品名：**RFMTA110700NNLB004** **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.
A0	Huiwenchan	ALL	Temporary Release	2022/02/22	According to the date of PLM Release	N/A

INPAQ TECHNOLOGY CO., LTD.
350402 38F, No. 1, Keyi Street, Zhunan Town, Miaoli Prefecture, Taiwan, China
TEL:+886-37-585-555
FAX:+886-37-585-511
E-mail: info@inpaq.com.tw

1.Explanation of part number：

RF	MTA	1107	00	N	N	L	B	0	04
Type Code	**Product Code**	**Metal Dimension (Unit: mm)**	**Cable Length (unit: cm)**	**Connector Brand**	**Type of Connector**	**Application**	**Project status**	**Wire Diameter**	**Project**
Walsin RF Device	Metal Antenna	Per 2 digits of length, width e.g.:1107 Length 11.35 mm, Width 7.85mm	2 digits for cable length e.g.: 00 None Cable	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** 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 2:⌀ 1.32 3:⌀ 1.13 4:Low Loss ⌀ 1.13 5:⌀ 0.5 6:RG316 7：⌀ 1.37 8:RG178 9:Low Loss ⌀ 1.37	01~99 series number

2.Electrical Specification：

Item	Specification
Working Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz (Note-1)
Return Loss	-10dB(Max)
Peak Gain	ANT1:1.20 dBi(@2.4 ~ 2.5 GHz) ANT1:3.25 dBi(@5.15 ~ 5.85 GHz) ANT2:1.76 dBi(@2.4 ~ 2.5 GHz) ANT2:3.55 dBi(@5.15 ~ 5.85 GHz)
VSWR	< 2.0
Polarization	Linear Vertical
Admitted Power	1W
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

INPAQ TECHNOLOGY CO., LTD.

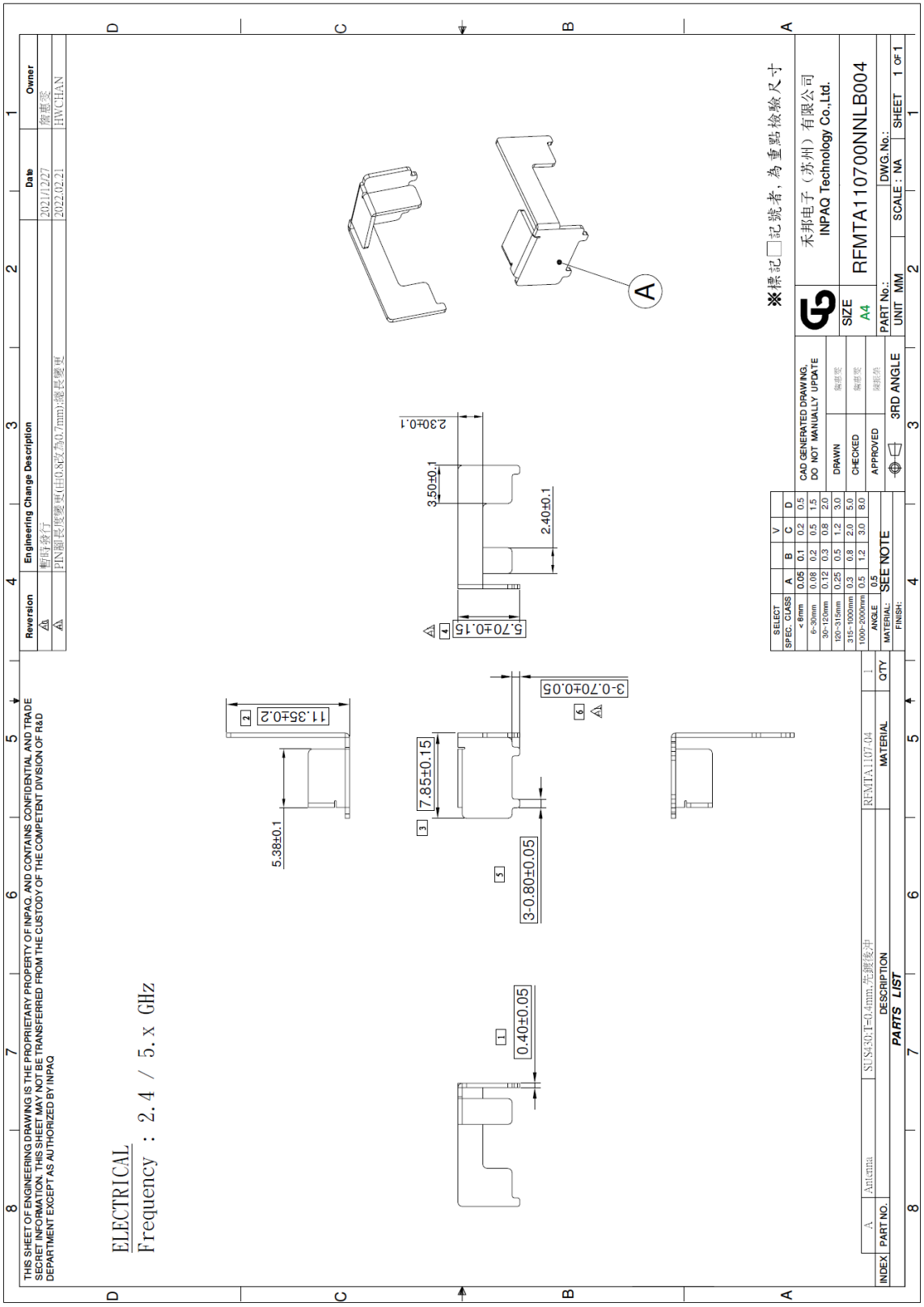
SCALE：N/A UNIT：mm
DRAWN BY：詹惠雯 CHECKED BY：詹惠雯
DESIGNED BY：黃瑞郎 APPROVED BY：陳振榮

TITLE：RFMTA110700NNLB004

DOCUMENT NO.

