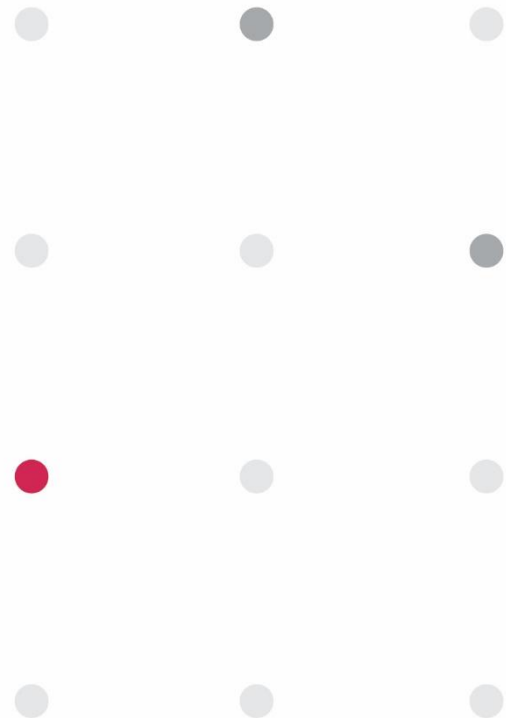


PSA

PASSIVE SYSTEM ALLIANCE
INPAQ TECHNOLOGY CO., LTD.



BSJ-C115 Antenna Test Report

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INPAQ Technology Co., Ltd.

Last updated in Sep.29th, 2022

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Revision History

Released Date	Version	Record
Mar.11 th ,2022	V0.0	First commissioning
Aug. 17 th ,2022	V0.1	New machine antenna verification
Sep. 8 th ,2022	V0.2	English version
Sep. 29 th ,2022	V0.3	optimization report

Requirements of Antenna Design and Measurement

Requirements of Antenna Design

RF Function	Number of ANT	Frequency Band	Remark
BT	1	2400 –2500MHz;	
	1		

Requirements of Measurement

Test Item	Specification	Remark
VSWR	N/A	
Peak gain	N/A	
Efficiency	N/A	
Isolation	N/A	

Antenna Placement & Solution



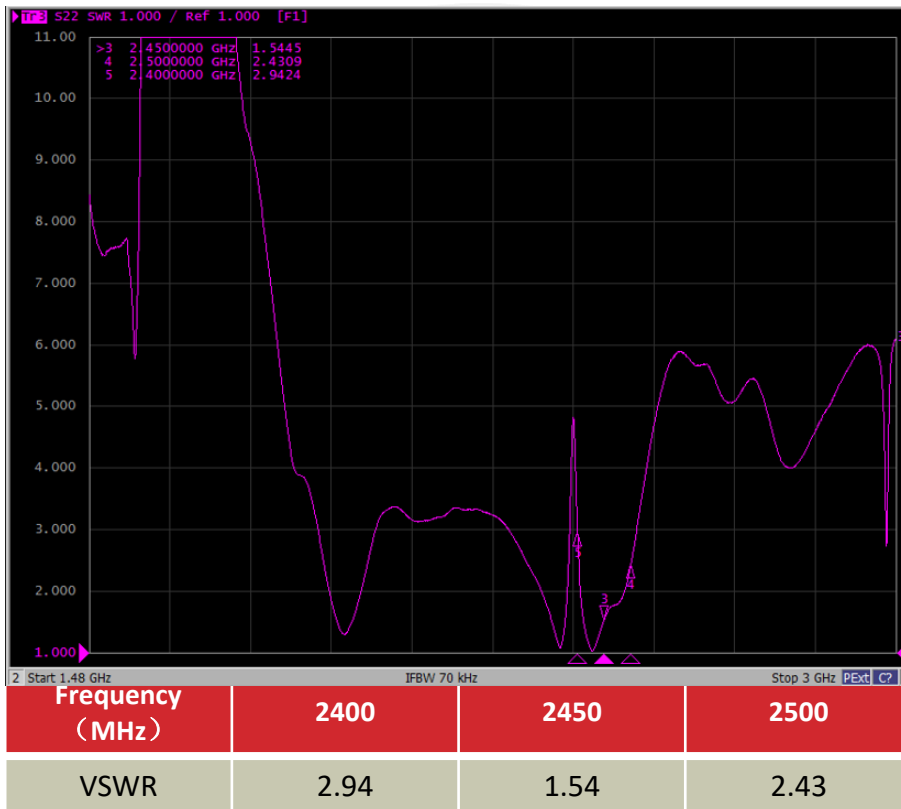
Antenna Placement & Solution



- ◆ shows the right side of the red Kuang; The internal cable of the machine needs to be fixed on one side;

