

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: P157766

Luminaire Tested: **VST-F02-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157766
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-F02-LED-E-U-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5358.1 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U1 - G2

Input Watts (W): 55
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

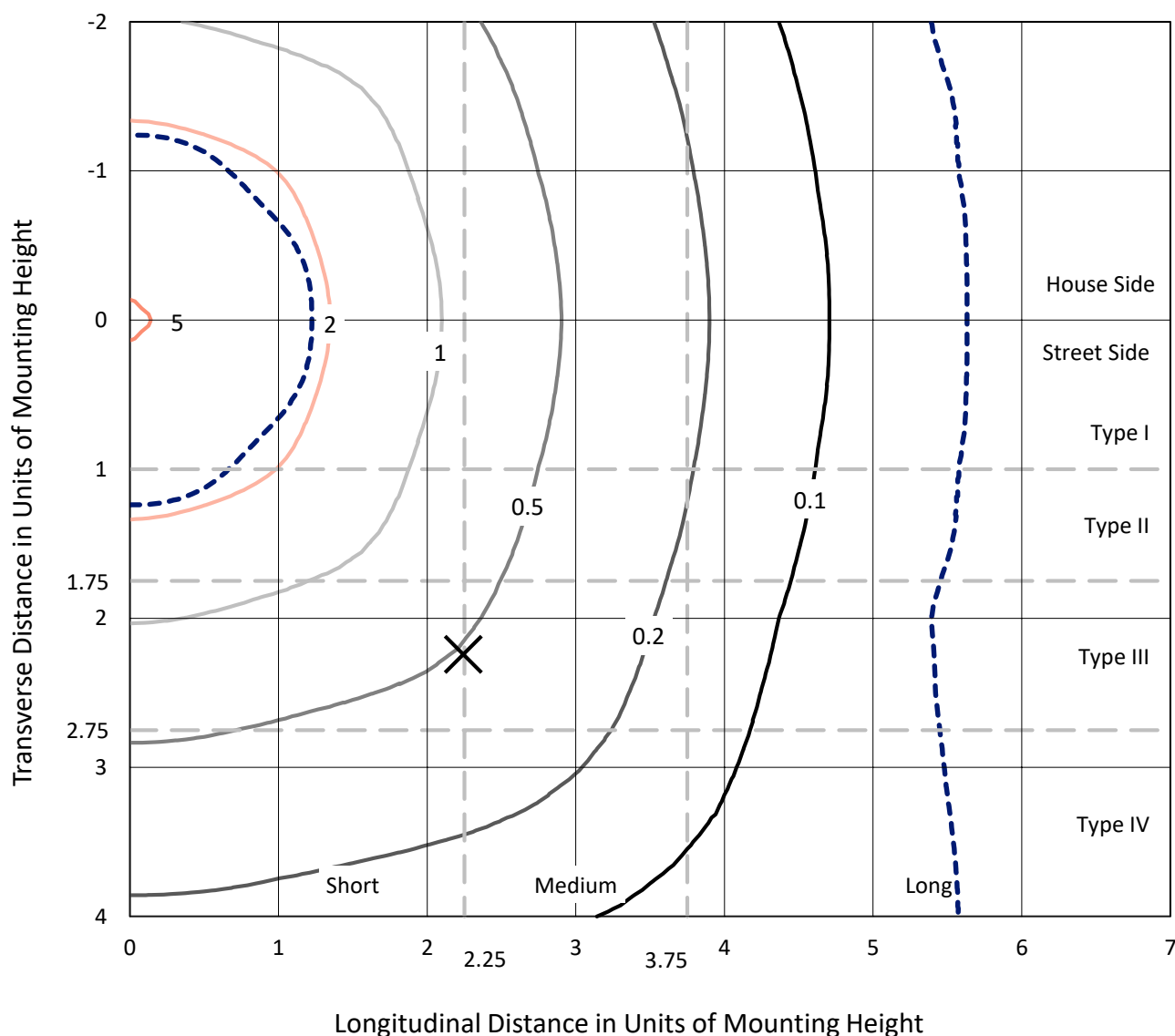


REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

Iso-Footcandle Lines of Horizontal Illumination

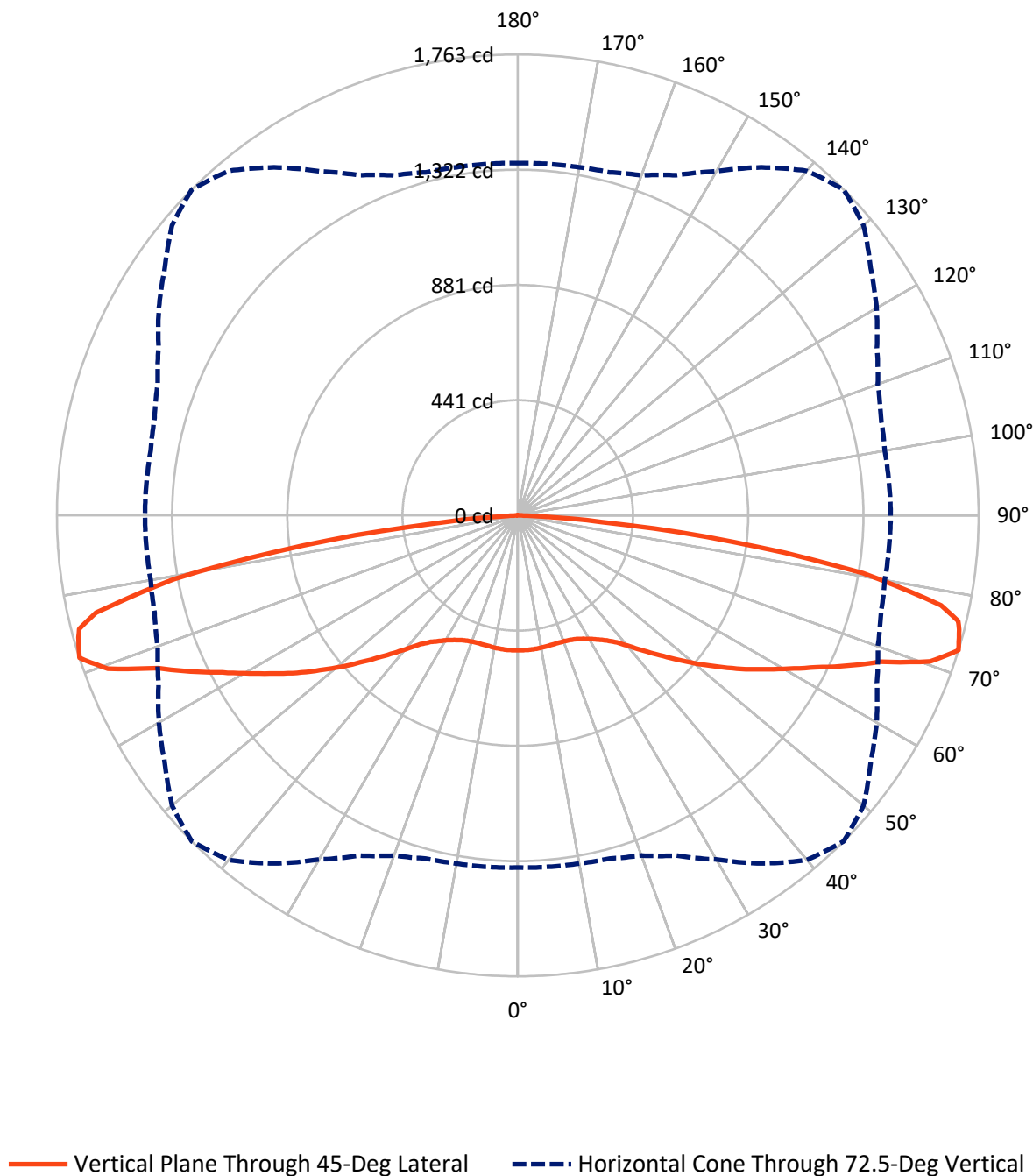
× Max cd
 - - - 1/2 Max cd



REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

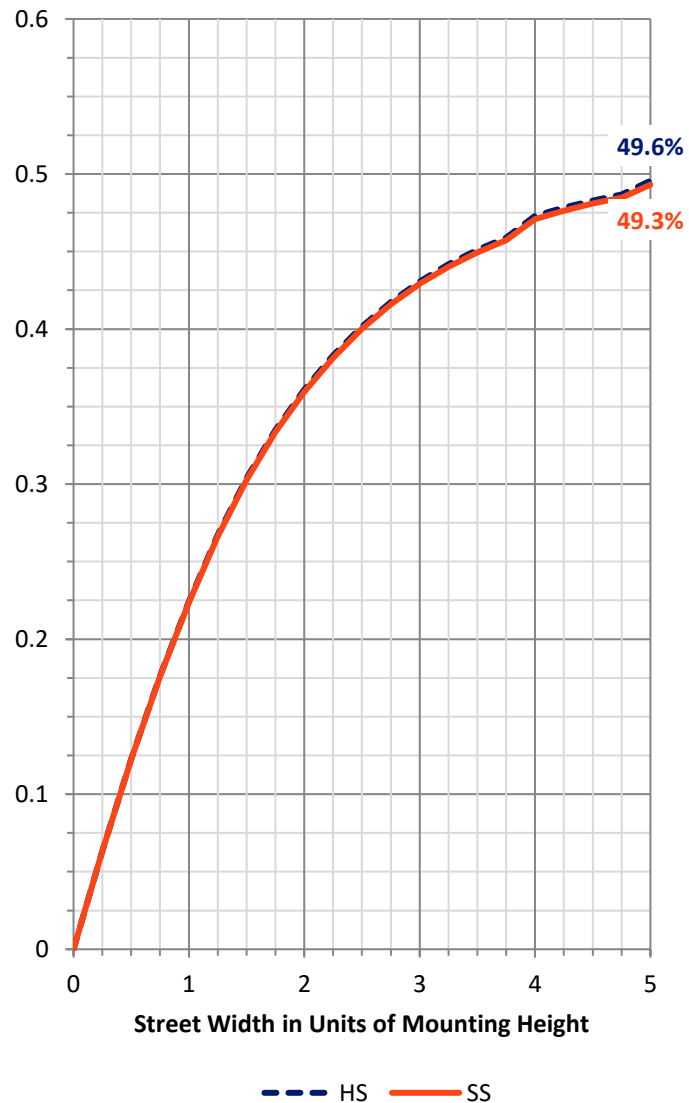
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2677.6	1.4	2679.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2677.6	1.4	2679.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	5355.3	2.9	5358.1
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.2	0.9
10°-20°	145.3	2.7
20°-30°	243.0	4.5
30°-40°	369.4	6.9
40°-50°	585.0	10.9
50°-60°	894.8	16.7
60°-70°	1280.7	23.9
70°-80°	1465.4	27.3
80°-90°	322.5	6.0
90°-100°	0.3	0.0
100°-110°	0.6	0.0
110°-120°	0.4	0.0
120°-130°	0.5	0.0
130°-140°	0.4	0.0
140°-150°	0.3	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	5355.3	99.9
0°-180°	5358.1	100.0

