Test Report

Product Name: 2.4G PCB ANT

Model Name: L406

Issued Date:12th Dec,2022

Report No.:CST20221124001E01

Report Version:V1.0

Issue By

Shenzhen CST Testing Co.,Ltd.

Room 202-203, Floor 2st, Building B, Baoan Zhigu Technology Park,Xixiang Street, Baoan District, Shenzhen, China.

Note: The test results relate only to the samples tested. This report shall not be reproduced in full, without the written approval of CST TestCenter.

General Summary

Product Name	2.4G PCB ANT	Model Name	L406
Brand Name	/	Receipt Date	24th Nov,2022
Applicant	SHENZHEN PANWEI ELECTRONICS CO.,LTD		
Address	Floor 5, fudigang second industrial zone, pingdi street, longgang district, shenzhen		
Manufacturer	SHENZHEN PANWEI ELECTRONICS CO.,LTD		
Address	Floor 5, fudigang second industrial zone, pingdi street, longgang district, shenzhen		
Test Program	Passive &VSWR		
Performed Date	06th Dec,2022~12th Dec,2022		
Conclusion	Information only Issue Date: 25th Nov,2022		
Comment	The test result only responds to the test sample		

Shenzhen CST Testing Co., Ltd.

Prepared By: Kyle Wang ***Date:*** *Dec 12,2022*

Project Engineer

Check By: ***Date:*** *Dec 12,2022*

Reviewer

SECTION 1 General Information

1.1 Testing Laboratory List

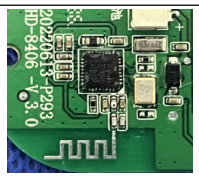
Company:	Shenzhen CST Testing Co.,Ltd.
Address:	2st Floor, Building B, Baoan zhigu Technology Park,Xixiang Street, Baoan District, Shenzhen,China.
Post Code:	518000
Contact	David
Telephone	0755-27907627
Fax	0755-27907627

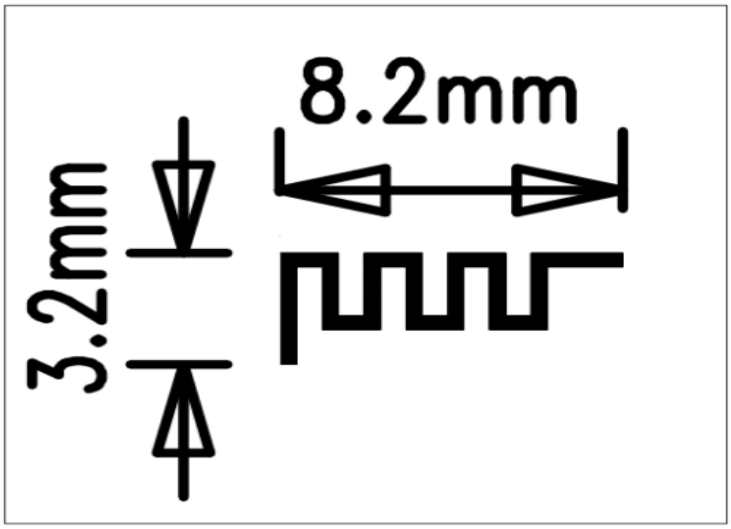
1.2 Applicant Information

Company:	SHENZHEN PANWEI ELECTRONICS CO.,LTD
Address:	3/F., BLK. 4, LIANJIAN INDUSTRIAL PARK,HUA RONG ROAD, LONGHUA DISTRICT , SHENZHEN, GUANGDONG, CHINA
	Post Code: 518000

1.3 Equipment under Test (EUT) Information

Table 1-1 EUT Information

Manufacture	SHENZHEN PANWEI ELECTRONICS CO.,LTD
Device Type	2.4G PCB ANT
Model	2.4G PCB ANT
Antenna Type	
Device Operation Configurations:	
Test Item	Configuration
VSWR	2400MHz, 2450MHz, 2500MHz
Passive	2400MHz, 2450MHz, 2500MHz



1.4 EUT Distribute

Table 1-2 EUT Used For Each Test

Model	Sample NO.	Test Item	Test Condition
2.4G PCB ANT	CST2022112401	VSWR	23.0℃, 49%RH
		Passive	

