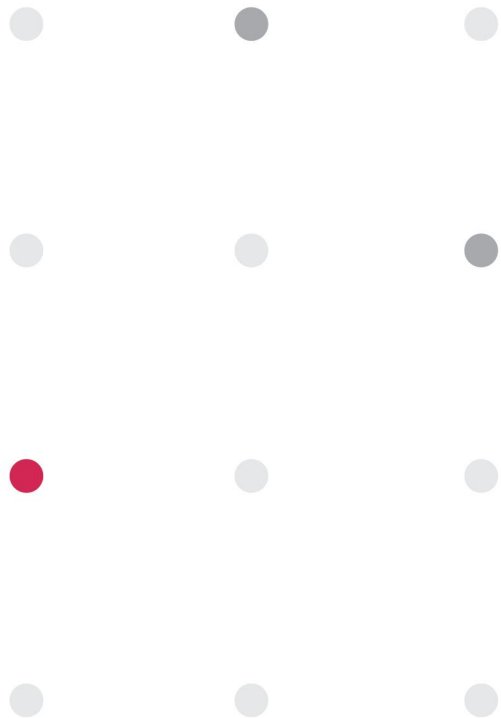


PSA

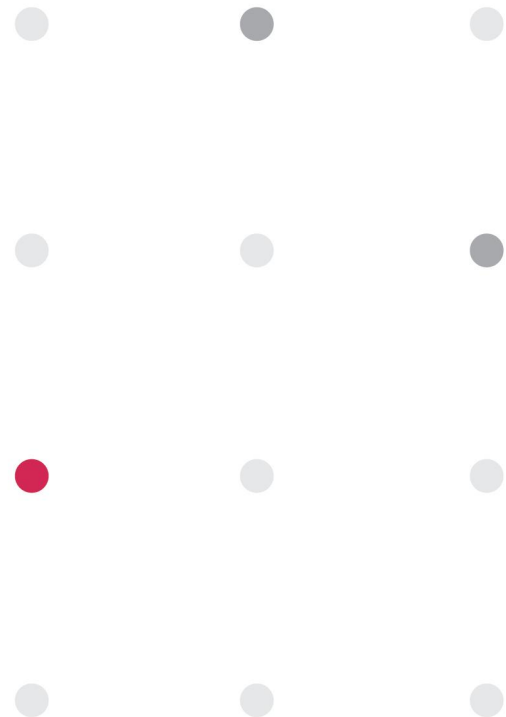
佳邦科技股份有限公司

INPAQ TECHNOLOGY CO., LTD.



PSA

PASSIVE SYSTEM ALLIANCE
INPAQ TECHNOLOGY CO., LTD.



峰米_C025FGN

Presented by

FangTan Jin

2023/04/06



Version	Date	Description	Author
V01	2023/03/14	New Release	FangTan Jin
V01	2023/04/06	更改天线位置及走线方式	FangTan Jin

OUTLINE

1. Measurement Information

1.1 Experimental Setup

1.2 Antenna Solution Detail

2. Antenna Characteristics

2.1 S-Parameter

2.2 Antenna Efficiency and Peak Gain

2.3 3 views of antenna & 2D Radiation Patterns

3. Summary

1. Measurement Information

1.1 Experimental Setup



1. Measurement Information

1.2 Antenna Solution Detail

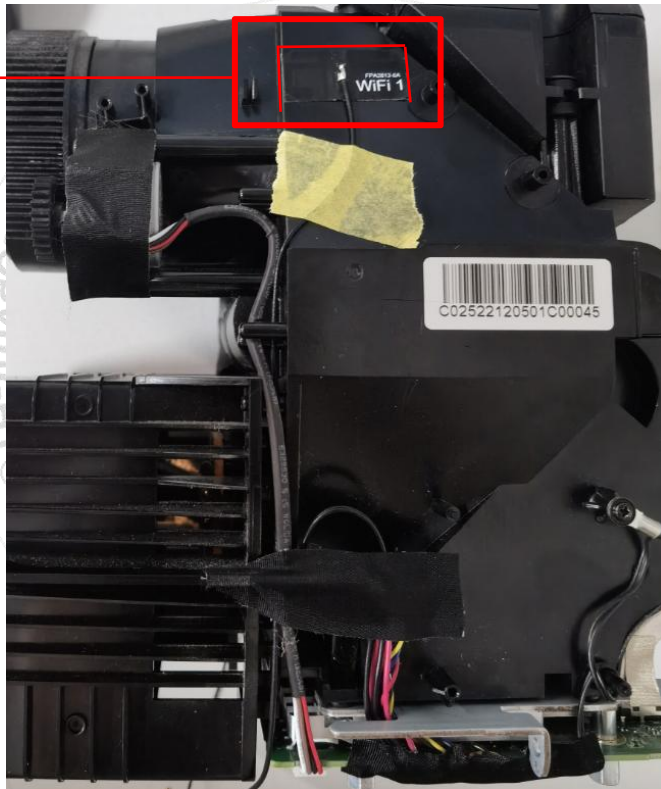
WIFI-1



model: C025FGN_WIFI 1

天线齐红线贴

线长: 235mm

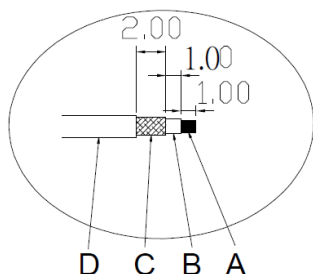


Dimensions

ELECTRICAL

Frequency:
2.4~2.5/5.15~5.85 GHz

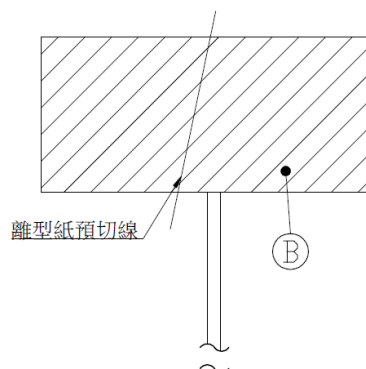
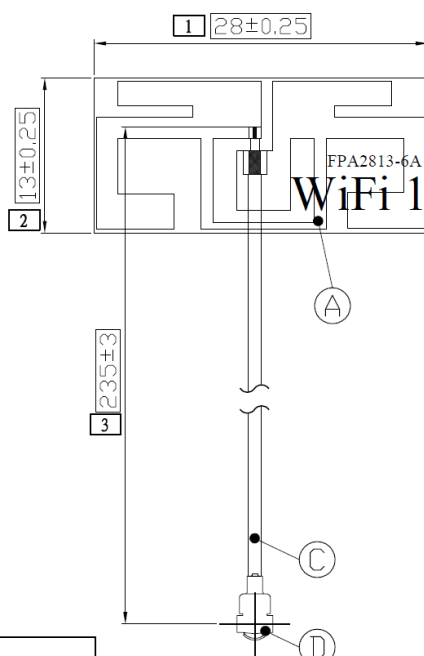
No.	DESCRIPTION	MAT'L	Color	Q'TY
A	Body	FPC (0.5oz) (Single Layer)	Black	1
B	Double Tape	3M 467	—	1
C	(Coaxial Cable $\phi 1.13$)	—	Black	1
D	IPEX Compatible(2130800037)	—	Gold	1



A - center conductor
B - Dielectric
C - Outer conductor
D - Jacket

(Front View)

(Back View)



IPEX方向:
100mm : $\pm 90^\circ$
200mm : $\pm 135^\circ$
200mm以上不管控

※標記□記號者, 為重點檢驗尺寸

設計 DR.	SHLEE	2021.07.16	品名	版本 REV.
核准 APP.	MARCO		ARTICLE	A
容許公差 TOLERANCE	RFFPA281323IMLB301			
6以下..... ± 0.2	單位 UNIT			
6以上~30..... ± 0.5	mm			
30以上~120..... ± 0.8	比例 SCALE			
120以上~315..... ± 1.2	****			
315以上~1000..... ± 2.0	張數 SHEET			
1000以上~2000..... ± 3.0	1			

