

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: P159536

Luminaire Tested: **VST-F03-LED-E-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159536
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-F03-LED-E-U-T3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7772 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

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

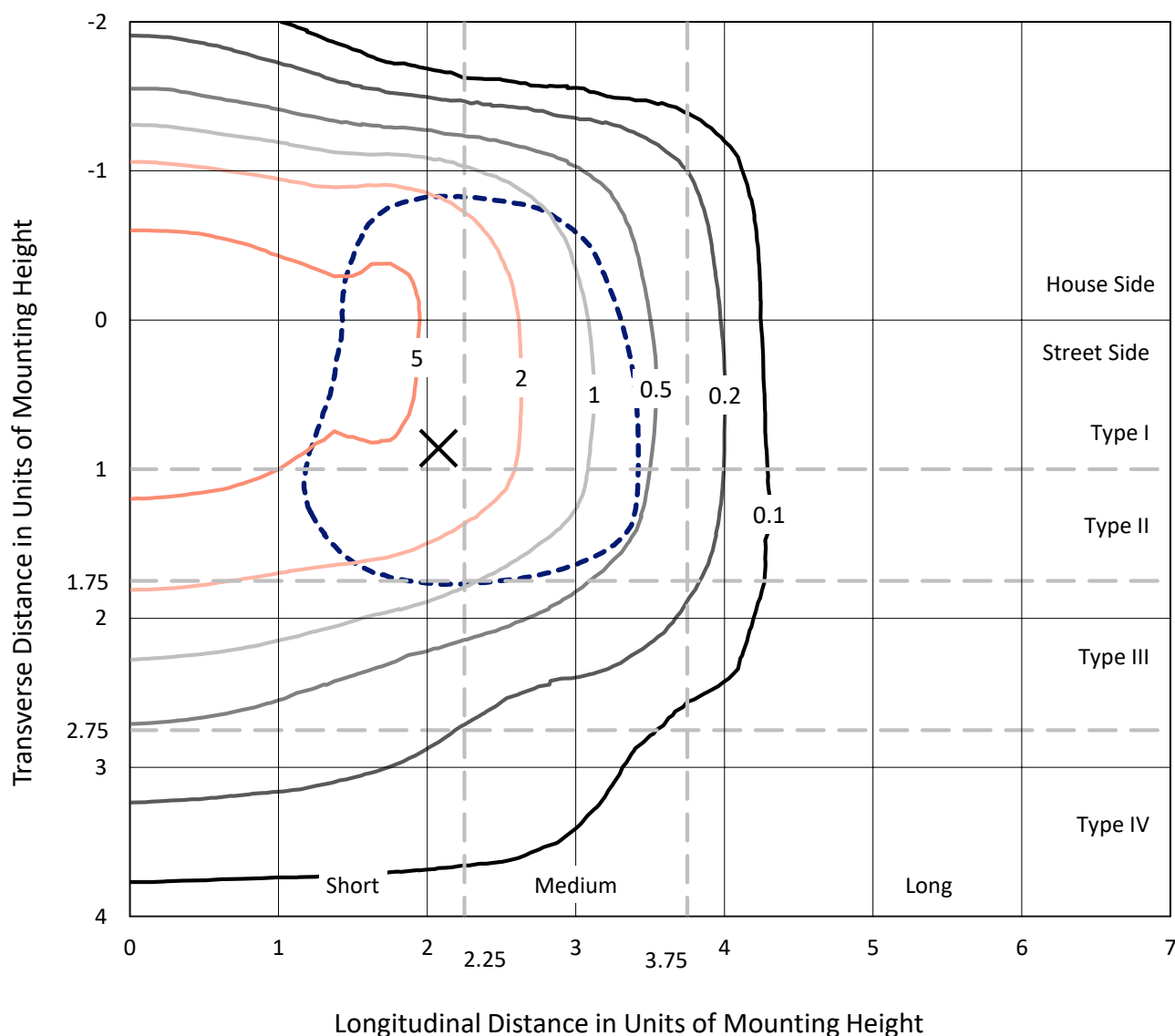


REPORT NUMBER: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

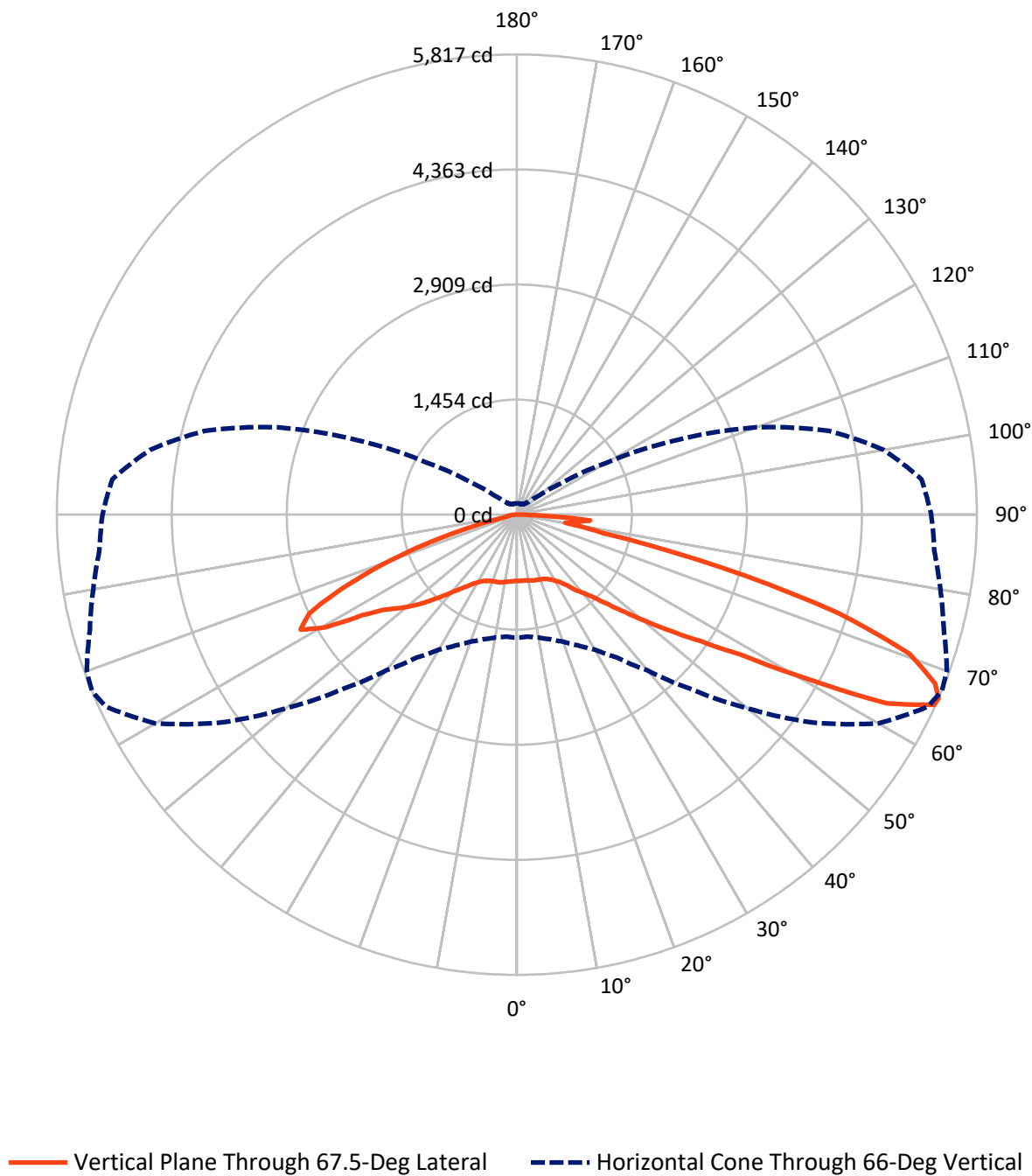


Based on 10 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

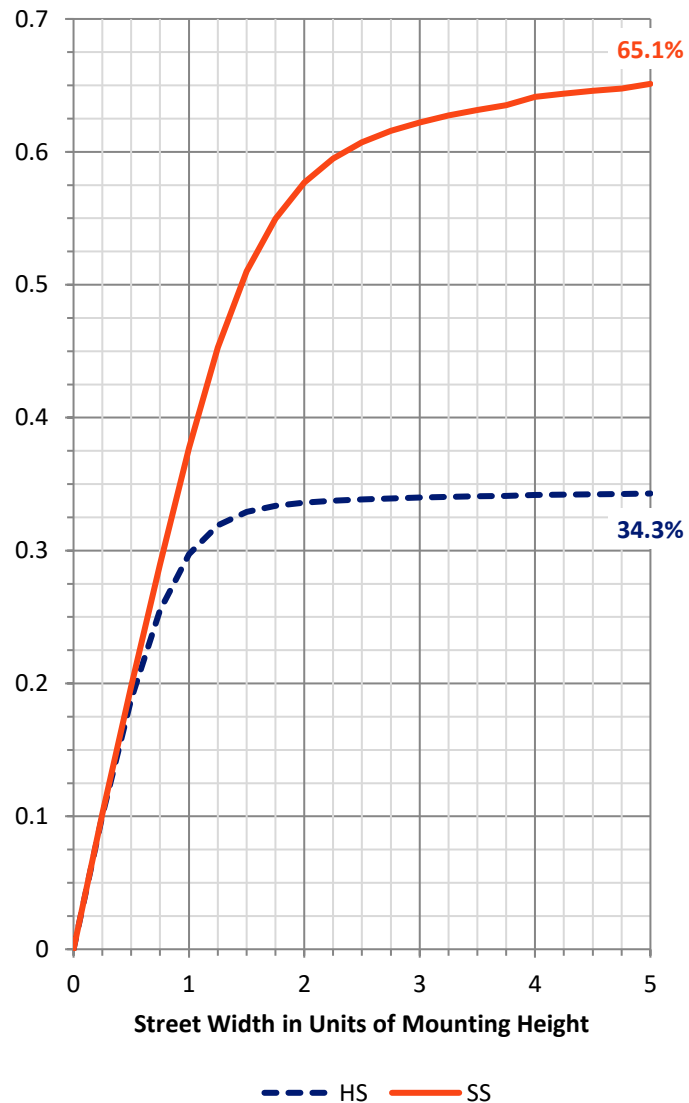
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2689.5	0.0	2689.5
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	5082.5	0.0	5082.5
	% Fixture	65.4	0.0	65.4
Total	Lumens	7772.0	0.0	7772.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.5	1.0
10°-20°	238.3	3.1
20°-30°	409.6	5.3
30°-40°	662.0	8.5
40°-50°	1097.1	14.1
50°-60°	1721.8	22.2
60°-70°	2354.1	30.3
70°-80°	1035.2	13.3
80°-90°	173.3	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°	7772.0	100.0
0°-180°	7772.0	100.0

Coefficient of Utilization



REPORT NUMBER: P159536

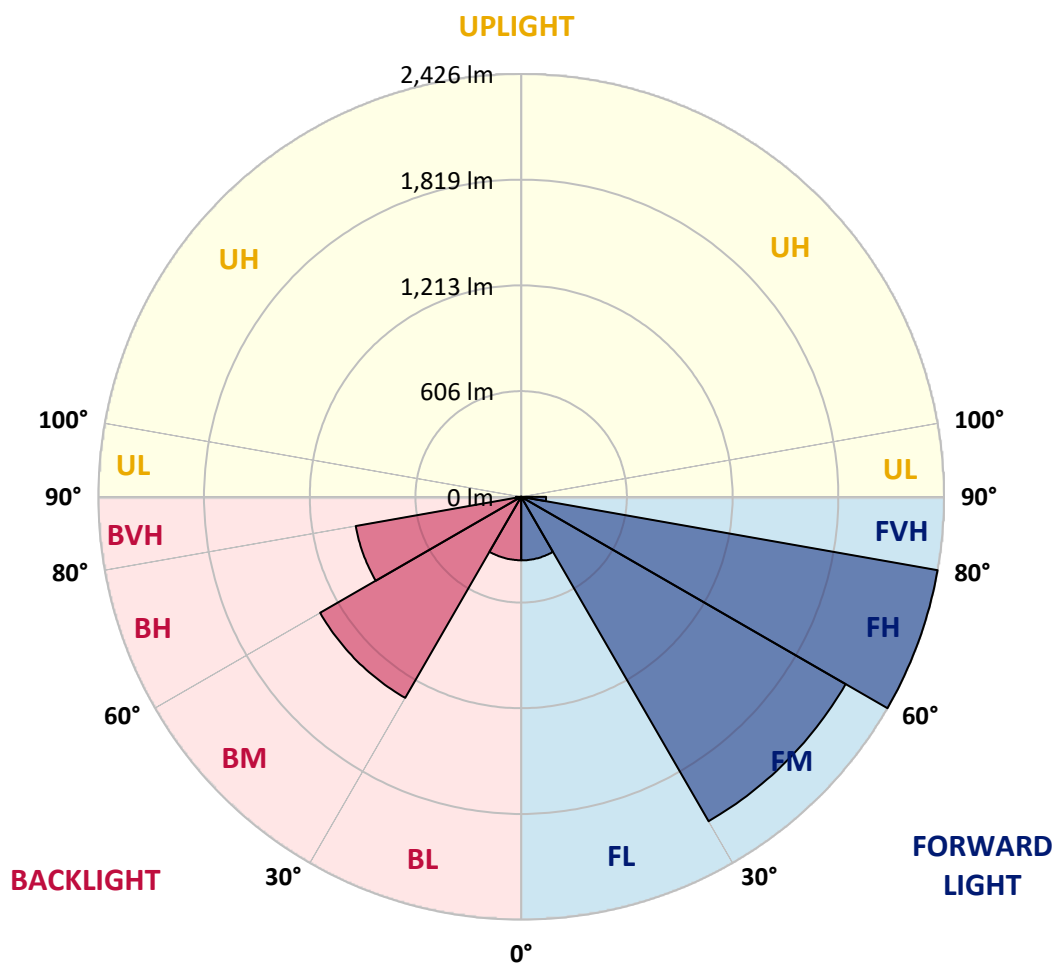
CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	364.6	4.7			
FM	(30°-60°)	2149.2	27.7			
FH	(60°-80°)	2425.8	31.2			G2/5000
FVH	(80°-90°)	143.0	1.8			G2/225
