

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: P159399

Luminaire Tested: **VST-E12-LED-E-U-T2-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P159399  
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-E12-LED-E-U-T2-7030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA  
Light Source: (252) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33831 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G4

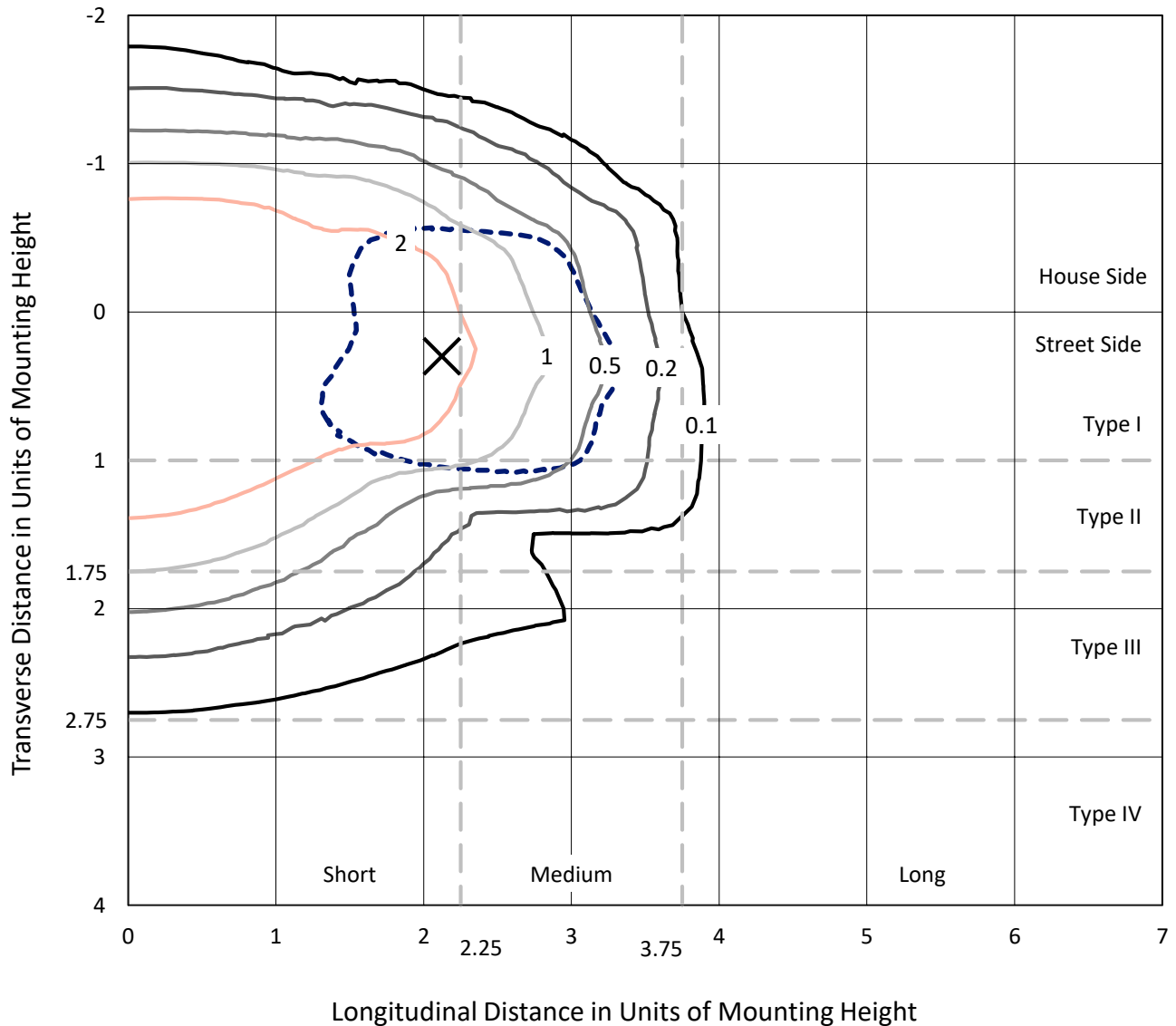
Input Watts (W): 291.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

