

# SPECIFICATION

Shenzhen Strongpower Communication Co., Ltd

## ShenzhenStrongpowerCommunicationCo. **SPECIFICATION**

Customer	By Me	Frequency Band	2402MHz-2480MHz
Model	NPD-03		
Serial No	RQ03B143701B-BT	Color	True Colors
RF designer	He YIBAI	Structural engineer	Zhou Jun
Technical director	Fu Yicheng	Date	2023/11/07

Confirm by customer:

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Confidentiality requirements

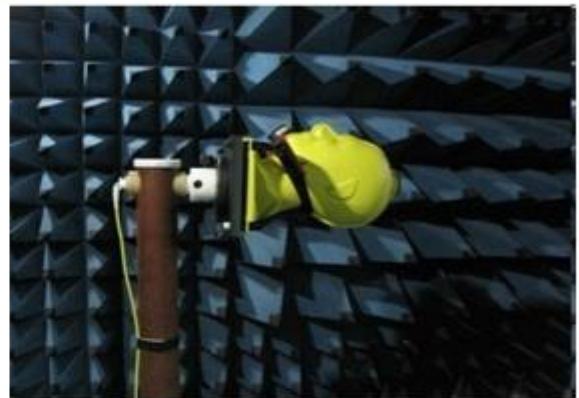
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## 1. The Equipment of Active&Passive Test

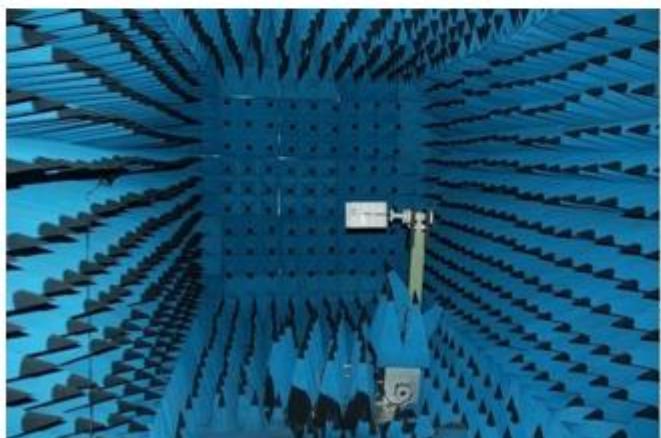
### chamber



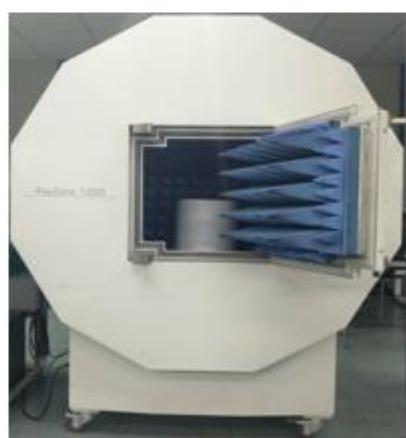
Satimo



Airlink



Guang Ping

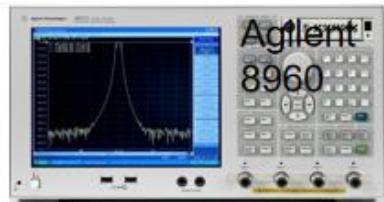


GTS

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# equipment



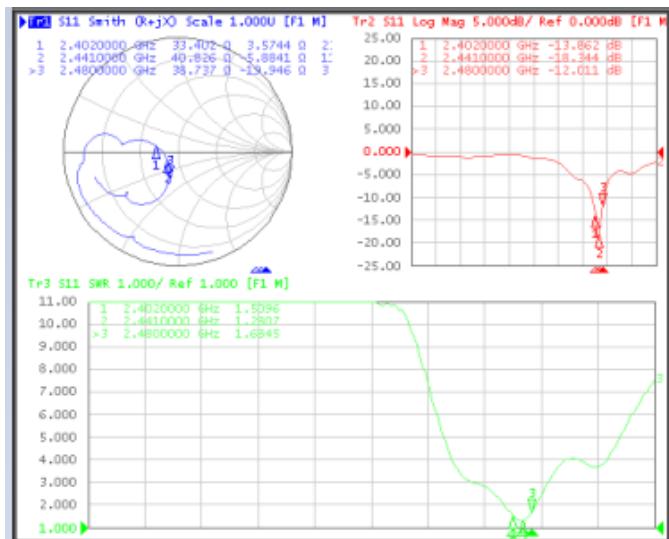
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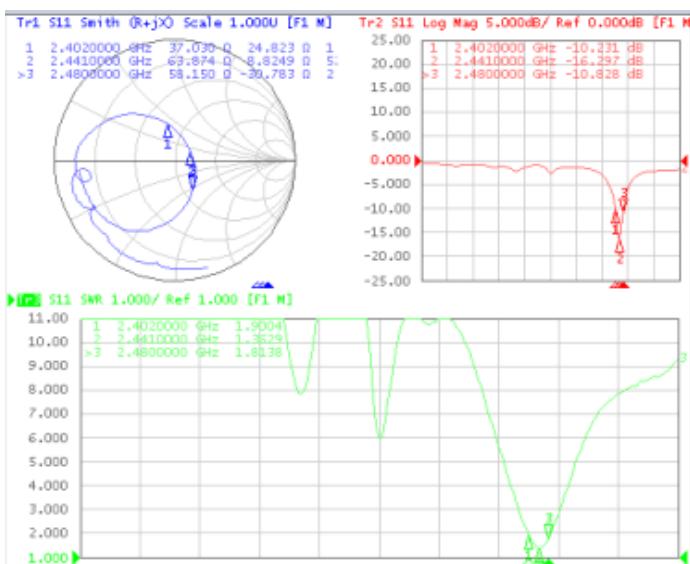
## 2. Passive Test