BL	(0°-30°)	363.8	4.7	B1/500		
BM	(30°-60°)	1331.8	17.1	B2/2500		
BH	(60°-80°)	963.5	12.4	B2/1000		G2/1000
BVH	(80°-90°)	30.3	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 II Short





REPORT NUMBER: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	837.1	837.1	837.6	837.1	837.1	836.6	838.6	838.6	838.6	838.1	839.6
5°	835.0	835.0	835.6	835.6	836.0	835.6	837.1	837.6	837.6	837.6	839.1
7.5°	830.0	831.5	830.5	831.0	831.5	833.0	835.0	836.0	837.1	838.6	839.1
10°	819.3	821.8	821.3	822.8	823.4	827.9	829.4	831.5	835.0	837.1	838.6
12.5°	804.5	806.1	806.6	808.6	810.7	816.2	820.3	823.9	829.0	834.1	839.1
15°	792.8	793.9	793.9	795.9	799.0	804.1	809.1	815.2	822.8	831.5	839.6
17.5°	796.4	799.0	796.9	796.4	797.5	800.5	805.1	810.1	819.3	829.0	838.6
20°	819.8	820.3	819.3	816.8	814.7	815.2	815.2	816.2	821.8	829.4	837.1
22.5°	839.1	841.1	840.7	841.1	840.7	842.7	841.7	839.6	837.6	838.1	841.7
25°	855.9	857.9	857.9	859.4	862.0	866.0	869.1	868.6	865.6	861.5	860.0
27.5°	883.3	883.3	883.3	884.9	888.4	893.5	898.6	901.6	904.1	900.1	891.5
30°	926.5	927.1	925.5	926.0	928.6	935.2	941.3	945.8	950.9	950.4	939.2
32.5°	973.8	975.8	975.3	977.3	980.9	987.0	993.6	1000.7	1007.3	1011.4	1004.3
35°	1034.8	1036.8	1037.3	1040.4	1044.4	1053.6	1062.7	1071.9	1079.0	1082.0	1080.5
37.5°	1134.9	1135.4	1133.4	1128.8	1130.3	1137.5	1148.1	1162.9	1167.4	1170.5	1177.6
40°	1284.8	1283.3	1275.2	1271.1	1268.6	1271.6	1269.6	1281.3	1292.0	1292.5	1292.0
