

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: P157775

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157775
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
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7832.4 lumens
Efficiency: N/A
Efficacy: 100.0 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



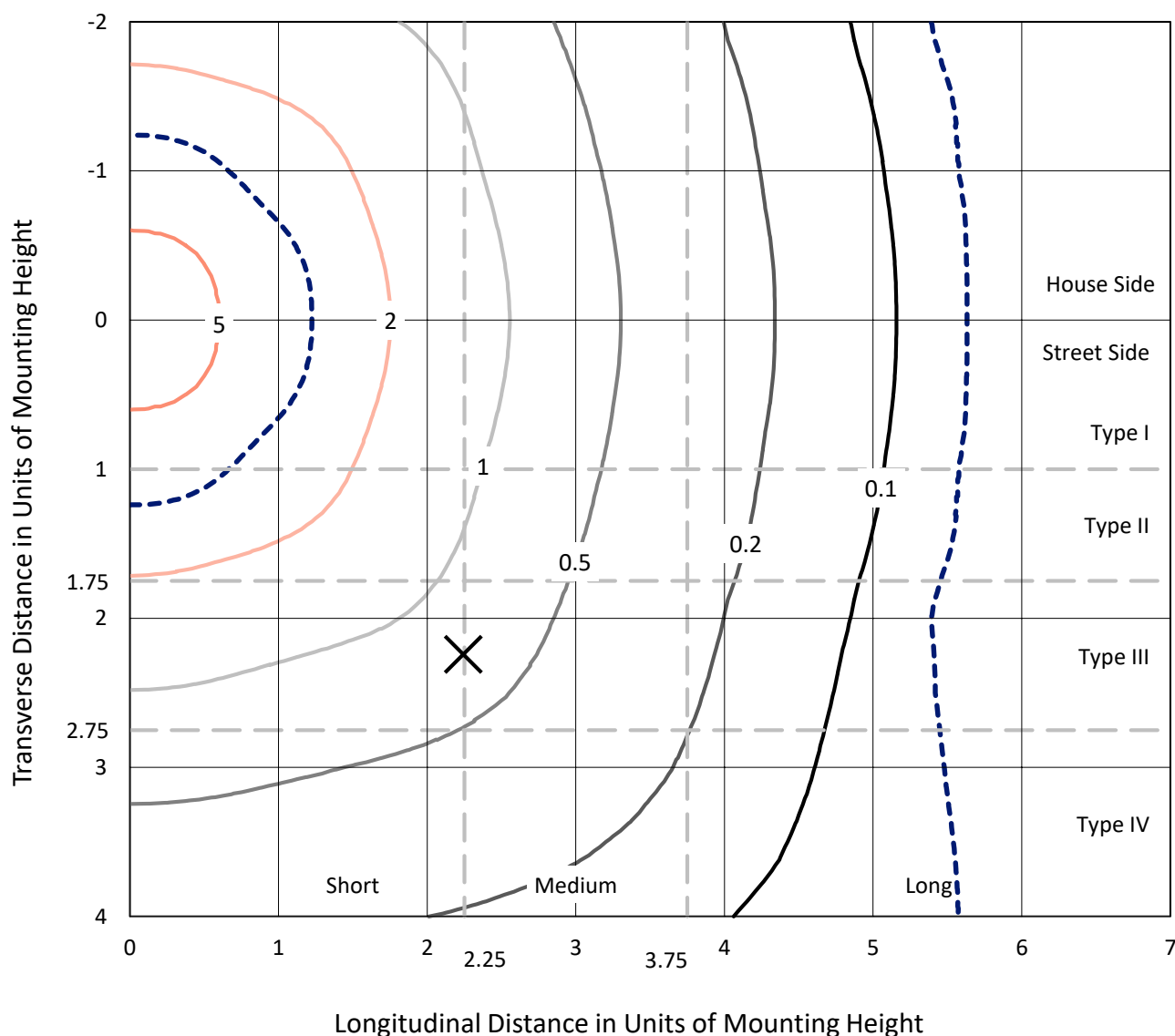
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

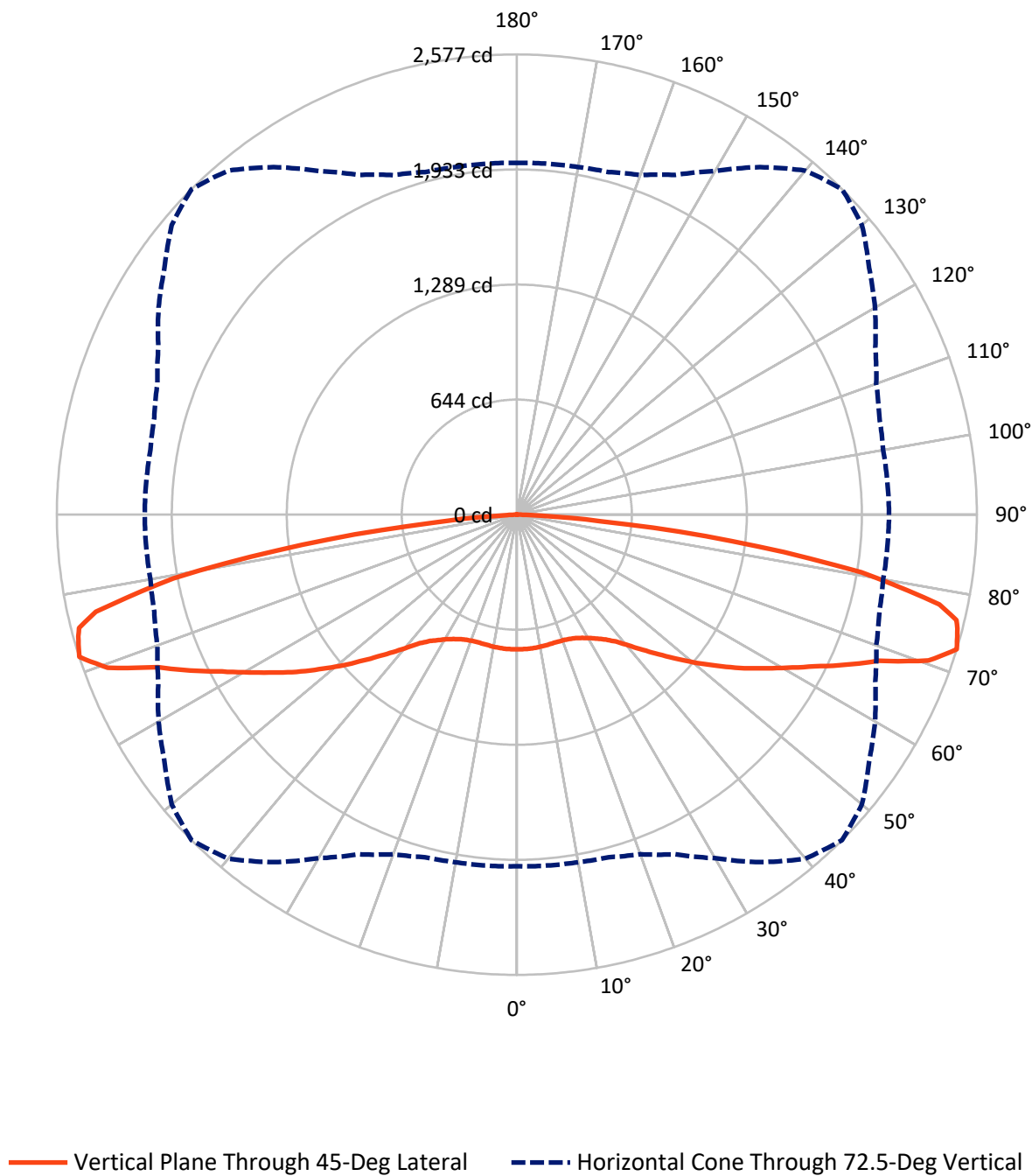


Based on 10 foot mounting height. Maximum calculated value = 7.5 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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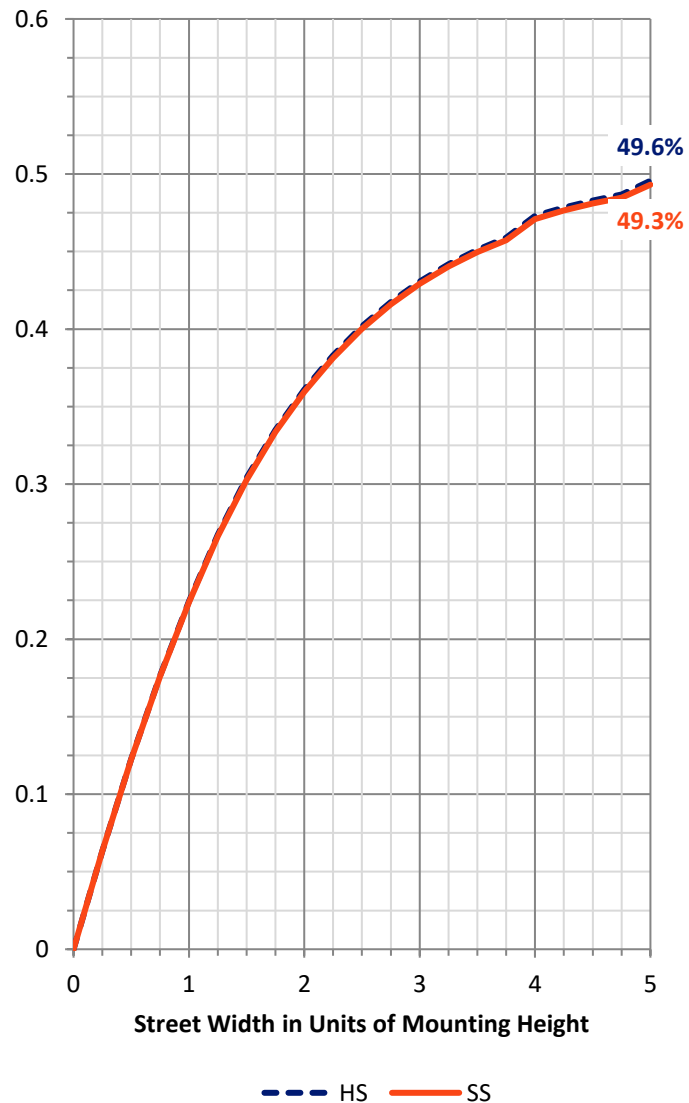
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3914.3	1.9	3916.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3914.3	1.9	3916.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	7828.6	3.9	7832.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	0.9
10°-20°	212.4	2.7
20°-30°	355.2	4.5
30°-40°	539.9	6.9
40°-50°	855.2	10.9
50°-60°	1308.1	16.7
60°-70°	1872.1	23.9
70°-80°	2142.1	27.3
80°-90°	471.5	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°	7828.6	100.0
