

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: P300963

Luminaire Tested: **GAA-AF-01-LED-U-SL4-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-01-LED-U-SL4-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3887.6 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

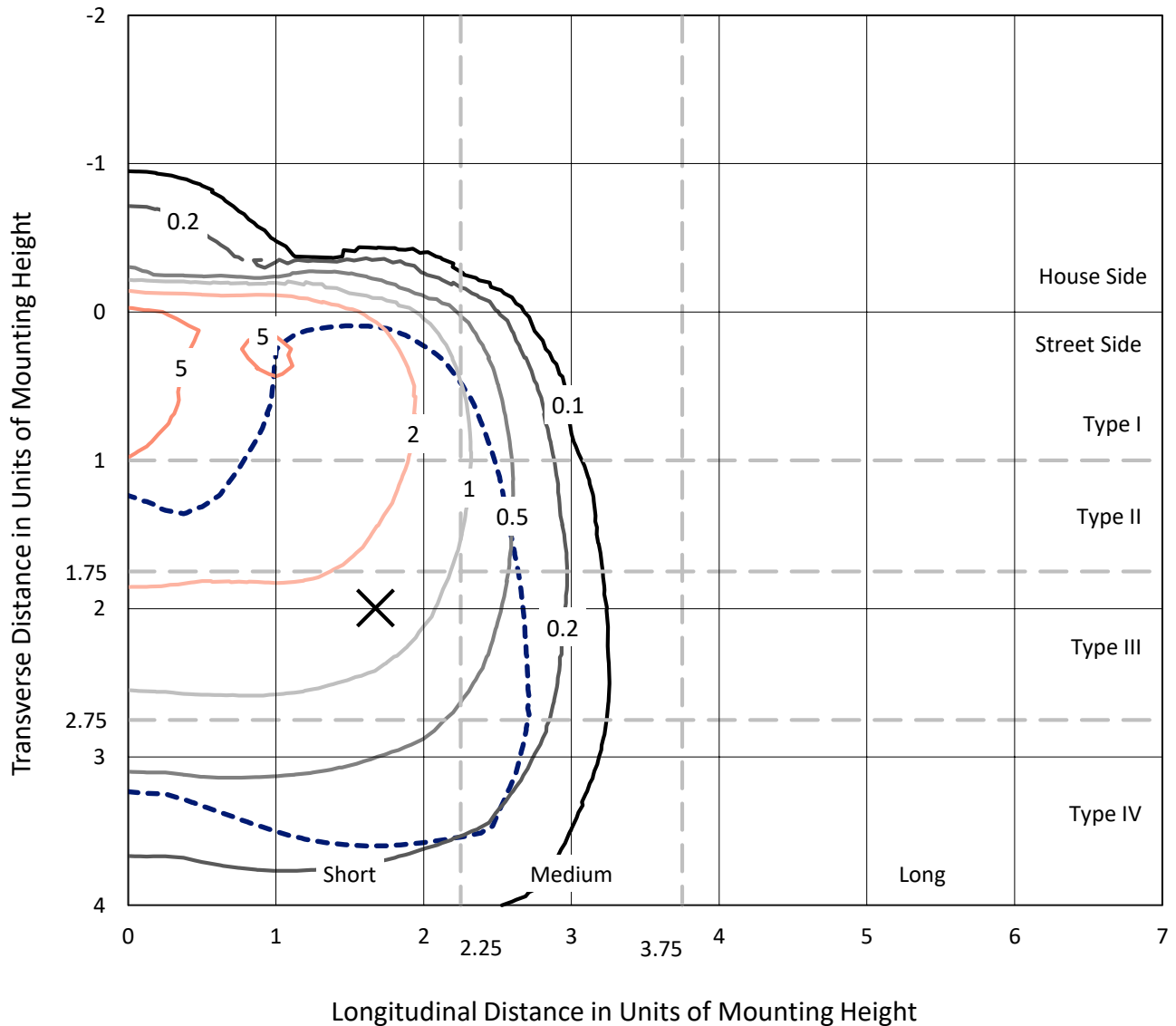
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P300963
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Iso-Footcandle Lines of Horizontal Illumination

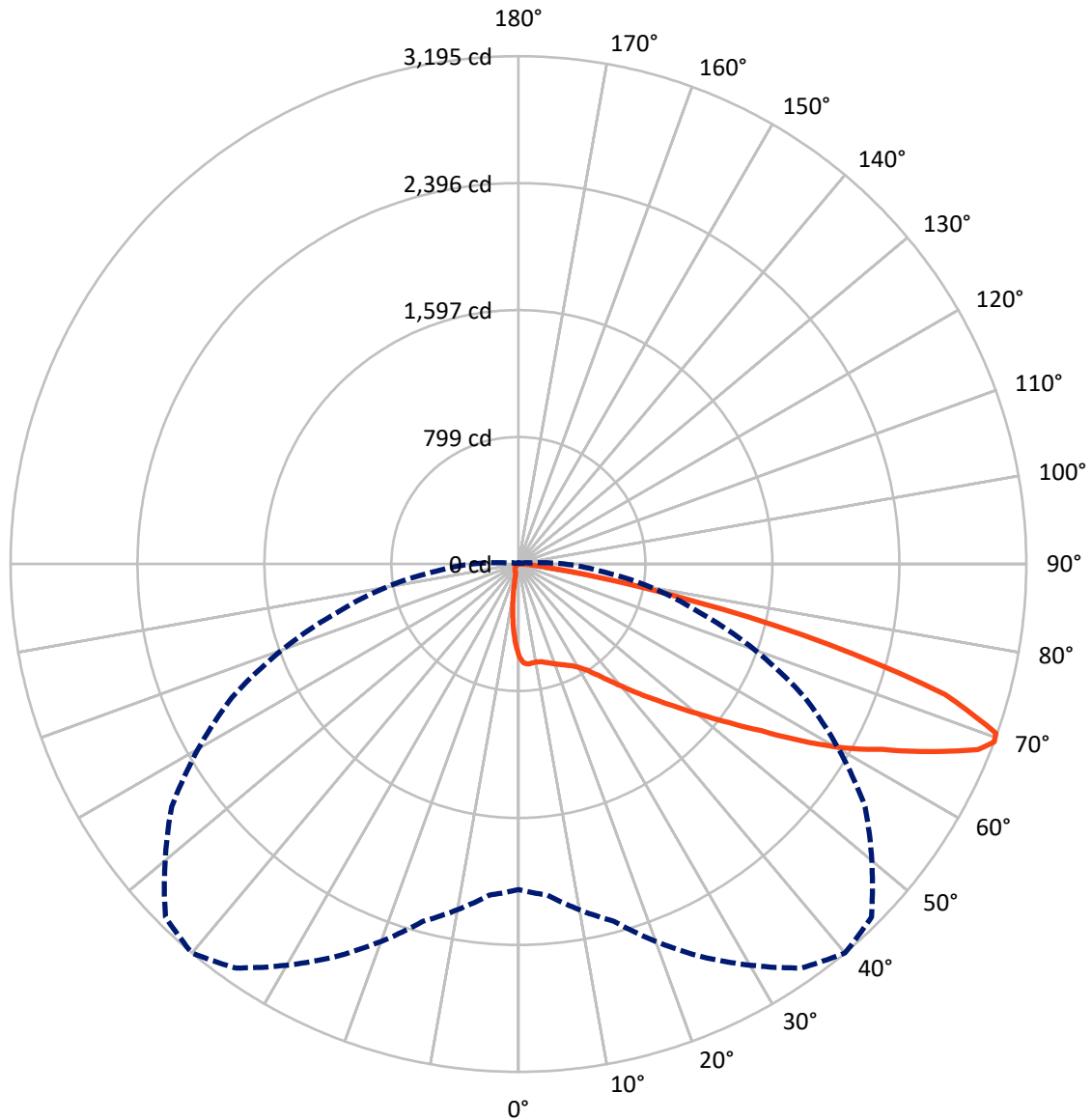
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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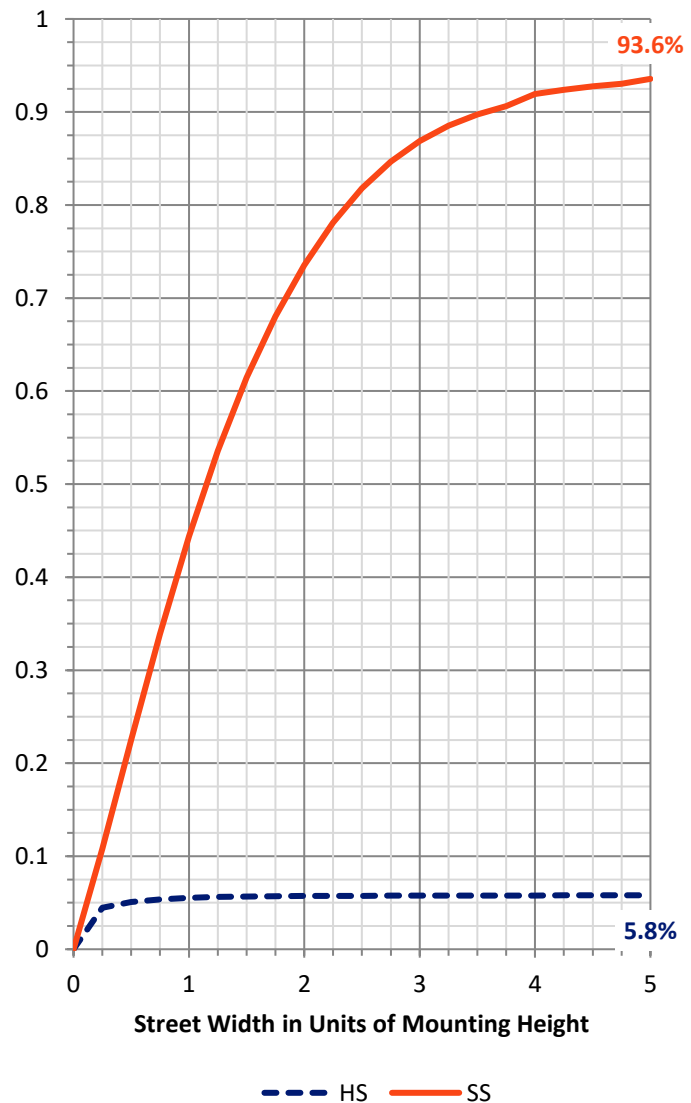
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 227.4 | 0.0 | 227.4 |
| | % Fixture | 5.9 | 0.0 | 5.9 |
| Street Side | Lumens | 3660.2 | 0.0 | 3660.2 |
| | % Fixture | 94.1 | 0.0 | 94.1 |
| Total | Lumens | 3887.6 | 0.0 | 3887.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 47.1 | 1.2 |
| 10°-20° | 115.8 | 3.0 |
| 20°-30° | 195.1 | 5.0 |
| 30°-40° | 319.3 | 8.2 |
| 40°-50° | 552.9 | 14.2 |
| 50°-60° | 870.9 | 22.4 |
| 60°-70° | 1137.4 | 29.3 |
| 70°-80° | 585.8 | 15.1 |
| 80°-90° | 63.4 | 1.6 |
| 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° | 3887.6 | 100.0 |
