

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: P158201

Luminaire Tested: **VST-E02-LED-E-U-SL2-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P158201  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33712)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-E02-LED-E-U-SL2-7050  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6174.6 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 52.1  
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

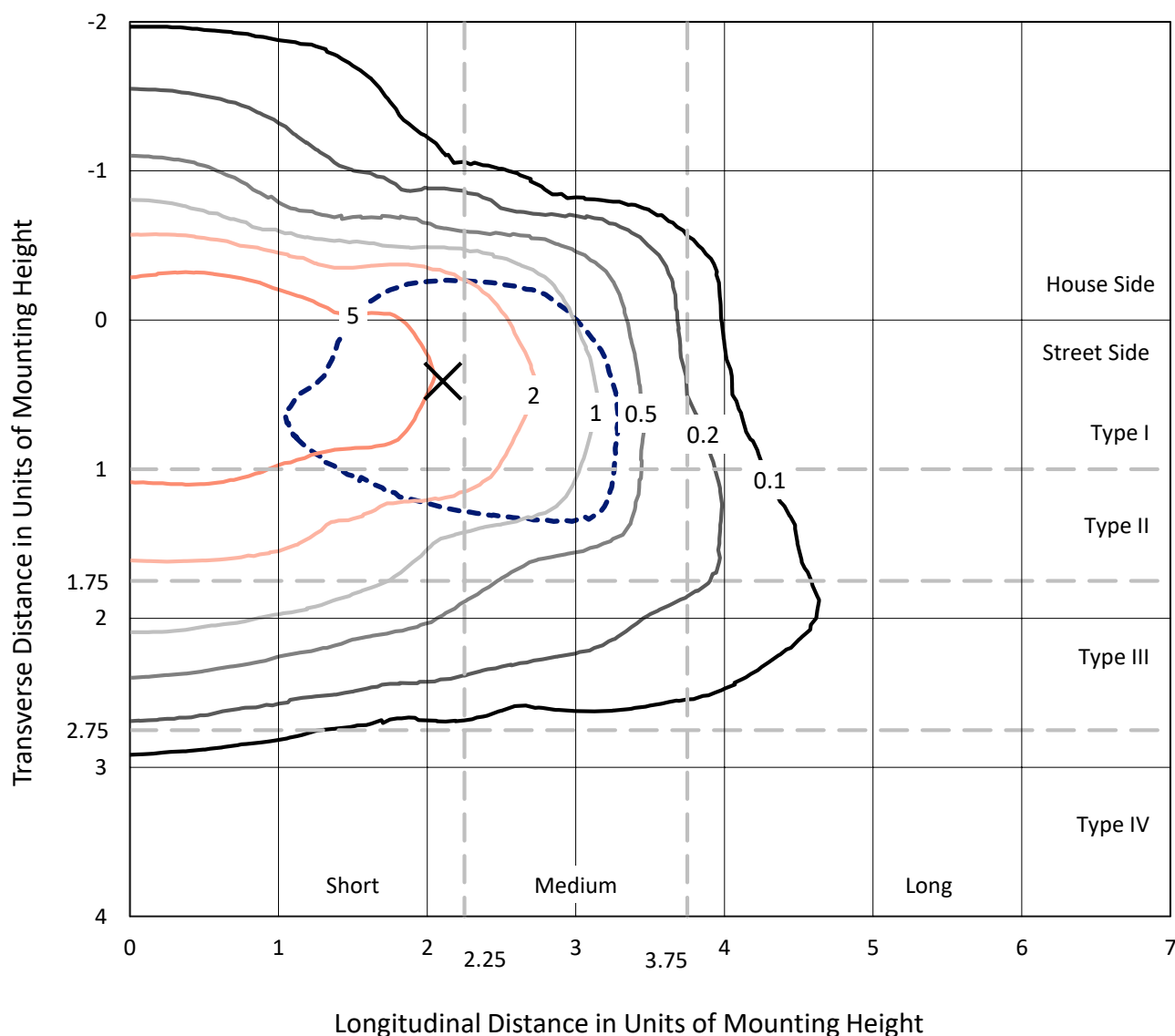


REPORT NUMBER: P158201

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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

