

A-RF3

Wireless Processor

Manufacturer: Lutron Electronics Co., Inc.

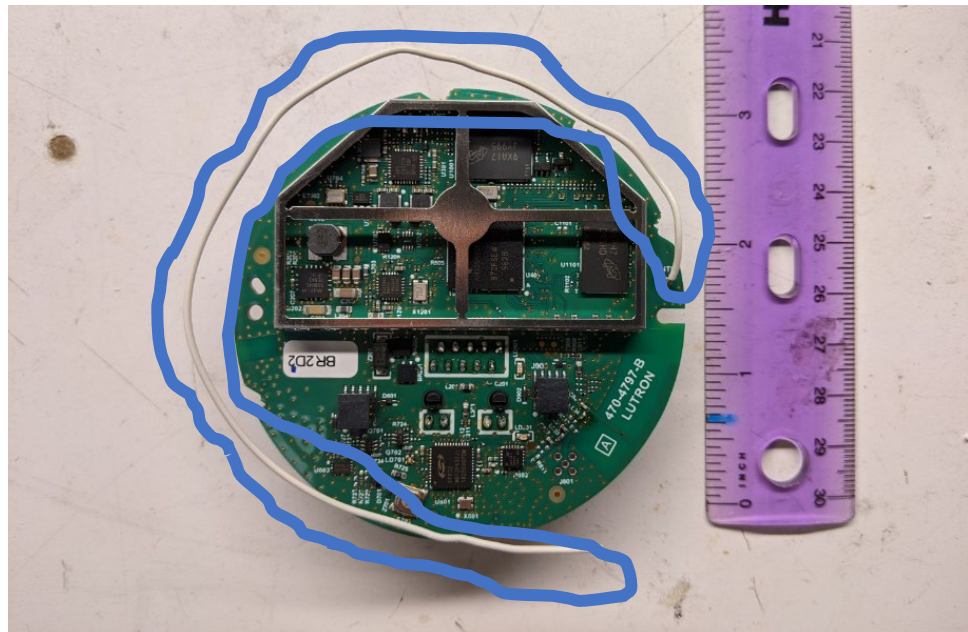
1. Antenna Description and Characteristics

The antennas are permanently attached and cannot be modified or replaced by the user.
The device utilizes 2 discreet antennas identified below:

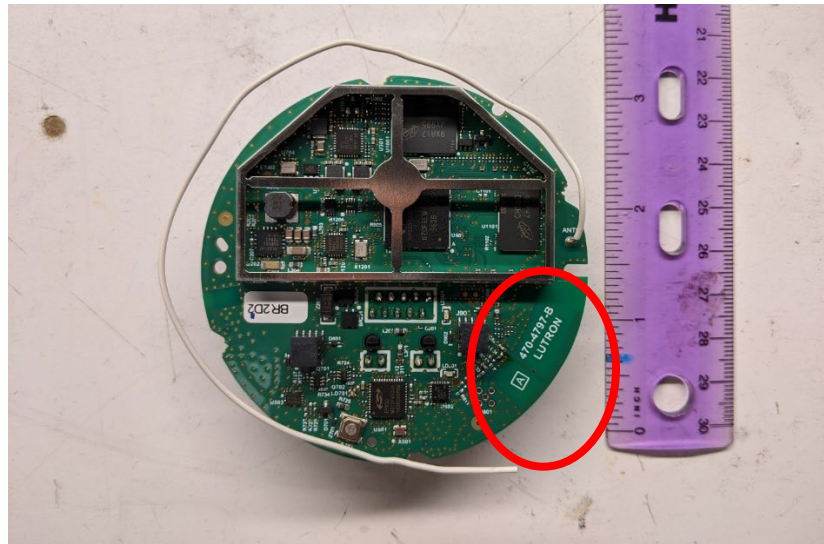
Frequency	Antenna Type	Maximum Antenna Gain
434 MHz	Wire Monopole	-1.85 dBi
2.4 GHz	PCB Printed F	2.9 dBi

2. Antenna Picture

- Wire monopole – See item highlighted blue below, is an 8.5" length of insulated 22 AWG wire