| 0°-180° | 3887.6 | 100.0 |



REPORT NUMBER: P300963

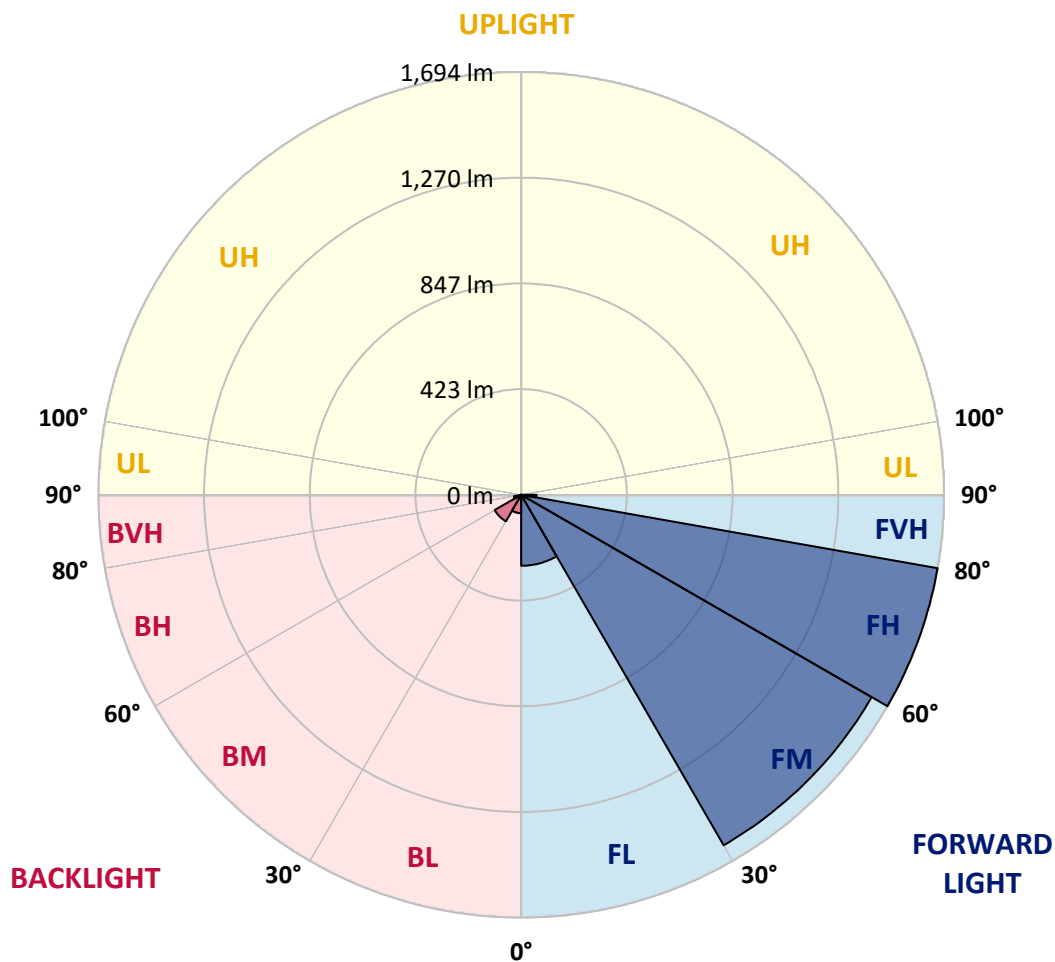
CATALOG NUMBER: GAA-AF-01-LED-U-SL4-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 284.3 | 7.3 | | | |
| FM | (30°-60°) | 1620.9 | 41.7 | | | |
| FH | (60°-80°) | 1693.6 | 43.6 | | | G1/1800 |
| FVH | (80°-90°) | 61.4 | 1.6 | | | G1/100 |
| BL | (0°-30°) | 73.7 | 1.9 | B0/110 | | |
| BM | (30°-60°) | 122.2 | 3.1 | B0/220 | | |
| BH | (60°-80°) | 29.5 | 0.8 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 2.0 | 0.1 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type IV Short





REPORT NUMBER: P300963

CATALOG NUMBER: GAA-AF-01-LED-U-SL4-600

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 |
| 2.5° | 637.8 | 634.3 | 632.2 | 629.4 | 626.0 | 622.9 | 621.8 | 613.2 | 605.1 | 594.0 | 581.3 |
| 5° | 649.6 | 648.4 | 644.7 | 641.0 | 636.8 | 632.2 | 629.7 | 619.5 | 607.9 | 591.7 | 569.5 |
| 7.5° | 650.7 | 649.3 | 644.7 | 639.6 | 633.8 | 628.3 | 623.9 | 613.7 | 603.0 | 586.6 | 559.5 |
| 10° | 648.9 | 647.2 | 643.8 | 638.2 | 631.0 | 625.7 | 621.3 | 611.6 | 602.6 | 587.8 | 557.7 |
| 12.5° | 646.8 | 645.2 | 643.5 | 640.8 | 634.5 | 630.8 | 627.1 | 617.9 | 609.8 | 597.3 | 564.4 |
| 15° | 648.9 | 647.9 | 649.8 | 648.6 | 645.2 | 641.9 | 638.2 | 629.9 | 622.5 | 612.1 | 576.7 |
