

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: P157864

Luminaire Tested: **VST-F12-LED-E-U-5XQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157864
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-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28614.7 lumens
Efficiency: N/A
Efficacy: 93.3 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

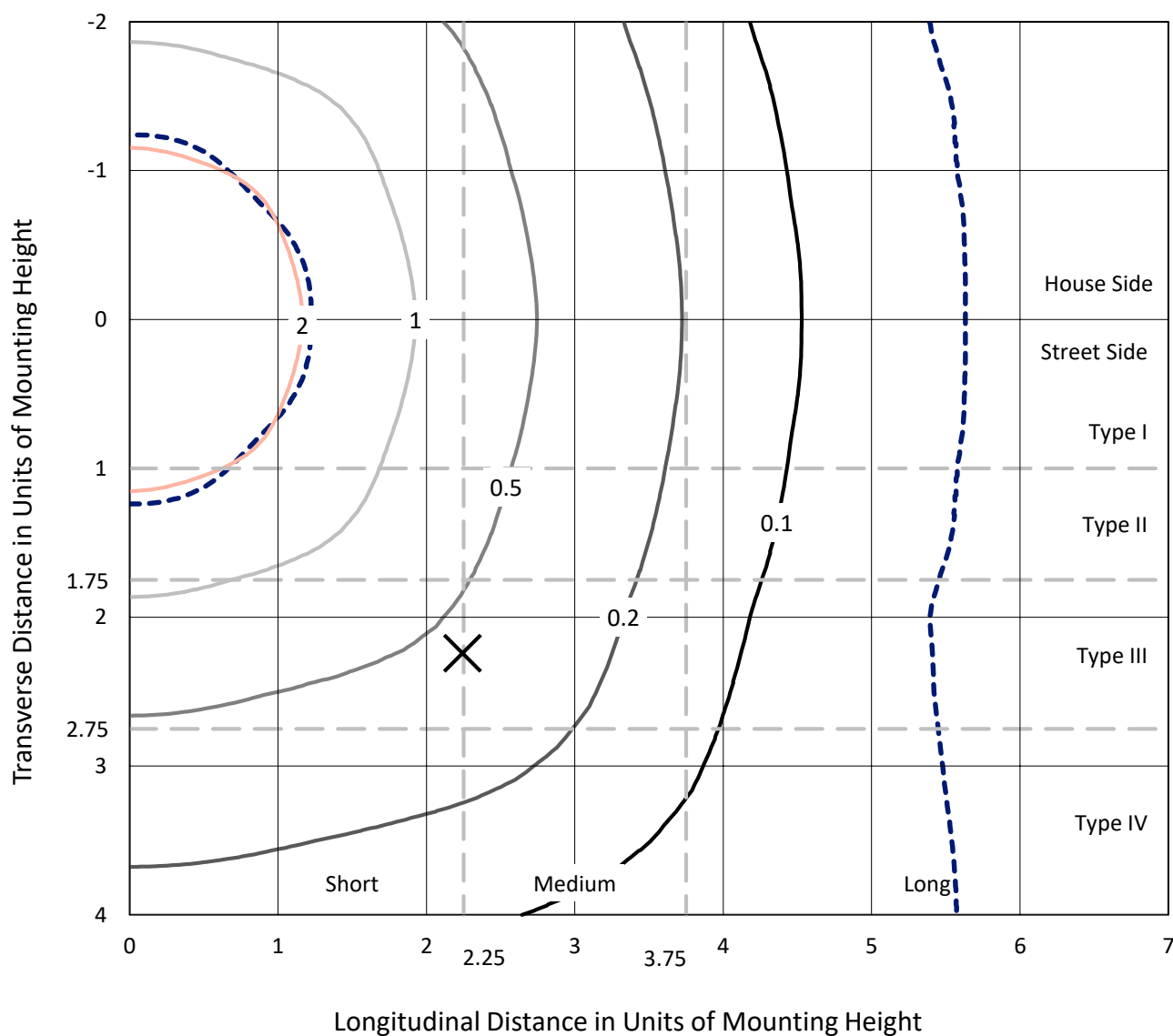


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

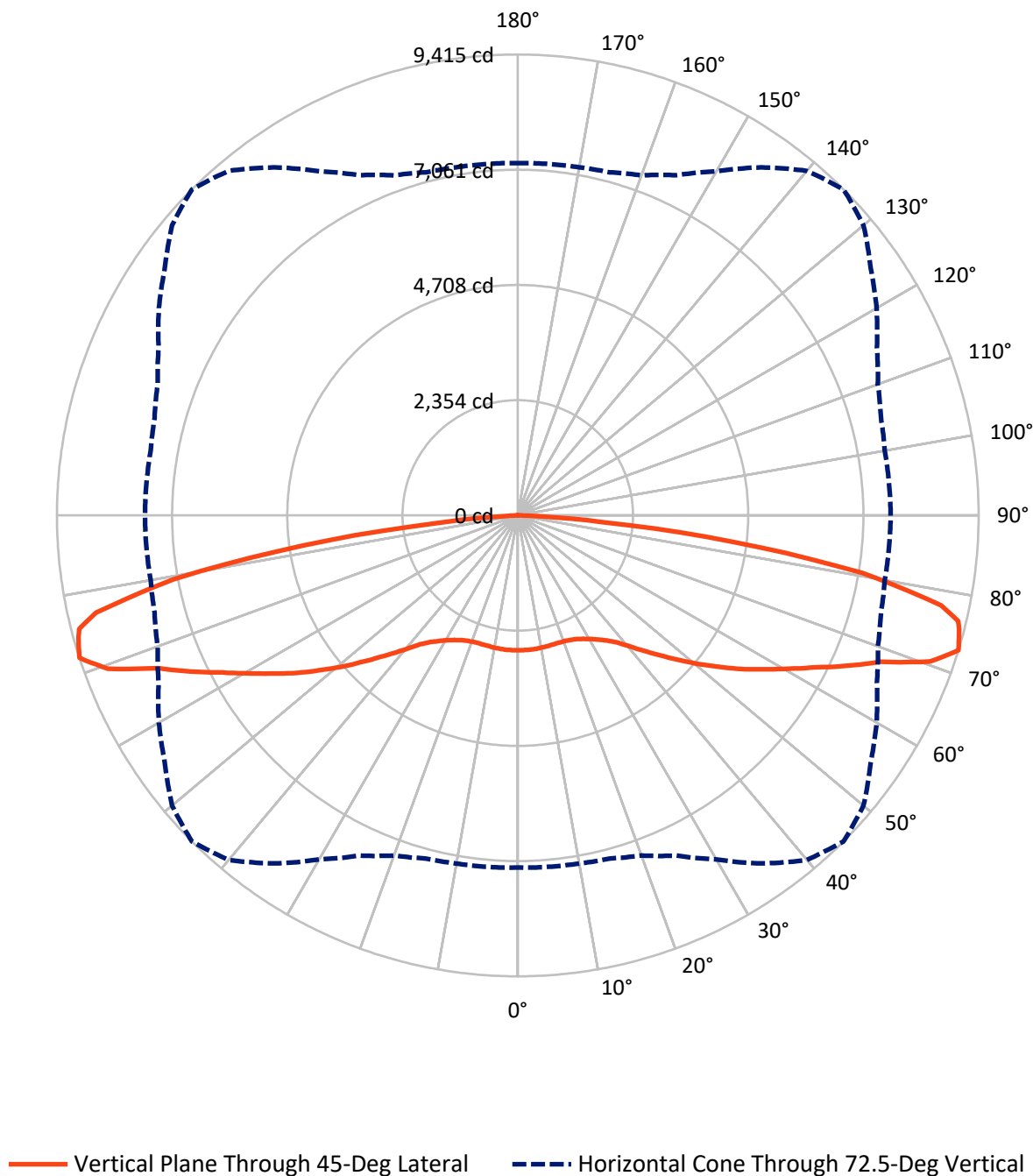


Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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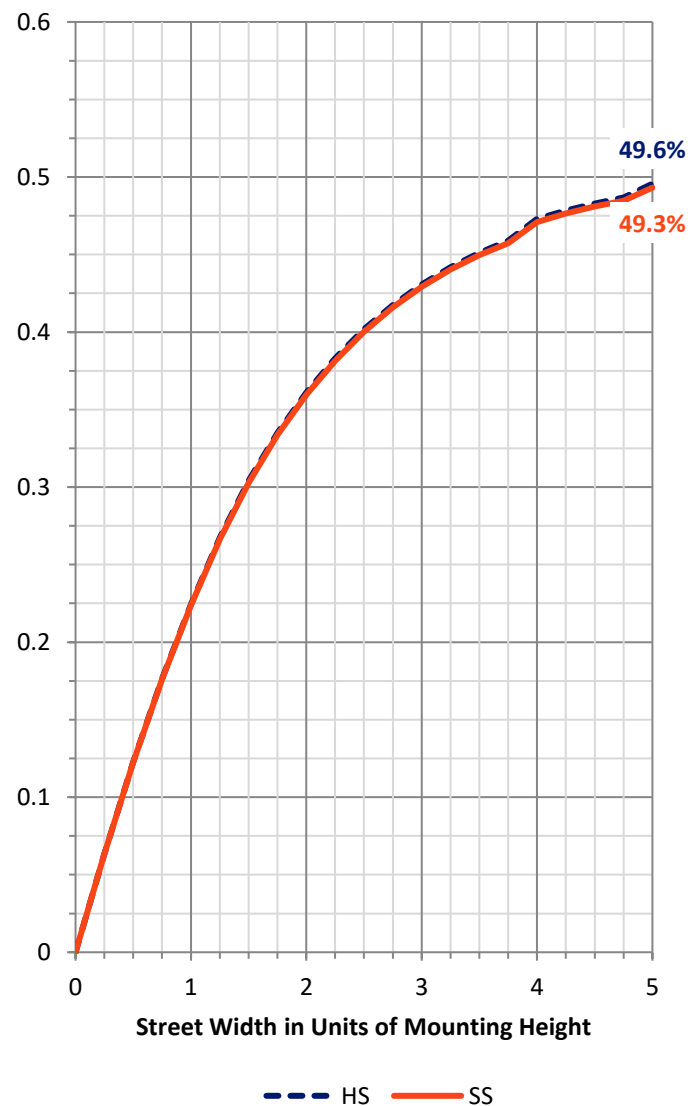
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14300.4	6.9	14307.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14300.4	6.9	14307.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	28600.8	13.9	28614.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.8	0.9
10°-20°	776.1	2.7
20°-30°	1297.8	4.5
30°-40°	1972.6	6.9
40°-50°	3124.3	10.9
50°-60°	4779.1	16.7
60°-70°	6839.6	23.9
70°-80°	7826.1	27.3
80°-90°	1722.4	6.0
90°-100°	1.4	0.0
100°-110°	2.9	0.0
110°-120°	2.0	0.0
120°-130°	2.2	0.0
130°-140°	2.1	0.0
140°-150°	1.6	0.0
150°-160°	1.1	0.0
160°-170°	0.4	0.0
170°-180°	0.0	0.0
0°-90°	28600.8	100.0
0°-180°	28614.7	100.0

Coefficient of Utilization



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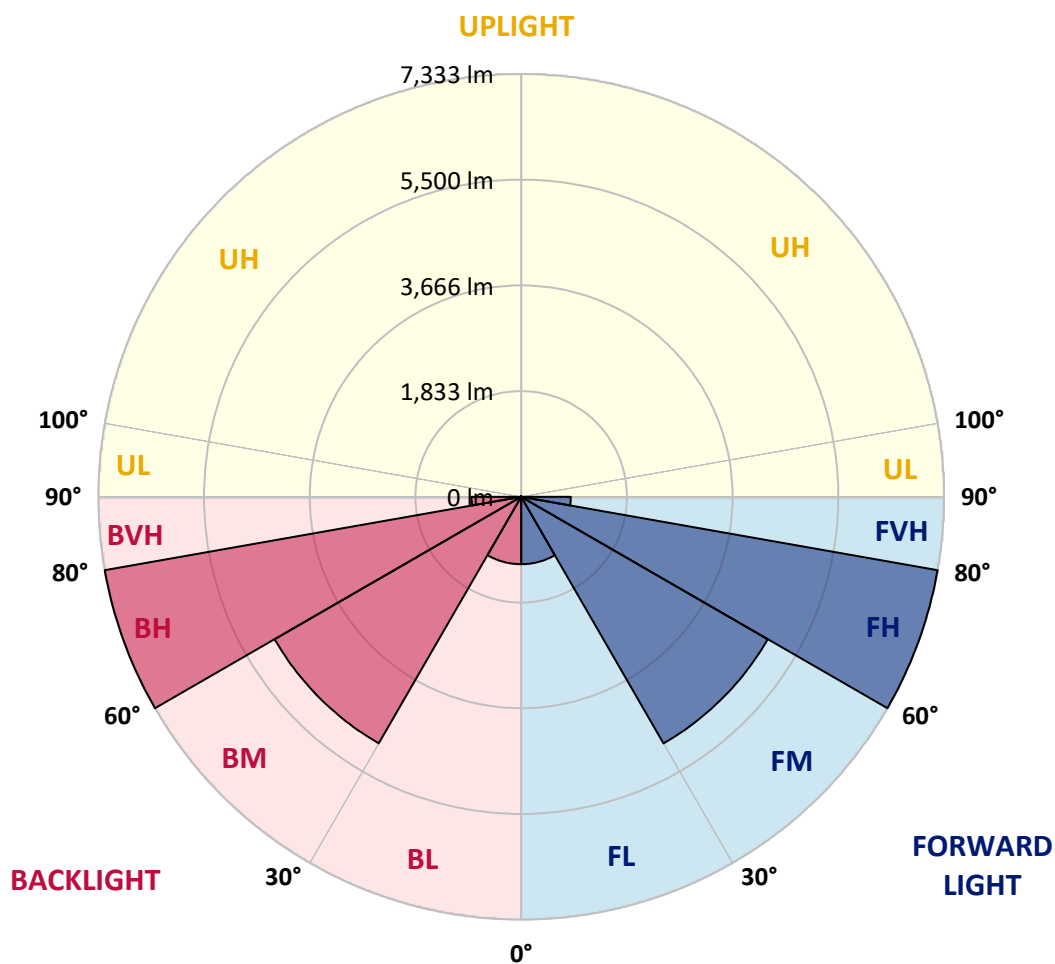
CATALOG NUMBER: VST-F12-LED-E-U-5XQ-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1168.4	4.1			
FM	(30°-60°)	4938.0	17.3			
FH	(60°-80°)	7332.9	25.6			G3/7500
FVH	(80°-90°)	861.2	3.0			G5
BL	(0°-30°)	1168.4	4.1	B3/2500		
BM	(30°-60°)	4938.0	17.3	B3/5000		
BH	(60°-80°)	7332.9	25.6	B5		G3/7500
BVH	(80°-90°)	861.2	3.0			G5
UL	(90°-100°)	1.4	0.0		U1/10	
