

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: P159743

Luminaire Tested: **VST-F02-LED-E-U-T4-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P159743  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F02-LED-E-U-T4-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT  
Light Source: (14) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4147.5 lumens  
Efficiency: N/A  
Efficacy: 75.4 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 55  
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



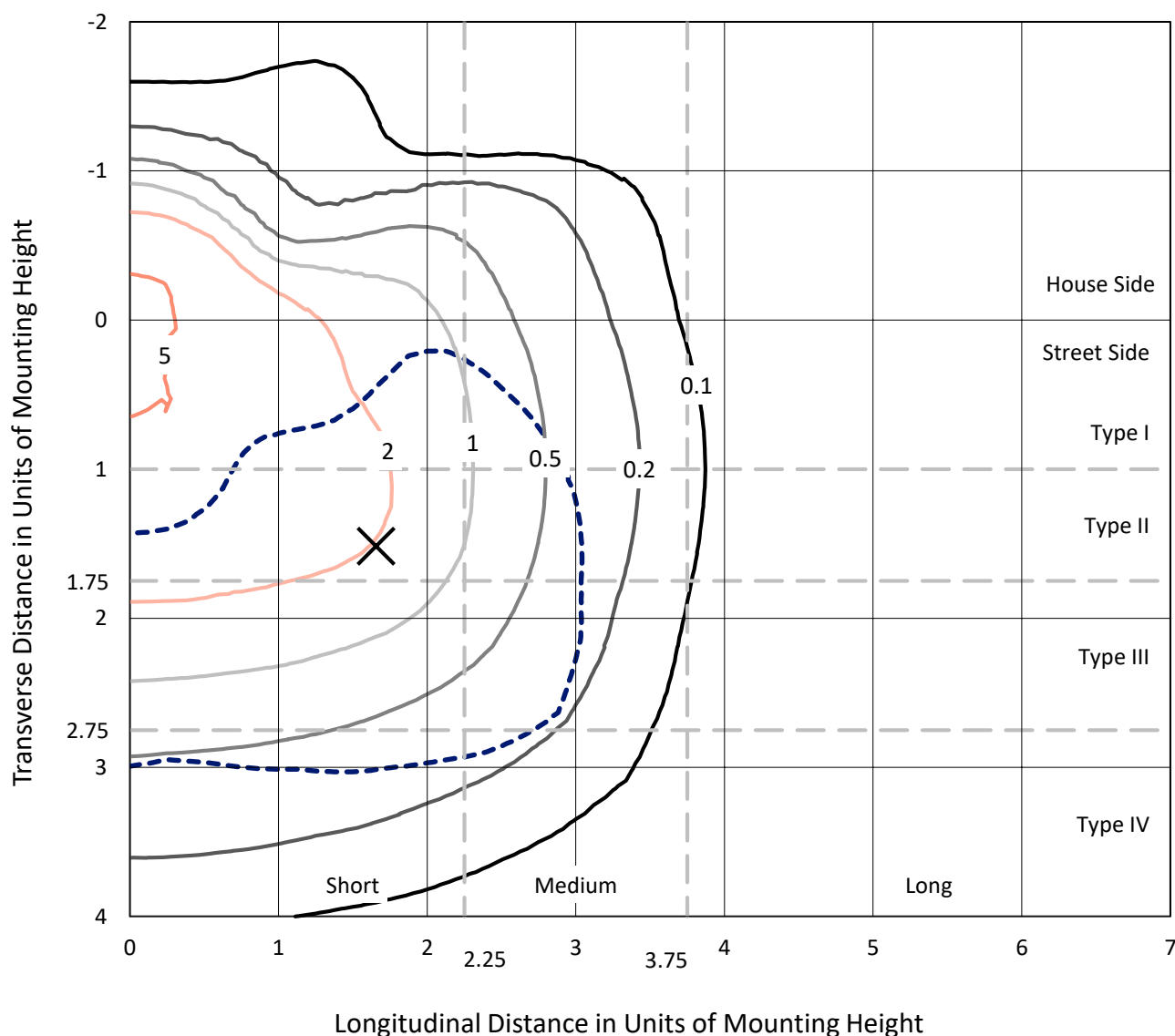
REPORT NUMBER: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

