

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: P157796

Luminaire Tested: **VST-F05-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157796
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-F05-LED-E-U-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (35) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13394.6 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U1 - G3

Input Watts (W): 133.3
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

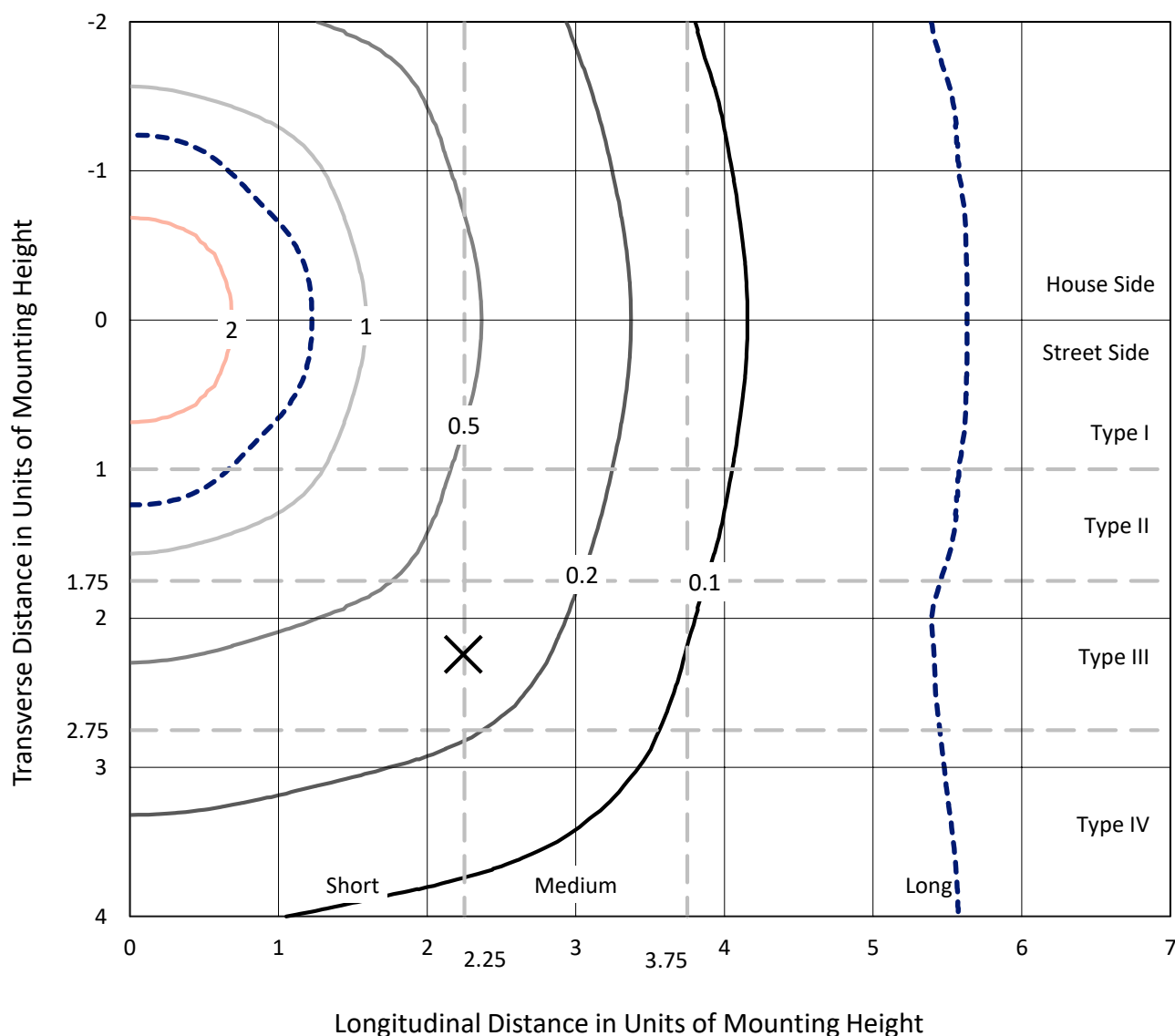


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

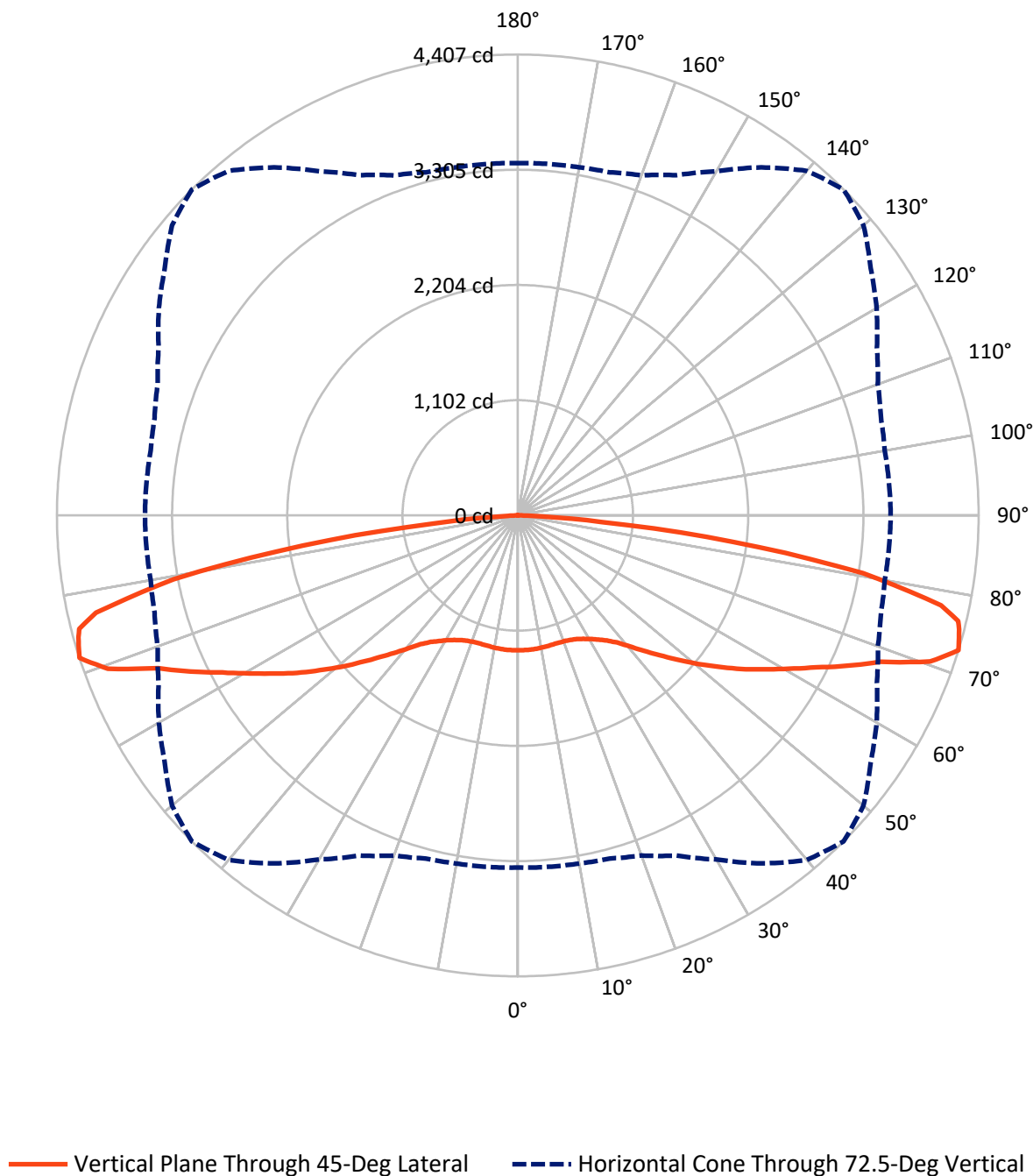


Based on 20 foot mounting height. Maximum calculated value = 3.2 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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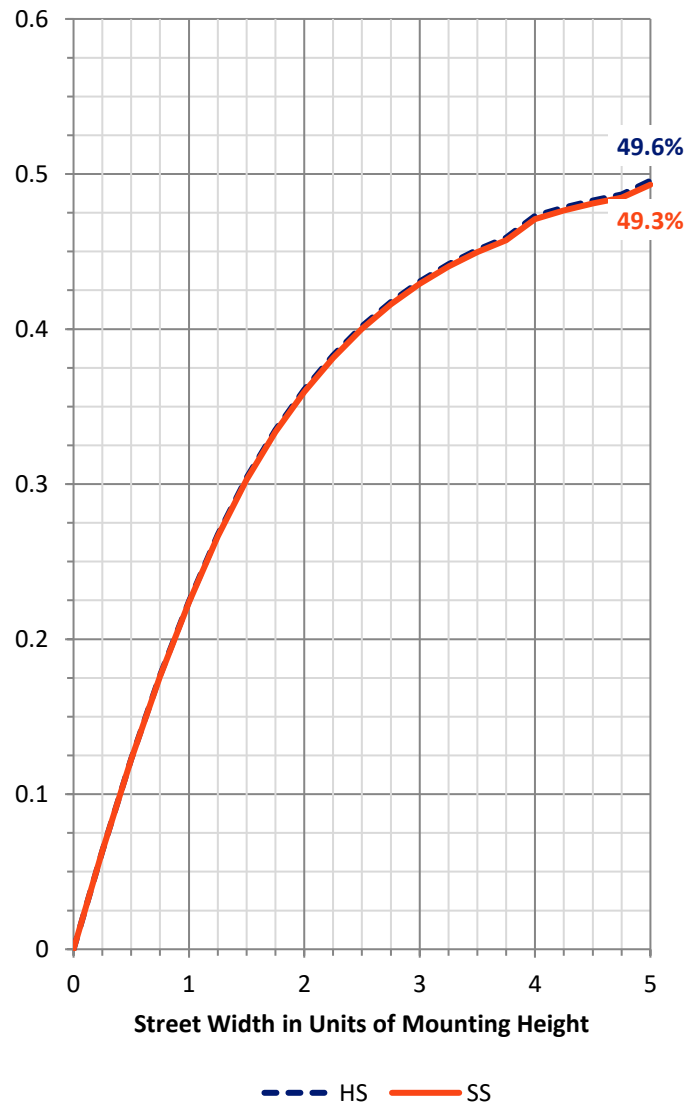
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6694.1	3.2	6697.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6694.1	3.2	6697.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	13388.2	6.4	13394.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.0	0.9
10°-20°	363.3	2.7
20°-30°	607.5	4.5
30°-40°	923.4	6.9
40°-50°	1462.5	10.9
50°-60°	2237.1	16.7
60°-70°	3201.7	23.9
70°-80°	3663.4	27.4
80°-90°	806.3	6.0
90°-100°	0.6	0.0
100°-110°	1.4	0.0
110°-120°	0.9	0.0
120°-130°	1.0	0.0
130°-140°	1.0	0.0
140°-150°	0.7	0.0
150°-160°	0.5	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-90°	13388.2	100.0
0°-180°	13394.6	100.0

