

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: P271345

Luminaire Tested: **XNV2-AF-02-LED-U-T3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (p24135)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-T3-7027
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10480.3 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

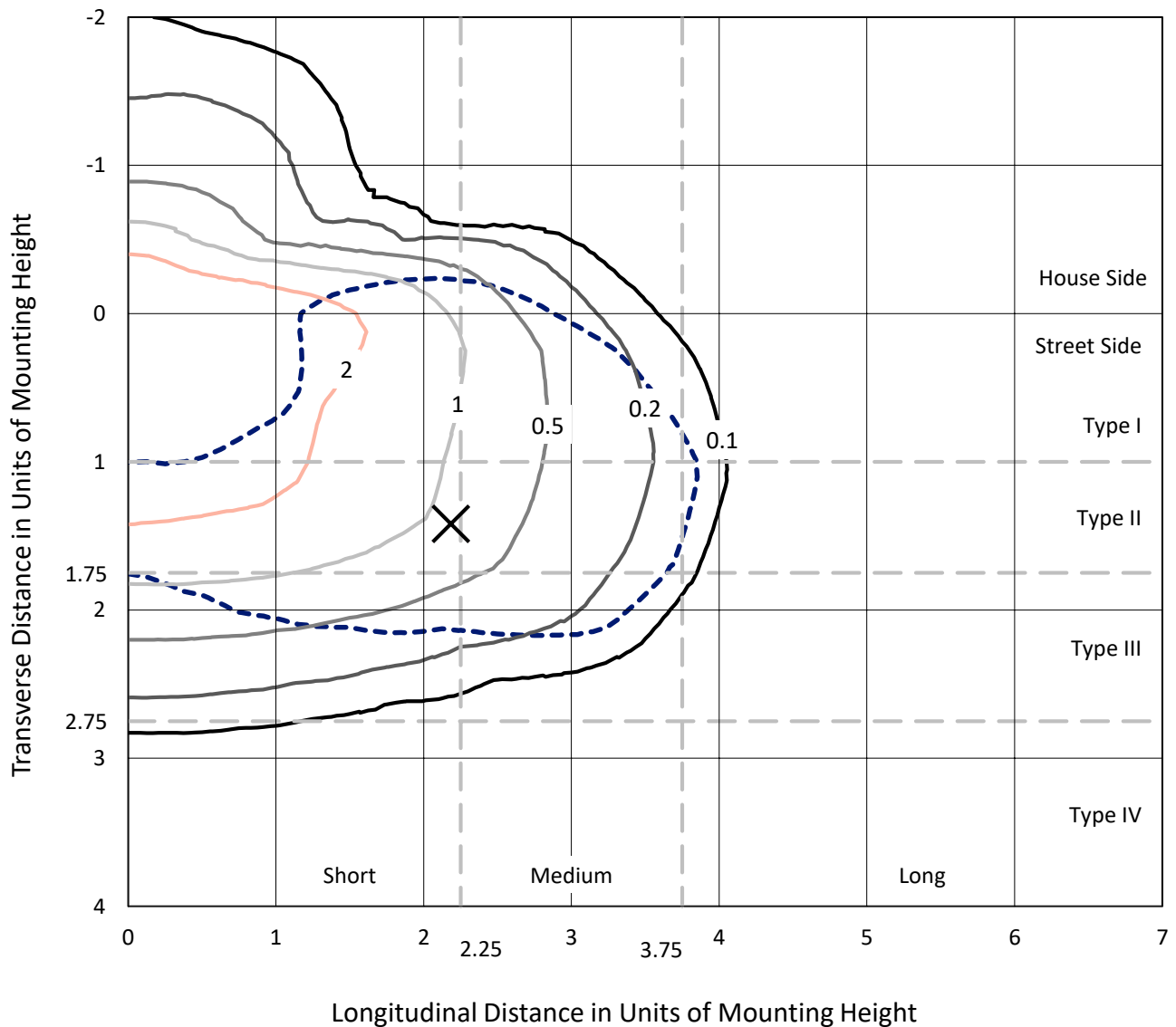
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

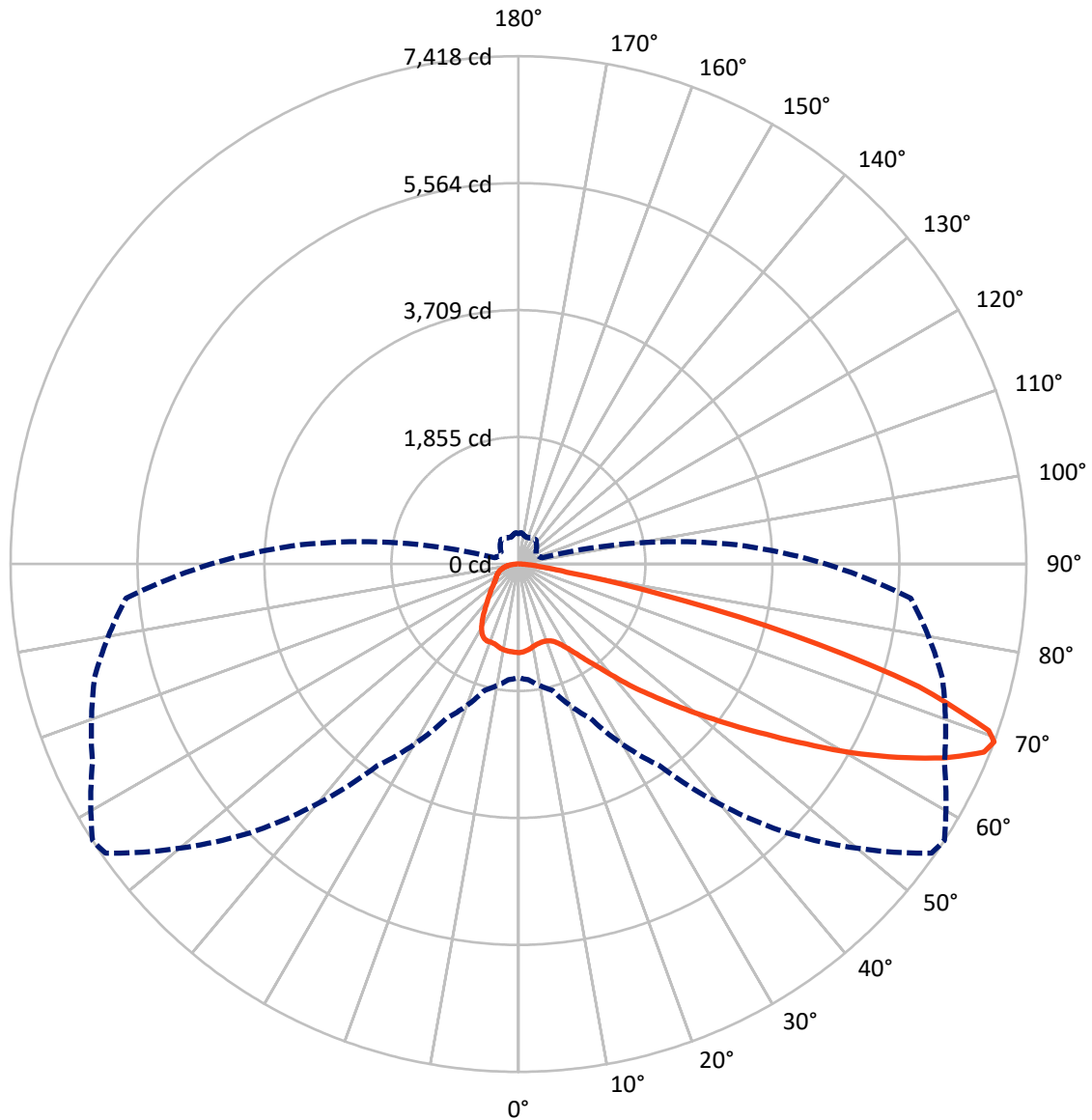
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2312.6 | 0.0 | 2312.6 |
| | % Fixture | 22.1 | 0.0 | 22.1 |
| Street Side | Lumens | 8167.6 | 0.0 | 8167.6 |
| | % Fixture | 77.9 | 0.0 | 77.9 |
| Total | Lumens | 10480.3 | 0.0 | 10480.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 121.2 | 1.2 |
| 10°-20° | 344.7 | 3.3 |
| 20°-30° | 573.4 | 5.5 |
| 30°-40° | 936.3 | 8.9 |
| 40°-50° | 1580.3 | 15.1 |
| 50°-60° | 2458.3 | 23.5 |
| 60°-70° | 2928.3 | 27.9 |
| 70°-80° | 1364.2 | 13.0 |
| 80°-90° | 173.5 | 1.7 |
| 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° | 10480.3 | 100.0 |
| 0°-180° | 10480.3 | 100.0 |



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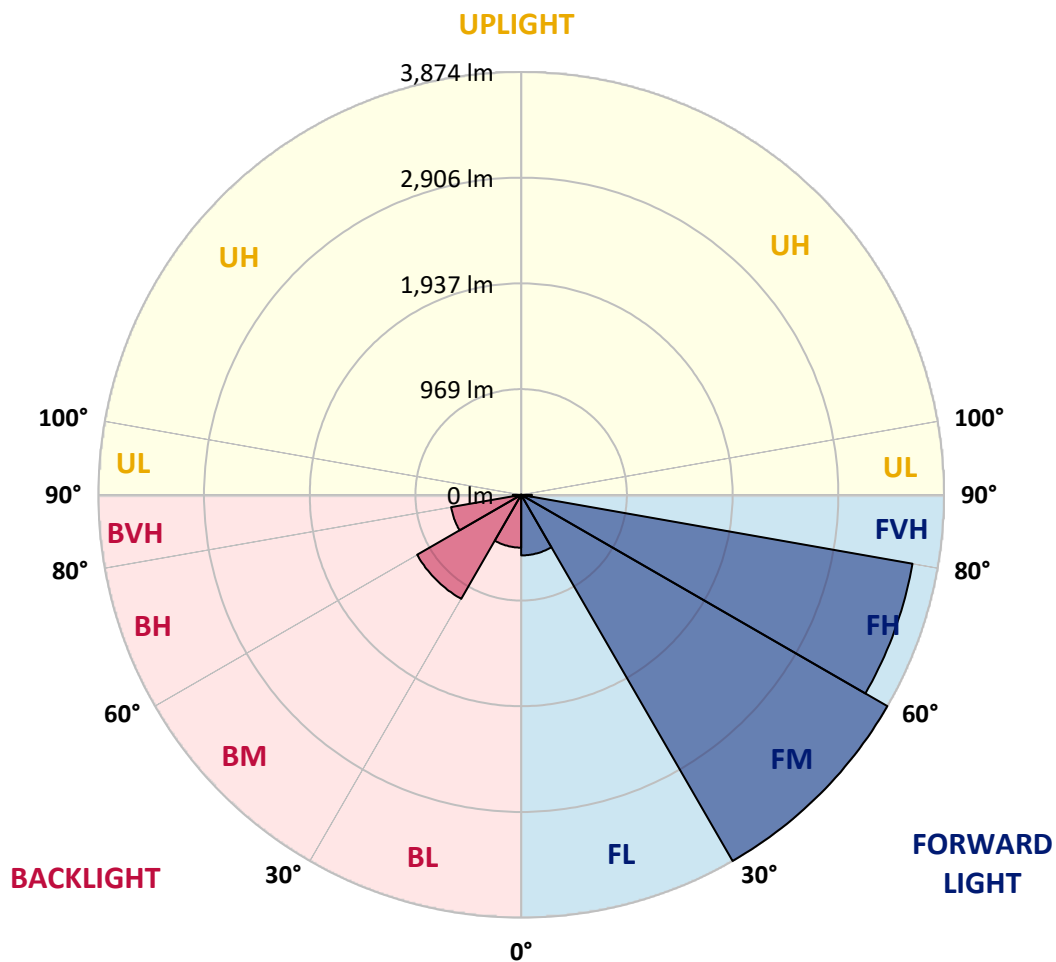
CATALOG NUMBER: XNV2-AF-02-LED-U-T3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 555.0 | 5.3 | | | |
| FM | (30°-60°) | 3874.2 | 37.0 | | | |
