

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: P159370

Luminaire Tested: **VST-E09-LED-E-U-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159370
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33705)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E09-LED-E-U-T2
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (189) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27780.4 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B4 - U0 - G4

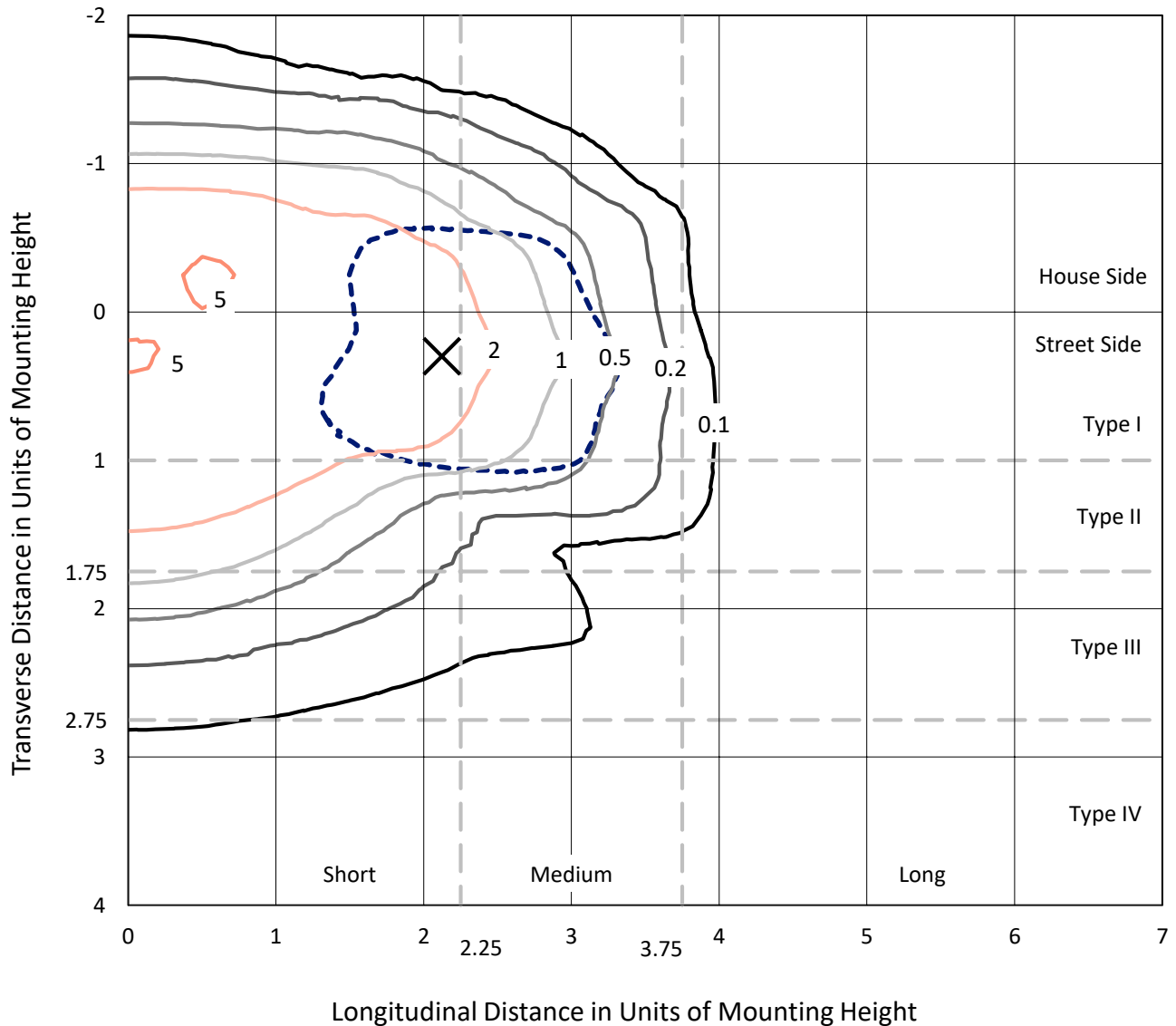
Input Watts (W): 225.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

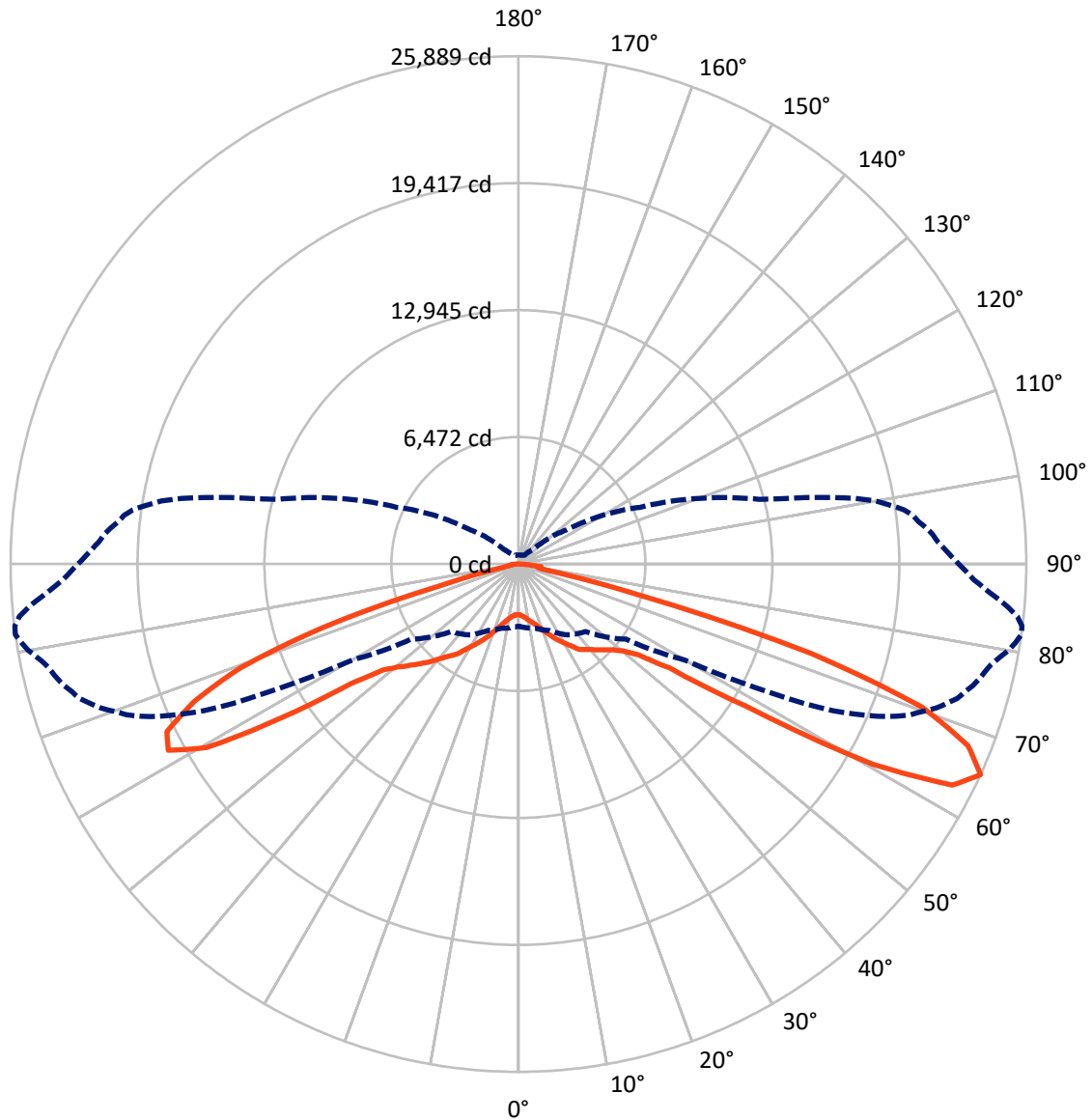
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



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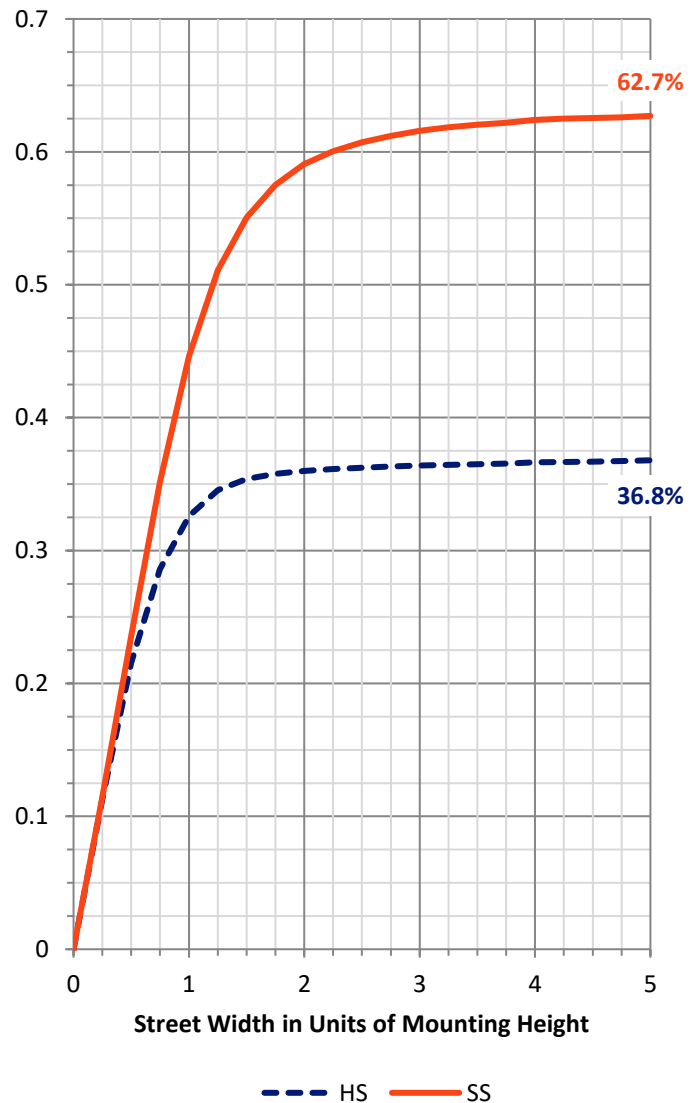
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10343.6	0.0	10343.6
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	17436.9	0.0	17436.9
	% Fixture	62.8	0.0	62.8
Total	Lumens	27780.4	0.0	27780.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.7	0.9
10°-20°	919.5	3.3
20°-30°	1821.9	6.6
30°-40°	3123.1	11.2
40°-50°	4691.6	16.9
50°-60°	6518.2	23.5
60°-70°	7436.3	26.8
70°-80°	2561.7	9.2
80°-90°	446.5	1.6
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°	27780.4	100.0
0°-180°	27780.4	100.0

Coefficient of Utilization



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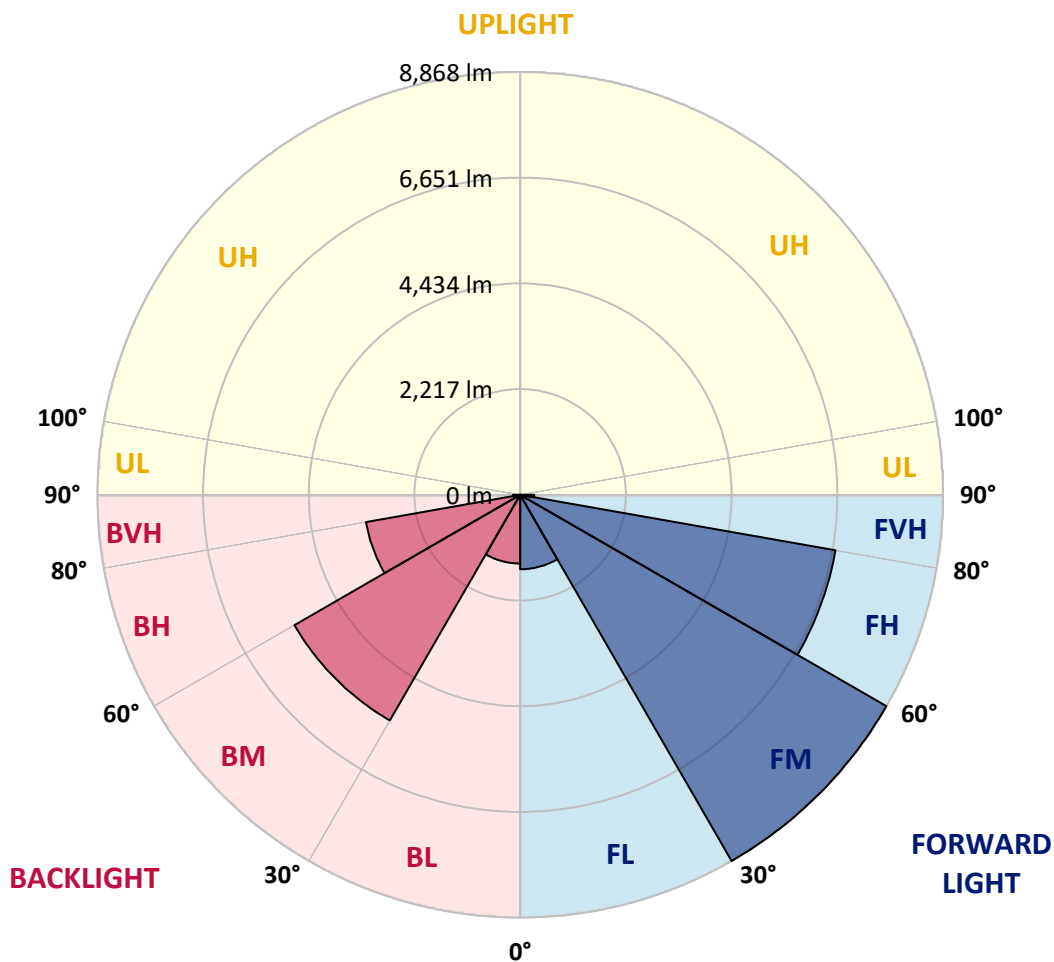
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1560.7	5.6			
FM (30°-60°)	8868.1	31.9			
FH (60°-80°)	6714.2	24.2			G3/7500
FVH (80°-90°)	293.9	1.1			G3/500
BL (0°-30°)	1442.3	5.2	B3/2500		
BM (30°-60°)	5464.9	19.7	B4/8500		
BH (60°-80°)	3283.8	11.8	B4/5000		G4/5000
BVH (80°-90°)	152.6	0.5			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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8
2.5°	2725.2	2727.0	2725.2	2719.8	2718.0	2701.8	2683.8	2674.8	2673.0	2665.8	2667.6
5°	2894.4	2889.0	2881.8	2872.8	2863.8	2836.8	2806.2	2790.0	2784.6	2779.2	2772.0
7.5°	3045.6	3049.2	3045.6	3033.0	3009.6	2975.4	2935.8	2910.6	2908.8	2903.4	2898.0
10°	3240.0	3249.0	3227.4	3205.8	3173.4	3121.2	3076.2	3043.8	3038.4	3031.2	3027.6
12.5°	3450.6	3452.4	3445.2	3396.6	3342.6	3270.6	3205.8	3173.4	3166.2	3157.2	3153.6
15°	3675.6	3677.4	3637.8	3591.0	3508.2	3421.8	3331.8	3295.8	3286.8	3288.6	3274.2
