

# 规 格 承 认 书

## SPECIFICATION FOR APPROVAL

日期

DATE: 2023.12.12

版本

REV.: V1.0

客 户  
CUSTOMER:

Asiatelco Technologies Co.  
德明通讯（上海）股份有限公司

客 户 料 号  
CUSTOMER P/N:

品 名  
PART NAME:

FT7200 WiFi&BLE Antenna

供 方 料 号  
SUPPLIER P/N:

送样日期 Date:

送样数量 Q'TY:

Pcs

### 客户确认 CUSTOMER APPROVED BY

工程研发部 ENGINEER R&D DEPT	生产采购部 BUSSINESS DEPT	承认 APPROVED BY

### 供方确认 SUPPLIER SIGNATURE

研发部 ENGINEER R&D DEPT	工程部 ENGINEER R&D DEPT	批准 APPROVAL

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# 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 teste. The testing was performed with apparatus in free space.



### 1.1.2 Anechoic Chamber Test Setup

When we test Gain and Efficiency of the antenna, we will use the Multi-Probe OTA Measurement System 3D chamber.

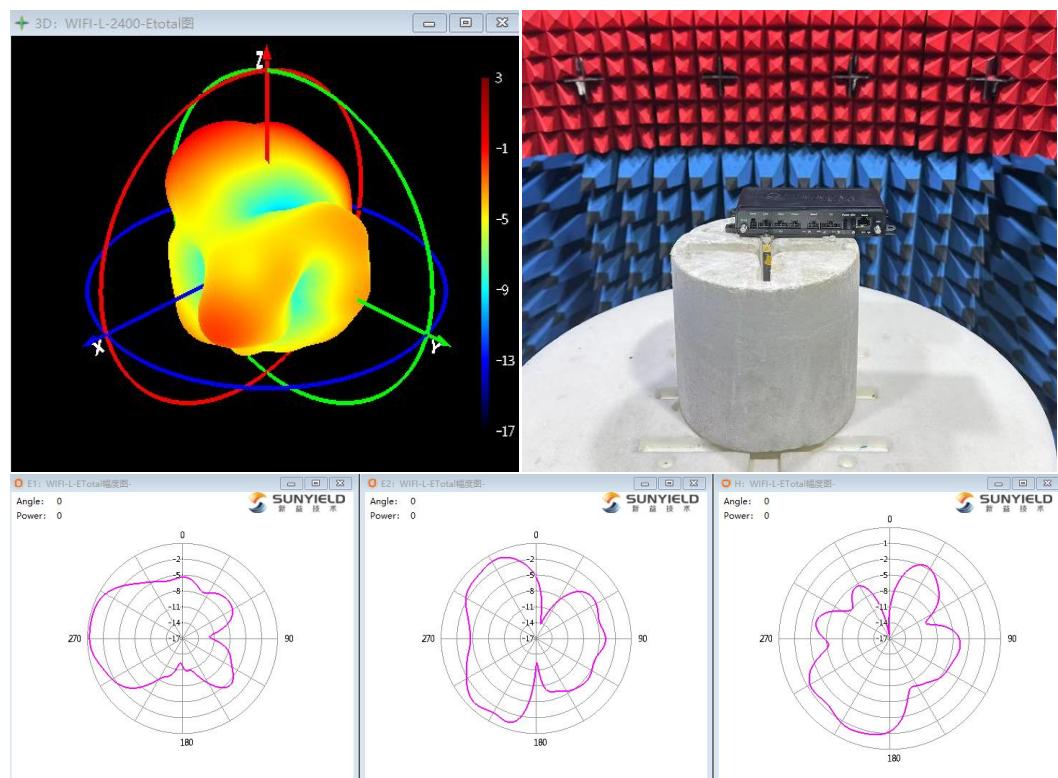
The chamber provides test frequency from 400MHz to 6GHz. The real test environment is showing as following picture



