

[illegible]

品名：RFFPA281353IMLB302

客戶：光峰

客戶料號：E22030000199

1. Explanation of part number :

RF	FPA	2813	53	I	M	L	B	3	02
Type Code	Product Code	PCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
RF Device	FPC Antenna	Per 2 digits of length, width e.g.: 2924 Length 29.6mm, Width 24.7mm	2 digits for cable length e.g.: 33 Length 33.5cm	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: 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 N: NFC T: LTE band W: WCDMA band	B: MP T: During Test X: Pile Run	0: None 1: $\varnothing$ 0.81 2: $\varnothing$ 1.32 3: $\varnothing$ 1.13 4: Low Loss $\varnothing$ 1.13 5: $\varnothing$ 0.5 6: RG316 7: $\varnothing$ 1.37 8: RG178 9: Low Loss $\varnothing$ 1.37	01~99 series number

2. Electrical Specification :

Item	Specification
Working Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz
Return Loss	-10 dB(Max)
Gain(peak)	2.99 dBi@2.4~2.5 GHz 2.88 dBi@5.15~5.85 GHz
VSWR	< 2.0
Impedance	50 Ohm Nominal
Radiation	Omni-directional
Polarization	Linear Vertical
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 : 李欣樺

CHECKED BY : 詹惠雯

DESIGNED BY : 黃瑞郎

APPROVED BY : 陳振榮

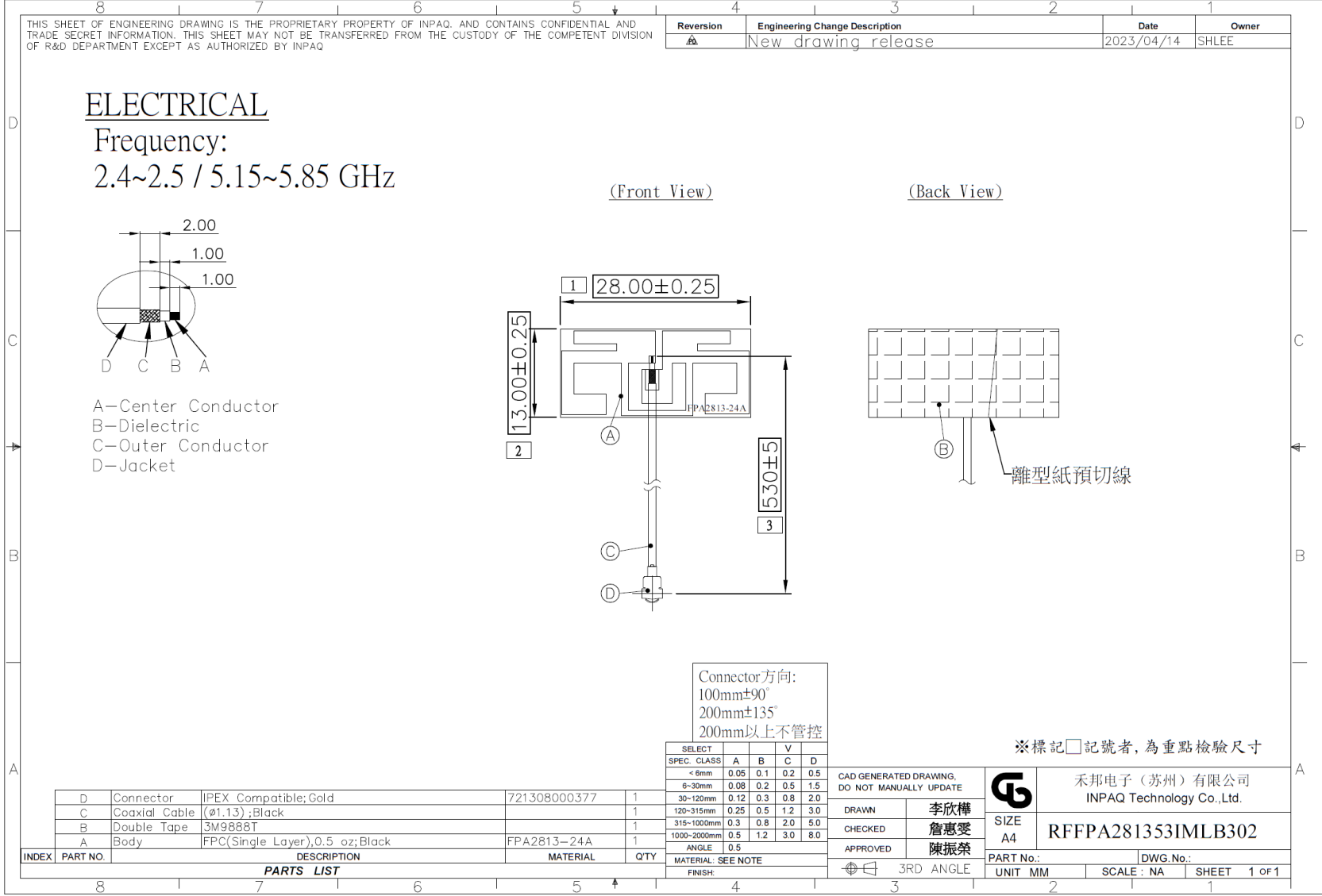
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3. Antenna Drawing :



