NANF60X20AUS0R868G2HF

868 / 915 MHz ISM FPC Antenna

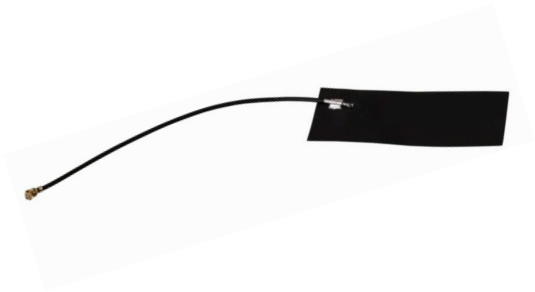
9001:2015 CERTIFIED

ROHS/REACH COMPLIANT HALOGEN FREE

NIC Components Corp.

Features

The NANF60X20AUS0R868G2HF is a Flexible FPC antenna designed for dual-band WIFI applications. It operates within the frequency ranges of 863~873MHz and 902~928 MHz, making it perfect for use in Smart Agriculture, Smart Factory, and Smart Parking .



Applications

- Support ISM/LoRa & Sigfox Bands, 868 / 915 MHz
- Stable and Reliable Performance
- Customizable Cable and Connector
- RoHS & REACH Compliant

Part Number Breakdown:

NANF 60X20 A U S 0R868G 2 X100AH F

- NANF — Series
- 60X20 — Dimensions
- A — Adhesive Option Code
- U — Internal Production Code
- S — Protocol Code
- 0R868G — Center Frequency
- 2 — Number of Frequency Bands
- X100AH — Cable & Connector Format Codes
- F — RoHS Compliant

Standard Part Number Listing

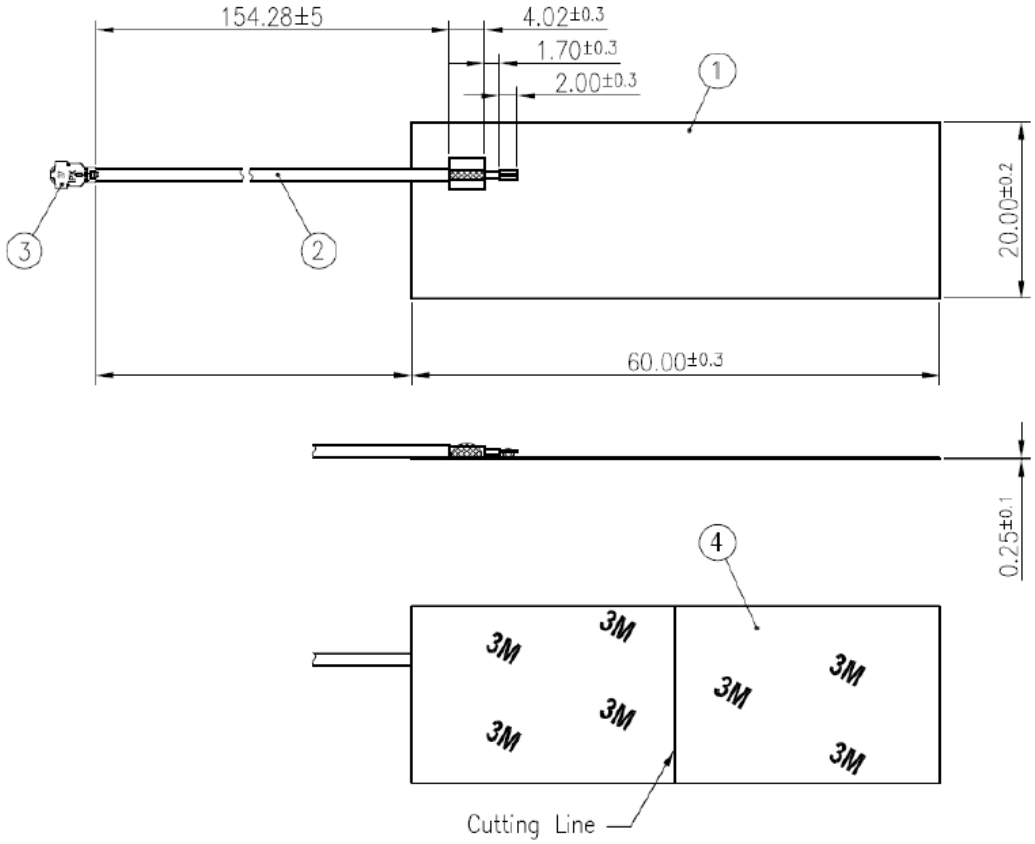
Part Number	Connector	Cable Length	Cable Type	Cable Orientation
NANF60X20AUS0R868G2X100AHF	IPEX 1	100 mm	RF1.13	Horizontal
NANF60X20AUS0R868G2X150AHF	IPEX 1	150 mm	RF1.13	Horizontal

