



Antenna info

Model DELLFMFHP – FCC ID XFJ DELLFMFHP

The device is equipped with two antennas:

2.4GHz Antenna

- Integrated PWB 28mm
- Type: quarter wave

The device does not allow the end user or installer to modify the radio configuration.

All frequency channel selections, power levels, and radio operation parameters are pre-defined in the firmware and are not accessible through any external software or hardware interface.

The device has no physical interface (e.g., USB, UART) accessible to the user.

Firmware updates can only be performed using a secure, proprietary over-the-air (OTA) update process through the 2.4 GHz radio interface. This update mechanism is cryptographically protected and inaccessible to end users.

Radio detection antenna (*below 30MHz*)

- Soldered in the PWB

The VLF frequencies are fixed within a regulatory-compliant band and cannot be extended or modified by the end user or installer.

Both antennas are fixed and not replaceable by the end user or installer, ensuring compliance with FCC 15.203.

The device does not include any external RF power amplifiers and no provision exists for connecting one. It has been tested and certified with the integrated antennas only, in accordance with FCC 15.204.

Therefore, the device fully complies with the requirements of FCC Sections 15.203 and 15.204 regarding antenna type and RF power control.



EMC Test Data

Client:	XPLOER	PR Number:	PR185702
Model:	DELLFMFHP	T-Log Number:	TL185702-RA-HF2-2413
Contact:	Huong Monnier	Project Manager:	Christine Krebill
Standard:	FCC Part 15, RSS-210, RSS-247	Project Engineer:	David Bare
		Class:	N/A

EIRP / Antenna gain measurements

Specific Details

Objective: Determine antenna gain to support RF Exposure evaluation.

Date of Test: 1/7/2025

Test Engineer: Deniz Demirci

Fremont Chamber #8

Test Method: Pseudo active OTA measurement.

Sample Notes

Sample S/N: CE000D

Power Setting ²	Frequency (MHz)	Output Power (dBm) ¹	mW	Measured EIRP dBm	W	Antenna Gain (dBi)	Result		
0	2404	2.2	1.7	-0.7	0.0008	-2.9	N/A		
0	2440	1.9	1.5	0.8	0.0012	-1.1	N/A		
0	2476	1.3	1.3	1.8	0.0015	0.5	N/A		

Note: Antenna gain (dBi) = Measured EIRP (dBm) – Conducted Output Power (dBm)

Measurement settings:

RBW: 1 MHz

VBW: 3 MHz

Detector: Positive peak

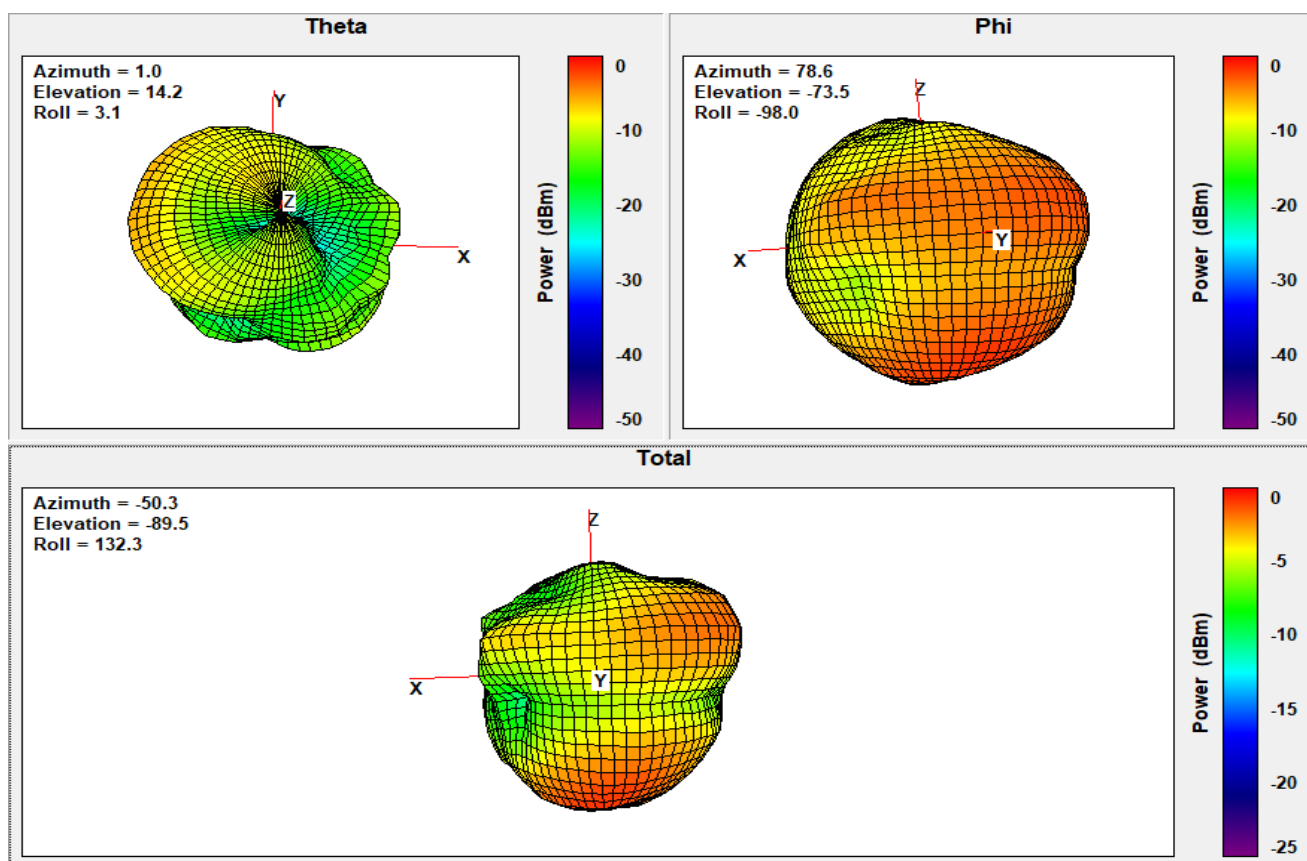
Span: Zero span

Test Equipment

Manufacturer	Description	Model #	Asset #	Last Cal	Cal Due
Rohde & Schwarz	Signal Analyzer OTA	FSV13	WC064873	10/10/2024	10/31/2025

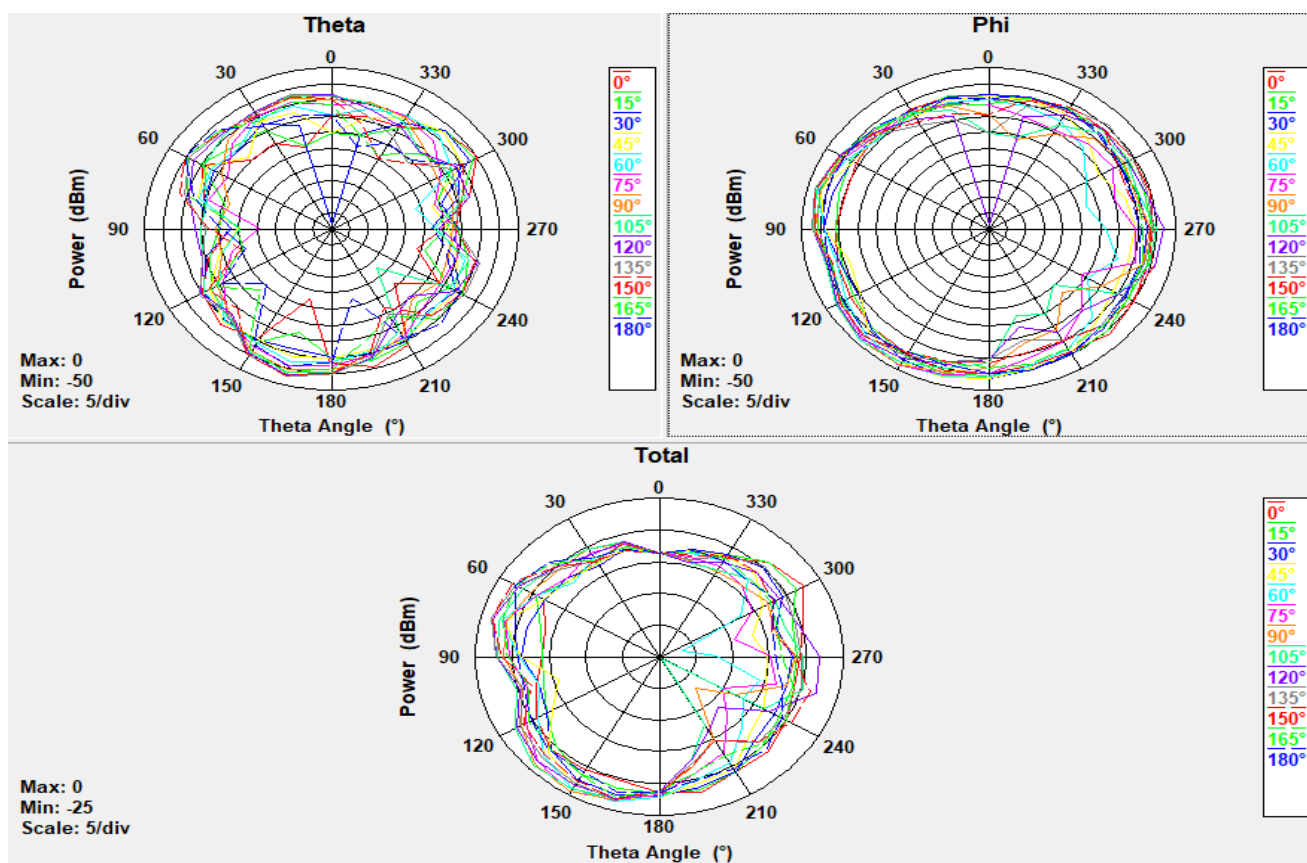
Client:	XPLORER	PR Number:	PR185702
Model:	DELLFMFHP	T-Log Number:	TL185702-RA-HF2-2413
Contact:	Huong Monnier	Project Manager:	Christine Krebill
Standard:	FCC Part 15, RSS-210, RSS-247	Project Engineer:	David Bare
		Class:	N/A

