

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: P158431

Luminaire Tested: **VST-E03-LED-E-U-SL3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158431
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-E03-LED-E-U-SL3-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9286.9 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-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

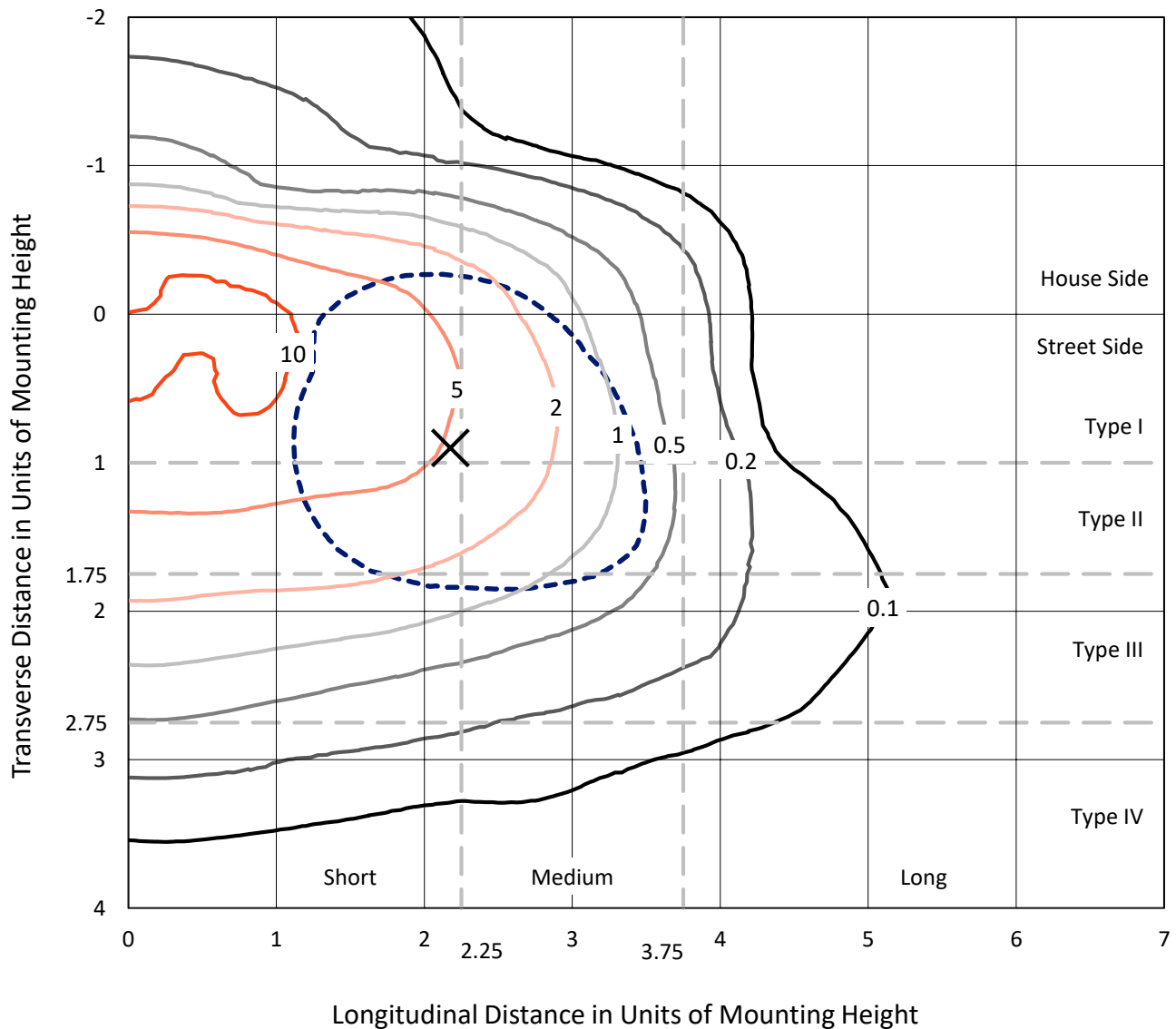


REPORT NUMBER: P158431

CATALOG NUMBER: VST-E03-LED-E-U-SL3-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

