APPROVAL SHEET

Dipole ANTENNA
2.4/5.x GHz Working Frequency
Halogens Free Product
P/N: RFDPA141500SBLB801

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 Dec.	New Release	PIPI

Antenna Specification

ELECTRICAL CHARACTERISTICS

Item	Specification
Working Frequency Range	2.4 ~ 2.5/5.x GHz (Note-1)
Gain	1.29 dBi @ 2.4GHz 1.60 dBi @ 5.xGHz
Return Loss	-10dB(Max)
Polarization	Linear
Radiation Pattern	Omni-directional
Impedance	50Ω
Operation Temperature	-20° C~+65° C

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

MATERIAL TABLE

Items	Description
Antenna Cover	ABS(Black)
Antenna Base	PC+PBT(Black)
Connector	Reverse SMA Plug (Black)
Cable	RG178 (Black)
Up Brass Tube	Brass
Down Brass Tube	Brass
Heat Shrink Tube	Black
Rivet	POM (Black)
Sponge	Black

ORDERING RULE

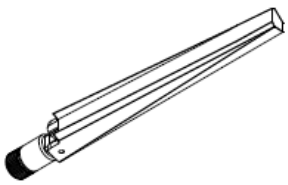
RF	DPA	1415	00	S	B	L	B	8	01
Type Code	**Product Code**	**Dipole Dimension (Unit: mm)**	**Cable Length (unit: cm)**	**Connector Brand**	**Type of Connector**	**Application**	**Project status**	**Wire Diameter**	**Project**
Walsin RF Device	DPA: Dipole Antenna	Per 2 digits of length, width e.g.: 2513 Length 255mm, Width 13.00mm	2 digits for cable length e.g.: 13 Cable Length:130mm	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:ø0.81 3:ø1.13 6:RG316 7:ø1.37 8:RG178	01~99 series number

