

## **INPAQ Technology (Suzhou) Co., Ltd.**

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4F, No. 27, Keya Road, Daya Dist.  
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214105, Jiangsu  
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No. 11, Ke-Yi St., Chunan  
Miaoli 35059  
Taiwan, R.O.C.

# 1.Explanation of part number :

RF	DPA	8709	07	I	M	A	B	3	03
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 8709 Length 87mm, Width 9.4mm	2 digits for cable length e.g.: 07 Cable Length:7.00cm	A: N C:MCX D:IPEX III E: IPEX IV F: IPEX A13 H: Hirose I: IPEX K:F 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>1:1GHz</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>U:UHF band</b> <b>W: WCDMA band</b> <b>P:WPC</b> <b>D:DECT</b>	B: MP <b>T:During Test</b> X: Pile Run	0:None 1:Ø0.81 2:Ø 1.32 3:Ø1.13 4:Low Loss Ø1.13 5:Ø0.50 6:RG316 7:Ø1.37 8:RG178 9: Low Loss Ø1.37 A:RG174 B:RG178 單芯線 C:WPC 用 0.3mm D:DECT 用 E : RG405	01~99 series number

# 2.Electrical Specification :

Item	Specification
Working Frequency Range	2.4 ~ 2.5 GHz (Note-1)
Peak Gain	1.65 dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear Vertical
Radiation Pattern	Omni-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 : 詹惠雯

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

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TITLE : RFDPA870907IMAB303

DOCUMENT NO.

ENS070008180-000821104042

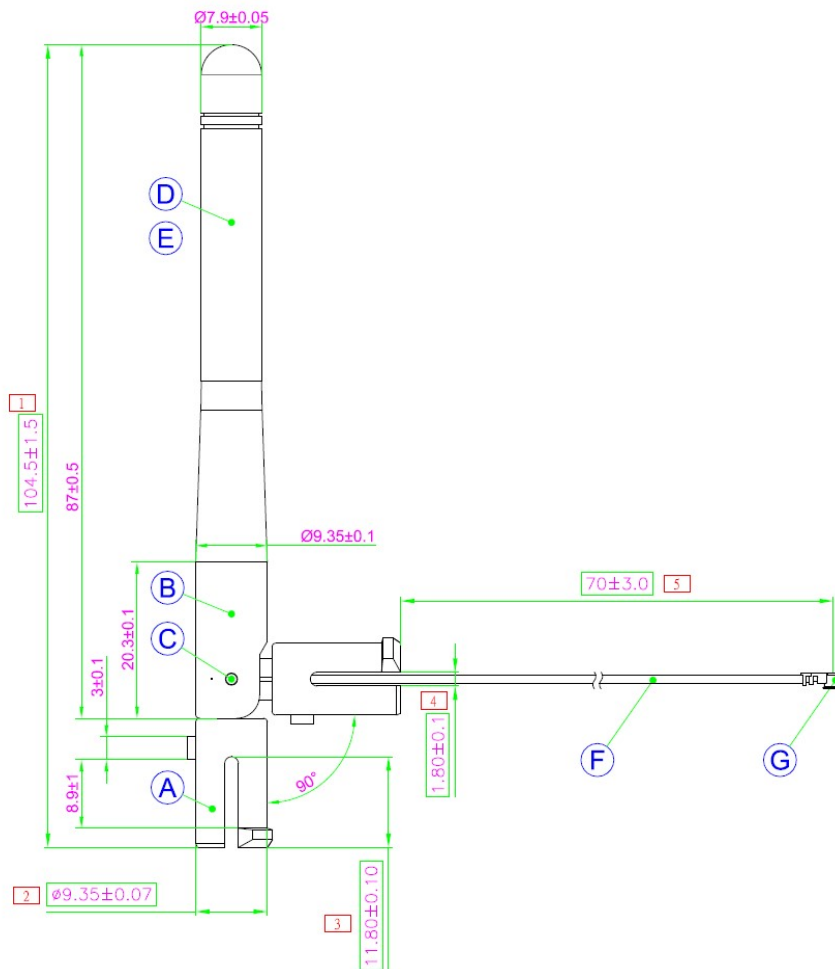
SPEC REV.  
A0


### 3. Antenna Drawing :

ELECTRICAL

Frequency: 2.4GHz  
Gain: 2dBi

No.	DESCRIPTION	MAT'L	Color	Q'TY
A	Antenna Down Base	PC+PBT	Black	1
B	Antenna Up Base	PC	Black	1
C	Rivet	POM	Black	2
D	Antenna Cover	TPEE	Black	1
E	Brass Tube	Brass	—	1
F	Coaxial Cable 1.13	—	Black	1
G	IPEX Compatible	—	Glod	1




