



Applicable to Q181 mini project WIFI antenna solution

### Electrical Specifications:

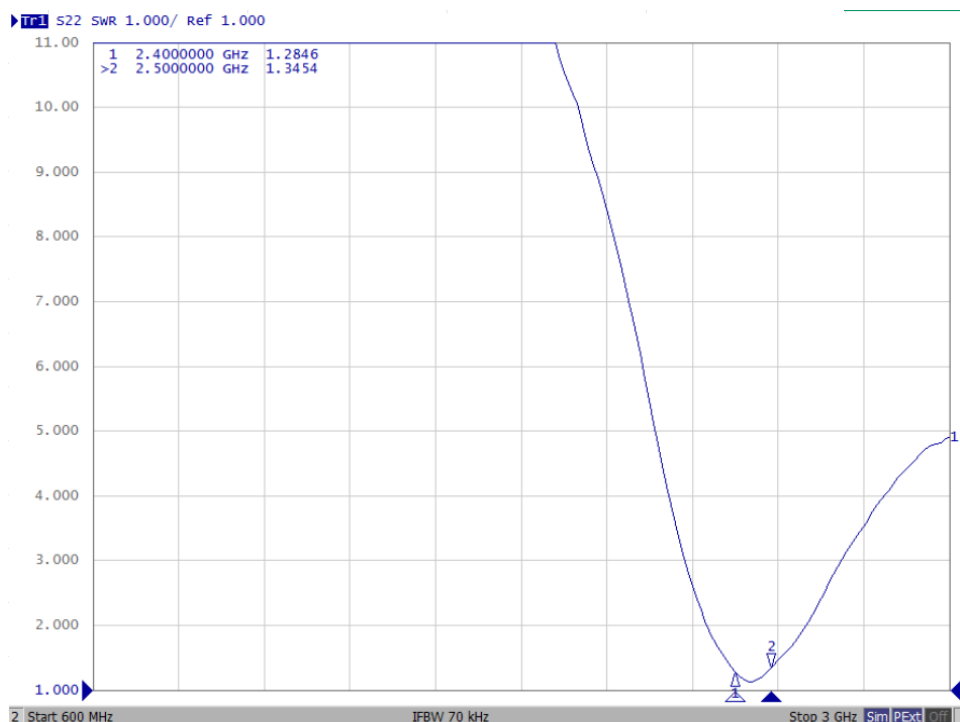
|                   |                    |                         |                     |
|-------------------|--------------------|-------------------------|---------------------|
| Frequency Band    | 2400MHz            | The Antenna Material    | PCB                 |
| Nominal Impedance | 50 $\Omega$        | Antenna Connection Mode |                     |
| VSWR              | $\leq 4.0$         | Working Temperature     | -40℃~+85℃           |
| Peak Gain         | 2400-2500MHz:-1.72 | Keep The Temperature    | +19℃~+23℃           |
|                   |                    | Polarization            | Linear Polarization |

### Test Conditions And Methods:

| Test Instruments                                    | Test Method  | Test Result              |
|---|--|--------------------------|
| 7*4*3 microwave darkroom<br>E5071B network analyzer | 1.<br>Assemble the antenna to be tested on the prototype.<br>2.<br>Put the prototype on the test fixture in a dark room, and conduct comprehensive test with it. Instrument/analyzer connection is established.<br>3.<br>Test antenna passive data with test software. | Refer to the Test Report |

### Passive performance test parameters

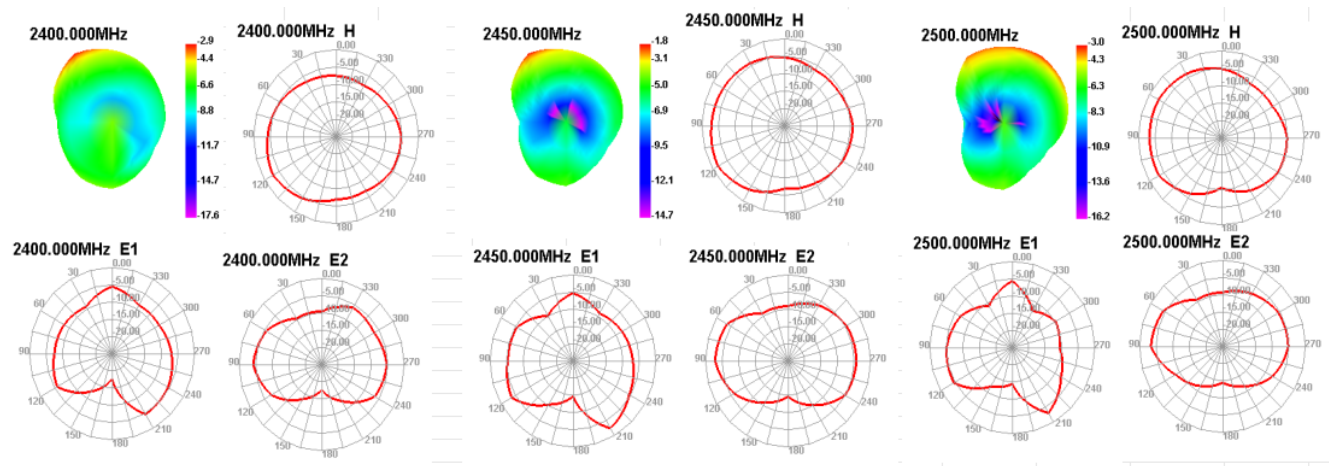
|                 |      |      |  |
|-----------------|------|------|--|
| Frequency (MHz) | 2400 | 2500 |  |
| VSWR            | 1.28 | 1.35 |  |



antenna passive data:

| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|
| 2400          | 16.62       | -2.92         |
| 2410          | 18.74       | -2.65         |
| 2420          | 20.43       | -2.46         |
| 2430          | 22.48       | -2.2          |
| 2440          | 23.57       | -1.99         |
| 2450          | 24.13       | -1.77         |
| 2460          | 23.89       | -1.72         |
| 2470          | 22.89       | -1.84         |
| 2480          | 21.73       | -2.14         |
| 2490          | 19.98       | -2.56         |
| 2500          | 17.39       | -3.01         |

Directional diagram



antenna dawning:

