



Features & Applications:

- Integrated antenna system to Fell Tech

Physical & Mechanical Details:

- Antenna dimensions: 103.95 x 81.83 x 18.92 mm
- Weight: 23g
- Connector type: Spring clip
- Mounting details: Snap in

Compliance Information:

- Manufacturer and model number: Pulse Electronics W3448D

ELECTRICAL SPECIFICATIONS @ 25°C

General Specifications

Antenna type	Nominal Impedance	Polarization	Radiation pattern
Internal LDS	50Ω	Linear	Omni

Antenna (Port)	Frequency (MHz)	Return Loss (dB)	VSWR	Efficiency (%)	Peak Gain (dBi)	Average Gain (dBi)
LTE	698-960	-6	3.0:1	>30	-0.5	-3.3
	1710-2200	-10	1.9:1	>60	3.0	2.3
ISM	865-928	-10	1.9:1	>44	1.4	0.7
	2400-2500	-14	1.5:1	67	3.5	3.1
GNSS	1565-1605	-13	1.6:1	70	3.2	3.1
2.4G	2400-2500	-11	1.8:1	50	0.5	0.2
2.4G	2400-2500	-6	3.0:1	60	0.5	0.3

MECHANICAL SPECIFICATIONS

W3448D

Dimension (Width x Length x Height)	Housing Material	Color	Weight
103.95 x 81.83 x 18.92 mm	PC+10GF	Black	23g

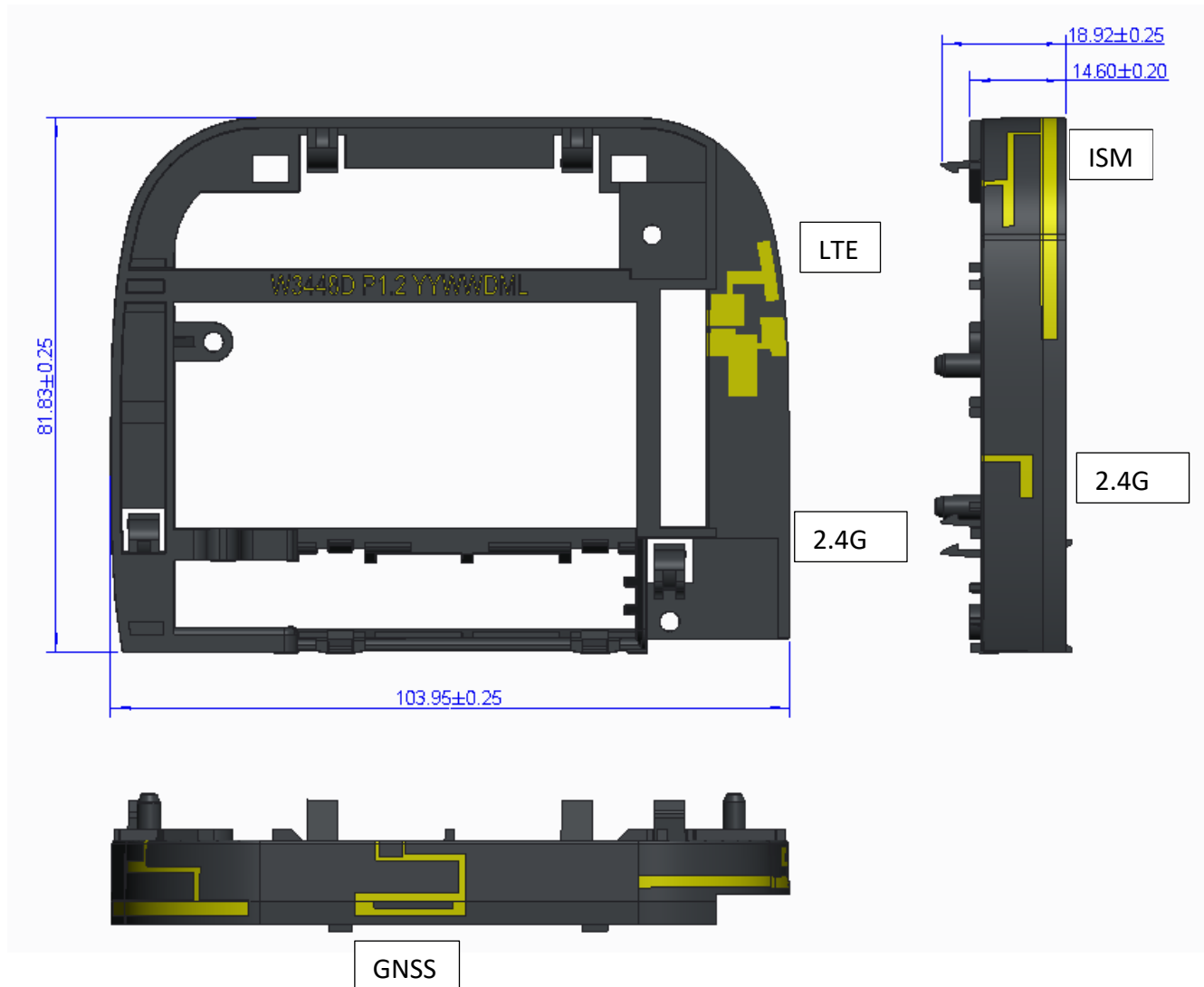
Operating Temperature	Storage Temperature	RoHS Compliant
-40 / +85° C	-40 / +85° C	Yes

Notes:

- Storage Temperature: -40°C to 85°C

Mechanical Drawing

W3448D



Test Setup

W3448D

- Measured at Pulse, Finland (in MVG SG24L chamber)
- RF results measured with device mechanics

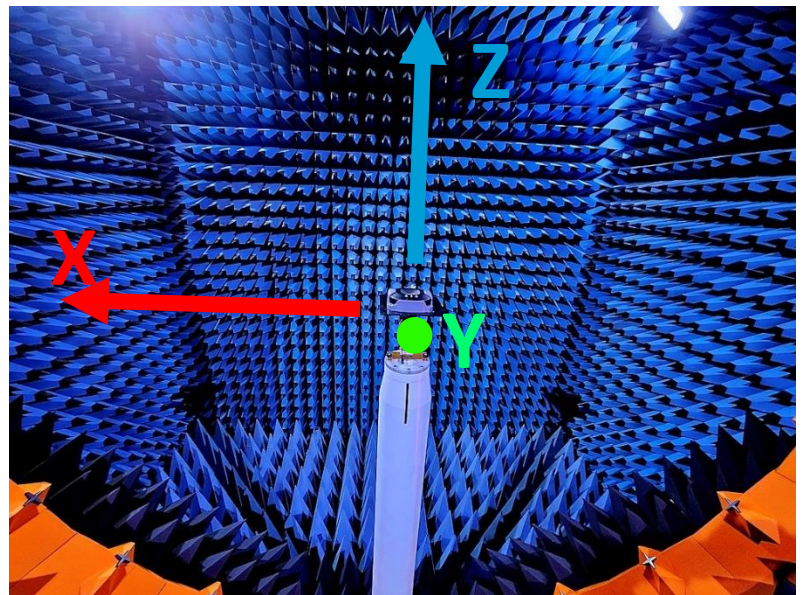
Measurement and Test Conditions:

