

# APPROVAL SHEET

**FPB Antenna**

**2.4/5.XGHz Band Working Frequency**

**Halogens Free Product**

**P/N: RFFPA360911EMLB101**

Customer : 振曜

Customer 's Part No. : 5064-EA0T00+700

Production : \_\_\_\_\_

Address : \_\_\_\_\_





# 品名：RFFPA360911EMLB101

Antenna manufacturer name: INPAQ TECHNOLOGY CO., LTD. CHUNAN BRANCH

Antenna manufacturer address: NO.11, KE-YI ST., CHUNAN TOWN, MIAOLI COUNTY 350402, TAIWAN, R.O.C..

## 1. Explanation of part number :

RF	FPA	3609	11	E	M	L	B	1	01
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 3609 Length 36.06mm, Width 9.36mm	2 digits for cable length e.g.: 11 Cable Length:10.1cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX M: MMCX S: SMA T: TNC U:MURATA N: None	A: Reverse Female <b>B: Reverse Male</b> F: Female M: Male <b>N: None</b>	<b>0: 0GHz</b> <b>3: 3GHz</b> <b>5: 5 GHz</b> <b>6: 6GHz</b> A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band <b>N: NFC</b> <b>T:LTE band</b> <b>W: WCDMA band</b>	B: MP <b>T:During Test</b> X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 6:RG316 7:Ø1.37 8:RG178	01~99 series number

## 2. Electrical Specification :

Item	Specification
Working Frequency Range	2.4 ~ 2.5 /5.15~5.85GHz
Return Loss	-10 dB
Peak Gain	2.4~2.5 GHz @ 3.31dBi 5.15~5.85GHz @ 4.34dBi
VSWR	2 max.
Polarization	Linear Vertical
Radiation Pattern	Directional
Impedance	50Ω
Operation Temperature	-20°C ~ +65°C

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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 劉采璇

CHECKED BY : 詹惠雯

DESIGNED BY : 吳加宸

APPROVED BY : 陳振榮

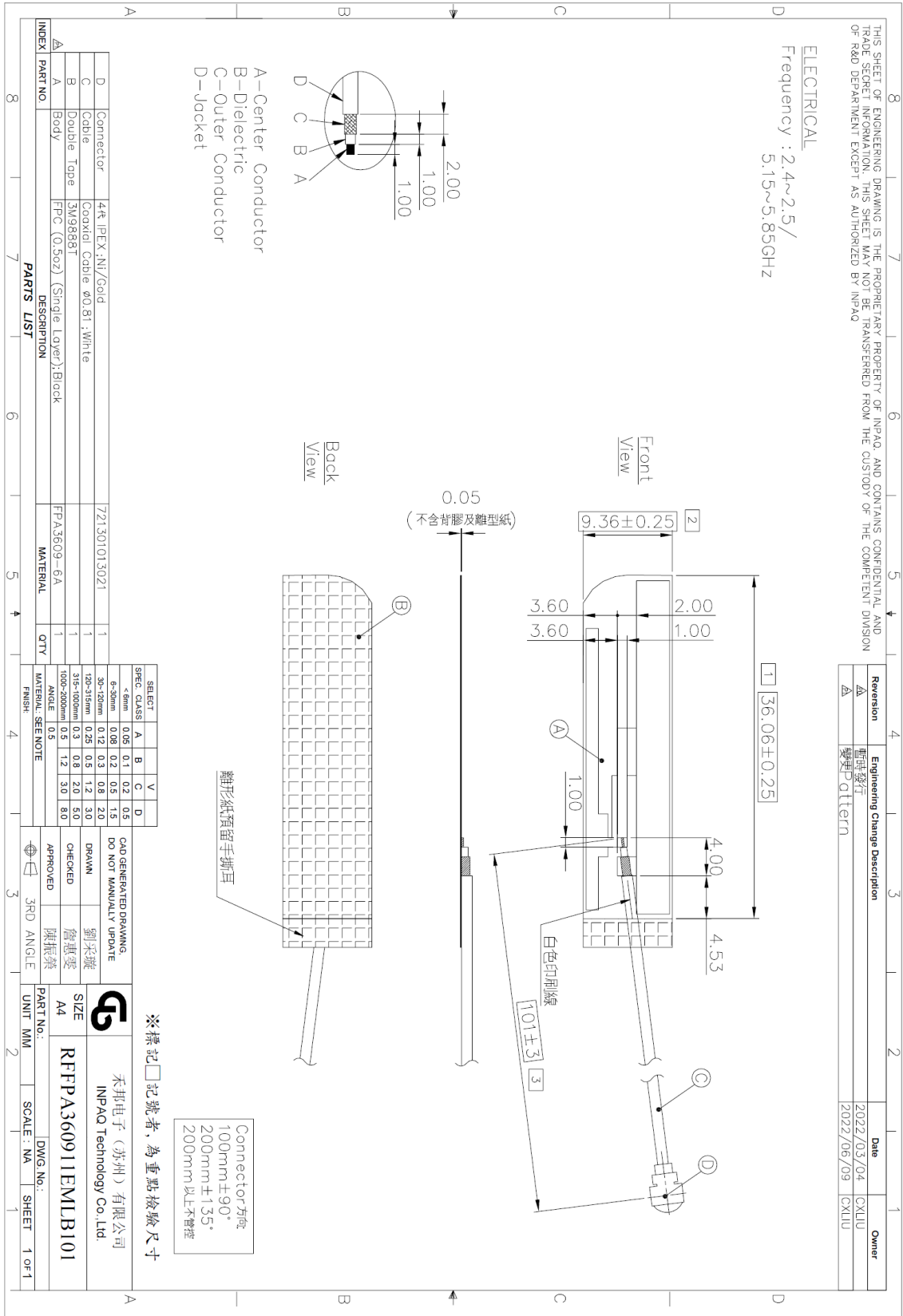
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### 3. Antenna Drawing :



