

Dipole Antenna

- RFDPA151300SBAB8G1 for Single Band 2.4 GHz Application

ELECTRICAL CHARACTERISTICS

Item	Specification
Working Frequency Range	2.4 ~ 2.5 GHz (Note-1)
Gain	3 dBi
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

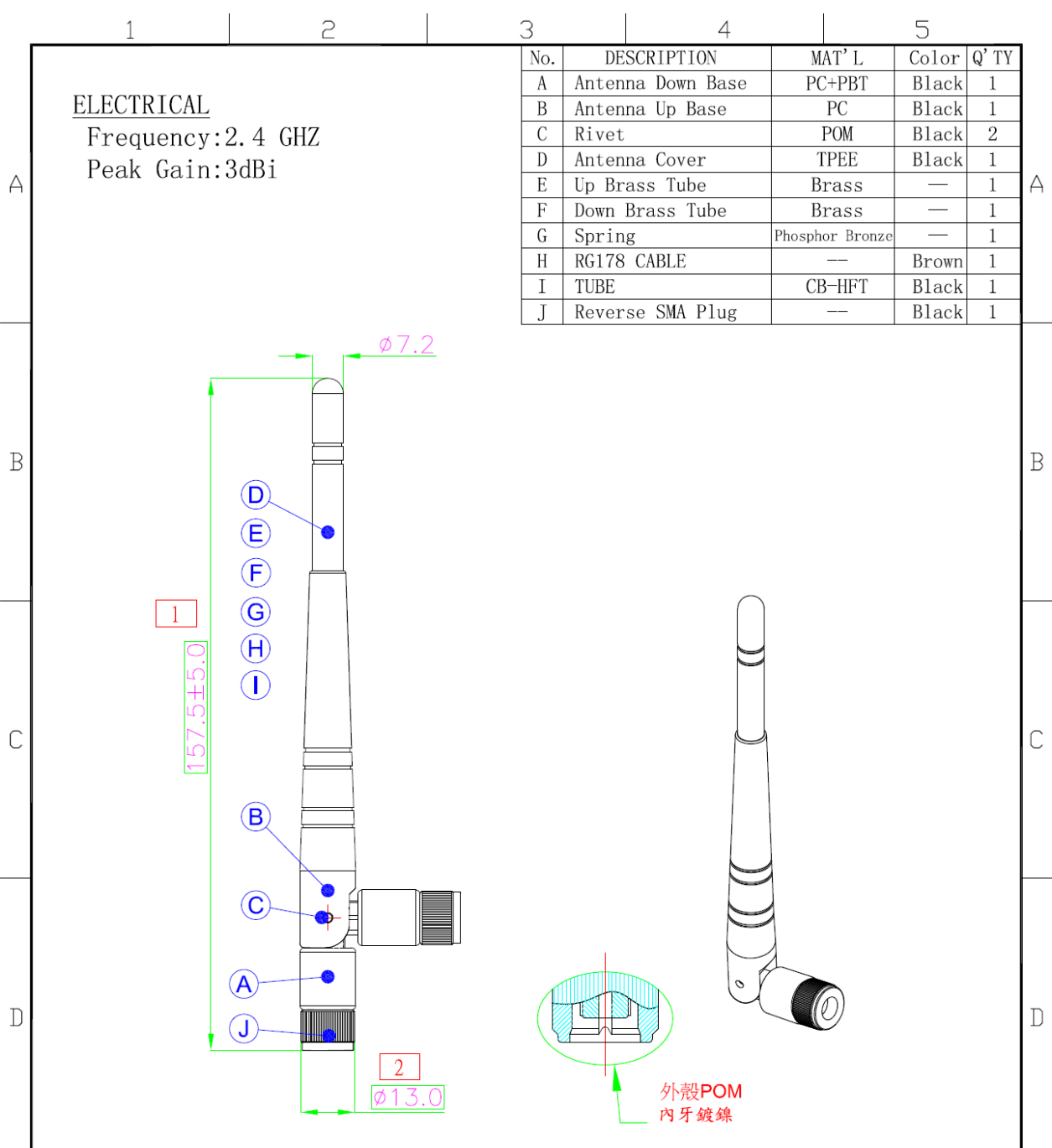
RF	DPA	1513	00	S	B	A	B	8	G1
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 1513 Length 157.5mm, Width 13mm	2 digits for 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:∅0.81 3:∅1.13 6:RG316 7:∅1.37 8:RG178	01~99 series number

