



Signal Plus Technology Co., Ltd.

SPECIFICATION FOR APPROVAL

DATE: 2024.11.04

REV.: A

CUSTOMER: _____

CUSTOMER P/N: _____

PART NAME: _____

External black WiFi 2.4GHz antenna with 1.37mm black cable, L=90mm,
with RF connector

SUPPLIER P/N: _____

6346F00002

Date:

Q'TY:

Pcs

CUSTOMER APPROVED BY		
Approved by	Checked by	Confirmed by

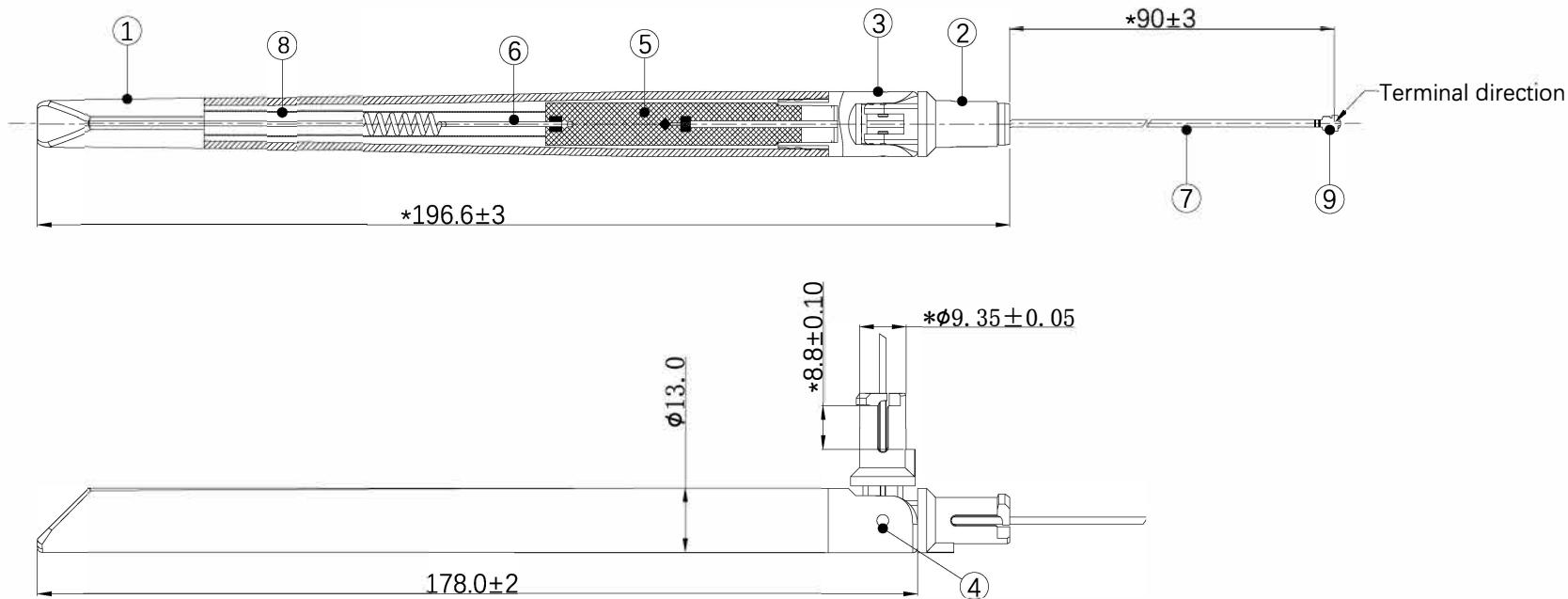
SUPPLIER SIGNATURE		
Approved by	Checked by	Prepared by
Andy		Cindy

ZX-QT-RD-0011-A1

Contents

<i>Item</i>	<i>Description</i>	<i>Page</i>
1.	Cover 1
2.	Content 2
3.	Drawing 3
4.	Antenna Test Report 4~8

REV	DATE	DESCRIPTION
X1	05/06-2023	New Issue



1.ELECTRICAL PROPERTIES:

- 1.1 Frequency Range.....2.4-2.5GHz
- 1.2 Impedance.....50 Ohm Nominal
- 1.3 VSWR.....2.0(Max)
- 1.4 Gain.....5.0 dBi

2.These Products are in conformity with ROHS 2.0;
3.With "*" Is Important Dimension.