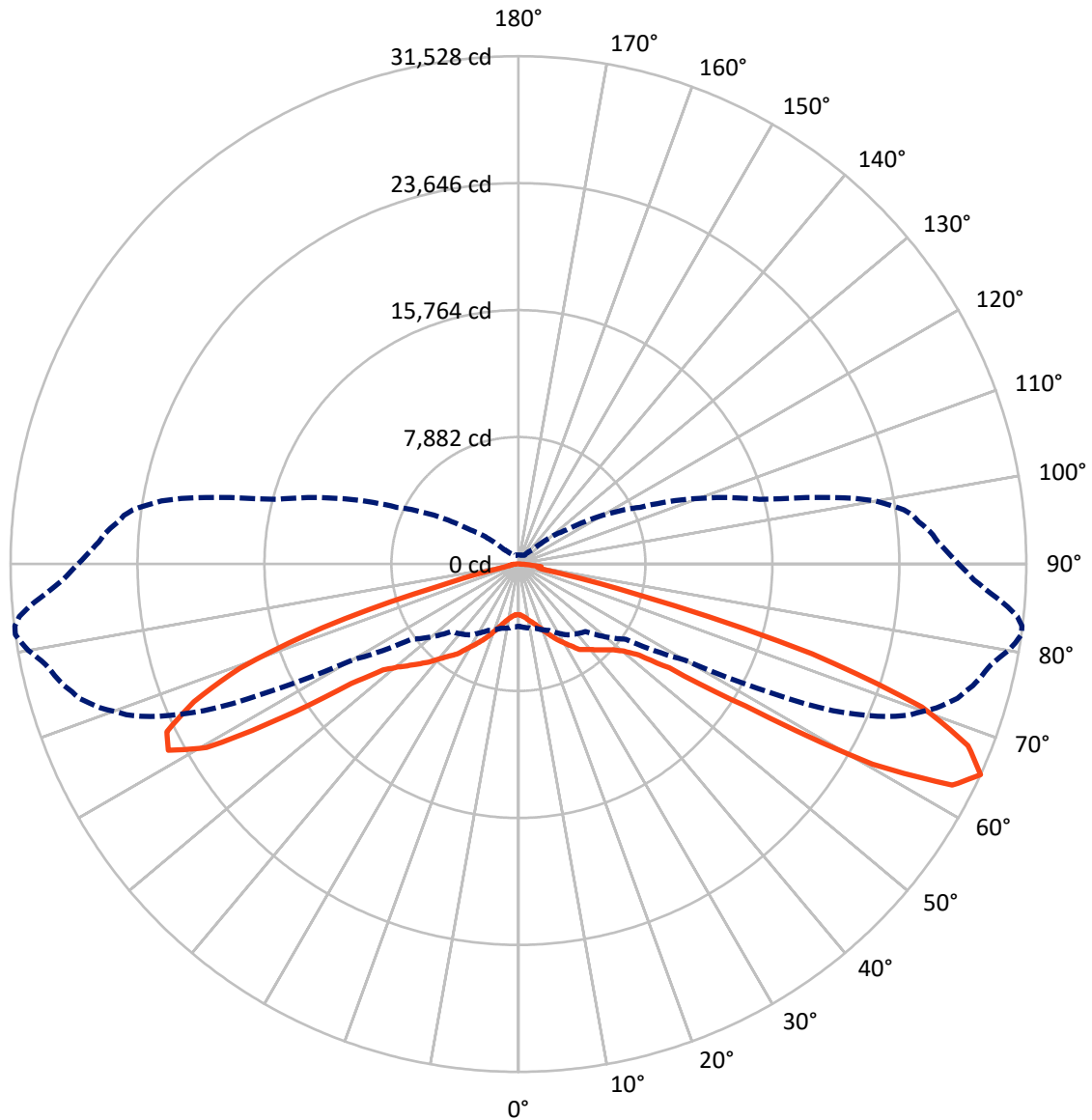


Based on 30 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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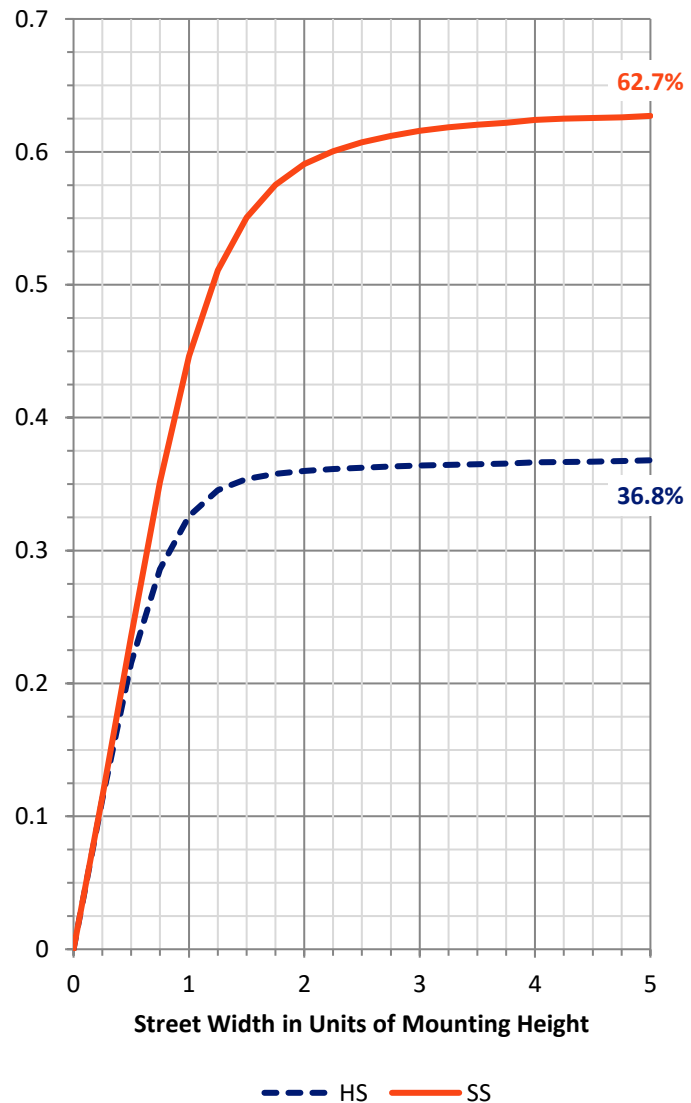
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12596.4	0.0	12596.4
	% Fixture	37.2	0.0	37.2
<b>Street Side</b>	Lumens	21234.6	0.0	21234.6
	% Fixture	62.8	0.0	62.8
<b>Total</b>	Lumens	33831.0	0.0	33831.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	318.7	0.9
10°-20°	1119.7	3.3
20°-30°	2218.7	6.6
30°-40°	3803.3	11.2
40°-50°	5713.5	16.9
50°-60°	7937.9	23.5
60°-70°	9055.9	26.8
70°-80°	3119.7	9.2
80°-90°	543.7	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°	33831.0	100.0
0°-180°	33831.0	100.0



