



Manufacturer:

深圳市艾特诺通讯设备有限公司

SHENZHEN ATN COMMUNICATION TECHNOLOGY CO., LTD.
Rooms 504-505, Xiagu, Meisheng Chuanggu Technology Park, Liuxian 2nd
Road, Xinan Street, Bao'an District, Shenzhen

深圳市艾特诺通讯设备有限公司
SHENZHEN ATN COMMUNICATION TECHNOLOGY CO., LTD.
规 格 书
SPECIFICATION FOR APPROVL

客 户:	外星
CUSTOMER:	
客 户 项 目 :	RSY-1
CUSTOMER PRJ:	
客 户 料 号:	
CUSTOMER P/N:	
本 厂 项 目:	ATN75005
OUR PRJ:	
规 格:	2.4~2.48GHz
SPECIFICATIONS:	
样 品 数:	1 PCS
Q' TY:	
日 期:	2025.11.11
DATE:	

地址：深圳市宝安区新安街道留仙二路美生创谷科技园夏谷 504-505 室

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1、测试设备 Test Equipment&Conditions

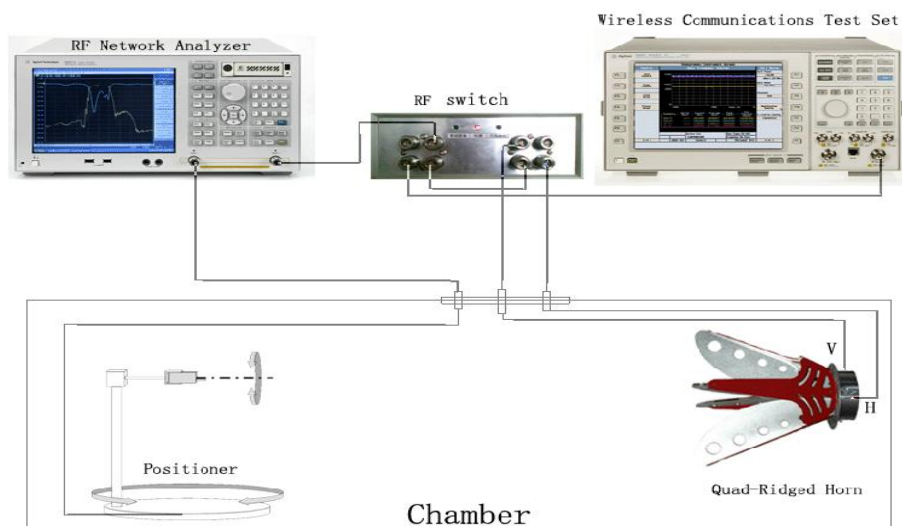
1.1 网络分析仪 (Network Analyzers)

Agilent Technologies E5071B

1.2 综合测试仪 (Communications Test Set)

CMW500

1.3 3D 暗室测试系统 (Test System)



2、产品规格 Product Specification

2.1、Material&Mechanical Characteristics

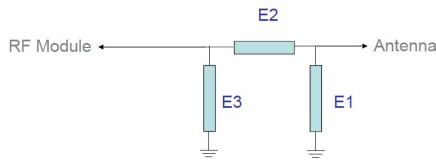
材质 Material	FPC
天线类型 Antenna type	PIFA 天线

2.2、储存条件 Storage conditions

储存温度 Storage Temperature	22℃±5℃
相对湿度 relative humidity	35-65%
储存期限 Storage life	360 天

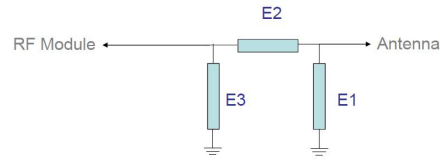
3、匹配电路 Matching circuit

天线匹配电路(L)



Element	Value
E1(0201)	NC
E2(0201)	1.5pF
E3(0201)	2.4nH

天线匹配电路(R)

