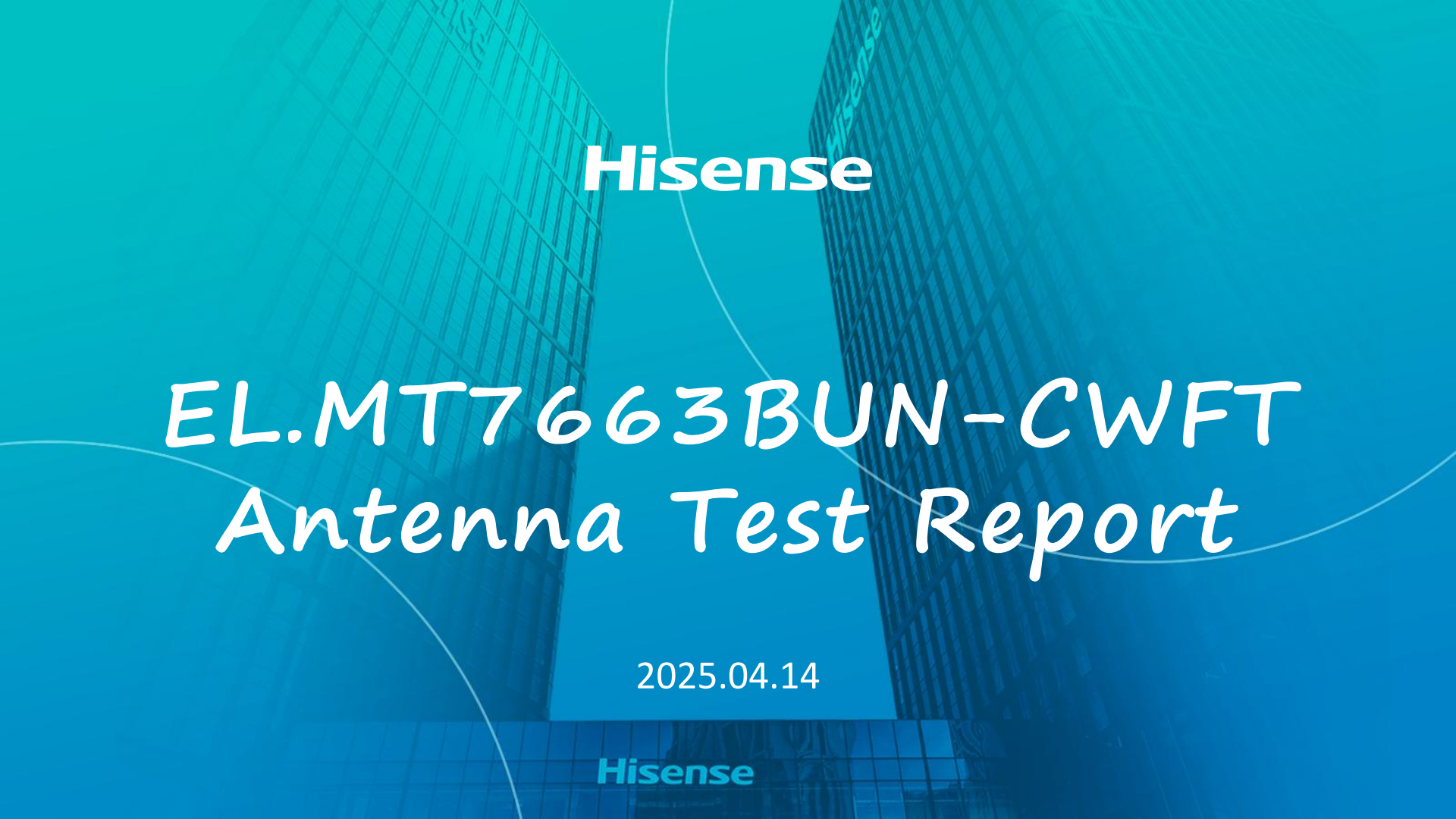




Hisense

EL.MT7663BUN-CWFT Antenna Test Report

2025.04.14

Hisense

Wi-Fi0	
Antenna Type	Inverted F Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: $S_{11} \leq -6\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq -6\text{dB}$.
Peak Gain	2.90dBi@2.4~2.5GHz , 3.02dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz $\geq 31\%$ (Avg) , 5.15~5.85GHz $\geq 45\%$ (Avg)

Wi-Fi1	
Antenna Type	Monopole Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: $S_{11} \leq -8\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq -4\text{dB}$.
Peak Gain	4.72dBi@2.4~2.5GHz , -0.01dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz $\geq 40\%$ (Avg) , 5.15~5.85GHz $\geq 25\%$ (Avg)

