

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: P159335

Luminaire Tested: **VST-F05-LED-E-U-T2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159335
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-F05-LED-E-U-T2
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 AREA
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12740.8 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 133.3
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



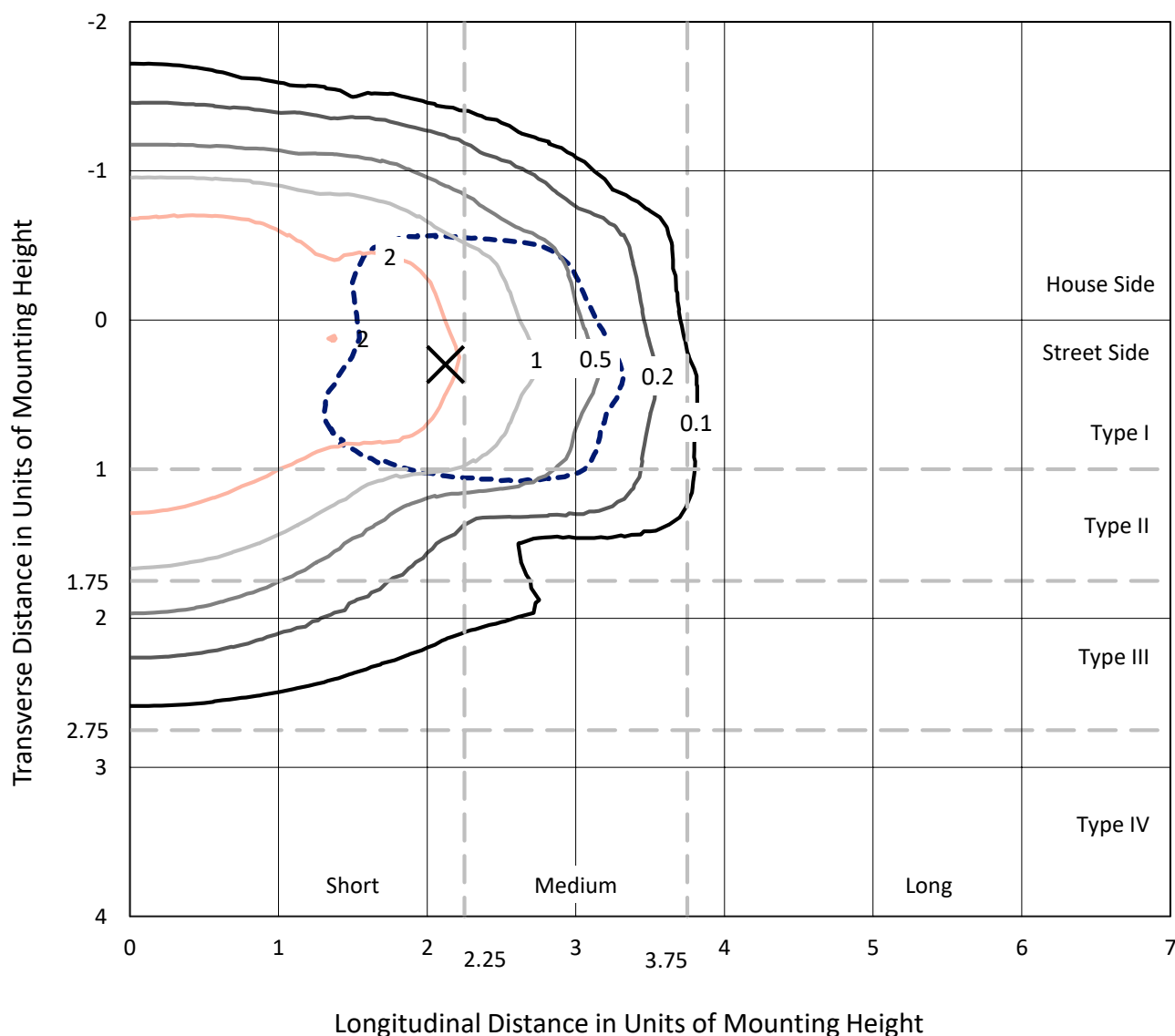
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

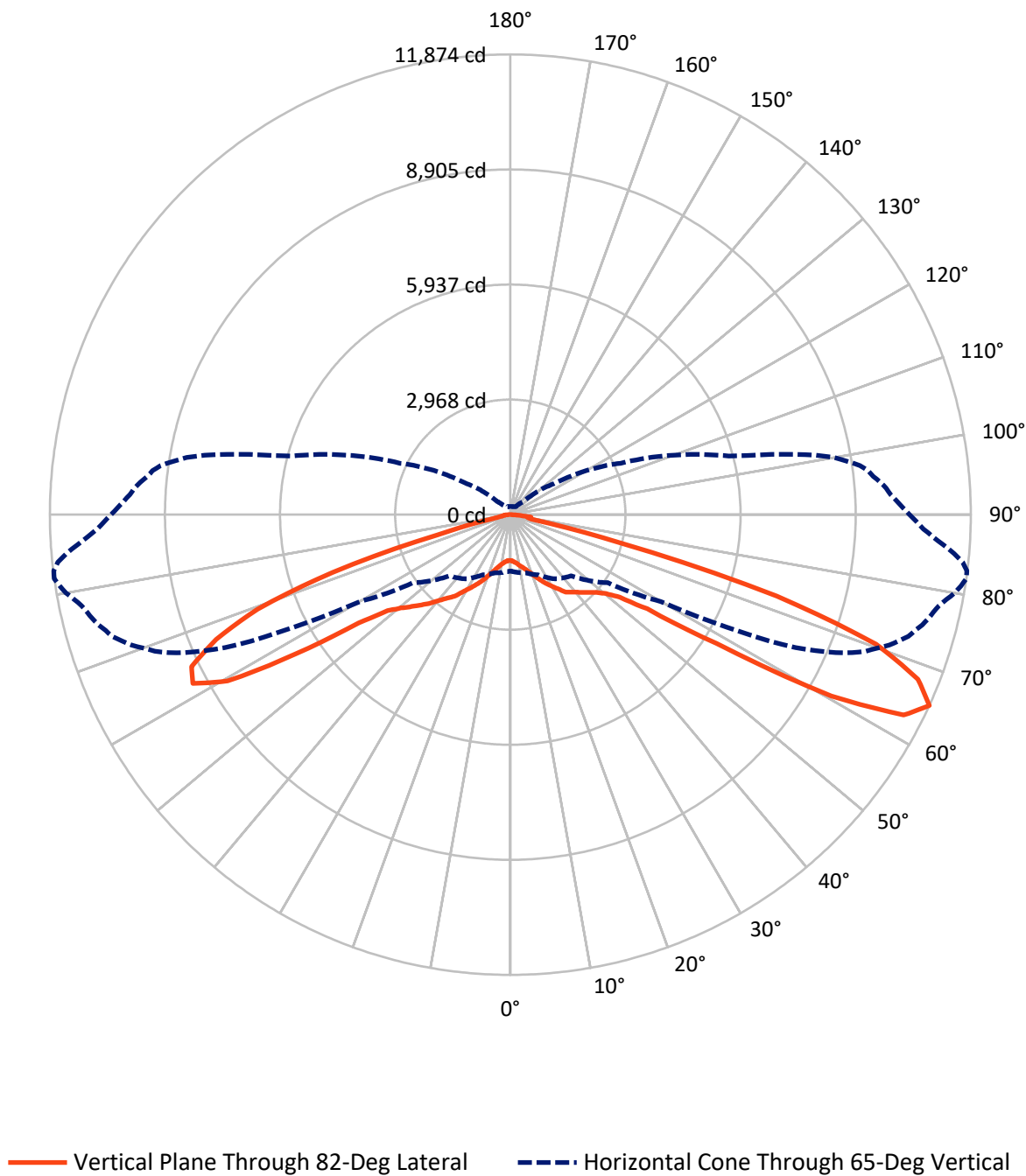


Based on 20 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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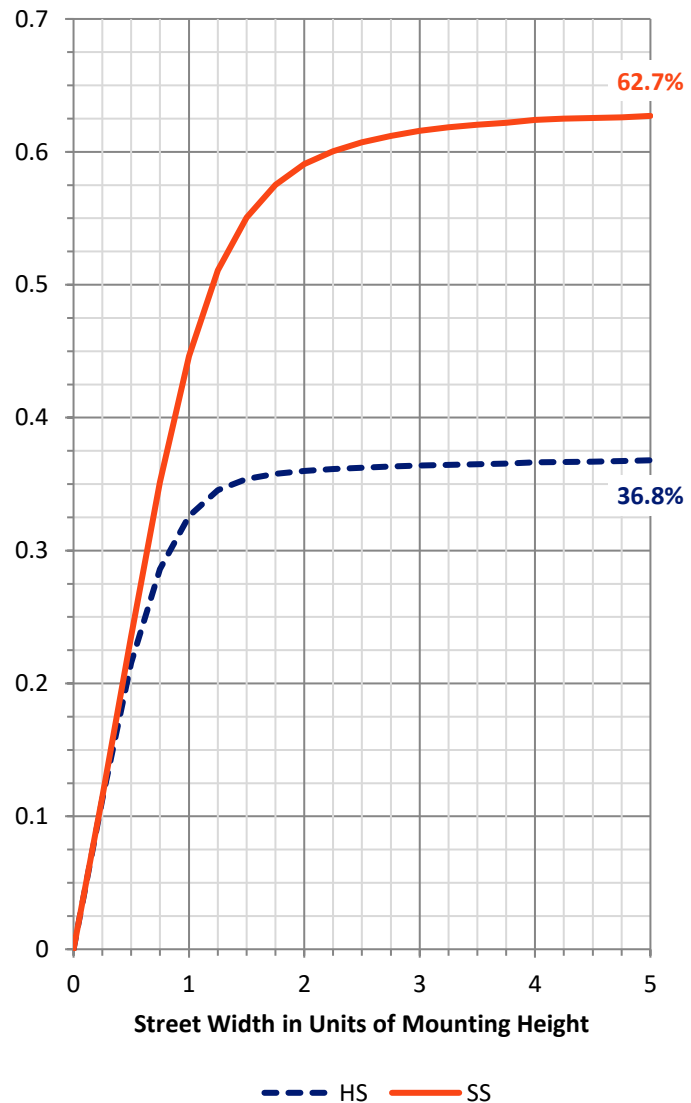
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4743.8	0.0	4743.8
	% Fixture	37.2	0.0	37.2
Street Side	Lumens	7997.0	0.0	7997.0
	% Fixture	62.8	0.0	62.8
Total	Lumens	12740.8	0.0	12740.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.0	0.9
10°-20°	421.7	3.3
20°-30°	835.6	6.6
30°-40°	1432.3	11.2
40°-50°	2151.7	16.9
50°-60°	2989.4	23.5
60°-70°	3410.5	26.8
70°-80°	1174.9	9.2
80°-90°	204.8	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°	12740.8	100.0
0°-180°	12740.8	100.0

Coefficient of Utilization



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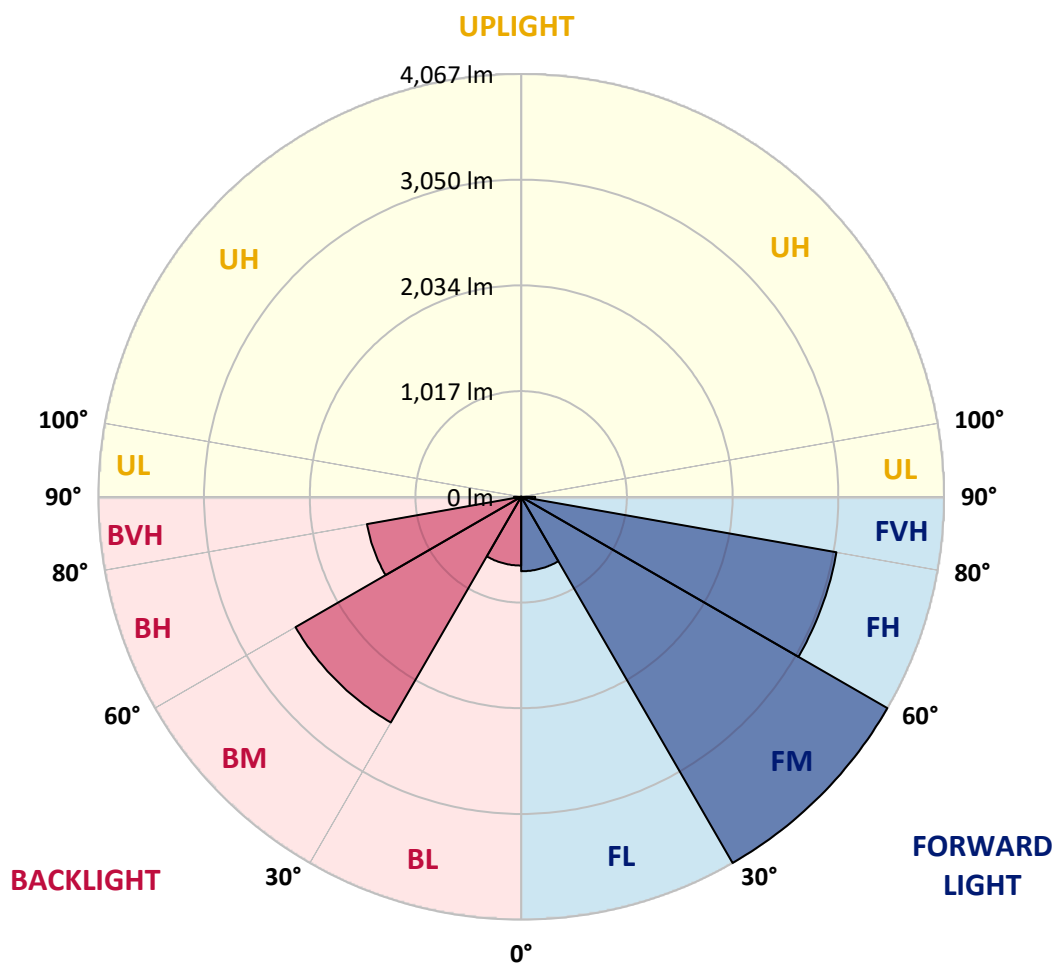
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	715.8	5.6			
FM	(30°-60°)	4067.1	31.9			
FH	(60°-80°)	3079.3	24.2			G2/5000
FVH	(80°-90°)	134.8	1.1			G2/225
BL	(0°-30°)	661.5	5.2	B2/1000		
BM	(30°-60°)	2506.3	19.7	B3/5000		
BH	(60°-80°)	1506.0	11.8	B3/2500		G3/2500
BVH	(80°-90°)	70.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5
2.5°	1249.8	1250.7	1249.8	1247.4	1246.5	1239.1	1230.9	1226.7	1225.9	1222.6	1223.4
5°	1327.4	1325.0	1321.7	1317.5	1313.4	1301.0	1287.0	1279.6	1277.1	1274.6	1271.3
7.5°	1396.8	1398.4	1396.8	1391.0	1380.3	1364.6	1346.4	1334.9	1334.0	1331.6	1329.1
10°	1485.9	1490.1	1480.2	1470.3	1455.4	1431.5	1410.8	1396.0	1393.5	1390.2	1388.5
12.5°	1582.5	1583.4	1580.1	1557.8	1533.0	1500.0	1470.3	1455.4	1452.1	1448.0	1446.3
15°	1685.7	1686.5	1668.4	1646.9	1608.9	1569.3	1528.0	1511.5	1507.4	1508.2	1501.6
17.5°	1767.4	1769.1	1751.8	1724.5	1679.1	1632.1	1587.5	1574.3	1571.8	1572.6	1569.3
