

# APPROVAL SHEET

**Dipole Antenna**

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

**Halogens Free Product**

**P/N: RFDPA870900SBLB8G1**

Customer : \_\_\_\_\_  
Customer 's Part No. : \_\_\_\_\_  
Approval No. : \_\_\_\_\_  
Issue Date : \_\_\_\_\_

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

Version	Date	Description	Author
V01	2018 Jan.	New Release	SHLEE

Approval sheet

**ELECTRICAL CHARACTERISTICS**

Item	Specification
Working Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz (Note-1)
Gain	2.4 ~ 2.5 GHz : 2 dBi 5.15 ~ 5.85GHz : 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.

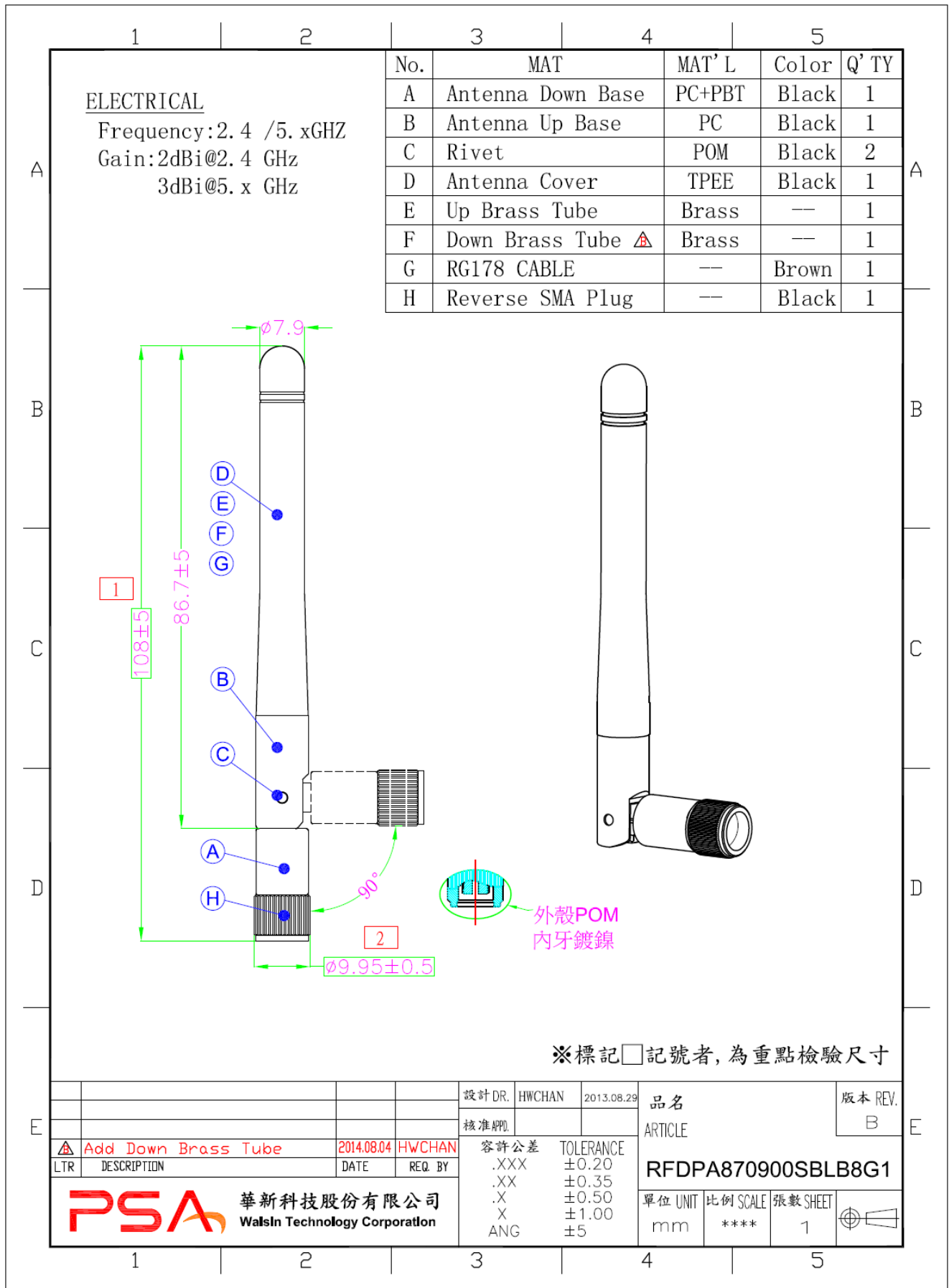
**MATERIAL TABLE**

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

**ORDERING RULE**

RF	DPA	8709	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.: 8709 Length 86.7mm, Width 9.95mm	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

