

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: P191509

Luminaire Tested: **GAN-AF-01-LED-U-T4FT-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-01-LED-U-T4FT-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4225.8 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

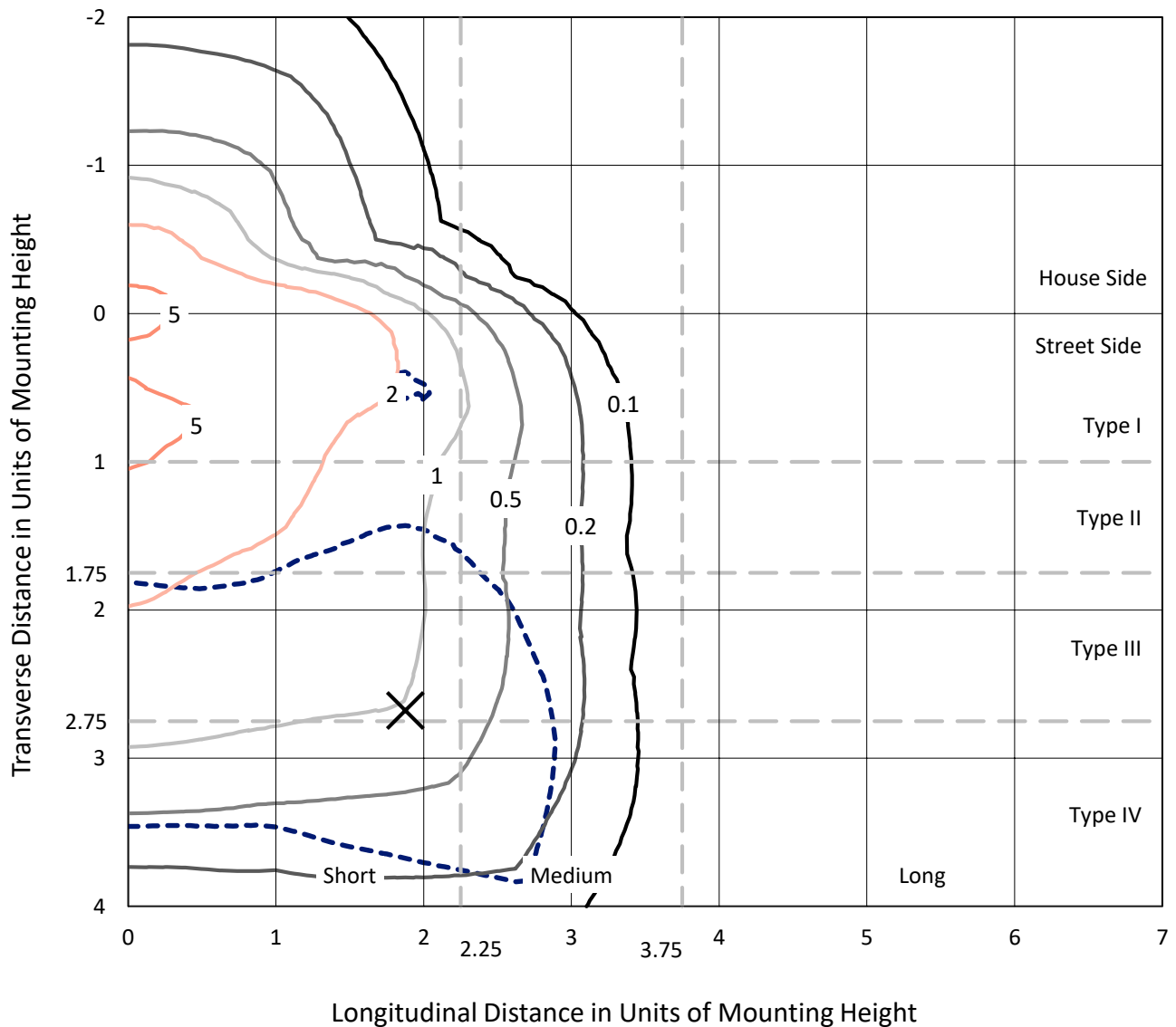
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

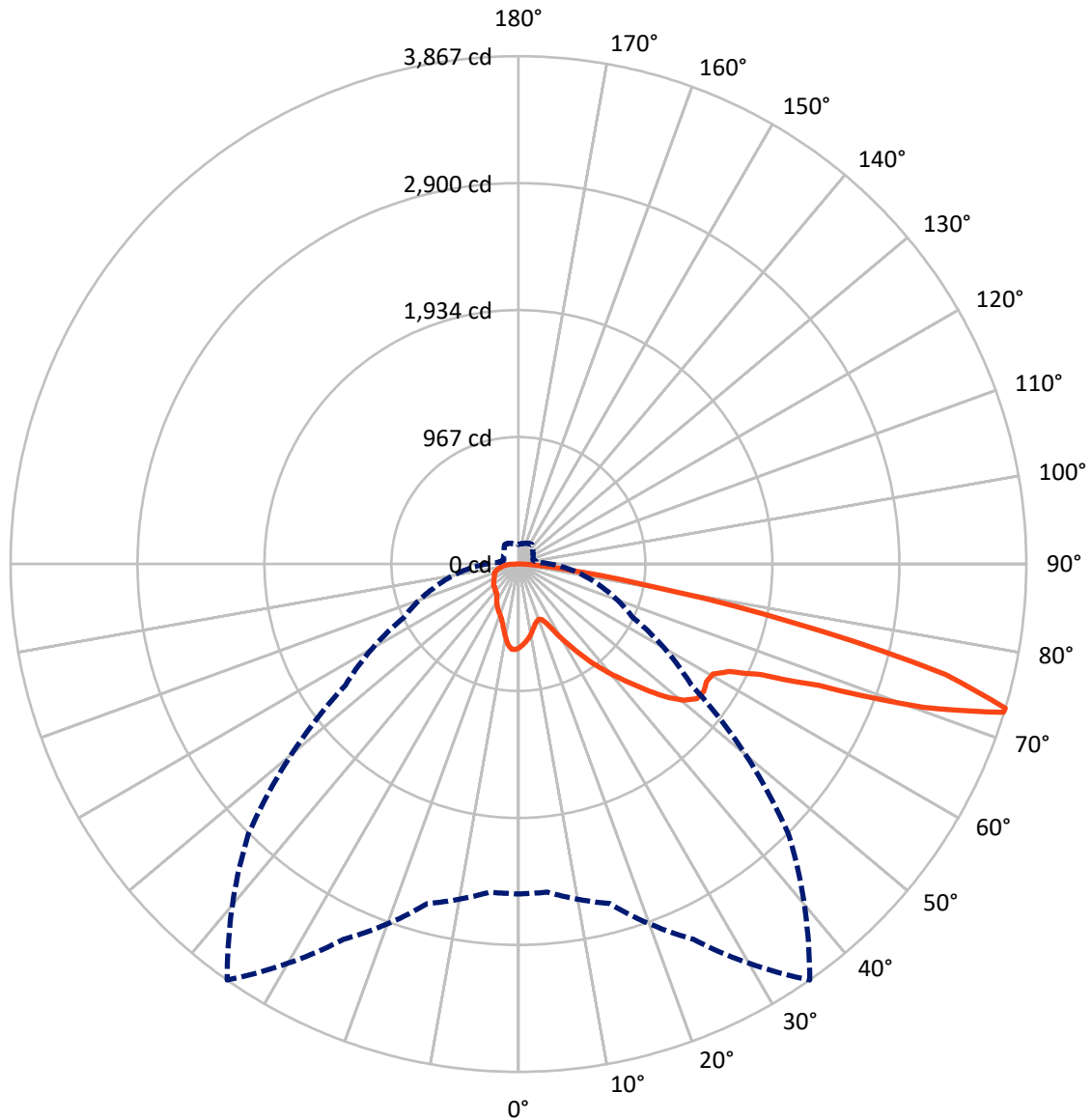
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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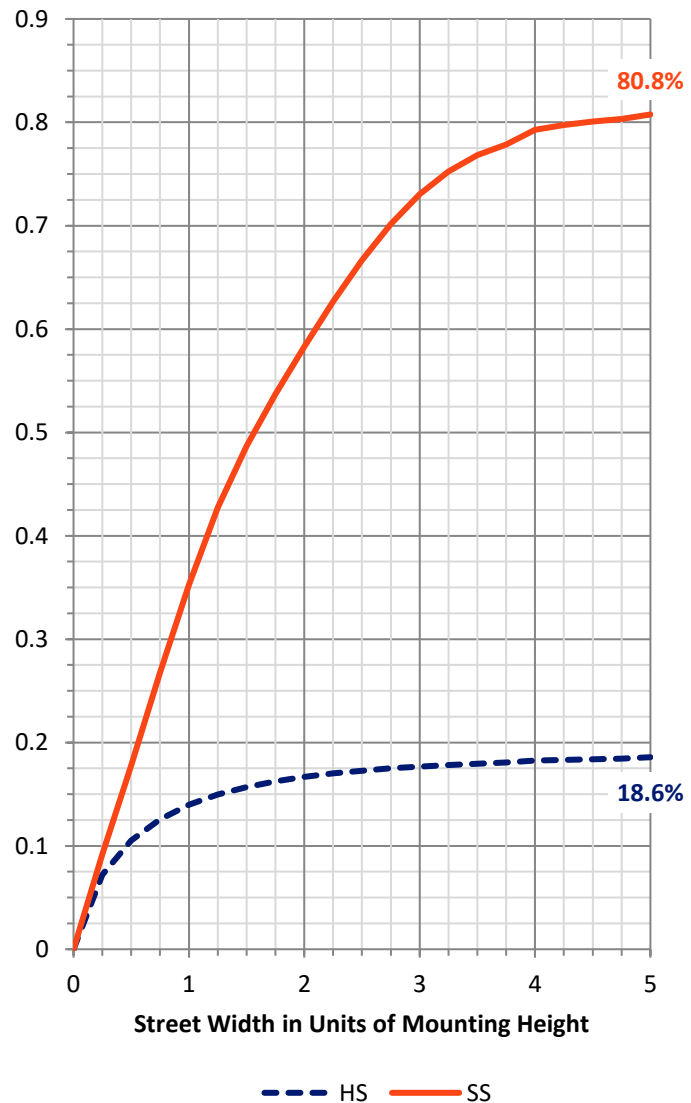
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 806.0 | 0.0 | 806.0 |
| | % Fixture | 19.1 | 0.0 | 19.1 |
| Street Side | Lumens | 3419.8 | 0.0 | 3419.8 |
| | % Fixture | 80.9 | 0.0 | 80.9 |
| Total | Lumens | 4225.8 | 0.0 | 4225.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 57.7 | 1.4 |
| 10°-20° | 144.1 | 3.4 |
| 20°-30° | 233.0 | 5.5 |
| 30°-40° | 390.7 | 9.2 |
| 40°-50° | 602.2 | 14.3 |
| 50°-60° | 807.9 | 19.1 |
| 60°-70° | 1076.3 | 25.5 |
| 70°-80° | 820.9 | 19.4 |
| 80°-90° | 93.0 | 2.2 |
| 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° | 4225.8 | 100.0 |
| 0°-180° | 4225.8 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P191509

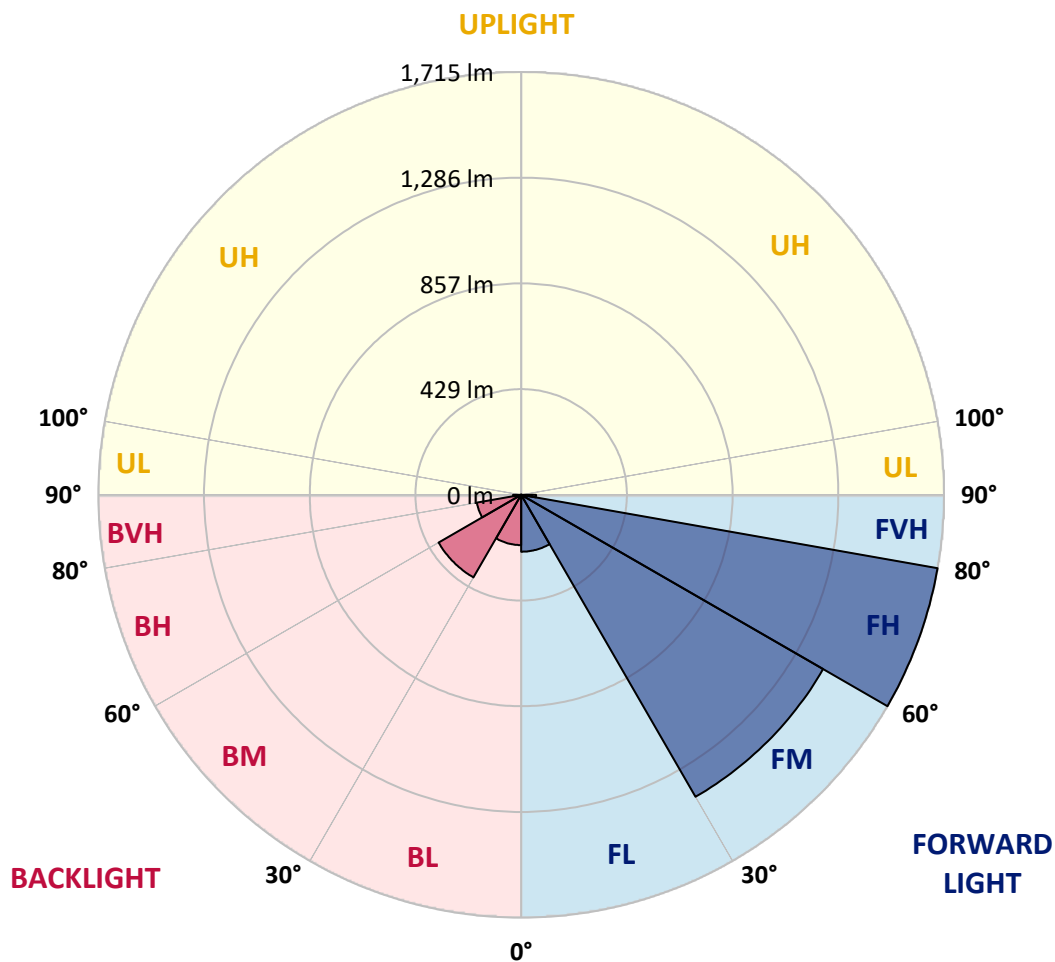
