

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: P324971

Luminaire Tested: **GAN-SA7C-830-U-AFL-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P324971  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-30)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7C-830-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32545 lumens  
Efficiency: N/A  
Efficacy: 83.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

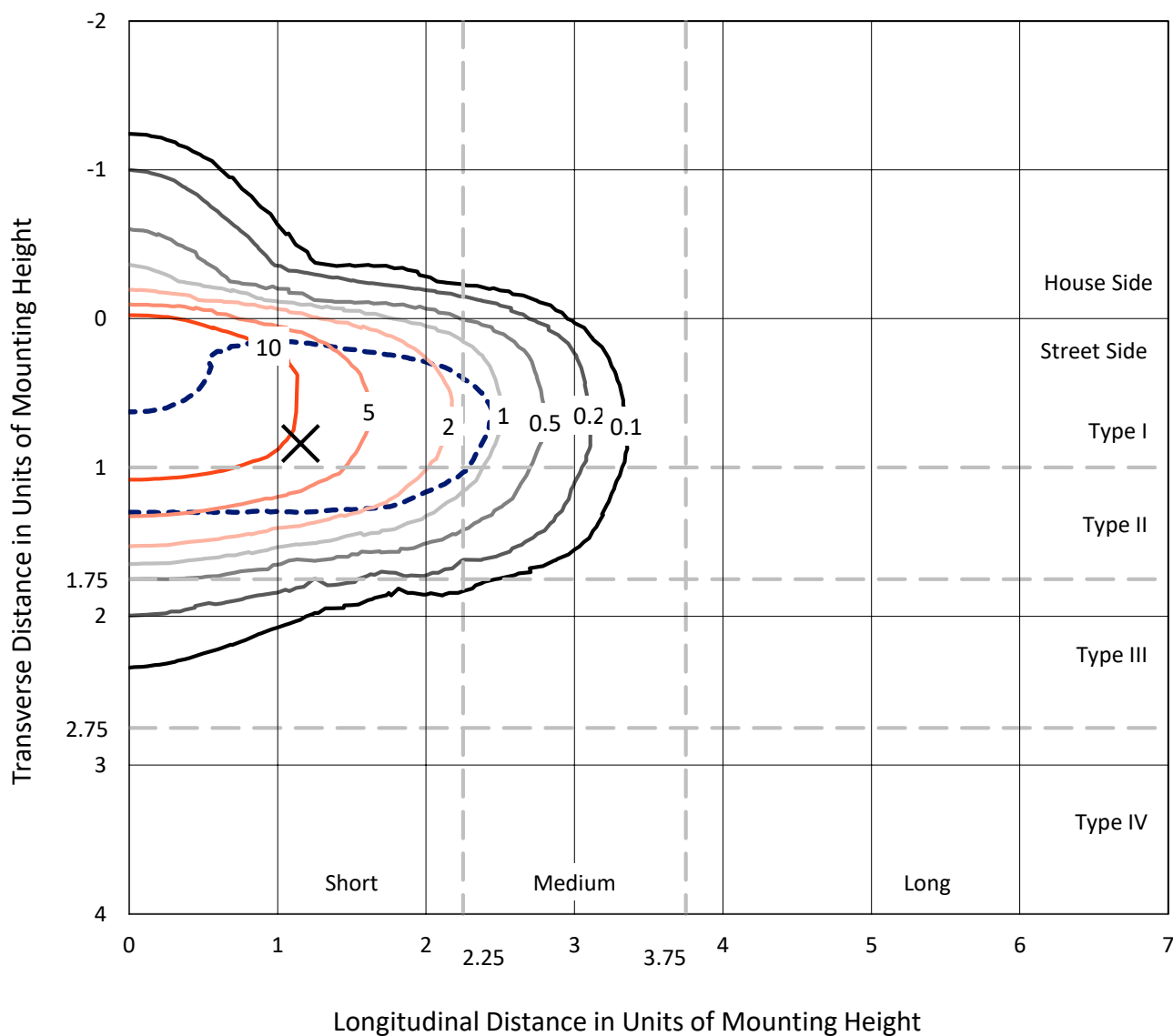
Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P324971  
CATALOG NUMBER: GAN-SA7C-830-U-AFL-HSS

## Iso-Footcandle Lines of Horizontal Illumination

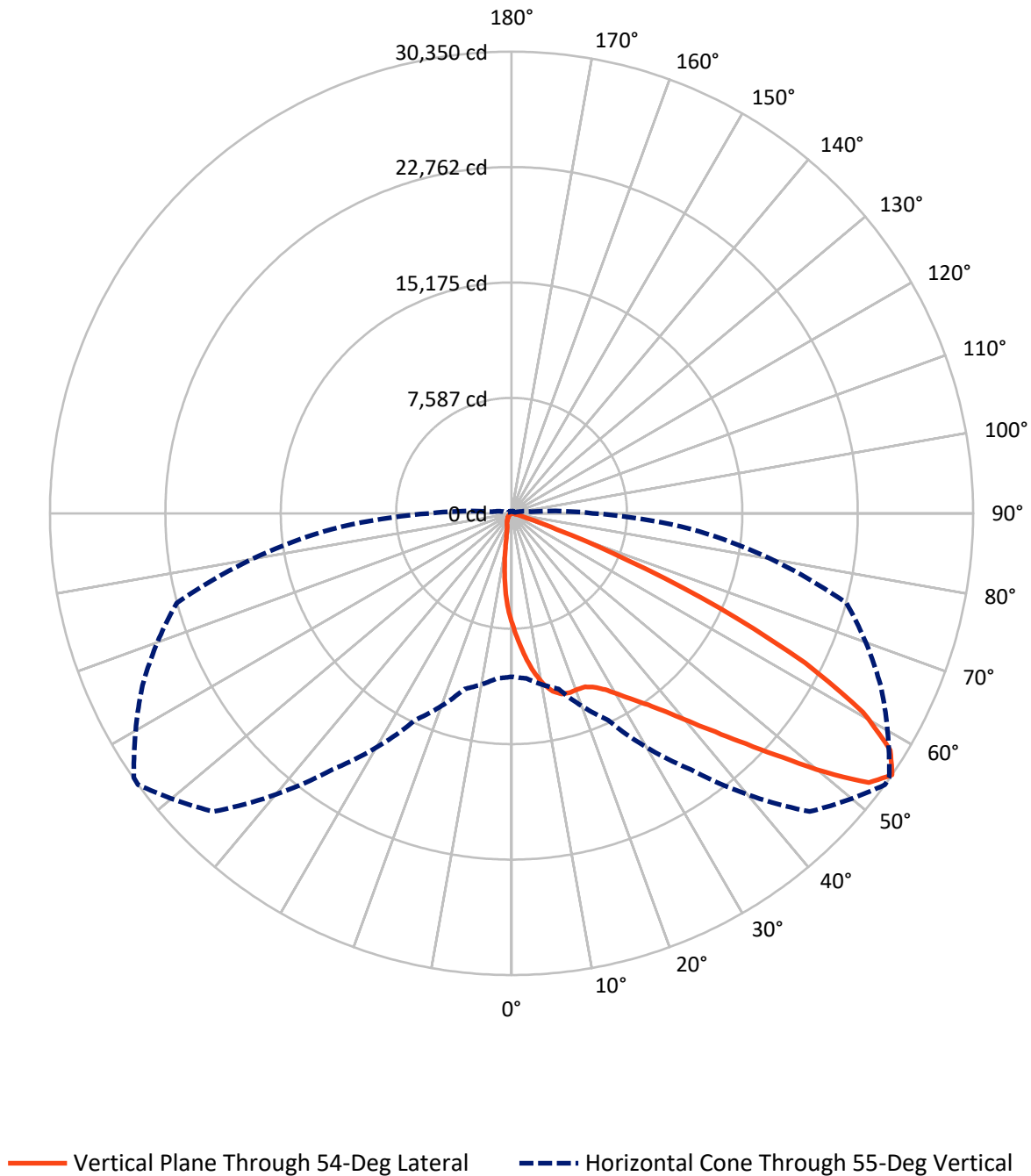
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.9 fc  
Type II - Short - N/A

REPORT NUMBER: P324971  
CATALOG NUMBER: GAN-SA7C-830-U-AFL-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P324971

CATALOG NUMBER: GAN-SA7C-830-U-AFL-HSS

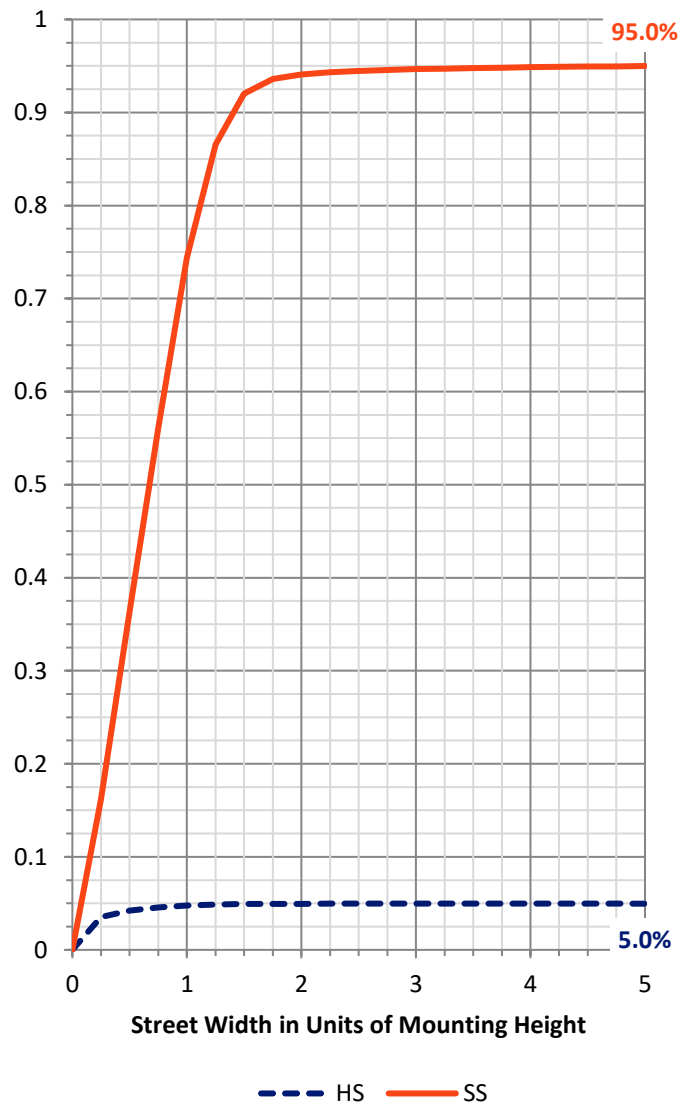
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1623.7   | 0.0    | 1623.7  |
|                    | % Fixture | 5.0      | 0.0    | 5.0     |
| <b>Street Side</b> | Lumens    | 30921.3  | 0.0    | 30921.3 |
|                    | % Fixture | 95.0     | 0.0    | 95.0    |
| <b>Total</b>       | Lumens    | 32545.0  | 0.0    | 32545.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 671.2   | 2.1       |
| 10°-20°   | 1840.8  | 5.7       |
| 20°-30°   | 3142.9  | 9.7       |
| 30°-40°   | 5043.8  | 15.5      |
| 40°-50°   | 8060.0  | 24.8      |
