APPROVAL SHEET
FOR
RUNZHUOWULIAN TD702
（WIFI band internal antenna）

Issued by		**Checked by**	
Confirmed by		**Date**	**2024-06-05**
Customer Confirm			

Revision History

Date	Revision	Description of Changes
2024-06-05	R:A	Antenna performance approved by customer

1 SUMMARY

2 GENERAL DESCRIPTION

2.1 Definitions

3 MECHANICAL DESCRIPTION

4 ELECTRICAL PERFORMANCE

4.1 Set-up

4.1.1 VSWR and return loss
4.1.2 Efficiency, Gain and TRP/TIS
4.1.3 Matching Circuit Description

4.2 Measurement Data

4.2.1 VSWR
4.2.2 Active result

5 MECHANICAL DRAWING

6 CONCLUSION

1 Summary

This report summarizes the electrical results of the proposed antenna to support the TD702 program. We test the antenna with the latest version handset .

2 General Description

2.1 Definitions

VSWR: Voltage Standing Wave Rate

3 Mechanical Description

4 Electrical Performance

4.1 Set-up

4.1.1 VSWR and return loss

VSWR measurements (S_{11}) were performed using an Agilent E5070B 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.

4.1.2 Efficiency, Gain and TRP/TIS

The gain of the antenna was measured in Dong Xin's 3D anechoic chamber in Shenzhen. The chamber is capable of doing tests from 380MHz to 6GHz. Coaxial chokes on the feed cable were used to mitigate surface currents. The measurement results are calibrated using dipole standards. For TRP and TIS the chamber uses a Agilent 8960 to establish the connection with the mobile device. During TRP tests the 8960 reads the power received through the chamber probes whilst during TIS tests the 8960 transmits through the probe. All data is afterwards corrected by a calibration table.

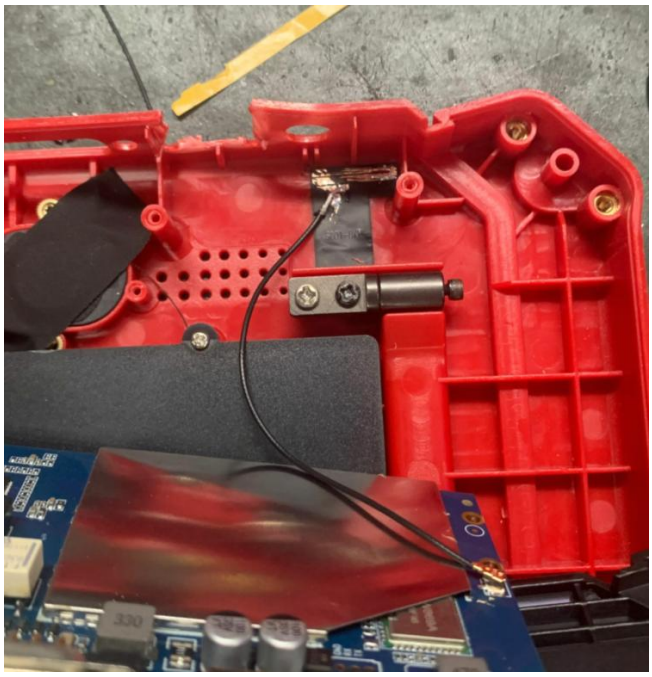
4.1.3 Matching Circuit Description

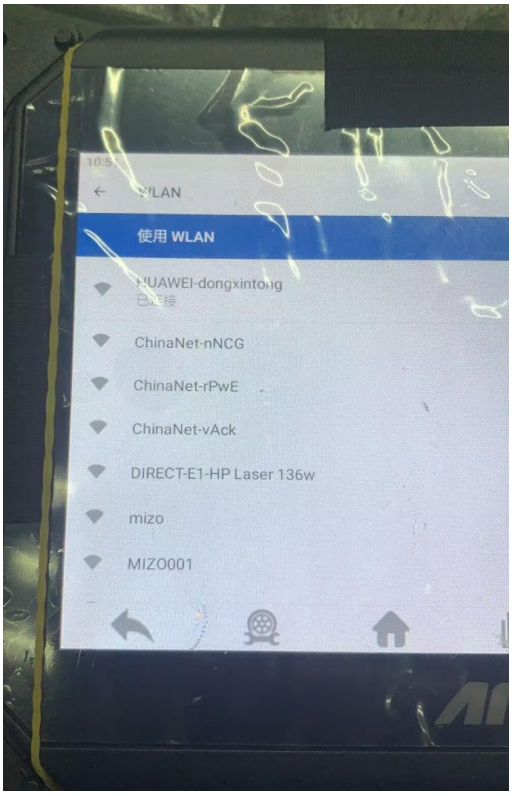
No matching.

