

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: P159530

Luminaire Tested: **VST-E03-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159530
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-E03-LED-E-U-T3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9175.1 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 75.2
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



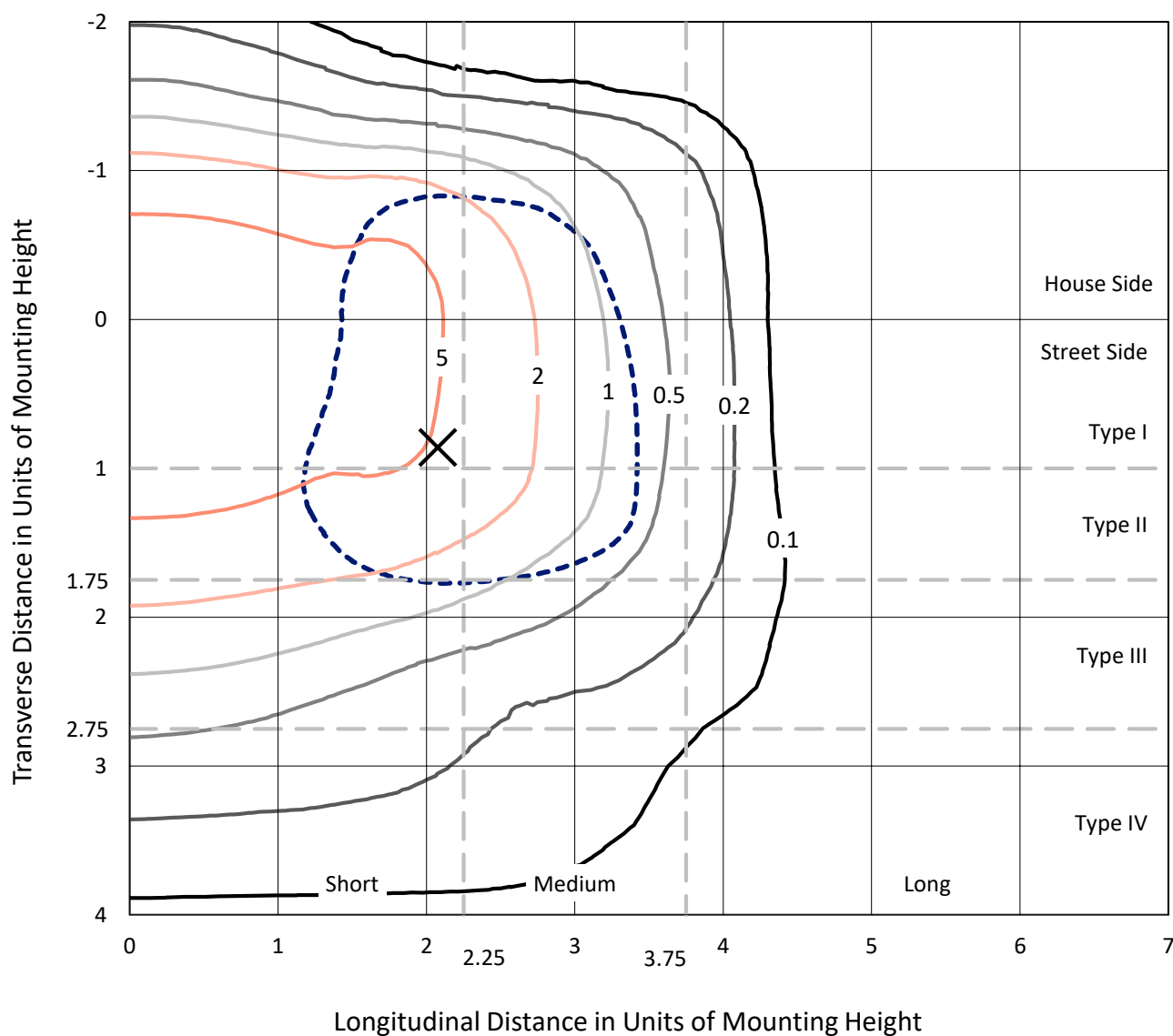
REPORT NUMBER: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

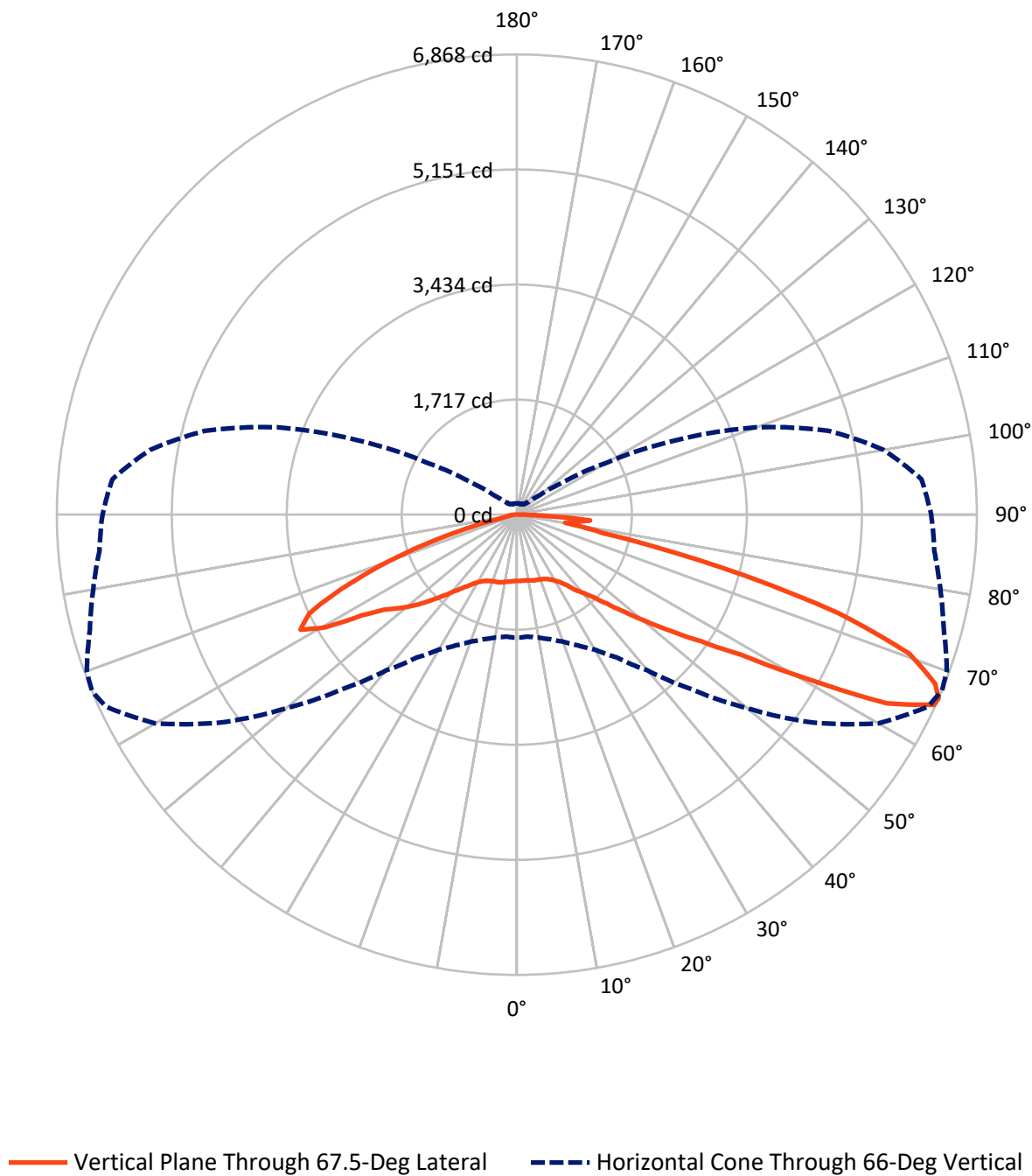


Based on 10 foot mounting height. Maximum calculated value = 9.9 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

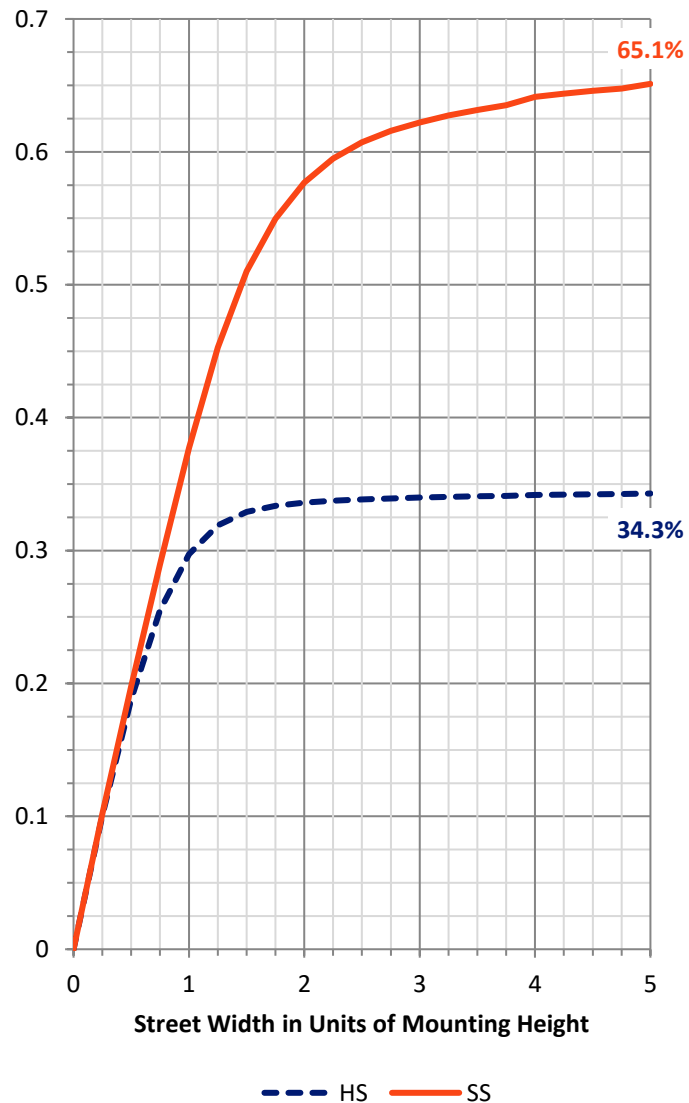
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3175.0	0.0	3175.0
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	6000.1	0.0	6000.1
	% Fixture	65.4	0.0	65.4
Total	Lumens	9175.1	0.0	9175.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	1.0
10°-20°	281.3	3.1
20°-30°	483.6	5.3
30°-40°	781.5	8.5
40°-50°	1295.2	14.1
50°-60°	2032.7	22.2
60°-70°	2779.1	30.3
70°-80°	1222.1	13.3
80°-90°	204.6	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°	9175.1	100.0
0°-180°	9175.1	100.0

Coefficient of Utilization



REPORT NUMBER: P159530

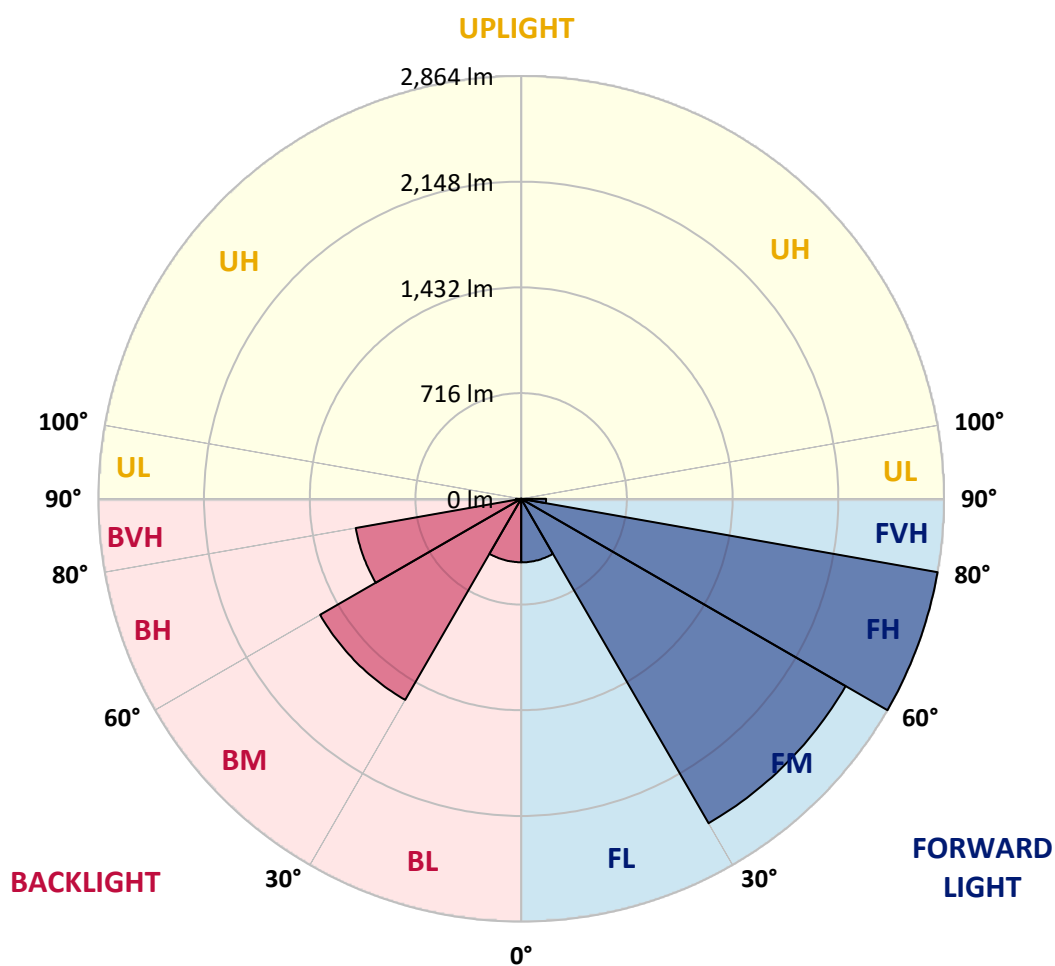
CATALOG NUMBER: VST-E03-LED-E-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	430.4	4.7			
FM	(30°-60°)	2537.2	27.7			
FH	(60°-80°)	2863.7	31.2			G2/5000