| 50°-60°   | 8636.5  | 26.5      |
| 60°-70°   | 4434.3  | 13.6      |
| 70°-80°   | 671.7   | 2.1       |
| 80°-90°   | 43.7    | 0.1       |
| 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°    | 32545.0 | 100.0     |
| 0°-180°   | 32545.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P324971

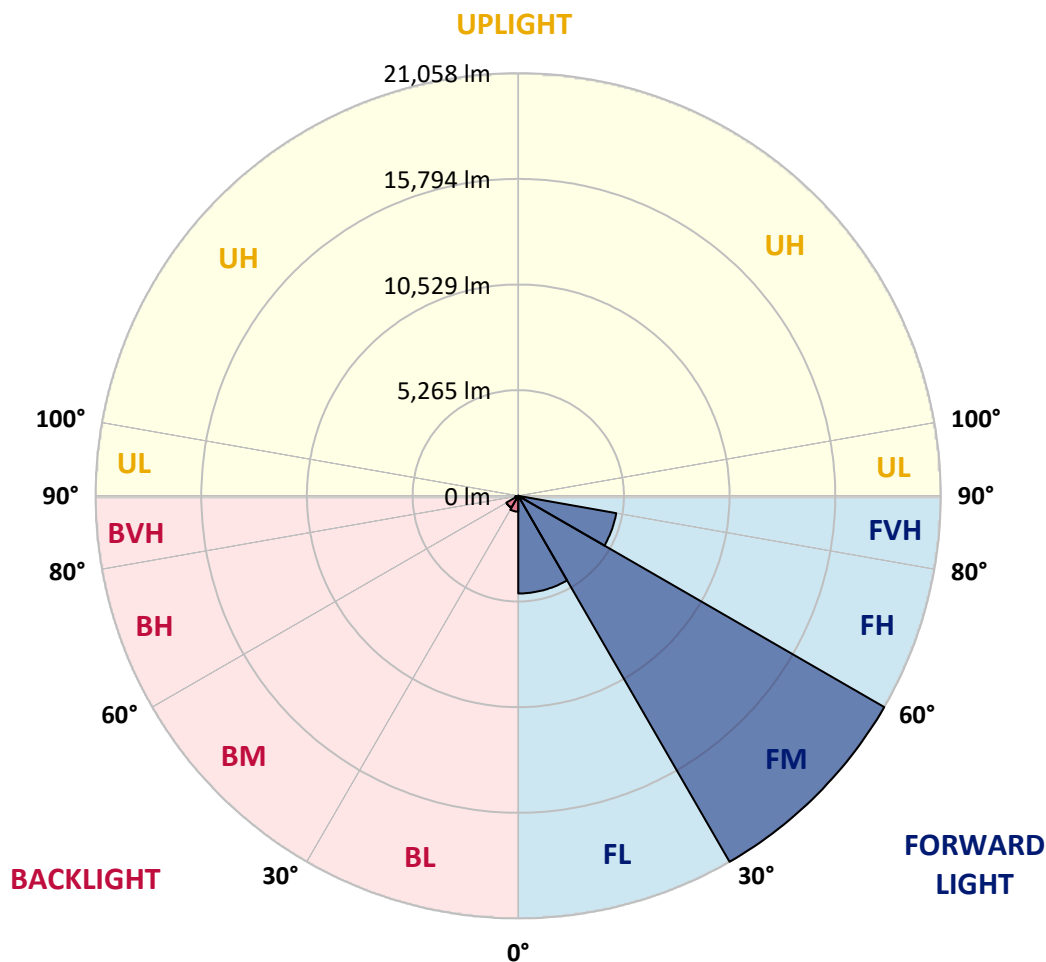
CATALOG NUMBER: GAN-SA7C-830-U-AFL-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 4864.9  | 14.9      |                         |      |         |
| FM   | (30°-60°)   | 21058.1 | 64.7      |                         |      |         |
| FH   | (60°-80°)   | 4956.3  | 15.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 42.0    | 0.1       |                         |      | G1/100  |
| BL   | (0°-30°)    | 790.0   | 2.4       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 682.3   | 2.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 149.6   | 0.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.8     | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P324971

CATALOG NUMBER: GAN-SA7C-830-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  | 7288.8  |
| 2.5°  | 9146.8  | 9010.5  | 9014.7  | 8952.9  | 8726.6  | 8549.5  | 8365.4  | 8321.8  | 8035.1  | 7734.3  | 7444.8  |
| 5°    | 10728.0 | 10628.2 | 10604.3 | 10484.8 | 10170.0 | 9836.9  | 9479.9  | 9397.0  | 8836.2  | 8220.6  | 7614.8  |
| 7.5°  | 11540.3 | 11541.7 | 11522.1 | 11478.5 | 11281.7 | 10958.5 | 10522.8 | 10435.6 | 9672.5  | 8749.1  | 7791.9  |
