

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: P198558

Luminaire Tested: **XNV-AF-01-LED-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198558
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)
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-SL3-7030
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5347 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

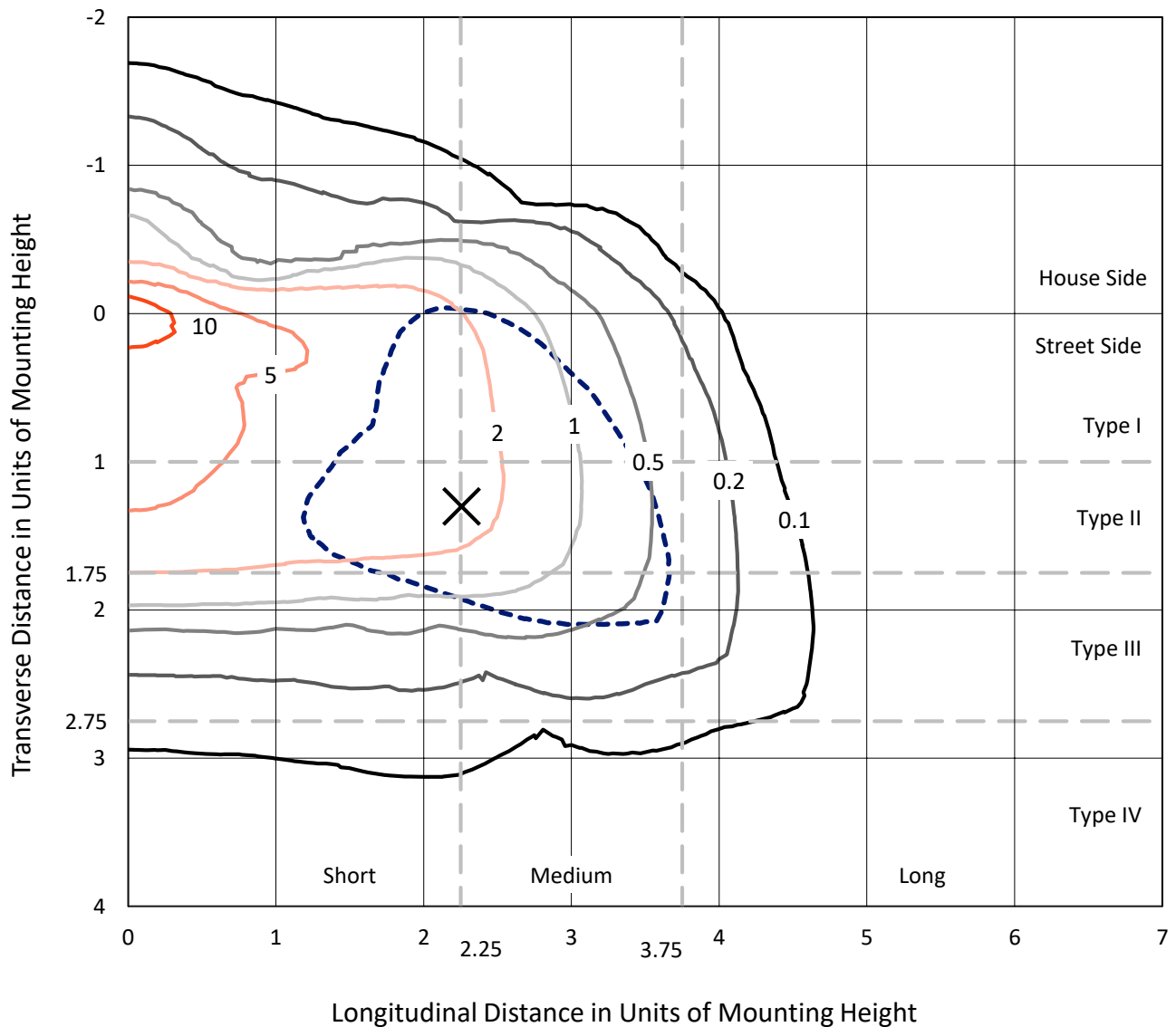
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198558
 CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030

Iso-Footcandle Lines of Horizontal Illumination

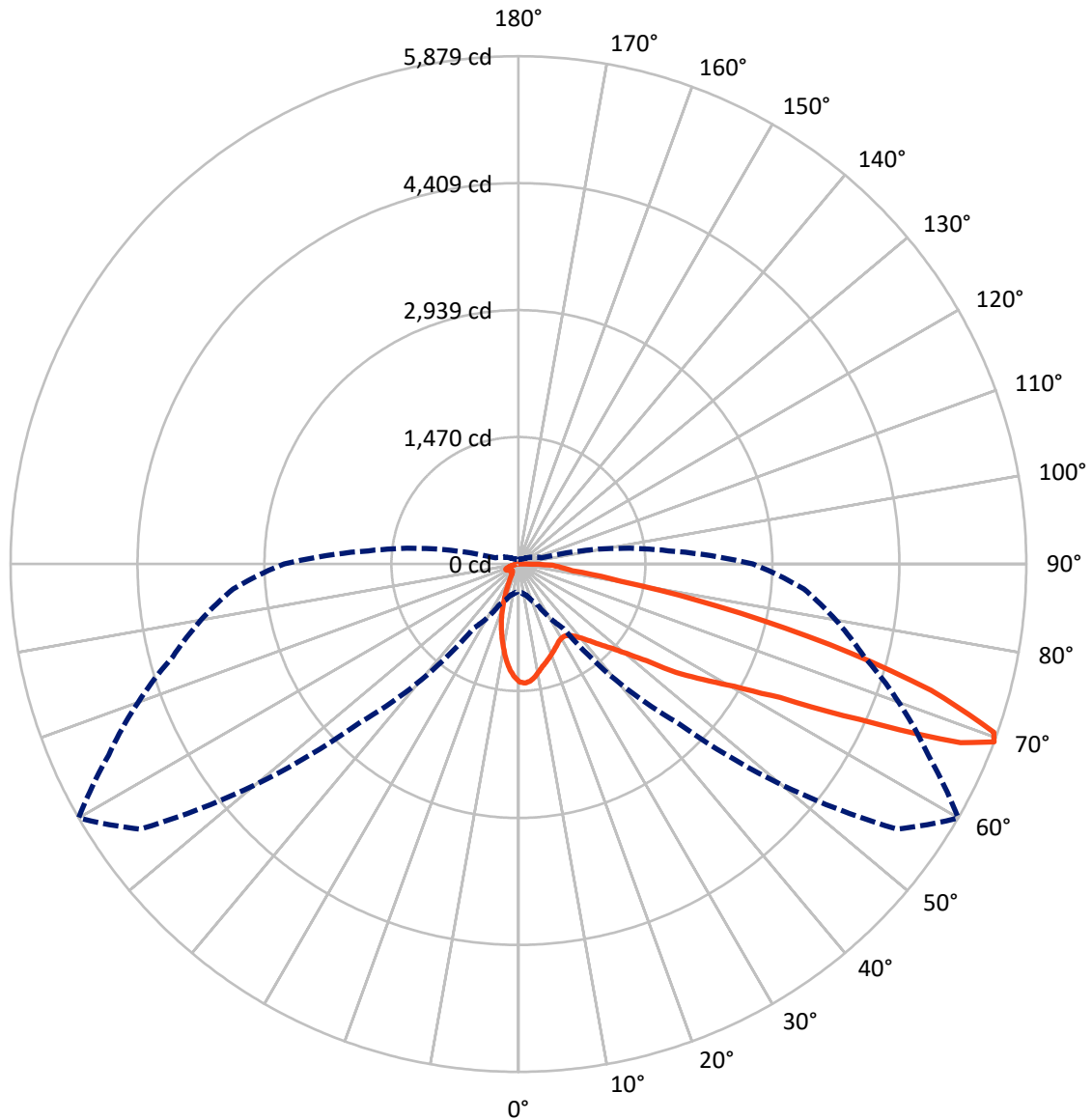
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.6 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P198558
CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P198558

CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 762.6 | 0.0 | 762.6 |
| | % Fixture | 14.3 | 0.0 | 14.3 |
| Street Side | Lumens | 4584.3 | 0.0 | 4584.3 |
| | % Fixture | 85.7 | 0.0 | 85.7 |
| Total | Lumens | 5347.0 | 0.0 | 5347.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 115.7 | 2.2 |
| 10°-20° | 247.8 | 4.6 |
| 20°-30° | 316.1 | 5.9 |
| 30°-40° | 435.0 | 8.1 |
| 40°-50° | 704.7 | 13.2 |
| 50°-60° | 1105.9 | 20.7 |
| 60°-70° | 1474.4 | 27.6 |
| 70°-80° | 820.1 | 15.3 |
| 80°-90° | 127.2 | 2.4 |