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



**INPAQ TECHNOLOGY CO., LTD.**

SCALE : N/A

UNIT : mm

DRAWN BY : 劉采璇

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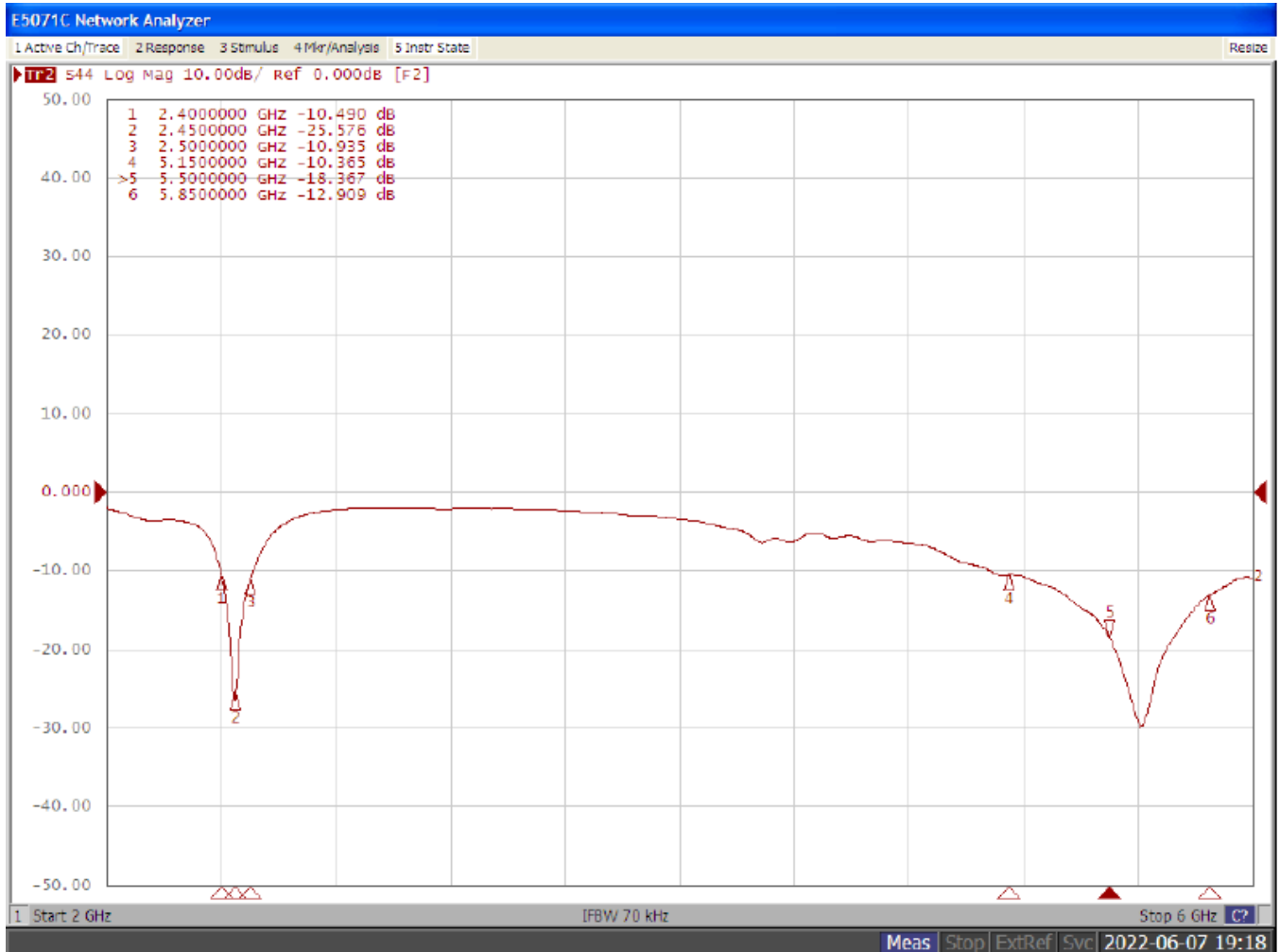
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4. Performance Report :

