

**045WIFI 2.4G aerial** antenna

SD-045WIFI 2.4-FPC

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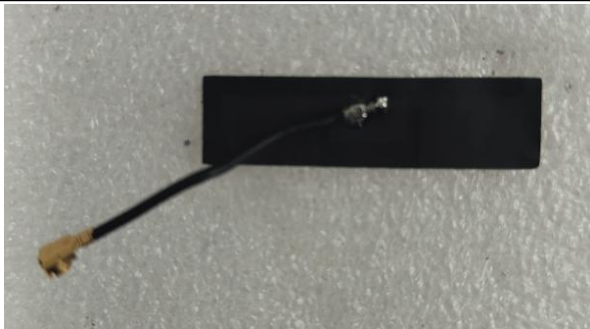
FAX: 18929599312

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The operating temperature range for this product is -20 to +65° C.

| NO. | ITEMS                       | DETAILS                                                                              |
|-----|-----------------------------|--------------------------------------------------------------------------------------|
| 1   | model                       | 2.4GWIFI                                                                             |
| 2   | Frequency band              | 2400MHz-2500MHz                                                                      |
| 3   | VSWR                        | $\leq 2.0$                                                                           |
| 4   | Gain                        | $\geq 2.0\text{dBi}$                                                                 |
| 5   | Radiation Efficiency        | $\geq 50\%$                                                                          |
| 6   | impedance                   | $50\ \Omega$                                                                         |
| 7   | Antenna Type                | FPC antenna                                                                          |
| 8   | Antenna implementation form | FPC + 1.13 Coaxial Cable                                                             |
| 9   | Antenna images              |  |

### Product Drawings:

[illegible]

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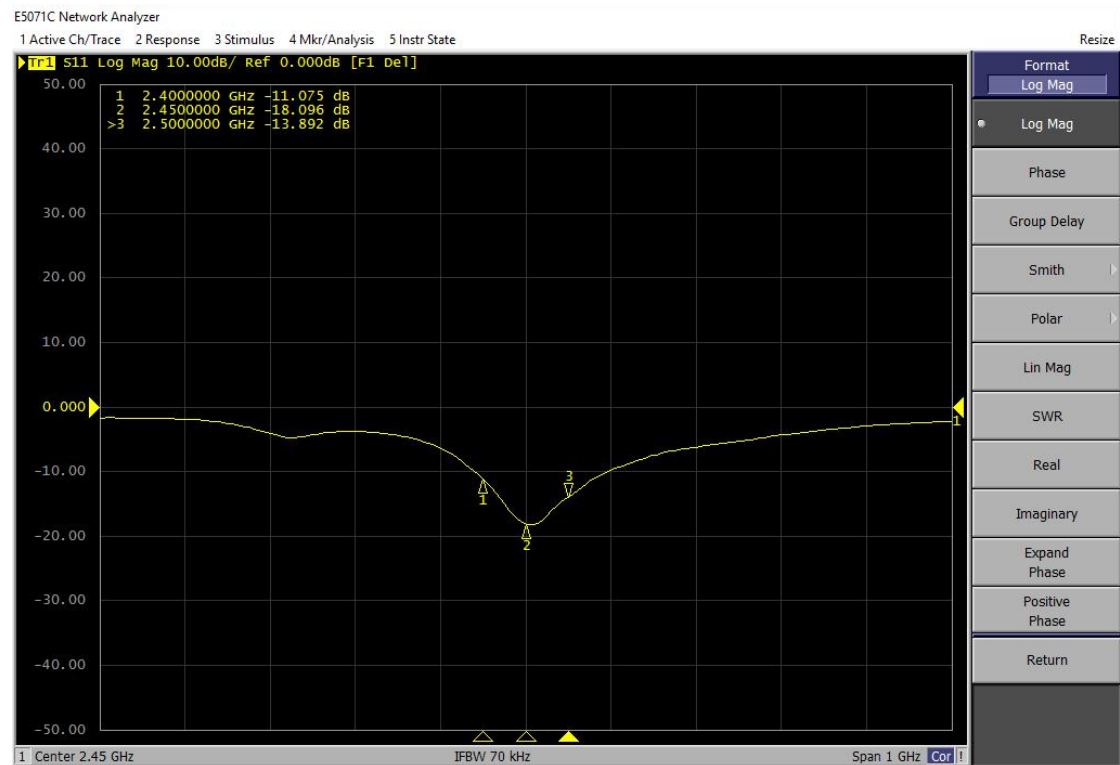
## Testing Environment and Equipment

|                                                                                                                       |                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Test environment:<br>temperature: 10℃——+30℃<br>Relative humidity: ≤80% (+40℃)<br>Atmospheric pressure: 750mmkg±30mmkg | Testing equipment:<br>Network analyzer<br>KEYSIGHT<br>E5071C Multi-probe Microwave Anechoic Chamber |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|