| 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° | 5347.0 | 100.0 |
| 0°-180° | 5347.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P198558

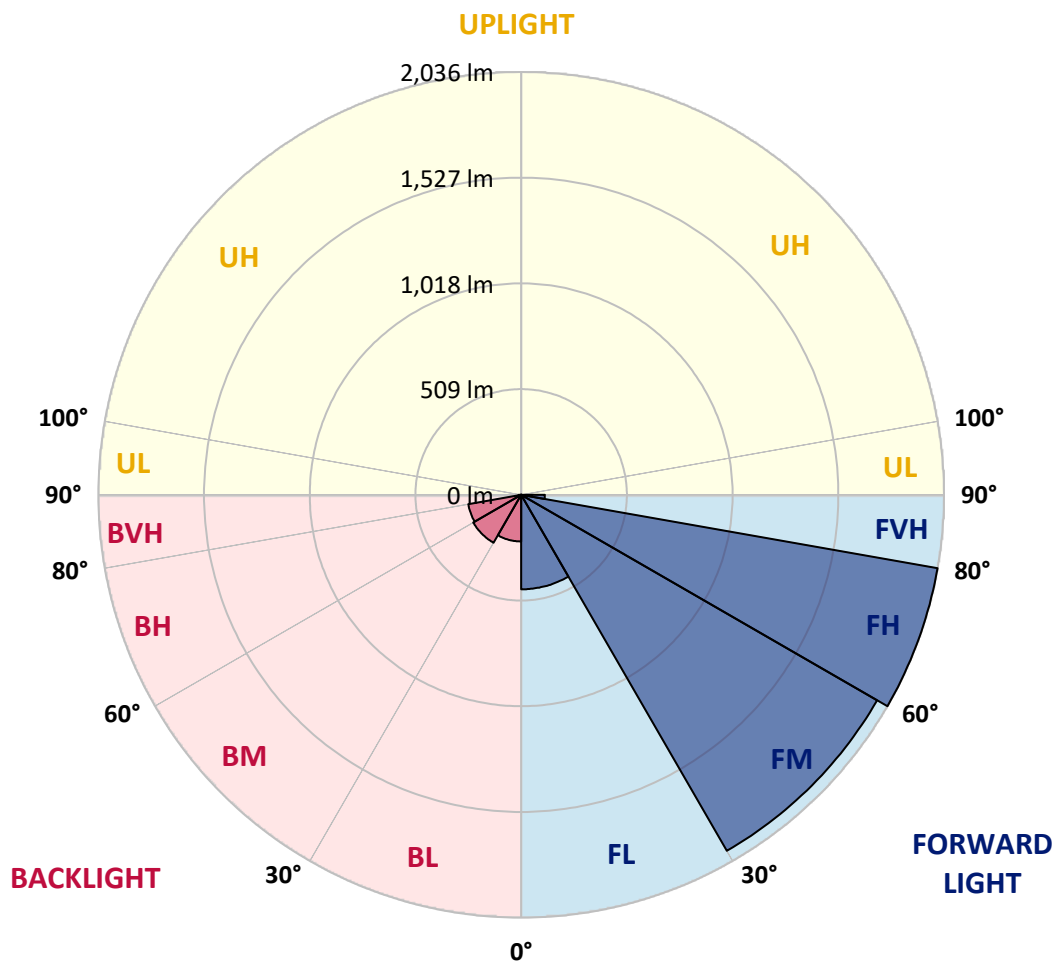
CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 454.9 | 8.5 | | | |
| FM | (30°-60°) | 1979.2 | 37.0 | | | |
| FH | (60°-80°) | 2035.9 | 38.1 | | | G2/5000 |
| FVH | (80°-90°) | 114.3 | 2.1 | | | G2/225 |
| BL | (0°-30°) | 224.8 | 4.2 | B1/500 | | |
| BM | (30°-60°) | 266.4 | 5.0 | B1/1000 | | |
| BH | (60°-80°) | 258.6 | 4.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 12.9 | 0.2 | | | 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 III Medium





REPORT NUMBER: P198558

CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 |
| 2.5° | 1400.6 | 1404.4 | 1404.4 | 1401.3 | 1399.6 | 1389.7 | 1383.8 | 1379.7 | 1372.5 | 1359.2 | 1347.2 |
| 5° | 1350.6 | 1357.8 | 1360.9 | 1362.2 | 1371.2 | 1368.1 | 1368.4 | 1365.7 | 1359.5 | 1345.1 | 1325.6 |
| 7.5° | 1258.7 | 1260.1 | 1265.6 | 1274.8 | 1296.4 | 1311.5 | 1323.8 | 1326.2 | 1324.9 | 1314.2 | 1286.8 |
| 10° | 1168.2 | 1170.6 | 1177.1 | 1192.9 | 1213.4 | 1235.0 | 1261.8 | 1272.8 | 1281.0 | 1277.6 | 1242.9 |
| 12.5° | 1093.1 | 1093.4 | 1100.6 | 1118.8 | 1141.8 | 1168.9 | 1205.2 | 1222.4 | 1241.9 | 1249.8 | 1211.0 |
| 15° | 1020.7 | 1025.5 | 1032.4 | 1054.3 | 1082.8 | 1117.1 | 1158.9 | 1182.6 | 1208.3 | 1230.9 | 1186.4 |