DIMENSIONS

ELECTRICAL

Frequency: 2.4 GHZ
Peak Gain: 3dBi

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



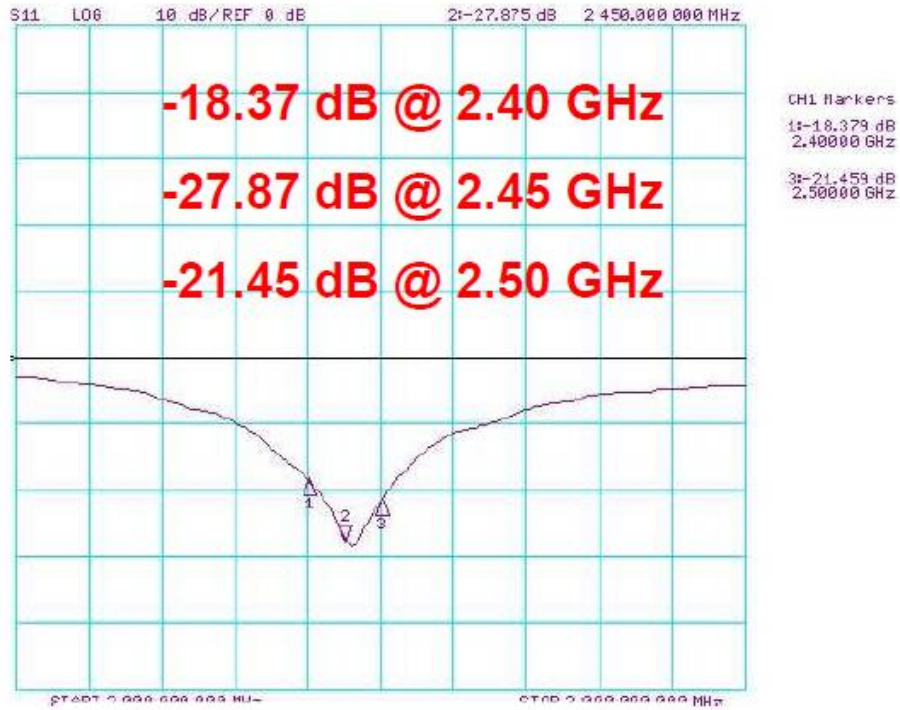
※標記□記號者, 為重點檢驗尺寸

設計 DR. HWCHAN 2013.08.29		品名		版本 REV.
核准 APPD.		ARTICLE		A
LTR	DESCRIPTION	DATE	REQ. BY	
容許公差 TOLERANCE		RFDPA151300SBAB8G1		
.XXX ±0.20		單位 UNIT	比例 SCALE	張數 SHEET
.XX ±0.35		mm	****	1
.X ±0.50				
X ±1.00				
ANG ±5				