BT	
Antenna Type	Inverted F Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz
Return Loss	$S_{11} \leq -9\text{dB}$
Peak Gain	-0.44dBi
Efficiency	$\geq 26\%$ (Avg)



Wi-Fi0	CH	Gain/dBi	Efficiency/%
2.4G	L	0.30	22
	M	2.51	33
	H	2.90	34
5G	L	-0.09	34
	M	1.72	43
	H	3.02	51

Wi-Fi1	CH	Gain/dBi	Efficiency/%
2.4G	L	1.01	35
	M	3.16	40
	H	4.72	44
5G	L	-1.23	24
	M	-0.01	24
	H	-1.63	24

BT	CH	Gain/dBi	Efficiency/%
2.4G	L	-0.44	28
	M	-1.00	27
	H	-1.49	26

ANT Directivity Pattern

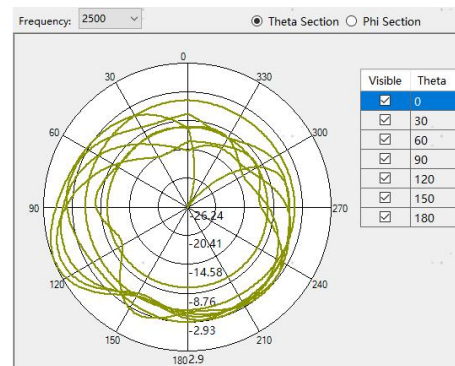
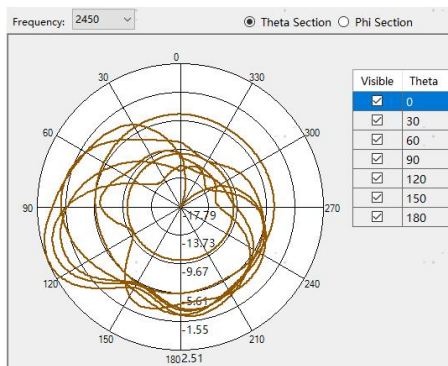
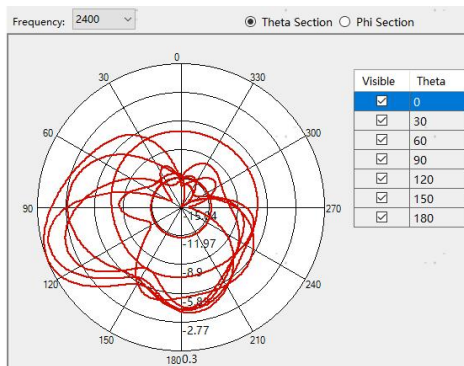
Hisense

Wi-Fi0 2.4G: L Band

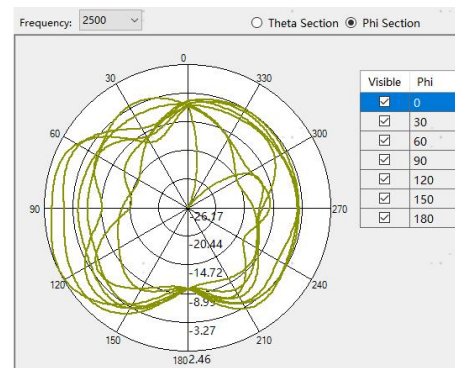
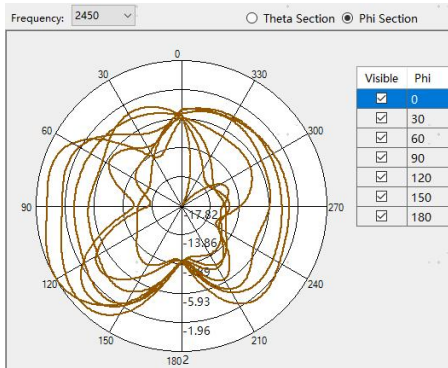
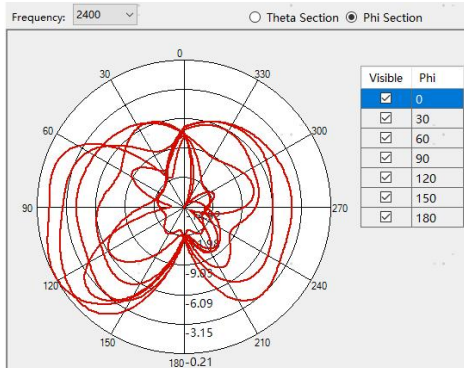
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