| 17.5° | 965.9 | 969.7 | 973.8 | 991.9 | 1024.9 | 1067.7 | 1119.5 | 1144.9 | 1178.8 | 1213.4 | 1161.0 |
| 20° | 935.7 | 937.1 | 934.0 | 942.9 | 970.7 | 1017.0 | 1077.0 | 1107.5 | 1147.9 | 1196.6 | 1134.9 |
| 22.5° | 929.5 | 929.5 | 918.2 | 916.5 | 928.9 | 967.9 | 1033.1 | 1070.5 | 1119.8 | 1185.0 | 1111.6 |
| 25° | 958.3 | 956.3 | 935.0 | 915.5 | 911.0 | 930.9 | 991.3 | 1037.2 | 1095.8 | 1184.6 | 1094.1 |
| 27.5° | 1012.9 | 1010.1 | 983.7 | 950.8 | 922.3 | 913.8 | 959.0 | 1006.0 | 1077.0 | 1196.3 | 1085.2 |
| 30° | 1080.7 | 1079.7 | 1053.0 | 1011.8 | 964.9 | 920.6 | 946.3 | 989.9 | 1064.3 | 1217.9 | 1084.9 |
| 32.5° | 1155.1 | 1150.3 | 1133.9 | 1092.7 | 1031.7 | 958.7 | 953.9 | 990.6 | 1060.9 | 1249.4 | 1092.7 |
| 35° | 1234.4 | 1230.9 | 1226.8 | 1185.3 | 1116.7 | 1025.9 | 987.1 | 1014.2 | 1077.7 | 1293.3 | 1115.0 |
| 37.5° | 1335.2 | 1331.4 | 1338.2 | 1293.0 | 1217.9 | 1114.0 | 1043.4 | 1061.5 | 1111.9 | 1357.1 | 1156.5 |
| 40° | 1514.5 | 1503.5 | 1484.3 | 1414.7 | 1335.8 | 1222.0 | 1124.6 | 1127.4 | 1170.6 | 1442.5 | 1223.0 |
| 42.5° | 1809.0 | 1773.7 | 1678.7 | 1550.8 | 1460.3 | 1347.5 | 1230.6 | 1217.6 | 1251.5 | 1555.3 | 1319.7 |
| 45° | 2104.2 | 2064.5 | 1904.0 | 1699.3 | 1589.2 | 1482.3 | 1361.6 | 1330.4 | 1352.3 | 1686.6 | 1444.2 |
| 47.5° | 2294.9 | 2275.3 | 2094.3 | 1847.8 | 1724.3 | 1629.0 | 1511.4 | 1460.0 | 1475.7 | 1835.4 | 1597.8 |
