

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: P177329

Luminaire Tested: **VAL-E02-LED-E-U-WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P177329
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VAL-E02-LED-E-U-WQ-7050
Description: VALET TUNNEL LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - WIDE TYPE V SQUARE
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6345.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G2

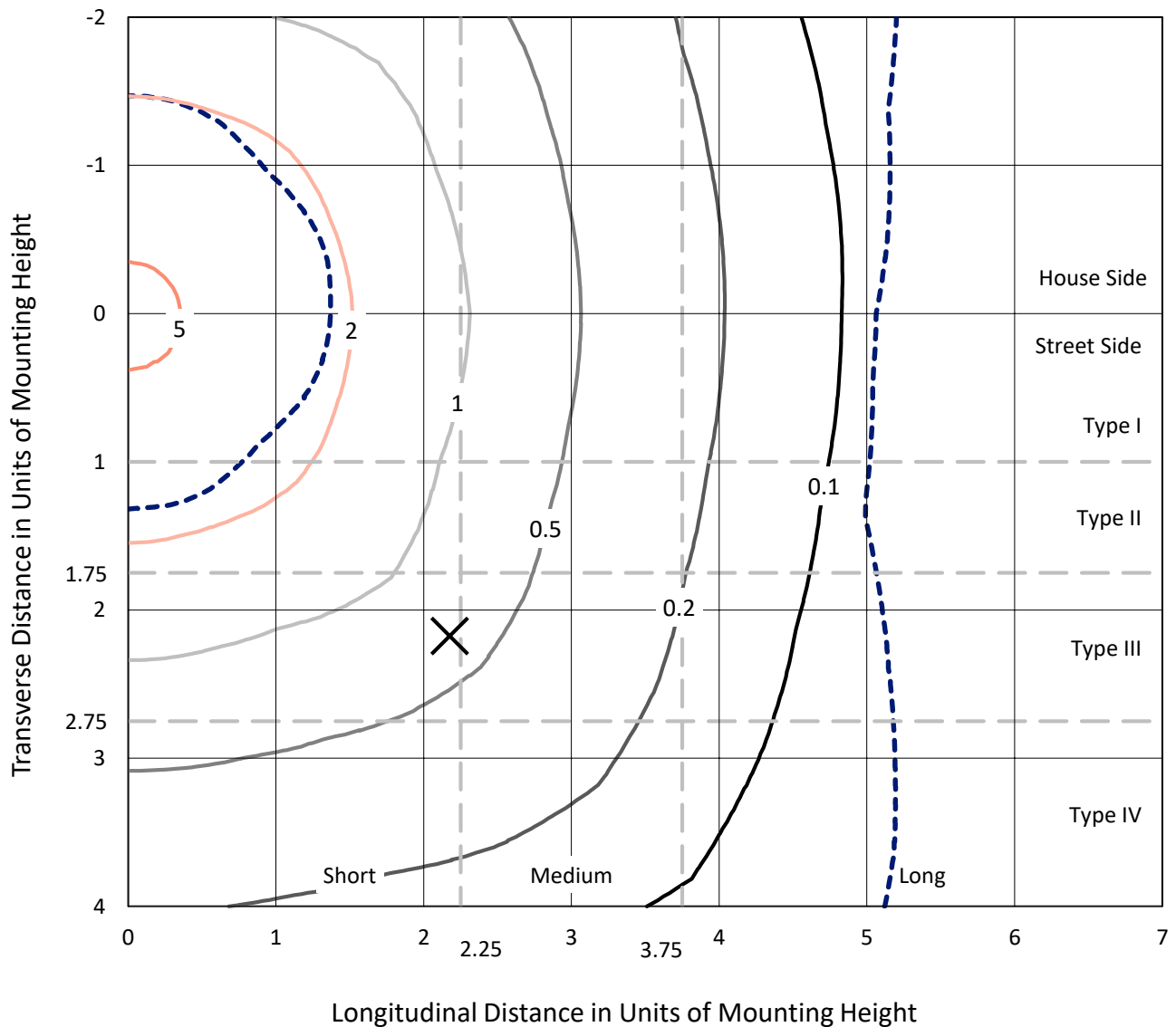
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

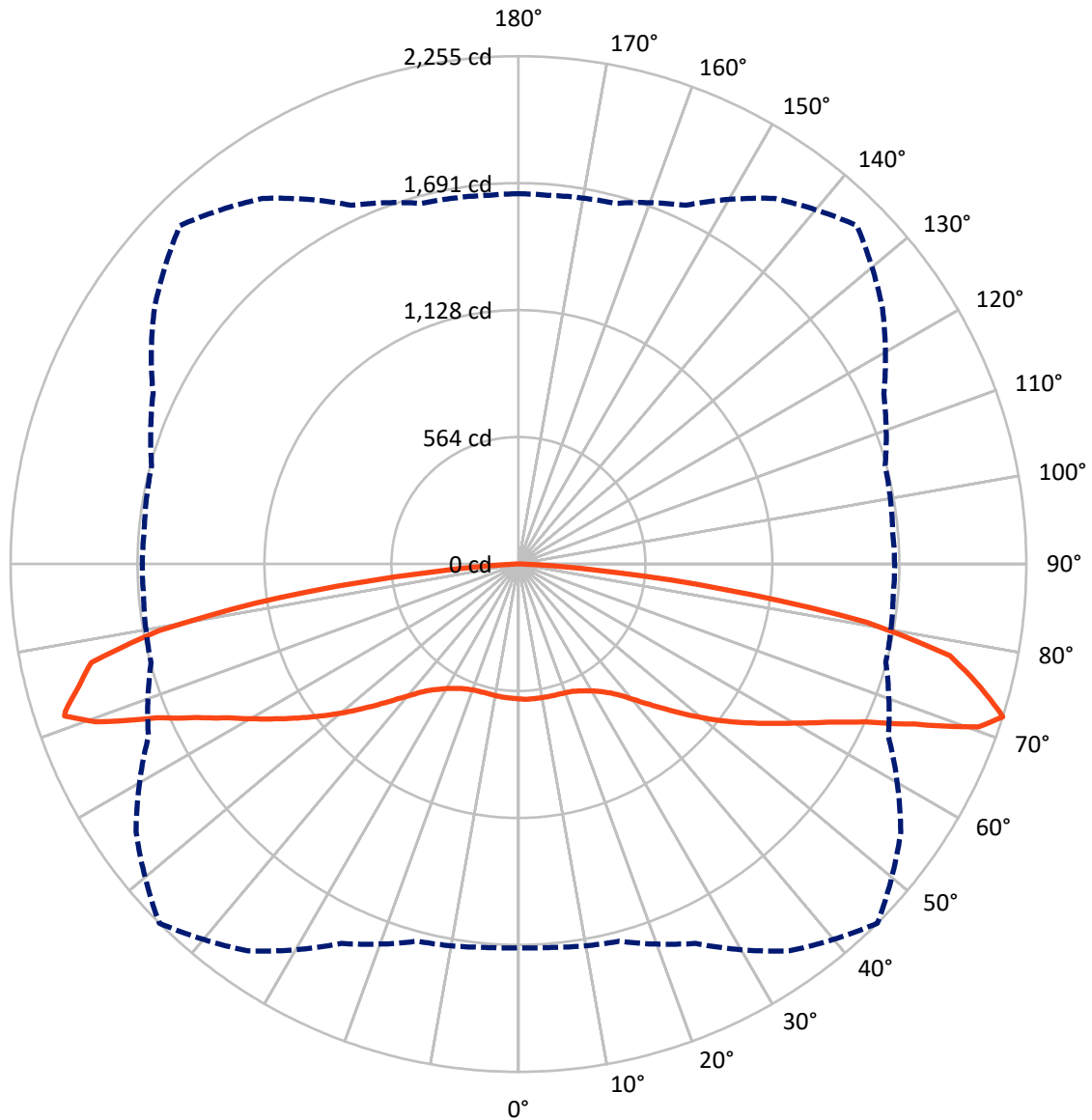
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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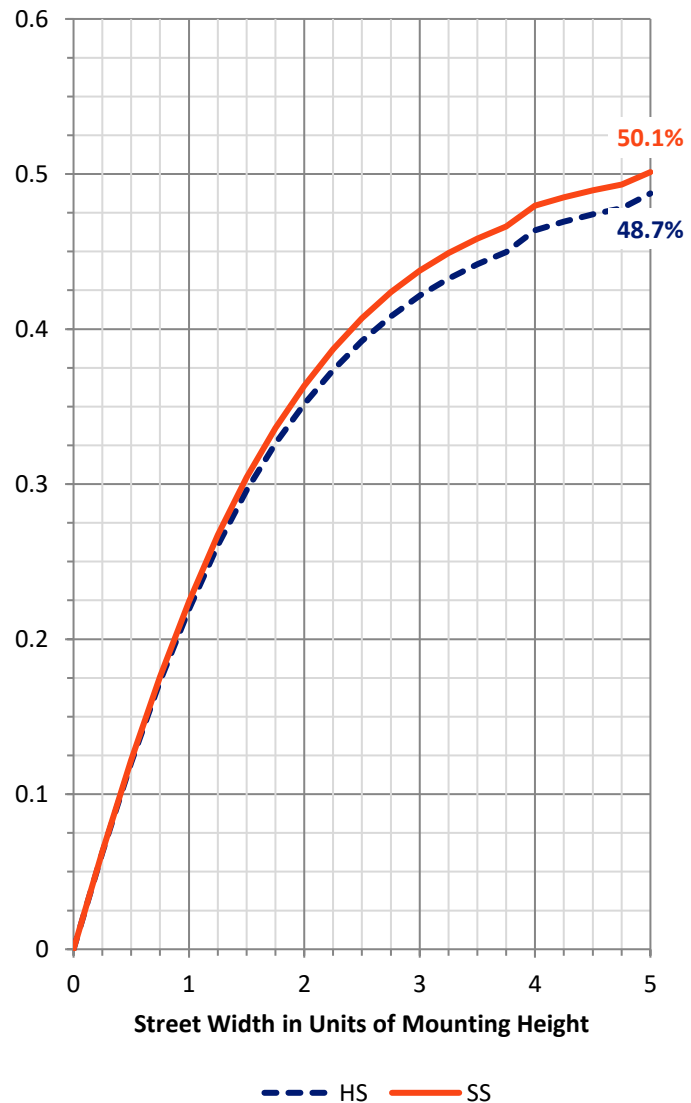
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3129.3 | 0.0 | 3129.3 |
| | % Fixture | 49.3 | 0.0 | 49.3 |
| Street Side | Lumens | 3216.3 | 0.0 | 3216.3 |
| | % Fixture | 50.7 | 0.0 | 50.7 |
| Total | Lumens | 6345.7 | 0.0 | 6345.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 57.2 | 0.9 |
| 10°-20° | 169.9 | 2.7 |
| 20°-30° | 285.4 | 4.5 |
| 30°-40° | 434.4 | 6.8 |
| 40°-50° | 686.7 | 10.8 |
| 50°-60° | 1048.8 | 16.5 |
| 60°-70° | 1536.5 | 24.2 |
| 70°-80° | 1745.6 | 27.5 |
| 80°-90° | 381.3 | 6.0 |
| 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° | 6345.7 | 100.0 |
