LTE/ISM/WiFi/GNSS/ LDS Antenna Frame

W3448D

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)	Avarage 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

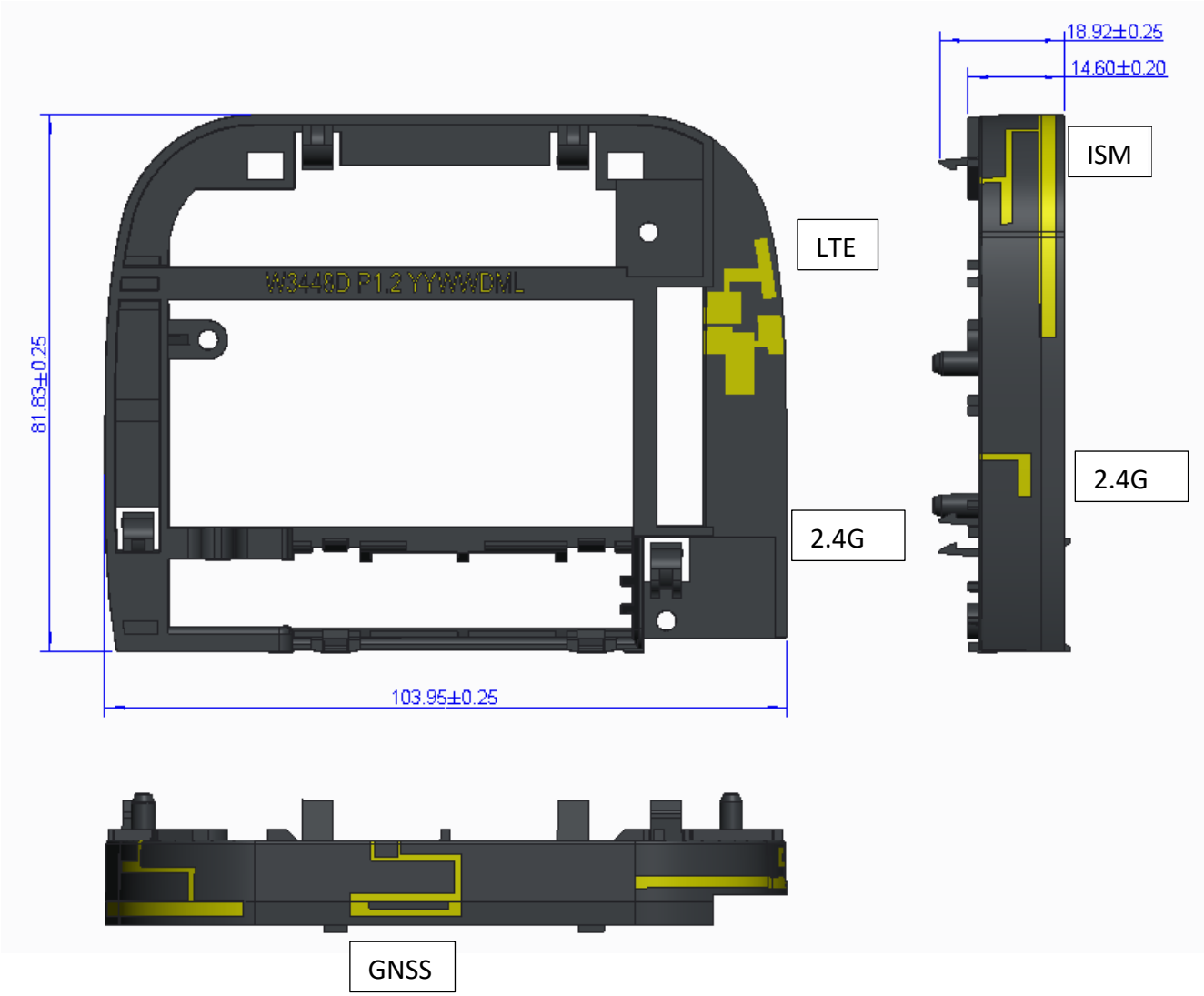
Operating Temperature	Storage Temperature	RoHS Compliant
-40 / +85° C	-40 / +85° C	Yes

Notes:

1. Storage Temperature: -40°C to 85°C

Mechanical Drawing

W3448D

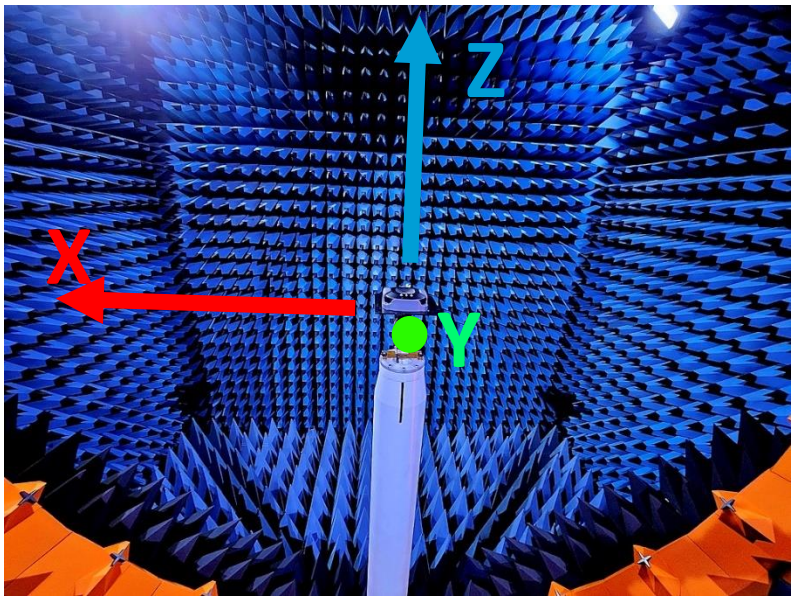


Test Setup

W3448D

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

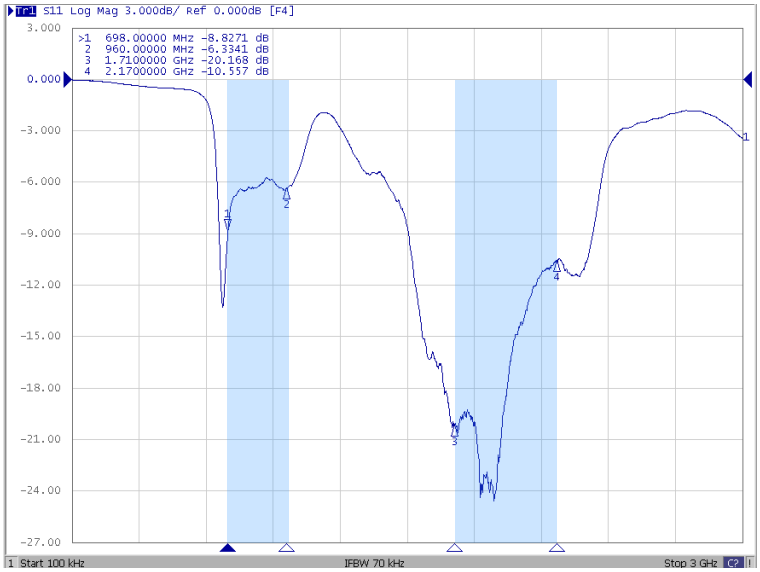
Measurement and Test Conditions:
Description of test setup: MVG, SG24L
Measuring instruments used: VNA Anritsu MS46322B
Calibration details: MVG System calibration 4 May, 2022, Annual gain calibration
Environmental conditions during testing, room temperature +22degC

