Shenzhen Yishengbang Technology Co., Ltd

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Antenna Test Report

Customer: MADIGI

Project: NUCPN01-A

Product: WIFI Antenna

Report date: 2024. 1.30

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Checked by： 黄震

Approved by：

Purpose

This report is to measure the performance of SLK for Master Antenna on MADIGI. All measure data are showed below.

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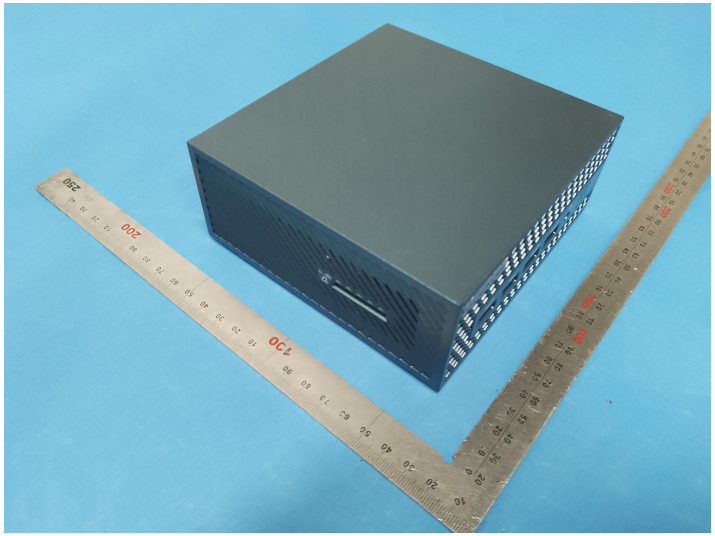
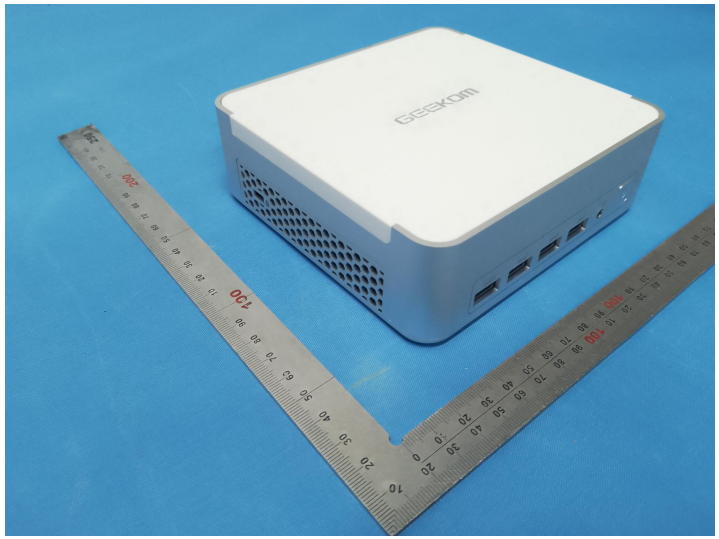
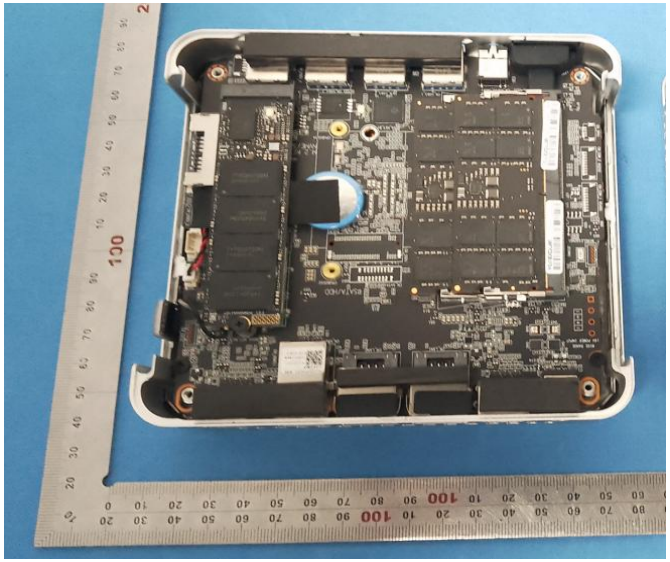
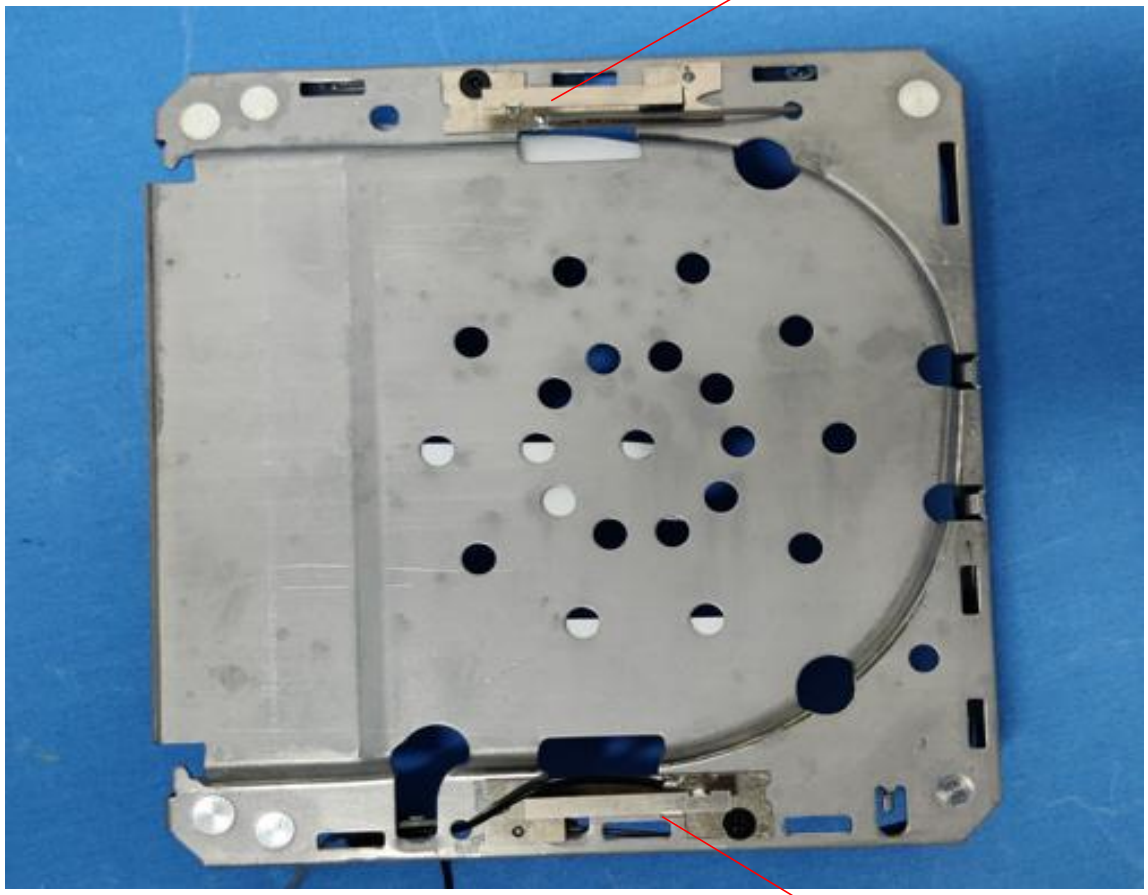
1. Product Overview





