

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: P159381

Luminaire Tested: **VST-E10-LED-E-U-T2-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159381
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-E10-LED-E-U-T2-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (210) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31673 lumens
Efficiency: N/A
Efficacy: 127.9 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): 247.7
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

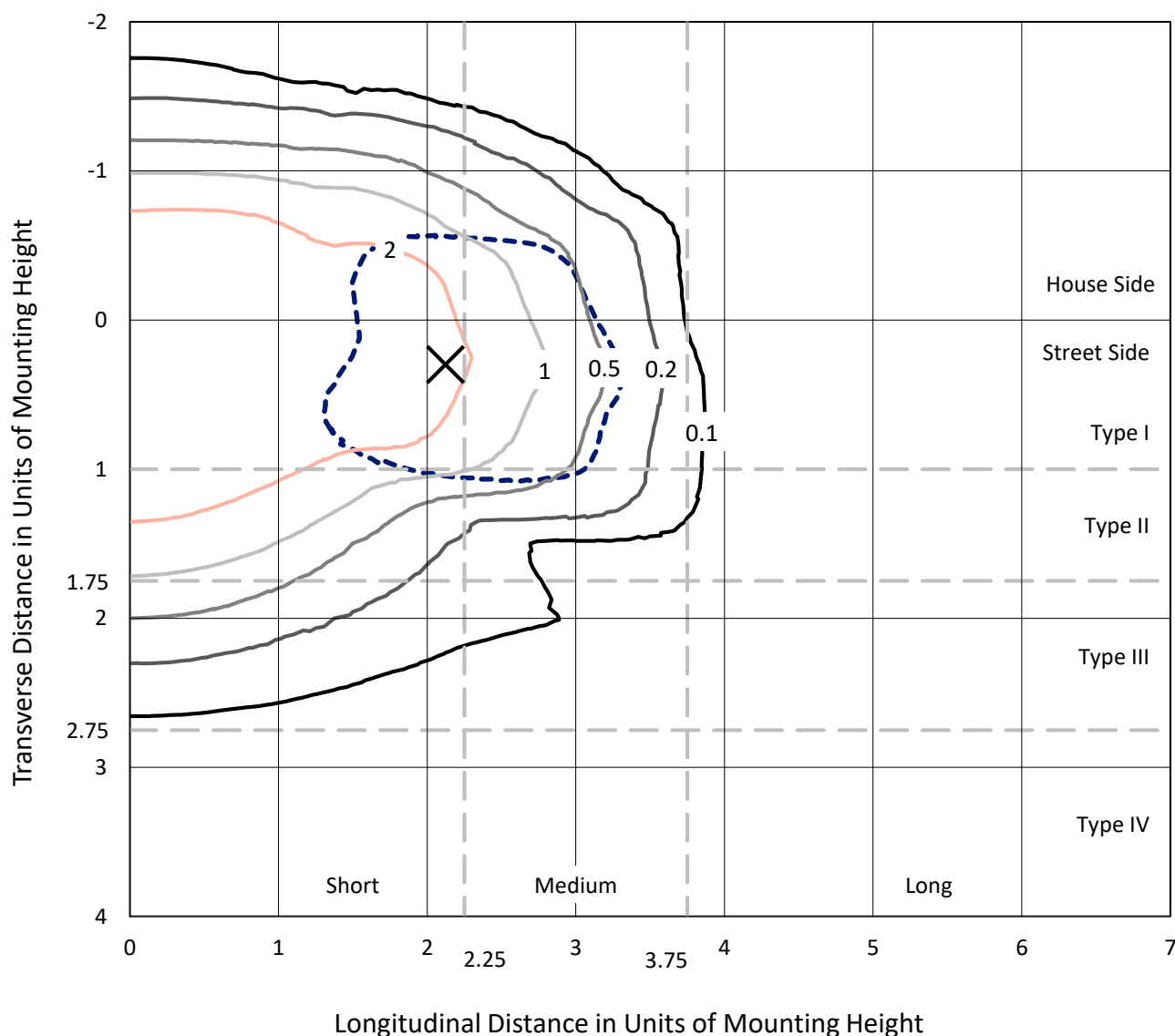


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

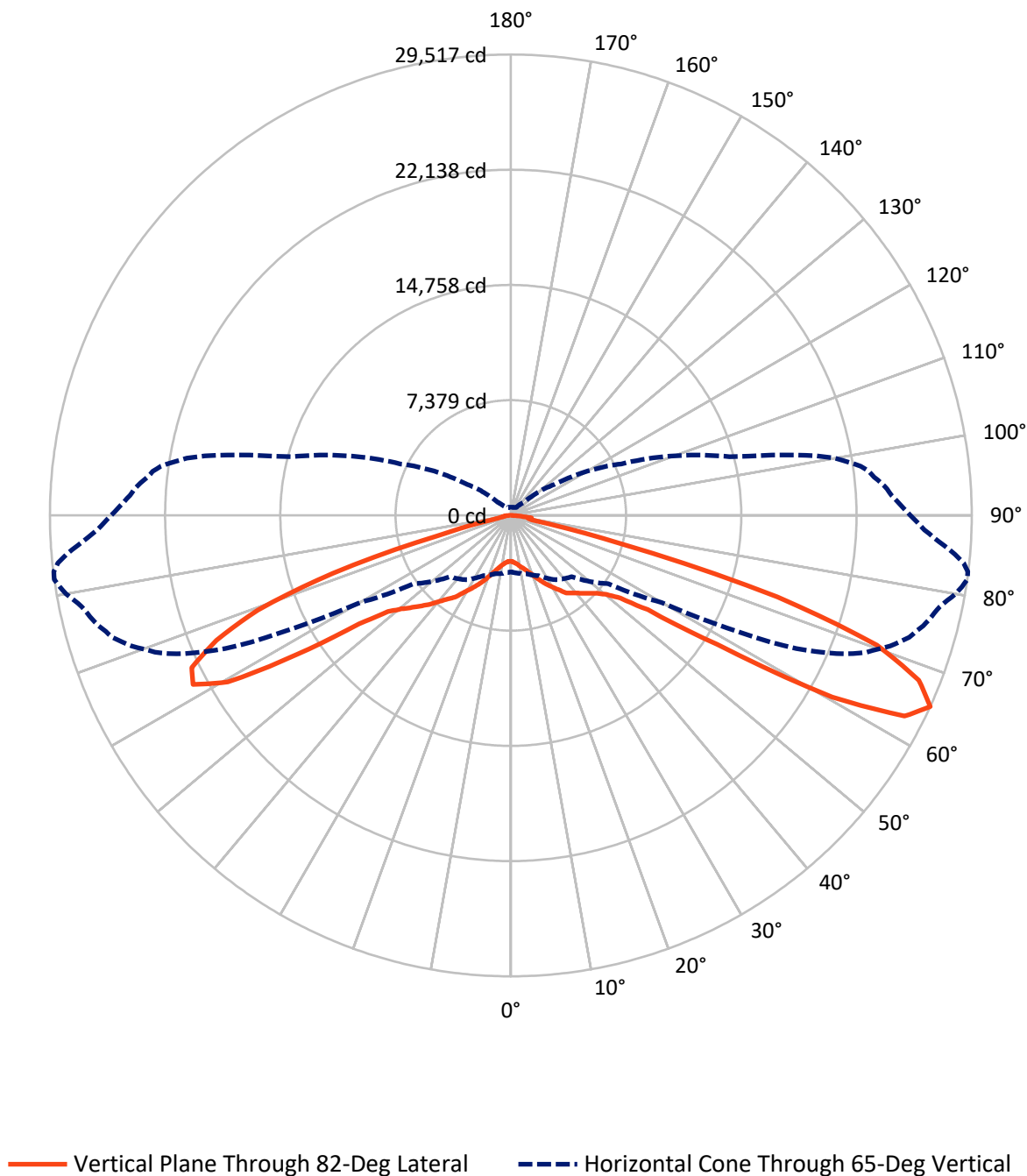


Based on 30 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11792.9	0.0	11792.9
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	19880.1	0.0	19880.1
	% Fixture	62.8	0.0	62.8
Total	Lumens	31673.0	0.0	31673.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.3	0.9
10°-20°	1048.3	3.3
20°-30°	2077.1	6.6
30°-40°	3560.7	11.2
40°-50°	5349.0	16.9
50°-60°	7431.5	23.5
60°-70°	8478.2	26.8
70°-80°	2920.7	9.2
80°-90°	509.0	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°	31673.0	100.0
0°-180°	31673.0	100.0

Coefficient of Utilization



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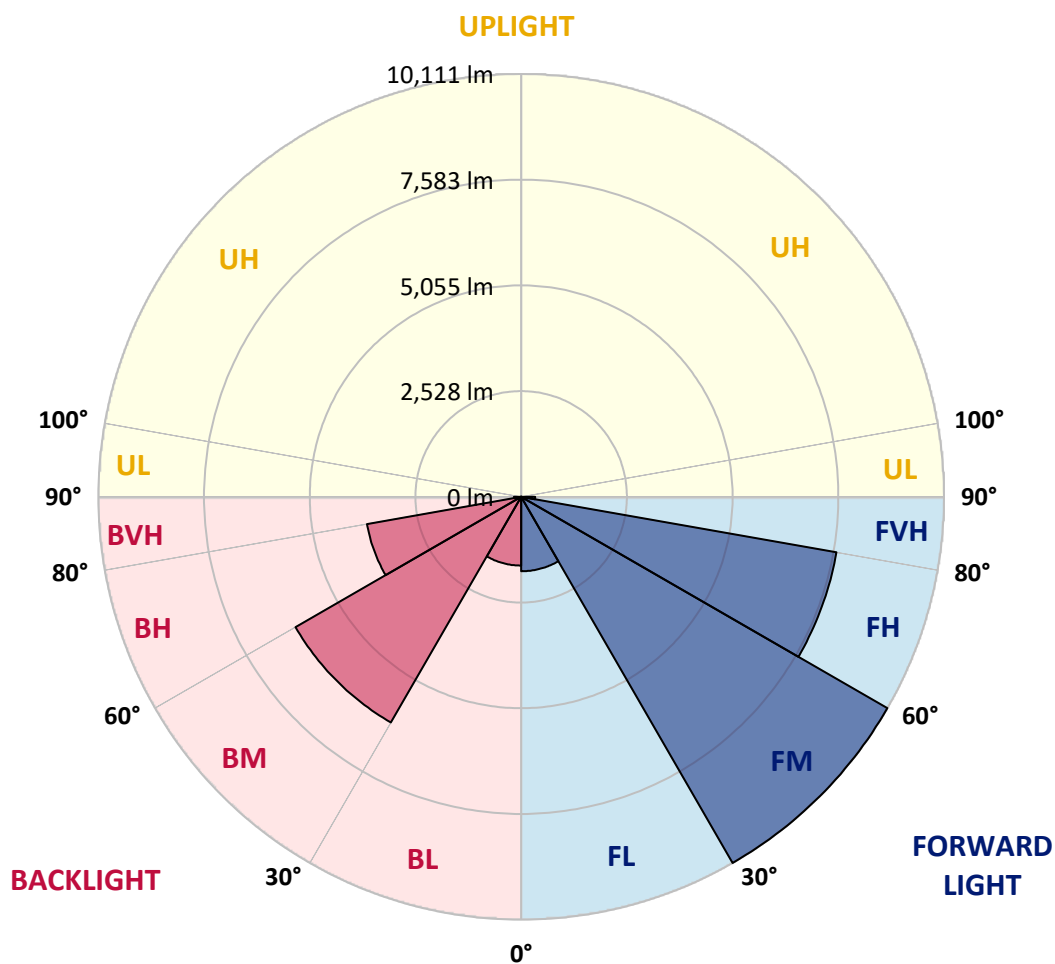
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1779.3	5.6			
FM	(30°-60°)	10110.7	31.9			
FH	(60°-80°)	7655.0	24.2			G4/12000
FVH	(80°-90°)	335.1	1.1			G3/500
BL	(0°-30°)	1644.4	5.2	B3/2500		
BM	(30°-60°)	6230.6	19.7	B4/8500		
BH	(60°-80°)	3743.9	11.8	B4/5000		G4/5000
BVH	(80°-90°)	173.9	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°	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0
2.5°	3107.0	3109.1	3107.0	3100.9	3098.8	3080.4	3059.8	3049.6	3047.5	3039.3	3041.4
5°	3300.0	3293.8	3285.6	3275.3	3265.1	3234.3	3199.4	3180.9	3174.8	3168.6	3160.4
7.5°	3472.3	3476.4	3472.3	3458.0	3431.3	3392.3	3347.2	3318.4	3316.4	3310.2	3304.1
10°	3694.0	3704.2	3679.6	3655.0	3618.0	3558.5	3507.2	3470.3	3464.1	3455.9	3451.8
12.5°	3934.1	3936.1	3927.9	3872.5	3811.0	3728.9	3655.0	3618.0	3609.8	3599.6	3595.5
15°	4190.6	4192.7	4147.5	4094.2	3999.8	3901.3	3798.6	3757.6	3747.3	3749.4	3733.0
17.5°	4393.8	4397.9	4354.8	4287.1	4174.2	4057.2	3946.4	3913.6	3907.4	3909.5	3901.3
