

APPROVAL SHEET

PIFA Antenna

2.4 ~ 2.5/5.15 ~ 6.5 GHz Working Frequency

P/N: RFPCA303510EMMB101

Antenna Type : PIFA

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：RFPCA303510EMMB101

History List

[illegible]

1.Explanation of part number :

RF	PCA	3035	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.: 3035 Length 30.0 mm, Width 35.0mm	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 @3.32 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

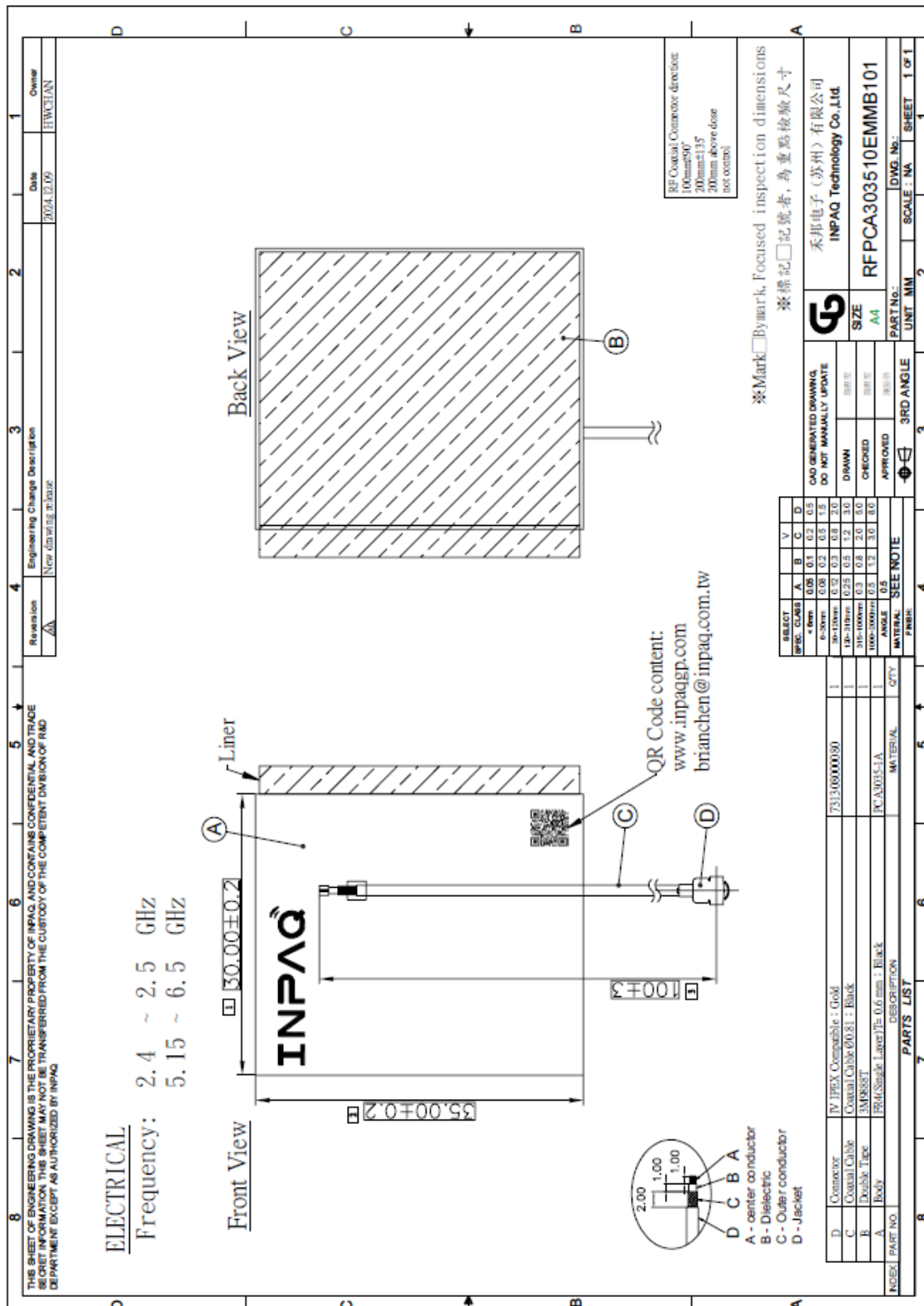
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3. Antenna Drawing :



