

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: P157848

Luminaire Tested: **VST-E11-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157848
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-E11-LED-E-U-5XQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (231) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29361.2 lumens
Efficiency: N/A
Efficacy: 108.9 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): 269.7
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

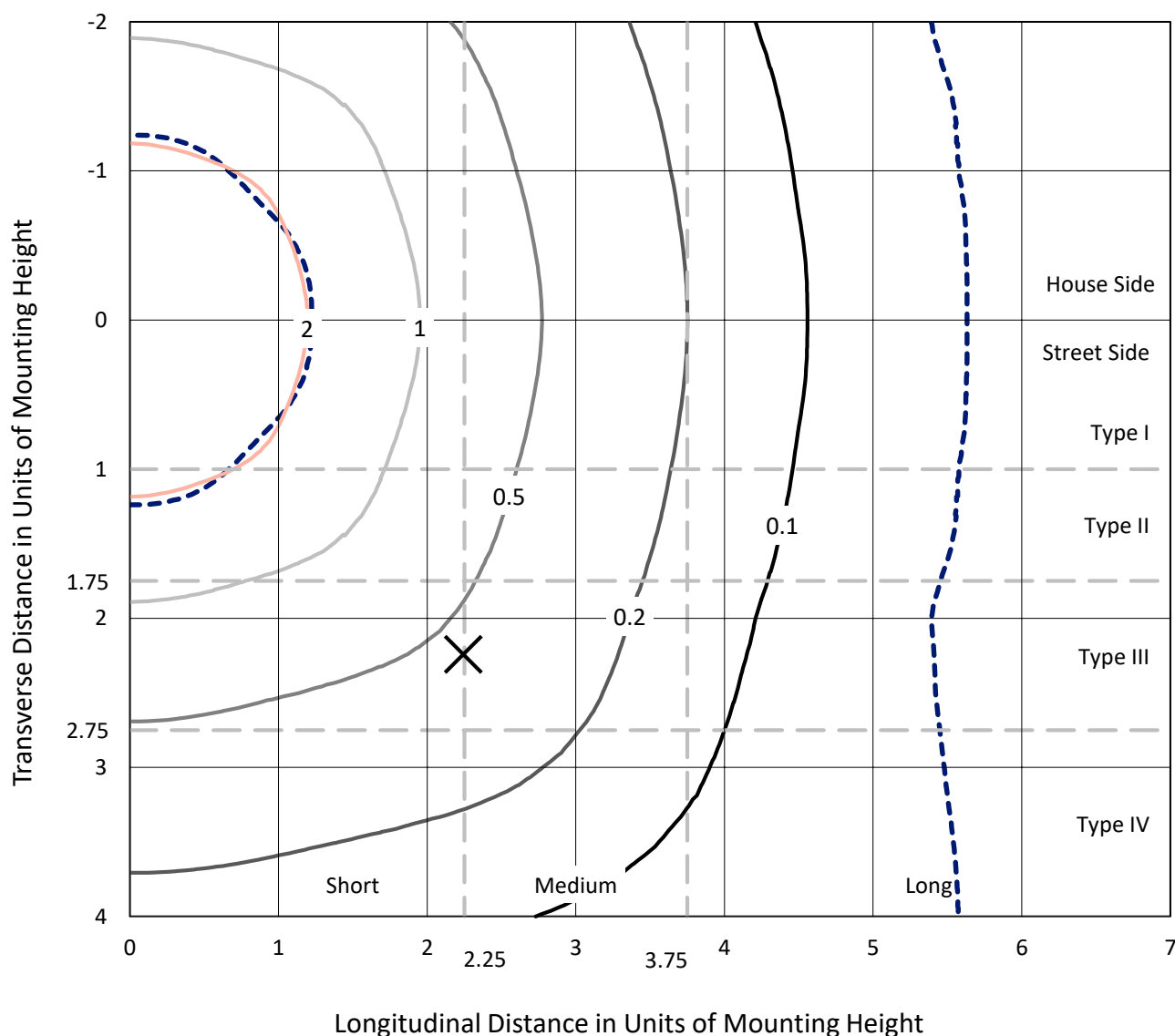


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

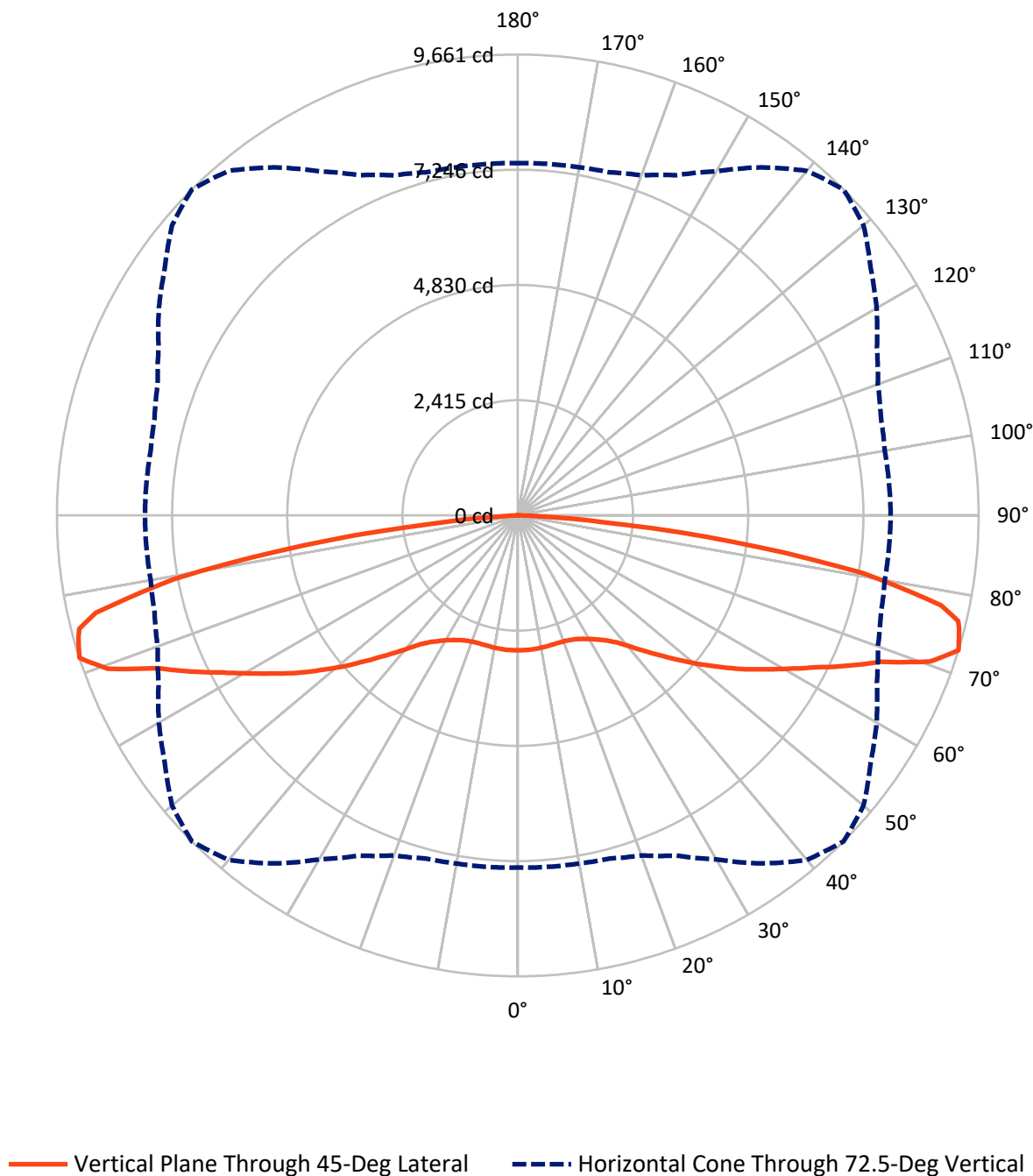


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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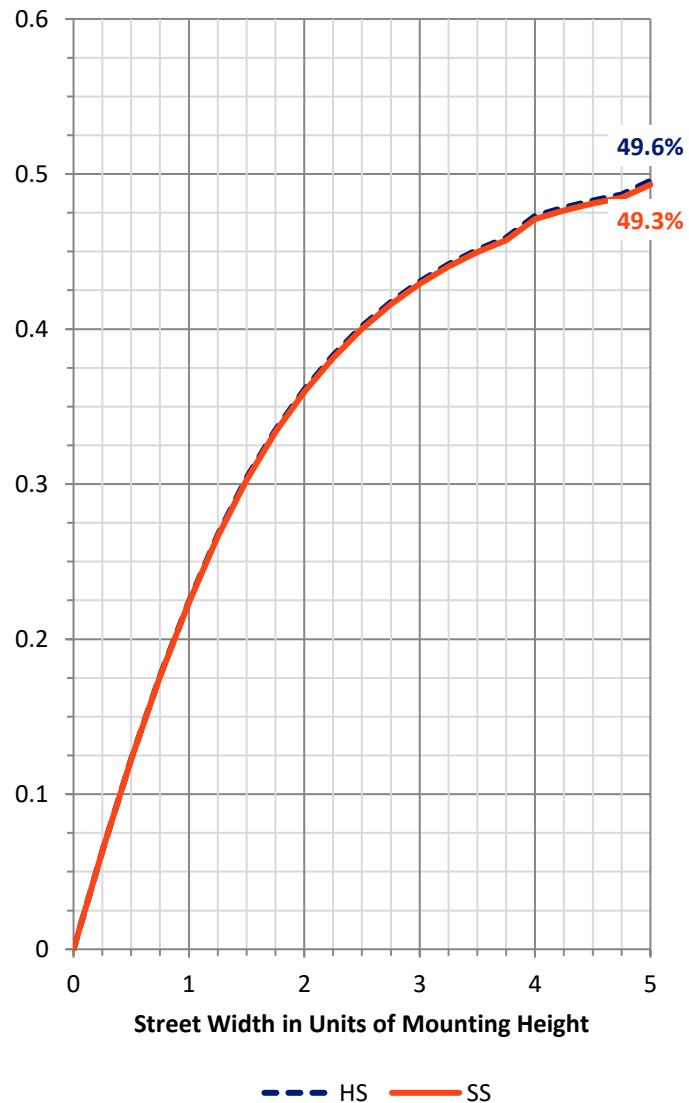
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14673.4	7.2	14680.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14673.4	7.2	14680.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	29346.8	14.4	29361.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.6	0.9
10°-20°	796.4	2.7
20°-30°	1331.7	4.5
30°-40°	2024.1	6.9
40°-50°	3205.7	10.9
50°-60°	4903.7	16.7
60°-70°	7018.0	23.9
70°-80°	8030.2	27.3
80°-90°	1767.4	6.0
90°-100°	1.5	0.0
100°-110°	3.0	0.0
110°-120°	2.1	0.0
120°-130°	2.3	0.0
130°-140°	2.1	0.0
140°-150°	1.7	0.0
150°-160°	1.1	0.0
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-90°	29346.8	100.0
0°-180°	29361.2	100.0

Coefficient of Utilization



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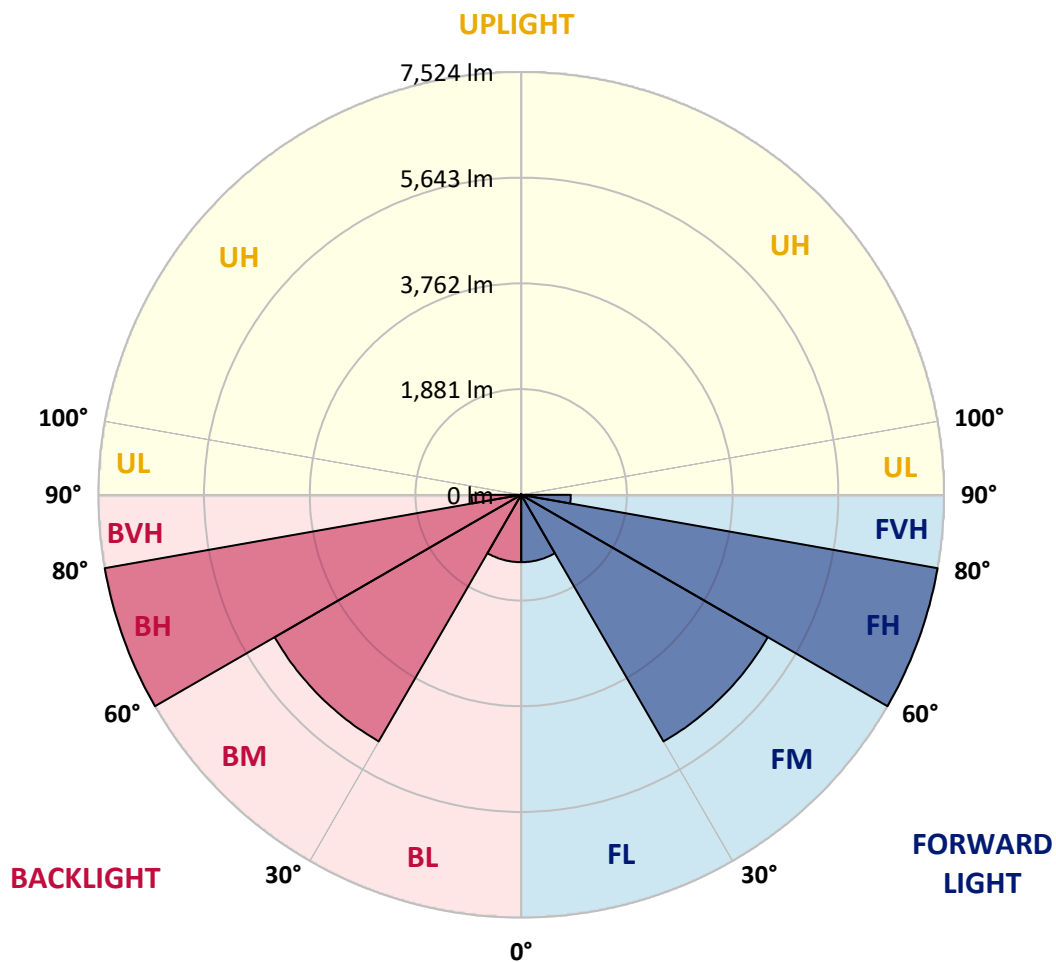
CATALOG NUMBER: VST-E11-LED-E-U-5XQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1198.8	4.1			
FM	(30°-60°)	5066.8	17.3			
FH	(60°-80°)	7524.1	25.6			G4/12000
FVH	(80°-90°)	883.7	3.0			G5
BL	(0°-30°)	1198.8	4.1	B3/2500		
BM	(30°-60°)	5066.8	17.3	B4/8500		
