

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: P319185

Luminaire Tested: **GAN-SA1A-830-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319185  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA1A-830-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3850 lumens  
Efficiency: N/A  
Efficacy: 113.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

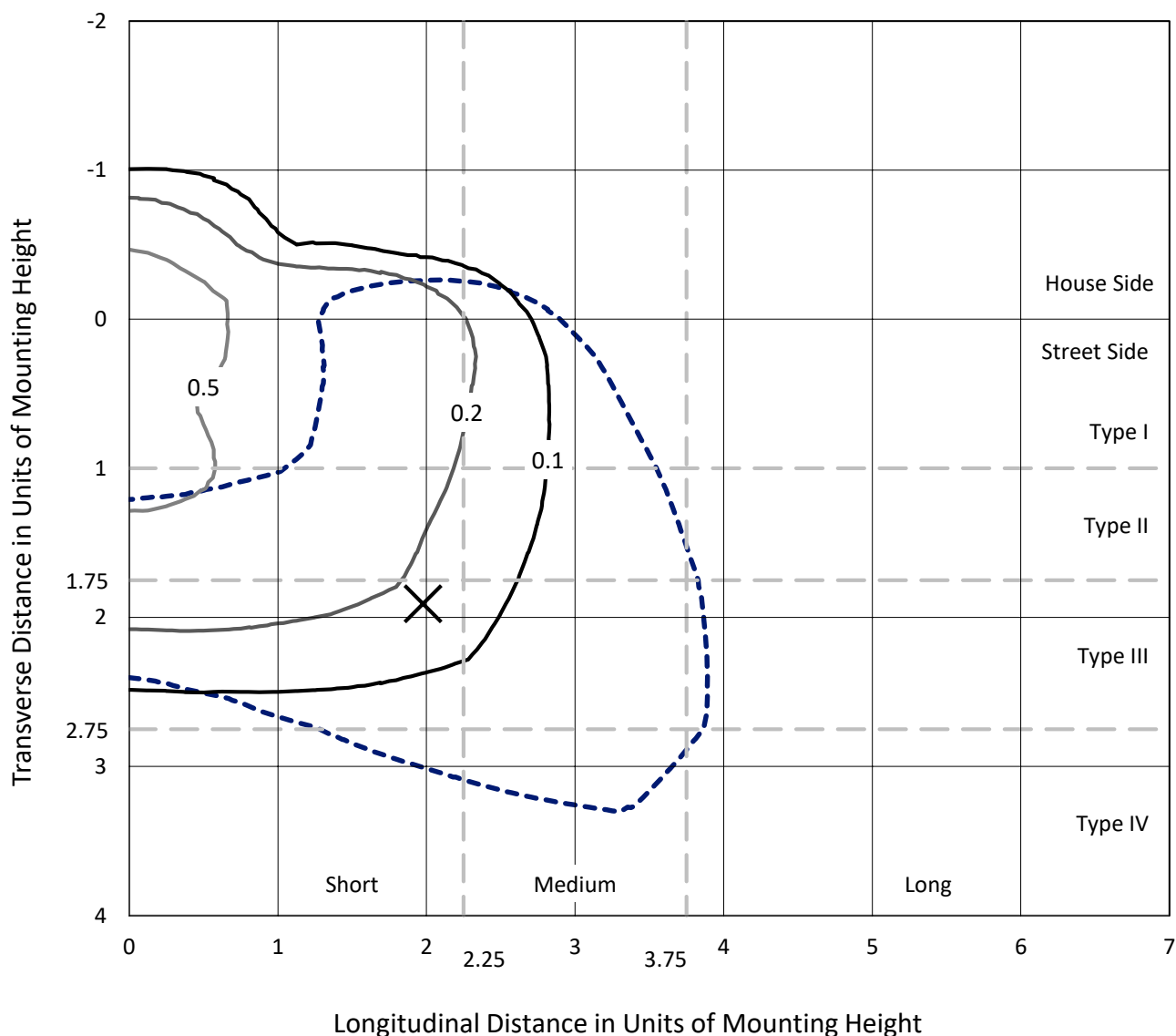
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P319185  
 CATALOG NUMBER: GAN-SA1A-830-U-T4W