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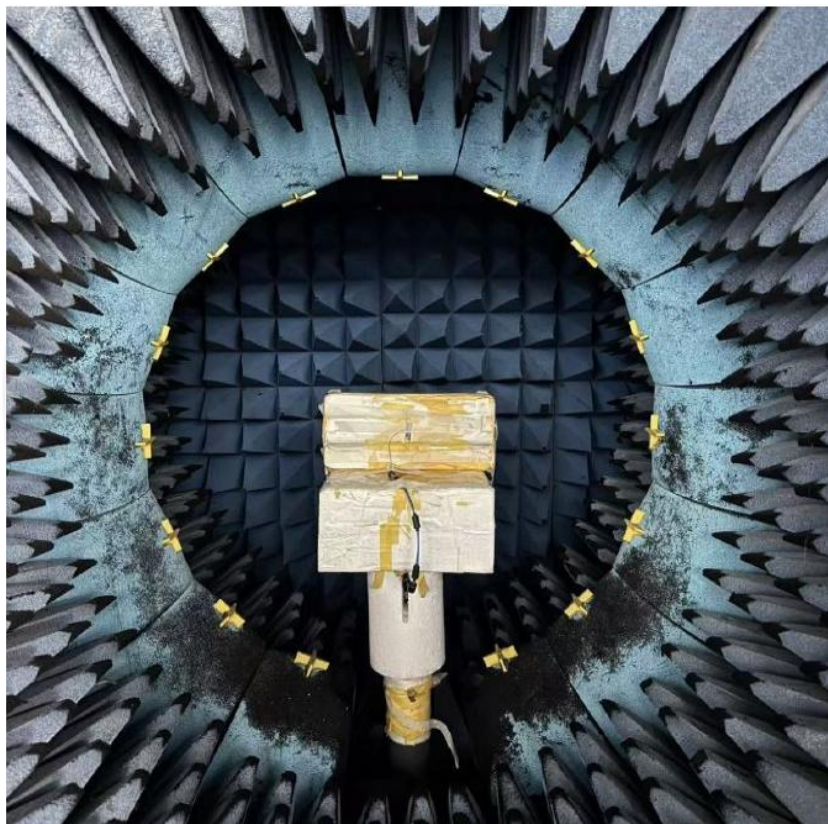
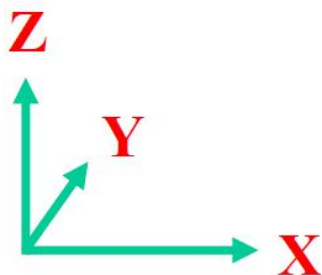
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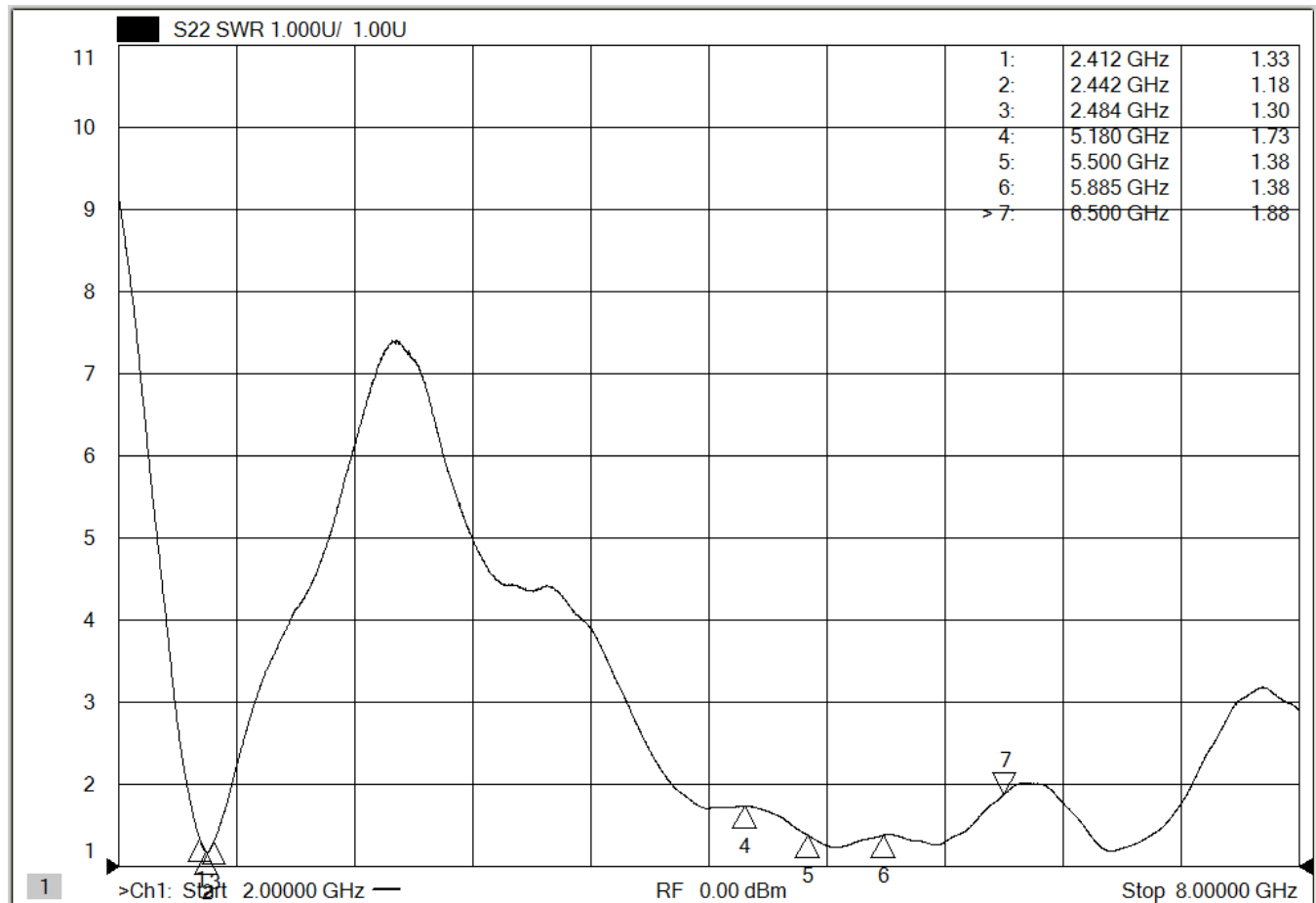
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Test Report