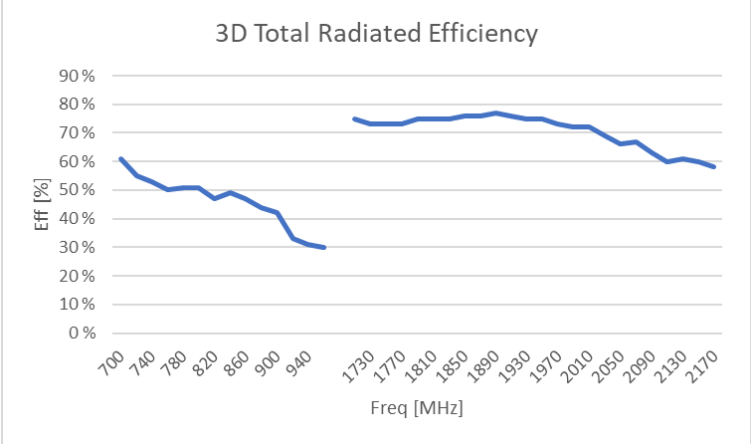


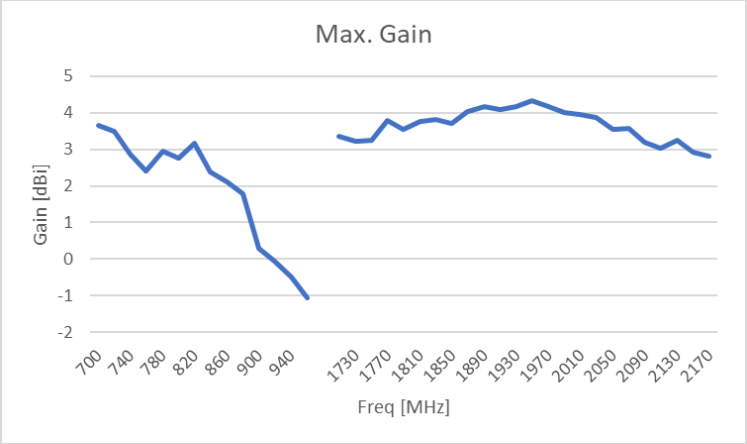
Charts

LTE

Return Loss



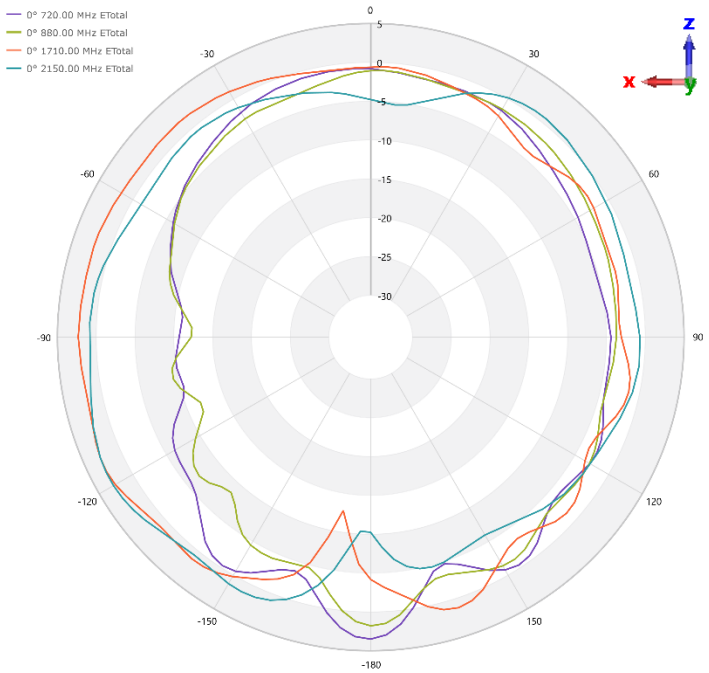


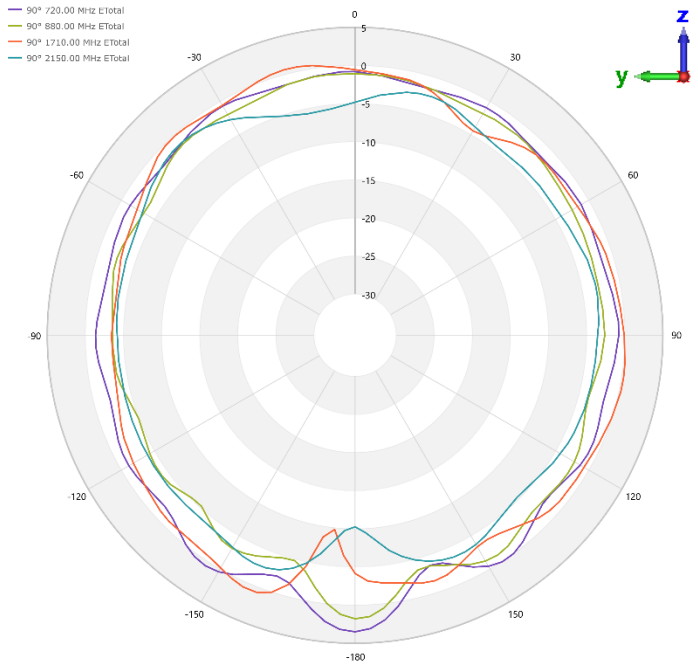


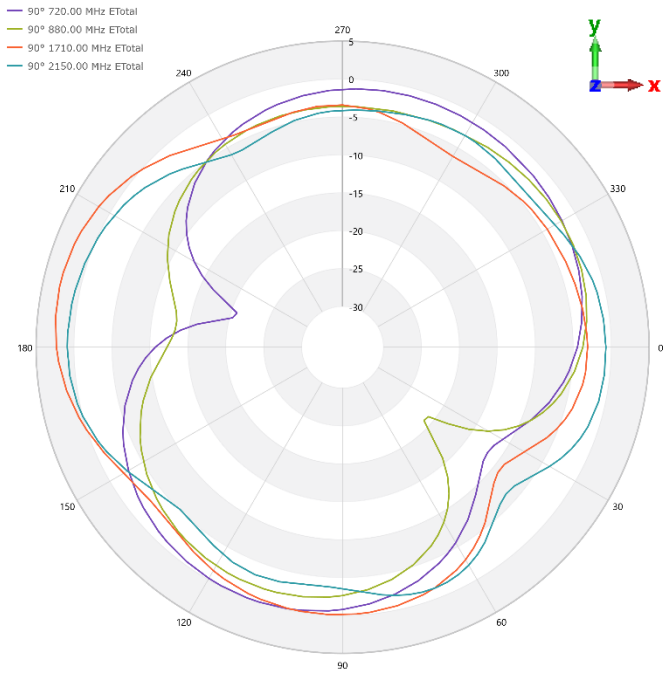
Charts

LTE

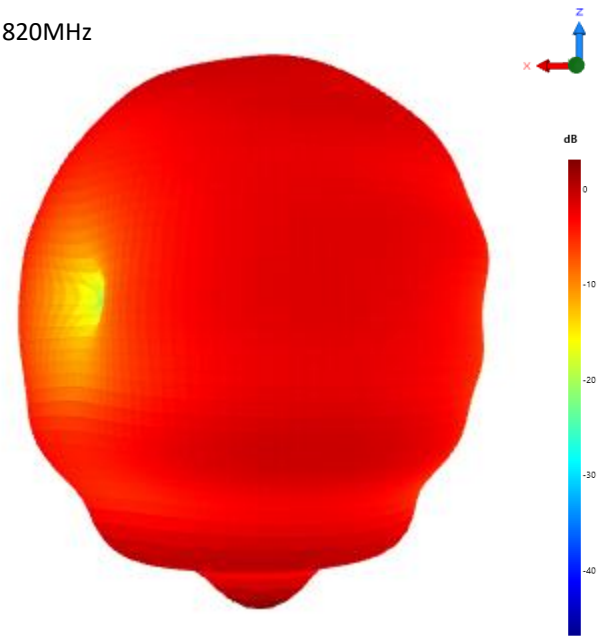
