

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: P197211

Luminaire Tested: **NVN-AF-03-LED-U-T2-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24136)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-03-LED-U-T2-8030-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9533 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

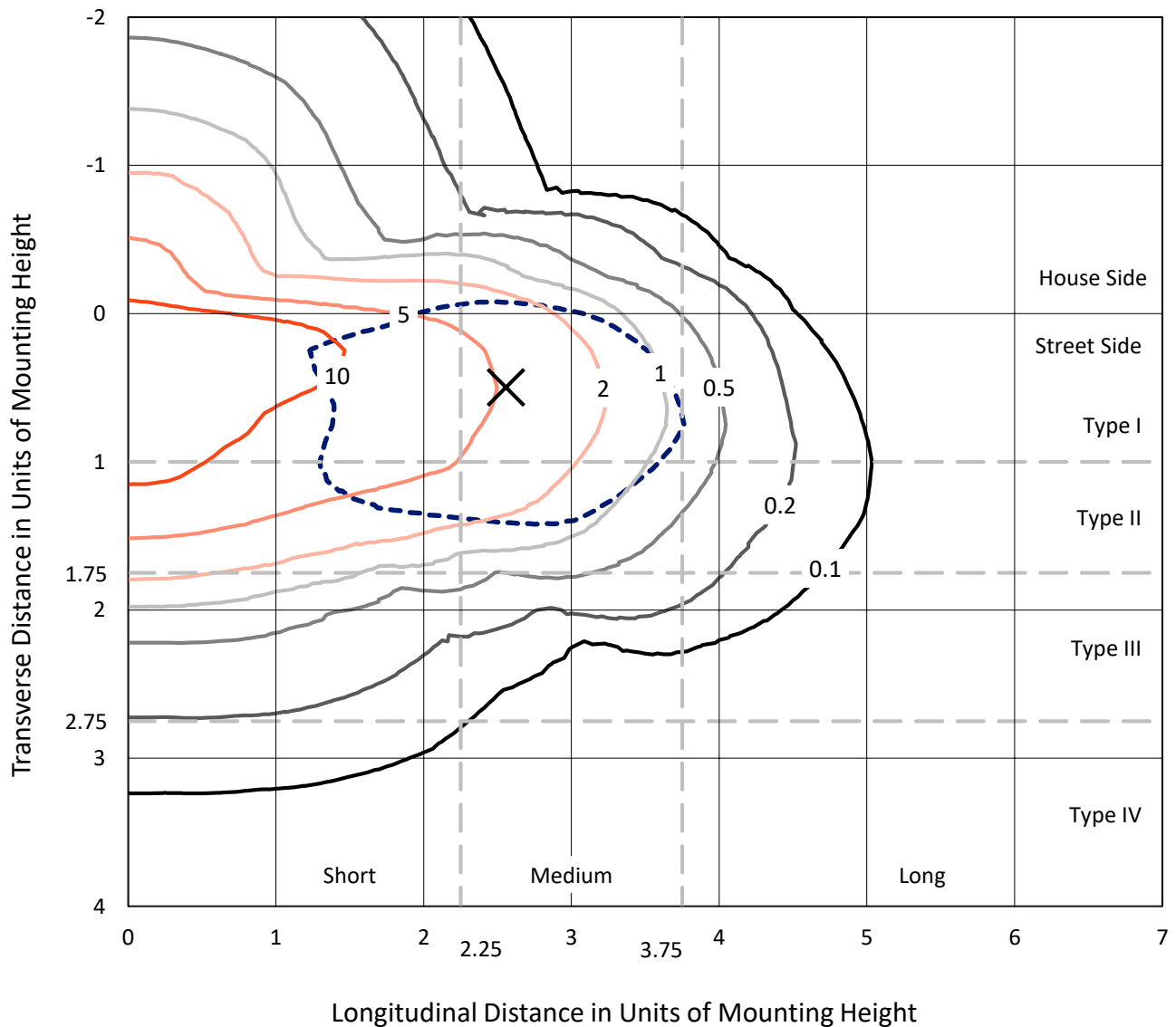
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P197211
 CATALOG NUMBER: NVN-AF-03-LED-U-T2-8030-600

Iso-Footcandle Lines of Horizontal Illumination

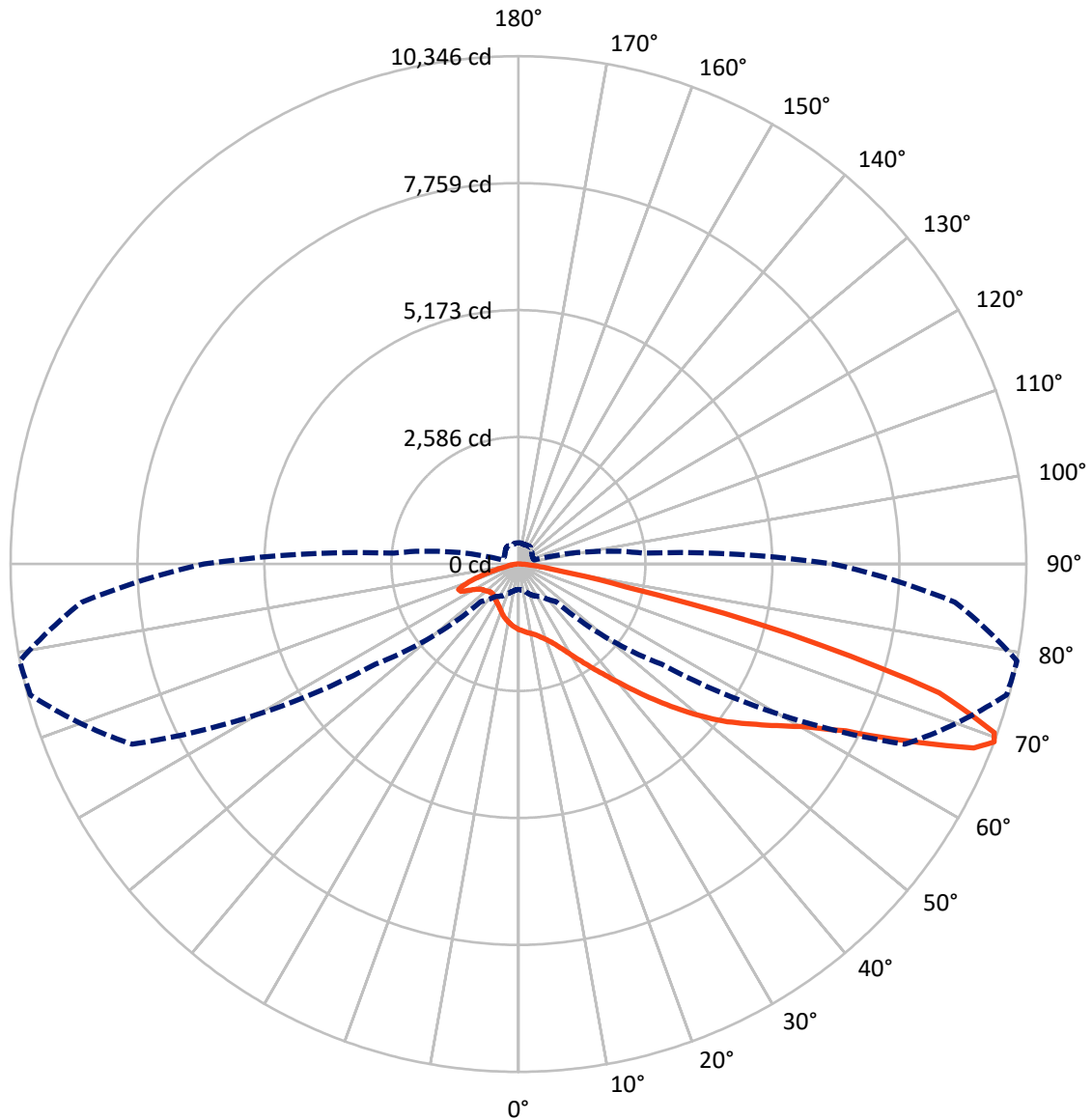
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.2 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P197211
CATALOG NUMBER: NVN-AF-03-LED-U-T2-8030-600

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P197211

CATALOG NUMBER: NVN-AF-03-LED-U-T2-8030-600

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1793.3 | 0.0 | 1793.3 |
| | % Fixture | 18.8 | 0.0 | 18.8 |
| Street Side | Lumens | 7739.7 | 0.0 | 7739.7 |
| | % Fixture | 81.2 | 0.0 | 81.2 |
| Total | Lumens | 9533.0 | 0.0 | 9533.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 124.0 | 1.3 |
| 10°-20° | 355.6 | 3.7 |
| 20°-30° | 587.5 | 6.2 |
| 30°-40° | 951.4 | 10.0 |
| 40°-50° | 1519.8 | 15.9 |
| 50°-60° | 2176.5 | 22.8 |
| 60°-70° | 2425.0 | 25.4 |
| 70°-80° | 1213.2 | 12.7 |
| 80°-90° | 180.0 | 1.9 |
