



Product Name: 5G NR FR1 LTE Hinge Rotatable Terminal Antenna

Part Number: ADA-0045-5G

Features:

- Support 5G NR FR1 LTE 617-960MHz, 1710-2690MHz, 3300-3800MHz, 4200MHz-4700MHz, 5000MHz-5925MHz
Also included 2.4/5.0-5.9 bands
- Hinge Rotatable, 90 Degree
- Connector: SMA Male
- RoHS & REACH Compliant

Applications:

- LTE Router Application
- Smart Metering Application
- IoT Device Application

5G NR FR1 LTE Hinge Terminal Antenna

MODEL: ADA-0045-5G

2023-07-26

I. Specifications:

Items	Specifications									
LTE Electrical Characteristics										
Application Bands	5G NR Band 71	LTE 700	GSM 850/ 900	DCS	PCS	UMTS1	LTE2600	5G NR Band	Japan 5G NR	LTE5200 WiFi5800
Frequencies (MHz)	617	698	824	1710	1850	1920	2300	3300	4200	5000
	~	~	~	~	~	~	~	~	~	~
	698	824	960	1880	1990	2170	2690	3800	4700	5925
Efficiency (%)	54.28	52.03	58.29	70.04	79.27	78.75	56.77	61.80	89.84	72.43
Average Gain (dBi)	-2.65	-2.84	-2.34	-1.55	-1.01	-1.04	-2.46	-2.09	-0.47	-1.40
Peak Gain (dBi)	1.29	2.00	1.29	3.77	4.55	5.49	5.21	5.14	6.57	7.72
V.S.W.R	< 7.5	< 4.5	< 4.4	< 1.9	< 2.7	< 4.1	< 2.1	< 2.5	< 1.9	< 2.0
Return Loss (dB)	< -2	< -4	< -4	< -10	< -7	< -4	< -9	< -7	< -10	< -9
Test Condition	215 x 125 x 16.5 mm (With Box)									
Impedance	50 Ω									
Polarization	Linear									
Physical Condition										
Dimension (mm)	196-220(L) x 26.9(W) x 14.4(T)									
Connector	90° hinged SMA(Male)									

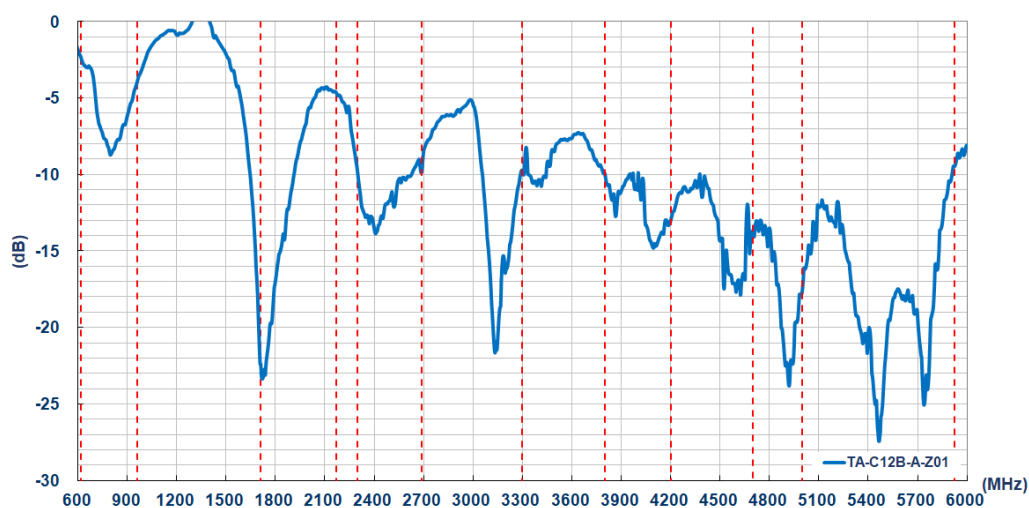
All specifications subject to change without notice.

