



承認書

Approval sheet

Customer : 億豐綜合工業股份有限公司

Customer P/N : 84601-11714

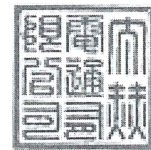
Brand : INPAQ

Supplier P/N : RFPCA310503IMAB302

Description : 2.4GHz PCB Antenna

廠商簽認	
承辦人 :	楊榮翔
技術 / 負責人:	邱正鈞
認可 :	Raymond Jao

Prepared by : Andy Li
Date : 2021/6/21



品名：RFPCA310503IMAB302

1. Explanation of part number :

RF	PCA	3105	03	I	M	A	B	3	02
Type Code	Product Code	Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	PCB Antenna	Per 2 digits of length, width e.g.: 3105 Length 31mm, Width1 5.6mm	2 digits for cable length e.g.:03 Length 3.3cm	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 6: 6GHz 5: 5GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.X GHz tri-band M:3300~4200MHz 5G : 5150~7150MHz N: NFC R: 860~875MHz/ 900~928MHz T: LTE band W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:∅ 0.81 2:∅ 1.32 3:∅ 1.13 4:Low Loss ∅ 1.13 5:∅ 0.5 6:RG316 7: ∅ 1.37 8:RG178 9:Low Loss ∅ 1.37	01~99 series number

2. Electrical Specification :

Item	Specification
Working Frequency Range	2.4~2.5 GHz
Return Loss	< -10 dB
VSWR	2 max.
Peak Gain	1.18 dBi
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
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



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

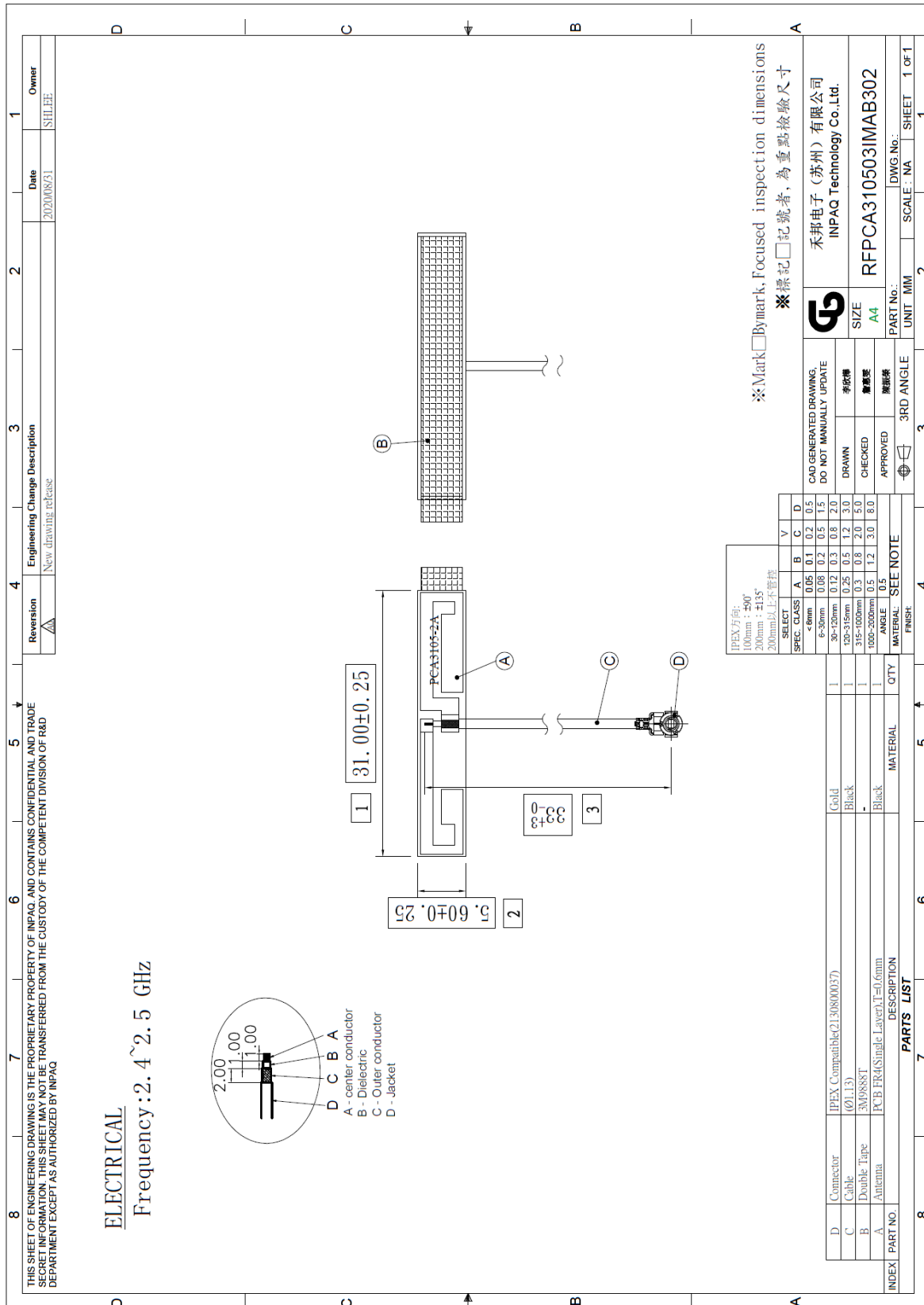
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3. Antenna Drawing :

