

PSA

佳邦科技股份有限公司

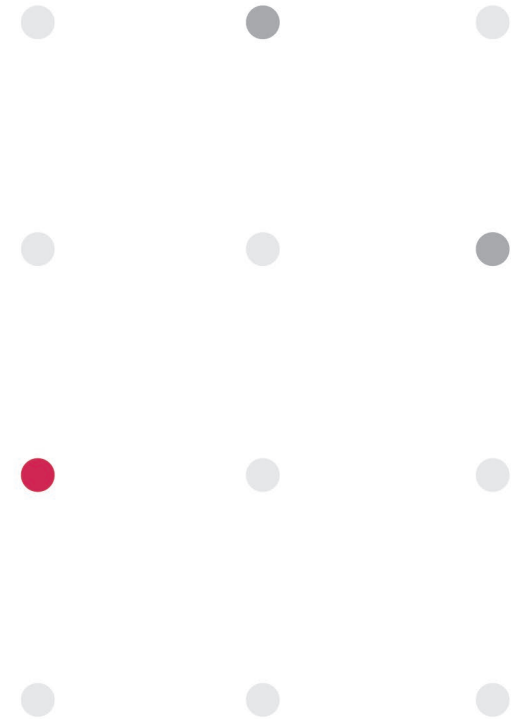
INPAQ TECHNOLOGY CO., LTD.

ADD : No. 11, Keyi St., Zhunan Township, Miaoli County 350402 , Taiwan (R.O.C.)
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PASSIVE SYSTEM ALLIANCE

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PASSIVE SYSTEM ALLIANCE
INPAQ TECHNOLOGY CO., LTD.



環天_潛水手錶

Presented by

Yen Ling

2023 / 11 / 17



Version	Date	Description	Author
V01	2023/10/26	New Release	Yen Ling
V02	2023/11/17	工廠樣修改驗證	Yen Ling

OUTLINE

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- 1.2 Antenna Solution Detail

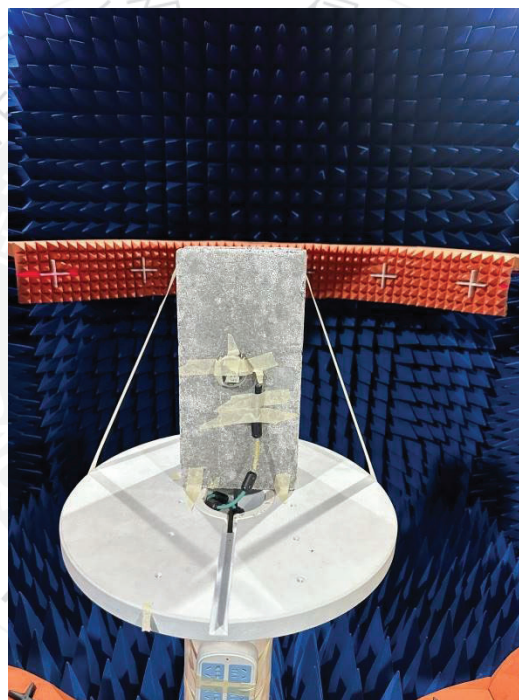
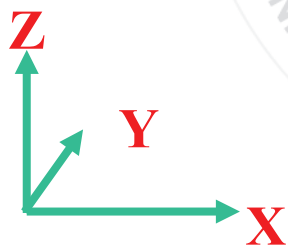
2. Antenna Characteristics