0°-180°	7832.4	100.0

Coefficient of Utilization



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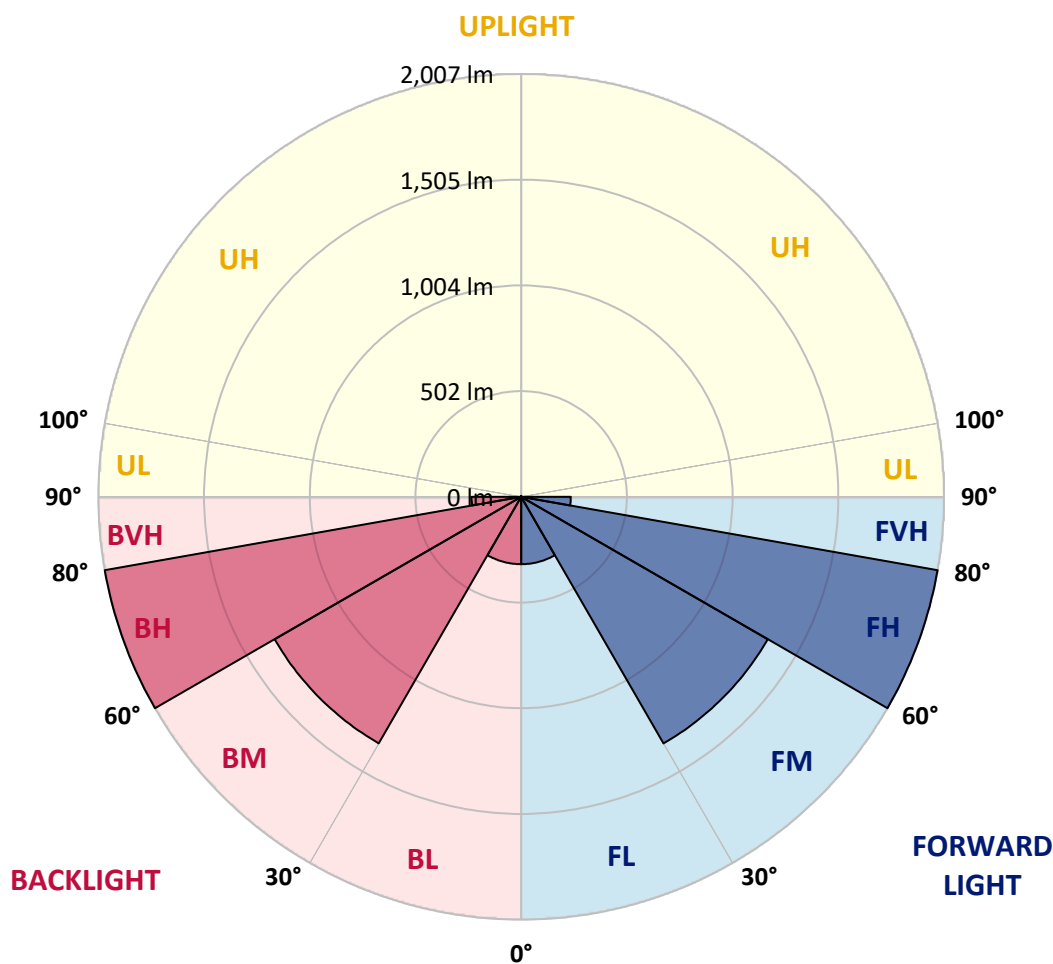
CATALOG NUMBER: VST-F03-LED-E-U-5XQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	319.8	4.1			
FM	(30°-60°)	1351.6	17.3			
FH	(60°-80°)	2007.1	25.6			G2/5000
FVH	(80°-90°)	235.7	3.0			G3/500
BL	(0°-30°)	319.8	4.1	B1/500		
BM	(30°-60°)	1351.6	17.3	B2/2500		
BH	(60°-80°)	2007.1	25.6	B3/2500		G2/5000
BVH	(80°-90°)	235.7	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°	753.8	753.8	753.8	753.8	753.8	753.8	753.8	753.8	753.8	753.8	753.8
2.5°	754.4	753.4	753.8	754.9	754.4	754.4	753.8	753.8	754.9	753.8	754.4
5°	754.9	753.8	754.4	754.9	754.4	754.9	754.4	754.4	754.4	753.8	754.9
7.5°	752.9	752.9	753.4	753.4	752.9	753.4	753.4	753.4	752.9	752.9	753.8
10°	751.9	751.4	751.4	751.9	751.4	751.4	751.9	751.9	750.9	750.9	751.9
12.5°	750.4	749.9	749.9	749.9	749.4	749.4	749.9	749.9	749.4	748.9	750.4
15°	749.4	748.9	748.9	748.9	747.9	748.4	748.4	748.4	747.9	747.4	748.9
17.5°	748.9	748.4	748.4	748.4	747.9	747.9	747.9	747.9	747.4	747.4	748.4
