

RAZER (ASIA-PACIFIC) PTE. LTD.

Antenna Part Specification

Project name:	Silver T1X
Antenna name:	2.4G antenna
Antenna type:	monopole
Version:	V1.0
Date:	2026.08.19
Manufacturer:	RAZER (ASIA-PACIFIC) PTE. LTD.
Manufacturer address:	Razer SEA HQ, 1 One-north Crescent, #02-01, Singapore 138538

Index

I: Passive test data	3
Antenna S11 parameter:	3
Antenna efficiency and gain:	4
2D Antenna radiation pattern(Etotal):	4
3D Antenna radiation pattern :	7
II: Active test data	10
III: Antenna matching circuit	10
IV: Antenna structure diagram file	11

Change record

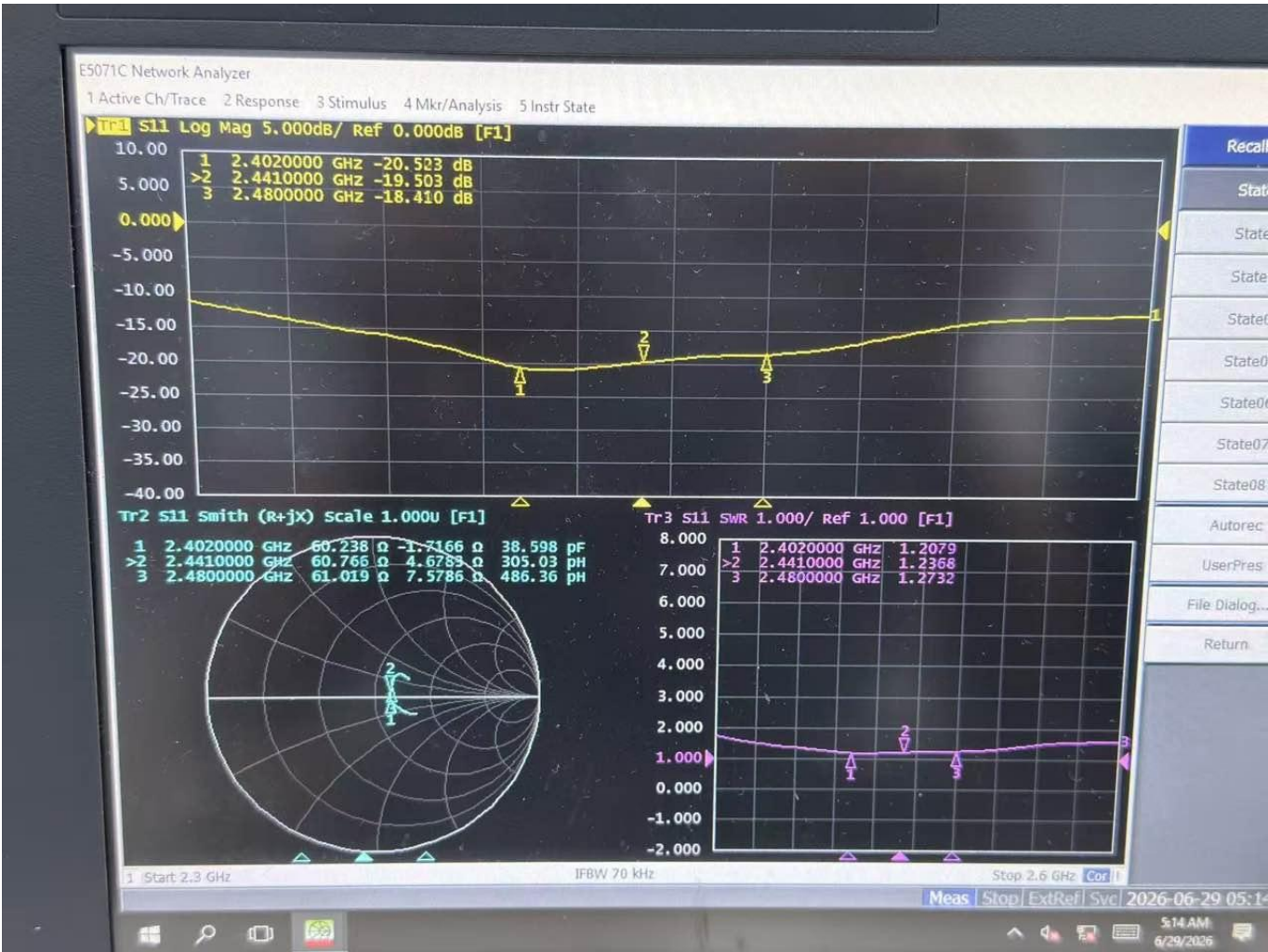
Compile / change date	Reason for change	Changed content	Version
2026.08.14	First edition	First edition	V1.0