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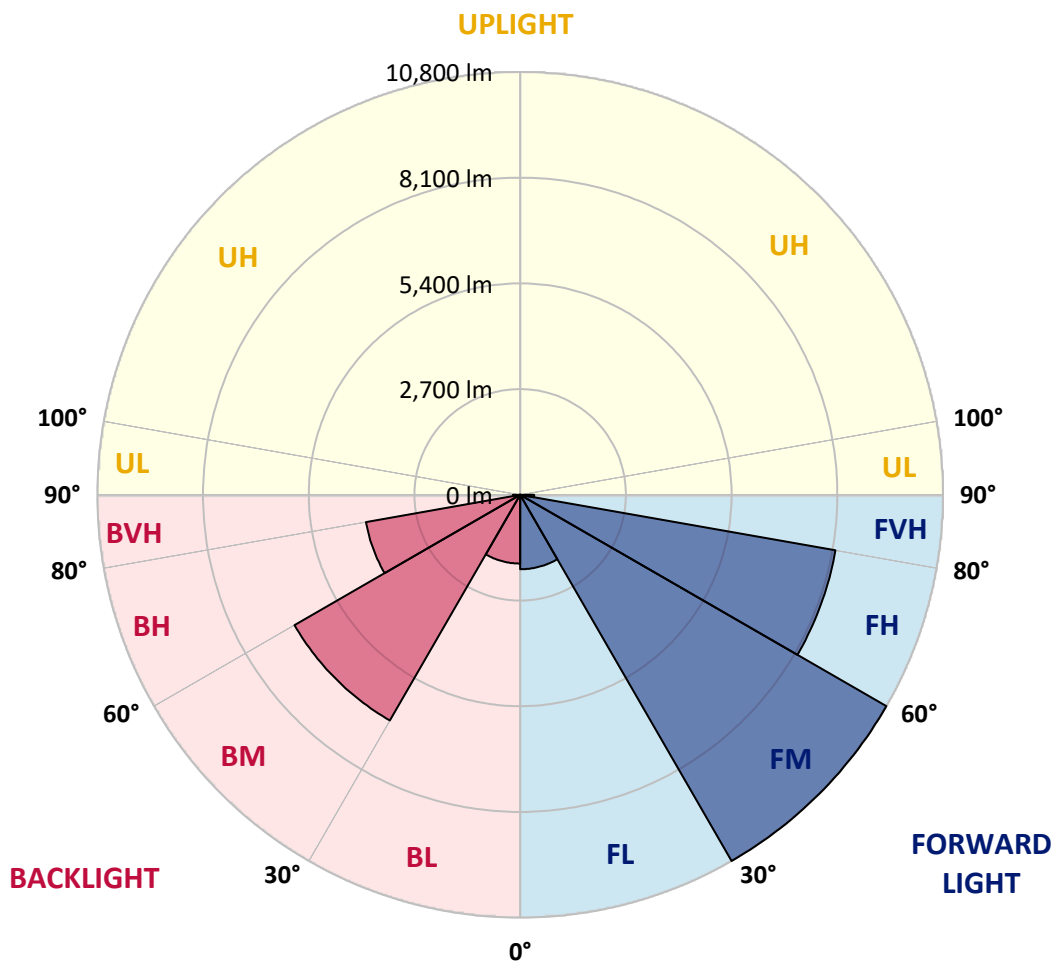
CATALOG NUMBER: VST-E12-LED-E-U-T2-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1900.6	5.6			
FM	(30°-60°)	10799.6	31.9			
FH	(60°-80°)	8176.6	24.2			G4/12000
FVH	(80°-90°)	357.9	1.1			G3/500
BL	(0°-30°)	1756.5	5.2	B3/2500		
BM	(30°-60°)	6655.1	19.7	B4/8500		
BH	(60°-80°)	3999.0	11.8	B4/5000		G4/5000
BVH	(80°-90°)	185.8	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°	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8
2.5°	3318.7	3320.9	3318.7	3312.2	3310.0	3290.3	3268.3	3257.4	3255.2	3246.4	3248.6
5°	3524.8	3518.2	3509.5	3498.5	3487.5	3454.7	3417.4	3397.7	3391.1	3384.5	3375.7
7.5°	3708.9	3713.3	3708.9	3693.6	3665.1	3623.4	3575.2	3544.5	3542.3	3535.8	3529.2
10°	3945.7	3956.6	3930.3	3904.0	3864.6	3801.0	3746.2	3706.7	3700.2	3691.4	3687.0
12.5°	4202.1	4204.3	4195.6	4136.4	4070.6	3982.9	3904.0	3864.6	3855.8	3844.8	3840.5
15°	4476.1	4478.3	4430.1	4373.1	4272.3	4167.1	4057.5	4013.6	4002.7	4004.9	3987.3
17.5°	4693.2	4697.5	4651.5	4579.2	4458.6	4333.7	4215.3	4180.2	4173.6	4175.8	4167.1
20°	4787.4	4794.0	4765.5	4710.7	4596.7	4487.1	4401.6	4379.7	4377.5	4373.1	4390.7
22.5°	4783.0	4785.2	4774.3	4752.3	4684.4	4620.8	4609.9	4623.0	4620.8	4625.2	4640.6
25°	4743.6	4750.2	4748.0	4756.7	4745.8	4769.9	4820.3	4866.3	4872.9	4881.7	4910.2
27.5°	4844.4	4857.6	4842.2	4851.0	4868.5	4949.6	5052.7	5122.8	5136.0	5160.1	5184.2
30°	5239.0	5221.4	5201.7	5179.8	5190.8	5241.2	5357.3	5418.7	5425.3	5442.8	5475.7
32.5°	5824.3	5804.5	5787.0	5751.9	5743.1	5721.2	5760.7	5776.0	5773.8	5791.4	5800.1
35°	6484.1	6486.2	6481.9	6508.2	6530.1	6418.3	6280.2	6242.9	6258.3	6238.5	6242.9
37.5°	7047.4	7054.0	7170.2	7314.8	7356.5	7286.3	6983.8	6834.8	6784.4	6777.8	6727.4
40°	7672.1	7672.1	7847.5	8025.1	8141.2	8228.9	7869.4	7606.4	7499.0	7468.3	7343.3
42.5°	8358.3	8323.2	8483.2	8678.3	8893.1	9092.6	8906.3	8610.3	8456.9	8402.1	8182.9
45°	8921.6	8899.7	8978.6	9160.5	9509.1	9899.3	9925.6	9774.3	9682.2	9568.3	9366.6
47.5°	9267.9	9257.0	9303.0	9500.3	9936.5	10567.8	10920.7	10997.5	10942.7	10855.0	10659.9
50°	9403.9	9388.5	9421.4	9640.6	10129.4	10962.4	11742.8	12104.4	12130.8	12150.5	12089.1
