



# 品名：RFDPA191716IMAB301

## 1. Explanation of part number :

RF	DPA	1917	16	I	M	A	B	3	01
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 1310 Length 135.7mm, Width φ 10.0mm	2 digits for cable length e.g.: 00 None Cable	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.x 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 GHz
Gain	4.2 dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-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 : 邱登鈺      CHECKED BY : 詹惠雯  
 DESIGNED BY : 顏耀祺      APPROVED BY : 陳振榮

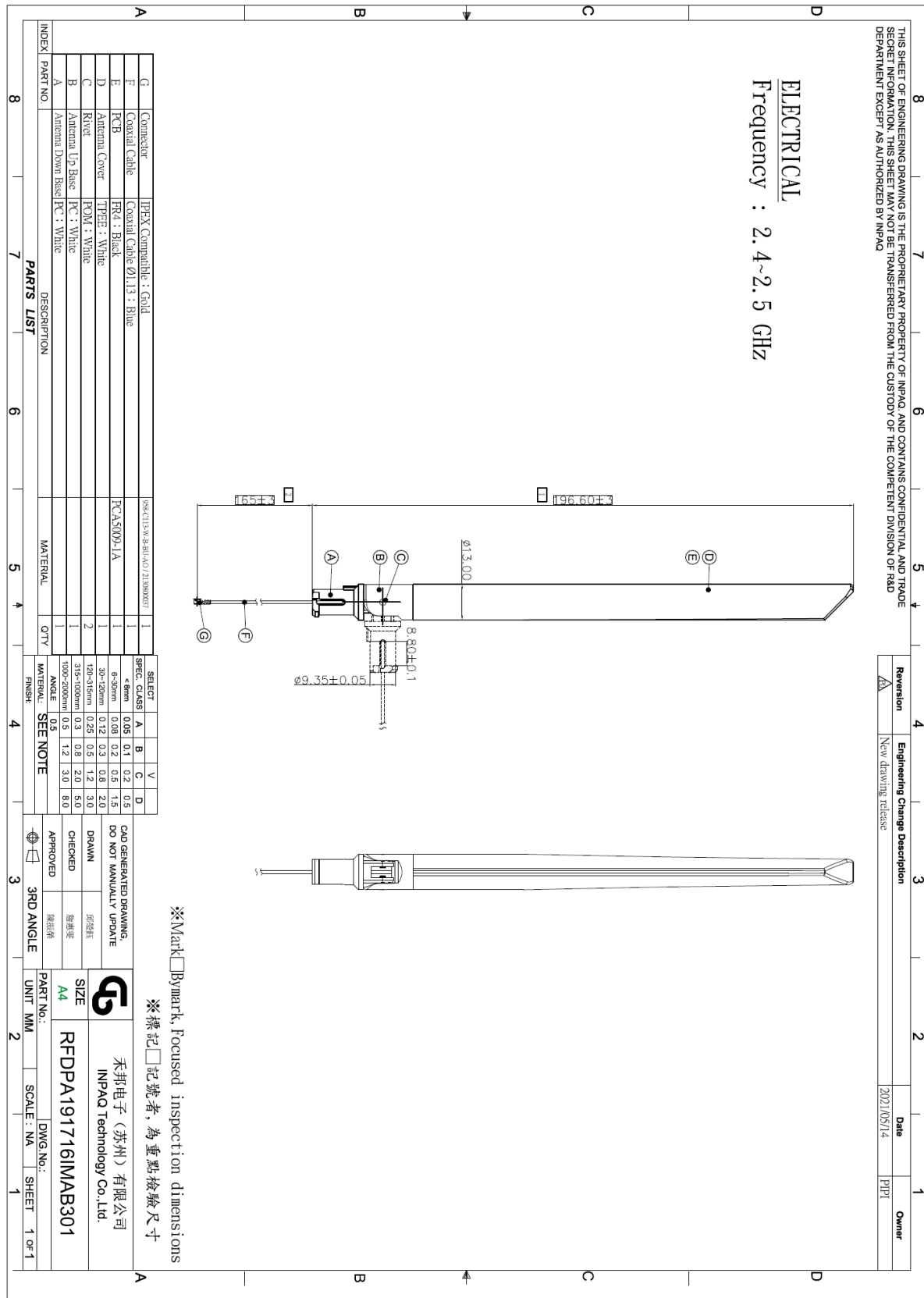
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### 3. Antenna Drawing :



