

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: P157838

Luminaire Tested: **VST-E10-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157838
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33710)
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-5XQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (210) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26692 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U2 - G5

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

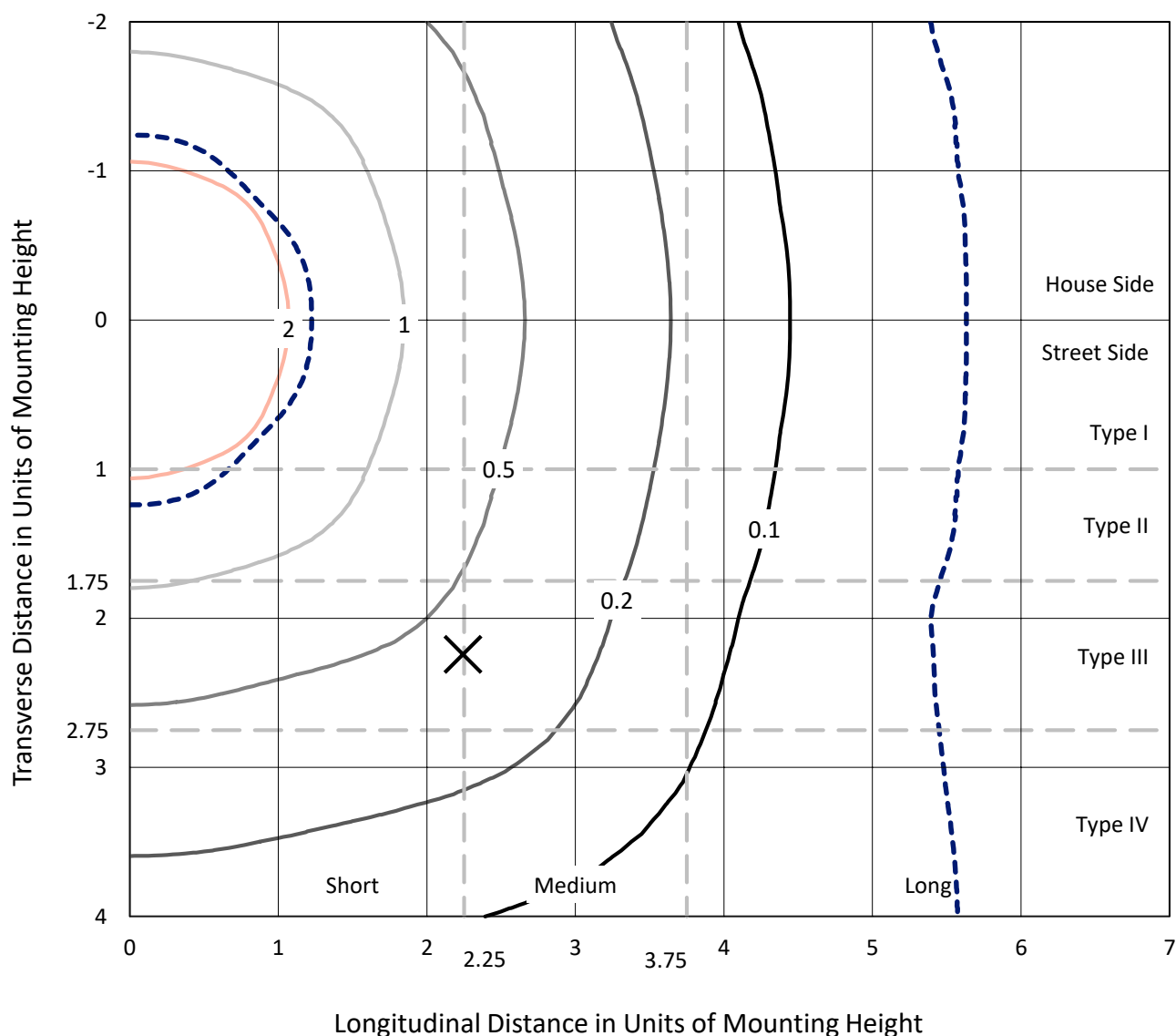


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

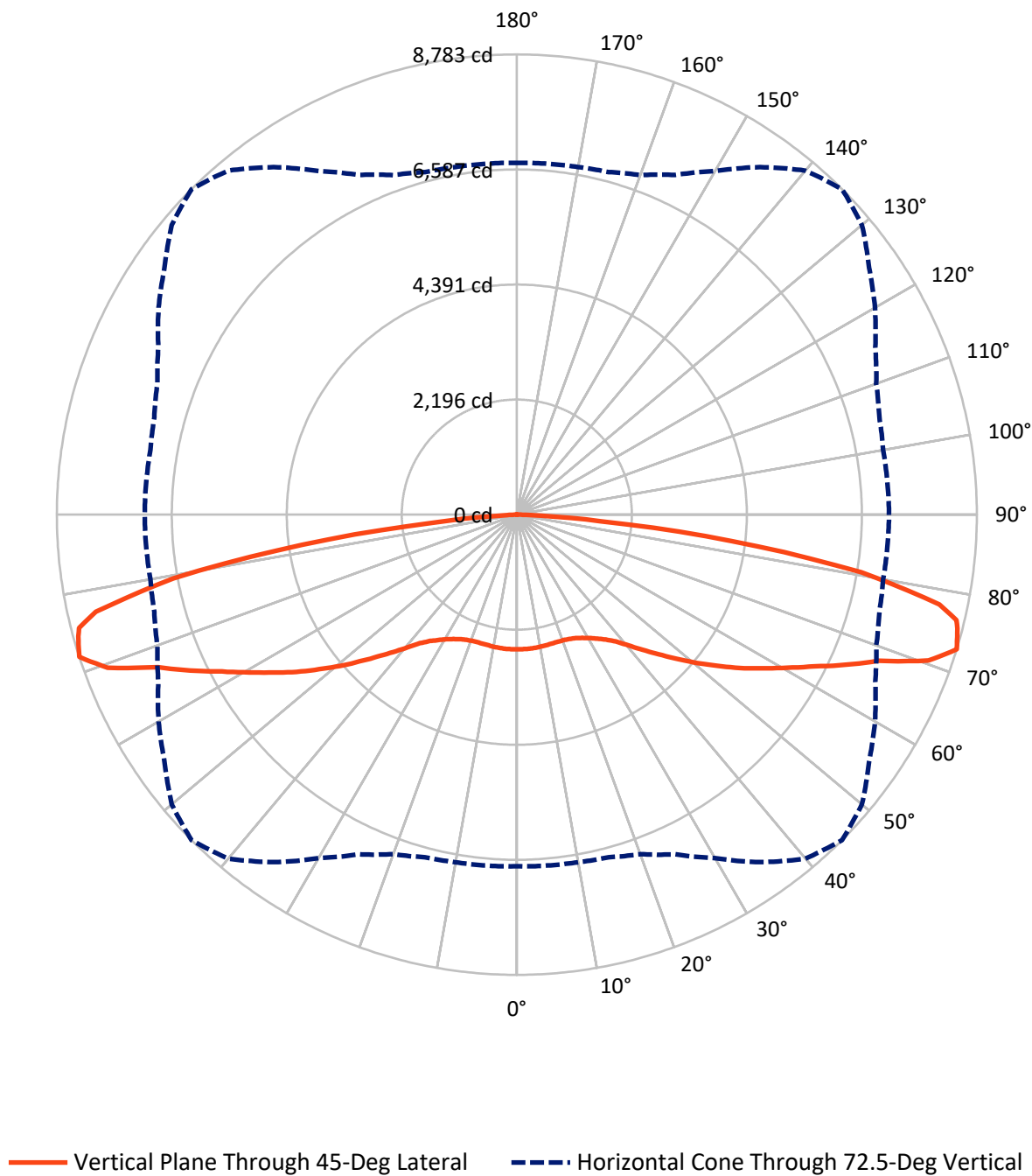


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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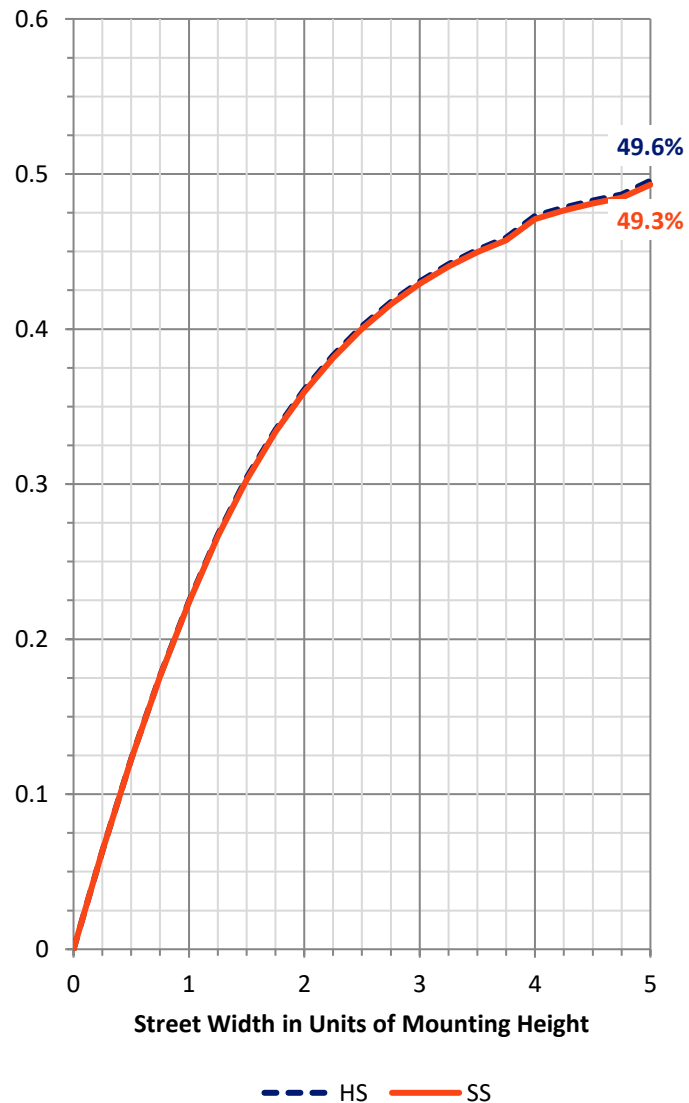
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13339.4	6.6	13346.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	13339.4	6.6	13346.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	26678.9	13.1	26692.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.1	0.9
10°-20°	724.0	2.7
20°-30°	1210.6	4.5
30°-40°	1840.1	6.9
40°-50°	2914.3	10.9
50°-60°	4457.9	16.7
60°-70°	6380.0	23.9
70°-80°	7300.2	27.3
80°-90°	1606.7	6.0
90°-100°	1.4	0.0
100°-110°	2.8	0.0
110°-120°	1.9	0.0
120°-130°	2.1	0.0
130°-140°	2.0	0.0
140°-150°	1.5	0.0
150°-160°	1.0	0.0
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-90°	26678.9	100.0
0°-180°	26692.0	100.0

