

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: INVUE

Report Number: P147169

Luminaire Tested: **VXS-E02-LED-E1-5MQ-7030**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P147169  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33674)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: VXS-E02-LED-E1-5MQ-7030  
Description: VISION SITE SMALL LED LUMINAIRE  
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (42) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5888.8 lumens  
Efficiency: N/A  
Efficacy: 113.0 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

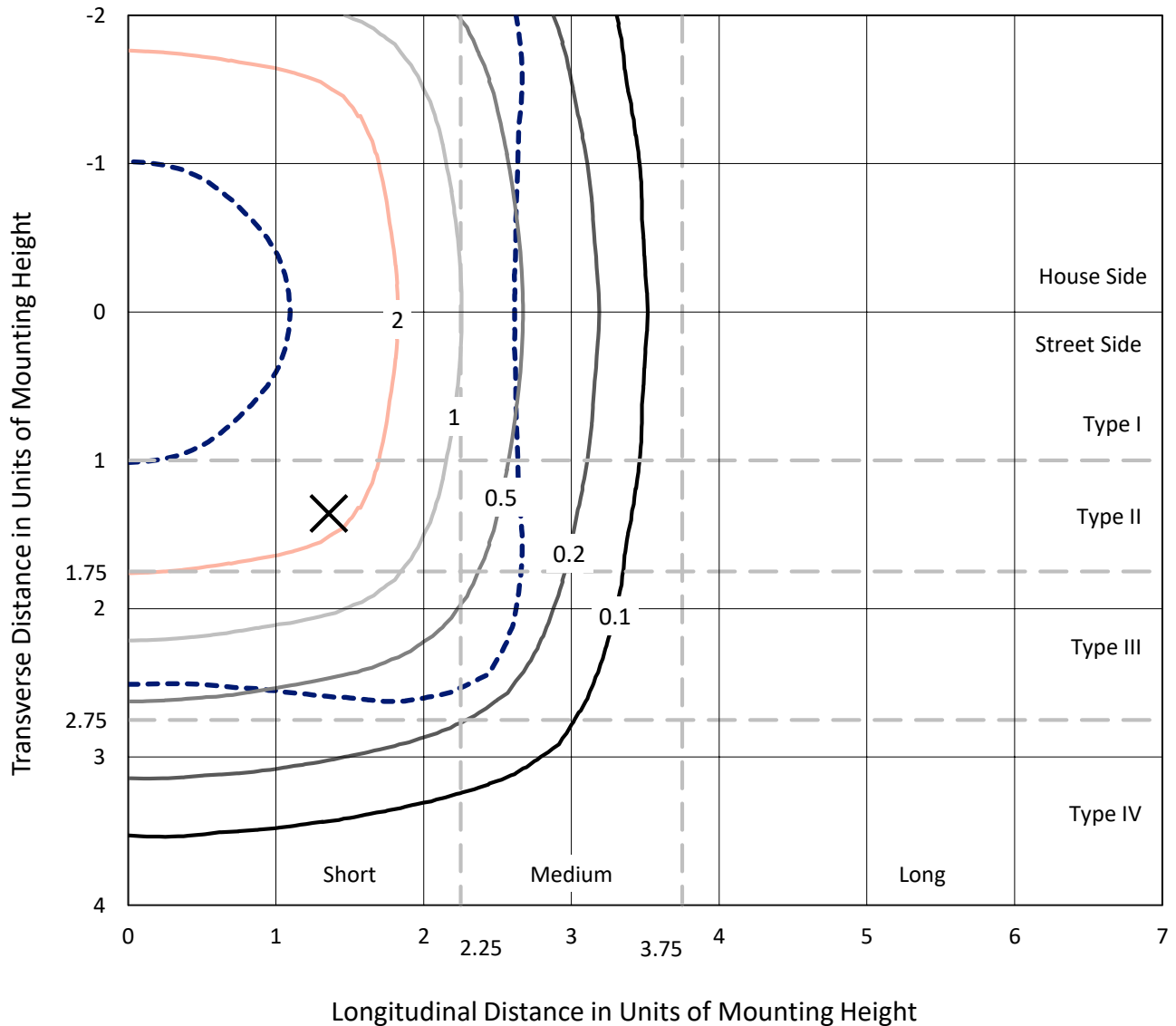
Input Watts (W): 52.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P147169  
 CATALOG NUMBER: VXS-E02-LED-E1-5MQ-7030