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		SPEC REV. A0

4. Performance Report :

**Test Report**

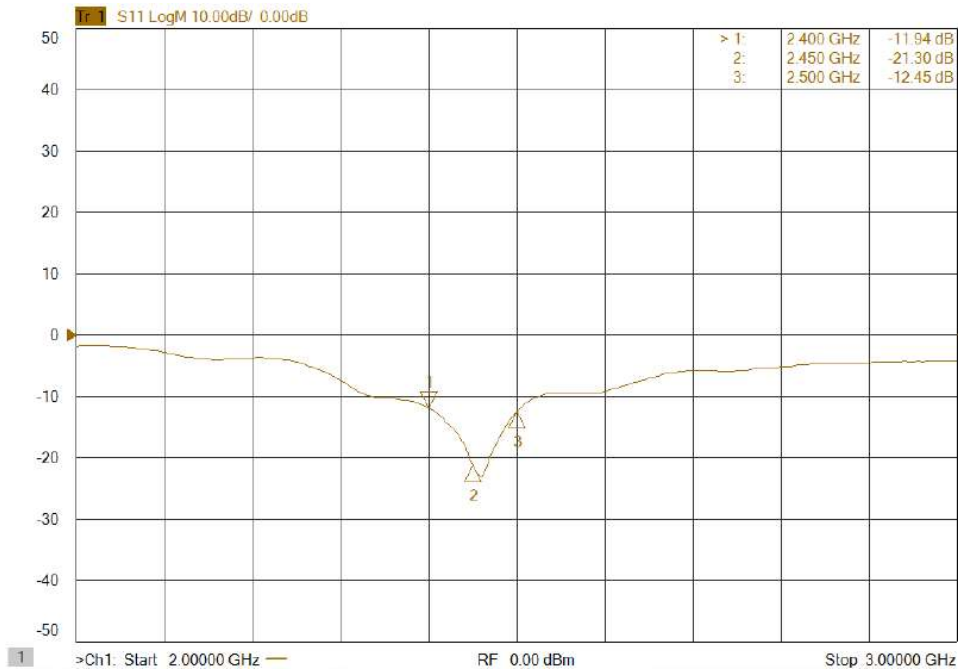
**Experimental Setup**



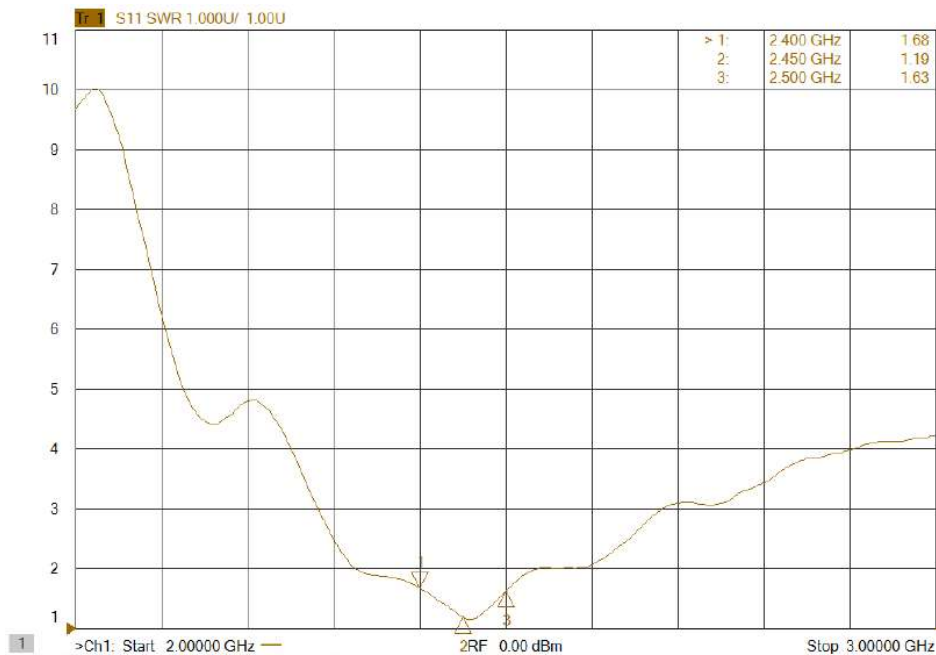
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ANGLES=N/A		HOLEDIA=N/A	
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# ELECTRICAL CHARACTERISTICS

