



# 深圳市博格斯通信技术有限公司

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Applicable to A99-SC200E-AU project WIFI antenna solution

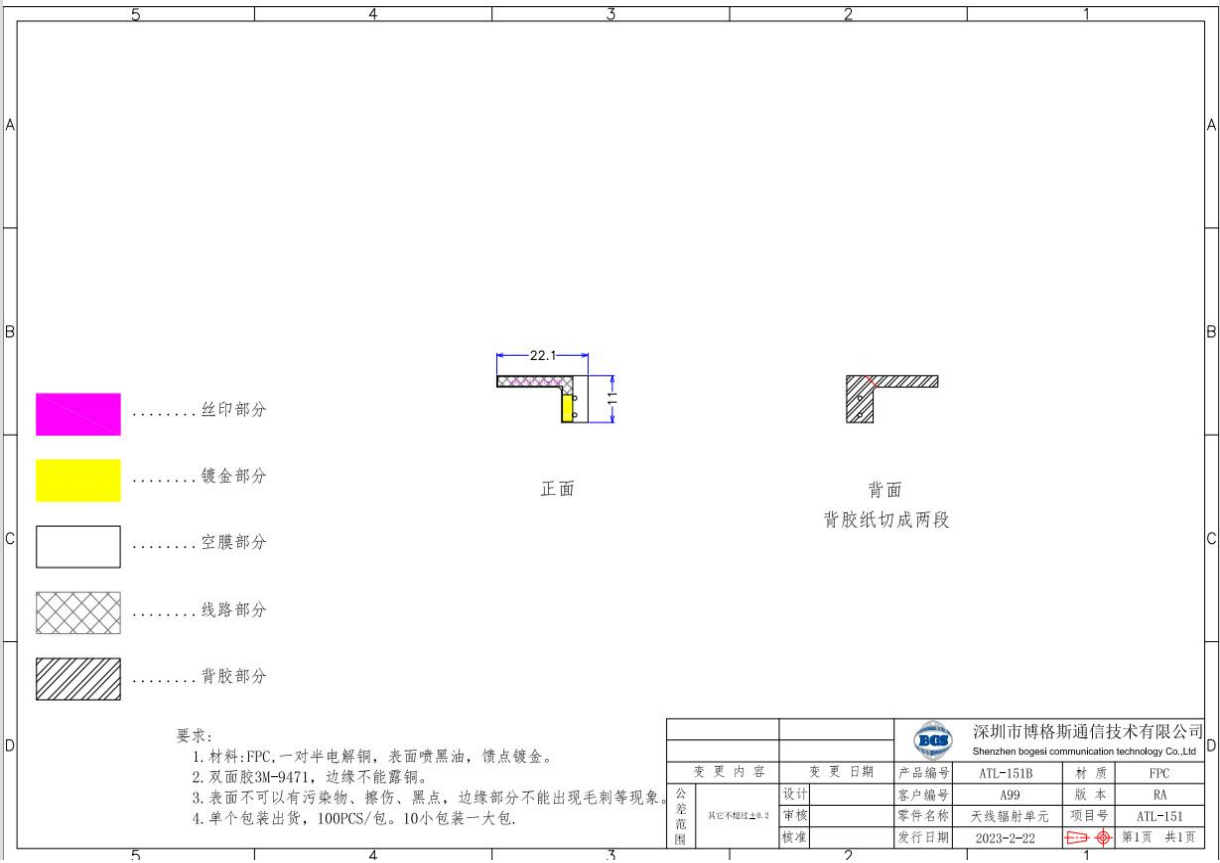
### Electrical Specifications:

|                   |                       |                         |                     |
|-------------------|-----------------------|-------------------------|---------------------|
| Frequency Band    | WIFI                  | The Antenna Material    | FPC                 |
| Nominal Impedance | 50 $\Omega$           | Antenna Connection Mode | Touch               |
| VSWR              | $\leq 3.0$            | Working Temperature     | -40°C ~ +85°C       |
| Peak Gain         | 2400-2500MHz: 2.11dBi | Keep The Temperature    | +19°C ~ +23°C       |
|                   | 5100-5800MHz: 4.56dBi | Polarization            | Linear Polarization |

