品名：**RFFPA312207IMLB301**

History List

版本 REV.	修訂者 EDITOR	修訂頁次 PAGE	修訂內容 ITEMS OF CHANGE	申請日期 DATE	生效日期 VALID DATE	ECN 編號 ECN NO.
P0	李欣樺	ALL	New Release	2023/11/09	According to the date of PLM Release	N/A

品名：RFFPA312207IMLB301

1. Explanation of part number：

RF	FPA	3122	07	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:∅0.81 3:∅1.13 6:RG316 7:∅1.37 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.
Peak Gain	2.21 dBi@2.4~2.5 GHz 3.44 dBi@5.15~5.85 GHz
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	－20℃ ～ ＋65℃

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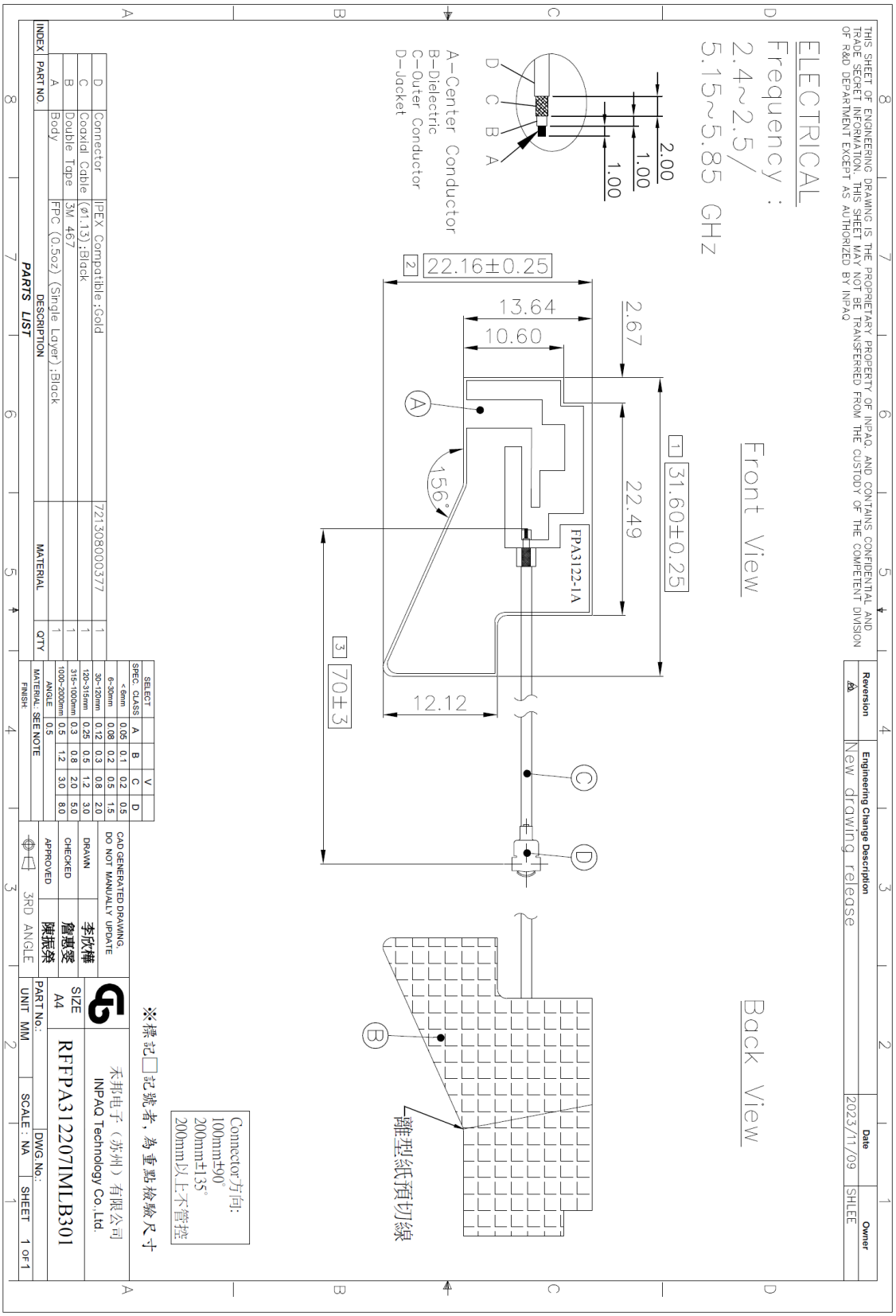
3. Antenna Drawing：