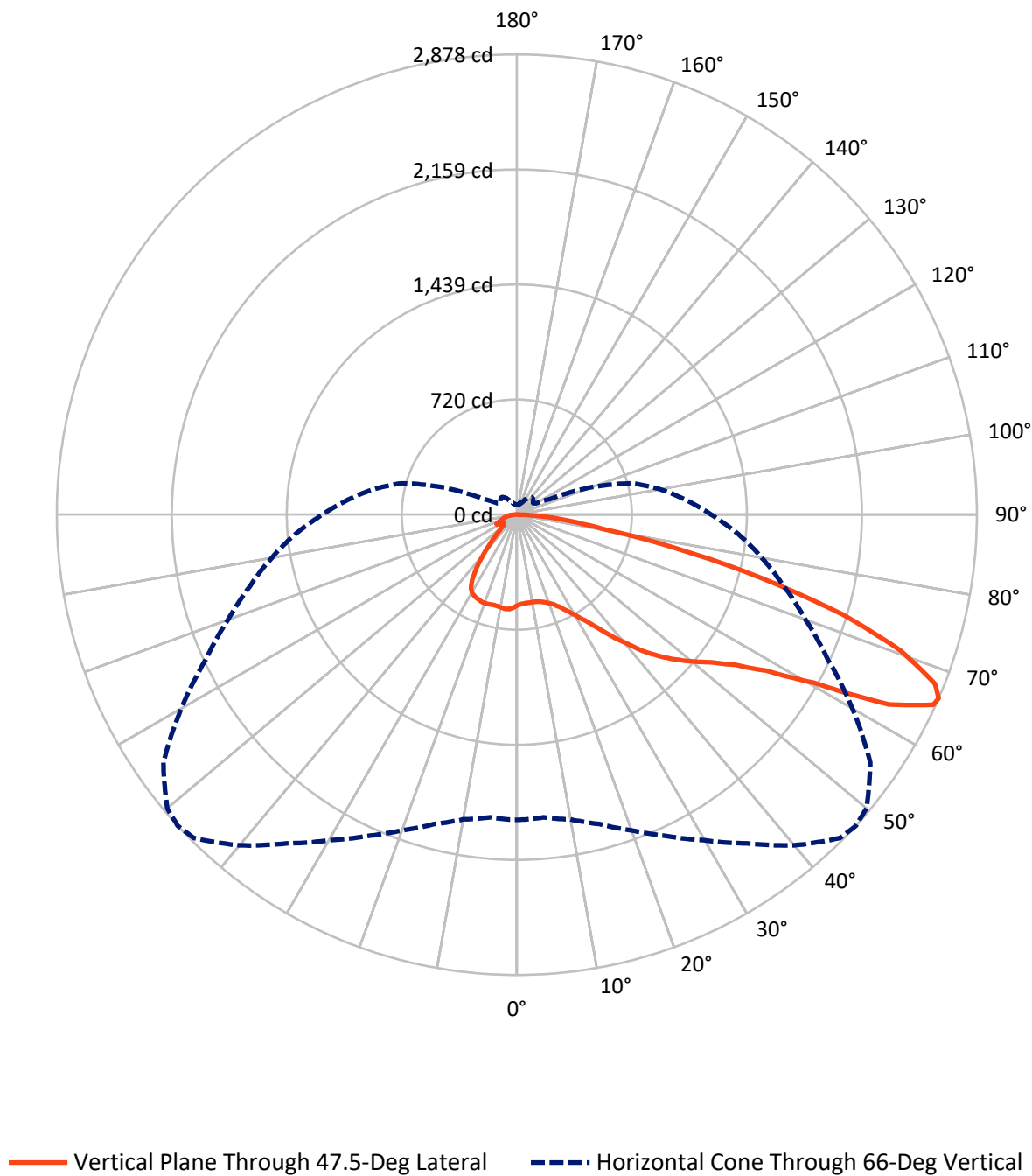


Based on 10 foot mounting height. Maximum calculated value = 5.8 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