| 10°   | 11304.2 | 11357.6 | 11467.2 | 11612.0 | 11762.4 | 11721.6 | 11394.2 | 11315.4 | 10486.2 | 9308.4  | 7988.7  |
| 12.5° | 10753.3 | 10760.3 | 10882.6 | 11120.1 | 11553.0 | 11997.1 | 12002.7 | 11976.0 | 11263.4 | 9893.1  | 8205.1  |
| 15°   | 10479.2 | 10505.9 | 10550.9 | 10704.1 | 11114.5 | 11825.6 | 12334.4 | 12372.4 | 11976.0 | 10514.3 | 8435.6  |
| 17.5° | 10659.1 | 10697.0 | 10659.1 | 10677.4 | 10914.9 | 11554.4 | 12392.0 | 12489.0 | 12598.6 | 11128.5 | 8653.5  |
| 20°   | 11146.8 | 11181.9 | 11114.5 | 11040.0 | 11086.4 | 11475.7 | 12351.3 | 12482.0 | 13086.3 | 11673.8 | 8836.2  |
| 22.5° | 11804.6 | 11818.6 | 11716.0 | 11593.7 | 11560.0 | 11742.7 | 12385.0 | 12519.9 | 13477.1 | 12167.2 | 8951.4  |
| 25°   | 12528.4 | 12541.0 | 12413.1 | 12272.6 | 12192.5 | 12267.0 | 12661.9 | 12763.1 | 13821.4 | 12638.0 | 9017.5  |
| 27.5° | 13316.8 | 13328.1 | 13167.9 | 12995.0 | 12902.2 | 12905.0 | 13118.7 | 13226.9 | 14188.2 | 13174.9 | 9070.9  |
| 30°   | 14150.3 | 14144.7 | 13997.1 | 13756.8 | 13638.7 | 13635.9 | 13776.4 | 13886.1 | 14719.5 | 13863.6 | 9144.0  |
| 32.5° | 15086.3 | 15075.1 | 14865.7 | 14567.7 | 14434.2 | 14453.9 | 14579.0 | 14642.2 | 15378.7 | 14597.2 | 9274.7  |
| 35°   | 16318.9 | 16286.6 | 15970.4 | 15600.7 | 15354.8 | 15347.7 | 15453.2 | 15503.8 | 16219.1 | 15485.5 | 9492.6  |
| 37.5° | 17918.4 | 17888.8 | 17460.2 | 16923.3 | 16577.5 | 16448.2 | 16573.3 | 16638.0 | 17418.0 | 16625.3 | 9842.5  |
| 40°   | 19495.3 | 19465.8 | 19211.4 | 18719.5 | 18186.8 | 17876.2 | 17974.6 | 18043.4 | 18914.8 | 18008.3 | 10283.8 |
