
Shenzhen Linrong Technology Co., Ltd



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Summary

GK-7J2 Project Test Report

Customer	Jieke Electronics Co. , LTD	Project	GK-7J2	
date	2025/07/05	edition	R: C	
Frequency Band	2400MHZ~2500MHZ			
Designer	RF	Tian Qiukui	contact information	18123894021
	ME	Zhang asterina pectinifera	contact information	13691727201

Test Environment

2 Test Condition

2.1 Test Environment (Condition/Method)

① Voltage Standing Wave Ratio(VSWR)

Step 1. Set the frequency range after connect 50cm cable to

Network analyzer. Step 2. Connect Calibration Kit to Network analyzer and calibrate.

Step 3. Fix the cable and keep separation distance over 30cm for reducing effect by Network analyzer.

Step 4. Fix insulator over 5cm on the bottom of measuring antenna.

Step 5. Measure VSWR with setting marker of desired frequency.

Test Environment

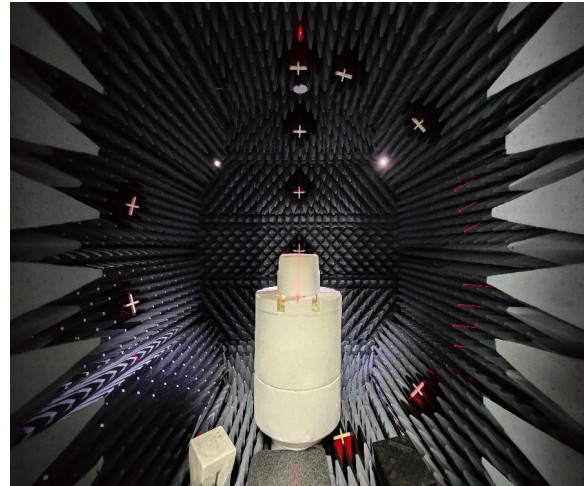
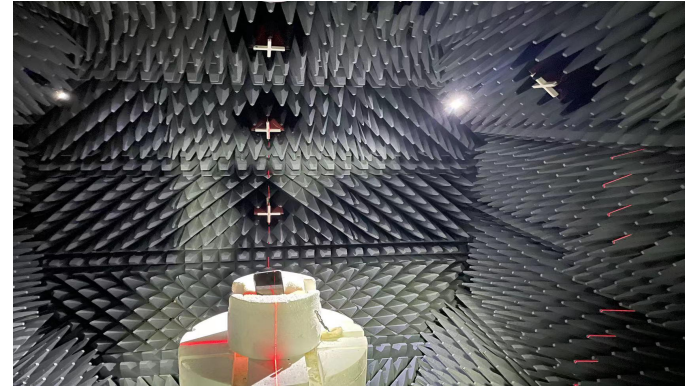
3 Antenna description