17.5°	3853.8	3857.4	3819.6	3760.2	3661.2	3558.6	3461.4	3432.6	3427.2	3429.0	3421.8
20°	3931.2	3936.6	3913.2	3868.2	3774.6	3684.6	3614.4	3596.4	3594.6	3591.0	3605.4
22.5°	3927.6	3929.4	3920.4	3902.4	3846.6	3794.4	3785.4	3796.2	3794.4	3798.0	3810.6
25°	3895.2	3900.6	3898.8	3906.0	3897.0	3916.8	3958.2	3996.0	4001.4	4008.6	4032.0
27.5°	3978.0	3988.8	3976.2	3983.4	3997.8	4064.4	4149.0	4206.6	4217.4	4237.2	4257.0
30°	4302.0	4287.6	4271.4	4253.4	4262.4	4303.8	4399.2	4449.6	4455.0	4469.4	4496.4
32.5°	4782.6	4766.4	4752.0	4723.2	4716.0	4698.0	4730.4	4743.0	4741.2	4755.6	4762.8
35°	5324.4	5326.2	5322.6	5344.2	5362.2	5270.4	5157.0	5126.4	5139.0	5122.8	5126.4
37.5°	5787.0	5792.4	5887.8	6006.6	6040.8	5983.2	5734.8	5612.4	5571.0	5565.6	5524.2
40°	6300.0	6300.0	6444.0	6589.8	6685.2	6757.2	6462.0	6246.0	6157.8	6132.6	6030.0
42.5°	6863.4	6834.6	6966.0	7126.2	7302.6	7466.4	7313.4	7070.4	6944.4	6899.4	6719.4
45°	7326.0	7308.0	7372.8	7522.2	7808.4	8128.8	8150.4	8026.2	7950.6	7857.0	7691.4
47.5°	7610.4	7601.4	7639.2	7801.2	8159.4	8677.8	8967.6	9030.6	8985.6	8913.6	8753.4
50°	7722.0	7709.4	7736.4	7916.4	8317.8	9001.8	9642.6	9939.6	9961.2	9977.4	9927.0
52.5°	7682.4	7666.2	7722.0	7873.2	8290.8	9115.2	10170.0	10740.6	10836.0	10917.0	11082.6
55°	7302.6	7277.4	7428.6	7713.0	8173.8	9073.8	10555.2	11511.0	11712.6	11928.6	12295.8
57.5°	6721.2	6699.6	6917.4	7308.0	7966.8	8960.4	10814.4	12484.8	12938.4	13327.2	14369.4
60°	6161.4	6143.4	6271.2	6649.2	7295.4	8407.8	10494.0	12812.4	13573.8	14412.6	16315.2
62.5°	5160.6	5112.0	5283.0	5601.6	6010.2	6955.2	9095.4	12083.4	13257.0	14490.0	17069.4
65°	3171.6	3241.8	3389.4	3742.2	4411.8	4861.8	6679.8	9775.8	11323.8	12870.0	16216.2
67.5°	2014.2	2034.0	2143.8	2388.6	2907.0	3358.8	4048.2	6134.4	7327.8	8848.8	12731.4
70°	1726.2	1738.8	1832.4	2088.0	2446.2	3002.4	3063.6	3204.0	3632.4	4600.8	7484.4
72.5°	1360.8	1382.4	1456.2	1677.6	2109.6	2707.2	3781.8	2532.6	2446.2	2527.2	3652.2
75°	810.0	835.2	896.4	1017.0	1355.4	2070.0	3961.8	2946.6	2746.8	2590.2	2520.0
77.5°	428.4	410.4	451.8	522.0	696.6	1103.4	2977.2	3610.8	3470.4	3283.2	2885.4
80°	212.4	219.6	232.2	246.6	311.4	448.2	1488.6	3735.0	4140.0	4320.0	3967.2
82.5°	84.6	95.4	135.0	144.0	171.0	190.8	478.8	2070.0	2964.6	4021.2	5250.6
85°	43.2	41.4	72.0	86.4	100.8	90.0	169.2	772.2	1389.6	2165.4	3508.2
