

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: P299155

Luminaire Tested: **GAA-AF-01-LED-U-T3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299155
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
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-T3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4360.5 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

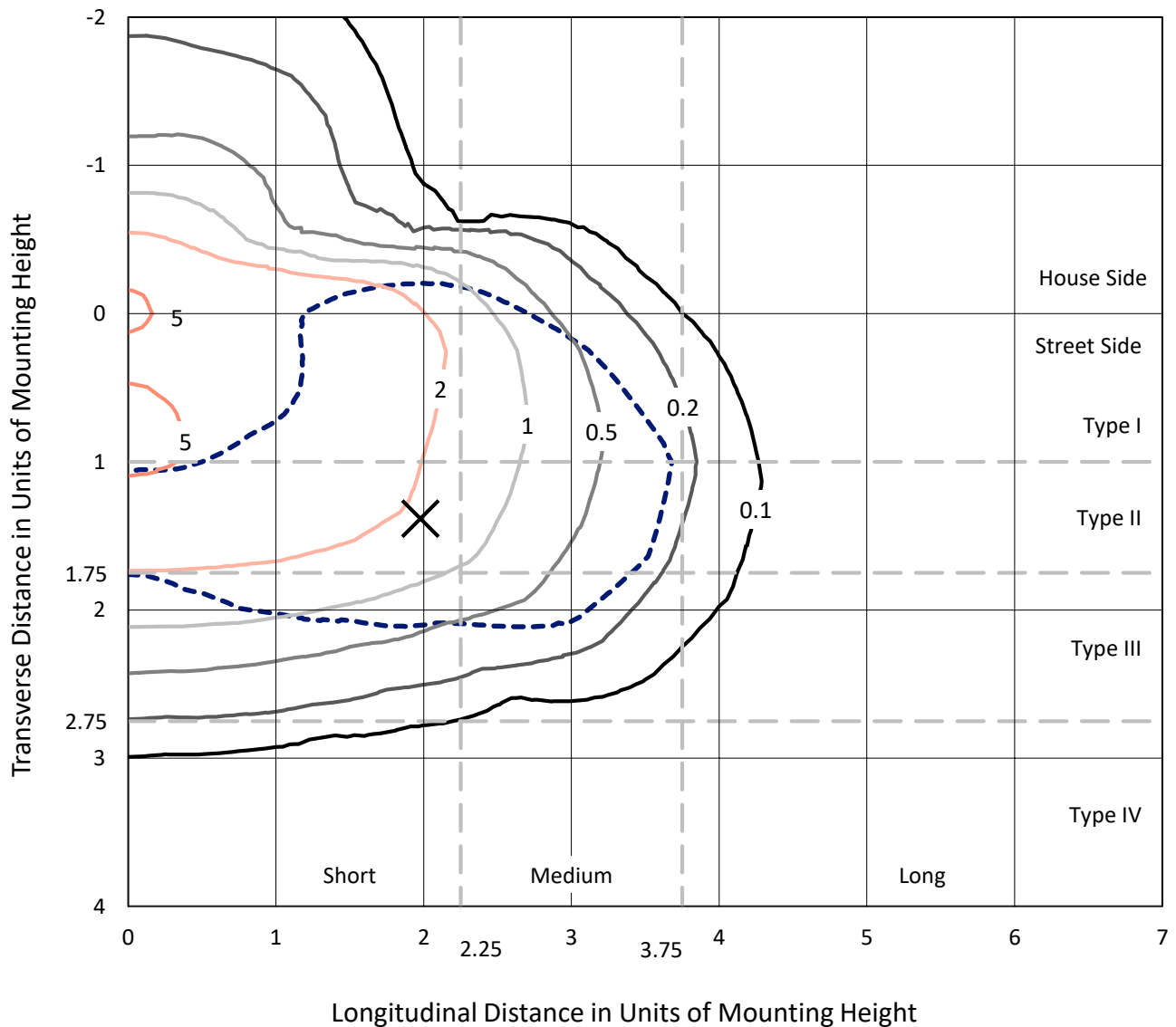
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P299155
 CATALOG NUMBER: GAA-AF-01-LED-U-T3-7027-800

