

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: P159325

Luminaire Tested: **VST-F04-LED-E-U-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159325
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-F04-LED-E-U-T2
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (28) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10192.6 lumens
Efficiency: N/A
Efficacy: 99.7 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): 102.2
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

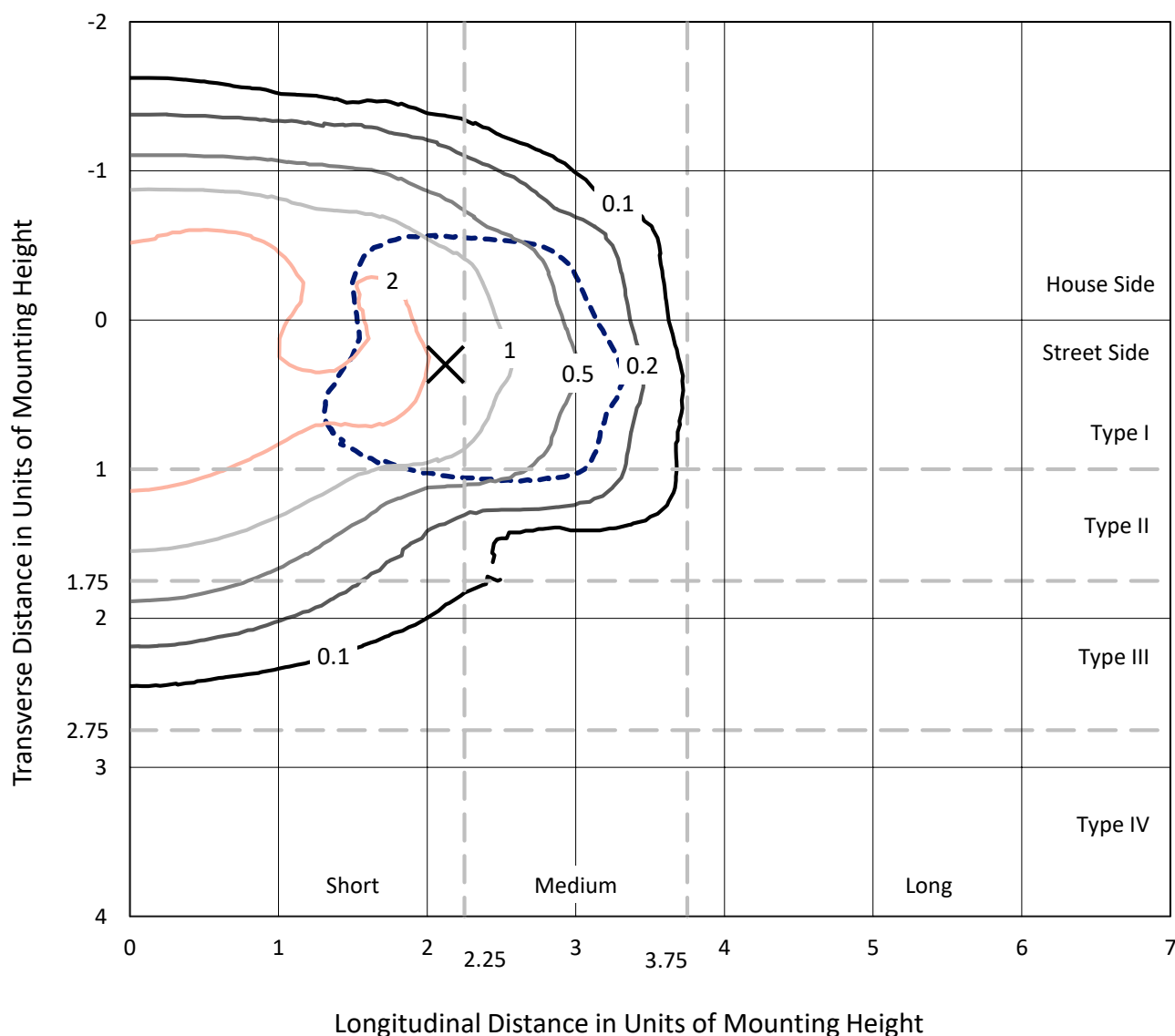


REPORT NUMBER: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

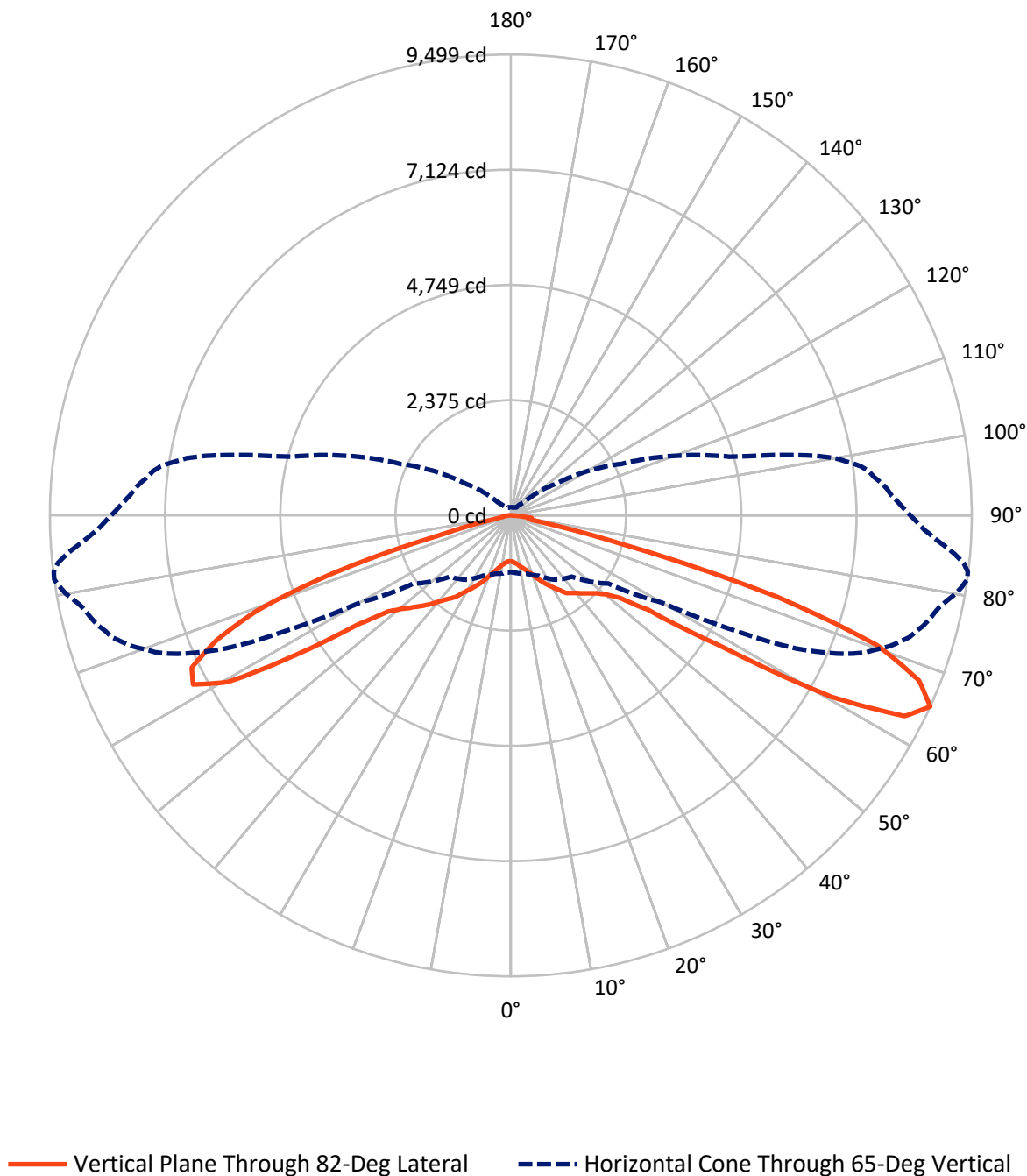


Based on 20 foot mounting height. Maximum calculated value = 3 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

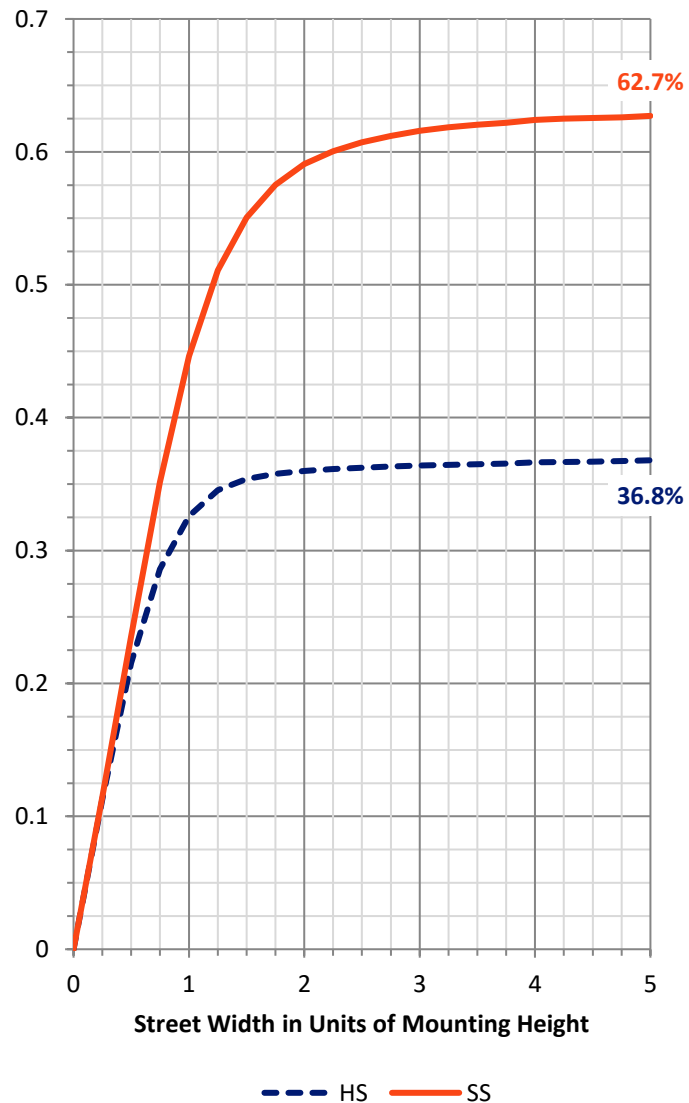
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3795.0	0.0	3795.0
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	6397.6	0.0	6397.6
	% Fixture	62.8	0.0	62.8
Total	Lumens	10192.6	0.0	10192.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.0	0.9
10°-20°	337.4	3.3
20°-30°	668.4	6.6
30°-40°	1145.9	11.2
40°-50°	1721.4	16.9
50°-60°	2391.5	23.5
60°-70°	2728.4	26.8
70°-80°	939.9	9.2
80°-90°	163.8	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°	10192.6	100.0
0°-180°	10192.6	100.0

Coefficient of Utilization



REPORT NUMBER: P159325

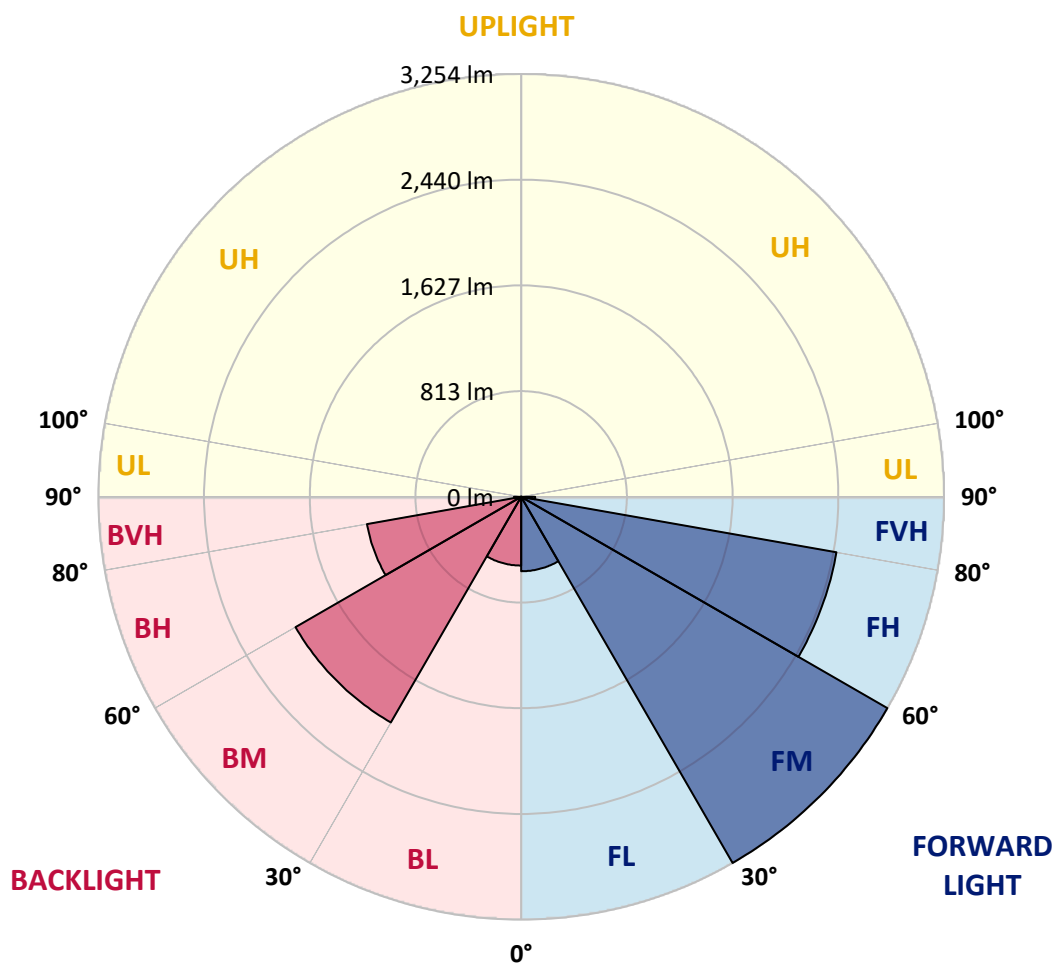
CATALOG NUMBER: VST-F04-LED-E-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	572.6	5.6			
FM	(30°-60°)	3253.7	31.9			
FH	(60°-80°)	2463.4	24.2			G2/5000
FVH	(80°-90°)	107.8	1.1			G2/225
BL	(0°-30°)	529.2	5.2	B2/1000		
BM	(30°-60°)	2005.1	19.7	B2/2500		
BH	(60°-80°)	1204.8	11.8	B3/2500		G3/2500
BVH	(80°-90°)	56.0	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: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4
2.5°	999.9	1000.5	999.9	997.9	997.2	991.3	984.7	981.4	980.7	978.1	978.7
5°	1062.0	1060.0	1057.3	1054.0	1050.7	1040.8	1029.6	1023.7	1021.7	1019.7	1017.0
7.5°	1117.4	1118.8	1117.4	1112.8	1104.2	1091.7	1077.1	1067.9	1067.2	1065.3	1063.3
10°	1188.8	1192.1	1184.1	1176.2	1164.3	1145.2	1128.7	1116.8	1114.8	1112.1	1110.8
12.5°	1266.0	1266.7	1264.0	1246.2	1226.4	1200.0	1176.2	1164.3	1161.7	1158.4	1157.1
