

APPROVAL SHEET

PCB ANTENNA

2.4/5.x GHz Working Frequency

Halogens Free Product

P/N: RFPCA430805IMLB301

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	2015 Feb.	New Release	PIPI

ELECTRICAL CHARACTERISTICS

Item	Specification
Frequency Range	2.4 ~ 2.5 / 5.15 ~ 5.85 GHz
Impedance	50 Ohm Nominal
Return Loss	-10 dB (Max)
Peak Gain	3.52 dBi @2.4 ~ 2.5 GHz 6.29 dBi @5.15 ~ 5.85 GHz
VSWR	2.0 (Max)
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W

*note-1: Electrical characteristics will depend on customer's final application.

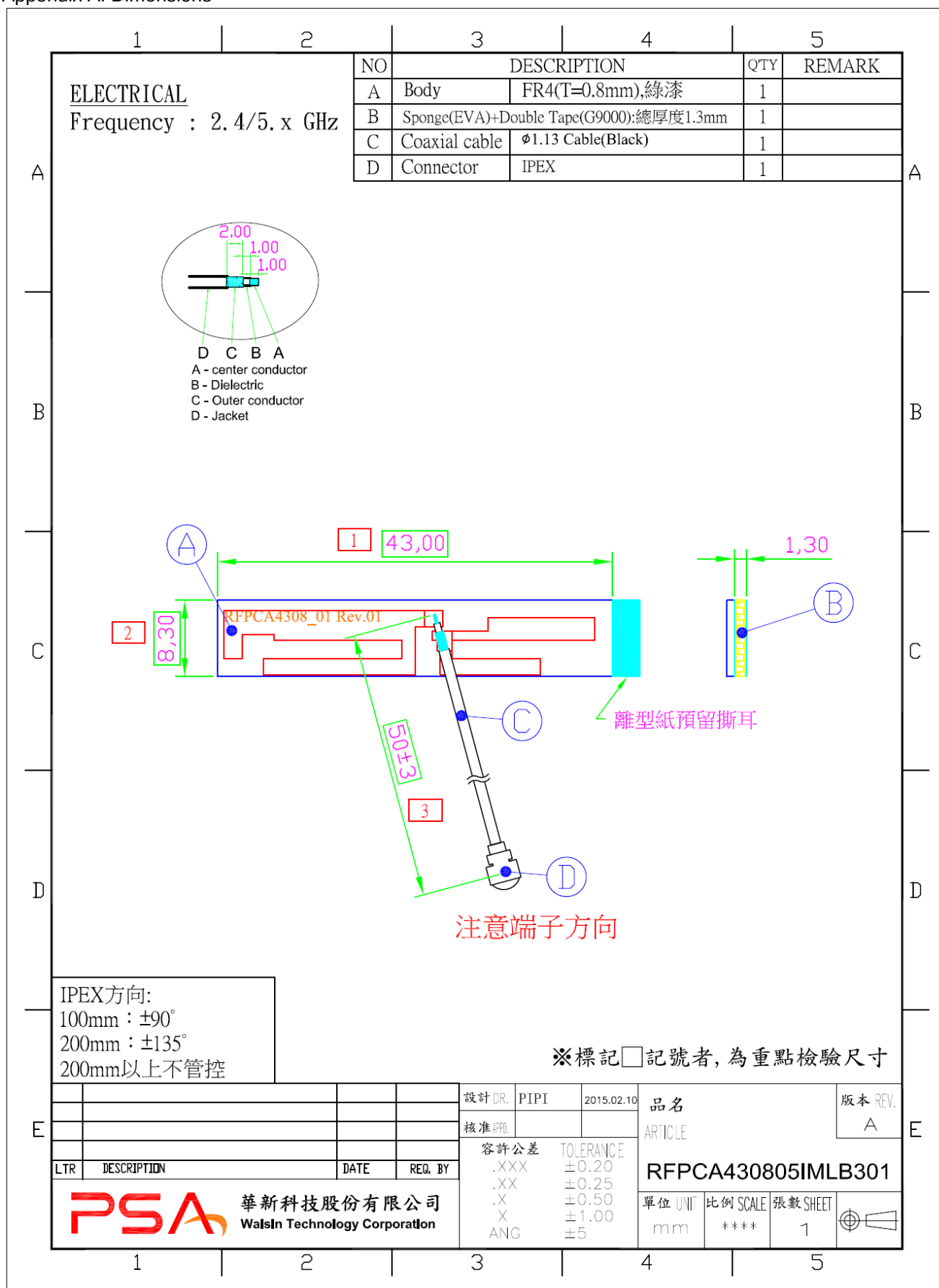
MATERIAL TABLE

Items	Description
