Data Sheet

CUSTOMER: 虹堡

MODEL NAME: S1E2 WiFi

CUSTOMER P/N: 311600156000

AWAN P/N: ALF6P-100008

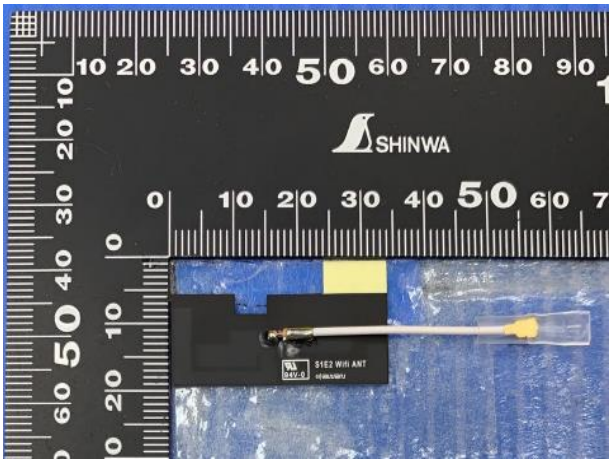
1. Description

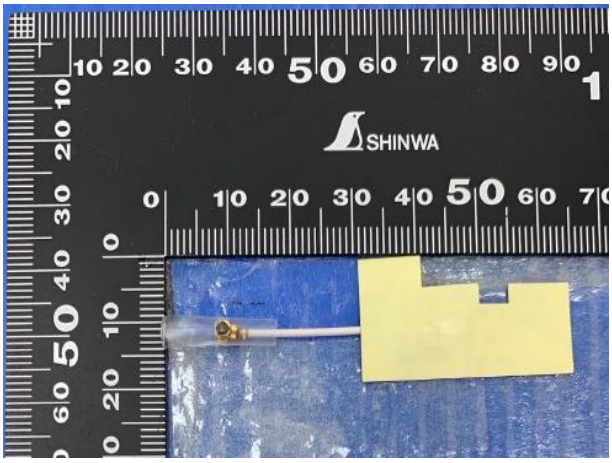
1.1 Specifications