SPEC REV. A0

3. Antenna Drawing：



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.
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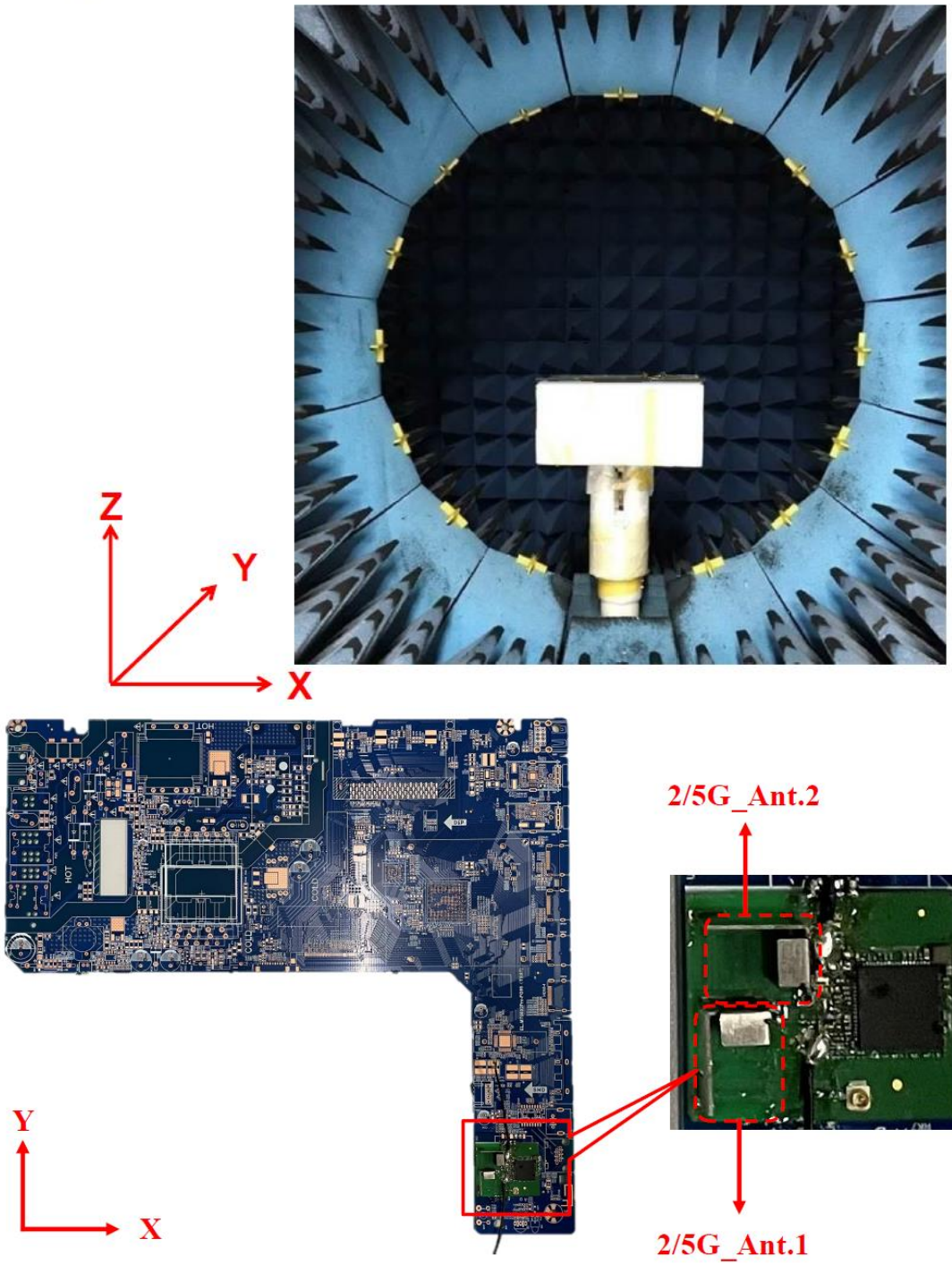
DESIGNED BY：黃瑞郎	APPROVED BY：陳振榮	
TITLE：RFMTA110700NNLB004	DOCUMENT NO.	SPEC REV. A0

4. Performance Report：

Test Report

■Experimental Setup

Experimental Setup



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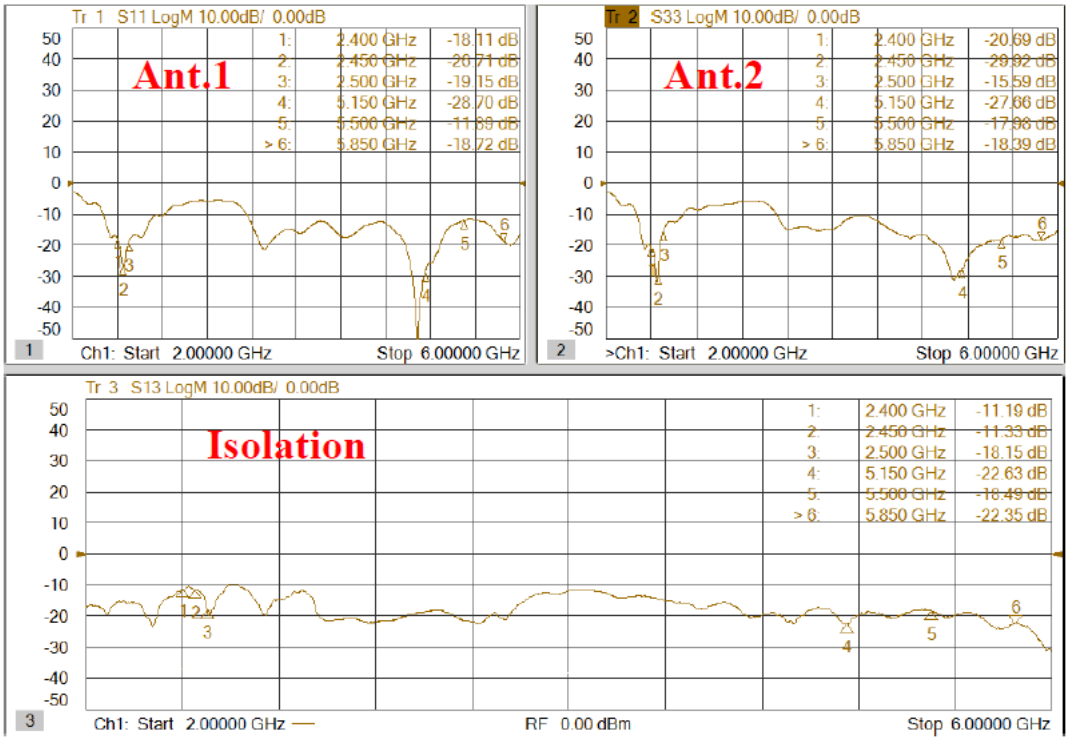
ELECTRICAL CHARACTERISTICS