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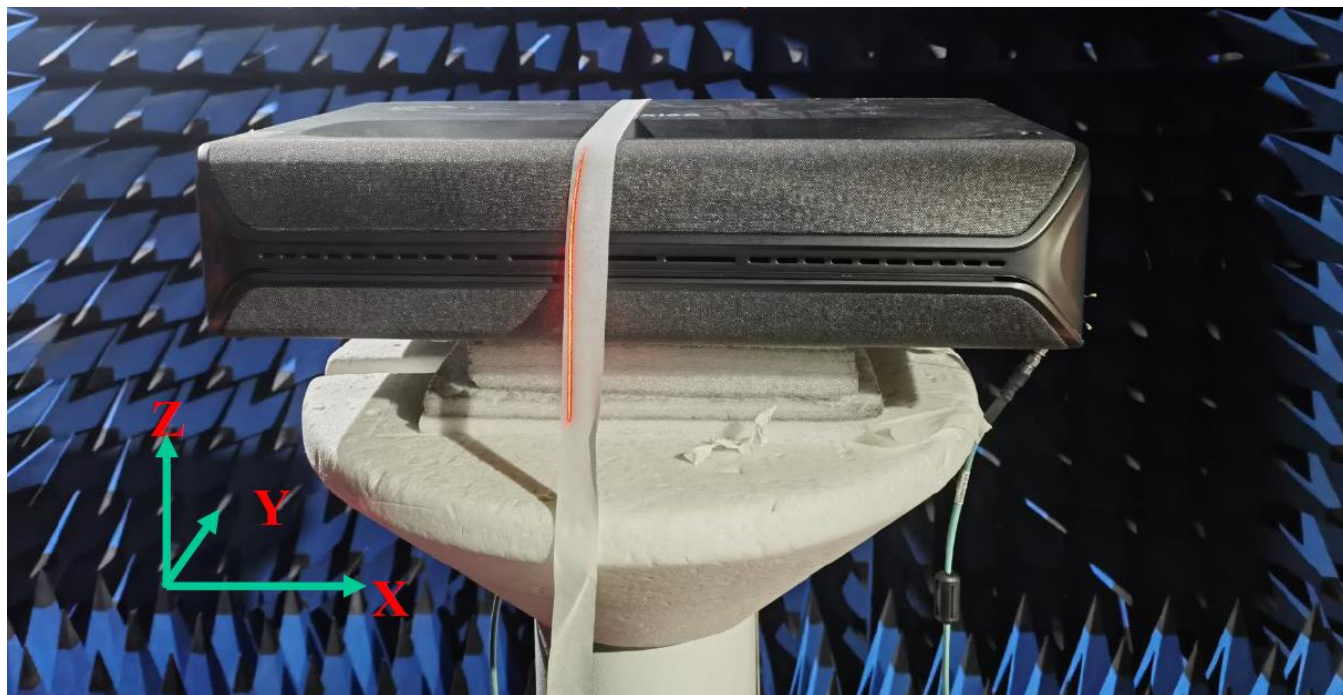
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4. Performance Report :

Test Report

■ Experimental Setup



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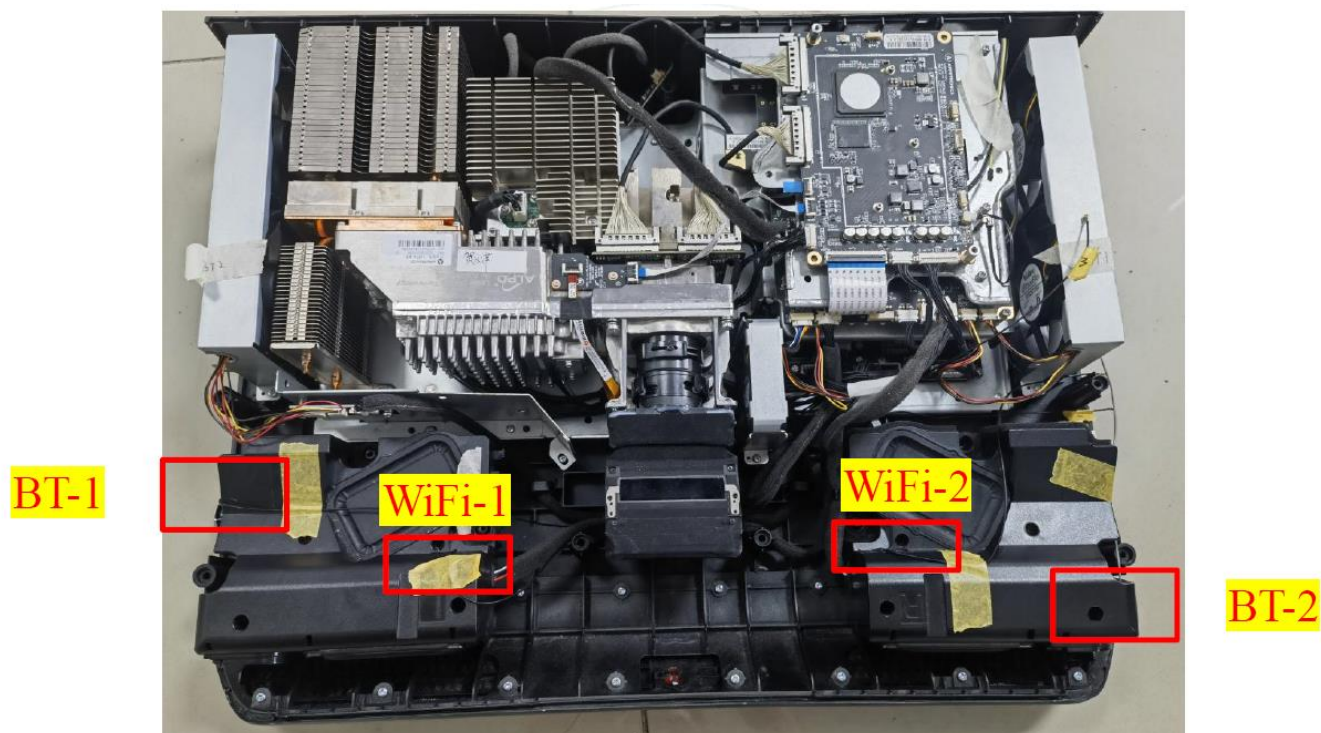
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■ Antenna Solution Detail