| 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° | 9533.0 | 100.0 |
| 0°-180° | 9533.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P197211

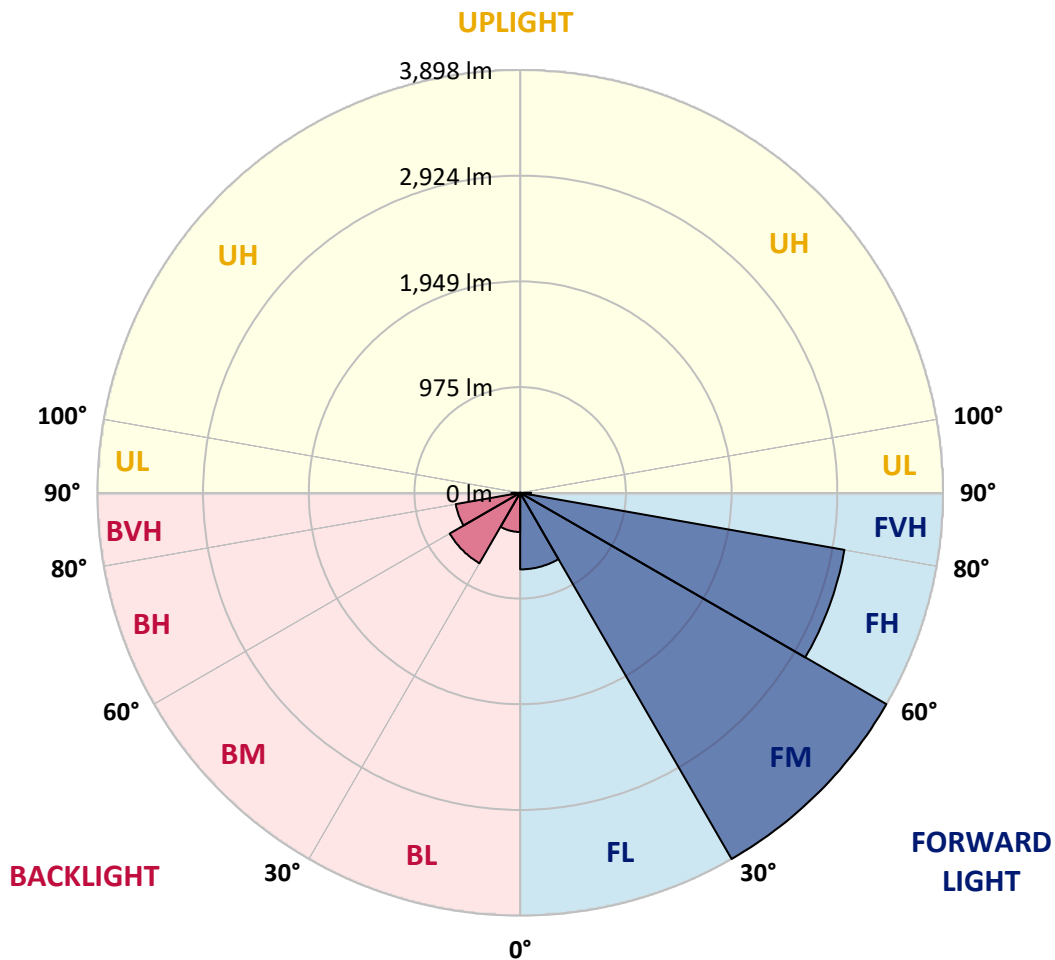
CATALOG NUMBER: NVN-AF-03-LED-U-T2-8030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 705.8 | 7.4 | | | |
| FM (30°-60°) | 3898.1 | 40.9 | | | |
| FH (60°-80°) | 3035.2 | 31.8 | | | G2/5000 |
| FVH (80°-90°) | 100.6 | 1.1 | | | G2/225 |
| BL (0°-30°) | 361.3 | 3.8 | B1/500 | | |
| BM (30°-60°) | 749.6 | 7.9 | B1/1000 | | |
| BH (60°-80°) | 603.0 | 6.3 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 79.4 | 0.8 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Medium





REPORT NUMBER: P197211
 CATALOG NUMBER: NVN-AF-03-LED-U-T2-8030-600

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0° | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 |
| 2.5° | 1468.8 | 1465.6 | 1465.0 | 1455.7 | 1450.7 | 1440.1 | 1415.1 | 1389.5 | 1365.8 | 1353.4 | 1340.3 |
| 5° | 1591.6 | 1585.4 | 1582.3 | 1566.7 | 1552.9 | 1529.2 | 1490.0 | 1449.4 | 1407.0 | 1385.2 | 1359.0 |
| 7.5° | 1665.8 | 1666.5 | 1666.5 | 1654.0 | 1640.3 | 1611.6 | 1561.7 | 1506.2 | 1443.2 | 1414.5 | 1373.3 |
| 10° | 1672.1 | 1672.7 | 1682.0 | 1685.2 | 1688.3 | 1673.3 | 1627.2 | 1557.3 | 1476.2 | 1438.8 | 1385.2 |
| 12.5° | 1610.3 | 1614.7 | 1630.3 | 1652.7 | 1684.5 | 1700.8 | 1680.8 | 1612.2 | 1518.6 | 1473.1 | 1407.6 |
