



上海增信电子有限公司
Signal Plus Technology Co., Ltd.

规格承认书
SPECIFICATION FOR APPROVAL

日期
DATE: 2025.07.04

版本
REV.: A

客 户
CUSTOMER: 乐思

客 户 料 号
CUSTOMER P/N:

品 名
PART NAME: 内置2.4G FPC天线 1.13黑色线L=63mm with RF CONN for LITE BT项目

供 方 料 号
SUPPLIER P/N: 6302F00004

送样日期Date: 送样数量Q'TY: Pcs

客户确认CUSTOMER APPROVED BY		
核准 Approved by	审核 Checked by	确认 Confirmed by

供方确认SUPPLIER SIGNATURE		
核准 Approved by	审核 Checked by	拟制 Prepared by
Andy		Cindy

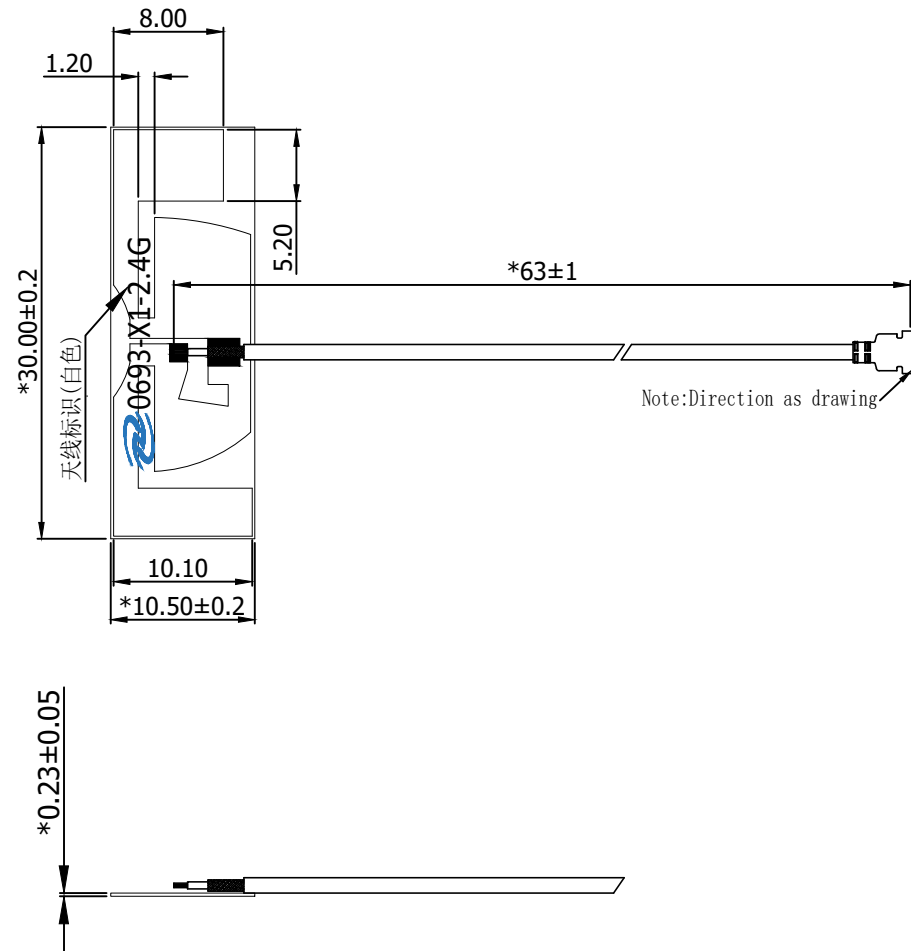
ZX-QT-RD-0011-A1

Add:上海市徐汇区桂箐路69号30栋603室

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REV	DATE	DESCRIPTION
X1	07-04-2025	New drawing



1.ELECTRICAL PROPERTIES:

- 1.1 Frequency Range...2.4~2.5GHz
- 1.2 Impedance.....50 Ohm Nominal
- 1.3 VSWR.....≤2.0@2.4~2.5GHz (tested in Device)
≤9.5@2.4~2.5GHz (tested in free space)

2.These Products are in conformity with ROHS2.0

3.Strict dimensions are marked with "*",and () for reference

4.The Connector complied with the 48-hour salt spray test

3	Connector	IPEX-1 compatible,Gold-Plated	1	
2	Cable	1.13 cable;Black	1	
1	FPC-antenna	FPC;Black	1	502-1-0693
NO	DESCRIPTION		Q'TY	REMARK