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DESIGNED BY： 黃瑞郎	APPROVED BY：陳振榮		
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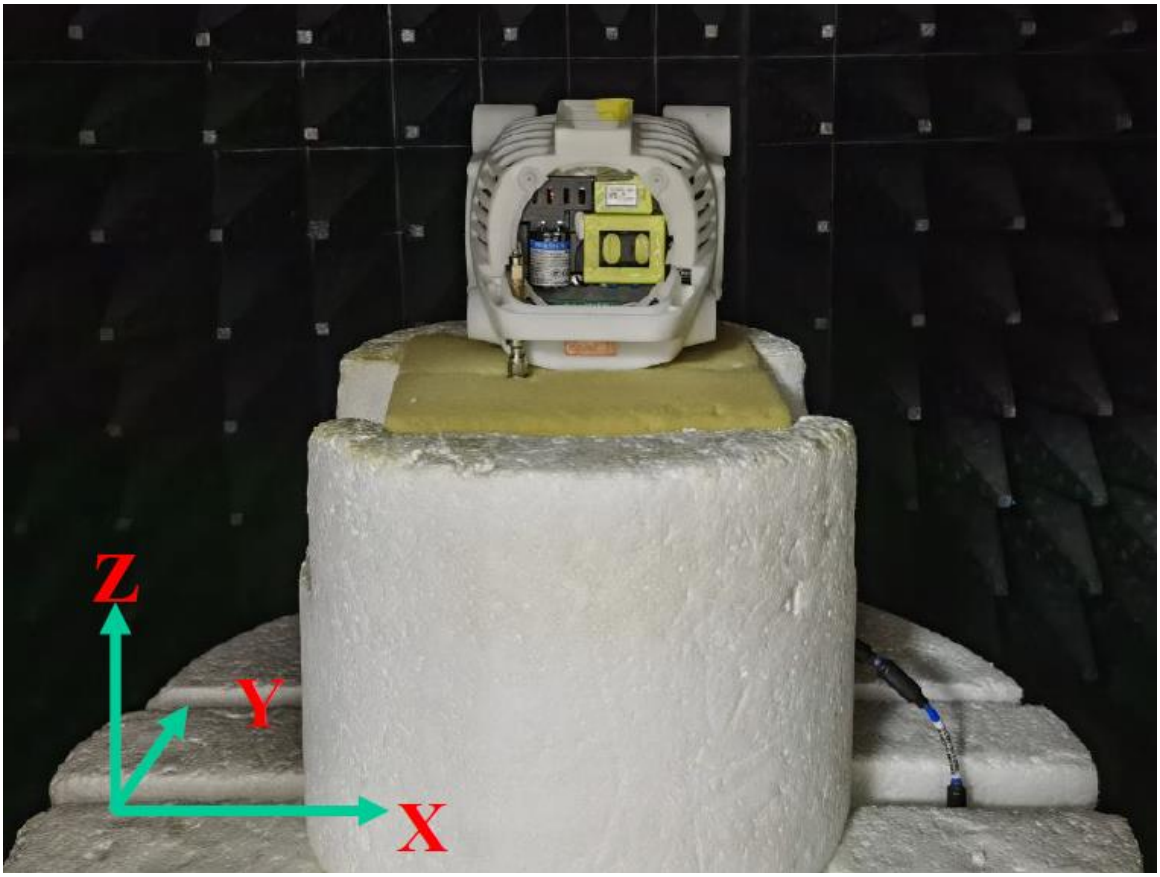
4. Performance Report：

