

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: P199140

Luminaire Tested: **XNV-AF-01-LED-U-5WQ-8030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)
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-5WQ-8030-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4149 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - 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

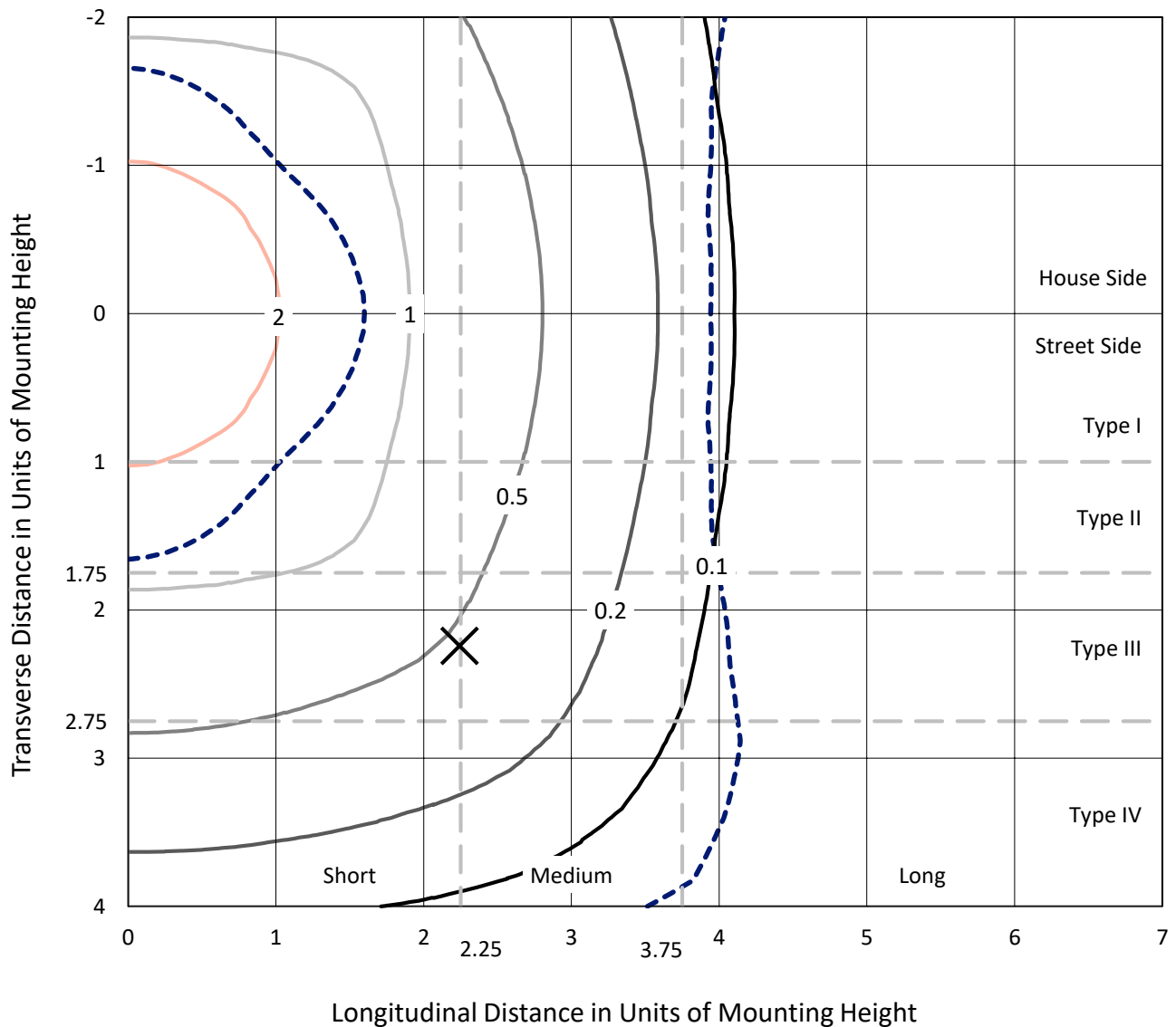


REPORT NUMBER: P199140

CATALOG NUMBER: XNV-AF-01-LED-U-5WQ-8030-800