Return Loss & Isolation



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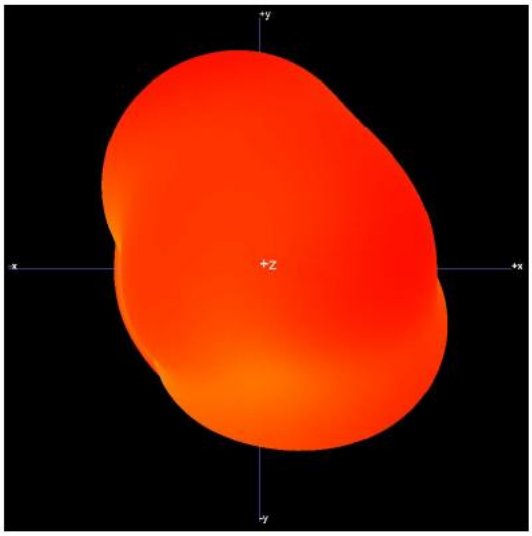
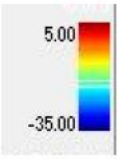
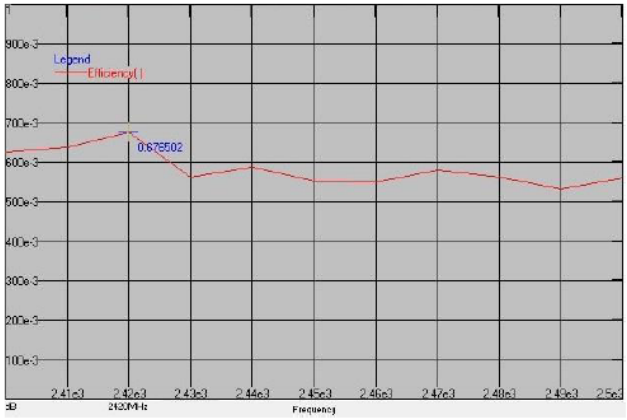
Antenna Efficiency and Peak Gain

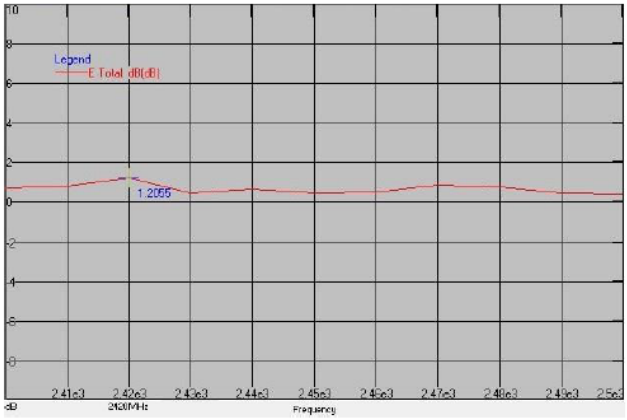
Ant.1_2G

2450 MHz









Maximum Efficiency at 2420 MHz : 67.65 %

Maximum Peak Gain at 2420 MHz : 1.20 dBi

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.
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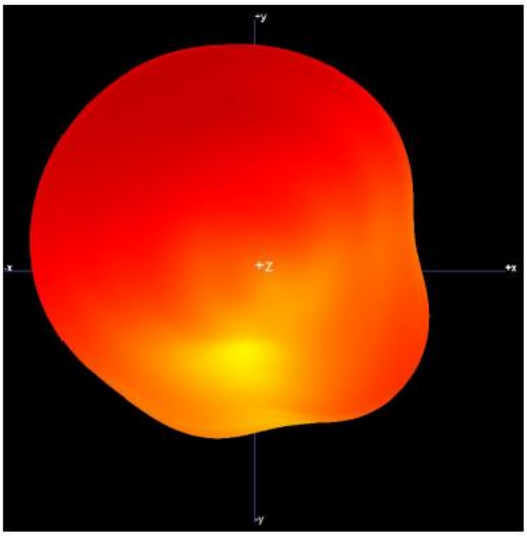
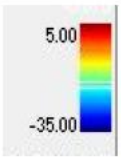
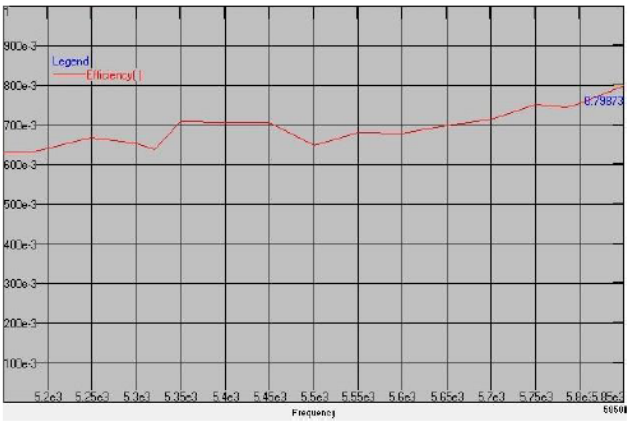
TITLE：RFMTA110700NNLB004		DOCUMENT NO.	SPEC REV. A0