CATALOG NUMBER: GAN-AF-01-LED-U-T4FT-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 230.9 | 5.5 | | | |
| FM | (30°-60°) | 1414.0 | 33.5 | | | |
| FH | (60°-80°) | 1714.8 | 40.6 | | | G1/1800 |
| FVH | (80°-90°) | 60.1 | 1.4 | | | G1/100 |
| BL | (0°-30°) | 204.0 | 4.8 | B1/500 | | |
| BM | (30°-60°) | 386.8 | 9.2 | B1/1000 | | |
| BH | (60°-80°) | 182.4 | 4.3 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 32.9 | 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-G1

Type IV Short





REPORT NUMBER: P191509

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 |
| 2.5° | 612.6 | 613.9 | 612.4 | 614.3 | 617.4 | 620.5 | 622.8 | 626.0 | 629.7 | 634.7 | 636.0 |
| 5° | 583.8 | 585.6 | 585.6 | 588.9 | 594.7 | 600.1 | 605.0 | 610.2 | 618.0 | 626.7 | 630.1 |
| 7.5° | 552.2 | 553.2 | 555.1 | 559.9 | 568.5 | 575.9 | 582.8 | 591.4 | 601.9 | 613.5 | 619.5 |
| 10° | 514.0 | 515.5 | 518.3 | 525.2 | 536.7 | 547.1 | 557.0 | 568.8 | 582.2 | 596.6 | 604.4 |
| 12.5° | 487.0 | 486.6 | 487.8 | 493.0 | 503.1 | 515.7 | 530.1 | 545.0 | 561.5 | 578.4 | 587.7 |
| 15° | 477.9 | 475.7 | 471.0 | 469.7 | 475.3 | 487.8 | 504.5 | 522.9 | 542.7 | 562.9 | 574.5 |
| 17.5° | 483.5 | 479.8 | 467.0 | 457.6 | 456.7 | 466.4 | 484.0 | 504.7 | 527.4 | 552.2 | 566.6 |
