

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: P198760

Luminaire Tested: **XNV-AF-01-LED-U-T2-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198760
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: XNV-AF-01-LED-U-T2-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6643 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

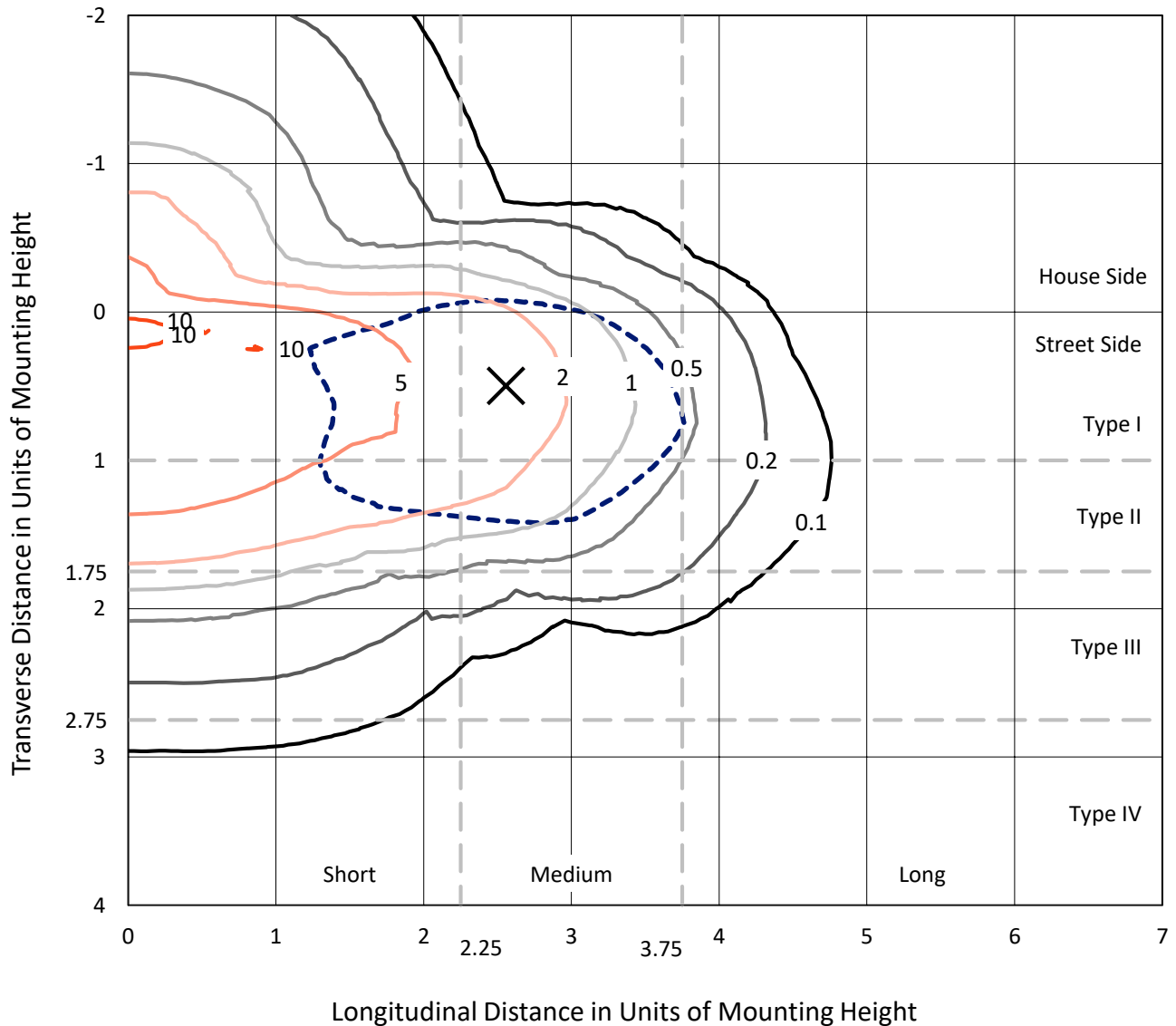
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198760
 CATALOG NUMBER: XNV-AF-01-LED-U-T2-1200

