

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: P159555

Luminaire Tested: **VST-F05-LED-E-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159555
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
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-T3
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12623.8 lumens
Efficiency: N/A
Efficacy: 94.7 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



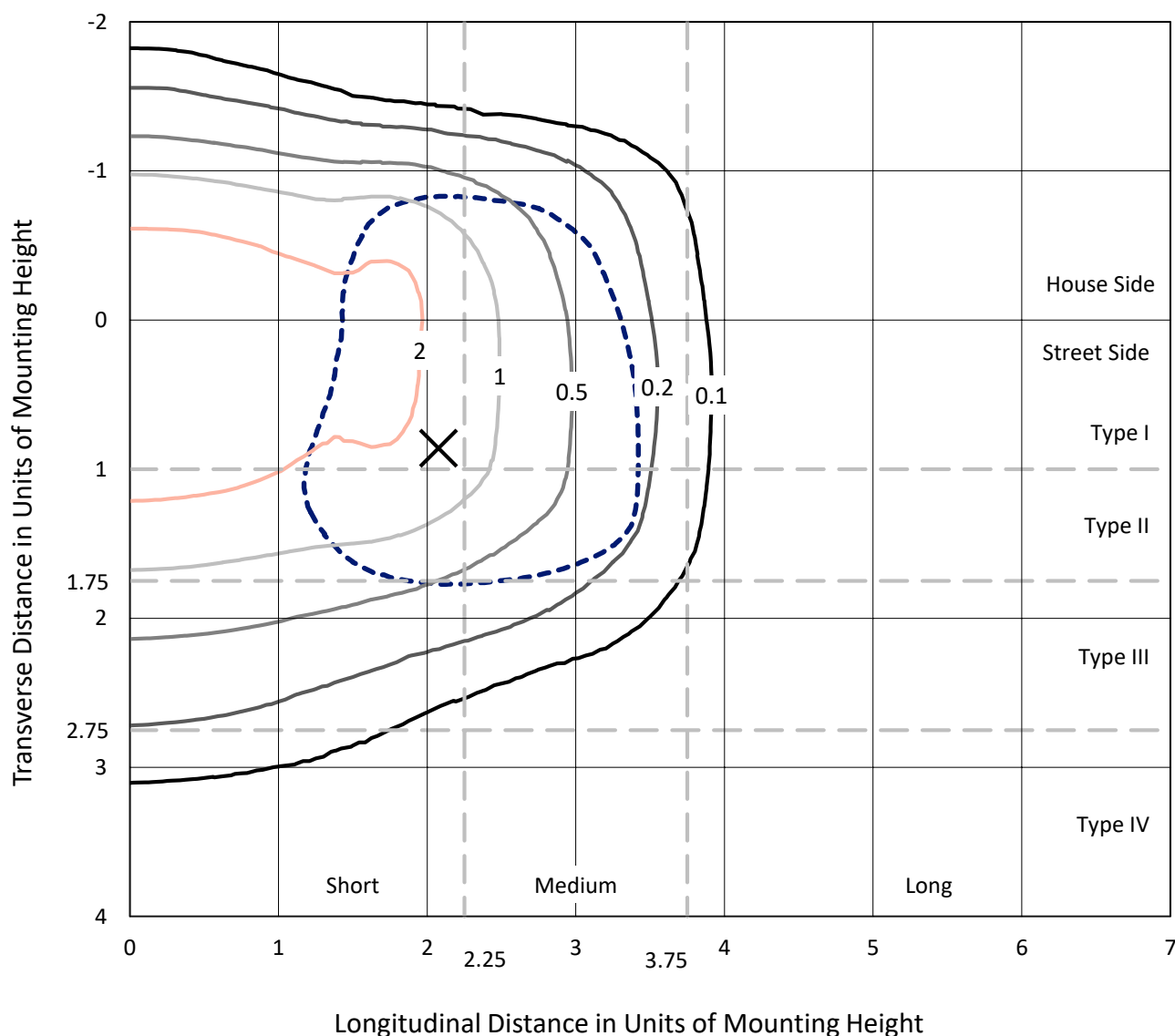
REPORT NUMBER: P159555

CATALOG NUMBER: VST-F05-LED-E-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