I: Passive test data



KEYSIGHT E5071C

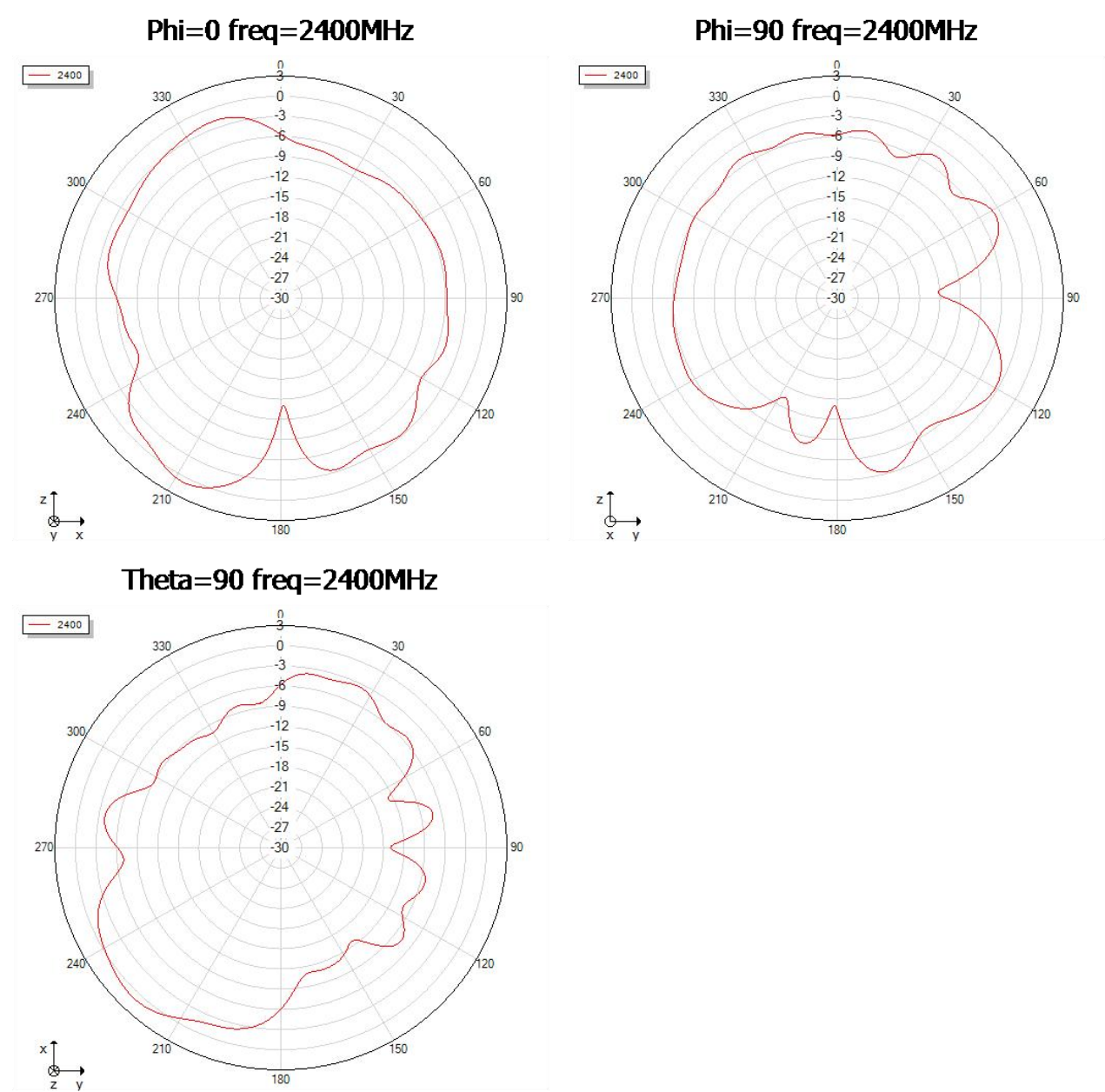
Antenna S11 parameter:



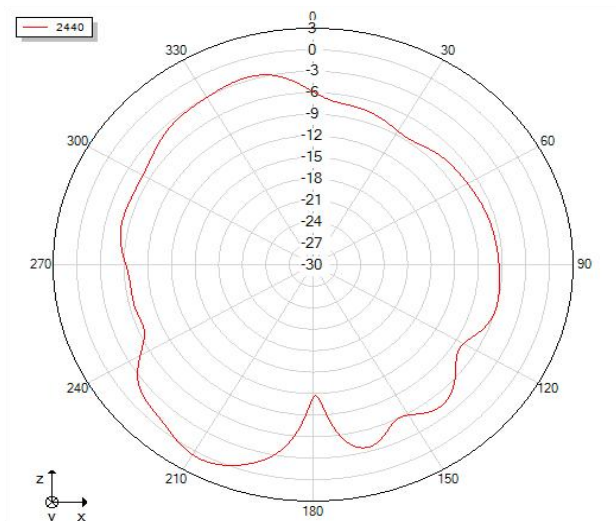
Antenna efficiency and gain:

Frequency (MHz)	Efficiency (dB)	Gain (dBi)	Efficiency (%)
2400	-2.42	2.48	57.26%
2410	-2.75	2.03	53.05%
2420	-2.79	1.95	52.58%
2430	-3.06	1.77	49.46%
2440	-3.33	1.50	46.42%
2450	-3.25	1.68	47.28%
2460	-3.43	1.45	45.43%
2470	-3.42	1.39	45.52%
2480	-3.10	1.54	49.01%
Average	-3.06	1.75	49.56%

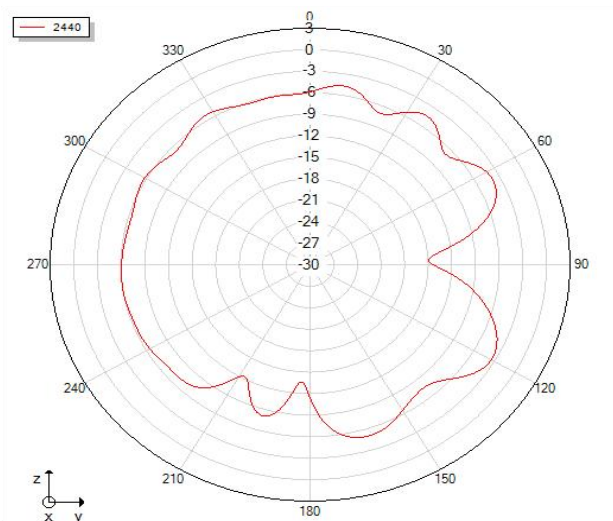
2D Antenna radiation pattern(Etotal):