ELECTRICAL CHARACTERISTICS



UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A			INPAQ TECHNOLOGY CO., LTD.	
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ELECTRICAL CHARACTERISTICS**VSWR**

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

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CHECKED BY : HW

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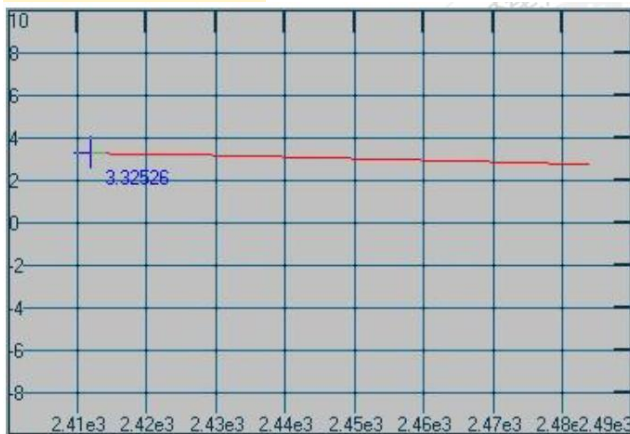
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Antenna Efficiency & Peak Gain

ANT_2.4G

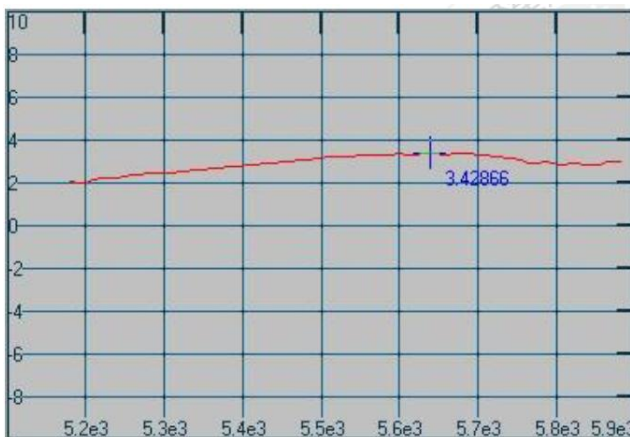


Maximum Peak Gain at 2412 MHz : 3.32 dBi



Maximum Efficiency at 2412 MHz : 82.63 %

ANT_5G



Maximum Peak Gain at 5640 MHz : 3.43 dBi



Maximum Efficiency at 5520 MHz : 75.31 %

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



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Antenna Efficiency and Peak Gain

