

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: P159544

Luminaire Tested: **VST-F04-LED-E-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159544
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
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-T3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9223.9 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

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



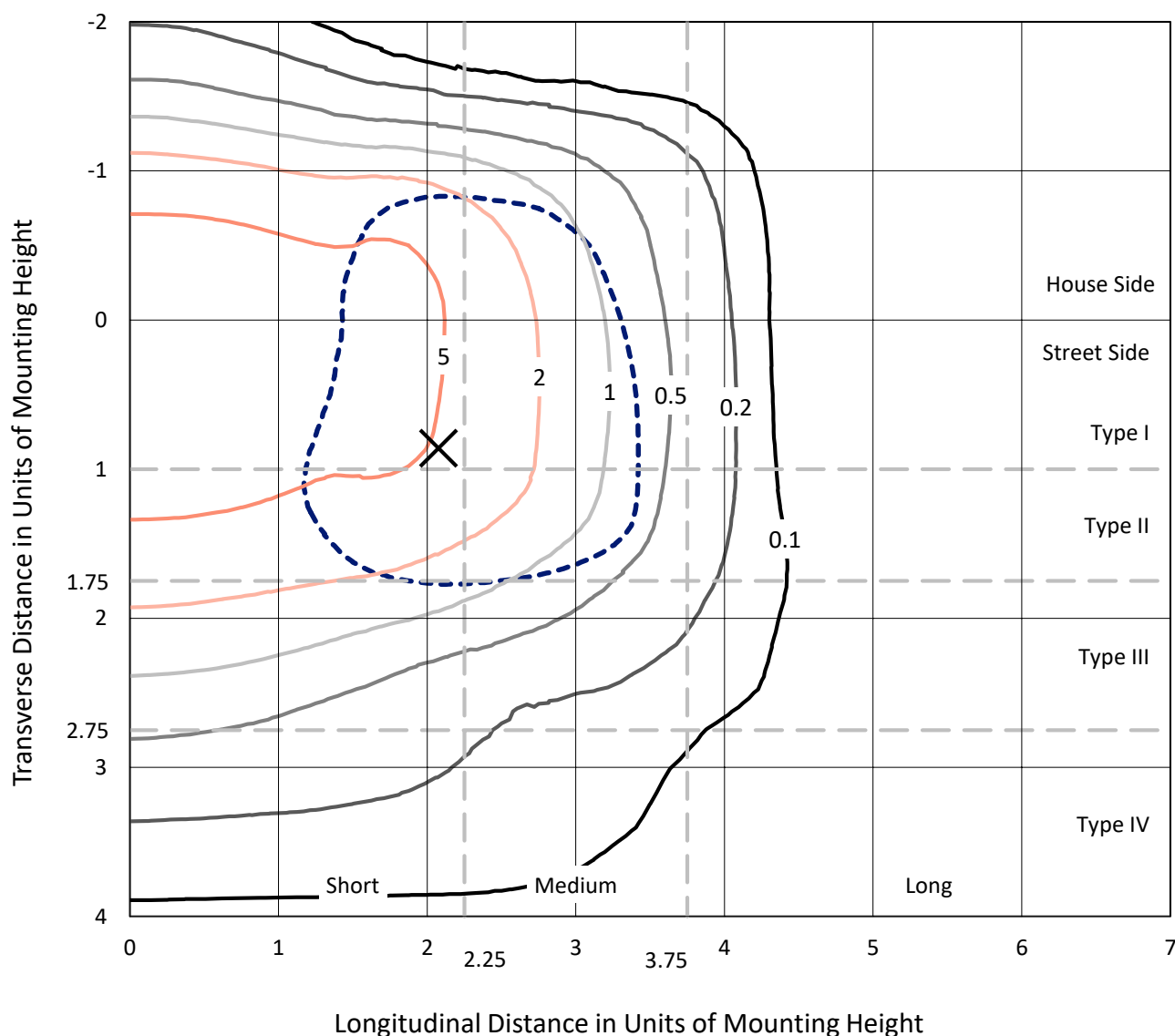
REPORT NUMBER: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

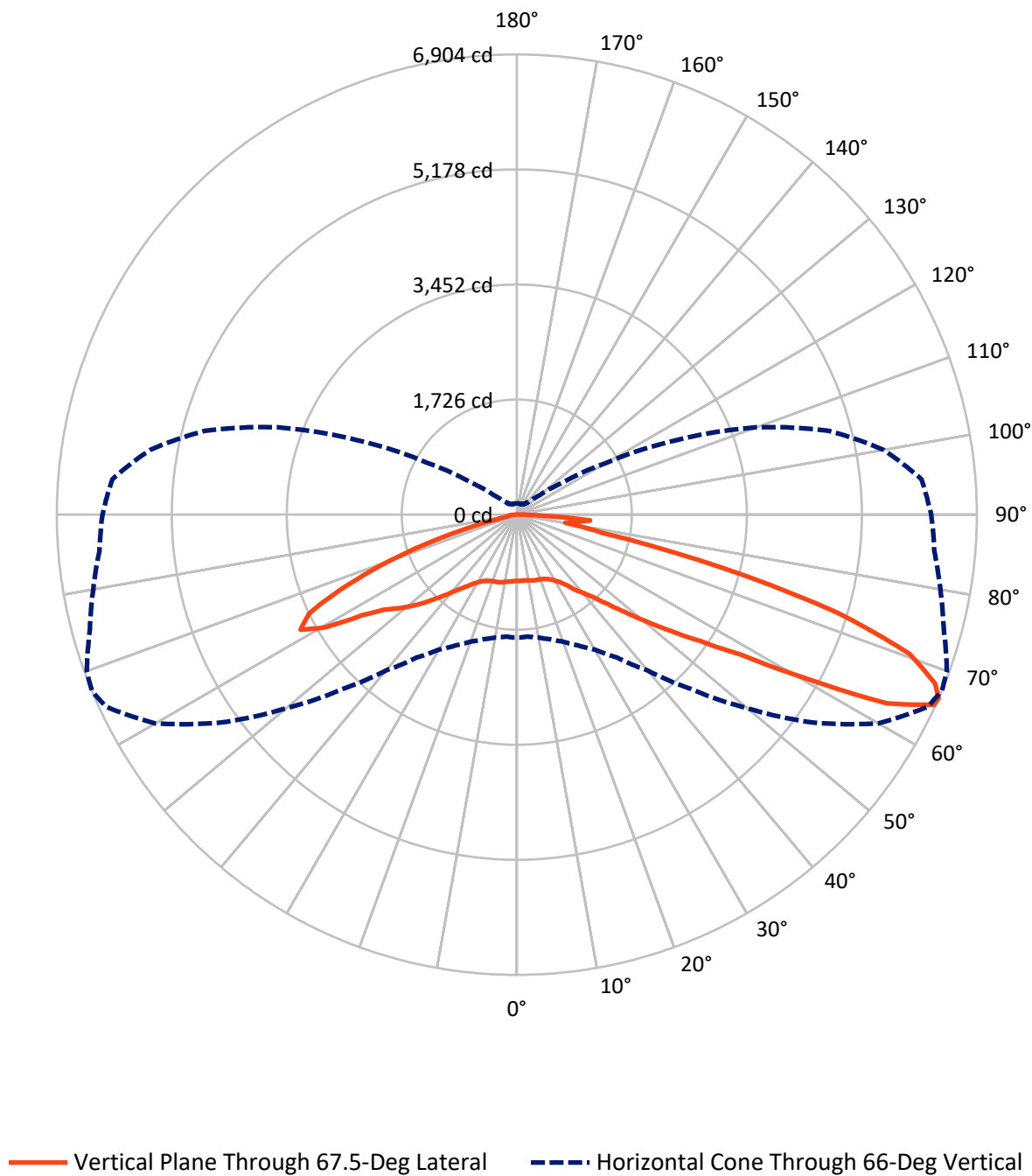


Based on 10 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

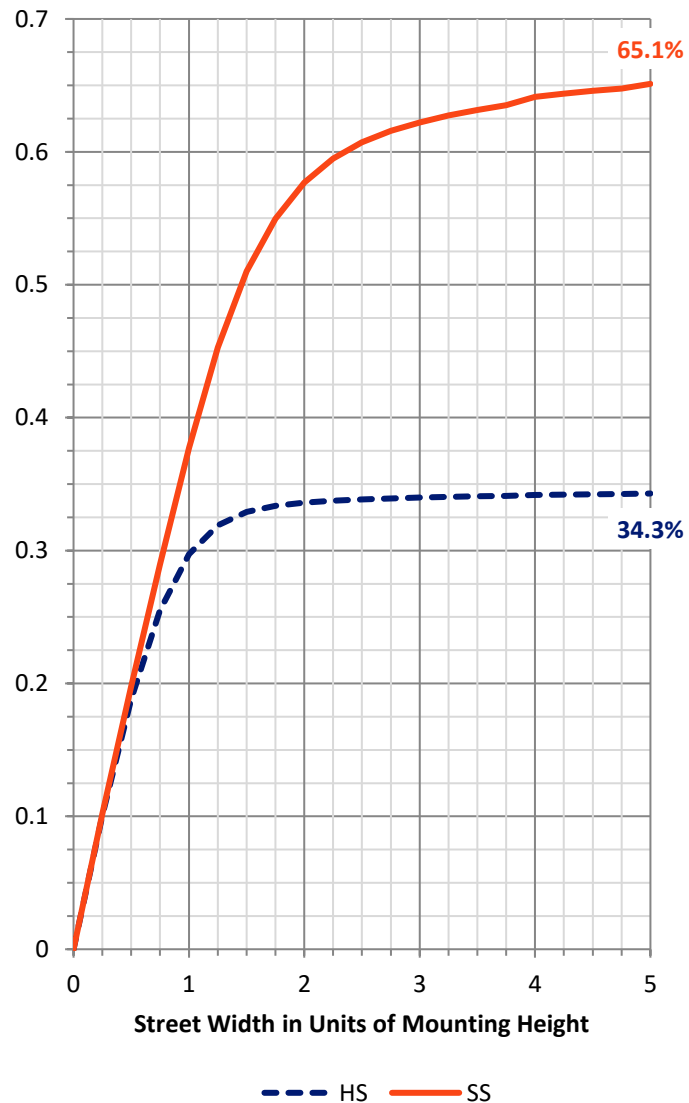
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3191.9	0.0	3191.9
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	6032.1	0.0	6032.1
	% Fixture	65.4	0.0	65.4
Total	Lumens	9223.9	0.0	9223.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	1.0
10°-20°	282.8	3.1
20°-30°	486.2	5.3
30°-40°	785.7	8.5
40°-50°	1302.1	14.1
50°-60°	2043.5	22.2
60°-70°	2793.9	30.3
70°-80°	1228.6	13.3
80°-90°	205.7	2.2
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°	9223.9	100.0
0°-180°	9223.9	100.0

Coefficient of Utilization



REPORT NUMBER: P159544

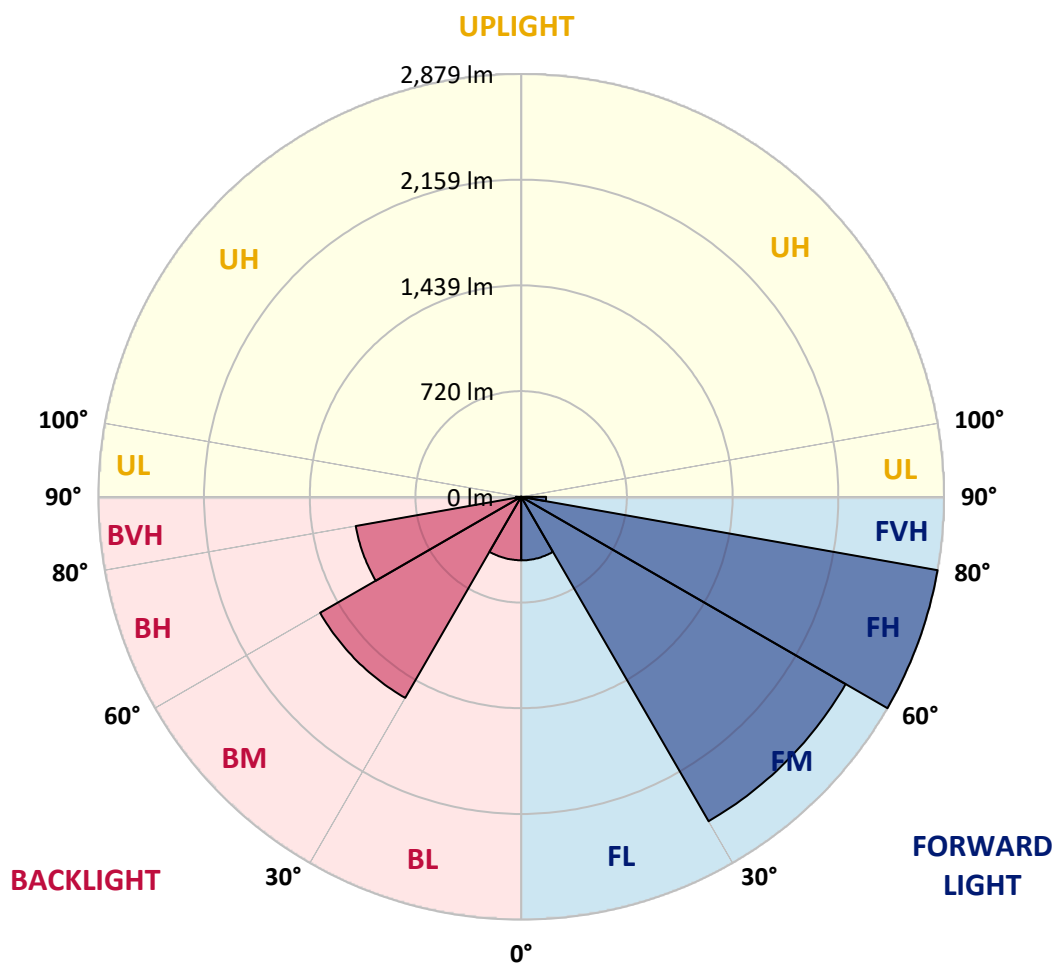
CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	432.7	4.7			
FM	(30°-60°)	2550.7	27.7			
FH	(60°-80°)	2879.0	31.2			G2/5000
FVH	(80°-90°)	169.7	1.8			G2/225