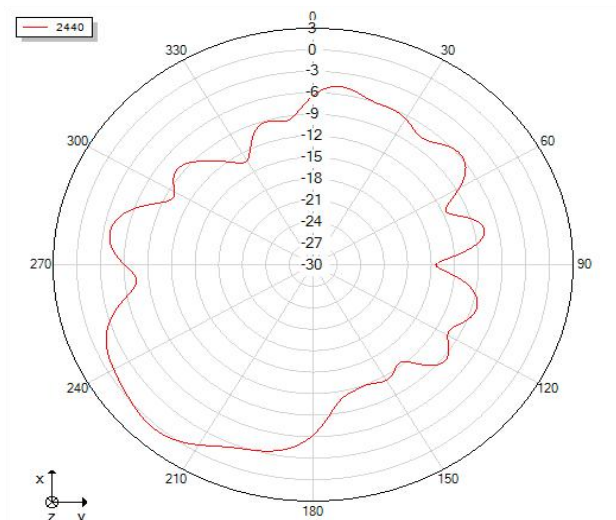
Phi=0 freq=2440MHz



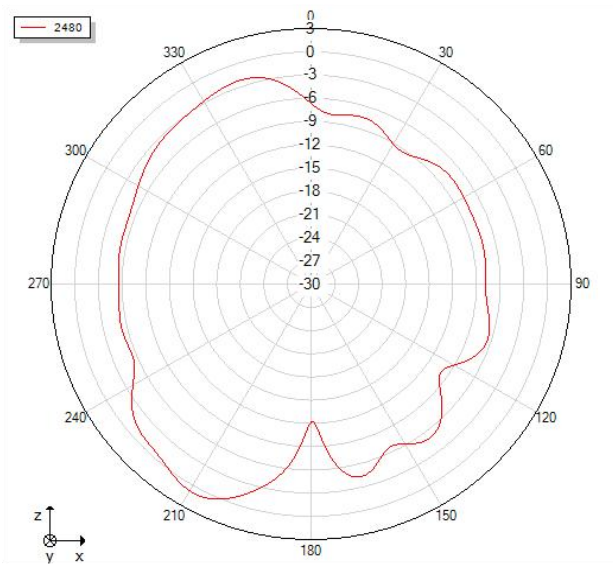
Phi=90 freq=2440MHz



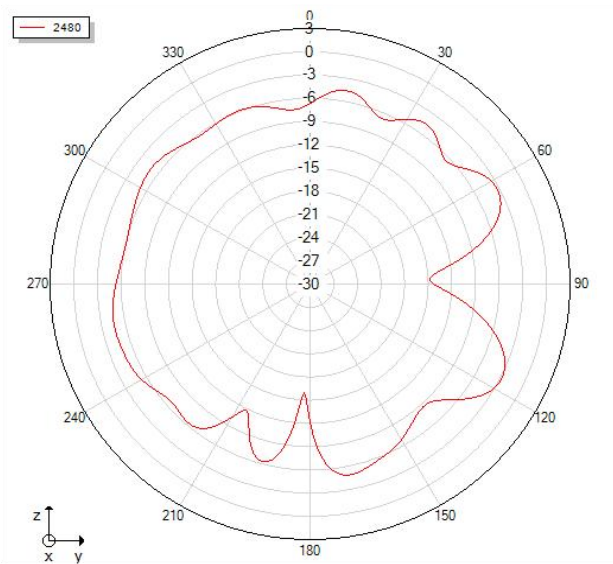
Theta=90 freq=2440MHz



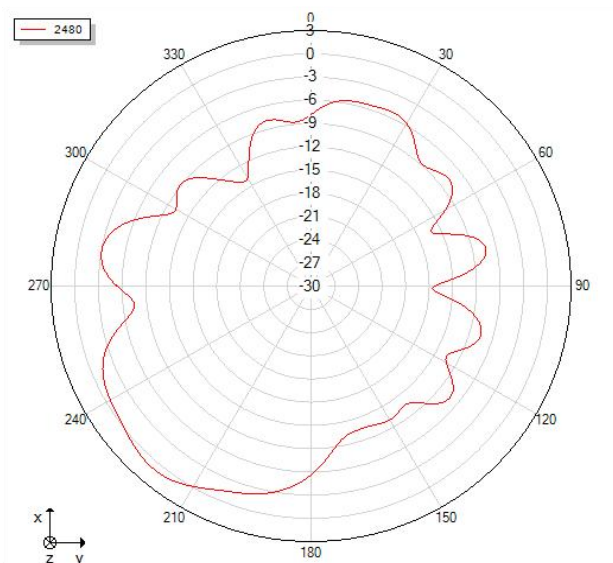
Phi=0 freq=2480MHz



Phi=90 freq=2480MHz



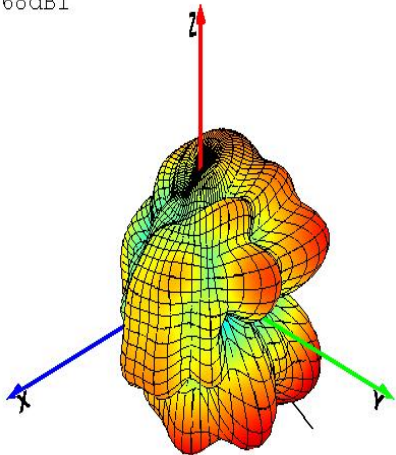
Theta=90 freq=2480MHz



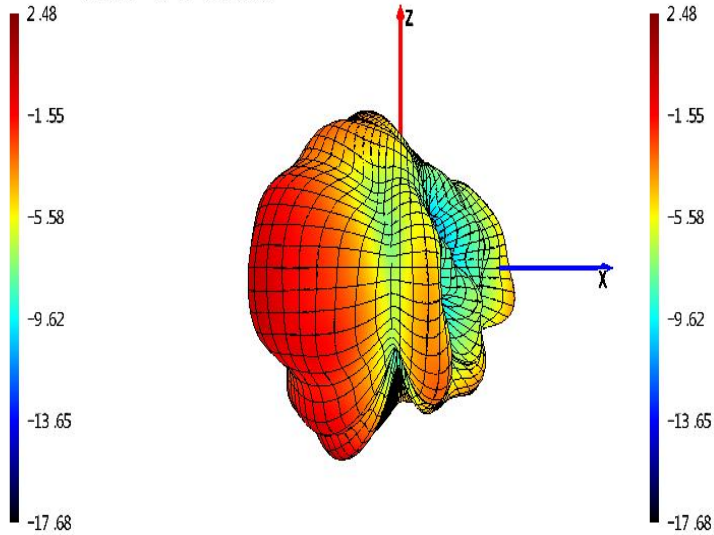
3D Antenna radiation pattern :