NO	DESCRIPTION	Q'TY	REMARK
9	IPEX compatible Conn	1	
8	Plastic, transparent Tube	1	
7	Φ1.37 Cable, Black, Cable	1	
6	Brass Spring	1	403-1-0032
5	FR4, Black Ink PCB	1	501-1-0581(X1)
4	POM, Color:Black Rivet	2	
3	PC/PC+PBT, Color:Black Antenna Base	1	
2	PC/PC+PBT, Color:Black, anti-wind Antenna Base	1	
1	TPEE, Color:Black Antenna Body	1	

CUSTOMER'S SINGATURE	XXX.	±5.0	APPROVED	CUSTOMER:			
	XX.	±3.0		PART NO:			
	X.	±1.0	CHECKED	PART NAME: RF Antenna Assembly			
	.X	±0.5		Z&X P/NO: 6346F00002			
	.XX	±0.3	DRAWING	yzq	REV	UNIT	FILE:
					X1	mm	SHEET: 1/1



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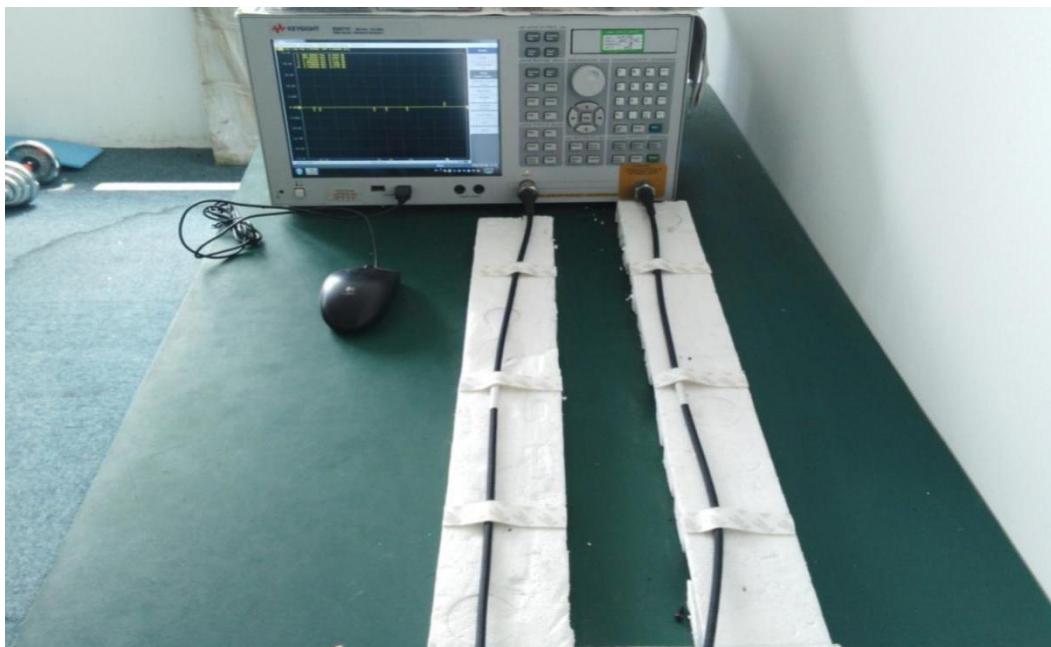
Antenna Test Report