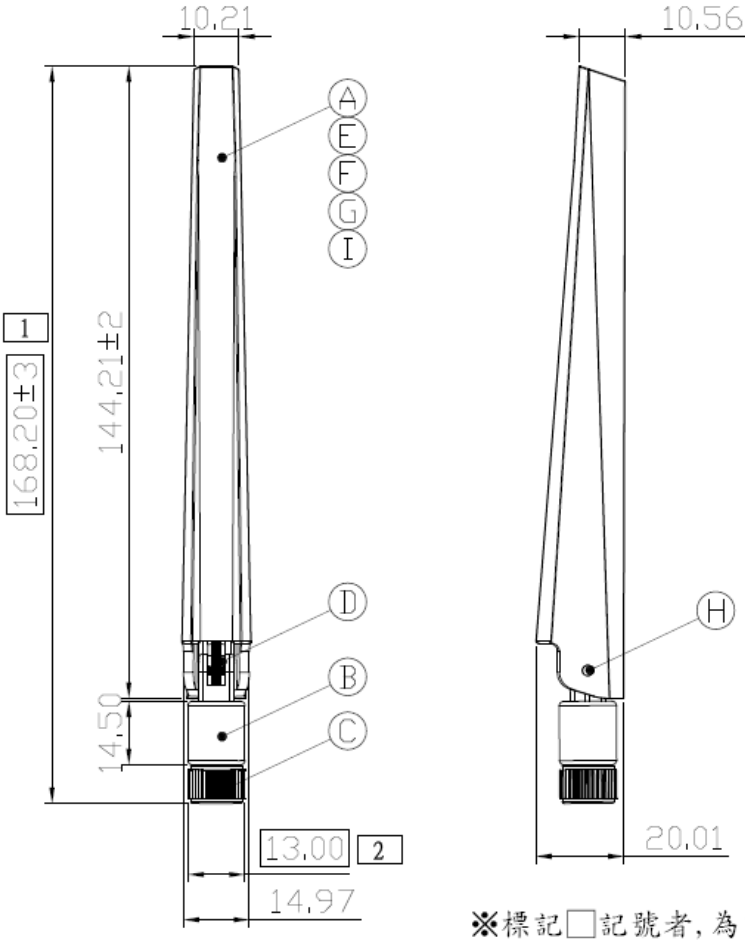
DIMENSIONS

ELECTRICAL

Frequency:2.4/5.x GHz

No.	DESCRIPTION		MAT'L	Color	Q'TY
A	Antenna Cover		ABS	Black	1
B	Antenna Base		PC+PBT	Black	1
C	Connector	Reverse SMA Plug	Brass	Black	1
D	Cable	RG178	---	Black	1
E	Up Brass Tube		Brass	---	1
F	Down Brass Tube		Brass	---	1
G	Heat Shrink Tube		---	Black	1
H	Rivet		POM	Black	2
I	Sponge		---	Black	1





※標記□記號者,為重點檢驗尺寸

LTR	DESCRIPTION	DATE	REQ. BY

設計 DR. PIPI 2018.12.17

核准 APPL. Marco

客許公差 TOLERANCE

6以下.....±0.2
6以上~30.....±0.5
30以上~120.....±0.8
120以上~315.....±1.2
315以上~1000.....±2.0
1000以上~2000.....±3.0

