



# 品名：RFMTA211200NNLB001

## 1. Explanation of part number :

RF	MTA	2112	00	N	N	L	B	0	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	MTA: Metal Antenna	Per 2 digits of length, width e.g.: 2112 Length 28.1mm, Width 11.30mm	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: 2.4/5.2/5.8 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/ 5.15 ~ 5.85 GHz
Return Loss	-10dB(Max)
Peak Gain	3.51 dBi@2.4~2.5 GHz 3.78 dBi@5.15~5.85 GHz
Polarization	Linear Vertical
Radiation Pattern	Directional
Impedance	50Ω

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 : 李欣樺      CHECKED BY : 詹惠雯  
 DESIGNED BY : 林育帆      APPROVED BY : 陳振榮

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TITLE : RFMTA211200NNLB001

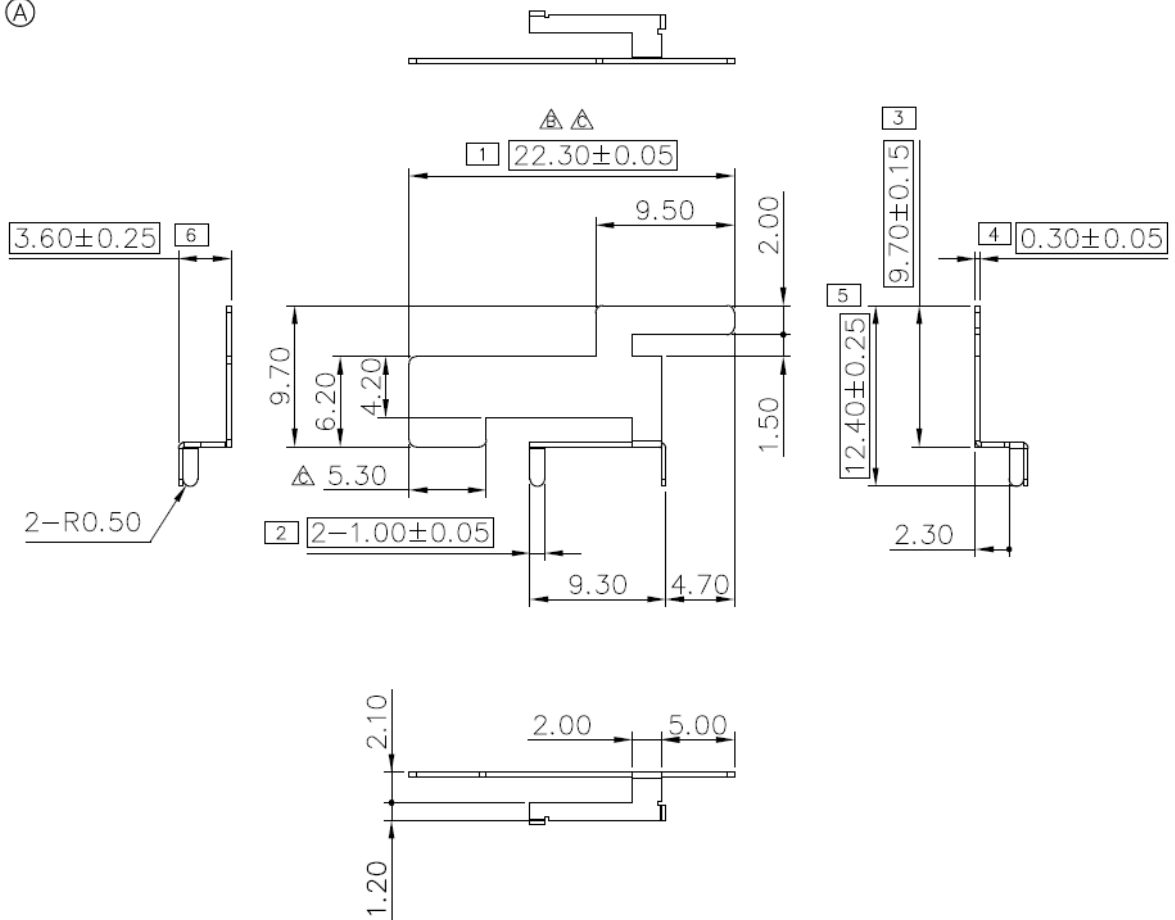
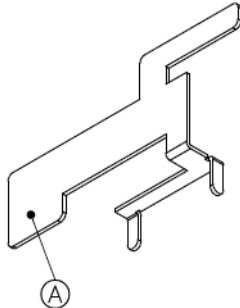
DOCUMENT NO.      SPEC REV. **P0**

