

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: P157854

Luminaire Tested: **VST-F11-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157854
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-F11-LED-E-U-5XQ-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (77) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26230.3 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U2 - G5

Input Watts (W): 282.7
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



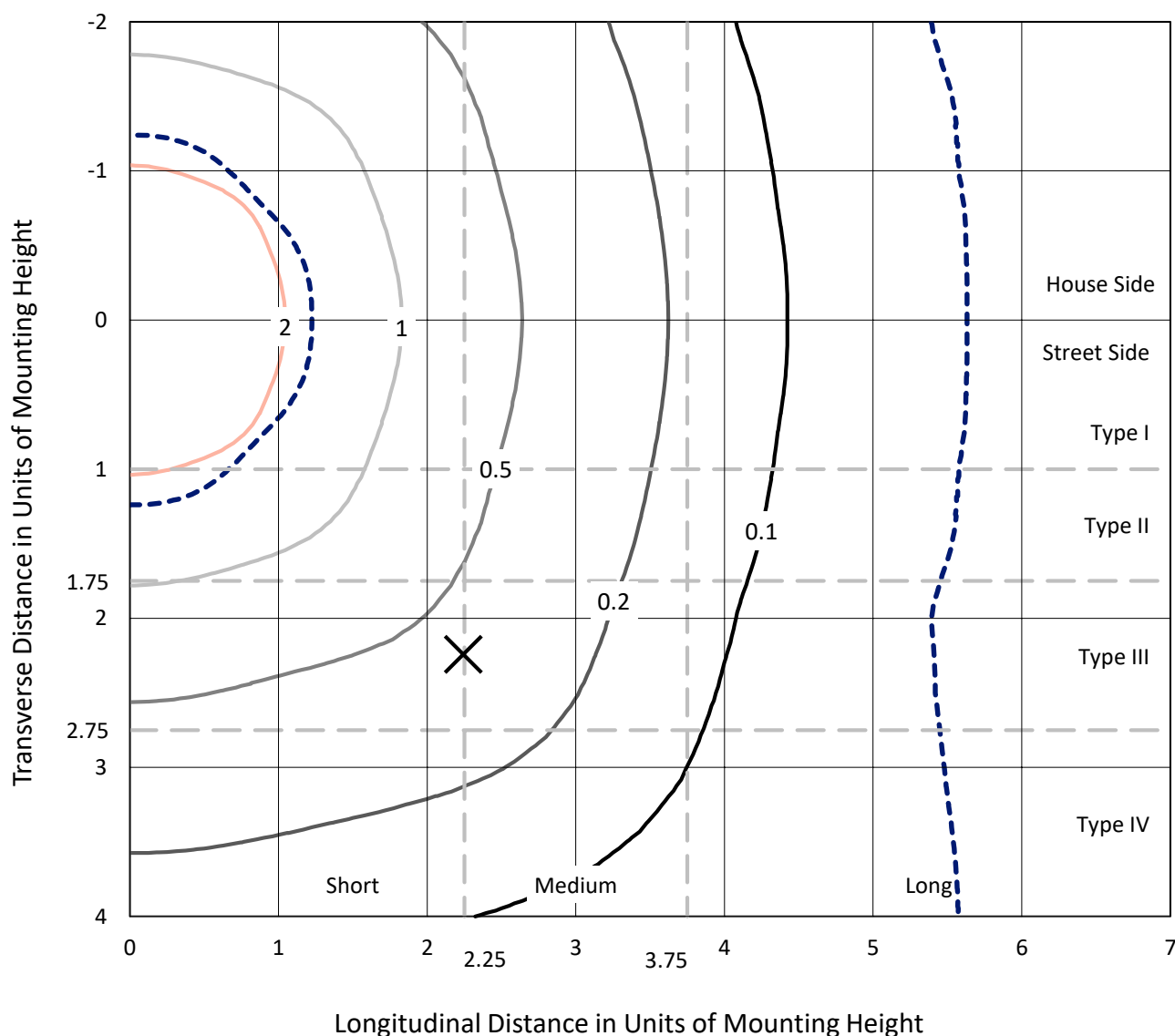
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

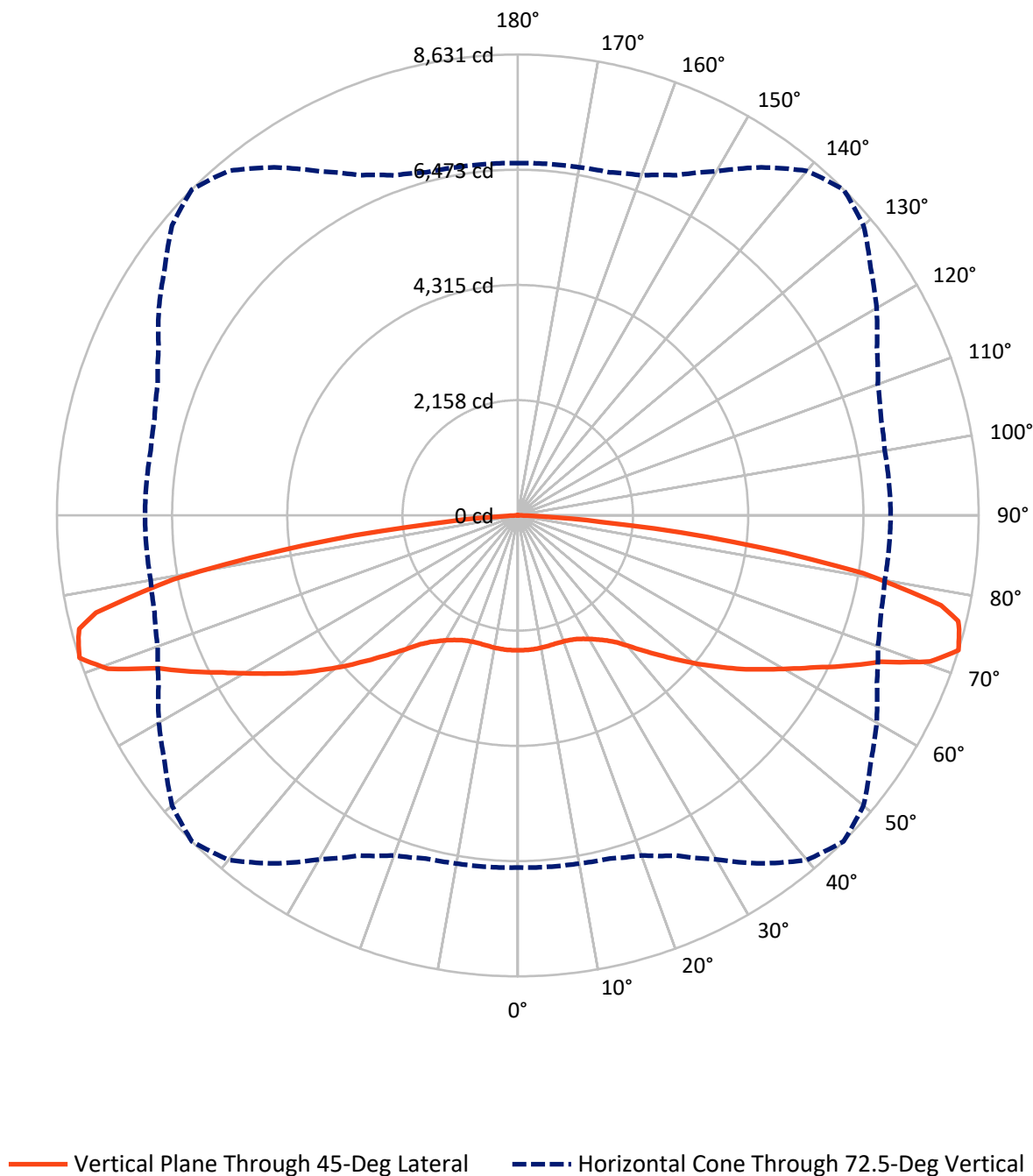


Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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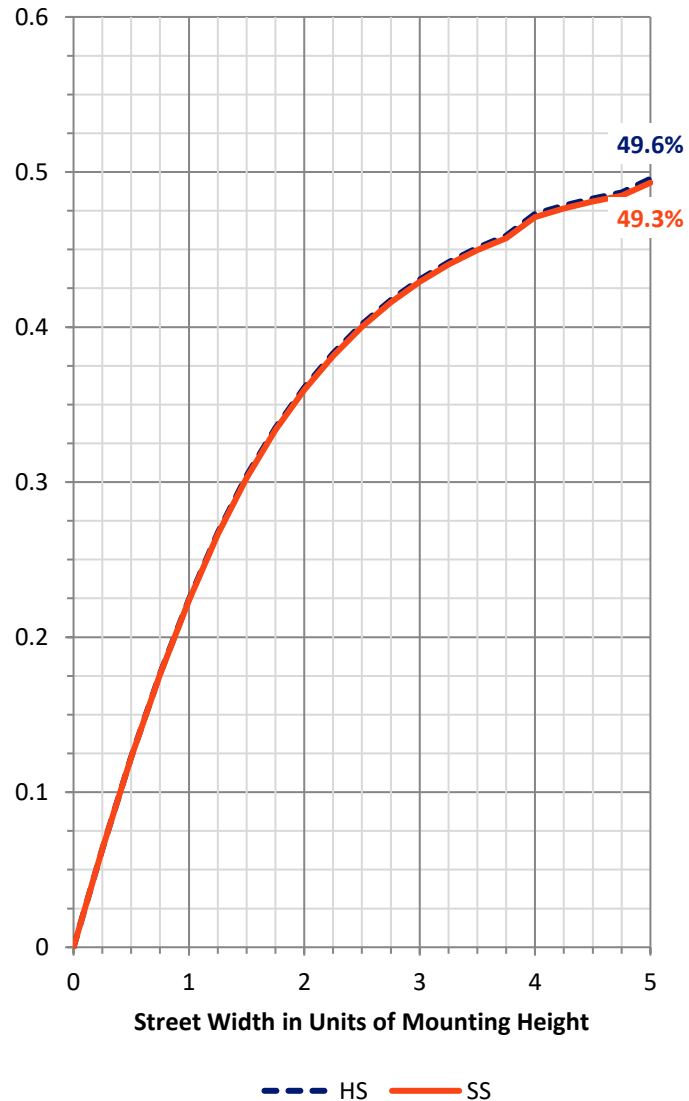
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13108.7	6.4	13115.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	13108.7	6.4	13115.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	26217.4	12.9	26230.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.9	0.9
10°-20°	711.5	2.7
20°-30°	1189.7	4.5
30°-40°	1808.2	6.9
40°-50°	2863.9	10.9
50°-60°	4380.8	16.7
60°-70°	6269.7	23.9
70°-80°	7173.9	27.3