Iso-Footcandle Lines of Horizontal Illumination

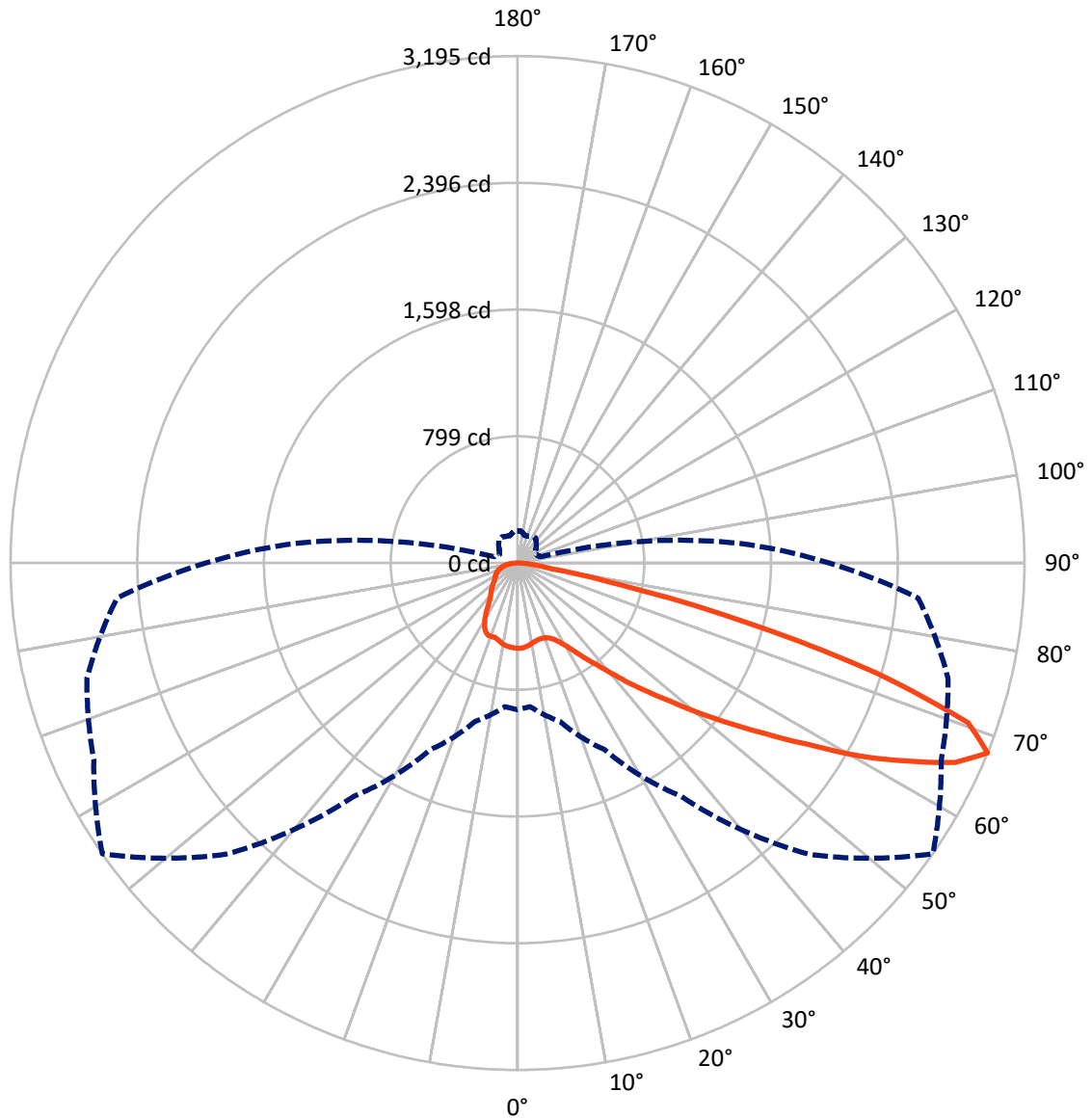
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P299155
CATALOG NUMBER: GAA-AF-01-LED-U-T3-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