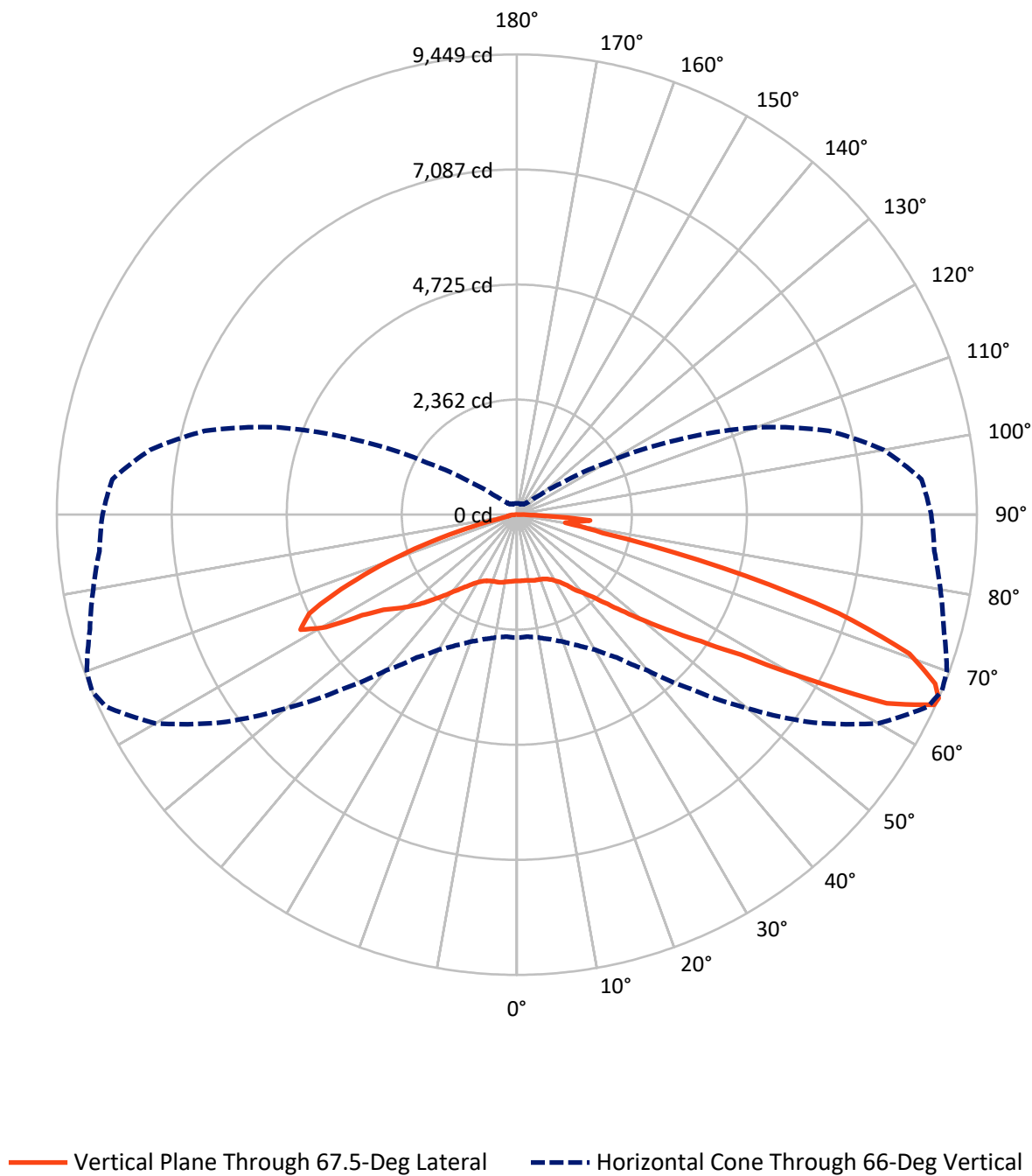


Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P159555

CATALOG NUMBER: VST-F05-LED-E-U-T3

Luminous Intensity Polar Plot



REPORT NUMBER: P159555

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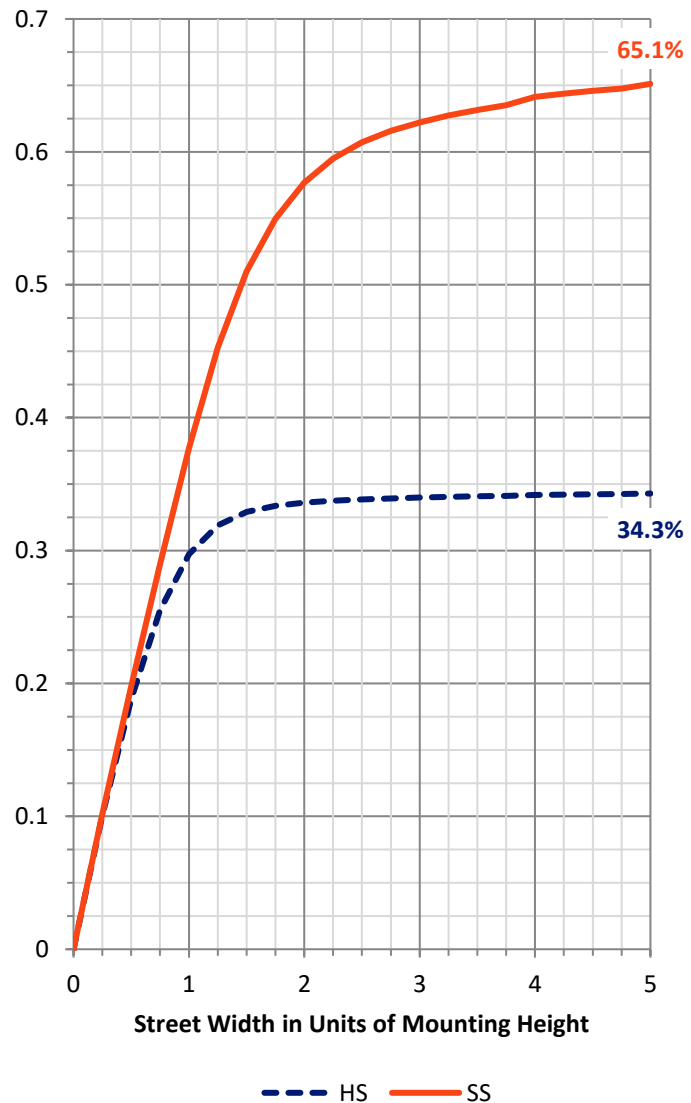
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4368.4	0.0	4368.4
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	8255.4	0.0	8255.4
	% Fixture	65.4	0.0	65.4
Total	Lumens	12623.8	0.0	12623.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	1.0
10°-20°	387.0	3.1
20°-30°	665.3	5.3
30°-40°	1075.3	8.5
40°-50°	1782.0	14.1
50°-60°	2796.7	22.2
60°-70°	3823.7	30.3
70°-80°	1681.5	13.3
80°-90°	281.5	2.2
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°	12623.8	100.0
0°-180°	12623.8	100.0

