



Antenna Part Specification

Customer name:	EDIFIER
Project name:	S300
Material category:	BT/WIFI Antenna
Version:	V2.0
Date:	2024.10.18
Manufacturer Address:	505-506 ,A Block,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china



Contents

I: The report of passive data	3
II: 3D Active test report of antenna	11
III: Environmental treatment	11
IV: Structure file	12

Change record			
Compile / change date	Reason for change	Changed content	Version
2024.09.09	first edition	first edition	V1.0
2024.10.18	Add adhesive pack sponge	Add adhesive pack sponge	V2.0

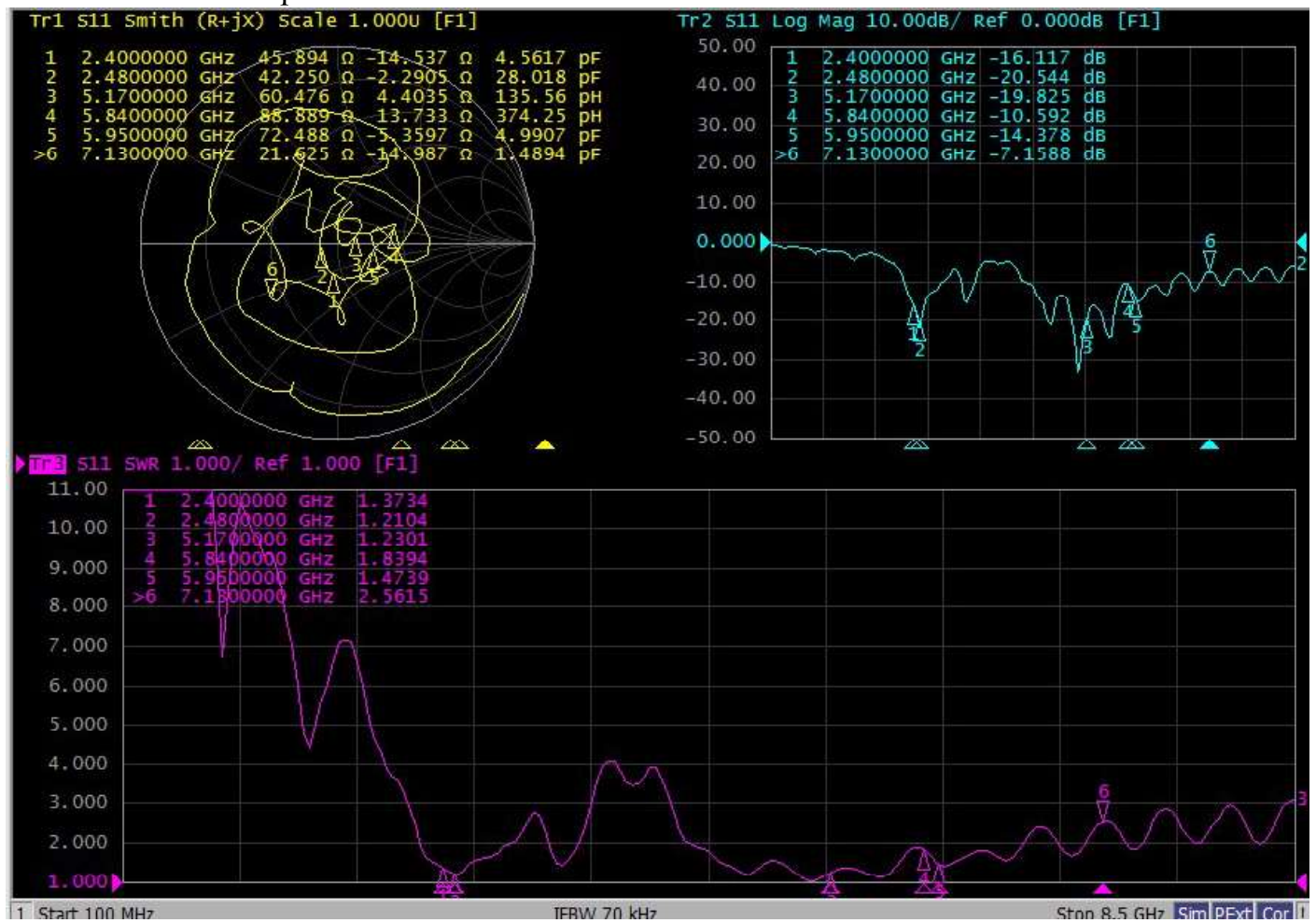


I: The report of passive data



Angilent E5071C

WIFI Antenna S11 parameter:





BT Antenna S11 parameter:





WIFI 2.4G antenna efficiency:

WIFI 2.4G			
Frequency(MHz)	Gain (dBi)	Efficiency (dB)	Efficiency(%)
2400	1.55	-3.35	46.26
2410	1.50	-3.30	46.82
2420	1.69	-3.24	47.46
2430	1.47	-3.39	45.78
2440	1.36	-3.54	44.25
2450	1.53	-3.40	45.69
2460	1.50	-3.48	44.92
2470	1.75	-3.20	47.87
2480	1.94	-2.98	50.35
Average value	1.59	-3.32	46.60

WIFI 5G antenna efficiency:

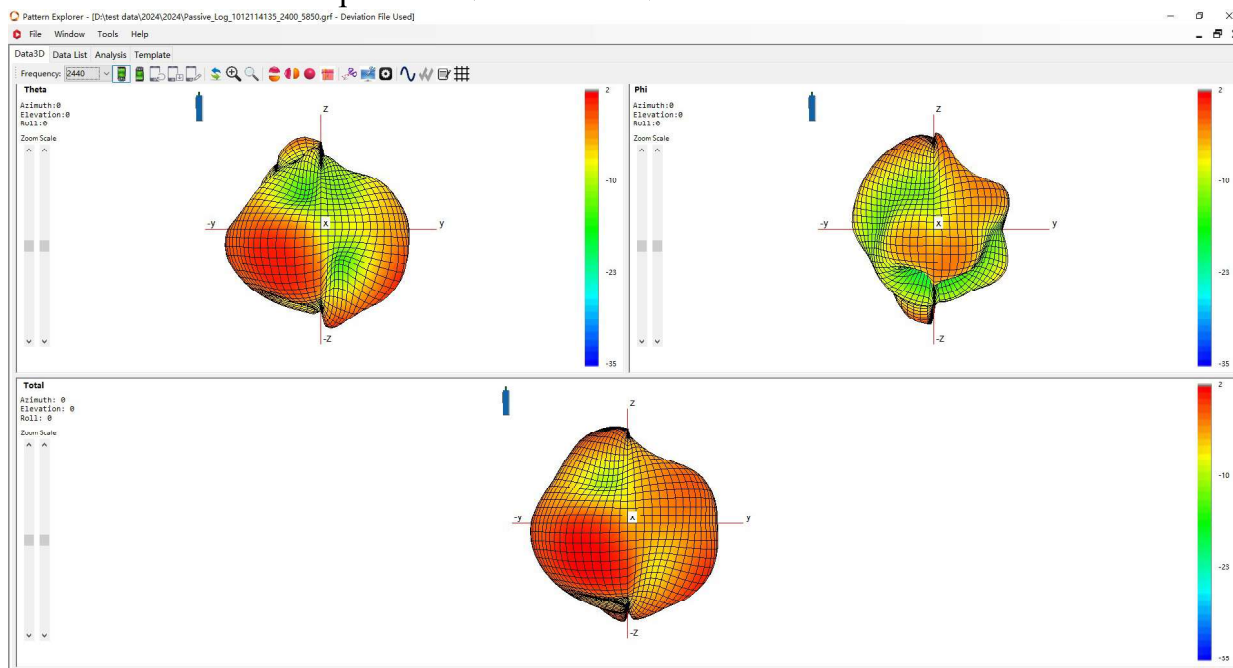
WIFI 5G			
Frequency(MHz)	Gain (dBi)	Efficiency (dB)	Efficiency(%)
5150	2.16	-3.57	43.95
5200	2.16	-3.98	40.02
5250	2.32	-4.06	39.30
5300	3.03	-3.60	43.63
5350	3.27	-3.71	42.55
5400	3.35	-3.94	40.39
5450	2.53	-4.45	35.85
5500	2.74	-3.66	43.03
5550	2.85	-3.42	45.51
5600	2.15	-3.54	44.25
5650	1.56	-4.10	38.87
5700	1.61	-4.05	39.36
5750	2.34	-3.39	45.85
5800	2.08	-3.59	43.77
5850	2.86	-3.23	47.54
Average value	2.47	-3.75	42.26