4.2 Measurement Data

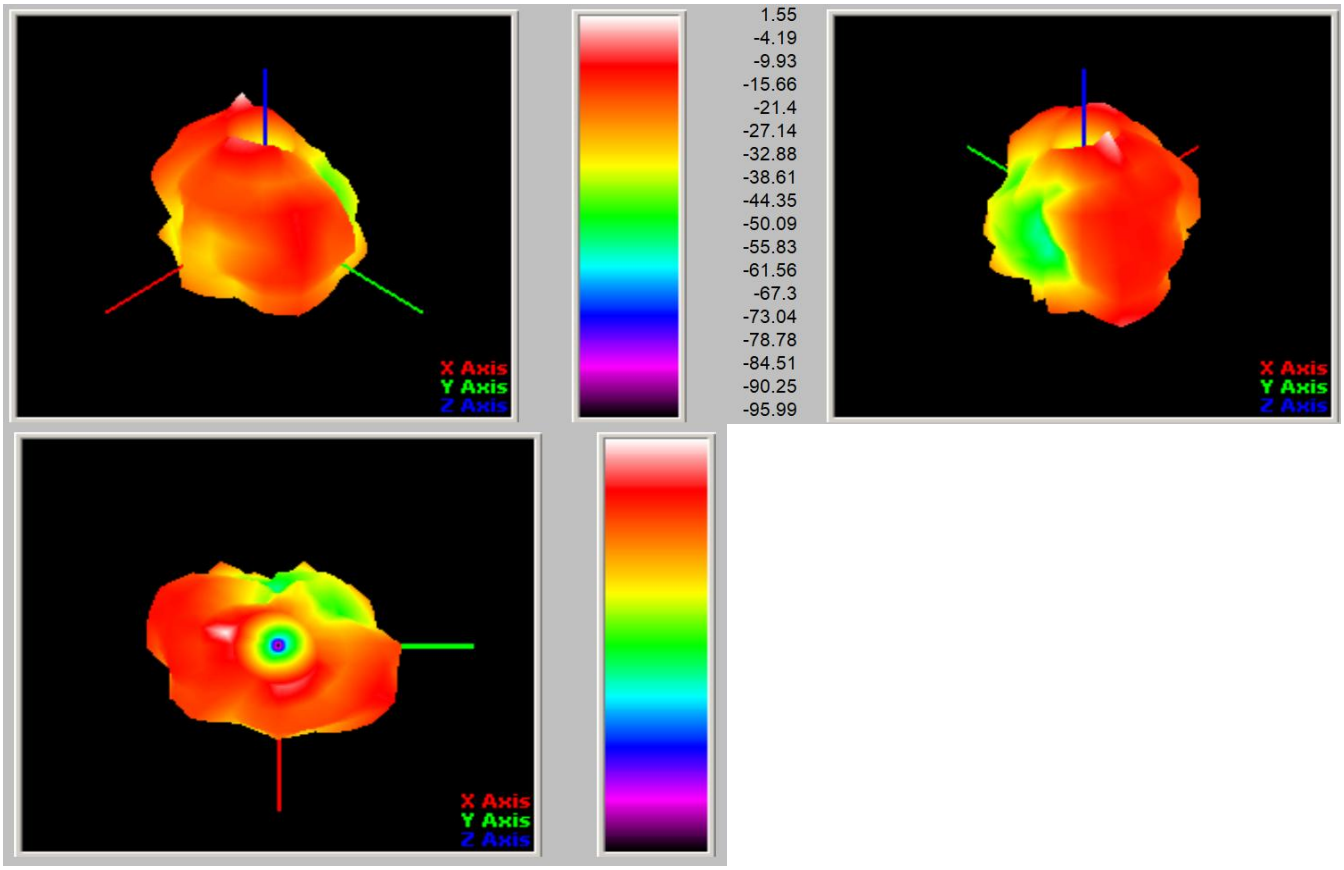
Effective Radiated Power Summation

5 Mechanical drawing





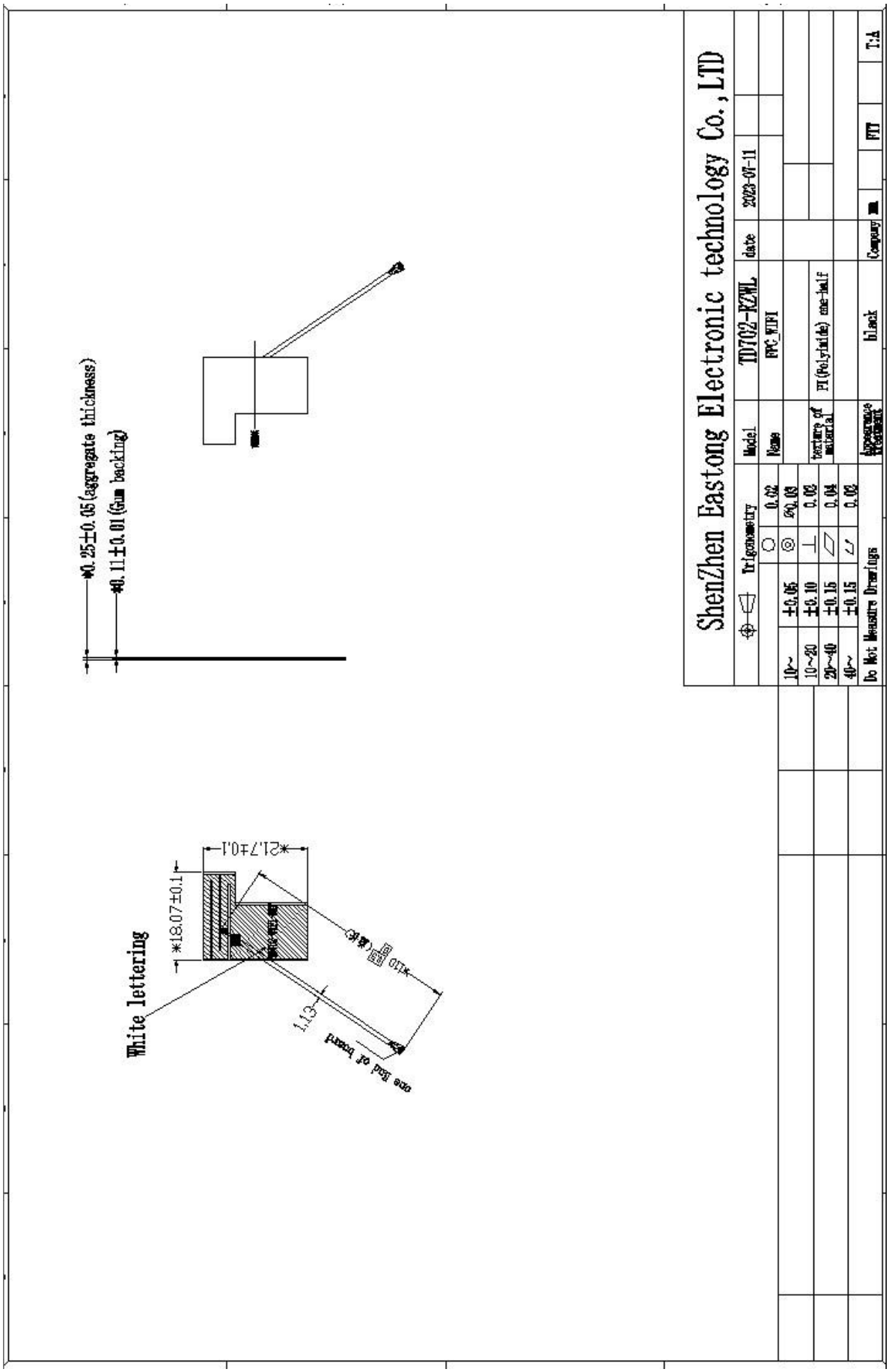
Address： 409-411, Shanhai E-commerce Port, No.9 Huancheng Road, Yangmei Community, Bantian Street, Longgang District, Shenzhen



Antenna type： PIFA

Antenna gain：

Freq (MHz)	Effi(%)	Gain(dBi)
2400	36.45	1.64
2410	36.98	1.57
2420	37.59	1.89
2430	37.69	1.76
2440	38.76	1.82
2450	38.98	1.73
2460	37.53	1.76
2470	37.68	1.68
2480	37.21	1.63
2490	36.43	1.57
2500	35.23	1.54
5150	28.86	1.22
5350	29.37	1.28
5550	31.56	1.33
5750	32.42	1.25
5850	30.65	1.13



Project: UNZHUOWULIAN TD702		Author: Li Kai	File Name: RUNZHUOWULIAN TD702-APP-RA
Date: 2024-06-05			
Rev:	Language:	Check:	
A	ENG		

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ShenZhen Eastong Electronic technology Co., LTD