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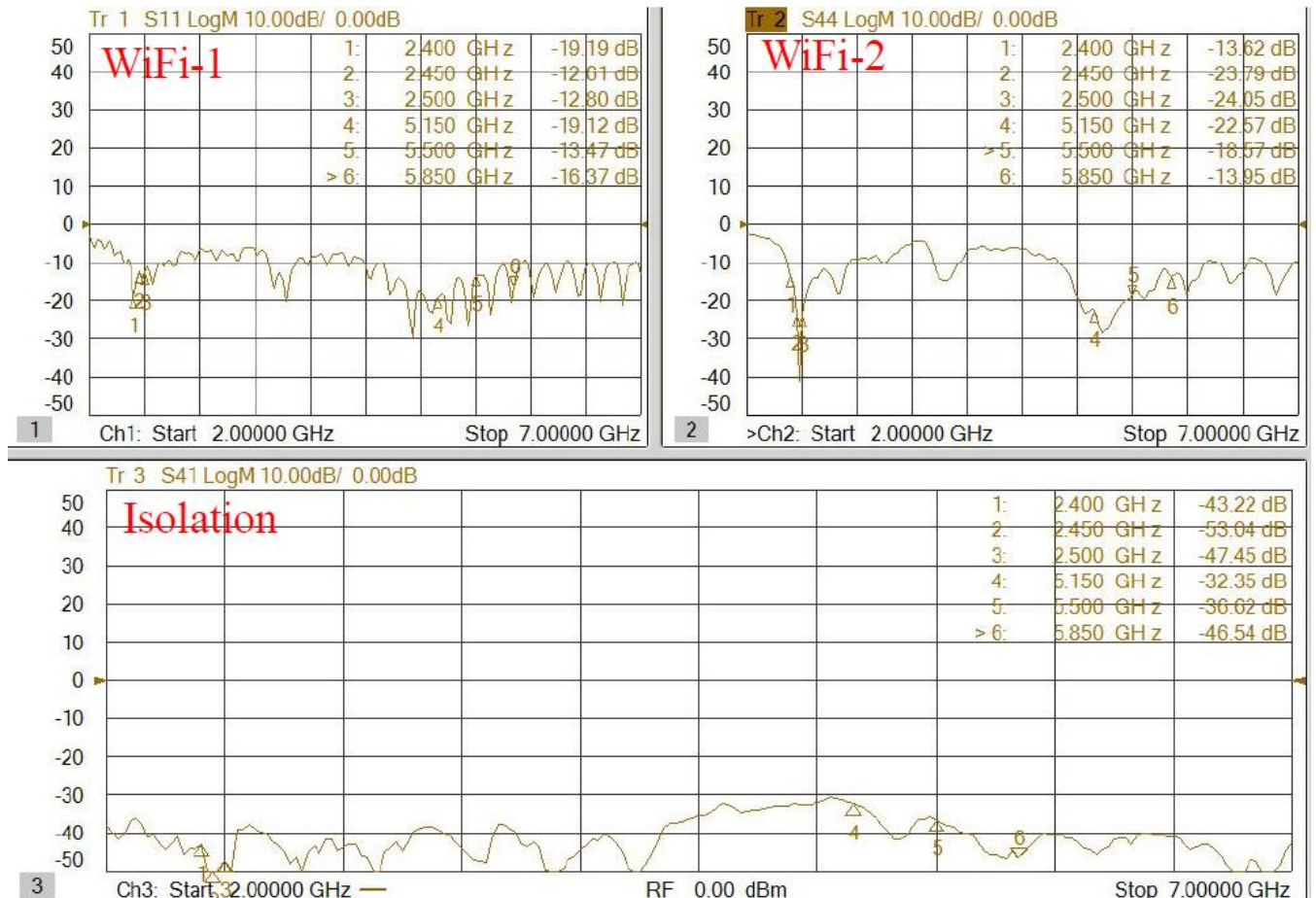
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ELECTRICAL CHARACTERISTICS

Return Loss & Isolation

WiFi-1



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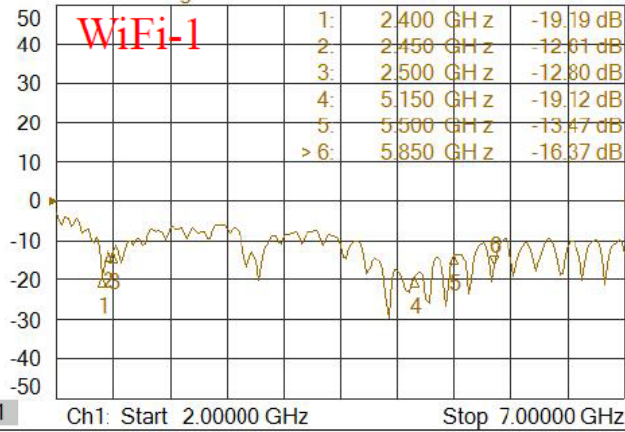
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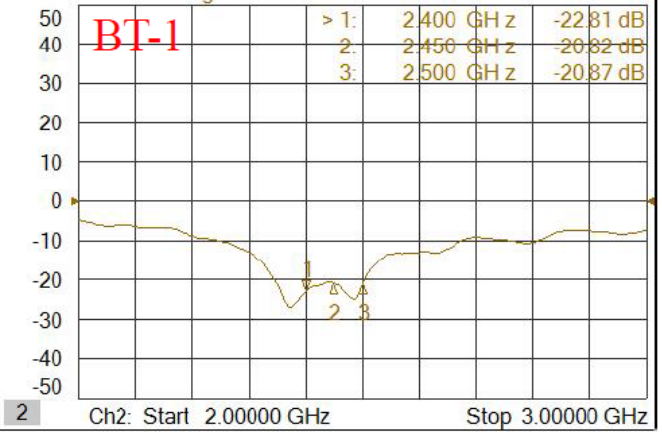
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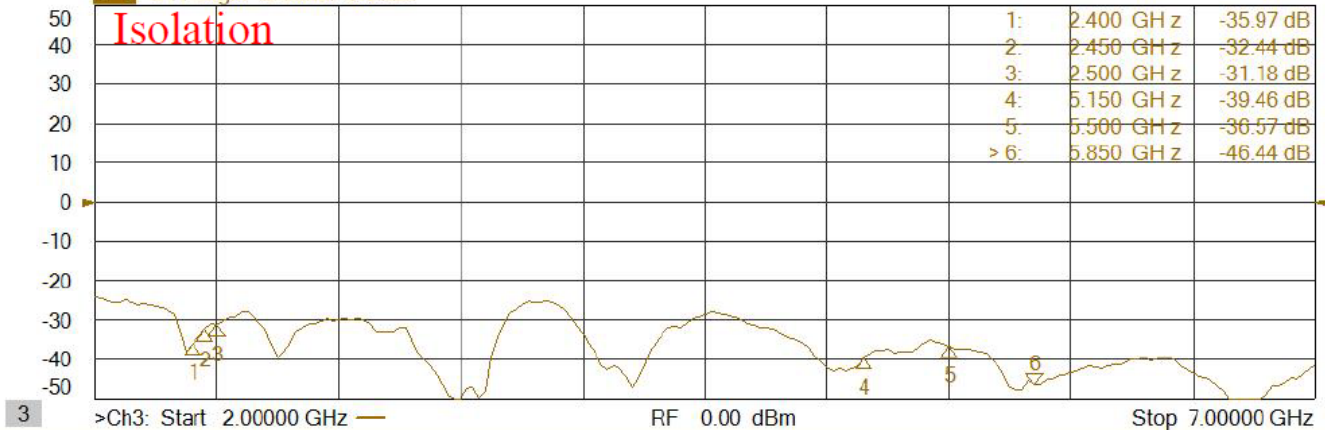
Tr 1 S11 LogM 10.00dB/ 0.00dB



