



Heyuan Sunway Microwave Communications Technology Co. , Ltd.

XR506

Antenna test report

RF engineer: Chen Chuanming

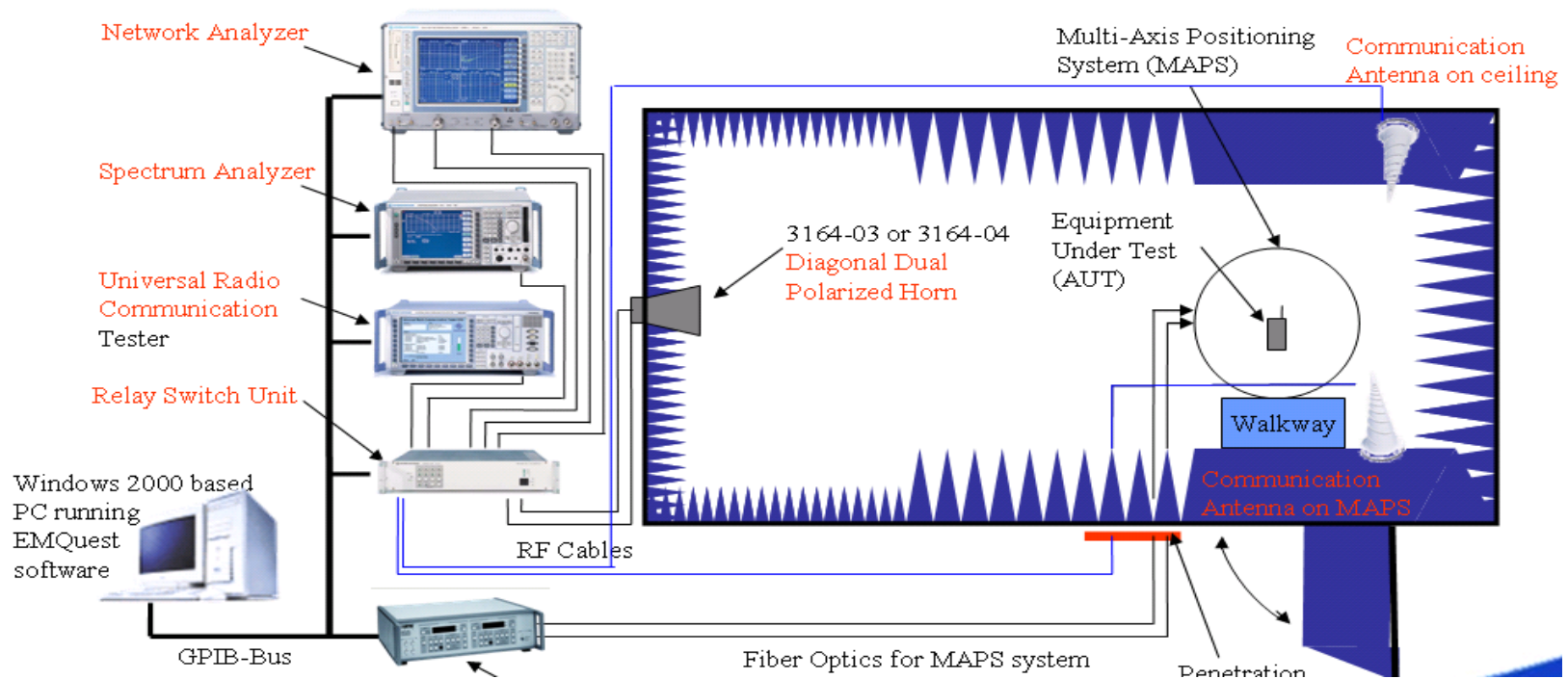
Test Date : 2022.12.28

1、 Test equipment

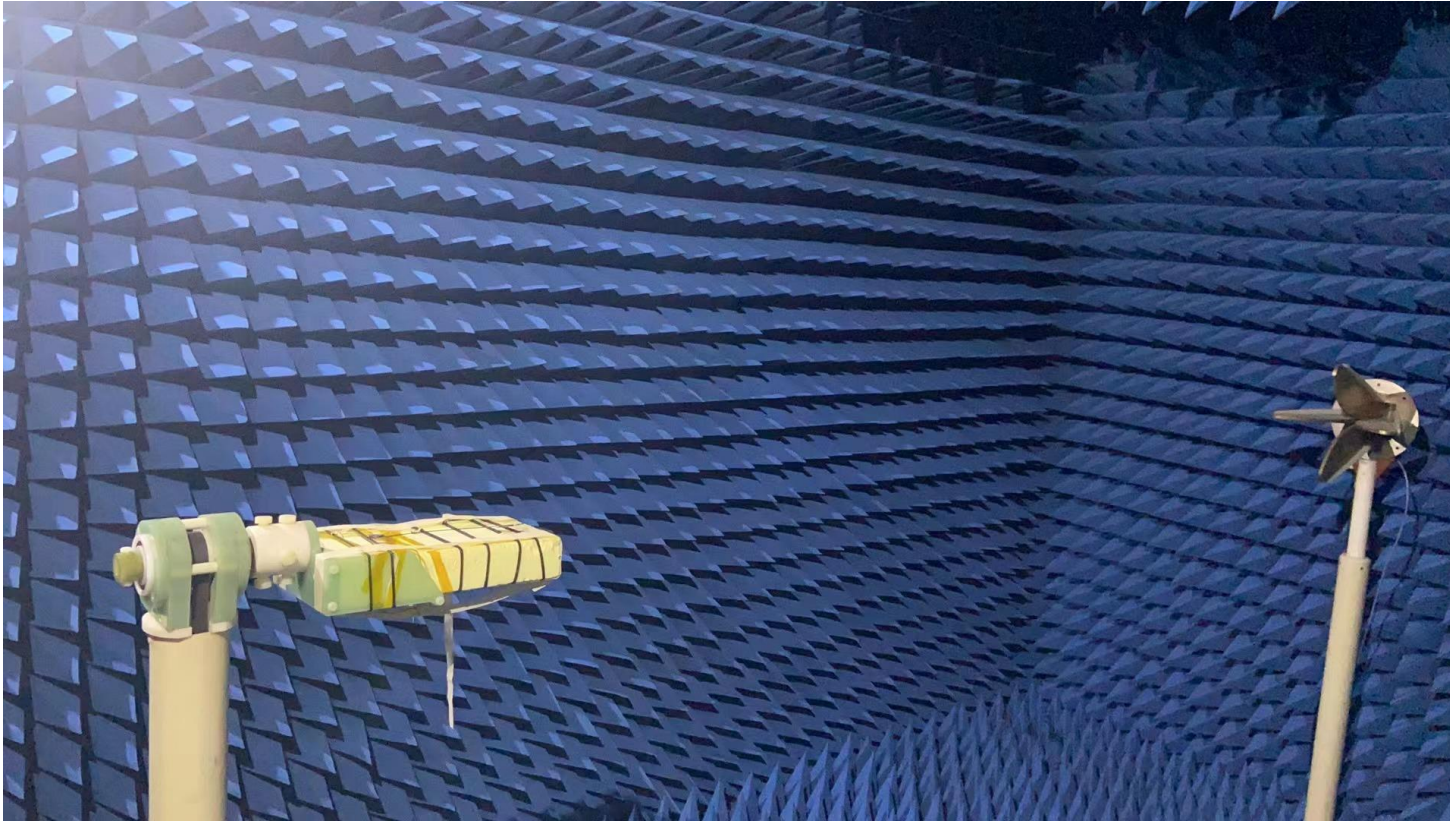
Monitor: Agilent 8960

Network Analyzer: Agilent 8753ES 3D

darkroom: 7x4x3m



Setup photo:



1、 Equipment list

Equipment	Manufacturer	Model Number	Last Cal	Due Date
Network Analyzer	Agilent	5071C	2022. 06. 18	2023. 06. 18
Integrated test instrument	Rohde&Schwarz	CMW500	2022. 07. 22	2023. 07. 22
Microwave anechoic chamber	SATIMO	SG24	2022. 06. 18	2023. 06. 18
Test Software	ETS-Lindgren	EMQuest V1.12		

