

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: P157843

Luminaire Tested: **VST-F10-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157843
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-F10-LED-E-U-5XQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (70) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22034.9 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U1 - G4

Input Watts (W): 258.7
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



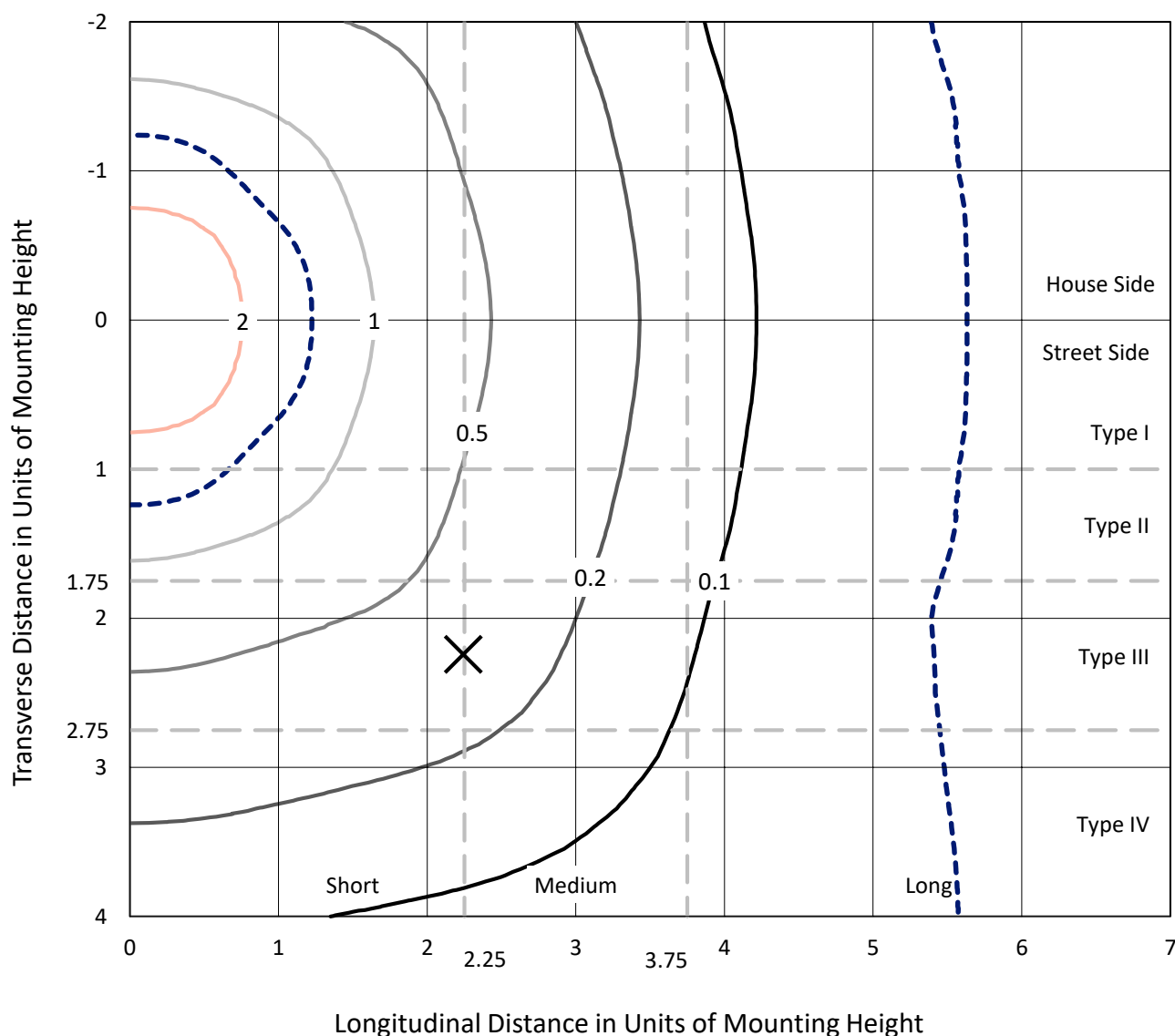
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

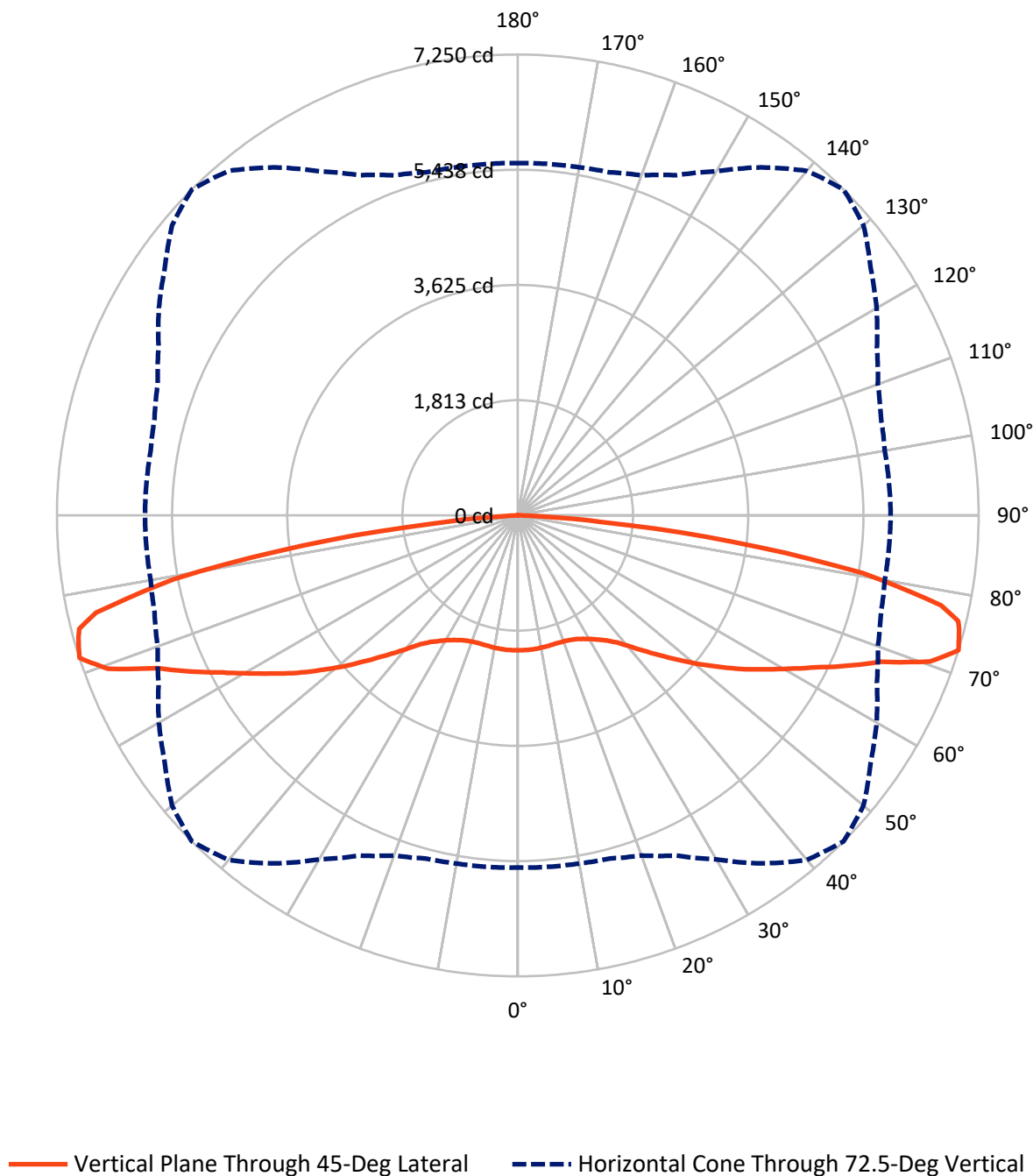


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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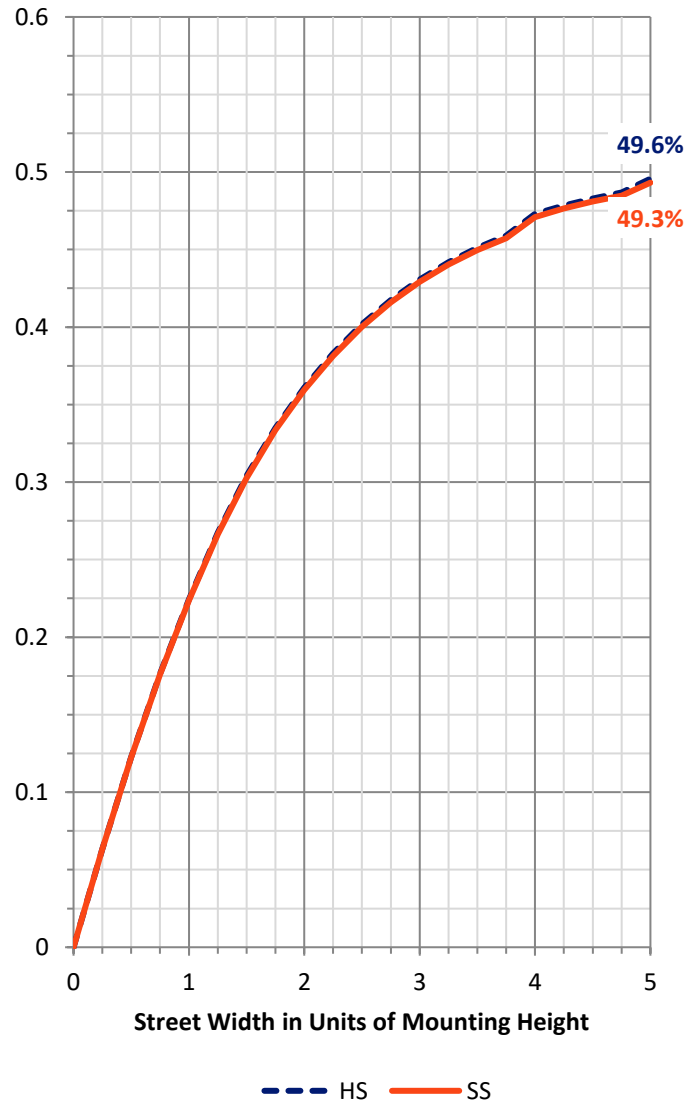
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11012.0	5.4	11017.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11012.0	5.4	11017.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	22024.1	10.8	22034.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.4	0.9
10°-20°	597.7	2.7
20°-30°	999.4	4.5
30°-40°	1519.0	6.9
40°-50°	2405.8	10.9
50°-60°	3680.1	16.7
60°-70°	5266.9	23.9
70°-80°	6026.5	27.3
80°-90°	1326.4	6.0
90°-100°	1.1	0.0
100°-110°	2.3	0.0
110°-120°	1.6	0.0
120°-130°	1.7	0.0
130°-140°	1.6	0.0
140°-150°	1.3	0.0
150°-160°	0.9	0.0
160°-170°	0.3	0.0
170°-180°	0.0	0.0
0°-90°	22024.1	100.0
0°-180°	22034.9	100.0

Coefficient of Utilization



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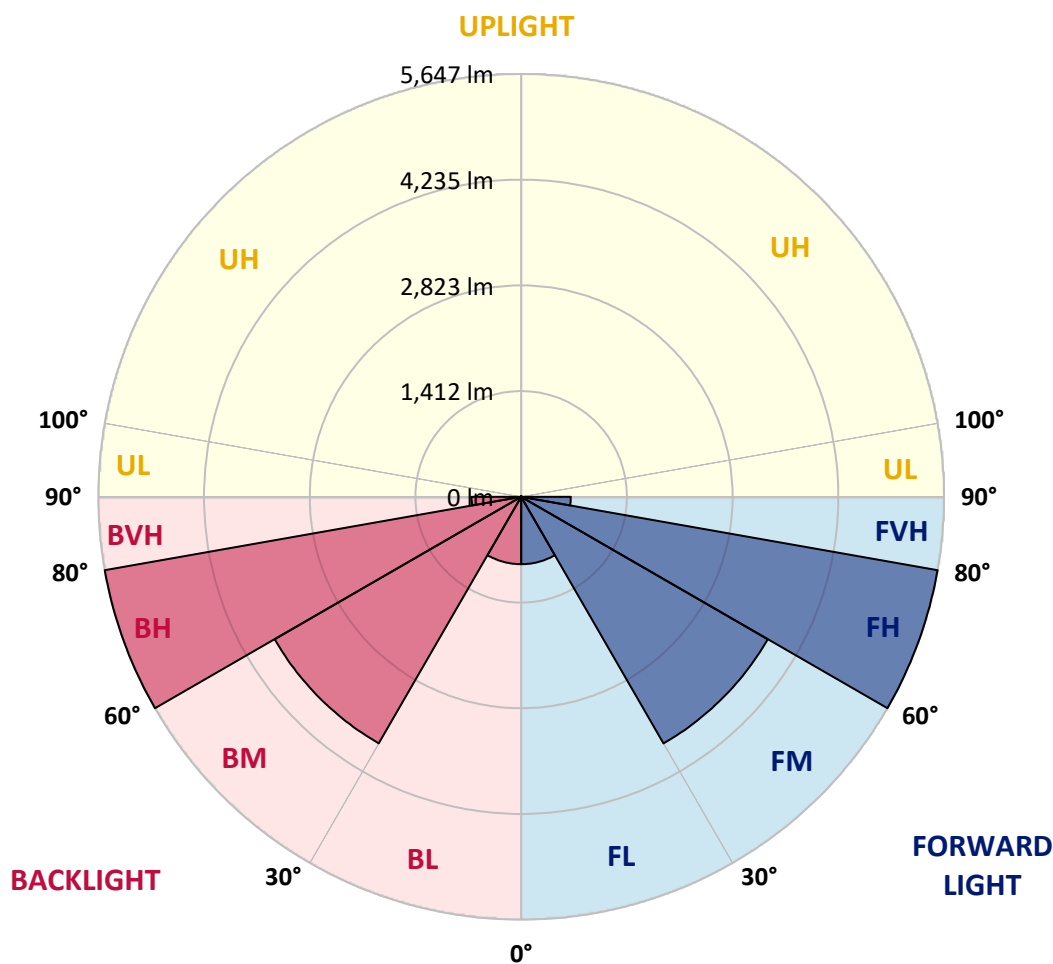
CATALOG NUMBER: VST-F10-LED-E-U-5XQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	899.7	4.1			
FM	(30°-60°)	3802.5	17.3			
FH	(60°-80°)	5646.7	25.6			G3/7500
FVH	(80°-90°)	663.2	3.0			G4/750
BL	(0°-30°)	899.7	4.1	B2/1000		
BM	(30°-60°)	3802.5	17.3	B3/5000		
BH	(60°-80°)	5646.7	25.6	B5		G3/7500