15°	1348.6	1349.2	1334.7	1317.5	1287.2	1255.5	1222.4	1209.2	1205.9	1206.6	1201.3
17.5°	1414.0	1415.3	1401.4	1379.6	1343.3	1305.7	1270.0	1259.4	1257.4	1258.1	1255.5
20°	1442.4	1444.3	1435.8	1419.2	1384.9	1351.9	1326.1	1319.5	1318.9	1317.5	1322.8
22.5°	1441.0	1441.7	1438.4	1431.8	1411.3	1392.2	1388.9	1392.8	1392.2	1393.5	1398.1
25°	1429.1	1431.1	1430.5	1433.1	1429.8	1437.1	1452.3	1466.1	1468.1	1470.8	1479.3
27.5°	1459.5	1463.5	1458.9	1461.5	1466.8	1491.2	1522.3	1543.4	1547.4	1554.6	1561.9
30°	1578.4	1573.1	1567.2	1560.6	1563.9	1579.1	1614.1	1632.6	1634.5	1639.8	1649.7
32.5°	1754.7	1748.8	1743.5	1732.9	1730.3	1723.7	1735.6	1740.2	1739.5	1744.8	1747.5
35°	1953.5	1954.2	1952.9	1960.8	1967.4	1933.7	1892.1	1880.9	1885.5	1879.6	1880.9
37.5°	2123.3	2125.2	2160.2	2203.8	2216.4	2195.2	2104.1	2059.2	2044.0	2042.0	2026.8
40°	2311.5	2311.5	2364.3	2417.8	2452.8	2479.2	2370.9	2291.7	2259.3	2250.1	2212.4
42.5°	2518.2	2507.6	2555.8	2614.6	2679.3	2739.4	2683.3	2594.1	2547.9	2531.4	2465.3
45°	2687.9	2681.3	2705.1	2759.9	2864.9	2982.5	2990.4	2944.8	2917.1	2882.7	2822.0
47.5°	2792.3	2789.0	2802.8	2862.3	2993.7	3183.9	3290.2	3313.3	3296.8	3270.4	3211.6
50°	2833.2	2828.6	2838.5	2904.5	3051.8	3302.8	3537.9	3646.8	3654.8	3660.7	3642.2
52.5°	2818.7	2812.7	2833.2	2888.7	3041.9	3344.4	3731.4	3940.7	3975.7	4005.4	4066.2
55°	2679.3	2670.1	2725.6	2829.9	2999.0	3329.2	3872.7	4223.4	4297.4	4376.6	4511.3
57.5°	2466.0	2458.1	2538.0	2681.3	2923.0	3287.6	3967.8	4580.7	4747.1	4889.7	5272.1
60°	2260.6	2254.0	2300.9	2439.6	2676.7	3084.8	3850.2	4700.9	4980.2	5288.0	5986.0
62.5°	1893.4	1875.6	1938.3	2055.2	2205.1	2551.9	3337.1	4433.4	4864.0	5316.4	6262.8
65°	1163.7	1189.4	1243.6	1373.0	1618.7	1783.8	2450.8	3586.7	4154.7	4722.0	5949.7
67.5°	739.0	746.3	786.6	876.4	1066.6	1232.3	1485.3	2250.7	2688.6	3246.6	4671.2
70°	633.3	638.0	672.3	766.1	897.5	1101.6	1124.0	1175.5	1332.7	1688.0	2746.0
72.5°	499.3	507.2	534.3	615.5	774.0	993.3	1387.5	929.2	897.5	927.2	1340.0
75°	297.2	306.4	328.9	373.1	497.3	759.5	1453.6	1081.1	1007.8	950.3	924.6
77.5°	157.2	150.6	165.8	191.5	255.6	404.8	1092.3	1324.8	1273.3	1204.6	1058.7
80°	77.9	80.6	85.2	90.5	114.3	164.4	546.2	1370.4	1519.0	1585.0	1455.6
