



Antenna Part Specification

Project name:	D0109S (CI-X075S) Voice Recorder Project
Antenna name:	BT antenna
Antenna type:	monopole
Version:	V2.0
Date:	2026.04.08
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china



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Change record			
Compile / change date	Reason for change	Changed content	Version
2026.01.29	First edition	First edition	V1.0
2026.04.08	Antenna Optimization	Data update	V2.0



I: The report of passive data

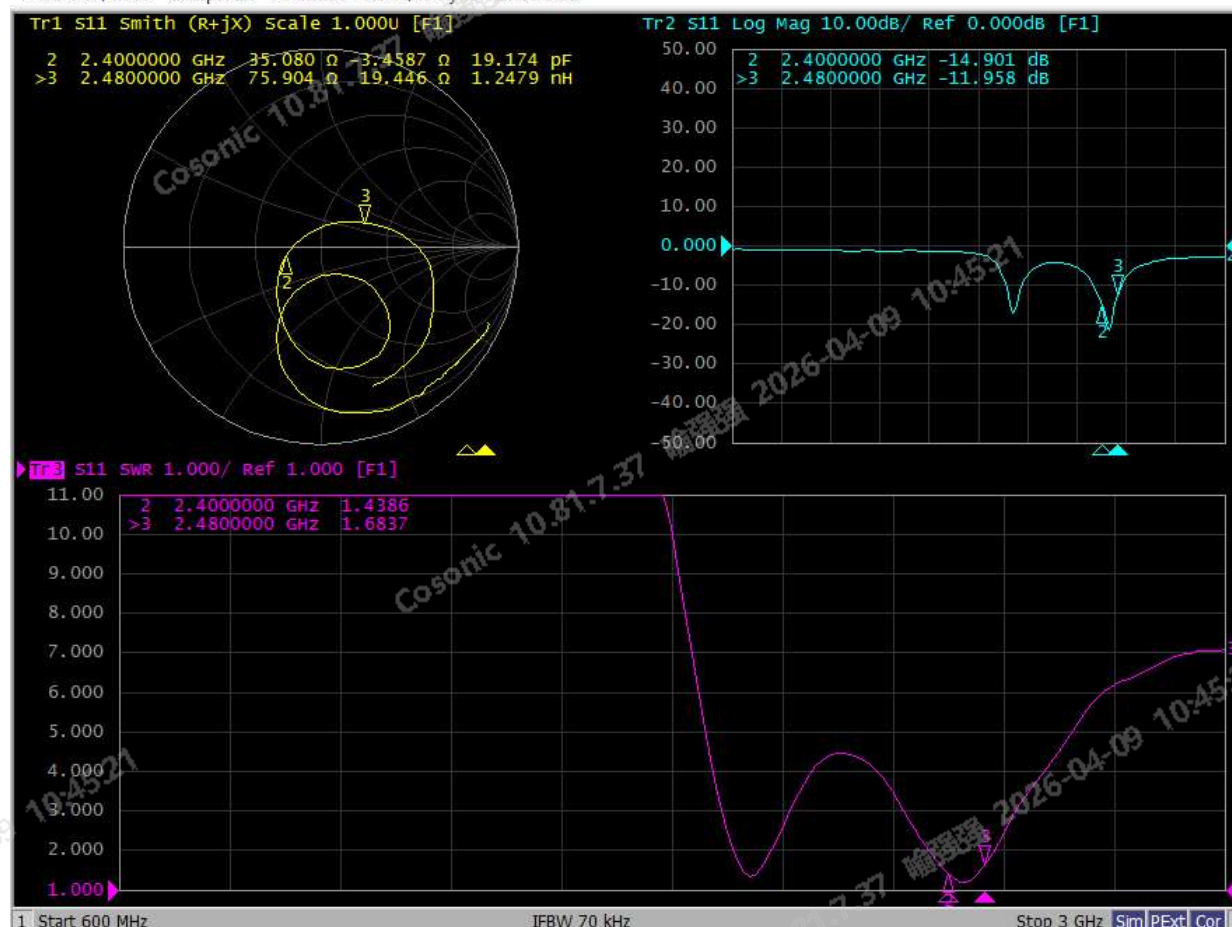


Agilent E5071C

Antenna S11 parameter:

E5071C Network Analyzer

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

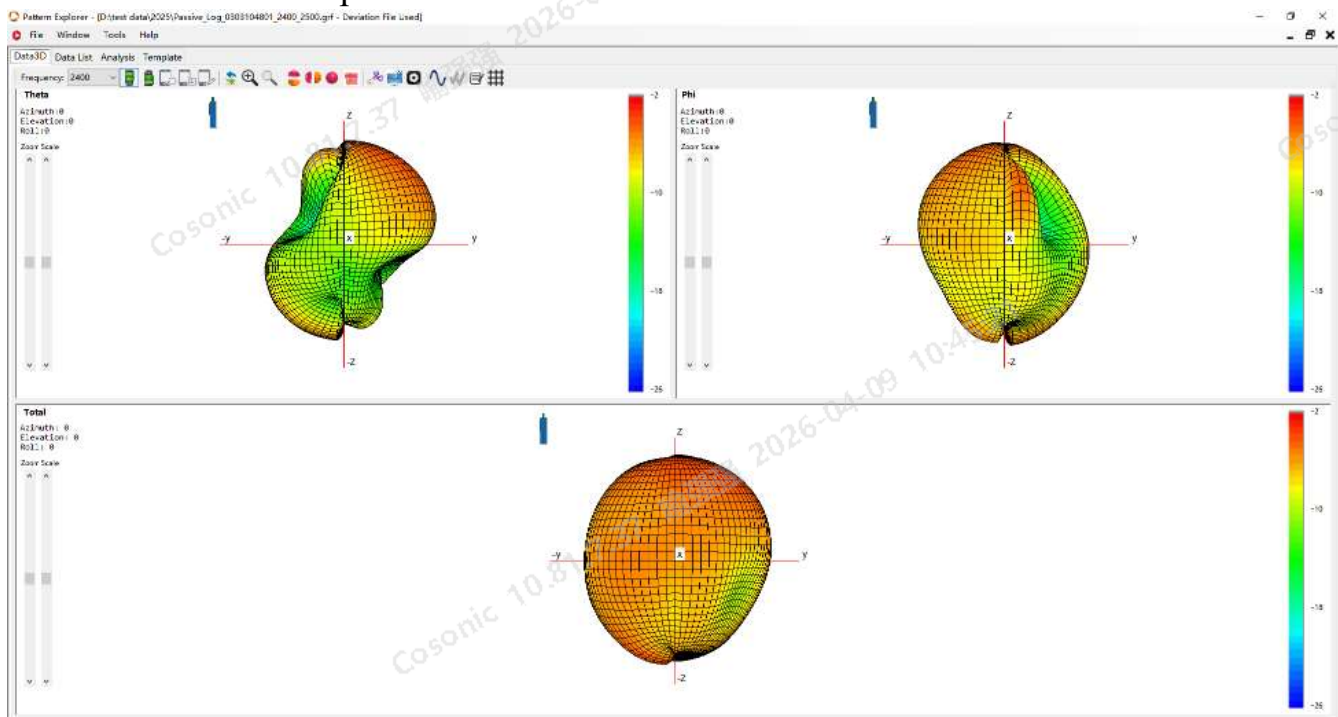




Antenna efficiency and gain:

Frequency (MHz)	Efficiency (dB)	Gain (dBi)	Efficiency (%)
2400	-5.6	-3.2	27.8
2410	-5.4	-3.0	29.1
2420	-5.2	-2.8	29.9
2430	-5.2	-2.8	30.5
2440	-5.1	-2.6	30.9
2450	-5.1	-2.6	30.8
2460	-5.3	-2.8	29.7
2470	-5.5	-2.9	28.4
2480	-5.7	-3.1	27.1
average	-5.33	-2.86	29.36

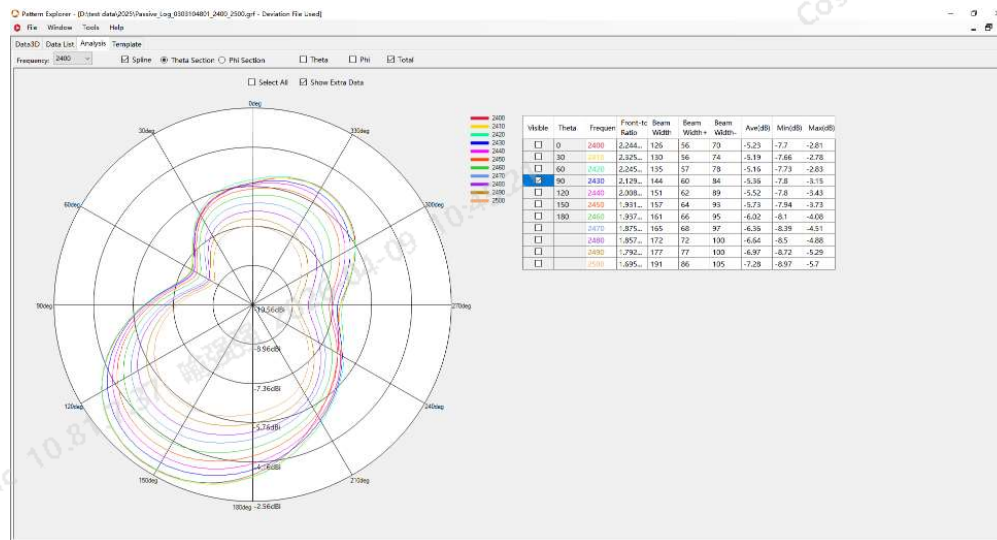
3D Antenna radiation pattern:



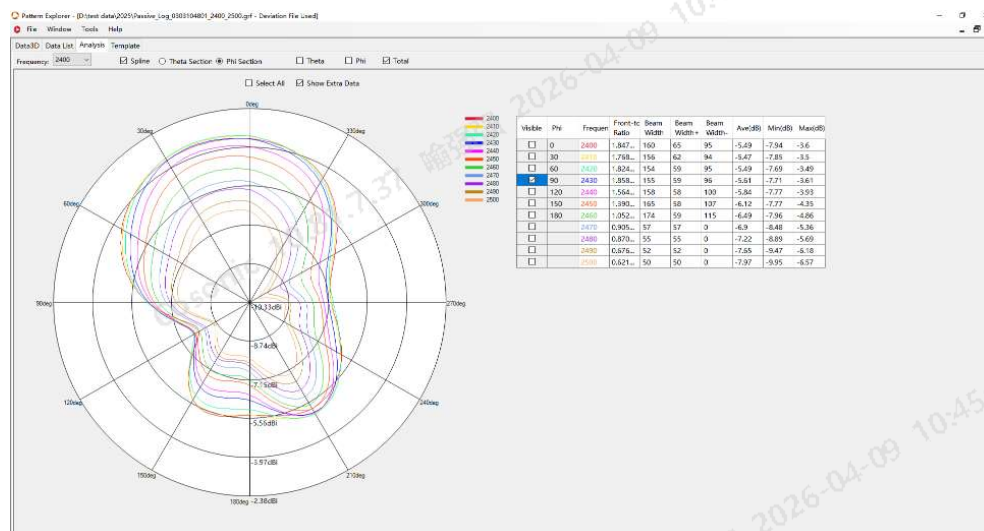


2D Antenna radiation pattern:

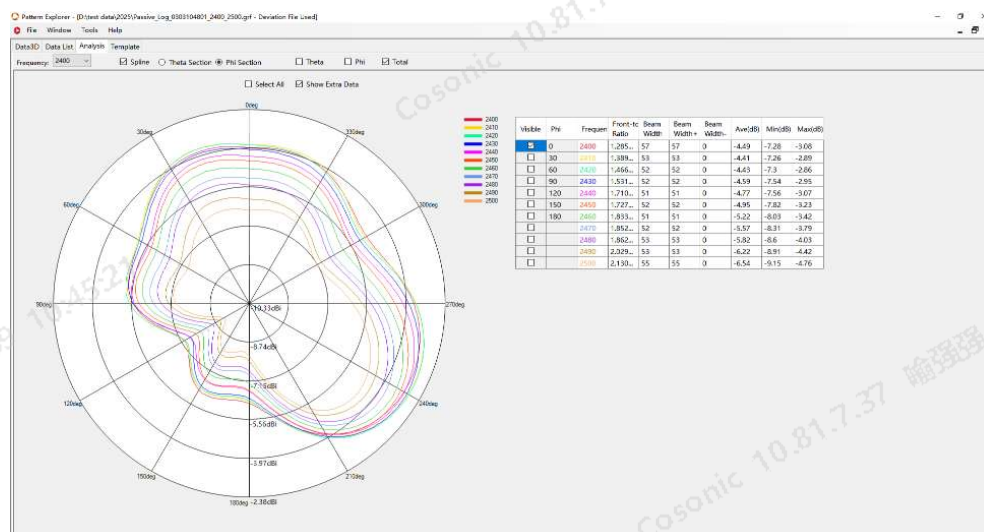
Theta = 90°



Phi=90°



Phi=0°



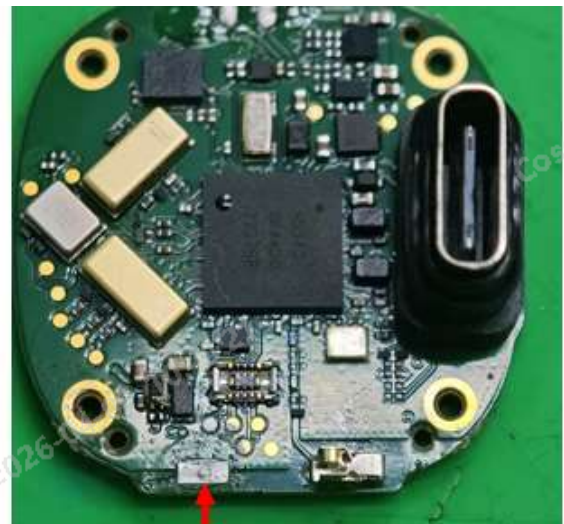


OTA Standard Chamber

II: Antenna matching circuit



Change the string position from 0R to a 1.0pF capacitor



Remove the ground feeding foot shrapnel



III: Antenna structure drawing

