

# Project commissioning report of T8162

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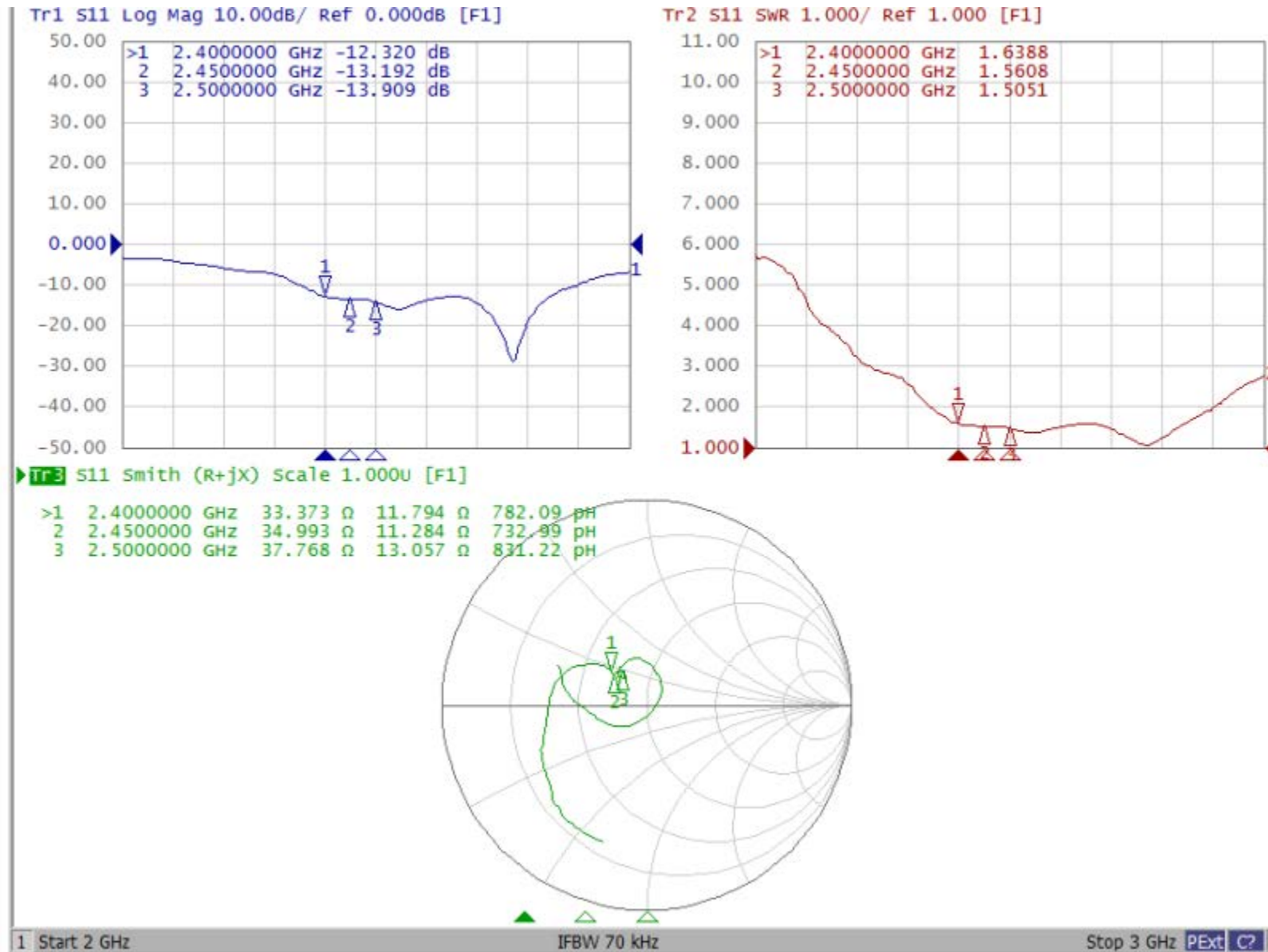
- ☐ Project requirements
- ☐ overall scheme design
- ☐ Passive test data
- ☐ Suggest summary

