

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: P159378

Luminaire Tested: **VST-E10-LED-E-U-T2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159378
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-T2-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (210) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26051.6 lumens
Efficiency: N/A
Efficacy: 105.2 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

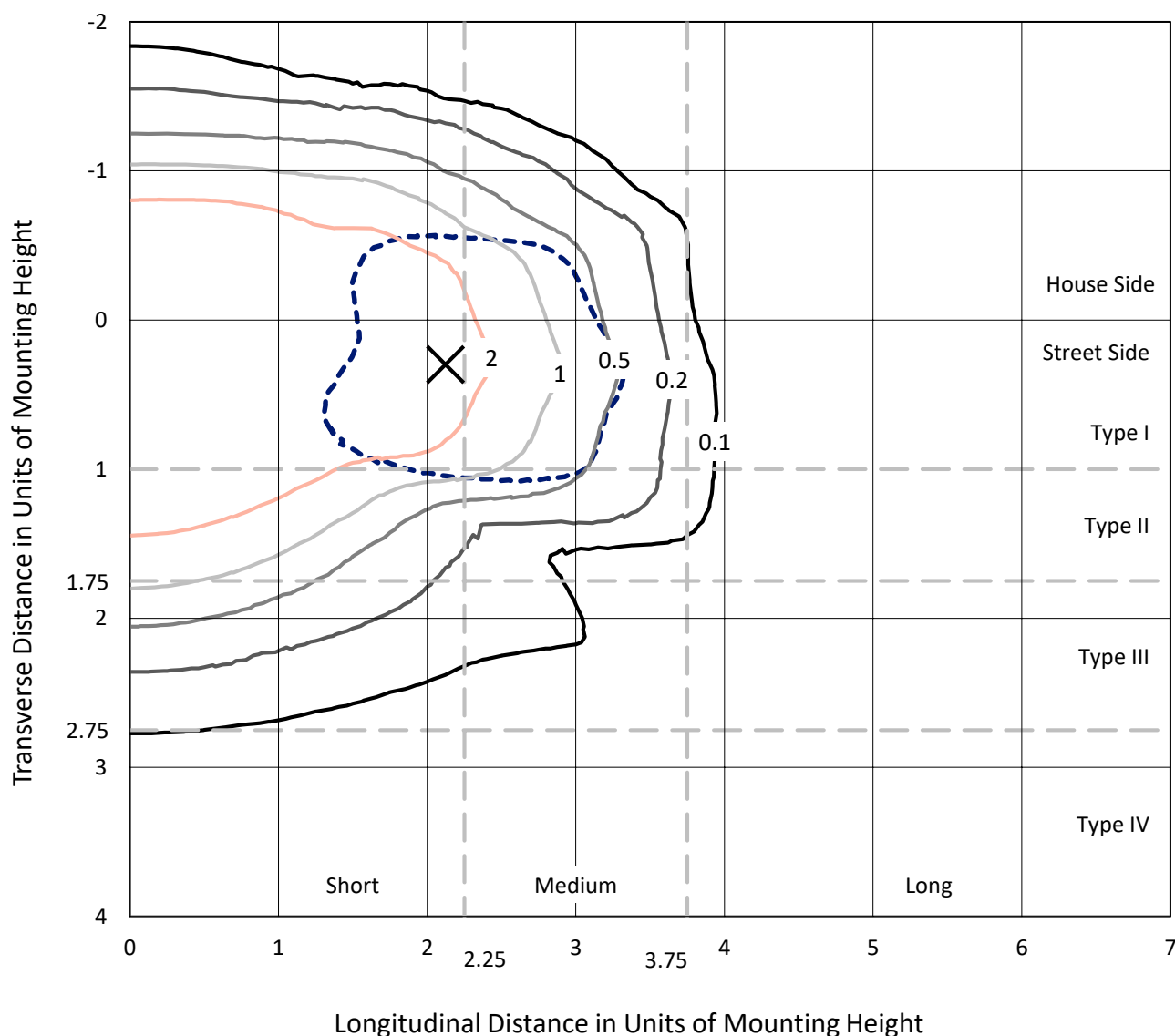


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

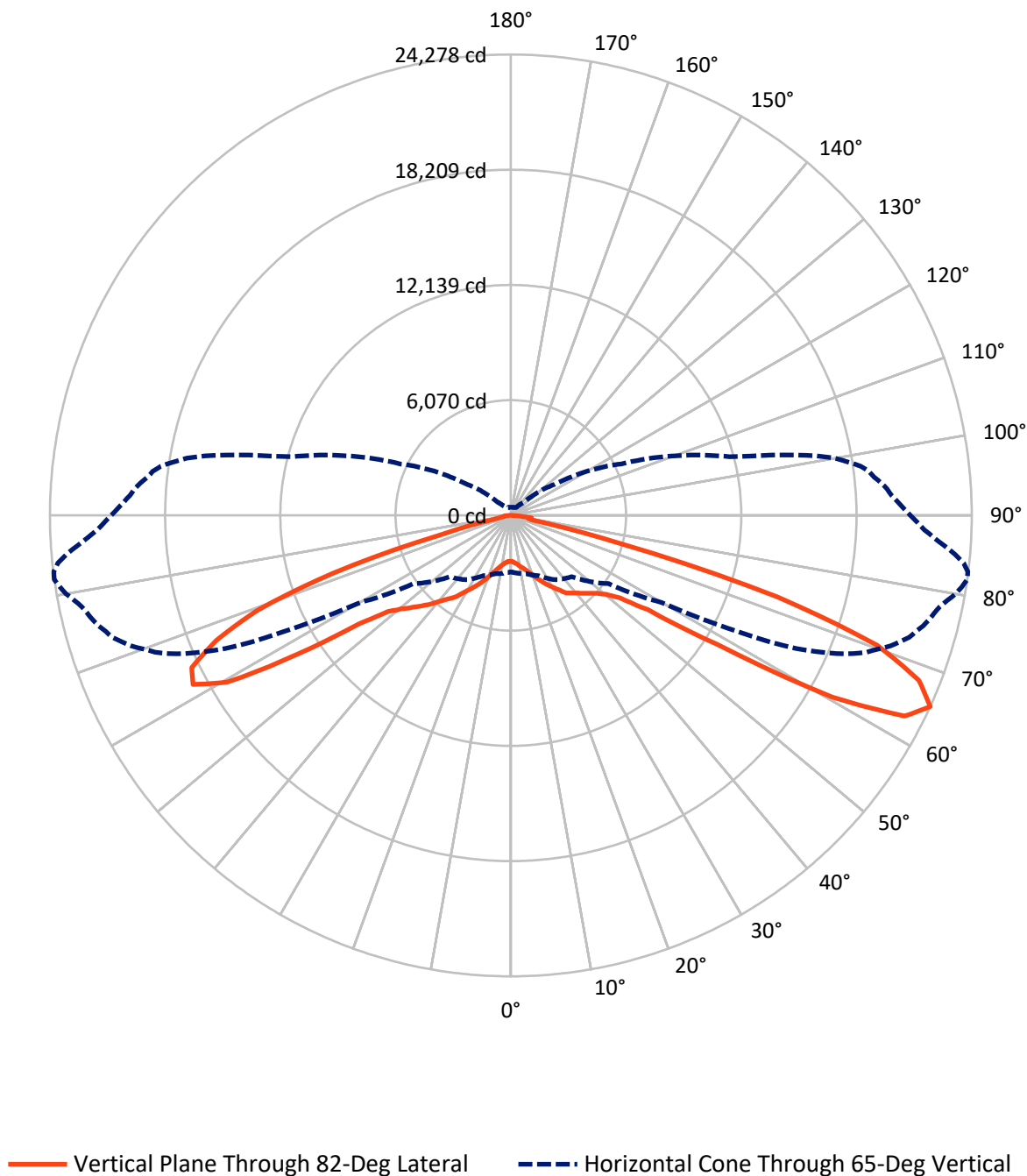


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9699.9	0.0	9699.9
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	16351.7	0.0	16351.7
	% Fixture	62.8	0.0	62.8
Total	Lumens	26051.6	0.0	26051.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.4	0.9
10°-20°	862.2	3.3
20°-30°	1708.5	6.6
30°-40°	2928.7	11.2
40°-50°	4399.7	16.9
50°-60°	6112.6	23.5
60°-70°	6973.5	26.8
70°-80°	2402.3	9.2
80°-90°	418.7	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°	26051.6	100.0
0°-180°	26051.6	100.0

Coefficient of Utilization



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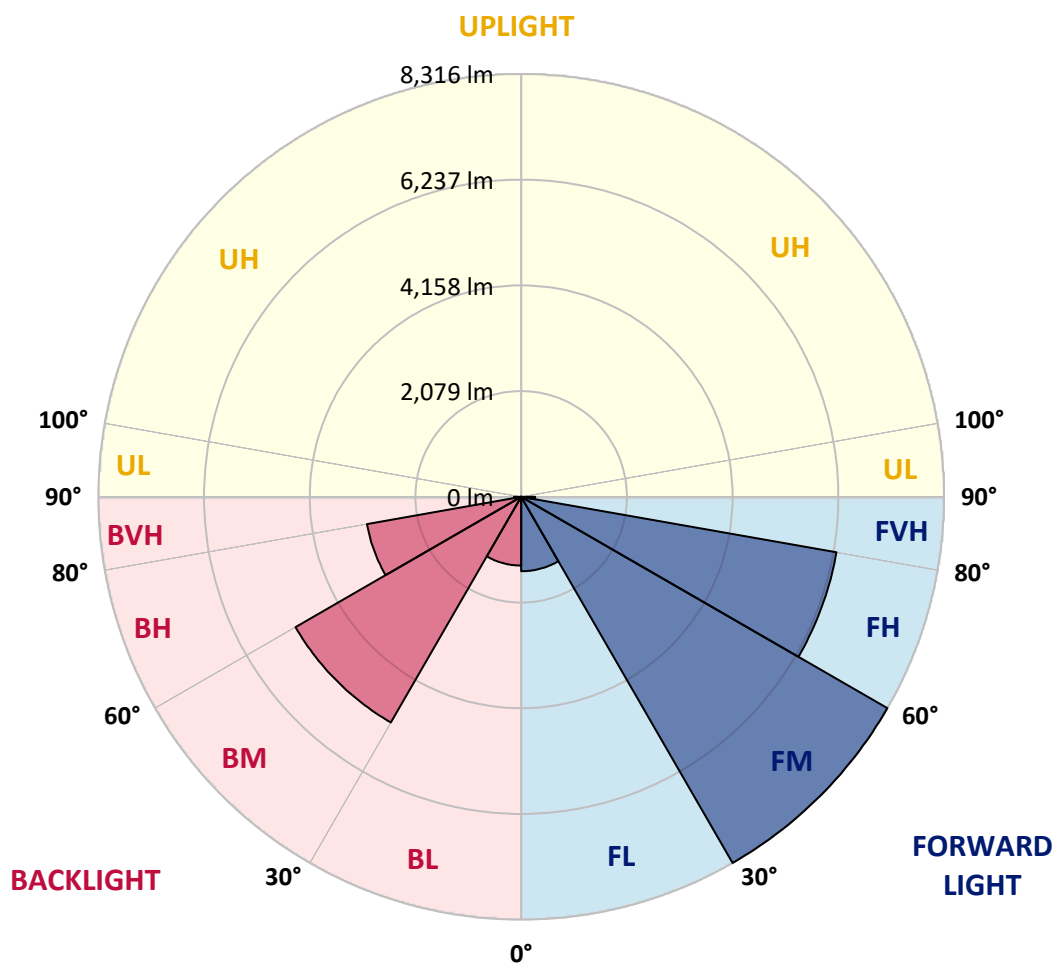
CATALOG NUMBER: VST-E10-LED-E-U-T2-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1463.5	5.6			
FM	(30°-60°)	8316.2	31.9			
FH	(60°-80°)	6296.4	24.2			G3/7500
FVH	(80°-90°)	275.6	1.1			G3/500
BL	(0°-30°)	1352.6	5.2	B3/2500		
BM	(30°-60°)	5124.8	19.7	B4/8500		
BH	(60°-80°)	3079.4	11.8	B4/5000		G4/5000
BVH	(80°-90°)	143.1	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°	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2555.6	2557.3	2555.6	2550.5	2548.9	2533.7	2516.8	2508.3	2506.7	2499.9	2501.6
5°	2714.3	2709.2	2702.5	2694.0	2685.6	2660.3	2631.6	2616.4	2611.3	2606.2	2599.5
7.5°	2856.1	2859.4	2856.1	2844.2	2822.3	2790.2	2753.1	2729.5	2727.8	2722.7	2717.7
10°	3038.4	3046.8	3026.6	3006.3	2975.9	2927.0	2884.8	2854.4	2849.3	2842.6	2839.2
12.5°	3235.9	3237.5	3230.8	3185.2	3134.6	3067.1	3006.3	2975.9	2969.2	2960.7	2957.3
15°	3446.9	3448.5	3411.4	3367.5	3289.9	3208.9	3124.5	3090.7	3082.3	3083.9	3070.4
17.5°	3614.0	3617.3	3581.9	3526.2	3433.4	3337.1	3246.0	3219.0	3213.9	3215.6	3208.9
20°	3686.6	3691.6	3669.7	3627.5	3539.7	3455.3	3389.5	3372.6	3370.9	3367.5	3381.0
