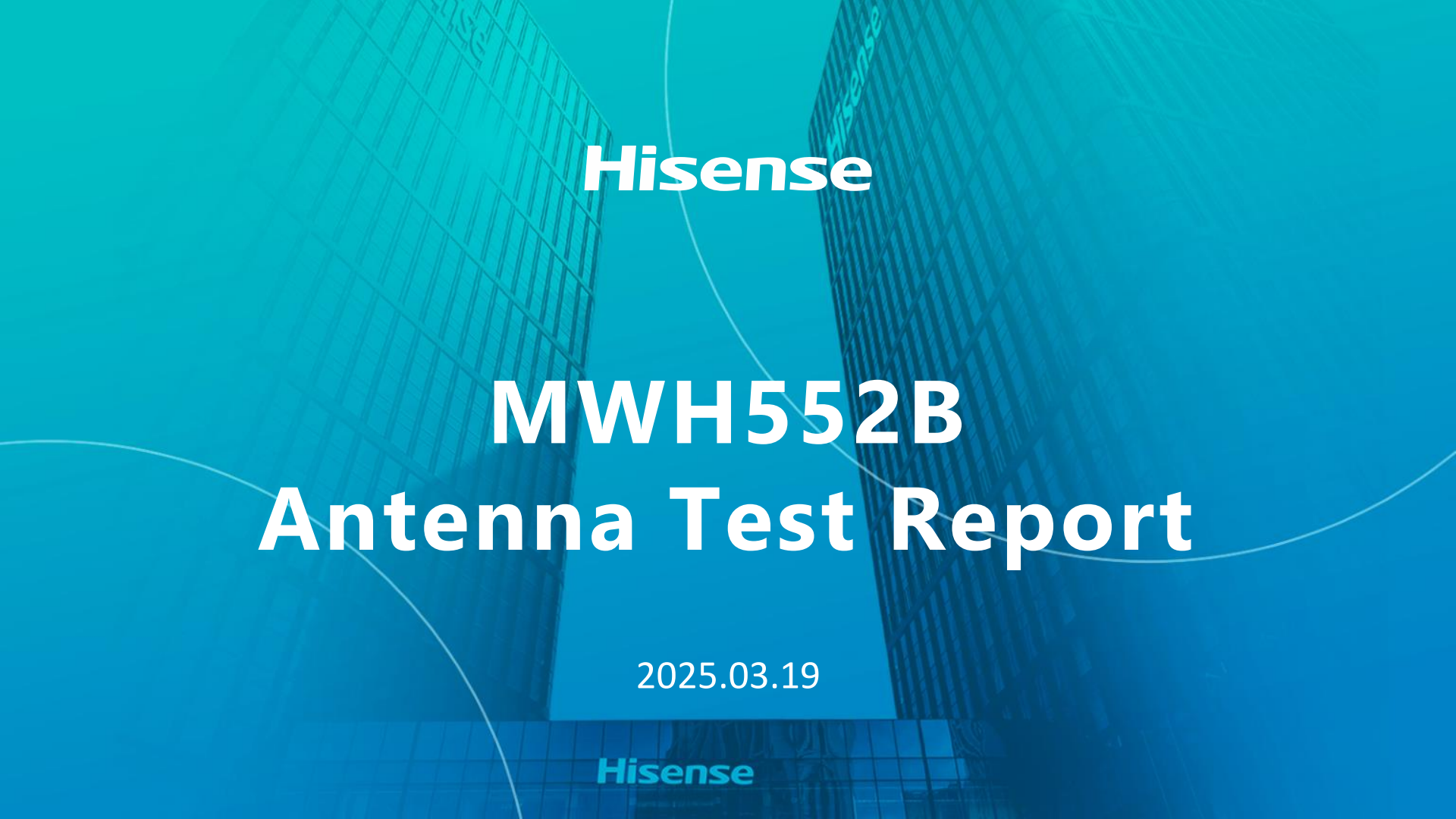




Hisense

MWH552B
Antenna Test Report

2025.03.19

Hisense

Wi-Fi0	
Antenna Type	Inverted F PCB Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: S11≤-8dB 5.15GHz~5.85GHz: S11≤-8dB.
Peak Gain	2.32dBi@2.4~2.5GHz , 4.26dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz≥53%(Avg) , 5.15~5.85GHz≥65%(Avg)

