

# APPROVAL SHEET

## **PIFA ANTENNA**

**5.925~7.125 GHz Working Frequency**

**Halogens Free Product**

**P/N: RFMTA421230IMMB701**

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	2021 Nov.	New Release	SHLEE

**ELECTRICAL CHARACTERISTICS**

Item	Specification
Frequency Range	5.925~7.125 GHz
Impedance	50 Ohm Nominal
Return Loss	-2.923 dB (Max)
Peak Gain	-10.54 dBi
VSWR	6.0 (Max)
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
Operation Temperature	-20°C ~ +65°C

\*note-1: Electrical characteristics will depend on customer's final application.

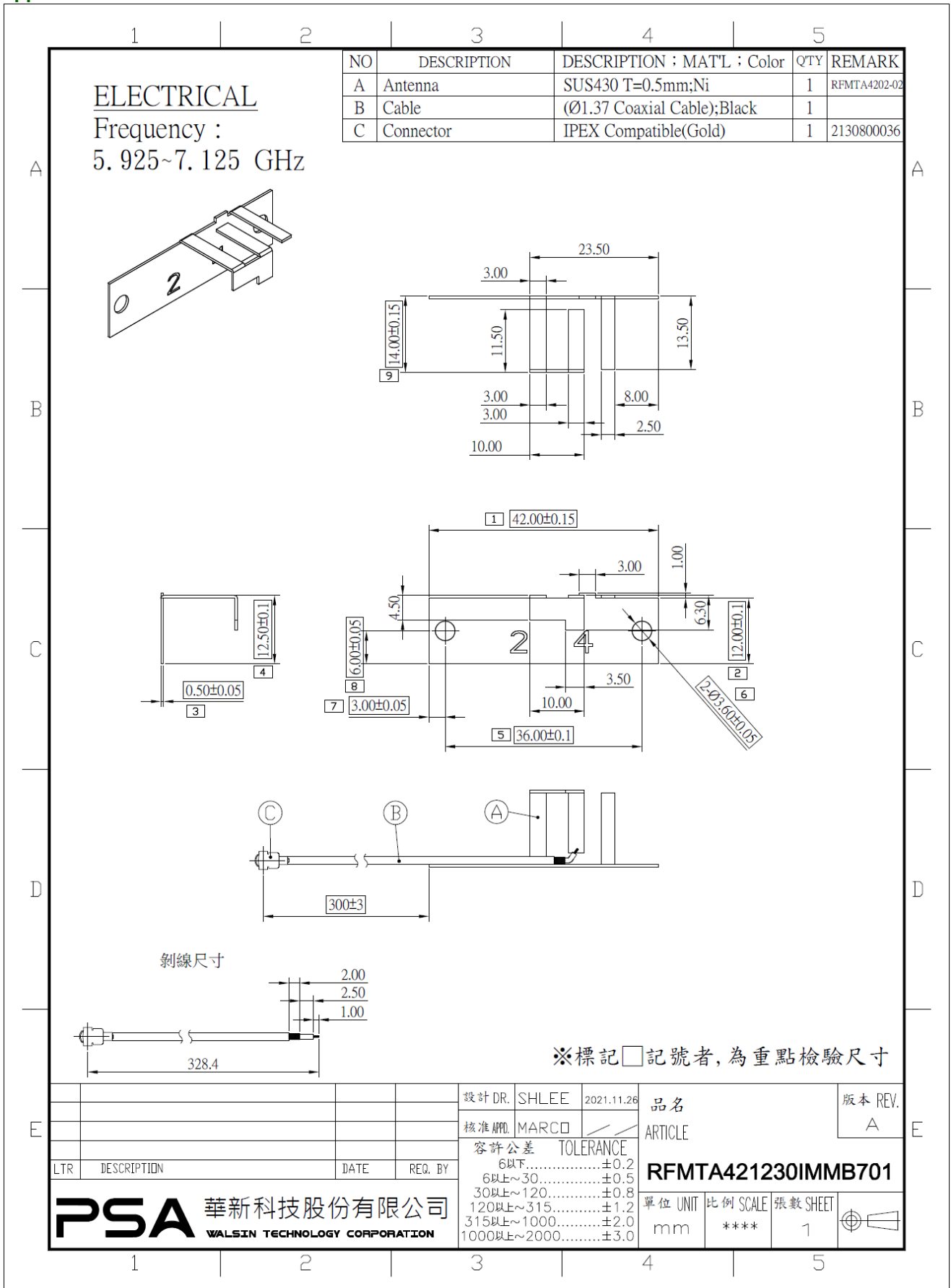
**MATERIAL TABLE**

Items	Description
Metal	SUS 430 T=0.5mm(鍍鎳)