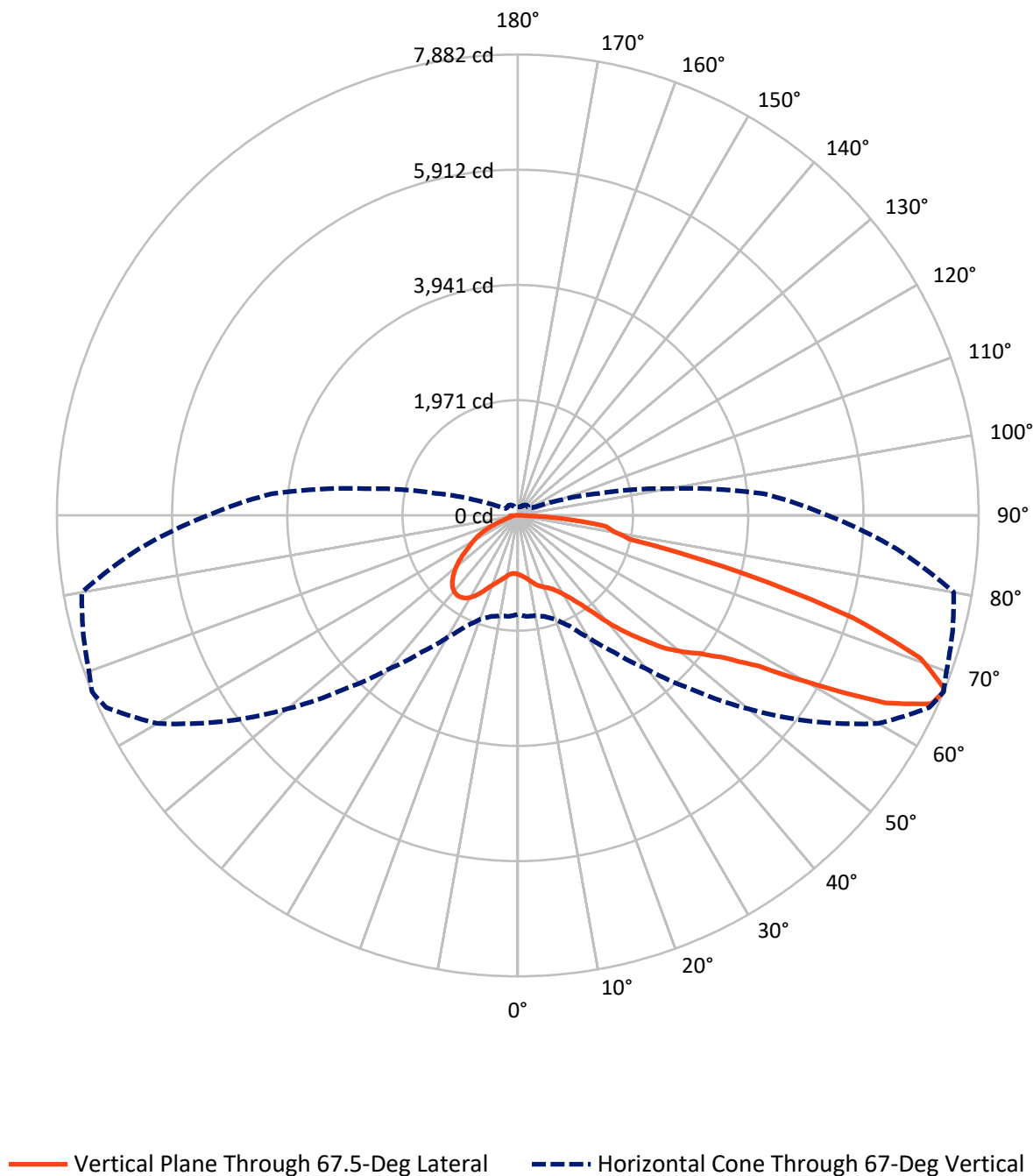


Based on 10 foot mounting height. Maximum calculated value = 12.6 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158431

