

**Product Number:NB0037-2450-100PEXPM**

**Product Name: 双频内置全向天线**

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1. Specification



| A. Electrical Characteristics            |                                    |
|------------------------------------------|------------------------------------|
| Frequency 天线频率                           | 2400-2500MHZ / 5150~5850MHZ        |
| S.W.R. 驻波比                               | < 2.0                              |
| Antenna Gain 天线增益                        | 2.3dBi ±0.7@ E-Plane // Peak Gain  |
| Polarization 极化方式                        | Linear 线性极化                        |
| PCB SIZE 天线尺寸                            | L=95mm ,W=13.5mm                   |
| Impedance 阻抗                             | 50 Ohm                             |
| B. Material & Mechanical Characteristics |                                    |
| Material of Radiator 材质                  | FR-4                               |
| Cable Type 线材类型                          | RG-1.13 Black 泡棉高度: 长宽高 86*12*15mm |
| Connector Type 天线接口                      | 50 ohm / I-PEX MHF20278-111R-13    |
| Cable length 天线长度                        | 从焊点算起线长 100mm ±0.5mm               |
| C. Environmental                         |                                    |
| Operation Temperature                    | - 40 °C ~ + 65 °C                  |
| Storage Temperature                      | - 40 °C ~ + 80 °C                  |
| Antenna Color Storage life               | < 2 year                           |

2. Characteristics and Reliability Test

| Test Items |              | Test Condition and Procedure                                     | Requirements                |
|------------|--------------|------------------------------------------------------------------|-----------------------------|
| C1         | S.W.R.       | Set DUT on Network Analyzer; make individual calibration to test | Directive DUT specification |
| C2         | Antenna Gain | Set DUT on Antenna Chamber; make individual calibration to test  | Directive DUT specification |
| M1         | Vibration    | GB / T2423 . 48-1997                                             | 1. No Visual Damage         |