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
2412	82.63	3.33
2417	81.82	3.30
2422	81.10	3.25
2427	80.61	3.23
2432	79.75	3.18
2437	79.31	3.18
2442	78.19	3.11
2447	77.86	3.11
2452	77.09	3.07
2457	77.18	3.05
2462	76.28	2.99
2467	76.14	2.97
2472	75.16	2.91
2484	73.22	2.79

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Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
5180	70.28	2.08
5190	69.47	2.04
5200	68.70	2.03
5210	70.25	2.17
5220	71.17	2.26
5230	70.20	2.24
5240	70.44	2.27
5260	71.49	2.39
5270	70.98	2.40
5280	71.70	2.47
5290	72.29	2.52
5300	72.29	2.52
5310	72.57	2.53
5320	72.80	2.56

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
5500	74.67	3.21
5510	75.16	3.26
5520	75.31	3.28
5530	75.05	3.29
5540	74.60	3.28
5550	74.68	3.32
5560	74.73	3.32
5580	73.50	3.31
5590	73.99	3.38
5600	74.07	3.40
5610	73.35	3.35
5620	73.25	3.35
5630	73.54	3.42
5640	73.58	3.43

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
5660	72.57	3.38
5670	72.77	3.41
5680	73.25	3.42
5690	72.85	3.41
5700	71.90	3.33
5710	72.08	3.32
5720	71.78	3.30

Frequency(MHz)	Efficiency(%)	Peak gain(dBi)
5745	70.74	3.19
5755	70.55	3.12
5765	68.10	2.97
5775	68.40	2.95
5785	70.01	3.05
5795	68.91	2.97
5805	68.08	2.92
5825	68.00	2.95
5835	67.57	2.92
5845	67.69	2.92
5855	67.72	2.88
5865	68.24	3.03
5875	67.19	3.01
5885	66.38	3.02

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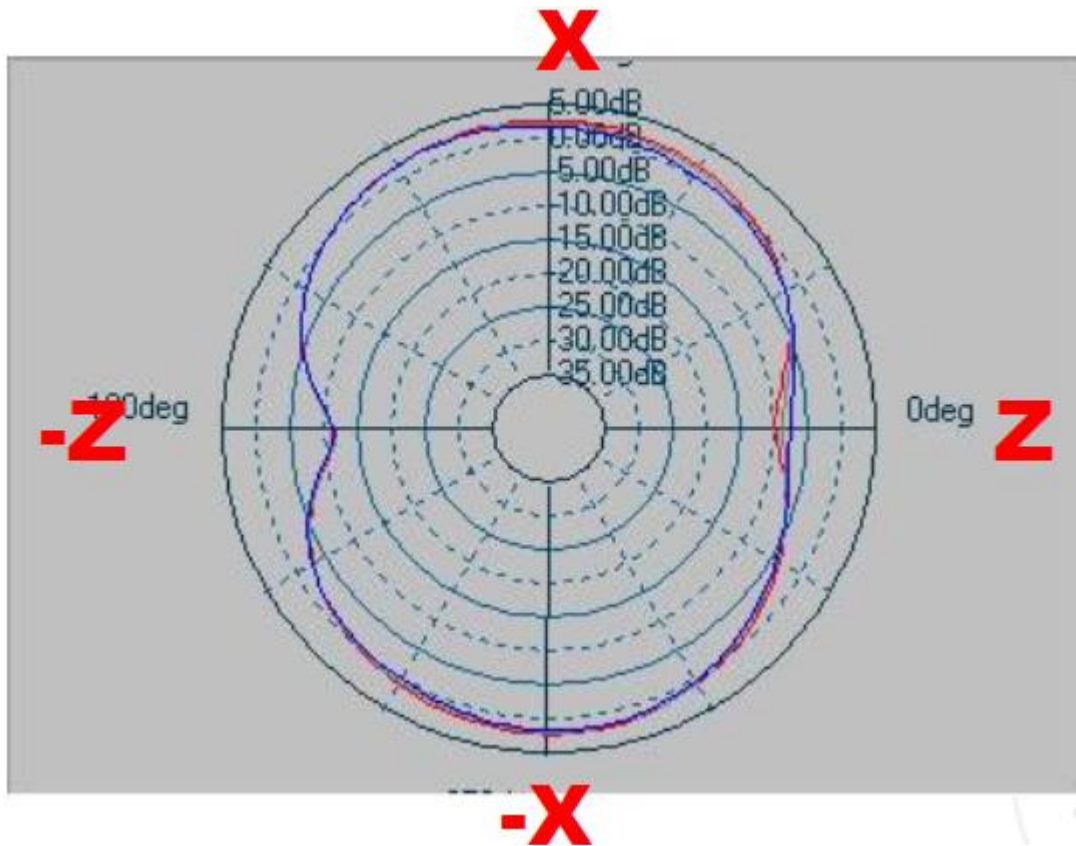
RADIATION PATTERN

