



Product Name: 5G NR/ 4G LTE Terminal Antenna

Part Number: ADA-0035-5G

Features:

- Support 5G NR/ 4G LTE Full Frequency Bands, 617-960MHz, 1710-2690MHz, 3300-4600MHz, 5150-5850MHz
- Straight Length: 115-133.5mm
- Hinge Rotatable 90 Degree
- SMA (Male) Connector
- RoHS & REACH Compliant

Applications:

- Machine to Machine Communication & IOT Application
- Fleet Management & Telematics
- Vehicle Navigation

5G NR/ 4G LTE Terminal Antenna

MODEL: ADA-0035-5G

20230726

All specifications subject to change without notice.

I. Specifications:

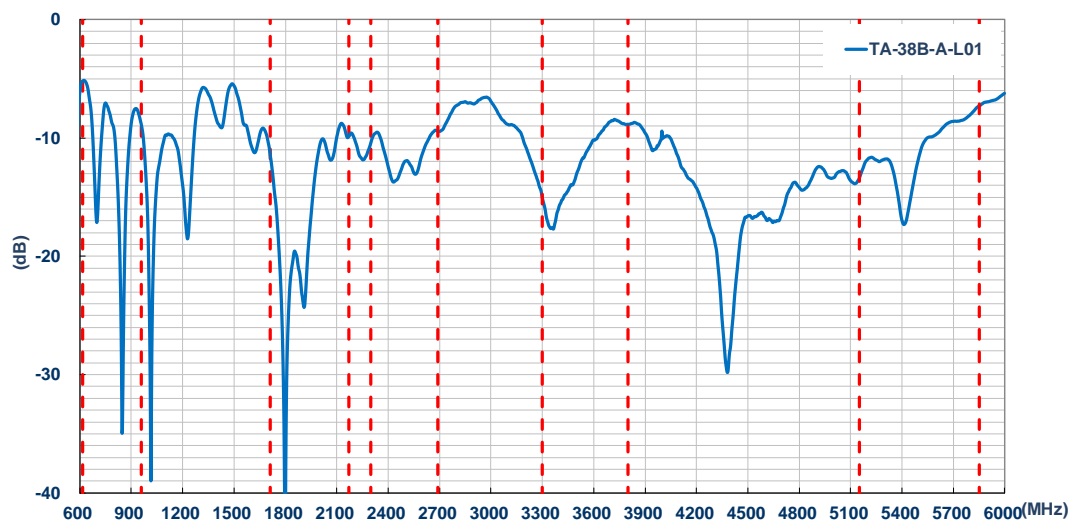
Items		Specifications									
Application Bands		5G NR Band 71	LTE 700	GSM 850/900	DCS	PCS	UMTS1	LTE 2600	5G NR Band	Janpan 5G NR	Wi-Fi 5800
Frequencies (MHz)		617 ~ 698	698 ~ 824	824 ~ 960	1710 ~ 1880	1850 ~ 1990	1920 ~ 2170	2300 ~ 2690	3300 ~ 3800	3600 ~ 4600	5150 ~ 5850
Efficiency (%)	Free Space	62.69	65.30	60.85	78.12	66.22	52.41	74.57	67.38	63.82	55.58
	With Box	73.68	61.23	48.21	76.62	56.05	46.48	71.15	58.32	50.78	42.07
Average Gain (dBi)	Free Space	-2.03	-1.85	-2.16	-1.07	-1.79	-2.81	-1.27	-1.72	-1.95	-2.55
	With Box	-1.33	-2.13	-3.17	-1.16	-2.51	-3.33	-1.48	-2.34	-2.94	-3.76
Peak Gain (dBi)	Free Space	2.27	2.68	2.44	2.82	3.31	3.08	2.40	1.90	3.62	3.29
	With Box	1.95	1.70	1.70	1.99	2.17	2.02	2.54	2.11	2.75	2.46
V.S.W.R	Free Space	< 4	< 3	< 3	< 3	< 3	< 3	< 2	< 3	< 2	< 3
	With Box	< 3	< 3	< 3	< 3	< 3	< 3	< 2	< 2	< 2	< 3
Return Loss (dB)	Free Space	< -5	< -6	< -6	< -8	< -8	< -8	< -9	< -8	< -10	< -7
	With Box	< -7	< -7	< -6	< -7	< -7	< -7	< -7	< -9	< -10	< -7
Impedance (Ω)		50									
Polarization		Linear									

Mechanical	
Dimensions (mm)	φ 10.0(D) x 115-133.5(L) x 19.0(W)
Connector	SMA (Male)
Environmental Conditions	
Operation Temperature (°C)	-30 ~ +65
Storage Temperature (°C)	-30 ~ +85

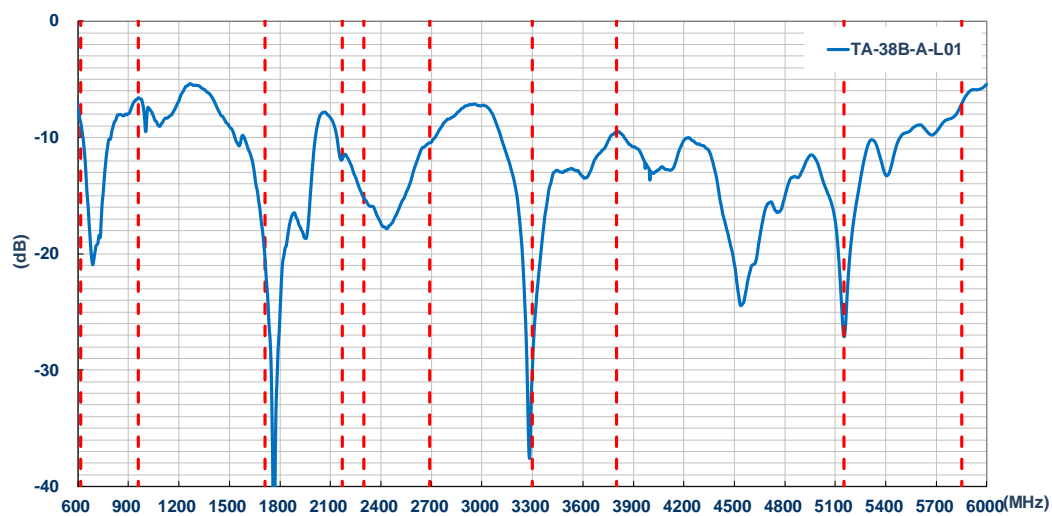
All specifications subject to change without notice.