CATALOG NUMBER: VST-E03-LED-E-U-SL3-7050

Luminous Intensity Polar Plot



REPORT NUMBER: P158431

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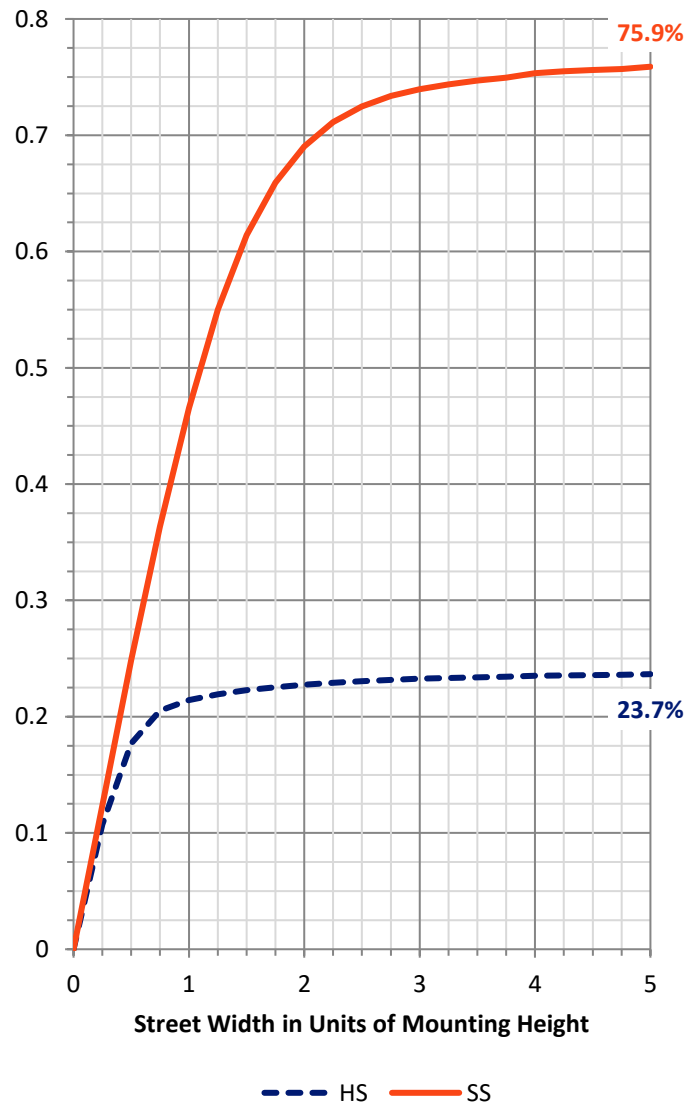
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2227.9	0.0	2227.9
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	7058.9	0.0	7058.9
	% Fixture	76.0	0.0	76.0
Total	Lumens	9286.9	0.0	9286.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.0	1.1
10°-20°	340.9	3.7
20°-30°	608.5	6.6
30°-40°	891.8	9.6
40°-50°	1378.0	14.8
50°-60°	2006.6	21.6
60°-70°	2614.0	28.1
70°-80°	1170.1	12.6
80°-90°	176.9	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°	9286.9	100.0
0°-180°	9286.9	100.0