PSA 華新科技股份有限公司
WALSIN TECHNOLOGY CORPORATION

1. Measurement Information

1.2 Antenna Solution Detail

WIFI-2

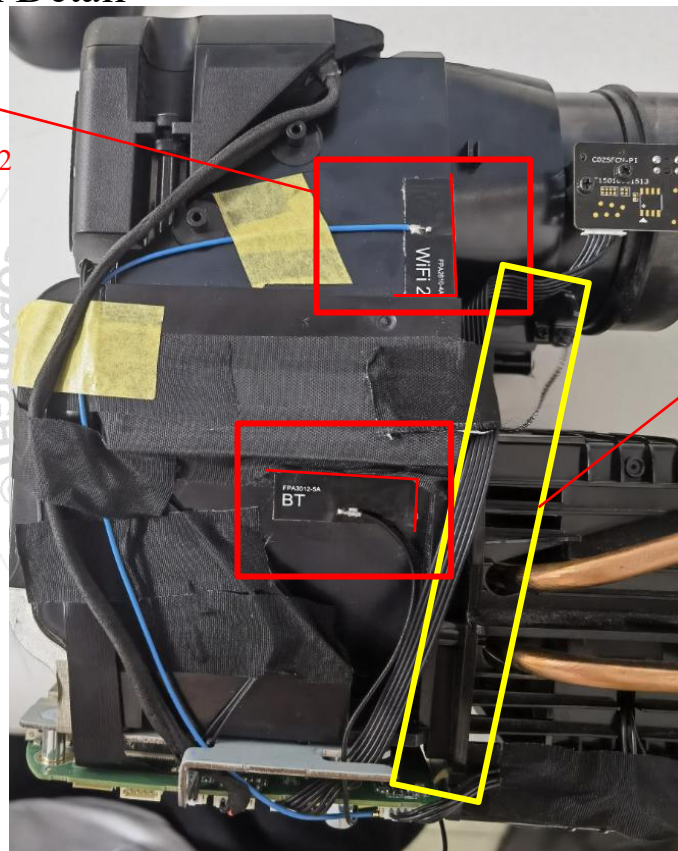
model: C025FGN_WIFI 2

天线齐红线贴
线长: 235mm

BT

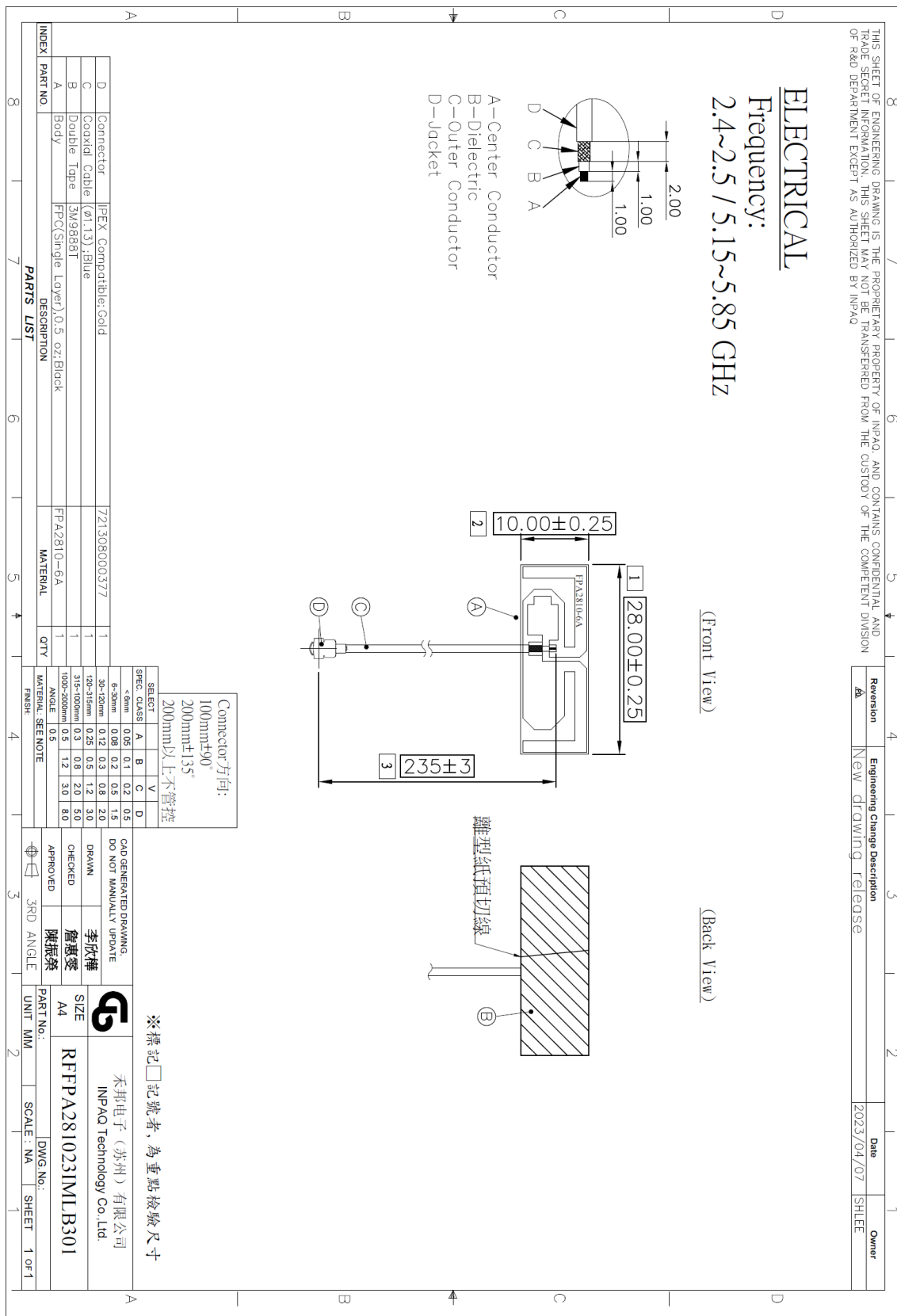
model: C025FGN_BT

天线齐红线贴 线
长: 100mm



黄框内的线请缕一缕，使其远离天线

3. Antenna Drawing : WiFi2



UNLESS OTHER SPECIFIED TOLERANCES ON :
X = N/A X.X = N/A X.XX = N/A
ANGLES = N/A HOLEDIA = N/A

SCALE : N/A

UNIT : mm

DRAWN BY : 李欣樺

CHECKED BY : 詹惠愛