## Iso-Footcandle Lines of Horizontal Illumination

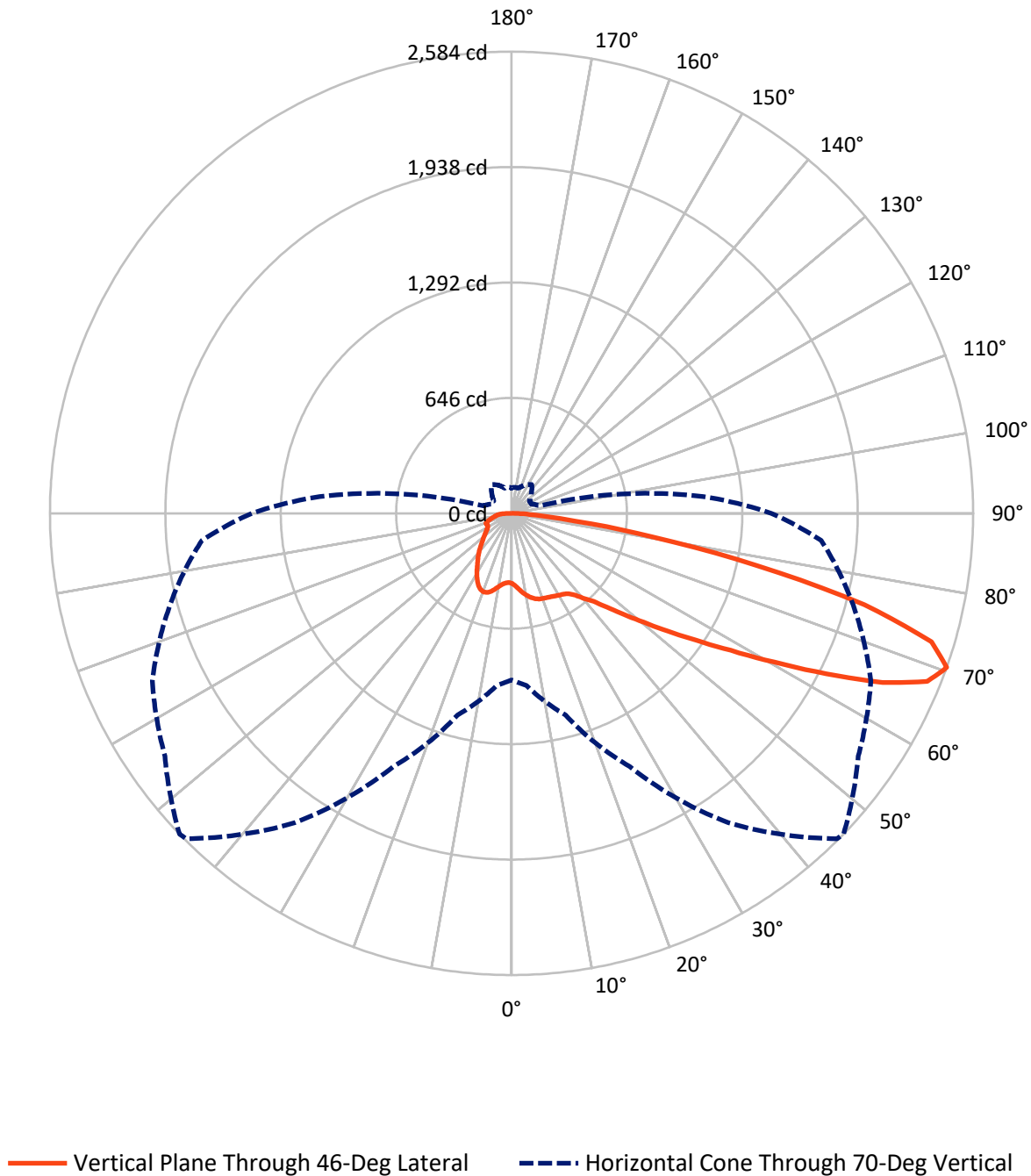
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P319185  
CATALOG NUMBER: GAN-SA1A-830-U-T4W

## Luminous Intensity Polar Plot



REPORT NUMBER: P319185

CATALOG NUMBER: GAN-SA1A-830-U-T4W

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 882.4    | 0.0    | 882.4  |
|                    | % Fixture | 22.9     | 0.0    | 22.9   |
| <b>Street Side</b> | Lumens    | 2967.6   | 0.0    | 2967.6 |
|                    | % Fixture | 77.1     | 0.0    | 77.1   |
| <b>Total</b>       | Lumens    | 3850.0   | 0.0    | 3850.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 40.0   | 1.0       |
| 10°-20°   | 133.2  | 3.5       |
| 20°-30°   | 222.1  | 5.8       |
| 30°-40°   | 315.2  | 8.2       |
| 40°-50°   | 463.7  | 12.0      |
| 50°-60°   | 785.2  | 20.4      |
| 60°-70°   | 1114.6 | 29.0      |
| 70°-80°   | 677.1  | 17.6      |
| 80°-90°   | 98.8   | 2.6       |
| 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°    | 3850.0 | 100.0     |
| 0°-180°   | 3850.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P319185

