

Test Report

Name of the buyer: Jiangsu Austin Optoelectronic Technology Co., Ltd

Buyer's material number:

Supplier company name: Shenzhen Jia Zhichun Technology Co., LTD

Supplier product material number: JZC-FPC-WIFI-V2.1

Supplier product description: built-in BT antenna

Remarks:

Signature of the demander:

The demander seal:

Signature of the supplier:

Seal of the Supplier:

MAKER:

DATE:

ADDRESS

深圳市南山区松白路西丽南岗第一工业区 12 栋 2 楼

FU JIAN JUN

2023.3.23

PHONE

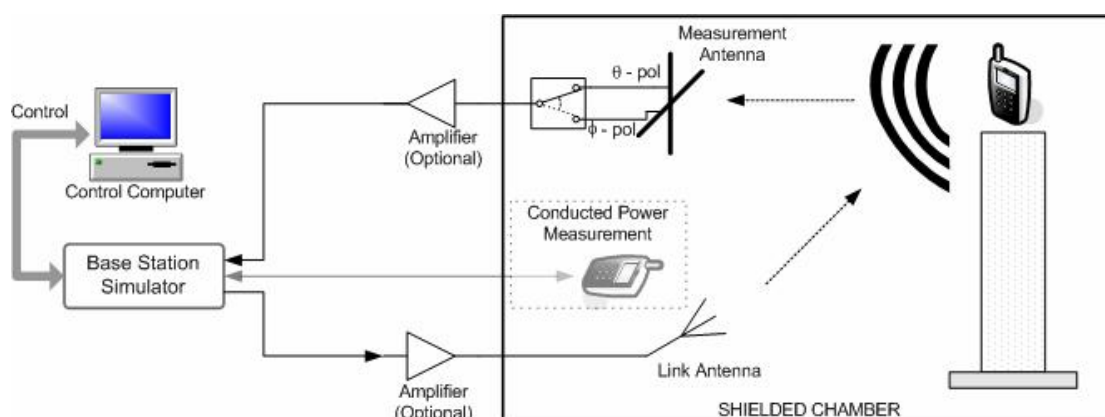
0755-86265563

FAX

0755-26913300

Product model	Date of production	Page number
	2023-3-23	2 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

1、 Introduction to the OTA test system



1、 Place the subject DUT on the 3D all-wave dark chamber turntable. The turntable rotates at 360 degrees to enable a 3D comprehensive measurement of the DUT. The test antenna Probe transmits the measured DUT signal to the integrated sensor via the RF coaxial cable. The comprehensive instrument then transmits the signal to the computer through the GPIB card for post-processing, and obtains the final RF test data.

2、 Test indicators

2.1、 TRP (Total Radiated Power): The total radiation power reflects the performance of the terminal emission part.

$$TRP \cong \frac{\pi}{2NM} \sum_{i=1}^{N-1} \sum_{j=0}^{M-1} [EiRP_{\theta}(\theta_i, \phi_j) + EiRP_{\phi}(\theta_i, \phi_j)] \sin(\theta_i).$$

2.2、 TIS (Total Isotropic Sensitivity): Overall receiving sensitivity reflects the performance of the terminal receiving part.

$$TIS \cong \frac{2NM}{\pi \sum_{i=1}^{N-1} \sum_{j=0}^{M-1} \left[\frac{1}{EIS_{\theta}(\theta_i, \phi_j)} + \frac{1}{EIS_{\phi}(\theta_i, \phi_j)} \right] \sin(\theta_i)}$$

2.3、 Testing facility

Device name	Comprehensive measuring instrument	Comprehensive measuring instrument	Network analyzer	Network analyzer
Unit type	CMW500	8820C	E5071B	8753ES
Equipment manufacturers	Rohde & Schwarz	Antitsu	Agilent	Agilent

Product model	Date of production	Page number
	2023-3-23	3 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

2、 Product picture

2.1.The overall appearance



2.2.Antenna pictures



Product model	Date of production	Page number
	2023-3-23	4 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

3、Antenna specifications

3.1、Physical characteristics

Antenna Dimensions(mm)	39.8×18.3	Cable length (mm)	100
Connector model	Generation 1 IPEX (MHF ①)	Type of Cable	RF1.13 coaxial
Antenna material	FPC	Antenna colour	Black
Working temperature	-40℃~80℃	Working humidity	10%~95%
Storage temperature	-45℃~85℃	Storage humidity	10%~95%

