



**Hisense**

WM55US01

PIFA Antenna Test Report

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| Wi-Fi          |                                                                                     |
|----------------|-------------------------------------------------------------------------------------|
| Antenna Type   | PIFA Antenna                                                                        |
| Dimensions     | 210mm                                                                               |
| Frequency Band | 2.4~2.5GHz/5.15~5.85GHz                                                             |
| Return Loss    | 2.4GHz~2.5GHz: $S_{11} \leq 2\text{dB}$ 5.15GHz~5.85GHz: $S_{11} \leq 3\text{dB}$ . |
| Peak Gain      | 3.77dBi@2.4~2.5GHz , 4.03dBi@5.15~5.85GHz                                           |
| Efficiency     | 2.4~2.5GHz $\geq 60\%$ (Avg) , 5.15~5.85GHz $\geq 50\%$ (Avg)                       |

| BT             |                                         |
|----------------|-----------------------------------------|
| Antenna Type   | PIFA Antenna                            |
| Dimensions     | 210mm                                   |
| Frequency Band | 2.4~2.5GHz                              |
| Return Loss    | 2.4GHz~2.5GHz: $S_{11} \leq 4\text{dB}$ |
| Peak Gain      | 3.77dBi@2.4~2.5GHz                      |
| Efficiency     | 2.4~2.5GHz $\geq 7\%$ (Avg)             |



| Wi-Fi0 | CH | Gain/dBi | Efficiency/% |
|--------|----|----------|--------------|
| 2.4G   | L  | 0.68     | 61           |
|        | M  | 3.77     | 55           |
|        | H  | 0.99     | 60           |
| 5G     | L  | 1.43     | 43           |
|        | M  | 2.73     | 55           |
|        | H  | 4.03     | 61           |

| BT   | CH | Gain/dBi | Efficiency/% |
|------|----|----------|--------------|
| 2.4G | L  | 0.68     | 61           |
|      | M  | 3.77     | 55           |
|      | H  | 0.99     | 60           |

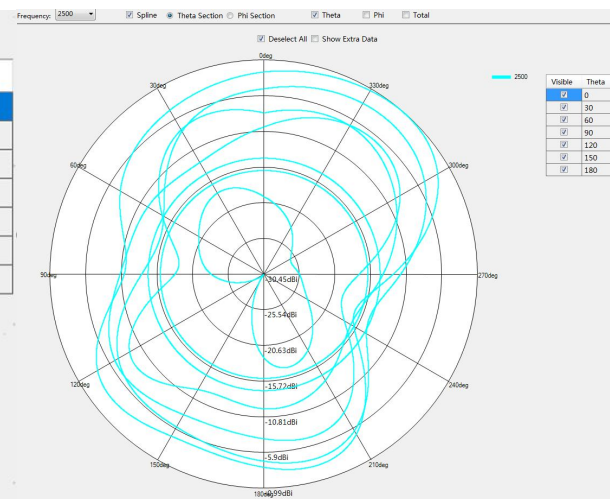
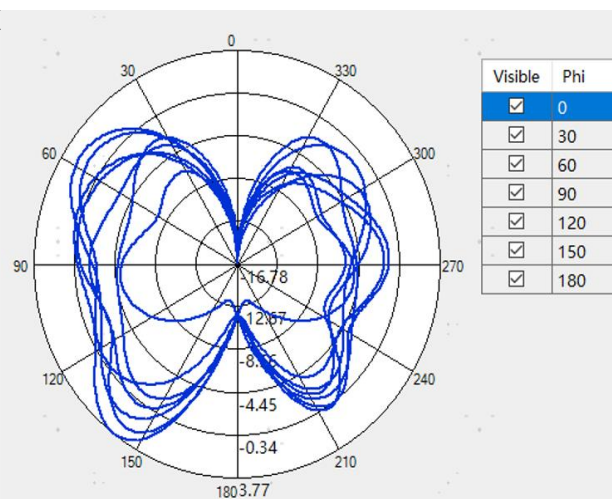
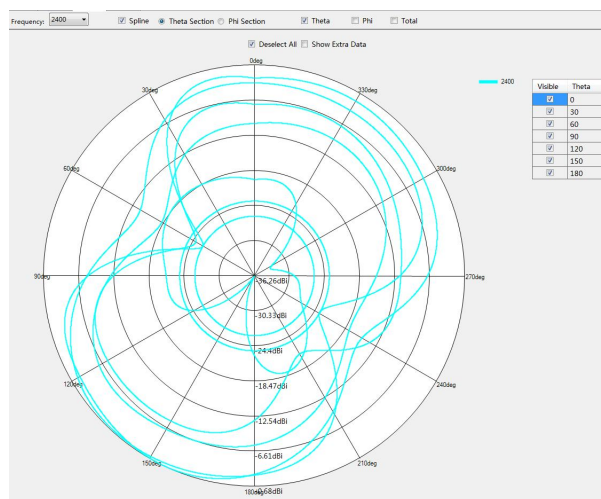
# ANT Directivity Pattern