### 3. Antenna Drawing :


ELECTRICAL

Frequency : 2.4~2.5/  
5.15~5.85GHz

NO	DESCRIPTION	Q'TY	REMARK
A	Antenna	1	RFMTA2112-3C



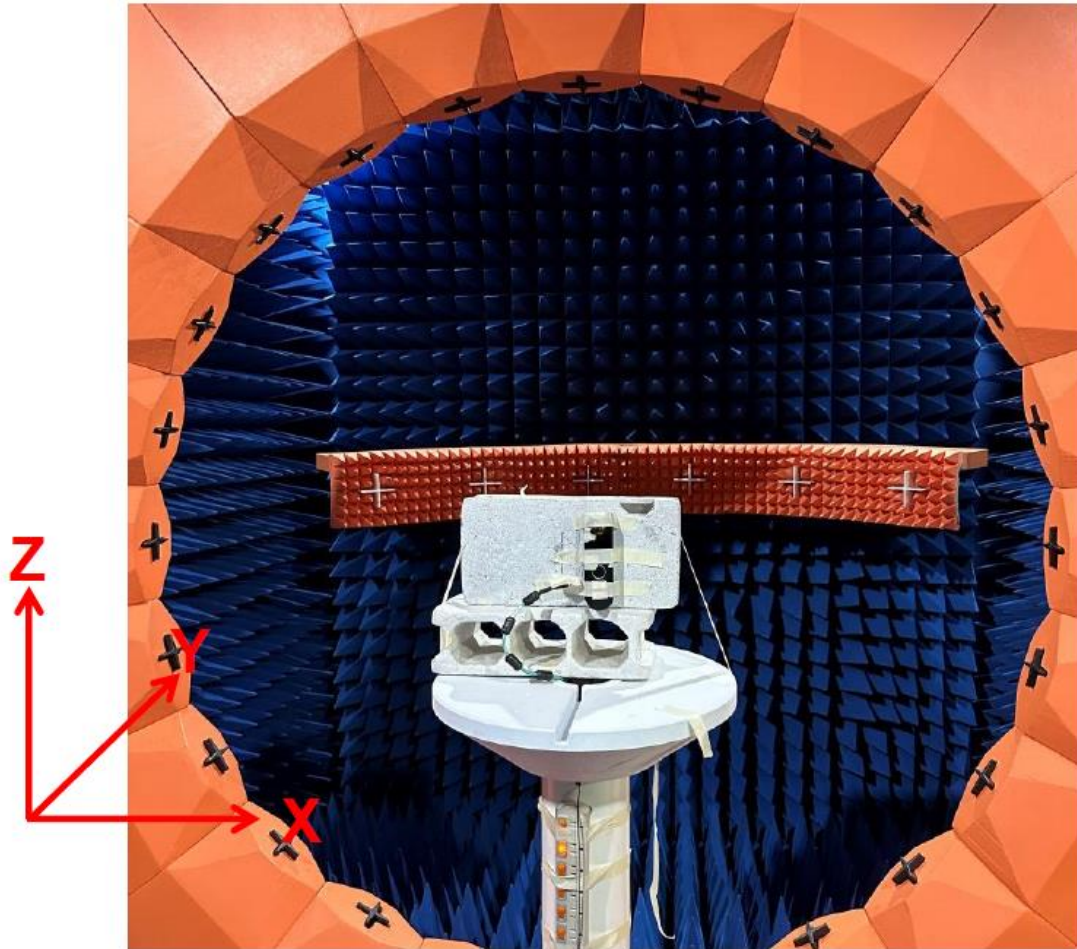
Note :  
未標示之R角為0.5  
※標記□記號者, 為重點檢驗尺寸


UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>	
SCALE : N/A	UNIT : mm		
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4. Performance Report :

**Test Report**


**Experimental Setup**



UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
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DRAWN BY : 李欣樺	CHECKED BY : 詹惠雯		
DESIGNED BY : 林育帆	APPROVED BY : 陳振榮		
TITLE : RFMTA211200NNLB001		DOCUMENT NO.	SPEC REV. <b>P0</b>

