

Hisense



FIFA WORLD CUP
Qatar 2022

2022世界杯™官方赞助商



MWH619B

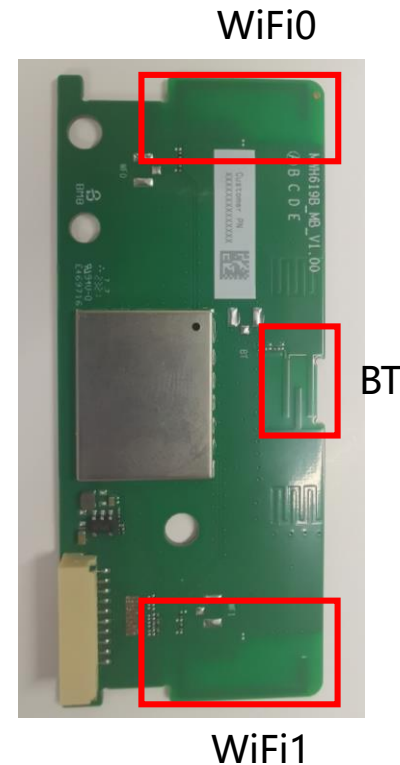
Antenna Test Report

2023.07.05

WiFi0	
Antenna Type	Inverted F Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: $S_{11} \leq -13\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq -3\text{dB}$.
Peak Gain	0.89dBi@2.4~2.5GHz , 1.69dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz $\geq 50\%$ (Avg) , 5.15~5.85GHz $\geq 50\%$ (Avg)

WiFi1	
Antenna Type	Inverted F Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz/5.15~5.85GHz
Return Loss	2.4GHz~2.5GHz: $S_{11} \leq -7.3\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq -3.7\text{dB}$.
Peak Gain	0.49dBi@2.4~2.5GHz , 1.48dBi@5.15~5.85GHz
Efficiency	2.4~2.5GHz $\geq 45\%$ (Avg) , 5.15~5.85GHz $\geq 50\%$ (Avg)

BT	
Antenna Type	Monopole Antenna
Input impedance	50Ω
Frequency Band	2.4~2.5GHz
Return Loss	$S_{11} \leq -3.9\text{dB}$
Peak Gain	-2.21dBi
Efficiency	$\geq 30\%$ (Avg)



WiFi0	CH	Gain/dBi	Efficiency/%
2.4G	L	0.89	50
	M	0.41	50
	H	-0.15	51
5G	L	-1.32	45
	M	1.69	55
	H	0.65	52

WiFi1	CH	Gain/dBi	Efficiency/%
2.4G	L	-0.08	48
	M	-0.14	45
	H	0.49	44
5G	L	-0.14	48
	M	1.48	53
	H	-0.79	50

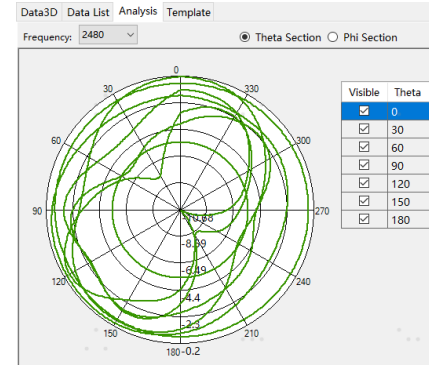
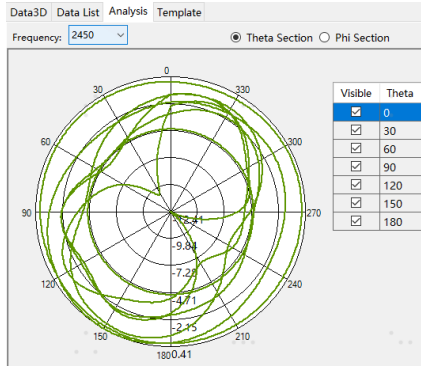
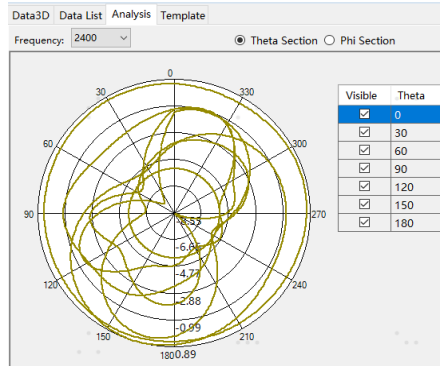
BT	CH	Gain/dBi	Efficiency/%
2.4G	L	-9.61	25
	M	-5.22	28
	H	-2.21	32

