

Antenna Test Report

Company Name:Shenzhen Surbaner Technology Co., Ltd.

**Address:2F(A),BuildingB25,HengfengIndustrial City,
Hezhou Community, Xixiang Street,Bao'an District, Shenzhen**

Purpose

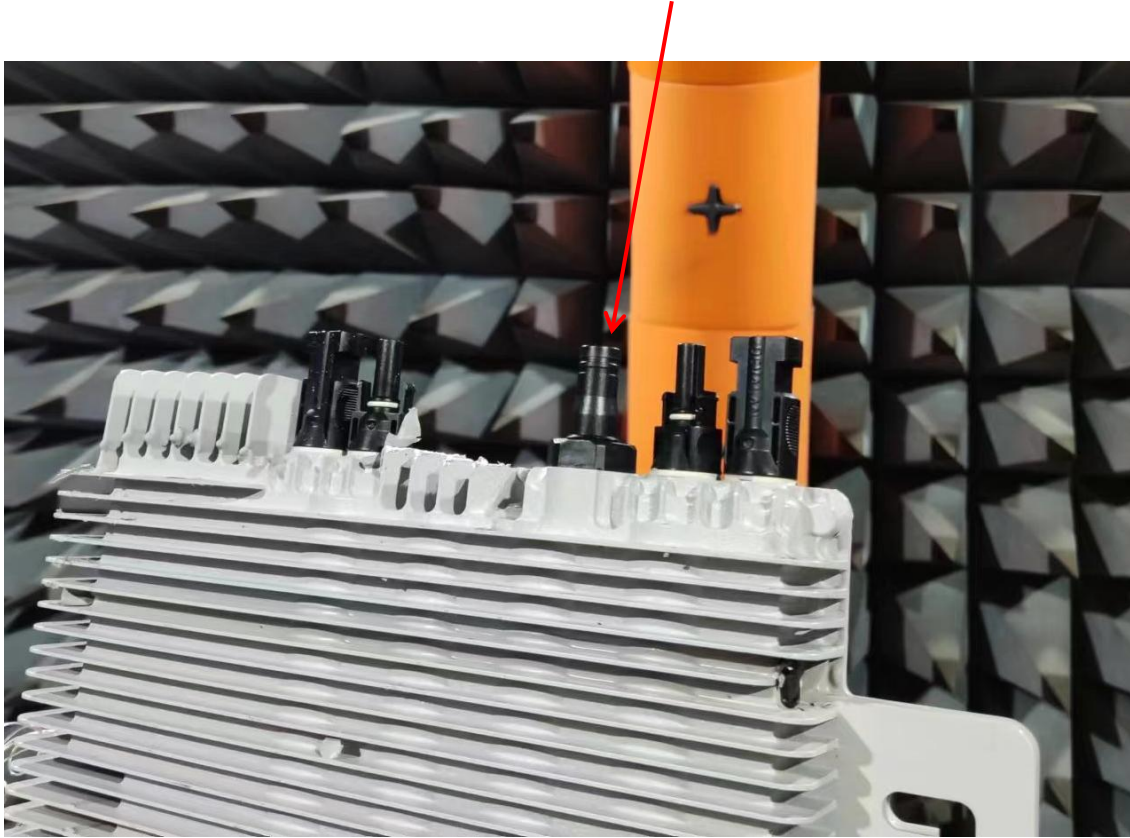
The antenna operating frequency at 2400-2500MHz All test data are showed as below.

Content

1. Product Overview & Dimension
2. Test system
3. Antenna Matching Network
4. Test Result
 - 4.1 ***S11 Parameter-VSWR***
 - 4.2 ***Gain & Efficiency***
 - 4.3 ***2D Pattern***
 - 4.4 ***OTA***
5. Conclusion

1. Product Overview & Dimension

Antenna

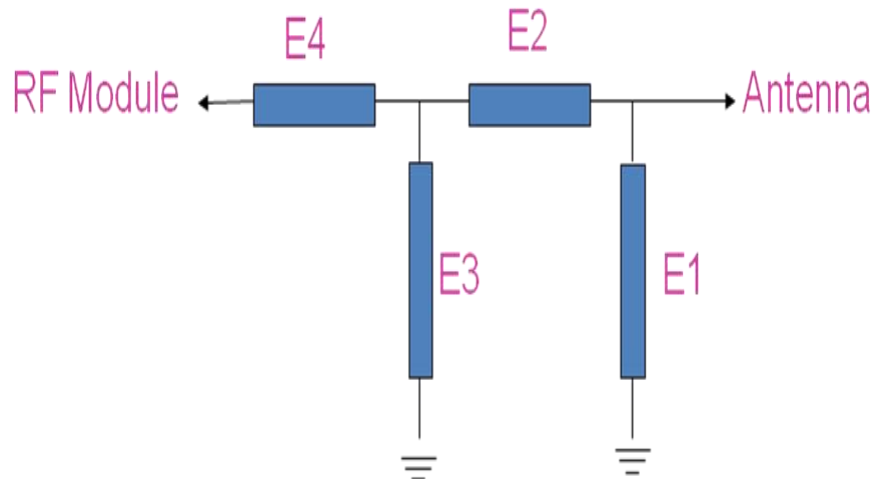


2. Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C & Agilent 4438C & CMW500 & CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



