

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: P157844

Luminaire Tested: **VST-F10-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157844
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-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(10) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (70) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23845.6 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Luminous Opening: Rectangular (W 1.67' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U2 - 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

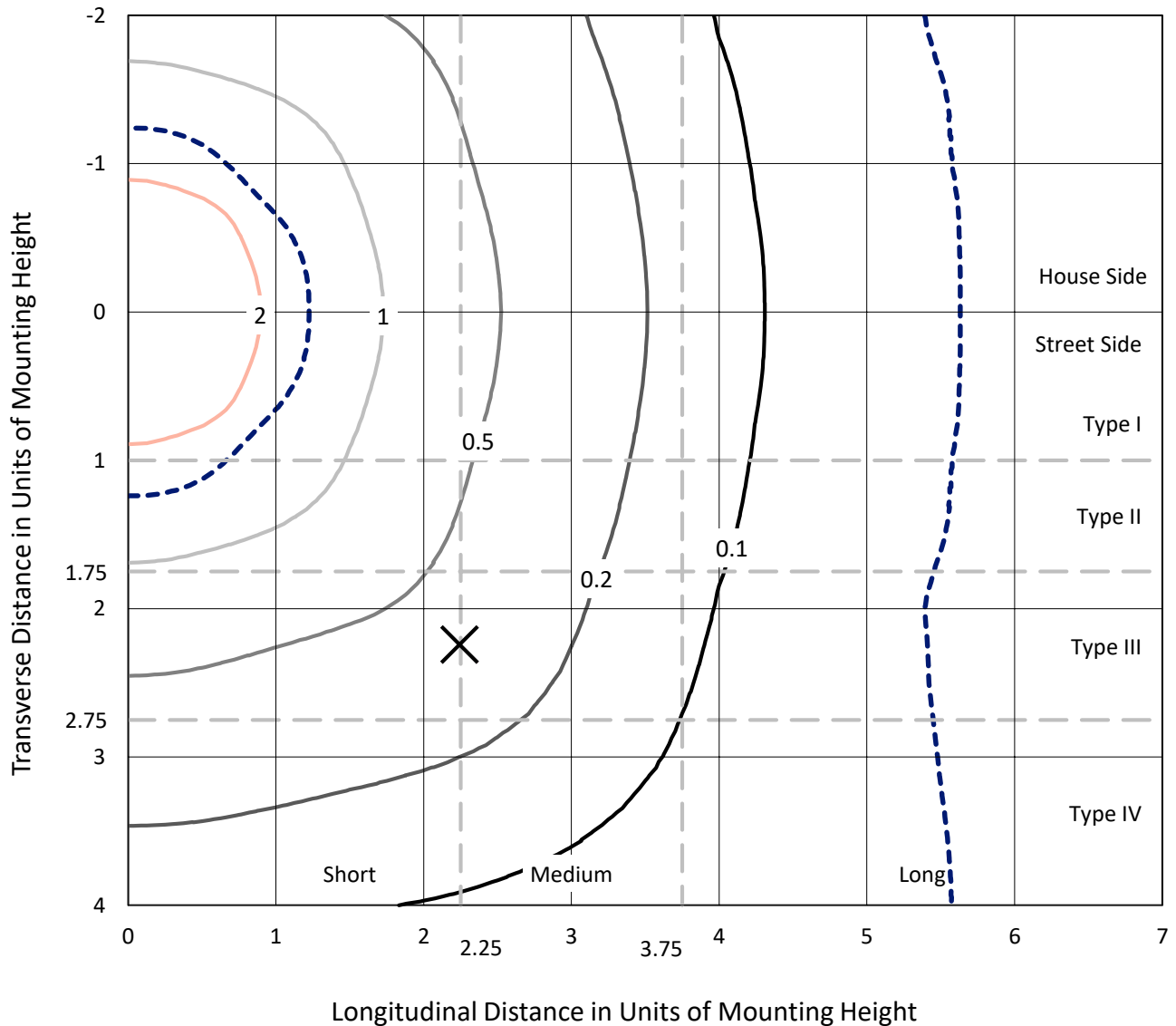


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

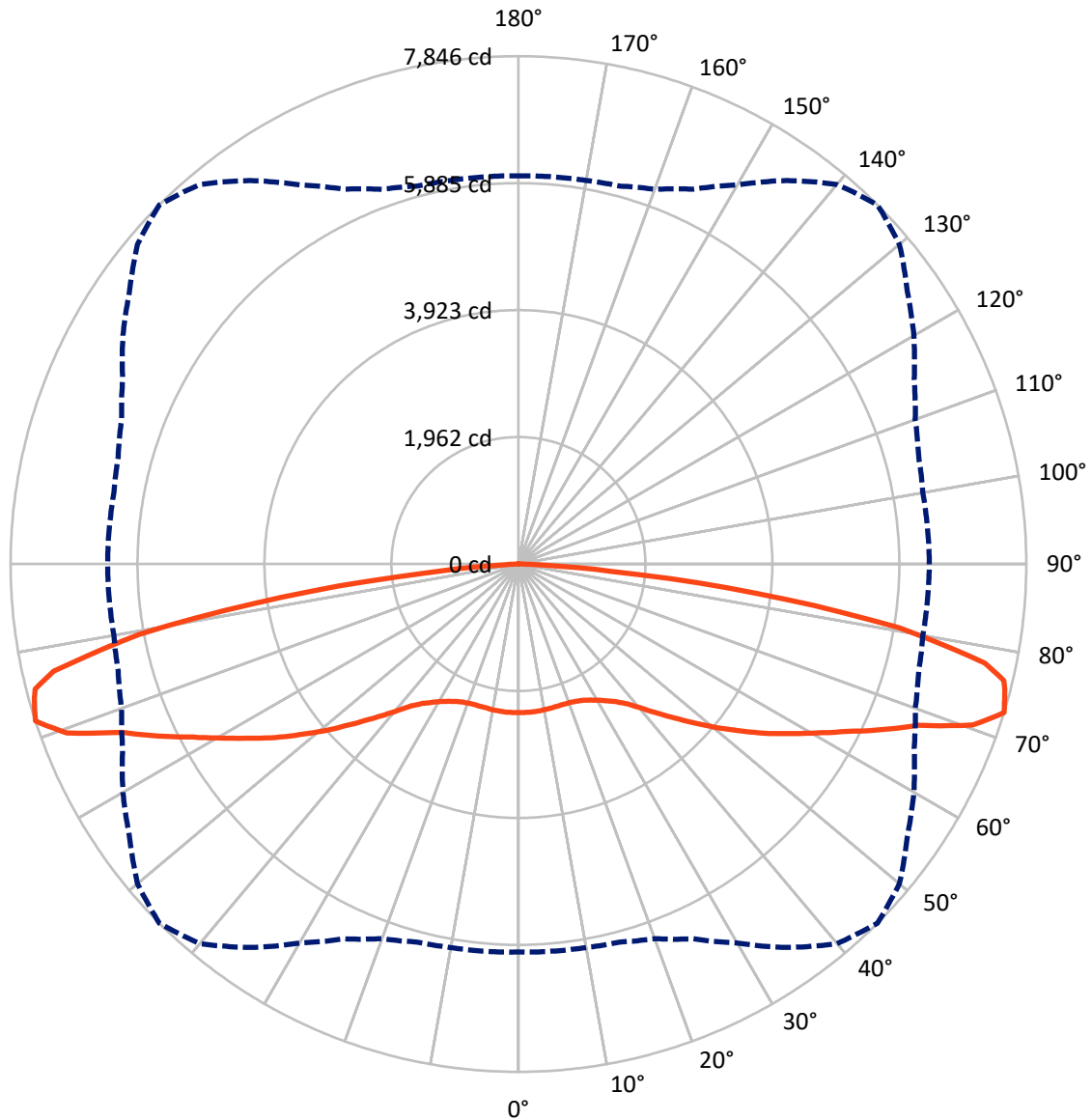


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type V - Short - Non-Cutoff

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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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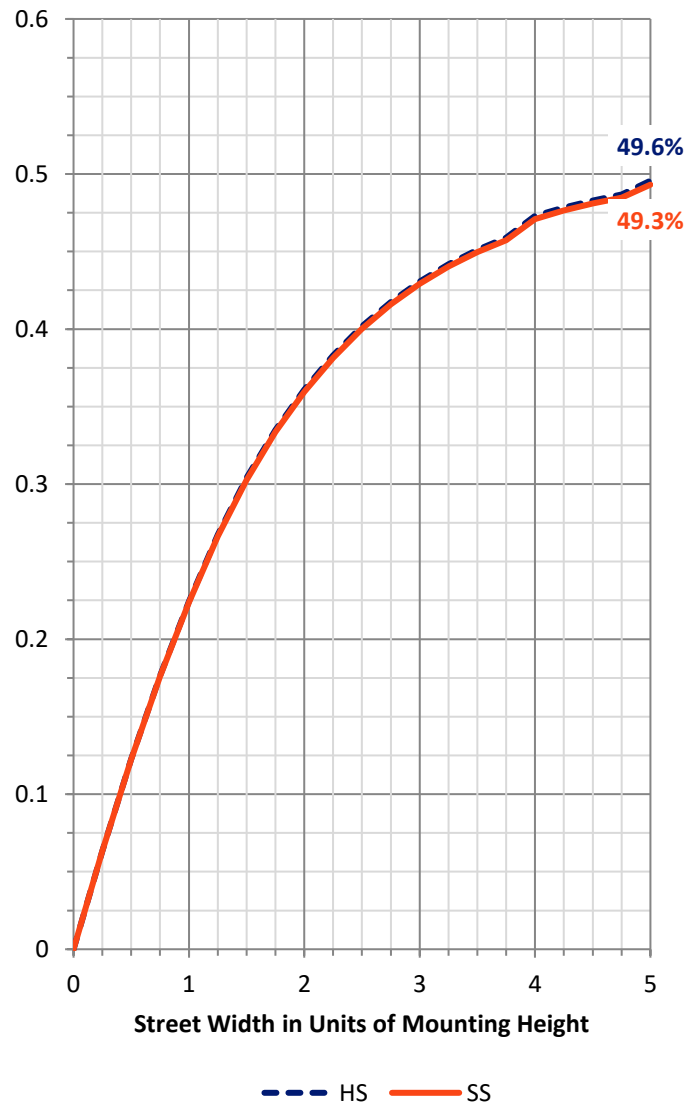
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11917.0	5.8	11922.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11917.0	5.8	11922.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	23834.0	11.6	23845.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.0	0.9
10°-20°	646.8	2.7
20°-30°	1081.5	4.5
30°-40°	1643.9	6.9
40°-50°	2603.6	10.9
50°-60°	3982.5	16.7
60°-70°	5699.7	23.9
70°-80°	6521.7	27.3
80°-90°	1435.4	6.0
90°-100°	1.2	0.0
100°-110°	2.5	0.0
110°-120°	1.7	0.0
120°-130°	1.9	0.0
130°-140°	1.7	0.0
140°-150°	1.3	0.0
150°-160°	0.9	0.0
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-90°	23834.0	100.0
0°-180°	23845.6	100.0



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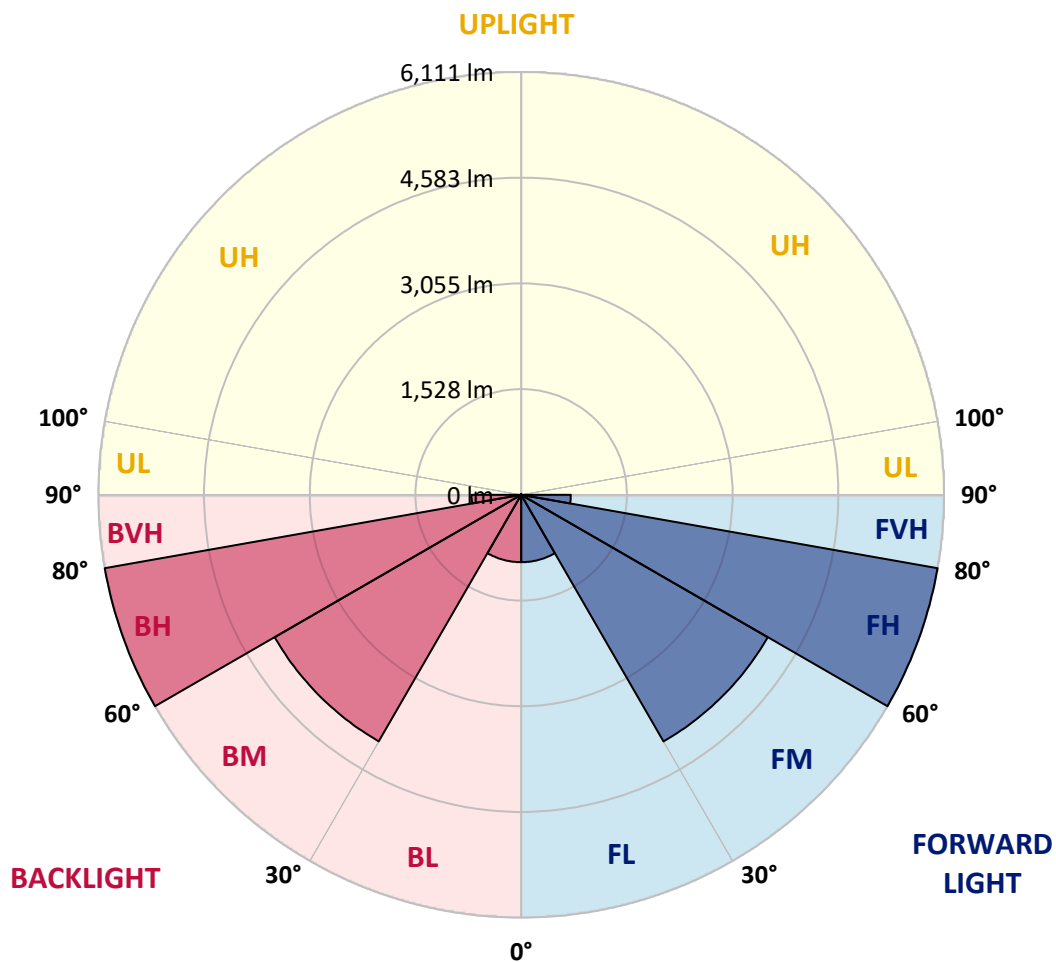
CATALOG NUMBER: VST-F10-LED-E-U-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	973.6	4.1			