FVH	(80°-90°)	168.8	1.8			G2/225
BL	(0°-30°)	429.5	4.7	B1/500		
BM	(30°-60°)	1572.2	17.1	B2/2500		
BH	(60°-80°)	1137.5	12.4	B3/2500		G3/2500
BVH	(80°-90°)	35.8	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: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0
2.5°	988.2	988.2	988.8	988.2	988.2	987.6	990.0	990.0	990.0	989.4	991.2
5°	985.8	985.8	986.4	986.4	987.0	986.4	988.2	988.8	988.8	988.8	990.6
7.5°	979.8	981.6	980.4	981.0	981.6	983.4	985.8	987.0	988.2	990.0	990.6
10°	967.2	970.2	969.6	971.4	972.0	977.4	979.2	981.6	985.8	988.2	990.0
12.5°	949.8	951.6	952.2	954.6	957.0	963.6	968.4	972.6	978.6	984.6	990.6
15°	936.0	937.2	937.2	939.6	943.2	949.2	955.2	962.4	971.4	981.6	991.2
17.5°	940.2	943.2	940.8	940.2	941.4	945.0	950.4	956.4	967.2	978.6	990.0
20°	967.8	968.4	967.2	964.2	961.8	962.4	962.4	963.6	970.2	979.2	988.2
22.5°	990.6	993.0	992.4	993.0	992.4	994.8	993.6	991.2	988.8	989.4	993.6
25°	1010.4	1012.8	1012.8	1014.6	1017.6	1022.4	1026.0	1025.4	1021.8	1017.0	1015.2
27.5°	1042.8	1042.8	1042.8	1044.6	1048.8	1054.8	1060.8	1064.4	1067.4	1062.6	1052.4
30°	1093.8	1094.4	1092.6	1093.2	1096.2	1104.0	1111.2	1116.6	1122.6	1122.0	1108.8
32.5°	1149.6	1152.0	1151.4	1153.8	1158.0	1165.2	1173.0	1181.4	1189.2	1194.0	1185.6
35°	1221.6	1224.0	1224.6	1228.2	1233.0	1243.8	1254.6	1265.4	1273.8	1277.4	1275.6
37.5°	1339.8	1340.4	1338.0	1332.6	1334.4	1342.8	1355.4	1372.8	1378.2	1381.8	1390.2
40°	1516.8	1515.0	1505.4	1500.6	1497.6	1501.2	1498.8	1512.6	1525.2	1525.8	1525.2