### Test Conditions And Methods:

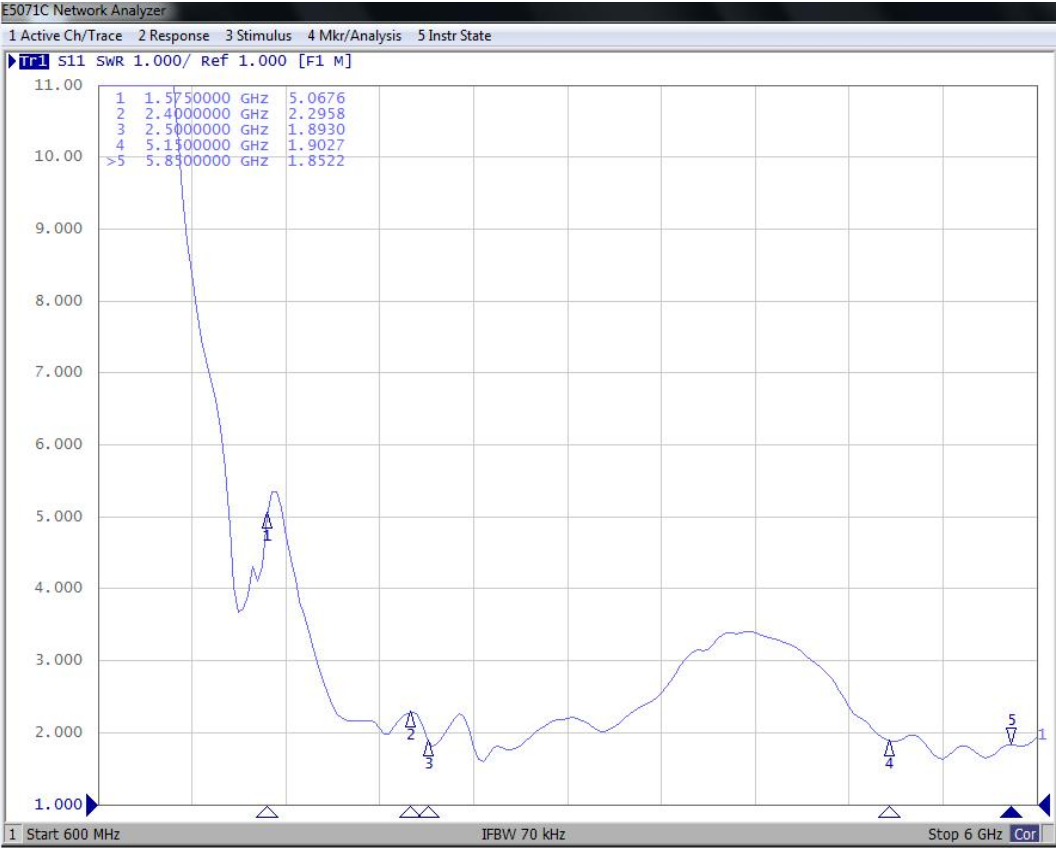
| Test Instruments                                                               | Test Method                                                                                                                                                                                                                                                   | Test Result              |
|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| E5071B network analyzer<br>48 probe test system<br>MT8862 comprehensive tester | 1. Assemble the antenna to be tested on the prototype.<br>2. Put the prototype on the test fixture in a dark room, and conduct comprehensive test with it. Instrument/analyzer connection is established.<br>3. Test antenna passive data with test software. | Refer to the Test Report |