## Luminous Intensity Polar Plot



REPORT NUMBER: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

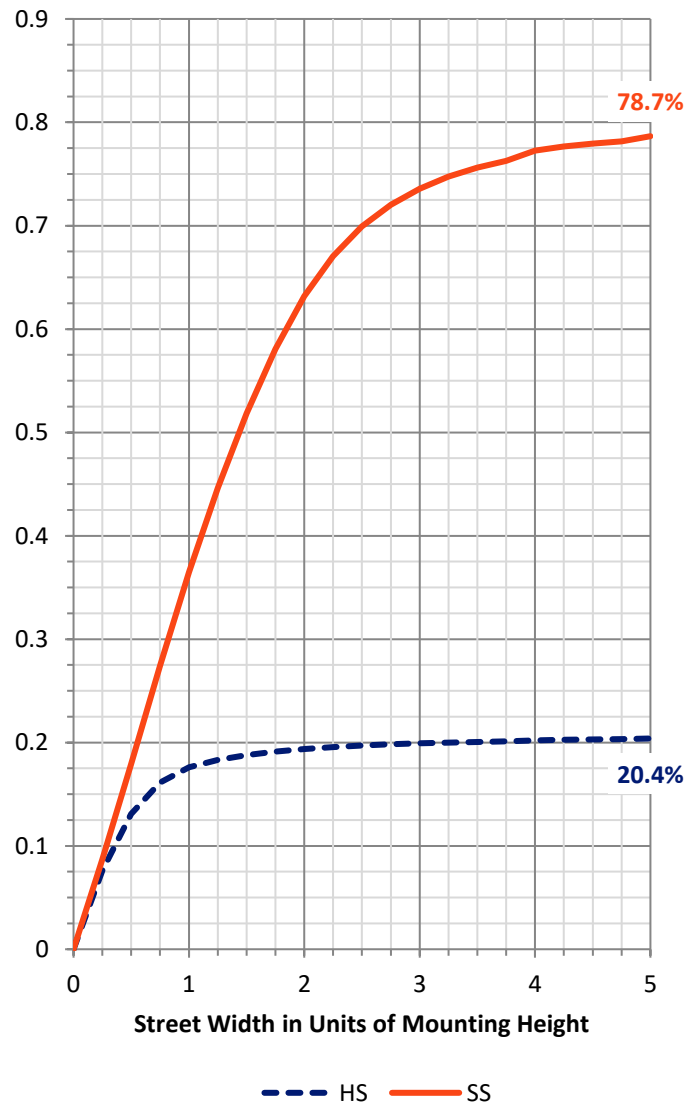
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 858.7    | 0.0    | 858.7  |
|                    | % Fixture | 20.7     | 0.0    | 20.7   |
| <b>Street Side</b> | Lumens    | 3288.8   | 0.0    | 3288.8 |
|                    | % Fixture | 79.3     | 0.0    | 79.3   |
| <b>Total</b>       | Lumens    | 4147.5   | 0.0    | 4147.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.7   | 1.3       |
| 10°-20°   | 164.0  | 4.0       |
| 20°-30°   | 279.8  | 6.7       |
| 30°-40°   | 422.4  | 10.2      |
| 40°-50°   | 549.0  | 13.2      |
| 50°-60°   | 753.1  | 18.2      |
| 60°-70°   | 1158.6 | 27.9      |
| 70°-80°   | 669.7  | 16.1      |
| 80°-90°   | 96.2   | 2.3       |
| 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°    | 4147.5 | 100.0     |
| 0°-180°   | 4147.5 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P159743

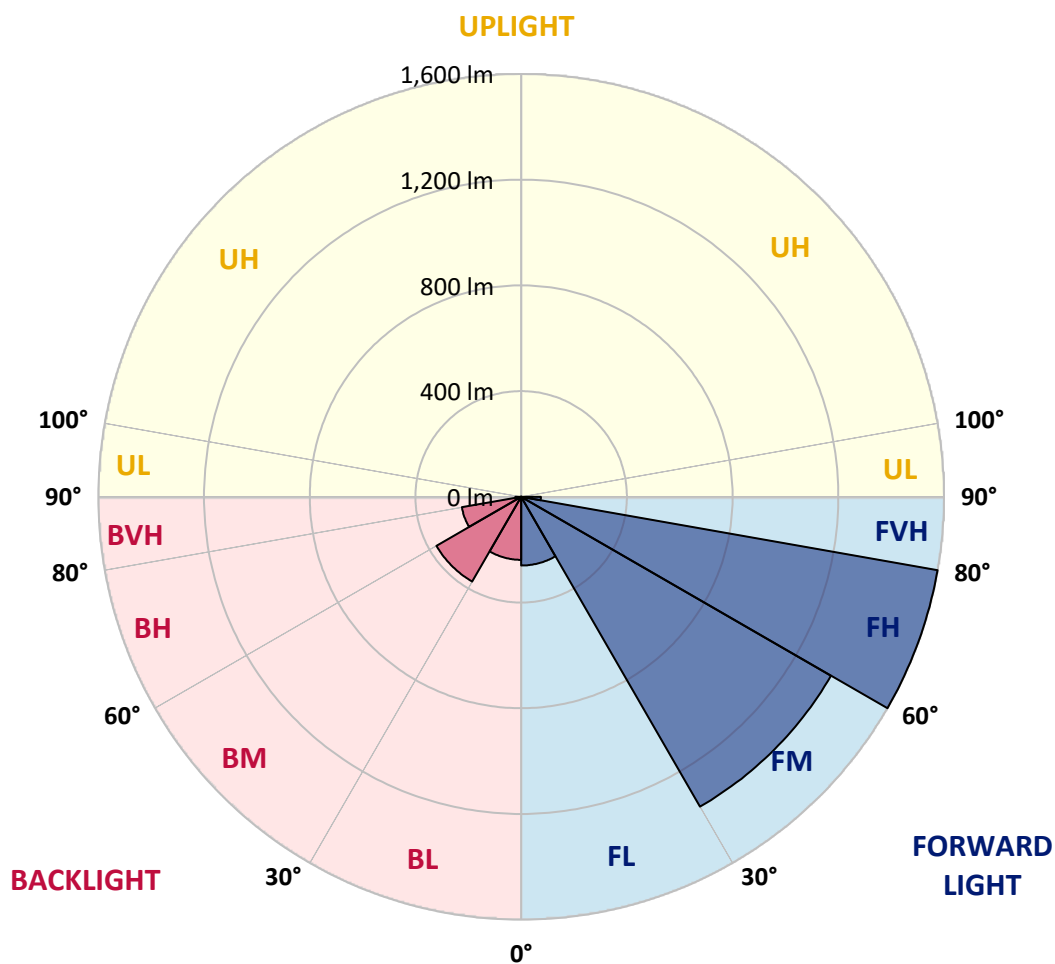
CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 260.0  | 6.3       |                         |      |         |
| FM   | (30°-60°)   | 1354.0 | 32.6      |                         |      |         |
| FH   | (60°-80°)   | 1600.4 | 38.6      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 74.5   | 1.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 238.6  | 5.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 370.5  | 8.9       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 227.9  | 5.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 21.8   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type IV Short