| FH | (60°-80°) | 3640.9 | 34.7 | | | G2/5000 |
| FVH | (80°-90°) | 97.5 | 0.9 | | | G1/100 |
| BL | (0°-30°) | 484.3 | 4.6 | B1/500 | | |
| BM | (30°-60°) | 1100.7 | 10.5 | B2/2500 | | |
| BH | (60°-80°) | 651.7 | 6.2 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 76.0 | 0.7 | | | 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 III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 |
| 2.5° | 1287.6 | 1287.6 | 1291.0 | 1291.0 | 1291.0 | 1289.5 | 1285.6 | 1286.9 | 1284.1 | 1282.2 | 1278.8 |
| 5° | 1261.4 | 1262.7 | 1266.8 | 1268.0 | 1270.2 | 1270.8 | 1270.8 | 1270.2 | 1270.8 | 1270.8 | 1268.8 |
| 7.5° | 1225.2 | 1226.5 | 1231.1 | 1233.9 | 1239.9 | 1245.3 | 1247.9 | 1247.9 | 1251.2 | 1254.0 | 1254.8 |
| 10° | 1203.0 | 1203.0 | 1205.7 | 1205.7 | 1210.3 | 1213.2 | 1221.9 | 1221.2 | 1230.5 | 1239.2 | 1243.3 |
| 12.5° | 1200.3 | 1200.3 | 1199.0 | 1194.2 | 1191.6 | 1191.0 | 1199.6 | 1201.0 | 1215.0 | 1230.5 | 1238.0 |
| 15° | 1209.1 | 1209.1 | 1205.0 | 1195.6 | 1185.6 | 1180.9 | 1189.5 | 1192.3 | 1207.7 | 1225.8 | 1237.2 |
| 17.5° | 1237.2 | 1236.5 | 1227.9 | 1209.1 | 1191.6 | 1184.2 | 1186.9 | 1189.5 | 1203.6 | 1224.5 | 1238.6 |
| 20° | 1299.7 | 1299.7 | 1280.9 | 1246.7 | 1216.5 | 1199.0 | 1194.9 | 1197.0 | 1207.1 | 1226.5 | 1244.6 |
| 22.5° | 1409.0 | 1411.0 | 1377.6 | 1321.0 | 1269.5 | 1232.6 | 1216.5 | 1218.5 | 1223.1 | 1241.9 | 1262.1 |