22.5°	3683.2	3684.9	3676.4	3659.5	3607.2	3558.3	3549.8	3560.0	3558.3	3561.6	3573.5
25°	3652.8	3657.9	3656.2	3662.9	3654.5	3673.0	3711.9	3747.3	3752.4	3759.1	3781.1
27.5°	3730.4	3740.6	3728.8	3735.5	3749.0	3811.5	3890.8	3944.8	3954.9	3973.5	3992.1
30°	4034.3	4020.8	4005.6	3988.7	3997.1	4036.0	4125.4	4172.7	4177.8	4191.3	4216.6
32.5°	4485.0	4469.8	4456.3	4429.3	4422.5	4405.6	4436.0	4447.8	4446.1	4459.6	4466.4
35°	4993.1	4994.7	4991.4	5011.6	5028.5	4942.4	4836.1	4807.4	4819.2	4804.0	4807.4
37.5°	5426.9	5431.9	5521.4	5632.8	5664.9	5610.9	5377.9	5263.1	5224.3	5219.2	5180.4
40°	5907.9	5907.9	6043.0	6179.7	6269.2	6336.7	6059.9	5857.3	5774.6	5751.0	5654.7
42.5°	6436.3	6409.3	6532.5	6682.7	6848.1	7001.7	6858.3	6630.4	6512.2	6470.0	6301.2
45°	6870.1	6853.2	6914.0	7054.1	7322.5	7622.9	7643.2	7526.7	7455.8	7368.0	7212.7
47.5°	7136.8	7128.3	7163.8	7315.7	7651.6	8137.8	8409.5	8468.6	8426.4	8358.9	8208.7
50°	7241.4	7229.6	7254.9	7423.7	7800.2	8441.6	9042.5	9321.0	9341.3	9356.5	9309.2
52.5°	7204.3	7189.1	7241.4	7383.2	7774.8	8547.9	9537.1	10072.2	10161.7	10237.6	10392.9
55°	6848.1	6824.5	6966.3	7233.0	7665.1	8509.1	9898.3	10794.6	10983.7	11186.3	11530.6
57.5°	6302.9	6282.7	6486.9	6853.2	7471.0	8402.8	10141.4	11707.8	12133.2	12497.8	13475.2
60°	5778.0	5761.1	5880.9	6235.4	6841.4	7884.6	9840.9	12015.1	12729.1	13515.7	15299.9
62.5°	4839.4	4793.9	4954.2	5253.0	5636.2	6522.4	8529.4	11331.4	12432.0	13588.3	16007.1
65°	2974.2	3040.1	3178.5	3509.3	4137.2	4559.2	6264.1	9167.4	10619.1	12069.1	15207.0
67.5°	1888.9	1907.4	2010.4	2240.0	2726.1	3149.8	3796.3	5752.6	6871.8	8298.1	11939.1
70°	1618.8	1630.6	1718.4	1958.1	2294.0	2815.6	2872.9	3004.6	3406.3	4314.5	7018.6
72.5°	1276.1	1296.4	1365.6	1573.2	1978.3	2538.7	3546.4	2375.0	2294.0	2369.9	3424.9
75°	759.6	783.2	840.6	953.7	1271.1	1941.2	3715.2	2763.2	2575.9	2429.0	2363.2
77.5°	401.7	384.9	423.7	489.5	653.2	1034.7	2791.9	3386.1	3254.4	3078.9	2705.8
80°	199.2	205.9	217.7	231.3	292.0	420.3	1396.0	3502.6	3882.4	4051.2	3720.3
82.5°	79.3	89.5	126.6	135.0	160.4	178.9	449.0	1941.2	2780.1	3771.0	4923.8
85°	40.5	38.8	67.5	81.0	94.5	84.4	158.7	724.1	1303.1	2030.6	3289.9
87.5°	5.1	6.8	15.2	20.3	28.7	27.0	45.6	157.0	249.8	354.5	498.0