REPORT NUMBER: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 47.5°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  |
| 2.5°  | 552.9  | 553.2  | 553.5  | 553.5  | 554.3  | 554.3  | 555.7  | 556.6  | 556.9  | 558.5  | 559.6  |
| 5°    | 542.6  | 542.3  | 542.6  | 543.2  | 544.6  | 545.7  | 548.5  | 550.4  | 552.1  | 554.9  | 556.3  |
| 7.5°  | 538.1  | 538.7  | 539.3  | 539.6  | 540.7  | 543.5  | 545.9  | 547.9  | 551.3  | 554.6  | 556.0  |
| 10°   | 544.0  | 544.9  | 544.0  | 544.6  | 544.6  | 547.1  | 548.2  | 549.6  | 552.1  | 555.2  | 556.0  |
| 12.5° | 557.6  | 559.3  | 557.6  | 556.3  | 555.2  | 557.4  | 556.9  | 555.7  | 557.1  | 557.9  | 557.9  |
| 15°   | 580.3  | 580.3  | 579.1  | 577.2  | 574.4  | 574.7  | 572.2  | 569.6  | 568.6  | 566.6  | 565.2  |
| 17.5° | 602.3  | 601.7  | 599.2  | 596.7  | 594.7  | 593.9  | 590.3  | 586.9  | 583.0  | 580.0  | 576.6  |
| 20°   | 623.7  | 625.9  | 622.9  | 619.3  | 616.2  | 614.2  | 611.5  | 604.7  | 600.0  | 595.0  | 591.7  |
| 22.5° | 660.8  | 658.9  | 655.5  | 650.2  | 647.1  | 643.8  | 637.9  | 630.7  | 623.5  | 617.3  | 613.1  |
| 25°   | 698.9  | 697.0  | 692.3  | 688.4  | 683.9  | 681.1  | 674.7  | 665.8  | 658.9  | 649.4  | 643.8  |
| 27.5° | 739.9  | 738.2  | 732.7  | 729.6  | 726.5  | 723.2  | 717.7  | 708.4  | 702.1  | 691.1  | 685.3  |
| 30°   | 786.2  | 785.9  | 778.4  | 777.8  | 773.4  | 769.7  | 765.8  | 758.0  | 751.6  | 740.8  | 733.8  |
| 32.5° | 835.5  | 834.4  | 829.1  | 827.5  | 830.5  | 828.0  | 822.4  | 814.3  | 806.0  | 799.6  | 791.8  |
| 35°   | 905.8  | 903.8  | 900.7  | 902.2  | 904.1  | 911.0  | 902.4  | 895.4  | 885.4  | 877.1  | 866.2  |
| 37.5° | 957.1  | 954.2  | 957.9  | 965.7  | 976.8  | 982.1  | 989.6  | 989.9  | 985.2  | 974.0  | 964.6  |
| 40°   | 1004.2 | 1003.0 | 1011.4 | 1022.3 | 1042.9 | 1057.9 | 1072.1 | 1079.1 | 1080.8 | 1073.5 | 1059.3 |
| 42.5° | 1044.0 | 1047.4 | 1058.5 | 1075.2 | 1104.2 | 1127.0 | 1153.5 | 1169.9 | 1180.3 | 1176.4 | 1169.9 |
| 45°   | 1091.3 | 1093.0 | 1106.7 | 1127.9 | 1155.5 | 1193.3 | 1228.2 | 1256.1 | 1274.2 | 1273.9 | 1266.7 |
| 47.5° | 1150.7 | 1151.0 | 1162.7 | 1187.5 | 1217.0 | 1255.5 | 1299.5 | 1336.6 | 1360.6 | 1361.7 | 1356.1 |
| 50°   | 1221.2 | 1220.7 | 1233.5 | 1256.9 | 1288.4 | 1325.5 | 1372.3 | 1418.6 | 1452.0 | 1452.0 | 1443.9 |
| 52.5° | 1312.1 | 1311.0 | 1318.0 | 1338.5 | 1369.0 | 1408.0 | 1454.5 | 1508.0 | 1544.2 | 1552.0 | 1534.5 |
| 55°   | 1433.3 | 1435.0 | 1436.6 | 1454.8 | 1480.7 | 1511.6 | 1565.2 | 1614.5 | 1663.0 | 1667.4 | 1657.1 |
| 57.5° | 1573.5 | 1567.9 | 1579.9 | 1609.4 | 1639.0 | 1677.7 | 1715.6 | 1773.9 | 1831.3 | 1841.0 | 1839.7 |
| 60°   | 1792.6 | 1785.3 | 1797.6 | 1835.2 | 1867.8 | 1928.8 | 1993.8 | 2069.0 | 2137.0 | 2157.1 | 2132.8 |
