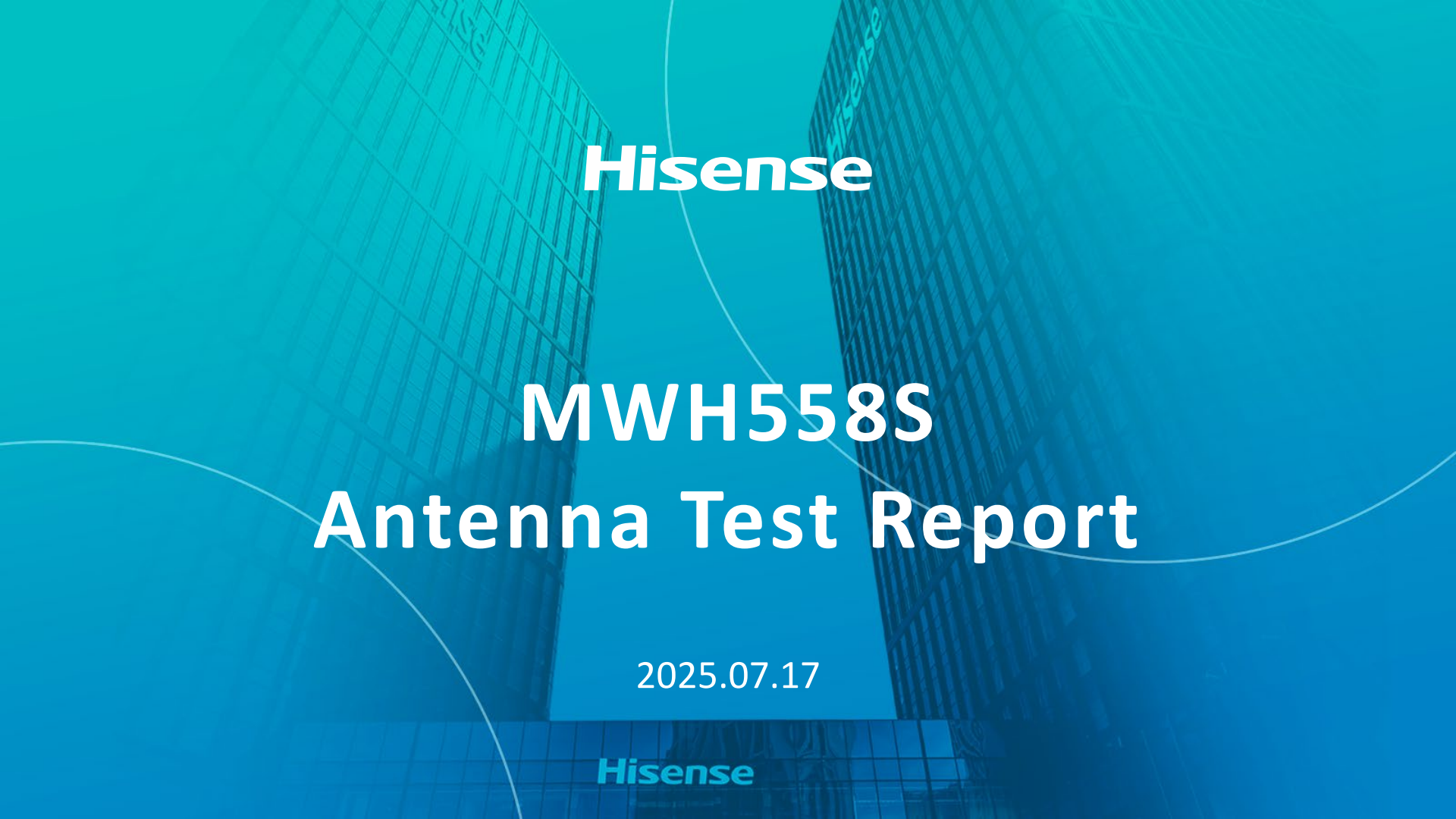




Hisense

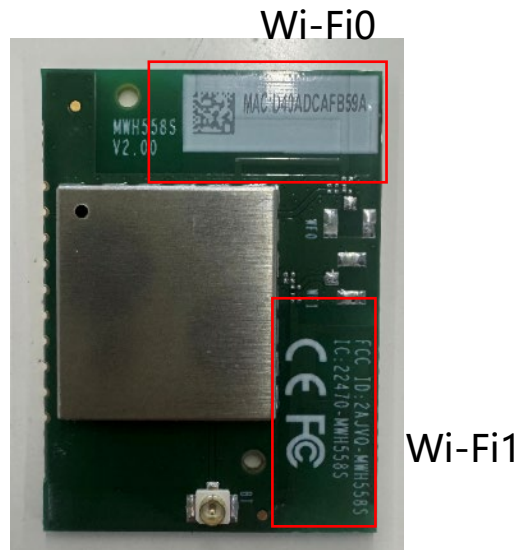
MWH558S
Antenna Test Report

2025.07.17

Hisense

Wi-Fi0	
Antenna Type	Monopole Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: S11≤-13dB 5.15GHz~5.85GHz: S11≤-10dB.
Peak Gain	0.00dBi@2.4~2.5GHz , 2.91dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz≥26%(Avg) , 5.15~5.85GHz≥40%(Avg)

Wi-Fi1	
Antenna Type	Inverted F Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: S11≤-16dB 5.15GHz~5.85GHz: S11≤-7dB.