Tr 2 S44 LogM 10.00dB/ 0.00dB



Tr 3 S41 LogM 10.00dB/ 0.00dB



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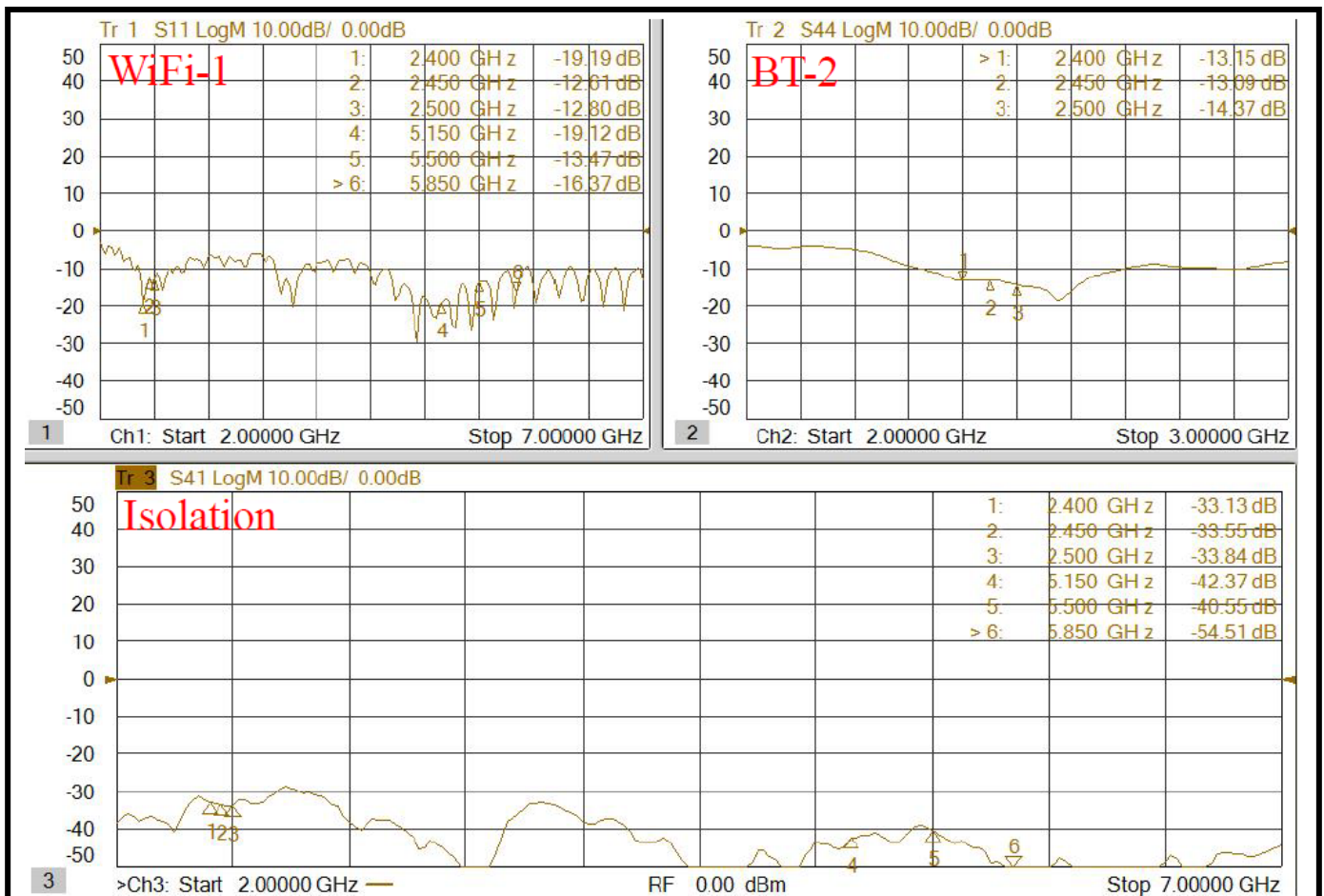
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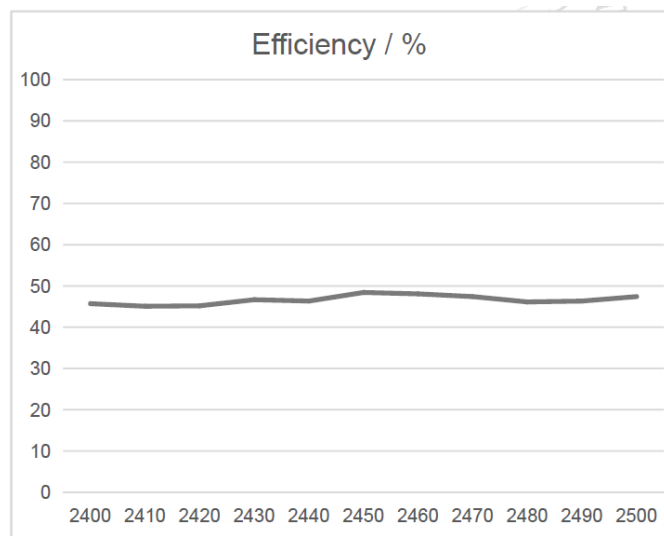


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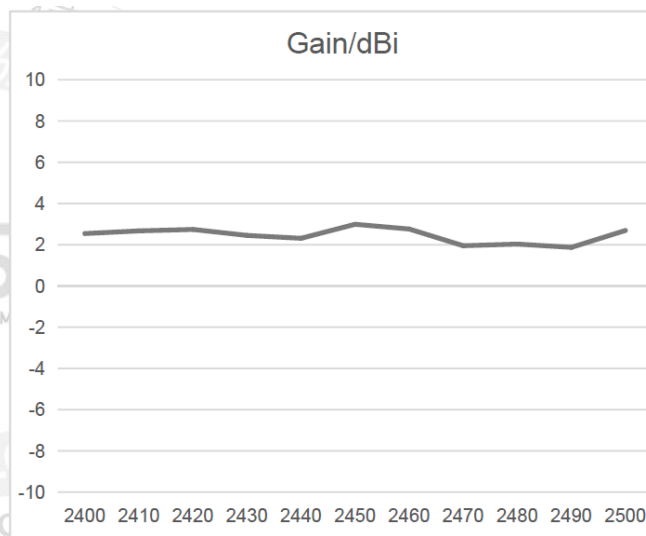
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■ Antenna Efficiency & Peak Gain

