



ONE PLUS ONE
Wireless Communication

深圳市一加一无线通讯技术有限公司

承认书

APPROVAL SHEET

客户 Customer	电小酷
项目名 Project	SW2-BK
料号 Part NO.	
规格 Specification	WIFI Antennas

APPROVAL			
OnePlusOne:			
RF Check	ME Check	QC Check	Confirm By
PASS	PASS	PASS	
Customer:			
EE Check	PM Check	QC Check	Confirm By
Defu Chen	Riqing Sun	Bowen Liang	Yu Zhang

承认签章后请寄回承认书一份

Please return to us one copy of "APPROVAL SHEET" with your approved signatures

Project: SW2-BK	Author: Haiou.Zhu	File Name: SW2-BK_APP_A.doc
Date: 2022-08-11		
Revision:	A	
CONFIDENTIAL		
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

Date:	Revision:	Updates and changes:	Issued by:
2022-08-11	A	Initial sheet	Haiou.Zhu

Contents

1 ANTENNA DESCRIPTION	3
1.1 Part number	3
1.2 3	
2 ELECTRICAL PERFORMANCE	3
2.1 Specification	3
2.2 Measurement Set-up	3
2.2.1 VSWR and Return Loss	3
2.2.2 Efficiency and Gain	3
3 REFERENCE MEASUREMENT DATA	4
3.1 Passive	4
3.2 Active	5
4 MECHANICAL DESCRIPTION	6
4.1 Drawings	6

Project: SW2-BK	Author: Haiou.Zhu	File Name: SW2-BK_APP_A.doc
Date: 2022-08-11		
Revision:	A	
CONFIDENTIAL		
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

1 Antenna description

It summarize **Main and WIFI** antennas for project **SW2-BK**. **WIFI** antenna's frequency band is **2400-2500MHz**. **WIFI** antenna's type is **IFA**.

1.1 Part number

Part number of antenna: **SW2-BK-WIFI**

1.2 Antenna pictures



2 Electrical Performance

2.1 Specification

WIFI	
Frequency Range	2400MHz~2500MHz
Return Loss	<-5
Efficiency	>35%

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.

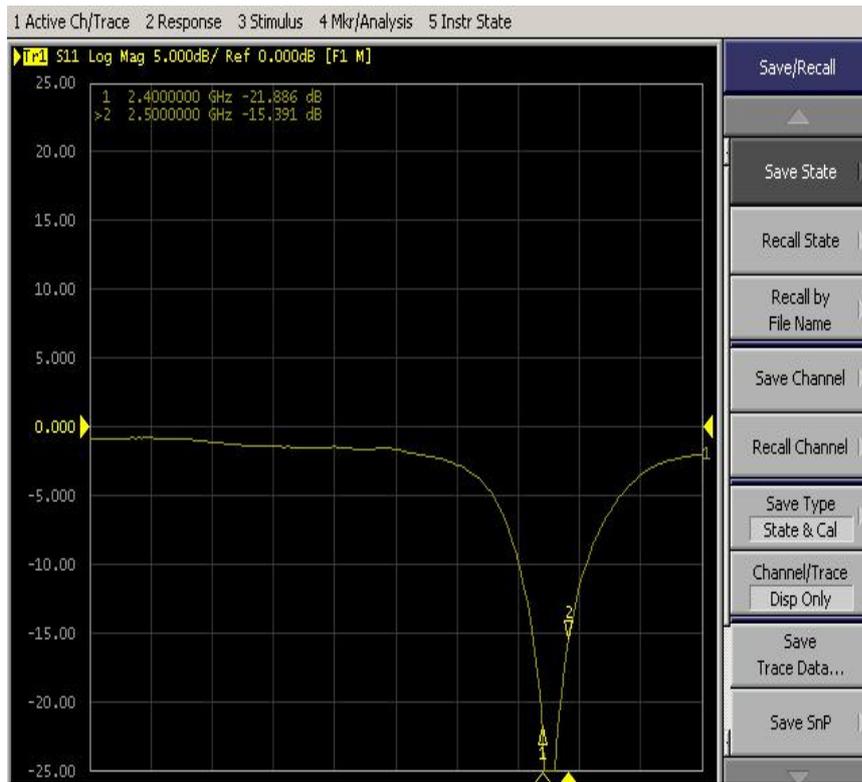
2.2.2 Efficiency and Gain

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: SW2-BK	Author: Haiou.Zhu	File Name: SW2-BK_APP_A.doc
Date: 2022-08-11		
Revision:	A	
CONFIDENTIAL		
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

3 Reference measurement data

3.1 Passive



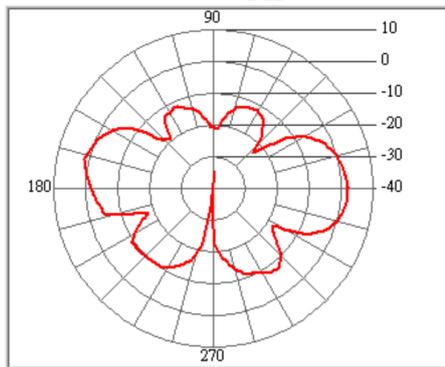
WIFI Return Loss

Project: SW2-BK	Author: Haiou.Zhu	File Name: SW2-BK_APP_A.doc
Date: 2022-08-11		
Revision:	A	
CONFIDENTIAL		
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