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3. Summary

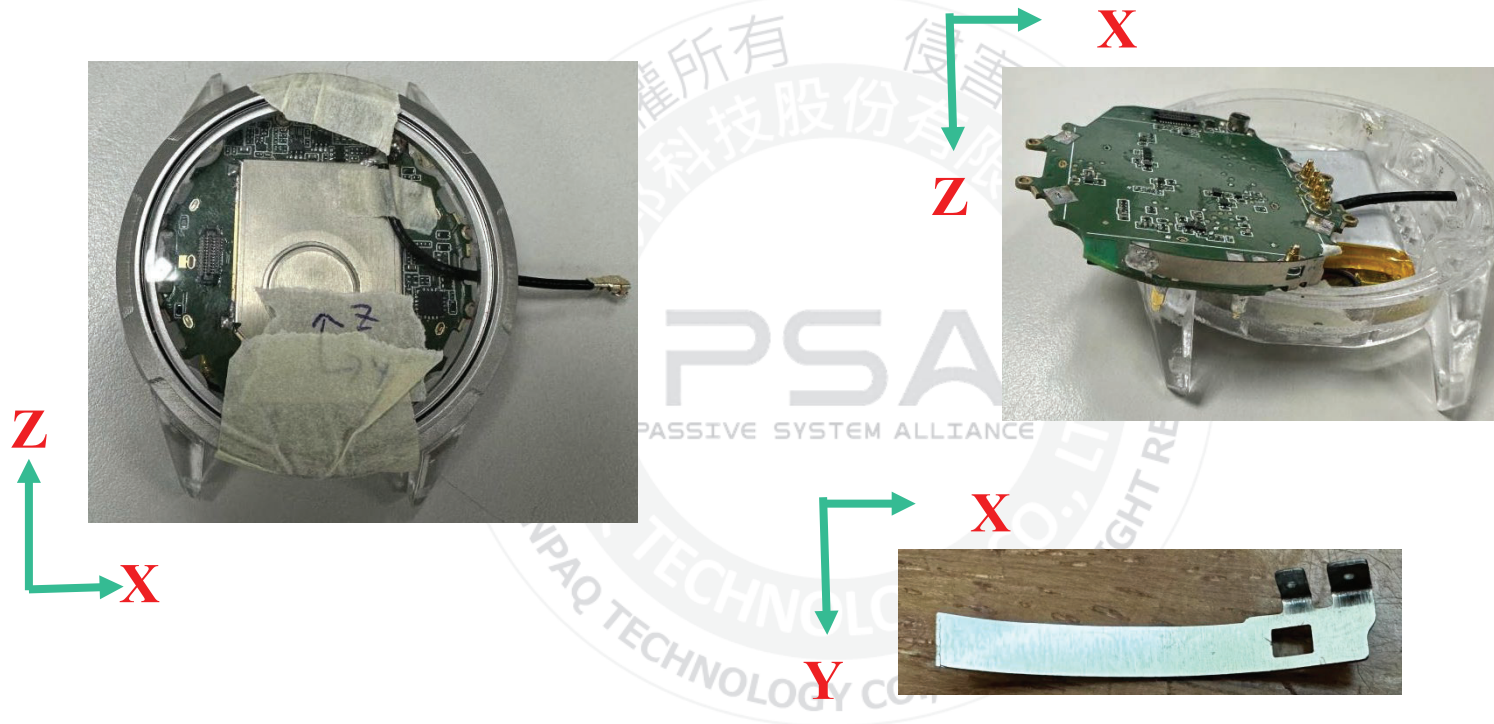
1. Measurement Information

1.1 Experimental Setup



1. Measurement Information

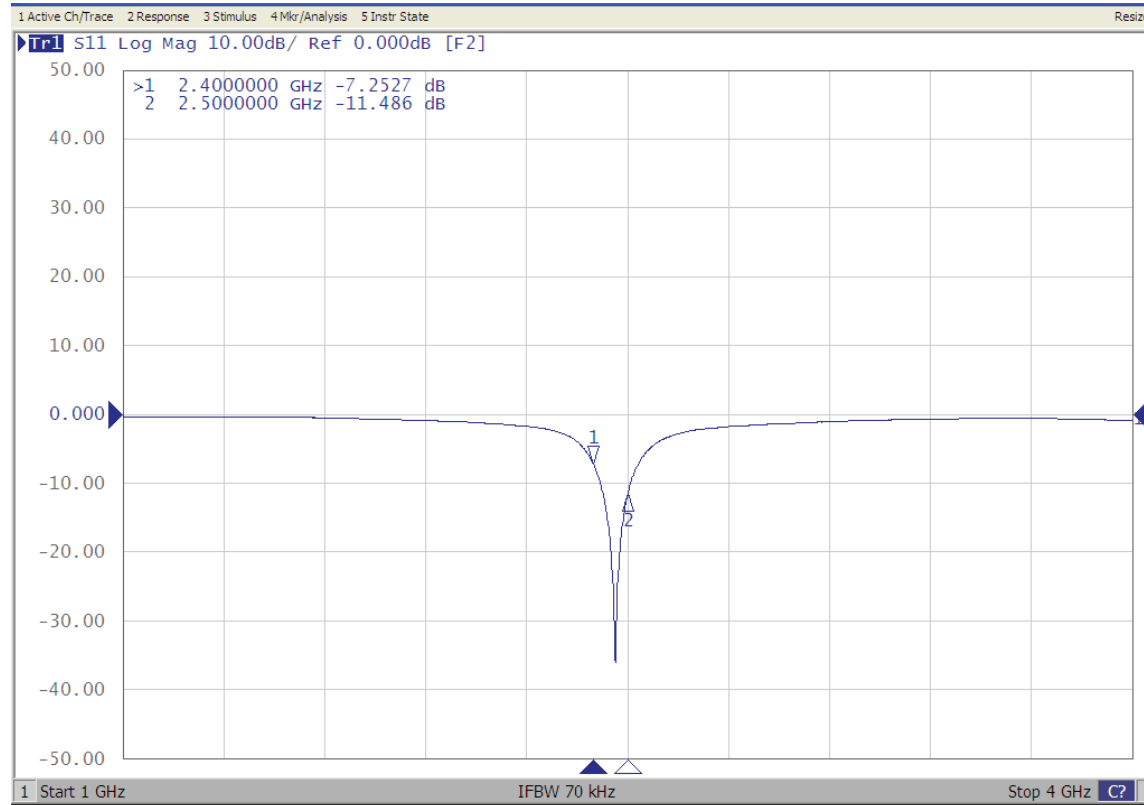
1.1 Experimental Setup



