

Data Sheet

CUSTOMER: 虹堡

MODEL NAME: S1E2 WiFi

CUSTOMER P/N: 311600156000

AWAN P/N: ALF6P-100008



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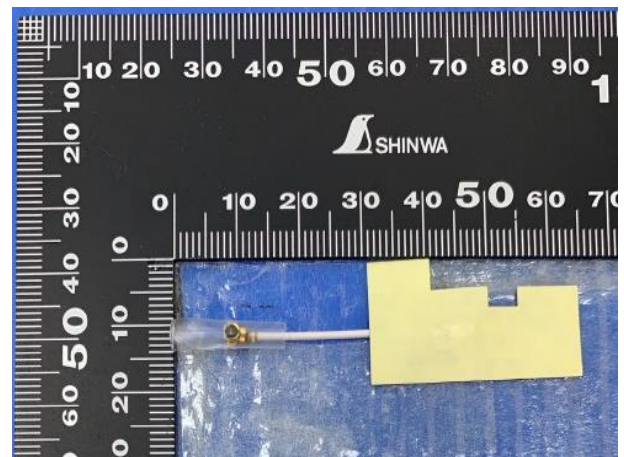
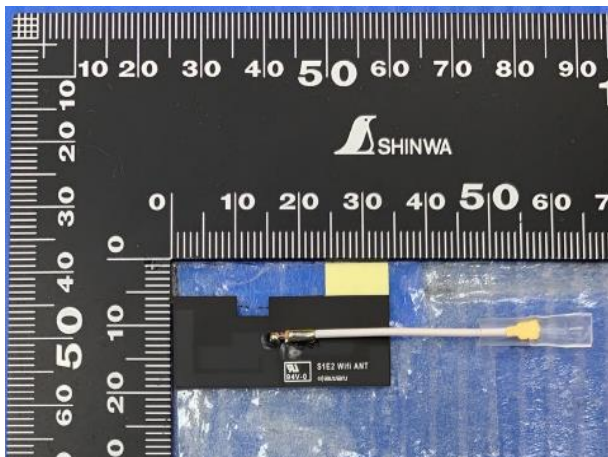
1. Description

1.1 Specifications

Antennas Type	DIPOLE Antenna for WIFI application	
Connector Type	I-PEX MHF1	
Impedance	50Ω	
Polarization	Linear	
Radiation pattern	Omni-directional	
Frequency	WIFI	2.40~2.50 GHz, 5.15-5.85 GHz
VSWR	WIFI	2.40~2.50 GHz: 3.0 Max 5.15~5.85 GHz: 3.0 Max

1.2 Antenna Picture

WIFI P/N: ALF6P-100008



2. Electrical Specification

2.1 Test Equipment

2.1 Test Equipment

Equipment Description	Manufacturer	Identification no.	Current Calibration date	Next calibration date
Universal Radio Communication tester	Anritsu	MT8820C	2022/07/29	2022/12/29
Network Analyzer	Agilent	E5071C	2022/07/29	2022/12/29
Sleeve Dipole	MVG	SD740	2022/07/12	2022/12/12
Dual Ridge Horn	MVG	SH800	2022/07/12	2022/12/12
Dipole antenna	MVG	3126-700	2022/07/12	2022/12/12
Stargate-16-L probe array	MVG	Stargate-16-L	2022/07/12	2022/12/12
Measurement software	MVG	Wave Studio 22.1	N/A	N/A
Wireless protocol tester	R&S	CMW500	2022/07/29	2022/12/29

2.1.2 General Information

Description	Tester	Measured Date
Measured	Stanley. Sin	2022/10/31

2.2 Test Setup

2.2.1 Frequency Range

A. WiFi: 2.40~2.50 GHz ; 5.15~5.85 GHz

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 2.4GHz to 6GHz and a 45cm 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