II. Antenna Electrical Properties:

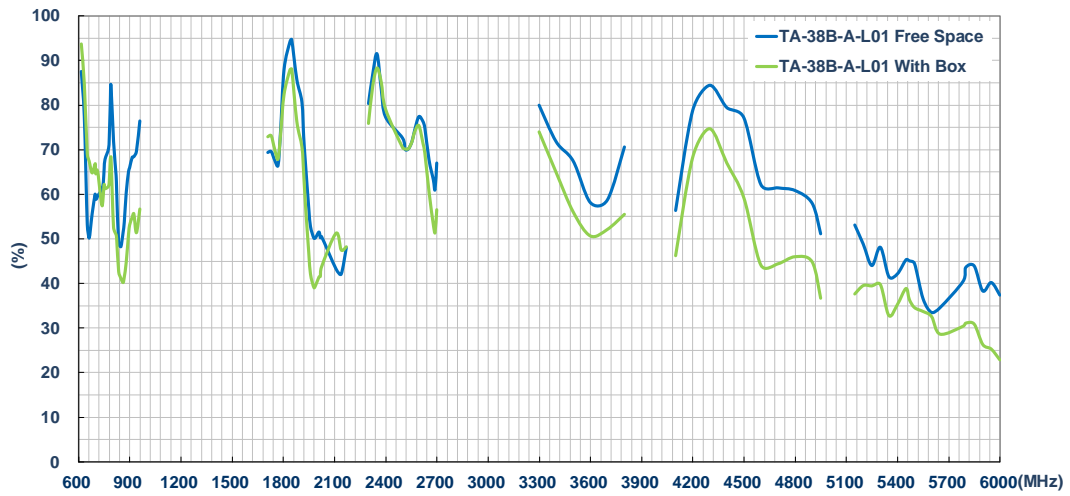
S11 (dB) - Free Space



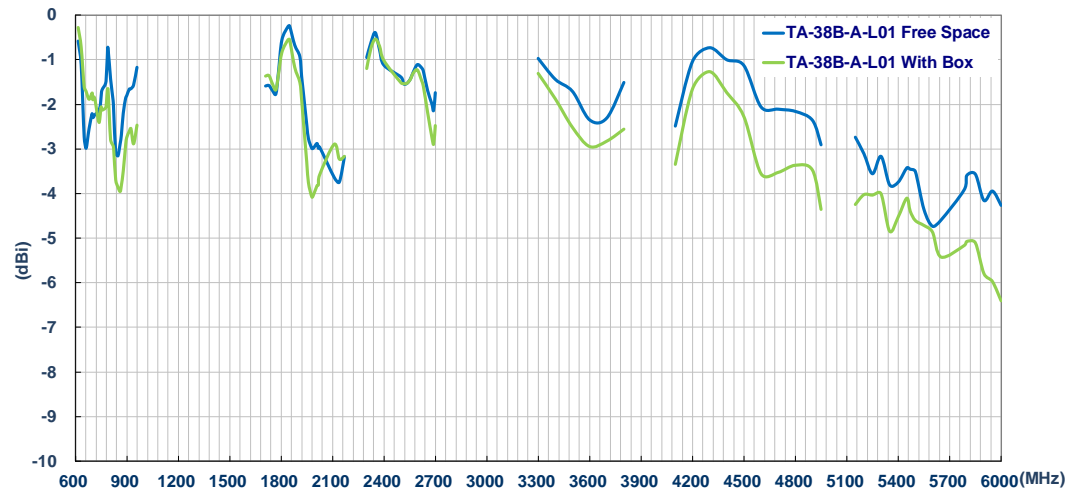
S11 (dB) - With Box



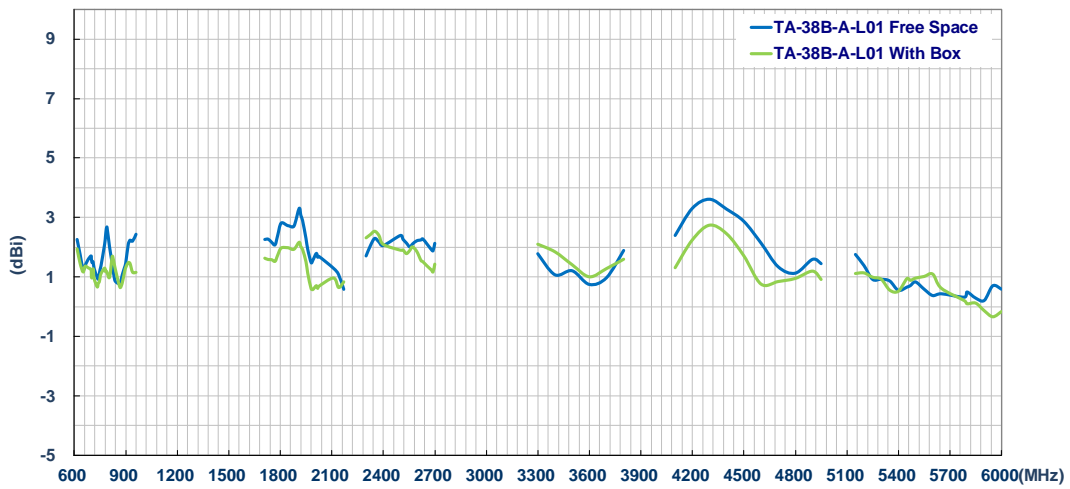
Efficiency (%)



Average Gain (dBi)



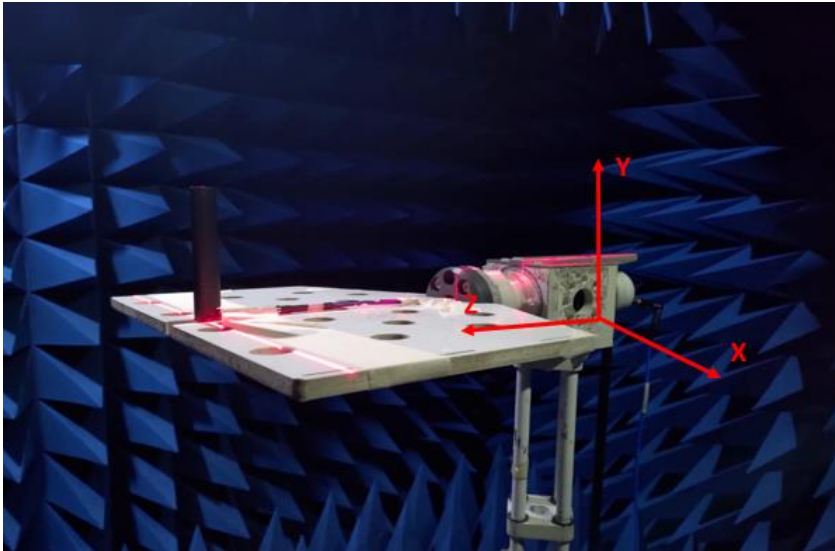
Peak Gain (dBi)



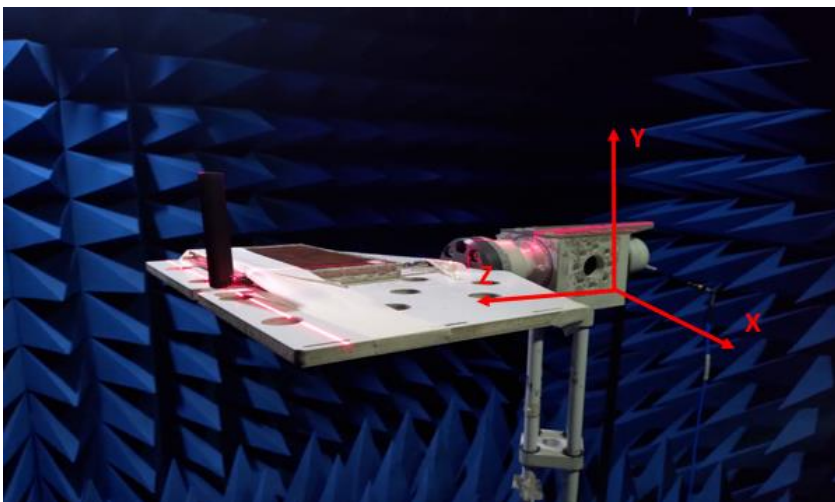
III. Antenna Radiation Pattern Measurement:

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

Free Space

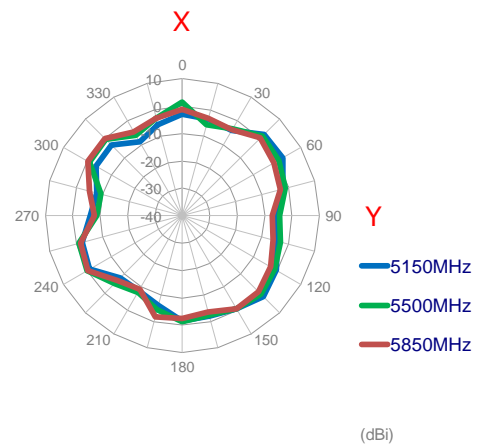
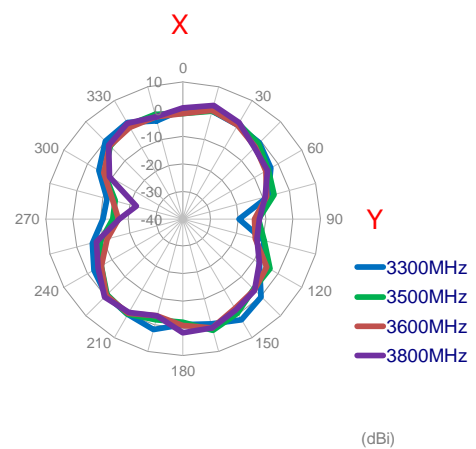
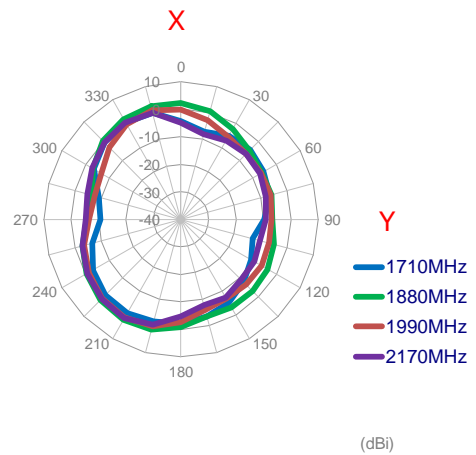