Radiation Patterns







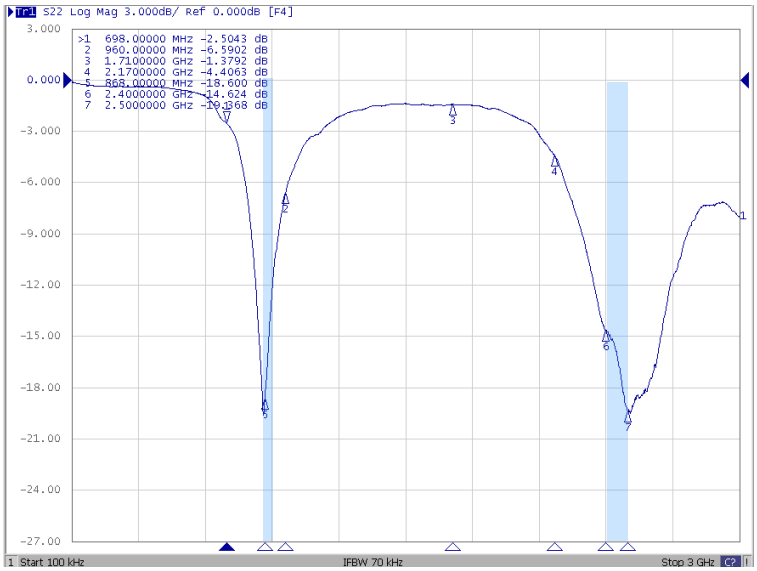
820MHz

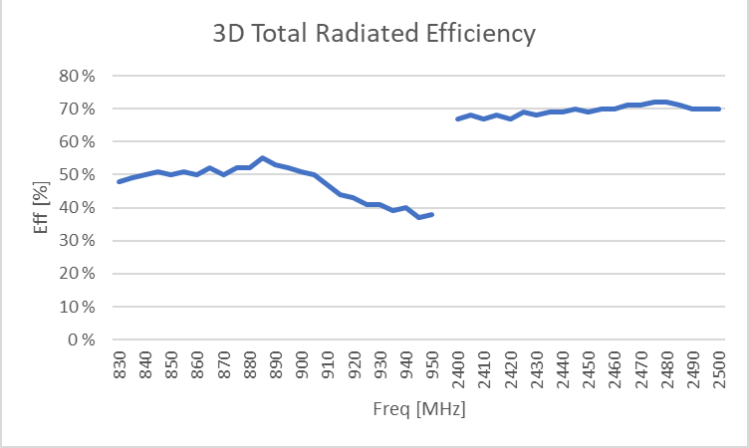


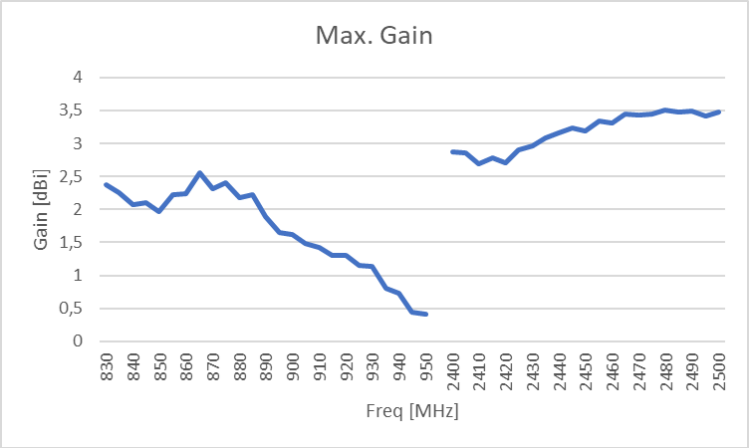
Charts

ISM

Return Loss





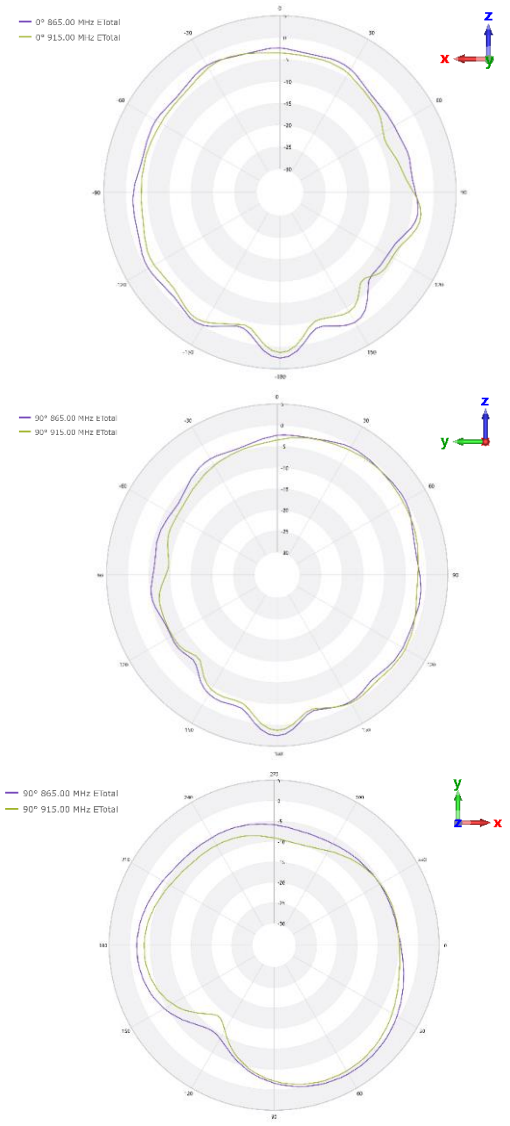


Charts

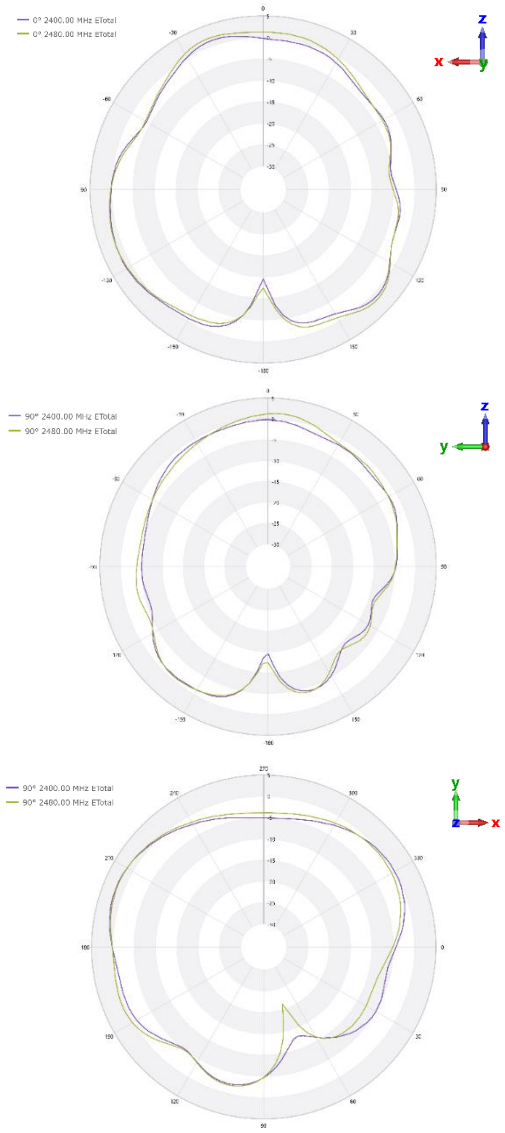
ISM

Radiation Patterns