42.5°	1731.6	1726.2	1717.2	1716.0	1714.8	1713.6	1707.0	1707.6	1719.0	1722.0	1718.4
45°	1945.2	1938.6	1932.0	1938.0	1930.8	1949.4	1954.8	1969.2	1971.0	1977.0	1968.0
47.5°	2120.4	2121.0	2121.0	2129.4	2143.8	2179.2	2211.0	2238.6	2248.8	2263.2	2265.0
50°	2253.0	2256.6	2268.0	2295.0	2325.6	2385.0	2438.4	2488.2	2533.2	2550.0	2594.4
52.5°	2330.4	2340.0	2364.0	2409.0	2463.6	2540.4	2624.4	2709.0	2787.0	2853.0	2905.8
55°	2316.6	2323.8	2365.8	2436.0	2521.2	2624.4	2742.0	2864.4	2986.2	3097.8	3184.2
57.5°	2227.8	2232.6	2274.6	2353.8	2460.0	2598.6	2764.8	2946.6	3117.6	3297.6	3445.2
60°	2111.4	2118.6	2157.6	2220.0	2331.0	2478.6	2671.2	2917.8	3190.8	3474.0	3750.0
62.5°	2037.0	2035.2	2069.4	2125.2	2208.6	2342.4	2527.8	2820.0	3198.0	3676.8	4222.2
65°	1913.4	1908.0	1943.4	2007.0	2097.6	2227.2	2403.0	2683.8	3122.4	3753.6	4527.0
66°	1836.6	1825.8	1861.2	1925.4	2016.0	2154.0	2322.6	2599.8	3030.6	3678.6	4494.6
67.5°	1702.2	1696.8	1713.6	1764.0	1831.2	1960.8	2136.6	2415.6	2813.4	3453.0	4257.0
70°	1383.6	1371.6	1384.8	1407.6	1433.4	1465.2	1573.2	1794.6	2131.2	2751.0	3429.6
72.5°	942.6	936.6	961.2	996.0	1065.0	1097.4	1140.0	1176.0	1294.8	1734.0	2392.2
75°	717.0	720.6	751.8	809.4	898.2	994.2	1087.8	1122.0	1082.4	1048.2	1357.8
77.5°	402.0	423.0	460.8	534.0	628.2	763.8	927.0	1107.0	1197.0	1174.8	1098.6
80°	165.6	162.6	181.2	221.4	253.8	364.8	558.0	783.6	1036.8	1197.0	1171.8
82.5°	46.2	47.4	61.2	78.6	101.4	129.0	201.6	324.0	528.0	821.4	1075.2
85°	14.4	14.4	19.8	29.4	34.8	40.2	51.0	84.0	143.4	286.2	580.2