|                    |                                                                                         |                        |                                                         |
|--------------------|-----------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------|
| ZTX                |                                                                                         |                        |                                                         |
| radio frequency    | Wanze. Zhang                                                                            | structure              | Youjie. Ke                                              |
| MANAGER<br>CHECKED |                                                                                         | vocational work        | Hang. Ye                                                |
| Company address    | No. 34, Shilong Avenue, Shiyan Town, Baoan District, Shenzhen, (Tengda Industrial Park) |                        |                                                         |
| item information   |                                                                                         |                        |                                                         |
| project name       | T8162                                                                                   | Antenna 1<br>Antenna 2 | T8162-WIFI 1 Antenna components<br>T8162-WIFI 2 antenna |
| Antenna type       | FPC+Cable                                                                               | Manufacturer           | Anker Innovations Limited                               |
| Antenna band       | 2400-2500M                                                                              | date                   | 2024.07.18                                              |
|                    |                                                                                         |                        |                                                         |

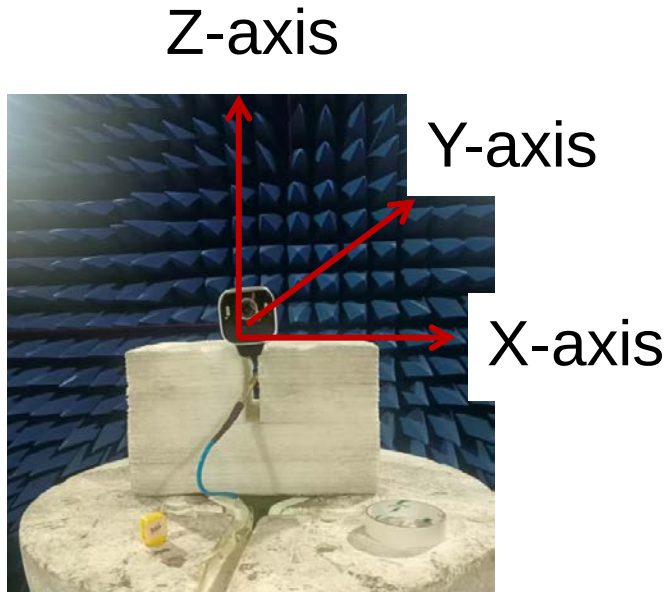
# overall scheme design

# Antenna shrapnel + FPC passive test

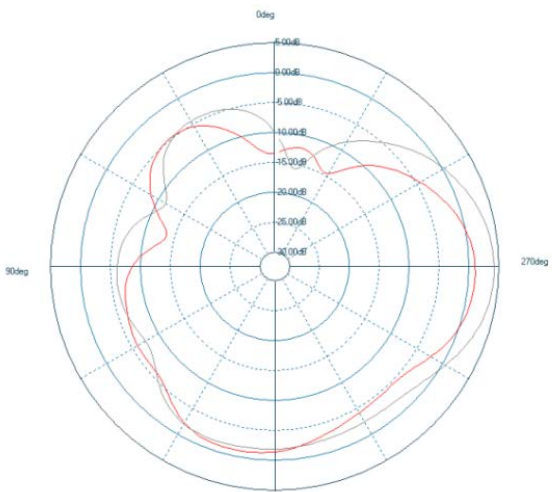
## data:VSWR WIFI



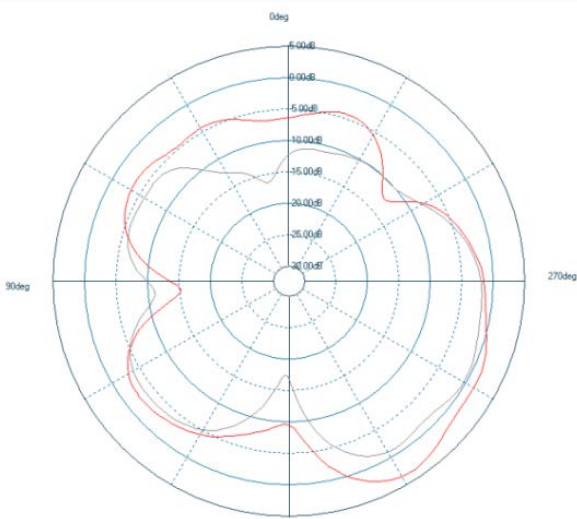
# Antenna shrapnel + FPC passive test data: direction diagram WiFi 2.4G



