



深圳市安威无线科技有限公司

行业领先的一站式通信射频天线解决方案制造商

S937-L502 Test Report

Anwei shu 频 : wu x i

Mobile phone number : 13751118278

Antenna manufacturer name: Shenzhen Anwei Wireless Technology Co., Ltd

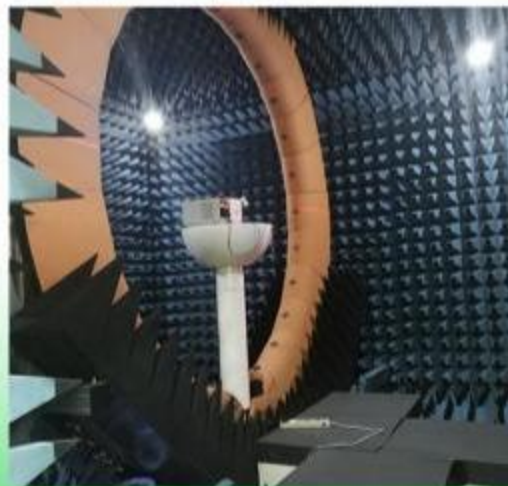
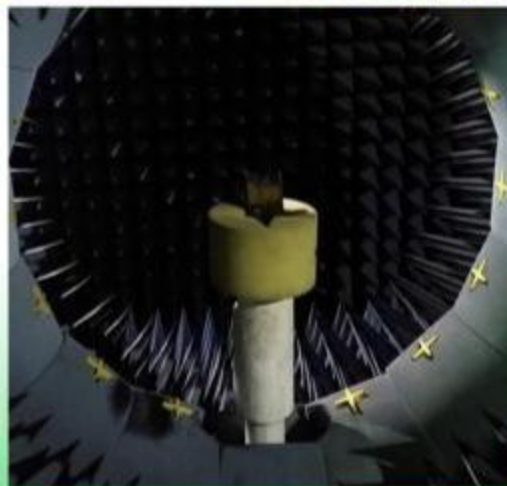
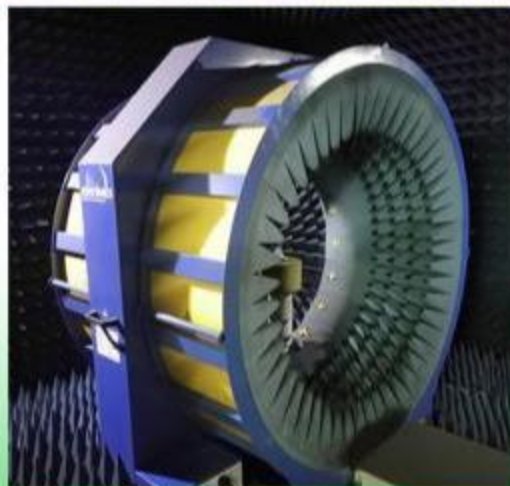
Address: 2nd Floor, East, Building 5, Yifenghua Industrial Park, Dalang Street, Longhua District, Shenzhen

T ime: 2025.5.10

携手共进 共创未来



version	date	Content summary
V1	2025.5.10	Test data



安威无线一直都是您值得信赖且优秀的合作伙伴，我们为您提供全方位一站式的产品以及技术服务！

“质量第一，服务至上”是安威一直以来的发展宗旨

携手共进 共创未来

Main Antenna Test Data (Free)

Band	Channel	Total	TIS
FDD_B1	18050	17.14	
	18300	17.22	
	18550	17.15	-91.1
FDD_B2	18650	16.53	
	18900	17.25	
	19150	17.31	-91.4
FDD_B3	19250	17.14	
	19575	17.46	
	19900	17.65	-91.3
FDD_B4	20000	17.14	
	20175	17.63	
	20350	17.36	-91.4
FDD_B5	20450	17.14	
	20525	17.52	
	20600	17.63	-91.1
FDD_B7	20800	17.14	
	21100	17.63	
	21400	17.14	-90.2
FDD_B8	21500	17.47	
	21625	17.55	
	21750	16.36	-90