| 50° | 2350.8 | 2334.0 | 2191.7 | 1964.0 | 1851.9 | 1806.3 | 1696.9 | 1628.7 | 1631.4 | 2009.3 | 1781.9 |
| 52.5° | 2308.9 | 2302.1 | 2207.8 | 2036.0 | 1969.1 | 1993.1 | 1953.7 | 1858.7 | 1836.1 | 2199.9 | 1981.5 |
| 55° | 2253.0 | 2255.4 | 2219.1 | 2108.3 | 2088.5 | 2167.3 | 2289.7 | 2213.3 | 2117.3 | 2398.4 | 2189.3 |
| 57.5° | 2077.1 | 2078.9 | 2174.2 | 2246.2 | 2316.1 | 2411.4 | 2551.3 | 2519.1 | 2407.3 | 2612.7 | 2422.1 |
| 60° | 1672.5 | 1685.9 | 1898.2 | 2217.7 | 2576.4 | 2892.5 | 2926.8 | 2871.2 | 2715.9 | 2859.6 | 2724.8 |
| 62.5° | 1194.9 | 1206.9 | 1452.8 | 1925.2 | 2545.9 | 3437.0 | 3620.1 | 3399.3 | 3134.6 | 3228.9 | 3150.7 |
| 65° | 627.8 | 625.7 | 816.0 | 1330.4 | 2144.3 | 3563.2 | 4712.5 | 4336.7 | 3839.9 | 3736.7 | 3562.1 |
| 67.5° | 350.8 | 362.1 | 435.8 | 671.0 | 1397.6 | 3135.9 | 5410.2 | 5521.0 | 4820.5 | 4139.5 | 3544.3 |
| 69° | 324.4 | 328.1 | 377.5 | 518.8 | 911.0 | 2587.3 | 5350.2 | 5878.6 | 5234.0 | 4141.3 | 3316.0 |
| 70° | 315.1 | 319.2 | 364.1 | 478.0 | 765.3 | 2120.0 | 5131.8 | 5836.8 | 5334.5 | 4049.4 | 3108.2 |
| 72.5° | 282.5 | 288.0 | 331.6 | 429.6 | 644.9 | 1092.7 | 4133.7 | 4995.7 | 4832.2 | 3539.2 | 2410.1 |
| 75° | 241.0 | 250.3 | 316.1 | 426.5 | 611.0 | 694.7 | 2756.7 | 3721.9 | 3596.4 | 2531.1 | 1367.4 |