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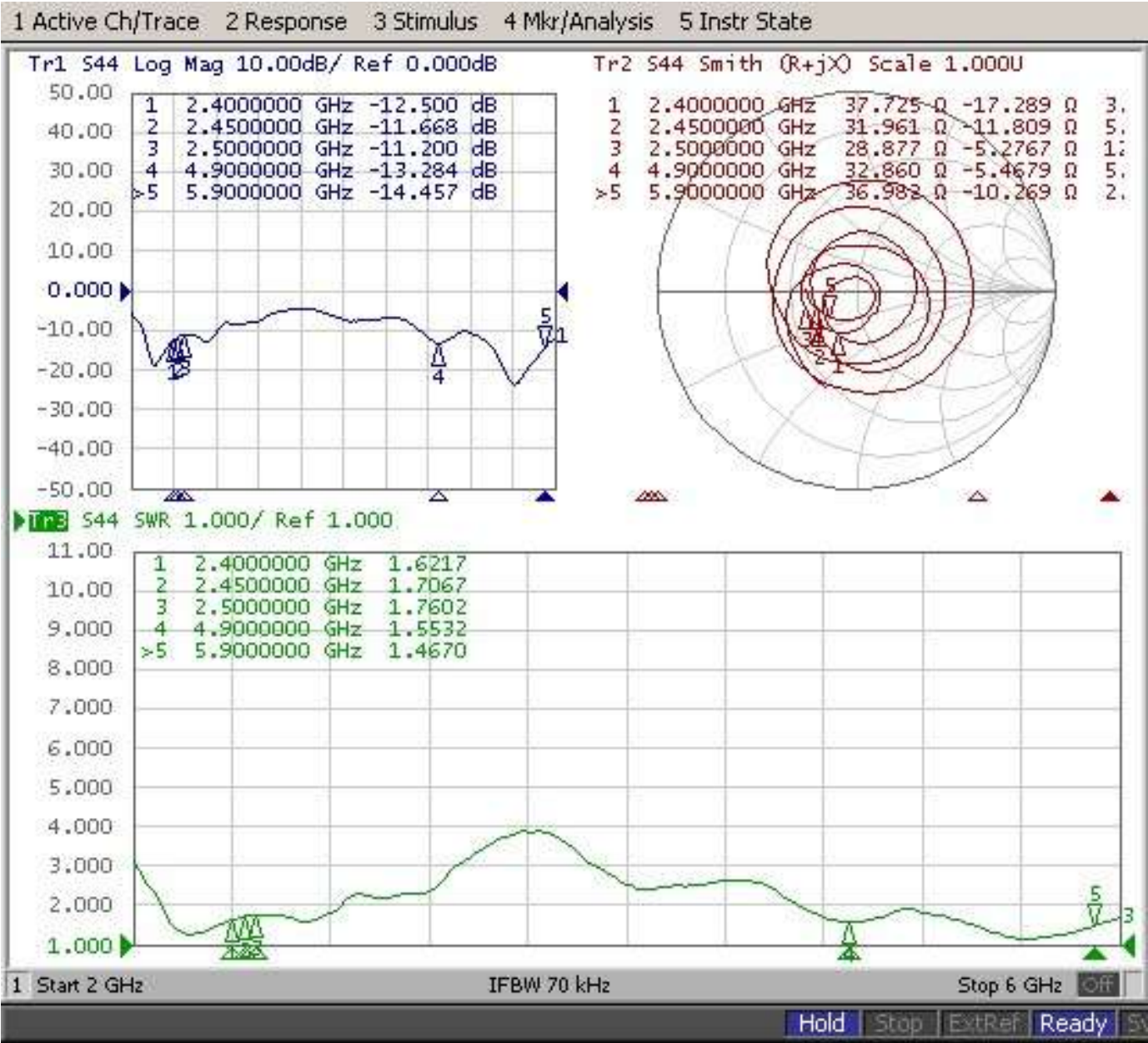
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|    |                      |                                                                                                       |                                                                         |
|----|----------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
|    |                      | Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz<br>3 directions; 2 hours for each direction     | 2. Frequency Tol.<= 5%                                                  |
| M2 | Random Drop          | GB / T2423.8-1995<br>Height: 1.0 Meter;<br>3 directions; 1 time for each direction                    | 1. No parts separated<br>2. Frequency Tol.<= 5%                         |
| M3 | Solderability        | GB 2423 . 28- 82<br>Solder iron: 260±5°C; Duration: 5 seconds                                         | 1. Mounted on PCB<br>2. No Visual Damage                                |
| M4 | Terminal-Pull Test   | Holding with individual specification; force applied to axis of terminal                              | 1. Directive DUT specification<br>2. Frequency Tol.<= 5%                |
| M5 | Terminal-Torque Test | Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal | 1. Directive DUT specification<br>2. Frequency Tol.<= 5%                |
| M6 | Dimension            | Inspection of dimension, color, material, package, surface process                                    | Directive DUT specification                                             |
| E1 | Salt Spray           | GB / T 2423 . 17- 93<br>Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%;<br>Time: 24 hours               | After 2 Hours Recovery<br>1. No Visual Damage<br>2. Frequency Tol.<= 5% |
| E2 | Humidity             | GB / T 2423 . 4 - 93<br>Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%;<br>Time: 24 hours                  | After 2 Hours Recovery<br>1. No Visual Damage<br>2. Frequency Tol.<= 5% |
| E3 | Thermal Shock        | GB / T 2423 . 22 - 87<br>1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes)<br>Cycles: 24            | After 2 Hours Recovery<br>1. No Visual Damage<br>2. Frequency Tol.<= 5% |