Iso-Footcandle Lines of Horizontal Illumination

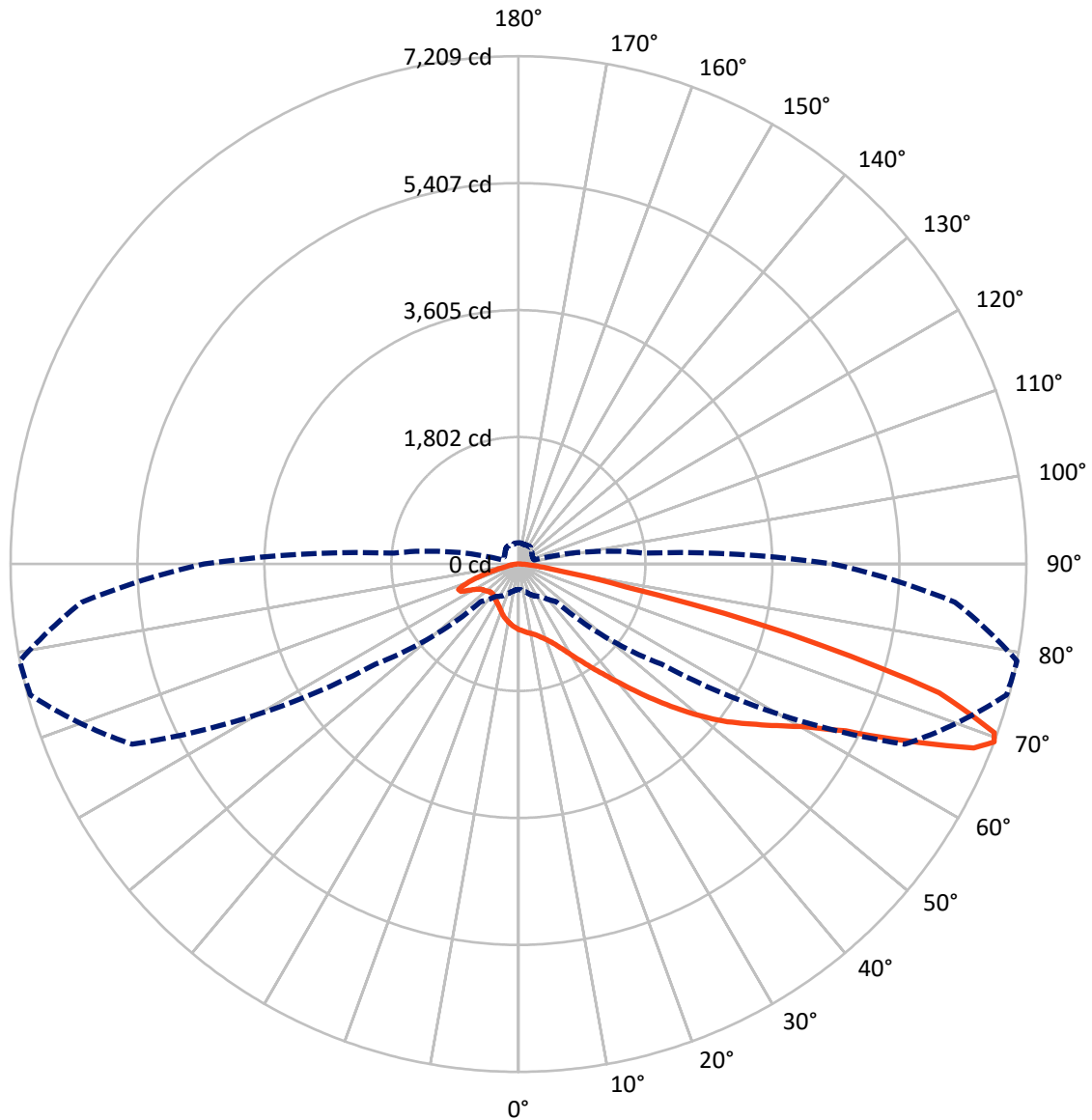
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.3 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P198760
CATALOG NUMBER: XNV-AF-01-LED-U-T2-1200

