

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: P157863

Luminaire Tested: **VST-F12-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P157863  
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-F12-LED-E-U-5XQ-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (84) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26441.8 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B5 - U2 - G5

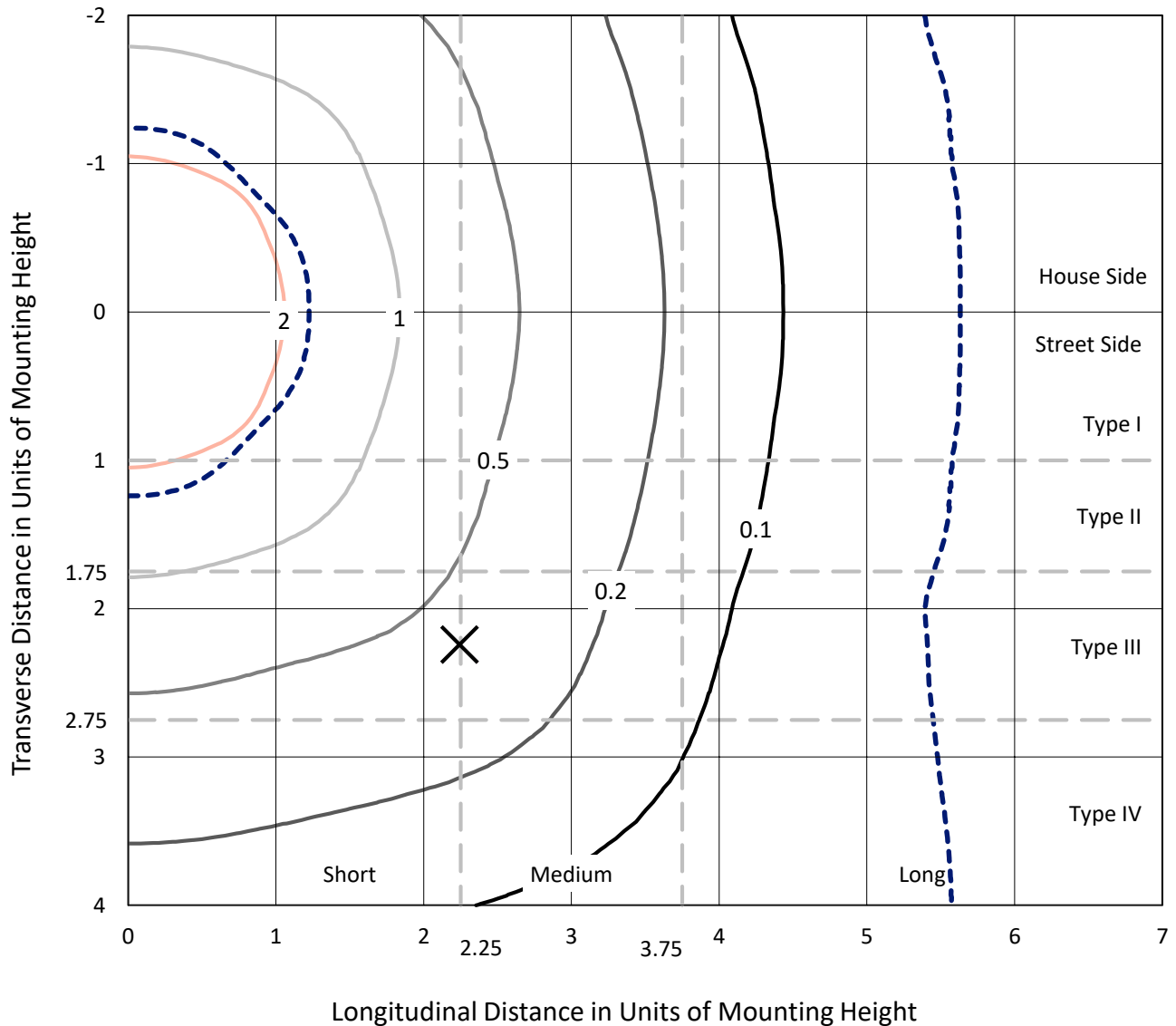
Input Watts (W): 306.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

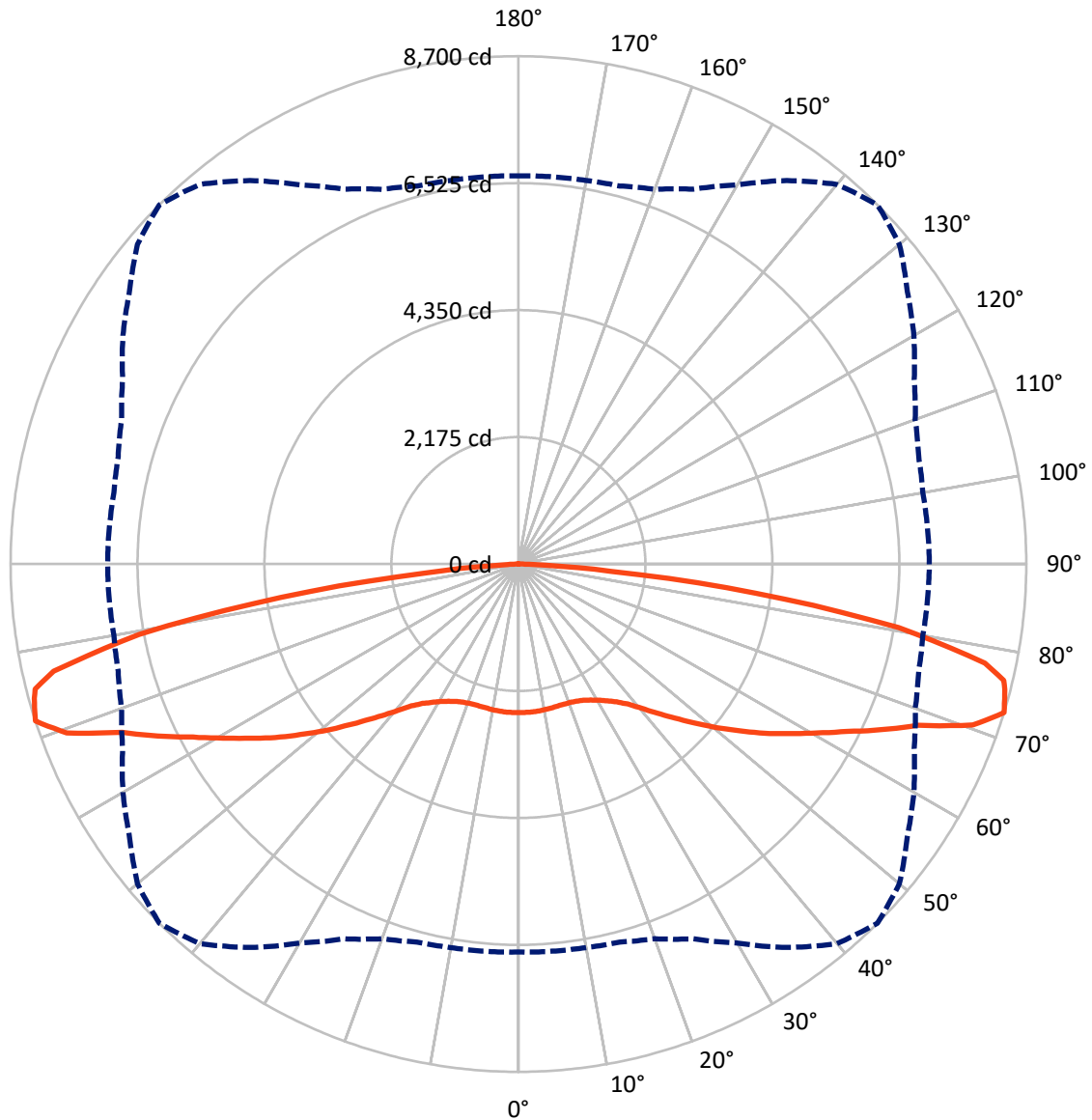


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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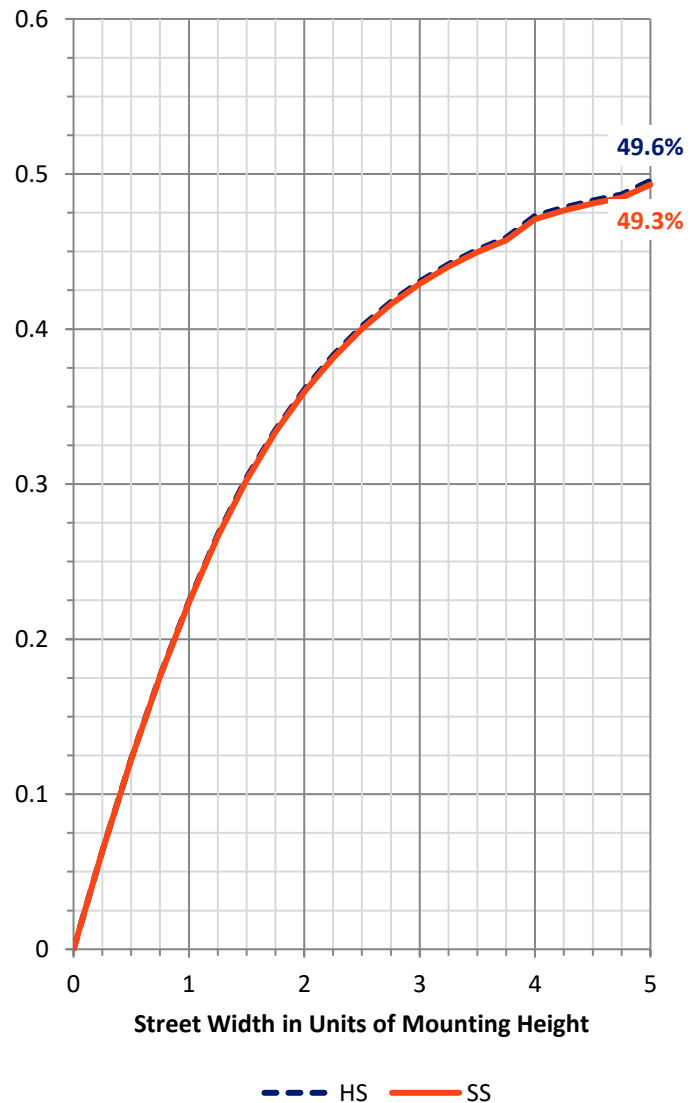
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13214.5	6.4	13220.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	13214.5	6.4	13220.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	26428.9	12.9	26441.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.8	0.9
10°-20°	717.2	2.7
20°-30°	1199.3	4.5
30°-40°	1822.8	6.9
40°-50°	2887.0	10.9
50°-60°	4416.1	16.7
60°-70°	6320.2	23.9
70°-80°	7231.8	27.3
80°-90°	1591.6	6.0
90°-100°	1.3	0.0
100°-110°	2.7	0.0
110°-120°	1.9	0.0
120°-130°	2.1	0.0
130°-140°	1.9	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°	26428.9	100.0
0°-180°	26441.8	100.0



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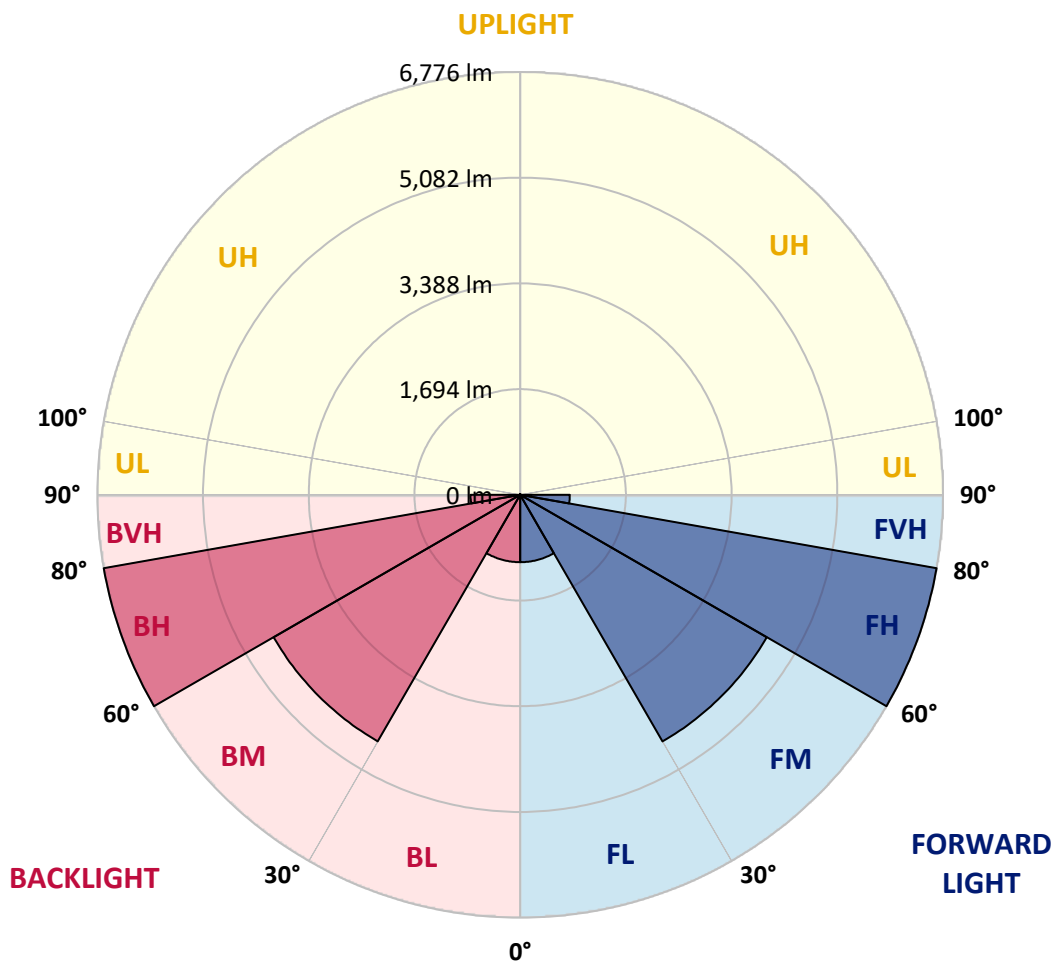
CATALOG NUMBER: VST-F12-LED-E-U-5XQ-8030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1079.6	4.1			
FM	(30°-60°)	4563.0	17.3			
FH	(60°-80°)	6776.0	25.6			G3/7500
FVH	(80°-90°)	795.8	3.0			G5
BL	(0°-30°)	1079.6	4.1	B3/2500		
BM	(30°-60°)	4563.0	17.3	B3/5000		
BH	(60°-80°)	6776.0	25.6	B5		G3/7500