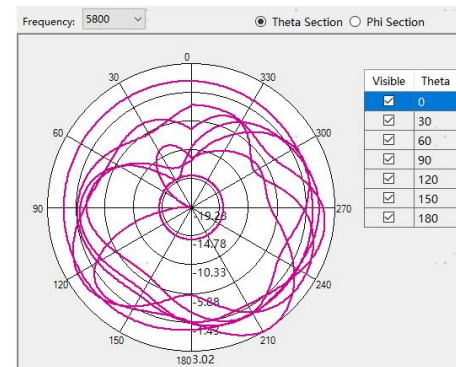
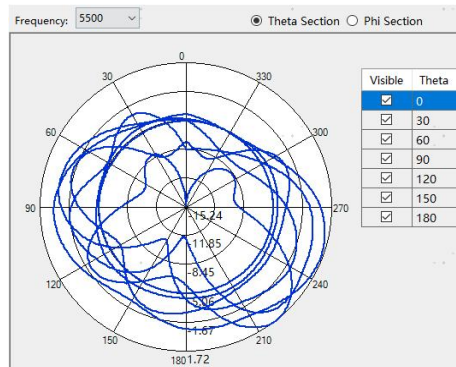
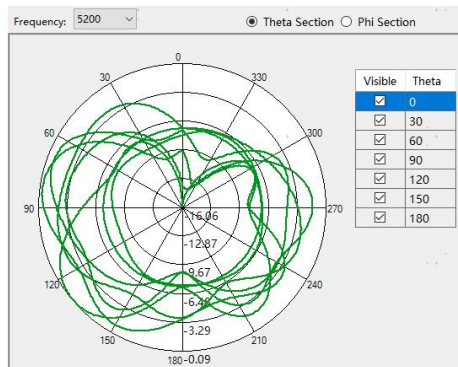
Hisense

Wi-Fi0 5G: L Band

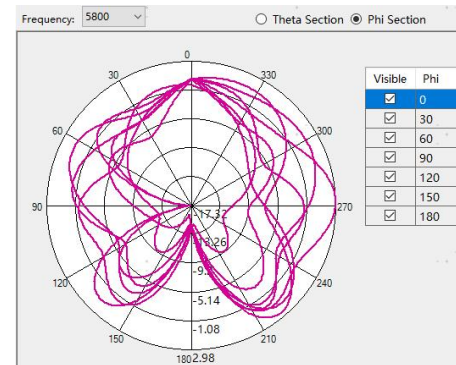
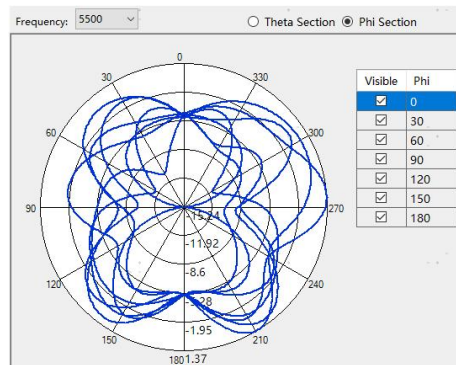
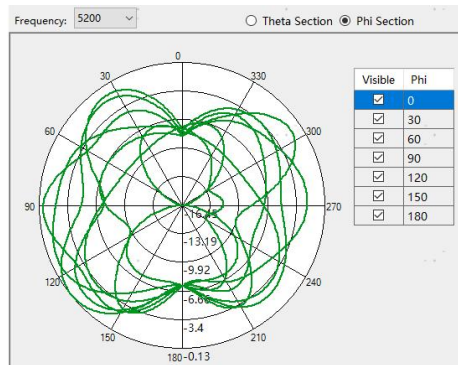
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

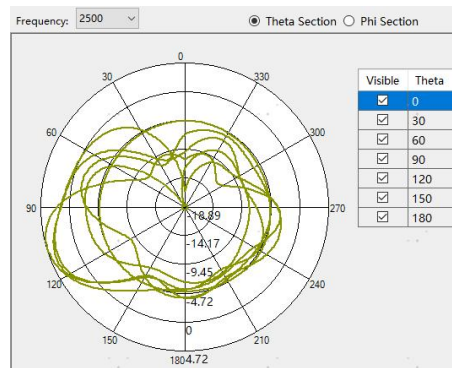
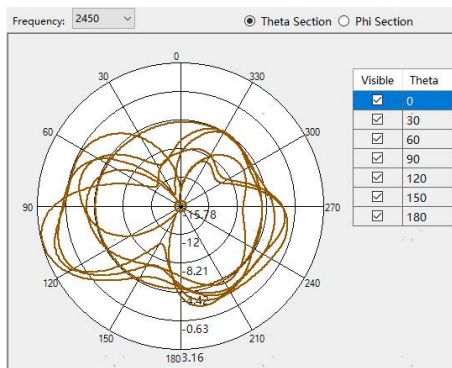
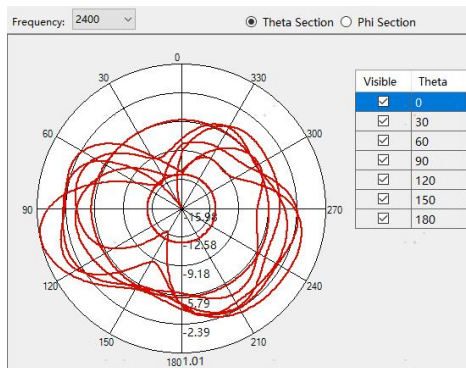
Hisense