| 77.5° | 99.8 | 100.8 | 138.2 | 312.4 | 641.2 | 664.8 | 1481.6 | 2357.6 | 2087.1 | 1109.9 | 411.8 |
| 80° | 69.6 | 68.2 | 68.9 | 91.2 | 517.4 | 669.3 | 760.2 | 1199.0 | 931.9 | 292.8 | 192.7 |
| 82.5° | 58.6 | 57.9 | 60.7 | 57.3 | 175.2 | 759.5 | 635.7 | 625.1 | 438.9 | 157.7 | 91.9 |
| 85° | 38.7 | 37.7 | 49.7 | 52.1 | 83.3 | 603.1 | 683.7 | 491.3 | 327.1 | 84.3 | 39.1 |
| 87.5° | 18.9 | 19.2 | 28.5 | 35.3 | 44.2 | 191.0 | 654.9 | 388.5 | 252.7 | 36.7 | 15.8 |
| 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: P198558

CATALOG NUMBER: XNV-AF-01-LED-U-SL3-7030

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 | 1364.3 |
| 2.5° | 1342.4 | 1332.1 | 1322.8 | 1311.2 | 1302.2 | 1294.7 | 1284.4 | 1284.1 | 1282.4 | 1284.8 | 1285.4 |
| 5° | 1312.5 | 1295.4 | 1269.3 | 1240.2 | 1219.6 | 1192.5 | 1166.1 | 1157.2 | 1147.3 | 1146.2 | 1149.3 |
| 7.5° | 1267.6 | 1240.9 | 1196.3 | 1151.7 | 1107.1 | 1061.5 | 1018.3 | 996.4 | 975.1 | 968.6 | 971.7 |
| 10° | 1217.6 | 1183.6 | 1115.4 | 1042.7 | 979.9 | 912.1 | 846.2 | 803.7 | 765.0 | 748.5 | 752.6 |
| 12.5° | 1178.5 | 1135.3 | 1039.3 | 945.0 | 851.0 | 753.6 | 666.9 | 582.9 | 519.5 | 491.0 | 492.7 |
| 15° | 1144.9 | 1089.7 | 967.9 | 842.4 | 724.8 | 591.5 | 471.1 | 373.7 | 318.2 | 297.6 | 296.9 |
| 17.5° | 1108.5 | 1041.7 | 893.5 | 747.1 | 594.5 | 429.6 | 315.4 | 257.8 | 235.9 | 229.0 | 229.0 |