2G

Maximum Efficiency at 2450 MHz : 48.42 %



Maximum Peak Gain at 2450 MHz : 2.99 dBi

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UNIT : mm

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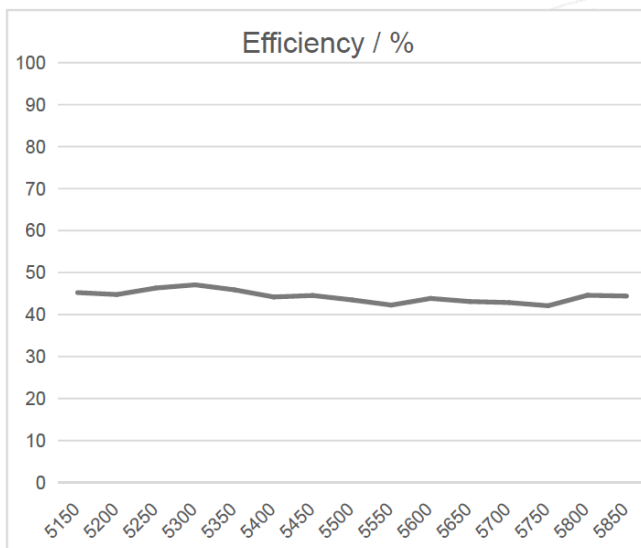
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APPROVED BY : 陳振榮

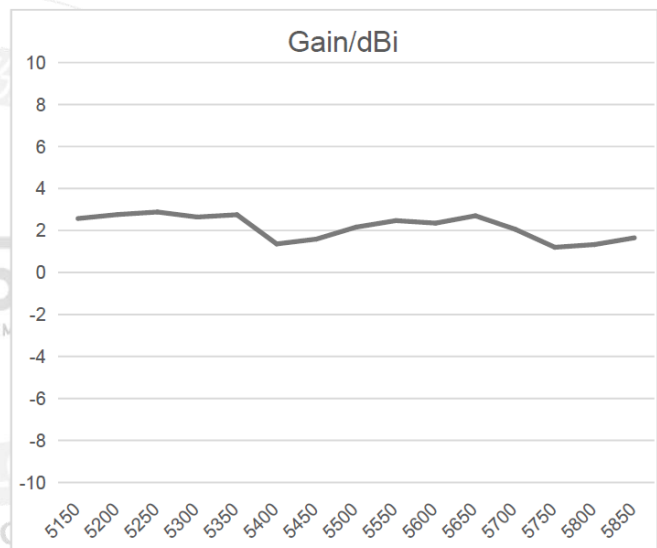
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5G

Maximum Efficiency 5300 at MHz : 47.08 %



Maximum Peak Gain at 5250 MHz : 2.88 dBi

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

**INPAQ TECHNOLOGY CO., LTD.**

SCALE : N/A

UNIT : mm

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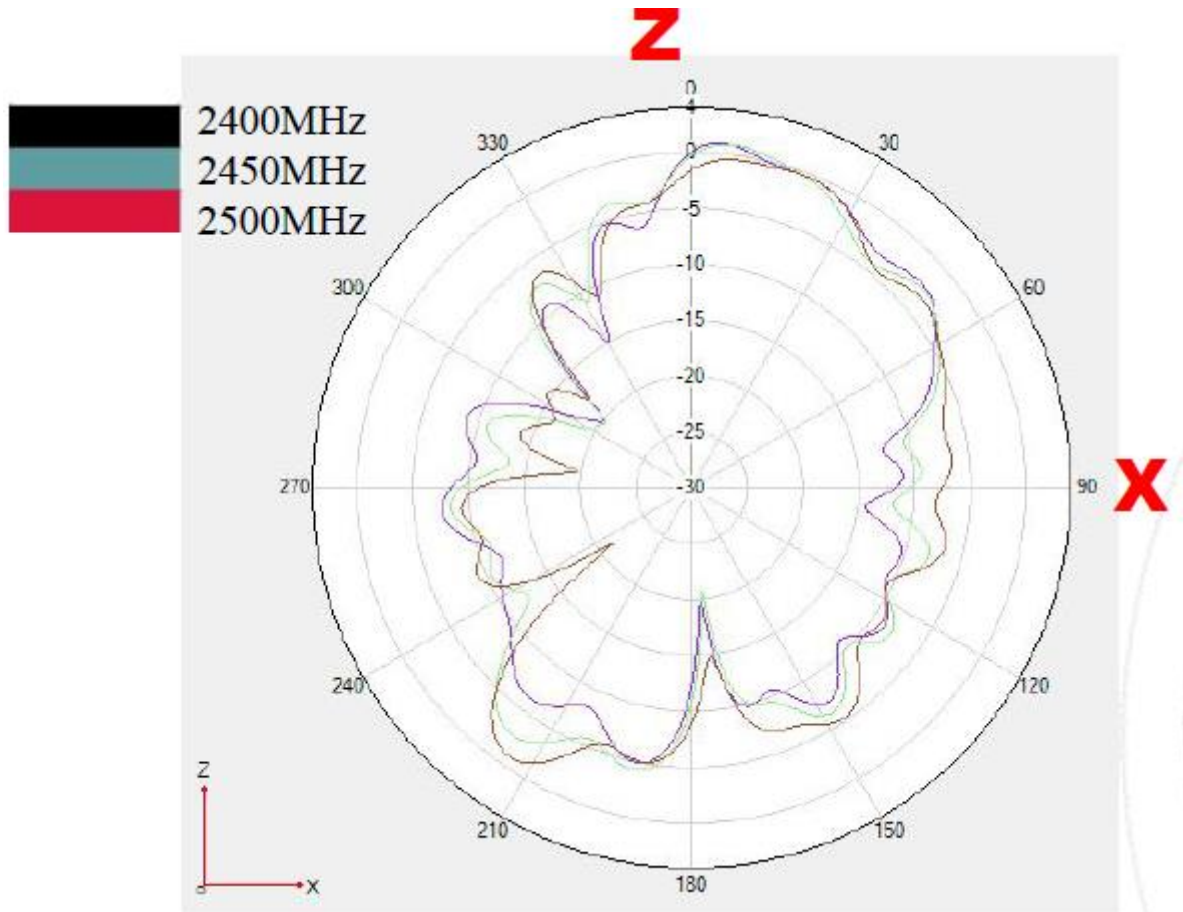
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RADIATION PATTERN