87.5°	5.4	7.2	16.2	21.6	30.6	28.8	48.6	167.4	266.4	378.0	531.0
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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CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8
2.5°	2658.6	2656.8	2656.8	2649.6	2649.6	2651.4	2646.0	2642.4	2642.4	2644.2	2637.0
5°	2766.6	2761.2	2761.2	2754.0	2745.0	2745.0	2737.8	2736.0	2732.4	2725.2	2719.8
7.5°	2892.6	2887.2	2878.2	2872.8	2869.2	2863.8	2854.8	2851.2	2844.0	2836.8	2829.6
10°	3022.2	3015.0	3011.4	3002.4	2998.8	2988.0	2982.6	2984.4	2970.0	2964.6	2966.4
12.5°	3151.8	3144.6	3132.0	3128.4	3126.6	3115.8	3110.4	3106.8	3096.0	3094.2	3088.8
15°	3267.0	3270.6	3265.2	3256.2	3249.0	3247.2	3241.8	3238.2	3231.0	3223.8	3216.6
17.5°	3416.4	3421.8	3414.6	3402.0	3402.0	3400.2	3402.0	3400.2	3387.6	3393.0	3389.4
20°	3607.2	3610.8	3592.8	3598.2	3601.8	3600.0	3605.4	3610.8	3607.2	3607.2	3612.6
22.5°	3826.8	3832.2	3821.4	3828.6	3839.4	3830.4	3846.6	3844.8	3848.4	3853.8	3855.6
25°	4051.8	4062.6	4053.6	4073.4	4066.2	4073.4	4093.2	4087.8	4096.8	4111.2	4116.6
27.5°	4276.8	4284.0	4285.8	4298.4	4311.0	4321.8	4347.0	4347.0	4354.2	4379.4	4379.4
30°	4512.6	4519.8	4527.0	4545.0	4552.2	4572.0	4597.2	4604.4	4600.8	4636.8	4647.6
32.5°	4784.4	4791.6	4804.2	4825.8	4834.8	4854.6	4854.6	4874.4	4888.8	4919.4	4921.2
35°	5146.2	5151.6	5146.2	5144.4	5157.0	5184.0	5185.8	5214.6	5227.2	5257.8	5266.8
37.5°	5508.0	5506.2	5482.8	5457.6	5459.4	5448.6	5441.4	5454.0	5459.4	5461.2	5481.0
40°	5995.8	5949.0	5913.0	5850.0	5821.2	5776.2	5749.2	5747.4	5718.6	5715.0	5720.4
42.5°	6634.8	6580.8	6496.2	6390.0	6309.0	6226.2	6165.0	6129.0	6066.0	6033.6	6006.6
45°	7527.6	7394.4	7293.6	7167.6	7011.0	6867.0	6715.8	6647.4	6526.8	6453.0	6370.2
47.5°	8618.4	8487.0	8332.2	8202.6	7997.4	7797.6	7590.6	7408.8	7198.2	7030.8	6894.0
50°	9802.8	9725.4	9613.8	9493.2	9228.6	9097.2	8836.2	8589.6	8362.8	8064.0	7803.0
52.5°	11017.8	11062.8	11037.6	10994.4	10827.0	10776.6	10551.6	10251.0	10022.4	9817.2	9363.6
55°	12515.4	12569.4	12677.4	12740.4	12720.6	12848.4	12792.6	12558.6	12466.8	12371.4	12049.2
57.5°	14806.8	15192.0	15604.2	15966.0	16050.6	16504.2	16407.0	16641.0	16806.6	16687.8	16583.4
60°	17249.4	18027.0	18727.2	19459.8	20055.6	20502.0	21092.4	21490.2	21740.4	22190.4	22226.4
62.5°	18234.0	19290.6	20179.8	21029.4	21736.8	22356.0	22888.8	23437.8	23887.8	24294.6	24588.0