BVH	(80°-90°)	663.2	3.0			G4/750
UL	(90°-100°)	1.1	0.0		U1/10	
UH	(100°-180°)	5.4	0.0		U1/10	

BUG Rating: B5-U1-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2122.3	2119.5	2120.9	2123.6	2122.3	2122.3	2120.9	2120.9	2123.6	2120.9	2122.3
5°	2123.6	2120.9	2122.3	2123.6	2122.3	2123.6	2122.3	2122.3	2122.3	2120.9	2123.6
7.5°	2118.1	2118.1	2119.5	2119.5	2118.1	2119.5	2119.5	2119.5	2118.1	2118.1	2120.9
10°	2115.3	2113.9	2113.9	2115.3	2113.9	2113.9	2115.3	2115.3	2112.5	2112.5	2115.3
12.5°	2111.1	2109.7	2109.7	2109.7	2108.3	2108.3	2109.7	2109.7	2108.3	2106.9	2111.1
15°	2108.3	2106.9	2106.9	2106.9	2104.1	2105.5	2105.5	2105.5	2104.1	2102.7	2106.9
17.5°	2106.9	2105.5	2105.5	2105.5	2104.1	2104.1	2104.1	2104.1	2102.7	2102.7	2105.5
20°	2109.7	2109.7	2109.7	2109.7	2108.3	2108.3	2108.3	2109.7	2109.7	2109.7	2112.5
22.5°	2116.7	2116.7	2118.1	2119.5	2119.5	2122.3	2123.6	2125.0	2125.0	2126.4	2129.2
25°	2134.8	2134.8	2136.2	2137.6	2141.8	2144.6	2150.1	2152.9	2154.3	2154.3	2155.7
27.5°	2168.2	2169.6	2172.4	2175.2	2180.8	2185.0	2190.5	2196.1	2197.5	2198.9	2200.3
30°	2210.0	2211.4	2217.0	2219.8	2226.8	2235.1	2242.1	2247.7	2251.8	2254.6	2253.2
32.5°	2270.0	2272.8	2279.7	2283.9	2293.7	2302.0	2311.8	2320.1	2324.3	2328.5	2327.1
35°	2353.6	2360.5	2367.5	2371.7	2381.4	2388.4	2401.0	2409.3	2417.7	2414.9	2416.3
37.5°	2477.6	2483.2	2484.6	2487.3	2497.1	2502.7	2516.6	2527.8	2531.9	2534.7	2536.1
40°	2644.8	2644.8	2651.8	2646.2	2658.7	2660.1	2676.9	2692.2	2696.4	2707.5	2699.2
42.5°	2839.9	2838.5	2842.7	2838.5	2838.5	2852.4	2866.4	2894.2	2897.0	2911.0	2902.6
45°	3051.7	3051.7	3047.5	3048.9	3051.7	3067.0	3083.8	3114.4	3128.3	3136.7	3131.1
47.5°	3281.6	3276.1	3274.7	3273.3	3281.6	3298.3	3323.4	3352.7	3387.5	3390.3	3387.5
50°	3514.3	3512.9	3503.2	3511.5	3517.1	3525.5	3572.9	3611.9	3648.1	3670.4	3663.4