Coefficient of Utilization



REPORT NUMBER: P159555

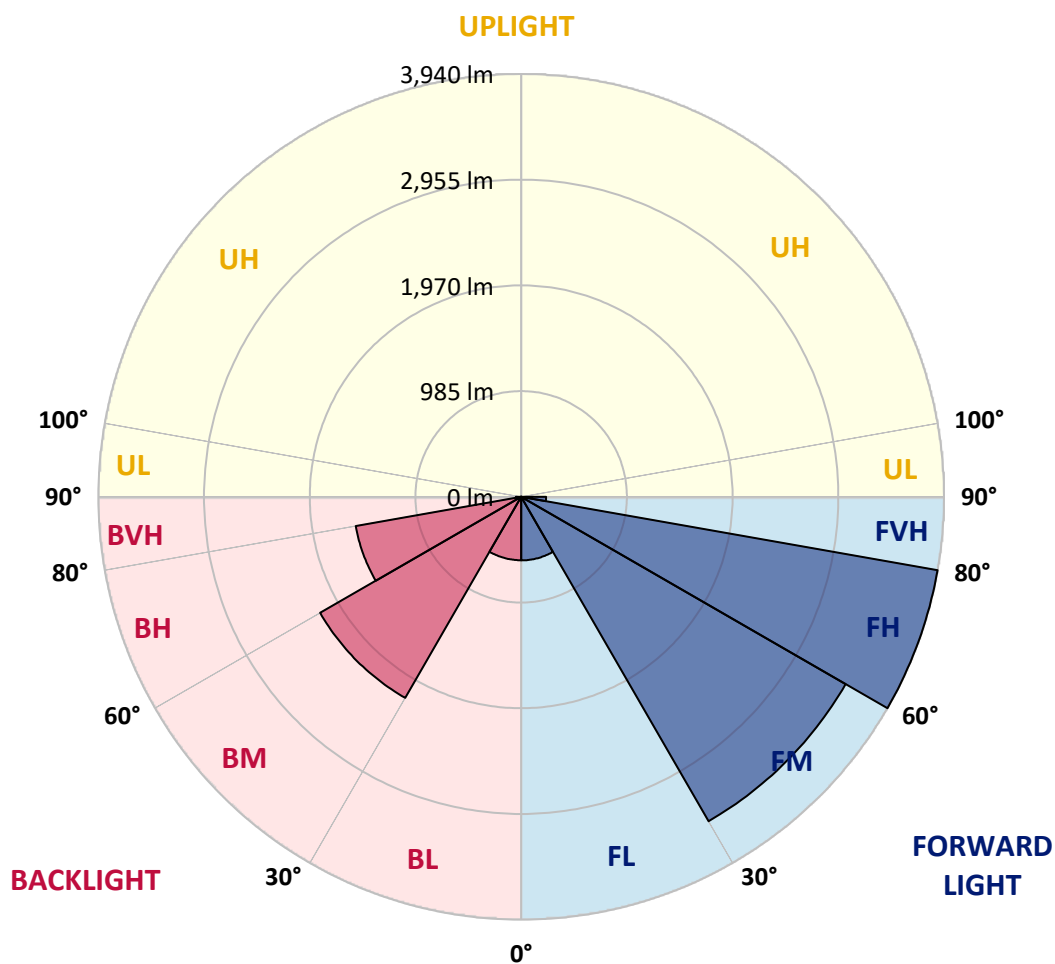
CATALOG NUMBER: VST-F05-LED-E-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	592.2	4.7			
FM	(30°-60°)	3490.9	27.7			
FH	(60°-80°)	3940.2	31.2			G2/5000
FVH	(80°-90°)	232.2	1.8			G3/500
BL	(0°-30°)	590.9	4.7	B2/1000		
BM	(30°-60°)	2163.2	17.1	B2/2500		
BH	(60°-80°)	1565.0	12.4	B3/2500		G3/2500
BVH	(80°-90°)	49.2	0.4			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: P159555