87.5°	3.0	3.0	4.2	8.4	9.0	9.0	11.4	15.6	13.8	12.6	56.4
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: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0
2.5°	989.4	988.2	988.8	989.4	988.8	988.8	988.2	987.6	988.2	988.2	990.0
5°	988.8	988.2	988.8	988.8	988.8	989.4	989.4	989.4	991.2	991.2	994.2
7.5°	990.0	990.0	991.2	991.2	991.2	991.2	991.8	993.0	996.0	995.4	1000.8
10°	992.4	993.6	996.6	997.2	997.2	999.0	1000.2	1002.6	1005.6	1006.8	1011.6
12.5°	995.4	1001.4	1006.8	1008.0	1009.8	1012.8	1014.6	1015.8	1021.2	1023.0	1029.0
15°	999.0	1007.4	1014.0	1016.4	1018.8	1022.4	1024.8	1026.6	1031.4	1033.8	1041.0
17.5°	999.6	1009.2	1017.0	1020.6	1023.6	1027.8	1031.4	1035.0	1040.4	1044.0	1051.2
20°	999.0	1011.6	1023.6	1028.4	1031.4	1039.2	1044.6	1049.4	1056.0	1059.6	1066.8
22.5°	1005.6	1020.0	1036.2	1042.2	1047.0	1057.8	1065.0	1072.8	1081.2	1083.6	1089.0
25°	1021.2	1036.2	1056.6	1065.0	1073.4	1087.8	1098.0	1109.4	1117.8	1119.0	1120.8
27.5°	1047.6	1061.4	1086.0	1098.6	1112.4	1132.8	1147.8	1159.2	1171.2	1171.2	1170.0
30°	1101.0	1104.0	1129.8	1146.0	1166.4	1196.4	1218.6	1231.2	1240.2	1240.2	1230.0
32.5°	1170.0	1166.4	1189.8	1207.2	1235.4	1277.4	1307.4	1317.0	1326.6	1323.6	1306.2
35°	1269.6	1259.4	1272.6	1299.0	1330.8	1388.4	1419.6	1441.2	1447.2	1438.8	1411.2
37.5°	1395.0	1393.8	1400.4	1429.8	1465.2	1539.6	1571.4	1585.2	1580.4	1565.4	1516.8
40°	1527.6	1524.0	1519.8	1539.6	1579.2	1668.6	1725.0	1732.2	1725.6	1703.4	1642.2