Environmental Conditions	
Operation Temperature	-40 ~ +85 °C
Storage Temperature	-40 ~ +85 °C
Relative Humidity	95% non-condensing

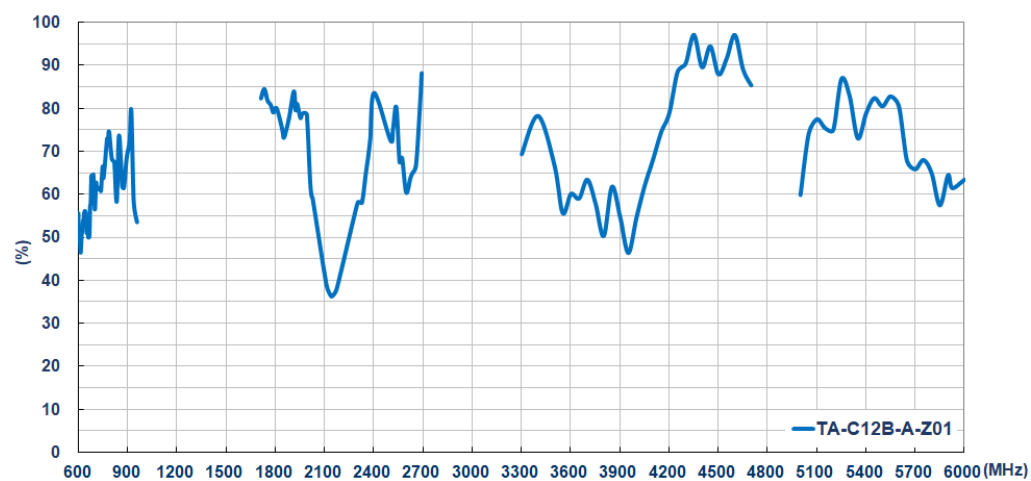
All specifications subject to change without notice.

II. Antenna Technical Parameters:

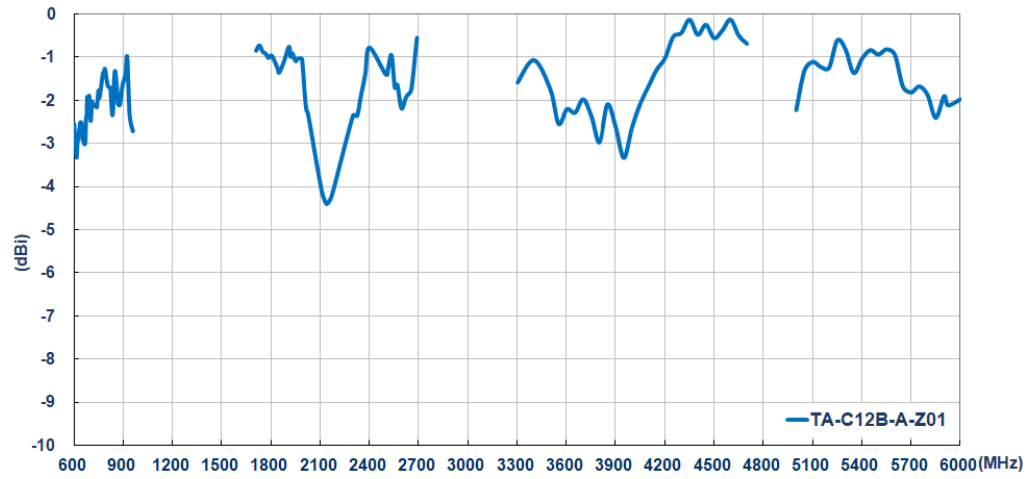
S11-parameters (dB)



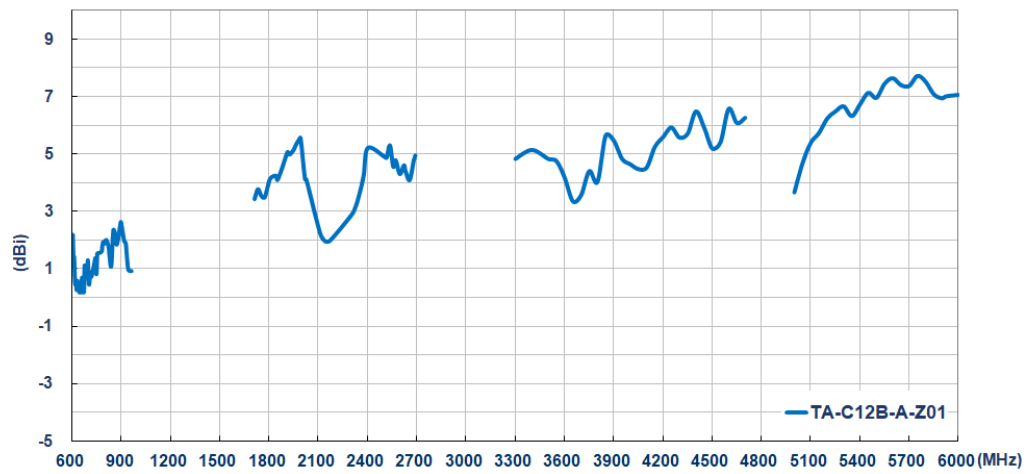
Efficiency (%)