| 20° | 519.2 | 510.1 | 478.7 | 457.0 | 449.5 | 454.2 | 469.5 | 491.5 | 518.3 | 551.2 | 569.6 |
| 22.5° | 604.8 | 591.4 | 524.6 | 484.2 | 458.8 | 453.2 | 464.7 | 488.0 | 519.2 | 563.7 | 587.3 |
| 25° | 729.2 | 710.0 | 603.3 | 552.0 | 499.6 | 469.3 | 472.0 | 495.9 | 533.7 | 593.0 | 621.3 |
| 27.5° | 827.4 | 815.0 | 706.1 | 647.5 | 573.9 | 513.2 | 495.7 | 515.9 | 563.1 | 640.9 | 669.8 |
| 30° | 885.8 | 878.3 | 816.2 | 756.0 | 668.6 | 583.0 | 541.2 | 553.2 | 609.2 | 707.2 | 731.1 |
| 32.5° | 953.6 | 949.1 | 918.6 | 863.3 | 770.9 | 674.7 | 613.3 | 609.0 | 670.9 | 787.0 | 797.9 |
| 35° | 1023.8 | 1022.3 | 1004.5 | 964.7 | 880.8 | 795.7 | 708.8 | 680.1 | 738.1 | 869.7 | 862.9 |
| 37.5° | 1089.1 | 1086.7 | 1076.3 | 1053.2 | 995.5 | 925.6 | 806.2 | 752.9 | 810.5 | 948.9 | 918.3 |
| 40° | 1209.4 | 1190.4 | 1154.9 | 1137.4 | 1111.6 | 1034.9 | 883.5 | 820.8 | 885.6 | 1024.4 | 966.2 |
| 42.5° | 1356.1 | 1325.1 | 1258.9 | 1235.0 | 1231.3 | 1121.2 | 936.3 | 886.8 | 961.3 | 1099.3 | 1013.2 |
| 45° | 1471.6 | 1442.5 | 1385.4 | 1355.2 | 1368.5 | 1199.3 | 989.3 | 957.2 | 1039.2 | 1177.8 | 1061.7 |
| 47.5° | 1594.8 | 1549.0 | 1473.5 | 1482.6 | 1511.8 | 1273.2 | 1043.3 | 1032.9 | 1124.6 | 1265.7 | 1122.0 |