BVH	(80°-90°)	795.8	3.0			G5
UL	(90°-100°)	1.3	0.0		U1/10	
UH	(100°-180°)	6.4	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°	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0
2.5°	2546.7	2543.4	2545.0	2548.4	2546.7	2546.7	2545.0	2545.0	2548.4	2545.0	2546.7
5°	2548.4	2545.0	2546.7	2548.4	2546.7	2548.4	2546.7	2546.7	2546.7	2545.0	2548.4
7.5°	2541.7	2541.7	2543.4	2543.4	2541.7	2543.4	2543.4	2543.4	2541.7	2541.7	2545.0
10°	2538.3	2536.7	2536.7	2538.3	2536.7	2536.7	2538.3	2538.3	2535.0	2535.0	2538.3
12.5°	2533.3	2531.7	2531.7	2531.7	2530.0	2530.0	2531.7	2531.7	2530.0	2528.3	2533.3
15°	2530.0	2528.3	2528.3	2528.3	2525.0	2526.6	2526.6	2526.6	2525.0	2523.3	2528.3
17.5°	2528.3	2526.6	2526.6	2526.6	2525.0	2525.0	2525.0	2525.0	2523.3	2523.3	2526.6
20°	2531.7	2531.7	2531.7	2531.7	2530.0	2530.0	2530.0	2531.7	2531.7	2531.7	2535.0
22.5°	2540.0	2540.0	2541.7	2543.4	2543.4	2546.7	2548.4	2550.1	2550.1	2551.7	2555.1
25°	2561.8	2561.8	2563.4	2565.1	2570.1	2573.5	2580.2	2583.5	2585.2	2585.2	2586.8
27.5°	2601.9	2603.6	2606.9	2610.3	2616.9	2622.0	2628.6	2635.3	2637.0	2638.7	2640.3
30°	2652.1	2653.7	2660.4	2663.8	2672.1	2682.2	2690.5	2697.2	2702.2	2705.6	2703.9
32.5°	2724.0	2727.3	2735.7	2740.7	2752.4	2762.4	2774.1	2784.2	2789.2	2794.2	2792.5
35°	2824.3	2832.6	2841.0	2846.0	2857.7	2866.1	2881.1	2891.2	2901.2	2897.9	2899.5
37.5°	2973.1	2979.8	2981.5	2984.8	2996.5	3003.2	3019.9	3033.3	3038.3	3041.7	3043.3
40°	3173.8	3173.8	3182.1	3175.4	3190.5	3192.2	3212.2	3230.6	3235.6	3249.0	3239.0
42.5°	3407.9	3406.2	3411.2	3406.2	3406.2	3422.9	3439.6	3473.1	3476.4	3493.2	3483.1
45°	3662.0	3662.0	3657.0	3658.7	3662.0	3680.4	3700.5	3737.3	3754.0	3764.0	3757.4
47.5°	3937.9	3931.3	3929.6	3927.9	3937.9	3958.0	3988.1	4023.2	4065.0	4068.4	4065.0
