

东莞市泰康电子科技有限公司

Dongguan Teconn Electronics Technology Co., Ltd.

SPECIFICATION

规格书

Customer Name	创维
Product name	2. 4G/5. 8G 内置天线
Product number	W300244-A(B C D E)-01-P
Customer P/N :	
Prepared By	张景
Date	2021 年 04 月 12 日

频率范围 Frequency range	2400~2500MHz 5150~5850MHz
驻波比系数 VSWR	2400~2500MHz ≤ 3.0 5150~5850MHz ≤ 3.0
输入阻抗 Input Impedance	50 $\pm$ 5 (Ω)
极化方式 Polarization	垂直极化 Vertical Polarization

Dongguan Teconn Electronics Technology Co., Ltd.

地址: 东莞市虎门镇 358 省道虎门路段村头村 58 号

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Revision History

Date	Revision	Description of Changes
2021-02-01	RA	Measured with 2.4G 5.8G Antenna sample.

1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the W300244-A(B C D E)-01-P Antenna program. We test the antenna with the latest version handset. And it seems to be acceptable.

2 General Description

2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

3 Mechanical Description

4 Electrical Performance

4.1 Set-up

4.1.1 VSWR

VSWR measurements (S11) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

4.1.2 Gain & Radiation Patterns

The gain of the antenna was measured in the HT's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quiet zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

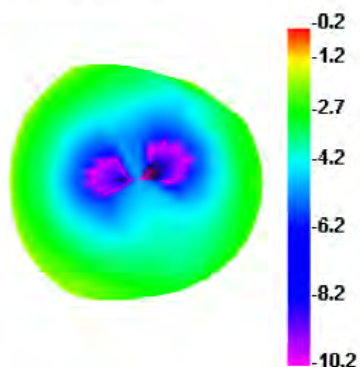
4.1.3 Matching Circuit Description

No changed..

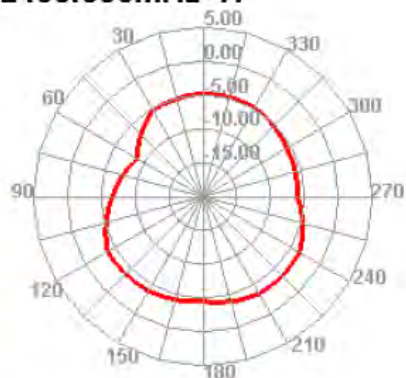
4. 2D Radiation characteristics of antenna

4.1 characteristics of antenna(VEC 03)