Peak Gain	2.32dBi@2.4~2.5GHz , 0.08dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz≥30%(Avg) , 5.15~5.85GHz≥32%(Avg)



Wi-Fi0	CH	Gain/dBi	Efficiency/%
2.4G	L	-0.17	29
	M	-0.96	25
	H	0.00	27
5G	L	0.00	30
	M	2.61	45
	H	2.91	35

Wi-Fi1	CH	Gain/dBi	Efficiency/%
2.4G	L	2.32	40
	M	2.21	43
	H	1.59	45
5G	L	0.05	33
	M	0.08	32
	H	-1.80	35

ANT Directivity Pattern

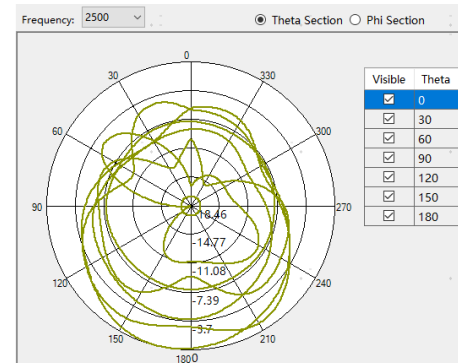
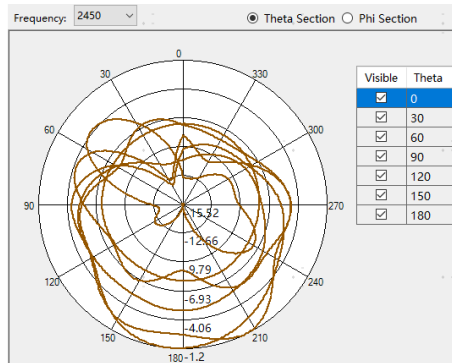
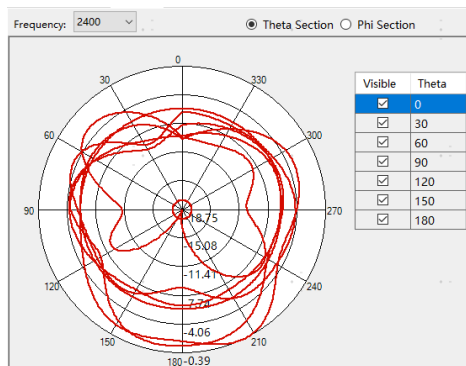
Hisense

