

# SPECIFICATION

## SHEET FOR APPROVAL

(Revision: R: A2)

|  |                |                          |  |
|--|----------------|--------------------------|--|
|  | CUSTOMER(客户名称) | Newland                  |  |
|  | CS P/N(客户机种)   | P300                     |  |
|  | PART NAME(品名)  | WIFI&BT                  |  |
|  | FREQUENCY(频率)  | 2400-2500; 5150-5850MHz。 |  |
|  | ZTX NO.(物料编号)  | E.03.00846               |  |
|  | DATE(日期)       | 2023-4-11                |  |

| CUSTOMER      |               |               |                    |
|---------------|---------------|---------------|--------------------|
| QA<br>CHECKED | ME<br>CHECKED | RF<br>CHECKED | MANAGER<br>CHECKED |
|               |               |               |                    |



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# ANTENNA SPECIFICATION

CUS P/N : P300 WIFI&BT

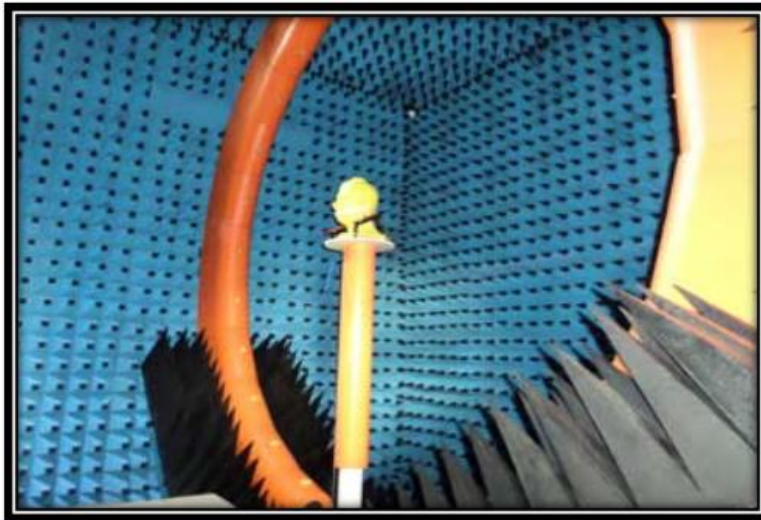
ApplicationDate:Apr,11,2023

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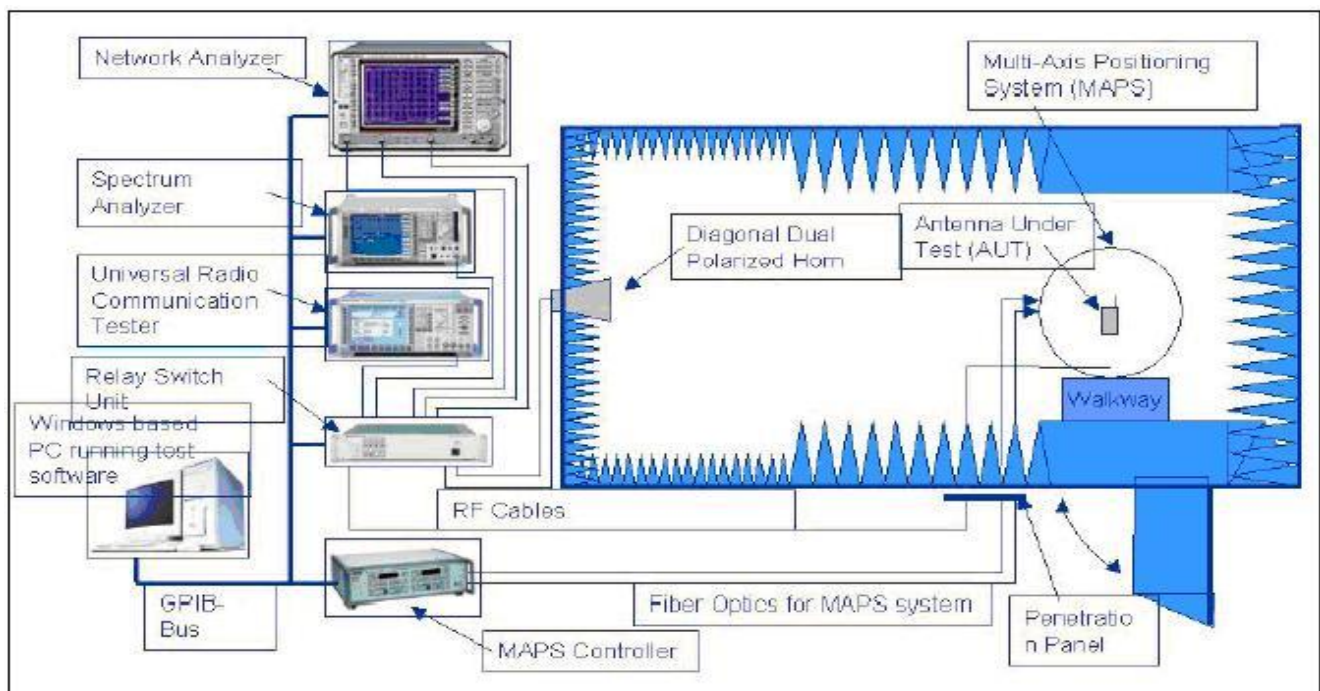
## 1. Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CITA standards.