Antenna S-Parameter (VSWR)

BT:



Test Setup for Radiation Pattern Measurement

ETS Ams-8600 12.91x3.05x3.05 m³ Tapered Chamber

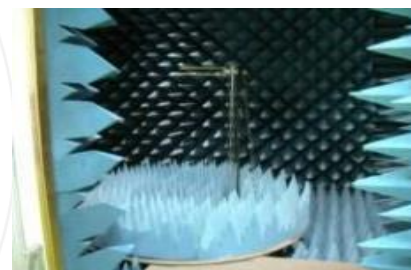
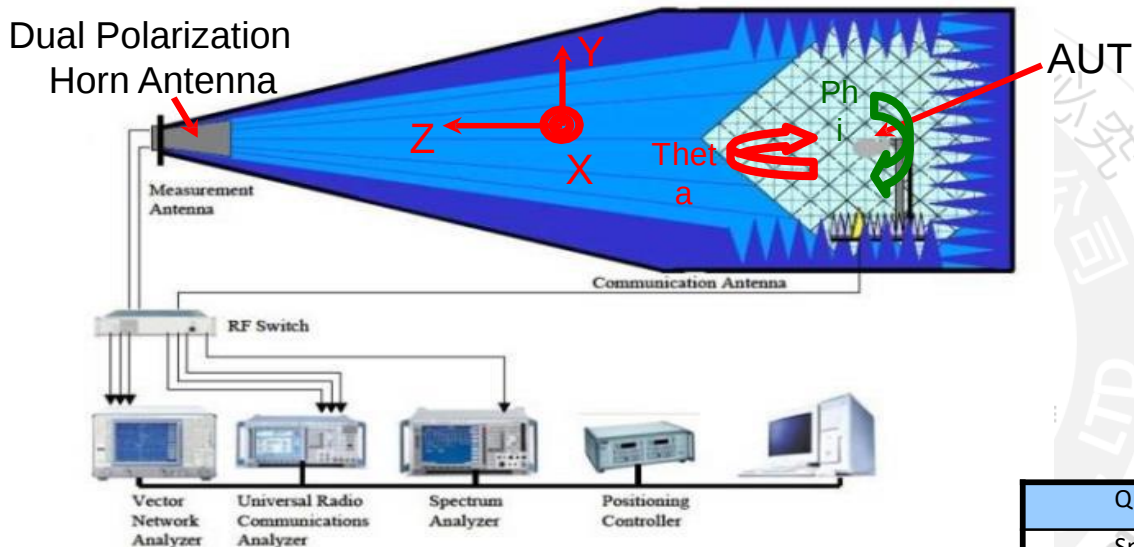
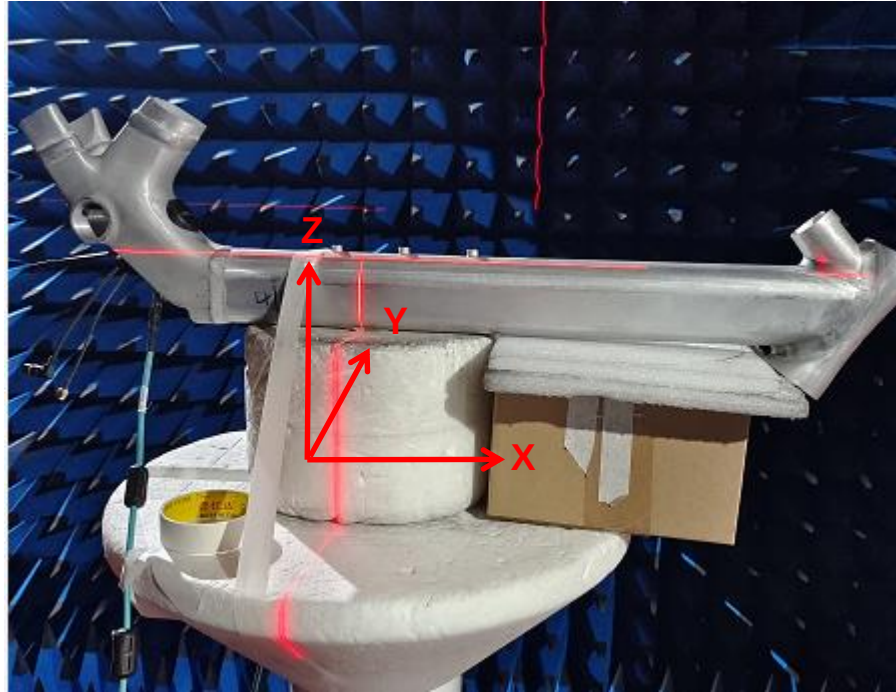


