

# APPROVAL SHEET

**Dipole ANTENNA**

**802.11 b/a Series**

**2.4/5.x GHz Dual Band Working Frequency**

**Halogens Free Product**

**P/N: RFDPA151300SBLB8G1**

Customer : 友旺科技股份有限公司

Customer 's Part No. : M30-15130-000

Approval No. :

Issue Date :

友旺品名敘述:

ANTENNA RFDPA151300SBLB8G1 Gain 3dB/5dB 50ohm 157.5mm  
Black Walsin LF

\*Contents in this sheet are subject to change without prior notice.

Version	Date	Description	Author
V01	2015 May.	New Release	PIPI

Approval sheet

**ELECTRICAL CHARACTERISTICS**

Item	Specification
Working Frequency Range	2.4 / 5.X GHz (Note-1)
Gain	3 dBi ; 5dBi
Return Loss	-10dB(Max)
VSWR	2 max.
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω

\*Note 1. Central Frequency should be defined after customers' application approval.

**MATERIAL TABLE**

Items	Description
Cable	RG178(Brown)
Antenna Cover	TPEE
Antenna Base	PC/PBT
Connector	Reverse SMA Plug
Color	Black
Brass Tube	Brass
Spring	Phosphor Bronze
Tube	CB-HFT

**ORDERING RULE**

RF	DPA	1513	00	S	B	L	B	8	G1
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 1513 Length 157.5mm, Width 13mm	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 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:φ0.81 3:φ1.13 6:RG316 7:φ1.37 8:RG178	01~99 series number

