

APPROVAL SHEET

Dipole Antenna

5.15~5.85 GHz Working Frequency

P/N: RFDPA161527IM5B901

Customer : 威強電工業電腦股份有限公司

Customer 's Part No. : CKP-32505-012700-100-HF

Approval No. :

Issue Date :

佳邦科技股份有限公司 INPAQ TECHNOLOGY CO., LTD.

地址 Add : 326 桃園市楊梅區高獅路 566 之 1 號

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電話號碼 Tel : 03 475 8711



History List

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品名：RFDPA161527IM5B901

1. Explanation of part number：

RF	DPAA	1615	27	I	M	5	B	9	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	Dipole Antenna	Per 2 digits of length, width e.g.: 1614 Length 160.0mm, Width140.0mm	2 digits for cable length e.g.:20 5G1 : Length 17.5cm 5G2 : Length 17.5cm 2G1 : Length 20.0cm 2G2 : Length 13.0cm BT : Length 7.0cm	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 6: 6GHz 5: 5GHz A: 2.4GHz ISM band B: GSM 900/1800 dual band G: GPS band L: 2.4/5.X GHz tri-band N: NFC T: LTE band W: WCDMA band	B: MP T:During Test X: Pile Run	0:None 1:Ø 0.81 2:Ø 1.32 3:Ø 1.13 4:Low Loss Ø 1.13 5:Ø 0.5 6:RG316 7: Ø 1.37 8:RG178 9:Low Loss Ø 1.37	01~99 series number

2. Electrical Specification：

Item	Specification
Working Frequency Range	5.15 ~ 5.85 GHz
Gain	3.49 dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20℃ ~ +65℃
Cable Loss	5GHz ≤ 1.38 dB

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：邱瑩鈺

CHECKED BY：詹惠雯

DESIGNED BY：王章程

APPROVED BY：陳振榮

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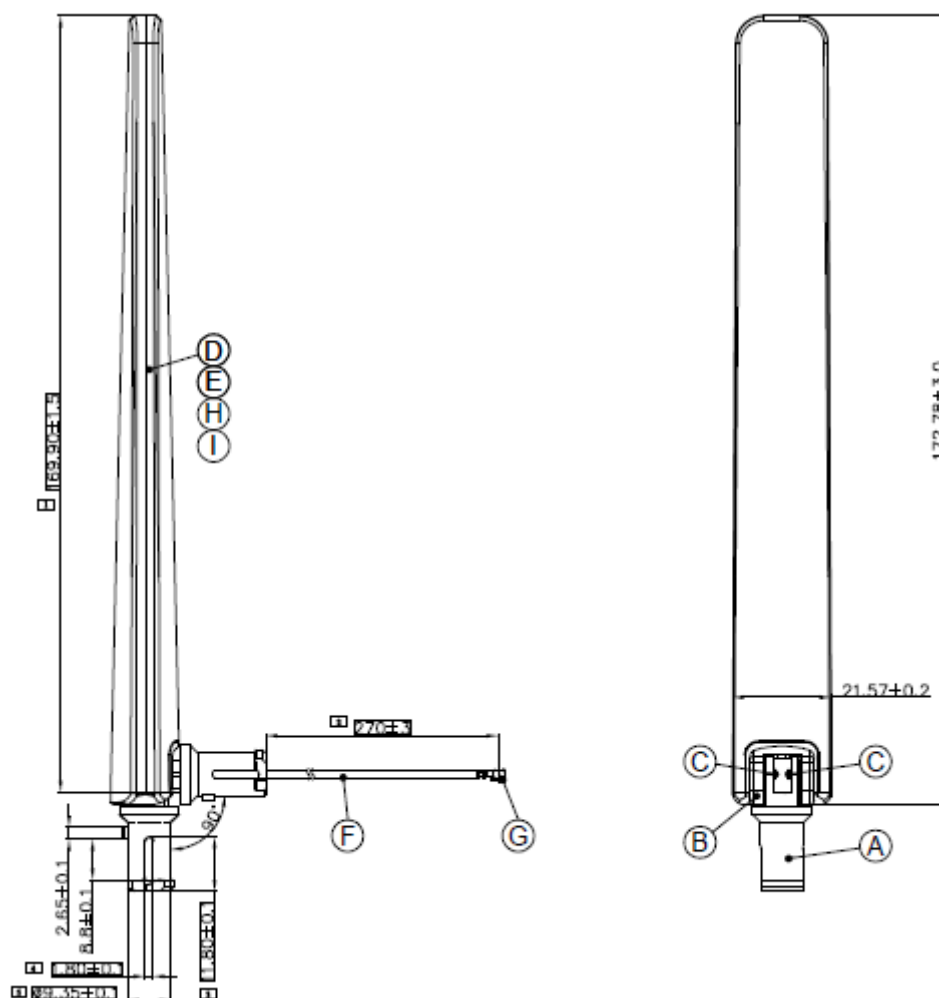
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3. Drawing :