| 15° | 1527.4 | 1531.7 | 1551.7 | 1586.0 | 1637.1 | 1691.4 | 1719.5 | 1675.2 | 1574.2 | 1520.5 | 1440.7 |
| 17.5° | 1486.8 | 1491.8 | 1505.5 | 1533.0 | 1582.9 | 1655.9 | 1740.1 | 1742.5 | 1639.6 | 1577.9 | 1480.0 |
| 20° | 1467.5 | 1471.2 | 1488.7 | 1511.2 | 1549.2 | 1619.1 | 1741.9 | 1813.6 | 1717.6 | 1645.9 | 1528.0 |
| 22.5° | 1511.8 | 1513.0 | 1521.8 | 1534.2 | 1559.8 | 1613.4 | 1740.7 | 1887.2 | 1814.9 | 1731.3 | 1589.7 |
| 25° | 1641.5 | 1633.4 | 1627.2 | 1611.6 | 1617.8 | 1655.9 | 1760.6 | 1965.8 | 1939.6 | 1843.6 | 1672.1 |
| 27.5° | 1794.9 | 1793.7 | 1777.5 | 1741.3 | 1718.2 | 1742.5 | 1817.4 | 2053.8 | 2092.4 | 1986.4 | 1780.0 |
| 30° | 1965.8 | 1966.4 | 1949.6 | 1905.3 | 1858.5 | 1861.0 | 1907.8 | 2155.4 | 2275.2 | 2158.5 | 1912.8 |
| 32.5° | 2144.8 | 2156.0 | 2124.9 | 2080.6 | 2023.8 | 2005.7 | 2037.5 | 2278.3 | 2486.6 | 2361.9 | 2066.9 |
| 35° | 2358.7 | 2360.6 | 2326.3 | 2261.4 | 2204.7 | 2176.0 | 2205.3 | 2431.7 | 2730.4 | 2600.7 | 2254.6 |
| 37.5° | 2580.8 | 2582.0 | 2546.5 | 2463.5 | 2391.8 | 2373.1 | 2405.5 | 2618.2 | 2988.6 | 2872.6 | 2475.4 |
| 40° | 2762.3 | 2775.4 | 2747.3 | 2669.3 | 2597.0 | 2585.8 | 2632.5 | 2841.5 | 3318.6 | 3194.5 | 2737.9 |
| 42.5° | 2968.1 | 2983.0 | 2949.4 | 2868.3 | 2810.9 | 2807.2 | 2880.1 | 3095.9 | 3646.6 | 3566.8 | 3035.4 |
| 45° | 3200.1 | 3221.3 | 3174.5 | 3083.4 | 3034.8 | 3117.1 | 3121.5 | 3377.8 | 4024.6 | 3983.4 | 3370.3 |