SECTION 2 Test Method

2.1 Test System Describe

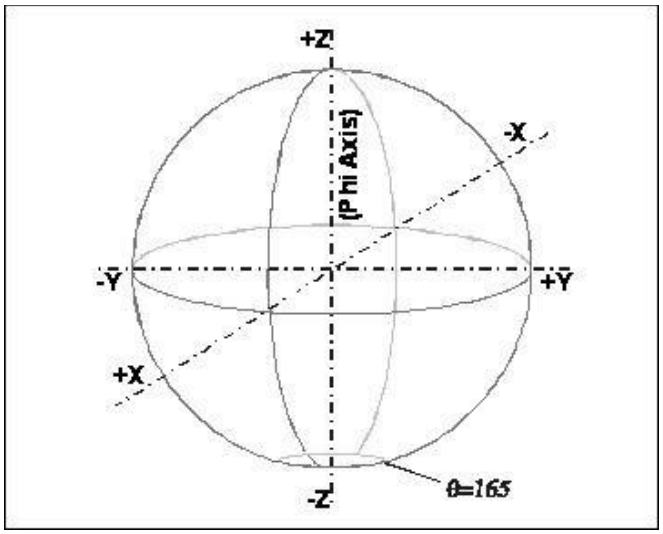


Fig.1 Coordinate Axis

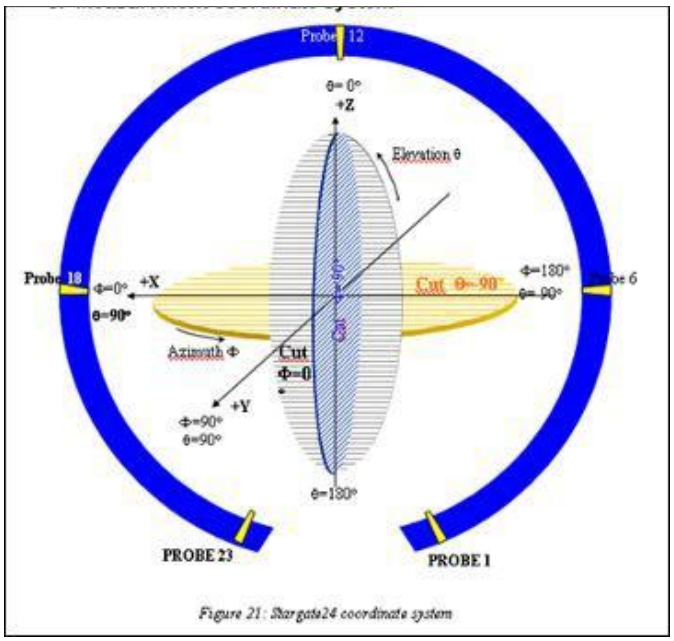
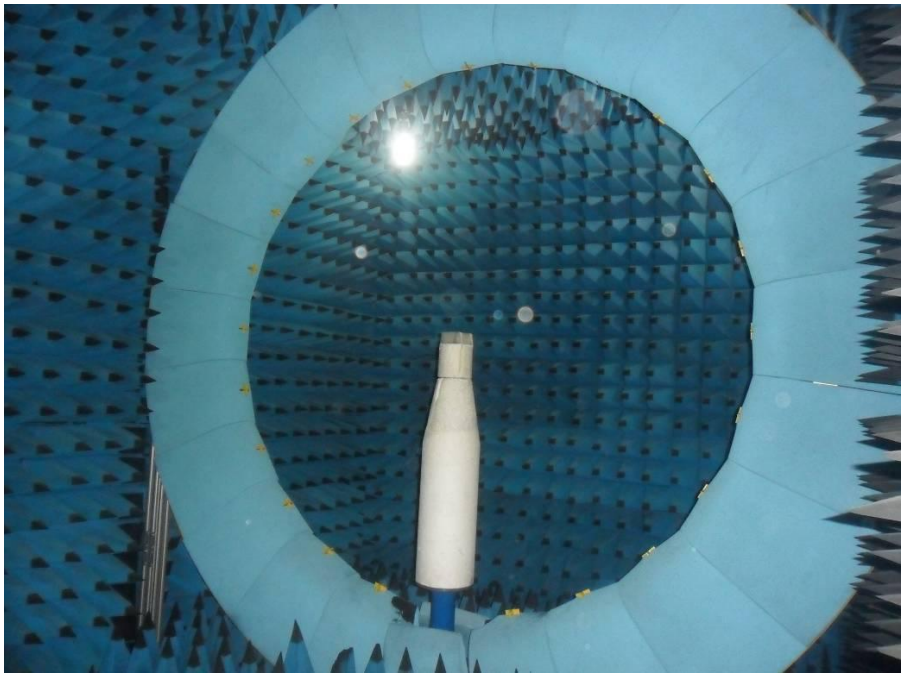


Fig.2 Coordinate Axis

For the purposes of these tests, two principal categories of positioning systems will be defined, based on expected methods of performing spherical pattern tests. These are distributed-axis systems and combined-axis systems. Distributed-axis systems move the measurement antenna about the EUT and Phi-axis positioner and are representative of most conicalcut method systems.

