

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: P177502

Luminaire Tested: **VAL-F03-LED-E-U-GL3-7030**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P177502  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33702)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VAL-F03-LED-E-U-GL3-7030  
Description: VALET TUNNEL LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE III W/ GLARE CONTROL  
Light Source: (21) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 6715.1 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 78.3  
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



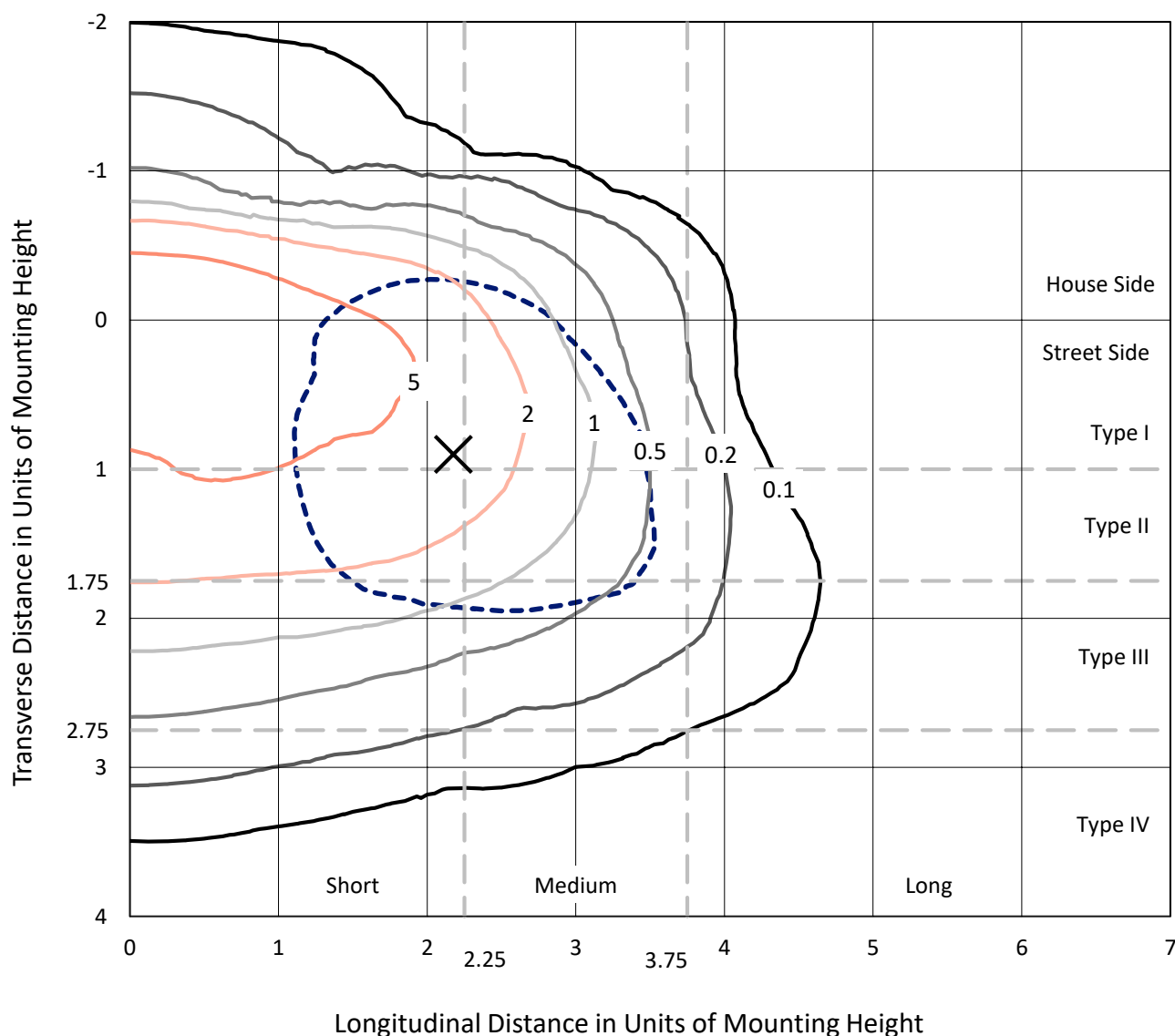
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CATALOG NUMBER: VAL-F03-LED-E-U-GL3-7030