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°	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2493.1	2491.5	2491.5	2484.7	2484.7	2486.4	2481.3	2478.0	2478.0	2479.6	2472.9
5°	2594.4	2589.4	2589.4	2582.6	2574.2	2574.2	2567.4	2565.7	2562.4	2555.6	2550.5
7.5°	2712.6	2707.5	2699.1	2694.0	2690.6	2685.6	2677.1	2673.8	2667.0	2660.3	2653.5
10°	2834.1	2827.4	2824.0	2815.6	2812.2	2802.0	2797.0	2798.7	2785.2	2780.1	2781.8
12.5°	2955.7	2948.9	2937.1	2933.7	2932.0	2921.9	2916.8	2913.5	2903.3	2901.6	2896.6
15°	3063.7	3067.1	3062.0	3053.6	3046.8	3045.1	3040.1	3036.7	3029.9	3023.2	3016.4
17.5°	3203.8	3208.9	3202.1	3190.3	3190.3	3188.6	3190.3	3188.6	3176.8	3181.8	3178.5
20°	3382.7	3386.1	3369.2	3374.3	3377.7	3376.0	3381.0	3386.1	3382.7	3382.7	3387.8
22.5°	3588.6	3593.7	3583.6	3590.3	3600.5	3592.0	3607.2	3605.5	3608.9	3614.0	3615.7
25°	3799.6	3809.8	3801.3	3819.9	3813.2	3819.9	3838.5	3833.4	3841.8	3855.4	3860.4
27.5°	4010.6	4017.4	4019.1	4030.9	4042.7	4052.8	4076.5	4076.5	4083.2	4106.9	4106.9
30°	4231.8	4238.5	4245.3	4262.2	4268.9	4287.5	4311.1	4317.9	4314.5	4348.2	4358.4
32.5°	4486.7	4493.4	4505.2	4525.5	4533.9	4552.5	4552.5	4571.1	4584.6	4613.3	4614.9
35°	4825.9	4831.0	4825.9	4824.3	4836.1	4861.4	4863.1	4890.1	4901.9	4930.6	4939.0
37.5°	5165.2	5163.5	5141.6	5118.0	5119.6	5109.5	5102.8	5114.6	5119.6	5121.3	5139.9
40°	5622.7	5578.8	5545.0	5485.9	5458.9	5416.7	5391.4	5389.7	5362.7	5359.3	5364.4
42.5°	6221.9	6171.3	6091.9	5992.3	5916.4	5838.7	5781.3	5747.6	5688.5	5658.1	5632.8
45°	7059.1	6934.2	6839.7	6721.5	6574.7	6439.7	6297.9	6233.7	6120.6	6051.4	5973.8
47.5°	8082.1	7958.8	7813.7	7692.1	7499.7	7312.3	7118.2	6947.7	6750.2	6593.3	6465.0
50°	9192.7	9120.2	9015.5	8902.4	8654.3	8531.1	8286.3	8055.0	7842.4	7562.2	7317.4
52.5°	10332.1	10374.3	10350.7	10310.2	10153.2	10105.9	9894.9	9613.1	9398.7	9206.3	8780.9
55°	11736.5	11787.2	11888.5	11947.5	11929.0	12048.8	11996.5	11777.0	11691.0	11601.5	11299.4
57.5°	13885.3	14246.6	14633.1	14972.4	15051.7	15477.1	15386.0	15605.4	15760.7	15649.3	15551.4
60°	16175.9	16905.1	17561.8	18248.8	18807.5	19226.1	19779.8	20152.8	20387.4	20809.4	20843.2
62.5°	17099.3	18090.1	18924.0	19720.7	20384.1	20964.7	21464.4	21979.2	22401.2	22782.7	23057.8
65°	16592.9	17627.6	18638.7	19447.2	20085.3	20584.9	21128.5	21537.0	21952.2	22197.0	22485.6