| 47.5° | 3453.3 | 3470.7 | 3432.7 | 3334.8 | 3281.8 | 3400.9 | 3357.9 | 3682.8 | 4433.1 | 4430.0 | 3732.7 |
| 50° | 3648.5 | 3667.8 | 3671.6 | 3628.5 | 3573.0 | 3588.0 | 3617.3 | 4003.4 | 4840.3 | 4889.0 | 4107.5 |
| 52.5° | 3612.9 | 3631.7 | 3715.9 | 3828.7 | 3917.9 | 3879.3 | 3914.8 | 4343.9 | 5233.9 | 5336.8 | 4463.6 |
| 55° | 3326.1 | 3336.0 | 3493.8 | 3762.0 | 4141.8 | 4326.4 | 4328.9 | 4714.4 | 5608.1 | 5752.1 | 4801.7 |
| 57.5° | 2809.0 | 2810.3 | 3015.5 | 3410.9 | 4011.5 | 4616.4 | 4982.5 | 5179.6 | 5998.5 | 6211.2 | 5220.8 |
| 60° | 1987.6 | 1992.6 | 2231.5 | 2748.5 | 3544.3 | 4581.5 | 5685.4 | 6012.2 | 6450.7 | 6726.9 | 5760.9 |
| 62.5° | 1180.0 | 1191.2 | 1371.5 | 1786.2 | 2632.5 | 4132.5 | 6100.8 | 7493.4 | 7116.7 | 7483.5 | 6625.3 |
| 65° | 767.7 | 777.1 | 885.0 | 1093.3 | 1555.4 | 3006.7 | 5964.2 | 8927.9 | 8377.2 | 8673.4 | 7867.7 |
| 67.5° | 591.2 | 598.7 | 683.5 | 809.5 | 954.2 | 1625.3 | 4768.6 | 9228.5 | 9911.4 | 10003.7 | 8916.0 |
| 69° | 519.5 | 525.8 | 588.1 | 709.1 | 803.3 | 1075.8 | 3553.7 | 8682.8 | 10295.0 | 10345.5 | 8929.1 |
| 70° | 481.5 | 486.5 | 545.1 | 649.9 | 737.8 | 858.8 | 2719.8 | 8049.1 | 10154.7 | 10283.8 | 8671.6 |
| 72.5° | 396.7 | 401.0 | 442.8 | 523.3 | 603.1 | 611.8 | 1204.9 | 5877.5 | 8550.6 | 8963.4 | 7338.2 |
| 75° | 331.2 | 333.7 | 361.1 | 419.7 | 488.3 | 487.1 | 615.6 | 3329.2 | 5217.7 | 5709.7 | 4531.0 |
| 77.5° | 276.3 | 278.2 | 296.2 | 332.4 | 385.4 | 383.6 | 433.5 | 1436.9 | 2303.9 | 2222.8 | 1559.8 |