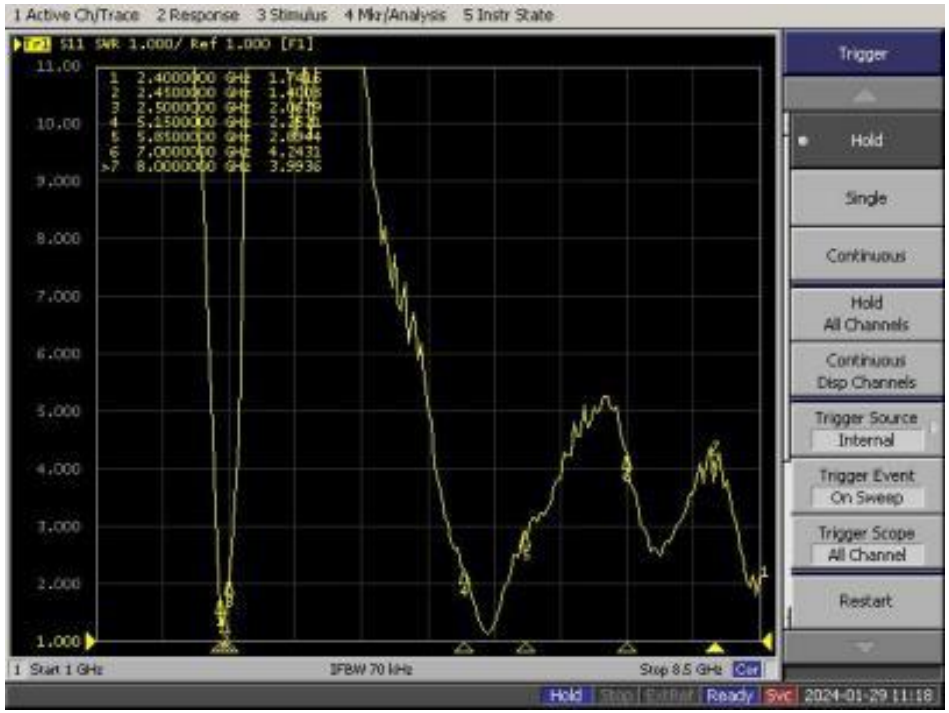


1. Product Overview



2. Test Result

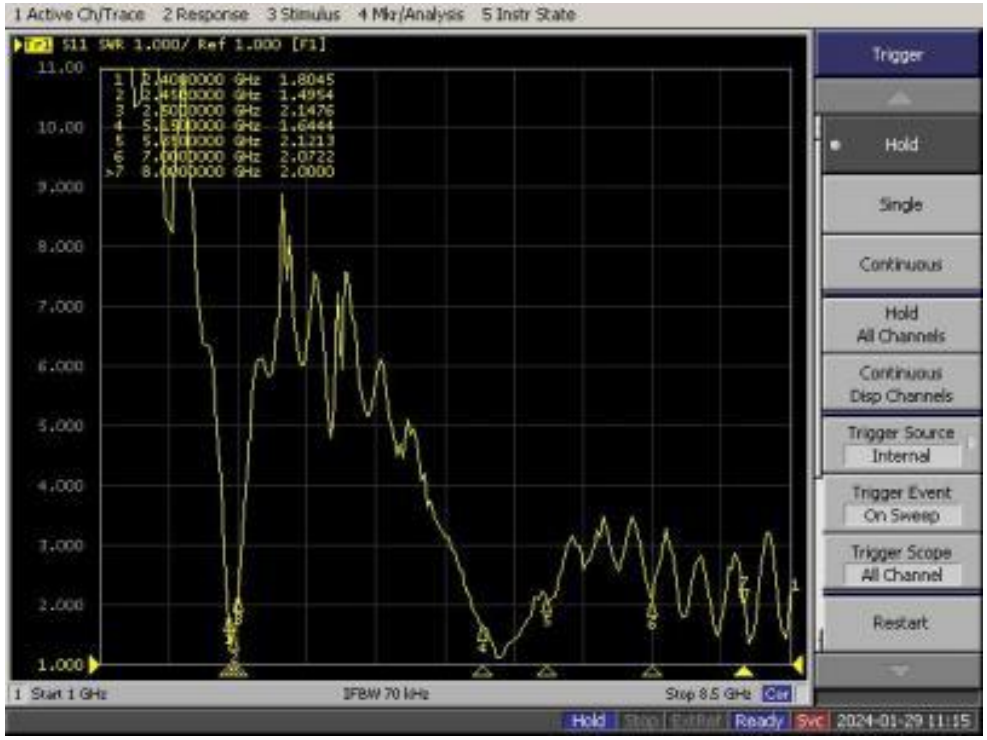
2.1 VSWR/S11 MAIN



2. Test Result

2.1 VSWR/S11

AUX

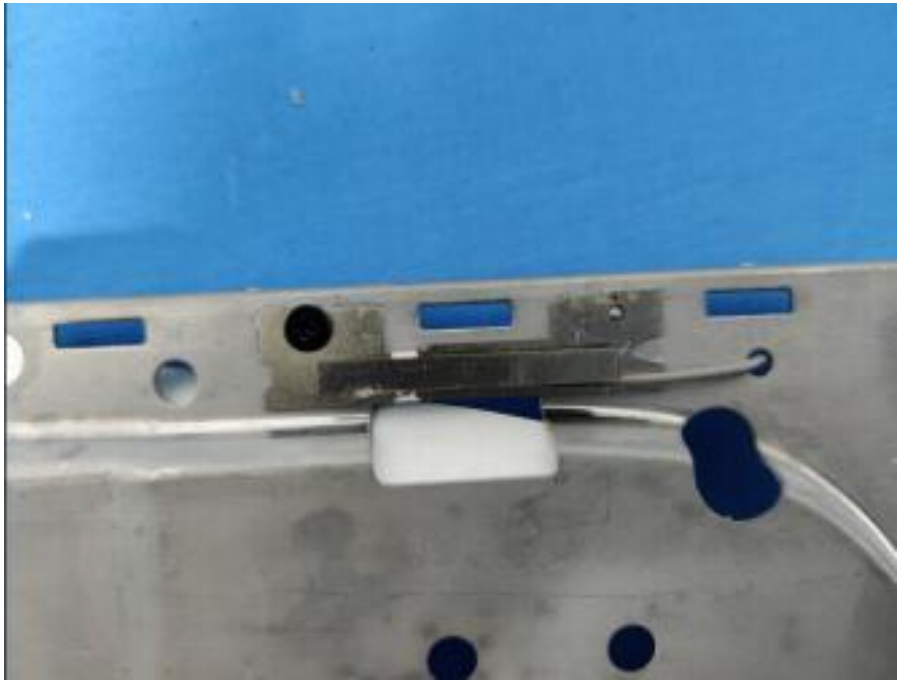


2. Test Result

2.2 Antenna Parameters

MAIN

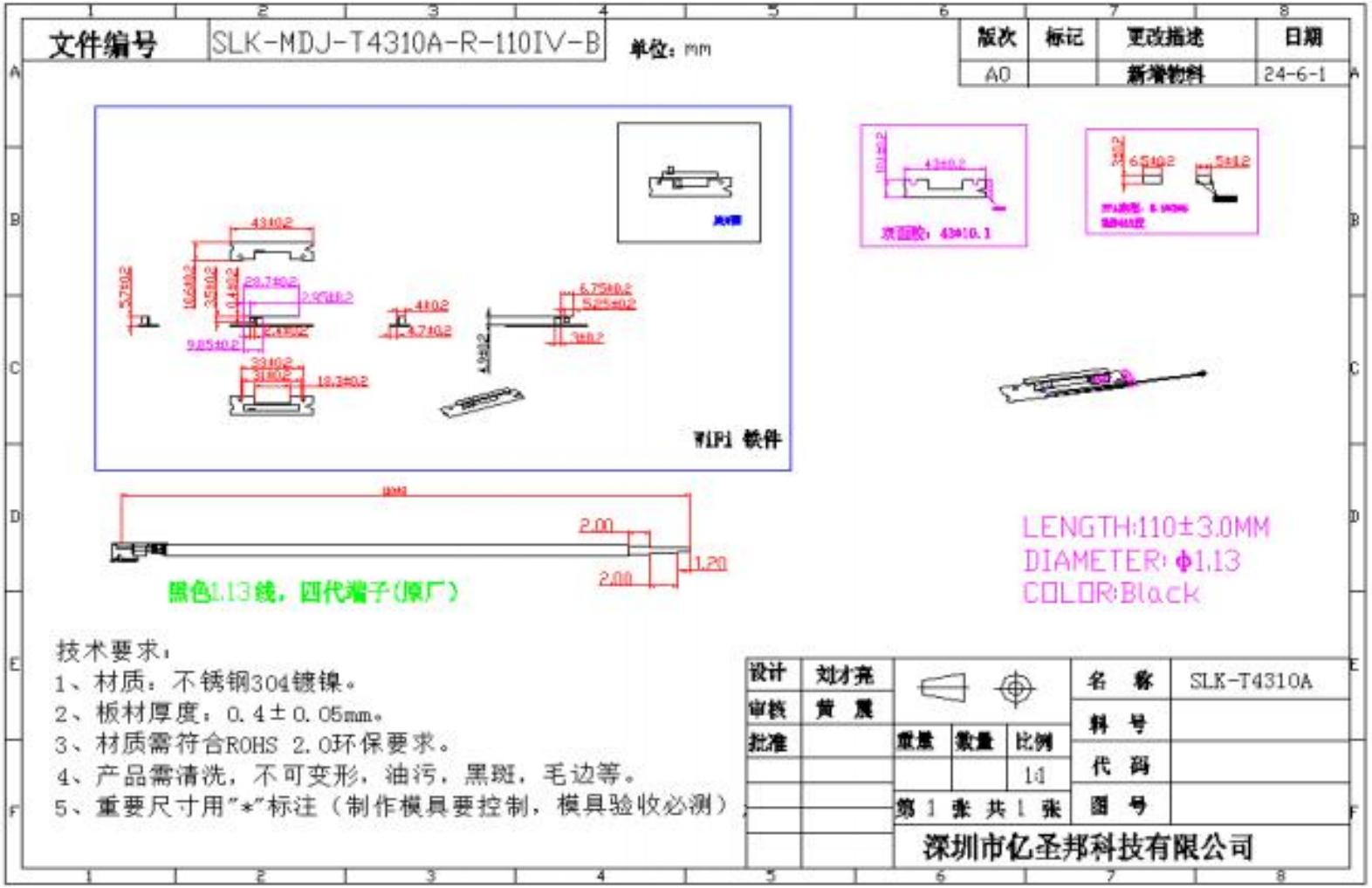
