

BT Antenna Test Report Prepared for 【H90】 Project

Author Ken

Date 2024.2.27



Client Information

Client	Vtsonic
Engineer of Client	
Project Name	
Project Stage	<input type="checkbox"/> Evaluation <input checked="" type="checkbox"/> EVT <input type="checkbox"/> DVT <input type="checkbox"/> PVT
Antenna Type	Linear Polarization
Antenna Band	2400~2500MHz
Antenna Engineer	Ken

Tuning Note

Version	Date	Revision Description	Designer
01	2024/2/27	Version 1	Ken

Antenna Info

Product name	Material	Dimension	Feed-In Location	PIN Length
DCAH0S15	/	3.05x1.6x0.55mm	/	/

1. Test Content :

BT Antenna in pattern measurement

2. Test Item :

Efficiency 、 Radiation Pattern 、 Total Gain 、 Average Gain

3. Test Setting :

Network Analyzer : Agilent E5071C

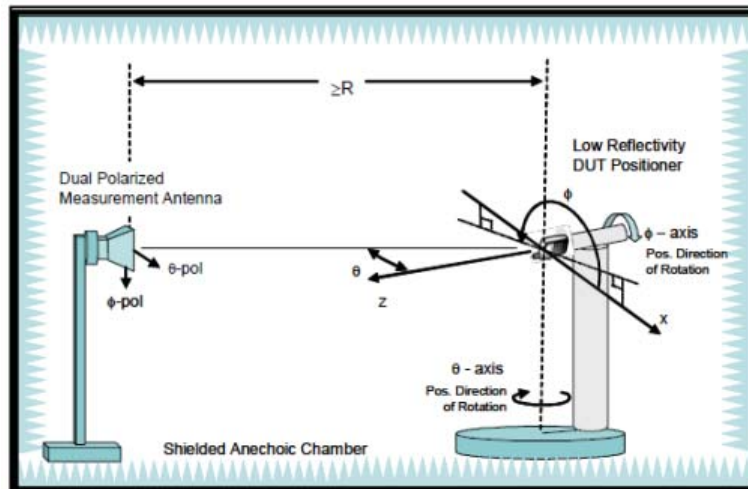
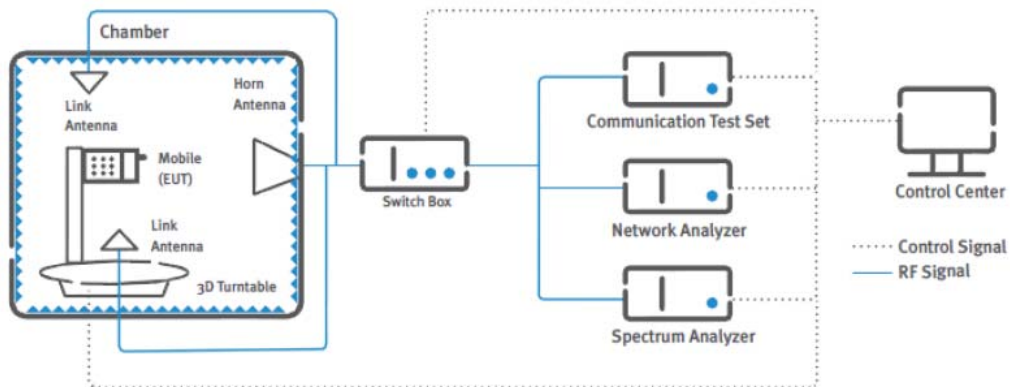
Source Antenna : Dual Polarization Horn Antenna

