



U7-Mesh Antenna Datasheet

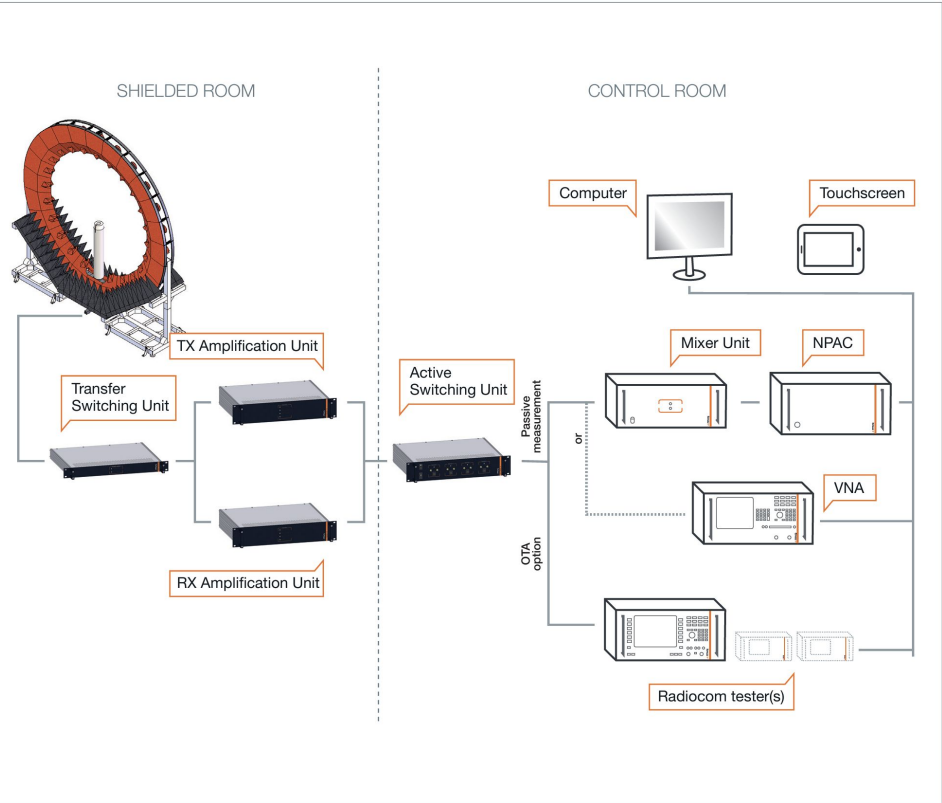
Authorized by: Robin Jeanty



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AUT Environment

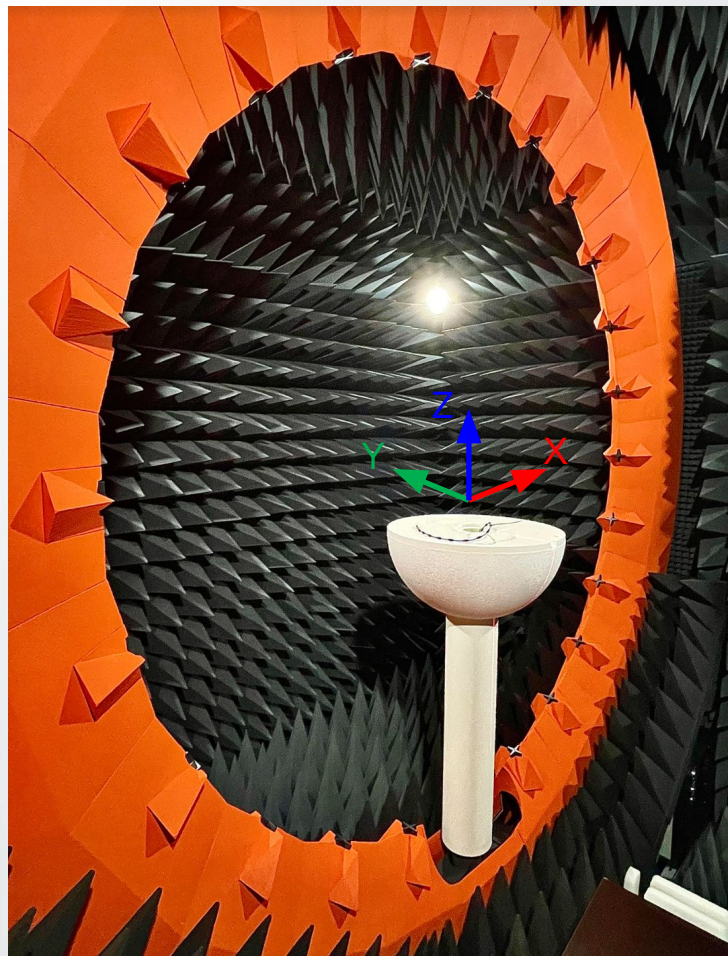


Calibration Record

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

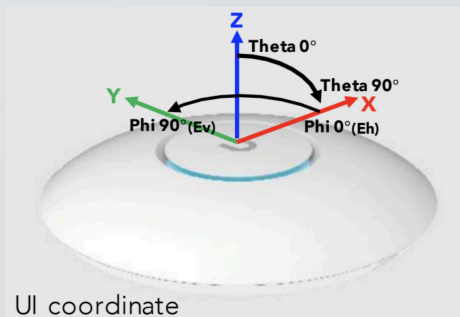
Instrument List	Manufacturer	Calibration Date	Calibration Due Date
Transfer Switching	MVG	2025/11/13	2026/11/12
TX Amplification	MVG	2025/11/13	2026/11/12
RX Amplification	MVG	2025/11/13	2026/11/12
Active Switching	MVG	2025/11/13	2026/11/12
Network Analyzer	R&S ZNB	2025/11/13	2026/11/12
Radiocom Tester	Anritsu MT8821	2025/11/13	2026/11/12
Full System	SG24-Standard	2025/11/13	2026/11/12

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° / Theta increment 5° .
- Finished 3D data collection along with Theta- $175^\circ \sim \text{Theta}175^\circ$ and Phi $0^\circ \sim \text{Phi}180^\circ$
- Frequency resolution setup depends on the different bands.