AUX



Note:Antenna type: PIFA

2. Test Result

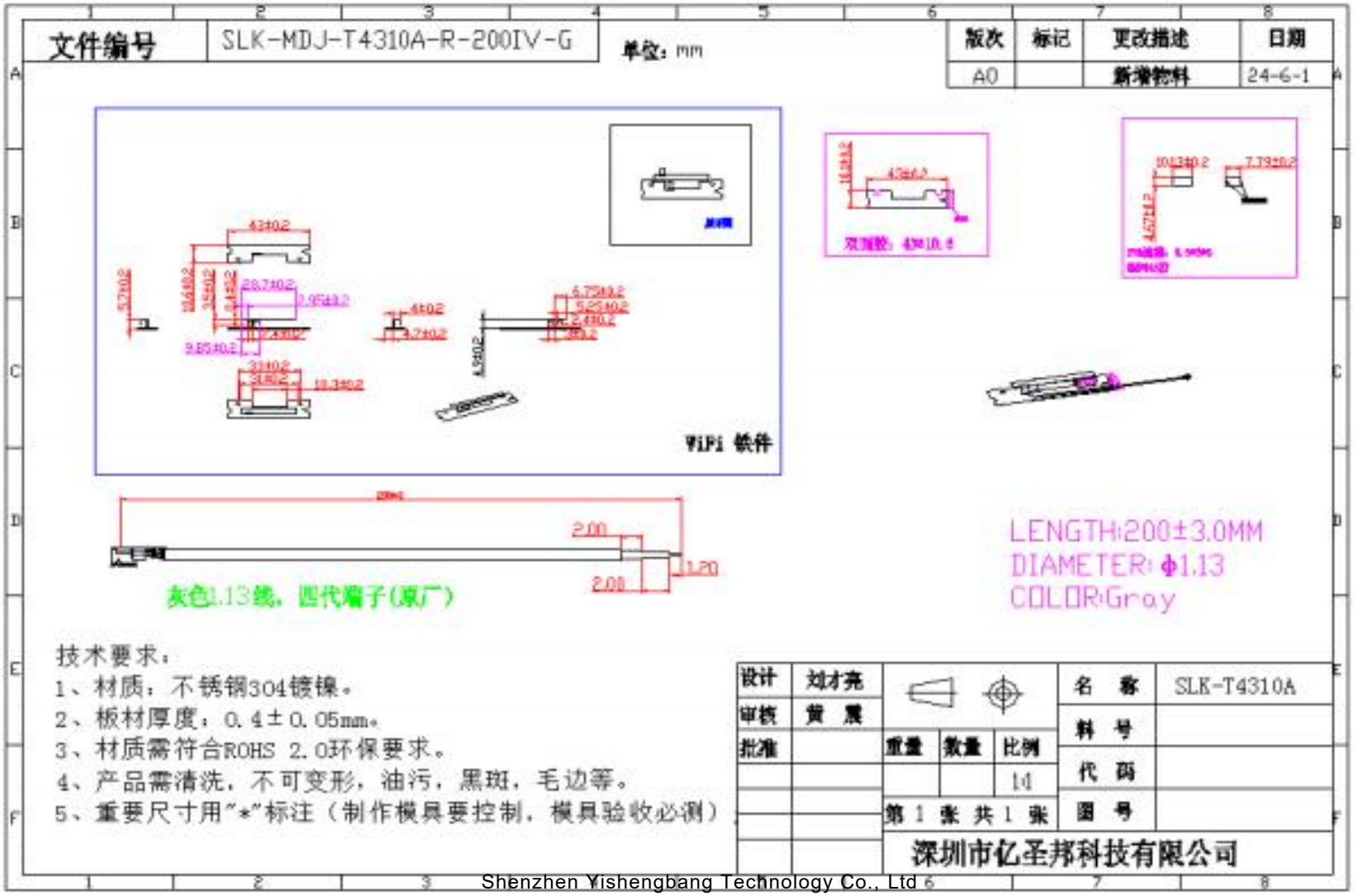
2.2 Antenna Parameters MAIN



2. Test Result

2.2 Antenna Parameter

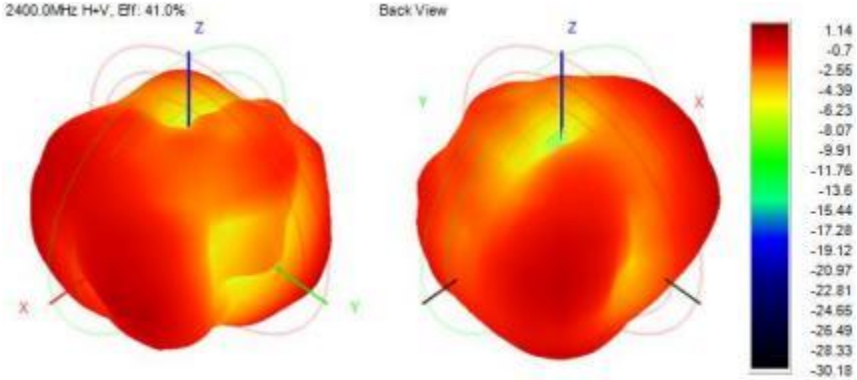
AUX

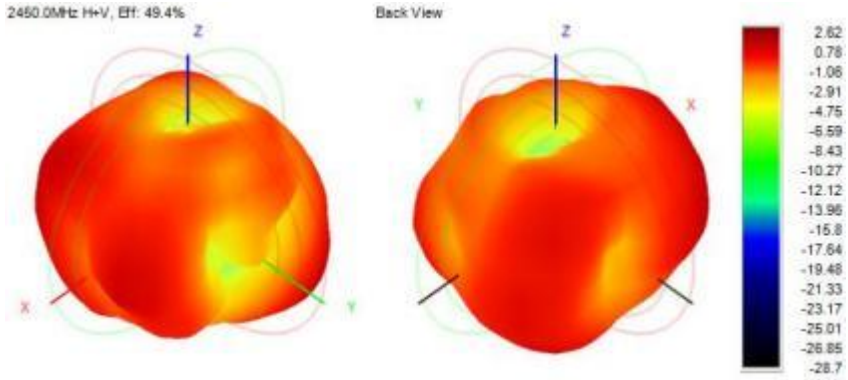


2. Test Result