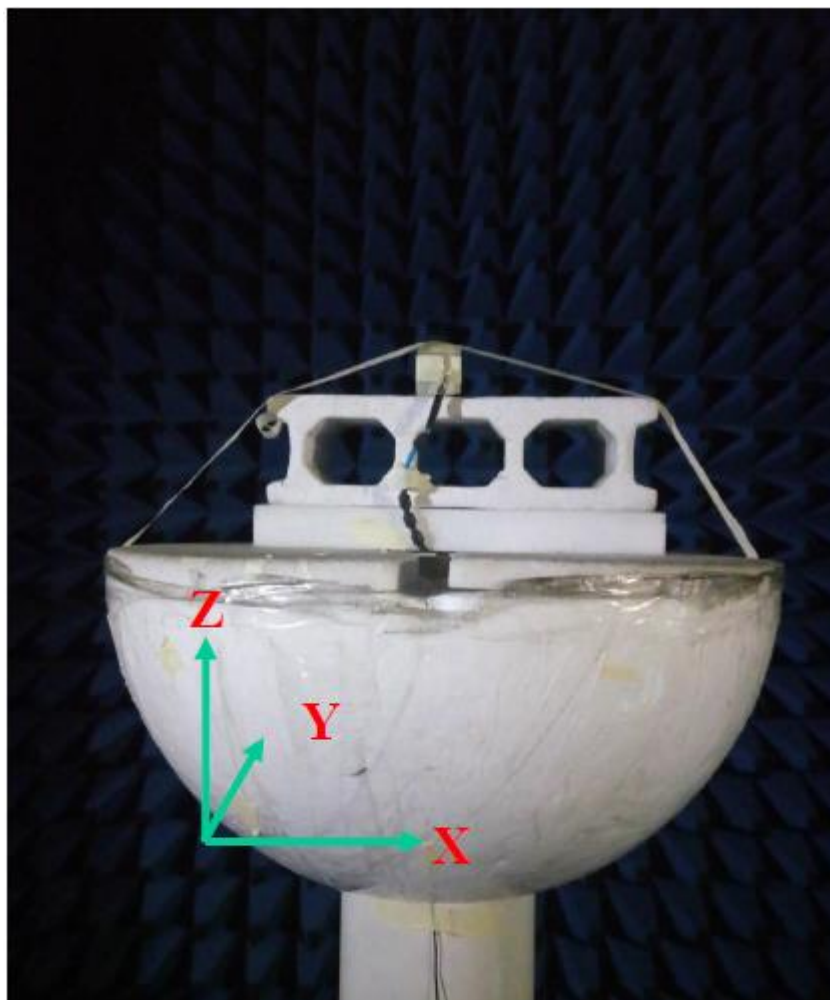



UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A		 INPAQ TECHNOLOGY CO., LTD.
SCALE : N/A	UNIT : mm	
DRAWN BY : 李欣樺	CHECKED BY : 詹惠愛	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE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

