

Logitech

Antenna Under Test (AUT)

Report

Model Name: RR0021

Equipment Type: Wireless Presenter

Antenna Model: RFLDA210900NNAB002

Antenna Manufacturer: Walsin Technology Corporation

Test Location: BIC

Tested by: _____**Pierre Rouaze**_____

Report Date: _____**29/08/2025**_____

Report Release History

Report version	Description	Date Issued
1.00	Original release	21/3/2025

Table of Contents

1. EUT Antenna Information	3
2. Measured Values and Calculation of Antenna Gains	3
4. Antenna Gain Measurement	4
4.1 Test Location	4
4.2 Description of the anechoic chamber	4
4.3 Test Instruments	5
4.4 Test Procedure	6
4.5 Test Setup photos	6
4.6 Gain Measurement	7

1. EUT Antenna Information

- 1) Antenna Material : polycarbonate and copper
- 2) Antenna Type : Inverted F
- 3) Antenna Dimension: 9.45mmX21mm
- 4) Operating Frequency : 2.4 GHz - 2.4835 GHz
- 5) Input Impedance : 50 Ω
- 6) Standing-Wave Ratio : 2:1

2. Measured Values and Calculation of Antenna Gains

Passive measurement (S21) in StarLab.

Frequency (MHz)	Gain	Efficiency
2400	3.28	-3.62
2410	3.49	-3.44
2420	3.83	-3.13
2430	3.95	-3.01
2440	4	-3
2450	4.1	-2.9
2460	4.07	-2.96
2470	4.02	-3.03
2480	3.92	-3.16
2490	3.73	-3.36
2500	3.64	-3.49