BT 2.4G antenna efficiency:

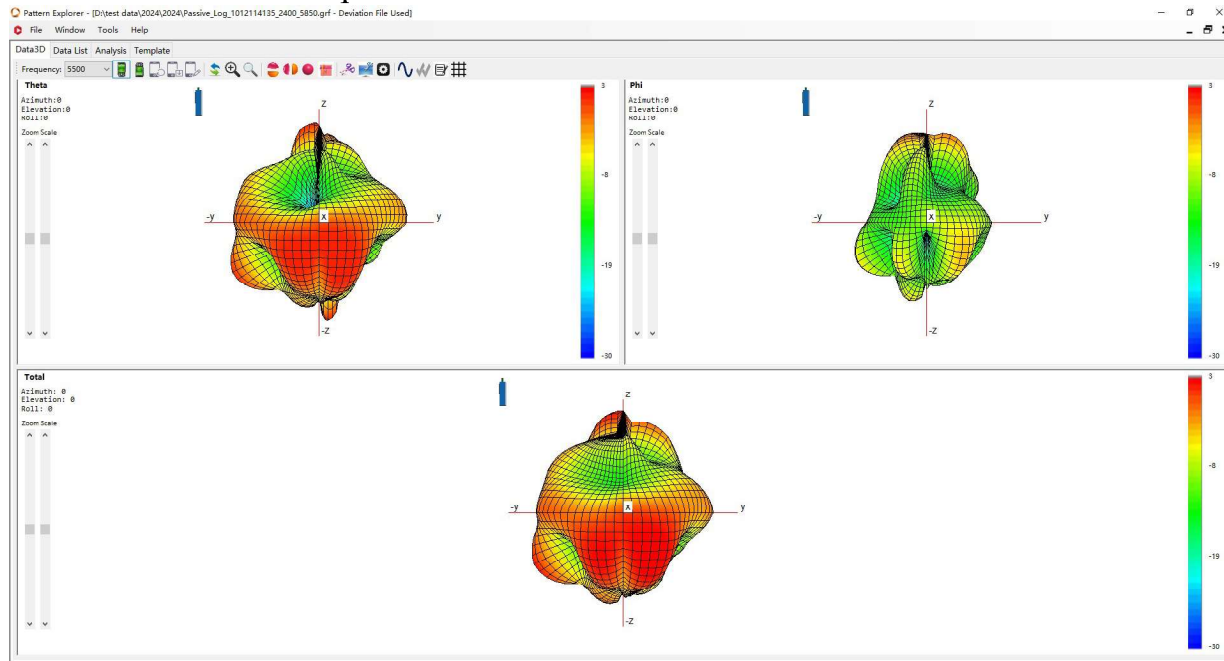
BT 2.4G			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency(%)
2400	2.26	-3.48	44.91
2410	2.15	-3.60	43.70
2420	2.13	-3.71	42.60
2430	2.52	-3.53	44.36
2440	2.58	-3.57	43.94
2450	2.93	-3.25	47.37
2460	3.27	-2.98	50.38
2470	3.07	-3.15	48.37
2480	3.08	-3.24	47.44
Average value	2.67	-3.39	45.90

3D Antenna radiation pattern (WIFI 2.4G) :