Cable	Ø1.13(Black)
Connector	IPEX
FPC Antenna	FR4(綠漆板) T=0.8mm
Sponge+Double Tape	EVA+G9000

ORDERING RULE

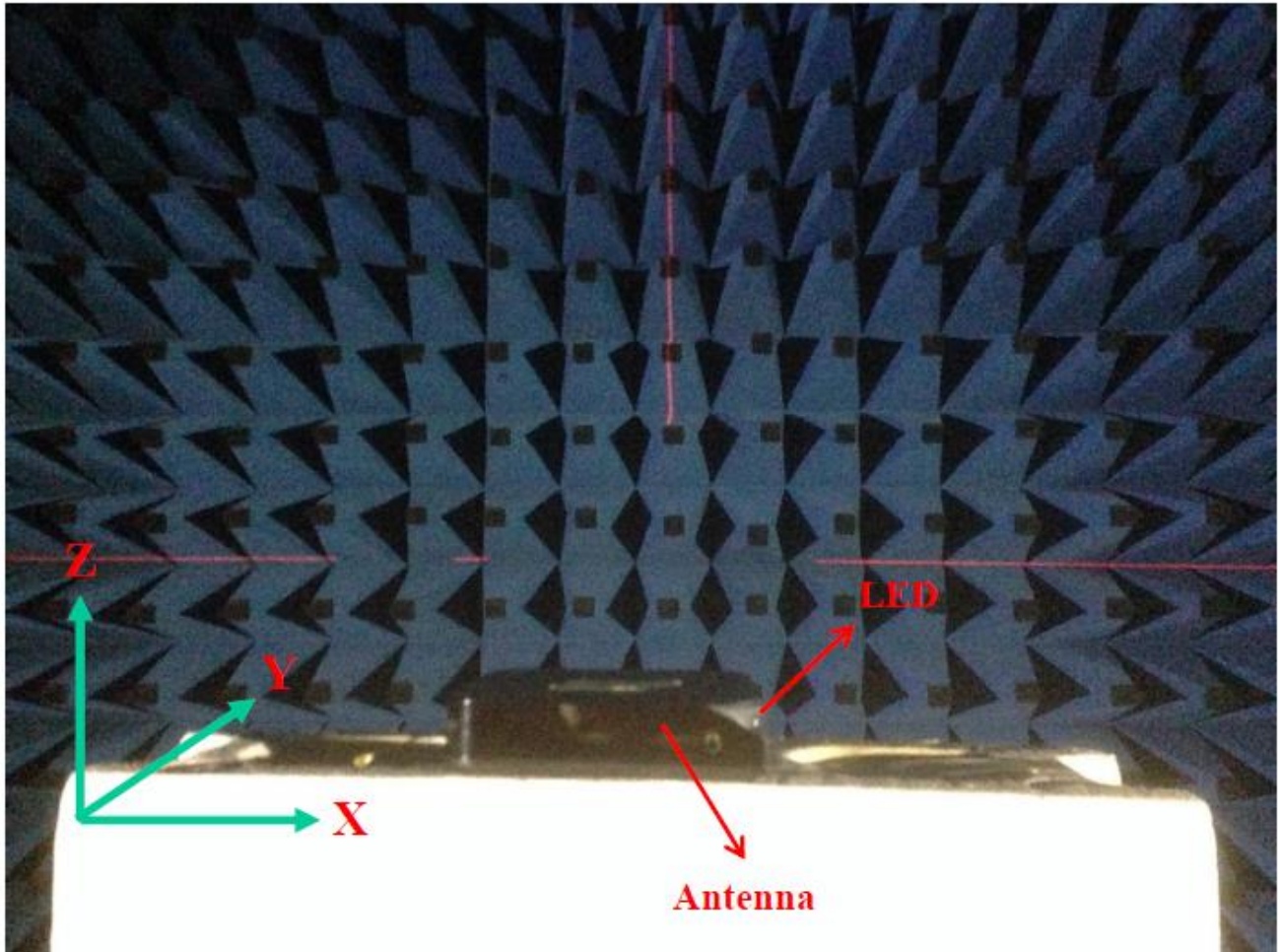
RF	PCA	4308	05	I	M	L	B	3	01
Type Code	Product Code	Dipole Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	PCA: PCB Antenna	Per 2 digits of length, width e.g.: 4308 Length 43mm, Width 8.3mm	2 digits for cable length e.g.: 10 Cable Length:10cm	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: 5GHz 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: Durin g Test X: Pile Run	0: None 1: Ø 0.81 3: Ø 1.13 6: RG316 7: Ø 1.37 8: RG178	01~99 series number