Average Gain (dBi)

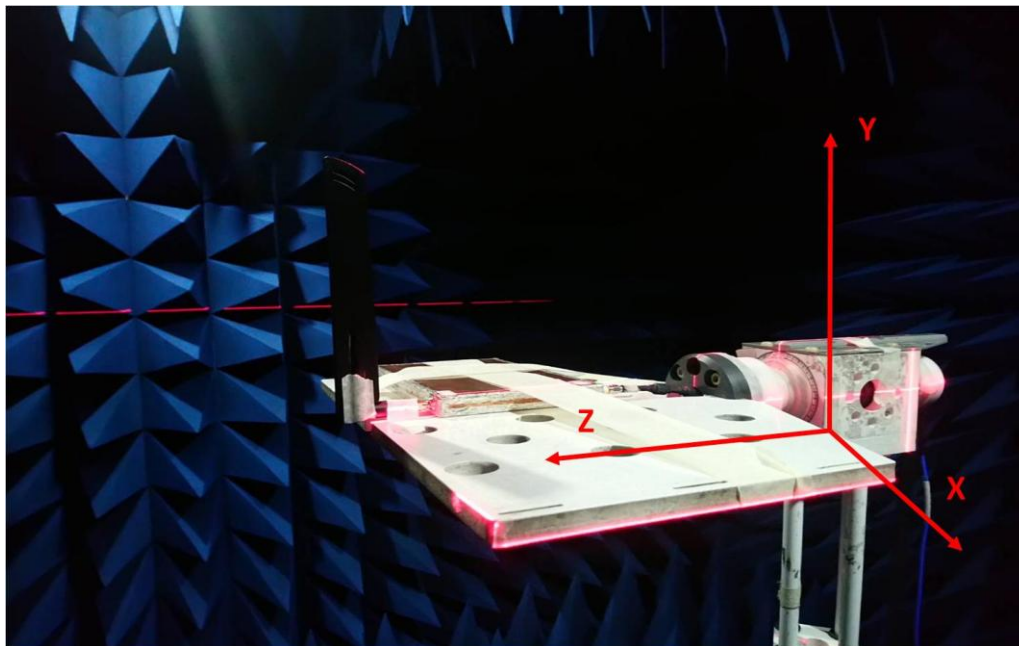


Peak Gain (dBi)