## DIMENSIONS

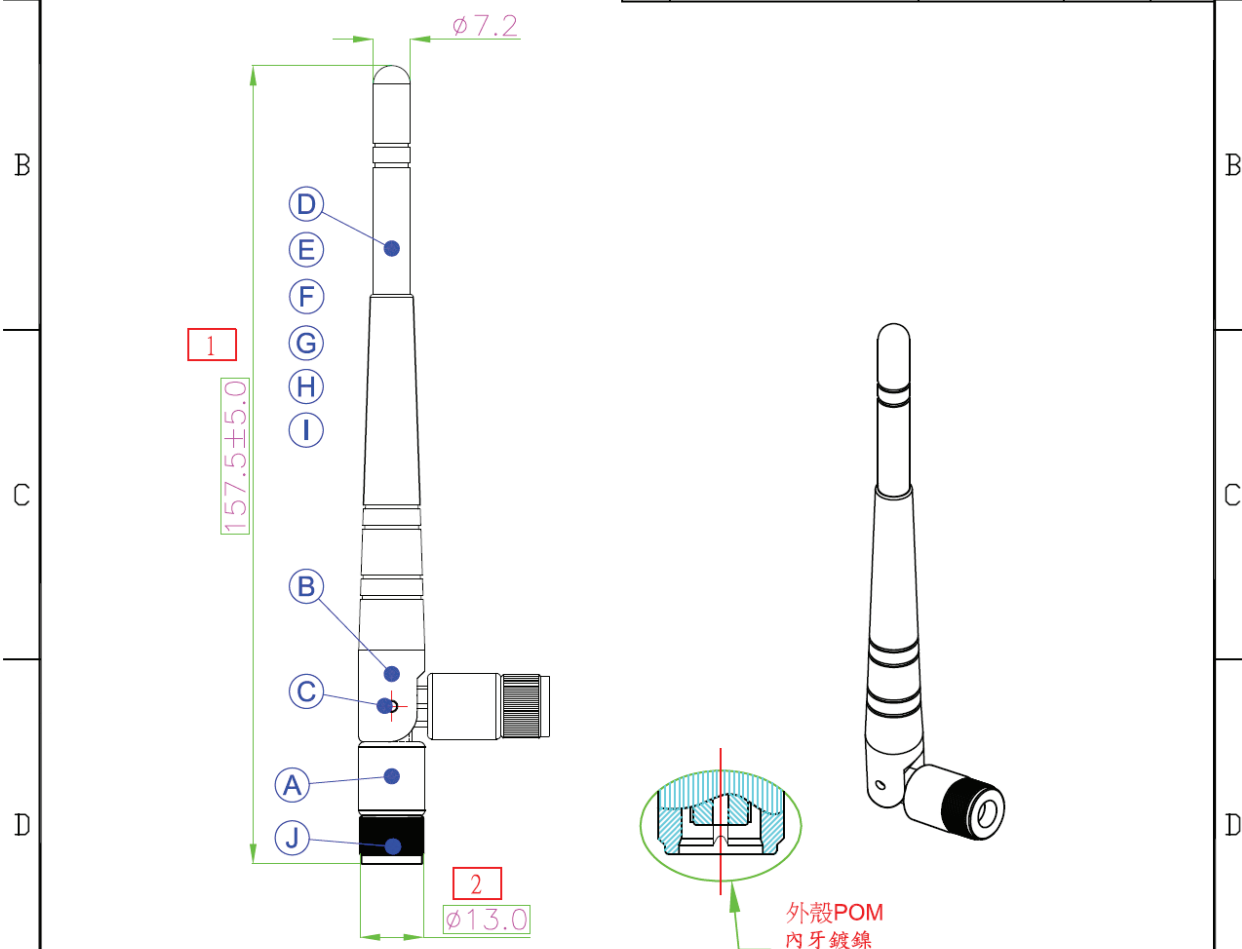
ELECTRICAL

Frequency: 2.4/5. x GHZ

Peak Gain: 2.4 GHz: 3dBi

5. x GHz: 5dBi

No.	DESCRIPTION	MAT'L	Color	Q'TY
A	Antenna Down Base	PC+PBT	Black	1
B	Antenna Up Base	PC	Black	1
C	Rivet	POM	Black	2
D	Antenna Cover	TPEE	Black	1
E	Up Brass Tube	Brass	---	1
F	Down Brass Tube	Brass	---	1
G	Spring	Phosphor Bronze	---	1
H	RG178 CABLE	---	Brown	1
I	TUBE	CB-HFT	Black	1
J	Reverse SMA Plug	---	Black	1



