

Data Sheet

CUSTOMER: 虹堡

MODEL NAME: S1F4 pro Com Cradle

CUSTOMER P/N: 311600260000

AWAN P/N: ALF6P-100027



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1. Description

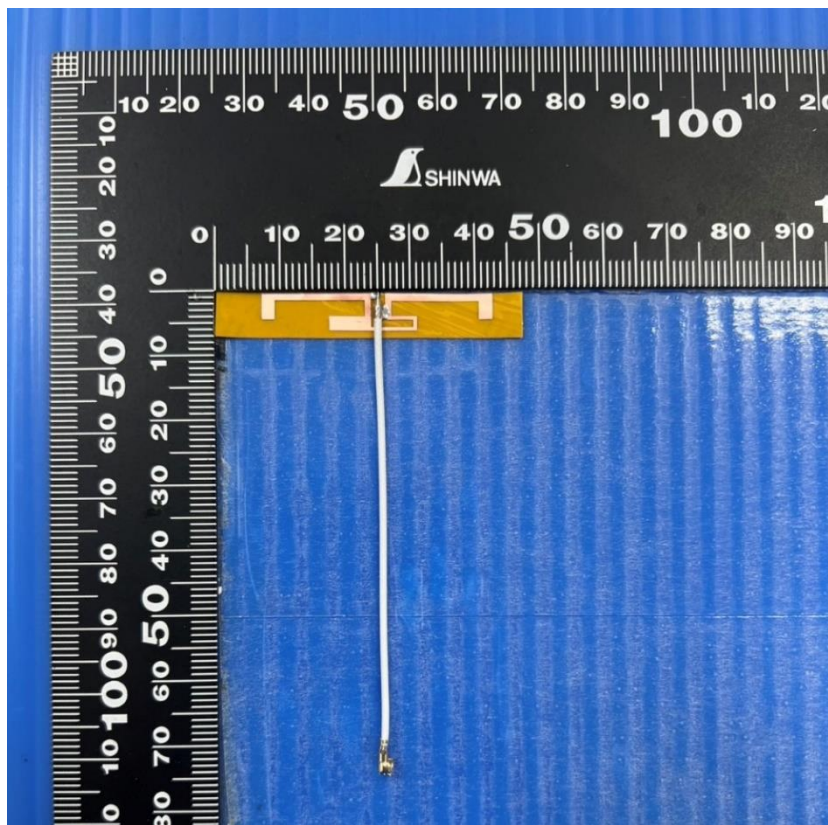
1.1 Specifications

Antennas Type	Dipole Antenna for Dual Band Wi-Fi application	
Impedance	50Ω	
Polarization	Linear	
Radiation pattern	Omni-directional	
Frequency	Dual Band Wi-Fi	2400-2500MHz, 5150-5850MHz

Frequency range	2400-2500MHz	5150-5850MHz
Peak gain	2.88~3.28dBi	2.4~4.06dBi
Efficiency (%)	57~58%	45~56%
VSWR (in Device)	1.45 Max.	2.9 Max.
Polarization	Linear	
Power handling	1W (cw)	
Impedance	50 Ω	

1.2 Antenna Picture

Wi-Fi Dual Band P/N: ALF6P-100027



2. Electrical Specification

2.1 Test Equipment

Equipment Description	Manufacturer	Identification no.	Current Calibration date	Next calibration date
Universal Radio Communication tester	R&S	CMW500	2024/07/29	2025/01/29
Network Analyzer	Agilent	E5071C	2024/07/29	2025/01/29
Sleeve Dipole	MVG	SD740	2024/07/29	2025/01/29
Dual Ridge Horn	MVG	SH800	2024/07/29	2025/01/29
Dipole antenna	MVG	3126-700	2024/07/29	2025/01/29
Stargate-16-L probe array	MVG	Stargate-16-L	2024/07/29	2025/01/29
Measurement software	MVG	Wave Studio 22.1	2024/12/29	2025/02/11
Wireless protocol tester	R&S	CMW500	2024/07/29	2025/01/29

2.1.2 General Information

Description	Tester	Measured Date
Measured	Kevin.Lin	2025/02/11

2.2 Test Setup

2.2.1 Frequency Range

A. Wi-Fi Dual Band: 2400~2500 MHz
5250~5850 MHz

2.2.2 VSWR

Step 1: The antenna is arranged on the customer provided test fixture.

Step 2: The VSWR of the antenna is measured via Agilent 8720/8753 Network Analyzer (see figure. 1).