FM	(30°-60°)	4115.0	17.3			
FH	(60°-80°)	6110.7	25.6			G3/7500
FVH	(80°-90°)	717.7	3.0			G4/750
BL	(0°-30°)	973.6	4.1	B2/1000		
BM	(30°-60°)	4115.0	17.3	B3/5000		
BH	(60°-80°)	6110.7	25.6	B5		G3/7500
BVH	(80°-90°)	717.7	3.0			G4/750
UL	(90°-100°)	1.2	0.0		U1/10	
UH	(100°-180°)	5.8	0.0		U1/10	

BUG Rating: B5-U2-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2296.7	2293.6	2295.2	2298.2	2296.7	2296.7	2295.2	2295.2	2298.2	2295.2	2296.7
5°	2298.2	2295.2	2296.7	2298.2	2296.7	2298.2	2296.7	2296.7	2296.7	2295.2	2298.2
7.5°	2292.1	2292.1	2293.6	2293.6	2292.1	2293.6	2293.6	2293.6	2292.1	2292.1	2295.2
10°	2289.1	2287.6	2287.6	2289.1	2287.6	2287.6	2289.1	2289.1	2286.1	2286.1	2289.1
12.5°	2284.6	2283.1	2283.1	2283.1	2281.6	2281.6	2283.1	2283.1	2281.6	2280.1	2284.6
15°	2281.6	2280.1	2280.1	2280.1	2277.1	2278.6	2278.6	2278.6	2277.1	2275.6	2280.1
17.5°	2280.1	2278.6	2278.6	2278.6	2277.1	2277.1	2277.1	2277.1	2275.6	2275.6	2278.6
20°	2283.1	2283.1	2283.1	2283.1	2281.6	2281.6	2281.6	2283.1	2283.1	2283.1	2286.1
22.5°	2290.6	2290.6	2292.1	2293.6	2293.6	2296.7	2298.2	2299.7	2299.7	2301.2	2304.2
25°	2310.2	2310.2	2311.7	2313.3	2317.8	2320.8	2326.8	2329.8	2331.3	2331.3	2332.9
27.5°	2346.4	2347.9	2351.0	2354.0	2360.0	2364.5	2370.6	2376.6	2378.1	2379.6	2381.1
30°	2391.7	2393.2	2399.2	2402.2	2409.8	2418.8	2426.4	2432.4	2436.9	2439.9	2438.4
32.5°	2456.5	2459.5	2467.1	2471.6	2482.1	2491.2	2501.8	2510.8	2515.3	2519.8	2518.3
35°	2547.0	2554.5	2562.1	2566.6	2577.1	2584.7	2598.3	2607.3	2616.4	2613.3	2614.8
37.5°	2681.2	2687.2	2688.7	2691.8	2702.3	2708.3	2723.4	2735.5	2740.0	2743.0	2744.5
40°	2862.2	2862.2	2869.7	2863.7	2877.2	2878.7	2896.8	2913.4	2918.0	2930.0	2921.0
42.5°	3073.3	3071.8	3076.3	3071.8	3071.8	3086.8	3101.9	3132.1	3135.1	3150.2	3141.1
45°	3302.5	3302.5	3298.0	3299.5	3302.5	3319.1	3337.2	3370.4	3385.4	3394.5	3388.4