| 50° | 1599.3 | 1564.2 | 1531.1 | 1585.7 | 1631.1 | 1341.2 | 1110.8 | 1112.3 | 1229.2 | 1376.3 | 1202.2 |
| 52.5° | 1506.5 | 1499.0 | 1551.6 | 1637.4 | 1703.0 | 1394.9 | 1187.7 | 1194.2 | 1362.9 | 1503.3 | 1290.2 |
| 55° | 1474.1 | 1465.6 | 1526.2 | 1619.3 | 1712.7 | 1439.4 | 1271.1 | 1282.9 | 1524.6 | 1637.2 | 1376.1 |
| 57.5° | 1553.2 | 1534.3 | 1538.4 | 1610.8 | 1689.0 | 1488.1 | 1362.1 | 1385.8 | 1700.3 | 1754.4 | 1431.2 |
| 60° | 1774.4 | 1734.0 | 1657.3 | 1655.5 | 1701.8 | 1561.1 | 1467.2 | 1496.2 | 1882.9 | 1810.3 | 1409.7 |
| 62.5° | 2084.7 | 2044.3 | 1900.6 | 1807.0 | 1800.2 | 1681.6 | 1596.2 | 1604.0 | 1988.5 | 1734.4 | 1278.5 |
| 65° | 2420.5 | 2384.4 | 2223.9 | 2091.8 | 2028.1 | 1881.3 | 1746.2 | 1652.1 | 1954.0 | 1525.6 | 1048.7 |
| 67.5° | 2828.3 | 2789.5 | 2651.5 | 2529.6 | 2468.2 | 2203.6 | 1851.5 | 1605.9 | 1735.0 | 1181.8 | 753.9 |
| 70° | 3113.4 | 3073.8 | 3019.3 | 3118.2 | 3268.1 | 2668.5 | 1865.1 | 1418.6 | 1295.9 | 785.5 | 453.8 |
| 72.5° | 2741.4 | 2722.9 | 2822.1 | 3238.4 | 3863.0 | 2950.6 | 1685.9 | 1032.9 | 752.7 | 417.1 | 262.6 |
| 73° | 2511.7 | 2507.6 | 2676.9 | 3154.2 | 3867.3 | 2907.1 | 1607.4 | 960.0 | 645.5 | 368.9 | 240.1 |
| 75° | 1134.1 | 1166.9 | 1537.8 | 2409.2 | 3359.9 | 2395.5 | 1131.3 | 550.8 | 364.7 | 254.9 | 181.2 |