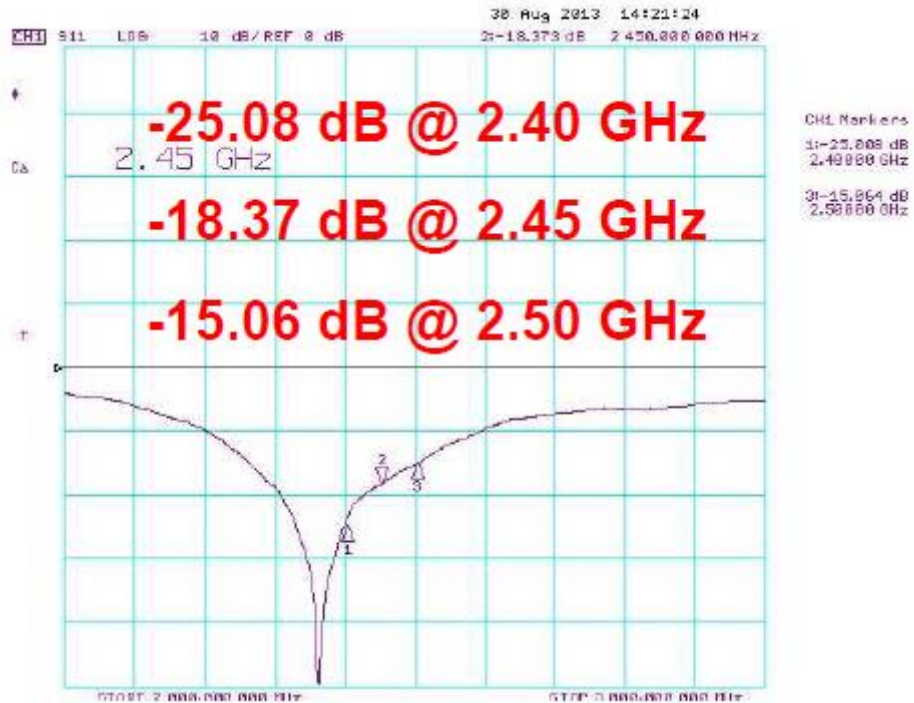
**DIMENSIONS**



# Test Report

## ELECTRICAL CHARACTERISTICS

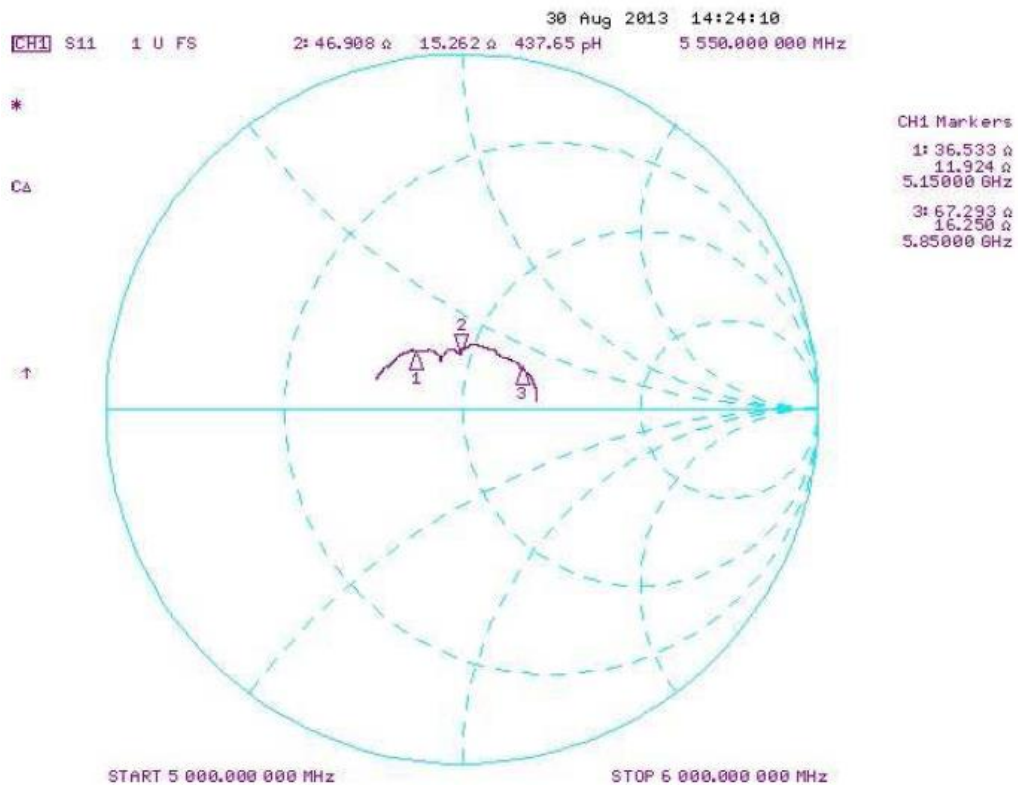
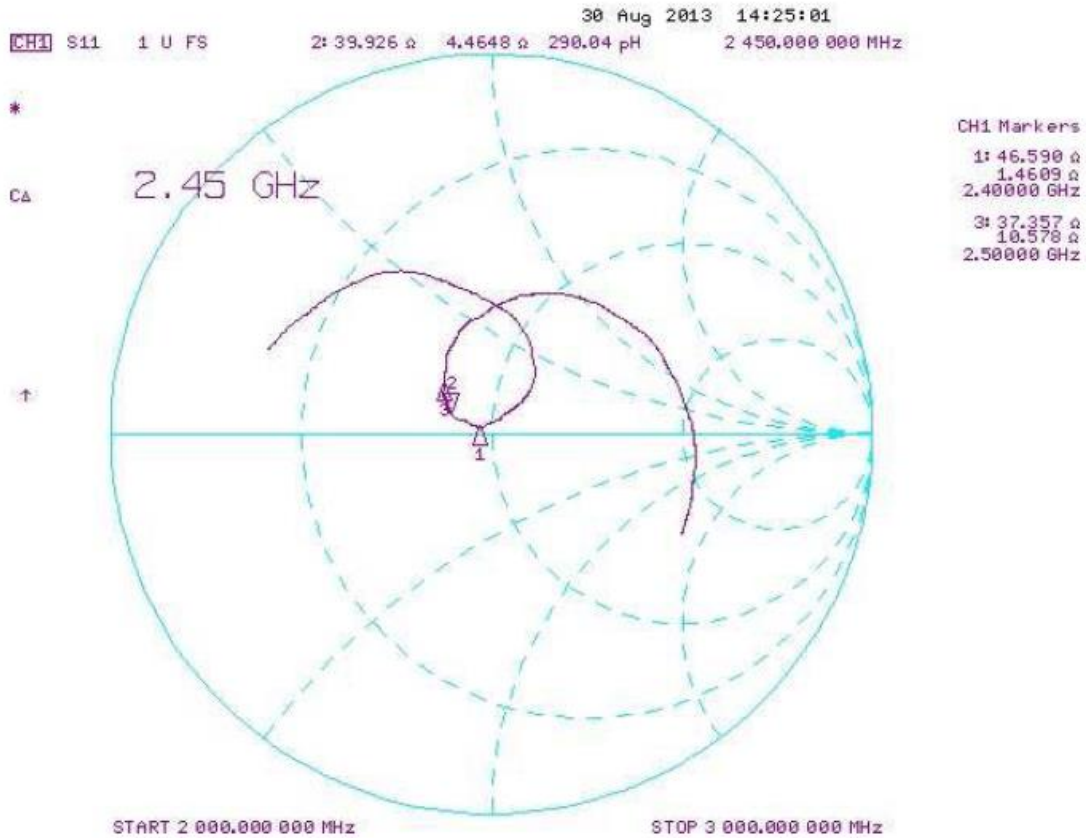
### Return Loss