## 2. Test result

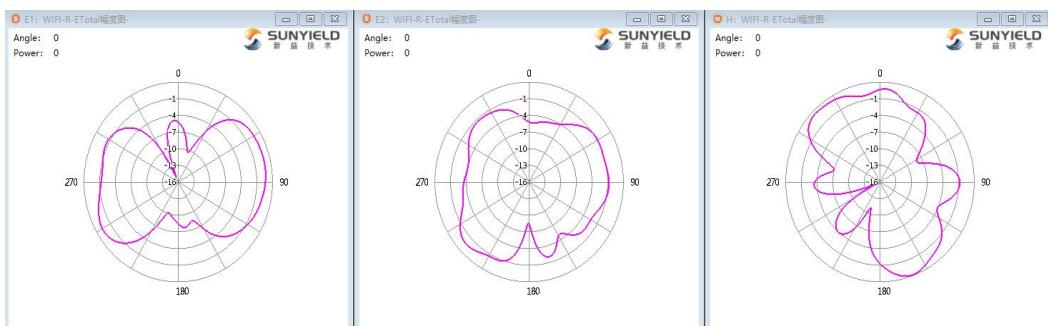
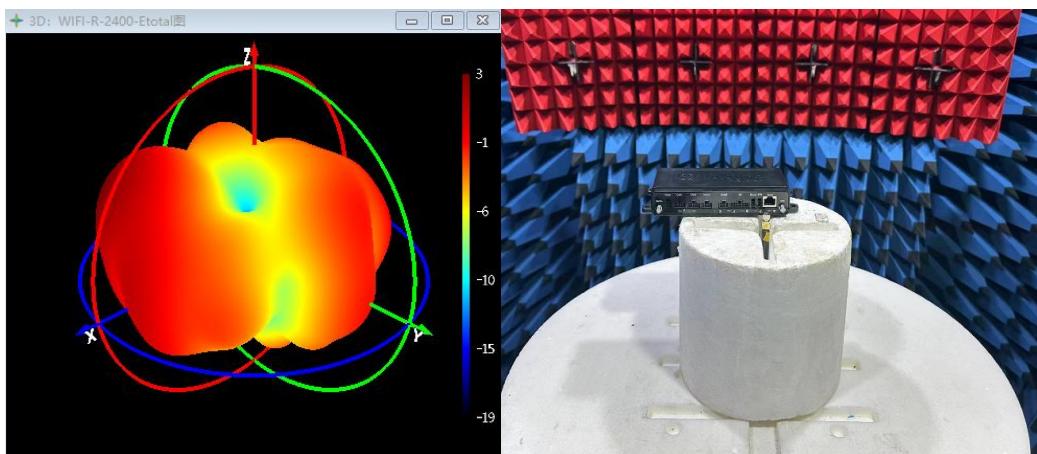
### 2.1 WiFi antenna test data

FT7200 WiFi Antenna			
频率(MHz)	增益(dBi)	效率(dB)	效率(%)
2400	2.03	-2.6	54.95
2410	1.47	-3.3	46.79
2420	1.23	-3.58	43.89
2430	1.83	-2.95	50.72
2440	1.81	-2.9	51.27
2450	1.14	-3.5	44.71
2460	0.98	-3.66	43.06
2470	1.09	-3.55	44.16
2480	1.45	-3.12	48.77
2490	1.41	-3.14	48.54
2500	0.34	-4.15	38.44



## 2.2 BLE antenna test data

FT7200 BLE Antenna			
频率(MHz)	增益(dBi)	效率(dB)	效率(%)
2400	2.4	-1.64	68.47
2410	2.23	-1.75	66.81
2420	2.32	-1.59	69.39
2430	2.4	-1.51	70.68
2440	1.99	-1.74	66.98
2450	1.67	-1.79	66.16
2460	1.71	-1.6	69.13
2470	1.86	-1.46	71.37
2480	2.27	-1.38	72.75
2490	2.4	-1.5	70.73
2500	2.52	-1.52	70.45



### 3. WIFI & BT antenna

#### 3.1 WiFi & BT antenna photo