### Iso-Footcandle Lines of Horizontal Illumination

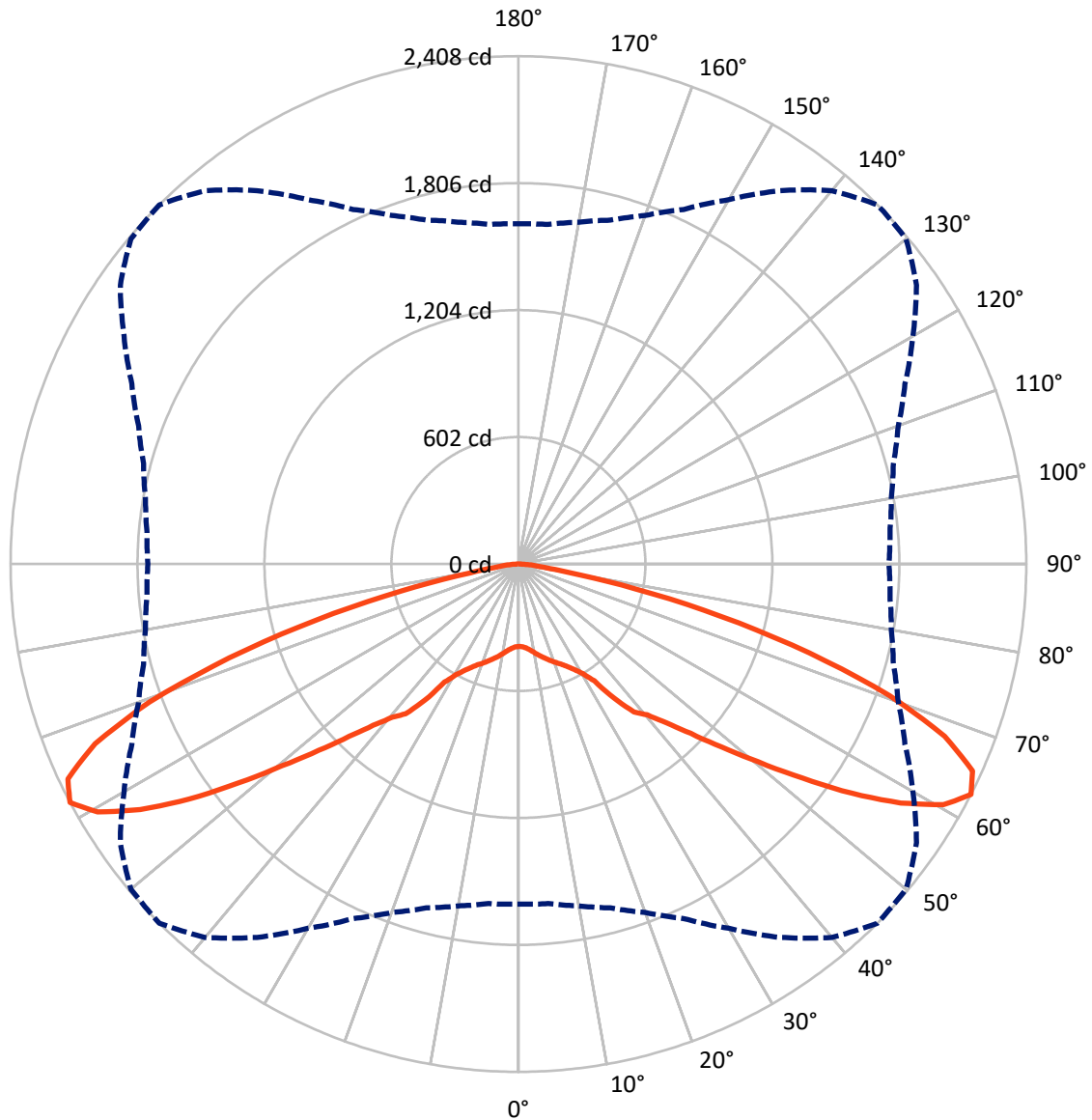
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P147169  
CATALOG NUMBER: VXS-E02-LED-E1-5MQ-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P147169