Test Frequency : 2400~2500MHz

4. Test Environment :

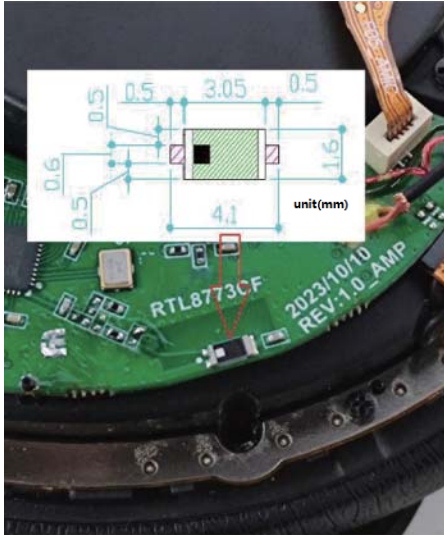
Room temperature : 22°C Humidity : 31%

5. Test Schematic Drawing of Setting :

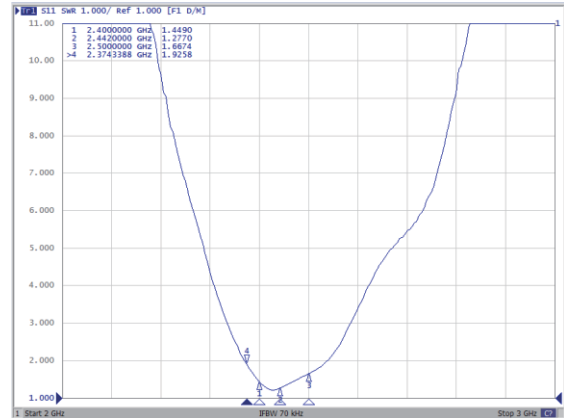
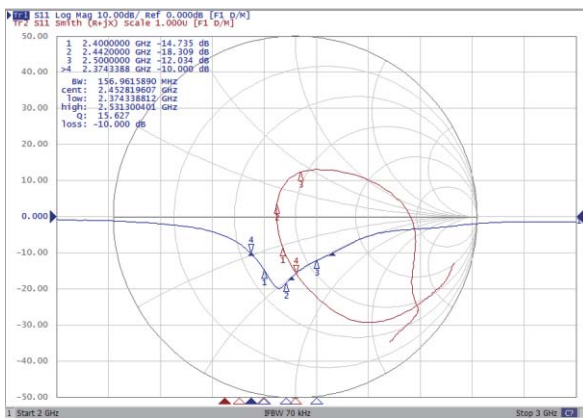


6. Test Data

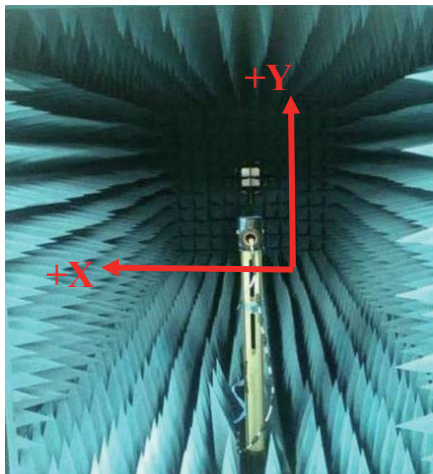
Environment



DCAH0S15 Antenna S11 Return Loss Measurement & SWR



Coordinate

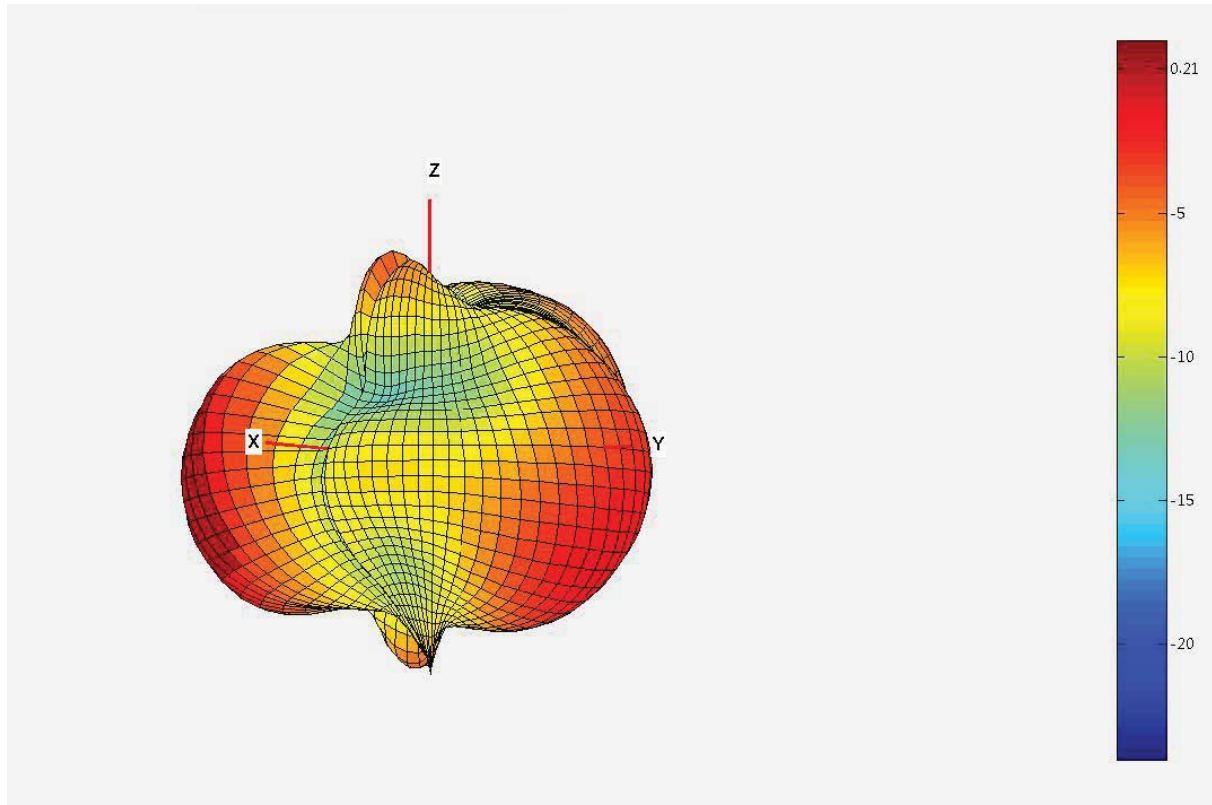


Chamber coordinate



Antenna mounted on chamber coordinate

Antenna 3D Pattern at 2442MHz



Measurements summary

Frequency	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400MHz	-4.58	34.83	-0.25
2404MHz	-4.55	35.08	-0.17
2441MHz	-4.31	37.07	0.19
2442MHz	-4.29	37.24	0.21
2472MHz	-4.47	35.73	-0.12
2500MHz	-4.51	35.4	-0.15