82.5°	31.0	35.0	49.5	52.8	62.7	70.0	175.7	759.5	1087.7	1475.4	1926.4
85°	15.9	15.2	26.4	31.7	37.0	33.0	62.1	283.3	509.8	794.5	1287.2
87.5°	2.0	2.6	5.9	7.9	11.2	10.6	17.8	61.4	97.7	138.7	194.8
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: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4
2.5°	975.4	974.8	974.8	972.1	972.1	972.8	970.8	969.5	969.5	970.2	967.5
5°	1015.1	1013.1	1013.1	1010.4	1007.1	1007.1	1004.5	1003.8	1002.5	999.9	997.9
7.5°	1061.3	1059.3	1056.0	1054.0	1052.7	1050.7	1047.4	1046.1	1043.5	1040.8	1038.2
10°	1108.8	1106.2	1104.9	1101.6	1100.3	1096.3	1094.3	1095.0	1089.7	1087.7	1088.4
12.5°	1156.4	1153.8	1149.1	1147.8	1147.1	1143.2	1141.2	1139.9	1135.9	1135.3	1133.3
15°	1198.7	1200.0	1198.0	1194.7	1192.1	1191.4	1189.4	1188.1	1185.5	1182.8	1180.2
17.5°	1253.5	1255.5	1252.8	1248.2	1248.2	1247.5	1248.2	1247.5	1242.9	1244.9	1243.6
20°	1323.5	1324.8	1318.2	1320.2	1321.5	1320.8	1322.8	1324.8	1323.5	1323.5	1325.5
22.5°	1404.1	1406.0	1402.1	1404.7	1408.7	1405.4	1411.3	1410.7	1412.0	1414.0	1414.6
25°	1486.6	1490.6	1487.3	1494.5	1491.9	1494.5	1501.8	1499.8	1503.1	1508.4	1510.4
27.5°	1569.2	1571.8	1572.5	1577.1	1581.7	1585.7	1594.9	1594.9	1597.6	1606.8	1606.8
30°	1655.7	1658.3	1661.0	1667.6	1670.2	1677.5	1686.7	1689.4	1688.0	1701.2	1705.2
32.5°	1755.4	1758.0	1762.7	1770.6	1773.9	1781.2	1781.2	1788.4	1793.7	1804.9	1805.6
35°	1888.1	1890.1	1888.1	1887.5	1892.1	1902.0	1902.7	1913.2	1917.9	1929.1	1932.4
37.5°	2020.9	2020.2	2011.6	2002.4	2003.1	1999.1	1996.4	2001.1	2003.1	2003.7	2011.0
40°	2199.9	2182.7	2169.5	2146.4	2135.8	2119.3	2109.4	2108.7	2098.2	2096.8	2098.8
42.5°	2434.3	2414.5	2383.5	2344.5	2314.8	2284.4	2261.9	2248.7	2225.6	2213.7	2203.8
45°	2761.9	2713.0	2676.0	2629.8	2572.3	2519.5	2464.0	2438.9	2394.7	2367.6	2337.2
47.5°	3162.1	3113.9	3057.1	3009.5	2934.2	2860.9	2785.0	2718.3	2641.0	2579.6	2529.4
50°	3596.6	3568.2	3527.3	3483.1	3386.0	3337.8	3242.0	3151.5	3068.3	2958.7	2862.9
52.5°	4042.4	4058.9	4049.7	4033.8	3972.4	3953.9	3871.4	3761.1	3677.2	3601.9	3435.5
55°	4591.9	4611.7	4651.3	4674.5	4667.2	4714.1	4693.6	4607.7	4574.1	4539.1	4420.9
57.5°	5432.6	5573.9	5725.2	5857.9	5889.0	6055.4	6019.7	6105.6	6166.3	6122.8	6084.4
