

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: P199206

Luminaire Tested: **XNV-AF-01-LED-U-SL4-8030-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199206
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)
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-SL4-8030-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4021 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

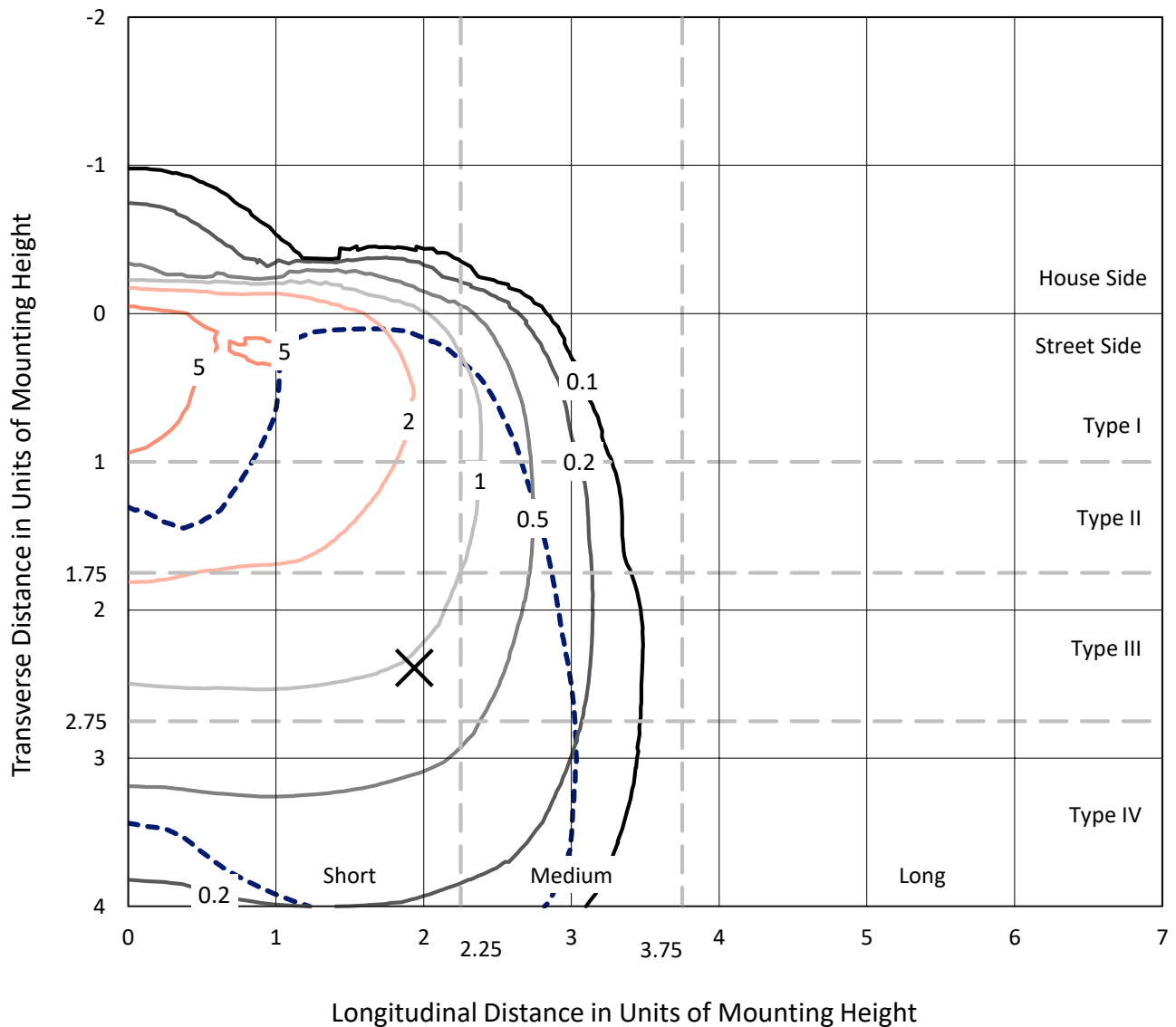
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P199206
 CATALOG NUMBER: XNV-AF-01-LED-U-SL4-8030-HSS

Iso-Footcandle Lines of Horizontal Illumination

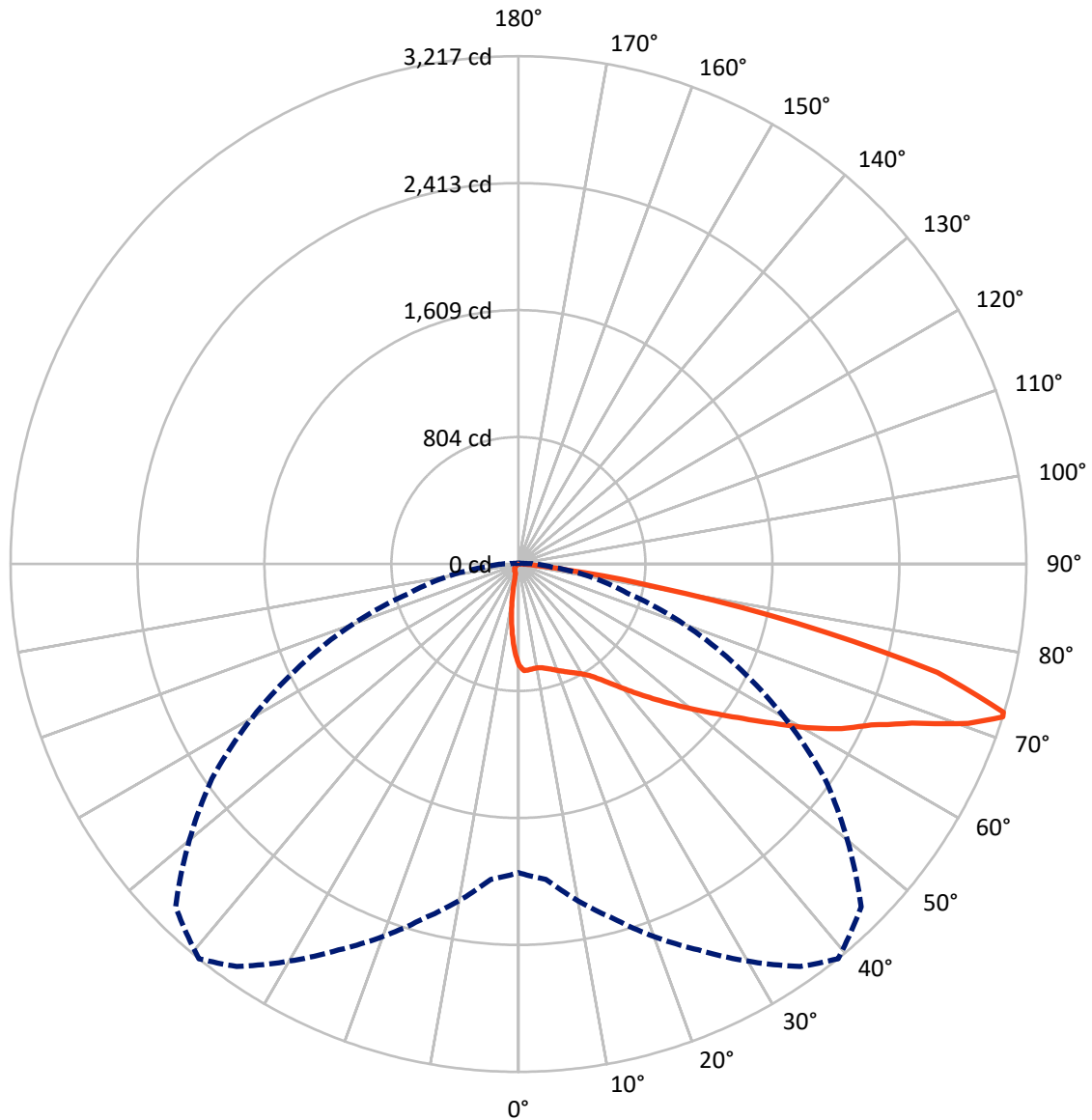
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P199206
CATALOG NUMBER: XNV-AF-01-LED-U-SL4-8030-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P199206

CATALOG NUMBER: XNV-AF-01-LED-U-SL4-8030-HSS

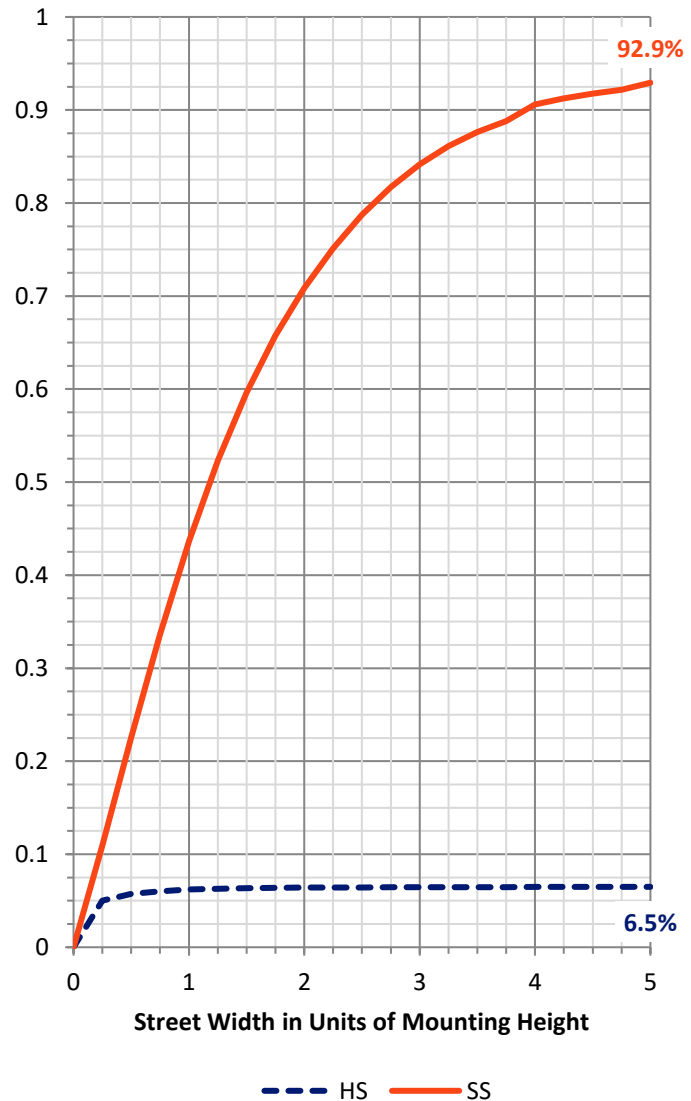
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 263.5 | 0.0 | 263.5 |
| | % Fixture | 6.6 | 0.0 | 6.6 |
| Street Side | Lumens | 3757.5 | 0.0 | 3757.5 |
| | % Fixture | 93.4 | 0.0 | 93.4 |
| Total | Lumens | 4021.0 | 0.0 | 4021.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.3 | 1.3 |
| 10°-20° | 126.7 | 3.2 |
| 20°-30° | 210.5 | 5.2 |
| 30°-40° | 335.5 | 8.3 |
| 40°-50° | 553.7 | 13.8 |
| 50°-60° | 836.2 | 20.8 |
