

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: P157776

Luminaire Tested: **VST-F03-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157776
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-F03-LED-E-U-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8036.8 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U1 - G3

Input Watts (W): 78.3
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

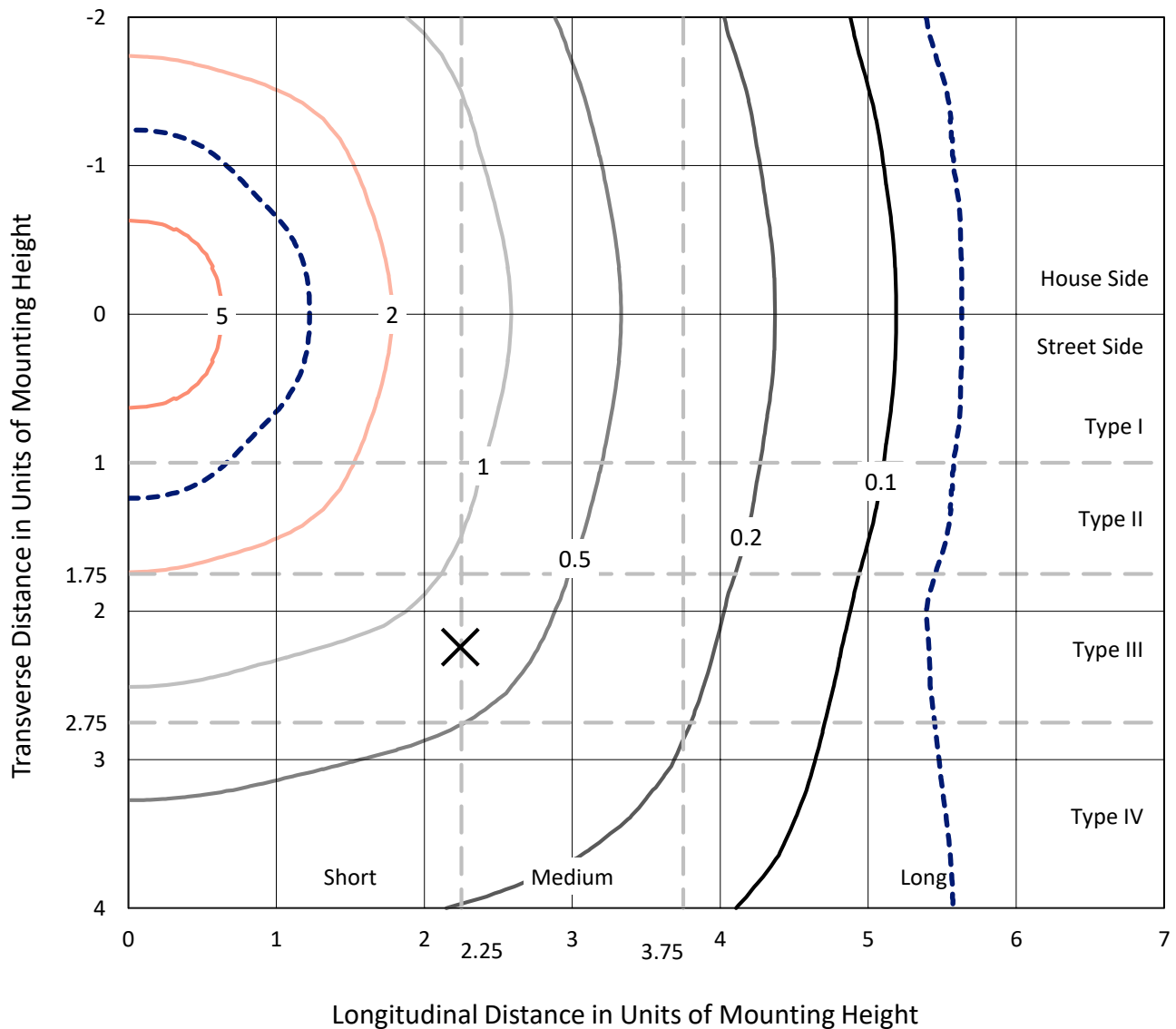