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

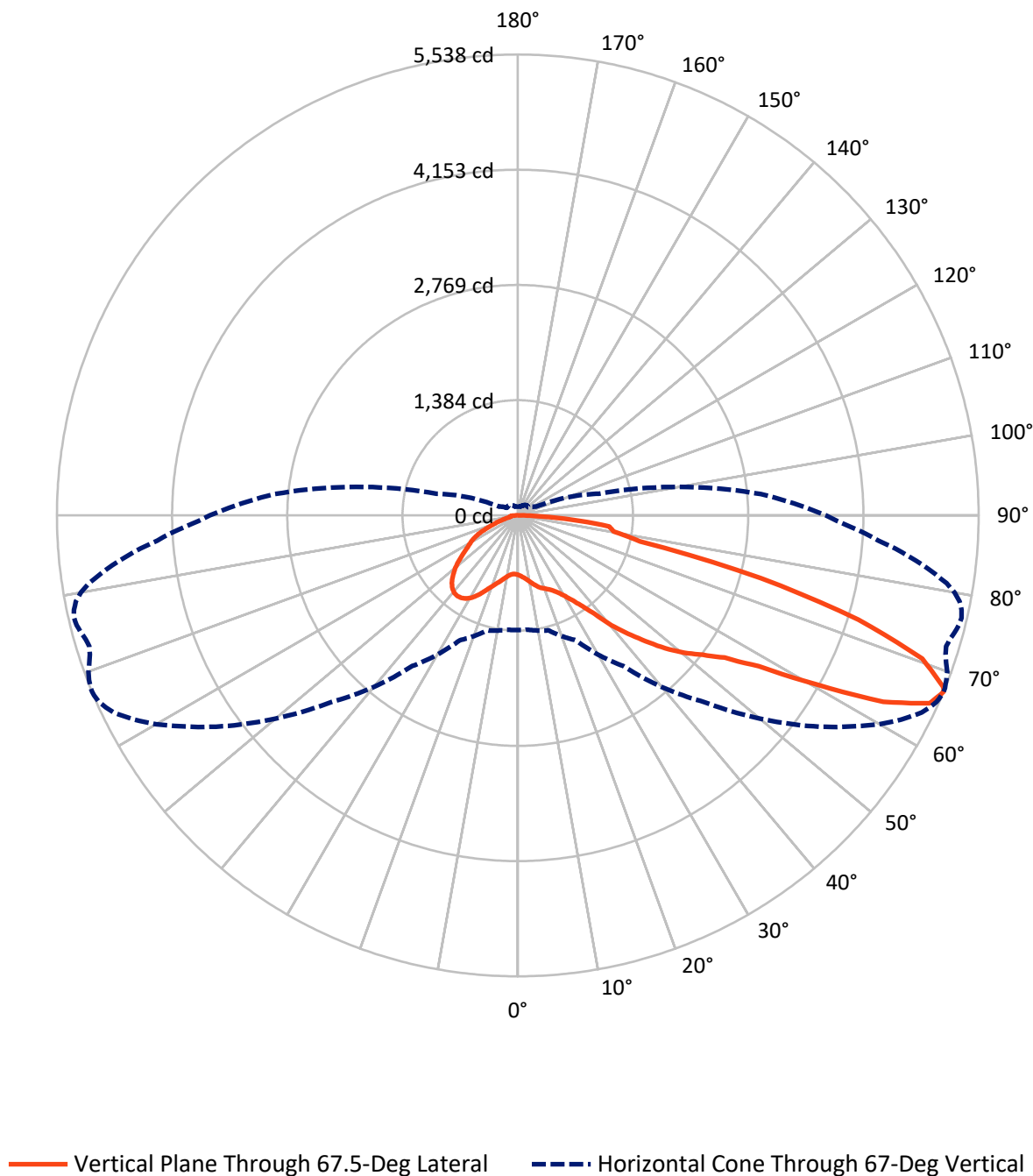


Based on 10 foot mounting height. Maximum calculated value = 9.1 fc  
 Type III - Short - Semi-Cutoff

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CATALOG NUMBER: VAL-F03-LED-E-U-GL3-7030

## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1590.1   | 0.0    | 1590.1 |
|                    | % Fixture | 23.7     | 0.0    | 23.7   |
| <b>Street Side</b> | Lumens    | 5125.0   | 0.0    | 5125.0 |
|                    | % Fixture | 76.3     | 0.0    | 76.3   |
| <b>Total</b>       | Lumens    | 6715.1   | 0.0    | 6715.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 71.3   | 1.1       |
| 10°-20°   | 244.1  | 3.6       |
| 20°-30°   | 434.6  | 6.5       |
| 30°-40°   | 633.1  | 9.4       |
| 40°-50°   | 975.5  | 14.5      |
| 50°-60°   | 1428.6 | 21.3      |
| 60°-70°   | 1897.0 | 28.2      |