ANT_2.4G

X-Z Plane

Phi=0.00deg

Gain . dB



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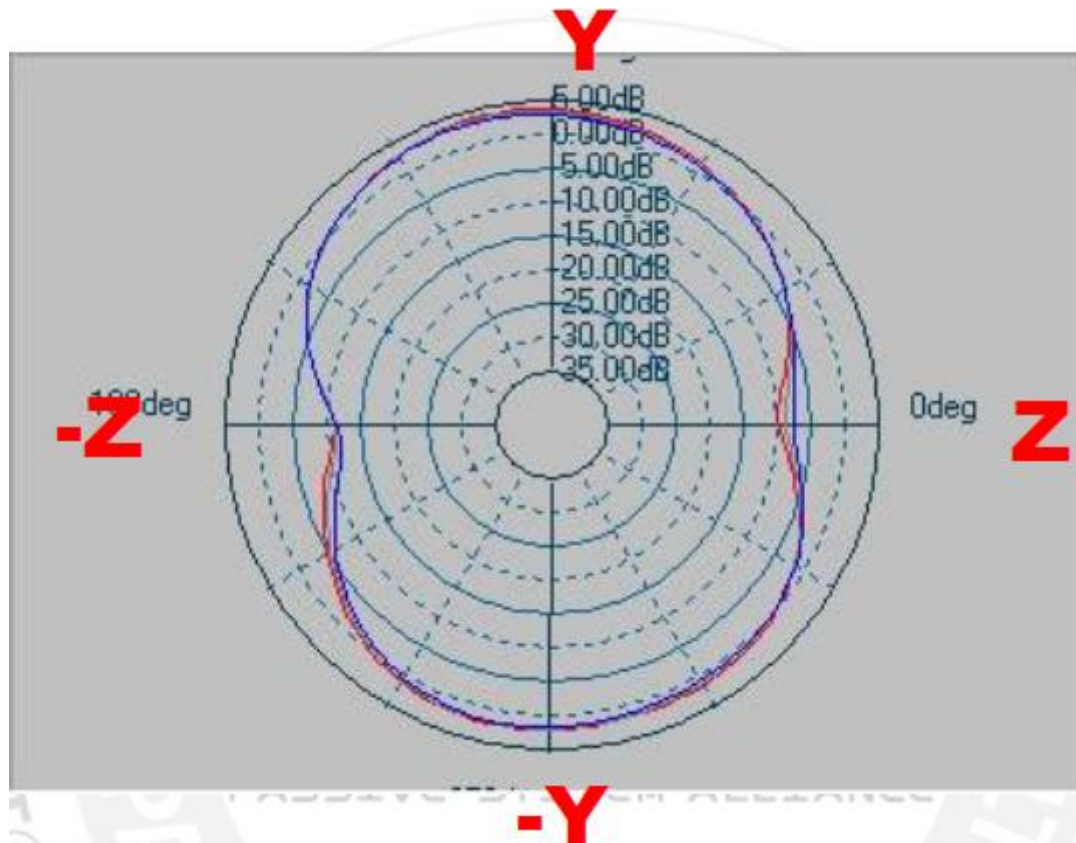
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SPEC REV.
A0

