

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: P157811

Luminaire Tested: **VST-E07-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157811
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-E07-LED-E-U-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (147) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22715.9 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U1 - G4

Input Watts (W): 172.5
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

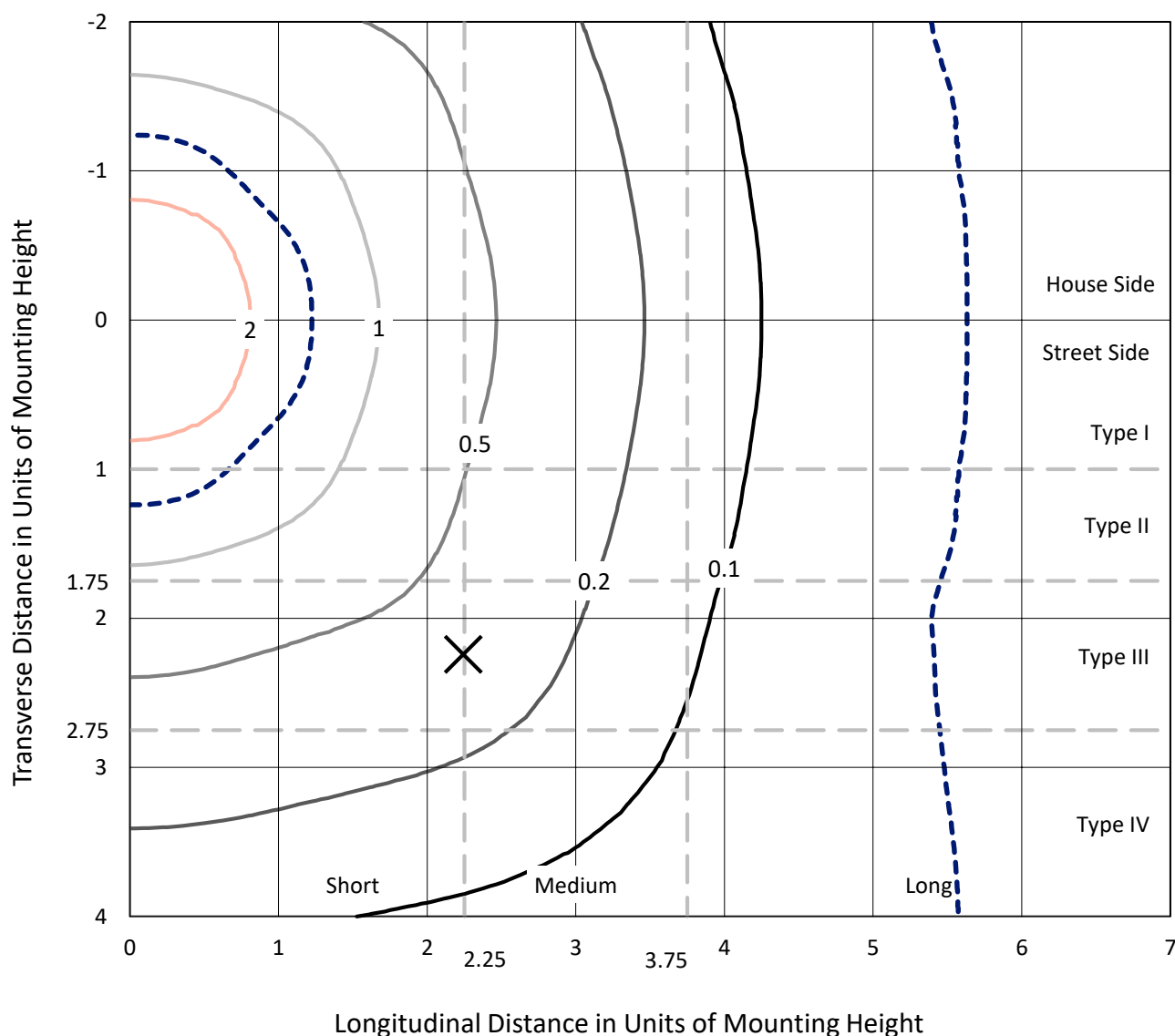


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

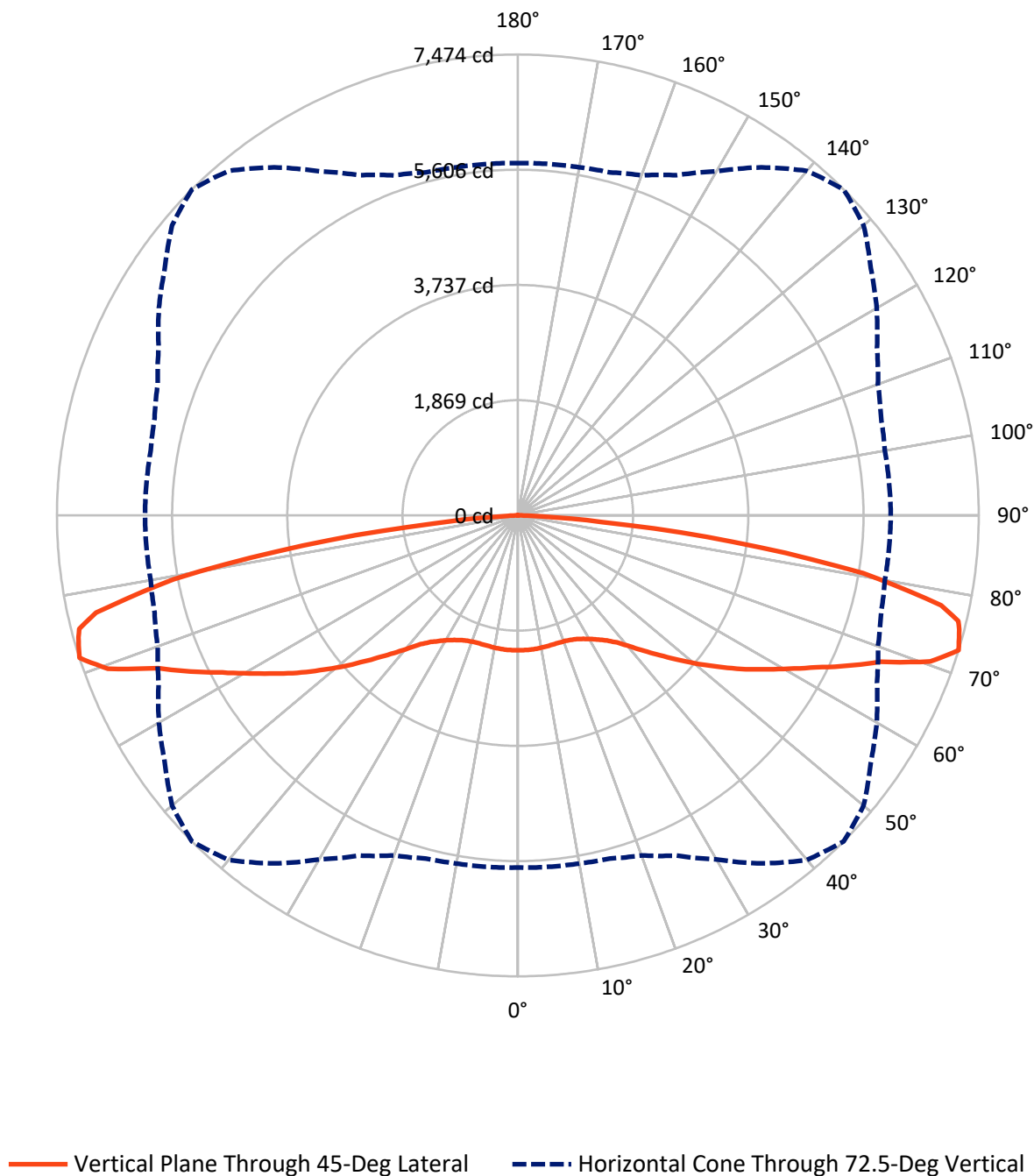


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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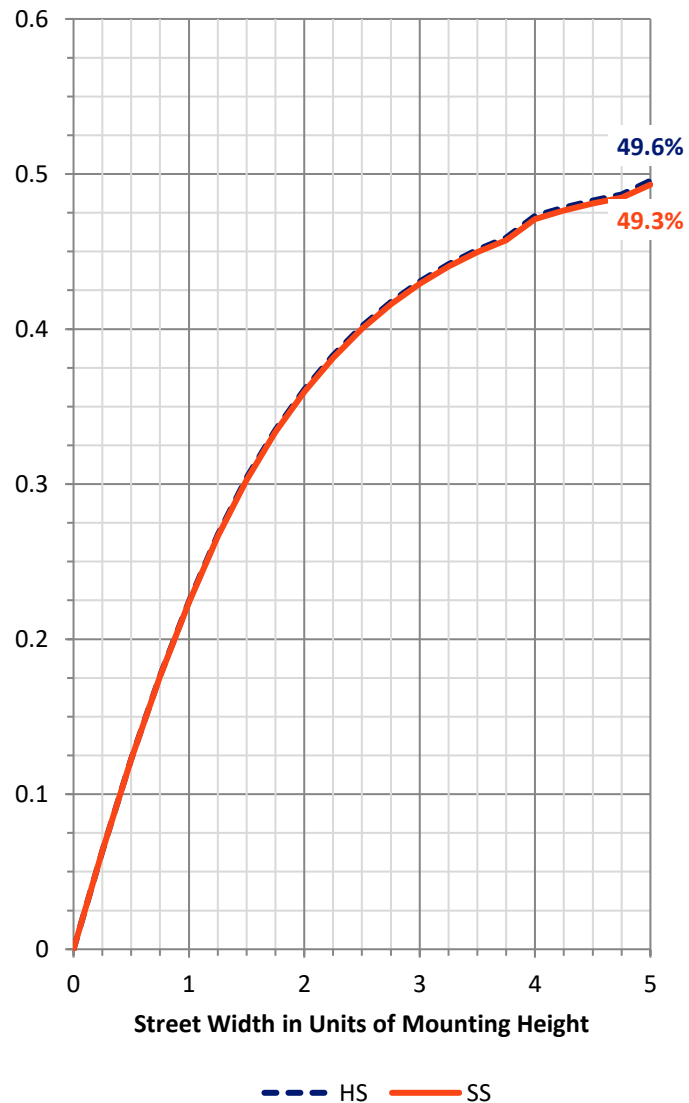
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11352.5	5.5	11358.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11352.5	5.5	11358.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	22704.9	11.0	22715.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.6	0.9
10°-20°	616.1	2.7
20°-30°	1030.3	4.5
30°-40°	1566.0	6.9
40°-50°	2480.2	10.9
50°-60°	3793.9	16.7
60°-70°	5429.7	23.9
70°-80°	6212.8	27.3
80°-90°	1367.4	6.0
90°-100°	1.1	0.0
100°-110°	2.3	0.0
110°-120°	1.6	0.0
120°-130°	1.8	0.0
130°-140°	1.6	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°	22704.9	100.0
0°-180°	22715.9	100.0

Coefficient of Utilization



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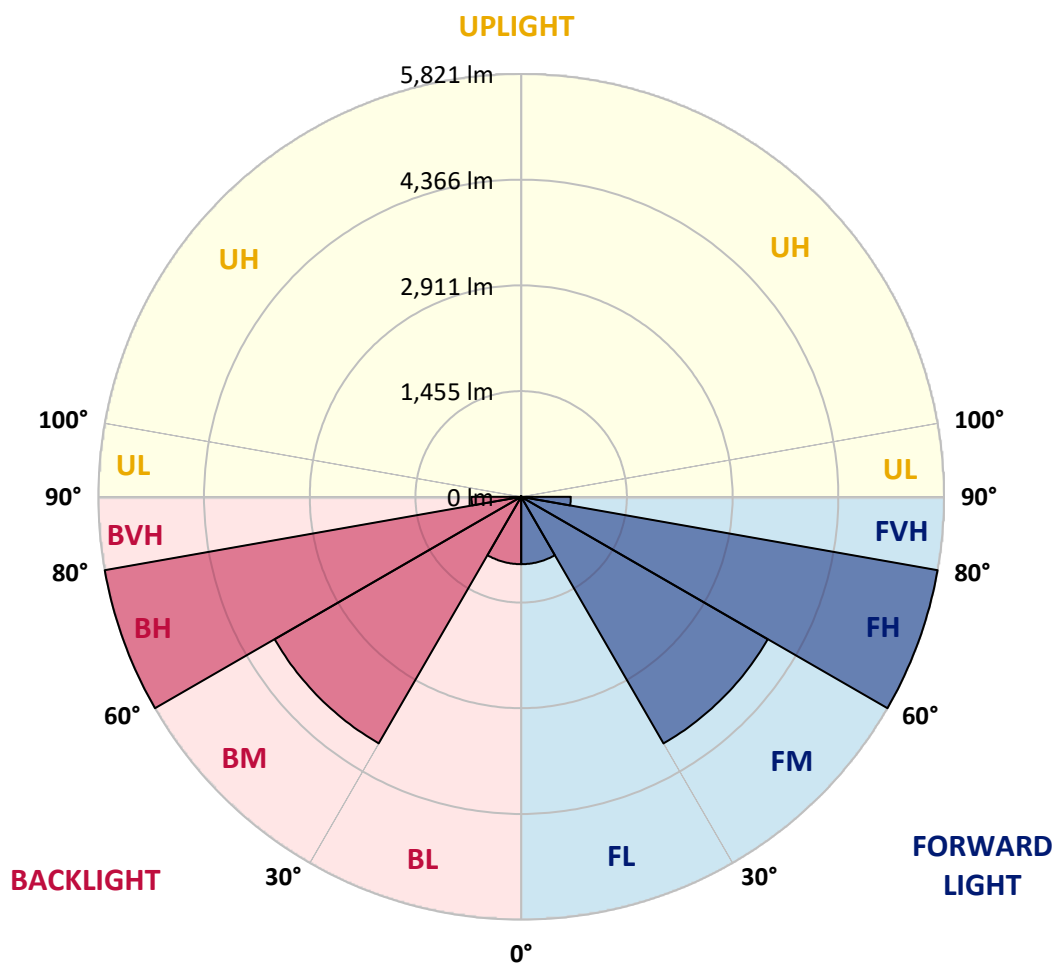
CATALOG NUMBER: VST-E07-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	927.5	4.1			
FM	(30°-60°)	3920.0	17.3			
FH	(60°-80°)	5821.2	25.6			G3/7500
FVH	(80°-90°)	683.7	3.0			G4/750
BL	(0°-30°)	927.5	4.1	B2/1000		
BM	(30°-60°)	3920.0	17.3	B3/5000		
