



Antenna Specification

Customers:	Best Link Chip
Project name:	EPA713
Material category:	L- 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	Versio n
2024.07.25	First edition	First edition	V1.0
2024.09.12	Antenna performance optimization	Antenna performance optimization	V2.0

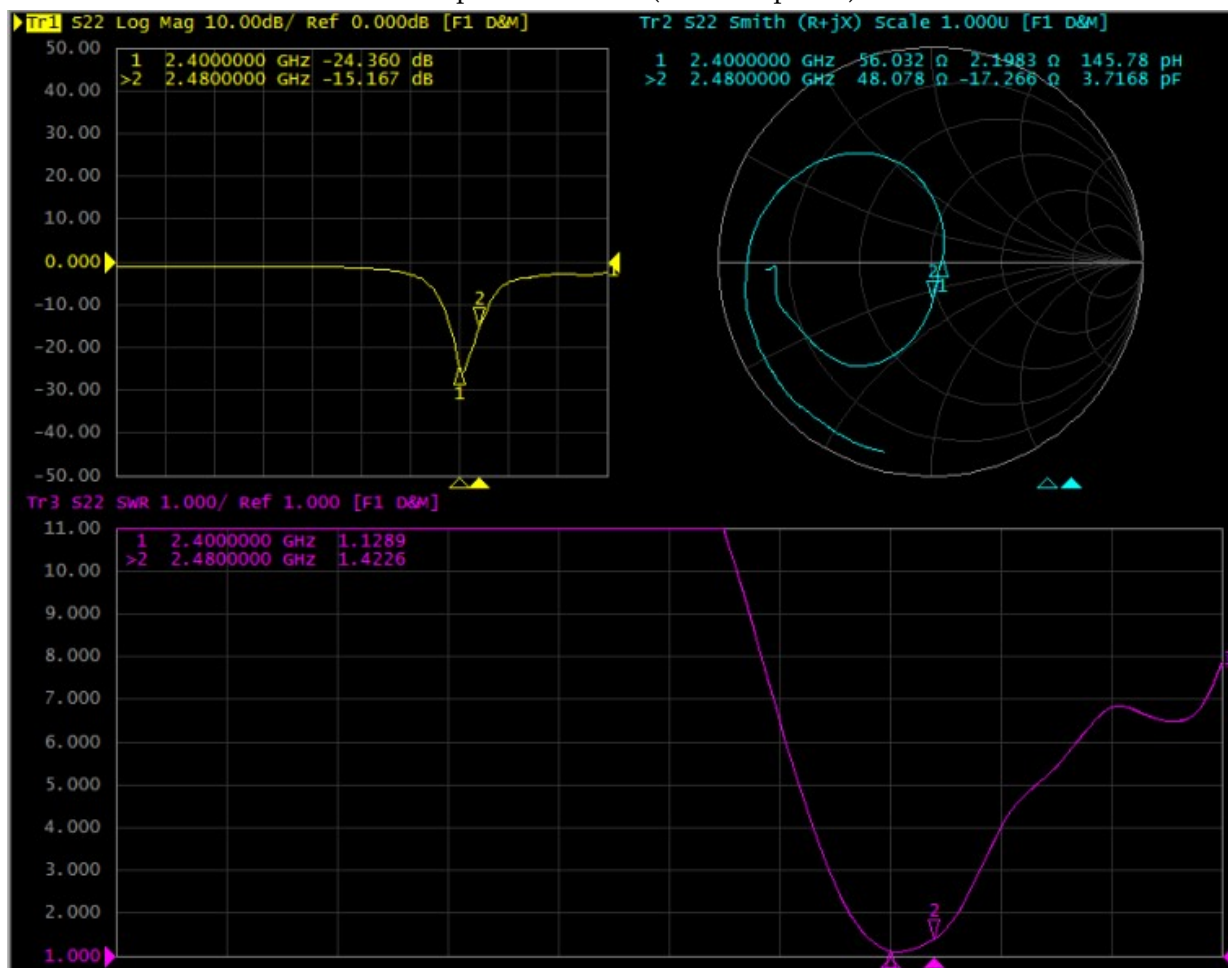


I: The report of passive data



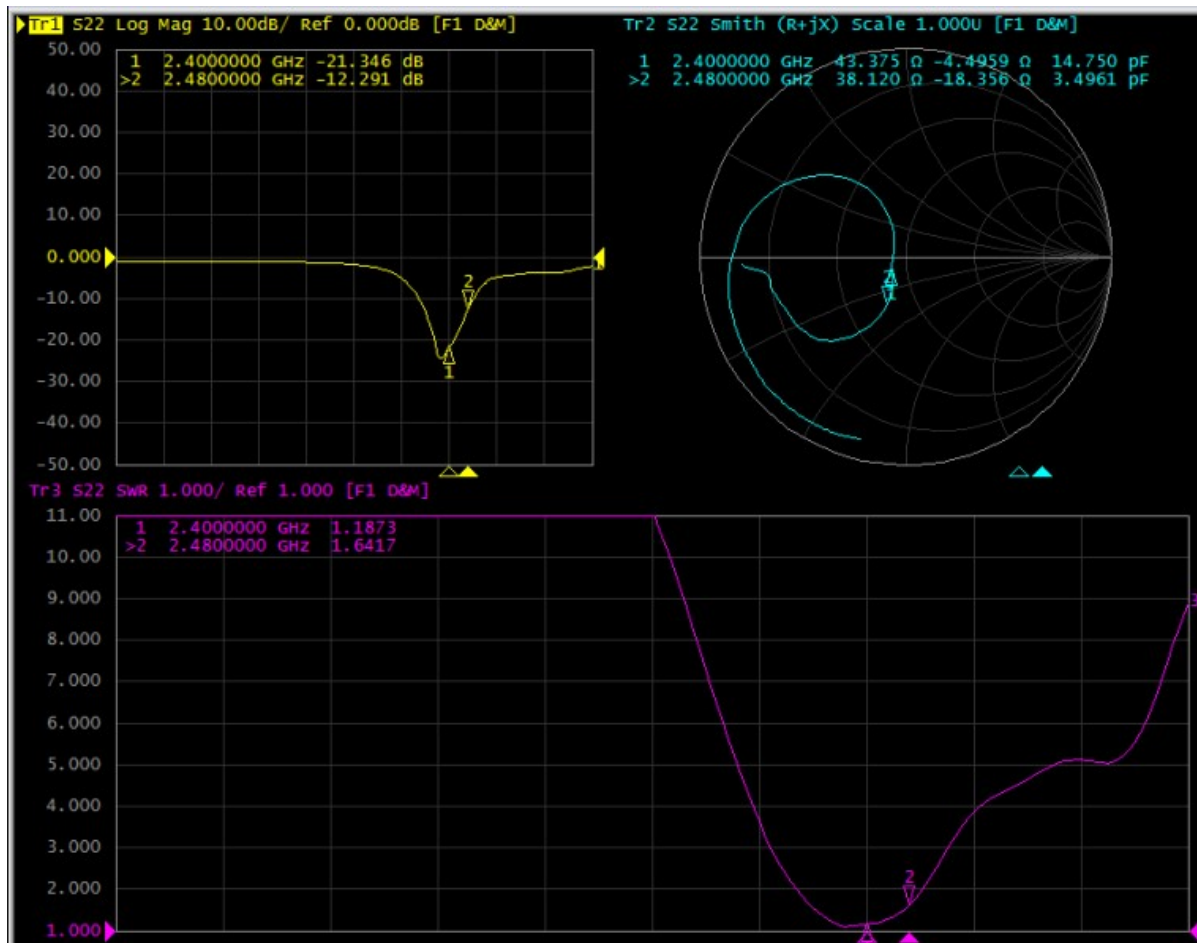
Angilent E5071C

Left ear BT antenna S11 parameter (free space)