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Revision	Engineering Change Description	Date	Owner
1	New drawing release	2021/05/14	PPY

INDEX PART NO.	DESCRIPTION	MATERIAL	QTY	FINISH	SELECT CLASS	A	B	C	D	3RD ANGLE	PART No.:	SCALE:	SHEET
G	Connector	IPPEX Compatible : Gold	1										
F	Coaxial Cable	Coaxial Cable Ø1.13 ± Blue	1		< mm	0.05	0.1	0.2	0.5				
E	PCB	FR4 : Black	1		6~30mm	0.08	0.2	0.5	1.5				
D	Antenna Cover	TPPE : White	1		30~120mm	0.12	0.3	0.8	2.0				
C	Rivet	PCMT : White	2		120~315mm	0.25	0.5	1.2	3.0				
B	Antenna Up Base	PC : White	1		315~1000mm	0.3	0.8	2.0	5.0				
A	Antenna Down Base	PC : White	1		1000~2000mm	0.5	1.2	3.0	8.0				

※Mark  Bymark, Focused inspection dimensions

※標記  記號者, 為重點檢驗尺寸

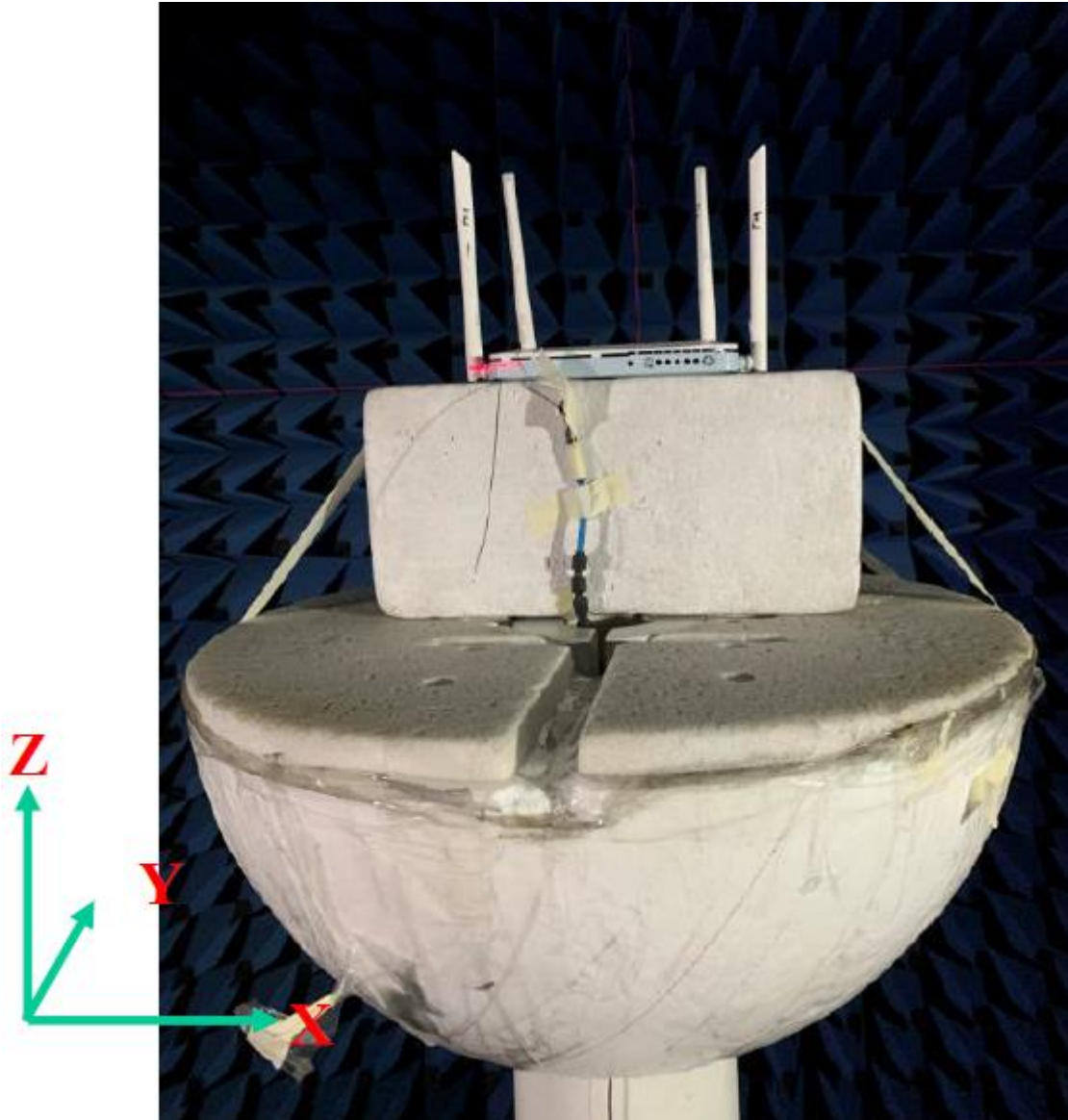
INSPECTED: W.B. SHI / 21/05/07	INSPECTED: W.B. SHI / 21/05/07	INSPECTED: W.B. SHI / 21/05/07
SELECT CLASS	DO NOT MANUALLY UPDATE	SIZE
A	0.05	A4
B	0.1	
C	0.2	
D	0.5	
CAO GENERATED DRAWING.	DRAWN	RFDPDA191716IMAB301
DO NOT MANUALLY UPDATE	CHECKED	
	APPROVED	
	3RD ANGLE	
	PART No.:	
	UNIT MM	
	SCALE: NA	
	DWG. No.:	
	SHEET	1 of 1