Band	Channel	Total	TIS
FDD_B12	23060	15.25	
	23095	15.02	
	23130	15.36	-90.3
FDD_B17	23780	15.14	
	23790	15.6	
	27800	15.63	-90.12
FDD_B20	24200	17.14	
	24300	17.36	
	24400	16.96	-90.4
FDD_B28A	27260	15.23	
	27360	15.4	
	27469	15.12	-90.20
FDD_B28B	27410	15.12	
	27510	15.36	
	27600	15.41	-90.14
TDD_B34	36250	17.12	
	36272	17.21	
	36300	17.32	-89.36
TDD_B41	40490	17.12	
	40620	17.63	
	40940	17.74	-89.12

Band	Channel	Total	TIS
WCDMA_B2	9262	17.31	
	9400	17.14	
	9538	16.83	-103.2
WCDMA_B8	2712	16.32	
	2787	17.41	
	2863	17.1	-103.2
WCDMA_B5	4132	17.41	
	4183	17.25	
	4233	17.22	-104.0
WCDMA_B4	1312	17.44	
	1413	17.65	
	1513	17.12	-103.65
TDD_B38	37850	17.65	
	38000	17.36	
	38150	17.45	-90.36
TDD_B39	38350	17.14	
	38450	17.54	
	38550	17.65	-90.14
TDD_B40	38750	17.36	
	39150	17.25	
	39550	17.15	-88.41

Band	Channel	Total	TIS
GSM 850	128	26.01	
	190	26.18	
	251	26.18	-102.1
GSM 900	1	26.32	
	62	26.79	
	124	27.02	-102.4
DCS 1800	512	23.06	
	698	23.41	
	885	24.83	-103.0
PCS 1900	512	24.72	
	661	24.7	
	810	24.98	-102.1
WCDMA_B1	9612	17.23	
	9750	16.23	
	9888	16.04	-103.52

W i F i test data (free)

BAND	2.4GWIFI			5GWIFI		
CHANNEL	low	medium	high	low	medium	high
TRP (dBm)	14.46	14.52	14.43	11.64	11.01	11.46
TIS (dBm)	-80.5	-81.0	-81.5	-72.4	-72.1	-72.24

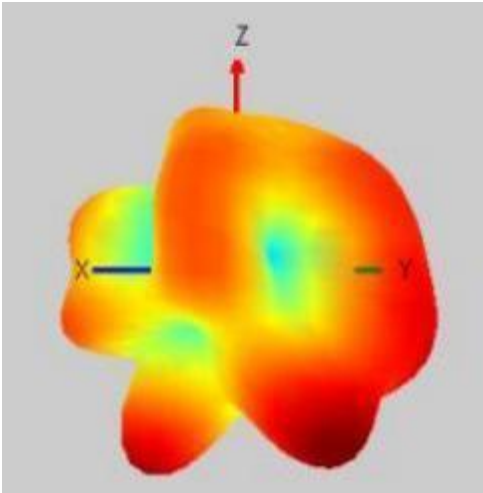
Antenna gain

Band	gain(dbi)	
FDD_B1	0.99	
FDD_B2	0.88	
FDD_B3	-0.56	
FDD_B4	-0.86	
FDD_B5	-2.53	
FDD_B7	-1.49	
FDD_B8	-2.69	
FDD_B12	-2.89	
FDD_B17	-2.89	
FDD_B20	-2.54	
FDD_B28	-2.8	
TDD B34	1.0	
TDD B38	-1.51	
TDD B39	0.88	
TDD B40	-0.93	
TDD B41	-1.49	

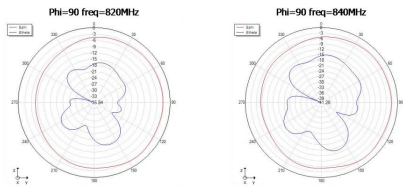
Band	gain(dbi)	
WCDMA_B 1	0.99	
WCDMA_B 2	0.88	
WCDMA_B 4	-0.86	
WCDMA_B 5	-2.53	
WCDMA_B 8	-2.69	
GSM 850	-2.53	
GSM 900	-2.69	
DCS 1800	0.87	
PCS 1900	-0.86	