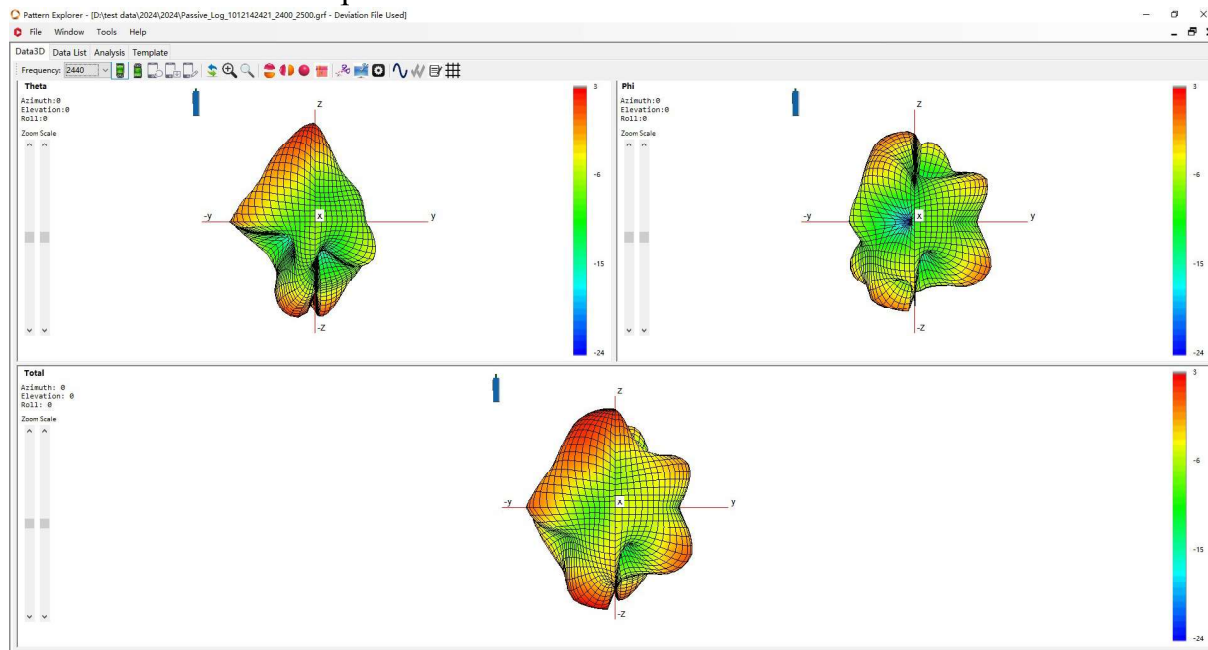




3D Antenna radiation pattern (WIFI 5G) :



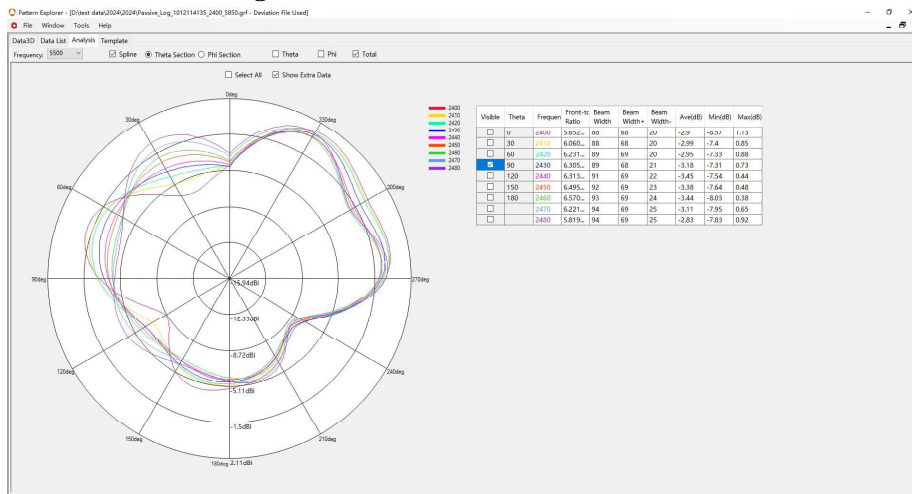
3D Antenna radiation pattern (BT 2.4G) :