| 20° | 1069.8 | 992.3 | 815.7 | 643.2 | 457.4 | 300.0 | 237.3 | 215.0 | 206.8 | 204.7 | 204.4 |
| 22.5° | 1033.8 | 943.9 | 737.5 | 532.5 | 330.9 | 227.7 | 202.0 | 193.4 | 192.0 | 193.7 | 193.7 |
| 25° | 1005.3 | 901.4 | 658.3 | 415.9 | 240.7 | 190.6 | 179.7 | 178.6 | 183.8 | 190.0 | 191.0 |
| 27.5° | 984.1 | 863.4 | 580.1 | 303.8 | 189.3 | 166.0 | 162.2 | 166.6 | 178.6 | 191.0 | 193.4 |
| 30° | 969.3 | 830.8 | 486.5 | 218.4 | 157.7 | 145.4 | 147.1 | 155.0 | 173.2 | 192.0 | 197.2 |
| 32.5° | 962.8 | 804.4 | 392.3 | 167.7 | 134.8 | 127.9 | 132.4 | 142.6 | 161.5 | 180.4 | 186.5 |
| 35° | 969.0 | 785.2 | 305.2 | 139.2 | 117.9 | 112.8 | 117.9 | 128.6 | 140.9 | 150.2 | 154.0 |
| 37.5° | 991.3 | 778.3 | 229.7 | 123.4 | 107.0 | 101.8 | 105.9 | 113.1 | 118.6 | 122.1 | 123.8 |
| 40° | 1038.2 | 785.5 | 180.0 | 115.2 | 100.8 | 95.0 | 96.0 | 99.4 | 103.2 | 105.9 | 106.3 |
| 42.5° | 1113.0 | 809.2 | 160.1 | 112.1 | 97.0 | 89.5 | 87.8 | 90.2 | 94.3 | 98.1 | 98.7 |
| 45° | 1212.4 | 848.6 | 158.1 | 113.1 | 95.3 | 85.0 | 81.6 | 84.0 | 89.5 | 95.7 | 96.7 |
| 47.5° | 1341.0 | 911.0 | 167.7 | 118.6 | 96.3 | 82.6 | 77.5 | 79.9 | 87.1 | 95.3 | 96.7 |
| 50° | 1493.2 | 997.4 | 185.5 | 126.9 | 101.1 | 82.6 | 75.8 | 77.8 | 85.4 | 94.6 | 96.0 |
| 52.5° | 1672.5 | 1117.8 | 204.0 | 135.1 | 108.0 | 85.7 | 76.5 | 76.1 | 83.0 | 91.5 | 93.3 |
| 55° | 1870.4 | 1267.3 | 221.8 | 142.3 | 111.8 | 89.8 | 78.2 | 74.1 | 79.5 | 86.4 | 87.8 |