BL	(0°-30°)	431.8	4.7	B1/500		
BM	(30°-60°)	1580.6	17.1	B2/2500		
BH	(60°-80°)	1143.5	12.4	B3/2500		G3/2500
BVH	(80°-90°)	36.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3
2.5°	993.5	993.5	994.1	993.5	993.5	992.9	995.3	995.3	995.3	994.7	996.5
5°	991.0	991.0	991.7	991.7	992.3	991.7	993.5	994.1	994.1	994.1	995.9
7.5°	985.0	986.8	985.6	986.2	986.8	988.6	991.0	992.3	993.5	995.3	995.9
10°	972.3	975.4	974.8	976.6	977.2	982.6	984.4	986.8	991.0	993.5	995.3
12.5°	954.9	956.7	957.3	959.7	962.1	968.7	973.6	977.8	983.8	989.8	995.9
15°	941.0	942.2	942.2	944.6	948.2	954.3	960.3	967.5	976.6	986.8	996.5
17.5°	945.2	948.2	945.8	945.2	946.4	950.0	955.5	961.5	972.3	983.8	995.3
20°	973.0	973.6	972.3	969.3	966.9	967.5	967.5	968.7	975.4	984.4	993.5
22.5°	995.9	998.3	997.7	998.3	997.7	1000.1	998.9	996.5	994.1	994.7	998.9
25°	1015.8	1018.2	1018.2	1020.0	1023.0	1027.8	1031.5	1030.9	1027.2	1022.4	1020.6
27.5°	1048.4	1048.4	1048.4	1050.2	1054.4	1060.4	1066.4	1070.1	1073.1	1068.3	1058.0
30°	1099.6	1100.2	1098.4	1099.0	1102.0	1109.9	1117.1	1122.5	1128.6	1128.0	1114.7
32.5°	1155.7	1158.1	1157.5	1159.9	1164.2	1171.4	1179.2	1187.7	1195.5	1200.4	1191.9
35°	1228.1	1230.5	1231.1	1234.7	1239.6	1250.4	1261.3	1272.1	1280.6	1284.2	1282.4
37.5°	1346.9	1347.5	1345.1	1339.7	1341.5	1349.9	1362.6	1380.1	1385.5	1389.2	1397.6
40°	1524.9	1523.1	1513.4	1508.6	1505.6	1509.2	1506.8	1520.7	1533.3	1533.9	1533.3
42.5°	1740.8	1735.4	1726.3	1725.1	1723.9	1722.7	1716.1	1716.7	1728.2	1731.2	1727.5