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Wi-Fi 2.4G: L Band

M Band

H Band



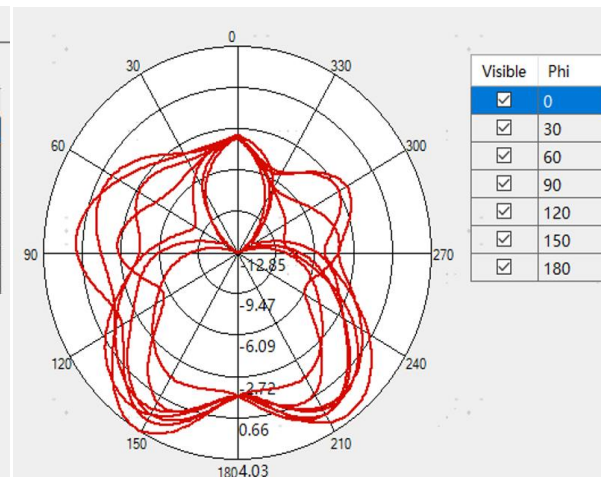
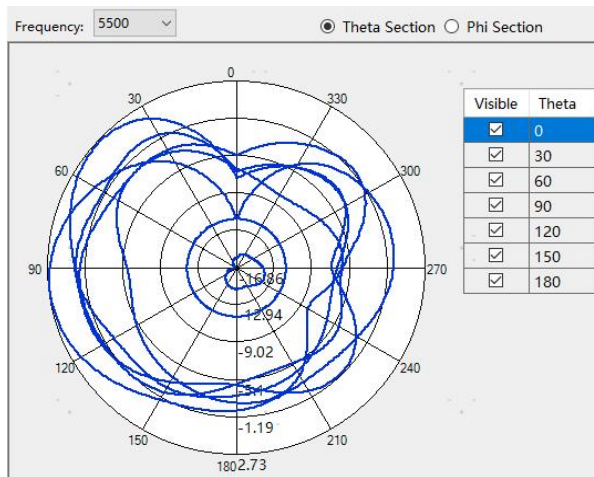
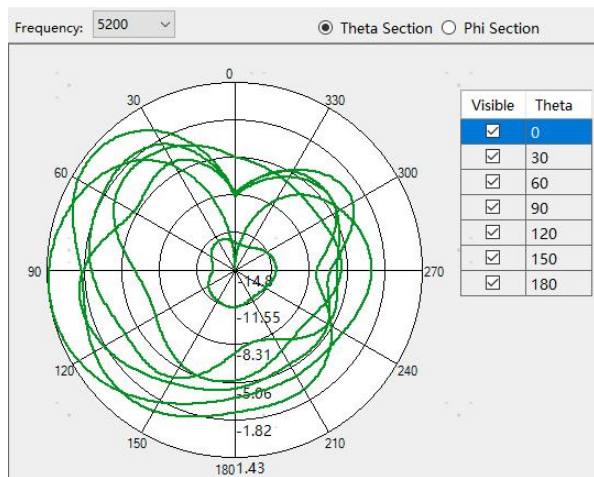
# ANT Directivity Pattern

