

[illegible]

品名：RFFPA301206IMLB301

1. Explanation of part number：

RF	FPA	3012	06	I	M	L	B	3	01
Type Code	Product Code	Dipole 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.: 4014 Length 40.4mm, Width 14.1mm	2 digits for cable length e.g.: 11 Cable Length:11cm	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

2. Electrical Specification：

Item	Specification
Working Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz
Return Loss	-10dB(Max)
VSWR	2 max.
Gain	1.13dBi@2.4 ~ 2.5 GHz 3.84 dBi@5.1 ~ 5.8GHz
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20℃ ~ +65℃

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：黄瑞郎

APPROVED BY：陳振榮

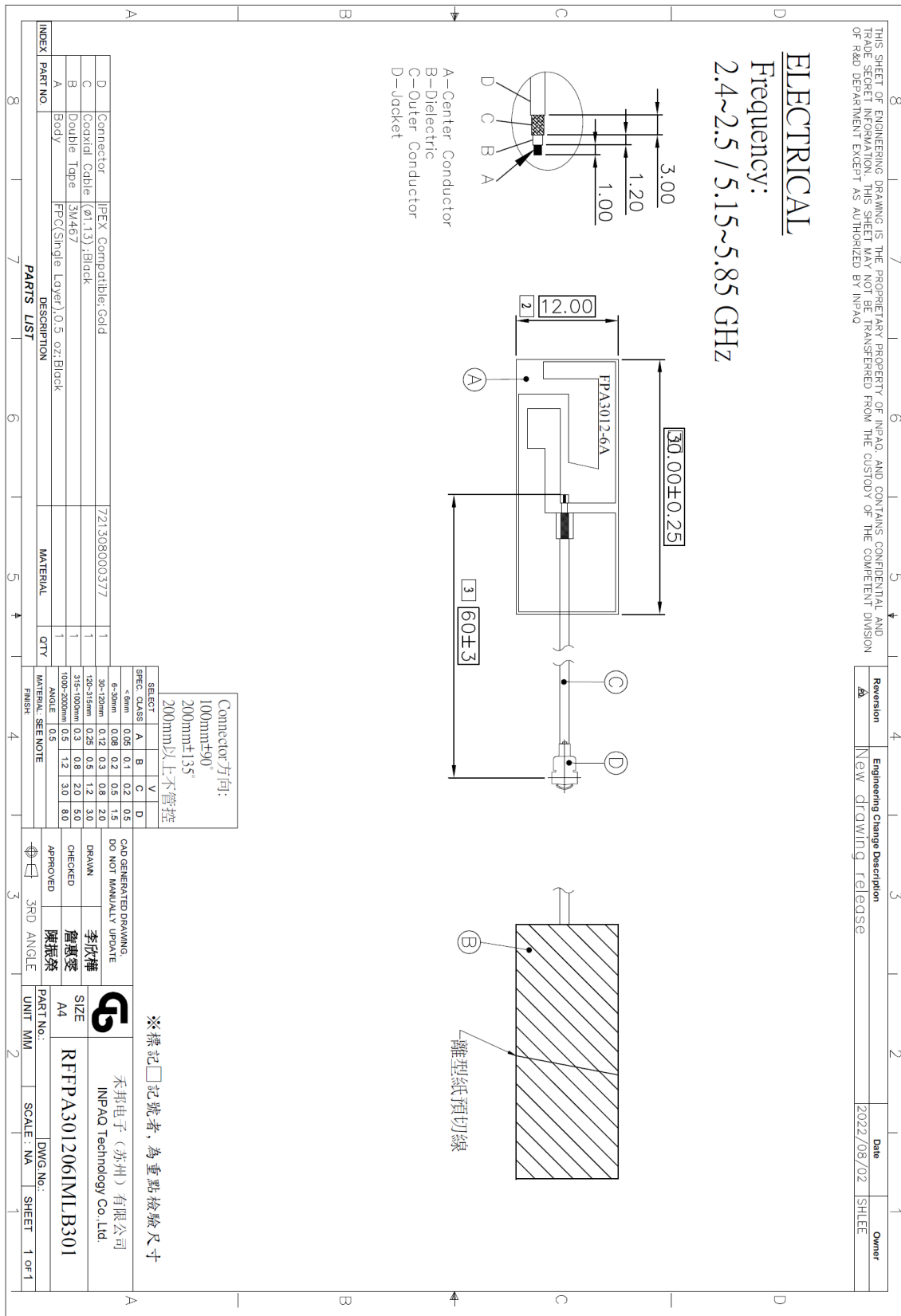
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3. Antenna Drawing :



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UNIT : mm

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4. Performance Report :