| 60°-70° | 1089.3 | 27.1 |
| 70°-80° | 736.1 | 18.3 |
| 80°-90° | 80.6 | 2.0 |
| 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° | 4021.0 | 100.0 |
| 0°-180° | 4021.0 | 100.0 |



REPORT NUMBER: P199206

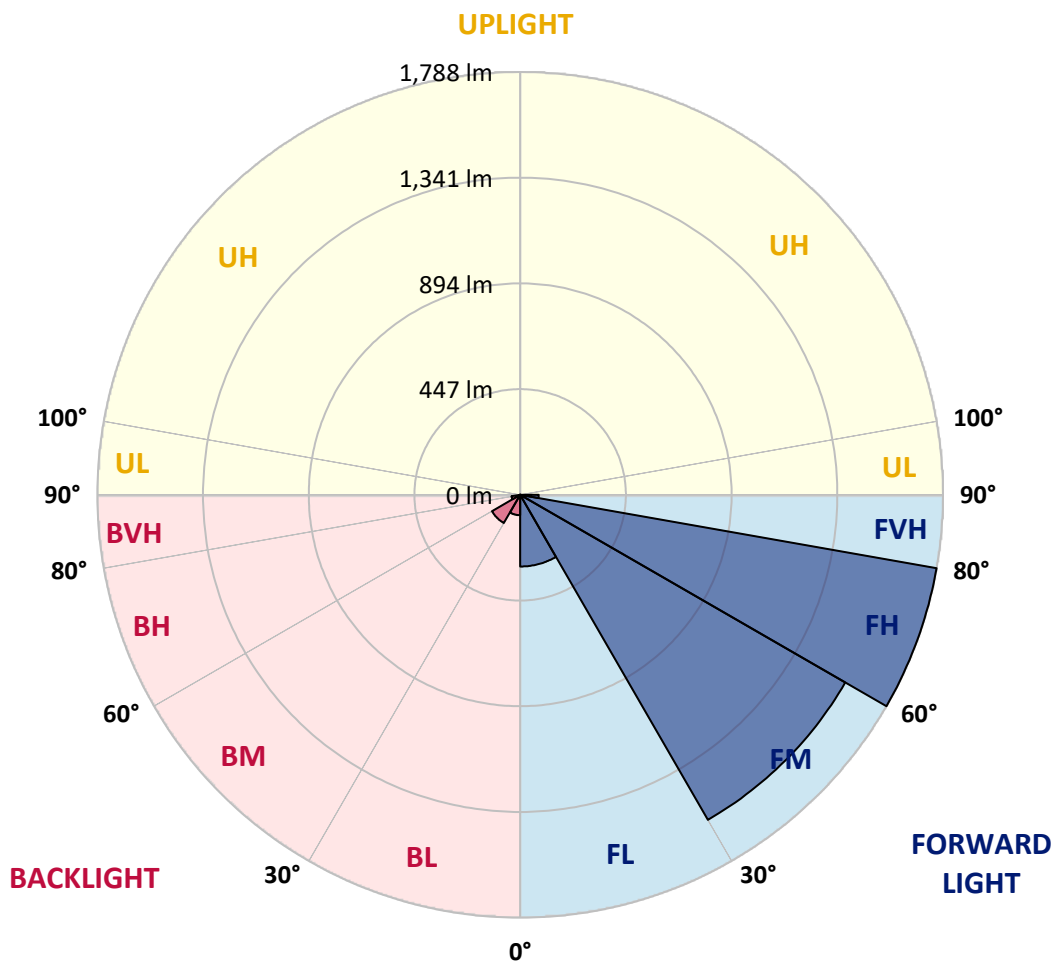
CATALOG NUMBER: XNV-AF-01-LED-U-SL4-8030-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 303.3 | 7.5 | | | |
| FM | (30°-60°) | 1587.5 | 39.5 | | | |
| FH | (60°-80°) | 1788.4 | 44.5 | | | G1/1800 |
| FVH | (80°-90°) | 78.3 | 1.9 | | | G1/100 |
| BL | (0°-30°) | 86.3 | 2.1 | B0/110 | | |
| BM | (30°-60°) | 137.9 | 3.4 | B0/220 | | |
| BH | (60°-80°) | 37.0 | 0.9 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 2.3 | 0.1 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type IV Short





REPORT NUMBER: P199206

CATALOG NUMBER: XNV-AF-01-LED-U-SL4-8030-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 |
| 2.5° | 685.3 | 686.6 | 685.0 | 682.2 | 678.0 | 675.5 | 672.0 | 664.4 | 655.0 | 646.7 | 637.3 |
| 5° | 690.7 | 691.3 | 689.4 | 684.0 | 677.7 | 674.2 | 669.8 | 661.6 | 651.8 | 640.4 | 623.4 |
| 7.5° | 692.3 | 692.0 | 689.7 | 683.1 | 673.3 | 668.9 | 661.3 | 651.2 | 641.1 | 630.6 | 611.3 |
| 10° | 691.6 | 691.6 | 690.1 | 683.7 | 672.7 | 668.6 | 660.0 | 649.3 | 636.6 | 626.2 | 605.7 |