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Wi-Fi 5G: L Band

M Band

H Band



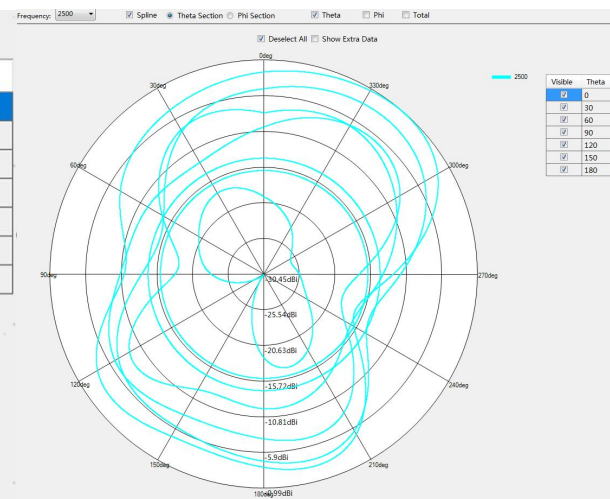
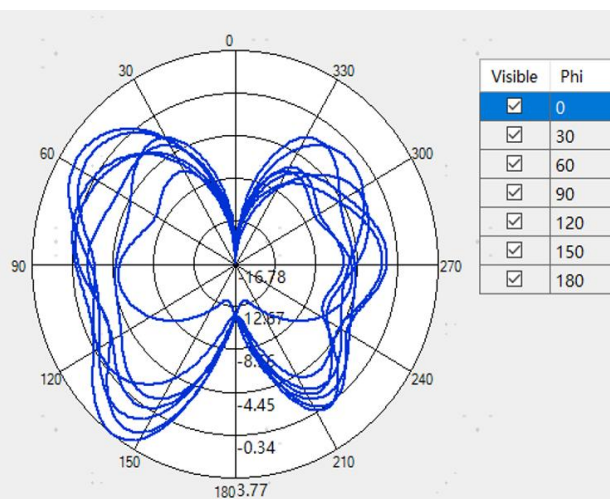
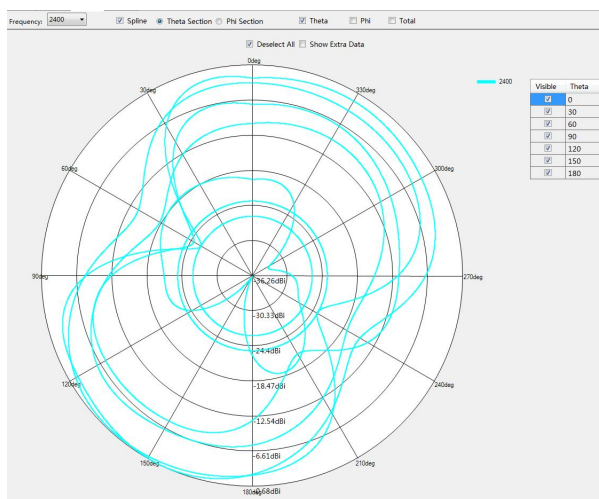
# ANT Directivity Pattern