20°	749.9	749.9	749.9	749.9	749.4	749.4	749.4	749.9	749.9	749.9	750.9
22.5°	752.4	752.4	752.9	753.4	753.4	754.4	754.9	755.3	755.3	755.9	756.8
25°	758.8	758.8	759.3	759.8	761.3	762.3	764.3	765.2	765.8	765.8	766.3
27.5°	770.7	771.2	772.2	773.2	775.1	776.6	778.6	780.6	781.1	781.6	782.1
30°	785.6	786.1	788.0	789.1	791.5	794.5	797.0	799.0	800.4	801.4	800.9
32.5°	806.9	807.8	810.4	811.8	815.3	818.3	821.7	824.7	826.2	827.7	827.2
35°	836.6	839.0	841.6	843.0	846.5	848.9	853.4	856.4	859.4	858.4	858.9
37.5°	880.7	882.7	883.1	884.2	887.6	889.6	894.5	898.5	900.0	901.0	901.5
40°	940.1	940.1	942.6	940.6	945.1	945.5	951.5	956.9	958.4	962.4	959.4
42.5°	1009.4	1009.0	1010.5	1009.0	1009.0	1013.9	1018.9	1028.8	1029.8	1034.7	1031.8
45°	1084.7	1084.7	1083.2	1083.7	1084.7	1090.2	1096.1	1107.0	1112.0	1115.0	1113.0
47.5°	1166.5	1164.5	1164.0	1163.5	1166.5	1172.4	1181.3	1191.7	1204.1	1205.1	1204.1
50°	1249.2	1248.7	1245.2	1248.2	1250.2	1253.2	1270.0	1283.9	1296.7	1304.6	1302.2
52.5°	1336.4	1331.9	1331.9	1331.9	1336.9	1346.3	1361.1	1379.9	1397.3	1405.7	1404.2
55°	1424.5	1423.0	1418.6	1416.6	1423.0	1436.4	1457.7	1480.5	1503.3	1516.1	1511.2
