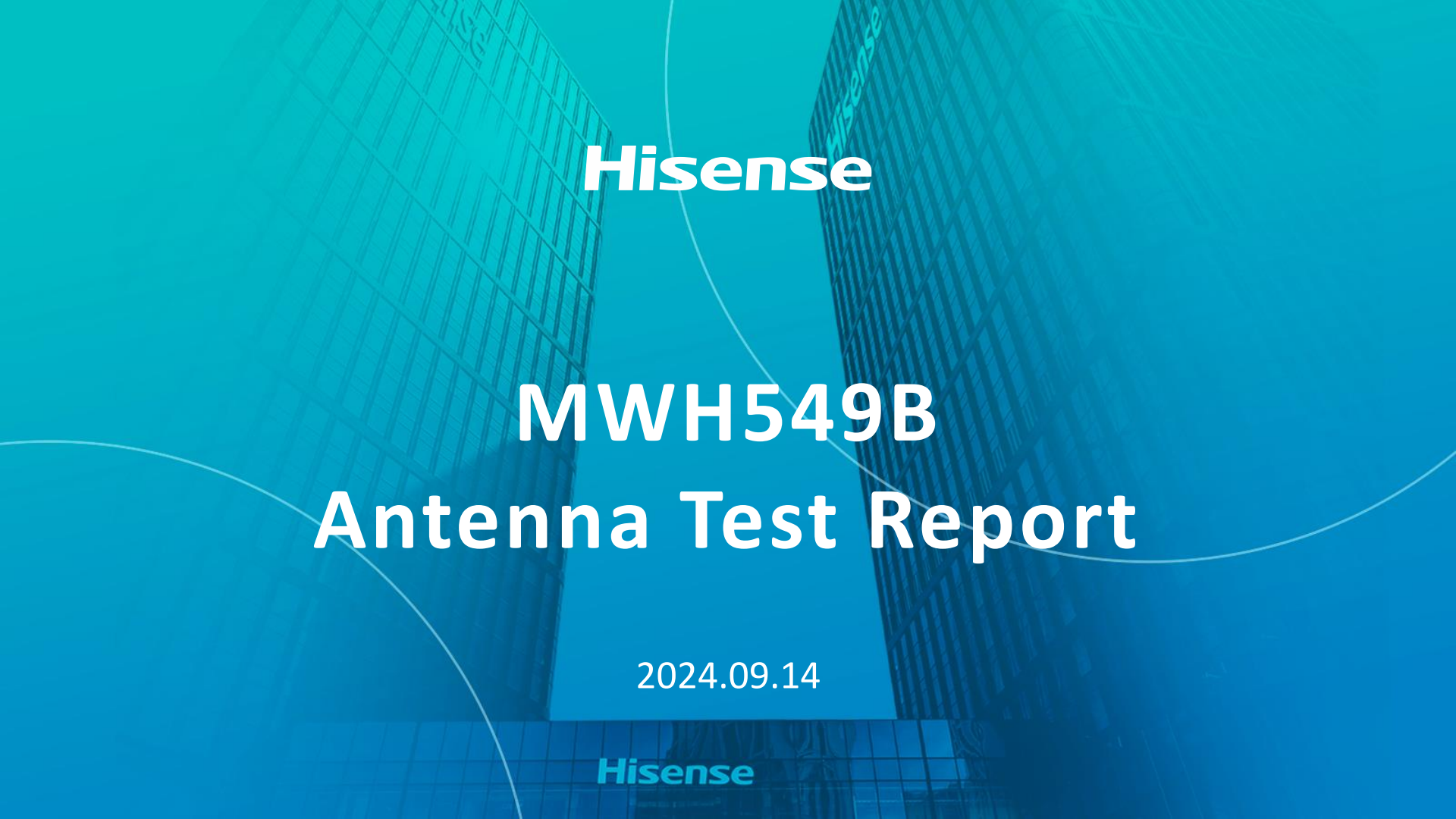




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MWH549B
Antenna Test Report

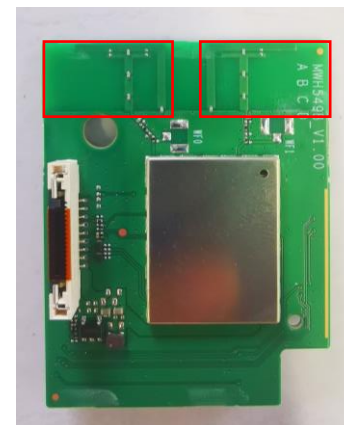
2024.09.14

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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: S11≤-11dB 5.15GHz~5.85GHz: S11≤-8dB.
Peak Gain	0.90dBi@2.4~2.5GHz , 2.82dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz≥45%(Avg) , 5.15~5.85GHz≥55%(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≤-11dB 5.15GHz~5.85GHz: S11≤-8dB.
Peak Gain	0.35dBi@2.4~2.5GHz , 4.44dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz≥45%(Avg) , 5.15~5.85GHz≥50%(Avg)