Y-Z Plane

Phi=90.00deg

Gain . dB



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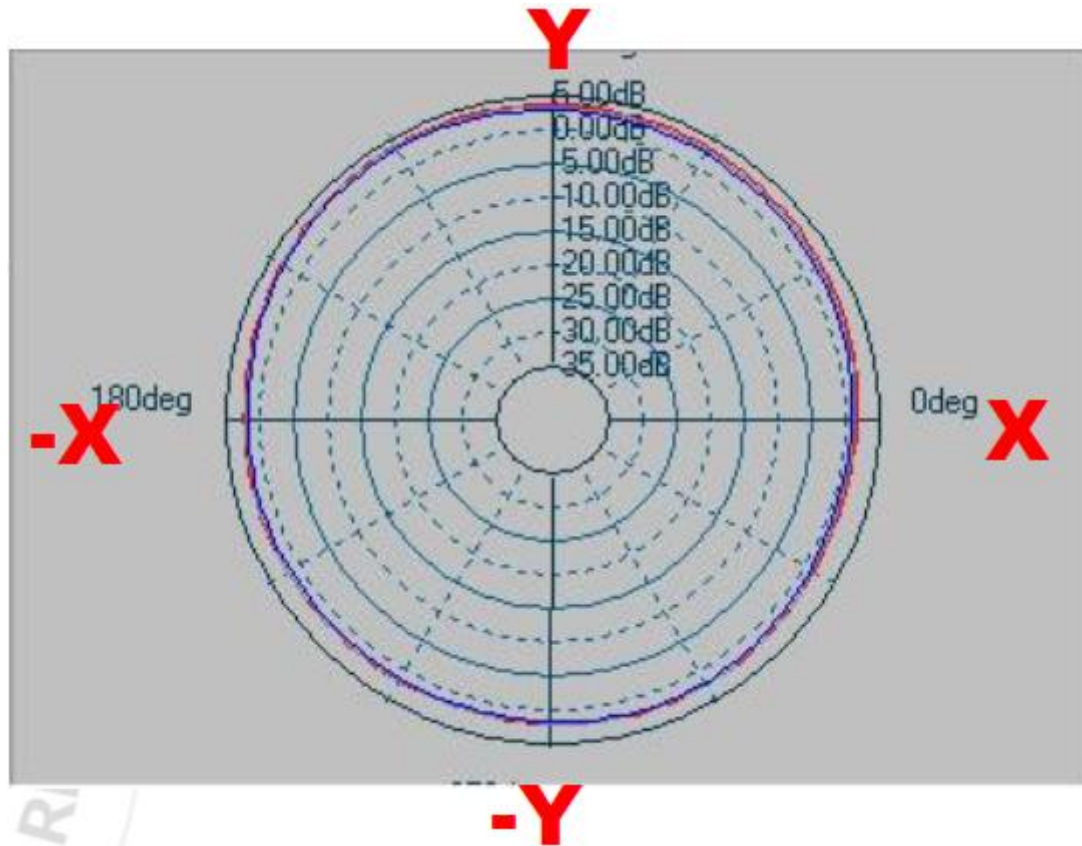
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DOCUMENT
NO.SPEC REV.
A0

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	2.12	-0.62	3.21	-0.26	3.16	2.33
2442	1.89	-0.86	2.89	-0.48	2.96	2.10
2484	1.65	-1.13	2.46	-0.72	2.62	1.74