20°	1802.9	1805.4	1794.7	1774.1	1731.1	1689.8	1657.7	1649.4	1648.6	1646.9	1653.5
22.5°	1801.3	1802.1	1798.0	1789.7	1764.1	1740.2	1736.1	1741.0	1740.2	1741.9	1747.6
25°	1786.4	1788.9	1788.1	1791.4	1787.3	1796.3	1815.3	1832.7	1835.1	1838.4	1849.2
27.5°	1824.4	1829.4	1823.6	1826.9	1833.5	1864.0	1902.8	1929.3	1934.2	1943.3	1952.4
30°	1973.0	1966.4	1959.0	1950.7	1954.8	1973.8	2017.6	2040.7	2043.2	2049.8	2062.2
32.5°	2193.4	2186.0	2179.4	2166.2	2162.9	2154.6	2169.5	2175.3	2174.4	2181.0	2184.3
35°	2441.9	2442.7	2441.1	2451.0	2459.2	2417.1	2365.1	2351.1	2356.9	2349.4	2351.1
37.5°	2654.1	2656.5	2700.3	2754.8	2770.5	2744.0	2630.1	2574.0	2555.0	2552.5	2533.5
40°	2889.3	2889.3	2955.4	3022.2	3066.0	3099.0	2963.6	2864.6	2824.1	2812.6	2765.5
42.5°	3147.7	3134.5	3194.8	3268.3	3349.2	3424.3	3354.1	3242.7	3184.9	3164.2	3081.7
45°	3359.9	3351.6	3381.4	3449.9	3581.1	3728.1	3738.0	3681.0	3646.3	3603.4	3527.5
47.5°	3490.3	3486.2	3503.5	3577.8	3742.1	3979.9	4112.8	4141.7	4121.0	4088.0	4014.5
50°	3541.5	3535.7	3548.1	3630.7	3814.8	4128.5	4422.3	4558.5	4568.5	4575.9	4552.8
52.5°	3523.3	3515.9	3541.5	3610.8	3802.4	4180.5	4664.2	4925.9	4969.7	5006.8	5082.8
55°	3349.2	3337.6	3406.9	3537.4	3748.7	4161.5	4840.9	5279.2	5371.7	5470.8	5639.2
57.5°	3082.5	3072.6	3172.5	3351.6	3653.8	4109.5	4959.8	5725.8	5933.9	6112.2	6590.2
60°	2825.8	2817.5	2876.1	3049.5	3345.9	3856.0	4812.8	5876.1	6225.3	6610.0	7482.6
62.5°	2366.8	2344.5	2422.9	2569.0	2756.4	3189.8	4171.4	5541.7	6080.0	6645.5	7828.5
65°	1454.6	1486.8	1554.5	1716.3	2023.4	2229.7	3063.5	4483.4	5193.4	5902.5	7437.2
67.5°	923.8	932.8	983.2	1095.5	1333.2	1540.4	1856.6	2813.4	3360.7	4058.3	5838.9
70°	791.7	797.5	840.4	957.6	1121.9	1377.0	1405.0	1469.4	1665.9	2110.0	3432.5
72.5°	624.1	634.0	667.8	769.4	967.5	1241.6	1734.4	1161.5	1121.9	1159.0	1675.0
75°	371.5	383.0	411.1	466.4	621.6	949.4	1817.0	1351.4	1259.8	1187.9	1155.7
77.5°	196.5	188.2	207.2	239.4	319.5	506.0	1365.4	1656.0	1591.6	1505.8	1323.3
80°	97.4	100.7	106.5	113.1	142.8	205.6	682.7	1713.0	1898.7	1981.3	1819.5
82.5°	38.8	43.8	61.9	66.0	78.4	87.5	219.6	949.4	1359.6	1844.2	2408.1
85°	19.8	19.0	33.0	39.6	46.2	41.3	77.6	354.2	637.3	993.1	1608.9
87.5°	2.5	3.3	7.4	9.9	14.0	13.2	22.3	76.8	122.2	173.4	243.5