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

TITLE : RFFPA281023IMLB301

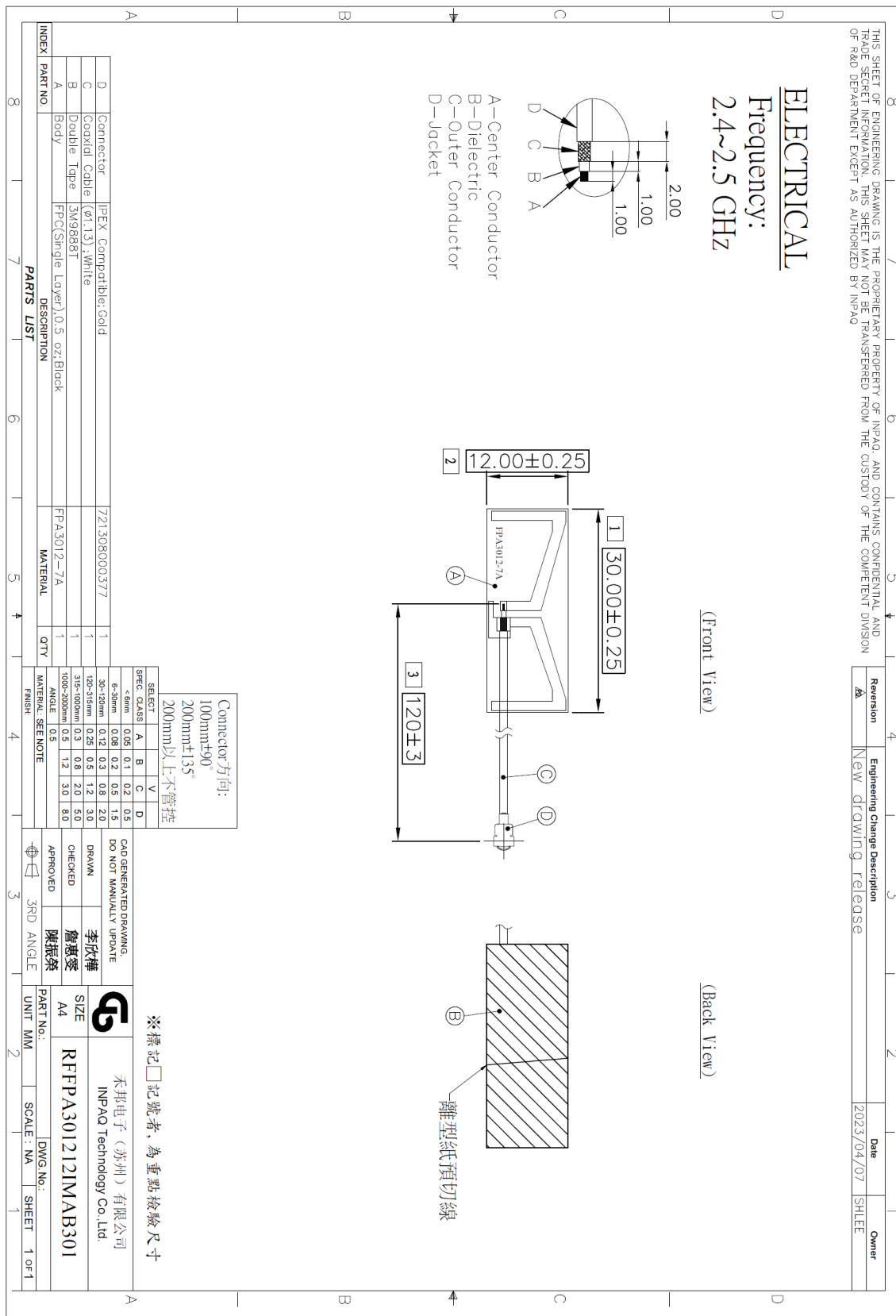


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DOCUMENT
NO.SPEC REV.
P0

3. Antenna Drawing : BT



UNLESS OTHER SPECIFIED TOLERANCES ON :
X = N/A X.X = N/A X.XX = N/A
ANGLES = N/A HOLEDIA = N/A

SCALE : N/A

UNIT : mm

DRAWN BY : 李欣樺

CHECKED BY : 詹惠愛

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

TITLE : RFFPA301212IMAB301

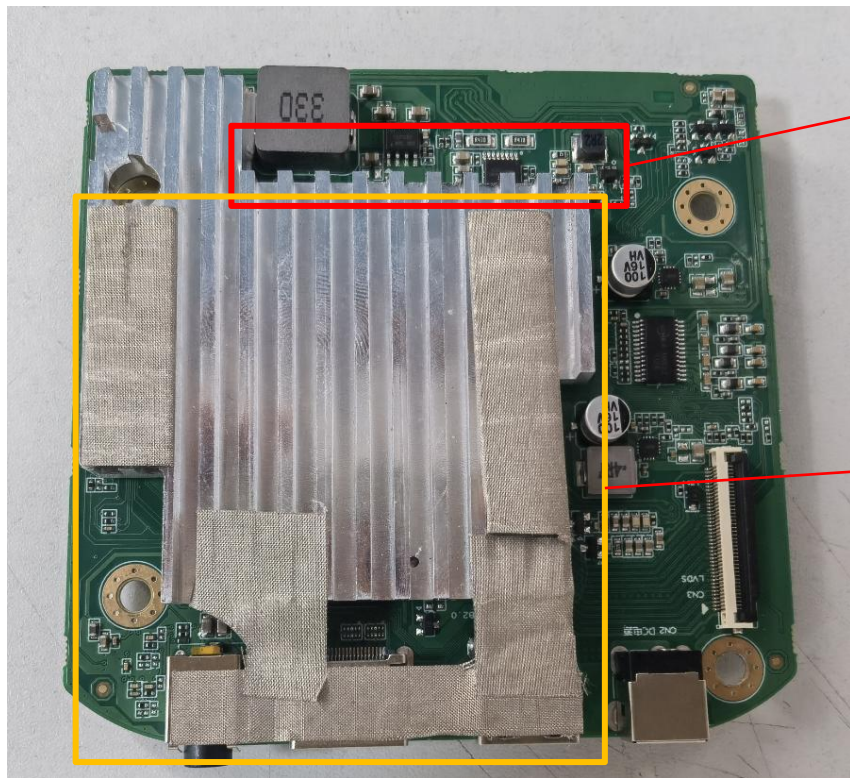