Type : PIFA

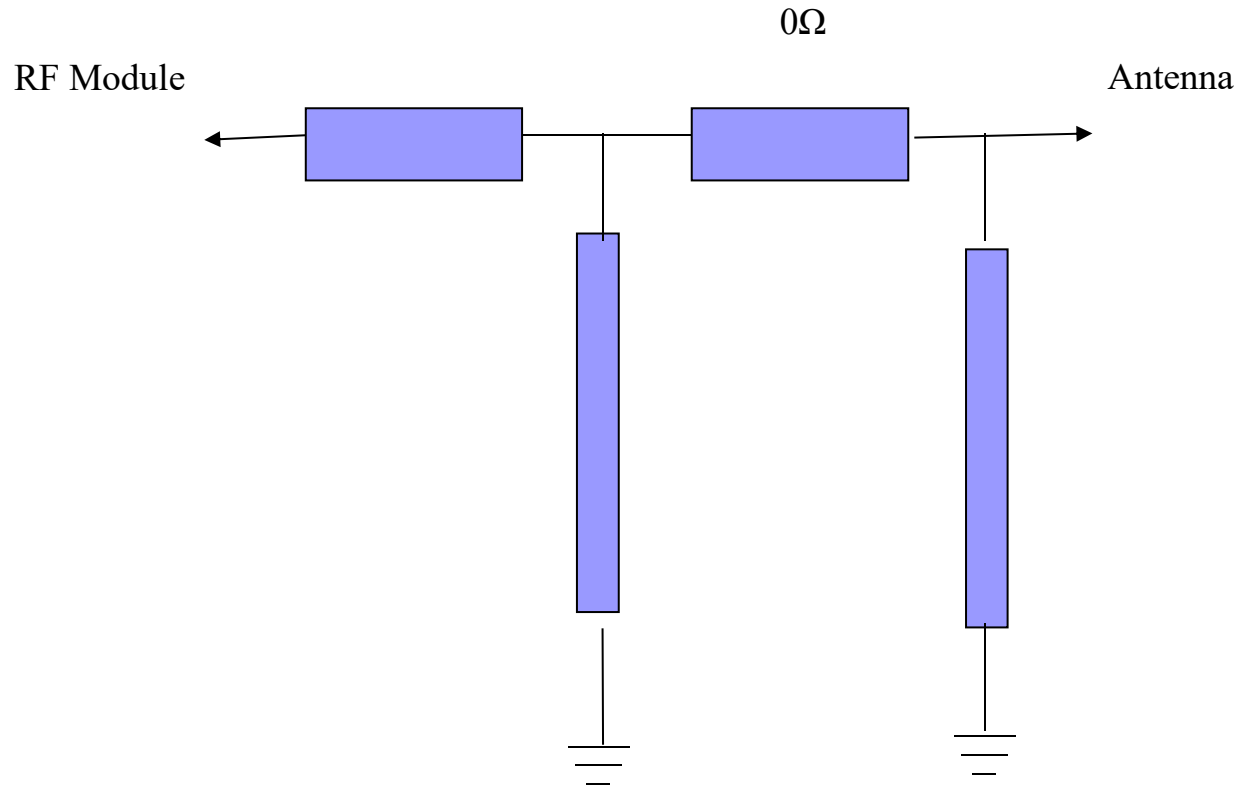
4 List of Measuring Equipment

Multi-Probe OTA Measurement System

DUT setup photo of free space OTA testing



Schematic Diagram Of Matching Circuit



Complete Machin Eschematic Diagram

schematic diagram



OTA Test Data

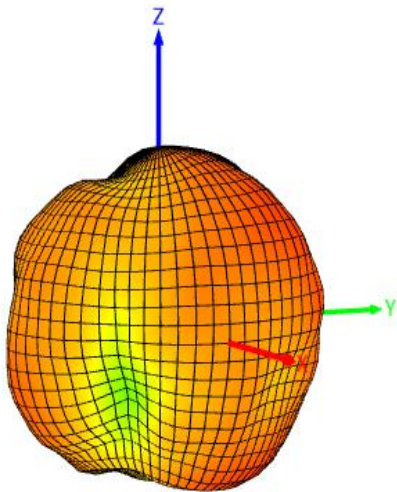
WIFI	CH	Data Rate		
			TPR	TIS
11b	1	11	15.58	
	6	11	15.83	
	11	11	15.28	-79.95
11G	1	54	14.92	
	6	54	14.10	
	11	54	13.98	-69.21
11N	1	MCS7	12.82	
	6	MCS7	12.22	
	11	MCS7	12.99	-64.04

Passive Test Data

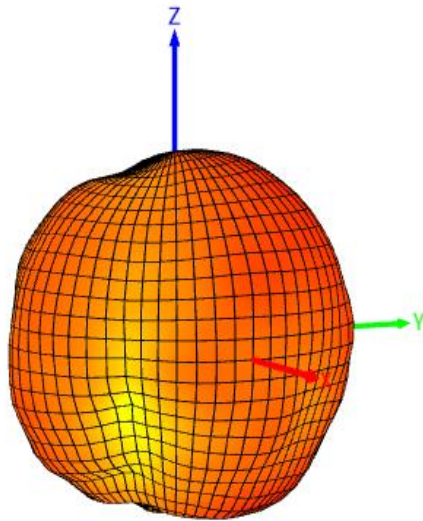
Freq(MHz)	Gain(dBi)	Efficiency(%)
2400	2.32	62.54
2410	2.26	65.31
2420	2.06	65.72
2430	2.31	66.09
2440	2.58	66.24
2450	2.87	67.32
2460	2.87	68.53
2470	2.99	68.96
2480	3.21	68.3
2490	3.34	66.93
2500	3.35	66.57

Apple Image

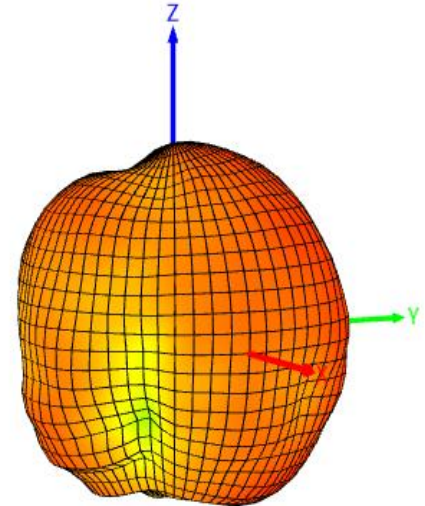
2400



2450



2500



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7. Mechanical Dimension Testing report

Full size measurement report

Vendor	Material name	SUS304 nickel lating		Part NO	34.10.06.001					Tool Number		Cav. Number		Unit(mm)					Quality							
LINRONG TECHNOLOGY	Material grade	SUS304		Part Name	WIFI					/		/		☒ MILLIMETERS ☐ INCHES					Chunyan Tang							
Date				2025/8/12					MEASURED DIMENSION				% TOLERANCE USED				DISPOSITION							ACCEPTABLE VARIANCE		
DIM. #	DIMENSION	DRAWING ZONE	+ TOL.	- TOL.	NOTE	SAMPLE 1	SAMPLE 2	SAMPLE 3	SAMPLE 4	SAMPLE 5	UPPER	LOWER	0%-25%	25%-50%	50%-75%	75%-100%	100%+	Re-Measure	Accept	Fix Tool	Accept With Variance	DIMENSION	+ TOL.	- TOL.		
1	8.00		0.20	(0.20)		7.96	7.93	7.98	7.95	8.00	0%	-35%	X									8.00	8.00	7.93		
2	18.50		0.10	(0.10)		18.52	18.56	18.57	18.52	18.54	70%	0%	X		X							18.50	18.57	18.52		
3	5.60		0.15	(0.15)		5.70	5.68	5.72	5.62	5.60	80%	0%	X			X						5.60	5.72	5.60		
4	0.95		0.10	(0.10)		0.93	0.94	0.91	0.94	0.93	0%	-40%	X									0.95	0.94	0.91		
6	4.00		0.10	(0.10)		4.00	4.05	3.98	4.01	3.99	50%	-20%	X	X								4.00	4.05	3.98		
7	Below blank																									
8																										
9																										
10																										
11																										
12																										
13																										



The end, Thanks !