WiFi0 2.4G: L Band

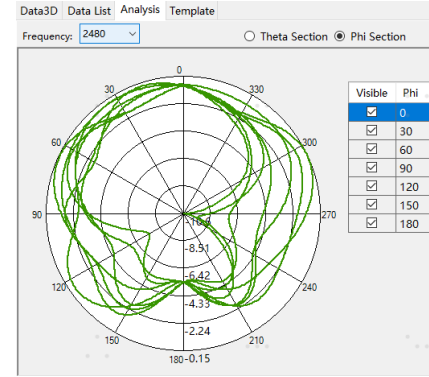
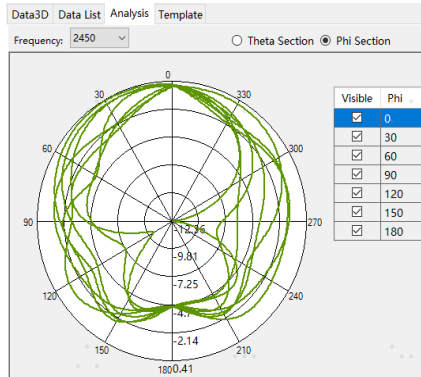
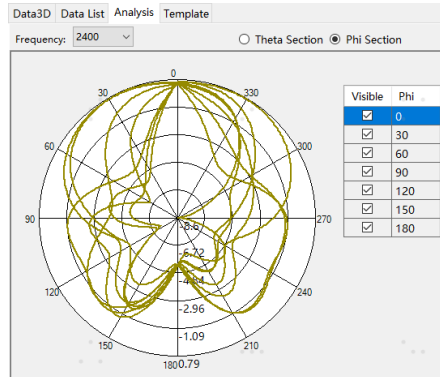
M Band

H Band

Theta Section



Phi Section

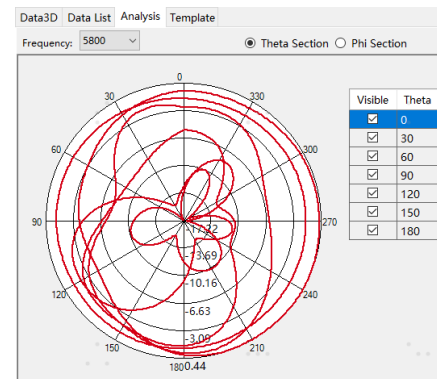
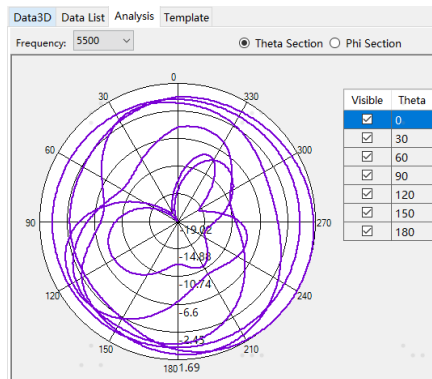
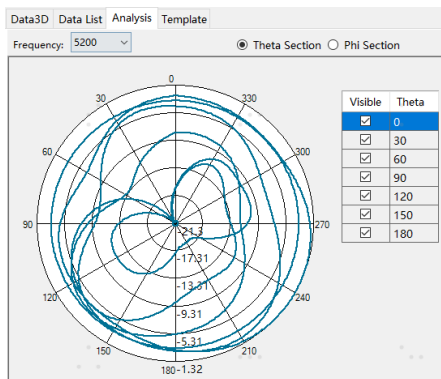


