

RFPCA441010EMABY01

Specification

Part Series

PIFA Antenna Type

RFPCA441010EMABY01

Version

V0.1

Contents

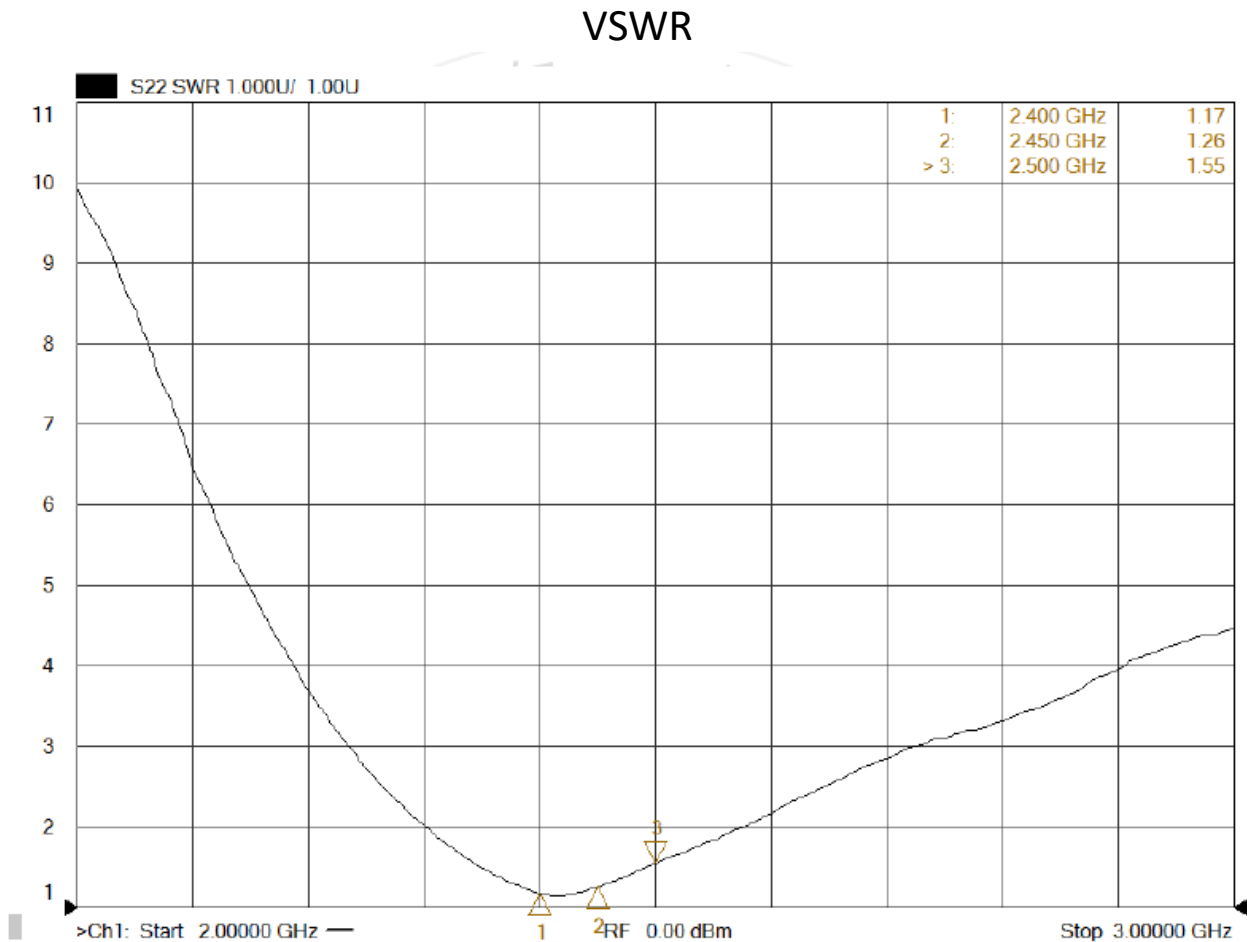
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1. Performance