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

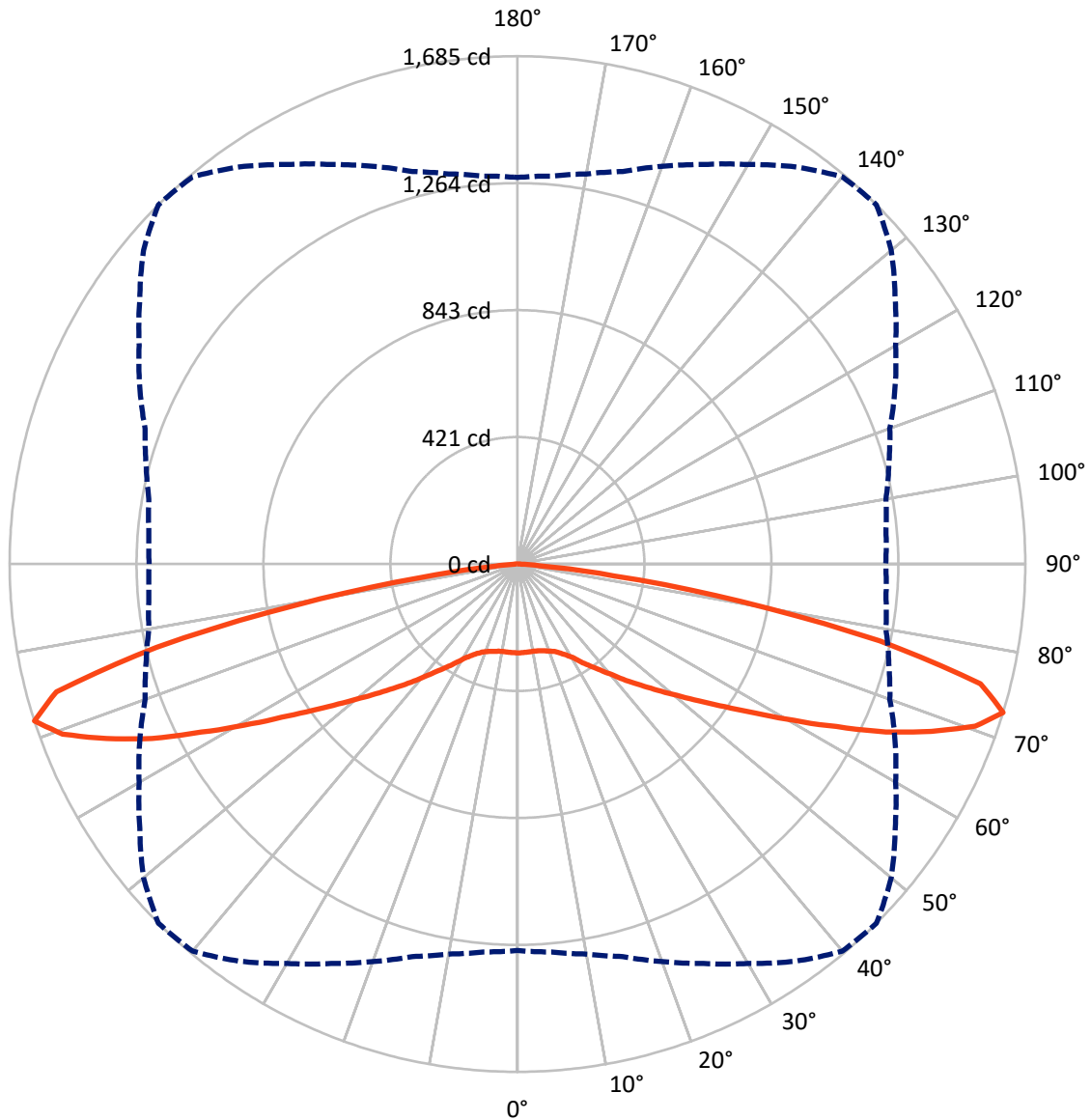


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P199140

CATALOG NUMBER: XNV-AF-01-LED-U-5WQ-8030-800

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



REPORT NUMBER: P199140

CATALOG NUMBER: XNV-AF-01-LED-U-5WQ-8030-800

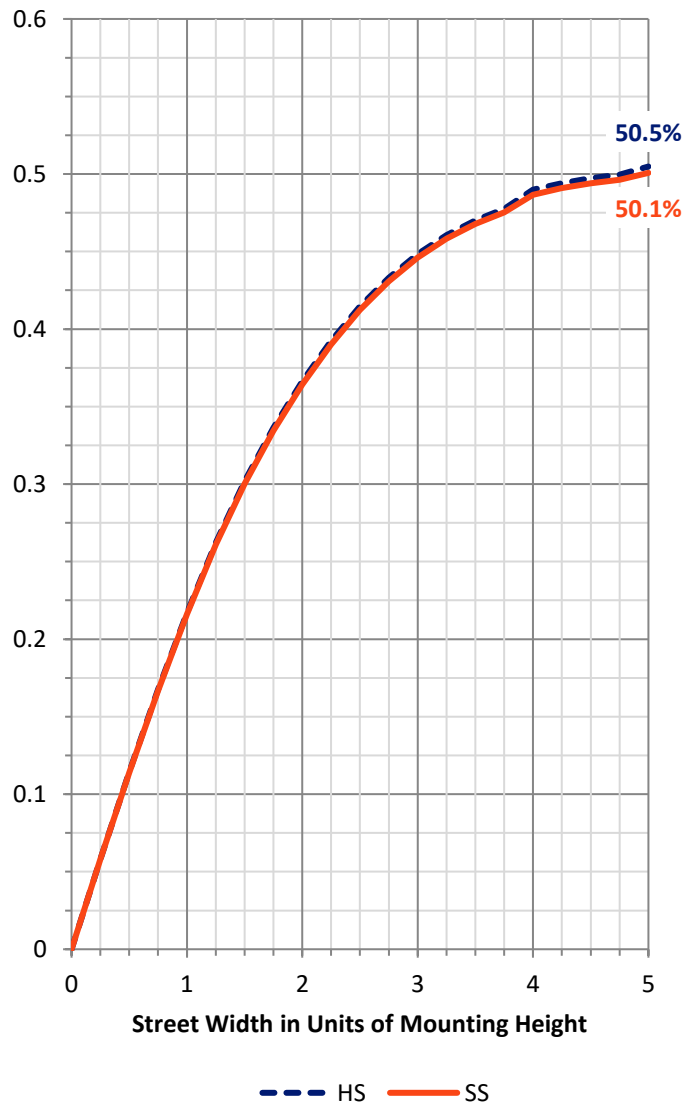
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2074.5 | 0.0 | 2074.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2074.5 | 0.0 | 2074.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 4149.0 | 0.0 | 4149.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 28.2 | 0.7 |
| 10°-20° | 85.2 | 2.1 |
| 20°-30° | 153.8 | 3.7 |
| 30°-40° | 262.4 | 6.3 |
| 40°-50° | 446.7 | 10.8 |
| 50°-60° | 718.9 | 17.3 |
| 60°-70° | 1195.5 | 28.8 |
| 70°-80° | 1156.5 | 27.9 |
| 80°-90° | 101.8 | 2.5 |
| 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° | 4149.0 | 100.0 |
| 0°-180° | 4149.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P199140