1. RF Fixture Experiment

1.1 Test Setup

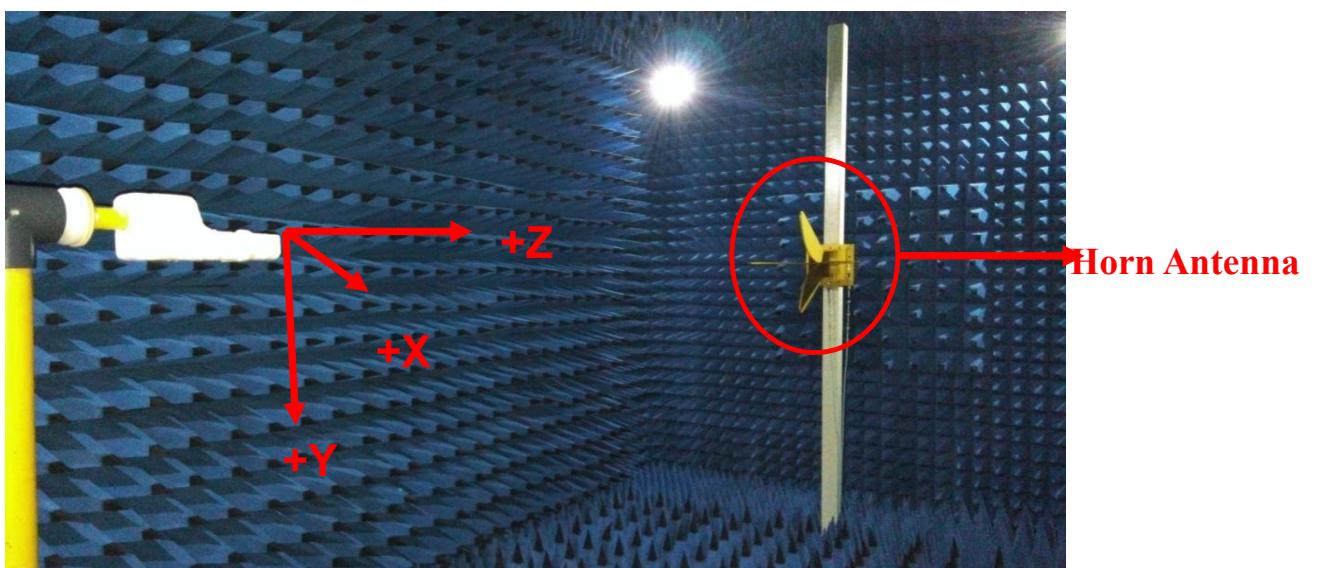
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S11) were performed using an KeySight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

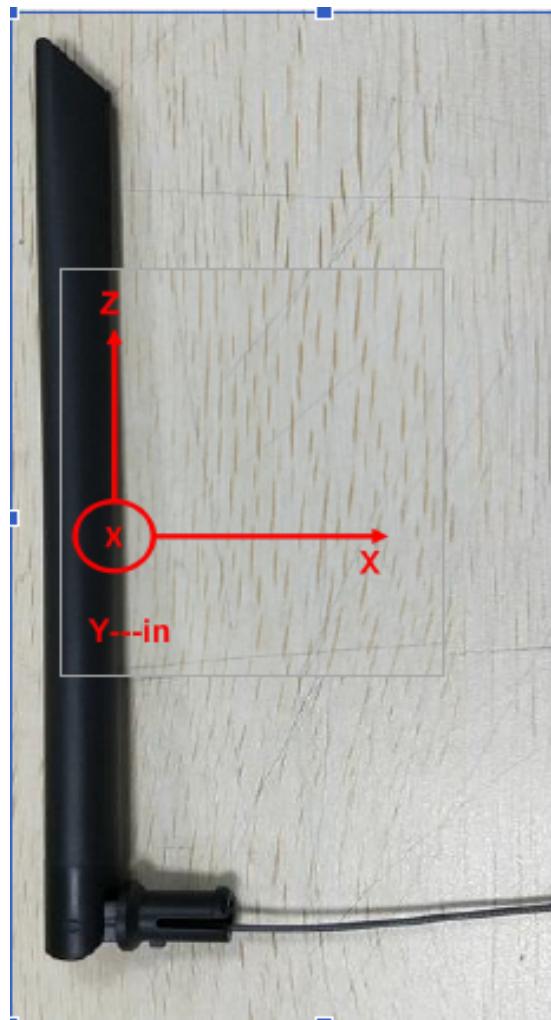


1.1.2 Anechoic Chamber Test Setup

The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: $7\text{m} \times 4\text{m} \times 3\text{m}$. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