Test Report

ELECTRICAL CHARACTERISTICS

Return Loss

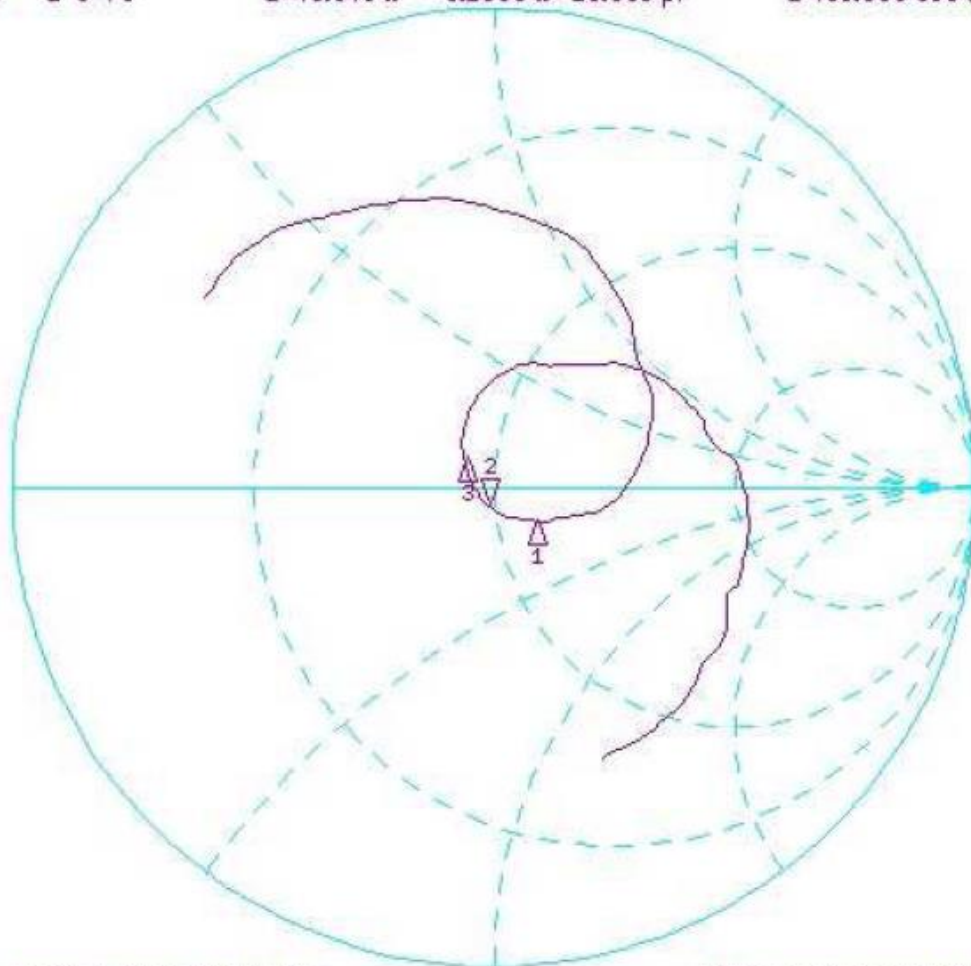


VSWR



Smith Chart

S11 1 U FS 2: 48.543 Ω -3.1895 Ω 20.368 pF 2 450.000 000 MHz



CH1 Markers