The table represents assembled part numbers available on www.niccomp.com from standard connector and cable options. For options not listed above please contact NIC"

Specifications

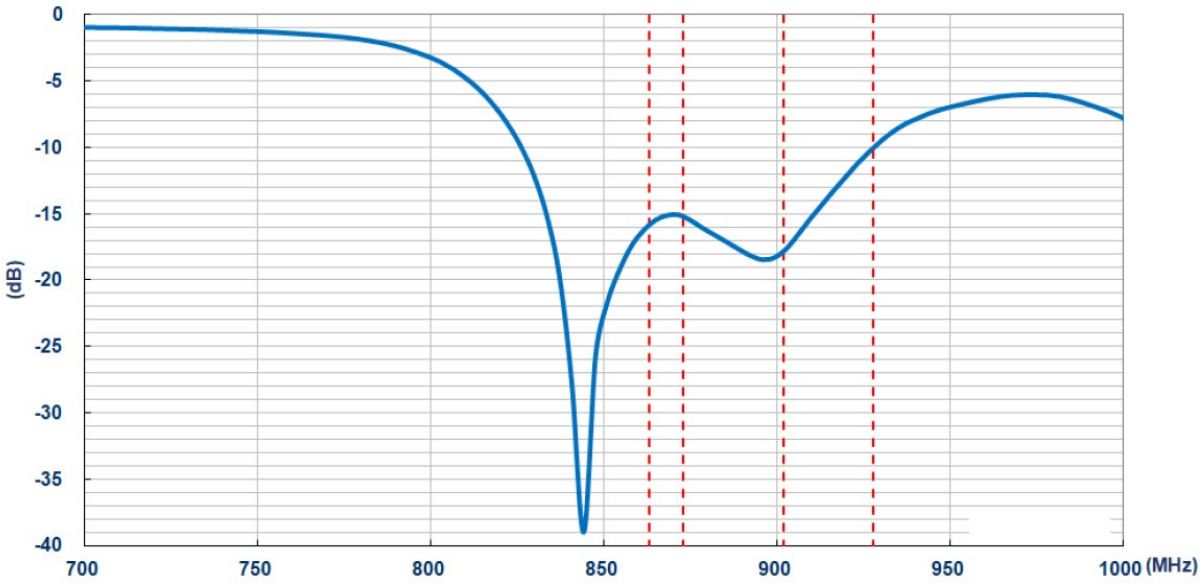
Electrical						
Frequency Bands	Frequency Band 868 MHz			Frequency Band 915 MHz		
Frequency Range	863 MHz	868 MHz	873 MHz	902 MHz	915 MHz	928 MHz
Efficiency (typ.)	40.09%	37.41%	34.91%	37.76%	40.46%	36.90%
Average Gain (typ.)	-3.97 dBi	-4.27 dBi	-4.57 dBi	-4.23 dBi	-3.93 dBi	-4.33 dBi
Peak Gain (typ.)	1.86 dBi	1.56 dBi	1.26 dBi	0.96 dBi	1.26 dBi	0.86 dBi
V.S.W.R	< 3 typ.					
Return Loss	< -6 dBi					
Test Condition	On the 2mm ABS					
Polarization	Linear					
Impedance	50Ω					
Material	Polymer 0.25t					
Mounting Method	Adhesive					
Environmental						
Operating Temperature	-40℃~+85℃					
Storage Temperature	-40℃~+85℃					
Relative Humidity	95% non-condensing					
RoHS Complaint	Yes					