Description of test setup: MVG, SG24L

Measuring instruments used: VNA Anritsu MS46322B

Calibration details: MVG System calibration 4 May, 2022, Annual gain calibration

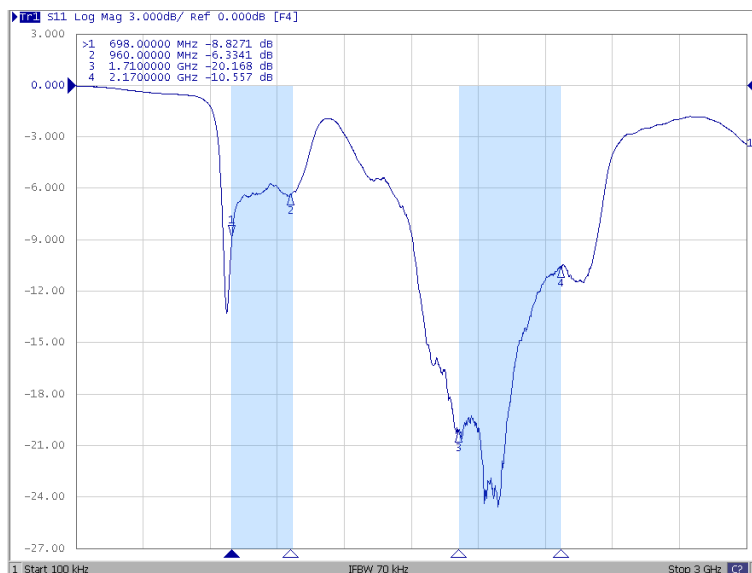
Environmental conditions during testing, room temperature +22degC



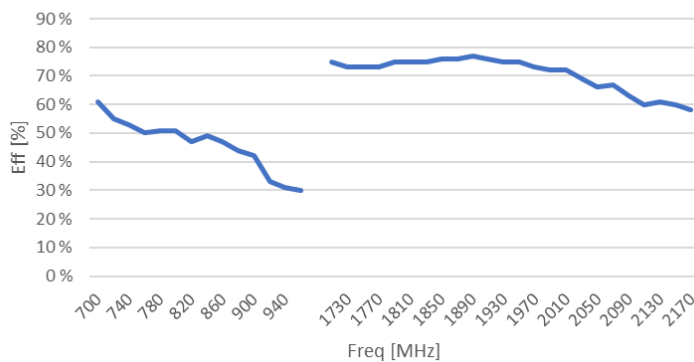
Charts

LTE

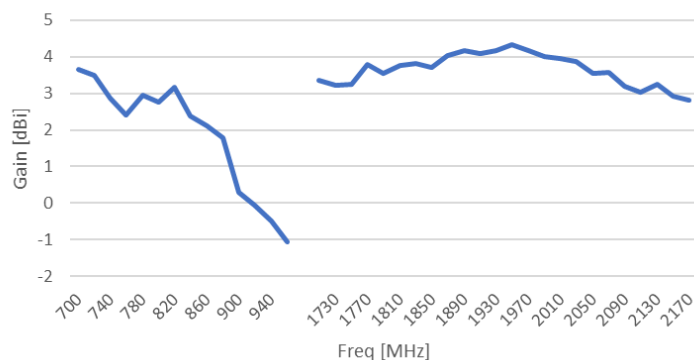
Return Loss



3D Total Radiated Efficiency



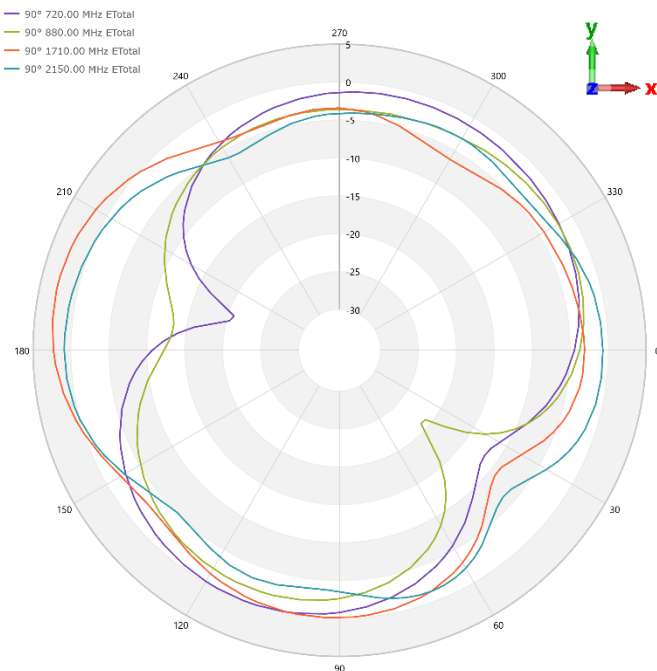
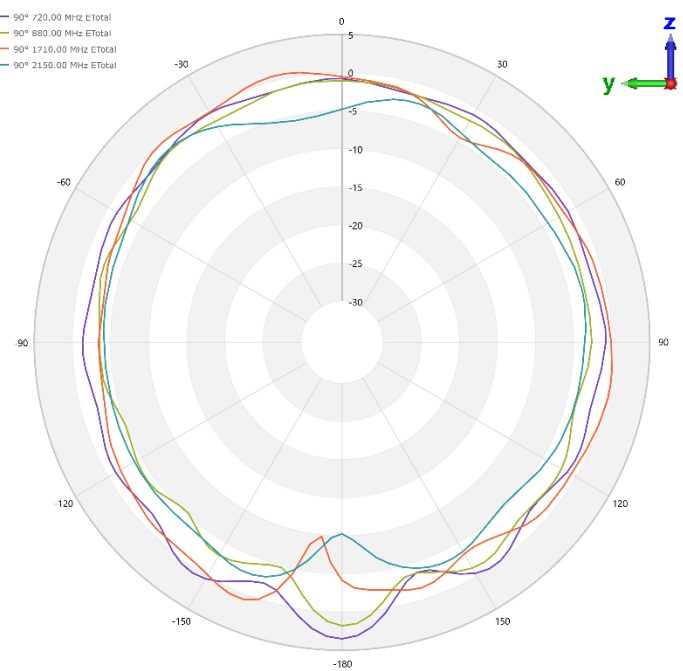
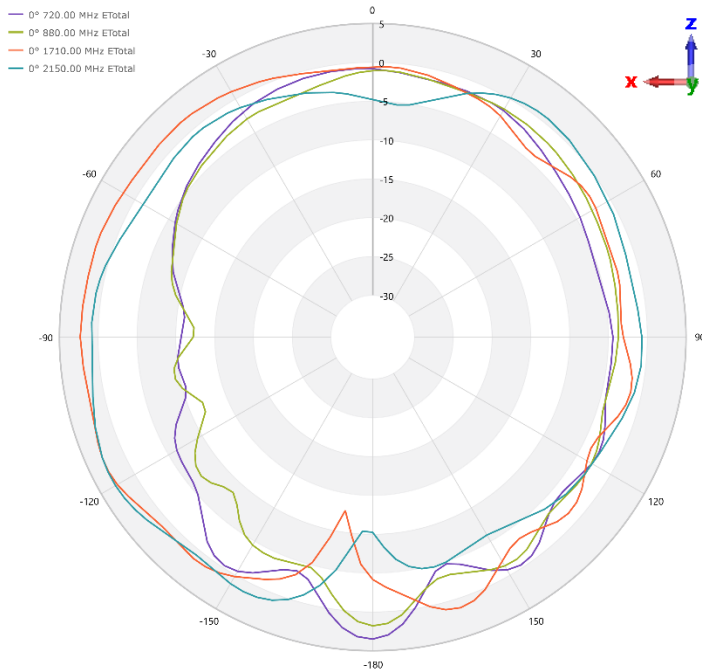
Max. Gain