52.5°	9355.6	9335.9	9403.9	9588.0	10096.5	11100.5	12385.0	13079.9	13196.1	13294.7	13496.4
55°	8893.1	8862.4	9046.6	9392.9	9954.1	11050.1	12854.1	14018.1	14263.6	14526.7	14973.8
57.5°	8185.1	8158.8	8424.0	8899.7	9702.0	10912.0	13169.8	15204.0	15756.4	16229.9	17499.1
60°	7503.4	7481.4	7637.1	8097.4	8884.3	10239.0	12779.6	15602.9	16530.2	17551.7	19868.7
62.5°	6284.6	6225.4	6433.6	6821.6	7319.2	8470.0	11076.4	14715.2	16144.4	17645.9	20787.1
65°	3862.4	3947.9	4127.6	4557.3	5372.7	5920.7	8134.7	11905.0	13790.1	15673.1	19748.1
67.5°	2452.9	2477.0	2610.7	2908.8	3540.1	4090.3	4929.9	7470.5	8923.8	10776.1	15504.3
70°	2102.2	2117.5	2231.5	2542.8	2979.0	3656.3	3730.9	3901.8	4423.5	5602.9	9114.5
72.5°	1657.2	1683.5	1773.4	2043.0	2569.1	3296.8	4605.5	3084.2	2979.0	3077.6	4447.7
75°	986.4	1017.1	1091.6	1238.5	1650.6	2520.8	4824.7	3588.4	3345.1	3154.3	3068.9
77.5°	521.7	499.8	550.2	635.7	848.3	1343.7	3625.6	4397.2	4226.3	3998.3	3513.8
80°	258.7	267.4	282.8	300.3	379.2	545.8	1812.8	4548.5	5041.7	5260.9	4831.3
82.5°	103.0	116.2	164.4	175.4	208.2	232.4	583.1	2520.8	3610.3	4897.0	6394.2
85°	52.6	50.4	87.7	105.2	122.8	109.6	206.1	940.4	1692.3	2637.0	4272.3
87.5°	6.6	8.8	19.7	26.3	37.3	35.1	59.2	203.9	324.4	460.3	646.7
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°	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8
2.5°	3237.6	3235.5	3235.5	3226.7	3226.7	3228.9	3222.3	3217.9	3217.9	3220.1	3211.3
5°	3369.2	3362.6	3362.6	3353.8	3342.9	3342.9	3334.1	3331.9	3327.5	3318.7	3312.2
7.5°	3522.6	3516.0	3505.1	3498.5	3494.1	3487.5	3476.6	3472.2	3463.4	3454.7	3445.9
10°	3680.4	3671.7	3667.3	3656.3	3651.9	3638.8	3632.2	3634.4	3616.9	3610.3	3612.5
12.5°	3838.3	3829.5	3814.2	3809.8	3807.6	3794.4	3787.8	3783.5	3770.3	3768.1	3761.5
15°	3978.6	3982.9	3976.4	3965.4	3956.6	3954.4	3947.9	3943.5	3934.7	3925.9	3917.2
17.5°	4160.5	4167.1	4158.3	4143.0	4143.0	4140.8	4143.0	4140.8	4125.4	4132.0	4127.6
20°	4392.8	4397.2	4375.3	4381.9	4386.3	4384.1	4390.7	4397.2	4392.8	4392.8	4399.4
22.5°	4660.3	4666.9	4653.7	4662.5	4675.6	4664.7	4684.4	4682.2	4686.6	4693.2	4695.4
25°	4934.3	4947.4	4936.5	4960.6	4951.8	4960.6	4984.7	4978.1	4989.1	5006.6	5013.2