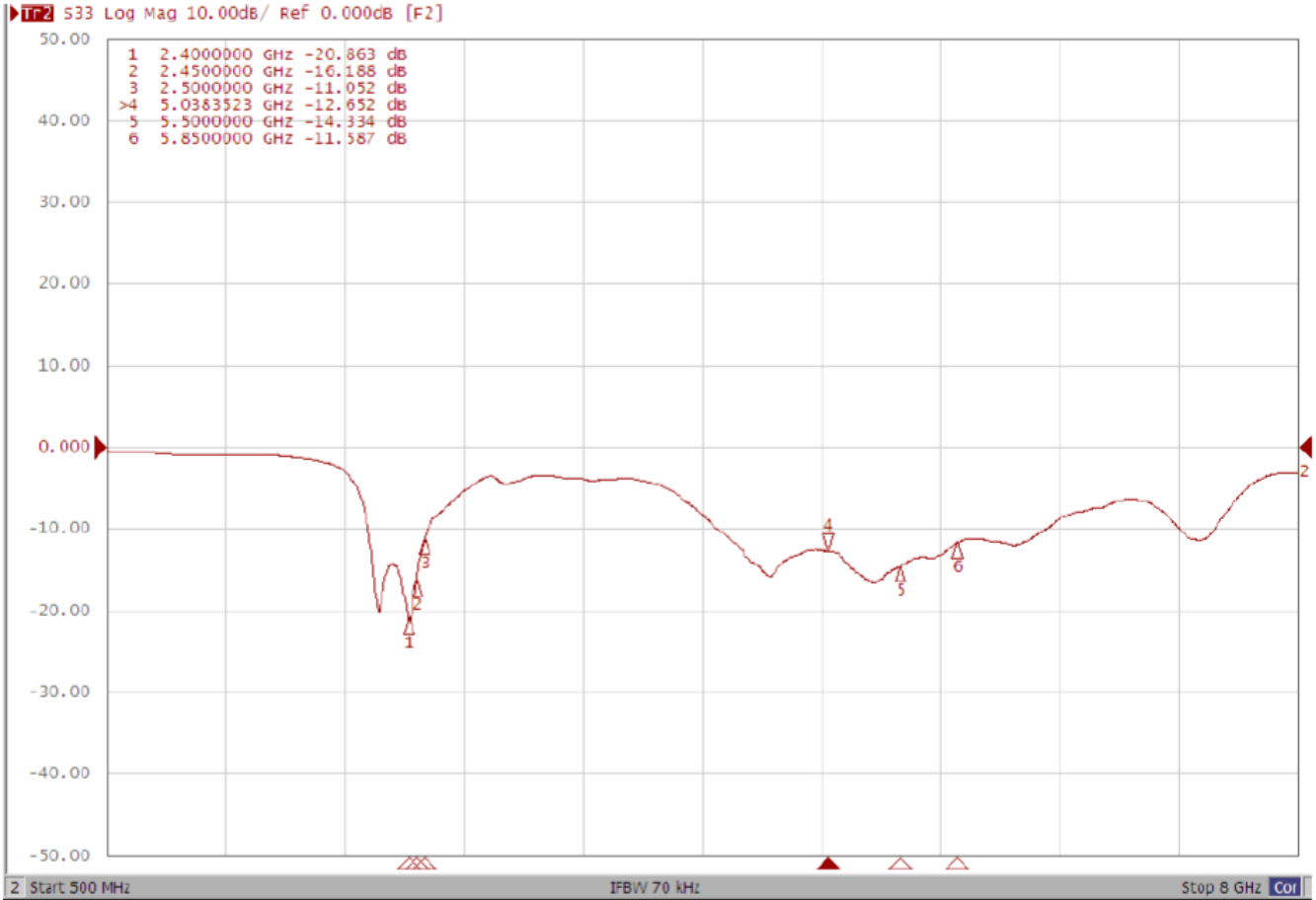
**Antenna Solution Detail**




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 : 李欣樺	CHECKED BY : 詹惠雯	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
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		SPEC REV. P0

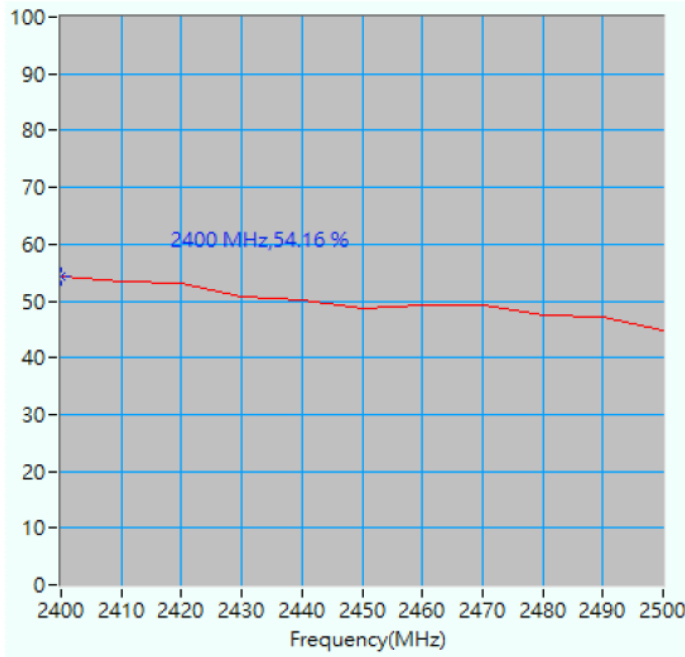
# ELECTRICAL CHARACTERISTICS

## Return Loss

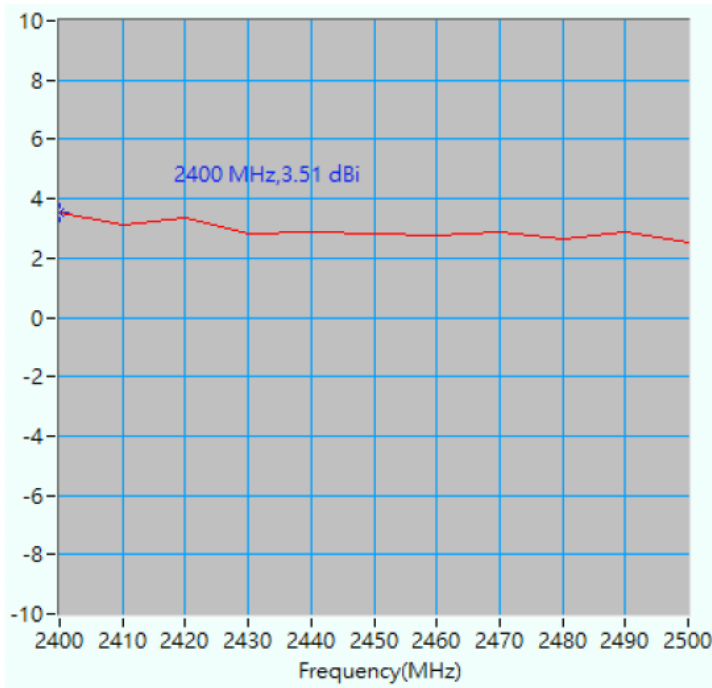


UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>	
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TITLE : RFMTA211200NNLB001		DOCUMENT NO.	SPEC REV. <b>P0</b>