| 70°-80°   | 894.2  | 13.3      |
| 80°-90°   | 136.7  | 2.0       |
| 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°    | 6715.1 | 100.0     |
| 0°-180°   | 6715.1 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P177502

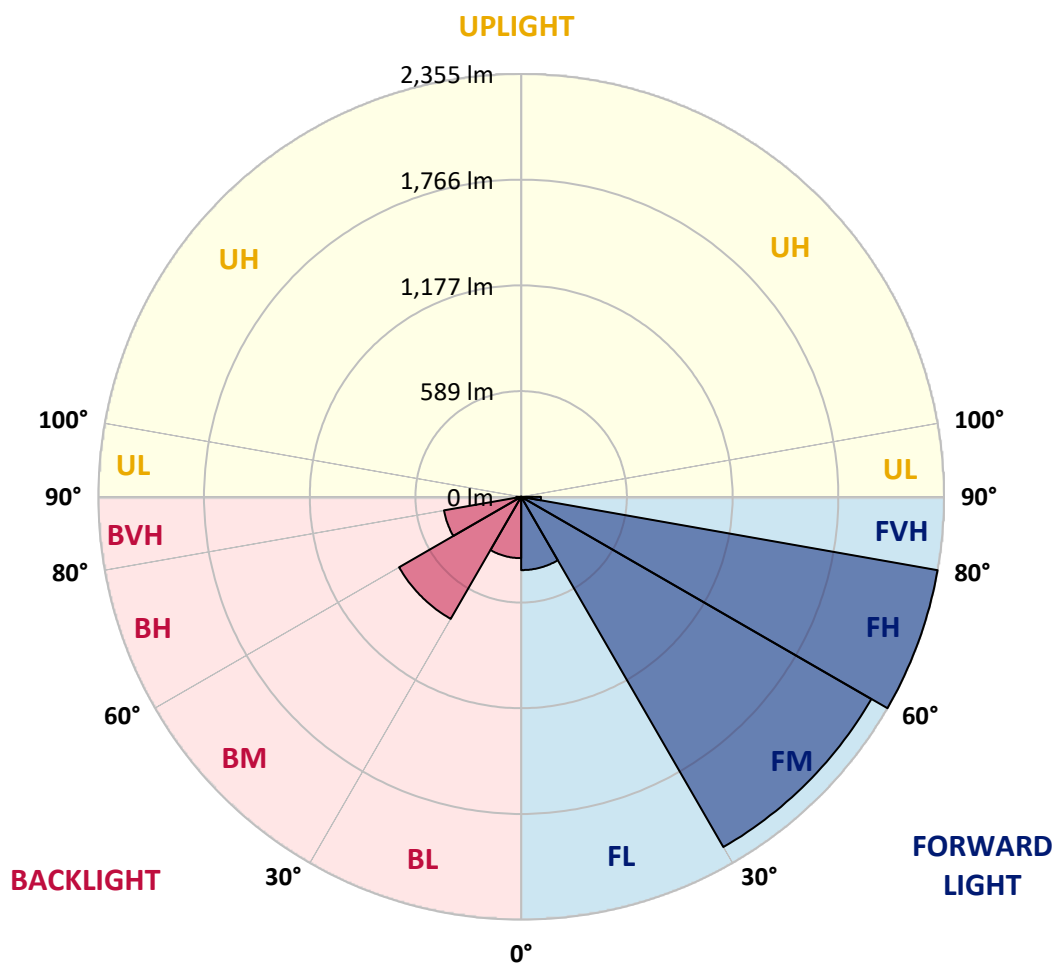
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 408.2  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 2251.9 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 2354.7 | 35.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 110.2  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 341.8  | 5.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 785.2  | 11.7      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 436.5  | 6.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 26.5   | 0.4       |                         |      | 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 III Short



