

APPROVAL SHEET

PCB Antenna

2400~2500 MHz Working Frequency

P/N: RFPCA501010EMABY01

Antenna Type : Monopole

Customer : _____
Approval No. : _____
Issue Date : _____
Production : INPAQ TECHNOLOGY(SUZHOU)
Address : No. 81,Antai Road 1,Xishan Econmic Development Zone, Wuxi
City,Jiangsu Province ,China

*Contents in this sheet are subject to change without prior notice.

[illegible]

1.Explanation of part number :

RF	PCA	5010	10	E	M	A	B	Y	01
Type Code	Product Code	PCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	PCB Antenna	Per 2 digits of length, width e.g.: 5010 Length 50.0 mm, Width 10.0mm	2 digits for cable length e.g.: 10 Cable Length 10.0 cm	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 M: LTE+Sub-6G+5G LTE : 617~960/1710~2690MHz Sub-6G : 3300~4200MHz 5G : 5150~7150MHz N79 : 4.4~5GHz N: NFC S: UWB(6~7GHz) T:LTE band M:LTE+Sub-6G+5G	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 6:RG316 7:Ø1.37 8:RG178 Y: Ø0.81 Low Loss	01~99 series number

2.Electrical Specification :

Item	Specification
Frequency Range	2400 ~ 2500 MHz
Impedance	50 Ohm Nominal
VSWR	2.0 (Max)
Peak Gain	3.12 dBi
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
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 : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

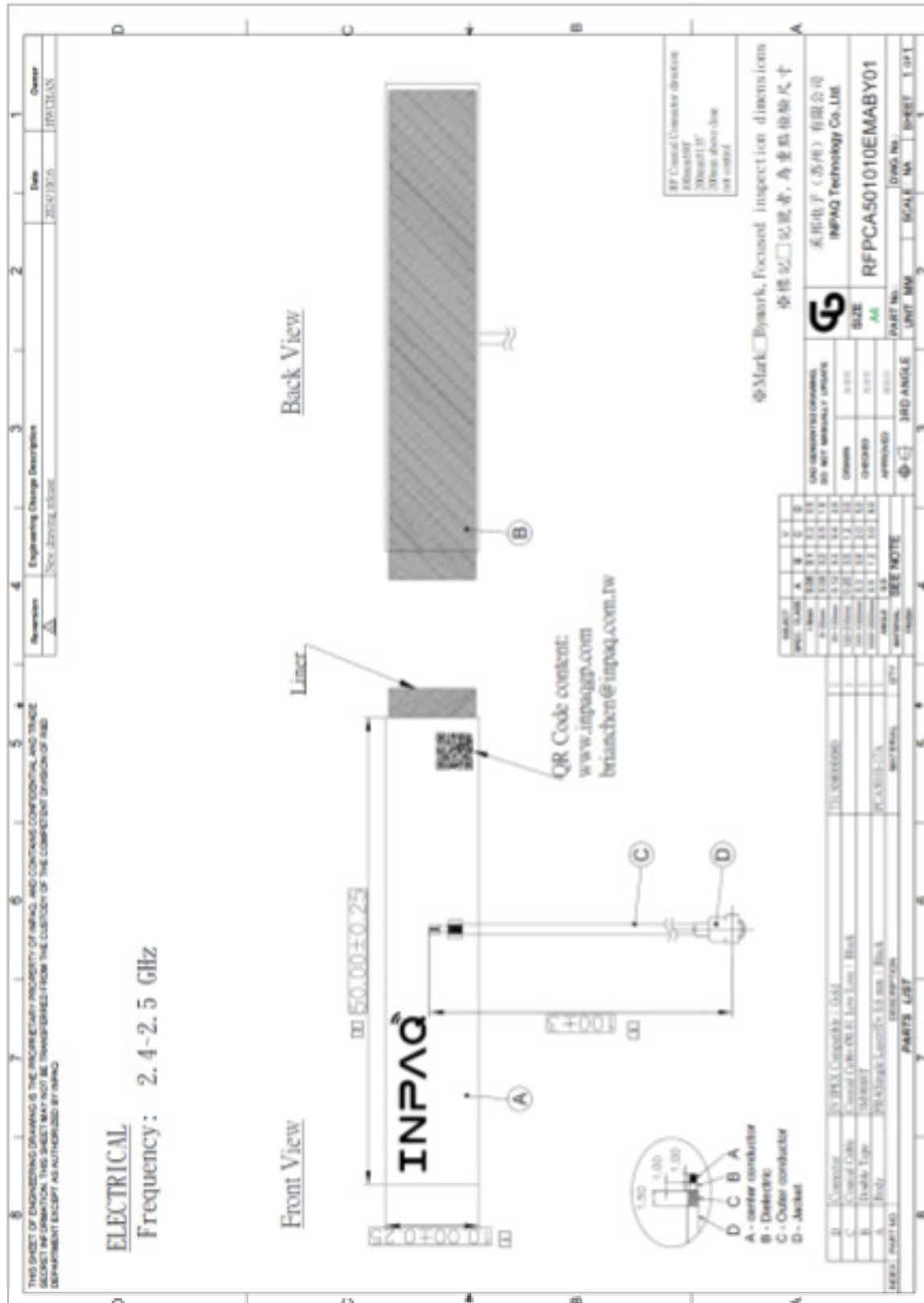
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SPEC REV.
A1