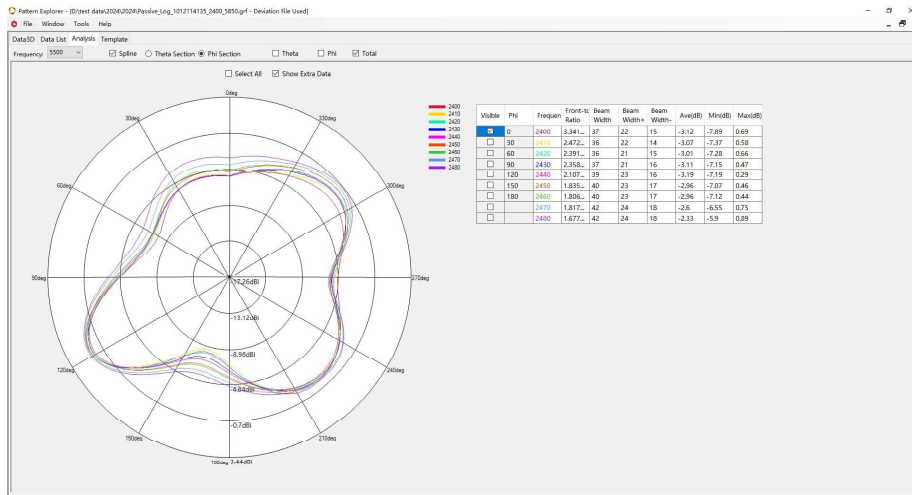


Antenna radiation pattern (WIFI 2.4G) :