UH	(100°-180°)	6.9	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°	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2
2.5°	2756.0	2752.4	2754.2	2757.8	2756.0	2756.0	2754.2	2754.2	2757.8	2754.2	2756.0
5°	2757.8	2754.2	2756.0	2757.8	2756.0	2757.8	2756.0	2756.0	2756.0	2754.2	2757.8
7.5°	2750.6	2750.6	2752.4	2752.4	2750.6	2752.4	2752.4	2752.4	2750.6	2750.6	2754.2
10°	2746.9	2745.1	2745.1	2746.9	2745.1	2745.1	2746.9	2746.9	2743.3	2743.3	2746.9
12.5°	2741.5	2739.7	2739.7	2739.7	2737.9	2737.9	2739.7	2739.7	2737.9	2736.1	2741.5
15°	2737.9	2736.1	2736.1	2736.1	2732.5	2734.3	2734.3	2734.3	2732.5	2730.7	2736.1
17.5°	2736.1	2734.3	2734.3	2734.3	2732.5	2732.5	2732.5	2732.5	2730.7	2730.7	2734.3
20°	2739.7	2739.7	2739.7	2739.7	2737.9	2737.9	2737.9	2739.7	2739.7	2739.7	2743.3
22.5°	2748.8	2748.8	2750.6	2752.4	2752.4	2756.0	2757.8	2759.6	2759.6	2761.4	2765.0
25°	2772.3	2772.3	2774.1	2775.9	2781.3	2785.0	2792.2	2795.8	2797.6	2797.6	2799.4
27.5°	2815.7	2817.5	2821.1	2824.8	2832.0	2837.4	2844.7	2851.9	2853.7	2855.5	2857.3
30°	2870.0	2871.8	2879.0	2882.7	2891.7	2902.6	2911.6	2918.9	2924.3	2927.9	2926.1
32.5°	2947.8	2951.4	2960.5	2965.9	2978.6	2989.4	3002.1	3013.0	3018.4	3023.8	3022.0
35°	3056.4	3065.4	3074.5	3079.9	3092.6	3101.6	3117.9	3128.8	3139.6	3136.0	3137.8
37.5°	3217.4	3224.7	3226.5	3230.1	3242.8	3250.0	3268.1	3282.6	3288.0	3291.6	3293.4
40°	3434.6	3434.6	3443.6	3436.4	3452.7	3454.5	3476.2	3496.1	3501.5	3516.0	3505.2
42.5°	3687.9	3686.1	3691.6	3686.1	3686.1	3704.2	3722.3	3758.5	3762.1	3780.2	3769.4
45°	3963.0	3963.0	3957.6	3959.4	3963.0	3982.9	4004.6	4044.4	4062.5	4073.4	4066.1
47.5°	4261.6	4254.3	4252.5	4250.7	4261.6	4283.3	4315.9	4353.9	4399.1	4402.7	4399.1
50°	4563.8	4562.0	4549.3	4560.2	4567.4	4578.2	4639.8	4690.4	4737.5	4766.4	4757.4
52.5°	4882.3	4866.0	4866.0	4866.0	4884.1	4918.5	4972.7	5041.5	5104.8	5135.6	5130.2