# VSWR



# Smith Chart



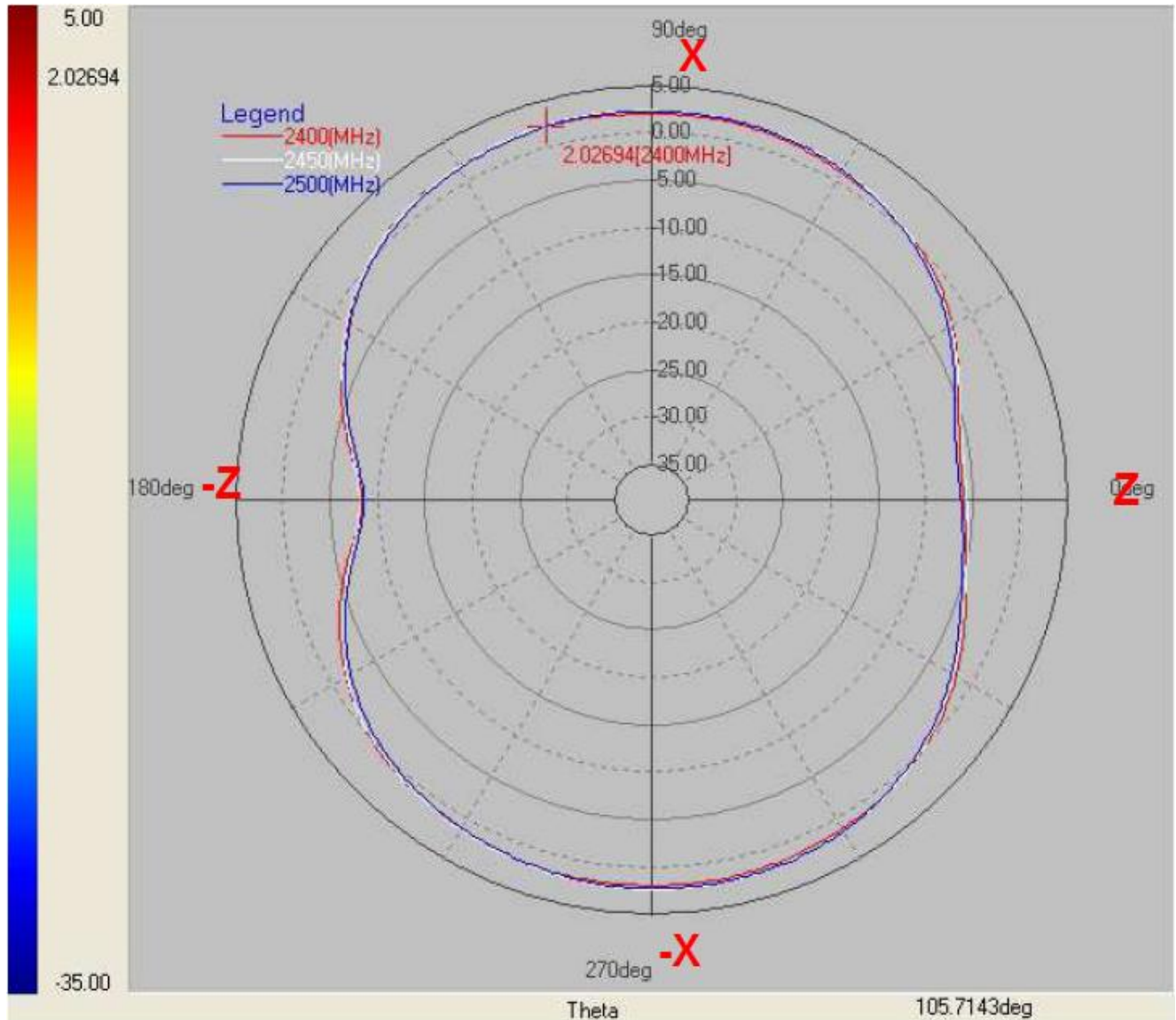
**RADIATION PATTERN**

**2400~2500 MHz**

**X-Z Plane**

**Phi=0.00deg**

**Gain . dB**



Layer	Max value	Min value	Average
2400(MHz)	2.03	-8.37	-0.17
2450(MHz)	2.20	-8.08	-0.04
2500(MHz)	2.12	-8.53	-0.21