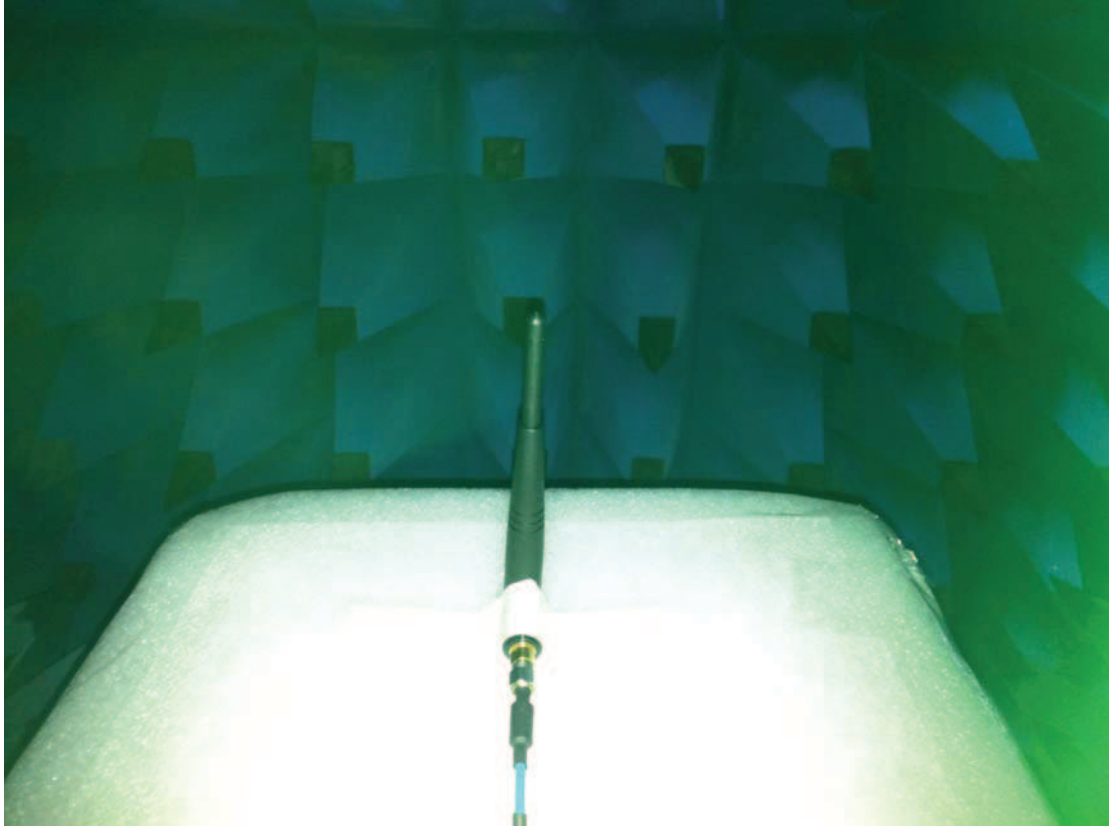
※標記□記號者，為重點檢驗尺寸

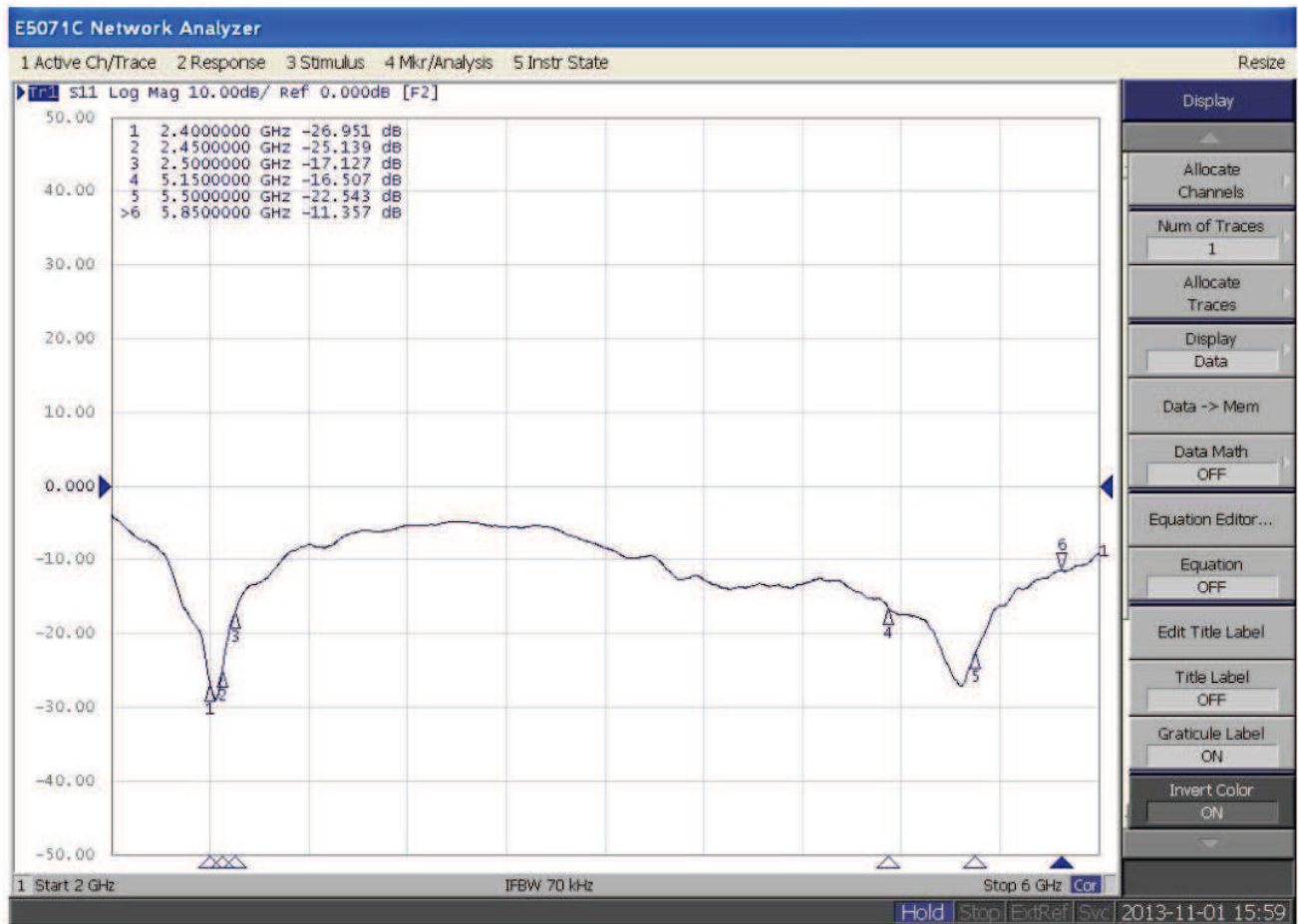
				設計 DR.	HWCHAN	2013.08.29	品名	版本 REV.
				核准 APP.			ARTICLE	A
				容許公差	TOLERANCE		RFDPA151300SBLB8G1	
				.XXX	±0.20			
				.XX	±0.35		單位 UNIT	比例 SCALE
				.X	±0.50		mm	****
				X	±1.00		張數 SHEET	1
				ANG	±5			