With Box

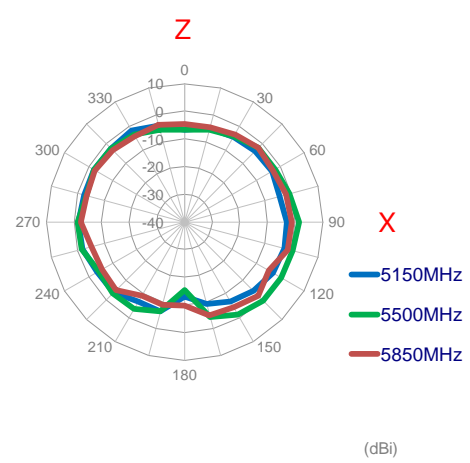
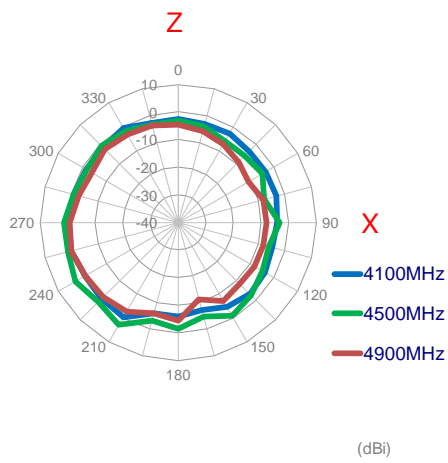
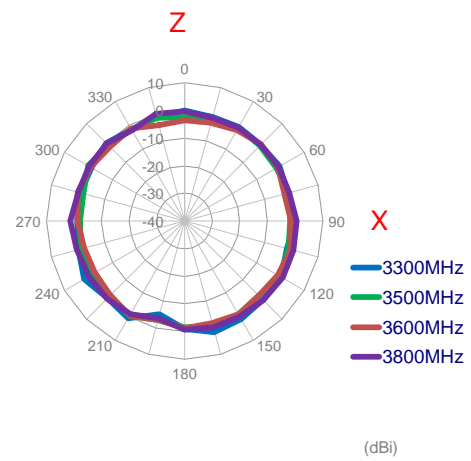
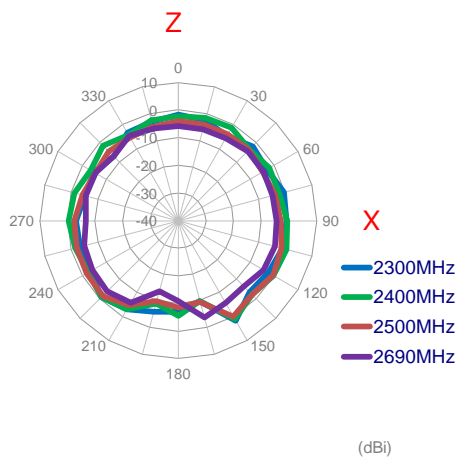
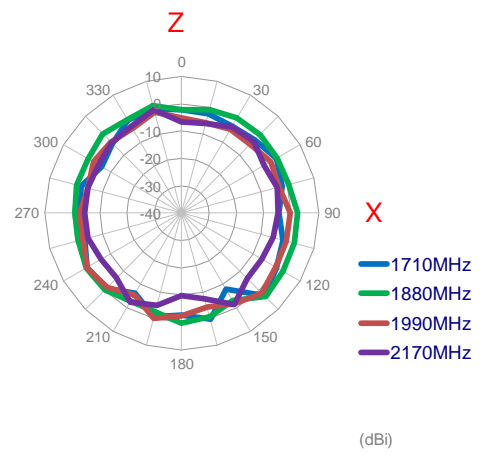
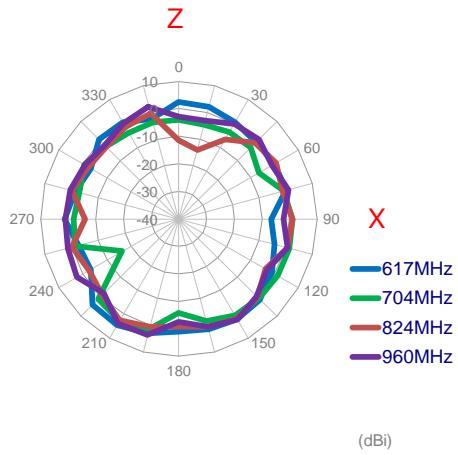


All specifications subject to change without notice.

X-Y Plane

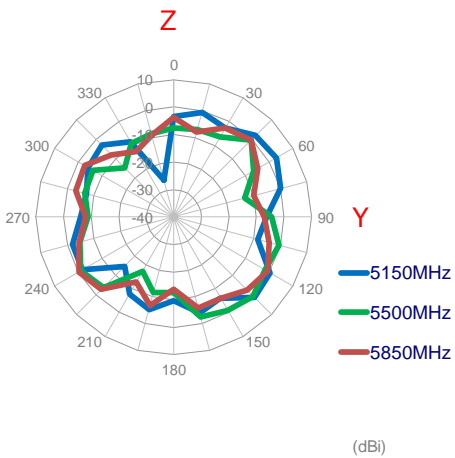
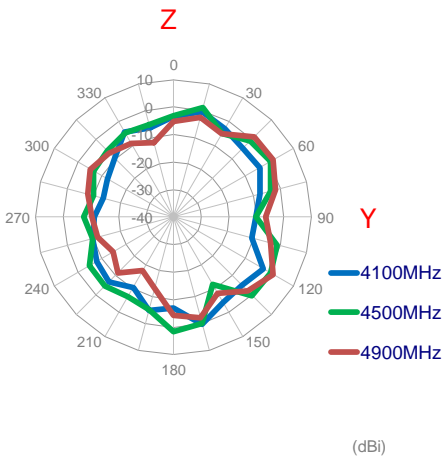
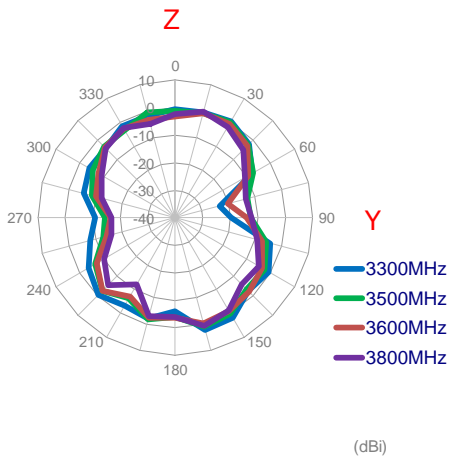
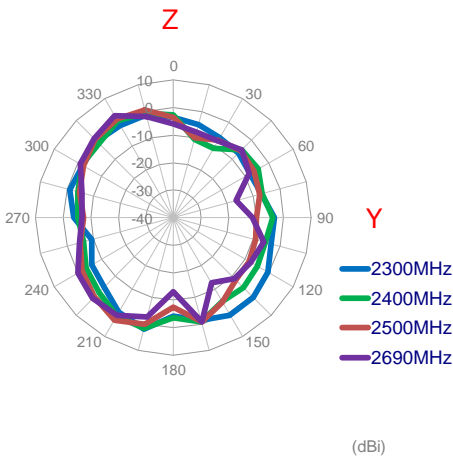
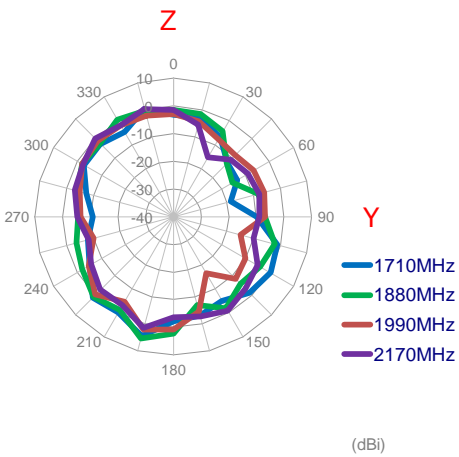
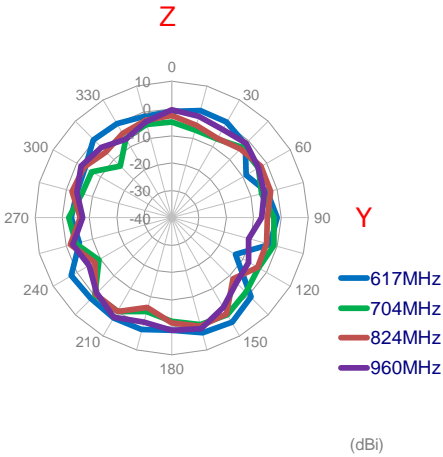