Luminous Intensity Polar Plot



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

REPORT NUMBER: P198760

CATALOG NUMBER: XNV-AF-01-LED-U-T2-1200

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1249.7 | 0.0 | 1249.7 |
| | % Fixture | 18.8 | 0.0 | 18.8 |
| Street Side | Lumens | 5393.4 | 0.0 | 5393.4 |
| | % Fixture | 81.2 | 0.0 | 81.2 |
| Total | Lumens | 6643.0 | 0.0 | 6643.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.4 | 1.3 |
| 10°-20° | 247.8 | 3.7 |
| 20°-30° | 409.4 | 6.2 |
| 30°-40° | 663.0 | 10.0 |
| 40°-50° | 1059.1 | 15.9 |
| 50°-60° | 1516.7 | 22.8 |
| 60°-70° | 1689.8 | 25.4 |
| 70°-80° | 845.4 | 12.7 |
| 80°-90° | 125.5 | 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° | 6643.0 | 100.0 |
| 0°-180° | 6643.0 | 100.0 |



REPORT NUMBER: P198760

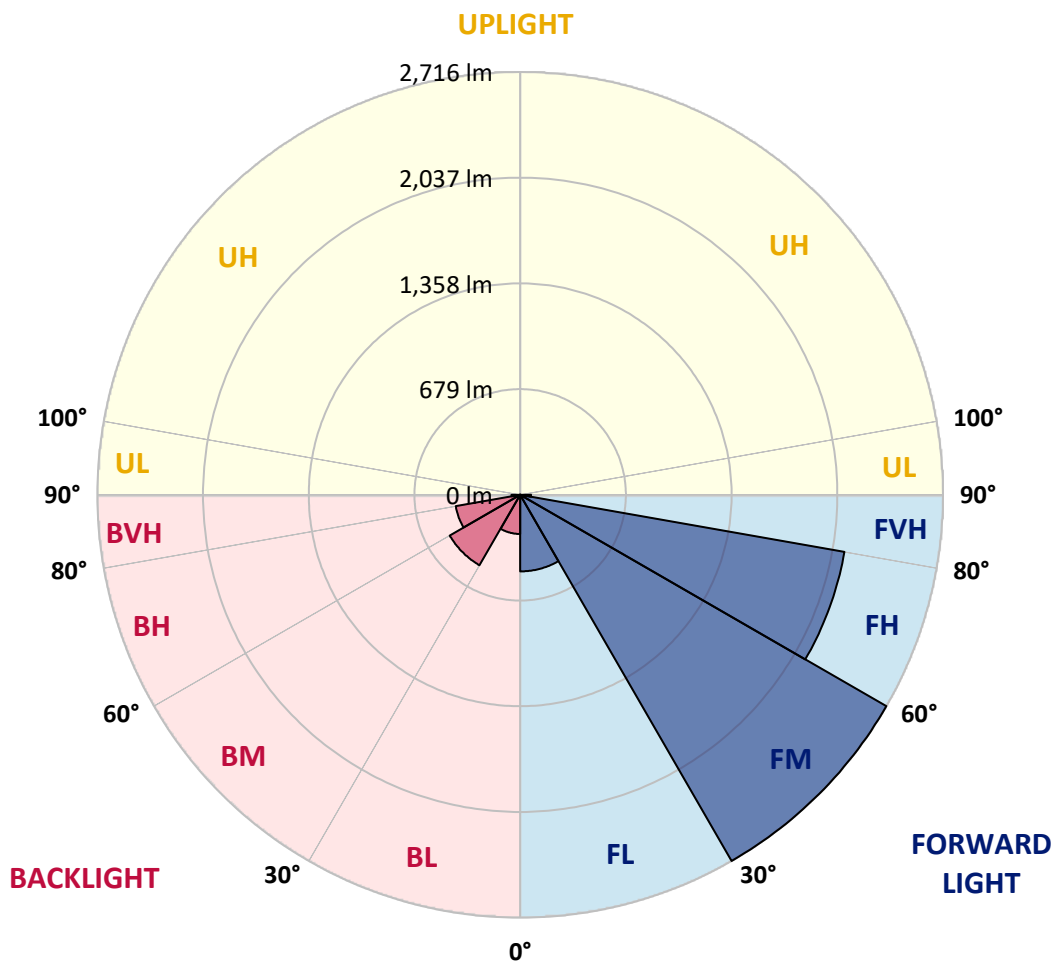
CATALOG NUMBER: XNV-AF-01-LED-U-T2-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 491.9 | 7.4 | | | |
| FM (30°-60°) | 2716.3 | 40.9 | | | |
| FH (60°-80°) | 2115.1 | 31.8 | | | G2/5000 |
| FVH (80°-90°) | 70.1 | 1.1 | | | G1/100 |
| BL (0°-30°) | 251.8 | 3.8 | B1/500 | | |
| BM (30°-60°) | 522.4 | 7.9 | B1/1000 | | |
| BH (60°-80°) | 420.2 | 6.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 55.4 | 0.8 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Medium