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DOCUMENT
NO.SPEC. REV.
P0

优化TIS措施

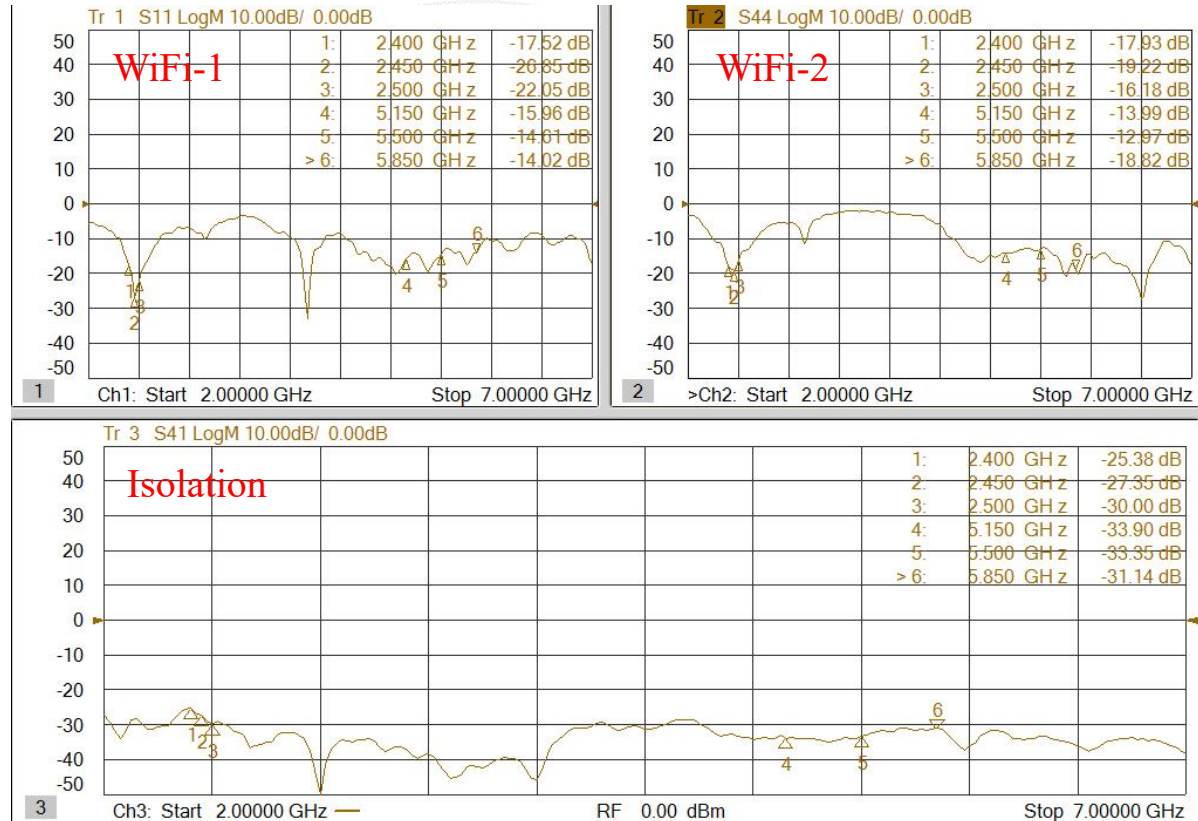


1.散热片此处请切平。

2.导电布及导电泡棉
请如图贴

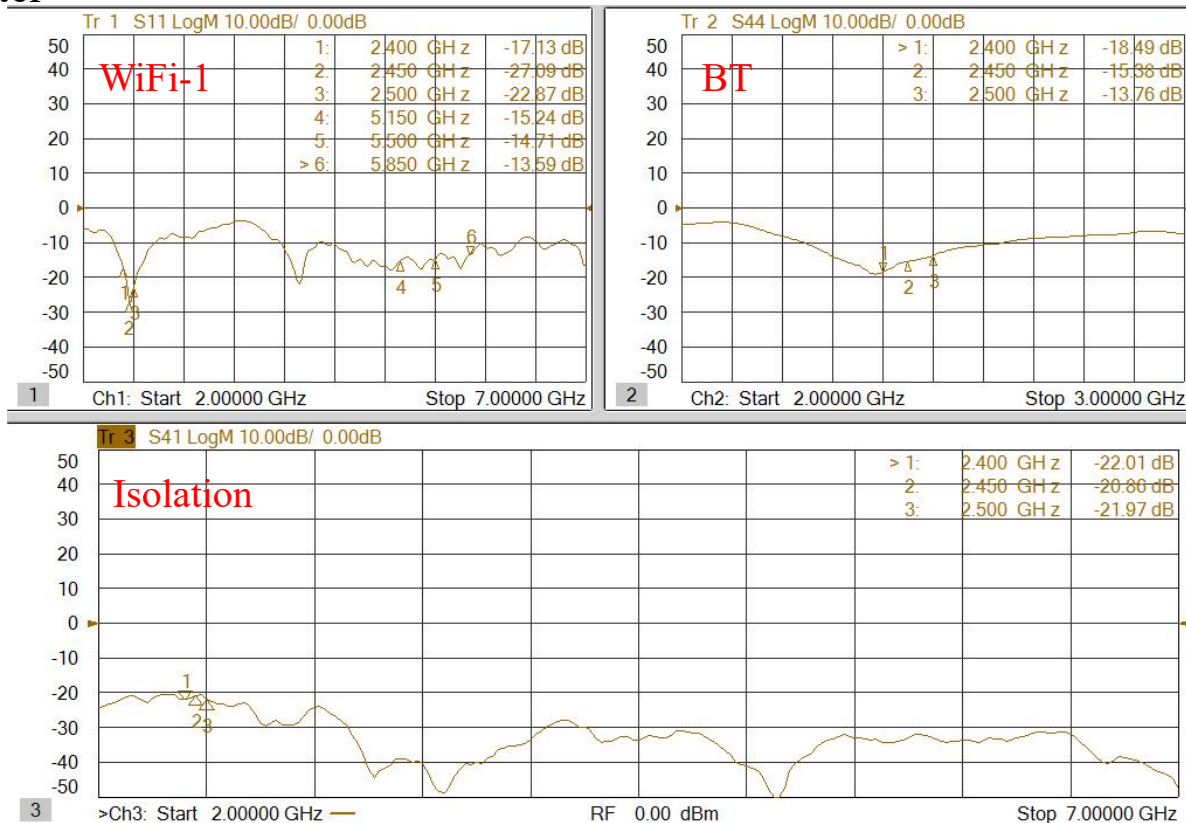
2. Antenna Characteristics

2.1 S-Parameter



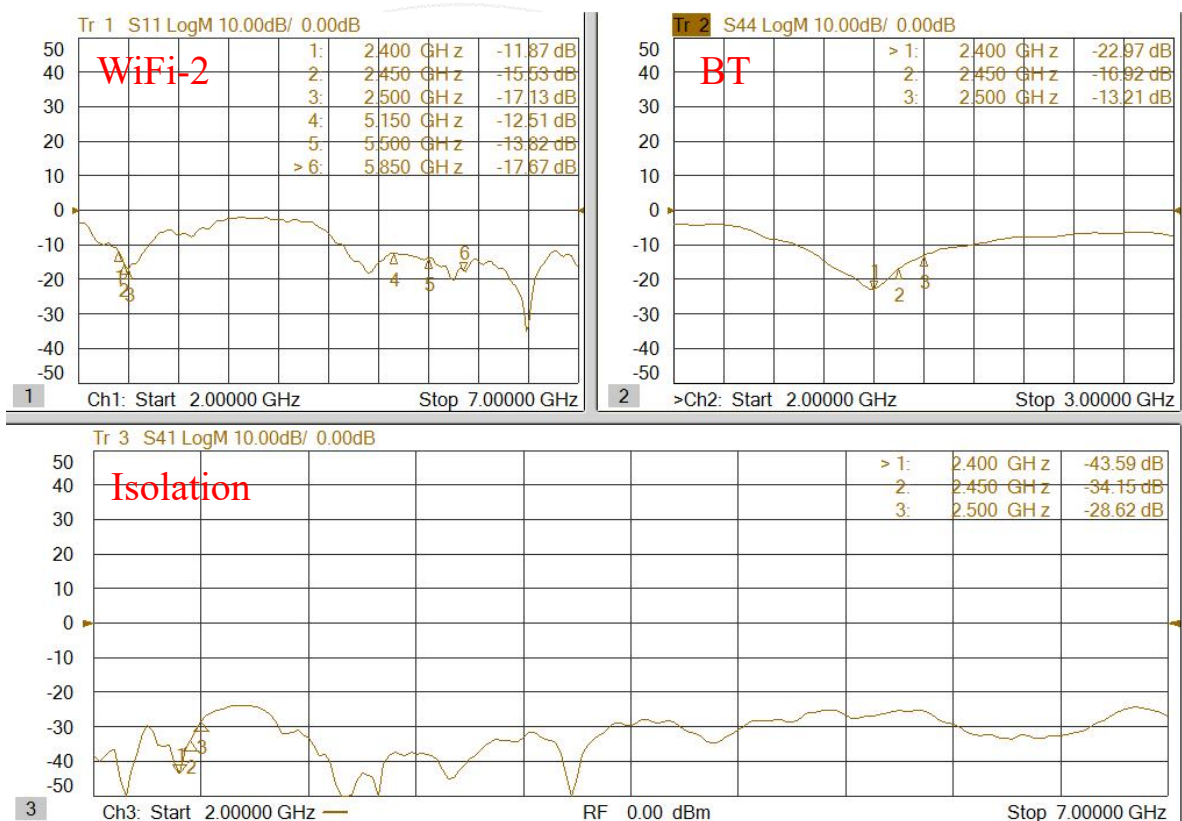
2. Antenna Characteristics

2.1 S-Parameter



2. Antenna Characteristics

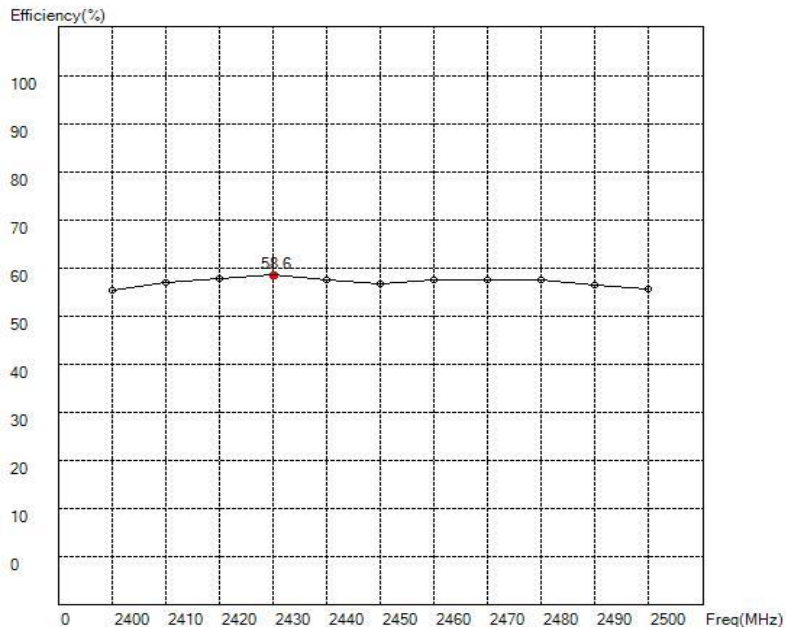
2.1 S-Parameter



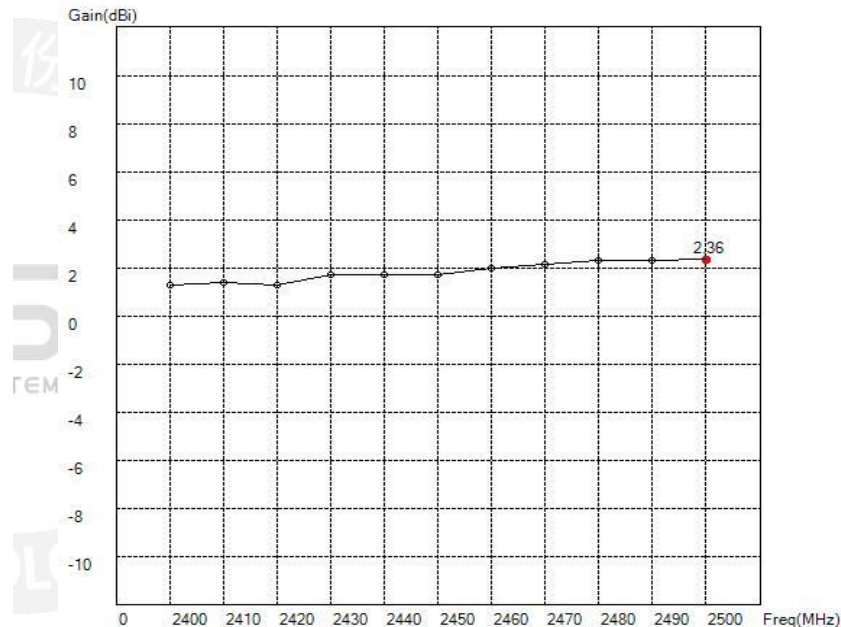
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

