

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: P197005

Luminaire Tested: **NVN-AF-01-LED-U-RW-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197005  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-AF-01-LED-U-RW-8030  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

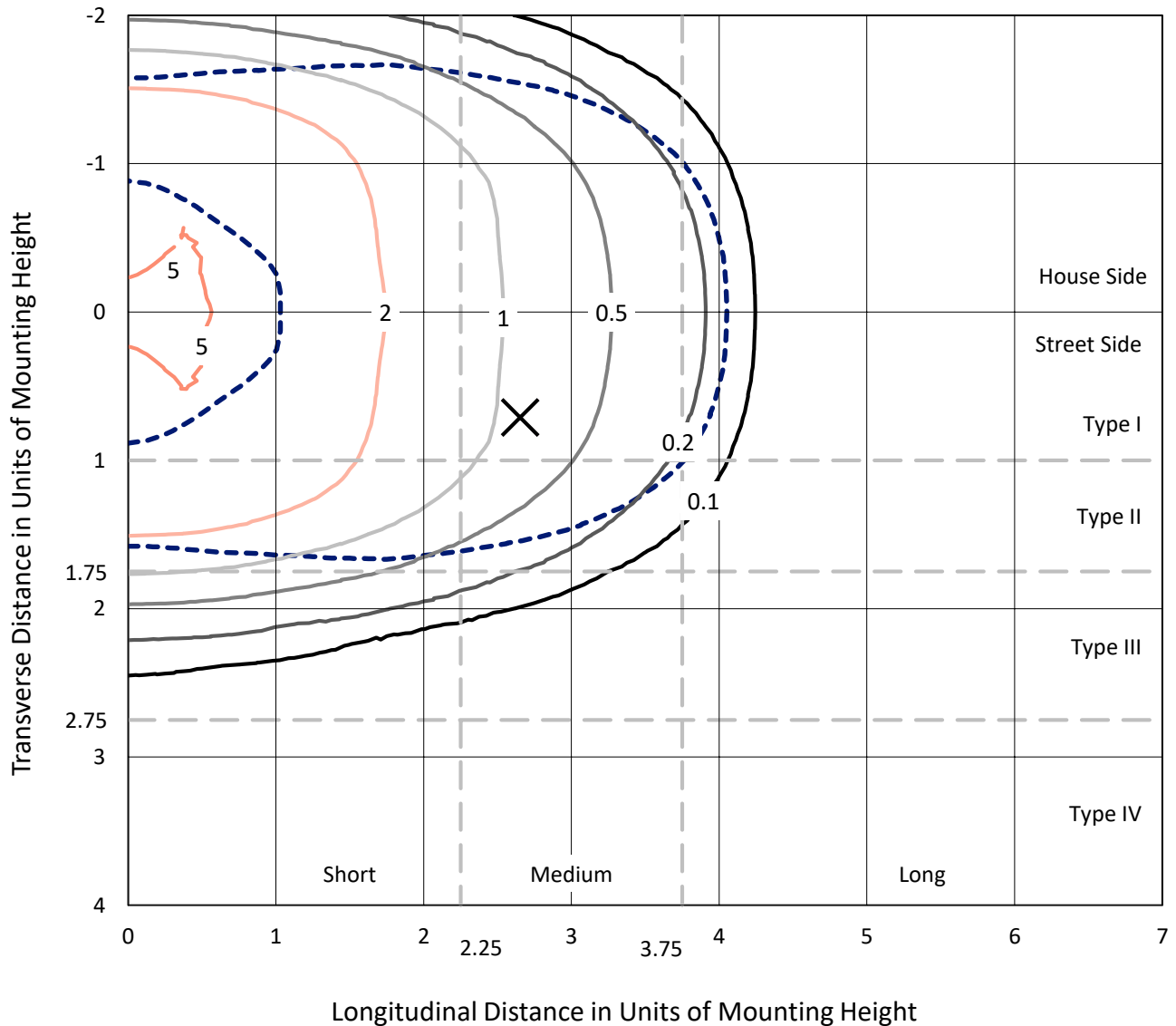
Lumens per Lamp: N/A  
Luminaire Lumens: 5094 lumens  
Efficiency: N/A  
Efficacy: 86.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Medium - Full Cutoff  
BUG Rating: B2 - U0 - G1  
  