REPORT NUMBER: P299155
 CATALOG NUMBER: GAA-AF-01-LED-U-T3-7027-800

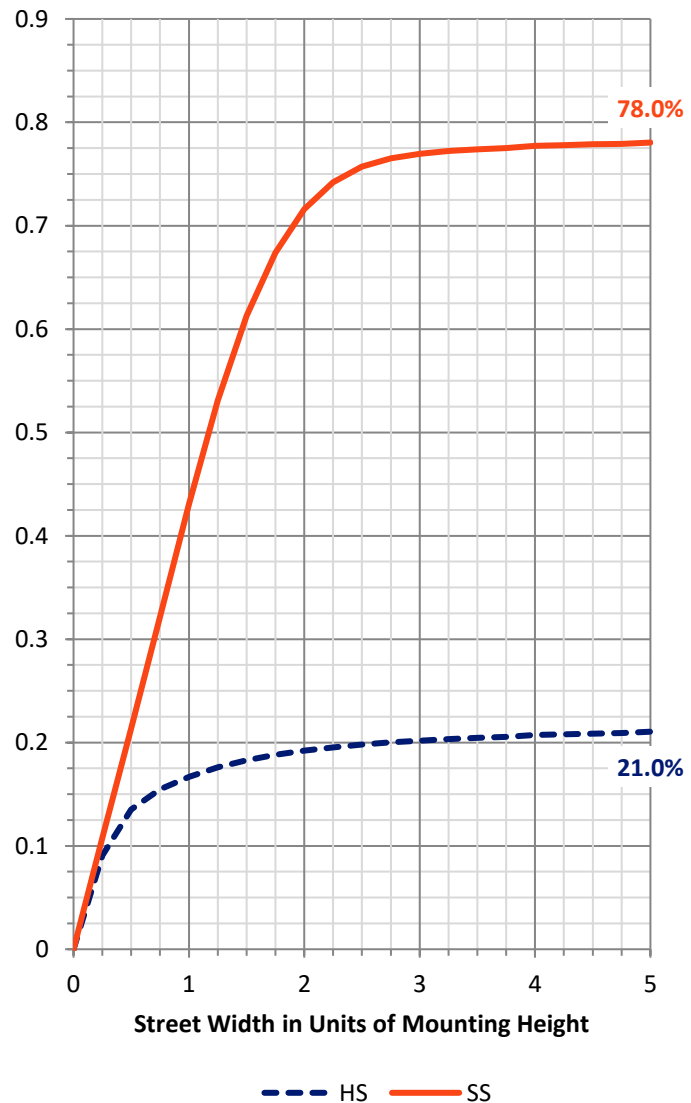
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 942.0 | 0.0 | 942.0 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 3418.5 | 0.0 | 3418.5 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 4360.5 | 0.0 | 4360.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 50.2 | 1.2 |
| 10°-20° | 142.1 | 3.3 |
| 20°-30° | 238.1 | 5.5 |
| 30°-40° | 391.5 | 9.0 |
| 40°-50° | 659.1 | 15.1 |
| 50°-60° | 1037.3 | 23.8 |
| 60°-70° | 1238.0 | 28.4 |
| 70°-80° | 531.6 | 12.2 |
| 80°-90° | 72.5 | 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° | 4360.5 | 100.0 |
| 0°-180° | 4360.5 | 100.0 |



