

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: P159319

Luminaire Tested: **VST-E04-LED-E-U-T2-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159319
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33705)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E04-LED-E-U-T2-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (84) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11277 lumens
Efficiency: N/A
Efficacy: 116.0 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): 97.2
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



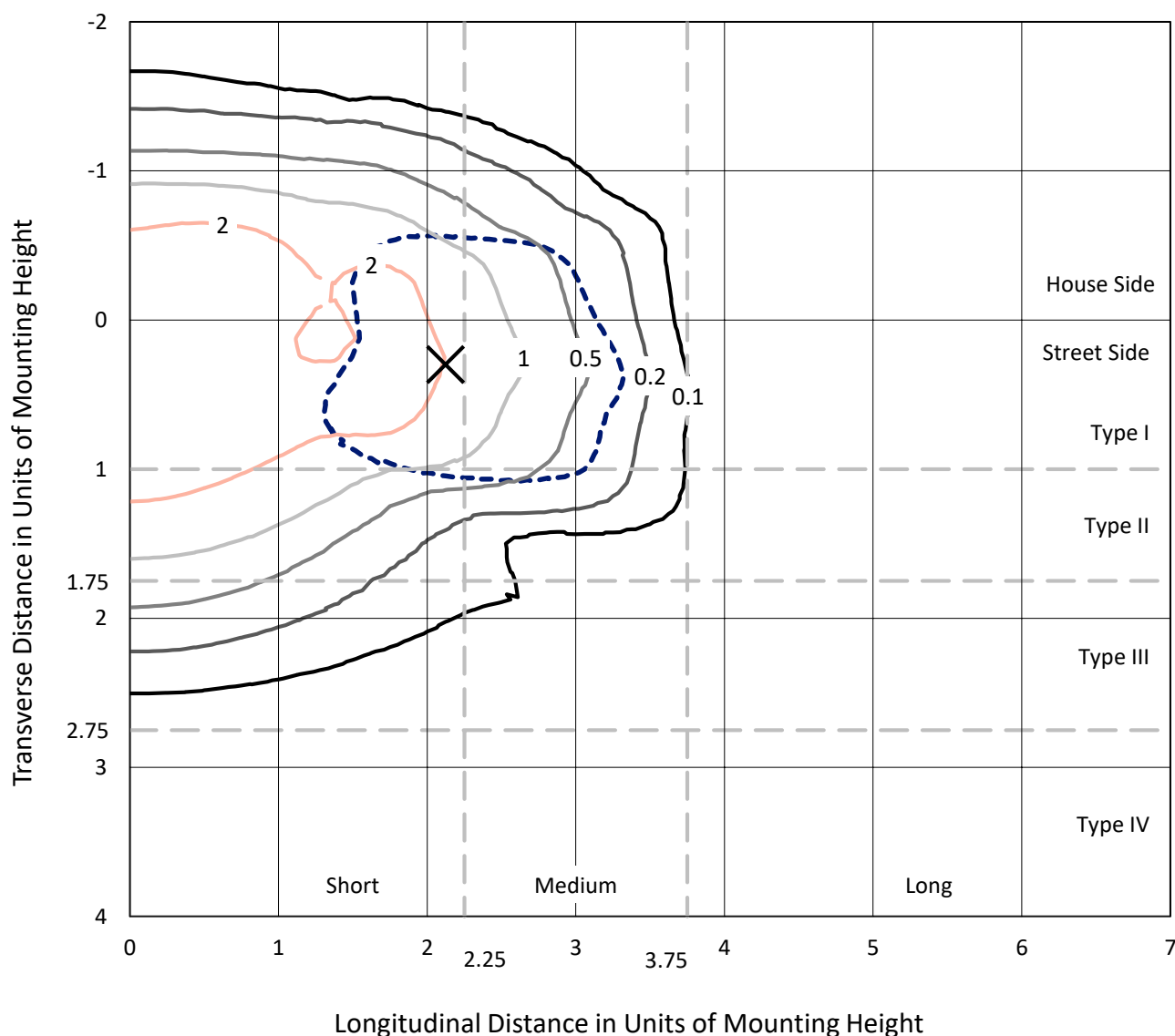
REPORT NUMBER: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

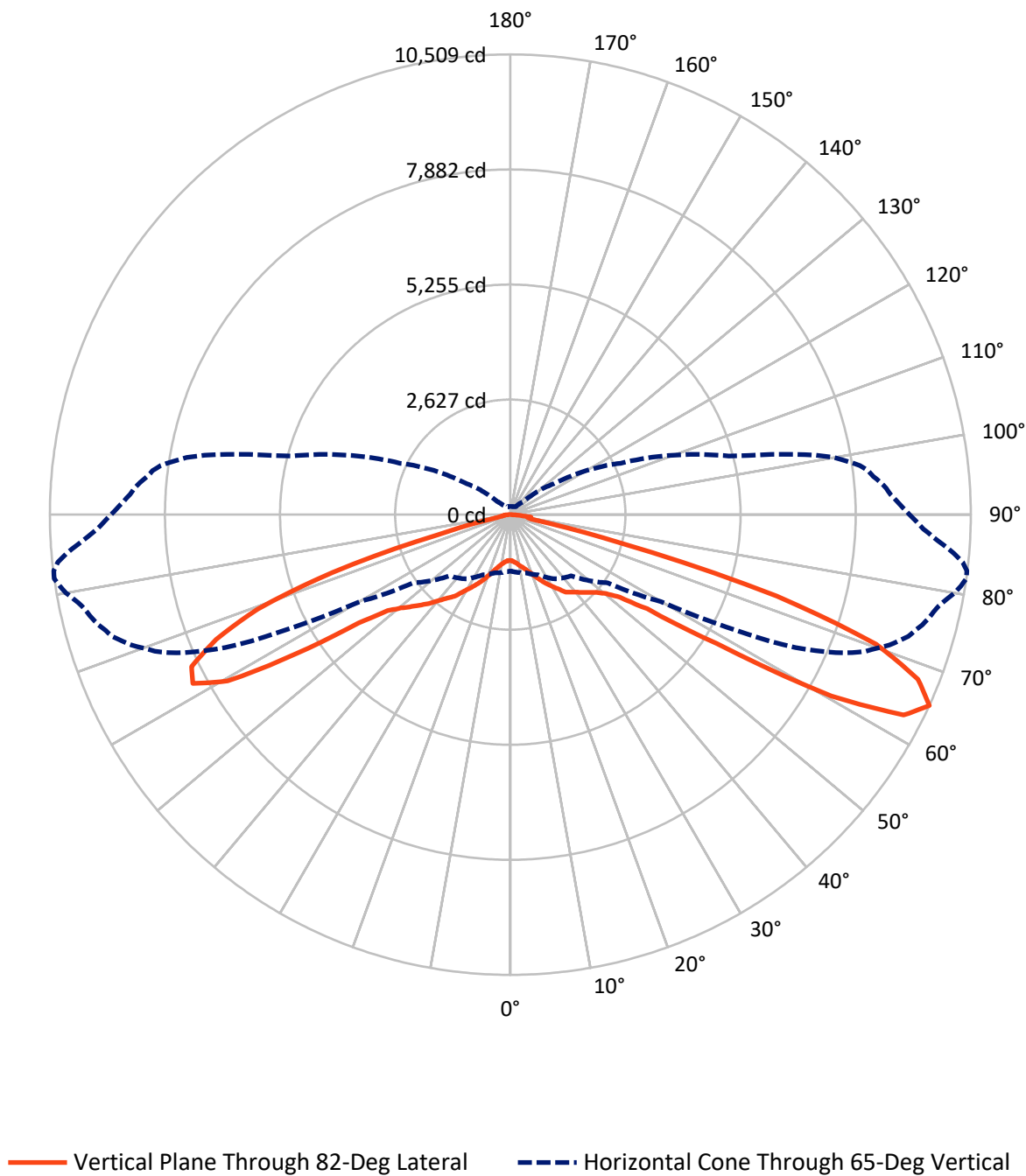


Based on 20 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P159319

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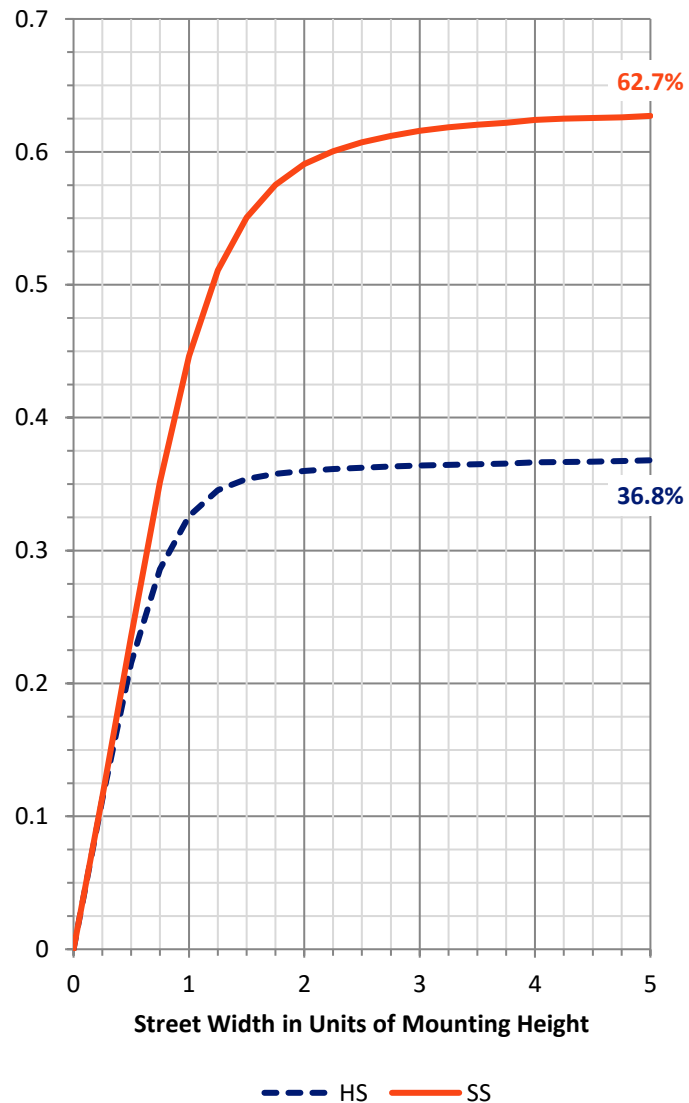
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4198.8	0.0	4198.8
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	7078.2	0.0	7078.2
	% Fixture	62.8	0.0	62.8
Total	Lumens	11277.0	0.0	11277.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	0.9
10°-20°	373.2	3.3
20°-30°	739.6	6.6
30°-40°	1267.8	11.2
40°-50°	1904.5	16.9
50°-60°	2646.0	23.5
60°-70°	3018.6	26.8
70°-80°	1039.9	9.2
80°-90°	181.2	1.6
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°	11277.0	100.0
0°-180°	11277.0	100.0

Coefficient of Utilization



REPORT NUMBER: P159319

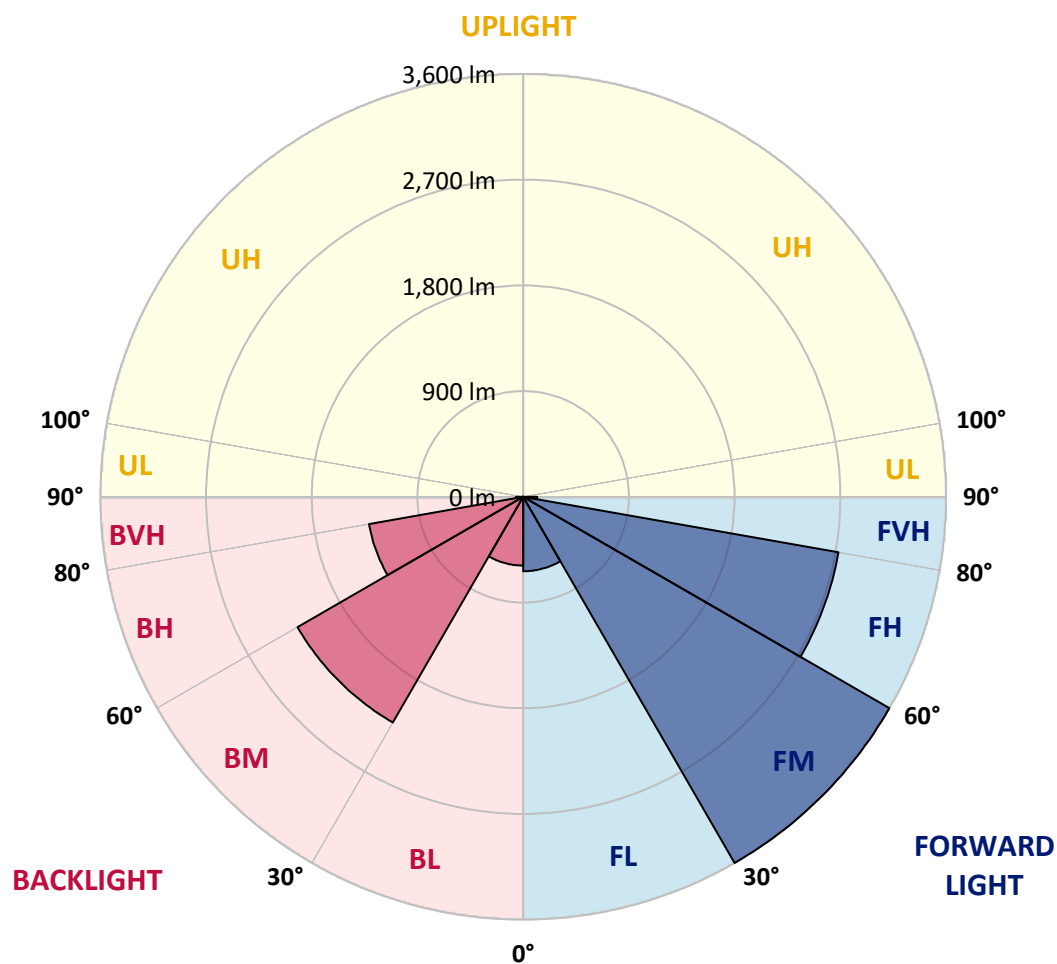
CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	633.5	5.6			
FM	(30°-60°)	3599.9	31.9			
FH	(60°-80°)	2725.5	24.2			G2/5000
FVH	(80°-90°)	119.3	1.1			G2/225
BL	(0°-30°)	585.5	5.2	B2/1000		
BM	(30°-60°)	2218.4	19.7	B2/2500		
BH	(60°-80°)	1333.0	11.8	B3/2500		G3/2500
BVH	(80°-90°)	61.9	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





REPORT NUMBER: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3
2.5°	1106.2	1107.0	1106.2	1104.1	1103.3	1096.8	1089.4	1085.8	1085.1	1082.1	1082.9
5°	1174.9	1172.7	1169.8	1166.2	1162.5	1151.6	1139.1	1132.6	1130.4	1128.2	1125.2
7.5°	1236.3	1237.8	1236.3	1231.2	1221.7	1207.8	1191.7	1181.5	1180.8	1178.6	1176.4
10°	1315.2	1318.9	1310.1	1301.3	1288.2	1267.0	1248.7	1235.6	1233.4	1230.5	1229.0