65°	17694.0	18797.4	19875.6	20737.8	21418.2	21951.0	22530.6	22966.2	23409.0	23670.0	23977.8
67.5°	14709.6	16171.2	17497.8	18469.8	19400.4	19942.2	20628.0	21056.4	21526.2	21801.6	21999.6
70°	9590.4	11493.0	13305.6	14779.8	16036.2	16668.0	17496.0	18081.0	18646.2	18660.6	18990.0
72.5°	5175.0	6766.2	8283.6	9790.2	11223.0	12063.6	12880.8	13591.8	14153.4	13914.0	14241.6
75°	2881.8	3627.0	4456.8	5362.2	6235.2	6715.8	7326.0	7329.6	7619.4	7164.0	7279.2
77.5°	2772.0	2737.8	2750.4	2775.6	2818.8	2727.0	2725.2	2669.4	2583.0	2426.4	2453.4
80°	3641.4	3205.8	2892.6	2401.2	1933.2	1576.8	1477.8	1501.2	1571.4	1711.8	1890.0
82.5°	5265.0	4897.8	4372.2	3598.2	2824.2	2178.0	1789.2	1587.6	1578.6	1719.0	1989.0
85°	3834.0	4055.4	4021.2	3357.0	2768.4	2248.2	1636.2	1382.4	1144.8	1089.0	1184.4
87.5°	565.2	468.0	527.4	441.0	320.4	248.4	217.8	174.6	167.4	171.0	187.2
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):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8
2.5°	2638.8	2631.6	2624.4	2629.8	2624.4	2622.6	2617.2	2613.6	2611.8	2611.8	2611.8
5°	2719.8	2710.8	2705.4	2703.6	2698.2	2692.8	2691.0	2682.0	2680.2	2680.2	2674.8
7.5°	2829.6	2822.4	2813.4	2808.0	2804.4	2795.4	2786.4	2784.6	2782.8	2775.6	2770.2
10°	2957.4	2946.6	2935.8	2935.8	2928.6	2926.8	2917.8	2905.2	2903.4	2892.6	2889.0
12.5°	3078.0	3074.4	3061.8	3058.2	3052.8	3047.4	3042.0	3036.6	3031.2	3022.2	3025.8
15°	3222.0	3213.0	3202.2	3204.0	3202.2	3195.0	3187.8	3182.4	3178.8	3175.2	3175.2
17.5°	3394.8	3391.2	3389.4	3380.4	3373.2	3378.6	3378.6	3378.6	3369.6	3371.4	3373.2
20°	3614.4	3618.0	3614.4	3607.2	3605.4	3610.8	3598.2	3618.0	3607.2	3600.0	3603.6
22.5°	3857.4	3870.0	3855.6	3857.4	3866.4	3870.0	3857.4	3873.6	3868.2	3857.4	3866.4
25°	4122.0	4131.0	4123.8	4122.0	4127.4	4140.0	4138.2	4136.4	4149.0	4138.2	4143.6
27.5°	4393.8	4399.2	4402.8	4408.2	4411.8	4410.0	4417.2	4417.2	4424.4	4411.8	4417.2
30°	4663.8	4663.8	4671.0	4678.2	4678.2	4678.2	4692.6	4694.4	4683.6	4687.2	4674.6
32.5°	4951.8	4953.6	4960.8	4960.8	4975.2	4977.0	4993.2	4971.6	4993.2	4975.2	4978.8
35°	5290.2	5313.6	5317.2	5335.2	5349.6	5355.0	5355.0	5356.8	5376.6	5362.2	5367.6
37.5°	5488.2	5493.6	5508.0	5517.0	5517.0	5524.2	5529.6	5524.2	5529.6	5527.8	5533.2
40°	5722.2	5716.8	5733.0	5736.6	5729.4	5738.4	5736.6	5731.2	5745.6	5734.8	5742.0