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DRAWN BY : 邱發鈺	CHECKED BY : 詹惠愛	
DESIGNED BY : 顏耀祺	APPROVED BY : 陳振榮	
TITLE : RFDPDA191716IMAB301		DOCUMENT NO.
		SPEC REV. <b>P0</b>

4. Performance Report :

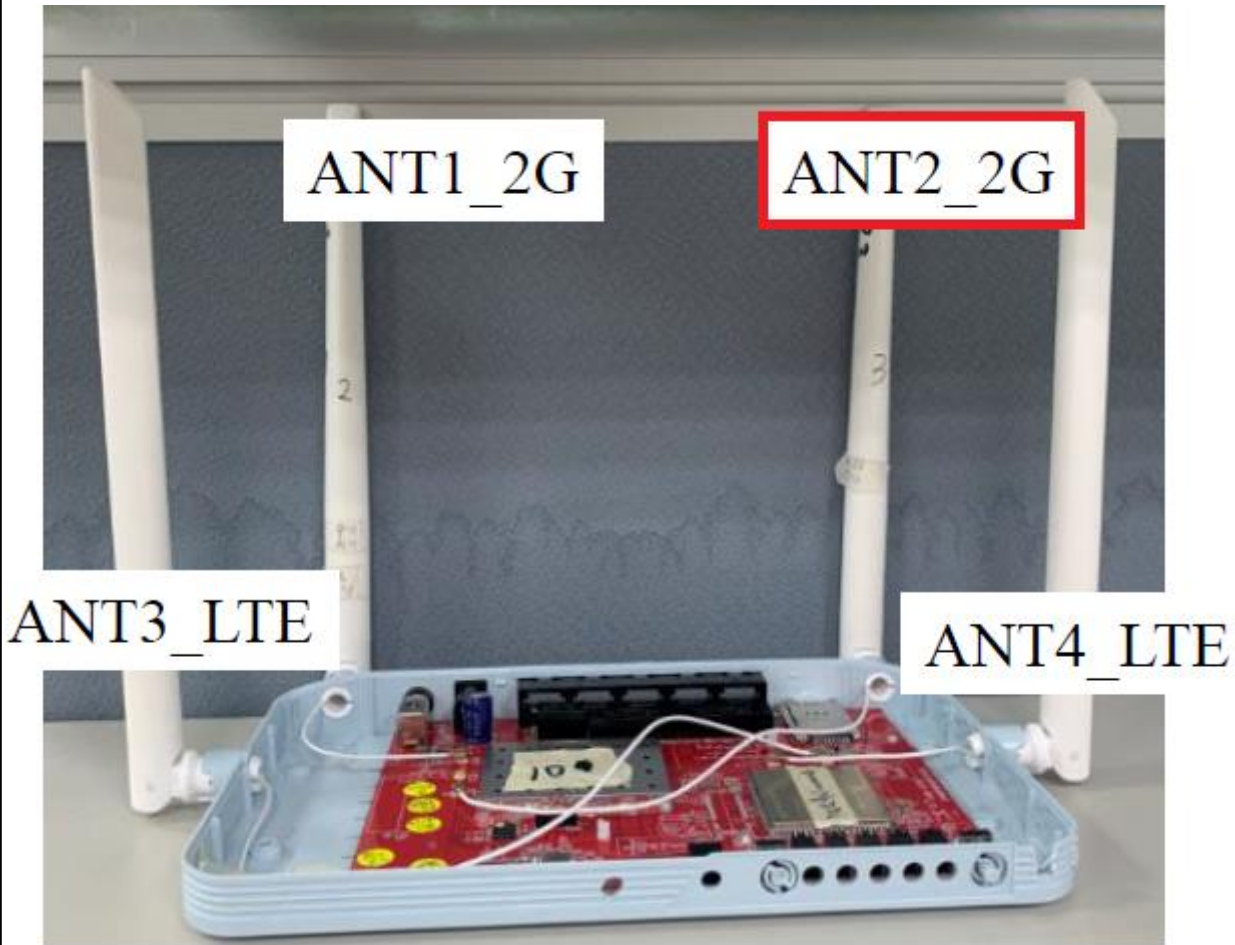
**Test Report**


**Experimental Setup**



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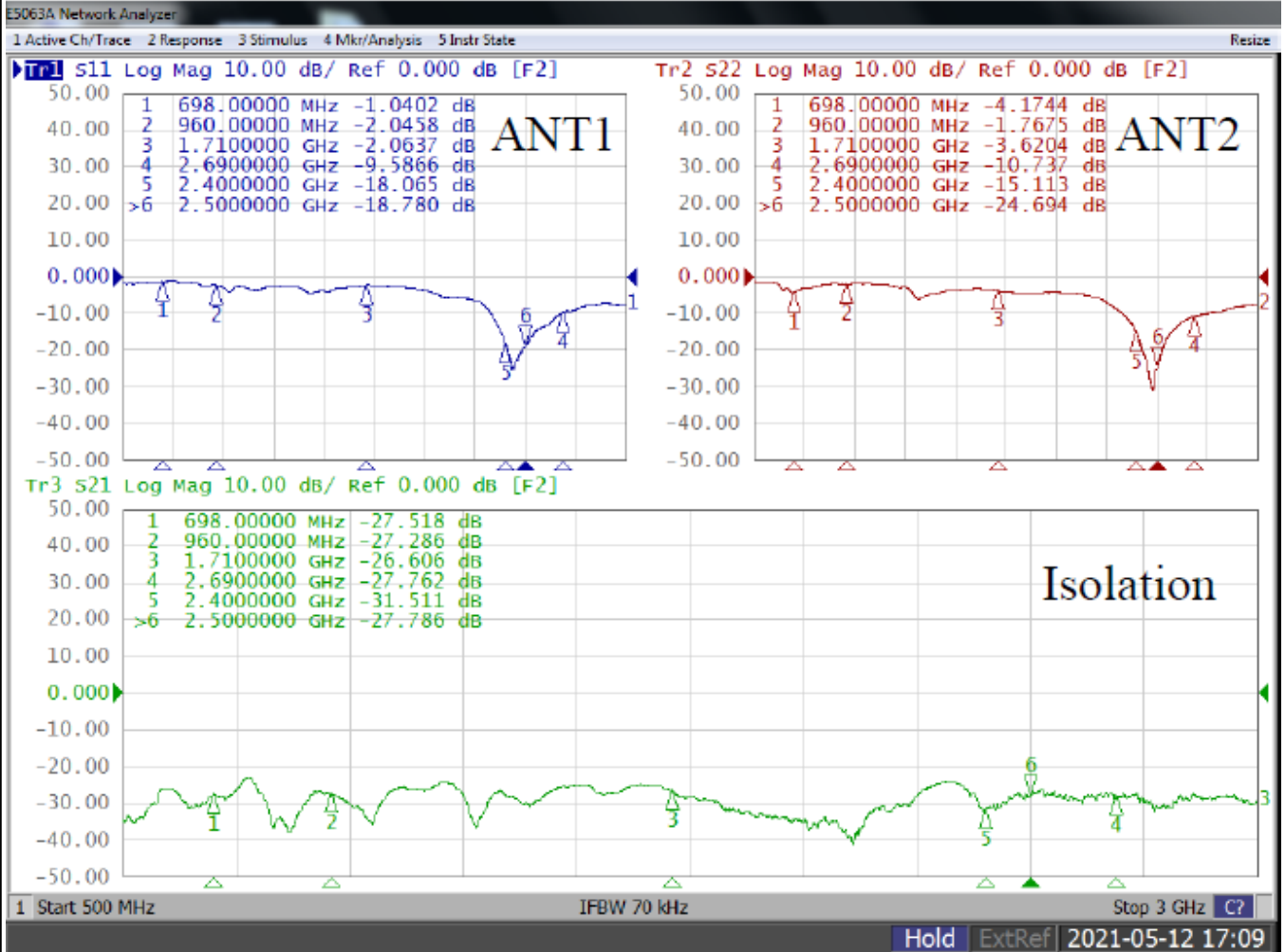
**Antenna Solution Detail**