42.5°	1466.8	1462.2	1454.6	1453.6	1452.5	1451.5	1445.9	1446.5	1456.1	1458.7	1455.6
45°	1647.7	1642.1	1636.6	1641.7	1635.5	1651.3	1655.9	1668.1	1669.6	1674.7	1667.0
47.5°	1796.2	1796.6	1796.6	1803.8	1816.0	1846.0	1872.9	1896.2	1904.9	1917.1	1918.6
50°	1908.5	1911.5	1921.1	1944.1	1970.0	2020.3	2065.5	2107.7	2145.8	2160.1	2197.7
52.5°	1974.0	1982.2	2002.5	2040.6	2086.9	2151.9	2223.1	2294.7	2360.8	2416.7	2461.4
55°	1962.4	1968.4	2004.0	2063.5	2135.6	2223.1	2322.7	2426.3	2529.5	2624.1	2697.2
57.5°	1887.1	1891.2	1926.8	1993.9	2083.8	2201.2	2342.0	2496.0	2640.8	2793.3	2918.3
60°	1788.5	1794.6	1827.7	1880.5	1974.5	2099.6	2262.7	2471.6	2702.8	2942.8	3176.5
62.5°	1725.5	1724.0	1753.0	1800.2	1870.9	1984.2	2141.2	2388.8	2708.9	3114.5	3576.5
65°	1620.8	1616.2	1646.2	1700.1	1776.8	1886.6	2035.5	2273.4	2644.9	3179.6	3834.7
66°	1555.7	1546.6	1576.6	1631.0	1707.7	1824.6	1967.4	2202.2	2567.2	3116.0	3807.2
67.5°	1441.9	1437.3	1451.5	1494.2	1551.2	1660.9	1809.8	2046.2	2383.1	2924.9	3606.0
70°	1172.0	1161.8	1173.1	1192.3	1214.2	1241.2	1332.6	1520.2	1805.3	2330.3	2905.1
72.5°	798.5	793.4	814.2	843.7	902.2	929.6	965.6	996.2	1096.8	1468.8	2026.4
75°	607.4	610.4	636.8	685.6	760.9	842.2	921.4	950.4	916.9	887.9	1150.1
77.5°	340.5	358.3	390.4	452.3	532.1	647.0	785.2	937.7	1013.9	995.2	930.6
80°	140.3	137.8	153.5	187.6	215.0	309.0	472.7	663.8	878.2	1013.9	992.6
82.5°	39.1	40.1	51.8	66.6	85.9	109.3	170.8	274.4	447.2	695.8	910.8