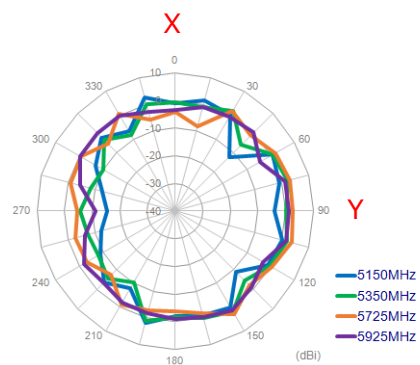
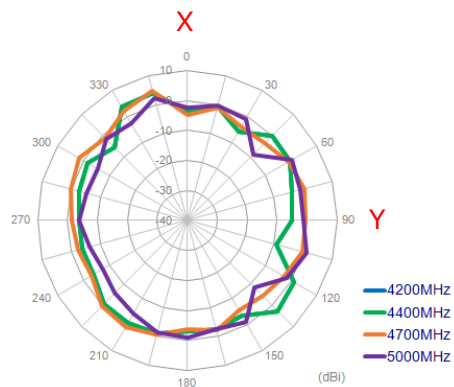
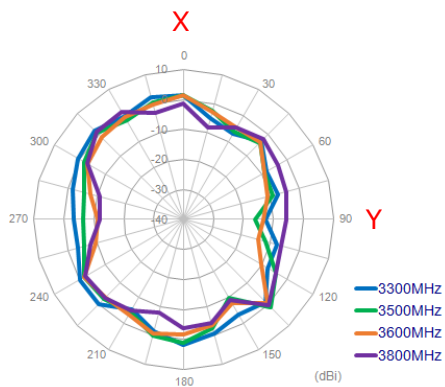
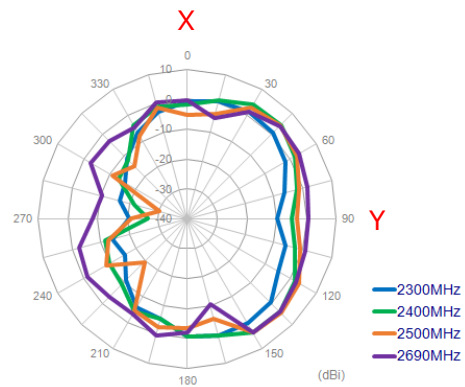
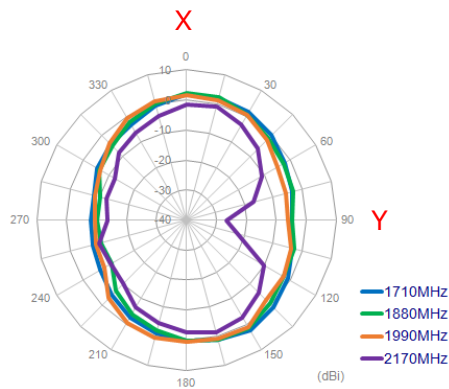
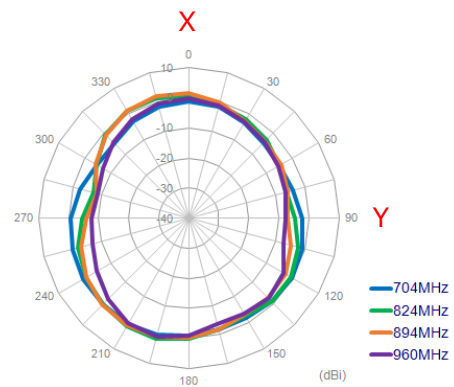
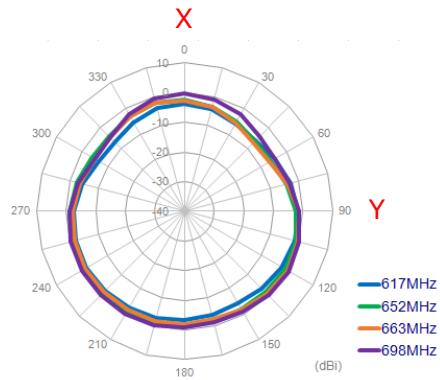
III. Antenna Radiation Pattern Measurement:

The antenna radiation patterns are measured in 3D Anechoic Chamber. The measurement setup is as show below,



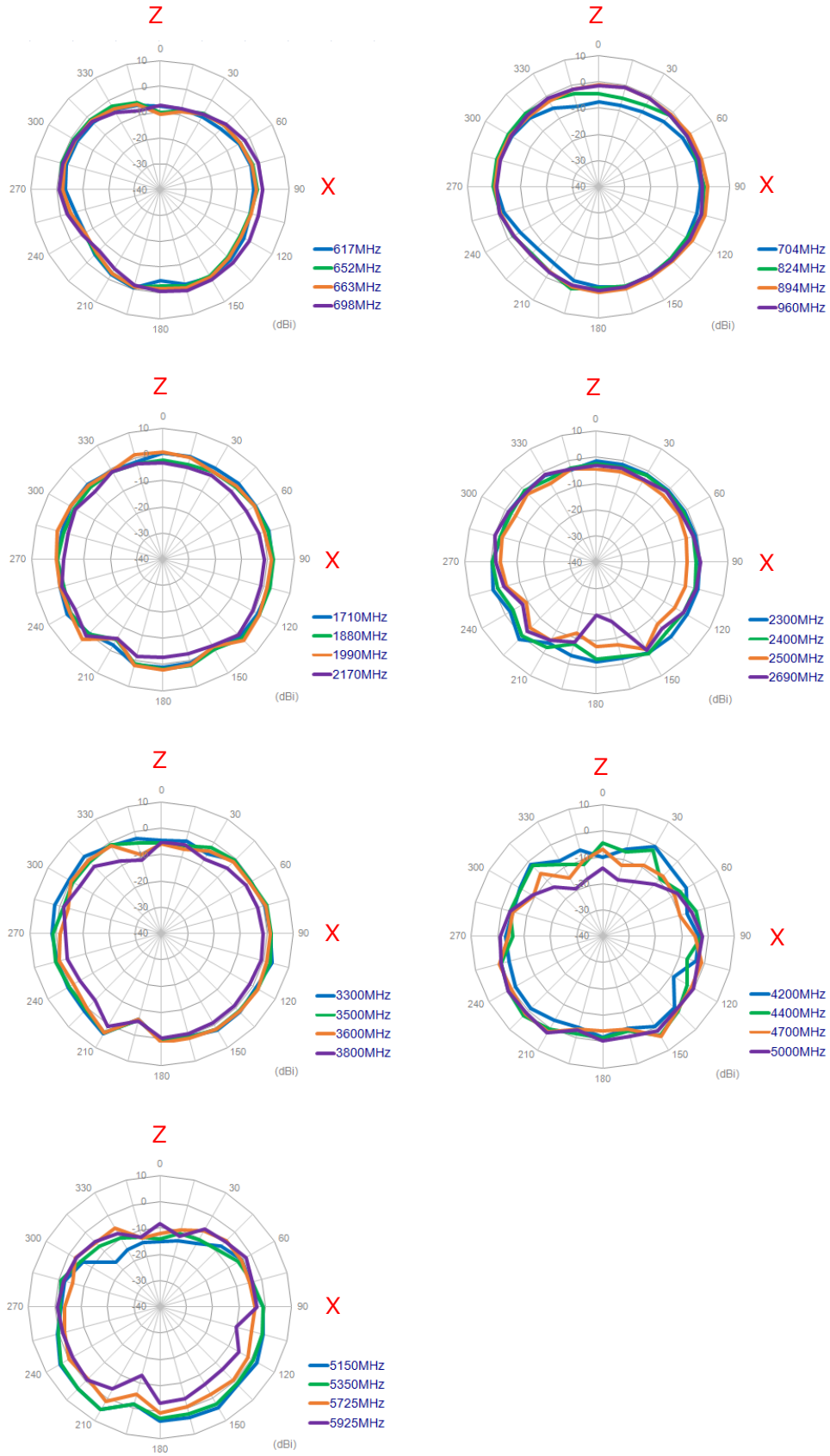
IV. 2D Radiation Pattern:

X-Y plane

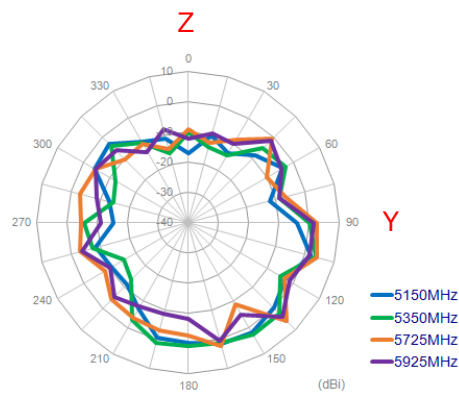
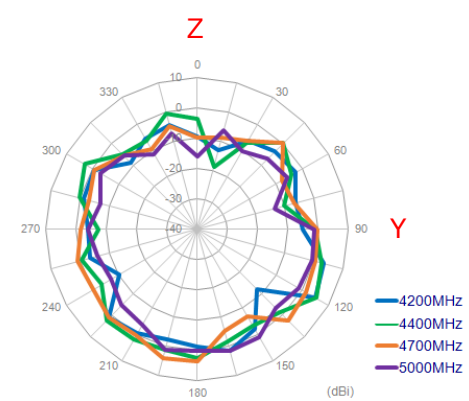
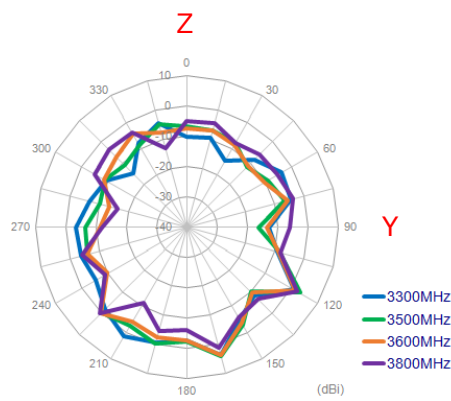
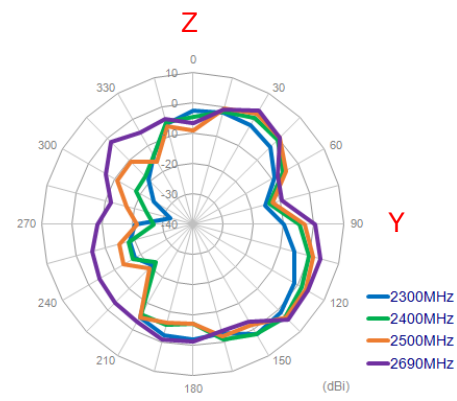
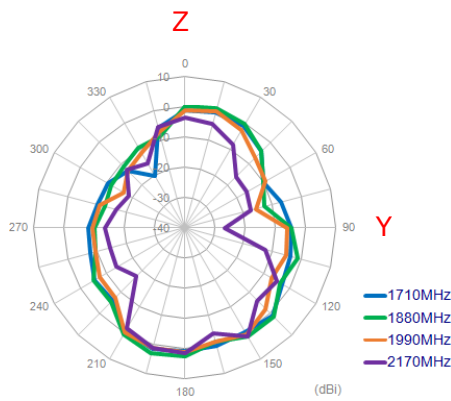
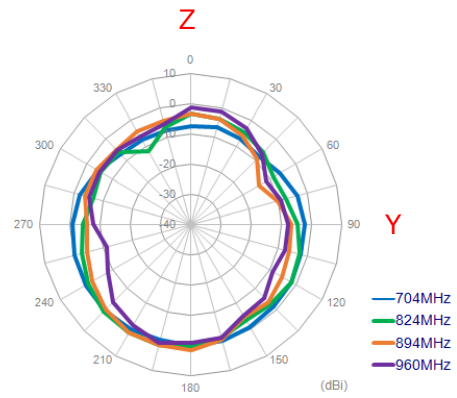
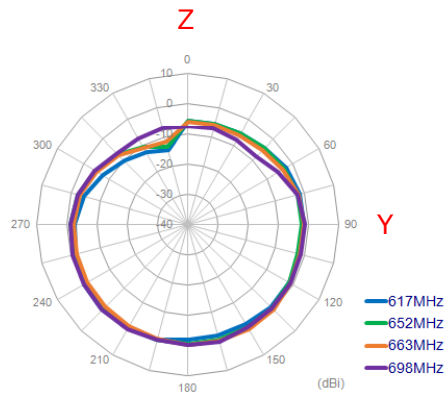