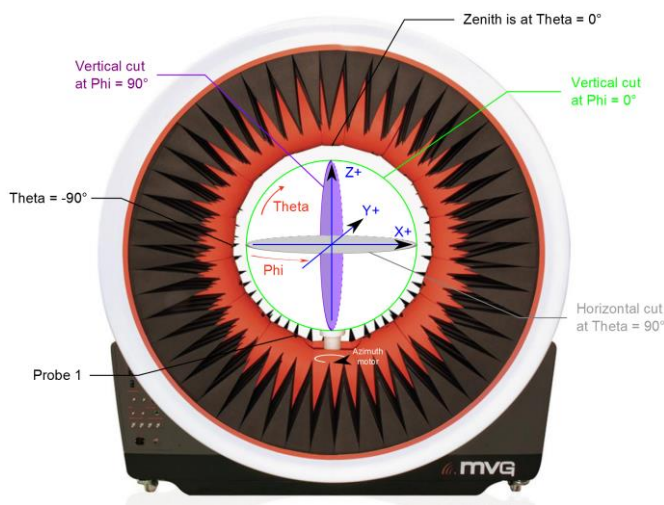


Figure.2

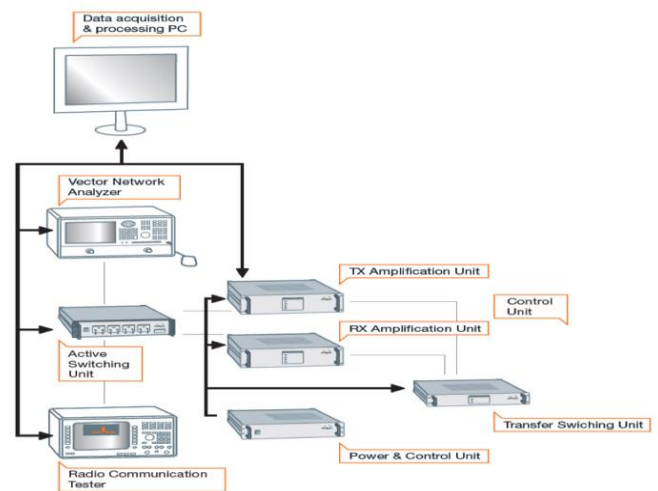


Figure.3

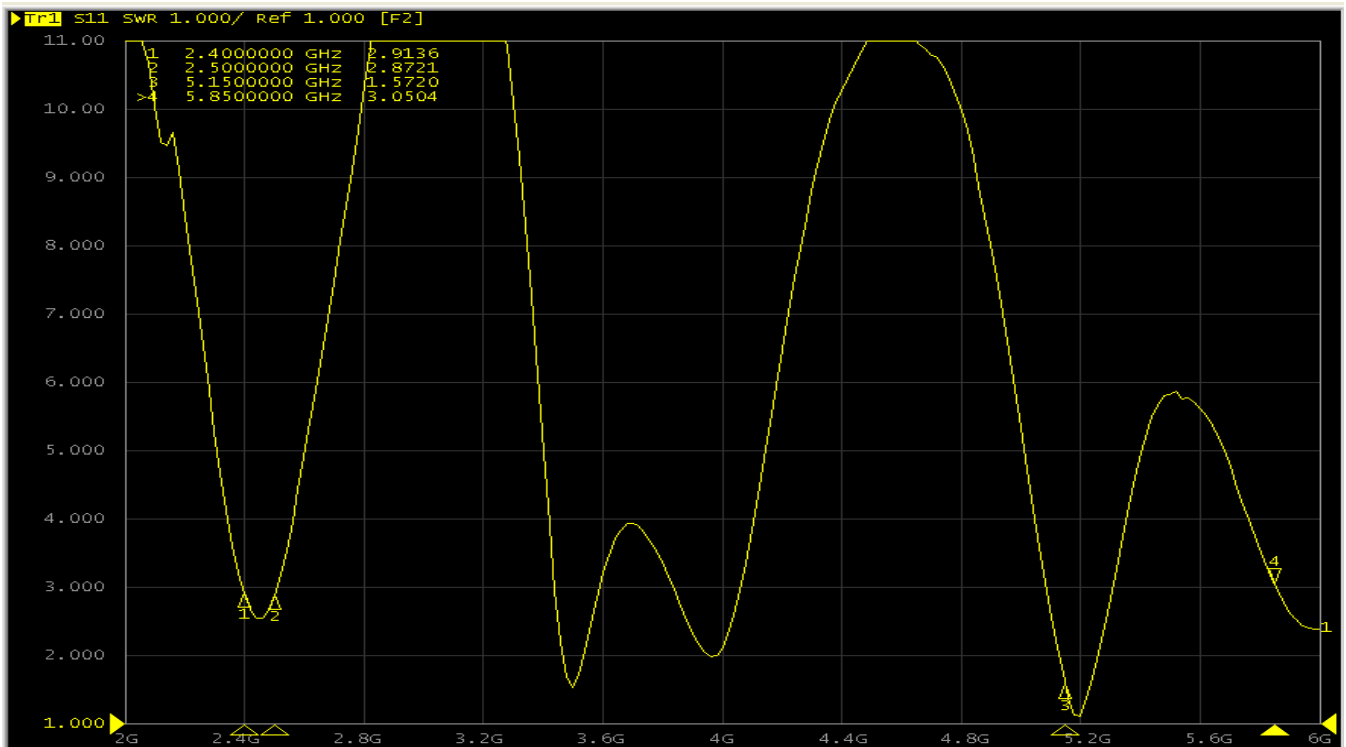


Figure.4

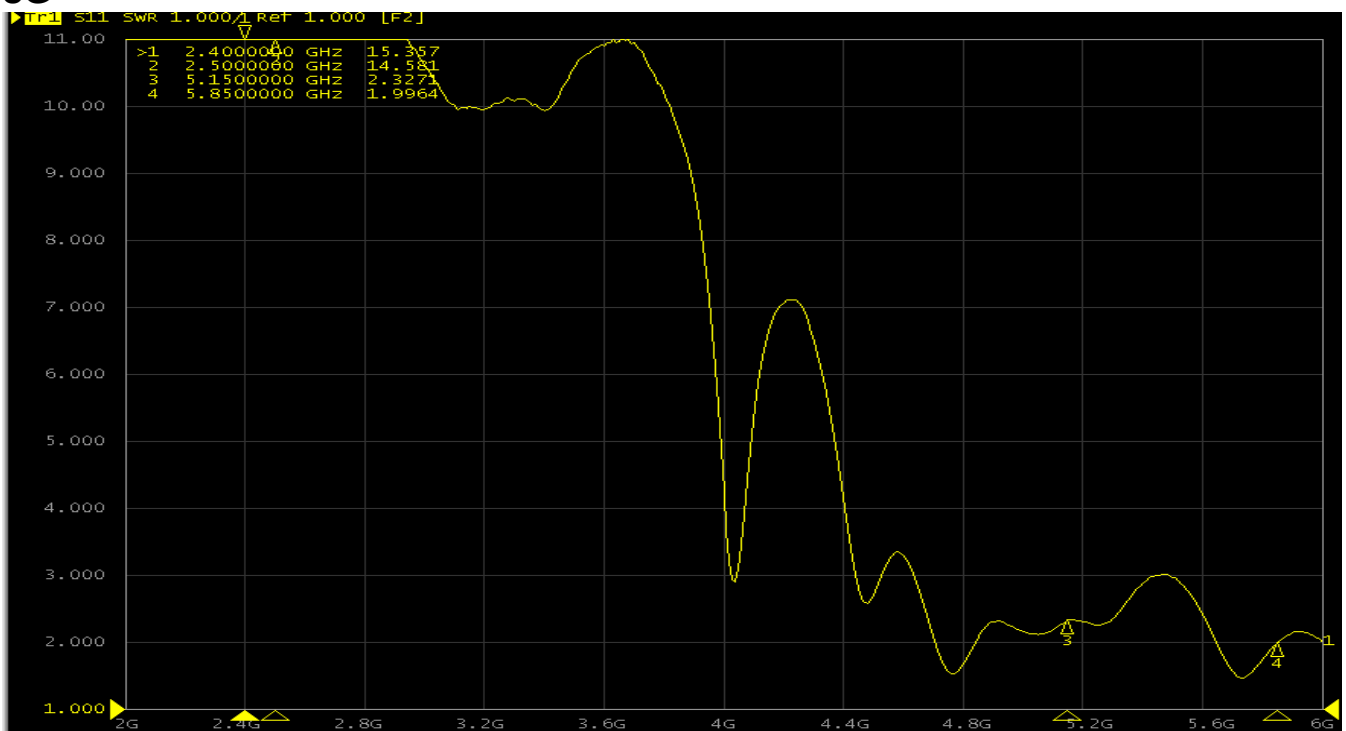
3. Performance Data

3.1 VSWR

2.4G



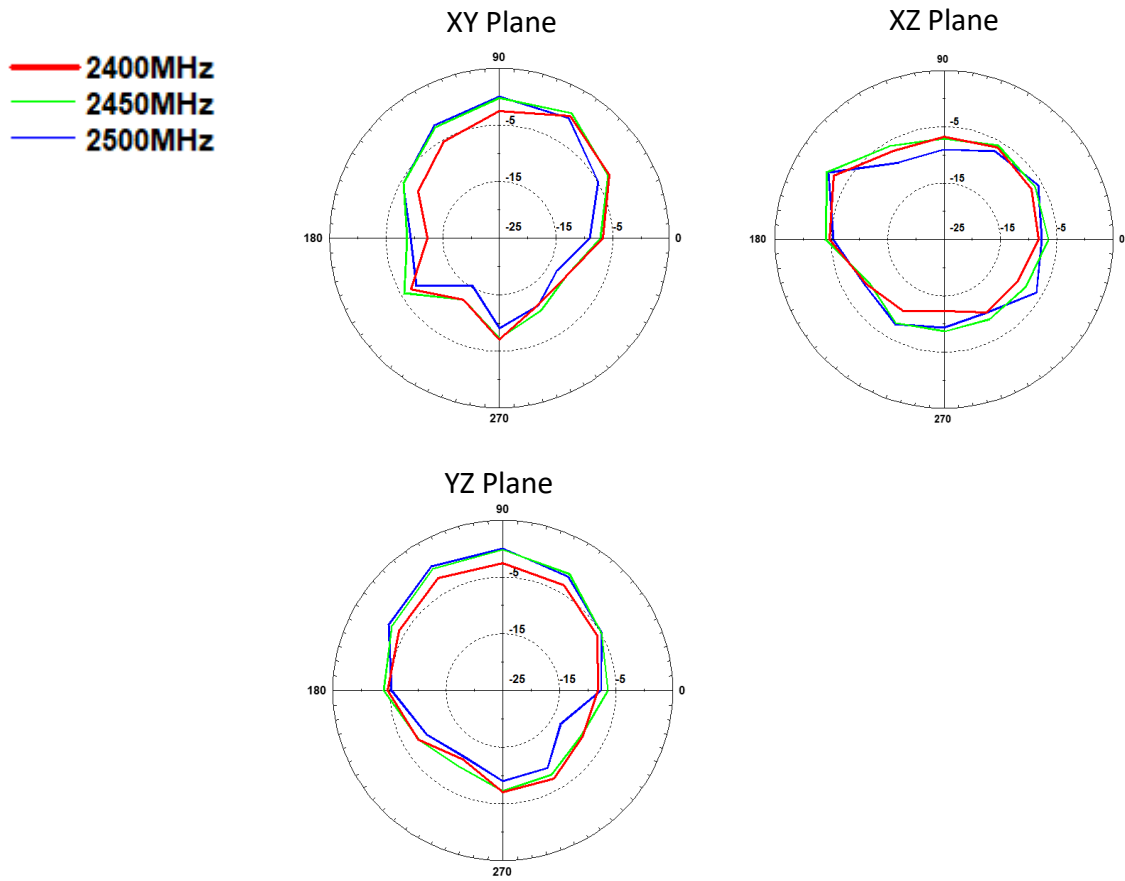
5G