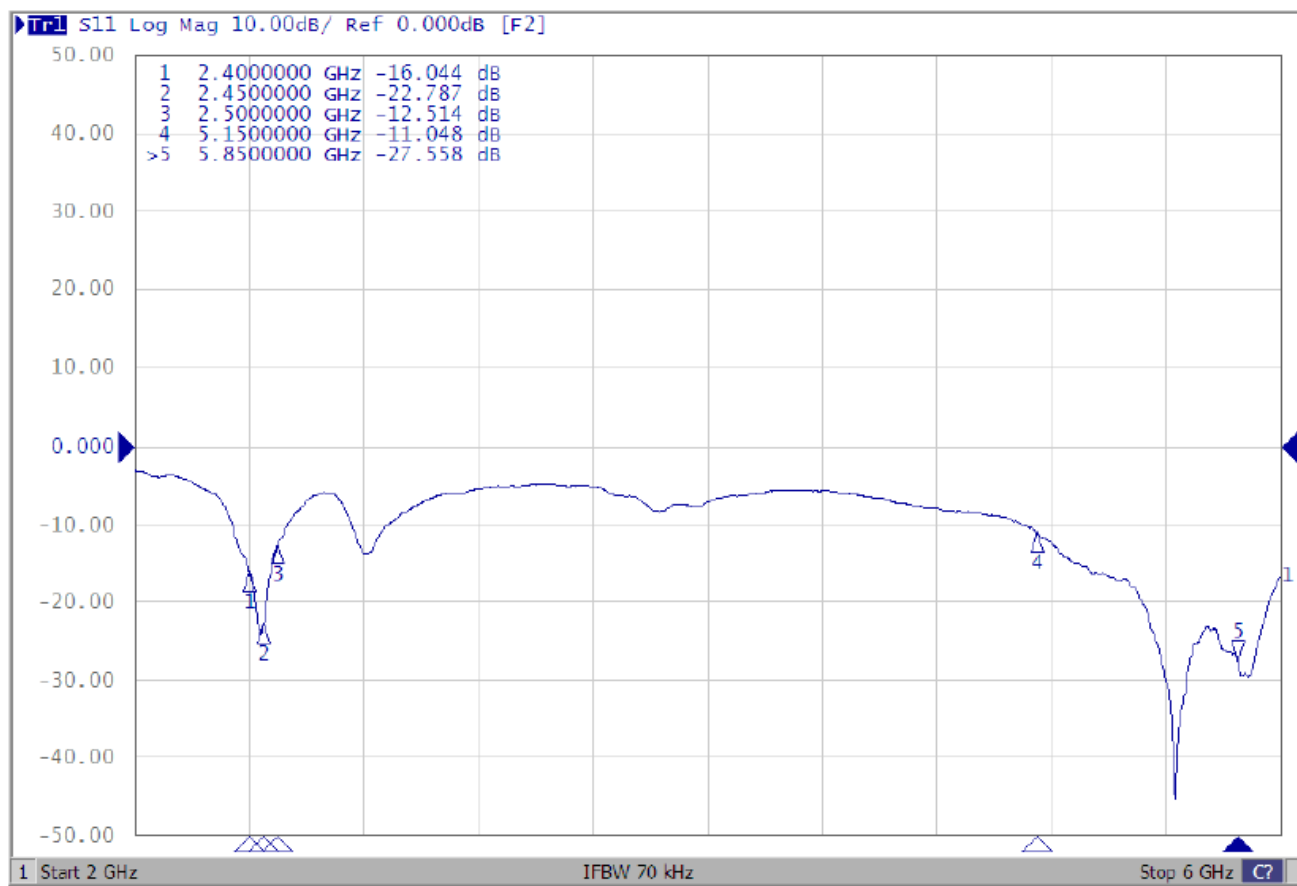
Appendix A: Dimensions



Test Report

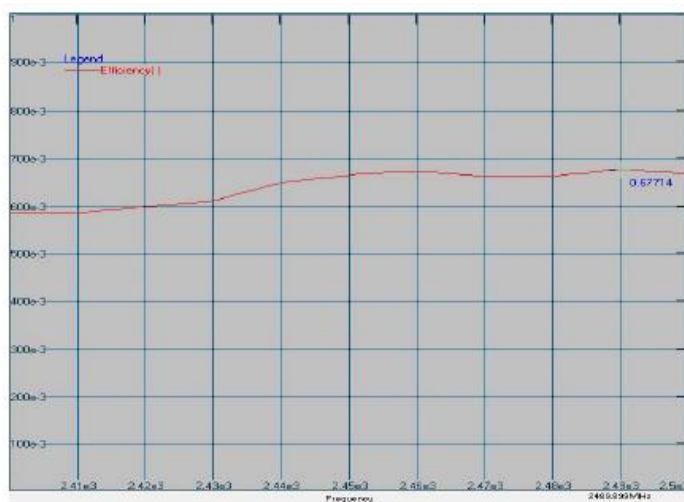