CUSTOMER'S SINGATURE	XXX.	±2.0	APPROVED	CUSTOMER:		
	XX.	±1.0		PART NO:		
	X.	±0.5	CHECKED	PART NAME: 2.4G antenna		
	.X	±0.3		Z&X P/NO: 6302F00004		
	.XX	±0.2	DRAWING	REV	UNIT	FILE:
	⊕	⊖		X1	mm	SHEET: 1/1



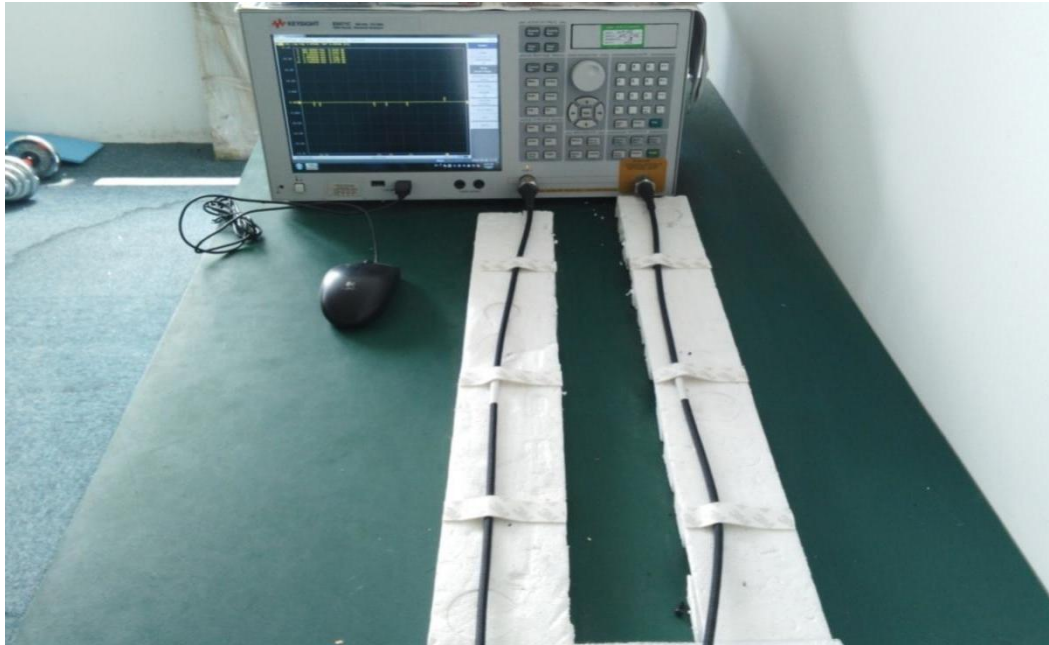
Antenna Test Report

1. RF Fixture Experiment

1.1 Test Setup

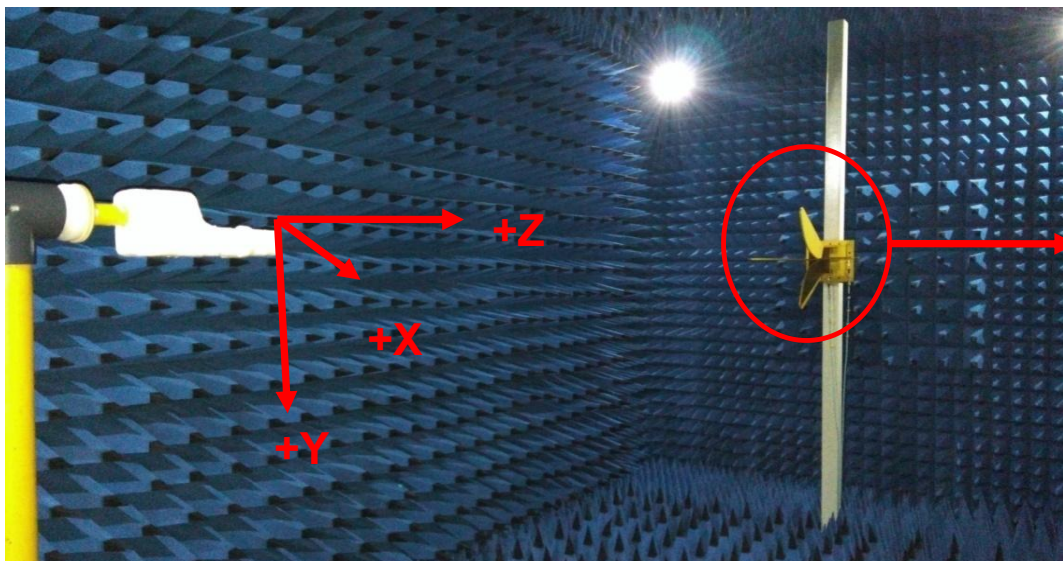
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (S_{11}) 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