45°	1955.6	1948.9	1942.3	1948.3	1941.1	1959.8	1965.2	1979.7	1981.5	1987.5	1978.5
47.5°	2131.7	2132.3	2132.3	2140.7	2155.2	2190.8	2222.8	2250.5	2260.8	2275.3	2277.1
50°	2265.0	2268.6	2280.1	2307.2	2338.0	2397.7	2451.4	2501.4	2546.7	2563.6	2608.2
52.5°	2342.8	2352.5	2376.6	2421.8	2476.7	2553.9	2638.4	2723.4	2801.8	2868.2	2921.3
55°	2328.9	2336.2	2378.4	2449.0	2534.6	2638.4	2756.6	2879.7	3002.1	3114.3	3201.2
57.5°	2239.7	2244.5	2286.7	2366.3	2473.1	2612.4	2779.5	2962.3	3134.2	3315.2	3463.5
60°	2122.6	2129.9	2169.1	2231.8	2343.4	2491.8	2685.4	2933.3	3207.8	3492.5	3770.0
62.5°	2047.8	2046.0	2080.4	2136.5	2220.4	2354.9	2541.3	2835.0	3215.0	3696.4	4244.7
65°	1923.6	1918.2	1953.7	2017.7	2108.8	2239.1	2415.8	2698.1	3139.0	3773.6	4551.1
66°	1846.4	1835.5	1871.1	1935.7	2026.7	2165.5	2335.0	2613.6	3046.7	3698.2	4518.5
67.5°	1711.3	1705.8	1722.7	1773.4	1841.0	1971.2	2148.0	2428.5	2828.4	3471.4	4279.7
70°	1391.0	1378.9	1392.2	1415.1	1441.0	1473.0	1581.6	1804.2	2142.5	2765.6	3447.9
72.5°	947.6	941.6	966.3	1001.3	1070.7	1103.2	1146.1	1182.3	1301.7	1743.2	2404.9
75°	720.8	724.4	755.8	813.7	903.0	999.5	1093.6	1128.0	1088.2	1053.8	1365.0
77.5°	404.1	425.3	463.3	536.8	631.5	767.9	931.9	1112.9	1203.4	1181.1	1104.4
80°	166.5	163.5	182.2	222.6	255.2	366.7	561.0	787.8	1042.3	1203.4	1178.0
82.5°	46.4	47.7	61.5	79.0	101.9	129.7	202.7	325.7	530.8	825.8	1080.9
85°	14.5	14.5	19.9	29.6	35.0	40.4	51.3	84.4	144.2	287.7	583.3
87.5°	3.0	3.0	4.2	8.4	9.0	9.0	11.5	15.7	13.9	12.7	56.7