| 12.5° | 689.4 | 690.7 | 689.7 | 686.3 | 678.0 | 674.9 | 667.3 | 656.5 | 644.5 | 633.8 | 612.0 |
| 15° | 692.3 | 694.2 | 696.1 | 694.8 | 690.1 | 687.2 | 680.3 | 669.2 | 659.4 | 648.0 | 624.6 |
| 17.5° | 703.6 | 707.8 | 712.2 | 712.5 | 707.4 | 702.4 | 694.5 | 683.1 | 673.6 | 663.2 | 637.9 |
| 20° | 725.1 | 728.3 | 736.5 | 738.1 | 728.0 | 720.7 | 709.7 | 696.4 | 686.9 | 678.0 | 650.2 |
| 22.5° | 757.1 | 760.5 | 767.2 | 765.0 | 747.9 | 739.4 | 725.5 | 710.3 | 700.5 | 695.4 | 664.4 |
| 25° | 805.4 | 806.4 | 808.0 | 798.2 | 770.0 | 760.5 | 743.5 | 726.4 | 718.5 | 717.9 | 684.7 |
| 27.5° | 862.3 | 863.6 | 856.6 | 834.8 | 794.7 | 782.4 | 763.1 | 747.6 | 743.8 | 748.5 | 710.3 |
| 30° | 927.4 | 927.8 | 908.5 | 873.1 | 823.1 | 809.5 | 789.6 | 772.6 | 776.0 | 787.7 | 743.2 |
| 32.5° | 994.1 | 991.0 | 964.4 | 918.3 | 862.0 | 845.6 | 828.5 | 811.4 | 821.6 | 845.3 | 791.2 |
| 35° | 1055.2 | 1053.9 | 1022.6 | 968.9 | 912.6 | 898.1 | 885.7 | 867.7 | 884.1 | 922.7 | 856.6 |
| 37.5° | 1116.2 | 1115.2 | 1079.5 | 1023.5 | 974.9 | 964.4 | 955.3 | 941.4 | 968.2 | 1024.8 | 944.2 |
| 40° | 1183.5 | 1181.9 | 1138.0 | 1084.2 | 1047.3 | 1041.6 | 1036.2 | 1030.2 | 1076.0 | 1154.7 | 1053.3 |
| 42.5° | 1266.6 | 1259.7 | 1199.9 | 1150.3 | 1126.9 | 1128.5 | 1128.8 | 1134.8 | 1206.6 | 1309.3 | 1181.9 |
| 45° | 1362.1 | 1346.6 | 1262.2 | 1221.1 | 1214.5 | 1224.0 | 1233.4 | 1258.4 | 1358.6 | 1487.3 | 1324.2 |