1.1 Antenna performance

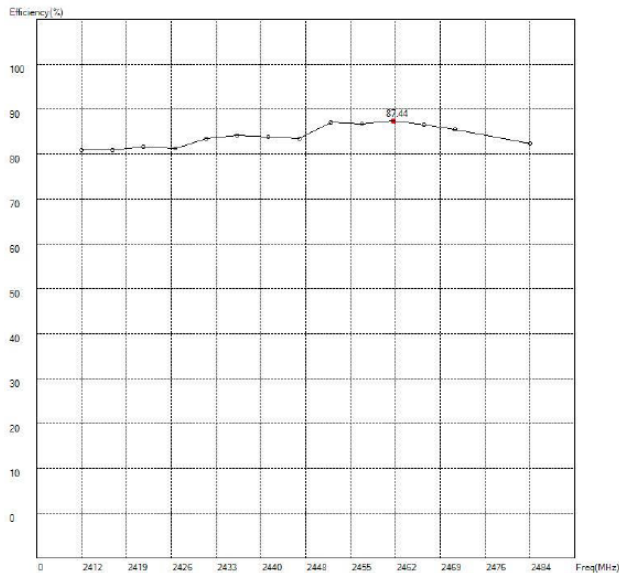
Item	Specification
Frequency Range	2.4 ~ 2.5 GHz
Impedance	50 Ohm Nominal
VSWR	2.0 (Max)
Peak Gain	3.19 dBi
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
Operation Temperature	−20°C ~ +65°C

1.2 Antenna S-Parameter and matching factor

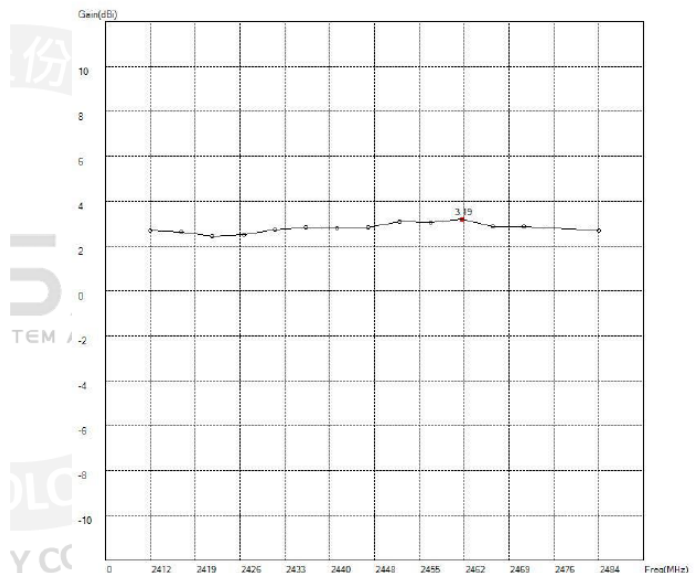


1.3 Antenna Efficiency & Peak Gain

2400-2500MHz



Maximum Efficiency at 2462 MHz : 87.44%



Peak Gain at 2462 MHz : 3.19dBi

Antenna Efficiency and Peak Gain

CH.	Freq (MHz)	Gain (dBi)	Efficiency (%)
1	2412	2.69	80.95
2	2417	2.62	80.85
3	2422	2.53	81.69
4	2427	2.51	81.21
5	2432	2.74	83.45
6	2437	2.85	84.14
7	2442	2.80	83.91
8	2447	2.83	83.42
9	2452	3.09	87.03
10	2457	3.04	86.79
11	2462	3.19	87.44
12	2467	2.86	86.54
13	2472	2.88	85.41
14	2484	2.70	82.29