50°	4217.2	4215.5	4203.8	4213.9	4220.5	4230.6	4287.4	4334.3	4377.7	4404.5	4396.1
52.5°	4511.5	4496.5	4496.5	4496.5	4513.2	4544.9	4595.1	4658.7	4717.2	4745.6	4740.6
55°	4809.1	4804.1	4789.1	4782.4	4804.1	4849.3	4921.2	4998.1	5075.0	5118.5	5101.8
57.5°	5081.7	5073.3	5075.0	5076.7	5101.8	5162.0	5245.6	5347.6	5431.2	5478.0	5466.3
60°	5295.7	5285.7	5304.1	5309.1	5354.3	5454.6	5588.4	5717.1	5827.5	5874.3	5855.9
62.5°	5538.2	5531.5	5543.2	5541.6	5590.0	5702.1	5881.0	6086.7	6253.9	6314.1	6287.3
65°	5929.5	5909.4	5904.4	5886.0	5917.8	6004.7	6183.7	6422.8	6690.3	6844.2	6807.4
67.5°	6397.7	6392.7	6376.0	6365.9	6377.6	6486.3	6658.6	6889.3	7161.9	7374.2	7421.1
70°	6707.1	6713.7	6730.5	6755.5	6852.5	7063.2	7377.6	7727.1	8101.6	8260.5	8232.1
72.5°	6648.5	6658.6	6671.9	6703.7	6830.8	7083.3	7498.0	8019.7	8489.6	8700.3	8519.7
75°	6362.6	6370.9	6401.0	6449.5	6605.1	6911.1	7357.5	7911.0	8395.9	8606.6	8417.7
76°	6098.4	6125.1	6180.3	6237.2	6424.5	6757.2	7233.8	7824.1	8337.4	8551.5	8369.2
77.5°	5499.8	5523.2	5568.3	5667.0	5879.3	6305.7	6862.6	7442.8	7977.9	8170.2	8016.4
80°	4138.6	4158.7	4200.5	4319.2	4503.1	4767.3	5198.8	5765.6	6352.6	6605.1	6504.7
82.5°	1747.4	1770.8	1936.4	2108.6	2310.9	2596.9	2877.8	3379.4	3810.9	4098.5	3944.6
85°	192.3	237.4	292.6	398.0	488.3	650.5	809.3	1113.7	1408.0	1586.9	1402.9
87.5°	33.4	38.5	55.2	70.2	78.6	90.3	108.7	152.2	207.3	178.9	182.3
90°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.3	3.3	3.3	3.3
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	3.3	3.3	3.3
102.5°	1.7	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3	3.3
105°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
107.5°	1.7	1.7	1.7	1.7	3.3	3.3	1.7	1.7	1.7	3.3	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°	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