42.5°	1704.6	1704.6	1684.8	1690.2	1723.2	1823.4	1890.0	1912.8	1913.4	1881.0	1799.4
45°	1948.2	1945.8	1911.0	1902.6	1927.8	2026.2	2112.0	2124.6	2124.6	2082.0	1992.6
47.5°	2241.0	2238.0	2203.8	2174.4	2179.2	2285.4	2356.8	2376.0	2359.2	2327.4	2221.2
50°	2571.0	2565.6	2530.8	2503.2	2491.2	2598.6	2659.2	2668.2	2643.6	2605.8	2490.6
52.5°	2905.8	2922.0	2901.6	2886.6	2890.8	2960.4	3022.8	2980.2	2967.6	2926.8	2811.0
55°	3254.4	3304.2	3349.2	3336.0	3351.6	3419.4	3431.4	3375.0	3352.2	3322.8	3193.8
57.5°	3605.4	3750.6	3898.2	3939.6	3978.0	4075.2	4061.4	3969.0	3986.4	4030.2	3885.0
60°	4095.6	4515.0	4889.4	4958.4	5077.8	5160.6	5179.2	5161.2	5242.2	5219.4	5091.0
62.5°	4848.6	5547.6	6068.4	6198.0	6318.0	6313.8	6250.8	6186.0	6265.8	6265.8	5930.4
65°	5386.2	6179.4	6736.8	6844.2	6839.4	6694.8	6546.0	6416.4	6405.0	6316.2	5826.0
66°	5411.4	6228.0	6774.0	6867.6	6831.6	6598.8	6420.6	6256.2	6186.0	6062.4	5560.2
67.5°	5184.6	6090.6	6652.8	6734.4	6639.6	6306.0	6060.6	5840.4	5738.4	5530.2	5057.4
70°	4252.8	5234.4	6052.2	6219.0	6111.6	5689.2	5353.2	5055.6	4860.6	4560.0	4219.2
72.5°	3104.4	3864.6	4750.2	5021.4	5004.6	4615.8	4345.2	4072.8	3816.6	3543.0	3294.0
75°	2017.8	2514.0	3007.8	3166.2	3090.0	2865.0	2671.2	2512.2	2269.2	2079.0	2032.8
77.5°	1152.0	1407.6	1331.4	1311.6	1216.2	981.6	652.8	457.8	413.4	516.0	565.8
80°	1096.2	993.6	813.6	733.8	674.4	459.6	241.2	169.8	148.8	152.4	163.8
82.5°	1236.0	1288.2	1053.6	880.2	766.2	559.2	305.4	142.2	103.8	123.0	138.0
