

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: P271267

Luminaire Tested: **XNV-AF-01-LED-U-T3-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271267  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (p24135)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV-AF-01-LED-U-T3-7027-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4246.9 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

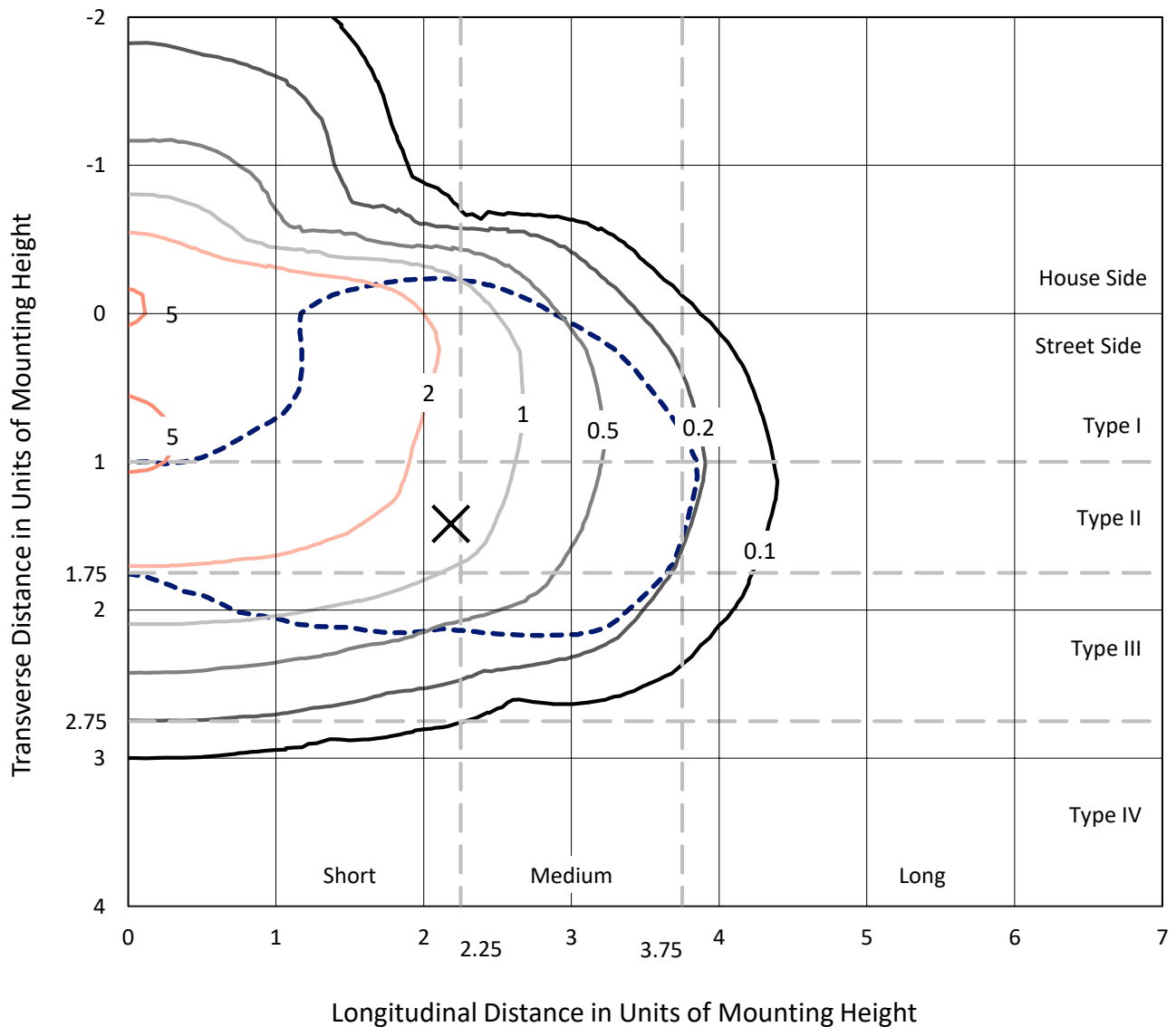
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271267  
 CATALOG NUMBER: XNV-AF-01-LED-U-T3-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