Test Report

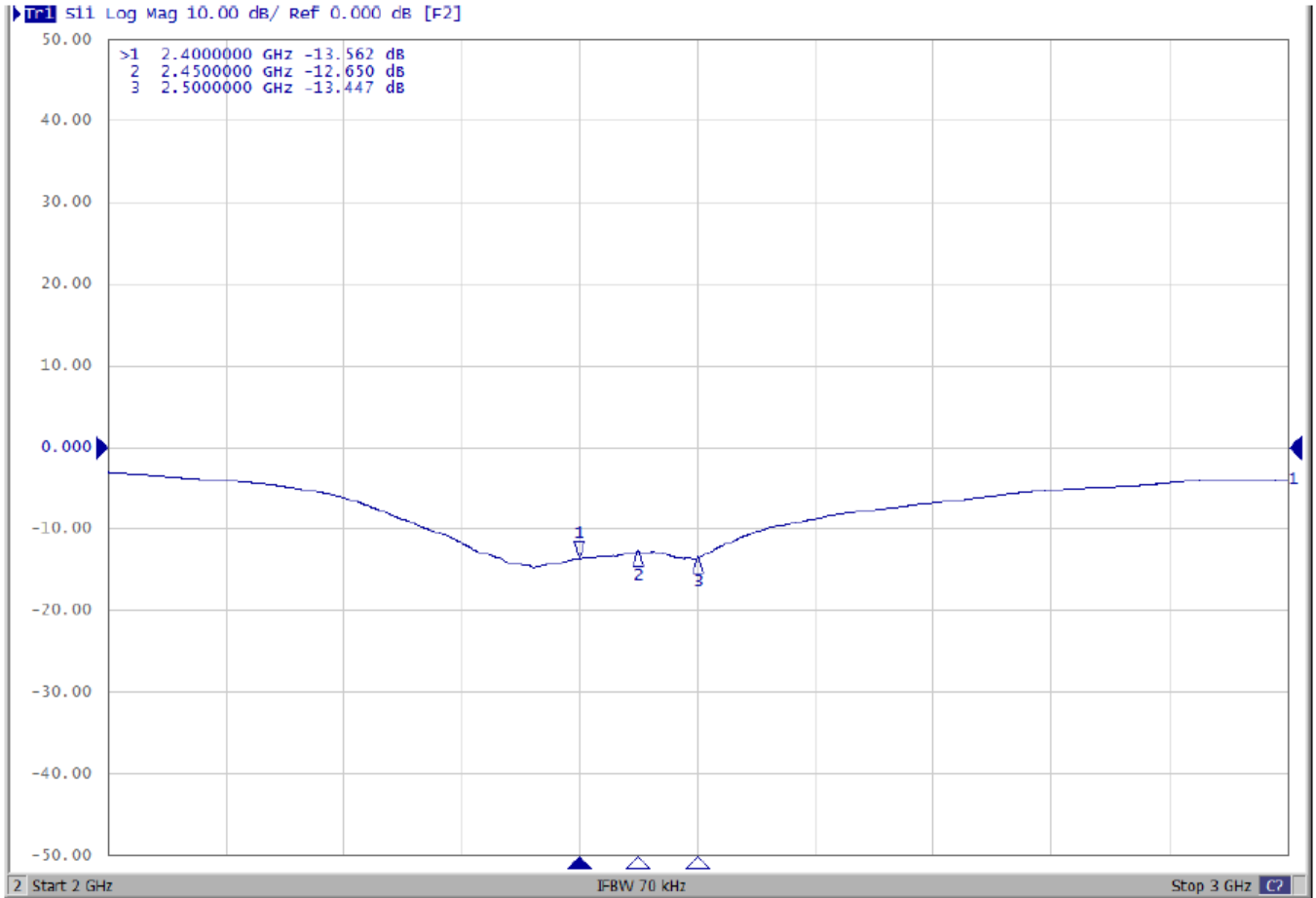
Experimental Setup




UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A		 INPAQ TECHNOLOGY CO., LTD.
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