| 80° | 243.9 | 245.1 | 254.5 | 263.8 | 297.5 | 295.6 | 321.2 | 659.8 | 937.4 | 866.3 | 590.0 |
| 82.5° | 185.2 | 187.7 | 235.1 | 239.5 | 230.8 | 222.7 | 223.9 | 384.2 | 480.2 | 437.2 | 316.8 |
| 85° | 104.8 | 105.4 | 150.9 | 176.5 | 200.8 | 150.9 | 145.3 | 198.3 | 237.0 | 207.7 | 138.5 |
| 87.5° | 46.8 | 48.6 | 72.3 | 83.6 | 108.5 | 88.6 | 82.9 | 84.2 | 102.3 | 84.8 | 54.9 |
| 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: P197211
 CATALOG NUMBER: NVN-AF-03-LED-U-T2-8030-600

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 | 1337.8 |
| 2.5° | 1327.8 | 1317.2 | 1292.3 | 1266.7 | 1241.1 | 1224.9 | 1208.1 | 1192.5 | 1186.2 | 1185.6 | 1173.8 |
| 5° | 1333.4 | 1308.5 | 1251.7 | 1189.3 | 1130.1 | 1083.9 | 1045.3 | 1020.3 | 996.0 | 991.6 | 981.0 |
| 7.5° | 1335.3 | 1294.7 | 1202.4 | 1102.7 | 1012.2 | 948.6 | 909.9 | 893.1 | 881.3 | 878.1 | 874.4 |
| 10° | 1334.7 | 1277.3 | 1147.6 | 1011.0 | 908.1 | 860.0 | 845.7 | 849.4 | 854.4 | 856.9 | 856.9 |
| 12.5° | 1344.6 | 1269.2 | 1092.7 | 924.9 | 840.7 | 817.6 | 828.9 | 848.2 | 863.2 | 869.4 | 870.6 |
| 15° | 1362.7 | 1264.2 | 1032.2 | 850.1 | 793.3 | 798.9 | 826.4 | 854.4 | 875.6 | 885.0 | 887.5 |
| 17.5° | 1385.2 | 1257.3 | 962.3 | 788.3 | 765.9 | 785.2 | 820.8 | 856.3 | 881.9 | 893.7 | 895.6 |
| 20° | 1410.1 | 1247.3 | 890.0 | 742.2 | 741.5 | 765.9 | 801.4 | 841.3 | 868.8 | 881.9 | 881.3 |