| 47.5° | 1454.7 | 1429.7 | 1334.0 | 1297.3 | 1310.9 | 1330.5 | 1353.2 | 1401.9 | 1529.3 | 1673.5 | 1453.1 |
| 50° | 1534.4 | 1508.8 | 1405.1 | 1374.7 | 1418.0 | 1447.1 | 1487.6 | 1561.2 | 1709.5 | 1830.9 | 1534.4 |
| 52.5° | 1597.0 | 1576.7 | 1480.3 | 1460.1 | 1536.9 | 1576.7 | 1640.3 | 1737.0 | 1879.6 | 1934.6 | 1591.3 |
| 55° | 1643.1 | 1633.0 | 1552.4 | 1555.2 | 1669.0 | 1726.6 | 1805.6 | 1915.0 | 2023.1 | 2015.2 | 1633.9 |
| 57.5° | 1695.3 | 1687.4 | 1627.9 | 1667.4 | 1828.0 | 1902.3 | 1993.7 | 2081.5 | 2127.4 | 2080.0 | 1675.7 |
| 60° | 1748.7 | 1751.2 | 1719.6 | 1803.4 | 2024.6 | 2106.8 | 2186.5 | 2208.3 | 2216.8 | 2145.7 | 1719.6 |
| 62.5° | 1789.1 | 1799.9 | 1802.7 | 1950.0 | 2226.3 | 2296.5 | 2330.9 | 2315.5 | 2313.6 | 2233.9 | 1716.1 |
| 65° | 1835.6 | 1863.7 | 1910.5 | 2110.9 | 2409.7 | 2455.8 | 2480.5 | 2502.9 | 2455.5 | 2260.1 | 1547.3 |
| 67.5° | 1915.9 | 1960.2 | 2065.4 | 2308.2 | 2621.4 | 2689.7 | 2759.6 | 2735.9 | 2476.7 | 1993.7 | 1178.8 |
| 70° | 2024.0 | 2078.1 | 2263.9 | 2565.8 | 2908.8 | 3023.2 | 3081.7 | 2717.2 | 2102.7 | 1377.6 | 621.8 |
| 72° | 1955.7 | 2004.7 | 2325.3 | 2697.3 | 3112.4 | 3217.3 | 3070.9 | 2370.1 | 1524.3 | 714.1 | 208.3 |
| 72.5° | 1889.4 | 1939.9 | 2305.7 | 2695.7 | 3132.6 | 3212.9 | 3001.1 | 2233.3 | 1348.8 | 555.7 | 143.5 |