WiFi-1-2G



Maximum Efficiency at 2430 MHz : 58.6 %

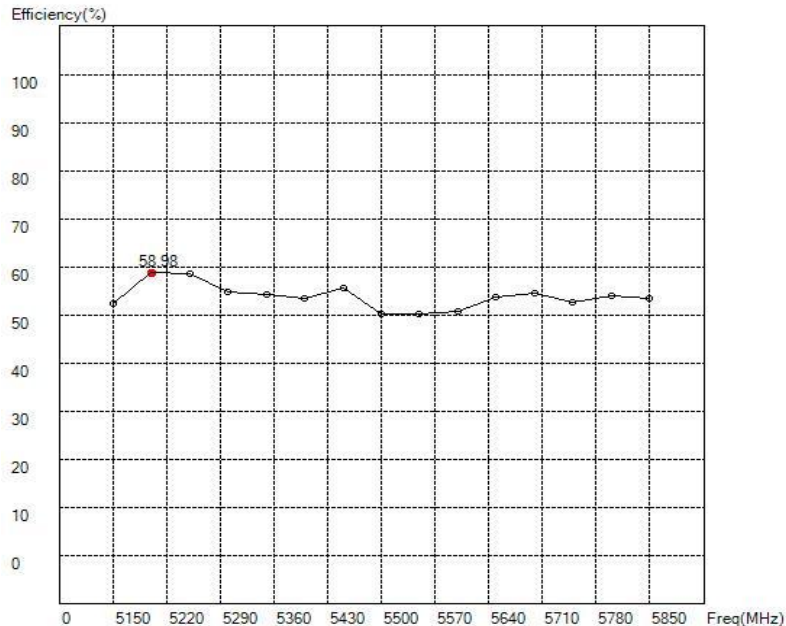


Maximum Peak Gain at 2500 MHz : 2.36 dBi

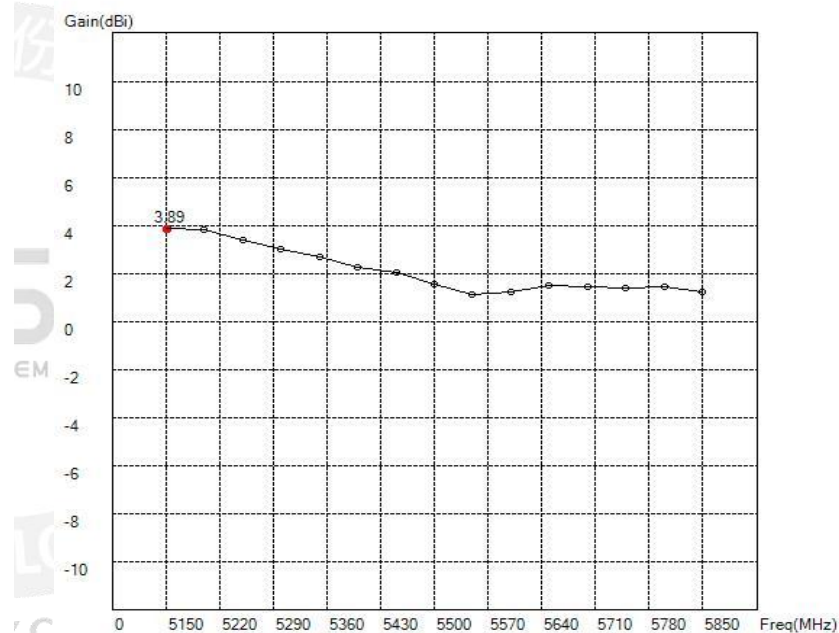
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

WiFi-1-5G



Maximum Efficiency 5200 at MHz : 58.98 %

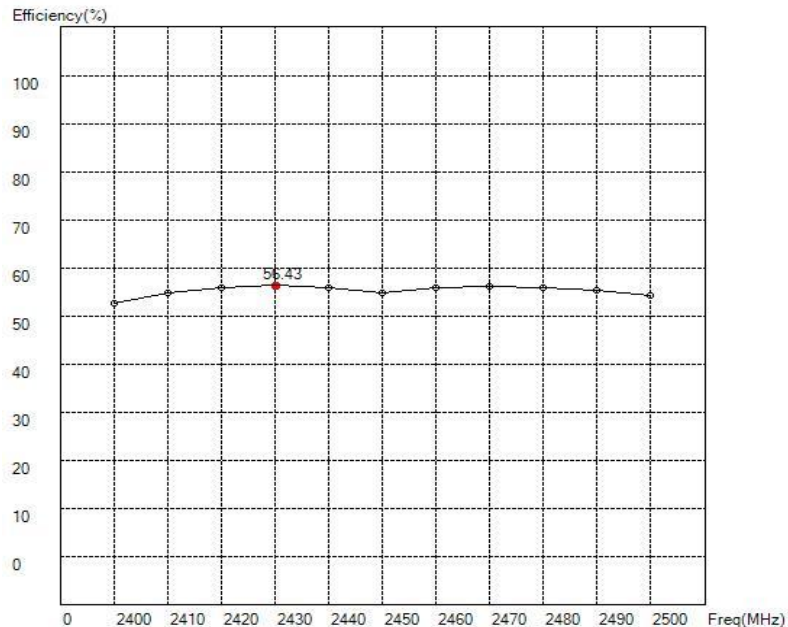


Maximum Peak Gain at 5150 MHz : 3.89 dBi

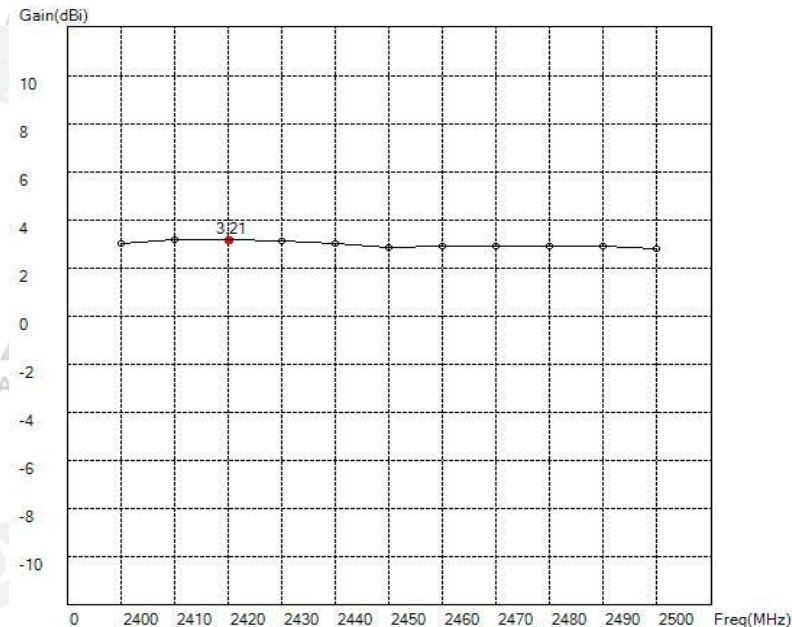
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