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: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3
2.5°	994.7	993.5	994.1	994.7	994.1	994.1	993.5	992.9	993.5	993.5	995.3
5°	994.1	993.5	994.1	994.1	994.1	994.7	994.7	994.7	996.5	996.5	999.5
7.5°	995.3	995.3	996.5	996.5	996.5	996.5	997.1	998.3	1001.3	1000.7	1006.1
10°	997.7	998.9	1001.9	1002.5	1002.5	1004.3	1005.5	1007.9	1011.0	1012.2	1017.0
12.5°	1000.7	1006.7	1012.2	1013.4	1015.2	1018.2	1020.0	1021.2	1026.6	1028.4	1034.5
15°	1004.3	1012.8	1019.4	1021.8	1024.2	1027.8	1030.3	1032.1	1036.9	1039.3	1046.5
17.5°	1004.9	1014.6	1022.4	1026.0	1029.1	1033.3	1036.9	1040.5	1045.9	1049.6	1056.8
20°	1004.3	1017.0	1029.1	1033.9	1036.9	1044.7	1050.2	1055.0	1061.6	1065.2	1072.5
22.5°	1011.0	1025.4	1041.7	1047.7	1052.6	1063.4	1070.7	1078.5	1087.0	1089.4	1094.8
25°	1026.6	1041.7	1062.2	1070.7	1079.1	1093.6	1103.8	1115.3	1123.8	1125.0	1126.8
27.5°	1053.2	1067.1	1091.8	1104.4	1118.3	1138.8	1153.9	1165.4	1177.4	1177.4	1176.2
30°	1106.9	1109.9	1135.8	1152.1	1172.6	1202.8	1225.1	1237.8	1246.8	1246.8	1236.5
32.5°	1176.2	1172.6	1196.1	1213.6	1242.0	1284.2	1314.4	1324.0	1333.7	1330.6	1313.2
35°	1276.4	1266.1	1279.4	1305.9	1337.9	1395.8	1427.2	1448.9	1454.9	1446.5	1418.7
37.5°	1402.4	1401.2	1407.9	1437.4	1473.0	1547.8	1579.8	1593.6	1588.8	1573.7	1524.9
40°	1535.7	1532.1	1527.9	1547.8	1587.6	1677.5	1734.2	1741.4	1734.8	1712.5	1650.9
42.5°	1713.7	1713.7	1693.8	1699.2	1732.4	1833.1	1900.1	1923.0	1923.6	1891.0	1809.0