## Antenna Efficiency and Peak Gain

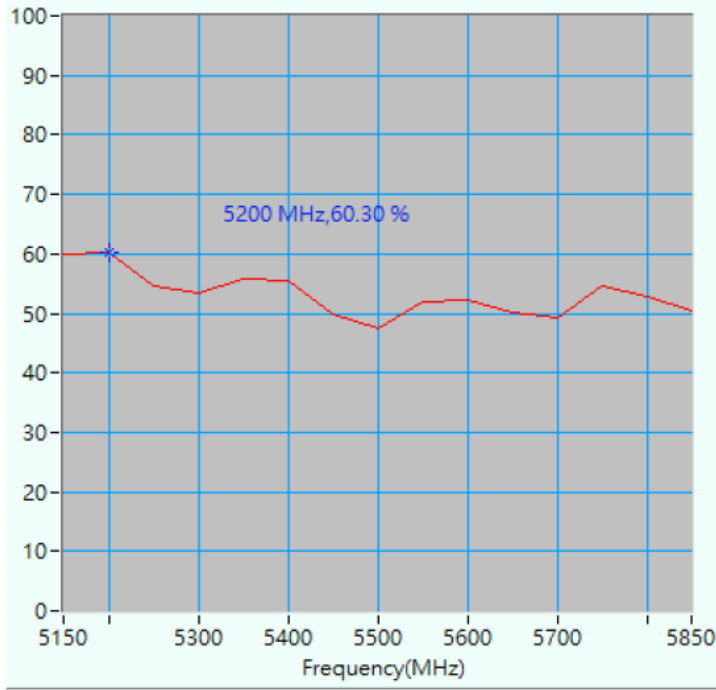


Maximum Efficiency at 2400MHz : 54.16%

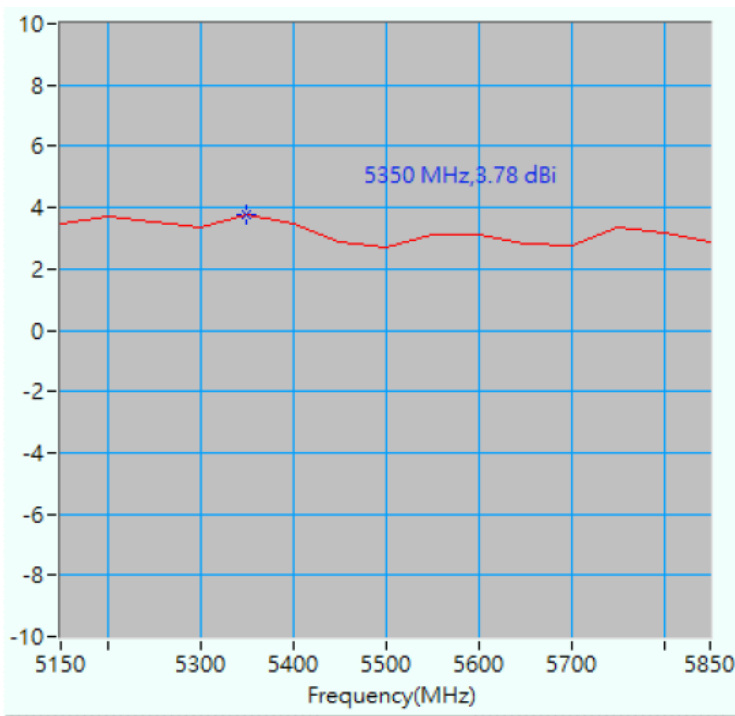


Maximum Peak Gain at 2400 MHz : 3.51dBi


UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>
SCALE : N/A	UNIT : mm	
DRAWN BY : 李欣樺	CHECKED BY : 詹惠雯	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
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TITLE : RFMTA211200NNLB001		DOCUMENT NO.
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Maximum Efficiency at 5200MHz : 60.30%

