

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: P158444

Luminaire Tested: **VST-F04-LED-E-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158444
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F04-LED-E-U-SL3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9098.8 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 102.2
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



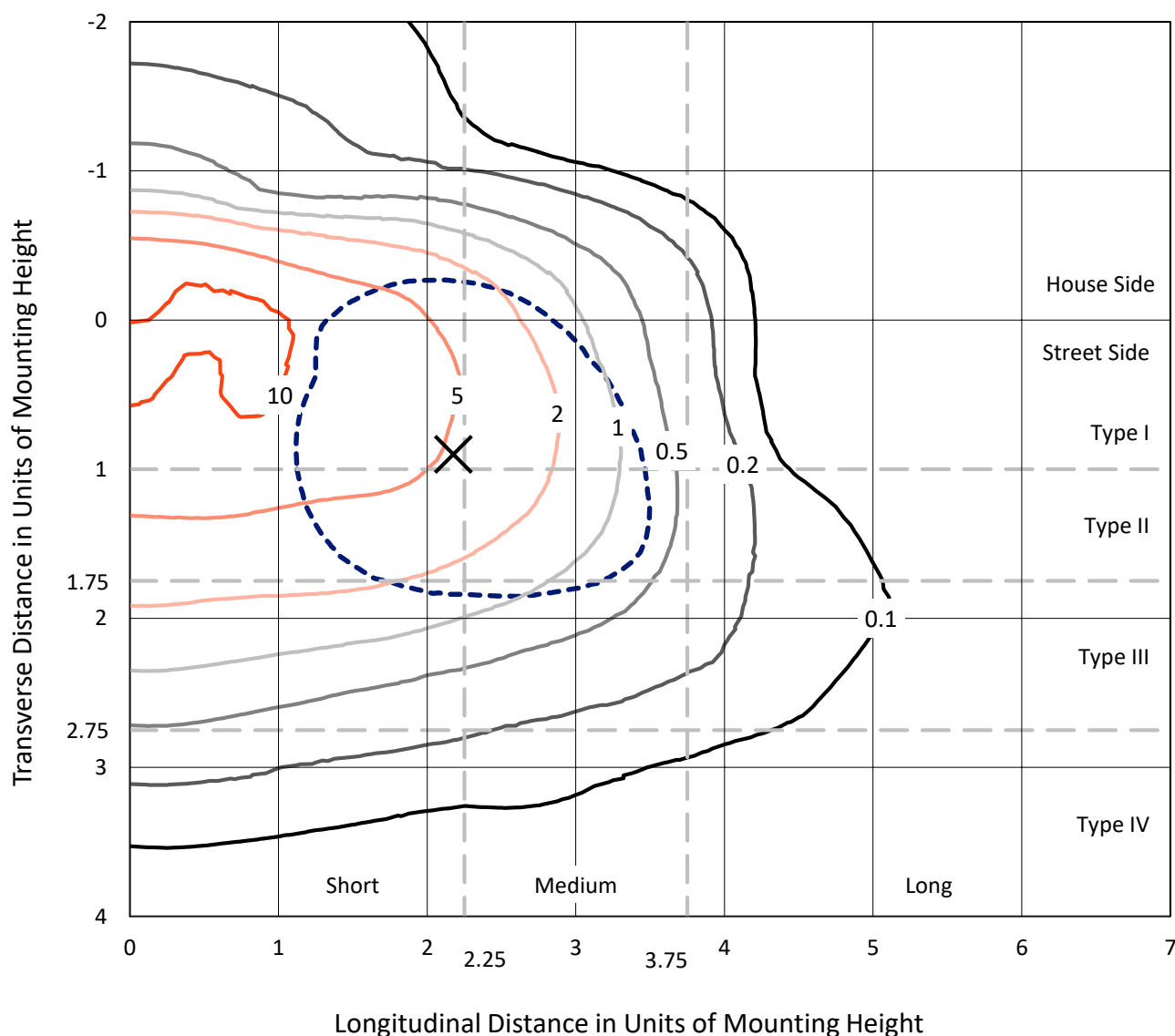
REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

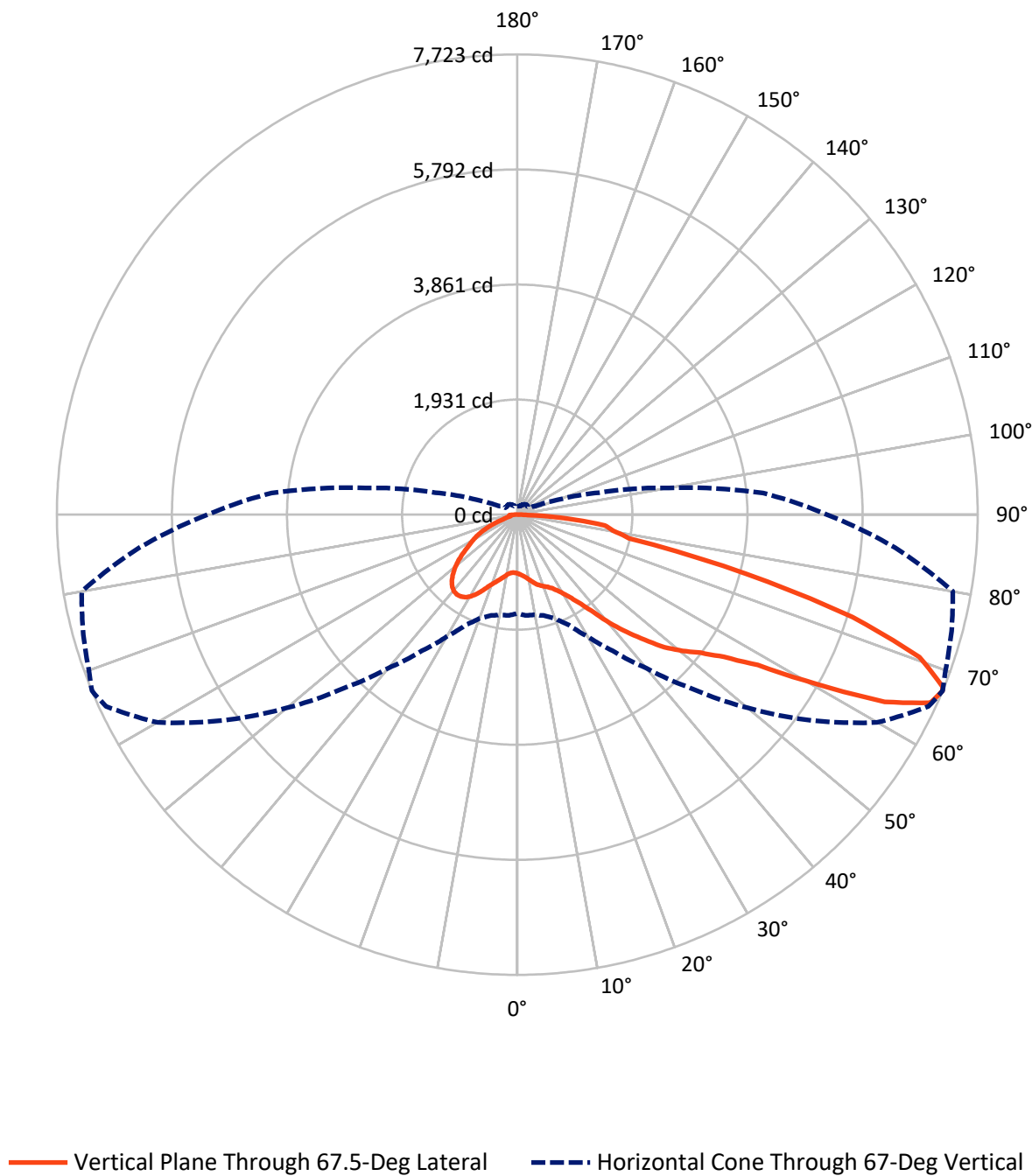


Based on 10 foot mounting height. Maximum calculated value = 12.4 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

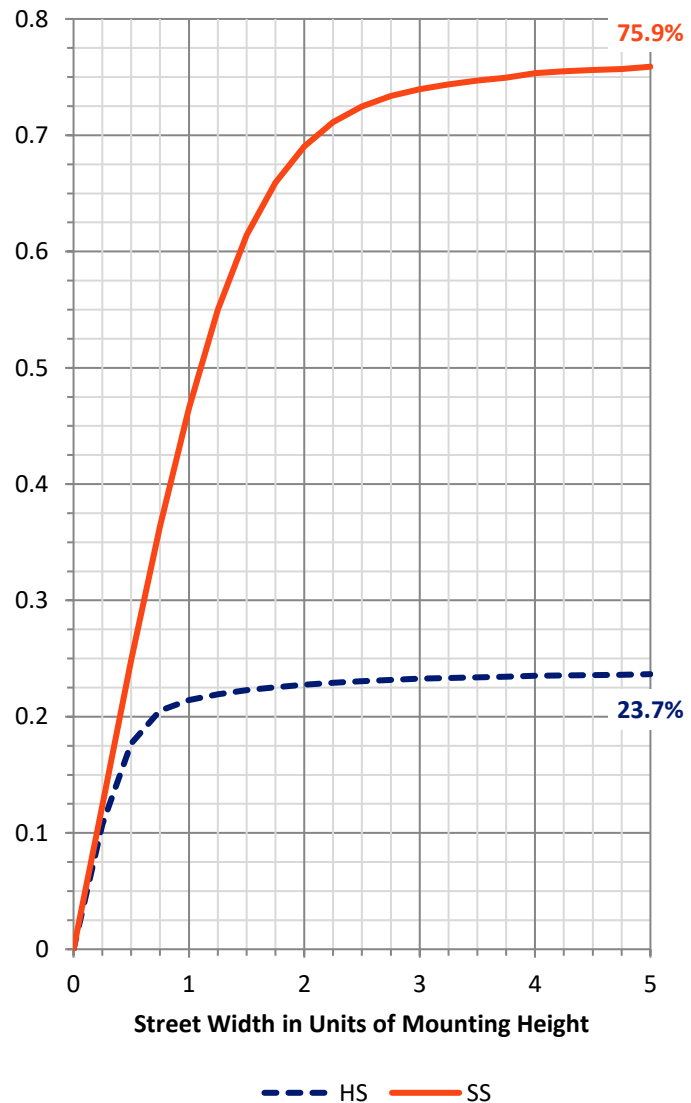
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2182.8	0.0	2182.8
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	6916.0	0.0	6916.0
	% Fixture	76.0	0.0	76.0
Total	Lumens	9098.8	0.0	9098.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.0	1.1
10°-20°	333.9	3.7
20°-30°	596.2	6.6
30°-40°	873.8	9.6
40°-50°	1350.1	14.8
50°-60°	1966.0	21.6
60°-70°	2561.0	28.1
70°-80°	1146.4	12.6
80°-90°	173.3	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9098.8	100.0
0°-180°	9098.8	100.0

Coefficient of Utilization



REPORT NUMBER: P158444

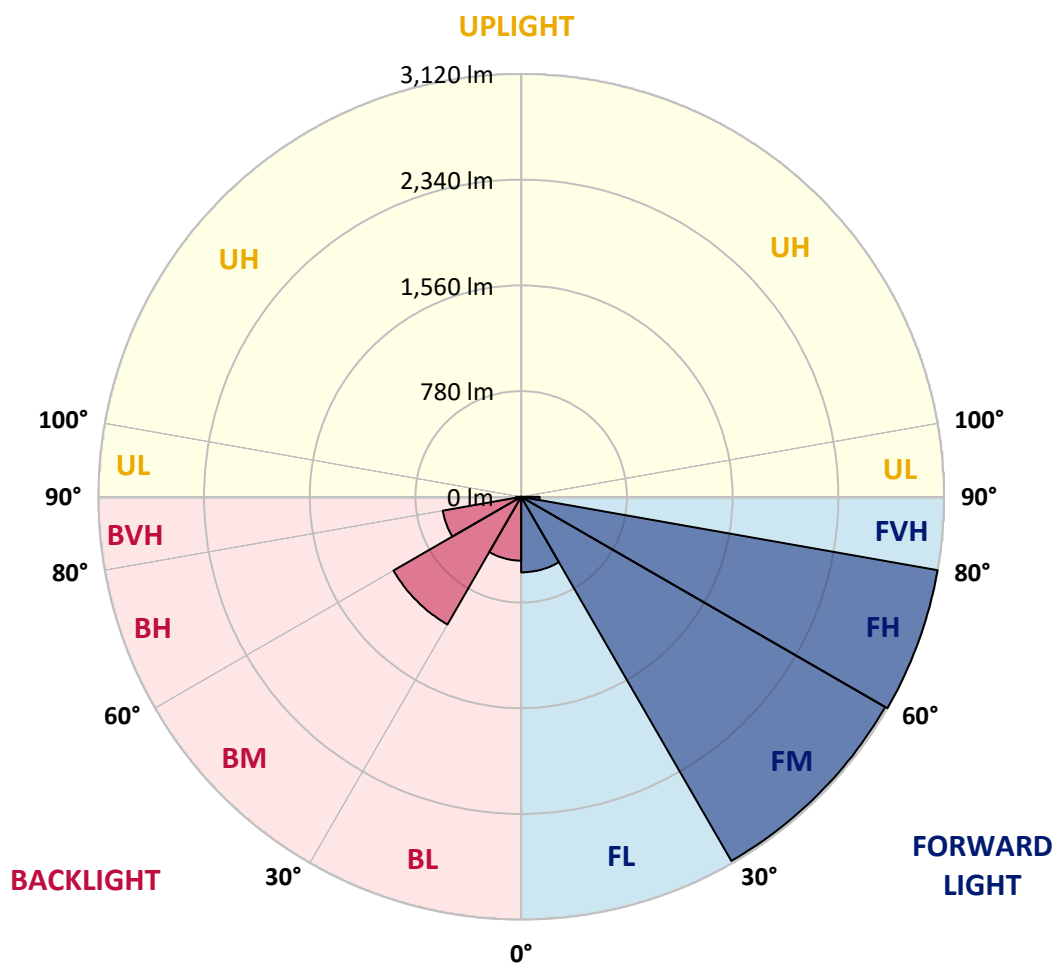
CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	557.5	6.1			
FM	(30°-60°)	3102.2	34.1			
FH	(60°-80°)	3120.2	34.3			G2/5000
FVH	(80°-90°)	136.1	1.5			G2/225