Band	gain(dbi)	
wifi2.4G	1.78	
wifi 5G	1.92	
BT	1.98	
gps	1.56	

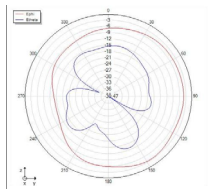
Directional diagram



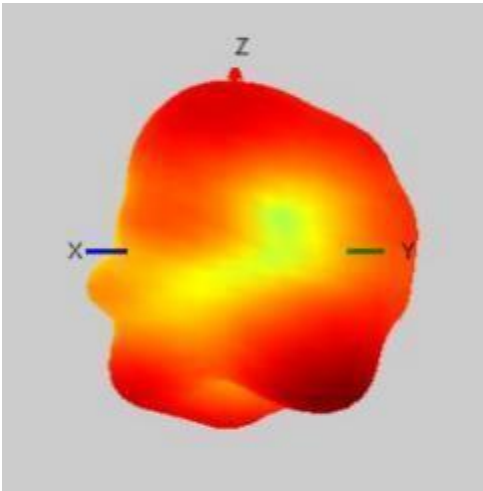
H Theta=90 Freq=820Mhz H Theta=0 Freq=820Mhz



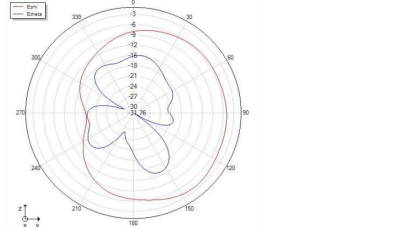
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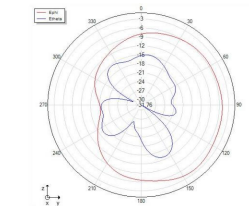
GSM850 、 WCDMA B5 、 FDD B5/20



H Theta=90 Freq=780Mhz H Theta=0 Freq=780Mhz

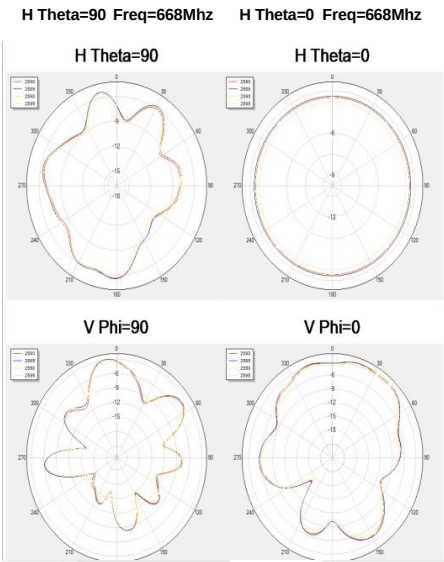
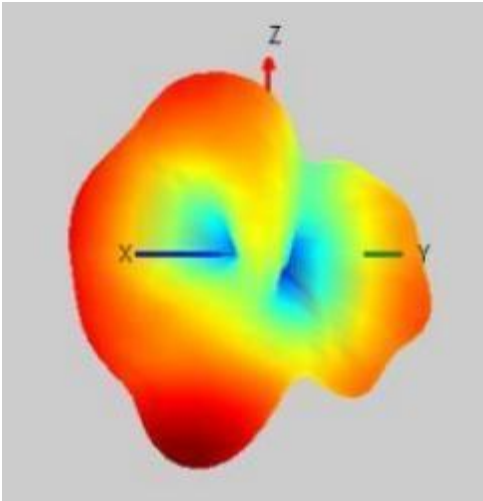


H Theta=90 Freq=700Mhz H Theta=0 Freq=700Mhz

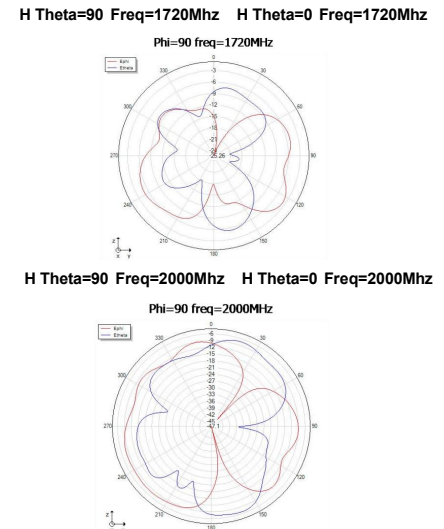
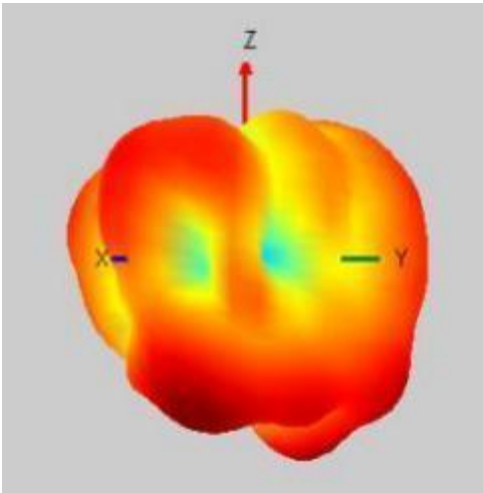