2.3 WIFI MAIN Antenna Gain/Efficiency/3D DATA

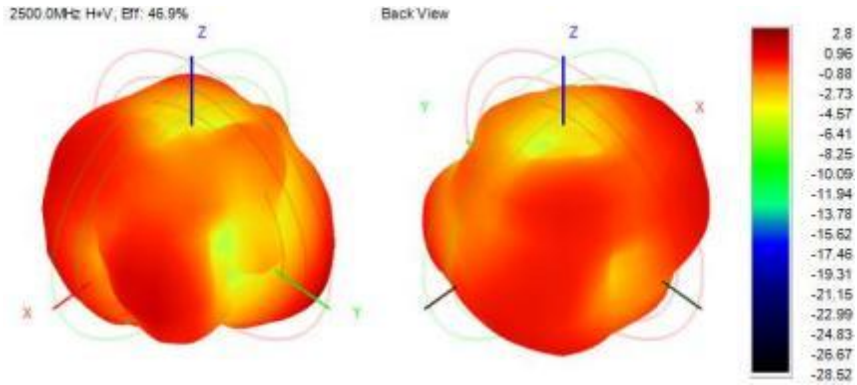
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5500.0	5750.0	6400.0	7100.0
Efficiency (dBi)	**-3.87**	**-3.67**	**-3.26**	**-3.18**	**-3.10**	**-3.06**	**-2.88**	**-2.76**	**-2.96**	**-2.99**	**-3.29**	**-2.46**	**-2.24**	**-3.23**	**-3.93**	**-3.41**
Gain (dBi)	1.14	1.27	2.13	2.47	2.61	2.62	2.77	3.03	3.09	3.12	2.80	2.53	1.38	0.53	1.43	2.67
Efficiency (%)	**40.99**	**42.93**	**47.17**	**48.05**	**49.01**	**49.40**	**51.53**	**53.02**	**50.63**	**50.28**	**46.91**	**56.78**	**59.75**	**47.54**	**40.44**	**45.56**