2400MHz

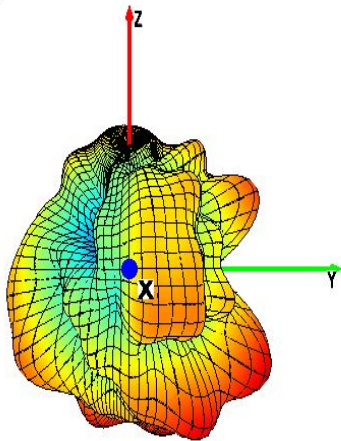
MAX:2.48dBi
MIN:-17.68dBi



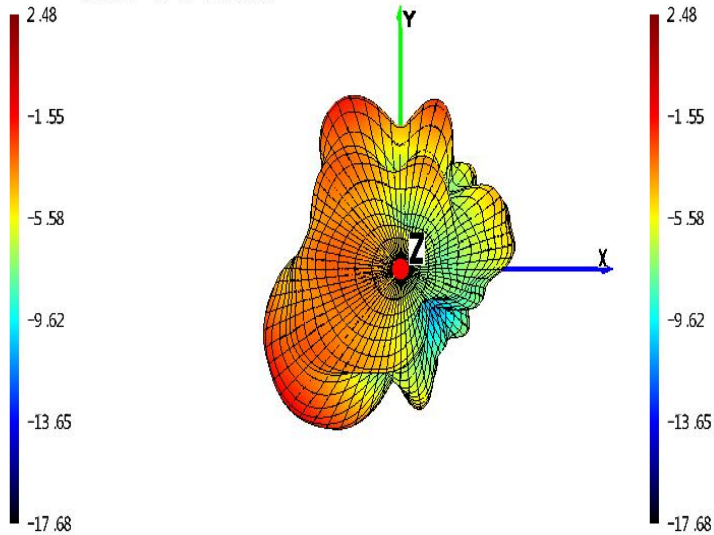
MAX:2.48dBi
MIN:-17.68dBi



MAX:2.48dBi
MIN:-17.68dBi



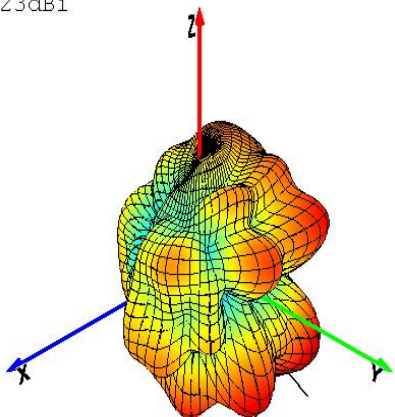
MAX:2.48dBi
MIN:-17.68dBi



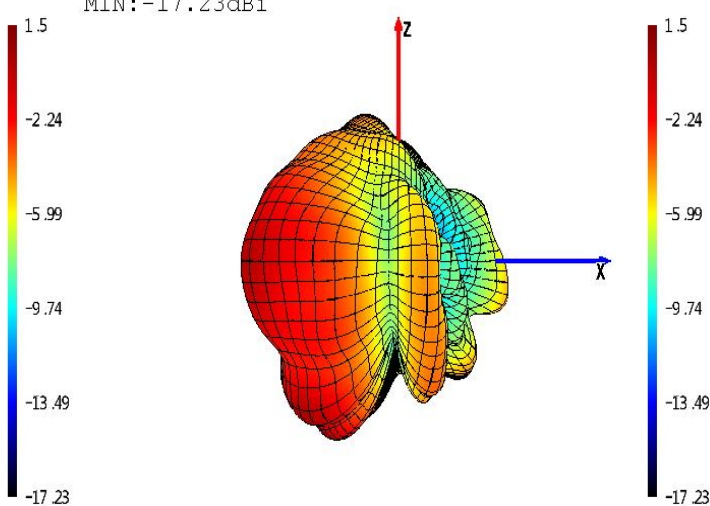
3D Antenna radiation pattern :