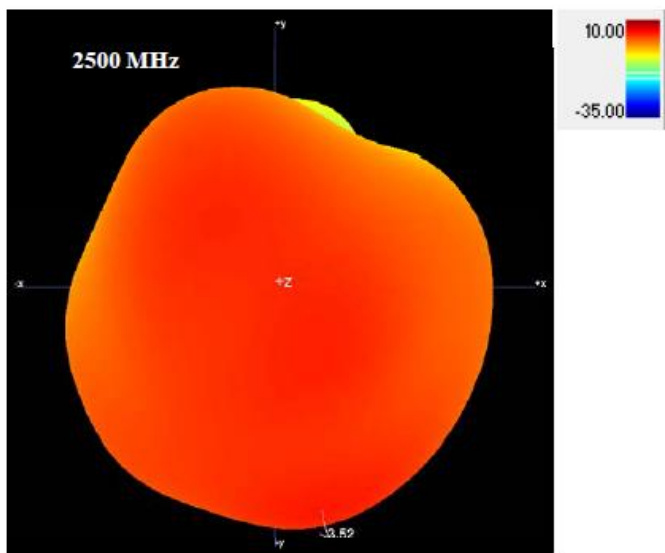
■ Experimental Setup



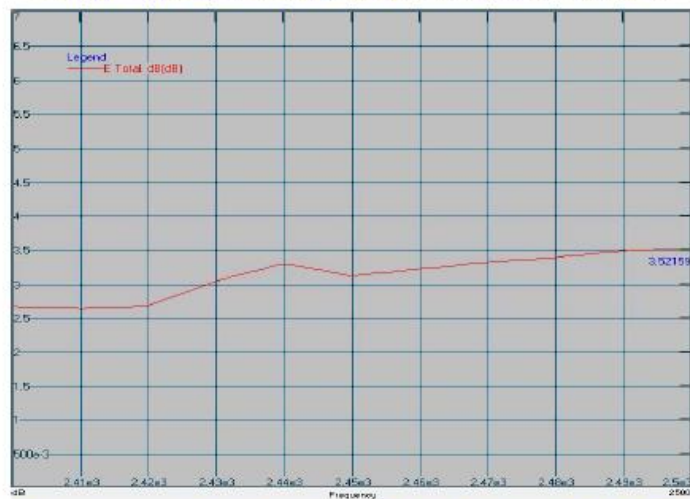
ELECTRICAL CHARACTERISTICS**Return Loss**

