

APPROVAL SHEET

PCB Antenna

2.4~2.5GHz Working Frequency

Halogens Free Product

P/N: RFPCA302027IMAB401

Customer : TYMPHANY

Customer 's Part No. :

Production :

Address :

品名：RFPCA302027IMAB401

1. Explanation of part number :

RF	PCA	3020	27	I	M	A	B	4	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	PCA Antenna	Per 2 digits of length, width e.g.: 3020 Length 30.0, Width 20.0mm	2 digits for cable length e.g.: 27 Cable Length:27.5cm	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 4: Ø1.13 Low Loss 6:RG316 7:Ø1.37 8:RG178	01~99 series number

2. Electrical Specification :

Item	Specification
Working Frequency Range	2.4 ~ 2.5GHz (Note-1)
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20°C ~ +65°C

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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SCALE : N/A UNIT : mm
 DRAWN BY : 劉采璇 CHECKED BY : 詹惠雯
 DESIGNED BY : 黃泰進 APPROVED BY : 陳振榮

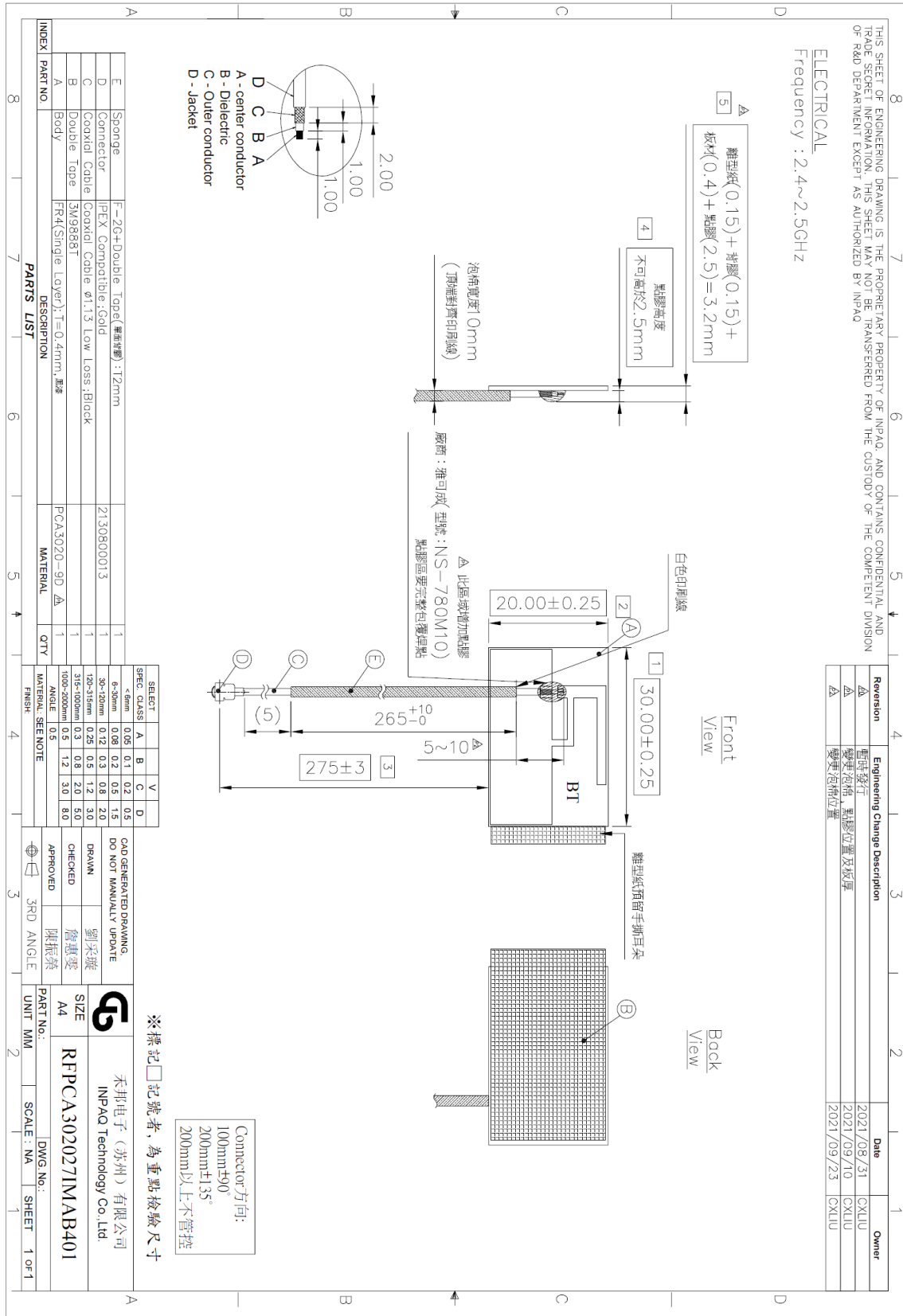
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3. Antenna Drawing :