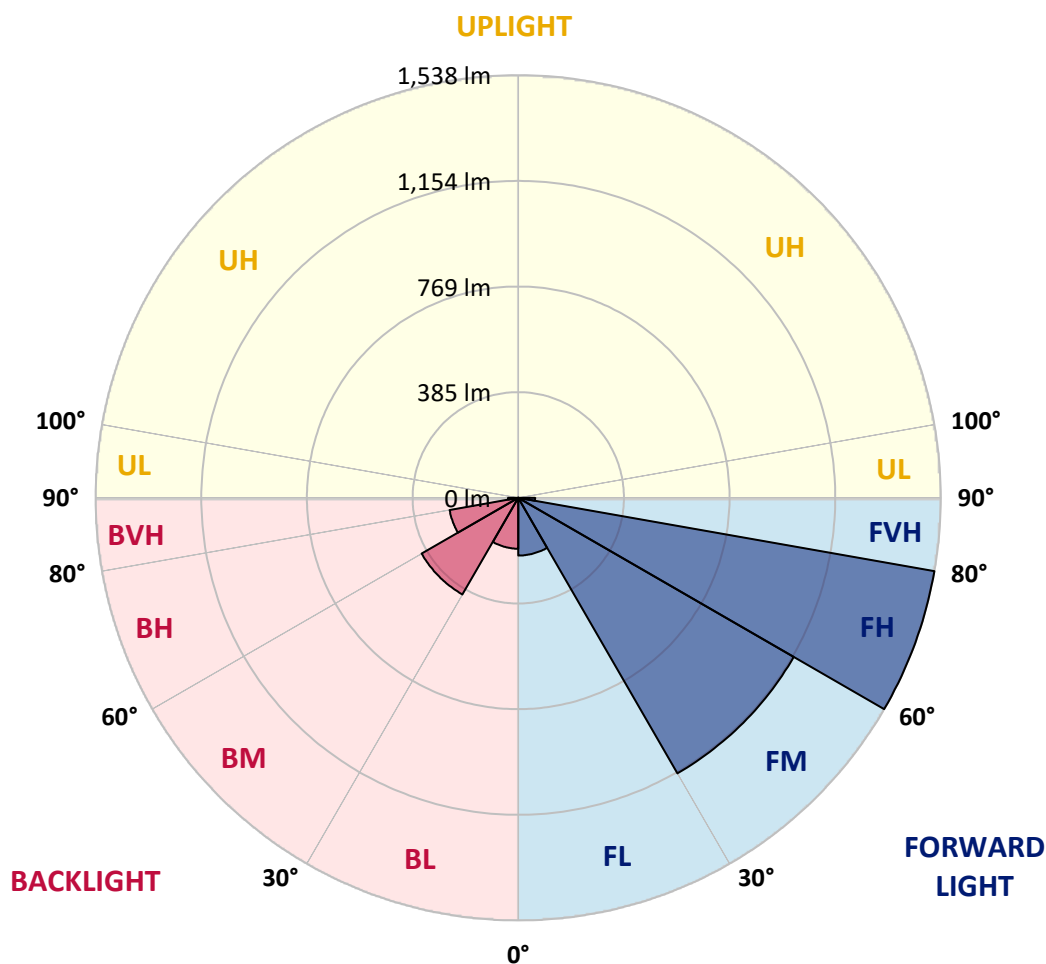
CATALOG NUMBER: GAN-SA1A-830-U-T4W

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 210.1  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 1157.9 | 30.1      |                         |      |         |
| FH   | (60°-80°)   | 1538.1 | 39.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 61.6   | 1.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 185.3  | 4.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 406.2  | 10.6      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 253.7  | 6.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 37.3   | 1.0       |                         |      | 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: P319185