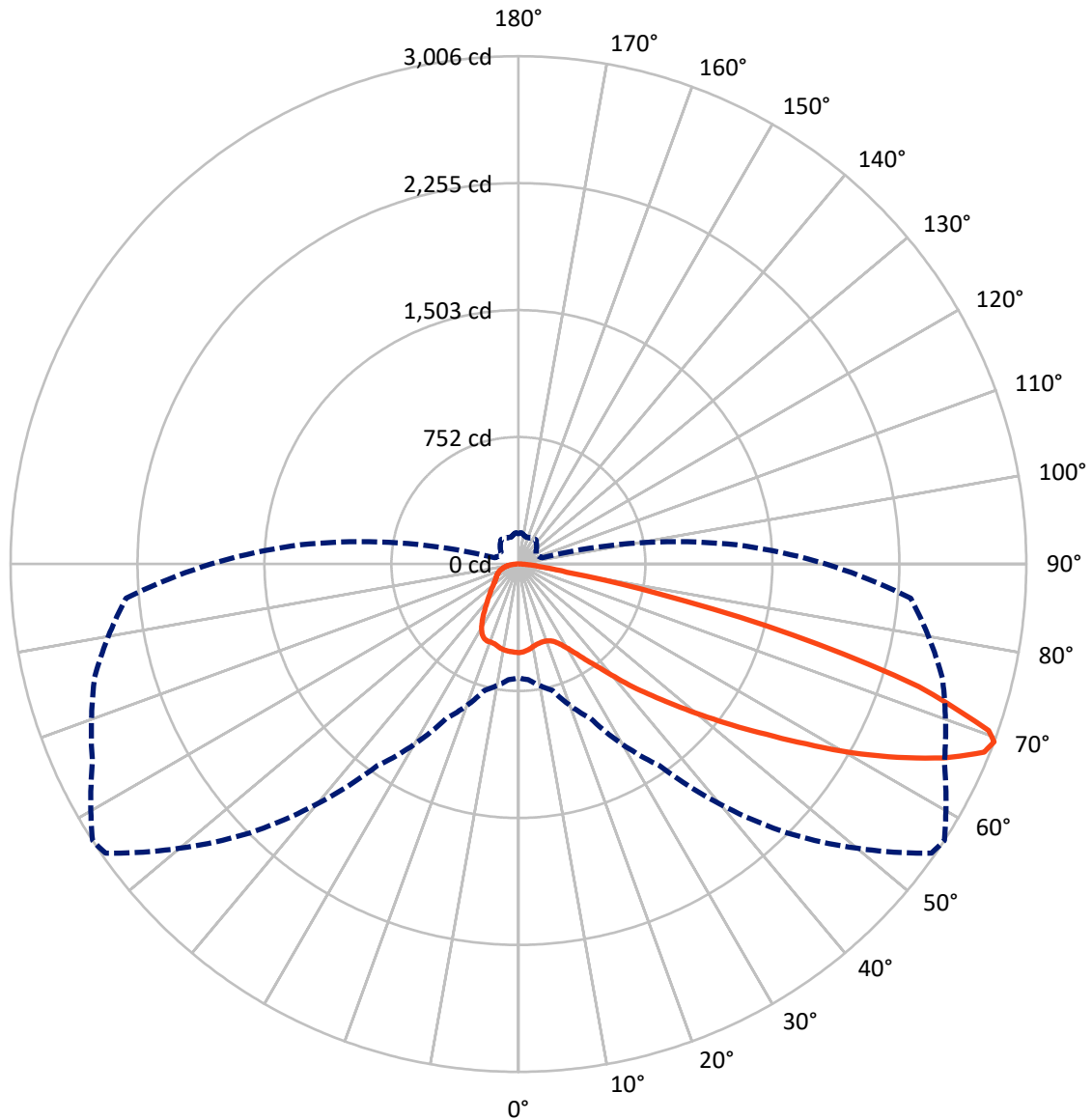
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.4 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P271267  
CATALOG NUMBER: XNV-AF-01-LED-U-T3-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P271267