**Test Report**

**Electrical Characteristics**

Return Loss



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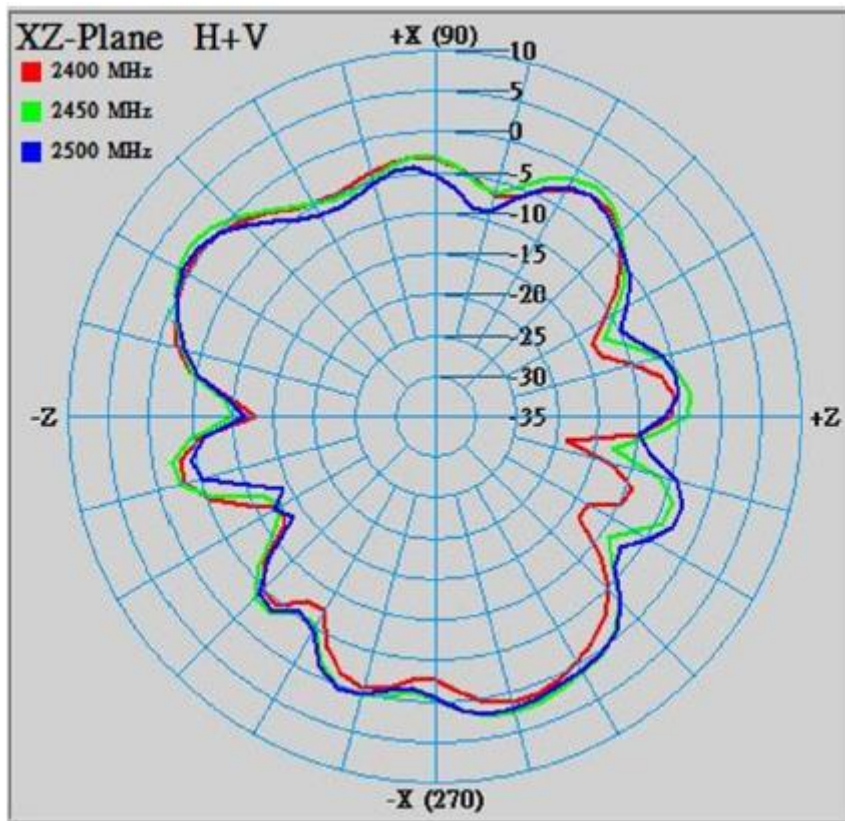
## 2D Radiation Patterns