BH	(60°-80°)	7524.1	25.6	B5		G4/12000
BVH	(80°-90°)	883.7	3.0			G5
UL	(90°-100°)	1.5	0.0		U1/10	
UH	(100°-180°)	7.2	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°	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0
2.5°	2827.9	2824.2	2826.0	2829.7	2827.9	2827.9	2826.0	2826.0	2829.7	2826.0	2827.9
5°	2829.7	2826.0	2827.9	2829.7	2827.9	2829.7	2827.9	2827.9	2827.9	2826.0	2829.7
7.5°	2822.3	2822.3	2824.2	2824.2	2822.3	2824.2	2824.2	2824.2	2822.3	2822.3	2826.0
10°	2818.6	2816.7	2816.7	2818.6	2816.7	2816.7	2818.6	2818.6	2814.9	2814.9	2818.6
12.5°	2813.0	2811.2	2811.2	2811.2	2809.3	2809.3	2811.2	2811.2	2809.3	2807.5	2813.0
15°	2809.3	2807.5	2807.5	2807.5	2803.7	2805.6	2805.6	2805.6	2803.7	2801.9	2807.5
17.5°	2807.5	2805.6	2805.6	2805.6	2803.7	2803.7	2803.7	2803.7	2801.9	2801.9	2805.6
20°	2811.2	2811.2	2811.2	2811.2	2809.3	2809.3	2809.3	2811.2	2811.2	2811.2	2814.9
22.5°	2820.4	2820.4	2822.3	2824.2	2824.2	2827.9	2829.7	2831.6	2831.6	2833.4	2837.2
25°	2844.6	2844.6	2846.4	2848.3	2853.9	2857.6	2865.0	2868.7	2870.6	2870.6	2872.4
27.5°	2889.1	2891.0	2894.7	2898.4	2905.9	2911.4	2918.9	2926.3	2928.1	2930.0	2931.9
30°	2944.9	2946.7	2954.1	2957.9	2967.1	2978.3	2987.6	2995.0	3000.6	3004.3	3002.4
32.5°	3024.7	3028.4	3037.7	3043.3	3056.3	3067.4	3080.4	3091.5	3097.1	3102.7	3100.8
35°	3136.1	3145.4	3154.7	3160.2	3173.2	3182.5	3199.2	3210.4	3221.5	3217.8	3219.7
37.5°	3301.4	3308.8	3310.6	3314.4	3327.3	3334.8	3353.3	3368.2	3373.8	3377.5	3379.3
40°	3524.2	3524.2	3533.5	3526.0	3542.7	3544.6	3566.9	3587.3	3592.9	3607.7	3596.6
42.5°	3784.1	3782.3	3787.8	3782.3	3782.3	3800.8	3819.4	3856.5	3860.2	3878.8	3867.7
45°	4066.3	4066.3	4060.8	4062.6	4066.3	4086.8	4109.1	4149.9	4168.5	4179.6	4172.2
47.5°	4372.7	4365.3	4363.4	4361.6	4372.7	4395.0	4428.4	4467.4	4513.8	4517.5	4513.8
50°	4682.8	4680.9	4667.9	4679.1	4686.5	4697.7	4760.8	4812.8	4861.1	4890.8	4881.5
52.5°	5009.6	4992.9	4992.9	4992.9	5011.4	5046.7	5102.4	5173.0	5238.0	5269.5	5264.0
55°	5340.1	5334.5	5317.8	5310.4	5334.5	5384.7	5464.5	5549.9	5635.3	5683.6	5665.0
57.5°	5642.8	5633.5	5635.3	5637.2	5665.0	5731.9	5824.7	5938.0	6030.8	6082.8	6069.8
60°	5880.4	5869.3	5889.7	5895.3	5945.4	6056.8	6205.4	6348.3	6470.9	6522.9	6502.4
62.5°	6149.7	6142.2	6155.2	6153.4	6207.2	6331.6	6530.3	6758.7	6944.4	7011.2	6981.5
65°	6584.1	6561.9	6556.3	6535.9	6571.1	6667.7	6866.4	7131.9	7429.0	7599.8	7559.0
67.5°	7104.0	7098.5	7079.9	7068.8	7081.8	7202.4	7393.7	7649.9	7952.6	8188.4	8240.4
70°	7447.5	7455.0	7473.5	7501.4	7609.1	7843.0	8192.1	8580.2	8996.1	9172.5	9140.9
72.5°	7382.6	7393.7	7408.6	7443.8	7584.9	7865.3	8325.8	8905.1	9426.9	9660.8	9460.3
75°	7065.0	7074.3	7107.8	7161.6	7334.3	7674.1	8169.8	8784.4	9322.9	9556.8	9347.0
76°	6771.7	6801.4	6862.7	6925.8	7133.7	7503.2	8032.4	8687.9	9257.9	9495.6	9293.2
77.5°	6106.9	6132.9	6183.1	6292.6	6528.4	7001.9	7620.2	8264.5	8858.7	9072.2	8901.4
80°	4595.5	4617.8	4664.2	4796.1	5000.3	5293.7	5772.7	6402.2	7053.9	7334.3	7222.9
82.5°	1940.3	1966.3	2150.2	2341.4	2566.1	2883.6	3195.5	3752.6	4231.6	4551.0	4380.1
85°	213.5	263.7	324.9	441.9	542.2	722.3	898.7	1236.6	1563.4	1762.1	1557.8
87.5°	37.1	42.7	61.3	78.0	87.3	100.3	120.7	169.0	230.2	198.7	202.4
90°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	3.7	3.7	3.7	3.7
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9
95°	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9
97.5°	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
100°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.7	3.7	3.7
102.5°	1.9	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7	3.7
105°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
107.5°	1.9	1.9	1.9	1.9	3.7	3.7	1.9	1.9	1.9	3.7	1.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