Coefficient of Utilization



REPORT NUMBER: P157766

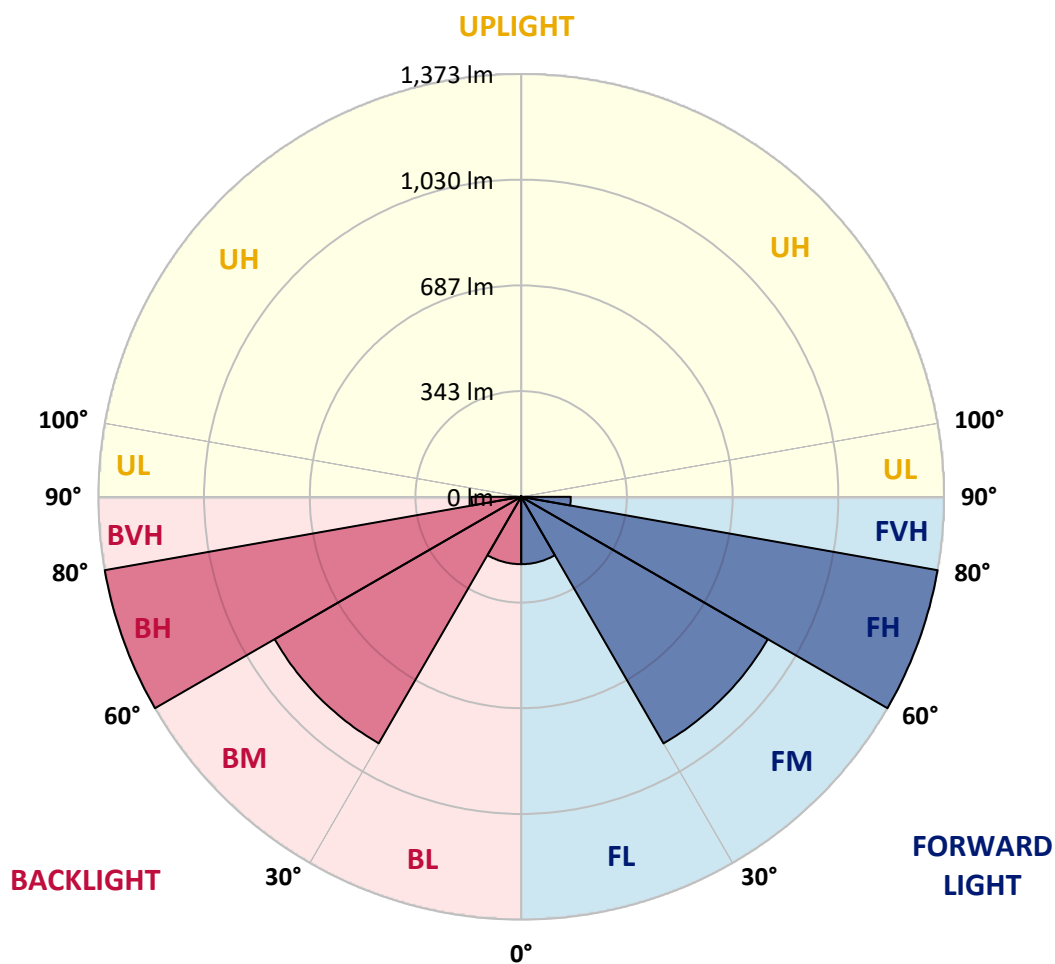
CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	218.8	4.1			
FM	(30°-60°)	924.6	17.3			
FH	(60°-80°)	1373.0	25.6			G1/1800
FVH	(80°-90°)	161.3	3.0			G2/225
BL	(0°-30°)	218.8	4.1	B1/500		
BM	(30°-60°)	924.6	17.3	B1/1000		
BH	(60°-80°)	1373.0	25.6	B3/2500		G1/1800
BVH	(80°-90°)	161.3	3.0			G2/225
UL	(90°-100°)	0.3	0.0		U1/10	
UH	(100°-180°)	1.4	0.0		U1/10	