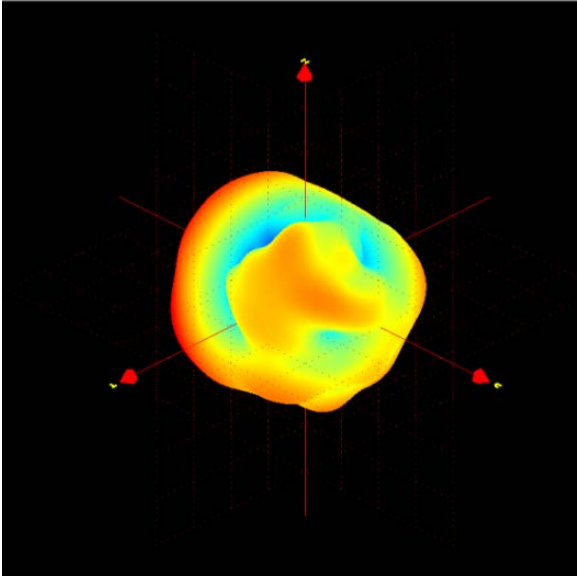
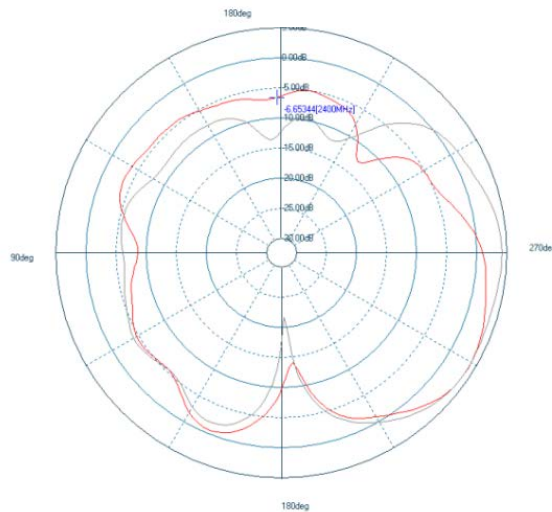
XOY



