

APPROVAL SHEET

Dipole Antenna

2.4 ~ 2.5/5.15 ~ 6.5 GHz Working Frequency

P/N: RFPCA331010EMMB101

Antenna Type : Dipole

Customer : _____
Approval No. : _____
Issue Date : _____
Production : INPAQ TECHNOLOGY(SUZHOU)
Address : No. 81,Antai Road 1,Xishan Econmic Development Zone, Wuxi
City,Jiangsu Province ,China

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

品名：RFPCA331010EMMB101

History List

[illegible]

1.Explanation of part number :

RF	PCA	3310	10	E	M	M	B	1	01
Type Code	Product Code	PCB Dimension (Unit: mm)	Cable Length (unit: cm)	Connector Brand	Type of Connector	Application	Project status	Wire Diameter	Project
Walsin RF Device	PCB Antenna	Per 2 digits of length, width e.g.: 3310 Length 33.8 mm, Width 10.0mm	2 digits for cable length e.g.: 10 Cable Length 10.0 cm	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 M: LTE+Sub-6G+5G LTE : 617~960/1710~2690MHz Sub-6G : 3300~4200MHz 5G : 5150~7150MHz N79 : 4.4~5GHz N: NFC S: UWB(6~7GHz) T:LTE band M:LTE+Sub-6G +5G	B: MP T:During Test X: Pile Run	0:None 1:Ø0.81 3:Ø1.13 6:RG316 7:Ø1.37 8:RG178 Y: Ø0.81 Low Loss	01~99 series number

2.Electrical Specification :

Item	Specification
Frequency Range	2.4 ~ 2.5/5.15 ~ 6.5 GHz
Impedance	50 Ohm Nominal
VSWR	2.0 (Max)
Peak Gain	2.4 ~ 2.5 GHz @ 3.11 dBi 5.15 ~ 6.5 GHz@3.43 dBi
Radiation	Omni-directional
Polarization	Linear Vertical
Admitted Power	1W
Operation Temperature	-20℃ ~ +65℃

UNLESS OTHER SPECIFIED TOLERANCES ON :
X = N/A X.X = N/A X.XX = N/A
ANGLES = N/A HOLEDIA = N/A



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SCALE : N/A

UNIT : mm

DRAWN BY : HW

CHECKED BY : HW

DESIGNED BY : Lang

APPROVED BY : Brian

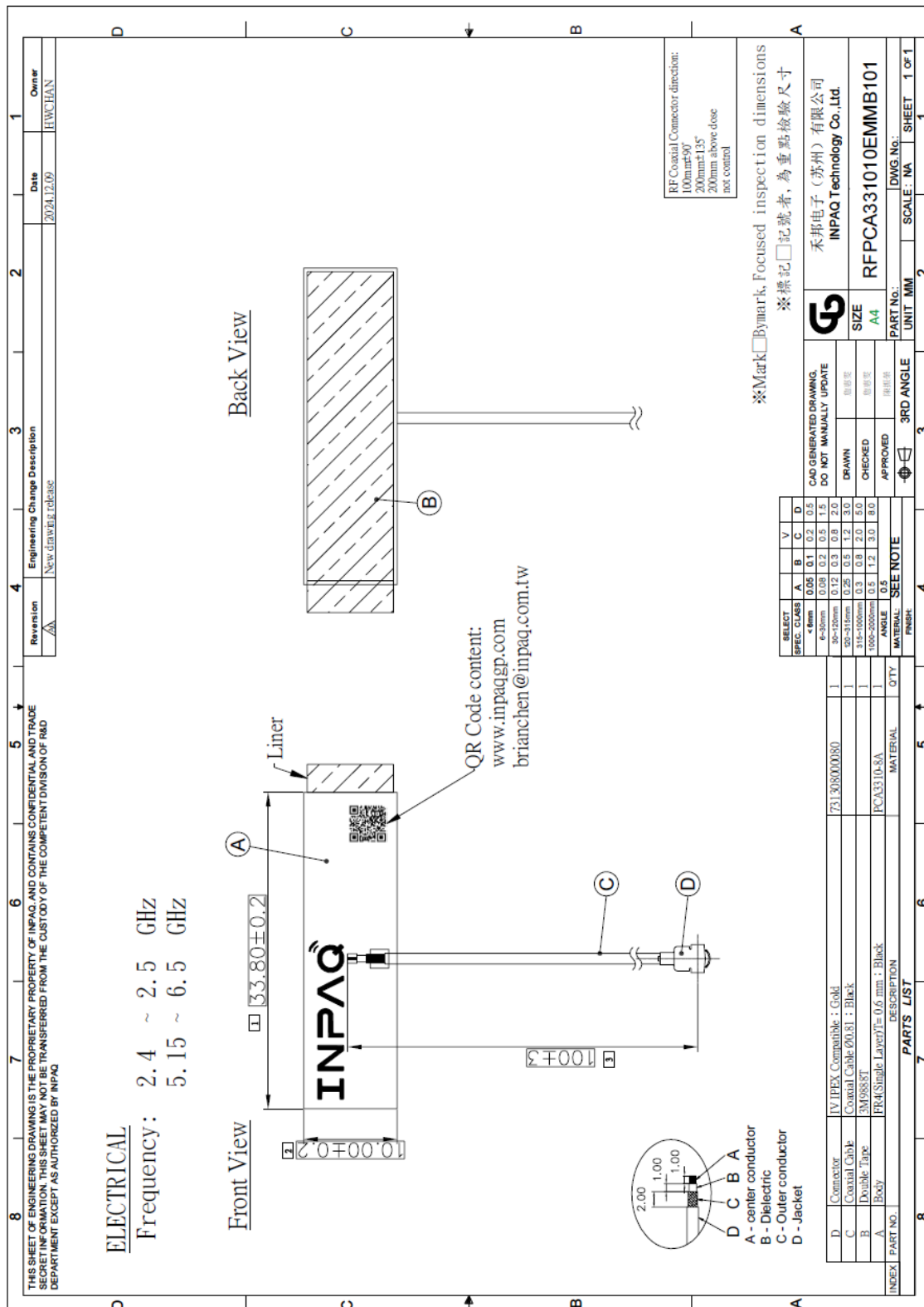
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3. Antenna Drawing :