CATALOG NUMBER: VST-F05-LED-E-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1
2.5°	1359.6	1359.6	1360.5	1359.6	1359.6	1358.8	1362.1	1362.1	1362.1	1361.3	1363.8
5°	1356.3	1356.3	1357.2	1357.2	1358.0	1357.2	1359.6	1360.5	1360.5	1360.5	1362.9
7.5°	1348.1	1350.6	1348.9	1349.7	1350.6	1353.0	1356.3	1358.0	1359.6	1362.1	1362.9
10°	1330.7	1334.9	1334.0	1336.5	1337.4	1344.8	1347.3	1350.6	1356.3	1359.6	1362.1
12.5°	1306.8	1309.3	1310.1	1313.4	1316.7	1325.8	1332.4	1338.2	1346.4	1354.7	1362.9
15°	1287.8	1289.5	1289.5	1292.8	1297.7	1306.0	1314.2	1324.1	1336.5	1350.6	1363.8
17.5°	1293.6	1297.7	1294.4	1293.6	1295.2	1300.2	1307.6	1315.9	1330.7	1346.4	1362.1
20°	1331.6	1332.4	1330.7	1326.6	1323.3	1324.1	1324.1	1325.8	1334.9	1347.3	1359.6
22.5°	1362.9	1366.2	1365.4	1366.2	1365.4	1368.7	1367.1	1363.8	1360.5	1361.3	1367.1
25°	1390.2	1393.5	1393.5	1396.0	1400.1	1406.7	1411.6	1410.8	1405.9	1399.3	1396.8
27.5°	1434.8	1434.8	1434.8	1437.2	1443.0	1451.3	1459.5	1464.5	1468.6	1462.0	1448.0
30°	1504.9	1505.8	1503.3	1504.1	1508.2	1519.0	1528.9	1536.3	1544.6	1543.7	1525.6
32.5°	1581.7	1585.0	1584.2	1587.5	1593.3	1603.2	1613.9	1625.5	1636.2	1642.8	1631.2
35°	1680.8	1684.1	1684.9	1689.8	1696.5	1711.3	1726.2	1741.0	1752.6	1757.5	1755.1
37.5°	1843.4	1844.2	1840.9	1833.5	1836.0	1847.5	1864.9	1888.8	1896.2	1901.2	1912.7
40°	2086.9	2084.5	2071.2	2064.6	2060.5	2065.5	2062.2	2081.1	2098.5	2099.3	2098.5
42.5°	2382.5	2375.0	2362.7	2361.0	2359.4	2357.7	2348.6	2349.4	2365.1	2369.3	2364.3
45°	2676.4	2667.3	2658.2	2666.4	2656.5	2682.1	2689.6	2709.4	2711.8	2720.1	2707.7
47.5°	2917.4	2918.2	2918.2	2929.8	2949.6	2998.3	3042.1	3080.0	3094.1	3113.9	3116.4
50°	3099.8	3104.8	3120.5	3157.6	3199.7	3281.5	3354.9	3423.5	3485.4	3508.5	3569.6
52.5°	3206.3	3219.5	3252.6	3314.5	3389.6	3495.3	3610.8	3727.2	3834.6	3925.4	3998.0
55°	3187.4	3197.3	3255.0	3351.6	3468.9	3610.8	3772.6	3941.1	4108.6	4262.2	4381.1
57.5°	3065.2	3071.8	3129.6	3238.5	3384.7	3575.3	3804.0	4054.2	4289.4	4537.1	4740.2
60°	2905.0	2914.9	2968.6	3054.4	3207.2	3410.2	3675.2	4014.5	4390.1	4779.8	5159.5
62.5°	2802.7	2800.2	2847.2	2924.0	3038.8	3222.8	3477.9	3880.0	4400.0	5058.8	5809.2
65°	2632.6	2625.2	2673.9	2761.4	2886.0	3064.3	3306.2	3692.6	4296.0	5164.5	6228.6
66°	2526.9	2512.1	2560.8	2649.1	2773.8	2963.6	3195.6	3577.0	4169.7	5061.3	6184.0
67.5°	2342.0	2334.6	2357.7	2427.0	2519.5	2697.8	2939.7	3323.6	3870.9	4750.9	5857.1
70°	1903.7	1887.1	1905.3	1936.7	1972.2	2015.9	2164.5	2469.1	2932.3	3785.0	4718.7
72.5°	1296.9	1288.6	1322.5	1370.4	1465.3	1509.9	1568.5	1618.0	1781.5	2385.8	3291.4
75°	986.5	991.5	1034.4	1113.6	1235.8	1367.9	1496.7	1543.7	1489.2	1442.2	1868.2
77.5°	553.1	582.0	634.0	734.7	864.3	1050.9	1275.4	1523.1	1646.9	1616.4	1511.5
80°	227.8	223.7	249.3	304.6	349.2	501.9	767.7	1078.1	1426.5	1646.9	1612.3
82.5°	63.6	65.2	84.2	108.1	139.5	177.5	277.4	445.8	726.5	1130.1	1479.3
85°	19.8	19.8	27.2	40.5	47.9	55.3	70.2	115.6	197.3	393.8	798.3
87.5°	4.1	4.1	5.8	11.6	12.4	12.4	15.7	21.5	19.0	17.3	77.6
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: P159555