| 77.5° | 272.5 | 283.9 | 481.1 | 1144.1 | 2121.8 | 1427.6 | 512.6 | 272.3 | 233.1 | 180.0 | 132.3 |
| 80° | 116.1 | 119.9 | 185.3 | 422.7 | 999.0 | 574.9 | 236.2 | 182.4 | 161.3 | 125.6 | 92.8 |
| 82.5° | 64.5 | 68.6 | 105.2 | 191.8 | 403.2 | 196.0 | 144.0 | 127.1 | 106.2 | 75.7 | 60.3 |
| 85° | 36.5 | 38.8 | 61.5 | 107.1 | 170.8 | 78.8 | 86.2 | 84.4 | 59.8 | 39.0 | 29.7 |
| 87.5° | 17.3 | 18.7 | 29.7 | 49.7 | 67.0 | 30.9 | 43.8 | 48.3 | 37.5 | 23.7 | 15.4 |
| 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: GAN-AF-01-LED-U-T4FT-600

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 | 637.8 |
| 2.5° | 637.4 | 641.1 | 645.3 | 647.5 | 649.6 | 652.0 | 654.5 | 654.5 | 654.9 | 655.1 |
| 5° | 632.9 | 640.5 | 647.1 | 650.0 | 650.6 | 650.6 | 650.0 | 646.7 | 643.8 | 645.1 |
| 7.5° | 623.6 | 634.5 | 640.3 | 639.2 | 631.5 | 622.6 | 615.1 | 606.0 | 601.3 | 600.5 |
| 10° | 610.2 | 622.8 | 623.8 | 613.7 | 594.5 | 575.5 | 559.7 | 544.2 | 536.9 | 535.1 |
| 12.5° | 595.4 | 606.9 | 600.5 | 579.6 | 548.9 | 521.1 | 501.0 | 485.4 | 478.5 | 476.7 |
| 15° | 583.4 | 591.4 | 574.9 | 542.1 | 503.5 | 474.0 | 457.4 | 445.8 | 441.0 | 439.6 |
| 17.5° | 577.1 | 578.8 | 548.7 | 504.3 | 463.3 | 438.7 | 428.4 | 422.9 | 421.0 | 420.0 |
| 20° | 580.2 | 568.8 | 523.8 | 469.1 | 430.5 | 413.2 | 410.7 | 409.3 | 408.9 | 408.3 |