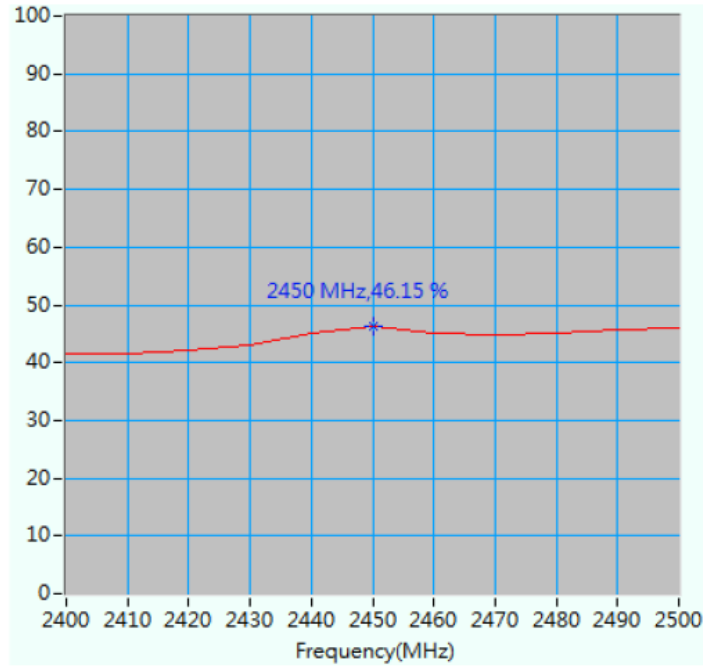
ELECTRICAL CHARACTERISTICS

Return Loss

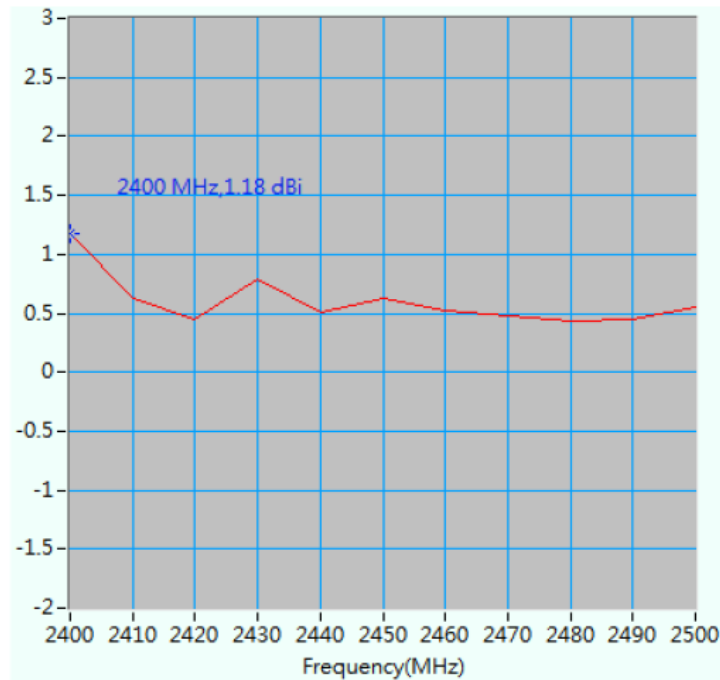


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■ Antenna Efficiency and Peak Gain