55°	5204.4	5198.9	5182.6	5175.4	5198.9	5247.8	5325.6	5408.8	5492.1	5539.1	5521.0
57.5°	5499.3	5490.3	5492.1	5493.9	5521.0	5586.2	5676.7	5787.1	5877.5	5928.2	5915.5
60°	5731.0	5720.1	5740.0	5745.4	5794.3	5902.9	6047.6	6187.0	6306.4	6357.1	6337.2
62.5°	5993.3	5986.1	5998.8	5997.0	6049.4	6170.7	6364.3	6586.9	6767.8	6833.0	6804.0
65°	6416.8	6395.1	6389.6	6369.7	6404.1	6498.2	6691.8	6950.6	7240.1	7406.6	7366.8
67.5°	6923.5	6918.0	6899.9	6889.1	6901.8	7019.4	7205.8	7455.5	7750.4	7980.3	8030.9
70°	7258.2	7265.5	7283.6	7310.7	7415.7	7643.7	7983.9	8362.1	8767.4	8939.3	8908.6
72.5°	7194.9	7205.8	7220.2	7254.6	7392.2	7665.4	8114.2	8678.8	9187.3	9415.3	9219.8
75°	6885.5	6894.5	6927.1	6979.6	7147.9	7479.0	7962.2	8561.1	9085.9	9313.9	9109.4
76°	6599.6	6628.5	6688.2	6749.7	6952.4	7312.5	7828.3	8467.0	9022.6	9254.2	9057.0
77.5°	5951.7	5977.1	6025.9	6132.7	6362.5	6823.9	7426.5	8054.5	8633.5	8841.6	8675.1
80°	4478.7	4500.4	4545.7	4674.2	4873.2	5159.1	5626.0	6239.4	6874.6	7147.9	7039.3
82.5°	1891.0	1916.3	2095.5	2281.9	2500.8	2810.3	3114.3	3657.2	4124.0	4435.3	4268.8
85°	208.1	257.0	316.7	430.7	528.4	703.9	875.8	1205.2	1523.7	1717.3	1518.2
87.5°	36.2	41.6	59.7	76.0	85.1	97.7	117.6	164.7	224.4	193.6	197.2
90°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	3.6	3.6	3.6	3.6
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8
97.5°	0.0	0.0	0.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
100°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	3.6	3.6
102.5°	1.8	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6	3.6
105°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
107.5°	1.8	1.8	1.8	1.8	3.6	3.6	1.8	1.8	1.8	3.6	1.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
112.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