Cable	( $\phi$ 1.37) (Black)
Connector	IPEX Compatible(Gold)

**ORDERING RULE**

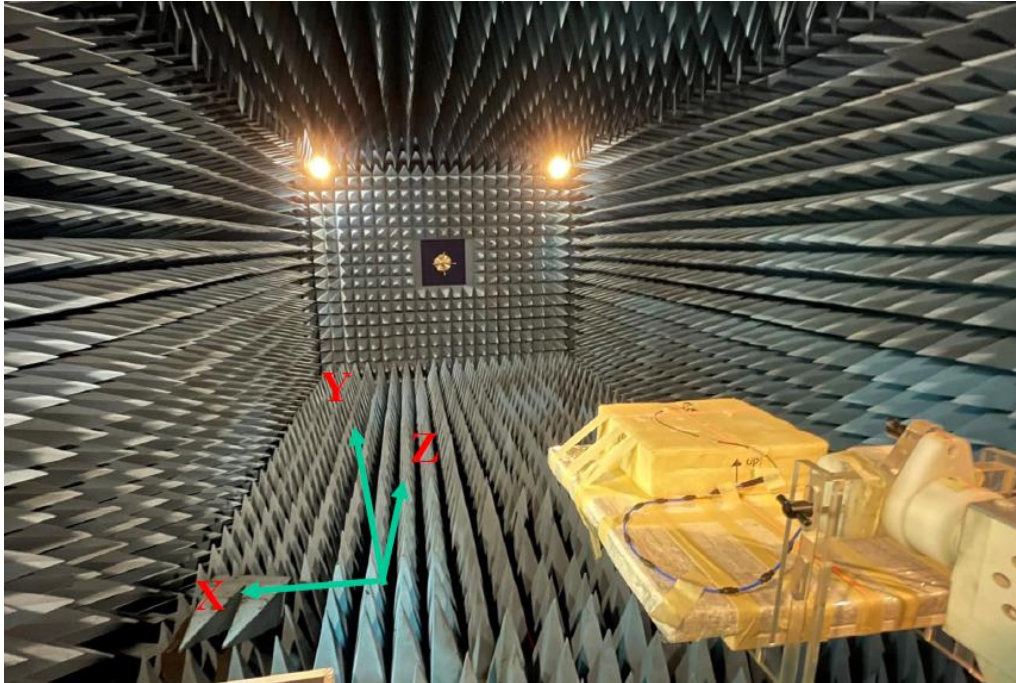
RF	MTA	4212	30	I	M	M	B	7	01
Type Code	Product Code	Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	MTA: PIFA Antenna	Per 2 digits of length, width e.g.: 4212 Length 42mm, Width 12.5mm	2 digits for cable length e.g.: 30 Cable Length:30cm	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: 5GHz 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 M:5.15~7.15 GHz N: NFC T: LTE band W: WCDMA band	B: MP T:Durin g Test X: Pile Run	0:None 1: $\phi$ 0.81 3: $\phi$ 1.13 6:RG316 7: $\phi$ 1.37 8:RG178	01~99 series number