品名 ARTICLE: RFDPA141500SBLB801

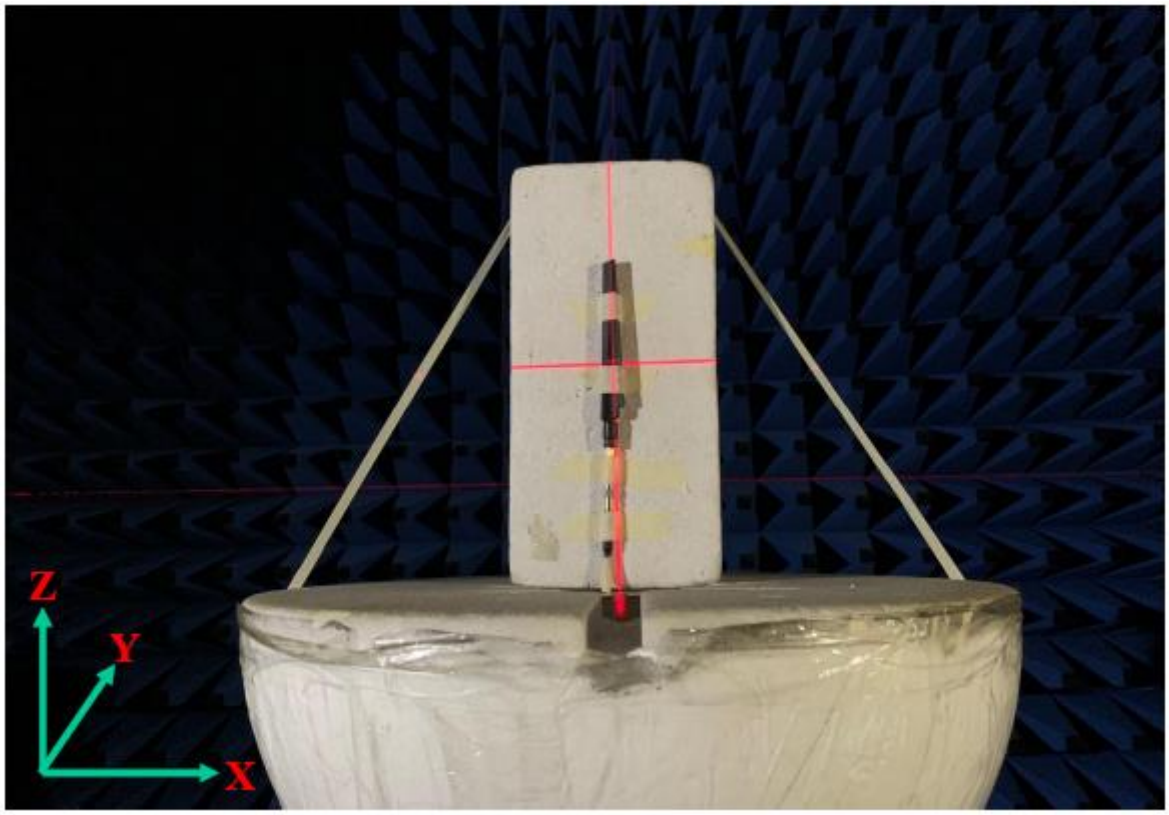
版本 REV. A

單位 UNIT: mm | 比例 SCALE: **** | 張數 SHEET: 1

PSA 華新科技股份有限公司 WALSIN TECHNOLOGY CORPORATION

Test Report