UNLESS OTHER SPECIFIED TOLERANCES ON :
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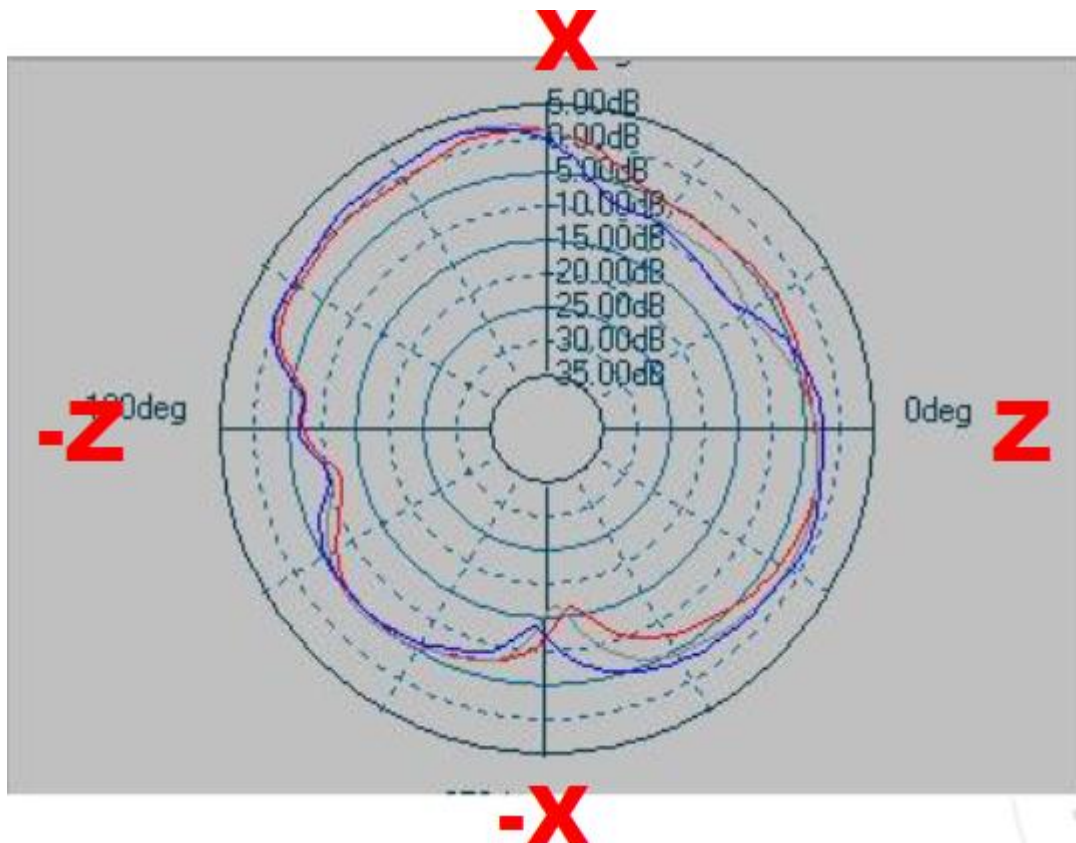
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ANT_5G

X-Z Plane

Phi=0.00deg

Gain . dB



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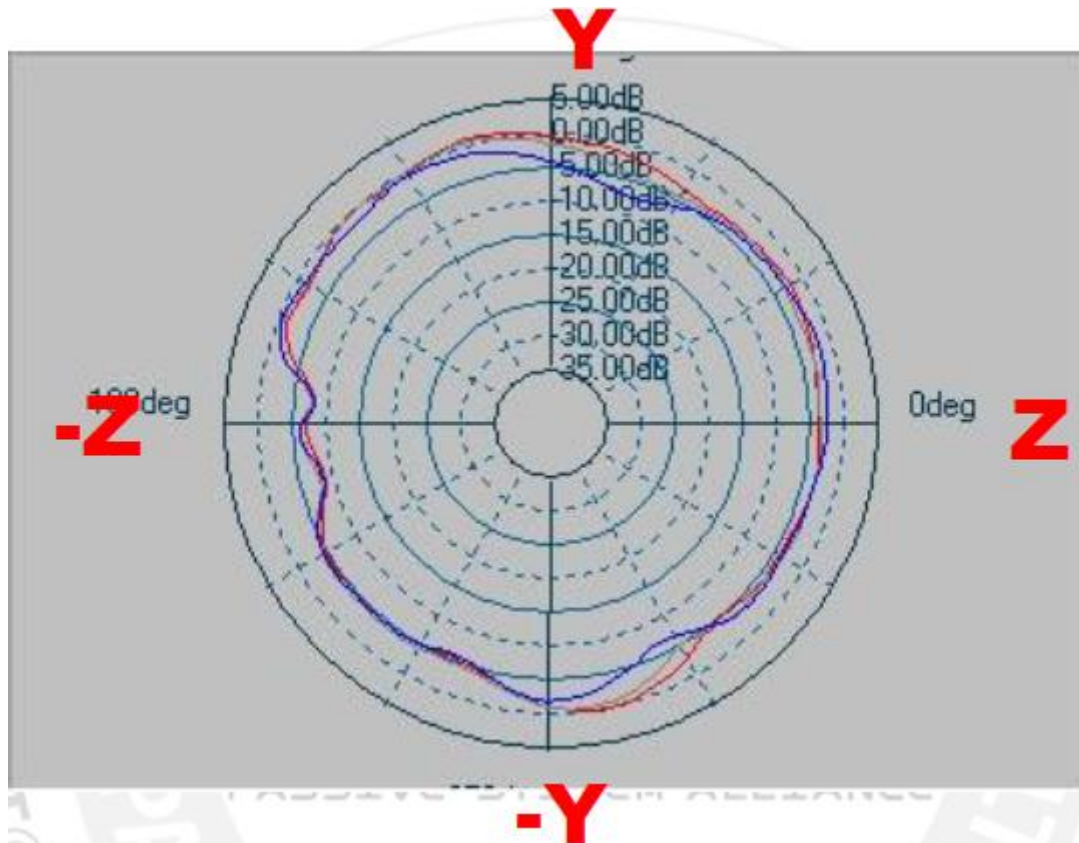
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Y-Z Plane

