



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: 2024.04.01

版本
REV.: A

客 户
CUSTOMER: 上海六联智能科技有限公司

客 户 料 号
CUSTOMER P/N:

品 名
PART NAME: 内置 2.4G&5G WiFi FPC天线, 0.81黑色普通线L=130mm with RF CONN(4代)
for DNB20主端口

供 方 料 号
SUPPLIER P/N: 6241F00021

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

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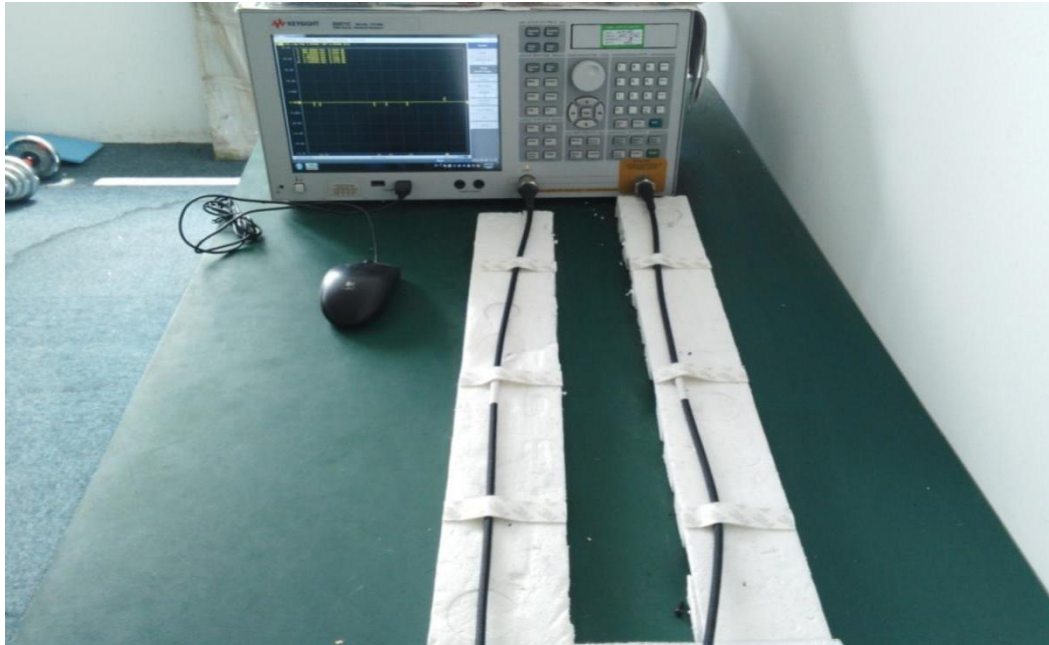
Antenna Test Report

1. RF Fixture Experiment

1.1 Test Setup

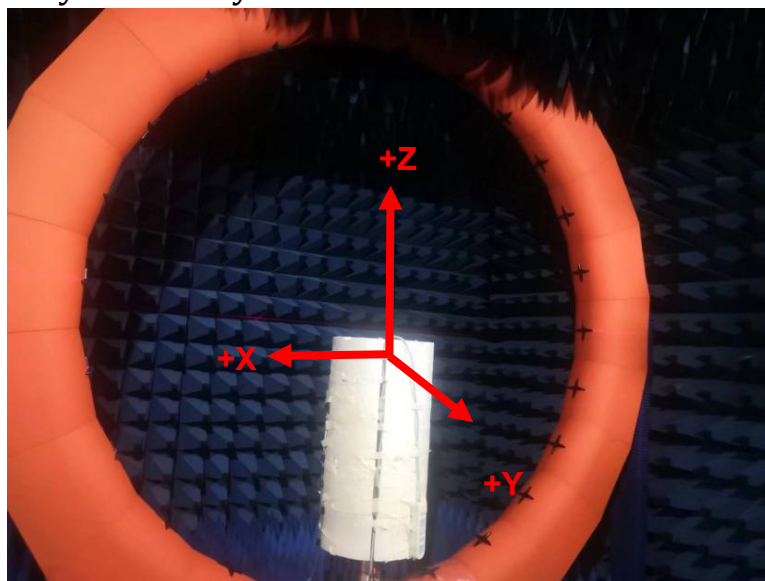
1.1.1 VNA Test Setup

VSWR and Return Loss measurements (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.