| 57.5° | 2103.2 | 1472.0 | 253.0 | 149.2 | 113.8 | 92.9 | 80.2 | 72.0 | 75.1 | 79.9 | 80.9 |
| 60° | 2419.0 | 1772.7 | 313.7 | 160.8 | 117.6 | 94.3 | 80.6 | 69.9 | 69.6 | 73.0 | 73.4 |
| 62.5° | 2830.8 | 2124.8 | 371.7 | 174.5 | 125.1 | 94.6 | 79.2 | 68.6 | 65.1 | 66.2 | 66.2 |
| 65° | 3123.6 | 2254.4 | 354.9 | 186.2 | 132.0 | 94.3 | 77.8 | 67.5 | 61.7 | 60.0 | 60.0 |
| 67.5° | 2957.0 | 1991.4 | 301.4 | 189.3 | 132.7 | 90.5 | 74.7 | 65.1 | 58.6 | 54.5 | 54.5 |
| 69° | 2712.1 | 1745.6 | 276.7 | 183.8 | 127.2 | 86.1 | 71.3 | 62.7 | 56.6 | 51.8 | 51.8 |
| 70° | 2512.6 | 1559.4 | 261.6 | 177.3 | 120.7 | 82.3 | 68.2 | 60.3 | 54.5 | 50.4 | 50.1 |
| 72.5° | 1875.9 | 1040.6 | 223.6 | 152.9 | 99.1 | 69.6 | 59.7 | 53.8 | 49.0 | 46.3 | 46.3 |
| 75° | 989.9 | 521.5 | 183.1 | 124.8 | 76.5 | 55.5 | 49.0 | 45.3 | 42.5 | 42.2 | 41.8 |
| 77.5° | 324.4 | 235.9 | 131.7 | 93.9 | 56.2 | 43.2 | 39.1 | 36.7 | 36.3 | 37.7 | 37.7 |
| 80° | 175.2 | 140.9 | 84.7 | 63.4 | 39.1 | 32.2 | 30.2 | 29.8 | 30.9 | 32.9 | 32.9 |
| 82.5° | 85.0 | 69.6 | 50.4 | 39.1 | 26.7 | 23.7 | 23.7 | 24.0 | 25.4 | 27.8 | 27.8 |
| 85° | 36.7 | 32.9 | 29.1 | 21.9 | 16.5 | 14.7 | 16.8 | 18.5 | 19.5 | 21.3 | 21.9 |
| 87.5° | 17.5 | 15.4 | 13.4 | 8.6 | 7.2 | 7.5 | 8.9 | 11.0 | 13.0 | 14.4 | 14.7 |
| 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)