45°	1958.6	1956.2	1921.2	1912.7	1938.1	2037.0	2123.2	2135.9	2135.9	2093.1	2003.2
47.5°	2252.9	2249.9	2215.5	2186.0	2190.8	2297.6	2369.3	2388.7	2371.8	2339.8	2233.0
50°	2584.7	2579.3	2544.3	2516.5	2504.5	2612.4	2673.4	2682.4	2657.7	2619.7	2503.9
52.5°	2921.3	2937.6	2917.0	2902.0	2906.2	2976.2	3038.9	2996.1	2983.4	2942.4	2826.0
55°	3271.7	3321.8	3367.0	3353.8	3369.4	3437.6	3449.7	3393.0	3370.0	3340.5	3210.8
57.5°	3624.6	3770.6	3919.0	3960.6	3999.2	4096.9	4083.0	3990.1	4007.6	4051.7	3905.7
60°	4117.4	4539.0	4915.4	4984.8	5104.8	5188.1	5206.8	5188.7	5270.1	5247.2	5118.1
62.5°	4874.4	5577.1	6100.7	6231.0	6351.6	6347.4	6284.1	6218.9	6299.2	6299.2	5962.0
65°	5414.9	6212.3	6772.7	6880.6	6875.8	6730.4	6580.9	6450.6	6439.1	6349.8	5857.0
66°	5440.2	6261.2	6810.1	6904.2	6868.0	6633.9	6454.8	6289.5	6218.9	6094.7	5589.8
67.5°	5212.2	6123.0	6688.2	6770.3	6675.0	6339.6	6092.9	5871.5	5769.0	5559.6	5084.3
70°	4275.4	5262.3	6084.4	6252.1	6144.1	5719.5	5381.7	5082.5	4886.5	4584.3	4241.7
72.5°	3120.9	3885.2	4775.5	5048.1	5031.2	4640.4	4368.3	4094.5	3836.9	3561.9	3311.5
75°	2028.5	2527.4	3023.8	3183.1	3106.5	2880.3	2685.4	2525.6	2281.3	2090.1	2043.6
77.5°	1158.1	1415.1	1338.5	1318.6	1222.7	986.8	656.3	460.2	415.6	518.7	568.8
80°	1102.0	998.9	817.9	737.7	678.0	462.0	242.5	170.7	149.6	153.2	164.7
82.5°	1242.6	1295.1	1059.2	884.9	770.3	562.2	307.0	143.0	104.4	123.7	138.7
85°	931.3	1311.3	1299.9	1101.4	903.6	647.8	363.1	109.2	62.7	86.9	113.4