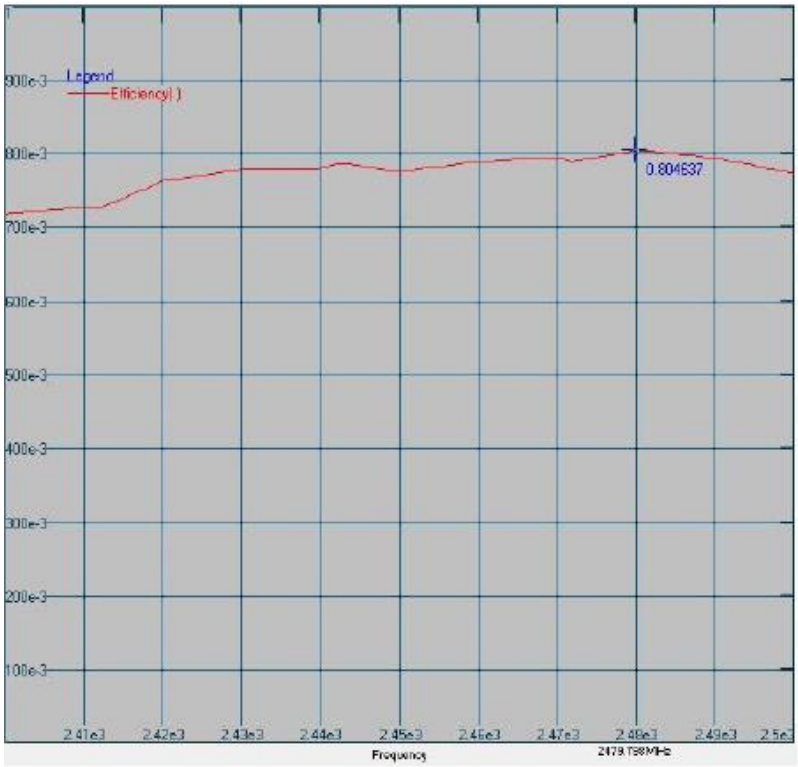
EXPERIMENTAL SETUP



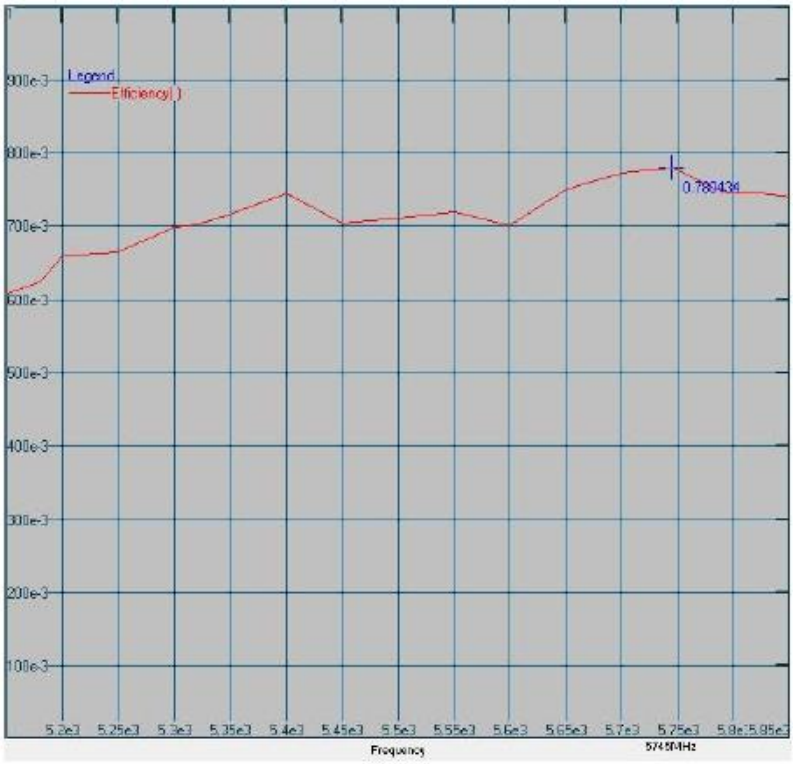
■ELECTRICAL CHARACTERISTICS

Return Loss

Efficiency