### 3. Antenna - S Parameter Test Data

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4. Antenna - Gain Test Data

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|                                 |                        |
|---------------------------------|------------------------|
| Model: Antenna                  | Remark: E-Plane\ H-Pol |
| Tested by:CORTEC Antenna 3D Lab |                        |

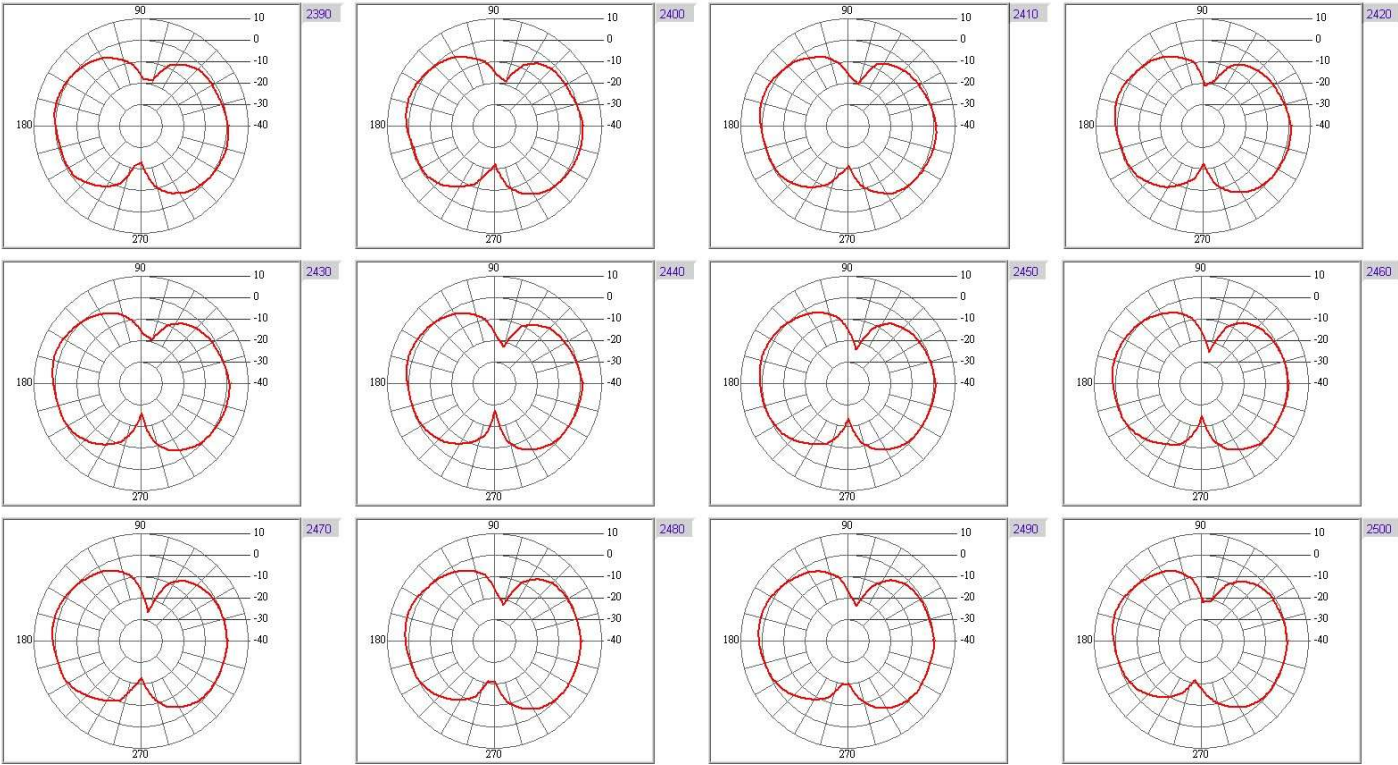
| Freq. (MHz)    | 2400 | 2410 | 2420 | 2430 | 2440 | 2450 | 2460 | 2470 | 2480 | 2490 | 2500 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|
| Peak Gain (dB) | 1.85 | 1.76 | 2    | 2.34 | 1.88 | 1.89 | 1.84 | 1.64 | 2.19 | 2.01 | 2.19 |
| Peak Degree    | 162  | 161  | 162  | 162  | 162  | 162  | 162  | 162  | 162  | 162  | 162  |

Location: Chamber

Time: 下午 03:00:01

Temperatuer (°C): 25.00

Approved by:



Frequency (MHz)    Peak Gain    (dBi)

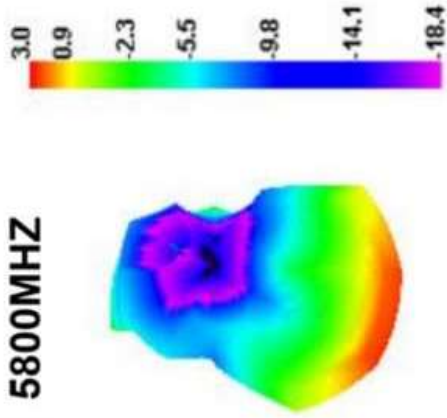
|         |               |
|---------|---------------|
| 5150MHZ | 2.3DBi±0.7DB  |
| 5800MHZ | 2.5DBi ±0.7DB |
| 5850MHZ | 2.4DBi±0.7DB  |

5G 辐射场型图

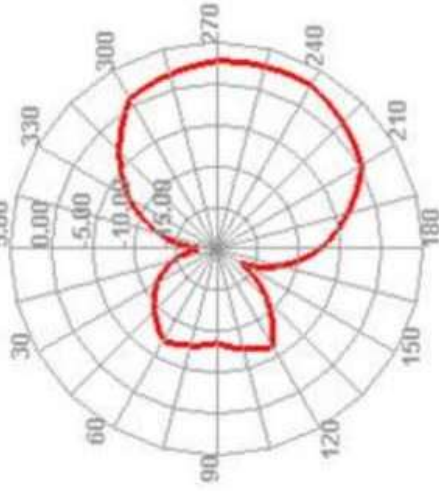
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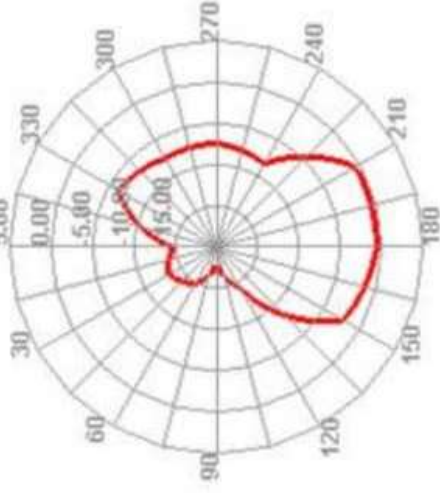
5800MHZ



5150MHZ H



5800MHZ E1



5850MHZ E2