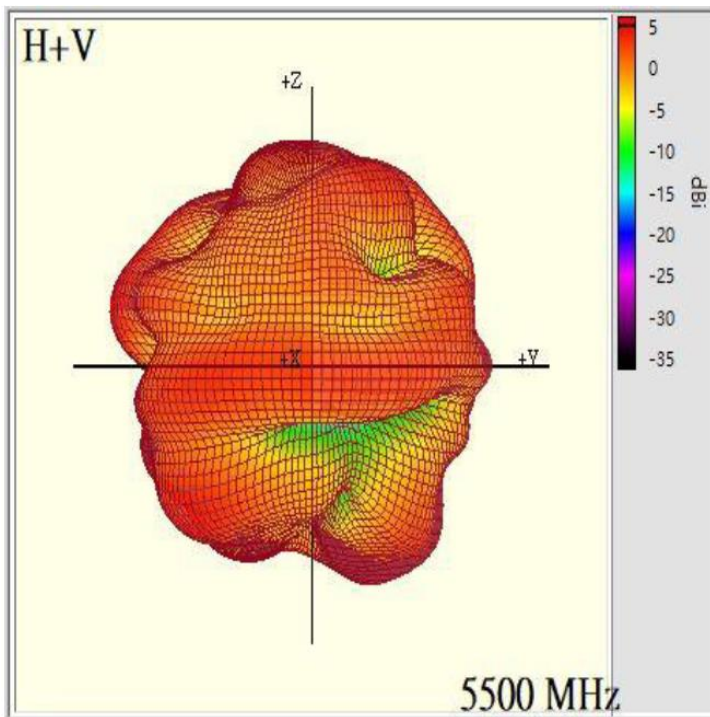
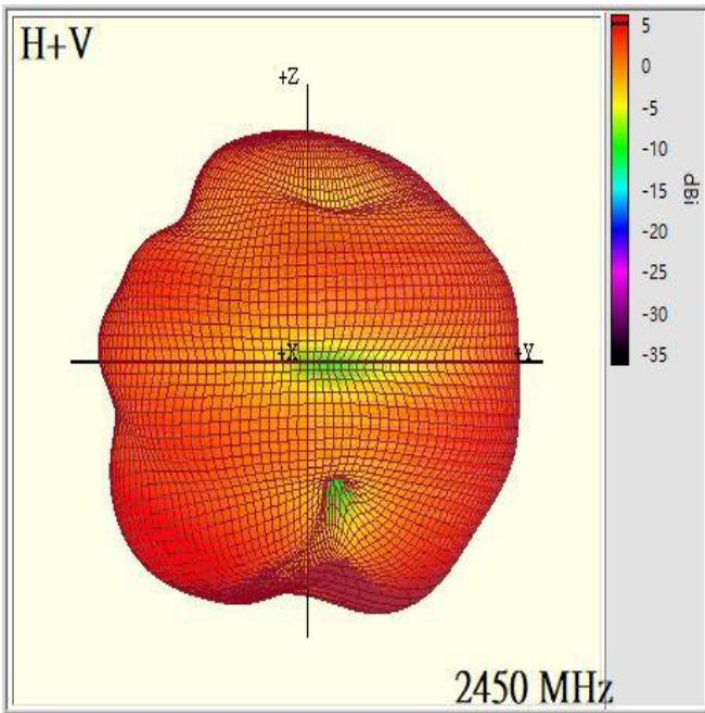



Maximum Peak Gain at 5350MHz : 3.78dBi

UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
SCALE : N/A	UNIT : mm		
DRAWN BY : 李欣樺	CHECKED BY : 詹惠雯		
DESIGNED BY : 林育帆	APPROVED BY : 陳振榮		
TITLE : RFMTA211200NNLB001		DOCUMENT NO.	SPEC REV. <b>P0</b>



3D Pattern



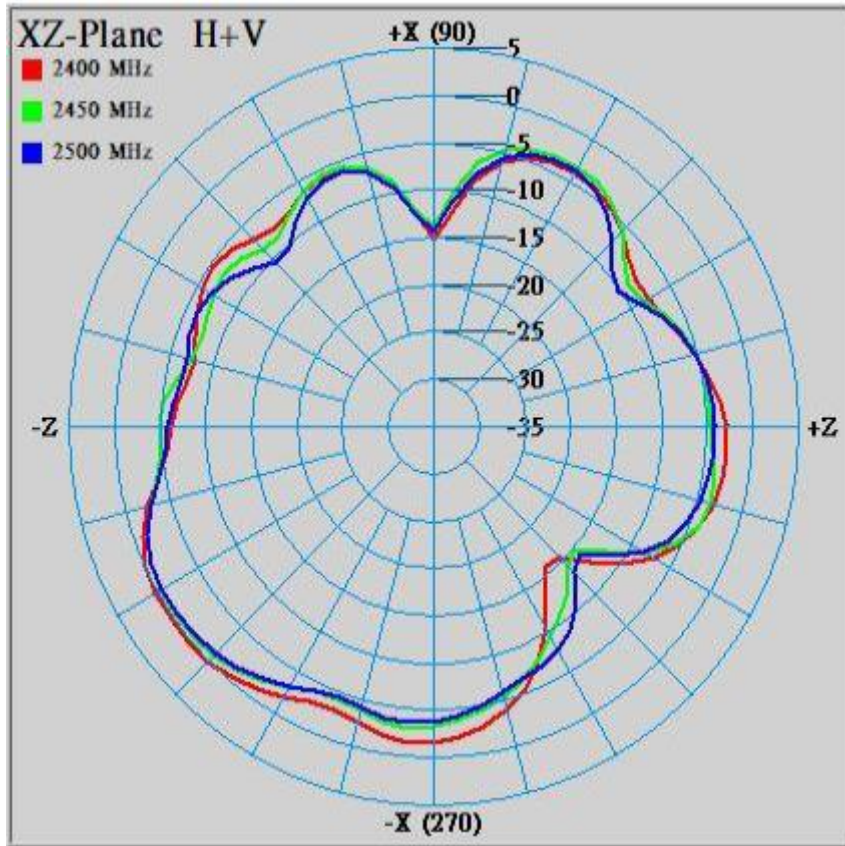
UNLESS OTHER SPECIFIED TOLERANCES ON :			<b>INPAQ TECHNOLOGY CO., LTD.</b>
X = N/A	X.X = N/A		
ANGLES = N/A		HOLEDIA = N/A	
SCALE : N/A	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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TITLE : RFMTA211200NNLB001		DOCUMENT NO.	SPEC REV. P0