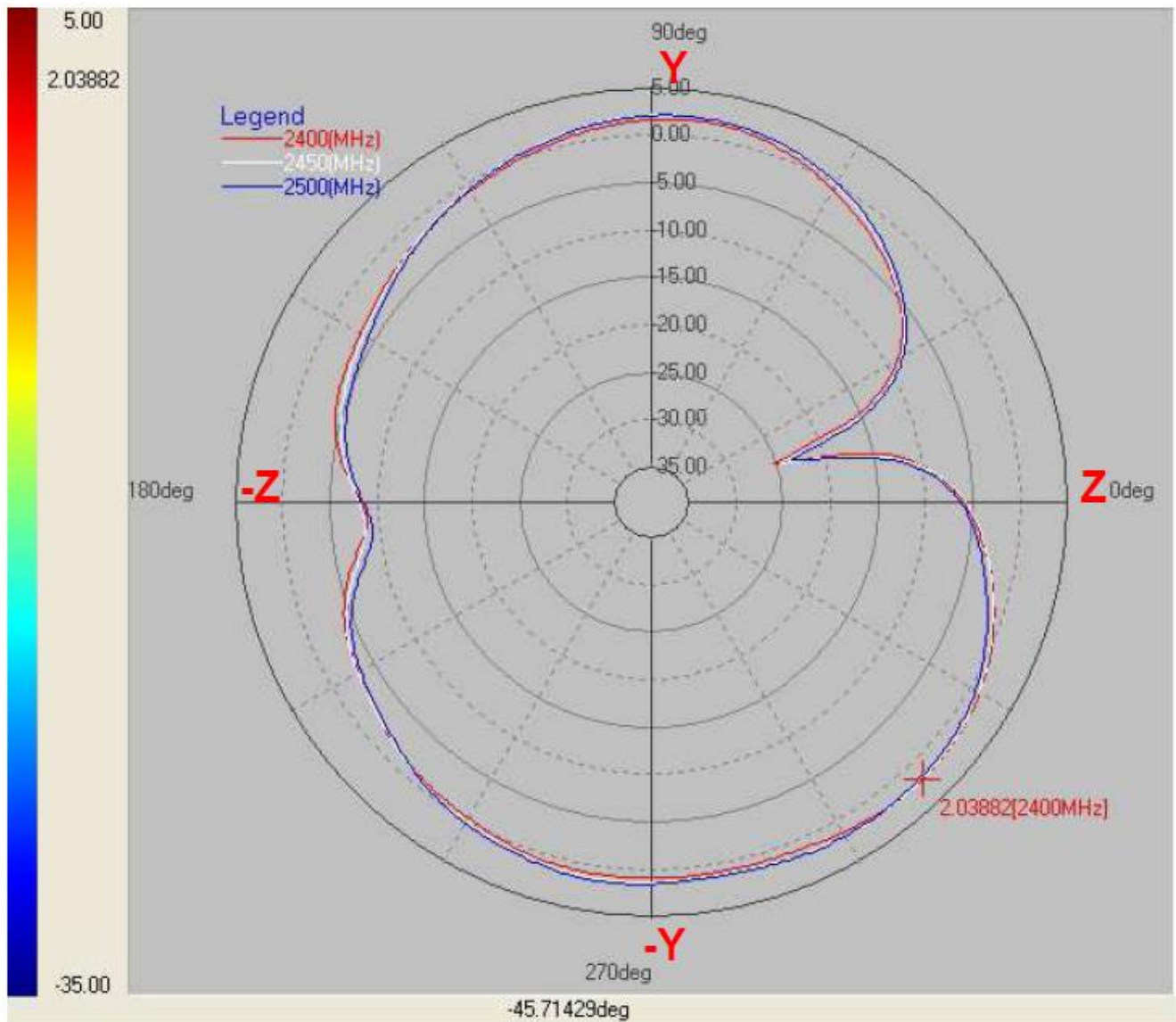


**2400~2500 MHz**

**Y-Z Plane**

**Phi=90.00deg**

**Gain . dB**



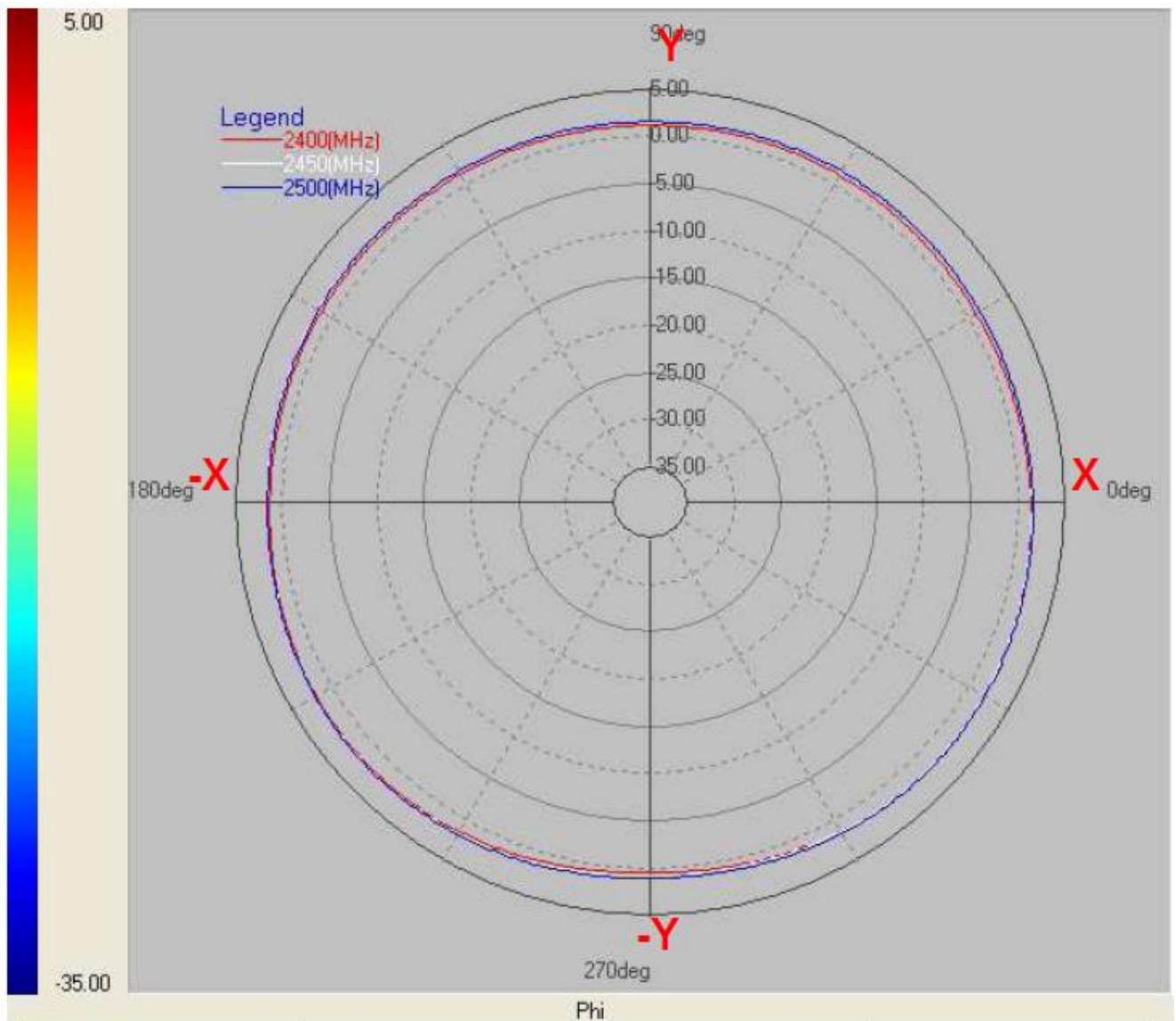
Layer	Max value	Min value	Average
2400(MHz)	2.04	-25.82	-1.07
2450(MHz)	2.02	-25.22	-0.82
2500(MHz)	2.01	-23.79	-1.07