Coefficient of Utilization



REPORT NUMBER: P158431

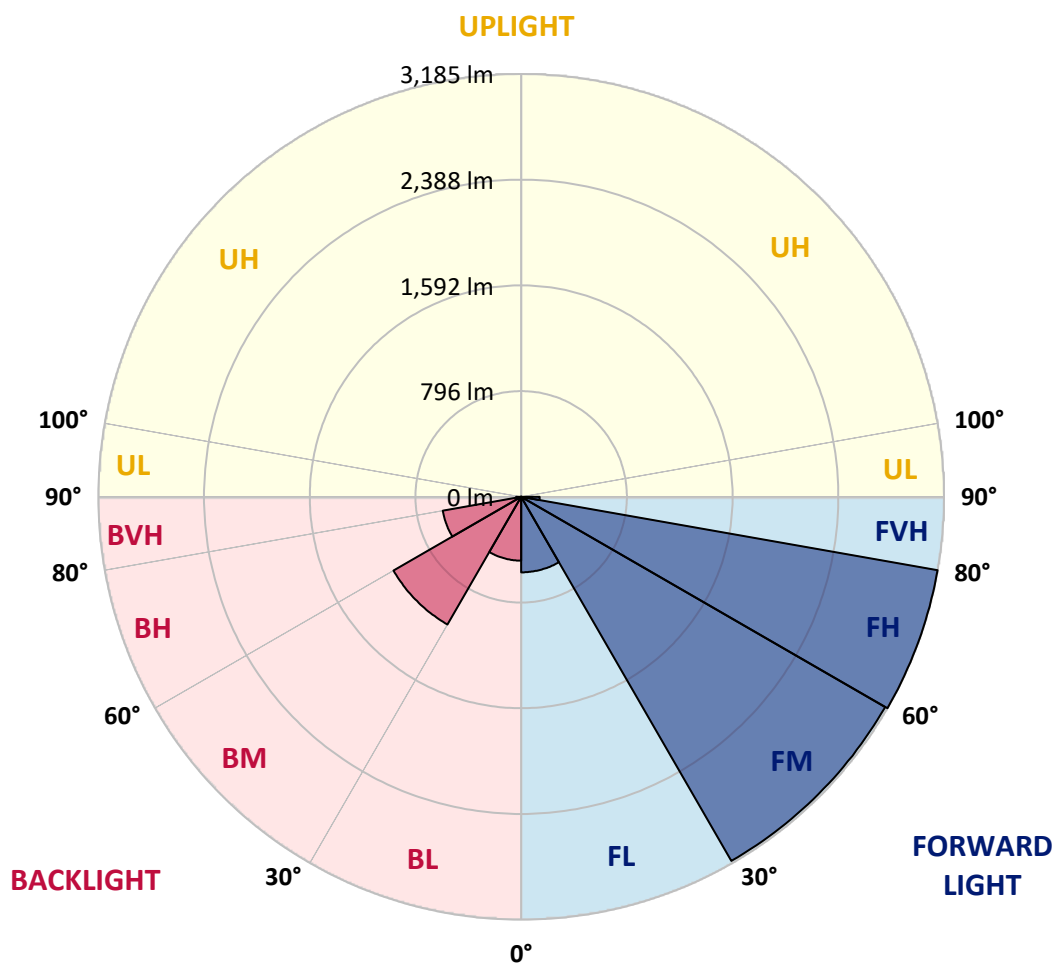
CATALOG NUMBER: VST-E03-LED-E-U-SL3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	569.0	6.1			
FM	(30°-60°)	3166.3	34.1			
FH	(60°-80°)	3184.7	34.3			G2/5000
FVH	(80°-90°)	138.9	1.5			G2/225
BL	(0°-30°)	480.4	5.2	B1/500		
BM	(30°-60°)	1110.1	12.0	B2/2500		
BH	(60°-80°)	599.4	6.5	B2/1000		G2/1000
BVH	(80°-90°)	38.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P158431

