



Antenna Specification

Customers:	Best Link Chip
Project name:	EPA713
Material category:	R- BT antenna
Antenna type:	monopole antenna
Version:	V2.0
Date:	2024.09.12

Manufacturer: Shenzhen Cicent Communication Technology Co., Ltd

Address: A505/506 Donglian Building, Chuangye 2nd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen City, Guangdong Province



Catalogue

I: The report of passive data	3
II: 3D Active test report of antenna	8
III: Structure file	9

Change record			
Compile / change date	Reason for change	Changed content	Version
2024.07.25	First edition	First edition	V1.0
2024.09.12	Antenna performance optimization	Antenna performance optimization	V2.0

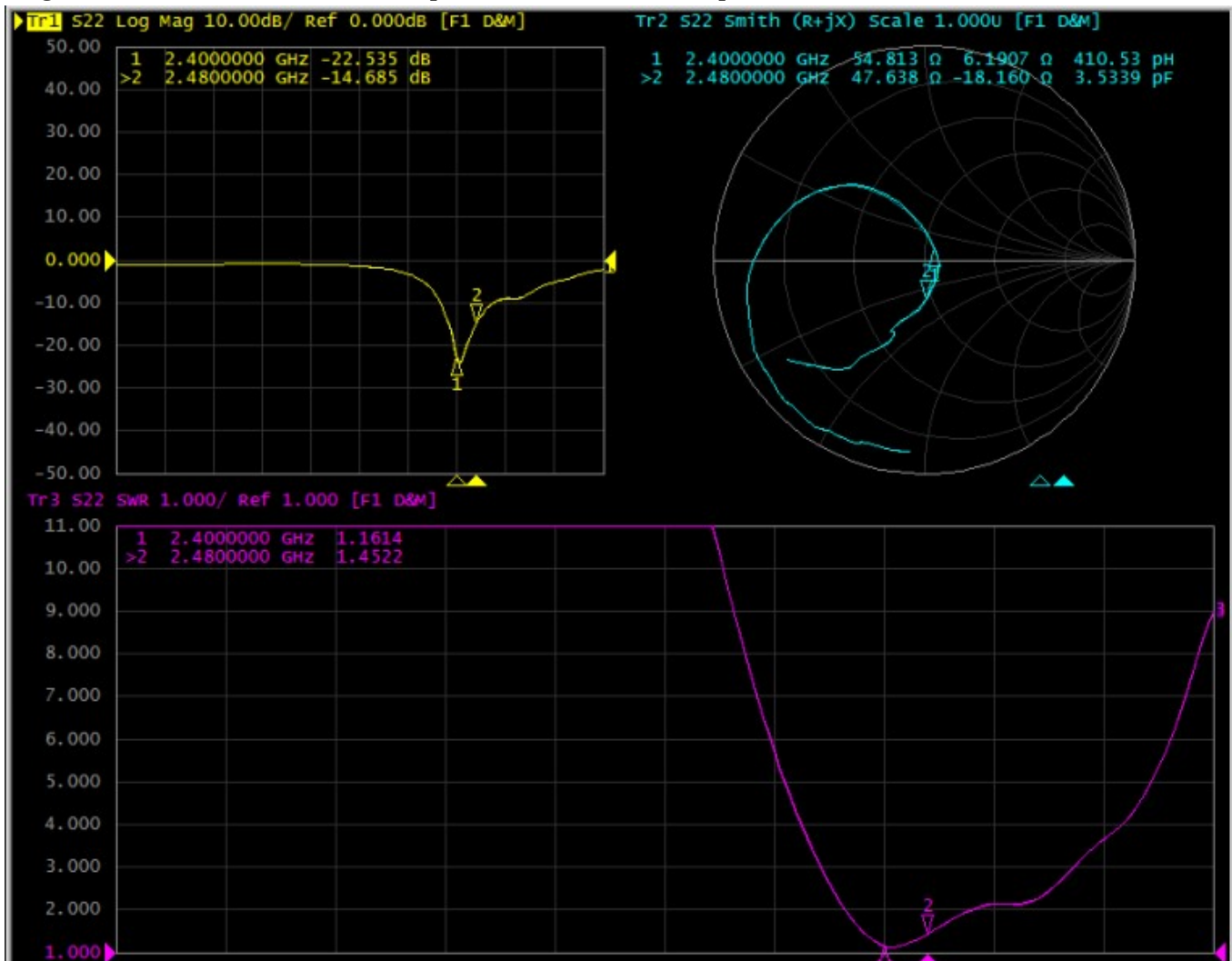


I: The report of passive data



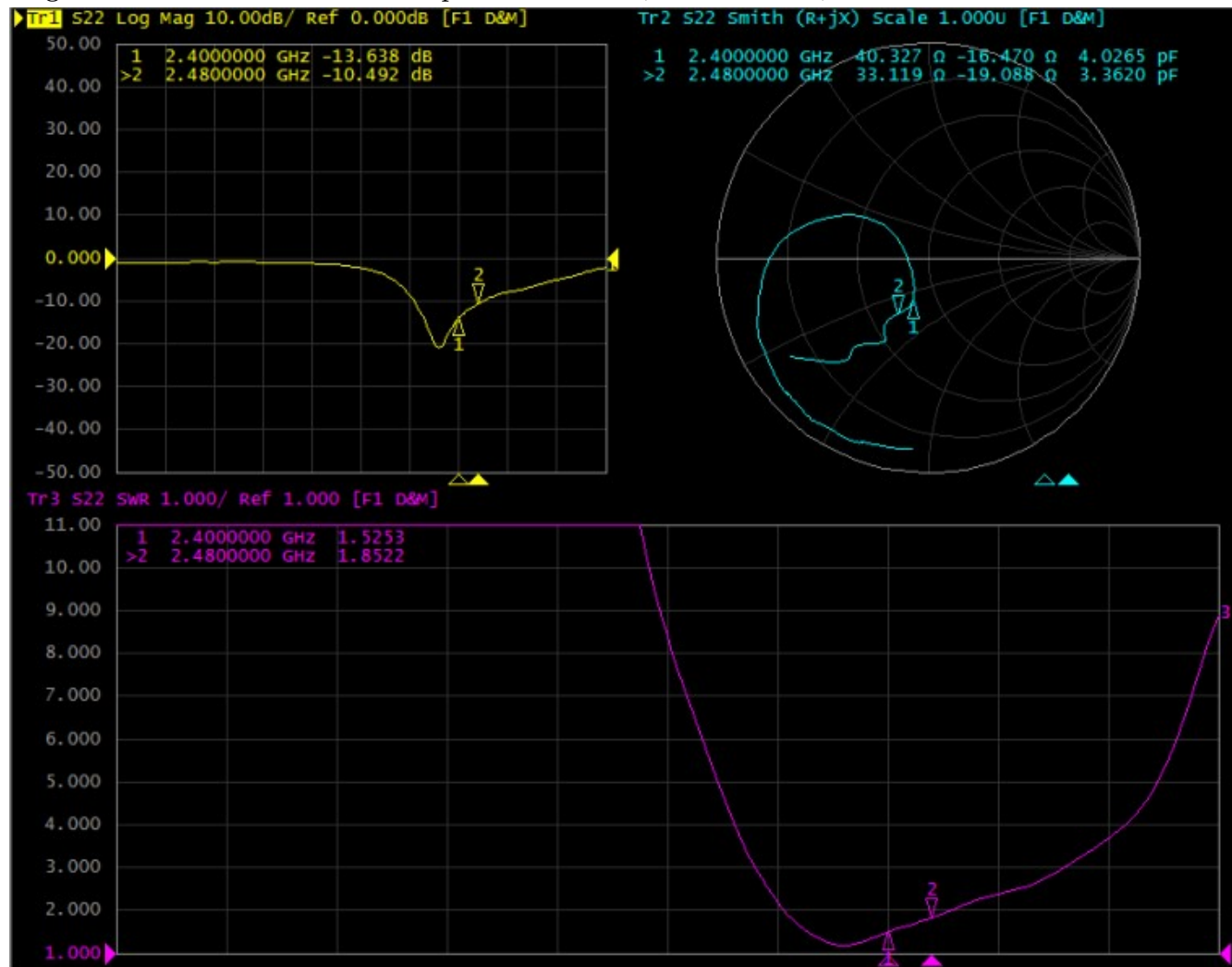
Angilent E5071C

Right ear BT antenna S11 parameter (free space)





Right ear BT antenna S11 parameters (head model)