60°	6328.8	6614.1	6871.0	7139.8	7358.4	7522.2	7738.8	7884.8	7976.6	8141.7	8154.9
62.5°	6690.1	7077.7	7404.0	7715.7	7975.2	8202.4	8397.9	8599.3	8764.4	8913.7	9021.3
65°	6491.9	6896.8	7292.4	7608.7	7858.3	8053.8	8266.5	8426.3	8588.8	8684.5	8797.5
67.5°	5397.0	5933.2	6419.9	6776.6	7118.0	7316.8	7568.4	7725.6	7898.0	7999.0	8071.7
70°	3518.7	4216.8	4881.8	5422.7	5883.7	6115.5	6419.3	6633.9	6841.3	6846.6	6967.4
72.5°	1898.7	2482.5	3039.3	3592.0	4117.7	4426.1	4726.0	4986.8	5192.9	5105.0	5225.2
75°	1057.3	1330.7	1635.2	1967.4	2287.7	2464.0	2687.9	2689.2	2795.6	2628.5	2670.7
77.5°	1017.0	1004.5	1009.1	1018.4	1034.2	1000.5	999.9	979.4	947.7	890.2	900.2
80°	1336.0	1176.2	1061.3	881.0	709.3	578.5	542.2	550.8	576.5	628.1	693.4
82.5°	1931.7	1797.0	1604.2	1320.2	1036.2	799.1	656.5	582.5	579.2	630.7	729.8
85°	1406.7	1487.9	1475.4	1231.7	1015.7	824.9	600.3	507.2	420.0	399.6	434.6
87.5°	207.4	171.7	193.5	161.8	117.6	91.1	79.9	64.1	61.4	62.7	68.7
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: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4
2.5°	968.2	965.5	962.9	964.9	962.9	962.2	960.3	958.9	958.3	958.3	958.3
5°	997.9	994.6	992.6	992.0	990.0	988.0	987.3	984.0	983.4	983.4	981.4
7.5°	1038.2	1035.5	1032.2	1030.3	1028.9	1025.6	1022.3	1021.7	1021.0	1018.4	1016.4
10°	1085.1	1081.1	1077.1	1077.1	1074.5	1073.8	1070.5	1065.9	1065.3	1061.3	1060.0
12.5°	1129.3	1128.0	1123.4	1122.1	1120.1	1118.1	1116.1	1114.1	1112.1	1108.8	1110.2
15°	1182.2	1178.8	1174.9	1175.5	1174.9	1172.2	1169.6	1167.6	1166.3	1165.0	1165.0
17.5°	1245.6	1244.2	1243.6	1240.3	1237.6	1239.6	1239.6	1239.6	1236.3	1237.0	1237.6
20°	1326.1	1327.4	1326.1	1323.5	1322.8	1324.8	1320.2	1327.4	1323.5	1320.8	1322.2
22.5°	1415.3	1419.9	1414.6	1415.3	1418.6	1419.9	1415.3	1421.2	1419.2	1415.3	1418.6
25°	1512.4	1515.7	1513.0	1512.4	1514.3	1519.0	1518.3	1517.6	1522.3	1518.3	1520.3
27.5°	1612.1	1614.1	1615.4	1617.4	1618.7	1618.0	1620.7	1620.7	1623.3	1618.7	1620.7
30°	1711.1	1711.1	1713.8	1716.4	1716.4	1716.4	1721.7	1722.4	1718.4	1719.7	1715.1
32.5°	1816.8	1817.5	1820.1	1820.1	1825.4	1826.1	1832.0	1824.1	1832.0	1825.4	1826.7
35°	1941.0	1949.6	1950.9	1957.5	1962.8	1964.7	1964.7	1965.4	1972.7	1967.4	1969.4
37.5°	2013.6	2015.6	2020.9	2024.2	2024.2	2026.8	2028.8	2026.8	2028.8	2028.1	2030.1