CATALOG NUMBER: XNV-AF-01-LED-U-T3-7027-800

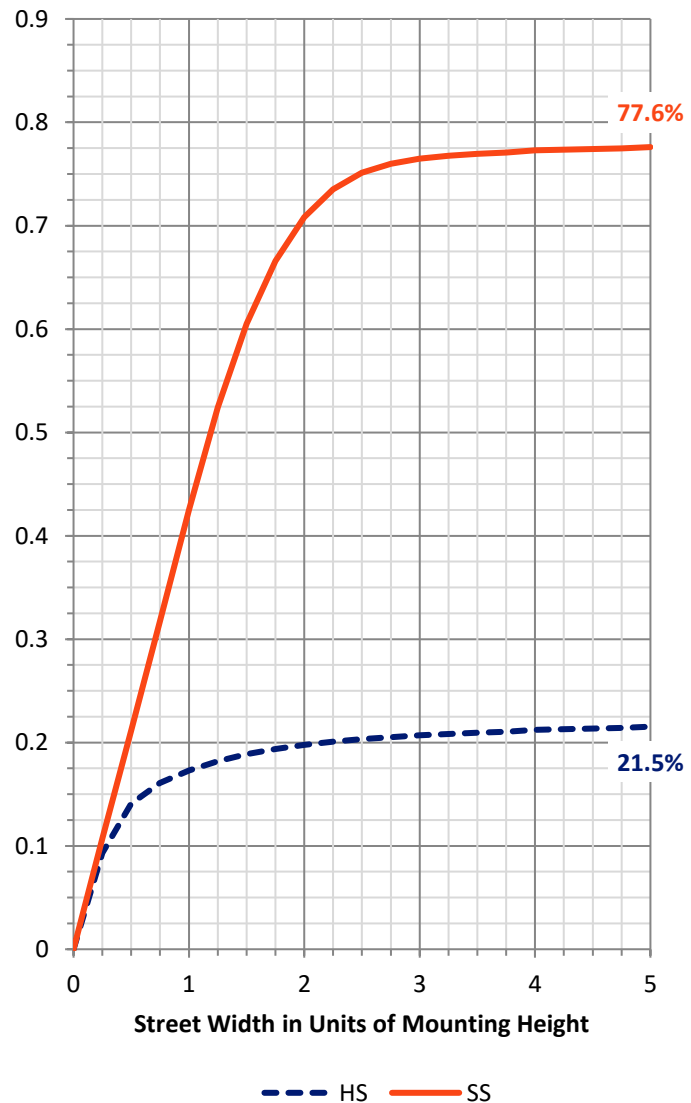
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 937.1    | 0.0    | 937.1  |
|                    | % Fixture | 22.1     | 0.0    | 22.1   |
| <b>Street Side</b> | Lumens    | 3309.7   | 0.0    | 3309.7 |
|                    | % Fixture | 77.9     | 0.0    | 77.9   |
| <b>Total</b>       | Lumens    | 4246.9   | 0.0    | 4246.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 49.1   | 1.2       |
| 10°-20°   | 139.7  | 3.3       |
| 20°-30°   | 232.4  | 5.5       |
| 30°-40°   | 379.4  | 8.9       |
| 40°-50°   | 640.4  | 15.1      |
| 50°-60°   | 996.1  | 23.5      |
| 60°-70°   | 1186.6 | 27.9      |
| 70°-80°   | 552.8  | 13.0      |
| 80°-90°   | 70.3   | 1.7       |
| 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°    | 4246.9 | 100.0     |
| 0°-180°   | 4246.9 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P271267