80°-90°	1578.9	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°	26217.4	100.0
0°-180°	26230.3	100.0

Coefficient of Utilization



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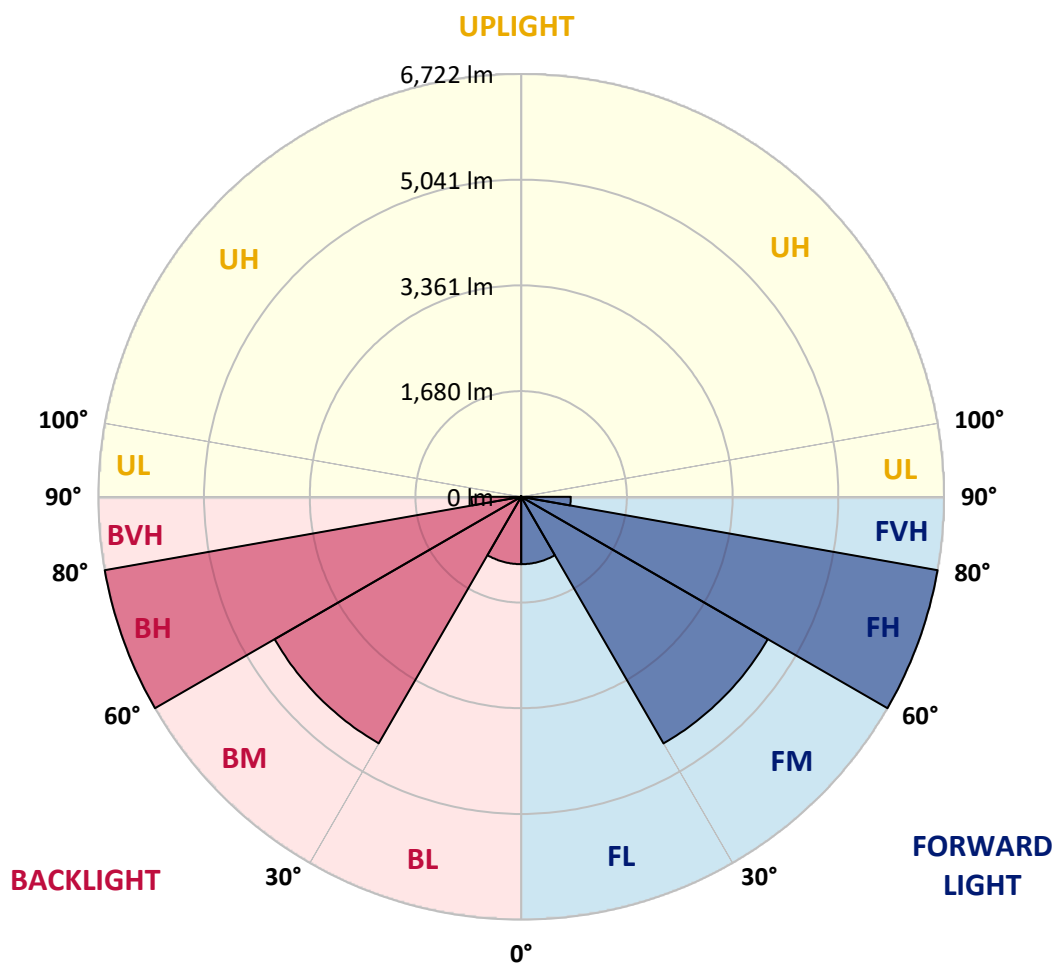
CATALOG NUMBER: VST-F11-LED-E-U-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1071.0	4.1			
FM	(30°-60°)	4526.5	17.3			
FH	(60°-80°)	6721.8	25.6			G3/7500
FVH	(80°-90°)	789.5	3.0			G5
BL	(0°-30°)	1071.0	4.1	B3/2500		
BM	(30°-60°)	4526.5	17.3	B3/5000		
BH	(60°-80°)	6721.8	25.6	B5		G3/7500
BVH	(80°-90°)	789.5	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°	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7
2.5°	2526.3	2523.0	2524.7	2528.0	2526.3	2526.3	2524.7	2524.7	2528.0	2524.7	2526.3
5°	2528.0	2524.7	2526.3	2528.0	2526.3	2528.0	2526.3	2526.3	2526.3	2524.7	2528.0
7.5°	2521.4	2521.4	2523.0	2523.0	2521.4	2523.0	2523.0	2523.0	2521.4	2521.4	2524.7
10°	2518.0	2516.4	2516.4	2518.0	2516.4	2516.4	2518.0	2518.0	2514.7	2514.7	2518.0
12.5°	2513.1	2511.4	2511.4	2511.4	2509.7	2509.7	2511.4	2511.4	2509.7	2508.1	2513.1
15°	2509.7	2508.1	2508.1	2508.1	2504.8	2506.4	2506.4	2506.4	2504.8	2503.1	2508.1
17.5°	2508.1	2506.4	2506.4	2506.4	2504.8	2504.8	2504.8	2504.8	2503.1	2503.1	2506.4