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



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A
DRAWN BY : 劉采璇
DESIGNED BY : 黃泰進

UNIT : mm
CHECKED BY : 詹惠雯
APPROVED BY : 陳振榮

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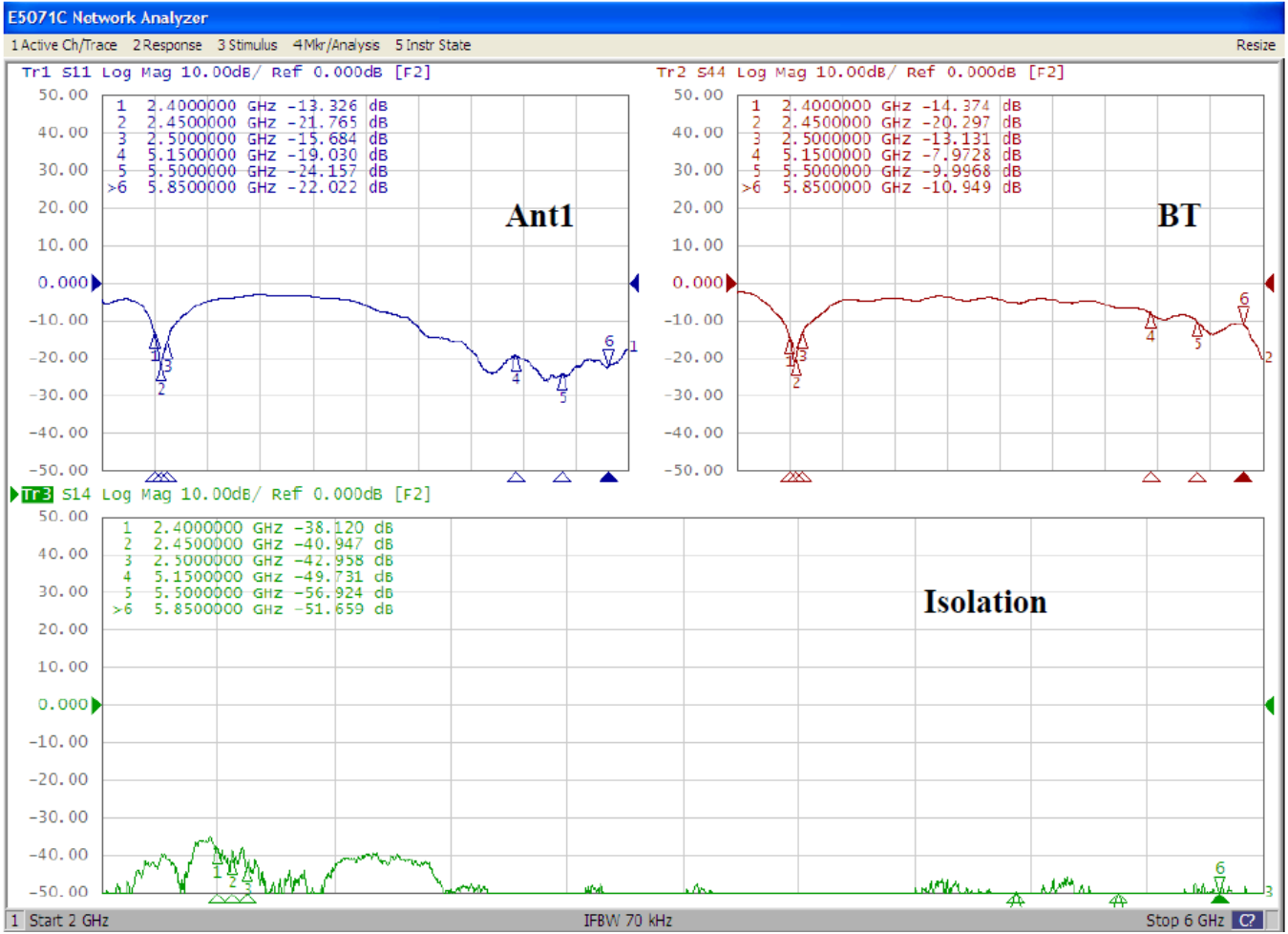
DOCUMENT NO.