67.5°	13794.2	15164.8	16408.9	17320.4	18193.1	18701.2	19344.3	19746.0	20186.6	20444.8	20630.5
70°	8993.6	10777.8	12477.6	13860.0	15038.2	15630.7	16407.2	16955.8	17485.8	17499.3	17808.2
72.5°	4852.9	6345.1	7768.1	9180.9	10524.6	11312.9	12079.2	12746.0	13272.6	13048.1	13355.3
75°	2702.5	3401.3	4179.4	5028.5	5847.2	6297.9	6870.1	6873.5	7145.2	6718.2	6826.2
77.5°	2599.5	2567.4	2579.2	2602.9	2643.4	2557.3	2555.6	2503.3	2422.3	2275.4	2300.7
80°	3414.8	3006.3	2712.6	2251.8	1812.9	1478.7	1385.8	1407.8	1473.6	1605.3	1772.4
82.5°	4937.3	4593.0	4100.1	3374.3	2648.4	2042.5	1677.9	1488.8	1480.4	1612.0	1865.2
85°	3595.4	3803.0	3771.0	3148.1	2596.1	2108.3	1534.4	1296.4	1073.6	1021.2	1110.7
87.5°	530.0	438.9	494.6	413.6	300.5	232.9	204.2	163.7	157.0	160.4	175.6
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°	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2474.6	2467.8	2461.1	2466.1	2461.1	2459.4	2454.3	2450.9	2449.3	2449.3	2449.3
5°	2550.5	2542.1	2537.0	2535.3	2530.3	2525.2	2523.5	2515.1	2513.4	2513.4	2508.3
7.5°	2653.5	2646.8	2638.3	2633.3	2629.9	2621.4	2613.0	2611.3	2609.6	2602.9	2597.8
10°	2773.4	2763.2	2753.1	2753.1	2746.3	2744.7	2736.2	2724.4	2722.7	2712.6	2709.2
12.5°	2886.4	2883.1	2871.3	2867.9	2862.8	2857.8	2852.7	2847.6	2842.6	2834.1	2837.5
15°	3021.5	3013.0	3002.9	3004.6	3002.9	2996.2	2989.4	2984.4	2981.0	2977.6	2977.6
17.5°	3183.5	3180.2	3178.5	3170.0	3163.3	3168.3	3168.3	3168.3	3159.9	3161.6	3163.3
20°	3389.5	3392.8	3389.5	3382.7	3381.0	3386.1	3374.3	3392.8	3382.7	3376.0	3379.3
22.5°	3617.3	3629.2	3615.7	3617.3	3625.8	3629.2	3617.3	3632.5	3627.5	3617.3	3625.8
25°	3865.5	3873.9	3867.2	3865.5	3870.5	3882.4	3880.7	3879.0	3890.8	3880.7	3885.7
27.5°	4120.4	4125.4	4128.8	4133.9	4137.2	4135.6	4142.3	4142.3	4149.1	4137.2	4142.3
30°	4373.6	4373.6	4380.3	4387.1	4387.1	4387.1	4400.6	4402.3	4392.1	4395.5	4383.7
32.5°	4643.6	4645.3	4652.1	4652.1	4665.6	4667.3	4682.5	4662.2	4682.5	4665.6	4669.0
35°	4961.0	4982.9	4986.3	5003.2	5016.7	5021.7	5021.7	5023.4	5042.0	5028.5	5033.6
37.5°	5146.7	5151.7	5165.2	5173.7	5173.7	5180.4	5185.5	5180.4	5185.5	5183.8	5188.9
40°	5366.1	5361.0	5376.2	5379.6	5372.8	5381.3	5379.6	5374.5	5388.0	5377.9	5384.7
42.5°	5632.8	5604.1	5602.4	5615.9	5602.4	5609.2	5607.5	5595.7	5612.5	5617.6	5612.5
45°	5918.1	5902.9	5872.5	5872.5	5859.0	5853.9	5855.6	5853.9	5855.6	5875.9	5882.6