52.5°	3759.6	3747.0	3747.0	3747.0	3761.0	3787.5	3829.3	3882.2	3931.0	3954.7	3950.5
55°	4007.6	4003.4	3990.9	3985.3	4003.4	4041.1	4101.0	4165.1	4229.2	4265.4	4251.5
57.5°	4234.8	4227.8	4229.2	4230.6	4251.5	4301.6	4371.3	4456.3	4526.0	4565.0	4555.3
60°	4413.1	4404.8	4420.1	4424.3	4461.9	4545.5	4657.0	4764.3	4856.2	4895.3	4879.9
62.5°	4615.2	4609.6	4619.4	4618.0	4658.4	4751.7	4900.8	5072.2	5211.6	5261.7	5239.5
65°	4941.2	4924.5	4920.3	4905.0	4931.5	5004.0	5153.1	5352.3	5575.3	5703.5	5672.8
67.5°	5331.4	5327.2	5313.3	5304.9	5314.7	5405.3	5548.8	5741.1	5968.2	6145.2	6184.2
70°	5589.2	5594.8	5608.7	5629.6	5710.4	5886.0	6148.0	6439.2	6751.4	6883.7	6860.1
72.5°	5540.4	5548.8	5559.9	5586.4	5692.3	5902.7	6248.3	6683.1	7074.7	7250.2	7099.7
75°	5302.2	5309.1	5334.2	5374.6	5504.2	5759.2	6131.3	6592.5	6996.6	7172.2	7014.7
76°	5082.0	5104.3	5150.3	5197.6	5353.7	5631.0	6028.2	6520.1	6947.8	7126.2	6974.3
77.5°	4583.1	4602.6	4640.3	4722.5	4899.4	5254.8	5718.8	6202.3	6648.3	6808.5	6680.3
80°	3448.8	3465.6	3500.4	3599.3	3752.6	3972.8	4332.3	4804.7	5293.8	5504.2	5420.6
82.5°	1456.2	1475.7	1613.6	1757.2	1925.8	2164.1	2398.2	2816.2	3175.7	3415.4	3287.2
85°	160.2	197.9	243.9	331.6	406.9	542.1	674.4	928.1	1173.3	1322.4	1169.1
87.5°	27.9	32.0	46.0	58.5	65.5	75.2	90.6	126.8	172.8	149.1	151.9
90°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8	2.8
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4
97.5°	0.0	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
100°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8
102.5°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8	2.8
105°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
107.5°	1.4	1.4	1.4	1.4	2.8	2.8	1.4	1.4	1.4	2.8	1.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
112.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