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):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5
2.5°	1219.3	1218.5	1218.5	1215.2	1215.2	1216.0	1213.5	1211.9	1211.9	1212.7	1209.4
5°	1268.8	1266.4	1266.4	1263.1	1258.9	1258.9	1255.6	1254.8	1253.1	1249.8	1247.4
7.5°	1326.6	1324.1	1320.0	1317.5	1315.9	1313.4	1309.3	1307.6	1304.3	1301.0	1297.7
10°	1386.1	1382.8	1381.1	1377.0	1375.3	1370.4	1367.9	1368.7	1362.1	1359.6	1360.5
12.5°	1445.5	1442.2	1436.4	1434.8	1433.9	1429.0	1426.5	1424.9	1419.9	1419.1	1416.6
15°	1498.3	1500.0	1497.5	1493.4	1490.1	1489.2	1486.8	1485.1	1481.8	1478.5	1475.2
17.5°	1566.8	1569.3	1566.0	1560.2	1560.2	1559.4	1560.2	1559.4	1553.6	1556.1	1554.5
20°	1654.4	1656.0	1647.7	1650.2	1651.9	1651.0	1653.5	1656.0	1654.4	1654.4	1656.8
22.5°	1755.1	1757.5	1752.6	1755.9	1760.8	1756.7	1764.1	1763.3	1765.0	1767.4	1768.3
25°	1858.3	1863.2	1859.1	1868.2	1864.9	1868.2	1877.2	1874.8	1878.9	1885.5	1888.0
27.5°	1961.4	1964.7	1965.6	1971.4	1977.1	1982.1	1993.6	1993.6	1996.9	2008.5	2008.5
30°	2069.6	2072.9	2076.2	2084.5	2087.8	2096.8	2108.4	2111.7	2110.0	2126.6	2131.5
32.5°	2194.2	2197.5	2203.3	2213.2	2217.4	2226.4	2226.4	2235.5	2242.1	2256.2	2257.0
35°	2360.2	2362.7	2360.2	2359.4	2365.1	2377.5	2378.3	2391.5	2397.3	2411.4	2415.5
37.5°	2526.1	2525.3	2514.5	2503.0	2503.8	2498.9	2495.6	2501.3	2503.8	2504.6	2513.7
40°	2749.8	2728.4	2711.8	2683.0	2669.7	2649.1	2636.7	2635.9	2622.7	2621.0	2623.5
42.5°	3042.9	3018.1	2979.3	2930.6	2893.5	2855.5	2827.4	2810.9	2782.0	2767.2	2754.8
45°	3452.3	3391.3	3345.0	3287.2	3215.4	3149.4	3080.0	3048.7	2993.4	2959.5	2921.5
47.5°	3952.6	3892.4	3821.4	3761.9	3667.8	3576.2	3481.2	3397.9	3301.3	3224.5	3161.8
50°	4495.8	4460.3	4409.1	4353.8	4232.5	4172.2	4052.5	3939.4	3835.4	3698.4	3578.7
52.5°	5053.0	5073.7	5062.1	5042.3	4965.5	4942.4	4839.2	4701.4	4596.5	4502.4	4294.4
55°	5739.9	5764.6	5814.2	5843.1	5834.0	5892.6	5867.0	5759.7	5717.6	5673.8	5526.1
57.5°	6790.8	6967.4	7156.5	7322.4	7361.2	7569.2	7524.7	7632.0	7707.9	7653.4	7605.6
60°	7911.0	8267.6	8588.8	8924.7	9198.0	9402.7	9673.5	9855.9	9970.7	10177.1	10193.6
62.5°	8362.6	8847.2	9255.0	9644.6	9969.0	10253.0	10497.4	10749.2	10955.5	11142.1	11276.7
65°	8114.9	8621.0	9115.4	9510.9	9822.9	10067.3	10333.1	10532.9	10736.0	10855.7	10996.8