| 0°-180° | 6345.7 | 100.0 |



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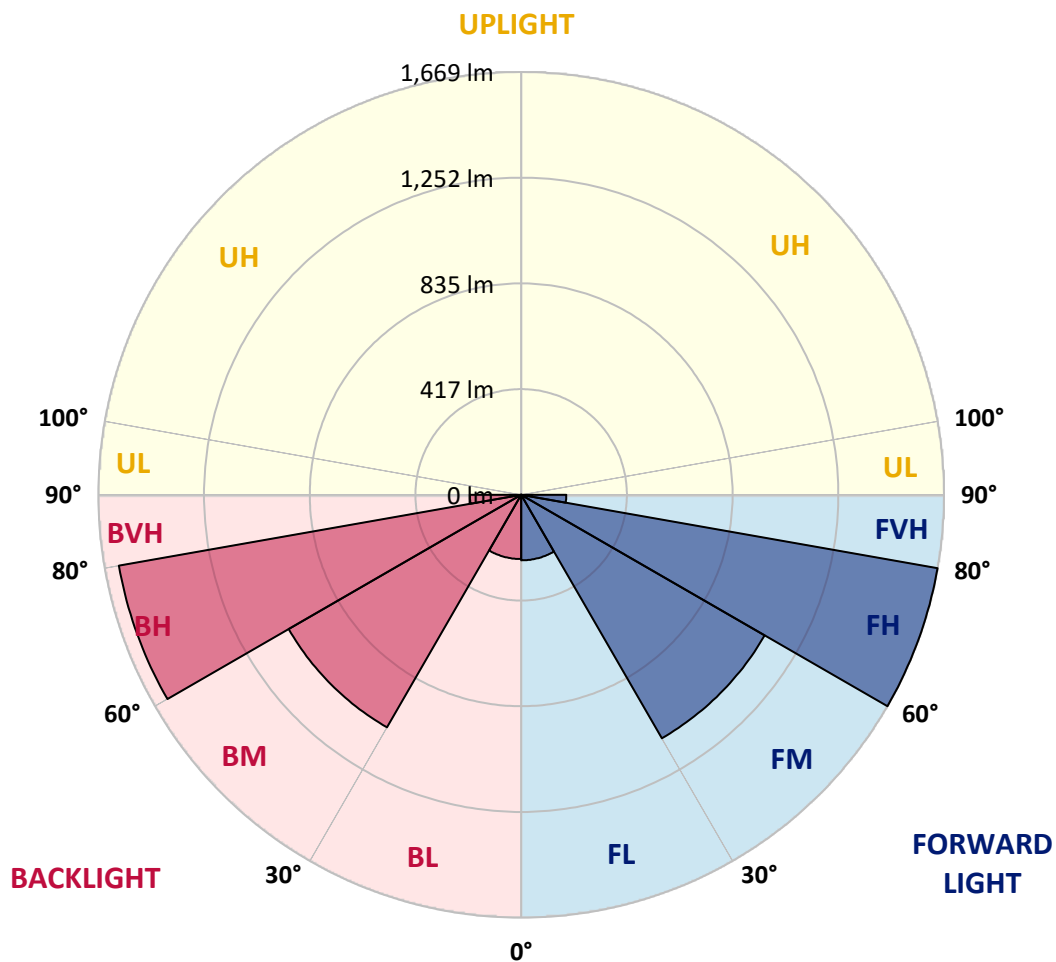
CATALOG NUMBER: VAL-E02-LED-E-U-WQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 258.8 | 4.1 | | | |
| FM (30°-60°) | 1109.8 | 17.5 | | | |
| FH (60°-80°) | 1669.4 | 26.3 | | | G1/1800 |
| FVH (80°-90°) | 178.3 | 2.8 | | | G2/225 |
| BL (0°-30°) | 253.7 | 4.0 | B1/500 | | |
| BM (30°-60°) | 1060.0 | 16.7 | B2/2500 | | |
| BH (60°-80°) | 1612.7 | 25.4 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 202.9 | 3.2 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 |
| 2.5° | 604.2 | 604.2 | 602.5 | 601.7 | 601.7 | 601.3 | 600.9 | 600.9 | 600.5 | 600.9 | 599.7 |
| 5° | 605.0 | 605.0 | 603.4 | 602.5 | 602.1 | 601.7 | 601.7 | 600.9 | 600.5 | 600.9 | 599.7 |
| 7.5° | 605.0 | 605.4 | 604.6 | 603.8 | 602.5 | 602.1 | 601.7 | 600.5 | 600.5 | 599.7 | 599.2 |
| 10° | 606.6 | 607.9 | 606.2 | 605.0 | 603.4 | 602.5 | 601.3 | 600.5 | 600.1 | 599.2 | 599.2 |
| 12.5° | 607.9 | 609.1 | 607.5 | 606.2 | 604.6 | 603.4 | 601.7 | 600.5 | 599.7 | 598.4 | 598.8 |
| 15° | 609.5 | 610.7 | 609.1 | 607.5 | 605.8 | 604.2 | 602.5 | 600.9 | 599.7 | 598.8 | 598.8 |
| 17.5° | 610.3 | 611.6 | 609.9 | 608.3 | 607.0 | 606.2 | 604.2 | 601.7 | 600.1 | 599.2 | 599.2 |