20°	4482.0	4488.2	4461.5	4410.2	4303.5	4200.9	4120.8	4100.3	4098.3	4094.2	4110.6
22.5°	4477.9	4480.0	4469.7	4449.2	4385.6	4326.1	4315.8	4328.1	4326.1	4330.2	4344.5
25°	4441.0	4447.1	4445.1	4453.3	4443.0	4465.6	4512.8	4555.9	4562.1	4570.3	4597.0
27.5°	4535.4	4547.7	4533.3	4541.5	4558.0	4633.9	4730.3	4796.0	4808.3	4830.9	4853.5
30°	4904.8	4888.4	4869.9	4849.4	4859.6	4906.8	5015.6	5073.1	5079.2	5095.6	5126.4
32.5°	5452.7	5434.3	5417.8	5385.0	5376.8	5356.3	5393.2	5407.6	5405.5	5421.9	5430.2
35°	6070.4	6072.5	6068.4	6093.0	6113.5	6008.9	5879.6	5844.7	5859.1	5840.6	5844.7
37.5°	6597.9	6604.0	6712.8	6848.2	6887.2	6821.5	6538.3	6398.8	6351.6	6345.4	6298.2
40°	7182.7	7182.7	7346.9	7513.1	7621.9	7704.0	7367.4	7121.2	7020.6	6991.9	6874.9
42.5°	7825.1	7792.2	7942.1	8124.7	8325.8	8512.6	8338.1	8061.1	7917.4	7866.1	7660.9
45°	8352.5	8332.0	8405.9	8576.2	8902.5	9267.8	9292.4	9150.8	9064.6	8957.9	8769.1
47.5°	8676.7	8666.5	8709.6	8894.3	9302.7	9893.7	10224.1	10295.9	10244.6	10162.5	9979.9
50°	8804.0	8789.6	8820.4	9025.6	9483.3	10263.1	10993.7	11332.3	11356.9	11375.4	11317.9
52.5°	8758.8	8740.4	8804.0	8976.4	9452.5	10392.4	11595.0	12245.5	12354.3	12446.7	12635.5
55°	8325.8	8297.1	8469.5	8793.7	9319.1	10345.2	12034.2	13123.9	13353.7	13600.0	14018.7
57.5°	7663.0	7638.3	7886.6	8332.0	9083.1	10215.9	12329.7	14234.1	14751.3	15194.6	16382.8
60°	7024.7	7004.2	7149.9	7580.9	8317.6	9585.9	11964.4	14607.6	15475.7	16432.1	18601.2
62.5°	5883.7	5828.3	6023.2	6386.5	6852.3	7929.7	10369.8	13776.5	15114.5	16520.3	19461.1
65°	3616.0	3696.0	3864.3	4266.5	5030.0	5543.0	7615.8	11145.6	12910.5	14673.3	18488.4
67.5°	2296.4	2319.0	2444.2	2723.3	3314.3	3829.4	4615.4	6993.9	8354.6	10088.7	14515.3
70°	1968.1	1982.4	2089.2	2380.6	2789.0	3423.1	3492.9	3652.9	4141.4	5245.5	8533.1
72.5°	1551.5	1576.1	1660.2	1912.7	2405.2	3086.5	4311.7	2887.5	2789.0	2881.3	4163.9
75°	923.5	952.2	1022.0	1159.5	1545.3	2360.0	4516.9	3359.5	3131.7	2953.1	2873.1
77.5°	488.4	467.9	515.1	595.1	794.2	1258.0	3394.4	4116.7	3956.7	3743.2	3289.7
80°	242.2	250.4	264.7	281.2	355.0	511.0	1697.2	4258.3	4720.1	4925.3	4523.1
82.5°	96.5	108.8	153.9	164.2	195.0	217.5	545.9	2360.0	3380.0	4584.6	5986.3
85°	49.3	47.2	82.1	98.5	114.9	102.6	192.9	880.4	1584.3	2468.8	3999.8
87.5°	6.2	8.2	18.5	24.6	34.9	32.8	55.4	190.9	303.7	431.0	605.4