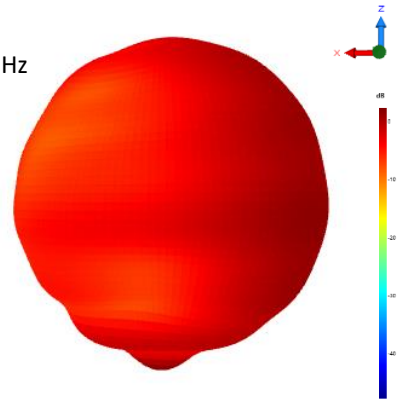
868/915MHz



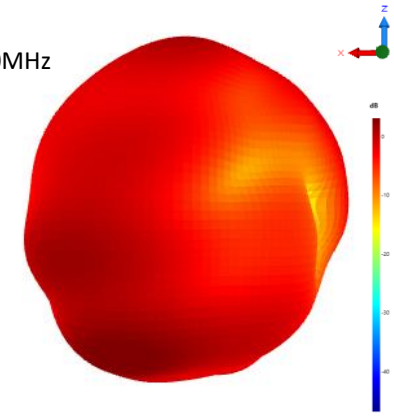
2.4GHz



868MHz



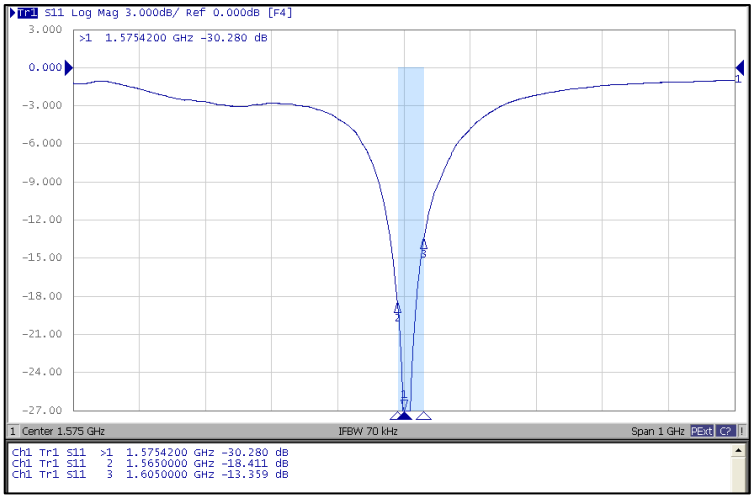
2440MHz

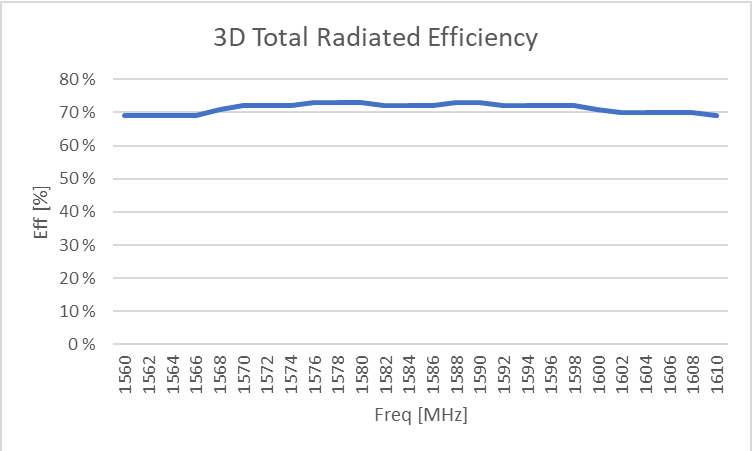


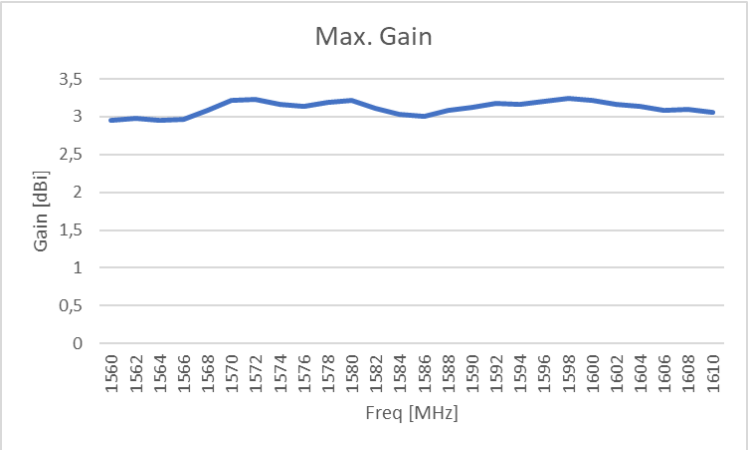
Charts

GNSS

Return Loss