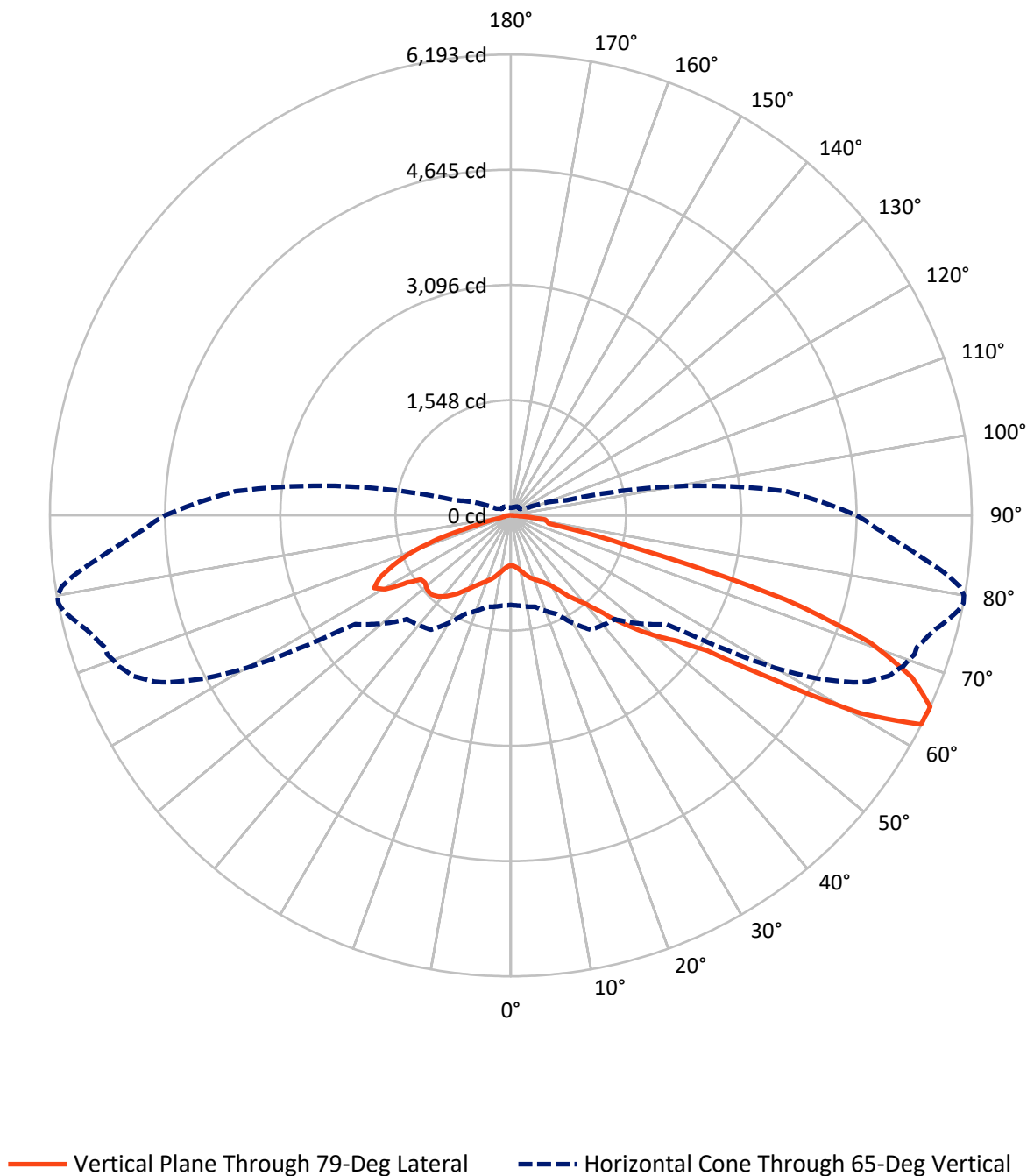


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc  
 Type II - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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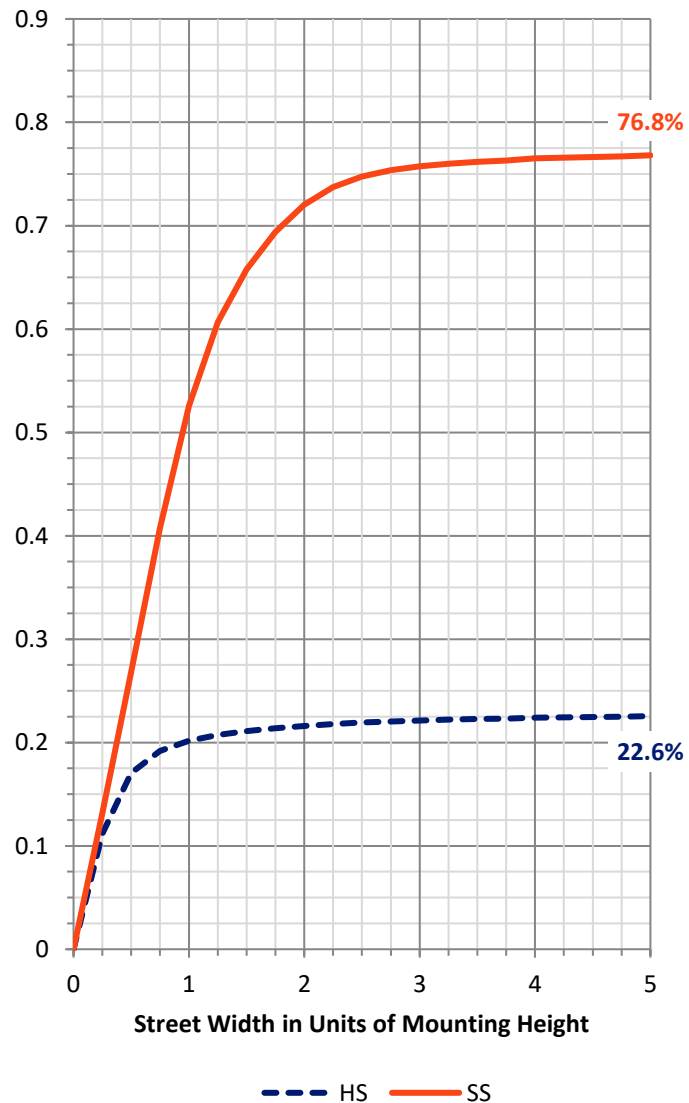
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1418.8   | 0.0    | 1418.8 |
|                    | % Fixture | 23.0     | 0.0    | 23.0   |
| <b>Street Side</b> | Lumens    | 4755.8   | 0.0    | 4755.8 |
|                    | % Fixture | 77.0     | 0.0    | 77.0   |
| <b>Total</b>       | Lumens    | 6174.6   | 0.0    | 6174.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 66.8   | 1.1       |
| 10°-20°   | 217.1  | 3.5       |
| 20°-30°   | 374.2  | 6.1       |
| 30°-40°   | 613.0  | 9.9       |
| 40°-50°   | 1026.6 | 16.6      |
| 50°-60°   | 1388.6 | 22.5      |
| 60°-70°   | 1710.0 | 27.7      |
| 70°-80°   | 661.9  | 10.7      |
| 80°-90°   | 116.4  | 1.9       |
| 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°    | 6174.6 | 100.0     |
| 0°-180°   | 6174.6 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P158201