GSM900、 WCDMA B8 、 FDD B8

Directional diagram

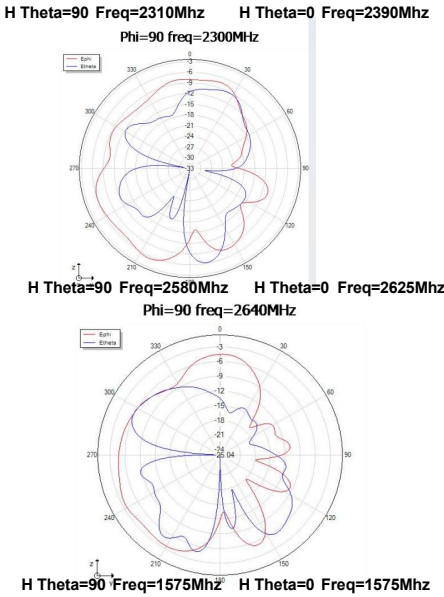
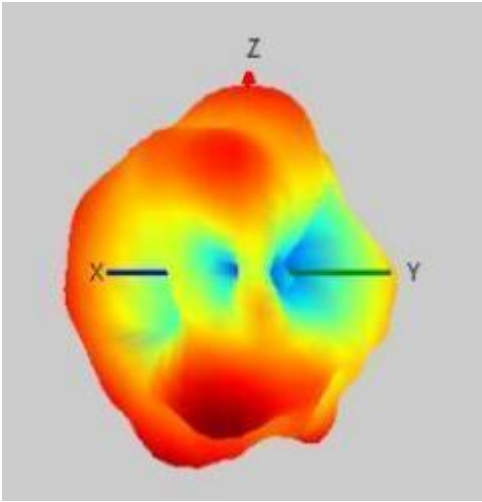


FDD B4 B12 B17 B28 WCDMA B4

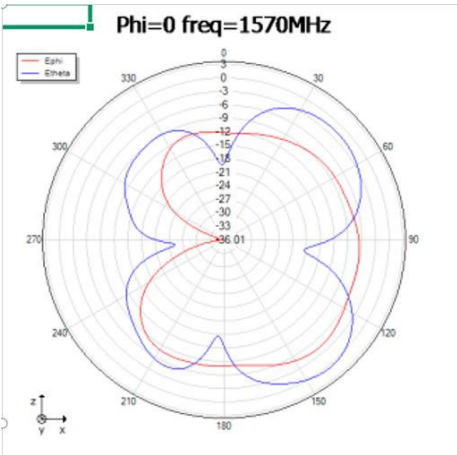
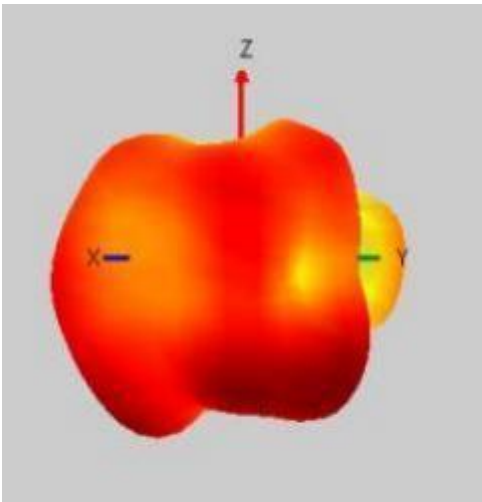