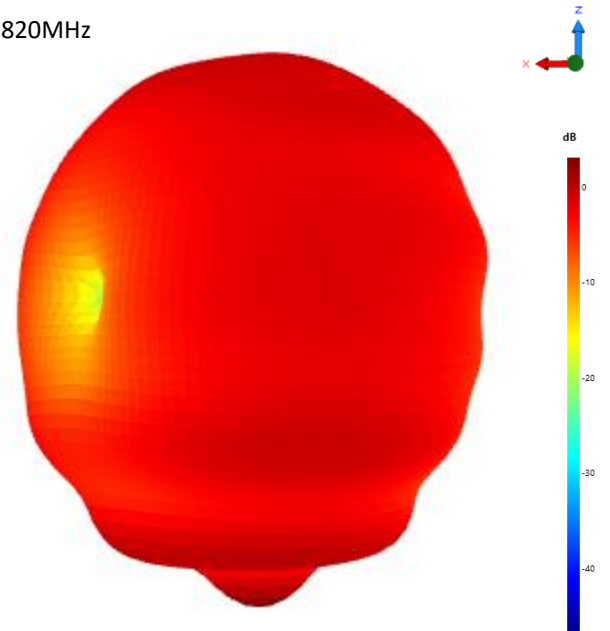
Charts

LTE

Radiation Patterns



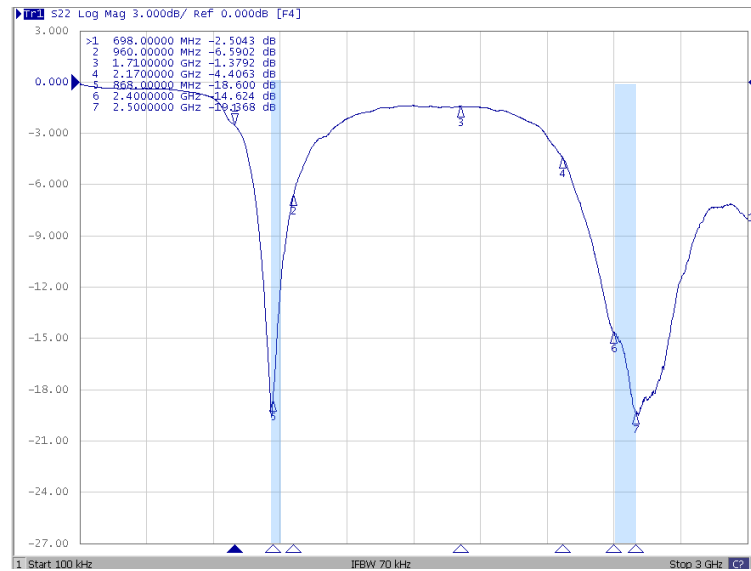
820MHz



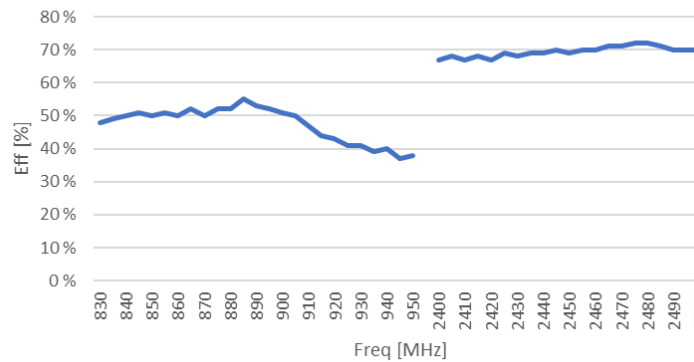
Charts

ISM

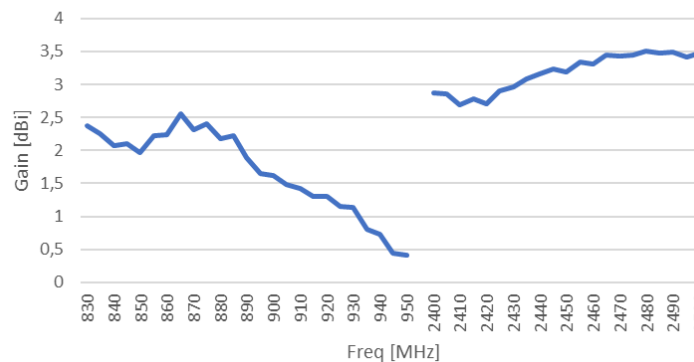
Return Loss



3D Total Radiated Efficiency



Max. Gain

