

# APPROVAL SHEET

**Dipole ANTENNA**  
**2.4 GHz Single Band Working Frequency**  
**Halogens Free Product**  
**P/N: RFDPA870915IMAB306**

Customer : \_\_\_\_\_  
Customer 's Part No. : \_\_\_\_\_  
Approval No. : \_\_\_\_\_  
Issue Date : \_\_\_\_\_

\*Contents in this sheet are subject to change without prior notice.

Version	Date	Description	Author
V01	2022 Apr.	New Release	SHLEE

**ELECTRICAL CHARACTERISTICS**

Item	Specification
Working Frequency Range	2.4 ~ 2.5 GHz (Note-1)
Gain	1.82 dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20°C ~ +65°C

\*Note 1. Central Frequency should be defined after customers' application approval.

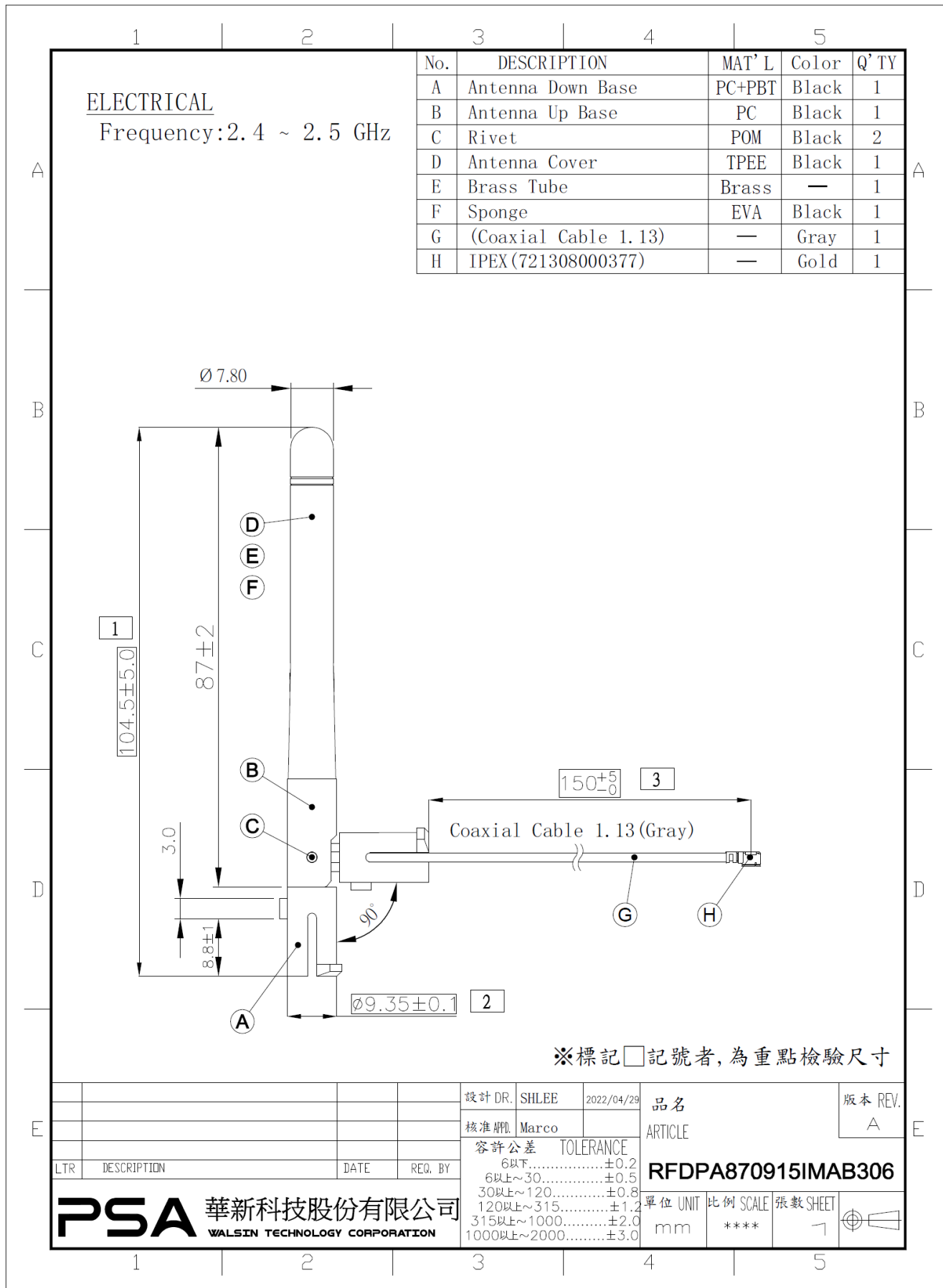
**MATERIAL TABLE**

Items	Description
Cable	Coaxial Cable Ø1.13 (Gray)
Antenna Cover	TPEE
Rivet	POM
Antenna Down Base	PC/PBT
Antenna UP Base	PC
Connector	IPEX
Brass Tube	Brass
Sponge	Black

**ORDERING RULE**

RF	DPA	8709	15	I	M	A	B	3	06
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.: 15 Cable Length:15cm	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 6:RG316 7:Ø1.37 8:RG178	01~99 series number

**DIMENSIONS**



ELECTRICAL  
Frequency: 2.4 ~ 2.5 GHz

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	Sponge	EVA	Black	1
G	(Coaxial Cable 1.13)	—	Gray	1
H	IPEX (721308000377)	—	Gold	1