67.5°	6746.2	7416.5	8024.9	8470.7	8897.5	9146.0	9460.5	9657.0	9872.5	9998.8	10089.6
70°	4398.4	5271.0	6102.3	6778.4	7354.6	7644.4	8024.1	8292.4	8551.6	8558.2	8709.3
72.5°	2373.4	3103.1	3799.1	4490.0	5147.1	5532.7	5907.5	6233.5	6491.1	6381.3	6531.6
75°	1321.7	1663.4	2044.0	2459.2	2859.6	3080.0	3359.9	3361.5	3494.4	3285.6	3338.4
77.5°	1271.3	1255.6	1261.4	1273.0	1292.8	1250.7	1249.8	1224.3	1184.6	1112.8	1125.2
80°	1670.0	1470.3	1326.6	1101.3	886.6	723.2	677.8	688.5	720.7	785.1	866.8
82.5°	2414.7	2246.3	2005.2	1650.2	1295.2	998.9	820.6	728.1	724.0	788.4	912.2
85°	1758.4	1859.9	1844.2	1539.6	1269.7	1031.1	750.4	634.0	525.0	499.4	543.2
87.5°	259.2	214.6	241.9	202.3	146.9	113.9	99.9	80.1	76.8	78.4	85.9
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):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5
2.5°	1210.2	1206.9	1203.6	1206.1	1203.6	1202.8	1200.3	1198.7	1197.8	1197.8	1197.8
5°	1247.4	1243.2	1240.8	1239.9	1237.5	1235.0	1234.2	1230.0	1229.2	1229.2	1226.7
7.5°	1297.7	1294.4	1290.3	1287.8	1286.2	1282.0	1277.9	1277.1	1276.3	1273.0	1270.5
10°	1356.3	1351.4	1346.4	1346.4	1343.1	1342.3	1338.2	1332.4	1331.6	1326.6	1325.0
12.5°	1411.6	1410.0	1404.2	1402.6	1400.1	1397.6	1395.1	1392.7	1390.2	1386.1	1387.7
15°	1477.7	1473.6	1468.6	1469.4	1468.6	1465.3	1462.0	1459.5	1457.9	1456.2	1456.2
17.5°	1556.9	1555.3	1554.5	1550.3	1547.0	1549.5	1549.5	1549.5	1545.4	1546.2	1547.0
20°	1657.7	1659.3	1657.7	1654.4	1653.5	1656.0	1650.2	1659.3	1654.4	1651.0	1652.7
22.5°	1769.1	1774.9	1768.3	1769.1	1773.2	1774.9	1769.1	1776.5	1774.1	1769.1	1773.2
25°	1890.5	1894.6	1891.3	1890.5	1892.9	1898.7	1897.9	1897.1	1902.8	1897.9	1900.4
27.5°	2015.1	2017.6	2019.2	2021.7	2023.4	2022.5	2025.8	2025.8	2029.1	2023.4	2025.8
30°	2138.9	2138.9	2142.2	2145.5	2145.5	2145.5	2152.1	2153.0	2148.0	2149.7	2143.9
32.5°	2271.0	2271.8	2275.1	2275.1	2281.8	2282.6	2290.0	2280.1	2290.0	2281.8	2283.4
35°	2426.2	2436.9	2438.6	2446.9	2453.5	2455.9	2455.9	2456.8	2465.8	2459.2	2461.7
37.5°	2517.0	2519.5	2526.1	2530.2	2530.2	2533.5	2536.0	2533.5	2536.0	2535.2	2537.7
40°	2624.3	2621.9	2629.3	2630.9	2627.6	2631.8	2630.9	2628.5	2635.1	2630.1	2633.4
42.5°	2754.8	2740.7	2739.9	2746.5	2739.9	2743.2	2742.4	2736.6	2744.9	2747.3	2744.9
45°	2894.3	2886.9	2872.0	2872.0	2865.4	2862.9	2863.7	2862.9	2863.7	2873.7	2877.0