2、 Basic project information

Customer name	wort
Project name	XR506
Type	FPC Antenna
Motherboard model	
Small Plate model	
Version	V1.3

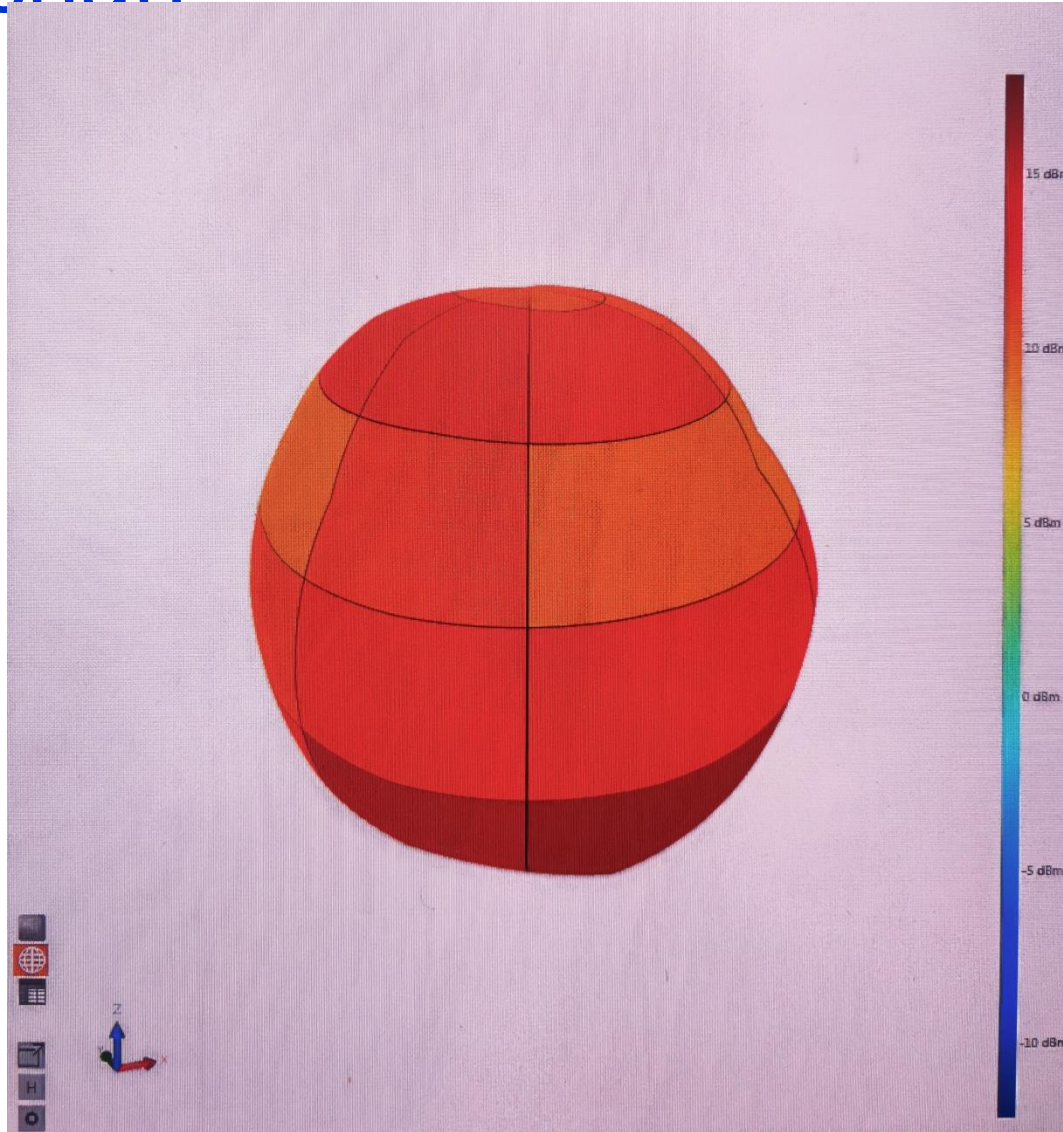
3、Item Change Log

Reportversion	Date	Change content description
V1.0	2022.06.28	WIFIAntenna test report
V1.1	2022.08.03	WIFIAntenna test report
V1.2	2022.12.07	WIFIAntenna test report
V1.3	2022.12.28	Add antenna 3D map

