APPROVAL SHEET

2400~2500 MHz Working Frequency

P/N: RFPCA521010EMABY01

Antenna Type : Dipole

Customer：_____

Approval No.：_____

Issue Date：_____

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

品名：**RFPCA521010EMABY01**

History List

版本 **REV.**	修訂者 **EDITOR**	修訂頁次 **PAGE**	修訂內容 **ITEMS OF CHANGE**	申請日期 **DATE**	生效日期 **VALID DATE**	**ECN 編號 ECN NO.**
A0	Huiwenchan	ALL	Temporary Release	2024/10/16	According to the date of PLM Release	N/A

1.Explanation of part number：

RF	PCA	5210	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.: 5210 Length 52.0 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	3.37 dBi
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
Operation Temperature	－20℃ ～ ＋65℃

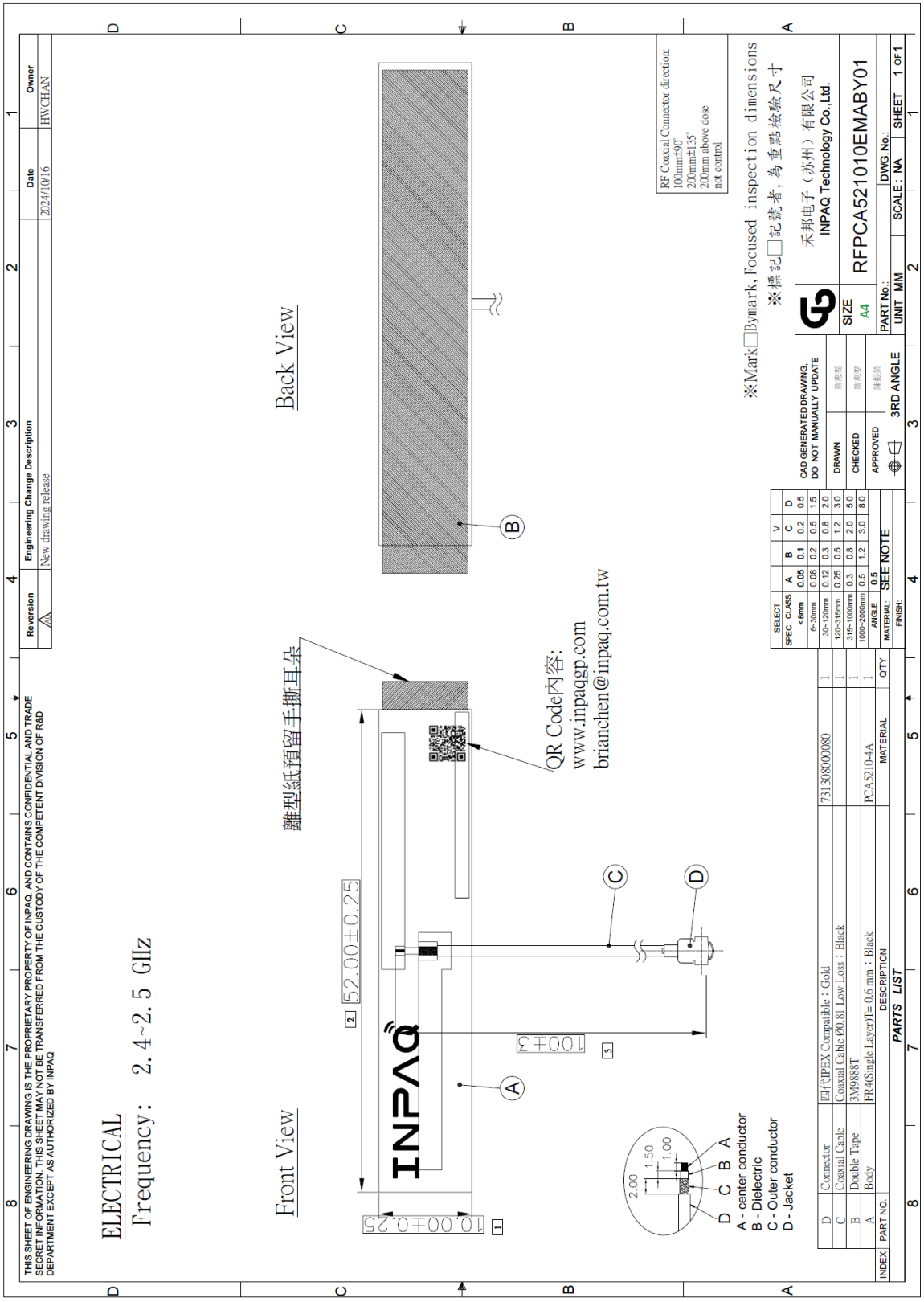
UNLESS OTHER SPECIFIED TOLERANCES ON：
X＝N/A X.X＝N/A X.XX＝N/A
ANGLES＝N/A HOLEDIA＝N/A