Appendix A: Dimensions

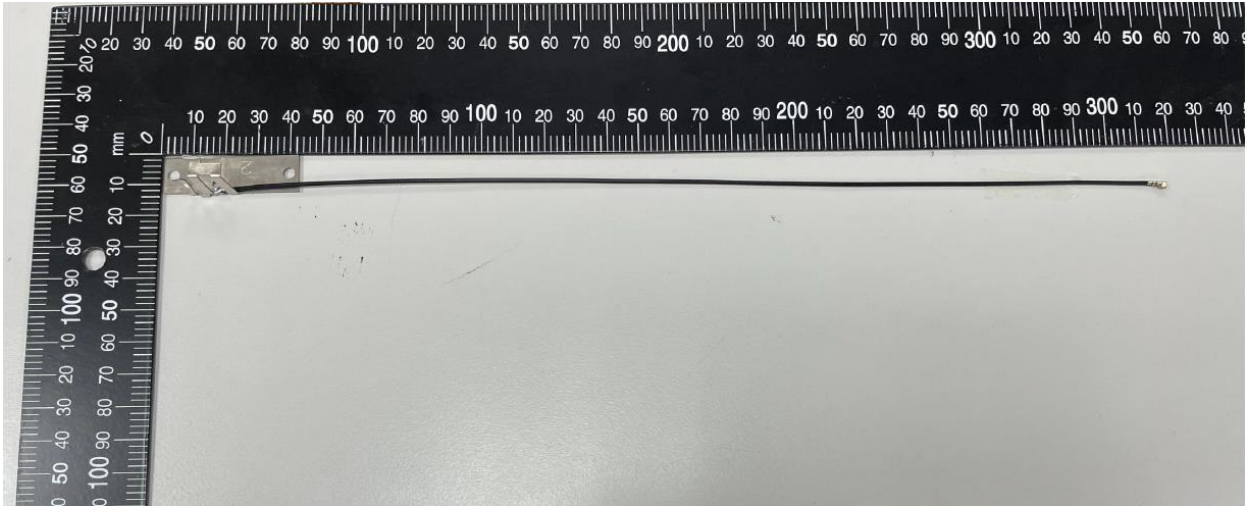


# Test Report

## ■ EXPERIMENTAL SETUP

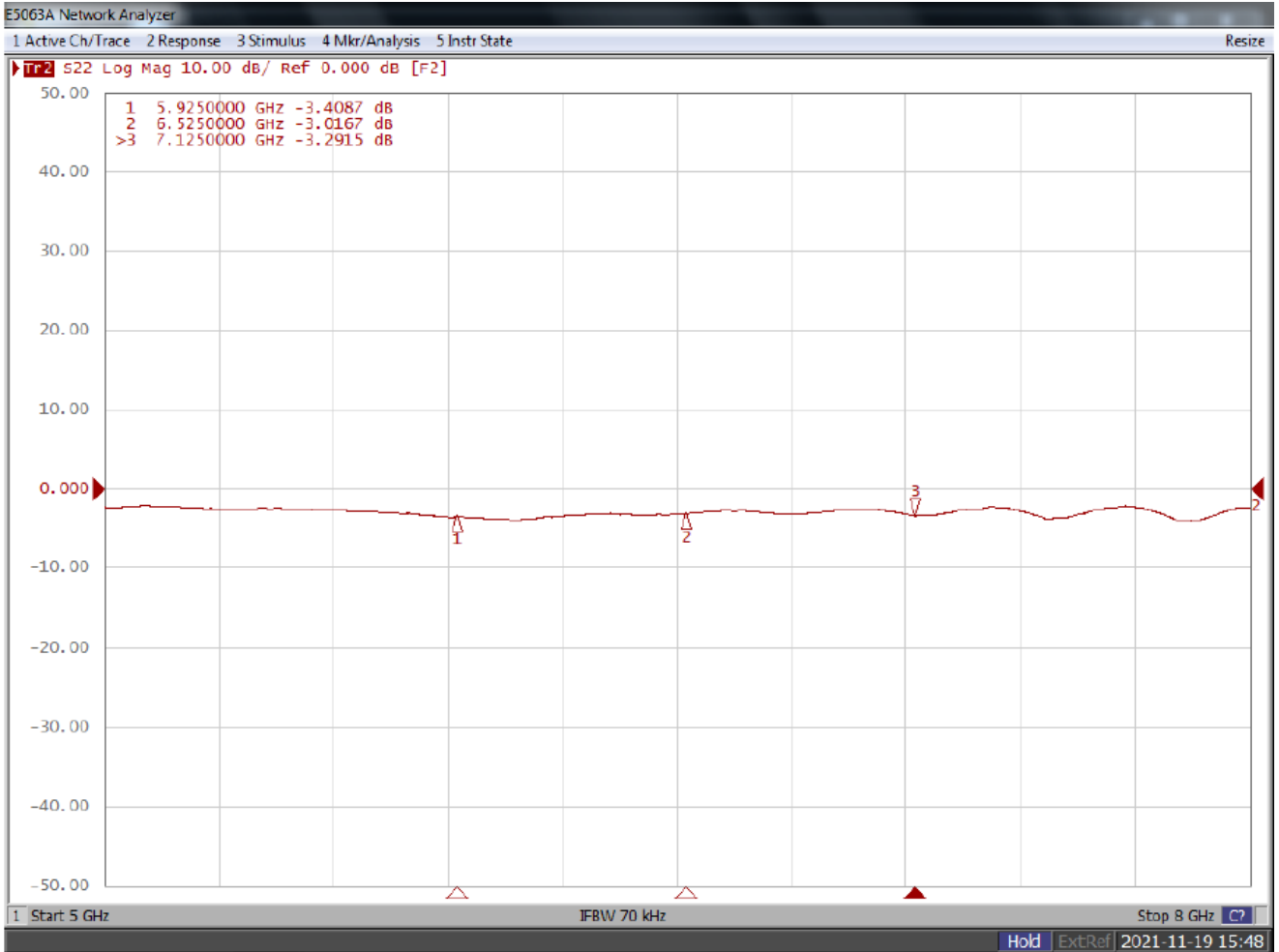