| 25° | 1570.1 | 1564.7 | 1517.0 | 1437.2 | 1356.7 | 1293.6 | 1260.7 | 1262.7 | 1262.7 | 1280.2 | 1300.9 |
| 27.5° | 1740.5 | 1741.9 | 1673.4 | 1587.5 | 1481.5 | 1387.5 | 1335.2 | 1334.5 | 1333.9 | 1350.6 | 1372.8 |
| 30° | 1933.1 | 1933.7 | 1854.6 | 1755.2 | 1633.7 | 1513.6 | 1435.1 | 1434.6 | 1428.5 | 1449.2 | 1478.2 |
| 32.5° | 2143.6 | 2143.0 | 2051.1 | 1939.0 | 1804.2 | 1668.1 | 1566.0 | 1565.3 | 1560.6 | 1588.8 | 1623.6 |
| 35° | 2377.2 | 2377.2 | 2285.9 | 2147.7 | 2002.1 | 1850.5 | 1732.4 | 1731.8 | 1734.4 | 1772.6 | 1805.6 |
| 37.5° | 2658.4 | 2664.4 | 2554.3 | 2386.5 | 2227.5 | 2065.8 | 1928.3 | 1924.3 | 1904.1 | 1968.5 | 2023.0 |
| 40° | 2951.6 | 2968.3 | 2854.3 | 2658.4 | 2486.6 | 2319.5 | 2167.9 | 2165.2 | 2147.7 | 2216.2 | 2304.1 |
| 42.5° | 3268.9 | 3307.1 | 3180.3 | 2980.3 | 2793.2 | 2612.7 | 2460.4 | 2453.0 | 2385.9 | 2492.5 | 2630.1 |
| 45° | 3684.8 | 3709.7 | 3525.8 | 3344.7 | 3168.2 | 2962.3 | 2781.2 | 2741.4 | 2674.4 | 2811.2 | 2989.7 |
| 47.5° | 3968.1 | 3956.0 | 3841.2 | 3719.7 | 3606.3 | 3409.1 | 3130.7 | 3080.4 | 2998.5 | 3179.6 | 3376.2 |
| 50° | 4143.8 | 4152.5 | 4088.0 | 4082.1 | 4076.0 | 3938.4 | 3525.2 | 3464.9 | 3370.3 | 3584.9 | 3814.4 |
| 52.5° | 4259.9 | 4220.2 | 4231.6 | 4368.5 | 4534.3 | 4468.6 | 3971.3 | 3904.3 | 3806.9 | 4021.7 | 4280.7 |