■ Antenna Efficiency & Peak Gain

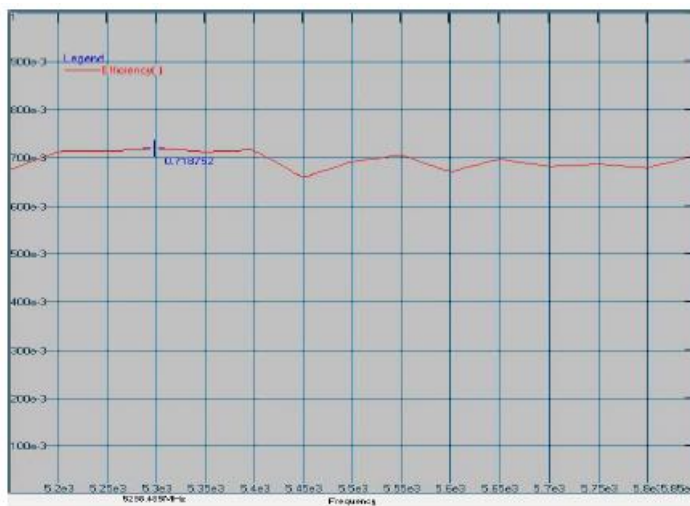
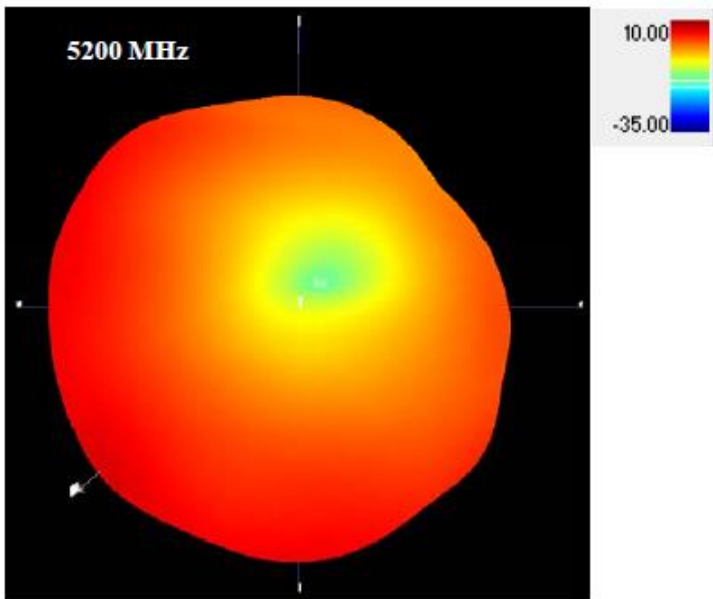
2400~2500 MHz



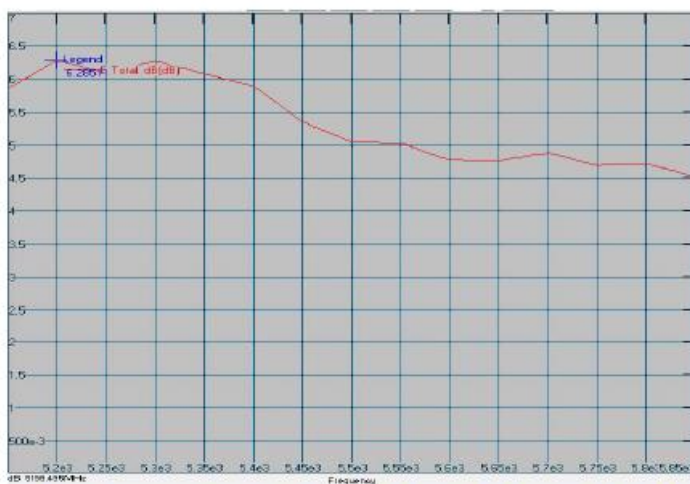
Maximum Efficiency at 2490 MHz : 67.71 %