| 17.5° | 657.7 | 657.7 | 663.4 | 664.1 | 660.9 | 656.3 | 650.9 | 642.6 | 636.4 | 627.6 | 591.2 |
| 20° | 678.3 | 677.6 | 685.0 | 686.3 | 678.5 | 671.3 | 663.4 | 653.3 | 648.4 | 642.8 | 605.6 |
| 22.5° | 713.7 | 710.4 | 714.8 | 713.4 | 697.9 | 686.8 | 677.1 | 664.6 | 662.1 | 659.5 | 621.6 |
| 25° | 759.7 | 757.9 | 760.9 | 747.2 | 719.9 | 704.9 | 693.3 | 679.2 | 679.2 | 681.7 | 639.6 |
| 27.5° | 826.6 | 819.6 | 809.5 | 785.4 | 744.4 | 725.2 | 712.7 | 697.7 | 701.6 | 711.1 | 663.4 |
| 30° | 895.1 | 887.4 | 864.1 | 827.0 | 774.3 | 754.2 | 739.6 | 723.8 | 733.1 | 750.4 | 695.4 |
| 32.5° | 962.6 | 954.1 | 921.0 | 874.3 | 817.1 | 797.0 | 782.8 | 765.5 | 781.0 | 810.2 | 742.1 |
| 35° | 1028.1 | 1020.5 | 982.3 | 927.2 | 874.0 | 857.4 | 844.4 | 829.4 | 849.3 | 890.0 | 808.1 |
| 37.5° | 1101.7 | 1093.4 | 1046.9 | 987.2 | 943.2 | 931.2 | 921.7 | 906.6 | 941.4 | 1001.1 | 899.9 |
| 40° | 1192.2 | 1178.1 | 1115.4 | 1055.9 | 1023.3 | 1017.5 | 1011.0 | 1008.9 | 1062.8 | 1145.5 | 1022.4 |
| 42.5° | 1295.9 | 1272.7 | 1187.1 | 1128.3 | 1111.2 | 1115.4 | 1113.8 | 1123.0 | 1214.9 | 1325.0 | 1171.4 |
| 45° | 1399.5 | 1369.7 | 1266.9 | 1205.6 | 1207.9 | 1222.5 | 1231.5 | 1268.6 | 1405.3 | 1531.0 | 1331.7 |
| 47.5° | 1487.5 | 1458.1 | 1343.5 | 1289.2 | 1316.9 | 1345.6 | 1370.2 | 1440.3 | 1601.1 | 1733.7 | 1456.5 |