Wi-Fi1	
Antenna Type	Inverted F PCB Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: S11≤-5dB 5.15GHz~5.85GHz: S11≤-5dB
Peak Gain	2.93dBi@2.4~2.5GHz , 4.63dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz≥50%(Avg) , 5.15~5.85GHz≥45%(Avg)



Wi-Fi1

Wi-Fi0	CH	Gain/dBi	Efficiency/%
2.4G	L	1.76	51
	M	2.23	59
	H	2.32	57
5G	L	4.26	73
	M	3.55	67
	H	2.85	55

Wi-Fi1	CH	Gain/dBi	Efficiency/%
2.4G	L	1.94	49
	M	2.69	53
	H	2.93	52
5G	L	3.21	40
	M	3.73	44
	H	4.63	55

ANT Directivity Pattern

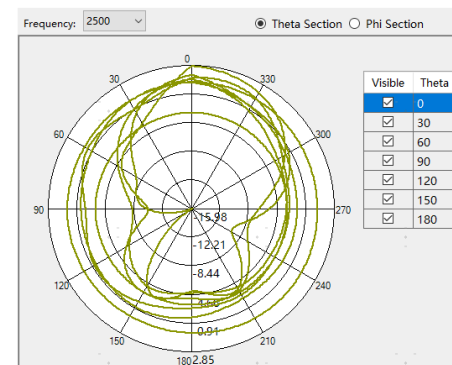
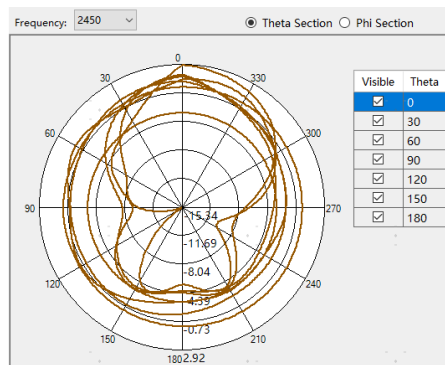
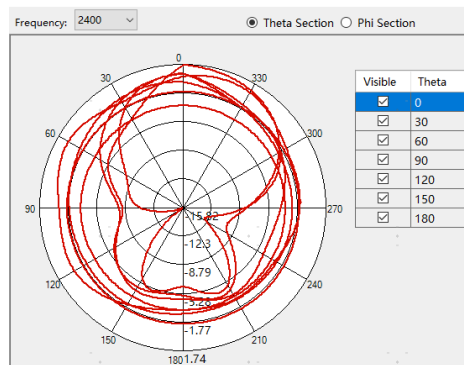
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Wi-Fi0 2.4G: L Band

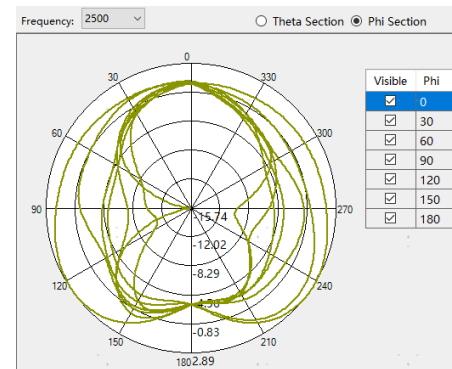
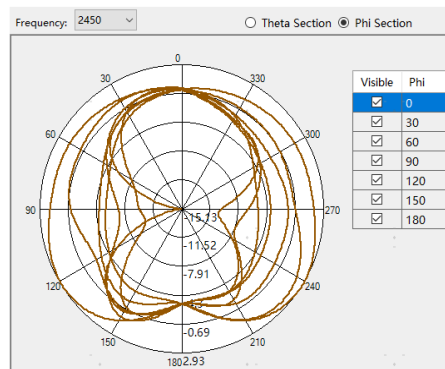
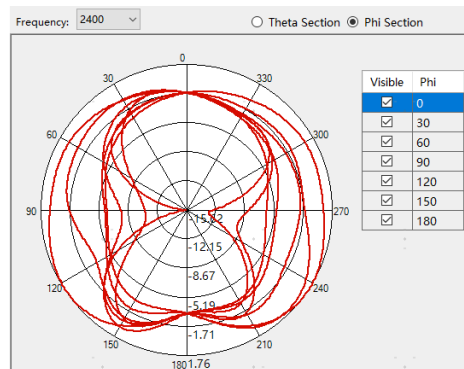
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