WiFi0 5G: L Band

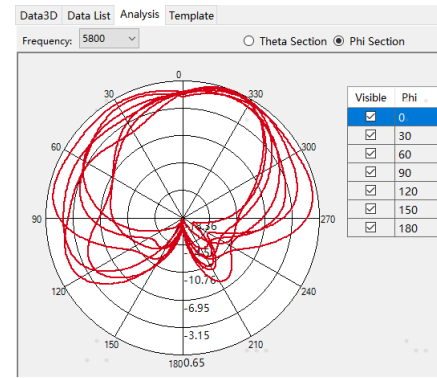
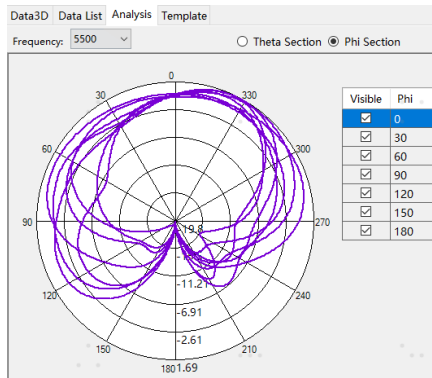
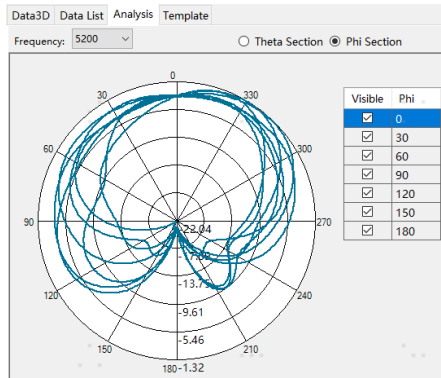
M Band

H Band

Theta Section



Phi Section

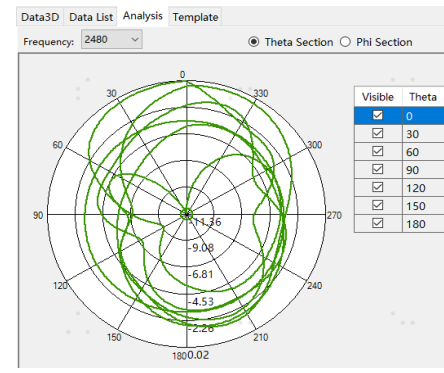
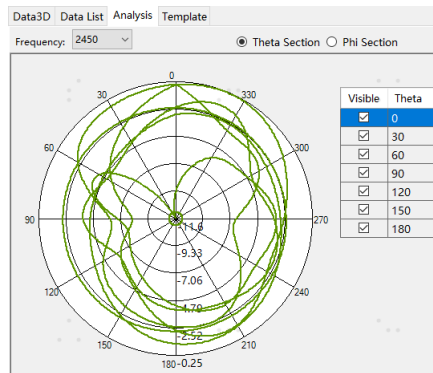
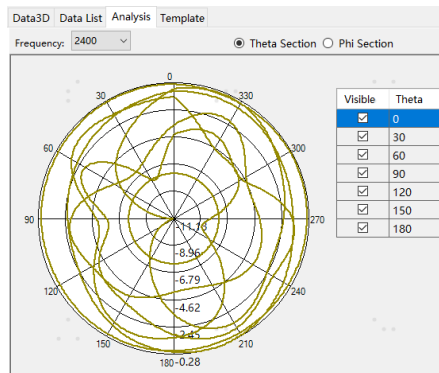


WiFi1 2.4G: L Band

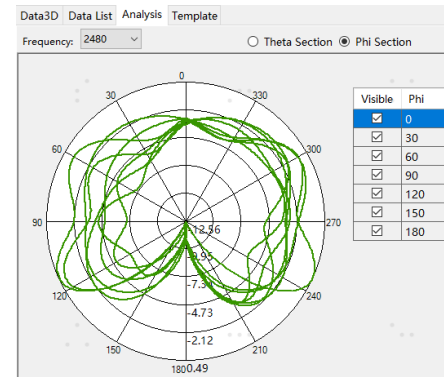
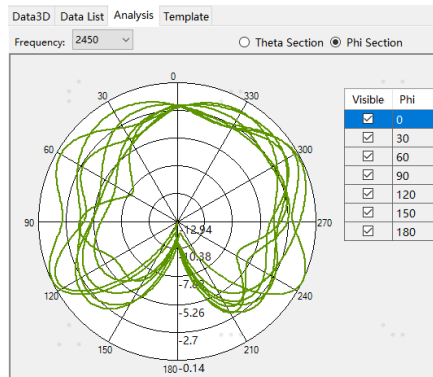
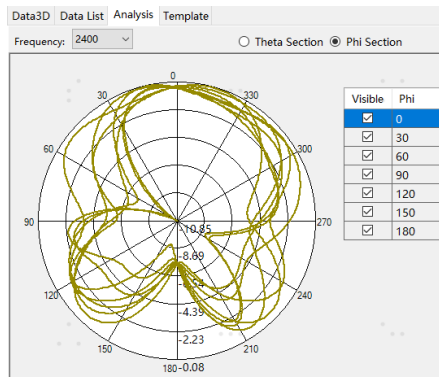
M Band