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

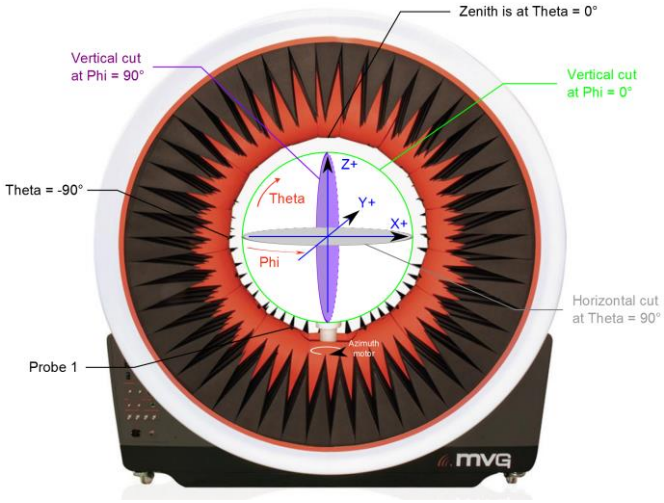


Figure.2

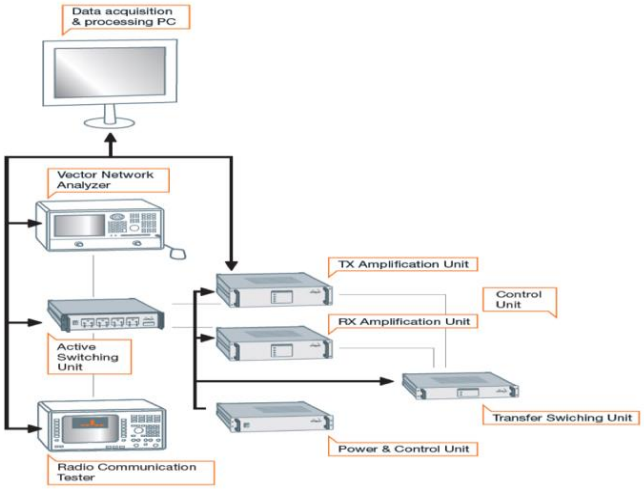


Figure.3

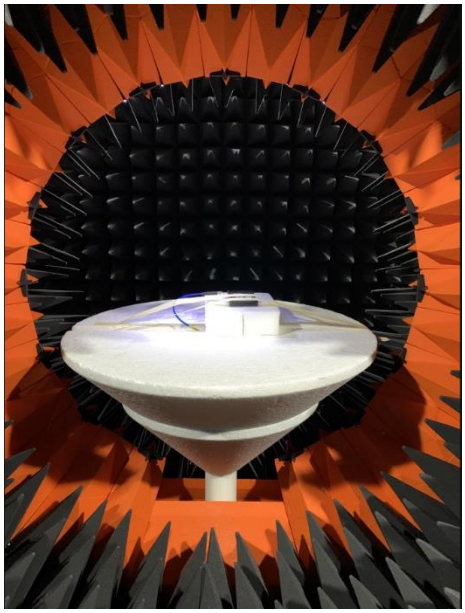
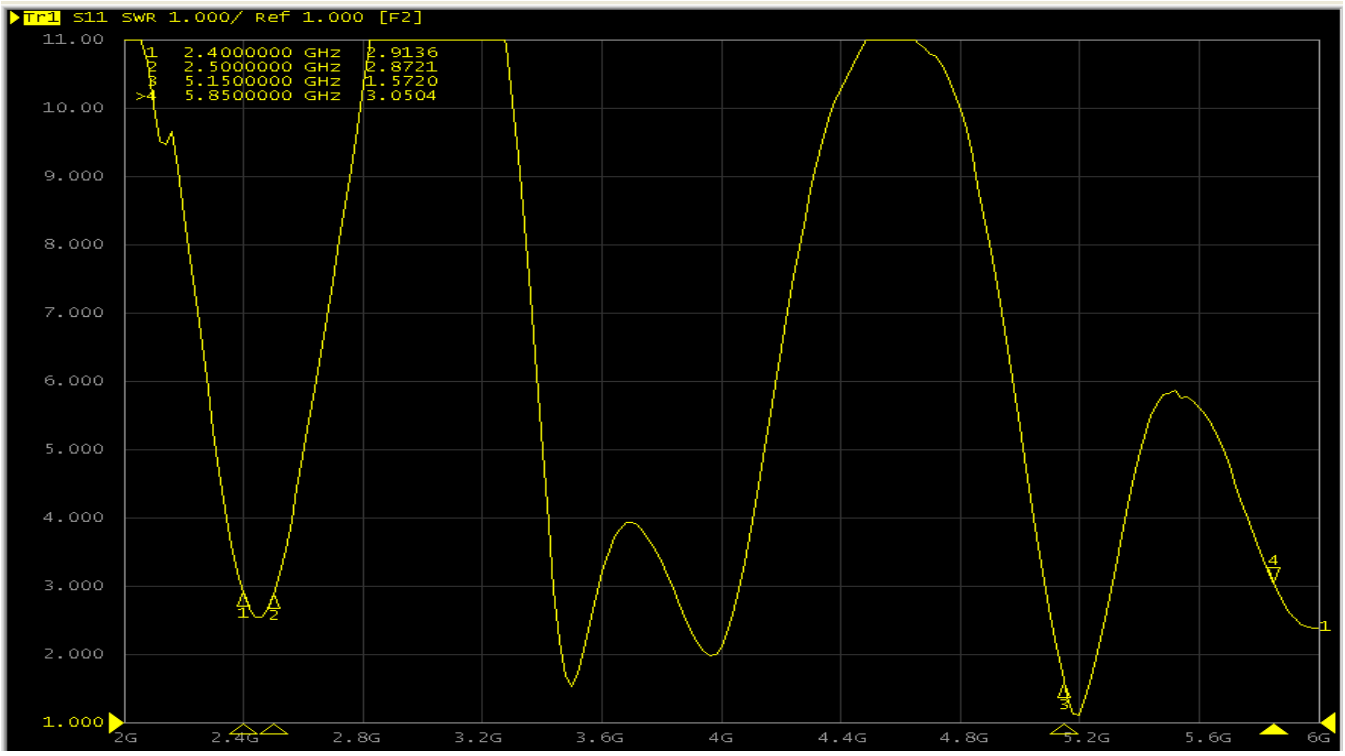