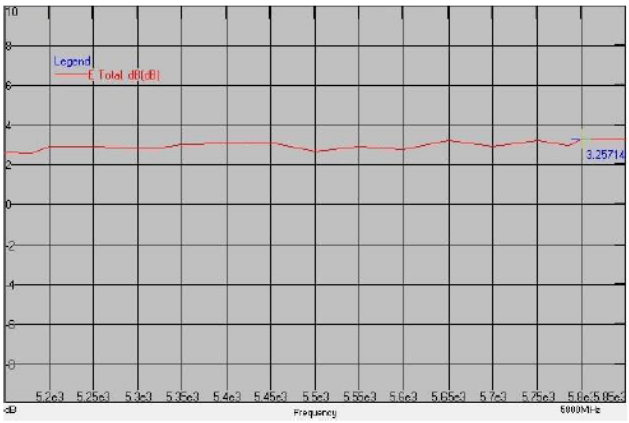
Ant.1_5G

5500 MHz









Maximum Efficiency at 5850 MHz : 79.87 %

Maximum Peak Gain at 5800 MHz : 3.25 dBi

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	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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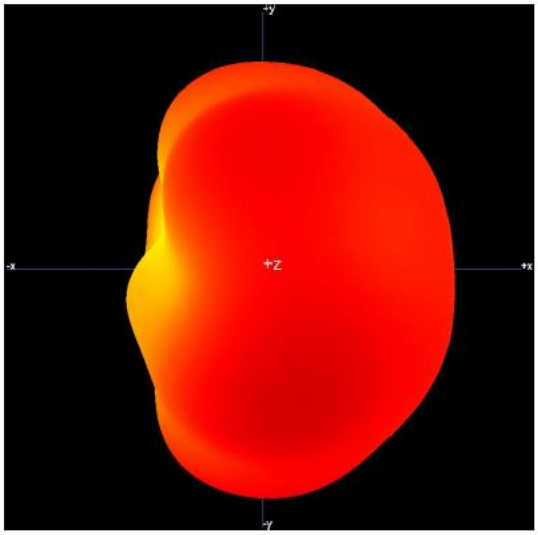
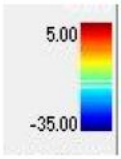
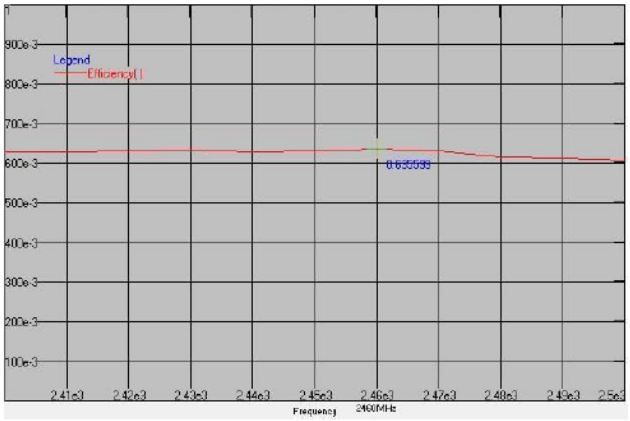
TITLE：RFMTA110700NNLB004		DOCUMENT NO.	SPEC REV. A0

Ant.2_2G

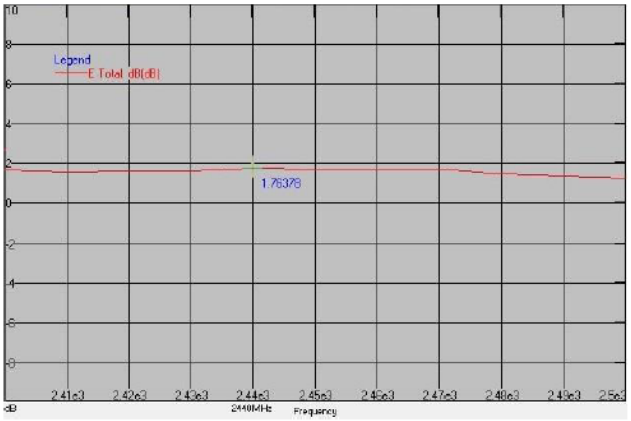
2450 MHz







Maximum Efficiency at 2460 MHz : 63.55 %



Maximum Peak Gain at 2440 MHz : 1.76 dBi

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.
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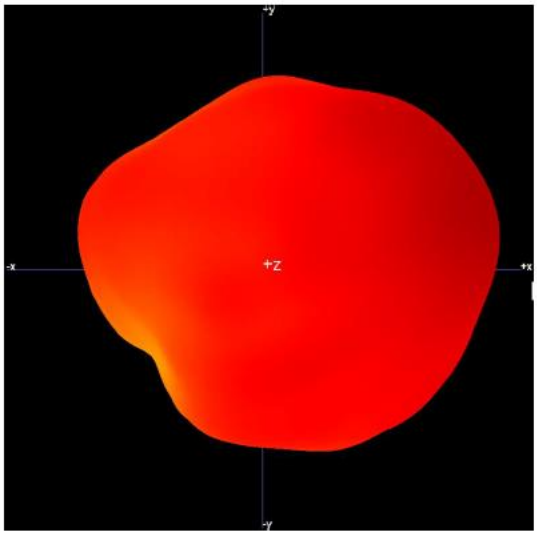
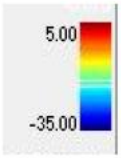
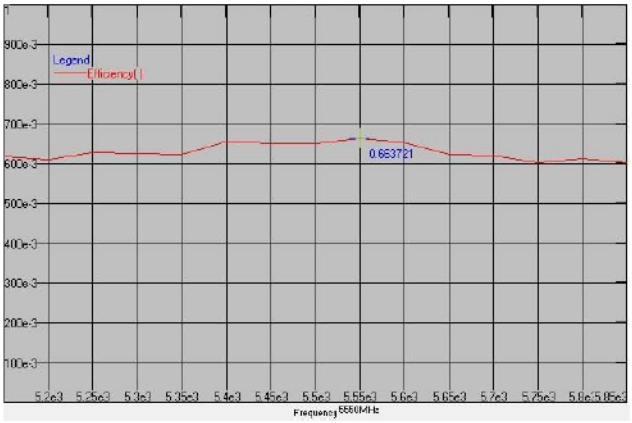
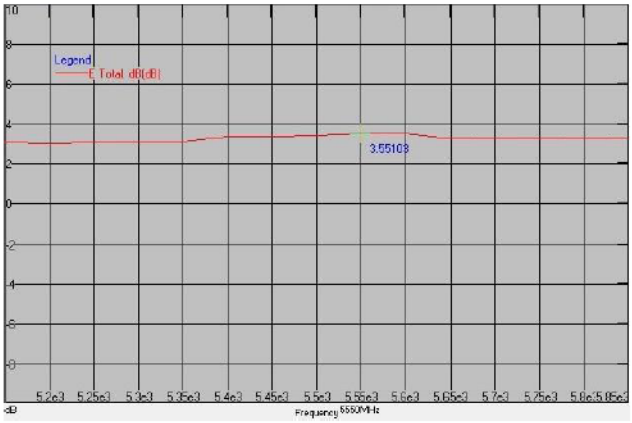
Ant.2_5G