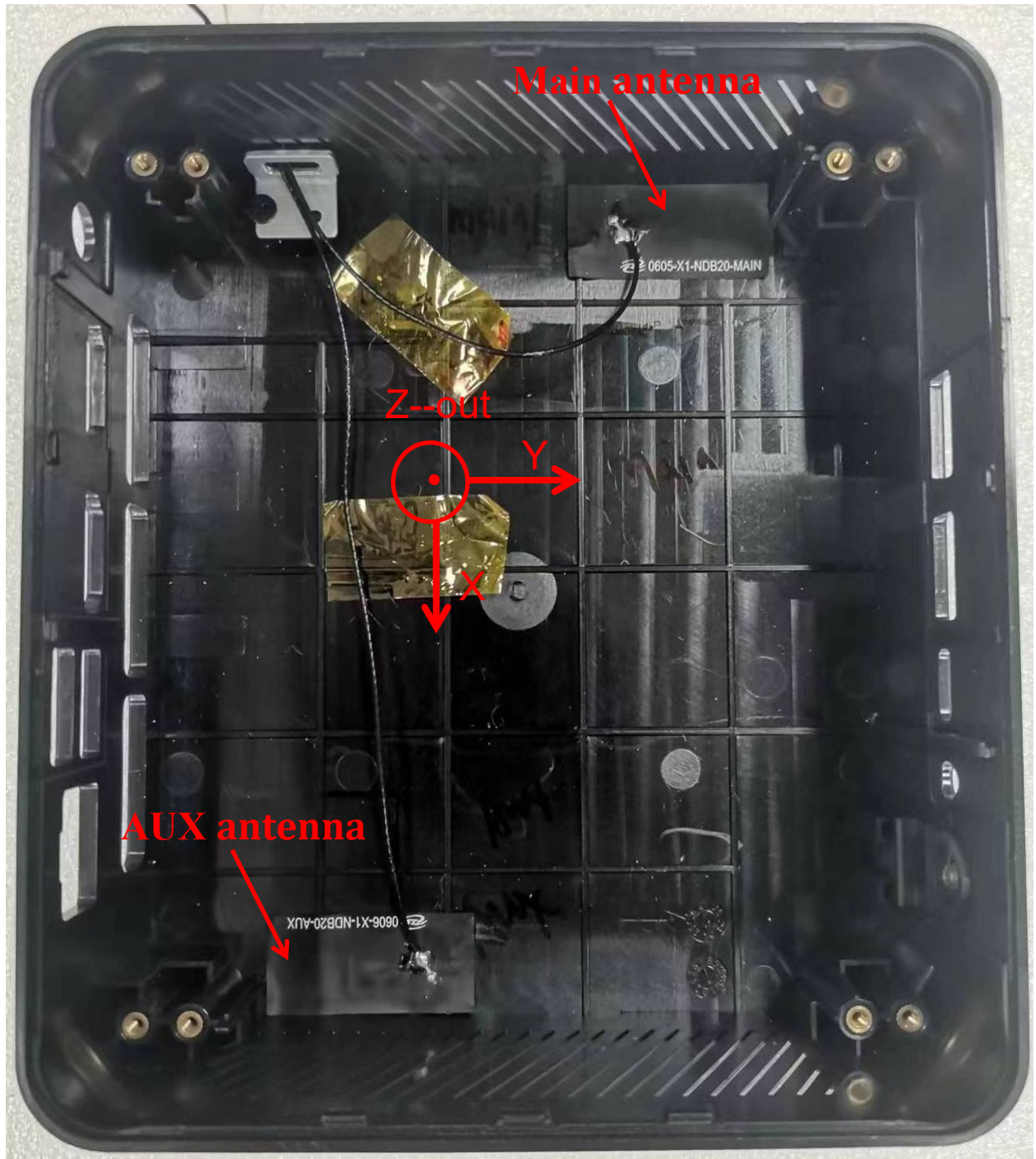


1.1.2 Anechoic Chamber Test Setup

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.