85°	926.4	1304.4	1293.0	1095.6	898.8	644.4	361.2	108.6	62.4	86.4	112.8
87.5°	187.8	309.0	297.6	261.6	222.6	155.4	60.6	34.2	31.2	42.6	64.8
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: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0	990.0
2.5°	991.2	991.2	992.4	994.2	994.8	994.8	996.0	994.8	997.2	997.8	998.4
5°	996.6	998.4	999.6	1002.6	1004.4	1005.6	1007.4	1006.2	1008.6	1009.2	1010.4
7.5°	1002.6	1005.6	1008.0	1009.2	1011.6	1011.6	1012.2	1011.0	1010.4	1008.6	1008.0
10°	1013.4	1015.2	1018.2	1017.0	1015.8	1011.6	1008.0	1002.6	999.6	994.2	991.2
12.5°	1030.8	1032.0	1032.0	1026.6	1018.8	1009.2	1000.2	991.2	984.0	978.0	974.4
15°	1042.8	1045.2	1042.2	1034.4	1023.0	1009.8	997.8	985.8	976.2	968.4	963.6
17.5°	1051.8	1051.2	1045.8	1035.0	1024.2	1012.8	1002.0	989.4	977.4	966.0	958.8
20°	1065.6	1059.6	1050.0	1038.6	1027.2	1017.6	1009.2	997.2	984.6	969.0	958.2
22.5°	1084.2	1073.4	1059.6	1047.6	1036.8	1027.8	1018.2	1008.0	994.8	977.4	962.4
25°	1110.6	1092.0	1076.4	1064.4	1054.8	1044.6	1033.8	1020.6	1007.4	989.4	971.4
27.5°	1150.8	1123.2	1103.4	1092.6	1083.6	1069.8	1056.0	1040.4	1023.6	1005.0	984.6
30°	1199.4	1166.4	1143.6	1134.0	1123.2	1107.6	1092.6	1071.0	1047.6	1025.4	1000.2
32.5°	1256.4	1222.8	1200.0	1192.8	1175.4	1157.4	1136.4	1107.6	1077.0	1044.0	1014.0
35°	1342.8	1300.2	1279.2	1262.4	1238.4	1216.8	1181.4	1143.6	1099.8	1056.0	1018.8
37.5°	1431.6	1388.4	1366.8	1343.4	1312.2	1272.6	1225.2	1171.2	1113.0	1059.0	1013.4
40°	1550.4	1503.6	1476.0	1440.0	1389.6	1327.8	1257.6	1183.8	1113.0	1045.8	990.6