57.5°	1505.3	1502.8	1503.3	1503.8	1511.2	1529.0	1553.8	1584.0	1608.8	1622.6	1619.2
60°	1568.6	1565.7	1571.2	1572.6	1586.0	1615.7	1655.3	1693.5	1726.2	1740.1	1734.6
62.5°	1640.5	1638.5	1642.0	1641.5	1655.8	1689.0	1742.0	1802.9	1852.5	1870.3	1862.4
65°	1756.4	1750.4	1748.9	1743.5	1752.9	1778.7	1831.7	1902.5	1981.7	2027.3	2016.4
67.5°	1895.1	1893.6	1888.6	1885.7	1889.2	1921.3	1972.3	2040.7	2121.4	2184.4	2198.2
70°	1986.7	1988.7	1993.6	2001.1	2029.8	2092.2	2185.3	2288.9	2399.8	2446.9	2438.5
72.5°	1969.4	1972.3	1976.3	1985.7	2023.4	2098.1	2221.0	2375.5	2514.7	2577.1	2523.6
75°	1884.7	1887.1	1896.1	1910.4	1956.5	2047.1	2179.4	2343.4	2487.0	2549.4	2493.4
76°	1806.4	1814.3	1830.7	1847.5	1903.0	2001.5	2142.7	2317.6	2469.7	2533.0	2479.1
77.5°	1629.1	1636.0	1649.4	1678.6	1741.5	1867.9	2032.8	2204.6	2363.2	2420.1	2374.6
80°	1225.9	1231.9	1244.2	1279.4	1333.9	1412.2	1540.0	1707.8	1881.7	1956.5	1926.8
82.5°	517.6	524.5	573.6	624.6	684.5	769.2	852.4	1001.0	1128.8	1214.0	1168.4
85°	56.9	70.3	86.7	117.9	144.7	192.7	239.8	329.9	417.1	470.0	415.6
87.5°	9.9	11.4	16.3	20.8	23.3	26.8	32.2	45.1	61.4	53.0	54.0