47.5°	6382.3	6289.4	6237.1	6188.1	6147.6	6145.9	6127.4	6137.5	6151.0	6184.8	6215.1
50°	7160.4	6946.0	6814.4	6692.8	6605.1	6574.7	6539.2	6535.9	6547.7	6586.5	6638.8
52.5°	8547.9	8250.9	7970.7	7710.7	7484.5	7310.6	7224.6	7179.0	7162.1	7200.9	7251.6
55°	11086.7	10526.3	10131.3	9867.9	9305.8	9067.8	8762.3	8622.2	8485.5	8499.0	8585.1
57.5°	15424.8	15122.6	14791.8	14331.0	13986.6	13571.4	12808.4	12383.0	12401.6	12501.2	12190.6
60°	21109.9	20804.4	20667.6	20249.0	20009.3	19842.2	19437.1	18731.5	18481.7	18434.4	17863.9
62.5°	23268.8	23341.4	23449.4	23567.6	23560.9	23633.4	23279.0	23049.4	22760.7	22386.0	21822.2
65°	22705.0	22889.0	23108.5	23425.8	23787.0	24053.7	24278.2	24251.2	23981.2	23481.5	22885.7
67.5°	20795.9	20978.2	21138.6	21564.0	22156.4	22698.3	23177.7	23503.5	23322.8	22909.3	22213.8
70°	17926.4	18058.0	18159.3	18529.0	19178.8	19840.5	20466.8	21013.7	20958.0	20456.7	19901.3
72.5°	12989.0	13308.0	13480.2	13454.9	13856.6	14597.7	14685.4	15153.0	15283.0	14742.8	13858.3
75°	6328.2	6333.3	6134.1	6068.3	6088.6	6216.8	5972.1	5987.3	5902.9	5519.7	5204.0
77.5°	2211.3	2150.5	2005.3	1833.1	1586.7	1355.4	1120.8	1019.5	985.8	886.2	817.0
80°	1905.7	1995.2	1966.5	1824.7	1564.8	1247.4	931.8	690.4	589.1	553.7	519.9
82.5°	2164.0	2508.3	2727.8	2716.0	2359.8	1772.4	1105.6	634.7	452.4	396.7	364.6
85°	1206.9	1298.1	1323.4	1205.2	1001.0	683.6	381.5	268.4	227.9	207.6	187.4
87.5°	192.4	175.6	172.2	150.2	141.8	130.0	114.8	108.0	99.6	94.5	94.5
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-E10-LED-E-U-T2-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2447.6	2445.9	2440.8	2435.8	2432.4	2430.7	2429.0	2425.6	2423.9	2422.3	2418.9
5°	2505.0	2501.6	2493.1	2484.7	2481.3	2476.3	2471.2	2467.8	2464.5	2462.8	2456.0
7.5°	2594.4	2591.1	2580.9	2574.2	2572.5	2559.0	2557.3	2552.2	2543.8	2542.1	2532.0
10°	2702.5	2700.8	2692.3	2687.3	2683.9	2677.1	2667.0	2658.6	2650.1	2650.1	2643.4
12.5°	2827.4	2820.6	2825.7	2813.9	2810.5	2803.7	2798.7	2797.0	2786.9	2778.4	2776.7
15°	2974.2	2965.8	2965.8	2962.4	2959.0	2952.3	2950.6	2952.3	2942.2	2945.5	2935.4
17.5°	3156.5	3159.9	3158.2	3158.2	3149.8	3149.8	3136.3	3153.2	3141.3	3149.8	3146.4
20°	3384.4	3386.1	3382.7	3387.8	3391.2	3389.5	3387.8	3386.1	3391.2	3397.9	3392.8