Maximum Efficiency at 2480 MHz : 80 %



Maximum Efficiency at 5745 MHz : 78 %

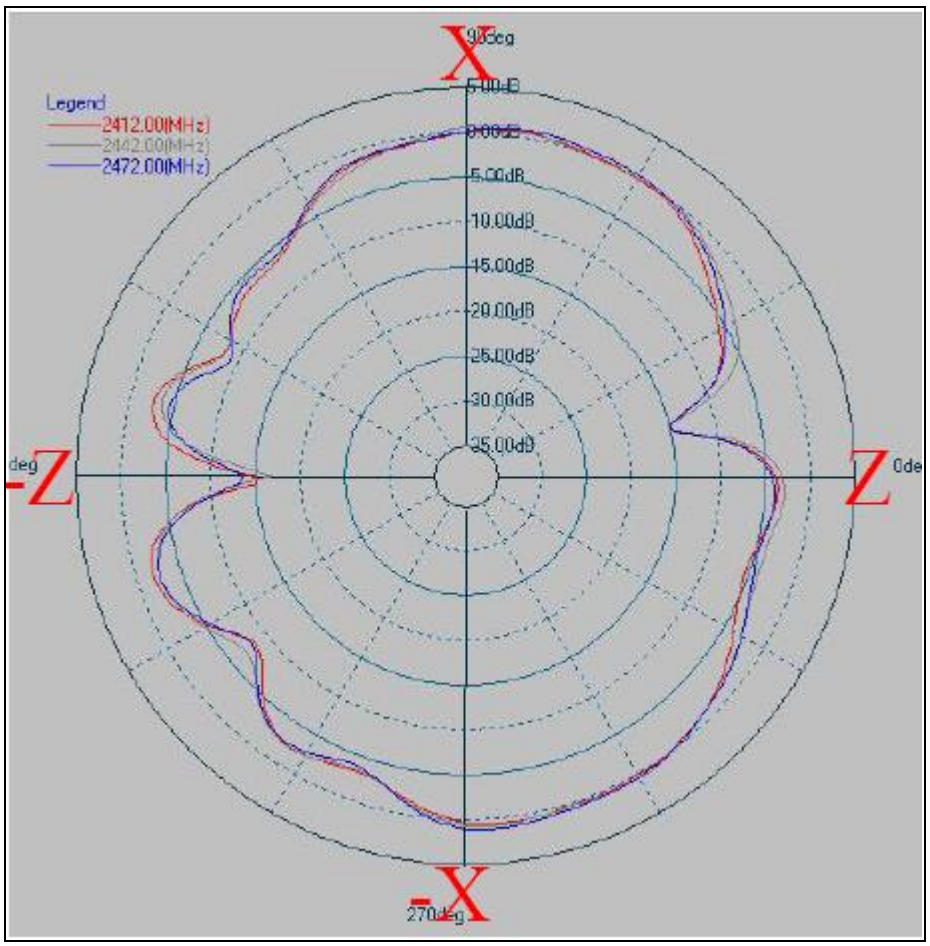
RADIATION PATTERN

2400 ~2500 MHz

X-Z Plane

Phi=0.00deg

