

HWL-RD4xx-YY, HWL-RD6xx-yy, RRL-RD4xx-yy, RRL-RD6xx-yy,

HWL-CD4xx-yy, HWL-CD6xx-yy, RRL-CD4xx-yy, RRL-CD6xx-yy

Antenna Specification

Manufacturer: Lutron Electronics Co., Inc.

1. Antenna construction

The Robin antenna is a monopole soldered onto the PCB. The antenna connection points are permanently attached to the DUT and cannot be modified or replaced by the user as they are behind the reflector inside the plastic enclosure.

2. Antenna Characteristics

No.	Item	Specification
1	Type	Monopole
2	Connection Type	Permanently Attached
3	Bandwidth	2402~2480 MHz
4	Peak Gain	+0.87 dBi

3. Antenna Picture

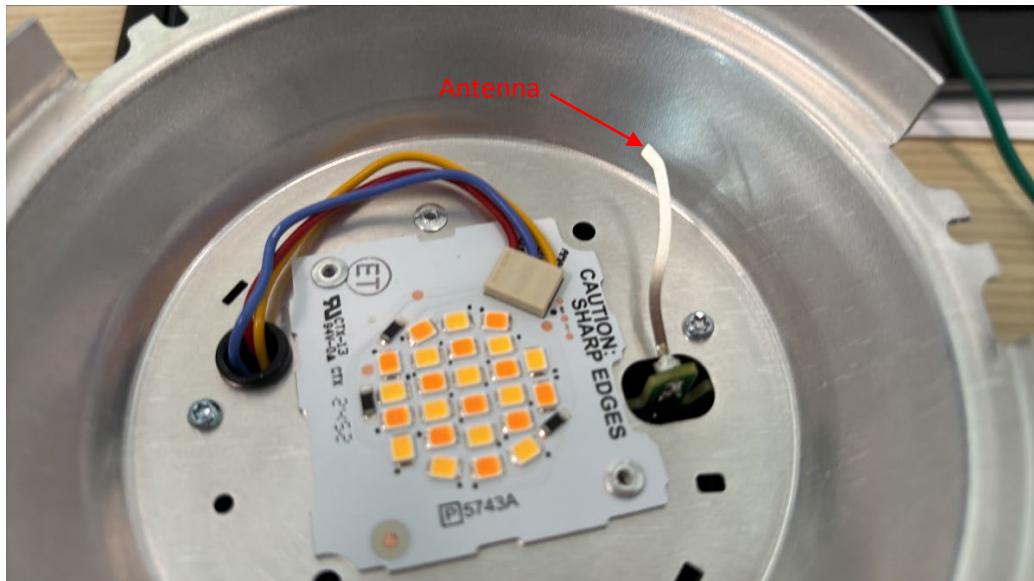


Figure 1: Antenna

4. Peak Gain and Pattern

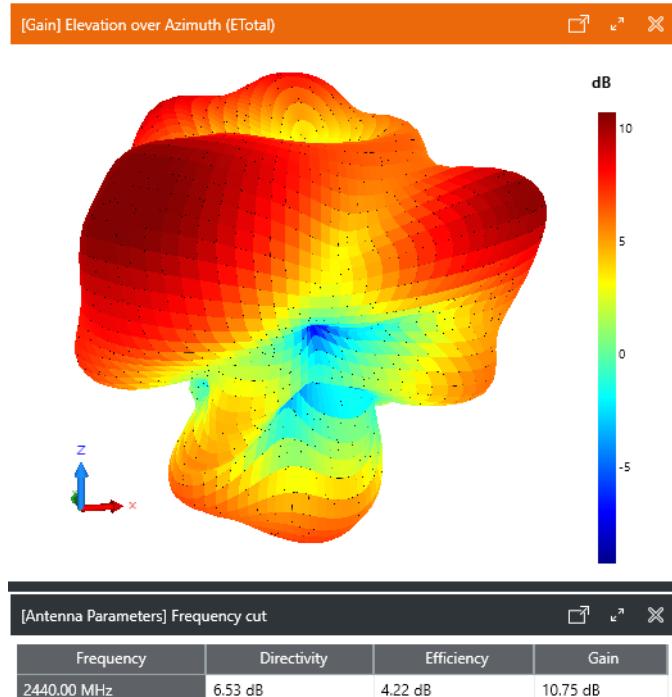


Figure 2: Peak Gain, showing results with zzz-RD6xx-yy in a 5" fixture can

Peak Gain dBi = EIRP as reported by StarLab – Measured conducted RF power
Peak Gain dBi = 10.75 dB -9.88 dBm = +0.87 dBi

