

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: P301863

Luminaire Tested: **GAA-AF-01-LED-U-SL4-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301863
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-SL4-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3712.9 lumens
Efficiency: N/A
Efficacy: 84.4 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

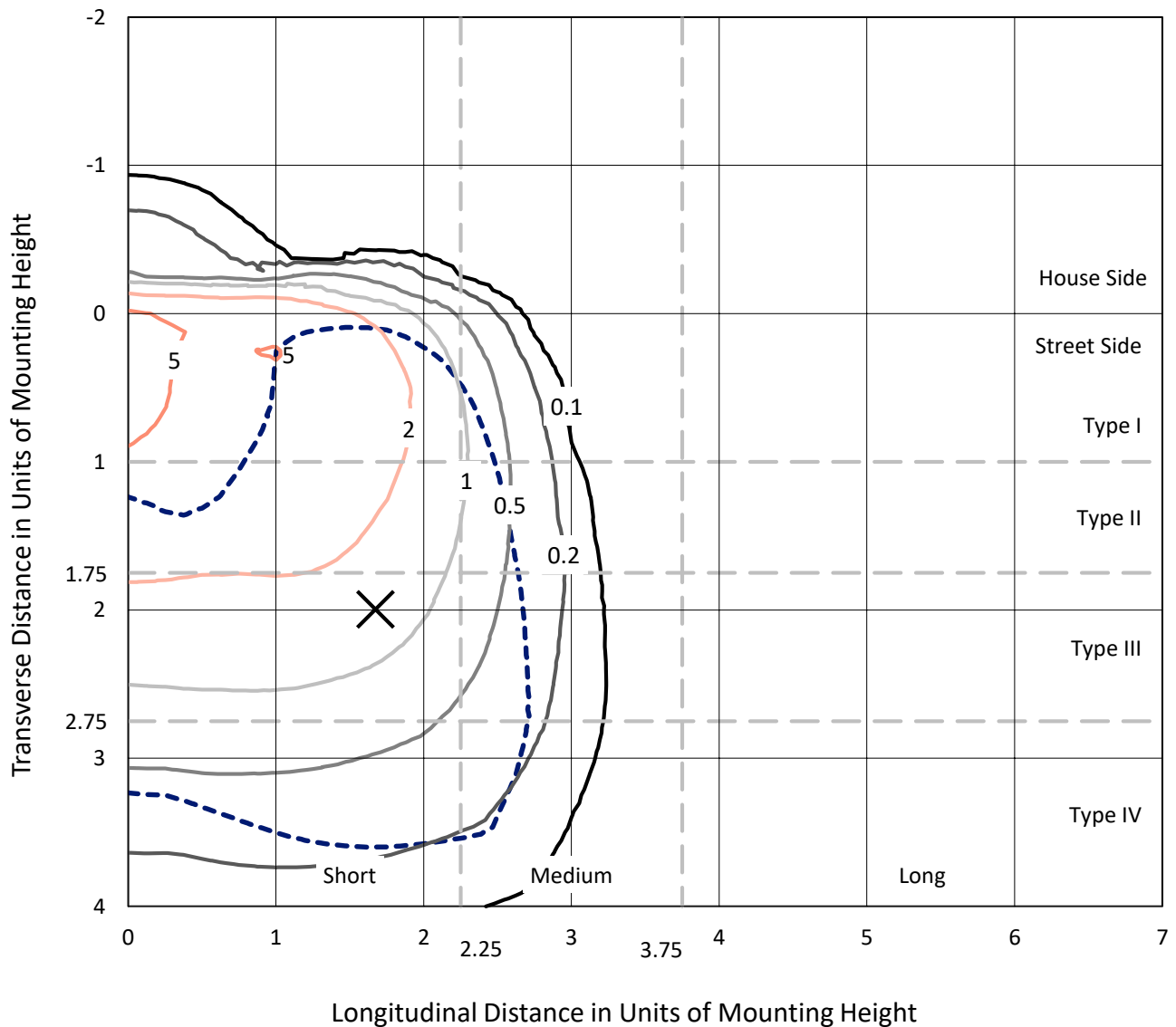
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

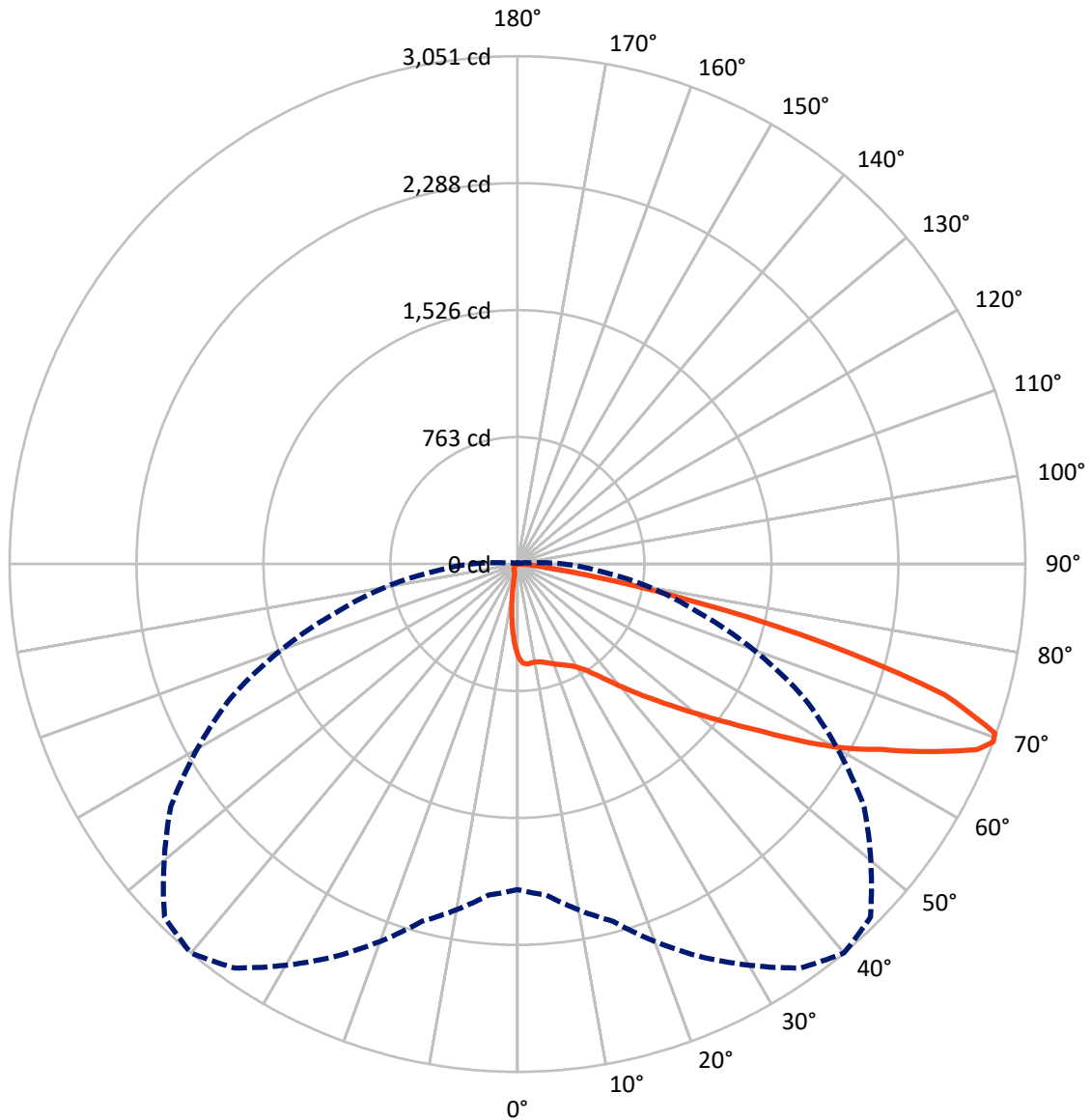
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 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 | 217.2 | 0.0 | 217.2 |
| | % Fixture | 5.9 | 0.0 | 5.9 |
| Street Side | Lumens | 3495.7 | 0.0 | 3495.7 |
| | % Fixture | 94.1 | 0.0 | 94.1 |
| Total | Lumens | 3712.9 | 0.0 | 3712.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 45.0 | 1.2 |
| 10°-20° | 110.6 | 3.0 |
| 20°-30° | 186.3 | 5.0 |
| 30°-40° | 305.0 | 8.2 |
| 40°-50° | 528.1 | 14.2 |
| 50°-60° | 831.8 | 22.4 |
| 60°-70° | 1086.2 | 29.3 |
| 70°-80° | 559.5 | 15.1 |
| 80°-90° | 60.5 | 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° | 3712.9 | 100.0 |
| 0°-180° | 3712.9 | 100.0 |

Coefficient of Utilization



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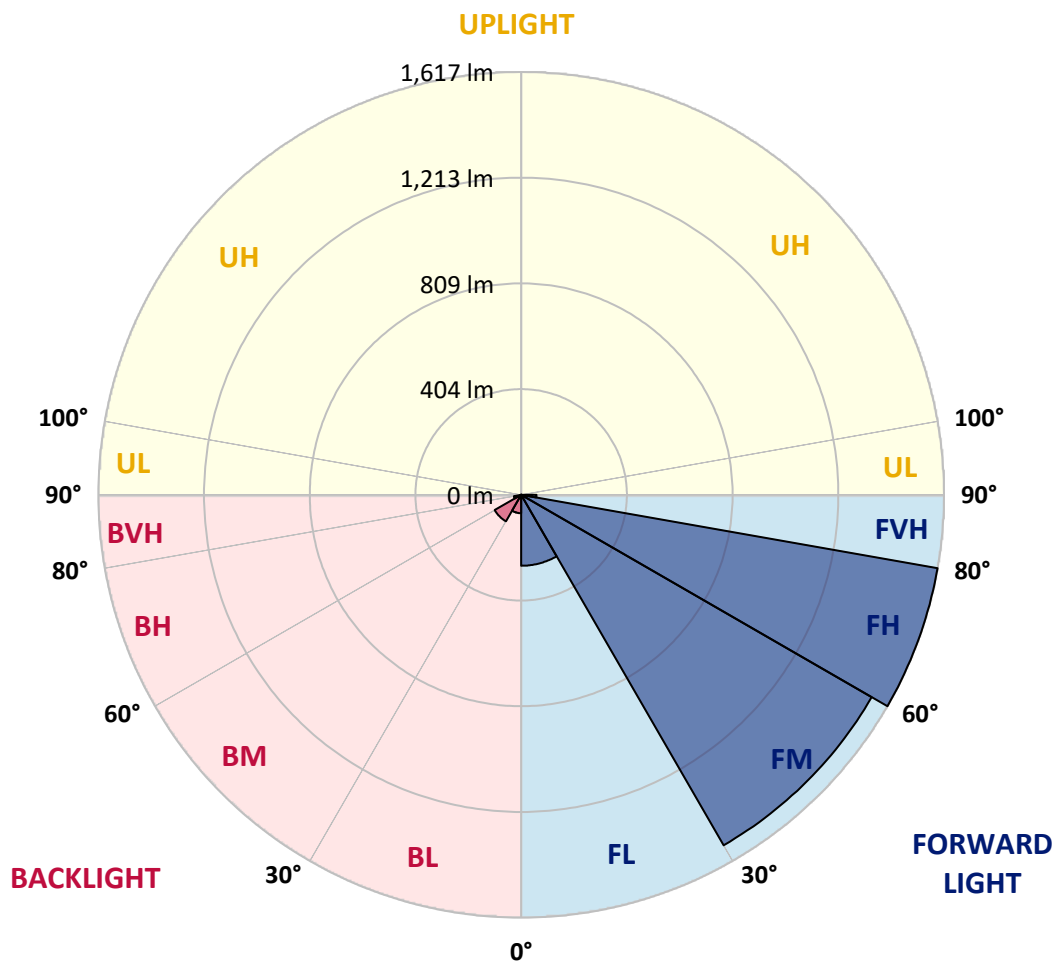
CATALOG NUMBER: GAA-AF-01-LED-U-SL4-800-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 271.5 | 7.3 | | | |
| FM | (30°-60°) | 1548.1 | 41.7 | | | |
