



Antenna specification

Project name:	TAV9000
Antenna name:	BT antenna assembly
Specification version number:	V2.0
Date:	2025.07.01

Antenna manufacturer: Shenzhen Sixun Communication Technology Co., Ltd.

Address: A505/506, Donglian Building, Chuangye Second Road, Dalang Community, Xixiang'an Street, Baoan District, Shenzhen



catalogue

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Change record column			
Date of establishment/change	Reason for change	Change content	version
2025.05.30	First edition issue	First edition issue	V1.0
2025.07.01	The antenna area should be increased.	The antenna area should be increased.	V2.0



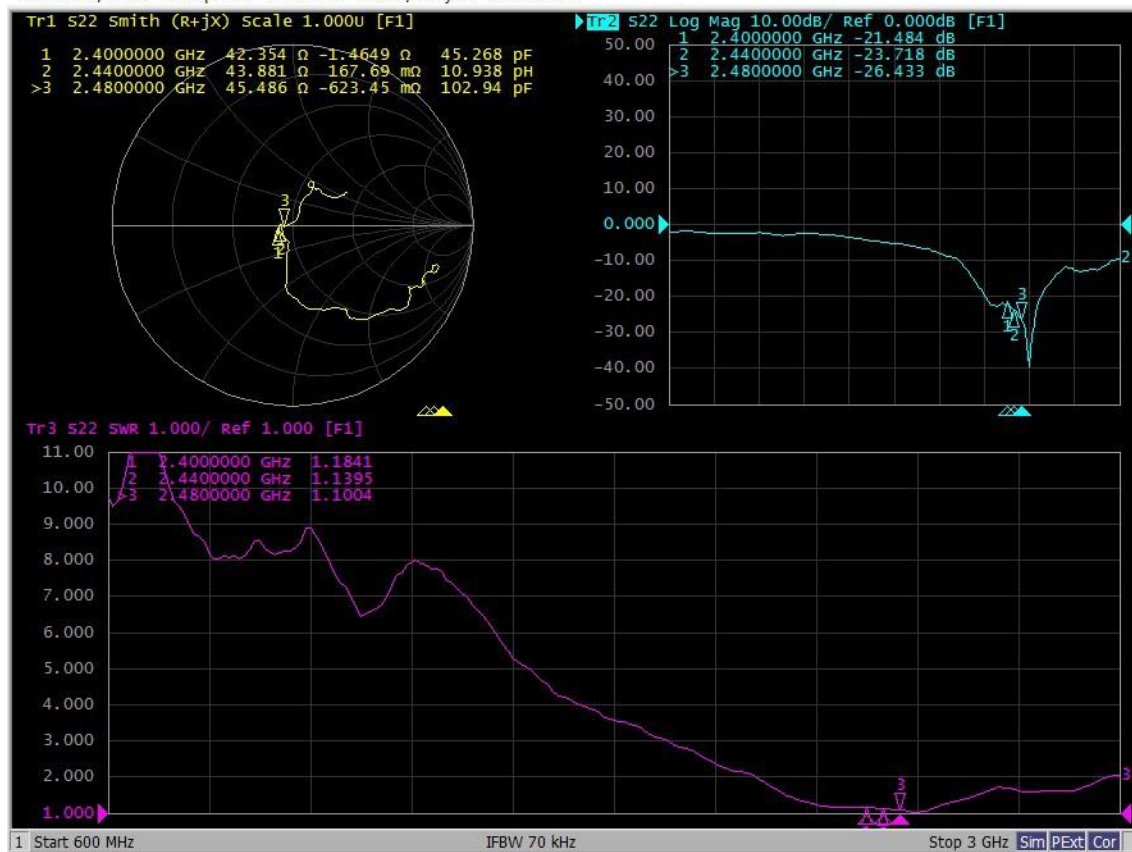
One: Passive test report



Agilent E5071C

S11 parameters of BT1 antenna:

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

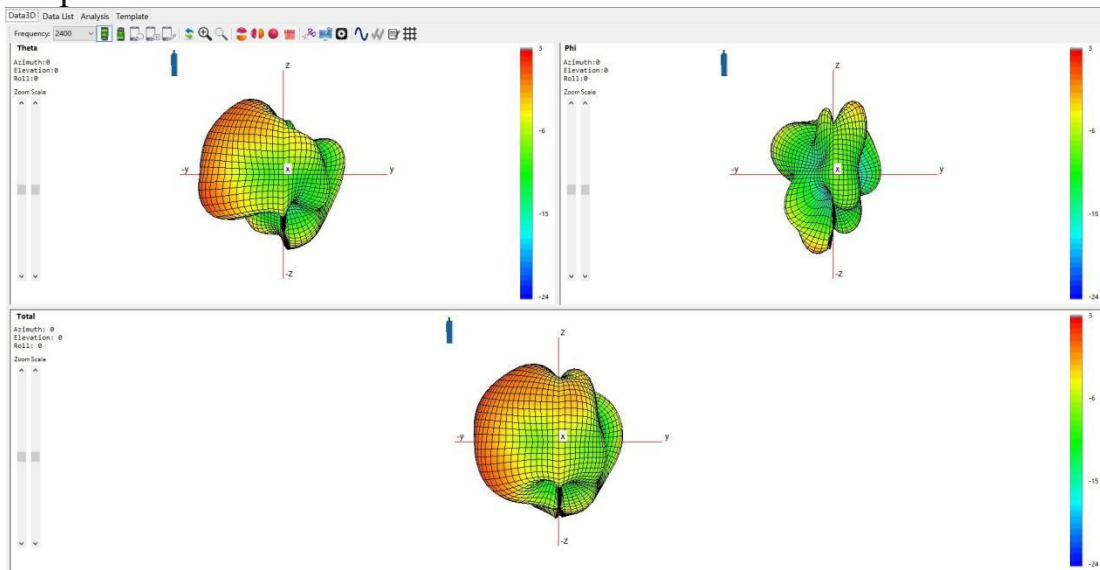




BT1 antenna efficiency and gain:

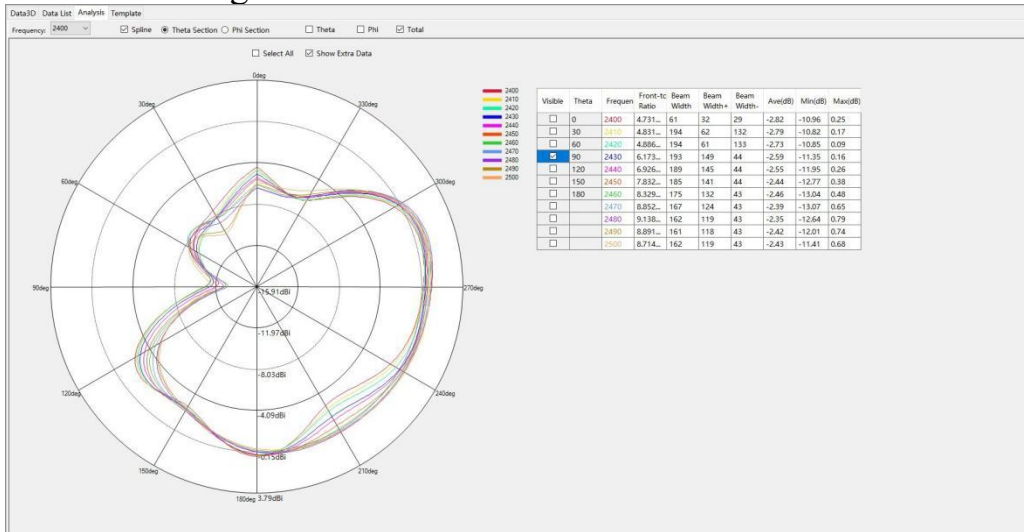
2400-2480MHz			
frequency point	Gain (dBi)	Efficiency (dB)	Efficiency%
2400	-2.7	2.6	53.6%
2410	-2.8	2.6	52.5%
2420	-2.9	2.6	51.7%
2430	-2.9	2.6	51.6%
2440	-2.9	2.5	51.2%
2450	-2.9	2.4	51.5%
2460	-2.9	2.4	51.6%
2470	-2.8	2.5	52.3%
2480	-2.8	2.6	52.9%
average value	-2.8	2.5	52.1%