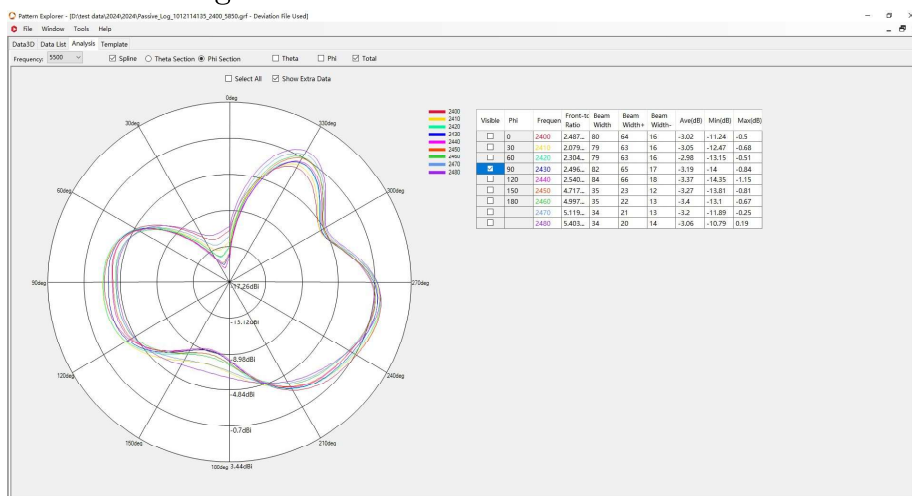
Theta=90.00deg



Phi=0.00deg



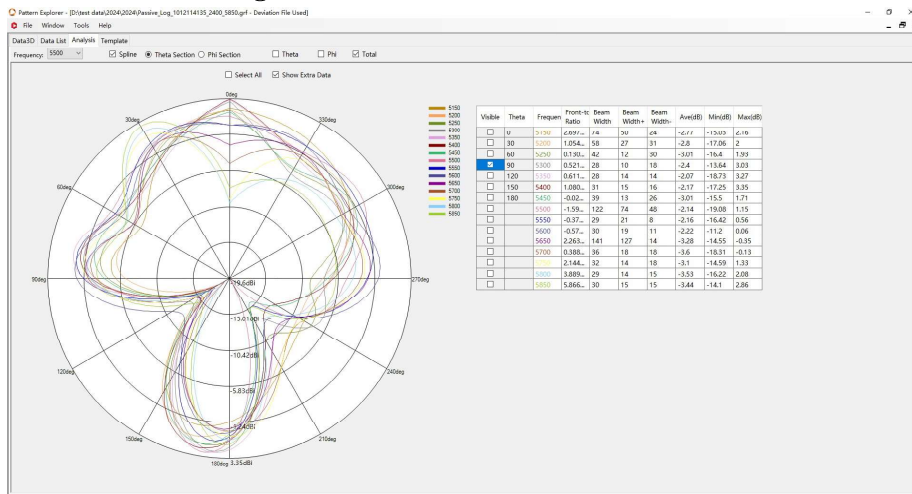
Phi=90.00deg



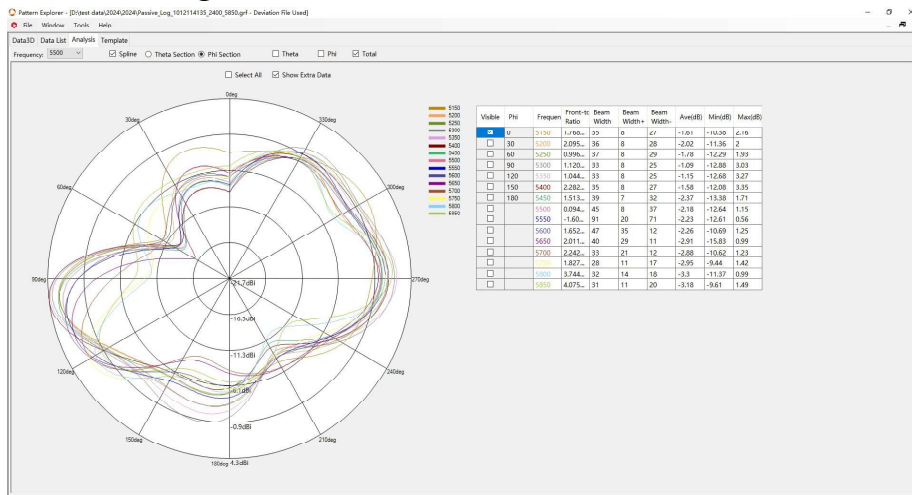


Antenna radiation pattern (WIFI 5G) :