27.5°	5208.3	5217.1	5219.2	5234.6	5249.9	5263.1	5293.8	5293.8	5302.5	5333.2	5333.2
30°	5495.4	5504.2	5513.0	5534.9	5543.7	5567.8	5598.5	5607.2	5602.9	5646.7	5659.8
32.5°	5826.4	5835.2	5850.6	5876.9	5887.8	5911.9	5911.9	5936.0	5953.6	5990.8	5993.0
35°	6267.0	6273.6	6267.0	6264.9	6280.2	6313.1	6315.3	6350.3	6365.7	6403.0	6413.9
37.5°	6707.6	6705.5	6677.0	6646.3	6648.5	6635.3	6626.5	6641.9	6648.5	6650.7	6674.8
40°	7301.7	7244.7	7200.9	7124.1	7089.1	7034.3	7001.4	6999.2	6964.1	6959.7	6966.3
42.5°	8079.9	8014.1	7911.1	7781.7	7683.1	7582.3	7507.7	7463.9	7387.2	7347.7	7314.8
45°	9167.1	9004.9	8882.1	8728.7	8538.0	8362.6	8178.5	8095.2	7948.3	7858.5	7757.6
47.5°	10495.5	10335.5	10147.0	9989.1	9739.2	9495.9	9243.8	9022.4	8766.0	8562.1	8395.5
50°	11937.9	11843.6	11707.7	11560.8	11238.6	11078.6	10760.7	10460.4	10184.2	9820.3	9502.5
52.5°	13417.5	13472.3	13441.6	13389.0	13185.1	13123.7	12849.7	12483.7	12205.3	11955.4	11403.0
55°	15241.3	15307.0	15438.5	15515.3	15491.2	15646.8	15578.8	15293.9	15182.1	15065.9	14673.5
57.5°	18031.7	18500.8	19002.8	19443.4	19546.4	20098.8	19980.5	20265.4	20467.1	20322.4	20195.3
60°	21006.3	21953.3	22806.0	23698.2	24423.7	24967.3	25686.3	26170.8	26475.5	27023.5	27067.3
62.5°	22205.4	23492.1	24575.0	25609.6	26471.1	27225.1	27874.0	28542.6	29090.6	29586.0	29943.3
65°	21547.8	22891.5	24204.5	25254.5	26083.1	26731.9	27437.8	27968.2	28507.5	28825.3	29200.2
67.5°	17913.4	19693.3	21308.8	22492.5	23625.8	24285.6	25120.8	25642.5	26214.6	26550.0	26791.1
70°	11679.2	13996.2	16203.6	17998.8	19528.9	20298.3	21306.6	22019.0	22707.4	22724.9	23126.0
72.5°	6302.1	8239.9	10087.8	11922.5	13667.4	14691.1	15686.2	16552.1	17236.0	16944.5	17343.4
75°	3509.5	4417.0	5427.5	6530.1	7593.2	8178.5	8921.6	8926.0	9278.9	8724.3	8864.6
77.5°	3375.7	3334.1	3349.4	3380.1	3432.7	3320.9	3318.7	3250.8	3145.6	2954.9	2987.8
80°	4434.5	3904.0	3522.6	2924.2	2354.3	1920.2	1799.7	1828.2	1913.7	2084.6	2301.6
82.5°	6411.7	5964.5	5324.5	4381.9	3439.3	2652.4	2178.9	1933.4	1922.4	2093.4	2422.2
85°	4669.0	4938.7	4897.0	4088.2	3371.4	2737.9	1992.6	1683.5	1394.1	1326.2	1442.4
87.5°	688.3	569.9	642.3	537.0	390.2	302.5	265.2	212.6	203.9	208.2	228.0
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):**