REPORT NUMBER: P299155

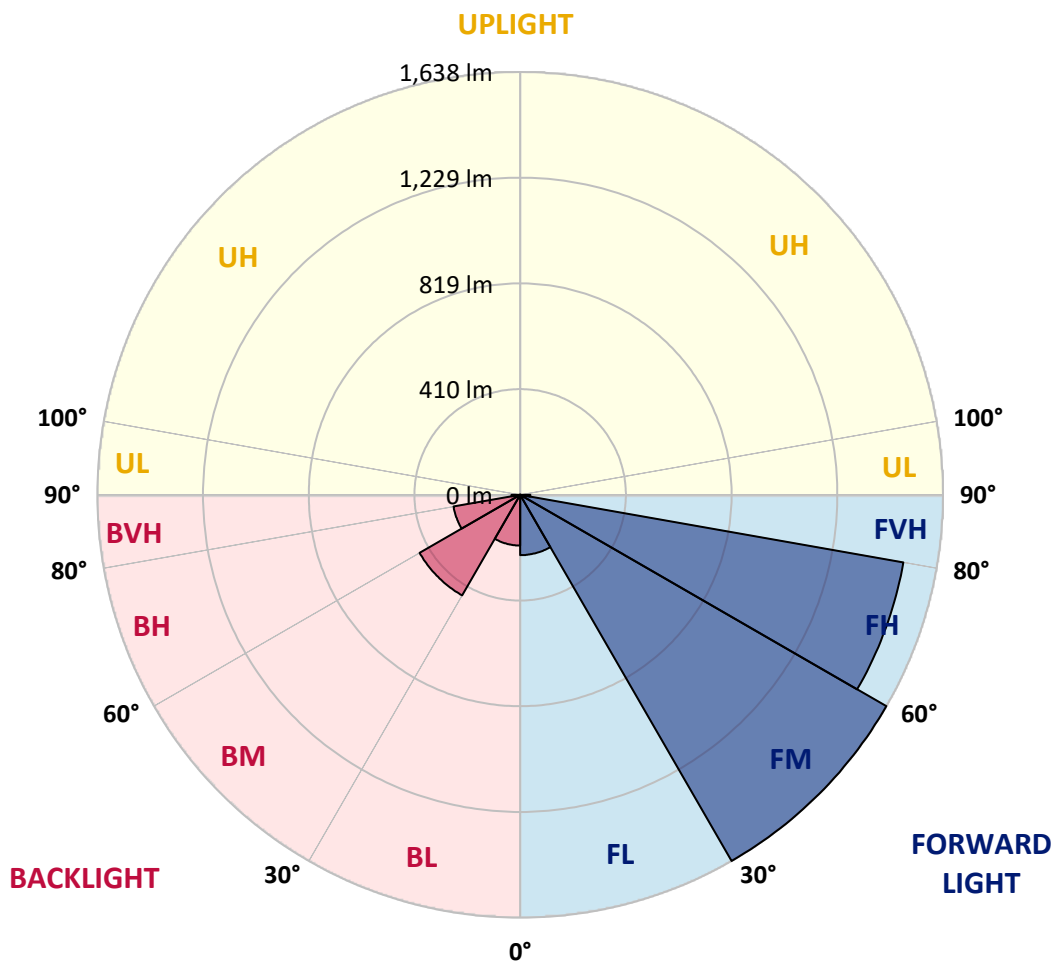
CATALOG NUMBER: GAA-AF-01-LED-U-T3-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 233.7 | 5.4 | | | |
| FM | (30°-60°) | 1638.1 | 37.6 | | | |
| FH | (60°-80°) | 1507.4 | 34.6 | | | G1/1800 |
| FVH | (80°-90°) | 39.2 | 0.9 | | | G1/100 |
| BL | (0°-30°) | 196.7 | 4.5 | B1/500 | | |
| BM | (30°-60°) | 449.9 | 10.3 | B1/1000 | | |
| BH | (60°-80°) | 262.1 | 6.0 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 33.2 | 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 III Short