| FH | (60°-80°) | 1617.5 | 43.6 | | | G1/1800 |
| FVH | (80°-90°) | 58.6 | 1.6 | | | G1/100 |
| BL | (0°-30°) | 70.4 | 1.9 | B0/110 | | |
| BM | (30°-60°) | 116.8 | 3.1 | B0/220 | | |
| BH | (60°-80°) | 28.2 | 0.8 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 1.9 | 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





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 |
| 2.5° | 609.1 | 605.8 | 603.8 | 601.1 | 597.8 | 595.0 | 593.8 | 585.7 | 577.9 | 567.3 | 555.2 |
| 5° | 620.4 | 619.3 | 615.7 | 612.2 | 608.2 | 603.8 | 601.4 | 591.6 | 580.6 | 565.1 | 543.9 |
| 7.5° | 621.5 | 620.1 | 615.7 | 610.9 | 605.3 | 600.0 | 595.8 | 586.1 | 575.9 | 560.3 | 534.4 |
| 10° | 619.7 | 618.2 | 614.8 | 609.5 | 602.7 | 597.6 | 593.4 | 584.1 | 575.5 | 561.4 | 532.6 |
| 12.5° | 617.7 | 616.2 | 614.6 | 612.0 | 606.0 | 602.5 | 598.9 | 590.1 | 582.4 | 570.4 | 539.0 |
| 15° | 619.7 | 618.8 | 620.6 | 619.5 | 616.2 | 613.1 | 609.5 | 601.6 | 594.5 | 584.6 | 550.8 |
| 17.5° | 628.1 | 628.1 | 633.6 | 634.3 | 631.2 | 626.8 | 621.7 | 613.7 | 607.8 | 599.4 | 564.7 |
| 20° | 647.8 | 647.1 | 654.2 | 655.5 | 648.0 | 641.1 | 633.6 | 623.9 | 619.3 | 614.0 | 578.4 |
| 22.5° | 681.6 | 678.5 | 682.7 | 681.4 | 666.6 | 656.0 | 646.7 | 634.7 | 632.3 | 629.9 | 593.6 |
| 25° | 725.6 | 723.8 | 726.7 | 713.6 | 687.6 | 673.2 | 662.1 | 648.7 | 648.7 | 651.1 | 610.9 |
| 27.5° | 789.4 | 782.8 | 773.1 | 750.1 | 711.0 | 692.6 | 680.7 | 666.3 | 670.1 | 679.2 | 633.6 |