X-Z Plane

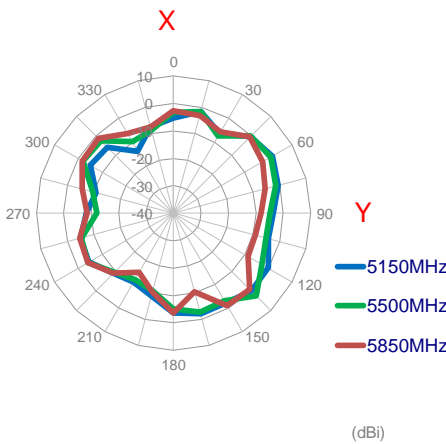
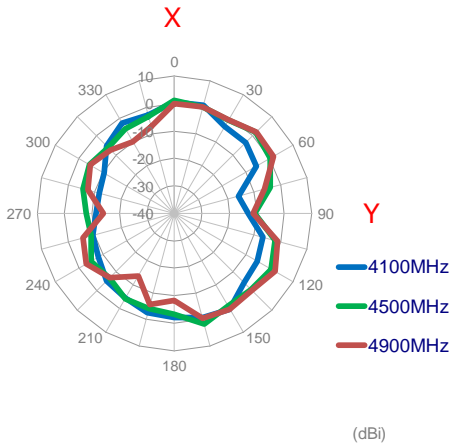
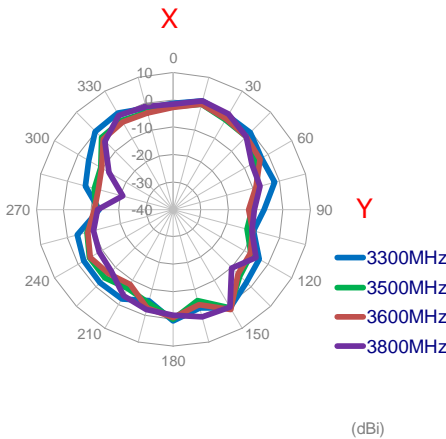
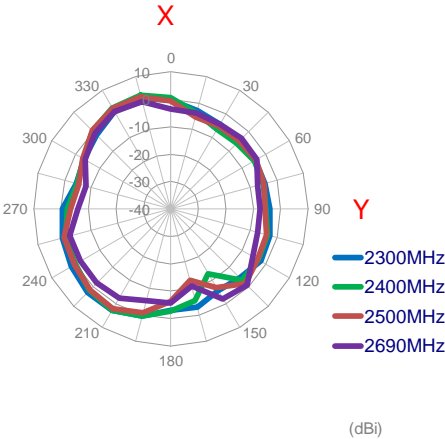
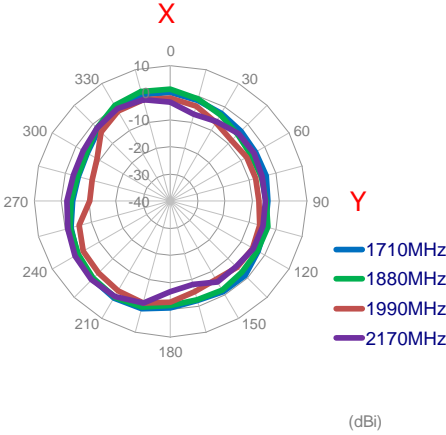
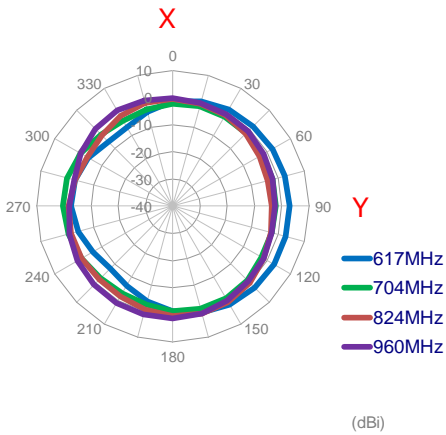


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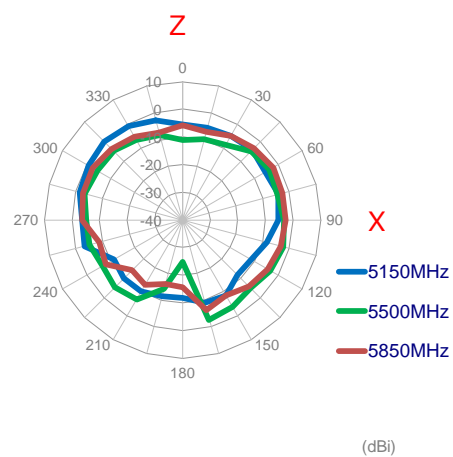
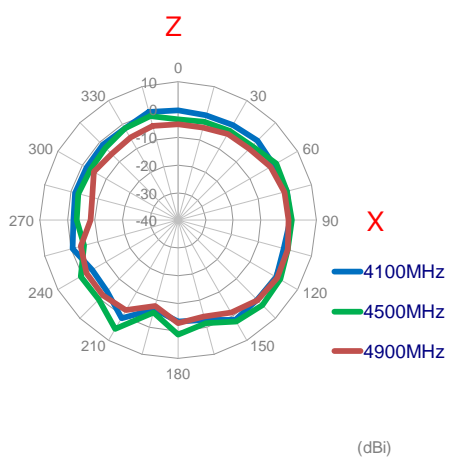
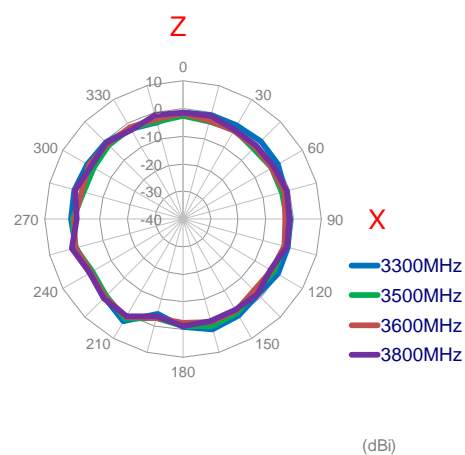
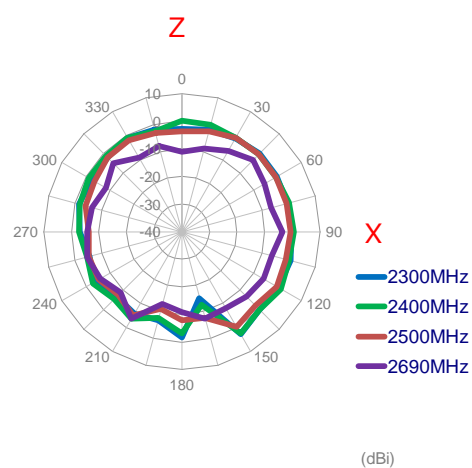
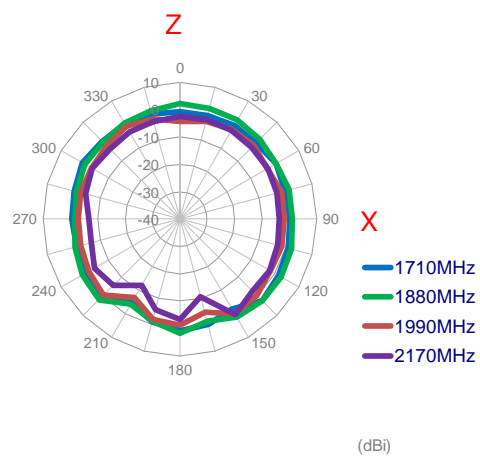
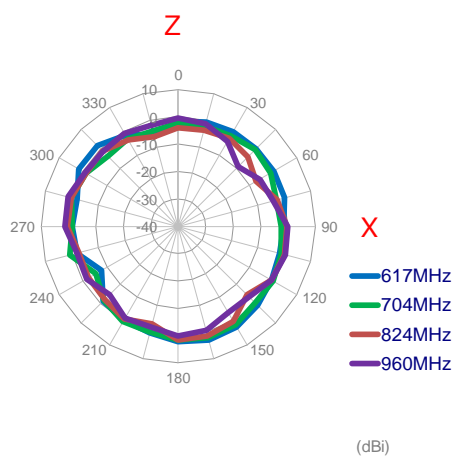
Y-Z Plane