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



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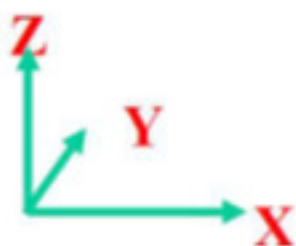
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SPEC	REV.
A1	

Test Report

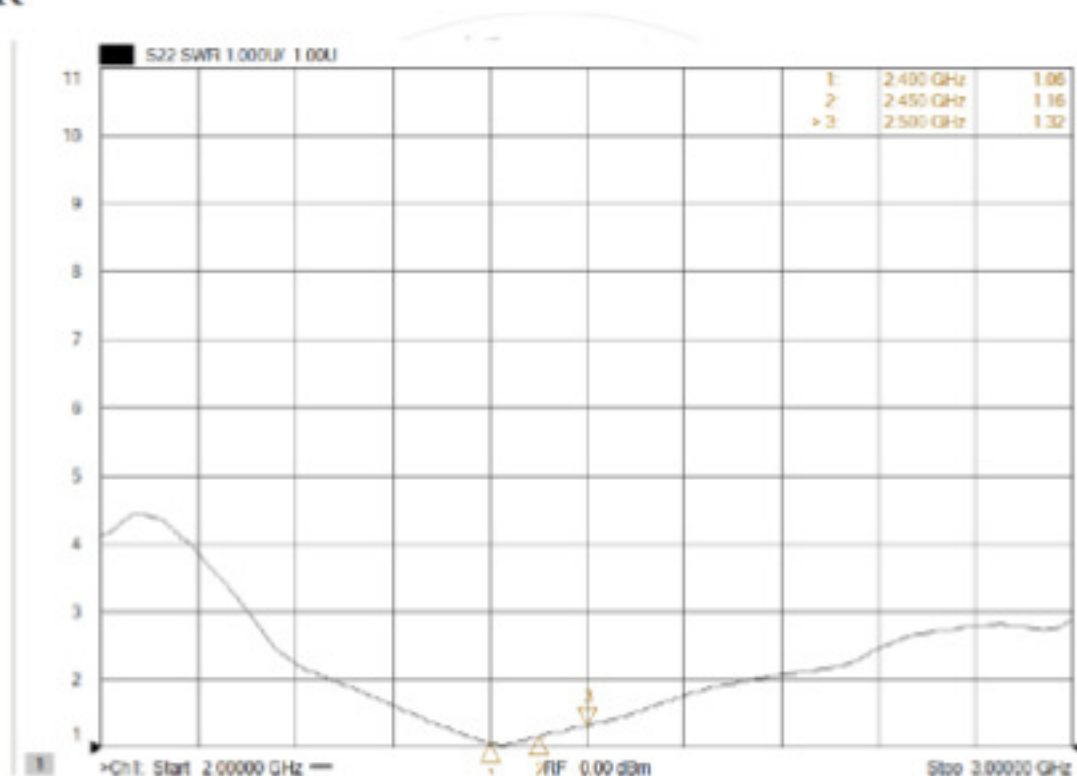
ELECTRICAL CHARACTERISTICS



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.
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ELECTRICAL CHARACTERISTICS