## ■ Antenna Solution Detail

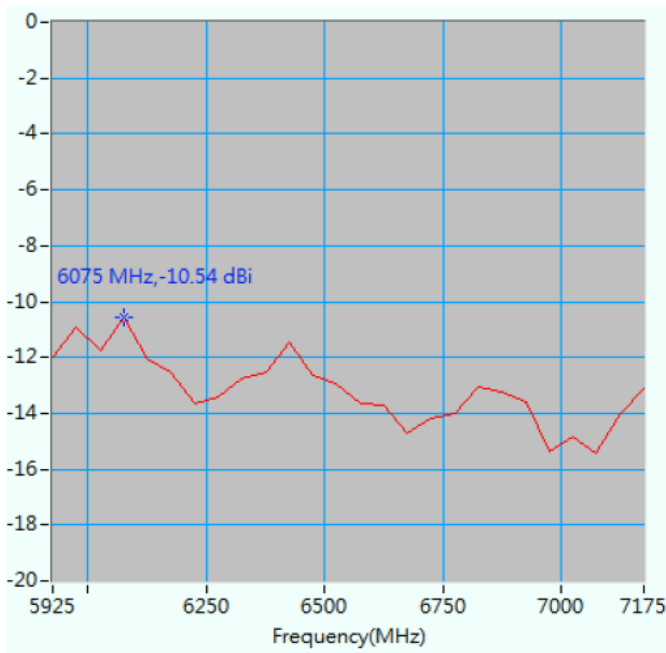
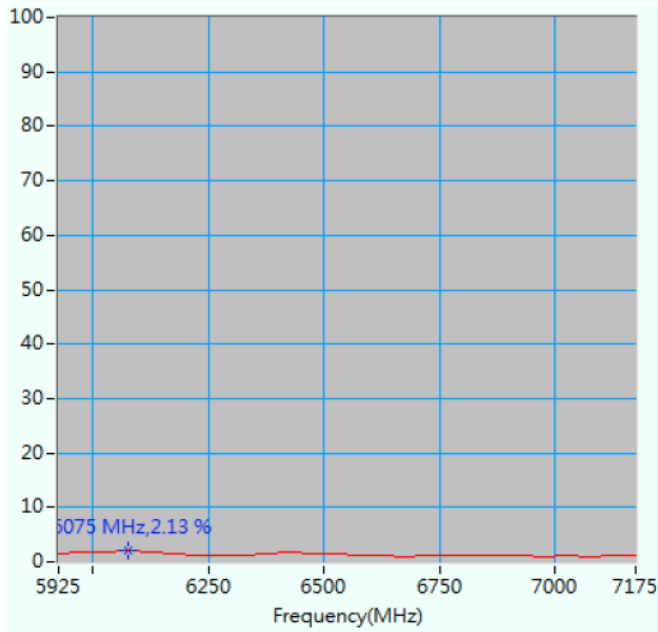


