

CSMR-C, CSMR-C-N, CSMR-R, CSMR-RN

Antenna Specification

Manufacturer: Lutron Electronics Co., Inc.

1. Antenna construction

The Starling Dock antenna is a planar inverted-F antenna printed on 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	Planar Inverted-F
2	Connection Type	Trace on PCB
3	Bandwidth	2402~2480 MHz
4	Peak Gain	3.61 dBd

3. Antenna Picture

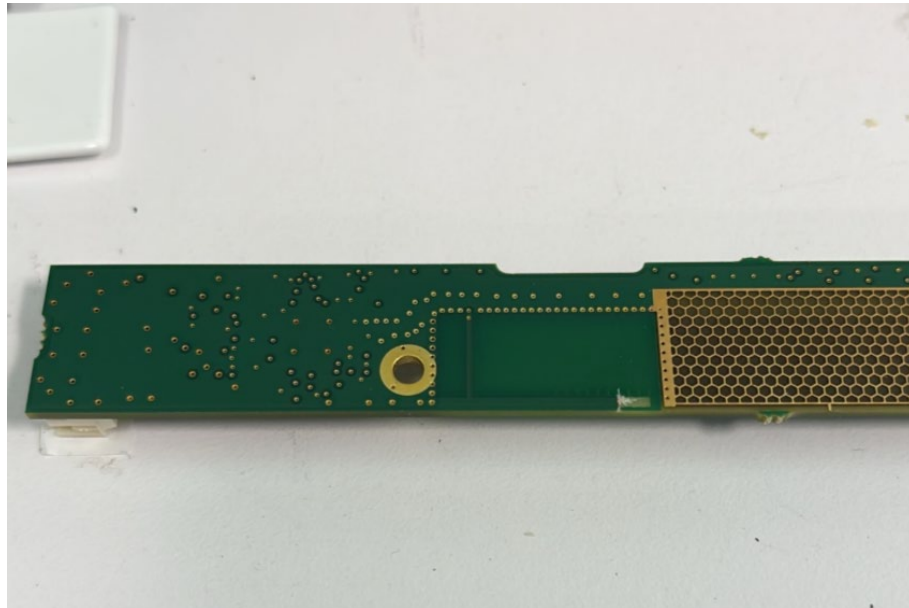


Figure 1: Antenna

4. Peak Gain and Pattern

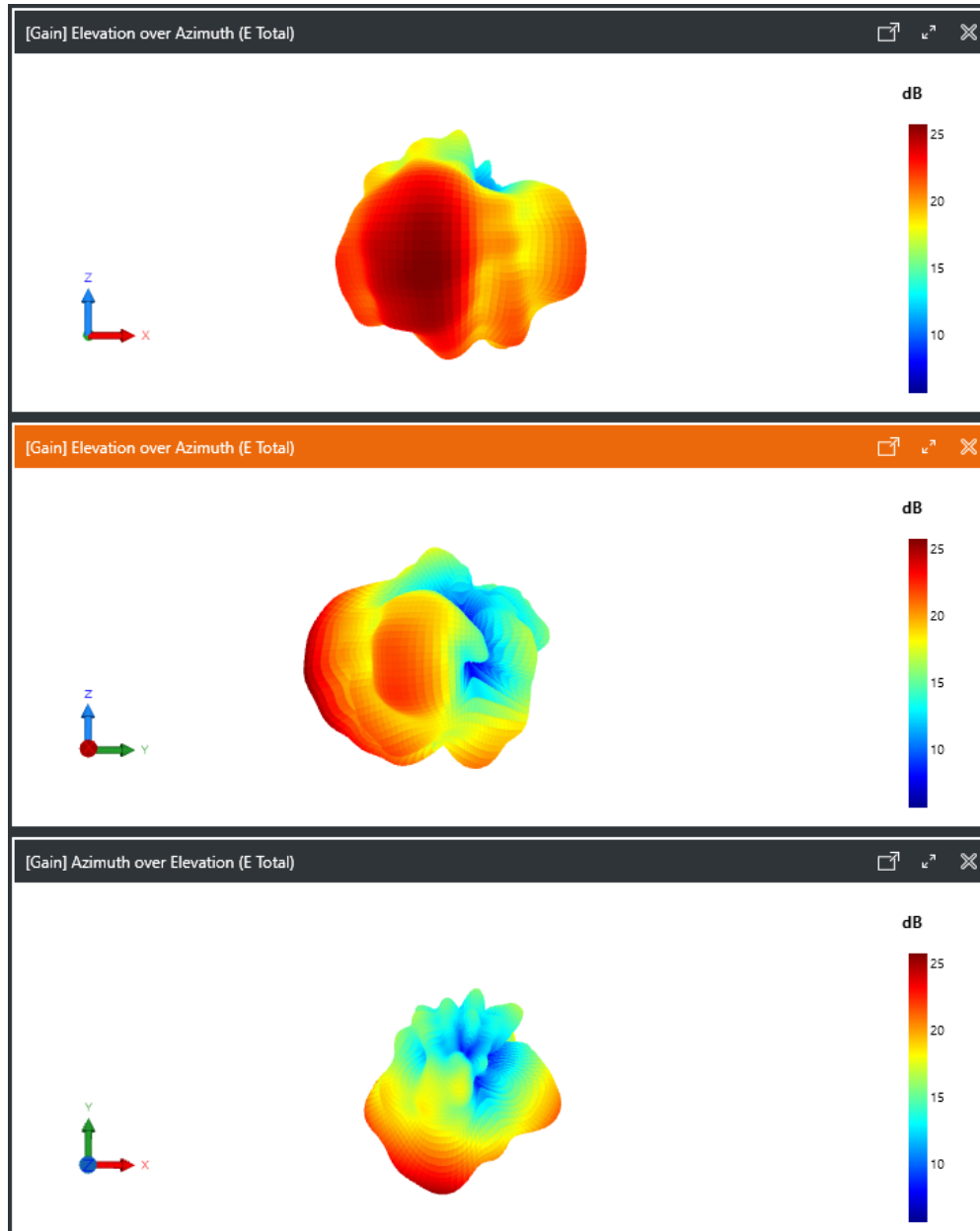


Figure 2: Peak Gain 3D Result

Peak Gain dBi = EIRP as reported by StarLab – Measured conducted RF power – 2.15dB
(dBi to dBd correction)

Peak Gain dBi = 25.76 - 20 - 2.15 = 3.61dBd

5. Test Site and Procedure

The antenna gain is measured at Lutron Electronics by Krishna Annambhotla, using MVG StarLab model SL V2_0.4-6GHz. DUT is connected to 3.3V DC, set to transmit +20 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	11/12/2025	11/12/2026