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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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°	753.8	753.8	753.8	753.8	753.8	753.8	753.8	753.8
2.5°	753.8	753.8	754.9	754.4	754.4	754.9	755.9	755.3
5°	754.4	754.9	753.8	754.4	754.9	754.9	755.3	754.9
7.5°	753.4	753.4	753.4	753.8	754.4	753.8	754.4	754.4
10°	751.4	751.9	751.4	752.4	752.9	752.9	753.4	753.4
12.5°	749.9	749.9	749.9	750.9	751.4	751.4	751.9	751.4
15°	748.4	748.4	747.9	748.9	749.9	749.9	750.4	750.4
17.5°	747.9	747.9	747.4	748.4	749.4	749.4	749.9	749.9
20°	749.4	749.9	748.9	749.9	750.9	751.4	751.4	751.4
22.5°	755.3	754.9	753.4	753.8	754.4	754.4	754.4	754.4
25°	764.3	763.3	761.8	761.3	760.8	760.3	760.3	760.3
27.5°	779.6	778.1	775.7	775.1	774.7	773.7	773.7	773.7
30°	797.9	796.0	793.0	792.0	790.5	789.5	789.1	788.5
32.5°	824.2	820.3	816.8	814.3	812.8	809.8	809.3	808.4
35°	854.4	851.5	846.5	845.0	842.5	841.0	840.5	838.1
37.5°	896.0	892.6	888.1	887.1	886.6	885.1	885.1	884.6
40°	954.0	950.5	946.6	942.6	943.6	944.1	944.1	942.1
42.5°	1024.8	1019.3	1011.4	1013.9	1012.4	1010.5	1014.4	1011.9
45°	1105.6	1098.1	1092.2	1089.7	1089.7	1087.2	1091.2	1091.2
47.5°	1195.2	1183.3	1172.4	1172.9	1168.9	1169.9	1172.4	1175.9