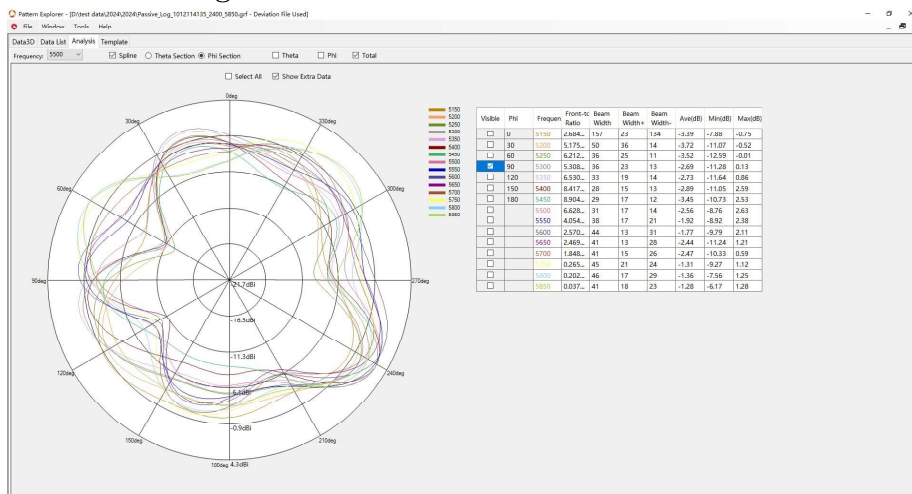
Theta=90.00deg



Phi=0.00deg

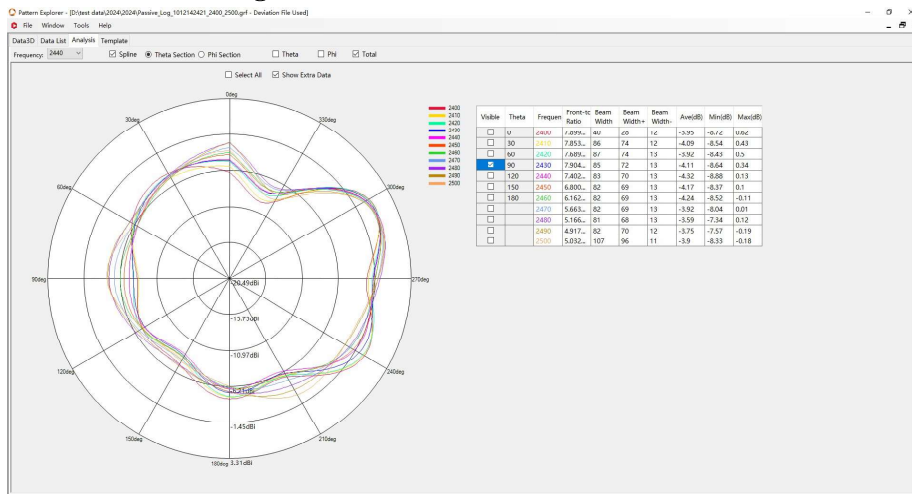


Phi=90.00deg

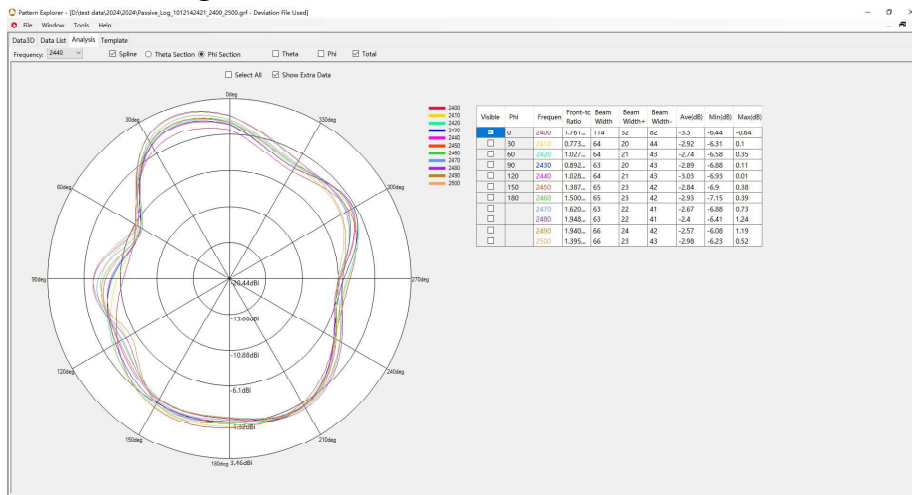




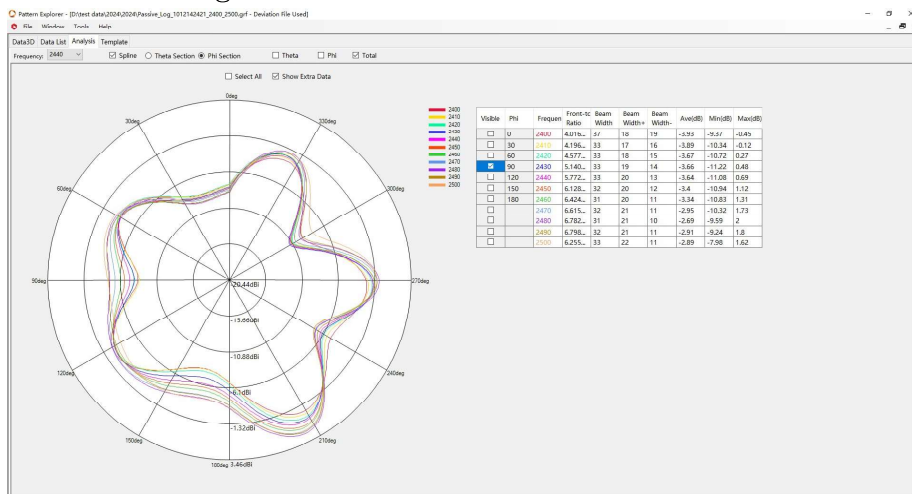
Antenna radiation pattern (BT 2.4G) : Theta=90.00deg



Phi=0.00deg



Phi=90.00deg





II: 3D Active test report of antenna

11M	Channel	TRP (dBm)	TIS (dBm)
WIFI B	CH 1	14.4	-84.8
	CH 6	14.2	-82.8
	CH 11	14.2	-84.6

48M	Channel	TRP (dBm)	TIS (dBm)
WIFI A	CH 36	8.2	-70.9
	CH 100	8.2	-71.9
	CH 165	7.0	-71.1

