

深圳市一加一无线通讯技术有限公司

承认书 **APPROVAL SHEET**

客户	
Customer	
项目名	
Project	SW-1U
料号	
Part NO.	
规格	
Specification	BT Antennas

	APPR	OVAL	
OnePlusOne:			
RF Check	ME Check	QC Check	Confirm By
Customer:			
EE Check	PM Check	QC Check	Confirm By

承认鉴章后请寄回承认书一份 Please return to us one copy of "APPROVAL SHEET" with your approved signatures

Project:SW-1U		File Name:
Date:2024-9-15	Haiou.Zhu	SW-1U_APP_A.doc
Revision:	A	
	CONFI	DENTIAL
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

Date:	Revision:	Updates and changes:	Issued by:
2024-9-15	A	Initial sheet	Haiou.Zhu

Contents

1 ANTENNA DESCRIPTION	1-3
1.1 Part number	1-3
1.2 1-3	
2 ELECTRICAL PERFORMANCE	2-3
2.1 Specification	2-3
2.2 Measurement Set-up	2-3
3 REFERENCE MEASUREMENT DATA	3-4
3.1 Passive	3-4
3.2 Active	3-4

Project:SW-1U	Author:	File Name:
Date:2024-9-15	Haiou.Zhu	SW-1U_APP_A.doc
Revision:	A	
	CON	FIDENTIAL
Shenz	then OnePlusOne Wireles	s Communication Technology Co.,Ltd.

1 Antenna description

It summarize for project R23.BT antenna's frequency band is 2400-2500MHz.BT antenna's type is IFA.

1.1 Part number

Part number of antenna: Antennapictures

1.2 Antenna pictures



2 Electrical Performance

2.1 Specification

ВТ		
Frequency Range	2400MHz~2500MHz <-5	
Return Loss	>22%	
Efficiency		

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.

Project:SW-1U	Author:	File Name:
Date:2024-9-15	Haiou.Zhu	SW-1U_APP_A.doc
Revision:	A	
	CONFI	DENTIAL
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

3 Reference measurement data

3.1 Passive

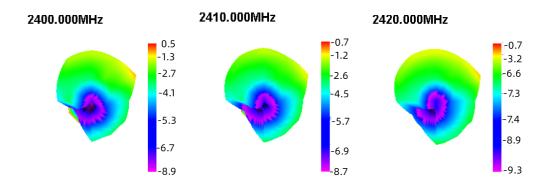
BT ReturnLoss



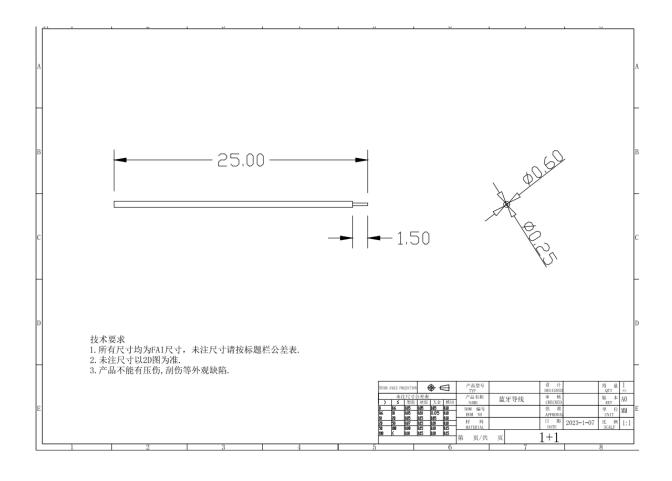
3.2 Active

Passiv	ve Test Fo	or BT	
Freq	Effi	Effi	Gain
(\mathtt{MHz})	(%)	(dB)	(dBi)
2400	20.11	-6.97	0.58
2410	19.79	-7.04	-0.74
2420	22.47	-6.48	-0.85
2430	20.84	-6.81	-0.68
2440	20.91	-6.80	-0.69
2450	19.74	-7.05	-1.16
2460	23.83	-6.23	0.3
2470	20.19	-6.95	-2.03
2480	20.6	-6.86	-1.41
2490	20.43	-6.90	-2.5
2500	19.89	-7.01	-1.73

Project:SW-1U	Author:	File Name:
Date:2024-9-15	Haiou.Zhu	SW-1U_APP_A.doc
Revision:	A	
	CONFI	DENTIAL
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		



4 Mechanical description 4.1 Drawings



Project:SW-1U		File Name:
Date:2024-9-15	Haiou.Zhu	SW-1U_APP_A.doc
Revision:	A	
	CONFI	DENTIAL
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		