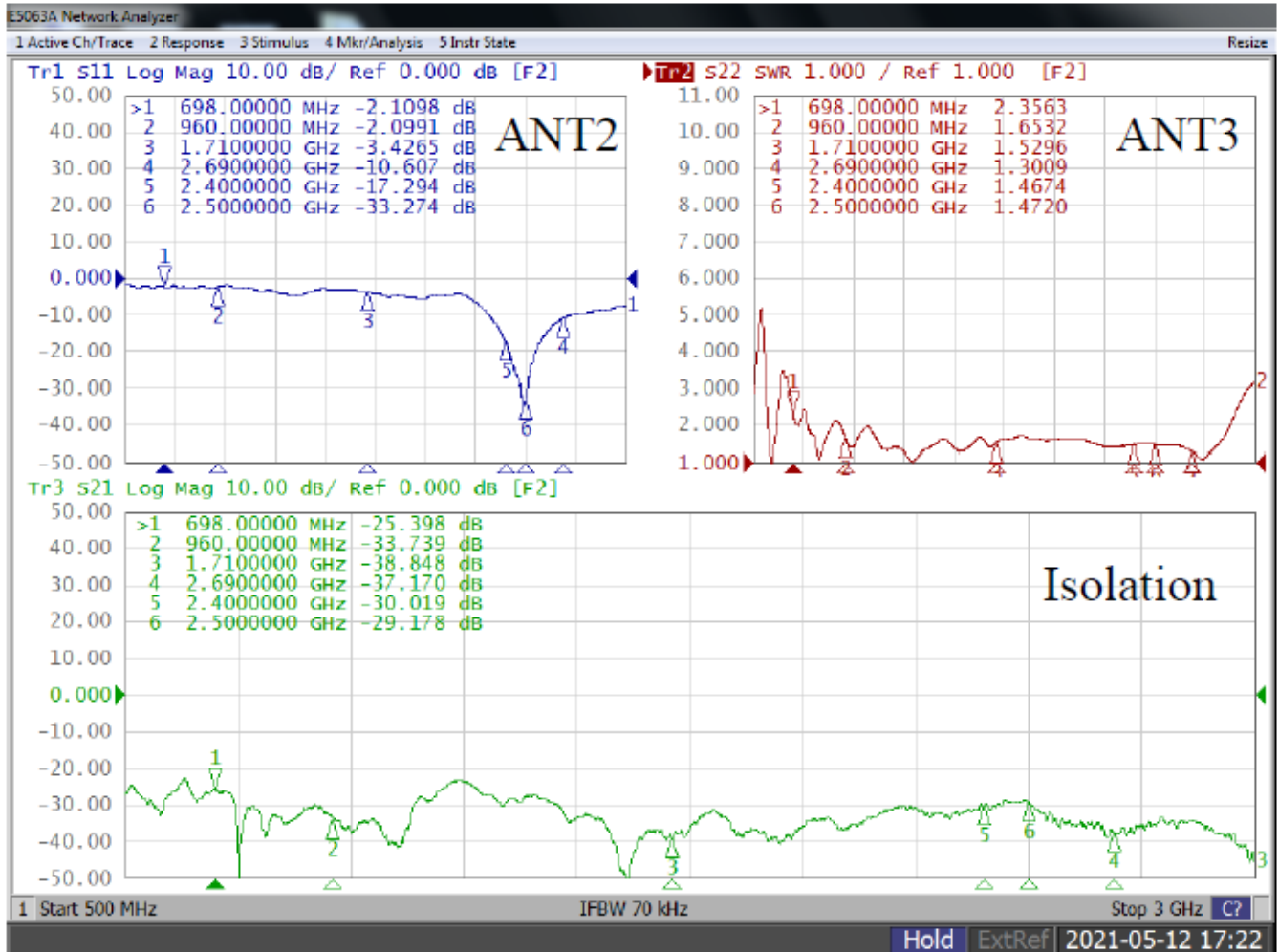
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**Electrical characteristics**