5500 MHz









Maximum Efficiency at 5550 MHz : 66.37 %

Maximum Peak Gain at 5550 MHz : 3.55 dBi

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.
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DESIGNED BY：黃瑞郎	APPROVED BY：陳振榮		
TITLE：RFMTA110700NNLB004		DOCUMENT NO.	SPEC REV. A0

RADIATION PATTERN

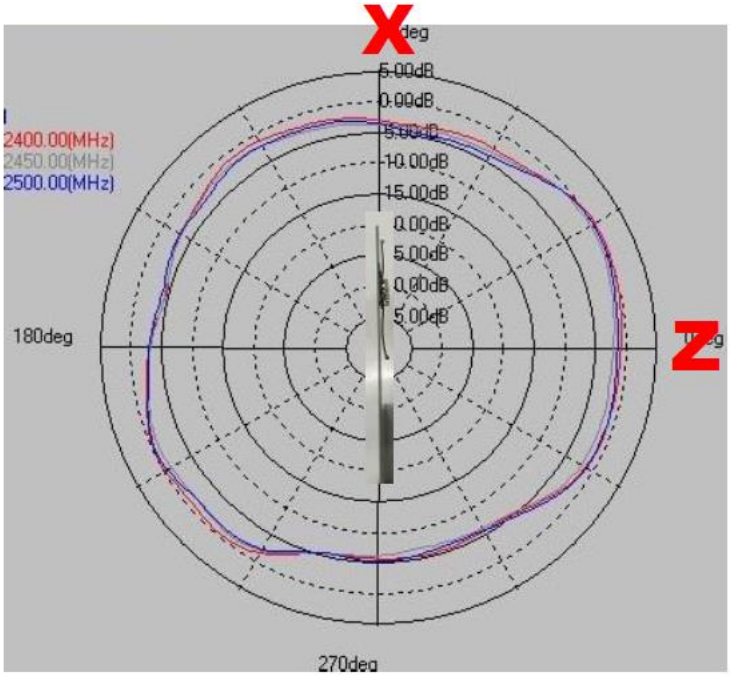
Ant.1

2400 ~ 2500MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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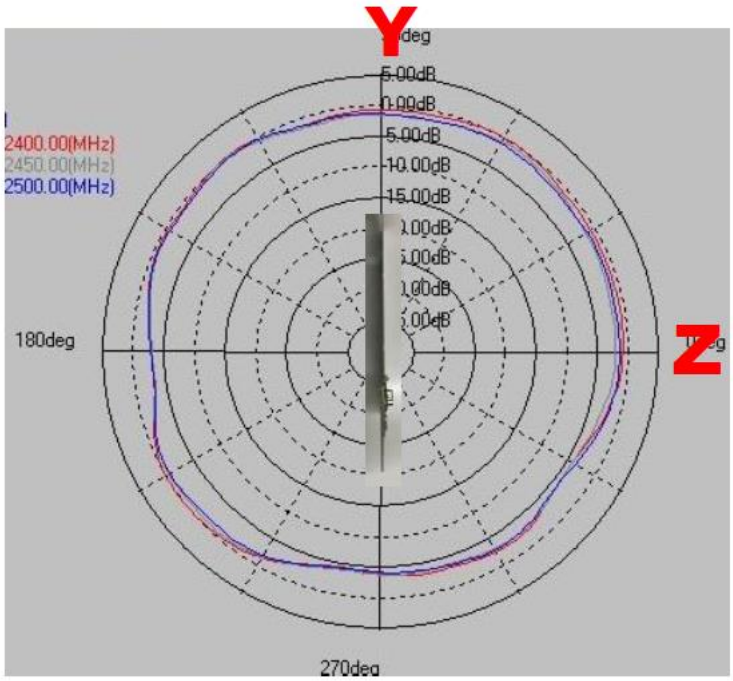
Y-Z Plane

Phi=90.00deg

Gain . dB



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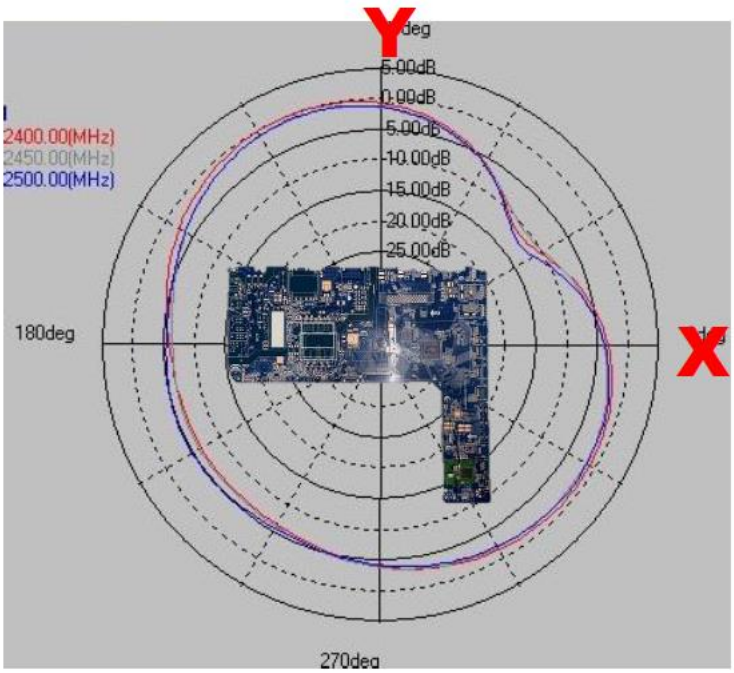
X-Y Plane