5. Test Site and Procedure

The antenna gain is measured at Lutron Electronics by Kaiming Li, using MVG StarLab model SL V2_0.4-6GHz. DUT is connected to 120V AC line power, set to transmit +10 dBm power in constant wave mode at 802.15.4 Channel 18 (2440MHz). The 3D result is shown above.

6. 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

7. Test Setup Photograph

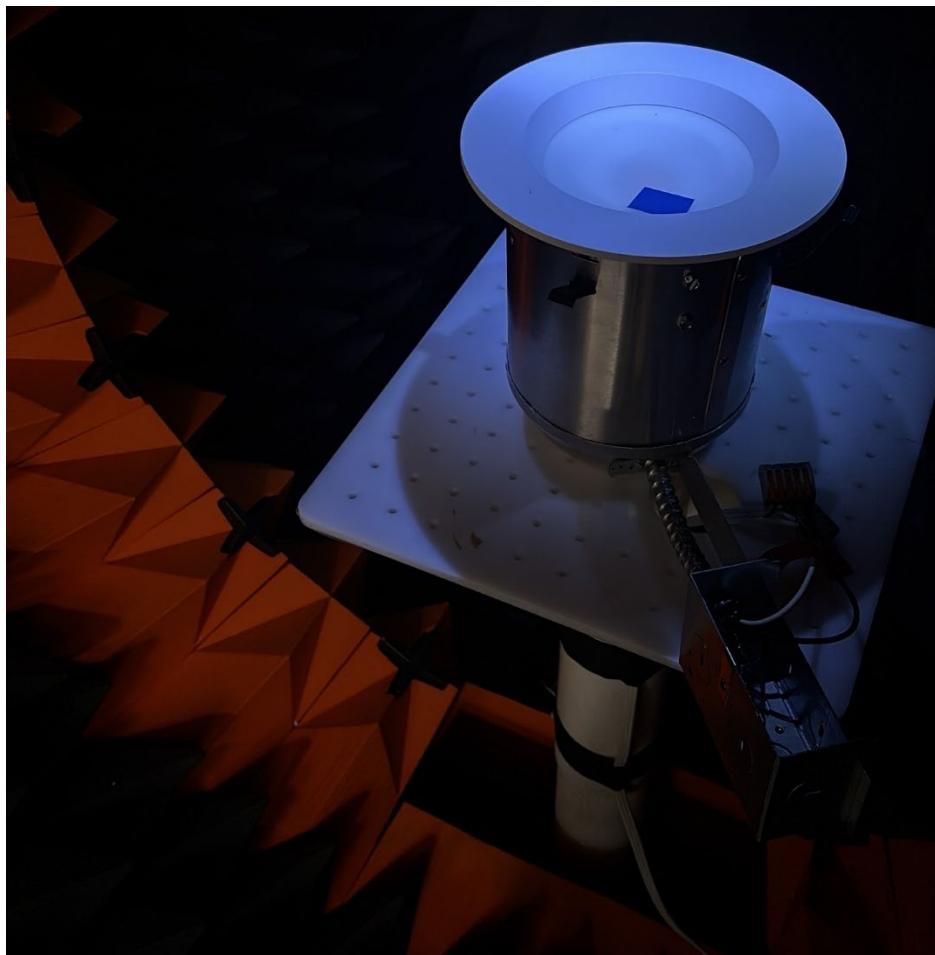


Figure 3: Gain Measurement Setup: zzz-RD6xx-yy in a 5" fixture can