### 2.1 S Parameters, VSWR, Smith Chart

#### R: S11 Parameter (free space)



#### L: S11 Parameter (free space)



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## 2.2 Passive Efficiency and Gain

**L: Efficiency and Gain(free space)**

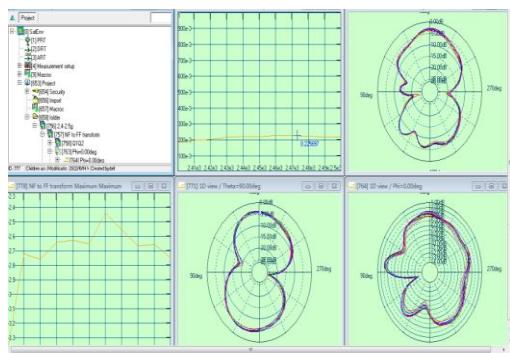
**R: Efficiency and Gain(free space)**

frequency (MHz)	Efficiency %	Gain dBi
2400	19%	-3.39
2410	20%	-2.72
2420	20%	-2.76
2430	22%	-2.64
2440	22%	-2.63
2450	22%	-2.65
2460	23%	-2.44
2470	23%	-2.55
2480	22%	-2.66

frequency (MHz)	Efficiency %	Gain dBi
2400	19%	-2.41
2410	20%	-2.39
2420	20%	-2.22
2430	21%	-2.29
2440	21%	-2.26
2450	21%	-2.07
2460	20%	-2.10
2470	20%	-2.36
2480	19%	-2.46

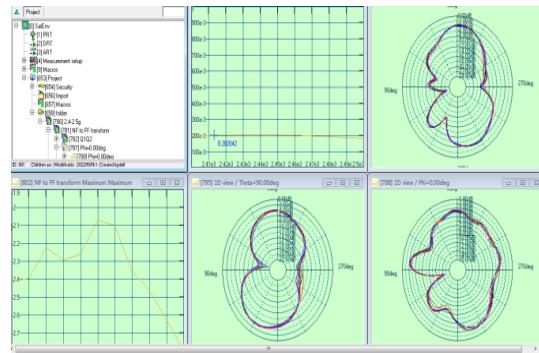
## 2.3 Passive pattern

**L**



Theta=90      Phi=0°      Phi=90°

**R**



Theta=90      Phi=0°      Phi=90°

## 3. Active test

### 3.1 TRP&TIS

**FS-R**

信道 CH	TRP (dBm)	TIS (dBm)
0	3.92	-88.38
39	3.9	-88.9
78	3.2	-88.45

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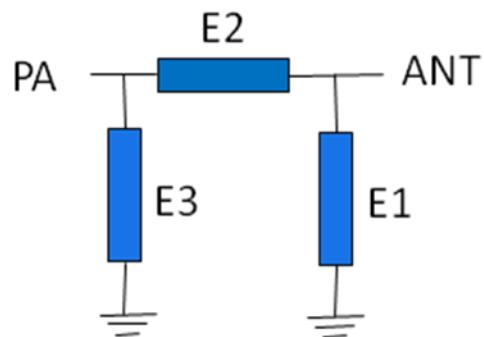
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**FS-L**

信道 CH	TRP (dBm)	TIS (dBm)
0	3.68	-88.68
39	4.11	-89.43
78	3.7	-89.21

**4. Matching Circuit****Left&Right are the same**

Element	E1	E2	E3
Value	2PF	0 Ω	NC

**5. Engineering drawing**

(see next page)

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PE film board half-cut shipment

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