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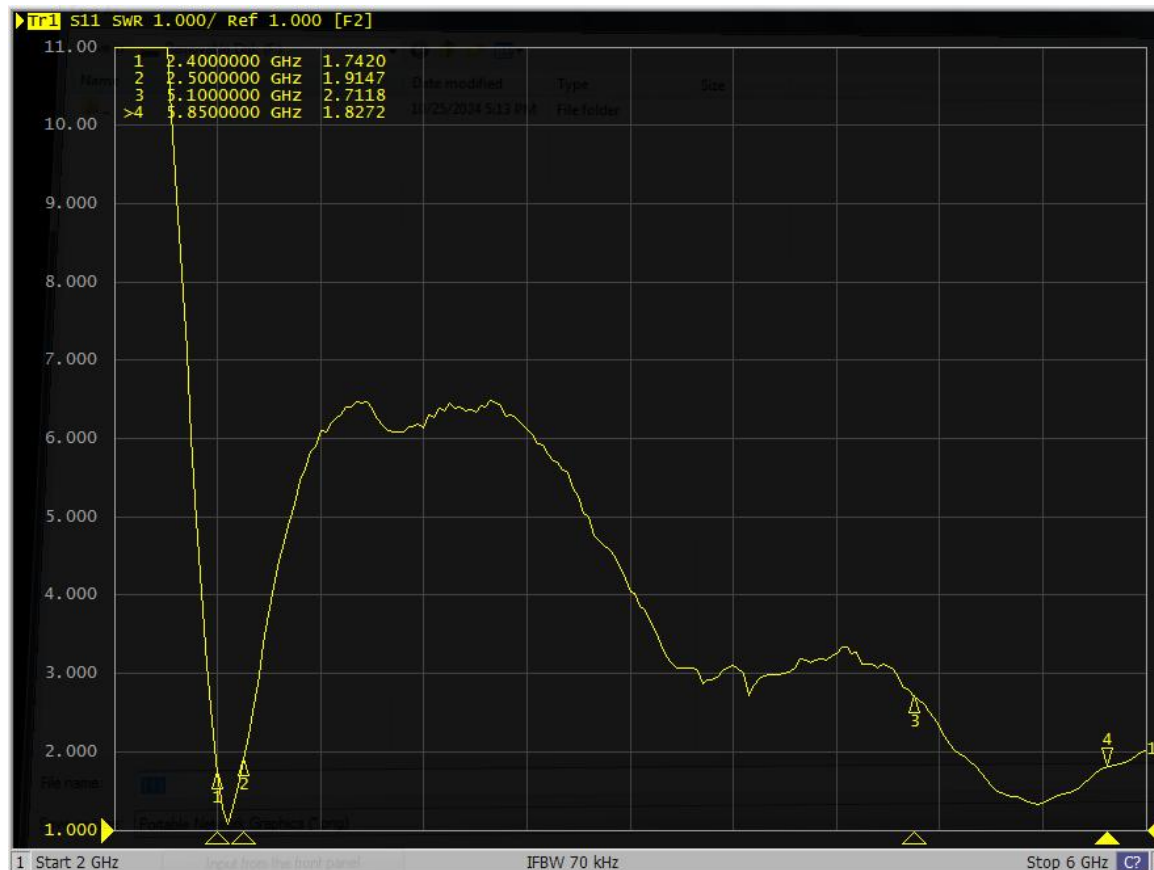
BT 2.4G: L Band