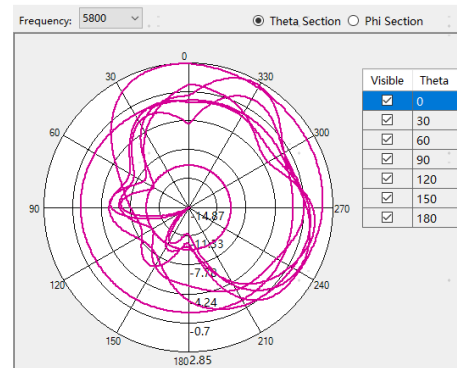
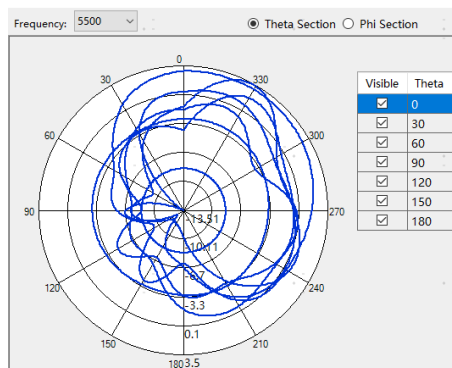
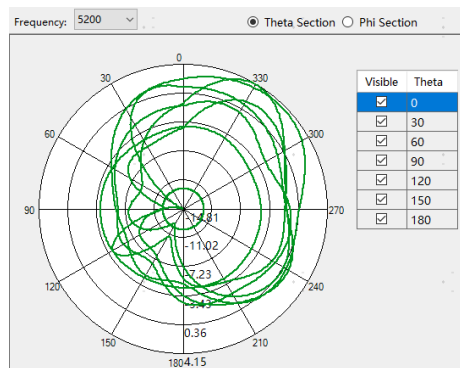
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Wi-Fi0 5G: L Band

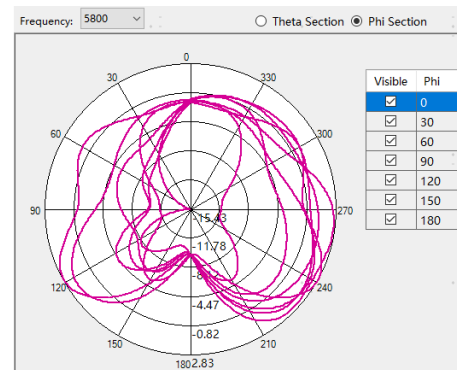
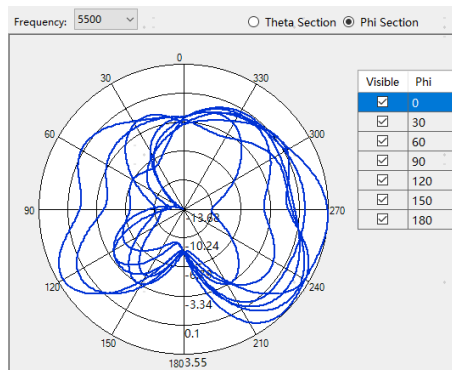
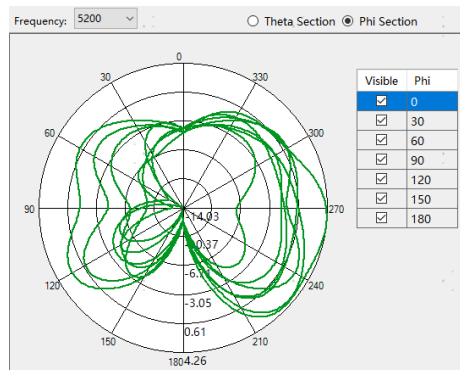
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