2. Antenna Characteristics

ANT1

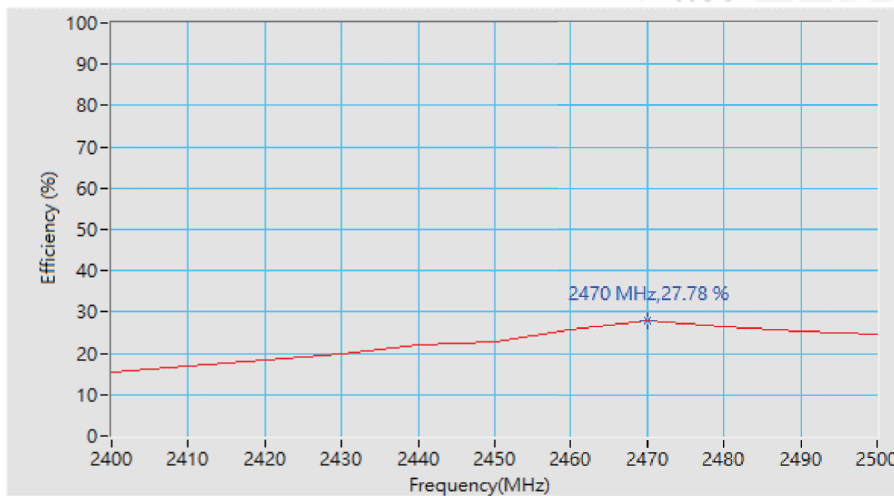
2.1 S-Parameter



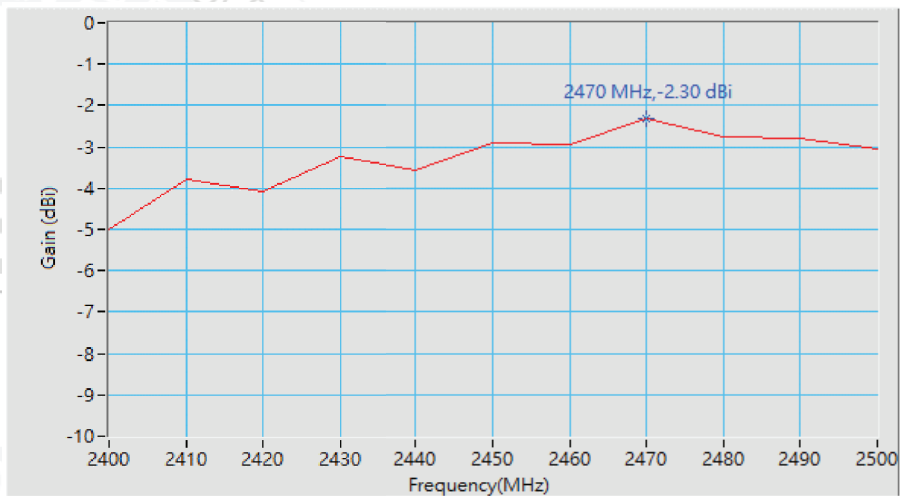
2. Antenna Characteristics

ANT1

2.2 Antenna Efficiency and Peak Gain



Maximum Efficiency at 2470 MHz : 27.78 %