## Return Loss



## VSWR



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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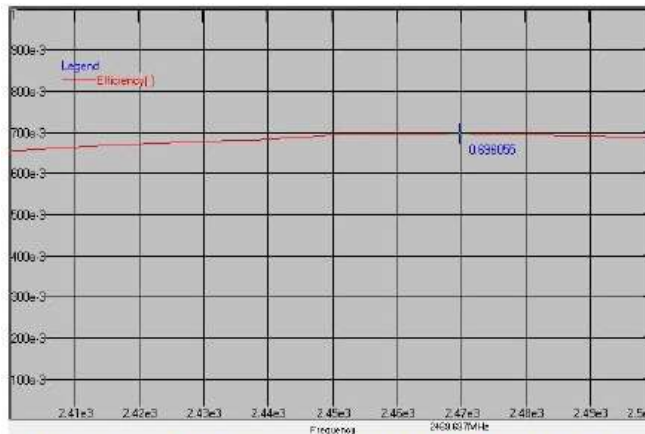
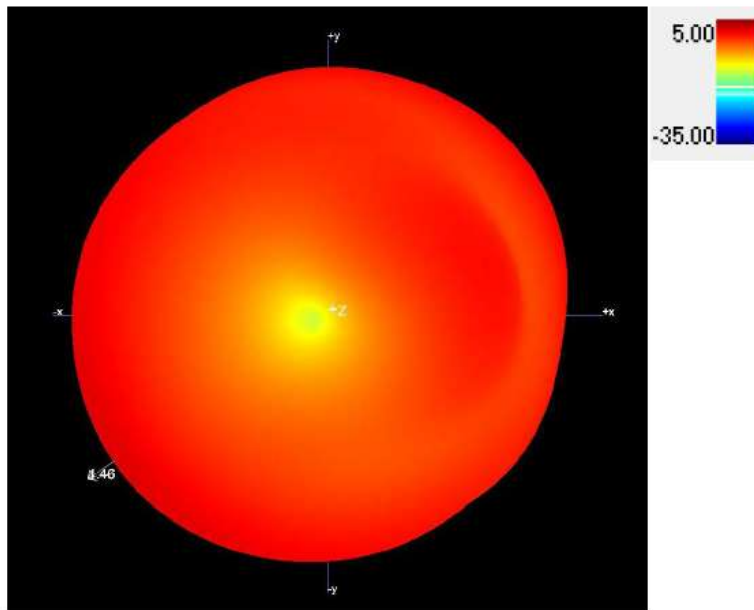
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# Antenna Efficiency and Peak Gain


2450 MHz



Maximum Efficiency at 2469 MHz : 69.61%



Maximum Peak Gain at 2489 MHz : 1.65 dBi

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DESIGNED BY : 黃瑞郎	APPROVED BY : 陳振榮	DOCUMENT NO.	ENS070008180-000821104042
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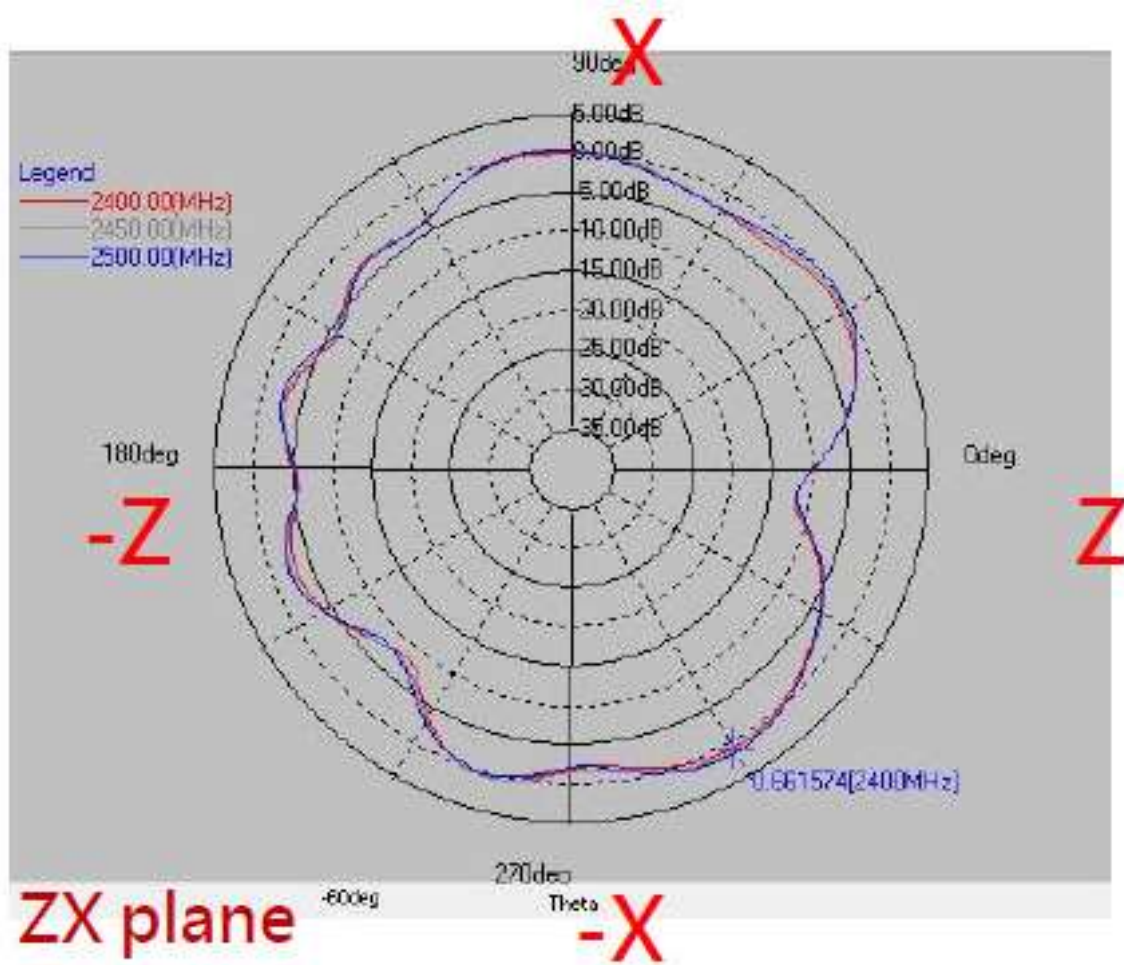
# RADIATION PATTERN