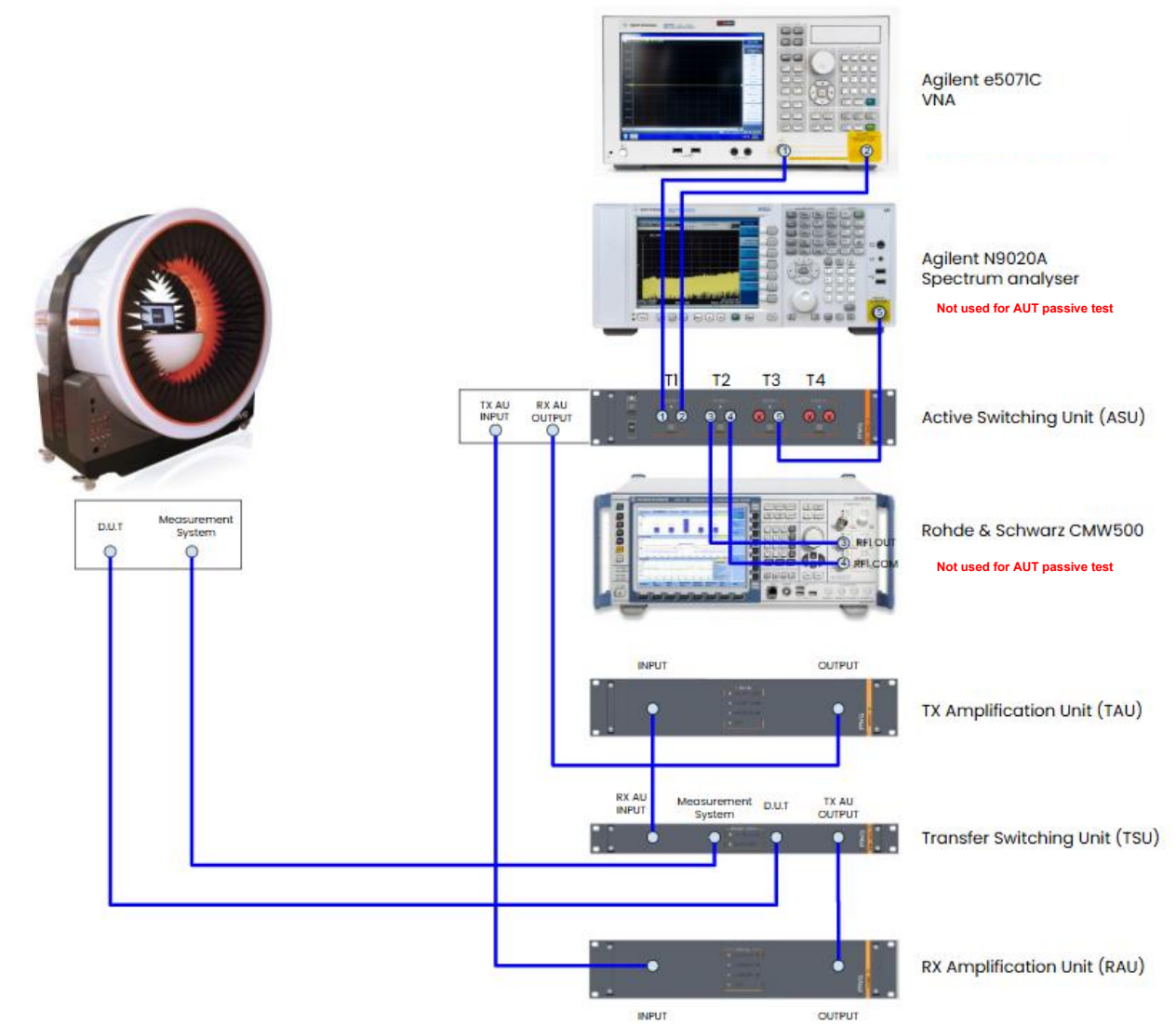
Test Date: 28/08/2025

4. Antenna Gain Measurement

4.1 Test Location

S21 pattern measurement in the Starlab

4.2 Description of the anechoic chamber



4.3 Test Instruments

Description	Model No.	Serial No.	Last Calibration
Anechoic chamber	Microwave Vision Group: 650Mhz to 18GHz , 4.7 x 4.6 x 3.2 m	N.A.	N.A.
Starlab Main Unit	SL V2_065-18GHz	1102284-0035	9 Aug. 2024
Starlab (Active Switching Unit)			
Starlab (Tx Amplification Unit)			
Starlab (Transfer Switching Unit)			
Starlab (Rx Amplification Unit)			
VNA	Agilent E5071C	MY46111439	18 Jul. 2024
Software	WaveStudio for passive and active measurements	V23.2	
Workstation	Asus 841R6 windows 10	N.A.	N.A.