112.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
115°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
117.5°	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
120°	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
122.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
125°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
127.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
130°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9
132.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
135°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9
137.5°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9
140°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9
142.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
145°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	0.0	1.9
147.5°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	1.9	1.9
150°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	0.0	0.0	0.0
152.5°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	0.0	0.0
155°	3.7	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	0.0	1.9
157.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	0.0	0.0	0.0
160°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	0.0	0.0	0.0
162.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	0.0	0.0	0.0
165°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9	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°	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0	2826.0
2.5°	2826.0	2826.0	2829.7	2827.9	2827.9	2829.7	2833.4	2831.6
5°	2827.9	2829.7	2826.0	2827.9	2829.7	2829.7	2831.6	2829.7
7.5°	2824.2	2824.2	2824.2	2826.0	2827.9	2826.0	2827.9	2827.9
10°	2816.7	2818.6	2816.7	2820.4	2822.3	2822.3	2824.2	2824.2
12.5°	2811.2	2811.2	2811.2	2814.9	2816.7	2816.7	2818.6	2816.7
15°	2805.6	2805.6	2803.7	2807.5	2811.2	2811.2	2813.0	2813.0
17.5°	2803.7	2803.7	2801.9	2805.6	2809.3	2809.3	2811.2	2811.2
20°	2809.3	2811.2	2807.5	2811.2	2814.9	2816.7	2816.7	2816.7
22.5°	2831.6	2829.7	2824.2	2826.0	2827.9	2827.9	2827.9	2827.9
25°	2865.0	2861.3	2855.7	2853.9	2852.0	2850.2	2850.2	2850.2
27.5°	2922.6	2917.0	2907.7	2905.9	2904.0	2900.3	2900.3	2900.3
30°	2991.3	2983.8	2972.7	2969.0	2963.4	2959.7	2957.9	2956.0
32.5°	3089.7	3074.8	3061.8	3052.5	3047.0	3035.8	3034.0	3030.3
35°	3202.9	3191.8	3173.2	3167.7	3158.4	3152.8	3151.0	3141.7
37.5°	3358.9	3345.9	3329.2	3325.5	3323.6	3318.1	3318.1	3316.2
40°	3576.2	3563.2	3548.3	3533.5	3537.2	3539.0	3539.0	3531.6
42.5°	3841.7	3821.3	3791.5	3800.8	3795.3	3787.8	3802.7	3793.4
45°	4144.3	4116.5	4094.2	4084.9	4084.9	4075.6	4090.5	4090.5
47.5°	4480.4	4435.8	4395.0	4396.9	4382.0	4385.7	4395.0	4408.0
50°	4835.1	4775.6	4736.6	4718.1	4703.2	4708.8	4725.5	4729.2
52.5°	5202.7	5130.3	5078.3	5050.4	5031.9	5039.3	5052.3	5063.4
55°	5585.2	5505.4	5427.4	5397.7	5375.4	5390.2	5392.1	5406.9
57.5°	5984.4	5874.9	5783.9	5739.3	5717.0	5731.9	5743.0	5757.9
60°	6387.3	6261.1	6153.4	6101.4	6069.8	6090.2	6116.2	6123.7
62.5°	6855.2	6680.7	6560.0	6485.7	6470.9	6491.3	6498.7	6521.0
65°	7408.6	7198.7	7031.6	6940.6	6936.9	6948.1	6964.8	6970.4
67.5°	8039.9	7805.9	7581.2	7490.3	7455.0	7488.4	7505.1	7527.4
70°	8931.1	8609.9	8285.0	8082.6	7997.2	7971.2	7978.6	8002.7
72.5°	9031.4	8686.0	8307.2	8032.4	7882.0	7813.3	7811.5	7815.2
75°	8812.3	8260.8	7993.4	7677.8	7464.3	7352.8	7338.0	7336.1
76°	8702.7	8051.0	7664.8	7414.1	7157.9	7044.6	7027.9	7018.6
77.5°	8240.4	7540.4	6959.2	6807.0	6561.9	6418.9	6448.6	6424.5
80°	6606.4	5912.0	5364.2	4935.3	4948.3	4844.3	4801.6	4788.6
82.5°	3893.7	3323.6	2718.3	2363.7	2025.7	1936.6	1667.4	1606.1
85°	1244.0	882.0	534.8	388.1	263.7	221.0	172.7	157.8
87.5°	165.3	130.0	105.8	102.1	92.8	79.8	52.0	37.1
90°	1.9	1.9	1.9	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°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0
97.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
100°	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
102.5°	3.7	3.7	3.7	3.7	1.9	1.9	1.9	1.9
105°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
107.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7



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CATALOG NUMBER: VST-E11-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.9	1.9	1.9	1.9	1.9	3.7	3.7	3.7
112.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.7
115°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.7
117.5°	1.9	1.9	1.9	1.9	1.9	3.7	3.7	3.7
120°	1.9	1.9	1.9	1.9	1.9	3.7	3.7	3.7
122.5°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
125°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
127.5°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
130°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
132.5°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
135°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
137.5°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
140°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
142.5°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
145°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
147.5°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
150°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
152.5°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
155°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
157.5°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
160°	1.9	1.9	1.9	1.9	3.7	3.7	3.7	3.7
162.5°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
165°	1.9	1.9	1.9	3.7	3.7	3.7	3.7	3.7
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)