2400~2500 MHz

X-Z Plane

Phi=0.00deg

Gain . dB

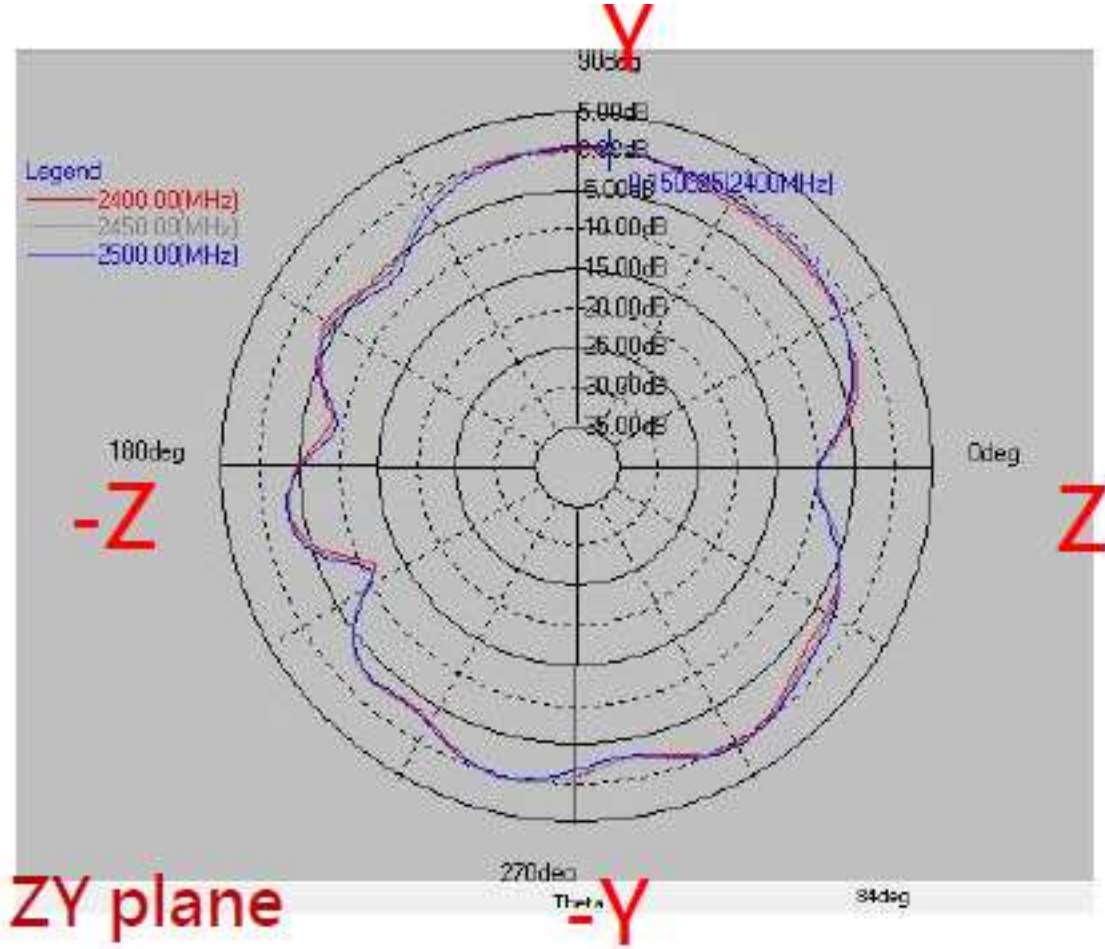



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ANGLES=N/A HOLEDIA=N/A		THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION
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Y-Z Plane

Phi=90.00deg

Gain . dB



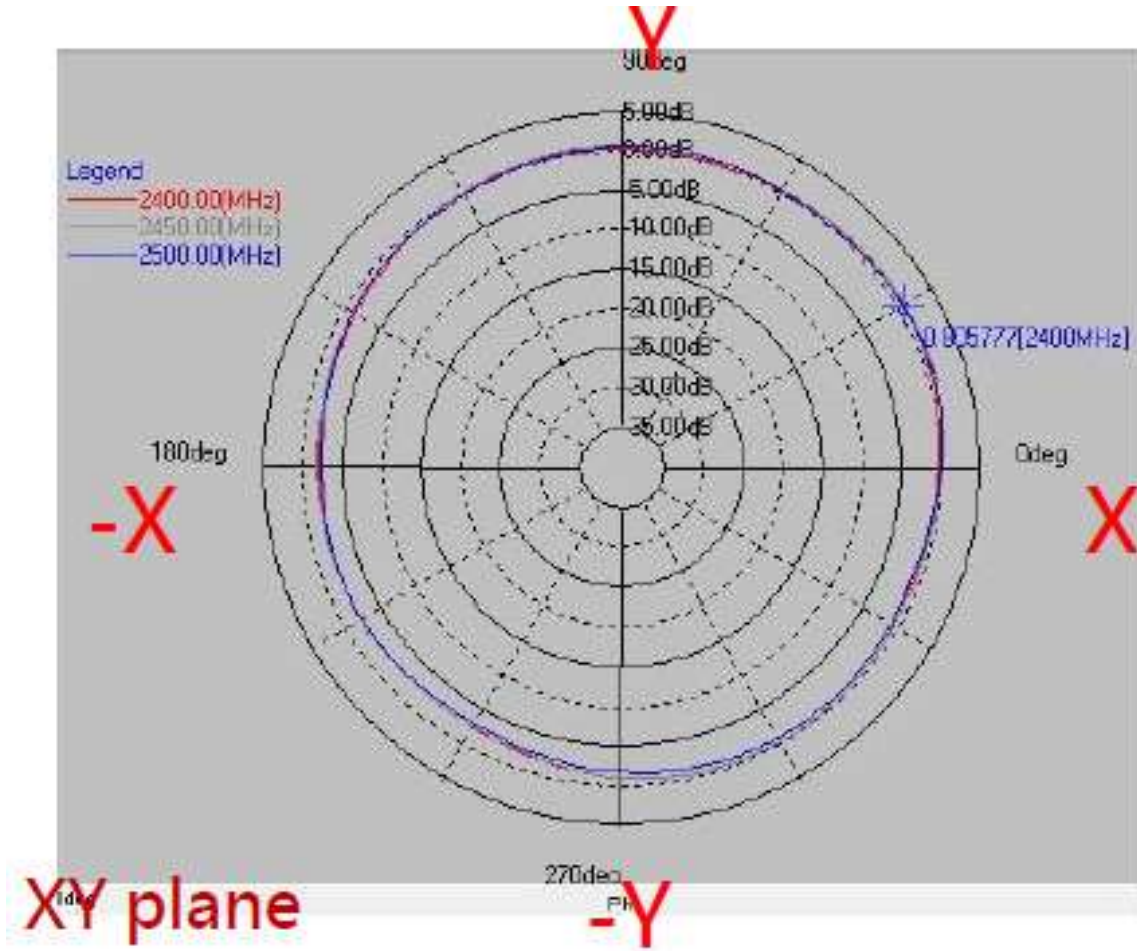
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**X-Y Plane**

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	0.66	-2.52	0.15	12.04	0.81	-0.75
2450	1.05	-2.25	0.44	11.30	1.00	-0.58
2500	1.28	-2.21	0.53	11.48	0.82	-0.86

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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