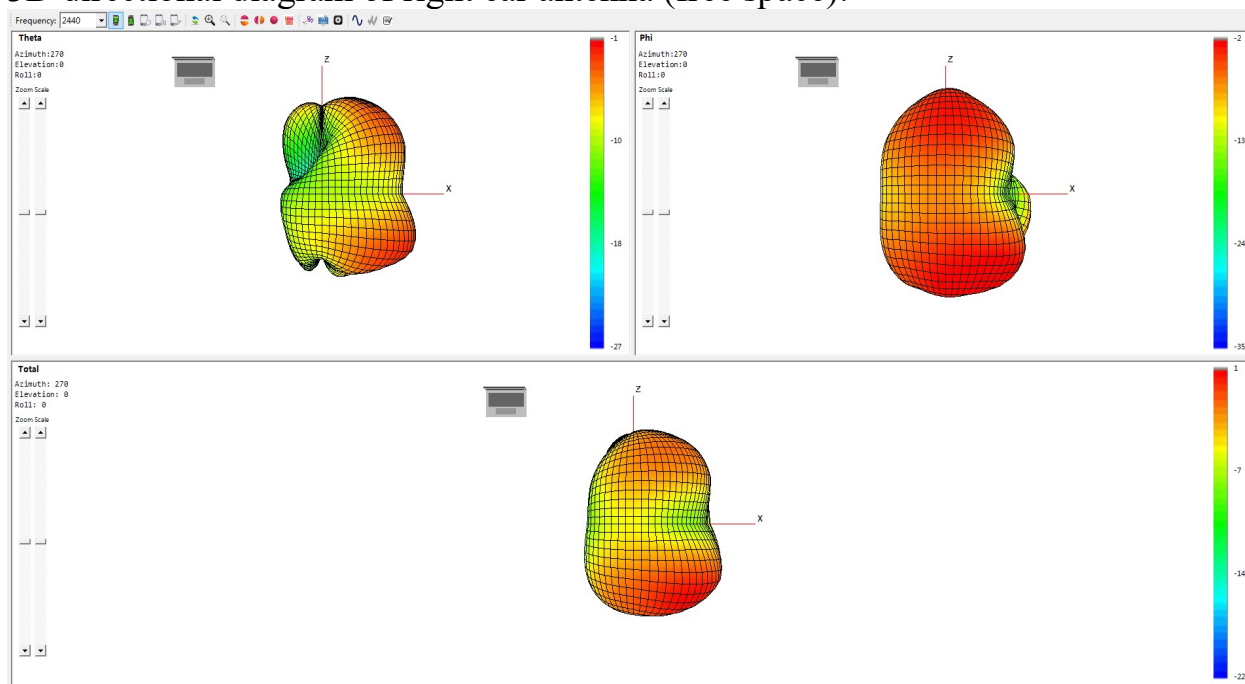


Right ear BT antenna efficiency and gain:

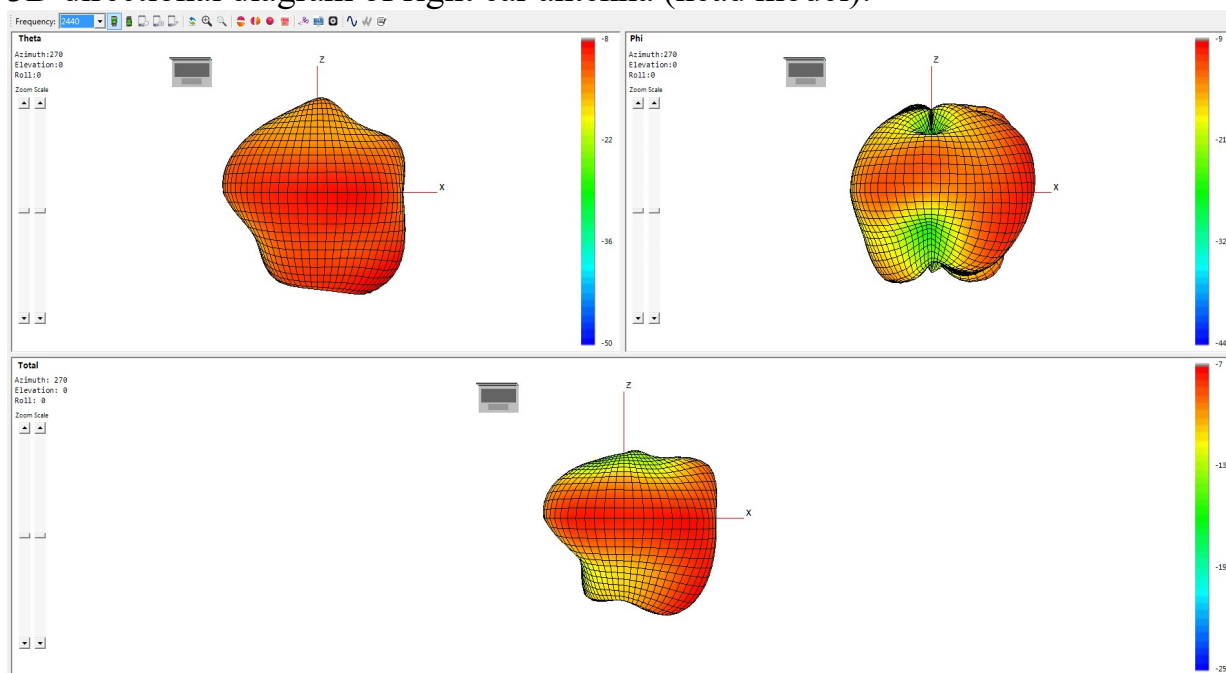
Free space				R	Head			
Freq (MHz)	Gain	Eff_dB	Eff (%)		Freq (MHz)	Gain	Eff_dB	Eff (%)
2400	0.7	-5.4	29.0		2400	-6.6	-12.1	6.2
2410	0.5	-5.4	29.1		2410	-6.6	-12.2	6.1
2420	0.8	-5.4	29.1		2420	-6.5	-12.1	6.2
2430	0.5	-5.0	31.7		2430	-6.9	-12.3	5.9
2440	0.2	-5.2	30.3		2440	-7.2	-12.6	5.6
2450	0.2	-5.1	30.8		2450	-6.9	-12.5	5.7
2460	-0.1	-5.2	30.0		2460	-6.9	-12.5	5.6
2470	0.1	-5.0	31.9		2470	-6.5	-12.2	6.0
2480	0.1	-5.0	31.5		2480	-6.3	-12.0	6.3
2490	-0.1	-5.3	29.6		2490	-6.3	-12.2	6.0
2500	-0.2	-5.4	28.7		2500	-6.3	-12.3	5.9
average value	0.2	-5.2	30.2		average value	-6.6	-12.3	5.9



3D directional diagram of right ear antenna (free space):



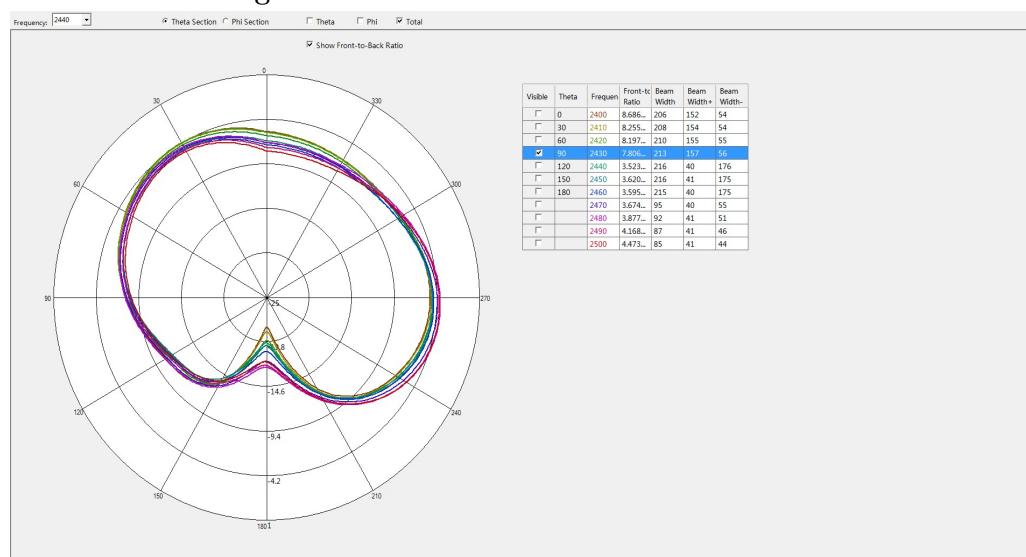
3D directional diagram of right ear antenna (head model):