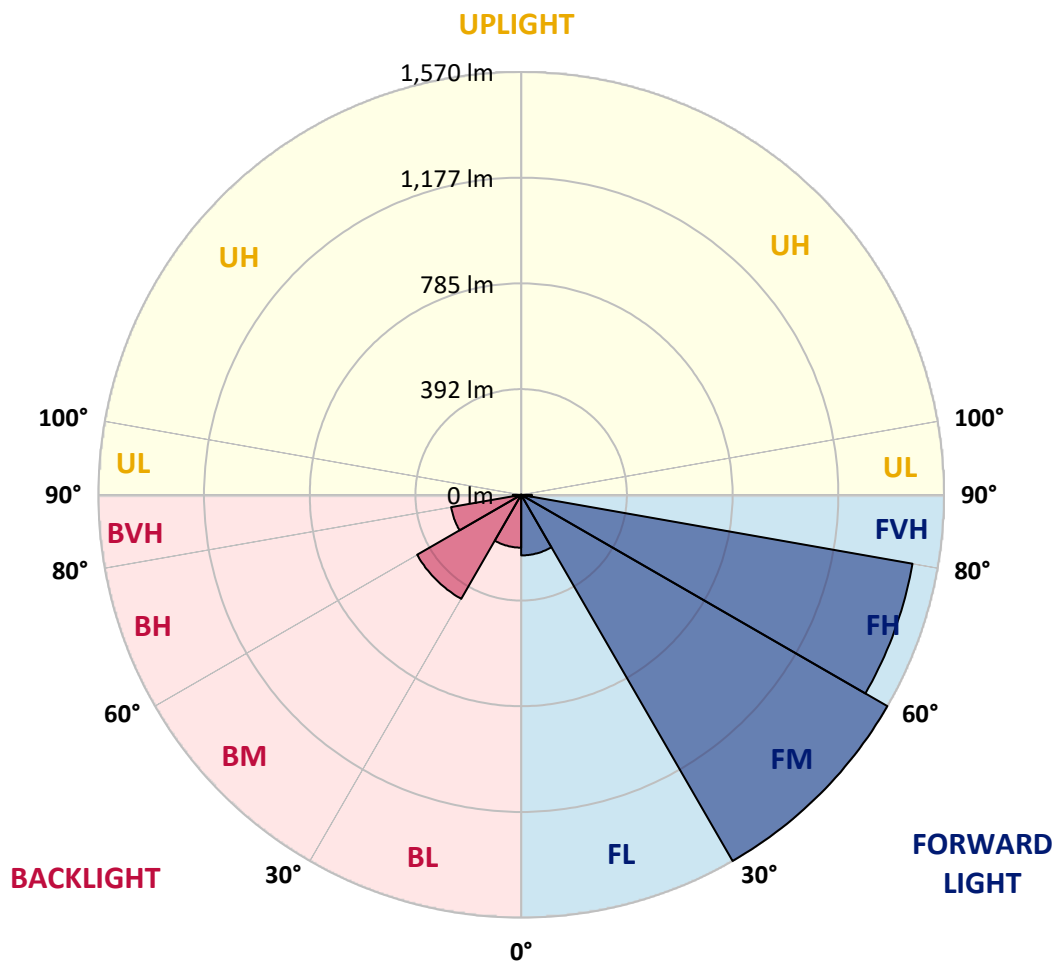
CATALOG NUMBER: XNV-AF-01-LED-U-T3-7027-800

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 224.9  | 5.3       |                         |      |         |
| FM   | (30°-60°)   | 1569.9 | 37.0      |                         |      |         |
| FH   | (60°-80°)   | 1475.4 | 34.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 39.5   | 0.9       |                         |      | G1/100  |
| BL   | (0°-30°)    | 196.3  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 446.0  | 10.5      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 264.1  | 6.2       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 30.8   | 0.7       |                         |      | 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 III Short