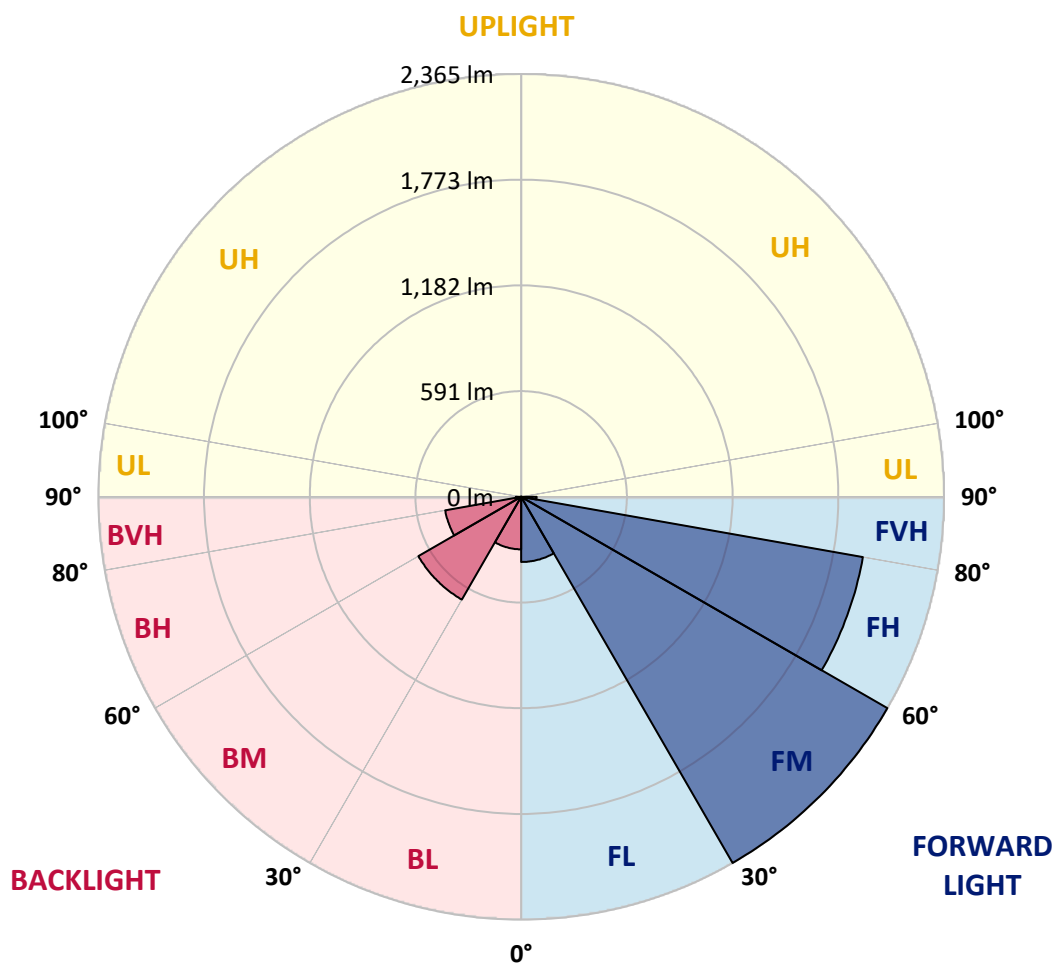
CATALOG NUMBER: VST-E02-LED-E-U-SL2-7050

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 364.5  | 5.9       |                         |      |         |
| FM   | (30°-60°)   | 2364.6 | 38.3      |                         |      |         |
| FH   | (60°-80°)   | 1940.3 | 31.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 86.4   | 1.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 293.6  | 4.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 663.5  | 10.7      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 431.7  | 7.0       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 30.0   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short