Wi-Fi0 2.4G: L Band

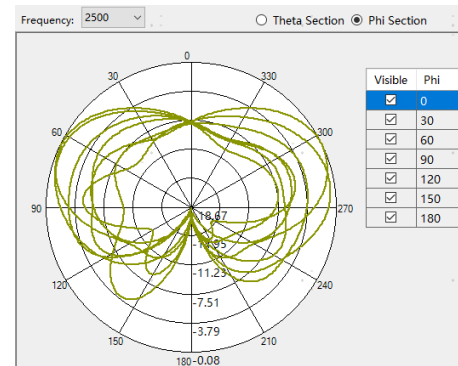
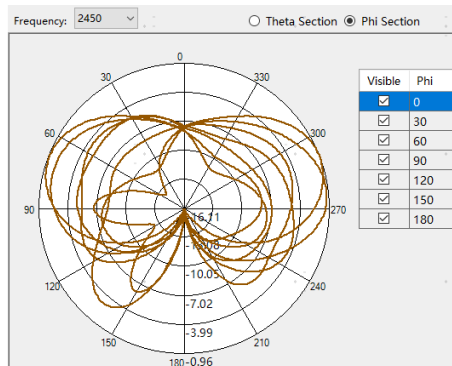
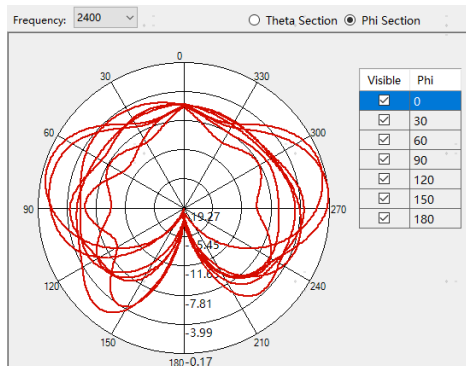
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

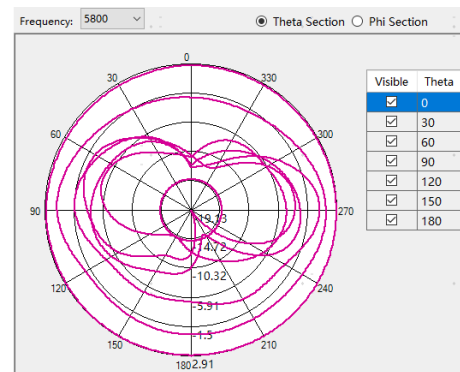
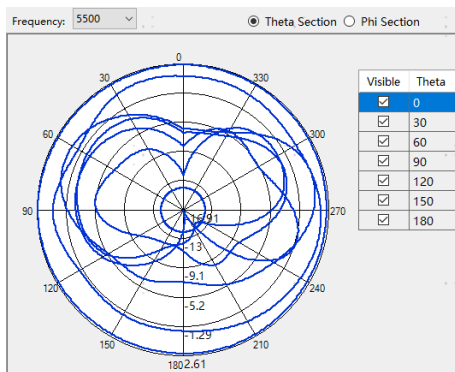
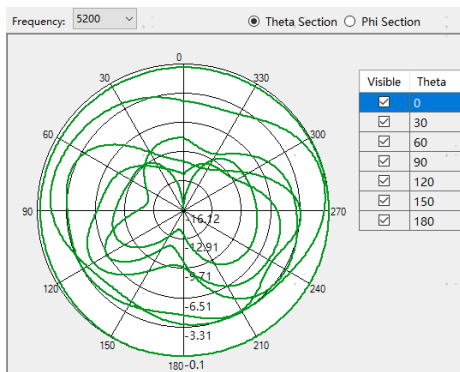
Hisense

