

Data Sheet

CUSTOMER: 虹堡

MODEL NAME: S1U2

CUSTOMER P/N: 311600203000

AWAN P/N: ALF6P-100007



1. Description-----	
1.1 Specifications-----	1
1.2 Antenna Picture-----	1
2. Electrical Specification-----	2
2.1 Test Equipment-----	2
2.2 Test Setup-----	2
2.2.1 Frequency Range-----	2
2.2.2 VSWR-----	2
2.2.3 Radiation Pattern & Gain-----	2
2.2.4 Efficiency-----	2
3. Performance Data-----	4
3.1 VSWR-----	4
3.2 Radiation pattern & Gain(BT Antenna)-----	5
3.2.1 Antenna pattern-----	5
4. Mechanical Specification-----	9
4.1 Assembly Drawing(BT Antenna)-----	9

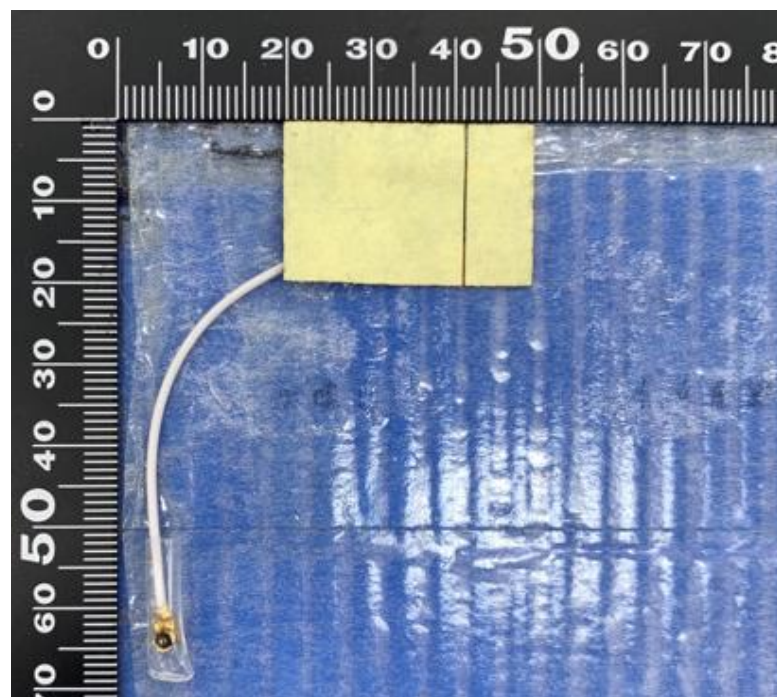
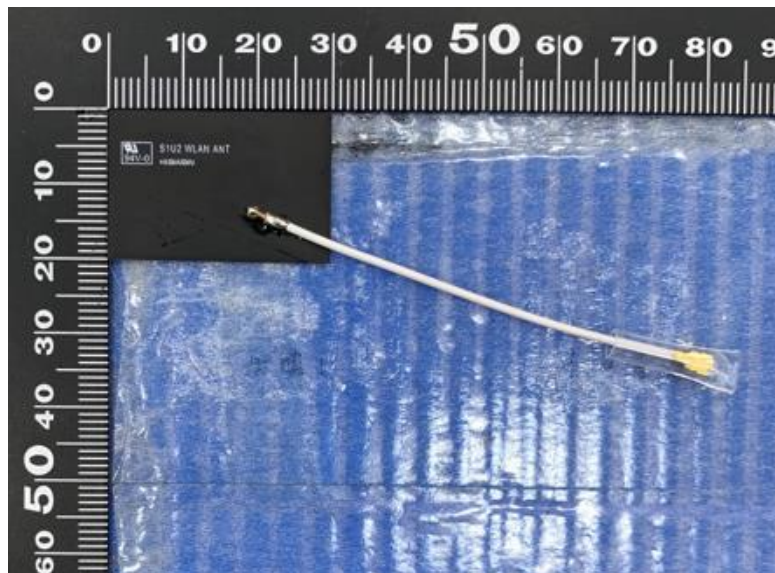
1. Description

1.1 Specifications

Antennas Type	PIFA 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

1.2 Antenna Picture

WIFI P/N: A8F6P-100007



2. Electrical Specification

2.1 Test Equipment

- A. VSWR and input impedance: Agilent 8720/8753 Network Analyzer
- B. Antenna gain and efficiency: ETS three-dimensional anechoic chamber

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 800MHz to 6GHz and a 40cm diameter spherical quiet zone. The measurement results are calibrated using both dipoles and standard gain horns (see figure. 2).
- B. The antenna under tested is arranged in the turned table and a decoupling sleeve is used to reduce feed line radiation (see figure. 3).
- C. The measured results of the radiation patterns and antenna gain are obtained from the control system and showed on the monitor (see figure. 4 and 5).