87.5°	188.8	310.6	299.2	263.0	223.8	156.2	60.9	34.4	31.4	42.8	65.1
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: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3	995.3
2.5°	996.5	996.5	997.7	999.5	1000.1	1000.1	1001.3	1000.1	1002.5	1003.1	1003.7
5°	1001.9	1003.7	1004.9	1007.9	1009.7	1011.0	1012.8	1011.6	1014.0	1014.6	1015.8
7.5°	1007.9	1011.0	1013.4	1014.6	1017.0	1017.0	1017.6	1016.4	1015.8	1014.0	1013.4
10°	1018.8	1020.6	1023.6	1022.4	1021.2	1017.0	1013.4	1007.9	1004.9	999.5	996.5
12.5°	1036.3	1037.5	1037.5	1032.1	1024.2	1014.6	1005.5	996.5	989.2	983.2	979.6
15°	1048.4	1050.8	1047.7	1039.9	1028.4	1015.2	1003.1	991.0	981.4	973.6	968.7
17.5°	1057.4	1056.8	1051.4	1040.5	1029.7	1018.2	1007.3	994.7	982.6	971.1	963.9
20°	1071.3	1065.2	1055.6	1044.1	1032.7	1023.0	1014.6	1002.5	989.8	974.2	963.3
22.5°	1090.0	1079.1	1065.2	1053.2	1042.3	1033.3	1023.6	1013.4	1000.1	982.6	967.5
25°	1116.5	1097.8	1082.1	1070.1	1060.4	1050.2	1039.3	1026.0	1012.8	994.7	976.6
27.5°	1156.9	1129.2	1109.3	1098.4	1089.4	1075.5	1061.6	1045.9	1029.1	1010.4	989.8
30°	1205.8	1172.6	1149.7	1140.0	1129.2	1113.5	1098.4	1076.7	1053.2	1030.9	1005.5
32.5°	1263.1	1229.3	1206.4	1199.2	1181.7	1163.6	1142.5	1113.5	1082.7	1049.6	1019.4
35°	1349.9	1307.1	1286.0	1269.1	1245.0	1223.3	1187.7	1149.7	1105.7	1061.6	1024.2
37.5°	1439.2	1395.8	1374.1	1350.6	1319.2	1279.4	1231.7	1177.4	1118.9	1064.6	1018.8
40°	1558.7	1511.6	1483.9	1447.7	1397.0	1334.9	1264.3	1190.1	1118.9	1051.4	995.9