All specifications subject to change without notice.

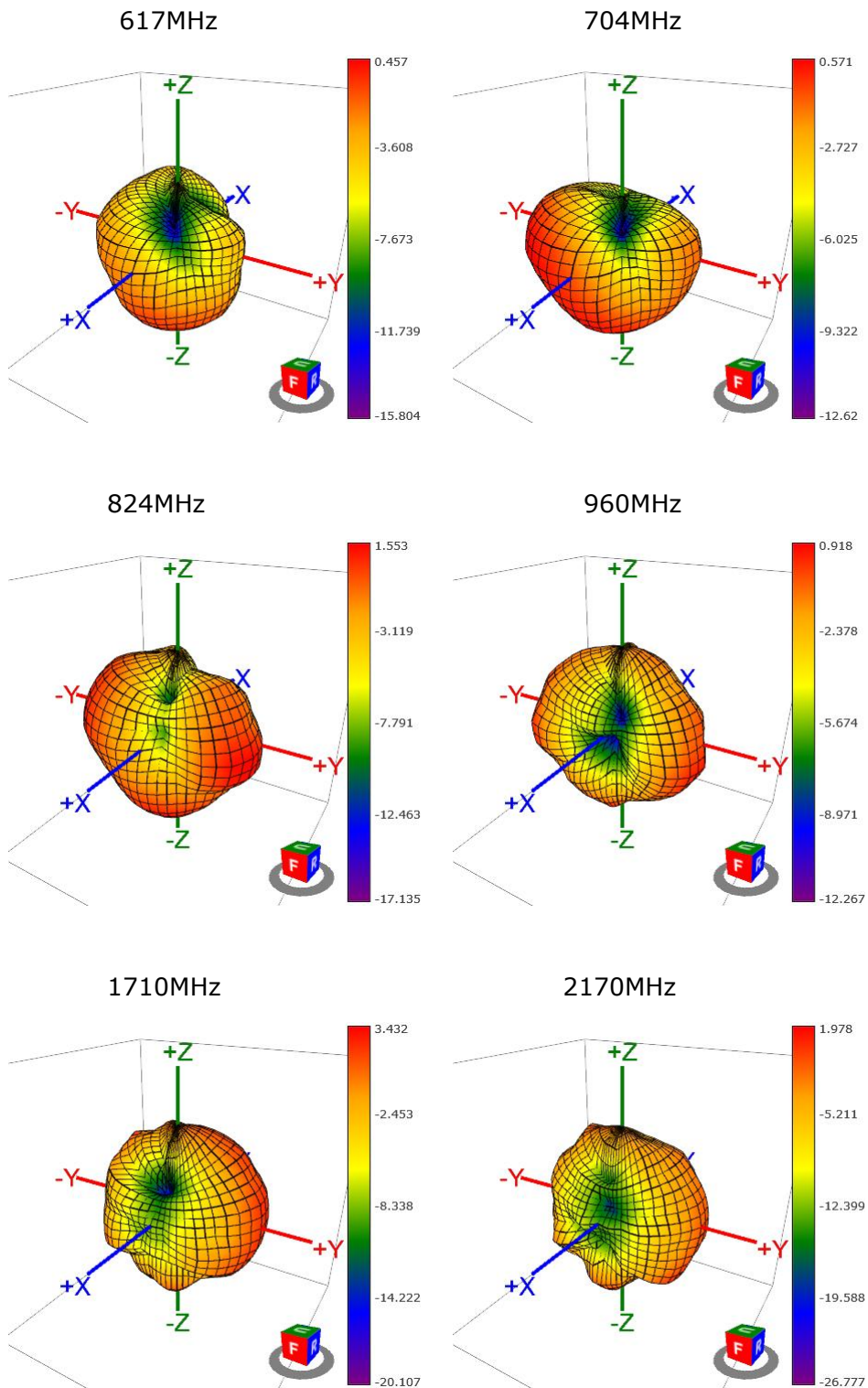
X-Z plane

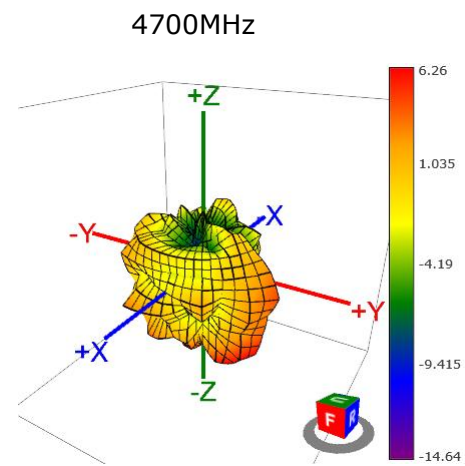
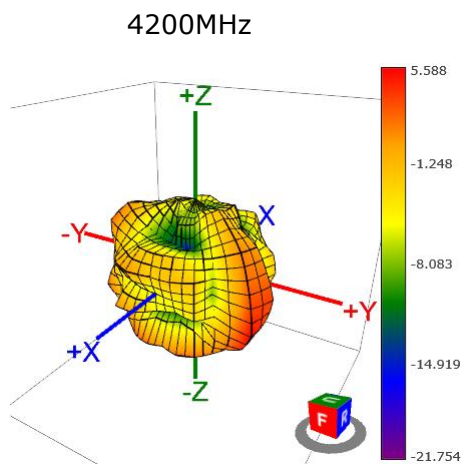
