL	(0°-30°)	1248.5	5.2	B3/2500		
BM	(30°-60°)	2885.0	12.0	B3/5000		
BH	(60°-80°)	1557.7	6.5	B3/2500		G3/2500
BVH	(80°-90°)	98.7	0.4			G1/100
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: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0
2.5°	2718.4	2724.8	2726.4	2724.8	2726.4	2720.0	2718.4	2708.8	2713.6	2700.8	2697.6
5°	2865.6	2870.4	2873.6	2860.8	2864.0	2857.6	2849.6	2840.0	2827.2	2809.6	2798.4
7.5°	3009.6	3017.6	3016.0	3011.2	3000.0	2993.6	2977.6	2963.2	2940.8	2920.0	2905.6
10°	3203.2	3201.6	3201.6	3174.4	3158.4	3144.0	3115.2	3092.8	3070.4	3040.0	3024.0
12.5°	3427.2	3416.0	3411.2	3392.0	3358.4	3332.8	3291.2	3248.0	3208.0	3176.0	3150.4
15°	3643.2	3643.2	3630.4	3600.0	3568.0	3534.4	3475.2	3412.8	3347.2	3296.0	3270.4
17.5°	3840.0	3822.4	3811.2	3771.2	3737.6	3683.2	3617.6	3550.4	3468.8	3396.8	3347.2
20°	3984.0	3969.6	3945.6	3896.0	3838.4	3774.4	3697.6	3619.2	3531.2	3452.8	3396.8
22.5°	4067.2	4049.6	4012.8	3947.2	3868.8	3779.2	3689.6	3616.0	3536.0	3476.8	3430.4
25°	4110.4	4092.8	4043.2	3956.8	3851.2	3732.8	3630.4	3558.4	3512.0	3497.6	3491.2
27.5°	4108.8	4094.4	4041.6	3942.4	3806.4	3670.4	3560.0	3499.2	3494.4	3550.4	3592.0
30°	4067.2	4057.6	4009.6	3910.4	3768.0	3625.6	3523.2	3491.2	3540.8	3659.2	3761.6
32.5°	4025.6	4020.8	3987.2	3897.6	3776.0	3656.0	3585.6	3588.8	3691.2	3873.6	4038.4
35°	4030.4	4036.8	4032.0	3984.0	3907.2	3844.8	3811.2	3881.6	4041.6	4262.4	4483.2
37.5°	4072.0	4096.0	4126.4	4131.2	4132.8	4123.2	4193.6	4342.4	4576.0	4864.0	5209.6
40°	4163.2	4190.4	4278.4	4355.2	4454.4	4572.8	4715.2	4921.6	5211.2	5566.4	5990.4
42.5°	4446.4	4484.8	4593.6	4736.0	4918.4	5104.0	5316.8	5598.4	5953.6	6328.0	6772.8
45°	4816.0	4896.0	5016.0	5174.4	5448.0	5708.8	5984.0	6299.2	6676.8	7145.6	7593.6
47.5°	5276.8	5356.8	5531.2	5700.8	6024.0	6348.8	6649.6	6979.2	7388.8	7868.8	8364.8
50°	5680.0	5771.2	5926.4	6155.2	6529.6	6928.0	7260.8	7617.6	7961.6	8467.2	8968.0
52.5°	5996.8	6062.4	6211.2	6420.8	6838.4	7275.2	7696.0	8092.8	8500.8	9006.4	9470.4
55°	6036.8	6097.6	6243.2	6483.2	6907.2	7392.0	7876.8	8347.2	8924.8	9476.8	10091.2
57.5°	5864.0	5913.6	6060.8	6275.2	6688.0	7240.0	7852.8	8456.0	9195.2	9940.8	10691.2
60°	5619.2	5668.8	5784.0	5955.2	6328.0	6923.2	7638.4	8464.0	9446.4	10523.2	11627.2
62.5°	5350.4	5393.6	5486.4	5608.0	5936.0	6484.8	7304.0	8411.2	9651.2	11102.4	12804.8
65°	4897.6	5001.6	5041.6	5166.4	5494.4	6012.8	6846.4	8054.4	9568.0	11360.0	13544.0
67°	4396.8	4502.4	4523.2	4649.6	4912.0	5409.6	6257.6	7393.6	8908.8	10915.2	13380.8
67.5°	4236.8	4326.4	4358.4	4484.8	4732.8	5201.6	6006.4	7155.2	8707.2	10672.0	13184.0
70°	3115.2	3214.4	3249.6	3302.4	3480.0	3870.4	4403.2	5400.0	6942.4	8708.8	11121.6
72.5°	1667.2	1747.2	1780.8	1859.2	1950.4	2163.2	2571.2	3286.4	4260.8	5827.2	7912.0