REPORT NUMBER: P177502

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 60°    | 61°    | 62°    | 64°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  |
| 2.5°  | 750.1  | 746.9  | 747.4  | 748.7  | 744.2  | 741.9  | 737.0  | 733.8  | 733.3  | 732.9  | 731.1  |
| 5°    | 794.0  | 790.8  | 792.1  | 788.5  | 779.9  | 774.0  | 763.6  | 758.2  | 757.3  | 756.4  | 754.1  |
| 7.5°  | 839.6  | 835.6  | 831.1  | 827.0  | 817.5  | 808.0  | 794.4  | 786.3  | 785.4  | 784.0  | 782.6  |
| 10°   | 893.9  | 888.1  | 884.4  | 871.8  | 855.5  | 842.4  | 828.8  | 820.2  | 819.7  | 818.4  | 815.7  |
| 12.5° | 955.0  | 948.7  | 941.9  | 925.1  | 899.8  | 880.4  | 864.5  | 859.6  | 855.5  | 855.9  | 853.2  |
| 15°   | 1015.6 | 1008.8 | 999.8  | 978.5  | 945.1  | 916.1  | 895.7  | 888.5  | 889.0  | 886.7  | 888.1  |
| 17.5° | 1066.7 | 1060.9 | 1047.7 | 1020.6 | 981.7  | 941.9  | 916.1  | 912.9  | 913.8  | 913.4  | 914.7  |
| 20°   | 1100.2 | 1096.6 | 1076.7 | 1044.1 | 1000.2 | 956.4  | 930.1  | 930.1  | 930.6  | 932.4  | 935.6  |
| 22.5° | 1120.6 | 1115.2 | 1088.9 | 1043.2 | 999.8  | 963.2  | 942.8  | 947.3  | 950.0  | 951.4  | 956.4  |
| 25°   | 1131.9 | 1125.1 | 1089.4 | 1028.7 | 984.4  | 968.1  | 961.8  | 973.1  | 977.6  | 979.9  | 988.0  |
| 27.5° | 1131.9 | 1123.8 | 1083.5 | 1010.7 | 966.8  | 983.1  | 998.0  | 1017.4 | 1020.6 | 1027.4 | 1036.9 |
| 30°   | 1119.2 | 1112.9 | 1074.4 | 997.1  | 962.2  | 1011.1 | 1056.3 | 1078.5 | 1086.2 | 1093.9 | 1106.1 |
| 32.5° | 1105.7 | 1100.2 | 1069.9 | 1004.3 | 987.6  | 1069.9 | 1145.5 | 1175.8 | 1180.3 | 1186.6 | 1199.3 |
| 35°   | 1104.8 | 1102.9 | 1089.8 | 1050.5 | 1064.0 | 1177.6 | 1279.8 | 1300.6 | 1313.3 | 1316.5 | 1321.9 |
| 37.5° | 1114.3 | 1117.9 | 1129.2 | 1125.1 | 1174.0 | 1337.7 | 1455.8 | 1497.4 | 1507.4 | 1502.0 | 1506.9 |
| 40°   | 1136.4 | 1145.5 | 1187.5 | 1239.6 | 1341.8 | 1531.4 | 1695.6 | 1743.5 | 1754.4 | 1751.2 | 1749.9 |
| 42.5° | 1206.5 | 1218.8 | 1280.7 | 1392.0 | 1516.4 | 1731.8 | 1918.2 | 1969.7 | 1973.4 | 1975.2 | 1963.4 |
| 45°   | 1316.5 | 1323.3 | 1405.6 | 1547.6 | 1705.5 | 1947.6 | 2140.3 | 2197.7 | 2195.5 | 2186.4 | 2177.8 |
| 47.5° | 1441.3 | 1455.4 | 1554.0 | 1725.9 | 1901.0 | 2147.1 | 2365.1 | 2421.2 | 2426.2 | 2418.1 | 2402.2 |
| 50°   | 1554.9 | 1565.7 | 1677.0 | 1881.1 | 2073.3 | 2313.1 | 2554.7 | 2611.2 | 2610.3 | 2614.8 | 2619.4 |
| 52.5° | 1644.5 | 1654.4 | 1760.3 | 1984.7 | 2200.0 | 2452.4 | 2697.6 | 2767.3 | 2778.2 | 2785.4 | 2794.5 |
| 55°   | 1690.6 | 1701.0 | 1798.7 | 2027.6 | 2276.9 | 2588.6 | 2862.8 | 2962.7 | 2981.3 | 2997.6 | 3012.5 |
| 57.5° | 1691.5 | 1705.1 | 1794.7 | 2024.5 | 2316.7 | 2710.3 | 3081.3 | 3260.9 | 3287.1 | 3328.7 | 3379.9 |
| 60°   | 1663.9 | 1682.9 | 1763.4 | 1995.1 | 2362.4 | 2864.6 | 3441.4 | 3785.2 | 3836.8 | 3909.6 | 3975.2 |
| 62.5° | 1592.0 | 1611.0 | 1682.9 | 1920.4 | 2415.8 | 3062.3 | 3961.6 | 4465.6 | 4575.5 | 4656.1 | 4785.9 |
| 65°   | 1478.4 | 1496.5 | 1557.1 | 1796.9 | 2373.3 | 3218.3 | 4349.3 | 4953.7 | 5065.9 | 5166.8 | 5319.3 |
| 67°   | 1377.1 | 1378.9 | 1430.0 | 1655.3 | 2207.7 | 3169.9 | 4427.1 | 5018.9 | 5122.5 | 5224.7 | 5401.6 |
| 67.5° | 1341.4 | 1351.3 | 1391.1 | 1608.3 | 2144.8 | 3134.2 | 4396.4 | 4983.6 | 5084.0 | 5193.1 | 5373.6 |
| 70°   | 1084.4 | 1087.1 | 1125.6 | 1283.0 | 1701.9 | 2598.6 | 3949.0 | 4533.5 | 4602.2 | 4761.9 | 4939.3 |
| 72.5° | 661.4  | 656.9  | 669.1  | 785.8  | 1120.1 | 1799.6 | 3161.8 | 3732.3 | 3826.4 | 3962.5 | 4082.4 |
| 75°   | 364.2  | 385.9  | 400.8  | 481.8  | 629.3  | 1058.2 | 2153.0 | 2700.4 | 2838.3 | 2919.3 | 2943.3 |
| 77.5° | 222.6  | 220.8  | 227.6  | 310.8  | 516.2  | 723.8  | 1189.3 | 1584.3 | 1661.2 | 1684.3 | 1595.1 |
| 80°   | 105.9  | 109.9  | 108.6  | 128.0  | 250.2  | 610.7  | 831.5  | 1017.4 | 1056.3 | 1078.5 | 1107.5 |
| 82.5° | 57.9   | 60.2   | 68.3   | 76.5   | 98.6   | 262.8  | 717.5  | 938.3  | 964.5  | 1002.5 | 1045.0 |
| 85°   | 36.2   | 38.0   | 52.5   | 55.2   | 60.6   | 81.0   | 299.0  | 548.3  | 570.5  | 646.0  | 670.0  |
| 87.5° | 14.9   | 16.3   | 28.5   | 25.8   | 30.8   | 28.5   | 90.5   | 139.3  | 147.9  | 157.4  | 174.6  |
| 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: P177502