Note: The calibration interval of the above test instruments is 24 and 36 months

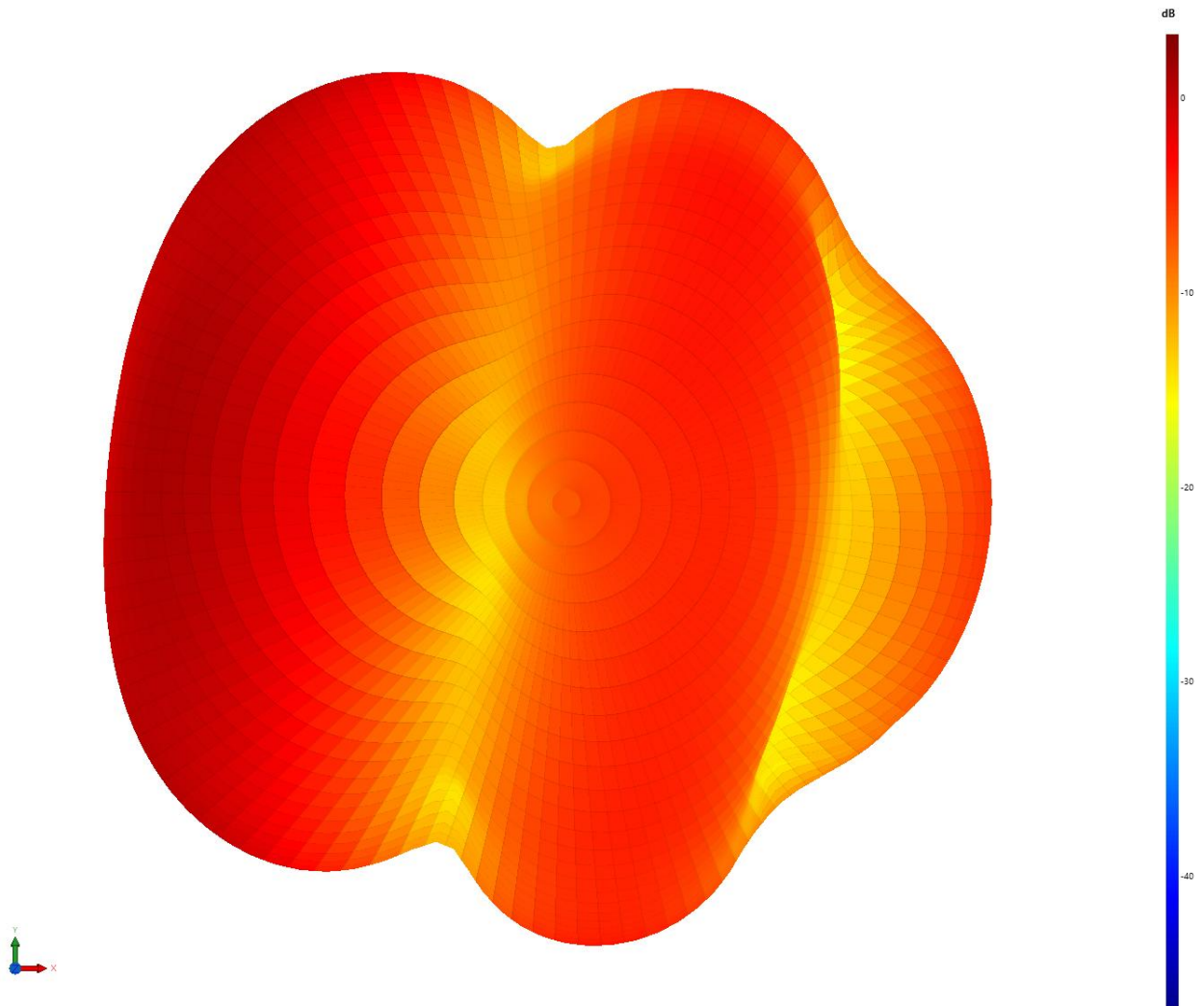
4.4 Test Procedure

- Calibrating the cable loss, air loss and test antenna gain by substitution method(test environment calibration)
- Measure the DUT in the frequencies range in step of 10 degrees,
- Perform the post-processing
- Extract test data from post process test item

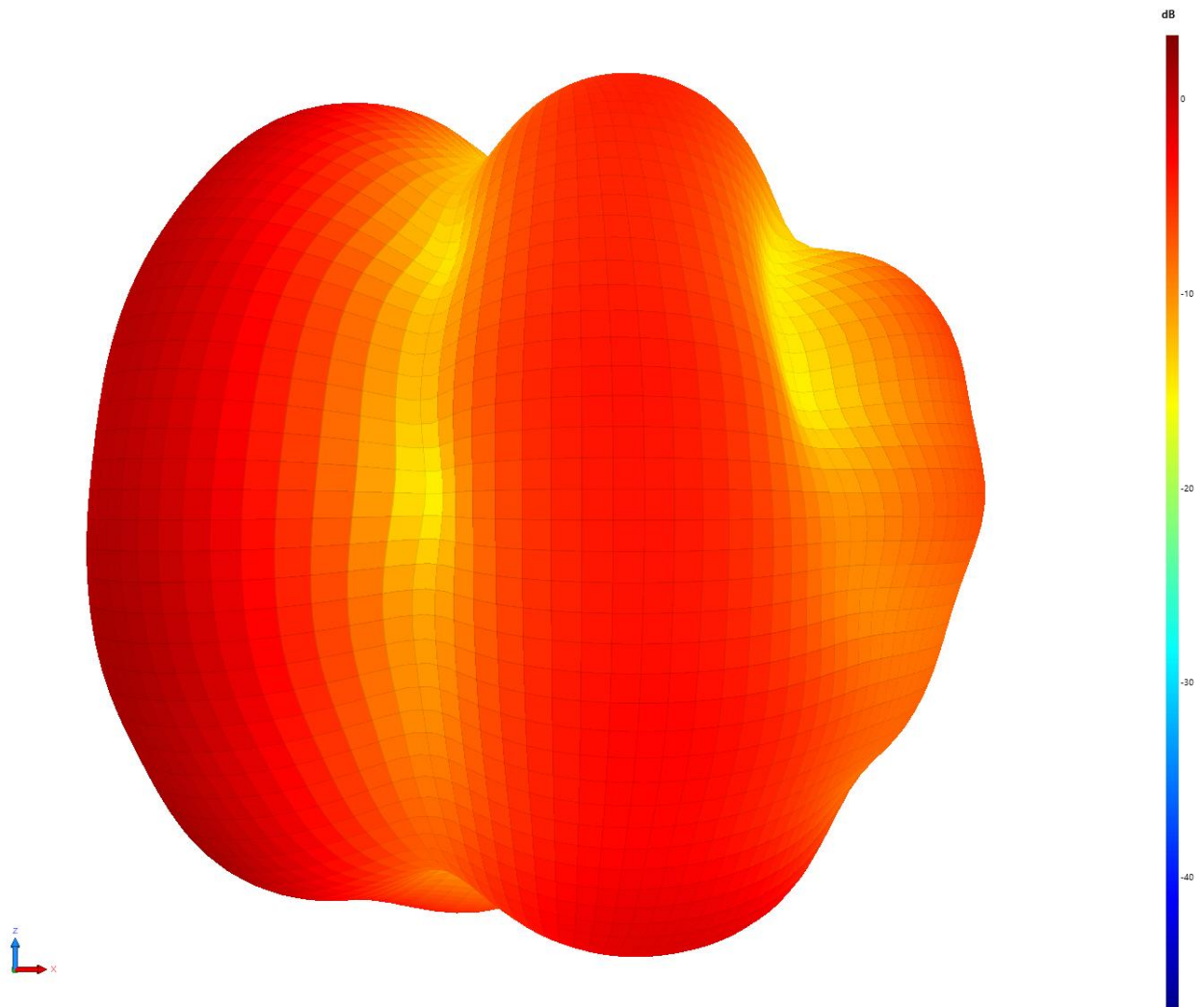
Note: Only the worst-case measurement, determined at 0 degrees, is recorded and presented in this report; the measurement at 90 degrees DUT is repeated but not included.