REPORT NUMBER: P198760

CATALOG NUMBER: XNV-AF-01-LED-U-T2-1200

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 |
| 2.5° | 1023.5 | 1021.3 | 1020.9 | 1014.4 | 1010.9 | 1003.5 | 986.1 | 968.3 | 951.8 | 943.1 | 934.0 |
| 5° | 1109.1 | 1104.8 | 1102.6 | 1091.7 | 1082.2 | 1065.6 | 1038.3 | 1010.1 | 980.5 | 965.3 | 947.0 |
| 7.5° | 1160.8 | 1161.3 | 1161.3 | 1152.6 | 1143.0 | 1123.0 | 1088.2 | 1049.5 | 1005.7 | 985.7 | 957.0 |
| 10° | 1165.1 | 1165.7 | 1172.1 | 1174.3 | 1176.5 | 1166.1 | 1133.8 | 1085.2 | 1028.7 | 1002.6 | 965.3 |
| 12.5° | 1122.2 | 1125.1 | 1136.1 | 1151.7 | 1173.8 | 1185.2 | 1171.3 | 1123.4 | 1058.2 | 1026.5 | 980.9 |
| 15° | 1064.4 | 1067.3 | 1081.3 | 1105.2 | 1140.8 | 1178.6 | 1198.2 | 1167.4 | 1096.9 | 1059.6 | 1003.9 |
| 17.5° | 1036.1 | 1039.6 | 1049.1 | 1068.3 | 1103.0 | 1153.9 | 1212.5 | 1214.2 | 1142.5 | 1099.6 | 1031.3 |
| 20° | 1022.6 | 1025.2 | 1037.4 | 1053.0 | 1079.5 | 1128.2 | 1213.8 | 1263.9 | 1196.9 | 1146.9 | 1064.8 |
| 22.5° | 1053.4 | 1054.4 | 1060.4 | 1069.1 | 1087.0 | 1124.3 | 1213.0 | 1315.1 | 1264.7 | 1206.5 | 1107.9 |
| 25° | 1143.9 | 1138.2 | 1133.8 | 1123.0 | 1127.4 | 1153.9 | 1226.9 | 1369.8 | 1351.6 | 1284.7 | 1165.1 |
| 27.5° | 1250.8 | 1249.9 | 1238.6 | 1213.4 | 1197.4 | 1214.2 | 1266.4 | 1431.1 | 1458.1 | 1384.3 | 1240.3 |
| 30° | 1369.8 | 1370.3 | 1358.6 | 1327.7 | 1295.2 | 1296.9 | 1329.4 | 1502.0 | 1585.5 | 1504.1 | 1332.9 |
| 32.5° | 1494.6 | 1502.4 | 1480.7 | 1449.8 | 1410.3 | 1397.7 | 1419.9 | 1587.6 | 1732.8 | 1645.8 | 1440.3 |
| 35° | 1643.7 | 1645.0 | 1621.1 | 1575.9 | 1536.4 | 1516.3 | 1536.8 | 1694.5 | 1902.7 | 1812.3 | 1571.0 |
| 37.5° | 1798.3 | 1799.3 | 1774.5 | 1716.7 | 1666.7 | 1653.7 | 1676.3 | 1824.4 | 2082.6 | 2001.8 | 1724.9 |
| 40° | 1924.9 | 1934.0 | 1914.5 | 1860.1 | 1809.7 | 1801.8 | 1834.5 | 1980.0 | 2312.6 | 2226.0 | 1907.9 |
| 42.5° | 2068.3 | 2078.7 | 2055.2 | 1998.7 | 1958.7 | 1956.2 | 2007.0 | 2157.4 | 2541.1 | 2485.5 | 2115.3 |
