

Hisense



FIFA WORLD CUP
Qatar 2022

2022世界杯™官方赞助商



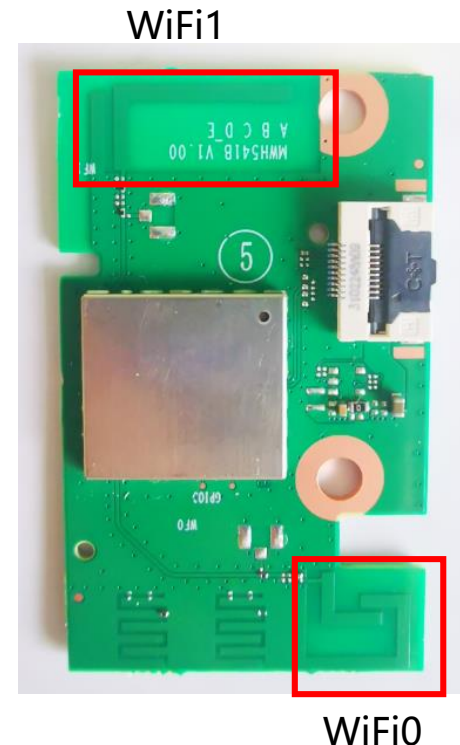
MWH541B

Antenna Test Report

2024.01.30

WiFi0	
Antenna Type	Monopole Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: $S_{11} \leq -3.6\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq -8\text{dB}$.
Peak Gain	2.30dBi@2.4~2.5GHz , 5.26dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz $\geq 45\%$ (Avg) , 5.15~5.85GHz $\geq 50\%$ (Avg)

WiFi1	
Antenna Type	Monopole Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: $S_{11} \leq -4\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq -3.7\text{dB}$.
Peak Gain	-0.55dBi@2.4~2.5GHz , 0.79dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz $\geq 37\%$ (Avg) , 5.15~5.85GHz $\geq 40\%$ (Avg)



WiFi0	CH	Gain/dBi	Efficiency/%
2.4G	L	-0.02	35
	M	0.94	47
	H	2.30	57
5G	L	5.26	64
	M	2.94	43
	H	-0.38	33

WiFi1	CH	Gain/dBi	Efficiency/%
2.4G	L	-1.01	33
	M	-0.91	37
	H	-0.55	40
5G	L	-0.87	30
	M	0.74	40
	H	0.79	48

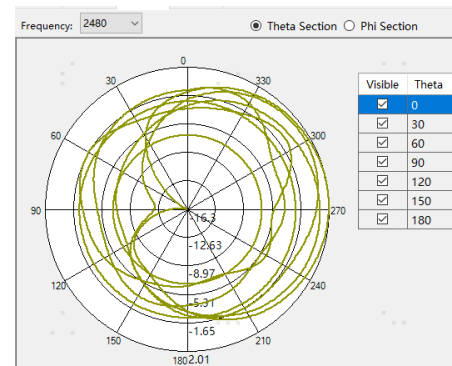
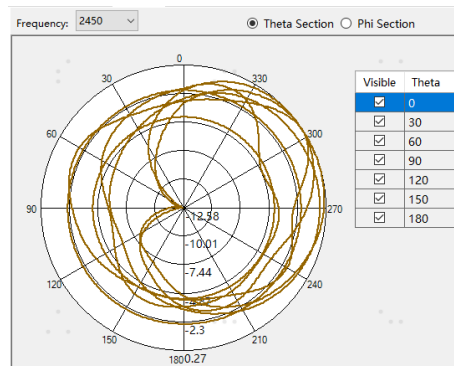
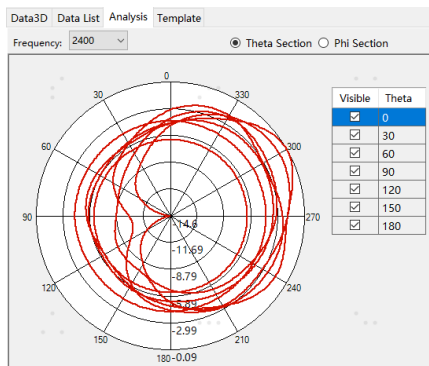
ANT Directivity Pattern