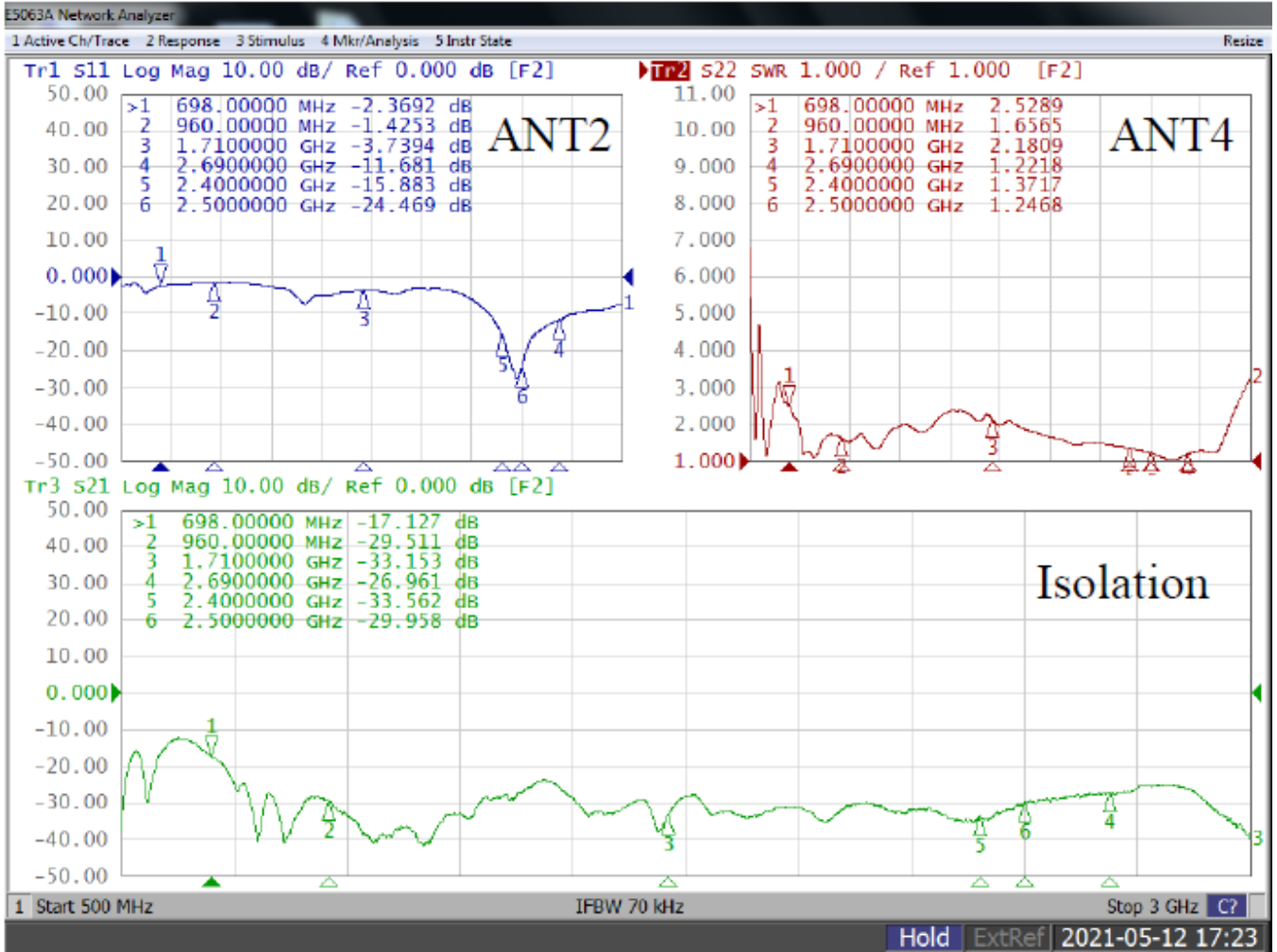
**Return Loss & Isolation**




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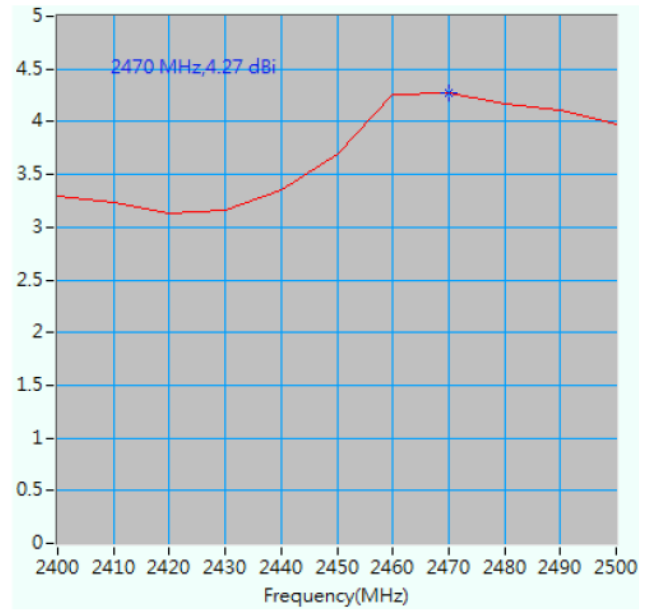
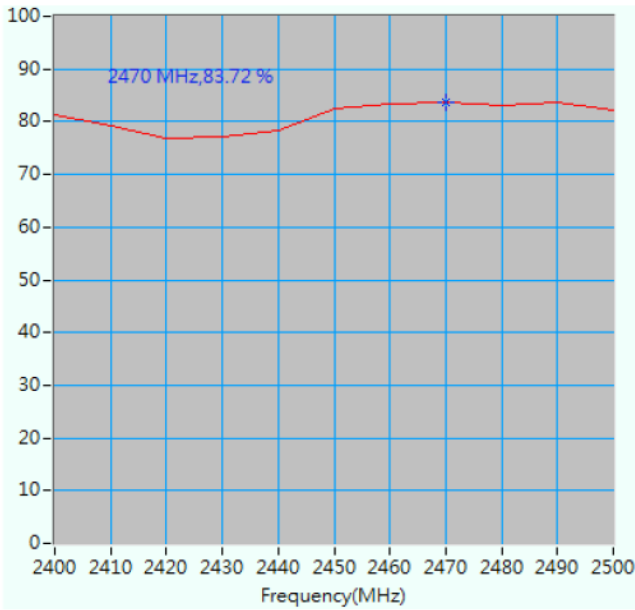
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## Antenna Efficiency and Peak Gain



Maximum Efficiency at 2470 MHz : 83.7 %

Maximum Peak Gain at 2470 MHz : 4.2 dBi

Frequency (GHz)	ANT2	
	Efficiency (%)	Peak gain (dBi)
2400	81.30	3.296
2410	79.10	3.239
2420	76.91	3.129
2430	77.02	3.154
2440	78.40	3.351
2450	82.35	3.691
2460	83.36	4.264
2470	83.72	4.270
2480	83.00	4.167
2490	83.54	4.112
2500	82.32	3.980

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