| 20° | 611.6 | 612.8 | 611.6 | 610.7 | 609.5 | 609.1 | 607.0 | 604.2 | 602.1 | 600.9 | 600.5 |
| 22.5° | 614.4 | 615.3 | 614.8 | 614.8 | 614.8 | 614.4 | 612.8 | 608.3 | 605.8 | 603.8 | 603.4 |
| 25° | 621.4 | 621.0 | 621.8 | 622.6 | 623.1 | 623.9 | 621.4 | 616.5 | 613.2 | 609.9 | 609.5 |
| 27.5° | 632.9 | 633.3 | 633.7 | 635.4 | 637.0 | 637.4 | 635.0 | 629.6 | 624.7 | 620.2 | 619.8 |
| 30° | 646.0 | 646.0 | 647.7 | 651.0 | 652.6 | 653.8 | 651.4 | 644.8 | 638.6 | 634.1 | 633.3 |
| 32.5° | 664.9 | 666.6 | 667.4 | 671.1 | 674.4 | 675.6 | 671.9 | 664.9 | 657.9 | 652.2 | 651.0 |
| 35° | 692.0 | 694.5 | 695.3 | 698.6 | 702.3 | 702.7 | 699.4 | 691.6 | 684.2 | 676.4 | 676.8 |
| 37.5° | 730.2 | 730.6 | 732.6 | 733.5 | 740.4 | 740.4 | 735.1 | 728.1 | 720.7 | 713.8 | 711.7 |
| 40° | 781.1 | 781.5 | 782.3 | 781.1 | 789.3 | 791.7 | 784.8 | 774.1 | 767.1 | 758.1 | 756.9 |
| 42.5° | 836.5 | 840.6 | 840.2 | 838.1 | 846.3 | 851.7 | 843.0 | 830.7 | 823.3 | 813.9 | 812.3 |
| 45° | 905.0 | 904.2 | 900.5 | 905.0 | 914.5 | 920.2 | 909.5 | 893.9 | 886.1 | 874.2 | 873.8 |
| 47.5° | 971.5 | 970.7 | 964.9 | 968.2 | 985.9 | 995.3 | 979.7 | 962.1 | 951.8 | 944.8 | 939.5 |
| 50° | 1034.7 | 1040.5 | 1033.1 | 1040.1 | 1063.0 | 1075.8 | 1061.4 | 1033.5 | 1021.2 | 1010.5 | 1007.6 |