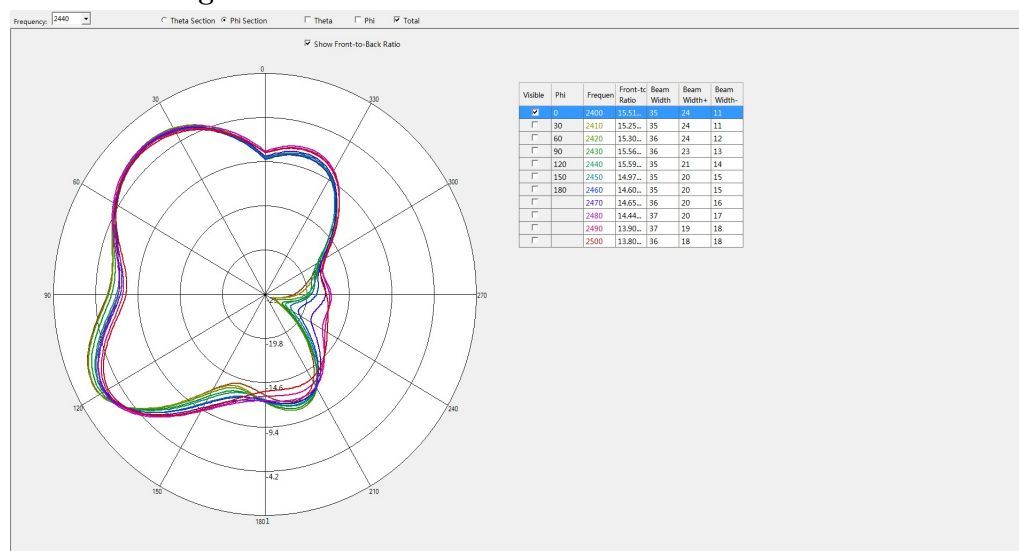


2D directional pattern of right ear antenna (free space):