42.5°	6006.6	5976.0	5974.2	5988.6	5974.2	5981.4	5979.6	5967.0	5985.0	5990.4	5985.0
45°	6310.8	6294.6	6262.2	6262.2	6247.8	6242.4	6244.2	6242.4	6244.2	6265.8	6273.0
47.5°	6805.8	6706.8	6651.0	6598.8	6555.6	6553.8	6534.0	6544.8	6559.2	6595.2	6627.6
50°	7635.6	7407.0	7266.6	7137.0	7043.4	7011.0	6973.2	6969.6	6982.2	7023.6	7079.4
52.5°	9115.2	8798.4	8499.6	8222.4	7981.2	7795.8	7704.0	7655.4	7637.4	7678.8	7732.8
55°	11822.4	11224.8	10803.6	10522.8	9923.4	9669.6	9343.8	9194.4	9048.6	9063.0	9154.8
57.5°	16448.4	16126.2	15773.4	15282.0	14914.8	14472.0	13658.4	13204.8	13224.6	13330.8	12999.6
60°	22510.8	22185.0	22039.2	21592.8	21337.2	21159.0	20727.0	19974.6	19708.2	19657.8	19049.4
62.5°	24813.0	24890.4	25005.6	25131.6	25124.4	25201.8	24823.8	24579.0	24271.2	23871.6	23270.4
65°	24211.8	24408.0	24642.0	24980.4	25365.6	25650.0	25889.4	25860.6	25572.6	25039.8	24404.4
67.5°	22176.0	22370.4	22541.4	22995.0	23626.8	24204.6	24715.8	25063.2	24870.6	24429.6	23688.0
70°	19116.0	19256.4	19364.4	19758.6	20451.6	21157.2	21825.0	22408.2	22348.8	21814.2	21222.0
72.5°	13851.0	14191.2	14374.8	14347.8	14776.2	15566.4	15660.0	16158.6	16297.2	15721.2	14778.0
75°	6748.2	6753.6	6541.2	6471.0	6492.6	6629.4	6368.4	6384.6	6294.6	5886.0	5549.4
77.5°	2358.0	2293.2	2138.4	1954.8	1692.0	1445.4	1195.2	1087.2	1051.2	945.0	871.2
80°	2032.2	2127.6	2097.0	1945.8	1668.6	1330.2	993.6	736.2	628.2	590.4	554.4
82.5°	2307.6	2674.8	2908.8	2896.2	2516.4	1890.0	1179.0	676.8	482.4	423.0	388.8
85°	1287.0	1384.2	1411.2	1285.2	1067.4	729.0	406.8	286.2	243.0	221.4	199.8
87.5°	205.2	187.2	183.6	160.2	151.2	138.6	122.4	115.2	106.2	100.8	100.8
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-E09-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8
2.5°	2610.0	2608.2	2602.8	2597.4	2593.8	2592.0	2590.2	2586.6	2584.8	2583.0	2579.4
5°	2671.2	2667.6	2658.6	2649.6	2646.0	2640.6	2635.2	2631.6	2628.0	2626.2	2619.0
7.5°	2766.6	2763.0	2752.2	2745.0	2743.2	2728.8	2727.0	2721.6	2712.6	2710.8	2700.0
10°	2881.8	2880.0	2871.0	2865.6	2862.0	2854.8	2844.0	2835.0	2826.0	2826.0	2818.8
12.5°	3015.0	3007.8	3013.2	3000.6	2997.0	2989.8	2984.4	2982.6	2971.8	2962.8	2961.0
15°	3171.6	3162.6	3162.6	3159.0	3155.4	3148.2	3146.4	3148.2	3137.4	3141.0	3130.2
17.5°	3366.0	3369.6	3367.8	3367.8	3358.8	3358.8	3344.4	3362.4	3349.8	3358.8	3355.2