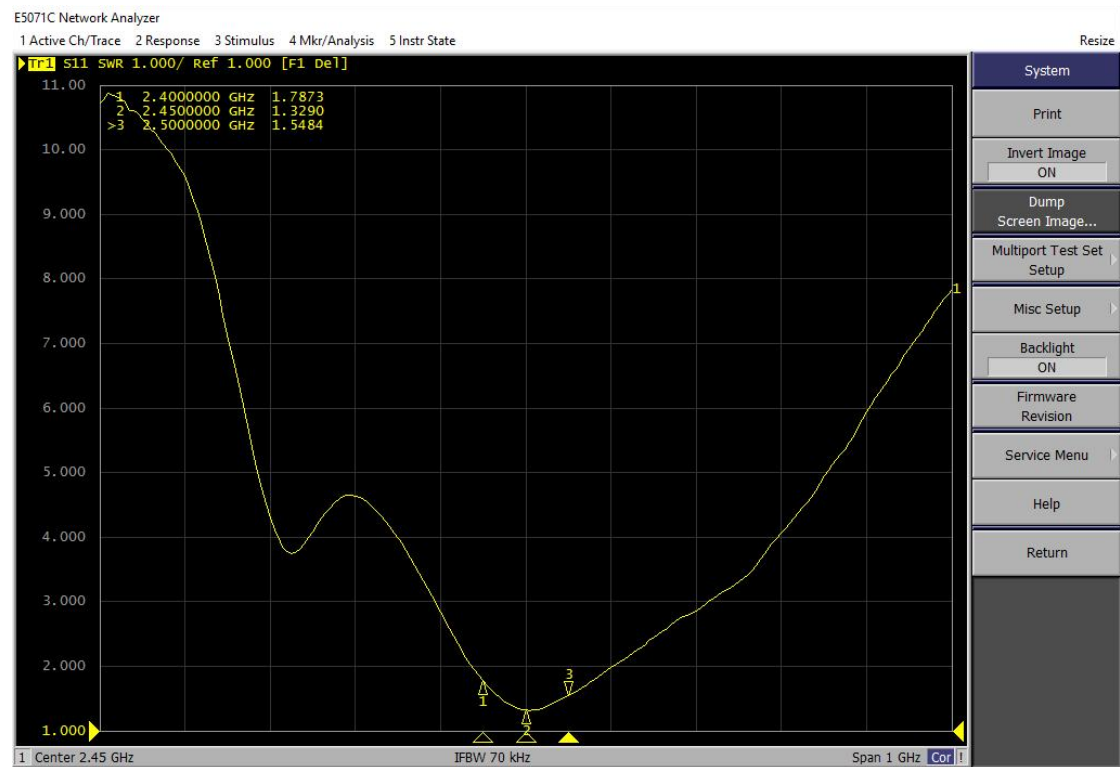
### 4.22.1 Product electrical performance test data:

S11 :

| Marker (MHZ) | 2400 | 2450 | 2500  |
|--------------|------|------|-------|
| Returnloss   | -11  | -18  | -13.8 |
| VSWR         | 1.7  | 1.3  | 1.5   |



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## 4.22.2 antenna gain:

| frequency (MHz) | 2400  | 2410  | 2420  | 2430  | 2440  | 2450  | 2460  | 2470  | 2480  | 2490  | 2500  |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Gain (dBi)      | 2.66  | 2.89  | 3.00  | 2.60  | 2.71  | 2.62  | 2.90  | 2.82  | 2.72  | 3.07  | 3.35  |
| Efficient (%)   | 54.93 | 56.05 | 60.10 | 60.95 | 66.79 | 66.42 | 68.93 | 67.32 | 68.18 | 69.37 | 70.22 |

Test setup photo



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Antenna radiation pattern:

2450MHZ