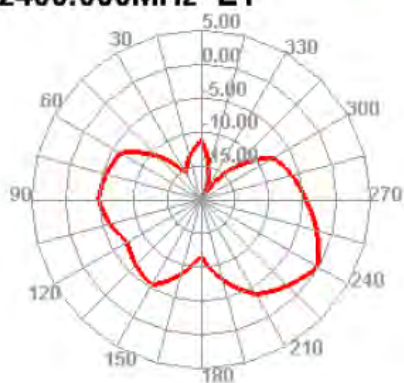
2400.000MHz



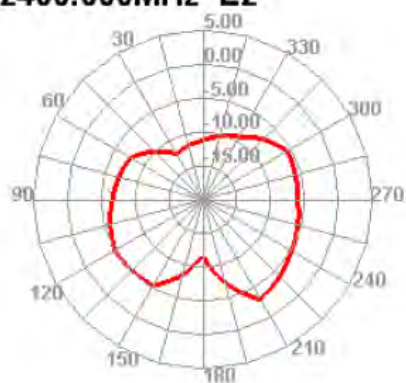
2400.000MHz H



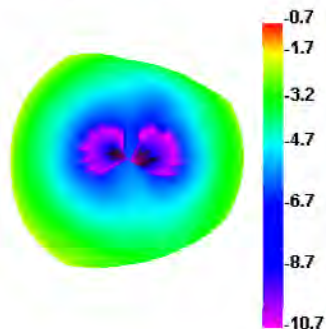
2400.000MHz E1



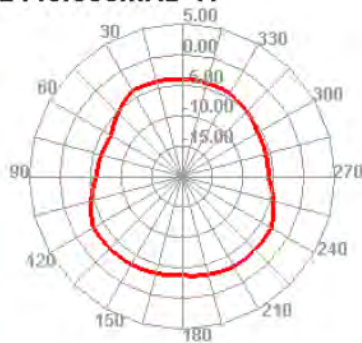
2400.000MHz E2



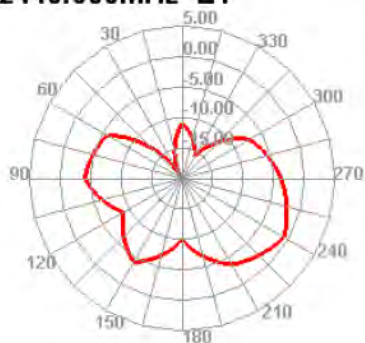
2440.000MHz



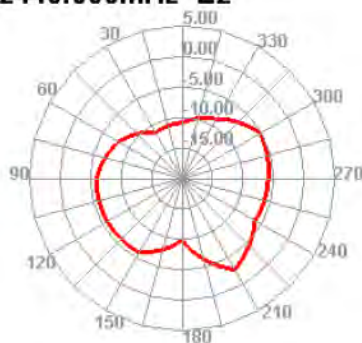
2440.000MHz H



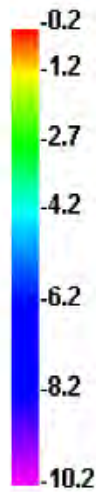
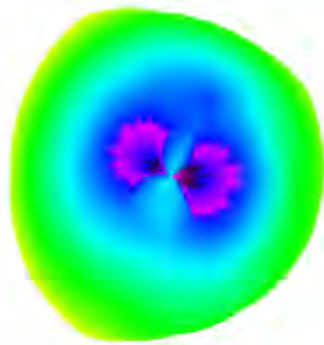
2440.000MHz E1



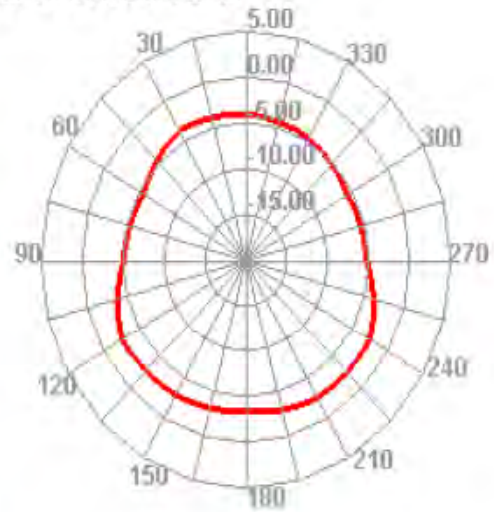
2440.000MHz E2



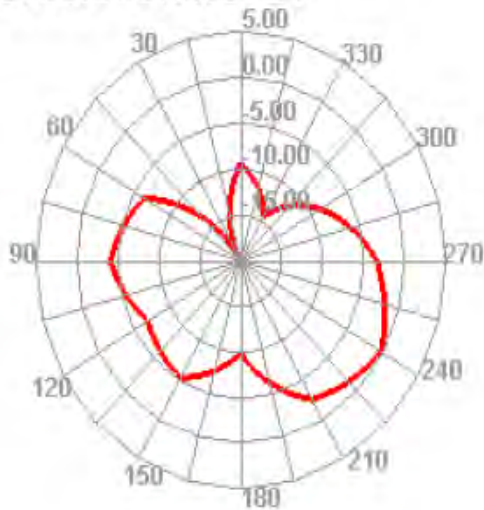
2480.000MHz



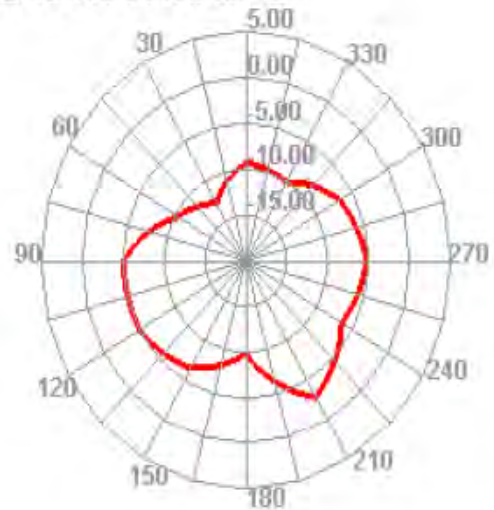
2480.000MHz H



2480.000MHz E1



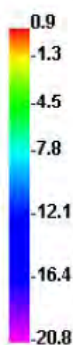
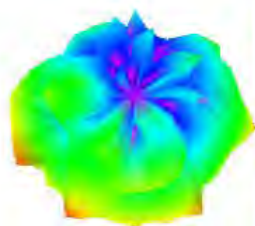
2480.000MHz E2