| 52.5° | 1109.0 | 1112.3 | 1105.7 | 1116.8 | 1142.3 | 1160.7 | 1141.0 | 1104.9 | 1092.6 | 1080.7 | 1077.0 |
| 55° | 1184.9 | 1183.3 | 1180.0 | 1192.3 | 1223.5 | 1245.3 | 1223.9 | 1180.4 | 1162.4 | 1153.3 | 1153.3 |
| 57.5° | 1259.6 | 1260.5 | 1252.7 | 1267.4 | 1306.8 | 1335.6 | 1308.9 | 1255.5 | 1233.4 | 1223.1 | 1226.4 |
| 60° | 1339.7 | 1339.7 | 1327.8 | 1341.3 | 1396.3 | 1432.9 | 1392.6 | 1331.5 | 1307.3 | 1301.1 | 1301.5 |
| 62.5° | 1429.6 | 1426.3 | 1413.2 | 1430.0 | 1496.9 | 1545.3 | 1494.8 | 1418.5 | 1386.9 | 1386.9 | 1389.8 |
| 65° | 1533.4 | 1528.1 | 1523.6 | 1542.9 | 1629.5 | 1688.6 | 1622.1 | 1525.6 | 1497.7 | 1494.4 | 1499.8 |
| 67.5° | 1682.8 | 1688.6 | 1677.1 | 1702.5 | 1820.7 | 1897.9 | 1796.9 | 1672.6 | 1643.0 | 1640.1 | 1653.3 |
| 70° | 1817.4 | 1811.7 | 1826.5 | 1898.3 | 2059.2 | 2166.7 | 2026.4 | 1835.1 | 1750.5 | 1733.3 | 1738.6 |
| 72° | 1704.2 | 1708.7 | 1733.7 | 1858.5 | 2096.9 | 2255.0 | 2072.7 | 1812.5 | 1688.6 | 1670.5 | 1670.1 |
| 72.5° | 1677.9 | 1681.2 | 1702.5 | 1822.4 | 2069.9 | 2231.6 | 2049.3 | 1783.8 | 1666.8 | 1651.2 | 1650.4 |
| 75° | 1540.0 | 1546.5 | 1580.2 | 1696.8 | 1948.0 | 2100.2 | 1929.1 | 1680.8 | 1552.3 | 1522.7 | 1528.9 |
| 77.5° | 1311.8 | 1325.3 | 1359.4 | 1493.6 | 1788.3 | 1958.6 | 1775.6 | 1489.9 | 1345.8 | 1324.1 | 1317.1 |
