



Antenna Part Specification

Project name:	MTW4
Material category:	BT antenna
Version:	V3.0
Date:	2023.06.13



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Change record			
Compile / change date	Reason for change	Changed content	Version
2023.04.14	First edition	First edition	V1.0
2023.05.31	Antenna optimization	RF data update	V2.0
2023.06.13	Antenna optimization	Antenna optimization	V3.0



I: The report of passive data



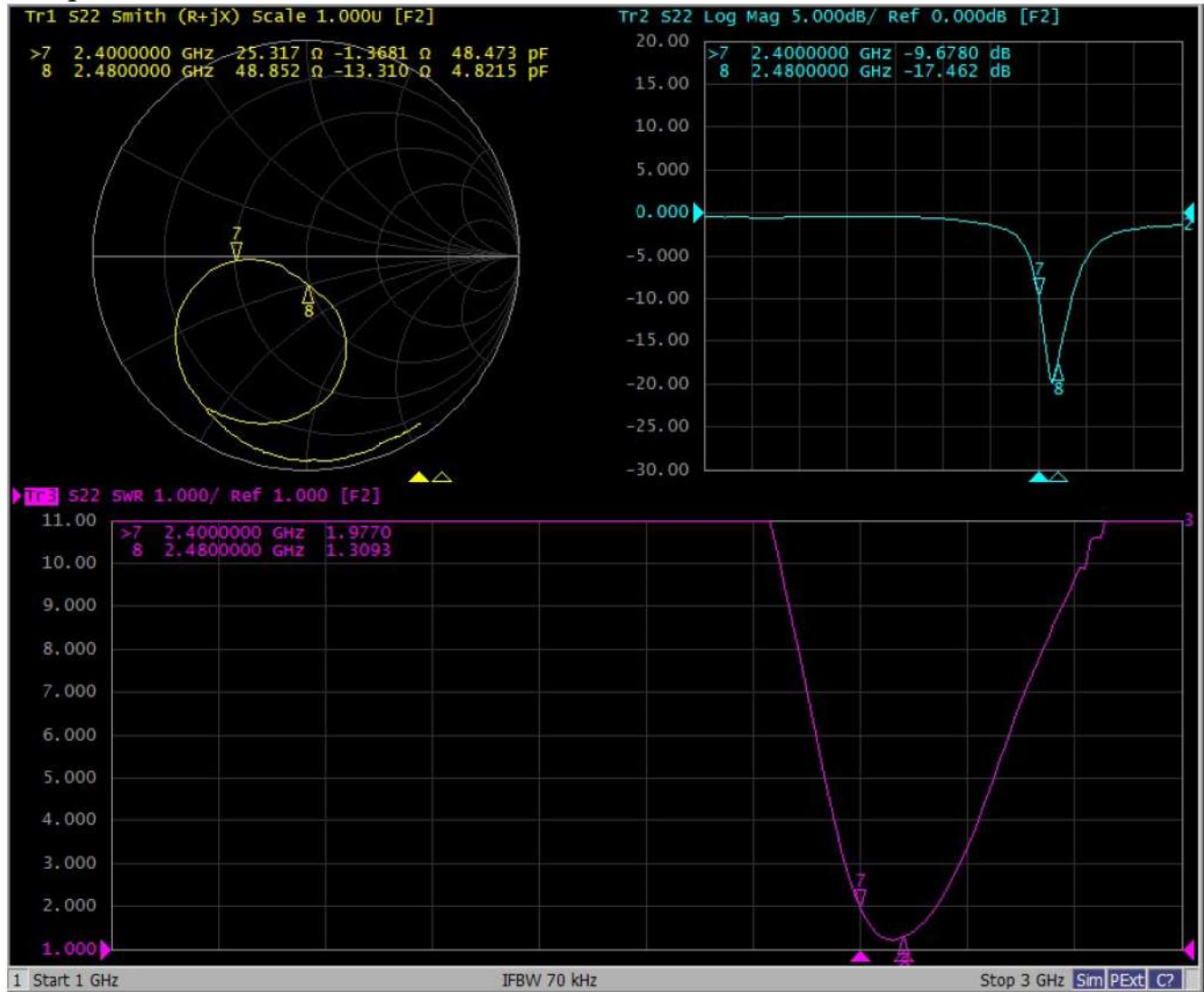
Angilent E5071C

S11 parameter (L) :





S11 parameter (BHL) :