# ELECTRICAL CHARACTERISTICS

## Return Loss



## ■ Antenna Efficiency and Peak Gain



		Maximum Efficiency (%)	Peak Gain (dBi)
Antenna	5925-7125MHz	2.13	-10.54

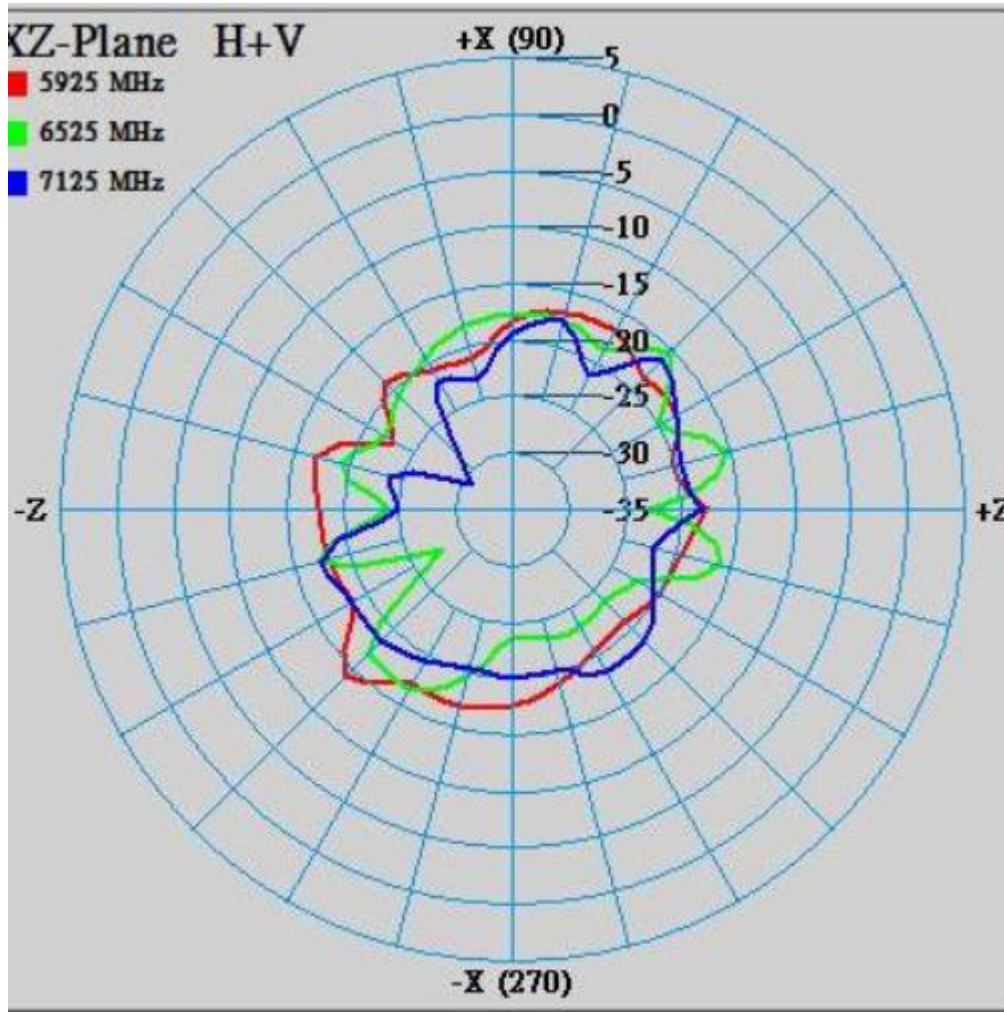