85°	12.2	12.2	16.8	24.9	29.5	34.1	43.2	71.2	121.5	242.5	491.5
87.5°	2.5	2.5	3.5	7.1	7.6	7.6	9.7	13.2	11.7	10.7	47.8
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: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	838.1	837.1	837.6	838.1	837.6	837.6	837.1	836.6	837.1	837.1	838.6
5°	837.6	837.1	837.6	837.6	837.6	838.1	838.1	838.1	839.6	839.6	842.2
7.5°	838.6	838.6	839.6	839.6	839.6	839.6	840.1	841.1	843.7	843.2	847.7
10°	840.7	841.7	844.2	844.7	844.7	846.2	847.3	849.3	851.8	852.8	856.9
12.5°	843.2	848.3	852.8	853.9	855.4	857.9	859.4	860.5	865.0	866.6	871.6
15°	846.2	853.3	859.0	860.9	863.0	866.0	868.1	869.6	873.7	875.7	881.8
17.5°	846.7	854.9	861.5	864.5	867.1	870.6	873.7	876.7	881.3	884.3	890.5
20°	846.2	856.9	867.1	871.1	873.7	880.3	884.9	888.9	894.5	897.5	903.7
22.5°	851.8	864.0	877.7	882.8	886.9	896.0	902.2	908.8	915.8	917.9	922.4
25°	865.0	877.7	895.0	902.2	909.2	921.4	930.1	939.7	946.9	947.9	949.4
27.5°	887.4	899.1	919.9	930.6	942.3	959.6	972.3	982.0	992.1	992.1	991.1
30°	932.6	935.2	957.0	970.7	988.0	1013.5	1032.2	1042.9	1050.5	1050.5	1041.9
32.5°	991.1	988.0	1007.9	1022.6	1046.5	1082.0	1107.5	1115.6	1123.7	1121.2	1106.5
35°	1075.4	1066.8	1078.0	1100.3	1127.3	1176.1	1202.5	1220.8	1225.9	1218.8	1195.4
37.5°	1181.7	1180.7	1186.3	1211.2	1241.2	1304.2	1331.1	1342.8	1338.7	1326.0	1284.8
40°	1294.0	1291.0	1287.4	1304.2	1337.7	1413.4	1461.2	1467.3	1461.7	1442.9	1391.0