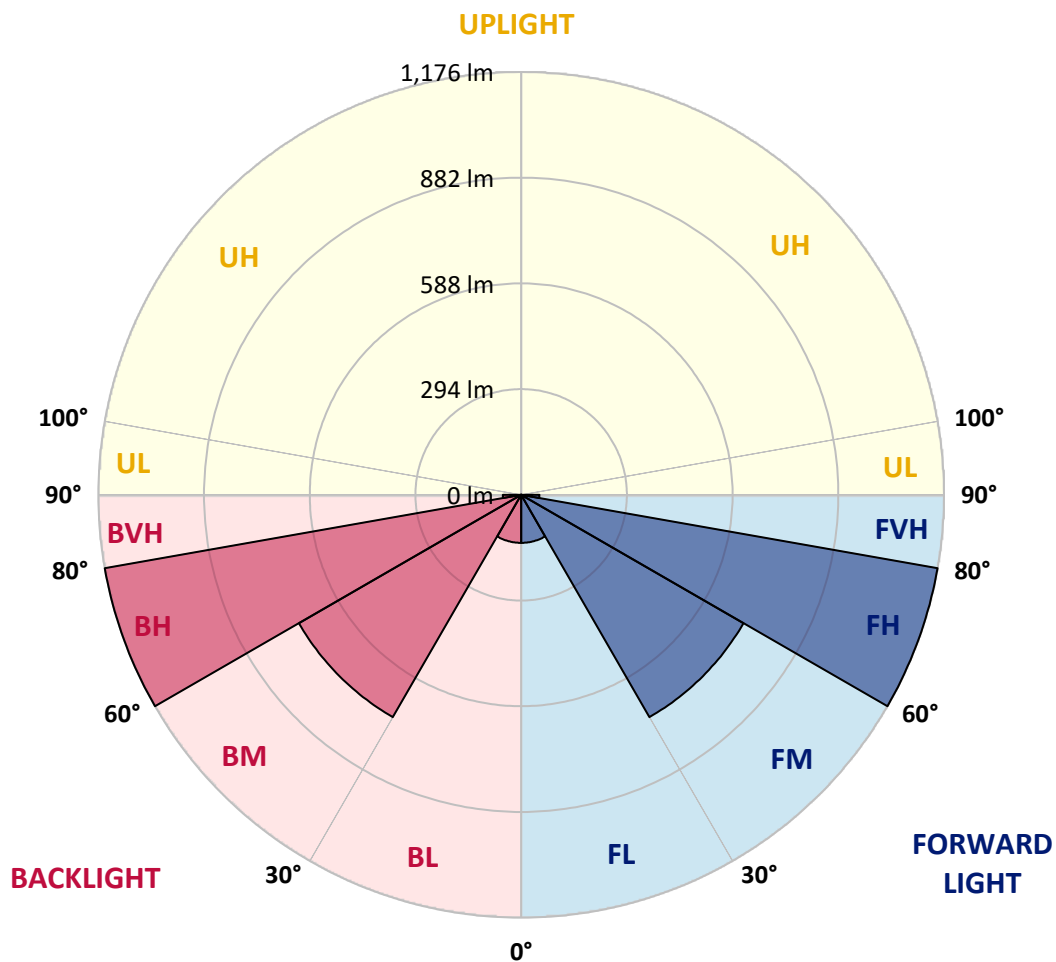
CATALOG NUMBER: XNV-AF-01-LED-U-5WQ-8030-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 133.6 | 3.2 | | | |
| FM | (30°-60°) | 714.0 | 17.2 | | | |
| FH | (60°-80°) | 1176.0 | 28.3 | | | G1/1800 |
| FVH | (80°-90°) | 50.9 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 133.6 | 3.2 | B1/500 | | |
| BM | (30°-60°) | 714.0 | 17.2 | B1/1000 | | |
| BH | (60°-80°) | 1176.0 | 28.3 | B3/2500 | | G1/1800 |
| BVH | (80°-90°) | 50.9 | 1.2 | | | 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: P199140