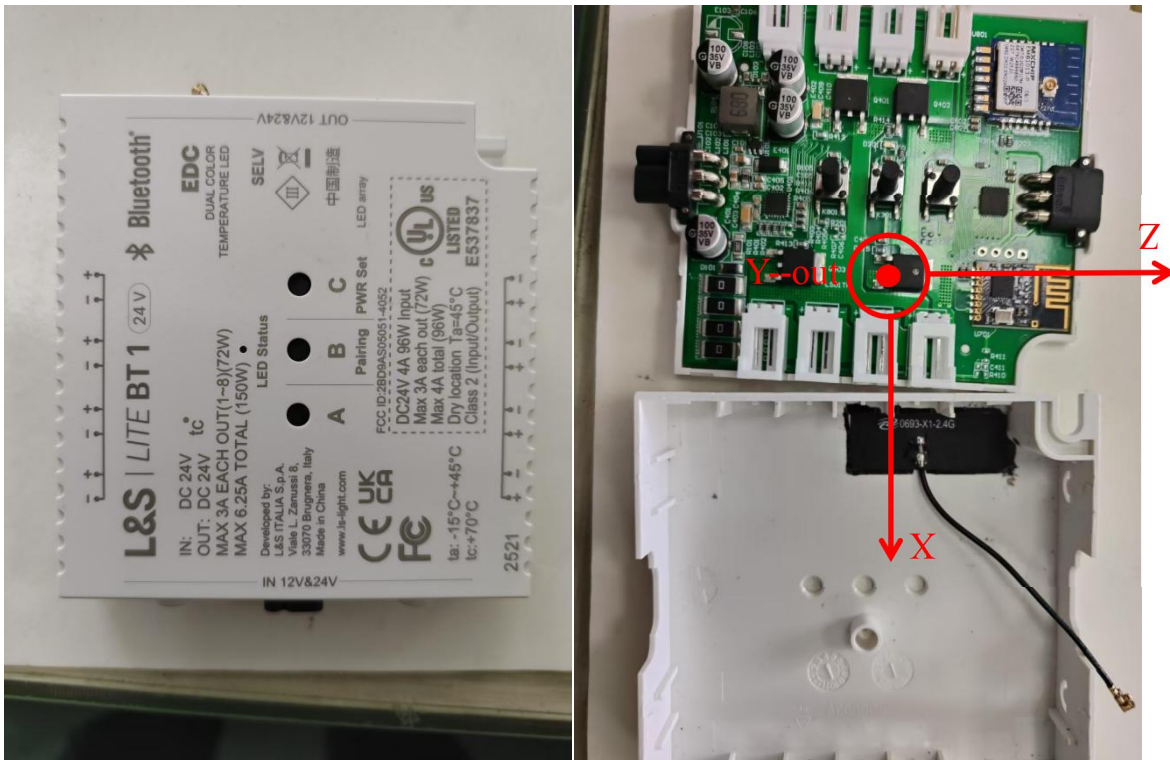
The gain of the antenna was measured in the anechoic chamber. The chamber provides less than -30 dB reflectivity from 400 MHz through 6 GHz. The chamber size is: 7m*4m*3m. The measurement results are calibrated using a leaky wave horn standard. We can measure the antenna gain and efficiency accurately.