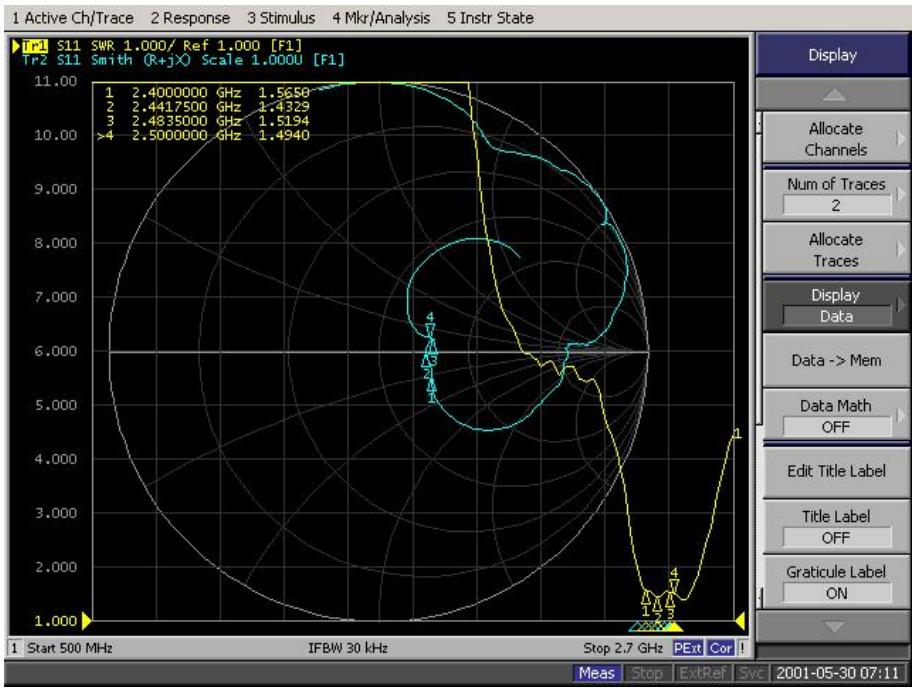
2.2 Chamber Test Photos



SECTION 3 Test Result

3.1 Test Result

3.1.1 VSWR,Smith

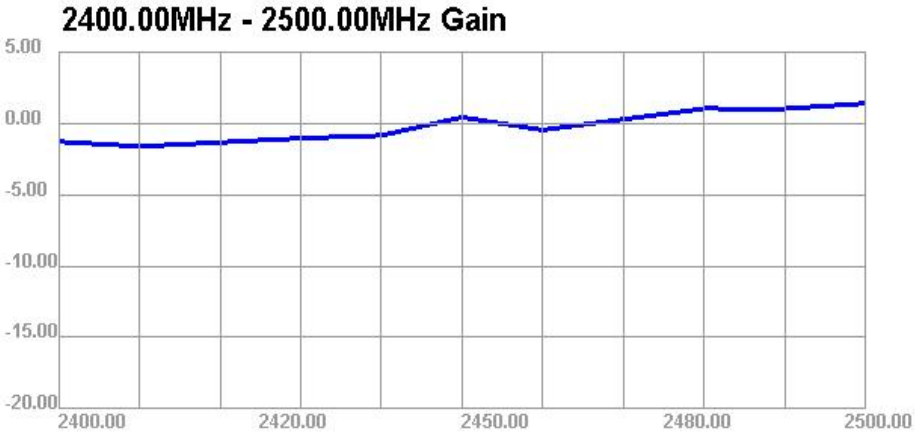


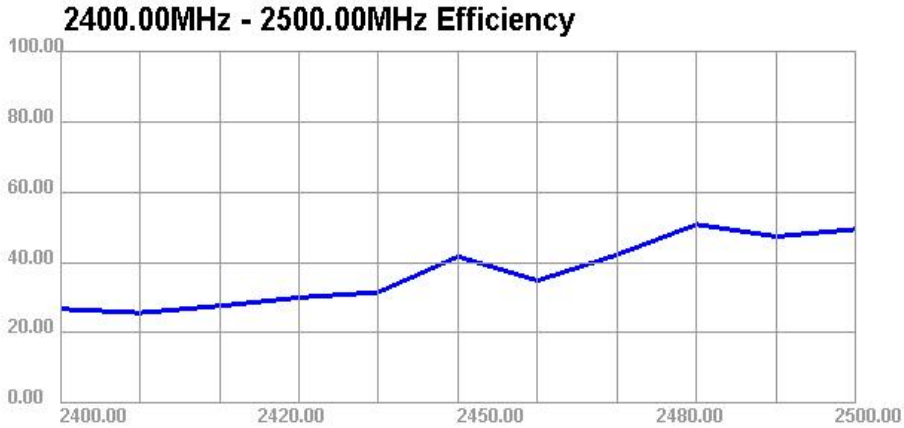
VSWR

3.1.2 Passive Result

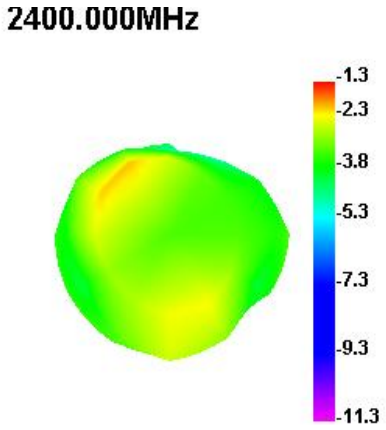
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)
2400	26.8	-5.72	-1.26	-3.43	-1.28	-18.77
2410	25.72	-5.9	-1.64	-3.77	-1.62	-18.66
2420	27.67	-5.58	-1.35	-3.49	-1.34	-18.14
2430	30.04	-5.22	-1.06	-3.19	-1.04	-16.76
2440	31.56	-5.01	-0.83	-3	-0.85	-16.31
2450	41.67	-3.8	0.43	-1.73	0.42	-14.41
2460	34.86	-4.58	-0.46	-2.62	-0.47	-15.33
2470	42.19	-3.75	0.29	-1.87	0.28	-15.81
2480	50.79	-2.94	1.02	-1.12	1.03	-15.86
2490	47.4	-3.24	1.01	-1.13	1.02	-16.54
2500	49.43	-3.06	1.03	-0.76	1.03	-15.76