ELECTRICAL

Frequency: 5150~5850 MHz



I	醋酸膠布	Black		1
H	Sponge	Black		1
G	Connector	IPEX : Gold	20351-112R-37 / 721215007739	1
F	Coaxial Cable	Coaxial Cable Ø1.37 Low Loss : Green		1
E	PCB	FR4(Single Layer) ; T=0.8mm ; Black	PCA1515-25A	1
D	Antenna Cover	ABS ; Black		1
C	Rivet	POM ; Black		2
B	Antenna Up Base	ABS ; Black		1
A	Antenna Down Base	PC ; Black	防卡線	1

INDEX	PART NO.	DESCRIPTION	MATERIAL	Q'TY
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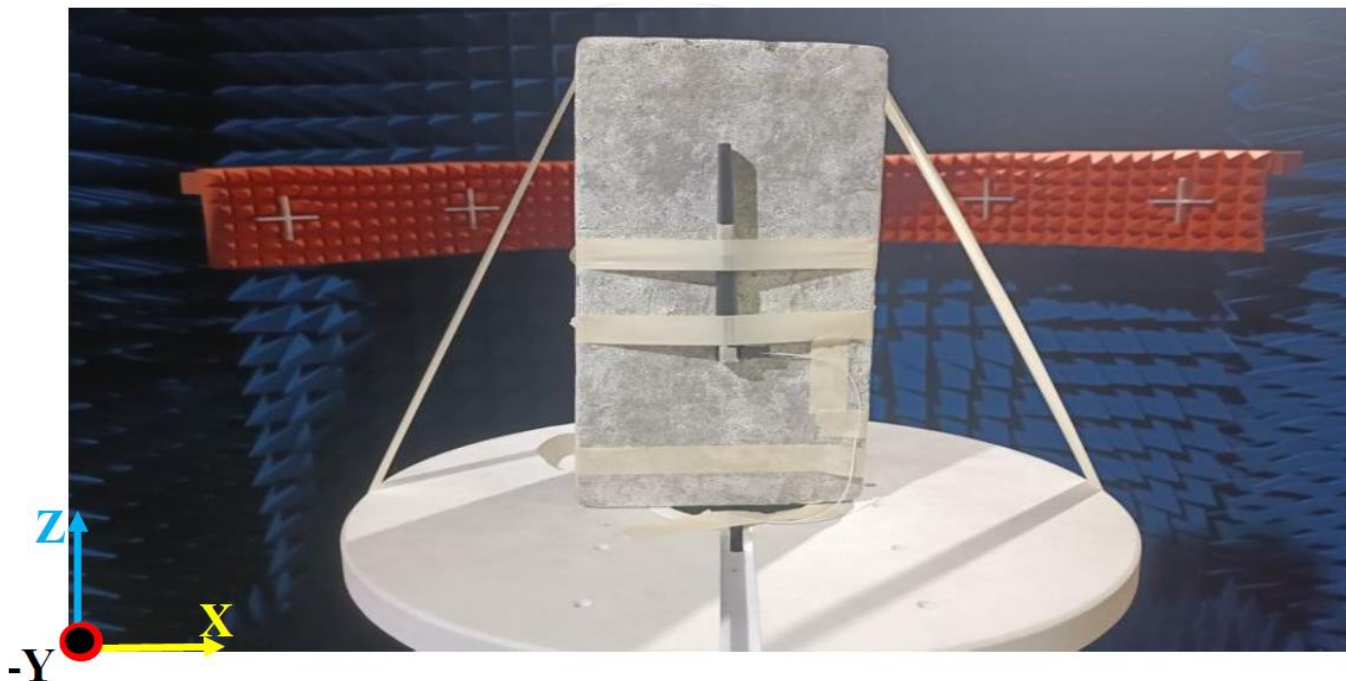
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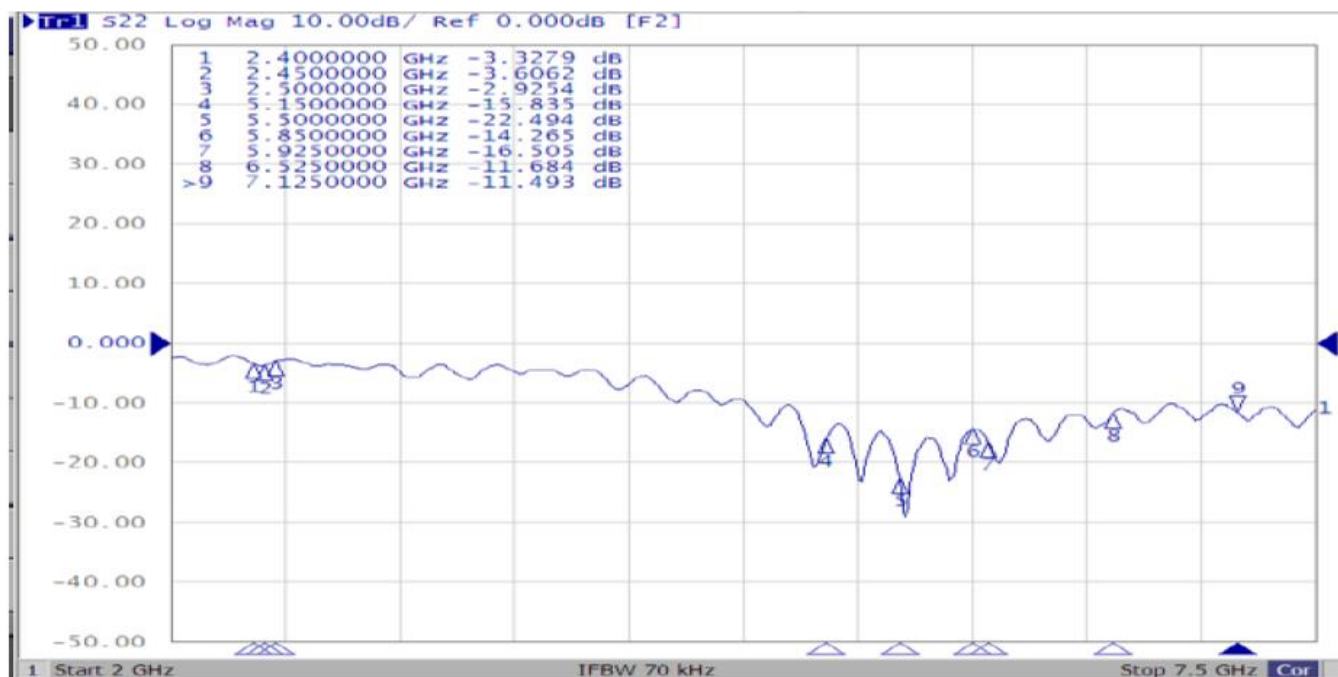
4. Performance Report :