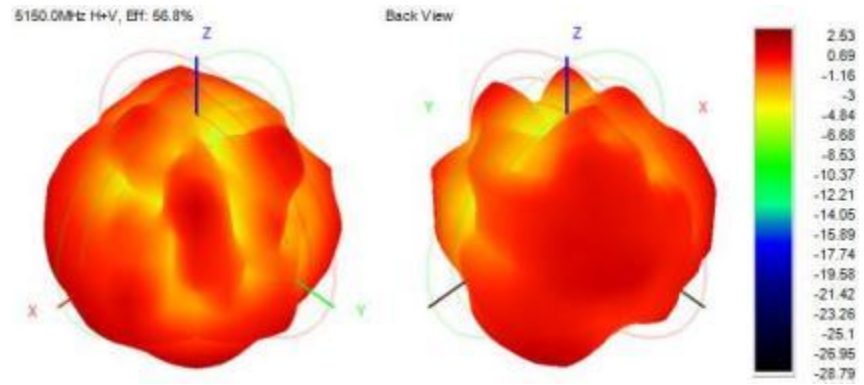


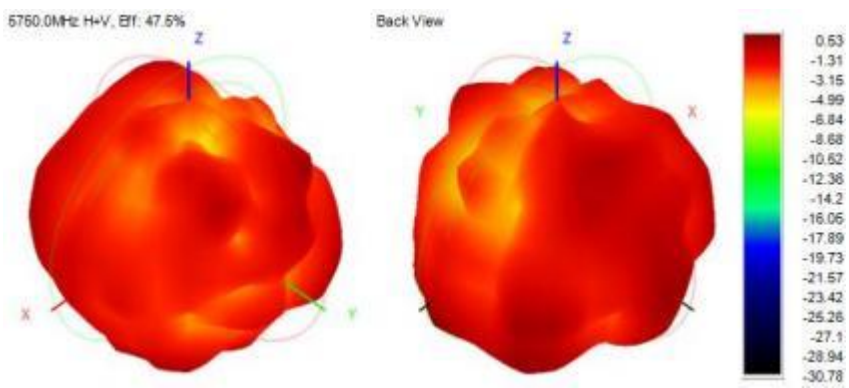


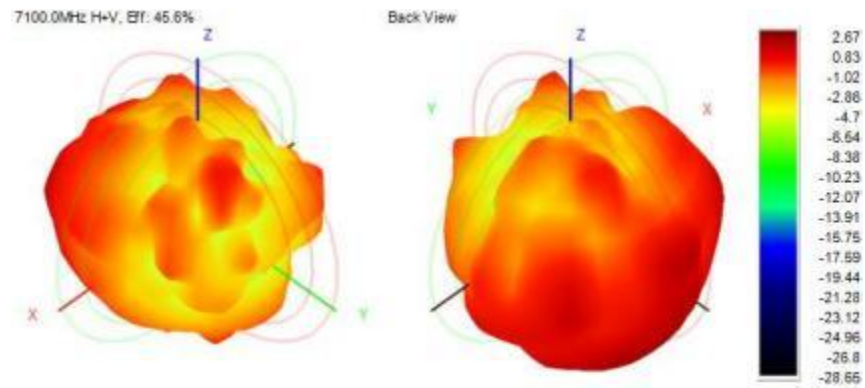
2. Test Result

2.3 WIFI MAIN Antenna Gain/Efficiency/3D DATA





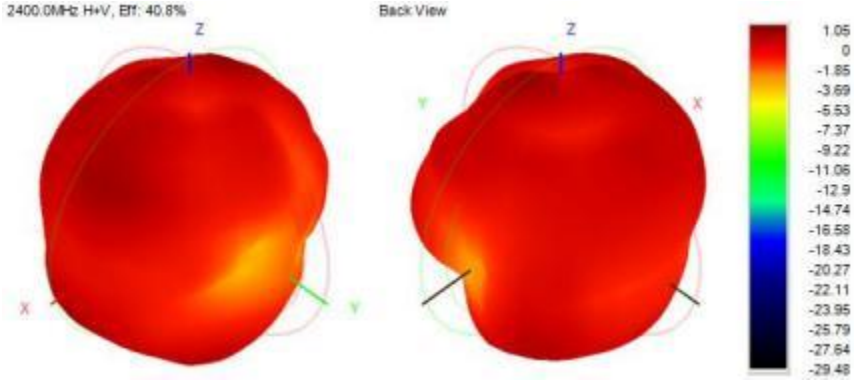


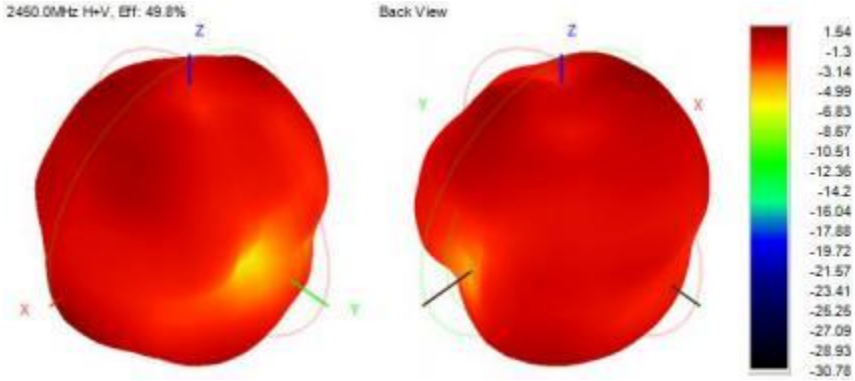


2. Test Result

2.3 WIFI AUX Antenna Gain/Efficiency/3D DATA

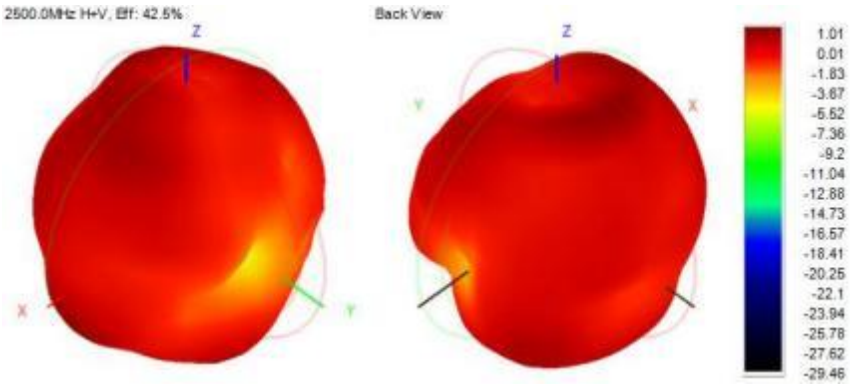
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5500.0	5750.0	6400.0	7100.0
Efficiency (dBi)	**-3.90**	**-3.60**	**-3.36**	**-3.21**	**-3.16**	**-3.02**	**-3.13**	**-3.36**	**-3.68**	**-3.68**	**-3.71**	**-4.17**	**-2.90**	**-4.08**	**-5.21**	**-5.17**
Gain (dBi)	1.05	1.13	1.26	1.32	1.31	1.54	1.63	1.39	1.10	1.17	1.01	0.86	2.16	1.42	0.19	1.30