| 50° | 1562.7 | 1534.9 | 1424.8 | 1381.0 | 1443.5 | 1489.8 | 1529.6 | 1633.5 | 1811.7 | 1888.0 | 1543.9 |
| 52.5° | 1624.2 | 1605.7 | 1509.0 | 1486.3 | 1588.1 | 1655.9 | 1714.3 | 1838.8 | 1998.2 | 2013.5 | 1612.0 |
| 55° | 1684.2 | 1671.0 | 1599.5 | 1611.5 | 1758.0 | 1850.3 | 1924.1 | 2056.5 | 2158.8 | 2118.1 | 1677.2 |
| 57.5° | 1753.1 | 1741.1 | 1702.7 | 1770.3 | 1981.3 | 2097.5 | 2178.0 | 2249.5 | 2300.2 | 2225.0 | 1738.8 |
| 60° | 1823.5 | 1816.5 | 1817.5 | 1946.6 | 2237.7 | 2349.2 | 2393.7 | 2412.2 | 2439.0 | 2325.6 | 1742.3 |
| 62.5° | 1890.6 | 1903.8 | 1948.7 | 2142.8 | 2483.2 | 2568.8 | 2591.3 | 2609.6 | 2578.1 | 2341.6 | 1609.7 |
| 65° | 2004.2 | 2025.7 | 2132.9 | 2405.5 | 2753.3 | 2844.9 | 2868.0 | 2805.3 | 2600.1 | 2135.2 | 1309.3 |
| 67.5° | 2059.7 | 2099.1 | 2290.2 | 2650.3 | 3015.2 | 3117.0 | 3108.5 | 2818.1 | 2333.3 | 1628.2 | 840.2 |
| 69° | 2048.2 | 2090.1 | 2326.6 | 2725.3 | 3102.2 | 3194.6 | 3140.2 | 2662.3 | 1987.8 | 1179.5 | 515.8 |
| 70° | 2002.4 | 2044.7 | 2307.8 | 2722.5 | 3113.3 | 3186.5 | 3081.4 | 2470.0 | 1680.7 | 862.4 | 322.6 |
| 72.5° | 1672.1 | 1708.7 | 2048.9 | 2460.8 | 2868.0 | 2808.6 | 2577.9 | 1711.2 | 818.9 | 234.9 | 72.7 |