Wi-Fi1 2.4G: L Band

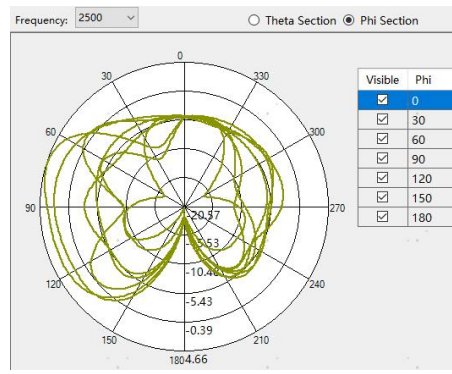
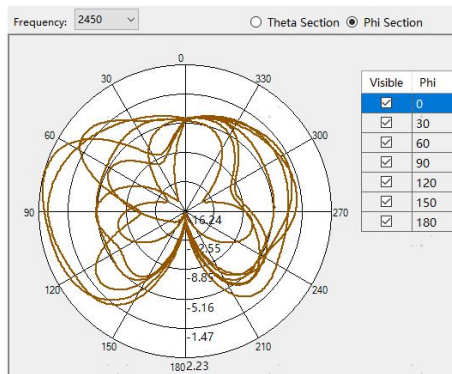
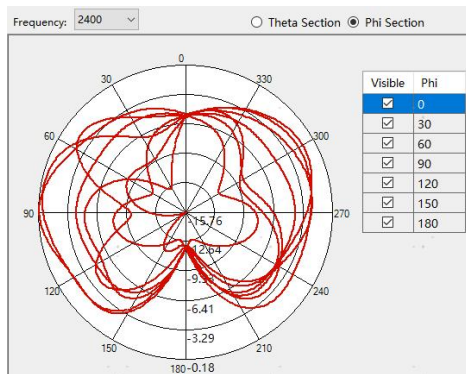
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

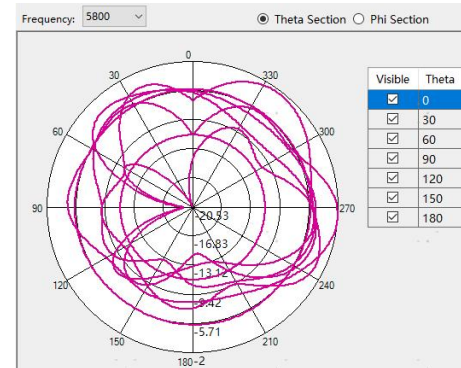
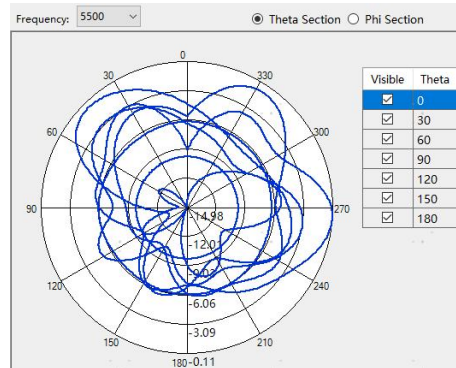
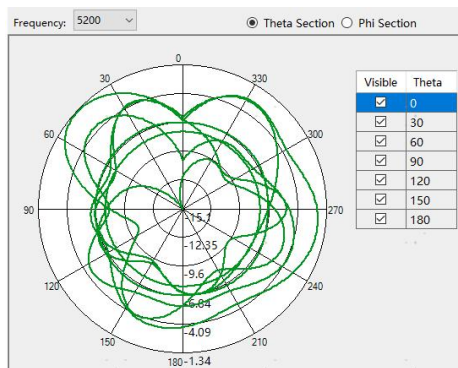
Hisense