120°	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
122.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
125°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
127.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
130°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7
132.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
135°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7
137.5°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7
140°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7
142.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
145°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	0.0	1.7
147.5°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	1.7	1.7
150°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	0.0	0.0	0.0
152.5°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	0.0	0.0
155°	3.3	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	0.0	1.7
157.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	0.0	0.0	0.0
160°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	0.0	0.0	0.0
162.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7	0.0	0.0	0.0
165°	3.3	3.3	3.3	3.3	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°	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0	2545.0
2.5°	2545.0	2545.0	2548.4	2546.7	2546.7	2548.4	2551.7	2550.1
5°	2546.7	2548.4	2545.0	2546.7	2548.4	2548.4	2550.1	2548.4
7.5°	2543.4	2543.4	2543.4	2545.0	2546.7	2545.0	2546.7	2546.7
10°	2536.7	2538.3	2536.7	2540.0	2541.7	2541.7	2543.4	2543.4
12.5°	2531.7	2531.7	2531.7	2535.0	2536.7	2536.7	2538.3	2536.7
15°	2526.6	2526.6	2525.0	2528.3	2531.7	2531.7	2533.3	2533.3
17.5°	2525.0	2525.0	2523.3	2526.6	2530.0	2530.0	2531.7	2531.7
20°	2530.0	2531.7	2528.3	2531.7	2535.0	2536.7	2536.7	2536.7
22.5°	2550.1	2548.4	2543.4	2545.0	2546.7	2546.7	2546.7	2546.7
25°	2580.2	2576.8	2571.8	2570.1	2568.4	2566.8	2566.8	2566.8
27.5°	2632.0	2627.0	2618.6	2616.9	2615.3	2611.9	2611.9	2611.9
30°	2693.9	2687.2	2677.1	2673.8	2668.8	2665.4	2663.8	2662.1
32.5°	2782.5	2769.1	2757.4	2749.0	2744.0	2734.0	2732.3	2729.0
35°	2884.5	2874.5	2857.7	2852.7	2844.4	2839.3	2837.7	2829.3
37.5°	3024.9	3013.2	2998.2	2994.8	2993.2	2988.2	2988.2	2986.5
40°	3220.6	3208.9	3195.5	3182.1	3185.5	3187.1	3187.1	3180.5
42.5°	3459.7	3441.3	3414.6	3422.9	3417.9	3411.2	3424.6	3416.2
45°	3732.3	3707.2	3687.1	3678.8	3678.8	3670.4	3683.8	3683.8
47.5°	4034.9	3994.8	3958.0	3959.7	3946.3	3949.7	3958.0	3969.7
50°	4354.3	4300.8	4265.7	4249.0	4235.6	4240.6	4255.7	4259.0
52.5°	4685.4	4620.2	4573.4	4548.3	4531.6	4538.3	4550.0	4560.0
55°	5029.9	4958.0	4887.7	4861.0	4840.9	4854.3	4856.0	4869.3
57.5°	5389.4	5290.7	5208.8	5168.7	5148.6	5162.0	5172.0	5185.4
60°	5752.2	5638.5	5541.6	5494.7	5466.3	5484.7	5508.1	5514.8
62.5°	6173.6	6016.5	5907.8	5840.9	5827.5	5845.9	5852.6	5872.6
65°	6671.9	6483.0	6332.5	6250.6	6247.2	6257.2	6272.3	6277.3
67.5°	7240.5	7029.8	6827.5	6745.5	6713.7	6743.8	6758.9	6779.0
70°	8043.1	7753.8	7461.2	7278.9	7202.0	7178.6	7185.3	7207.0
72.5°	8133.4	7822.4	7481.3	7233.8	7098.3	7036.5	7034.8	7038.1
75°	7936.1	7439.5	7198.7	6914.4	6722.1	6621.8	6608.4	6606.7
76°	7837.4	7250.5	6902.7	6677.0	6446.2	6344.2	6329.1	6320.8
77.5°	7421.1	6790.7	6267.3	6130.2	5909.4	5780.7	5807.4	5785.7
80°	5949.6	5324.2	4830.9	4444.6	4456.3	4362.7	4324.2	4312.5
82.5°	3506.5	2993.2	2448.1	2128.7	1824.3	1744.1	1501.6	1446.4
85°	1120.4	794.3	481.6	349.5	237.4	199.0	155.5	142.1
87.5°	148.8	117.1	95.3	92.0	83.6	71.9	46.8	33.4
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°	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7
102.5°	3.3	3.3	3.3	3.3	1.7	1.7	1.7	1.7
105°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
107.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3



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CATALOG NUMBER: VST-F12-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	3.3	3.3	3.3
112.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3
115°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.3
117.5°	1.7	1.7	1.7	1.7	1.7	3.3	3.3	3.3
120°	1.7	1.7	1.7	1.7	1.7	3.3	3.3	3.3
122.5°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
125°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
127.5°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
130°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
132.5°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
135°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
137.5°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
140°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
142.5°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
145°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
147.5°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
150°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
152.5°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
155°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
157.5°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
160°	1.7	1.7	1.7	1.7	3.3	3.3	3.3	3.3
162.5°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
165°	1.7	1.7	1.7	3.3	3.3	3.3	3.3	3.3
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)