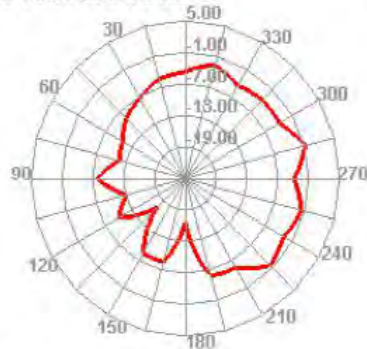
Freq (MHz)	Effi (%)	Gain (dBi)
2400	29.71	-0.18
2410	31.52	0.02
2420	30.04	-0.32
2430	31.28	-0.38
2440	29.87	-0.71
2450	31.43	-0.43
2460	30.87	-0.35
2470	32.31	-0.04
2480	30.84	-0.22
Averagr	30.87	-0.29

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
5000	28.24	-5.49	0.87	-1.28
5050	32.86	-4.83	0.3	-1.85
5100	29.95	-5.24	0.41	-1.74
5150	27.9	-5.54	0.89	-1.26
5200	28.09	-5.51	0.26	-1.89
5250	32.93	-4.82	2.25	0.1
5300	35.04	-4.55	2.95	0.8
5350	33.54	-4.74	2.44	0.29
5400	33.22	-4.79	2.33	0.18
5450	27.03	-5.68	1.37	-0.78
5500	26.78	-5.72	0.93	-1.22
5550	23.55	-6.28	0.08	-2.07
5600	31.68	-4.99	1.65	-0.5
5650	30.14	-5.21	0.77	-1.38
5700	35.85	-4.45	2.62	0.47
5750	40.31	-3.95	2.44	0.29
5800	38.14	-4.19	2.2	0.05
5850	50.09	-3	3.4	1.25
5900	41.43	-3.83	2.46	0.31
5950	44.34	-3.53	2.68	0.53
6000	36.5	-4.38	2.64	0.49

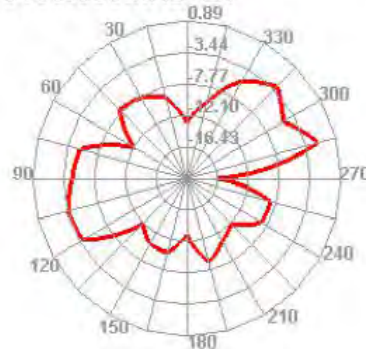
5150.000MHz



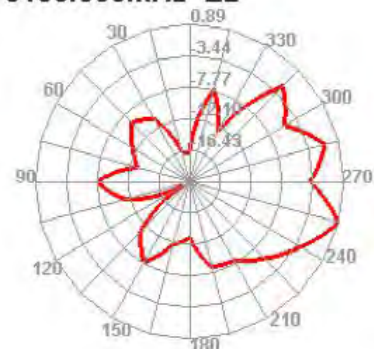
5150.000MHz H



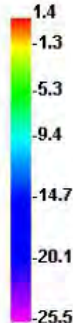
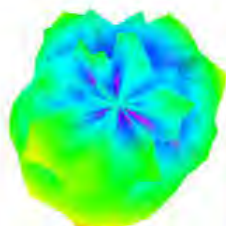
5150.000MHz E1