47.5°	3121.3	3075.9	3050.3	3026.4	3006.6	3005.7	2996.7	3001.6	3008.2	3024.7	3039.6
50°	3501.9	3397.0	3332.6	3273.2	3230.3	3215.4	3198.1	3196.4	3202.2	3221.2	3246.8
52.5°	4180.5	4035.2	3898.1	3771.0	3660.4	3575.3	3533.2	3511.0	3502.7	3521.7	3546.5
55°	5422.0	5148.0	4954.8	4826.0	4551.1	4434.7	4285.3	4216.8	4149.9	4156.5	4198.6
57.5°	7543.6	7395.9	7234.1	7008.7	6840.3	6637.2	6264.1	6056.1	6065.1	6113.8	5961.9
60°	10324.0	10174.6	10107.7	9903.0	9785.8	9704.0	9505.9	9160.9	9038.7	9015.6	8736.5
62.5°	11379.9	11415.4	11468.2	11526.0	11522.7	11558.2	11384.8	11272.5	11131.4	10948.1	10672.4
65°	11104.1	11194.1	11301.4	11456.6	11633.3	11763.7	11873.5	11860.3	11728.2	11483.9	11192.5
67.5°	10170.5	10259.6	10338.0	10546.1	10835.8	11100.8	11335.3	11494.6	11406.3	11204.0	10863.9
70°	8767.1	8831.5	8881.0	9061.8	9379.6	9703.2	10009.5	10277.0	10249.7	10004.5	9732.9
72.5°	6352.4	6508.4	6592.6	6580.3	6776.7	7139.1	7182.1	7410.7	7474.3	7210.1	6777.6
75°	3094.9	3097.4	3000.0	2967.8	2977.7	3040.4	2920.7	2928.1	2886.9	2699.5	2545.1
77.5°	1081.4	1051.7	980.7	896.5	776.0	662.9	548.1	498.6	482.1	433.4	399.6
80°	932.0	975.8	961.7	892.4	765.3	610.1	455.7	337.6	288.1	270.8	254.3
82.5°	1058.3	1226.7	1334.0	1328.3	1154.1	866.8	540.7	310.4	221.2	194.0	178.3
85°	590.3	634.8	647.2	589.4	489.5	334.3	186.6	131.3	111.4	101.5	91.6
87.5°	94.1	85.9	84.2	73.5	69.3	63.6	56.1	52.8	48.7	46.2	46.2
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: P159335

CATALOG NUMBER: VST-F05-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	91°	92°	93°	94°	95°	96°	97°
0°	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5
2.5°	1197.0	1196.2	1193.7	1191.2	1189.6	1188.8	1187.9	1186.3	1185.5	1184.6	1183.0
5°	1225.1	1223.4	1219.3	1215.2	1213.5	1211.0	1208.6	1206.9	1205.3	1204.4	1201.1
7.5°	1268.8	1267.2	1262.2	1258.9	1258.1	1251.5	1250.7	1248.2	1244.1	1243.2	1238.3
10°	1321.7	1320.8	1316.7	1314.2	1312.6	1309.3	1304.3	1300.2	1296.1	1296.1	1292.8
12.5°	1382.8	1379.5	1381.9	1376.2	1374.5	1371.2	1368.7	1367.9	1362.9	1358.8	1358.0
15°	1454.6	1450.4	1450.4	1448.8	1447.1	1443.8	1443.0	1443.8	1438.9	1440.5	1435.6
17.5°	1543.7	1545.4	1544.6	1544.6	1540.4	1540.4	1533.8	1542.1	1536.3	1540.4	1538.8
20°	1655.2	1656.0	1654.4	1656.8	1658.5	1657.7	1656.8	1656.0	1658.5	1661.8	1659.3