42.5°	1443.9	1443.9	1427.2	1431.7	1459.7	1544.6	1601.0	1620.3	1620.8	1593.4	1524.2
45°	1650.3	1648.3	1618.7	1611.7	1633.0	1716.4	1789.0	1799.7	1799.7	1763.6	1687.9
47.5°	1898.3	1895.8	1866.8	1841.9	1846.0	1935.9	1996.4	2012.6	1998.4	1971.5	1881.5
50°	2177.8	2173.3	2143.8	2120.4	2110.3	2201.2	2252.5	2260.1	2239.3	2207.3	2109.7
52.5°	2461.4	2475.2	2457.9	2445.2	2448.7	2507.7	2560.6	2524.4	2513.8	2479.2	2381.1
55°	2756.7	2798.9	2837.0	2825.8	2839.1	2896.5	2906.6	2858.9	2839.6	2814.7	2705.4
57.5°	3054.1	3177.1	3302.1	3337.1	3369.7	3452.0	3440.3	3362.0	3376.8	3413.9	3290.9
60°	3469.3	3824.5	4141.7	4200.1	4301.3	4371.4	4387.2	4371.9	4440.5	4421.2	4312.4
62.5°	4107.1	4699.3	5140.4	5250.2	5351.8	5348.3	5294.9	5240.0	5307.6	5307.6	5023.5
65°	4562.5	5234.4	5706.6	5797.6	5793.5	5671.0	5545.0	5435.2	5425.5	5350.3	4935.1
66°	4583.9	5275.6	5738.1	5817.4	5786.9	5589.7	5438.8	5299.5	5240.0	5135.3	4709.9
67.5°	4391.8	5159.2	5635.4	5704.6	5624.2	5341.7	5133.8	4947.2	4860.8	4684.5	4284.0
70°	3602.5	4433.9	5126.7	5267.9	5177.0	4819.2	4534.6	4282.5	4117.3	3862.7	3574.0
72.5°	2629.7	3273.6	4023.8	4253.5	4239.3	3910.0	3680.7	3449.9	3232.9	3001.2	2790.2
75°	1709.2	2129.5	2547.8	2682.0	2617.4	2426.9	2262.7	2128.0	1922.2	1761.1	1721.9
77.5°	975.8	1192.3	1127.8	1111.0	1030.2	831.5	553.0	387.8	350.2	437.1	479.3
80°	928.6	841.7	689.2	621.6	571.3	389.3	204.3	143.8	126.1	129.1	138.8
82.5°	1047.0	1091.2	892.5	745.6	649.0	473.7	258.7	120.5	87.9	104.2	116.9