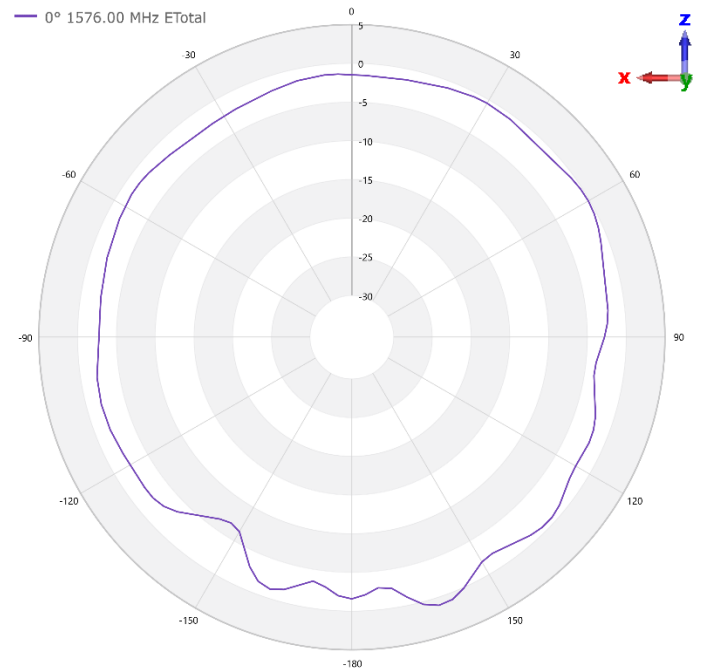


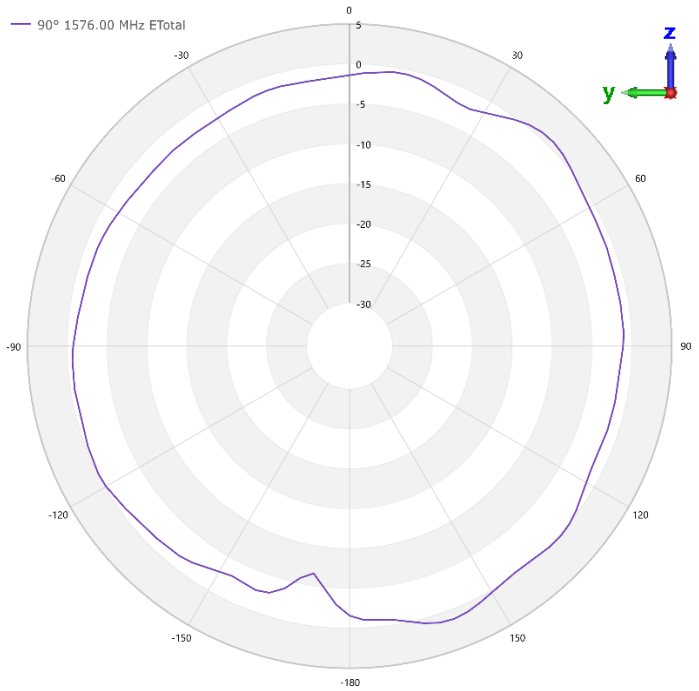


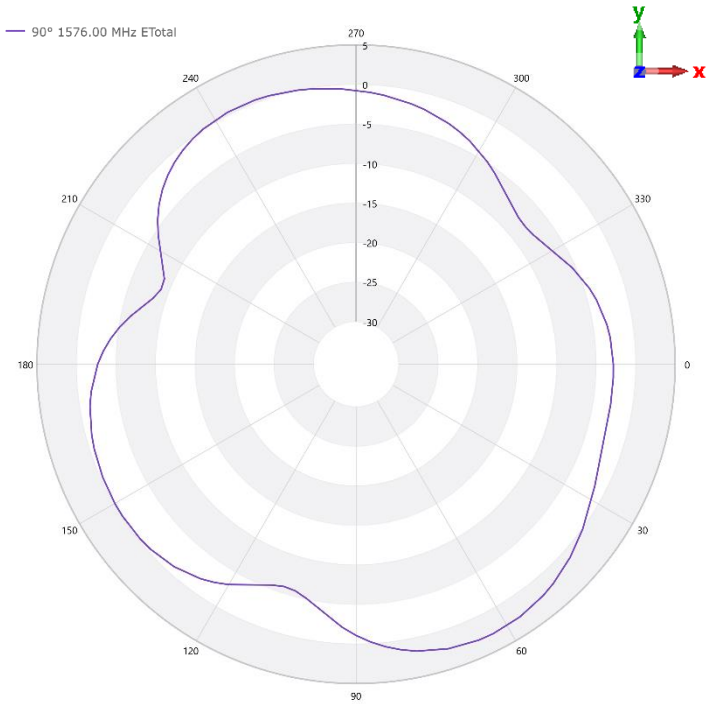
Charts

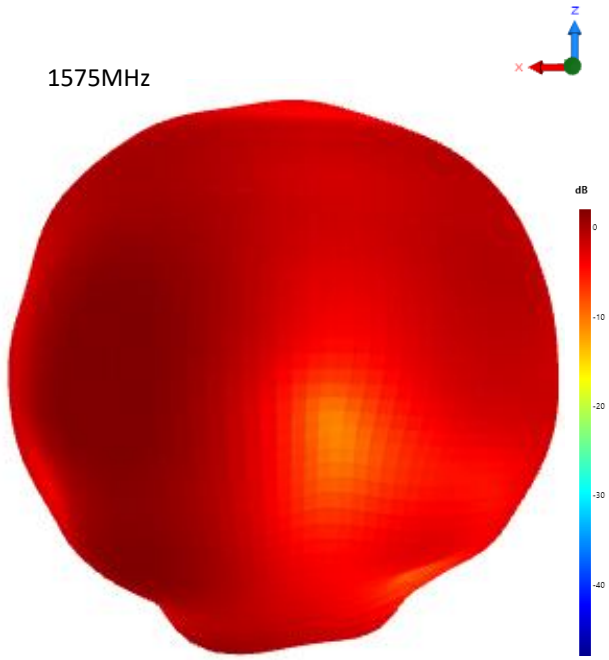
GNSS

Radiation Patterns





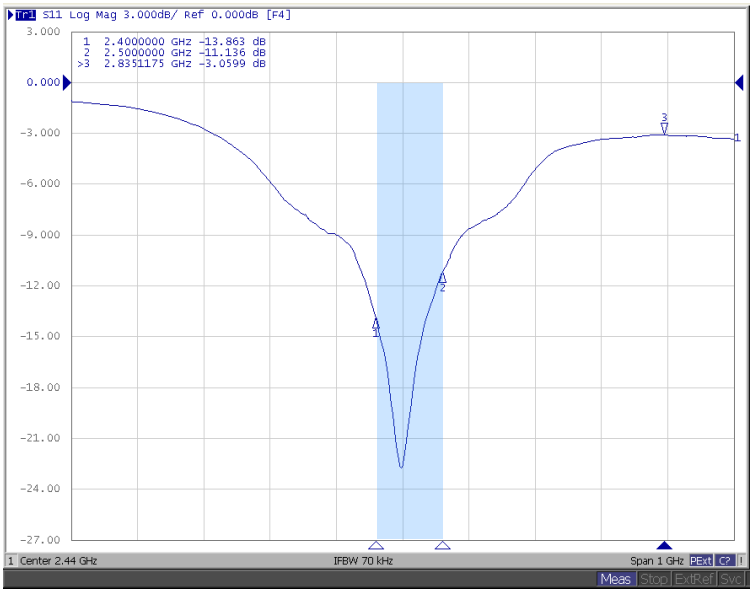


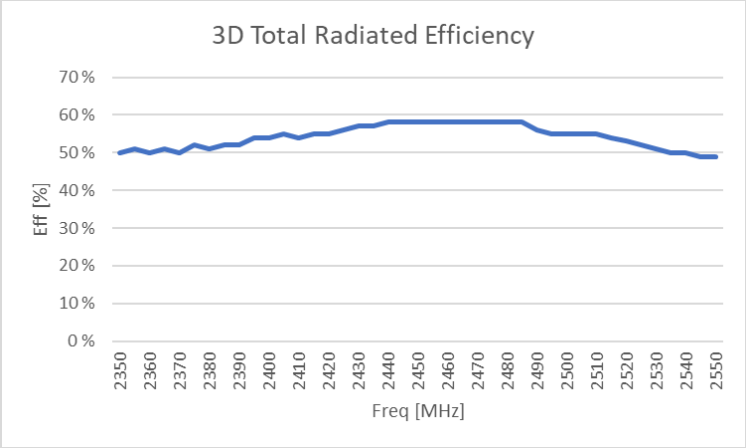


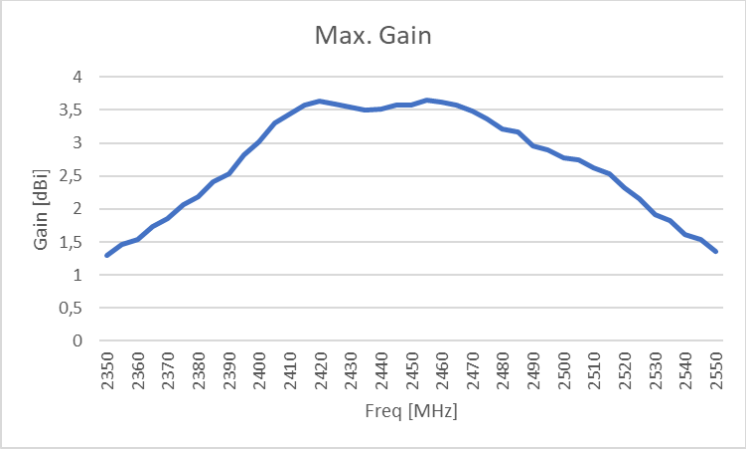