XOZ



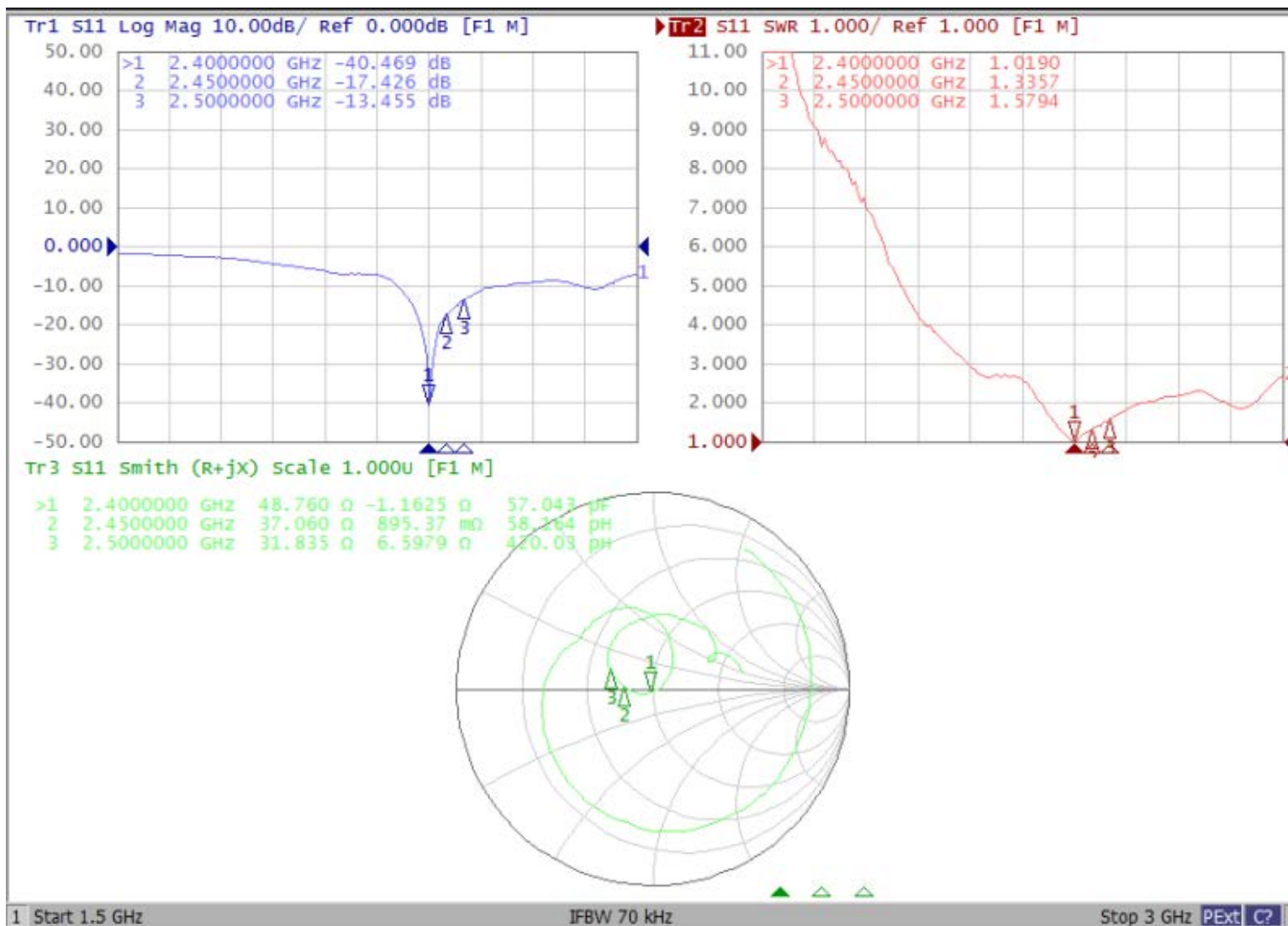
YOZ



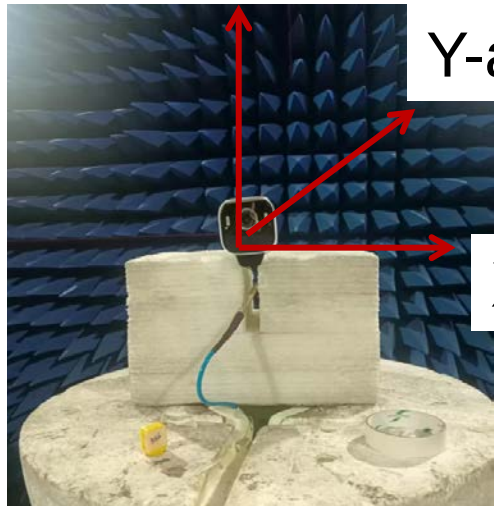
# Antenna shrapnel + FPC passive test data: efficiency / gain

| Frequency | Efficiency | Efficiency . dB | Gain . dB |
|-----------|------------|-----------------|-----------|
| 2400      | 58%        | -2.38           | 4.63      |
| 2410      | 59%        | -2.27           | 4.64      |
| 2420      | 60%        | -2.24           | 4.57      |
| 2430      | 61%        | -2.16           | 4.42      |
| 2440      | 61%        | -2.12           | 4.56      |
| 2450      | 61%        | -2.12           | 4.57      |
| 2460      | 61%        | -2.14           | 4.62      |
| 2470      | 62%        | -2.06           | 4.71      |
| 2480      | 62%        | -2.05           | 4.38      |
| 2490      | 61%        | -2.13           | 4.81      |
| 2500      | 62%        | -2.06           | 4.58      |