20°	3609.0	3610.8	3607.2	3612.6	3616.2	3614.4	3612.6	3610.8	3616.2	3623.4	3618.0
22.5°	3868.2	3868.2	3866.4	3886.2	3864.6	3880.8	3886.2	3875.4	3904.2	3900.6	3906.0
25°	4149.0	4149.0	4163.4	4179.6	4183.2	4170.6	4177.8	4168.8	4186.8	4201.2	4204.8
27.5°	4410.0	4433.4	4444.2	4433.4	4442.4	4462.2	4460.4	4460.4	4473.0	4469.4	4503.6
30°	4678.2	4692.6	4707.0	4699.8	4703.4	4728.6	4730.4	4732.2	4748.4	4771.8	4797.0
32.5°	4984.2	4998.6	4991.4	5014.8	5013.0	5043.6	5049.0	5054.4	5104.8	5095.8	5148.0
35°	5360.4	5374.8	5367.6	5392.8	5389.2	5400.0	5419.8	5441.4	5450.4	5502.6	5544.0
37.5°	5536.8	5536.8	5553.0	5581.8	5592.6	5610.6	5641.2	5668.2	5713.2	5769.0	5833.8
40°	5749.2	5754.6	5776.2	5806.8	5826.6	5868.0	5923.8	5961.6	6030.0	6091.2	6166.8
42.5°	6006.6	6030.0	6055.2	6096.6	6139.8	6204.6	6283.8	6332.4	6422.4	6501.6	6595.2
45°	6307.2	6330.6	6390.0	6465.6	6528.6	6600.6	6665.4	6780.6	6861.6	6944.4	7025.4
47.5°	6670.8	6739.2	6787.8	6877.8	6955.2	7050.6	7131.6	7239.6	7327.8	7428.6	7497.0
50°	7137.0	7221.6	7284.6	7401.6	7477.2	7583.4	7686.0	7767.0	7857.0	7956.0	8011.8
52.5°	7806.6	7893.0	7972.2	8118.0	8211.6	8283.6	8420.4	8521.2	8604.0	8676.0	8737.2
55°	9257.4	9232.2	9451.8	9734.4	9766.8	10027.8	10076.4	10161.0	10314.0	10335.6	10506.6
57.5°	13402.8	13273.2	13591.8	14005.8	13933.8	13802.4	14351.4	14385.6	14308.2	14515.2	14281.2
60°	19139.4	18912.6	18999.0	19112.4	18948.6	18871.2	18898.2	18975.6	18900.0	18817.2	18590.4
62.5°	22969.8	22620.6	22370.4	22159.8	21893.4	21700.8	21484.8	21218.4	21146.4	20844.0	20590.2
65°	23787.0	23243.4	22847.4	22449.6	22082.4	21742.2	21416.4	21187.8	20885.4	20527.2	20262.6
67.5°	22888.8	22215.6	21636.0	21058.2	20642.4	20142.0	19897.2	19524.6	19152.0	18741.6	18498.6
70°	20278.8	19576.8	18847.8	18282.6	17717.4	17098.2	16977.6	16536.6	16322.4	15762.6	15665.4
72.5°	13996.8	13528.8	13203.0	12504.6	12160.8	11844.0	11743.2	11334.6	11377.8	10764.0	10987.2
75°	4977.0	4910.4	4815.0	4420.8	4350.6	4228.2	4195.8	4167.0	4458.6	4053.6	4347.0
77.5°	855.0	849.6	801.0	777.6	822.6	793.8	801.0	786.6	871.2	883.8	864.0
80°	531.0	516.6	500.4	489.6	491.4	480.6	482.4	486.0	491.4	489.6	495.0
82.5°	363.6	351.0	343.8	336.6	347.4	351.0	360.0	369.0	383.4	392.4	403.2
85°	198.0	181.8	181.8	180.0	194.4	205.2	219.6	237.6	262.8	284.4	307.8
87.5°	100.8	97.2	99.0	102.6	115.2	124.2	142.2	158.4	180.0	203.4	225.0