CATALOG NUMBER: VST-E03-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6
2.5°	1046.0	1048.5	1049.1	1048.5	1049.1	1046.6	1046.0	1042.3	1044.2	1039.3	1038.0
5°	1102.7	1104.5	1105.7	1100.8	1102.0	1099.6	1096.5	1092.8	1087.9	1081.1	1076.8
7.5°	1158.1	1161.1	1160.5	1158.7	1154.3	1151.9	1145.8	1140.2	1131.6	1123.6	1118.0
10°	1232.6	1231.9	1231.9	1221.5	1215.3	1209.8	1198.7	1190.1	1181.5	1169.8	1163.6
12.5°	1318.7	1314.4	1312.6	1305.2	1292.3	1282.4	1266.4	1249.8	1234.4	1222.1	1212.2
15°	1401.8	1401.8	1396.9	1385.2	1372.9	1360.0	1337.2	1313.2	1288.0	1268.3	1258.4
17.5°	1477.6	1470.8	1466.5	1451.1	1438.2	1417.3	1392.0	1366.1	1334.8	1307.0	1288.0
20°	1533.0	1527.5	1518.2	1499.2	1477.0	1452.4	1422.8	1392.7	1358.8	1328.6	1307.0
22.5°	1565.0	1558.3	1544.1	1518.8	1488.7	1454.2	1419.7	1391.4	1360.6	1337.8	1320.0
25°	1581.7	1574.9	1555.8	1522.6	1481.9	1436.3	1396.9	1369.3	1351.4	1345.9	1343.4
27.5°	1581.0	1575.5	1555.1	1517.0	1464.7	1412.3	1369.9	1346.5	1344.6	1366.1	1382.2
30°	1565.0	1561.3	1542.8	1504.7	1449.9	1395.1	1355.7	1343.4	1362.5	1408.0	1447.4
32.5°	1549.0	1547.2	1534.3	1499.8	1453.0	1406.8	1379.7	1381.0	1420.3	1490.5	1553.9
35°	1550.9	1553.3	1551.5	1533.0	1503.4	1479.4	1466.5	1493.6	1555.1	1640.1	1725.1
37.5°	1566.8	1576.1	1587.8	1589.6	1590.2	1586.6	1613.6	1670.9	1760.8	1871.6	2004.6
40°	1601.9	1612.4	1646.3	1675.9	1714.0	1759.6	1814.3	1893.8	2005.2	2141.9	2305.0
42.5°	1710.9	1725.7	1767.5	1822.4	1892.5	1964.0	2045.8	2154.2	2290.9	2434.9	2606.1
45°	1853.2	1883.9	1930.1	1991.0	2096.3	2196.7	2302.6	2423.9	2569.1	2749.6	2921.9
47.5°	2030.5	2061.2	2128.3	2193.6	2318.0	2443.0	2558.7	2685.5	2843.2	3027.8	3218.7
50°	2185.6	2220.7	2280.4	2368.4	2512.5	2665.8	2793.9	2931.2	3063.5	3258.1	3450.8
52.5°	2307.5	2332.7	2390.0	2470.7	2631.4	2799.4	2961.4	3114.0	3271.0	3465.5	3644.1
55°	2322.9	2346.3	2402.3	2494.7	2657.8	2844.4	3030.9	3211.9	3434.2	3646.6	3883.0
57.5°	2256.4	2275.5	2332.1	2414.6	2573.5	2785.9	3021.7	3253.8	3538.2	3825.1	4113.8
60°	2162.2	2181.3	2225.6	2291.5	2434.9	2664.0	2939.2	3256.9	3634.9	4049.2	4474.0
62.5°	2058.8	2075.4	2111.1	2157.9	2284.1	2495.3	2810.5	3236.5	3713.7	4272.1	4927.1
65°	1884.5	1924.6	1940.0	1988.0	2114.2	2313.7	2634.4	3099.2	3681.7	4371.2	5211.6
67°	1691.8	1732.5	1740.5	1789.1	1890.1	2081.6	2407.9	2845.0	3428.0	4200.1	5148.8
67.5°	1630.3	1664.8	1677.1	1725.7	1821.1	2001.5	2311.2	2753.2	3350.5	4106.5	5073.1
70°	1198.7	1236.8	1250.4	1270.7	1339.1	1489.3	1694.3	2077.9	2671.4	3351.1	4279.5
72.5°	641.5	672.3	685.3	715.4	750.5	832.4	989.4	1264.6	1639.5	2242.3	3044.5
75°	434.0	446.3	455.6	476.5	512.8	578.1	647.0	743.7	970.3	1265.2	1732.5
77.5°	247.5	253.0	254.3	257.9	286.9	349.1	462.4	626.1	802.8	916.7	1108.2
80°	107.1	118.2	126.8	121.3	119.5	132.4	165.6	246.9	483.9	768.4	911.8
82.5°	57.9	62.8	70.2	70.8	74.5	78.8	85.6	101.6	142.9	288.1	628.6
85°	30.2	31.4	41.9	48.0	51.1	53.6	54.8	61.0	70.2	89.3	156.4
87.5°	4.3	6.2	7.4	9.8	11.1	11.7	13.6	17.2	20.3	24.6	41.9
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: P158431