22.5°	1774.1	1774.1	1773.2	1782.3	1772.4	1779.8	1782.3	1777.4	1790.6	1788.9	1791.4
25°	1902.8	1902.8	1909.4	1916.9	1918.5	1912.7	1916.0	1911.9	1920.2	1926.8	1928.4
27.5°	2022.5	2033.3	2038.2	2033.3	2037.4	2046.5	2045.7	2045.7	2051.4	2049.8	2065.5
30°	2145.5	2152.1	2158.7	2155.4	2157.1	2168.7	2169.5	2170.3	2177.7	2188.5	2200.0
32.5°	2285.9	2292.5	2289.2	2299.9	2299.1	2313.1	2315.6	2318.1	2341.2	2337.1	2361.0
35°	2458.4	2465.0	2461.7	2473.3	2471.6	2476.6	2485.7	2495.6	2499.7	2523.6	2542.6
37.5°	2539.3	2539.3	2546.7	2560.0	2564.9	2573.2	2587.2	2599.6	2620.2	2645.8	2675.5
40°	2636.7	2639.2	2649.1	2663.1	2672.2	2691.2	2716.8	2734.1	2765.5	2793.6	2828.2
42.5°	2754.8	2765.5	2777.1	2796.1	2815.9	2845.6	2881.9	2904.2	2945.5	2981.8	3024.7
45°	2892.6	2903.4	2930.6	2965.3	2994.2	3027.2	3056.9	3109.8	3146.9	3184.9	3222.0
47.5°	3059.4	3090.8	3113.1	3154.3	3189.8	3233.6	3270.7	3320.3	3360.7	3406.9	3438.3
50°	3273.2	3312.0	3340.9	3394.6	3429.2	3477.9	3525.0	3562.1	3603.4	3648.8	3674.4
52.5°	3580.3	3619.9	3656.2	3723.1	3766.0	3799.1	3861.8	3908.0	3946.0	3979.0	4007.1
55°	4245.7	4234.1	4334.8	4464.4	4479.3	4599.0	4621.3	4660.1	4730.3	4740.2	4818.6
57.5°	6146.9	6087.4	6233.5	6423.4	6390.4	6330.1	6581.9	6597.6	6562.1	6657.0	6549.7
60°	8777.8	8673.8	8713.4	8765.4	8690.3	8654.8	8667.2	8702.7	8668.0	8630.0	8526.0
62.5°	10534.5	10374.4	10259.6	10163.0	10040.9	9952.5	9853.5	9731.3	9698.3	9559.6	9443.2
65°	10909.3	10660.0	10478.4	10295.9	10127.5	9971.5	9822.1	9717.3	9578.6	9414.3	9292.9
67.5°	10497.4	10188.6	9922.8	9657.8	9467.1	9237.6	9125.4	8954.5	8783.6	8595.4	8483.9
70°	9300.4	8978.4	8644.1	8384.9	8125.6	7841.7	7786.4	7584.1	7485.9	7229.1	7184.5
72.5°	6419.3	6204.6	6055.2	5734.9	5577.2	5432.0	5385.7	5198.3	5218.1	4936.6	5039.0
75°	2282.6	2252.0	2208.3	2027.5	1995.3	1939.2	1924.3	1911.1	2044.8	1859.1	1993.6
77.5°	392.1	389.6	367.4	356.6	377.3	364.1	367.4	360.8	399.6	405.3	396.3
80°	243.5	236.9	229.5	224.5	225.4	220.4	221.2	222.9	225.4	224.5	227.0
82.5°	166.8	161.0	157.7	154.4	159.3	161.0	165.1	169.2	175.8	180.0	184.9
85°	90.8	83.4	83.4	82.6	89.2	94.1	100.7	109.0	120.5	130.4	141.2
87.5°	46.2	44.6	45.4	47.1	52.8	57.0	65.2	72.6	82.6	93.3	103.2
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: P159335