Product drawings



Passive performance test parameters

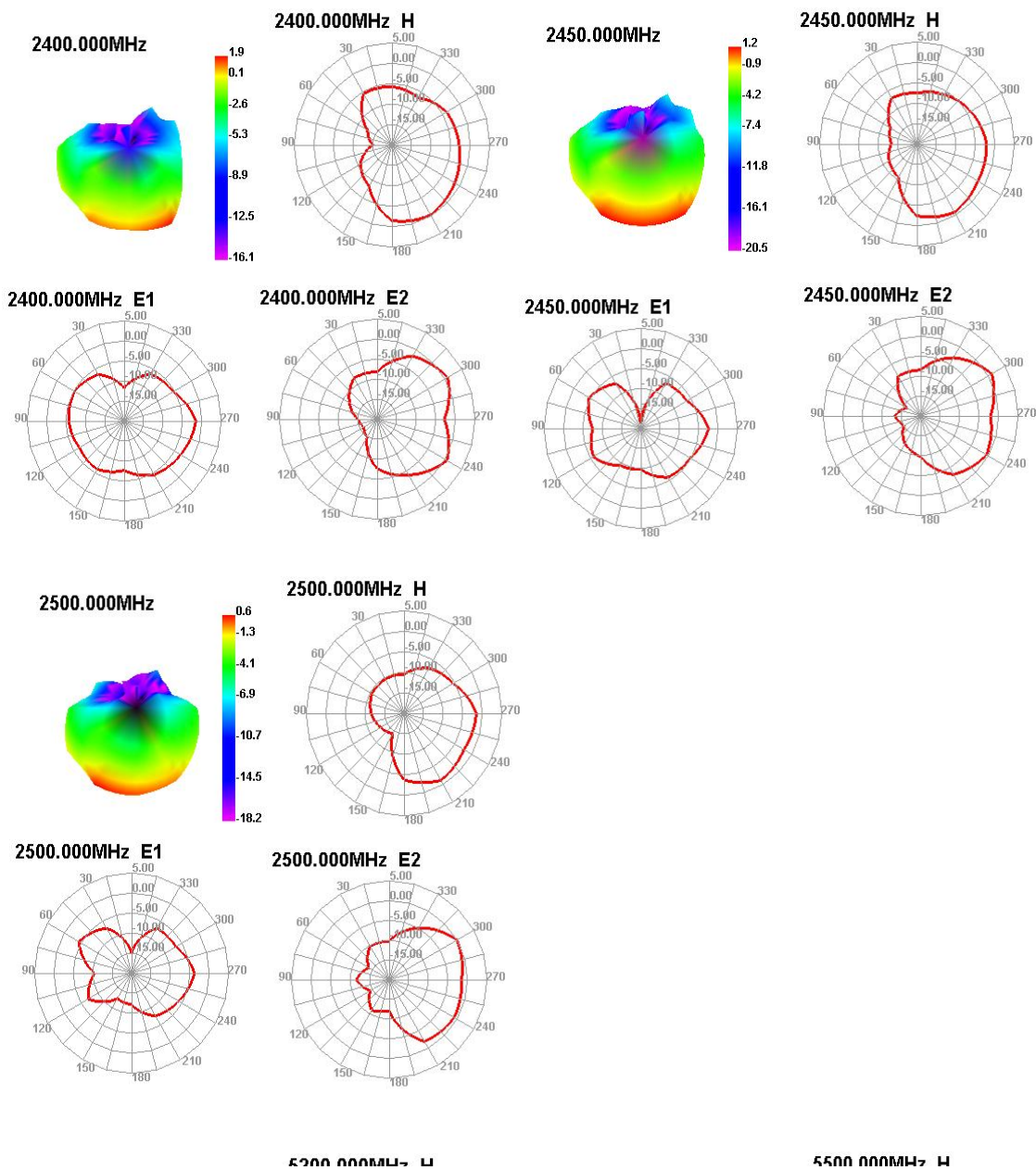
|                 |      |      |
|-----------------|------|------|
| Frequency (GHz) | 2.4  | 2.5  |
| VSWR            | 2.2  | 1.8  |
| Frequency (GHz) | 5.15 | 5.85 |
| VSWR            | 1.9  | 1.8  |



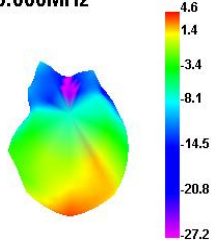
### Antenna Passive Data:

| Freq<br>(MHz) | Effi<br>(%) | Gain<br>(dBi) |
|---------------|-------------|---------------|
| 2400          | 37.26       | 1.88          |
| 2410          | 39.85       | 2.11          |
| 2420          | 36.24       | 1.62          |
| 2430          | 38.52       | 2.08          |
| 2440          | 32.59       | 1.17          |
| 2450          | 35.14       | 1.24          |
| 2460          | 30.25       | 0.5           |
| 2470          | 33.28       | 1.16          |
| 2480          | 31.1        | 0.61          |
| 2490          | 34.36       | 1.23          |
| 2500          | 30.29       | 0.58          |
| 5200          | 40.34       | 4.56          |
| 5220          | 36.53       | 4.14          |
| 5240          | 35.55       | 3.95          |
| 5260          | 34.54       | 3.84          |
| 5280          | 36.46       | 3.95          |
| 5300          | 36.26       | 3.67          |
| 5320          | 37.88       | 3.52          |
| 5340          | 39.5        | 3.29          |
| 5360          | 39.33       | 3.17          |
| 5380          | 39.01       | 2.72          |
| 5400          | 36.41       | 2.3           |
| 5420          | 36.72       | 2.29          |
| 5440          | 37.33       | 2.53          |
| 5460          | 36.5        | 2.58          |
| 5480          | 37.84       | 2.8           |
| 5500          | 42.14       | 3.53          |
| 5520          | 39.51       | 3.26          |
| 5540          | 36.91       | 2.81          |
| 5560          | 36.86       | 2.71          |
| 5580          | 36.58       | 2.6           |
| 5600          | 35.88       | 2.3           |
| 5620          | 37.15       | 2.32          |
| 5640          | 37.41       | 2.2           |
| 5660          | 38.81       | 2.38          |
| 5680          | 41.79       | 3.07          |
| 5700          | 42.9        | 3.42          |
| 5720          | 45.28       | 3.89          |
| 5740          | 47.12       | 4.19          |
| 5760          | 48.21       | 4.38          |
| 5780          | 44.69       | 4.21          |
| 5800          | 47.83       | 4.49          |

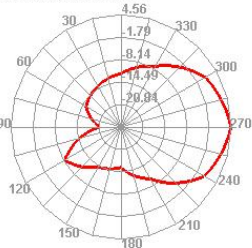
Directional diagram



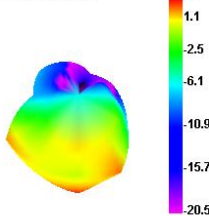
5200.000MHz



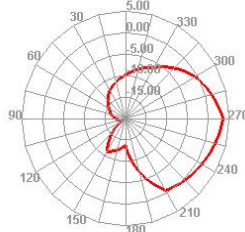
5200.000MHz H



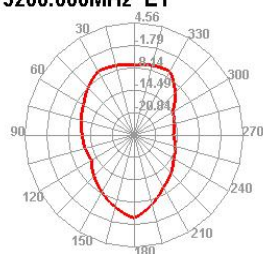
5500.000MHz



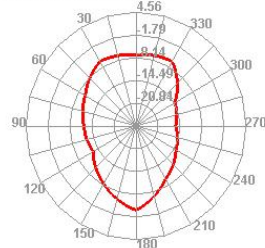
5500.000MHz H



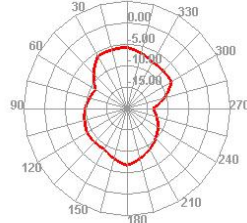
5200.000MHz E1



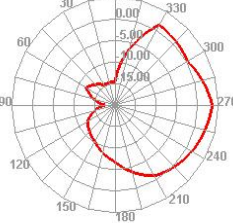
5200.000MHz E1



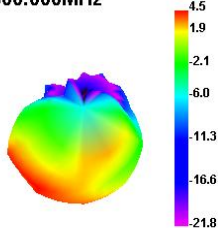
5500.000MHz E1



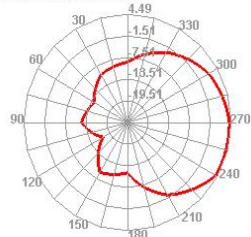
5500.000MHz E2



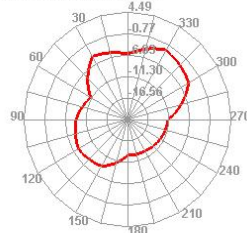
5800.000MHz



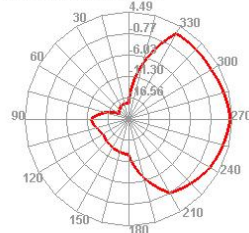
5800.000MHz H



5800.000MHz E1



5800.000MHz E2



Dianlov Picturax