CATALOG NUMBER: VST-E03-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6
2.5°	1032.5	1031.2	1027.6	1025.1	1022.6	1020.2	1017.1	1014.6	1010.3	1007.2	1003.6
5°	1070.6	1063.3	1058.3	1051.6	1050.3	1042.3	1034.3	1030.6	1023.2	1017.1	1009.7
7.5°	1109.4	1100.8	1092.8	1087.3	1084.2	1073.1	1065.1	1055.9	1047.2	1039.3	1030.6
10°	1155.0	1146.4	1137.7	1134.1	1128.5	1118.0	1111.3	1099.6	1091.0	1081.1	1069.4
12.5°	1202.4	1196.2	1190.1	1185.2	1182.7	1177.7	1167.9	1158.1	1146.4	1136.5	1123.0
15°	1244.3	1240.0	1237.5	1236.2	1236.2	1233.2	1223.9	1214.7	1202.4	1191.3	1176.5
17.5°	1273.8	1271.9	1273.8	1275.7	1278.1	1275.7	1273.8	1263.4	1255.3	1241.8	1227.0
20°	1291.0	1294.7	1304.0	1310.2	1315.7	1320.0	1321.8	1313.2	1302.7	1292.9	1283.0
22.5°	1309.5	1320.0	1336.0	1345.2	1354.4	1369.9	1373.5	1367.4	1359.4	1353.2	1342.7
25°	1340.3	1355.7	1383.4	1398.2	1411.1	1433.9	1436.9	1438.2	1436.3	1431.4	1418.5
27.5°	1388.3	1418.5	1455.4	1474.5	1488.7	1518.2	1529.9	1529.9	1525.0	1530.5	1530.5
30°	1472.0	1512.1	1560.1	1571.2	1593.4	1619.2	1638.3	1640.8	1641.4	1653.1	1670.3
32.5°	1600.7	1638.9	1692.5	1704.8	1723.9	1748.5	1770.1	1767.5	1773.1	1798.4	1821.1
35°	1787.9	1826.7	1861.7	1878.4	1887.0	1909.2	1917.2	1930.7	1947.4	1978.7	1975.7
37.5°	2065.0	2099.4	2104.3	2114.8	2104.3	2108.6	2114.8	2130.8	2175.1	2203.4	2157.9
40°	2398.6	2455.9	2450.3	2438.0	2414.6	2383.3	2394.3	2419.0	2467.0	2442.4	2319.8
42.5°	2713.2	2772.4	2761.3	2747.1	2695.4	2683.7	2682.4	2702.8	2728.6	2658.4	2446.6
45°	3022.9	3083.2	3064.1	3056.2	3021.7	2996.5	3017.3	3018.6	3011.8	2861.6	2557.4
47.5°	3342.4	3397.9	3385.6	3392.3	3356.6	3340.0	3341.8	3333.2	3269.8	3034.0	2643.7
50°	3600.4	3674.9	3682.3	3666.9	3647.8	3622.6	3687.2	3663.8	3522.8	3201.4	2726.8
52.5°	3801.1	3901.4	3939.6	3929.8	3914.4	3917.5	4038.8	4065.2	3831.9	3412.6	2818.5
55°	4038.8	4197.0	4259.2	4296.1	4280.1	4341.7	4619.3	4632.8	4261.6	3688.4	2938.0
57.5°	4381.7	4608.2	4804.6	4856.9	4907.5	5107.6	5558.2	5420.9	4819.4	4105.9	3089.4
60°	4903.1	5399.3	5718.3	5885.8	6004.0	6283.4	6712.0	6364.1	5514.5	4602.7	3279.7
62.5°	5633.3	6358.6	6891.7	7059.8	7108.4	7269.1	7579.4	6913.9	5893.1	4825.6	3296.3
65°	6176.9	7046.9	7685.3	7771.5	7713.7	7716.7	7798.0	6884.9	5752.1	4631.0	3010.6
67°	6141.2	7115.2	7769.0	7882.3	7802.3	7697.0	7570.2	6492.8	5299.0	4223.5	2636.3
67.5°	6086.5	7049.3	7732.7	7852.1	7778.9	7658.9	7473.5	6340.7	5158.0	4096.6	2559.9
70°	5261.5	6217.6	7138.0	7306.1	7336.9	7227.3	6707.0	5346.4	4187.8	3332.6	1988.0
72.5°	4095.4	4946.9	5857.4	6003.4	6121.6	5805.7	4881.6	3692.8	3052.4	2401.7	1439.4
75°	2704.0	3570.2	4029.5	4051.1	3900.2	3315.4	2385.1	1849.4	1702.3	1411.7	890.9
77.5°	1446.8	2099.4	2112.4	1955.9	1884.5	1405.0	570.1	314.6	350.3	397.7	354.6
80°	1079.3	1337.2	1549.6	1666.0	1700.5	1204.9	294.9	166.9	145.9	133.0	131.2
82.5°	973.4	1291.7	1448.0	1511.5	1495.4	991.2	165.6	112.1	92.9	101.0	115.1
85°	381.7	689.5	906.9	877.9	737.6	369.4	90.5	60.4	60.4	87.4	113.3