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P197005  
 CATALOG NUMBER: NVN-AF-01-LED-U-RW-8030

### Iso-Footcandle Lines of Horizontal Illumination

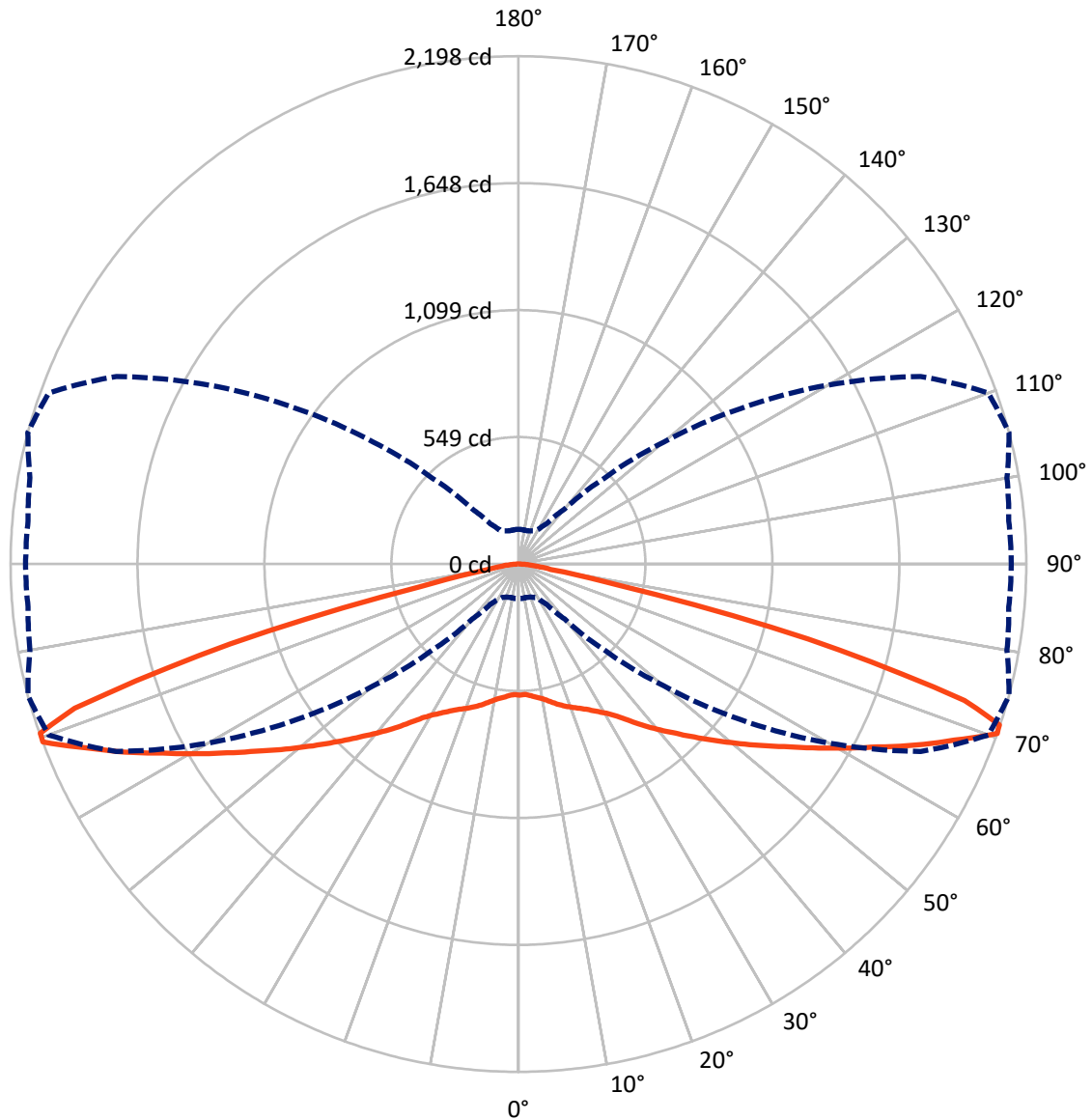
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc  
 Type V - Medium - Full Cutoff