| 22.5° | 1443.8 | 1238.0 | 822.6 | 708.5 | 714.7 | 737.2 | 766.5 | 802.7 | 828.2 | 840.1 | 837.6 |
| 25° | 1488.7 | 1229.3 | 762.1 | 678.6 | 684.2 | 699.1 | 719.7 | 747.2 | 765.2 | 771.5 | 767.1 |
| 27.5° | 1549.2 | 1222.4 | 714.7 | 651.1 | 650.5 | 657.4 | 669.8 | 684.8 | 693.5 | 691.7 | 684.8 |
| 30° | 1623.4 | 1215.5 | 679.8 | 626.8 | 618.1 | 617.4 | 623.1 | 631.8 | 637.4 | 626.2 | 620.6 |
| 32.5° | 1706.4 | 1203.7 | 648.6 | 605.6 | 590.0 | 584.4 | 586.9 | 598.7 | 621.8 | 610.6 | 606.2 |
| 35° | 1804.3 | 1190.0 | 617.4 | 582.5 | 570.7 | 560.1 | 561.9 | 587.5 | 657.4 | 649.2 | 644.9 |
| 37.5° | 1922.2 | 1177.5 | 588.7 | 557.6 | 556.9 | 543.8 | 542.6 | 573.2 | 666.7 | 649.2 | 645.5 |
| 40° | 2063.7 | 1175.0 | 563.2 | 530.1 | 540.1 | 535.1 | 530.7 | 549.5 | 614.9 | 579.4 | 572.5 |
| 42.5° | 2234.6 | 1186.2 | 544.5 | 503.9 | 520.8 | 532.6 | 524.5 | 528.9 | 555.7 | 523.9 | 518.3 |
| 45° | 2434.2 | 1216.8 | 530.7 | 480.9 | 500.2 | 530.7 | 521.4 | 517.6 | 522.0 | 504.6 | 500.8 |
| 47.5° | 2666.8 | 1271.0 | 521.4 | 461.5 | 480.9 | 525.8 | 520.1 | 512.7 | 510.8 | 500.8 | 498.3 |
| 50° | 2915.7 | 1344.0 | 515.2 | 444.1 | 463.4 | 517.0 | 519.5 | 508.9 | 505.8 | 501.4 | 500.2 |
| 52.5° | 3162.7 | 1423.2 | 507.7 | 429.1 | 449.0 | 506.4 | 520.1 | 505.2 | 500.8 | 498.3 | 497.1 |
| 55° | 3408.4 | 1505.5 | 493.9 | 416.0 | 438.4 | 493.9 | 519.5 | 500.2 | 495.2 | 495.2 | 495.2 |