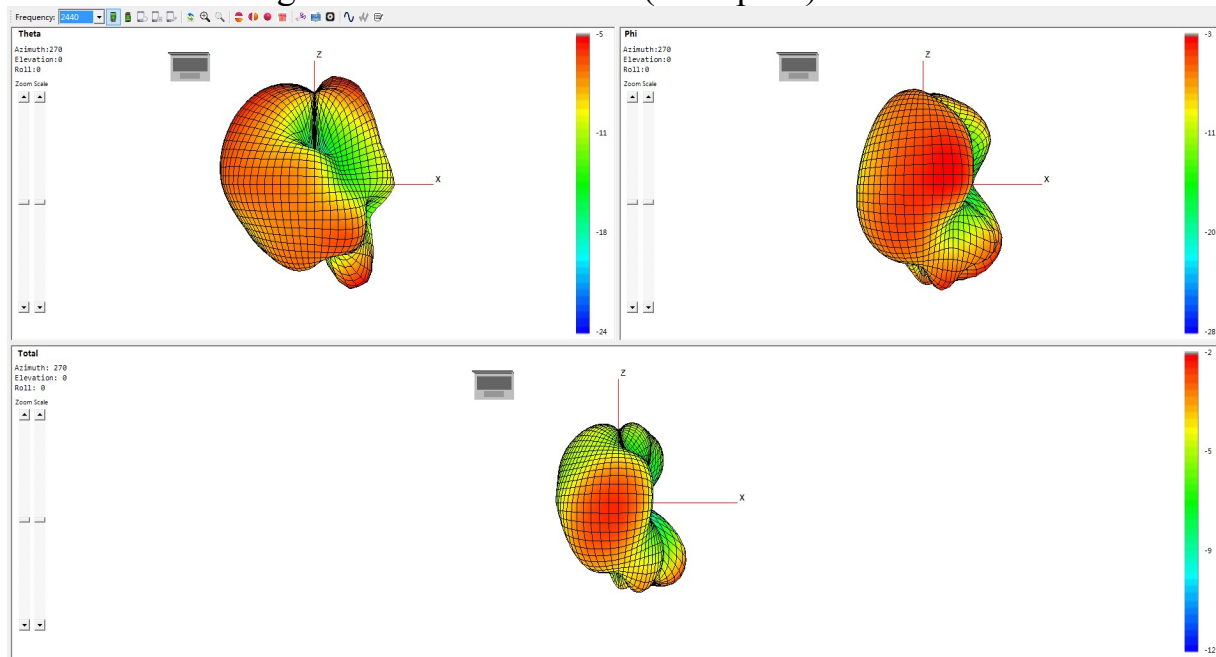
Left ear BT antenna S11 parameters (head model)



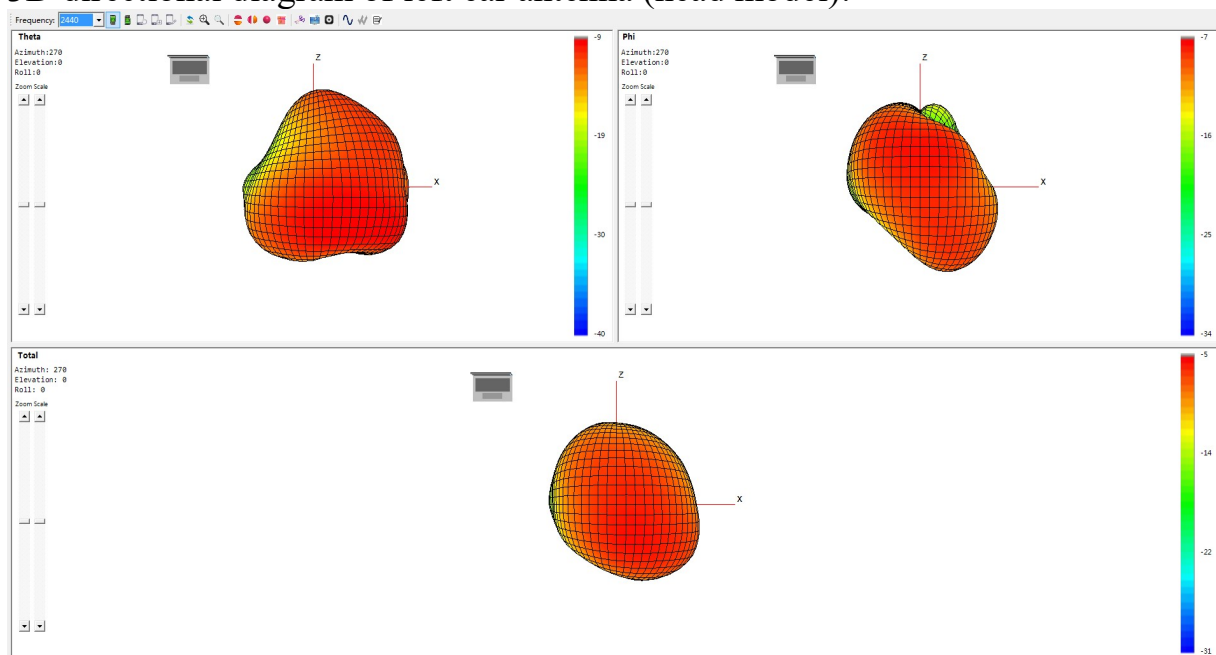
Efficiency and gain of left ear BT antenna:

Free space				Head			
Freq (MHz)	Gain	Eff_dB	Eff (%)	Freq (MHz)	Gain	Eff_dB	Eff (%)
2400	-1.0	-5.5	28.1	2400	-5.0	-11.6	6.9
2410	-1.2	-5.5	28.3	2410	-5.2	-11.8	6.7
2420	-1.2	-5.5	28.5	2420	-5.2	-11.8	6.6
2430	-1.6	-5.6	27.4	2430	-5.5	-11.7	6.7
2440	-1.4	-5.5	28.0	2440	-5.8	-12.0	6.3
2450	-1.6	-5.5	28.1	2450	-5.9	-12.0	6.3
2460	-1.9	-5.7	27.0	2460	-6.1	-12.2	6.1
2470	-1.5	-5.6	27.8	2470	-5.9	-12.0	6.3
2480	-1.6	-5.8	26.3	2480	-5.7	-11.9	6.5
2490	-1.4	-5.8	26.3	2490	-6.0	-12.2	6.0
2500	-1.6	-6.0	25.0	2500	-6.2	-12.5	5.7
average value	-1.5	-5.6	27.3	average value	-5.7	-12.0	6.4

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



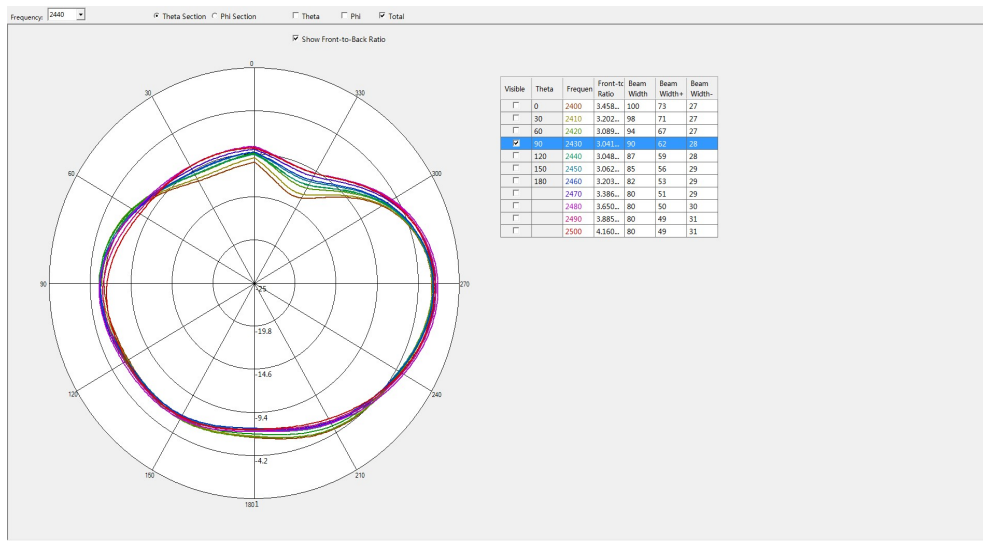
3D directional diagram of left ear antenna (head model):