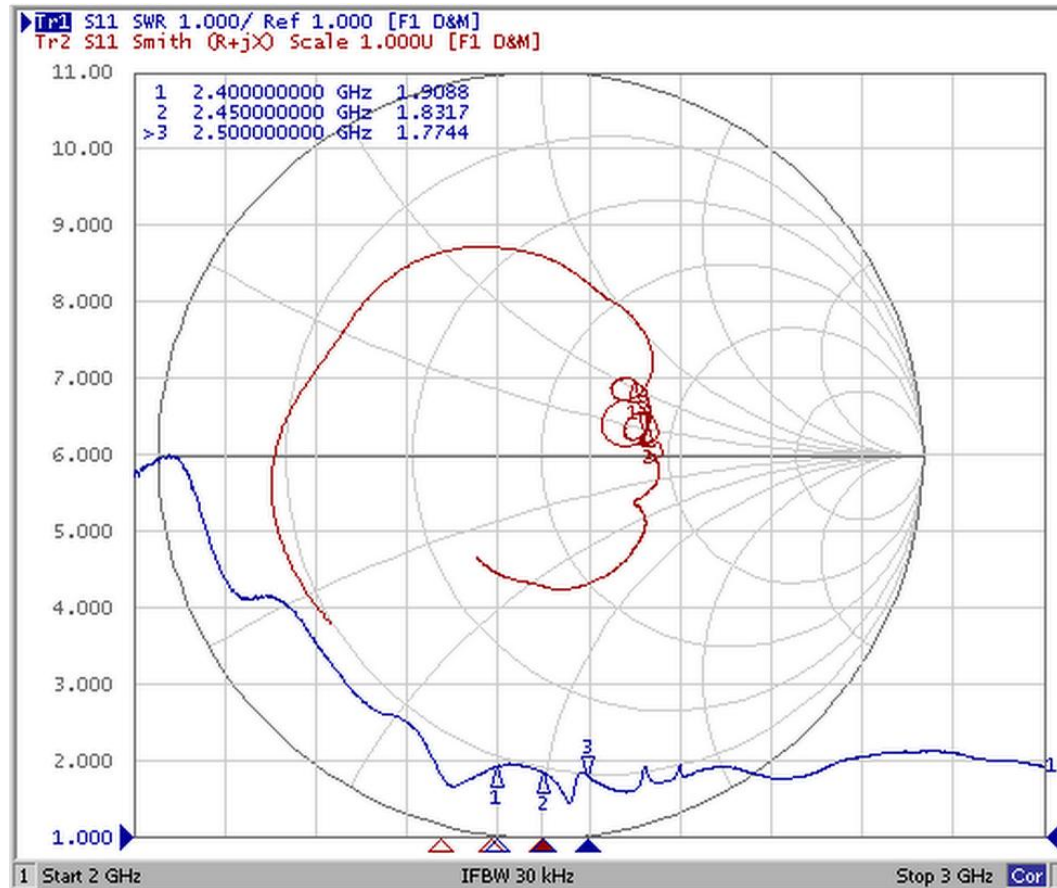
3. Antenna Matching Network



Element	Value
E1	N/A
E2	N/A
E3	N/A
E4	N/A

4. Test Result

4.1 S11 Parameter-VSWR



Frequency	2400	2450	2500
VSWR	1.90	1.83	1.77

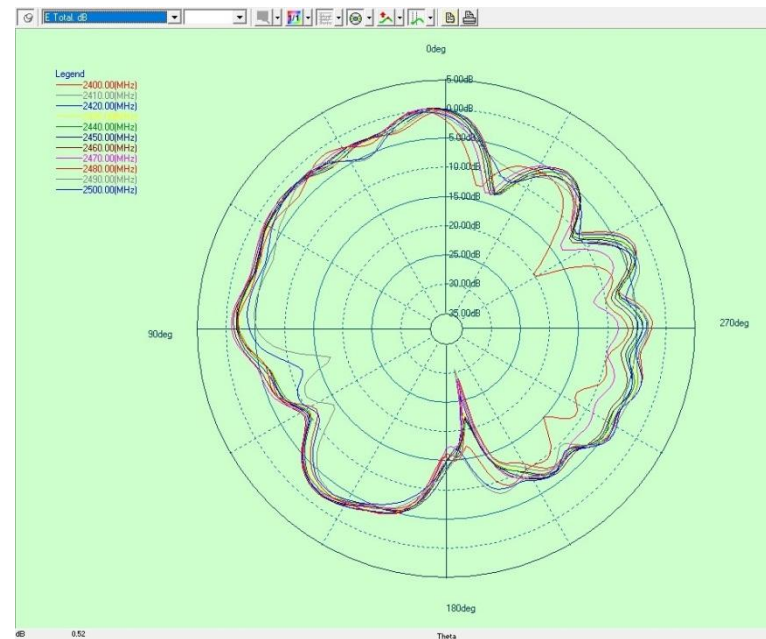
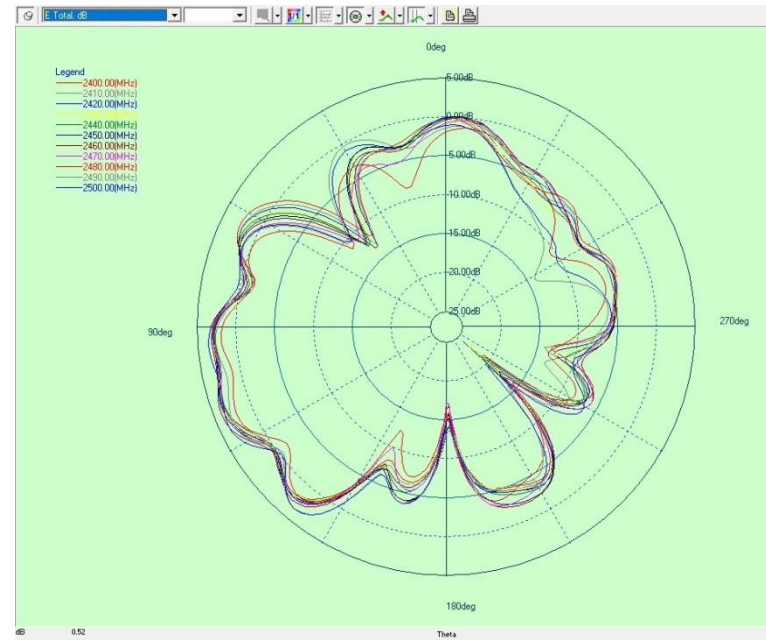
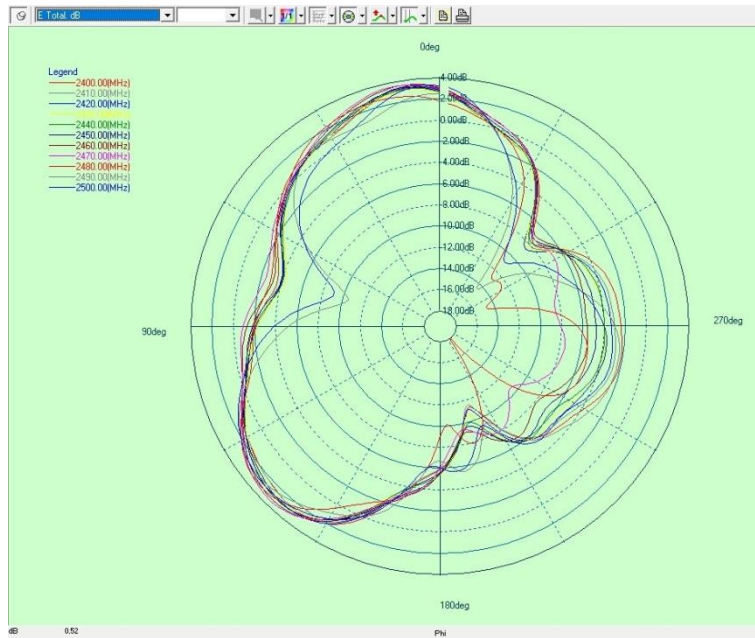
4. Test Result

4.2 Gain & Efficiency

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	47.1%	3.56
2410	45.2%	3.46
2420	47.4%	3.88
2430	43.6%	3.64
2440	45.3%	3.64
2450	47.6%	3.98
2460	50.2%	4.40
2470	46.7%	4.22
2480	41.8%	3.58
2490	43.7%	3.51
2500	44.6%	3.81

4. Test Result

4.3 2D Pattern



4. Test Result

4.4 OTA

Mode	Channel	传导TRP	传导TIS	OTA/TRP	OTA/TIS
802.11B	1	11.69	-86	8.92	-82.28
	6	11.53	-86	8.32	-82.37
	11	11.72	-86	8.50	/
802.11G	1	8.26	-73.8	5.35	-69.42
	6	8.08	-74	5.01	-71.11
	11	8.27	-74	5.14	/
802.11N	1	8.27	-73.6	5.32	-67.54
	6	8.08	-74	4.78	-67.23
	11	8.27	-74	5.21	-67.79