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Antenna Solution Detail

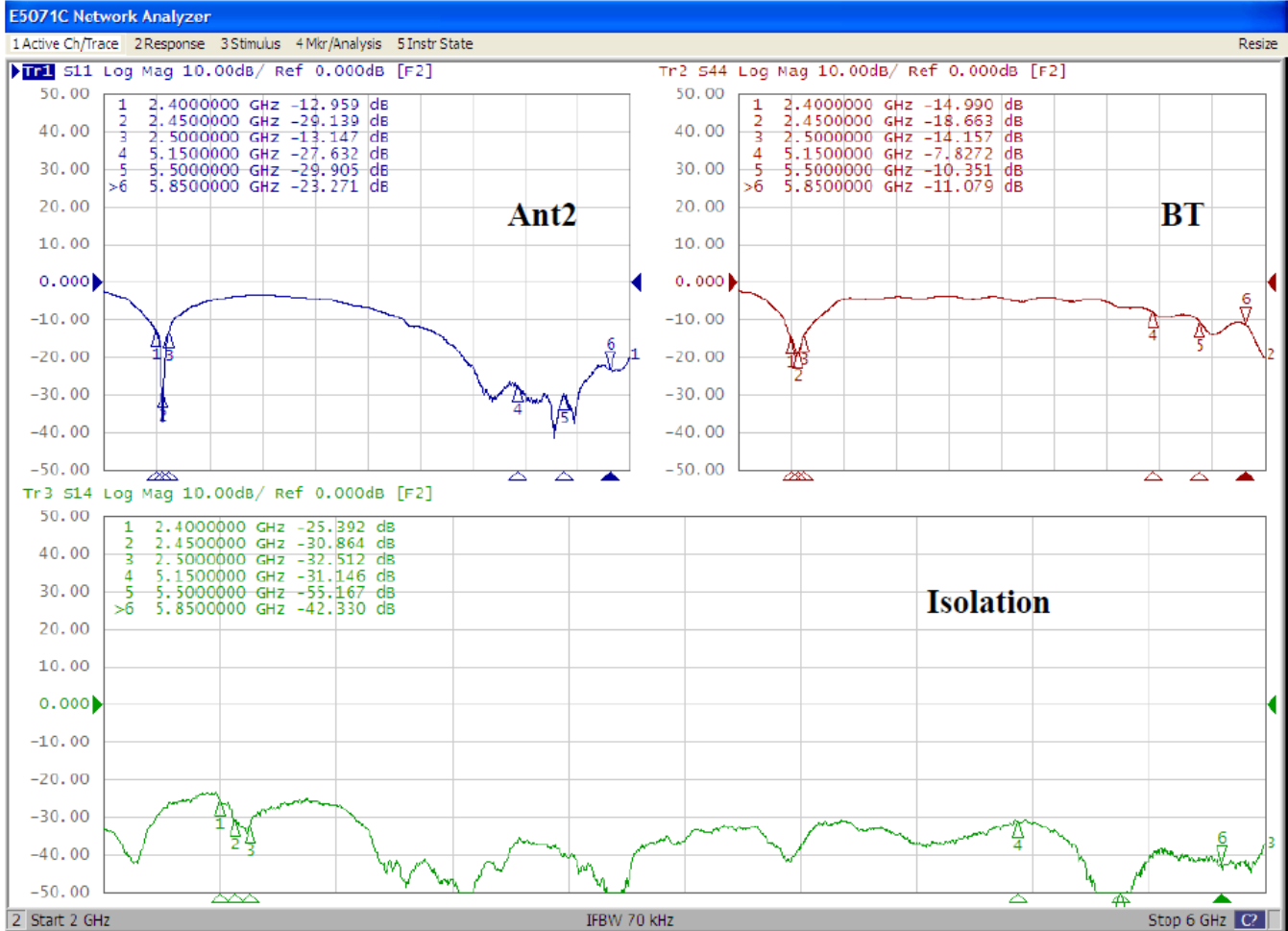
Return Loss & Isolation


Ant1_BT



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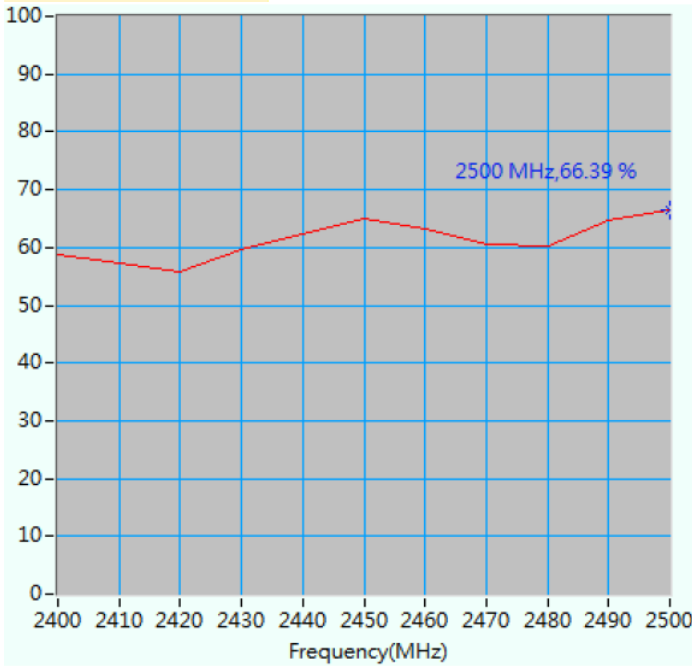
Ant2_BT



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X=N/A	X.X=N/A X.XX=N/A		
ANGLES=N/A HOLEDIA=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	