Coefficient of Utilization



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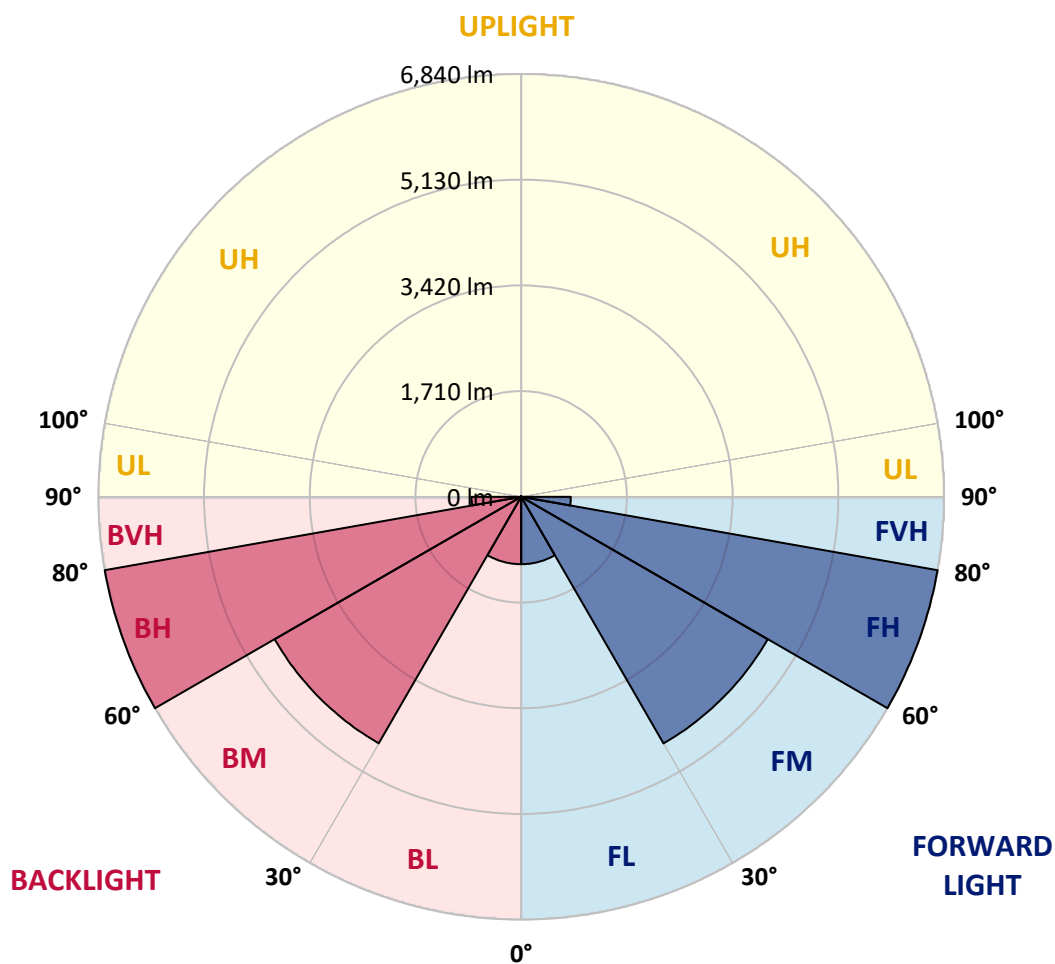
CATALOG NUMBER: VST-E10-LED-E-U-5XQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1089.9	4.1			
FM	(30°-60°)	4606.1	17.3			
FH	(60°-80°)	6840.1	25.6			G3/7500
FVH	(80°-90°)	803.3	3.0			G5
BL	(0°-30°)	1089.9	4.1	B3/2500		
BM	(30°-60°)	4606.1	17.3	B3/5000		
BH	(60°-80°)	6840.1	25.6	B5		G3/7500
BVH	(80°-90°)	803.3	3.0			G5
UL	(90°-100°)	1.4	0.0		U1/10	
UH	(100°-180°)	6.6	0.0		U1/10	