**華新科技股份有限公司**  
**Walsin Technology Corporation**

## Test Report

### ■ Experimental Setup



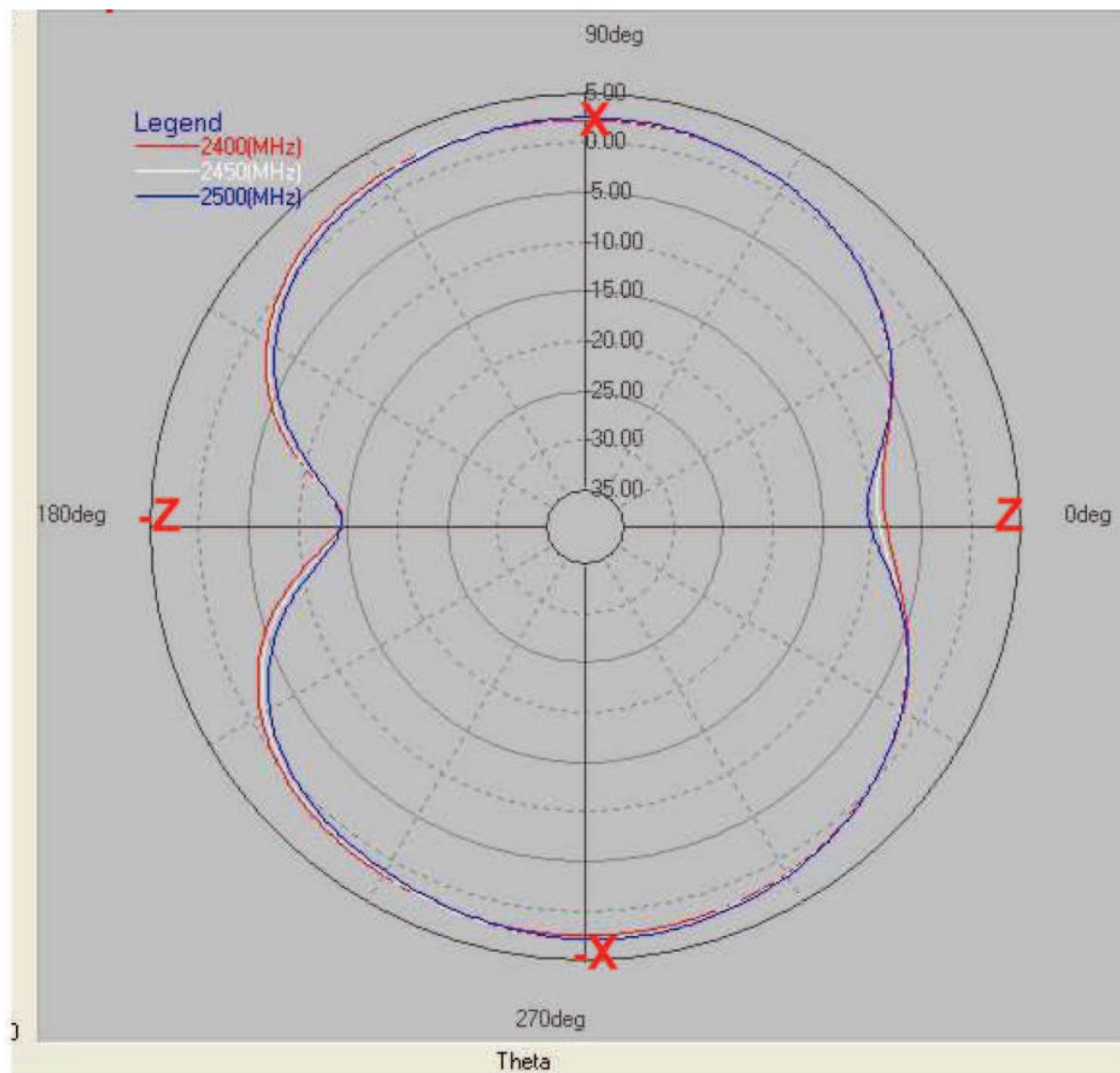
**ELECTRICAL CHARACTERISTICS****Return Loss**

# RADIATION PATTERN

2400~2500 MHz

Phi=0.00deg

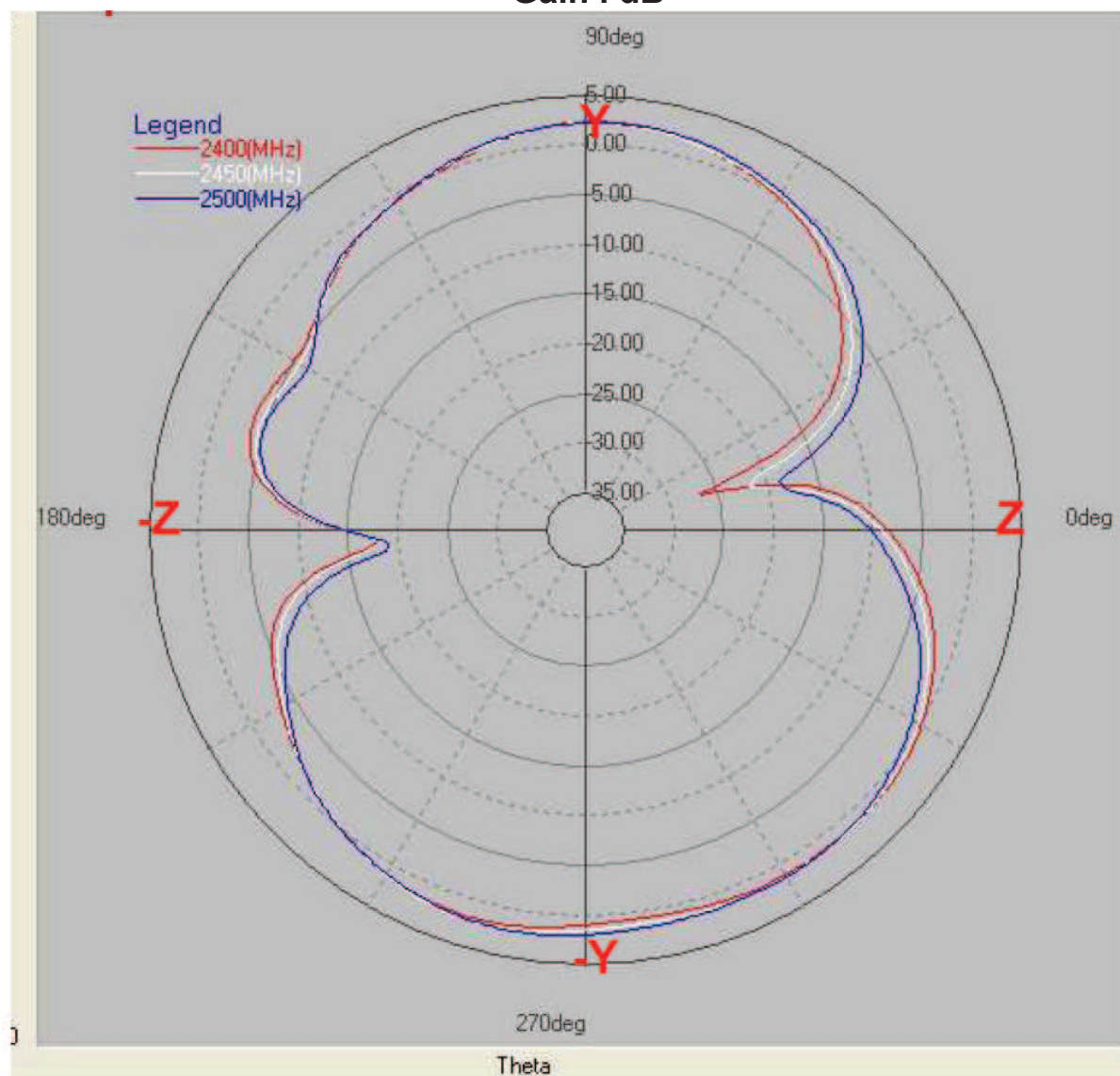
Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	2.29	-14.39	-0.06
2450(MHz)	2.58	-14.39	-0.08
2500(MHz)	2.73	-14.33	-0.19