H Band

Theta Section



Phi Section

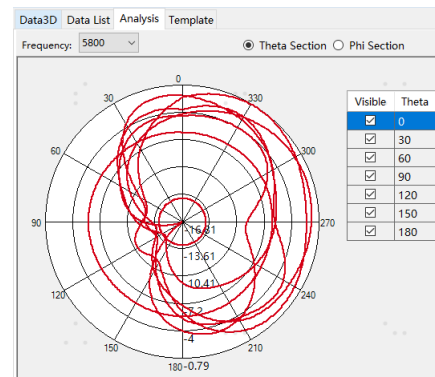
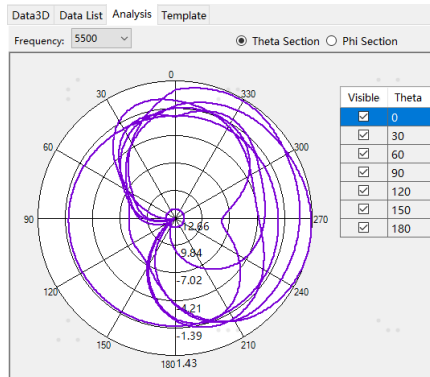
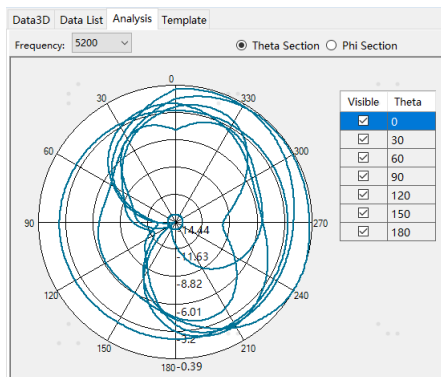


WiFi1 5G: L Band

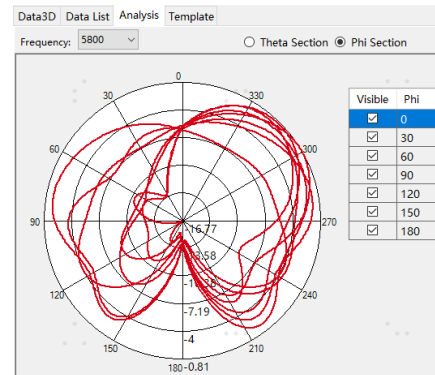
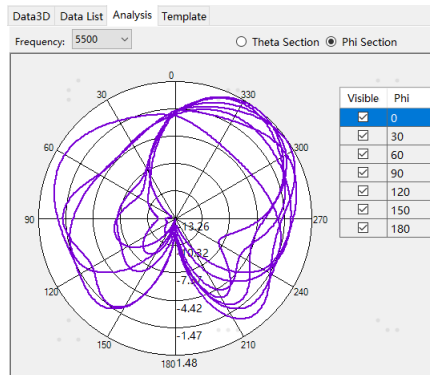
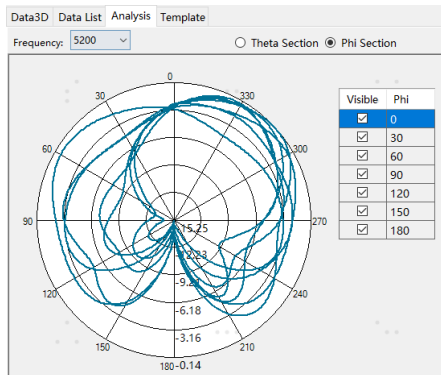
M Band