CATALOG NUMBER: VST-F05-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1
2.5°	1361.3	1359.6	1360.5	1361.3	1360.5	1360.5	1359.6	1358.8	1359.6	1359.6	1362.1
5°	1360.5	1359.6	1360.5	1360.5	1360.5	1361.3	1361.3	1361.3	1363.8	1363.8	1367.9
7.5°	1362.1	1362.1	1363.8	1363.8	1363.8	1363.8	1364.6	1366.2	1370.4	1369.5	1377.0
10°	1365.4	1367.1	1371.2	1372.0	1372.0	1374.5	1376.2	1379.5	1383.6	1385.2	1391.8
12.5°	1369.5	1377.8	1385.2	1386.9	1389.4	1393.5	1396.0	1397.6	1405.0	1407.5	1415.8
15°	1374.5	1386.1	1395.1	1398.4	1401.7	1406.7	1410.0	1412.5	1419.1	1422.4	1432.3
17.5°	1375.3	1388.5	1399.3	1404.2	1408.3	1414.1	1419.1	1424.0	1431.5	1436.4	1446.3
20°	1374.5	1391.8	1408.3	1414.9	1419.1	1429.8	1437.2	1443.8	1452.9	1457.9	1467.8
22.5°	1383.6	1403.4	1425.7	1433.9	1440.5	1455.4	1465.3	1476.0	1487.6	1490.9	1498.3
25°	1405.0	1425.7	1453.7	1465.3	1476.9	1496.7	1510.7	1526.4	1538.0	1539.6	1542.1
27.5°	1441.4	1460.4	1494.2	1511.5	1530.5	1558.6	1579.2	1594.9	1611.4	1611.4	1609.8
30°	1514.8	1519.0	1554.5	1576.8	1604.8	1646.1	1676.6	1694.0	1706.4	1706.4	1692.3
32.5°	1609.8	1604.8	1637.0	1661.0	1699.8	1757.5	1798.8	1812.0	1825.2	1821.1	1797.2
35°	1746.8	1732.8	1750.9	1787.3	1831.0	1910.3	1953.2	1982.9	1991.2	1979.6	1941.6
37.5°	1919.3	1917.7	1926.8	1967.2	2015.9	2118.3	2162.0	2181.0	2174.4	2153.8	2086.9
40°	2101.8	2096.8	2091.1	2118.3	2172.8	2295.8	2373.4	2383.3	2374.2	2343.7	2259.5
42.5°	2345.3	2345.3	2318.1	2325.5	2370.9	2508.8	2600.4	2631.8	2632.6	2588.0	2475.7
45°	2680.5	2677.2	2629.3	2617.7	2652.4	2787.8	2905.8	2923.2	2923.2	2864.6	2741.6
47.5°	3083.3	3079.2	3032.2	2991.7	2998.3	3144.4	3242.7	3269.1	3246.0	3202.2	3056.1
50°	3537.4	3529.9	3482.1	3444.1	3427.6	3575.3	3658.7	3671.1	3637.3	3585.3	3426.8
52.5°	3998.0	4020.3	3992.2	3971.6	3977.4	4073.1	4159.0	4100.4	4083.0	4026.9	3867.6
55°	4477.6	4546.2	4608.1	4589.9	4611.4	4704.7	4721.2	4643.6	4612.2	4571.8	4394.3
57.5°	4960.6	5160.4	5363.4	5420.4	5473.2	5607.0	5588.0	5460.8	5484.8	5545.1	5345.3
60°	5635.0	6212.1	6727.2	6822.1	6986.4	7100.3	7125.9	7101.2	7212.6	7181.2	7004.6
62.5°	6671.1	7632.8	8349.4	8527.7	8692.8	8687.0	8600.3	8511.2	8621.0	8621.0	8159.5
65°	7410.7	8502.1	9269.0	9416.8	9410.2	9211.2	9006.5	8828.2	8812.5	8690.3	8015.8
66°	7445.4	8568.9	9320.2	9449.0	9399.4	9079.1	8833.9	8607.7	8511.2	8341.1	7650.1
67.5°	7133.4	8379.9	9153.4	9265.7	9135.3	8676.3	8338.6	8035.7	7895.3	7608.9	6958.3
70°	5851.3	7201.9	8327.1	8556.6	8408.8	7827.6	7365.3	6955.9	6687.6	6274.0	5805.1
72.5°	4271.3	5317.2	6535.7	6908.8	6885.7	6350.8	5978.5	5603.7	5251.2	4874.7	4532.1
75°	2776.2	3458.9	4138.4	4356.3	4251.5	3941.9	3675.2	3456.5	3122.1	2860.4	2796.9
77.5°	1585.0	1936.7	1831.8	1804.6	1673.3	1350.6	898.2	629.9	568.8	710.0	778.5
80°	1508.2	1367.1	1119.4	1009.6	927.9	632.4	331.9	233.6	204.7	209.7	225.4
82.5°	1700.6	1772.4	1449.6	1211.0	1054.2	769.4	420.2	195.6	142.8	169.2	189.9
85°	1274.6	1794.7	1779.0	1507.4	1236.6	886.6	497.0	149.4	85.9	118.9	155.2
87.5°	258.4	425.1	409.5	359.9	306.3	213.8	83.4	47.1	42.9	58.6	89.2
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: P159555