- 1: 58.548 Ω
-8.6523 Ω
2.40000 GHz
- 3: 44.281 Ω
5.4102 Ω
2.50000 GHz

START 2 000.000 000 MHz

STOP 3 000.000 000 MHz

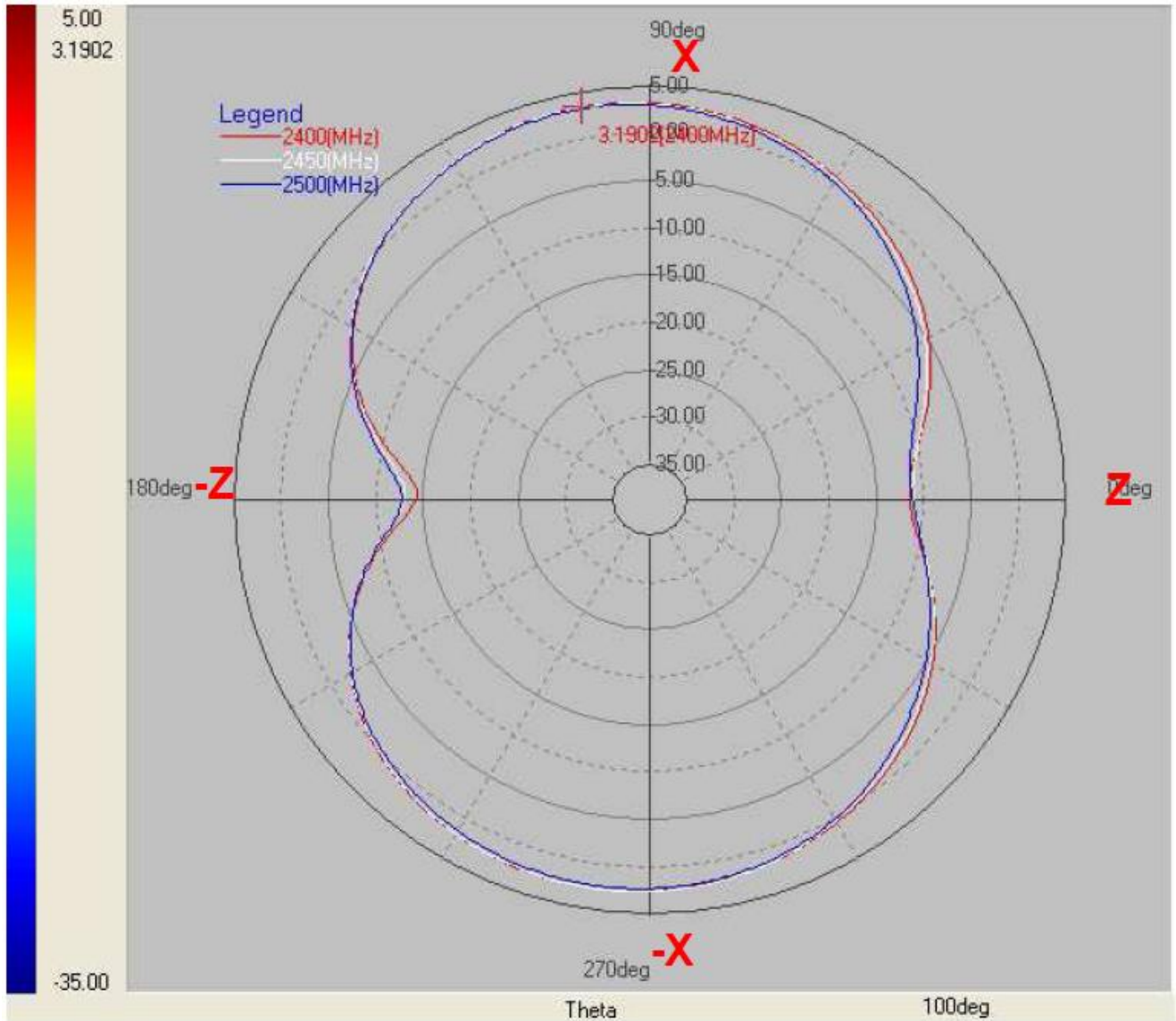
RADIATION PATTERN