12.5°	1400.7	1401.4	1398.5	1378.8	1356.9	1327.6	1301.3	1288.2	1285.3	1281.6	1280.2
15°	1492.0	1492.8	1476.7	1457.7	1424.1	1389.0	1352.5	1337.9	1334.2	1335.0	1329.1
17.5°	1564.4	1565.8	1550.5	1526.4	1486.2	1444.6	1405.1	1393.4	1391.2	1391.9	1389.0
20°	1595.8	1598.0	1588.5	1570.2	1532.2	1495.7	1467.2	1459.9	1459.2	1457.7	1463.6
22.5°	1594.3	1595.1	1591.4	1584.1	1561.5	1540.3	1536.6	1541.0	1540.3	1541.7	1546.9
25°	1581.2	1583.4	1582.7	1585.6	1581.9	1590.0	1606.8	1622.1	1624.3	1627.2	1636.7
27.5°	1614.8	1619.2	1614.1	1617.0	1622.8	1649.9	1684.2	1707.6	1712.0	1720.0	1728.1
30°	1746.3	1740.5	1733.9	1726.6	1730.3	1747.1	1785.8	1806.2	1808.4	1814.3	1825.2
32.5°	1941.4	1934.8	1929.0	1917.3	1914.4	1907.1	1920.2	1925.3	1924.6	1930.5	1933.4
35°	2161.4	2162.1	2160.6	2169.4	2176.7	2139.4	2093.4	2081.0	2086.1	2079.5	2081.0
37.5°	2349.1	2351.3	2390.1	2438.3	2452.2	2428.8	2327.9	2278.3	2261.5	2259.3	2242.5
40°	2557.4	2557.4	2615.8	2675.0	2713.7	2743.0	2623.1	2535.5	2499.7	2489.4	2447.8
42.5°	2786.1	2774.4	2827.7	2892.8	2964.4	3030.9	2968.8	2870.1	2819.0	2800.7	2727.6
45°	2973.9	2966.6	2992.9	3053.5	3169.7	3299.8	3308.5	3258.1	3227.4	3189.4	3122.2
47.5°	3089.3	3085.7	3101.0	3166.8	3312.2	3522.6	3640.2	3665.8	3647.6	3618.3	3553.3
50°	3134.6	3129.5	3140.5	3213.5	3376.5	3654.1	3914.3	4034.8	4043.6	4050.2	4029.7
52.5°	3118.5	3112.0	3134.6	3196.0	3365.5	3700.2	4128.3	4360.0	4398.7	4431.6	4498.8
55°	2964.4	2954.1	3015.5	3131.0	3318.0	3683.4	4284.7	4672.7	4754.5	4842.2	4991.3
57.5°	2728.4	2719.6	2808.0	2966.6	3234.0	3637.3	4389.9	5068.0	5252.1	5410.0	5833.0
60°	2501.1	2493.8	2545.7	2699.1	2961.4	3413.0	4259.9	5201.0	5510.1	5850.6	6622.9
62.5°	2094.9	2075.1	2144.5	2273.9	2439.7	2823.3	3692.1	4905.1	5381.5	5882.0	6929.0
65°	1287.5	1316.0	1375.9	1519.1	1790.9	1973.6	2711.6	3968.3	4596.7	5224.4	6582.7
67.5°	817.6	825.7	870.2	969.6	1180.0	1363.4	1643.3	2490.2	2974.6	3592.0	5168.1
70°	700.7	705.8	743.8	847.6	993.0	1218.8	1243.6	1300.6	1474.5	1867.6	3038.2
72.5°	552.4	561.2	591.1	681.0	856.4	1098.9	1535.2	1028.1	993.0	1025.9	1482.6
75°	328.8	339.0	363.9	412.8	550.2	840.3	1608.2	1196.1	1115.0	1051.4	1023.0
77.5°	173.9	166.6	183.4	211.9	282.8	447.9	1208.5	1465.7	1408.8	1332.8	1171.3
80°	86.2	89.1	94.3	100.1	126.4	181.9	604.3	1516.2	1680.6	1753.6	1610.4