115°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
117.5°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
120°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
122.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
125°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
127.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
130°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
132.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
135°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
137.5°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
140°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
142.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
145°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	0.0	1.4
147.5°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
150°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	0.0	0.0	0.0
152.5°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	0.0	0.0
155°	2.8	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	0.0	1.4
157.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	0.0	0.0	0.0
160°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	0.0	0.0	0.0
162.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	0.0	0.0	0.0
165°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4	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°	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9	2120.9
2.5°	2120.9	2120.9	2123.6	2122.3	2122.3	2123.6	2126.4	2125.0
5°	2122.3	2123.6	2120.9	2122.3	2123.6	2123.6	2125.0	2123.6
7.5°	2119.5	2119.5	2119.5	2120.9	2122.3	2120.9	2122.3	2122.3
10°	2113.9	2115.3	2113.9	2116.7	2118.1	2118.1	2119.5	2119.5
12.5°	2109.7	2109.7	2109.7	2112.5	2113.9	2113.9	2115.3	2113.9
15°	2105.5	2105.5	2104.1	2106.9	2109.7	2109.7	2111.1	2111.1
17.5°	2104.1	2104.1	2102.7	2105.5	2108.3	2108.3	2109.7	2109.7
20°	2108.3	2109.7	2106.9	2109.7	2112.5	2113.9	2113.9	2113.9
22.5°	2125.0	2123.6	2119.5	2120.9	2122.3	2122.3	2122.3	2122.3
25°	2150.1	2147.3	2143.2	2141.8	2140.4	2139.0	2139.0	2139.0
27.5°	2193.3	2189.1	2182.2	2180.8	2179.4	2176.6	2176.6	2176.6
30°	2244.9	2239.3	2230.9	2228.2	2224.0	2221.2	2219.8	2218.4
32.5°	2318.7	2307.6	2297.8	2290.9	2286.7	2278.3	2276.9	2274.1
35°	2403.7	2395.4	2381.4	2377.3	2370.3	2366.1	2364.7	2357.8
37.5°	2520.8	2511.0	2498.5	2495.7	2494.3	2490.1	2490.1	2488.7
40°	2683.8	2674.1	2662.9	2651.8	2654.6	2656.0	2656.0	2650.4
42.5°	2883.1	2867.8	2845.5	2852.4	2848.3	2842.7	2853.8	2846.9
45°	3110.2	3089.3	3072.6	3065.6	3065.6	3058.7	3069.8	3069.8
47.5°	3362.4	3329.0	3298.3	3299.7	3288.6	3291.4	3298.3	3308.1
50°	3628.6	3584.0	3554.7	3540.8	3529.7	3533.8	3546.4	3549.2
52.5°	3904.5	3850.2	3811.1	3790.2	3776.3	3781.9	3791.6	3800.0
55°	4191.6	4131.6	4073.1	4050.8	4034.1	4045.2	4046.6	4057.8
57.5°	4491.2	4408.9	4340.7	4307.2	4290.5	4301.6	4310.0	4321.2
60°	4793.5	4698.8	4618.0	4578.9	4555.3	4570.6	4590.1	4595.7
62.5°	5144.7	5013.7	4923.1	4867.4	4856.2	4871.6	4877.1	4893.9
65°	5559.9	5402.5	5277.1	5208.8	5206.0	5214.4	5226.9	5231.1
67.5°	6033.7	5858.2	5689.5	5621.3	5594.8	5619.9	5632.4	5649.1
70°	6702.6	6461.5	6217.7	6065.8	6001.7	5982.2	5987.7	6005.9
72.5°	6777.8	6518.7	6234.4	6028.2	5915.3	5863.7	5862.3	5865.1
75°	6613.4	6199.6	5998.9	5762.0	5601.8	5518.1	5507.0	5505.6
76°	6531.2	6042.1	5752.2	5564.1	5371.8	5286.8	5274.3	5267.3
77.5°	6184.2	5658.9	5222.7	5108.5	4924.5	4817.2	4839.5	4821.4
80°	4958.0	4436.8	4025.7	3703.8	3713.6	3635.6	3603.5	3593.8
82.5°	2922.1	2494.3	2040.0	1773.9	1520.3	1453.4	1251.3	1205.4
85°	933.6	661.9	401.3	291.2	197.9	165.8	129.6	118.4
87.5°	124.0	97.5	79.4	76.6	69.7	59.9	39.0	27.9
90°	1.4	1.4	1.4	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°	1.4	1.4	1.4	1.4	0.0	0.0	0.0	0.0
97.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
100°	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
102.5°	2.8	2.8	2.8	2.8	1.4	1.4	1.4	1.4
105°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
107.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8



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CATALOG NUMBER: VST-F10-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8
112.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
115°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8
117.5°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8
120°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8
122.5°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
125°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
127.5°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
130°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
132.5°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
135°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
137.5°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
140°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
142.5°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
145°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
147.5°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
150°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
152.5°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
155°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
157.5°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
160°	1.4	1.4	1.4	1.4	2.8	2.8	2.8	2.8
162.5°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
165°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8
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)