FDD B1 B2 B3 TDD B34 B39 DCS1800
PCS1900 WCDMA B1 B2

Directional diagram

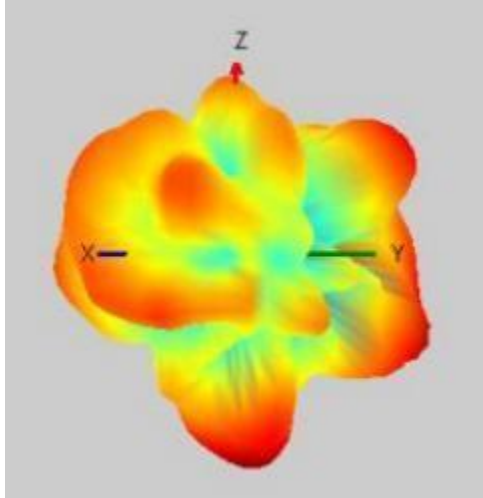


FDD B7 TDD B40 B38 B41

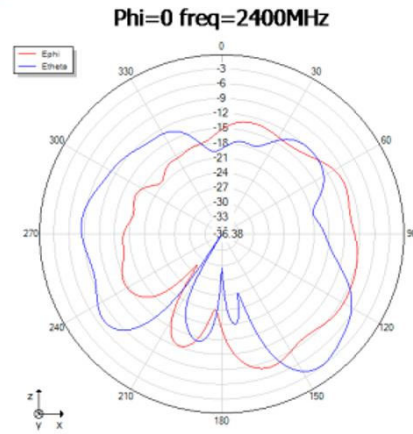


gps

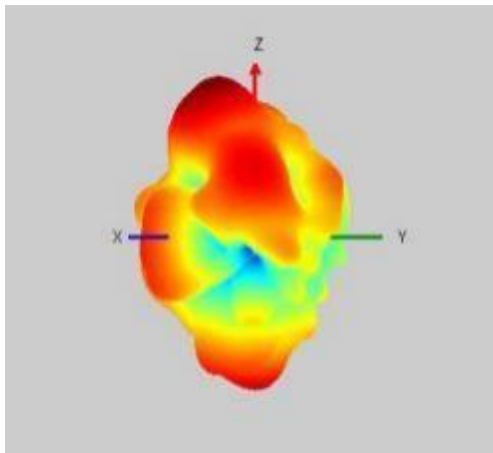
Directional diagram



H Theta=90 Freq=2450Mhz H Theta=0 Freq=2450Mhz