Test Report**■ Experimental Setup**

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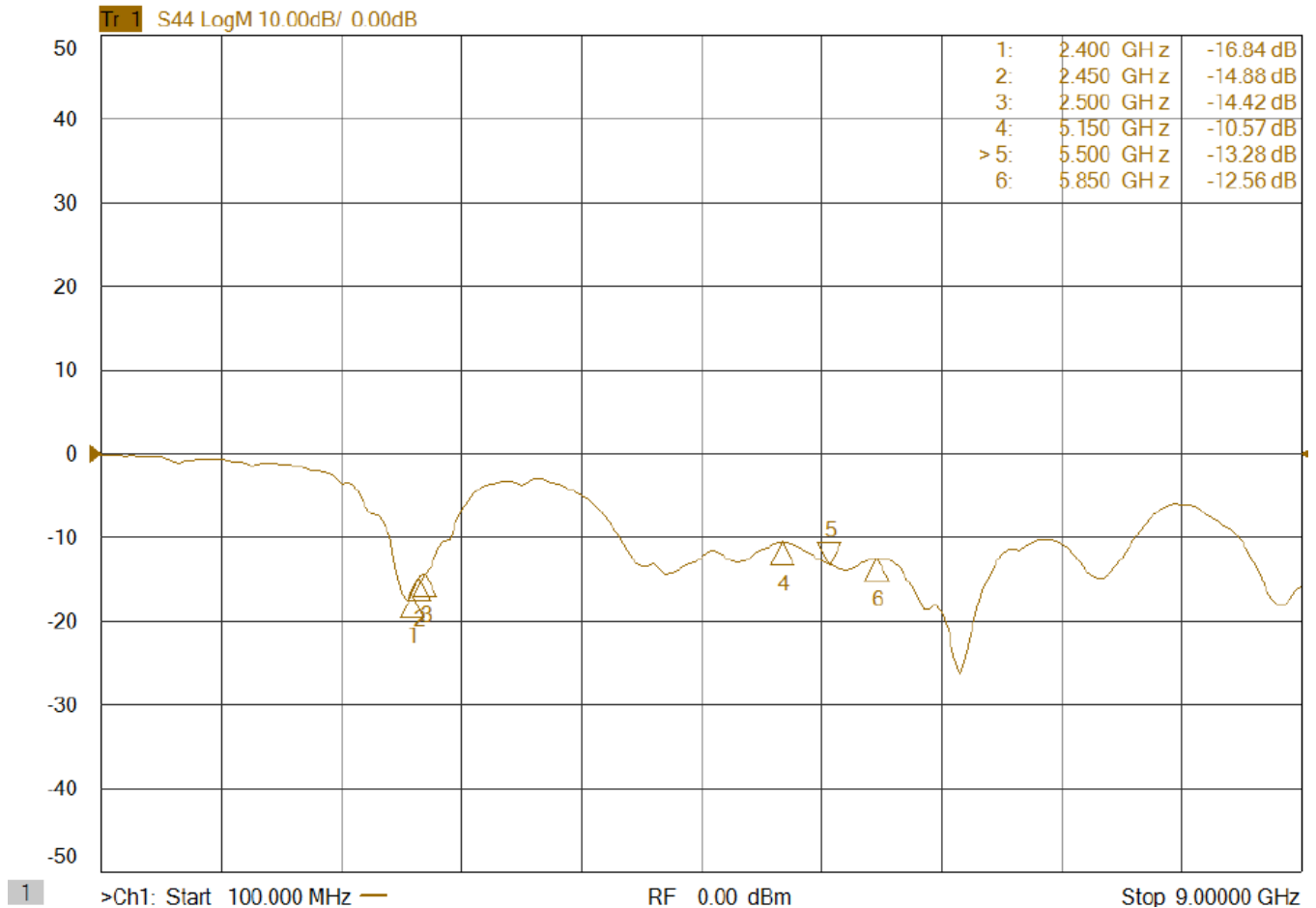
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ELECTRICAL CHARACTERISTICS