| 55° | 4211.6 | 4159.2 | 4264.6 | 4534.3 | 4924.1 | 4938.9 | 4461.2 | 4392.1 | 4308.9 | 4486.0 | 4841.5 |
| 57.5° | 4011.7 | 4037.8 | 4204.2 | 4579.3 | 5190.4 | 5360.2 | 5024.1 | 4953.7 | 4789.9 | 4969.8 | 5374.3 |
| 60° | 3730.5 | 3783.5 | 4037.8 | 4508.1 | 5377.1 | 5688.3 | 5642.1 | 5595.1 | 5313.3 | 5440.8 | 5933.9 |
| 62.5° | 3428.7 | 3480.9 | 3793.5 | 4386.8 | 5293.2 | 5978.8 | 6248.6 | 6219.8 | 5890.9 | 5894.3 | 6288.9 |
| 65° | 2982.5 | 3003.8 | 3323.2 | 4055.3 | 5060.3 | 6241.2 | 6855.8 | 6830.4 | 6443.2 | 6281.5 | 6388.1 |
| 67.5° | 2252.4 | 2279.2 | 2541.6 | 3201.1 | 4351.7 | 6099.0 | 7340.9 | 7336.8 | 6775.2 | 6425.0 | 6152.0 |
| 69° | 1663.3 | 1696.2 | 1910.2 | 2485.3 | 3598.3 | 5556.8 | 7363.6 | 7418.1 | 6865.1 | 6410.2 | 5752.7 |
| 70° | 1217.2 | 1254.8 | 1452.6 | 1972.6 | 2997.1 | 4958.4 | 7168.5 | 7285.3 | 6831.0 | 6317.1 | 5441.5 |
| 72.5° | 517.3 | 530.1 | 627.3 | 890.4 | 1520.4 | 2989.7 | 5871.5 | 6117.1 | 6169.4 | 5660.2 | 4251.1 |
| 75° | 324.1 | 328.2 | 366.4 | 456.9 | 676.3 | 1236.5 | 3802.3 | 4137.1 | 4606.1 | 4391.4 | 2846.2 |
| 77.5° | 244.2 | 247.7 | 269.8 | 314.6 | 420.0 | 461.5 | 1763.9 | 2103.4 | 2638.2 | 2583.2 | 1416.4 |
| 80° | 187.1 | 189.3 | 203.9 | 228.8 | 295.9 | 289.2 | 572.3 | 719.3 | 1101.1 | 971.5 | 501.3 |
| 82.5° | 147.0 | 147.6 | 160.3 | 165.1 | 206.7 | 194.6 | 287.2 | 320.1 | 444.8 | 369.7 | 244.9 |