3.2、Electrical character; electrical specification

frequency (MHz)	2400~2500	Impedance	50 Ω
Gain (MAX)	2dBi	VSWR	≤3
Polarization	Linear polarization		

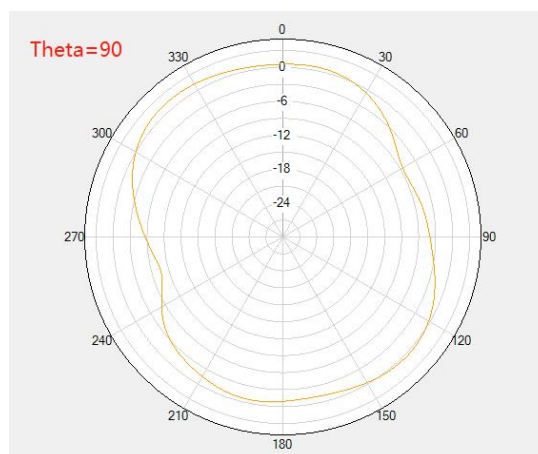
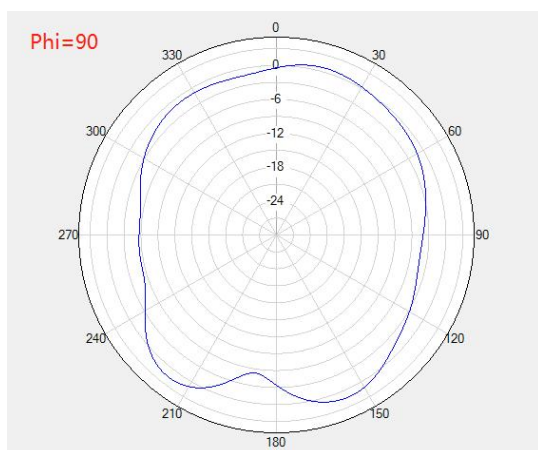
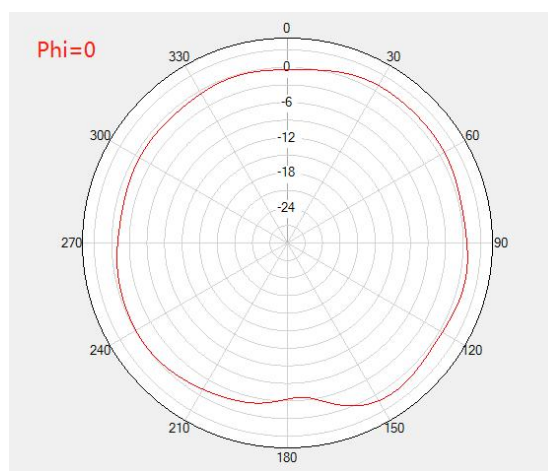
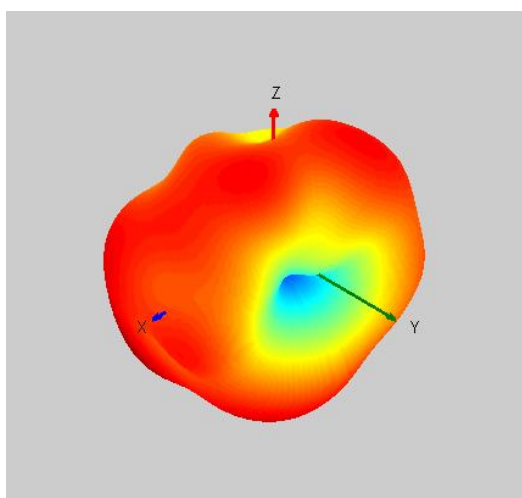
Product model	Date of production	Page number
	2023-3-23	5 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

4、OTA test data

频段 (MHz)	效率 (%)
2400	62.13
2410	63.77
2420	64.32
2430	65.91
2440	66.3
2450	67.3
2460	68.57
2470	67.08
2480	66.09
2490	64.42
2500	63.52