Maximum Peak Gain at 2470 MHz : -2.30 dBi

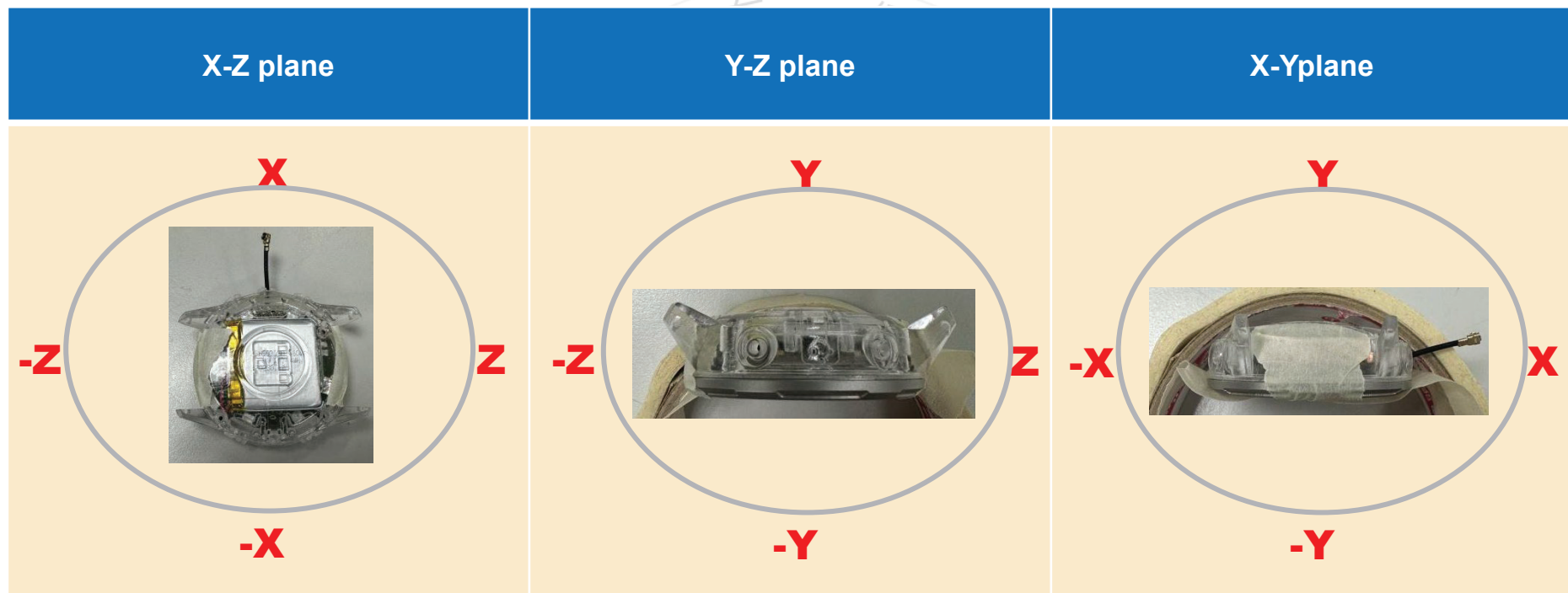
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

	ANT1	
Frequency (GHz)	Efficiency (%)	Peak gain (dBi)
2.4	15.35	-5.00
2.45	22.91	-2.92
2.5	24.55	-3.06