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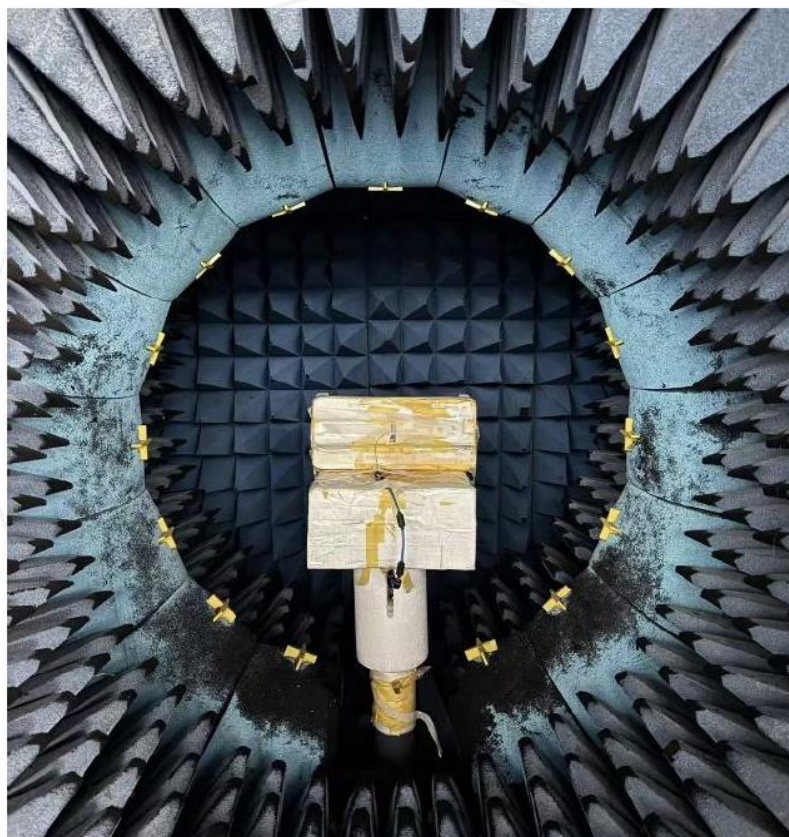
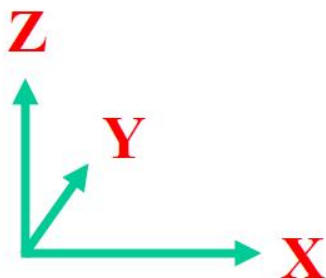
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Test Report