BUG Rating: B5-U2-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1
2.5°	2570.8	2567.4	2569.1	2572.5	2570.8	2570.8	2569.1	2569.1	2572.5	2569.1	2570.8
5°	2572.5	2569.1	2570.8	2572.5	2570.8	2572.5	2570.8	2570.8	2570.8	2569.1	2572.5
7.5°	2565.7	2565.7	2567.4	2567.4	2565.7	2567.4	2567.4	2567.4	2565.7	2565.7	2569.1
10°	2562.4	2560.7	2560.7	2562.4	2560.7	2560.7	2562.4	2562.4	2559.0	2559.0	2562.4
12.5°	2557.3	2555.6	2555.6	2555.6	2553.9	2553.9	2555.6	2555.6	2553.9	2552.2	2557.3
15°	2553.9	2552.2	2552.2	2552.2	2548.9	2550.5	2550.5	2550.5	2548.9	2547.2	2552.2
17.5°	2552.2	2550.5	2550.5	2550.5	2548.9	2548.9	2548.9	2548.9	2547.2	2547.2	2550.5
20°	2555.6	2555.6	2555.6	2555.6	2553.9	2553.9	2553.9	2555.6	2555.6	2555.6	2559.0
22.5°	2564.0	2564.0	2565.7	2567.4	2567.4	2570.8	2572.5	2574.2	2574.2	2575.9	2579.2
25°	2586.0	2586.0	2587.7	2589.4	2594.4	2597.8	2604.6	2607.9	2609.6	2609.6	2611.3
27.5°	2626.5	2628.2	2631.6	2634.9	2641.7	2646.8	2653.5	2660.3	2661.9	2663.6	2665.3
30°	2677.1	2678.8	2685.6	2689.0	2697.4	2707.5	2716.0	2722.7	2727.8	2731.2	2729.5
32.5°	2749.7	2753.1	2761.5	2766.6	2778.4	2788.5	2800.4	2810.5	2815.6	2820.6	2818.9
35°	2851.0	2859.4	2867.9	2872.9	2884.8	2893.2	2908.4	2918.5	2928.6	2925.3	2927.0
37.5°	3001.2	3008.0	3009.7	3013.0	3024.9	3031.6	3048.5	3062.0	3067.1	3070.4	3072.1
40°	3203.8	3203.8	3212.2	3205.5	3220.7	3222.4	3242.6	3261.2	3266.2	3279.7	3269.6
42.5°	3440.1	3438.4	3443.5	3438.4	3438.4	3455.3	3472.2	3505.9	3509.3	3526.2	3516.1
45°	3696.7	3696.7	3691.6	3693.3	3696.7	3715.2	3735.5	3772.6	3789.5	3799.6	3792.9
47.5°	3975.2	3968.4	3966.8	3965.1	3975.2	3995.5	4025.8	4061.3	4103.5	4106.9	4103.5
50°	4257.1	4255.4	4243.6	4253.7	4260.5	4270.6	4328.0	4375.2	4419.1	4446.1	4437.7
52.5°	4554.2	4539.0	4539.0	4539.0	4555.9	4587.9	4638.6	4702.7	4761.8	4790.5	4785.4
55°	4854.6	4849.6	4834.4	4827.6	4849.6	4895.1	4967.7	5045.4	5123.0	5166.9	5150.0
57.5°	5129.8	5121.3	5123.0	5124.7	5150.0	5210.8	5295.2	5398.2	5482.6	5529.8	5518.0
60°	5345.8	5335.7	5354.3	5359.3	5404.9	5506.2	5641.2	5771.2	5882.6	5929.9	5911.3
62.5°	5590.6	5583.8	5595.7	5594.0	5642.9	5756.0	5936.6	6144.3	6313.1	6373.8	6346.8
65°	5985.6	5965.3	5960.3	5941.7	5973.8	6061.5	6242.2	6483.5	6753.6	6908.9	6871.8
67.5°	6458.2	6453.2	6436.3	6426.1	6438.0	6547.7	6721.5	6954.5	7229.6	7444.0	7491.3
70°	6770.5	6777.2	6794.1	6819.4	6917.3	7130.0	7447.4	7800.2	8178.3	8338.6	8309.9
72.5°	6711.4	6721.5	6735.0	6767.1	6895.4	7150.3	7568.9	8095.6	8569.9	8782.6	8600.3
75°	6422.8	6431.2	6461.6	6510.5	6667.5	6976.4	7427.1	7985.8	8475.4	8688.0	8497.3
76°	6156.1	6183.1	6238.8	6296.2	6485.2	6821.1	7302.2	7898.1	8416.3	8632.3	8448.3
77.5°	5551.8	5575.4	5621.0	5720.6	5934.9	6365.4	6927.5	7513.2	8053.4	8247.5	8092.2
80°	4177.8	4198.0	4240.2	4360.1	4545.7	4812.4	5247.9	5820.2	6412.6	6667.5	6566.2
82.5°	1763.9	1787.6	1954.7	2128.5	2332.8	2621.4	2905.0	3411.4	3846.9	4137.2	3981.9
85°	194.1	239.7	295.4	401.7	492.9	656.6	817.0	1124.2	1421.3	1601.9	1416.2
87.5°	33.8	38.8	55.7	70.9	79.3	91.2	109.7	153.6	209.3	180.6	184.0
90°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	3.4	3.4	3.4	3.4
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.7	1.7	1.7
97.5°	0.0	0.0	0.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
100°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.4	3.4	3.4
102.5°	1.7	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4	3.4
105°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
107.5°	1.7	1.7	1.7	1.7	3.4	3.4	1.7	1.7	1.7	3.4	1.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
112.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
115°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
117.5°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
120°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
122.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
125°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
127.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
130°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7
132.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
135°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7
137.5°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7
140°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7
142.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
145°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	1.7
147.5°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7