| 45° | 2229.9 | 2244.8 | 2212.1 | 2148.7 | 2114.7 | 2172.1 | 2175.2 | 2353.8 | 2804.5 | 2775.8 | 2348.6 |
| 47.5° | 2406.4 | 2418.6 | 2392.1 | 2323.8 | 2286.9 | 2369.9 | 2339.9 | 2566.4 | 3089.2 | 3087.0 | 2601.2 |
| 50° | 2542.4 | 2555.9 | 2558.5 | 2528.5 | 2489.9 | 2500.3 | 2520.8 | 2789.7 | 3373.0 | 3406.8 | 2862.3 |
| 52.5° | 2517.7 | 2530.7 | 2589.4 | 2668.1 | 2730.2 | 2703.2 | 2728.0 | 3027.0 | 3647.2 | 3718.9 | 3110.5 |
| 55° | 2317.8 | 2324.7 | 2434.6 | 2621.5 | 2886.3 | 3014.8 | 3016.6 | 3285.2 | 3908.0 | 4008.3 | 3346.1 |
| 57.5° | 1957.4 | 1958.3 | 2101.3 | 2376.8 | 2795.4 | 3217.0 | 3472.1 | 3609.4 | 4180.1 | 4328.2 | 3638.1 |
| 60° | 1385.1 | 1388.6 | 1555.0 | 1915.3 | 2469.8 | 3192.6 | 3961.9 | 4189.6 | 4495.2 | 4687.7 | 4014.5 |
| 62.5° | 822.2 | 830.1 | 955.7 | 1244.7 | 1834.5 | 2879.7 | 4251.3 | 5221.8 | 4959.3 | 5214.8 | 4616.8 |
| 65° | 535.0 | 541.6 | 616.7 | 761.9 | 1083.9 | 2095.2 | 4156.1 | 6221.4 | 5837.6 | 6044.1 | 5482.5 |
| 67.5° | 412.0 | 417.3 | 476.3 | 564.2 | 664.9 | 1132.6 | 3323.0 | 6430.9 | 6906.8 | 6971.1 | 6213.1 |
| 69° | 362.0 | 366.4 | 409.8 | 494.2 | 559.8 | 749.7 | 2476.4 | 6050.5 | 7174.1 | 7209.2 | 6222.2 |
| 70° | 335.5 | 339.0 | 379.8 | 452.9 | 514.1 | 598.4 | 1895.3 | 5609.0 | 7076.3 | 7166.2 | 6042.8 |
| 72.5° | 276.4 | 279.5 | 308.5 | 364.7 | 420.2 | 426.4 | 839.6 | 4095.7 | 5958.5 | 6246.1 | 5113.5 |
| 75° | 230.8 | 232.5 | 251.6 | 292.5 | 340.3 | 339.4 | 428.9 | 2320.0 | 3635.9 | 3978.8 | 3157.4 |
| 77.5° | 192.5 | 193.8 | 206.4 | 231.6 | 268.6 | 267.3 | 302.1 | 1001.4 | 1605.4 | 1549.0 | 1087.0 |
| 80° | 169.9 | 170.8 | 177.3 | 183.8 | 207.4 | 206.0 | 223.8 | 459.8 | 653.3 | 603.6 | 411.1 |
| 82.5° | 129.1 | 130.8 | 163.9 | 166.8 | 160.8 | 155.2 | 156.0 | 267.7 | 334.6 | 304.6 | 220.8 |
| 85° | 73.0 | 73.4 | 105.2 | 123.0 | 139.9 | 105.2 | 101.3 | 138.2 | 165.1 | 144.7 | 96.5 |
| 87.5° | 32.6 | 33.9 | 50.4 | 58.2 | 75.6 | 61.7 | 57.8 | 58.7 | 71.3 | 59.1 | 38.3 |
| 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: P198760