REPORT NUMBER: P299155

CATALOG NUMBER: GAA-AF-01-LED-U-T3-7027-800

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 |
| 2.5° | 533.1 | 533.3 | 533.7 | 535.4 | 536.8 | 536.4 | 536.6 | 535.8 | 535.6 | 534.3 | 535.6 |
| 5° | 526.3 | 527.0 | 527.2 | 529.9 | 531.6 | 532.0 | 531.4 | 530.3 | 529.1 | 527.8 | 528.4 |
| 7.5° | 510.9 | 512.6 | 512.8 | 516.6 | 519.4 | 522.9 | 523.2 | 523.4 | 522.7 | 521.9 | 523.2 |
| 10° | 501.3 | 501.7 | 501.5 | 504.2 | 506.3 | 510.3 | 512.6 | 516.6 | 518.3 | 518.7 | 519.6 |
| 12.5° | 500.6 | 500.2 | 499.6 | 499.6 | 498.9 | 500.6 | 504.8 | 510.5 | 514.5 | 515.8 | 516.8 |
| 15° | 507.4 | 507.2 | 505.0 | 501.9 | 497.9 | 496.6 | 500.2 | 506.5 | 511.8 | 514.5 | 515.6 |
| 17.5° | 522.5 | 521.3 | 517.9 | 510.7 | 502.1 | 498.7 | 499.2 | 504.4 | 510.5 | 514.1 | 515.2 |
| 20° | 550.3 | 550.3 | 543.2 | 529.7 | 514.3 | 506.3 | 502.5 | 505.7 | 511.6 | 516.4 | 517.9 |
| 22.5° | 598.3 | 598.8 | 586.8 | 564.7 | 538.7 | 521.7 | 512.2 | 511.6 | 518.5 | 524.0 | 525.7 |
| 25° | 666.4 | 664.7 | 647.8 | 616.3 | 576.9 | 548.6 | 532.2 | 528.4 | 534.3 | 540.4 | 542.5 |
| 27.5° | 745.6 | 739.5 | 719.5 | 681.3 | 630.4 | 589.1 | 563.8 | 557.7 | 563.4 | 570.3 | 572.4 |
| 30° | 823.9 | 817.6 | 793.8 | 752.1 | 695.4 | 643.2 | 607.0 | 597.1 | 605.1 | 615.0 | 616.3 |
| 32.5° | 902.3 | 902.3 | 875.7 | 827.1 | 765.4 | 707.9 | 664.5 | 652.7 | 666.0 | 678.0 | 680.7 |
| 35° | 996.0 | 996.4 | 970.7 | 912.2 | 845.8 | 785.0 | 737.1 | 728.5 | 748.5 | 756.9 | 763.5 |
| 37.5° | 1111.2 | 1113.5 | 1080.4 | 1009.7 | 937.0 | 873.0 | 816.1 | 804.3 | 824.3 | 847.3 | 868.4 |
| 40° | 1235.7 | 1238.6 | 1202.2 | 1115.0 | 1042.3 | 975.3 | 913.8 | 892.6 | 925.8 | 969.7 | 996.8 |
| 42.5° | 1354.4 | 1369.6 | 1334.4 | 1244.7 | 1166.6 | 1097.3 | 1034.9 | 1004.0 | 1045.7 | 1111.8 | 1135.4 |
| 45° | 1526.1 | 1537.0 | 1475.8 | 1394.5 | 1321.0 | 1243.5 | 1160.9 | 1128.2 | 1186.6 | 1270.0 | 1274.8 |