Theta=90.00deg

Gain . dB



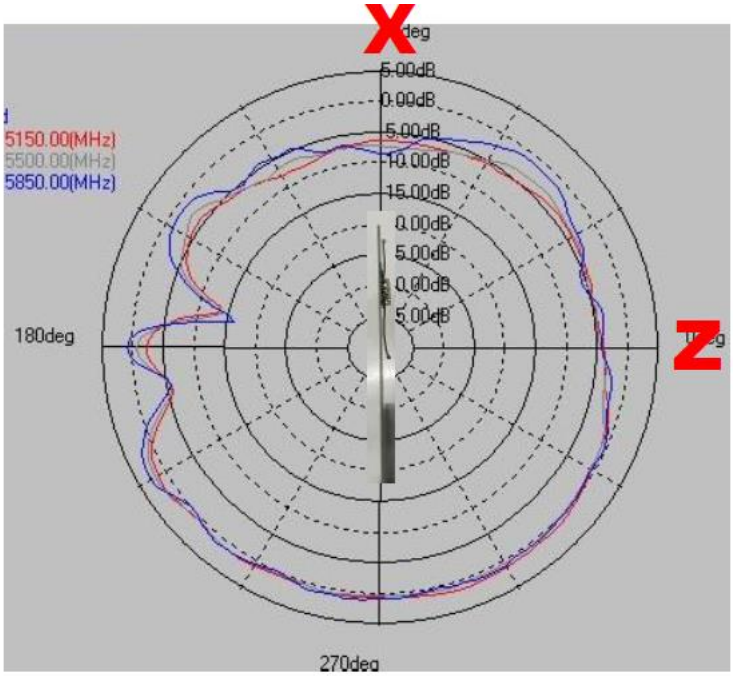
	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2400	0.42	-2.19	0.17	-1.44	-0.13	-3.25
2450	0.39	-2.67	-0.10	-1.95	-0.92	-3.80
2500	0.11	-2.59	-0.19	-1.90	-0.84	-3.67

Ant.1
5150 ~ 5850MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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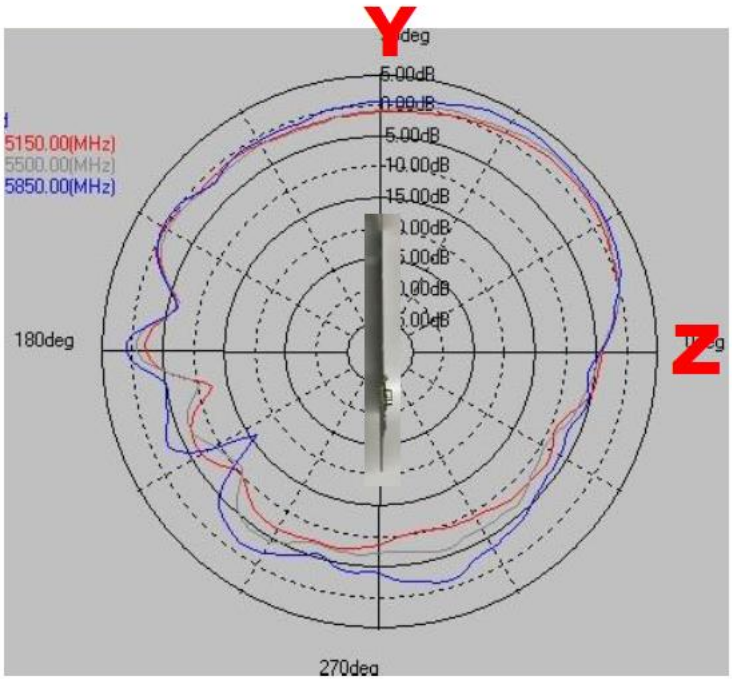
Y-Z Plane

Phi=90.00deg

Gain . dB



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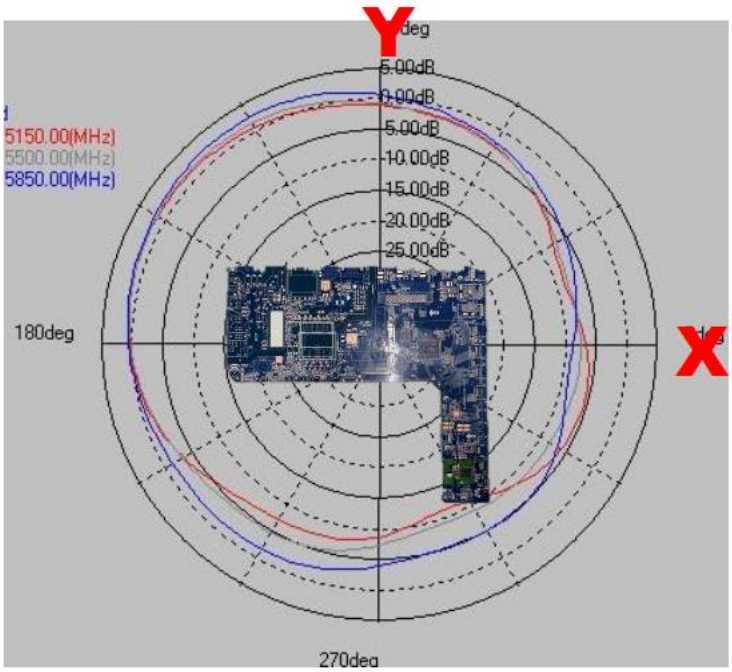
X-Y Plane