BL	(0°-30°)	470.7	5.2	B1/500		
BM	(30°-60°)	1087.7	12.0	B2/2500		
BH	(60°-80°)	587.3	6.5	B2/1000		G2/1000
BVH	(80°-90°)	37.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2
2.5°	1024.8	1027.2	1027.8	1027.2	1027.8	1025.4	1024.8	1021.2	1023.0	1018.2	1017.0
5°	1080.3	1082.1	1083.3	1078.5	1079.7	1077.3	1074.3	1070.7	1065.8	1059.2	1055.0
7.5°	1134.6	1137.6	1137.0	1135.2	1131.0	1128.6	1122.5	1117.1	1108.7	1100.8	1095.4
10°	1207.6	1207.0	1207.0	1196.7	1190.7	1185.3	1174.4	1166.0	1157.5	1146.1	1140.0
12.5°	1292.0	1287.8	1286.0	1278.8	1266.1	1256.5	1240.8	1224.5	1209.4	1197.3	1187.7
15°	1373.5	1373.5	1368.6	1357.2	1345.1	1332.5	1310.1	1286.6	1261.9	1242.6	1232.9
17.5°	1447.7	1441.0	1436.8	1421.7	1409.1	1388.6	1363.8	1338.5	1307.7	1280.6	1261.9
20°	1502.0	1496.5	1487.5	1468.8	1447.1	1422.9	1394.0	1364.4	1331.3	1301.7	1280.6
22.5°	1533.3	1526.7	1512.8	1488.1	1458.5	1424.7	1391.0	1363.2	1333.1	1310.7	1293.2
25°	1549.6	1543.0	1524.3	1491.7	1451.9	1407.3	1368.6	1341.5	1324.0	1318.6	1316.2
27.5°	1549.0	1543.6	1523.7	1486.3	1435.0	1383.7	1342.1	1319.2	1317.4	1338.5	1354.2
30°	1533.3	1529.7	1511.6	1474.2	1420.5	1366.8	1328.2	1316.2	1334.9	1379.5	1418.1
32.5°	1517.6	1515.8	1503.2	1469.4	1423.5	1378.3	1351.8	1353.0	1391.6	1460.3	1522.5
35°	1519.4	1521.9	1520.1	1502.0	1473.0	1449.5	1436.8	1463.4	1523.7	1606.9	1690.2
37.5°	1535.1	1544.2	1555.6	1557.4	1558.1	1554.4	1581.0	1637.1	1725.1	1833.7	1964.0