40°	2099.5	2097.5	2103.4	2104.8	2102.1	2105.4	2104.8	2102.8	2108.1	2104.1	2106.7
42.5°	2203.8	2192.6	2191.9	2197.2	2191.9	2194.6	2193.9	2189.3	2195.9	2197.9	2195.9
45°	2315.4	2309.5	2297.6	2297.6	2292.3	2290.3	2291.0	2290.3	2291.0	2298.9	2301.6
47.5°	2497.0	2460.7	2440.3	2421.1	2405.2	2404.6	2397.3	2401.3	2406.6	2419.8	2431.7
50°	2801.5	2717.6	2666.1	2618.6	2584.2	2572.3	2558.5	2557.1	2561.8	2577.0	2597.4
52.5°	3344.4	3228.1	3118.5	3016.8	2928.3	2860.3	2826.6	2808.8	2802.2	2817.4	2837.2
55°	4337.6	4118.4	3963.8	3860.8	3640.9	3547.8	3428.2	3373.4	3319.9	3325.2	3358.9
57.5°	6034.9	5916.7	5787.3	5607.0	5472.2	5309.8	5011.3	4844.8	4852.1	4891.1	4769.6
60°	8259.2	8139.7	8086.2	7922.4	7828.6	7763.2	7604.7	7328.7	7230.9	7212.4	6989.2
62.5°	9103.9	9132.3	9174.6	9220.8	9218.1	9246.5	9107.9	9018.0	8905.1	8758.5	8537.9
65°	8883.3	8955.3	9041.1	9165.3	9306.6	9411.0	9498.8	9488.3	9382.6	9187.1	8954.0
67.5°	8136.4	8207.7	8270.4	8436.9	8668.7	8880.7	9068.2	9195.7	9125.0	8963.2	8691.1
70°	7013.7	7065.2	7104.8	7249.4	7503.7	7762.6	8007.6	8221.6	8199.8	8003.6	7786.4
72.5°	5081.9	5206.8	5274.1	5264.2	5421.4	5711.3	5745.7	5928.6	5979.4	5768.1	5422.0
75°	2475.9	2477.9	2400.0	2374.2	2382.1	2432.3	2336.6	2342.5	2309.5	2159.6	2036.1
77.5°	865.2	841.4	784.6	717.2	620.8	530.3	438.5	398.9	385.7	346.7	319.6
80°	745.6	780.6	769.4	713.9	612.2	488.1	364.6	270.1	230.5	216.6	203.4
82.5°	846.7	981.4	1067.2	1062.6	923.3	693.4	432.6	248.3	177.0	155.2	142.7
85°	472.2	507.9	517.8	471.5	391.6	267.5	149.3	105.0	89.2	81.2	73.3
87.5°	75.3	68.7	67.4	58.8	55.5	50.9	44.9	42.3	39.0	37.0	37.0
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: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4
2.5°	957.6	956.9	955.0	953.0	951.7	951.0	950.3	949.0	948.4	947.7	946.4
5°	980.1	978.7	975.4	972.1	970.8	968.8	966.9	965.5	964.2	963.6	960.9
7.5°	1015.1	1013.7	1009.8	1007.1	1006.5	1001.2	1000.5	998.6	995.3	994.6	990.6
10°	1057.3	1056.7	1053.4	1051.4	1050.1	1047.4	1043.5	1040.2	1036.9	1036.9	1034.2
12.5°	1106.2	1103.6	1105.5	1100.9	1099.6	1097.0	1095.0	1094.3	1090.4	1087.1	1086.4
15°	1163.7	1160.4	1160.4	1159.0	1157.7	1155.1	1154.4	1155.1	1151.1	1152.4	1148.5
17.5°	1235.0	1236.3	1235.6	1235.6	1232.3	1232.3	1227.1	1233.7	1229.0	1232.3	1231.0