75°	1128.0	1160.0	1184.0	1238.4	1332.8	1502.4	1681.6	1932.8	2521.6	3288.0	4502.4
77.5°	643.2	657.6	660.8	670.4	745.6	907.2	1201.6	1627.2	2086.4	2382.4	2880.0
80°	278.4	307.2	329.6	315.2	310.4	344.0	430.4	641.6	1257.6	1996.8	2369.6
82.5°	150.4	163.2	182.4	184.0	193.6	204.8	222.4	264.0	371.2	748.8	1633.6
85°	78.4	81.6	108.8	124.8	132.8	139.2	142.4	158.4	182.4	232.0	406.4
87.5°	11.2	16.0	19.2	25.6	28.8	30.4	35.2	44.8	52.8	64.0	108.8
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: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0
2.5°	2683.2	2680.0	2670.4	2664.0	2657.6	2651.2	2643.2	2636.8	2625.6	2617.6	2608.0
5°	2782.4	2763.2	2750.4	2732.8	2729.6	2708.8	2688.0	2678.4	2659.2	2643.2	2624.0
7.5°	2883.2	2860.8	2840.0	2825.6	2817.6	2788.8	2768.0	2744.0	2721.6	2700.8	2678.4
10°	3001.6	2979.2	2956.8	2947.2	2932.8	2905.6	2888.0	2857.6	2835.2	2809.6	2779.2
12.5°	3124.8	3108.8	3092.8	3080.0	3073.6	3060.8	3035.2	3009.6	2979.2	2953.6	2918.4
15°	3233.6	3222.4	3216.0	3212.8	3212.8	3204.8	3180.8	3156.8	3124.8	3096.0	3057.6
17.5°	3310.4	3305.6	3310.4	3315.2	3321.6	3315.2	3310.4	3283.2	3262.4	3227.2	3188.8
20°	3355.2	3364.8	3388.8	3404.8	3419.2	3430.4	3435.2	3412.8	3385.6	3360.0	3334.4
22.5°	3403.2	3430.4	3472.0	3496.0	3520.0	3560.0	3569.6	3553.6	3532.8	3516.8	3489.6
25°	3483.2	3523.2	3595.2	3633.6	3667.2	3726.4	3734.4	3737.6	3732.8	3720.0	3686.4
27.5°	3608.0	3686.4	3782.4	3832.0	3868.8	3945.6	3976.0	3976.0	3963.2	3977.6	3977.6
30°	3825.6	3929.6	4054.4	4083.2	4140.8	4208.0	4257.6	4264.0	4265.6	4296.0	4340.8
32.5°	4160.0	4259.2	4398.4	4430.4	4480.0	4544.0	4600.0	4593.6	4608.0	4673.6	4732.8
35°	4646.4	4747.2	4838.4	4881.6	4904.0	4961.6	4982.4	5017.6	5060.8	5142.4	5134.4
37.5°	5366.4	5456.0	5468.8	5496.0	5468.8	5480.0	5496.0	5537.6	5652.8	5726.4	5608.0
40°	6233.6	6382.4	6368.0	6336.0	6275.2	6193.6	6222.4	6286.4	6411.2	6347.2	6028.8
42.5°	7051.2	7204.8	7176.0	7139.2	7004.8	6974.4	6971.2	7024.0	7091.2	6908.8	6358.4
45°	7856.0	8012.8	7963.2	7942.4	7852.8	7787.2	7841.6	7844.8	7827.2	7436.8	6646.4
47.5°	8686.4	8830.4	8798.4	8816.0	8723.2	8680.0	8684.8	8662.4	8497.6	7884.8	6870.4
50°	9356.8	9550.4	9569.6	9529.6	9480.0	9414.4	9582.4	9521.6	9155.2	8320.0	7086.4
52.5°	9878.4	10139.2	10238.4	10212.8	10172.8	10180.8	10496.0	10564.8	9958.4	8868.8	7324.8
55°	10496.0	10907.2	11068.8	11164.8	11123.2	11283.2	12004.8	12040.0	11075.2	9585.6	7635.2
57.5°	11387.2	11976.0	12486.4	12622.4	12753.6	13273.6	14444.8	14088.0	12524.8	10670.4	8028.8
60°	12742.4	14032.0	14860.8	15296.0	15603.2	16329.6	17443.2	16539.2	14331.2	11961.6	8523.2
62.5°	14640.0	16524.8	17910.4	18347.2	18473.6	18891.2	19697.6	17968.0	15315.2	12540.8	8566.4