WiFi-2-2G



Maximum Efficiency at 2430 MHz : 56.43 %

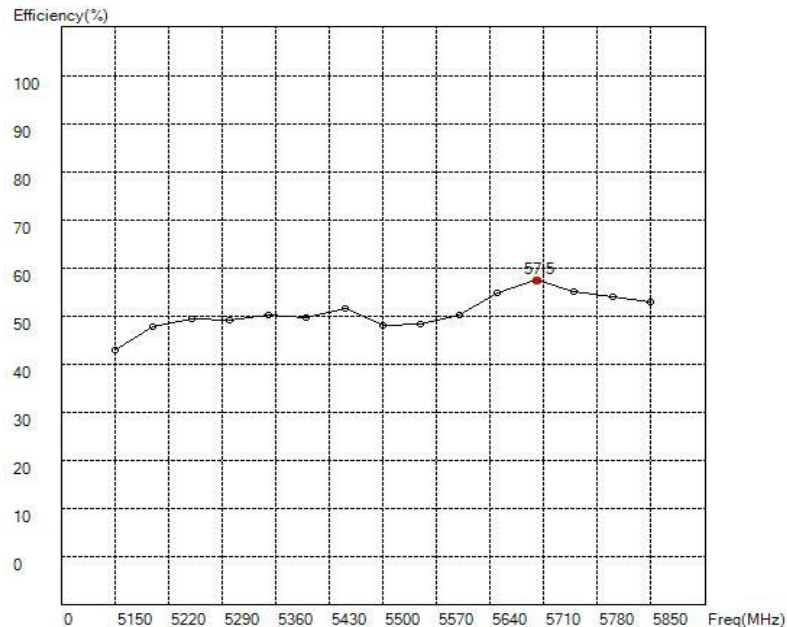


Maximum Peak Gain at 2420 MHz : 3.21 dBi

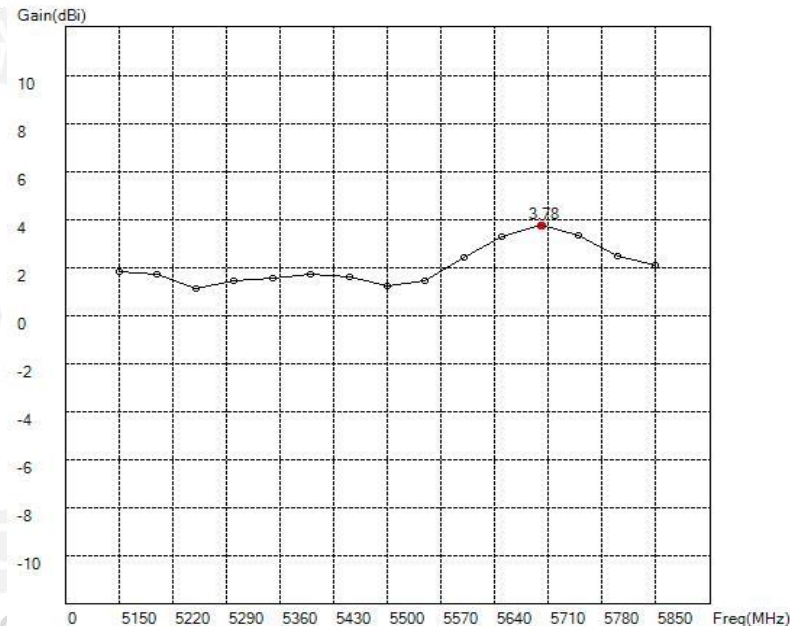
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

WiFi-2-5G



Maximum Efficiency 57.5% at 5700 MHz

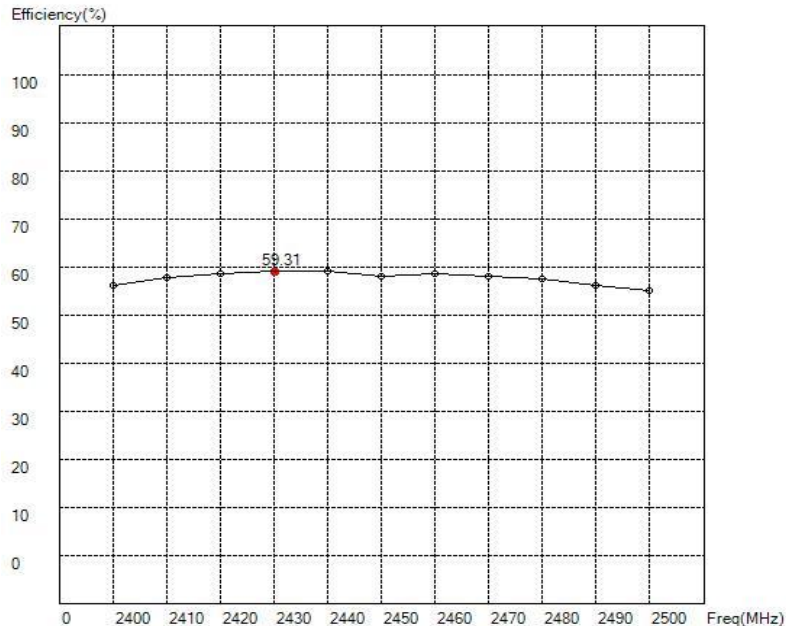


Maximum Peak Gain at 5700 MHz : 3.78dBi

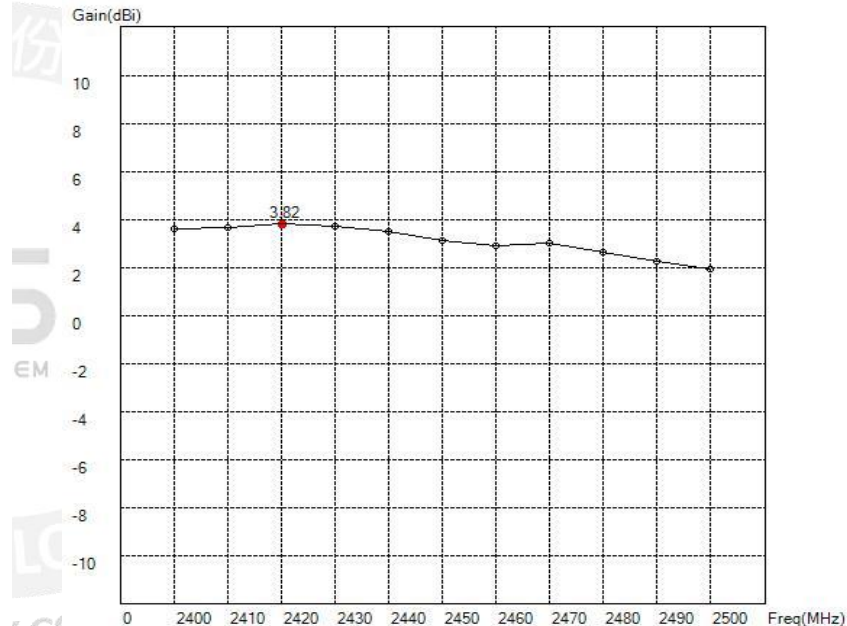
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

BT



Maximum Efficiency at 2430 MHz : 59.31 %



Maximum Peak Gain at 2420 MHz : 3.82 dBi

2. Antenna Characteristics

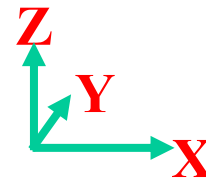
2.2 Antenna Efficiency and Peak Gain

	WiFi-1		WiFi-2		BT	
Frequency (GHz)	Efficiency (%)	Peak gain (dBi)	Efficiency (%)	Peak gain (dBi)	Efficiency (%)	Peak gain (dBi)
2.4	55.34	1.30	52.68	3.04	56.15	3.65
2.45	56.68	1.73	54.93	2.86	58.14	3.15
2.5	55.71	2.36	54.42	2.84	55.10	1.95