2440MHz

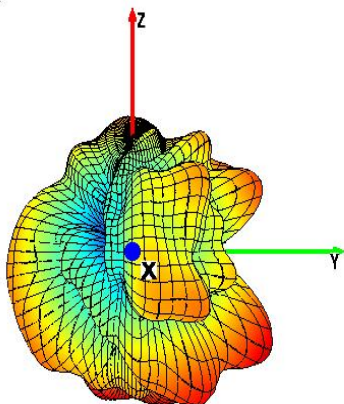
MAX:1.5dBi
MIN:-17.23dBi



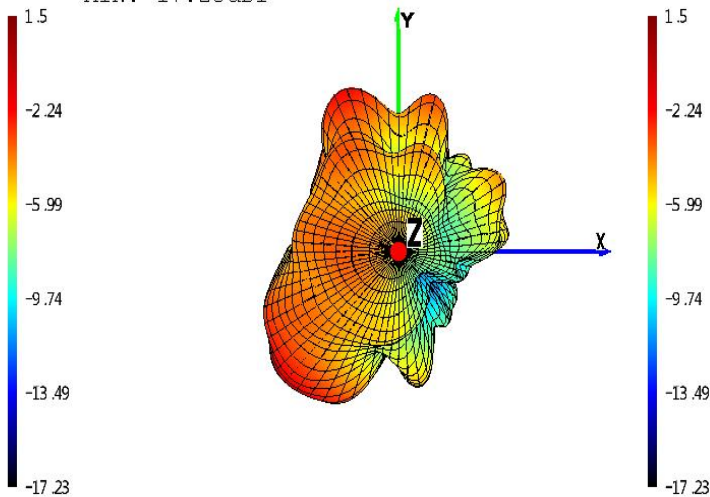
MAX:1.5dBi
MIN:-17.23dBi



MAX:1.5dBi
MIN:-17.23dBi



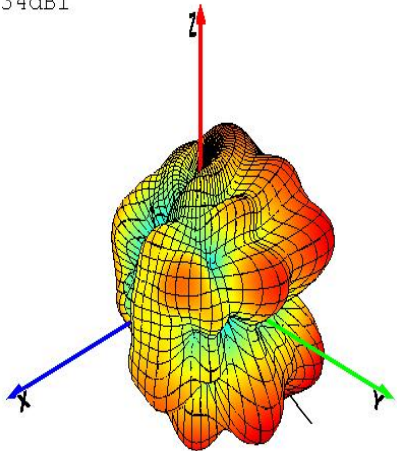
MAX:1.5dBi
MIN:-17.23dBi



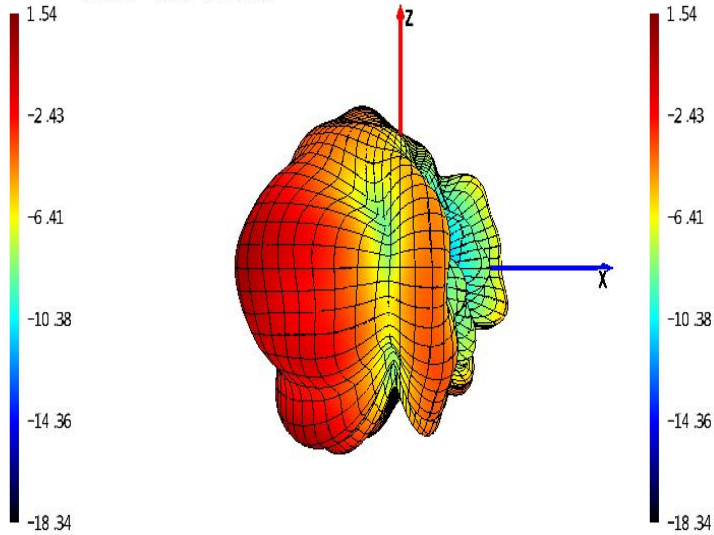
3D Antenna radiation pattern :