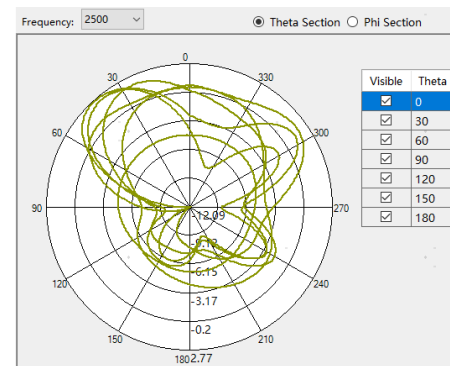
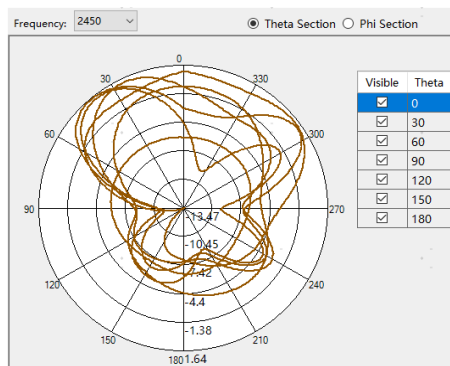
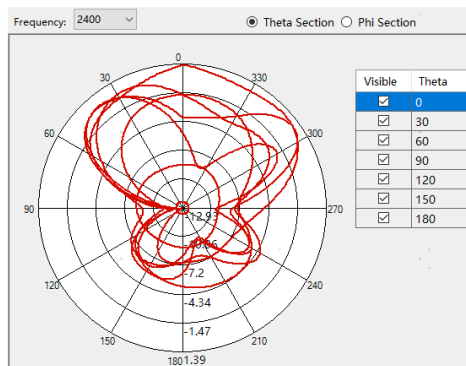
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Wi-Fi1 2.4G: L Band

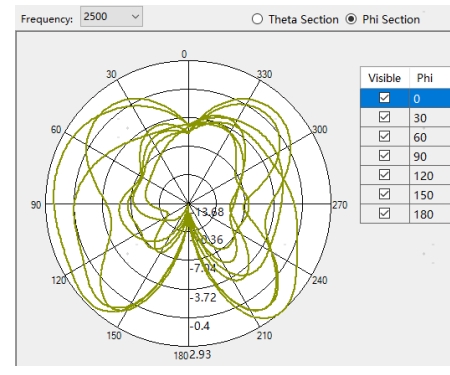
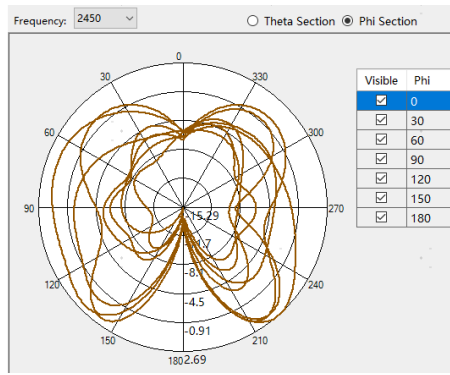
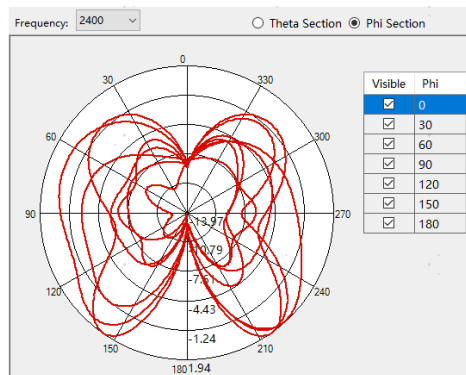
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

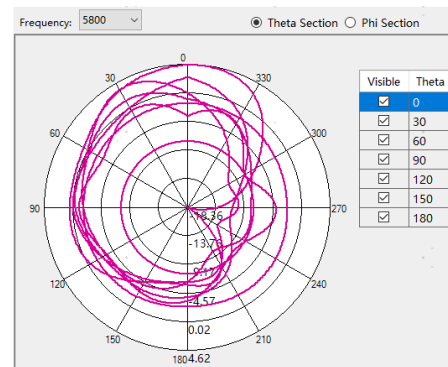
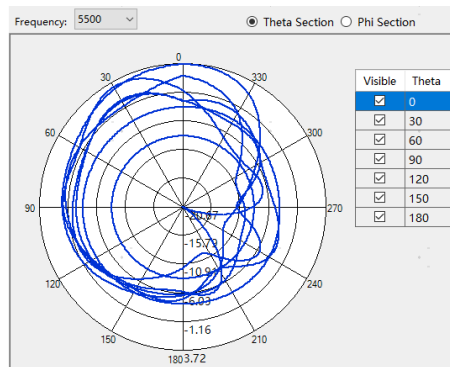
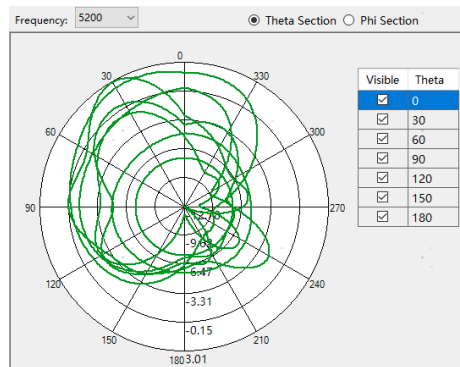
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Wi-Fi1 5G: L Band