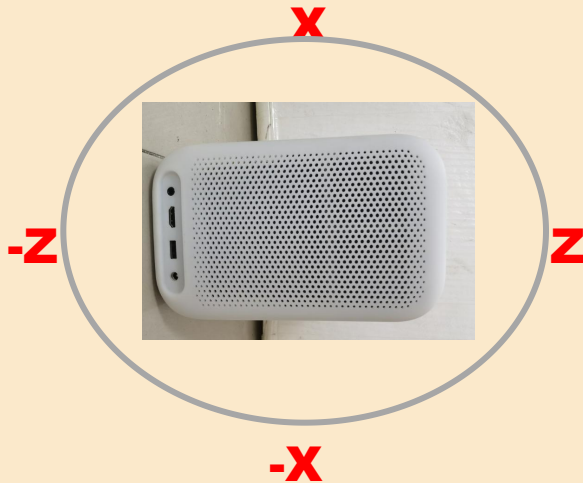
	WiFi-1		WiFi-2	
Frequency (GHz)	Efficiency (%)	Peak gain (dBi)	Efficiency (%)	Peak gain (dBi)
5.15	52.35	3.89	42.99	1.85
5.5	50.28	1.55	48.00	1.24
5.85	53.62	1.24	53.03	2.13

2. Antenna Characteristics

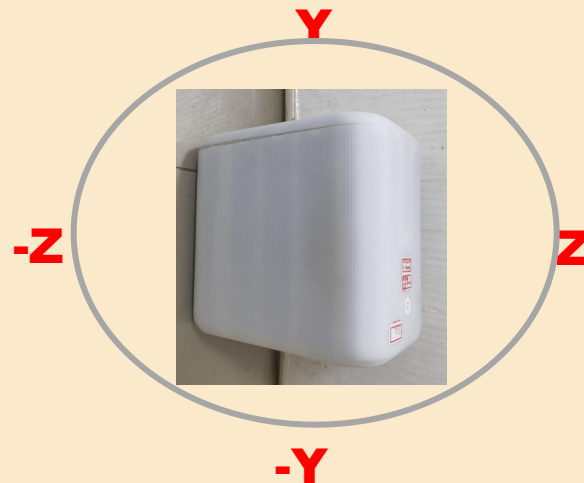
2.3 3 views of antenna



X-Z plane



Y-Z plane



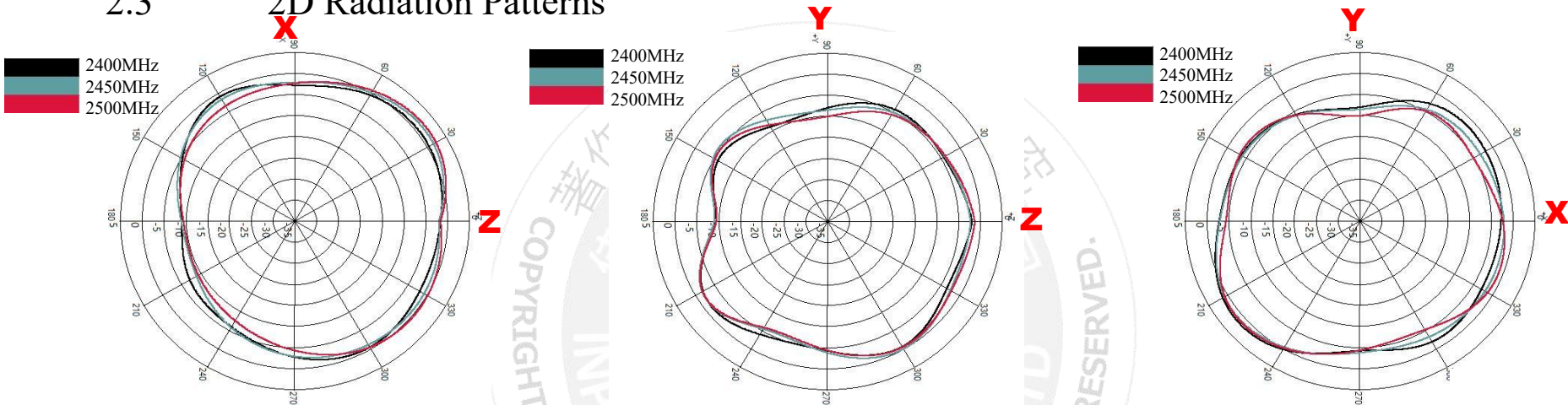
X-Y plane



2. Antenna Characteristics

2.3 2D Radiation Patterns

WiFi-1-2G

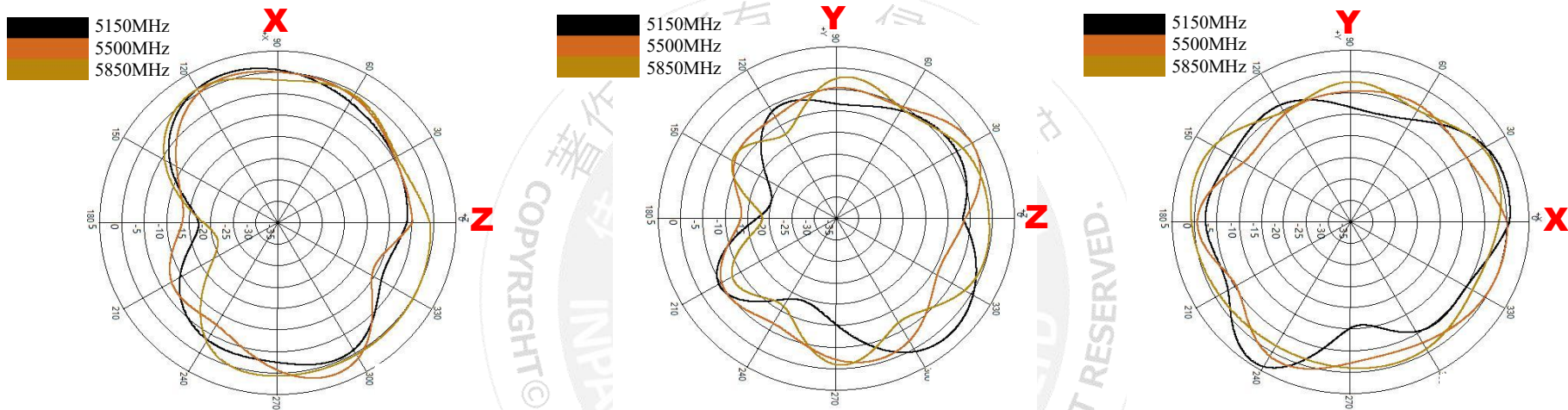


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	0.55	-2.02	-0.68	-3.54	1.30	-2.33
2450	1.73	-1.78	-0.08	-3.39	0.85	-2.72
2500	2.36	-1.66	-0.57	-3.40	0.76	-3.02

2. Antenna Characteristics

WiFi-1-5G

2.3 2D Radiation Patterns

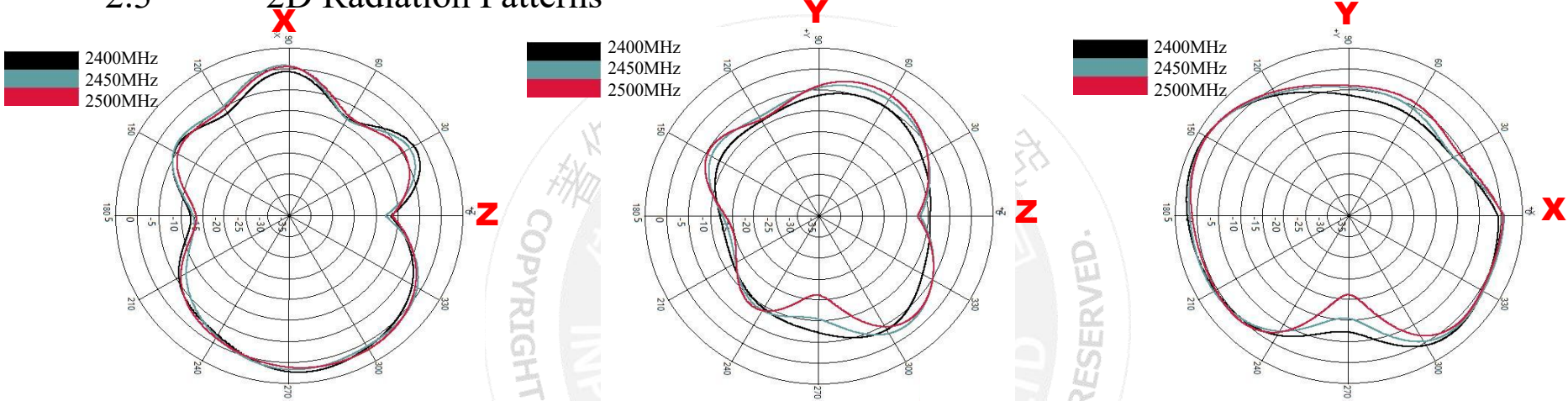


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	1.06	-2.91	0.76	-4.44	3.89	-2.05
5500	1.55	-2.57	0.16	-4.39	1.14	-2.25
5850	1.24	-1.29	-0.75	-3.57	0.67	-1.49