40°	1569.5	1579.8	1612.9	1641.9	1679.3	1723.9	1777.6	1855.4	1964.6	2098.5	2258.4
42.5°	1676.3	1690.8	1731.8	1785.5	1854.2	1924.2	2004.4	2110.6	2244.5	2385.6	2553.3
45°	1815.6	1845.8	1891.0	1950.7	2053.9	2152.2	2255.9	2374.8	2517.1	2693.9	2862.8
47.5°	1989.3	2019.5	2085.2	2149.2	2271.0	2393.5	2506.9	2631.1	2785.6	2966.5	3153.5
50°	2141.3	2175.7	2234.2	2320.5	2461.6	2611.8	2737.3	2871.8	3001.5	3192.1	3380.9
52.5°	2260.8	2285.5	2341.6	2420.6	2578.1	2742.7	2901.4	3051.0	3204.8	3395.4	3570.3
55°	2275.9	2298.8	2353.7	2444.1	2604.0	2786.8	2969.5	3146.9	3364.6	3572.7	3804.3
57.5°	2210.7	2229.4	2284.9	2365.7	2521.4	2729.5	2960.5	3187.9	3466.6	3747.6	4030.5
60°	2118.4	2137.1	2180.5	2245.1	2385.6	2610.0	2879.7	3190.9	3561.3	3967.2	4383.4
62.5°	2017.1	2033.4	2068.4	2114.2	2237.9	2444.7	2753.6	3171.0	3638.5	4185.6	4827.4
65°	1846.4	1885.6	1900.7	1947.7	2071.4	2266.8	2581.1	3036.5	3607.1	4282.7	5106.0
67°	1657.6	1697.4	1705.2	1752.9	1851.8	2039.4	2359.1	2787.4	3358.6	4115.0	5044.5
67.5°	1597.3	1631.0	1643.1	1690.8	1784.3	1961.0	2264.4	2697.5	3282.6	4023.3	4970.3
70°	1174.4	1211.8	1225.1	1245.0	1311.9	1459.1	1660.0	2035.8	2617.3	3283.2	4192.8
72.5°	628.5	658.7	671.4	700.9	735.3	815.5	969.3	1239.0	1606.3	2196.8	2982.8
75°	425.3	437.3	446.4	466.9	502.5	566.4	634.0	728.7	950.6	1239.6	1697.4
77.5°	242.5	247.9	249.1	252.7	281.1	342.0	453.0	613.4	786.6	898.2	1085.8
80°	105.0	115.8	124.3	118.8	117.0	129.7	162.3	241.9	474.1	752.8	893.3
82.5°	56.7	61.5	68.8	69.4	73.0	77.2	83.8	99.5	139.9	282.3	615.9
