

C3 LDS Simulation Report

Customer:	Clarius
Project:	C3
Version:	R1A1
Date:	2021/06/21
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Report Outline

- **Measurement Setup**
 - Reflection Coefficient Measurement
 - Gain Pattern Measurement
 - Placement of Antenna
- **Experimental Results**
 - Efficiency vs. Frequency
 - S Parameters and 3D Gain Pattern

Measurement Setup

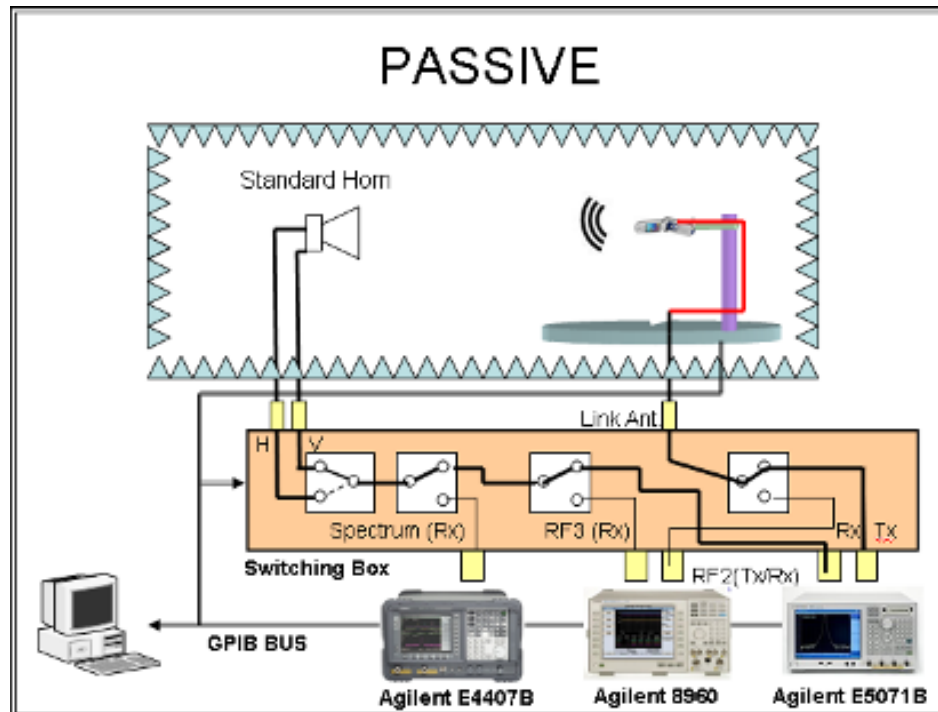
Reflection Coefficient Measurement

- a) Equipment : Network Analyzer(Agilent E5071A)
- b) Item : Impedance、 Return loss、 VSWR

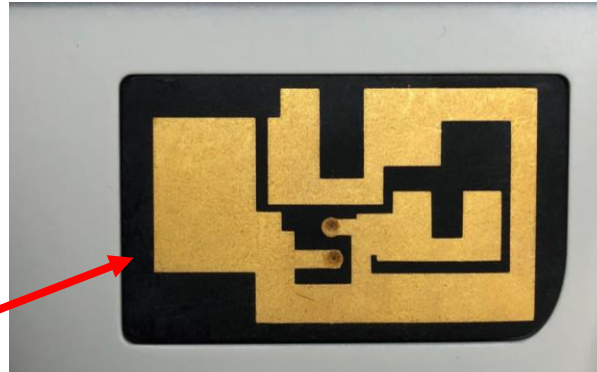


Gain Pattern Measurement

- a) Equipment : Anechoic Chamber, Network Analyzer (Agilent E5071C), Standard Horn.
- b) Item : Gain