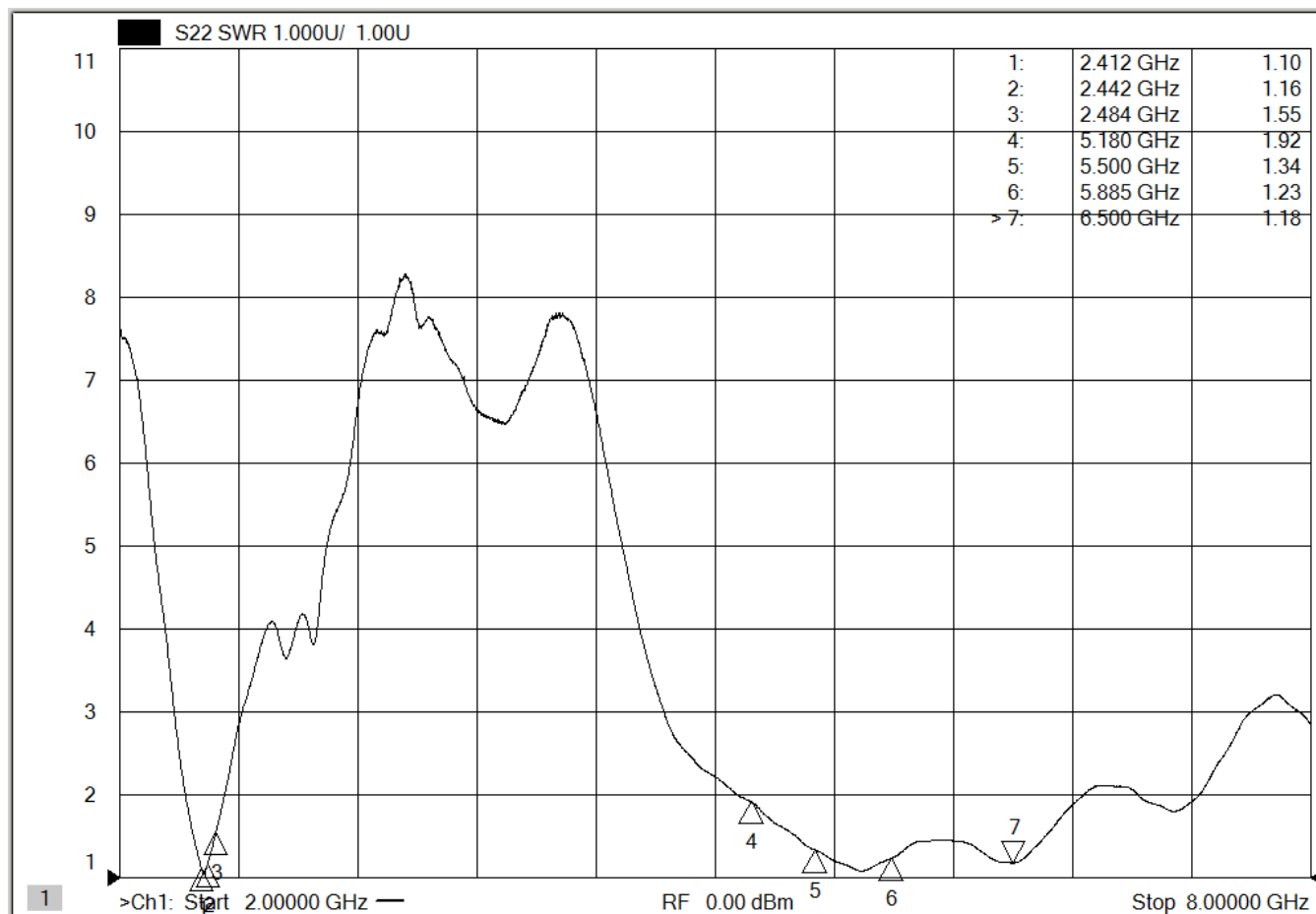
ELECTRICAL CHARACTERISTICS



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ELECTRICAL CHARACTERISTICS

VSWR



UNLESS OTHER SPECIFIED TOLERANCES ON :
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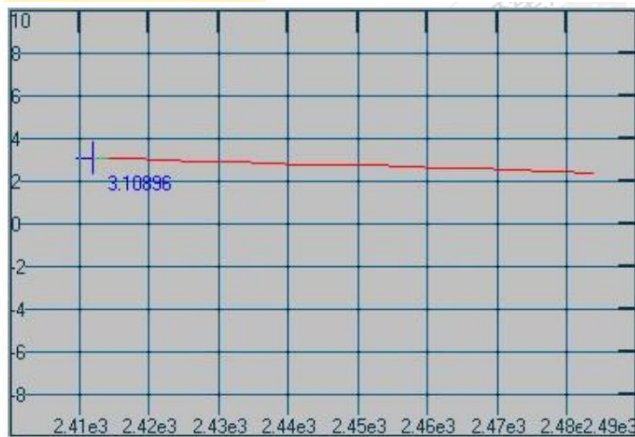
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Antenna Efficiency & Peak Gain