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°	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0
2.5°	3031.1	3029.1	3029.1	3020.9	3020.9	3022.9	3016.8	3012.6	3012.6	3014.7	3006.5
5°	3154.2	3148.1	3148.1	3139.9	3129.6	3129.6	3121.4	3119.4	3115.3	3107.0	3100.9
7.5°	3297.9	3291.7	3281.5	3275.3	3271.2	3265.1	3254.8	3250.7	3242.5	3234.3	3226.1
10°	3445.7	3437.5	3433.3	3423.1	3419.0	3406.7	3400.5	3402.6	3386.1	3380.0	3382.0
12.5°	3593.4	3585.2	3570.8	3566.7	3564.7	3552.4	3546.2	3542.1	3529.8	3527.8	3521.6
15°	3724.8	3728.9	3722.7	3712.4	3704.2	3702.2	3696.0	3691.9	3683.7	3675.5	3667.3
17.5°	3895.1	3901.3	3893.0	3878.7	3878.7	3876.6	3878.7	3876.6	3862.3	3868.4	3864.3
20°	4112.6	4116.7	4096.2	4102.4	4106.5	4104.4	4110.6	4116.7	4112.6	4112.6	4118.8
22.5°	4363.0	4369.2	4356.8	4365.1	4377.4	4367.1	4385.6	4383.5	4387.6	4393.8	4395.8
25°	4619.5	4631.8	4621.6	4644.2	4635.9	4644.2	4666.7	4660.6	4670.8	4687.2	4693.4
27.5°	4876.1	4884.3	4886.3	4900.7	4915.0	4927.4	4956.1	4956.1	4964.3	4993.0	4993.0
30°	5144.9	5153.1	5161.3	5181.8	5190.0	5212.6	5241.3	5249.6	5245.5	5286.5	5298.8
32.5°	5454.8	5463.0	5477.4	5502.0	5512.2	5534.8	5534.8	5557.4	5573.8	5608.7	5610.7
35°	5867.3	5873.4	5867.3	5865.2	5879.6	5910.4	5912.4	5945.3	5959.6	5994.5	6004.8
37.5°	6279.8	6277.7	6251.0	6222.3	6224.4	6212.0	6203.8	6218.2	6224.4	6226.4	6249.0
40°	6835.9	6782.6	6741.5	6669.7	6636.8	6585.5	6554.8	6552.7	6519.9	6515.8	6521.9
42.5°	7564.4	7502.9	7406.4	7285.3	7193.0	7098.6	7028.8	6987.8	6916.0	6879.0	6848.2
45°	8582.3	8430.5	8315.6	8171.9	7993.4	7829.2	7656.8	7578.8	7441.3	7357.2	7262.8
47.5°	9826.0	9676.2	9499.7	9351.9	9118.0	8890.2	8654.2	8446.9	8206.8	8015.9	7860.0
50°	11176.3	11088.1	10960.9	10823.4	10521.7	10371.9	10074.3	9793.2	9534.6	9193.9	8896.3
52.5°	12561.6	12612.9	12584.2	12534.9	12344.0	12286.6	12030.1	11687.3	11426.7	11192.8	10675.6
55°	14269.0	14330.6	14453.7	14525.5	14503.0	14648.7	14585.1	14318.3	14213.6	14104.8	13737.5
57.5°	16881.5	17320.7	17790.6	18203.1	18299.6	18816.7	18705.9	18972.7	19161.5	19026.0	18907.0
60°	19666.3	20552.9	21351.2	22186.5	22865.7	23374.7	24047.8	24501.3	24786.6	25299.7	25340.7
62.5°	20788.9	21993.5	23007.3	23976.0	24782.5	25488.5	26095.9	26721.8	27234.9	27698.7	28033.2
65°	20173.2	21431.2	22660.5	23643.5	24419.3	25026.7	25687.5	26184.2	26689.0	26986.6	27337.5