| 75° | 1310.9 | 1374.7 | 1976.6 | 2423.3 | 2828.8 | 2740.6 | 2296.2 | 1352.3 | 488.7 | 95.5 | 47.4 |
| 77.5° | 677.7 | 727.0 | 1199.0 | 1712.3 | 1971.5 | 1805.6 | 1357.0 | 586.7 | 135.3 | 50.6 | 31.3 |
| 80° | 420.1 | 444.4 | 560.8 | 843.7 | 1024.2 | 895.8 | 598.7 | 237.1 | 86.6 | 30.0 | 25.0 |
| 82.5° | 217.5 | 236.1 | 353.1 | 340.4 | 378.4 | 314.5 | 221.0 | 198.5 | 53.4 | 18.7 | 25.6 |
| 85° | 71.4 | 75.9 | 216.8 | 226.3 | 161.8 | 108.7 | 98.0 | 189.3 | 15.5 | 12.0 | 21.8 |
| 87.5° | 9.5 | 11.1 | 76.2 | 129.6 | 79.7 | 49.3 | 58.8 | 66.7 | 5.4 | 6.6 | 6.0 |
| 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: P199206

CATALOG NUMBER: XNV-AF-01-LED-U-SL4-8030-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 | 643.6 |
| 2.5° | 630.9 | 626.8 | 613.9 | 600.9 | 586.1 | 572.5 | 561.7 | 554.8 | 557.9 | 547.5 | 549.1 |
| 5° | 612.9 | 602.5 | 574.0 | 543.4 | 510.2 | 479.2 | 454.6 | 436.2 | 432.7 | 416.9 | 417.6 |
| 7.5° | 595.5 | 578.5 | 532.3 | 481.7 | 426.7 | 382.2 | 341.7 | 306.3 | 293.7 | 280.7 | 273.1 |
| 10° | 586.1 | 562.7 | 497.2 | 423.6 | 346.1 | 280.7 | 223.8 | 179.2 | 160.6 | 147.0 | 140.4 |
| 12.5° | 588.9 | 557.9 | 471.0 | 370.8 | 269.0 | 185.9 | 126.4 | 93.9 | 82.5 | 76.2 | 74.0 |
| 15° | 598.4 | 558.9 | 447.3 | 319.3 | 195.7 | 112.5 | 74.3 | 63.5 | 62.6 | 62.3 | 62.0 |