ANT_2.4G

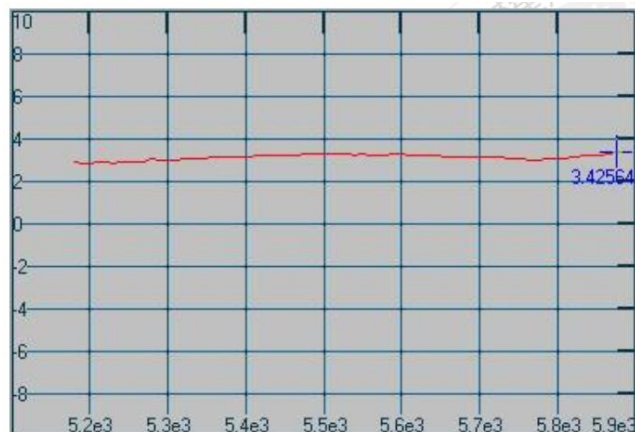


Maximum Peak Gain at 2412 MHz : 3.11 dBi

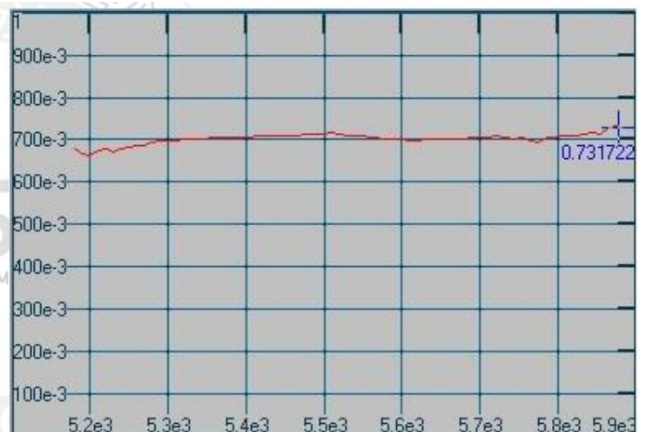


Maximum Efficiency at 2412 MHz : 85.39 %

ANT_5G



Maximum Peak Gain at 5885 MHz : 3.43 dBi



Maximum Efficiency at 5875 MHz : 73.17 %

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Antenna Efficiency and Peak Gain

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
2412	85.39	3.11
2417	84.87	3.08
2422	84.46	3.03
2427	84.01	2.99
2432	83.47	2.93
2437	83.24	2.92
2442	82.13	2.83
2447	81.98	2.82
2452	81.14	2.78
2457	80.99	2.74
2462	80.15	2.68
2467	80.03	2.65
2472	78.93	2.58
2484	76.62	2.44

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ANT_5G

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)	Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
5180	67.84	2.97	5500	71.18	3.34
5190	66.86	2.91	5510	71.62	3.37
5200	66.40	2.89	5520	71.44	3.36
5210	67.63	2.95	5530	71.00	3.32
5220	67.88	2.97	5540	70.96	3.31
5230	67.24	2.92	5550	71.09	3.33
5240	67.90	2.94	5560	70.63	3.29
5260	68.76	2.98	5580	70.05	3.28
5270	68.68	2.96	5590	70.38	3.32
5280	69.49	3.09	5600	70.20	3.31
5290	69.77	3.08	5610	69.84	3.27
5300	69.64	3.06	5620	69.94	3.27
5310	69.85	3.06	5630	70.12	3.26
5320	70.24	3.09	5640	70.24	3.24

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)	Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
5660	70.07	3.22	5745	70.14	3.14
5670	70.17	3.19	5755	70.49	3.12
5680	70.31	3.19	5765	69.65	3.05
5690	70.70	3.22	5775	69.58	3.01
5700	70.64	3.21	5785	70.45	3.08
5710	70.48	3.19	5795	70.57	3.09
5720	70.84	3.22	5805	70.91	3.13
			5825	70.96	3.23
			5835	71.30	3.26
			5845	71.56	3.28
			5855	71.48	3.25
			5865	72.71	3.38
			5875	73.17	3.43
			5885	72.69	3.42

