



Antenna Part Specification

Customer name:	Cosonic Intelligent Technologies Co., Ltd.
Project name:	CE-2228B(T20)
Material category:	R-BT Antenna
Antenna type:	monopole
Version:	V1.0
Date:	2025.03.14
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
2025. 03. 14	First edition	First edition	V1. 0

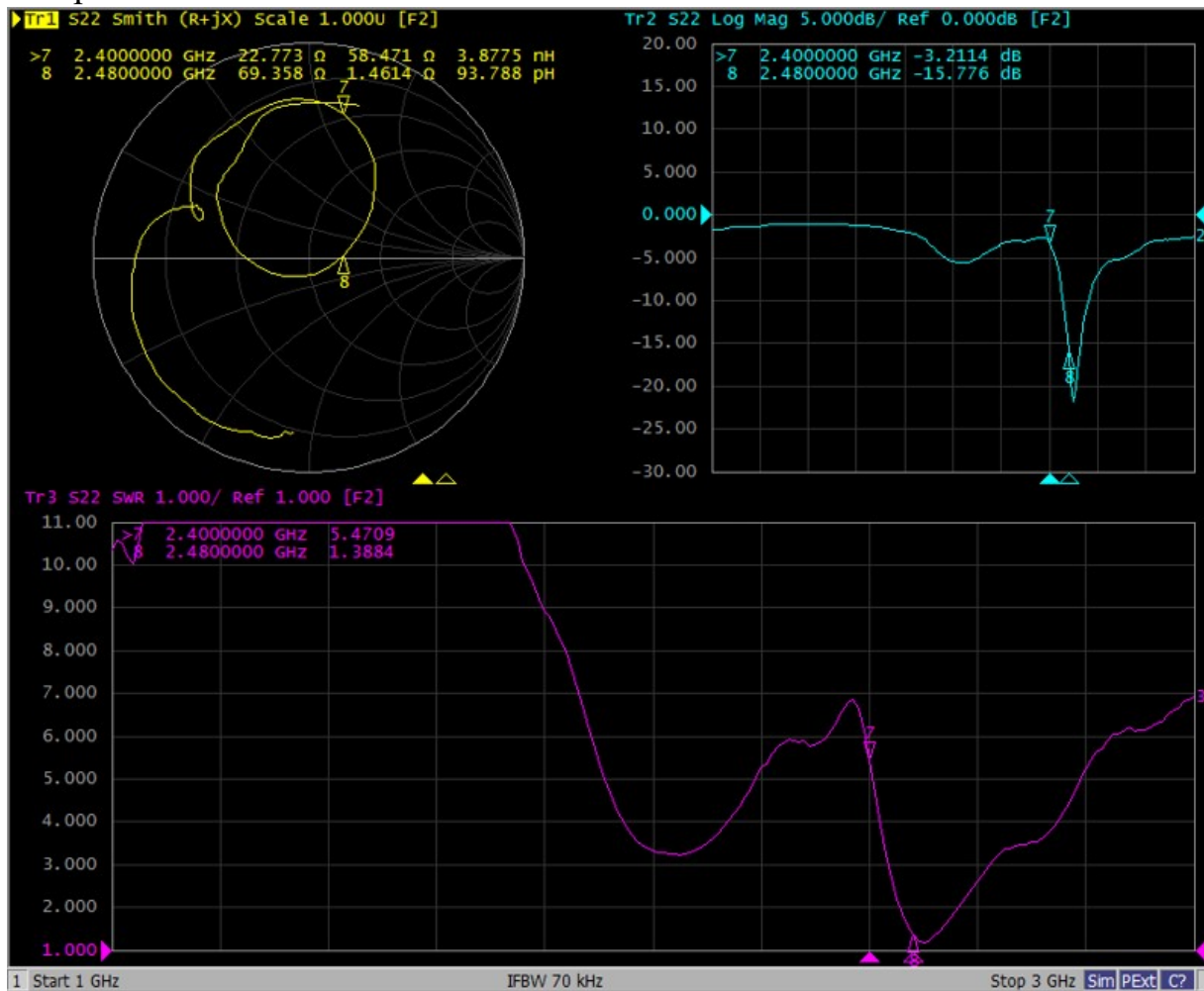


I: The report of passive data



Angilent E5071C

S11 parameter:





Left ear antenna efficiency and gain (free):

Frequency (MHz)	Gain (dBi)	efficiency (dB)	efficiency (%)
2400	-6.2	-9.1	12.2
2410	-6.1	-8.8	13.1
2420	-5.7	-8.2	15.1
2430	-5.2	-7.8	16.4
2440	-4.3	-7.2	19.2
2450	-3.5	-6.5	22.2
2460	-3.3	-6.4	22.9
2470	-3.0	-6.2	23.8
2480	-2.9	-6.1	24.4
AVG	-4.5	-7.4	18.8

2400~2480MHz

Peak Gain:-2.9dBi Min Gain: -6.2dBi Avg Gain: -4.5dBi

Left ear antenna efficiency and gain (headform):

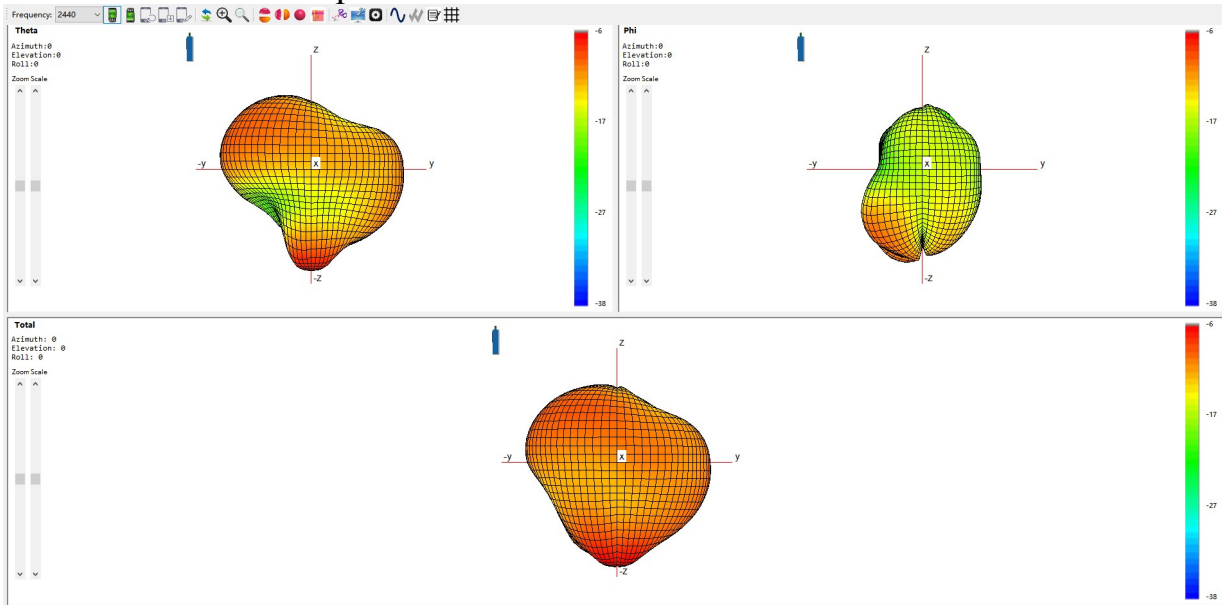
Frequency (MHz)	Gain (dBi)	efficiency (dB)	efficiency (%)
2400	-8.8	-13.1	4.9
2410	-8.5	-12.6	5.5
2420	-8.4	-12.3	5.9
2430	-8.4	-12.2	6.0
2440	-7.8	-11.8	6.5
2450	-7.3	-11.7	6.7
2460	-6.5	-11.3	7.5
2470	-6.0	-11.0	8.0
2480	-6.0	-11.2	7.6
AVG	-7.5	-11.9	6.5