3D pattern of BT1 antenna:

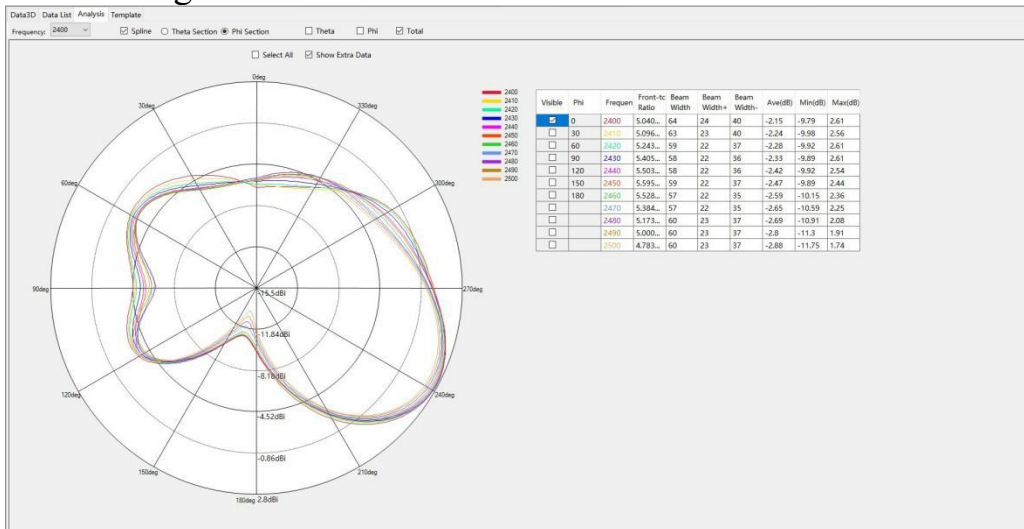




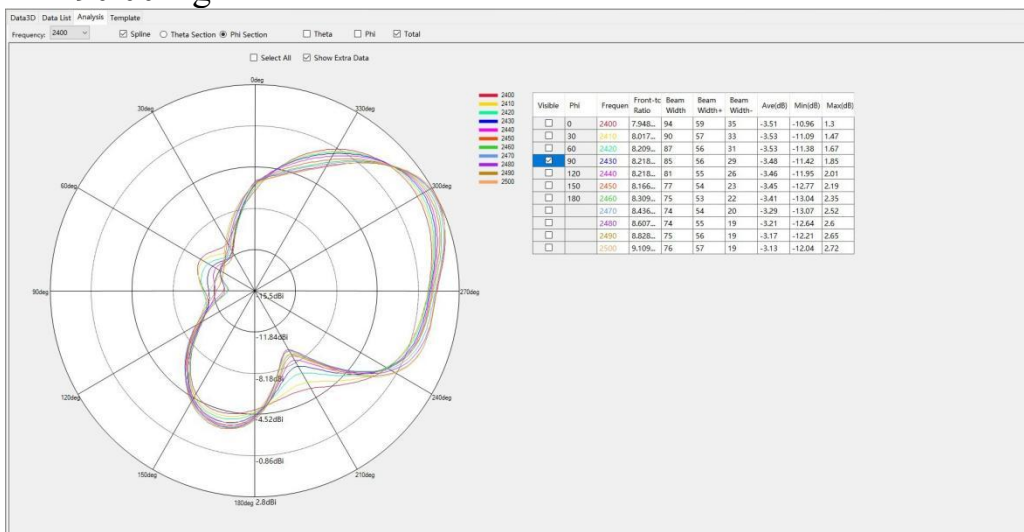
2D pattern of BT1 antenna: Theta=90.00deg