85°	29.6	30.8	41.0	47.0	50.1	52.5	53.7	59.7	68.8	87.5	153.2
87.5°	4.2	6.0	7.2	9.7	10.9	11.5	13.3	16.9	19.9	24.1	41.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2
2.5°	1011.6	1010.4	1006.7	1004.3	1001.9	999.5	996.5	994.1	989.8	986.8	983.2
5°	1049.0	1041.7	1036.9	1030.3	1029.1	1021.2	1013.4	1009.7	1002.5	996.5	989.2
7.5°	1087.0	1078.5	1070.7	1065.2	1062.2	1051.4	1043.5	1034.5	1026.0	1018.2	1009.7
10°	1131.6	1123.1	1114.7	1111.1	1105.7	1095.4	1088.8	1077.3	1068.9	1059.2	1047.7
12.5°	1178.0	1172.0	1166.0	1161.1	1158.7	1153.9	1144.3	1134.6	1123.1	1113.5	1100.2
15°	1219.1	1214.8	1212.4	1211.2	1211.2	1208.2	1199.2	1190.1	1178.0	1167.2	1152.7
17.5°	1248.0	1246.2	1248.0	1249.8	1252.2	1249.8	1248.0	1237.8	1229.9	1216.6	1202.2
20°	1264.9	1268.5	1277.6	1283.6	1289.0	1293.2	1295.1	1286.6	1276.4	1266.7	1257.1
22.5°	1283.0	1293.2	1308.9	1318.0	1327.0	1342.1	1345.7	1339.7	1331.9	1325.8	1315.6
25°	1313.2	1328.2	1355.4	1369.9	1382.5	1404.8	1407.9	1409.1	1407.3	1402.4	1389.8
27.5°	1360.2	1389.8	1426.0	1444.7	1458.5	1487.5	1498.9	1498.9	1494.1	1499.5	1499.5
30°	1442.2	1481.4	1528.5	1539.4	1561.1	1586.4	1605.1	1607.5	1608.1	1619.6	1636.5
32.5°	1568.3	1605.7	1658.2	1670.2	1688.9	1713.1	1734.2	1731.8	1737.2	1761.9	1784.3
35°	1751.7	1789.7	1824.1	1840.3	1848.8	1870.5	1878.3	1891.6	1907.9	1938.7	1935.7
37.5°	2023.1	2056.9	2061.7	2072.0	2061.7	2065.9	2072.0	2087.7	2131.1	2158.8	2114.2
40°	2350.0	2406.1	2400.7	2388.7	2365.7	2335.0	2345.8	2370.0	2417.0	2392.9	2272.8