22.5°	3627.5	3627.5	3625.8	3644.4	3624.1	3639.3	3644.4	3634.2	3661.2	3657.9	3662.9
25°	3890.8	3890.8	3904.3	3919.5	3922.9	3911.1	3917.8	3909.4	3926.2	3939.7	3943.1
27.5°	4135.6	4157.5	4167.6	4157.5	4165.9	4184.5	4182.8	4182.8	4194.6	4191.3	4223.3
30°	4387.1	4400.6	4414.1	4407.3	4410.7	4434.3	4436.0	4437.7	4452.9	4474.8	4498.5
32.5°	4674.0	4687.5	4680.8	4702.7	4701.0	4729.7	4734.8	4739.9	4787.1	4778.7	4827.6
35°	5026.8	5040.3	5033.6	5057.2	5053.8	5063.9	5082.5	5102.8	5111.2	5160.2	5199.0
37.5°	5192.2	5192.2	5207.4	5234.4	5244.6	5261.4	5290.1	5315.5	5357.7	5410.0	5470.7
40°	5391.4	5396.5	5416.7	5445.4	5464.0	5502.8	5555.1	5590.6	5654.7	5712.1	5783.0
42.5°	5632.8	5654.7	5678.4	5717.2	5757.7	5818.5	5892.7	5938.3	6022.7	6097.0	6184.8
45°	5914.7	5936.6	5992.3	6063.2	6122.3	6189.8	6250.6	6358.6	6434.6	6512.2	6588.2
47.5°	6255.7	6319.8	6365.4	6449.8	6522.4	6611.8	6687.8	6789.1	6871.8	6966.3	7030.4
50°	6692.8	6772.2	6831.3	6941.0	7011.9	7111.5	7207.7	7283.6	7368.0	7460.9	7513.2
52.5°	7320.8	7401.8	7476.1	7612.8	7700.6	7768.1	7896.4	7990.9	8068.6	8136.1	8193.5
55°	8681.3	8657.7	8863.6	9128.6	9159.0	9403.7	9449.3	9528.7	9672.1	9692.4	9852.8
57.5°	12568.7	12447.2	12746.0	13134.2	13066.7	12943.4	13458.3	13490.4	13417.8	13611.9	13392.4
60°	17948.3	17735.6	17816.6	17923.0	17769.4	17696.8	17722.1	17794.7	17723.8	17646.2	17433.5
62.5°	21540.3	21212.9	20978.2	20780.7	20530.9	20350.3	20147.8	19897.9	19830.4	19546.8	19308.8
65°	22306.7	21796.9	21425.6	21052.5	20708.2	20389.1	20083.6	19869.2	19585.7	19249.7	19001.6
67.5°	21464.4	20833.1	20289.5	19747.7	19357.8	18888.5	18659.0	18309.5	17960.1	17575.3	17347.4
70°	19016.8	18358.5	17674.9	17144.8	16614.8	16034.1	15921.0	15507.5	15306.6	14781.7	14690.5
72.5°	13125.7	12686.9	12381.3	11726.4	11404.0	11106.9	11012.4	10629.2	10669.7	10094.1	10303.4
75°	4667.3	4604.8	4515.4	4145.7	4079.9	3965.1	3934.7	3907.7	4181.1	3801.3	4076.5
77.5°	801.8	796.7	751.2	729.2	771.4	744.4	751.2	737.6	817.0	828.8	810.2
80°	498.0	484.5	469.3	459.1	460.8	450.7	452.4	455.8	460.8	459.1	464.2
82.5°	341.0	329.2	322.4	315.7	325.8	329.2	337.6	346.0	359.5	368.0	378.1
85°	185.7	170.5	170.5	168.8	182.3	192.4	205.9	222.8	246.4	266.7	288.6
87.5°	94.5	91.2	92.8	96.2	108.0	116.5	133.4	148.5	168.8	190.7	211.0