82.5°	34.3	38.7	54.8	58.5	69.4	77.5	194.4	840.3	1203.4	1632.3	2131.4
85°	17.5	16.8	29.2	35.1	40.9	36.5	68.7	313.5	564.1	879.0	1424.1
87.5°	2.2	2.9	6.6	8.8	12.4	11.7	19.7	68.0	108.1	153.4	215.6
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: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3
2.5°	1079.2	1078.5	1078.5	1075.6	1075.6	1076.3	1074.1	1072.6	1072.6	1073.4	1070.4
5°	1123.1	1120.9	1120.9	1117.9	1114.3	1114.3	1111.4	1110.6	1109.2	1106.2	1104.1
7.5°	1174.2	1172.0	1168.4	1166.2	1164.7	1162.5	1158.9	1157.4	1154.5	1151.6	1148.6
10°	1226.8	1223.9	1222.4	1218.8	1217.3	1212.9	1210.7	1211.5	1205.6	1203.4	1204.2
12.5°	1279.4	1276.5	1271.4	1269.9	1269.2	1264.8	1262.6	1261.2	1256.8	1256.0	1253.8
15°	1326.2	1327.6	1325.5	1321.8	1318.9	1318.1	1316.0	1314.5	1311.6	1308.6	1305.7
17.5°	1386.8	1389.0	1386.1	1381.0	1381.0	1380.3	1381.0	1380.3	1375.1	1377.3	1375.9
20°	1464.3	1465.7	1458.4	1460.6	1462.1	1461.4	1463.6	1465.7	1464.3	1464.3	1466.5
22.5°	1553.4	1555.6	1551.2	1554.2	1558.5	1554.9	1561.5	1560.7	1562.2	1564.4	1565.1
25°	1644.8	1649.1	1645.5	1653.5	1650.6	1653.5	1661.6	1659.4	1663.0	1668.9	1671.1
27.5°	1736.1	1739.0	1739.7	1744.9	1750.0	1754.4	1764.6	1764.6	1767.5	1777.7	1777.7
30°	1831.8	1834.7	1837.7	1845.0	1847.9	1855.9	1866.2	1869.1	1867.6	1882.2	1886.6
32.5°	1942.1	1945.1	1950.2	1959.0	1962.6	1970.6	1970.6	1978.7	1984.5	1996.9	1997.7
35°	2089.0	2091.2	2089.0	2088.3	2093.4	2104.4	2105.1	2116.8	2121.9	2134.3	2138.0
37.5°	2235.9	2235.2	2225.7	2215.4	2216.2	2211.8	2208.8	2214.0	2216.2	2216.9	2224.9
40°	2433.9	2414.9	2400.3	2374.7	2363.0	2344.8	2333.8	2333.1	2321.4	2319.9	2322.1
42.5°	2693.3	2671.4	2637.0	2593.9	2561.0	2527.4	2502.6	2488.0	2462.4	2449.2	2438.3
45°	3055.7	3001.6	2960.7	2909.6	2846.0	2787.5	2726.2	2698.4	2649.4	2619.5	2585.9
47.5°	3498.5	3445.2	3382.3	3329.7	3246.4	3165.3	3081.3	3007.5	2922.0	2854.0	2798.5
50°	3979.3	3947.9	3902.6	3853.6	3746.2	3692.9	3586.9	3486.8	3394.7	3273.4	3167.5
52.5°	4472.5	4490.8	4480.5	4463.0	4395.0	4374.6	4283.2	4161.2	4068.4	3985.1	3801.0
55°	5080.4	5102.3	5146.2	5171.8	5163.7	5215.6	5192.9	5098.0	5060.7	5022.0	4891.2
57.5°	6010.6	6166.9	6334.3	6481.1	6515.5	6699.6	6660.2	6755.1	6822.4	6774.1	6731.8
60°	7002.1	7317.8	7602.0	7899.4	8141.2	8322.4	8562.1	8723.6	8825.2	9007.8	9022.4