CATALOG NUMBER: VAL-F03-LED-E-U-GL3-7030

**CANDELA DISTRIBUTION (continued):**

|       | 65°    | 66°    | 67°    | 67.5°  | 68°    | 69°    | 70°    | 71°    | 72°    | 73°    | 74°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  |
| 2.5°  | 731.5  | 731.1  | 729.3  | 728.8  | 729.7  | 729.7  | 728.8  | 727.5  | 727.0  | 726.5  | 725.6  |
| 5°    | 753.2  | 752.3  | 751.0  | 750.1  | 749.6  | 749.6  | 748.3  | 746.9  | 745.5  | 743.7  | 743.3  |
| 7.5°  | 779.0  | 779.0  | 778.6  | 777.2  | 775.9  | 774.0  | 772.7  | 771.3  | 770.0  | 769.1  | 767.7  |
| 10°   | 813.0  | 814.8  | 811.6  | 810.7  | 810.2  | 807.5  | 807.1  | 805.7  | 804.8  | 802.6  | 802.6  |
| 12.5° | 853.2  | 851.4  | 851.0  | 849.1  | 849.1  | 847.8  | 847.3  | 846.9  | 846.0  | 844.2  | 843.7  |
| 15°   | 886.7  | 886.7  | 886.2  | 885.3  | 886.2  | 885.3  | 884.0  | 884.9  | 883.5  | 884.0  | 882.6  |
| 17.5° | 913.8  | 915.6  | 915.2  | 915.6  | 915.2  | 915.2  | 916.1  | 916.1  | 917.0  | 915.2  | 915.6  |
| 20°   | 936.5  | 939.2  | 940.5  | 939.6  | 940.5  | 941.0  | 943.2  | 944.2  | 945.5  | 946.4  | 946.4  |
| 22.5° | 960.0  | 963.6  | 966.3  | 966.3  | 968.1  | 969.9  | 974.0  | 974.9  | 978.1  | 977.6  | 979.9  |
| 25°   | 993.0  | 998.9  | 1000.7 | 1003.4 | 1005.7 | 1008.8 | 1013.8 | 1016.1 | 1017.4 | 1020.6 | 1024.2 |
| 27.5° | 1043.7 | 1050.9 | 1052.3 | 1055.4 | 1061.3 | 1063.1 | 1068.6 | 1070.8 | 1075.8 | 1082.6 | 1083.9 |
| 30°   | 1112.9 | 1121.9 | 1122.4 | 1126.0 | 1132.8 | 1135.1 | 1139.6 | 1145.5 | 1149.5 | 1156.3 | 1156.8 |
| 32.5° | 1207.0 | 1216.0 | 1214.7 | 1221.5 | 1221.0 | 1227.8 | 1226.4 | 1235.5 | 1239.1 | 1242.7 | 1252.7 |
| 35°   | 1332.3 | 1331.4 | 1338.2 | 1340.4 | 1339.1 | 1344.5 | 1343.6 | 1347.7 | 1351.3 | 1351.3 | 1362.2 |
| 37.5° | 1512.8 | 1511.5 | 1510.6 | 1501.1 | 1498.8 | 1499.2 | 1497.4 | 1501.1 | 1495.2 | 1495.2 | 1506.9 |
| 40°   | 1754.8 | 1746.7 | 1740.4 | 1734.0 | 1727.7 | 1719.1 | 1711.9 | 1710.1 | 1700.1 | 1699.7 | 1695.1 |
| 42.5° | 1965.2 | 1957.5 | 1953.0 | 1940.8 | 1934.4 | 1933.1 | 1915.4 | 1910.5 | 1907.8 | 1909.6 | 1905.0 |
| 45°   | 2186.0 | 2177.8 | 2160.6 | 2155.2 | 2153.4 | 2143.9 | 2141.2 | 2129.0 | 2125.4 | 2131.7 | 2129.4 |
| 47.5° | 2413.5 | 2401.8 | 2392.3 | 2385.9 | 2383.7 | 2375.5 | 2363.8 | 2373.7 | 2368.7 | 2365.1 | 2358.3 |
| 50°   | 2618.0 | 2604.9 | 2604.9 | 2593.6 | 2595.4 | 2590.0 | 2577.8 | 2580.5 | 2566.4 | 2571.9 | 2568.3 |
| 52.5° | 2789.5 | 2790.4 | 2794.9 | 2782.2 | 2784.5 | 2784.5 | 2780.4 | 2767.3 | 2770.9 | 2769.1 | 2777.7 |
| 55°   | 3007.5 | 3022.5 | 3014.3 | 3016.6 | 3019.3 | 3032.0 | 3041.0 | 3033.3 | 3020.6 | 3030.6 | 3058.2 |
| 57.5° | 3388.9 | 3402.5 | 3410.6 | 3416.9 | 3427.4 | 3433.2 | 3482.1 | 3488.9 | 3474.4 | 3504.3 | 3565.8 |
| 60°   | 4052.1 | 4068.4 | 4092.8 | 4124.9 | 4131.7 | 4172.9 | 4198.2 | 4228.1 | 4239.0 | 4264.7 | 4330.8 |
| 62.5° | 4849.7 | 4886.3 | 4890.9 | 4931.6 | 4963.2 | 4924.8 | 4934.7 | 4971.4 | 4929.8 | 4986.8 | 4989.5 |
| 65°   | 5371.8 | 5425.1 | 5426.9 | 5441.9 | 5453.6 | 5417.4 | 5401.2 | 5384.9 | 5345.5 | 5343.3 | 5382.6 |
| 67°   | 5461.3 | 5510.2 | 5530.5 | 5537.8 | 5536.0 | 5517.4 | 5490.7 | 5443.7 | 5405.7 | 5384.0 | 5400.3 |
| 67.5° | 5436.0 | 5483.9 | 5512.4 | 5519.2 | 5519.7 | 5501.6 | 5477.2 | 5426.0 | 5390.3 | 5365.9 | 5383.1 |
| 70°   | 5019.8 | 5132.0 | 5180.8 | 5155.5 | 5170.0 | 5170.0 | 5169.1 | 5122.0 | 5104.4 | 5080.9 | 5071.8 |
| 72.5° | 4173.8 | 4251.6 | 4313.6 | 4280.6 | 4284.6 | 4315.4 | 4308.2 | 4313.1 | 4262.5 | 4257.0 | 4173.4 |
| 75°   | 2989.9 | 3014.8 | 2994.0 | 3017.5 | 2890.8 | 2845.6 | 2768.7 | 2656.5 | 2627.1 | 2580.5 | 2441.1 |
| 77.5° | 1588.4 | 1560.3 | 1504.7 | 1500.1 | 1448.1 | 1407.9 | 1358.1 | 1325.5 | 1243.2 | 1197.5 | 1093.0 |
| 80°   | 1121.9 | 1135.5 | 1156.8 | 1169.4 | 1181.2 | 1190.3 | 1171.7 | 1119.7 | 1050.9 | 974.0  | 901.2  |
| 82.5° | 1071.7 | 1090.3 | 1102.9 | 1109.3 | 1104.8 | 1090.3 | 1047.7 | 998.0  | 906.1  | 839.6  | 760.9  |
| 85°   | 675.9  | 690.8  | 665.0  | 659.6  | 670.9  | 579.5  | 529.3  | 488.6  | 395.8  | 368.3  | 325.3  |
| 87.5° | 181.4  | 191.4  | 191.8  | 185.9  | 182.3  | 160.6  | 142.1  | 125.8  | 104.1  | 97.7   | 79.2   |
| 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: P177502