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8
2.5°	3213.5	3204.8	3196.0	3202.6	3196.0	3193.8	3187.2	3182.8	3180.7	3180.7	3180.7
5°	3312.2	3301.2	3294.6	3292.4	3285.9	3279.3	3277.1	3266.1	3263.9	3263.9	3257.4
7.5°	3445.9	3437.1	3426.2	3419.6	3415.2	3404.2	3393.3	3391.1	3388.9	3380.1	3373.6
10°	3601.5	3588.4	3575.2	3575.2	3566.5	3564.3	3553.3	3538.0	3535.8	3522.6	3518.2
12.5°	3748.4	3744.0	3728.7	3724.3	3717.7	3711.1	3704.5	3698.0	3691.4	3680.4	3684.8
15°	3923.8	3912.8	3899.6	3901.8	3899.6	3890.9	3882.1	3875.5	3871.1	3866.8	3866.8
17.5°	4134.2	4129.8	4127.6	4116.7	4107.9	4114.5	4114.5	4114.5	4103.5	4105.7	4107.9
20°	4401.6	4406.0	4401.6	4392.8	4390.7	4397.2	4381.9	4406.0	4392.8	4384.1	4388.5
22.5°	4697.5	4712.9	4695.4	4697.5	4708.5	4712.9	4697.5	4717.3	4710.7	4697.5	4708.5
25°	5019.8	5030.7	5022.0	5019.8	5026.3	5041.7	5039.5	5037.3	5052.7	5039.5	5046.1
27.5°	5350.8	5357.3	5361.7	5368.3	5372.7	5370.5	5379.3	5379.3	5388.0	5372.7	5379.3
30°	5679.6	5679.6	5688.3	5697.1	5697.1	5697.1	5714.7	5716.8	5703.7	5708.1	5692.7
32.5°	6030.3	6032.5	6041.3	6041.3	6058.8	6061.0	6080.7	6054.4	6080.7	6058.8	6063.2
35°	6442.4	6470.9	6475.3	6497.2	6514.7	6521.3	6521.3	6523.5	6547.6	6530.1	6536.7
37.5°	6683.5	6690.1	6707.6	6718.6	6718.6	6727.4	6733.9	6727.4	6733.9	6731.8	6738.3
40°	6968.5	6961.9	6981.6	6986.0	6977.3	6988.2	6986.0	6979.5	6997.0	6983.8	6992.6
42.5°	7314.8	7277.6	7275.4	7292.9	7275.4	7284.2	7282.0	7266.6	7288.5	7295.1	7288.5
45°	7685.3	7665.6	7626.1	7626.1	7608.6	7602.0	7604.2	7602.0	7604.2	7630.5	7639.3
47.5°	8288.1	8167.5	8099.6	8036.0	7983.4	7981.2	7957.1	7970.3	7987.8	8031.6	8071.1
50°	9298.6	9020.2	8849.3	8691.4	8577.5	8538.0	8492.0	8487.6	8502.9	8553.3	8621.3
52.5°	11100.5	10714.7	10350.8	10013.2	9719.5	9493.7	9381.9	9322.7	9300.8	9351.2	9417.0
55°	14397.3	13669.6	13156.6	12814.7	12084.7	11775.6	11378.9	11196.9	11019.4	11036.9	11148.7
57.5°	20030.9	19638.5	19208.9	18610.4	18163.3	17624.0	16633.2	16080.8	16104.9	16234.3	15830.9
60°	27413.7	27016.9	26839.3	26295.7	25984.5	25767.4	25241.4	24325.1	24000.7	23939.3	23198.4
62.5°	30217.3	30311.5	30451.8	30605.3	30596.5	30690.8	30230.4	29932.3	29557.5	29070.8	28338.7
65°	29485.1	29724.1	30009.0	30421.1	30890.2	31236.6	31528.1	31493.1	31142.3	30493.5	29719.7
67.5°	27005.9	27242.7	27450.9	28003.3	28772.7	29476.4	30098.9	30522.0	30287.4	29750.4	28847.3
70°	23279.5	23450.5	23582.0	24062.0	24906.0	25765.2	26578.5	27288.7	27216.4	26565.3	25844.2
72.5°	16867.8	17282.0	17505.6	17472.8	17994.5	18956.8	19070.8	19678.0	19846.7	19145.3	17996.7
75°	8218.0	8224.5	7965.9	7880.4	7906.7	8073.3	7755.4	7775.2	7665.6	7168.0	6758.1
77.5°	2871.6	2792.7	2604.1	2380.6	2060.5	1760.2	1455.5	1324.0	1280.2	1150.8	1060.9
80°	2474.8	2591.0	2553.7	2369.6	2032.0	1619.9	1210.0	896.5	765.0	719.0	675.1
82.5°	2810.2	3257.4	3542.3	3527.0	3064.5	2301.6	1435.8	824.2	587.5	515.1	473.5
85°	1567.3	1685.7	1718.6	1565.1	1299.9	887.8	495.4	348.5	295.9	269.6	243.3
87.5°	249.9	228.0	223.6	195.1	184.1	168.8	149.1	140.3	129.3	122.8	122.8
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: P159399