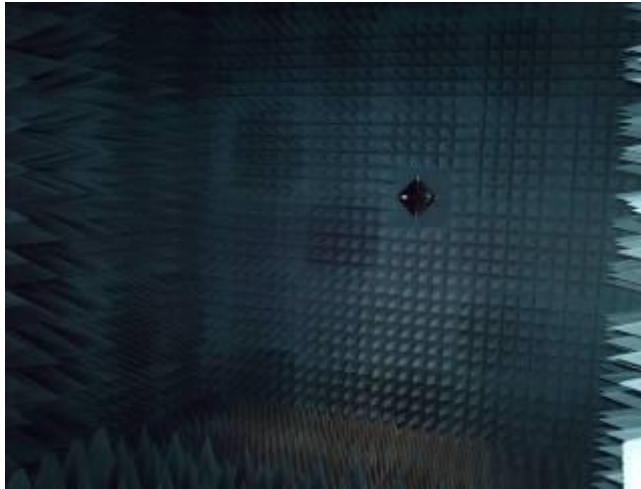


Figure.2



Figure.3



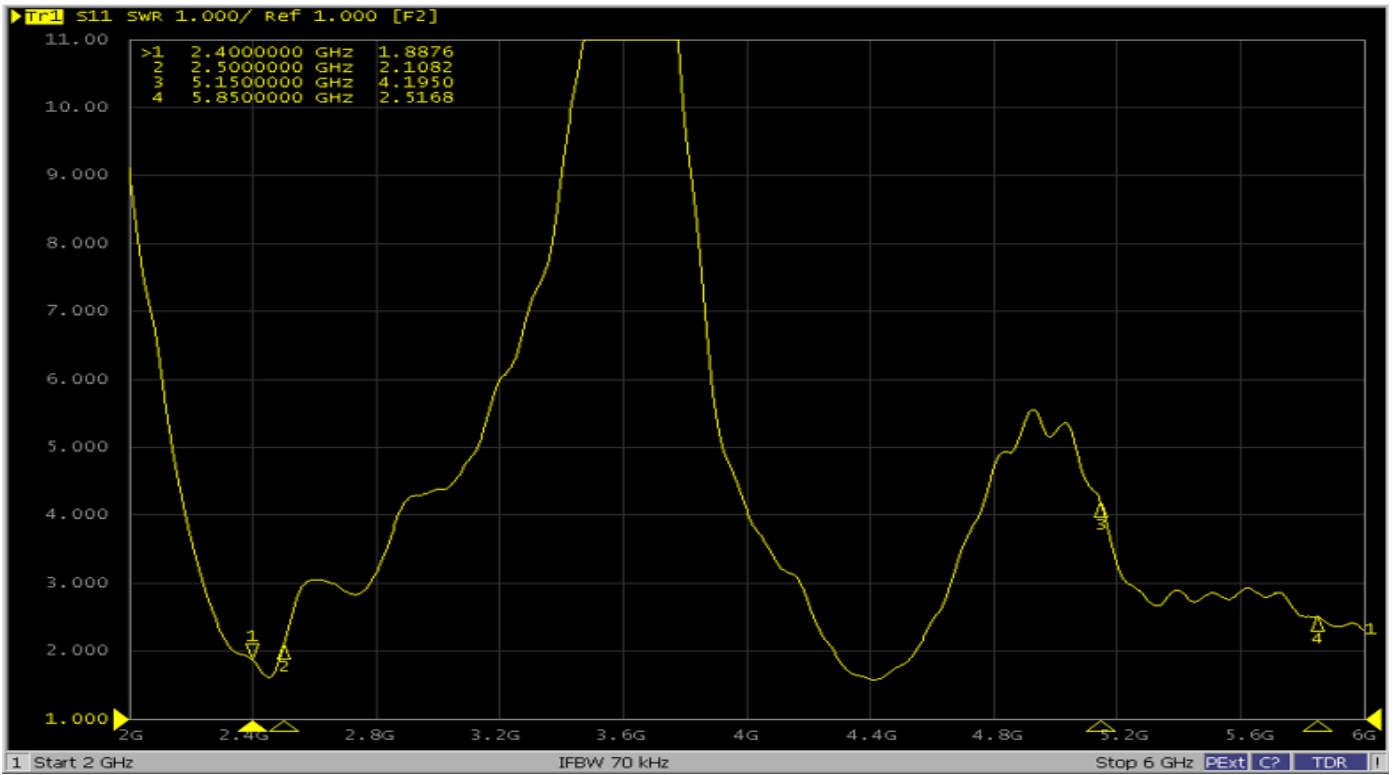
Figure.4



Figure.5

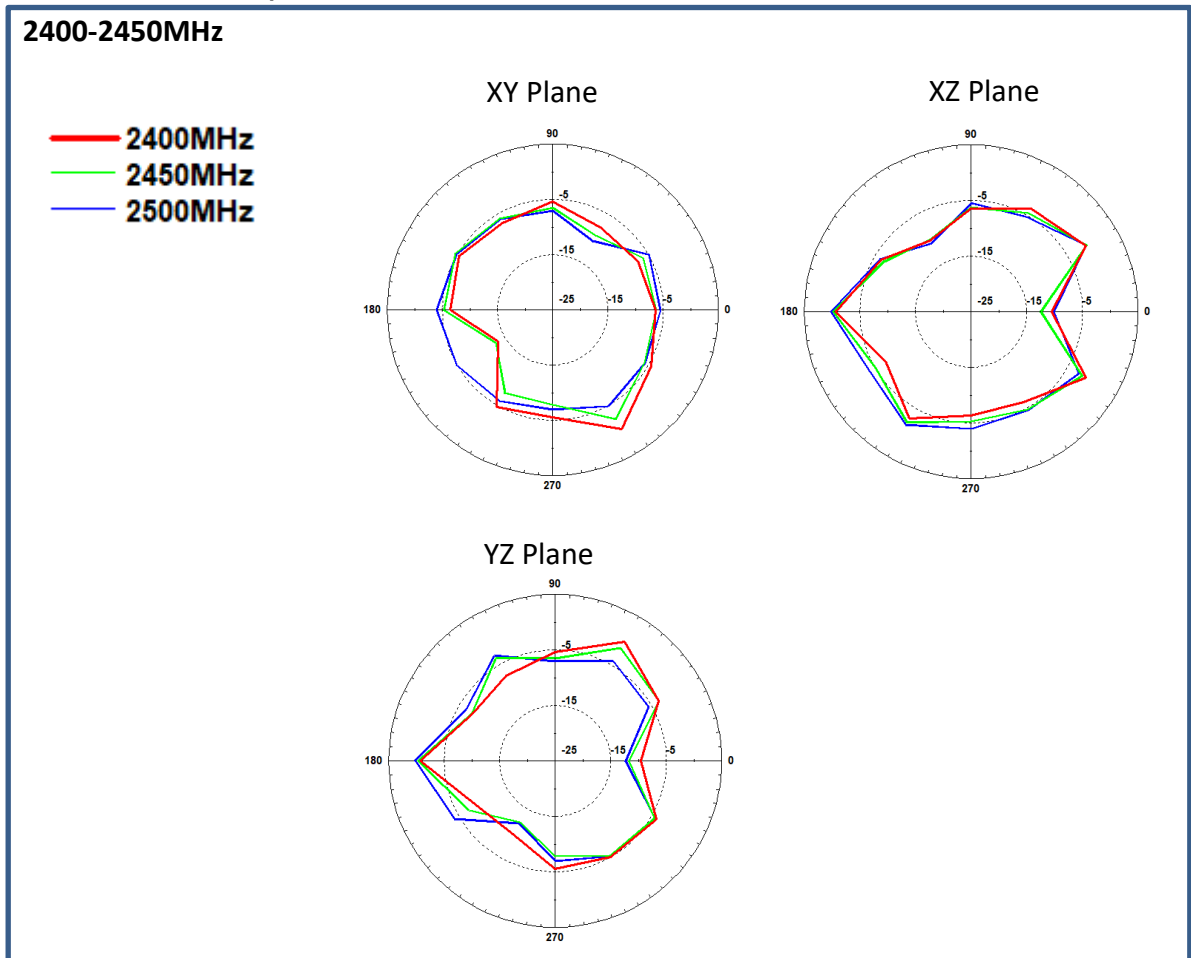
3. Performance Data

3.1 VSWR



3.2 Radiation pattern & Gain (WIFI Antenna)

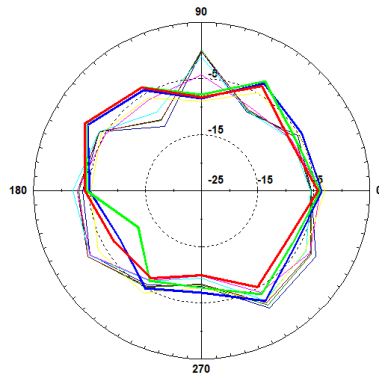
3.2.1 Antenna pattern



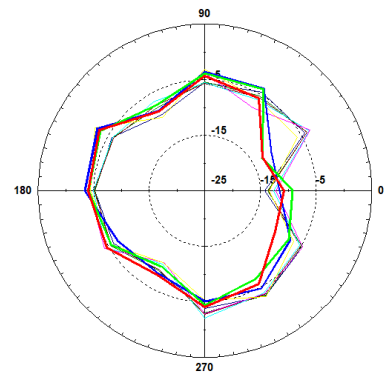
