

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: P157793

Luminaire Tested: **VST-F05-LED-E-U-5XQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157793
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-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (35) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11017.4 lumens
Efficiency: N/A
Efficacy: 82.7 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

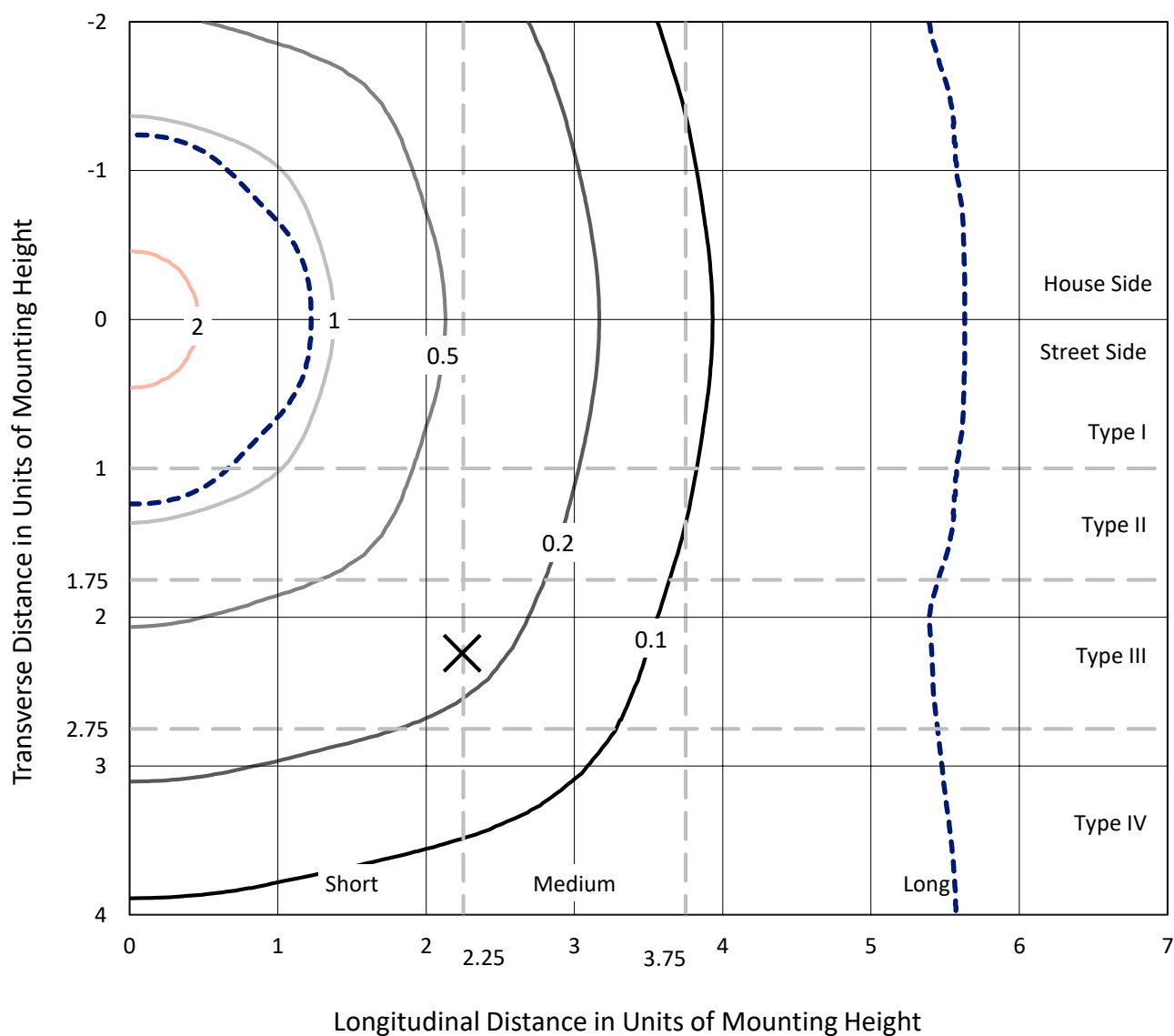


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

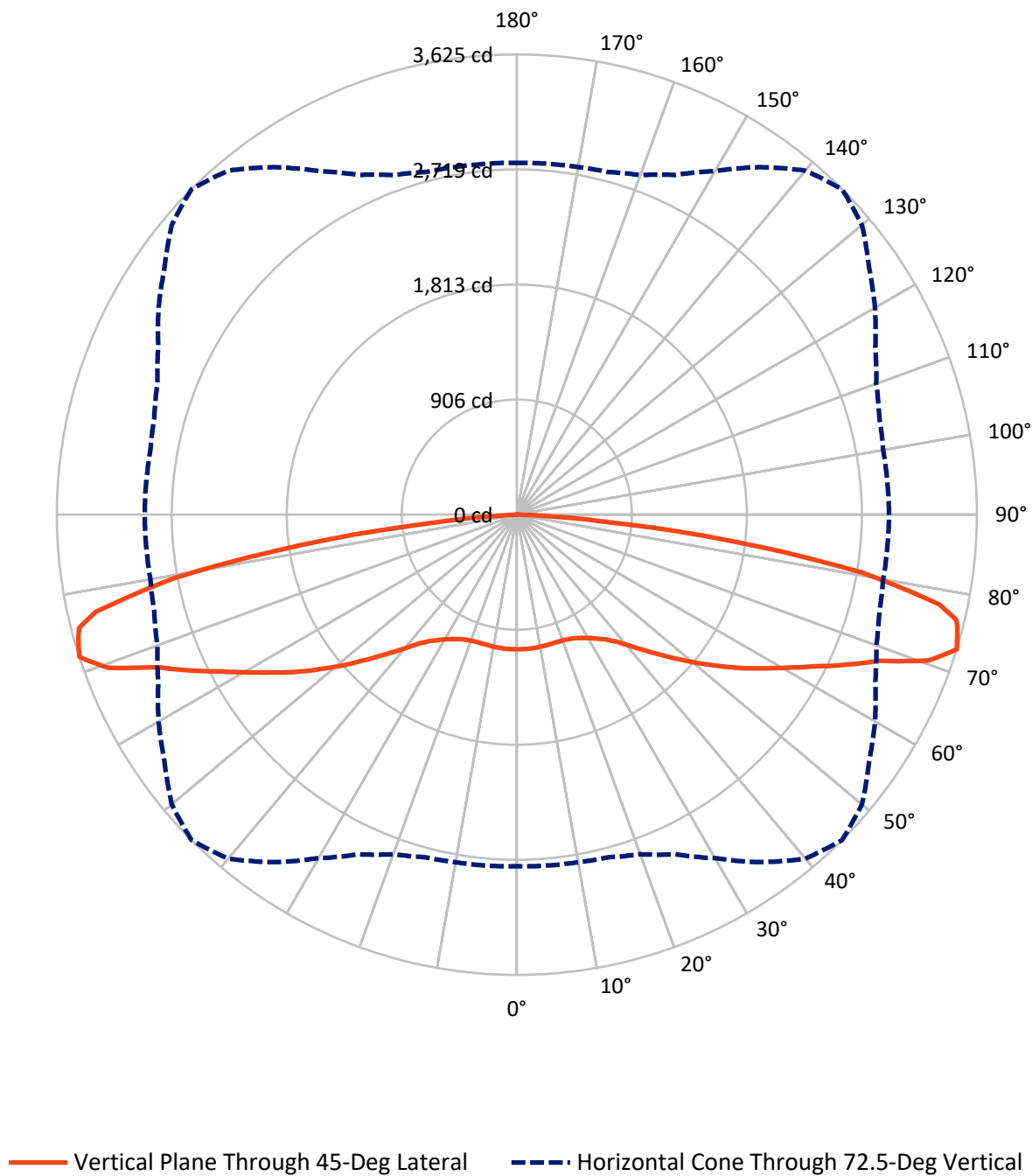


Based on 20 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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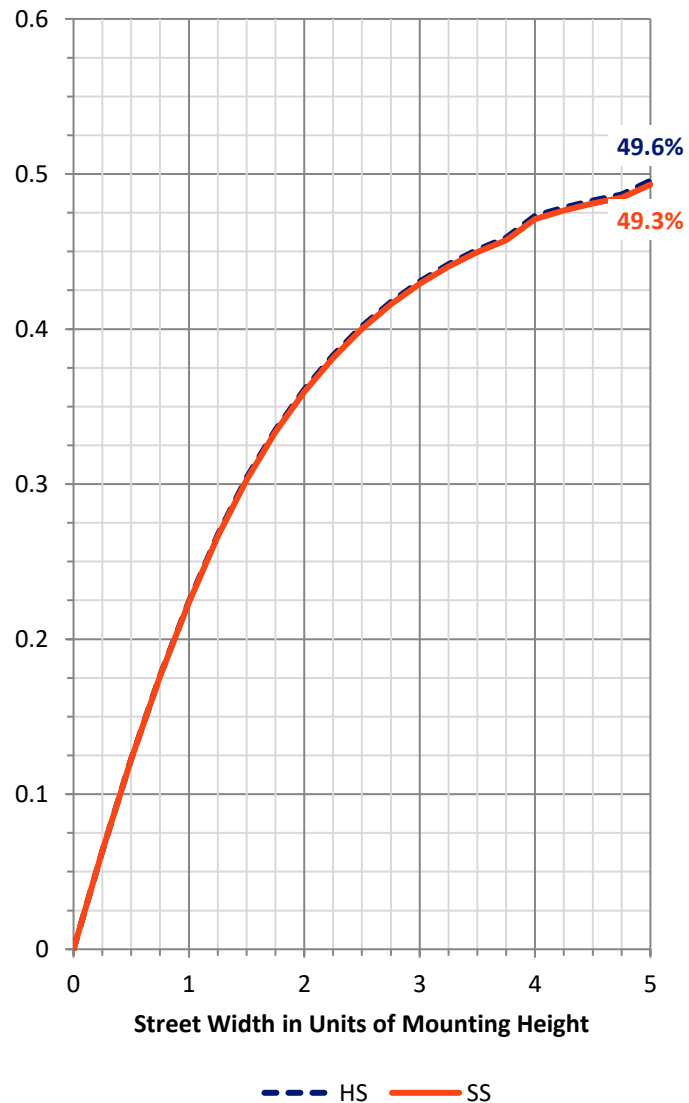
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5506.0	2.7	5508.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5506.0	2.7	5508.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	11012.0	5.4	11017.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	0.9
10°-20°	298.8	2.7
20°-30°	499.7	4.5
30°-40°	759.5	6.9
40°-50°	1202.9	10.9
50°-60°	1840.1	16.7
60°-70°	2633.4	23.9
70°-80°	3013.2	27.3
80°-90°	663.2	6.0
90°-100°	0.6	0.0
100°-110°	1.1	0.0
110°-120°	0.8	0.0
120°-130°	0.9	0.0
130°-140°	0.8	0.0
140°-150°	0.6	0.0
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-90°	11012.0	100.0
0°-180°	11017.4	100.0

Coefficient of Utilization



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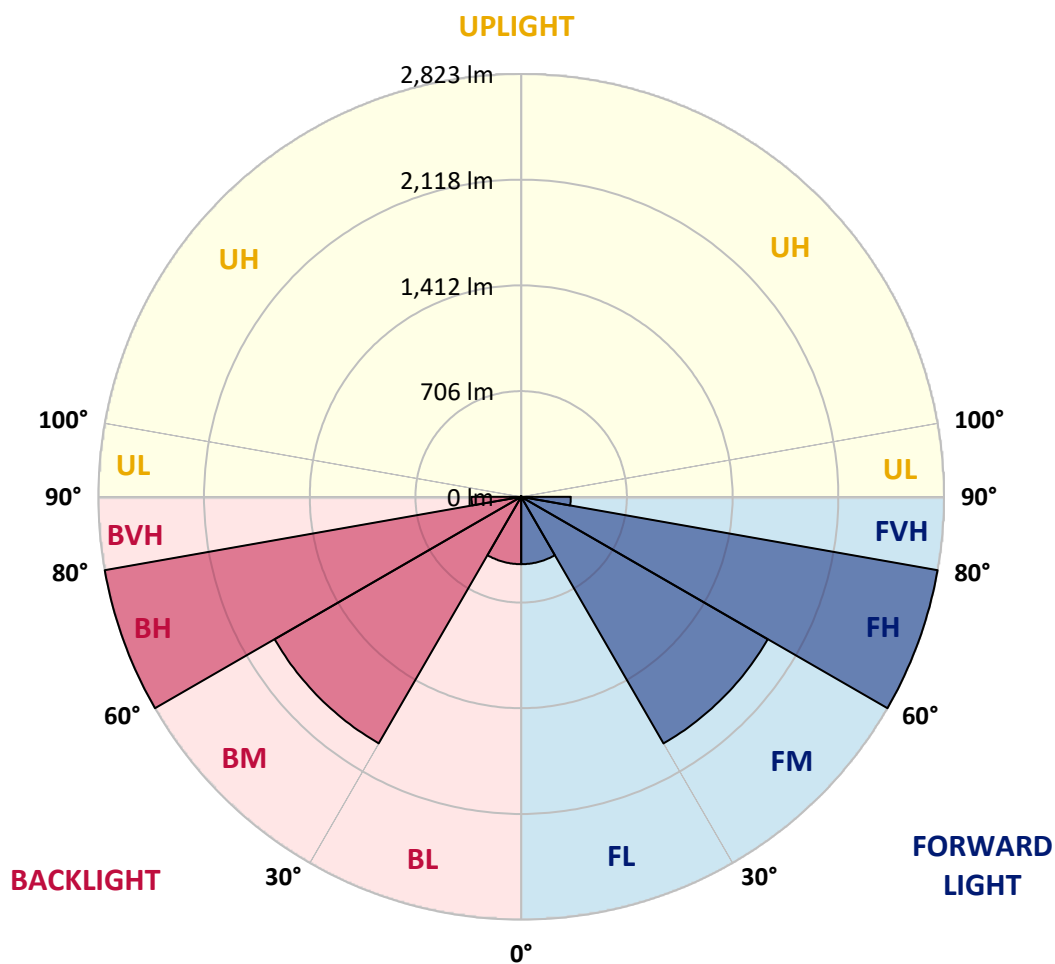
CATALOG NUMBER: VST-F05-LED-E-U-5XQ-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	449.9	4.1			
FM	(30°-60°)	1901.2	17.3			
FH	(60°-80°)	2823.3	25.6			G2/5000
FVH	(80°-90°)	331.6	3.0			G3/500
BL	(0°-30°)	449.9	4.1	B1/500		
BM	(30°-60°)	1901.2	17.3	B2/2500		