Return Loss

WiFi 1



UNLESS OTHER SPECIFIED TOLERANCES ON :
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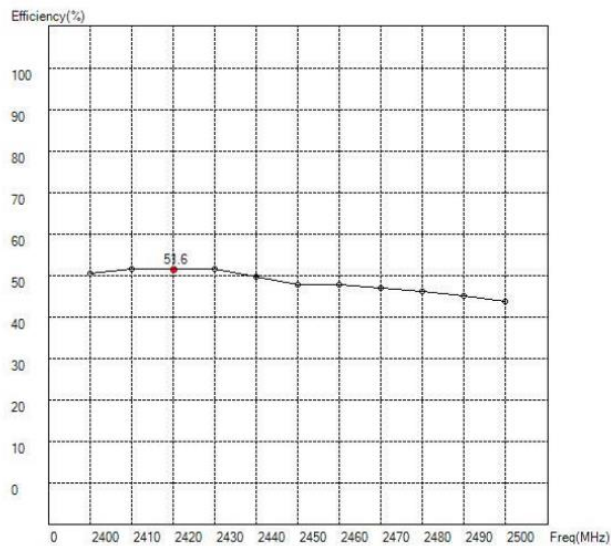
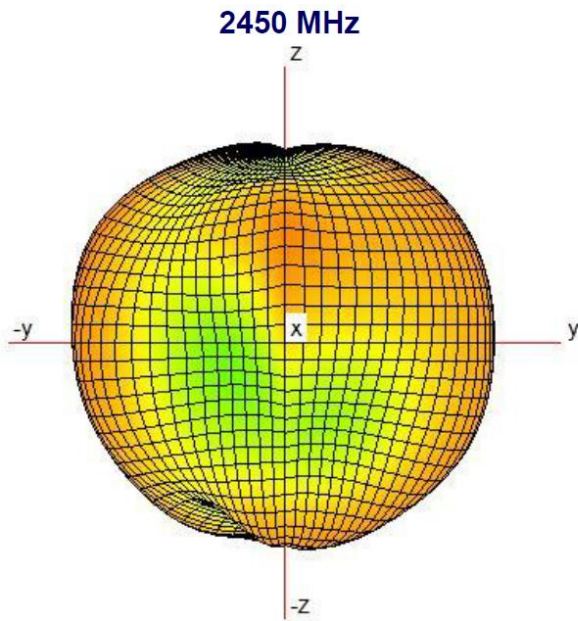
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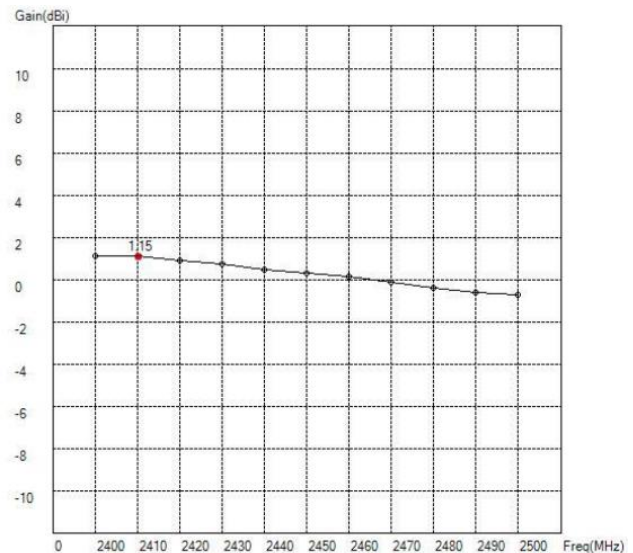
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Antenna Efficiency and Peak Gain



Maximum Efficiency at 2420MHz : 51.6 %



Maximum Peak Gain at 2410 MHz : 1.15 dBi

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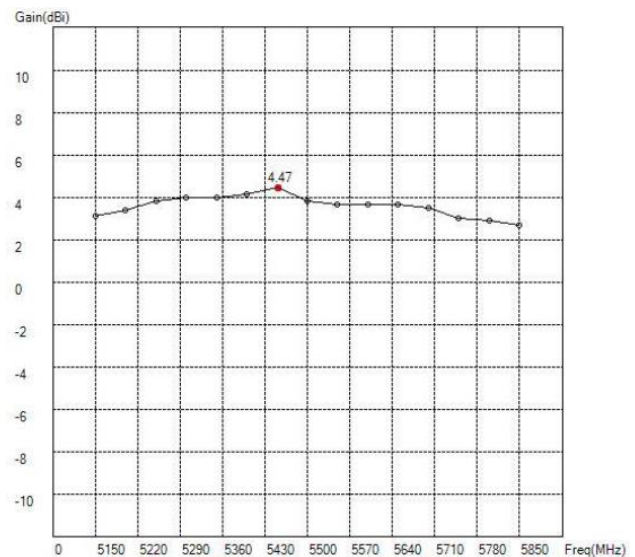
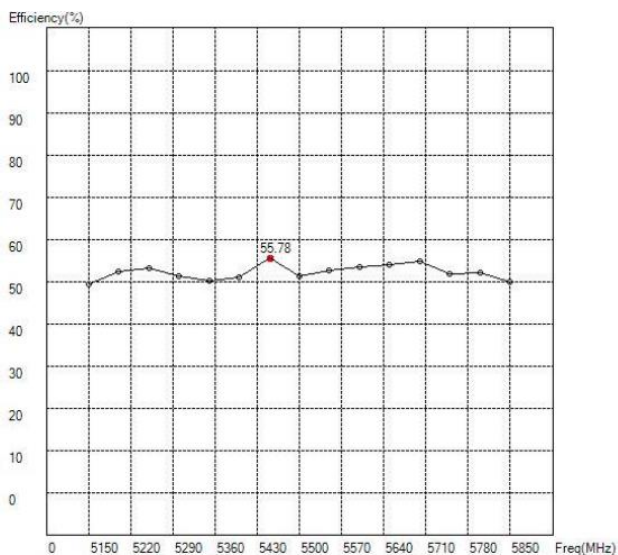
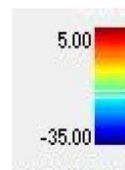
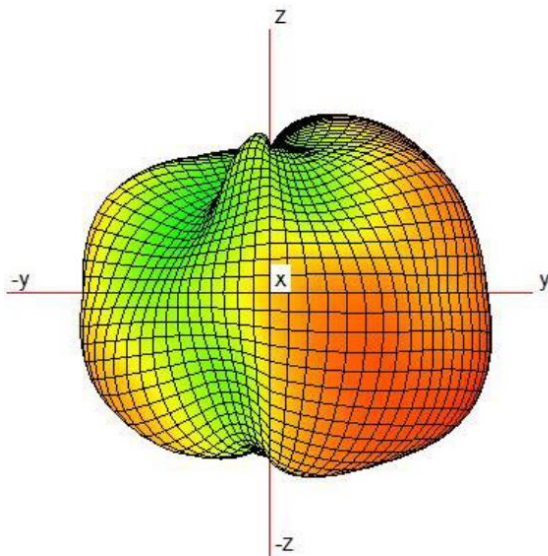
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5500 MHz