2G

X-Z Plane

Phi=0.00deg

Gain . dB

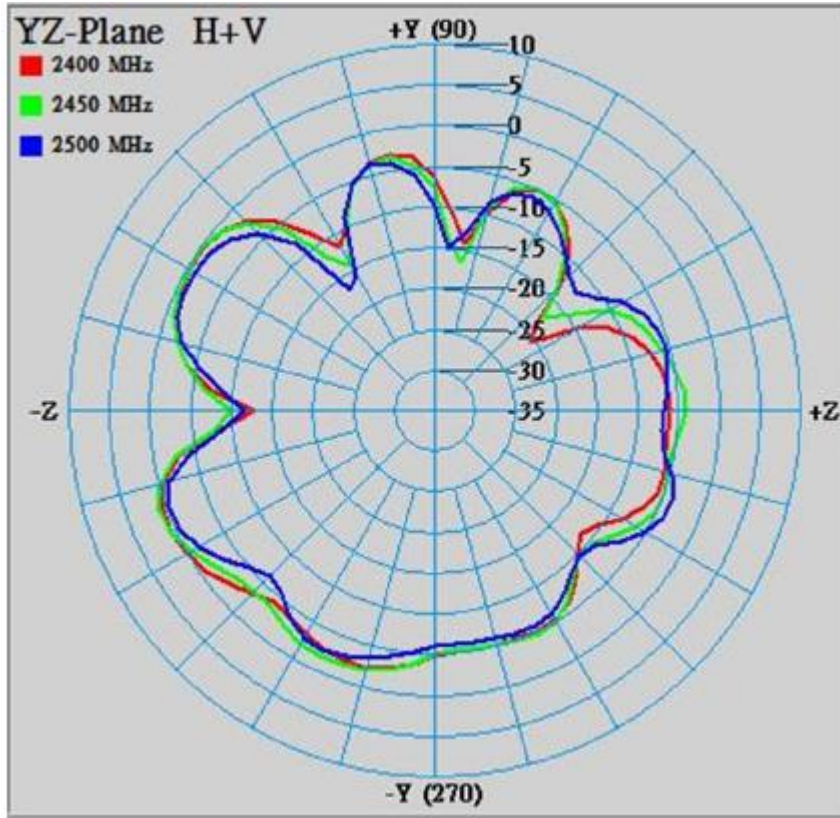



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Y-Z Plane

Phi=90.00deg

Gain . dB

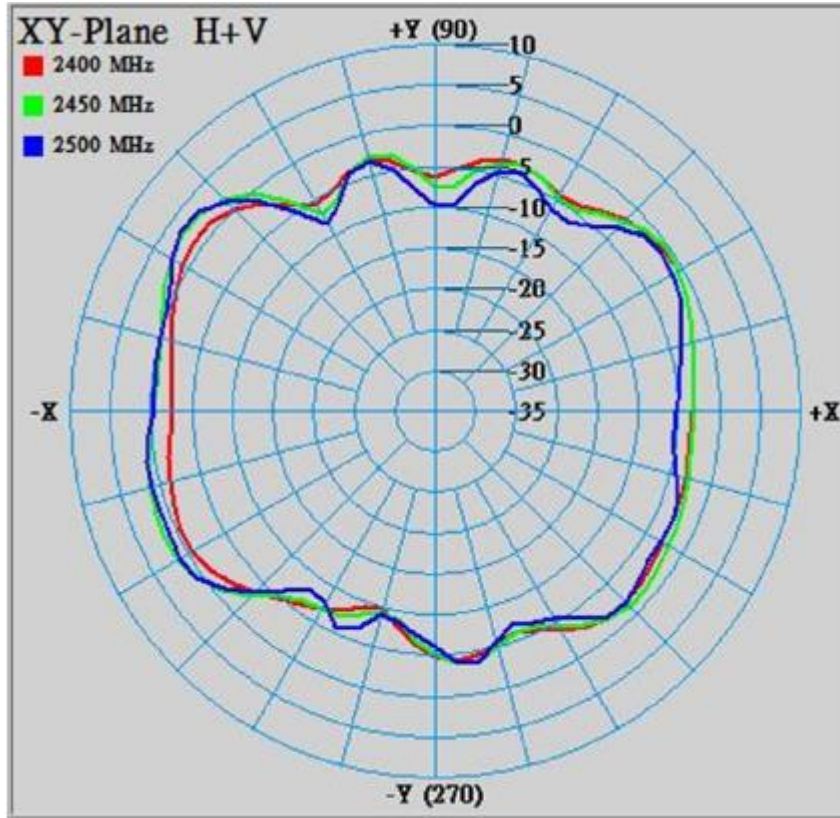


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# X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	