REPORT NUMBER: P271267

CATALOG NUMBER: XNV-AF-01-LED-U-T3-7027-800

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 57°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  | 524.7  |
| 2.5°  | 521.7  | 521.7  | 523.2  | 523.2  | 523.2  | 522.5  | 520.9  | 521.5  | 520.4  | 519.6  | 518.2  |
| 5°    | 511.1  | 511.7  | 513.3  | 513.9  | 514.6  | 515.0  | 515.0  | 514.6  | 515.0  | 515.0  | 514.1  |
| 7.5°  | 496.5  | 497.0  | 498.9  | 499.9  | 502.4  | 504.6  | 505.7  | 505.7  | 507.1  | 508.1  | 508.4  |
| 10°   | 487.5  | 487.5  | 488.6  | 488.6  | 490.5  | 491.6  | 495.1  | 494.8  | 498.6  | 502.2  | 503.8  |
| 12.5° | 486.4  | 486.4  | 485.9  | 483.9  | 482.8  | 482.6  | 486.2  | 486.7  | 492.5  | 498.6  | 501.7  |
| 15°   | 489.9  | 489.9  | 488.3  | 484.5  | 480.5  | 478.5  | 482.1  | 483.2  | 489.3  | 496.8  | 501.3  |
| 17.5° | 501.3  | 501.1  | 497.5  | 489.9  | 482.8  | 479.9  | 481.0  | 482.1  | 487.8  | 496.3  | 502.0  |
| 20°   | 526.6  | 526.6  | 519.0  | 505.1  | 492.9  | 485.9  | 484.2  | 485.1  | 489.1  | 497.0  | 504.4  |
| 22.5° | 571.0  | 571.9  | 558.1  | 535.3  | 514.4  | 499.5  | 492.9  | 493.8  | 495.7  | 503.3  | 511.5  |
| 25°   | 636.2  | 634.1  | 614.7  | 582.5  | 549.8  | 524.3  | 510.9  | 511.7  | 511.7  | 518.7  | 527.1  |
| 27.5° | 705.3  | 705.8  | 678.1  | 643.2  | 600.3  | 562.2  | 541.0  | 540.8  | 540.5  | 547.2  | 556.3  |
| 30°   | 783.3  | 783.6  | 751.5  | 711.3  | 662.1  | 613.5  | 581.6  | 581.4  | 578.9  | 587.3  | 599.0  |
| 32.5° | 868.8  | 868.4  | 831.1  | 785.7  | 731.1  | 676.0  | 634.7  | 634.4  | 632.3  | 643.8  | 658.0  |
| 35°   | 963.3  | 963.3  | 926.3  | 870.3  | 811.3  | 749.8  | 702.0  | 701.8  | 702.8  | 718.4  | 731.7  |
| 37.5° | 1077.2 | 1079.7 | 1035.0 | 967.0  | 902.6  | 837.1  | 781.3  | 779.8  | 771.6  | 797.8  | 819.8  |
| 40°   | 1196.1 | 1202.8 | 1156.6 | 1077.2 | 1007.5 | 939.8  | 878.5  | 877.4  | 870.3  | 898.0  | 933.7  |
| 42.5° | 1324.6 | 1340.1 | 1288.8 | 1207.7 | 1131.9 | 1058.7 | 996.9  | 994.1  | 966.8  | 1010.1 | 1065.7 |