2400~2500 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



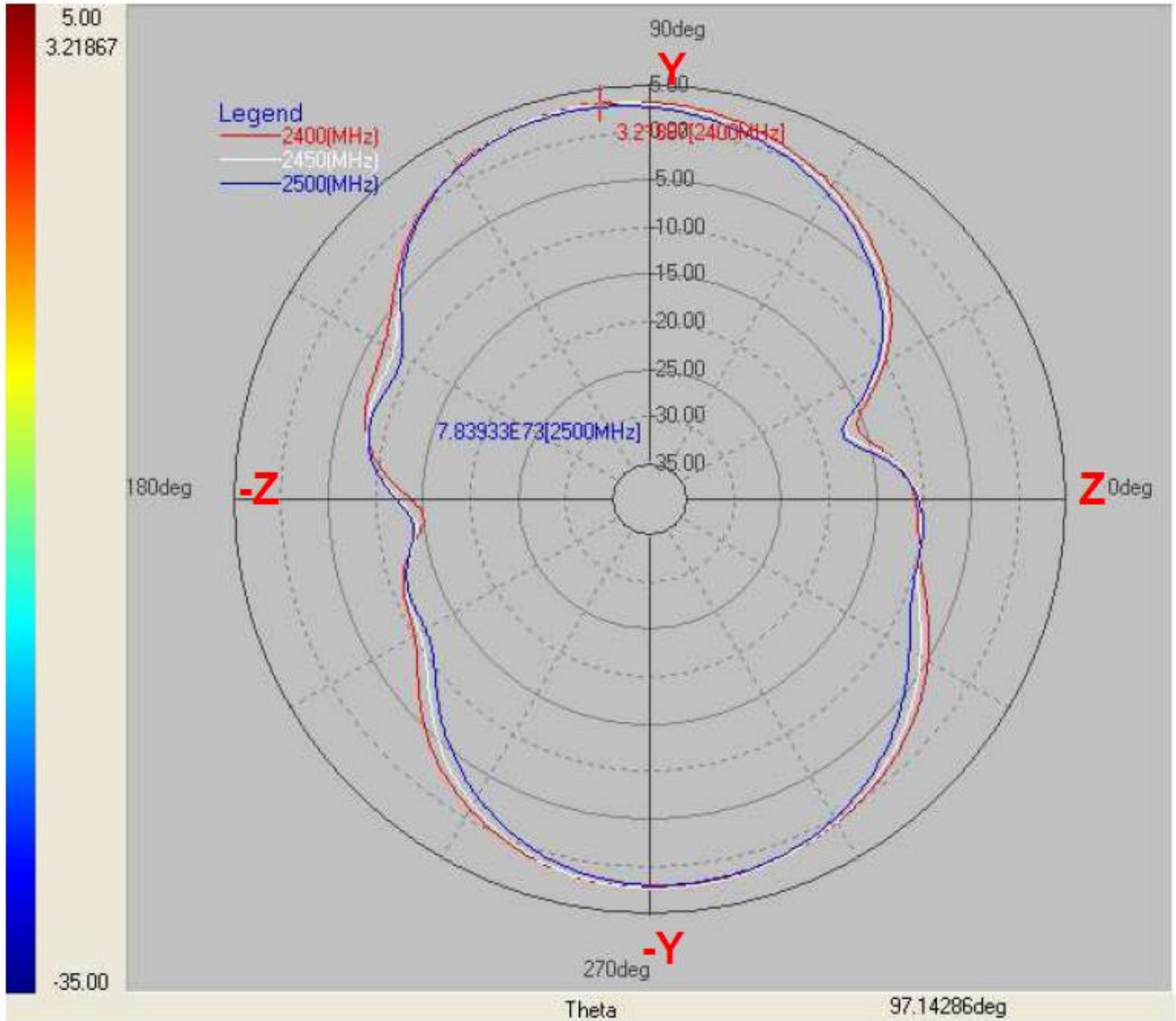
Layer	Max value	Min value	Average
2400(MHz)	3.19	-14.31	-0.32
2450(MHz)	3.13	-13.06	-0.39
2500(MHz)	3.02	-12.81	-0.64