1.39	-3.51	0.75	-4.39	1.20	-2.63
2450	2.66	-2.39	1.04	-4.14	2.96	-1.73
2500	2.27	-2.91	-0.09	-5.07	3.31	-2.27

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 ANGLES=N/A      HOLEDIA=N/A



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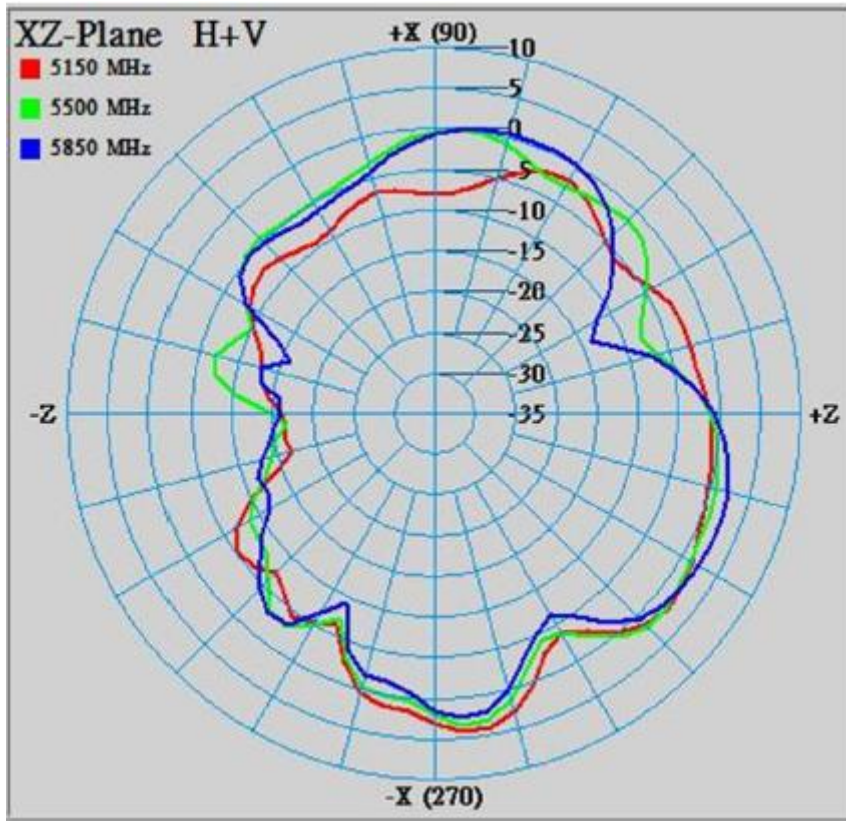