REPORT NUMBER: P197005  
CATALOG NUMBER: NVN-AF-01-LED-U-RW-8030

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P197005

CATALOG NUMBER: NVN-AF-01-LED-U-RW-8030

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2547.0   | 0.0    | 2547.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2547.0   | 0.0    | 2547.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5094.0   | 0.0    | 5094.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.4   | 1.1       |
| 10°-20°   | 168.7  | 3.3       |
| 20°-30°   | 316.9  | 6.2       |
| 30°-40°   | 558.3  | 11.0      |
| 40°-50°   | 925.3  | 18.2      |
| 50°-60°   | 1287.2 | 25.3      |
| 60°-70°   | 1215.1 | 23.9      |
| 70°-80°   | 519.0  | 10.2      |
| 80°-90°   | 49.0   | 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°    | 5094.0 | 100.0     |
| 0°-180°   | 5094.0 | 100.0     |



REPORT NUMBER: P197005

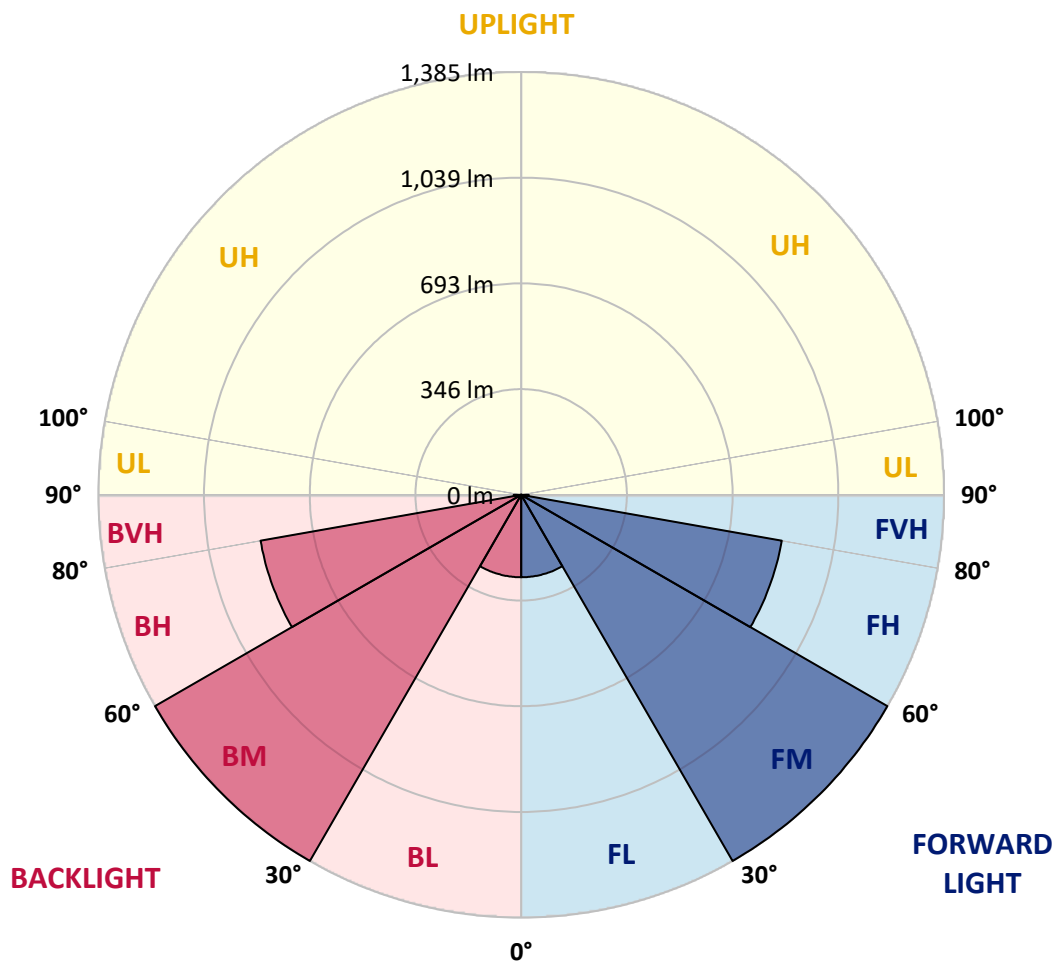
CATALOG NUMBER: NVN-AF-01-LED-U-RW-8030

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 270.0  | 5.3       |                         |      |         |
| FM   | (30°-60°)   | 1385.4 | 27.2      |                         |      |         |
| FH   | (60°-80°)   | 867.1  | 17.0      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 24.5   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 270.0  | 5.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1385.4 | 27.2      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 867.1  | 17.0      | B2/1000                 |      | G1/1800 |
| BVH  | (80°-90°)   | 24.5   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G1**