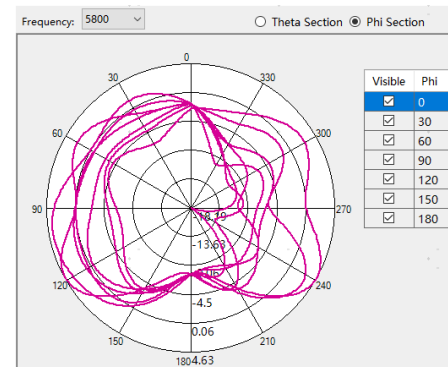
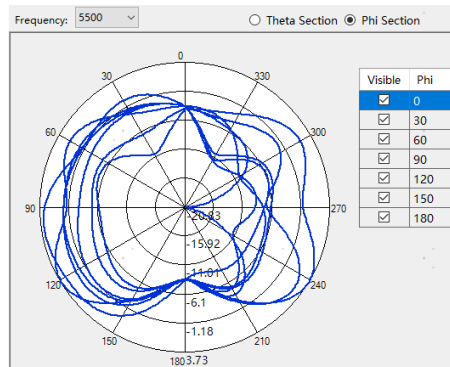
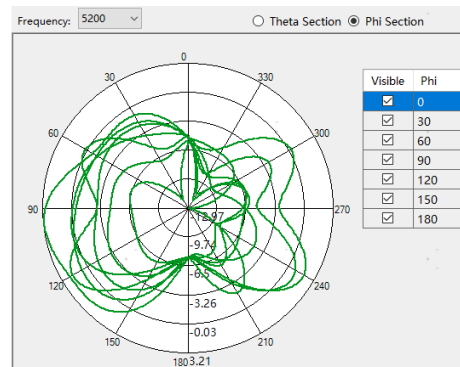
M Band