CATALOG NUMBER: GAN-SA1A-830-U-T4W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  | 392.2  |
| 2.5°  | 411.9  | 412.1  | 412.7  | 411.3  | 407.7  | 406.6  | 406.2  | 402.4  | 399.9  | 396.2  | 393.0  |
| 5°    | 444.8  | 445.1  | 444.3  | 440.6  | 432.4  | 426.4  | 425.8  | 417.1  | 409.2  | 400.8  | 394.5  |
| 7.5°  | 479.2  | 479.6  | 477.1  | 470.1  | 458.6  | 448.1  | 447.4  | 435.6  | 423.6  | 410.8  | 401.3  |
| 10°   | 509.6  | 508.1  | 504.0  | 494.2  | 480.6  | 467.7  | 467.2  | 454.8  | 441.0  | 425.6  | 412.9  |
| 12.5° | 529.9  | 528.6  | 523.3  | 511.5  | 496.6  | 484.7  | 483.7  | 472.2  | 458.8  | 441.9  | 426.8  |
| 15°   | 541.1  | 542.0  | 534.9  | 521.5  | 507.0  | 497.0  | 496.1  | 487.9  | 475.9  | 458.9  | 441.5  |
| 17.5° | 542.6  | 543.4  | 536.5  | 523.2  | 511.3  | 504.5  | 504.1  | 498.7  | 490.0  | 473.7  | 455.5  |
| 20°   | 534.1  | 534.7  | 529.0  | 518.1  | 510.3  | 508.2  | 508.1  | 505.7  | 499.2  | 484.7  | 467.1  |
| 22.5° | 521.9  | 522.3  | 518.2  | 510.3  | 507.7  | 511.0  | 511.9  | 511.0  | 506.3  | 492.8  | 476.2  |
| 25°   | 518.9  | 518.6  | 514.4  | 506.3  | 508.6  | 515.6  | 516.7  | 517.1  | 514.0  | 502.1  | 487.8  |
| 27.5° | 533.5  | 532.6  | 524.5  | 511.6  | 513.1  | 521.5  | 523.1  | 526.9  | 524.9  | 514.5  | 500.9  |
| 30°   | 575.8  | 574.2  | 557.7  | 531.6  | 524.5  | 528.9  | 530.8  | 536.9  | 537.3  | 528.6  | 518.5  |
| 32.5° | 647.2  | 645.2  | 615.7  | 569.1  | 543.9  | 536.4  | 538.2  | 547.3  | 552.2  | 545.5  | 534.5  |
| 35°   | 737.4  | 735.2  | 696.5  | 632.7  | 576.3  | 550.7  | 552.1  | 559.3  | 569.1  | 559.6  | 545.1  |
| 37.5° | 831.5  | 826.1  | 788.8  | 707.5  | 627.8  | 581.4  | 581.4  | 582.4  | 587.0  | 567.2  | 557.5  |
| 40°   | 925.1  | 919.7  | 885.9  | 795.5  | 694.5  | 629.8  | 626.8  | 606.3  | 602.7  | 585.7  | 582.4  |
| 42.5° | 1012.0 | 1010.4 | 990.5  | 895.0  | 772.8  | 677.4  | 673.1  | 638.5  | 639.3  | 628.7  | 628.9  |