	Channel	TRP (dBm)	TIS (dBm)
BT	CH 0	2.3	-90.4
	CH 39	2.9	-90.7
	CH 78	3.5	-91.0

anti

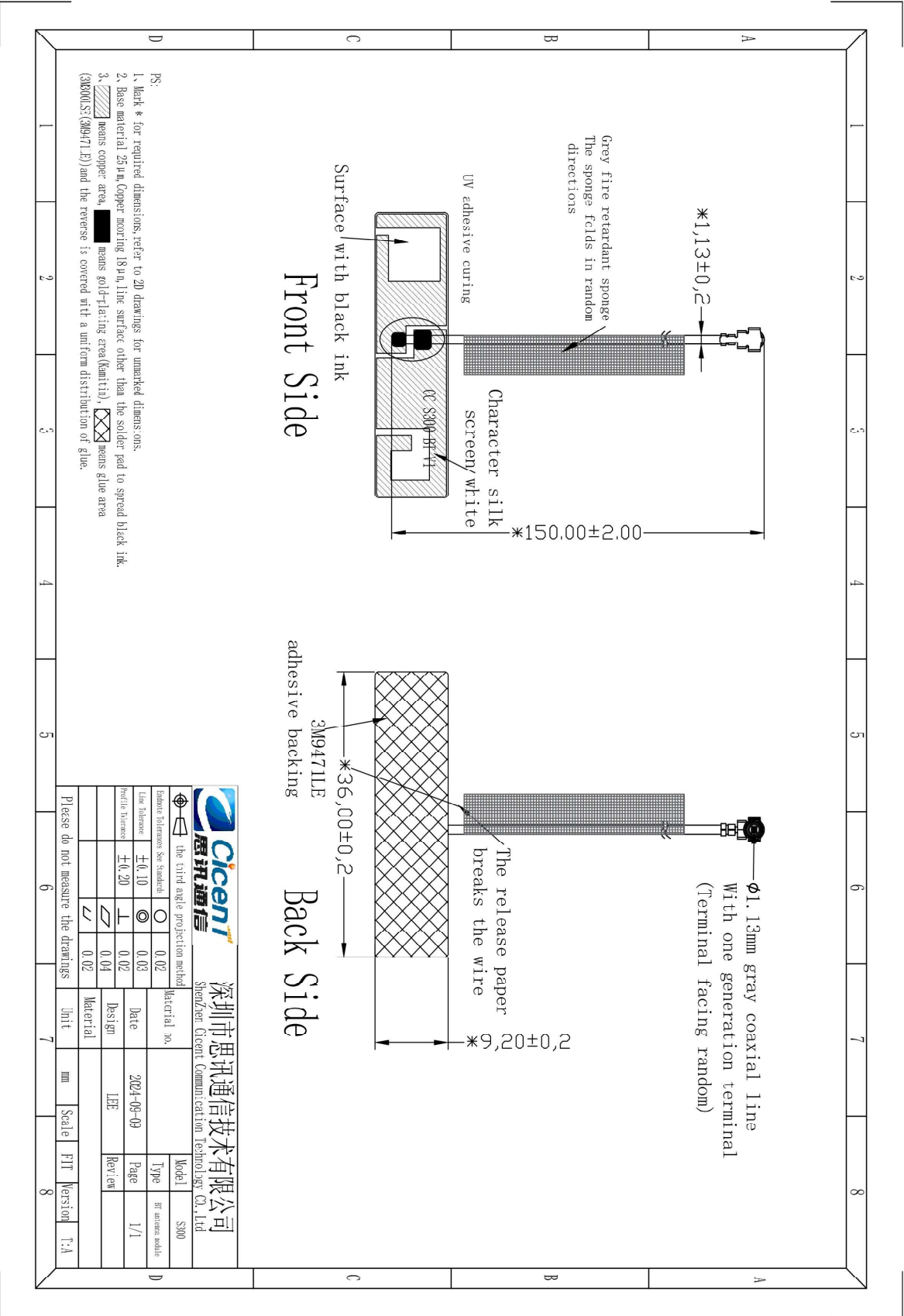


OTA Standard Chamber



IV: Structure file

BT ANTENNA



WIFI ANTENNA