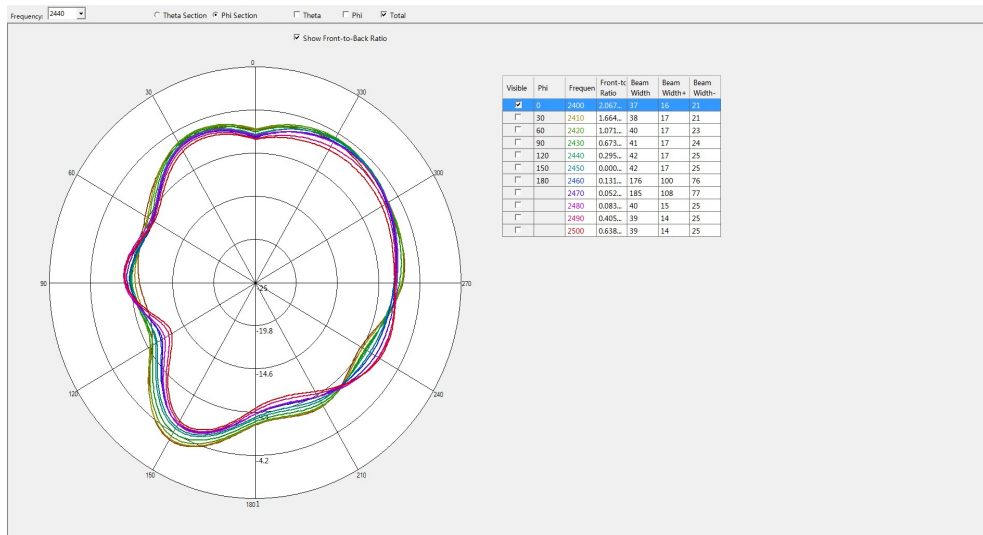


2D directional pattern of left ear antenna (free space):