Wi-Fi0 5G: L Band

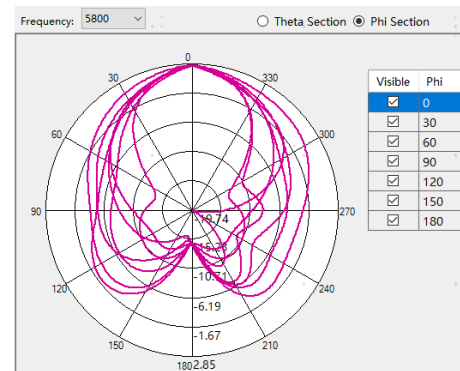
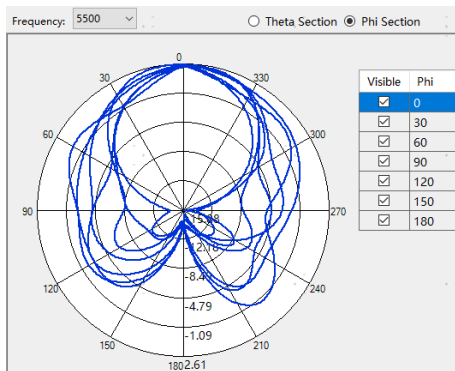
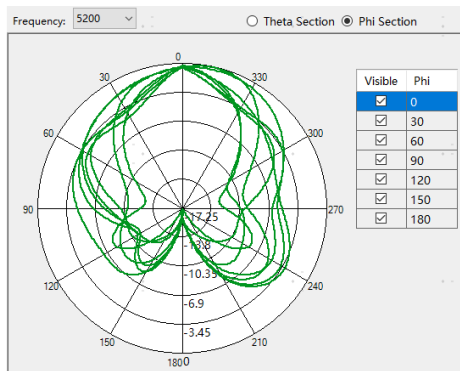
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

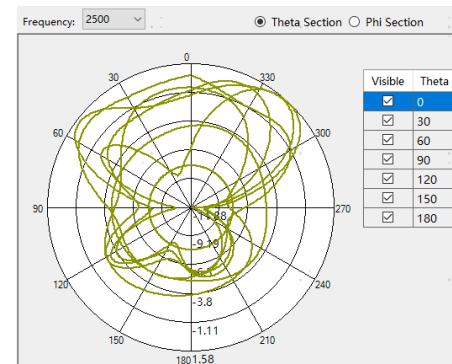
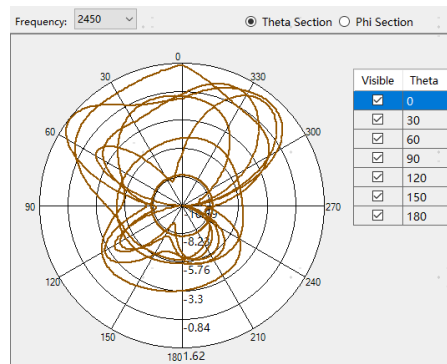
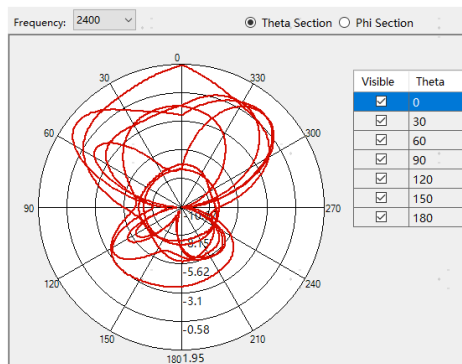
Hisense

Wi-Fi1 2.4G: L Band

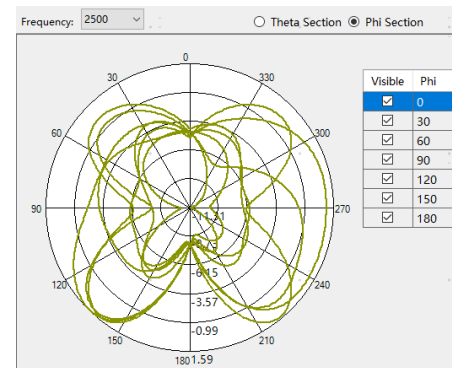
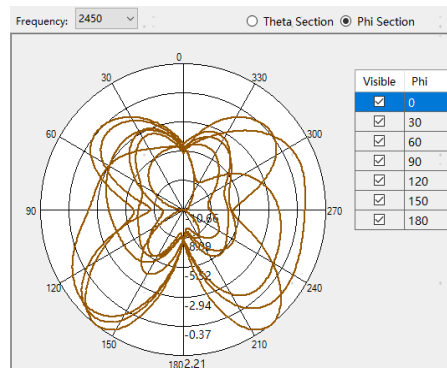
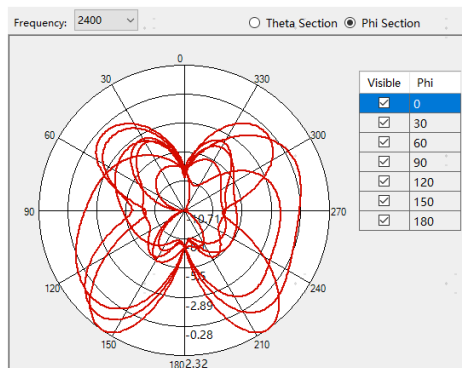
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