Figure.1

2.2.3 Radiation pattern and Gain

- A. The 3D chamber provides less than -40dB reflectivity from 600MHz to 6GHz and a 20cm diameter spherical quiet zone. The measurement results are calibrated using Stargate-16-L probe array (see figure. 2).
- B. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 3).
- C. The measured photo is shown in figure. 4

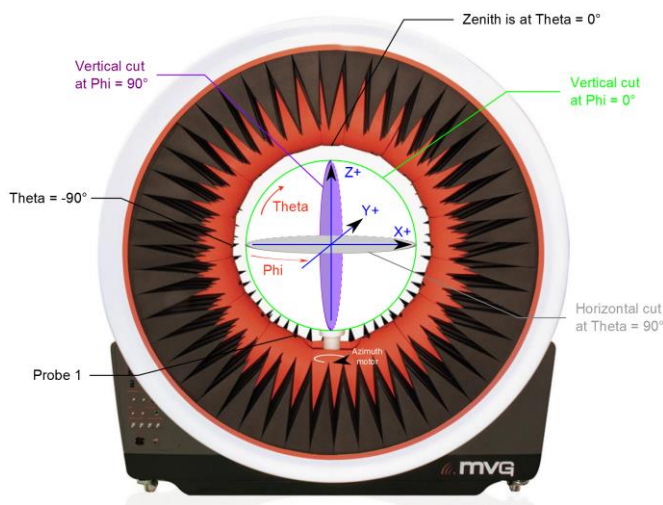


Figure.2

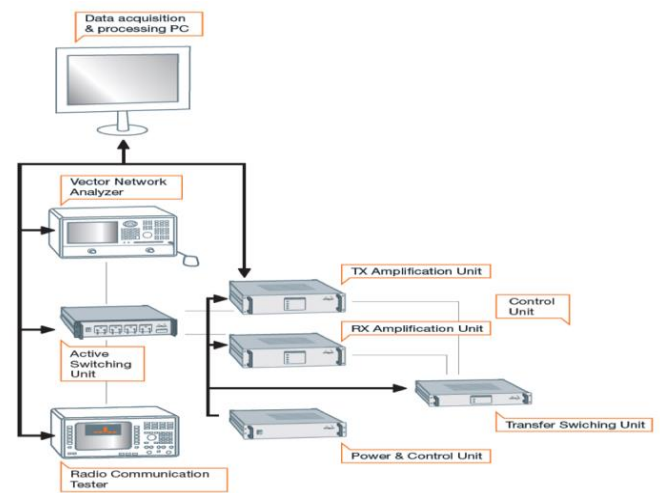


Figure.3

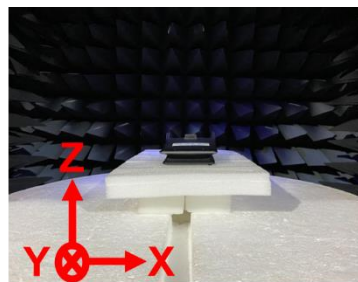
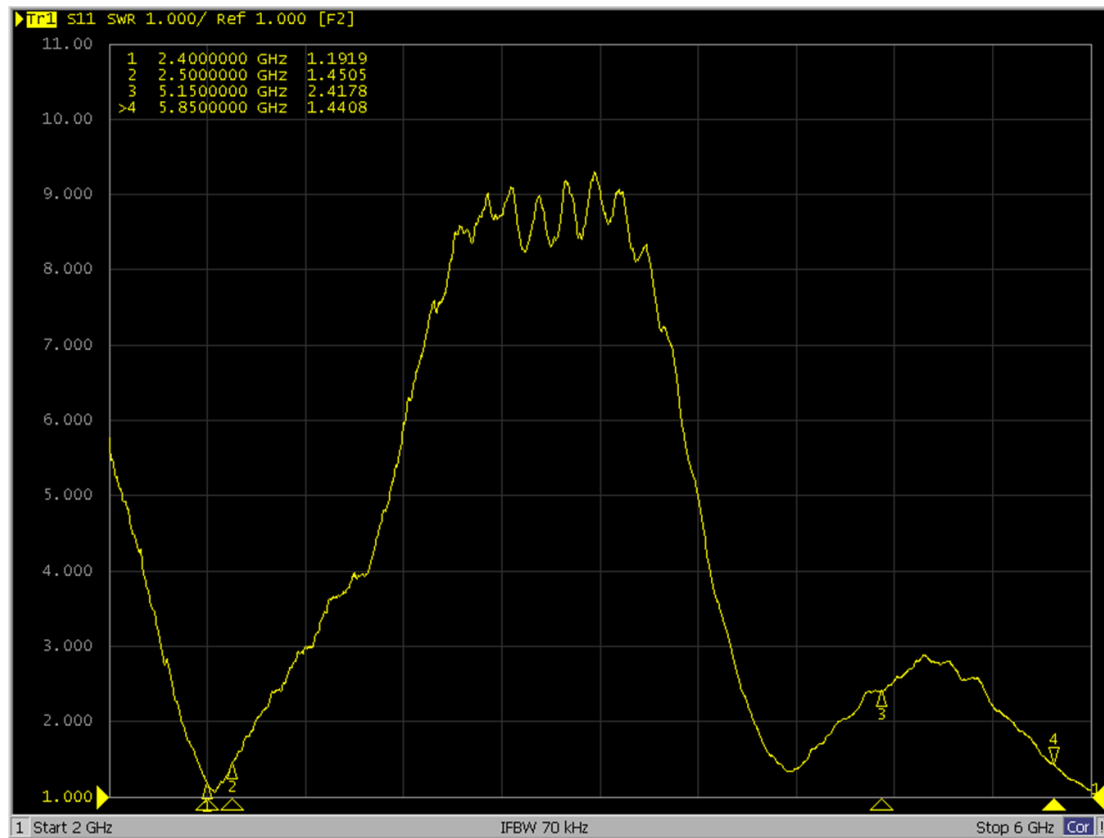