Testing range:

Support active, passive testing of  
GSM/CDMA/WCDMA/TD-  
SCDMA/LTE/WIFI/WLAN/WiMax/BT  
/GPS/MIMO/UWB within 0.4-6G.



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## 2.Antenna test data

### 2-1 Antenna passive test

| chNo | Freq<br>(MHz) | Gain<br>(dBi) | Efficiency<br>(%) | chNo | Freq<br>(MHz) | Gain<br>(dBi) | Efficiency<br>(%) |
|------|---------------|---------------|-------------------|------|---------------|---------------|-------------------|
| 1    | 2400          | 0.700613      | 36.68845          | 14   | 5250          | -0.21816      | 29.35735          |
| 2    | 2410          | 0.920495      | 37.07595          | 15   | 5300          | -0.04295      | 30.90049          |
| 3    | 2420          | 1.035053      | 37.43773          | 16   | 5350          | 1.607861      | 37.28893          |
| 4    | 2430          | 0.928318      | 36.55397          | 17   | 5400          | 0.386412      | 32.63774          |
| 5    | 2440          | 0.617171      | 34.56904          | 18   | 5450          | 0.153869      | 30.15193          |
| 6    | 2450          | 0.65204       | 34.63328          | 19   | 5500          | 2.389826      | 34.27641          |
| 7    | 2460          | 0.338511      | 33.68398          | 20   | 5550          | 1.45063       | 35.70216          |
| 8    | 2470          | 0.616511      | 33.61077          | 21   | 5600          | -0.40378      | 30.13587          |
| 9    | 2480          | 0.500804      | 31.82191          | 22   | 5650          | -0.81202      | 31.36342          |
| 10   | 2490          | 0.551458      | 31.42544          | 23   | 5700          | 0.455491      | 38.63689          |
| 11   | 2500          | 0.802846      | 31.48932          | 24   | 5750          | -0.48157      | 31.26063          |
| 12   | 5150          | 0.352192      | 25.7205           | 25   | 5800          | -0.15291      | 28.53475          |
| 13   | 5200          | -0.39394      | 27.0016           | 26   | 5850          | 0.296124      | 33.3353           |



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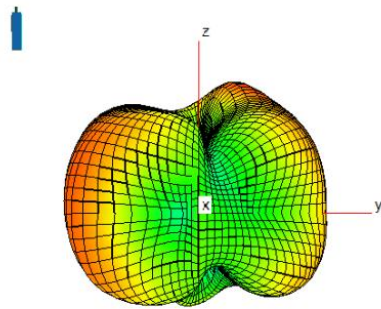
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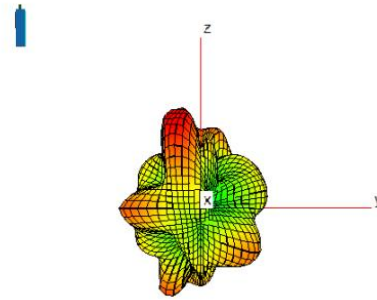
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## 2-2 3D radiation drawing



2450MHz



5500MHz



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## 2-3 Active test data

| 频段<br>(frequency) | 参数\信道<br>Parameter/channel | 1      | 7      | 13     |
|-------------------|----------------------------|--------|--------|--------|
| 11B               | TRP (dBm)                  | 13.78  | 13.52  | 13.32  |
|                   | TIS (dBm)                  | -70.21 | -71.15 | -70.17 |
| 频段<br>(frequency) | 参数\信道<br>Parameter/channel | 36     | 100    | 165    |
| 11A               | TRP (dBm)                  | 13.48  | 15.38  | 12.39  |
|                   | TIS (dBm)                  | -70.74 | -72.33 | -71.06 |



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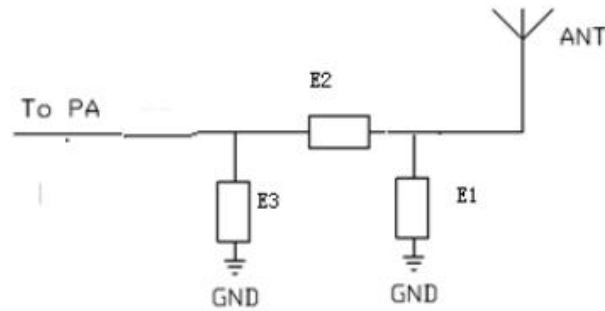
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## 2-4 Matching circuit



| 匹配说明<br>specification |    |
|-----------------------|----|
| E1                    | NC |
| E2                    | 0Ω |
| E3                    | NC |