| 17.5° | 607.2 | 559.8 | 422.3 | 265.5 | 130.9 | 71.8 | 59.7 | 58.8 | 58.8 | 58.8 | 58.8 |
| 20° | 616.4 | 560.1 | 394.8 | 209.3 | 86.0 | 58.8 | 56.3 | 55.6 | 56.3 | 56.3 | 56.3 |
| 22.5° | 627.1 | 562.3 | 368.3 | 154.6 | 63.5 | 55.3 | 53.7 | 53.4 | 53.7 | 53.7 | 53.4 |
| 25° | 640.4 | 567.1 | 339.5 | 110.6 | 57.5 | 53.1 | 51.5 | 51.2 | 51.5 | 51.2 | 51.2 |
| 27.5° | 658.1 | 573.4 | 306.0 | 79.3 | 55.0 | 50.9 | 49.3 | 49.3 | 49.3 | 49.0 | 49.0 |
| 30° | 680.9 | 581.0 | 261.1 | 62.6 | 52.5 | 48.7 | 47.4 | 47.4 | 47.1 | 46.8 | 46.8 |
| 32.5° | 713.4 | 593.3 | 212.1 | 56.6 | 49.6 | 45.8 | 44.6 | 44.9 | 44.6 | 44.3 | 43.9 |
| 35° | 759.6 | 612.6 | 163.7 | 53.4 | 46.8 | 43.0 | 41.7 | 41.7 | 41.7 | 41.1 | 41.1 |
| 37.5° | 825.0 | 642.0 | 122.6 | 50.3 | 43.9 | 40.1 | 38.6 | 38.6 | 38.2 | 37.6 | 37.9 |
| 40° | 906.0 | 679.0 | 88.8 | 47.4 | 41.1 | 37.0 | 35.7 | 35.1 | 34.5 | 33.8 | 33.8 |
| 42.5° | 1003.3 | 715.0 | 66.7 | 44.6 | 38.2 | 34.5 | 32.9 | 32.2 | 31.0 | 30.3 | 30.0 |
| 45° | 1112.4 | 753.3 | 55.3 | 41.1 | 35.1 | 31.6 | 30.3 | 29.1 | 27.5 | 26.6 | 26.2 |
| 47.5° | 1204.4 | 776.7 | 49.3 | 37.6 | 31.9 | 28.8 | 27.5 | 25.6 | 23.7 | 23.1 | 23.1 |
| 50° | 1259.7 | 766.9 | 44.3 | 34.1 | 28.8 | 25.9 | 24.3 | 21.8 | 20.5 | 19.9 | 19.6 |
| 52.5° | 1290.7 | 737.8 | 40.1 | 31.3 | 25.9 | 22.8 | 20.5 | 18.3 | 17.7 | 17.1 | 17.1 |