| 80° | 962.5 | 944.4 | 1006.0 | 1125.0 | 1334.8 | 1569.1 | 1354.0 | 1122.6 | 973.2 | 933.3 | 943.2 |
| 82.5° | 327.5 | 335.3 | 432.6 | 577.5 | 732.6 | 916.1 | 777.8 | 562.3 | 414.1 | 364.1 | 341.9 |
| 85° | 39.8 | 43.1 | 67.3 | 122.7 | 230.7 | 333.3 | 235.6 | 124.8 | 77.6 | 47.6 | 41.9 |
| 87.5° | 19.3 | 20.5 | 28.7 | 30.8 | 38.2 | 32.4 | 38.6 | 24.6 | 23.4 | 14.4 | 11.9 |
| 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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CATALOG NUMBER: VAL-E02-LED-E-U-WQ-7050

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 | 599.2 |
| 2.5° | 599.2 | 598.4 | 598.0 | 597.2 | 596.4 | 596.4 | 596.4 | 596.4 | 596.4 | 596.8 |
| 5° | 599.2 | 598.4 | 598.0 | 596.8 | 596.0 | 596.0 | 595.6 | 596.0 | 595.6 | 596.0 |
| 7.5° | 599.2 | 598.0 | 596.8 | 595.6 | 594.7 | 595.1 | 594.3 | 593.9 | 594.3 | 594.3 |
| 10° | 598.8 | 596.8 | 595.1 | 593.9 | 593.5 | 593.1 | 593.1 | 592.7 | 593.5 | 593.1 |
| 12.5° | 598.4 | 596.0 | 593.9 | 592.3 | 591.9 | 591.9 | 591.9 | 591.9 | 593.1 | 592.7 |
| 15° | 598.0 | 595.6 | 593.5 | 591.4 | 591.0 | 591.9 | 591.9 | 592.7 | 593.5 | 593.5 |
| 17.5° | 598.4 | 595.6 | 593.1 | 591.4 | 591.4 | 592.3 | 592.7 | 593.9 | 595.1 | 594.3 |
| 20° | 600.1 | 596.8 | 594.7 | 593.1 | 593.9 | 594.7 | 594.7 | 595.6 | 596.8 | 596.0 |
| 22.5° | 602.5 | 600.1 | 598.4 | 598.0 | 599.2 | 599.7 | 599.2 | 598.8 | 599.2 | 598.4 |