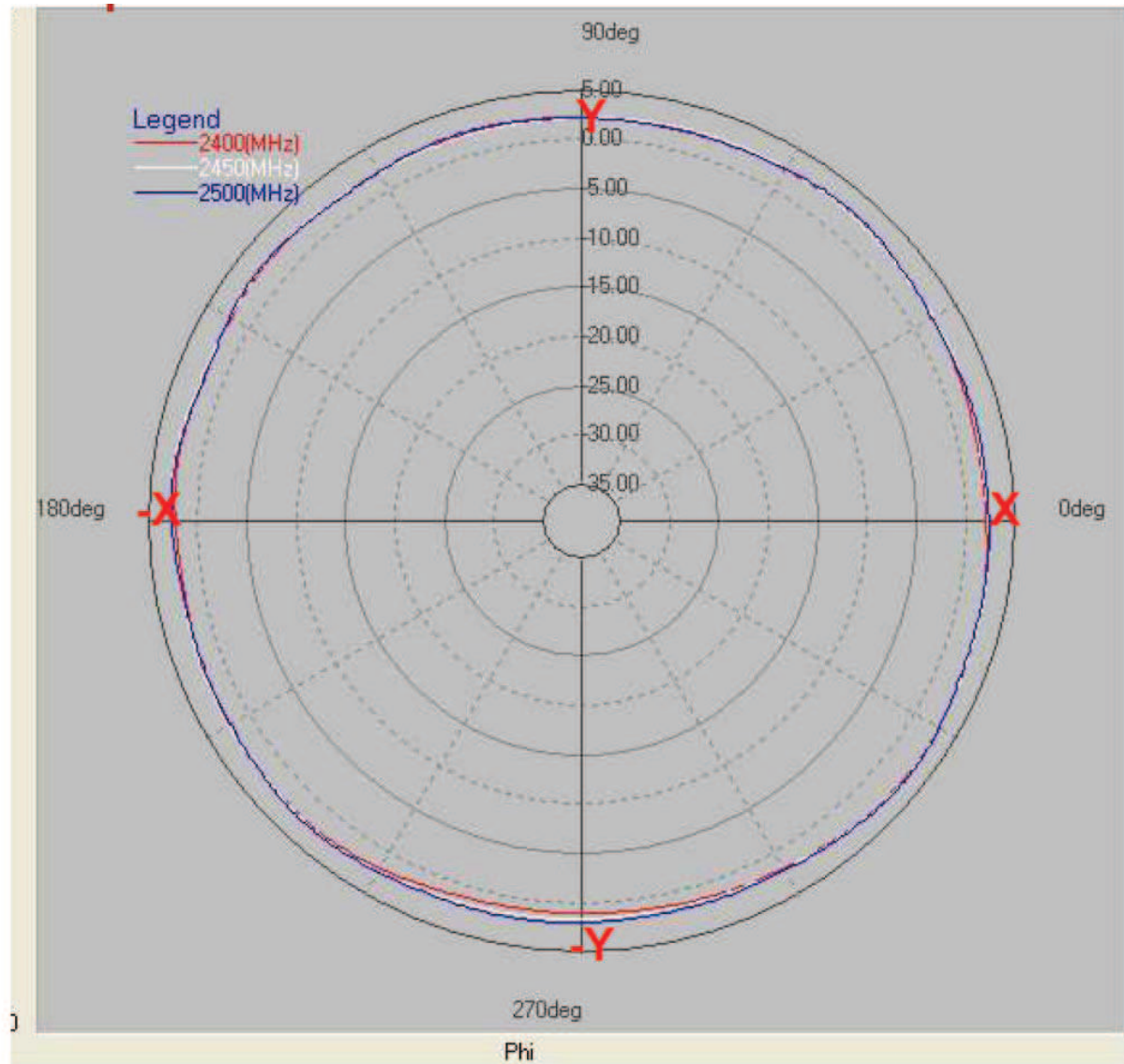
Phi=90.00deg  
Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	2.20	-27.55	-1.05
2450(MHz)	2.09	-21.76	-0.97
2500(MHz)	2.11	-19.03	-0.94