# Antenna cable + fpc passive test data: VSWR WIFI 1



# Antenna cable + fpc passive test data: direction diagram WiFi 2.4G

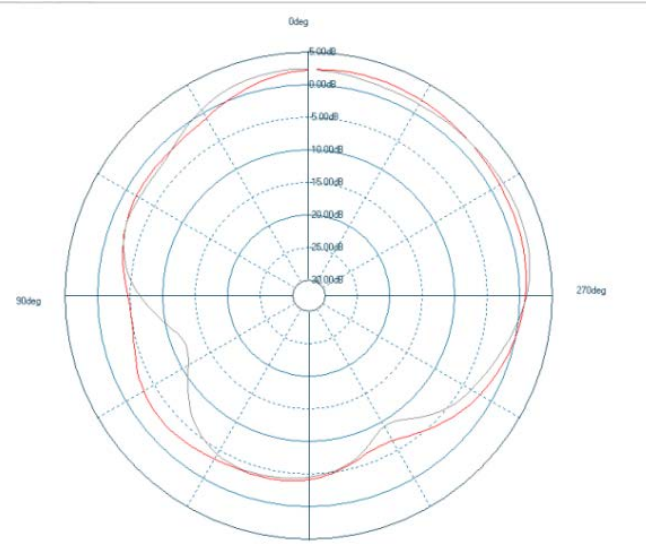


z-axis

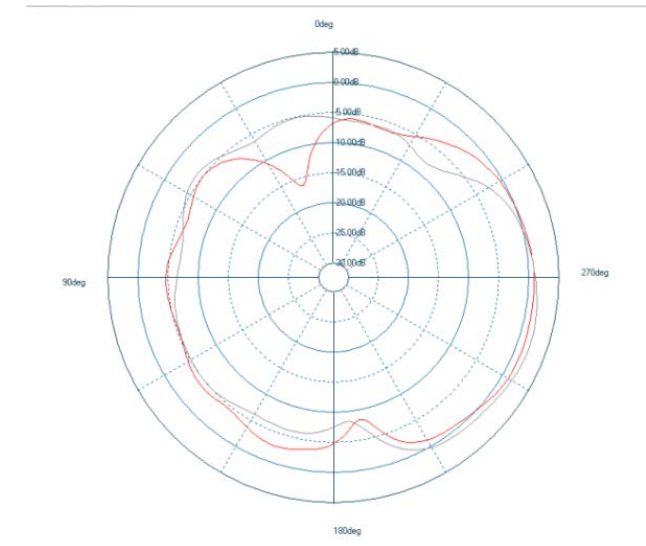
Y-axis

X-axis

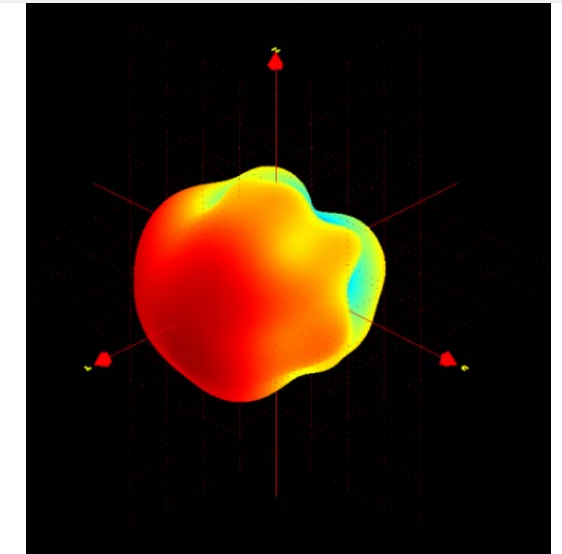
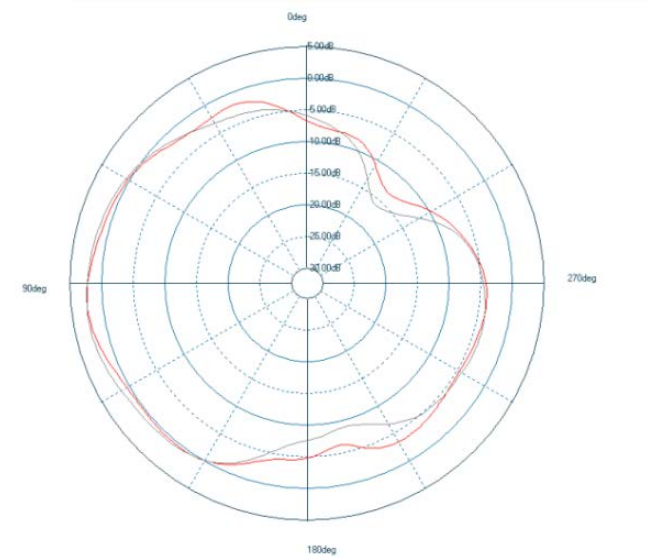
XOY