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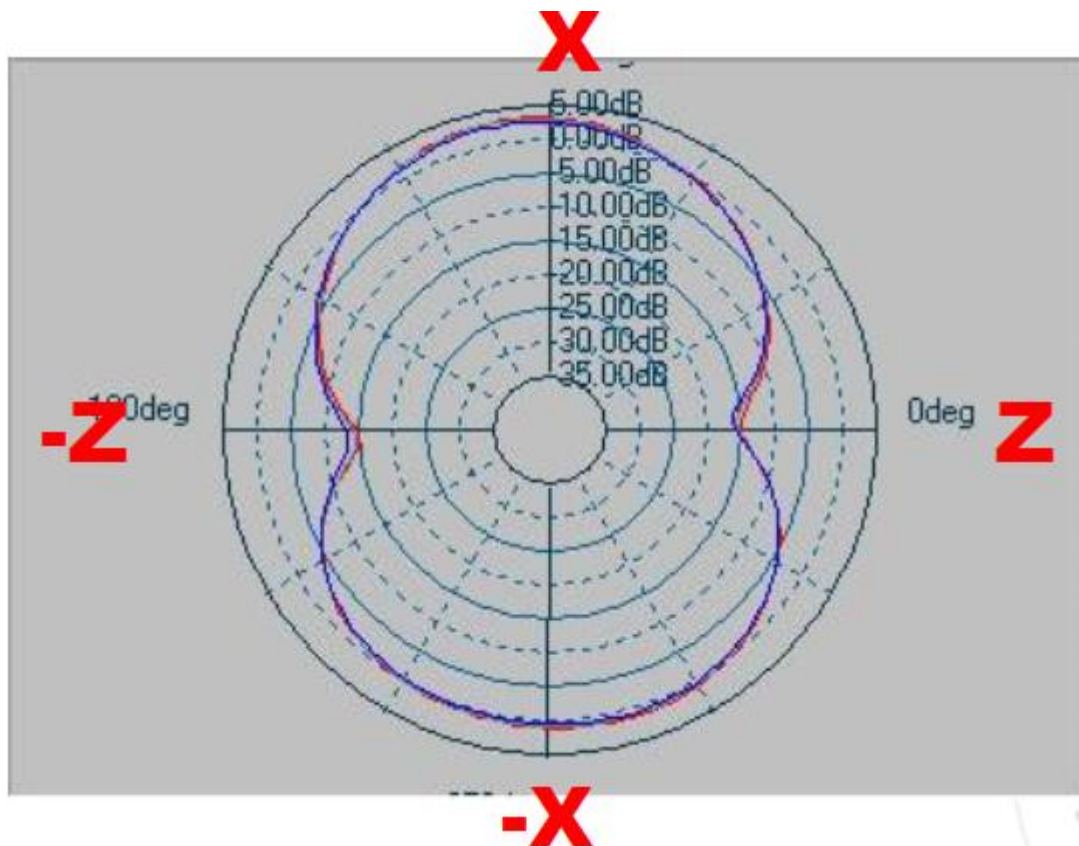
RADIATION PATTERN

ANT_2.4G

X-Z Plane

Phi=0.00deg

Gain . dB



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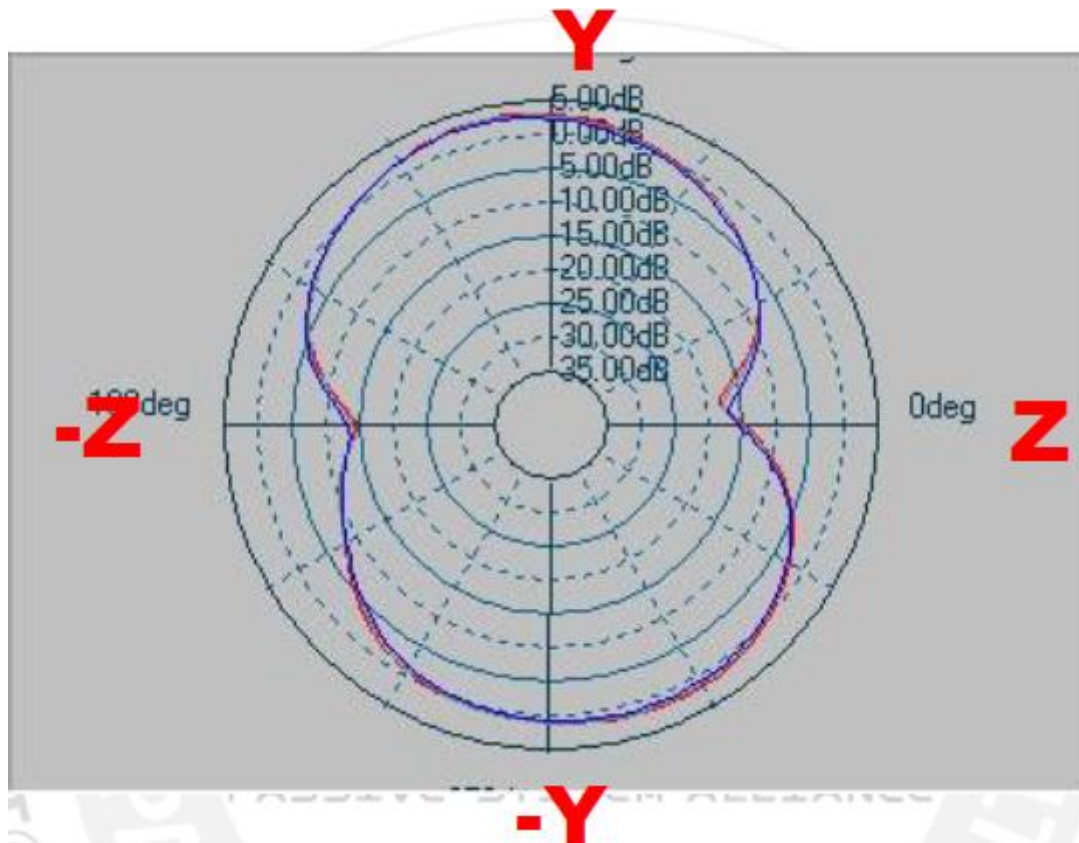
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DOCUMENT
NO.SPEC REV.
A0