| 42.5° | 20583.1 | 20608.4 | 20697.0 | 20737.7 | 20238.8 | 19586.6 | 19631.6 | 19703.3 | 20487.6 | 19486.9 | 10788.4 |
| 45°   | 20869.8 | 20924.7 | 21425.0 | 22407.4 | 22594.4 | 22085.6 | 21614.7 | 21654.1 | 22085.6 | 20965.4 | 11293.0 |
| 47.5° | 20008.3 | 20109.5 | 21075.0 | 22902.2 | 24484.7 | 24844.5 | 23953.4 | 23901.4 | 23618.9 | 22161.5 | 11651.4 |
| 50°   | 18050.5 | 18143.2 | 19394.1 | 22096.8 | 25058.1 | 27478.4 | 26756.0 | 26602.8 | 24964.0 | 22876.9 | 11777.8 |
| 52.5° | 15217.0 | 15329.5 | 16345.6 | 19561.3 | 23977.3 | 28653.3 | 29409.5 | 29281.6 | 25950.6 | 22933.1 | 11798.9 |
| 55°   | 10746.2 | 10882.6 | 11957.7 | 14992.2 | 20552.2 | 27718.7 | 30349.7 | 30311.8 | 26770.0 | 22784.1 | 11843.9 |
| 57.5° | 6039.3  | 6137.7  | 7297.2  | 9610.6  | 15052.6 | 24143.2 | 29367.3 | 29618.9 | 27264.7 | 22525.5 | 11911.4 |
| 60°   | 2681.6  | 2708.3  | 3308.5  | 4784.2  | 8812.3  | 18451.0 | 26555.0 | 26979.4 | 26840.3 | 22179.7 | 12025.2 |
| 62.5° | 1487.0  | 1464.5  | 1464.5  | 1988.7  | 3829.9  | 11422.3 | 21654.1 | 22355.4 | 25028.6 | 21770.7 | 12030.8 |
| 65°   | 1165.1  | 1144.1  | 1083.6  | 1092.1  | 1458.9  | 5069.5  | 14995.0 | 16241.6 | 21588.0 | 20571.9 | 11626.1 |
| 67.5° | 988.0   | 969.8   | 909.3   | 885.4   | 906.5   | 1672.5  | 8238.9  | 9533.3  | 16380.8 | 17456.0 | 10070.2 |
| 70°   | 834.8   | 822.2   | 791.3   | 761.8   | 708.4   | 826.4   | 3152.5  | 4032.3  | 10094.1 | 11612.0 | 6874.2  |
| 72.5° | 671.8   | 666.2   | 677.4   | 652.1   | 587.5   | 550.9   | 1078.0  | 1305.7  | 4534.1  | 5182.0  | 2832.0  |