87.5°	78.2	141.6	192.1	183.5	165.0	71.4	44.3	36.3	37.0	70.8	107.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6	1006.6
2.5°	999.8	996.1	993.7	991.2	988.7	987.5	985.7	985.7	982.0	980.8	979.5
5°	1004.2	998.0	993.7	988.1	983.8	980.2	975.2	974.0	969.7	966.6	965.3
7.5°	1022.6	1013.4	1004.2	997.4	991.2	983.2	977.7	972.7	968.5	965.3	961.7
10°	1057.7	1047.8	1034.9	1022.6	1014.6	1002.3	993.7	985.1	980.2	976.4	971.5
12.5°	1109.4	1095.2	1079.9	1065.1	1051.6	1035.5	1026.9	1016.5	1010.3	1007.2	1003.6
15°	1162.4	1147.0	1127.9	1113.7	1098.4	1086.0	1078.0	1068.8	1063.9	1060.2	1057.7
17.5°	1216.6	1198.7	1185.2	1171.0	1163.6	1154.3	1143.9	1132.2	1118.0	1109.4	1097.7
20°	1271.9	1258.4	1250.4	1242.4	1233.8	1220.9	1199.9	1175.9	1149.4	1124.2	1100.2
22.5°	1336.6	1328.6	1327.4	1320.0	1302.1	1271.3	1232.6	1187.6	1142.7	1100.8	1068.2
25°	1427.7	1427.7	1421.6	1391.4	1349.5	1294.1	1228.9	1164.2	1104.5	1047.2	1004.2
27.5°	1542.2	1537.9	1507.7	1445.6	1370.5	1284.3	1196.8	1115.0	1038.6	975.8	920.4
30°	1668.4	1638.3	1573.6	1475.8	1363.1	1252.3	1145.2	1050.3	960.4	883.5	818.2
32.5°	1799.6	1726.3	1610.0	1475.8	1337.2	1204.3	1080.5	964.1	861.3	775.1	697.6
35°	1918.4	1784.8	1618.6	1451.8	1286.8	1133.5	990.0	858.2	735.1	642.1	557.2
37.5°	2026.1	1823.6	1609.3	1405.0	1213.5	1033.7	865.6	720.3	581.2	491.3	418.7
40°	2096.3	1831.6	1571.2	1331.7	1108.8	898.9	712.9	550.4	440.2	358.3	309.7
42.5°	2140.0	1816.2	1509.6	1231.3	967.8	729.5	535.0	394.6	312.8	267.2	248.7
45°	2164.7	1776.2	1418.5	1094.0	797.3	554.7	379.9	285.1	240.7	224.7	218.6
47.5°	2163.4	1711.6	1304.6	935.2	608.9	386.6	269.0	222.2	209.9	205.0	203.8
50°	2150.5	1632.1	1171.0	762.8	439.6	269.6	213.0	199.5	196.4	193.3	192.1
52.5°	2132.6	1533.6	1023.2	594.7	312.1	215.5	193.3	189.6	187.1	184.1	182.9
55°	2099.4	1412.3	863.2	447.6	244.4	194.5	186.5	185.3	182.2	177.9	175.4
57.5°	2058.8	1289.2	709.9	349.7	216.1	189.6	185.3	183.5	179.2	174.2	169.3
60°	2044.0	1187.6	589.8	294.9	209.3	191.5	188.4	185.9	179.8	172.4	166.9
62.5°	1951.7	1073.1	503.6	273.4	213.0	199.5	198.2	194.5	185.3	176.7	168.1
65°	1712.8	907.5	426.7	258.6	220.4	213.0	214.3	208.7	199.5	187.8	172.4
67°	1448.6	740.0	355.3	244.4	226.0	227.2	231.5	227.2	215.5	198.8	177.9
67.5°	1378.5	697.6	337.4	240.1	227.2	230.9	235.8	232.7	221.0	202.0	180.4
70°	1024.4	491.3	251.8	217.3	227.2	242.0	253.0	256.1	243.2	216.7	185.3
72.5°	721.6	317.0	193.3	188.4	206.2	226.0	246.9	257.3	242.6	213.7	178.6
75°	433.4	198.2	157.0	160.1	173.6	193.9	210.5	214.9	196.4	177.9	154.6
77.5°	200.7	131.8	123.1	127.4	140.4	149.6	149.6	141.0	126.8	115.7	110.8
80°	118.2	107.8	107.1	115.1	123.7	117.0	106.5	94.8	87.4	83.8	81.9
82.5°	110.8	115.1	122.5	124.4	117.6	101.0	88.0	76.3	72.7	70.8	68.9
85°	130.5	139.7	127.4	117.6	104.0	85.0	68.9	59.1	57.2	55.4	52.9
87.5°	120.7	115.1	100.4	86.2	71.4	51.7	37.6	33.8	36.3	35.7	34.5
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: P158431