62.5°	7401.8	7830.7	8191.7	8536.5	8823.7	9075.0	9291.3	9514.2	9696.9	9862.0	9981.1
65°	7182.6	7630.5	8068.2	8418.2	8694.4	8910.6	9145.9	9322.7	9502.5	9608.4	9733.4
67.5°	5971.1	6564.4	7102.9	7497.5	7875.3	8095.2	8373.6	8547.5	8738.2	8850.0	8930.4
70°	3893.1	4665.4	5401.2	5999.6	6509.6	6766.1	7102.2	7339.7	7569.1	7575.0	7708.7
72.5°	2100.7	2746.6	3362.6	3974.2	4555.8	4897.0	5228.7	5517.4	5745.3	5648.2	5781.1
75°	1169.8	1472.3	1809.2	2176.7	2531.1	2726.2	2973.9	2975.3	3093.0	2908.1	2954.9
77.5°	1125.2	1111.4	1116.5	1126.7	1144.2	1107.0	1106.2	1083.6	1048.5	985.0	995.9
80°	1478.2	1301.3	1174.2	974.7	784.8	640.1	599.9	609.4	637.9	694.9	767.2
82.5°	2137.2	1988.2	1774.8	1460.6	1146.4	884.1	726.3	644.5	640.8	697.8	807.4
85°	1556.3	1646.2	1632.3	1362.7	1123.8	912.6	664.2	561.2	464.7	442.1	480.8
87.5°	229.4	190.0	214.1	179.0	130.1	100.8	88.4	70.9	68.0	69.4	76.0
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: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3
2.5°	1071.2	1068.3	1065.3	1067.5	1065.3	1064.6	1062.4	1060.9	1060.2	1060.2	1060.2
5°	1104.1	1100.4	1098.2	1097.5	1095.3	1093.1	1092.4	1088.7	1088.0	1088.0	1085.8
7.5°	1148.6	1145.7	1142.1	1139.9	1138.4	1134.7	1131.1	1130.4	1129.6	1126.7	1124.5
10°	1200.5	1196.1	1191.7	1191.7	1188.8	1188.1	1184.4	1179.3	1178.6	1174.2	1172.7
12.5°	1249.5	1248.0	1242.9	1241.4	1239.2	1237.0	1234.8	1232.7	1230.5	1226.8	1228.3
15°	1307.9	1304.3	1299.9	1300.6	1299.9	1297.0	1294.0	1291.8	1290.4	1288.9	1288.9
17.5°	1378.1	1376.6	1375.9	1372.2	1369.3	1371.5	1371.5	1371.5	1367.8	1368.6	1369.3
20°	1467.2	1468.7	1467.2	1464.3	1463.6	1465.7	1460.6	1468.7	1464.3	1461.4	1462.8
22.5°	1565.8	1571.0	1565.1	1565.8	1569.5	1571.0	1565.8	1572.4	1570.2	1565.8	1569.5
25°	1673.3	1676.9	1674.0	1673.3	1675.4	1680.6	1679.8	1679.1	1684.2	1679.8	1682.0
27.5°	1783.6	1785.8	1787.2	1789.4	1790.9	1790.2	1793.1	1793.1	1796.0	1790.9	1793.1
30°	1893.2	1893.2	1896.1	1899.0	1899.0	1899.0	1904.9	1905.6	1901.2	1902.7	1897.6
32.5°	2010.1	2010.8	2013.8	2013.8	2019.6	2020.3	2026.9	2018.1	2026.9	2019.6	2021.1
35°	2147.5	2157.0	2158.4	2165.7	2171.6	2173.8	2173.8	2174.5	2182.5	2176.7	2178.9
37.5°	2227.8	2230.0	2235.9	2239.5	2239.5	2242.5	2244.6	2242.5	2244.6	2243.9	2246.1
