

ACW Antenna report

Purpose

This report is to measure the performance of BT antenna. The antenna operating frequency at 2.4~2.5GHz, All test data are showed as below.

Content

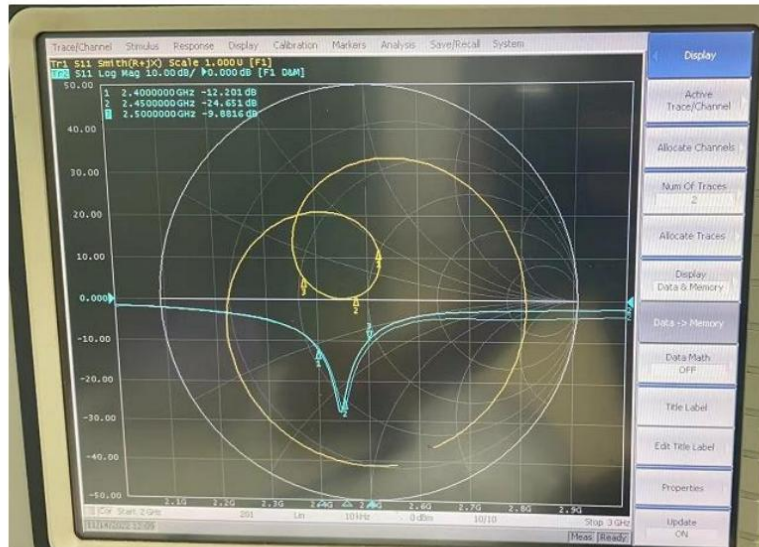
- 1. Product Overview & Dimension
- 2. Test system
- 3. Antenna Matching Network
- 4. Test Result
 - 4.1 S11 Parameter
 - 4.2 Test coordinate
 - 4.3 2D Pattern
 - 4.4 OTA Data
 - 4.5 BT Boot measured
- 5. Antenna Assembly & environmental processing

2.Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	CMW500 &CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



S11—(BT ANT)



Test Result

Test Result

Gain & Efficiency—BT- ANT(L/R)

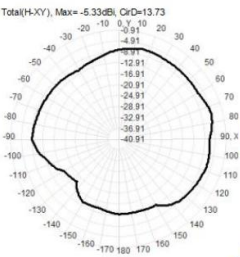
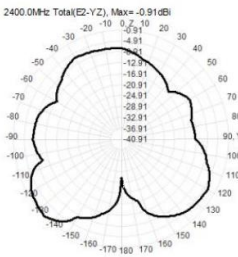
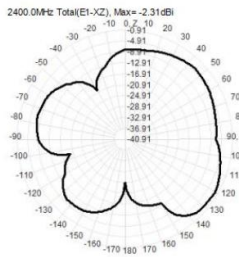
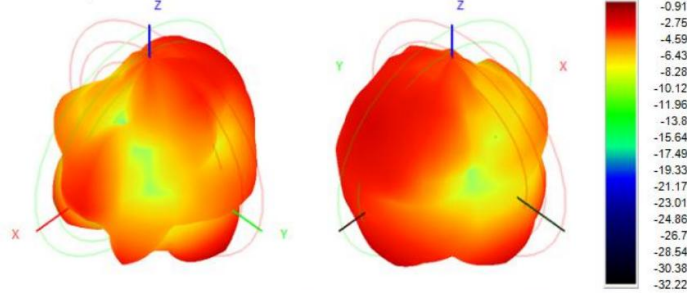
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	20.89	0.91
2410	21.88	0.51
2420	22.96	0.05
2430	23.40	0.47
2440	24.87	0.81
2450	26.49	1.11
2460	28.30	1.58
2470	28.90	2.00
2480	28.85	2.17
2490	28.75	2.11
2500	27.81	1.89