REPORT NUMBER: P158201

CATALOG NUMBER: VST-E02-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 57°    | 58°    | 59°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  |
| 2.5°  | 676.8  | 674.8  | 676.8  | 678.5  | 679.7  | 681.4  | 680.9  | 680.5  | 680.1  | 680.5  | 680.5  |
| 5°    | 682.6  | 682.1  | 684.2  | 685.9  | 688.7  | 690.8  | 693.2  | 693.2  | 693.2  | 692.8  | 693.7  |
| 7.5°  | 701.0  | 700.6  | 702.7  | 704.3  | 706.8  | 710.9  | 714.2  | 715.8  | 715.4  | 715.4  | 715.4  |
| 10°   | 731.4  | 729.8  | 729.8  | 729.8  | 733.0  | 735.9  | 743.3  | 744.1  | 745.8  | 745.0  | 745.4  |
| 12.5° | 761.0  | 761.4  | 760.1  | 758.9  | 759.3  | 765.1  | 775.7  | 777.8  | 778.2  | 779.4  | 780.2  |
| 15°   | 787.6  | 787.2  | 784.4  | 781.5  | 785.2  | 795.0  | 809.0  | 812.7  | 812.7  | 815.2  | 816.8  |
| 17.5° | 812.3  | 811.4  | 806.1  | 801.2  | 804.9  | 821.7  | 843.5  | 845.9  | 849.6  | 850.9  | 852.5  |
| 20°   | 841.4  | 839.8  | 833.6  | 820.5  | 820.5  | 843.5  | 872.2  | 874.7  | 877.9  | 878.8  | 881.6  |
| 22.5° | 882.1  | 877.9  | 864.8  | 841.0  | 834.4  | 861.1  | 896.4  | 897.7  | 900.1  | 903.4  | 905.8  |
| 25°   | 928.0  | 928.9  | 907.5  | 866.0  | 851.6  | 879.6  | 919.8  | 921.8  | 926.3  | 928.9  | 931.7  |
| 27.5° | 975.6  | 976.9  | 953.0  | 901.3  | 877.1  | 905.0  | 951.4  | 953.9  | 959.2  | 962.1  | 966.6  |
| 30°   | 1029.8 | 1031.5 | 1008.5 | 956.3  | 919.4  | 942.4  | 998.2  | 1004.8 | 1009.3 | 1013.0 | 1020.4 |
| 32.5° | 1159.9 | 1150.1 | 1134.1 | 1078.6 | 1020.4 | 1018.7 | 1073.7 | 1081.1 | 1087.3 | 1095.1 | 1102.0 |
| 35°   | 1323.7 | 1329.8 | 1338.1 | 1300.7 | 1249.4 | 1212.1 | 1216.6 | 1212.4 | 1218.2 | 1229.7 | 1236.7 |
| 37.5° | 1453.4 | 1466.9 | 1502.6 | 1526.8 | 1524.8 | 1517.4 | 1448.5 | 1448.5 | 1452.1 | 1446.0 | 1445.2 |
| 40°   | 1555.1 | 1563.8 | 1636.9 | 1730.8 | 1810.1 | 1849.0 | 1794.5 | 1786.7 | 1790.8 | 1759.1 | 1760.4 |
| 42.5° | 1607.7 | 1620.4 | 1725.5 | 1890.5 | 2047.7 | 2172.9 | 2156.0 | 2150.7 | 2138.4 | 2130.6 | 2125.7 |
| 45°   | 1634.4 | 1649.6 | 1774.7 | 2001.3 | 2230.3 | 2423.6 | 2510.7 | 2509.9 | 2498.8 | 2489.8 | 2485.6 |
| 47.5° | 1620.8 | 1634.0 | 1767.4 | 2035.0 | 2326.4 | 2585.4 | 2777.9 | 2789.8 | 2786.5 | 2799.6 | 2804.9 |
| 50°   | 1532.2 | 1549.0 | 1682.8 | 1962.3 | 2286.2 | 2649.0 | 2963.0 | 2985.1 | 3015.1 | 3034.0 | 3059.0 |
| 52.5° | 1452.1 | 1466.1 | 1586.8 | 1844.5 | 2154.0 | 2597.3 | 3074.6 | 3120.2 | 3161.2 | 3199.8 | 3229.7 |
| 55°   | 1368.4 | 1382.3 | 1488.2 | 1722.2 | 2020.6 | 2444.6 | 3125.5 | 3192.0 | 3256.0 | 3321.3 | 3381.2 |
| 57.5° | 1336.8 | 1351.6 | 1430.4 | 1627.4 | 1911.4 | 2293.1 | 3150.5 | 3259.7 | 3364.0 | 3474.8 | 3589.7 |
| 60°   | 1418.9 | 1432.0 | 1492.0 | 1629.8 | 1828.1 | 2141.7 | 3100.1 | 3271.6 | 3451.0 | 3633.7 | 3810.1 |
| 62.5° | 1393.9 | 1400.8 | 1475.5 | 1689.4 | 1934.4 | 1992.3 | 2881.3 | 3107.9 | 3368.5 | 3636.1 | 3906.6 |
| 65°   | 1202.6 | 1216.1 | 1272.4 | 1460.3 | 1874.9 | 1972.2 | 2548.0 | 2775.8 | 3083.2 | 3399.7 | 3762.1 |
| 67.5° | 862.7  | 843.8  | 887.4  | 1052.0 | 1454.6 | 1968.9 | 2172.9 | 2341.6 | 2582.5 | 2825.1 | 3122.2 |
| 70°   | 392.0  | 382.9  | 417.0  | 547.1  | 877.5  | 1556.0 | 1837.1 | 1894.2 | 1983.7 | 2147.0 | 2347.7 |
| 72.5° | 154.7  | 154.3  | 176.5  | 226.1  | 415.0  | 1001.5 | 1544.9 | 1577.8 | 1609.3 | 1680.4 | 1766.9 |
| 75°   | 101.4  | 101.4  | 107.9  | 121.9  | 204.4  | 483.5  | 1306.9 | 1336.8 | 1385.2 | 1405.4 | 1442.3 |
| 77.5° | 76.3   | 76.7   | 79.6   | 82.9   | 112.9  | 254.5  | 922.3  | 1028.6 | 1110.7 | 1171.8 | 1216.6 |
| 80°   | 54.2   | 56.6   | 62.0   | 64.0   | 73.4   | 144.9  | 521.3  | 598.0  | 690.8  | 789.7  | 914.0  |
| 82.5° | 40.6   | 43.5   | 52.6   | 55.0   | 58.3   | 82.5   | 235.2  | 266.8  | 311.5  | 403.9  | 580.8  |
| 85°   | 18.9   | 20.9   | 36.1   | 39.4   | 42.3   | 47.6   | 119.5  | 133.4  | 151.4  | 165.8  | 193.3  |
| 87.5° | 2.9    | 2.0    | 6.2    | 8.6    | 13.6   | 14.0   | 41.0   | 48.8   | 52.9   | 63.6   | 66.1   |
| 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: P158201