Phi=0.00deg

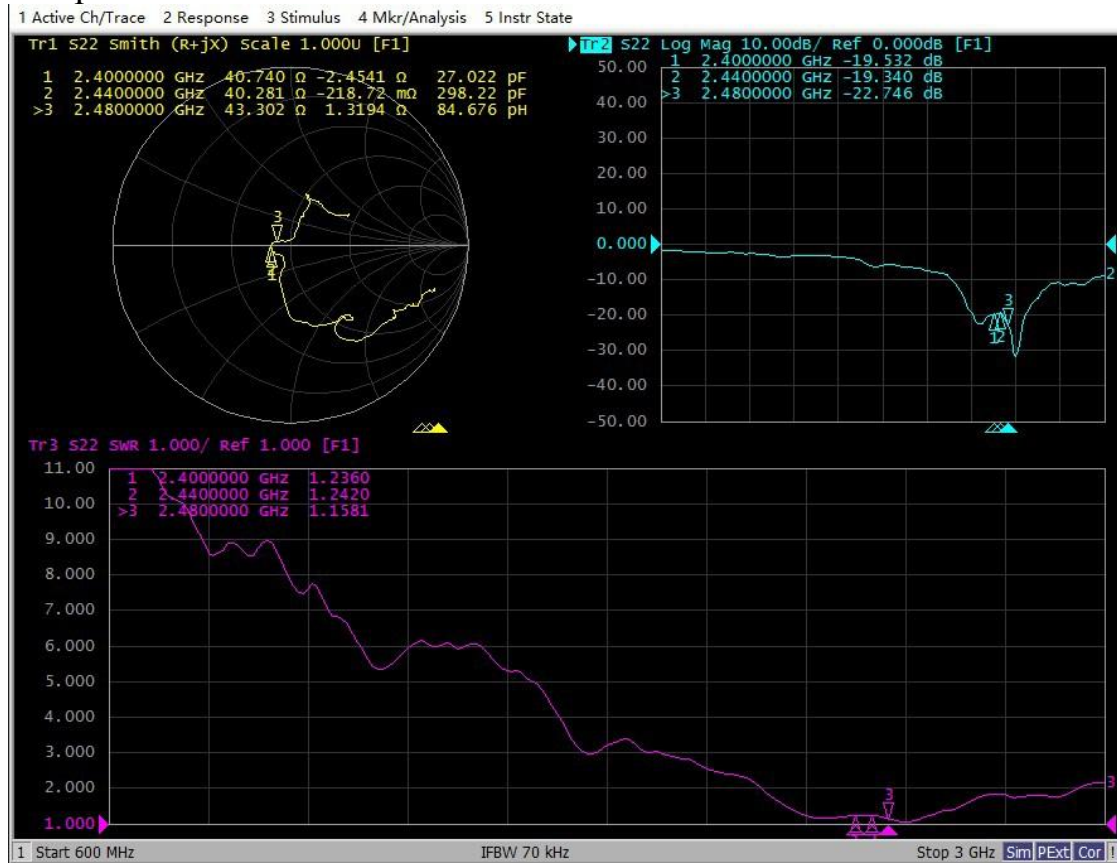


Phi=90.00deg





S11 parameters of BT2 antenna:



BT2 antenna efficiency and gain:

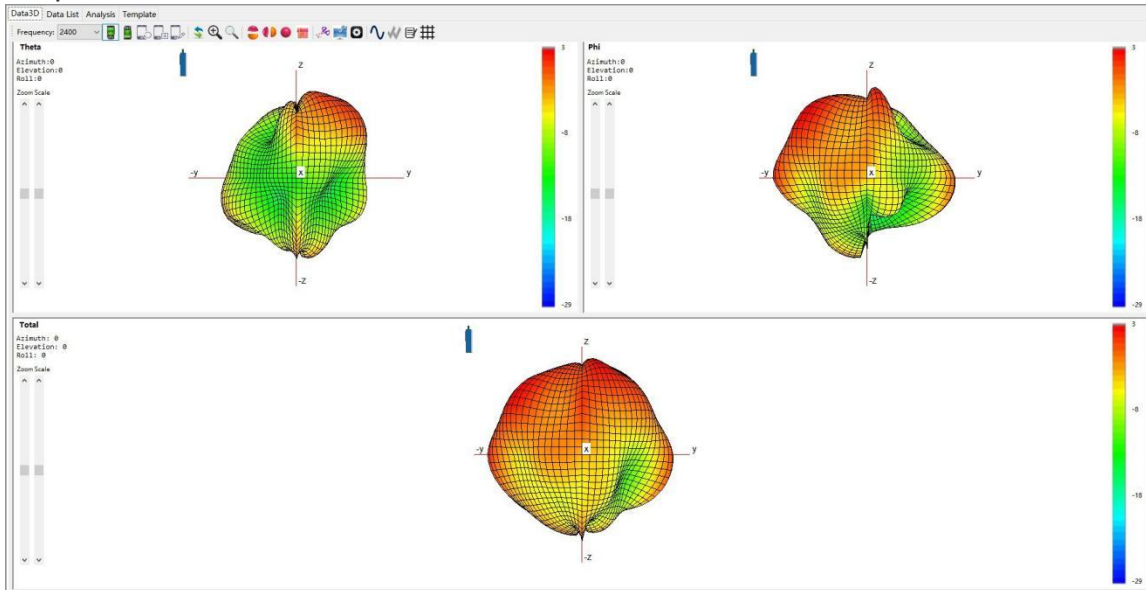
2400-2480MHz			
frequency point	Gain (dBi)	Efficiency (dB)	Efficiency%
2400	-2.4	2.8	58.1%
2410	-2.5	2.6	56.7%
2420	-2.5	2.4	55.8%
2430	-2.6	2.3	54.8%
2440	-2.7	2.2	53.9%
2450	-2.7	2.1	53.9%
2460	-2.7	2.0	53.9%
2470	-2.7	2.1	54.4%
2480	-2.6	2.1	55.4%
average	-2.6	2.3	55.2%



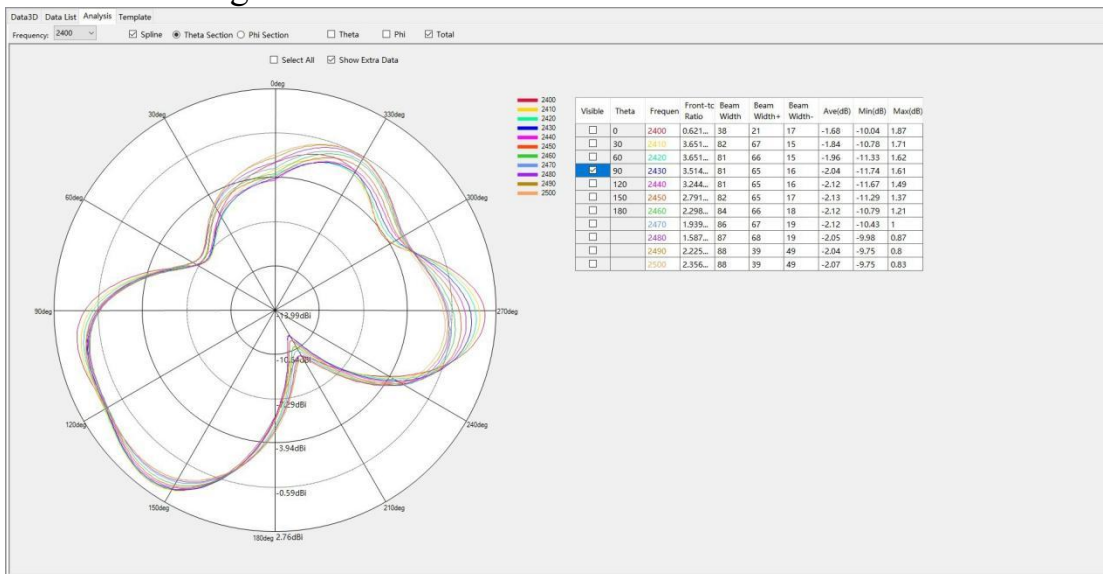
value			
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3D pattern of BT2