5150-5850MHz

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

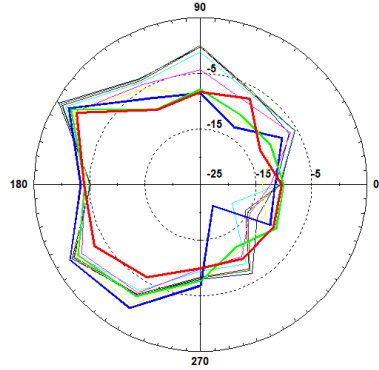
XY Plane

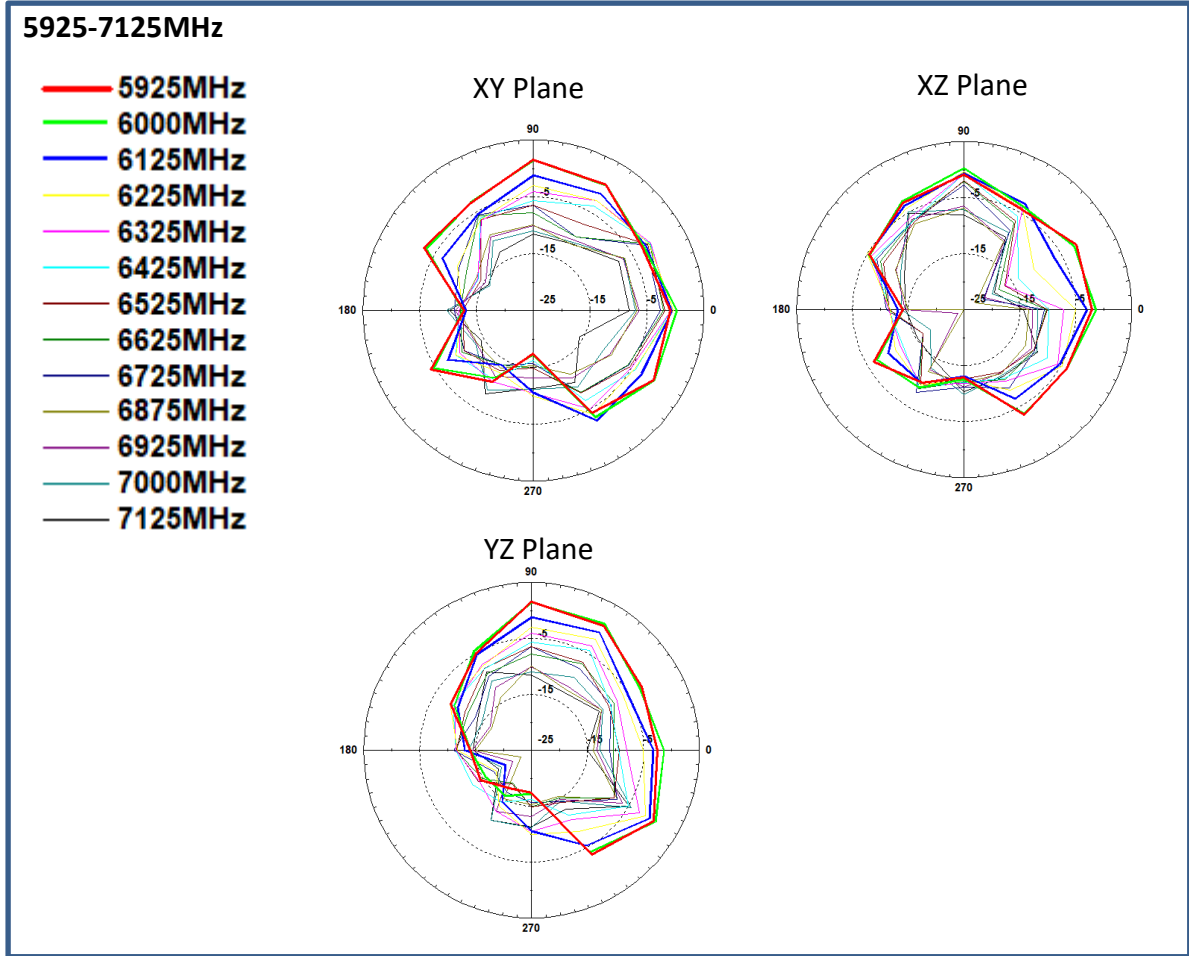


XZ Plane



YZ Plane



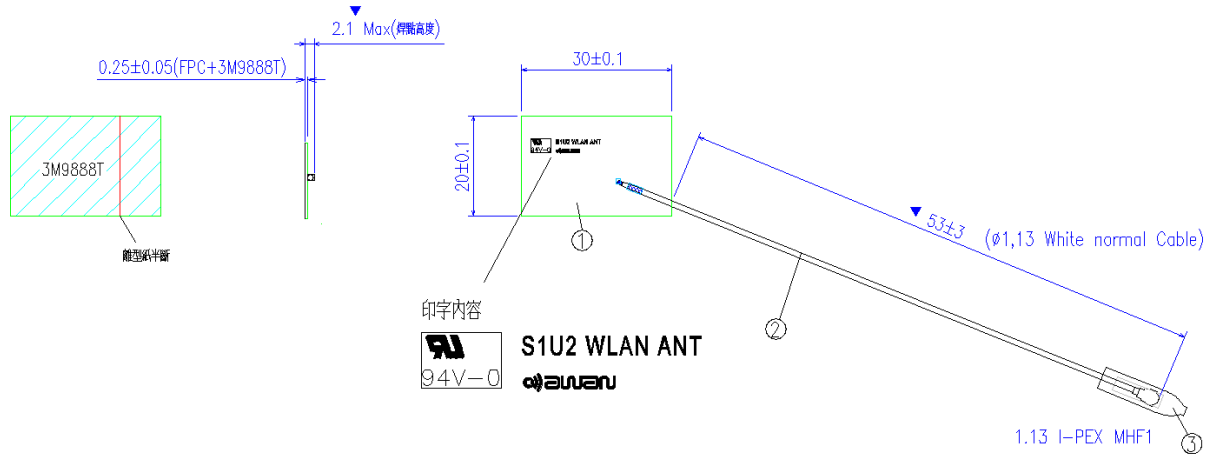


Antenna Gain/Efficiency (WIFI Antenna)

Frequency (MHz)	3D		
	Efficiency	Avg. Gain	Peak Gain
2400	37.1	-4.31	2.011
2450	36.0	-4.43	1.359
2500	35.8	-4.46	0.88
5150	29.4	-5.31	1.063
5250	34.3	-4.65	1.991
5350	39.7	-4.02	2.439
5470	40.5	-3.93	2.161
5600	42.2	-3.75	2.743
5725	44.7	-3.50	3.581
5785	45.9	-3.38	3.681
5800	47.3	-3.26	4.029
5850	46.9	-3.29	4.427
5925	50.3	-2.983	2.435
6000	51.4	-2.892	2.586
6125	34.7	-4.602	0.821
6225	27.9	-5.546	-0.364
6325	23.9	-6.216	-0.741
6425	20.8	-6.812	-0.764
6525	15.0	-8.24	-1.831
6625	14.8	-8.284	-1.4
6725	14.8	-8.311	-2.055
6875	7.4	-11.298	-6.483
6925	8.1	-10.889	-6.209
7000	9.6	-10.169	-4.488
7125	8.6	-10.671	-4.915

4. Mechanical Specification

4.1 Assembly Drawing(WIFI Antenna)



Revision

Revision	Date	Change Notification	Notes
Rev.1	2022-09-29		