2.Antenna Solution

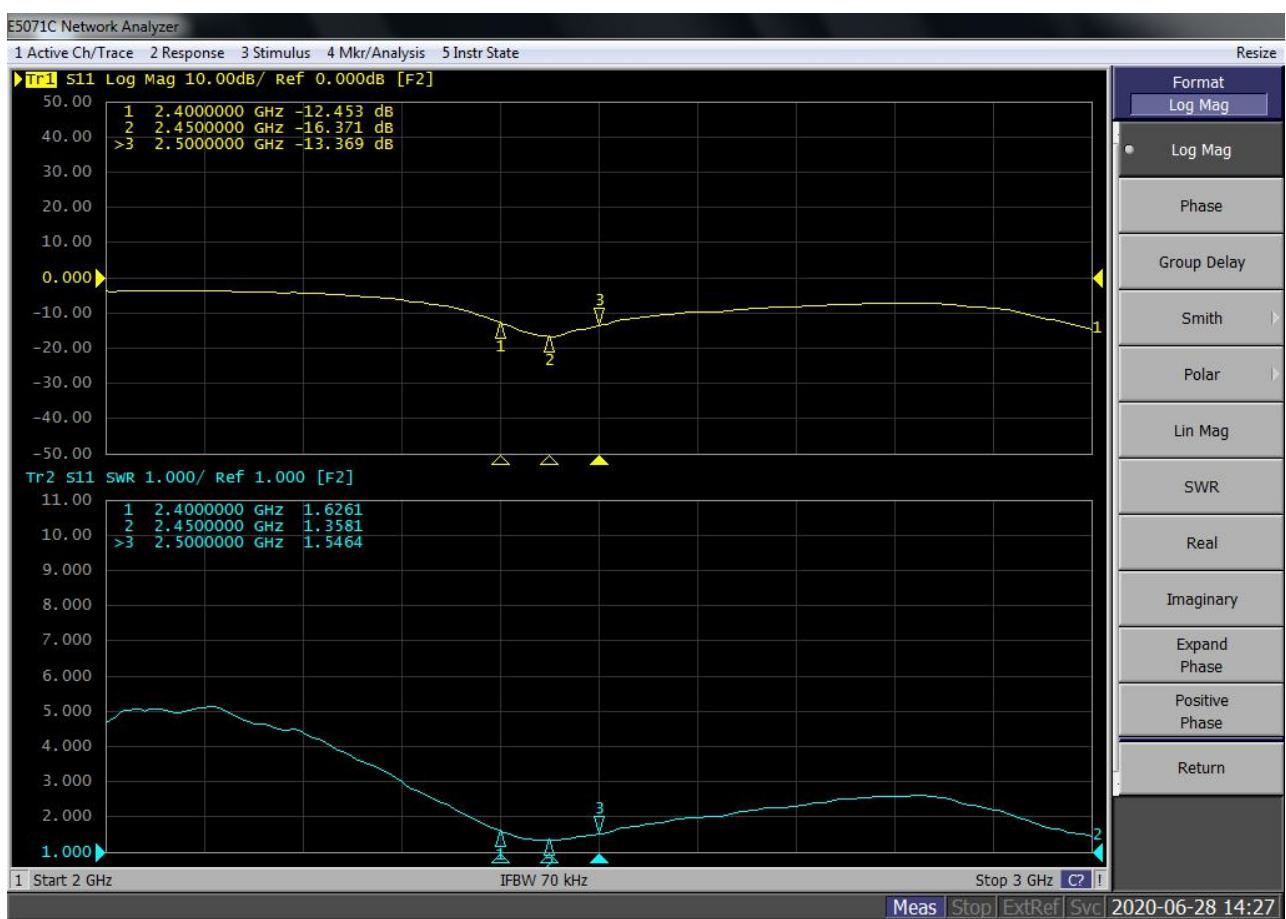


Data Preview

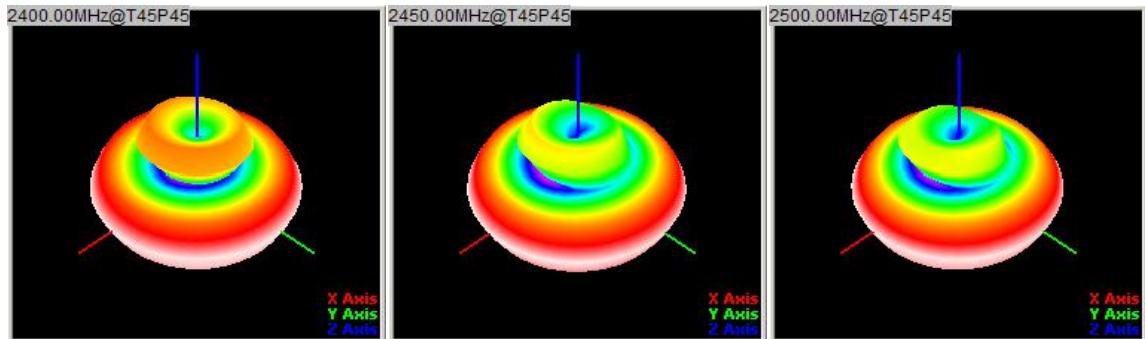
2.4G:

Freq.(MHz)	2400	2450	2500
VSWR	1.62	1.35	1.54
Gain(dBi)	5.07	5.45	5.21
Eff.	78.2%	79.3%	78.5%

S11



Radiation patterns:3D



Radiation patterns:2D

2450MHz

