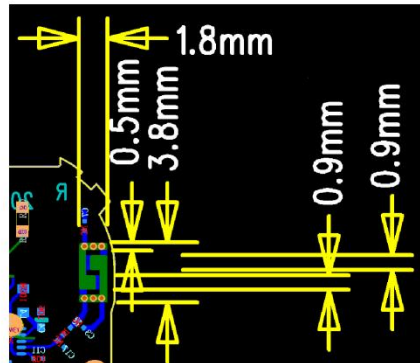


拓普 **Antenna Test Report**

Customer	拓普
Project	S27
Antenna Revision	A1
Product Description	板载
Product No	
DATE	2025.12.04

Antenna shape



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Purpose

This report is to measure the performance of BT antenna for CBS01. The antenna operating frequency at 2.4~2.5GHz, All test data are showed as below.

Content

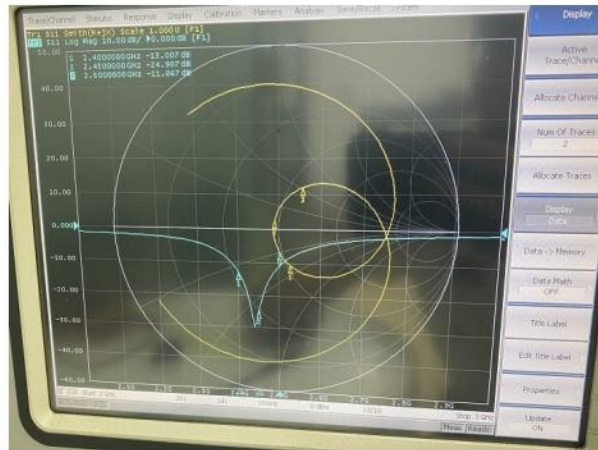
1. Product Overview & Dimension
2. Test system
3. Antenna Matching Network
4. Test Result
 - 4.1 S11 Parameter
 - 4.2 Test coordinate
 - 4.3 2D Pattern
 - 4.4 OTA Data
 - 4.5 BT Boot measured
5. Antenna Assembly & environmental processing

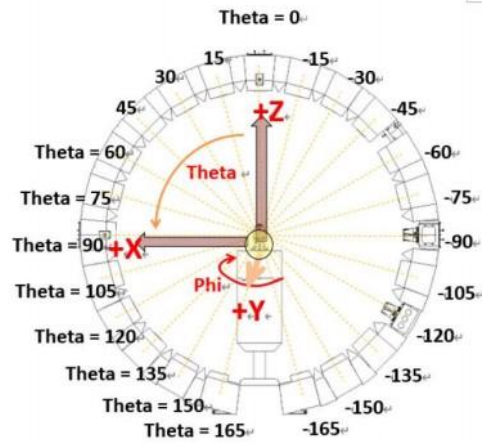
2. Test System

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



无源S11—(BT ANT)



Test Result**Sample status & coordinates**

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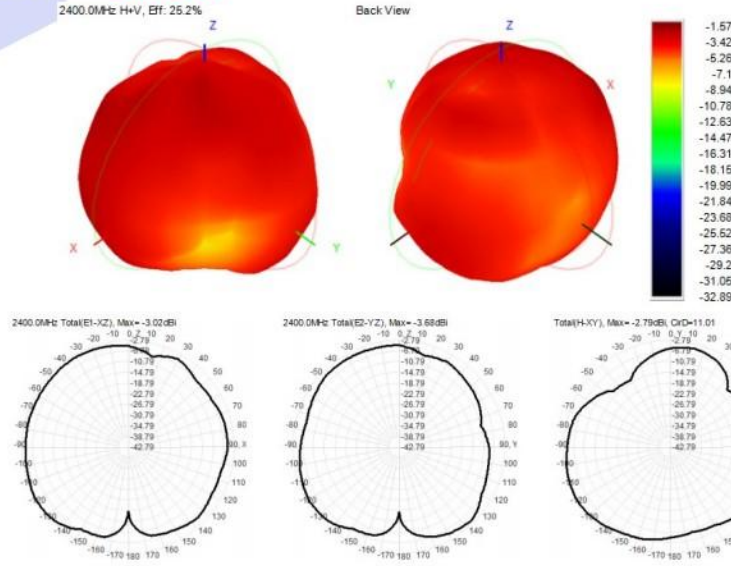
Test ResultGain & Efficiency — **BT-ANT**