INPAQ TECHNOLOGY CO., LTD.

SCALE：N/A | UNIT：mm
DRAWN BY：詹惠雯 | CHECKED BY：詹惠雯
DESIGNED BY：黃瑞郎 | APPROVED BY：陳振榮

TITLE：RFPCA521010EMABY01 | DOCUMENT NO. | SPEC REV. A0

3. Antenna Drawing：



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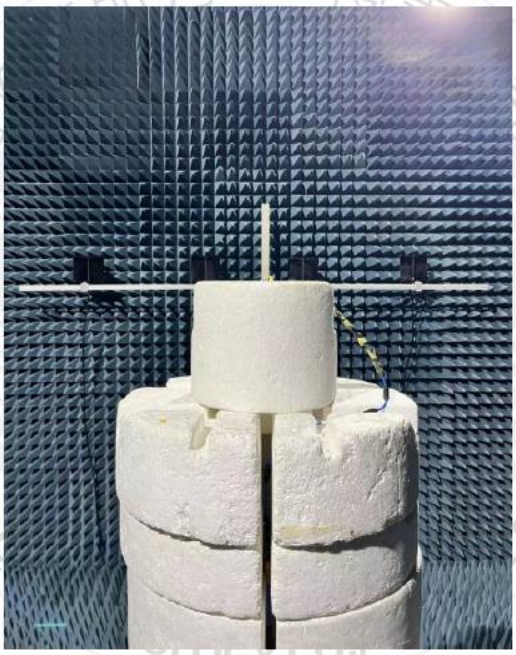
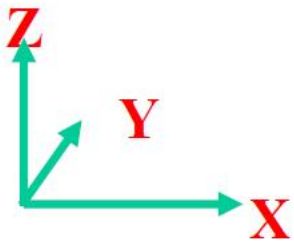
Test Report

ELECTRICAL CHARACTERISTICS





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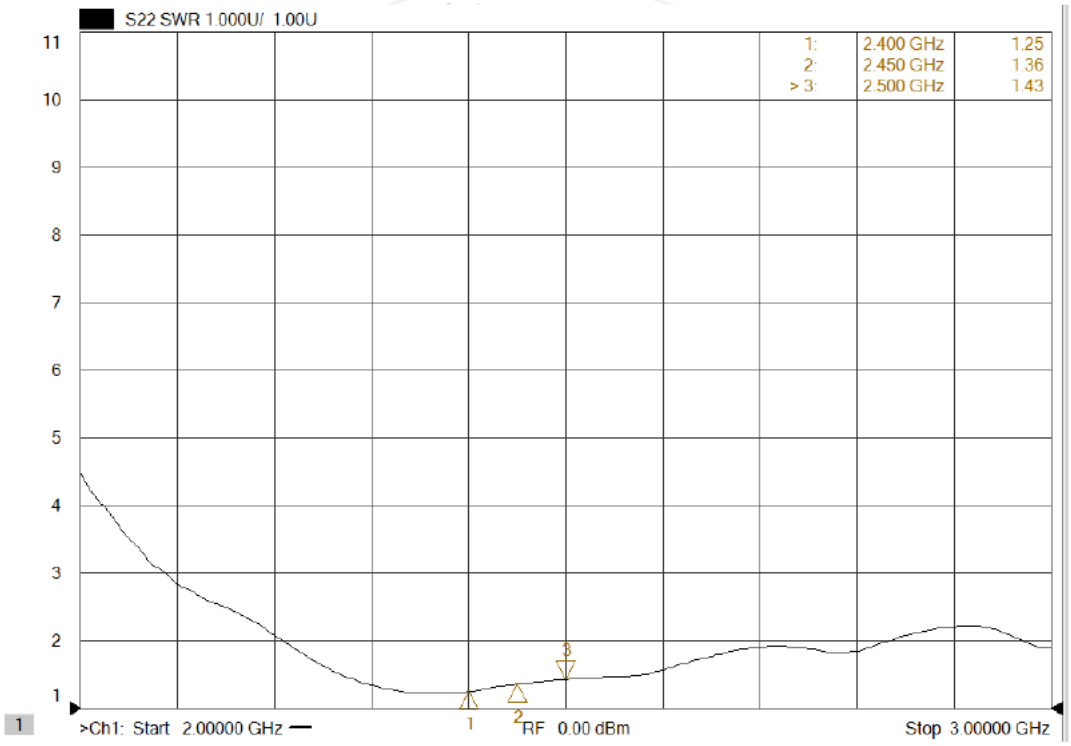
ELECTRICAL CHARACTERISTICS