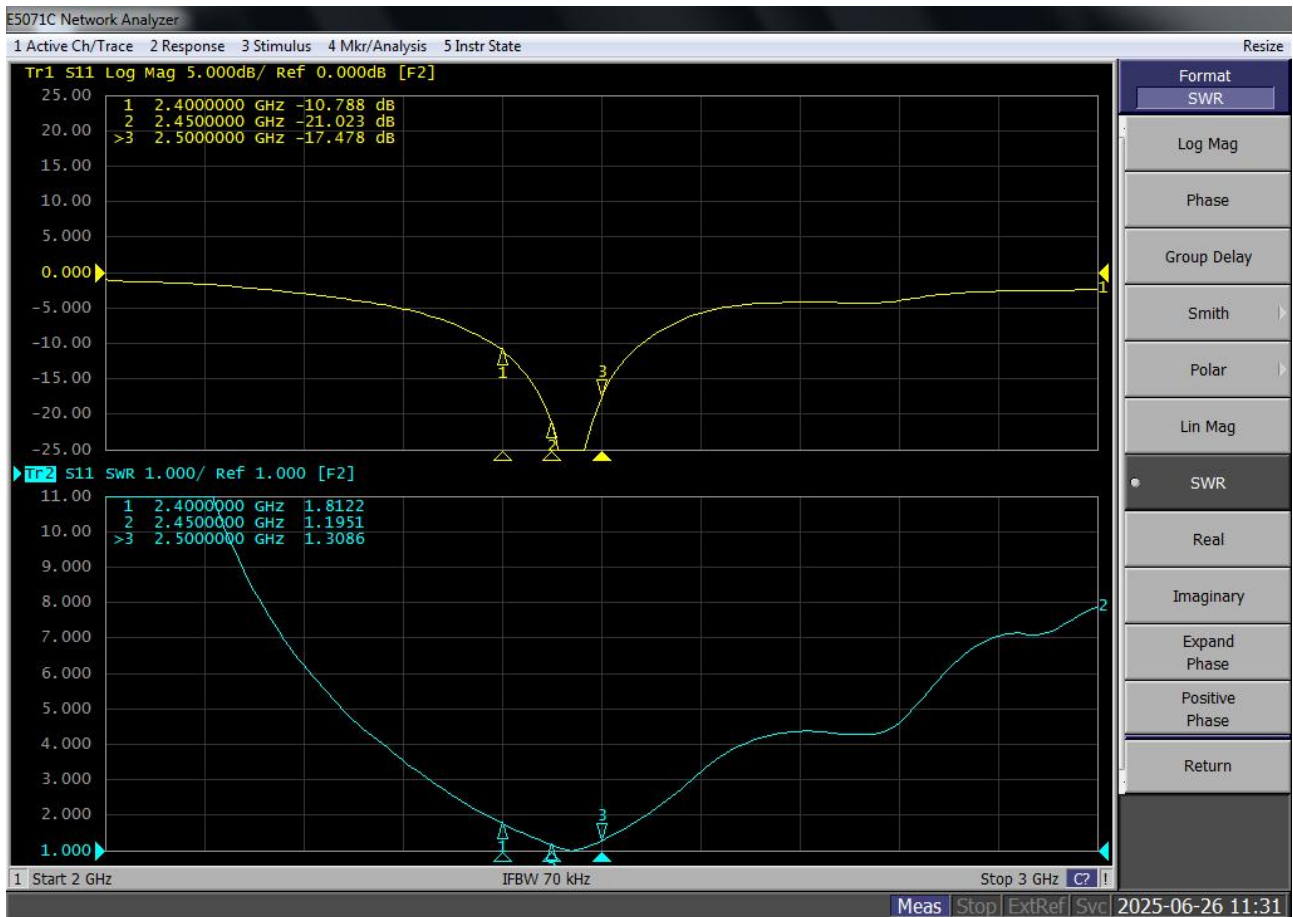
Data Preview

Freq.(MHz)	2400	2450	2500
VSWR	1.81	1.19	1.30
Gain(dBi)	1.80	2.06	2.46
Eff.%	58.4	64.3	58.2

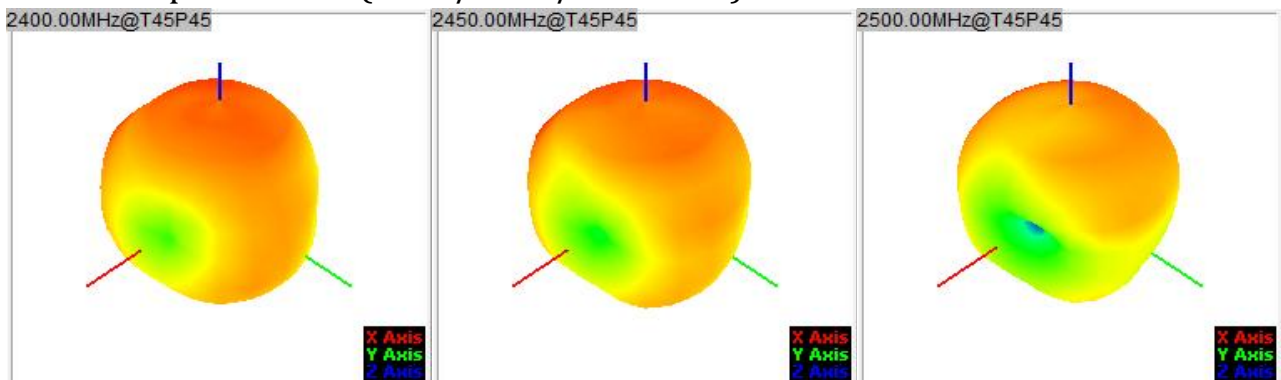
ANT Solution



S11



Radiation patterns:3D(2400/2450/2500MHz)



Radiation patterns:2D(2400/2450/2500MHz)