85°	784.7	1104.9	1095.2	928.1	761.3	545.9	305.9	92.0	52.9	73.2	95.6
87.5°	159.1	261.7	252.1	221.6	188.6	131.6	51.4	29.0	26.4	36.1	54.9
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: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6	838.6
2.5°	839.6	839.6	840.7	842.2	842.7	842.7	843.7	842.7	844.7	845.2	845.7
5°	844.2	845.7	846.7	849.3	850.8	851.8	853.3	852.3	854.3	854.9	855.9
7.5°	849.3	851.8	853.9	854.9	856.9	856.9	857.4	856.4	855.9	854.3	853.9
10°	858.4	860.0	862.5	861.5	860.5	856.9	853.9	849.3	846.7	842.2	839.6
12.5°	873.2	874.2	874.2	869.6	863.0	854.9	847.3	839.6	833.5	828.4	825.4
15°	883.3	885.4	882.8	876.2	866.6	855.4	845.2	835.0	826.9	820.3	816.2
17.5°	890.9	890.5	885.9	876.7	867.6	857.9	848.8	838.1	827.9	818.3	812.2
20°	902.6	897.5	889.4	879.8	870.1	862.0	854.9	844.7	834.1	820.8	811.7
22.5°	918.4	909.2	897.5	887.4	878.2	870.6	862.5	853.9	842.7	827.9	815.2
25°	940.7	925.0	911.8	901.6	893.5	884.9	875.7	864.5	853.3	838.1	822.8
27.5°	974.8	951.4	934.7	925.5	917.9	906.2	894.5	881.3	867.1	851.3	834.1
30°	1016.0	988.0	968.7	960.6	951.4	938.2	925.5	907.2	887.4	868.6	847.3
32.5°	1064.3	1035.8	1016.5	1010.4	995.6	980.4	962.6	938.2	912.3	884.3	859.0
35°	1137.5	1101.4	1083.6	1069.3	1049.0	1030.7	1000.7	968.7	931.6	894.5	863.0
37.5°	1212.7	1176.1	1157.8	1138.0	1111.6	1078.0	1037.8	992.1	942.8	897.1	858.4
40°	1313.3	1273.7	1250.3	1219.8	1177.1	1124.8	1065.3	1002.8	942.8	885.9	839.1
