ONE PLUS ONE
Wireless Communication

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承认书

APPROVAL SHEET

客户 Customer	爱保护 SHENZHEN SMART CARE TECHNOLOGY LIMITED
项目名 Project	SPORT4
料号 Part NO.	
规格 Specification	BT 5.1 Antennas

APPROVAL			
OnePlusOne:			
RF Check	ME Check	QC Check	Confirm By
Customer:			
EE Check	PM Check	QC Check	Confirm By

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Date:	Revision:	Updates and changes:	Issued by:
2023.7.15	A	Initial sheet	Haiou.Zhu

Contents

1 Antenna description

It summarize BT 5.1antennas for project SPORT4 antenna's frequency band is 2400-2500MHz. BT 5.1 antenna's type is Monopole

1.1 Part number

Part number of antenna：**SPORT4**

1.2 Antenna pictures

See test report

2 Electrical Performance

2.1 Specification

BT	
Frequency Range	2400MHz~2500MHz
Return Loss	<-5
Efficiency	>25

2.2 Measurement Set-up

2.2.1 VSWR and Return Loss

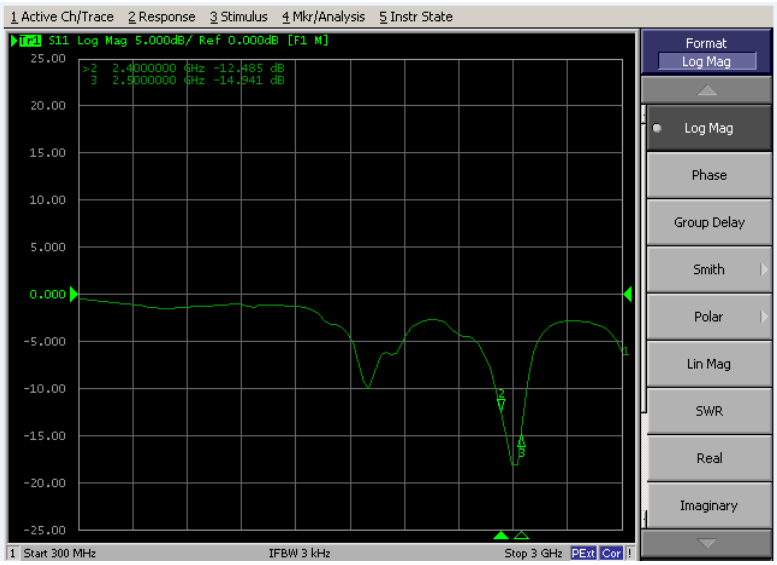
VSWR measurements (S_{11}) were performed using an Agilent ENA series Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

2.2.2 Efficiency and Gain

The gain of the antenna was measured in OPO's 3D anechoic chamber in Shenzhen, China. The chamber is a ETS system capable of doing tests from 380MHz to 6GHz. Coaxial chokes on the feed cable were used to mitigate surface currents during passive tests. The measurement results are calibrated using dipole standards. For TRP and TIS the chamber uses a 8960 / MT8820C to establish the connection with the mobile device and read the power.