4.5 3D plots

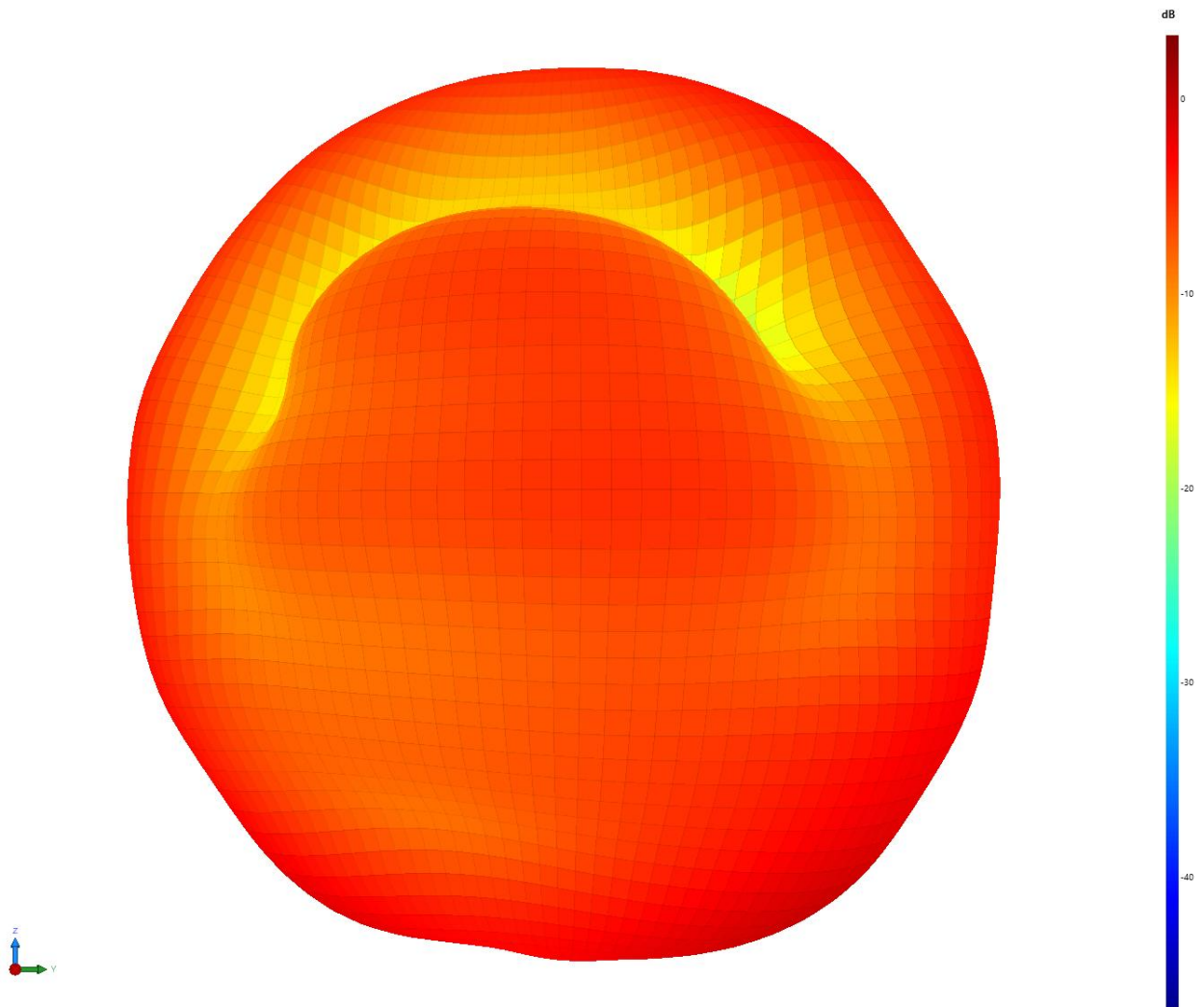
Unit 161 2400MHZ XY