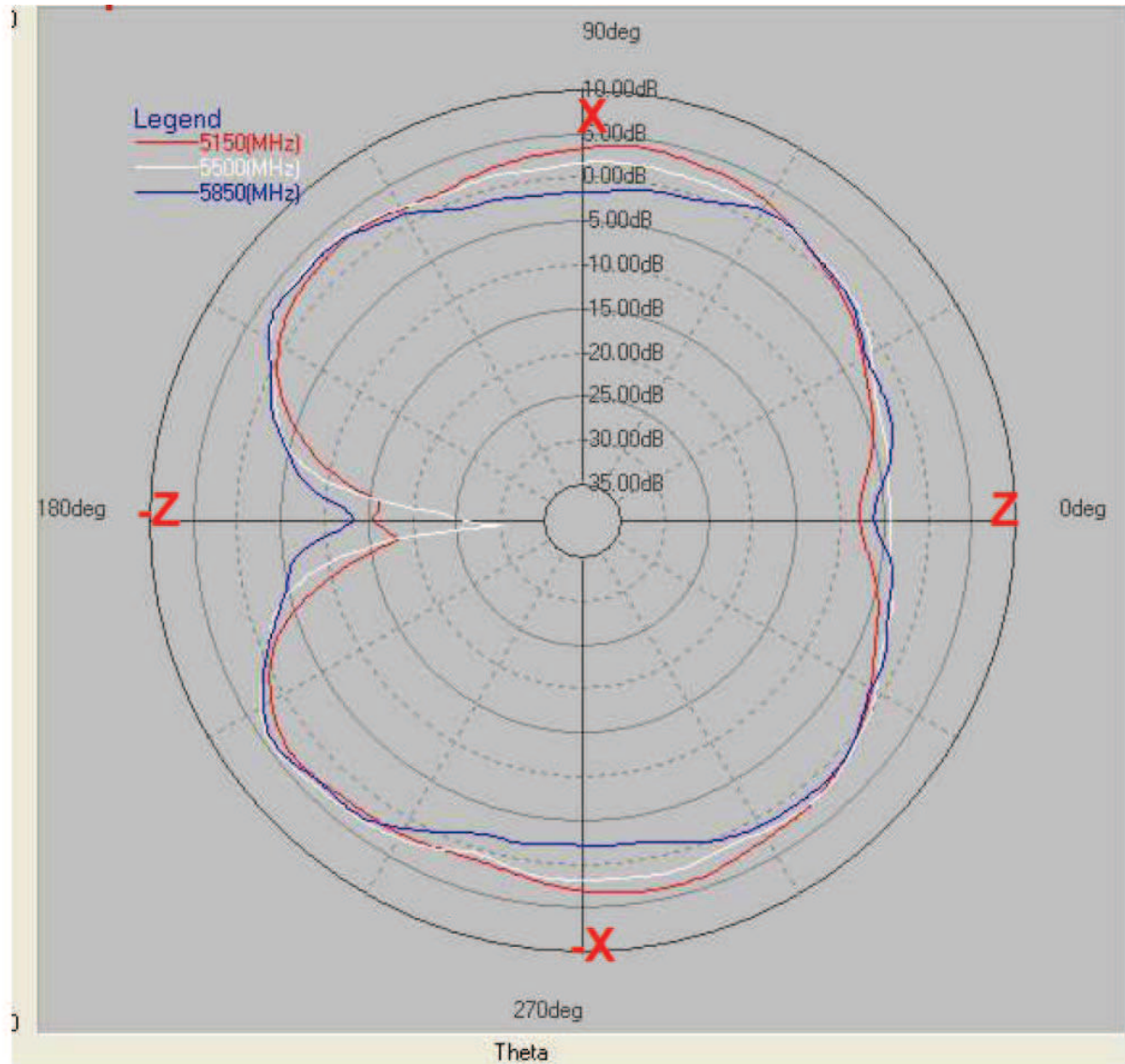
Theta=90.00deg  
Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	3.03	0.89	2.13
2450(MHz)	3.11	1.41	2.26
2500(MHz)	3.18	1.76	2.30