Test Report

■ Experimental Setup



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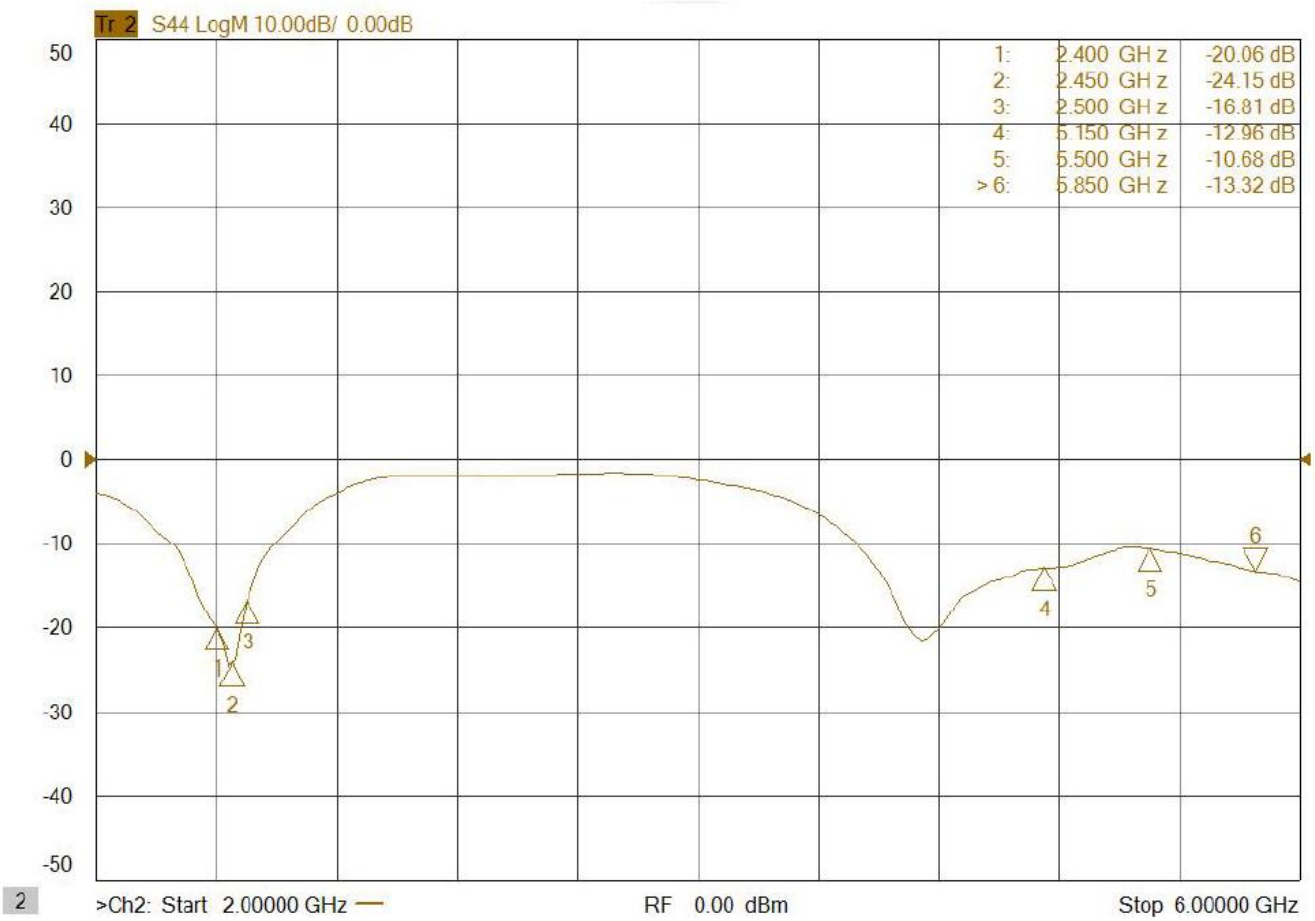
ELECTRICAL CHARACTERISTICS

S-Parameter



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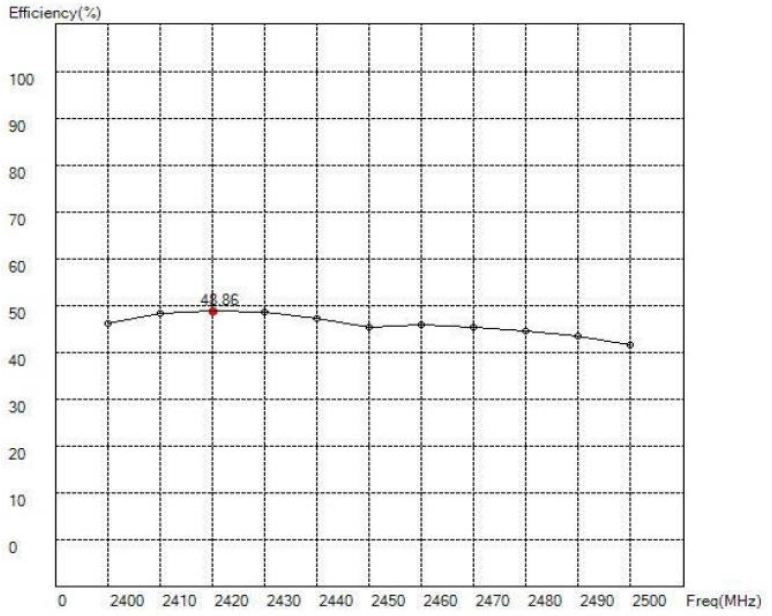
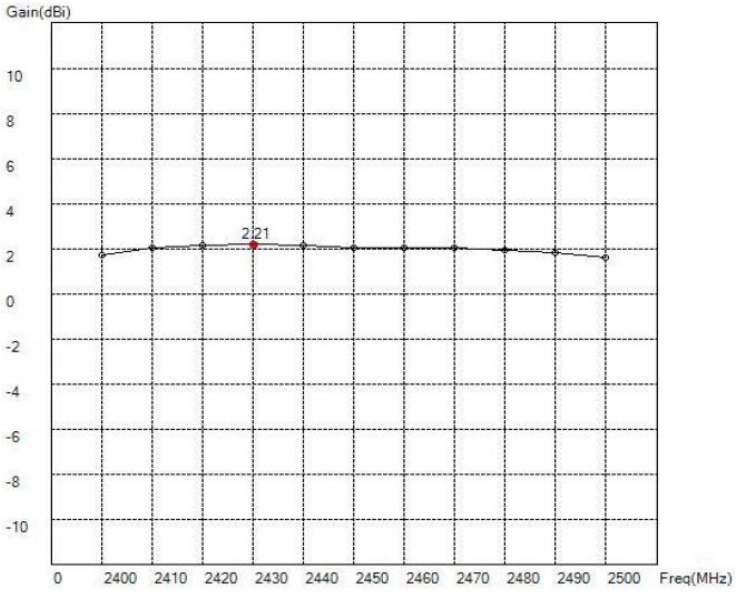
Antenna Efficiency and Peak Gain