Charts

WiFi 1

Return Loss



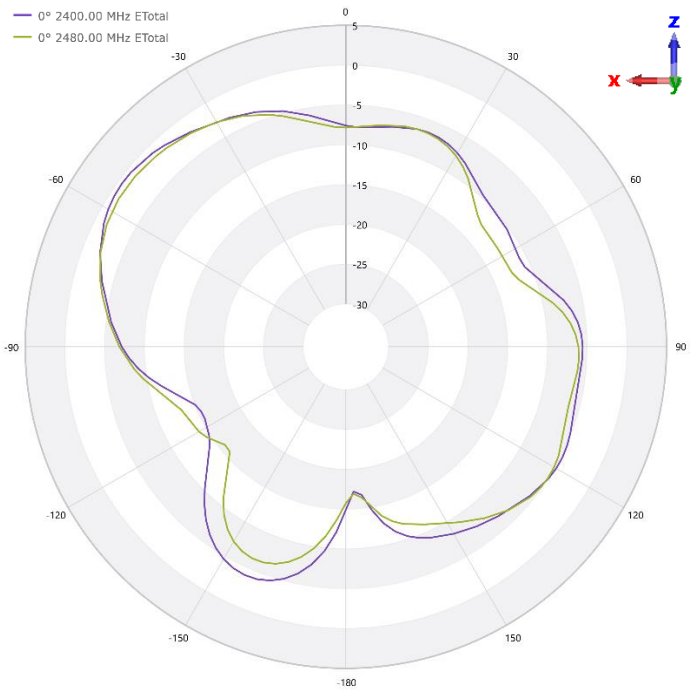


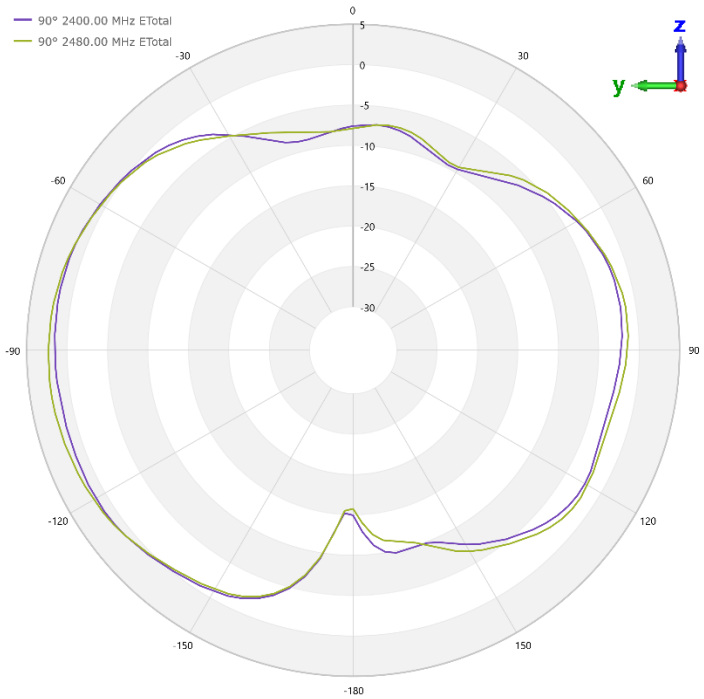


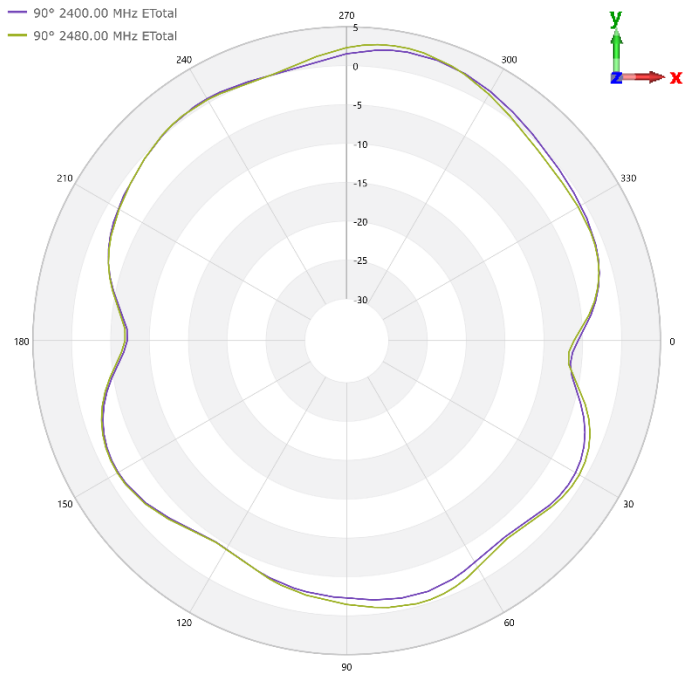
Charts

WiFi 1

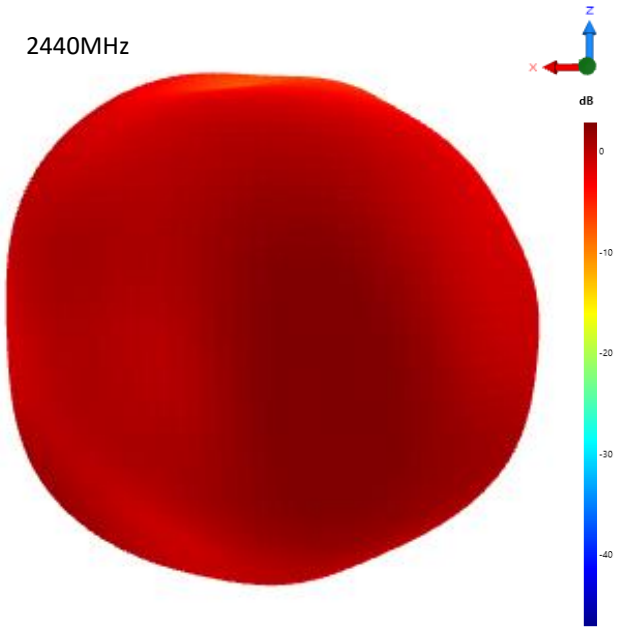
Radiation Patterns







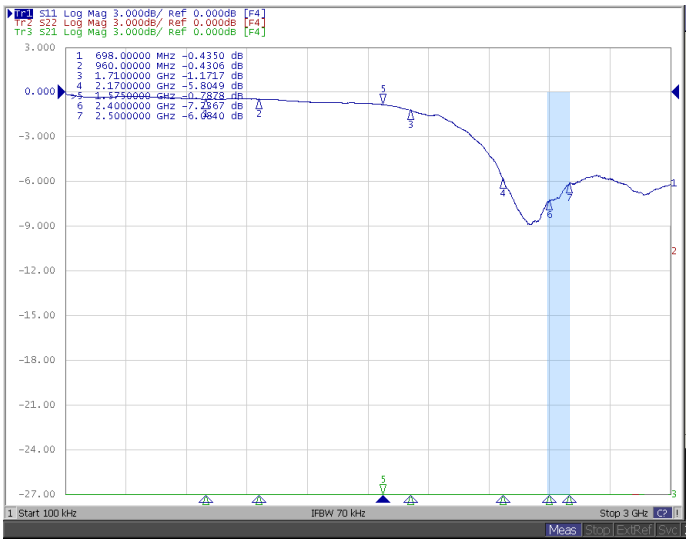