2400~2480MHz

Peak Gain:-6.0dBi Min Gain:-8.8dBi Avg Gain:-7.5dBi

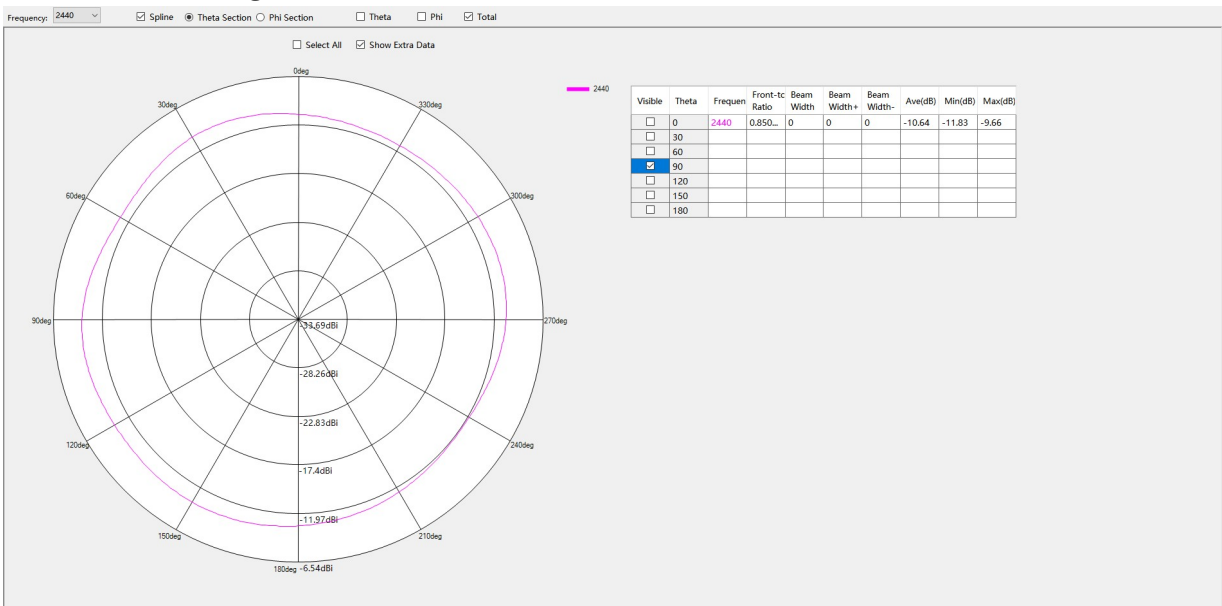


3D Antenna radiation pattern:



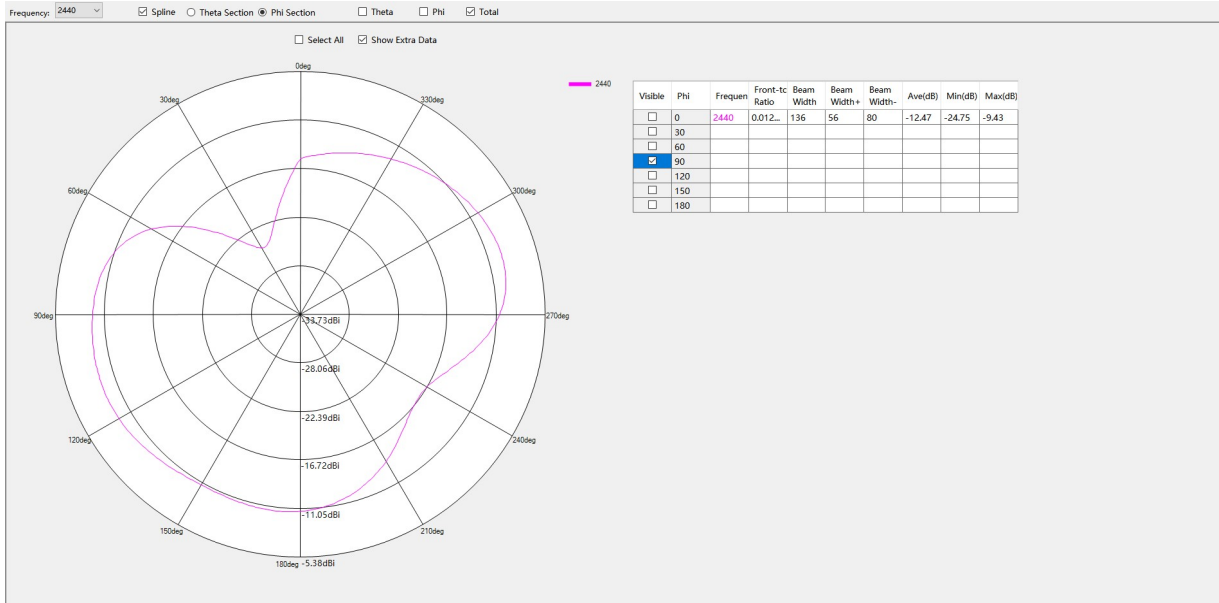
Antenna radiation pattern:

Theta=90.00deg

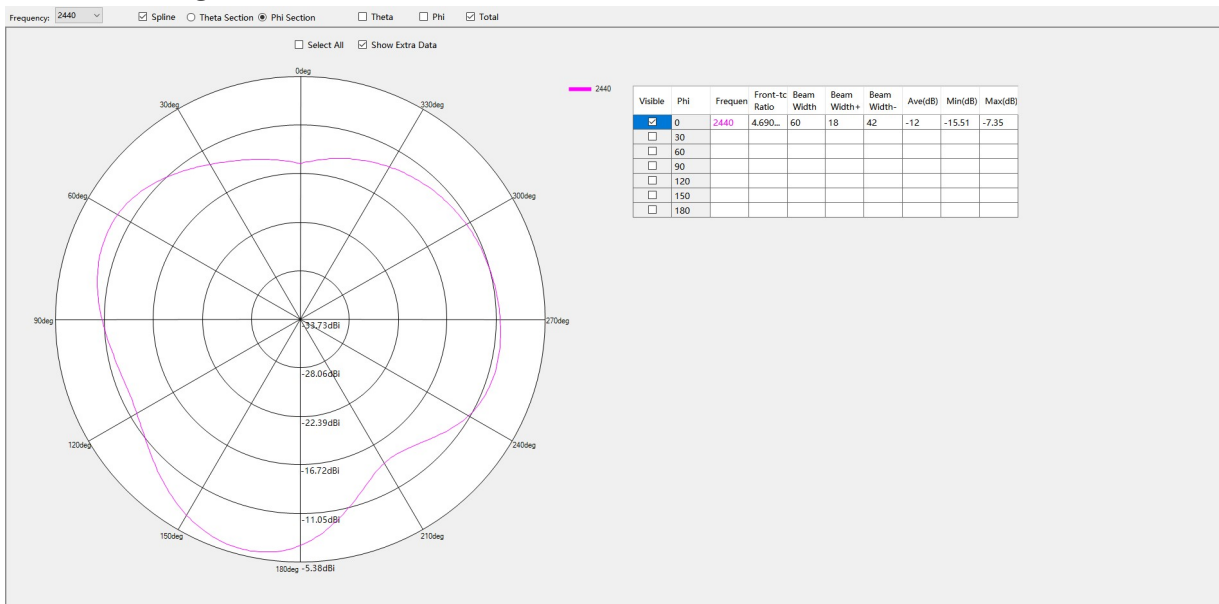




Phi=90.00deg



Phi=0.00deg





II: Antenna active test data

50:1B:6A:EA:4C:51		free		headform	
1#	Channel	TRP	TIS	TRP	TIS
R	CH 0	4.8	-90.9	1.8	-86.8
	CH 39	6.5	-92.0	2.9	-87.1
	CH 78	6.8	-91.5	2.7	-86.0
	AVG	6.0	-91.4	2.4	-86.6



OTA Standard Chamber

[illegible]