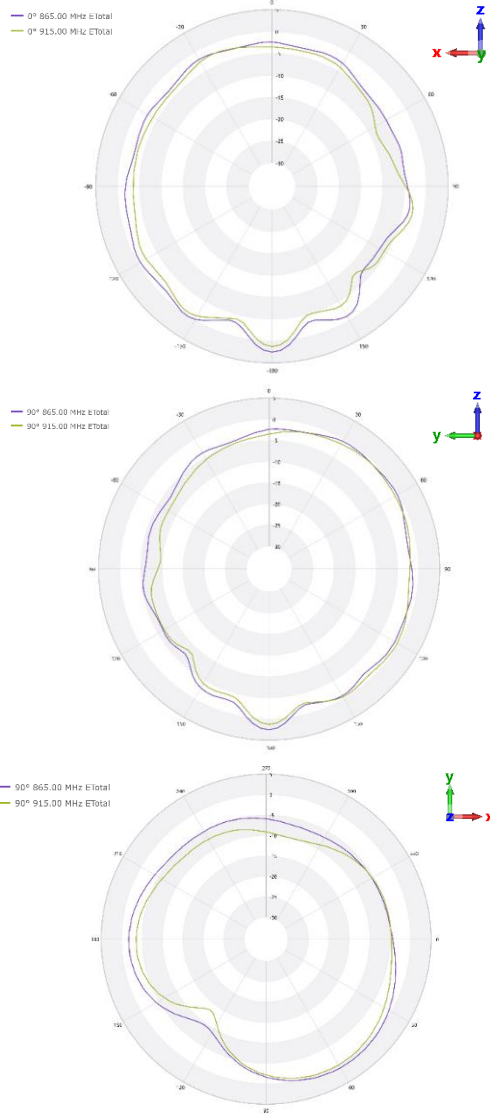


Charts

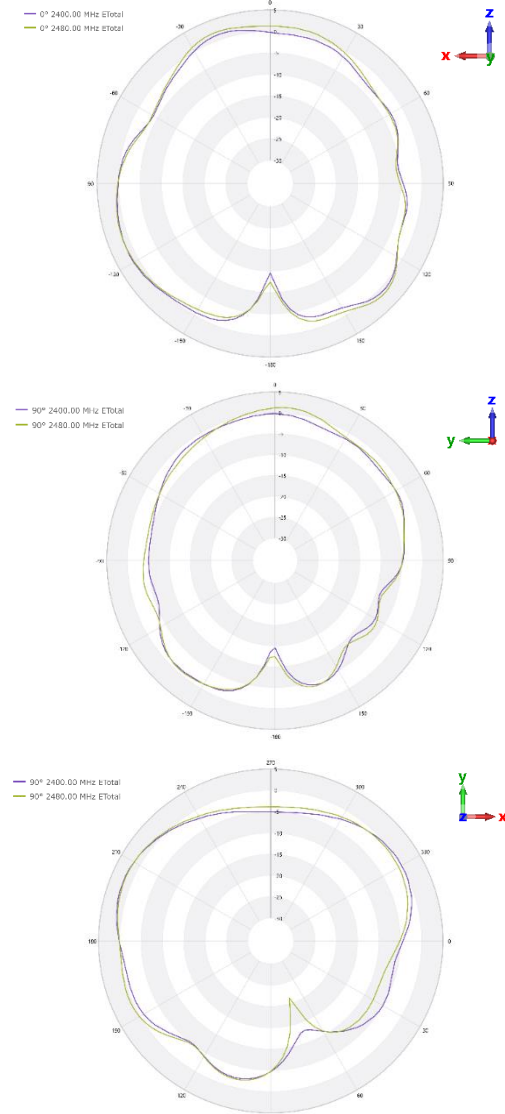
ISM

Radiation Patterns

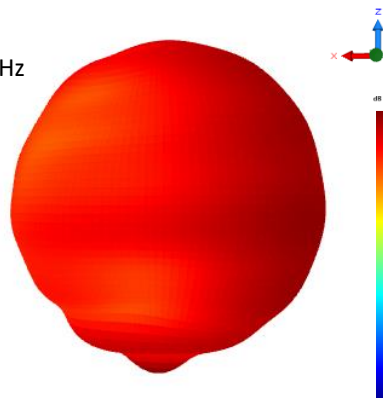
868/915MHz



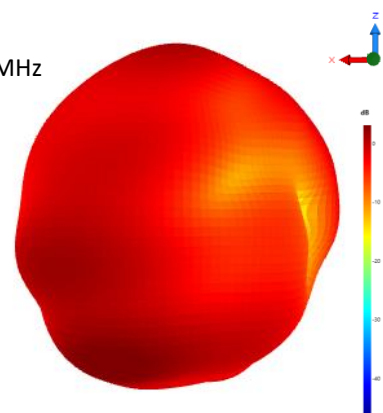
2.4GHz



868MHz



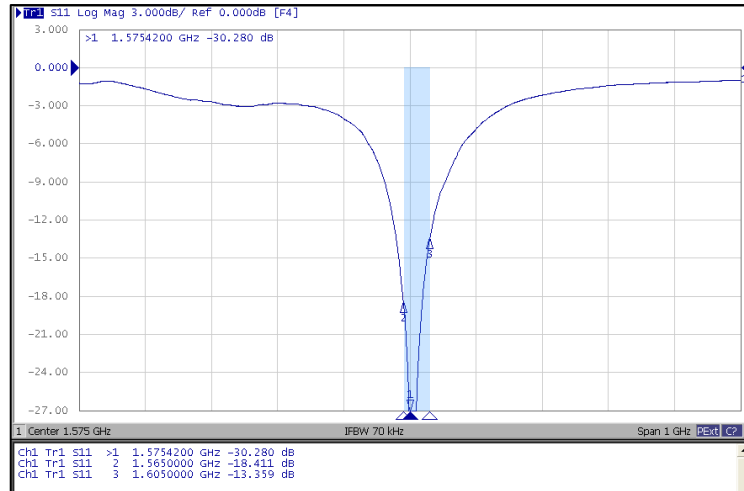
2440MHz