CATALOG NUMBER: XNV-AF-01-LED-U-5WQ-8030-800

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 |
| 2.5° | 297.3 | 297.3 | 297.5 | 297.3 | 296.8 | 296.5 | 295.7 | 295.2 | 294.7 | 294.5 | 293.9 |
| 5° | 297.5 | 297.5 | 297.8 | 297.5 | 297.0 | 296.5 | 296.0 | 295.2 | 294.7 | 294.2 | 293.9 |
| 7.5° | 298.5 | 298.8 | 299.0 | 298.8 | 297.8 | 297.3 | 296.5 | 295.7 | 294.7 | 294.2 | 293.7 |
| 10° | 300.6 | 300.6 | 300.6 | 300.3 | 299.6 | 298.5 | 297.5 | 296.8 | 295.5 | 294.2 | 293.4 |
| 12.5° | 302.1 | 302.4 | 302.4 | 301.9 | 300.8 | 299.6 | 298.5 | 297.8 | 296.8 | 295.7 | 295.0 |
| 15° | 304.4 | 304.4 | 304.2 | 303.1 | 301.6 | 300.6 | 300.1 | 299.8 | 299.6 | 299.0 | 298.3 |
| 17.5° | 309.0 | 308.8 | 308.0 | 306.5 | 304.7 | 303.9 | 303.4 | 303.4 | 303.4 | 303.1 | 302.6 |
| 20° | 315.6 | 315.6 | 314.6 | 312.1 | 310.5 | 309.8 | 309.0 | 309.0 | 309.0 | 308.2 | 307.5 |
| 22.5° | 326.4 | 326.6 | 325.1 | 322.0 | 320.0 | 318.5 | 317.4 | 316.7 | 315.9 | 315.4 | 314.1 |
| 25° | 340.9 | 340.7 | 338.9 | 335.1 | 333.5 | 332.0 | 329.9 | 328.7 | 327.7 | 326.9 | 325.4 |
| 27.5° | 356.3 | 356.0 | 354.0 | 350.6 | 349.6 | 347.3 | 345.8 | 344.0 | 342.7 | 341.4 | 339.9 |
| 30° | 375.9 | 374.6 | 373.1 | 370.6 | 370.0 | 368.3 | 366.2 | 363.7 | 361.6 | 359.6 | 357.8 |
| 32.5° | 393.5 | 393.5 | 391.2 | 390.0 | 391.0 | 390.2 | 390.5 | 388.9 | 387.7 | 386.9 | 385.1 |
| 35° | 418.1 | 418.1 | 417.0 | 415.5 | 415.8 | 414.0 | 413.7 | 414.0 | 415.0 | 415.0 | 412.9 |
| 37.5° | 450.7 | 451.3 | 447.9 | 447.4 | 446.1 | 443.6 | 442.3 | 442.8 | 445.1 | 446.4 | 443.6 |
| 40° | 491.3 | 492.4 | 491.3 | 488.0 | 486.5 | 482.2 | 479.6 | 479.6 | 481.4 | 482.7 | 481.6 |
| 42.5° | 531.4 | 533.2 | 531.4 | 528.9 | 527.6 | 524.3 | 523.0 | 524.0 | 526.3 | 527.9 | 526.3 |
| 45° | 576.1 | 577.4 | 575.1 | 572.0 | 570.5 | 568.7 | 568.0 | 568.7 | 571.3 | 572.8 | 572.3 |