47.5°	3551.3	3545.3	3543.8	3542.3	3551.3	3569.4	3596.5	3628.2	3665.9	3668.9	3665.9
50°	3803.1	3801.6	3791.1	3800.1	3806.2	3815.2	3866.5	3908.7	3947.9	3972.0	3964.5
52.5°	4068.5	4055.0	4055.0	4055.0	4070.1	4098.7	4143.9	4201.3	4254.0	4279.7	4275.1
55°	4337.0	4332.4	4318.9	4312.8	4332.4	4373.2	4438.0	4507.4	4576.7	4615.9	4600.9
57.5°	4582.8	4575.2	4576.7	4578.2	4600.9	4655.2	4730.6	4822.5	4897.9	4940.2	4929.6
60°	4775.8	4766.7	4783.3	4787.9	4828.6	4919.1	5039.7	5155.8	5255.3	5297.6	5281.0
62.5°	4994.5	4988.4	4999.0	4997.5	5041.2	5142.2	5303.6	5489.1	5639.9	5694.2	5670.0
65°	5347.3	5329.2	5324.7	5308.1	5336.8	5415.2	5576.5	5792.2	6033.5	6172.2	6139.0
67.5°	5769.6	5765.0	5750.0	5740.9	5751.5	5849.5	6004.8	6212.9	6458.7	6650.2	6692.4
70°	6048.5	6054.6	6069.6	6092.3	6179.7	6369.7	6653.2	6968.4	7306.2	7449.5	7423.8
72.5°	5995.8	6004.8	6016.9	6045.5	6160.1	6387.8	6761.8	7232.3	7656.0	7846.1	7683.2
75°	5737.9	5745.4	5772.6	5816.3	5956.5	6232.5	6635.1	7134.3	7571.6	7761.6	7591.2
76°	5499.6	5523.8	5573.5	5624.8	5793.7	6093.8	6523.6	7055.9	7518.8	7711.8	7547.5
77.5°	4959.8	4980.9	5021.6	5110.6	5302.1	5686.6	6188.8	6712.0	7194.6	7368.0	7229.3
80°	3732.3	3750.4	3788.1	3895.1	4061.0	4299.3	4688.3	5199.5	5728.8	5956.5	5866.1
82.5°	1575.8	1597.0	1746.2	1901.6	2084.0	2341.9	2595.2	3047.6	3436.7	3696.1	3557.3
85°	173.4	214.1	263.9	358.9	440.3	586.6	729.9	1004.3	1269.7	1431.1	1265.2
87.5°	30.2	34.7	49.8	63.3	70.9	81.4	98.0	137.2	187.0	161.4	164.4
90°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.0	3.0	3.0	3.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
97.5°	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0
102.5°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0
105°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