Wi-Fi1 5G: L Band

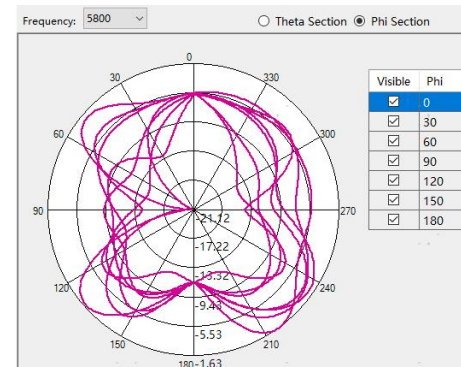
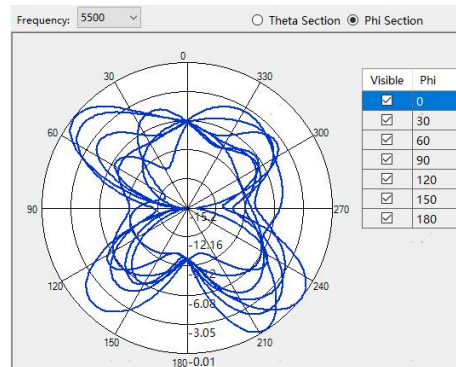
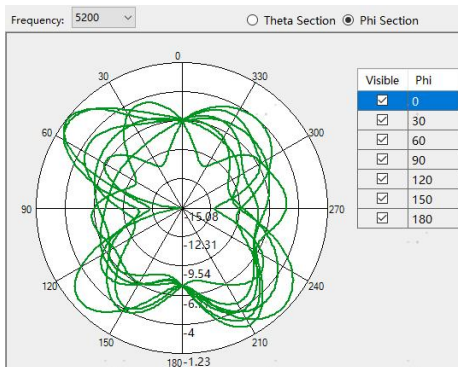
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

Hisense

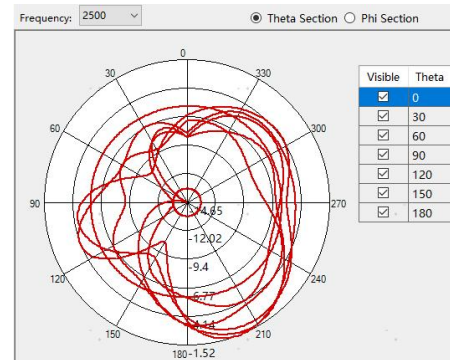
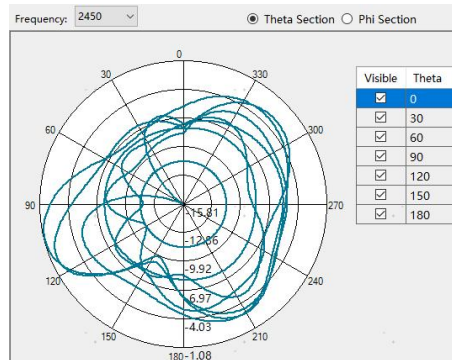
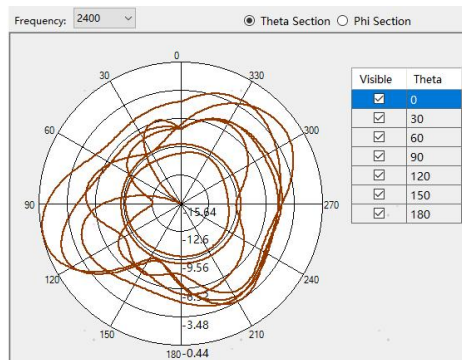
BT 2.4G:

L Band

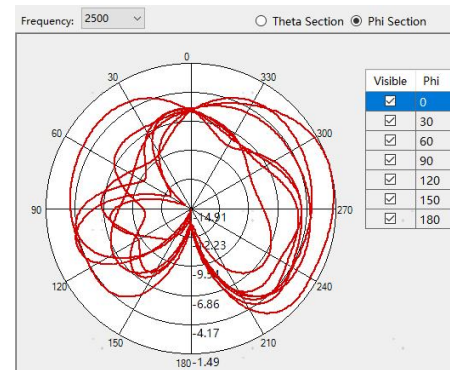
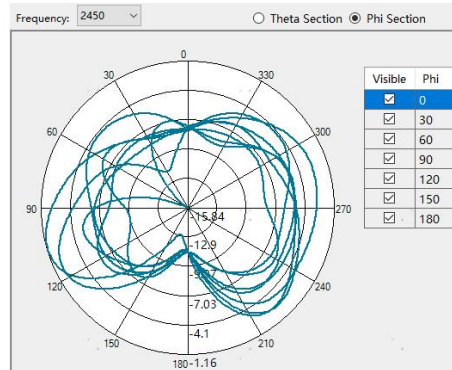
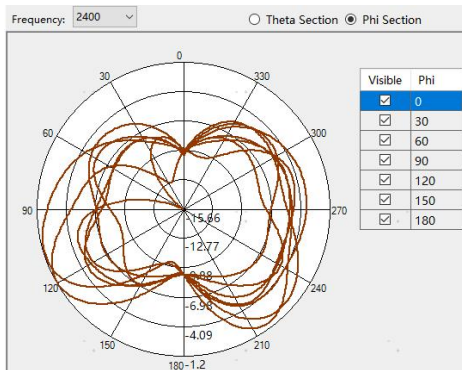
M Band