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

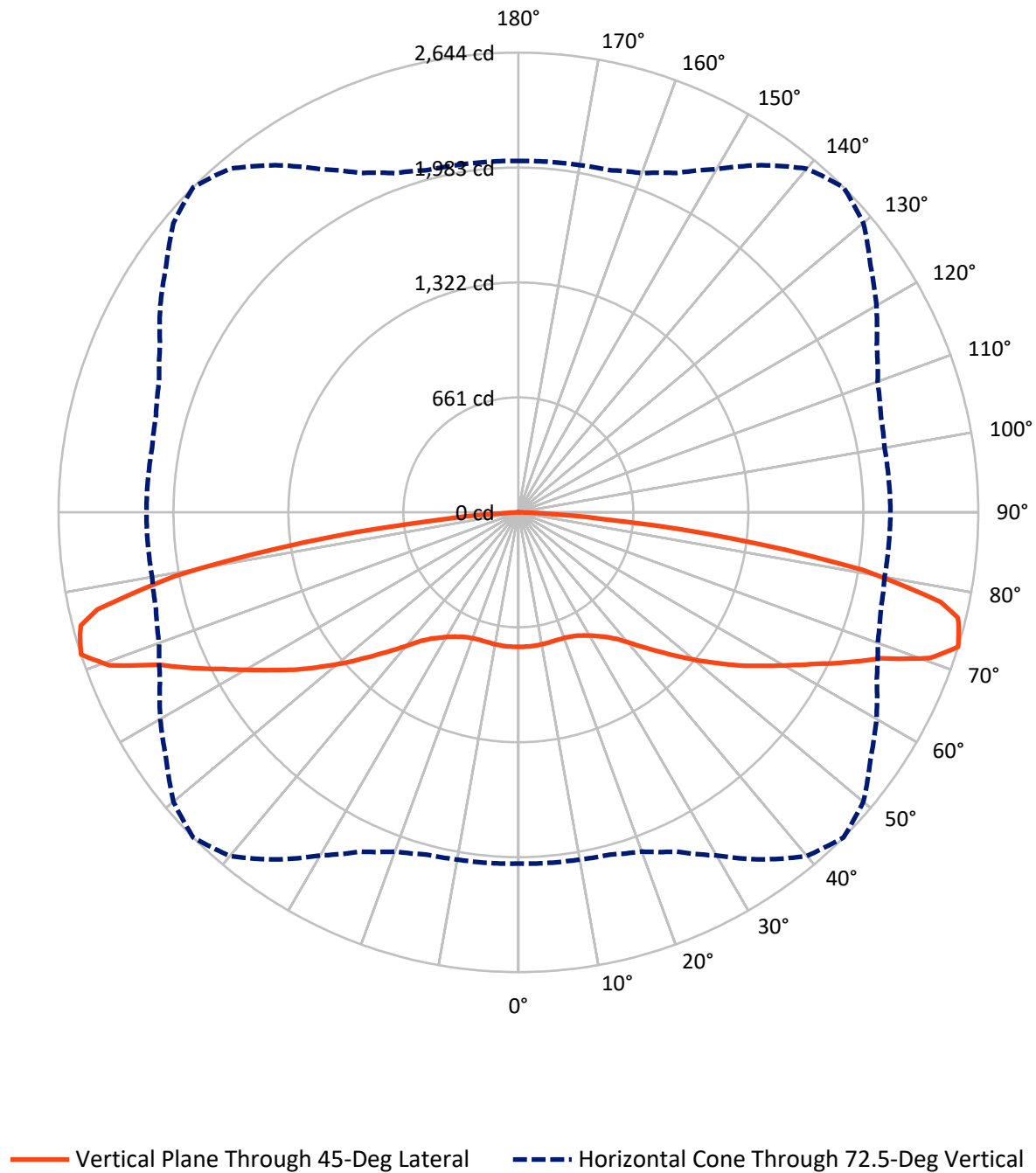


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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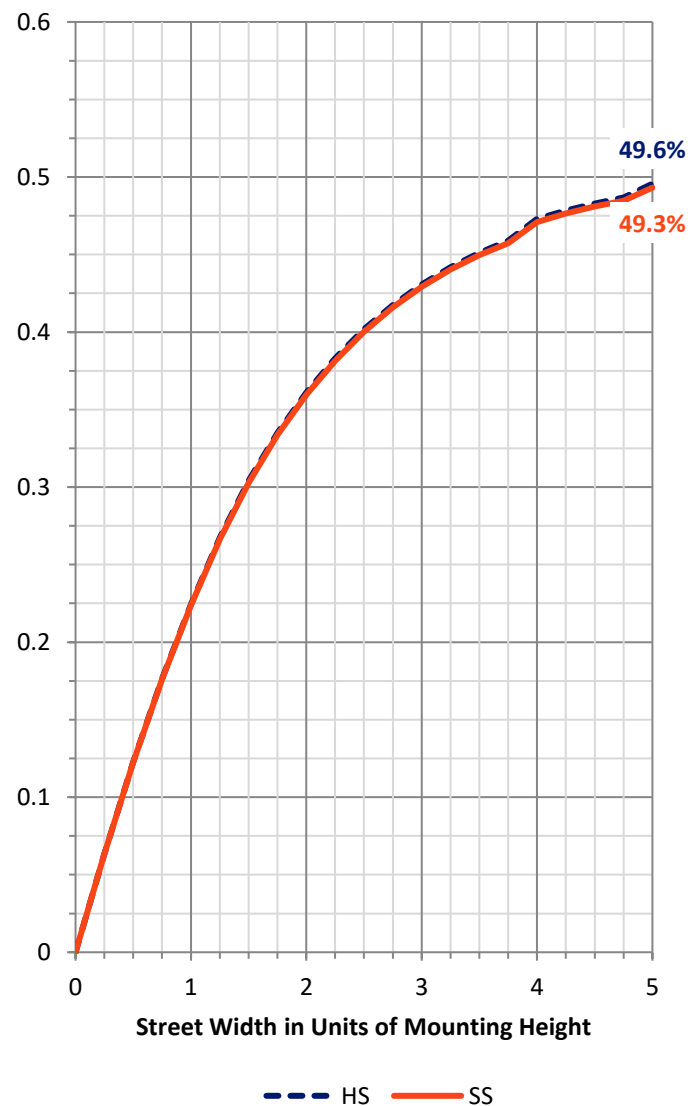
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4016.5	1.9	4018.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4016.5	1.9	4018.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	8032.9	3.9	8036.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	0.9
10°-20°	218.0	2.7
20°-30°	364.5	4.5
30°-40°	554.0	6.9
40°-50°	877.5	10.9
50°-60°	1342.3	16.7
60°-70°	1921.0	23.9
70°-80°	2198.1	27.3
80°-90°	483.8	6.0
90°-100°	0.4	0.0
100°-110°	0.8	0.0
110°-120°	0.6	0.0
120°-130°	0.6	0.0
130°-140°	0.6	0.0
140°-150°	0.4	0.0
150°-160°	0.3	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	8032.9	100.0
0°-180°	8036.8	100.0