2400~2500 MHz

Y-Z Plane

Phi=90.00deg

Gain . dB



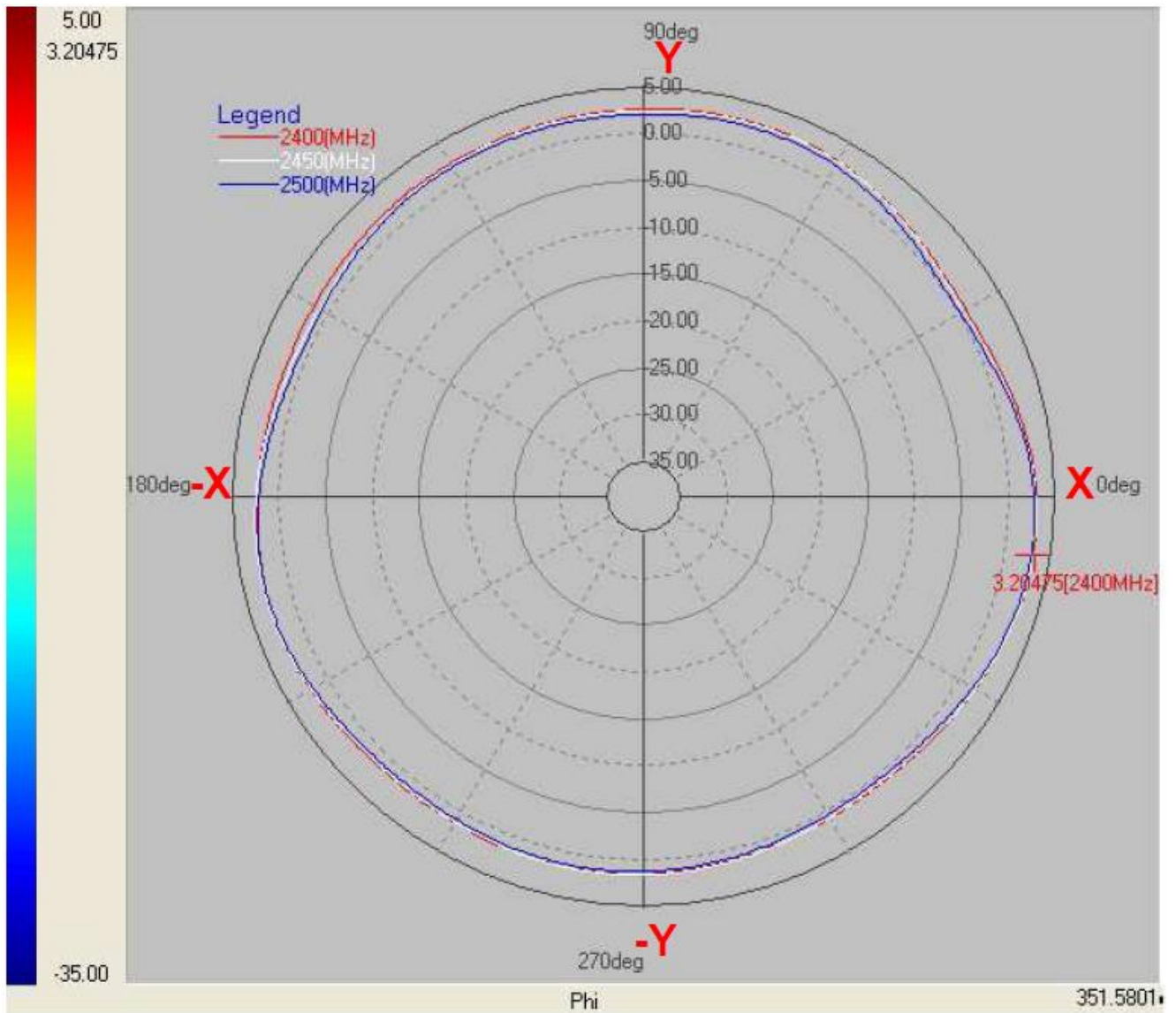
Layer	Max value	Min value	Average
2400(MHz)	3.22	-15.68	-1.39
2450(MHz)	3.17	-16.95	-1.59
2500(MHz)	3.12	-17.44	-2.00

2400~2500 MHz

X-Y Plane

Theta=90.00deg

Gain . dB



Layer	Max value	Min value	Average
2400(MHz)	3.20	0.76	1.96
2450(MHz)	3.16	0.63	1.83
2500(MHz)	3.10	0.17	1.53

Package

PSA 蘇州華科電子有限公司

制品規格書

版別：1.0.0

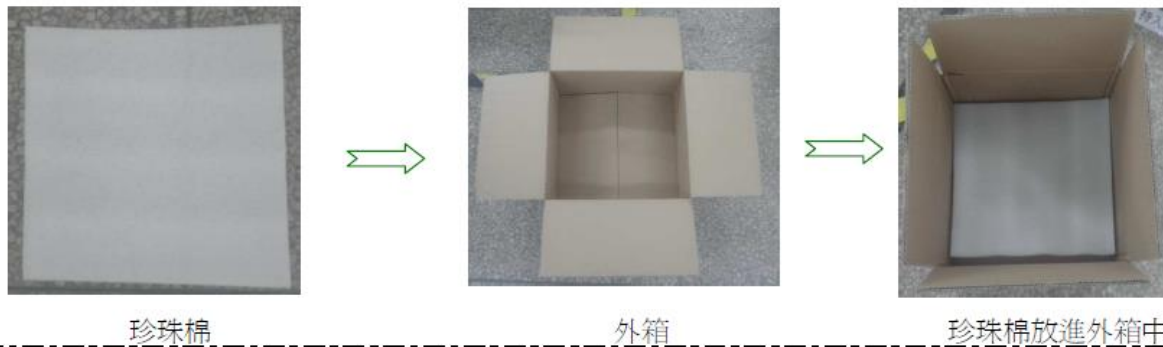
客戶		品名	RFDPA151300SAXB8G1(3dBi)	發行編號		頁次	1/1
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EDA-1513 3dBi 產品包裝圖示：

圖示一



圖示二



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 :