Maximum Peak Gain at 2500 MHz : 3.52 dBi

5150~5850 MHz

Maximum Efficiency at 5299 MHz : 71.88 %



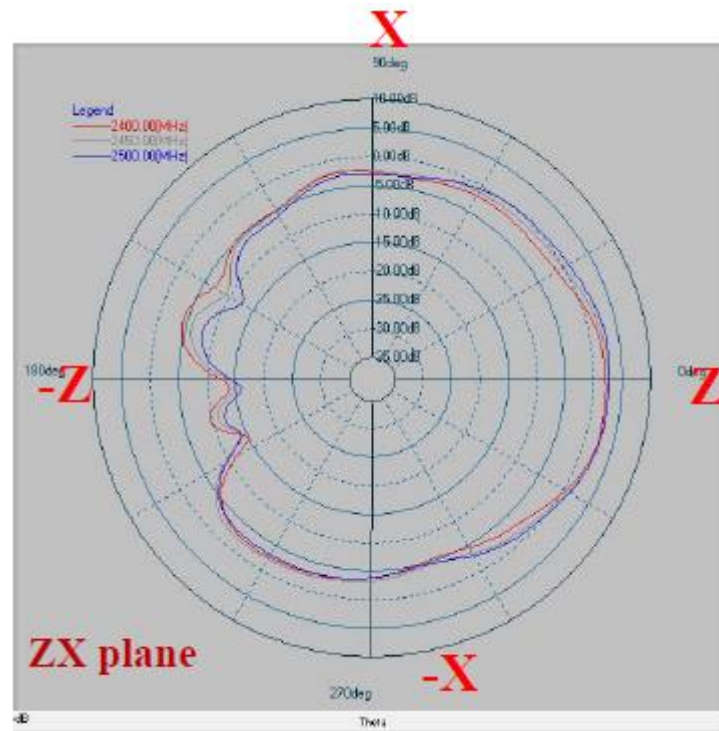
Maximum Peak Gain at 5200 MHz : 6.29 dBi

■ RADIATION PATTERN

2400~2500 MHz

Phi=0.00deg

Gain . dB

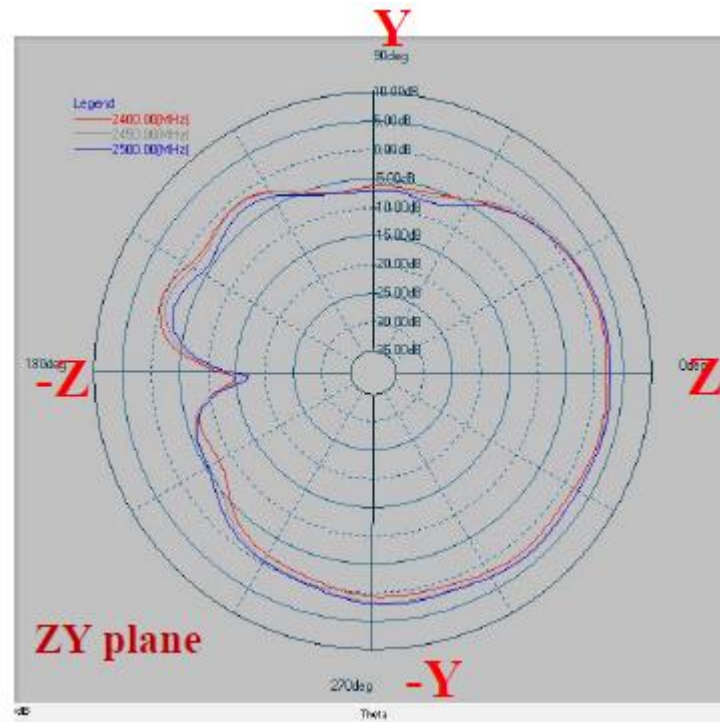


	ZX plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	2.35	-2.50
2450	2.60	-2.00
2500	2.92	-1.87