CATALOG NUMBER: VXS-E02-LED-E1-5MQ-7030

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2944.4   | 0.0    | 2944.4 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2944.4   | 0.0    | 2944.4 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5888.8   | 0.0    | 5888.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 39.2   | 0.7       |
| 10°-20°   | 132.4  | 2.2       |
| 20°-30°   | 256.0  | 4.3       |
| 30°-40°   | 495.7  | 8.4       |
| 40°-50°   | 895.1  | 15.2      |
| 50°-60°   | 1556.5 | 26.4      |
| 60°-70°   | 1767.0 | 30.0      |
| 70°-80°   | 685.0  | 11.6      |
| 80°-90°   | 61.8   | 1.0       |
| 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°    | 5888.8 | 100.0     |
| 0°-180°   | 5888.8 | 100.0     |



REPORT NUMBER: P147169

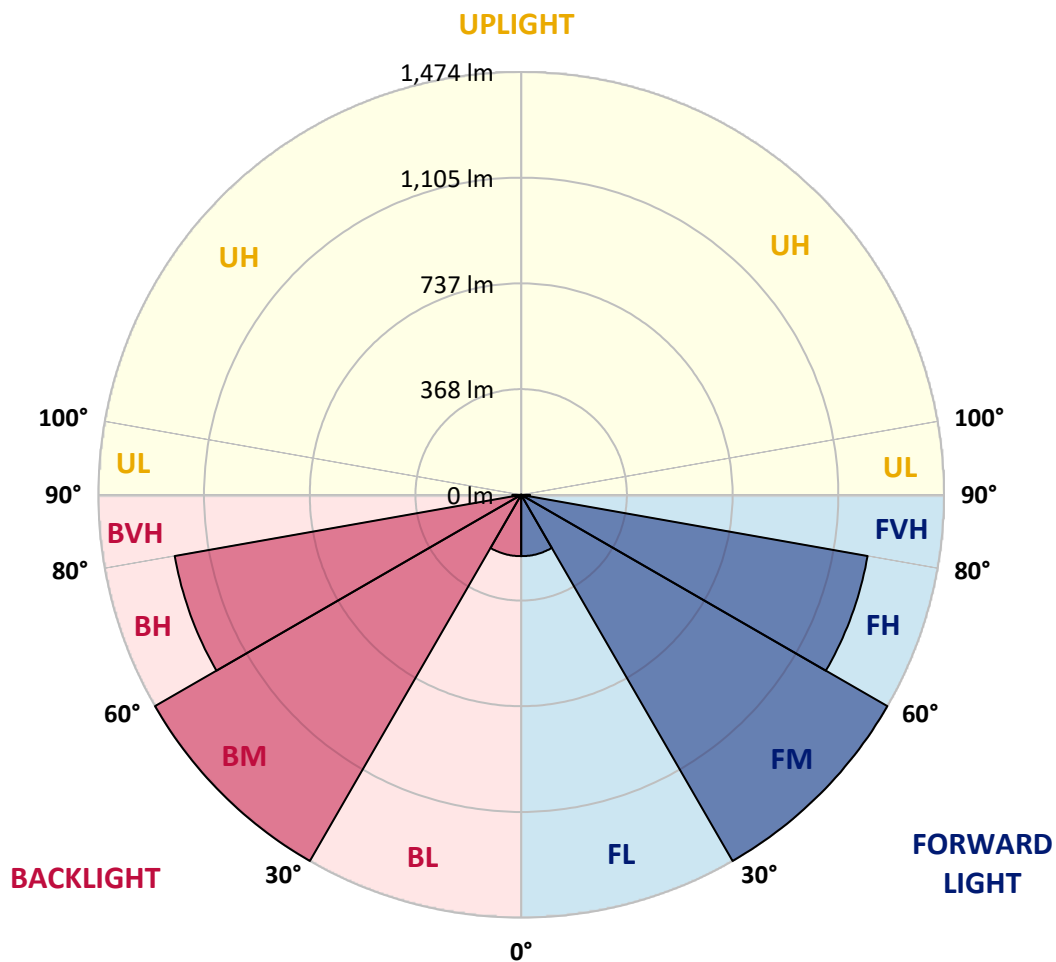
CATALOG NUMBER: VXS-E02-LED-E1-5MQ-7030

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 213.8  | 3.6       |                         |      |         |
| FM   | (30°-60°)   | 1473.7 | 25.0      |                         |      |         |
| FH   | (60°-80°)   | 1226.0 | 20.8      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 30.9   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 213.8  | 3.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1473.7 | 25.0      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1226.0 | 20.8      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 30.9   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Short