CATALOG NUMBER: VST-F05-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1	1362.1
2.5°	1363.8	1363.8	1365.4	1367.9	1368.7	1368.7	1370.4	1368.7	1372.0	1372.8	1373.7
5°	1371.2	1373.7	1375.3	1379.5	1381.9	1383.6	1386.1	1384.4	1387.7	1388.5	1390.2
7.5°	1379.5	1383.6	1386.9	1388.5	1391.8	1391.8	1392.7	1391.0	1390.2	1387.7	1386.9
10°	1394.3	1396.8	1400.9	1399.3	1397.6	1391.8	1386.9	1379.5	1375.3	1367.9	1363.8
12.5°	1418.3	1419.9	1419.9	1412.5	1401.7	1388.5	1376.2	1363.8	1353.9	1345.6	1340.7
15°	1434.8	1438.1	1433.9	1423.2	1407.5	1389.4	1372.8	1356.3	1343.1	1332.4	1325.8
17.5°	1447.1	1446.3	1438.9	1424.0	1409.2	1393.5	1378.6	1361.3	1344.8	1329.1	1319.2
20°	1466.1	1457.9	1444.7	1429.0	1413.3	1400.1	1388.5	1372.0	1354.7	1333.2	1318.4
22.5°	1491.7	1476.9	1457.9	1441.4	1426.5	1414.1	1400.9	1386.9	1368.7	1344.8	1324.1
25°	1528.0	1502.5	1481.0	1464.5	1451.3	1437.2	1422.4	1404.2	1386.1	1361.3	1336.5
27.5°	1583.4	1545.4	1518.1	1503.3	1490.9	1471.9	1452.9	1431.5	1408.3	1382.8	1354.7
30°	1650.2	1604.8	1573.5	1560.2	1545.4	1523.9	1503.3	1473.6	1441.4	1410.8	1376.2
32.5°	1728.6	1682.4	1651.0	1641.1	1617.2	1592.4	1563.5	1523.9	1481.8	1436.4	1395.1
35°	1847.5	1788.9	1760.0	1736.9	1703.9	1674.2	1625.5	1573.5	1513.2	1452.9	1401.7
37.5°	1969.7	1910.3	1880.5	1848.4	1805.4	1750.9	1685.7	1611.4	1531.3	1457.1	1394.3
40°	2133.2	2068.8	2030.8	1981.3	1911.9	1826.9	1730.3	1628.8	1531.3	1438.9	1362.9
42.5°	2323.9	2264.4	2205.8	2124.1	2012.6	1888.8	1753.4	1623.0	1504.9	1398.4	1318.4
45°	2588.0	2486.5	2393.2	2261.9	2099.3	1925.1	1755.9	1595.7	1459.5	1341.5	1252.3
47.5°	2885.2	2754.0	2588.8	2383.3	2161.2	1939.2	1732.0	1544.6	1387.7	1259.8	1162.3
50°	3227.8	3026.4	2772.9	2479.9	2192.6	1920.2	1675.0	1458.7	1288.6	1141.7	1037.7
52.5°	3619.9	3312.8	2939.7	2548.4	2187.6	1862.4	1580.9	1345.6	1155.7	999.7	897.3
55°	4055.0	3624.9	3099.0	2592.1	2143.1	1750.1	1433.1	1186.3	990.6	837.1	747.1
57.5°	4821.9	4172.2	3402.8	2650.8	2049.8	1580.1	1245.7	984.9	808.2	677.8	591.9
60°	6246.7	5129.0	3978.2	2788.6	1909.4	1367.1	1009.6	772.7	624.9	530.0	466.4
62.5°	7128.4	5802.6	4258.9	2768.8	1681.6	1075.7	749.6	572.9	456.5	393.8	354.2
65°	6919.5	5538.4	3916.3	2378.3	1308.5	762.8	496.1	374.8	313.7	281.5	262.5
66°	6635.6	5242.9	3626.5	2129.9	1140.0	637.3	409.5	314.5	269.9	246.0	236.1
67.5°	6040.4	4703.0	3127.9	1705.5	854.4	474.7	302.1	246.8	219.6	207.2	200.6
70°	5055.5	3789.2	2212.4	1007.1	463.1	257.6	193.2	171.7	165.1	161.0	158.5
72.5°	3908.9	2743.2	1292.8	495.3	233.6	166.8	146.9	137.9	135.4	135.4	136.2
75°	2462.5	1576.8	578.7	238.6	158.5	134.6	125.5	121.4	122.2	123.0	122.2
77.5°	818.1	544.0	241.1	169.2	137.9	122.2	114.7	113.1	114.7	115.6	115.6
80°	235.3	205.6	174.2	149.4	126.3	113.9	107.3	106.5	110.6	111.4	109.8
82.5°	180.8	169.2	157.7	144.5	121.4	107.3	104.8	105.7	108.1	106.5	99.1
85°	165.9	164.3	118.1	117.2	105.7	102.4	99.9	100.7	98.2	89.2	80.9
87.5°	93.3	86.7	66.9	67.7	78.4	80.9	66.9	71.0	66.0	57.8	52.8
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: P159555