107.5°	1.5	1.5	1.5	1.5	3.0	3.0	1.5	1.5	1.5	3.0	1.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
112.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
115°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
117.5°	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
120°	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
122.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
125°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
127.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
130°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
132.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
135°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
137.5°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
140°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
142.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
145°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
147.5°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
150°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	0.0	0.0	0.0
152.5°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	0.0	0.0
155°	3.0	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	0.0	1.5
157.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0
160°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0
162.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0
165°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	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°	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2	2295.2
2.5°	2295.2	2295.2	2298.2	2296.7	2296.7	2298.2	2301.2	2299.7
5°	2296.7	2298.2	2295.2	2296.7	2298.2	2298.2	2299.7	2298.2
7.5°	2293.6	2293.6	2293.6	2295.2	2296.7	2295.2	2296.7	2296.7
10°	2287.6	2289.1	2287.6	2290.6	2292.1	2292.1	2293.6	2293.6
12.5°	2283.1	2283.1	2283.1	2286.1	2287.6	2287.6	2289.1	2287.6
15°	2278.6	2278.6	2277.1	2280.1	2283.1	2283.1	2284.6	2284.6
17.5°	2277.1	2277.1	2275.6	2278.6	2281.6	2281.6	2283.1	2283.1
20°	2281.6	2283.1	2280.1	2283.1	2286.1	2287.6	2287.6	2287.6
22.5°	2299.7	2298.2	2293.6	2295.2	2296.7	2296.7	2296.7	2296.7
25°	2326.8	2323.8	2319.3	2317.8	2316.3	2314.8	2314.8	2314.8
27.5°	2373.6	2369.0	2361.5	2360.0	2358.5	2355.5	2355.5	2355.5
30°	2429.4	2423.3	2414.3	2411.3	2406.7	2403.7	2402.2	2400.7
32.5°	2509.3	2497.2	2486.7	2479.1	2474.6	2465.6	2464.1	2461.0
35°	2601.3	2592.2	2577.1	2572.6	2565.1	2560.6	2559.1	2551.5
37.5°	2727.9	2717.4	2703.8	2700.8	2699.3	2694.8	2694.8	2693.3
40°	2904.4	2893.8	2881.8	2869.7	2872.7	2874.2	2874.2	2868.2
42.5°	3120.0	3103.4	3079.3	3086.8	3082.3	3076.3	3088.4	3080.8
45°	3365.8	3343.2	3325.1	3317.6	3317.6	3310.0	3322.1	3322.1
47.5°	3638.8	3602.6	3569.4	3570.9	3558.8	3561.9	3569.4	3580.0
50°	3926.8	3878.5	3846.9	3831.8	3819.7	3824.3	3837.8	3840.8
52.5°	4225.4	4166.6	4124.3	4101.7	4086.6	4092.7	4103.2	4112.3
55°	4536.0	4471.2	4407.8	4383.7	4365.6	4377.7	4379.2	4391.3
57.5°	4860.2	4771.3	4697.4	4661.2	4643.1	4655.2	4664.2	4676.3
60°	5187.5	5084.9	4997.5	4955.2	4929.6	4946.2	4967.3	4973.3
62.5°	5567.5	5425.7	5327.7	5267.4	5255.3	5271.9	5278.0	5296.1
65°	6016.9	5846.5	5710.7	5636.9	5633.8	5642.9	5656.5	5661.0
67.5°	6529.6	6339.6	6157.1	6083.2	6054.6	6081.7	6095.3	6113.4
70°	7253.4	6992.5	6728.6	6564.3	6494.9	6473.8	6479.8	6499.4
72.5°	7334.8	7054.4	6746.7	6523.6	6401.4	6345.6	6344.1	6347.1
75°	7156.9	6709.0	6491.9	6235.5	6062.1	5971.6	5959.6	5958.1
76°	7067.9	6538.6	6225.0	6021.4	5813.3	5721.3	5707.7	5700.2
77.5°	6692.4	6123.9	5651.9	5528.3	5329.2	5213.1	5237.2	5217.6
80°	5365.4	4801.4	4356.6	4008.2	4018.8	3934.3	3899.7	3889.1
82.5°	3162.2	2699.3	2207.7	1919.7	1645.2	1572.8	1354.2	1304.4
85°	1010.4	716.3	434.3	315.2	214.1	179.5	140.2	128.2
87.5°	134.2	105.6	86.0	82.9	75.4	64.8	42.2	30.2
90°	1.5	1.5	1.5	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°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
100°	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
102.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5
105°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
107.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0



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CATALOG NUMBER: VST-F10-LED-E-U-5XQ-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0
112.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
115°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
117.5°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0
120°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0
122.5°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
125°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
127.5°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
130°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
132.5°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
135°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
137.5°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
140°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
142.5°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
145°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
147.5°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
150°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
152.5°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
155°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
157.5°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
160°	1.5	1.5	1.5	1.5	3.0	3.0	3.0	3.0
162.5°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
165°	1.5	1.5	1.5	3.0	3.0	3.0	3.0	3.0
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)