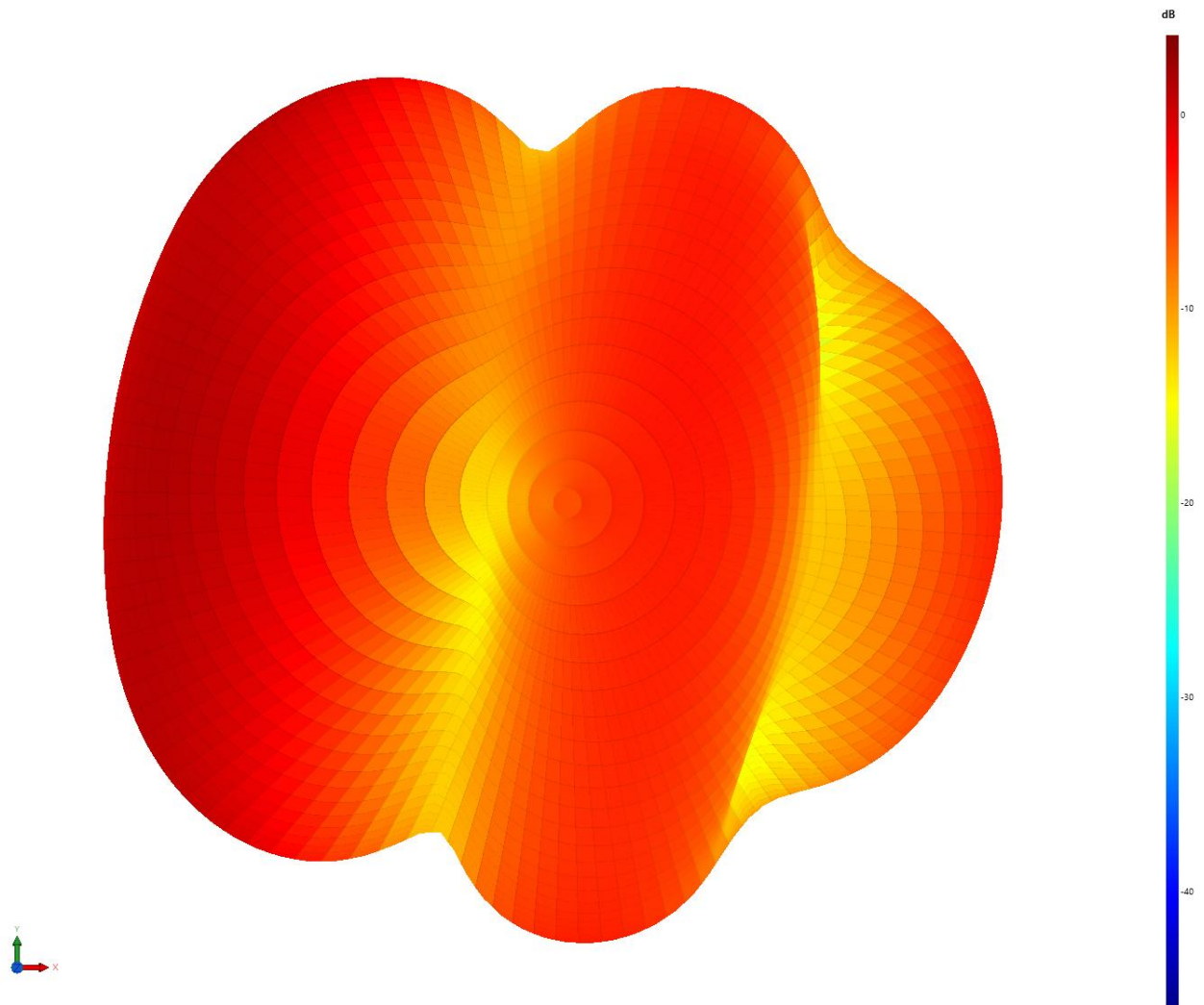
Unit 161 2400MHZ XZ



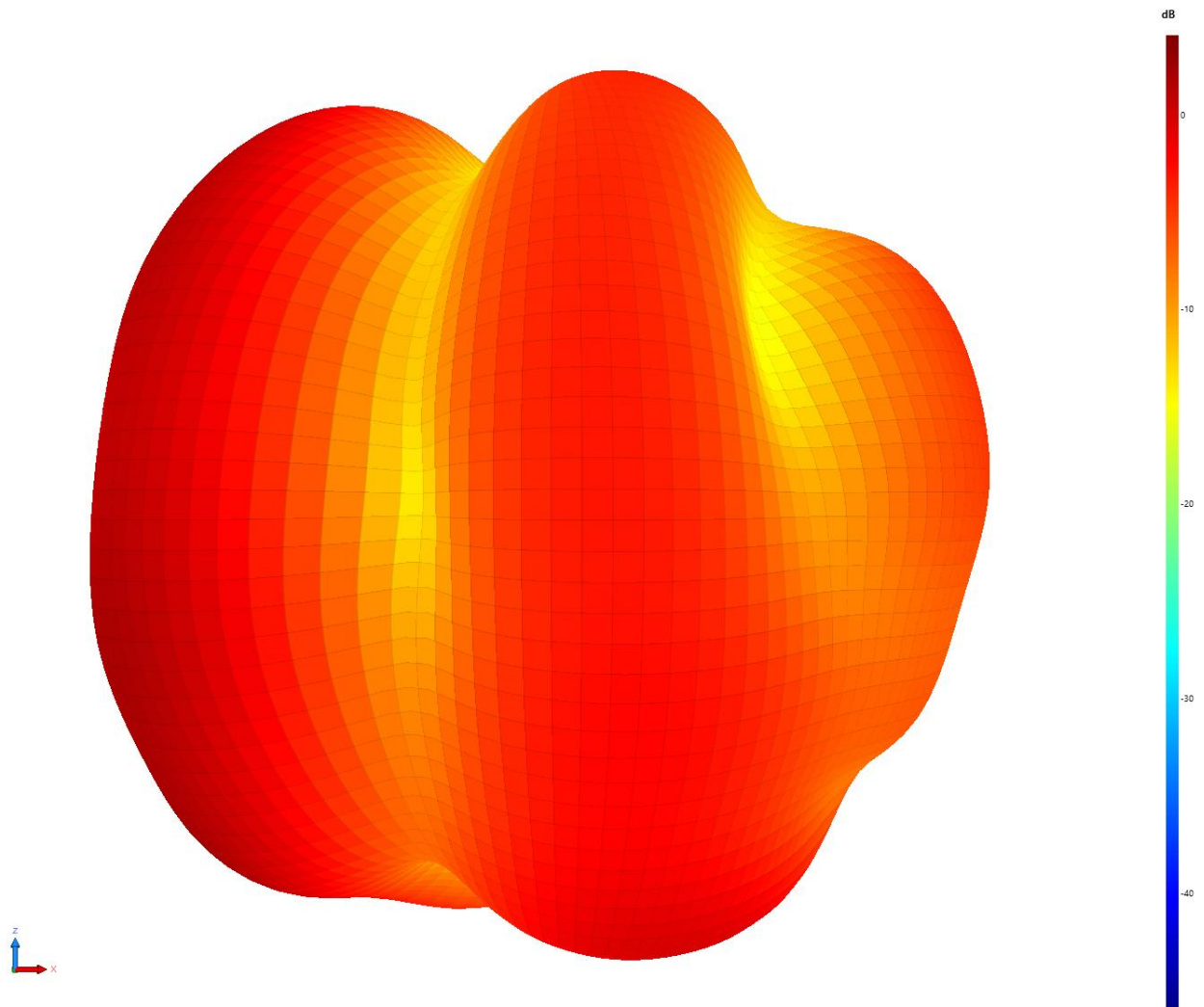