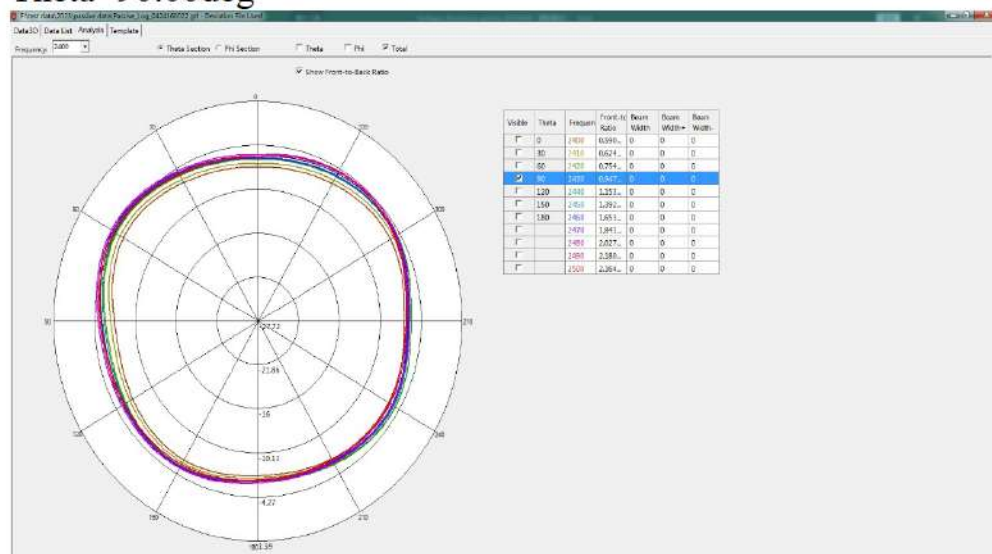
Efficiency:

L			
Frequency (MHz)	Efficiency	Efficiency (dB)	Max gain:
2402	19%	-7.3	-0.4dBi
2410	21%	-6.7	
2420	22%	-6.5	
2430	22%	-6.5	
2440	23%	-6.4	
2450	22%	-6.6	
2460	23%	-6.5	
2470	23%	-6.4	
2480	20%	-6.9	
Average value	22%	-6.6	

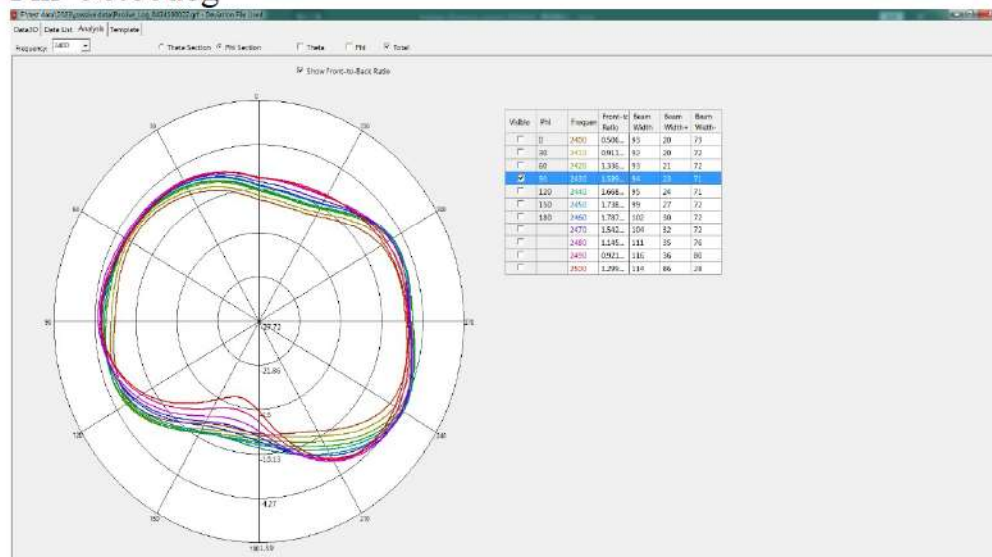


Antenna radiation pattern:

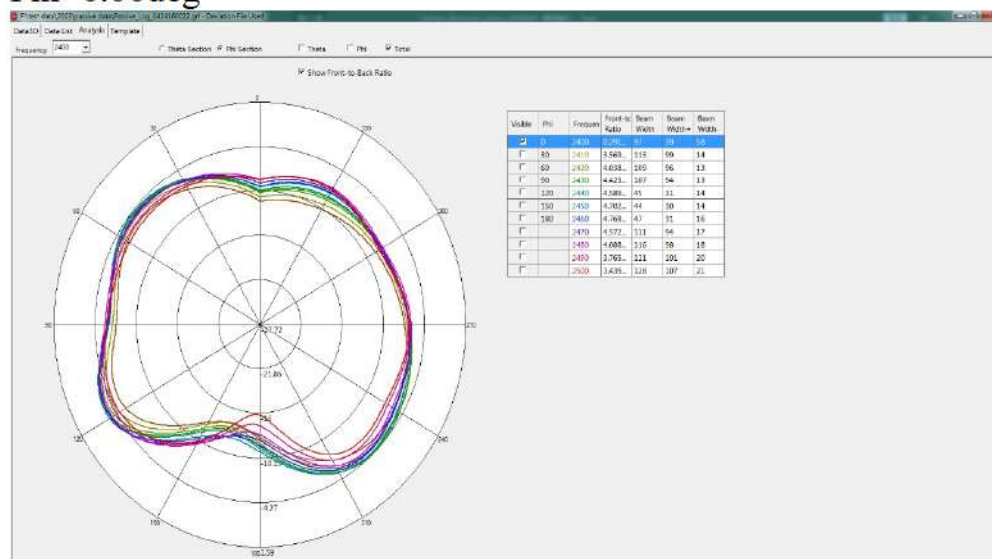
Theta=90.00deg



Phi=90.00deg

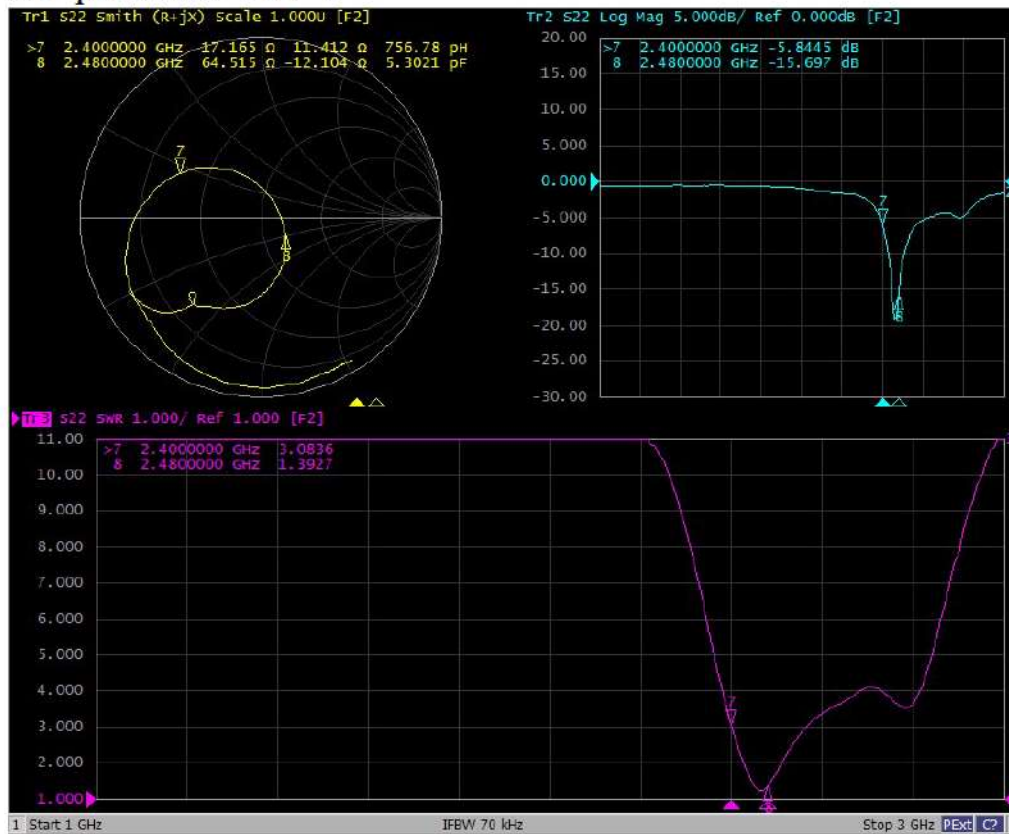


Phi=0.00deg





S11 parameter (R) :



S11 parameter (BHR) :