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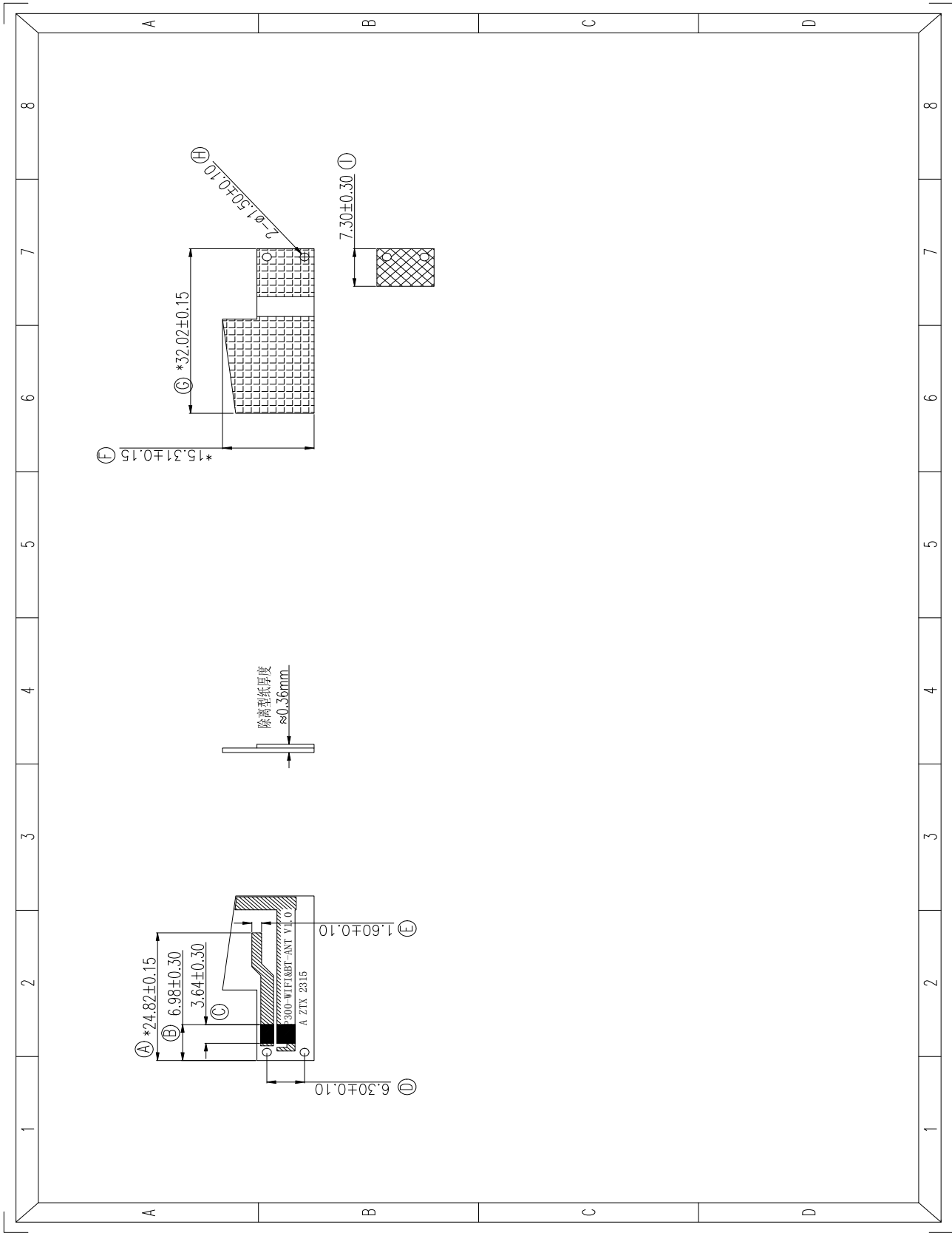
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## 3. Mechanical Specification



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## 4.Size report

## 5.Salt-Spray test

## 6.Environment Characteristic

| NO. | ITEM                                                     | TEST CONDITION                                                                      | SPECIFICATION                       |
|-----|----------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|
| 4-1 | High Temperature/Humidity<br>Storage Test(non operating) | 1.Temperature: $+70 \pm 2^{\circ}\text{C}$<br>2.Humidity: 90~95%RH<br>3.Time: 48hrs | No material deformation is allowed. |
| 4-2 | Low Temperature/Humidity<br>Storage Test(non operating)  | 1.Temperature: $-30 \pm 2^{\circ}\text{C}$<br>2.Humidity: 0%RH<br>3.Time:48hrs      |                                     |