| 47.5° | 620.1 | 621.8 | 619.0 | 617.8 | 617.8 | 616.0 | 618.0 | 620.1 | 622.4 | 625.9 | 624.4 |
| 50° | 663.0 | 665.3 | 663.5 | 663.7 | 665.8 | 669.1 | 672.9 | 677.0 | 681.1 | 684.9 | 685.4 |
| 52.5° | 701.3 | 704.8 | 705.1 | 709.7 | 716.1 | 721.2 | 731.9 | 740.9 | 750.6 | 753.9 | 752.3 |
| 55° | 741.6 | 746.5 | 752.9 | 760.0 | 770.2 | 780.7 | 798.8 | 814.9 | 827.7 | 835.6 | 834.3 |
| 57.5° | 799.3 | 804.2 | 810.8 | 822.6 | 837.9 | 852.2 | 877.0 | 902.0 | 921.4 | 933.4 | 927.5 |
| 60° | 874.2 | 879.3 | 888.0 | 900.5 | 920.4 | 939.8 | 973.8 | 1009.8 | 1039.9 | 1053.7 | 1043.0 |
| 62.5° | 973.2 | 978.1 | 983.7 | 1000.3 | 1022.5 | 1047.6 | 1090.2 | 1136.4 | 1174.7 | 1188.0 | 1173.0 |
| 65° | 1114.5 | 1120.3 | 1122.1 | 1135.7 | 1157.4 | 1180.6 | 1226.6 | 1278.7 | 1322.4 | 1344.1 | 1313.9 |
| 67.5° | 1273.6 | 1275.9 | 1283.0 | 1298.9 | 1321.1 | 1342.0 | 1378.3 | 1427.6 | 1469.5 | 1481.5 | 1449.3 |
| 70° | 1366.8 | 1371.4 | 1383.9 | 1405.9 | 1432.4 | 1465.4 | 1504.9 | 1558.1 | 1605.6 | 1611.2 | 1570.3 |
| 72.5° | 1282.5 | 1292.0 | 1314.2 | 1348.4 | 1404.1 | 1462.6 | 1530.7 | 1609.1 | 1677.3 | 1685.2 | 1619.6 |
| 75° | 1028.7 | 1039.4 | 1066.0 | 1103.5 | 1169.4 | 1256.2 | 1354.8 | 1472.5 | 1574.7 | 1587.7 | 1500.9 |
| 77.5° | 548.3 | 561.6 | 600.1 | 650.7 | 744.7 | 859.6 | 978.4 | 1112.7 | 1199.5 | 1228.9 | 1166.3 |
| 80° | 138.2 | 145.3 | 164.0 | 193.6 | 257.2 | 349.9 | 452.3 | 596.8 | 704.6 | 750.3 | 704.6 |
| 82.5° | 53.6 | 59.0 | 64.1 | 67.7 | 73.8 | 86.6 | 119.5 | 194.9 | 262.5 | 323.3 | 279.9 |
| 85° | 20.7 | 22.0 | 31.7 | 36.0 | 36.0 | 39.6 | 45.5 | 53.6 | 66.4 | 72.5 | 60.8 |
| 87.5° | 8.2 | 8.9 | 11.0 | 16.9 | 17.4 | 15.3 | 16.3 | 18.4 | 14.0 | 11.7 | 13.3 |
| 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: P199140