# RADIATION PATTERN

2400~2500 MHz

Phi=0.00deg

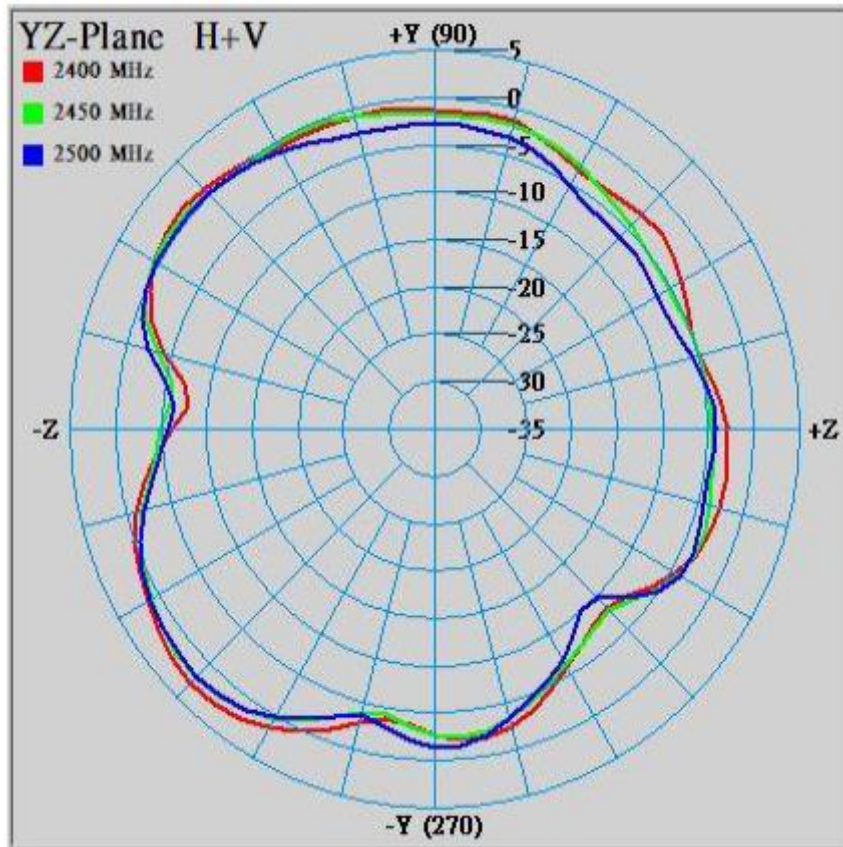
Gain . dB




UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A      X.X=N/A      X.XX=N/A ANGLES=N/A      HOLEDIA=N/A		 <b>INPAQ TECHNOLOGY CO., LTD.</b>
SCALE : N/A	UNIT : mm	
DRAWN BY : 李欣樺	CHECKED BY : 詹惠雯	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
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Phi=90.00deg