| 75°   | 579.1   | 576.2   | 581.9   | 556.6   | 483.5   | 383.7   | 548.1   | 598.7   | 1279.0  | 1267.7  | 573.4   |
| 77.5° | 376.7   | 380.9   | 482.1   | 470.8   | 416.0   | 255.8   | 283.9   | 306.4   | 387.9   | 290.9   | 174.3   |
| 80°   | 240.3   | 237.5   | 244.6   | 390.7   | 373.9   | 195.4   | 142.0   | 149.0   | 186.9   | 143.4   | 84.3    |
| 82.5° | 146.2   | 143.4   | 160.2   | 182.7   | 188.3   | 136.3   | 87.1    | 88.5    | 116.7   | 92.8    | 45.0    |
| 85°   | 12.6    | 16.9    | 97.0    | 90.0    | 64.7    | 42.2    | 42.2    | 45.0    | 61.8    | 54.8    | 25.3    |
| 87.5° | 0.0     | 0.0     | 16.9    | 25.3    | 14.1    | 15.5    | 15.5    | 16.9    | 23.9    | 23.9    | 12.6    |
| 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: P324971

CATALOG NUMBER: GAN-SA7C-830-U-AFL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 | 7288.8 |
| 2.5°  | 7294.4 | 7148.2 | 6853.1 | 6569.2 | 6328.8 | 6096.9 | 5832.7 | 5571.3 | 5449.0 | 5399.8 | 5349.2 |
| 5°    | 7307.0 | 7006.3 | 6397.7 | 5784.9 | 5149.6 | 4577.6 | 4089.9 | 3589.6 | 3339.4 | 3229.8 | 3179.2 |
| 7.5°  | 7323.9 | 6865.7 | 5881.9 | 4853.1 | 3829.9 | 3054.1 | 2376.7 | 1941.0 | 1752.6 | 1723.1 | 1650.0 |
| 10°   | 7326.7 | 6695.7 | 5283.2 | 3824.3 | 2567.8 | 1841.2 | 1416.7 | 1191.8 | 1108.9 | 1094.9 | 1071.0 |
| 12.5° | 7332.3 | 6494.7 | 4618.4 | 2832.0 | 1711.9 | 1231.2 | 1024.6 | 950.1  | 927.6  | 926.2  | 926.2  |
| 15°   | 7349.2 | 6283.9 | 3928.3 | 2040.7 | 1229.8 | 975.4  | 899.5  | 870.0  | 861.6  | 865.8  | 864.4  |