| 45°   | 1104.5 | 1104.5 | 1088.3 | 995.4  | 863.9  | 753.8  | 749.6  | 698.6  | 706.5  | 701.6  | 713.3  |
| 47.5° | 1180.0 | 1182.4 | 1180.1 | 1100.0 | 970.0  | 850.9  | 843.2  | 781.8  | 804.0  | 820.7  | 854.8  |
| 50°   | 1257.1 | 1260.8 | 1261.2 | 1214.8 | 1098.2 | 966.3  | 957.6  | 892.4  | 941.8  | 989.8  | 1056.8 |
| 52.5° | 1369.0 | 1377.3 | 1344.2 | 1329.3 | 1255.2 | 1103.3 | 1094.8 | 1034.6 | 1117.0 | 1184.4 | 1299.9 |
| 55°   | 1472.6 | 1465.4 | 1441.8 | 1451.0 | 1423.4 | 1259.3 | 1252.9 | 1200.0 | 1312.3 | 1399.8 | 1549.9 |
| 57.5° | 1528.8 | 1528.2 | 1552.0 | 1591.5 | 1604.7 | 1451.7 | 1446.3 | 1394.9 | 1532.5 | 1598.2 | 1784.5 |
| 60°   | 1594.7 | 1595.6 | 1654.3 | 1744.1 | 1798.3 | 1691.2 | 1688.9 | 1649.9 | 1746.3 | 1783.5 | 1968.6 |
| 62.5° | 1603.9 | 1620.5 | 1721.7 | 1876.1 | 1979.6 | 1971.1 | 1976.4 | 1879.5 | 1937.6 | 1931.3 | 2106.0 |
| 65°   | 1497.8 | 1519.7 | 1702.8 | 1916.0 | 2159.9 | 2277.2 | 2282.0 | 2110.5 | 2088.5 | 2057.6 | 2155.1 |
| 67.5° | 1280.4 | 1312.8 | 1511.8 | 1829.2 | 2219.3 | 2503.4 | 2510.2 | 2289.5 | 2213.6 | 2100.5 | 2036.8 |
| 70°   | 931.8  | 967.8  | 1168.0 | 1562.2 | 2113.4 | 2575.7 | 2583.5 | 2368.7 | 2218.4 | 1978.6 | 1738.8 |
| 72.5° | 562.9  | 591.1  | 756.2  | 1150.1 | 1783.7 | 2444.0 | 2457.8 | 2268.3 | 2025.4 | 1675.9 | 1284.0 |
| 75°   | 247.2  | 265.6  | 365.6  | 662.7  | 1277.0 | 2022.1 | 2039.3 | 1941.6 | 1645.6 | 1218.0 | 758.9  |
| 77.5° | 105.3  | 110.5  | 149.9  | 287.9  | 721.9  | 1381.7 | 1405.4 | 1418.6 | 1116.5 | 662.7  | 320.7  |
| 80°   | 65.6   | 67.7   | 84.9   | 130.3  | 337.8  | 776.0  | 801.6  | 834.7  | 554.4  | 243.6  | 112.0  |
| 82.5° | 39.9   | 42.3   | 56.4   | 78.8   | 175.9  | 351.8  | 364.0  | 387.4  | 215.2  | 105.3  | 58.0   |
| 85°   | 24.0   | 25.7   | 34.5   | 49.8   | 100.1  | 138.3  | 138.2  | 152.8  | 101.3  | 67.7   | 30.6   |
| 87.5° | 11.5   | 12.8   | 18.4   | 25.8   | 50.5   | 51.9   | 48.6   | 55.1   | 61.5   | 44.4   | 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    |