| 85° | 130.2 | 132.2 | 144.9 | 120.8 | 132.2 | 117.4 | 157.7 | 171.0 | 236.2 | 222.8 | 92.5 |
| 87.5° | 66.5 | 69.8 | 121.5 | 103.3 | 66.5 | 55.7 | 69.1 | 74.5 | 95.9 | 104.1 | 44.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: XNV2-AF-02-LED-U-T3-7027

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 | 1294.9 |
| 2.5° | 1279.5 | 1280.2 | 1282.2 | 1285.6 | 1291.0 | 1297.6 | 1305.6 | 1313.7 | 1318.4 | 1321.8 | 1320.4 |
| 5° | 1268.8 | 1269.5 | 1273.4 | 1279.5 | 1286.3 | 1296.3 | 1309.6 | 1319.8 | 1327.2 | 1331.8 | 1331.2 |
| 7.5° | 1255.3 | 1257.4 | 1265.4 | 1272.1 | 1281.5 | 1289.5 | 1300.2 | 1309.6 | 1317.0 | 1321.8 | 1321.0 |
| 10° | 1245.3 | 1247.2 | 1257.4 | 1266.2 | 1274.2 | 1275.5 | 1273.4 | 1270.8 | 1270.2 | 1273.4 | 1272.1 |
| 12.5° | 1240.6 | 1244.6 | 1254.0 | 1260.1 | 1256.6 | 1244.0 | 1229.2 | 1223.1 | 1221.2 | 1227.9 | 1228.5 |
| 15° | 1241.9 | 1245.3 | 1253.3 | 1249.4 | 1231.1 | 1209.7 | 1201.7 | 1206.3 | 1210.3 | 1214.4 | 1215.0 |
| 17.5° | 1245.3 | 1247.2 | 1249.4 | 1234.5 | 1209.1 | 1194.9 | 1192.3 | 1187.6 | 1175.5 | 1168.9 | 1168.2 |
| 20° | 1251.2 | 1254.0 | 1250.7 | 1227.2 | 1204.4 | 1185.6 | 1153.3 | 1124.5 | 1097.0 | 1082.3 | 1076.2 |
| 22.5° | 1272.1 | 1274.2 | 1264.0 | 1241.3 | 1206.3 | 1145.2 | 1080.2 | 1030.5 | 988.3 | 965.5 | 956.8 |