Type V Medium





REPORT NUMBER: P197005

CATALOG NUMBER: NVN-AF-01-LED-U-RW-8030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  |
| 2.5°  | 570.8  | 570.5  | 570.8  | 569.8  | 570.1  | 569.8  | 569.8  | 568.5  | 568.5  | 567.9  | 566.9  |
| 5°    | 564.4  | 565.0  | 565.0  | 565.0  | 566.0  | 566.0  | 567.3  | 567.6  | 568.5  | 569.5  | 570.1  |
| 7.5°  | 553.9  | 554.2  | 555.1  | 555.8  | 557.7  | 560.2  | 562.8  | 565.7  | 568.2  | 571.4  | 574.9  |
| 10°   | 544.9  | 545.6  | 547.2  | 548.8  | 552.3  | 555.5  | 559.9  | 564.4  | 568.9  | 574.3  | 579.7  |
| 12.5° | 540.1  | 541.1  | 543.6  | 546.2  | 551.6  | 555.8  | 561.8  | 568.9  | 574.9  | 580.0  | 586.1  |
| 15°   | 540.8  | 541.1  | 544.6  | 548.1  | 555.8  | 561.5  | 570.1  | 578.4  | 585.8  | 591.5  | 598.6  |
| 17.5° | 550.0  | 550.7  | 554.2  | 559.3  | 566.6  | 574.0  | 583.2  | 591.8  | 601.7  | 608.4  | 616.7  |
| 20°   | 568.2  | 569.2  | 573.0  | 578.4  | 586.4  | 594.1  | 603.7  | 612.6  | 622.8  | 630.8  | 639.1  |
| 22.5° | 591.8  | 593.4  | 597.6  | 604.3  | 612.3  | 621.5  | 631.4  | 640.7  | 650.3  | 658.2  | 665.3  |
| 25°   | 623.5  | 625.4  | 629.8  | 636.5  | 644.5  | 654.4  | 664.6  | 674.2  | 684.1  | 690.2  | 695.9  |
| 27.5° | 665.9  | 669.1  | 673.9  | 679.3  | 686.3  | 696.9  | 706.4  | 714.4  | 724.0  | 730.7  | 734.5  |
| 30°   | 723.0  | 727.5  | 731.3  | 737.1  | 742.2  | 753.4  | 761.0  | 767.4  | 774.8  | 778.6  | 779.6  |
| 32.5° | 793.0  | 797.1  | 800.9  | 805.1  | 812.1  | 822.3  | 829.7  | 833.2  | 837.0  | 836.4  | 832.9  |
| 35°   | 871.8  | 875.0  | 877.2  | 884.6  | 896.1  | 902.8  | 908.2  | 909.5  | 910.1  | 903.4  | 896.7  |
| 37.5° | 954.8  | 958.6  | 960.6  | 972.0  | 982.9  | 990.6  | 993.1  | 996.0  | 994.1  | 982.9  | 970.8  |
| 40°   | 1044.5 | 1048.7 | 1054.4 | 1064.3 | 1077.1 | 1084.4 | 1087.6 | 1087.3 | 1085.7 | 1072.6 | 1052.8 |
| 42.5° | 1132.6 | 1137.7 | 1142.5 | 1159.8 | 1170.3 | 1182.7 | 1184.3 | 1184.0 | 1180.5 | 1165.5 | 1142.5 |
| 45°   | 1207.3 | 1213.4 | 1223.3 | 1242.4 | 1259.4 | 1274.4 | 1280.4 | 1282.7 | 1279.1 | 1263.2 | 1237.0 |