CATALOG NUMBER: VST-E02-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 60°    | 61°    | 62°    | 64°    | 65°    | 66°    | 67°    | 68°    | 69°    | 70°    | 71°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  |
| 2.5°  | 680.5  | 680.9  | 681.4  | 680.5  | 680.9  | 680.9  | 680.1  | 679.7  | 679.7  | 679.7  | 680.1  |
| 5°    | 693.7  | 694.4  | 693.7  | 694.1  | 695.7  | 695.3  | 694.4  | 694.1  | 695.7  | 696.1  | 694.9  |
| 7.5°  | 717.1  | 717.5  | 715.8  | 717.8  | 718.7  | 719.1  | 719.1  | 719.9  | 719.9  | 721.1  | 719.9  |
| 10°   | 747.0  | 747.0  | 749.9  | 749.5  | 749.9  | 750.7  | 751.1  | 752.8  | 754.0  | 754.0  | 754.8  |
| 12.5° | 781.5  | 781.9  | 784.7  | 785.2  | 786.8  | 787.2  | 789.7  | 788.0  | 792.2  | 792.2  | 793.4  |
| 15°   | 817.2  | 820.1  | 820.5  | 824.6  | 825.4  | 825.8  | 829.1  | 829.1  | 832.0  | 832.4  | 833.2  |
| 17.5° | 852.5  | 854.9  | 856.6  | 859.9  | 862.7  | 864.0  | 865.2  | 867.7  | 869.7  | 870.5  | 872.6  |
| 20°   | 882.8  | 885.3  | 887.0  | 890.2  | 892.7  | 894.8  | 896.0  | 898.9  | 900.9  | 901.7  | 904.6  |
| 22.5° | 908.3  | 910.0  | 912.8  | 917.3  | 918.2  | 920.6  | 924.3  | 926.3  | 927.2  | 929.6  | 932.9  |
| 25°   | 935.4  | 937.9  | 939.5  | 943.6  | 946.9  | 951.0  | 954.3  | 957.5  | 958.4  | 961.7  | 964.6  |
| 27.5° | 971.5  | 974.0  | 974.4  | 982.6  | 985.9  | 991.6  | 995.3  | 1000.3 | 1002.7 | 1005.6 | 1011.3 |
| 30°   | 1024.9 | 1030.6 | 1033.1 | 1042.5 | 1044.2 | 1050.7 | 1057.3 | 1058.9 | 1062.7 | 1063.0 | 1072.5 |
| 32.5° | 1106.6 | 1114.7 | 1118.0 | 1127.9 | 1130.3 | 1136.5 | 1140.2 | 1148.8 | 1149.2 | 1153.3 | 1155.4 |
| 35°   | 1240.4 | 1238.3 | 1251.0 | 1253.5 | 1260.9 | 1266.2 | 1269.9 | 1269.9 | 1277.7 | 1278.1 | 1280.6 |
| 37.5° | 1423.0 | 1418.9 | 1422.2 | 1407.4 | 1411.1 | 1404.5 | 1403.3 | 1405.0 | 1401.7 | 1402.5 | 1402.1 |
| 40°   | 1715.2 | 1696.7 | 1677.5 | 1631.9 | 1622.0 | 1603.2 | 1588.4 | 1576.5 | 1565.0 | 1552.7 | 1544.5 |
| 42.5° | 2081.8 | 2055.1 | 2026.4 | 1953.3 | 1919.2 | 1882.7 | 1847.0 | 1826.5 | 1785.4 | 1760.4 | 1746.8 |
| 45°   | 2465.9 | 2434.7 | 2394.5 | 2333.8 | 2285.3 | 2246.3 | 2181.1 | 2150.3 | 2086.7 | 2055.1 | 2012.4 |
| 47.5° | 2780.8 | 2781.2 | 2748.7 | 2687.2 | 2635.4 | 2609.6 | 2569.0 | 2509.4 | 2437.2 | 2396.6 | 2320.6 |
| 50°   | 3056.2 | 3055.7 | 3053.7 | 3016.7 | 2980.6 | 2952.3 | 2916.6 | 2862.8 | 2803.7 | 2757.8 | 2670.7 |
| 52.5° | 3259.7 | 3286.8 | 3298.3 | 3297.9 | 3293.4 | 3280.3 | 3253.1 | 3206.8 | 3146.9 | 3121.0 | 3051.7 |
| 55°   | 3428.0 | 3487.1 | 3517.9 | 3585.2 | 3591.4 | 3613.1 | 3589.3 | 3589.7 | 3554.4 | 3556.9 | 3534.7 |
| 57.5° | 3682.9 | 3790.9 | 3852.8 | 4001.8 | 4076.5 | 4166.8 | 4150.8 | 4226.3 | 4253.8 | 4288.7 | 4335.1 |
| 60°   | 3972.2 | 4173.8 | 4320.7 | 4617.1 | 4737.7 | 4883.9 | 4964.3 | 5050.1 | 5112.5 | 5176.5 | 5223.7 |
| 62.5° | 4179.1 | 4443.8 | 4685.2 | 5107.6 | 5264.3 | 5418.2 | 5519.6 | 5623.4 | 5693.6 | 5739.6 | 5773.7 |
| 65°   | 4094.6 | 4387.2 | 4672.5 | 5115.4 | 5286.1 | 5397.7 | 5518.4 | 5578.3 | 5648.5 | 5686.7 | 5735.5 |
| 67.5° | 3479.3 | 3772.8 | 4078.6 | 4601.0 | 4779.6 | 4933.9 | 5027.9 | 5105.5 | 5162.2 | 5210.6 | 5266.8 |
| 70°   | 2587.4 | 2908.4 | 3224.5 | 3797.4 | 4022.8 | 4245.6 | 4356.4 | 4452.5 | 4511.6 | 4560.4 | 4622.4 |
| 72.5° | 1862.2 | 2063.3 | 2260.7 | 2902.3 | 3127.6 | 3415.7 | 3530.6 | 3637.3 | 3714.1 | 3711.6 | 3777.3 |
| 75°   | 1482.5 | 1564.2 | 1652.0 | 1983.2 | 2145.0 | 2387.9 | 2452.4 | 2512.3 | 2476.2 | 2406.8 | 2402.7 |
| 77.5° | 1234.2 | 1267.9 | 1297.4 | 1401.2 | 1425.1 | 1482.9 | 1450.9 | 1417.7 | 1310.5 | 1220.2 | 1172.6 |
| 80°   | 1001.9 | 1068.4 | 1111.9 | 1185.8 | 1216.1 | 1233.4 | 1237.9 | 1226.4 | 1187.0 | 1132.4 | 1045.4 |
| 82.5° | 745.0  | 871.4  | 957.5  | 1102.9 | 1156.2 | 1167.3 | 1188.7 | 1175.5 | 1149.7 | 1105.3 | 1042.9 |
| 85°   | 218.3  | 247.1  | 283.2  | 384.2  | 450.2  | 506.5  | 563.9  | 592.3  | 609.9  | 585.3  | 520.9  |
| 87.5° | 76.7   | 86.6   | 96.8   | 133.4  | 142.0  | 171.5  | 168.3  | 198.7  | 199.9  | 208.5  | 199.5  |
| 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: P158201