42.5°	1689.0	1645.8	1603.2	1543.8	1462.8	1372.8	1274.4	1179.6	1093.8	1016.4	958.2
45°	1881.0	1807.2	1739.4	1644.0	1525.8	1399.2	1276.2	1159.8	1060.8	975.0	910.2
47.5°	2097.0	2001.6	1881.6	1732.2	1570.8	1409.4	1258.8	1122.6	1008.6	915.6	844.8
50°	2346.0	2199.6	2015.4	1802.4	1593.6	1395.6	1217.4	1060.2	936.6	829.8	754.2
52.5°	2631.0	2407.8	2136.6	1852.2	1590.0	1353.6	1149.0	978.0	840.0	726.6	652.2
55°	2947.2	2634.6	2252.4	1884.0	1557.6	1272.0	1041.6	862.2	720.0	608.4	543.0
57.5°	3504.6	3032.4	2473.2	1926.6	1489.8	1148.4	905.4	715.8	587.4	492.6	430.2
60°	4540.2	3727.8	2891.4	2026.8	1387.8	993.6	733.8	561.6	454.2	385.2	339.0
62.5°	5181.0	4217.4	3095.4	2012.4	1222.2	781.8	544.8	416.4	331.8	286.2	257.4
65°	5029.2	4025.4	2846.4	1728.6	951.0	554.4	360.6	272.4	228.0	204.6	190.8
66°	4822.8	3810.6	2635.8	1548.0	828.6	463.2	297.6	228.6	196.2	178.8	171.6
67.5°	4390.2	3418.2	2273.4	1239.6	621.0	345.0	219.6	179.4	159.6	150.6	145.8
70°	3674.4	2754.0	1608.0	732.0	336.6	187.2	140.4	124.8	120.0	117.0	115.2
72.5°	2841.0	1993.8	939.6	360.0	169.8	121.2	106.8	100.2	98.4	98.4	99.0
75°	1789.8	1146.0	420.6	173.4	115.2	97.8	91.2	88.2	88.8	89.4	88.8
77.5°	594.6	395.4	175.2	123.0	100.2	88.8	83.4	82.2	83.4	84.0	84.0
80°	171.0	149.4	126.6	108.6	91.8	82.8	78.0	77.4	80.4	81.0	79.8
82.5°	131.4	123.0	114.6	105.0	88.2	78.0	76.2	76.8	78.6	77.4	72.0
85°	120.6	119.4	85.8	85.2	76.8	74.4	72.6	73.2	71.4	64.8	58.8
87.5°	67.8	63.0	48.6	49.2	57.0	58.8	48.6	51.6	48.0	42.0	38.4