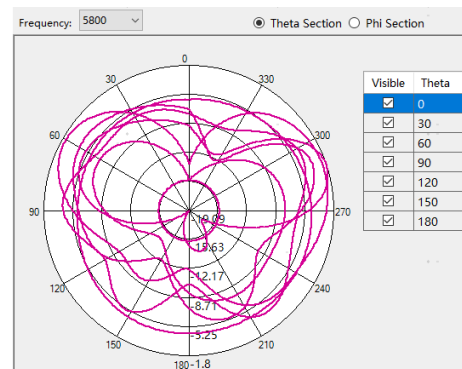
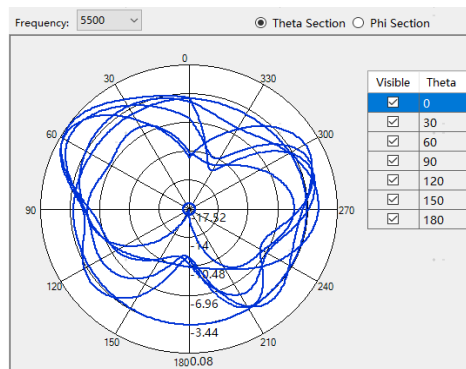
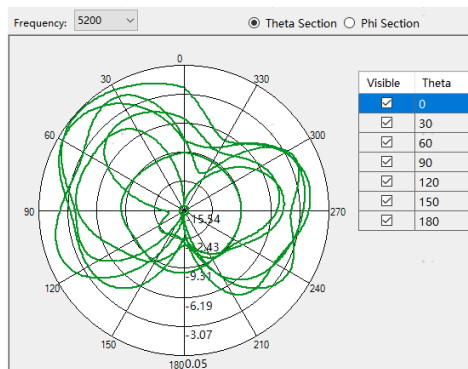
Hisense

Wi-Fi1 5G: L Band

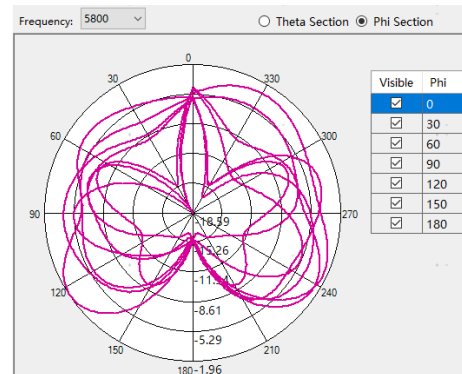
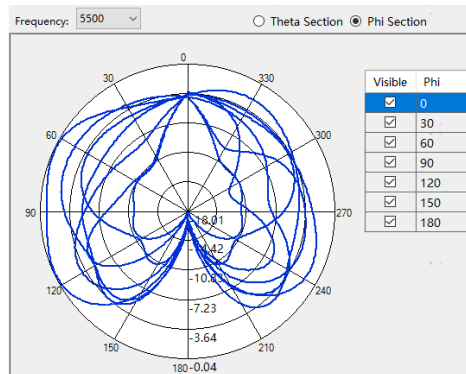
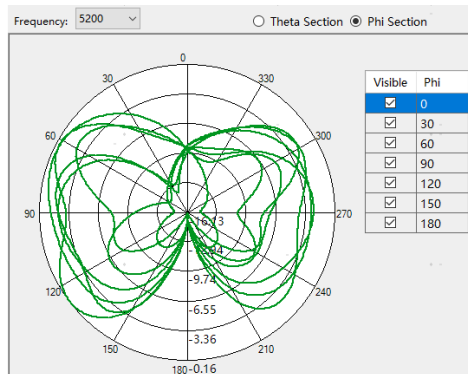
M Band