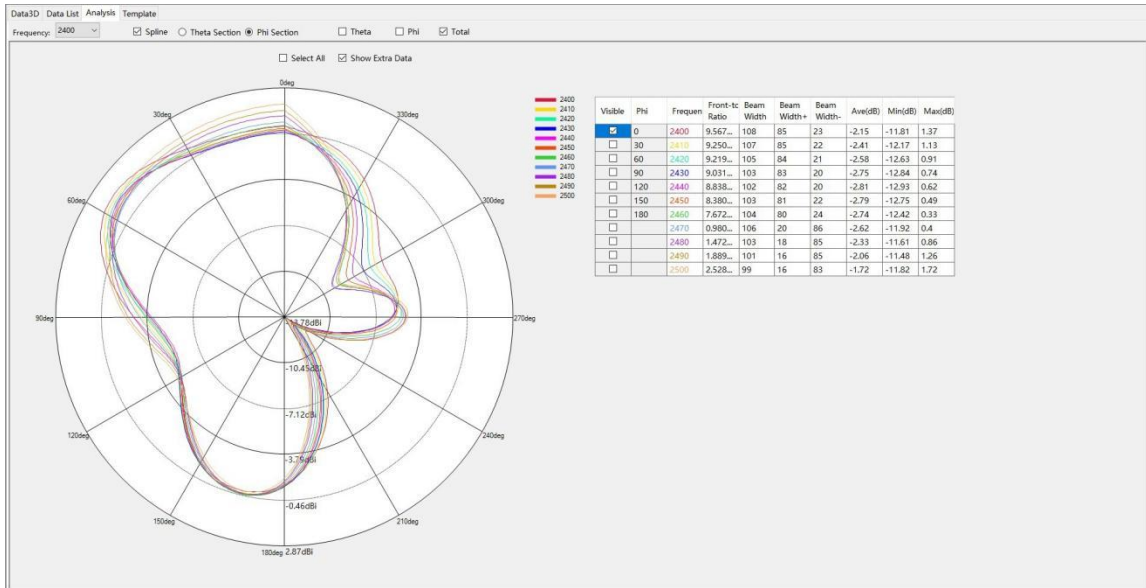


2D pattern of BT2 antenna: Theta=90.00deg

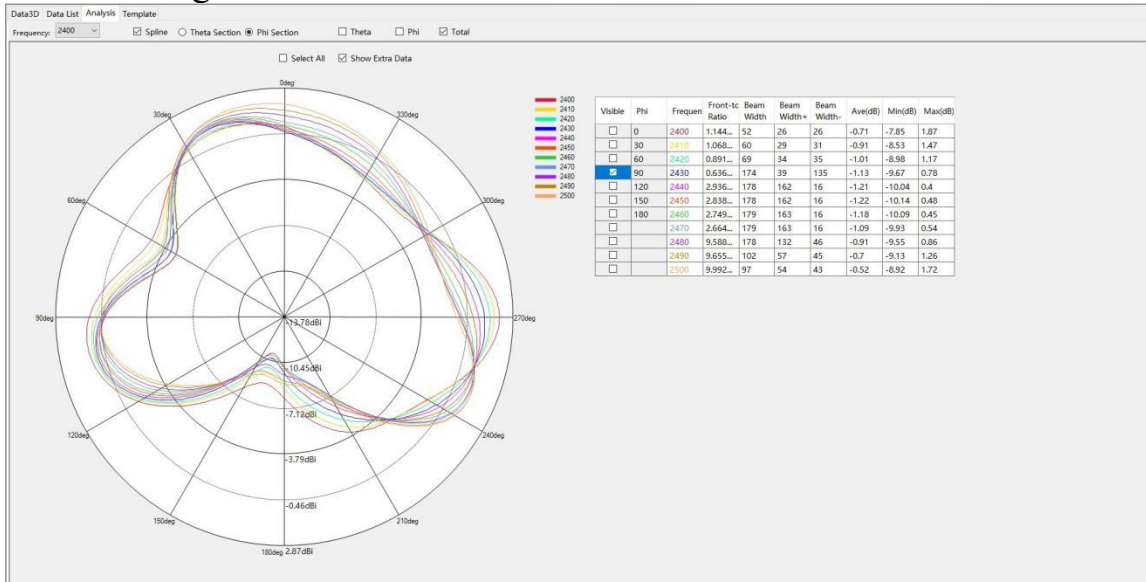




Phi=0.00deg



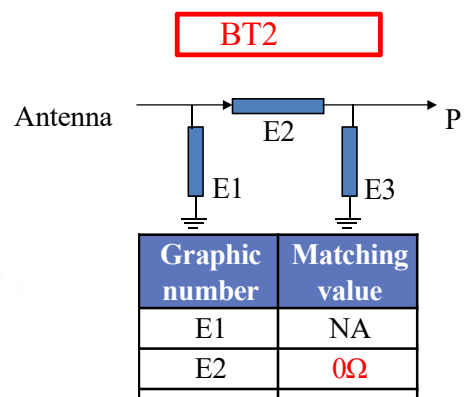
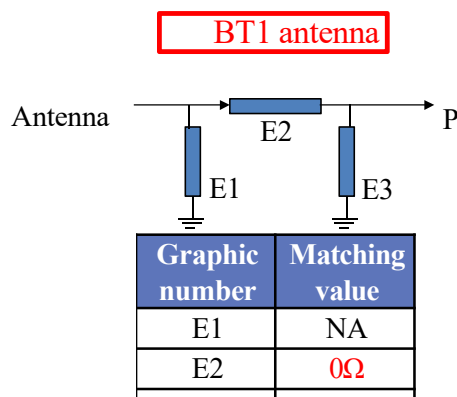