Coefficient of Utilization



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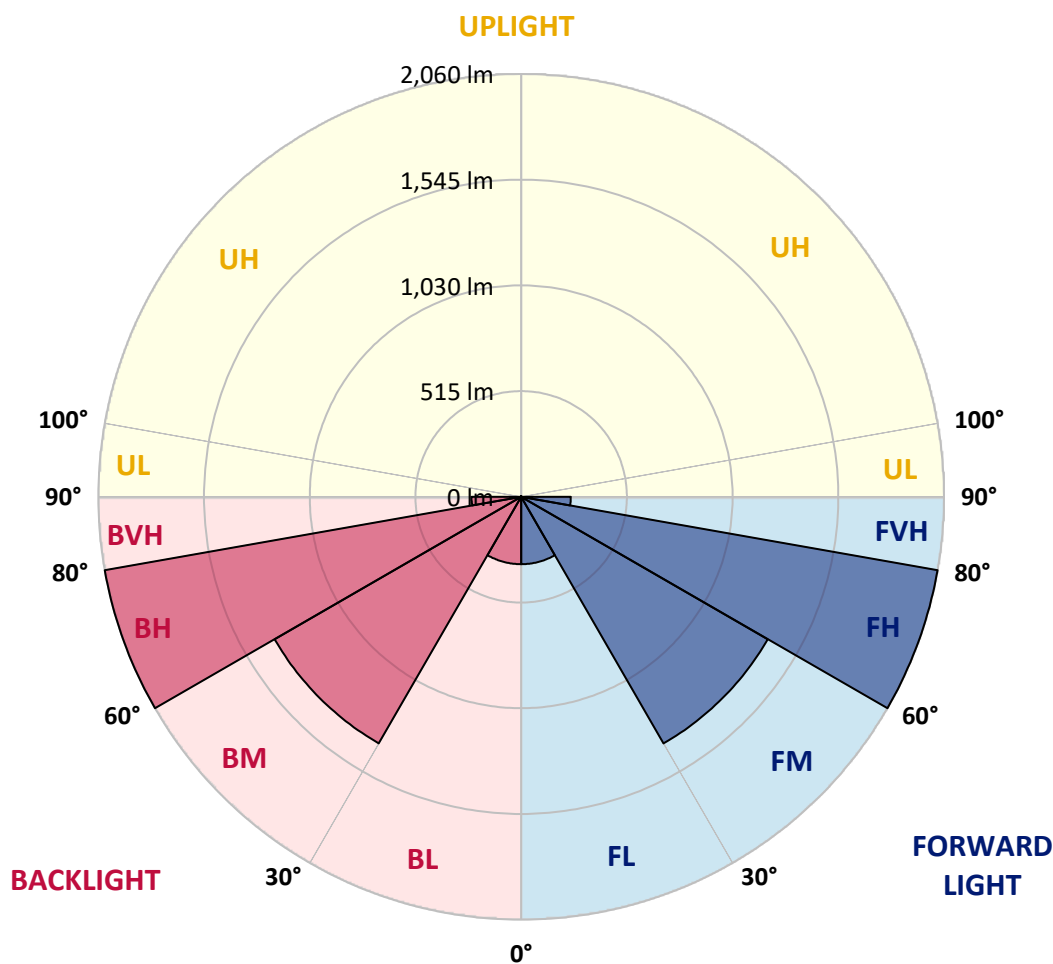
CATALOG NUMBER: VST-F03-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	328.2	4.1			
FM	(30°-60°)	1386.9	17.3			
FH	(60°-80°)	2059.5	25.6			G2/5000
FVH	(80°-90°)	241.9	3.0			G3/500
BL	(0°-30°)	328.2	4.1	B1/500		
BM	(30°-60°)	1386.9	17.3	B2/2500		
BH	(60°-80°)	2059.5	25.6	B3/2500		G2/5000
BVH	(80°-90°)	241.9	3.0			G3/500
UL	(90°-100°)	0.4	0.0		U1/10	
UH	(100°-180°)	1.9	0.0		U1/10	