20°	2511.4	2511.4	2511.4	2511.4	2509.7	2509.7	2509.7	2511.4	2511.4	2511.4	2514.7
22.5°	2519.7	2519.7	2521.4	2523.0	2523.0	2526.3	2528.0	2529.6	2529.6	2531.3	2534.6
25°	2541.3	2541.3	2542.9	2544.6	2549.6	2552.9	2559.5	2562.8	2564.5	2564.5	2566.1
27.5°	2581.1	2582.7	2586.0	2589.4	2596.0	2601.0	2607.6	2614.2	2615.9	2617.6	2619.2
30°	2630.8	2632.5	2639.1	2642.4	2650.7	2660.7	2669.0	2675.6	2680.6	2683.9	2682.3
32.5°	2702.2	2705.5	2713.8	2718.7	2730.4	2740.3	2751.9	2761.9	2766.9	2771.8	2770.2
35°	2801.7	2810.0	2818.3	2823.3	2834.9	2843.2	2858.1	2868.0	2878.0	2874.7	2876.3
37.5°	2949.3	2956.0	2957.6	2960.9	2972.5	2979.2	2995.8	3009.0	3014.0	3017.3	3019.0
40°	3148.4	3148.4	3156.7	3150.0	3165.0	3166.6	3186.5	3204.8	3209.8	3223.0	3213.1
42.5°	3380.6	3378.9	3383.9	3378.9	3378.9	3395.5	3412.1	3445.3	3448.6	3465.2	3455.3
45°	3632.7	3632.7	3627.8	3629.4	3632.7	3651.0	3670.9	3707.4	3724.0	3733.9	3727.3
47.5°	3906.4	3899.8	3898.1	3896.5	3906.4	3926.3	3956.2	3991.0	4032.5	4035.8	4032.5
50°	4183.5	4181.8	4170.2	4180.1	4186.8	4196.7	4253.1	4299.6	4342.7	4369.2	4360.9
52.5°	4475.4	4460.5	4460.5	4460.5	4477.1	4508.6	4558.3	4621.4	4679.4	4707.6	4702.7