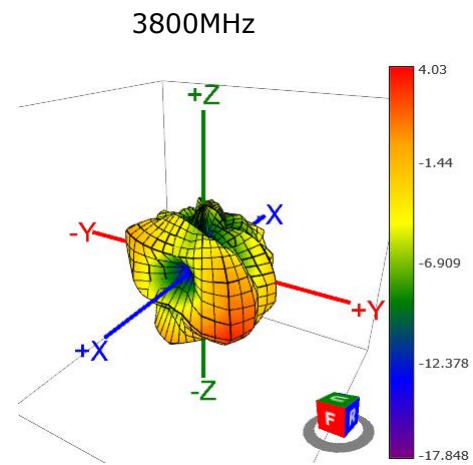
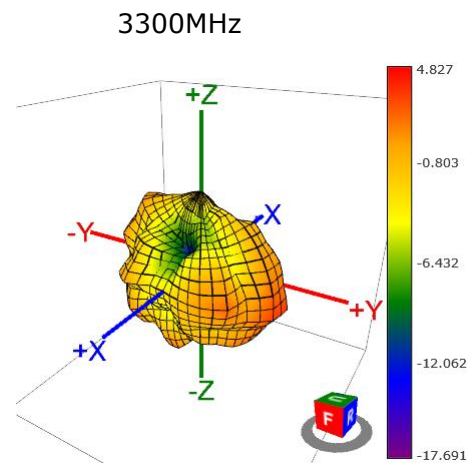
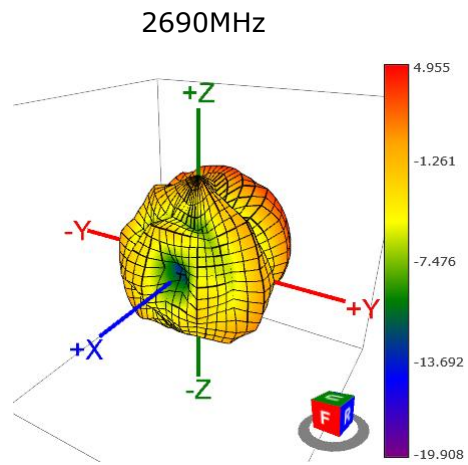
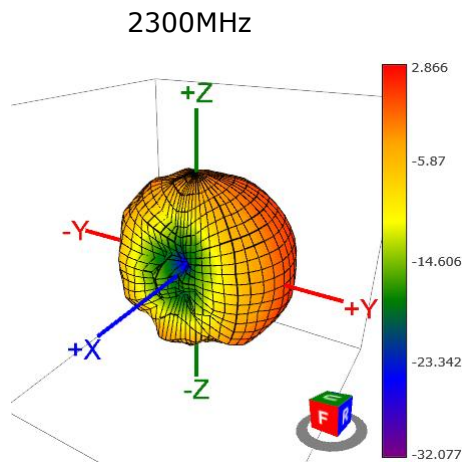