Phi=90.00deg



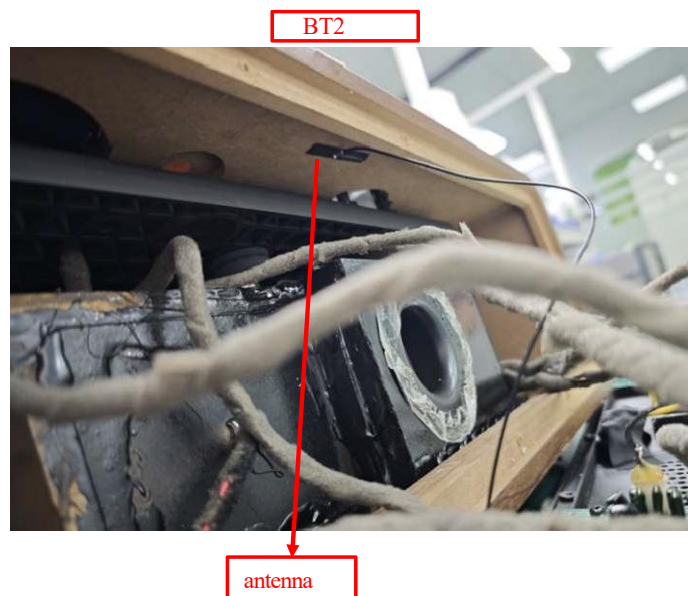
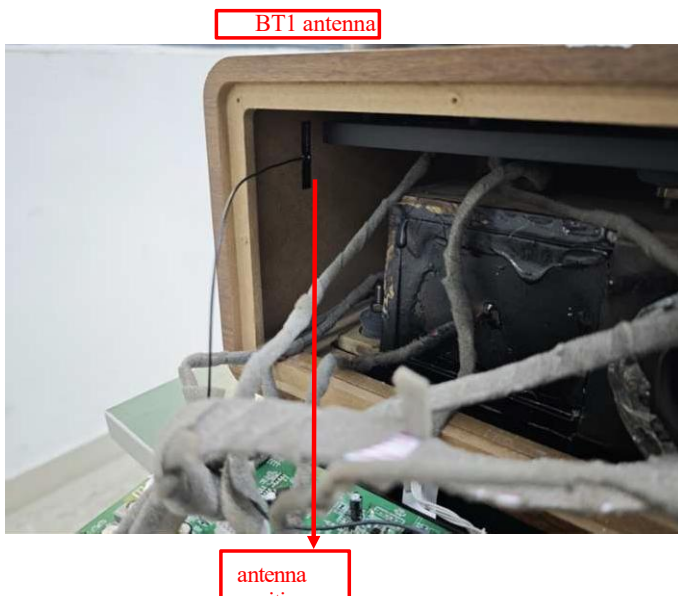
OTA Standard Chamber



Antenna matching circuit



Three: antenna placement position





Antenna structure drawing file