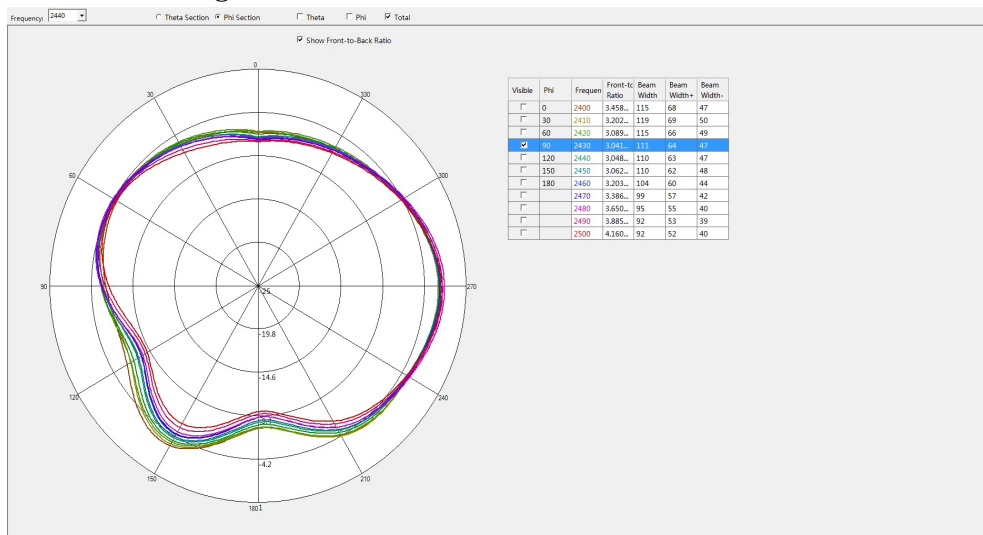
Theta=90.00deg



Phi=0.00deg



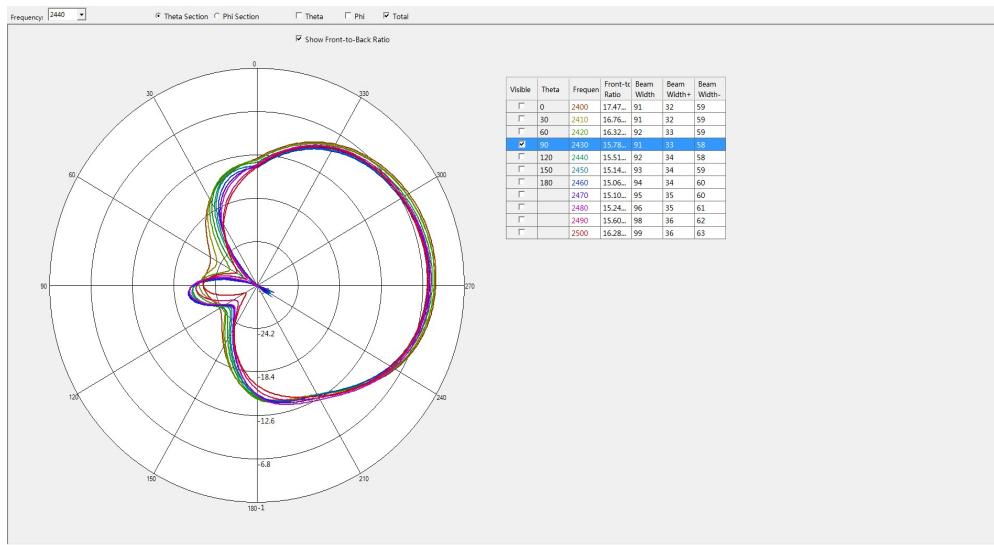
Phi=90.00deg



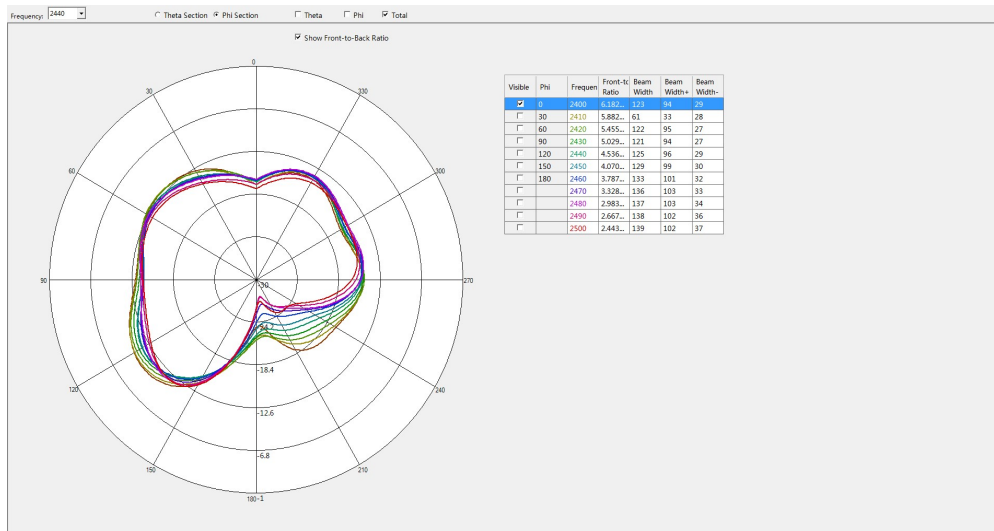


2D directional pattern of left ear antenna (head model):

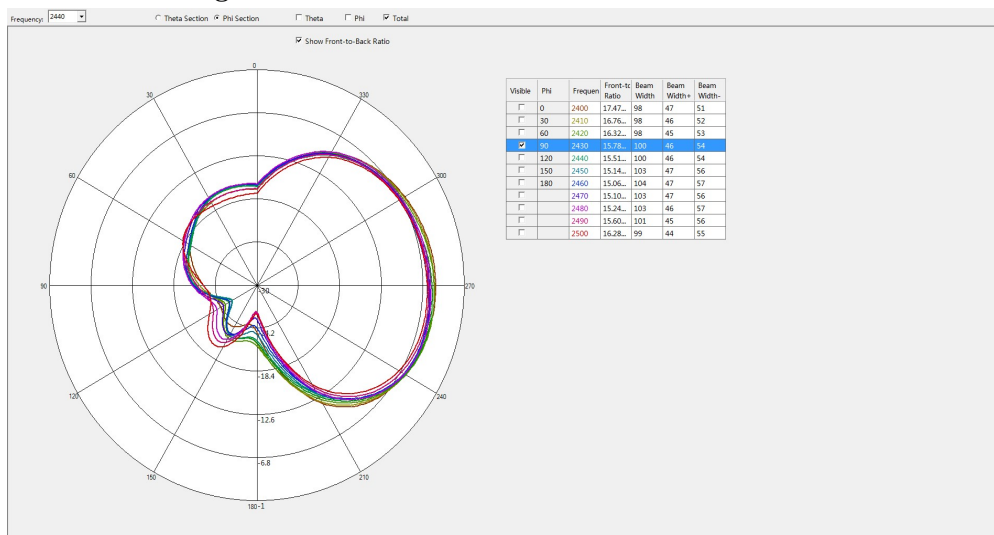
Theta=90.00deg



Phi=0.00deg



Phi=90.00deg





II: 3D Active test report of antenna

		FS		Hand	
	Channel	TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
L	CH 0	3.6	-89.1	-7.1	-78.7
	CH 39	3.7	-89.7	-7.2	-78.6
	CH 78	2.4	-88.6	-8.2	-77.9



OTA Standard Chamber



III: Structure file