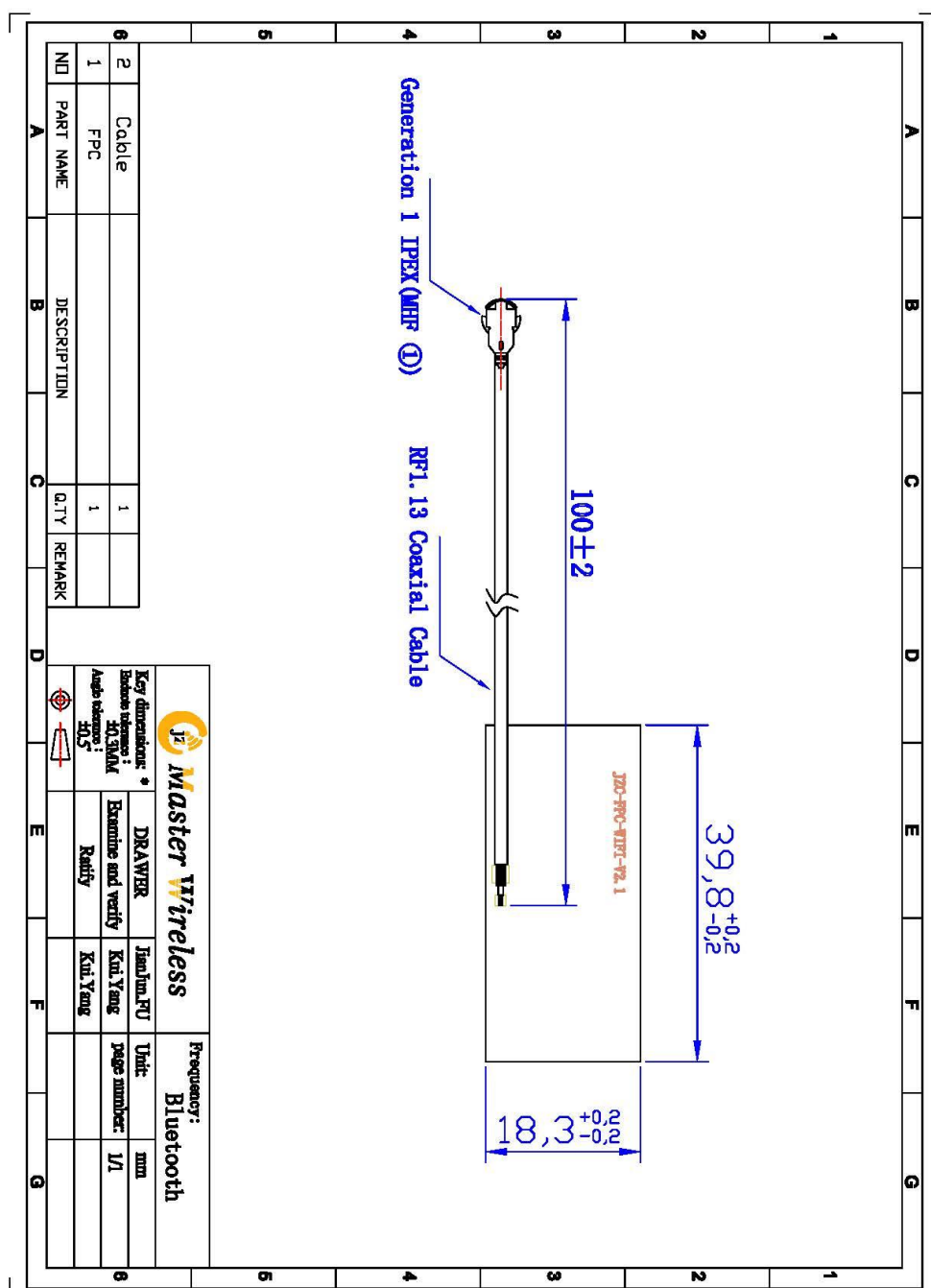
Product model	Date of production	Page number
	2023-3-23	6 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

5. 3D/2D Radiation pattern



Product model	Date of production	Page number
	2023-3-23	7 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

6. Schedule Drawing



Product model	Date of production	Page number
	2023-3-23	8 / 8
MAKER	Examine and verify	Ratify
FU JIAN JUN	YANG KUI	YE XUE

Thanks !