65°	16052.8	18313.6	19972.8	20196.8	20046.4	20054.4	20265.6	17892.8	14948.8	12035.2	7824.0
67°	15960.0	18491.2	20190.4	20484.8	20276.8	20003.2	19673.6	16873.6	13771.2	10976.0	6851.2
67.5°	15817.6	18320.0	20096.0	20406.4	20216.0	19904.0	19422.4	16478.4	13404.8	10646.4	6652.8
70°	13673.6	16158.4	18550.4	18987.2	19067.2	18782.4	17430.4	13894.4	10883.2	8660.8	5166.4
72.5°	10643.2	12856.0	15222.4	15601.6	15908.8	15088.0	12686.4	9596.8	7932.8	6241.6	3740.8
75°	7027.2	9278.4	10472.0	10528.0	10136.0	8616.0	6198.4	4806.4	4424.0	3668.8	2315.2
77.5°	3760.0	5456.0	5489.6	5083.2	4897.6	3651.2	1481.6	817.6	910.4	1033.6	921.6
80°	2804.8	3475.2	4027.2	4329.6	4419.2	3131.2	766.4	433.6	379.2	345.6	340.8
82.5°	2529.6	3356.8	3763.2	3928.0	3886.4	2576.0	430.4	291.2	241.6	262.4	299.2
85°	992.0	1792.0	2356.8	2281.6	1916.8	960.0	235.2	156.8	156.8	227.2	294.4
87.5°	203.2	368.0	499.2	476.8	428.8	185.6	115.2	94.4	96.0	184.0	278.4
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: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0	2616.0
2.5°	2598.4	2588.8	2582.4	2576.0	2569.6	2566.4	2561.6	2561.6	2552.0	2548.8	2545.6
5°	2609.6	2593.6	2582.4	2568.0	2556.8	2547.2	2534.4	2531.2	2520.0	2512.0	2508.8
7.5°	2657.6	2633.6	2609.6	2592.0	2576.0	2555.2	2540.8	2528.0	2516.8	2508.8	2499.2
10°	2748.8	2723.2	2689.6	2657.6	2636.8	2604.8	2582.4	2560.0	2547.2	2537.6	2524.8
12.5°	2883.2	2846.4	2806.4	2768.0	2732.8	2691.2	2668.8	2641.6	2625.6	2617.6	2608.0
15°	3020.8	2980.8	2931.2	2894.4	2854.4	2822.4	2801.6	2777.6	2764.8	2755.2	2748.8
17.5°	3161.6	3115.2	3080.0	3043.2	3024.0	3000.0	2972.8	2942.4	2905.6	2883.2	2852.8
20°	3305.6	3270.4	3249.6	3228.8	3206.4	3172.8	3118.4	3056.0	2987.2	2921.6	2859.2
22.5°	3473.6	3452.8	3449.6	3430.4	3384.0	3304.0	3203.2	3086.4	2969.6	2860.8	2776.0
25°	3710.4	3710.4	3694.4	3616.0	3507.2	3363.2	3193.6	3025.6	2870.4	2721.6	2609.6
27.5°	4008.0	3996.8	3918.4	3756.8	3561.6	3337.6	3110.4	2897.6	2699.2	2536.0	2392.0
30°	4336.0	4257.6	4089.6	3835.2	3542.4	3254.4	2976.0	2729.6	2496.0	2296.0	2126.4
32.5°	4676.8	4486.4	4184.0	3835.2	3475.2	3129.6	2808.0	2505.6	2238.4	2014.4	1812.8
35°	4985.6	4638.4	4206.4	3772.8	3344.0	2945.6	2572.8	2230.4	1910.4	1668.8	1448.0
37.5°	5265.6	4739.2	4182.4	3651.2	3153.6	2686.4	2249.6	1872.0	1510.4	1276.8	1088.0
40°	5448.0	4760.0	4083.2	3460.8	2881.6	2336.0	1852.8	1430.4	1144.0	931.2	804.8
42.5°	5561.6	4720.0	3923.2	3200.0	2515.2	1896.0	1390.4	1025.6	812.8	694.4	646.4
45°	5625.6	4616.0	3686.4	2843.2	2072.0	1441.6	987.2	740.8	625.6	584.0	568.0
47.5°	5622.4	4448.0	3390.4	2430.4	1582.4	1004.8	699.2	577.6	545.6	532.8	529.6
50°	5588.8	4241.6	3043.2	1982.4	1142.4	700.8	553.6	518.4	510.4	502.4	499.2
52.5°	5542.4	3985.6	2659.2	1545.6	811.2	560.0	502.4	492.8	486.4	478.4	475.2