Maximum Efficiency at 2450 MHz : 46.15 %



Maximum Peak Gain at 2400 MHz : 1.18 dBi

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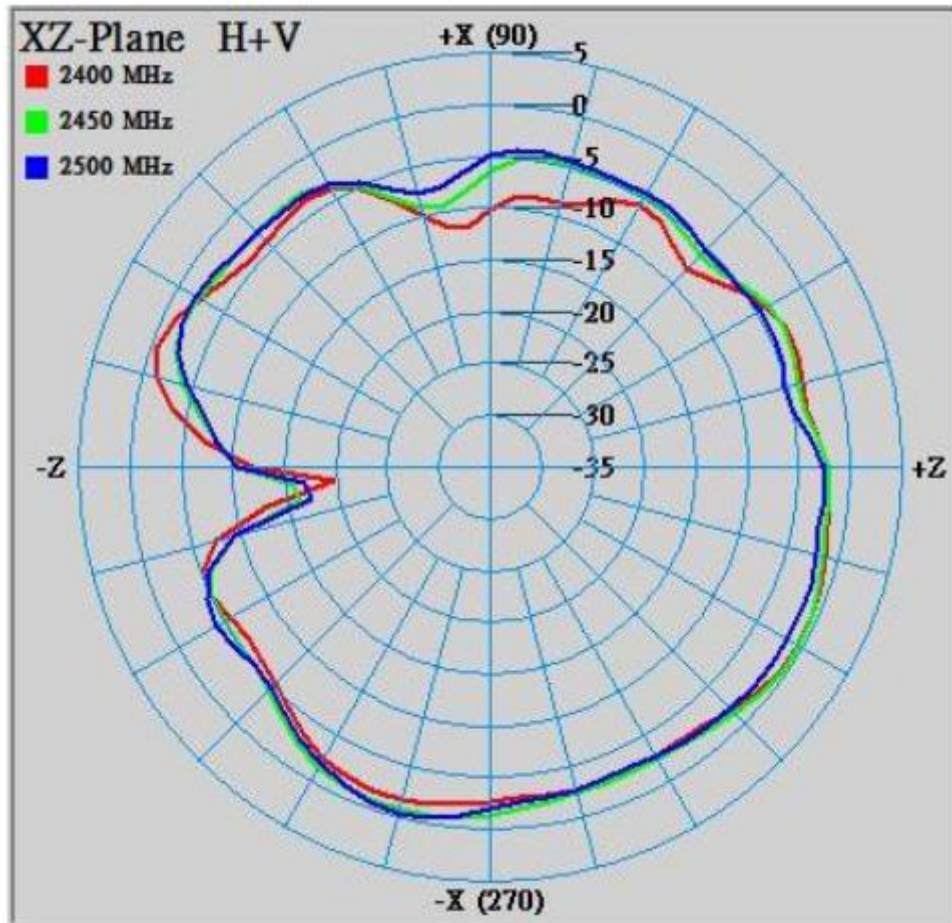
RADIATION PATTERN