REPORT NUMBER: P147169

CATALOG NUMBER: VXS-E02-LED-E1-5MQ-7030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  |
| 2.5°  | 393.4  | 394.6  | 394.2  | 393.6  | 393.6  | 393.6  | 393.4  | 392.4  | 392.1  | 392.7  | 393.4  |
| 5°    | 402.5  | 402.5  | 402.5  | 402.5  | 401.9  | 401.9  | 401.2  | 400.6  | 401.0  | 400.4  | 400.0  |
| 7.5°  | 416.5  | 415.5  | 415.5  | 415.2  | 415.3  | 414.7  | 413.8  | 412.5  | 412.8  | 412.5  | 412.2  |
| 10°   | 433.0  | 433.2  | 432.3  | 433.2  | 431.7  | 431.4  | 430.3  | 429.6  | 429.2  | 428.4  | 428.4  |
| 12.5° | 452.6  | 451.8  | 451.8  | 451.2  | 450.6  | 449.9  | 448.1  | 447.9  | 446.6  | 446.0  | 445.2  |
| 15°   | 471.3  | 471.0  | 469.8  | 468.6  | 468.3  | 467.6  | 465.5  | 464.2  | 464.0  | 462.4  | 461.2  |
| 17.5° | 489.8  | 489.2  | 487.7  | 487.2  | 485.9  | 485.0  | 483.1  | 481.3  | 480.4  | 479.8  | 478.3  |
| 20°   | 509.6  | 509.0  | 507.6  | 506.3  | 504.8  | 503.5  | 500.8  | 499.3  | 498.3  | 497.4  | 496.3  |
| 22.5° | 534.3  | 533.1  | 530.6  | 528.5  | 525.2  | 523.9  | 520.3  | 518.1  | 516.7  | 515.4  | 514.8  |
| 25°   | 561.0  | 561.5  | 558.1  | 555.2  | 551.4  | 548.0  | 543.4  | 540.9  | 539.5  | 538.2  | 537.9  |
| 27.5° | 594.6  | 594.9  | 591.9  | 587.9  | 581.8  | 578.1  | 572.0  | 569.0  | 568.1  | 566.8  | 566.6  |
| 30°   | 647.6  | 644.8  | 639.7  | 633.3  | 627.8  | 619.9  | 611.0  | 608.0  | 605.0  | 603.9  | 604.0  |
| 32.5° | 745.0  | 743.4  | 739.2  | 723.3  | 716.1  | 699.6  | 684.1  | 675.2  | 665.3  | 660.3  | 657.3  |
| 35°   | 813.3  | 812.6  | 809.2  | 803.7  | 799.2  | 795.9  | 786.7  | 785.2  | 783.3  | 783.3  | 785.8  |
| 37.5° | 863.4  | 859.8  | 859.2  | 860.1  | 858.9  | 859.5  | 866.7  | 876.8  | 885.4  | 889.5  | 889.0  |
| 40°   | 937.7  | 932.5  | 935.5  | 933.5  | 930.8  | 930.2  | 932.5  | 936.5  | 940.4  | 940.4  | 939.5  |
| 42.5° | 1034.8 | 1037.3 | 1038.5 | 1029.6 | 1023.8 | 1022.4 | 1028.1 | 1026.9 | 1030.9 | 1029.4 | 1025.4 |