| 25° | 1313.1 | 1316.3 | 1302.4 | 1273.4 | 1182.2 | 1075.5 | 983.6 | 916.5 | 863.5 | 836.1 | 828.6 |
| 27.5° | 1384.8 | 1388.2 | 1372.8 | 1297.6 | 1125.8 | 982.2 | 870.8 | 804.5 | 758.9 | 735.4 | 731.9 |
| 30° | 1492.3 | 1496.8 | 1482.8 | 1297.0 | 1040.0 | 863.5 | 760.9 | 722.0 | 695.7 | 679.7 | 678.9 |
| 32.5° | 1641.2 | 1658.6 | 1600.9 | 1274.2 | 934.0 | 743.3 | 677.6 | 664.2 | 651.5 | 640.8 | 640.8 |
| 35° | 1830.3 | 1871.3 | 1717.6 | 1226.5 | 817.2 | 661.5 | 631.4 | 618.7 | 602.6 | 591.2 | 589.7 |
| 37.5° | 2056.5 | 2120.2 | 1800.8 | 1141.9 | 716.6 | 621.9 | 603.2 | 582.5 | 556.9 | 534.8 | 529.5 |
| 40° | 2367.2 | 2381.9 | 1841.7 | 1004.5 | 641.4 | 600.4 | 577.0 | 550.8 | 518.6 | 493.8 | 491.2 |
| 42.5° | 2679.1 | 2630.7 | 1833.7 | 856.9 | 598.5 | 581.1 | 550.2 | 521.3 | 492.5 | 471.7 | 471.7 |
| 45° | 3034.0 | 2848.2 | 1772.6 | 708.6 | 559.6 | 558.8 | 525.4 | 497.8 | 475.7 | 460.3 | 456.9 |
| 47.5° | 3373.6 | 3043.5 | 1667.3 | 599.2 | 519.3 | 536.7 | 509.2 | 487.2 | 466.9 | 452.2 | 449.5 |
| 50° | 3785.5 | 3269.6 | 1555.2 | 522.6 | 480.5 | 517.3 | 502.5 | 491.2 | 471.7 | 446.2 | 443.6 |
| 52.5° | 4194.7 | 3533.9 | 1468.6 | 465.0 | 446.2 | 501.9 | 506.6 | 507.9 | 489.8 | 440.1 | 436.8 |
| 55° | 4634.3 | 3816.4 | 1377.6 | 420.0 | 418.0 | 494.4 | 515.9 | 514.5 | 505.8 | 441.4 | 436.0 |
| 57.5° | 5052.2 | 4100.3 | 1241.3 | 388.4 | 395.9 | 487.2 | 518.0 | 496.6 | 481.0 | 448.3 | 439.5 |
