

Antenna Test Report

manufacturer	Shenzhen Hetuo Technology Co., Ltd 1202B, Building C6, Hengfeng Industrial City, Xixiang, Bao'an District, Shenzhen
Project	TONEMAC H2
Antenna Revision	A1
Product Description	
Antenna Type	PCB Antenna
DATE	2023. 11. 20

Purpose

This report is to measure the performance of BT antenna for H2. The antenna operating frequency at 2.4~2.5GHz, All test data are showed as below.

Content

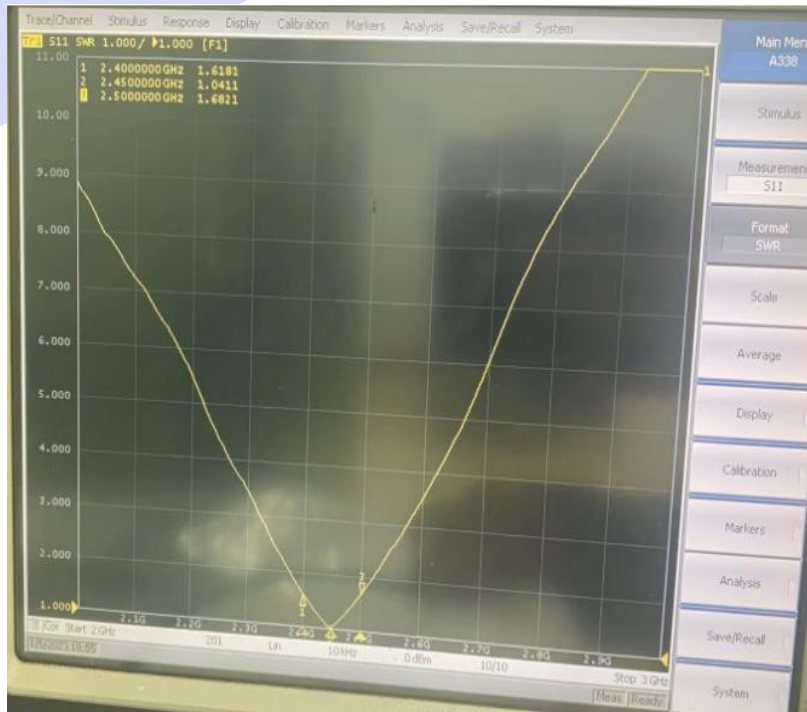
1. Product Overview & Dimension
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2. Test System

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

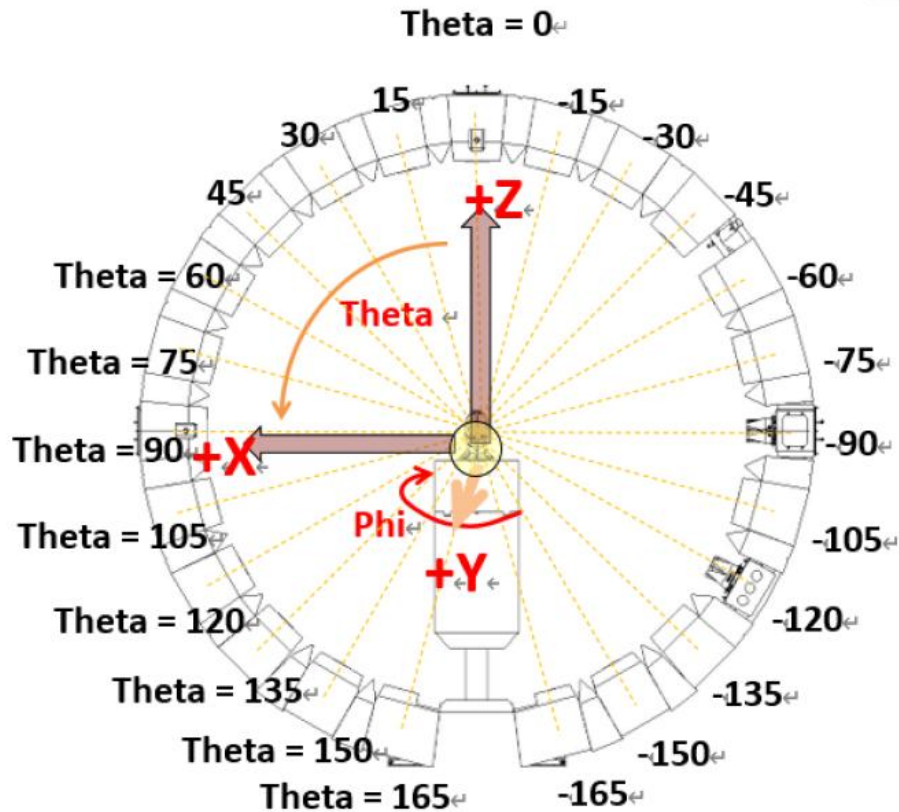


S11—(BT ANT)