2400~2500 MHz

Phi=90.00deg

Gain . dB

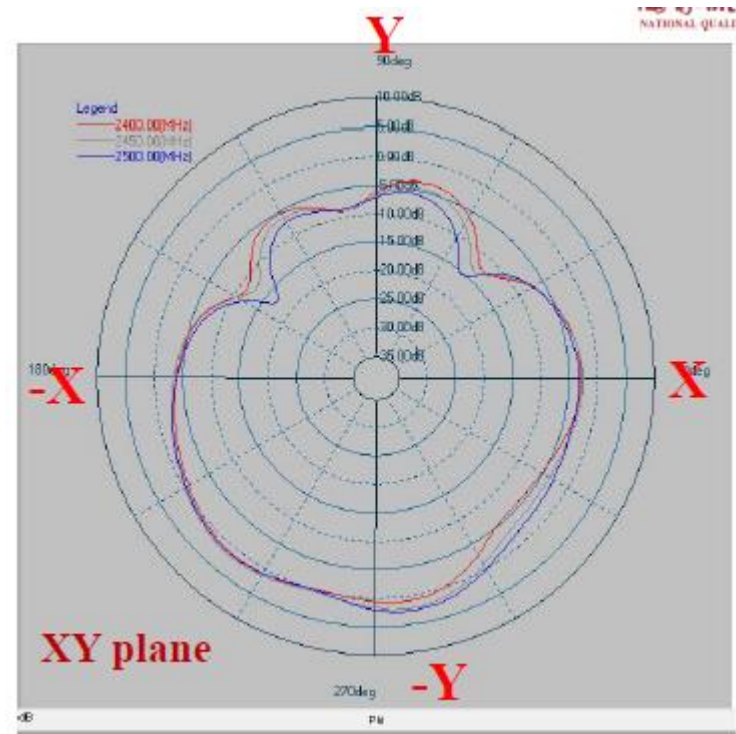


	ZY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	2.45	-0.80
2450	3.01	-0.28
2500	3.18	-0.33

2400~2500 MHz

Theta=90.00deg

Gain . dB

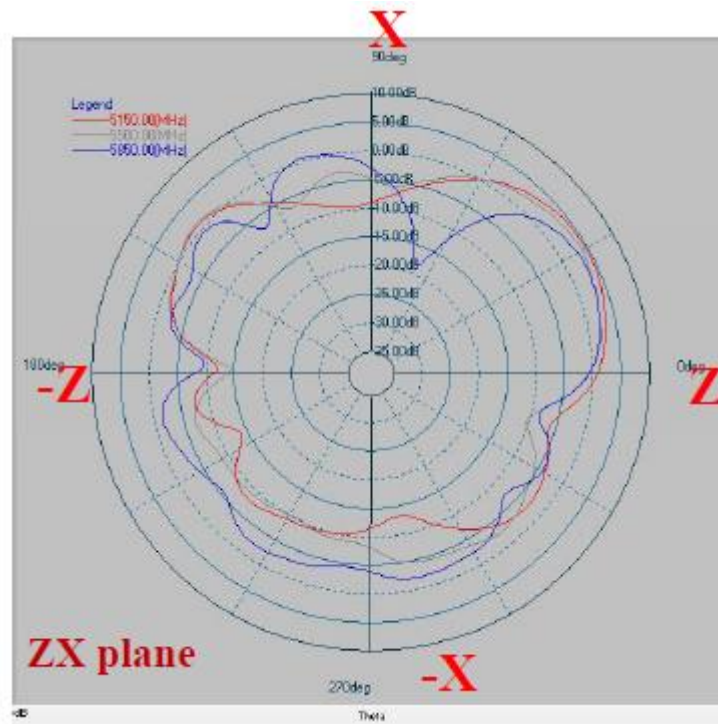


	XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
2400	0.99	-3.15
2450	1.95	-2.52
2500	2.42	-2.57