40°	2322.8	2320.6	2327.2	2328.7	2325.8	2329.4	2328.7	2326.5	2332.3	2327.9	2330.9
42.5°	2438.3	2425.9	2425.1	2431.0	2425.1	2428.1	2427.3	2422.2	2429.5	2431.7	2429.5
45°	2561.8	2555.2	2542.0	2542.0	2536.2	2534.0	2534.7	2534.0	2534.7	2543.5	2546.4
47.5°	2762.7	2722.5	2699.9	2678.7	2661.1	2660.4	2652.4	2656.8	2662.6	2677.2	2690.4
50°	3099.5	3006.7	2949.8	2897.1	2859.2	2846.0	2830.7	2829.2	2834.3	2851.1	2873.8
52.5°	3700.2	3571.6	3450.3	3337.7	3239.8	3164.6	3127.3	3107.6	3100.3	3117.1	3139.0
55°	4799.1	4556.5	4385.5	4271.6	4028.2	3925.2	3793.0	3732.3	3673.1	3679.0	3716.2
57.5°	6677.0	6546.2	6403.0	6203.5	6054.4	5874.7	5544.4	5360.3	5368.3	5411.4	5277.0
60°	9137.9	9005.6	8946.4	8765.2	8661.5	8589.1	8413.8	8108.4	8000.2	7979.8	7732.8
62.5°	10072.4	10103.8	10150.6	10201.8	10198.8	10230.3	10076.8	9977.4	9852.5	9690.3	9446.2
65°	9828.4	9908.0	10003.0	10140.4	10296.7	10412.2	10509.4	10497.7	10380.8	10164.5	9906.6
67.5°	9002.0	9080.9	9150.3	9334.4	9590.9	9825.5	10033.0	10174.0	10095.8	9916.8	9615.8
70°	7759.8	7816.8	7860.7	8020.7	8302.0	8588.4	8859.5	9096.2	9072.1	8855.1	8614.7
72.5°	5622.6	5760.7	5835.2	5824.3	5998.2	6318.9	6356.9	6559.3	6615.6	6381.8	5998.9
75°	2739.3	2741.5	2655.3	2626.8	2635.6	2691.1	2585.1	2591.7	2555.2	2389.3	2252.7
77.5°	957.2	930.9	868.0	793.5	686.8	586.7	485.2	441.3	426.7	383.6	353.6
80°	824.9	863.7	851.2	789.9	677.3	540.0	403.3	298.8	255.0	239.7	225.0
82.5°	936.7	1085.8	1180.8	1175.7	1021.5	767.2	478.6	274.7	195.8	171.7	157.8
85°	522.4	561.9	572.9	521.7	433.3	295.9	165.1	116.2	98.6	89.9	81.1
87.5°	83.3	76.0	74.5	65.0	61.4	56.3	49.7	46.8	43.1	40.9	40.9
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: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3
2.5°	1059.5	1058.8	1056.6	1054.4	1052.9	1052.2	1051.4	1050.0	1049.3	1048.5	1047.1
5°	1084.3	1082.9	1079.2	1075.6	1074.1	1071.9	1069.7	1068.3	1066.8	1066.1	1063.1
7.5°	1123.1	1121.6	1117.2	1114.3	1113.6	1107.7	1107.0	1104.8	1101.1	1100.4	1096.0
10°	1169.8	1169.1	1165.4	1163.2	1161.8	1158.9	1154.5	1150.8	1147.2	1147.2	1144.2
12.5°	1223.9	1221.0	1223.2	1218.0	1216.6	1213.7	1211.5	1210.7	1206.4	1202.7	1202.0
15°	1287.5	1283.8	1283.8	1282.3	1280.9	1278.0	1277.2	1278.0	1273.6	1275.0	1270.7
17.5°	1366.4	1367.8	1367.1	1367.1	1363.4	1363.4	1357.6	1364.9	1359.8	1363.4	1362.0