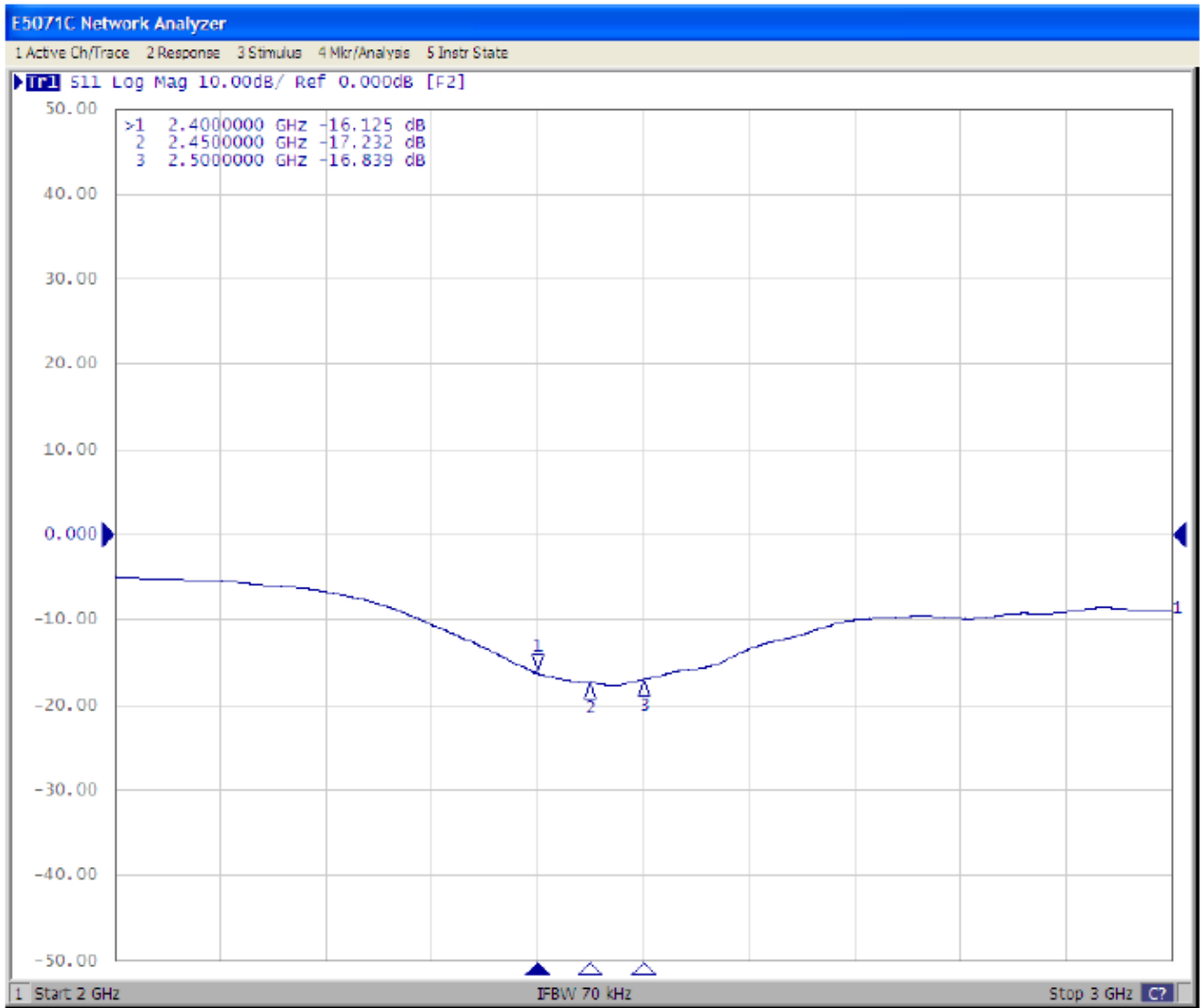
※標記□記號者, 為重點檢驗尺寸

設計 DR. SHLEE		2022/04/29		品名		版本 REV.	
核准 APP. Marco				ARTICLE		A	
容許公差 TOLERANCE				RFDPA870915IMAB306			
LTR DESCRIPTION		DATE REG. BY		單位 UNIT		比例 SCALE	
				mm		****	
				張數 SHEET		7	
				PSA 華新科技股份有限公司		WALSIN TECHNOLOGY CORPORATION	