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Antenna Efficiency and Peak Gain

BT



Maximum Efficiency at 2500 MHz : 66.39 %

BT	
Frequency (GHz)	Efficiency (%)
2.4	58.88
2.45	64.85
2.5	66.39
5.15	/
5.5	
5.85	

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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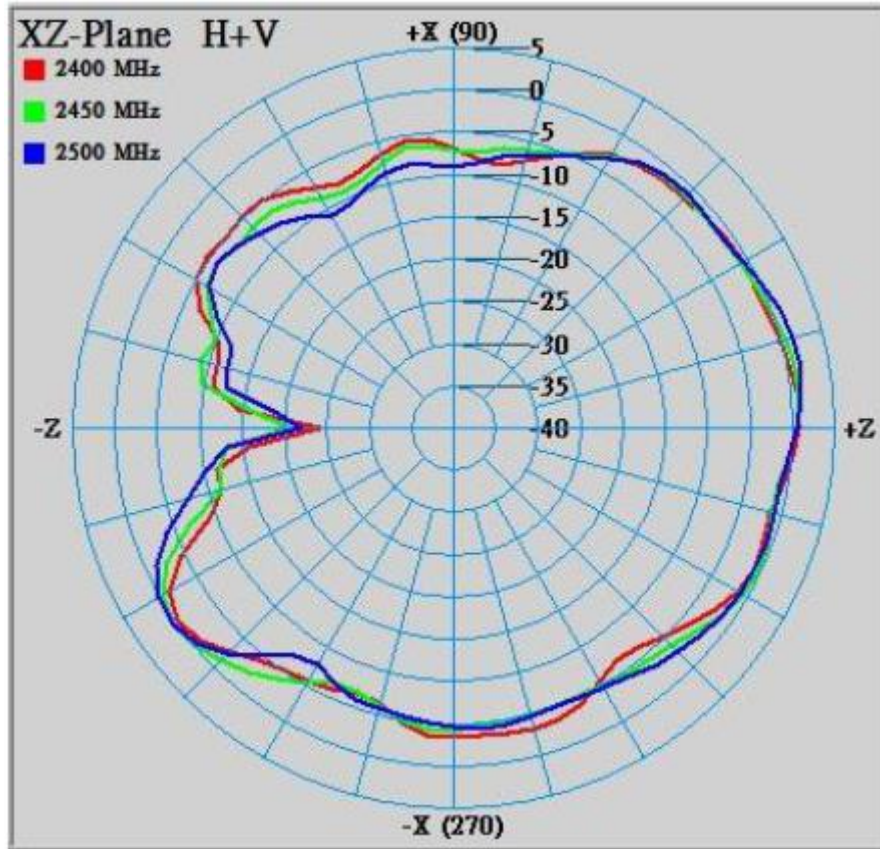
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P0