Coefficient of Utilization



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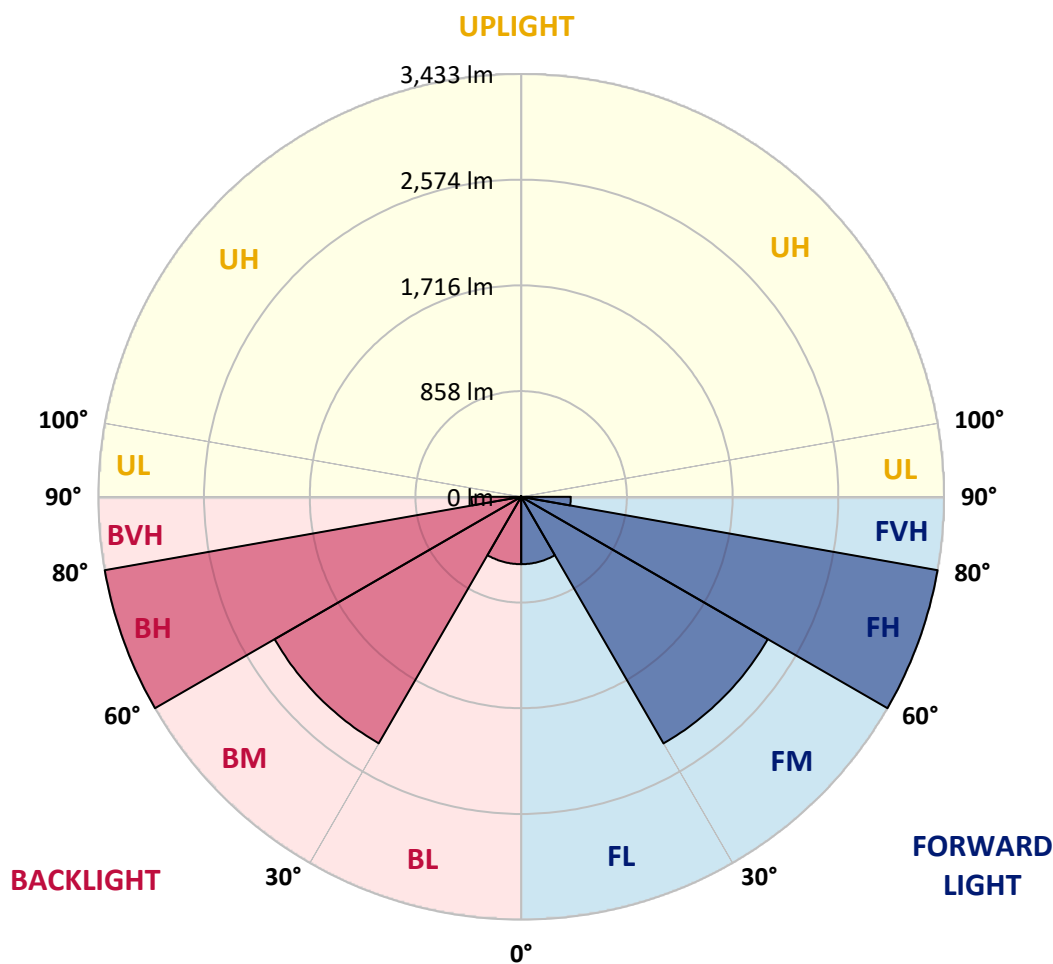
CATALOG NUMBER: VST-F05-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	546.9	4.1			
FM	(30°-60°)	2311.5	17.3			
FH	(60°-80°)	3432.5	25.6			G2/5000
FVH	(80°-90°)	403.1	3.0			G3/500
BL	(0°-30°)	546.9	4.1	B2/1000		
BM	(30°-60°)	2311.5	17.3	B2/2500		
BH	(60°-80°)	3432.5	25.6	B4/5000		G2/5000
BVH	(80°-90°)	403.1	3.0			G3/500
UL	(90°-100°)	0.6	0.0		U1/10	
UH	(100°-180°)	3.2	0.0		U1/10	