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	1.57	-1.96	1.76	-2.74	1.38	-2.78
5500	1.97	-1.98	2.40	-2.38	1.58	-2.54
5850	2.76	-1.40	3.13	-1.14	2.36	-1.37

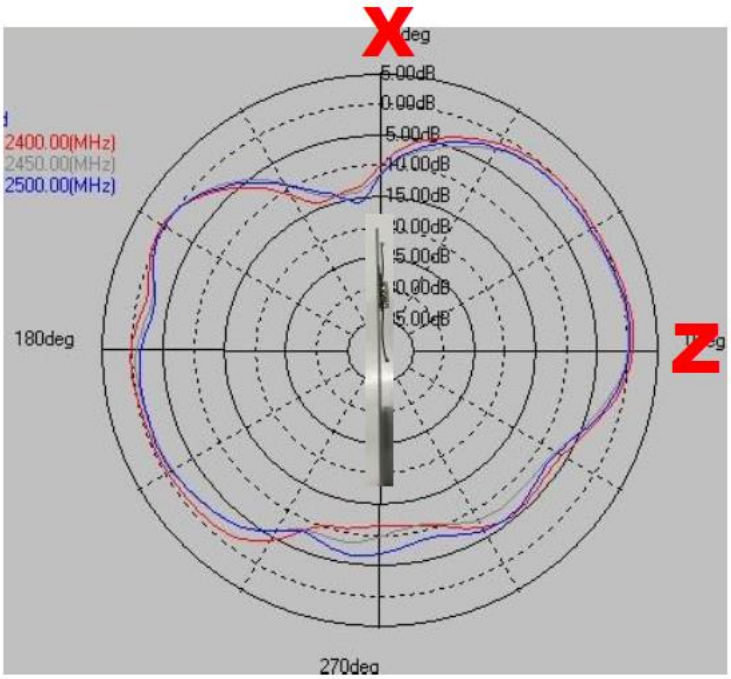
Ant.2

2400 ~ 2500MHz

X-Z Plane

Phi=0.00deg

Gain . dB



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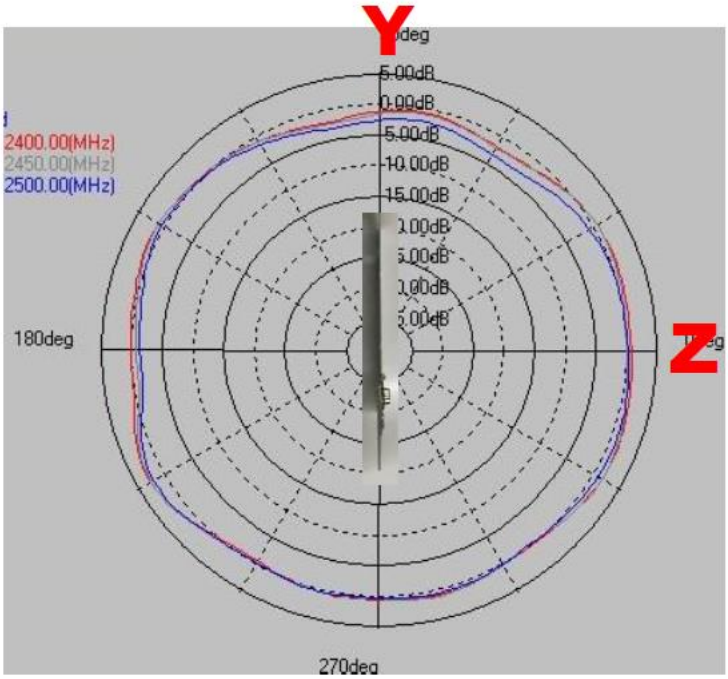
Y-Z Plane

Phi=90.00deg

Gain . dB



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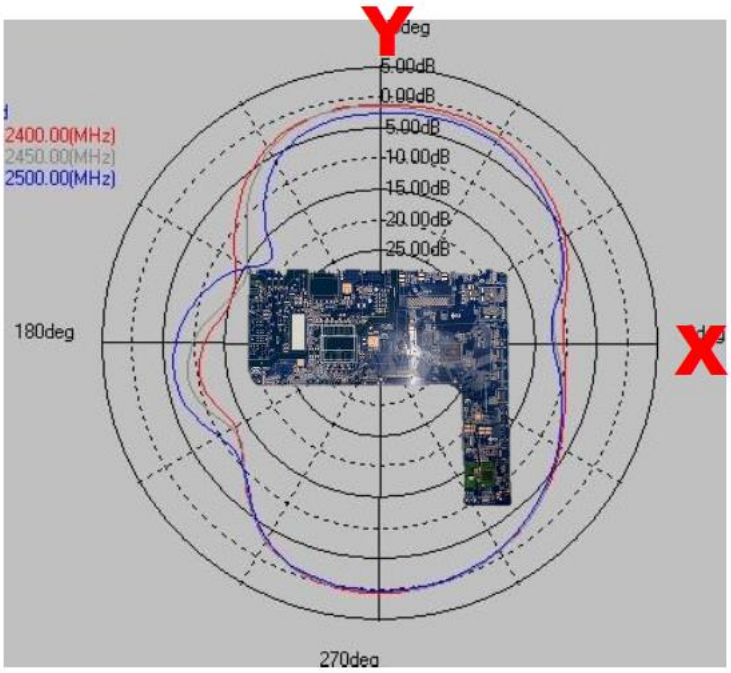
X-Y Plane

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	1.03	-2.47	1.63	0.31	0.36	-3.85
2450	0.30	-3.23	1.58	0.13	0.18	-4.12
2500	0.50	-3.08	1.10	-0.36	0.01	-4.47