With Box
X-Y Plane

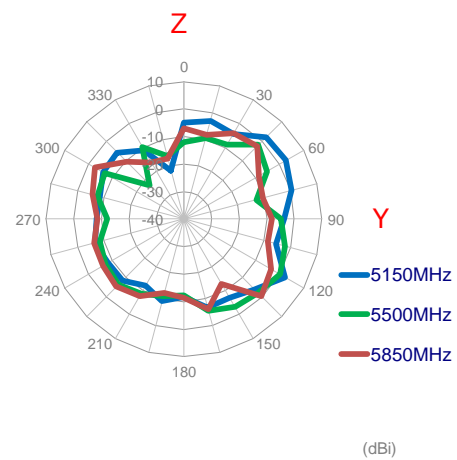
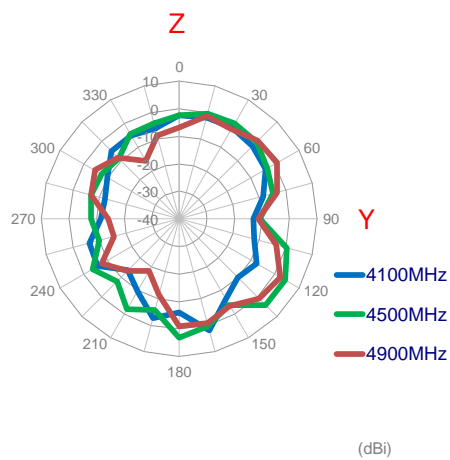
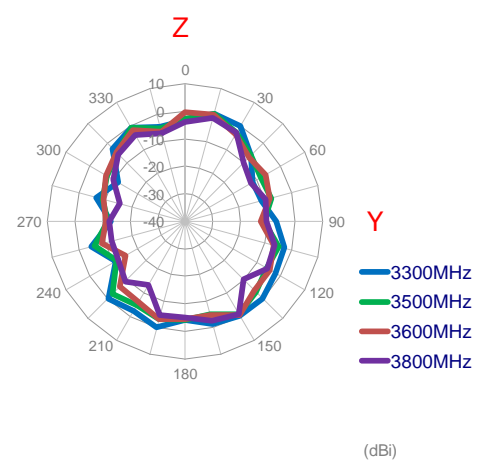
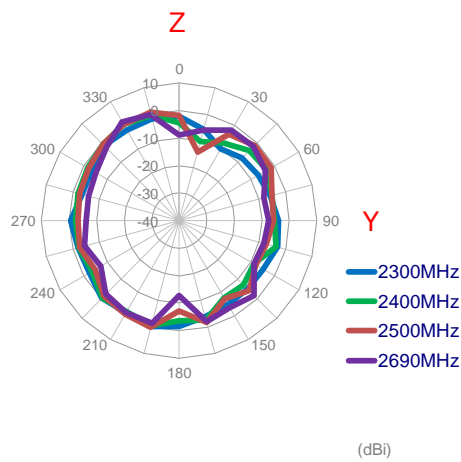
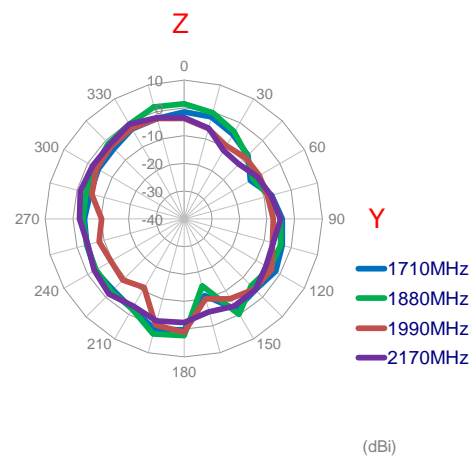
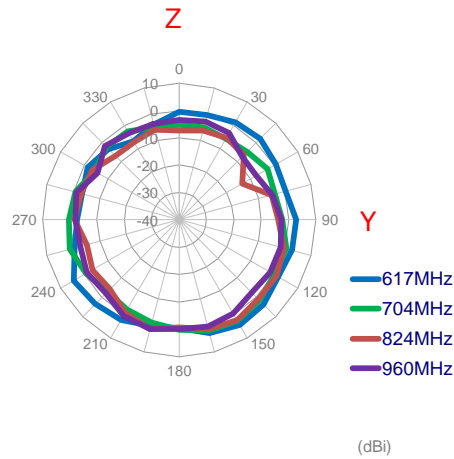


X-Z Plane



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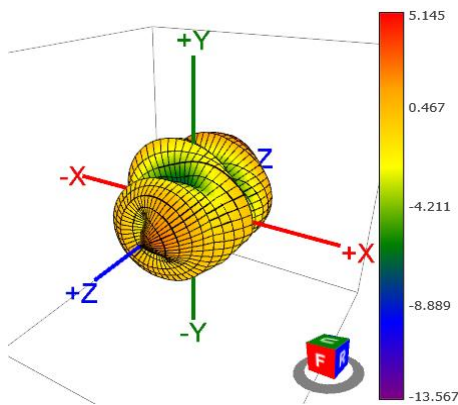
Y-Z Plane



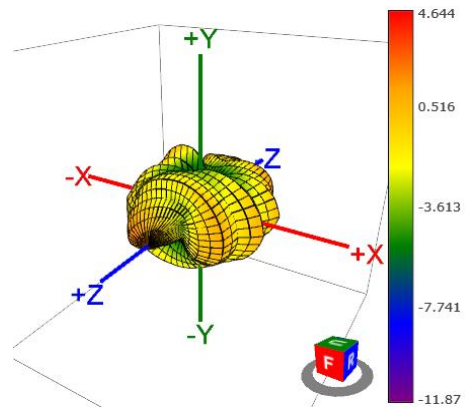
V. 3D Radiation Pattern:

Free Space

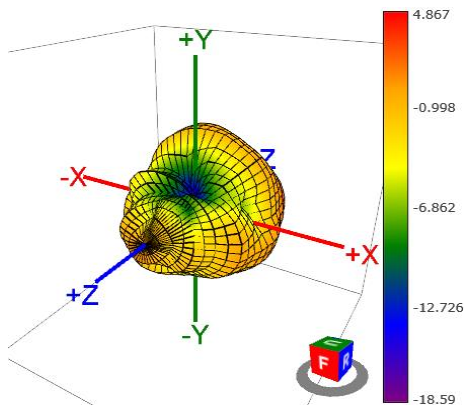
617MHz



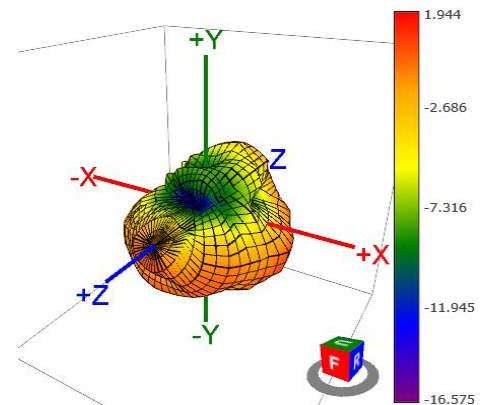
960MHz



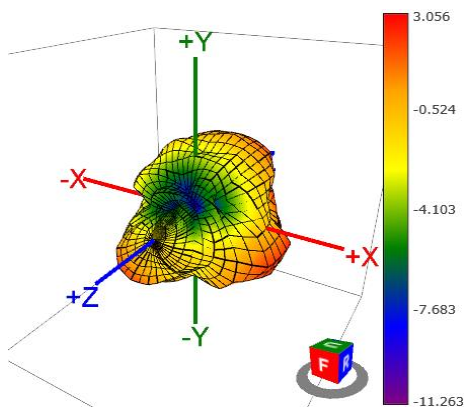
1710MHz



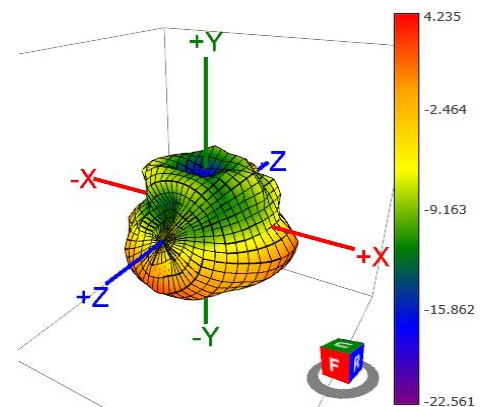
2170MHz



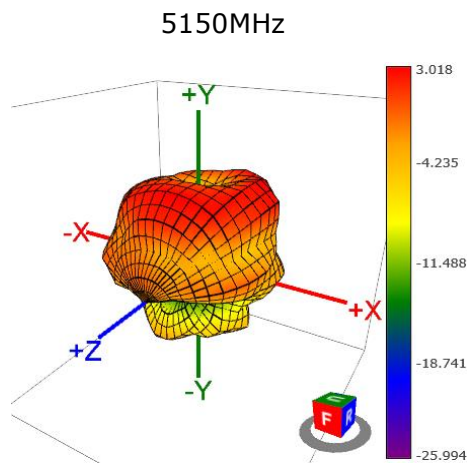
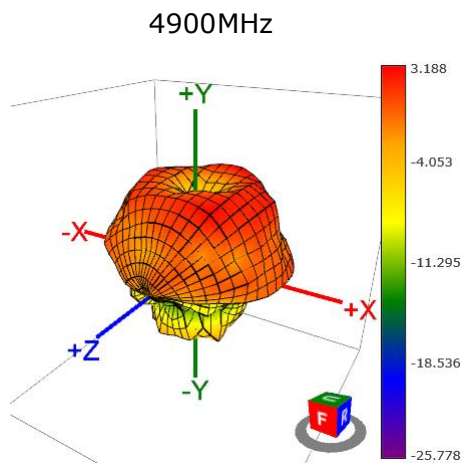
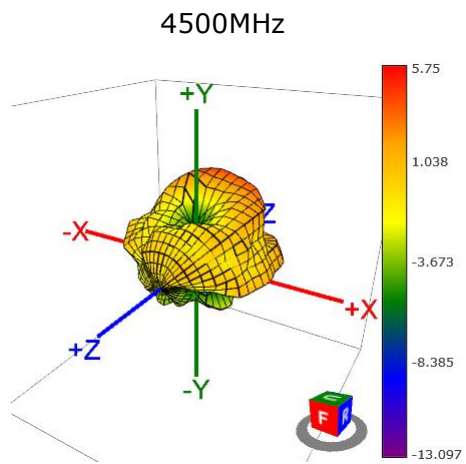
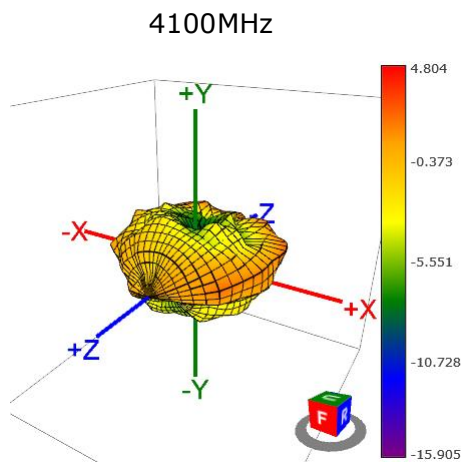
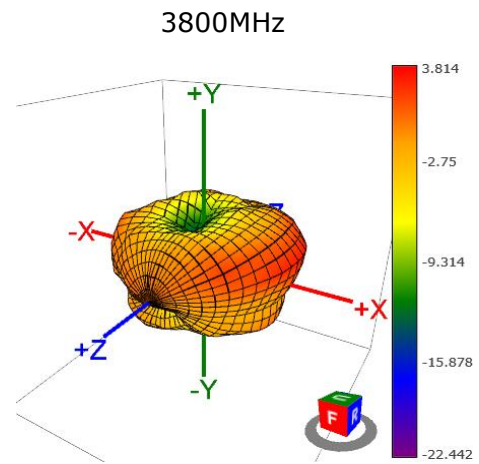
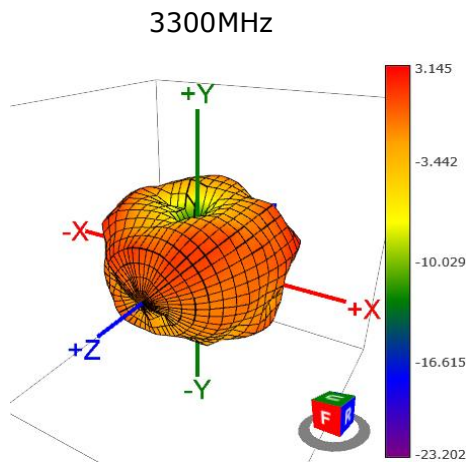
2300MHz

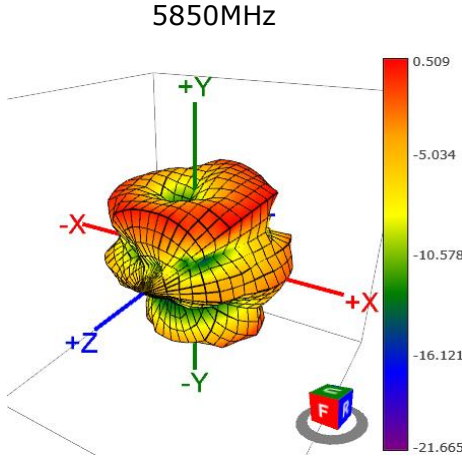
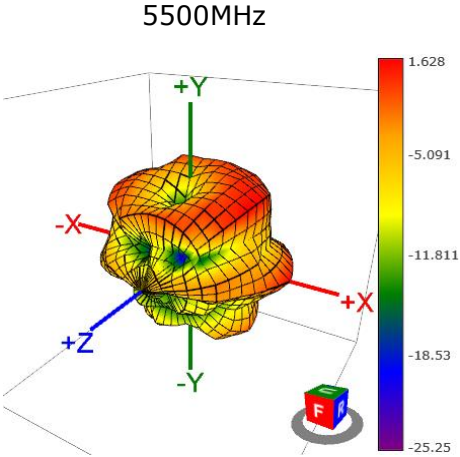