BH	(60°-80°)	5821.2	25.6	B5		G3/7500
BVH	(80°-90°)	683.7	3.0			G4/750
UL	(90°-100°)	1.1	0.0		U1/10	
UH	(100°-180°)	5.5	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°	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4
2.5°	2187.9	2185.0	2186.4	2189.3	2187.9	2187.9	2186.4	2186.4	2189.3	2186.4	2187.9
5°	2189.3	2186.4	2187.9	2189.3	2187.9	2189.3	2187.9	2187.9	2187.9	2186.4	2189.3
7.5°	2183.6	2183.6	2185.0	2185.0	2183.6	2185.0	2185.0	2185.0	2183.6	2183.6	2186.4
10°	2180.7	2179.2	2179.2	2180.7	2179.2	2179.2	2180.7	2180.7	2177.8	2177.8	2180.7
12.5°	2176.4	2174.9	2174.9	2174.9	2173.5	2173.5	2174.9	2174.9	2173.5	2172.1	2176.4
15°	2173.5	2172.1	2172.1	2172.1	2169.2	2170.6	2170.6	2170.6	2169.2	2167.8	2172.1
17.5°	2172.1	2170.6	2170.6	2170.6	2169.2	2169.2	2169.2	2169.2	2167.8	2167.8	2170.6
20°	2174.9	2174.9	2174.9	2174.9	2173.5	2173.5	2173.5	2174.9	2174.9	2174.9	2177.8
22.5°	2182.1	2182.1	2183.6	2185.0	2185.0	2187.9	2189.3	2190.7	2190.7	2192.2	2195.0
25°	2200.8	2200.8	2202.2	2203.7	2208.0	2210.8	2216.6	2219.5	2220.9	2220.9	2222.3
27.5°	2235.3	2236.7	2239.6	2242.5	2248.2	2252.5	2258.3	2264.0	2265.4	2266.9	2268.3
30°	2278.4	2279.8	2285.5	2288.4	2295.6	2304.2	2311.4	2317.2	2321.5	2324.3	2322.9
32.5°	2340.1	2343.0	2350.2	2354.5	2364.6	2373.2	2383.2	2391.9	2396.2	2400.5	2399.0
35°	2426.3	2433.5	2440.7	2445.0	2455.1	2462.2	2475.2	2483.8	2492.4	2489.5	2491.0
37.5°	2554.2	2559.9	2561.4	2564.2	2574.3	2580.0	2594.4	2605.9	2610.2	2613.1	2614.5
40°	2726.6	2726.6	2733.8	2728.0	2740.9	2742.4	2759.6	2775.4	2779.7	2791.2	2782.6
42.5°	2927.7	2926.2	2930.6	2926.2	2926.2	2940.6	2955.0	2983.7	2986.6	3000.9	2992.3
45°	3146.0	3146.0	3141.7	3143.2	3146.0	3161.8	3179.1	3210.7	3225.0	3233.7	3227.9