5150~5850 MHz

Phi=0.00deg

Gain . dB

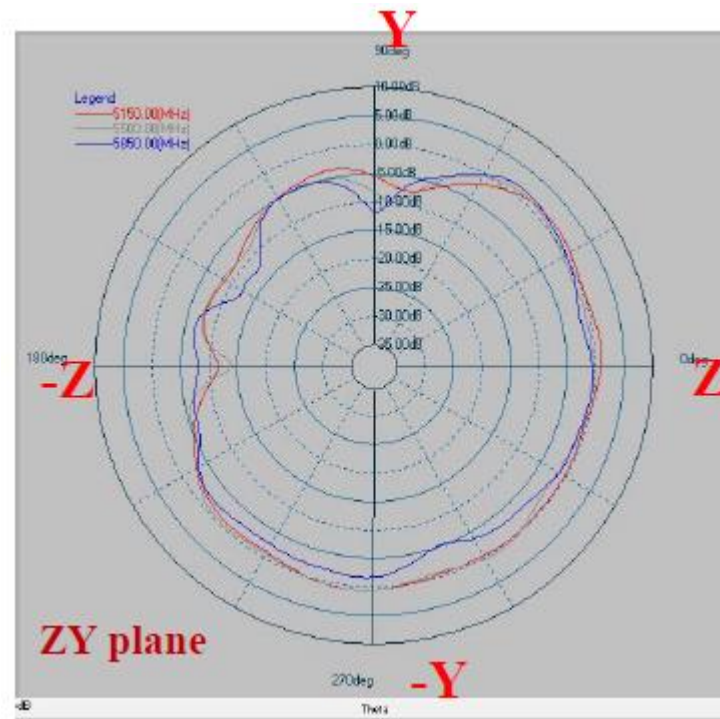


	ZX plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
5150	4.70	-2.02
5500	3.84	-2.27
5850	3.19	-2.28

5150~5850 MHz

Phi=90.00deg

Gain . dB

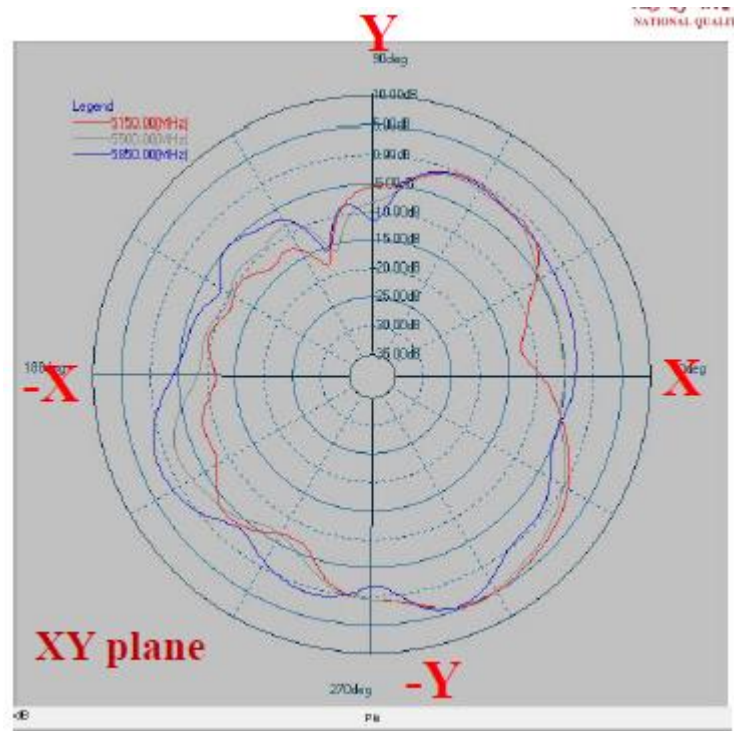


	ZY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
5150	1.32	-1.80
5500	0.94	-2.12
5850	1.60	-2.99

5150~5850 MHz

Theta=90.00deg

Gain . dB



	XY plane	
Frequency [MHz]	Max Value [dB]	Average [dB]
5150	4.97	-2.09
5500	4.67	-2.05
5850	4.34	-1.59

Mouser Electronics

Authorized Distributor

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