55°	4770.7	4765.7	4750.8	4744.1	4765.7	4810.5	4881.8	4958.1	5034.4	5077.5	5061.0
57.5°	5041.0	5032.8	5034.4	5036.1	5061.0	5120.7	5203.6	5304.8	5387.7	5434.2	5422.6
60°	5253.4	5243.4	5261.7	5266.6	5311.4	5411.0	5543.7	5671.4	5780.9	5827.3	5809.1
62.5°	5493.9	5487.3	5498.9	5497.2	5545.3	5656.5	5833.9	6038.0	6203.9	6263.6	6237.0
65°	5882.1	5862.1	5857.2	5838.9	5870.4	5956.7	6134.2	6371.4	6636.8	6789.4	6752.9
67.5°	6346.5	6341.5	6324.9	6315.0	6326.6	6434.4	6605.3	6834.2	7104.6	7315.2	7361.7
70°	6653.4	6660.0	6676.6	6701.5	6797.7	7006.7	7318.6	7665.2	8036.8	8194.4	8166.2
72.5°	6595.3	6605.3	6618.6	6650.1	6776.1	7026.6	7438.0	7955.5	8421.7	8630.7	8451.5
75°	6311.7	6320.0	6349.8	6397.9	6552.2	6855.8	7298.7	7847.7	8328.8	8537.8	8350.3
76°	6049.6	6076.1	6130.9	6187.3	6373.1	6703.2	7175.9	7761.5	8270.7	8483.0	8302.2
77.5°	5455.7	5479.0	5523.8	5621.6	5832.3	6255.3	6807.7	7383.3	7914.1	8104.8	7952.2
80°	4105.5	4125.4	4166.9	4284.6	4467.1	4729.2	5157.2	5719.5	6301.7	6552.2	6452.7
82.5°	1733.4	1756.7	1920.9	2091.7	2292.4	2576.1	2854.8	3352.4	3780.4	4065.7	3913.1
85°	190.8	235.5	290.3	394.8	484.4	645.3	802.9	1104.8	1396.7	1574.2	1391.7
87.5°	33.2	38.2	54.7	69.7	78.0	89.6	107.8	150.9	205.7	177.5	180.8