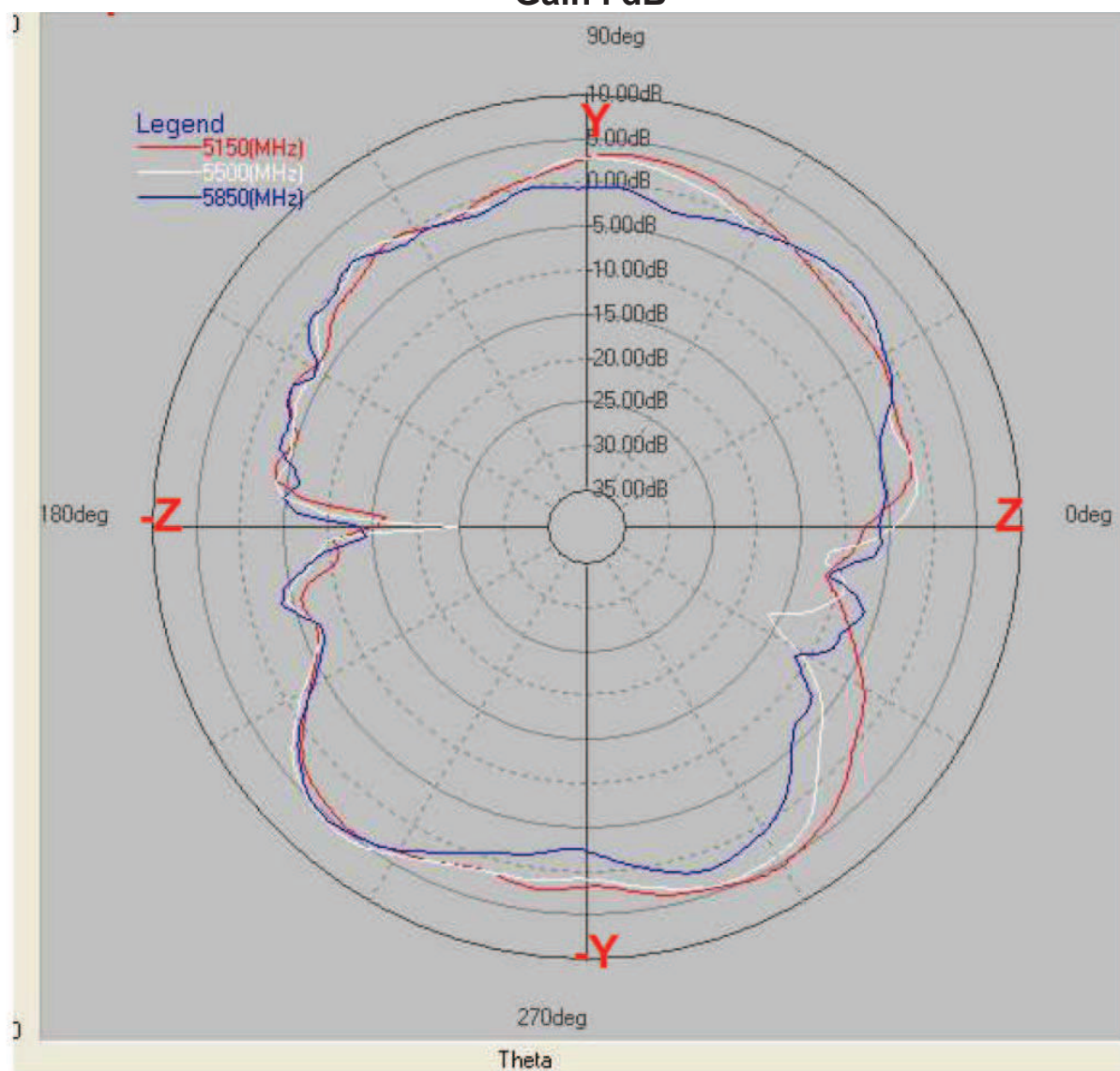
5150~5850 MHz

Phi=0.00deg  
Gain . dB



Layer	Max value	Min value	Average
5150(MHz)	3.73 dB	-18.38 dB	0.26 dB
5500(MHz)	4.32 dB	-30.78 dB	0.31 dB
5850(MHz)	3.98 dB	-13.58 dB	-0.62 dB