Maximum Efficiency at 5450MHz : 55.78 %

Maximum Peak Gain at 5450MHz : 4.47 dBi

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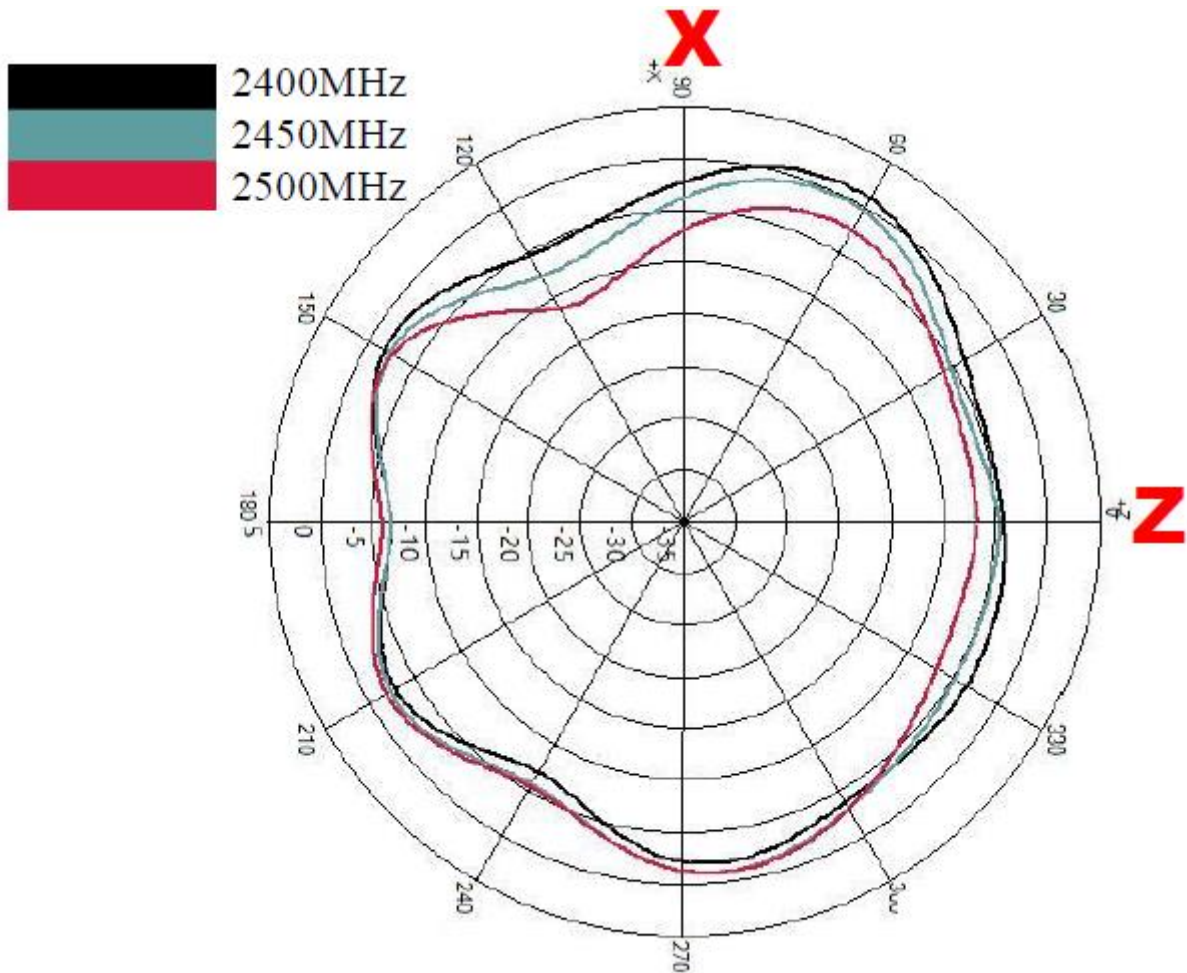
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RADIATION PATTERN