Y-Z Plane

Phi=90.00deg

Gain . dB



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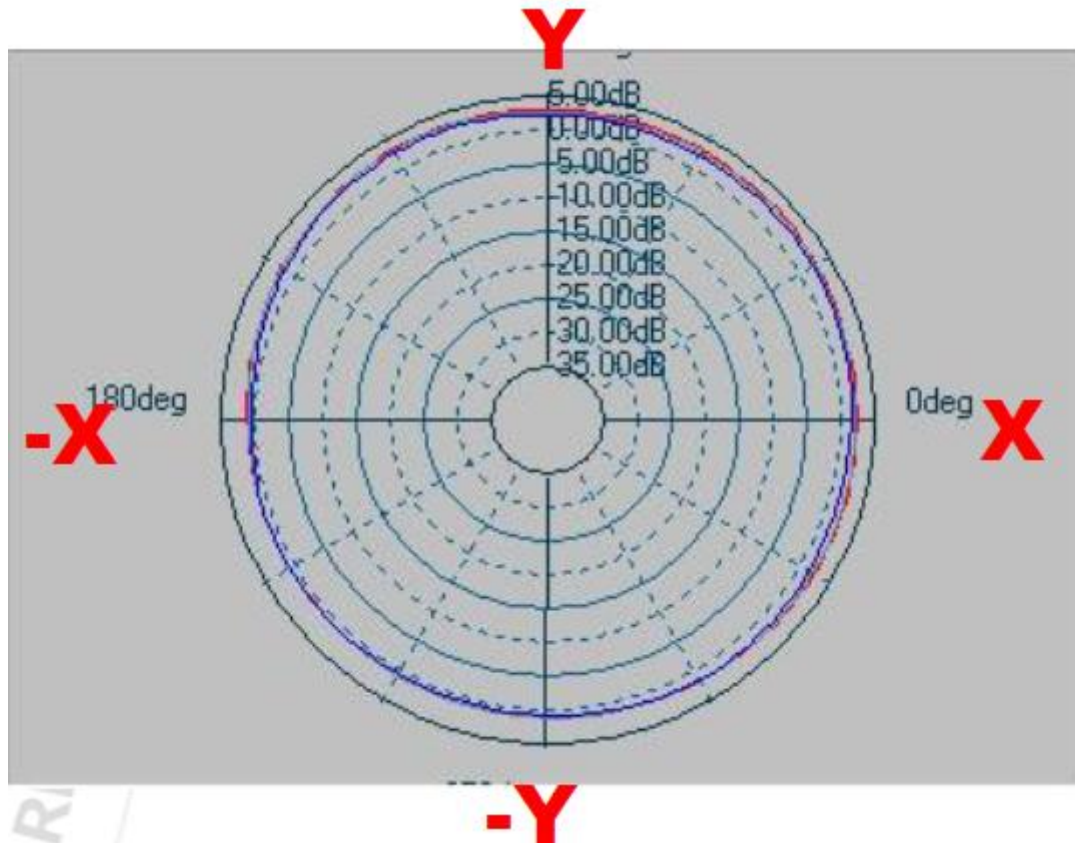
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X-Y Plane

Theta=90.00deg

Gain . dB



	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
2412	2.70	-1.41	2.59	-1.38	2.77	1.85
2442	2.45	-1.58	2.36	-1.55	2.49	1.69
2484	1.95	-1.85	2.06	-1.81	2.21	1.31