| 22.5° | 595.4 | 565.8 | 500.8 | 435.9 | 401.6 | 394.0 | 396.1 | 395.9 | 395.5 | 395.1 |
| 25° | 622.6 | 568.5 | 478.5 | 404.3 | 377.5 | 375.8 | 379.5 | 379.5 | 377.9 | 377.9 |
| 27.5° | 658.5 | 573.9 | 453.6 | 374.2 | 355.6 | 355.8 | 358.5 | 357.7 | 356.0 | 354.8 |
| 30° | 702.4 | 577.4 | 424.3 | 347.2 | 335.0 | 334.2 | 335.0 | 331.5 | 326.1 | 325.7 |
| 32.5° | 747.2 | 573.1 | 390.5 | 323.3 | 313.3 | 311.5 | 310.9 | 306.1 | 299.7 | 297.9 |
| 35° | 787.8 | 557.4 | 356.0 | 304.2 | 292.7 | 288.6 | 291.4 | 289.8 | 284.1 | 282.6 |
| 37.5° | 817.4 | 528.5 | 324.9 | 287.3 | 277.8 | 276.8 | 278.7 | 279.3 | 272.5 | 271.1 |
| 40° | 837.3 | 489.1 | 298.3 | 273.1 | 275.0 | 271.1 | 265.0 | 260.8 | 258.7 | 258.1 |
| 42.5° | 853.3 | 448.1 | 276.0 | 266.5 | 275.6 | 264.4 | 251.2 | 244.3 | 248.0 | 249.6 |
| 45° | 871.8 | 408.1 | 257.3 | 258.1 | 272.5 | 256.7 | 241.7 | 235.0 | 236.4 | 236.8 |
| 47.5° | 897.1 | 359.4 | 237.2 | 244.7 | 262.4 | 251.4 | 235.8 | 226.3 | 219.5 | 216.6 |
| 50° | 932.2 | 301.8 | 216.4 | 229.8 | 252.5 | 247.6 | 226.7 | 216.6 | 204.2 | 201.3 |
| 52.5° | 956.6 | 248.0 | 199.1 | 217.2 | 243.6 | 239.9 | 219.3 | 206.2 | 193.2 | 190.8 |
| 55° | 943.5 | 206.0 | 184.0 | 203.2 | 231.7 | 230.4 | 213.3 | 195.6 | 185.5 | 183.4 |