VSWR



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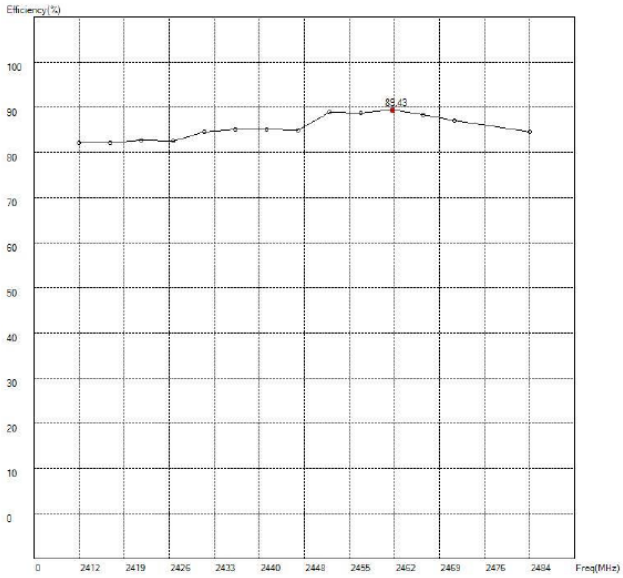
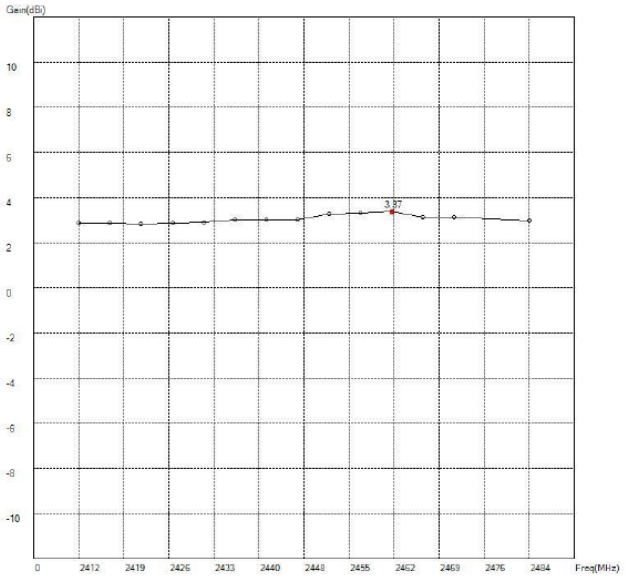
Antenna Efficiency & Peak Gain

2400-2500MHz



Maximum Efficiency at 2462 MHz : 89.43%



Peak Gain at 2462 MHz : 3.37dBi

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Antenna Efficiency and Peak Gain

CH.	Freq(MHz)	Gain(dBi)	Efficiency(%)
1	2412	2.87	82.15
2	2417	2.87	82.20
3	2422	2.85	82.78
4	2427	2.87	82.48
5	2432	2.90	84.46
6	2437	3.02	85.15
7	2442	3.03	85.02
8	2447	3.01	84.82
9	2452	3.26	88.87
10	2457	3.30	88.73
11	2462	3.37	89.43
12	2467	3.13	88.34
13	2472	3.14	87.17
14	2484	2.97	84.52