2D Radiation Patterns

BT

X-Z Plane
Phi=0.00deg

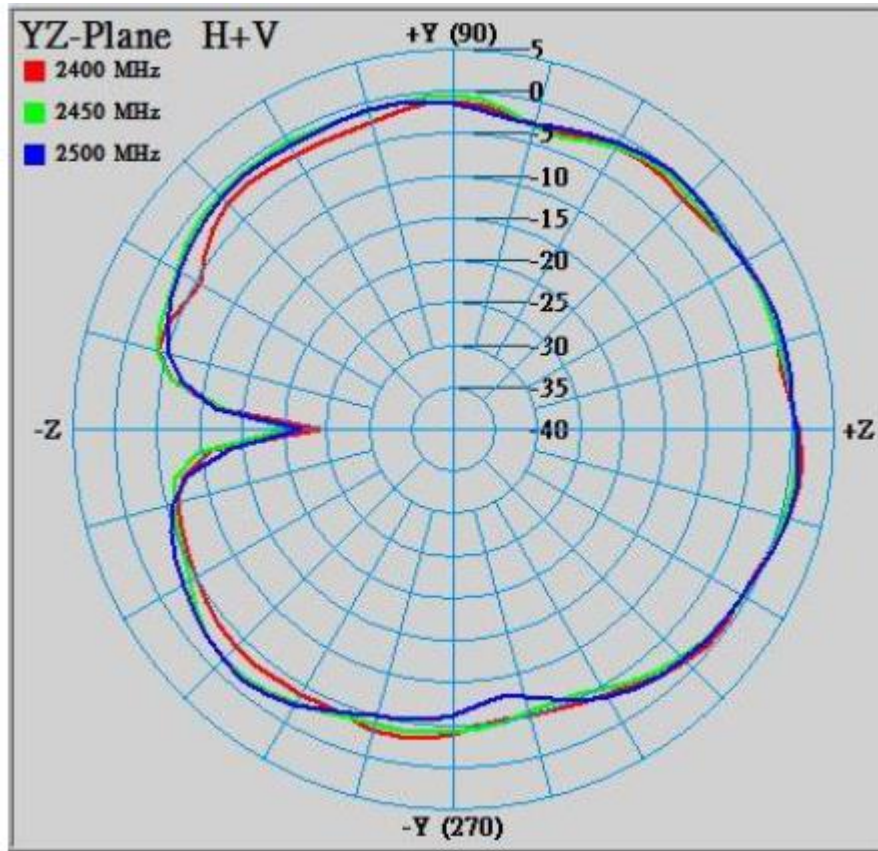
Gain . dB




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ANGLES = N/A		HOLEDIA = N/A	
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Y-Z Plane
Phi=90.00deg

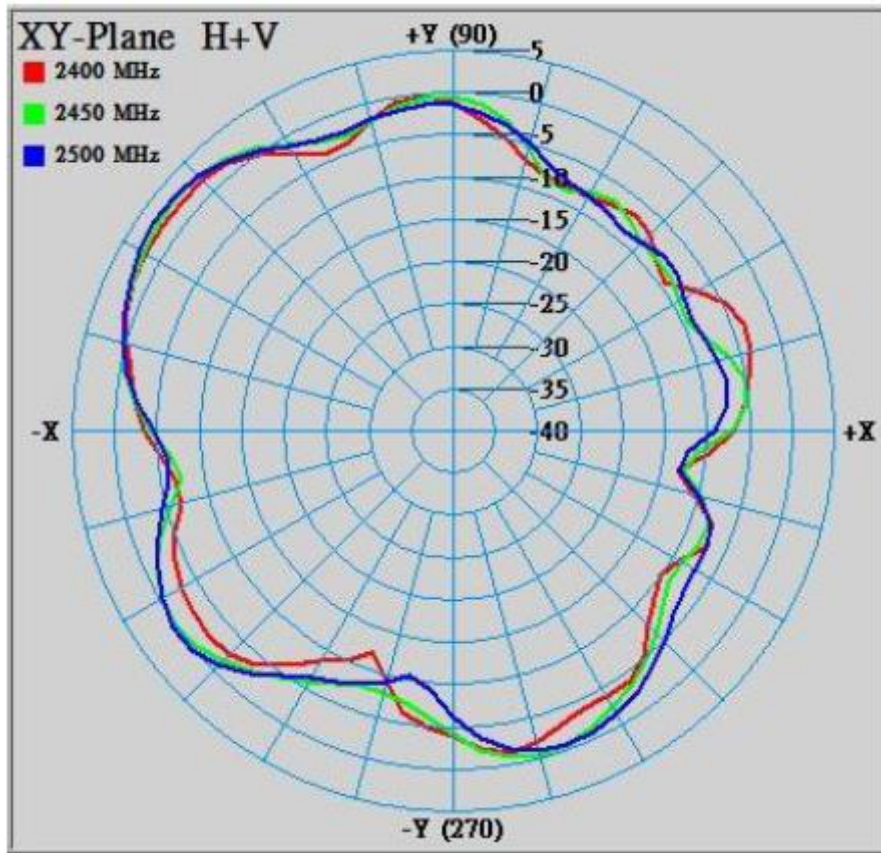
Gain . dB



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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		
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X-Y Plane
Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	0.93	-3.46	1.52	-2.28	2.08	-3.20
2450	0.95	-3.32	0.79	-1.90	2.86	-2.56
2500	1.63	-3.29	1.11	-1.90	3.13	-2.59

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