WiFi0 2.4G: L Band

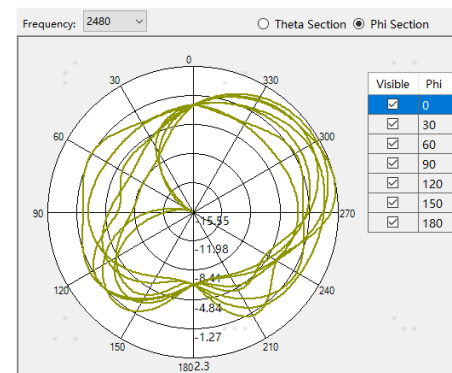
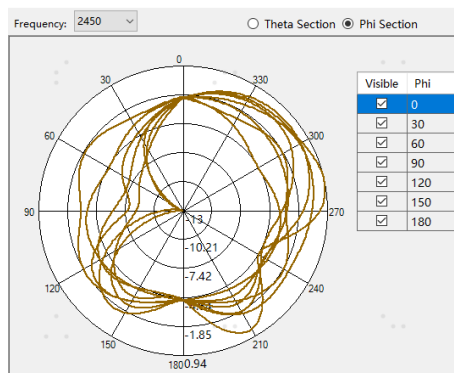
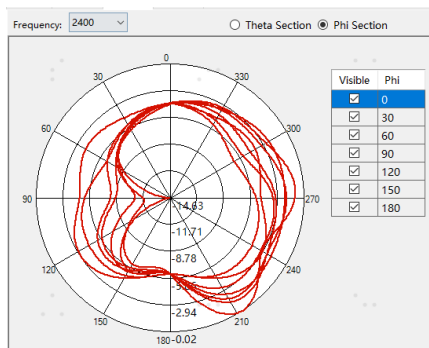
M Band

H Band

Theta
Section



Phi
Section



ANT Directivity Pattern

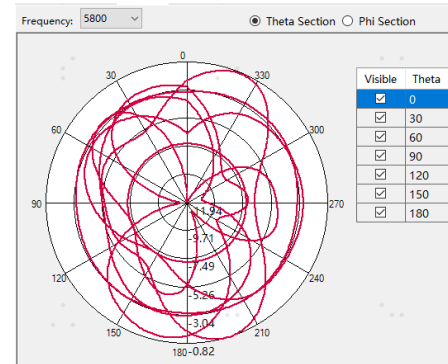
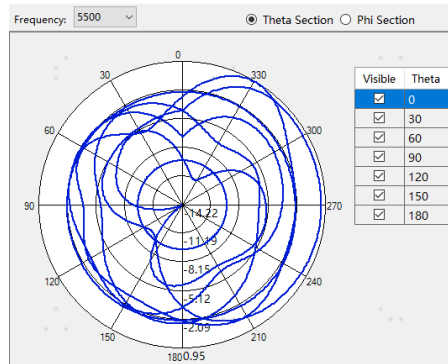
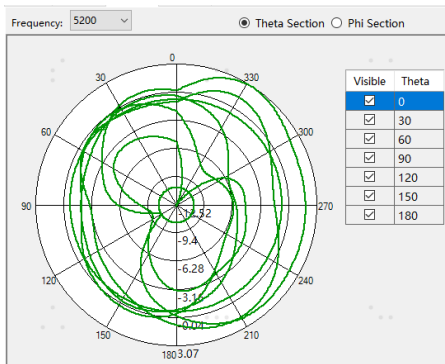
WiFi0 5G:

L Band

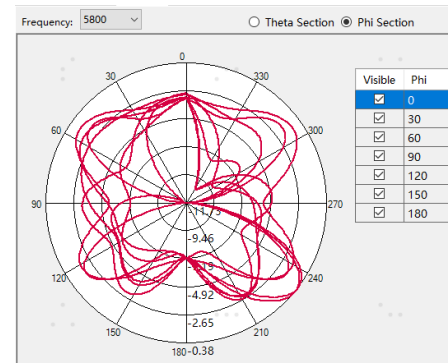
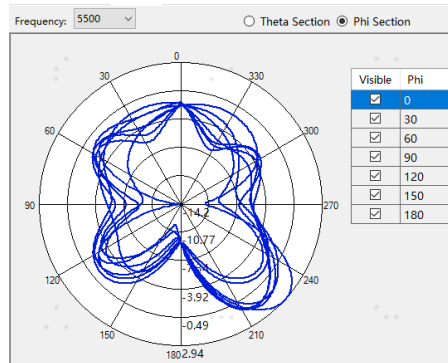
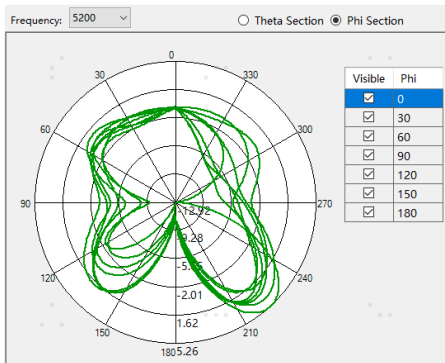
M Band

H Band

Theta Section



Phi Section



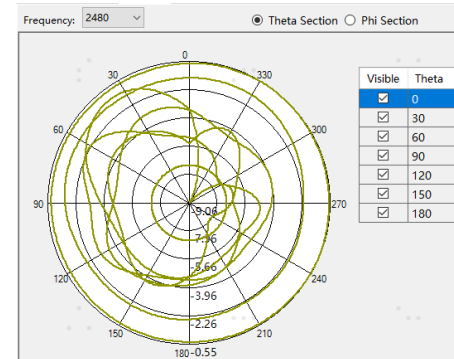
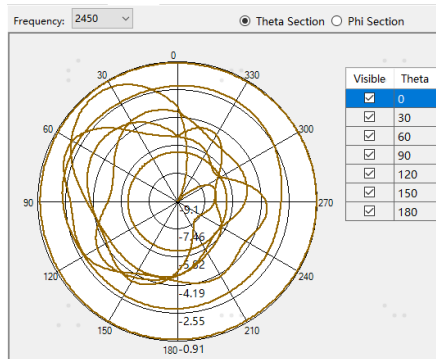
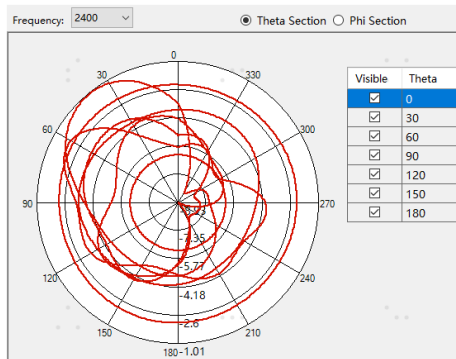
ANT Directivity Pattern

WiFi1 2.4G: L Band

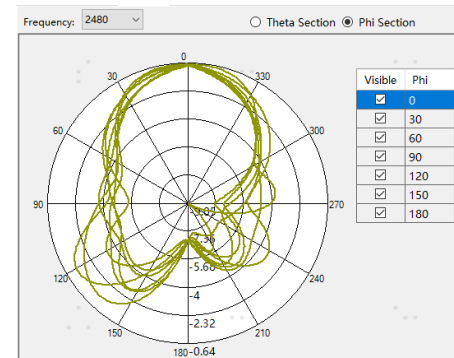
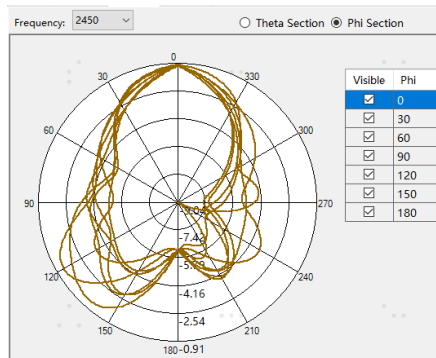
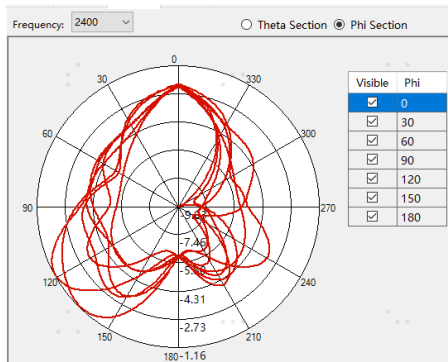
M Band