2. Antenna Characteristics

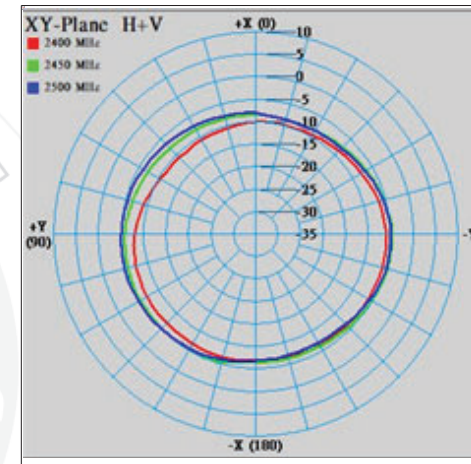
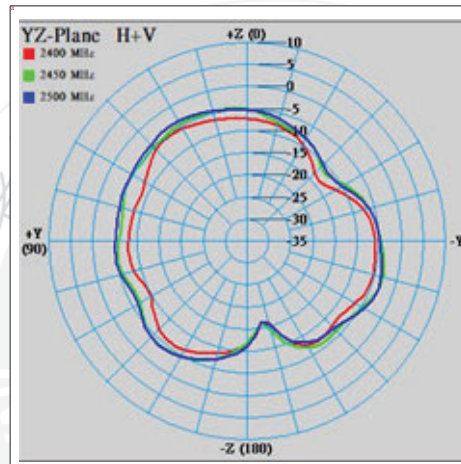
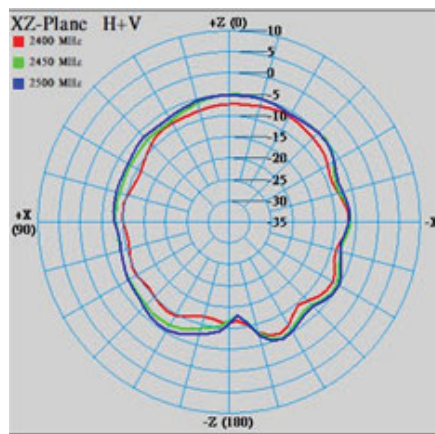
2.3 3 views of antenna



2. Antenna Characteristics

ANT

2.3 2D Radiation Patterns

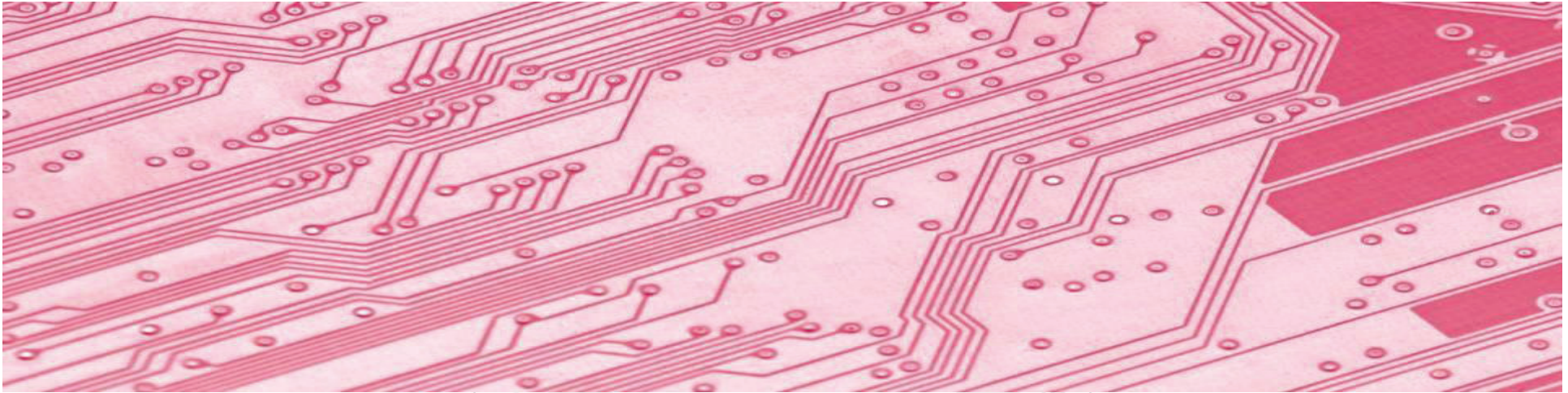


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	-6.15	-8.52	-5.28	-7.82	-5.78	-7.68
2450	-4.95	-7.01	-3.07	-6.03	-4.5	-6.3
2500	-4.77	-6.68	-3.28	-5.82	-4.75	-6.24

3. Summary

- The performance of antennas is shown in table

Metal PIFA Antenna	2G
Maximum Efficiency (%)	27.78
Maximum Gain (dBi)	-2.30



Title for Image (above image could be replaced)

Content Details

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Thank you

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品名：RFMTA210400NNAB003

History List

[illegible]

品名：RFMTA210400NNAB003

1.Explanation of part number：

RF	MTA	2104	00	N	N	A	B	0	03
Type Code	Product Code	Metal Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	MTA: Metal Antenna	Per 2 digits of length, width e.g.: 2104 Length 21.2mm, Width4.15mm	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: Reverse Male F: Female M: Male N: None	0: 0GHz 3: 3GHz 5: 5 GHz 6: 6GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.2/5.8 GHz tri-band N: NFC T:LTE band W: WCDMA band	B: MP T:During Test 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 (Note-1)
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20℃ ~ +65℃