2400~2500 MHz

Phi=0.00deg

Gain . dB



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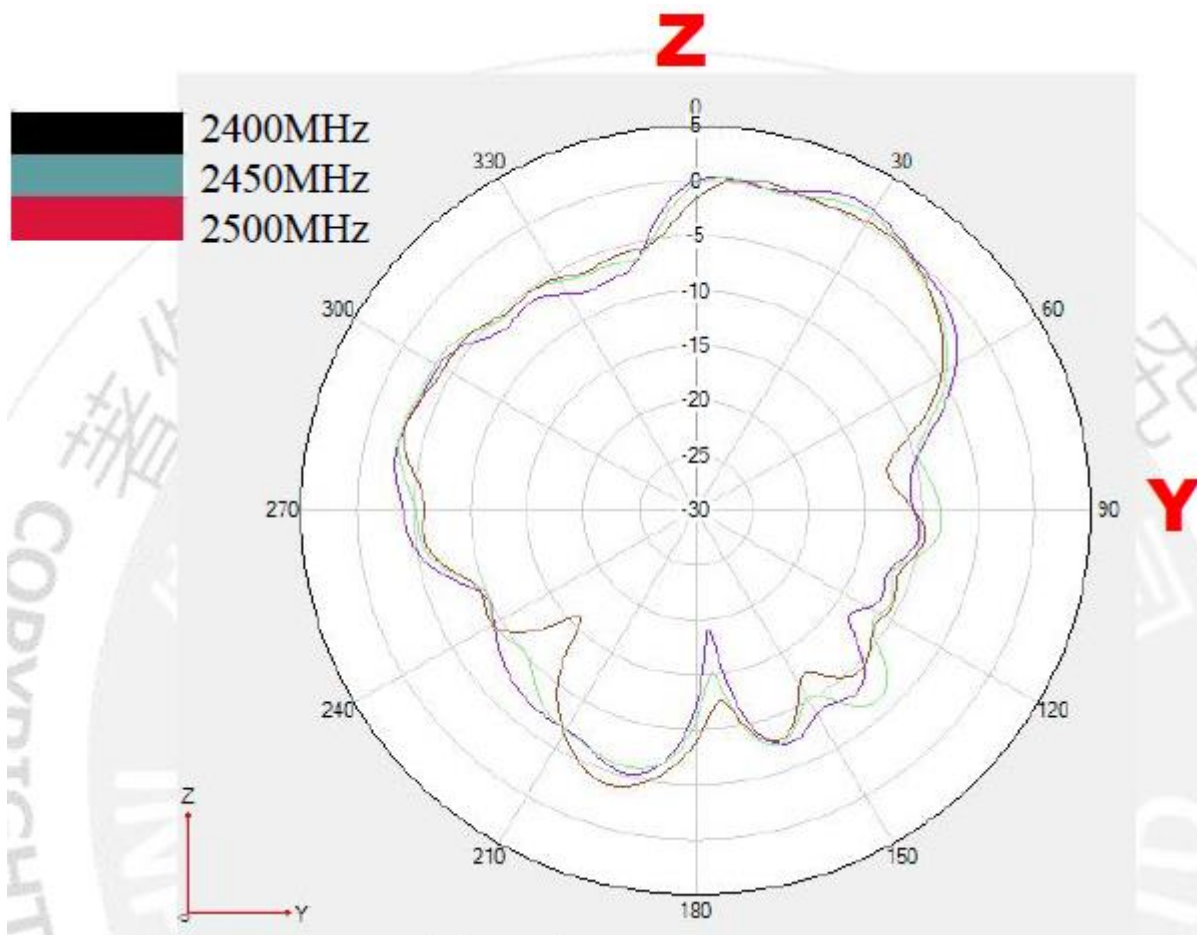
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Phi=90.00deg

Gain . dB



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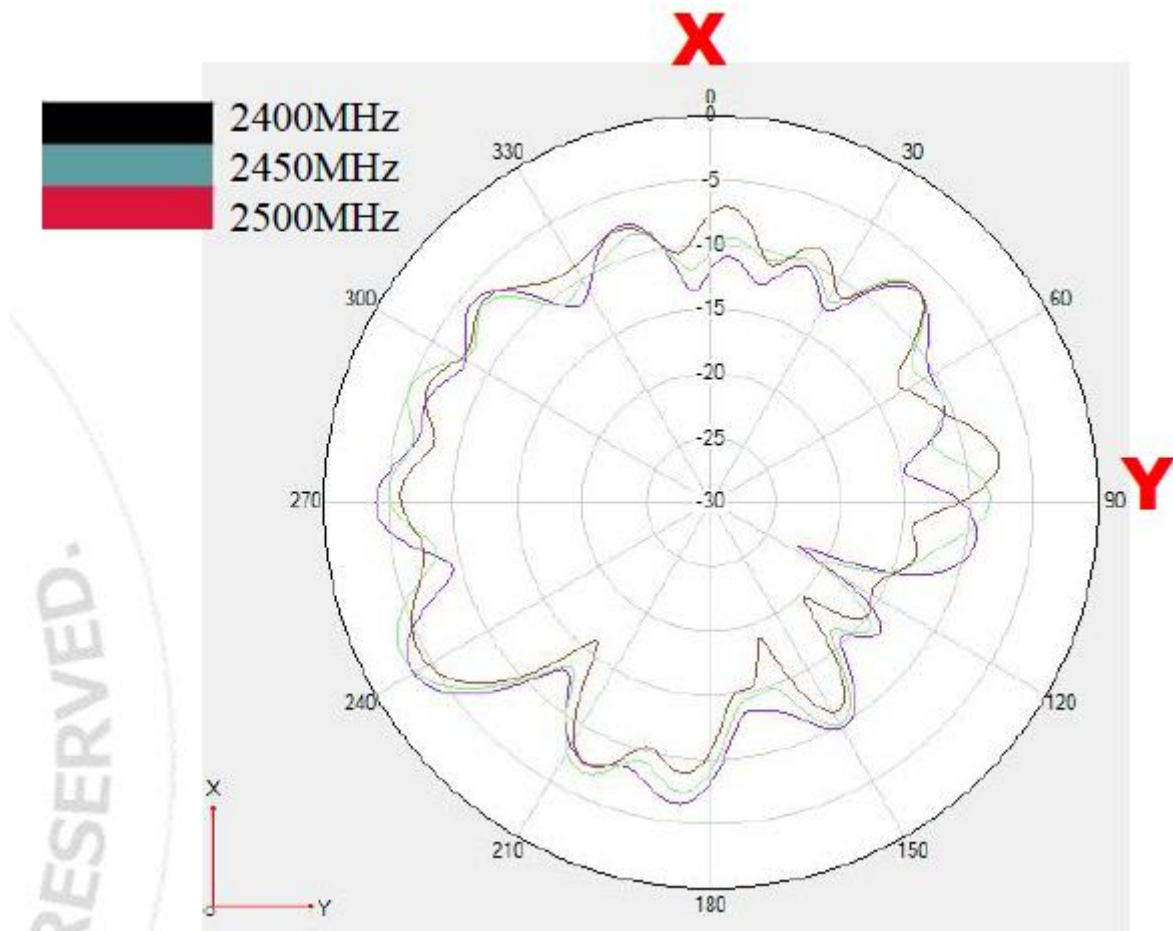
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Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2400	0.89	-7.28	1.64	-5.44	-3.36	-9.24
2450	0.85	-6.76	1.05	-5.47	-3.19	-9.22
2500	-0.33	-6.57	0.49	-5.85	-4.47	-9.49