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**CANDELA DISTRIBUTION (continued):**

|       | 72°    | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  |
| 2.5°  | 679.7  | 679.7  | 679.7  | 680.1  | 680.1  | 680.1  | 679.3  | 678.9  | 679.3  | 680.1  | 680.1  |
| 5°    | 695.7  | 696.1  | 697.0  | 695.3  | 695.7  | 697.0  | 696.1  | 695.7  | 696.1  | 697.0  | 696.1  |
| 7.5°  | 721.6  | 722.0  | 721.1  | 722.8  | 722.8  | 723.6  | 724.9  | 723.6  | 724.0  | 724.4  | 724.9  |
| 10°   | 755.2  | 755.6  | 756.4  | 757.7  | 758.1  | 758.9  | 759.7  | 761.0  | 761.0  | 760.1  | 762.2  |
| 12.5° | 795.4  | 795.0  | 795.8  | 797.5  | 798.3  | 799.6  | 802.0  | 802.0  | 803.6  | 803.2  | 805.3  |
| 15°   | 834.8  | 836.9  | 837.3  | 840.2  | 841.4  | 843.5  | 846.4  | 848.0  | 848.0  | 850.4  | 851.3  |
| 17.5° | 874.3  | 875.9  | 877.5  | 880.0  | 881.6  | 882.8  | 886.1  | 888.2  | 887.8  | 892.3  | 892.3  |
| 20°   | 904.6  | 907.9  | 910.0  | 911.6  | 914.5  | 916.5  | 919.0  | 921.4  | 923.1  | 926.0  | 926.8  |
| 22.5° | 934.1  | 936.2  | 939.1  | 941.2  | 944.4  | 946.9  | 949.7  | 951.8  | 954.7  | 958.4  | 959.6  |
| 25°   | 967.0  | 970.3  | 973.6  | 976.4  | 978.9  | 981.8  | 986.7  | 991.2  | 995.3  | 998.6  | 999.8  |
| 27.5° | 1012.6 | 1016.3 | 1021.2 | 1023.2 | 1026.9 | 1029.4 | 1036.8 | 1042.5 | 1044.6 | 1050.3 | 1052.0 |
| 30°   | 1074.1 | 1078.3 | 1083.2 | 1085.6 | 1092.2 | 1095.5 | 1103.3 | 1109.4 | 1111.5 | 1118.5 | 1119.7 |
| 32.5° | 1163.2 | 1165.7 | 1175.5 | 1175.1 | 1184.1 | 1193.6 | 1198.1 | 1203.0 | 1212.1 | 1215.7 | 1217.0 |
| 35°   | 1286.8 | 1292.5 | 1299.5 | 1299.1 | 1310.5 | 1315.9 | 1324.9 | 1330.3 | 1336.8 | 1336.4 | 1343.4 |
| 37.5° | 1406.2 | 1408.2 | 1410.7 | 1416.0 | 1424.2 | 1431.6 | 1434.9 | 1440.2 | 1445.2 | 1452.5 | 1461.6 |
| 40°   | 1536.3 | 1541.2 | 1541.6 | 1544.5 | 1548.6 | 1558.0 | 1564.2 | 1570.0 | 1586.8 | 1597.4 | 1602.8 |
| 42.5° | 1731.2 | 1730.0 | 1721.8 | 1727.2 | 1729.6 | 1744.0 | 1748.5 | 1766.2 | 1785.0 | 1807.6 | 1813.7 |
| 45°   | 1982.0 | 1965.6 | 1960.7 | 1958.6 | 1971.8 | 1979.2 | 1997.6 | 2030.5 | 2050.1 | 2071.5 | 2081.8 |
| 47.5° | 2290.7 | 2239.4 | 2215.1 | 2209.8 | 2223.4 | 2255.0 | 2261.1 | 2293.6 | 2319.4 | 2335.0 | 2345.3 |
| 50°   | 2599.7 | 2559.5 | 2508.6 | 2491.4 | 2487.7 | 2516.8 | 2523.8 | 2550.9 | 2577.2 | 2581.7 | 2576.3 |
| 52.5° | 2988.0 | 2922.4 | 2838.2 | 2807.8 | 2783.6 | 2785.7 | 2791.4 | 2802.9 | 2819.8 | 2812.7 | 2798.4 |
| 55°   | 3484.7 | 3410.0 | 3368.5 | 3311.0 | 3274.5 | 3268.0 | 3242.9 | 3208.4 | 3207.2 | 3211.7 | 3168.6 |
| 57.5° | 4311.7 | 4280.5 | 4298.2 | 4292.0 | 4255.9 | 4277.6 | 4164.8 | 4132.7 | 4107.3 | 4063.0 | 4023.2 |
| 60°   | 5265.5 | 5297.6 | 5334.1 | 5418.2 | 5414.6 | 5499.1 | 5420.7 | 5401.0 | 5377.2 | 5240.5 | 5173.6 |
| 62.5° | 5833.2 | 5845.9 | 5899.7 | 5978.1 | 6055.3 | 6136.1 | 6172.6 | 6185.3 | 6135.7 | 6024.1 | 5884.5 |
| 65°   | 5734.3 | 5790.5 | 5842.6 | 5910.4 | 5989.6 | 6070.4 | 6147.6 | 6192.8 | 6181.3 | 6107.4 | 5953.9 |
| 67.5° | 5284.9 | 5344.0 | 5420.3 | 5491.3 | 5576.7 | 5646.8 | 5731.4 | 5814.3 | 5816.8 | 5779.9 | 5673.1 |
| 70°   | 4628.9 | 4697.5 | 4776.3 | 4816.1 | 4908.5 | 4972.1 | 5042.3 | 5124.4 | 5151.1 | 5155.6 | 5031.2 |
| 72.5° | 3763.3 | 3792.1 | 3830.6 | 3809.7 | 3828.2 | 3868.8 | 3850.0 | 3856.5 | 3755.2 | 3774.0 | 3620.5 |
| 75°   | 2291.9 | 2265.7 | 2149.1 | 2042.8 | 1913.1 | 1813.3 | 1837.1 | 1646.7 | 1459.1 | 1449.7 | 1314.2 |
| 77.5° | 1162.4 | 1120.5 | 1048.3 | 973.1  | 863.2  | 737.2  | 632.1  | 518.8  | 423.2  | 368.6  | 316.4  |
| 80°   | 990.0  | 960.4  | 920.6  | 866.0  | 786.0  | 692.8  | 583.3  | 497.0  | 417.0  | 333.7  | 267.2  |
| 82.5° | 947.3  | 857.0  | 799.1  | 753.6  | 667.0  | 580.8  | 520.9  | 461.8  | 405.1  | 353.8  | 280.3  |
| 85°   | 470.0  | 415.8  | 351.7  | 311.9  | 240.1  | 188.0  | 176.1  | 144.9  | 135.1  | 104.3  | 87.8   |
| 87.5° | 158.0  | 129.3  | 96.5   | 81.2   | 64.9   | 52.9   | 52.1   | 46.4   | 46.0   | 41.9   | 38.6   |
| 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: P158201