H Band

Theta Section



Phi Section

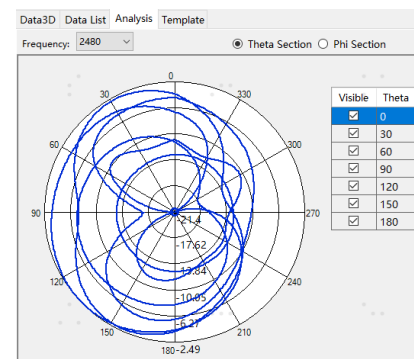
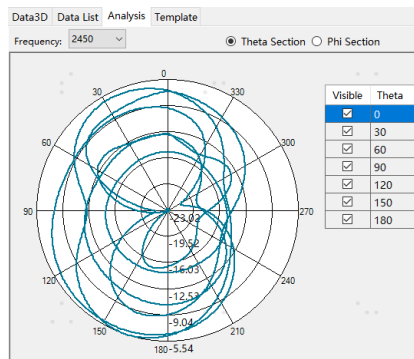
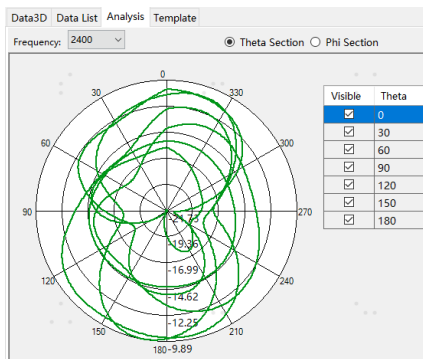


BT 2.4G: L Band

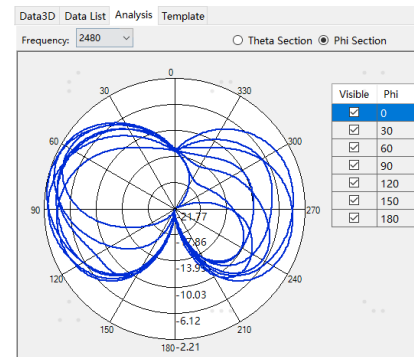
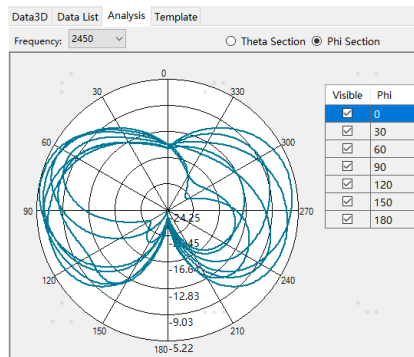
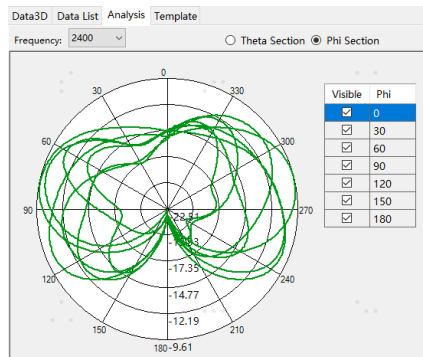
M Band