42.5°	1698.0	1654.6	1611.7	1552.0	1470.6	1380.1	1281.2	1185.9	1099.6	1021.8	963.3
45°	1891.0	1816.8	1748.7	1652.8	1533.9	1406.7	1283.0	1166.0	1066.4	980.2	915.0
47.5°	2108.2	2012.3	1891.6	1741.4	1579.2	1416.9	1265.5	1128.6	1014.0	920.5	849.3
50°	2358.5	2211.3	2026.1	1812.0	1602.1	1403.0	1223.9	1065.8	941.6	834.2	758.2
52.5°	2645.0	2420.6	2148.0	1862.1	1598.5	1360.8	1155.1	983.2	844.5	730.5	655.7
55°	2962.9	2648.6	2264.4	1894.0	1565.9	1278.8	1047.1	866.8	723.8	611.6	545.9
57.5°	3523.3	3048.5	2486.4	1936.9	1497.7	1154.5	910.2	719.6	590.5	495.2	432.5
60°	4564.4	3747.6	2906.8	2037.6	1395.2	998.9	737.7	564.6	456.6	387.3	340.8
62.5°	5208.6	4239.9	3111.9	2023.1	1228.7	786.0	547.7	418.6	333.6	287.7	258.8
65°	5056.0	4046.8	2861.6	1737.8	956.1	557.4	362.5	273.9	229.2	205.7	191.8
66°	4848.5	3830.9	2649.8	1556.2	833.0	465.7	299.2	229.8	197.2	179.8	172.5
67.5°	4413.6	3436.4	2285.5	1246.2	624.3	346.8	220.8	180.4	160.4	151.4	146.6
70°	3694.0	2768.7	1616.6	735.9	338.4	188.2	141.1	125.5	120.6	117.6	115.8
72.5°	2856.1	2004.4	944.6	361.9	170.7	121.8	107.4	100.7	98.9	98.9	99.5
75°	1799.3	1152.1	422.8	174.3	115.8	98.3	91.7	88.7	89.3	89.9	89.3
77.5°	597.8	397.5	176.1	123.7	100.7	89.3	83.8	82.6	83.8	84.4	84.4
80°	171.9	150.2	127.3	109.2	92.3	83.2	78.4	77.8	80.8	81.4	80.2
82.5°	132.1	123.7	115.2	105.6	88.7	78.4	76.6	77.2	79.0	77.8	72.4
85°	121.2	120.0	86.3	85.7	77.2	74.8	73.0	73.6	71.8	65.1	59.1
87.5°	68.2	63.3	48.9	49.5	57.3	59.1	48.9	51.9	48.3	42.2	38.6