20°	1465.0	1465.7	1464.3	1466.5	1467.9	1467.2	1466.5	1465.7	1467.9	1470.9	1468.7
22.5°	1570.2	1570.2	1569.5	1577.5	1568.8	1575.3	1577.5	1573.2	1584.8	1583.4	1585.6
25°	1684.2	1684.2	1690.1	1696.6	1698.1	1693.0	1695.9	1692.3	1699.6	1705.4	1706.9
27.5°	1790.2	1799.7	1804.0	1799.7	1803.3	1811.4	1810.6	1810.6	1815.7	1814.3	1828.2
30°	1899.0	1904.9	1910.7	1907.8	1909.3	1919.5	1920.2	1921.0	1927.5	1937.0	1947.3
32.5°	2023.3	2029.1	2026.2	2035.7	2034.9	2047.4	2049.6	2051.8	2072.2	2068.6	2089.7
35°	2176.0	2181.8	2178.9	2189.1	2187.7	2192.0	2200.1	2208.8	2212.5	2233.7	2250.5
37.5°	2247.6	2247.6	2254.1	2265.8	2270.2	2277.5	2290.0	2300.9	2319.2	2341.8	2368.1
40°	2333.8	2336.0	2344.8	2357.2	2365.2	2382.0	2404.7	2420.0	2447.8	2472.6	2503.3
42.5°	2438.3	2447.8	2458.0	2474.8	2492.4	2518.7	2550.8	2570.5	2607.1	2639.2	2677.2
45°	2560.3	2569.8	2593.9	2624.6	2650.2	2679.4	2705.7	2752.5	2785.4	2819.0	2851.8
47.5°	2707.9	2735.7	2755.4	2791.9	2823.3	2862.1	2895.0	2938.8	2974.6	3015.5	3043.3
50°	2897.1	2931.5	2957.1	3004.6	3035.2	3078.4	3120.0	3152.9	3189.4	3229.6	3252.3
52.5°	3169.0	3204.0	3236.2	3295.4	3333.4	3362.6	3418.1	3459.0	3492.7	3521.9	3546.7
55°	3757.9	3747.7	3836.8	3951.5	3964.7	4070.6	4090.3	4124.7	4186.8	4195.6	4265.0
57.5°	5440.6	5388.0	5517.4	5685.4	5656.2	5602.9	5825.7	5839.6	5808.2	5892.2	5797.2
60°	7769.3	7677.3	7712.3	7758.4	7691.9	7660.5	7671.4	7702.8	7672.1	7638.5	7546.5
62.5°	9324.2	9182.5	9080.9	8995.4	8887.3	8809.1	8721.4	8613.3	8584.0	8461.3	8358.3
65°	9655.9	9435.3	9274.5	9113.0	8964.0	8825.9	8693.6	8600.8	8478.1	8332.7	8225.3
67.5°	9291.3	9018.1	8782.8	8548.2	8379.4	8176.3	8076.9	7925.7	7774.4	7607.8	7509.2
70°	8231.8	7946.9	7651.0	7421.5	7192.1	6940.7	6891.8	6712.8	6625.8	6398.6	6359.1
72.5°	5681.8	5491.8	5359.5	5076.0	4936.5	4807.9	4767.0	4601.1	4618.6	4369.5	4460.1
75°	2020.3	1993.3	1954.6	1794.6	1766.1	1716.4	1703.2	1691.5	1809.9	1645.5	1764.6
77.5°	347.1	344.9	325.2	315.7	333.9	322.2	325.2	319.3	353.6	358.8	350.7
80°	215.6	209.7	203.1	198.7	199.5	195.1	195.8	197.3	199.5	198.7	200.9
82.5°	147.6	142.5	139.6	136.6	141.0	142.5	146.1	149.8	155.6	159.3	163.7
85°	80.4	73.8	73.8	73.1	78.9	83.3	89.1	96.4	106.7	115.4	124.9
87.5°	40.9	39.5	40.2	41.6	46.8	50.4	57.7	64.3	73.1	82.6	91.3