Figure 1: System diagram for test system including compact-size tapered anechoic chamber and optional test instrumentation



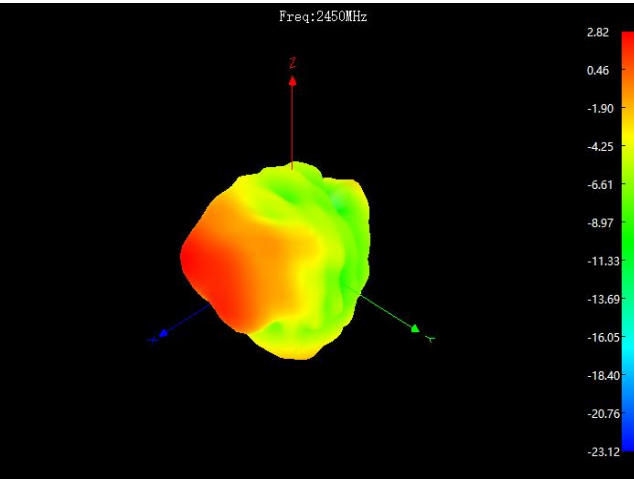
QUIPMENT	BRAND	MODULE TYPE
Spectrum	Agilent	E4402B
Signal Generator	Agilent	8960
Switch	Agilent	3499A
Switch	ETS	2090
Network Analyzer	Agilent	N5230A

Results Summary



Results Summary

3D Radiation Pattern



2450MHz
BT

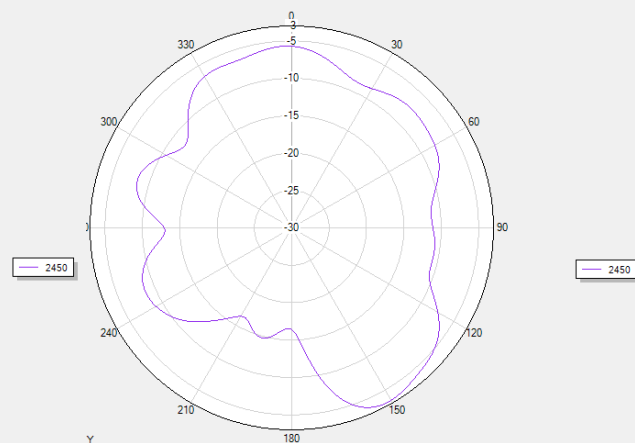
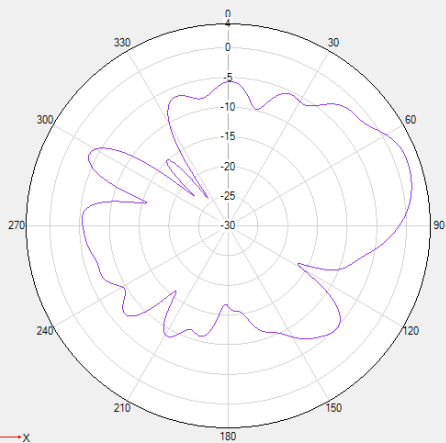
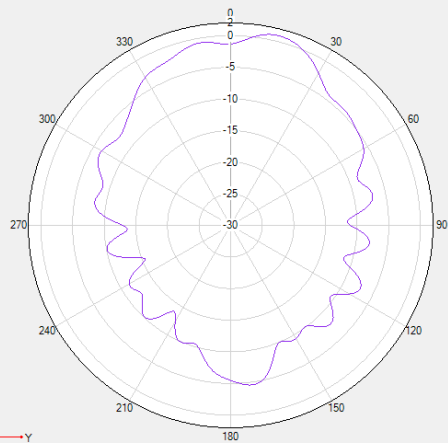
Results Summary

2D Radiation Pattern

XY-H-plane

XZ-E1-plane

YZ-E2-plane



2450MHz

Results Summary-BT

Efficiency

Freq.	Efficiency	Peak Gain
(MHz)	(%)	(dBi)
2400	22.66	-0.59
2410	30.79	1.76
2420	32.51	2.37
2430	32.84	2.56
2440	32.25	2.54
2450	31.99	2.82
2460	32.25	3.06
2470	32.91	3.05
2480	32.51	2.65
2490	30	1.79
2500	26.96	0.78

Conclusion

1. The cable arrangement is shown in P8 and P9;
2. The antenna passive data is as follows 。

Antenna		BT	
Average of Efficiency		≈30%	

Thank you

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