Phi=90.00deg

Gain . dB



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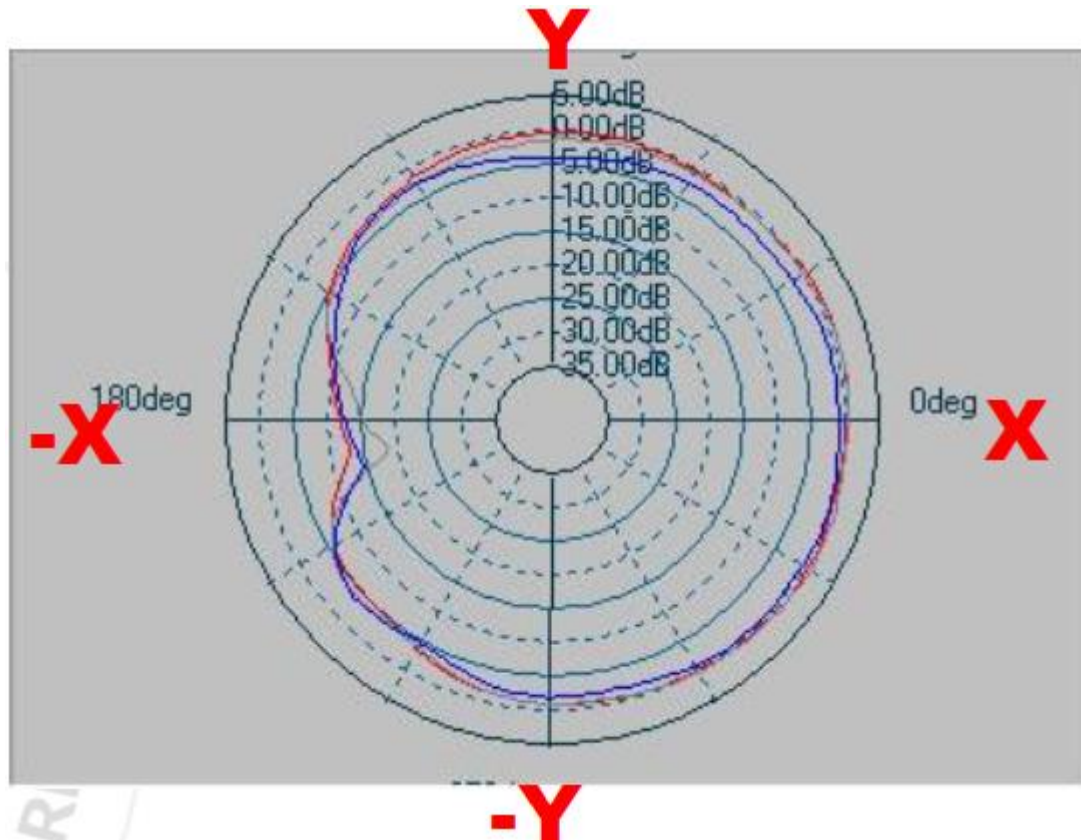
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X-Y Plane

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	0.80	-3.77	0.16	-2.86	0.89	-1.67
5500	1.83	-3.20	-0.20	-3.04	1.15	-1.82
5885	1.76	-3.16	-1.03	-3.72	0.13	-3.00

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