



# UA-G3-Fingerprint Antenna Datasheet

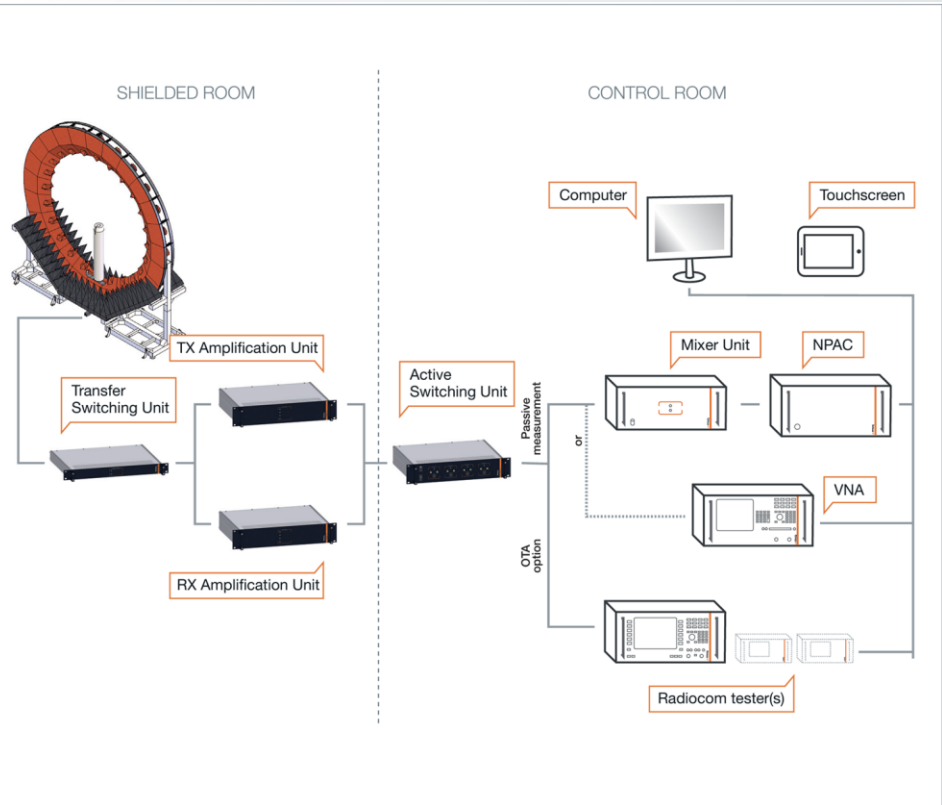
*Jerome Cheng*



- AUT Environment
  - Instrument Information
  - Test Method
- Antenna Performance
  - BLE Antenna
  - NFC Antenna



# **AUT Environment**



## Calibration Record

- Full system calibration, including each instrument, will proceed once per year.
- Regular calibration, including efficiency/peak gain consistency check, will proceed with bi-monthly.

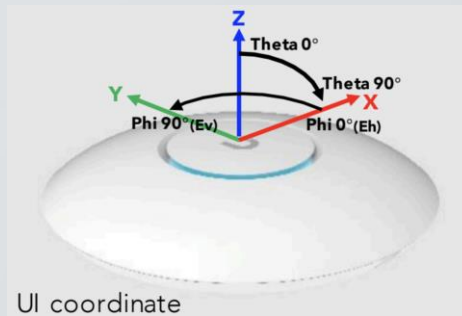
| Instrument List    | Model          | Calibration Date | Calibration Due Date |
|--------------------|----------------|------------------|----------------------|
| Transfer Switching | MVG            | 2026/01/13       | 2027/01/12           |
| TX Amplification   | MVG            | 2026/01/13       | 2027/01/12           |
| RX Amplification   | MVG            | 2026/01/13       | 2027/01/12           |
| Active Switching   | MVG            | 2026/01/13       | 2027/01/12           |
| Network Analyzer   | R&S ZNB        | 2026/01/13       | 2027/01/12           |
| Radiocom Tester    | Anritsu MT8821 | 2026/01/13       | 2027/01/12           |
| Full System        | SG24-Standard  | 2026/01/13       | 2027/01/12           |



# Test Method

## Measurement Standard

- To fix device on the turntable, and laser positioning the height level in the center of the probe.
- Align the chamber coordinate and UI coordinate.
- Sampling the antenna pattern according to Phi increment  $5^\circ$  / Theta increment  $5^\circ$ .
- Finished 3D data collection along with Theta- $175^\circ \sim 175^\circ$  and Phi  $0^\circ \sim 180^\circ$
- Frequency resolution setup depends on the different bands.