Wi-Fi0 Wi-Fi1



Wi-Fi0	CH	Gain/dBi	Efficiency/%
2.4G	L	0.65	45
	M	0.90	48
	H	0.88	44
5G	L	2.82	55
	M	1.56	62
	H	-0.82	50

Wi-Fi1	CH	Gain/dBi	Efficiency/%
2.4G	L	0.35	46
	M	-0.03	45
	H	0.0	45
5G	L	4.44	50
	M	2.59	55
	H	1.76	45

ANT Directivity Pattern

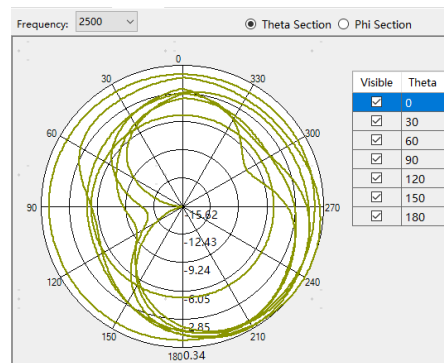
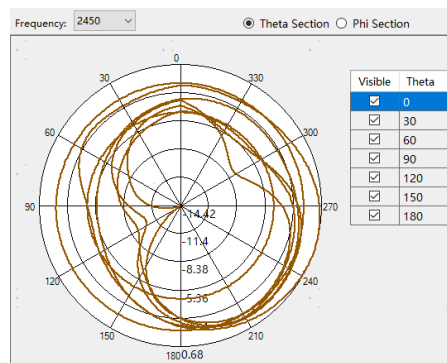
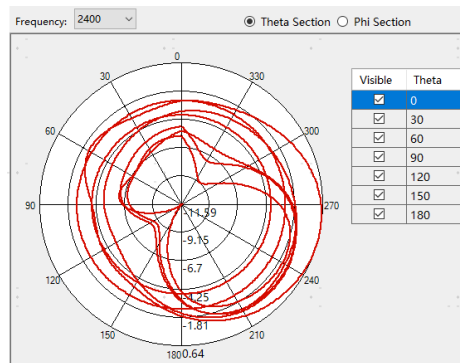
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Wi-Fi0 2.4G: L Band

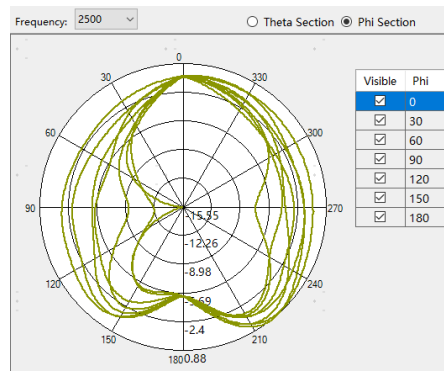
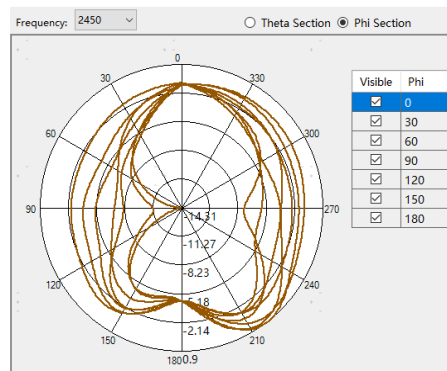
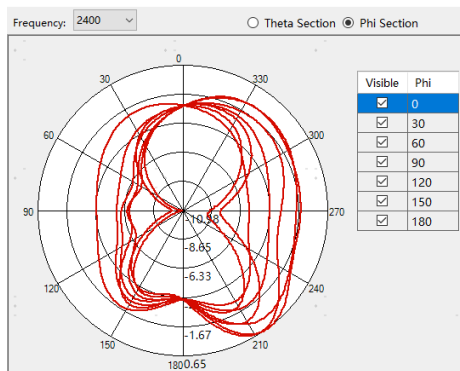
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