BUG Rating: B3-U1-G2

Type V Short





REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7
2.5°	516.1	515.3	515.7	516.4	516.1	516.1	515.7	515.7	516.4	515.7	516.1
5°	516.4	515.7	516.1	516.4	516.1	516.4	516.1	516.1	516.1	515.7	516.4
7.5°	515.0	515.0	515.3	515.3	515.0	515.3	515.3	515.3	515.0	515.0	515.7
10°	514.3	514.0	514.0	514.3	514.0	514.0	514.3	514.3	513.7	513.7	514.3
12.5°	513.3	513.0	513.0	513.0	512.6	512.6	513.0	513.0	512.6	512.3	513.3
15°	512.6	512.3	512.3	512.3	511.6	512.0	512.0	512.0	511.6	511.3	512.3
17.5°	512.3	512.0	512.0	512.0	511.6	511.6	511.6	511.6	511.3	511.3	512.0
20°	513.0	513.0	513.0	513.0	512.6	512.6	512.6	513.0	513.0	513.0	513.7
22.5°	514.7	514.7	515.0	515.3	515.3	516.1	516.4	516.7	516.7	517.1	517.7
25°	519.1	519.1	519.4	519.8	520.8	521.5	522.8	523.5	523.9	523.9	524.2
27.5°	527.2	527.6	528.2	528.9	530.3	531.3	532.6	534.0	534.4	534.7	535.0
30°	537.4	537.7	539.1	539.8	541.4	543.5	545.2	546.5	547.6	548.2	547.9
32.5°	551.9	552.7	554.3	555.4	557.7	559.7	562.1	564.2	565.1	566.2	565.9
35°	572.3	574.0	575.7	576.7	579.1	580.7	583.8	585.8	587.9	587.2	587.5
37.5°	602.5	603.8	604.1	604.8	607.2	608.5	611.9	614.6	615.7	616.3	616.7
40°	643.1	643.1	644.8	643.4	646.5	646.8	650.9	654.6	655.6	658.3	656.3
42.5°	690.5	690.2	691.2	690.2	690.2	693.6	697.0	703.7	704.4	707.8	705.8
45°	742.0	742.0	741.0	741.4	742.0	745.7	749.8	757.3	760.7	762.7	761.3
47.5°	797.9	796.6	796.3	795.9	797.9	802.0	808.1	815.2	823.7	824.4	823.7
50°	854.5	854.2	851.8	853.9	855.2	857.2	868.7	878.2	887.0	892.5	890.8
52.5°	914.2	911.1	911.1	911.1	914.5	920.9	931.1	944.0	955.9	961.6	960.6
55°	974.5	973.4	970.4	969.1	973.4	982.6	997.2	1012.7	1028.3	1037.2	1033.8
57.5°	1029.7	1028.0	1028.3	1028.7	1033.8	1046.0	1062.9	1083.6	1100.5	1110.0	1107.7
60°	1073.1	1071.1	1074.8	1075.8	1084.9	1105.3	1132.4	1158.5	1180.8	1190.3	1186.6
62.5°	1122.2	1120.9	1123.2	1122.9	1132.7	1155.4	1191.7	1233.4	1267.2	1279.4	1274.0
65°	1201.5	1197.4	1196.4	1192.7	1199.1	1216.7	1253.0	1301.5	1355.6	1386.8	1379.4
67.5°	1296.4	1295.3	1292.0	1289.9	1292.3	1314.3	1349.2	1396.0	1451.2	1494.2	1503.7
70°	1359.1	1360.4	1363.8	1368.9	1388.5	1431.2	1494.9	1565.8	1641.7	1673.8	1668.1
72.5°	1347.2	1349.2	1351.9	1358.4	1384.1	1435.3	1519.3	1625.0	1720.3	1762.9	1726.3
75°	1289.2	1291.0	1297.0	1306.9	1338.4	1400.4	1490.9	1603.0	1701.2	1744.0	1705.7
76°	1235.7	1241.2	1252.3	1263.8	1301.8	1369.2	1465.8	1585.4	1689.4	1732.8	1695.8
77.5°	1114.4	1119.2	1128.3	1148.3	1191.3	1277.7	1390.6	1508.2	1616.6	1655.5	1624.4
80°	838.6	842.7	851.2	875.2	912.5	966.0	1053.4	1168.3	1287.2	1338.4	1318.0
82.5°	354.1	358.8	392.3	427.3	468.2	526.2	583.1	684.8	772.2	830.5	799.3
85°	38.9	48.1	59.3	80.6	98.9	131.8	164.0	225.7	285.3	321.5	284.3
87.5°	6.8	7.8	11.2	14.2	15.9	18.3	22.0	30.8	42.0	36.2	37.0
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.7	0.7	0.7
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
97.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
100°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7
102.5°	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.7
105°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
107.5°	0.4	0.4	0.4	0.4	0.7	0.7	0.4	0.4	0.4	0.7	0.4



REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
112.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
115°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
117.5°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
120°	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
122.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
125°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
127.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
130°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4
132.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
135°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4
137.5°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4
140°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4
142.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
145°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.0	0.4
147.5°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4
150°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.0	0.0	0.0
152.5°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.0	0.0
155°	0.7	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.0	0.4
157.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.0	0.0	0.0
160°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.0	0.0	0.0
162.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.0	0.0	0.0
165°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	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



REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	515.7	515.7	515.7	515.7	515.7	515.7	515.7	515.7
2.5°	515.7	515.7	516.4	516.1	516.1	516.4	517.1	516.7
5°	516.1	516.4	515.7	516.1	516.4	516.4	516.7	516.4
7.5°	515.3	515.3	515.3	515.7	516.1	515.7	516.1	516.1
10°	514.0	514.3	514.0	514.7	515.0	515.0	515.3	515.3
12.5°	513.0	513.0	513.0	513.7	514.0	514.0	514.3	514.0
15°	512.0	512.0	511.6	512.3	513.0	513.0	513.3	513.3
17.5°	511.6	511.6	511.3	512.0	512.6	512.6	513.0	513.0
20°	512.6	513.0	512.3	513.0	513.7	514.0	514.0	514.0
22.5°	516.7	516.4	515.3	515.7	516.1	516.1	516.1	516.1
25°	522.8	522.1	521.1	520.8	520.4	520.1	520.1	520.1
27.5°	533.3	532.3	530.6	530.3	529.9	529.3	529.3	529.3
30°	545.9	544.5	542.5	541.8	540.8	540.1	539.8	539.4
32.5°	563.8	561.1	558.7	557.0	556.0	554.0	553.6	553.0
35°	584.5	582.4	579.1	578.0	576.4	575.3	575.0	573.3
37.5°	613.0	610.6	607.5	606.8	606.5	605.5	605.5	605.2
40°	652.6	650.2	647.5	644.8	645.5	645.8	645.8	644.5
42.5°	701.0	697.3	691.9	693.6	692.6	691.2	693.9	692.2
45°	756.2	751.2	747.1	745.4	745.4	743.8	746.5	746.5
47.5°	817.6	809.5	802.0	802.4	799.6	800.3	802.0	804.4
50°	882.3	871.5	864.4	860.9	858.2	859.3	862.3	863.0
52.5°	949.4	936.2	926.7	921.6	918.2	919.6	922.0	924.0
55°	1019.2	1004.6	990.4	985.0	980.9	983.6	983.9	986.7
57.5°	1092.1	1072.1	1055.5	1047.3	1043.3	1046.0	1048.0	1050.7
60°	1165.6	1142.5	1122.9	1113.4	1107.7	1111.4	1116.1	1117.4
62.5°	1250.9	1219.1	1197.1	1183.6	1180.8	1184.6	1185.9	1190.0
65°	1351.9	1313.6	1283.2	1266.5	1265.9	1267.9	1271.0	1271.9
67.5°	1467.1	1424.5	1383.4	1366.9	1360.4	1366.5	1369.6	1373.6
70°	1629.8	1571.2	1511.9	1474.9	1459.3	1454.6	1456.0	1460.3
72.5°	1648.1	1585.0	1515.9	1465.8	1438.3	1425.8	1425.5	1426.1
75°	1608.1	1507.4	1458.7	1401.1	1362.1	1341.8	1339.1	1338.7
76°	1588.1	1469.2	1398.7	1352.9	1306.2	1285.5	1282.5	1280.8
77.5°	1503.7	1376.0	1270.0	1242.2	1197.4	1171.3	1176.8	1172.3
80°	1205.6	1078.9	978.9	900.6	903.0	884.0	876.2	873.8
82.5°	710.5	606.5	496.0	431.3	369.7	353.4	304.3	293.1
85°	227.0	160.9	97.6	70.8	48.1	40.3	31.5	28.8
87.5°	30.2	23.7	19.3	18.7	16.9	14.6	9.5	6.8
90°	0.4	0.4	0.4	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°	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
97.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
100°	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
102.5°	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4
105°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
107.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



REPORT NUMBER: P157766

CATALOG NUMBER: VST-F02-LED-E-U-5XQ-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7
112.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
115°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.7
117.5°	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7
120°	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7
122.5°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
125°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
127.5°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
130°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
132.5°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
135°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
137.5°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
140°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
142.5°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
145°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
147.5°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
150°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
152.5°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
155°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
157.5°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
160°	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7
162.5°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
165°	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7
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)