Figure.4

3. Performance Data

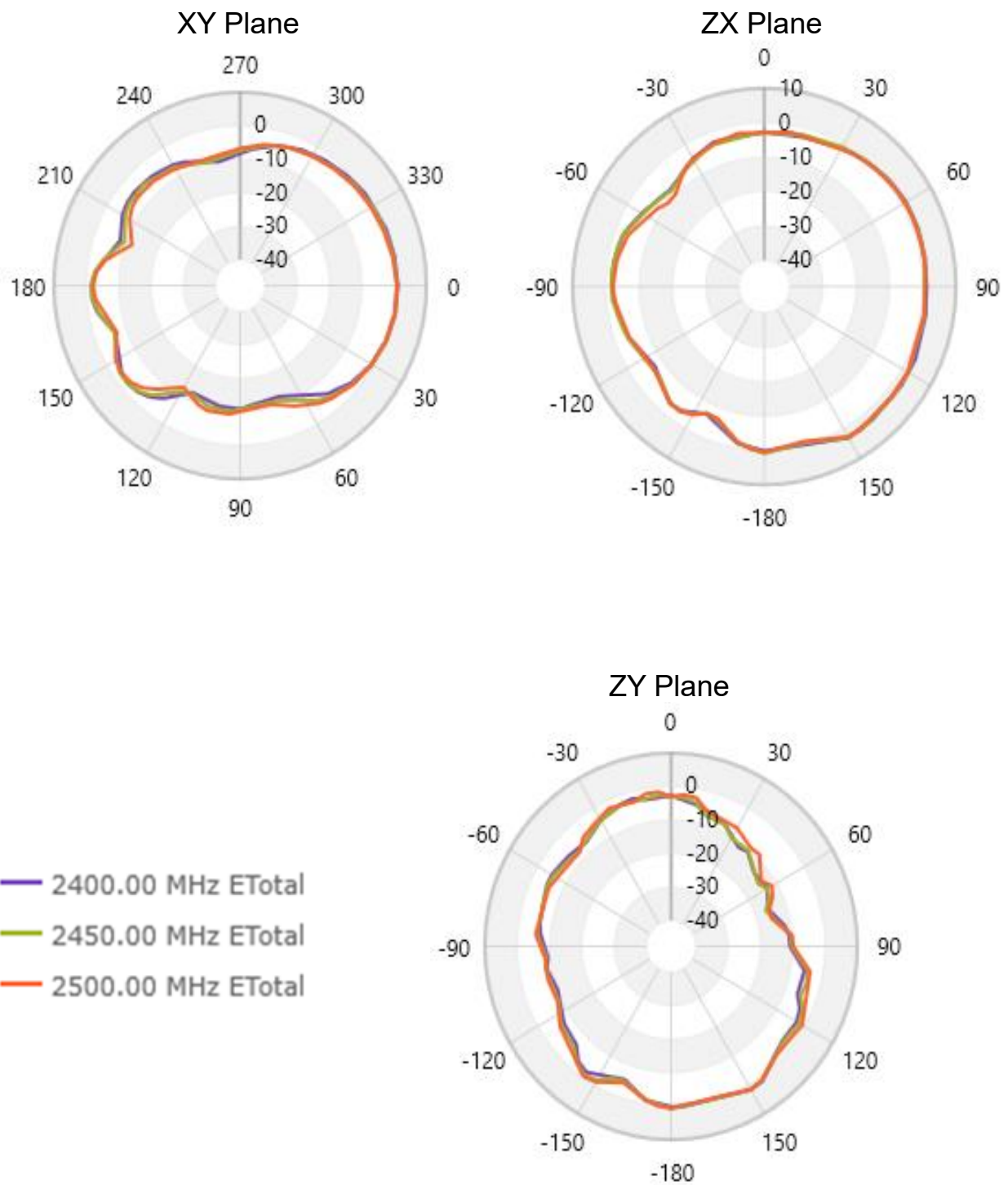
3.1 VSWR



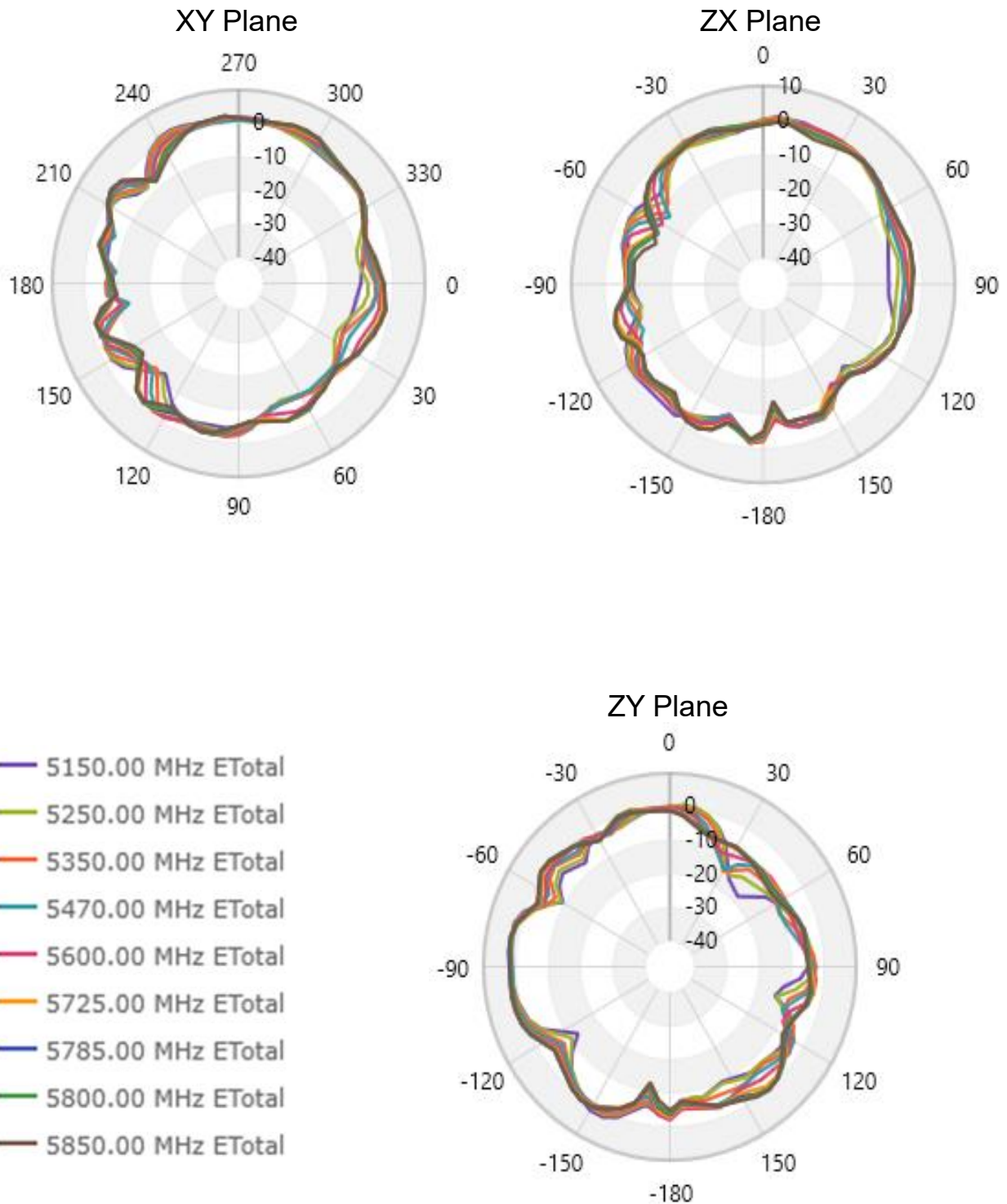
3.2 Radiation pattern & Gain

3.2.1 Antenna pattern

2400-2500MHz



5150-58500MHz

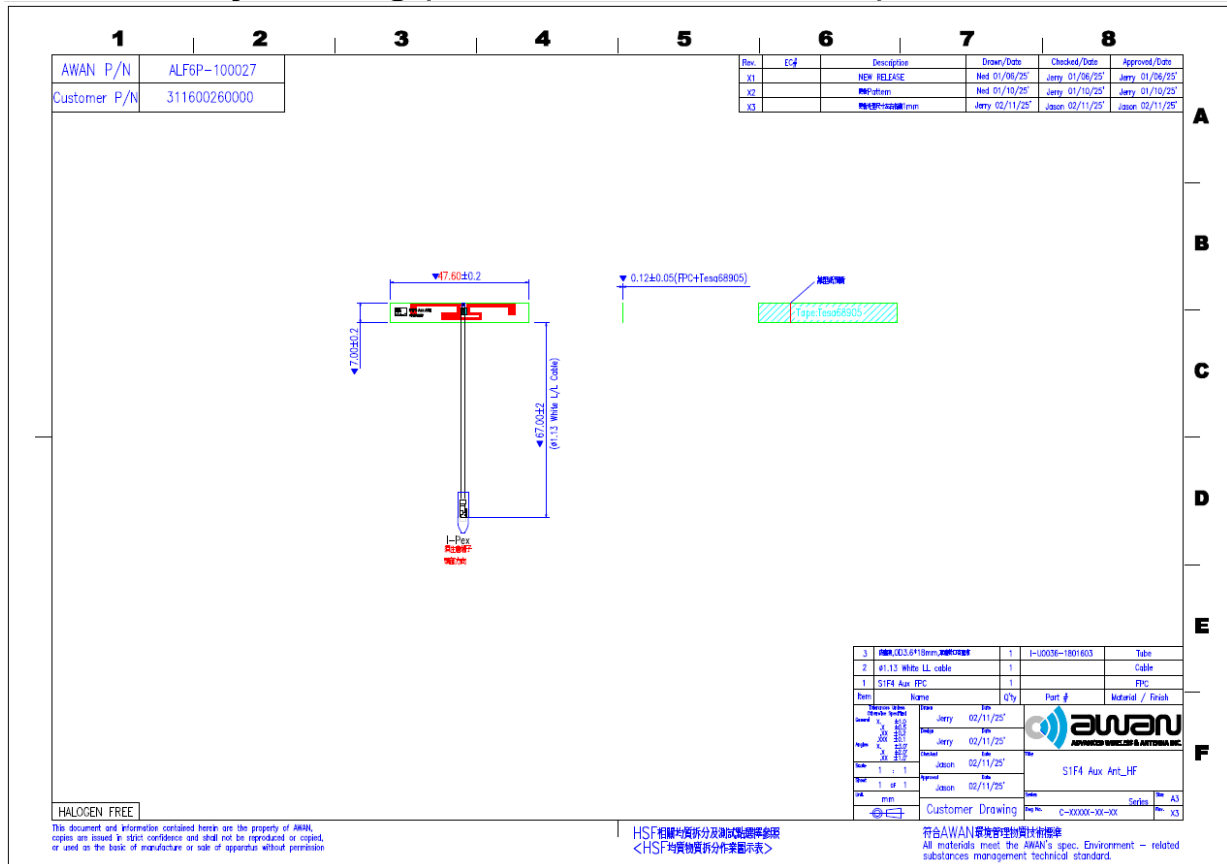


Antenna Gain Table

Frequency (MHz)	3D		
	Efficiency(%)	Avg. Gain(dB)	Peak Gain(dBi)
2400	58	-2.39	3.28
2450	58	-2.38	3.18
2500	57	-2.46	2.88
5150	47	-3.24	3.03
5250	45	-3.43	2.38
5350	47	-3.28	2.42
5470	45	-3.43	2.4
5600	51	-2.95	3.14
5725	54	-2.71	3.69
5785	56	-2.56	4.02
5800	55	-2.61	4.06
5850	54	-2.68	4

4. Mechanical Specification

4.1 Assembly Drawing (Wi-Fi Dual Band Antenna)



Revision

Revision	Date	Change Notification	Notes
Rev.1	2025-02-11		