Test Result

Sample status & coordinates



Test Result

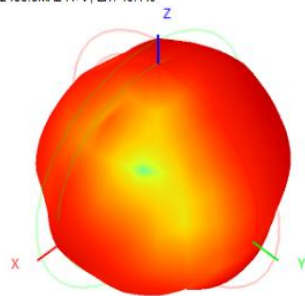
Gain & Efficiency—**BT- ANT**

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	48.06	2.09
2410	48.60	2.11
2420	48.57	2.10
2430	49.14	2.19
2440	46.76	1.67
2450	45.76	1.99
2460	45.10	1.83
2470	44.27	2.08
2480	42.33	1.88
2490	40.96	1.80
2500	39.60	1.52

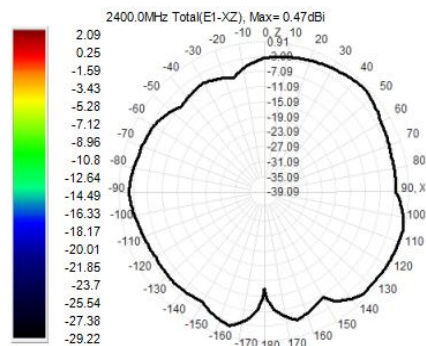
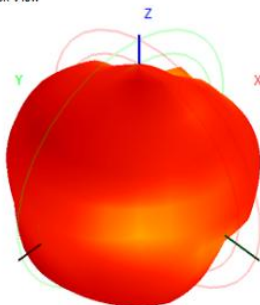
Test Result

2D&3D — BT-ANT

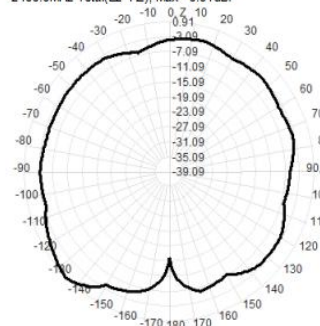
2400.0MHz H+V, Eff: 48.1%



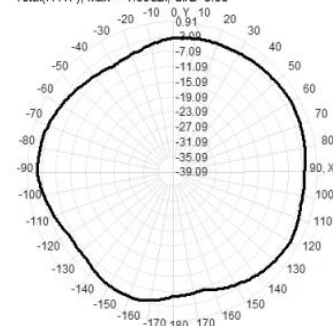
Back View



2400.0MHz Total(E2-YZ), Max= 0.91dBi



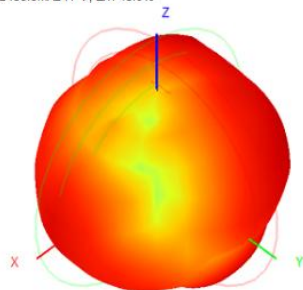
Total(H-XY), Max= -1.60dBi, CrD=5.05



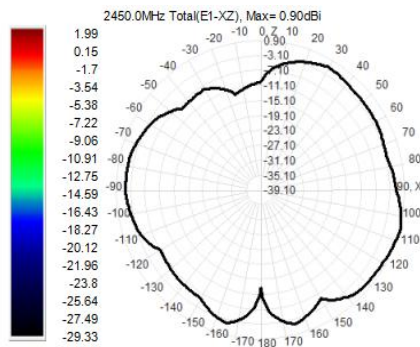
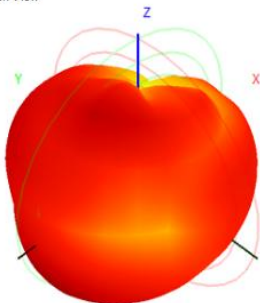
Test Result