Test Result

2D&3D BT- ANT

2400.0MHz H+V, Eff: 20.9%

Back View

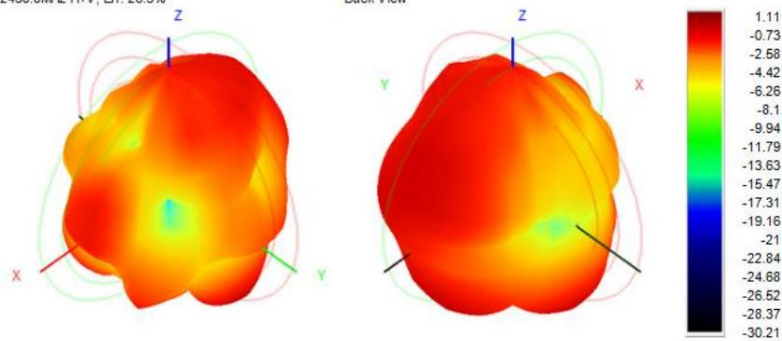


Test Result

2D&3D — BT- ANT

2450.0MHz H+V, Eff: 26.5%

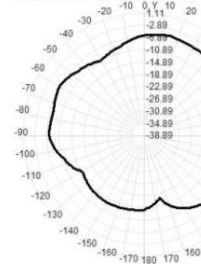
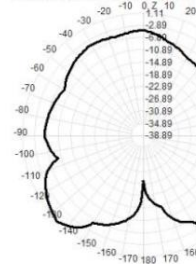
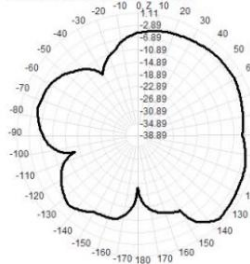
Back View



2450.0MHz Total(E1-XZ), Max=-0.49dBi

2450.0MHz Total(E2-YZ), Max= 1.11dBi

Total(H+V), Max=-3.78dBi, CrD=14.09

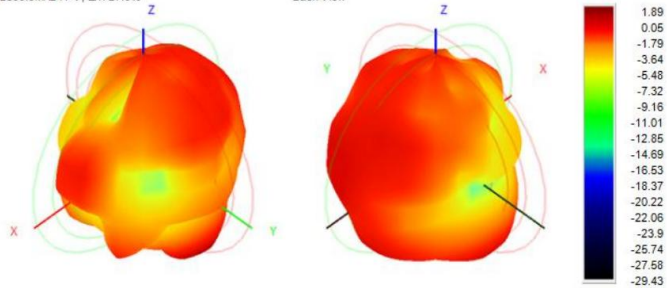


Test Result

2D&3D — BT- ANT

2500.0MHz H+V, Eff: 27.8%

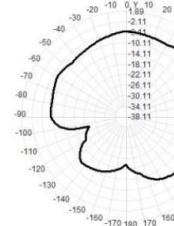
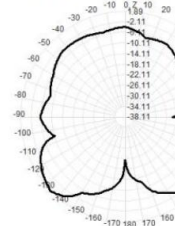
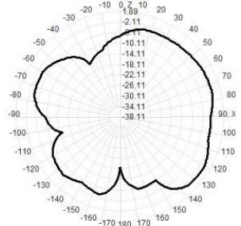
Back View



2500.0MHz Total(E1-XZ), Max=-0.71dBi

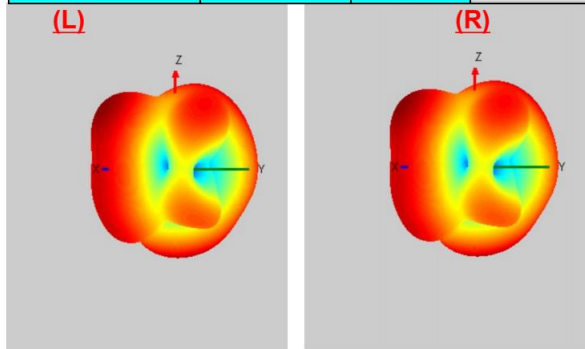
2500.0MHz Total(E2-YZ), Max= 1.89dBi

Total(H+V), Max=-3.42dBi, CrD=20.23



OTA DATA()

Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	0.51	-78.29
		39	1.25	-77.06
		78	0.69	-77.51



antenna