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	25.25	-1.57
2410	26.57	-1.06
2420	26.52	-1.09
2430	29.04	-0.67
2440	29.29	-0.66
2450	29.57	-0.57
2460	29.96	-0.42
2470	30.62	-0.63
2480	29.30	-0.83
2490	28.31	-0.83
2500	28.01	-0.64

Test Result

2D&3D — BT- ANT

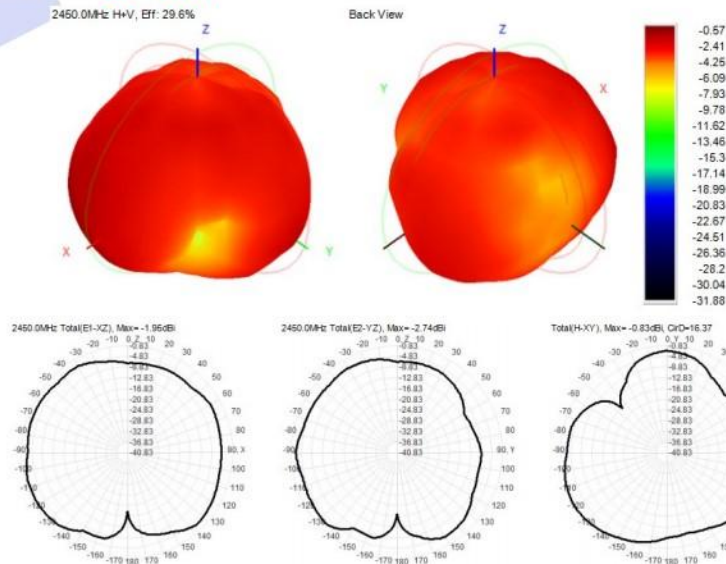
2400.0MHz H+V, Eff: 25.2%



Test Result

2D&3D — BT- ANT

2450.0MHz H+V, Eff: 29.6%

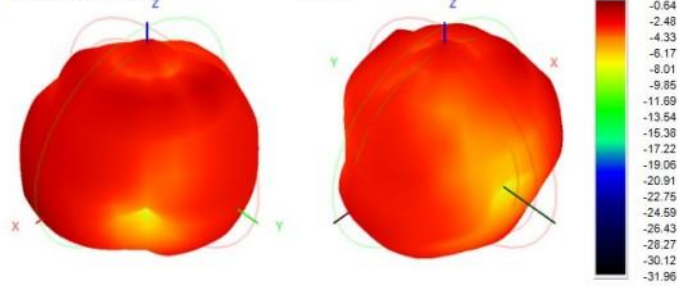


Test Result

2D&3D — BT-ANT

2500.0MHz H+V, Eff: 28.0%

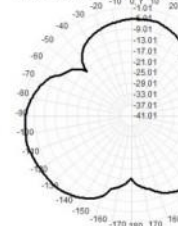
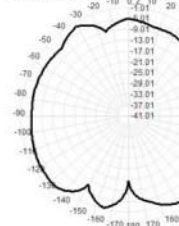
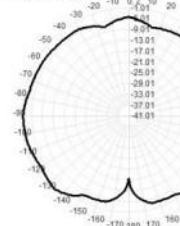
Back View



2500.0MHz Total(E1-XZ), Max=-1.90dB

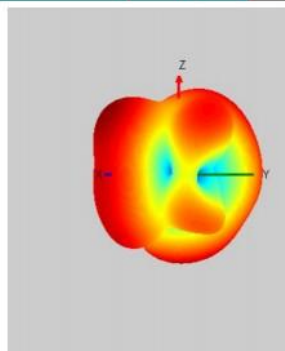
2500.0MHz Total(E2-YZ), Max=-2.85dB

Total(H+V), Max=-1.01dB, CirD=16.85



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	-1.20	-81.76
		39	-0.83	-81.35
		78	-0.36	-81.09



Thanks for your comment!

◆ 深圳市合拓科技有限公司

◆ 深圳: 深圳市宝安区西乡恒丰工业城C6栋1202B

◆ RF: 胡雪文

manufacturer:

◆ Shenzhen Hetuo Technology Co., Ltd.

◆ Shenzhen Hengfeng Industrial City, Xixiang, Bao'an District, Shenzhen Building 6, Unit 1202B