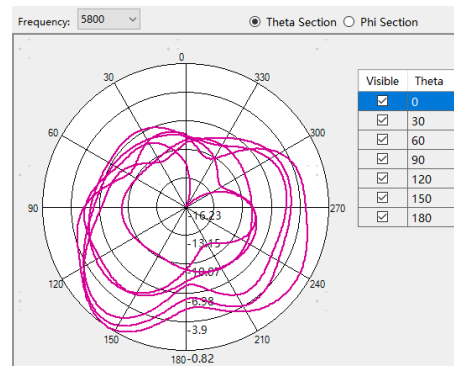
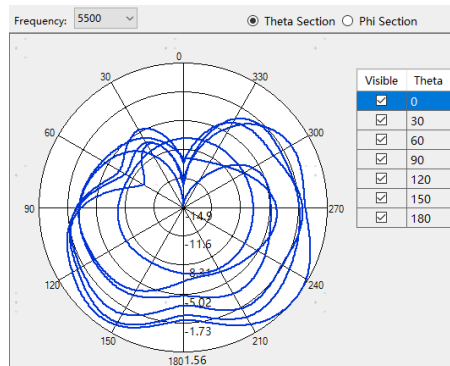
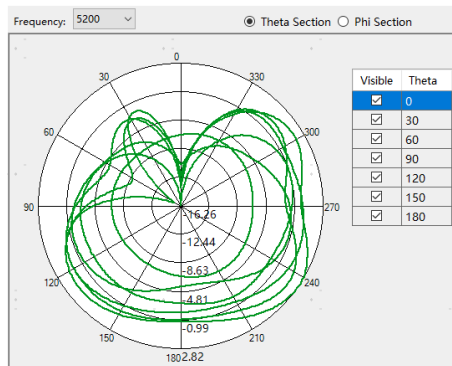
Hisense

Wi-Fi0 5G: L Band

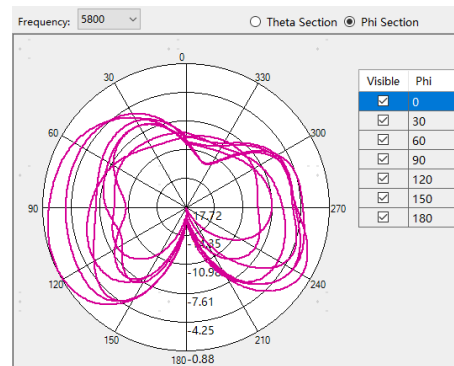
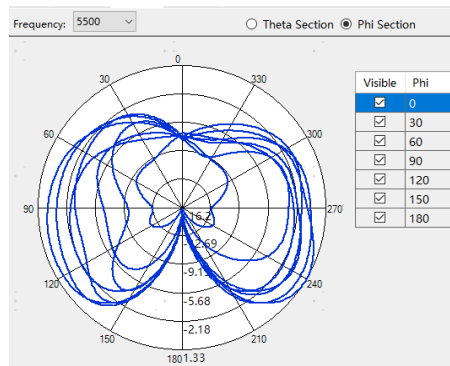
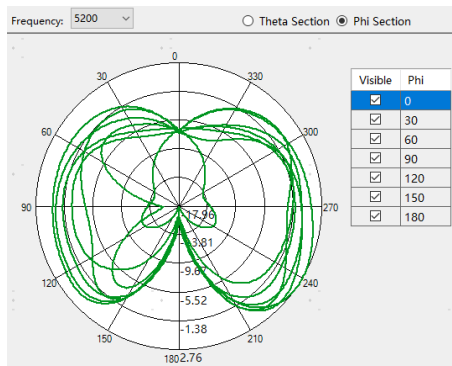
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