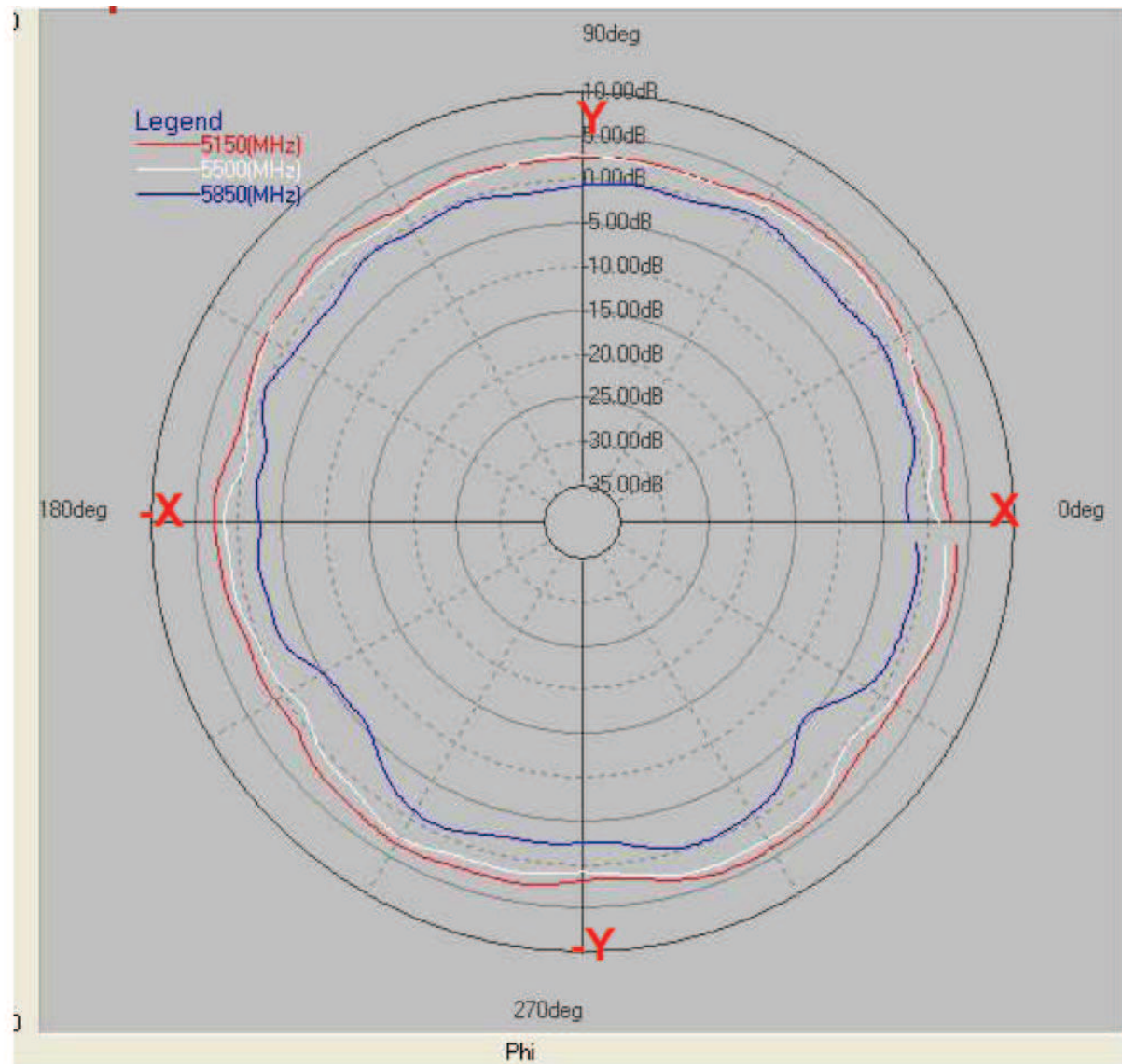
Phi=90.00deg  
Gain . dB



Layer	Max value	Min value	Average
5150(MHz)	5.17 dB	-16.65 dB	-0.22 dB
5500(MHz)	5.44 dB	-24.82 dB	-0.49 dB
5850(MHz)	5.12 dB	-14.41 dB	-1.62 dB



Theta=90.00deg  
Gain . dB



Layer	Max value	Min value	Average
5150(MHz)	3.80 dB	0.90 dB	2.57 dB
5500(MHz)	3.13 dB	-1.07 dB	1.70 dB
5850(MHz)	0.82 dB	-5.67 dB	-1.43 dB

## Package



蘇州華科電子有限公司

## 制品規格書

版別：1.0.0

客戶		品名	RFDPA151300SAXB8G1	發行編號		頁次	1/1
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產品包裝圖示：

圖示一

單PCS產品      PE袋      10pcs產品包裝

圖示二

珍珠棉      外箱      珍珠棉放進外箱中

圖示三

產品包裝說明：

- 1.將每10PCS產品裝入1PE袋中(如圖示一)
- 2.將珍珠棉放入外箱中(如圖示二)
- 3.將裝好的成品(如圖示三)放入外箱中，每箱放600pcs產品，上下各放1片珍珠棉。
- 4.包裝材料規格
  - 4.1 PE袋規格: 長250\*寬100\*厚度0.05mm
  - 4.2 珍珠棉規格: 長330\*寬330\*高8mm
  - 4.3 外箱規格: 長350\*寬350\*高190mm
- 5.產品標籤需貼到最小包裝

FORM NO :