42.5°	1430.7	1394.1	1358.0	1307.7	1239.1	1162.9	1079.5	999.2	926.5	860.9	811.7
45°	1593.4	1530.8	1473.4	1392.6	1292.5	1185.2	1081.0	982.4	898.6	825.9	771.0
47.5°	1776.3	1695.5	1593.8	1467.3	1330.6	1193.9	1066.3	950.9	854.3	775.6	715.6
50°	1987.3	1863.2	1707.2	1526.8	1349.9	1182.2	1031.2	898.1	793.4	702.9	638.9
52.5°	2228.6	2039.6	1809.8	1568.9	1346.9	1146.6	973.3	828.4	711.5	615.5	552.5
55°	2496.5	2231.7	1907.9	1595.9	1319.4	1077.5	882.3	730.3	609.9	515.3	460.0
57.5°	2968.7	2568.7	2095.0	1632.0	1262.0	972.8	766.9	606.4	497.6	417.2	364.4
60°	3845.9	3157.7	2449.3	1716.8	1175.6	841.7	621.6	475.7	384.7	326.3	287.2
62.5°	4388.7	3572.5	2622.1	1704.7	1035.3	662.2	461.5	352.7	281.0	242.5	218.0
65°	4260.1	3409.8	2411.1	1464.2	805.6	469.6	305.5	230.8	193.1	173.3	161.6
66°	4085.3	3227.9	2232.7	1311.3	701.9	392.3	252.1	193.6	166.2	151.4	145.4
67.5°	3718.9	2895.5	1925.8	1050.1	526.0	292.3	186.0	152.0	135.2	127.6	123.5
70°	3112.5	2332.9	1362.1	620.0	285.1	158.6	118.9	105.7	101.6	99.1	97.6
72.5°	2406.5	1688.9	795.9	304.9	143.8	102.7	90.5	84.9	83.3	83.3	83.9
75°	1516.1	970.7	356.3	146.9	97.6	82.9	77.3	74.7	75.2	75.7	75.2
77.5°	503.7	334.9	148.4	104.2	84.9	75.2	70.6	69.6	70.6	71.2	71.2
80°	144.8	126.5	107.2	92.0	77.8	70.1	66.1	65.6	68.1	68.6	67.6
82.5°	111.3	104.2	97.1	88.9	74.7	66.1	64.6	65.0	66.6	65.6	61.0
85°	102.2	101.2	72.7	72.2	65.0	63.0	61.5	62.0	60.5	54.9	49.8
87.5°	57.4	53.3	41.2	41.7	48.3	49.8	41.2	43.7	40.7	35.6	32.5