| 17.5° | 7349.2 | 6035.1 | 3250.9 | 1520.7 | 993.7  | 877.0  | 834.8  | 815.2  | 812.4  | 816.6  | 818.0  |
| 20°   | 7295.8 | 5732.9 | 2629.6 | 1183.4 | 881.2  | 813.8  | 775.8  | 757.5  | 750.5  | 753.3  | 754.7  |
| 22.5° | 7167.9 | 5361.9 | 2123.7 | 979.6  | 806.7  | 756.1  | 715.4  | 687.3  | 676.0  | 677.4  | 677.4  |
| 25°   | 6968.3 | 4922.0 | 1661.3 | 847.5  | 746.3  | 694.3  | 646.5  | 614.2  | 607.2  | 605.8  | 608.6  |
| 27.5° | 6712.5 | 4435.7 | 1322.5 | 746.3  | 674.6  | 625.4  | 577.6  | 550.9  | 545.3  | 546.7  | 548.1  |
| 30°   | 6461.0 | 3931.1 | 1042.9 | 660.6  | 594.5  | 548.1  | 511.6  | 498.9  | 498.9  | 503.2  | 504.6  |
| 32.5° | 6230.5 | 3446.2 | 825.0  | 586.1  | 522.8  | 480.7  | 459.6  | 458.2  | 465.2  | 468.0  | 469.4  |
| 35°   | 6032.3 | 2997.9 | 683.1  | 528.5  | 466.6  | 430.1  | 423.0  | 428.7  | 437.1  | 442.7  | 444.1  |
| 37.5° | 5891.7 | 2597.3 | 597.3  | 480.7  | 423.0  | 393.5  | 392.1  | 403.4  | 414.6  | 427.3  | 430.1  |
| 40°   | 5832.7 | 2258.6 | 538.3  | 438.5  | 387.9  | 365.4  | 361.2  | 376.7  | 397.7  | 416.0  | 418.8  |
| 42.5° | 5783.5 | 1981.7 | 487.7  | 397.7  | 359.8  | 327.5  | 326.1  | 345.7  | 371.0  | 389.3  | 393.5  |
| 45°   | 5741.3 | 1759.6 | 441.3  | 354.2  | 323.3  | 281.1  | 285.3  | 310.6  | 330.3  | 350.0  | 354.2  |
| 47.5° | 5654.2 | 1576.9 | 390.7  | 307.8  | 267.0  | 240.3  | 248.8  | 271.3  | 286.7  | 316.2  | 320.4  |
| 50°   | 5498.2 | 1428.0 | 338.7  | 251.6  | 217.8  | 208.0  | 220.7  | 236.1  | 255.8  | 281.1  | 283.9  |