50°	1289.8	1274.0	1263.5	1258.6	1254.7	1256.1	1260.6	1261.6
52.5°	1387.9	1368.5	1354.7	1347.2	1342.3	1344.3	1347.8	1350.7
55°	1489.9	1468.6	1447.8	1439.9	1433.9	1437.9	1438.4	1442.3
57.5°	1596.4	1567.2	1542.9	1531.0	1525.1	1529.0	1532.0	1536.0
60°	1703.9	1670.2	1641.5	1627.6	1619.2	1624.6	1631.6	1633.6
62.5°	1828.7	1782.1	1750.0	1730.2	1726.2	1731.6	1733.6	1739.5
65°	1976.3	1920.4	1875.8	1851.5	1850.5	1853.5	1857.9	1859.4
67.5°	2144.7	2082.3	2022.4	1998.1	1988.7	1997.6	2002.1	2008.0
70°	2382.5	2296.8	2210.1	2156.1	2133.3	2126.4	2128.4	2134.8
72.5°	2409.2	2317.1	2216.0	2142.7	2102.6	2084.3	2083.8	2084.8
75°	2350.7	2203.7	2132.3	2048.1	1991.2	1961.5	1957.5	1957.0
76°	2321.5	2147.7	2044.7	1977.8	1909.4	1879.2	1874.8	1872.3
77.5°	2198.2	2011.5	1856.5	1815.8	1750.4	1712.3	1720.2	1713.8
80°	1762.3	1577.1	1430.9	1316.5	1320.0	1292.3	1280.9	1277.4
82.5°	1038.7	886.6	725.2	630.5	540.4	516.6	444.8	428.5
85°	331.9	235.3	142.7	103.5	70.3	58.9	46.1	42.1
87.5°	44.1	34.7	28.3	27.2	24.8	21.3	13.9	9.9
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

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)