**2400~2500 MHz**

**X-Y Plane**

**Theta=90.00deg**

**Gain . dB**



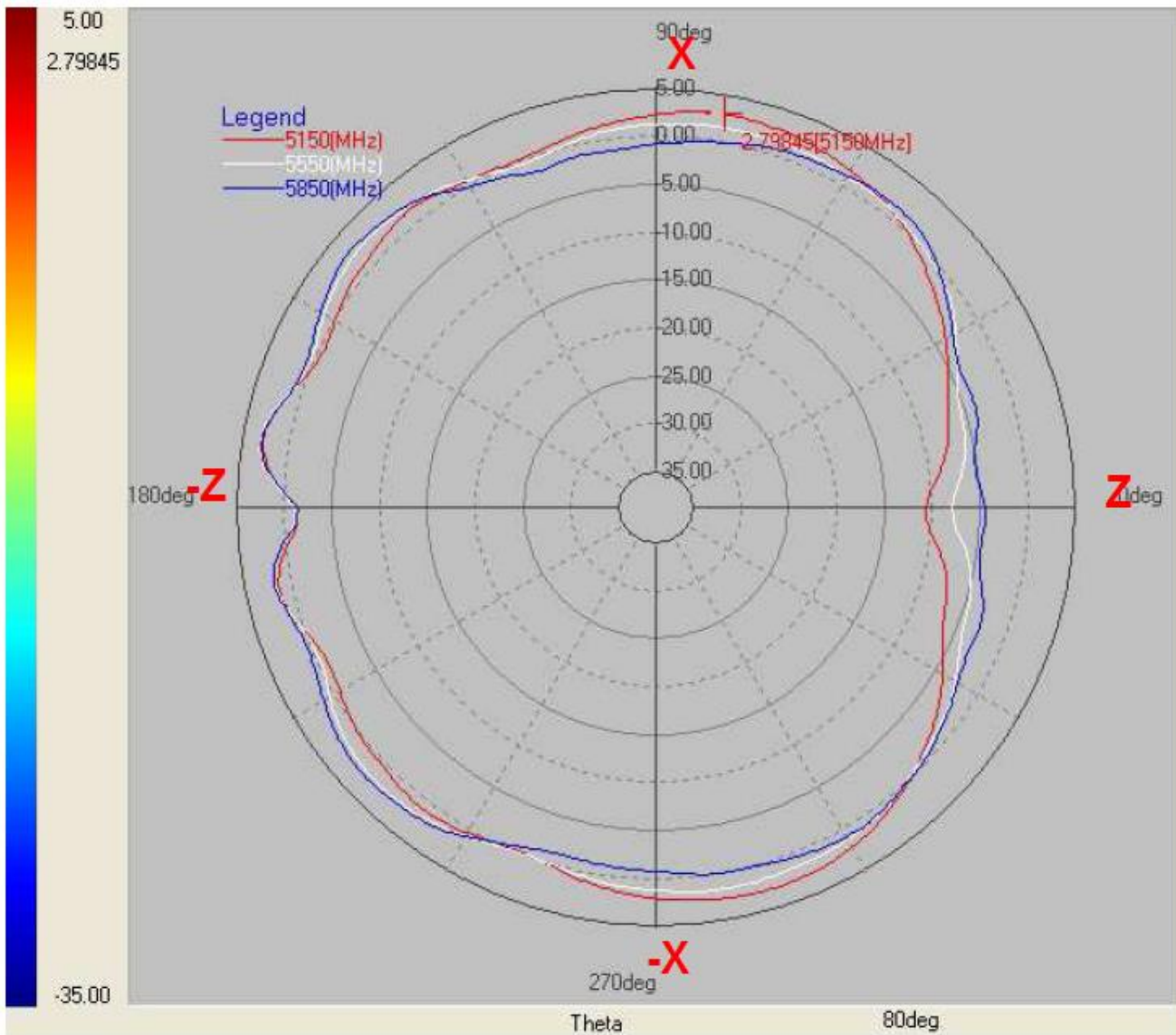
Layer	Max value	Min value	Average
2400(MHz)	2.10	0.35	1.32
2450(MHz)	2.08	0.65	1.55
2500(MHz)	2.13	0.91	1.60