20°	1324.1	1324.8	1323.5	1325.5	1326.8	1326.1	1325.5	1324.8	1326.8	1329.4	1327.4
22.5°	1419.2	1419.2	1418.6	1425.8	1417.9	1423.9	1425.8	1421.9	1432.5	1431.1	1433.1
25°	1522.3	1522.3	1527.6	1533.5	1534.8	1530.2	1532.8	1529.5	1536.1	1541.4	1542.7
27.5°	1618.0	1626.6	1630.6	1626.6	1629.9	1637.2	1636.5	1636.5	1641.1	1639.8	1652.4
30°	1716.4	1721.7	1727.0	1724.4	1725.7	1734.9	1735.6	1736.2	1742.2	1750.8	1760.0
32.5°	1828.7	1834.0	1831.3	1839.9	1839.3	1850.5	1852.5	1854.5	1873.0	1869.6	1888.8
35°	1966.7	1972.0	1969.4	1978.6	1977.3	1981.3	1988.5	1996.4	1999.8	2018.9	2034.1
37.5°	2031.5	2031.5	2037.4	2048.0	2051.9	2058.5	2069.8	2079.7	2096.2	2116.6	2140.4
40°	2109.4	2111.4	2119.3	2130.5	2137.8	2153.0	2173.4	2187.3	2212.4	2234.9	2262.6
42.5°	2203.8	2212.4	2221.7	2236.8	2252.7	2276.5	2305.5	2323.4	2356.4	2385.4	2419.8
45°	2314.1	2322.7	2344.5	2372.2	2395.3	2421.8	2445.5	2487.8	2517.5	2547.9	2577.6
47.5°	2447.5	2472.6	2490.4	2523.5	2551.9	2586.9	2616.6	2656.2	2688.6	2725.6	2750.6
50°	2618.6	2649.6	2672.7	2715.6	2743.4	2782.3	2820.0	2849.7	2882.7	2919.1	2939.5
52.5°	2864.2	2895.9	2925.0	2978.5	3012.8	3039.3	3089.4	3126.4	3156.8	3183.2	3205.7
55°	3396.5	3387.3	3467.9	3571.6	3583.4	3679.2	3697.0	3728.1	3784.2	3792.1	3854.9
57.5°	4917.5	4869.9	4986.8	5138.7	5112.3	5064.1	5265.5	5278.1	5249.7	5325.6	5239.8
60°	7022.2	6939.0	6970.7	7012.3	6952.2	6923.8	6933.7	6962.1	6934.4	6904.0	6820.8
62.5°	8427.6	8299.5	8207.7	8130.4	8032.7	7962.0	7882.8	7785.0	7758.6	7647.7	7554.5
65°	8727.4	8528.0	8382.7	8236.8	8102.0	7977.2	7857.7	7773.8	7662.9	7531.4	7434.3
67.5°	8397.9	8150.9	7938.2	7726.3	7573.7	7390.1	7300.3	7163.6	7026.9	6876.3	6787.1
70°	7440.3	7182.7	6915.3	6707.9	6500.5	6273.3	6229.1	6067.3	5988.7	5783.3	5747.6
72.5°	5135.4	4963.7	4844.2	4587.9	4461.8	4345.6	4308.6	4158.7	4174.5	3949.3	4031.2
75°	1826.1	1801.6	1766.6	1622.0	1596.2	1551.3	1539.4	1528.9	1635.9	1487.3	1594.9
77.5°	313.7	311.7	293.9	285.3	301.8	291.2	293.9	288.6	319.6	324.3	317.0
80°	194.8	189.5	183.6	179.6	180.3	176.3	177.0	178.3	180.3	179.6	181.6
82.5°	133.4	128.8	126.1	123.5	127.5	128.8	132.1	135.4	140.7	144.0	147.9
85°	72.6	66.7	66.7	66.0	71.3	75.3	80.6	87.2	96.4	104.3	112.9