H Band

Theta
Section



Phi
Section

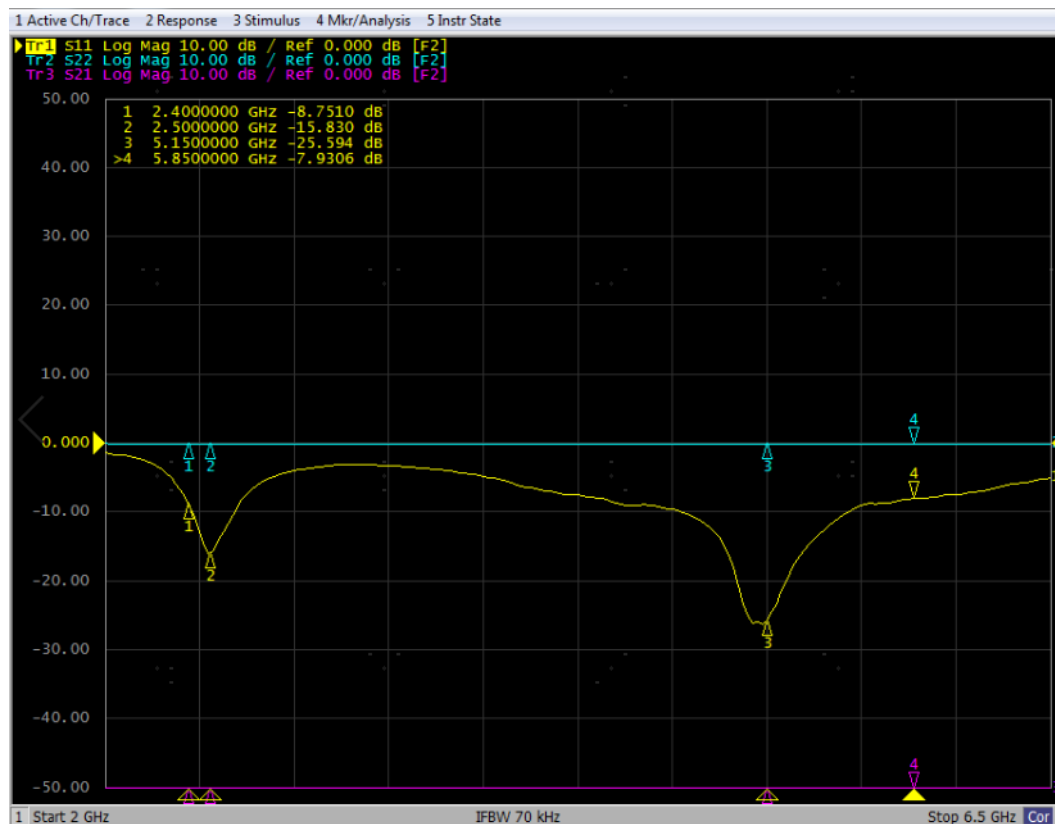


ANT Return Loss

Wi-Fi0 Antenna

2.4-2.5GHz: S11 < -8dB

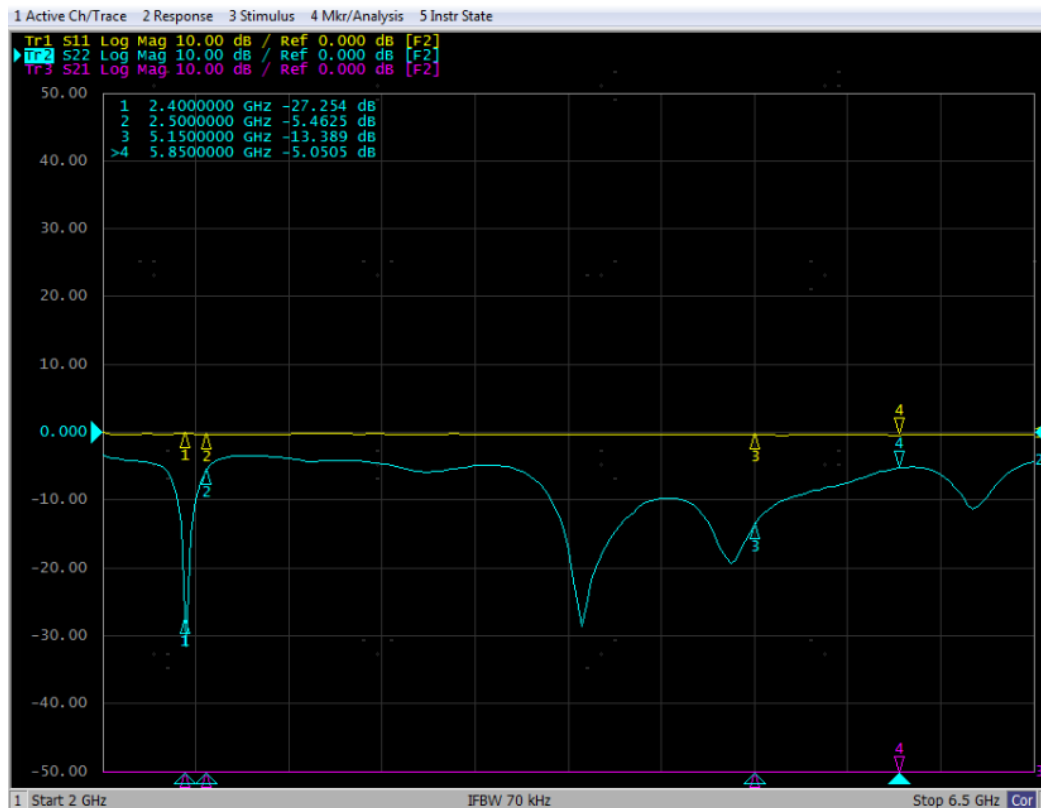
5.15-5.85GHz: S11 < -8dB



Wi-Fi1 Antenna

2.4-2.5GHz: $S_{11} < -5\text{dB}$

5.15-5.85GHz: $S_{11} < -5\text{dB}$



Isolation between
Wi-Fi0 and Wi-Fi1

2.4-2.5G:

Low band: -30dB

Middle band:-25dB

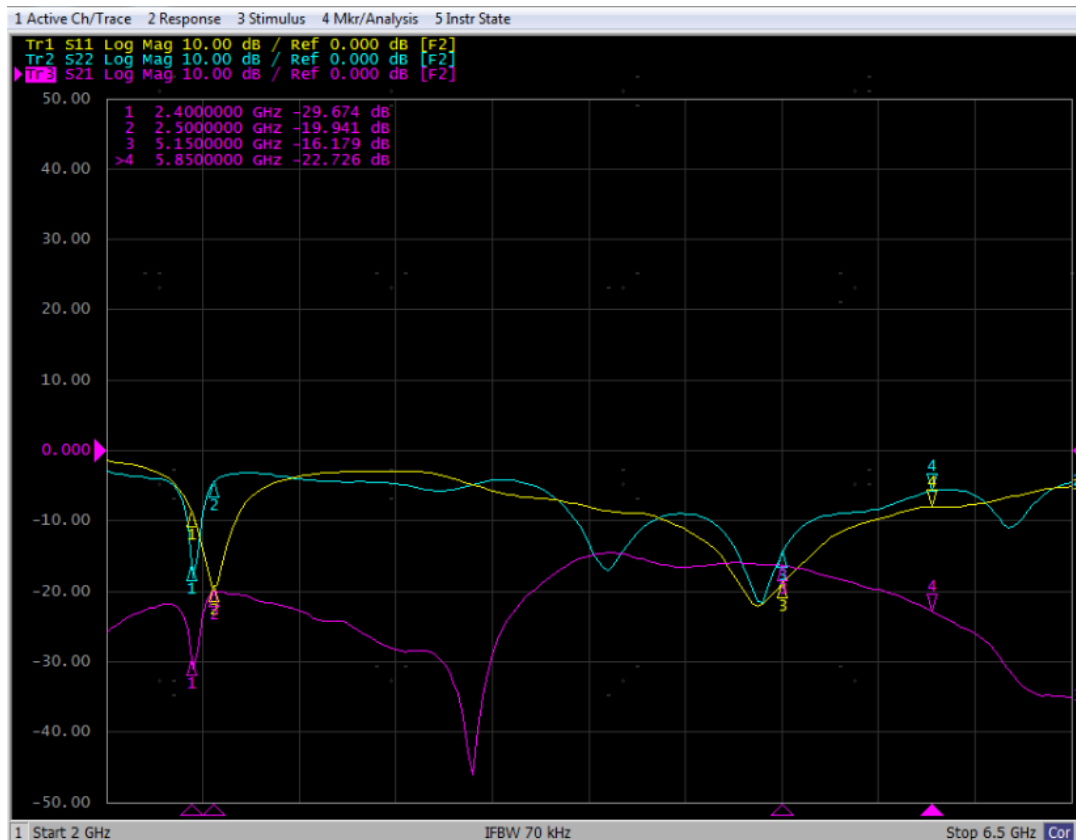
High band:-20dB

5.15-5.85G:

Low band:-16dB

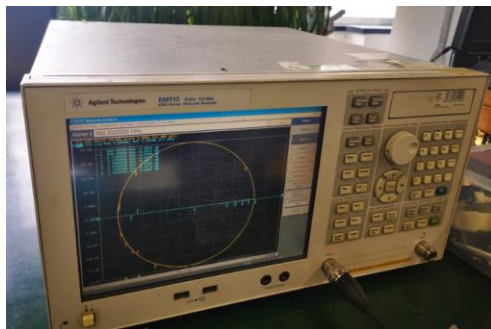
Middle band:-19dB

High band:-22dB



ANT Test Device

Hisense



Device Name	Vector network analyzer	Microwave anechoic chamber
Device Model	5071C	Rayzone 1800
Calibration Time	2024.06.11	2024.08.05
Test Time	2025.03.19	2025.03.19
Tester	Hu Wang	Hu Wang

- **Manufacturer:** Qingdao Intelligent & Precise Electronics Co., Ltd.
- **Address:** Building 1, No. 218 Qianwangang Road,
Qingdao Economic and Technological Development Zone,
Shandong Province,
CHINA
- **Contact:** Jin-hui Zhai
- **Email:** zhaijinhui@hisense.com

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谢 谢