ATW-T1406, T1407 Antenna Report

Specification				
Model	ATW-T1406, T1407			
	*Both models have same PCB and Antenna			
Antenna Type	PIFA Antenna			
Impedance	50Ω			
Frequency Range	2402 – 2480MHz			
Gain	0.12dBi (Peak)			
Manufacturer	Audio-Technica			

PIFA Antenna

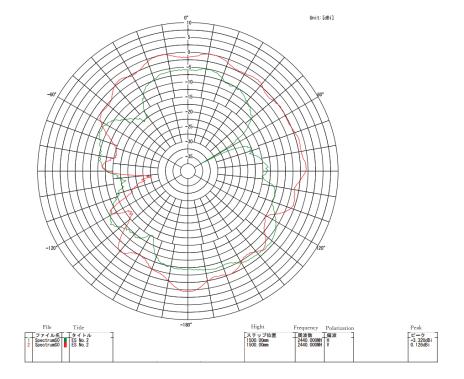
Reference to Test Setup Photo

Reference to Test Setup Photo

Antenna 1

Reference to Test Setup Photo

Antenna Radiation Pattern



Test Configuration

Test Facility

Test Site	Audio-Technica Fukui Inc.	
Test Software	TY2100AM (TOYO Corporation)	
Date	8/3/2023	
Measurer	Hiroki Takeichi	

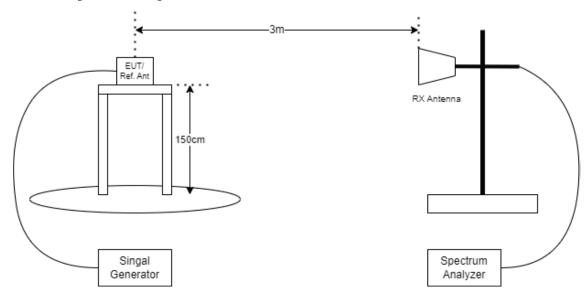
Test Equipment

Equipment	Manufacturer	Model	Cal. Date	Cal. Due
Signal Generator	ROHDE&SCHWARZ	SMB 100A	25/4/2022	25/4/2025
Test Receiver	ROHDE&SCHWARZ	ESU	27/4/2022	27/4/2023
Antenna	SCHWARZBECK	BBHA9120E	N/A	N/A
Reference Antenna	SCHWARZBECK	BBHA9120B	3/5/2022	3/5/2023

Test Procedure

- 1. The reference antenna with known antenna gain was placed on the top of the turntable 1.5 meter above ground and connected to the Signal Generator.
- 2. The receiving antenna was placed 3 meters far away from the center of the turntable and connected to the Spectrum analyzer.
- 3. Turn on the Signal analyzer output. The turntable was rotated by 360 degrees and the spectrum analyzer record the input level for each degree.
- 4. The maximum reading is the antenna gain of the reference antenna.
- 5. Replace the reference antenna with EUT.
- 6. Turn on the Signal analyzer output. The turntable was rotated by 360 degrees and the spectrum analyzer record the input level for each degree.
- 7. Subtract the maximum reading of the reference antenna and the measured reading of the EUT to obtain the radiation pattern of the antenna.
- 8. The peak reading is the antenna gain of EUT.

Test Set-up (Block Diagram of Antenna Radiation Test)



Test Set-up Photo

Reference to Test Setup Photo

Reference to Test Setup Photo