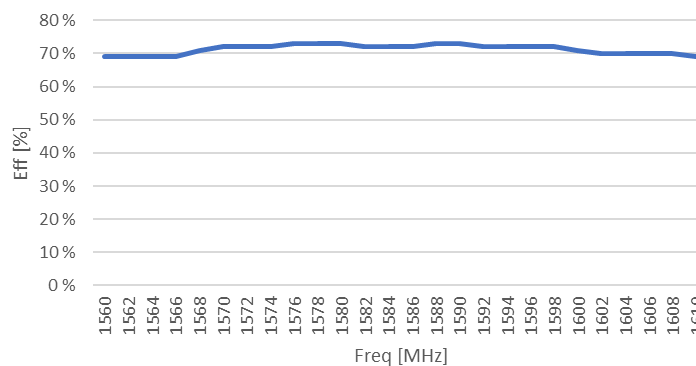
Charts

GNSS

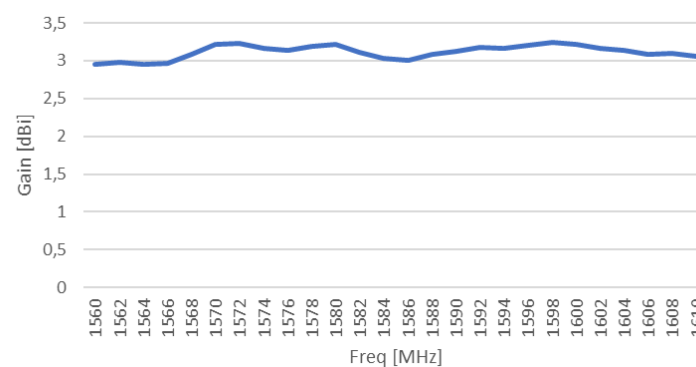
Return Loss



3D Total Radiated Efficiency



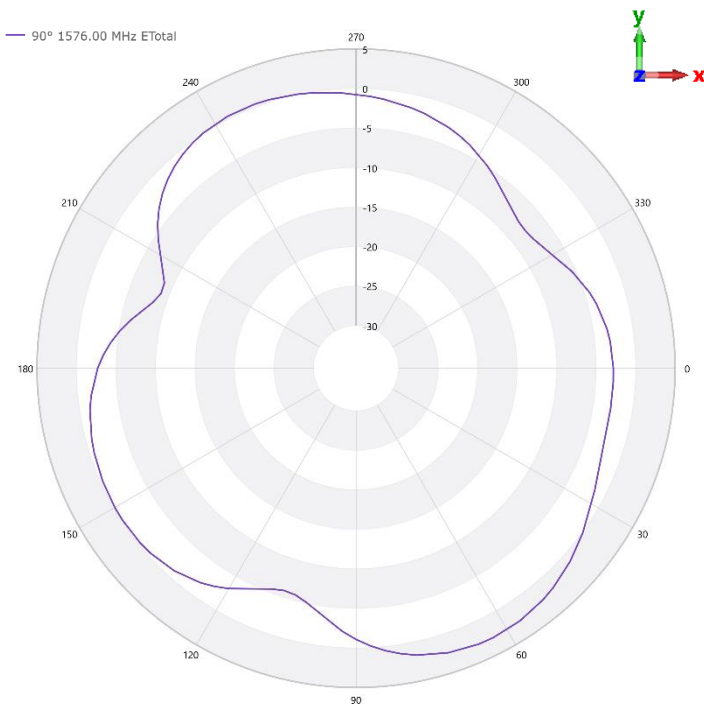
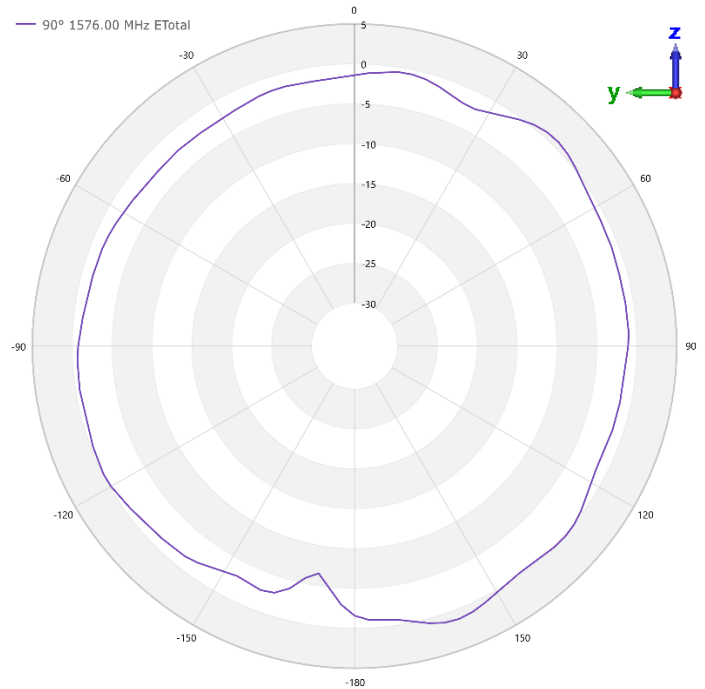
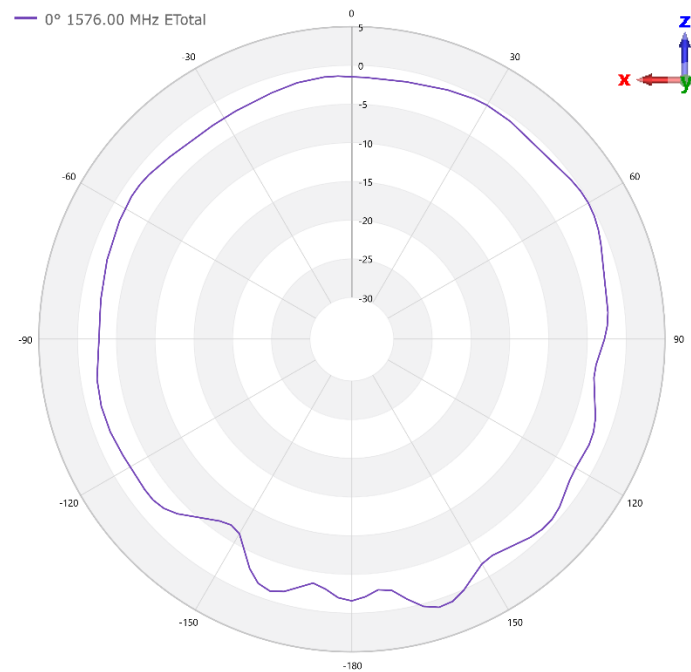
Max. Gain