BUG Rating: B4-U1-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2
2.5°	1290.1	1288.4	1289.2	1290.9	1290.1	1290.1	1289.2	1289.2	1290.9	1289.2	1290.1
5°	1290.9	1289.2	1290.1	1290.9	1290.1	1290.9	1290.1	1290.1	1290.1	1289.2	1290.9
7.5°	1287.6	1287.6	1288.4	1288.4	1287.6	1288.4	1288.4	1288.4	1287.6	1287.6	1289.2
10°	1285.9	1285.0	1285.0	1285.9	1285.0	1285.0	1285.9	1285.9	1284.2	1284.2	1285.9
12.5°	1283.3	1282.5	1282.5	1282.5	1281.6	1281.6	1282.5	1282.5	1281.6	1280.8	1283.3
15°	1281.6	1280.8	1280.8	1280.8	1279.1	1279.9	1279.9	1279.9	1279.1	1278.2	1280.8
17.5°	1280.8	1279.9	1279.9	1279.9	1279.1	1279.1	1279.1	1279.1	1278.2	1277.2	1279.9
20°	1282.5	1282.5	1282.5	1282.5	1281.6	1281.6	1281.6	1282.5	1282.5	1282.5	1284.2
22.5°	1286.7	1286.7	1287.6	1288.4	1288.4	1290.1	1290.9	1291.8	1291.8	1292.6	1294.3
25°	1297.7	1297.7	1298.6	1299.4	1302.0	1303.6	1307.0	1308.7	1309.6	1309.6	1310.4
27.5°	1318.0	1318.9	1320.6	1322.3	1325.7	1328.2	1331.6	1335.0	1335.8	1336.7	1337.5
30°	1343.5	1344.3	1347.7	1349.4	1353.6	1358.7	1362.9	1366.3	1368.9	1370.6	1369.7
32.5°	1379.9	1381.6	1385.8	1388.4	1394.3	1399.4	1405.3	1410.4	1412.9	1415.5	1414.6
35°	1430.7	1434.9	1439.2	1441.7	1447.7	1451.9	1459.5	1464.6	1469.7	1468.0	1468.8
37.5°	1506.1	1509.5	1510.3	1512.0	1518.0	1521.3	1529.8	1536.6	1539.1	1540.8	1541.7
40°	1607.7	1607.7	1612.0	1608.6	1616.2	1617.1	1627.2	1636.6	1639.1	1645.9	1640.8
42.5°	1726.3	1725.5	1728.0	1725.5	1725.5	1734.0	1742.4	1759.4	1761.1	1769.5	1764.5
45°	1855.1	1855.1	1852.6	1853.4	1855.1	1864.4	1874.6	1893.2	1901.7	1906.8	1903.4
47.5°	1994.9	1991.5	1990.6	1989.8	1994.9	2005.0	2020.3	2038.1	2059.2	2060.9	2059.2
50°	2136.3	2135.5	2129.5	2134.6	2138.0	2143.1	2171.9	2195.6	2217.6	2231.2	2227.0
52.5°	2285.4	2277.8	2277.8	2277.8	2286.3	2302.4	2327.8	2360.0	2389.6	2404.0	2401.5
55°	2436.2	2433.6	2426.0	2422.6	2433.6	2456.5	2492.9	2531.9	2570.9	2592.9	2584.4
57.5°	2574.3	2570.0	2570.9	2571.7	2584.4	2614.9	2657.3	2708.9	2751.3	2775.0	2769.1
60°	2682.7	2677.6	2686.9	2689.5	2712.3	2763.2	2830.9	2896.2	2952.1	2975.8	2966.5
62.5°	2805.5	2802.1	2808.1	2807.2	2831.8	2888.5	2979.2	3083.4	3168.1	3198.6	3185.0
65°	3003.7	2993.6	2991.0	2981.7	2997.8	3041.8	3132.5	3253.6	3389.1	3467.1	3448.4
67.5°	3240.9	3238.4	3229.9	3224.8	3230.7	3285.8	3373.1	3490.0	3628.0	3735.6	3759.3
70°	3397.6	3401.0	3409.5	3422.2	3471.3	3578.0	3737.3	3914.3	4104.1	4184.6	4170.2
72.5°	3368.0	3373.1	3379.8	3395.9	3460.3	3588.2	3798.3	4062.6	4300.6	4407.3	4315.9
75°	3223.1	3227.4	3242.6	3267.2	3345.9	3501.0	3727.1	4007.5	4253.2	4359.9	4264.2
76°	3089.3	3102.8	3130.8	3159.6	3254.5	3423.0	3664.4	3963.5	4223.5	4331.9	4239.6
77.5°	2786.0	2797.9	2820.8	2870.7	2978.3	3194.3	3476.4	3770.3	4041.4	4138.8	4060.9
80°	2096.5	2106.7	2127.9	2188.0	2281.2	2415.0	2633.6	2920.7	3218.0	3345.9	3295.1
82.5°	885.2	897.1	980.9	1068.2	1170.7	1315.5	1457.8	1711.9	1930.5	2076.2	1998.3
85°	97.4	120.3	148.2	201.6	247.3	329.5	410.0	564.2	713.2	803.9	710.7
87.5°	16.9	19.5	28.0	35.6	39.8	45.7	55.1	77.1	105.0	90.6	92.3
90°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7	1.7	1.7
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8
97.5°	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
102.5°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7
105°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
107.5°	0.8	0.8	0.8	0.8	1.7	1.7	0.8	0.8	0.8	1.7	0.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
112.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
117.5°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
120°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
122.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
125°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
127.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
130°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
132.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
135°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
137.5°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
140°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
142.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
145°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.8
147.5°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
150°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.0	0.0	0.0
152.5°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0
155°	1.7	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.8