| 30° | 854.9 | 847.6 | 825.2 | 789.9 | 739.5 | 720.3 | 706.3 | 691.3 | 700.2 | 716.7 | 664.1 |
| 32.5° | 919.4 | 911.2 | 879.6 | 835.0 | 780.4 | 761.2 | 747.7 | 731.1 | 745.9 | 773.7 | 708.8 |
| 35° | 981.9 | 974.6 | 938.2 | 885.6 | 834.7 | 818.8 | 806.5 | 792.1 | 811.1 | 850.0 | 771.8 |
| 37.5° | 1052.2 | 1044.3 | 999.8 | 942.8 | 900.8 | 889.3 | 880.3 | 865.9 | 899.1 | 956.1 | 859.5 |
| 40° | 1138.6 | 1125.2 | 1065.3 | 1008.5 | 977.3 | 971.8 | 965.6 | 963.6 | 1015.1 | 1094.0 | 976.4 |
| 42.5° | 1237.6 | 1215.5 | 1133.8 | 1077.6 | 1061.3 | 1065.3 | 1063.7 | 1072.6 | 1160.3 | 1265.5 | 1118.7 |
| 45° | 1336.7 | 1308.1 | 1210.0 | 1151.5 | 1153.7 | 1167.6 | 1176.2 | 1211.6 | 1342.2 | 1462.2 | 1271.9 |
| 47.5° | 1420.6 | 1392.6 | 1283.2 | 1231.2 | 1257.8 | 1285.2 | 1308.6 | 1375.6 | 1529.2 | 1655.8 | 1391.0 |
| 50° | 1492.5 | 1465.9 | 1360.7 | 1319.0 | 1378.6 | 1422.8 | 1460.9 | 1560.1 | 1730.3 | 1803.2 | 1474.6 |
| 52.5° | 1551.3 | 1533.6 | 1441.2 | 1419.5 | 1516.8 | 1581.5 | 1637.2 | 1756.1 | 1908.4 | 1923.0 | 1539.5 |
| 55° | 1608.5 | 1595.9 | 1527.6 | 1539.1 | 1679.0 | 1767.2 | 1837.7 | 1964.1 | 2061.8 | 2022.9 | 1601.9 |
| 57.5° | 1674.4 | 1662.9 | 1626.2 | 1690.7 | 1892.3 | 2003.2 | 2080.1 | 2148.4 | 2196.8 | 2125.0 | 1660.7 |
| 60° | 1741.5 | 1734.9 | 1735.8 | 1859.1 | 2137.1 | 2243.7 | 2286.1 | 2303.8 | 2329.4 | 2221.1 | 1664.0 |
| 62.5° | 1805.6 | 1818.2 | 1861.1 | 2046.5 | 2371.6 | 2453.4 | 2474.8 | 2492.3 | 2462.2 | 2236.4 | 1537.3 |