VSWR



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



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UNIT : mm

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DESIGNED BY : Lang

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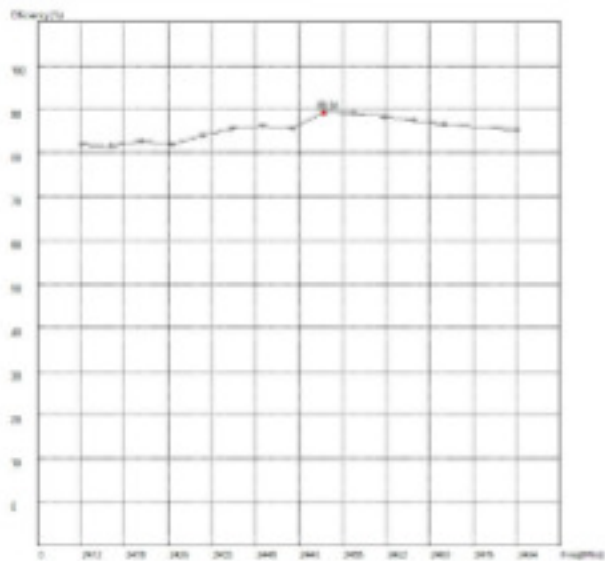
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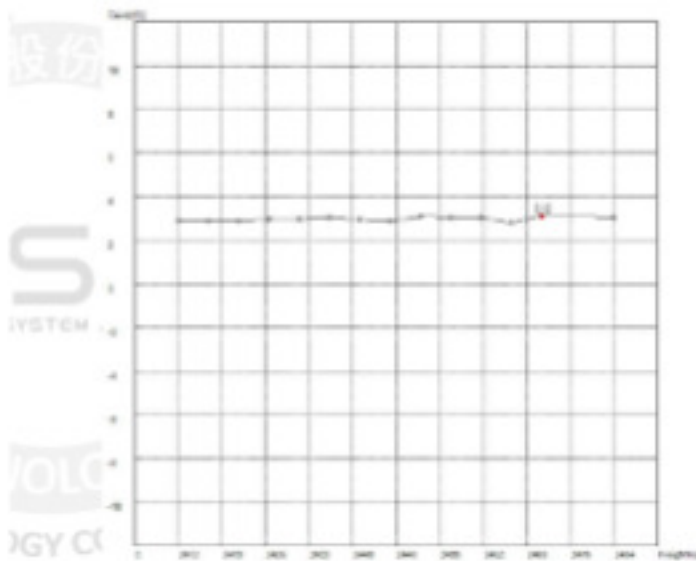
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■ Antenna Efficiency & Peak Gain

2400-2500MHz



Maximum Efficiency at 2452 MHz : 89.34%



Peak Gain at 2472 MHz : 3.12dBi

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ANGLES=N/A HOLEDIA=N/A



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SPEC REV.
A1

Antenna Efficiency and Peak Gain

CH.	Freq(MHz)	Gain(dBi)	Efficiency(%)
1	2412	2.91	81.94
2	2417	2.92	81.70
3	2422	2.88	82.77
4	2427	2.98	81.97
5	2432	3.00	84.02
6	2437	3.06	85.65
7	2442	2.96	86.10
8	2447	2.88	85.63
9	2452	3.09	89.34
10	2457	3.05	89.00
11	2462	3.07	88.41
12	2467	2.80	87.41
13	2472	3.12	86.51
14	2484	3.05	85.26

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



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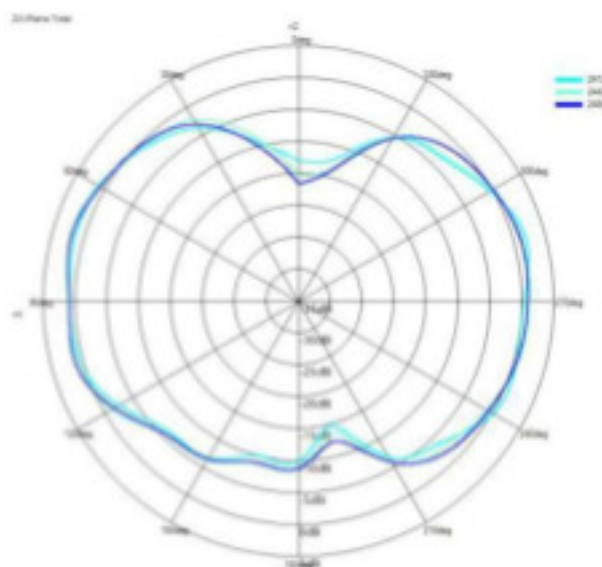
RADIATION PATTERN