115°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
117.5°	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
120°	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
122.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
125°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
127.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
130°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8
132.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
135°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8
137.5°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8
140°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8
142.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
145°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	0.0	1.8
147.5°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8
150°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	0.0	0.0	0.0
152.5°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	0.0	0.0
155°	3.6	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	0.0	1.8
157.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	0.0	0.0	0.0
160°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	0.0	0.0	0.0
162.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	0.0	0.0	0.0
165°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	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°	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2	2754.2
2.5°	2754.2	2754.2	2757.8	2756.0	2756.0	2757.8	2761.4	2759.6
5°	2756.0	2757.8	2754.2	2756.0	2757.8	2757.8	2759.6	2757.8
7.5°	2752.4	2752.4	2752.4	2754.2	2756.0	2754.2	2756.0	2756.0
10°	2745.1	2746.9	2745.1	2748.8	2750.6	2750.6	2752.4	2752.4
12.5°	2739.7	2739.7	2739.7	2743.3	2745.1	2745.1	2746.9	2745.1
15°	2734.3	2734.3	2732.5	2736.1	2739.7	2739.7	2741.5	2741.5
17.5°	2732.5	2732.5	2730.7	2734.3	2737.9	2737.9	2739.7	2739.7
20°	2737.9	2739.7	2736.1	2739.7	2743.3	2745.1	2745.1	2745.1
22.5°	2759.6	2757.8	2752.4	2754.2	2756.0	2756.0	2756.0	2756.0
25°	2792.2	2788.6	2783.1	2781.3	2779.5	2777.7	2777.7	2777.7
27.5°	2848.3	2842.9	2833.8	2832.0	2830.2	2826.6	2826.6	2826.6
30°	2915.2	2908.0	2897.1	2893.5	2888.1	2884.5	2882.7	2880.9
32.5°	3011.1	2996.7	2984.0	2975.0	2969.5	2958.7	2956.9	2953.2
35°	3121.5	3110.7	3092.6	3087.2	3078.1	3072.7	3070.9	3061.8
37.5°	3273.5	3260.9	3244.6	3241.0	3239.2	3233.7	3233.7	3231.9
40°	3485.3	3472.6	3458.1	3443.6	3447.3	3449.1	3449.1	3441.8
42.5°	3744.0	3724.1	3695.2	3704.2	3698.8	3691.6	3706.0	3697.0
45°	4039.0	4011.8	3990.1	3981.1	3981.1	3972.0	3986.5	3986.5
47.5°	4366.5	4323.1	4283.3	4285.1	4270.6	4274.2	4283.3	4296.0
50°	4712.2	4654.3	4616.2	4598.2	4583.7	4589.1	4605.4	4609.0
52.5°	5070.5	4999.9	4949.2	4922.1	4904.0	4911.2	4923.9	4934.7
55°	5443.2	5365.4	5289.4	5260.5	5238.7	5253.2	5255.0	5269.5
57.5°	5832.3	5725.5	5636.9	5593.4	5571.7	5586.2	5597.0	5611.5
60°	6225.0	6101.9	5997.0	5946.3	5915.5	5935.4	5960.8	5968.0
62.5°	6681.0	6510.9	6393.3	6320.9	6306.4	6326.3	6333.5	6355.3
65°	7220.2	7015.8	6852.9	6764.2	6760.6	6771.5	6787.8	6793.2
67.5°	7835.5	7607.5	7388.5	7299.9	7265.5	7298.1	7314.3	7336.1
70°	8704.1	8391.0	8074.4	7877.1	7793.9	7768.5	7775.8	7799.3
72.5°	8801.8	8465.2	8096.1	7828.3	7681.7	7614.7	7612.9	7616.5
75°	8588.3	8050.8	7790.3	7482.6	7274.5	7166.0	7151.5	7149.7
76°	8481.5	7846.4	7470.0	7225.7	6975.9	6865.6	6849.3	6840.2
77.5°	8030.9	7348.7	6782.3	6633.9	6395.1	6255.7	6284.7	6261.2
80°	6438.5	5761.7	5227.9	4809.9	4822.5	4721.2	4679.6	4666.9
82.5°	3794.7	3239.2	2649.2	2303.6	1974.3	1887.4	1625.0	1565.3
85°	1212.4	859.6	521.2	378.2	257.0	215.3	168.3	153.8
87.5°	161.1	126.7	103.1	99.5	90.5	77.8	50.7	36.2
90°	1.8	1.8	1.8	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°	1.8	1.8	1.8	1.8	0.0	0.0	0.0	0.0
97.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
100°	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8
102.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8
105°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
107.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6



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CATALOG NUMBER: VST-F12-LED-E-U-5XQ-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.8	1.8	1.8	1.8	1.8	3.6	3.6	3.6
112.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6
115°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6
117.5°	1.8	1.8	1.8	1.8	1.8	3.6	3.6	3.6
120°	1.8	1.8	1.8	1.8	1.8	3.6	3.6	3.6
122.5°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
125°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
127.5°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
130°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
132.5°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
135°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
137.5°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
140°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
142.5°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
145°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
147.5°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
150°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
152.5°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
155°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
157.5°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
160°	1.8	1.8	1.8	1.8	3.6	3.6	3.6	3.6
162.5°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
165°	1.8	1.8	1.8	3.6	3.6	3.6	3.6	3.6
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)