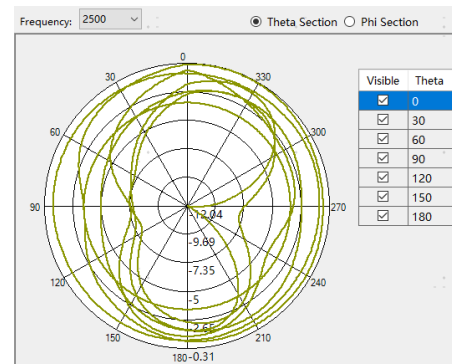
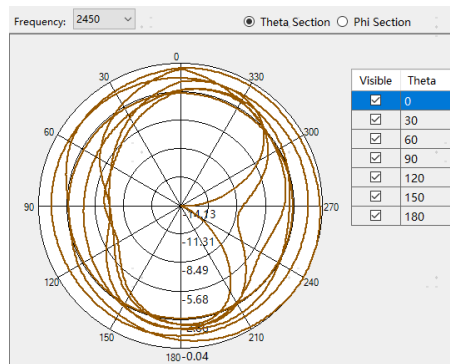
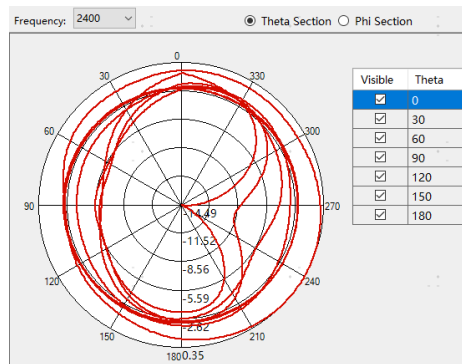
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Wi-Fi1 2.4G: L Band

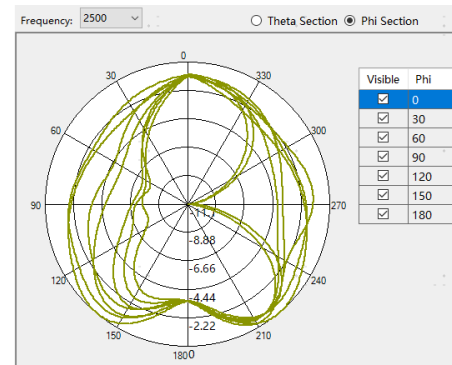
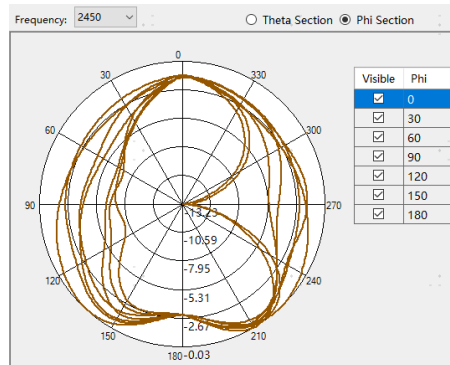
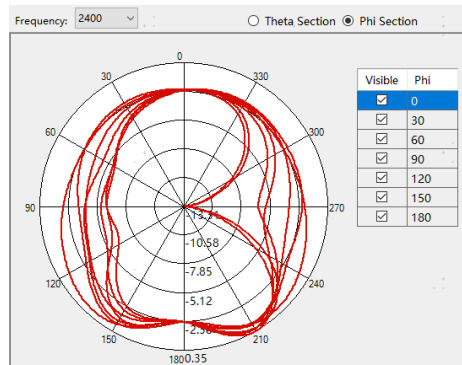
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