CATALOG NUMBER: VAL-F03-LED-E-U-GL3-7030

**CANDELA DISTRIBUTION (continued):**

|       | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    | 83°    | 84°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  |
| 2.5°  | 725.6  | 725.2  | 725.2  | 723.8  | 722.9  | 722.5  | 722.0  | 720.7  | 719.8  | 719.8  | 719.3  |
| 5°    | 742.8  | 741.9  | 740.6  | 740.1  | 738.3  | 737.4  | 735.6  | 734.7  | 733.3  | 732.4  | 732.0  |
| 7.5°  | 767.3  | 765.0  | 762.3  | 762.7  | 760.0  | 758.7  | 757.8  | 756.0  | 754.6  | 753.2  | 752.8  |
| 10°   | 799.8  | 799.4  | 796.7  | 797.6  | 792.6  | 794.9  | 790.3  | 790.8  | 788.1  | 785.4  | 784.9  |
| 12.5° | 841.5  | 841.0  | 838.3  | 835.1  | 834.2  | 834.7  | 832.0  | 832.4  | 829.2  | 828.3  | 827.4  |
| 15°   | 881.3  | 880.4  | 879.0  | 876.7  | 875.4  | 874.9  | 874.0  | 873.1  | 870.4  | 870.4  | 867.2  |
| 17.5° | 915.6  | 916.1  | 914.3  | 912.5  | 911.6  | 910.2  | 909.8  | 909.8  | 907.5  | 905.2  | 905.7  |
| 20°   | 946.0  | 946.9  | 946.9  | 945.5  | 946.0  | 945.1  | 944.6  | 945.5  | 943.2  | 942.3  | 941.0  |
| 22.5° | 979.9  | 979.9  | 980.3  | 981.2  | 982.6  | 983.1  | 983.1  | 982.2  | 980.8  | 980.3  | 977.6  |
| 25°   | 1026.9 | 1025.1 | 1027.4 | 1028.3 | 1028.3 | 1030.6 | 1029.7 | 1030.1 | 1030.6 | 1029.2 | 1027.8 |
| 27.5° | 1086.2 | 1084.4 | 1088.9 | 1092.1 | 1091.6 | 1093.0 | 1095.7 | 1092.5 | 1094.3 | 1095.7 | 1092.5 |
| 30°   | 1159.0 | 1163.6 | 1166.7 | 1169.0 | 1168.1 | 1172.2 | 1173.5 | 1173.1 | 1171.7 | 1174.0 | 1174.0 |
| 32.5° | 1251.8 | 1249.5 | 1257.7 | 1262.6 | 1263.1 | 1262.2 | 1264.4 | 1267.2 | 1264.9 | 1268.5 | 1266.7 |
| 35°   | 1362.2 | 1363.5 | 1365.3 | 1370.8 | 1373.0 | 1369.4 | 1373.0 | 1376.2 | 1375.3 | 1375.7 | 1377.5 |
| 37.5° | 1504.7 | 1506.9 | 1505.1 | 1505.6 | 1504.7 | 1521.9 | 1524.6 | 1527.3 | 1524.1 | 1521.4 | 1529.6 |
| 40°   | 1702.4 | 1702.4 | 1701.9 | 1707.8 | 1697.8 | 1708.7 | 1705.5 | 1713.2 | 1721.4 | 1716.8 | 1729.1 |
| 42.5° | 1896.9 | 1907.8 | 1908.7 | 1900.1 | 1907.3 | 1919.1 | 1919.1 | 1924.0 | 1931.3 | 1924.0 | 1935.8 |
| 45°   | 2119.9 | 2133.5 | 2131.2 | 2145.7 | 2134.9 | 2148.4 | 2150.7 | 2144.4 | 2160.2 | 2162.0 | 2157.5 |
| 47.5° | 2363.3 | 2366.0 | 2366.5 | 2371.5 | 2373.7 | 2384.6 | 2384.1 | 2395.9 | 2392.3 | 2374.2 | 2380.5 |
| 50°   | 2571.9 | 2578.7 | 2582.3 | 2585.4 | 2596.8 | 2604.4 | 2614.8 | 2616.7 | 2613.9 | 2608.5 | 2603.5 |
| 52.5° | 2780.4 | 2796.7 | 2807.1 | 2835.2 | 2852.8 | 2866.8 | 2884.0 | 2890.4 | 2887.2 | 2885.8 | 2865.9 |
| 55°   | 3059.6 | 3098.5 | 3158.6 | 3197.5 | 3240.1 | 3264.9 | 3284.8 | 3294.8 | 3287.6 | 3291.2 | 3250.0 |
| 57.5° | 3585.2 | 3676.6 | 3729.1 | 3795.6 | 3870.7 | 3901.9 | 3910.5 | 3945.8 | 3906.9 | 3868.0 | 3836.8 |
| 60°   | 4366.5 | 4450.7 | 4546.1 | 4614.4 | 4639.8 | 4726.2 | 4685.5 | 4639.8 | 4598.2 | 4517.6 | 4426.7 |
| 62.5° | 5071.8 | 5180.4 | 5229.2 | 5293.0 | 5275.8 | 5268.6 | 5241.5 | 5168.6 | 5079.5 | 4959.6 | 4838.4 |
| 65°   | 5419.7 | 5480.8 | 5511.1 | 5531.9 | 5512.4 | 5462.2 | 5372.7 | 5265.0 | 5137.4 | 4982.2 | 4823.0 |
| 67°   | 5433.7 | 5461.8 | 5471.7 | 5451.8 | 5408.4 | 5330.1 | 5217.0 | 5064.6 | 4907.6 | 4729.8 | 4550.7 |
| 67.5° | 5410.7 | 5429.2 | 5434.2 | 5403.0 | 5351.4 | 5266.8 | 5146.0 | 4983.1 | 4816.2 | 4631.6 | 4451.6 |
| 70°   | 5095.8 | 5082.2 | 5038.3 | 4995.4 | 4834.3 | 4720.8 | 4510.4 | 4336.7 | 4105.0 | 3935.4 | 3743.1 |
| 72.5° | 4139.9 | 4077.9 | 4035.4 | 3845.4 | 3650.8 | 3538.2 | 3312.0 | 3104.3 | 2893.1 | 2731.6 | 2613.5 |
| 75°   | 2324.0 | 2278.7 | 2160.6 | 2060.2 | 1899.6 | 1752.6 | 1647.2 | 1515.1 | 1388.4 | 1313.3 | 1258.1 |
| 77.5° | 1050.0 | 920.6  | 831.5  | 718.9  | 580.9  | 466.9  | 346.5  | 320.3  | 273.2  | 261.5  | 235.7  |
| 80°   | 819.3  | 726.5  | 609.8  | 480.9  | 339.3  | 228.0  | 167.4  | 142.1  | 133.5  | 128.0  | 125.3  |
| 82.5° | 683.6  | 563.2  | 474.1  | 336.6  | 215.3  | 144.8  | 109.0  | 98.6   | 92.3   | 87.8   | 83.7   |
| 85°   | 292.2  | 231.2  | 190.5  | 136.2  | 96.8   | 76.5   | 67.0   | 61.1   | 55.2   | 50.2   | 47.0   |
| 87.5° | 68.3   | 52.5   | 48.0   | 40.7   | 38.5   | 38.0   | 37.5   | 35.7   | 33.5   | 30.8   | 27.6   |
| 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: P177502