### 5150~5850 MHz

X-Z Plane

Phi=0.00deg

Gain . dB



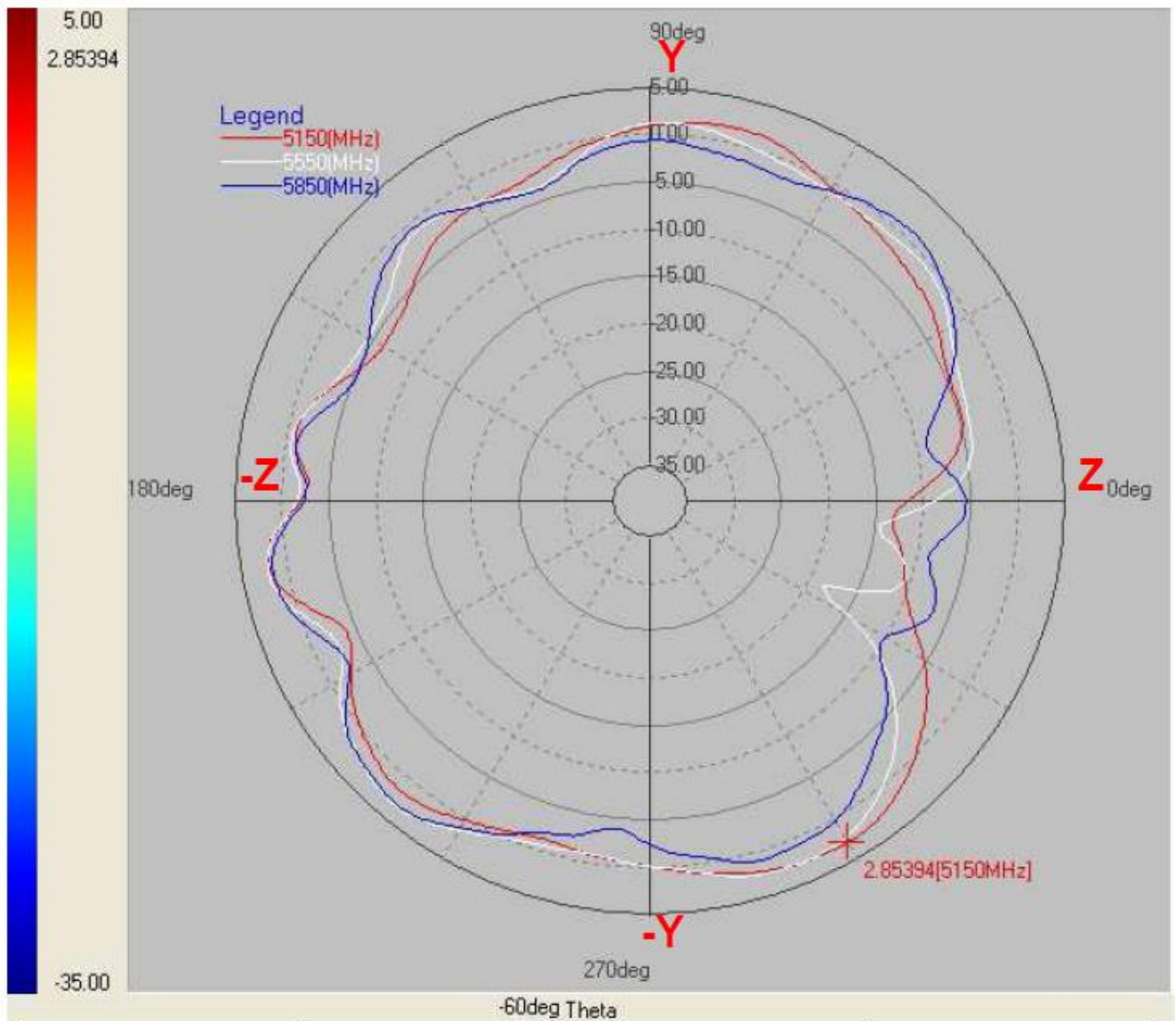
Layer	Max value	Min value	Average
5150MHz)	2.80	-10.65	0.29
5550(MHz)	3.05	-7.90	0.32
5850 (MHz)	2.93	-6.22	-0.90