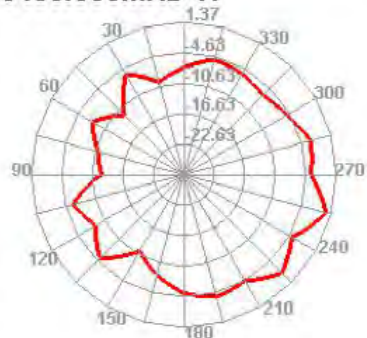
5150.000MHz E2



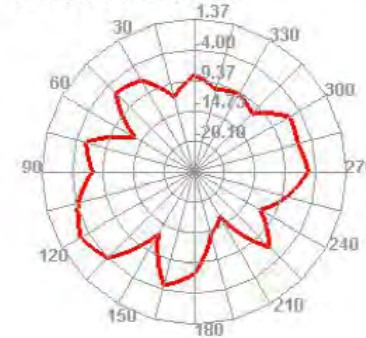
5450.000MHz



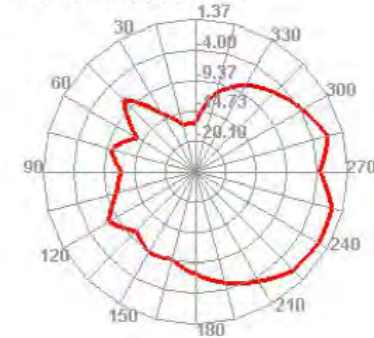
5450.000MHz H



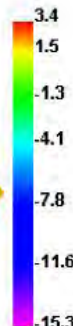
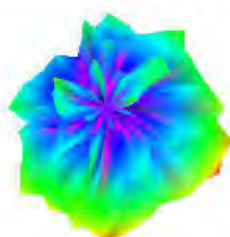
5450.000MHz E1