42.5°	2658.3	2716.2	2705.3	2691.5	2640.8	2629.3	2628.1	2648.0	2673.4	2604.6	2397.1
45°	2961.7	3020.8	3002.1	2994.3	2960.5	2935.7	2956.3	2957.5	2950.8	2803.6	2505.7
47.5°	3274.7	3329.0	3317.0	3323.6	3288.6	3272.3	3274.1	3265.7	3203.6	2972.5	2590.1
50°	3527.5	3600.5	3607.7	3592.6	3573.9	3549.2	3612.5	3589.6	3451.5	3136.6	2671.5
52.5°	3724.1	3822.4	3859.8	3850.2	3835.1	3838.1	3957.0	3982.9	3754.3	3343.5	2761.4
55°	3957.0	4112.0	4172.9	4209.1	4193.4	4253.7	4525.8	4539.0	4175.3	3613.7	2878.4
57.5°	4292.9	4514.9	4707.3	4758.6	4808.1	5004.1	5445.6	5311.1	4721.8	4022.7	3026.8
60°	4803.8	5290.0	5602.5	5766.5	5882.4	6156.2	6576.0	6235.2	5402.8	4509.5	3213.2
62.5°	5519.2	6229.8	6752.2	6916.8	6964.5	7121.9	7425.9	6773.9	5773.8	4727.8	3229.5
65°	6051.9	6904.2	7529.7	7614.1	7557.4	7560.4	7640.1	6745.5	5635.6	4537.2	2949.6
67°	6016.9	6971.1	7611.7	7722.7	7644.3	7541.1	7416.9	6361.3	5191.7	4137.9	2582.9
67.5°	5963.2	6906.6	7576.1	7693.1	7621.4	7503.7	7322.2	6212.3	5053.6	4013.7	2508.1
70°	5154.9	6091.7	6993.4	7158.1	7188.3	7080.9	6571.2	5238.1	4102.9	3265.1	1947.7
72.5°	4012.5	4846.7	5738.8	5881.8	5997.6	5688.1	4782.7	3618.0	2990.6	2353.1	1410.3
75°	2649.2	3497.9	3947.9	3969.0	3821.2	3248.2	2336.8	1812.0	1667.8	1383.1	872.8
77.5°	1417.5	2056.9	2069.6	1916.3	1846.4	1376.5	558.6	308.2	343.2	389.7	347.4
80°	1057.4	1310.1	1518.2	1632.2	1666.0	1180.5	288.9	163.5	143.0	130.3	128.5
82.5°	953.7	1265.5	1418.7	1480.8	1465.2	971.1	162.3	109.8	91.1	98.9	112.8