BUG Rating: B3-U1-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	774.1	773.0	773.5	774.5	774.1	774.1	773.5	773.5	774.5	773.5	774.1
5°	774.5	773.5	774.1	774.5	774.1	774.5	774.1	774.1	774.1	773.5	774.5
7.5°	772.6	772.6	773.0	773.0	772.6	773.0	773.0	773.0	772.6	772.6	773.5
10°	771.5	771.0	771.0	771.5	771.0	771.0	771.5	771.5	770.5	770.5	771.5
12.5°	770.0	769.5	769.5	769.5	769.0	769.0	769.5	769.5	769.0	768.5	770.0
15°	769.0	768.5	768.5	768.5	767.5	767.9	767.9	767.9	767.5	766.9	768.5
17.5°	768.5	767.9	767.9	767.9	767.5	767.5	767.5	767.5	766.9	766.9	767.9
20°	769.5	769.5	769.5	769.5	769.0	769.0	769.0	769.5	769.5	769.5	770.5
22.5°	772.0	772.0	772.6	773.0	773.0	774.1	774.5	775.1	775.1	775.6	776.6
25°	778.6	778.6	779.2	779.6	781.2	782.2	784.2	785.2	785.8	785.8	786.2
27.5°	790.8	791.3	792.4	793.4	795.4	796.9	799.0	801.0	801.5	802.0	802.5
30°	806.1	806.6	808.6	809.6	812.2	815.2	817.7	819.8	821.3	822.4	821.8
32.5°	827.9	829.0	831.5	833.0	836.6	839.6	843.2	846.2	847.7	849.3	848.8
35°	858.4	860.9	863.5	865.0	868.6	871.1	875.7	878.8	881.8	880.8	881.3
37.5°	903.7	905.7	906.2	907.2	910.8	912.8	917.9	922.0	923.5	924.5	925.0
40°	964.6	964.6	967.2	965.2	969.7	970.3	976.3	982.0	983.5	987.5	984.5
42.5°	1035.8	1035.3	1036.8	1035.3	1035.3	1040.4	1045.4	1055.6	1056.7	1061.7	1058.7
45°	1113.1	1113.1	1111.6	1112.0	1113.1	1118.6	1124.8	1135.9	1141.0	1144.1	1142.0
47.5°	1196.9	1194.9	1194.4	1193.9	1196.9	1203.0	1212.2	1222.9	1235.5	1236.5	1235.5
50°	1281.8	1281.3	1277.7	1280.8	1282.8	1285.9	1303.1	1317.4	1330.6	1338.7	1336.2
52.5°	1371.2	1366.7	1366.7	1366.7	1371.8	1381.4	1396.7	1416.0	1433.8	1442.4	1440.9
55°	1461.7	1460.2	1455.6	1453.6	1460.2	1473.9	1495.7	1519.1	1542.5	1555.7	1550.6
57.5°	1544.6	1542.0	1542.5	1543.0	1550.6	1568.9	1594.4	1625.3	1650.8	1665.0	1661.5
60°	1609.6	1606.6	1612.1	1613.7	1627.4	1657.9	1698.5	1737.7	1771.3	1785.5	1779.9
62.5°	1683.3	1681.3	1684.9	1684.3	1699.1	1733.1	1787.5	1850.0	1900.9	1919.2	1911.0
65°	1802.2	1796.2	1794.6	1789.0	1798.7	1825.1	1879.5	1952.2	2033.5	2080.3	2069.0
67.5°	1944.5	1943.0	1937.9	1934.9	1938.4	1971.5	2023.9	2094.0	2176.8	2241.4	2255.6
70°	2038.6	2040.6	2045.7	2053.3	2082.8	2146.8	2242.4	2348.6	2462.5	2510.8	2502.1
72.5°	2020.8	2023.9	2027.9	2037.5	2076.2	2152.9	2279.0	2437.6	2580.4	2644.4	2589.5
75°	1933.9	1936.4	1945.6	1960.3	2007.5	2100.6	2236.3	2404.5	2551.9	2615.9	2558.5
76°	1853.6	1861.7	1878.5	1895.8	1952.7	2053.8	2198.6	2378.1	2534.1	2599.1	2543.8
77.5°	1671.6	1678.7	1692.5	1722.4	1787.0	1916.6	2085.8	2262.2	2424.8	2483.3	2436.5
80°	1257.9	1264.0	1276.7	1312.8	1368.7	1449.0	1580.2	1752.4	1930.8	2007.5	1977.1
82.5°	531.1	538.3	588.5	640.9	702.4	789.3	874.7	1027.1	1158.3	1245.7	1199.0
85°	58.4	72.2	88.9	121.0	148.4	197.7	246.0	338.5	427.9	482.3	426.4
87.5°	10.1	11.7	16.8	21.4	23.9	27.4	33.1	46.3	63.0	54.4	55.4
90°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5
97.5°	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0
102.5°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0
105°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
107.5°	0.5	0.5	0.5	0.5	1.0	1.0	0.5	0.5	0.5	1.0	0.5