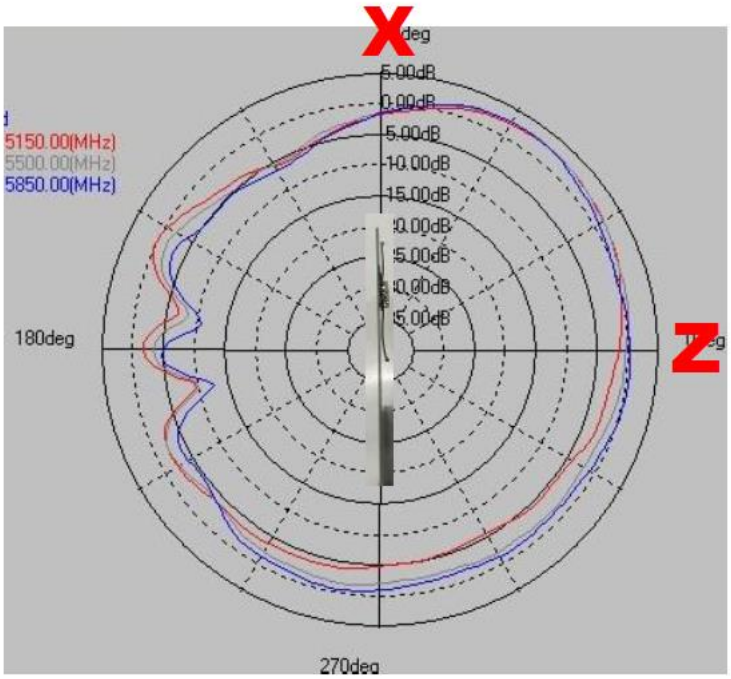
Ant.2

5150 ~ 5850MHz

X-Z Plane

Phi=0.00deg

Gain . dB

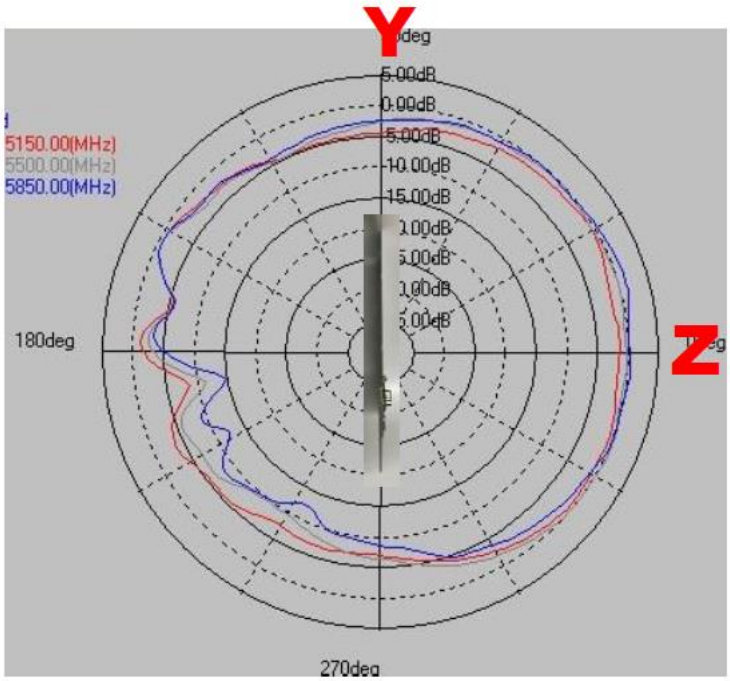


UNLESS OTHER SPECIFIED TOLERANCES ON： X＝N/A X.X＝N/A X.XX＝N/A ANGLES＝N/A HOLEDIA＝N/A			INPAQ TECHNOLOGY CO., LTD.
SCALE：N/A	UNIT：mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY：詹惠雯	CHECKED BY：詹惠雯		
DESIGNED BY：黃瑞郎	APPROVED BY：陳振榮		
TITLE：RFMTA110700NNLB004		DOCUMENT NO.	SPEC REV. A0

Y-Z Plane

Phi=90.00deg

Gain . 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.
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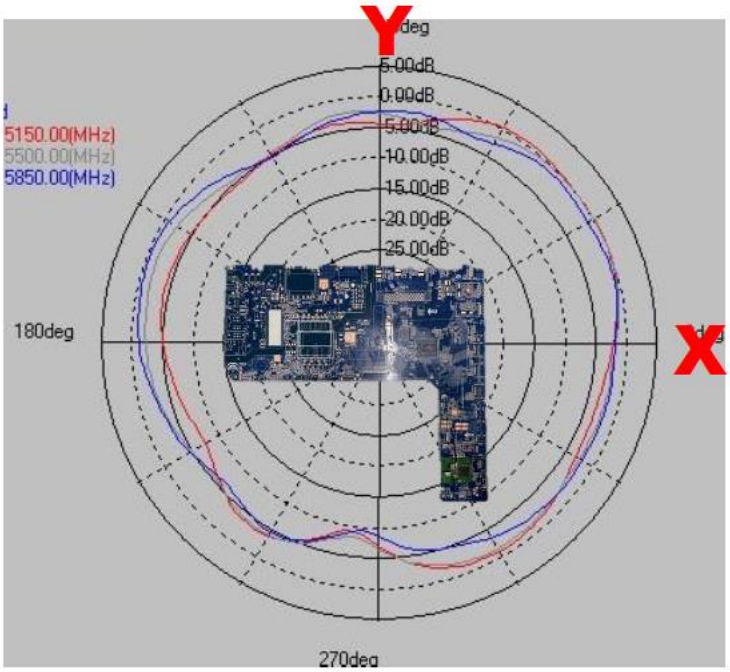
TITLE：RFMTA110700NNLB004		DOCUMENT NO.	SPEC REV. A0

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	2.54	-1.91	0.47	-2.95	0.36	-3.06
5500	2.67	-1.34	0.44	-2.51	0.08	-2.64
5850	2.59	-1.38	1.27	-2.67	0.33	-2.79