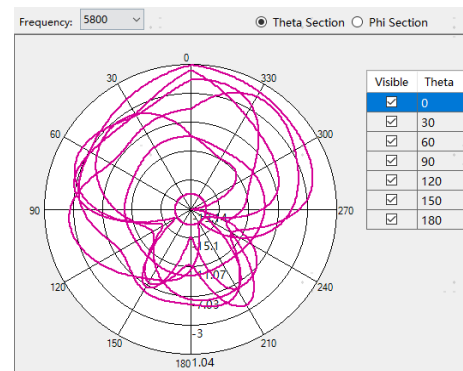
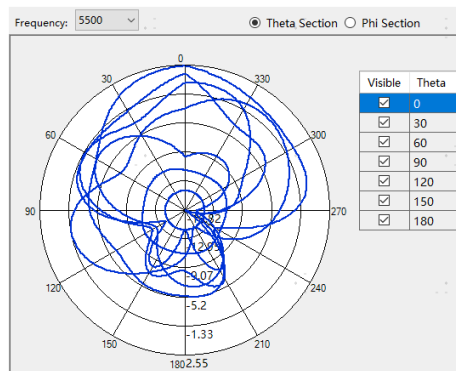
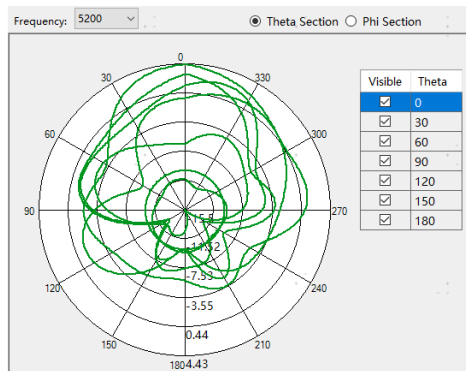
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Wi-Fi1 5G: L Band

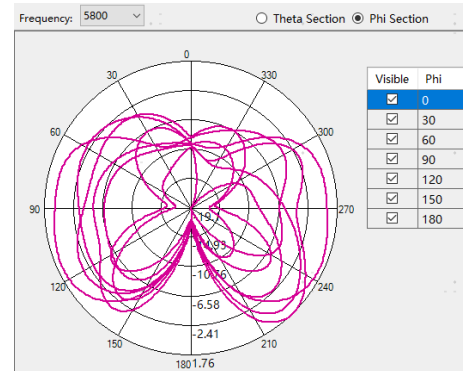
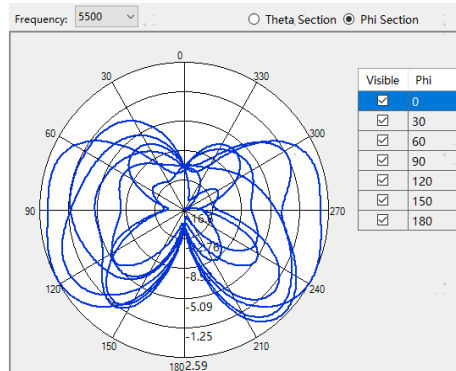
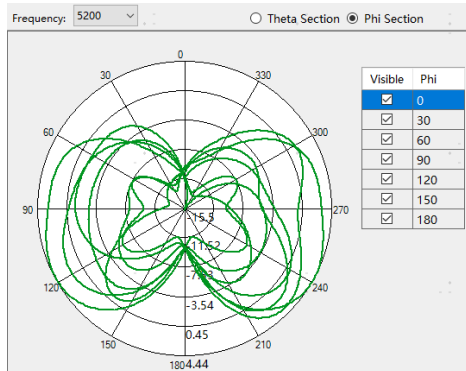
M Band