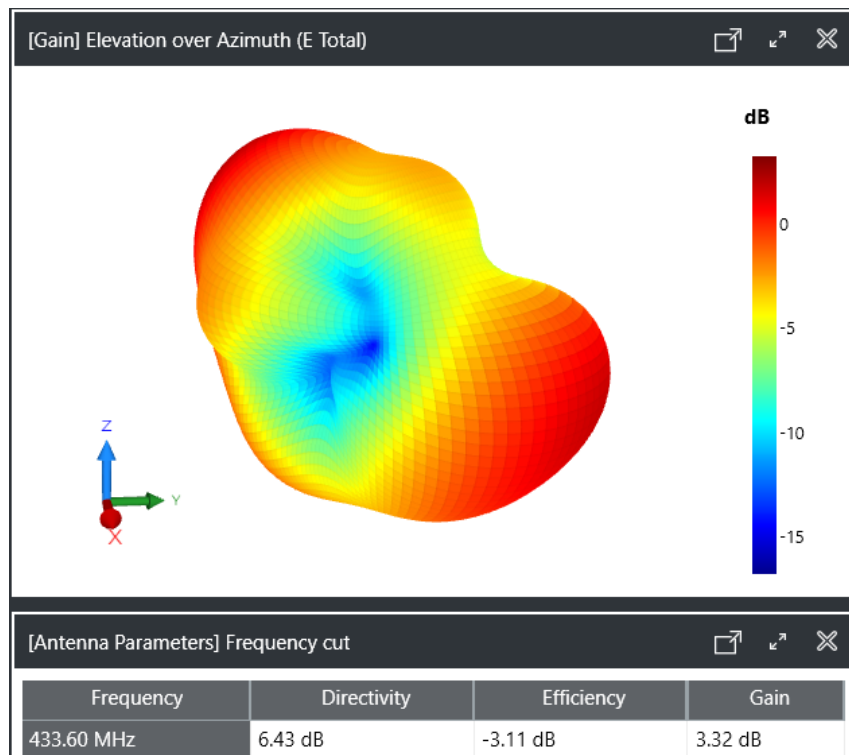
- b. PCB Printed F – See item highlighted in red below. Internal PCB trace.



3. Peak Gain and Pattern

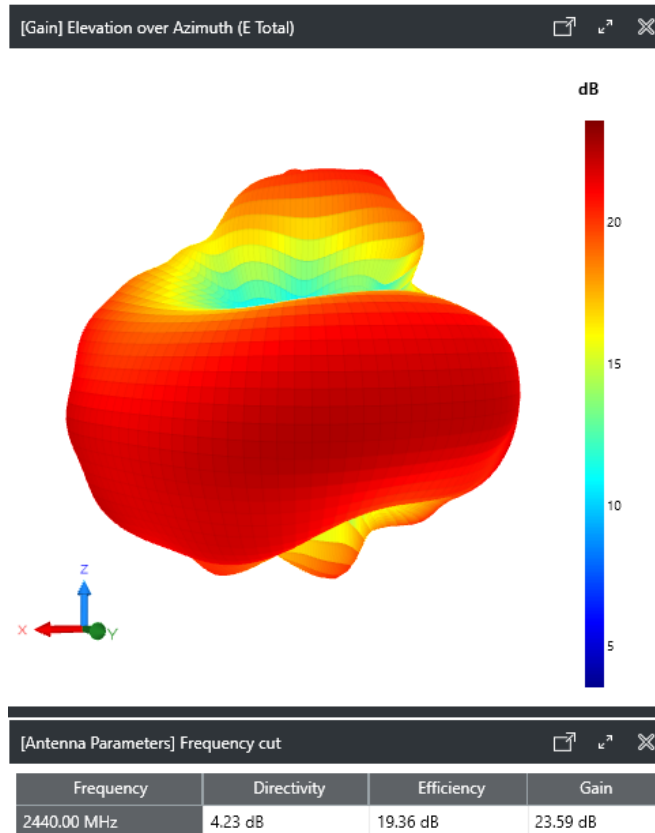
a. Wire monopole

- i. Peak Gain dBi = EIRP as reported by StarLab – Measured conducted RF power
- ii. 434 MHz Peak Gain = 3.32 dB - 5.17 dBm = -1.85 dBi



b. PCB Printed F

- i. Peak Gain dBi = EIRP as reported by StarLab – Measured conducted RF power
- ii. 2440 MHz Peak Gain = 23.59 dB – 20.7 dBm = 2.9 dBi



4. Test Site and Procedure

The antenna gain is measured at Lutron Electronics, using MVG StarLab model SL V2_0.4-6GHz.

5. Equipment List

Description	Make and Model	Calibrated	Calibration Due
StarLab Test Setup	StarLab SL V2_0.4-6GHz	6/26/2024	6/26/2025
RF Power Sensor	R&S NRPS8	7/18/2023	7/18/2025

Test Engineer: Kaiming Li

6. Test Setup Photograph