| 47.5° | 1640.5 | 1632.2 | 1601.1 | 1550.5 | 1504.0 | 1431.5 | 1307.3 | 1271.5 | 1349.0 | 1447.1 | 1419.9 |
| 50° | 1701.3 | 1703.8 | 1699.6 | 1702.6 | 1704.3 | 1658.8 | 1486.7 | 1437.6 | 1530.1 | 1648.7 | 1586.1 |
| 52.5° | 1758.2 | 1741.3 | 1755.2 | 1824.3 | 1907.7 | 1890.9 | 1681.9 | 1630.8 | 1724.3 | 1872.3 | 1761.8 |
| 55° | 1756.9 | 1731.2 | 1776.5 | 1898.5 | 2079.4 | 2098.7 | 1901.2 | 1842.2 | 1929.6 | 2112.2 | 1947.9 |
| 57.5° | 1694.8 | 1696.1 | 1765.8 | 1925.4 | 2199.0 | 2294.2 | 2155.6 | 2067.2 | 2147.4 | 2355.3 | 2117.9 |
| 60° | 1609.3 | 1620.9 | 1721.3 | 1921.0 | 2294.8 | 2454.5 | 2467.7 | 2309.6 | 2360.7 | 2576.2 | 2258.6 |
| 62.5° | 1471.3 | 1483.5 | 1622.1 | 1875.1 | 2280.3 | 2608.8 | 2750.0 | 2584.6 | 2583.8 | 2710.2 | 2299.9 |
| 65° | 1253.8 | 1250.2 | 1395.7 | 1703.4 | 2158.4 | 2723.0 | 3030.3 | 2822.4 | 2751.9 | 2712.3 | 2216.9 |
| 67.5° | 924.6 | 908.6 | 1033.5 | 1297.4 | 1794.0 | 2595.2 | 3195.2 | 2946.2 | 2809.1 | 2533.9 | 1963.3 |
| 70° | 479.8 | 463.8 | 564.9 | 757.6 | 1179.8 | 2025.5 | 3012.6 | 2882.2 | 2682.6 | 2124.0 | 1538.1 |
| 72.5° | 205.1 | 202.4 | 243.5 | 332.3 | 570.8 | 1168.3 | 2362.2 | 2494.7 | 2301.8 | 1582.5 | 1057.5 |
| 75° | 138.0 | 137.1 | 152.5 | 181.1 | 256.7 | 474.1 | 1478.3 | 1770.8 | 1684.1 | 981.2 | 594.8 |
| 77.5° | 108.3 | 107.2 | 116.3 | 130.2 | 166.4 | 187.0 | 656.1 | 950.7 | 879.9 | 427.1 | 260.3 |
| 80° | 84.7 | 83.8 | 89.5 | 97.1 | 119.6 | 117.9 | 215.9 | 378.3 | 292.8 | 163.6 | 126.6 |
| 82.5° | 66.8 | 66.8 | 71.4 | 71.6 | 84.9 | 80.5 | 112.7 | 166.6 | 146.2 | 95.4 | 77.5 |
| 85° | 61.1 | 61.1 | 65.9 | 53.5 | 55.4 | 50.8 | 69.9 | 98.8 | 92.7 | 39.2 | 33.7 |
| 87.5° | 30.7 | 29.9 | 55.4 | 47.4 | 30.1 | 27.0 | 34.1 | 47.8 | 51.4 | 21.7 | 16.8 |
| 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: P299155