3.2 Radiation pattern & Gain (WIFI Antenna)

3.2.1 Antenna pattern

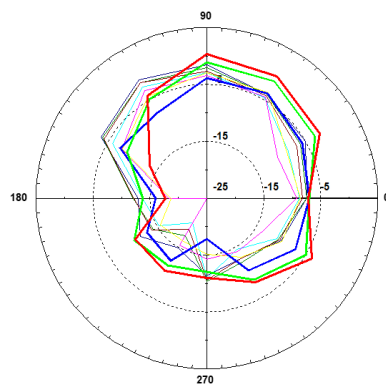
2400-2450MHz



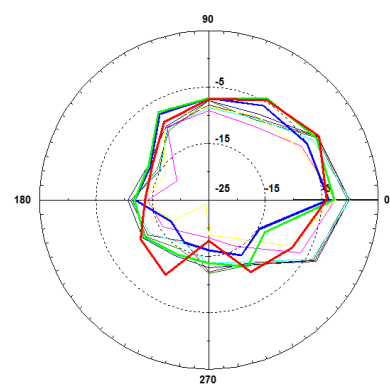
5150-5850MHz

- 5150MHz
- 5250MHz
- 5350MHz
- 5470MHz
- 5600MHz
- 5725MHz
- 5785MHz
- 5800MHz
- 5850MHz

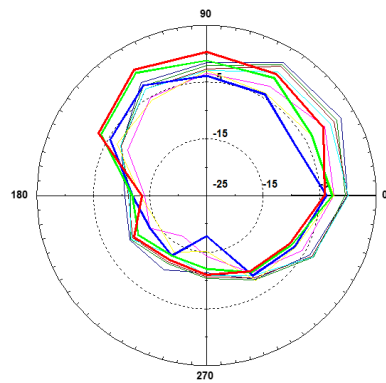