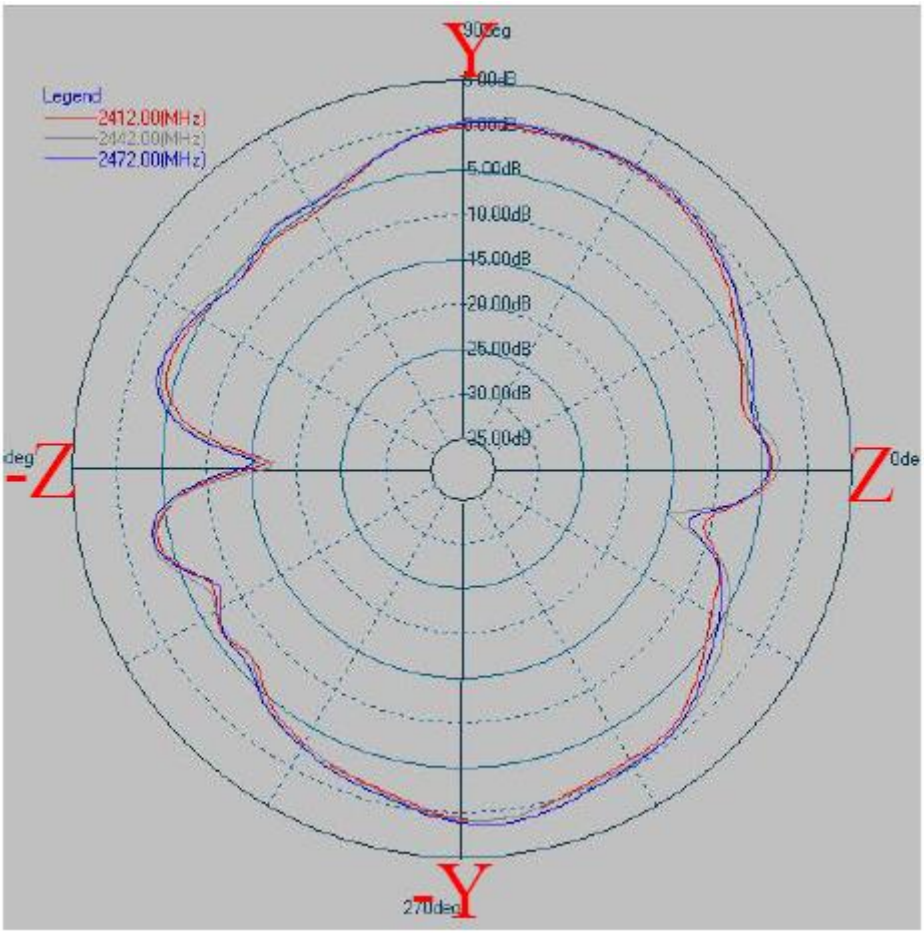
Gain . dB



Y-Z Plane

Phi=90.00deg

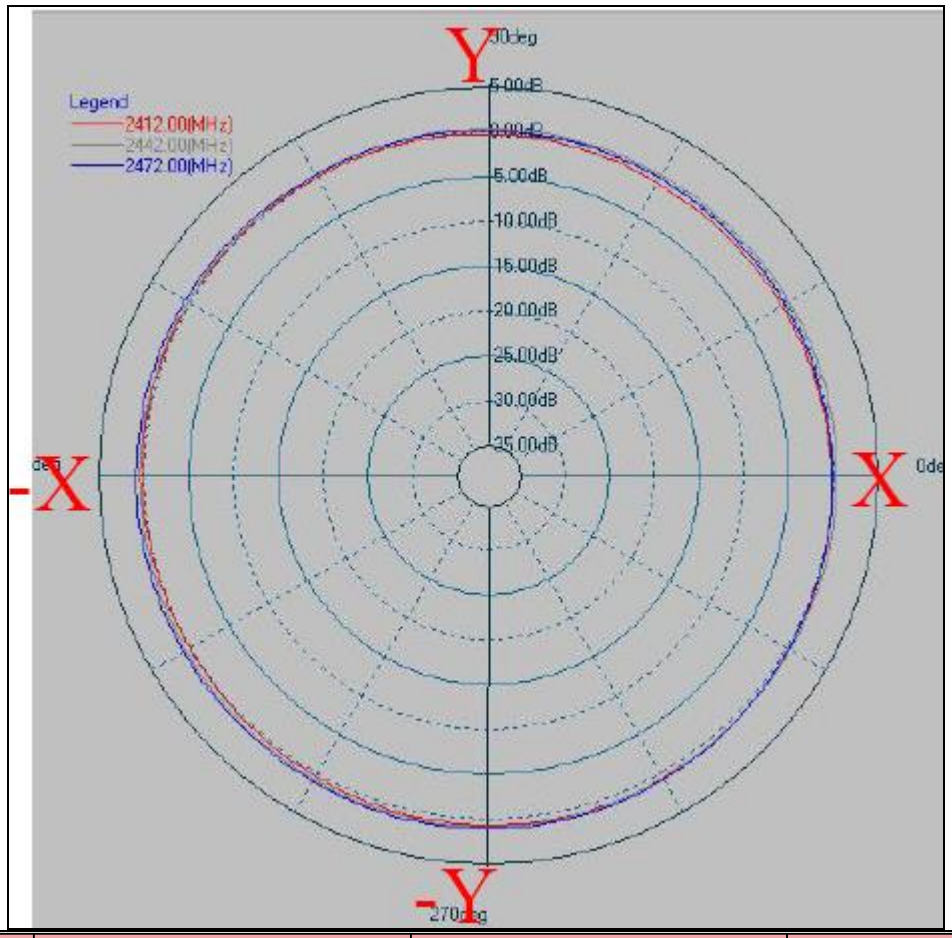
Gain . dB



X-Y Plane

Theta=90.00deg

Gain . dB



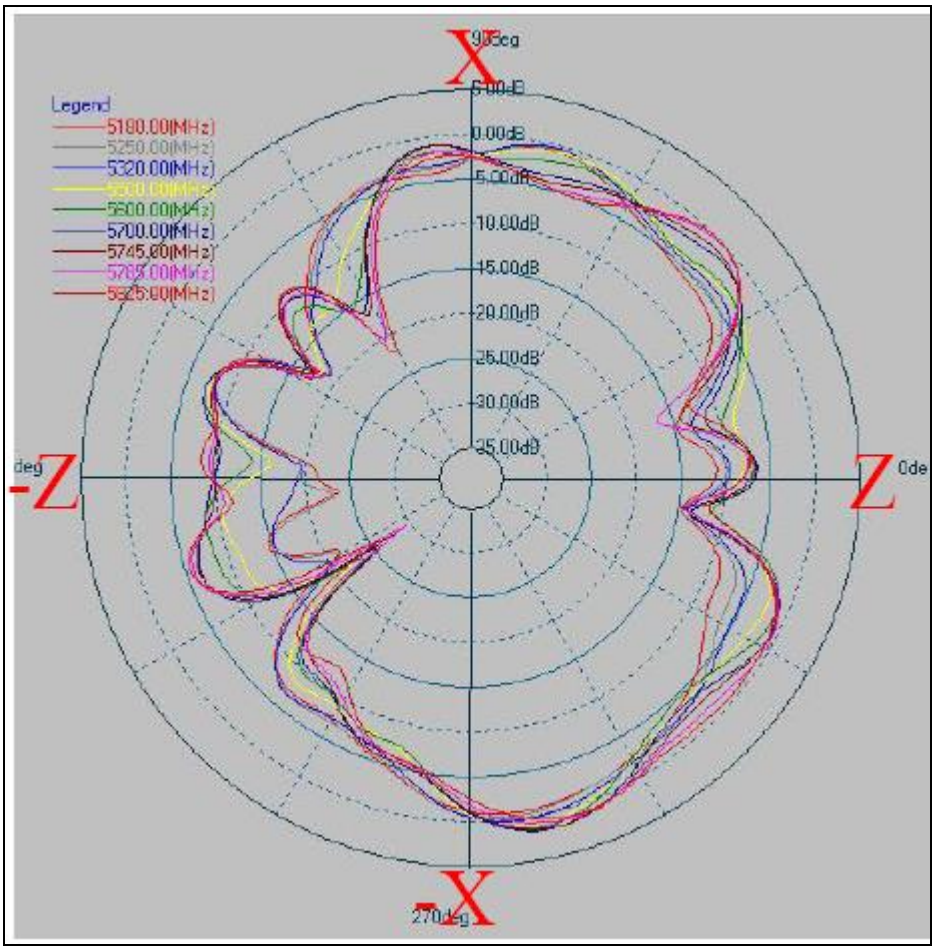
	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
2412	0.46	-2.60	0.84	-2.83	0.58	0.03
2442	0.72	-2.32	0.89	-2.32	0.74	0.42
2472	1.06	-2.40	1.29	-2.36	0.96	0.43