150°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	0.0	0.0	0.0
152.5°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	0.0
155°	3.4	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	1.7
157.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	0.0	0.0
160°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	0.0	0.0
162.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	0.0	0.0
165°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1	2569.1
2.5°	2569.1	2569.1	2572.5	2570.8	2570.8	2572.5	2575.9	2574.2
5°	2570.8	2572.5	2569.1	2570.8	2572.5	2572.5	2574.2	2572.5
7.5°	2567.4	2567.4	2567.4	2569.1	2570.8	2569.1	2570.8	2570.8
10°	2560.7	2562.4	2560.7	2564.0	2565.7	2565.7	2567.4	2567.4
12.5°	2555.6	2555.6	2555.6	2559.0	2560.7	2560.7	2562.4	2560.7
15°	2550.5	2550.5	2548.9	2552.2	2555.6	2555.6	2557.3	2557.3
17.5°	2548.9	2548.9	2547.2	2550.5	2553.9	2553.9	2555.6	2555.6
20°	2553.9	2555.6	2552.2	2555.6	2559.0	2560.7	2560.7	2560.7
22.5°	2574.2	2572.5	2567.4	2569.1	2570.8	2570.8	2570.8	2570.8
25°	2604.6	2601.2	2596.1	2594.4	2592.7	2591.1	2591.1	2591.1
27.5°	2656.9	2651.8	2643.4	2641.7	2640.0	2636.6	2636.6	2636.6
30°	2719.3	2712.6	2702.5	2699.1	2694.0	2690.6	2689.0	2687.3
32.5°	2808.8	2795.3	2783.5	2775.0	2770.0	2759.9	2758.2	2754.8
35°	2911.8	2901.6	2884.8	2879.7	2871.3	2866.2	2864.5	2856.1
37.5°	3053.6	3041.7	3026.6	3023.2	3021.5	3016.4	3016.4	3014.7
40°	3251.1	3239.2	3225.7	3212.2	3215.6	3217.3	3217.3	3210.5
42.5°	3492.4	3473.9	3446.9	3455.3	3450.2	3443.5	3457.0	3448.5
45°	3767.6	3742.3	3722.0	3713.6	3713.6	3705.1	3718.6	3718.6
47.5°	4073.1	4032.6	3995.5	3997.1	3983.6	3987.0	3995.5	4007.3
50°	4395.5	4341.5	4306.0	4289.2	4275.7	4280.7	4295.9	4299.3
52.5°	4729.7	4663.9	4616.6	4591.3	4574.4	4581.2	4593.0	4603.1
55°	5077.4	5004.9	4934.0	4907.0	4886.7	4900.2	4901.9	4915.4
57.5°	5440.4	5340.8	5258.1	5217.6	5197.3	5210.8	5220.9	5234.4
60°	5806.7	5691.9	5594.0	5546.7	5518.0	5536.6	5560.2	5567.0
62.5°	6232.0	6073.4	5963.6	5896.1	5882.6	5901.2	5907.9	5928.2
65°	6735.0	6544.3	6392.4	6309.7	6306.3	6316.4	6331.6	6336.7
67.5°	7309.0	7096.3	6892.0	6809.3	6777.2	6807.6	6822.8	6843.1
70°	8119.2	7827.2	7531.8	7347.8	7270.1	7246.5	7253.3	7275.2
72.5°	8210.3	7896.4	7552.0	7302.2	7165.5	7103.0	7101.3	7104.7
75°	8011.2	7509.8	7266.8	6979.8	6785.7	6684.4	6670.9	6669.2
76°	7911.6	7319.1	6968.0	6740.1	6507.2	6404.2	6389.0	6380.6
77.5°	7491.3	6854.9	6326.6	6188.1	5965.3	5835.4	5862.4	5840.4
80°	6005.8	5374.5	4876.6	4486.7	4498.5	4403.9	4365.1	4353.3
82.5°	3539.7	3021.5	2471.2	2148.8	1841.6	1760.6	1515.8	1460.1
85°	1130.9	801.8	486.1	352.8	239.7	200.9	157.0	143.5
87.5°	150.2	118.2	96.2	92.8	84.4	72.6	47.3	33.8
90°	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.7	1.7	1.7	1.7	0.0	0.0	0.0	0.0
97.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
100°	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
102.5°	3.4	3.4	3.4	3.4	1.7	1.7	1.7	1.7
105°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
107.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4



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CATALOG NUMBER: VST-E10-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.7	1.7	1.7	1.7	1.7	3.4	3.4	3.4
112.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.4
115°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.4
117.5°	1.7	1.7	1.7	1.7	1.7	3.4	3.4	3.4
120°	1.7	1.7	1.7	1.7	1.7	3.4	3.4	3.4
122.5°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
125°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
127.5°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
130°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
132.5°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
135°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
137.5°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
140°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
142.5°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
145°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
147.5°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
150°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
152.5°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
155°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
157.5°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
160°	1.7	1.7	1.7	1.7	3.4	3.4	3.4	3.4
162.5°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
165°	1.7	1.7	1.7	3.4	3.4	3.4	3.4	3.4
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)