| 47.5° | 1268.9 | 1273.1 | 1285.5 | 1308.8 | 1330.5 | 1352.6 | 1364.7 | 1373.3 | 1373.0 | 1361.5 | 1333.7 |
| 50°   | 1311.1 | 1315.9 | 1331.2 | 1357.4 | 1384.5 | 1410.3 | 1434.3 | 1453.8 | 1463.0 | 1454.7 | 1428.9 |
| 52.5° | 1323.2 | 1329.3 | 1349.4 | 1380.7 | 1412.3 | 1447.1 | 1482.8 | 1517.3 | 1538.0 | 1543.1 | 1523.0 |
| 55°   | 1272.1 | 1278.8 | 1308.2 | 1351.6 | 1403.6 | 1455.0 | 1509.3 | 1558.5 | 1601.2 | 1621.0 | 1613.1 |
| 57.5° | 1123.4 | 1128.1 | 1165.5 | 1221.7 | 1296.1 | 1386.4 | 1477.7 | 1567.7 | 1641.1 | 1692.5 | 1701.5 |
| 60°   | 888.4  | 894.5  | 935.3  | 994.7  | 1079.3 | 1193.6 | 1321.3 | 1468.8 | 1612.7 | 1730.5 | 1788.9 |
| 62.5° | 599.5  | 603.7  | 642.9  | 697.2  | 789.8  | 899.9  | 1042.3 | 1229.0 | 1434.3 | 1644.7 | 1809.4 |
| 65°   | 314.8  | 314.8  | 341.3  | 379.2  | 453.0  | 551.6  | 697.5  | 889.0  | 1133.3 | 1396.0 | 1671.5 |
| 67.5° | 182.6  | 182.3  | 188.3  | 197.0  | 220.3  | 260.2  | 340.6  | 481.4  | 712.5  | 1018.3 | 1331.8 |
| 70°   | 150.7  | 149.7  | 148.8  | 148.8  | 152.3  | 158.3  | 173.7  | 212.3  | 310.6  | 525.1  | 819.5  |
| 71°   | 144.0  | 143.3  | 140.8  | 139.8  | 141.4  | 144.6  | 151.3  | 169.2  | 220.6  | 358.2  | 612.0  |
| 72.5° | 136.0  | 134.4  | 130.6  | 129.0  | 129.3  | 130.6  | 132.5  | 139.5  | 155.1  | 203.7  | 348.9  |
| 75°   | 123.9  | 120.0  | 115.2  | 113.0  | 112.0  | 111.7  | 111.7  | 113.6  | 117.2  | 122.9  | 143.0  |
| 77.5° | 109.8  | 104.4  | 99.3   | 97.0   | 95.4   | 94.5   | 93.9   | 92.6   | 91.9   | 94.5   | 101.8  |
| 80°   | 92.9   | 87.1   | 83.0   | 81.7   | 80.8   | 78.8   | 76.3   | 73.7   | 72.1   | 73.4   | 77.9   |
| 82.5° | 71.8   | 66.1   | 66.7   | 67.0   | 65.4   | 62.2   | 59.7   | 56.8   | 53.9   | 53.3   | 55.5   |
| 85°   | 57.1   | 54.3   | 52.4   | 56.5   | 53.0   | 49.2   | 45.6   | 40.9   | 34.2   | 28.1   | 30.6   |
| 87.5° | 24.6   | 24.9   | 35.8   | 53.9   | 47.2   | 38.0   | 31.6   | 25.5   | 16.3   | 12.1   | 12.4   |
| 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: P197005