H Band

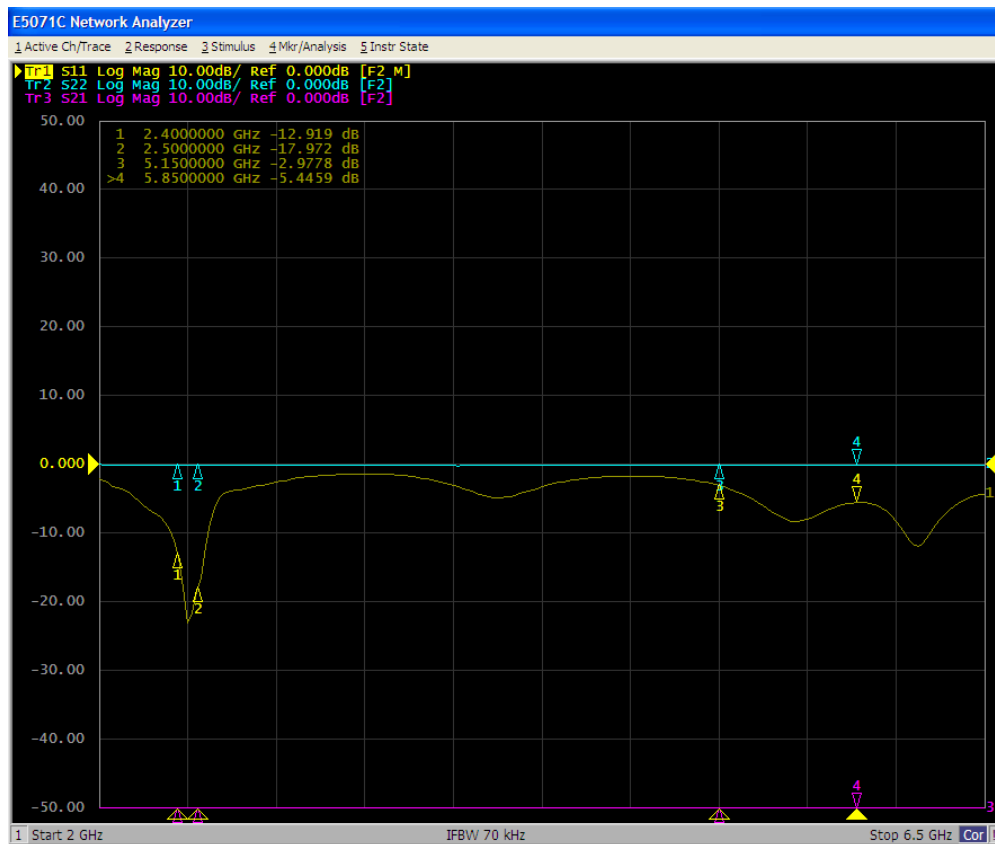
Theta Section



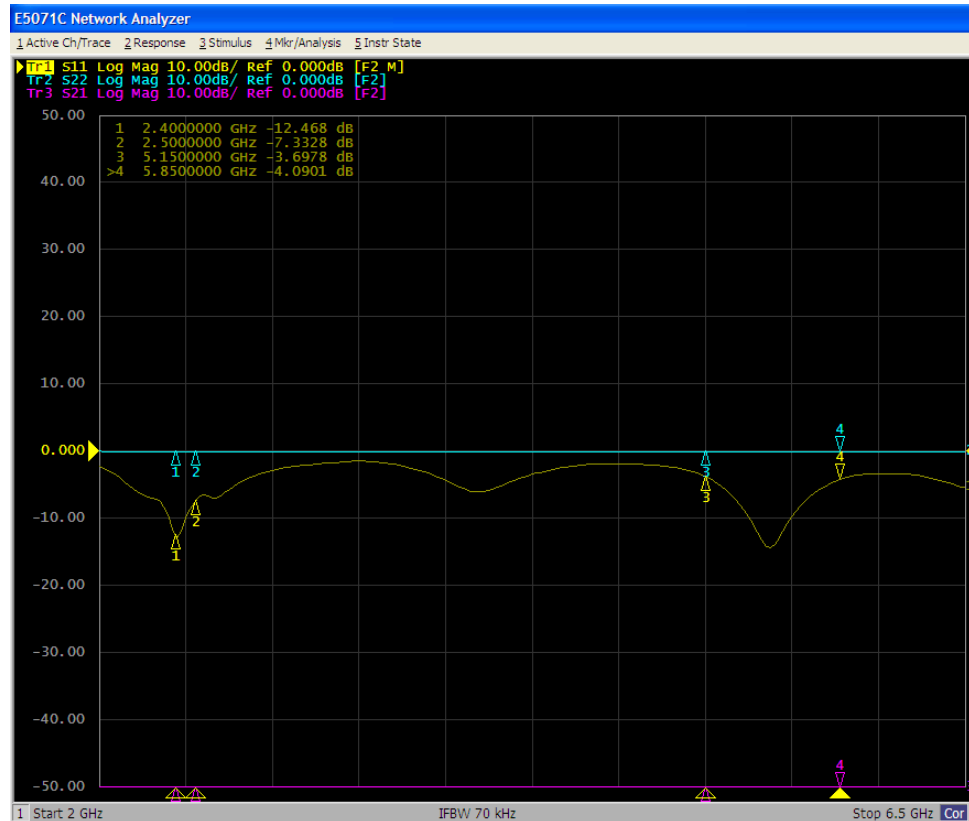