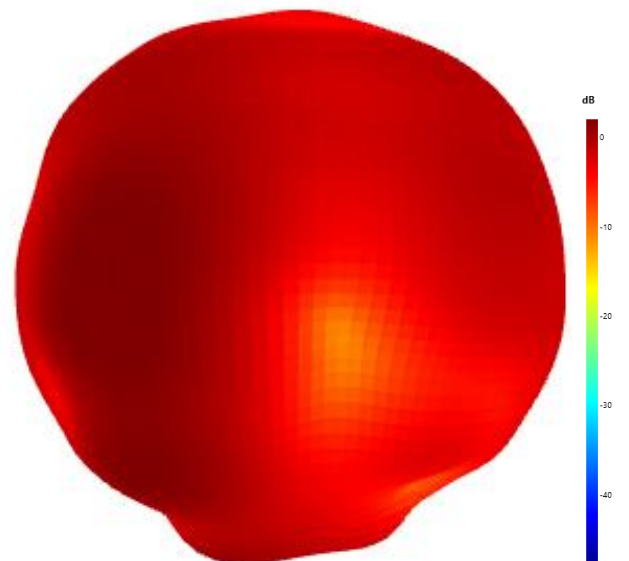
Charts

GNSS

Radiation Patterns



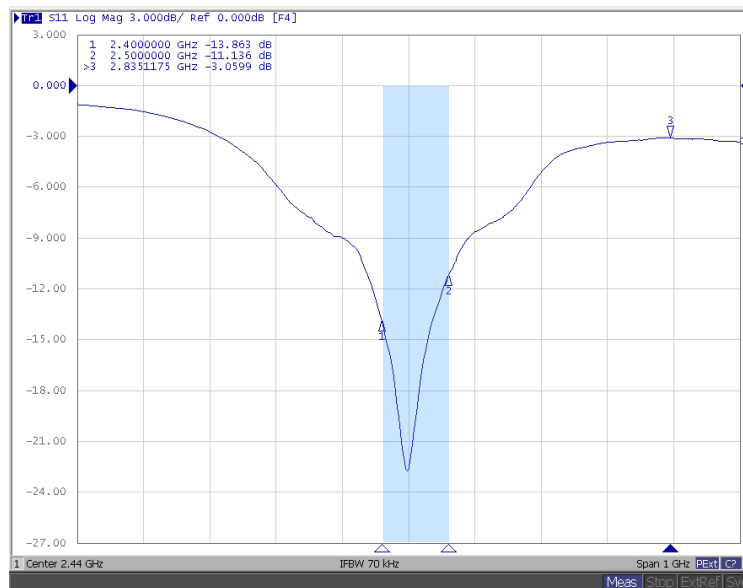
1575MHz



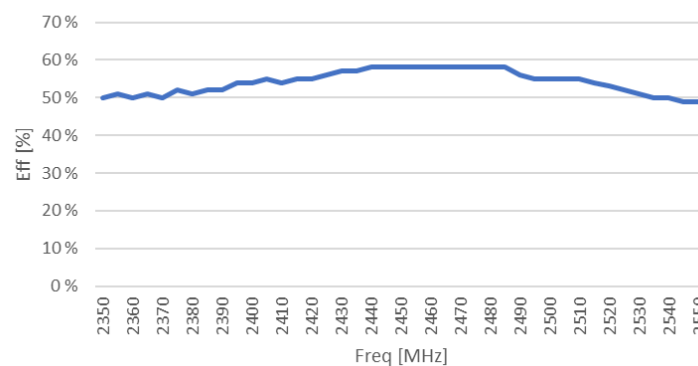
Charts

WiFi 1

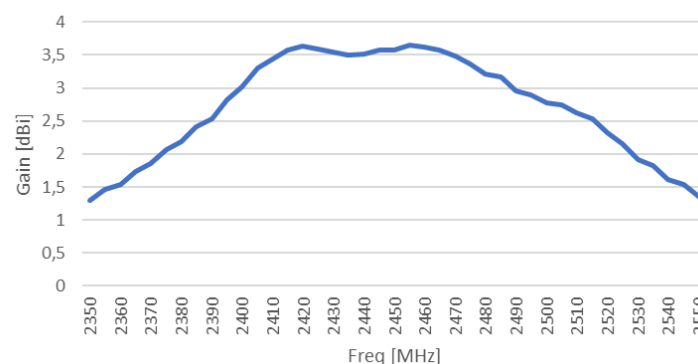
Return Loss



3D Total Radiated Efficiency



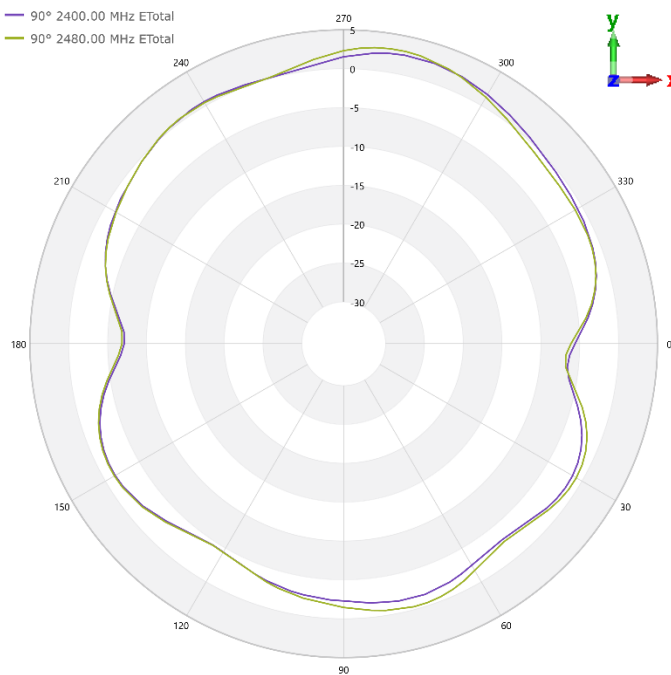
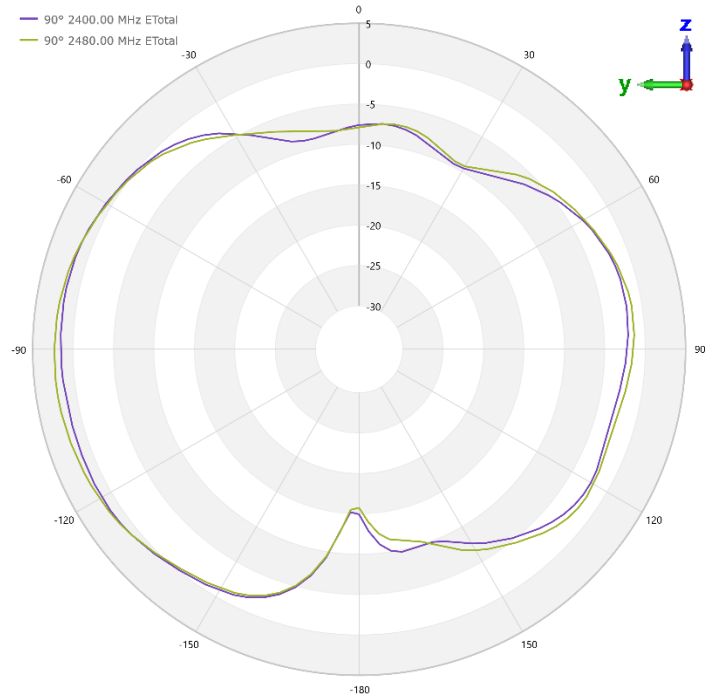
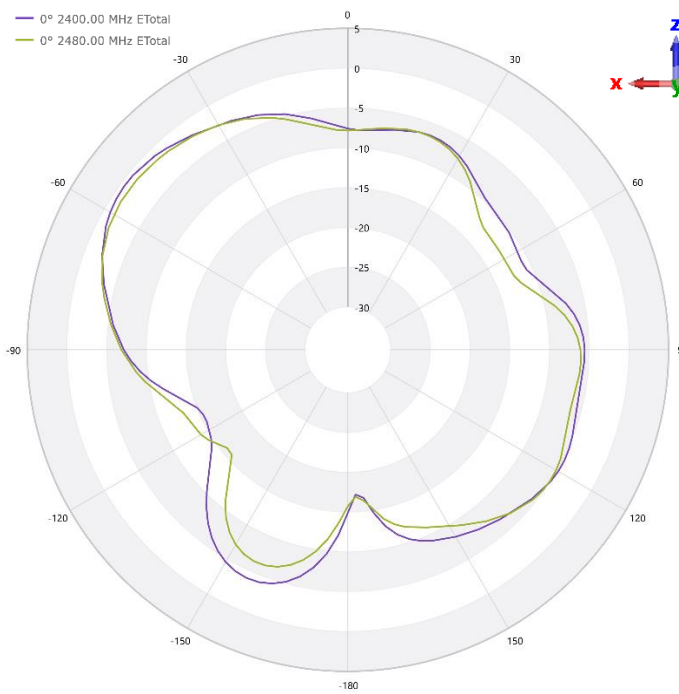
Max. Gain