BH	(60°-80°)	2823.3	25.6	B4/5000		G2/5000
BVH	(80°-90°)	331.6	3.0			G3/500
UL	(90°-100°)	0.6	0.0		U1/10	
UH	(100°-180°)	2.7	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°	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1061.1	1059.7	1060.4	1061.8	1061.1	1061.1	1060.4	1060.4	1061.8	1060.4	1061.1
5°	1061.8	1060.4	1061.1	1061.8	1061.1	1061.8	1061.1	1061.1	1061.1	1060.4	1061.8
7.5°	1059.0	1059.0	1059.7	1059.7	1059.0	1059.7	1059.7	1059.7	1059.0	1059.0	1060.4
10°	1057.6	1056.9	1056.9	1057.6	1056.9	1056.9	1057.6	1057.6	1056.3	1056.3	1057.6
12.5°	1055.6	1054.9	1054.9	1054.9	1054.2	1054.2	1054.9	1054.9	1054.2	1053.5	1055.6
15°	1054.2	1053.5	1053.5	1053.5	1052.1	1052.8	1052.8	1052.8	1052.1	1051.4	1053.5
17.5°	1053.5	1052.8	1052.8	1052.8	1052.1	1052.1	1052.1	1052.1	1051.4	1051.4	1052.8
20°	1054.9	1054.9	1054.9	1054.9	1054.2	1054.2	1054.2	1054.9	1054.9	1054.9	1056.3
22.5°	1058.3	1058.3	1059.0	1059.7	1059.7	1061.1	1061.8	1062.5	1062.5	1063.2	1064.6
25°	1067.4	1067.4	1068.1	1068.8	1070.9	1072.3	1075.1	1076.5	1077.2	1077.2	1077.8
27.5°	1084.1	1084.8	1086.2	1087.6	1090.4	1092.5	1095.3	1098.1	1098.8	1099.4	1100.1
30°	1105.0	1105.7	1108.5	1109.9	1113.4	1117.6	1121.0	1123.8	1125.9	1127.3	1126.6
32.5°	1135.0	1136.4	1139.9	1141.9	1146.8	1151.0	1155.9	1160.1	1162.2	1164.2	1163.5
35°	1176.8	1180.3	1183.8	1185.8	1190.7	1194.2	1200.5	1204.7	1208.8	1207.4	1208.1
37.5°	1238.8	1241.6	1242.3	1243.7	1248.6	1251.3	1258.3	1263.9	1266.0	1267.4	1268.1
40°	1322.4	1322.4	1325.9	1323.1	1329.4	1330.1	1338.4	1346.1	1348.2	1353.8	1349.6
42.5°	1419.9	1419.3	1421.3	1419.3	1419.3	1426.2	1433.2	1447.1	1448.5	1455.5	1451.3
45°	1525.9	1525.9	1523.8	1524.5	1525.9	1533.5	1541.9	1557.2	1564.2	1568.4	1565.6
47.5°	1640.8	1638.0	1637.3	1636.6	1640.8	1649.2	1661.7	1676.3	1693.8	1695.2	1693.8