CATALOG NUMBER: VST-E12-LED-E-U-T2-7030

**CANDELA DISTRIBUTION (continued):**

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8
2.5°	3178.5	3176.3	3169.7	3163.1	3158.7	3156.5	3154.3	3150.0	3147.8	3145.6	3141.2
5°	3253.0	3248.6	3237.6	3226.7	3222.3	3215.7	3209.1	3204.8	3200.4	3198.2	3189.4
7.5°	3369.2	3364.8	3351.6	3342.9	3340.7	3323.1	3320.9	3314.4	3303.4	3301.2	3288.1
10°	3509.5	3507.3	3496.3	3489.7	3485.3	3476.6	3463.4	3452.5	3441.5	3441.5	3432.7
12.5°	3671.7	3662.9	3669.5	3654.1	3649.7	3641.0	3634.4	3632.2	3619.1	3608.1	3605.9
15°	3862.4	3851.4	3851.4	3847.0	3842.6	3833.9	3831.7	3833.9	3820.7	3825.1	3812.0
17.5°	4099.1	4103.5	4101.3	4101.3	4090.3	4090.3	4072.8	4094.7	4079.4	4090.3	4086.0
20°	4395.0	4397.2	4392.8	4399.4	4403.8	4401.6	4399.4	4397.2	4403.8	4412.6	4406.0
22.5°	4710.7	4710.7	4708.5	4732.6	4706.3	4726.0	4732.6	4719.5	4754.5	4750.2	4756.7
25°	5052.7	5052.7	5070.2	5089.9	5094.3	5079.0	5087.7	5076.8	5098.7	5116.2	5120.6
27.5°	5370.5	5399.0	5412.1	5399.0	5410.0	5434.1	5431.9	5431.9	5447.2	5442.8	5484.5
30°	5697.1	5714.7	5732.2	5723.4	5727.8	5758.5	5760.7	5762.9	5782.6	5811.1	5841.8
32.5°	6069.8	6087.3	6078.5	6107.0	6104.8	6142.1	6148.7	6155.3	6216.6	6205.7	6269.2
35°	6527.9	6545.4	6536.7	6567.4	6563.0	6576.1	6600.2	6626.5	6637.5	6701.1	6751.5
37.5°	6742.7	6742.7	6762.4	6797.5	6810.7	6832.6	6869.9	6902.7	6957.5	7025.5	7104.4
40°	7001.4	7008.0	7034.3	7071.5	7095.6	7146.1	7214.0	7260.0	7343.3	7417.9	7509.9
42.5°	7314.8	7343.3	7374.0	7424.4	7477.1	7556.0	7652.4	7711.6	7821.2	7917.7	8031.6
45°	7680.9	7709.4	7781.7	7873.8	7950.5	8038.2	8117.1	8257.4	8356.1	8456.9	8555.5
47.5°	8123.7	8207.0	8266.2	8375.8	8470.0	8586.2	8684.9	8816.4	8923.8	9046.6	9129.8
50°	8691.4	8794.5	8871.2	9013.7	9105.7	9235.1	9360.0	9458.7	9568.3	9688.8	9756.8
52.5°	9506.9	9612.1	9708.5	9886.1	10000.1	10087.8	10254.4	10377.1	10478.0	10565.6	10640.2
55°	11273.7	11243.0	11510.4	11854.6	11894.0	12211.9	12271.0	12374.1	12560.4	12586.7	12794.9
57.5°	16321.9	16164.1	16552.1	17056.3	16968.6	16808.6	17477.1	17518.8	17424.5	17676.6	17391.7
60°	23308.0	23031.8	23137.0	23275.1	23075.6	22981.4	23014.2	23108.5	23016.4	22915.6	22639.4
62.5°	27972.6	27547.4	27242.7	26986.2	26661.8	26427.2	26164.2	25839.8	25752.1	25383.8	25074.8
65°	28967.8	28305.8	27823.6	27339.1	26892.0	26477.7	26080.9	25802.5	25434.2	24998.0	24675.8
67.5°	27874.0	27054.2	26348.3	25644.7	25138.3	24528.9	24230.8	23777.1	23323.3	22823.5	22527.6
70°	24695.5	23840.6	22952.9	22264.6	21576.3	20822.2	20675.3	20138.3	19877.4	19195.7	19077.3
72.5°	17045.3	16475.4	16078.6	15228.1	14809.4	14423.6	14300.9	13803.3	13855.9	13108.4	13380.2
75°	6061.0	5979.9	5863.7	5383.7	5298.2	5149.1	5109.6	5074.6	5429.7	4936.5	5293.8
77.5°	1041.2	1034.6	975.5	947.0	1001.8	966.7	975.5	957.9	1060.9	1076.3	1052.2
80°	646.7	629.1	609.4	596.2	598.4	585.3	587.5	591.9	598.4	596.2	602.8
82.5°	442.8	427.4	418.7	409.9	423.1	427.4	438.4	449.4	466.9	477.9	491.0
85°	241.1	221.4	221.4	219.2	236.7	249.9	267.4	289.3	320.0	346.3	374.8
87.5°	122.8	118.4	120.6	124.9	140.3	151.3	173.2	192.9	219.2	247.7	274.0
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: P159399