Figure.4

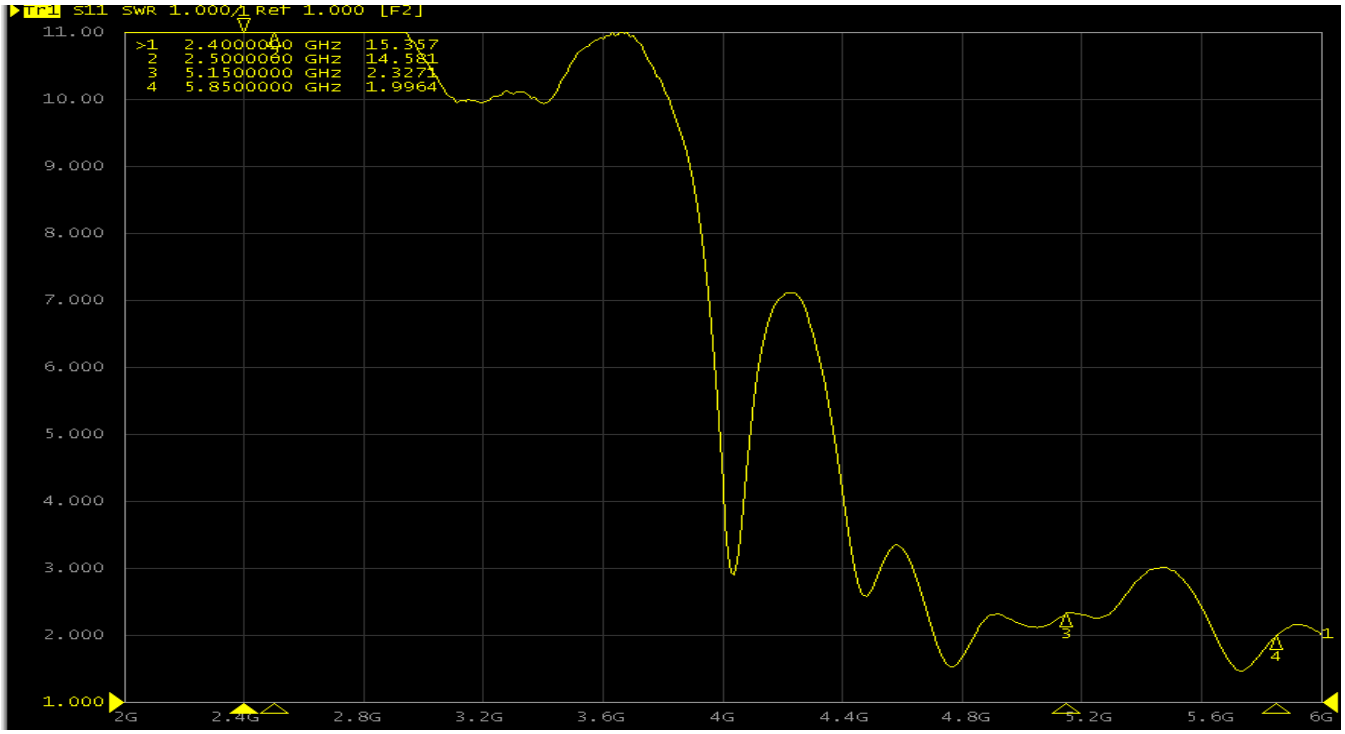
3. Performance Data

3.1 VSWR

2.4G



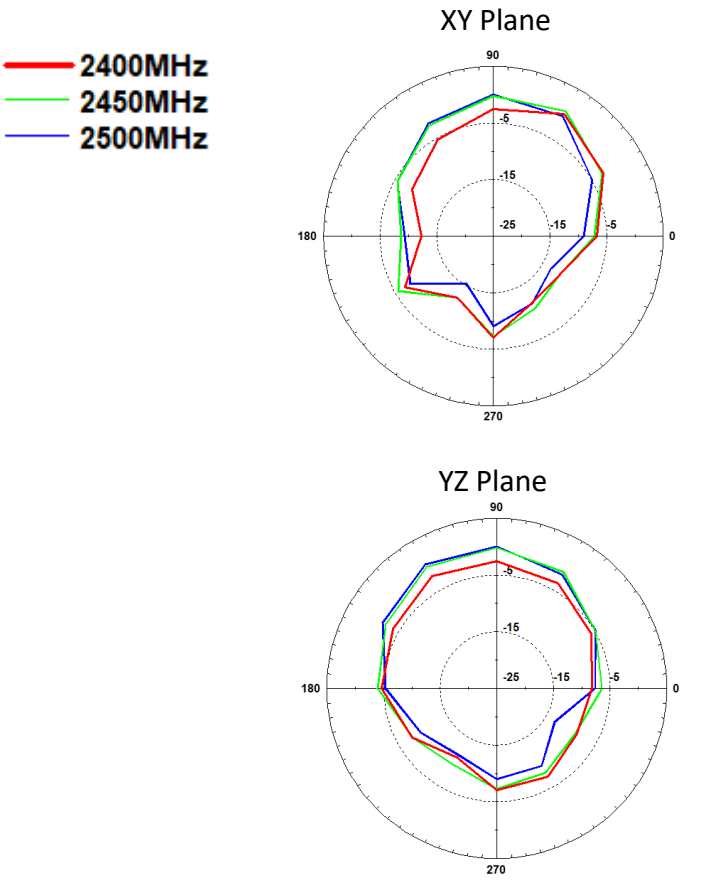
5G



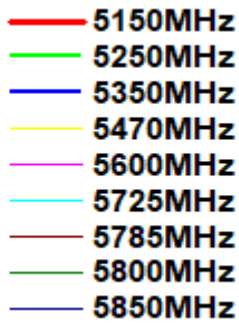
3.2 Radiation pattern & Gain (WIFI Antenna)

3.2.1 Antenna pattern

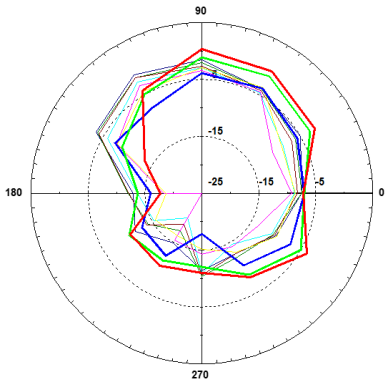