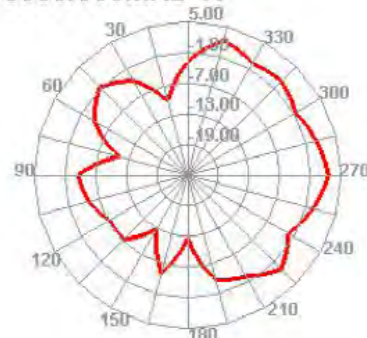
5450.000MHz E2



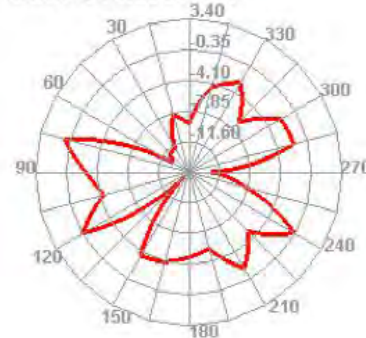
5850.000MHz



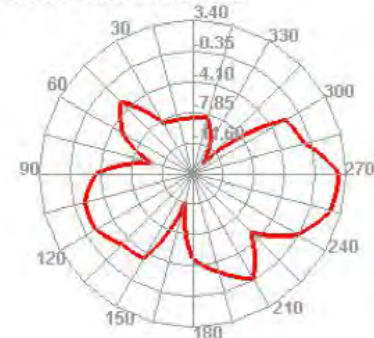
5850.000MHz H



5850.000MHz E1



5850.000MHz E2

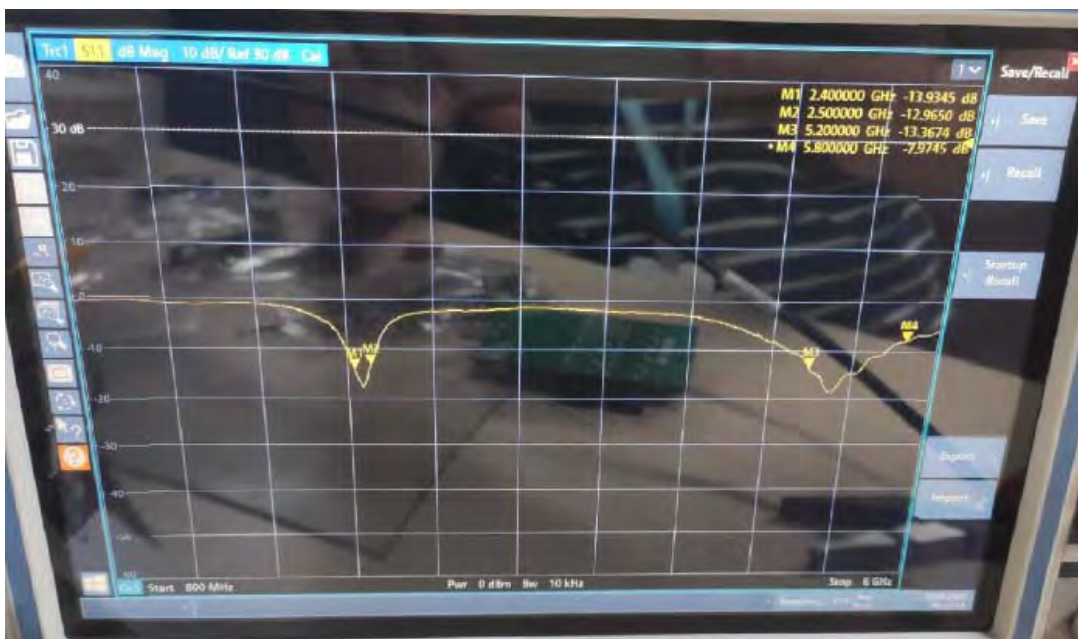
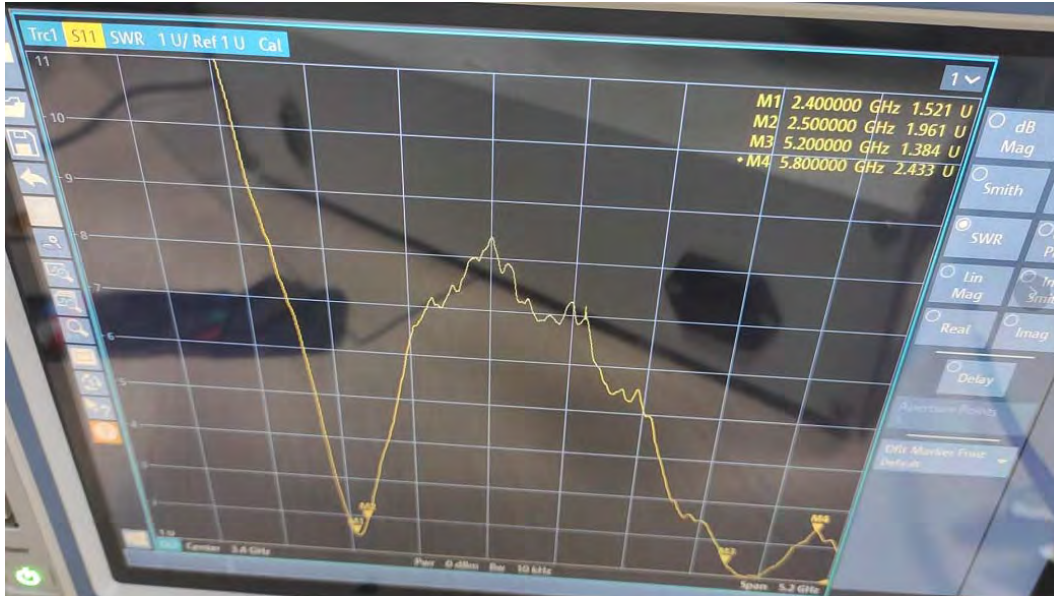