Phi Section



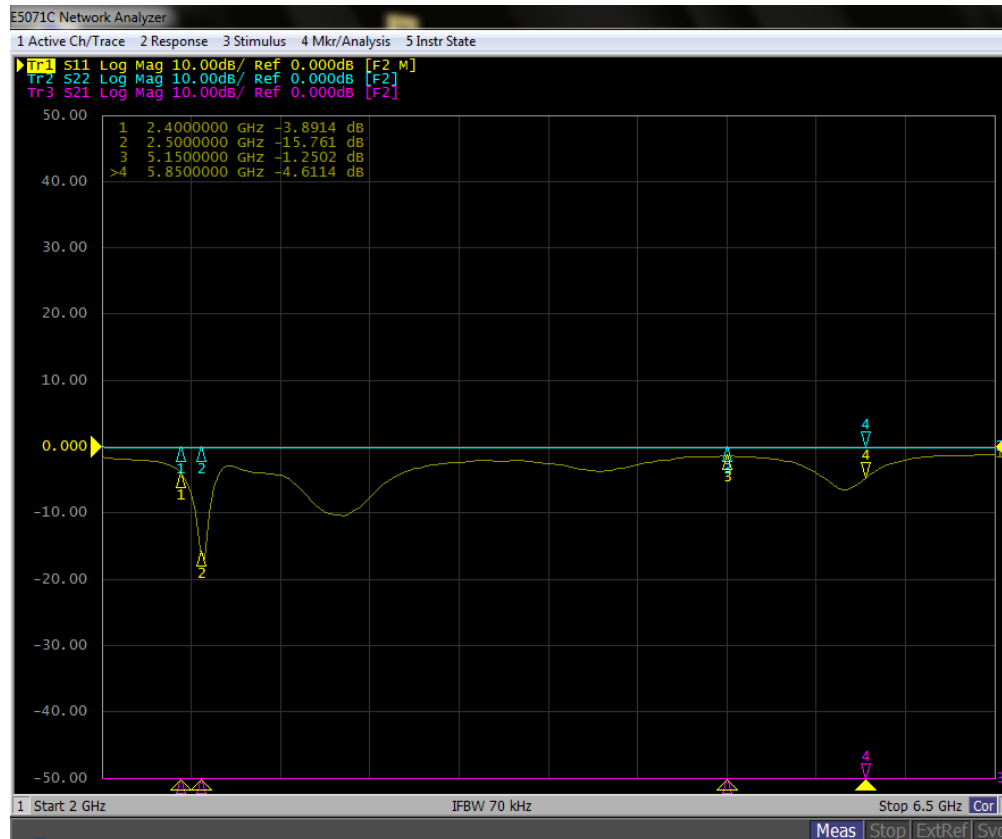
WiFi0 Antenna
2.4-2.5GHz < -13dB
5.15-5.85GHz < -3.0dB