2690MHz

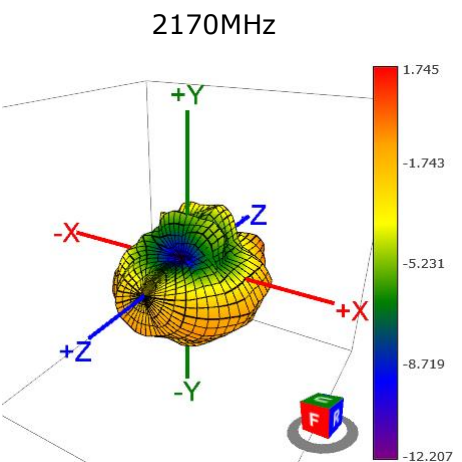
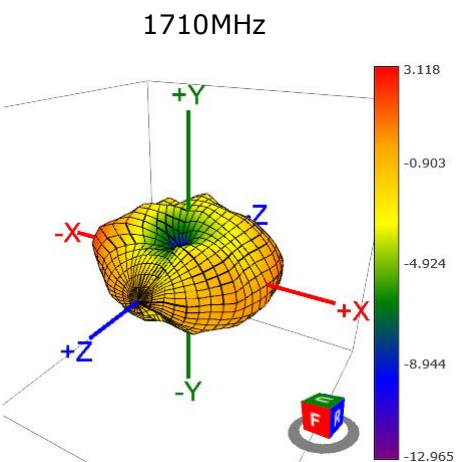
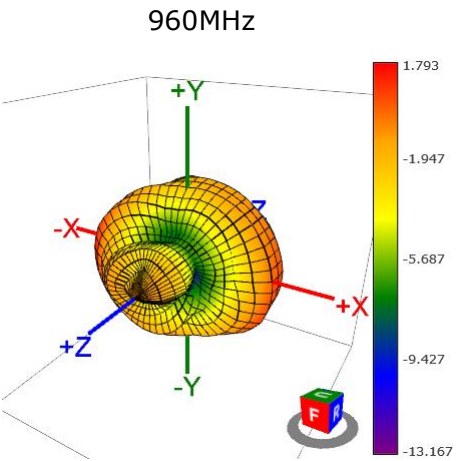
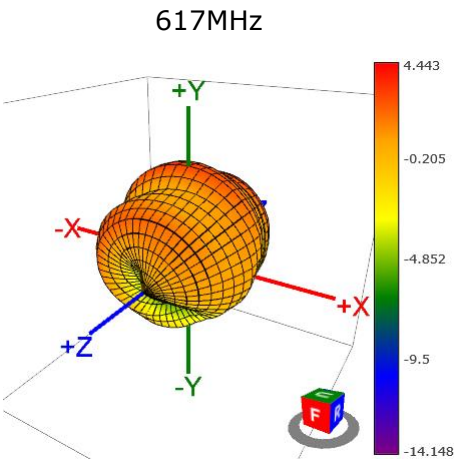


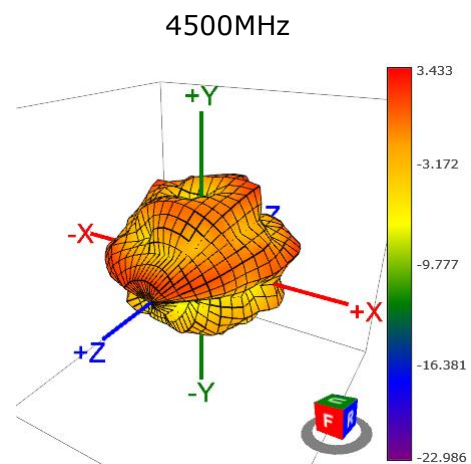
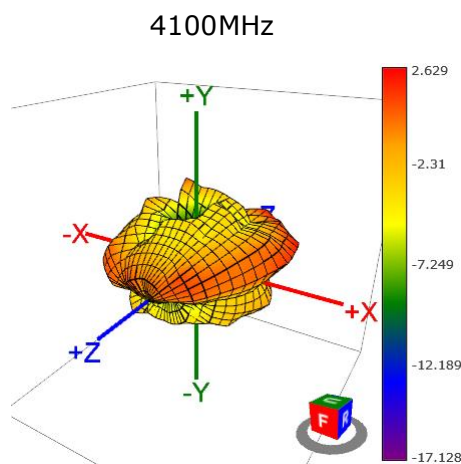
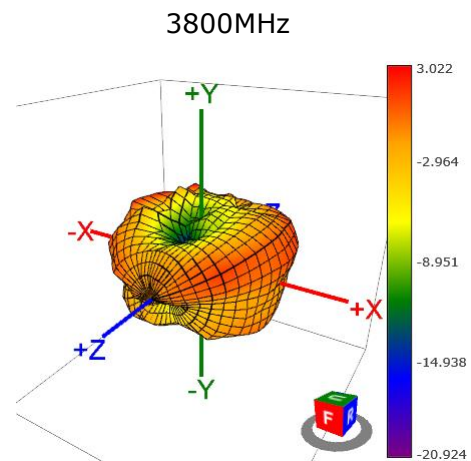
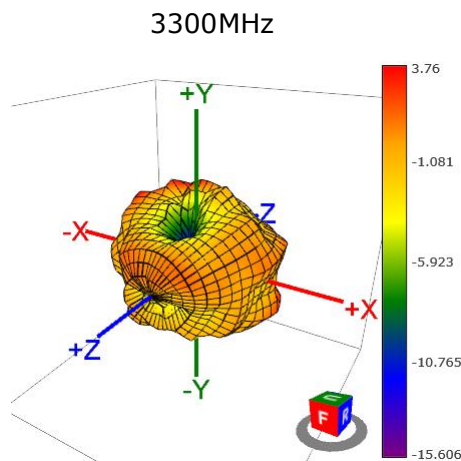
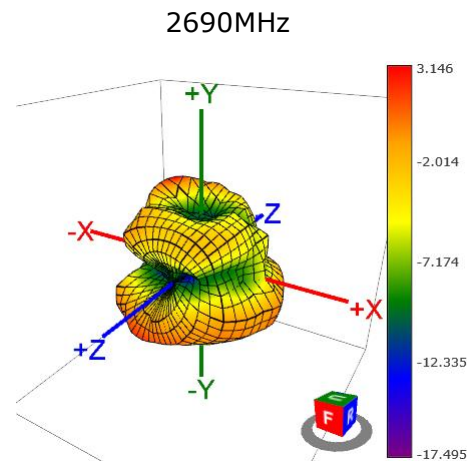
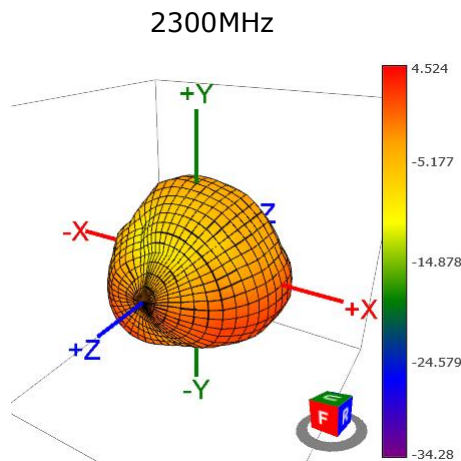
All specifications subject to change without notice.