2.4~2.5 GHz

X-Z Plane

Phi=0.00deg

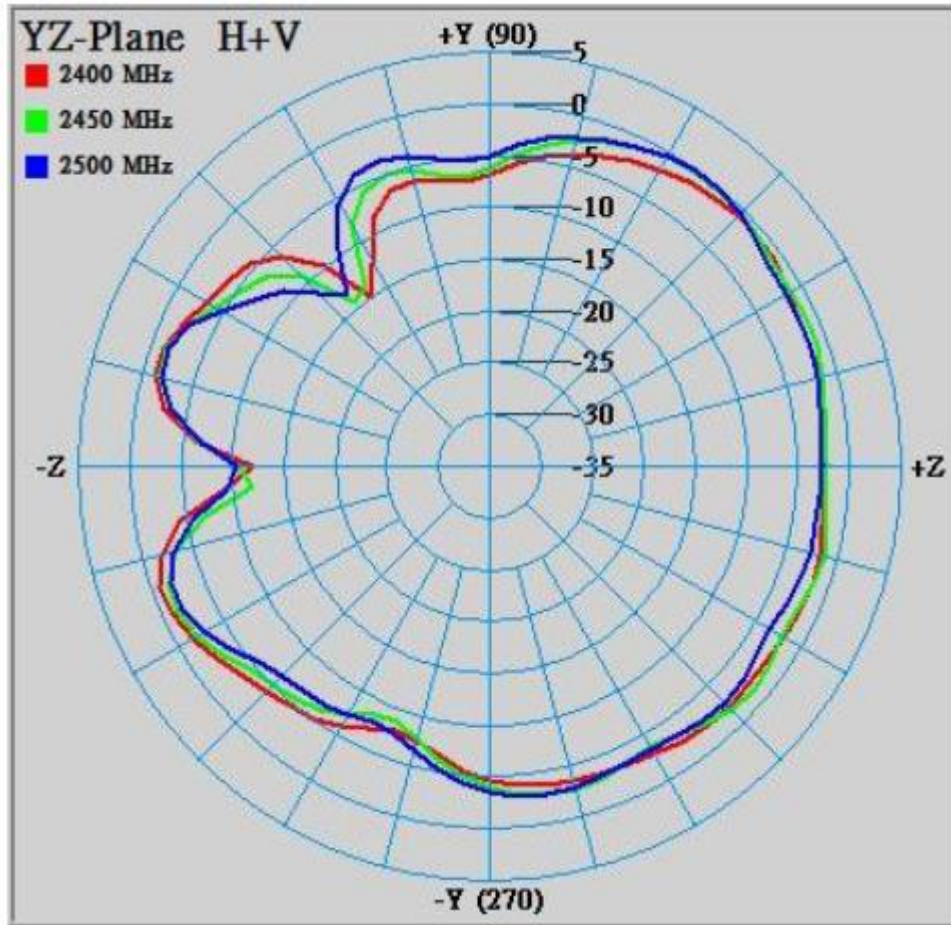
Gain . dB




UNLESS OTHER SPECIFIED TOLERANCES ON :		 INPAQ TECHNOLOGY CO., LTD.
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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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Y-Z Plane
Phi=90.00deg

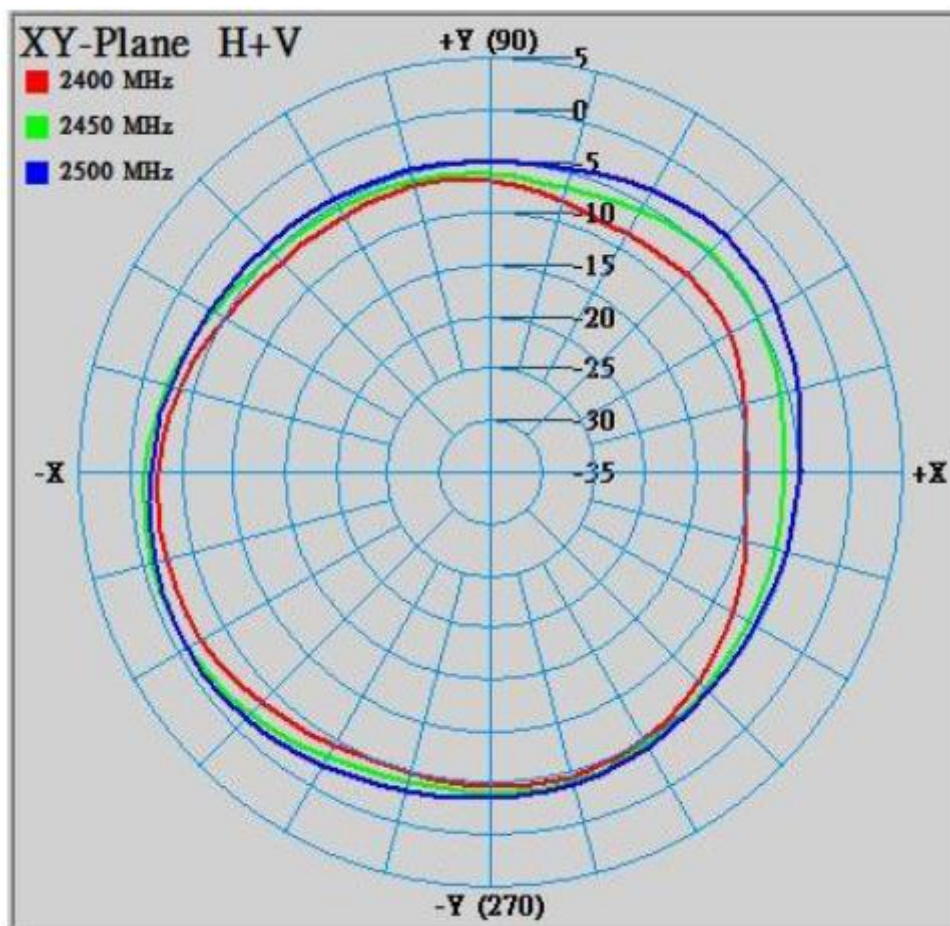
Gain . dB




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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	-0.54	-3.76	-0.75	-3.32	-2.36	-5.55
2450	-0.40	-3.34	-0.26	-3.23	-0.89	-4.11
2500	-0.34	-3.54	-0.17	-3.46	-0.96	-3.42

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