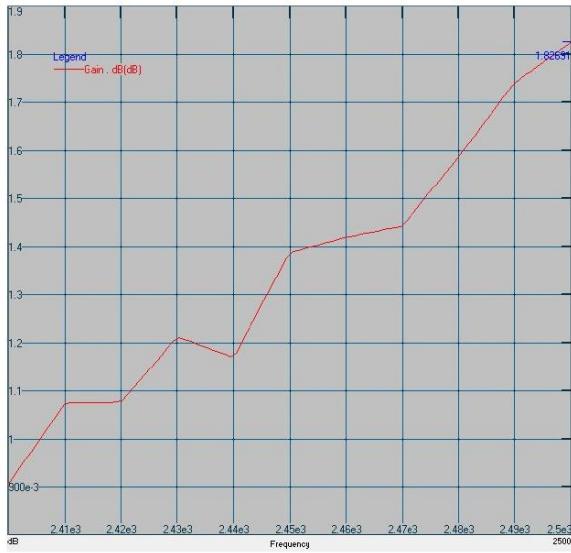
# Test Report

## ELECTRICAL CHARACTERISTICS

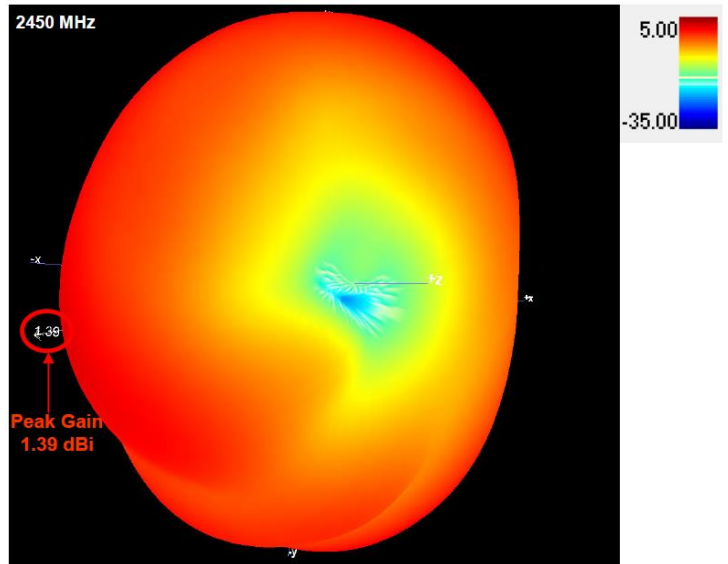
### Return Loss



# Antenna Peak Gain



Maximum Peak Gain at 2500 MHz : 1.82 dBi



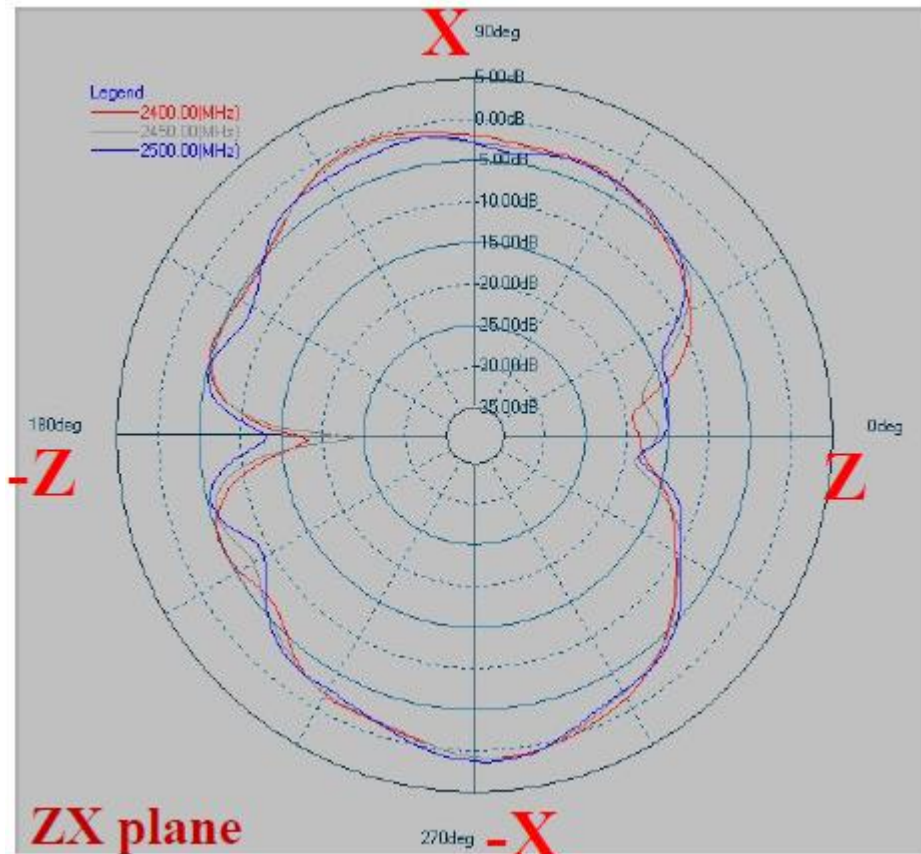