X-Z Plane

Phi=0.00deg

Gain . dB



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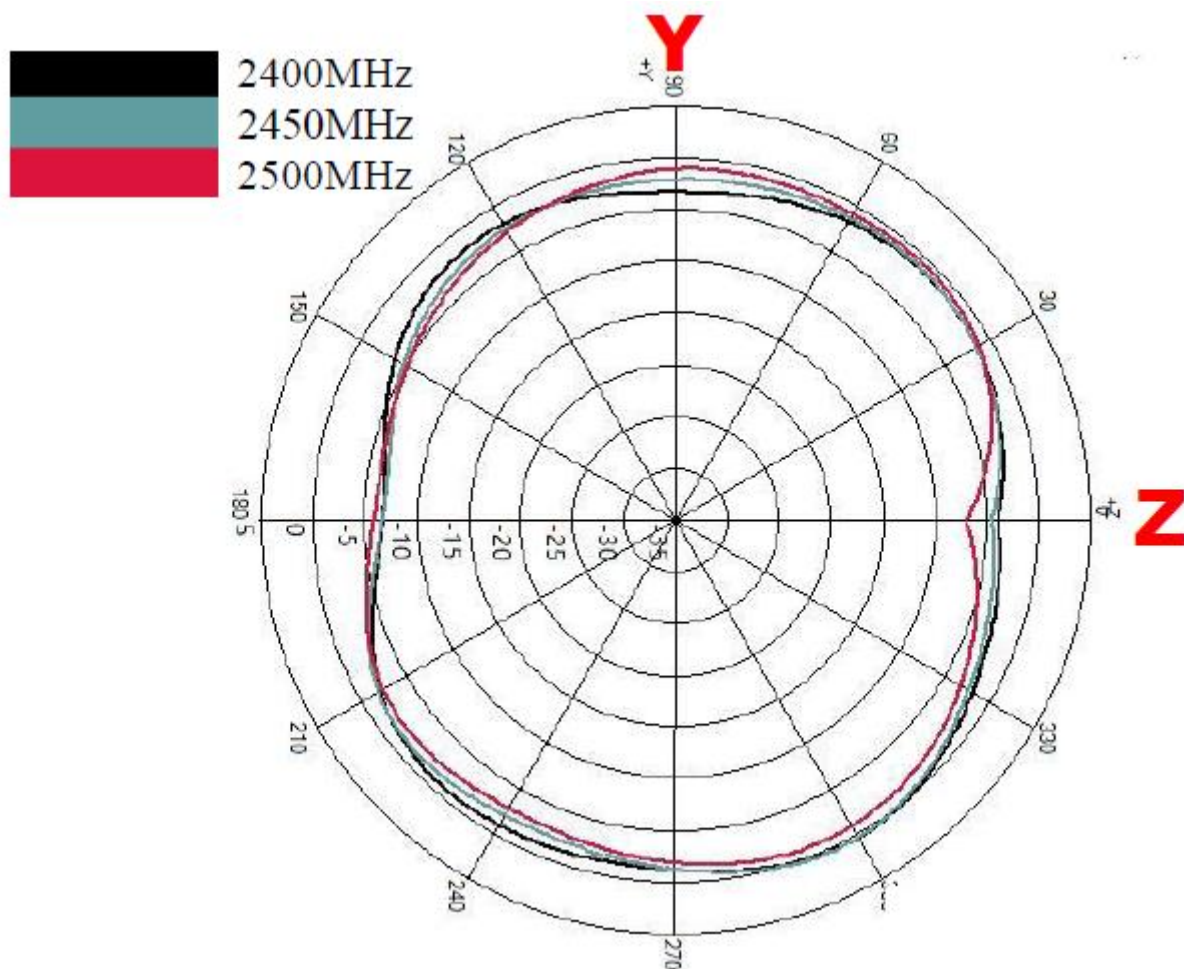
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Y-Z Plane
Phi=90.00deg