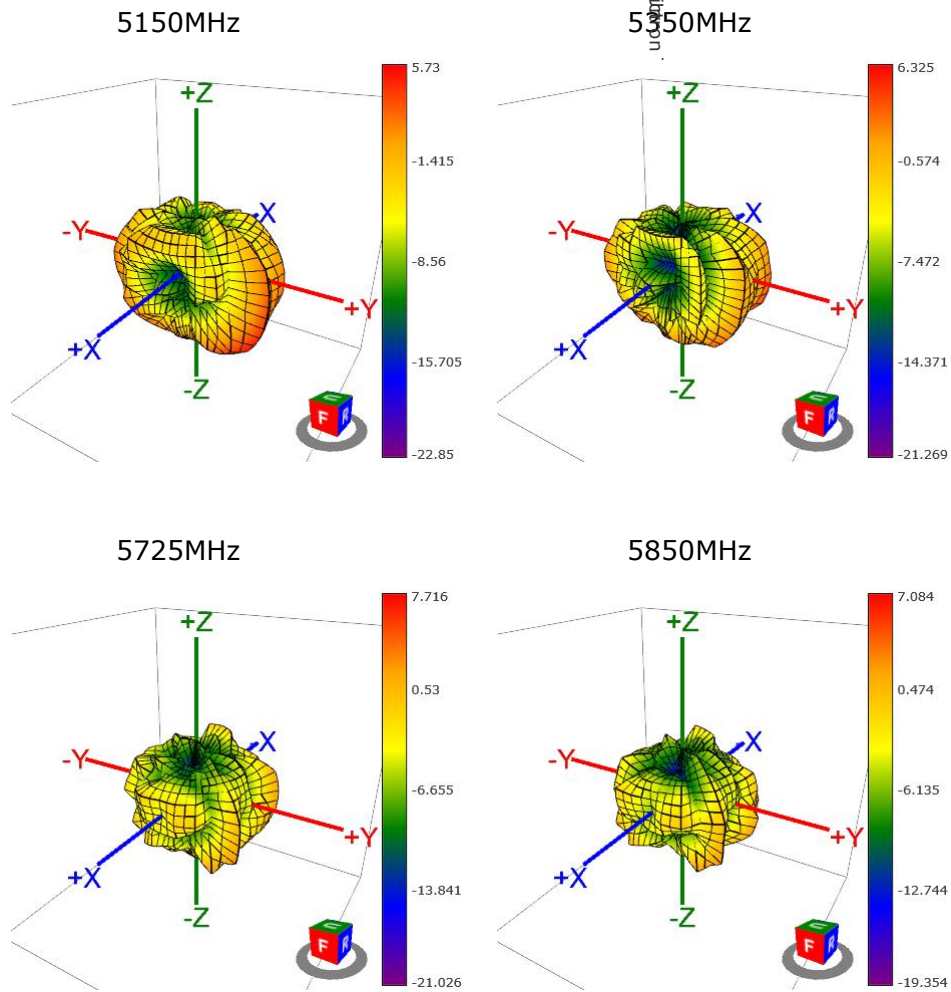
Y-Z plane



V. 3D Radiation Pattern:







VI. Mechanical Drawing (Unit:mm):