H Band

Theta
Section



Phi
Section

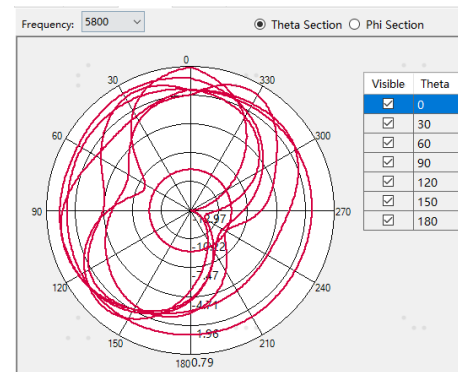
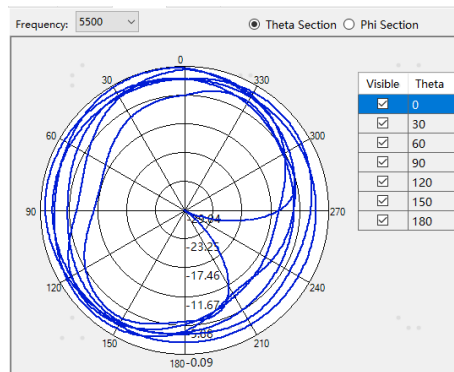
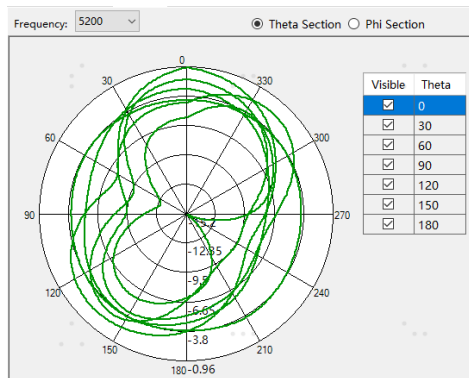


WiFi1 5G: L Band

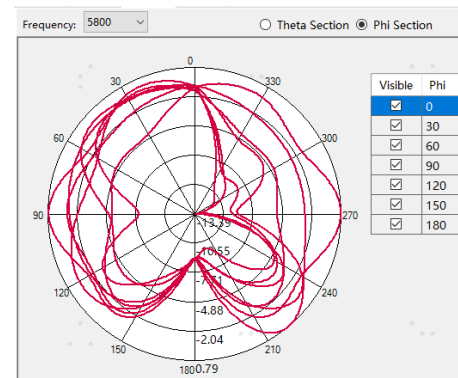
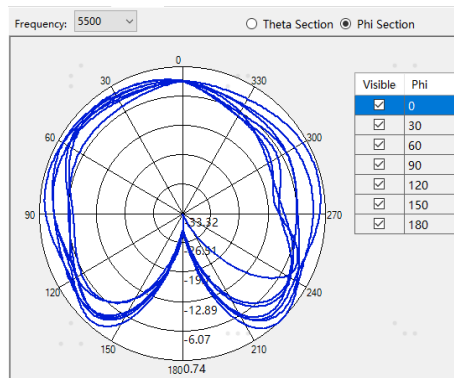
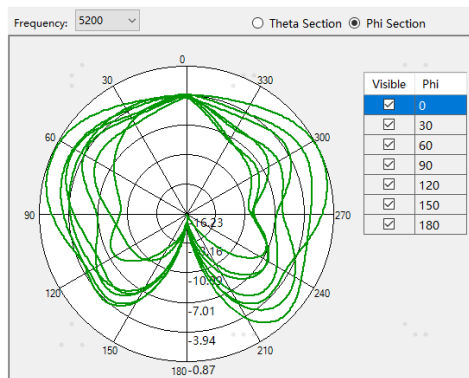
M Band