Dimension Drawing

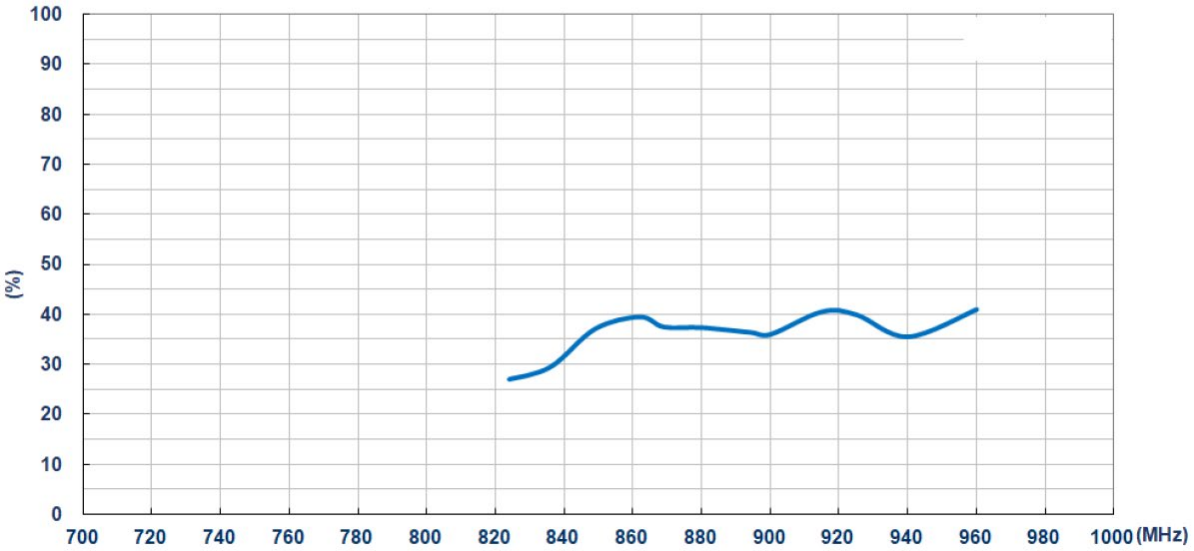


Antenna Parameters:

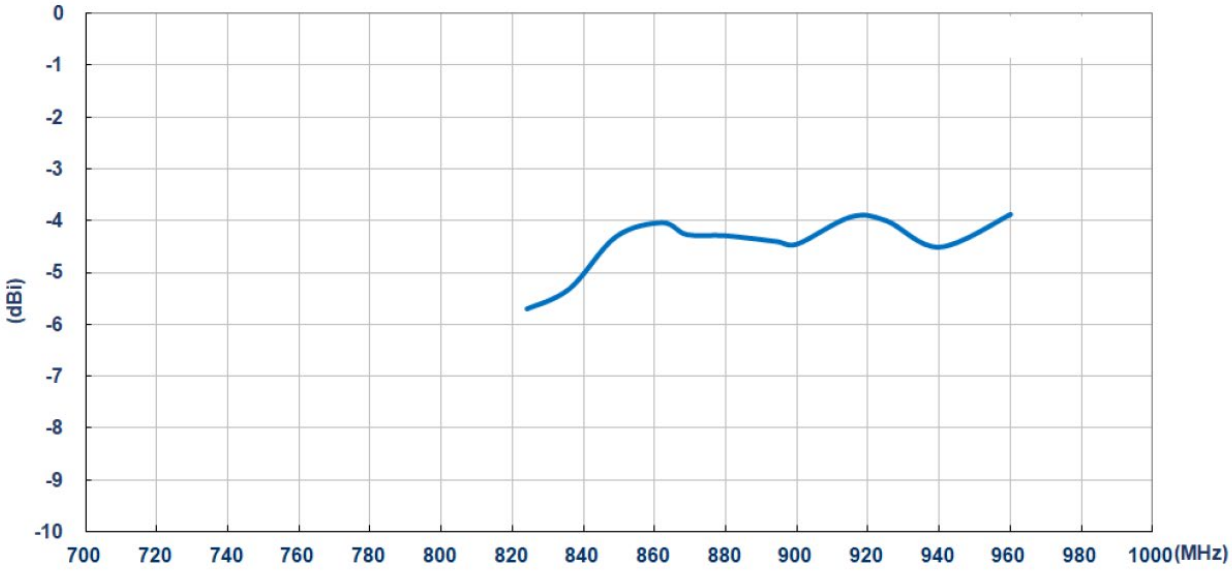
S11 (dB)