XY Plane



XZ Plane



YZ Plane

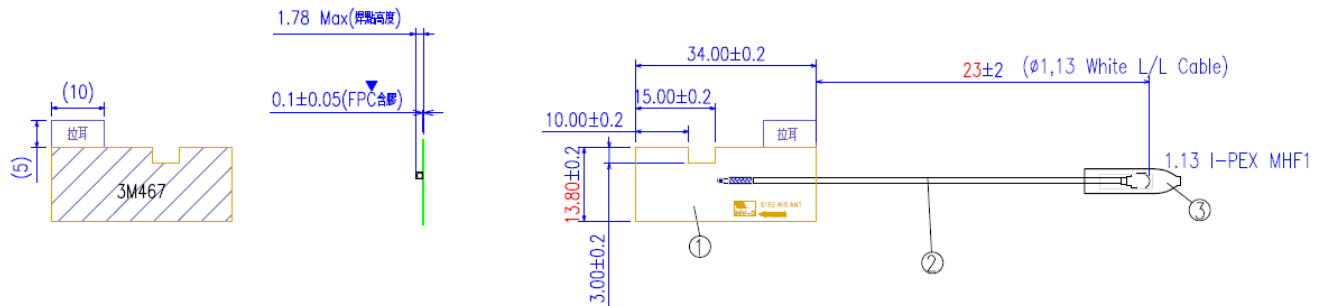


Antenna Gain/Efficiency (WIFI Antenna)

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2400	25.775	-5.888	-0.082
2450	27.328	-5.634	0.611
2500	24.468	-6.114	0.293
5150	26.589	-5.753	0.658
5250	29.424	-5.313	-0.033
5350	27.177	-5.658	-2.597
5470	27.033	-5.681	-2.275
5600	28.668	-5.426	-0.831
5725	35.612	-4.484	0.257
5785	34.041	-4.68	1.315
5800	35.400	-4.51	1.612
5850	38.415	-4.155	2.402

4.Mechanical Specification

4.1 Assembly Drawing (WIFI Antenna)



Revision

Revision	Date	Change Notification	Notes
Rev.1	2022-11-08		