CATALOG NUMBER: XNV-AF-01-LED-U-T2-1200

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 | 932.2 |
| 2.5° | 925.3 | 917.9 | 900.5 | 882.7 | 864.9 | 853.6 | 841.8 | 830.9 | 826.6 | 826.1 | 818.0 |
| 5° | 929.1 | 911.8 | 872.3 | 828.8 | 787.5 | 755.3 | 728.4 | 711.1 | 694.1 | 691.0 | 683.6 |
| 7.5° | 930.5 | 902.2 | 837.9 | 768.3 | 705.3 | 661.0 | 634.1 | 622.4 | 614.1 | 611.9 | 609.3 |
| 10° | 930.1 | 890.1 | 799.6 | 704.5 | 632.8 | 599.3 | 589.3 | 592.0 | 595.5 | 597.2 | 597.2 |
| 12.5° | 937.0 | 884.4 | 761.4 | 644.6 | 585.8 | 569.8 | 577.6 | 591.1 | 601.5 | 605.8 | 606.7 |
| 15° | 949.6 | 881.0 | 719.2 | 592.4 | 552.8 | 556.7 | 575.8 | 595.5 | 610.2 | 616.7 | 618.5 |
| 17.5° | 965.3 | 876.2 | 670.6 | 549.3 | 533.7 | 547.2 | 571.9 | 596.7 | 614.5 | 622.8 | 624.1 |
| 20° | 982.6 | 869.2 | 620.2 | 517.2 | 516.8 | 533.7 | 558.4 | 586.3 | 605.4 | 614.5 | 614.1 |
| 22.5° | 1006.1 | 862.7 | 573.3 | 493.7 | 498.1 | 513.7 | 534.1 | 559.3 | 577.1 | 585.4 | 583.7 |
| 25° | 1037.4 | 856.6 | 531.1 | 472.8 | 476.8 | 487.2 | 501.6 | 520.7 | 533.3 | 537.6 | 534.6 |
| 27.5° | 1079.5 | 851.8 | 498.1 | 453.7 | 453.3 | 458.1 | 466.8 | 477.2 | 483.2 | 482.0 | 477.2 |
| 30° | 1131.3 | 847.0 | 473.7 | 436.8 | 430.7 | 430.3 | 434.1 | 440.3 | 444.2 | 436.4 | 432.4 |
| 32.5° | 1189.1 | 838.8 | 451.9 | 422.0 | 411.1 | 407.2 | 409.0 | 417.3 | 433.3 | 425.4 | 422.5 |
| 35° | 1257.3 | 829.2 | 430.3 | 405.9 | 397.6 | 390.3 | 391.6 | 409.4 | 458.1 | 452.5 | 449.4 |
| 37.5° | 1339.5 | 820.5 | 410.3 | 388.5 | 388.1 | 379.0 | 378.1 | 399.4 | 464.6 | 452.5 | 449.8 |
| 40° | 1438.1 | 818.8 | 392.4 | 369.4 | 376.3 | 372.9 | 369.9 | 382.9 | 428.5 | 403.8 | 399.0 |
| 42.5° | 1557.2 | 826.6 | 379.4 | 351.2 | 362.9 | 371.1 | 365.5 | 368.6 | 387.2 | 365.1 | 361.2 |
| 45° | 1696.3 | 847.9 | 369.9 | 335.1 | 348.5 | 369.9 | 363.4 | 360.7 | 363.8 | 351.6 | 349.0 |
