

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: P158210

Luminaire Tested: **VST-E03-LED-E-U-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158210
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33712)
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-SL2
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9026.3 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

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

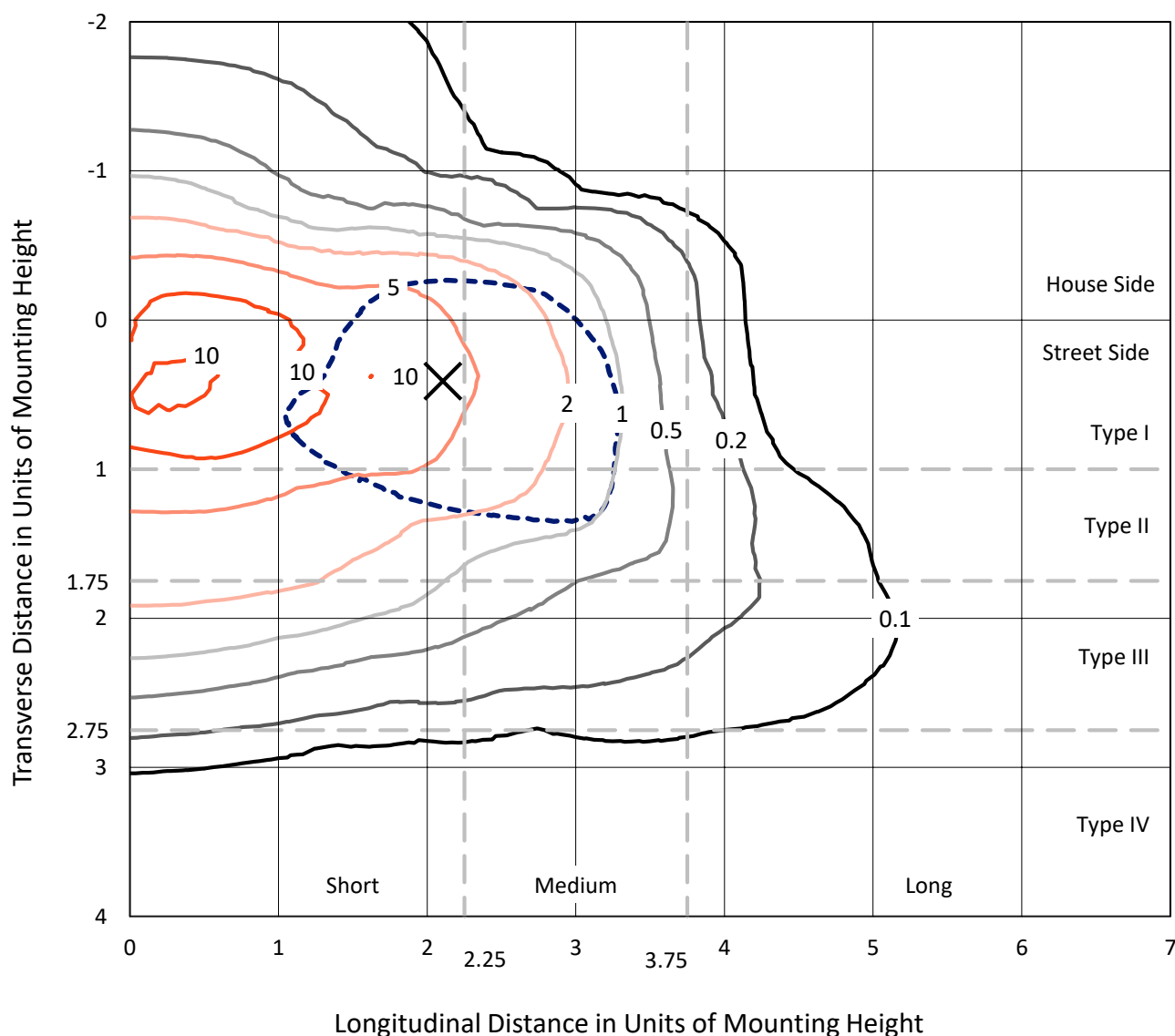


REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

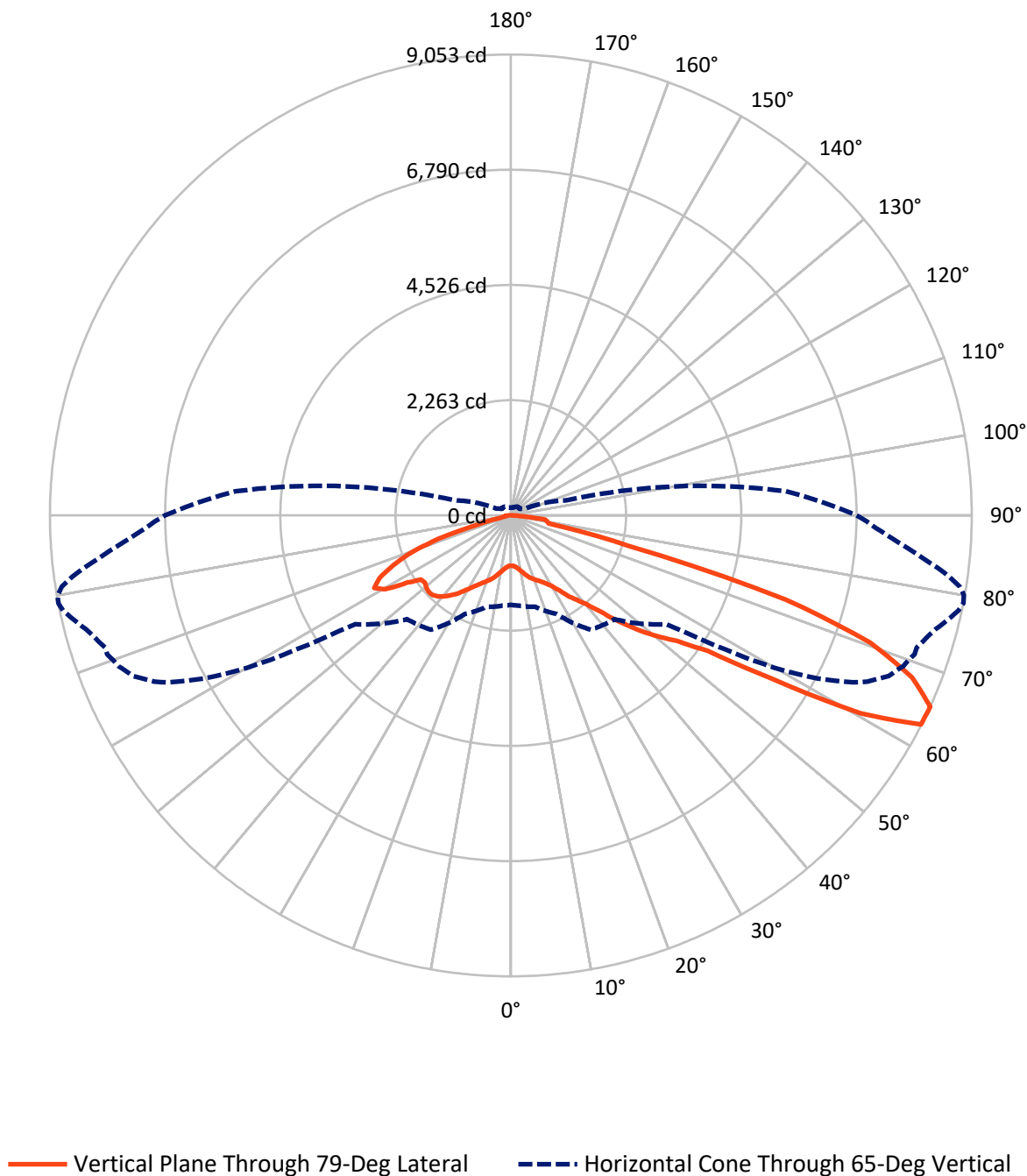


Based on 10 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

Luminous Intensity Polar Plot



REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2074.1	0.0	2074.1
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	6952.2	0.0	6952.2
	% Fixture	77.0	0.0	77.0
Total	Lumens	9026.3	0.0	9026.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.7	1.1
10°-20°	317.3	3.5
20°-30°	547.1	6.1
30°-40°	896.1	9.9
40°-50°	1500.7	16.6
50°-60°	2029.9	22.5
60°-70°	2499.8	27.7
70°-80°	967.6	10.7
80°-90°	170.2	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°	9026.3	100.0
0°-180°	9026.3	100.0

