



规格承认书

SPECIFICATION FOR APPROVAL

日期
DATE: 2024.03.20

版本
REV.: V1.0

客 户
CUSTOMER: Asiatelco Technologies Co.

客 户 料 号
CUSTOMER P/N:

品 名
PART NAME: SD-D04-BT Antenna

供 方 料 号
SUPPLIER P/N: RQ03B140710-BT

送样日期 Date: 送样数量 Q'TY: Pcs

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

供方确认 SUPPLIER SIGNATURE		
研发部	工程部	批准
ENGINEER R&D DEPT	ENGINEER R&D DEPT	APPROVAL
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1. RF Fixture Experiment

1.1 Test Setup

1.1.1 VNA Test Setup

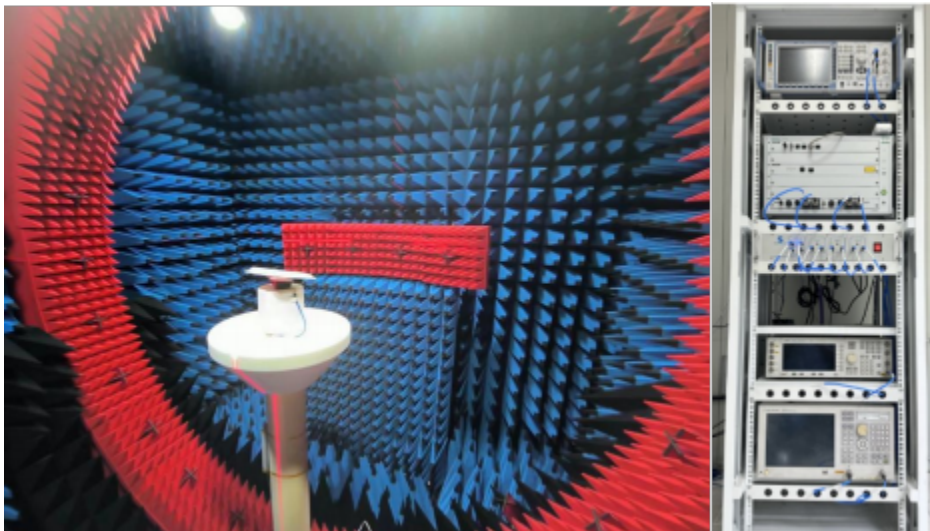
VSWR and Return Loss measurements (S_{11}) were performed using an Keysight E5071C Network Analyzer. The isolation between antennas is also tested. The testing was performed with apparatus in free space.