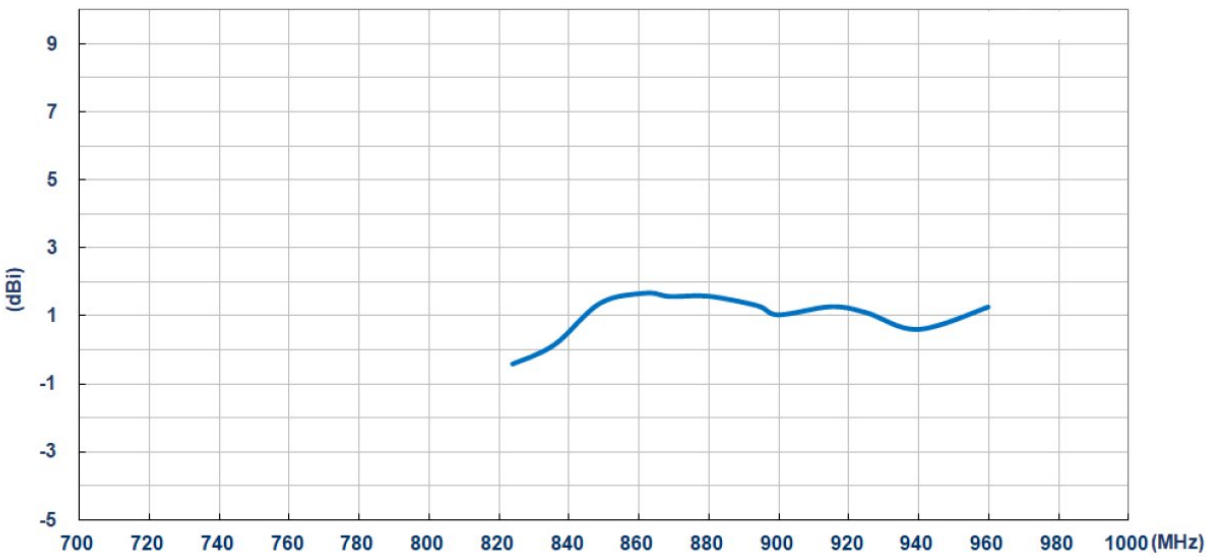
Efficiecny (%)



Average Gain (dBi)