5G

X-Z Plane

Phi=0.00deg

Gain . dB

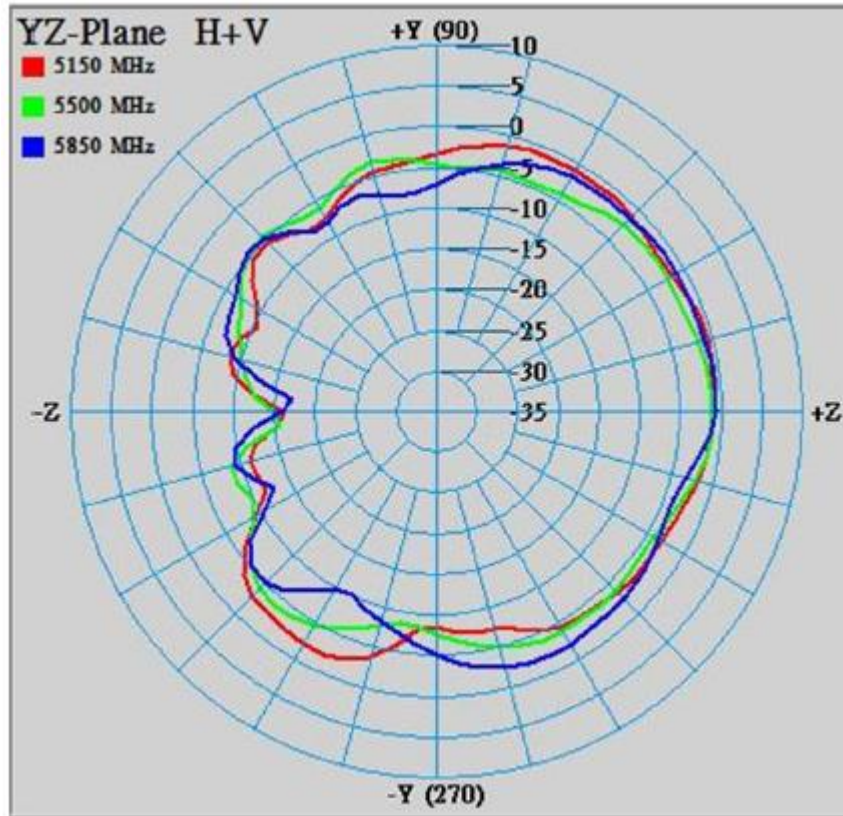



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Y-Z Plane

Phi=90.00deg

Gain . dB

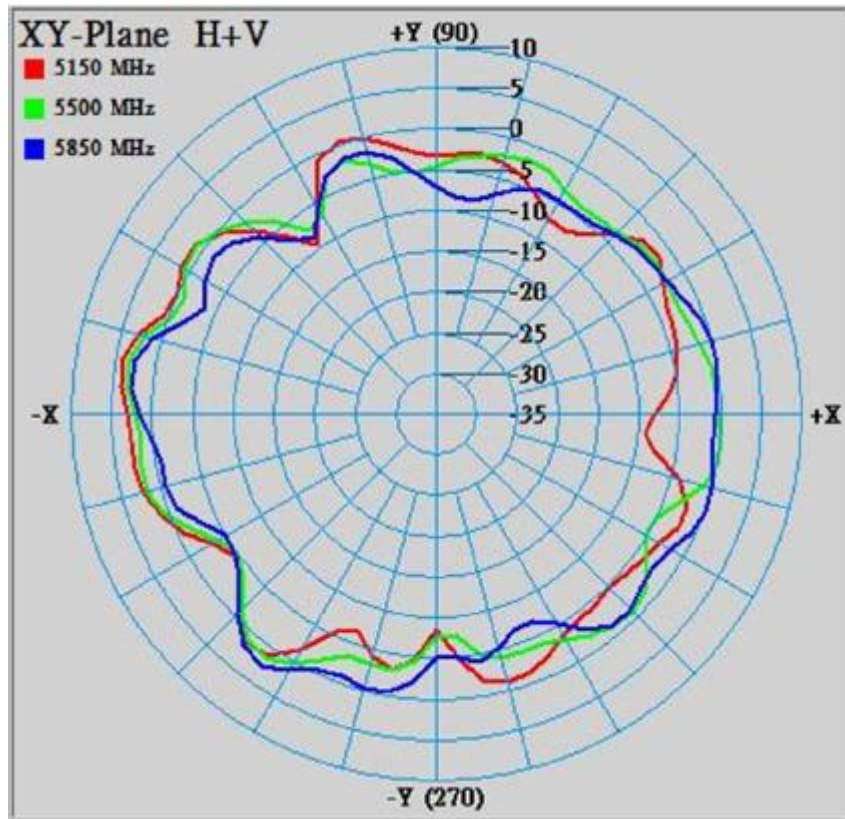


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# X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
5150	4.34	-2.41	-0.38	-3.68	4.31	-1.54
5500	3.46	-2.03	-1.02	-4.51	3.48	-1.40
5850	2.63	-2.27	-0.44	-4.12	2.89	-1.69