Unit 161 2400MHZ YZ



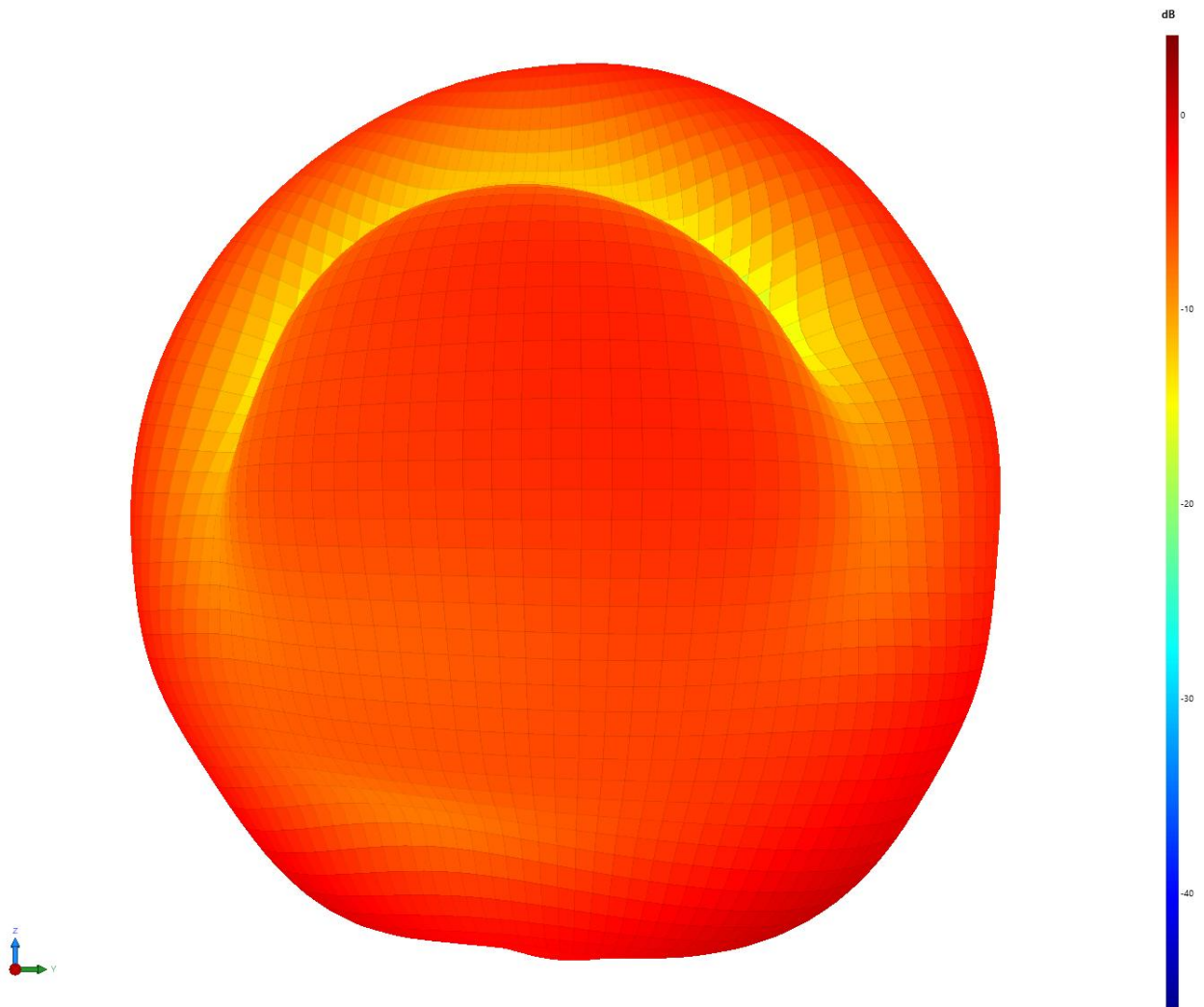
Unit 161 2445MHZ XY