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: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3	1049.3
2.5°	1046.3	1046.3	1045.6	1045.6	1044.9	1044.1	1043.4	1041.2	1033.2	1025.9	1020.8
5°	1062.4	1060.2	1059.5	1057.3	1056.6	1055.1	1052.9	1050.7	1036.1	1023.0	1013.5
7.5°	1095.3	1092.4	1090.9	1088.7	1086.5	1083.6	1080.7	1078.5	1060.9	1045.6	1033.9
10°	1138.4	1136.9	1136.2	1133.3	1133.3	1128.9	1128.2	1123.1	1104.1	1090.2	1079.9
12.5°	1198.3	1195.4	1194.7	1191.0	1192.5	1191.0	1189.5	1186.6	1172.7	1156.7	1142.8
15°	1272.8	1272.8	1269.2	1266.3	1267.0	1265.5	1268.5	1264.8	1256.0	1241.4	1218.8
17.5°	1362.7	1361.3	1362.7	1360.5	1362.0	1363.4	1359.8	1360.5	1356.1	1337.9	1304.3
20°	1467.2	1465.0	1473.8	1470.1	1478.2	1470.9	1472.3	1474.5	1474.5	1450.4	1405.1
22.5°	1587.0	1585.6	1585.6	1592.9	1595.8	1596.5	1599.5	1601.7	1607.5	1576.8	1504.5
25°	1706.9	1712.0	1712.7	1722.2	1726.6	1726.6	1728.8	1736.8	1754.4	1712.0	1618.5
27.5°	1828.9	1841.3	1844.2	1850.8	1857.4	1864.0	1869.1	1874.9	1903.4	1857.4	1735.4
30°	1950.9	1964.8	1975.0	1982.3	1990.4	2006.4	2009.4	2021.1	2068.6	2012.3	1846.4
32.5°	2094.1	2113.9	2127.0	2136.5	2148.9	2164.3	2173.0	2187.7	2233.7	2141.6	1927.5
35°	2265.1	2276.8	2295.8	2311.9	2319.2	2345.5	2359.4	2363.0	2398.1	2253.4	1987.5
37.5°	2383.5	2403.2	2436.1	2458.7	2471.9	2486.5	2509.9	2525.2	2558.8	2355.0	2017.4
40°	2534.0	2564.0	2590.3	2623.9	2645.1	2656.0	2679.4	2691.8	2696.2	2441.9	2007.9
42.5°	2717.4	2744.4	2779.5	2806.5	2822.6	2835.0	2854.0	2859.2	2802.2	2482.9	1956.8
45°	2889.8	2931.5	2961.4	2981.2	2992.9	2999.4	3011.1	3011.9	2889.8	2462.4	1869.1
47.5°	3075.4	3105.4	3133.2	3147.0	3145.6	3147.0	3142.7	3139.7	2933.7	2391.5	1756.6
50°	3280.8	3300.5	3312.2	3318.7	3322.4	3308.5	3288.8	3275.6	2937.3	2290.7	1642.6
52.5°	3556.2	3581.1	3578.9	3578.1	3548.9	3535.8	3483.2	3456.1	2916.1	2172.3	1514.0
55°	4254.0	4229.9	4182.4	4205.8	4086.7	4024.6	3942.8	3866.8	2943.9	2059.8	1364.9
57.5°	5835.2	5844.7	5709.5	5637.2	5436.3	5184.9	4982.5	4786.0	3193.8	1991.1	1170.5
60°	7485.1	7360.9	7189.2	6927.6	6668.9	6295.5	5935.3	5594.8	3443.0	1919.5	940.4
62.5°	8205.5	8028.7	7769.3	7431.0	7024.8	6568.1	6119.4	5704.4	3322.4	1687.9	683.9
65°	8059.4	7789.1	7502.6	7106.6	6612.7	6112.1	5588.2	5164.4	2779.5	1259.0	421.6