CATALOG NUMBER: GAA-AF-01-LED-U-T3-7027-800

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 | 537.7 |
| 2.5° | 535.2 | 535.0 | 535.4 | 535.6 | 537.3 | 539.6 | 540.6 | 542.1 | 543.0 | 542.5 |
| 5° | 528.8 | 529.3 | 531.0 | 532.2 | 535.2 | 539.0 | 541.1 | 542.7 | 544.2 | 543.6 |
| 7.5° | 523.6 | 524.6 | 527.2 | 528.2 | 529.9 | 531.0 | 530.7 | 531.4 | 532.6 | 531.2 |
| 10° | 520.6 | 521.9 | 523.8 | 522.3 | 518.3 | 512.6 | 507.4 | 504.6 | 505.5 | 504.4 |
| 12.5° | 517.7 | 519.4 | 517.9 | 510.9 | 499.8 | 492.4 | 488.4 | 488.8 | 490.7 | 491.1 |
| 15° | 516.0 | 516.6 | 510.3 | 497.3 | 485.9 | 484.8 | 486.9 | 486.5 | 486.7 | 486.7 |
| 17.5° | 516.0 | 514.3 | 502.5 | 489.5 | 484.6 | 482.7 | 476.2 | 468.0 | 464.4 | 463.1 |
| 20° | 518.7 | 514.3 | 500.0 | 491.4 | 480.8 | 464.6 | 447.3 | 432.2 | 425.4 | 423.5 |
| 22.5° | 527.0 | 519.4 | 507.2 | 492.2 | 462.3 | 435.1 | 407.7 | 389.6 | 377.4 | 375.3 |
| 25° | 543.6 | 535.2 | 521.3 | 481.0 | 432.8 | 394.1 | 362.9 | 342.7 | 330.5 | 328.8 |
| 27.5° | 572.7 | 567.2 | 528.8 | 456.4 | 393.6 | 352.1 | 323.3 | 307.7 | 298.6 | 298.0 |
| 30° | 616.5 | 613.7 | 525.1 | 420.0 | 345.4 | 311.5 | 297.6 | 288.5 | 281.8 | 281.6 |
| 32.5° | 686.4 | 664.3 | 512.6 | 375.5 | 301.4 | 282.6 | 277.0 | 271.5 | 266.2 | 266.2 |
| 35° | 776.3 | 705.1 | 489.0 | 327.9 | 274.6 | 266.6 | 259.5 | 250.8 | 243.9 | 243.5 |
| 37.5° | 882.0 | 730.4 | 446.7 | 289.6 | 262.0 | 255.9 | 245.4 | 232.5 | 220.3 | 218.2 |
| 40° | 988.8 | 738.0 | 387.1 | 266.0 | 254.0 | 245.2 | 232.3 | 217.1 | 205.3 | 204.7 |
| 42.5° | 1086.8 | 723.5 | 323.9 | 249.8 | 246.0 | 234.2 | 220.7 | 207.2 | 198.0 | 197.8 |
| 45° | 1168.9 | 685.8 | 270.8 | 234.4 | 237.6 | 224.3 | 212.3 | 201.3 | 194.2 | 192.7 |
| 47.5° | 1246.2 | 632.5 | 233.6 | 218.2 | 229.1 | 218.8 | 208.7 | 198.4 | 191.4 | 190.4 |
| 50° | 1335.9 | 575.0 | 207.5 | 202.4 | 221.8 | 216.9 | 211.7 | 200.9 | 189.3 | 188.1 |
| 52.5° | 1444.6 | 525.3 | 187.0 | 188.5 | 216.1 | 219.5 | 219.2 | 208.1 | 187.9 | 186.2 |
| 55° | 1565.9 | 470.1 | 171.6 | 177.1 | 213.8 | 224.1 | 221.1 | 214.8 | 189.1 | 186.6 |
| 57.5° | 1685.3 | 405.6 | 160.9 | 168.5 | 210.4 | 223.7 | 212.1 | 203.0 | 192.1 | 188.5 |
| 60° | 1774.8 | 319.1 | 152.7 | 160.9 | 203.0 | 216.7 | 202.2 | 190.2 | 191.4 | 188.7 |
| 62.5° | 1780.7 | 246.6 | 142.8 | 154.4 | 191.9 | 209.8 | 195.7 | 184.5 | 194.2 | 191.7 |
| 65° | 1676.0 | 186.4 | 133.3 | 146.6 | 179.9 | 205.3 | 189.3 | 181.3 | 199.9 | 197.1 |
| 67.5° | 1411.1 | 150.0 | 125.3 | 138.6 | 167.9 | 196.1 | 183.7 | 178.4 | 204.9 | 200.1 |
| 70° | 1018.7 | 127.8 | 117.5 | 128.9 | 157.1 | 185.5 | 178.6 | 173.1 | 191.2 | 183.7 |
| 72.5° | 627.2 | 110.8 | 108.7 | 116.0 | 148.9 | 174.6 | 171.0 | 163.2 | 172.3 | 166.2 |
| 75° | 313.2 | 96.0 | 98.8 | 103.4 | 137.3 | 162.2 | 158.4 | 150.6 | 151.9 | 150.6 |
| 77.5° | 150.0 | 82.1 | 87.2 | 90.8 | 122.4 | 148.1 | 144.1 | 136.1 | 134.6 | 134.8 |
| 80° | 95.0 | 68.7 | 73.5 | 76.0 | 109.3 | 131.6 | 127.6 | 119.6 | 136.5 | 126.6 |
| 82.5° | 59.4 | 55.8 | 57.1 | 61.7 | 95.2 | 114.6 | 109.3 | 102.1 | 123.0 | 97.3 |
| 85° | 32.9 | 39.0 | 40.6 | 44.6 | 73.3 | 95.8 | 90.6 | 81.5 | 73.1 | 71.8 |
| 87.5° | 19.6 | 23.2 | 23.8 | 26.7 | 49.3 | 69.3 | 61.3 | 58.1 | 48.2 | 48.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)