87.5°	37.0	35.7	36.3	37.6	42.3	45.6	52.2	58.1	66.0	74.6	82.6
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: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4	948.4
2.5°	945.7	945.7	945.1	945.1	944.4	943.7	943.1	941.1	933.8	927.2	922.6
5°	960.3	958.3	957.6	955.6	955.0	953.6	951.7	949.7	936.5	924.6	916.0
7.5°	990.0	987.3	986.0	984.0	982.0	979.4	976.8	974.8	958.9	945.1	934.5
10°	1028.9	1027.6	1027.0	1024.3	1024.3	1020.3	1019.7	1015.1	997.9	985.3	976.1
12.5°	1083.1	1080.4	1079.8	1076.5	1077.8	1076.5	1075.2	1072.5	1060.0	1045.4	1032.9
15°	1150.5	1150.5	1147.1	1144.5	1145.2	1143.8	1146.5	1143.2	1135.3	1122.1	1101.6
17.5°	1231.7	1230.4	1231.7	1229.7	1231.0	1232.3	1229.0	1229.7	1225.7	1209.2	1178.8
20°	1326.1	1324.1	1332.1	1328.8	1336.0	1329.4	1330.7	1332.7	1332.7	1310.9	1270.0
22.5°	1434.4	1433.1	1433.1	1439.7	1442.4	1443.0	1445.7	1447.6	1452.9	1425.2	1359.8
25°	1542.7	1547.4	1548.0	1556.6	1560.6	1560.6	1562.6	1569.8	1585.7	1547.4	1462.8
27.5°	1653.0	1664.3	1666.9	1672.8	1678.8	1684.7	1689.4	1694.6	1720.4	1678.8	1568.5
30°	1763.3	1775.9	1785.1	1791.7	1799.0	1813.5	1816.2	1826.7	1869.6	1818.8	1668.9
32.5°	1892.8	1910.6	1922.5	1931.1	1942.3	1956.2	1964.1	1977.3	2018.9	1935.7	1742.2
35°	2047.3	2057.9	2075.0	2089.6	2096.2	2119.9	2132.5	2135.8	2167.5	2036.7	1796.3
37.5°	2154.3	2172.1	2201.8	2222.3	2234.2	2247.4	2268.5	2282.4	2312.8	2128.5	1823.4
40°	2290.3	2317.4	2341.2	2371.6	2390.7	2400.6	2421.8	2433.0	2436.9	2207.1	1814.8
42.5°	2456.1	2480.5	2512.2	2536.7	2551.2	2562.4	2579.6	2584.2	2532.7	2244.1	1768.6
45°	2612.0	2649.6	2676.7	2694.5	2705.1	2711.0	2721.6	2722.3	2612.0	2225.6	1689.4
47.5°	2779.7	2806.8	2831.9	2844.4	2843.1	2844.4	2840.5	2837.8	2651.6	2161.6	1587.6
50°	2965.3	2983.1	2993.7	2999.6	3002.9	2990.4	2972.6	2960.7	2654.9	2070.4	1484.6
52.5°	3214.3	3236.7	3234.7	3234.1	3207.7	3195.8	3148.2	3123.8	2635.7	1963.4	1368.4
55°	3845.0	3823.2	3780.2	3801.4	3693.7	3637.6	3563.6	3494.9	2660.8	1861.7	1233.7
57.5°	5274.1	5282.7	5160.5	5095.1	4913.5	4686.3	4503.4	4325.8	2886.7	1799.6	1058.0
60°	6765.3	6653.1	6497.9	6261.4	6027.7	5690.2	5364.6	5056.8	3111.9	1734.9	850.0
62.5°	7416.5	7256.7	7022.2	6716.5	6349.3	5936.5	5531.0	5155.9	3002.9	1525.6	618.2