Gain . dB



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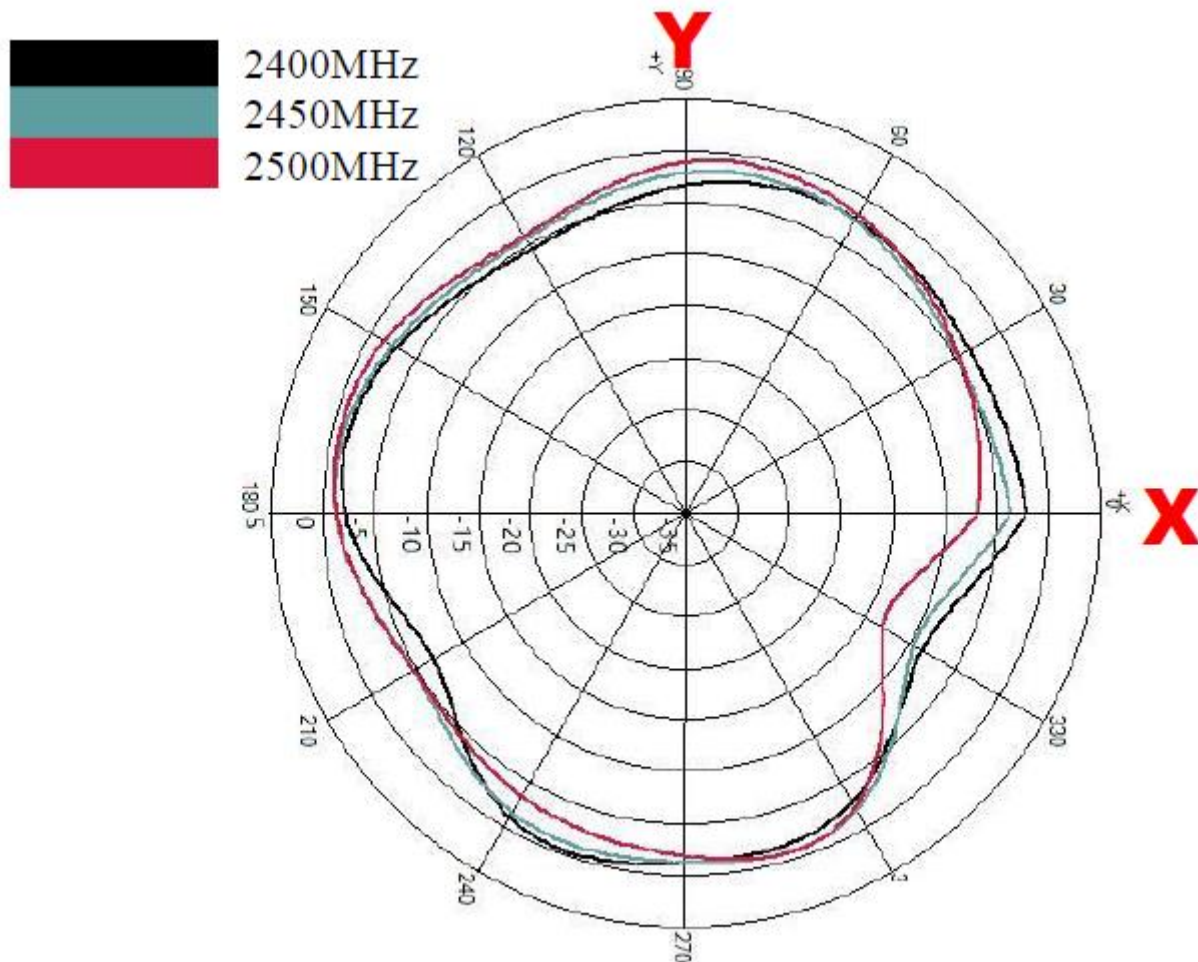
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X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	1.13	-2.82	0.38	-1.93	-1.18	-3.03
2450	-0.20	-3.32	0.34	-2.09	-1.29	-2.87
2500	-1.35	-4.30	-0.69	-2.54	-1.01	-3.03