CATALOG NUMBER: VST-F05-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	98°	99°	100°	101°	102°	103°	104°	105°	115°	125°	135°
0°	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5
2.5°	1182.2	1182.2	1181.3	1181.3	1180.5	1179.7	1178.8	1176.4	1167.3	1159.0	1153.3
5°	1200.3	1197.8	1197.0	1194.5	1193.7	1192.1	1189.6	1187.1	1170.6	1155.7	1145.0
7.5°	1237.5	1234.2	1232.5	1230.0	1227.6	1224.3	1221.0	1218.5	1198.7	1181.3	1168.1
10°	1286.2	1284.5	1283.7	1280.4	1280.4	1275.4	1274.6	1268.8	1247.4	1231.7	1220.1
12.5°	1353.9	1350.6	1349.7	1345.6	1347.3	1345.6	1344.0	1340.7	1325.0	1306.8	1291.1
15°	1438.1	1438.1	1433.9	1430.6	1431.5	1429.8	1433.1	1429.0	1419.1	1402.6	1377.0
17.5°	1539.6	1538.0	1539.6	1537.1	1538.8	1540.4	1536.3	1537.1	1532.2	1511.5	1473.6
20°	1657.7	1655.2	1665.1	1661.0	1670.0	1661.8	1663.4	1665.9	1665.9	1638.7	1587.5
22.5°	1793.0	1791.4	1791.4	1799.6	1802.9	1803.8	1807.1	1809.6	1816.2	1781.5	1699.8
25°	1928.4	1934.2	1935.0	1945.8	1950.7	1950.7	1953.2	1962.3	1982.1	1934.2	1828.5
27.5°	2066.3	2080.3	2083.6	2091.1	2098.5	2105.9	2111.7	2118.3	2150.5	2098.5	1960.6
30°	2204.2	2219.8	2231.4	2239.6	2248.7	2266.9	2270.2	2283.4	2337.1	2273.5	2086.1
32.5°	2366.0	2388.2	2403.1	2413.8	2427.9	2445.2	2455.1	2471.6	2523.6	2419.6	2177.7
35°	2559.1	2572.3	2593.8	2612.0	2620.2	2649.9	2665.6	2669.7	2709.4	2545.9	2245.4
37.5°	2692.9	2715.2	2752.3	2777.9	2792.8	2809.3	2835.7	2853.0	2891.0	2660.7	2279.3
40°	2862.9	2896.8	2926.5	2964.5	2988.4	3000.8	3027.2	3041.2	3046.2	2758.9	2268.5
42.5°	3070.1	3100.7	3140.3	3170.8	3189.0	3203.0	3224.5	3230.3	3165.9	2805.1	2210.8
45°	3265.0	3312.0	3345.9	3368.1	3381.4	3388.8	3402.0	3402.8	3265.0	2782.0	2111.7
47.5°	3474.6	3508.5	3539.9	3555.5	3553.9	3555.5	3550.6	3547.3	3314.5	2701.9	1984.6
50°	3706.6	3728.9	3742.1	3749.5	3753.7	3738.0	3715.7	3700.8	3318.6	2588.0	1855.8
52.5°	4017.8	4045.9	4043.4	4042.6	4009.6	3994.7	3935.3	3904.7	3294.7	2454.3	1710.5
55°	4806.2	4779.0	4725.3	4751.7	4617.2	4547.0	4454.5	4368.7	3326.0	2327.2	1542.1
57.5°	6592.6	6603.4	6450.7	6368.9	6141.9	5857.9	5629.3	5407.2	3608.4	2249.6	1322.5
60°	8456.7	8316.3	8122.3	7826.8	7534.6	7112.7	6705.7	6321.0	3889.9	2168.7	1062.5
62.5°	9270.6	9070.9	8777.8	8395.6	7936.6	7420.6	6913.8	6444.9	3753.7	1907.0	772.7
65°	9105.5	8800.1	8476.5	8029.1	7471.0	6905.5	6313.6	5834.8	3140.3	1422.4	476.3