2440MHz

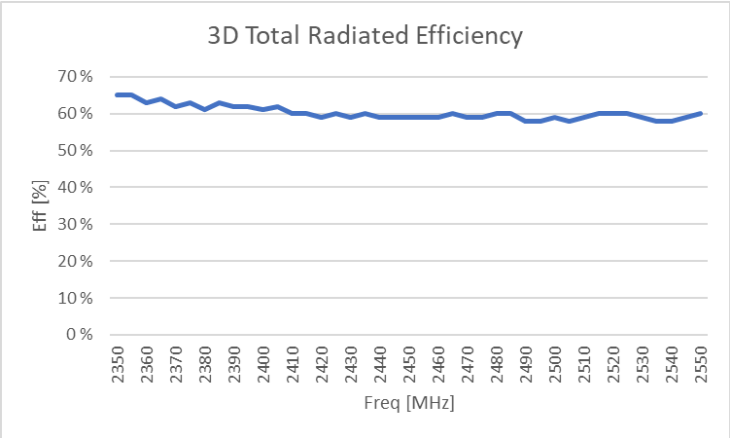


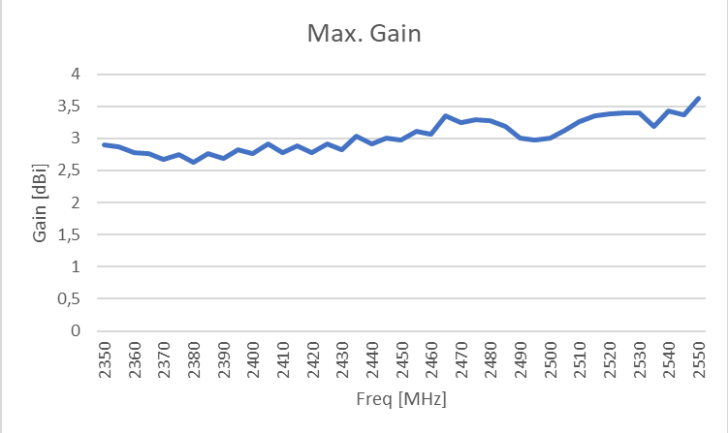
Charts

WiFi 2

Return Loss



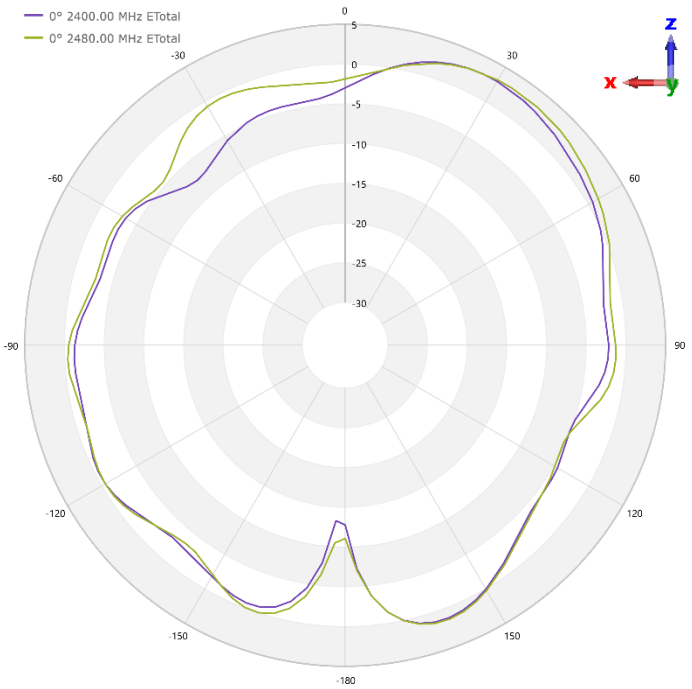


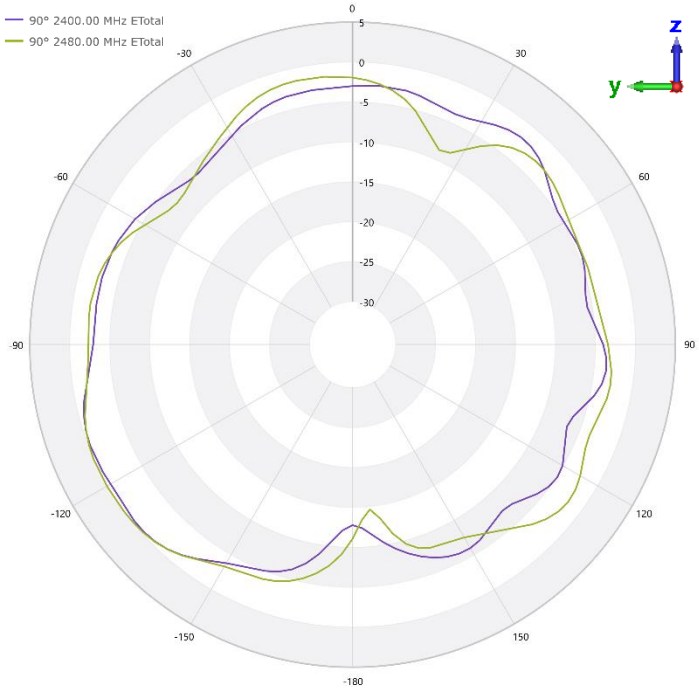


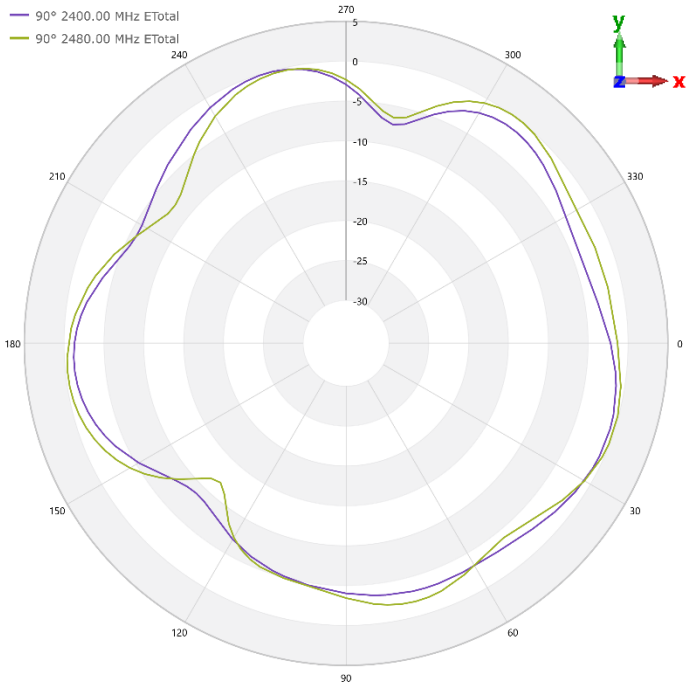
Charts

WiFi 2

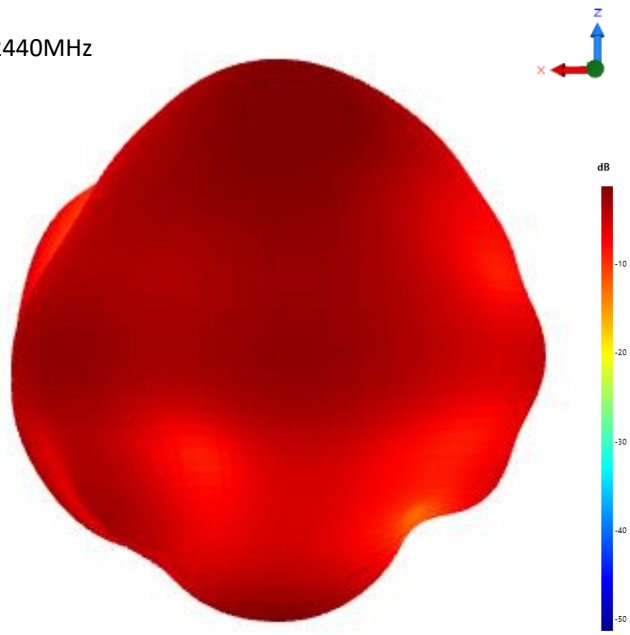
Radiation Patterns







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:
Americas - antennas.us@pulseelectronics.com | Europe – antennas.eu@pulseelectronics.com | Asia – antennas.as@pulseelectronics.com | Questions? +1-800-ANTENNA
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