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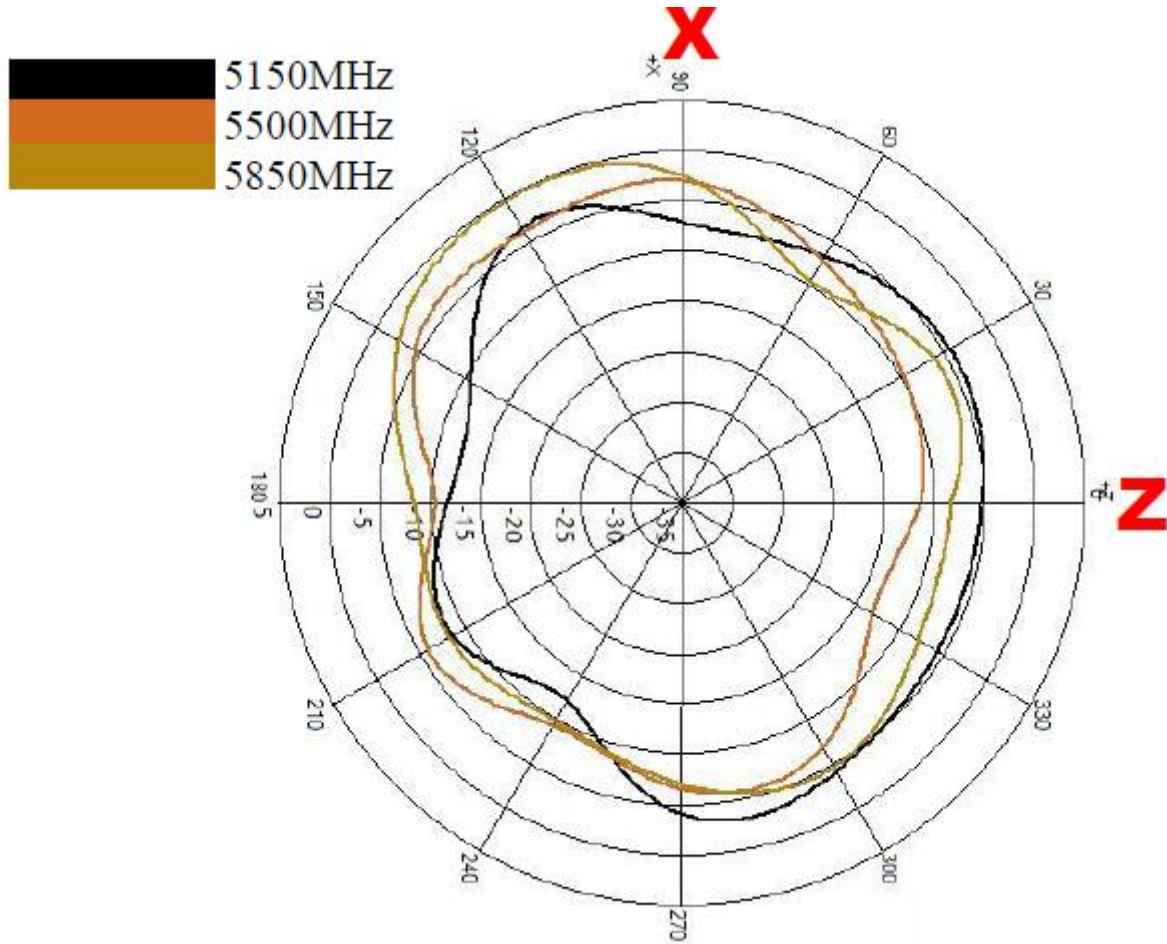
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X-Z Plane
Phi=0.00deg