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: P159370

CATALOG NUMBER: VST-E09-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8	2584.8
2.5°	2577.6	2577.6	2575.8	2575.8	2574.0	2572.2	2570.4	2565.0	2545.2	2527.2	2514.6
5°	2617.2	2611.8	2610.0	2604.6	2602.8	2599.2	2593.8	2588.4	2552.4	2520.0	2496.6
7.5°	2698.2	2691.0	2687.4	2682.0	2676.6	2669.4	2662.2	2656.8	2613.6	2575.8	2547.0
10°	2804.4	2800.8	2799.0	2791.8	2791.8	2781.0	2779.2	2766.6	2719.8	2685.6	2660.4
12.5°	2952.0	2944.8	2943.0	2934.0	2937.6	2934.0	2930.4	2923.2	2889.0	2849.4	2815.2
15°	3135.6	3135.6	3126.6	3119.4	3121.2	3117.6	3124.8	3115.8	3094.2	3058.2	3002.4
17.5°	3357.0	3353.4	3357.0	3351.6	3355.2	3358.8	3349.8	3351.6	3340.8	3295.8	3213.0
20°	3614.4	3609.0	3630.6	3621.6	3641.4	3623.4	3627.0	3632.4	3632.4	3573.0	3461.4
22.5°	3909.6	3906.0	3906.0	3924.0	3931.2	3933.0	3940.2	3945.6	3960.0	3884.4	3706.2
25°	4204.8	4217.4	4219.2	4242.6	4253.4	4253.4	4258.8	4278.6	4321.8	4217.4	3987.0
27.5°	4505.4	4536.0	4543.2	4559.4	4575.6	4591.8	4604.4	4618.8	4689.0	4575.6	4275.0
30°	4806.0	4840.2	4865.4	4883.4	4903.2	4942.8	4950.0	4978.8	5095.8	4957.2	4548.6
32.5°	5158.8	5207.4	5239.8	5263.2	5293.8	5331.6	5353.2	5389.2	5502.6	5275.8	4748.4
35°	5580.0	5608.8	5655.6	5695.2	5713.2	5778.0	5812.2	5821.2	5907.6	5551.2	4896.0
37.5°	5871.6	5920.2	6001.2	6057.0	6089.4	6125.4	6183.0	6220.8	6303.6	5801.4	4969.8
40°	6242.4	6316.2	6381.0	6463.8	6516.0	6543.0	6600.6	6631.2	6642.0	6015.6	4946.4
42.5°	6694.2	6760.8	6847.2	6913.8	6953.4	6984.0	7030.8	7043.4	6903.0	6116.4	4820.4
45°	7119.0	7221.6	7295.4	7344.0	7372.8	7389.0	7417.8	7419.6	7119.0	6066.0	4604.4
47.5°	7576.2	7650.0	7718.4	7752.6	7749.0	7752.6	7741.8	7734.6	7227.0	5891.4	4327.2
50°	8082.0	8130.6	8159.4	8175.6	8184.6	8150.4	8101.8	8069.4	7236.0	5643.0	4046.4
52.5°	8760.6	8821.8	8816.4	8814.6	8742.6	8710.2	8580.6	8514.0	7183.8	5351.4	3729.6
55°	10479.6	10420.2	10303.2	10360.8	10067.4	9914.4	9712.8	9525.6	7252.2	5074.2	3362.4
57.5°	14374.8	14398.2	14065.2	13887.0	13392.0	12772.8	12274.2	11790.0	7867.8	4905.0	2883.6
60°	18439.2	18133.2	17710.2	17065.8	16428.6	15508.8	14621.4	13782.6	8481.6	4728.6	2316.6
62.5°	20214.0	19778.4	19139.4	18306.0	17305.2	16180.2	15075.0	14052.6	8184.6	4158.0	1684.8
65°	19854.0	19188.0	18482.4	17506.8	16290.0	15057.0	13766.4	12722.4	6847.2	3101.4	1038.6