| 45°   | 1493.3 | 1503.3 | 1428.8 | 1355.4 | 1283.9 | 1200.3 | 1127.0 | 1110.9 | 1083.7 | 1139.2 | 1211.5 |
| 47.5° | 1608.0 | 1603.0 | 1556.6 | 1507.4 | 1461.5 | 1381.5 | 1268.6 | 1248.3 | 1215.0 | 1288.4 | 1368.2 |
| 50°   | 1679.2 | 1682.7 | 1656.7 | 1654.1 | 1651.8 | 1596.0 | 1428.5 | 1404.1 | 1365.8 | 1452.6 | 1545.7 |
| 52.5° | 1726.3 | 1710.2 | 1714.8 | 1770.3 | 1837.5 | 1810.8 | 1609.4 | 1582.2 | 1542.7 | 1629.6 | 1734.6 |
| 55°   | 1706.6 | 1685.4 | 1728.1 | 1837.5 | 1995.3 | 2001.3 | 1807.7 | 1779.8 | 1746.0 | 1817.8 | 1962.0 |
| 57.5° | 1625.7 | 1636.3 | 1703.6 | 1855.5 | 2103.3 | 2172.1 | 2035.9 | 2007.4 | 1941.0 | 2013.9 | 2177.9 |
| 60°   | 1511.7 | 1533.1 | 1636.3 | 1826.9 | 2178.8 | 2305.1 | 2286.2 | 2267.2 | 2153.1 | 2204.7 | 2404.6 |
| 62.5° | 1389.4 | 1410.6 | 1537.3 | 1777.6 | 2145.0 | 2422.8 | 2532.1 | 2520.4 | 2387.2 | 2388.6 | 2548.4 |
| 65°   | 1208.5 | 1217.3 | 1346.6 | 1643.3 | 2050.7 | 2529.1 | 2778.2 | 2767.8 | 2611.0 | 2545.3 | 2588.6 |
| 67.5° | 912.7  | 923.5  | 1029.8 | 1297.2 | 1763.5 | 2471.4 | 2974.6 | 2973.1 | 2745.5 | 2603.6 | 2492.9 |
| 69°   | 674.0  | 687.4  | 774.1  | 1007.1 | 1458.0 | 2251.8 | 2984.0 | 3006.0 | 2782.0 | 2597.5 | 2331.1 |
| 70°   | 493.2  | 508.4  | 588.6  | 799.3  | 1214.5 | 2009.2 | 2904.8 | 2952.2 | 2768.0 | 2559.8 | 2205.0 |
| 72.5° | 209.7  | 214.8  | 254.2  | 360.8  | 616.1  | 1211.5 | 2379.3 | 2478.9 | 2500.1 | 2293.6 | 1722.7 |
| 75°   | 131.3  | 132.9  | 148.5  | 185.1  | 274.1  | 501.1  | 1540.9 | 1676.4 | 1866.5 | 1779.5 | 1153.3 |
| 77.5° | 99.0   | 100.3  | 109.4  | 127.5  | 170.1  | 187.0  | 714.8  | 852.3  | 1069.1 | 1046.7 | 573.9  |
| 80°   | 75.8   | 76.6   | 82.6   | 92.7   | 120.0  | 117.1  | 231.9  | 291.5  | 446.2  | 393.6  | 203.0  |
| 82.5° | 59.6   | 59.7   | 64.9   | 66.8   | 83.7   | 78.8   | 116.4  | 129.6  | 180.3  | 149.7  | 99.3   |
| 85°   | 52.7   | 53.5   | 58.7   | 49.0   | 53.5   | 47.6   | 63.9   | 69.3   | 95.7   | 90.3   | 37.5   |
| 87.5° | 26.9   | 28.2   | 49.1   | 42.0   | 26.9   | 22.5   | 27.9   | 30.2   | 38.8   | 42.1   | 18.2   |
| 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: P271267