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°	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7	2524.7
2.5°	2524.7	2524.7	2528.0	2526.3	2526.3	2528.0	2531.3	2529.6
5°	2526.3	2528.0	2524.7	2526.3	2528.0	2528.0	2529.6	2528.0
7.5°	2523.0	2523.0	2523.0	2524.7	2526.3	2524.7	2526.3	2526.3
10°	2516.4	2518.0	2516.4	2519.7	2521.4	2521.4	2523.0	2523.0
12.5°	2511.4	2511.4	2511.4	2514.7	2516.4	2516.4	2518.0	2516.4
15°	2506.4	2506.4	2504.8	2508.1	2511.4	2511.4	2513.1	2513.1
17.5°	2504.8	2504.8	2503.1	2506.4	2509.7	2509.7	2511.4	2511.4
20°	2509.7	2511.4	2508.1	2511.4	2514.7	2516.4	2516.4	2516.4
22.5°	2529.6	2528.0	2523.0	2524.7	2526.3	2526.3	2526.3	2526.3
25°	2559.5	2556.2	2551.2	2549.6	2547.9	2546.2	2546.2	2546.2
27.5°	2610.9	2606.0	2597.7	2596.0	2594.3	2591.0	2591.0	2591.0
30°	2672.3	2665.7	2655.7	2652.4	2647.4	2644.1	2642.4	2640.8
32.5°	2760.2	2746.9	2735.3	2727.0	2722.1	2712.1	2710.5	2707.1
35°	2861.4	2851.5	2834.9	2829.9	2821.6	2816.6	2815.0	2806.7
37.5°	3000.7	2989.1	2974.2	2970.9	2969.2	2964.2	2964.2	2962.6
40°	3194.8	3183.2	3169.9	3156.7	3160.0	3161.6	3161.6	3155.0
42.5°	3432.0	3413.8	3387.2	3395.5	3390.6	3383.9	3397.2	3388.9
45°	3702.4	3677.5	3657.6	3649.3	3649.3	3641.0	3654.3	3654.3