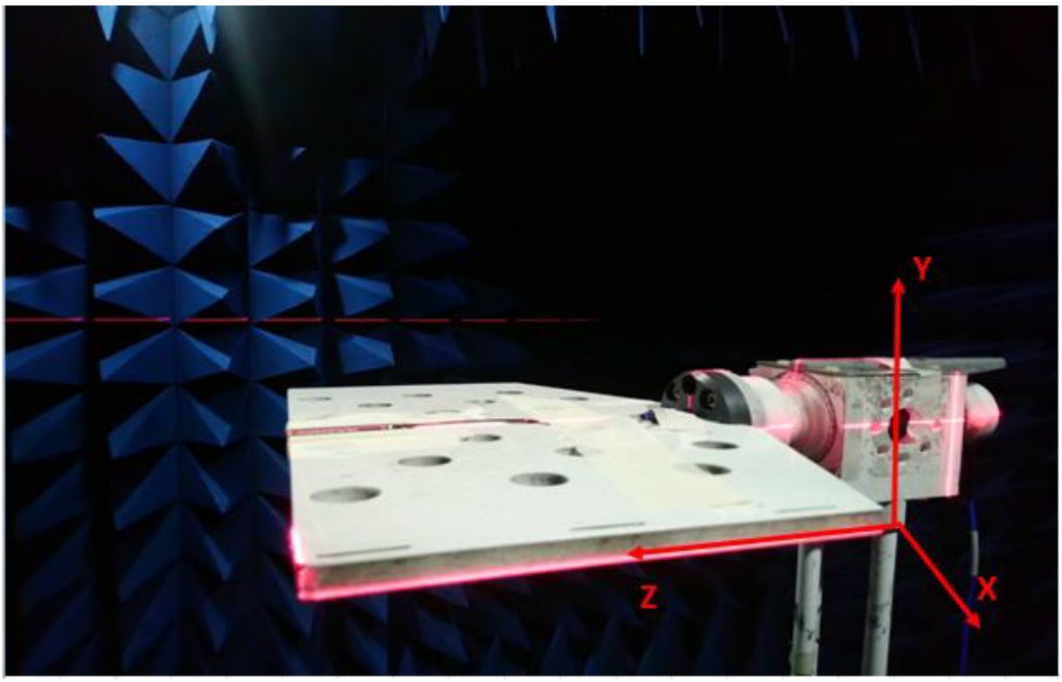


Peak Gain (dBi)



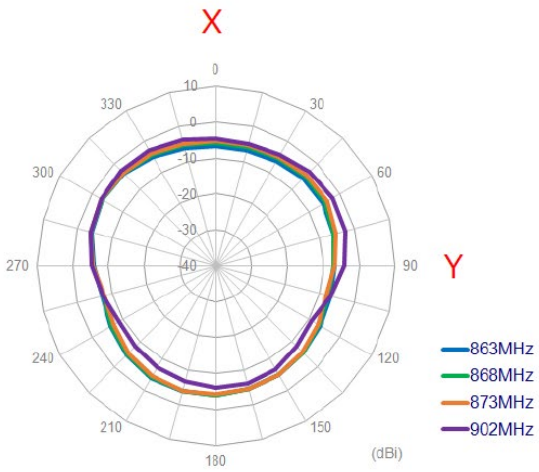
Radiation Patterns

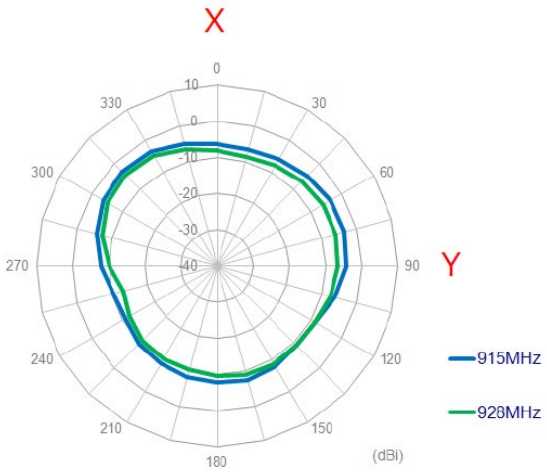
The antenna radiation patterns are measured in 3D Anechoic Chamber.
The measurement setup is as show below:



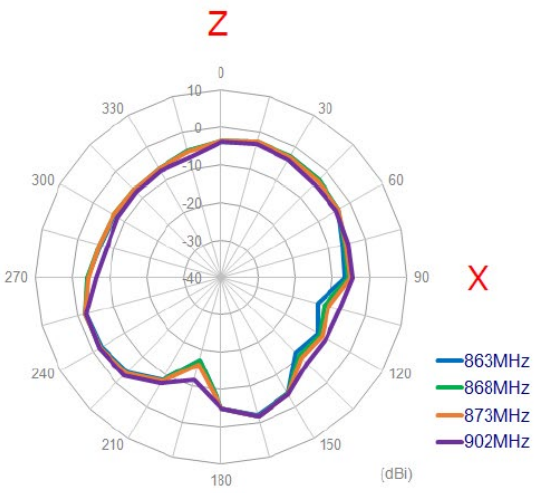
2D Radiation Patterns

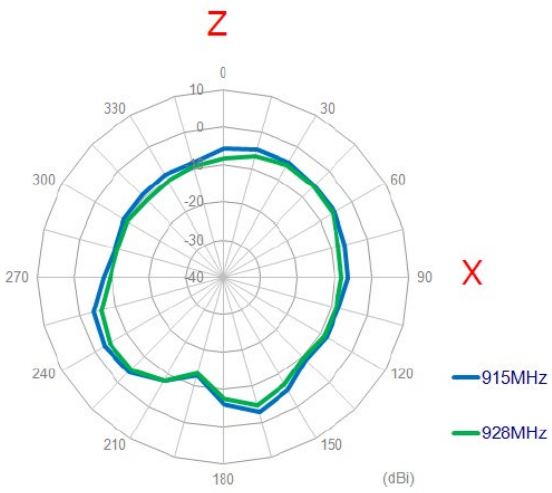
X-Y Plane



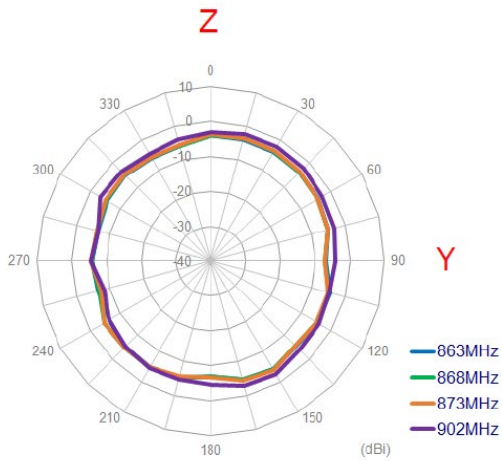


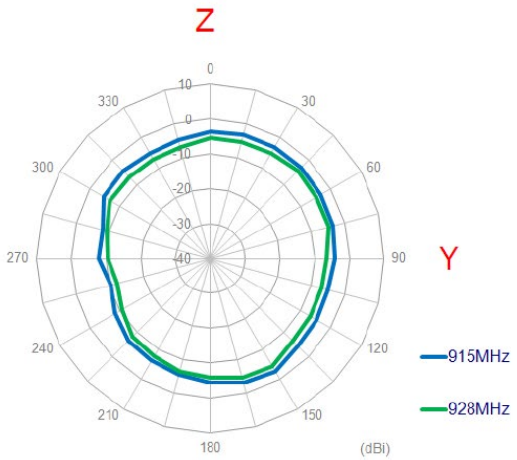
X-Z Plane





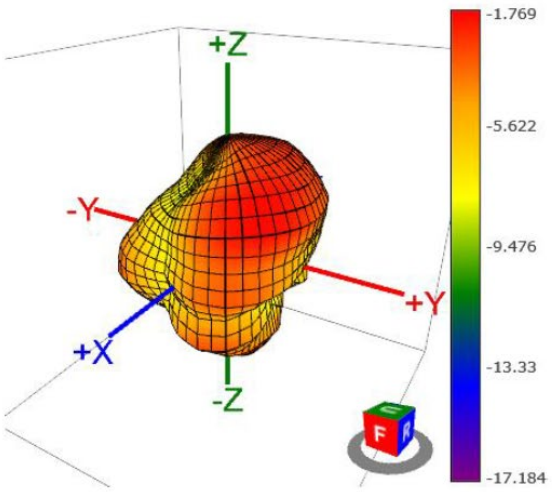