| 75° | 1029.3 | 1049.7 | 1470.1 | 1853.8 | 2166.2 | 2013.5 | 1717.5 | 851.3 | 244.1 | 66.4 | 40.3 |
| 77.5° | 543.8 | 553.1 | 804.8 | 1092.7 | 1373.2 | 1136.2 | 880.3 | 332.1 | 112.5 | 41.7 | 29.2 |
| 80° | 321.4 | 328.4 | 433.4 | 499.6 | 594.3 | 496.4 | 352.0 | 203.9 | 80.5 | 26.1 | 25.9 |
| 82.5° | 184.0 | 188.4 | 314.2 | 277.7 | 234.2 | 199.9 | 175.2 | 193.2 | 48.4 | 17.6 | 26.8 |
| 85° | 67.6 | 68.5 | 176.8 | 211.3 | 139.3 | 82.8 | 87.0 | 160.1 | 13.0 | 11.1 | 21.1 |
| 87.5° | 31.5 | 30.8 | 90.9 | 129.4 | 81.5 | 52.5 | 67.8 | 35.2 | 5.1 | 7.2 | 5.8 |
| 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: GAA-AF-01-LED-U-SL4-600

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 | 580.8 |
| 2.5° | 573.9 | 565.3 | 549.8 | 533.9 | 517.7 | 505.2 | 492.9 | 483.2 | 479.9 | 473.9 | 474.4 |
| 5° | 556.3 | 540.6 | 508.2 | 475.3 | 441.1 | 412.8 | 386.2 | 364.7 | 354.3 | 343.6 | 343.6 |
| 7.5° | 541.0 | 518.1 | 467.4 | 414.0 | 358.7 | 312.2 | 270.3 | 238.8 | 221.5 | 207.6 | 207.3 |
| 10° | 535.2 | 504.2 | 433.4 | 356.8 | 279.8 | 216.4 | 166.6 | 134.7 | 118.2 | 107.6 | 107.1 |
| 12.5° | 537.8 | 499.4 | 407.3 | 304.1 | 207.3 | 139.1 | 96.5 | 75.9 | 69.0 | 65.7 | 65.7 |
| 15° | 545.2 | 498.0 | 381.1 | 252.5 | 146.5 | 87.0 | 64.1 | 58.5 | 58.1 | 58.1 | 58.1 |
| 17.5° | 554.2 | 498.4 | 354.3 | 202.2 | 99.7 | 62.2 | 55.3 | 54.6 | 55.1 | 55.1 | 55.1 |