Placement of Antenna

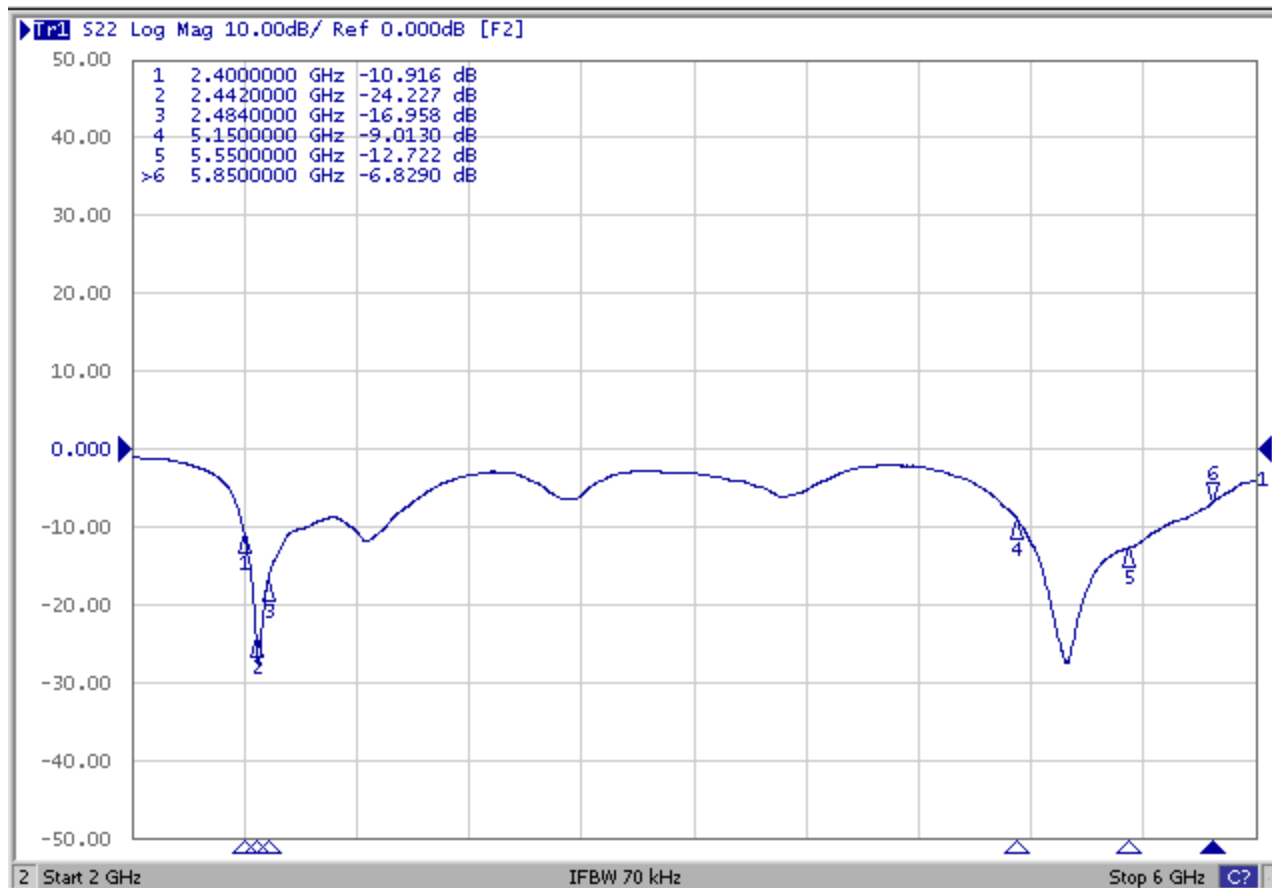


cable :70mm /Ipex I

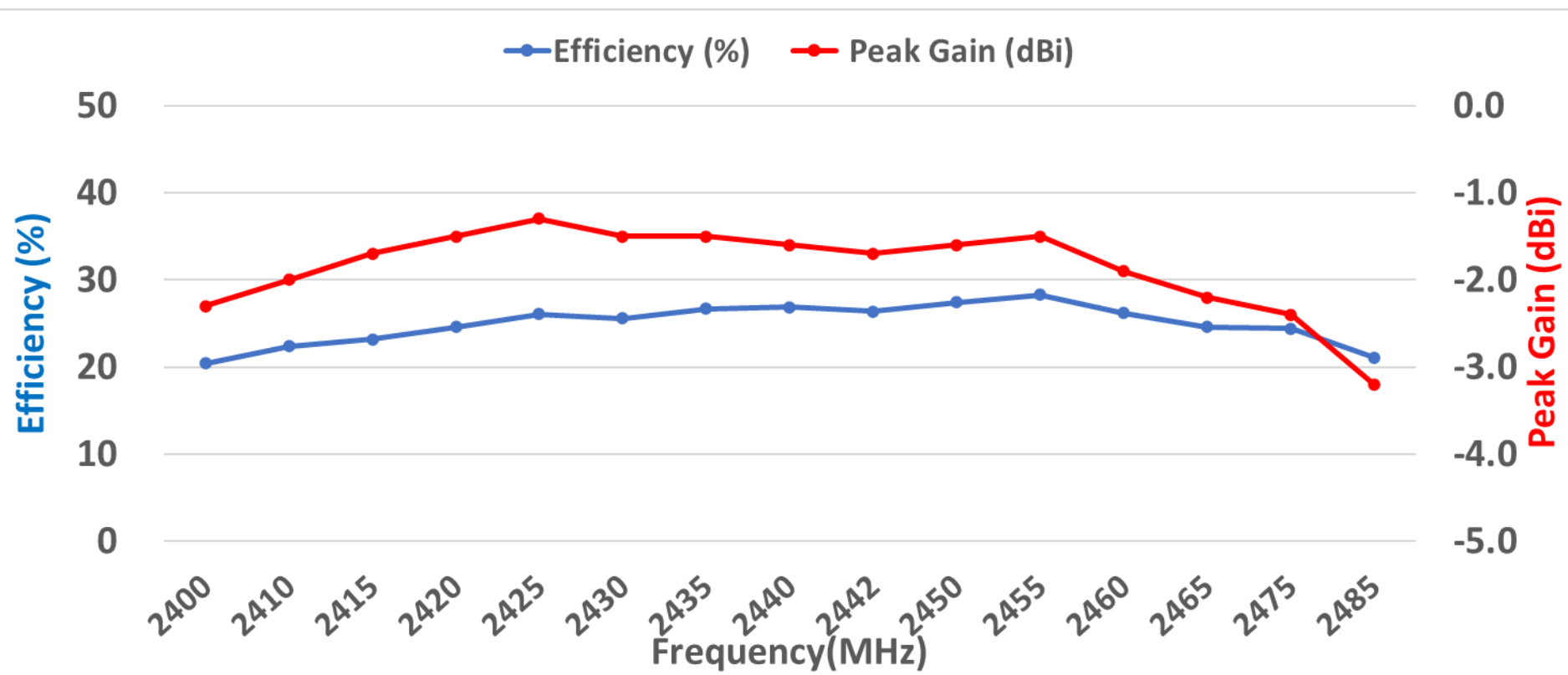
Experimental Results

S Parameters

a. Return Loss

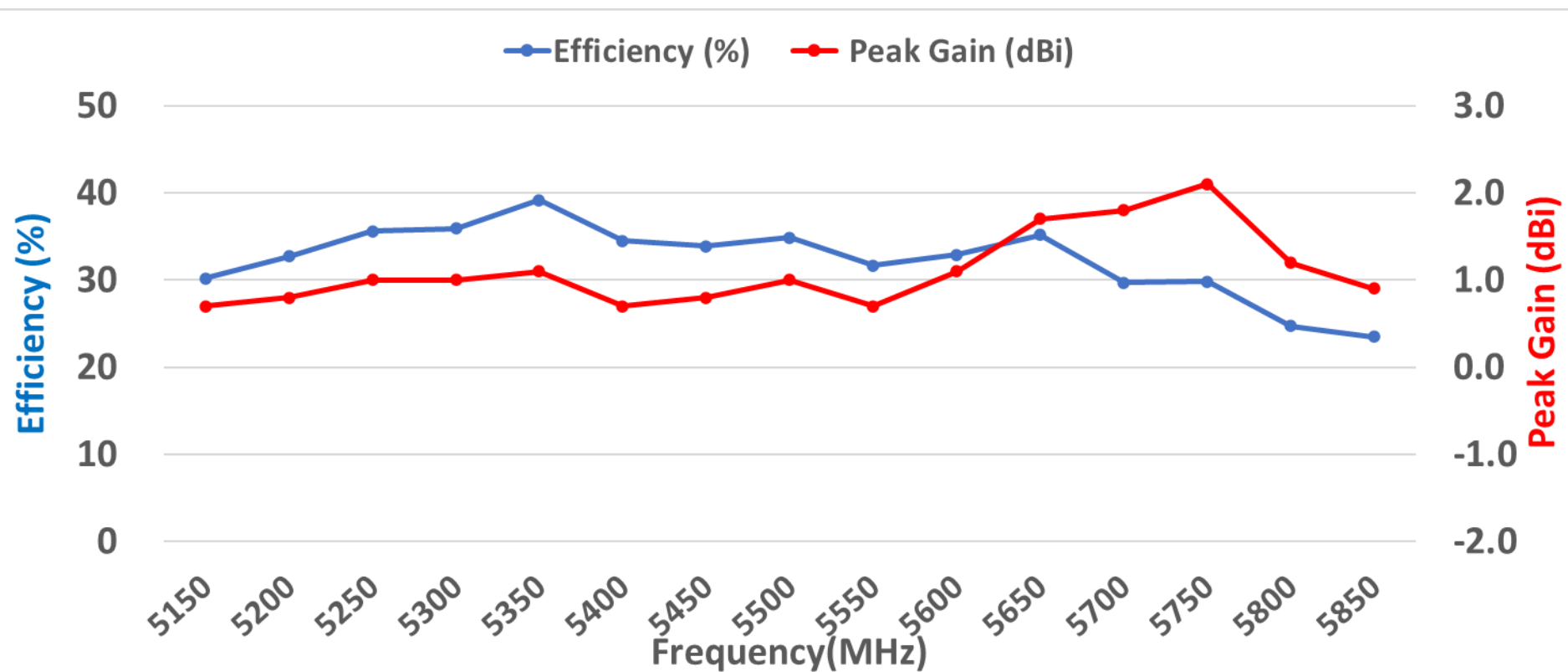


Efficiency vs. Frequency



Frequency (MHz)	2400	2410	2415	2420	2425	2430	2435	2440	2442	2450	2455	2460	2465	2475	2485
Efficiency (dB)	-6.9	-6.5	-6.3	-6.1	-5.8	-5.9	-5.7	-5.7	-5.8	-5.6	-5.5	-5.8	-6.1	-6.1	-6.8
Efficiency (%)	20.4	22.4	23.2	24.6	26.1	25.6	26.7	26.9	26.4	27.4	28.3	26.2	24.6	24.4	21.1
Peak Gain (dBi)	-2.3	-2.0	-1.7	-1.5	-1.3	-1.5	-1.5	-1.6	-1.7	-1.6	-1.5	-1.9	-2.2	-2.4	-3.2