H Band

Theta
Section



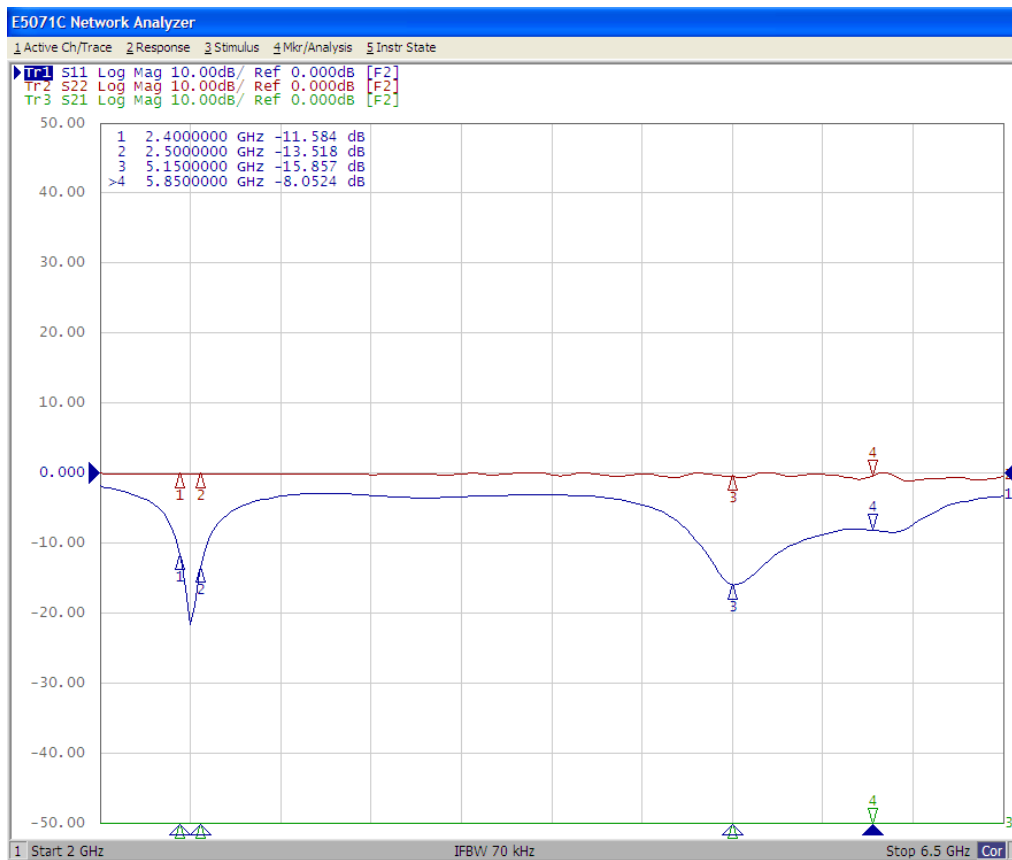
Phi
Section



Wi-Fi0 Antenna

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

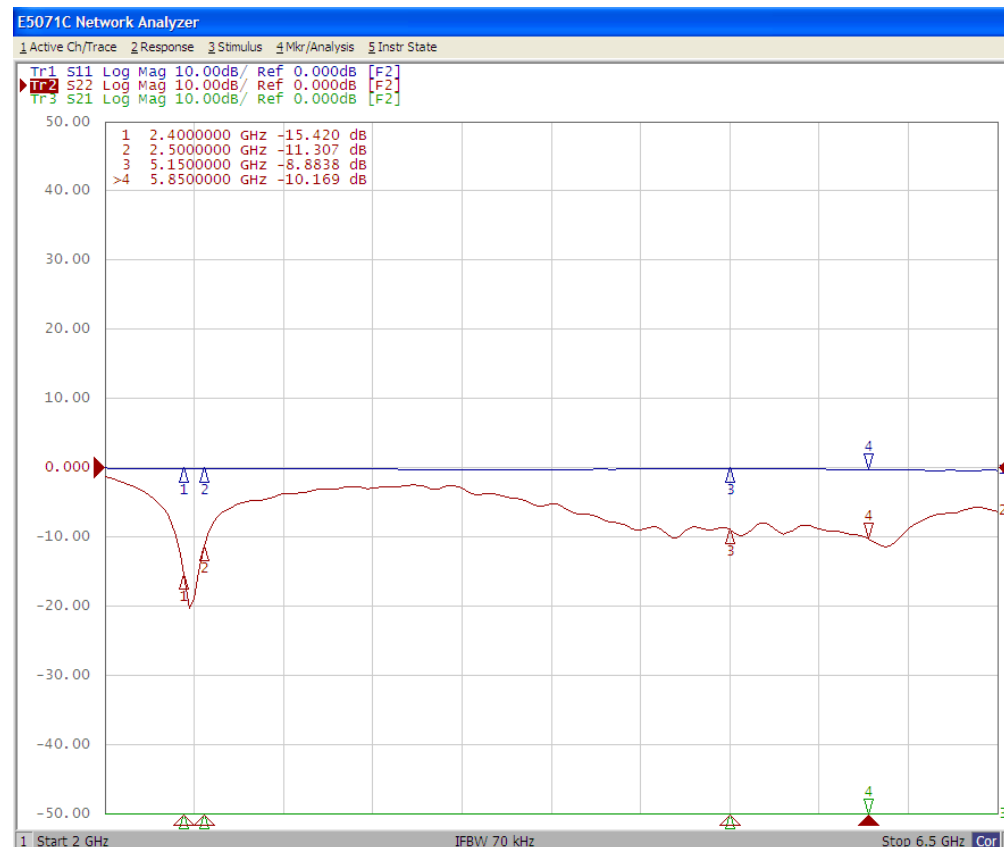
5.15-5.85GHz: $S_{11} < -8\text{dB}$



Wi-Fi1 Antenna

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

5.15-5.85GHz: $S_{11} < -8\text{dB}$