| 45°   | 1179.1 | 1177.6 | 1175.5 | 1164.8 | 1155.6 | 1148.4 | 1149.8 | 1147.8 | 1148.1 | 1145.7 | 1142.6 |
| 47.5° | 1324.7 | 1329.7 | 1321.0 | 1315.9 | 1305.5 | 1300.3 | 1304.6 | 1300.9 | 1308.0 | 1295.1 | 1289.0 |
| 50°   | 1465.9 | 1469.6 | 1466.5 | 1459.3 | 1459.3 | 1466.5 | 1471.7 | 1478.4 | 1488.2 | 1473.6 | 1451.6 |
| 52.5° | 1581.6 | 1584.7 | 1589.2 | 1595.3 | 1610.3 | 1625.7 | 1647.7 | 1671.1 | 1689.7 | 1686.9 | 1662.1 |
| 55°   | 1652.2 | 1656.0 | 1663.5 | 1684.6 | 1711.3 | 1752.1 | 1801.7 | 1856.2 | 1898.9 | 1919.6 | 1901.3 |
| 57.5° | 1676.0 | 1678.8 | 1699.5 | 1724.8 | 1766.4 | 1826.9 | 1910.1 | 2004.1 | 2086.1 | 2138.2 | 2129.9 |
| 60°   | 1670.6 | 1670.5 | 1691.6 | 1726.2 | 1784.7 | 1865.1 | 1982.6 | 2112.8 | 2238.3 | 2316.3 | 2304.7 |
| 62.5° | 1613.0 | 1616.0 | 1646.2 | 1687.9 | 1758.5 | 1854.7 | 1994.8 | 2161.2 | 2311.4 | 2408.3 | 2398.8 |
| 65°   | 1486.9 | 1489.0 | 1521.7 | 1571.3 | 1650.2 | 1763.9 | 1917.1 | 2101.6 | 2273.6 | 2366.8 | 2349.1 |
| 67.5° | 1283.3 | 1285.4 | 1311.9 | 1367.9 | 1451.3 | 1570.4 | 1735.6 | 1938.8 | 2107.2 | 2180.7 | 2127.8 |
| 70°   | 1020.8 | 1026.9 | 1043.9 | 1103.3 | 1166.6 | 1283.3 | 1435.4 | 1638.5 | 1797.5 | 1867.2 | 1808.7 |
| 72.5° | 695.8  | 711.2  | 731.8  | 784.6  | 845.2  | 942.0  | 1063.1 | 1234.3 | 1361.9 | 1442.5 | 1390.5 |
| 75°   | 391.8  | 413.7  | 420.1  | 460.0  | 509.9  | 586.3  | 675.0  | 797.6  | 926.4  | 991.9  | 929.1  |
| 77.5° | 169.2  | 187.3  | 195.1  | 213.7  | 252.6  | 284.7  | 338.5  | 421.3  | 520.9  | 566.8  | 491.6  |
| 80°   | 83.4   | 87.7   | 91.0   | 96.8   | 107.8  | 118.1  | 143.7  | 179.9  | 220.7  | 231.1  | 183.8  |
| 82.5° | 64.5   | 67.6   | 73.4   | 77.9   | 80.6   | 83.4   | 85.9   | 90.8   | 94.7   | 96.8   | 91.3   |
| 85°   | 45.4   | 49.3   | 55.8   | 60.9   | 63.9   | 66.1   | 68.2   | 69.7   | 66.1   | 60.3   | 63.3   |
| 87.5° | 11.8   | 15.5   | 21.7   | 23.4   | 26.4   | 28.0   | 27.4   | 28.3   | 25.6   | 18.7   | 20.7   |
| 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: P147169