Test Report**Experimental Setup**

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ELECTRICAL CHARACTERISTICS

S-parameter



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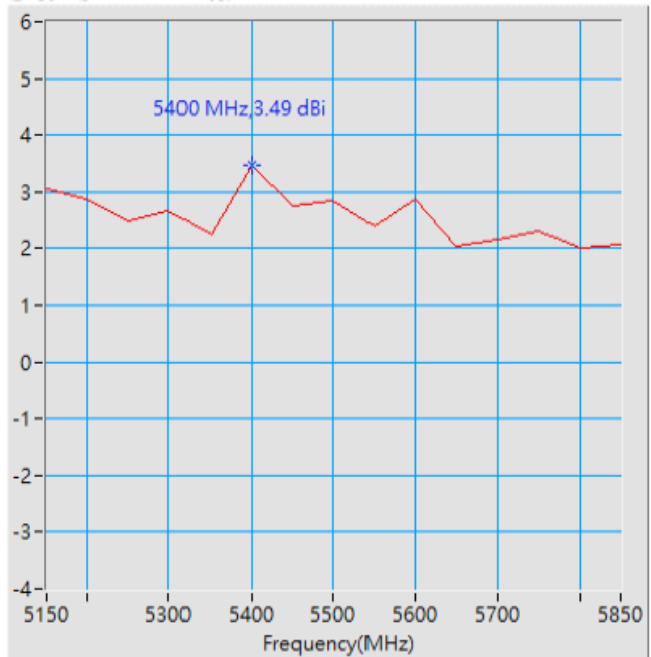
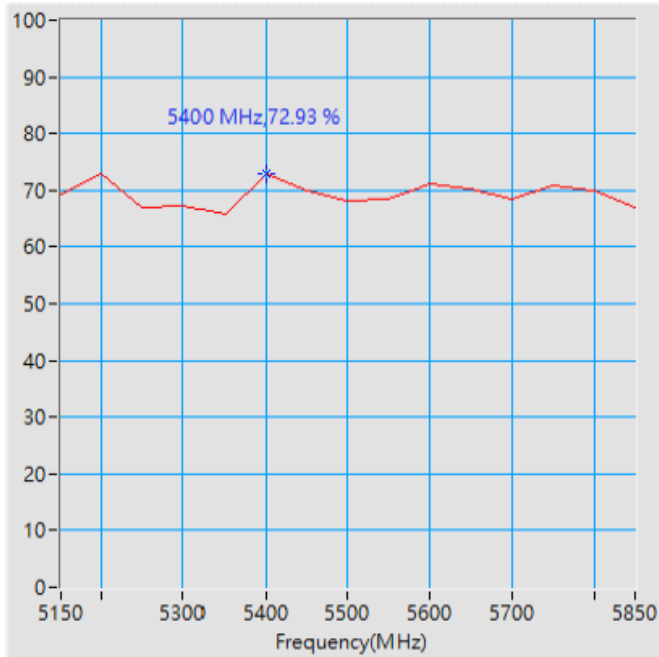
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■ Antenna Efficiency and Peak Gain

(5150 ~ 5850) MHz



Maximum Efficiency at 5400 MHz : 72.93 % Maximum Peak Gain at 5400 MHz : 3.49 dBi