5150 ~5850 MHz

X-Z Plane

Phi=0.00deg

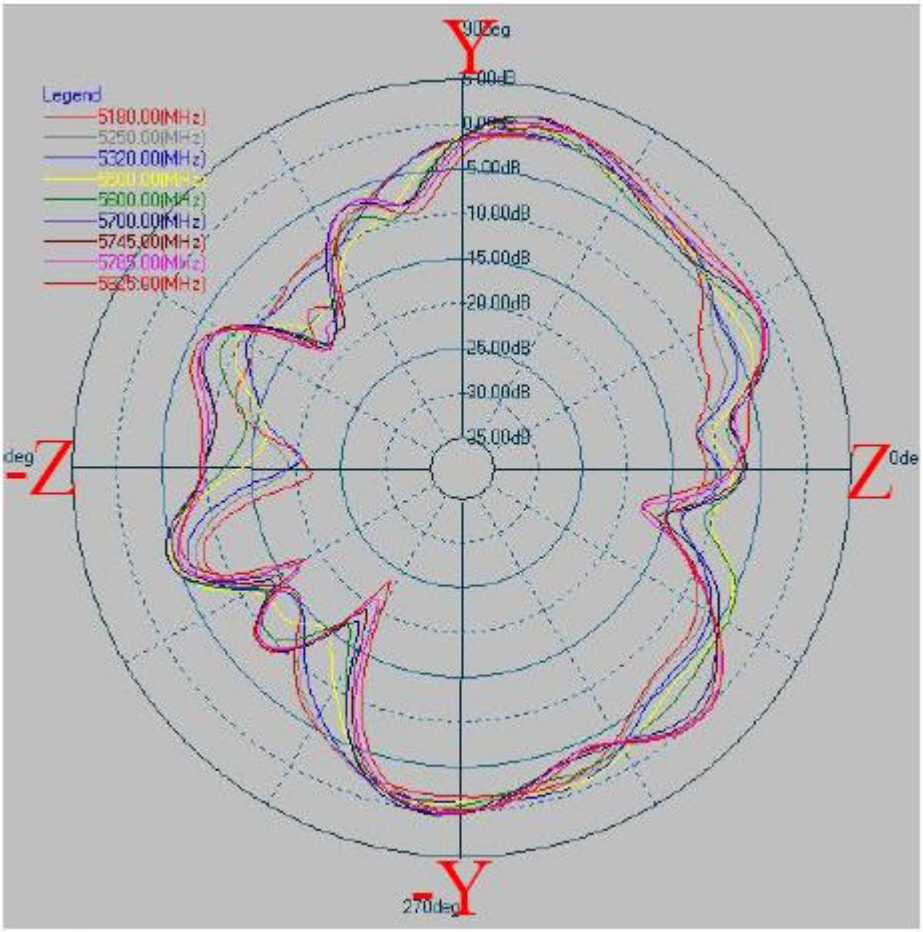
Gain . dB



Y-Z Plane

Phi=90.00deg

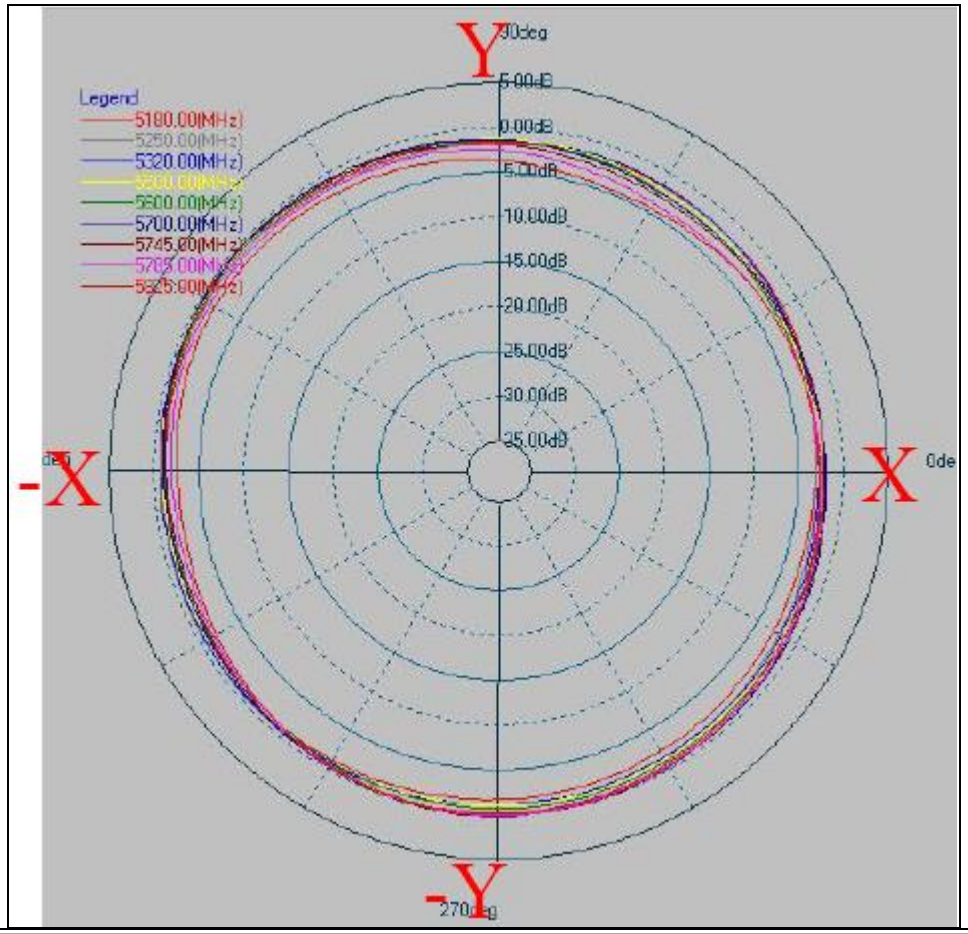
Gain . dB



X-Y Plane

Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]	Max Value [dB]	Average [dB]
5180	-0.80	-5.60	-0.77	-5.48	-0.86	-1.74
5250	-0.38	-5.29	-0.84	-5.13	-0.54	-1.50
5320	0.13	-4.97	-0.48	-4.89	-0.39	-1.33
5500	0.91	-4.64	0.28	-4.66	-0.42	-1.38
5600	1.24	-4.64	0.67	-4.57	-0.61	-1.44
5700	1.60	-4.21	1.38	-4.08	-0.09	-1.06
5745	1.54	-4.21	1.53	-4.03	-0.01	-1.21
5785	1.05	-4.30	0.97	-4.11	-0.11	-1.66
5825	0.86	-4.31	0.80	-4.08	-0.25	-2.05