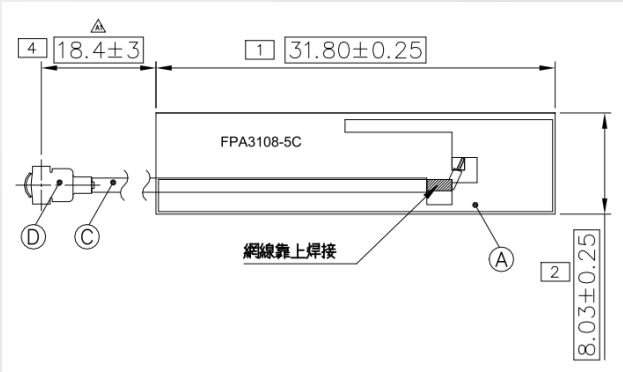


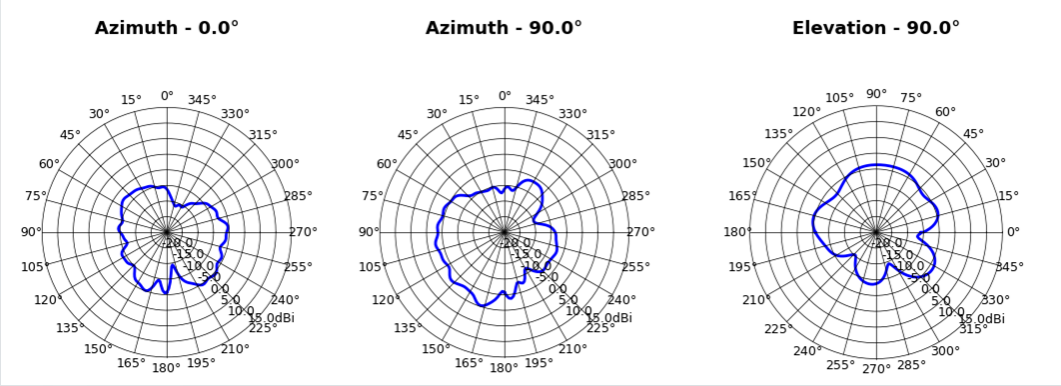


# **Antenna Performance**

# [UA-G3-Fingerprint] BLE Antenna Performance



|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | BLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Working frequency | 2400-2500 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Antenna type      | PIFA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Gain              | 3.0dBi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Model             | 117-06366                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Drawing           |  <p>Technical drawing of the antenna assembly. The drawing shows a rectangular antenna element labeled FPA3108-5C. Dimensions are provided for various parts: a small rectangular component (4) with width <math>18.4 \pm 3</math>, a long horizontal component (1) with length <math>31.80 \pm 0.25</math>, and a vertical component (2) with height <math>8.03 \pm 0.25</math>. A small circular component (D) is shown on the left, and a small rectangular component (C) is shown on the right. A label '網線靠上焊接' (Solder the mesh wire to the top) points to a specific location on the antenna element. A small square component (A) is also indicated.</p> |





Technical drawing showing the front view of a rectangular panel with dimensions and annotations:

- Overall Width:** 70.00 ± 0.2 (1)
- Overall Height:** 67.55 ± 0.2 (3)
- Inner Width:** 40.00 ± 0.2 (2)
- Inner Height:** 59.75 ± 0.2 (4)
- Top Flange Width:** 13.38
- Top Flange Radius:** R1.40
- Top Flange Thickness:** 13.25
- Top Flange Material:** NFCT88F-1C
- Bottom Flange Width:** 20.00
- Bottom Flange Radius:** R1.65
- Bottom Flange Thickness:** 0.30 ± 0.02 (7)
- Panel Thickness:** 7.04
- Panel Material:** Front View (軟板正面+補強版面)
- Panel Label:** 6
- Panel Note:** 0.29 MAX. (不含補強板)



Manufacturer: Ubiquiti Inc.

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