2400-2500MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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ANGLES = N/A HOLEDIA = N/A



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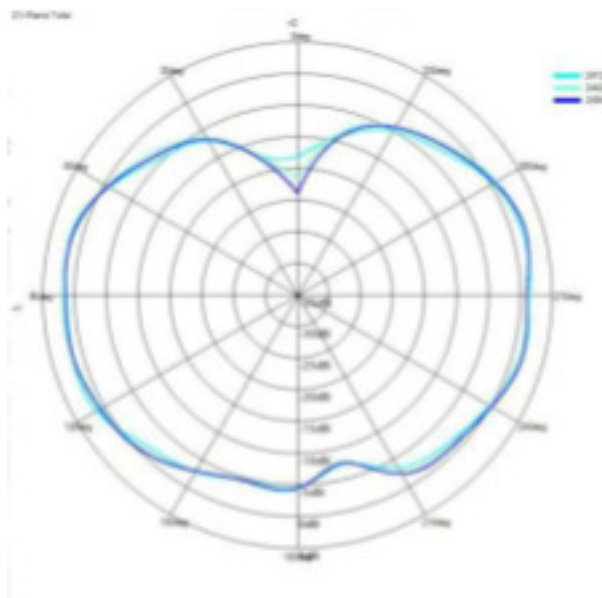
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Y-Z Plane

Phi=90.00deg

Gain . dB



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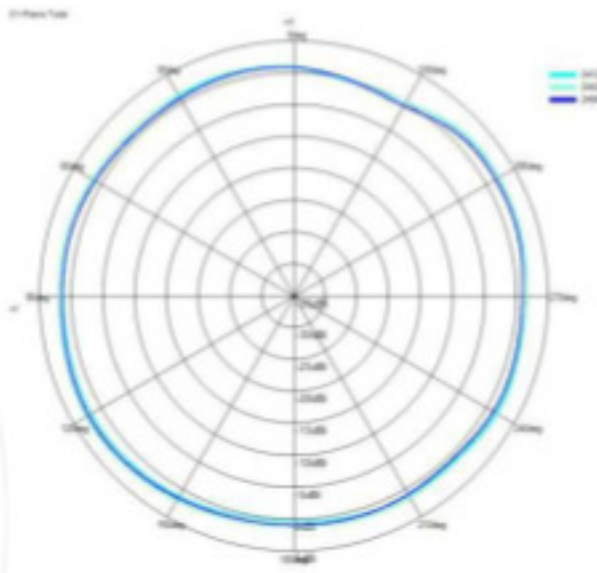
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X-Y Plane

Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2412	1.96	-1.89	1.97	-1.19	2.19	1.26
2442	2.12	-1.63	2.11	-0.99	2.72	1.72
2484	2.10	-1.60	2.22	-1.06	2.42	1.23

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



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DOCUMENT
NO.

SPEC REV.
A1

4. Package

RFPCA501010EMABY01 Package	PAGE: 1 之 1			
	Version : A0			
	Revision date: 2024/11/15			
Packaged				
Figure 1				
				
Figure 2				
				
Figure 3				
				
Packaging specifications:				
- Put every 1pcs of product into a shielding bag and paste the manufacturing label, and seal it with 400pcs per ziplock bag. As shown in Figure 1 - Put the foam in the outer box (as shown in Figure 2) - Put the finished product (as shown in Figure 3) into the outer box, put 2000pcs of products in each box, put 1 piece of pearl cotton up and down, see - The filling of mantissa boxes refers to this specification "Y-WI-09-281"				
Metal Antenna 370625 RFMTA3706251MAE301 75BI031604 10  -WW0121-031922193619-200 75BI031604 0001 First row: 6-11 digits of model + space + Antenna + space + specification Second row: specification + space + batch number + space + quantity The content of the third row of barcodes: specification + batch number + serial number (the same as the last 4 codes of the fourth row) + quantity (unit is K/PCS) Fourth row: "-" + Printer's number + "-" + Month + Date + Year + Hour + Minute + Second + "-" + "The "Label Number" of the current print + batch number + 4 yards  Label Annotation Ownership (PSA) Huaxin Technology Co., Ltd				
Approval:	He Yachui	Audit: Zhao Wenbao	Formulate: Xu Ruonan	

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 : HW CHECKED BY : HW
DESIGNED BY : Lang APPROVED BY : Brian

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