55°	5456.0	3670.4	2243.2	1163.2	635.2	505.6	484.8	481.6	473.6	462.4	456.0
57.5°	5350.4	3350.4	1844.8	908.8	561.6	492.8	481.6	476.8	465.6	452.8	440.0
60°	5312.0	3086.4	1532.8	766.4	544.0	497.6	489.6	483.2	467.2	448.0	433.6
62.5°	5072.0	2788.8	1308.8	710.4	553.6	518.4	515.2	505.6	481.6	459.2	436.8
65°	4451.2	2358.4	1108.8	672.0	572.8	553.6	556.8	542.4	518.4	488.0	448.0
67°	3764.8	1923.2	923.2	635.2	587.2	590.4	601.6	590.4	560.0	516.8	462.4
67.5°	3582.4	1812.8	876.8	624.0	590.4	600.0	612.8	604.8	574.4	524.8	468.8
70°	2662.4	1276.8	654.4	564.8	590.4	628.8	657.6	665.6	632.0	563.2	481.6
72.5°	1875.2	824.0	502.4	489.6	536.0	587.2	641.6	668.8	630.4	555.2	464.0
75°	1126.4	515.2	408.0	416.0	451.2	504.0	547.2	558.4	510.4	462.4	401.6
77.5°	521.6	342.4	320.0	331.2	364.8	388.8	388.8	366.4	329.6	300.8	288.0
80°	307.2	280.0	278.4	299.2	321.6	304.0	276.8	246.4	227.2	217.6	212.8
82.5°	288.0	299.2	318.4	323.2	305.6	262.4	228.8	198.4	188.8	184.0	179.2
85°	339.2	363.2	331.2	305.6	270.4	220.8	179.2	153.6	148.8	144.0	137.6
87.5°	313.6	299.2	260.8	224.0	185.6	134.4	97.6	88.0	94.4	92.8	89.6
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: P158480

CATALOG NUMBER: VST-E08-LED-E-U-SL3

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	2616.0	2616.0	2616.0	2616.0	2616.0
2.5°	2547.2	2547.2	2540.8	2537.6	2545.6
5°	2502.4	2504.0	2499.2	2497.6	2499.2
7.5°	2492.8	2491.2	2488.0	2484.8	2488.0
10°	2521.6	2520.0	2515.2	2518.4	2513.6
12.5°	2608.0	2617.6	2616.0	2619.2	2625.6
15°	2748.8	2747.2	2742.4	2745.6	2750.4
17.5°	2828.8	2816.0	2804.8	2800.0	2800.0
20°	2809.6	2772.8	2753.6	2742.4	2739.2
22.5°	2696.0	2643.2	2603.2	2593.6	2585.6
25°	2510.4	2444.8	2393.6	2382.4	2361.6
27.5°	2294.4	2206.4	2145.6	2132.8	2121.6
30°	2011.2	1910.4	1840.0	1795.2	1809.6
32.5°	1665.6	1569.6	1488.0	1416.0	1404.8
35°	1286.4	1180.8	1108.8	1076.8	1056.0
37.5°	960.0	872.0	824.0	793.6	795.2
40°	734.4	688.0	662.4	641.6	643.2
42.5°	612.8	592.0	585.6	576.0	571.2
45°	555.2	548.8	550.4	540.8	537.6
47.5°	523.2	518.4	520.0	513.6	512.0
50°	497.6	494.4	496.0	491.2	489.6
52.5°	472.0	473.6	472.0	468.8	468.8
55°	449.6	448.0	451.2	446.4	446.4
57.5°	432.0	430.4	430.4	428.8	428.8
60°	422.4	416.0	414.4	414.4	416.0
62.5°	417.6	406.4	404.8	404.8	406.4
65°	419.2	401.6	395.2	393.6	392.0
67°	420.8	395.2	382.4	376.0	374.4
67.5°	422.4	392.0	377.6	371.2	368.0
70°	412.8	369.6	348.8	337.6	334.4
72.5°	388.8	342.4	316.8	302.4	299.2
75°	345.6	310.4	288.0	272.0	265.6
77.5°	267.2	251.2	243.2	233.6	230.4
80°	208.0	200.0	196.8	190.4	188.8
82.5°	172.8	164.8	160.0	152.0	147.2
85°	134.4	124.8	121.6	115.2	112.0
87.5°	88.0	83.2	81.6	73.6	70.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)