67.5°	8242.0	7982.8	7641.1	7110.2	6513.4	5924.8	5382.4	4845.8	2332.9	886.6	266.6
70°	6956.7	6703.3	6356.5	5813.3	5217.3	4654.3	4079.7	3642.2	1486.8	427.6	192.3
72.5°	4826.0	4620.5	4375.3	3988.1	3465.6	2953.7	2564.9	2228.9	823.9	227.0	175.8
75°	1959.8	1960.6	1916.0	1752.6	1481.0	1277.1	1088.9	923.8	344.2	193.2	173.4
77.5°	444.1	451.6	493.7	468.1	421.8	394.6	353.3	312.0	209.7	199.0	175.0
80°	224.5	225.4	222.9	223.7	221.2	222.1	218.8	216.3	196.5	204.7	175.0
82.5°	187.4	191.5	190.7	190.7	191.5	191.5	191.5	190.7	203.9	215.5	169.2
85°	148.6	156.8	163.5	170.1	177.5	182.4	184.9	187.4	198.1	212.2	153.5
87.5°	112.3	122.2	130.4	137.0	148.6	148.6	156.8	162.6	162.6	165.9	80.9
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: P159335

CATALOG NUMBER: VST-F05-LED-E-U-T2

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	1185.5	1185.5	1185.5	1185.5	1185.5
2.5°	1145.0	1141.7	1138.4	1136.7	1133.4
5°	1136.7	1130.1	1126.0	1126.0	1122.7
7.5°	1160.7	1158.2	1152.4	1149.1	1152.4
10°	1211.9	1207.7	1201.1	1196.2	1198.7
12.5°	1280.4	1263.9	1250.7	1244.9	1240.8
15°	1351.4	1318.4	1291.9	1277.1	1273.0
17.5°	1427.3	1369.5	1329.9	1307.6	1303.5
20°	1504.9	1433.1	1377.0	1348.1	1347.3
22.5°	1598.2	1502.5	1430.6	1392.7	1390.2
25°	1696.5	1564.4	1469.4	1420.7	1415.8
27.5°	1781.5	1613.9	1493.4	1435.6	1430.6
30°	1852.5	1651.0	1513.2	1446.3	1439.7
32.5°	1903.7	1672.5	1521.4	1449.6	1442.2
35°	1920.2	1664.3	1498.3	1419.9	1411.6
37.5°	1897.9	1610.6	1433.9	1347.3	1337.4
40°	1831.0	1516.5	1329.1	1239.9	1227.6
42.5°	1728.6	1400.9	1202.8	1117.8	1102.1
45°	1602.3	1270.5	1077.3	982.4	974.9
47.5°	1470.3	1133.4	936.1	850.3	841.2
50°	1327.4	974.9	798.3	705.0	705.0
52.5°	1157.4	820.6	638.1	568.0	562.2
55°	961.7	646.4	508.5	454.9	447.4
57.5°	751.2	497.0	406.2	374.8	366.5
60°	552.3	373.1	326.9	309.6	306.3
62.5°	374.8	284.0	263.3	255.9	255.1
65°	253.4	221.2	215.5	213.0	213.8
67.5°	194.8	184.1	181.6	180.8	180.8
70°	169.2	162.6	160.2	161.0	160.2
72.5°	159.3	150.2	151.1	152.7	151.9
75°	156.0	144.5	147.8	148.6	145.3
77.5°	153.5	137.9	146.1	148.6	139.5
80°	148.6	132.1	151.9	152.7	137.0
82.5°	136.2	117.2	151.9	140.3	123.8
85°	115.6	89.2	171.7	122.2	91.6
87.5°	73.5	52.8	116.4	83.4	55.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)