| 47.5° | 1858.4 | 885.8 | 363.4 | 321.6 | 335.1 | 366.4 | 362.4 | 357.2 | 356.0 | 349.0 | 347.3 |
| 50° | 2031.8 | 936.6 | 359.0 | 309.4 | 322.9 | 360.3 | 362.0 | 354.7 | 352.5 | 349.4 | 348.5 |
| 52.5° | 2203.8 | 991.8 | 353.7 | 299.0 | 312.9 | 352.9 | 362.4 | 352.0 | 349.0 | 347.3 | 346.4 |
| 55° | 2375.1 | 1049.1 | 344.2 | 289.9 | 305.6 | 344.2 | 362.0 | 348.5 | 345.0 | 345.0 | 345.0 |
| 57.5° | 2597.2 | 1136.5 | 331.6 | 282.5 | 295.9 | 332.9 | 356.4 | 344.6 | 339.8 | 340.3 | 340.7 |
| 60° | 2918.0 | 1283.0 | 317.7 | 274.3 | 283.4 | 319.9 | 347.7 | 337.7 | 332.0 | 333.8 | 334.2 |
| 62.5° | 3453.8 | 1538.9 | 298.6 | 262.5 | 270.4 | 306.0 | 336.3 | 328.2 | 322.9 | 325.9 | 326.4 |
| 65° | 4168.3 | 1848.8 | 273.3 | 247.8 | 256.9 | 290.3 | 322.0 | 316.8 | 311.2 | 318.5 | 318.1 |
| 67.5° | 4604.2 | 1939.6 | 246.8 | 232.1 | 243.8 | 273.8 | 304.2 | 302.1 | 298.2 | 311.2 | 310.3 |
| 69° | 4461.2 | 1775.3 | 231.6 | 222.1 | 234.7 | 262.5 | 293.0 | 292.1 | 289.0 | 301.6 | 300.7 |
| 70° | 4239.1 | 1622.0 | 222.1 | 215.5 | 229.9 | 255.5 | 285.5 | 285.5 | 282.5 | 293.4 | 291.2 |
| 72.5° | 3405.1 | 1203.0 | 199.9 | 199.1 | 213.4 | 236.4 | 265.6 | 267.7 | 266.0 | 269.9 | 267.7 |
| 75° | 1999.2 | 725.0 | 178.2 | 180.8 | 193.4 | 216.0 | 243.4 | 245.1 | 243.4 | 243.0 | 243.4 |
| 77.5° | 693.2 | 325.1 | 157.3 | 161.2 | 172.1 | 195.2 | 219.0 | 222.5 | 219.9 | 216.9 | 217.8 |
| 80° | 271.2 | 189.0 | 134.7 | 140.3 | 149.6 | 171.7 | 194.7 | 196.9 | 192.9 | 192.5 | 189.0 |
| 82.5° | 163.0 | 115.2 | 104.8 | 113.9 | 125.2 | 149.0 | 168.2 | 167.4 | 164.3 | 182.1 | 159.5 |
| 85° | 70.9 | 63.9 | 76.5 | 85.6 | 91.2 | 111.7 | 142.1 | 138.2 | 130.8 | 115.2 | 112.5 |
| 87.5° | 28.6 | 33.0 | 42.1 | 50.8 | 54.7 | 72.1 | 97.4 | 93.9 | 95.1 | 78.3 | 77.7 |
| 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)