2G



Maximum Efficiency at 2420 MHz : 48.86 %



Maximum Peak Gain at 2430MHz : 2.21dBi

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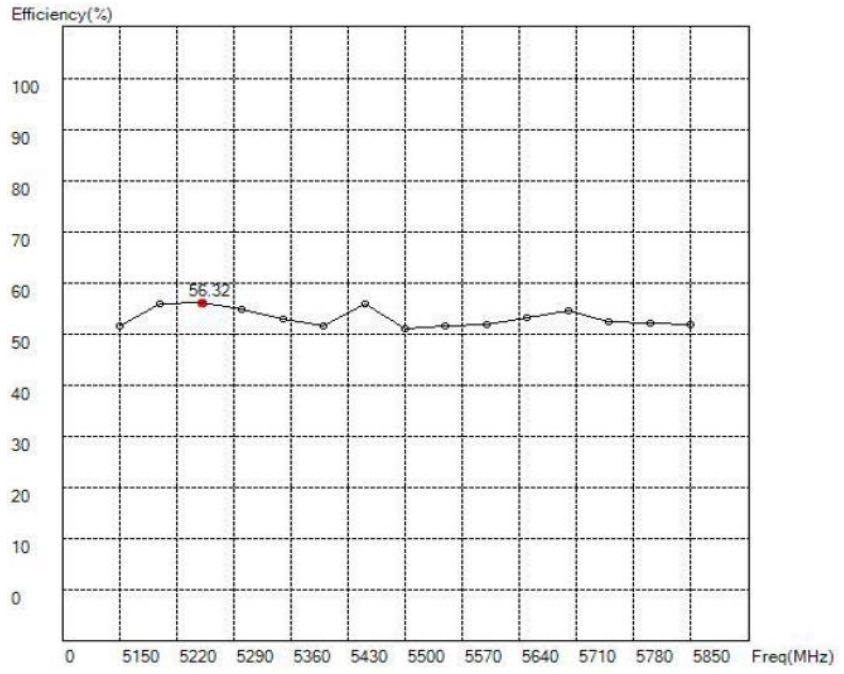
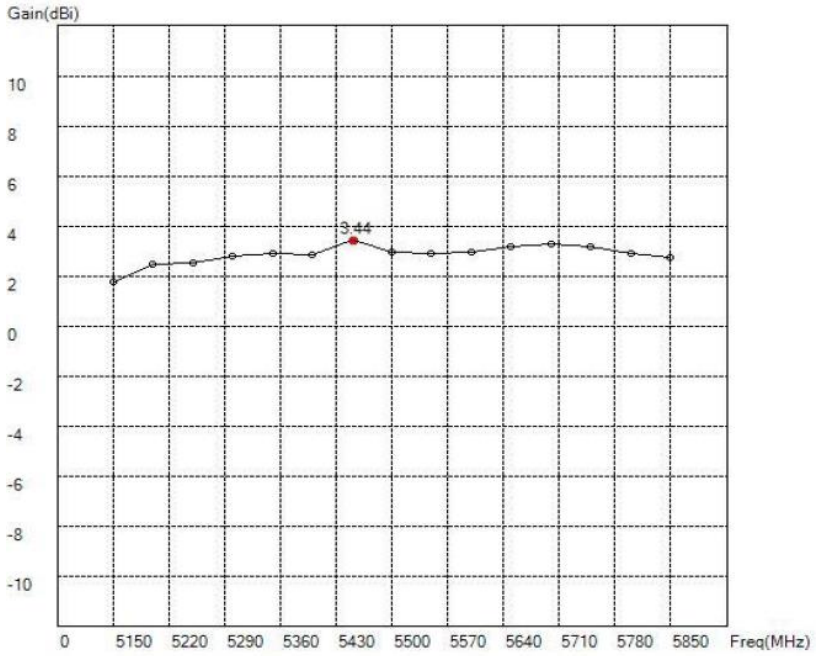
5G