47.5°	4002.6	3962.8	3926.3	3928.0	3914.7	3918.1	3926.3	3938.0
50°	4319.5	4266.4	4231.6	4215.0	4201.7	4206.7	4221.6	4224.9
52.5°	4647.9	4583.2	4536.8	4511.9	4495.3	4501.9	4513.6	4523.5
55°	4989.6	4918.3	4848.6	4822.1	4802.2	4815.5	4817.1	4830.4
57.5°	5346.3	5248.4	5167.1	5127.3	5107.4	5120.7	5130.6	5143.9
60°	5706.2	5593.4	5497.2	5450.8	5422.6	5440.8	5464.0	5470.7
62.5°	6124.2	5968.3	5860.5	5794.1	5780.9	5799.1	5805.7	5825.7
65°	6618.6	6431.1	6281.8	6200.5	6197.2	6207.2	6222.1	6227.1
67.5°	7182.5	6973.5	6772.8	6691.5	6660.0	6689.9	6704.8	6724.7
70°	7978.8	7691.8	7401.5	7220.7	7144.4	7121.2	7127.8	7149.4
72.5°	8068.3	7759.8	7421.4	7175.9	7041.5	6980.2	6978.5	6981.8
75°	7872.6	7379.9	7141.1	6859.1	6668.3	6568.8	6555.5	6553.9
76°	7774.7	7192.5	6847.5	6623.5	6394.6	6293.4	6278.5	6270.2
77.5°	7361.7	6736.3	6217.1	6081.1	5862.1	5734.4	5761.0	5739.4
80°	5902.0	5281.6	4792.2	4409.1	4420.7	4327.8	4289.6	4278.0
82.5°	3478.5	2969.2	2428.5	2111.6	1809.7	1730.1	1489.6	1434.8
85°	1111.4	787.9	477.7	346.7	235.5	197.4	154.3	141.0
87.5°	147.6	116.1	94.6	91.2	82.9	71.3	46.4	33.2
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-F11-LED-E-U-5XQ-7030

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)