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 : 林育帆

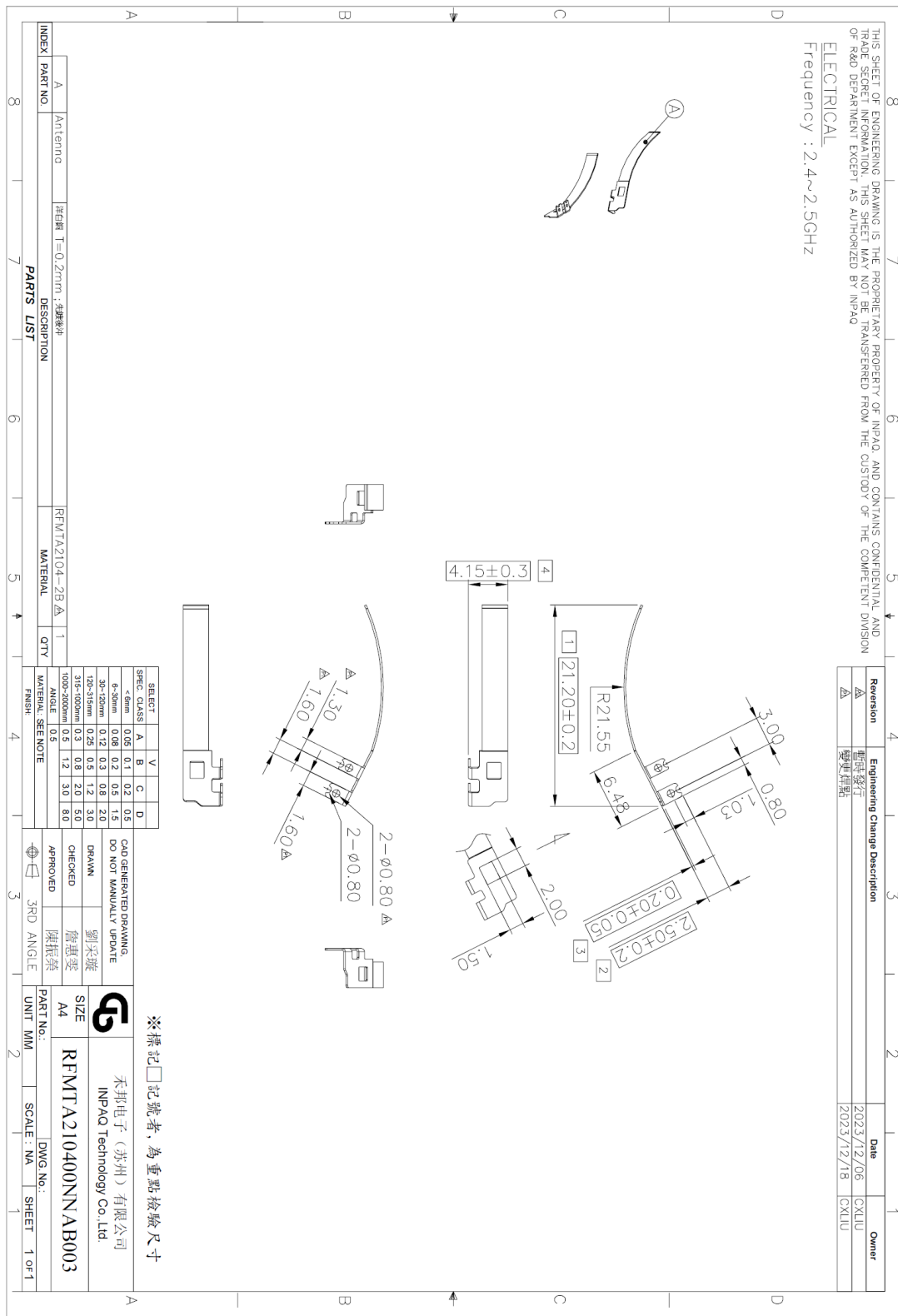
APPROVED BY : 陳振榮

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TITLE : RFMTA210400NNAB003

DOCUMENT
NO.SPEC REV.
P0

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

SCALE : N/A

UNIT : mm

DRAWN BY : 劉采璇

CHECKED BY : 詹惠愛

DESIGNED BY : 林育帆

APPROVED BY : 陳振榮

TITLE : RFMTA210400NNAB003



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