50°	1757.2	1756.5	1751.6	1755.8	1758.6	1762.7	1786.4	1805.9	1824.1	1835.2	1831.7
52.5°	1879.8	1873.5	1873.5	1873.5	1880.5	1893.7	1914.6	1941.1	1965.5	1977.3	1975.2
55°	2003.8	2001.7	1995.5	1992.7	2001.7	2020.5	2050.5	2082.5	2114.6	2132.7	2125.7
57.5°	2117.4	2113.9	2114.6	2115.3	2125.7	2150.8	2185.7	2228.2	2263.0	2282.5	2277.6
60°	2206.6	2202.4	2210.0	2212.1	2230.9	2272.8	2328.5	2382.1	2428.1	2447.6	2440.0
62.5°	2307.6	2304.8	2309.7	2309.0	2329.2	2375.9	2450.4	2536.1	2605.8	2630.9	2619.7
65°	2470.6	2462.3	2460.2	2452.5	2465.7	2502.0	2576.5	2676.2	2787.6	2851.7	2836.4
67.5°	2665.7	2663.6	2656.7	2652.5	2657.3	2702.6	2774.4	2870.6	2984.1	3072.6	3092.1
70°	2794.6	2797.4	2804.4	2814.8	2855.2	2943.0	3074.0	3219.6	3375.7	3441.9	3430.0
72.5°	2770.2	2774.4	2780.0	2793.2	2846.2	2951.4	3124.2	3341.5	3537.3	3625.1	3549.9
75°	2651.1	2654.6	2667.1	2687.3	2752.1	2879.6	3065.6	3296.3	3498.3	3586.1	3507.4
76°	2541.0	2552.1	2575.1	2598.8	2676.9	2815.5	3014.1	3260.0	3473.9	3563.1	3487.2
77.5°	2291.6	2301.3	2320.1	2361.2	2449.7	2627.4	2859.4	3101.2	3324.1	3404.2	3340.2
80°	1724.4	1732.8	1750.2	1799.7	1876.3	1986.4	2166.2	2402.3	2646.9	2752.1	2710.3
82.5°	728.1	737.8	806.8	878.6	962.9	1082.0	1199.1	1408.1	1587.9	1707.7	1643.6
85°	80.1	98.9	121.9	165.8	203.4	271.0	337.2	464.0	586.7	661.2	584.6
87.5°	13.9	16.0	23.0	29.3	32.7	37.6	45.3	63.4	86.4	74.6	75.9
90°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7
97.5°	0.0	0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
100°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
102.5°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4	1.4
105°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
107.5°	0.7	0.7	0.7	0.7	1.4	1.4	0.7	0.7	0.7	1.4	0.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