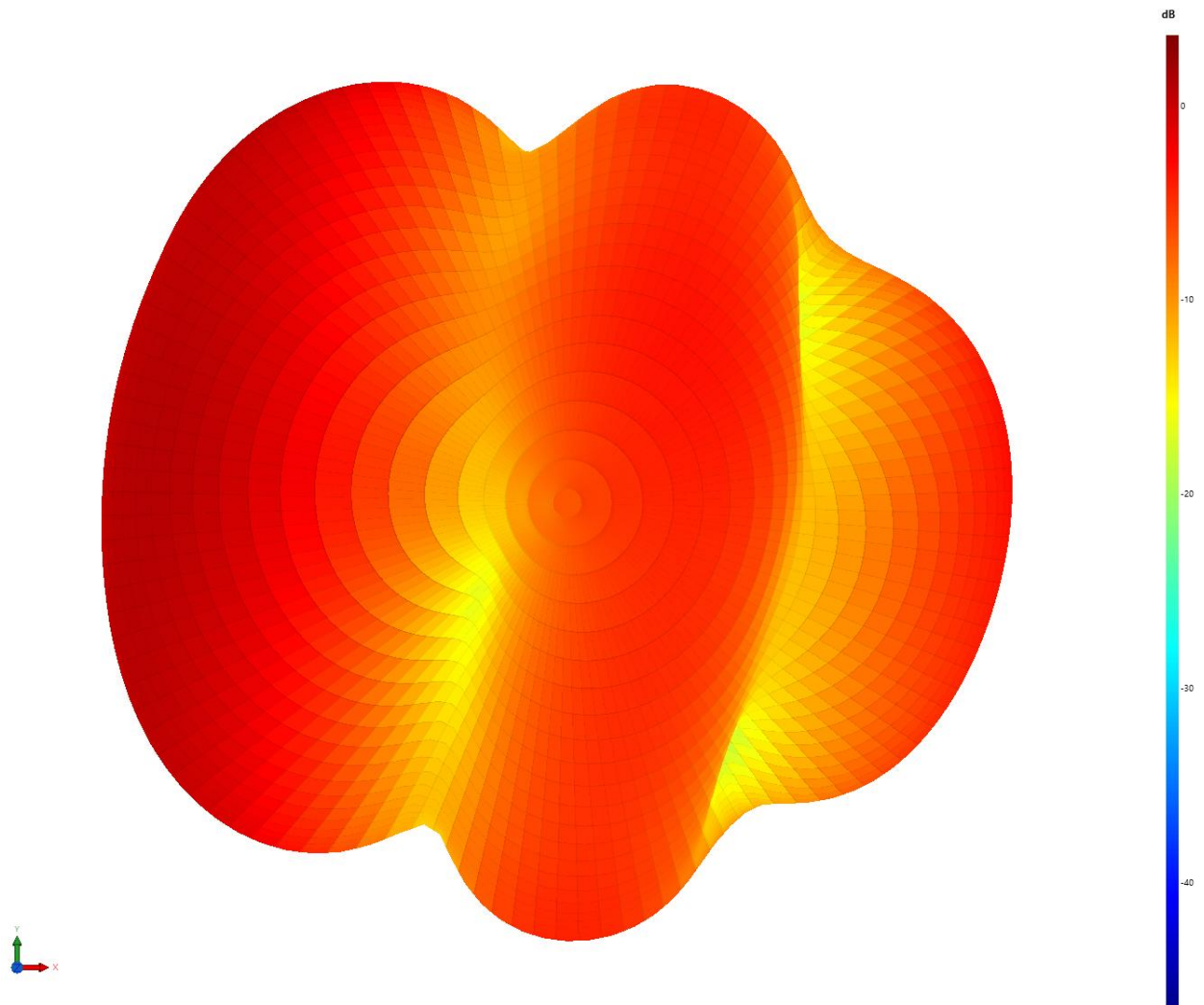
Unit 161 2445MHZ XZ



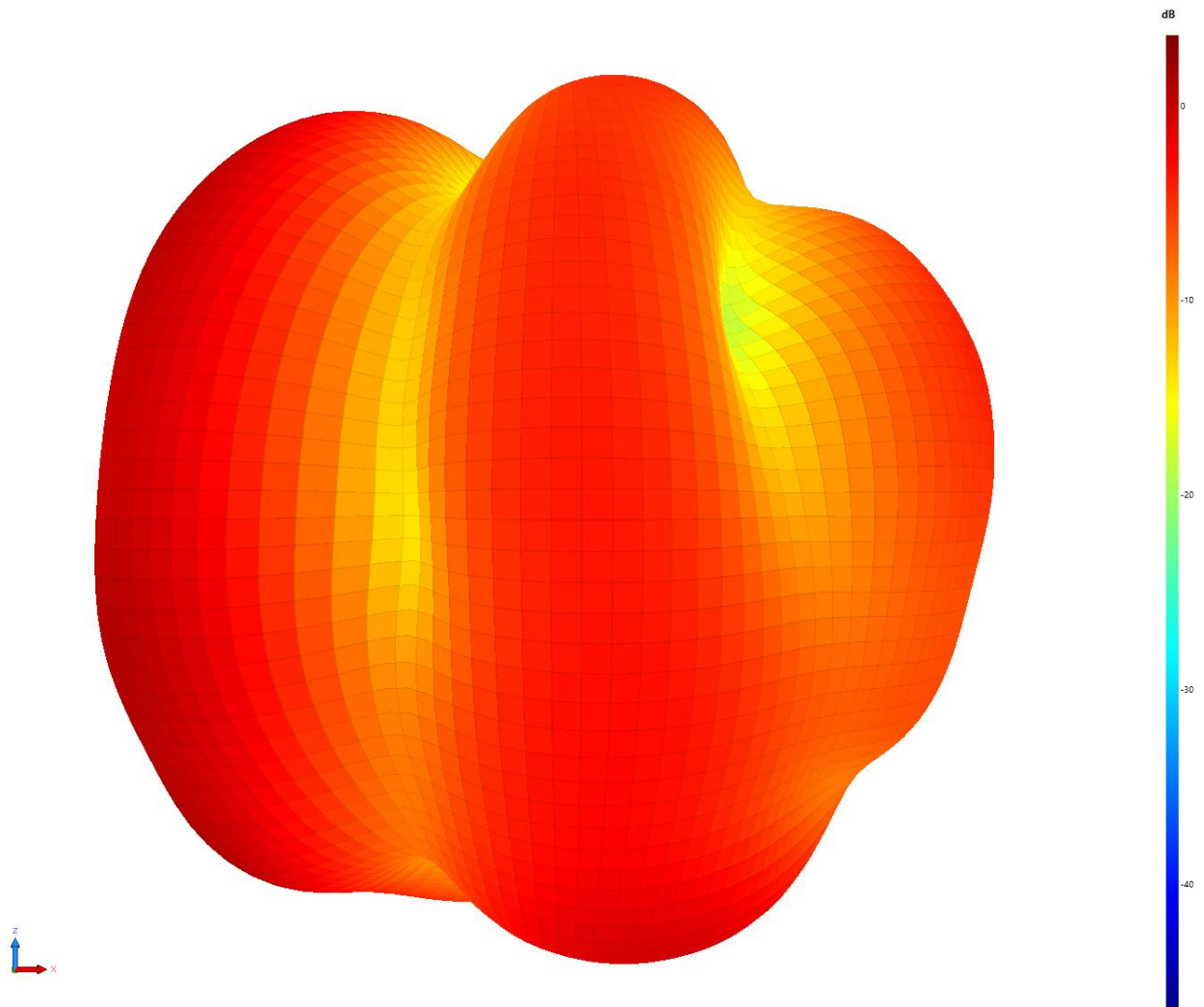
Unit 161 2445MHZ YZ



Unit 161 2500MHZ XY



Unit 161 2500MHZ XZ



Unit 161 2500MHZ YZ