47.5°	3383.1	3377.3	3375.9	3374.5	3383.1	3400.3	3426.2	3456.3	3492.2	3495.1	3492.2
50°	3623.0	3621.5	3611.5	3620.1	3625.8	3634.5	3683.3	3723.5	3760.9	3783.9	3776.7
52.5°	3875.8	3862.9	3862.9	3862.9	3877.2	3904.5	3947.6	4002.2	4052.5	4076.9	4072.6
55°	4131.5	4127.2	4114.3	4108.5	4127.2	4166.0	4227.8	4293.8	4359.9	4397.3	4382.9
57.5°	4365.7	4358.5	4359.9	4361.4	4382.9	4434.6	4506.4	4594.1	4665.9	4706.1	4696.1
60°	4549.5	4540.9	4556.7	4561.0	4599.8	4686.0	4800.9	4911.6	5006.4	5046.6	5030.8
62.5°	4757.8	4752.1	4762.2	4760.7	4802.4	4898.6	5052.3	5229.0	5372.7	5424.4	5401.4
65°	5094.0	5076.8	5072.4	5056.6	5083.9	5158.6	5312.4	5517.8	5747.6	5879.8	5848.2
67.5°	5496.2	5491.9	5477.6	5468.9	5479.0	5572.4	5720.3	5918.6	6152.7	6335.2	6375.4
70°	5762.0	5767.7	5782.1	5803.7	5887.0	6068.0	6338.0	6638.3	6960.1	7096.5	7072.1
72.5°	5711.7	5720.3	5731.8	5759.1	5868.3	6085.2	6441.5	6889.7	7293.4	7474.4	7319.2
75°	5466.1	5473.2	5499.1	5540.8	5674.4	5937.3	6320.8	6796.3	7212.9	7393.9	7231.6
76°	5239.1	5262.1	5309.5	5358.3	5519.2	5805.1	6214.5	6721.6	7162.6	7346.5	7189.9
77.5°	4724.8	4744.9	4783.7	4868.5	5050.9	5417.2	5895.6	6394.1	6853.8	7019.0	6886.8
80°	3555.5	3572.7	3608.6	3710.6	3868.6	4095.6	4466.2	4953.2	5457.4	5674.4	5588.2
82.5°	1501.2	1521.3	1663.5	1811.5	1985.3	2231.0	2472.3	2903.3	3273.9	3521.0	3388.8
85°	165.2	204.0	251.4	341.9	419.5	558.8	695.3	956.7	1209.6	1363.3	1205.3
87.5°	28.7	33.0	47.4	60.3	67.5	77.6	93.4	130.7	178.1	153.7	156.6
90°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	2.9	2.9	2.9	2.9
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	2.9	2.9	2.9
102.5°	1.4	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9	2.9
105°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