67.5°	16770.7	18437.1	19949.5	21057.7	22118.7	22736.4	23518.3	24006.8	24542.4	24856.4	25082.1
70°	10934.2	13103.4	15169.9	16850.7	18283.1	19003.5	19947.5	20614.5	21258.9	21275.3	21650.8
72.5°	5900.1	7714.3	9444.3	11162.0	12795.5	13753.9	14685.6	15496.2	16136.5	15863.6	16237.1
75°	3285.6	4135.2	5081.3	6113.5	7108.9	7656.8	8352.5	8356.6	8687.0	8167.8	8299.1
77.5°	3160.4	3121.4	3135.8	3164.5	3213.8	3109.1	3107.0	3043.4	2944.9	2766.4	2797.2
80°	4151.6	3655.0	3297.9	2737.6	2204.1	1797.7	1684.9	1711.5	1791.6	1951.7	2154.8
82.5°	6002.7	5584.1	4984.8	4102.4	3219.9	2483.2	2039.9	1810.0	1799.8	1959.9	2267.7
85°	4371.2	4623.6	4584.6	3827.4	3156.3	2563.2	1865.5	1576.1	1305.2	1241.6	1350.4
87.5°	644.4	533.6	601.3	502.8	365.3	283.2	248.3	199.1	190.9	195.0	213.4
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°	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0
2.5°	3008.5	3000.3	2992.1	2998.3	2992.1	2990.1	2983.9	2979.8	2977.8	2977.8	2977.8
5°	3100.9	3090.6	3084.5	3082.4	3076.3	3070.1	3068.1	3057.8	3055.7	3055.7	3049.6
7.5°	3226.1	3217.9	3207.6	3201.4	3197.3	3187.1	3176.8	3174.8	3172.7	3164.5	3158.4
10°	3371.8	3359.5	3347.2	3347.2	3338.9	3336.9	3326.6	3312.3	3310.2	3297.9	3293.8
12.5°	3509.3	3505.2	3490.8	3486.7	3480.5	3474.4	3468.2	3462.1	3455.9	3445.7	3449.8
15°	3673.5	3663.2	3650.9	3652.9	3650.9	3642.7	3634.5	3628.3	3624.2	3620.1	3620.1
17.5°	3870.5	3866.4	3864.3	3854.1	3845.8	3852.0	3852.0	3852.0	3841.7	3843.8	3845.8
20°	4120.8	4124.9	4120.8	4112.6	4110.6	4116.7	4102.4	4124.9	4112.6	4104.4	4108.5
22.5°	4397.9	4412.3	4395.8	4397.9	4408.1	4412.3	4397.9	4416.4	4410.2	4397.9	4408.1
25°	4699.6	4709.8	4701.6	4699.6	4705.7	4720.1	4718.0	4716.0	4730.3	4718.0	4724.2
27.5°	5009.4	5015.6	5019.7	5025.9	5030.0	5027.9	5036.1	5036.1	5044.3	5030.0	5036.1
30°	5317.3	5317.3	5325.5	5333.7	5333.7	5333.7	5350.1	5352.2	5339.9	5344.0	5329.6
32.5°	5645.6	5647.7	5655.9	5655.9	5672.3	5674.4	5692.8	5668.2	5692.8	5672.3	5676.4
35°	6031.4	6058.1	6062.2	6082.8	6099.2	6105.3	6105.3	6107.4	6130.0	6113.5	6119.7
37.5°	6257.2	6263.3	6279.8	6290.0	6290.0	6298.2	6304.4	6298.2	6304.4	6302.3	6308.5
40°	6524.0	6517.8	6536.3	6540.4	6532.2	6542.4	6540.4	6534.2	6550.7	6538.3	6546.6
42.5°	6848.2	6813.3	6811.3	6827.7	6811.3	6819.5	6817.4	6803.1	6823.6	6829.8	6823.6
45°	7195.1	7176.6	7139.6	7139.6	7123.2	7117.1	7119.1	7117.1	7119.1	7143.7	7152.0