| 60° | 5398.5 | 4335.0 | 1041.3 | 366.4 | 377.1 | 472.4 | 504.6 | 472.4 | 446.2 | 446.8 | 438.8 |
| 62.5° | 5566.8 | 4400.7 | 796.3 | 340.8 | 361.7 | 448.3 | 485.2 | 454.3 | 430.1 | 449.5 | 444.8 |
| 65° | 5438.8 | 4213.6 | 567.5 | 317.3 | 342.9 | 420.0 | 473.6 | 438.8 | 422.1 | 462.9 | 457.5 |
| 67.5° | 4978.4 | 3703.6 | 412.0 | 296.6 | 324.7 | 391.1 | 452.2 | 424.7 | 413.9 | 473.0 | 460.9 |
| 69° | 4489.3 | 3197.7 | 356.9 | 284.6 | 312.0 | 375.8 | 438.2 | 417.4 | 407.9 | 458.9 | 441.4 |
| 70° | 4082.7 | 2807.9 | 329.5 | 277.0 | 301.2 | 367.0 | 427.5 | 412.6 | 401.9 | 442.1 | 421.3 |
| 72.5° | 2927.3 | 1814.9 | 277.0 | 254.9 | 273.1 | 347.6 | 403.9 | 395.2 | 379.1 | 399.1 | 385.8 |
| 75° | 1768.7 | 947.4 | 235.4 | 232.1 | 243.6 | 320.8 | 376.4 | 365.7 | 349.6 | 351.5 | 344.9 |
| 77.5° | 812.5 | 437.5 | 197.3 | 205.4 | 212.7 | 287.2 | 342.9 | 330.8 | 316.1 | 310.6 | 311.4 |
| 80° | 356.3 | 255.7 | 165.1 | 175.1 | 179.1 | 258.4 | 306.6 | 293.1 | 277.0 | 306.0 | 283.9 |
| 82.5° | 192.5 | 148.3 | 128.8 | 135.6 | 147.0 | 224.8 | 266.3 | 248.9 | 233.5 | 271.7 | 219.4 |
| 85° | 77.9 | 75.7 | 87.2 | 94.0 | 102.0 | 161.8 | 222.8 | 204.6 | 185.9 | 166.4 | 162.4 |
| 87.5° | 33.5 | 36.2 | 42.9 | 45.6 | 54.3 | 100.6 | 149.6 | 130.9 | 131.5 | 112.6 | 110.8 |
| 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)