### 5150~5850 MHz

Y-Z Plane

Phi=90.00deg

Gain . dB



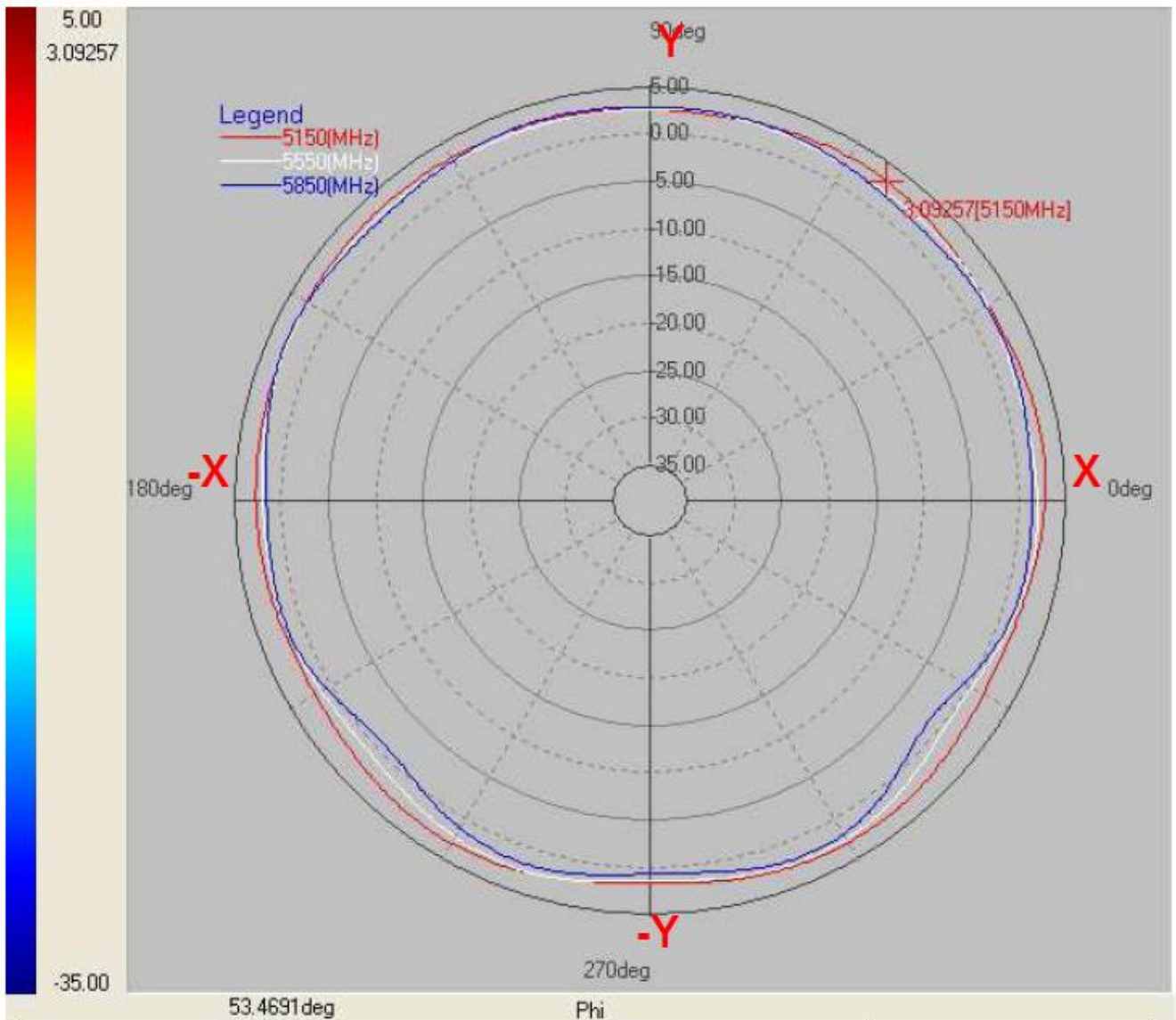
Layer	Max value	Min value	Average
5150MHz)	2.85	-13.11	-1.04
5550MHz)	3.12	-18.74	-0.84
5850(MHz)	2.95	-10.38	-1.48

**5150~5850 MHz**

**X-Y Plane**

**Theta=90.00deg**

**Gain . dB**



Layer	Max value	Min value	Average
5150(MHz)	3.09	1.52	2.58
5550(MHz)	2.84	0.31	2.03
5850(MHz)	3.01	-1.36	1.69