4、 Antenna matching circuit

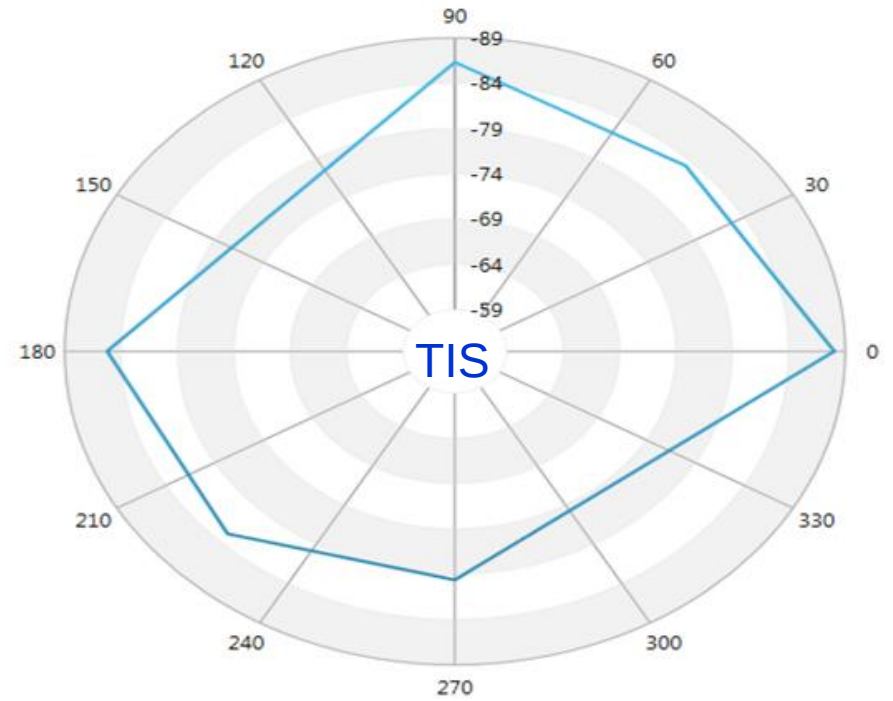
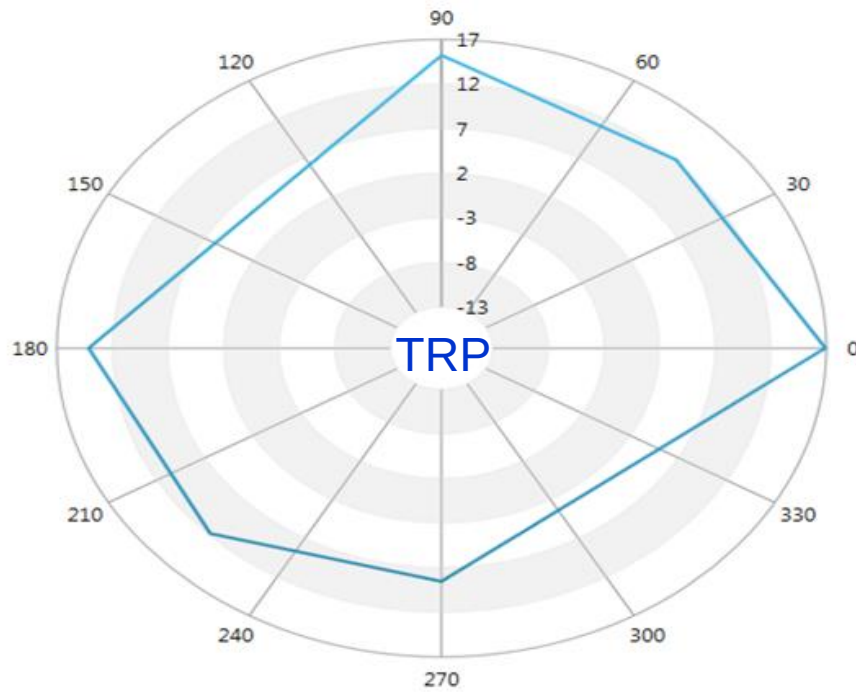
Name of antenna	Matches whether it has changed	Notes
Wi-fi antenna	No	