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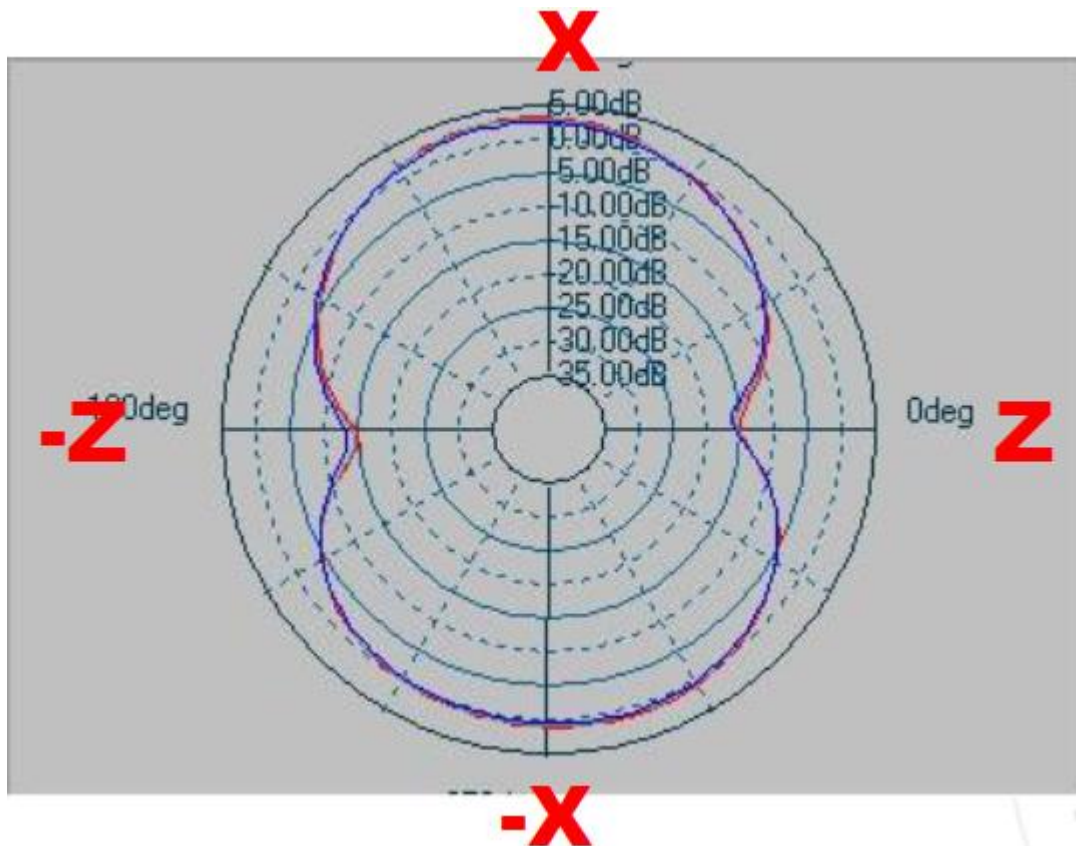
SPEC REV.
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ANT_5G

X-Z Plane

Phi=0.00deg

Gain . dB



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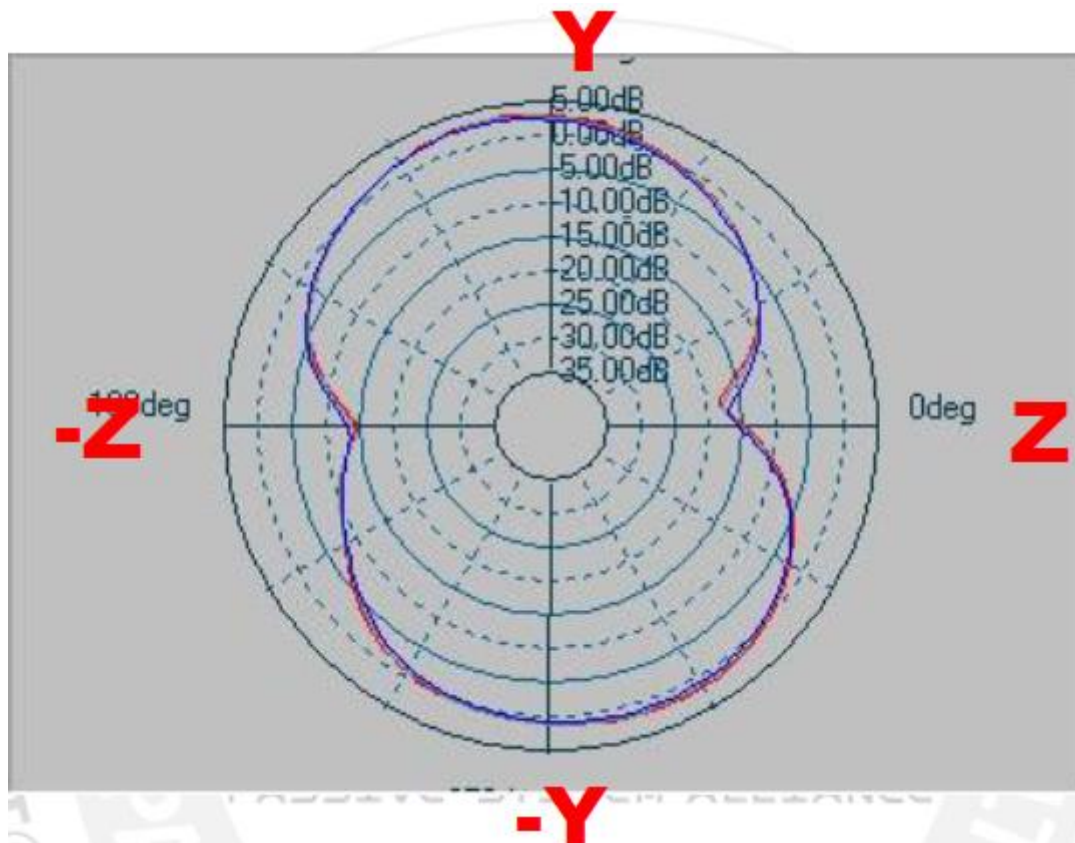
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Y-Z Plane