| 62.5° | 1994.0 | 2003.0 | 2019.7 | 2063.5 | 2110.9 | 2192.2 | 2289.8 | 2418.8 | 2547.8 | 2618.0 | 2613.1 |
| 65°   | 1975.9 | 1967.6 | 1999.6 | 2059.3 | 2145.1 | 2248.8 | 2370.0 | 2525.5 | 2711.4 | 2852.5 | 2865.0 |
| 66°   | 1908.8 | 1900.1 | 1934.7 | 2003.0 | 2101.1 | 2216.5 | 2351.0 | 2509.4 | 2699.5 | 2858.8 | 2878.1 |
| 67.5° | 1797.8 | 1789.2 | 1828.3 | 1890.4 | 1991.5 | 2136.7 | 2282.2 | 2455.3 | 2652.9 | 2805.6 | 2821.2 |
| 70°   | 1583.8 | 1572.1 | 1602.5 | 1672.7 | 1754.6 | 1895.1 | 2033.6 | 2217.0 | 2419.9 | 2542.0 | 2547.8 |
| 72.5° | 1341.7 | 1314.3 | 1346.6 | 1400.7 | 1459.3 | 1575.5 | 1696.1 | 1821.5 | 1983.2 | 2096.0 | 2128.4 |
| 75°   | 973.5  | 987.7  | 997.1  | 1032.8 | 1071.6 | 1167.7 | 1238.5 | 1343.6 | 1468.7 | 1550.4 | 1576.3 |
| 77.5° | 516.4  | 537.9  | 551.3  | 586.9  | 651.0  | 724.3  | 800.9  | 865.9  | 948.1  | 993.8  | 1025.6 |
| 80°   | 289.9  | 304.9  | 326.6  | 354.8  | 386.0  | 442.3  | 487.7  | 521.2  | 532.9  | 541.0  | 548.2  |
| 82.5° | 159.4  | 197.6  | 229.9  | 249.4  | 267.8  | 290.4  | 317.5  | 345.3  | 354.2  | 340.9  | 333.9  |
| 85°   | 24.8   | 36.5   | 111.2  | 135.7  | 147.7  | 165.0  | 184.5  | 205.1  | 205.4  | 176.7  | 192.8  |
| 87.5° | 7.0    | 7.8    | 15.9   | 23.9   | 23.4   | 19.0   | 23.4   | 42.7   | 25.1   | 12.5   | 14.5   |
| 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: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4  | 567.4 |
| 2.5°  | 560.2  | 560.8  | 562.1  | 563.5  | 564.9  | 566.3  | 567.1  | 568.6  | 569.6  | 571.3  | 573.3 |
| 5°    | 557.9  | 559.3  | 561.8  | 564.9  | 567.7  | 570.2  | 572.2  | 574.9  | 577.4  | 579.7  | 583.0 |
| 7.5°  | 557.9  | 560.8  | 564.9  | 568.3  | 570.8  | 573.8  | 576.9  | 579.7  | 582.5  | 584.7  | 586.9 |
| 10°   | 558.2  | 561.0  | 565.2  | 569.1  | 571.9  | 575.2  | 577.7  | 580.3  | 583.3  | 584.7  | 587.5 |
| 12.5° | 559.3  | 560.5  | 563.5  | 567.4  | 570.8  | 574.1  | 576.6  | 579.1  | 582.5  | 583.0  | 585.0 |
| 15°   | 564.9  | 563.2  | 564.1  | 566.9  | 570.5  | 573.3  | 576.1  | 578.0  | 580.3  | 579.7  | 581.3 |
| 17.5° | 575.2  | 571.0  | 569.4  | 569.6  | 571.3  | 573.3  | 574.4  | 574.7  | 574.9  | 572.5  | 572.7 |
| 20°   | 589.1  | 583.3  | 579.4  | 577.4  | 575.2  | 573.3  | 570.2  | 566.6  | 563.2  | 558.2  | 557.6 |
| 22.5° | 610.1  | 601.4  | 597.2  | 592.0  | 585.2  | 576.9  | 569.4  | 560.5  | 553.2  | 545.7  | 542.9 |
| 25°   | 640.4  | 631.5  | 627.1  | 618.7  | 606.7  | 594.7  | 583.9  | 571.9  | 561.3  | 552.4  | 548.2 |
| 27.5° | 681.1  | 672.2  | 667.5  | 658.9  | 644.0  | 632.1  | 617.0  | 604.2  | 591.4  | 578.3  | 573.0 |
| 30°   | 730.4  | 722.6  | 717.4  | 710.4  | 697.6  | 684.5  | 666.9  | 647.1  | 626.8  | 605.9  | 595.6 |