WiFi1 Antenna
2.4-2.5GHz < -7.3dB
5.15-5.85GHz < -3.7dB



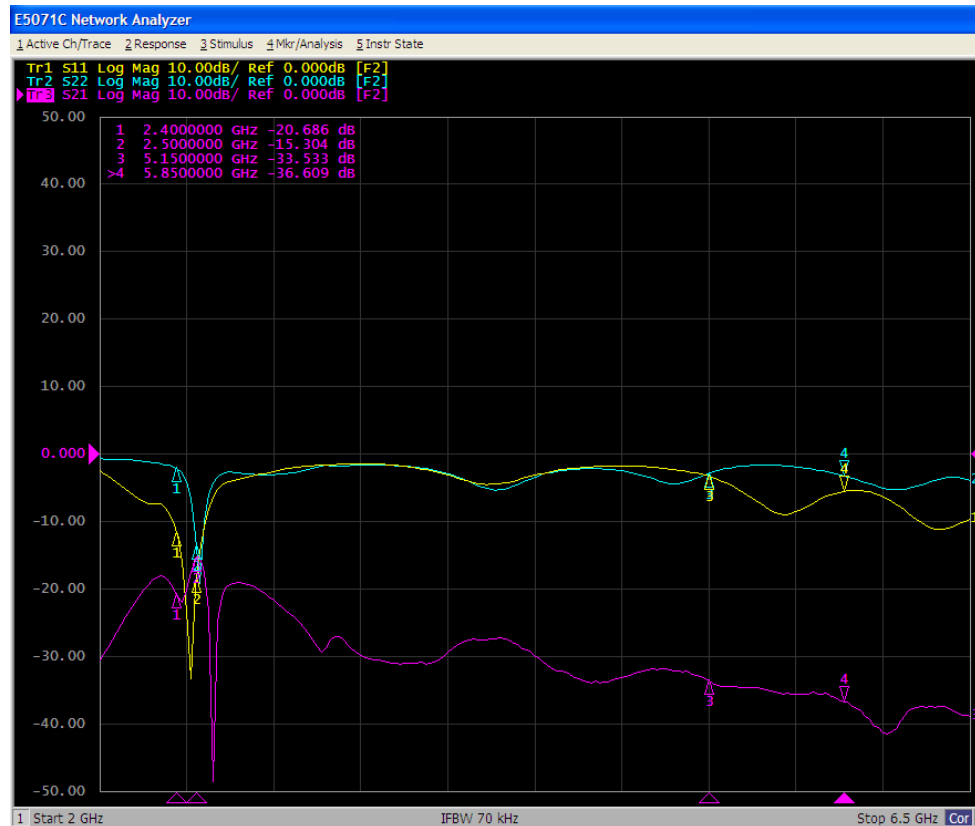
BT Antenna
2.4-2.5GHz < -3.9dB



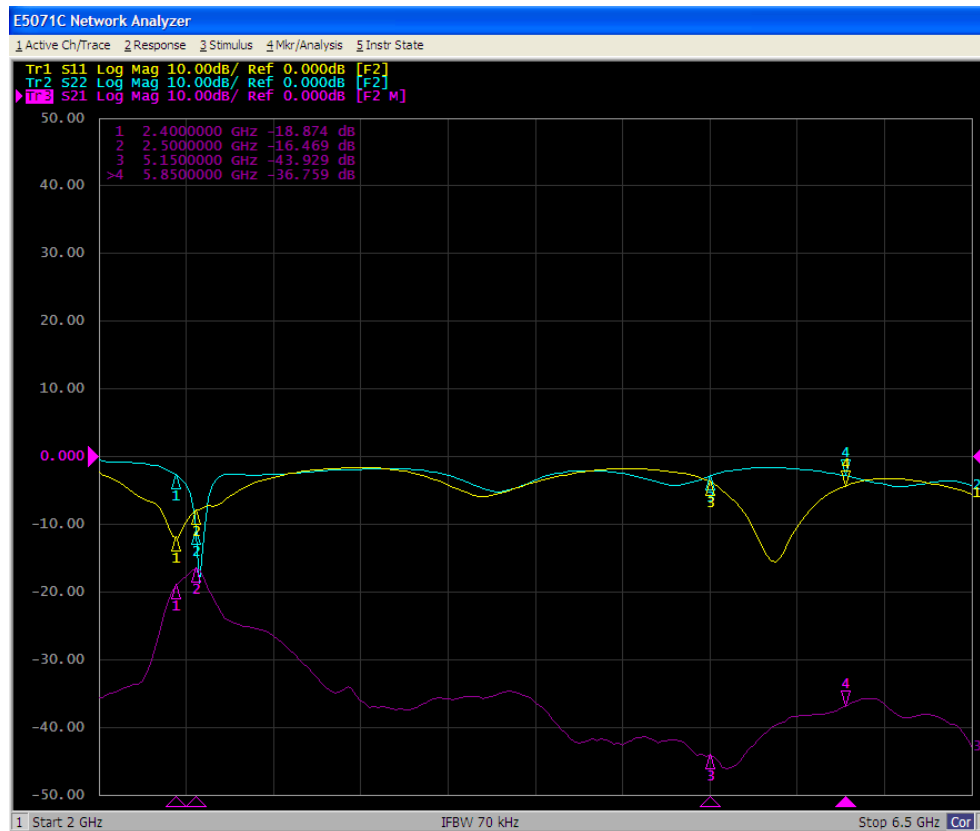
Isolation between WiFi0 and WiFi1
2.4G: L:-14.4dB M:-15dB H:-15.3dB
5G: L:-40dB M:-35dB H:-35dB



Isolation between WiFi and BT
2.4G: L:-20dB M:-18dB H:-15dB



Isolation between WiFi1 and BT
2.4G: L:-19dB M:-18dB H:-16.5dB



Manufacturer

Qingdao Intelligent & Precise Electronics Co., Ltd.

Address

Hisense Infor. Industrial Park
Economic Technology Dev.
District

Contact information

dingshizhao 13370851021

Hisense



FIFA WORLD CUP
Qatar 2022

2022世界杯™官方赞助商



THANKS