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CATALOG NUMBER: VST-F03-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
112.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
117.5°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
120°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
122.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
127.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
130°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
132.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
135°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
137.5°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
140°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
142.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
145°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.5
147.5°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
150°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.0	0.0	0.0
152.5°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0
155°	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.5
157.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
160°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
162.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0
165°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	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°	773.5	773.5	773.5	773.5	773.5	773.5	773.5	773.5
2.5°	773.5	773.5	774.5	774.1	774.1	774.5	775.6	775.1
5°	774.1	774.5	773.5	774.1	774.5	774.5	775.1	774.5
7.5°	773.0	773.0	773.0	773.5	774.1	773.5	774.1	774.1
10°	771.0	771.5	771.0	772.0	772.6	772.6	773.0	773.0
12.5°	769.5	769.5	769.5	770.5	771.0	771.0	771.5	771.0
15°	767.9	767.9	767.5	768.5	769.5	769.5	770.0	770.0
17.5°	767.5	767.5	766.9	767.9	769.0	769.0	769.5	769.5
20°	769.0	769.5	768.5	769.5	770.5	771.0	771.0	771.0
22.5°	775.1	774.5	773.0	773.5	774.1	774.1	774.1	774.1
25°	784.2	783.2	781.7	781.2	780.7	780.2	780.2	780.2
27.5°	800.0	798.5	795.9	795.4	794.9	793.9	793.9	793.9
30°	818.8	816.8	813.7	812.7	811.1	810.1	809.6	809.1
32.5°	845.7	841.7	838.1	835.6	834.1	831.0	830.5	829.4
35°	876.7	873.7	868.6	867.1	864.5	863.0	862.5	860.0
37.5°	919.4	915.8	911.3	910.3	909.8	908.2	908.2	907.7
40°	978.9	975.3	971.3	967.2	968.2	968.7	968.7	966.7
42.5°	1051.6	1046.0	1037.8	1040.4	1038.8	1036.8	1040.9	1038.4
45°	1134.4	1126.8	1120.7	1118.2	1118.2	1115.6	1119.7	1119.7
47.5°	1226.4	1214.2	1203.0	1203.5	1199.5	1200.5	1203.0	1206.6
50°	1323.5	1307.2	1296.5	1291.4	1287.4	1288.9	1293.5	1294.5
52.5°	1424.1	1404.3	1390.1	1382.4	1377.4	1379.4	1382.9	1386.0
55°	1528.8	1507.0	1485.6	1477.4	1471.4	1475.5	1475.9	1480.0
57.5°	1638.1	1608.1	1583.2	1571.0	1564.9	1568.9	1572.0	1576.1
60°	1748.3	1713.8	1684.3	1670.1	1661.5	1667.0	1674.2	1676.2
62.5°	1876.4	1828.7	1795.6	1775.3	1771.3	1776.8	1778.9	1784.9
65°	2027.9	1970.5	1924.7	1899.8	1898.8	1901.9	1906.4	1907.9
67.5°	2200.7	2136.7	2075.2	2050.3	2040.6	2049.8	2054.3	2060.4
70°	2444.6	2356.7	2267.8	2212.4	2189.0	2181.9	2183.9	2190.5
72.5°	2472.1	2377.6	2273.9	2198.6	2157.5	2138.7	2138.2	2139.2
75°	2412.1	2261.2	2188.0	2101.6	2043.1	2012.6	2008.6	2008.1
76°	2382.1	2203.7	2098.0	2029.4	1959.3	1928.3	1923.7	1921.1
77.5°	2255.6	2064.0	1904.9	1863.2	1796.2	1757.0	1765.1	1758.5
80°	1808.3	1618.3	1468.3	1350.9	1354.5	1326.0	1314.3	1310.8
82.5°	1065.8	909.8	744.1	647.0	554.5	530.1	456.4	439.6
85°	340.5	241.4	146.4	106.2	72.2	60.5	47.3	43.2
87.5°	45.2	35.6	29.0	28.0	25.4	21.8	14.2	10.1
90°	0.5	0.5	0.5	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°	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
97.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
102.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
105°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
107.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



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CATALOG NUMBER: VST-F03-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0
112.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
115°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0
117.5°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0
120°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0
122.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
125°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
127.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
130°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
132.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
135°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
137.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
140°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
142.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
145°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
150°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
152.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
155°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
157.5°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
160°	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0
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)