CATALOG NUMBER: VXS-E02-LED-E1-5MQ-7030

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  | 390.9  |
| 2.5°  | 393.0  | 392.7  | 393.1  | 393.1  | 393.1  | 392.7  | 392.7  | 392.7  |
| 5°    | 400.0  | 400.0  | 400.3  | 399.8  | 399.8  | 400.0  | 399.8  | 399.5  |
| 7.5°  | 412.0  | 411.6  | 411.6  | 411.3  | 411.6  | 411.3  | 411.4  | 411.0  |
| 10°   | 427.8  | 427.2  | 427.5  | 426.5  | 426.5  | 426.2  | 426.3  | 426.2  |
| 12.5° | 444.8  | 443.9  | 444.1  | 443.3  | 441.8  | 442.1  | 442.3  | 442.1  |
| 15°   | 461.2  | 460.3  | 459.5  | 458.9  | 457.8  | 458.2  | 458.2  | 457.9  |
| 17.5° | 477.9  | 476.2  | 475.9  | 474.9  | 474.6  | 474.6  | 474.6  | 474.9  |
| 20°   | 495.3  | 494.1  | 493.9  | 492.8  | 492.6  | 493.5  | 493.9  | 493.2  |
| 22.5° | 514.0  | 513.4  | 513.9  | 513.4  | 514.2  | 514.8  | 515.1  | 514.5  |
| 25°   | 537.4  | 536.8  | 537.6  | 539.8  | 541.0  | 541.7  | 543.2  | 542.5  |
| 27.5° | 567.5  | 566.8  | 569.0  | 572.0  | 573.9  | 577.0  | 578.4  | 579.1  |
| 30°   | 606.4  | 609.1  | 610.4  | 616.6  | 617.8  | 622.6  | 622.6  | 624.8  |
| 32.5° | 663.1  | 668.2  | 677.4  | 686.8  | 699.9  | 709.4  | 709.4  | 714.2  |
| 35°   | 787.4  | 789.4  | 796.5  | 797.9  | 800.7  | 803.7  | 800.7  | 803.1  |
| 37.5° | 882.6  | 873.2  | 866.5  | 857.0  | 851.2  | 851.2  | 851.8  | 851.2  |
| 40°   | 931.4  | 927.7  | 924.6  | 916.7  | 915.4  | 915.2  | 915.1  | 916.4  |
| 42.5° | 1018.4 | 1009.5 | 1004.7 | 998.0  | 995.9  | 995.2  | 994.9  | 995.5  |
| 45°   | 1131.6 | 1117.3 | 1104.2 | 1097.6 | 1091.8 | 1086.2 | 1088.1 | 1088.1 |
| 47.5° | 1263.4 | 1241.2 | 1219.9 | 1208.4 | 1198.3 | 1193.7 | 1190.8 | 1189.7 |
| 50°   | 1423.8 | 1392.8 | 1365.4 | 1343.8 | 1329.2 | 1328.9 | 1330.4 | 1320.7 |
| 52.5° | 1620.5 | 1571.6 | 1537.5 | 1508.2 | 1494.5 | 1493.1 | 1488.1 | 1482.7 |
| 55°   | 1838.5 | 1780.4 | 1724.1 | 1692.7 | 1674.8 | 1665.1 | 1659.3 | 1650.2 |
| 57.5° | 2063.2 | 1985.1 | 1904.0 | 1853.8 | 1822.2 | 1800.2 | 1788.6 | 1783.4 |
| 60°   | 2236.5 | 2129.5 | 2022.8 | 1942.1 | 1889.4 | 1856.8 | 1836.8 | 1828.5 |
| 62.5° | 2304.7 | 2159.8 | 2022.8 | 1916.8 | 1840.7 | 1795.6 | 1768.5 | 1756.7 |
| 65°   | 2223.4 | 2051.6 | 1895.8 | 1778.9 | 1694.0 | 1643.7 | 1614.2 | 1601.5 |
| 67.5° | 1996.3 | 1844.7 | 1675.0 | 1558.8 | 1471.4 | 1421.8 | 1389.8 | 1380.4 |
| 70°   | 1673.6 | 1518.5 | 1356.7 | 1252.7 | 1174.9 | 1134.3 | 1101.1 | 1097.2 |
| 72.5° | 1257.6 | 1124.0 | 985.2  | 899.4  | 836.6  | 769.6  | 752.6  | 761.1  |
| 75°   | 806.2  | 681.0  | 557.5  | 480.1  | 422.9  | 359.0  | 334.3  | 340.4  |
| 77.5° | 381.8  | 295.6  | 213.5  | 165.0  | 138.4  | 118.4  | 113.3  | 110.3  |
| 80°   | 141.6  | 114.8  | 101.3  | 96.2   | 92.6   | 89.2   | 86.8   | 84.0   |
| 82.5° | 91.6   | 89.5   | 86.7   | 85.8   | 83.1   | 78.9   | 70.9   | 67.6   |
| 85°   | 68.5   | 68.5   | 64.9   | 65.2   | 63.0   | 57.6   | 50.3   | 46.3   |
| 87.5° | 20.1   | 18.0   | 16.4   | 15.2   | 14.9   | 13.5   | 9.7    | 8.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)