2404 MHz



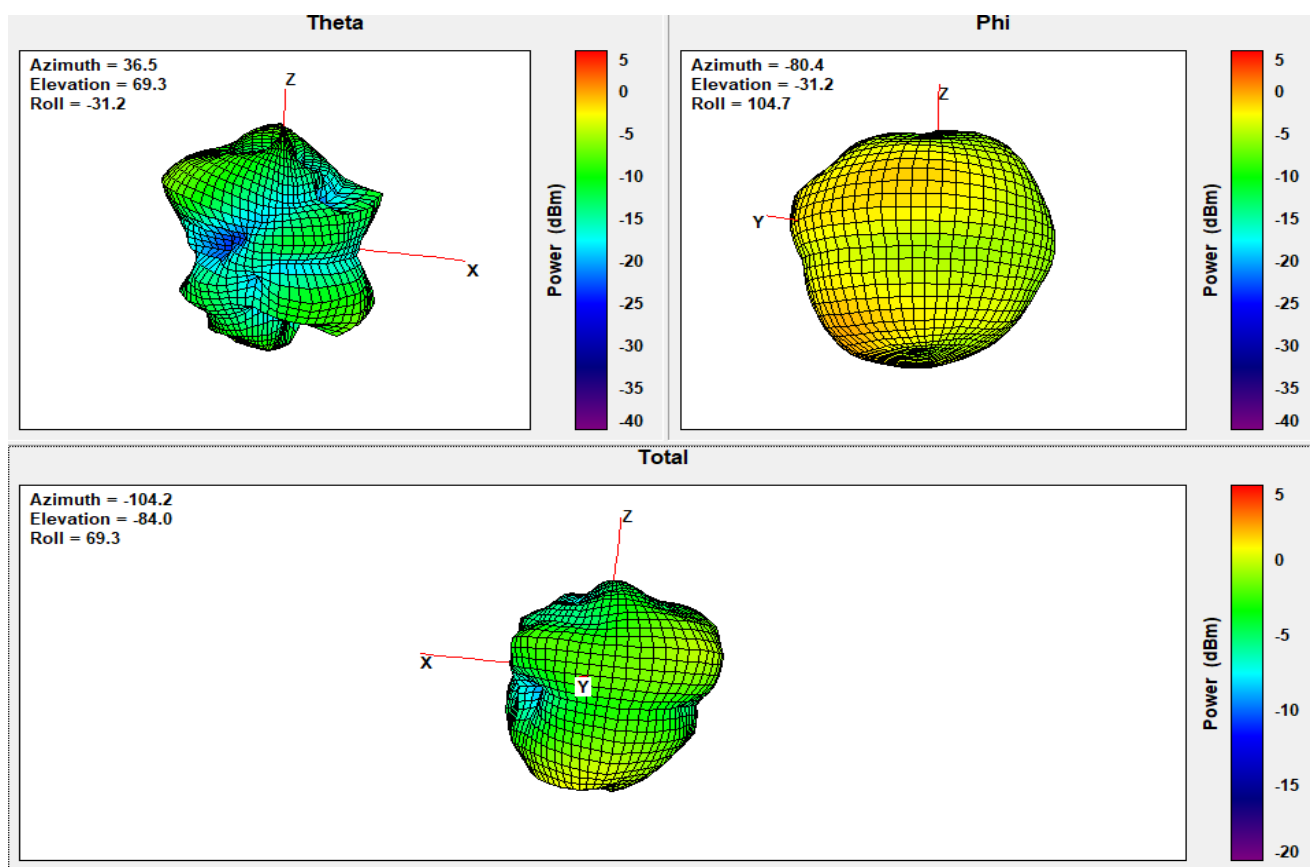
Client: XPLOER	PR Number: PR185702
Model: DELLFMFHP	T-Log Number: TL185702-RA-HF2-2413
Contact: Huong Monnier	Project Manager: Christine Krebill
Standard: FCC Part 15, RSS-210, RSS-247	Project Engineer: David Bare
	Class: N/A