112.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
115°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
117.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
120°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
122.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
125°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
127.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
130°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
132.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
135°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
137.5°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
140°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
142.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
145°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.7
147.5°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
150°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.0	0.0	0.0
152.5°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0
155°	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.7
157.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0	0.0
160°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0	0.0
162.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	0.0	0.0	0.0
165°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7	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°	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1060.4	1060.4	1061.8	1061.1	1061.1	1061.8	1063.2	1062.5
5°	1061.1	1061.8	1060.4	1061.1	1061.8	1061.8	1062.5	1061.8
7.5°	1059.7	1059.7	1059.7	1060.4	1061.1	1060.4	1061.1	1061.1
10°	1056.9	1057.6	1056.9	1058.3	1059.0	1059.0	1059.7	1059.7
12.5°	1054.9	1054.9	1054.9	1056.3	1056.9	1056.9	1057.6	1056.9
15°	1052.8	1052.8	1052.1	1053.5	1054.9	1054.9	1055.6	1055.6
17.5°	1052.1	1052.1	1051.4	1052.8	1054.2	1054.2	1054.9	1054.9
20°	1054.2	1054.9	1053.5	1054.9	1056.3	1056.9	1056.9	1056.9
22.5°	1062.5	1061.8	1059.7	1060.4	1061.1	1061.1	1061.1	1061.1
25°	1075.1	1073.7	1071.6	1070.9	1070.2	1069.5	1069.5	1069.5
27.5°	1096.7	1094.6	1091.1	1090.4	1089.7	1088.3	1088.3	1088.3
30°	1122.4	1119.7	1115.5	1114.1	1112.0	1110.6	1109.9	1109.2
32.5°	1159.4	1153.8	1148.9	1145.4	1143.3	1139.2	1138.5	1137.1
35°	1201.9	1197.7	1190.7	1188.6	1185.1	1183.1	1182.4	1178.9
37.5°	1260.4	1255.5	1249.2	1247.9	1247.2	1245.1	1245.1	1244.4
40°	1341.9	1337.0	1331.5	1325.9	1327.3	1328.0	1328.0	1325.2
42.5°	1441.5	1433.9	1422.7	1426.2	1424.1	1421.3	1426.9	1423.4
45°	1555.1	1544.7	1536.3	1532.8	1532.8	1529.3	1534.9	1534.9
47.5°	1681.2	1664.5	1649.2	1649.9	1644.3	1645.7	1649.2	1654.1
50°	1814.3	1792.0	1777.4	1770.4	1764.8	1766.9	1773.2	1774.6
52.5°	1952.3	1925.1	1905.6	1895.1	1888.2	1890.9	1895.8	1900.0
55°	2095.8	2065.8	2036.6	2025.4	2017.0	2022.6	2023.3	2028.9
57.5°	2245.6	2204.5	2170.3	2153.6	2145.2	2150.8	2155.0	2160.6
60°	2396.8	2349.4	2309.0	2289.5	2277.6	2285.3	2295.0	2297.8
62.5°	2572.3	2506.9	2461.6	2433.7	2428.1	2435.8	2438.6	2446.9
65°	2780.0	2701.2	2638.5	2604.4	2603.0	2607.2	2613.5	2615.5
67.5°	3016.9	2929.1	2844.8	2810.6	2797.4	2809.9	2816.2	2824.6
70°	3351.3	3230.8	3108.8	3032.9	3000.8	2991.1	2993.9	3002.9
72.5°	3388.9	3259.3	3117.2	3014.1	2957.6	2931.9	2931.2	2932.6
75°	3306.7	3099.8	2999.4	2881.0	2800.9	2759.1	2753.5	2752.8
76°	3265.6	3021.0	2876.1	2782.1	2685.9	2643.4	2637.1	2633.7
77.5°	3092.1	2829.4	2611.4	2554.2	2462.3	2408.6	2419.8	2410.7
80°	2479.0	2218.4	2012.9	1851.9	1856.8	1817.8	1801.8	1796.9
82.5°	1461.1	1247.2	1020.0	886.9	760.1	726.7	625.7	602.7
85°	466.8	330.9	200.7	145.6	98.9	82.9	64.8	59.2
87.5°	62.0	48.8	39.7	38.3	34.8	30.0	19.5	13.9
90°	0.7	0.7	0.7	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°	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
97.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
100°	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7
102.5°	1.4	1.4	1.4	1.4	0.7	0.7	0.7	0.7
105°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
107.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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CATALOG NUMBER: VST-F05-LED-E-U-5XQ-8030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
112.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
115°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.4
117.5°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
120°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4
122.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
125°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
127.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
130°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
132.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
135°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
137.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
140°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
142.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
145°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
150°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
152.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
157.5°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
160°	0.7	0.7	0.7	0.7	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4
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)