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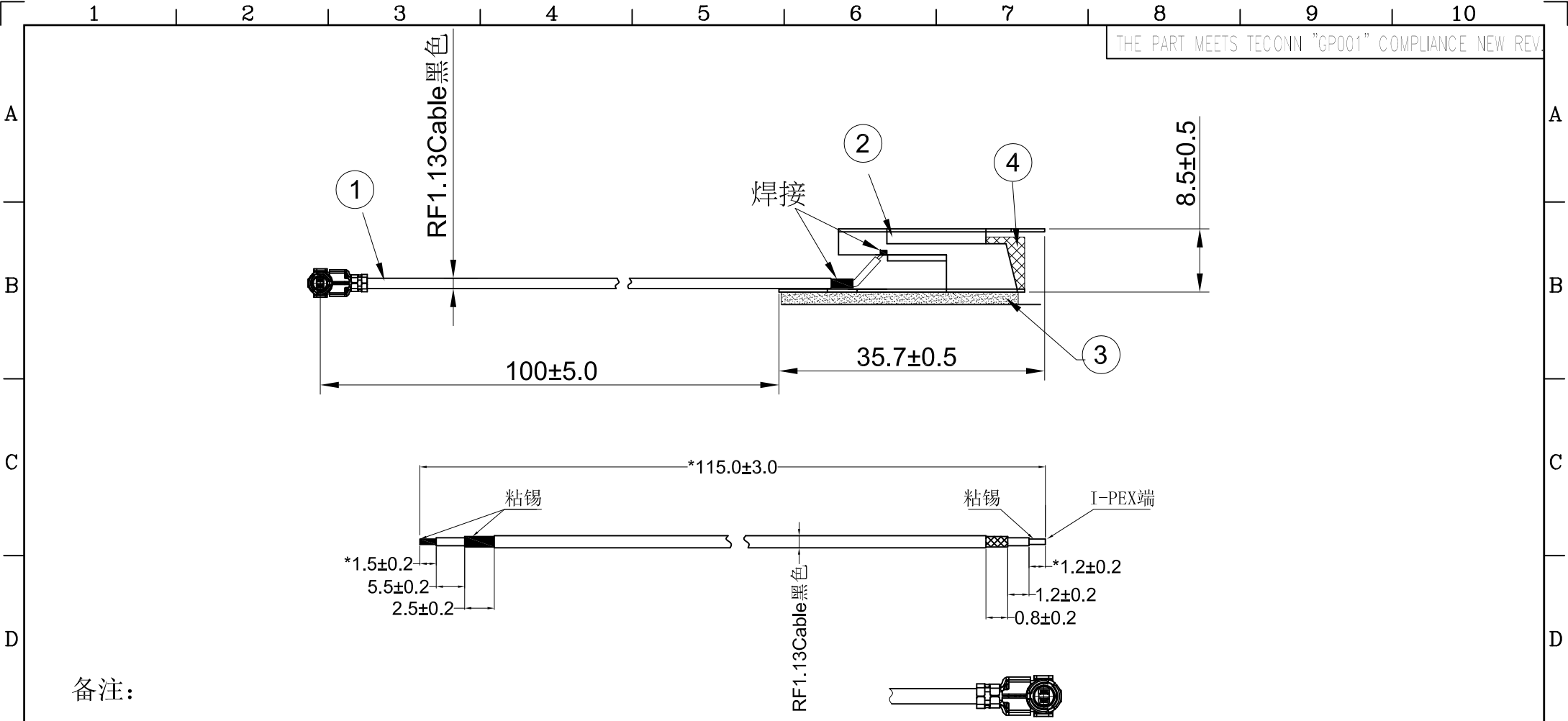
5 Plots

5.1 VSWR



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备注:

1.标注“*”重点管控尺寸。

2.未标注公差范围请参照标准公差。

3.无虚焊, 假焊。锡尖不良。

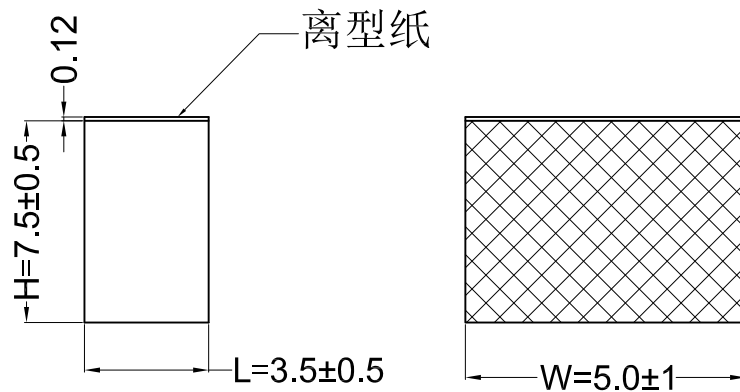
4.天线固定片无模痕、压伤、刮伤、破损、变形等现象。

5.拉力测试要求: 端子铆压后拉力需达到 $\geq 1.2\text{kg}$ 。

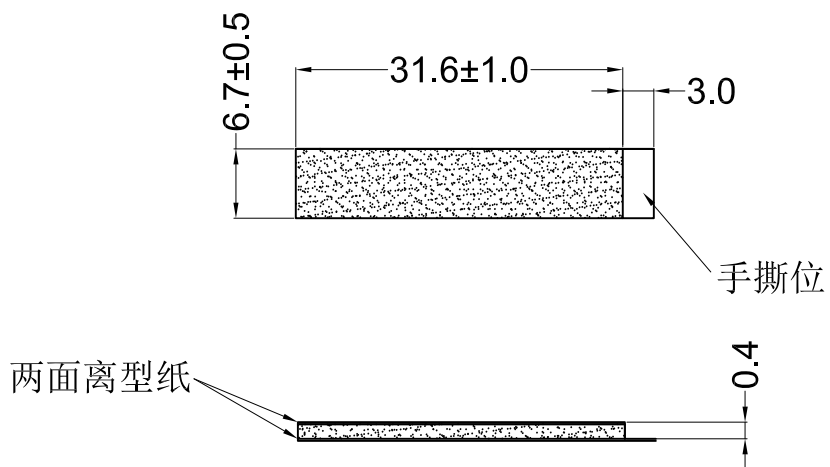
6.产品单重:2.75G (参考值)。

4	橡胶垫	L3.5*W5.0*H7.5mm 橡胶垫+单面背胶	1
3	3M背胶	L31.6*W6.7*H0.4mm 3M背胶	1
2	天线固定片	不锈钢 SUS201 T=0.40MM	1
1	端子+线材	IPEX1代+RF1.13黑色双锡线	1
NO	PARTNAME	DESCRIPTION	Q.TY
X. ± /	APPD: Lebon Lee	TITLE: 2.4G/5.8G WIFI内置天线 L=100MM 黑色线(配橡胶垫)	
.X ± 0.50	CHKD: Zhangjing	PART NO: W300244-A-01-P	
.XX ± 0.25		DWG NO: C-W300244-A-01-P	
.XXX ± /		CUSTOMER DRAWING	
X* ± 2°		SHEET: OF	
.X* ± 1.5°		REV: A	
	UNITS: mm	SCALE: 1:1	

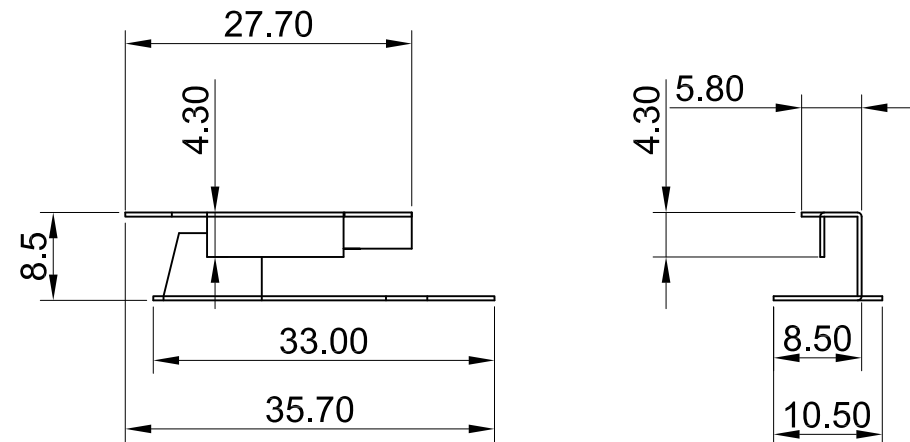
REV	ECN NO	DESCRIPTION	DESIGN	DATE
A	TE2021-0004	New Drawing	Zhangjing	2021/04/12



橡胶垫：L3.5*W5.0*H7.5mm

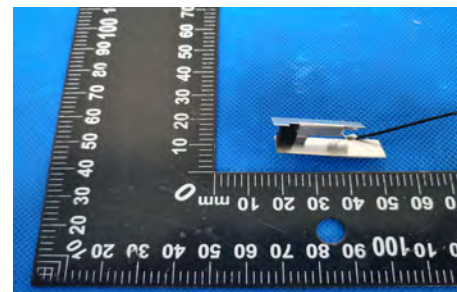


3M背胶

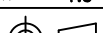


天线固定片

备注：材质不锈钢，T=0.4MM



REV	ECN NO	DESCRIPTION	DESIGN	DATE
A	TE2021-0004	New Drawing	Zhangjing	2021/04/12

X. ± /	APPD:	TITLE:		 泰康电子 TECON	
.X ± 0.50	Lebon Lee				
.XX ± 0.25	CHKD:	2.4G/5.8G WIFI内置天线 L=100MM 黑色线(配橡胶垫)			
.XXX±					
X° ± 2°	DR:	PART NO:			
X° ± 1.5°	Zhangjing	W300244-A-01-P			
	UNITS: mm	SCALE: 1:1	DWG NO:	CUSTOMER DRAWING	SHEET: OF
			C-300244-A-01-P		REV: A