CATALOG NUMBER: XNV-AF-01-LED-U-T3-7027-800

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 524.7  | 524.7  | 524.7 | 524.7 | 524.7 | 524.7 | 524.7 | 524.7 | 524.7 | 524.7 | 524.7 |
| 2.5°  | 518.5  | 518.7  | 519.6 | 520.9 | 523.2 | 525.9 | 529.1 | 532.3 | 534.2 | 535.6 | 535.1 |
| 5°    | 514.1  | 514.4  | 516.0 | 518.5 | 521.1 | 525.2 | 530.7 | 534.9 | 537.7 | 539.7 | 539.4 |
| 7.5°  | 508.7  | 509.5  | 512.8 | 515.4 | 519.3 | 522.5 | 526.9 | 530.7 | 533.8 | 535.6 | 535.3 |
| 10°   | 504.6  | 505.4  | 509.5 | 513.0 | 516.3 | 516.9 | 516.0 | 515.0 | 514.6 | 516.0 | 515.4 |
| 12.5° | 502.7  | 504.4  | 508.1 | 510.5 | 509.2 | 504.0 | 498.1 | 495.7 | 494.8 | 497.5 | 497.8 |
| 15°   | 503.3  | 504.6  | 507.9 | 506.3 | 498.9 | 490.3 | 486.9 | 488.9 | 490.5 | 492.1 | 492.5 |
| 17.5° | 504.6  | 505.4  | 506.3 | 500.3 | 489.9 | 484.2 | 483.2 | 481.2 | 476.3 | 473.6 | 473.3 |
| 20°   | 507.1  | 508.1  | 506.9 | 497.3 | 488.0 | 480.5 | 467.4 | 455.7 | 444.5 | 438.6 | 436.0 |
| 22.5° | 515.4  | 516.3  | 512.3 | 503.1 | 488.9 | 464.2 | 437.7 | 417.6 | 400.5 | 391.2 | 387.7 |
| 25°   | 532.1  | 533.5  | 527.8 | 516.0 | 479.1 | 435.9 | 398.6 | 371.4 | 349.9 | 338.8 | 335.7 |
| 27.5° | 561.3  | 562.5  | 556.3 | 525.9 | 456.2 | 398.0 | 352.9 | 325.9 | 307.5 | 298.0 | 296.6 |
| 30°   | 604.6  | 606.5  | 600.8 | 525.6 | 421.5 | 349.9 | 308.3 | 292.6 | 282.0 | 275.4 | 275.2 |
| 32.5° | 665.0  | 672.1  | 648.8 | 516.3 | 378.5 | 301.2 | 274.6 | 269.1 | 264.0 | 259.7 | 259.7 |
| 35°   | 741.7  | 758.3  | 696.0 | 497.0 | 331.1 | 268.1 | 255.8 | 250.6 | 244.2 | 239.6 | 238.9 |
| 37.5° | 833.4  | 859.1  | 729.8 | 462.7 | 290.4 | 252.1 | 244.3 | 236.1 | 225.7 | 216.8 | 214.5 |
| 40°   | 959.2  | 965.1  | 746.3 | 407.0 | 259.9 | 243.4 | 233.7 | 223.1 | 210.2 | 200.1 | 199.1 |
| 42.5° | 1085.6 | 1066.1 | 743.1 | 347.3 | 242.5 | 235.4 | 223.0 | 211.2 | 199.6 | 191.1 | 191.1 |
| 45°   | 1229.5 | 1154.1 | 718.4 | 287.1 | 226.7 | 226.6 | 212.9 | 201.7 | 192.7 | 186.5 | 185.1 |
| 47.5° | 1367.0 | 1233.3 | 675.6 | 242.8 | 210.5 | 217.5 | 206.4 | 197.4 | 189.3 | 183.3 | 182.1 |
| 50°   | 1533.9 | 1324.9 | 630.3 | 211.8 | 194.7 | 209.7 | 203.6 | 199.1 | 191.1 | 180.7 | 179.8 |
| 52.5° | 1699.9 | 1432.0 | 595.1 | 188.5 | 180.7 | 203.3 | 205.3 | 205.8 | 198.4 | 178.4 | 177.0 |
| 55°   | 1877.9 | 1546.5 | 558.1 | 170.1 | 169.4 | 200.4 | 209.0 | 208.5 | 205.1 | 178.9 | 176.7 |
| 57.5° | 2047.2 | 1661.5 | 503.1 | 157.5 | 160.3 | 197.4 | 209.9 | 201.2 | 194.9 | 181.5 | 178.0 |
| 60°   | 2187.6 | 1756.6 | 421.9 | 148.5 | 152.8 | 191.3 | 204.5 | 191.3 | 180.7 | 181.1 | 177.9 |
| 62.5° | 2255.9 | 1783.3 | 322.8 | 138.1 | 146.6 | 181.5 | 196.5 | 184.1 | 174.4 | 182.1 | 180.3 |
| 65°   | 2203.9 | 1707.5 | 230.1 | 128.5 | 139.0 | 170.1 | 192.0 | 177.9 | 170.9 | 187.6 | 185.4 |
| 67.5° | 2017.5 | 1500.8 | 166.9 | 120.2 | 131.6 | 158.6 | 183.3 | 172.1 | 167.8 | 191.7 | 186.8 |
| 69°   | 1819.2 | 1295.8 | 144.6 | 115.3 | 126.4 | 152.3 | 177.5 | 169.2 | 165.3 | 185.9 | 178.9 |
| 70°   | 1654.4 | 1137.9 | 133.5 | 112.3 | 122.1 | 148.7 | 173.3 | 167.3 | 162.9 | 179.2 | 170.8 |
| 72.5° | 1186.2 | 735.4  | 112.3 | 103.3 | 110.6 | 140.9 | 163.8 | 160.2 | 153.6 | 161.8 | 156.3 |
| 75°   | 716.7  | 383.8  | 95.4  | 94.1  | 98.8  | 130.0 | 152.5 | 148.2 | 141.7 | 142.6 | 139.7 |
| 77.5° | 329.3  | 177.2  | 79.9  | 83.3  | 86.1  | 116.4 | 139.0 | 134.0 | 128.1 | 125.9 | 126.1 |
| 80°   | 144.4  | 103.6  | 66.8  | 71.0  | 72.7  | 104.7 | 124.2 | 118.8 | 112.3 | 124.0 | 115.1 |
| 82.5° | 78.1   | 60.0   | 52.2  | 54.9  | 59.6  | 91.1  | 107.9 | 100.9 | 94.6  | 110.1 | 88.9  |
| 85°   | 31.5   | 30.7   | 35.4  | 38.1  | 41.3  | 65.5  | 90.3  | 83.0  | 75.3  | 67.5  | 65.8  |
| 87.5° | 13.7   | 14.7   | 17.3  | 18.4  | 22.0  | 40.9  | 60.6  | 53.0  | 53.3  | 45.6  | 44.8  |
| 90°   | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)