3 Reference measurement data

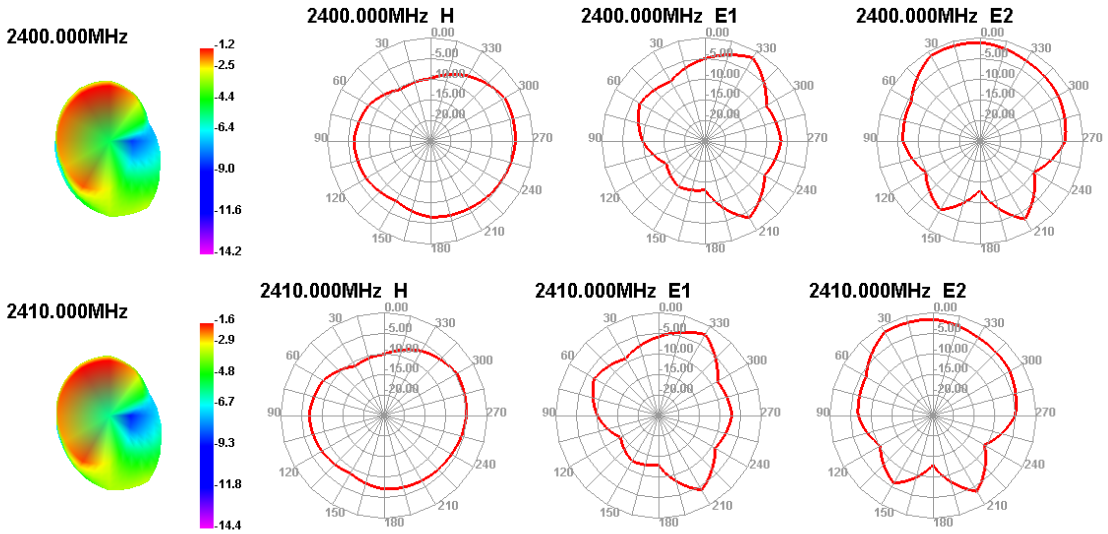
3.1 Passive



Return SWR

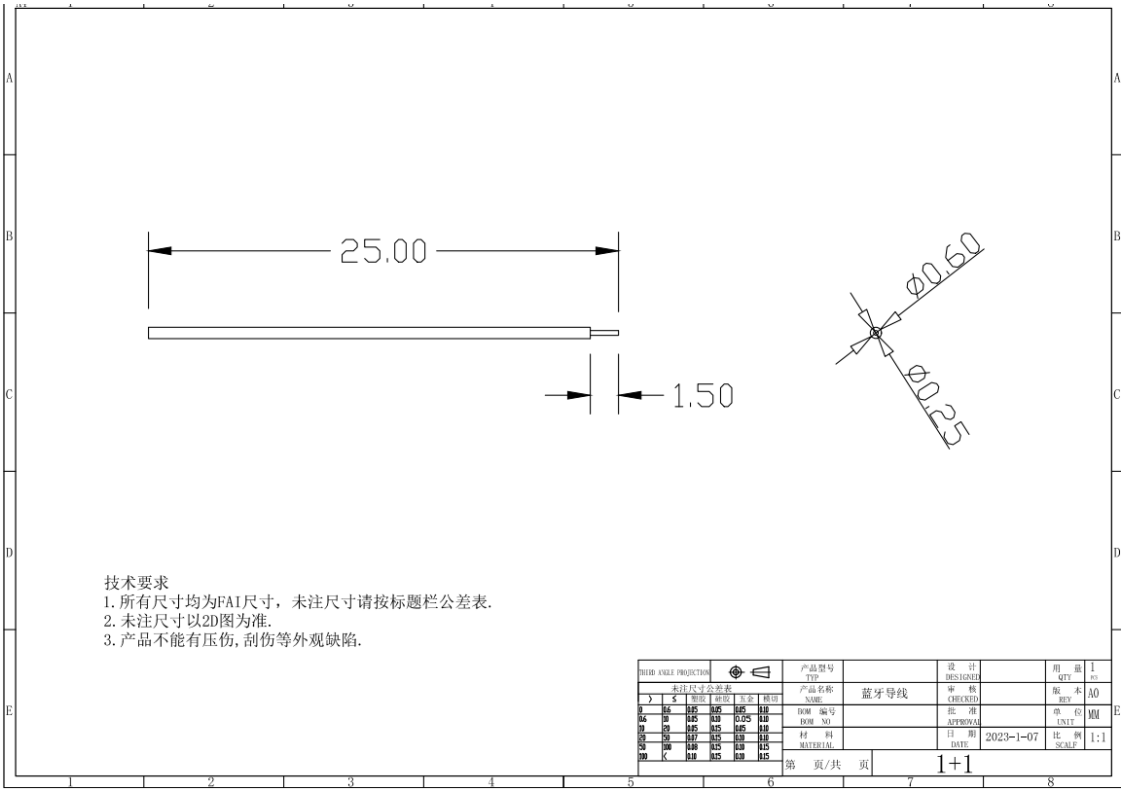
3.2 Active

Passive Test For BT			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	25.67	-5.91	-1.16
2410	23.08	-6.37	-1.63
2420	22.4	-6.5	-1.69
2430	18.61	-7.3	-2.48
2440	22.47	-6.48	-1.59
2450	19.74	-7.05	-2.16
2460	23.88	-6.22	-1.29
2470	18.07	-7.43	-2.76
2480	22.83	-6.41	-1.88
2490	18.32	-7.37	-3.07
2500	20.56	-6.87	-2.96



4 Mechanical description

4.1 Drawings



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