47.5°	7759.4	7646.5	7582.9	7523.4	7474.2	7472.1	7449.5	7461.8	7478.3	7519.3	7556.2
50°	8705.5	8444.8	8284.8	8137.0	8030.3	7993.4	7950.3	7946.2	7960.5	8007.7	8071.3
52.5°	10392.4	10031.2	9690.5	9374.5	9099.5	8888.1	8783.5	8728.1	8707.5	8754.7	8816.3
55°	13478.9	12797.6	12317.4	11997.2	11313.8	11024.5	10653.0	10482.7	10316.5	10332.9	10437.5
57.5°	18753.1	18385.8	17983.5	17423.3	17004.6	16499.8	15572.2	15055.0	15077.6	15198.7	14821.1
60°	25664.9	25293.5	25127.3	24618.3	24326.9	24123.7	23631.2	22773.4	22469.7	22412.2	21718.5
62.5°	28289.7	28378.0	28509.3	28653.0	28644.8	28733.0	28302.0	28022.9	27672.0	27216.4	26531.0
65°	27604.3	27828.0	28094.8	28480.6	28919.8	29244.0	29516.9	29484.1	29155.8	28548.3	27823.9
67.5°	25283.2	25504.9	25699.8	26217.0	26937.3	27596.1	28178.9	28575.0	28355.4	27852.6	27007.1
70°	21794.5	21954.6	22077.7	22527.1	23317.2	24121.7	24883.1	25548.0	25480.3	24870.7	24195.6
72.5°	15791.8	16179.6	16389.0	16358.2	16846.6	17747.5	17854.2	18422.7	18580.7	17924.0	16848.7
75°	7693.7	7699.9	7457.7	7377.7	7402.3	7558.3	7260.7	7279.2	7176.6	6710.7	6327.0
77.5°	2688.4	2614.5	2438.0	2228.7	1929.1	1647.9	1362.7	1239.5	1198.5	1077.4	993.3
80°	2316.9	2425.7	2390.8	2218.4	1902.4	1516.6	1132.8	839.4	716.2	673.1	632.1
82.5°	2630.9	3049.6	3316.4	3302.0	2869.0	2154.8	1344.2	771.6	550.0	482.3	443.3
85°	1467.3	1578.2	1608.9	1465.3	1217.0	831.1	463.8	326.3	277.0	252.4	227.8
87.5°	234.0	213.4	209.3	182.6	172.4	158.0	139.6	131.3	121.1	114.9	114.9
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: P159381

CATALOG NUMBER: VST-E10-LED-E-U-T2-7050

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0
2.5°	2975.7	2973.7	2967.5	2961.3	2957.2	2955.2	2953.1	2949.0	2947.0	2944.9	2940.8
5°	3045.5	3041.4	3031.1	3020.9	3016.8	3010.6	3004.4	3000.3	2996.2	2994.2	2986.0
7.5°	3154.2	3150.1	3137.8	3129.6	3127.6	3111.2	3109.1	3102.9	3092.7	3090.6	3078.3
10°	3285.6	3283.5	3273.3	3267.1	3263.0	3254.8	3242.5	3232.2	3222.0	3222.0	3213.8
12.5°	3437.5	3429.2	3435.4	3421.0	3416.9	3408.7	3402.6	3400.5	3388.2	3377.9	3375.9
15°	3616.0	3605.7	3605.7	3601.6	3597.5	3589.3	3587.3	3589.3	3577.0	3581.1	3568.8
17.5°	3837.6	3841.7	3839.7	3839.7	3829.4	3829.4	3813.0	3833.5	3819.2	3829.4	3825.3
20°	4114.7	4116.7	4112.6	4118.8	4122.9	4120.8	4118.8	4116.7	4122.9	4131.1	4124.9