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: P159544

CATALOG NUMBER: VST-F04-LED-E-U-T3-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	995.3	995.3	995.3	995.3	995.3
2.5°	1004.9	1004.3	1004.3	1006.1	1003.7
5°	1016.4	1015.8	1015.8	1017.6	1015.8
7.5°	1011.0	1009.1	1007.9	1007.3	1007.3
10°	992.9	991.0	987.4	986.2	985.0
12.5°	974.2	972.3	968.1	968.1	966.9
15°	962.7	960.3	957.3	955.5	954.3
17.5°	956.7	953.0	949.4	947.6	946.4
20°	954.3	949.4	945.2	942.2	942.2
22.5°	954.9	948.8	944.0	940.4	939.2
25°	960.9	951.8	945.8	942.2	941.0
27.5°	969.3	958.5	950.6	945.8	944.0
30°	980.8	965.7	954.9	948.8	946.4
32.5°	988.6	967.5	953.7	945.2	942.2
35°	988.0	960.9	944.0	933.1	929.5
37.5°	977.2	945.2	922.9	909.6	903.6
40°	953.0	916.3	892.7	880.1	872.8
42.5°	918.1	878.3	857.1	843.3	835.4
45°	863.2	824.0	798.0	787.2	776.9
47.5°	787.2	747.4	725.0	709.4	702.7
50°	697.9	658.1	634.6	621.9	615.9
52.5°	600.2	562.2	545.3	533.2	524.8
55°	498.8	463.9	456.6	443.3	435.5
57.5°	403.5	383.0	376.4	363.1	356.5
60°	315.5	308.8	301.6	293.2	289.5
62.5°	244.3	238.3	236.5	231.0	230.4
65°	186.4	187.0	185.8	184.6	183.4
66°	169.5	168.9	169.5	168.3	167.7
67.5°	144.2	146.6	148.4	147.8	147.8
70°	117.0	118.8	121.2	120.6	120.6
72.5°	100.1	103.1	104.4	103.7	103.7
75°	90.5	93.5	93.5	92.3	91.7
77.5°	84.4	85.7	84.4	83.2	82.0
80°	78.4	77.2	75.4	73.6	72.4
82.5°	68.2	65.1	63.3	60.3	60.3
85°	54.9	52.5	48.3	45.2	42.2
87.5°	35.6	34.4	31.4	23.5	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)