CATALOG NUMBER: VST-F05-LED-E-U-T3

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1362.1	1362.1	1362.1	1362.1	1362.1
2.5°	1375.3	1374.5	1374.5	1377.0	1373.7
5°	1391.0	1390.2	1390.2	1392.7	1390.2
7.5°	1383.6	1381.1	1379.5	1378.6	1378.6
10°	1358.8	1356.3	1351.4	1349.7	1348.1
12.5°	1333.2	1330.7	1325.0	1325.0	1323.3
15°	1317.5	1314.2	1310.1	1307.6	1306.0
17.5°	1309.3	1304.3	1299.4	1296.9	1295.2
20°	1306.0	1299.4	1293.6	1289.5	1289.5
22.5°	1306.8	1298.6	1291.9	1287.0	1285.3
25°	1315.1	1302.7	1294.4	1289.5	1287.8
27.5°	1326.6	1311.8	1301.0	1294.4	1291.9
30°	1342.3	1321.7	1306.8	1298.6	1295.2
32.5°	1353.0	1324.1	1305.2	1293.6	1289.5
35°	1352.2	1315.1	1291.9	1277.1	1272.1
37.5°	1337.4	1293.6	1263.1	1244.9	1236.6
40°	1304.3	1254.0	1221.8	1204.4	1194.5
42.5°	1256.4	1202.0	1173.1	1154.1	1143.4
45°	1181.3	1127.7	1092.2	1077.3	1063.3
47.5°	1077.3	1022.8	992.3	970.8	961.7
50°	955.1	900.6	868.5	851.1	842.9
52.5°	821.4	769.4	746.3	729.8	718.2
55°	682.7	634.8	624.9	606.8	596.0
57.5°	552.3	524.2	515.1	497.0	487.9
60°	431.7	422.7	412.8	401.2	396.3
62.5°	334.3	326.1	323.6	316.2	315.4
65°	255.1	255.9	254.3	252.6	251.0
66°	232.0	231.1	232.0	230.3	229.5
67.5°	197.3	200.6	203.1	202.3	202.3
70°	160.2	162.6	165.9	165.1	165.1
72.5°	137.0	141.2	142.8	142.0	142.0
75°	123.8	128.0	128.0	126.3	125.5
77.5°	115.6	117.2	115.6	113.9	112.3
80°	107.3	105.7	103.2	100.7	99.1
82.5°	93.3	89.2	86.7	82.6	82.6
85°	75.1	71.8	66.0	61.9	57.8
87.5°	48.7	47.1	42.9	32.2	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)