22.5°	4410.2	4410.2	4408.1	4430.7	4406.1	4424.6	4430.7	4418.4	4451.2	4447.1	4453.3
25°	4730.3	4730.3	4746.8	4765.2	4769.3	4755.0	4763.2	4752.9	4773.4	4789.9	4794.0
27.5°	5027.9	5054.6	5066.9	5054.6	5064.9	5087.4	5085.4	5085.4	5099.7	5095.6	5134.6
30°	5333.7	5350.1	5366.5	5358.3	5362.4	5391.2	5393.2	5395.3	5413.7	5440.4	5469.1
32.5°	5682.6	5699.0	5690.8	5717.5	5715.4	5750.3	5756.5	5762.6	5820.1	5809.8	5869.3
35°	6111.5	6127.9	6119.7	6148.4	6144.3	6156.6	6179.2	6203.8	6214.1	6273.6	6320.8
37.5°	6312.6	6312.6	6331.1	6363.9	6376.2	6396.7	6431.6	6462.4	6513.7	6577.3	6651.2
40°	6554.8	6560.9	6585.5	6620.4	6643.0	6690.2	6753.8	6796.9	6874.9	6944.7	7030.9
42.5°	6848.2	6874.9	6903.6	6950.8	7000.1	7074.0	7164.3	7219.7	7322.3	7412.6	7519.3
45°	7190.9	7217.6	7285.3	7371.5	7443.4	7525.5	7599.3	7730.7	7823.0	7917.4	8009.8
47.5°	7605.5	7683.5	7738.9	7841.5	7929.7	8038.5	8130.9	8254.0	8354.6	8469.5	8547.5
50°	8137.0	8233.5	8305.3	8438.7	8524.9	8646.0	8762.9	8855.3	8957.9	9070.8	9134.4
52.5°	8900.4	8998.9	9089.2	9255.5	9362.2	9444.3	9600.2	9715.2	9809.6	9891.7	9961.4
55°	10554.5	10525.8	10776.2	11098.4	11135.3	11432.9	11488.3	11584.7	11759.2	11783.8	11978.8
57.5°	15280.8	15133.0	15496.2	15968.3	15886.2	15736.4	16362.3	16401.3	16313.0	16549.0	16282.2
60°	21821.2	21562.6	21661.1	21790.4	21603.6	21515.4	21546.2	21634.4	21548.2	21453.8	21195.2
62.5°	26188.3	25790.1	25504.9	25264.8	24961.0	24741.5	24495.2	24191.5	24109.4	23764.6	23475.2
65°	27120.0	26500.2	26048.7	25595.2	25176.5	24788.7	24417.2	24156.6	23811.8	23403.4	23101.7
67.5°	26095.9	25328.4	24667.6	24008.8	23534.8	22964.2	22685.1	22260.3	21835.5	21367.6	21090.6
70°	23120.2	22319.8	21488.7	20844.3	20199.9	19494.0	19356.5	18853.7	18609.4	17971.2	17860.4
72.5°	15958.0	15424.4	15053.0	14256.7	13864.7	13503.5	13388.6	12922.8	12972.0	12272.2	12526.7
75°	5674.4	5598.4	5489.7	5040.2	4960.2	4820.6	4783.7	4750.9	5083.3	4621.6	4956.1
77.5°	974.8	968.6	913.2	886.6	937.9	905.0	913.2	896.8	993.3	1007.6	985.1
80°	605.4	589.0	570.5	558.2	560.3	547.9	550.0	554.1	560.3	558.2	564.4
82.5°	414.5	400.2	392.0	383.8	396.1	400.2	410.4	420.7	437.1	447.4	459.7
85°	225.7	207.3	207.3	205.2	221.6	234.0	250.4	270.9	299.6	324.2	350.9
87.5°	114.9	110.8	112.9	117.0	131.3	141.6	162.1	180.6	205.2	231.9	256.5
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: P159381