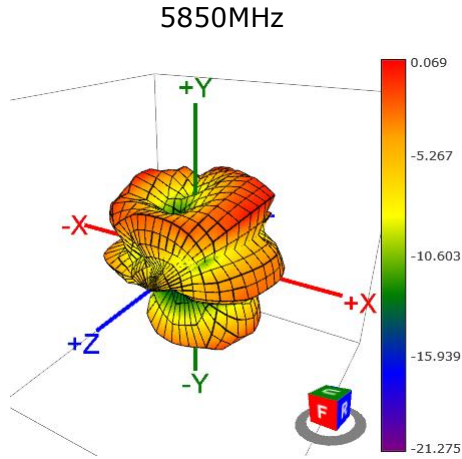
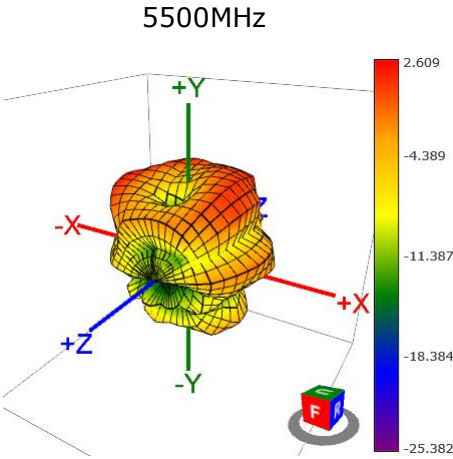
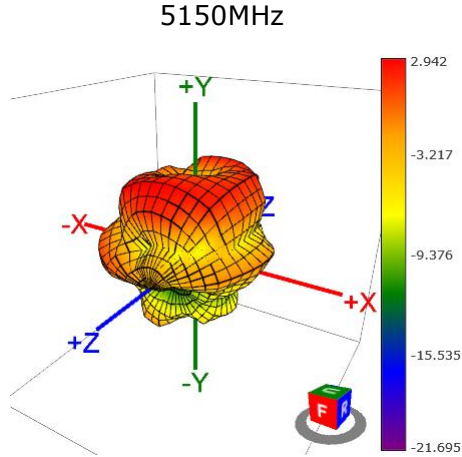
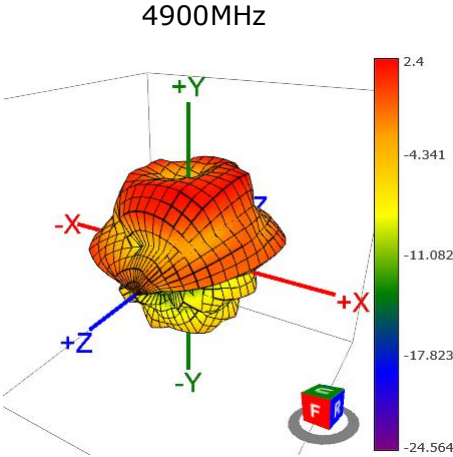




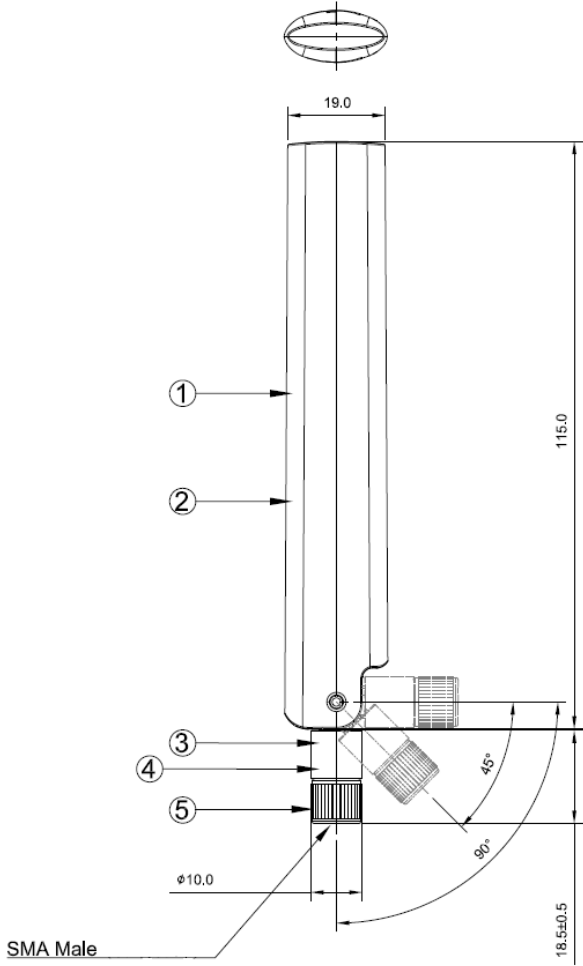
With Box





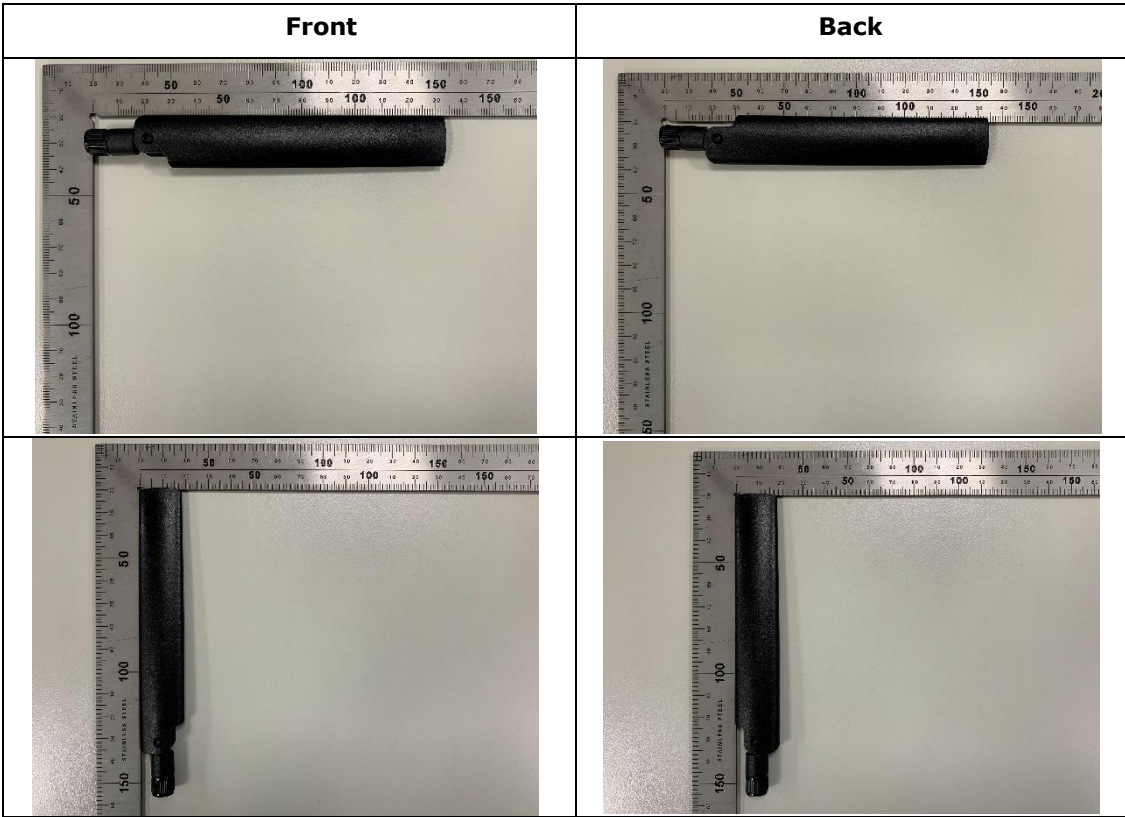


VI. Mechanical Drawing (Unit:mm):



5	Cable	O.D.1.37mm	Black	1
4	Connector	SMA Male Reverse	Black	1
3	Body2	PC+PPT	Black	1
2	PCB	FR4	Black	1
1	Body1	PC+PPT	Black	1
No.	Name	Material	Finish	Q'ty

VII. Antenna Photo (Front/Back)



'All specifications subject to change without notice.