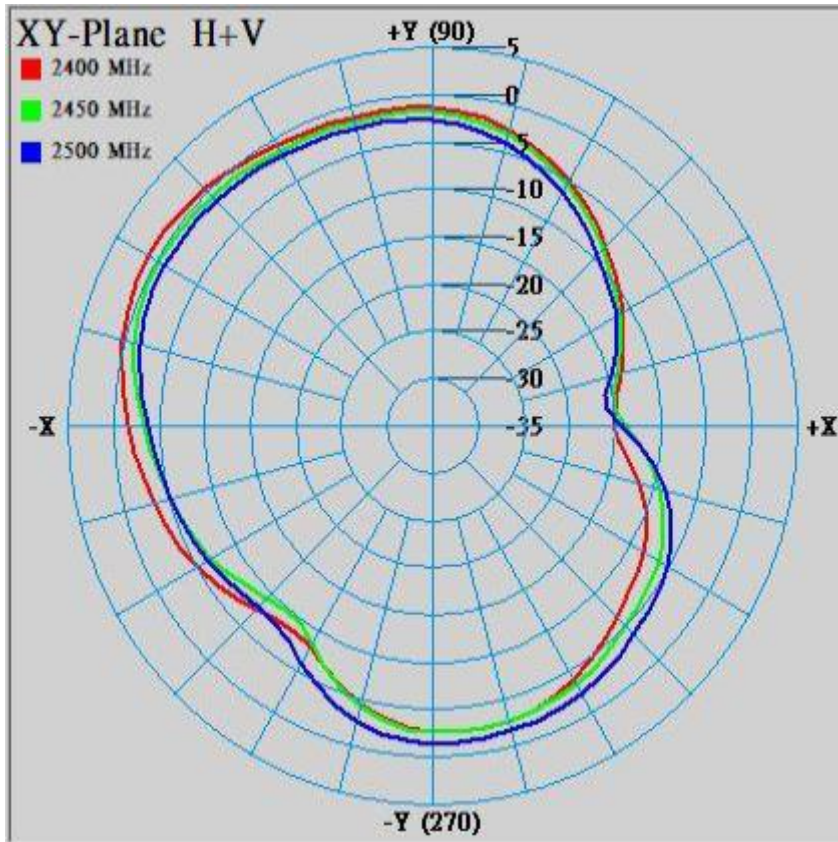
Gain . dB



UNLESS OTHER SPECIFIED TOLERANCES ON :			<b>INPAQ TECHNOLOGY CO., LTD.</b>
X=N/A	X.X=N/A      X.XX=N/A		
ANGLES=N/A		THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
HOLEDIA=N/A			
SCALE : N/A	UNIT : mm		
DRAWN BY : 李欣樺	CHECKED BY : 詹惠雯		
DESIGNED BY : 林育帆	APPROVED BY : 陳振榮	DOCUMENT NO.	
TITLE : RFMTA211200NNLB001			
		SPEC REV. P0	

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	0.27	-4.35	2.86	-1.60	0.92	-3.44
2450	-0.40	-4.91	2.09	-2.06	-0.31	-4.05
2500	-0.54	-5.21	1.84	-2.44	-1.05	-4.04

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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 DRAWN BY : 李欣樺      CHECKED BY : 詹惠雯  
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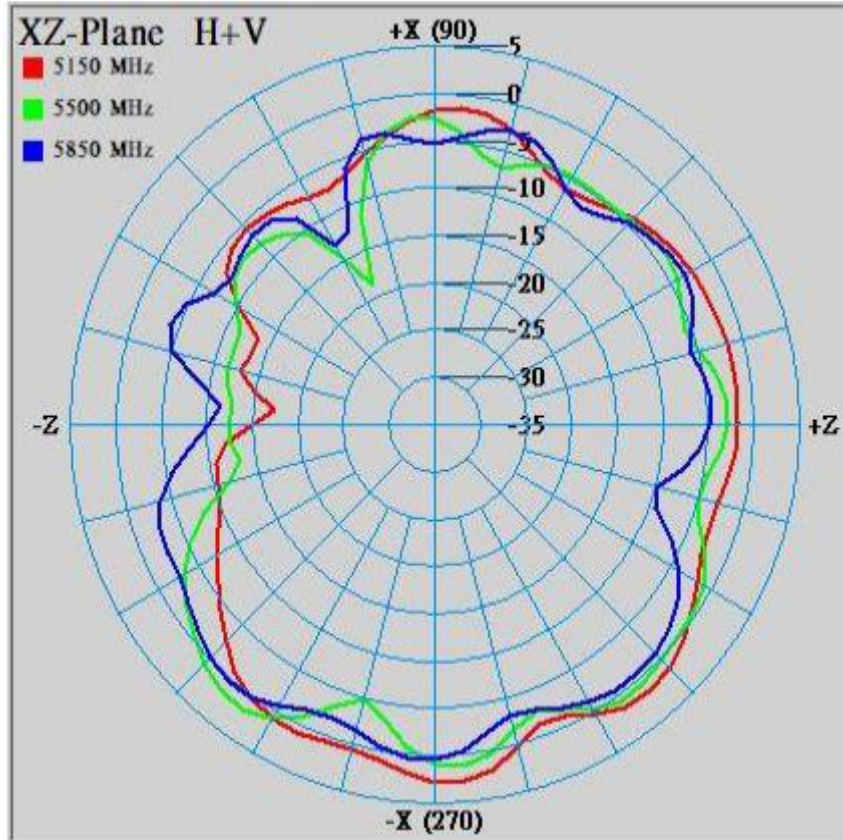
DOCUMENT NO.