| 57.5° | 877.5 | 179.4 | 172.5 | 190.0 | 217.4 | 222.2 | 205.2 | 186.7 | 179.4 | 178.0 |
| 60° | 751.7 | 162.8 | 165.2 | 181.1 | 205.6 | 214.1 | 197.0 | 181.8 | 177.0 | 175.9 |
| 62.5° | 583.2 | 151.6 | 159.7 | 174.5 | 196.4 | 208.4 | 192.6 | 181.2 | 179.4 | 178.2 |
| 65° | 417.9 | 142.7 | 153.9 | 168.1 | 188.1 | 203.2 | 191.0 | 180.4 | 180.9 | 179.8 |
| 67.5° | 283.9 | 134.7 | 146.7 | 160.7 | 180.0 | 198.5 | 188.7 | 177.6 | 182.6 | 181.4 |
| 70° | 198.7 | 127.1 | 138.4 | 151.4 | 169.8 | 192.0 | 184.6 | 173.3 | 172.9 | 168.1 |
| 72.5° | 155.1 | 116.9 | 127.1 | 138.4 | 156.8 | 182.8 | 176.6 | 163.8 | 157.0 | 152.0 |
| 73° | 147.9 | 114.5 | 124.2 | 135.5 | 154.1 | 180.7 | 174.3 | 161.1 | 153.6 | 148.9 |
| 75° | 122.3 | 103.9 | 112.8 | 123.0 | 141.9 | 170.0 | 163.4 | 149.1 | 139.6 | 136.8 |
| 77.5° | 96.2 | 88.9 | 97.4 | 106.5 | 125.0 | 154.7 | 147.1 | 133.5 | 128.3 | 125.8 |
| 80° | 71.2 | 73.7 | 81.2 | 89.3 | 108.3 | 138.2 | 131.4 | 117.9 | 141.5 | 135.5 |
| 82.5° | 50.1 | 55.9 | 62.7 | 70.0 | 90.9 | 122.1 | 114.1 | 100.0 | 103.5 | 86.0 |
| 85° | 29.7 | 36.5 | 43.1 | 49.3 | 65.6 | 101.3 | 94.1 | 79.8 | 65.4 | 62.3 |
| 87.5° | 17.3 | 20.3 | 22.1 | 28.6 | 45.0 | 76.3 | 66.4 | 59.0 | 33.9 | 22.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)