| 65° | 1914.1 | 1934.7 | 2037.0 | 2297.4 | 2629.5 | 2717.1 | 2739.2 | 2679.3 | 2483.2 | 2039.2 | 1250.5 |
| 67.5° | 1967.2 | 2004.8 | 2187.3 | 2531.2 | 2879.7 | 2977.0 | 2968.8 | 2691.4 | 2228.4 | 1555.0 | 802.5 |
| 69° | 1956.1 | 1996.1 | 2222.0 | 2602.8 | 2962.8 | 3051.0 | 2999.1 | 2542.7 | 1898.5 | 1126.5 | 492.6 |
| 70° | 1912.4 | 1952.8 | 2204.1 | 2600.2 | 2973.4 | 3043.3 | 2942.9 | 2359.0 | 1605.2 | 823.7 | 308.1 |
| 72.5° | 1597.0 | 1631.9 | 1956.8 | 2350.2 | 2739.2 | 2682.4 | 2462.0 | 1634.4 | 782.1 | 224.3 | 69.4 |
| 75° | 983.0 | 1002.5 | 1404.1 | 1770.5 | 2068.9 | 1923.0 | 1640.3 | 813.1 | 233.2 | 63.4 | 38.5 |
| 77.5° | 519.4 | 528.2 | 768.7 | 1043.6 | 1311.5 | 1085.1 | 840.7 | 317.1 | 107.4 | 39.8 | 27.8 |
| 80° | 307.0 | 313.6 | 413.9 | 477.2 | 567.5 | 474.1 | 336.2 | 194.7 | 76.9 | 25.0 | 24.8 |
| 82.5° | 175.7 | 179.9 | 300.1 | 265.2 | 223.7 | 191.0 | 167.3 | 184.5 | 46.2 | 16.8 | 25.6 |
| 85° | 64.5 | 65.4 | 168.8 | 201.8 | 133.0 | 79.1 | 83.1 | 152.9 | 12.4 | 10.6 | 20.1 |
| 87.5° | 30.1 | 29.4 | 86.9 | 123.5 | 77.8 | 50.2 | 64.8 | 33.6 | 4.9 | 6.9 | 5.5 |
| 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-SL4-800-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 | 554.7 |
| 2.5° | 548.1 | 539.9 | 525.1 | 509.9 | 494.4 | 482.5 | 470.7 | 461.5 | 458.4 | 452.6 | 453.1 |
| 5° | 531.3 | 516.3 | 485.3 | 453.9 | 421.2 | 394.3 | 368.9 | 348.3 | 338.4 | 328.2 | 328.2 |
| 7.5° | 516.7 | 494.8 | 446.4 | 395.4 | 342.6 | 298.1 | 258.1 | 228.1 | 211.5 | 198.2 | 198.0 |