2404 MHz



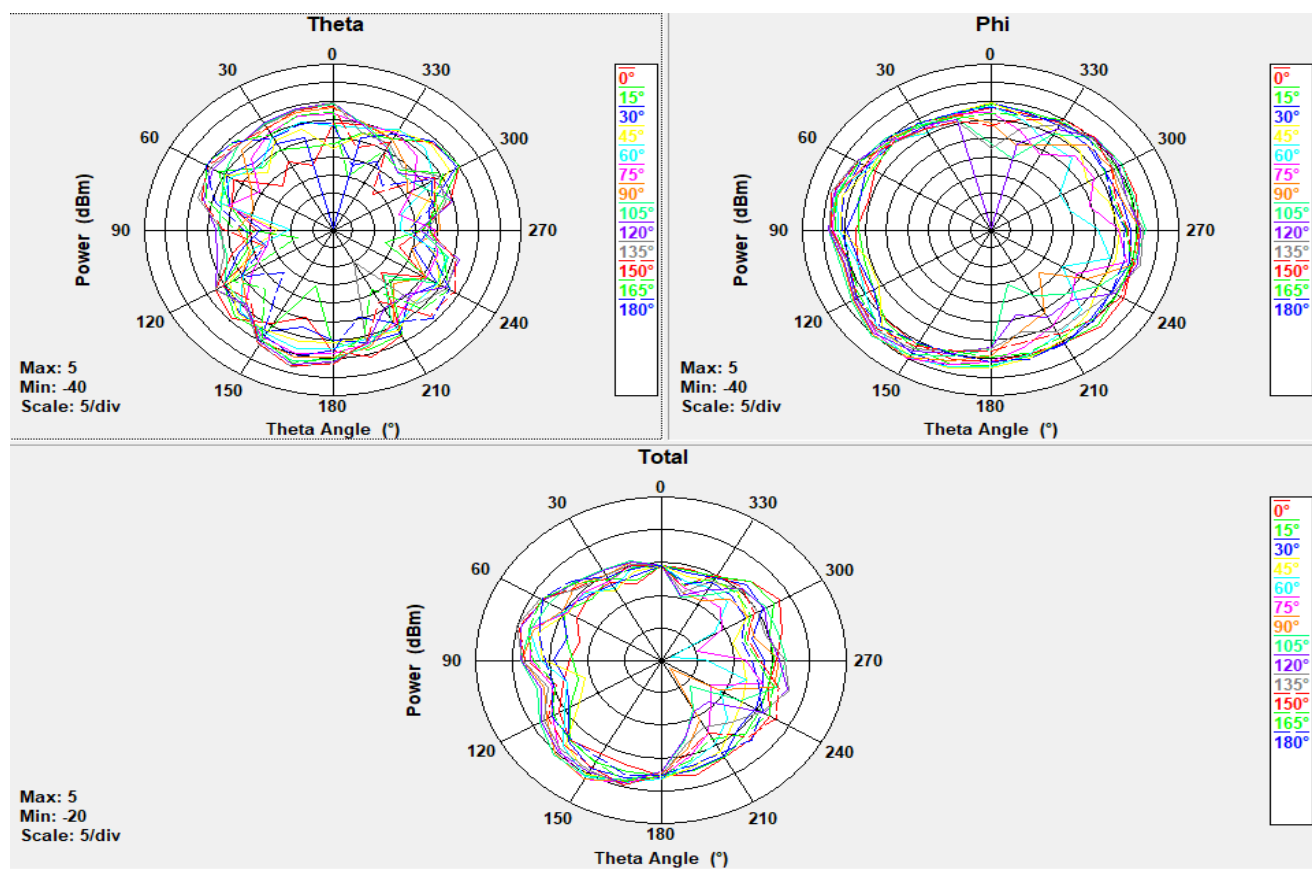
Client:	XPLORER	PR Number:	PR185702
Model:	DELLFMFHP	T-Log Number:	TL185702-RA-HF2-2413
Contact:	Huong Monnier	Project Manager:	Christine Krebill
Standard:	FCC Part 15, RSS-210, RSS-247	Project Engineer:	David Bare
		Class:	N/A