Efficiency (%)	**40.77**	**43.67**	**46.11**	**47.74**	**48.30**	**49.83**	**48.68**	**46.17**	**42.83**	**42.89**	**42.52**	**38.28**	**51.34**	**39.10**	**30.15**	**30.43**

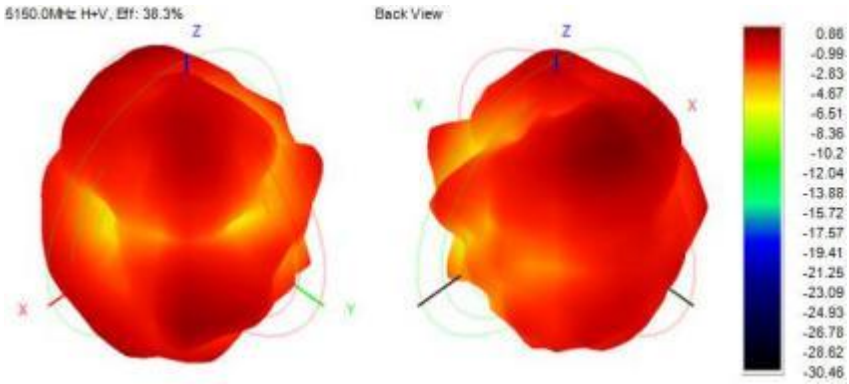


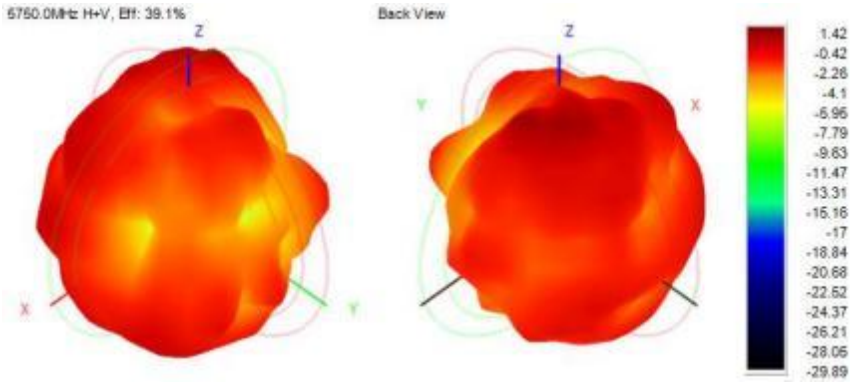


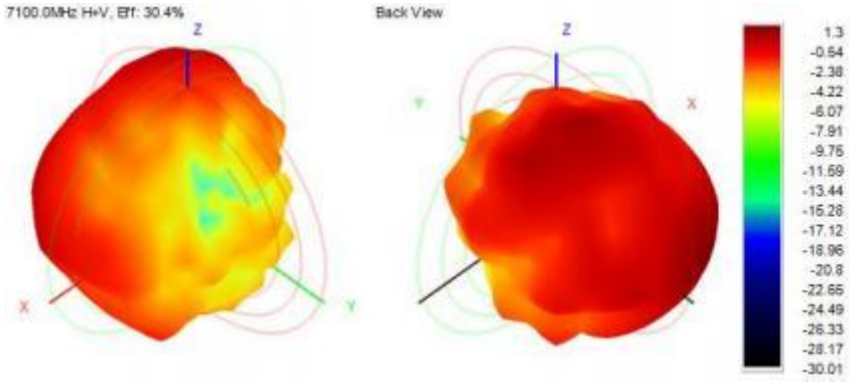
2. Test Result

2.3 WIFI AUX Antenna Gain/Efficiency/3D DATA









2. Test Result

2.4 WIFI Antenna Throughput

2.4G-TX	2.4G-RX	5.8G-TX	5.8G-RX
249M	322M	895M	924M

Test environment: 10M office space; Bluetooth plays music within 10 meters without any lag.

2. Test Result

2.5 BT Throughput

BT-TX	BT-RX
1.33M	1.37M

Test environment: Indoor 1M

3. Conclusions

Thank yon !