3.1.2.1 Gain and Efficiency

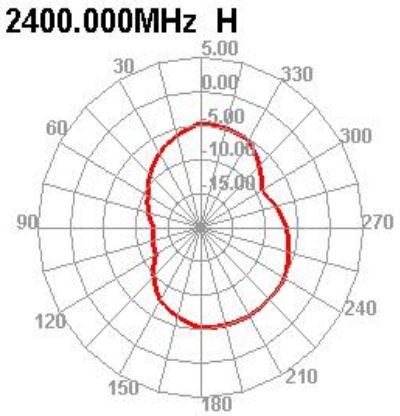




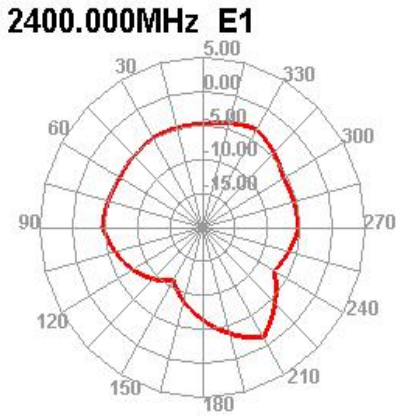
3.1.2.2 Pattern Plots of Passive



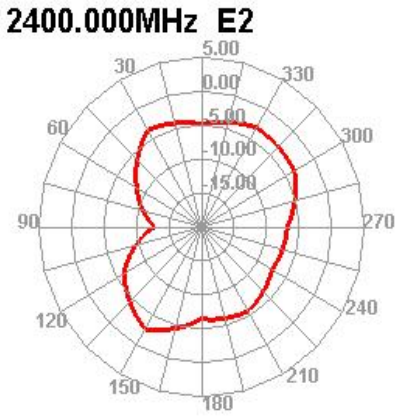
2400MHz



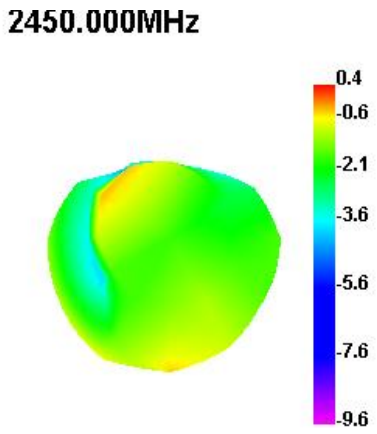
2400MHz-H



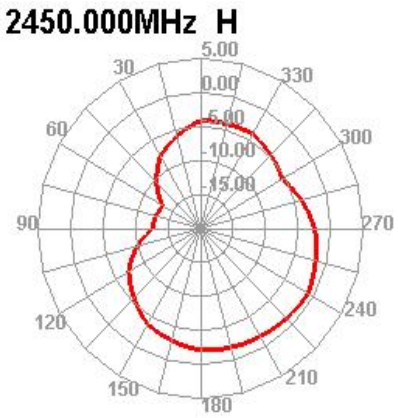
2400MHz-E1



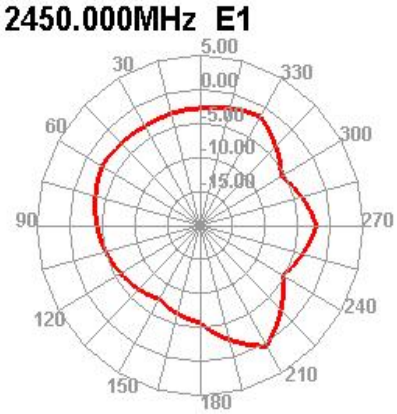