H Band

Theta
Section

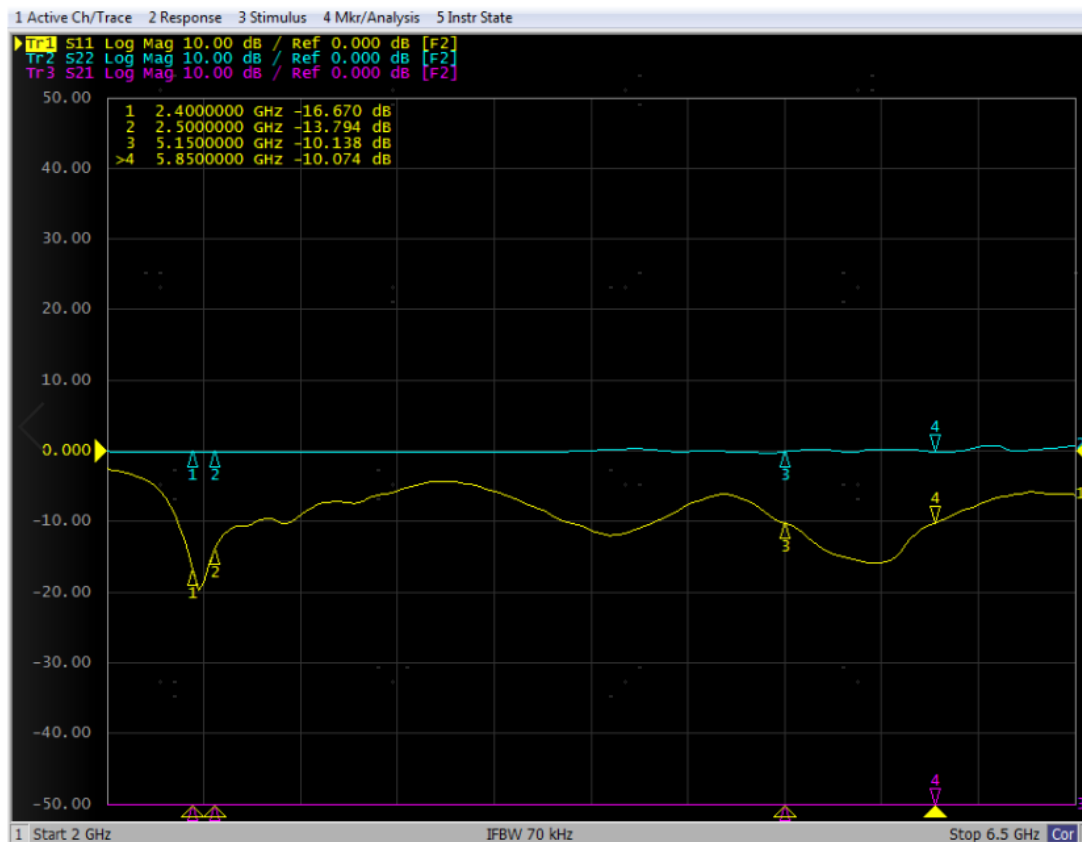


Phi
Section

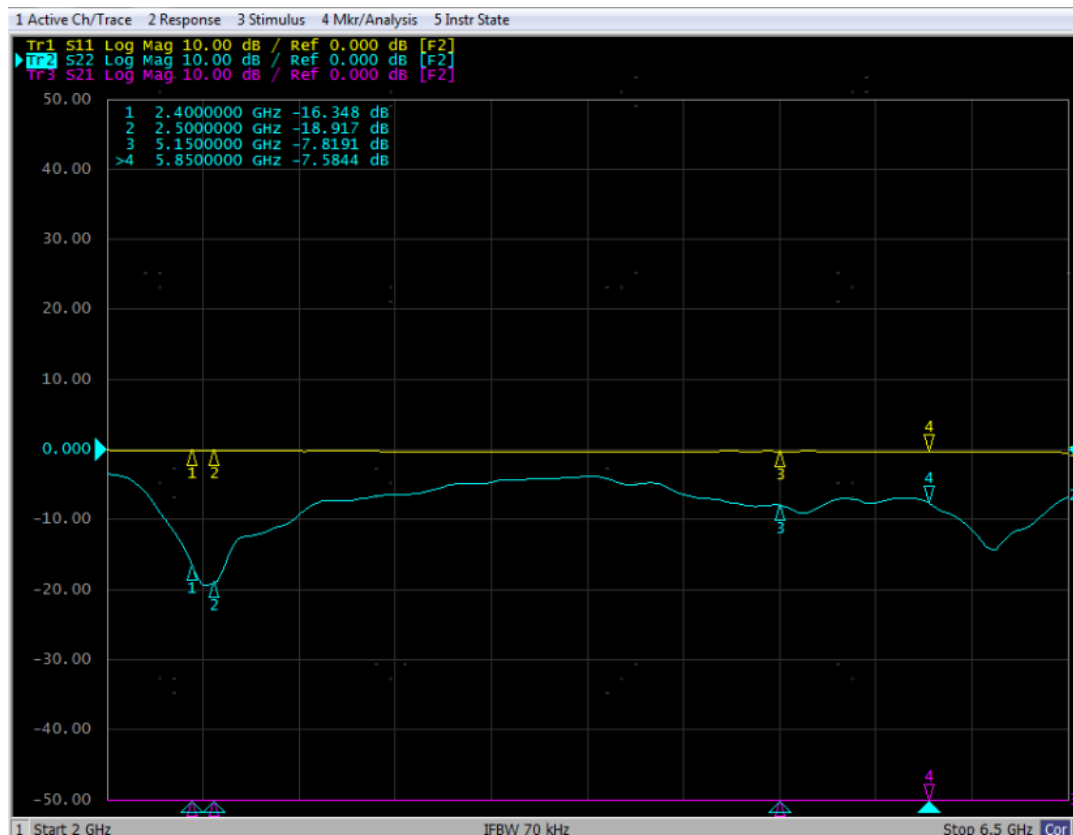


ANT Return Loss

Wi-Fi0 Antenna
2.4-2.5GHz: $S_{11} < -13\text{dB}$
5.15-5.85GHz: $S_{11} < -10\text{dB}$



Wi-Fi1 Antenna
2.4-2.5GHz: $S_{11} < -16\text{dB}$
5.15-5.85GHz: $S_{11} < -7\text{dB}$



Isolation between
Wi-Fi0 and Wi-Fi1

2.4-2.5G:

Low band: -14.5dB

Middle band:-14dB

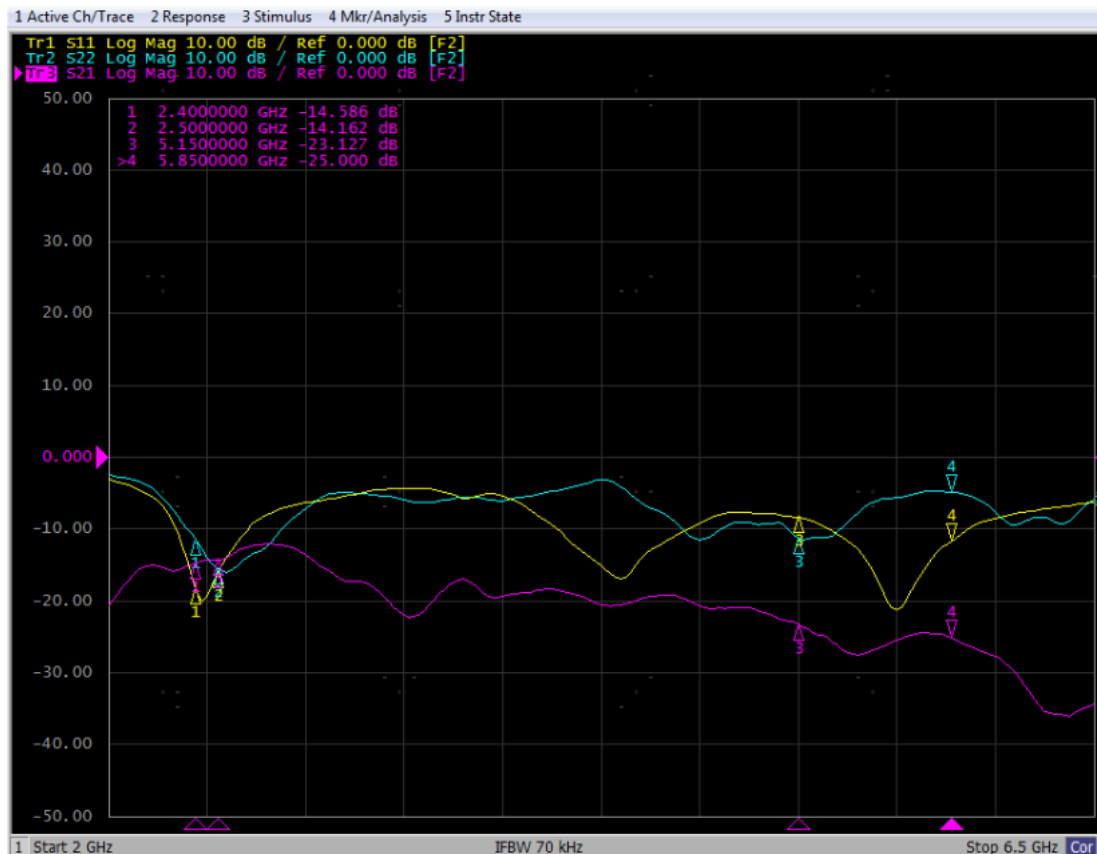
High band:-14dB

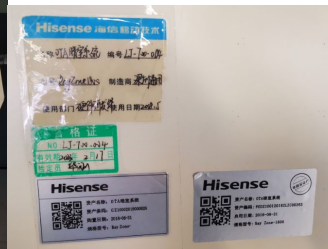
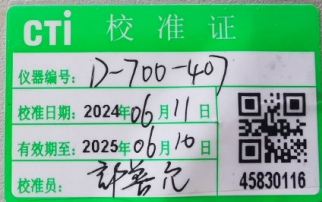
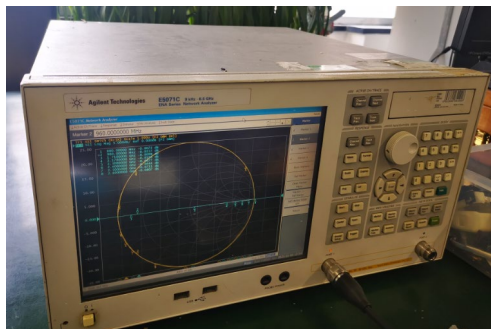
5.15-5.85G:

Low band:-23dB

Middle band:-26dB

High band:-25dB





Device Name	Vector network analyzer	Microwave anechoic chamber
Device Model	5072A	Rayzone 1800
Calibration Time	2024.06.11	2024.08.05
Test Time	2025.07.17	2025.07.17
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

The image features a blue-tinted background of a city skyline. On the left, a tall skyscraper is visible with the 'Hisense' logo and Chinese characters '海信国际中心' at the top. The overall scene is overlaid with a semi-transparent blue filter and decorative white curved lines.

Hisense

海信国际中心

Hisense

Thank you