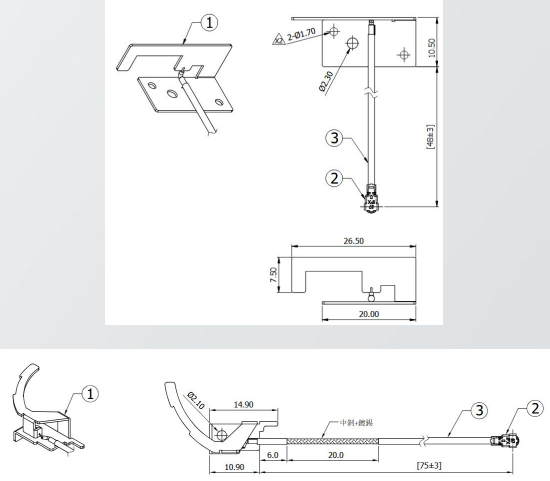


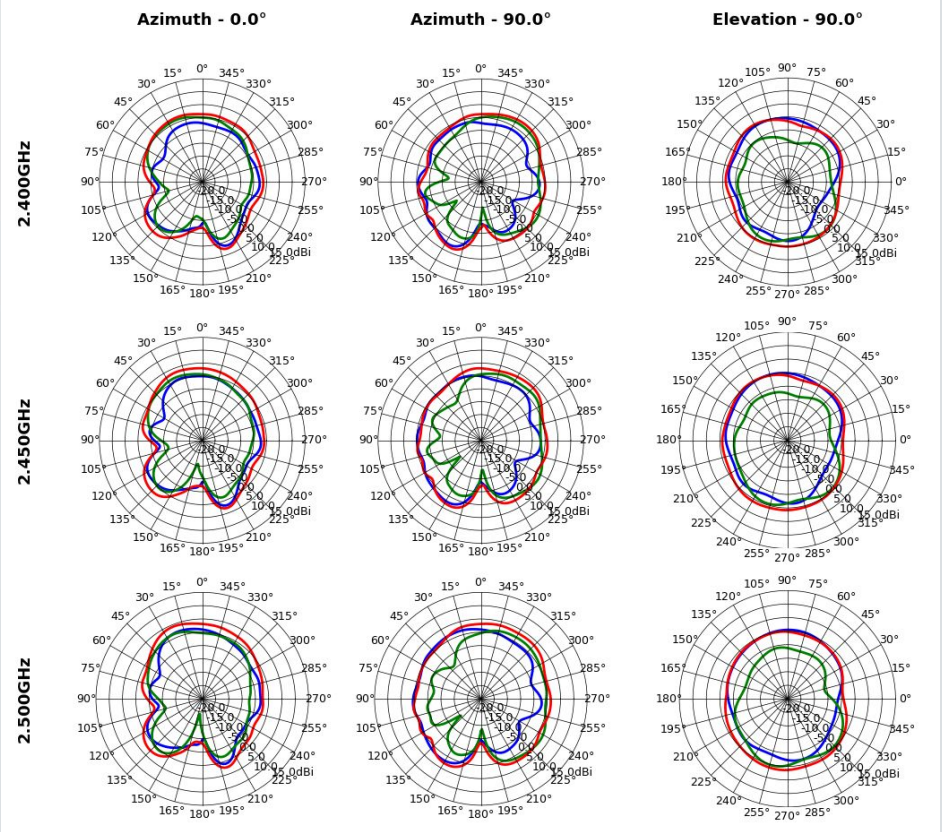


Antenna Performance



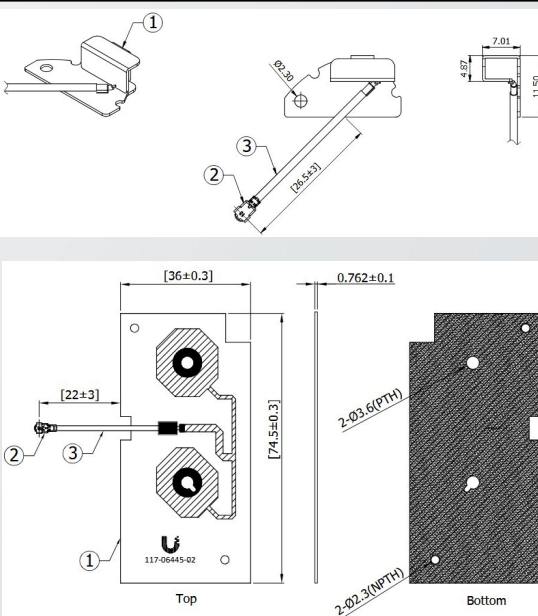
[U7-Mesh] 2G Antenna Performance

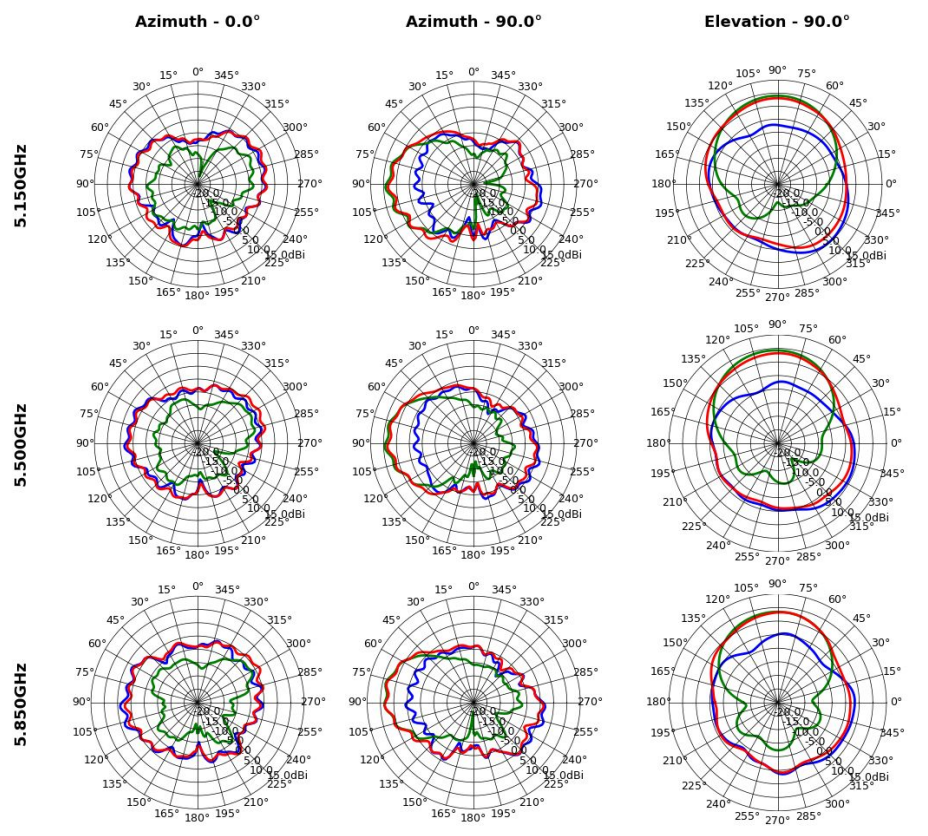
	WIFI 2G
Working frequency	2400 - 2500 MHz
Antenna type	PIFA
Gain	3 dBi
Model	117-06442 & 117-06443
Drawing	





[U7-Mesh] 5G Antenna Performance

	WIFI 5G
Working frequency	5150 - 5850 MHz
Antenna type	Patch array & PIFA
Gain	6dBi (omnidirectional) & 10 dBi (directional)
Model	117-06444 & 117-06445
Drawing	 The drawing shows a top view of the antenna assembly with dimensions: [36±0.3] for the main body width, [74.5±0.3] for the total height, [22±3] for the mounting bracket width, and 0.762±0.1 for the mounting hole spacing. It also shows a bottom view with dimensions 2-Ø2.3(NPTH) and 2-Ø2.3(NPTH). Part numbers 117-06444-Q2 and 117-06445 are indicated.





Manufacturer: Ubiquiti Inc.
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