| 52.5° | 5392.8 | 1315.5 | 293.7  | 210.8  | 179.9  | 182.7  | 195.4  | 201.0  | 212.2  | 222.1  | 219.3  |
| 55°   | 5332.4 | 1253.7 | 257.2  | 182.7  | 153.2  | 161.6  | 164.4  | 157.4  | 151.8  | 142.0  | 137.7  |
| 57.5° | 5325.3 | 1197.5 | 229.1  | 158.8  | 134.9  | 139.1  | 129.3  | 105.4  | 85.7   | 74.5   | 71.7   |
| 60°   | 5314.1 | 1128.6 | 206.6  | 133.5  | 119.5  | 113.8  | 92.8   | 57.6   | 40.8   | 37.9   | 37.9   |
| 62.5° | 5191.8 | 1021.8 | 189.7  | 112.4  | 101.2  | 85.7   | 53.4   | 26.7   | 22.5   | 23.9   | 23.9   |
| 65°   | 4802.5 | 872.8  | 172.9  | 91.4   | 80.1   | 61.8   | 26.7   | 15.5   | 8.4    | 9.8    | 9.8    |
| 67.5° | 4082.9 | 695.7  | 154.6  | 70.3   | 60.4   | 39.4   | 15.5   | 7.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 2733.6 | 431.5  | 130.7  | 49.2   | 39.4   | 23.9   | 11.2   | 1.4    | 0.0    | 0.0    | 0.0    |
| 72.5° | 1048.5 | 233.3  | 105.4  | 29.5   | 25.3   | 16.9   | 7.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 236.1  | 153.2  | 73.1   | 21.1   | 18.3   | 11.2   | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 90.0   | 111.0  | 42.2   | 14.1   | 12.6   | 7.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 43.6   | 66.1   | 19.7   | 8.4    | 7.0    | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 22.5   | 25.3   | 8.4    | 4.2    | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 12.6   | 12.6   | 4.2    | 2.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.0    | 4.2    | 1.4    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)