Coefficient of Utilization



REPORT NUMBER: P158210

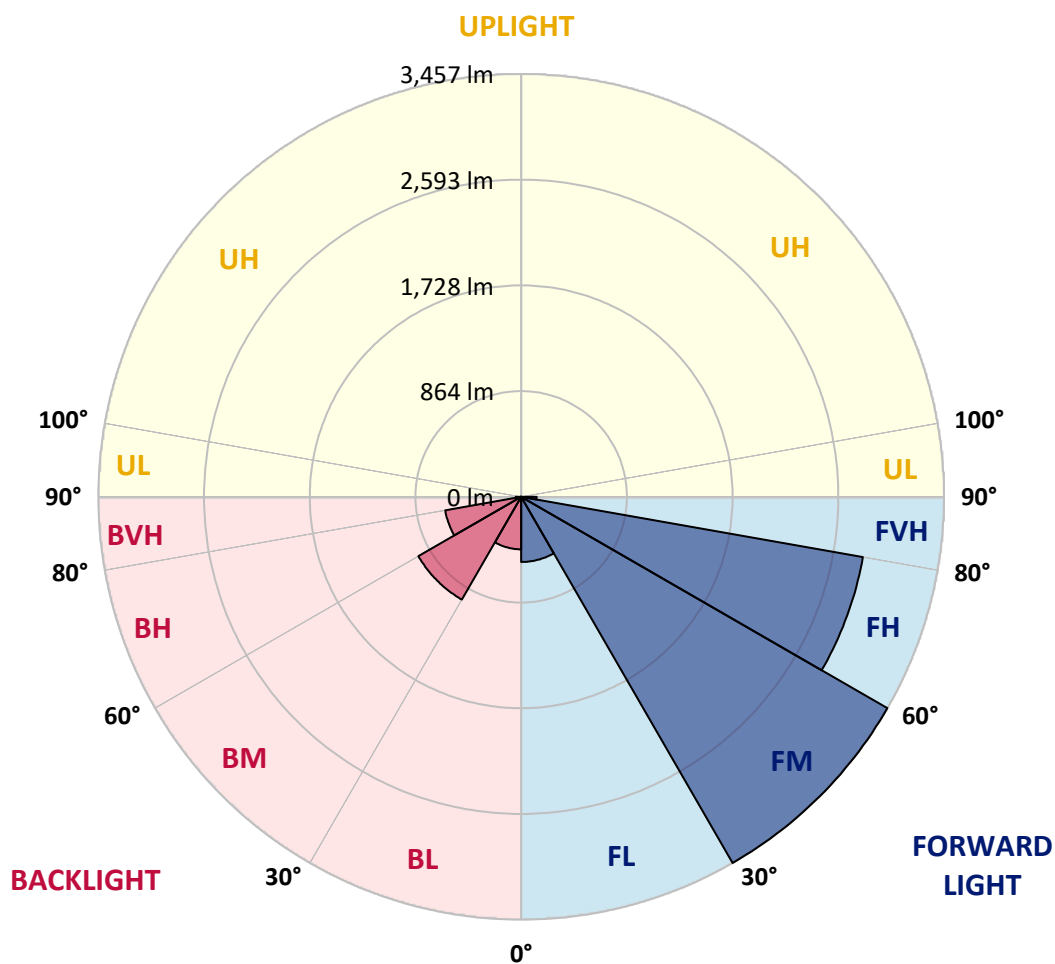
CATALOG NUMBER: VST-E03-LED-E-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	532.9	5.9			
FM	(30°-60°)	3456.7	38.3			
FH	(60°-80°)	2836.4	31.4			G2/5000
FVH	(80°-90°)	126.3	1.4			G2/225
BL	(0°-30°)	429.2	4.8	B1/500		
BM	(30°-60°)	969.9	10.7	B1/1000		
BH	(60°-80°)	631.0	7.0	B2/1000		G2/1000
BVH	(80°-90°)	43.9	0.5			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: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	989.4	986.4	989.4	991.8	993.6	996.0	995.4	994.8	994.2	994.8	994.8
5°	997.8	997.2	1000.2	1002.6	1006.8	1009.8	1013.4	1013.4	1013.4	1012.8	1014.0
7.5°	1024.8	1024.2	1027.2	1029.6	1033.2	1039.2	1044.0	1046.4	1045.8	1045.8	1045.8
10°	1069.2	1066.8	1066.8	1066.8	1071.6	1075.8	1086.6	1087.8	1090.2	1089.0	1089.6
12.5°	1112.4	1113.0	1111.2	1109.4	1110.0	1118.4	1134.0	1137.0	1137.6	1139.4	1140.6
15°	1151.4	1150.8	1146.6	1142.4	1147.8	1162.2	1182.6	1188.0	1188.0	1191.6	1194.0
17.5°	1187.4	1186.2	1178.4	1171.2	1176.6	1201.2	1233.0	1236.6	1242.0	1243.8	1246.2
20°	1230.0	1227.6	1218.6	1199.4	1199.4	1233.0	1275.0	1278.6	1283.4	1284.6	1288.8
22.5°	1289.4	1283.4	1264.2	1229.4	1219.8	1258.8	1310.4	1312.2	1315.8	1320.6	1324.2
25°	1356.6	1357.8	1326.6	1266.0	1245.0	1285.8	1344.6	1347.6	1354.2	1357.8	1362.0
27.5°	1426.2	1428.0	1393.2	1317.6	1282.2	1323.0	1390.8	1394.4	1402.2	1406.4	1413.0
30°	1505.4	1507.8	1474.2	1398.0	1344.0	1377.6	1459.2	1468.8	1475.4	1480.8	1491.6
32.5°	1695.6	1681.2	1657.8	1576.8	1491.6	1489.2	1569.6	1580.4	1589.4	1600.8	1611.0
35°	1935.0	1944.0	1956.0	1901.4	1826.4	1771.8	1778.4	1772.4	1780.8	1797.6	1807.8
37.5°	2124.6	2144.4	2196.6	2232.0	2229.0	2218.2	2117.4	2117.4	2122.8	2113.8	2112.6
40°	2273.4	2286.0	2392.8	2530.2	2646.0	2703.0	2623.2	2611.8	2617.8	2571.6	2573.4
42.5°	2350.2	2368.8	2522.4	2763.6	2993.4	3176.4	3151.8	3144.0			



REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	994.8	995.4	996.0	994.8	995.4	995.4	994.2	993.6	993.6	993.6	994.2
5°	1014.0	1015.2	1014.0	1014.6	1017.0	1016.4	1015.2	1014.6	1017.0	1017.6	1015.8
7.5°	1048.2	1048.8	1046.4	1049.4	1050.6	1051.2	1051.2	1052.4	1052.4	1054.2	1052.4
10°	1092.0	1092.0	1096.2	1095.6	1096.2	1097.4	1098.0	1100.4	1102.2	1102.2	1103.4
12.5°	1142.4	1143.0	1147.2	1147.8	1150.2	1150.8	1154.4	1152.0	1158.0	1158.0	1159.8
15°	1194.6	1198.8	1199.4	1205.4	1206.6	1207.2	1212.0	1212.0	1216.2	1216.8	1218.0
17.5°	1246.2	1249.8	1252.2	1257.0	1261.2	1263.0	1264.8	1268.4	1271.4	1272.6	1275.6
20°	1290.6	1294.2	1296.6	1301.4	1305.0	1308.0	1309.8	1314.0	1317.0	1318.2	1322.4
22.5°	1327.8	1330.2	1334.4	1341.0	1342.2	1345.8	1351.2	1354.2	1355.4	1359.0	1363.8
25°	1367.4	1371.0	1373.4	1379.4	1384.2	1390.2	1395.0	1399.8	1401.0	1405.8	1410.0
27.5°	1420.2	1423.8	1424.4	1436.4	1441.2	1449.6	1455.0	1462.2	1465.8	1470.0	1478.4
30°	1498.2	1506.6	1510.2	1524.0	1526.4	1536.0	1545.6	1548.0	1553.4	1554.0	1567.8
32.5°	1617.6	1629.6	1634.4	1648.8	1652.4	1661.4	1666.8	1679.4	1680.0	1686.0	1689.0
35°	1813.2	1810.2	1828.8	1832.4	1843.2	1851.0	1856.4	1856.4	1867.8	1868.4	1872.0
37.5°	2080.2	2074.2	2079.0	2057.4	2062.8	2053.2	2051.4	2053.8	2049.0	2050.2	2049.6
40°	2507.4	2480.4	2452.2	2385.6	2371.2	2343.6	2322.0	2304.6	2287.8	2269.8	2257.8
42.5°	3043.2	3004.2	2962.2	2855.4	2805.6	2752.2	2700.0</				



REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	993.6	993.6	993.6	994.2	994.2	994.2	993.0	992.4	993.0	994.2	994.2
5°	1017.0	1017.6	1018.8	1016.4	1017.0	1018.8	1017.6	1017.0	1017.6	1018.8	1017.6
7.5°	1054.8	1055.4	1054.2	1056.6	1056.6	1057.8	1059.6	1057.8	1058.4	1059.0	1059.6
10°	1104.0	1104.6	1105.8	1107.6	1108.2	1109.4	1110.6	1112.4	1112.4	1111.2	1114.2
12.5°	1162.8	1162.2	1163.4	1165.8	1167.0	1168.8	1172.4	1172.4	1174.8	1174.2	1177.2
15°	1220.4	1223.4	1224.0	1228.2	1230.0	1233.0	1237.2	1239.6	1239.6	1243.2	1244.4
17.5°	1278.0	1280.4	1282.8	1286.4	1288.8	1290.6	1295.4	1298.4	1297.8	1304.4	1304.4
20°	1322.4	1327.2	1330.2	1332.6	1336.8	1339.8	1343.4	1347.0	1349.4	1353.6	1354.8
22.5°	1365.6	1368.6	1372.8	1375.8	1380.6	1384.2	1388.4	1391.4	1395.6	1401.0	1402.8
25°	1413.6	1418.4	1423.2	1427.4	1431.0	1435.2	1442.4	1449.0	1455.0	1459.8	1461.6
27.5°	1480.2	1485.6	1492.8	1495.8	1501.2	1504.8	1515.6	1524.0	1527.0	1535.4	1537.8
30°	1570.2	1576.2	1583.4	1587.0	1596.6	1601.4	1612.8	1621.8	1624.8	1635.0	1636.8
32.5°	1700.4	1704.0	1718.4	1717.8	1731.0	1744.8	1751.4	1758.6	1771.8	1777.2	1779.0
35°	1881.0	1889.4	1899.6	1899.0	1915.8	1923.6	1936.8	1944.6	1954.2	1953.6	1963.8
37.5°	2055.6	2058.6	2062.2	2070.0	2082.0	2092.8	2097.6	2105.4	2112.6	2123.4	2136.6
40°	2245.8	2253.0	2253.6	2257.8	2263.8	2277.6	2286.6	2295.0	2319.6	2335.2	2343.0
42.5°	2530.8	2529.0	2517								



REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	993.6	994.8	994.8	993.6	994.2	993.0	993.6	994.2	992.4	991.8	990.0
5°	1018.2	1017.6	1017.6	1018.2	1020.0	1020.6	1017.6	1018.8	1019.4	1016.4	1009.8
7.5°	1059.0	1059.0	1060.8	1060.2	1063.8	1062.6	1062.0	1062.0	1062.0	1056.0	1045.2
10°	1114.2	1114.2	1116.0	1118.4	1119.0	1117.8	1117.8	1118.4	1121.4	1109.4	1092.6
12.5°	1176.0	1179.0	1178.4	1178.4	1185.6	1183.8	1181.4	1183.8	1186.8	1170.0	1146.0
15°	1245.0	1246.8	1248.0	1252.2	1251.0	1255.2	1256.4	1255.2	1258.2	1236.6	1196.4
17.5°	1307.4	1311.0	1312.2	1317.0	1317.0	1317.6	1322.4	1320.6	1321.2	1296.6	1239.0
20°	1359.0	1362.6	1364.4	1369.8	1371.0	1373.4	1375.2	1376.4	1379.4	1350.0	1273.8
22.5°	1410.6	1413.6	1416.6	1420.2	1425.0	1428.0	1430.4	1431.6	1437.0	1402.8	1306.8
25°	1468.2	1474.8	1477.8	1483.8	1488.6	1493.4	1497.0	1497.6	1506.6	1464.0	1333.8
27.5°	1545.0	1554.0	1558.8	1568.4	1573.2	1578.0	1576.8	1584.0	1596.6	1534.2	1354.8
30°	1645.8	1657.2	1660.2	1669.8	1677.6	1682.4	1687.8	1693.8	1702.2	1612.2	1365.0
32.5°	1786.2	1803.6	1807.8	1813.2	1824.6	1833.0	1836.6	1846.2	1848.6	1686.0	1362.0
35°	1978.8	1971.0	1991.4	1996.2	2012.4	2019.0	2023.2	2035.8	2026.2	1766.4	1342.2
37.5°	2152.8	2150.4	2170.2	2181.0	2202.0	2197.2	2207.4	2215.8	2181.6	1823.4	1305.6
40°	2365.2	2362.2	2389.8	2393.4	2425.8	2418.6	2422.8	2429.4	2353.2	1863.0	1239.0
42.5°	2661.6	2662.8	2692.2	2695.8	2700.0	2713.2	26				



REPORT NUMBER: P158210

CATALOG NUMBER: VST-E03-LED-E-U-SL2

CANDELA DISTRIBUTION (continued):

	125°	135°	145°	155°	165°	175°	180°
0°	987.6	987.6	987.6	987.6	987.6	987.6	987.6
2.5°	988.2	987.6	986.4	985.8	985.2	982.2	984.6
5°	1006.8	1000.8	995.4	988.8	985.2	982.2	982.2
7.5°	1035.0	1018.2	1004.4	989.4	979.2	971.4	970.2
10°	1070.4	1038.0	1006.2	979.2	960.0	945.6	943.8
12.5°	1104.0	1054.8	1004.4	960.0	930.0	909.6	908.4
15°	1135.2	1063.8	990.6	925.2	880.2	853.2	850.2
17.5°	1159.8	1058.4	959.4	876.6	815.4	783.6	781.8
20°	1165.2	1036.8	915.0	816.6	751.8	718.2	710.4
22.5°	1160.4	997.8	859.8	750.6	676.2	642.6	638.4
25°	1146.0	950.4	791.4	673.8	604.8	570.6	562.2
27.5°	1120.2	894.6	717.6	599.4	531.0	498.0	489.6
30°	1081.8	827.4	639.0	529.8	459.0	432.6	424.2
32.5°	1028.4	745.8	561.6	458.4	399.6	378.6	375.0
35°	954.6	652.2	480.6	399.6	356.4	343.8	342.0
37.5°	860.4	558.6	412.8	357.6	326.4	318.6	317.4
40°	737.4	462.6	364.8	327.6	304.8	298.2	297.0
42.5°	610.8	390.6	329.4	303.6	285.0	279.0	277.2
45°	499.8	342.0	303.0	283.8	266.4	259.8	259.2
47.5°	417.0	313.8	281.4	265.8	248.4	240.6	241.2
50°	356.4	288.0	263.4	250.2	230.4	223.2	223.8
52.5°	315.0	262.2	246.6	231.6	214.8	207.6	207.6
55°	282.6	241.2	230.4	214.2	201.0	194.4	193.8
57.5°	256.2	224.4	214.8	201.6	188.4	180.6	180.6
60°	240.0	212.4	204.6	192.6	177.0	168.6	168.0
62.5°	230.4	208.8	202.2	185.4	168.0	159.6	157.8
65°	223.2	217.2	208.8	181.2	160.8	151.8	150.0
67.5°	223.8	237.0	225.0	183.6	158.4	145.2	142.8
70°	227.4	252.6	236.4				