Phi=90.00deg

Gain . dB



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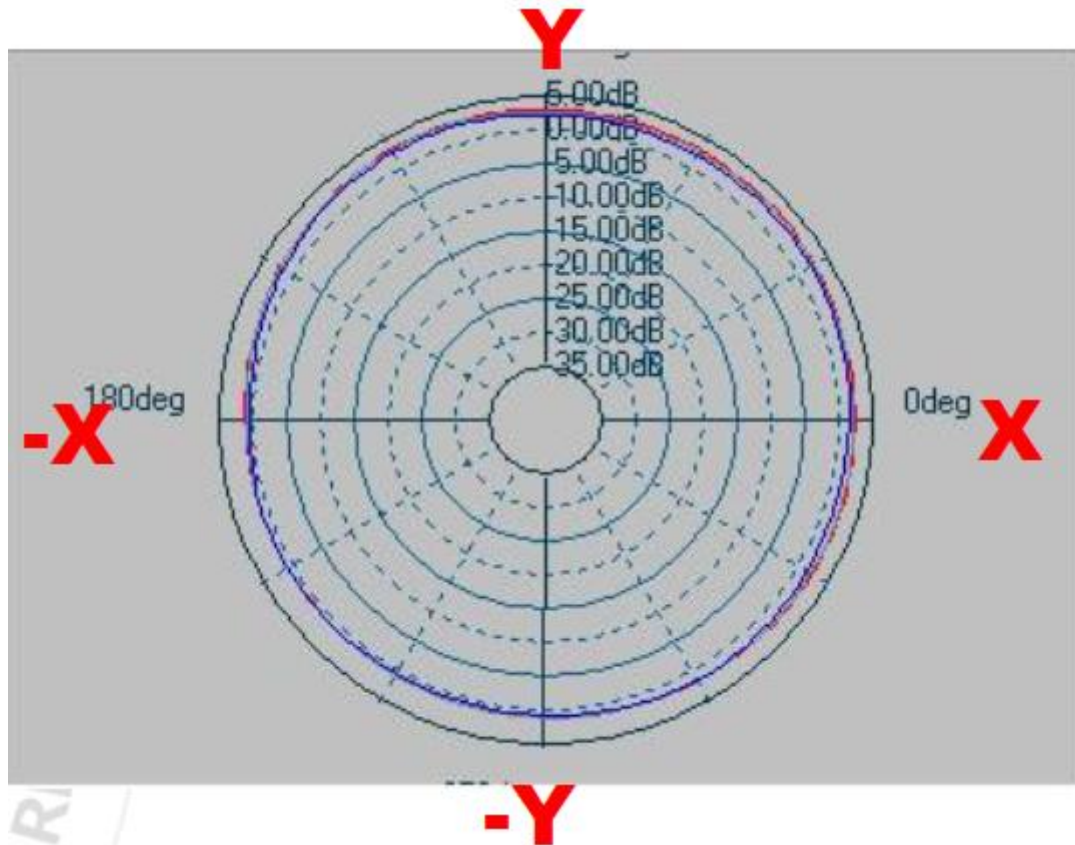
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A0

X-Y Plane

Theta=90.00deg

Gain . dB



Frequency [MHz]	ZX plane		ZY plane		XY plane	
	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
5180	1.88	-2.05	1.01	-2.54	2.95	0.08
5500	2.10	-2.10	1.49	-2.29	3.23	0.49
5885	2.23	-2.28	1.53	-1.91	3.05	0.66

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