2. Antenna Solution



Data Preview

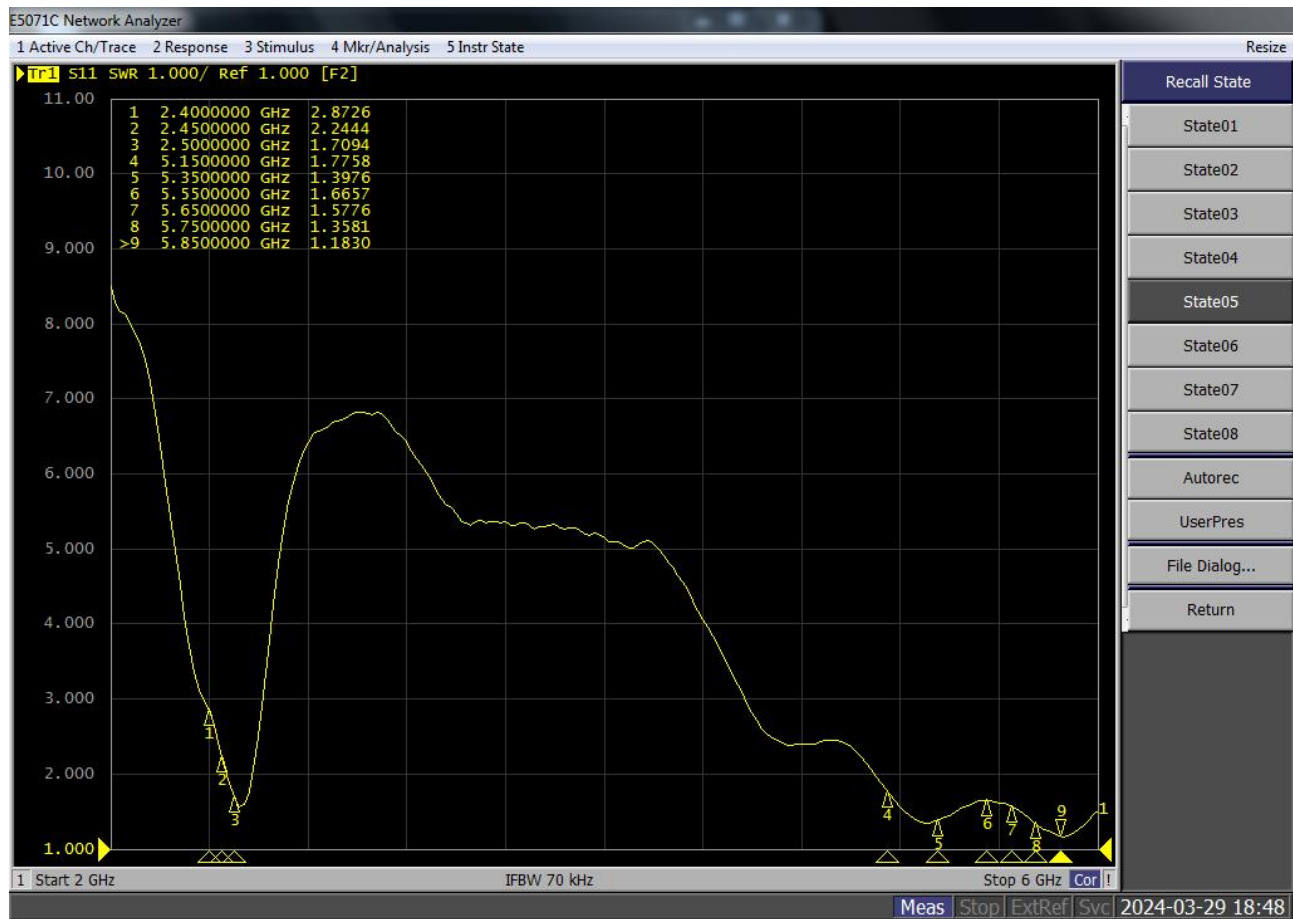
Main antenna

Freq.(MHz)	2400	2450	2500	5150	5350	5550	5750	5850
VSWR	2.87	2.24	1.70	1.77	1.39	1.66	1.35	1.18
Gain(dBi)	1.84	3.11	2.95	0.32	-1.32	-0.52	-0.91	-1.79
Eff.%	29.0	31.5	34.1	33.4	31.5	32.0	33.6	32.2