CATALOG NUMBER: NVN-AF-01-LED-U-RW-8030

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  | 567.3  |
| 2.5°  | 566.6  | 566.6  | 565.7  | 565.0  | 565.0  | 565.0  | 564.4  | 564.7  |
| 5°    | 570.5  | 571.1  | 571.7  | 571.4  | 572.4  | 573.3  | 573.0  | 572.7  |
| 7.5°  | 576.8  | 578.8  | 580.7  | 581.6  | 582.9  | 584.2  | 584.5  | 583.5  |
| 10°   | 583.2  | 587.1  | 589.9  | 592.5  | 594.1  | 595.4  | 596.3  | 596.0  |
| 12.5° | 591.2  | 596.6  | 601.7  | 606.9  | 610.4  | 612.3  | 614.2  | 613.6  |
| 15°   | 604.3  | 610.4  | 616.7  | 623.5  | 628.9  | 631.8  | 634.6  | 634.0  |
| 17.5° | 622.2  | 627.6  | 632.7  | 639.4  | 646.1  | 649.3  | 652.5  | 652.2  |
| 20°   | 644.5  | 648.7  | 651.5  | 655.4  | 661.8  | 665.3  | 668.1  | 667.2  |
| 22.5° | 670.1  | 671.3  | 671.7  | 672.9  | 678.0  | 682.2  | 686.0  | 687.0  |
| 25°   | 697.8  | 696.9  | 695.0  | 694.0  | 697.5  | 702.0  | 706.8  | 708.0  |
| 27.5° | 732.3  | 729.1  | 724.3  | 720.5  | 721.5  | 727.2  | 732.6  | 733.9  |
| 30°   | 775.7  | 768.4  | 758.2  | 750.8  | 749.5  | 755.6  | 761.4  | 763.3  |
| 32.5° | 825.2  | 815.3  | 801.3  | 790.1  | 785.3  | 790.7  | 795.8  | 798.7  |
| 35°   | 883.9  | 873.1  | 856.2  | 841.8  | 834.1  | 837.7  | 846.6  | 849.8  |
| 37.5° | 953.5  | 938.5  | 919.7  | 901.5  | 888.7  | 889.4  | 898.9  | 902.8  |
| 40°   | 1030.5 | 1008.8 | 984.8  | 962.2  | 943.6  | 942.4  | 951.0  | 953.9  |
| 42.5° | 1110.6 | 1082.8 | 1054.7 | 1025.0 | 1002.1 | 997.9  | 1009.1 | 1009.4 |
| 45°   | 1196.8 | 1161.0 | 1126.2 | 1091.8 | 1067.8 | 1060.5 | 1071.3 | 1072.6 |
| 47.5° | 1288.7 | 1244.0 | 1202.8 | 1165.5 | 1139.6 | 1128.1 | 1138.7 | 1140.6 |
| 50°   | 1384.5 | 1338.2 | 1290.3 | 1248.8 | 1218.5 | 1204.4 | 1216.9 | 1218.2 |
| 52.5° | 1479.3 | 1435.6 | 1388.0 | 1340.4 | 1303.7 | 1287.8 | 1302.4 | 1306.9 |
| 55°   | 1574.7 | 1532.6 | 1487.9 | 1440.4 | 1394.1 | 1380.0 | 1396.0 | 1400.8 |
| 57.5° | 1674.0 | 1633.5 | 1592.9 | 1545.1 | 1500.0 | 1478.7 | 1495.9 | 1502.6 |
| 60°   | 1783.5 | 1747.8 | 1709.5 | 1661.3 | 1616.9 | 1592.0 | 1606.7 | 1614.3 |
| 62.5° | 1891.1 | 1883.8 | 1849.0 | 1798.8 | 1742.7 | 1717.8 | 1730.2 | 1735.6 |
| 65°   | 1900.0 | 2019.1 | 2017.5 | 1967.7 | 1889.2 | 1847.4 | 1850.9 | 1853.4 |
| 67.5° | 1658.4 | 1931.6 | 2106.3 | 2121.9 | 2034.4 | 1969.0 | 1961.3 | 1962.9 |
| 70°   | 1174.1 | 1549.2 | 1919.8 | 2163.1 | 2197.6 | 2146.8 | 2130.2 | 2132.8 |
| 71°   | 940.8  | 1329.3 | 1737.2 | 2064.4 | 2195.0 | 2180.3 | 2171.1 | 2177.8 |
| 72.5° | 600.5  | 979.4  | 1376.5 | 1767.9 | 2018.5 | 2090.3 | 2100.8 | 2105.0 |
| 75°   | 218.0  | 421.4  | 713.2  | 1021.8 | 1295.1 | 1483.1 | 1586.6 | 1594.9 |
| 77.5° | 117.2  | 151.0  | 233.4  | 348.6  | 438.0  | 485.9  | 491.6  | 493.8  |
| 80°   | 86.2   | 99.9   | 114.3  | 130.6  | 140.8  | 142.7  | 139.2  | 131.8  |
| 82.5° | 61.0   | 69.0   | 74.7   | 80.4   | 84.6   | 81.1   | 67.4   | 51.4   |
| 85°   | 35.4   | 38.9   | 42.1   | 45.0   | 45.6   | 43.1   | 28.4   | 23.3   |
| 87.5° | 14.0   | 15.3   | 15.0   | 16.9   | 16.3   | 15.0   | 11.2   | 9.6    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)