Y-Z Plane



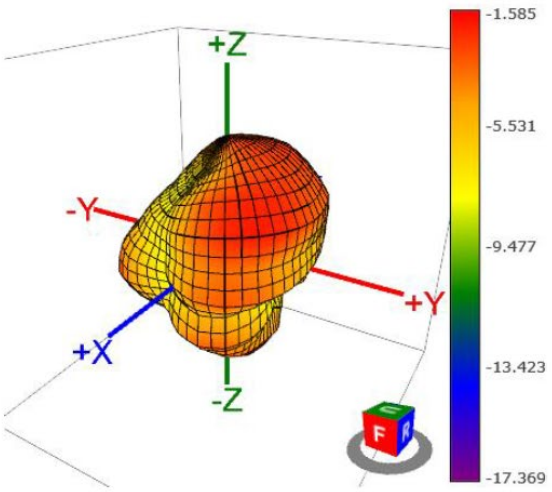


3D Radiation Patterns

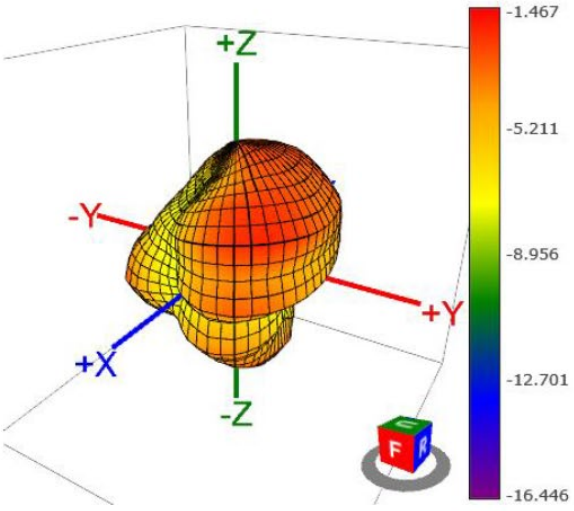
863MHz



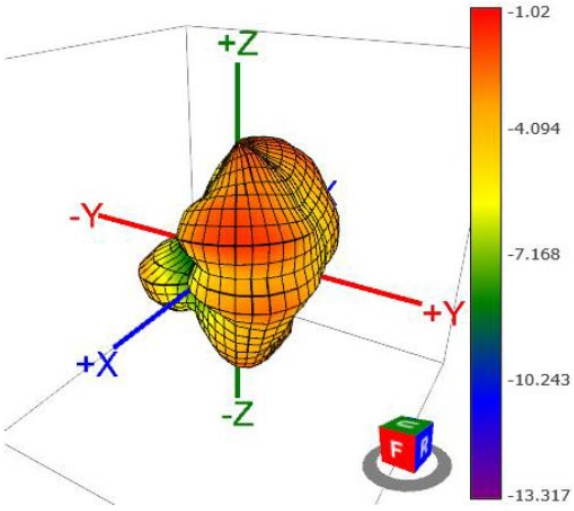
868MHz



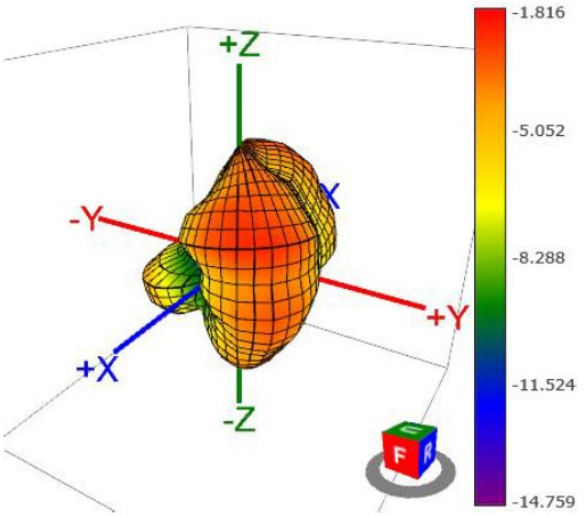
873MHz



902MHz



915MHz



928MHz