67.5°	7295.1	7065.7	6763.2	6293.3	5765.1	5244.1	4764.0	4289.1	2064.9	784.8	236.0
70°	6157.4	5933.1	5626.2	5145.5	4617.9	4119.6	3611.0	3223.8	1316.0	378.5	170.2
72.5°	4271.6	4089.6	3872.6	3529.9	3067.4	2614.4	2270.2	1972.8	729.2	200.9	155.6
75°	1734.6	1735.4	1695.9	1551.2	1310.8	1130.4	963.8	817.6	304.7	171.0	153.4
77.5°	393.1	399.7	436.9	414.3	373.4	349.3	312.7	276.2	185.6	176.1	154.9
80°	198.7	199.5	197.3	198.0	195.8	196.6	193.6	191.4	173.9	181.2	154.9
82.5°	165.9	169.5	168.8	168.8	169.5	169.5	169.5	168.8	180.5	190.7	149.8
85°	131.5	138.8	144.7	150.5	157.1	161.5	163.7	165.9	175.4	187.8	135.9
87.5°	99.4	108.1	115.4	121.3	131.5	131.5	138.8	143.9	143.9	146.9	71.6
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: P159319

CATALOG NUMBER: VST-E04-LED-E-U-T2-7030

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	1049.3	1049.3	1049.3	1049.3	1049.3
2.5°	1013.5	1010.5	1007.6	1006.1	1003.2
5°	1006.1	1000.3	996.6	996.6	993.7
7.5°	1027.3	1025.1	1020.0	1017.1	1020.0
10°	1072.6	1069.0	1063.1	1058.8	1060.9
12.5°	1133.3	1118.7	1107.0	1101.9	1098.2
15°	1196.1	1166.9	1143.5	1130.4	1126.7
17.5°	1263.3	1212.2	1177.1	1157.4	1153.7
20°	1332.0	1268.5	1218.8	1193.2	1192.5
22.5°	1414.6	1329.8	1266.3	1232.7	1230.5
25°	1501.5	1384.6	1300.6	1257.5	1253.1
27.5°	1576.8	1428.5	1321.8	1270.7	1266.3
30°	1639.6	1461.4	1339.3	1280.2	1274.3
32.5°	1684.9	1480.4	1346.6	1283.1	1276.5
35°	1699.6	1473.1	1326.2	1256.8	1249.5
37.5°	1679.8	1425.6	1269.2	1192.5	1183.7
40°	1620.6	1342.3	1176.4	1097.5	1086.5
42.5°	1530.0	1240.0	1064.6	989.3	975.5
45°	1418.3	1124.5	953.5	869.5	862.9
47.5°	1301.3	1003.2	828.6	752.6	744.6
50°	1174.9	862.9	706.6	624.0	624.0
52.5°	1024.4	726.3	564.8	502.7	497.6
55°	851.2	572.1	450.1	402.6	396.0
57.5°	664.9	439.9	359.5	331.7	324.4
60°	488.8	330.3	289.3	274.0	271.1
62.5°	331.7	251.4	233.1	226.5	225.8
65°	224.3	195.8	190.7	188.5	189.2
67.5°	172.4	162.9	160.7	160.0	160.0
70°	149.8	143.9	141.8	142.5	141.8
72.5°	141.0	133.0	133.7	135.2	134.4
75°	138.1	127.9	130.8	131.5	128.6
77.5°	135.9	122.0	129.3	131.5	123.5
80°	131.5	116.9	134.4	135.2	121.3
82.5°	120.6	103.8	134.4	124.2	109.6
85°	102.3	78.9	152.0	108.1	81.1
87.5°	65.0	46.8	103.0	73.8	49.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)