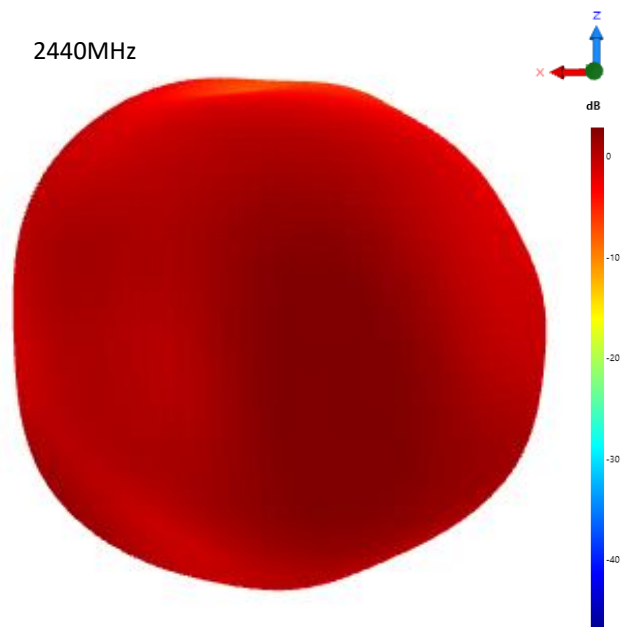
Charts

WiFi 1

Radiation Patterns



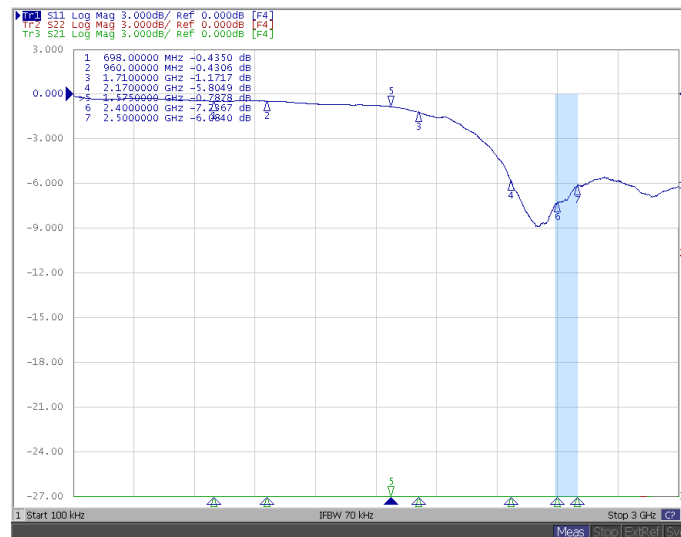
2440MHz



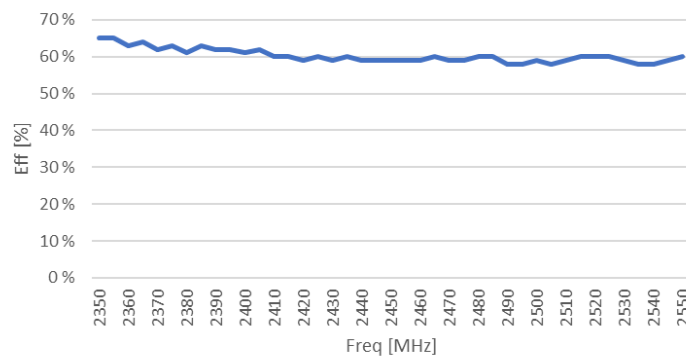
Charts

WiFi 2

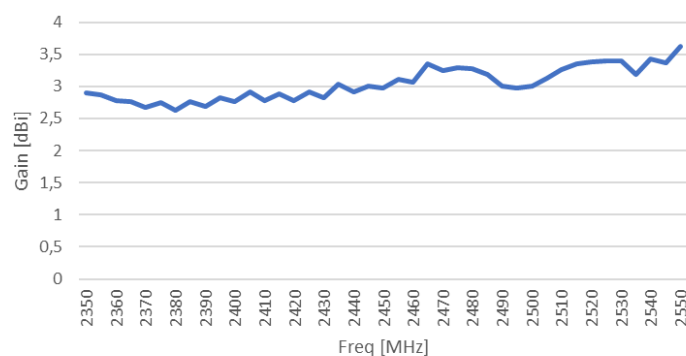
Return Loss



3D Total Radiated Efficiency



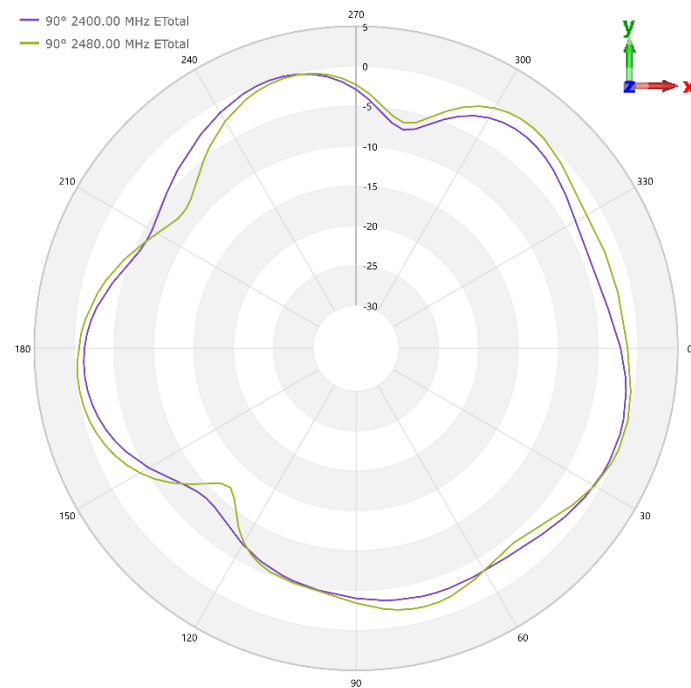
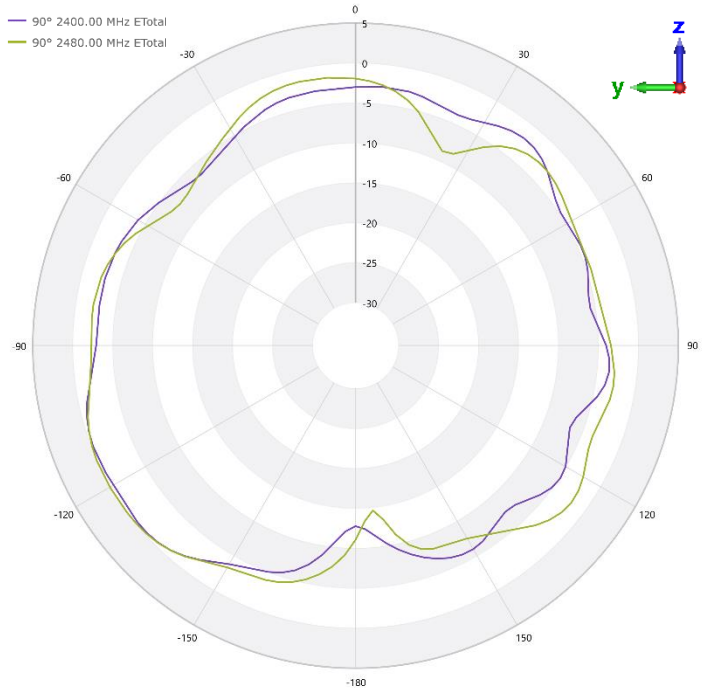