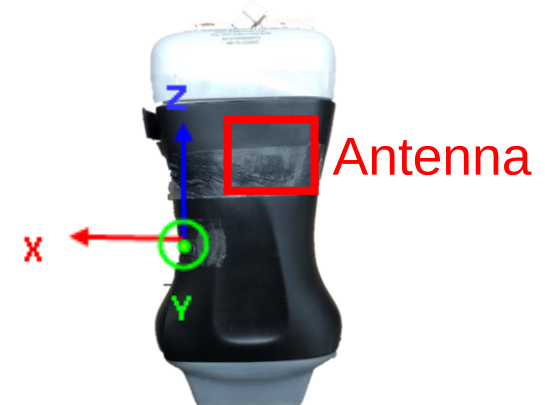
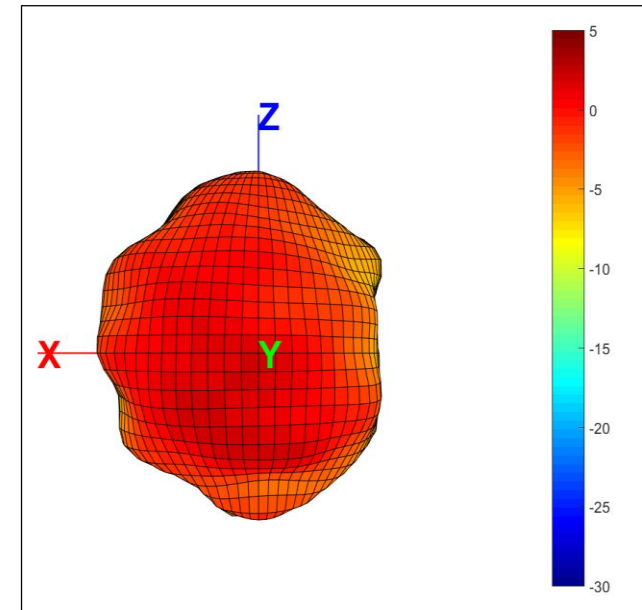
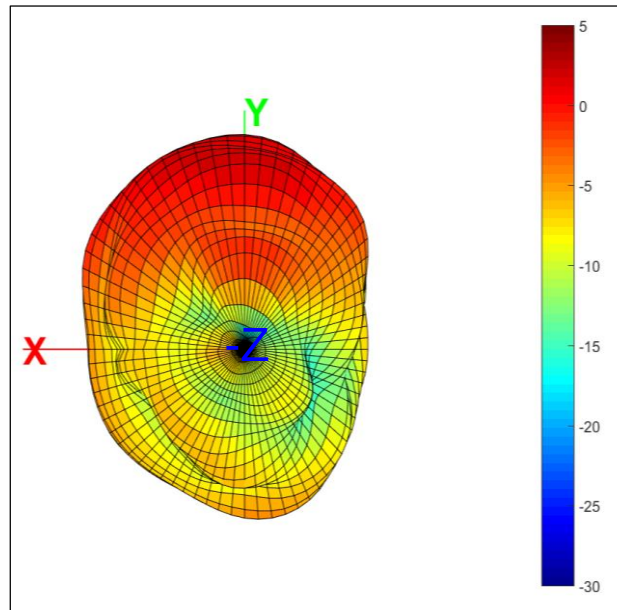
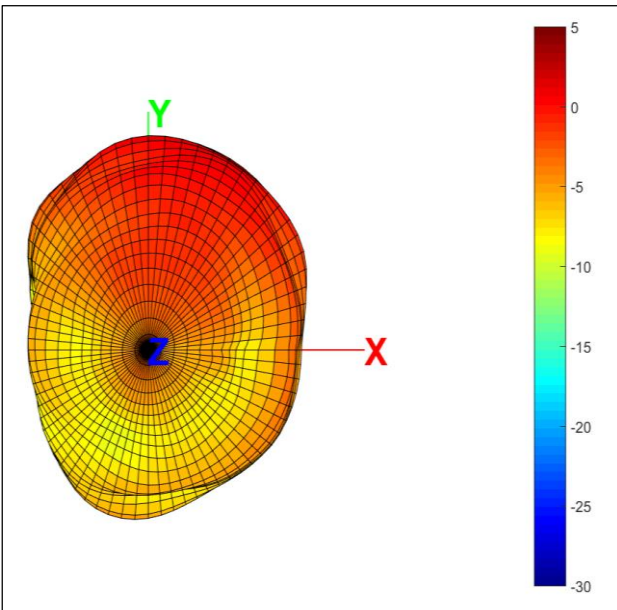
Efficiency vs. Frequency



Frequency (MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
Efficiency (dB)	-5.2	-4.9	-4.5	-4.4	-4.1	-4.6	-4.7	-4.6	-5.0	-4.8	-4.5	-5.3	-5.3	-6.1	-6.3
Efficiency (%)	30.2	32.7	35.6	35.9	39.2	34.5	33.9	34.9	31.7	32.9	35.2	29.7	29.8	24.7	23.5
Peak Gain (dBi)	0.7	0.8	1.0	1.0	1.1	0.7	0.8	1.0	0.7	1.1	1.7	1.8	2.1	1.2	0.9