| 20° | 563.5 | 498.7 | 325.4 | 155.7 | 70.3 | 54.1 | 52.1 | 51.8 | 52.3 | 52.3 | 52.5 |
| 22.5° | 574.8 | 499.8 | 296.4 | 116.4 | 58.1 | 51.1 | 49.5 | 49.5 | 49.8 | 49.8 | 49.5 |
| 25° | 587.8 | 502.2 | 266.3 | 86.3 | 53.0 | 49.1 | 47.7 | 47.4 | 47.7 | 47.4 | 47.2 |
| 27.5° | 604.0 | 505.4 | 232.8 | 67.6 | 50.7 | 47.0 | 45.8 | 45.8 | 45.6 | 45.4 | 45.1 |
| 30° | 624.3 | 509.1 | 195.1 | 57.4 | 48.4 | 45.1 | 44.0 | 43.7 | 43.5 | 43.0 | 43.0 |
| 32.5° | 655.3 | 517.2 | 157.8 | 52.1 | 45.8 | 42.6 | 41.7 | 41.7 | 41.2 | 40.7 | 40.5 |
| 35° | 703.0 | 533.2 | 124.5 | 48.8 | 43.0 | 39.8 | 38.6 | 38.6 | 38.2 | 38.0 | 37.7 |
| 37.5° | 769.0 | 557.5 | 96.7 | 45.8 | 40.3 | 36.8 | 35.6 | 35.4 | 34.9 | 34.5 | 34.2 |
| 40° | 856.7 | 587.5 | 76.1 | 43.0 | 37.5 | 33.8 | 32.9 | 32.4 | 31.5 | 30.8 | 30.8 |
| 42.5° | 966.8 | 621.8 | 61.8 | 40.0 | 34.2 | 31.0 | 30.3 | 29.6 | 28.0 | 27.3 | 27.1 |
| 45° | 1082.1 | 652.6 | 52.3 | 36.6 | 31.0 | 28.2 | 27.8 | 26.6 | 24.5 | 23.8 | 23.8 |
| 47.5° | 1165.1 | 659.7 | 46.0 | 33.3 | 28.0 | 25.2 | 25.0 | 22.9 | 21.1 | 20.6 | 20.4 |
| 50° | 1217.0 | 645.6 | 41.0 | 30.1 | 25.2 | 22.4 | 21.8 | 19.2 | 18.0 | 17.6 | 17.4 |
| 52.5° | 1251.9 | 620.4 | 36.8 | 27.3 | 22.7 | 19.9 | 18.3 | 16.4 | 15.5 | 15.0 | 15.0 |