85°	374.0	675.6	888.5	860.2	722.6	361.9	88.7	59.1	59.1	85.7	111.0
87.5°	76.6	138.7	188.2	179.8	161.7	70.0	43.4	35.6	36.2	69.4	105.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2	986.2
2.5°	979.6	976.0	973.6	971.1	968.7	967.5	965.7	965.7	962.1	960.9	959.7
5°	983.8	977.8	973.6	968.1	963.9	960.3	955.5	954.3	950.0	947.0	945.8
7.5°	1001.9	992.9	983.8	977.2	971.1	963.3	957.9	953.0	948.8	945.8	942.2
10°	1036.3	1026.6	1014.0	1001.9	994.1	982.0	973.6	965.1	960.3	956.7	951.8
12.5°	1087.0	1073.1	1058.0	1043.5	1030.3	1014.6	1006.1	995.9	989.8	986.8	983.2
15°	1138.8	1123.8	1105.1	1091.2	1076.1	1064.0	1056.2	1047.1	1042.3	1038.7	1036.3
17.5°	1191.9	1174.4	1161.1	1147.3	1140.0	1131.0	1120.7	1109.3	1095.4	1087.0	1075.5
20°	1246.2	1232.9	1225.1	1217.2	1208.8	1196.1	1175.6	1152.1	1126.2	1101.4	1077.9
22.5°	1309.5	1301.7	1300.5	1293.2	1275.8	1245.6	1207.6	1163.6	1119.5	1078.5	1046.5
25°	1398.8	1398.8	1392.8	1363.2	1322.2	1267.9	1204.0	1140.6	1082.1	1026.0	983.8
27.5°	1511.0	1506.8	1477.2	1416.3	1342.7	1258.3	1172.6	1092.4	1017.6	956.1	901.8
30°	1634.7	1605.1	1541.8	1445.9	1335.5	1226.9	1121.9	1029.1	941.0	865.6	801.6
32.5°	1763.1	1691.4	1577.4	1445.9	1310.1	1179.8	1058.6	944.6	843.9	759.4	683.4
35°	1879.6	1748.7	1585.8	1422.3	1260.7	1110.5	969.9	840.9	720.2	629.1	545.9
37.5°	1985.1	1786.7	1576.8	1376.5	1188.9	1012.8	848.1	705.7	569.4	481.3	410.2
40°	2053.9	1794.5	1539.4	1304.7	1086.4	880.7	698.5	539.3	431.3	351.1	303.4