2480MHz

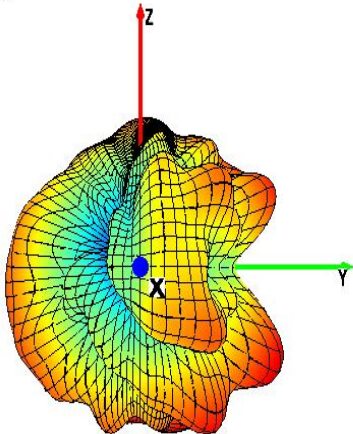
MAX:1.54dBi
MIN:-18.34dBi



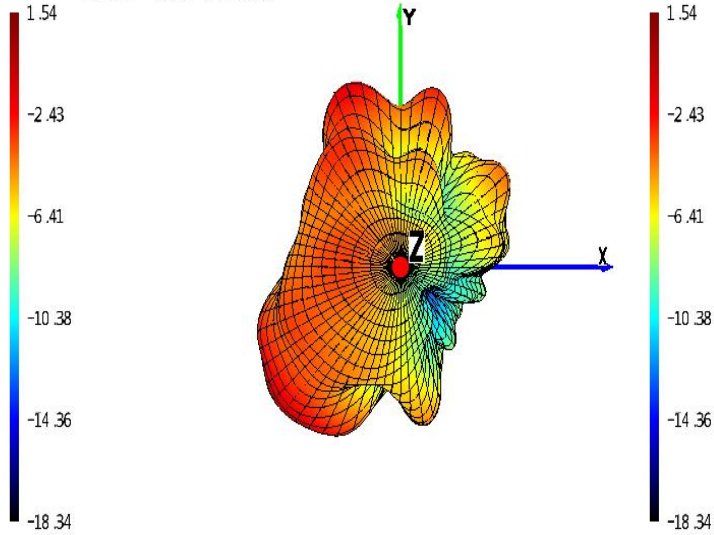
MAX:1.54dBi
MIN:-18.34dBi



MAX:1.54dBi
MIN:-18.34dBi



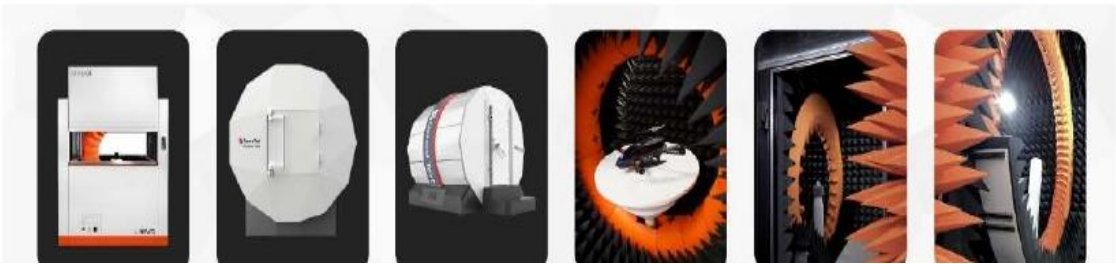
MAX:1.54dBi
MIN:-18.34dBi



II: Active test data

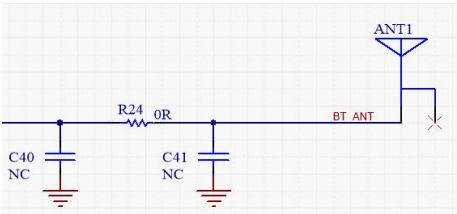
BT	Channel	TRP (dBm)	TIS (dBm)
DONGLE	CH 0	6.16	-91.16
	CH 39	6.46	-93.02
	CH 78	5.89	-91.14

Laptop in Airplane mode -front / Airplane mode -back



OTA Standard Chamber

III: Antenna matching circuit



number	matching value
C40	NC
R24	0R
C41	NC

IV: Antenna structure diagram file