CATALOG NUMBER: VAL-F03-LED-E-U-GL3-7030

**CANDELA DISTRIBUTION (continued):**

|       | 86°    | 87°    | 88°    | 89°    | 90°    | 95°    | 105°   | 115°   | 125°  | 135°  | 145°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3  | 714.3 | 714.3 | 714.3 |
| 2.5°  | 718.9  | 718.4  | 717.5  | 716.1  | 716.1  | 714.3  | 708.5  | 704.4  | 699.9 | 697.1 | 694.4 |
| 5°    | 731.1  | 730.6  | 728.4  | 727.0  | 726.1  | 722.5  | 712.5  | 704.8  | 696.7 | 690.8 | 686.3 |
| 7.5°  | 751.4  | 750.1  | 748.3  | 747.4  | 744.6  | 740.1  | 725.6  | 714.8  | 703.0 | 693.5 | 685.8 |
| 10°   | 784.5  | 782.2  | 779.5  | 776.8  | 777.7  | 770.4  | 753.7  | 737.9  | 720.7 | 705.7 | 695.3 |
| 12.5° | 824.7  | 824.7  | 823.4  | 821.6  | 818.4  | 810.2  | 787.6  | 769.1  | 748.3 | 729.7 | 722.0 |
| 15°   | 867.2  | 865.0  | 862.7  | 860.0  | 859.6  | 848.7  | 828.3  | 807.1  | 785.4 | 769.5 | 760.5 |
| 17.5° | 902.1  | 903.0  | 899.8  | 898.9  | 898.0  | 887.1  | 865.4  | 846.4  | 830.6 | 813.9 | 799.4 |
| 20°   | 939.2  | 937.4  | 936.5  | 935.1  | 934.7  | 925.6  | 908.4  | 896.6  | 882.6 | 857.3 | 819.3 |
| 22.5° | 979.0  | 976.7  | 977.6  | 974.9  | 974.5  | 968.1  | 955.5  | 951.8  | 931.0 | 877.6 | 811.6 |
| 25°   | 1030.6 | 1026.5 | 1027.8 | 1027.8 | 1028.3 | 1022.4 | 1021.1 | 1014.7 | 962.2 | 872.7 | 780.8 |
| 27.5° | 1092.1 | 1093.9 | 1093.9 | 1093.4 | 1090.3 | 1092.1 | 1098.4 | 1076.7 | 973.1 | 846.4 | 734.7 |
| 30°   | 1172.2 | 1173.1 | 1174.0 | 1177.1 | 1170.3 | 1182.1 | 1189.8 | 1120.6 | 965.0 | 810.2 | 676.8 |
| 32.5° | 1269.4 | 1265.8 | 1267.6 | 1269.4 | 1271.7 | 1283.9 | 1279.4 | 1142.8 | 941.0 | 760.9 | 604.9 |
| 35°   | 1376.6 | 1383.4 | 1385.2 | 1389.3 | 1393.8 | 1412.4 | 1360.4 | 1147.3 | 904.3 | 694.9 | 513.0 |
| 37.5° | 1536.3 | 1547.2 | 1547.2 | 1561.7 | 1553.1 | 1575.7 | 1432.7 | 1136.4 | 848.7 | 603.0 | 409.4 |
| 40°   | 1737.7 | 1742.6 | 1747.6 | 1749.4 | 1744.9 | 1742.2 | 1480.2 | 1109.7 | 770.4 | 487.7 | 299.5 |
| 42.5° | 1943.0 | 1941.2 | 1941.7 | 1944.9 | 1932.6 | 1881.5 | 1509.6 | 1063.1 | 673.2 | 364.2 | 214.9 |
| 45°   | 2164.3 | 2156.6 | 2154.3 | 2148.0 | 2137.1 | 2029.4 | 1526.4 | 997.5  | 545.1 | 256.1 | 168.7 |
| 47.5° | 2379.6 | 2370.1 | 2355.6 | 2338.0 | 2317.2 | 2148.4 | 1524.6 | 912.5  | 418.0 | 183.2 | 148.8 |
| 50°   | 2600.4 | 2583.6 | 2552.4 | 2535.2 | 2499.9 | 2266.5 | 1514.2 | 817.9  | 300.8 | 151.6 | 139.3 |
| 52.5° | 2852.8 | 2823.0 | 2794.0 | 2759.6 | 2701.3 | 2411.7 | 1498.3 | 711.6  | 219.4 | 138.9 | 133.0 |
| 55°   | 3229.2 | 3180.3 | 3132.8 | 3061.4 | 3004.8 | 2606.3 | 1471.6 | 597.2  | 173.3 | 133.9 | 129.4 |
| 57.5° | 3748.1 | 3664.9 | 3604.7 | 3508.3 | 3417.9 | 2875.4 | 1443.1 | 493.1  | 154.7 | 132.6 | 127.6 |
| 60°   | 4332.1 | 4206.8 | 4094.6 | 3976.1 | 3873.0 | 3211.6 | 1428.2 | 411.7  | 150.6 | 133.9 | 128.0 |
| 62.5° | 4698.6 | 4550.7 | 4410.4 | 4265.6 | 4117.3 | 3372.2 | 1363.5 | 355.6  | 152.5 | 139.8 | 131.6 |
| 65°   | 4652.4 | 4489.1 | 4336.7 | 4160.2 | 4020.4 | 3220.6 | 1198.8 | 300.8  | 155.6 | 150.2 | 141.6 |
| 67°   | 4341.2 | 4182.9 | 4009.1 | 3836.3 | 3700.6 | 2932.4 | 1012.0 | 253.3  | 159.2 | 162.0 | 152.5 |
| 67.5° | 4258.0 | 4079.7 | 3904.6 | 3745.8 | 3598.8 | 2843.3 | 963.2  | 241.6  | 160.1 | 165.1 | 156.1 |
| 70°   | 3550.9 | 3409.7 | 3204.8 | 3087.2 | 2980.8 | 2305.0 | 718.4  | 187.7  | 162.9 | 179.1 | 173.3 |
| 72.5° | 2484.6 | 2347.9 | 2240.7 | 2176.5 | 2114.5 | 1674.8 | 505.3  | 149.7  | 158.8 | 186.8 | 181.0 |
| 75°   | 1254.9 | 1223.7 | 1186.2 | 1165.4 | 1166.3 | 973.6  | 304.5  | 127.6  | 149.3 | 179.1 | 164.2 |
| 77.5° | 247.9  | 241.6  | 244.3  | 267.4  | 263.3  | 299.9  | 151.1  | 108.1  | 127.1 | 138.0 | 118.1 |
| 80°   | 119.9  | 115.8  | 112.2  | 111.3  | 109.0  | 104.5  | 95.0   | 90.0   | 103.1 | 90.9  | 78.3  |
| 82.5° | 77.8   | 73.3   | 71.5   | 67.9   | 68.3   | 74.2   | 82.8   | 86.4   | 83.7  | 62.9  | 52.9  |
| 85°   | 43.9   | 43.4   | 42.5   | 43.4   | 45.2   | 59.3   | 88.7   | 81.0   | 67.4  | 44.3  | 39.8  |
| 87.5° | 26.2   | 24.9   | 25.3   | 25.8   | 26.7   | 43.9   | 70.1   | 58.4   | 43.0  | 23.1  | 23.5  |
| 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: P177502