CATALOG NUMBER: VST-E02-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 83°    | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    | 95°    | 105°   | 115°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6  | 675.6 |
| 2.5°  | 679.7  | 680.5  | 680.5  | 679.7  | 680.1  | 679.3  | 679.7  | 680.1  | 678.9  | 678.5  | 677.2 |
| 5°    | 696.5  | 696.1  | 696.1  | 696.5  | 697.7  | 698.2  | 696.1  | 697.0  | 697.3  | 695.3  | 690.8 |
| 7.5°  | 724.4  | 724.4  | 725.6  | 725.3  | 727.7  | 726.9  | 726.5  | 726.5  | 726.5  | 722.4  | 715.0 |
| 10°   | 762.2  | 762.2  | 763.4  | 765.1  | 765.5  | 764.6  | 764.6  | 765.1  | 767.1  | 758.9  | 747.4 |
| 12.5° | 804.5  | 806.5  | 806.1  | 806.1  | 811.0  | 809.8  | 808.1  | 809.8  | 811.9  | 800.3  | 784.0 |
| 15°   | 851.6  | 852.9  | 853.7  | 856.6  | 855.8  | 858.7  | 859.4  | 858.7  | 860.7  | 845.9  | 818.4 |
| 17.5° | 894.4  | 896.8  | 897.7  | 900.9  | 900.9  | 901.3  | 904.6  | 903.4  | 903.8  | 887.0  | 847.6 |
| 20°   | 929.6  | 932.1  | 933.4  | 937.0  | 937.9  | 939.5  | 940.7  | 941.6  | 943.6  | 923.5  | 871.4 |
| 22.5° | 964.9  | 967.0  | 969.1  | 971.5  | 974.8  | 976.9  | 978.5  | 979.3  | 983.0  | 959.6  | 893.9 |
| 25°   | 1004.3 | 1008.8 | 1010.9 | 1015.0 | 1018.3 | 1021.6 | 1024.1 | 1024.4 | 1030.6 | 1001.5 | 912.4 |
| 27.5° | 1056.9 | 1063.0 | 1066.3 | 1072.9 | 1076.2 | 1079.5 | 1078.6 | 1083.5 | 1092.2 | 1049.5 | 926.8 |
| 30°   | 1125.8 | 1133.6 | 1135.7 | 1142.3 | 1147.6 | 1150.9 | 1154.6 | 1158.7 | 1164.4 | 1102.9 | 933.8 |
| 32.5° | 1221.9 | 1233.8 | 1236.7 | 1240.4 | 1248.2 | 1253.9 | 1256.3 | 1262.9 | 1264.6 | 1153.3 | 931.7 |
| 35°   | 1353.7 | 1348.3 | 1362.2 | 1365.5 | 1376.6 | 1381.1 | 1384.0 | 1392.7 | 1386.1 | 1208.3 | 918.2 |
| 37.5° | 1472.6 | 1471.0 | 1484.6 | 1492.0 | 1506.3 | 1503.1 | 1510.0 | 1515.8 | 1492.4 | 1247.3 | 893.1 |
| 40°   | 1618.0 | 1615.9 | 1634.8 | 1637.3 | 1659.4 | 1654.5 | 1657.4 | 1661.9 | 1609.7 | 1274.4 | 847.6 |
| 42.5° | 1820.7 | 1821.5 | 1841.6 | 1844.1 | 1847.0 | 1856.0 | 1841.2 | 1842.1 | 1734.5 | 1281.8 | 772.4 |
| 45°   | 2087.9 | 2102.3 | 2090.0 | 2090.4 | 2089.6 | 2072.3 | 2053.9 | 2032.1 | 1864.2 | 1256.3 | 675.6 |
| 47.5° | 2346.9 | 2337.1 | 2321.5 | 2307.1 | 2295.2 | 2268.1 | 2241.0 | 2204.1 | 1976.3 | 1196.0 | 567.7 |
| 50°   | 2568.5 | 2546.4 | 2532.4 | 2492.6 | 2464.3 | 2429.0 | 2391.2 | 2348.9 | 2068.2 | 1109.0 | 466.7 |
| 52.5° | 2774.6 | 2751.6 | 2699.5 | 2658.0 | 2617.4 | 2570.6 | 2526.7 | 2477.0 | 2149.5 | 1009.7 | 389.5 |
| 55°   | 3116.9 | 3096.8 | 3044.6 | 2968.7 | 2918.6 | 2854.2 | 2796.4 | 2729.0 | 2314.1 | 929.2  | 338.6 |
| 57.5° | 3913.6 | 3896.3 | 3786.7 | 3738.7 | 3672.7 | 3510.9 | 3487.1 | 3382.0 | 2755.3 | 919.8  | 308.6 |
| 60°   | 5035.3 | 4961.4 | 4870.3 | 4739.0 | 4584.2 | 4530.9 | 4411.9 | 4271.9 | 3465.4 | 945.7  | 284.5 |
| 62.5° | 5724.0 | 5555.8 | 5422.0 | 5270.5 | 5128.1 | 5005.7 | 4875.7 | 4737.3 | 3828.6 | 911.6  | 254.5 |
| 65°   | 5775.7 | 5577.9 | 5401.0 | 5223.3 | 5063.2 | 4910.9 | 4784.5 | 4646.2 | 3710.4 | 783.5  | 215.5 |
| 67.5° | 5490.9 | 5282.4 | 5089.5 | 4888.0 | 4726.3 | 4588.7 | 4427.9 | 4294.9 | 3377.1 | 609.9  | 179.3 |
| 70°   | 4903.6 | 4720.5 | 4554.2 | 4337.2 | 4202.9 | 4035.5 | 3933.2 | 3767.0 | 2943.7 | 415.8  | 148.1 |
| 72.5° | 3531.8 | 3394.0 | 3339.8 | 3188.3 | 3012.7 | 2914.1 | 2866.9 | 2705.6 | 2175.4 | 258.2  | 121.1 |
| 75°   | 1193.2 | 1227.2 | 1149.2 | 1029.8 | 1088.1 | 998.2  | 1034.7 | 958.0  | 920.2  | 148.1  | 101.8 |
| 77.5° | 264.7  | 248.7  | 229.9  | 213.4  | 212.2  | 199.5  | 211.4  | 199.9  | 213.8  | 94.4   | 89.9  |
| 80°   | 208.9  | 165.0  | 140.4  | 128.0  | 121.5  | 117.8  | 114.9  | 111.7  | 101.8  | 80.5   | 82.9  |
| 82.5° | 225.7  | 170.3  | 124.8  | 99.7   | 85.4   | 80.0   | 78.8   | 75.5   | 74.7   | 78.0   | 83.8  |
| 85°   | 72.2   | 60.4   | 51.3   | 48.4   | 44.8   | 42.7   | 41.9   | 40.6   | 49.3   | 85.0   | 80.5  |
| 87.5° | 37.7   | 33.2   | 29.6   | 28.3   | 24.6   | 23.0   | 22.6   | 23.0   | 34.5   | 85.0   | 58.3  |
| 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: P158201