| 57.5° | 3727.1 | 1630.9 | 475.9 | 405.4 | 424.7 | 477.7 | 511.4 | 494.6 | 487.7 | 488.3 | 489.0 |
| 60° | 4187.3 | 1841.1 | 455.9 | 393.5 | 406.6 | 459.0 | 498.9 | 484.6 | 476.5 | 479.0 | 479.6 |
| 62.5° | 4956.3 | 2208.4 | 428.5 | 376.7 | 387.9 | 439.1 | 482.7 | 470.9 | 463.4 | 467.8 | 468.4 |
| 65° | 5981.7 | 2653.1 | 392.3 | 355.5 | 368.6 | 416.6 | 462.1 | 454.7 | 446.6 | 457.2 | 456.5 |
| 67.5° | 6607.2 | 2783.5 | 354.2 | 333.0 | 349.9 | 392.9 | 436.6 | 433.5 | 427.8 | 446.6 | 445.3 |
| 69° | 6402.0 | 2547.7 | 332.4 | 318.7 | 336.8 | 376.7 | 420.4 | 419.1 | 414.7 | 432.8 | 431.6 |
| 70° | 6083.3 | 2327.6 | 318.7 | 309.3 | 329.9 | 366.7 | 409.8 | 409.8 | 405.4 | 421.0 | 417.9 |
| 72.5° | 4886.5 | 1726.3 | 286.9 | 285.6 | 306.2 | 339.3 | 381.1 | 384.2 | 381.7 | 387.3 | 384.2 |
| 75° | 2868.9 | 1040.3 | 255.7 | 259.4 | 277.5 | 310.0 | 349.3 | 351.8 | 349.3 | 348.6 | 349.3 |
| 77.5° | 994.8 | 466.5 | 225.8 | 231.4 | 247.0 | 280.0 | 314.3 | 319.3 | 315.6 | 311.2 | 312.5 |
| 80° | 389.2 | 271.3 | 193.3 | 201.4 | 214.5 | 246.4 | 279.4 | 282.5 | 276.9 | 276.3 | 271.3 |
| 82.5° | 233.9 | 165.3 | 150.3 | 163.4 | 179.6 | 213.9 | 241.4 | 240.1 | 235.7 | 261.3 | 228.9 |
| 85° | 101.7 | 91.7 | 109.8 | 122.9 | 131.0 | 160.3 | 203.9 | 198.3 | 187.7 | 165.3 | 161.5 |
| 87.5° | 41.2 | 47.4 | 60.5 | 73.0 | 78.6 | 103.5 | 139.7 | 134.7 | 136.6 | 112.3 | 111.6 |
| 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)