Maximum Efficiency at 5250 MHz : 56.32 %



Maximum Peak Gain at 5450MHz : 3.44dBi

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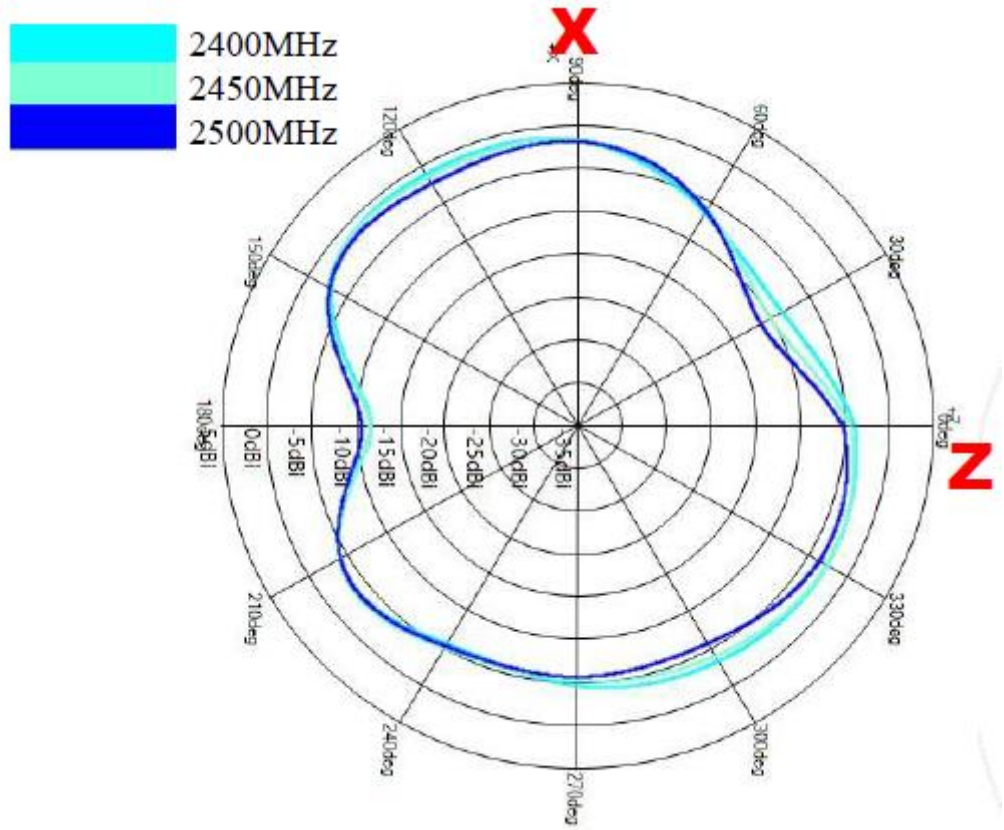
RADIATION PATTERN