M Band

H Band

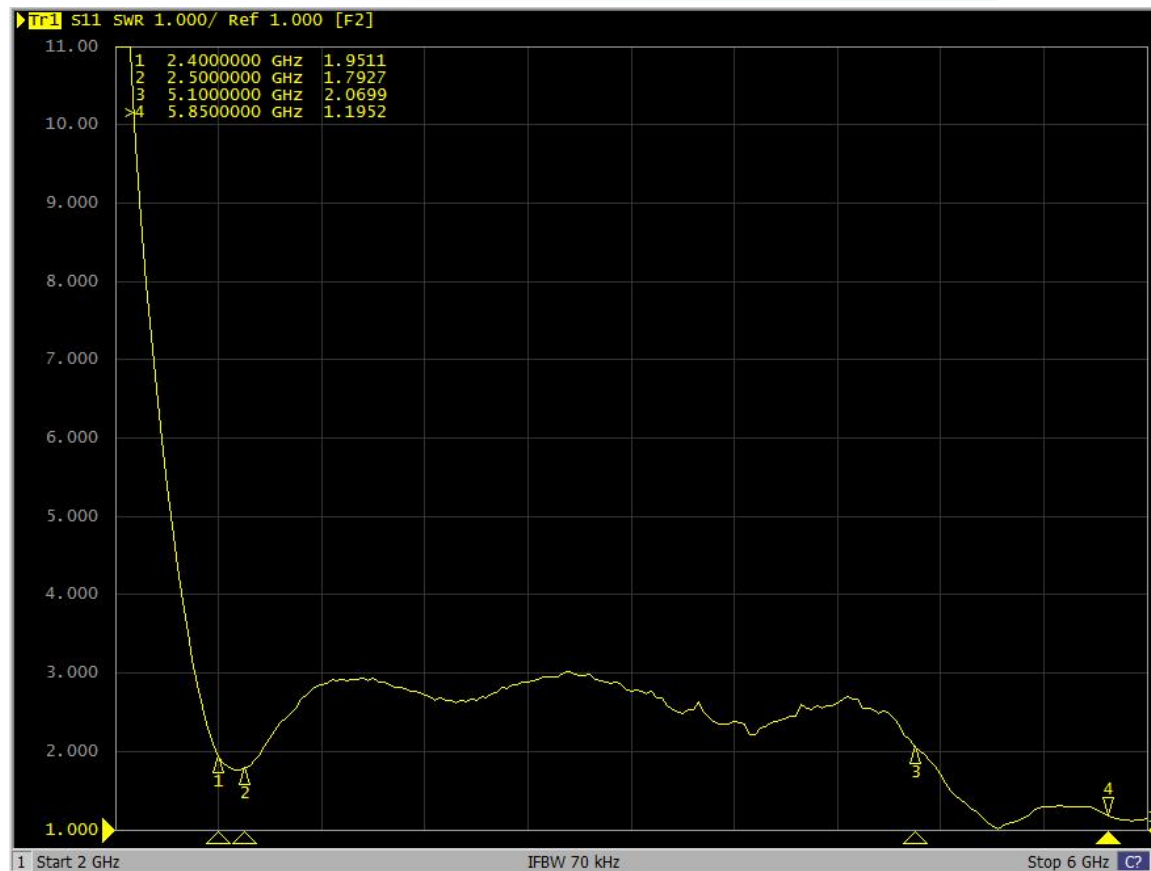


Wi-Fi0 Antenna  
2.4-2.5GHz: S11 < 2dB  
5.15-5.85GHz: S11 < 3dB

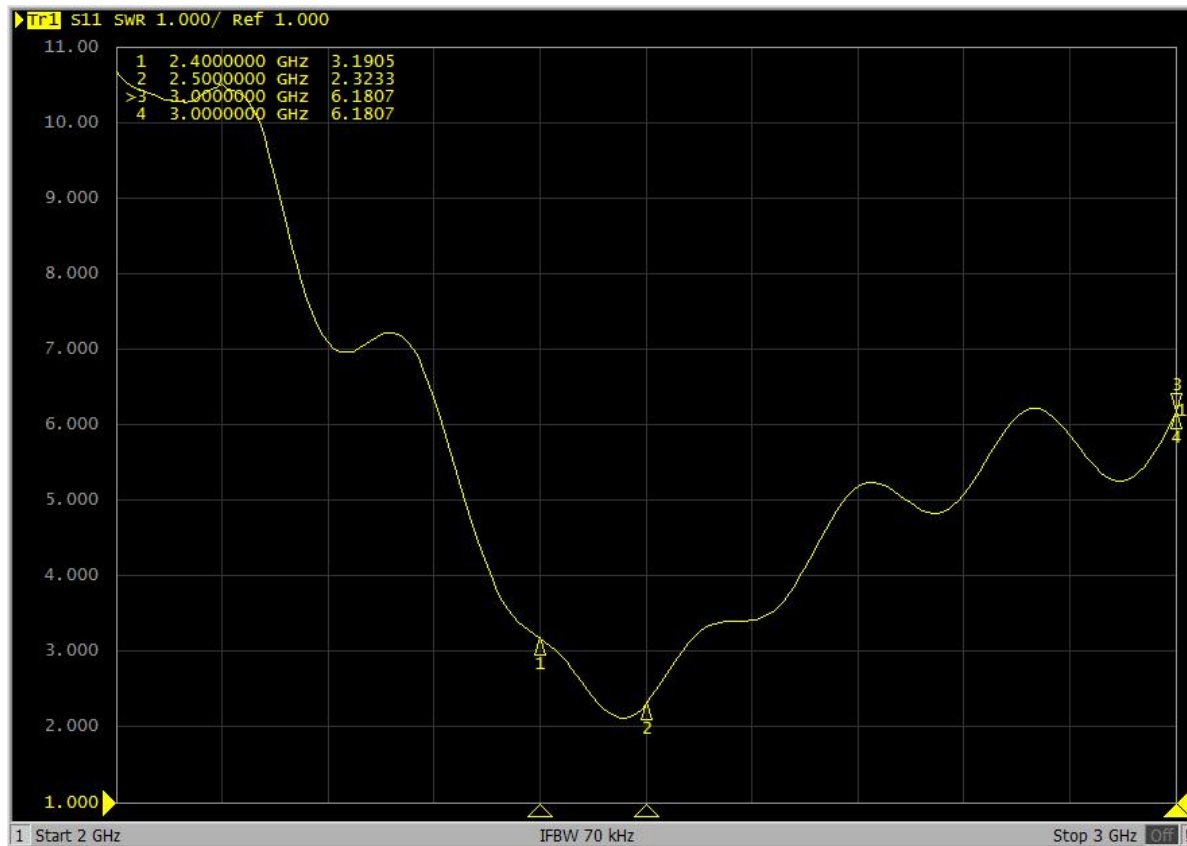


# ANT Return Loss

Wi-Fi1 Antenna  
2.4-2.5GHz: S11 < 2dB  
5.15-5.85GHz: S11 < 3dB



BT Antenna  
2.4-2.5GHz: S11 < 4dB



Isolation between  
Wi-Fi0 and Wi-Fi1

2.4-2.5G:

Low band: -15dB

Middle band:-16dB

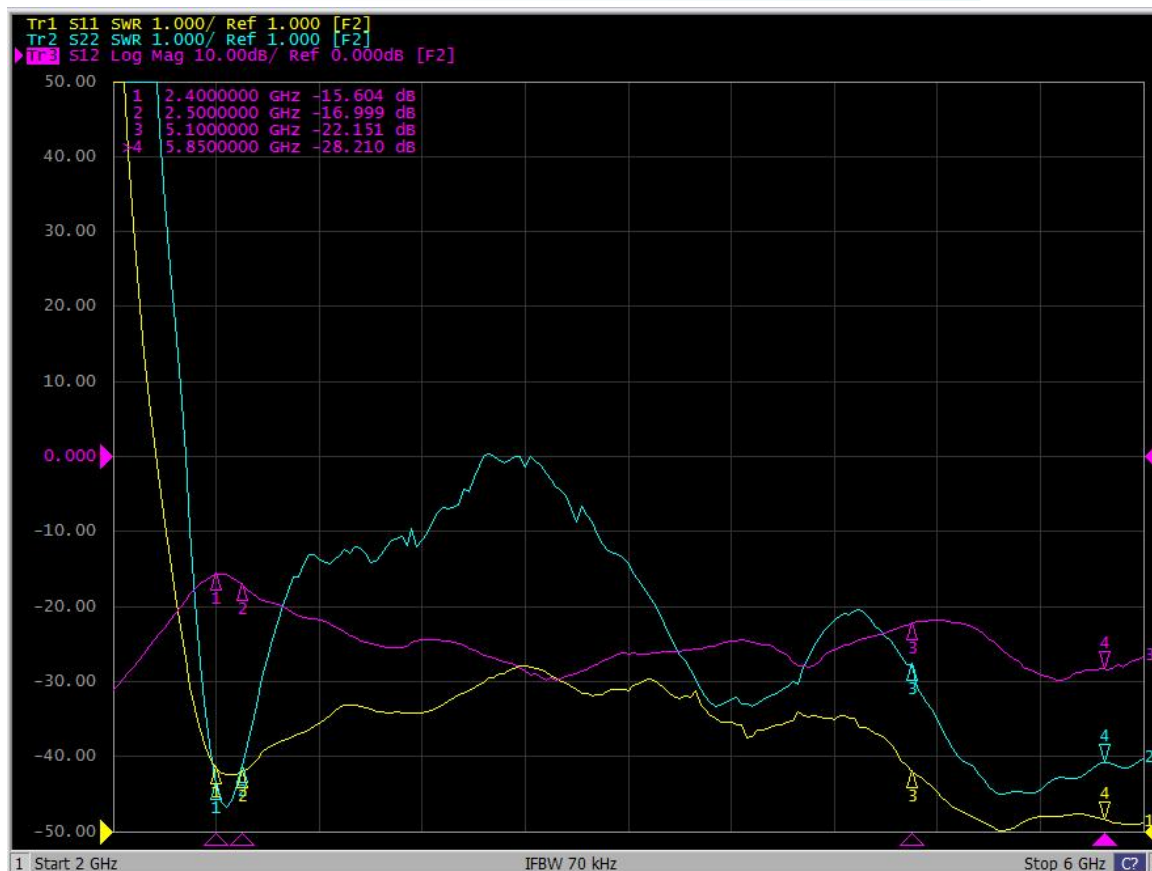
High band:-17dB

5.15-5.85G:

Low band:-22dB

Middle band:-25dB

High band:-28dB



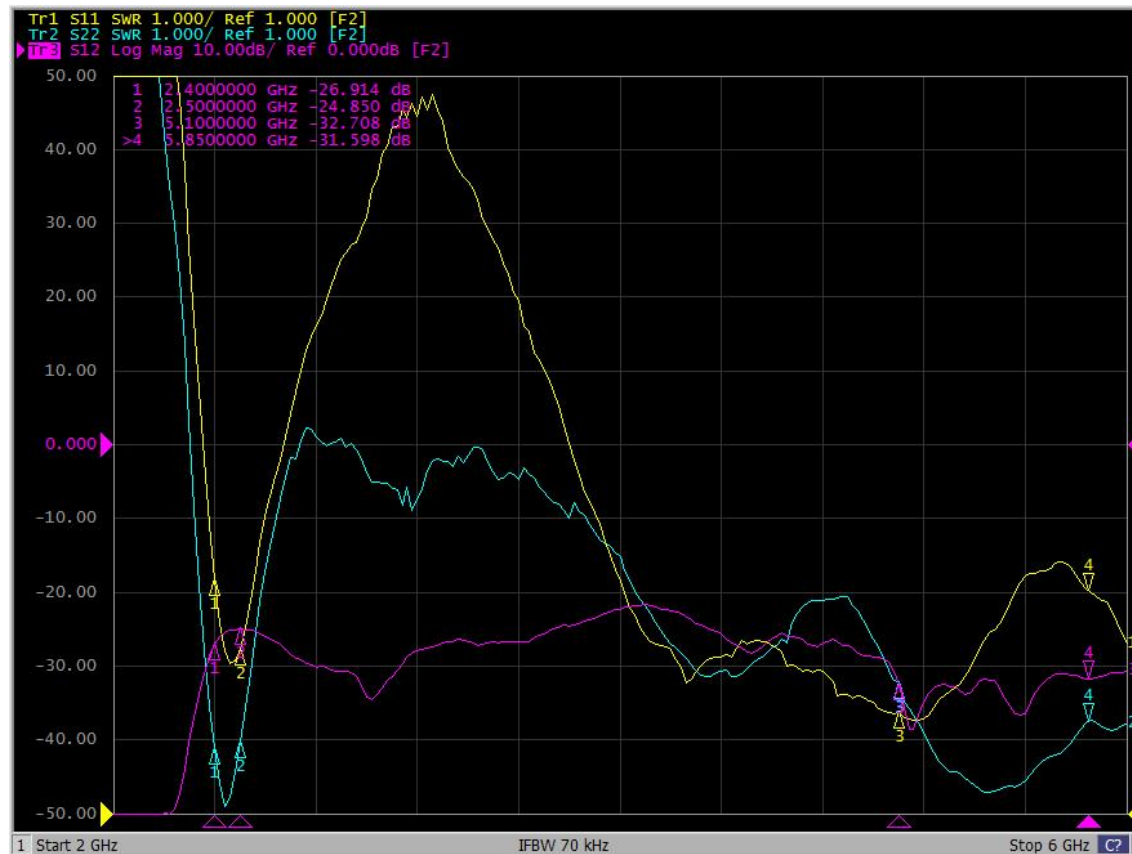
Isolation between  
Wi-Fi0 and BT

2.4-2.5G:

Low band: -26dB

Middle band:-25dB

High band:-24dB



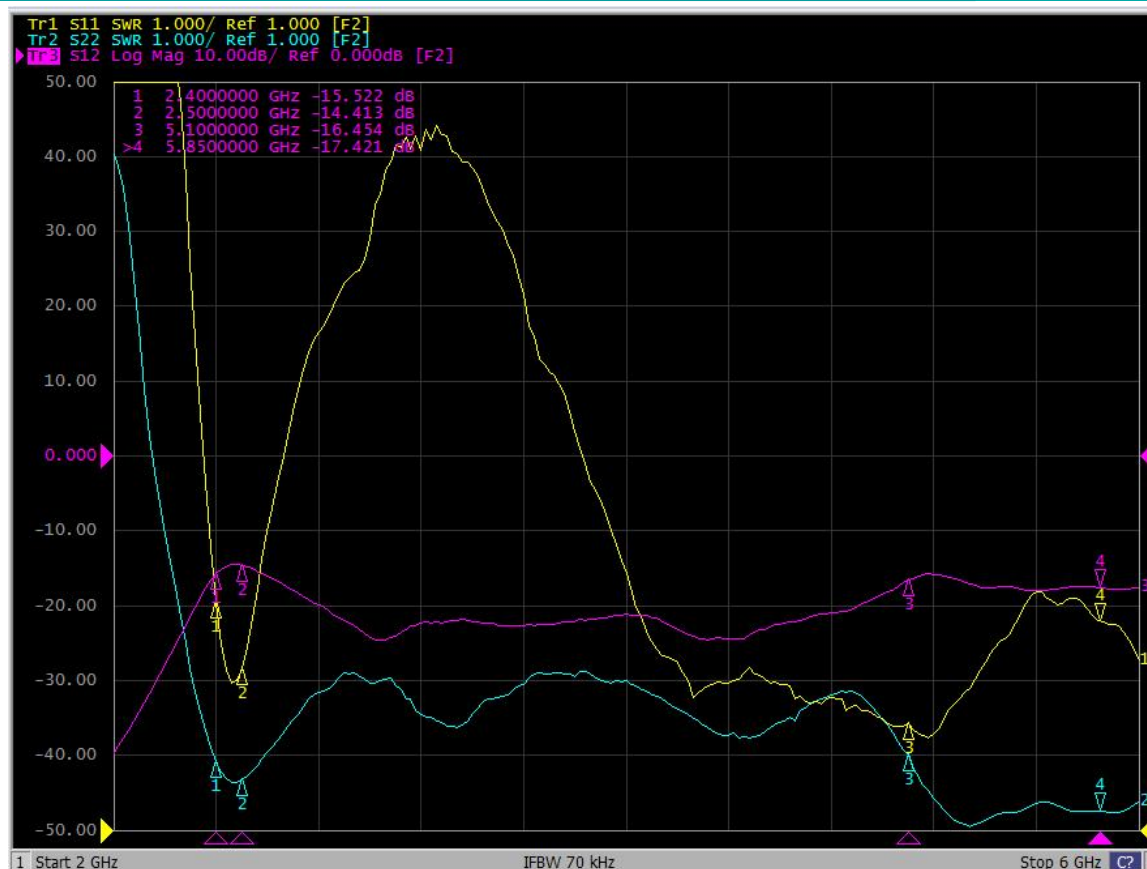
Isolation between  
Wi-Fi1 and BT

2.4-2.5G:

Low band: -15dB

Middle band:-15dB

High band:-14dB



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**谢 谢**