157.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0
160°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0
162.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.0	0.0	0.0
165°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	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°	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2
2.5°	1289.2	1289.2	1290.9	1290.1	1290.1	1290.9	1292.6	1291.8
5°	1290.1	1290.9	1289.2	1290.1	1290.9	1290.9	1291.8	1290.9
7.5°	1288.4	1288.4	1288.4	1289.2	1290.1	1289.2	1290.1	1290.1
10°	1285.0	1285.9	1285.0	1286.7	1287.6	1287.6	1288.4	1288.4
12.5°	1282.5	1282.5	1282.5	1284.2	1285.0	1285.0	1285.9	1285.0
15°	1279.9	1279.9	1279.1	1280.8	1282.5	1282.5	1283.3	1283.3
17.5°	1279.1	1279.1	1278.2	1279.9	1281.6	1281.6	1282.5	1282.5
20°	1281.6	1282.5	1280.8	1282.5	1284.2	1285.0	1285.0	1285.0
22.5°	1291.8	1290.9	1288.4	1289.2	1290.1	1290.1	1290.1	1290.1
25°	1307.0	1305.3	1302.8	1302.0	1301.1	1300.3	1300.3	1300.3
27.5°	1333.3	1330.8	1326.5	1325.7	1324.8	1323.1	1323.1	1323.1
30°	1364.6	1361.3	1356.2	1354.5	1351.9	1350.2	1349.4	1348.5
32.5°	1409.5	1402.8	1396.8	1392.6	1390.1	1385.0	1384.1	1382.4
35°	1461.2	1456.1	1447.7	1445.1	1440.9	1438.3	1437.5	1433.3
37.5°	1532.4	1526.4	1518.8	1517.1	1516.3	1513.7	1513.7	1512.9
40°	1631.5	1625.5	1618.8	1612.0	1613.7	1614.5	1614.5	1611.1
42.5°	1752.6	1743.3	1729.7	1734.0	1731.4	1728.0	1734.8	1730.6
45°	1890.7	1878.0	1867.8	1863.6	1863.6	1859.3	1866.1	1866.1
47.5°	2044.0	2023.7	2005.0	2005.9	1999.1	2000.8	2005.0	2011.0
50°	2205.8	2178.7	2160.9	2152.4	2145.6	2148.2	2155.8	2157.5
52.5°	2373.5	2340.5	2316.8	2304.0	2295.6	2299.0	2304.9	2310.0
55°	2548.0	2511.6	2476.0	2462.4	2452.3	2459.1	2459.9	2466.7
57.5°	2730.1	2680.1	2638.6	2618.3	2608.1	2614.9	2620.0	2626.8
60°	2913.9	2856.3	2807.2	2783.5	2769.1	2778.4	2790.3	2793.7
62.5°	3127.4	3047.8	2992.7	2958.8	2952.1	2961.4	2964.8	2974.9
65°	3379.8	3284.1	3207.9	3166.4	3164.7	3169.8	3177.4	3179.9
67.5°	3667.8	3561.1	3458.6	3417.1	3401.0	3416.3	3423.9	3434.0
70°	4074.4	3927.9	3779.7	3687.3	3648.4	3636.5	3639.9	3650.9
72.5°	4120.2	3962.6	3789.8	3664.4	3595.8	3564.5	3563.6	3565.3
75°	4020.2	3768.6	3646.7	3502.7	3405.2	3354.4	3347.6	3346.8
76°	3970.2	3672.9	3496.7	3382.4	3265.5	3213.8	3206.2	3201.9
77.5°	3759.3	3440.0	3174.8	3105.4	2993.6	2928.3	2941.9	2930.9
80°	3013.9	2697.1	2447.2	2251.5	2257.5	2210.0	2190.5	2184.6
82.5°	1776.3	1516.3	1240.1	1078.3	924.2	883.5	760.7	732.7
85°	567.5	402.4	244.0	177.0	120.3	100.8	78.8	72.0
87.5°	75.4	59.3	48.3	46.6	42.4	36.4	23.7	16.9
90°	0.8	0.8	0.8	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°	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
97.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
100°	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
102.5°	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8
105°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
107.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



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CATALOG NUMBER: VST-F05-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
112.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
115°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
117.5°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
120°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7
122.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
125°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
127.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
130°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
132.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
135°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
137.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
140°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
142.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
145°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
147.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
150°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
152.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
155°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
157.5°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
160°	0.8	0.8	0.8	0.8	1.7	1.7	1.7	1.7
162.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
165°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7
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)