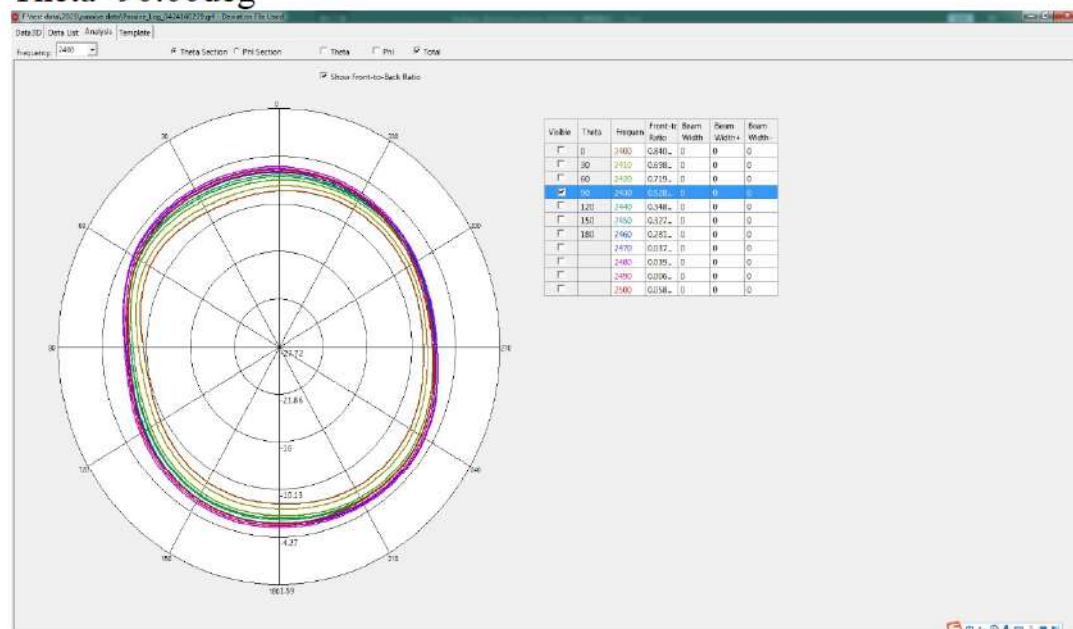


Efficiency:

R			
Frequency (MHz)	Efficiency	Efficiency (dB)	Max gain:
2402	18%	-7.4	-0.2dBi
2410	20%	-7.0	
2420	21%	-6.7	
2430	23%	-6.4	
2440	23%	-6.4	
2450	24%	-6.3	
2460	24%	-6.3	
2470	21%	-6.8	
2480	19%	-7.2	
Average value	21%	-6.7	

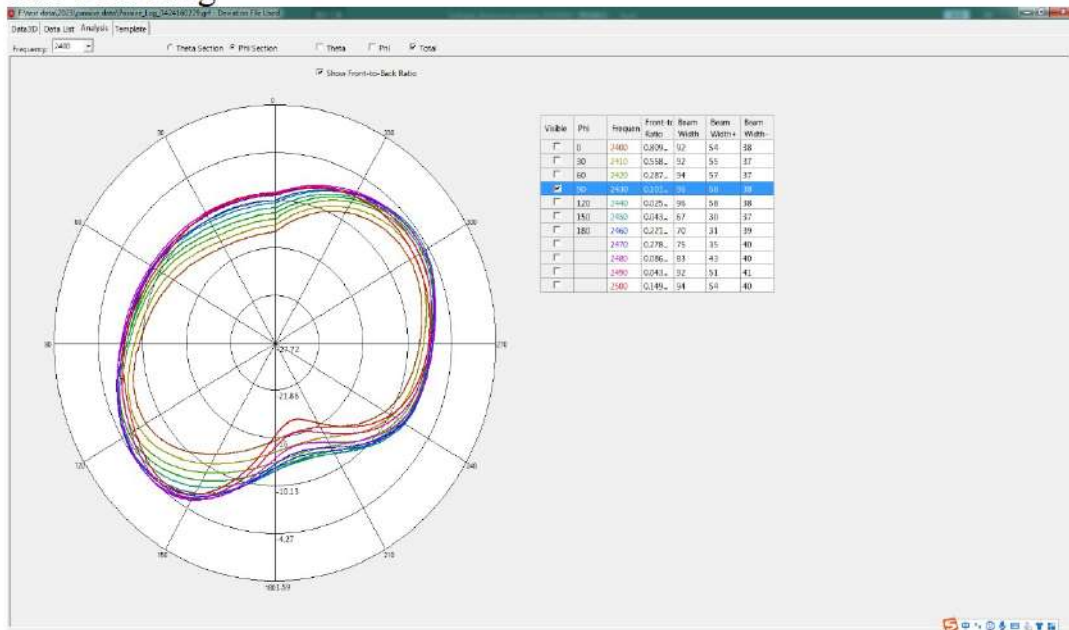
Antenna radiation pattern:

Theta=90.00deg

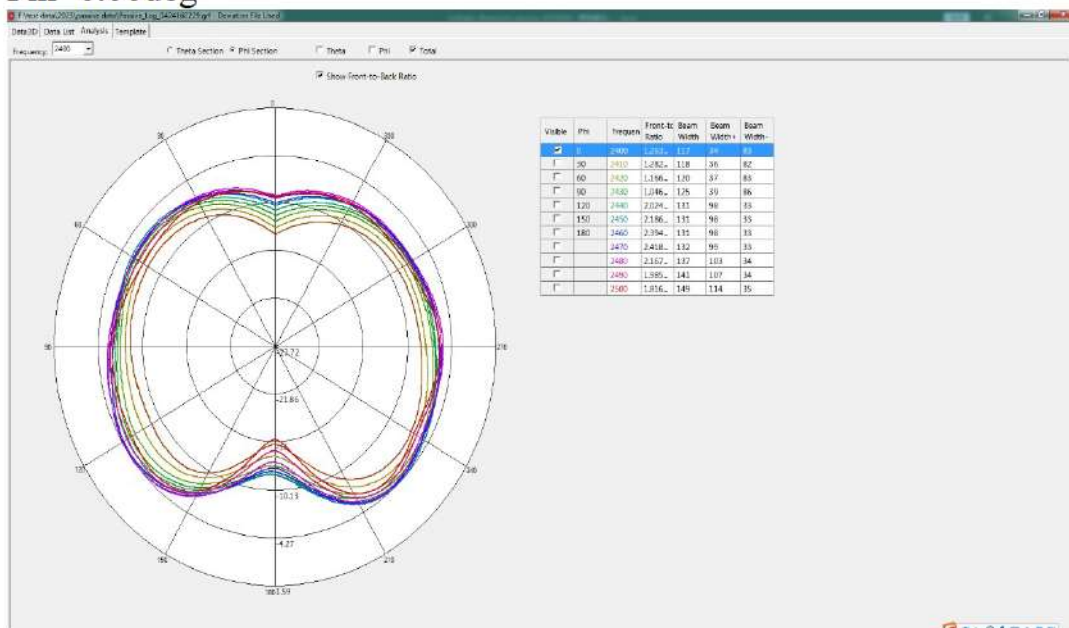




Phi=90.00deg

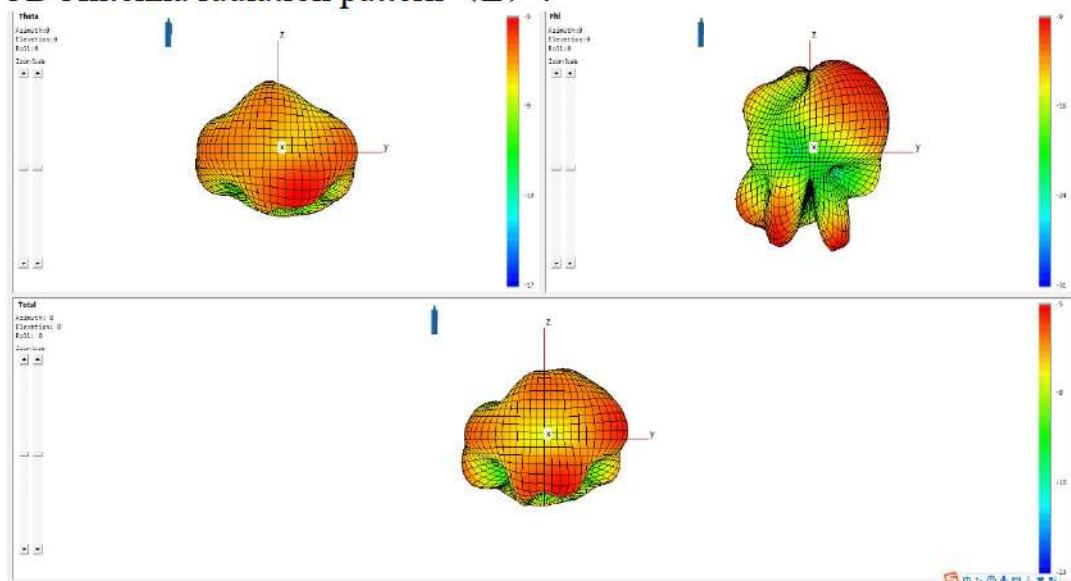


Phi=0.00deg

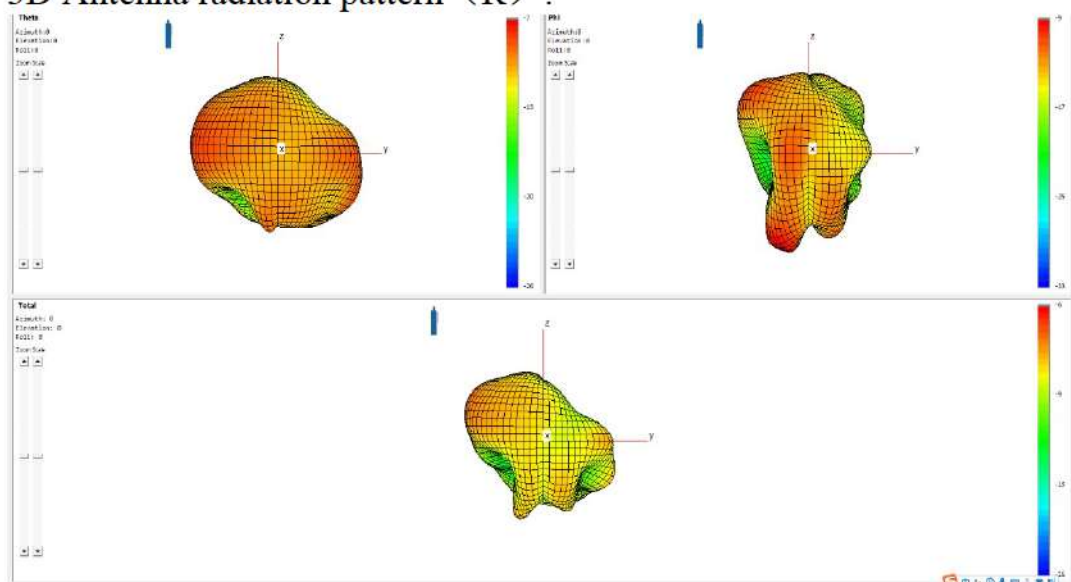




3D Antenna radiation pattern (L) :



3D Antenna radiation pattern (R) :





II: 3D Active test report of antenna



ROHDE&SCHWARZ CMW500

White	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	7.6	-89.0
	CH 39	7.6	-90.0
	CH 78	9.4	-91.4

White	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	8.2	-90.0