| 10° | 511.2 | 481.6 | 413.9 | 340.8 | 267.2 | 206.6 | 159.1 | 128.6 | 112.9 | 102.8 | 102.3 |
| 12.5° | 513.6 | 476.9 | 389.0 | 290.4 | 198.0 | 132.8 | 92.2 | 72.5 | 65.9 | 62.8 | 62.8 |
| 15° | 520.7 | 475.6 | 364.0 | 241.1 | 139.9 | 83.1 | 61.2 | 55.9 | 55.5 | 55.5 | 55.5 |
| 17.5° | 529.3 | 476.1 | 338.4 | 193.2 | 95.3 | 59.5 | 52.8 | 52.2 | 52.6 | 52.6 | 52.6 |
| 20° | 538.2 | 476.3 | 310.7 | 148.7 | 67.2 | 51.7 | 49.7 | 49.5 | 49.9 | 49.9 | 50.2 |
| 22.5° | 549.0 | 477.4 | 283.1 | 111.2 | 55.5 | 48.8 | 47.3 | 47.3 | 47.5 | 47.5 | 47.3 |
| 25° | 561.4 | 479.6 | 254.4 | 82.4 | 50.6 | 46.9 | 45.5 | 45.3 | 45.5 | 45.3 | 45.1 |
| 27.5° | 576.8 | 482.7 | 222.3 | 64.5 | 48.4 | 44.9 | 43.8 | 43.8 | 43.5 | 43.3 | 43.1 |
| 30° | 596.3 | 486.2 | 186.3 | 54.8 | 46.2 | 43.1 | 42.0 | 41.8 | 41.5 | 41.1 | 41.1 |
| 32.5° | 625.9 | 494.0 | 150.7 | 49.7 | 43.8 | 40.7 | 39.8 | 39.8 | 39.3 | 38.9 | 38.7 |
| 35° | 671.4 | 509.2 | 118.9 | 46.6 | 41.1 | 38.0 | 36.9 | 36.9 | 36.5 | 36.2 | 36.0 |
| 37.5° | 734.4 | 532.4 | 92.4 | 43.8 | 38.5 | 35.1 | 34.0 | 33.8 | 33.4 | 32.9 | 32.7 |
| 40° | 818.2 | 561.1 | 72.7 | 41.1 | 35.8 | 32.3 | 31.4 | 30.9 | 30.1 | 29.4 | 29.4 |
| 42.5° | 923.4 | 593.8 | 59.0 | 38.2 | 32.7 | 29.6 | 29.0 | 28.3 | 26.7 | 26.1 | 25.9 |
| 45° | 1033.4 | 623.2 | 49.9 | 34.9 | 29.6 | 27.0 | 26.5 | 25.4 | 23.4 | 22.8 | 22.8 |
| 47.5° | 1112.8 | 630.1 | 44.0 | 31.8 | 26.7 | 24.1 | 23.9 | 21.9 | 20.1 | 19.7 | 19.4 |