CATALOG NUMBER: XNV-AF-01-LED-U-5WQ-8030-800

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 | 295.0 |
| 2.5° | 293.7 | 293.4 | 292.9 | 293.2 | 292.9 | 292.9 | 292.9 | 292.9 |
| 5° | 293.4 | 293.4 | 292.9 | 292.9 | 292.9 | 293.2 | 292.9 | 292.9 |
| 7.5° | 293.2 | 292.9 | 292.4 | 292.2 | 292.2 | 291.9 | 291.9 | 291.9 |
| 10° | 292.7 | 292.2 | 291.6 | 291.4 | 291.4 | 290.9 | 290.9 | 290.9 |
| 12.5° | 293.9 | 293.2 | 292.7 | 292.4 | 292.4 | 292.4 | 292.7 | 292.7 |
| 15° | 297.5 | 296.0 | 295.2 | 295.0 | 295.2 | 295.7 | 296.0 | 296.2 |
| 17.5° | 301.3 | 299.8 | 298.5 | 298.0 | 298.3 | 299.0 | 299.8 | 300.3 |
| 20° | 306.2 | 304.9 | 303.4 | 302.9 | 302.9 | 303.9 | 304.4 | 305.2 |
| 22.5° | 313.1 | 312.1 | 310.8 | 310.0 | 309.5 | 310.8 | 311.6 | 312.1 |
| 25° | 324.1 | 323.1 | 322.0 | 321.3 | 321.0 | 322.3 | 322.8 | 323.1 |
| 27.5° | 338.6 | 337.6 | 337.1 | 336.8 | 336.1 | 336.6 | 337.4 | 337.1 |
| 30° | 357.5 | 358.3 | 357.5 | 357.5 | 356.3 | 356.8 | 356.3 | 355.7 |
| 32.5° | 382.8 | 382.0 | 379.7 | 378.2 | 376.4 | 376.4 | 375.7 | 374.9 |
| 35° | 408.1 | 405.5 | 404.3 | 405.0 | 404.3 | 404.8 | 403.5 | 402.2 |
| 37.5° | 438.0 | 436.4 | 436.2 | 438.5 | 438.0 | 438.5 | 438.5 | 436.7 |
| 40° | 477.6 | 476.5 | 478.3 | 482.2 | 483.7 | 483.4 | 483.9 | 481.6 |
| 42.5° | 523.0 | 521.2 | 522.0 | 525.3 | 527.1 | 527.6 | 527.4 | 525.3 |
| 45° | 568.5 | 569.0 | 569.0 | 572.6 | 574.3 | 575.4 | 573.6 | 572.8 |
| 47.5° | 619.8 | 620.6 | 618.8 | 621.1 | 621.6 | 623.4 | 621.8 | 620.6 |
| 50° | 679.1 | 676.2 | 672.2 | 672.9 | 672.9 | 672.4 | 670.6 | 669.1 |
| 52.5° | 745.2 | 738.8 | 731.2 | 728.6 | 725.8 | 723.0 | 719.4 | 716.6 |
| 55° | 820.5 | 809.6 | 795.8 | 789.4 | 784.0 | 777.6 | 769.5 | 766.6 |
| 57.5° | 907.9 | 889.0 | 870.6 | 859.1 | 845.3 | 836.9 | 826.4 | 825.9 |
| 60° | 1011.6 | 986.0 | 953.6 | 936.5 | 922.7 | 912.7 | 904.8 | 901.7 |
| 62.5° | 1131.3 | 1087.4 | 1052.4 | 1034.0 | 1017.9 | 1011.8 | 1001.9 | 1003.1 |
| 65° | 1254.2 | 1209.5 | 1175.5 | 1160.7 | 1145.6 | 1141.5 | 1132.4 | 1135.7 |
| 67.5° | 1387.2 | 1350.4 | 1313.2 | 1299.4 | 1285.6 | 1281.5 | 1272.0 | 1274.9 |
| 70° | 1506.5 | 1459.7 | 1417.4 | 1390.3 | 1366.8 | 1347.9 | 1335.9 | 1331.0 |
| 72.5° | 1530.2 | 1449.3 | 1382.6 | 1314.9 | 1275.9 | 1241.7 | 1227.6 | 1222.2 |
| 75° | 1375.0 | 1249.3 | 1154.3 | 1074.9 | 1031.0 | 981.2 | 975.8 | 968.4 |
| 77.5° | 1069.5 | 926.5 | 811.6 | 709.4 | 650.5 | 589.7 | 568.7 | 552.9 |
| 80° | 637.9 | 490.3 | 380.0 | 266.4 | 217.3 | 174.9 | 164.5 | 153.5 |
| 82.5° | 228.3 | 146.3 | 98.6 | 76.9 | 68.7 | 63.3 | 59.2 | 53.9 |
| 85° | 55.2 | 46.5 | 43.9 | 39.8 | 39.3 | 33.5 | 23.8 | 21.2 |
| 87.5° | 17.6 | 16.1 | 16.3 | 15.6 | 16.3 | 12.3 | 10.0 | 8.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)