| 25° | 608.3 | 605.8 | 604.6 | 606.2 | 607.5 | 607.0 | 605.4 | 603.8 | 602.9 | 602.5 |
| 27.5° | 618.9 | 616.9 | 616.5 | 618.5 | 619.8 | 617.7 | 614.8 | 612.4 | 611.6 | 610.3 |
| 30° | 632.1 | 630.8 | 632.1 | 634.1 | 634.5 | 631.3 | 627.2 | 623.5 | 622.2 | 622.2 |
| 32.5° | 649.3 | 648.1 | 651.0 | 654.2 | 655.1 | 650.6 | 644.0 | 639.1 | 635.8 | 635.4 |
| 35° | 674.4 | 673.5 | 674.4 | 678.5 | 678.1 | 673.5 | 666.1 | 660.4 | 657.1 | 657.1 |
| 37.5° | 709.2 | 708.4 | 706.4 | 710.5 | 710.1 | 703.9 | 696.1 | 691.2 | 687.5 | 687.9 |
| 40° | 754.8 | 753.6 | 751.1 | 751.9 | 755.2 | 747.0 | 737.2 | 730.6 | 730.2 | 730.2 |
| 42.5° | 809.4 | 803.6 | 804.5 | 809.4 | 806.9 | 797.1 | 788.0 | 782.3 | 782.3 | 781.9 |
| 45° | 868.9 | 866.9 | 866.0 | 867.7 | 869.7 | 861.9 | 846.7 | 840.2 | 839.8 | 839.8 |
| 47.5° | 937.9 | 927.6 | 929.7 | 933.8 | 938.7 | 928.8 | 909.5 | 901.7 | 900.5 | 900.9 |
| 50° | 1005.2 | 994.5 | 996.6 | 1005.2 | 1014.6 | 999.0 | 975.2 | 965.8 | 964.1 | 964.9 |
| 52.5° | 1074.9 | 1065.9 | 1065.9 | 1080.3 | 1092.6 | 1073.3 | 1043.3 | 1031.9 | 1031.9 | 1031.4 |
| 55° | 1148.8 | 1136.5 | 1141.4 | 1159.9 | 1174.7 | 1151.3 | 1114.4 | 1105.3 | 1098.3 | 1101.2 |
| 57.5° | 1222.3 | 1210.0 | 1214.1 | 1242.4 | 1260.9 | 1233.0 | 1186.6 | 1167.7 | 1163.6 | 1162.8 |