| 32.5° | 788.7  | 780.1  | 776.2  | 768.1  | 754.7  | 741.1  | 721.6  | 696.2  | 662.2  | 629.3  | 608.6 |
| 35°   | 861.4  | 851.7  | 847.3  | 836.6  | 821.0  | 800.9  | 780.1  | 746.0  | 700.1  | 654.4  | 620.6 |
| 37.5° | 958.7  | 937.0  | 922.2  | 898.0  | 872.9  | 844.7  | 814.9  | 780.1  | 725.7  | 669.1  | 622.3 |
| 40°   | 1044.8 | 1022.8 | 994.4  | 959.5  | 920.5  | 881.8  | 847.8  | 808.2  | 749.2  | 679.7  | 617.0 |
| 42.5° | 1151.8 | 1112.8 | 1067.4 | 1020.3 | 968.5  | 920.8  | 880.4  | 833.9  | 765.0  | 682.5  | 602.3 |
| 45°   | 1249.7 | 1203.1 | 1142.3 | 1079.6 | 1015.3 | 955.4  | 910.0  | 858.1  | 778.7  | 682.5  | 584.4 |
| 47.5° | 1338.8 | 1283.1 | 1210.4 | 1132.3 | 1057.4 | 991.9  | 940.3  | 882.9  | 797.9  | 691.1  | 579.1 |
| 50°   | 1421.3 | 1357.3 | 1274.5 | 1183.9 | 1099.7 | 1029.8 | 974.3  | 914.7  | 827.2  | 713.5  | 592.0 |
| 52.5° | 1508.3 | 1440.3 | 1339.4 | 1243.3 | 1150.4 | 1075.5 | 1016.4 | 954.0  | 865.1  | 748.6  | 614.5 |
| 55°   | 1622.3 | 1542.6 | 1428.0 | 1322.1 | 1220.1 | 1137.4 | 1070.2 | 1001.0 | 906.6  | 788.2  | 642.1 |
| 57.5° | 1802.0 | 1686.4 | 1571.8 | 1434.2 | 1338.0 | 1229.0 | 1155.5 | 1076.0 | 974.0  | 839.7  | 683.6 |
| 60°   | 2116.7 | 1974.5 | 1836.9 | 1678.6 | 1559.9 | 1445.9 | 1334.6 | 1231.0 | 1108.1 | 956.2  | 774.8 |
| 62.5° | 2566.0 | 2421.6 | 2205.3 | 2011.6 | 1832.4 | 1681.4 | 1536.4 | 1404.6 | 1246.9 | 1080.8 | 887.1 |
| 65°   | 2834.3 | 2669.0 | 2411.3 | 2150.9 | 1933.3 | 1746.0 | 1580.2 | 1418.8 | 1248.5 | 1086.6 | 921.1 |
| 66°   | 2855.8 | 2699.5 | 2424.1 | 2149.0 | 1923.0 | 1728.7 | 1556.2 | 1389.3 | 1214.8 | 1059.9 | 910.0 |
| 67.5° | 2815.9 | 2681.3 | 2397.9 | 2111.1 | 1880.1 | 1670.2 | 1493.0 | 1318.0 | 1142.6 | 999.1  | 872.9 |
| 70°   | 2534.7 | 2437.4 | 2194.4 | 1925.8 | 1695.3 | 1510.3 | 1323.2 | 1154.9 | 988.8  | 868.1  | 774.5 |
| 72.5° | 2077.9 | 1954.7 | 1784.8 | 1604.2 | 1422.7 | 1258.6 | 1088.6 | 945.4  | 806.0  | 718.2  | 651.8 |
| 75°   | 1526.4 | 1415.5 | 1228.2 | 1115.6 | 995.8  | 892.7  | 778.1  | 642.4  | 543.5  | 499.4  | 483.2 |
| 77.5° | 967.6  | 847.3  | 689.2  | 564.9  | 485.8  | 417.5  | 329.2  | 261.7  | 209.6  | 218.2  | 241.6 |
| 80°   | 488.8  | 421.1  | 315.2  | 248.9  | 215.2  | 178.9  | 141.6  | 107.3  | 78.3   | 89.5   | 101.2 |
| 82.5° | 313.8  | 262.0  | 208.7  | 164.4  | 138.8  | 122.3  | 97.8   | 71.0   | 53.0   | 59.6   | 73.0  |
| 85°   | 188.9  | 159.7  | 127.4  | 104.2  | 90.6   | 75.5   | 55.4   | 39.3   | 39.0   | 41.8   | 51.5  |
| 87.5° | 28.7   | 41.0   | 23.7   | 25.4   | 26.8   | 28.7   | 25.4   | 21.5   | 18.7   | 24.2   | 30.7  |
| 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: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