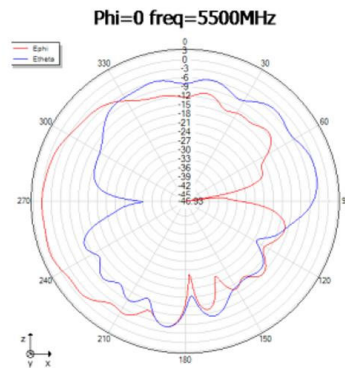


2.4GWIFI



H Theta=90 Freq=5500Mhz

H Theta=0 Freq=5500Mhz

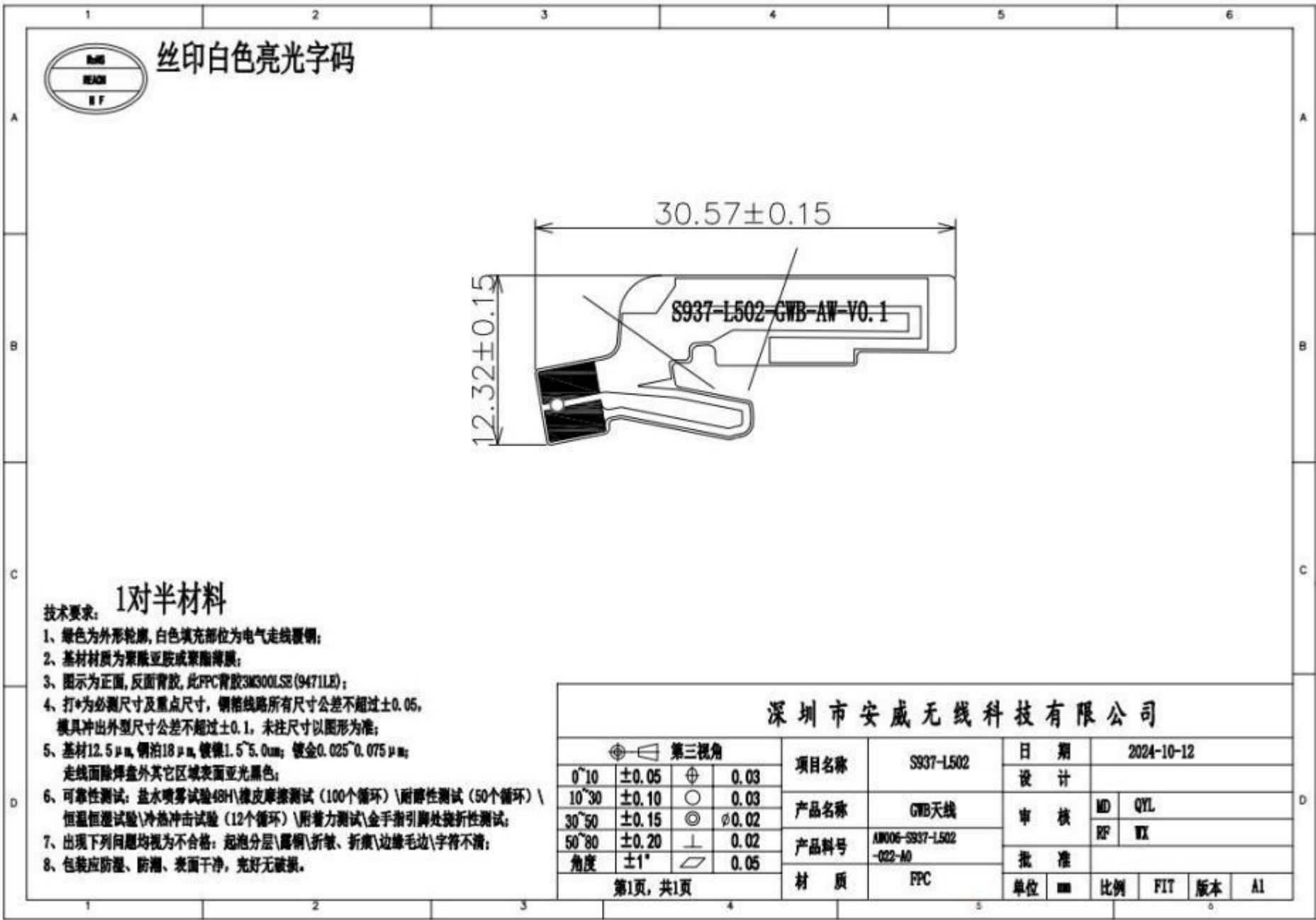


5GWIFI

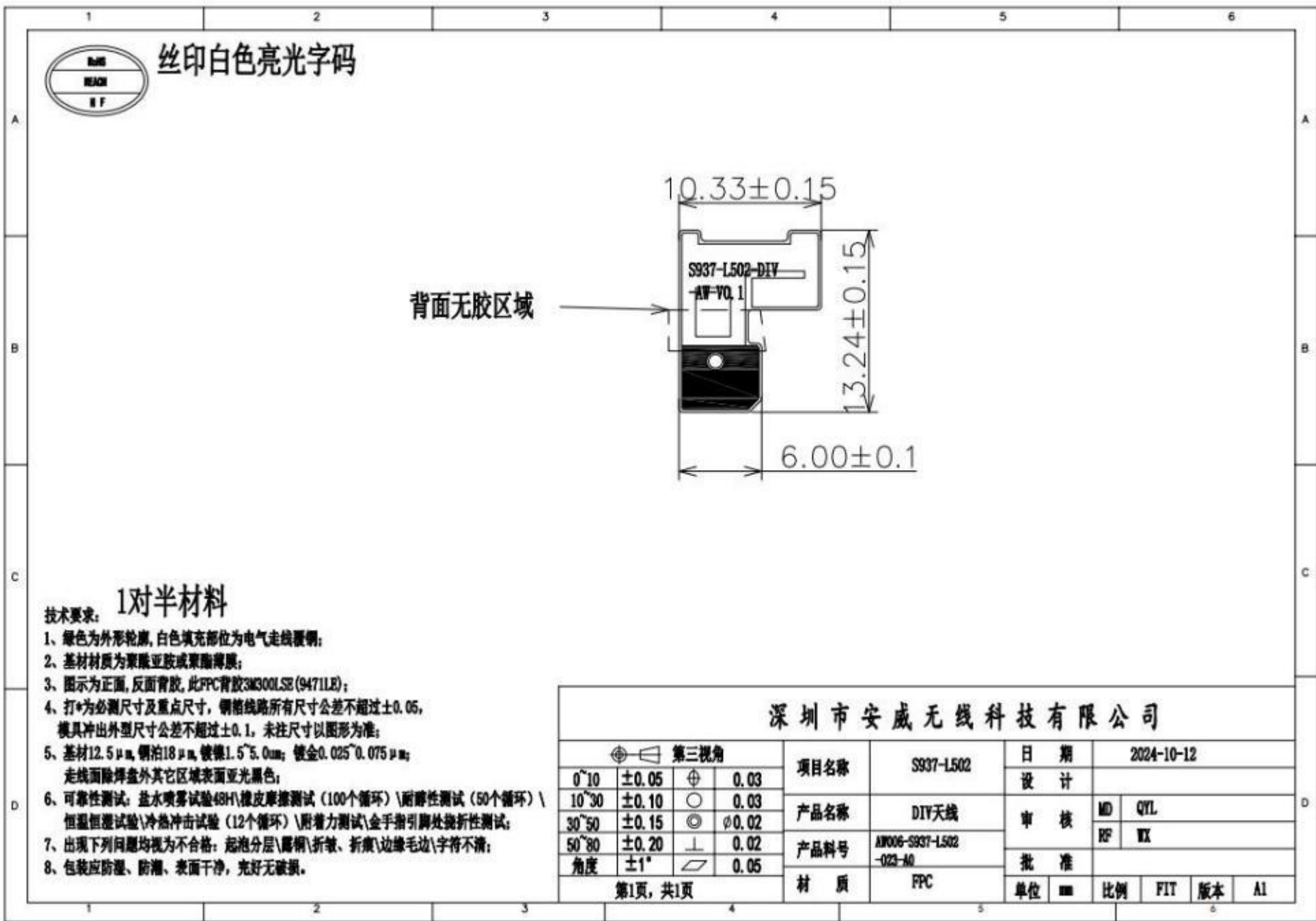
G:25.5/- R:29.7/- B:34.5/- E:-/-
Q:41.5/- L:-/- I:-/- S:27.0/-