65°	7284.4	7040.1	6781.2	6423.2	5976.8	5524.4	5050.9	4667.8	2512.2	1137.9	381.1
67.5°	6593.6	6386.3	6112.8	5688.2	5210.7	4739.8	4305.9	3876.7	1866.3	709.3	213.3
70°	5565.4	5362.6	5085.2	4650.7	4173.9	3723.4	3263.8	2913.8	1189.4	342.1	153.9
72.5°	3860.8	3696.4	3500.2	3190.5	2772.4	2363.0	2051.9	1783.1	659.1	181.6	140.7
75°	1567.8	1568.5	1532.8	1402.1	1184.8	1021.7	871.1	739.0	275.4	154.5	138.7
77.5°	355.3	361.2	394.9	374.5	337.5	315.7	282.7	249.6	167.7	159.2	140.0
80°	179.6	180.3	178.3	179.0	177.0	177.7	175.0	173.0	157.2	163.8	140.0
82.5°	149.9	153.2	152.6	152.6	153.2	153.2	153.2	152.6	163.1	172.4	135.4
85°	118.9	125.5	130.8	136.0	142.0	146.0	147.9	149.9	158.5	169.7	122.8
87.5°	89.8	97.7	104.3	109.6	118.9	118.9	125.5	130.1	130.1	132.7	64.7
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: P159325

CATALOG NUMBER: VST-F04-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	948.4	948.4	948.4	948.4	948.4
2.5°	916.0	913.4	910.7	909.4	906.8
5°	909.4	904.1	900.8	900.8	898.2
7.5°	928.6	926.6	921.9	919.3	921.9
10°	969.5	966.2	960.9	956.9	958.9
12.5°	1024.3	1011.1	1000.5	995.9	992.6
15°	1081.1	1054.7	1033.6	1021.7	1018.4
17.5°	1141.9	1095.6	1063.9	1046.1	1042.8
20°	1203.9	1146.5	1101.6	1078.5	1077.8
22.5°	1278.6	1202.0	1144.5	1114.1	1112.1
25°	1357.2	1251.5	1175.5	1136.6	1132.6
27.5°	1425.2	1291.1	1194.7	1148.5	1144.5
30°	1482.0	1320.8	1210.5	1157.1	1151.8
32.5°	1522.9	1338.0	1217.2	1159.7	1153.8
35°	1536.1	1331.4	1198.7	1135.9	1129.3
37.5°	1518.3	1288.5	1147.1	1077.8	1069.9
40°	1464.8	1213.2	1063.3	992.0	982.0
42.5°	1382.9	1120.7	962.2	894.2	881.7
45°	1281.9	1016.4	861.8	785.9	780.0
47.5°	1176.2	906.8	748.9	680.2	673.0
50°	1062.0	780.0	638.6	564.0	564.0
52.5°	925.9	656.5	510.5	454.4	449.7
55°	769.4	517.1	406.8	363.9	357.9
57.5°	601.0	397.6	324.9	299.8	293.2
60°	441.8	298.5	261.5	247.7	245.0
62.5°	299.8	227.2	210.7	204.7	204.1
65°	202.7	177.0	172.4	170.4	171.0
67.5°	155.9	147.3	145.3	144.6	144.6
70°	135.4	130.1	128.1	128.8	128.1
72.5°	127.5	120.2	120.9	122.2	121.5
75°	124.8	115.6	118.2	118.9	116.2
77.5°	122.8	110.3	116.9	118.9	111.6
80°	118.9	105.7	121.5	122.2	109.6
82.5°	109.0	93.8	121.5	112.3	99.1
85°	92.5	71.3	137.4	97.7	73.3
87.5°	58.8	42.3	93.1	66.7	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)