2400-2450MHz



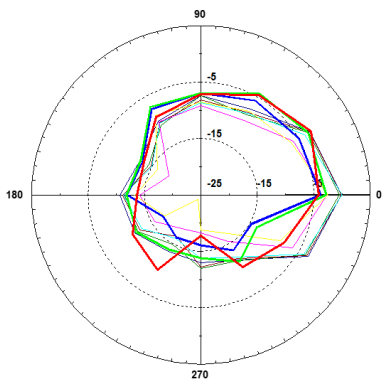
5150-5850MHz



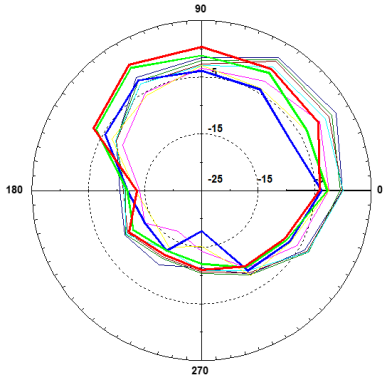
XY Plane



XZ Plane



YZ Plane

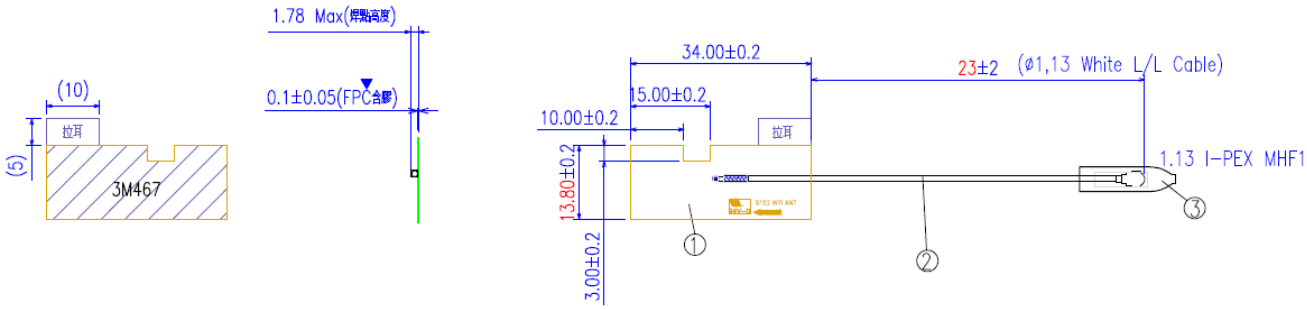


Antenna Gain/Efficiency (WIFI Antenna)

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		