H Band

Theta
Section



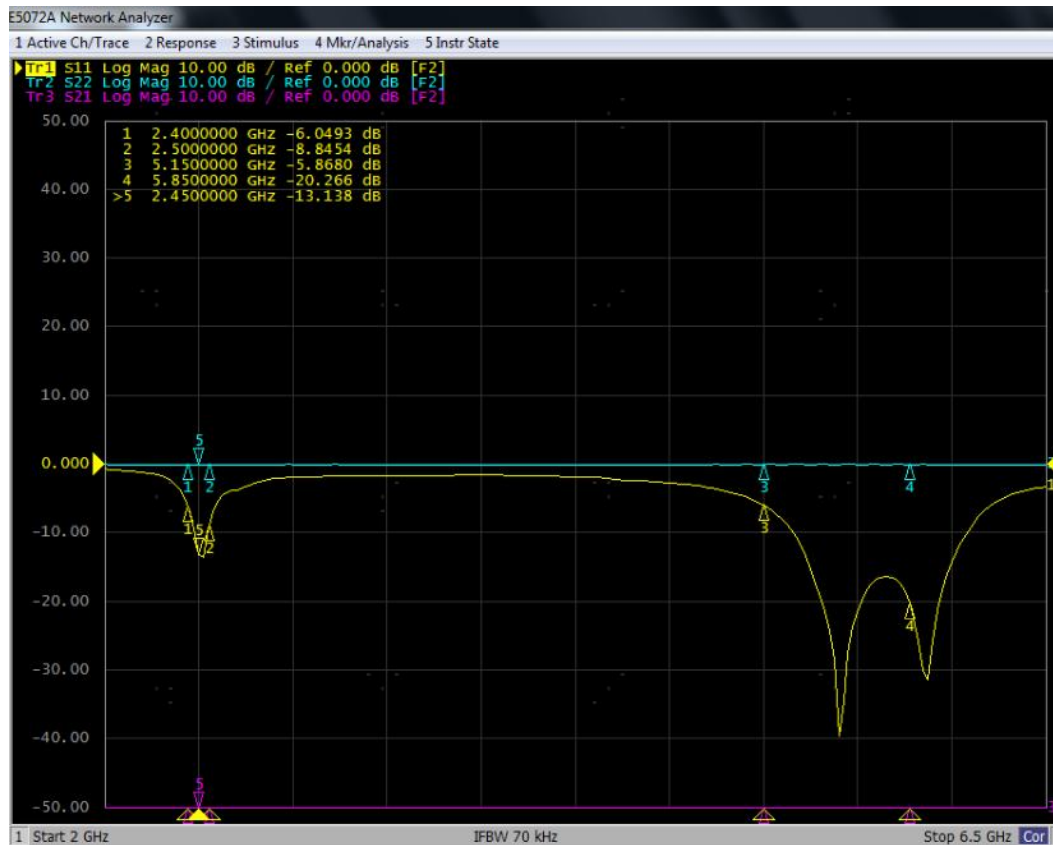
Phi
Section



Wi-Fi0 Antenna

2.4-2.5GHz: S11 < -6dB

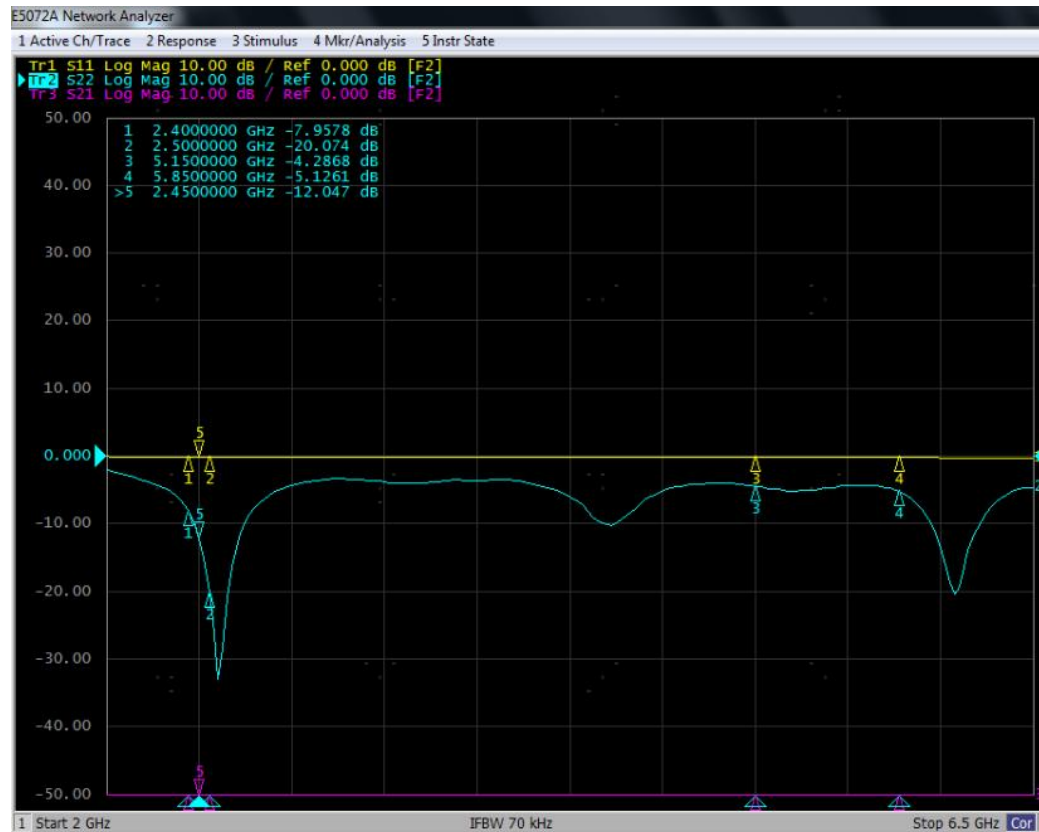
5.15-5.85GHz: S11 < -6dB



Wi-Fi1 Antenna

2.4-2.5GHz: S11 < -8dB