2440 MHz



Client:	XPLORER	PR Number:	PR185702
Model:	DELLFMFHP	T-Log Number:	TL185702-RA-HF2-2413
Contact:	Huong Monnier	Project Manager:	Christine Krebill
Standard:	FCC Part 15, RSS-210, RSS-247	Project Engineer:	David Bare
		Class:	N/A

2440 MHz

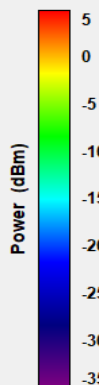
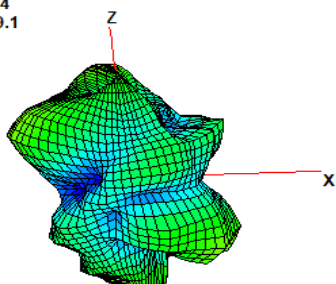


Client: XPLOER	PR Number: PR185702
Model: DELLFMFHP	T-Log Number: TL185702-RA-HF2-2413
Contact: Huong Monnier	Project Manager: Christine Krebill
Standard: FCC Part 15, RSS-210, RSS-247	Project Engineer: David Bare
	Class: N/A

2476 MHz

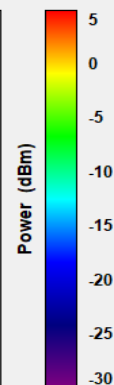
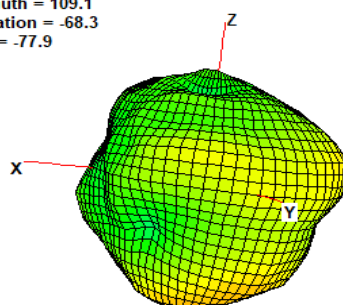
Theta

Azimuth = 36.4
Elevation = 69.1
Roll = -40.7



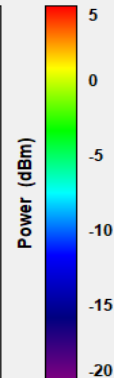
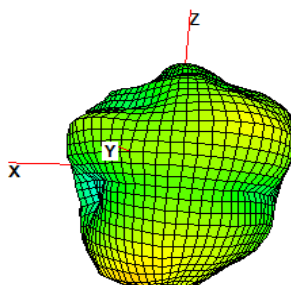
Phi

Azimuth = 109.1
Elevation = -68.3
Roll = -77.9



Total

Azimuth = -66.3
Elevation = -70.9
Roll = 110.1



Client: XPLOER	PR Number: PR185702
Model: DELLFMFHP	T-Log Number: TL185702-RA-HF2-2413
Contact: Huong Monnier	Project Manager: Christine Krebill
Standard: FCC Part 15, RSS-210, RSS-247	Project Engineer: David Bare
	Class: N/A

2476 MHz