2400MHz-E2



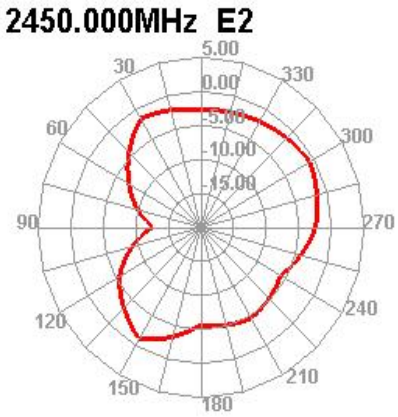
2450MHz



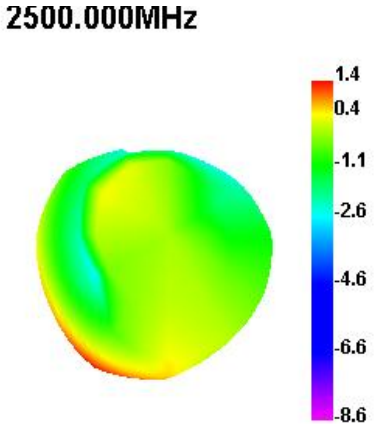
2450MHz-H



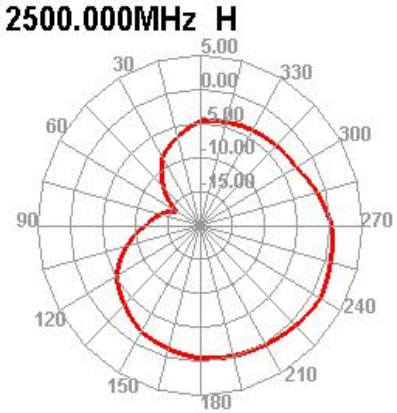
2450MHz-E1



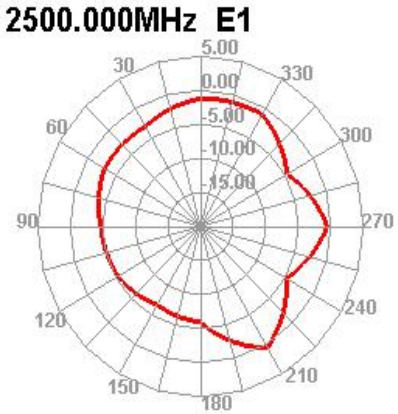
2450MHz-E2



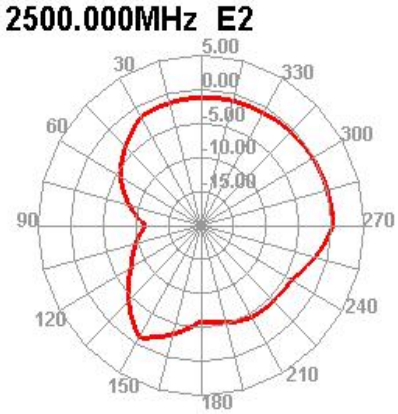
2500MHz



2500MHz-H



2500MHz-E1



2500MHz-E2