CATALOG NUMBER: VST-E03-LED-E-U-SL3-7050

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1006.6	1006.6	1006.6	1006.6	1006.6
2.5°	980.2	980.2	977.7	976.4	979.5
5°	962.9	963.5	961.7	961.1	961.7
7.5°	959.2	958.6	957.4	956.1	957.4
10°	970.3	969.7	967.8	969.1	967.2
12.5°	1003.6	1007.2	1006.6	1007.8	1010.3
15°	1057.7	1057.1	1055.2	1056.5	1058.3
17.5°	1088.5	1083.5	1079.3	1077.4	1077.4
20°	1081.1	1066.9	1059.5	1055.2	1054.0
22.5°	1037.4	1017.1	1001.7	998.0	994.9
25°	966.0	940.7	921.1	916.7	908.7
27.5°	882.8	849.0	825.6	820.7	816.4
30°	773.9	735.1	708.0	690.8	696.3
32.5°	640.9	604.0	572.6	544.9	540.5
35°	495.0	454.4	426.7	414.4	406.3
37.5°	369.4	335.5	317.0	305.3	306.0
40°	282.6	264.7	254.9	246.9	247.5
42.5°	235.8	227.8	225.4	221.6	219.8
45°	213.7	211.2	211.8	208.1	206.9
47.5°	201.3	199.5	200.1	197.6	197.0
50°	191.5	190.3	190.9	189.0	188.4
52.5°	181.6	182.2	181.6	180.4	180.4
55°	173.0	172.4	173.6	171.8	171.8
57.5°	166.2	165.6	165.6	165.0	165.0
60°	162.5	160.1	159.5	159.5	160.1
62.5°	160.7	156.4	155.8	155.8	156.4
65°	161.3	154.6	152.0	151.4	150.8
67°	161.9	152.0	147.1	144.7	144.1
67.5°	162.5	150.8	145.3	142.9	141.6
70°	158.8	142.2	134.2	129.9	128.7
72.5°	149.6	131.8	121.9	116.3	115.1
75°	133.0	119.5	110.8	104.6	102.2
77.5°	102.8	96.7	93.6	89.9	88.7
80°	80.0	77.0	75.7	73.3	72.7
82.5°	66.5	63.4	61.6	58.5	56.6
85°	51.7	48.0	46.8	44.3	43.1
87.5°	33.8	32.0	31.4	28.3	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)