Isolation between
Wi-Fi0 and Wi-Fi1

2.4-2.5G:

Low band: -8.5dB

Middle band:-8dB

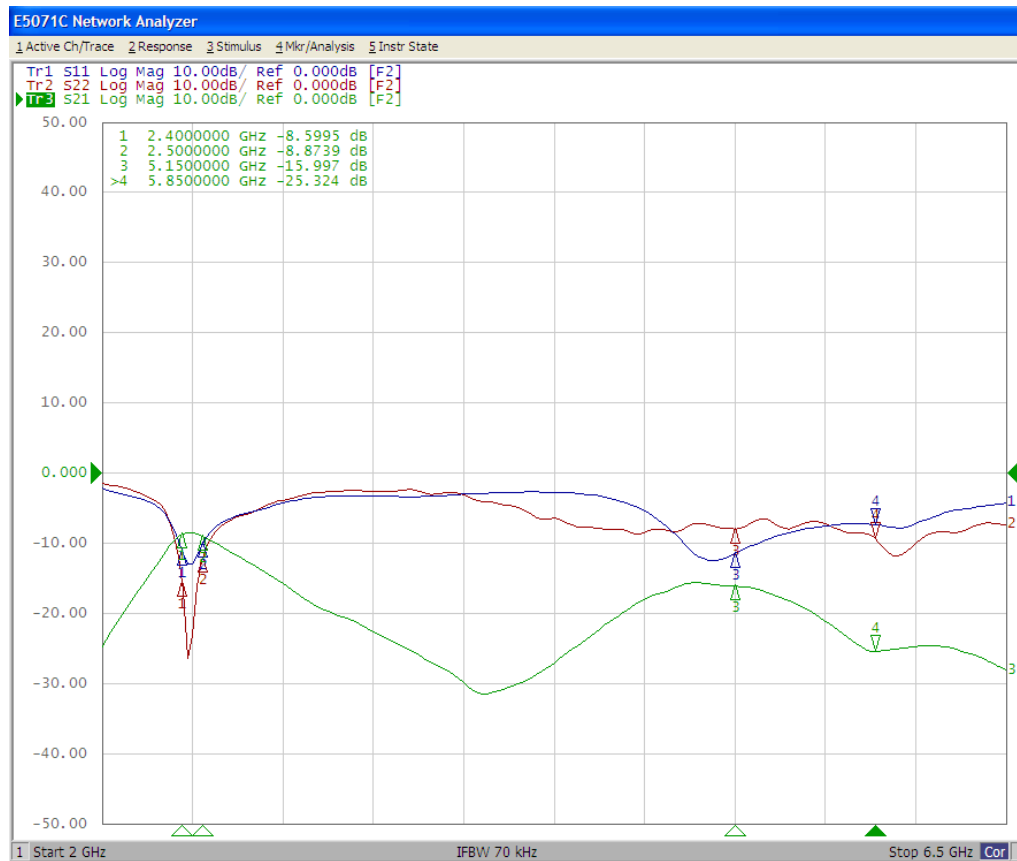
High band:-8.5dB

5.15-5.85G:

Low band:-16dB

Middle band:-20dB

High band:-25dB



- **Manufacturer:** Qingdao Intelligent & Precise Electronics Co., Ltd.
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