CATALOG NUMBER: VST-E10-LED-E-U-T2-7050

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0	2947.0
2.5°	2938.8	2938.8	2936.7	2936.7	2934.7	2932.6	2930.6	2924.4	2901.8	2881.3	2866.9
5°	2983.9	2977.8	2975.7	2969.5	2967.5	2963.4	2957.2	2951.1	2910.0	2873.1	2846.4
7.5°	3076.3	3068.1	3064.0	3057.8	3051.6	3043.4	3035.2	3029.1	2979.8	2936.7	2903.9
10°	3197.3	3193.2	3191.2	3183.0	3183.0	3170.7	3168.6	3154.2	3100.9	3061.9	3033.2
12.5°	3365.6	3357.4	3355.4	3345.1	3349.2	3345.1	3341.0	3332.8	3293.8	3248.6	3209.7
15°	3575.0	3575.0	3564.7	3556.5	3558.5	3554.4	3562.6	3552.4	3527.8	3486.7	3423.1
17.5°	3827.4	3823.3	3827.4	3821.2	3825.3	3829.4	3819.2	3821.2	3808.9	3757.6	3663.2
20°	4120.8	4114.7	4139.3	4129.0	4151.6	4131.1	4135.2	4141.4	4141.4	4073.6	3946.4
22.5°	4457.4	4453.3	4453.3	4473.8	4482.0	4484.1	4492.3	4498.4	4514.9	4428.7	4225.5
25°	4794.0	4808.3	4810.4	4837.1	4849.4	4849.4	4855.5	4878.1	4927.4	4808.3	4545.6
27.5°	5136.7	5171.6	5179.8	5198.3	5216.7	5235.2	5249.6	5266.0	5346.0	5216.7	4874.0
30°	5479.4	5518.4	5547.1	5567.6	5590.2	5635.4	5643.6	5676.4	5809.8	5651.8	5185.9
32.5°	5881.6	5937.0	5974.0	6000.7	6035.6	6078.6	6103.3	6144.3	6273.6	6015.0	5413.7
35°	6361.9	6394.7	6448.0	6493.2	6513.7	6587.6	6626.6	6636.8	6735.4	6329.0	5582.0
37.5°	6694.3	6749.7	6842.1	6905.7	6942.6	6983.7	7049.3	7092.4	7186.8	6614.3	5666.2
40°	7117.1	7201.2	7275.1	7369.5	7429.0	7459.8	7525.5	7560.3	7572.7	6858.5	5639.5
42.5°	7632.2	7708.1	7806.6	7882.5	7927.7	7962.6	8015.9	8030.3	7870.2	6973.4	5495.8
45°	8116.5	8233.5	8317.6	8373.0	8405.9	8424.3	8457.2	8459.2	8116.5	6916.0	5249.6
47.5°	8637.8	8721.9	8799.9	8838.9	8834.8	8838.9	8826.6	8818.4	8239.6	6716.9	4933.5
50°	9214.4	9269.8	9302.7	9321.1	9331.4	9292.4	9237.0	9200.1	8249.9	6433.7	4613.4
52.5°	9988.1	10057.9	10051.7	10049.7	9967.6	9930.6	9782.9	9707.0	8190.4	6101.2	4252.2
55°	11948.0	11880.2	11746.9	11812.5	11478.0	11303.6	11073.7	10860.3	8268.4	5785.2	3833.5
57.5°	16389.0	16415.6	16036.0	15832.8	15268.4	14562.5	13994.0	13442.0	8970.2	5592.3	3287.6
60°	21022.8	20674.0	20191.7	19457.0	18730.5	17681.8	16670.1	15713.8	9670.0	5391.2	2641.2
62.5°	23046.3	22549.7	21821.2	20871.0	19730.0	18447.3	17187.3	16021.6	9331.4	4740.6	1920.9
65°	22635.9	21876.6	21072.1	19959.8	18572.5	17166.7	15695.3	14505.0	7806.6	3536.0	1184.1