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: P159530

CATALOG NUMBER: VST-E03-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	990.0	990.0	990.0	990.0	990.0
2.5°	999.6	999.0	999.0	1000.8	998.4
5°	1011.0	1010.4	1010.4	1012.2	1010.4
7.5°	1005.6	1003.8	1002.6	1002.0	1002.0
10°	987.6	985.8	982.2	981.0	979.8
12.5°	969.0	967.2	963.0	963.0	961.8
15°	957.6	955.2	952.2	950.4	949.2
17.5°	951.6	948.0	944.4	942.6	941.4
20°	949.2	944.4	940.2	937.2	937.2
22.5°	949.8	943.8	939.0	935.4	934.2
25°	955.8	946.8	940.8	937.2	936.0
27.5°	964.2	953.4	945.6	940.8	939.0
30°	975.6	960.6	949.8	943.8	941.4
32.5°	983.4	962.4	948.6	940.2	937.2
35°	982.8	955.8	939.0	928.2	924.6
37.5°	972.0	940.2	918.0	904.8	898.8
40°	948.0	911.4	888.0	875.4	868.2
42.5°	913.2	873.6	852.6	838.8	831.0
45°	858.6	819.6	793.8	783.0	772.8
47.5°	783.0	743.4	721.2	705.6	699.0
50°	694.2	654.6	631.2	618.6	612.6
52.5°	597.0	559.2	542.4	530.4	522.0
55°	496.2	461.4	454.2	441.0	433.2
57.5°	401.4	381.0	374.4	361.2	354.6
60°	313.8	307.2	300.0	291.6	288.0
62.5°	243.0	237.0	235.2	229.8	229.2
65°	185.4	186.0	184.8	183.6	182.4
66°	168.6	168.0	168.6	167.4	166.8
67.5°	143.4	145.8	147.6	147.0	147.0
70°	116.4	118.2	120.6	120.0	120.0
72.5°	99.6	102.6	103.8	103.2	103.2
75°	90.0	93.0	93.0	91.8	91.2
77.5°	84.0	85.2	84.0	82.8	81.6
80°	78.0	76.8	75.0	73.2	72.0
82.5°	67.8	64.8	63.0	60.0	60.0
85°	54.6	52.2	48.0	45.0	42.0
87.5°	35.4	34.2	31.2	23.4	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)