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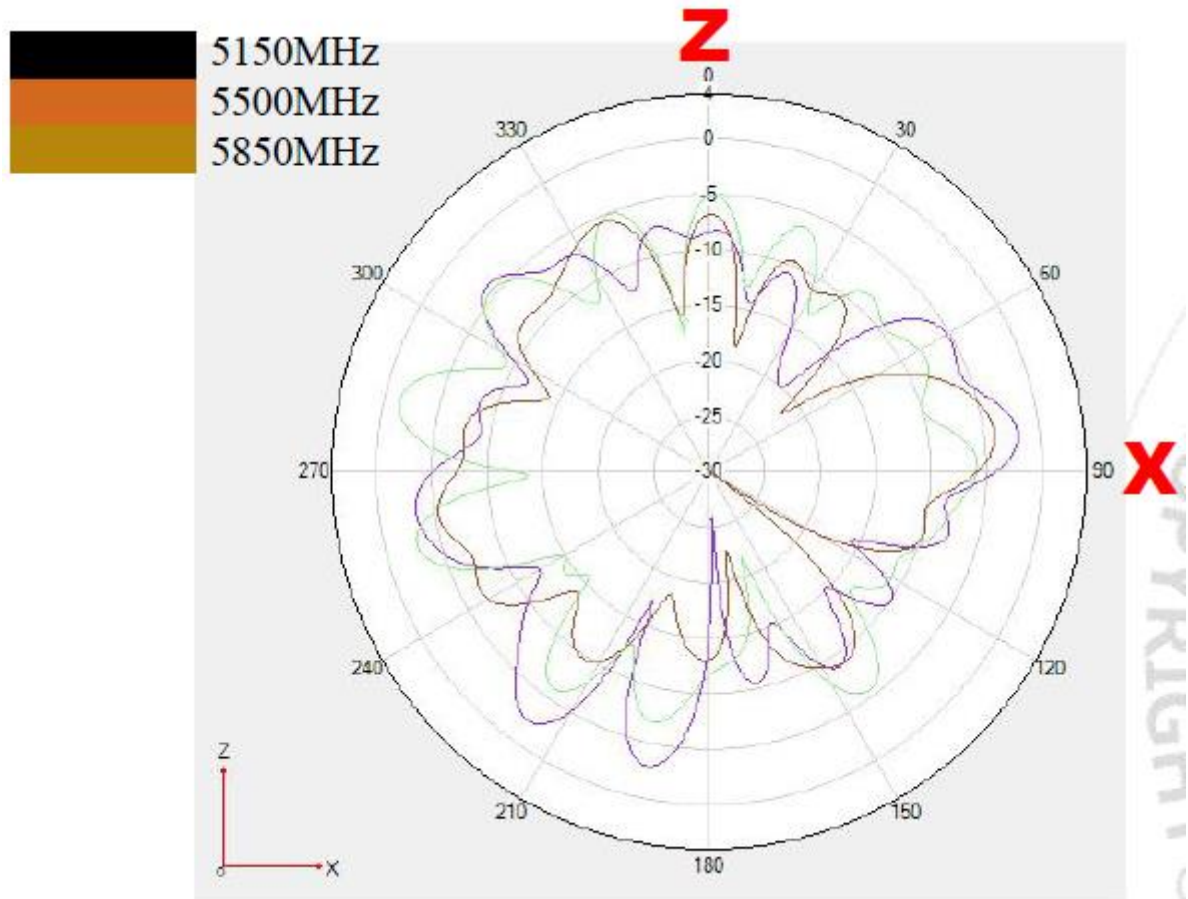
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5150~5850 MHz