67.5°	17971.2	17406.0	16660.8	15503.4	14202.0	12918.6	11736.0	10566.0	5086.8	1933.2	581.4
70°	15168.6	14616.0	13860.0	12675.6	11376.0	10148.4	8895.6	7941.6	3241.8	932.4	419.4
72.5°	10522.8	10074.6	9540.0	8695.8	7556.4	6440.4	5592.6	4860.0	1796.4	495.0	383.4
75°	4273.2	4275.0	4177.8	3821.4	3229.2	2784.6	2374.2	2014.2	750.6	421.2	378.0
77.5°	968.4	984.6	1076.4	1020.6	919.8	860.4	770.4	680.4	457.2	433.8	381.6
80°	489.6	491.4	486.0	487.8	482.4	484.2	477.0	471.6	428.4	446.4	381.6
82.5°	408.6	417.6	415.8	415.8	417.6	417.6	417.6	415.8	444.6	469.8	369.0
85°	324.0	342.0	356.4	370.8	387.0	397.8	403.2	408.6	432.0	462.6	334.8
87.5°	244.8	266.4	284.4	298.8	324.0	324.0	342.0	354.6	354.6	361.8	176.4
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: P159370

CATALOG NUMBER: VST-E09-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	2584.8	2584.8	2584.8	2584.8	2584.8
2.5°	2496.6	2489.4	2482.2	2478.6	2471.4
5°	2478.6	2464.2	2455.2	2455.2	2448.0
7.5°	2530.8	2525.4	2512.8	2505.6	2512.8
10°	2642.4	2633.4	2619.0	2608.2	2613.6
12.5°	2791.8	2755.8	2727.0	2714.4	2705.4
15°	2946.6	2874.6	2817.0	2784.6	2775.6
17.5°	3112.2	2986.2	2899.8	2851.2	2842.2
20°	3281.4	3124.8	3002.4	2939.4	2937.6
22.5°	3484.8	3276.0	3119.4	3036.6	3031.2
25°	3699.0	3411.0	3204.0	3097.8	3087.0
27.5°	3884.4	3519.0	3256.2	3130.2	3119.4
30°	4039.2	3600.0	3299.4	3153.6	3139.2
32.5°	4150.8	3646.8	3317.4	3160.8	3144.6
35°	4186.8	3628.8	3267.0	3096.0	3078.0
37.5°	4138.2	3511.8	3126.6	2937.6	2916.0
40°	3992.4	3306.6	2898.0	2703.6	2676.6
42.5°	3769.2	3054.6	2622.6	2437.2	2403.0
45°	3493.8	2770.2	2349.0	2142.0	2125.8
47.5°	3205.8	2471.4	2041.2	1854.0	1834.2
50°	2894.4	2125.8	1740.6	1537.2	1537.2
52.5°	2523.6	1789.2	1391.4	1238.4	1225.8
55°	2097.0	1409.4	1108.8	991.8	975.6
57.5°	1638.0	1083.6	885.6	817.2	799.2
60°	1204.2	813.6	712.8	675.0	667.8
62.5°	817.2	619.2	574.2	558.0	556.2
65°	552.6	482.4	469.8	464.4	466.2
67.5°	424.8	401.4	396.0	394.2	394.2
70°	369.0	354.6	349.2	351.0	349.2
72.5°	347.4	327.6	329.4	333.0	331.2
75°	340.2	315.0	322.2	324.0	316.8
77.5°	334.8	300.6	318.6	324.0	304.2
80°	324.0	288.0	331.2	333.0	298.8
82.5°	297.0	255.6	331.2	306.0	270.0
85°	252.0	194.4	374.4	266.4	199.8
87.5°	160.2	115.2	253.8	181.8	120.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)