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: P159536

CATALOG NUMBER: VST-F03-LED-E-U-T3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	838.6	838.6	838.6	838.6	838.6
2.5°	846.7	846.2	846.2	847.7	845.7
5°	856.4	855.9	855.9	857.4	855.9
7.5°	851.8	850.3	849.3	848.8	848.8
10°	836.6	835.0	832.0	831.0	830.0
12.5°	820.8	819.3	815.8	815.8	814.7
15°	811.1	809.1	806.6	805.1	804.1
17.5°	806.1	803.0	800.0	798.5	797.5
20°	804.1	800.0	796.4	793.9	793.9
22.5°	804.5	799.4	795.4	792.4	791.3
25°	809.6	802.0	796.9	793.9	792.8
27.5°	816.8	807.6	801.0	796.9	795.4
30°	826.4	813.7	804.5	799.4	797.5
32.5°	833.0	815.2	803.5	796.4	793.9
35°	832.5	809.6	795.4	786.2	783.2
37.5°	823.4	796.4	777.6	766.4	761.3
40°	803.0	772.0	752.2	741.5	735.4
42.5°	773.5	740.0	722.2	710.5	703.9
45°	727.3	694.3	672.4	663.2	654.6
47.5°	663.2	629.7	610.9	597.7	592.1
50°	588.1	554.5	534.7	524.0	518.9
52.5°	505.7	473.7	459.5	449.3	442.2
55°	420.3	390.8	384.7	373.6	367.0
57.5°	340.0	322.7	317.2	305.9	300.4
60°	265.8	260.2	254.1	247.0	244.0
62.5°	205.9	200.8	199.3	194.6	194.2
65°	157.0	157.6	156.5	155.5	154.5
66°	142.8	142.3	142.8	141.8	141.3
67.5°	121.5	123.5	125.0	124.5	124.5
70°	98.6	100.1	102.2	101.6	101.6
72.5°	84.4	86.9	87.9	87.4	87.4
75°	76.3	78.8	78.8	77.8	77.3
77.5°	71.2	72.2	71.2	70.1	69.1
80°	66.1	65.0	63.5	62.0	61.0
82.5°	57.4	54.9	53.3	50.8	50.8
85°	46.3	44.2	40.7	38.1	35.6
87.5°	30.0	29.0	26.4	19.8	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)