| 55° | 1311.8 | 695.7 | 35.7 | 28.4 | 23.4 | 19.9 | 17.4 | 15.8 | 15.2 | 14.9 | 14.5 |
| 57.5° | 1332.1 | 644.5 | 31.6 | 25.9 | 20.9 | 17.7 | 14.9 | 14.2 | 13.0 | 12.6 | 12.6 |
| 60° | 1338.1 | 574.0 | 27.8 | 23.1 | 18.7 | 15.5 | 13.0 | 12.0 | 10.7 | 10.4 | 10.4 |
| 62.5° | 1261.6 | 456.8 | 24.7 | 19.6 | 16.4 | 13.3 | 11.4 | 10.1 | 8.9 | 8.9 | 8.9 |
| 65° | 1054.2 | 310.1 | 21.2 | 17.1 | 14.5 | 11.4 | 9.8 | 8.2 | 7.6 | 7.6 | 7.6 |
| 67.5° | 734.3 | 172.9 | 18.0 | 14.5 | 12.3 | 9.5 | 8.2 | 7.0 | 6.6 | 7.0 | 7.0 |
| 70° | 331.0 | 68.6 | 15.2 | 12.0 | 10.1 | 7.9 | 7.0 | 6.0 | 6.6 | 6.6 | 6.6 |
| 72° | 99.3 | 36.7 | 12.6 | 9.8 | 8.2 | 7.0 | 6.0 | 5.7 | 6.3 | 6.6 | 6.6 |
| 72.5° | 73.7 | 32.9 | 12.0 | 9.5 | 8.2 | 6.6 | 5.7 | 5.7 | 6.3 | 6.6 | 6.6 |
| 75° | 37.9 | 22.4 | 9.2 | 7.0 | 6.0 | 5.4 | 4.7 | 5.4 | 6.3 | 6.3 | 6.3 |
| 77.5° | 29.7 | 18.3 | 7.6 | 5.4 | 5.1 | 4.7 | 4.4 | 5.1 | 5.7 | 5.7 | 5.7 |
| 80° | 27.8 | 12.0 | 6.0 | 5.1 | 4.4 | 4.1 | 4.1 | 4.4 | 5.1 | 5.4 | 5.4 |
| 82.5° | 28.1 | 9.8 | 5.4 | 4.7 | 4.1 | 3.8 | 3.8 | 4.1 | 4.7 | 5.1 | 5.1 |
| 85° | 18.0 | 6.6 | 4.7 | 4.1 | 3.8 | 3.5 | 3.5 | 3.8 | 4.4 | 4.7 | 4.7 |
| 87.5° | 6.0 | 5.1 | 4.1 | 3.8 | 3.2 | 3.2 | 3.2 | 3.2 | 3.8 | 4.1 | 4.4 |
| 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)