REPORT NUMBER: P319185

CATALOG NUMBER: GAN-SA1A-830-U-T4W

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 392.2  | 392.2  | 392.2 | 392.2 | 392.2 | 392.2 | 392.2 | 392.2 | 392.2 | 392.2 | 392.2 |
| 2.5°  | 392.0  | 391.4  | 389.7 | 388.4 | 388.2 | 387.4 | 386.7 | 387.1 | 387.6 | 387.8 | 387.8 |
| 5°    | 391.8  | 390.4  | 388.2 | 387.2 | 388.4 | 390.0 | 392.0 | 394.6 | 396.2 | 397.4 | 398.2 |
| 7.5°  | 398.2  | 395.4  | 392.9 | 392.4 | 394.7 | 399.0 | 403.4 | 409.0 | 412.8 | 415.4 | 416.0 |
| 10°   | 408.7  | 405.3  | 402.8 | 403.3 | 407.5 | 413.6 | 419.9 | 427.0 | 432.8 | 436.4 | 436.6 |
| 12.5° | 420.8  | 417.5  | 415.2 | 417.4 | 424.4 | 431.8 | 438.4 | 444.5 | 449.8 | 453.4 | 453.4 |
| 15°   | 434.8  | 432.4  | 429.7 | 434.8 | 444.3 | 450.9 | 453.6 | 456.7 | 459.6 | 462.2 | 461.7 |
| 17.5° | 448.2  | 446.0  | 444.5 | 450.6 | 460.5 | 463.5 | 461.7 | 459.4 | 459.4 | 460.9 | 461.1 |
| 20°   | 459.8  | 457.9  | 458.8 | 464.7 | 469.8 | 466.7 | 459.8 | 452.7 | 449.8 | 450.6 | 451.4 |
| 22.5° | 470.0  | 469.1  | 471.8 | 474.6 | 470.9 | 459.8 | 447.2 | 437.6 | 434.0 | 433.7 | 434.0 |
| 25°   | 481.8  | 481.7  | 485.1 | 480.1 | 463.8 | 443.4 | 426.4 | 417.0 | 415.0 | 416.6 | 419.2 |
| 27.5° | 496.6  | 498.0  | 499.8 | 481.4 | 449.3 | 418.5 | 401.2 | 394.7 | 396.7 | 400.5 | 403.0 |
| 30°   | 515.4  | 519.4  | 515.7 | 478.1 | 428.5 | 390.0 | 373.5 | 371.7 | 377.1 | 382.5 | 385.1 |
| 32.5° | 533.7  | 539.9  | 531.0 | 469.6 | 401.6 | 359.8 | 347.0 | 346.5 | 353.1 | 358.4 | 362.1 |
| 35°   | 548.5  | 560.8  | 542.4 | 452.6 | 370.5 | 332.0 | 322.7 | 319.1 | 321.5 | 327.7 | 331.9 |
| 37.5° | 567.7  | 588.2  | 550.3 | 426.6 | 336.8 | 309.1 | 298.2 | 290.0 | 287.9 | 290.4 | 292.5 |
| 40°   | 602.9  | 629.9  | 554.0 | 390.4 | 303.8 | 286.2 | 275.1 | 263.1 | 254.8 | 248.8 | 248.9 |
| 42.5° | 660.4  | 684.3  | 551.7 | 346.4 | 273.4 | 263.8 | 251.3 | 237.4 | 224.0 | 210.3 | 209.2 |
| 45°   | 753.6  | 765.2  | 544.6 | 299.7 | 246.6 | 240.3 | 228.6 | 214.8 | 196.8 | 181.3 | 179.8 |
| 47.5° | 902.9  | 877.2  | 533.5 | 259.0 | 223.1 | 220.4 | 209.6 | 193.7 | 174.7 | 162.2 | 161.1 |
| 50°   | 1106.5 | 1038.9 | 528.1 | 226.6 | 202.2 | 203.0 | 194.2 | 177.3 | 159.4 | 150.2 | 149.1 |
| 52.5° | 1350.0 | 1227.2 | 538.5 | 201.6 | 185.5 | 188.3 | 181.7 | 165.9 | 150.9 | 143.6 | 142.6 |
| 55°   | 1602.6 | 1422.2 | 549.7 | 183.4 | 169.7 | 175.1 | 172.9 | 159.8 | 146.2 | 139.5 | 138.6 |
| 57.5° | 1818.8 | 1567.8 | 527.3 | 168.6 | 155.6 | 164.0 | 166.0 | 156.0 | 143.9 | 137.8 | 136.8 |
| 60°   | 1954.9 | 1626.4 | 468.5 | 154.8 | 144.4 | 155.2 | 162.1 | 154.9 | 144.8 | 144.3 | 143.5 |
| 62.5° | 2019.4 | 1621.3 | 380.4 | 143.9 | 137.4 | 151.4 | 165.0 | 160.9 | 155.3 | 160.1 | 160.5 |
| 65°   | 1990.4 | 1543.8 | 283.3 | 136.6 | 132.4 | 152.8 | 173.7 | 172.1 | 158.4 | 163.1 | 163.8 |
| 67.5° | 1799.7 | 1358.9 | 209.8 | 130.3 | 126.9 | 156.9 | 189.5 | 175.8 | 152.4 | 155.9 | 153.8 |
| 70°   | 1454.6 | 1077.4 | 161.8 | 123.2 | 121.2 | 156.4 | 196.6 | 173.5 | 146.0 | 146.8 | 141.1 |
| 72.5° | 1003.1 | 734.7  | 131.6 | 116.6 | 113.0 | 142.6 | 191.6 | 168.0 | 140.6 | 134.5 | 127.0 |
| 75°   | 545.5  | 394.3  | 111.9 | 109.8 | 98.7  | 125.2 | 182.4 | 164.0 | 135.7 | 127.7 | 123.5 |
| 77.5° | 214.6  | 163.6  | 97.1  | 100.4 | 86.3  | 110.5 | 172.1 | 156.5 | 129.0 | 118.4 | 116.3 |
| 80°   | 87.6   | 83.5   | 80.5  | 86.8  | 74.2  | 96.7  | 159.7 | 147.7 | 121.0 | 109.9 | 105.7 |
| 82.5° | 49.7   | 51.9   | 62.6  | 68.5  | 60.2  | 89.1  | 153.8 | 140.6 | 111.3 | 98.4  | 93.4  |
| 85°   | 25.4   | 30.4   | 43.6  | 49.1  | 44.3  | 75.8  | 141.6 | 123.1 | 89.3  | 75.4  | 75.8  |
| 87.5° | 12.3   | 17.0   | 27.5  | 30.8  | 28.7  | 54.8  | 105.8 | 89.2  | 69.6  | 55.1  | 53.4  |
| 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)