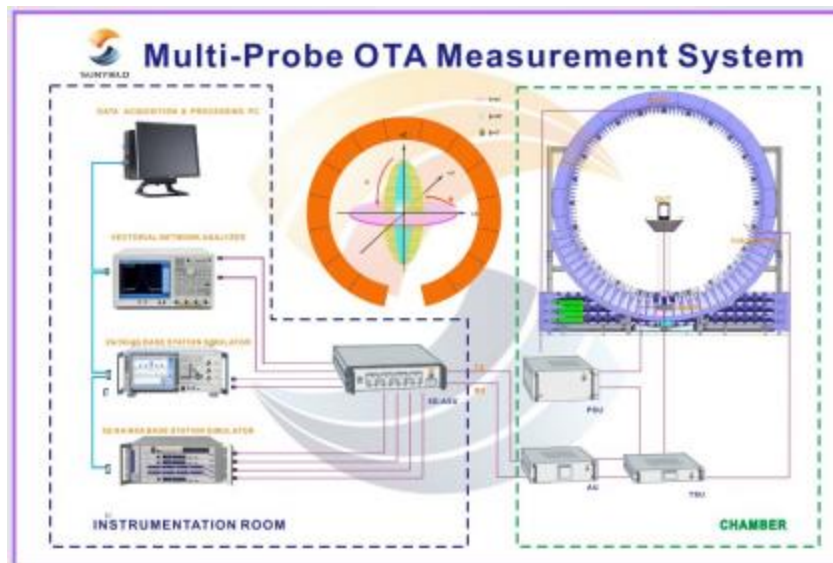


1.1.2 Anechoic Chamber Test Setup

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





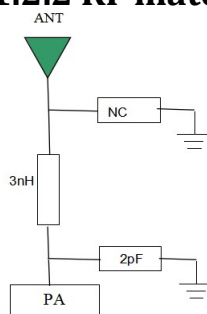
1.2 UE configuration

1.2.1 Antenna location pictures



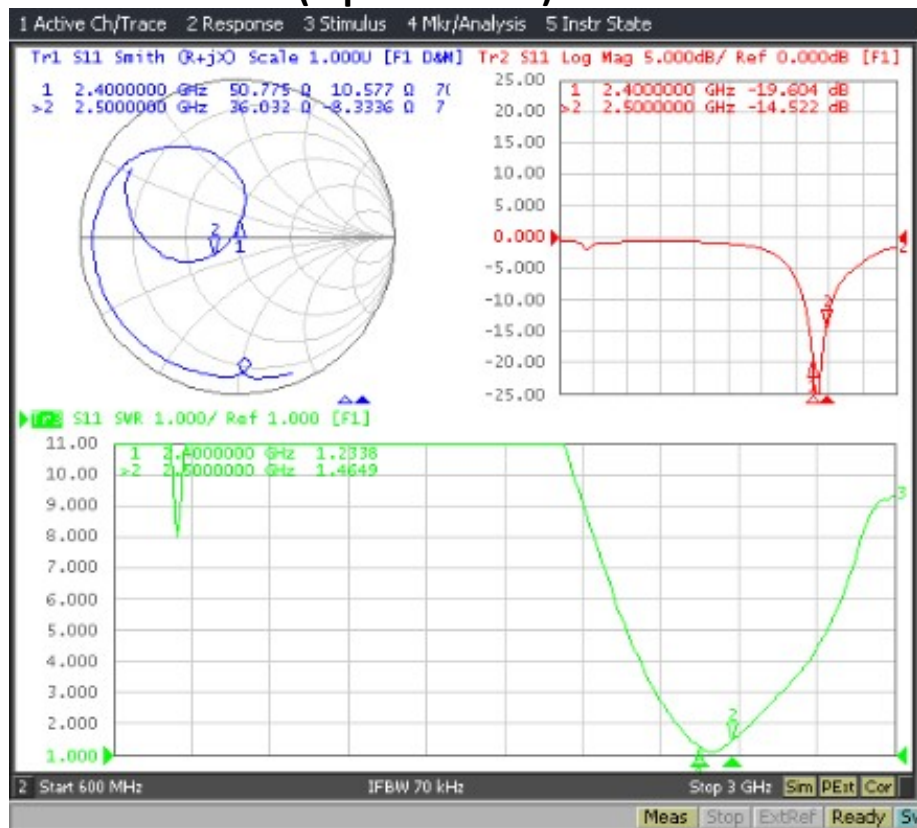
On the top is the BT antenna, welded to the PCB board.

1.2.2 RF matching for different antennas



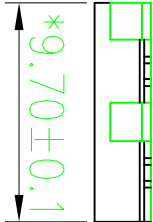
2. Test Result

2.1 Passive Test Result(S parameters)



BT			
frequency (MHz)	gain (dBi)	efficiency (dB)	efficiency (%)
2400	4.26	-2.41	57.47
2410	4.7	-1.95	63.9
2420	4.66	-2.04	62.49
2430	4.61	-2.16	60.75
2440	4.69	-1.91	64.46
2450	4.6	-1.66	68.21
2460	4.53	-1.68	67.94
2470	4.43	-1.71	67.38
2480	4.52	-1.69	67.72
2490	5.1	-1.65	68.41
2500	5.75	-1.49	70.94

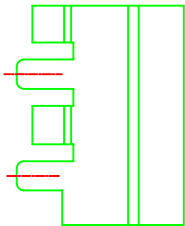
ROHS



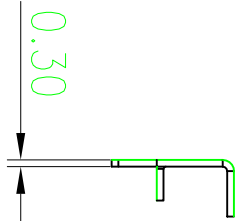
2.50±0.1

2.00±0.1

5.43±0.1



展平图



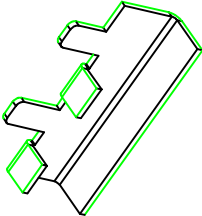
3.03±0.1

7.53±0.1

1.30

4.50±0.1

1.80±0.1



技术要求:

- 1.天线材质为：洋白铜，厚度为0.3mm；
- 2.打*为重点尺寸公差±0.05；
- 3.表面不得有油污、划痕及压印等外观不良；
- 4.所有材料符合环保ROHS标准。

备注：本图纸由深圳市瑞强通信有限公司内部发行

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日期	修 改 内 容	版 本	修 订
1	2	3	4

				深 圳 市 瑞 强 通 信 有 限 公 司			
RF PA		机 种		SD-04		日期	
0~10		±0.10		SD-04-BT-V1.0		2023.12.14	
10~20		±0.12		料 号		设计	
20~40		±0.15		RQ03B140710-BT		审核	
40~50		±0.20		材 质		结构	
		∠		表面处理		射频	
		∠		模面处理		确认	
		位置		外观处理		单位	
		5		6		7	
						mm	
						比例	
						FIT	
						版本	
						VI	