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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CATALOG NUMBER: VST-E10-LED-E-U-T2-8030

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2417.2	2417.2	2415.5	2415.5	2413.8	2412.1	2410.4	2405.4	2386.8	2369.9	2358.1
5°	2454.3	2449.3	2447.6	2442.5	2440.8	2437.4	2432.4	2427.3	2393.6	2363.2	2341.2
7.5°	2530.3	2523.5	2520.2	2515.1	2510.0	2503.3	2496.5	2491.5	2450.9	2415.5	2388.5
10°	2629.9	2626.5	2624.8	2618.1	2618.1	2607.9	2606.2	2594.4	2550.5	2518.5	2494.8
12.5°	2768.3	2761.5	2759.9	2751.4	2754.8	2751.4	2748.0	2741.3	2709.2	2672.1	2640.0
15°	2940.5	2940.5	2932.0	2925.3	2927.0	2923.6	2930.3	2921.9	2901.6	2867.9	2815.6
17.5°	3148.1	3144.7	3148.1	3143.0	3146.4	3149.8	3141.3	3143.0	3132.9	3090.7	3013.0
20°	3389.5	3384.4	3404.7	3396.2	3414.8	3397.9	3401.3	3406.3	3406.3	3350.6	3246.0
22.5°	3666.3	3662.9	3662.9	3679.8	3686.6	3688.2	3695.0	3700.1	3713.6	3642.7	3475.6
25°	3943.1	3954.9	3956.6	3978.6	3988.7	3988.7	3993.8	4012.3	4052.8	3954.9	3738.9
27.5°	4225.0	4253.7	4260.5	4275.7	4290.8	4306.0	4317.9	4331.4	4397.2	4290.8	4009.0
30°	4506.9	4539.0	4562.6	4579.5	4598.1	4635.2	4642.0	4669.0	4778.7	4648.7	4265.5
32.5°	4837.8	4883.3	4913.7	4935.7	4964.4	4999.8	5020.1	5053.8	5160.2	4947.5	4452.9
35°	5232.7	5259.8	5303.6	5340.8	5357.7	5418.4	5450.5	5458.9	5540.0	5205.7	4591.3
37.5°	5506.2	5551.8	5627.7	5680.1	5710.4	5744.2	5798.2	5833.7	5911.3	5440.4	4660.5
40°	5853.9	5923.1	5983.9	6061.5	6110.5	6135.8	6189.8	6218.5	6228.7	5641.2	4638.6
42.5°	6277.6	6340.1	6421.1	6483.5	6520.7	6549.4	6593.3	6605.1	6473.4	5735.8	4520.4
45°	6676.0	6772.2	6841.4	6887.0	6914.0	6929.2	6956.2	6957.9	6676.0	5688.5	4317.9
47.5°	7104.7	7173.9	7238.1	7270.1	7266.8	7270.1	7260.0	7253.3	6777.2	5524.8	4057.9
50°	7579.0	7624.6	7651.6	7666.8	7675.3	7643.2	7597.6	7567.2	6785.7	5291.8	3794.6
52.5°	8215.4	8272.8	8267.7	8266.0	8198.5	8168.1	8046.6	7984.2	6736.7	5018.4	3497.5
55°	9827.4	9771.7	9662.0	9716.0	9440.9	9297.4	9108.4	8932.8	6800.9	4758.4	3153.2
57.5°	13480.2	13502.2	13189.9	13022.8	12558.6	11977.9	11510.3	11056.3	7378.2	4599.8	2704.1
60°	17291.7	17004.7	16608.1	16003.8	15406.2	14543.7	13711.5	12924.9	7953.8	4434.3	2172.4
62.5°	18956.0	18547.5	17948.3	17166.8	16228.3	15173.3	14136.8	13178.1	7675.3	3899.2	1580.0
65°	18618.4	17993.9	17332.2	16417.3	15276.2	14120.0	12909.7	11930.7	6421.1	2908.4	974.0