| 60° | 1297.4 | 1283.5 | 1288.4 | 1332.7 | 1354.5 | 1317.5 | 1249.4 | 1226.4 | 1222.7 | 1222.3 |
| 62.5° | 1380.7 | 1370.9 | 1378.3 | 1429.6 | 1454.6 | 1402.1 | 1316.3 | 1290.0 | 1291.3 | 1288.4 |
| 65° | 1484.6 | 1476.8 | 1489.5 | 1552.3 | 1583.1 | 1505.9 | 1402.9 | 1372.5 | 1376.2 | 1375.8 |
| 67.5° | 1633.1 | 1623.7 | 1631.5 | 1719.3 | 1746.8 | 1647.9 | 1523.2 | 1493.2 | 1498.9 | 1508.4 |
| 70° | 1726.3 | 1733.3 | 1803.5 | 1926.6 | 2002.1 | 1901.2 | 1736.2 | 1679.9 | 1682.8 | 1684.0 |
| 72° | 1668.0 | 1685.7 | 1789.9 | 1973.8 | 2125.3 | 1981.6 | 1757.1 | 1657.4 | 1642.6 | 1644.2 |
| 72.5° | 1652.4 | 1666.0 | 1770.6 | 1954.1 | 2115.0 | 1964.4 | 1734.5 | 1640.1 | 1616.3 | 1617.1 |
| 75° | 1535.1 | 1560.9 | 1661.5 | 1852.3 | 2024.7 | 1877.8 | 1647.5 | 1547.0 | 1528.5 | 1528.5 |
| 77.5° | 1332.7 | 1368.8 | 1471.8 | 1739.9 | 1946.7 | 1786.7 | 1537.1 | 1412.7 | 1393.9 | 1386.9 |
| 80° | 980.5 | 1033.5 | 1134.9 | 1399.6 | 1622.9 | 1476.8 | 1265.4 | 1137.3 | 1107.8 | 1097.1 |
| 82.5° | 386.2 | 431.8 | 602.1 | 843.0 | 1069.6 | 910.4 | 688.3 | 574.2 | 482.7 | 472.8 |
| 85° | 48.0 | 77.6 | 151.9 | 277.9 | 424.8 | 302.1 | 180.2 | 94.4 | 50.9 | 42.7 |
| 87.5° | 14.0 | 26.3 | 28.7 | 46.8 | 55.4 | 50.9 | 32.0 | 28.7 | 16.0 | 14.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)