2G

X-Z Plane
Phi=0.00deg

Gain . dB



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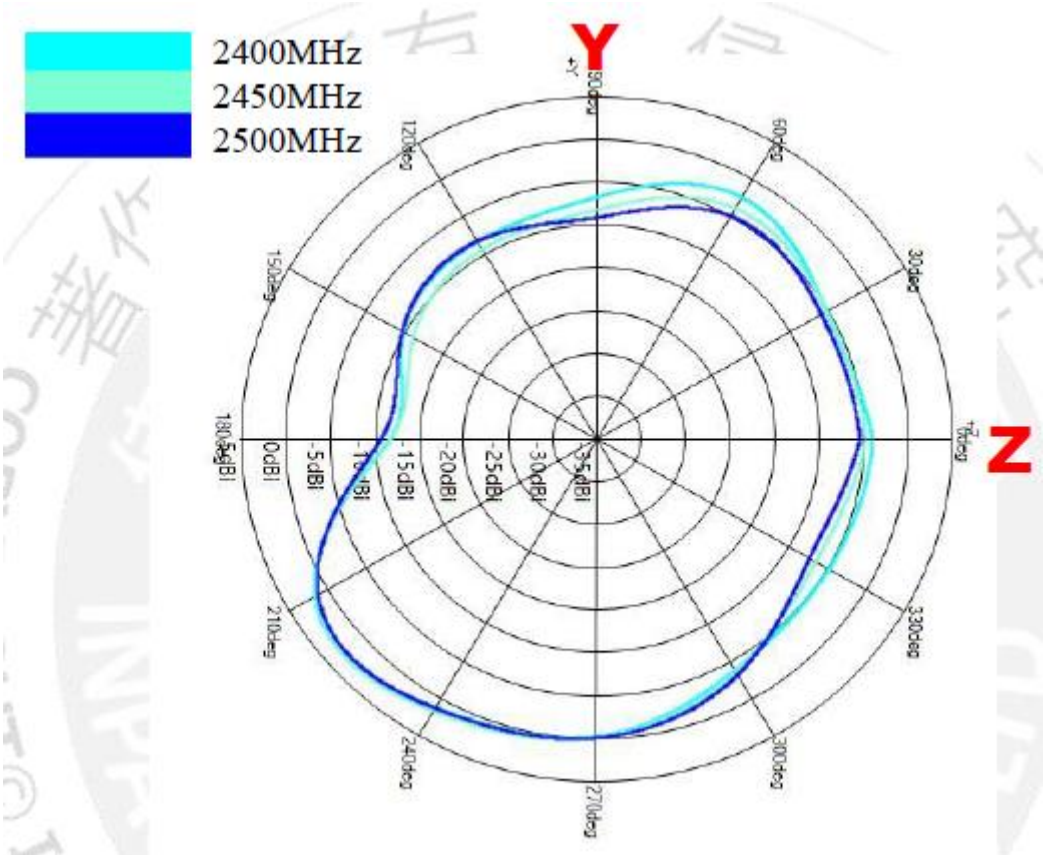
Y-Z Plane
Phi=90.00deg

Gain . dB



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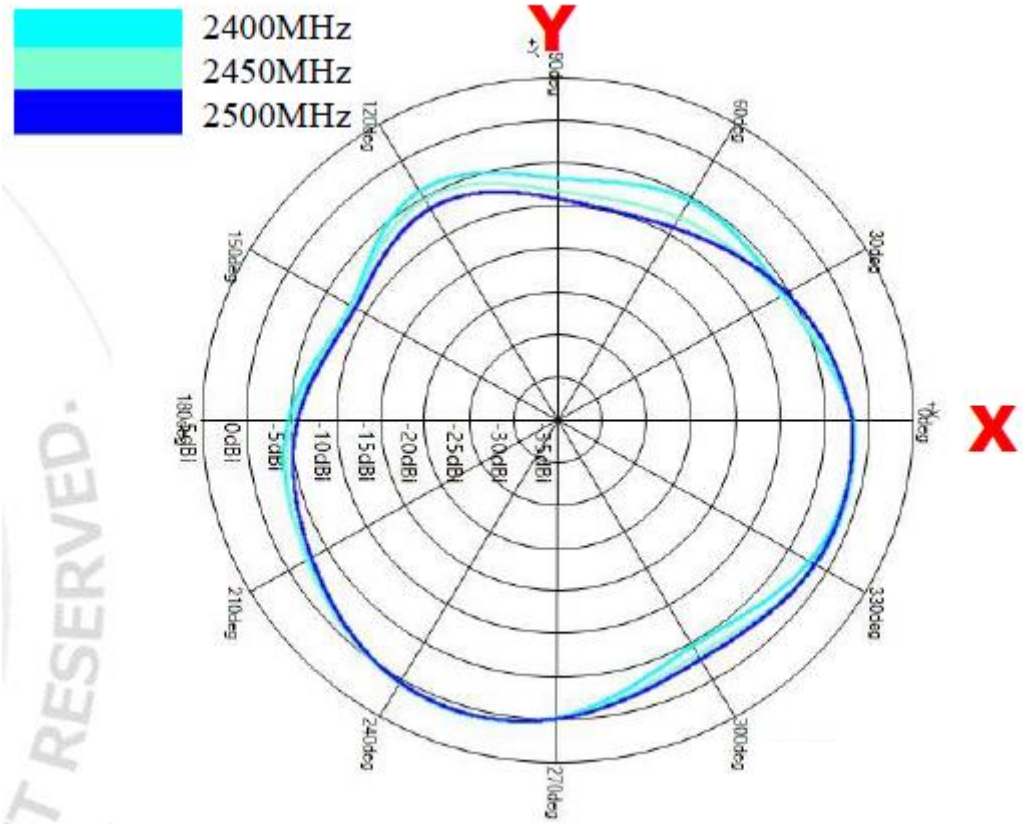
X-Y Plane
Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	-1.02	-3.69	1.52	-2.30	0.36	-3.11
2450	-1.49	-3.93	1.61	-2.56	0.43	-3.12
2500	-1.78	-4.57	2.21	-2.86	0.31	-3.30

T RESERVED.