| 50° | 1162.3 | 616.6 | 39.1 | 28.7 | 24.1 | 21.4 | 20.8 | 18.3 | 17.2 | 16.8 | 16.6 |
| 52.5° | 1195.7 | 592.5 | 35.1 | 26.1 | 21.7 | 19.0 | 17.5 | 15.7 | 14.8 | 14.4 | 14.4 |
| 55° | 1222.4 | 558.5 | 31.2 | 23.6 | 19.7 | 17.0 | 14.8 | 13.5 | 12.6 | 12.2 | 12.2 |
| 57.5° | 1229.9 | 512.3 | 27.2 | 21.7 | 17.7 | 15.0 | 12.6 | 11.7 | 10.6 | 10.4 | 10.4 |
| 60° | 1175.3 | 429.0 | 24.1 | 19.2 | 15.9 | 13.0 | 11.1 | 9.9 | 8.8 | 8.6 | 8.4 |
| 62.5° | 1031.4 | 332.0 | 21.2 | 17.0 | 13.9 | 11.3 | 9.5 | 8.2 | 7.3 | 7.3 | 7.3 |
| 65° | 786.8 | 222.6 | 18.6 | 14.8 | 12.2 | 9.5 | 8.2 | 6.6 | 6.2 | 6.2 | 6.4 |
| 67.5° | 471.0 | 121.1 | 15.9 | 12.6 | 10.4 | 8.0 | 6.9 | 5.7 | 5.5 | 5.7 | 5.7 |
| 69° | 276.0 | 71.2 | 14.4 | 11.3 | 9.1 | 7.1 | 6.0 | 5.1 | 5.5 | 5.7 | 5.7 |
| 70° | 170.4 | 48.0 | 13.3 | 10.2 | 8.2 | 6.4 | 5.5 | 4.9 | 5.3 | 5.5 | 5.5 |
| 72.5° | 47.5 | 24.8 | 10.6 | 8.0 | 6.6 | 5.3 | 4.4 | 4.4 | 5.1 | 5.3 | 5.3 |
| 75° | 30.9 | 18.3 | 8.2 | 6.0 | 5.1 | 4.2 | 3.8 | 4.2 | 4.9 | 5.1 | 5.1 |
| 77.5° | 25.6 | 15.0 | 6.6 | 4.9 | 4.2 | 4.0 | 3.5 | 3.8 | 4.4 | 4.6 | 4.6 |
| 80° | 23.4 | 10.6 | 5.3 | 4.4 | 3.8 | 3.5 | 3.3 | 3.1 | 4.0 | 4.2 | 4.2 |
| 82.5° | 22.3 | 8.4 | 4.6 | 4.0 | 3.5 | 3.1 | 2.9 | 3.1 | 3.5 | 3.8 | 4.0 |
| 85° | 13.9 | 5.5 | 4.2 | 3.8 | 3.1 | 2.9 | 2.9 | 2.9 | 3.3 | 3.5 | 3.5 |
| 87.5° | 5.1 | 4.4 | 3.8 | 3.1 | 2.7 | 2.7 | 2.7 | 2.7 | 2.9 | 3.3 | 3.3 |
| 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)