42.5°	2096.7	1779.4	1479.0	1206.4	948.2	714.8	524.2	386.6	306.4	261.8	243.7
45°	2120.8	1740.2	1389.8	1071.9	781.1	543.5	372.2	279.3	235.8	220.2	214.1
47.5°	2119.6	1676.9	1278.2	916.3	596.6	378.8	263.6	217.8	205.7	200.9	199.7
50°	2107.0	1599.1	1147.3	747.4	430.7	264.2	208.7	195.4	192.4	189.4	188.2
52.5°	2089.5	1502.6	1002.5	582.7	305.8	211.1	189.4	185.8	183.4	180.4	179.1
55°	2056.9	1383.7	845.7	438.5	239.5	190.6	182.8	181.6	178.5	174.3	171.9
57.5°	2017.1	1263.1	695.5	342.6	211.7	185.8	181.6	179.8	175.5	170.7	165.9
60°	2002.6	1163.6	577.9	288.9	205.1	187.6	184.6	182.2	176.1	168.9	163.5
62.5°	1912.1	1051.4	493.4	267.8	208.7	195.4	194.2	190.6	181.6	173.1	164.7
65°	1678.1	889.1	418.0	253.3	215.9	208.7	209.9	204.5	195.4	184.0	168.9
67°	1419.3	725.0	348.0	239.5	221.4	222.6	226.8	222.6	211.1	194.8	174.3
67.5°	1350.6	683.4	330.6	235.2	222.6	226.2	231.0	228.0	216.5	197.8	176.7
70°	1003.7	481.3	246.7	212.9	222.6	237.1	247.9	250.9	238.3	212.3	181.6
72.5°	706.9	310.6	189.4	184.6	202.1	221.4	241.9	252.1	237.7	209.3	174.9
75°	424.6	194.2	153.8	156.8	170.1	190.0	206.3	210.5	192.4	174.3	151.4
77.5°	196.6	129.1	120.6	124.9	137.5	146.6	146.6	138.1	124.3	113.4	108.6
80°	115.8	105.6	105.0	112.8	121.2	114.6	104.4	92.9	85.7	82.0	80.2
82.5°	108.6	112.8	120.0	121.8	115.2	98.9	86.3	74.8	71.2	69.4	67.6
85°	127.9	136.9	124.9	115.2	101.9	83.2	67.6	57.9	56.1	54.3	51.9
87.5°	118.2	112.8	98.3	84.4	70.0	50.7	36.8	33.2	35.6	35.0	33.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158444