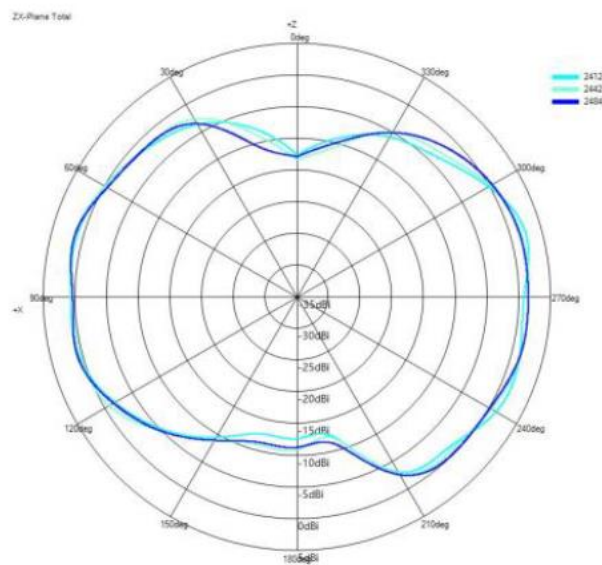
1.4 RADIATION PATTERN

2400-2500MHz

X-Z Plane

Phi=0.00deg

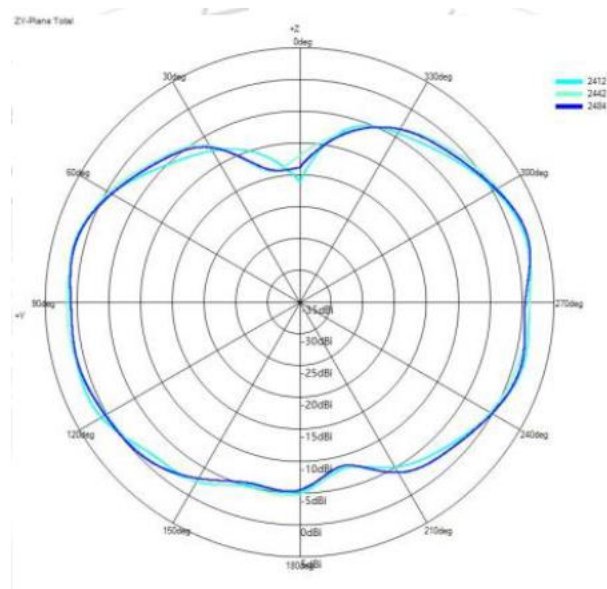
Gain . dB



Y-Z Plane

Phi=90.00deg

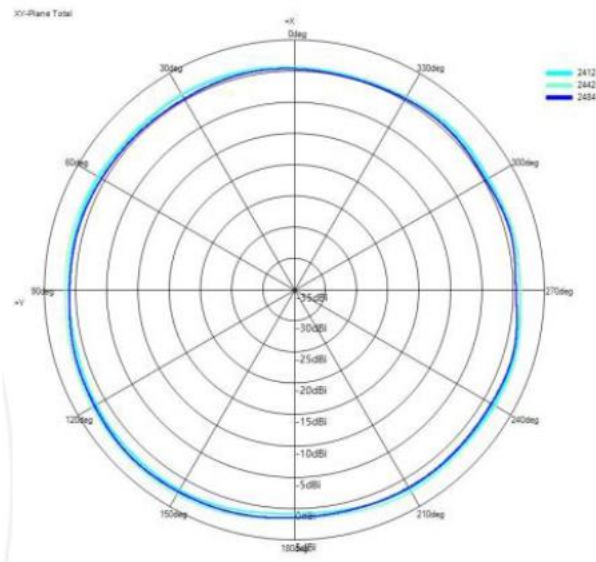
Gain . dB



X-Y Plane

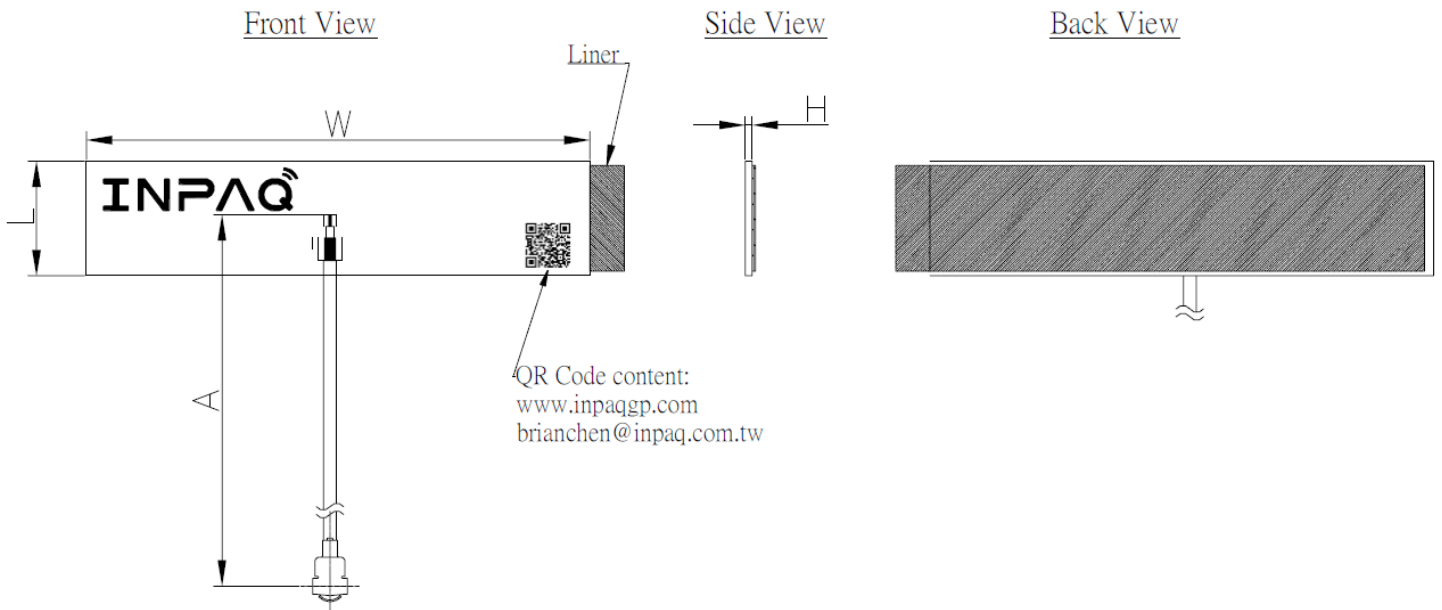
Theta=90.00deg

Gain . dB



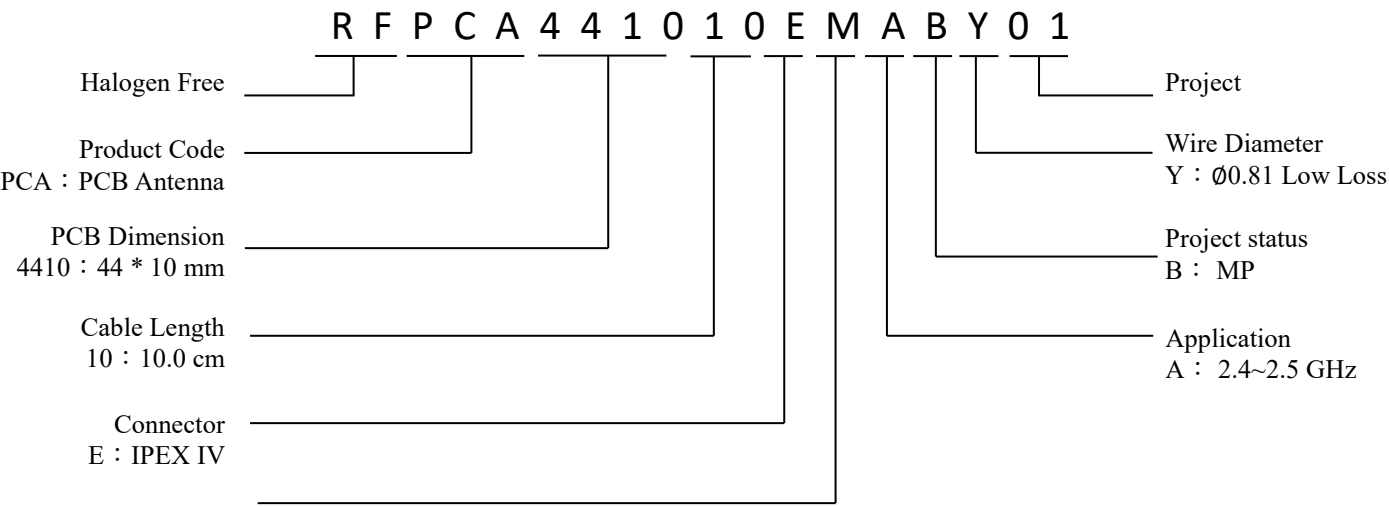
	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2412	2.48	-1.59	1.96	-1.37	1.95	1.27
2442	1.79	-1.46	2.13	-1.20	2.80	1.65
2484	1.53	-1.50	2.28	-1.34	2.44	1.16

2. Mechanical Specification

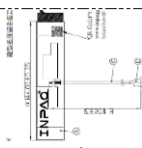


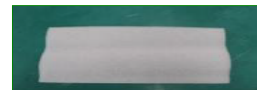











Symbol	Min (mm)	Normal (mm)	Max (mm)
W	43.8	44.0	44.2
L	9.8	10.0	10.2
H	0.5	0.6	0.7
A	97	100	103

3.Ordering Information



4.Package

RFPCA441010EMABY01 Package		PAGE: 1 之 1			
		Version :A0			
		Revision date :2024/11/15			
Packaged					
Figure 1					
<div><div><p>1pcs product</p></div><div><p>Shielding bag</p></div><div><p>1pcs/bag, 400/bag, ziplock bag needs to be sealed</p></div></div>					
Figure 2					
<div><div><p>pearl cotton</p></div><div><p>outer box</p></div><div><p>Put the pearl cotton in the outer box</p></div></div>					
Figure 3					
<div></div>					
Packaging specifications :					
<div><div>1. 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</div><div>2. Put the foam in the outer box (as shown in Figure 2)</div><div>3. 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,</div><div>4. The filling of mantissa boxes refers to this specification "Y-WI-09-281"</div></div>					
<div>Metal Antenna 370625 RFMTA370625IMAB301 75B1031604 10  WM0121-031922193619-200 75B1031604 0001</div>		<div>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 vards <div><div></div><div>Label Annotation Ownership (PSA) Huaxin Technology Co., Ltd</div></div></div>			
Approval:	He Yaohui	Audit:	Zhao Wenbao	Formulate:	Xu Ruonan

5. Version

Version	Date	Description
V01	2025.01.14	Initial release