H Band

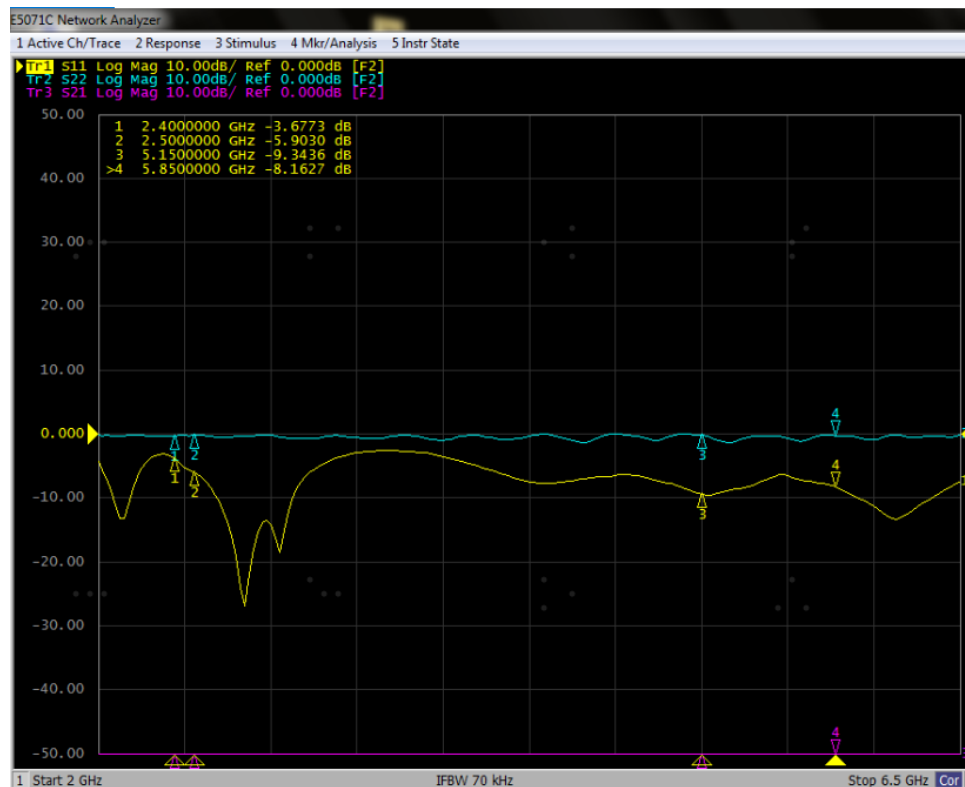
Theta Section



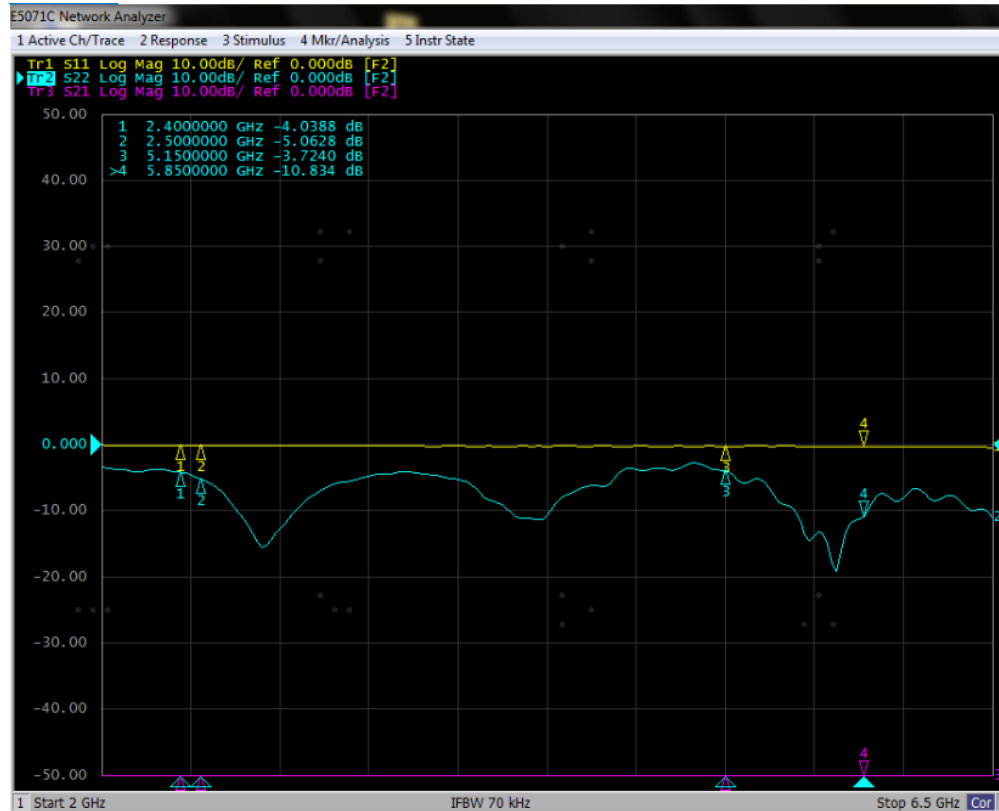
Phi Section



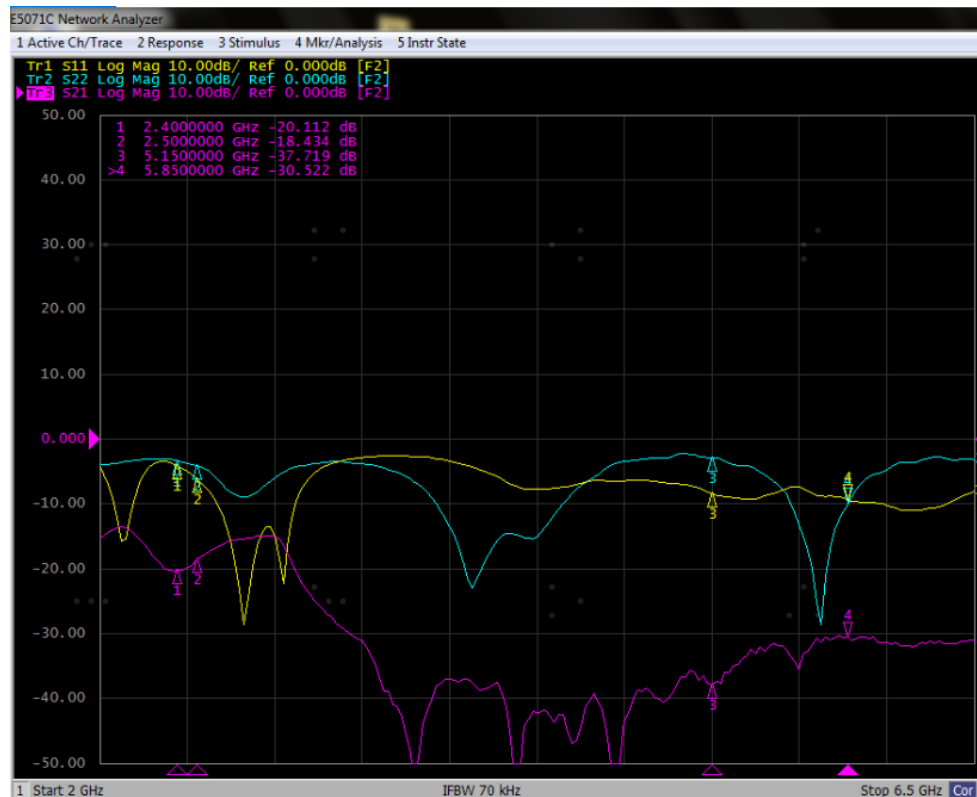
WiFi0 Antenna
2.4-2.5GHz < -3.6dB
5.15-5.85GHz < -8dB



WiFi1 Antenna
2.4-2.5GHz < -4.0dB
5.15-5.85GHz < -3.7dB



Isolation between WiFi0 and WiFi1
2.4G: L:-20dB M:-19dB H:-18dB
5G: L:-37dB M:-32dB H:-30dB



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THANKS