67.5°	16852.8	16322.8	15624.0	14538.6	13318.2	12114.6	11005.6	9908.5	4770.2	1812.9	545.2
70°	14224.6	13706.4	12997.5	11886.8	10668.0	9516.8	8342.0	7447.4	3040.1	874.4	393.3
72.5°	9867.9	9447.6	8946.3	8154.6	7086.1	6039.6	5244.6	4557.6	1684.6	464.2	359.5
75°	4007.3	4009.0	3917.8	3583.6	3028.2	2611.3	2226.4	1888.9	703.9	395.0	354.5
77.5°	908.1	923.3	1009.4	957.1	862.6	806.9	722.5	638.1	428.7	406.8	357.9
80°	459.1	460.8	455.8	457.4	452.4	454.1	447.3	442.3	401.7	418.6	357.9
82.5°	383.2	391.6	389.9	389.9	391.6	391.6	391.6	389.9	416.9	440.6	346.0
85°	303.8	320.7	334.2	347.7	362.9	373.0	378.1	383.2	405.1	433.8	314.0
87.5°	229.6	249.8	266.7	280.2	303.8	303.8	320.7	332.5	332.5	339.3	165.4
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: P159378

CATALOG NUMBER: VST-E10-LED-E-U-T2-8030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2341.2	2334.5	2327.7	2324.4	2317.6
5°	2324.4	2310.8	2302.4	2302.4	2295.7
7.5°	2373.3	2368.2	2356.4	2349.7	2356.4
10°	2478.0	2469.5	2456.0	2445.9	2450.9
12.5°	2618.1	2584.3	2557.3	2545.5	2537.0
15°	2763.2	2695.7	2641.7	2611.3	2602.9
17.5°	2918.5	2800.4	2719.3	2673.8	2665.3
20°	3077.2	2930.3	2815.6	2756.5	2754.8
22.5°	3267.9	3072.1	2925.3	2847.6	2842.6
25°	3468.8	3198.7	3004.6	2905.0	2894.9
27.5°	3642.7	3300.0	3053.6	2935.4	2925.3
30°	3787.8	3376.0	3094.1	2957.3	2943.8
32.5°	3892.5	3419.9	3111.0	2964.1	2948.9
35°	3926.2	3403.0	3063.7	2903.3	2886.4
37.5°	3880.7	3293.3	2932.0	2754.8	2734.5
40°	3743.9	3100.8	2717.7	2535.3	2510.0
42.5°	3534.6	2864.5	2459.4	2285.5	2253.5
45°	3276.4	2597.8	2202.8	2008.7	1993.5
47.5°	3006.3	2317.6	1914.2	1738.6	1720.1
50°	2714.3	1993.5	1632.3	1441.5	1441.5
52.5°	2366.6	1677.9	1304.8	1161.3	1149.5
55°	1966.5	1321.7	1039.8	930.1	914.9
57.5°	1536.1	1016.2	830.5	766.3	749.5
60°	1129.3	763.0	668.4	633.0	626.2
62.5°	766.3	580.7	538.5	523.3	521.6
65°	518.2	452.4	440.6	435.5	437.2
67.5°	398.4	376.4	371.4	369.7	369.7
70°	346.0	332.5	327.5	329.2	327.5
72.5°	325.8	307.2	308.9	312.3	310.6
75°	319.0	295.4	302.1	303.8	297.1
77.5°	314.0	281.9	298.8	303.8	285.3
80°	303.8	270.1	310.6	312.3	280.2
82.5°	278.5	239.7	310.6	287.0	253.2
85°	236.3	182.3	351.1	249.8	187.4
87.5°	150.2	108.0	238.0	170.5	113.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)