SPEC REV. P0

5150~5850 MHz

Phi=0.00deg

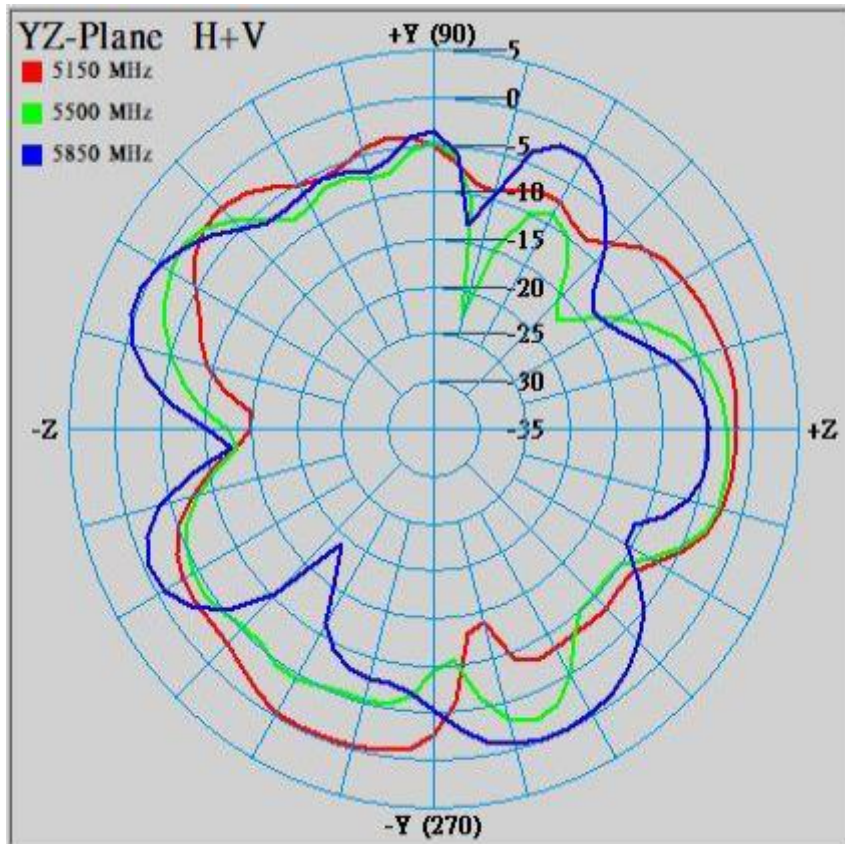
Gain . dB




UNLESS OTHER SPECIFIED TOLERANCES ON :			<b>INPAQ TECHNOLOGY CO., LTD.</b>
X = N/A	X.X = N/A		
ANGLES = N/A		HOLEDIA = N/A	
SCALE : N/A	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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Phi=90.00deg

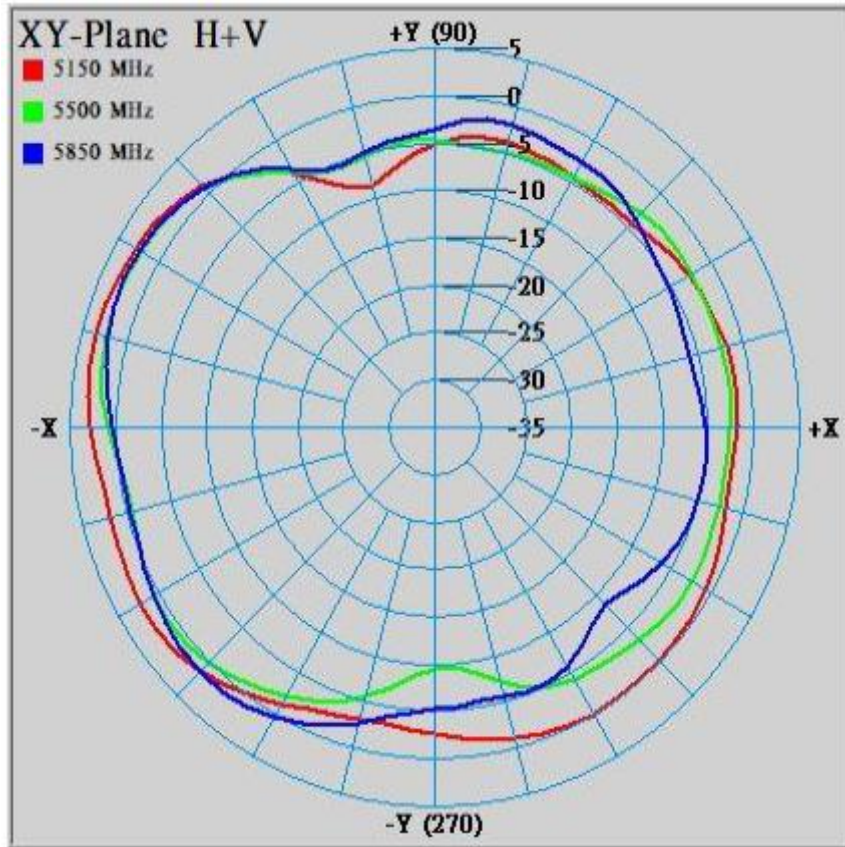
Gain . dB



UNLESS OTHER SPECIFIED TOLERANCES ON :			<b>INPAQ TECHNOLOGY CO., LTD.</b>
X=N/A	X.X=N/A      X.XX=N/A		
ANGLES=N/A		HOLEDIA=N/A	
SCALE : N/A	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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TITLE : RFMTA211200NNLB001		DOCUMENT NO.	SPEC REV. <b>P0</b>

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	2.86	-2.26	-0.22	-4.30	3.42	-0.46
5500	1.69	-3.19	-1.41	-5.82	2.38	-1.85
5850	0.40	-3.48	0.56	-4.32	2.53	-1.81

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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