2D&3D — BT- ANT

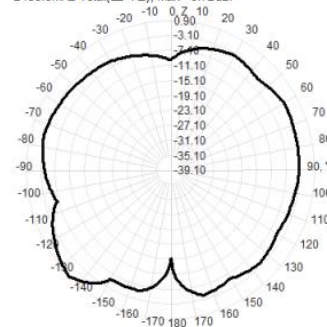
2450.0MHz H+V, Eff: 45.8%



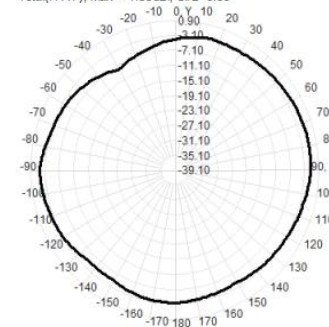
Back View



2450.0MHz Total(E2-YZ), Max= 0.72dBi



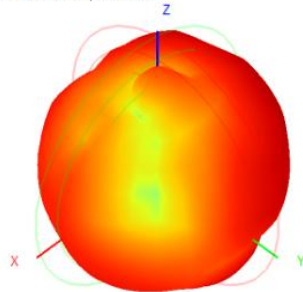
Total(H+V), Max= -1.55dBi, CirD=6.59



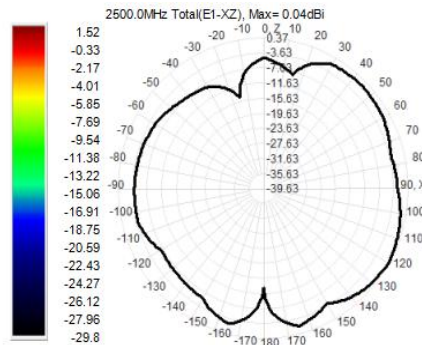
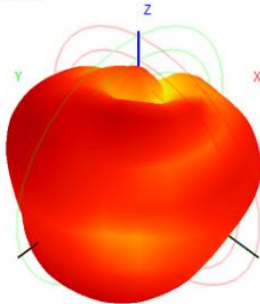
Test Result

2D&3D — BT- ANT

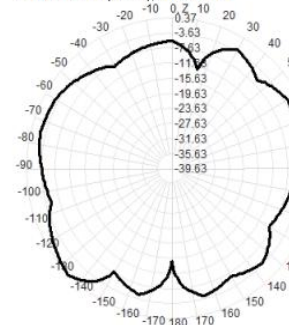
2500.0MHz H+V, Eff: 39.6%



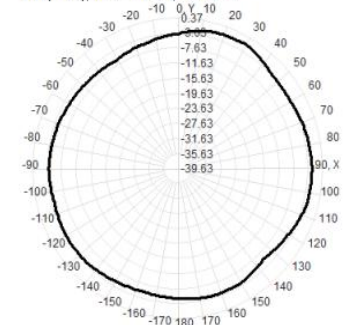
Back View



2500.0MHz Total(E2-YZ), Max= 0.37dBi



Total(H-XY), Max= -1.73dBi, CirD=4.56



OTA DATA--自由空间

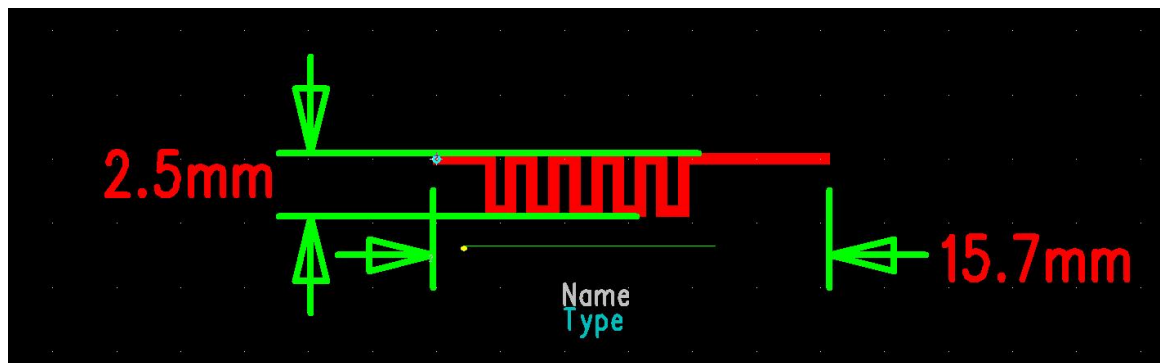
Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	5.44	-90.71
		39	6.46	-91.21
		78	4.43	-90.02