YOZ



XOZ

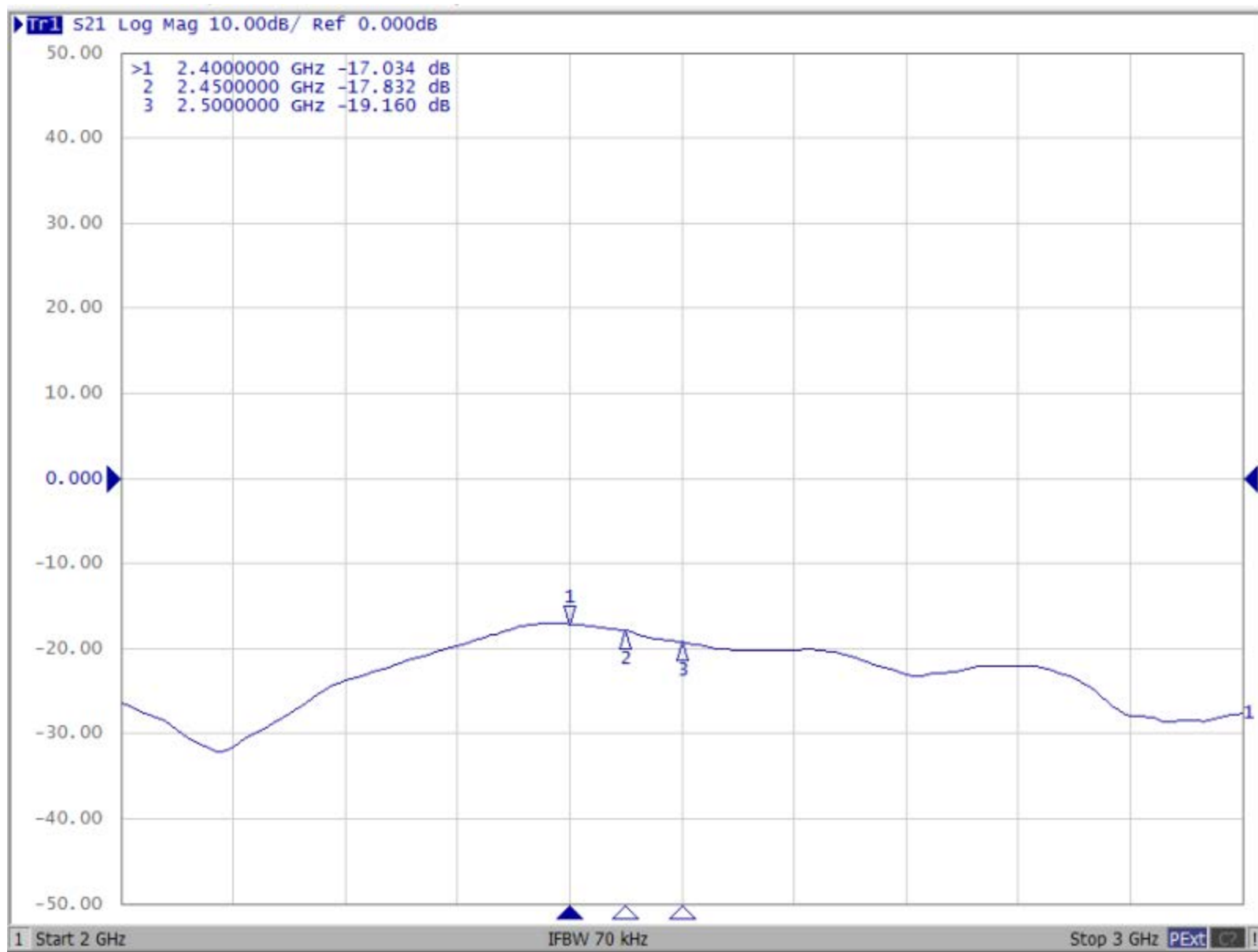


# Antenna 2 passive test data: efficiency / gain



| Frequency | Efficiency | Efficiency . dB | Gain . dB |
|-----------|------------|-----------------|-----------|
| 2400      | 61.23%     | -2.13           | 2.49      |
| 2410      | 61.11%     | -2.14           | 2.55      |
| 2420      | 61.76%     | -2.09           | 2.68      |
| 2430      | 62.07%     | -2.07           | 2.75      |
| 2440      | 61.67%     | -2.10           | 2.80      |
| 2450      | 61.16%     | -2.14           | 2.95      |
| 2460      | 60.84%     | -2.16           | 3.02      |
| 2470      | 61.67%     | -2.10           | 3.02      |
| 2480      | 61.76%     | -2.09           | 3.19      |
| 2490      | 61.19%     | -2.13           | 3.27      |
| 2500      | 60.28%     | -2.20           | 3.23      |

# Isolation



# Thank You