Phi=0.00deg

Gain . dB



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ANGLES = N/A HOLEDIA = N/A



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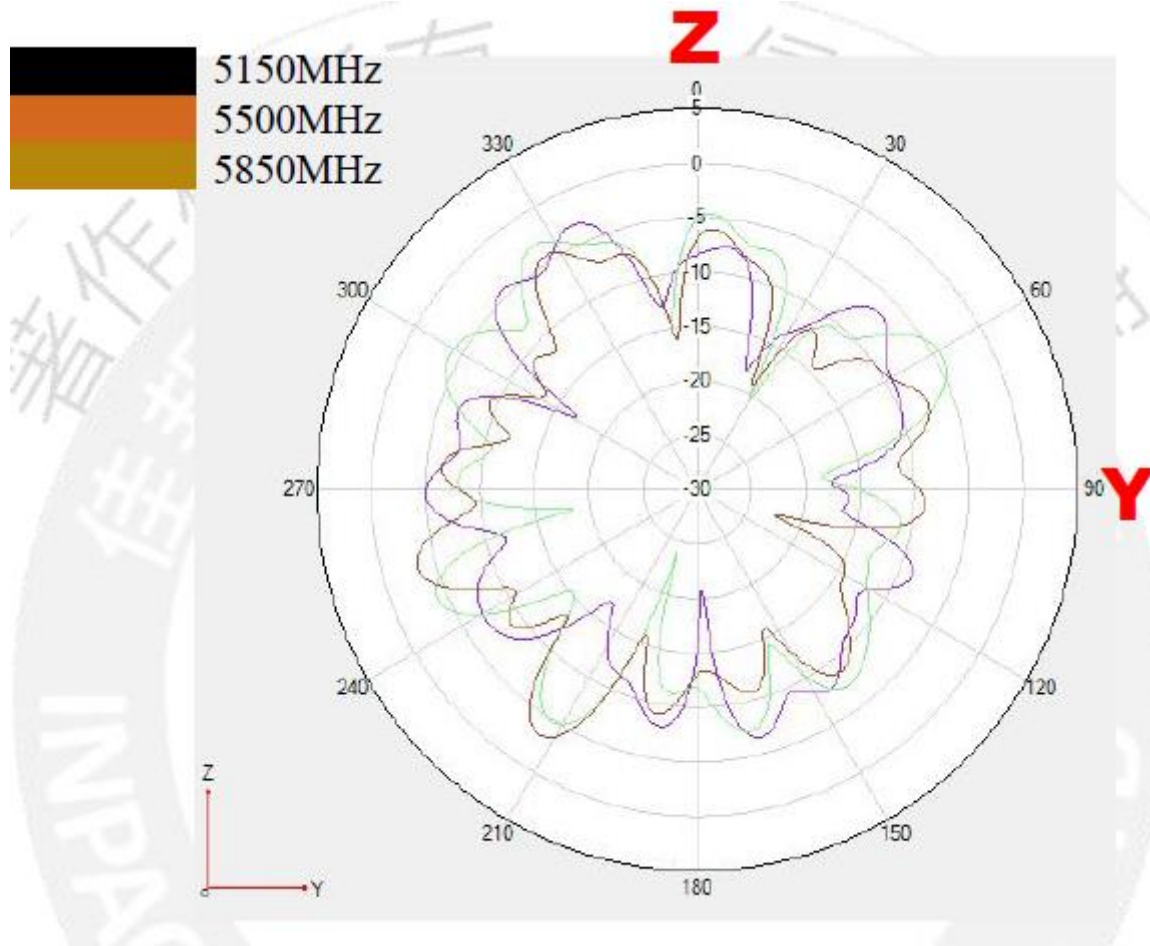
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Phi=90.00deg**Gain . dB**

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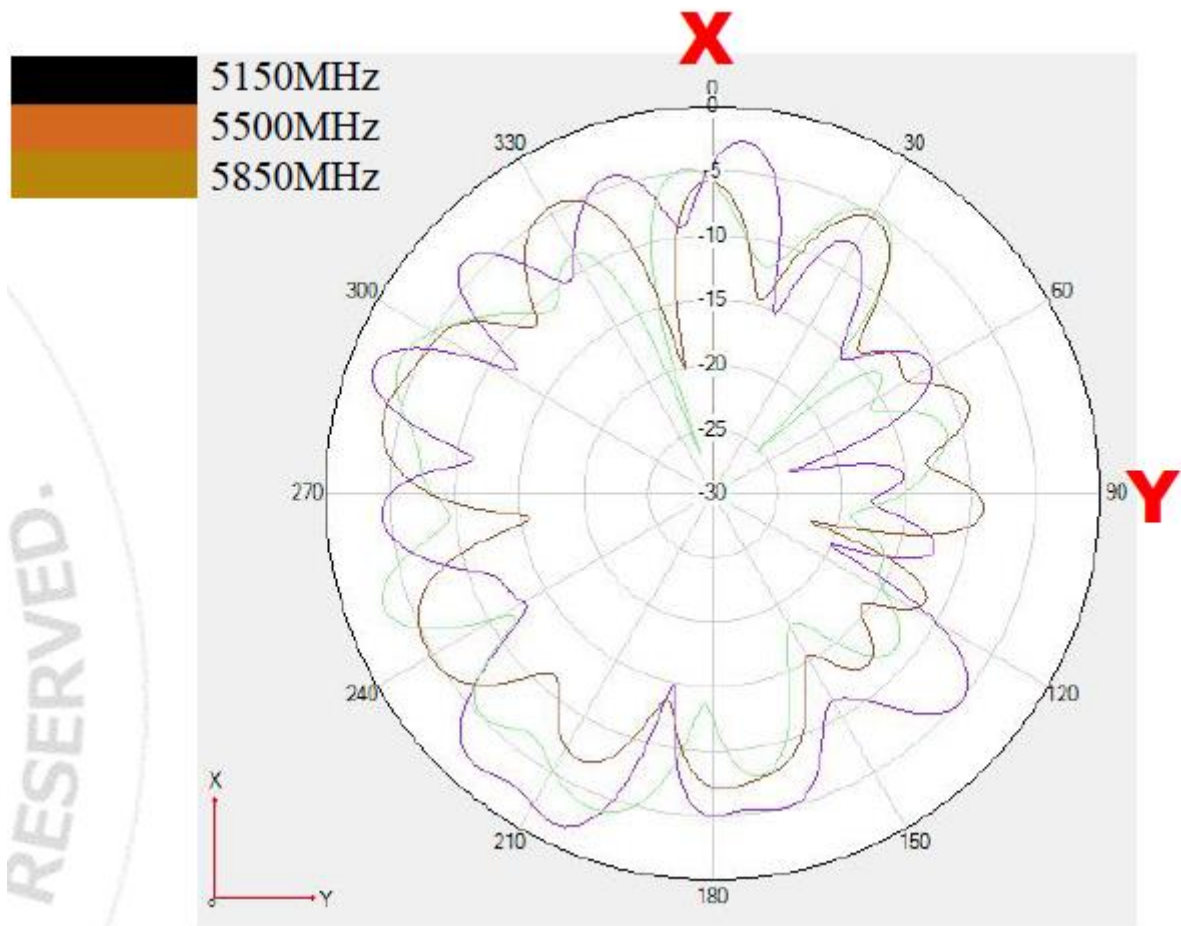
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Theta=90.00deg

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