

L-BDG-2 Helical Antenna Specification

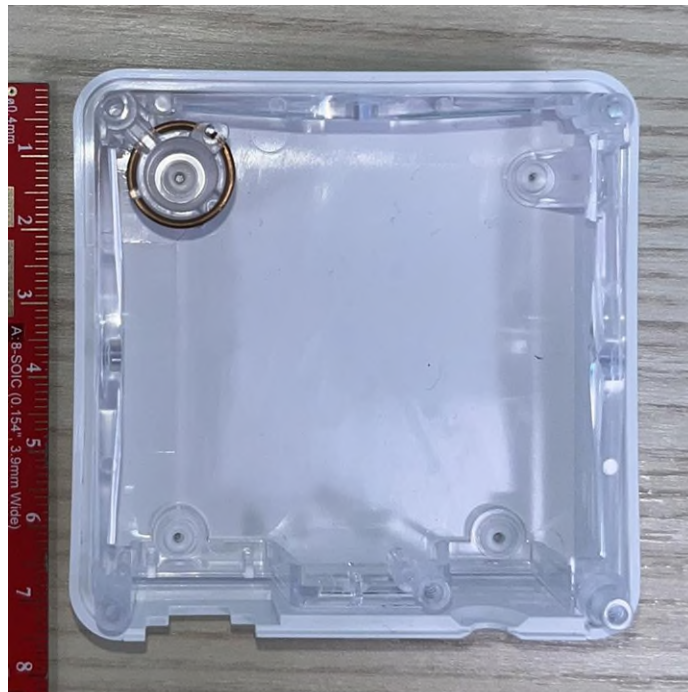
1. Antenna Construction

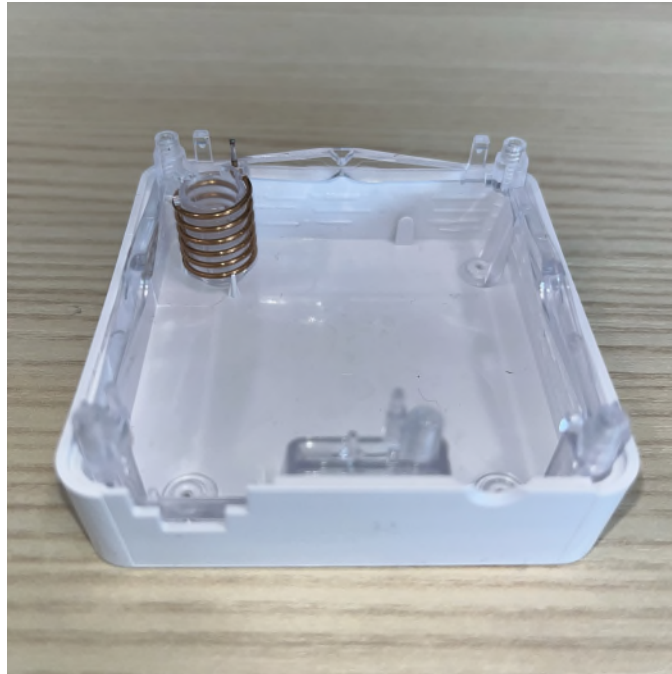
The antenna is a helical antenna. The antenna connection points are permanently attached to the DUT and cannot be modified or replaced by the user as it is underneath the plastic enclosure.

2. Antenna Characteristics

No.	Item	Specification
1	Type	Helical
2	Connection Type	Permanently Attached
3	Bandwidth	431~437 MHz
4	Peak Gain	-3.35 dBi

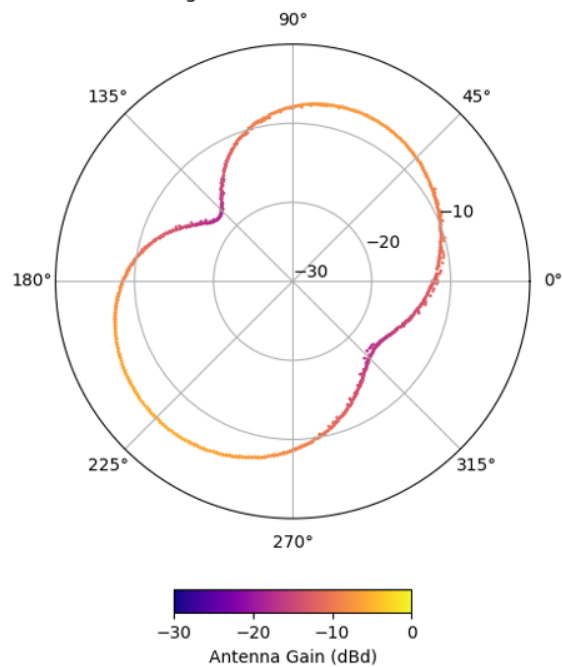
3. Antenna Picture





4. Peak Gain and Pattern

Mast = H at 135cm, Max Amp: 110.10 dBuV
Test Freq: 433.6 MHz, Peak Gain: -5.50 dBd
Caseta Bridge Class2 Unit3 with ethernet HH



$$\text{Peak Gain dBi} = -5.50 \text{ dBd} + 2.15 \text{ dB} = -3.35 \text{ dBi}$$

5. Test Site and Procedure

The antenna gain is measured at Lutron Electronics, in a 3-meter anechoic chamber and referenced to a certified 434MHz dipole antenna. Measurements taken 7/18/2025.

6. Equipment List

Description	Make and Model	Calibrated	Calibration Due
Receiver	Keysight N9010B	5/5/2025	5/5/2028
Signal Generator	HP 8648C	9/15/2022	9/15/2025
Test Antenna	AH Systems SAS-521-7	validated at time of test	
Reference Dipole	ETS Lindgren 3125-430	validated at time of test	

7. Test Setup Photo