	CH 39	9.4	-92.0
	CH 78	9.1	-91.3

Black	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	7.5	-89.8
	CH 39	7.1	-91.6
	CH 78	7.7	-92.6

Black	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	8.1	-90.2
	CH 39	9.5	-91.4
	CH 78	9.3	-92.0



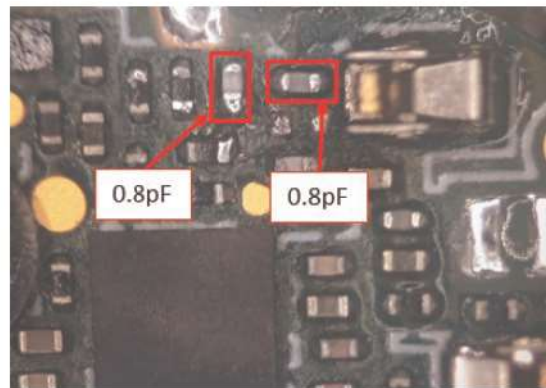
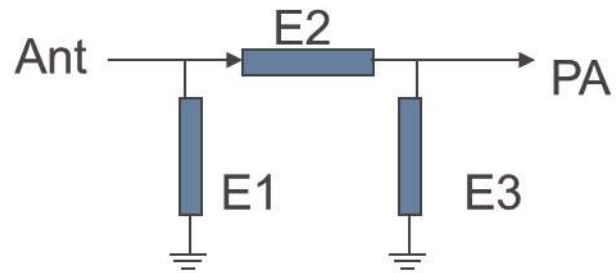
OTA Standard Chamber



III: Matching circuit

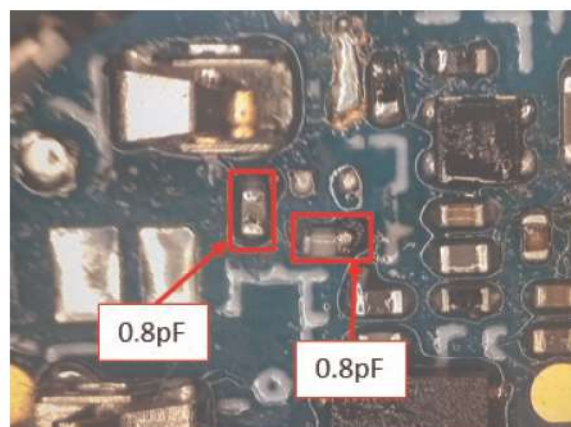
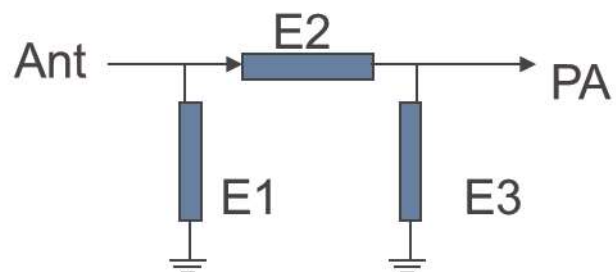
L:

Element	Value
E1	N/A
E2	0.8pF
E3	0.8pF



R:

Element	Value
E1	N/A
E2	0.8pF
E3	0.8pF



Notice: modification of matching circuit



IV: Performance Specifications

applicable frequency of antenna: 2400~2480

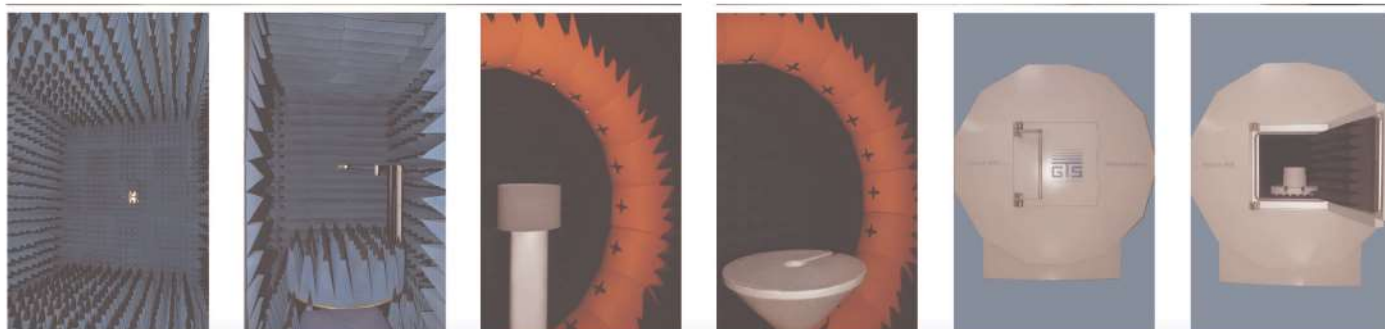
V: Test instructions

Test Dates: 20230607

Name of Test Personnel: qin honglang

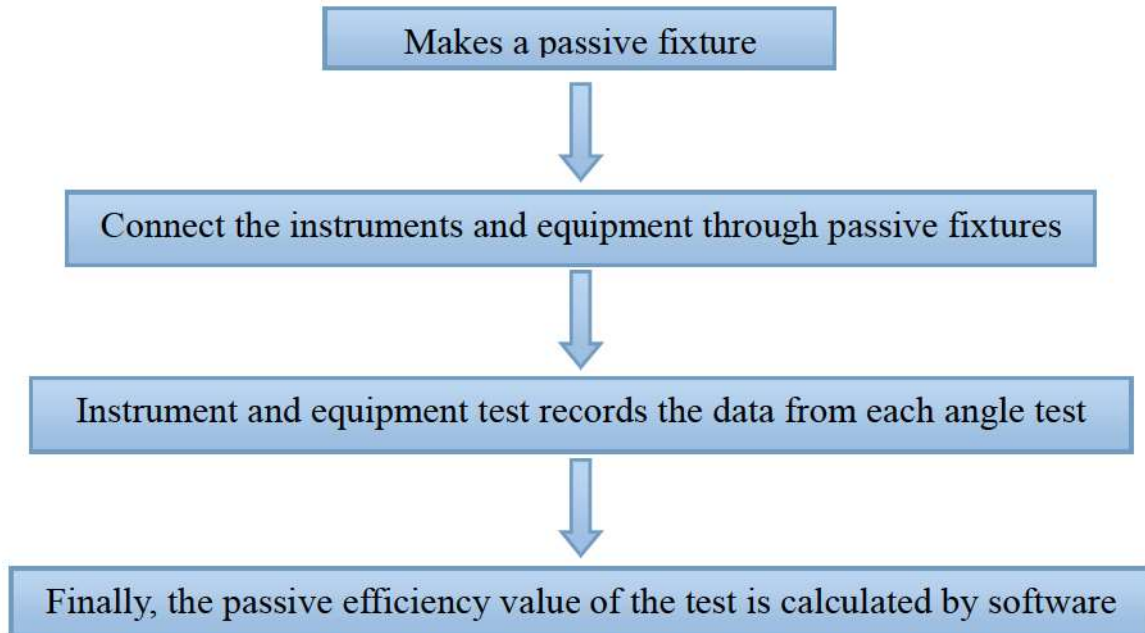
Names of Commercial Test Software Being Used: Wave studio

Passive and Active Test Setup Photos:

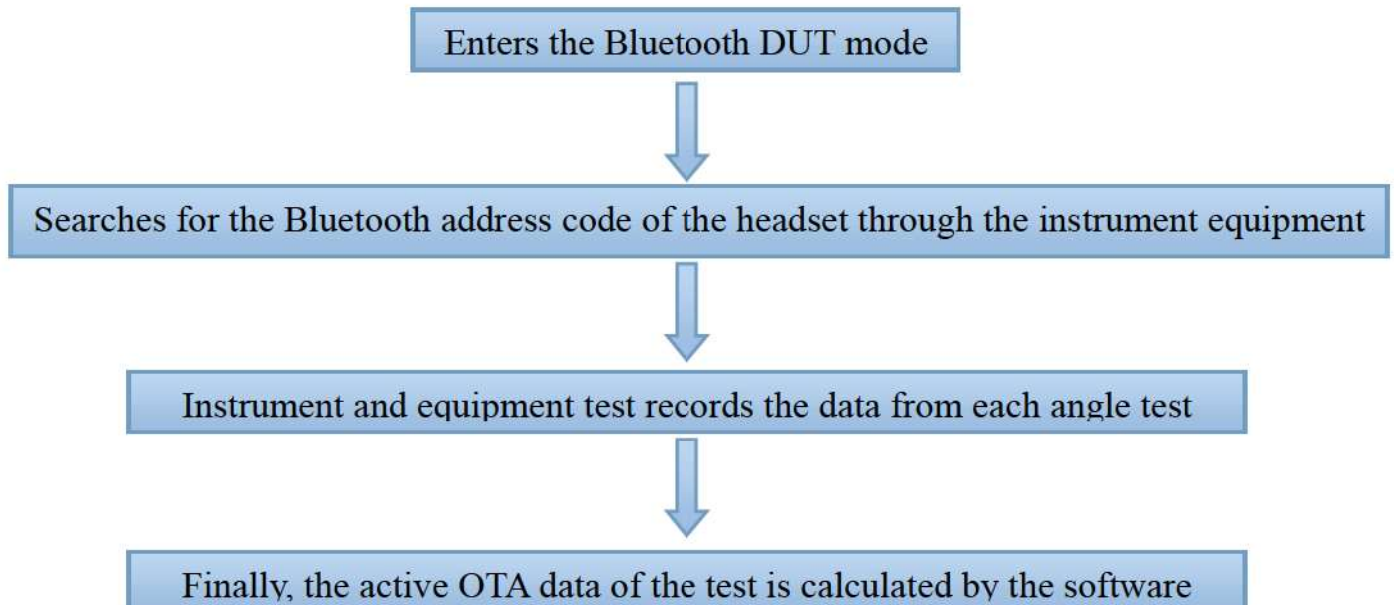




Description of passive test methods:



Description of the active test method:





VI: Calibration certificate of testing equipment



深圳精宇航检测技术有限公司

SHENZHEN JINGYUZHANG DETECTION TECHNOLOGY CO.,LTD



中国认可
国际互认
校准
CALIBRATION
CNAS L7875

校准证书

CALIBRATION CERTIFICATE

证书编号 Certificate No.	22AA147710003
委托方 Client	深圳市思讯通信技术有限公司
委托方地址 Address	深圳市宝安区创业二路东联大厦A座505-506
计量器具名称 Description	综合测试仪
规格/型号 Model/Type	ROHDE&SCHWARZ CMW500
制造单位 Manufacturer	ROHDE&SCHWARZ
出厂编号 Serial No.	/
管理编号 Asset No.	SX-009
接收日期 Date of Receiving	2022 年 11 月 05 日 Year Month Day
校准日期 Date of Calibration	2022 年 11 月 05 日 Year Month Day
发布日期 Date of Release	2022 年 11 月 07 日 Year Month Day
批准人 Approved Signatory	李孟劭 总经理
核验员 Inspected by	陈锐
校准员 Calibrated by	曾伟浩

签发单位(专用章)
Stamp

实验室地址: 广东省深圳市宝安区航城街道鹤洲社区洲石路739号恒丰工业城C6栋综合楼1604D
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邮编(Post Code): 518101 电话(Tel): 0755-23057616 传真(Fax): 0755-23057616
网址(HTTP): www.jyhtest.com 邮箱(E-mail): szjyhjc@126.com



深圳精宇航检测技术有限公司

SHENZHEN JINGYUHANG DETECTION TECHNOLOGY CO.,LTD



中国认可
国际互认
校准
CALIBRATION
CNAS L7875

校准证书

CALIBRATION CERTIFICATE

证书编号
Certificate No.

22AA147710001

委托方
Client

深圳市思讯通信技术有限公司

委托方地址
Address

深圳市宝安区创业二路东联大厦A座505-506

计量器具名称
Description

网络分析仪

规格/型号
Model/Type

E5071C

制造单位
Manufacturer

Keysight

出厂编号
Serial No.

/

管理编号
Asset No.

SX-048

接收日期
Date of Receiving

2022 年 11 月 05 日
Year Month Day

校准日期
Date of Calibration

2022 年 11 月 05 日
Year Month Day

发布日期
Date of Release

2022 年 11 月 07 日
Year Month Day

批准人
Approved Signatory

李孟劭

总经理

核验员
Inspected by

陈锐

校准员
Calibrated by

曾伟浩

签发单位(专用章)
Stamp



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