5、Antenna 3D Apple Chart/efficiency chart



Freq (MHz)	EFFI% (%)	Gain (dBi)
2390	38	1.51
2410	39	1.59
2430	40	1.65
2450	39	1.57
2470	37	1.49
2490	35	1.43
2510	37	1.52

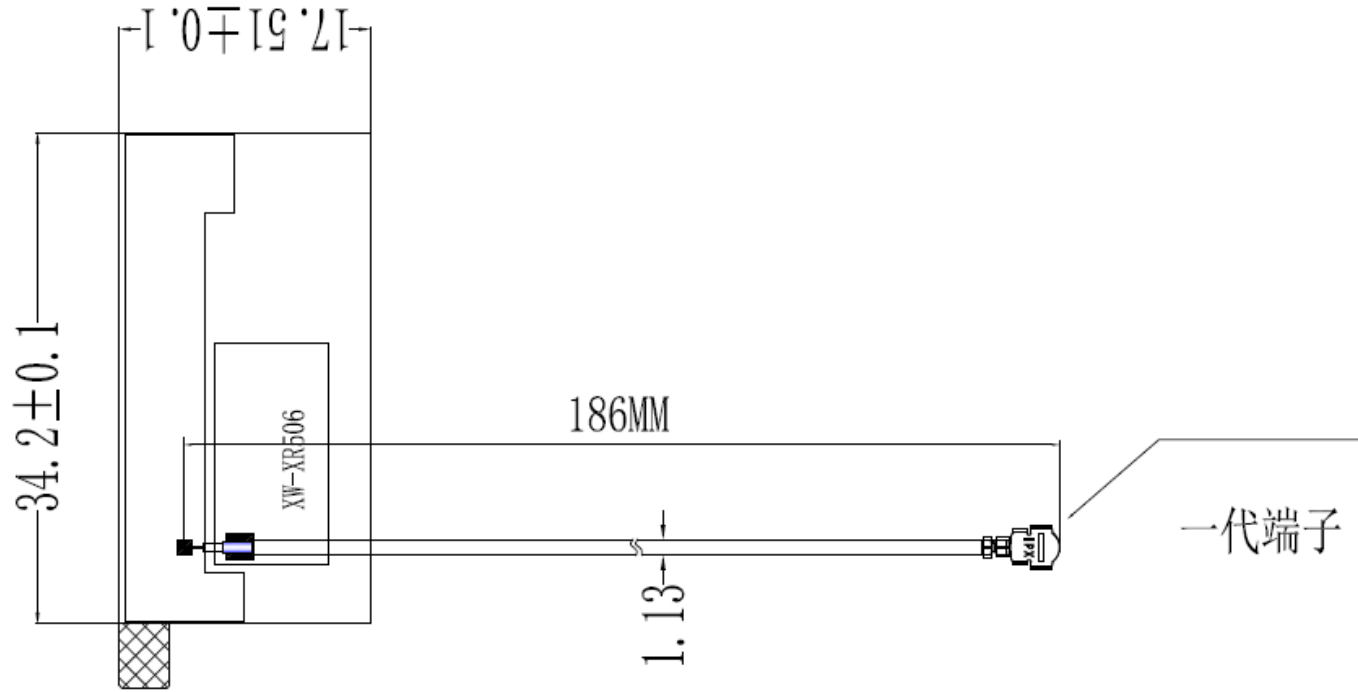
5.1、 3D map of the antenna



6、WIFI 3D test data

Band	Channel	TRP	TIS
WIFI-B	1	13.27	-85.73
	6	12.80	-85.01
	11	13.03	-85.24
WIFI-G	1	12.39	-71.53
	6	12.26	-70.65
	11	12.22	-70.86
WIFI-N	1	11.24	-67.42
	6	11.18	-67.61
	11	11.17	-67.39

7、Antenna 2d



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9、 Test methods and standards

Name	Parameter	Method	Standard no.
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149- 2021



Thanks and best regards!

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