

Antenna Description

Beacon Lite

Date: 2026-03-05

Version: 1.0

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1 Antenna overview

The Beacon Lite contains these transmitters for which antenna details are provided here:

- Bluetooth Low Energy (BLE)

2 Antenna Details

2.1 Bluetooth Low Energy

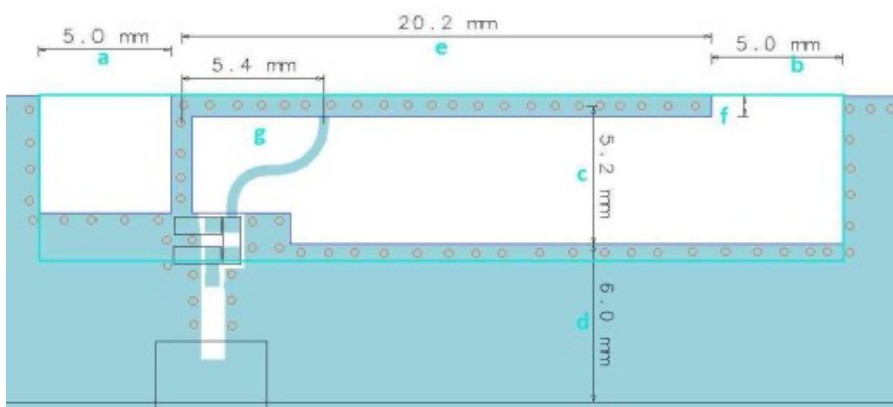
The Beacon Lite uses a full Size Printed inverted-F antenna.

The following antenna gain measurements were taken as part of the certification testing. More details can be found in the test report (1-0241-25-02-02_TR1-R01).

Frequency (MHz)	Antenna Gain (dBi)
2402	5.0
2440	4.7
2480	4.9

The design utilises a 1 mm substrate. All measurements and specifications provided hereafter are those provided with the reference design.

Bluetooth Antenna PCB layout:





S11 vs frequency plot:

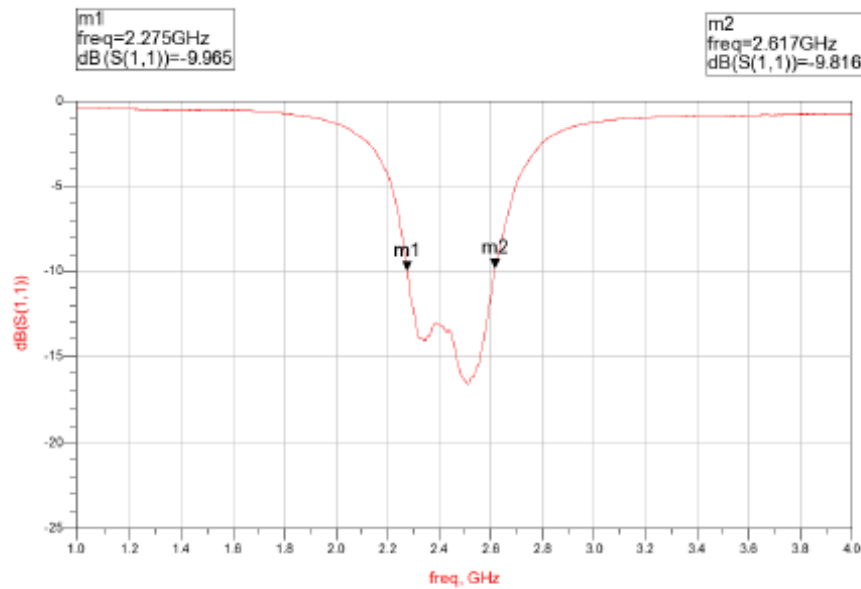
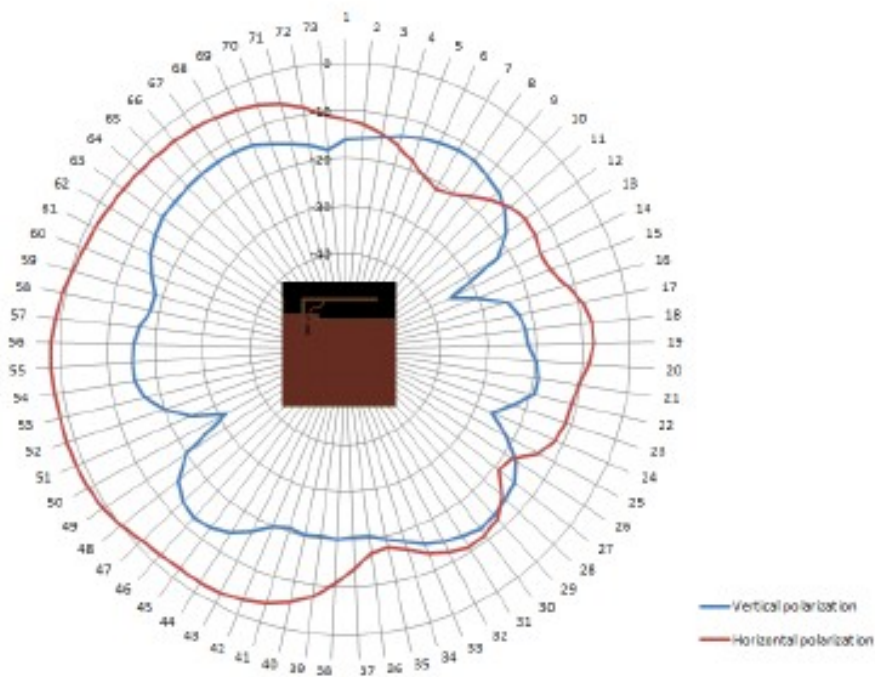


Figure 5: Measured S11, Full Size IFA

Horizontal Radiation Pattern:





Vertical radiation pattern