# RADIATION PATTERN

5925~7125 MHz

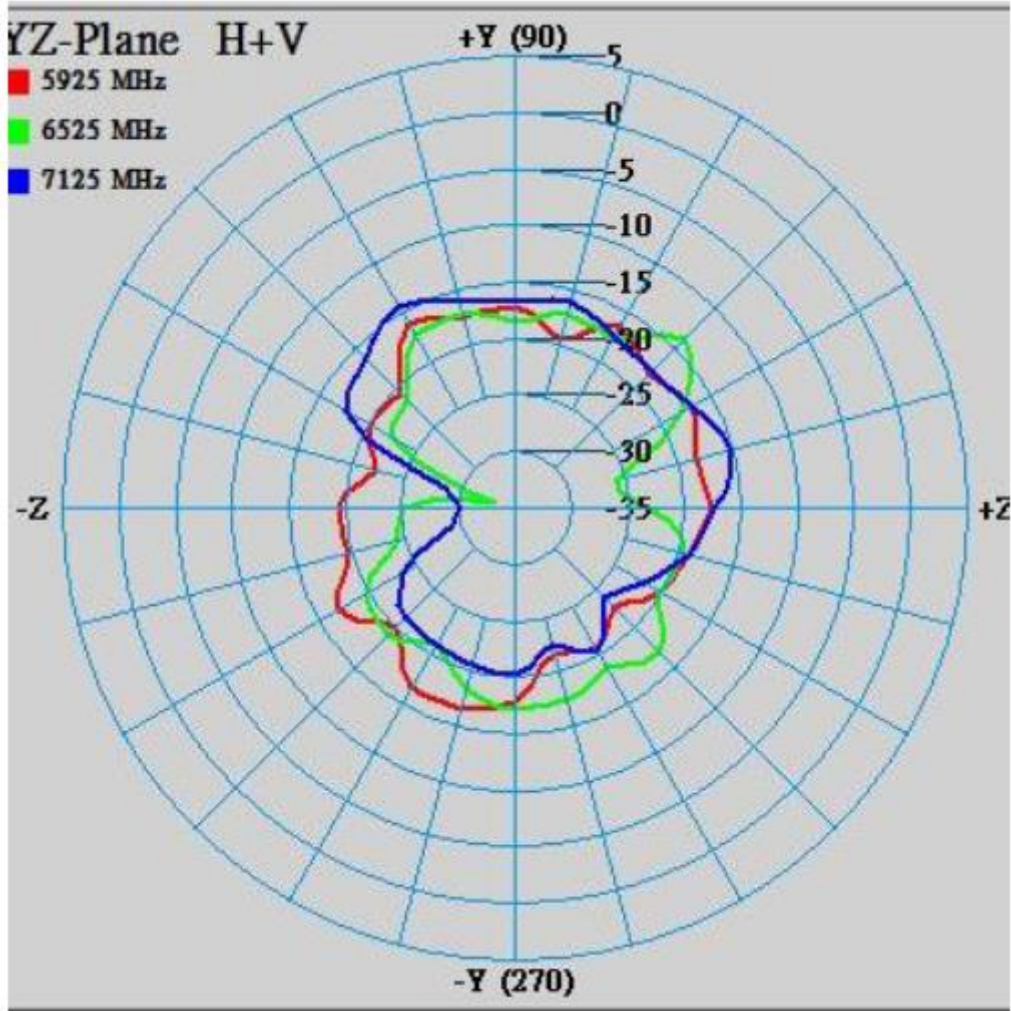
Phi=0.00deg

Gain . dB



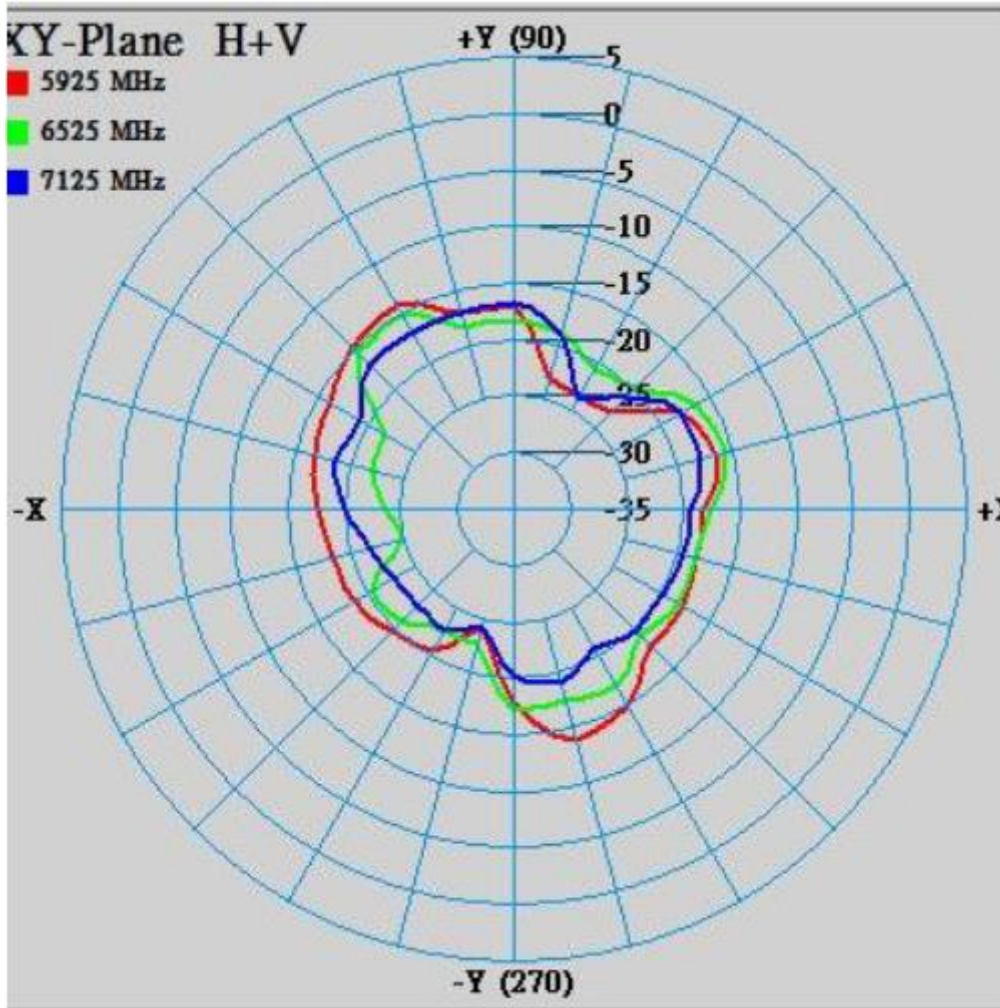
Phi=90.00deg

Gain . dB



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]
5925	-14.24	-18.31	-16.12	-18.50	-13.92	-17.50
6525	-15.34	-19.05	-13.91	-18.90	-15.21	-18.59
7125	-16.38	-19.83	-14.46	-18.67	-16.86	-19.46