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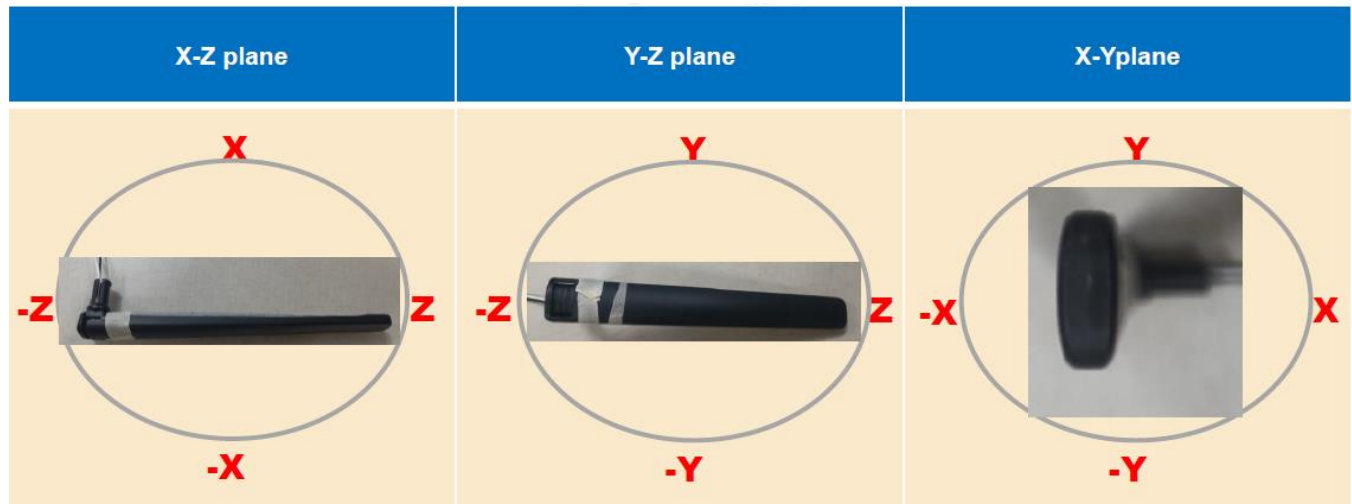
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■ 3 Views of antenna & 2D Radiation Patterns



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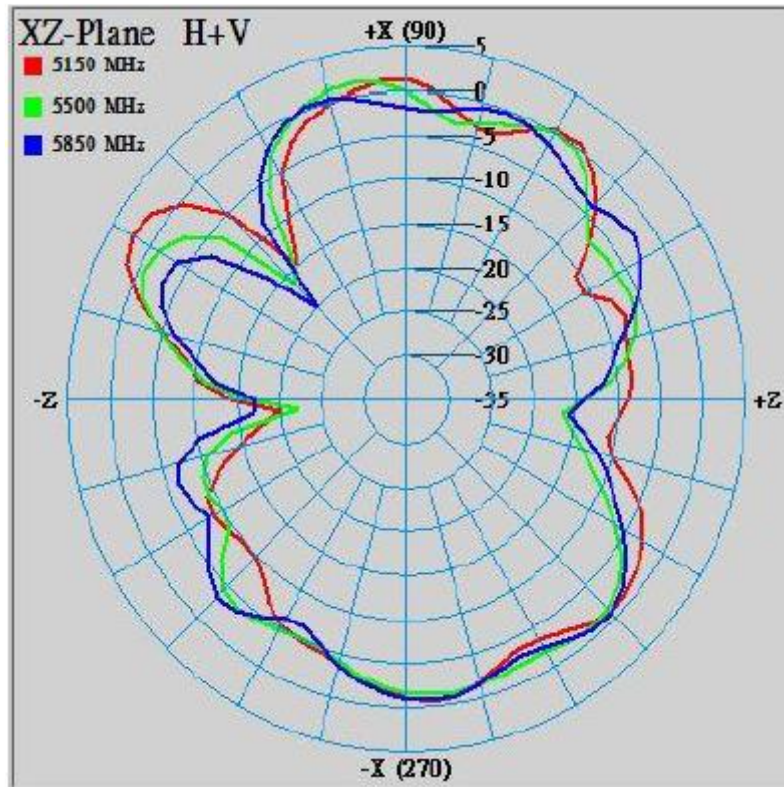
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RADIATION PATTERN**(5150 ~ 5850) MHz****X-Z Plane
Phi=0.00deg****Gain . dB**