CATALOG NUMBER: VST-E12-LED-E-U-T2-7030

**CANDELA DISTRIBUTION (continued):**

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8	3147.8
2.5°	3139.0	3139.0	3136.8	3136.8	3134.6	3132.4	3130.2	3123.7	3099.5	3077.6	3062.3
5°	3187.2	3180.7	3178.5	3171.9	3169.7	3165.3	3158.7	3152.2	3108.3	3068.9	3040.4
7.5°	3285.9	3277.1	3272.7	3266.1	3259.6	3250.8	3242.0	3235.5	3182.8	3136.8	3101.7
10°	3415.2	3410.8	3408.6	3399.9	3399.9	3386.7	3384.5	3369.2	3312.2	3270.5	3239.8
12.5°	3594.9	3586.2	3584.0	3573.0	3577.4	3573.0	3568.6	3559.9	3518.2	3470.0	3428.4
15°	3818.5	3818.5	3807.6	3798.8	3801.0	3796.6	3805.4	3794.4	3768.1	3724.3	3656.3
17.5°	4088.2	4083.8	4088.2	4081.6	4086.0	4090.3	4079.4	4081.6	4068.4	4013.6	3912.8
20°	4401.6	4395.0	4421.3	4410.4	4434.5	4412.6	4417.0	4423.5	4423.5	4351.2	4215.3
22.5°	4761.1	4756.7	4756.7	4778.6	4787.4	4789.6	4798.4	4805.0	4822.5	4730.4	4513.4
25°	5120.6	5136.0	5138.1	5166.6	5179.8	5179.8	5186.4	5210.5	5263.1	5136.0	4855.4
27.5°	5486.7	5523.9	5532.7	5552.4	5572.2	5591.9	5607.2	5624.8	5710.3	5572.2	5206.1
30°	5852.7	5894.4	5925.1	5947.0	5971.1	6019.3	6028.1	6063.2	6205.7	6036.9	5539.3
32.5°	6282.4	6341.6	6381.0	6409.5	6446.8	6492.8	6519.1	6563.0	6701.1	6424.9	5782.6
35°	6795.3	6830.4	6887.4	6935.6	6957.5	7036.5	7078.1	7089.1	7194.3	6760.3	5962.4
37.5°	7150.4	7209.6	7308.3	7376.2	7415.7	7459.5	7529.7	7575.7	7676.5	7064.9	6052.2
40°	7602.0	7691.9	7770.8	7871.6	7935.2	7968.1	8038.2	8075.5	8088.6	7325.8	6023.7
42.5°	8152.2	8233.3	8338.5	8419.6	8467.9	8505.1	8562.1	8577.5	8406.5	7448.6	5870.3
45°	8669.5	8794.5	8884.3	8943.5	8978.6	8998.3	9033.4	9035.6	8669.5	7387.2	5607.2
47.5°	9226.3	9316.2	9399.5	9441.1	9436.7	9441.1	9428.0	9419.2	8801.0	7174.5	5269.7
50°	9842.3	9901.4	9936.5	9956.2	9967.2	9925.6	9866.4	9826.9	8812.0	6872.0	4927.7
52.5°	10668.7	10743.2	10736.6	10734.4	10646.7	10607.3	10449.5	10368.4	8748.4	6516.9	4541.9
55°	12762.1	12689.7	12547.2	12617.4	12260.1	12073.8	11828.3	11600.3	8831.7	6179.4	4094.7
57.5°	17505.6	17534.1	17128.6	16911.6	16308.8	15554.7	14947.5	14357.9	9581.4	5973.3	3511.6
60°	22455.3	22082.6	21567.5	20782.7	20006.8	18886.6	17805.9	16784.5	10328.9	5758.5	2821.2
62.5°	24616.6	24086.1	23308.0	22293.1	21074.3	19704.3	18358.3	17113.3	9967.2	5063.6	2051.8
65°	24178.2	23367.2	22507.9	21319.8	19838.0	18336.4	16764.7	15493.3	8338.5	3776.9	1264.8
67.5°	21885.3	21197.0	20289.5	18880.0	17295.2	15732.3	14292.1	12867.3	6194.7	2354.3	708.0
70°	18472.3	17799.4	16878.7	15436.4	13853.7	12358.7	10833.1	9671.3	3947.9	1135.5	510.7
72.5°	12814.7	12268.9	11617.8	10589.7	9202.2	7843.1	6810.7	5918.5	2187.7	602.8	466.9
75°	5203.9	5206.1	5087.7	4653.7	3932.5	3391.1	2891.3	2452.9	914.1	512.9	460.3
77.5°	1179.3	1199.0	1310.8	1242.9	1120.1	1047.8	938.2	828.6	556.8	528.3	464.7
80°	596.2	598.4	591.9	594.0	587.5	589.7	580.9	574.3	521.7	543.6	464.7
82.5°	497.6	508.6	506.4	506.4	508.6	508.6	508.6	506.4	541.4	572.1	449.4
85°	394.6	416.5	434.0	451.6	471.3	484.4	491.0	497.6	526.1	563.4	407.7
87.5°	298.1	324.4	346.3	363.9	394.6	394.6	416.5	431.8	431.8	440.6	214.8
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: P159399

CATALOG NUMBER: VST-E12-LED-E-U-T2-7030

**CANDELA DISTRIBUTION (continued):**

	145°	155°	165°	175°	180°
0°	3147.8	3147.8	3147.8	3147.8	3147.8
2.5°	3040.4	3031.6	3022.8	3018.4	3009.7
5°	3018.4	3000.9	2989.9	2989.9	2981.2
7.5°	3082.0	3075.4	3060.1	3051.3	3060.1
10°	3217.9	3207.0	3189.4	3176.3	3182.8
12.5°	3399.9	3356.0	3320.9	3305.6	3294.6
15°	3588.4	3500.7	3430.5	3391.1	3380.1
17.5°	3790.0	3636.6	3531.4	3472.2	3461.2
20°	3996.1	3805.4	3656.3	3579.6	3577.4
22.5°	4243.8	3989.5	3798.8	3698.0	3691.4
25°	4504.6	4153.9	3901.8	3772.5	3759.4
27.5°	4730.4	4285.4	3965.4	3812.0	3798.8
30°	4918.9	4384.1	4018.0	3840.5	3822.9
32.5°	5054.8	4441.1	4039.9	3849.2	3829.5
35°	5098.7	4419.2	3978.6	3770.3	3748.4
37.5°	5039.5	4276.7	3807.6	3577.4	3551.1
40°	4861.9	4026.8	3529.2	3292.4	3259.6
42.5°	4590.1	3719.9	3193.8	2968.0	2926.4
45°	4254.8	3373.6	2860.6	2608.5	2588.8
47.5°	3904.0	3009.7	2485.8	2257.8	2233.7
50°	3524.8	2588.8	2119.7	1872.0	1872.0
52.5°	3073.2	2178.9	1694.4	1508.1	1492.8
55°	2553.7	1716.4	1350.3	1207.8	1188.1
57.5°	1994.8	1319.6	1078.5	995.2	973.3
60°	1466.5	990.8	868.0	822.0	813.2
62.5°	995.2	754.1	699.3	679.5	677.3
65°	673.0	587.5	572.1	565.5	567.7
67.5°	517.3	488.8	482.2	480.1	480.1
70°	449.4	431.8	425.3	427.4	425.3
72.5°	423.1	399.0	401.1	405.5	403.3
75°	414.3	383.6	392.4	394.6	385.8
77.5°	407.7	366.1	388.0	394.6	370.5
80°	394.6	350.7	403.3	405.5	363.9
82.5°	361.7	311.3	403.3	372.6	328.8
85°	306.9	236.7	455.9	324.4	243.3
87.5°	195.1	140.3	309.1	221.4	146.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)