107.5°	1.4	1.4	1.4	1.4	2.9	2.9	1.4	1.4	1.4	2.9	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°	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
120°	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
122.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
125°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
127.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
130°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4
132.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
135°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4
137.5°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4
140°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4
142.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
145°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	0.0	1.4
147.5°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4
150°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	0.0	0.0	0.0
152.5°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	0.0	0.0
155°	2.9	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	0.0	1.4
157.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	0.0	0.0	0.0
160°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	0.0	0.0	0.0
162.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4	0.0	0.0	0.0
165°	2.9	2.9	2.9	2.9	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°	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4	2186.4
2.5°	2186.4	2186.4	2189.3	2187.9	2187.9	2189.3	2192.2	2190.7
5°	2187.9	2189.3	2186.4	2187.9	2189.3	2189.3	2190.7	2189.3
7.5°	2185.0	2185.0	2185.0	2186.4	2187.9	2186.4	2187.9	2187.9
10°	2179.2	2180.7	2179.2	2182.1	2183.6	2183.6	2185.0	2185.0
12.5°	2174.9	2174.9	2174.9	2177.8	2179.2	2179.2	2180.7	2179.2
15°	2170.6	2170.6	2169.2	2172.1	2174.9	2174.9	2176.4	2176.4
17.5°	2169.2	2169.2	2167.8	2170.6	2173.5	2173.5	2174.9	2174.9
20°	2173.5	2174.9	2172.1	2174.9	2177.8	2179.2	2179.2	2179.2
22.5°	2190.7	2189.3	2185.0	2186.4	2187.9	2187.9	2187.9	2187.9
25°	2216.6	2213.7	2209.4	2208.0	2206.5	2205.1	2205.1	2205.1
27.5°	2261.1	2256.8	2249.6	2248.2	2246.8	2243.9	2243.9	2243.9
30°	2314.3	2308.5	2299.9	2297.0	2292.7	2289.9	2288.4	2287.0
32.5°	2390.4	2378.9	2368.9	2361.7	2357.4	2348.8	2347.3	2344.4
35°	2478.0	2469.4	2455.1	2450.8	2443.6	2439.3	2437.8	2430.6
37.5°	2598.7	2588.7	2575.7	2572.9	2571.4	2567.1	2567.1	2565.7
40°	2766.8	2756.7	2745.2	2733.8	2736.6	2738.1	2738.1	2732.3
42.5°	2972.2	2956.4	2933.4	2940.6	2936.3	2930.6	2942.0	2934.9
45°	3206.4	3184.8	3167.6	3160.4	3160.4	3153.2	3164.7	3164.7
47.5°	3466.4	3431.9	3400.3	3401.7	3390.3	3393.1	3400.3	3410.4
50°	3740.8	3694.8	3664.6	3650.3	3638.8	3643.1	3656.0	3658.9
52.5°	4025.2	3969.2	3929.0	3907.4	3893.0	3898.8	3908.8	3917.5
55°	4321.1	4259.4	4199.0	4176.0	4158.8	4170.3	4171.7	4183.2
57.5°	4630.0	4545.2	4474.8	4440.4	4423.1	4434.6	4443.2	4454.7
60°	4941.7	4844.0	4760.7	4720.5	4696.1	4711.9	4732.0	4737.7
62.5°	5303.7	5168.7	5075.3	5017.9	5006.4	5022.2	5027.9	5045.2
65°	5731.8	5569.5	5440.2	5369.8	5366.9	5375.6	5388.5	5392.8
67.5°	6220.3	6039.2	5865.4	5795.0	5767.7	5793.6	5806.5	5823.8
70°	6909.8	6661.3	6409.9	6253.3	6187.2	6167.1	6172.8	6191.5
72.5°	6987.4	6720.2	6427.1	6214.5	6098.1	6045.0	6043.6	6046.4
75°	6817.9	6391.2	6184.3	5940.1	5774.9	5688.7	5677.2	5675.8
76°	6733.1	6228.9	5930.1	5736.1	5537.9	5450.3	5437.3	5430.2
77.5°	6375.4	5833.8	5384.2	5266.4	5076.8	4966.1	4989.1	4970.5
80°	5111.2	4574.0	4150.2	3818.3	3828.4	3748.0	3714.9	3704.9
82.5°	3012.4	2571.4	2103.1	1828.7	1567.3	1498.3	1290.0	1242.6
85°	962.5	682.4	413.7	300.2	204.0	170.9	133.6	122.1
87.5°	127.9	100.6	81.9	79.0	71.8	61.8	40.2	28.7
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°	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
102.5°	2.9	2.9	2.9	2.9	1.4	1.4	1.4	1.4
105°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
107.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9



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CATALOG NUMBER: VST-E07-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	1.4	1.4	1.4	1.4	1.4	2.9	2.9	2.9
112.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.9
115°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.9
117.5°	1.4	1.4	1.4	1.4	1.4	2.9	2.9	2.9
120°	1.4	1.4	1.4	1.4	1.4	2.9	2.9	2.9
122.5°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
125°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
127.5°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
130°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
132.5°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
135°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
137.5°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
140°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
142.5°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
145°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
147.5°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
150°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
152.5°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
155°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
157.5°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
160°	1.4	1.4	1.4	1.4	2.9	2.9	2.9	2.9
162.5°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
165°	1.4	1.4	1.4	2.9	2.9	2.9	2.9	2.9
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)