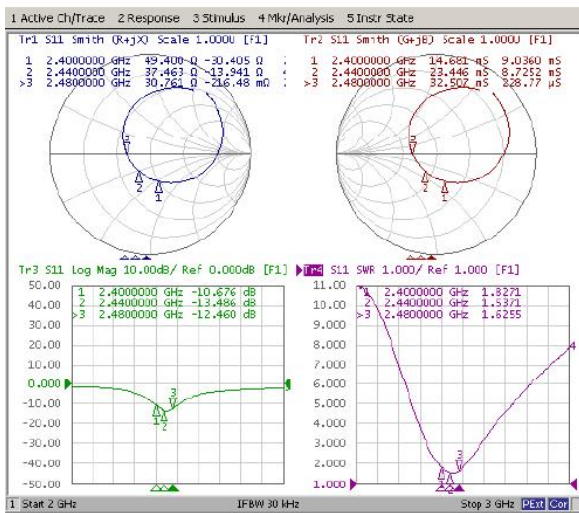


Element	Value
E1(0201)	NC
E2(0201)	2.7pF
E3(0201)	3.3nH

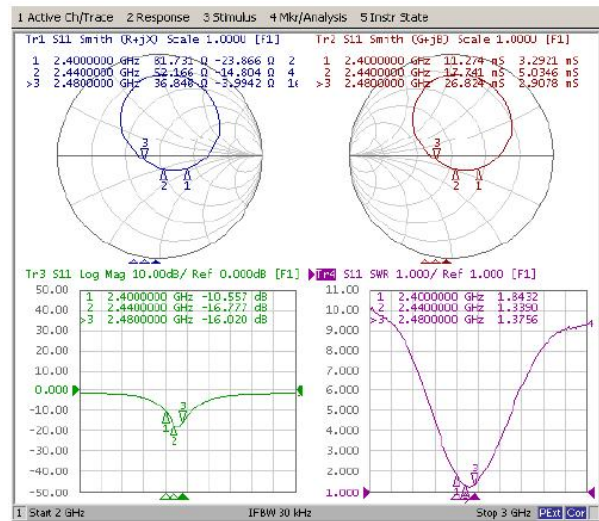
4、测试数据报告 Test Data Report

4.1 S11 Parameter

L



R

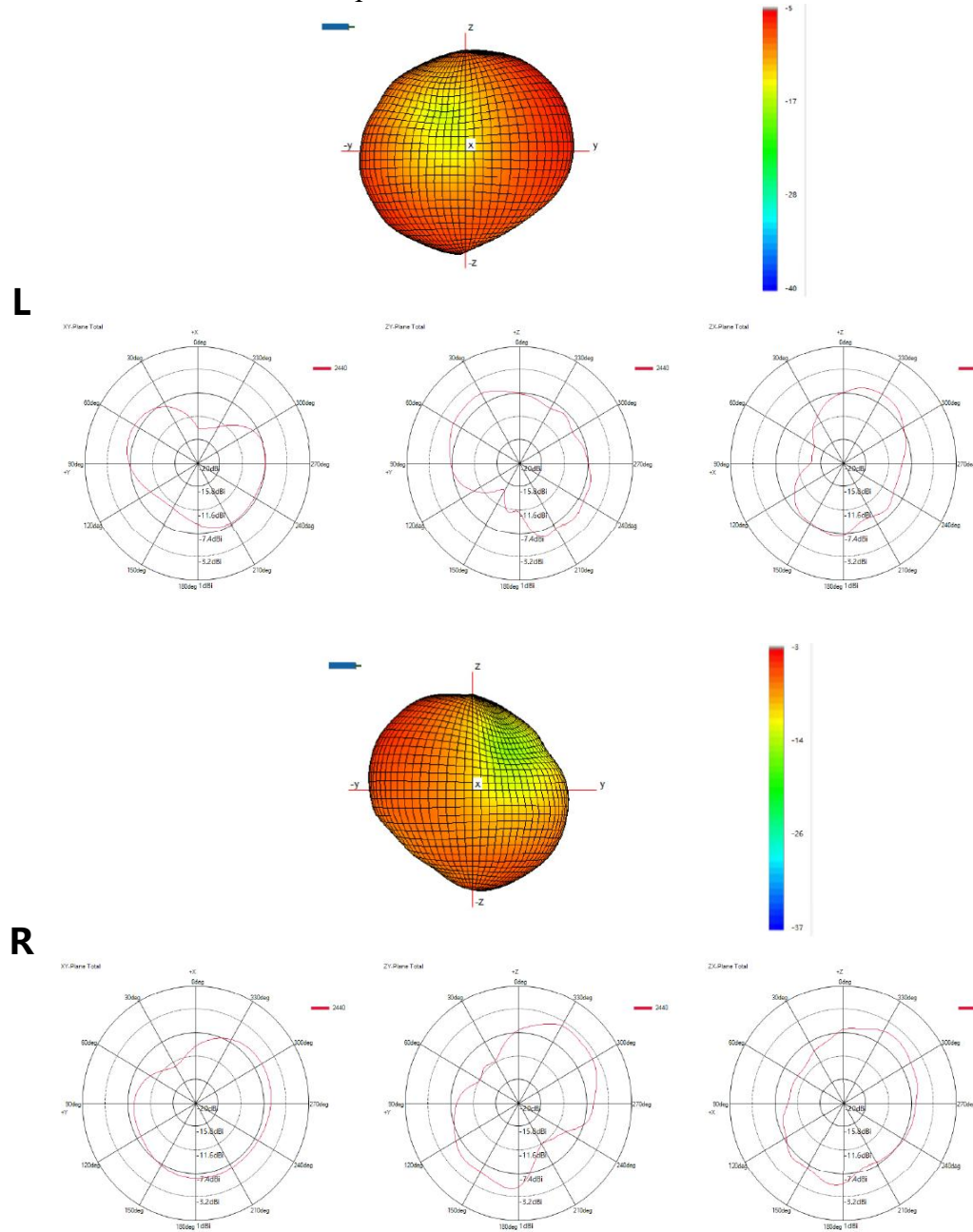


4.2 Gain & Efficiency

L&R

Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	0.56	-7.58	17.46
2410	0.78	-7.47	17.89
2420	1.0	-7.34	18.44
2430	-0.13	-7.29	18.67
2440	-1.1	-7.13	19.35
2450	1.2	-7.11	19.45
2460	1.15	-7.18	19.15
2470	-0.17	-7.27	18.75
2480	-0.19	-7.44	18.05

4.3 方向图 Radiation pattern



4.4 OTA 测试数据 OTA Test Data

Bluetooth BR (头模)	L				R		
	Channel	Frequency (MHz)	TRP (dBm)		Channel	Frequency (MHz)	TRP (dBm)
	0	2402	-1.18		0	2402	-0.66
	39	2441	1.1		39	2441	-0.11
	78	2480	0.32		78	2480	0.81
	Channel	Frequency (MHz)	TIS (dBm)		Channel	Frequency (MHz)	TIS (dBm)
	0	2402	-79.41		0	2402	-81.1
	39	2441	-81.47		39	2441	-82.31
	78	2480	-82.49		78	2480	-82.84

4.5 PCBA 传导测试数据

Bluetooth BR 芯片型号: BT8951	L				R		
	Channel	Frequency (MHz)	TX (dBm)		Channel	Frequency (MHz)	TX (dBm)
	0	2402	10.5		0	2402	10.4
	39	2441	11.0		39	2441	10.8
	78	2480	10.4		78	2480	10.5
	Channel	Frequency (MHz)	RX (dBm)		Channel	Frequency (MHz)	RX (dBm)
	0	2402	-92		0	2402	-92
	39	2441	-92		39	2441	-92
	78	2480	-92		78	2480	-92