5.15-5.85GHz: S11 < -4dB



BT Antenna
2.4-2.5GHz: S11 < -9dB



Isolation between
Wi-Fi0 and Wi-Fi1

2.4-2.5G:

Low band: -13dB

Middle band:-12dB

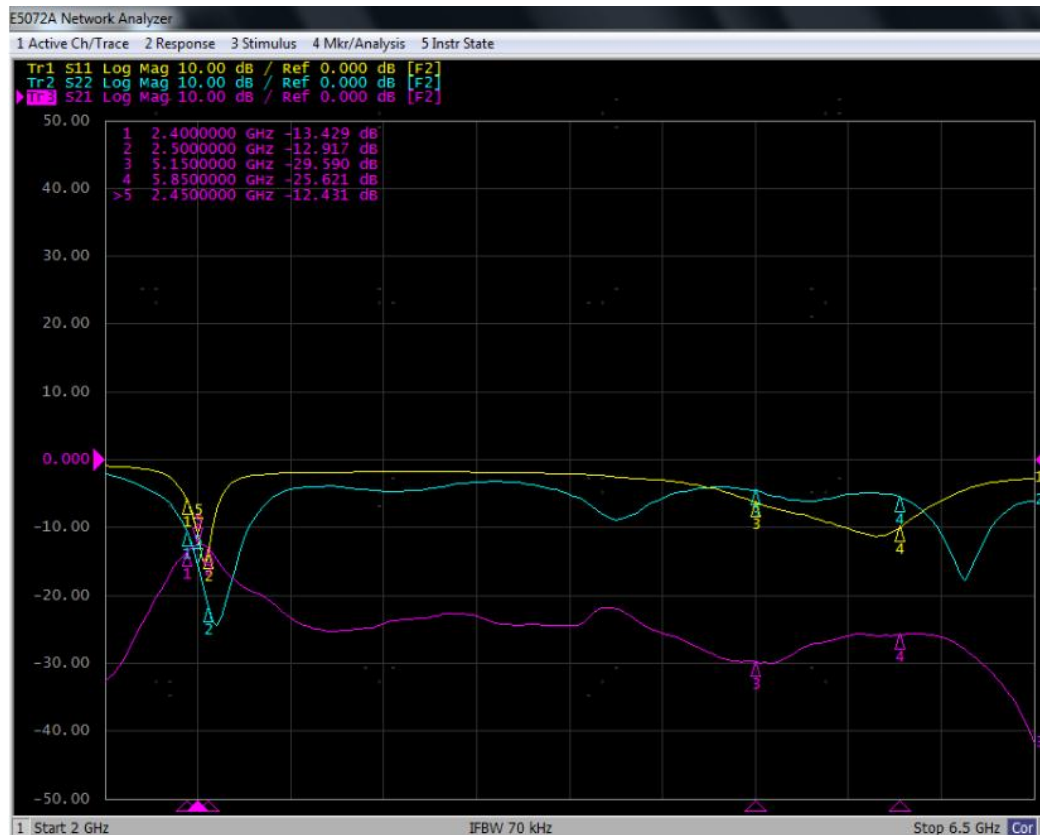
High band:-13dB

5.15-5.85G:

Low band:-29dB

Middle band:-26dB

High band:-25dB



Isolation between
Wi-Fi0 and BT

2.4-2.5G:

Low band: -15dB

Middle band: -12dB

High band: -13dB



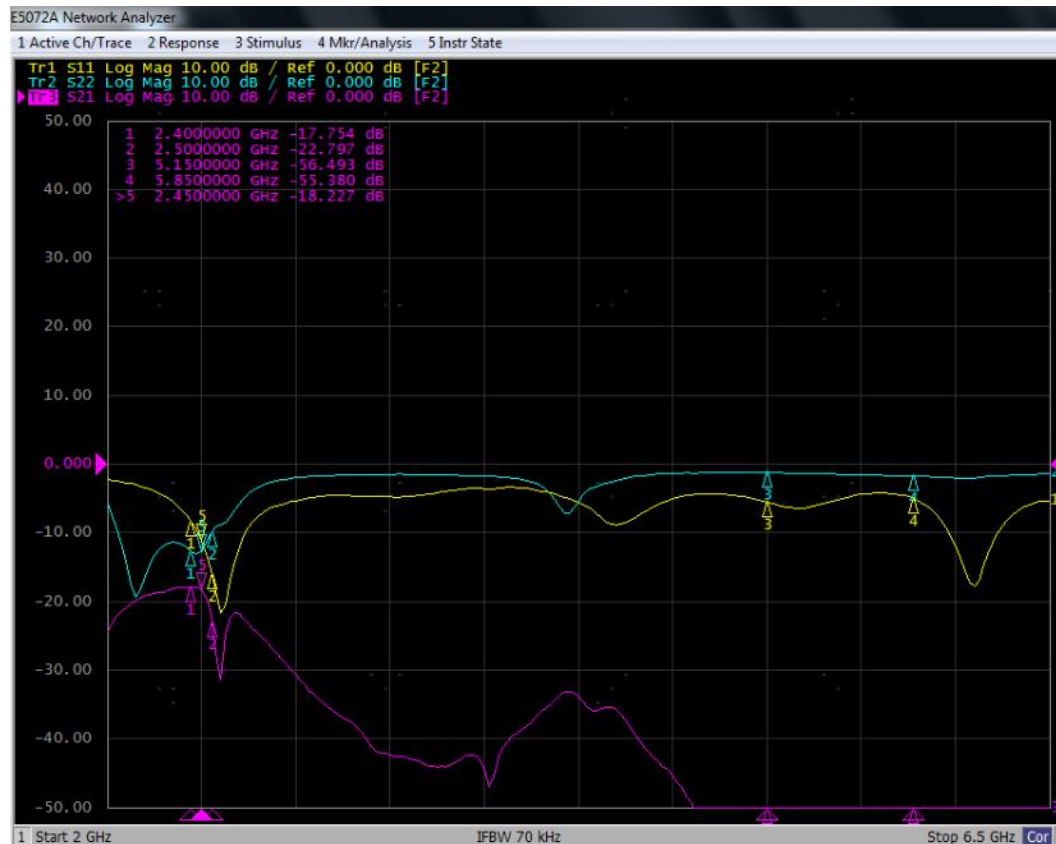
Isolation between
Wi-Fi1 and BT

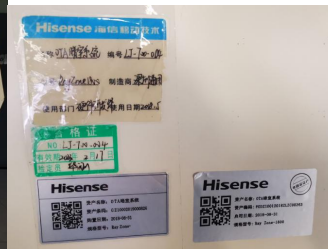
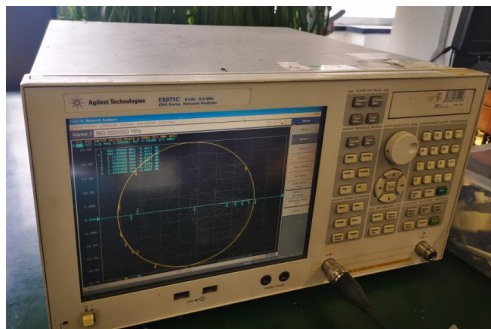
2.4-2.5G:

Low band: -17dB

Middle band:-18dB

High band:-22dB





Device Name	Vector network analyzer	Microwave anechoic chamber
Device Model	5072A	Rayzone 1800
Calibration Time	2024.06.11	2024.08.05
Test Time	2025.04.14	2025.04.14
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,
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- **Contact:** Jin-hui Zhai
- **Email:** zhajinhui@hisense.com

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