OTA DATA--头模

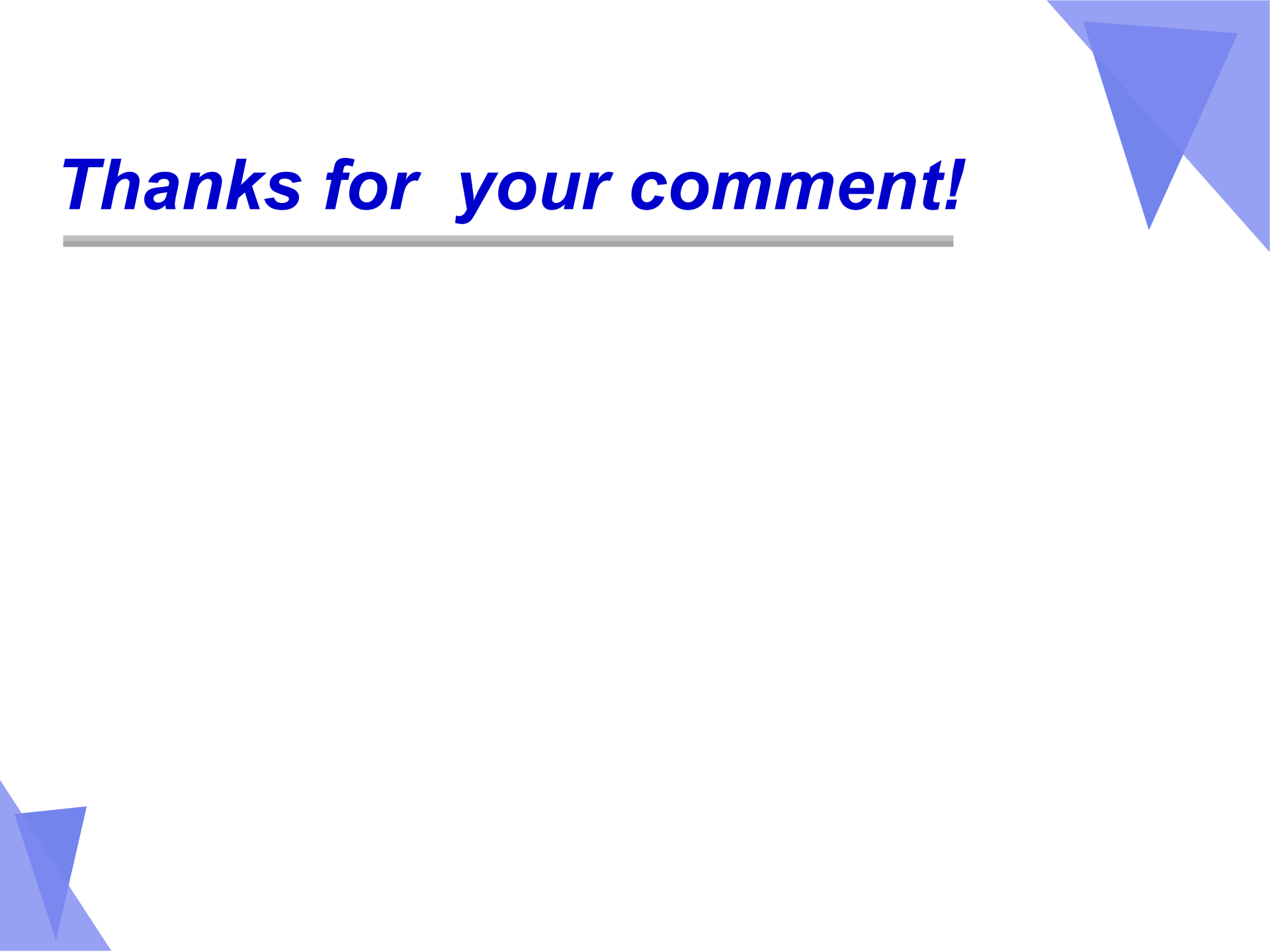
Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	1.27	-85.94
		39	1.34	-85.63
		78	1.38	-85.01

天线尺寸图

Antenna size



Thanks for your comment!

The slide features a white background with decorative elements in the corners. In the top-right and bottom-left corners, there are overlapping triangles in two shades of blue, creating a modern, geometric design.