## RADIATION PATTERN

2400~2500 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



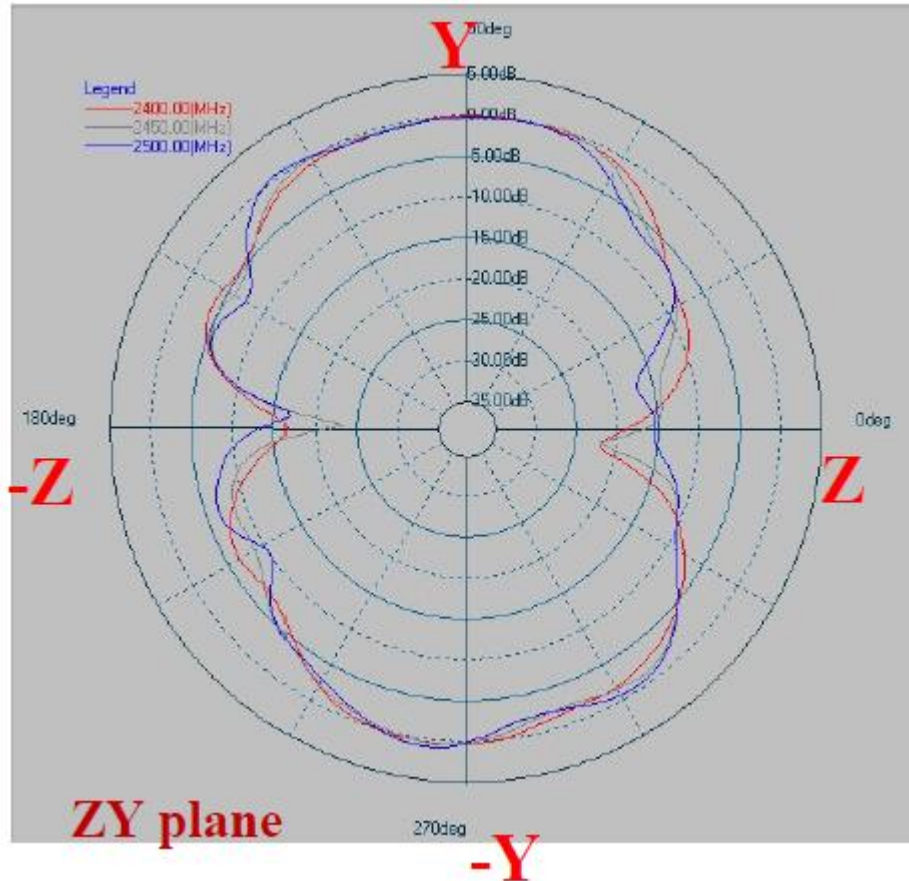
	ZX plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.83	-3.77
2450	0.94	-3.96
2500	1.26	-4.00