67.5°	20489.3	19844.9	18995.3	17675.7	16191.9	14728.7	13380.4	12046.5	5799.5	2204.1	662.9
70°	17294.0	16664.0	15802.0	14451.7	12970.0	11570.4	10142.0	9054.4	3696.0	1063.0	478.2
72.5°	11997.2	11486.2	10876.7	9914.2	8615.2	7342.8	6376.2	5541.0	2048.1	564.4	437.1
75°	4871.9	4874.0	4763.2	4356.8	3681.7	3174.8	2706.9	2296.4	855.8	480.2	431.0
77.5°	1104.1	1122.6	1227.2	1163.6	1048.7	981.0	878.3	775.7	521.3	494.6	435.1
80°	558.2	560.3	554.1	556.1	550.0	552.0	543.8	537.7	488.4	508.9	435.1
82.5°	465.9	476.1	474.1	474.1	476.1	476.1	476.1	474.1	506.9	535.6	420.7
85°	369.4	389.9	406.3	422.8	441.2	453.5	459.7	465.9	492.5	527.4	381.7
87.5°	279.1	303.7	324.2	340.7	369.4	369.4	389.9	404.3	404.3	412.5	201.1
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: P159381

CATALOG NUMBER: VST-E10-LED-E-U-T2-7050

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	2947.0	2947.0	2947.0	2947.0	2947.0
2.5°	2846.4	2838.2	2830.0	2825.9	2817.7
5°	2825.9	2809.5	2799.2	2799.2	2791.0
7.5°	2885.4	2879.3	2864.9	2856.7	2864.9
10°	3012.6	3002.4	2986.0	2973.7	2979.8
12.5°	3183.0	3141.9	3109.1	3094.7	3084.5
15°	3359.5	3277.4	3211.7	3174.8	3164.5
17.5°	3548.3	3404.6	3306.1	3250.7	3240.4
20°	3741.2	3562.6	3423.1	3351.3	3349.2
22.5°	3973.1	3735.0	3556.5	3462.1	3455.9
25°	4217.3	3888.9	3652.9	3531.9	3519.5
27.5°	4428.7	4012.1	3712.4	3568.8	3556.5
30°	4605.2	4104.4	3761.7	3595.5	3579.1
32.5°	4732.4	4157.8	3782.2	3603.7	3585.2
35°	4773.4	4137.3	3724.8	3529.8	3509.3
37.5°	4718.0	4003.9	3564.7	3349.2	3324.6
40°	4551.8	3769.9	3304.1	3082.4	3051.6
42.5°	4297.3	3482.6	2990.1	2778.7	2739.7
45°	3983.3	3158.4	2678.1	2442.1	2423.7
47.5°	3655.0	2817.7	2327.2	2113.8	2091.2
50°	3300.0	2423.7	1984.5	1752.6	1752.6
52.5°	2877.2	2039.9	1586.4	1411.9	1397.6
55°	2390.8	1606.9	1264.2	1130.8	1112.3
57.5°	1867.5	1235.4	1009.7	931.7	911.2
60°	1372.9	927.6	812.7	769.6	761.4
62.5°	931.7	706.0	654.7	636.2	634.1
65°	630.0	550.0	535.6	529.5	531.5
67.5°	484.3	457.6	451.5	449.4	449.4
70°	420.7	404.3	398.1	400.2	398.1
72.5°	396.1	373.5	375.6	379.7	377.6
75°	387.9	359.1	367.3	369.4	361.2
77.5°	381.7	342.7	363.2	369.4	346.8
80°	369.4	328.4	377.6	379.7	340.7
82.5°	338.6	291.4	377.6	348.9	307.8
85°	287.3	221.6	426.9	303.7	227.8
87.5°	182.6	131.3	289.4	207.3	137.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)