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：李欣樺 | CHECKED BY：詹惠雯

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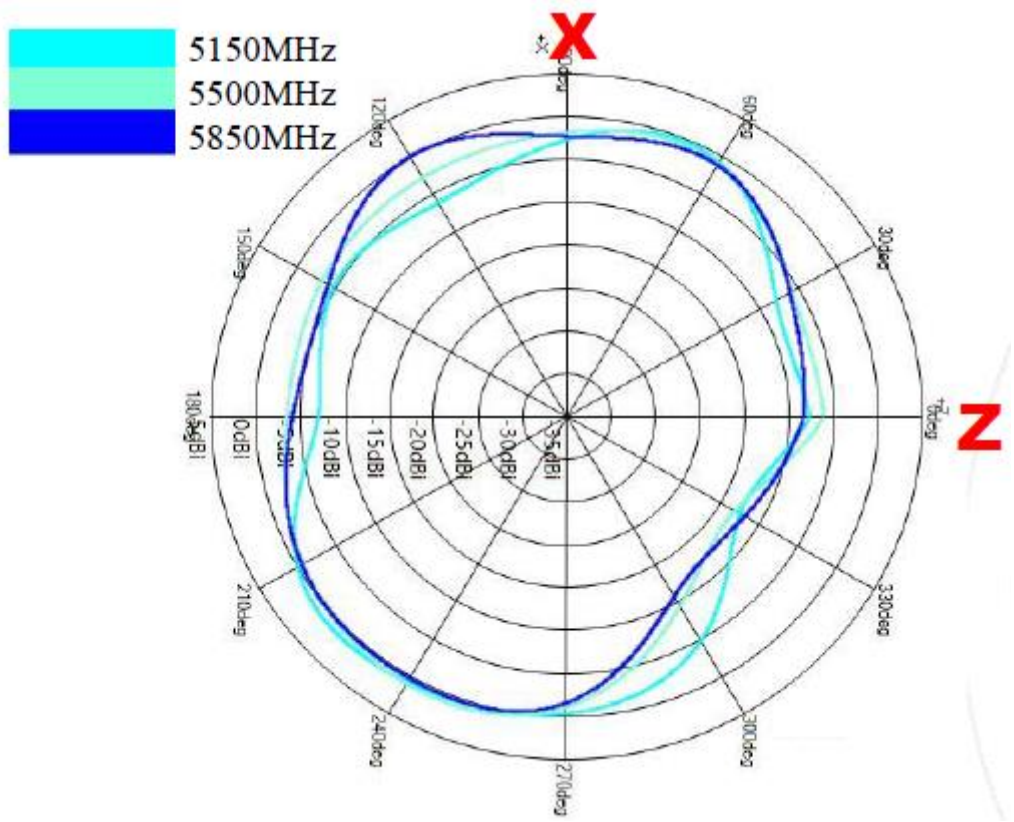
SPEC REV. P0