**CANDELA DISTRIBUTION (continued):**

|       | 105°  | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 |
| 2.5°  | 575.2 | 575.8 | 576.9 | 578.3 | 578.0 | 580.0 | 581.1 | 580.0 | 582.5 | 582.5 | 583.9 |
| 5°    | 585.8 | 586.7 | 588.6 | 590.0 | 590.6 | 592.2 | 592.8 | 592.5 | 593.0 | 593.3 | 593.9 |
| 7.5°  | 588.9 | 591.1 | 592.0 | 592.8 | 593.0 | 593.6 | 593.6 | 593.0 | 593.0 | 592.8 | 593.3 |
| 10°   | 588.1 | 588.9 | 589.4 | 589.1 | 589.1 | 588.6 | 588.3 | 588.1 | 588.1 | 587.5 | 588.3 |
| 12.5° | 585.2 | 585.2 | 585.2 | 584.7 | 584.7 | 584.4 | 584.4 | 584.4 | 585.0 | 585.2 | 586.7 |
| 15°   | 579.7 | 579.7 | 580.3 | 580.0 | 580.8 | 582.2 | 583.9 | 585.0 | 586.4 | 586.7 | 587.5 |
| 17.5° | 571.0 | 571.3 | 573.0 | 576.6 | 580.3 | 584.4 | 587.5 | 588.3 | 587.2 | 584.4 | 582.5 |
| 20°   | 556.0 | 559.6 | 566.3 | 574.9 | 583.0 | 588.3 | 589.7 | 586.4 | 581.1 | 573.8 | 569.9 |
| 22.5° | 542.6 | 549.8 | 561.8 | 576.1 | 586.1 | 589.7 | 585.5 | 577.7 | 568.3 | 559.9 | 554.0 |
| 25°   | 547.9 | 556.3 | 568.8 | 581.1 | 587.5 | 585.5 | 577.2 | 566.0 | 556.0 | 546.2 | 536.8 |
| 27.5° | 570.2 | 578.6 | 587.5 | 591.1 | 588.9 | 581.6 | 569.9 | 557.9 | 544.6 | 530.6 | 518.9 |
| 30°   | 591.4 | 596.1 | 596.7 | 593.0 | 585.0 | 573.3 | 559.6 | 545.7 | 528.7 | 512.0 | 497.2 |
| 32.5° | 598.1 | 592.5 | 582.5 | 572.2 | 561.0 | 549.0 | 533.2 | 514.7 | 496.6 | 477.7 | 461.2 |
| 35°   | 596.1 | 573.5 | 548.8 | 526.7 | 513.4 | 499.7 | 485.2 | 460.7 | 440.3 | 424.2 | 413.6 |
| 37.5° | 578.6 | 537.3 | 499.1 | 467.1 | 446.2 | 430.0 | 408.5 | 388.2 | 370.7 | 363.4 | 354.8 |
| 40°   | 554.0 | 491.0 | 438.1 | 393.2 | 371.5 | 350.9 | 326.9 | 311.3 | 306.3 | 299.6 | 299.9 |
| 42.5° | 518.9 | 437.0 | 368.7 | 317.2 | 293.5 | 270.9 | 253.9 | 244.7 | 245.0 | 239.4 | 240.5 |
| 45°   | 481.9 | 382.6 | 296.8 | 245.5 | 222.1 | 202.9 | 193.4 | 190.6 | 190.9 | 191.2 | 189.5 |
| 47.5° | 459.3 | 340.3 | 238.0 | 186.2 | 165.5 | 154.7 | 149.6 | 148.3 | 148.6 | 148.8 | 146.9 |
| 50°   | 455.9 | 318.2 | 198.7 | 142.4 | 129.1 | 122.9 | 120.4 | 119.0 | 119.0 | 117.9 | 116.2 |
| 52.5° | 465.4 | 312.7 | 179.5 | 123.5 | 110.6 | 105.1 | 103.1 | 102.0 | 100.3 | 98.1  | 95.0  |
| 55°   | 480.5 | 317.7 | 173.6 | 117.1 | 104.5 | 98.9  | 96.4  | 95.9  | 93.1  | 88.9  | 83.9  |
| 57.5° | 508.3 | 335.8 | 177.5 | 118.7 | 105.6 | 100.6 | 98.9  | 98.4  | 94.5  | 88.1  | 81.7  |
| 60°   | 588.3 | 388.5 | 197.0 | 128.2 | 113.7 | 109.5 | 109.5 | 108.7 | 103.4 | 94.2  | 85.0  |
| 62.5° | 698.7 | 465.7 | 223.5 | 141.3 | 124.9 | 124.3 | 129.1 | 129.3 | 119.8 | 105.1 | 90.6  |
| 65°   | 751.9 | 501.9 | 232.7 | 144.1 | 127.9 | 134.3 | 143.8 | 143.8 | 130.4 | 110.1 | 91.4  |
| 66°   | 752.2 | 501.1 | 229.9 | 140.8 | 124.6 | 133.0 | 142.7 | 142.7 | 128.8 | 108.7 | 90.0  |
| 67.5° | 733.0 | 485.5 | 220.7 | 134.6 | 117.1 | 124.9 | 133.5 | 133.2 | 120.7 | 103.1 | 86.1  |
| 70°   | 657.4 | 429.5 | 194.5 | 124.6 | 108.1 | 108.4 | 111.5 | 109.5 | 101.2 | 89.2  | 78.3  |
| 72.5° | 566.9 | 359.2 | 168.6 | 118.1 | 101.2 | 95.9  | 93.4  | 91.7  | 86.4  | 79.1  | 72.5  |
| 75°   | 434.8 | 279.0 | 146.9 | 112.3 | 95.0  | 85.9  | 82.5  | 81.1  | 77.5  | 73.3  | 68.0  |
| 77.5° | 266.5 | 191.2 | 124.6 | 102.8 | 88.1  | 79.7  | 76.1  | 73.3  | 69.7  | 65.8  | 62.2  |
| 80°   | 114.8 | 115.4 | 99.8  | 87.2  | 76.6  | 66.9  | 62.2  | 58.8  | 56.9  | 55.4  | 53.5  |
| 82.5° | 80.3  | 82.8  | 76.1  | 67.7  | 58.5  | 51.5  | 47.4  | 46.6  | 46.8  | 46.8  | 46.3  |
| 85°   | 60.2  | 59.1  | 53.2  | 48.5  | 44.3  | 39.8  | 36.5  | 36.2  | 37.3  | 37.3  | 36.5  |
| 87.5° | 34.9  | 35.1  | 30.1  | 28.1  | 29.3  | 25.1  | 22.9  | 23.2  | 25.9  | 25.6  | 25.1  |
| 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: P159743