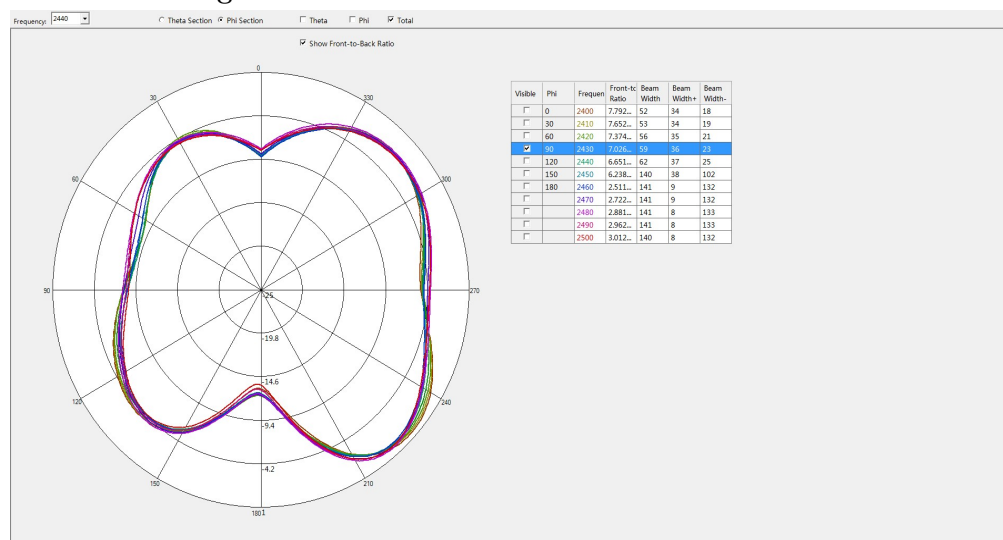
Theta=90.00deg



Phi=0.00deg

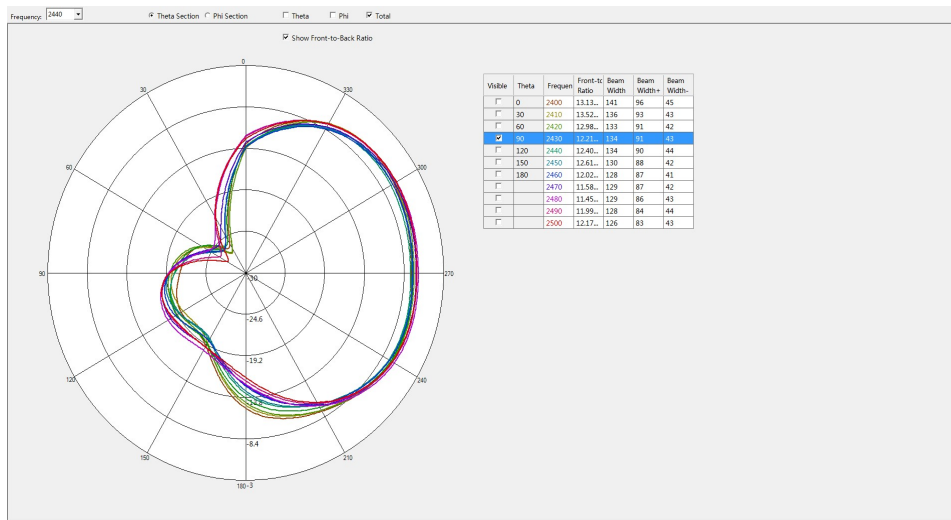


Phi=90.00deg

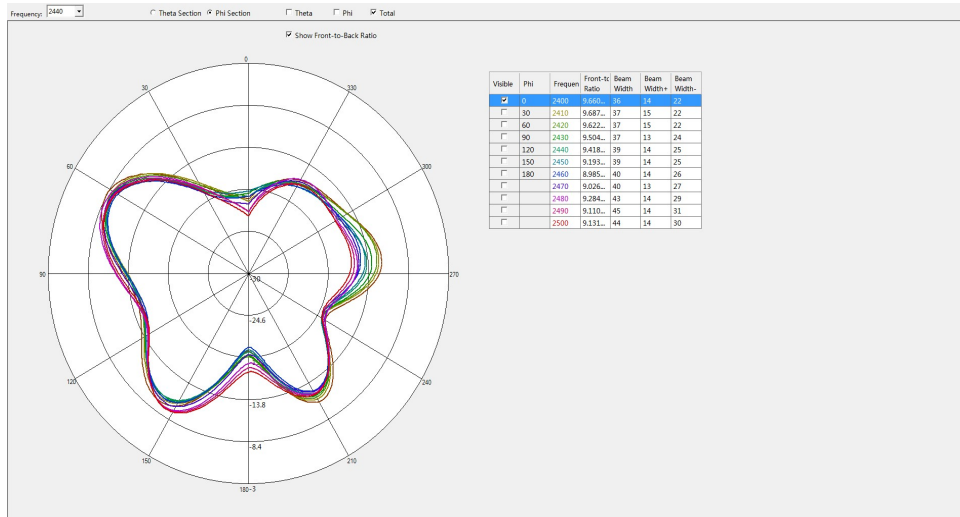




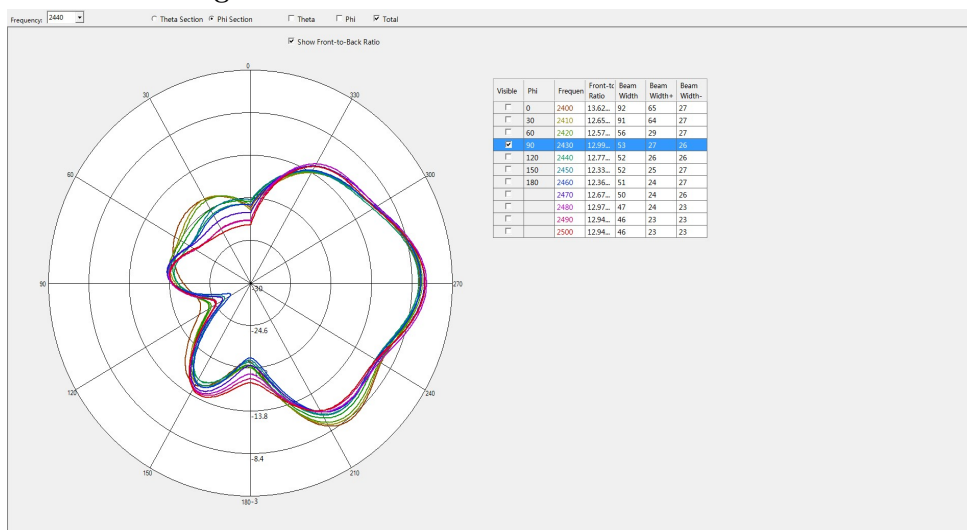
2D directional diagram of right ear antenna (head model): Theta=90.00deg



Phi=0.00deg



Phi=90.00deg





II: 3D Active test report of antenna

		FS		Hand	
	Channel	TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
R	CH 0	3.8	-89.1	-7.3	-78.3
	CH 39	2.9	-89.0	-8.0	-78.2
	CH 78	2.0	-88.3	-8.5	-77.6



OTA Standard Chamber



III: Structure file