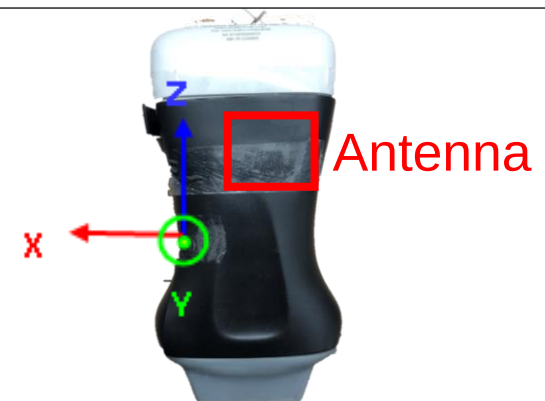
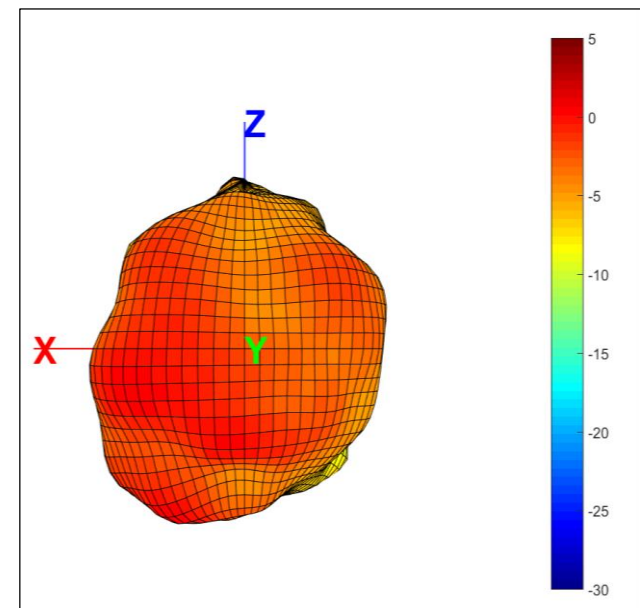
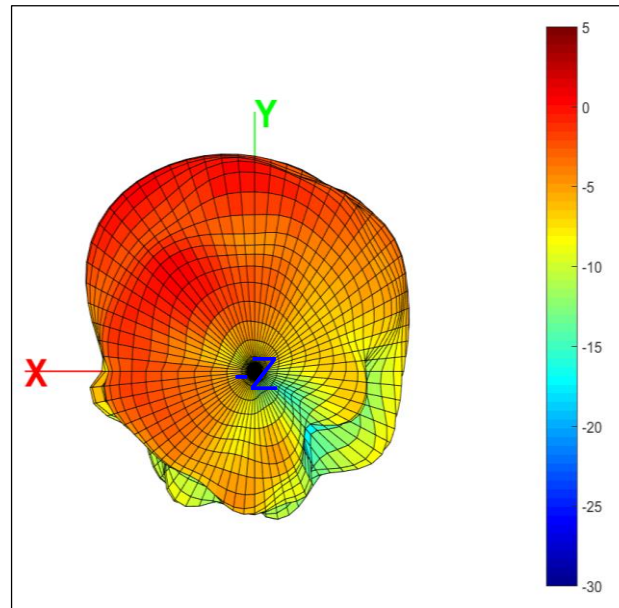
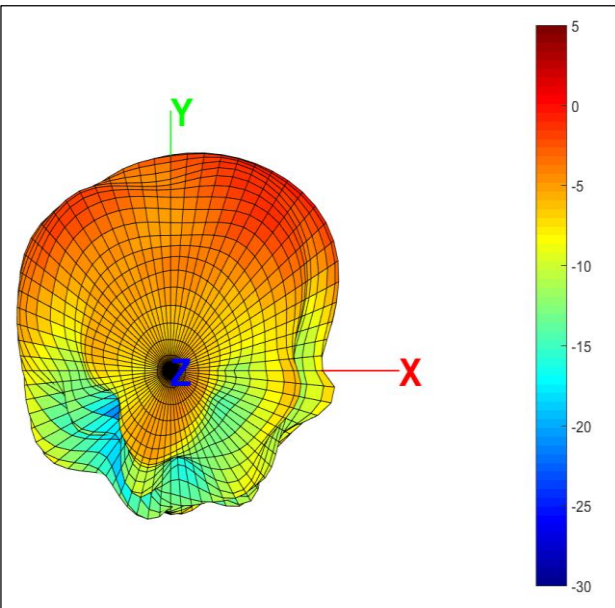
3D Gain Pattern

a. 3D Gain Pattern (Radiation Pattern @ **2445 MHz**) (unit: dBi)



3D Gain Pattern

a. 3D Gain Pattern (Radiation Pattern @ **5550 MHz**) (unit: dBi)



Thanks for Your Attention