| 55° | 1279.9 | 584.8 | 32.6 | 24.8 | 20.6 | 17.8 | 15.5 | 14.1 | 13.2 | 12.7 | 12.7 |
| 57.5° | 1287.8 | 536.4 | 28.5 | 22.7 | 18.5 | 15.7 | 13.2 | 12.3 | 11.1 | 10.9 | 10.9 |
| 60° | 1230.6 | 449.2 | 25.2 | 20.1 | 16.7 | 13.7 | 11.6 | 10.4 | 9.3 | 9.0 | 8.8 |
| 62.5° | 1080.0 | 347.6 | 22.2 | 17.8 | 14.6 | 11.8 | 10.0 | 8.6 | 7.6 | 7.6 | 7.6 |
| 65° | 823.8 | 233.0 | 19.4 | 15.5 | 12.7 | 10.0 | 8.6 | 6.9 | 6.5 | 6.5 | 6.7 |
| 67.5° | 493.1 | 126.8 | 16.7 | 13.2 | 10.9 | 8.3 | 7.2 | 6.0 | 5.8 | 6.0 | 6.0 |
| 69° | 289.0 | 74.5 | 15.0 | 11.8 | 9.5 | 7.4 | 6.2 | 5.3 | 5.8 | 6.0 | 6.0 |
| 70° | 178.4 | 50.2 | 13.9 | 10.6 | 8.6 | 6.7 | 5.8 | 5.1 | 5.6 | 5.8 | 5.8 |
| 72.5° | 49.8 | 25.9 | 11.1 | 8.3 | 6.9 | 5.6 | 4.6 | 4.6 | 5.3 | 5.6 | 5.6 |
| 75° | 32.4 | 19.2 | 8.6 | 6.2 | 5.3 | 4.4 | 3.9 | 4.4 | 5.1 | 5.3 | 5.3 |
| 77.5° | 26.8 | 15.7 | 6.9 | 5.1 | 4.4 | 4.2 | 3.7 | 3.9 | 4.6 | 4.9 | 4.9 |
| 80° | 24.5 | 11.1 | 5.6 | 4.6 | 3.9 | 3.7 | 3.5 | 3.2 | 4.2 | 4.4 | 4.4 |
| 82.5° | 23.4 | 8.8 | 4.9 | 4.2 | 3.7 | 3.2 | 3.0 | 3.2 | 3.7 | 3.9 | 4.2 |
| 85° | 14.6 | 5.8 | 4.4 | 3.9 | 3.2 | 3.0 | 3.0 | 3.0 | 3.5 | 3.7 | 3.7 |
| 87.5° | 5.3 | 4.6 | 3.9 | 3.2 | 2.8 | 2.8 | 2.8 | 2.8 | 3.0 | 3.5 | 3.5 |
| 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)