4.6 实测距离 Measured data

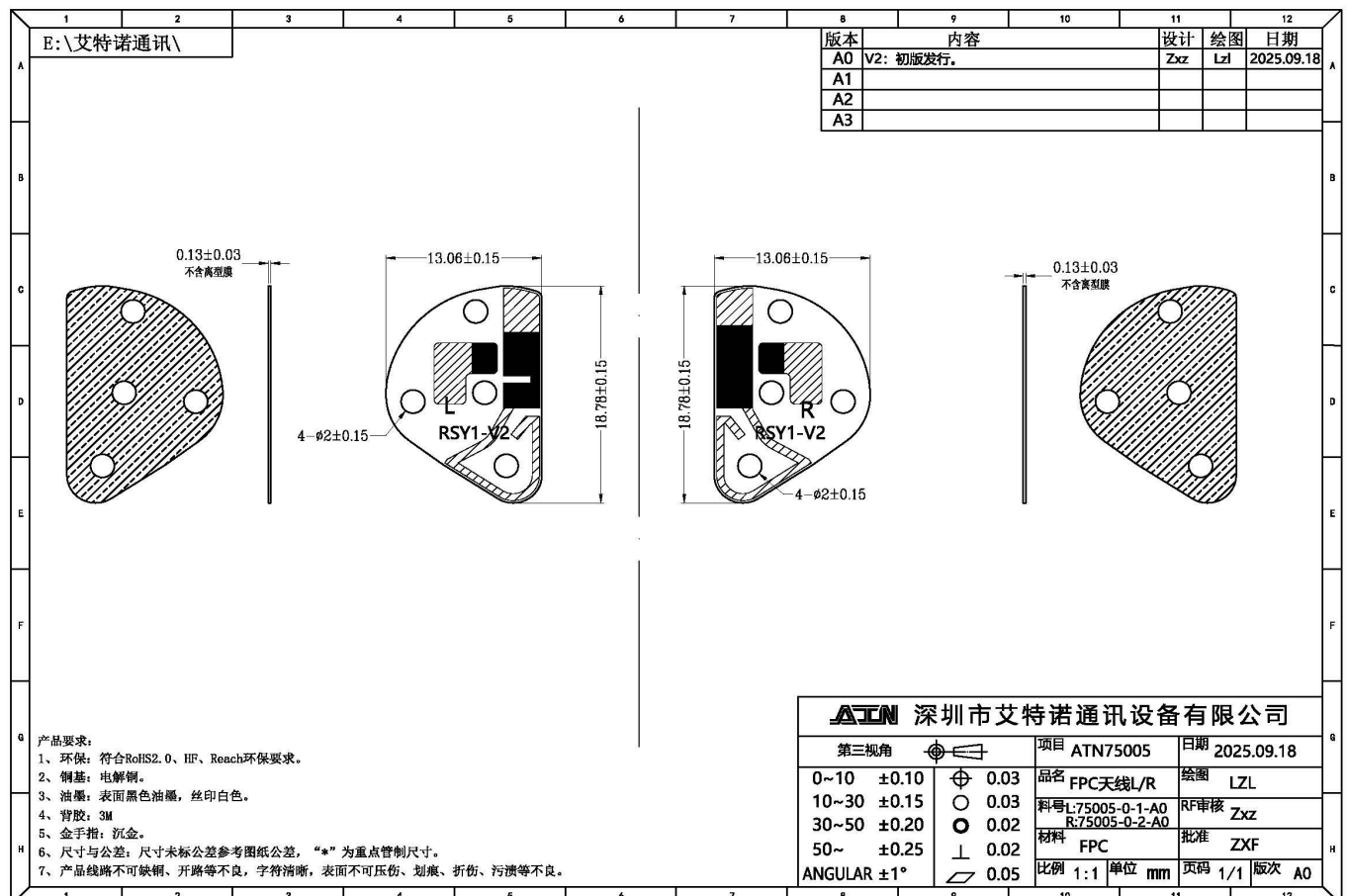
测试地点：美生创谷南门隆昌路

测试手机	三星S8
听音乐全向 (m)	13

5、装配要求 Assembly requirements

1	无特殊要求
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6、工程图纸 Product Drawing



7、尺寸检测报告 Size test report

尺寸检验报告 Dimension test report

项目 project: RSY-1			品名 Product Name: FPC 天线					
类别 category: FPC			数量 Quantity: 5 pcs				日期 Date: 2025.11.11	
检验依据标准: Inspection basis and standard			☒ 工程图纸 Engineering drawings ☐ 标准样板 Standard template ☐ 其它 Other _____					
测量设备&精度 Measurement equipment & accuracy			卡尺 Vernier caliper & 0.02mm					
检验项目 Inspection items			样品测验值 test value					判定结果 determine
			1	2	3	4	5	
尺寸检验 Dimensional inspection	1.	L						
	2.	0.13±0.03	0.12	0.12	0.12	0.12	0.12	OK
	3.	13.06±0.15	13.04	13.06	13.08	13.08	13.10	OK
	4.	18.78±0.15	18.80	18.76	18.76	18.78	18.80	OK
	5.	R						
	6.	13.06±0.15	13.08	13.06	13.08	13.10	13.04	OK
	7.	18.78±0.15	18.80	18.78	18.74	18.76	18.78	OK
	8.	0.13±0.03	0.12	0.12	0.12	0.12	0.12	OK
	9.	/						
	10.							
	11.							