ID	CNR	ID	CNR	ID	CNR	ID	CNR
G2	12.2/-	G4	25.3/-	G7	22.7/-	G8	40.9/-
G9	32.6/-	G16	23.2/-	G26	0.0/-	G27	27.8/-
G30	19.5/-	R65	0.0/-	R71	0.0/-	R73	35.7/-
R74	32.5/-	R75	25.1/-	R84	25.4/-	R85	0.0/-
R86	0.0/-	B4	34.0/-	B6	33.2/-	B7	31.5/-
B9	35.2/-	B10	29.5/-	B12	0.0/-	B16	37.8/-
B29	33.6/-	B35	41.2/-	Q2	41.0/-	Q3	42.0/-
Q7	0.0/-	S45	0.0/-				

Dimensional drawings

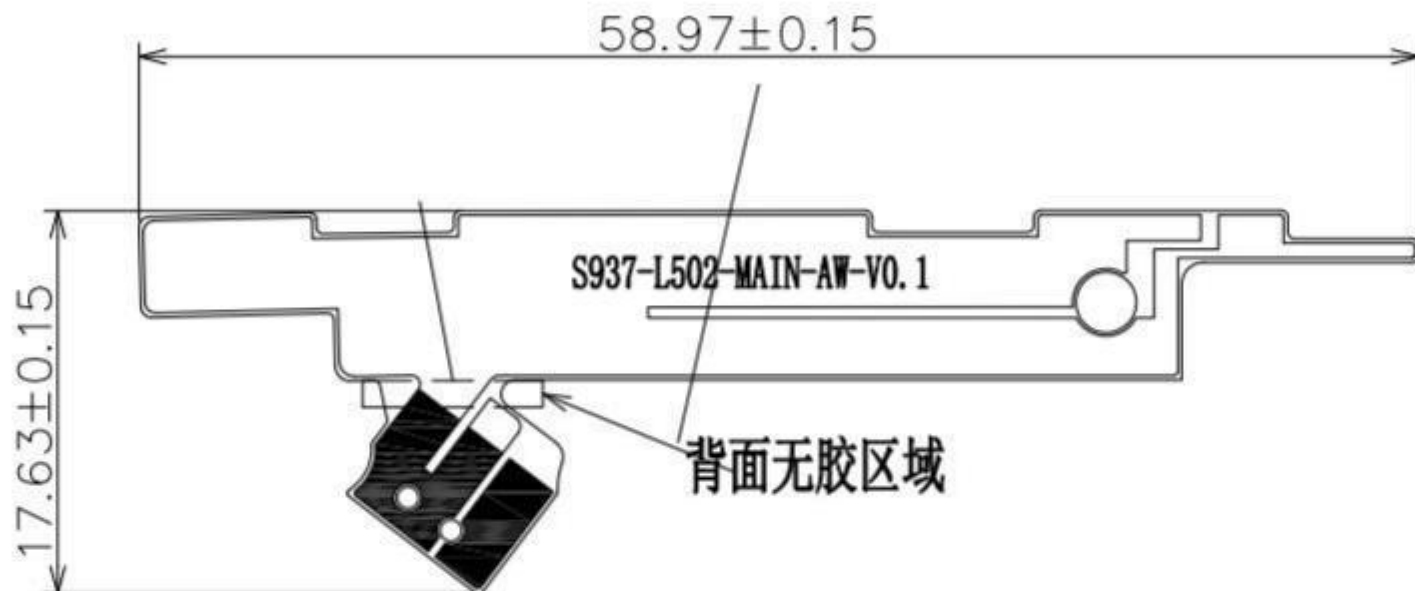


Dimensional drawings





丝印白色亮光字码



技术要求: 1对半材料

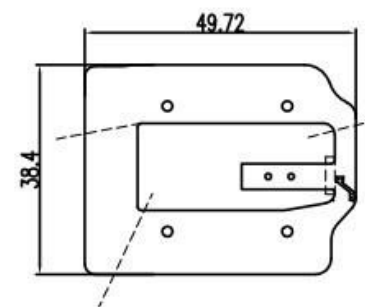
- 绿色为外形轮廓, 白色填充部位为电气走线覆铜;
- 基材材质为聚酰亚胺或聚酯薄膜;
- 图示为正面, 反面背胶, 此FPC背胶3M300LSE (9471LE);
- 打*为必测尺寸及重点尺寸, 铜箔线路所有尺寸公差不得超过 ± 0.05 , 模具冲出外型尺寸公差不得超过 ± 0.1 , 未注尺寸以图形为准;
- 基材 $12.5\mu m$, 铜箔 $18\mu m$, 电镀 $1.5\sim 5.0\mu m$; 镀金 $0.025\sim 0.075\mu m$; 走线面除焊盘外其它区域表面亚光黑色;
- 可靠性测试: 盐水喷雾试验48H\橡皮摩擦测试(100个循环)\耐醇性测试(50个循环)\恒温恒湿试验\冷热冲击试验(12个循环)\附着力测试\金手指引脚处挠折性测试;
- 出现下列问题均视为不合格: 起泡分层\露铜\折皱、折痕\边缘毛边\字符不清;
- 包装应防湿、防潮、表面干净, 完好无破损。

深圳市安威无线科技有限公司

第三视角				项目名称	S937-L502	日期	2024-10-12			
0~10	± 0.05	$\oplus$	0.03	产品名称	MAIN天线	设计				
10~30	± 0.10	$\bigcirc$	0.03	产品料号	AW006-S937-L502	审核	MD	QYL		
30~50	± 0.15	$\odot$	$\phi 0.02$	产品料号	-021-A0	批准	RF	WX		
50~80	± 0.20	$\perp$	0.02	材质	FPC	单位	mm	比例	FIT	版本
角度	$\pm 1^\circ$	$\angle$	0.05						A1	

第1页, 共1页

Diagram illustrating a contact pin on a component. The component is black with a white rectangular label. The label contains the text "6.09" and a small schematic diagram of a contact pin. A line points from the text "CONTACT PIN" to the pin. The word "TOP" is written below the component.



BOTTOM

We, Shenzhen Tianlong Century Technology Development Co., Ltd, states that All measurements were performed radiated and therefore additional antenna gain documentation is not required for NFC.

				安威无线科技有限公司															
				 Third Angle				Project		L631		Date							
				0°10'	±0.05	○	0.02	Part Name		NFC		Designed by		CZL					
				10°18'	±0.06	◎	∅ 0.03	Part No.		AW006-K78-021-A0		Checked by		MD	CZL				
				18°30'	±0.08	⊥	0.02	Material		FPC				RF	YLW				
				30°40'	±0.09	▱	0.04					Approved by							
Rev	Description			Date	Remark			Location		Treatment				Unit	mm	Scale		Rev	



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行业领先的一站式通信射频天线解决方案制造商

The End

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携手共进 共创未来