CATALOG NUMBER: VST-E02-LED-E-U-SL2-7050

**CANDELA DISTRIBUTION (continued):**

|       | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 675.6 | 675.6 | 675.6 | 675.6 | 675.6 | 675.6 | 675.6 |
| 2.5°  | 676.0 | 675.6 | 674.8 | 674.3 | 673.9 | 671.9 | 673.6 |
| 5°    | 688.7 | 684.6 | 680.9 | 676.4 | 673.9 | 671.9 | 671.9 |
| 7.5°  | 708.0 | 696.5 | 687.1 | 676.8 | 669.8 | 664.5 | 663.7 |
| 10°   | 732.2 | 710.0 | 688.3 | 669.8 | 656.7 | 646.9 | 645.6 |
| 12.5° | 755.2 | 721.6 | 687.1 | 656.7 | 636.2 | 622.3 | 621.4 |
| 15°   | 776.6 | 727.7 | 677.6 | 632.9 | 602.1 | 583.6 | 581.6 |
| 17.5° | 793.4 | 724.0 | 656.3 | 599.6 | 557.8 | 536.0 | 534.8 |
| 20°   | 797.1 | 709.3 | 625.9 | 558.6 | 514.3 | 491.3 | 485.9 |
| 22.5° | 793.8 | 682.6 | 588.2 | 513.5 | 462.5 | 439.6 | 436.7 |
| 25°   | 784.0 | 650.2 | 541.4 | 460.9 | 413.7 | 390.4 | 384.6 |
| 27.5° | 766.3 | 611.9 | 490.9 | 410.0 | 363.2 | 340.7 | 334.9 |
| 30°   | 740.0 | 566.0 | 437.1 | 362.4 | 314.0 | 295.9 | 290.2 |
| 32.5° | 703.5 | 510.2 | 384.2 | 313.6 | 273.4 | 259.0 | 256.5 |
| 35°   | 653.0 | 446.2 | 328.7 | 273.4 | 243.8 | 235.2 | 233.9 |
| 37.5° | 588.6 | 382.1 | 282.4 | 244.6 | 223.3 | 217.9 | 217.1 |
| 40°   | 504.4 | 316.4 | 249.5 | 224.1 | 208.5 | 204.0 | 203.2 |
| 42.5° | 417.8 | 267.2 | 225.4 | 207.7 | 194.9 | 190.9 | 189.6 |
| 45°   | 341.9 | 233.9 | 207.3 | 194.2 | 182.2 | 177.7 | 177.3 |
| 47.5° | 285.2 | 214.7 | 192.5 | 181.8 | 169.9 | 164.6 | 165.0 |
| 50°   | 243.8 | 197.0 | 180.2 | 171.2 | 157.6 | 152.7 | 153.1 |
| 52.5° | 215.5 | 179.3 | 168.7 | 158.5 | 146.9 | 142.0 | 142.0 |
| 55°   | 193.3 | 165.0 | 157.6 | 146.5 | 137.5 | 133.0 | 132.6 |
| 57.5° | 175.3 | 153.5 | 146.9 | 137.9 | 128.9 | 123.5 | 123.5 |
| 60°   | 164.2 | 145.3 | 140.0 | 131.8 | 121.1 | 115.3 | 114.9 |
| 62.5° | 157.6 | 142.9 | 138.3 | 126.8 | 114.9 | 109.2 | 107.9 |
| 65°   | 152.7 | 148.6 | 142.9 | 124.0 | 110.0 | 103.9 | 102.6 |
| 67.5° | 153.1 | 162.1 | 153.9 | 125.6 | 108.4 | 99.3  | 97.7  |
| 70°   | 155.6 | 172.8 | 161.7 | 129.3 | 115.3 | 97.3  | 93.6  |
| 72.5° | 143.2 | 156.4 | 145.7 | 123.1 | 112.4 | 93.6  | 89.0  |
| 75°   | 119.5 | 114.1 | 104.6 | 100.1 | 101.0 | 85.0  | 83.3  |
| 77.5° | 96.8  | 85.0  | 76.0  | 79.6  | 85.0  | 72.7  | 71.0  |
| 80°   | 84.1  | 68.9  | 64.4  | 70.6  | 77.2  | 62.0  | 57.9  |
| 82.5° | 78.8  | 58.3  | 55.4  | 73.4  | 80.9  | 53.3  | 46.8  |
| 85°   | 69.4  | 47.6  | 43.5  | 86.6  | 80.9  | 40.2  | 37.4  |
| 87.5° | 46.4  | 28.3  | 27.1  | 63.6  | 55.4  | 27.9  | 22.6  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)