5G

X-Z Plane
Phi=0.00deg

Gain . dB



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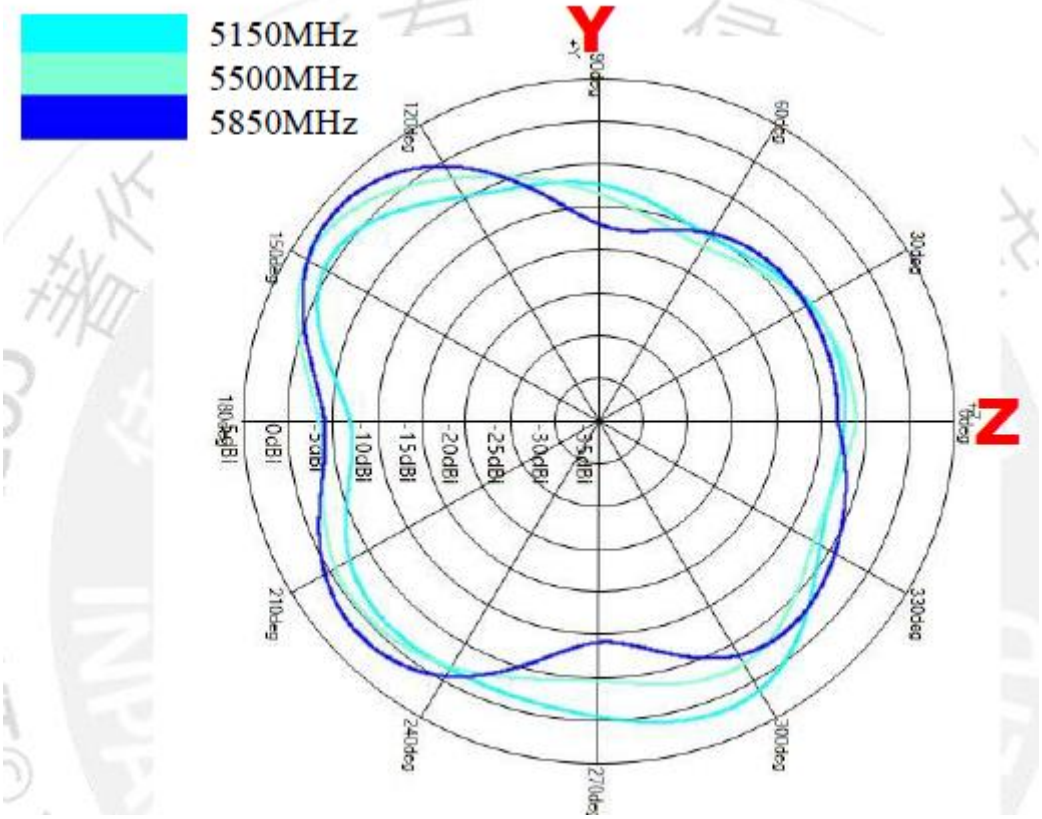
Y-Z Plane
Phi=90.00deg

Gain . dB



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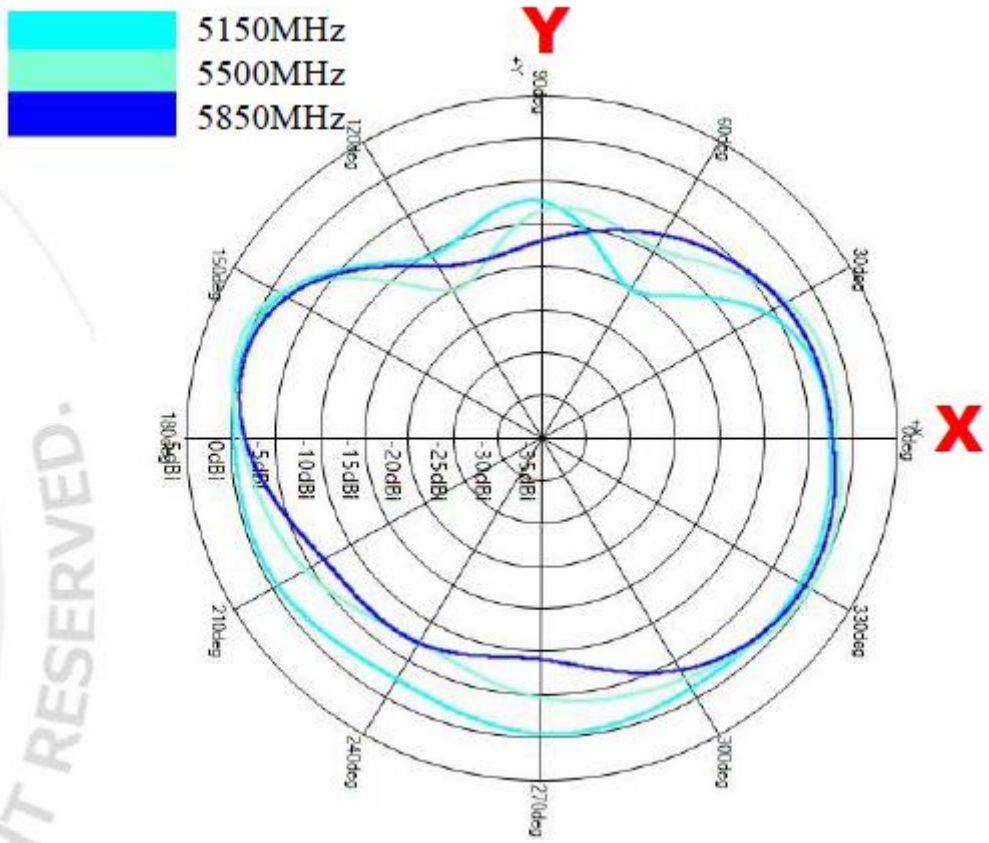
X-Y Plane
Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5150	0.68	-2.93	1.21	-3.55	-0.42	-2.63
5500	0.92	-2.81	2.78	-4.30	-0.01	-3.44
5850	0.20	-2.85	2.76	-3.92	-0.73	-4.31

IT RESERVED.

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

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