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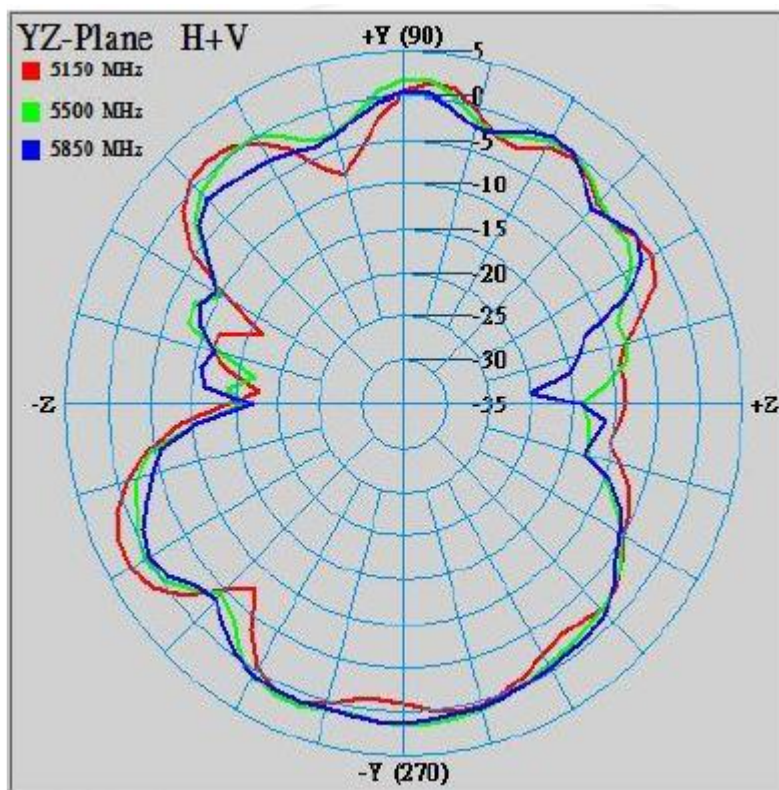
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Y-Z Plane
Phi=90.00deg

Gain . dB



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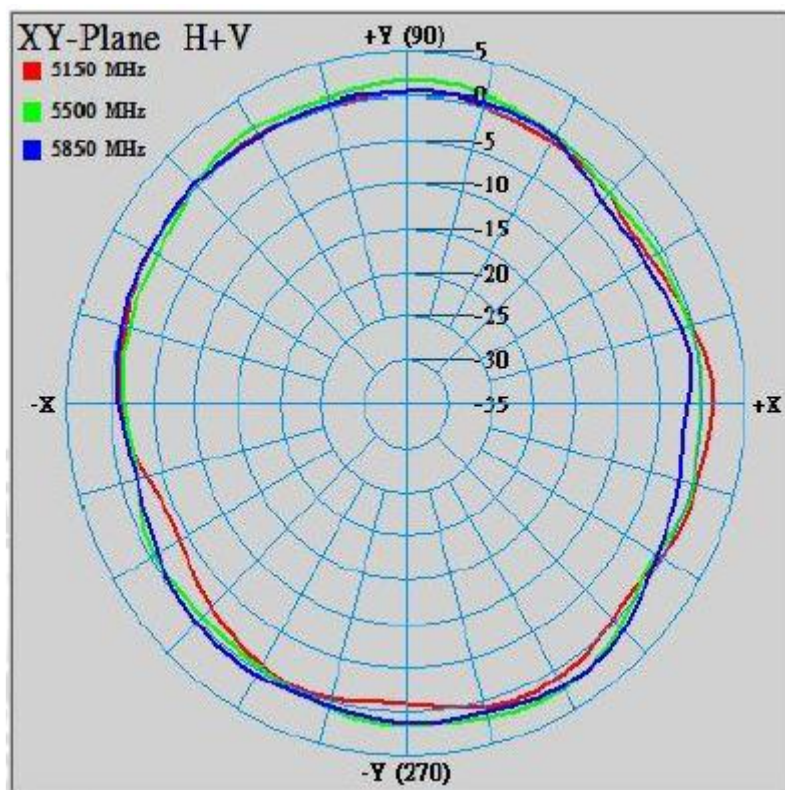
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X-Y Plane

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]
5150	2.32	-3.16	2.32	-2.05	1.24	-0.38
5500	1.28	-3.58	1.78	-1.91	2.31	0.25
5850	0.44	-3.68	1.30	-2.29	2.02	-0.06

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