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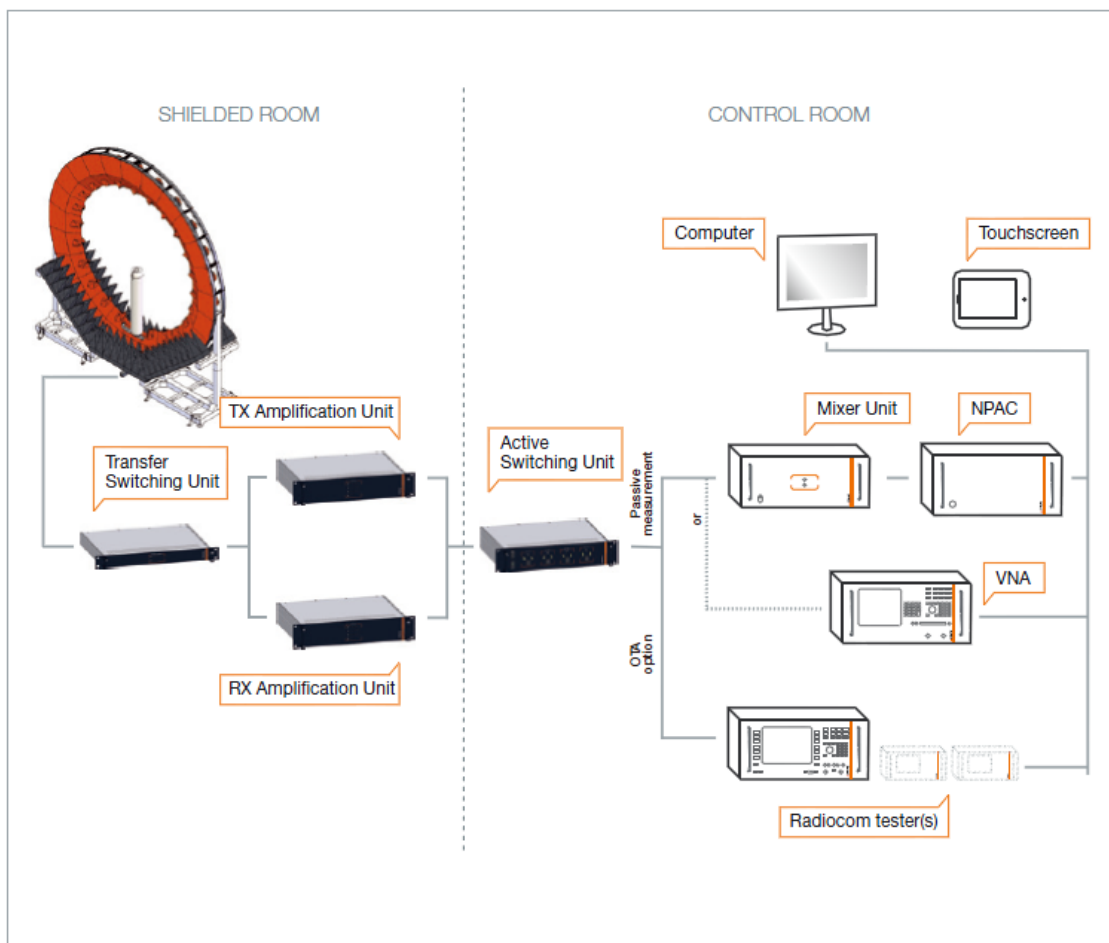
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## Test Instruments

Description	Manufacturer	Model No.	Calibrated Date	Calibrated Until
Satimo		SG24	2022/11/29	2023/11/29
Keysight Network Analyzer		E5071C	2020/3/3	2023/3/3

1. Test date: 2022/6/9
2. Name of test personnel-Kerry Wu
3. Test software : satimo SG24 SPM V15
6. Placing DUT in chamber and using software to set the frequency for measurement ,and use software to calculate efficiency/gain/3D raw data .

### System overview



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