Gain . dB



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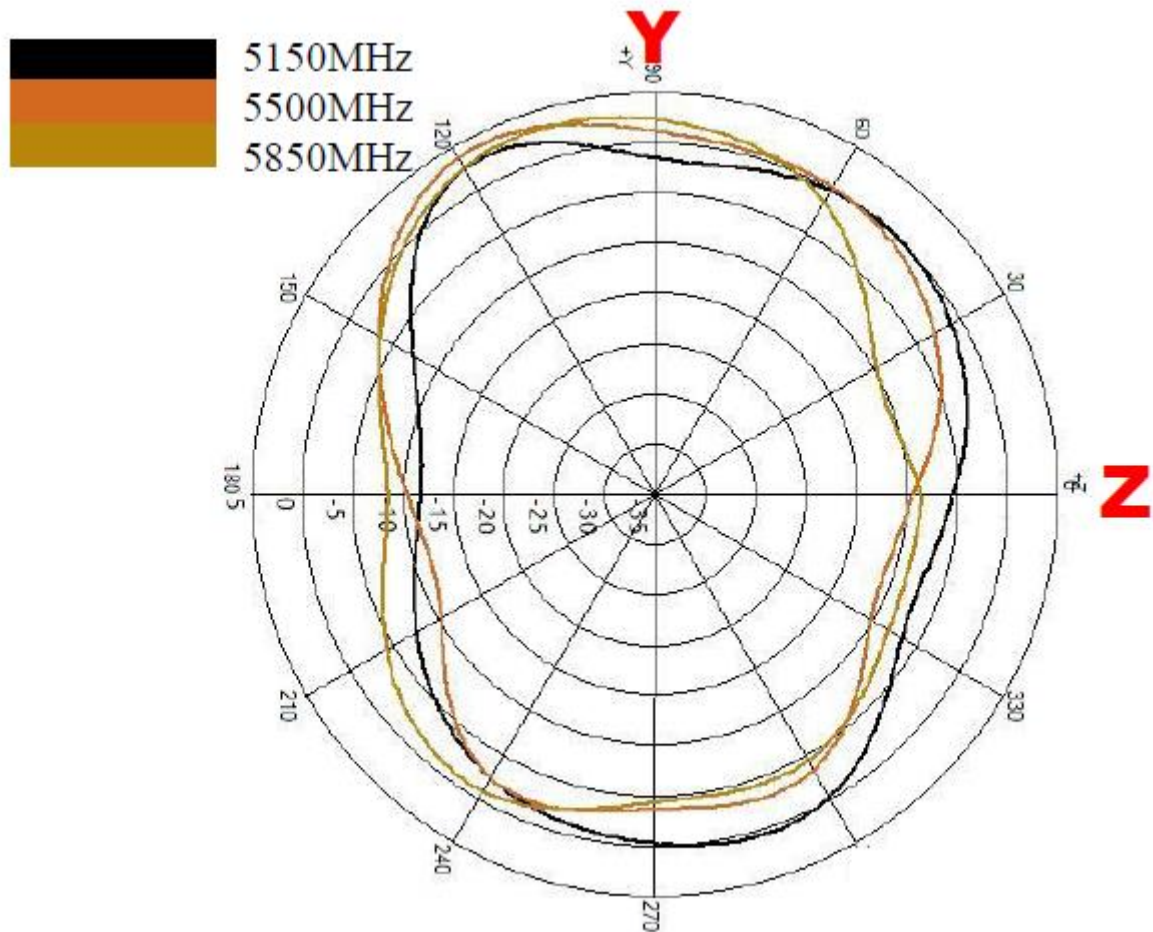
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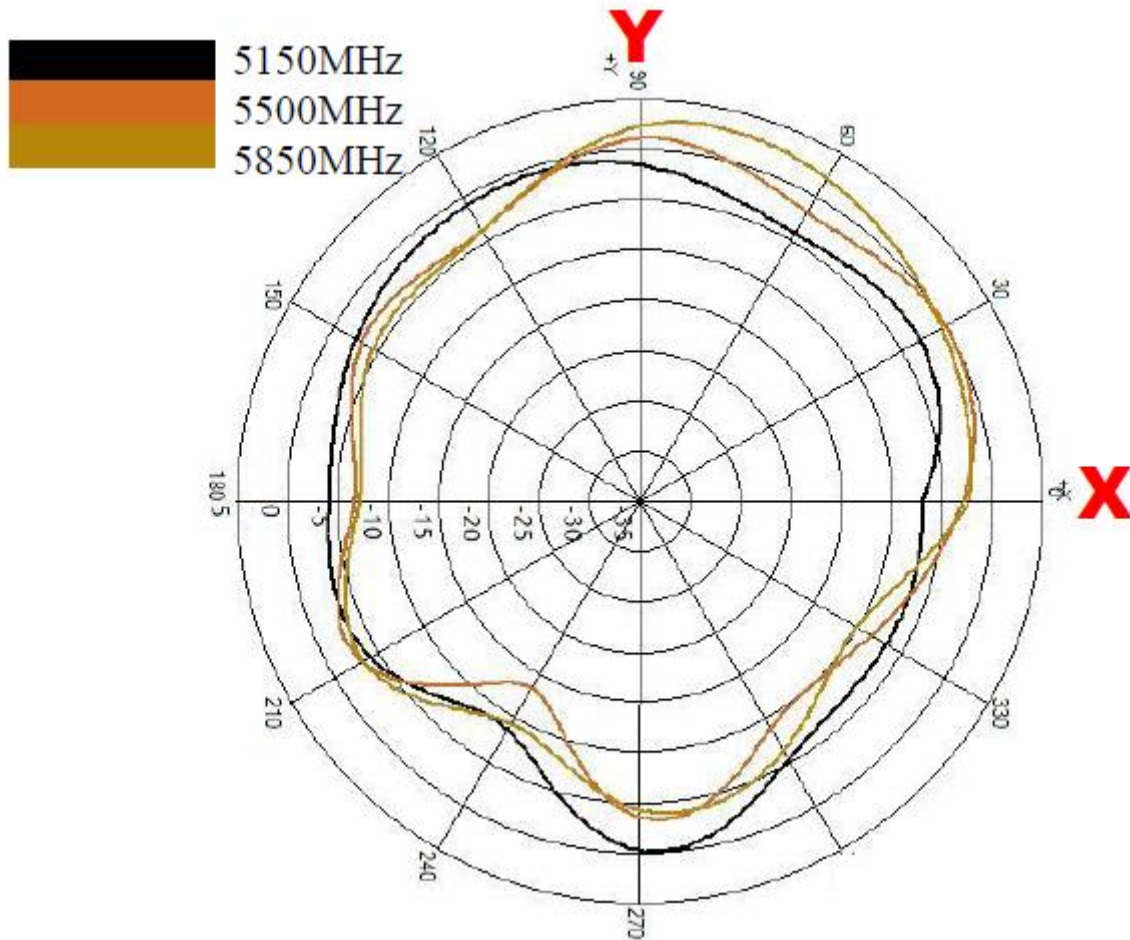
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X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	-3.30	-5.77	2.61	-1.78	-0.32	-3.33
5500	-2.87	-6.66	3.84	-1.93	1.26	-3.08
5850	-0.16	-5.10	2.72	-2.19	2.43	-2.23

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