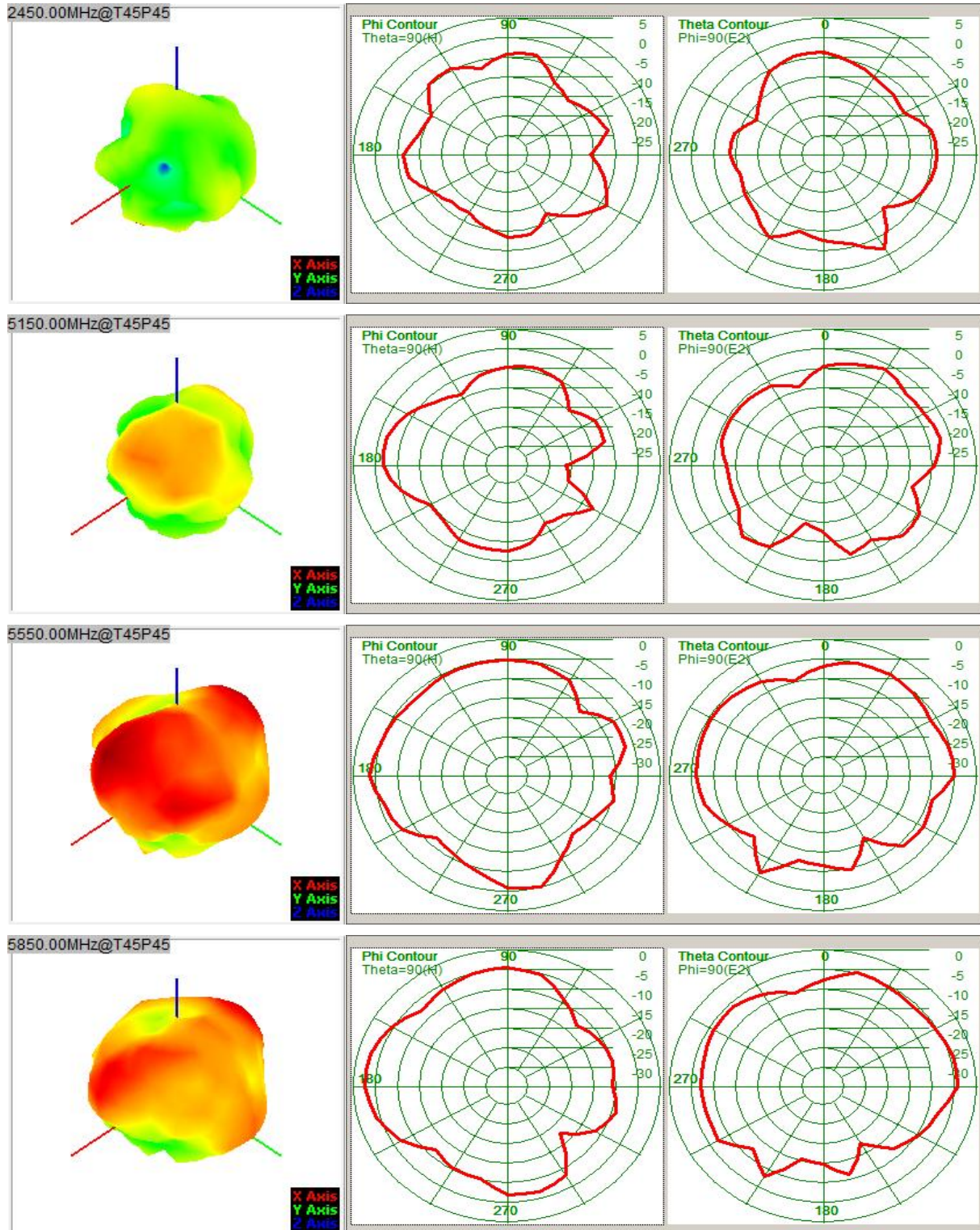
SWR and radiation patterns

Main antenna

S11



Radiation patterns:



4. Active data

Mode	Channel	TRP	TIS
5G 11a/54m	36	13.42	-66.01
	64	13.64	-65.21
	165	12.32	-68.65

Mode	channel	TRP	TIS
2.4G 11g/54m	1	12.32	-65.14
	6	12.2	-65.96
	11	12.03	-66.31