**2400~2500 MHz**

**Y-Z Plane**

**Phi=90.00deg**

**Gain . dB**



	ZY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.24	-3.35
2450	0.38	-3.47
2500	0.78	-3.43

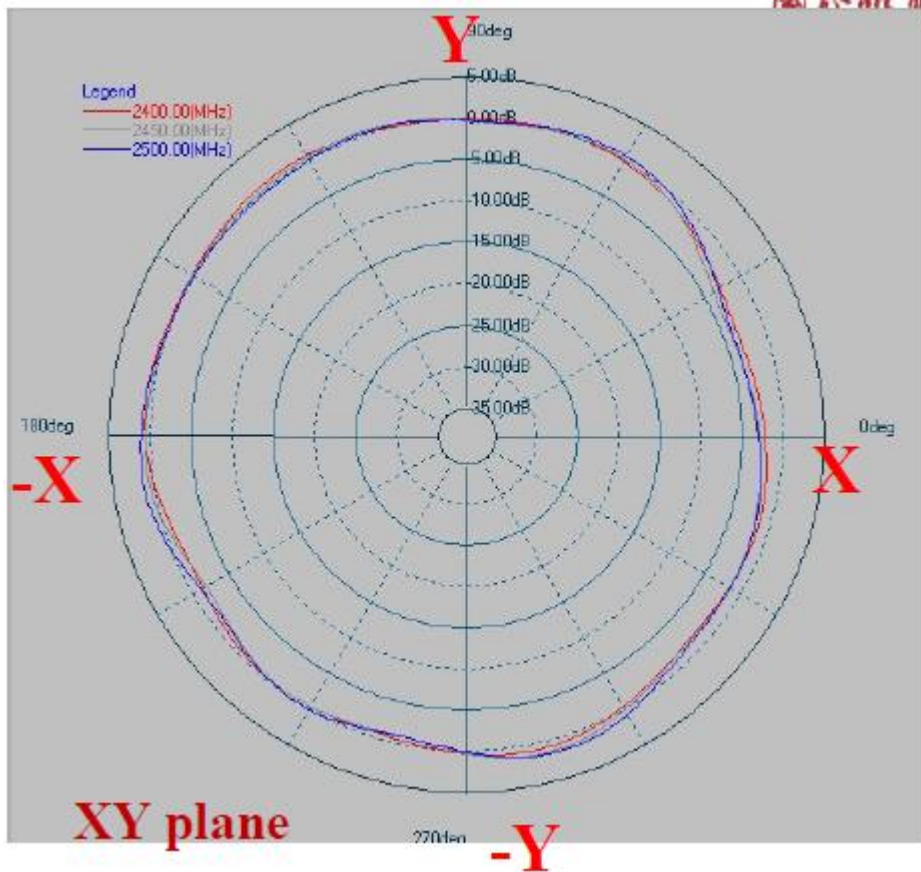


**2400~2500 MHz**

**X-Y Plane**

**Theta=90.00deg**

**Gain . dB**



	XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.75	-0.54
2450	1.23	-0.62
2500	1.53	-0.42