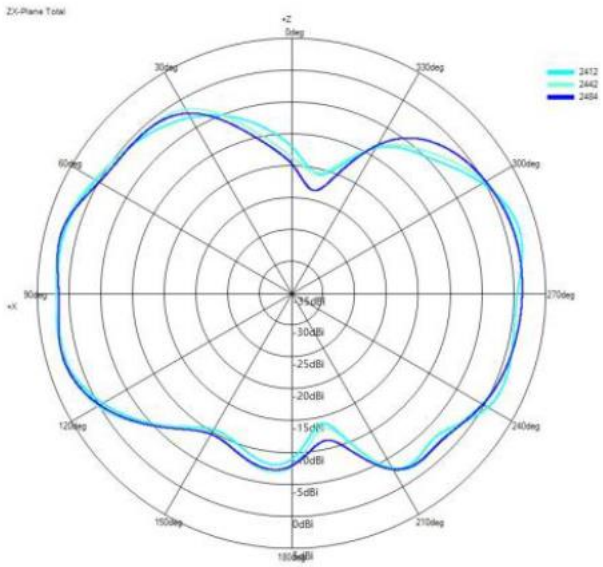
RADIATION PATTERN

2400-2500MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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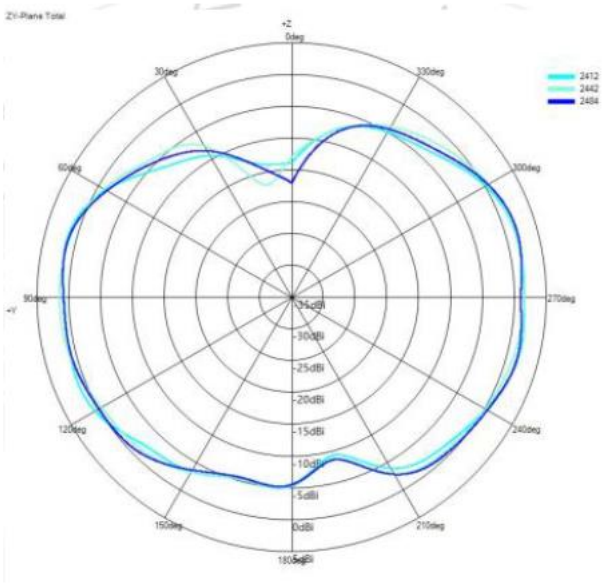
Y-Z Plane

Phi=90.00deg

Gain . dB



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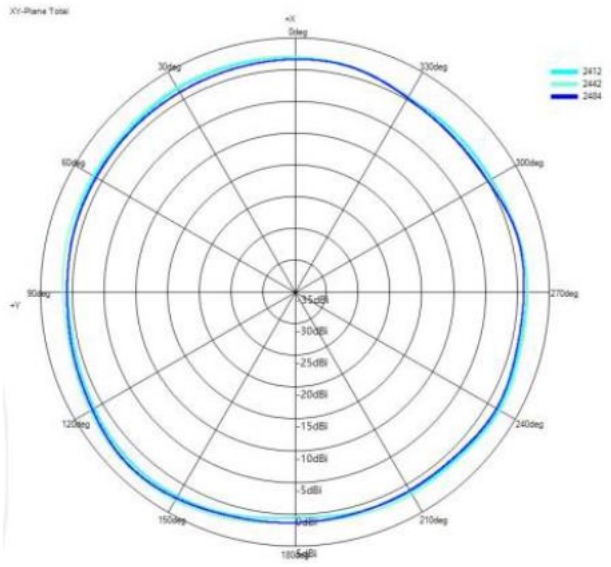
X-Y Plane

Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2412	2. 31	−1. 42	1. 86	−1. 54	2. 20	1. 41
2442	2. 51	−1. 26	1. 71	−1. 35	3. 03	1. 79
2484	2. 53	−1. 31	1. 89	−1. 40	2. 78	1. 32

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