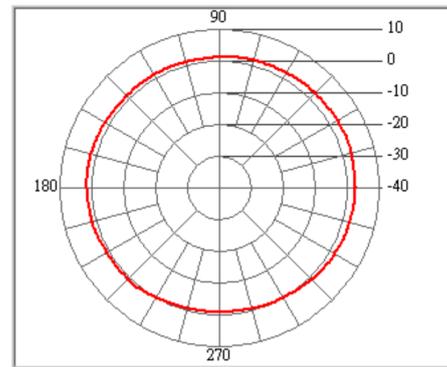
3.2 Active

Frequency: 2400-2450MHz		
Fre.(MHz)	Efficiency(%)	Gain(dBi)
2400	49.43%	2.00
2500	49.25%	1.95

2400MHz



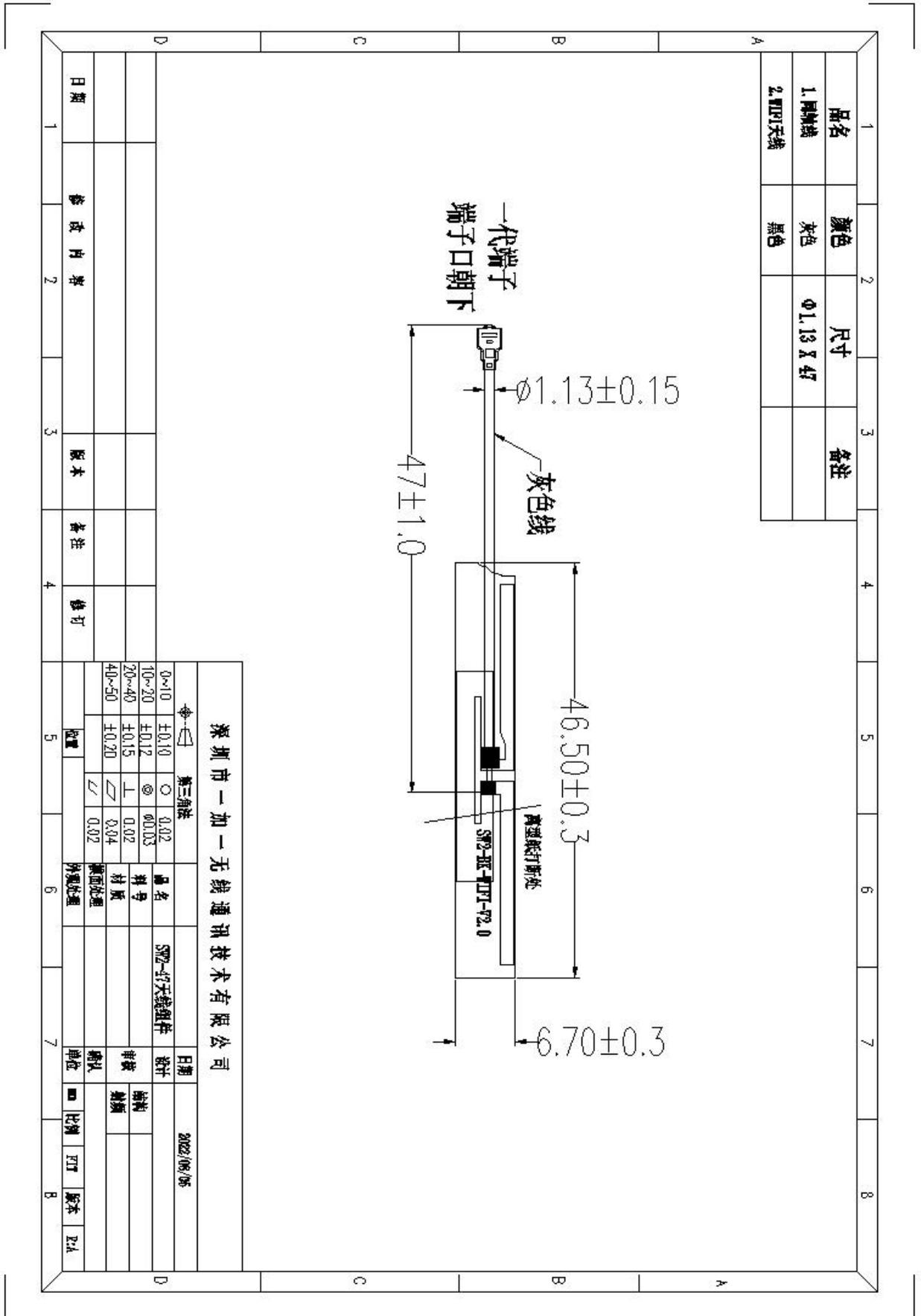
2500MHz



Project: SW2-BK	Author: Haiou.Zhu	File Name: SW2-BK_APP_A.doc
Date: 2022-08-11		
Revision:	A	
CONFIDENTIAL		
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		

4 Mechanical description

4.1 Drawings



Project: SW2-BK	Author: Haiou.Zhu	File Name: SW2-BK_APP_A.doc
Date: 2022-08-11		
Revision:	A	
CONFIDENTIAL		
Shenzhen OnePlusOne Wireless Communication Technology Co.,Ltd.		