2. Antenna Characteristics

WiFi-2-2G

2.3 2D Radiation Patterns

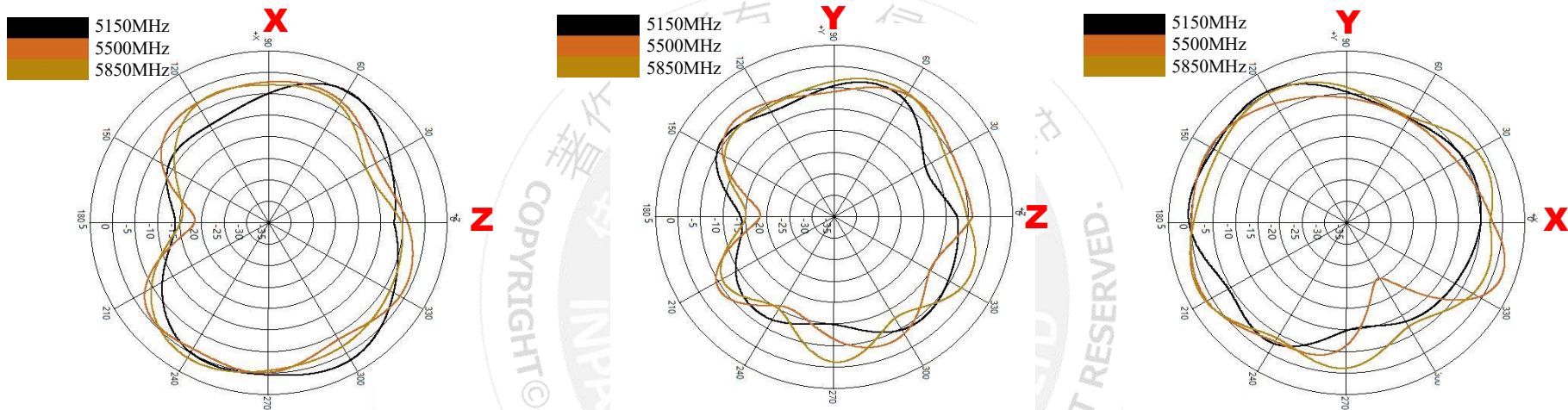


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	2.22	-2.42	-3.80	-7.39	3.04	-0.74
2450	1.69	-2.30	-2.74	-6.38	2.86	-0.74
2500	1.72	-2.43	-1.88	-6.46	2.84	-0.96

2. Antenna Characteristics

WiFi-2-5G

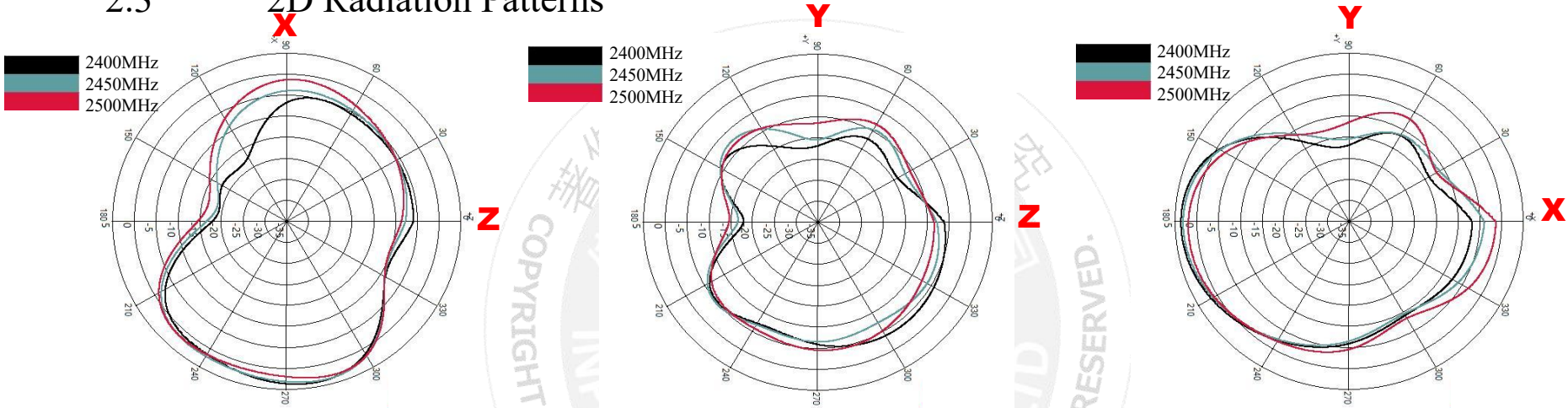
2.3 2D Radiation Patterns



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	1.85	-2.46	-3.51	-6.29	0.41	-3.24
5500	-0.10	-2.72	-2.18	-5.00	1.24	-2.46
5850	1.32	-3.04	-1.15	-4.41	2.13	-1.86

2. Antenna Characteristics

2.3 2D Radiation Patterns

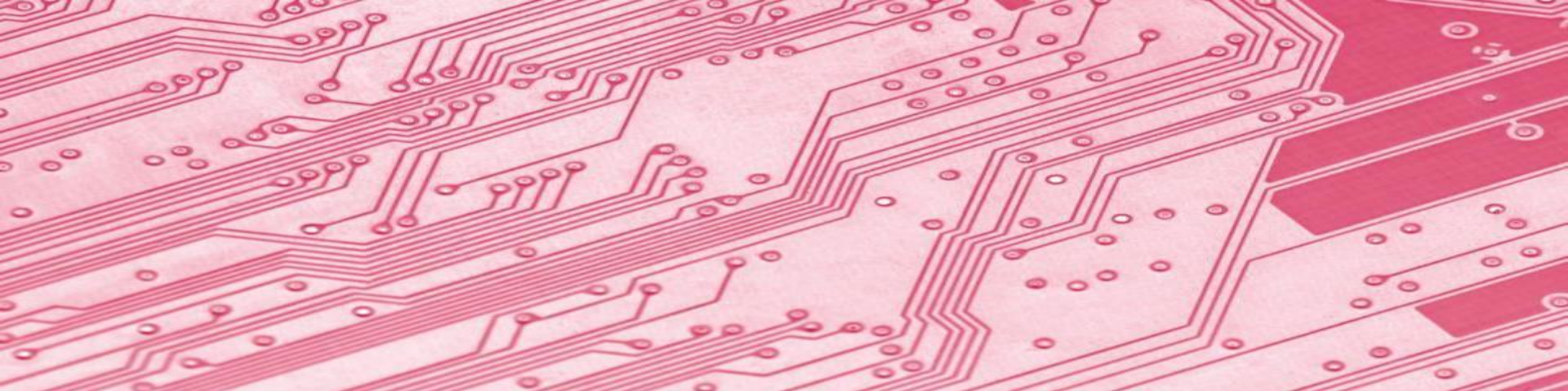


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	3.65	-2.30	-3.86	-7.28	3.65	-2.90
2450	3.15	-2.04	-5.72	-7.98	3.15	-3.02
2500	1.95	-2.09	-4.54	-7.50	1.95	-2.92

3. Summary

- The performance of antennas is shown in table

	WiFi-1-2G	WiFi-1-5G	WiFi-2-2G	WiFi-2-5G	BT
Maximum Efficiency (%)	58.6	58.98	56.43	57.5	59.31
Maximum Gain (dBi)	2.36	3.89	3.21	3.78	3.82



Title for Image (above image could be replaced)

Content Details

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INPAQ TECHNOLOGY CO., LTD.

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