CATALOG NUMBER: VAL-F03-LED-E-U-GL3-7030

**CANDELA DISTRIBUTION (continued):**

|       | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 714.3 | 714.3 | 714.3 | 714.3 |
| 2.5°  | 694.0 | 692.2 | 692.2 | 691.7 |
| 5°    | 682.7 | 680.0 | 679.5 | 679.5 |
| 7.5°  | 680.9 | 677.2 | 676.8 | 675.4 |
| 10°   | 689.0 | 687.6 | 688.1 | 686.7 |
| 12.5° | 714.8 | 716.6 | 718.4 | 718.4 |
| 15°   | 754.1 | 752.8 | 755.0 | 752.8 |
| 17.5° | 783.1 | 771.3 | 768.6 | 767.3 |
| 20°   | 784.0 | 759.6 | 751.4 | 750.1 |
| 22.5° | 756.0 | 719.8 | 706.2 | 703.9 |
| 25°   | 708.5 | 662.8 | 645.6 | 643.8 |
| 27.5° | 648.7 | 597.6 | 572.3 | 571.4 |
| 30°   | 576.8 | 516.2 | 484.1 | 479.1 |
| 32.5° | 489.0 | 417.1 | 383.2 | 372.3 |
| 35°   | 387.7 | 314.0 | 282.3 | 281.4 |
| 37.5° | 289.5 | 232.1 | 211.7 | 210.8 |
| 40°   | 212.2 | 182.3 | 174.6 | 173.3 |
| 42.5° | 173.3 | 161.1 | 157.9 | 156.5 |
| 45°   | 155.2 | 150.2 | 148.4 | 147.0 |
| 47.5° | 144.3 | 141.1 | 139.8 | 139.8 |
| 50°   | 135.7 | 134.8 | 133.9 | 133.9 |
| 52.5° | 129.8 | 129.4 | 128.5 | 128.0 |
| 55°   | 124.9 | 123.1 | 123.5 | 123.1 |
| 57.5° | 121.7 | 119.0 | 119.0 | 119.0 |
| 60°   | 119.9 | 114.9 | 114.9 | 115.4 |
| 62.5° | 120.3 | 112.6 | 112.2 | 112.2 |
| 65°   | 124.0 | 111.3 | 108.6 | 109.0 |
| 67°   | 128.5 | 109.9 | 104.5 | 104.1 |
| 67.5° | 129.8 | 109.0 | 103.1 | 102.7 |
| 70°   | 135.3 | 106.3 | 96.4  | 95.5  |
| 72.5° | 136.2 | 102.2 | 89.6  | 88.7  |
| 75°   | 126.7 | 96.8  | 84.1  | 81.9  |
| 77.5° | 98.6  | 83.2  | 76.0  | 76.0  |
| 80°   | 69.2  | 63.8  | 54.3  | 53.8  |
| 82.5° | 50.7  | 48.0  | 39.8  | 38.9  |
| 85°   | 37.1  | 34.8  | 29.4  | 29.4  |
| 87.5° | 23.1  | 22.2  | 19.0  | 18.1  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)