CATALOG NUMBER: VST-F02-LED-E-U-T4-8030

**CANDELA DISTRIBUTION (continued):**

|       | 160°  | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|
| 0°    | 567.4 | 567.4 | 567.4 | 567.4 | 567.4 |
| 2.5°  | 583.9 | 584.7 | 584.4 | 585.2 | 584.4 |
| 5°    | 594.7 | 594.5 | 594.2 | 595.3 | 593.9 |
| 7.5°  | 593.0 | 593.3 | 593.3 | 593.3 | 593.0 |
| 10°   | 588.9 | 590.0 | 590.6 | 591.7 | 591.4 |
| 12.5° | 587.5 | 589.1 | 590.8 | 592.5 | 592.8 |
| 15°   | 587.8 | 588.9 | 589.7 | 590.6 | 590.8 |
| 17.5° | 580.5 | 580.3 | 579.4 | 578.8 | 578.3 |
| 20°   | 565.7 | 564.4 | 563.0 | 560.8 | 561.8 |
| 22.5° | 547.4 | 543.5 | 539.0 | 535.4 | 535.1 |
| 25°   | 525.9 | 518.6 | 511.4 | 506.6 | 505.0 |
| 27.5° | 506.9 | 498.3 | 490.8 | 486.6 | 485.5 |
| 30°   | 484.4 | 476.6 | 469.9 | 466.3 | 464.0 |
| 32.5° | 450.9 | 444.8 | 436.4 | 433.6 | 433.4 |
| 35°   | 404.4 | 399.7 | 393.8 | 392.7 | 391.3 |
| 37.5° | 351.7 | 350.0 | 347.3 | 343.9 | 343.4 |
| 40°   | 295.4 | 296.5 | 295.7 | 293.8 | 290.7 |
| 42.5° | 241.1 | 243.0 | 243.3 | 244.7 | 246.1 |
| 45°   | 192.0 | 193.7 | 193.7 | 195.1 | 196.7 |
| 47.5° | 147.4 | 146.3 | 147.2 | 148.6 | 149.4 |
| 50°   | 111.5 | 110.6 | 109.3 | 108.1 | 107.0 |
| 52.5° | 89.8  | 88.1  | 84.2  | 83.0  | 82.0  |
| 55°   | 79.1  | 76.1  | 73.3  | 72.2  | 72.2  |
| 57.5° | 76.1  | 72.2  | 69.1  | 67.7  | 67.1  |
| 60°   | 76.6  | 71.0  | 67.1  | 64.9  | 64.1  |
| 62.5° | 79.1  | 71.3  | 66.1  | 63.5  | 62.7  |
| 65°   | 78.9  | 70.8  | 65.8  | 63.0  | 62.2  |
| 66°   | 77.5  | 70.0  | 65.2  | 62.7  | 62.2  |
| 67.5° | 75.2  | 68.8  | 64.7  | 62.4  | 61.6  |
| 70°   | 70.8  | 66.6  | 63.5  | 61.6  | 60.8  |
| 72.5° | 67.1  | 64.4  | 61.6  | 59.3  | 58.8  |
| 75°   | 63.8  | 61.0  | 58.5  | 57.4  | 56.6  |
| 77.5° | 58.8  | 56.3  | 54.9  | 53.8  | 53.2  |
| 80°   | 52.1  | 50.5  | 48.8  | 47.6  | 46.8  |
| 82.5° | 45.4  | 43.2  | 41.5  | 40.7  | 40.1  |
| 85°   | 37.1  | 35.7  | 33.2  | 31.5  | 31.2  |
| 87.5° | 24.8  | 23.4  | 22.6  | 21.2  | 19.8  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)