CATALOG NUMBER: VST-F04-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	986.2	986.2	986.2	986.2	986.2
2.5°	960.3	960.3	957.9	956.7	959.7
5°	943.4	944.0	942.2	941.6	942.2
7.5°	939.8	939.2	938.0	936.8	938.0
10°	950.6	950.0	948.2	949.4	947.6
12.5°	983.2	986.8	986.2	987.4	989.8
15°	1036.3	1035.7	1033.9	1035.1	1036.9
17.5°	1066.4	1061.6	1057.4	1055.6	1055.6
20°	1059.2	1045.3	1038.1	1033.9	1032.7
22.5°	1016.4	996.5	981.4	977.8	974.8
25°	946.4	921.7	902.4	898.2	890.3
27.5°	865.0	831.8	808.9	804.1	799.8
30°	758.2	720.2	693.7	676.8	682.2
32.5°	627.9	591.7	561.0	533.8	529.6
35°	485.0	445.2	418.0	406.0	398.1
37.5°	361.9	328.7	310.6	299.2	299.8
40°	276.9	259.4	249.7	241.9	242.5
42.5°	231.0	223.2	220.8	217.2	215.3
45°	209.3	206.9	207.5	203.9	202.7
47.5°	197.2	195.4	196.0	193.6	193.0
50°	187.6	186.4	187.0	185.2	184.6
52.5°	177.9	178.5	177.9	176.7	176.7
55°	169.5	168.9	170.1	168.3	168.3
57.5°	162.9	162.3	162.3	161.7	161.7
60°	159.2	156.8	156.2	156.2	156.8
62.5°	157.4	153.2	152.6	152.6	153.2
65°	158.0	151.4	149.0	148.4	147.8
67°	158.6	149.0	144.2	141.8	141.1
67.5°	159.2	147.8	142.4	139.9	138.7
70°	155.6	139.3	131.5	127.3	126.1
72.5°	146.6	129.1	119.4	114.0	112.8
75°	130.3	117.0	108.6	102.5	100.1
77.5°	100.7	94.7	91.7	88.1	86.9
80°	78.4	75.4	74.2	71.8	71.2
82.5°	65.1	62.1	60.3	57.3	55.5
85°	50.7	47.0	45.8	43.4	42.2
87.5°	33.2	31.4	30.8	27.7	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)