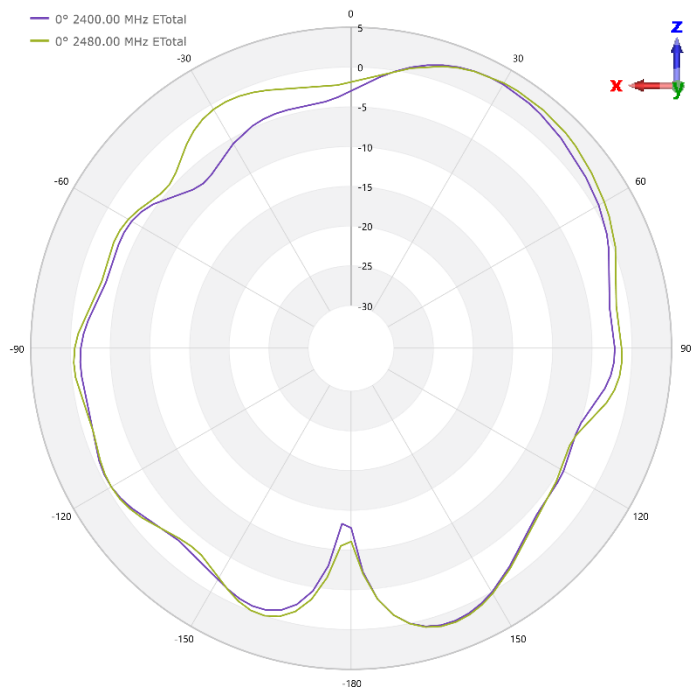
Max. Gain



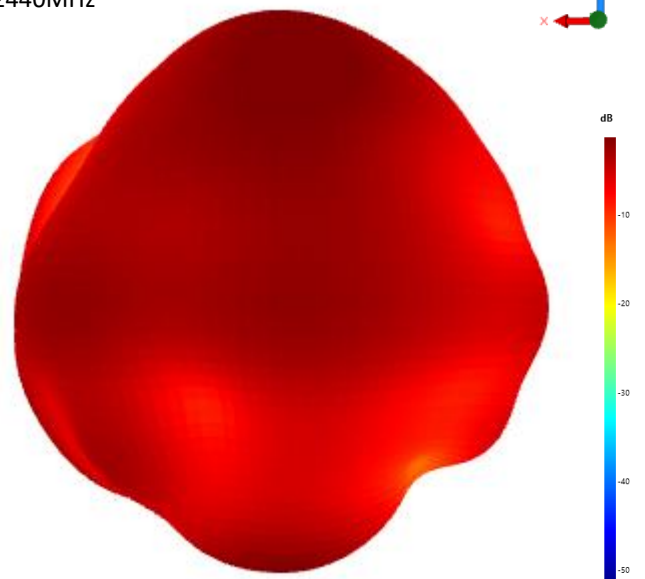
Charts

WiFi 2

Radiation Patterns



2440MHz



PACKAGING

W3448D

Antennas are packed by PE tray and carton box.

- 6 pcs antennas per tray
- 11 trays per carton box
- Carton box size: 400mm*30mm*300mm



For More Information:

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