

AZ06

BLE Antenna Specification

Project Name : 2403VD

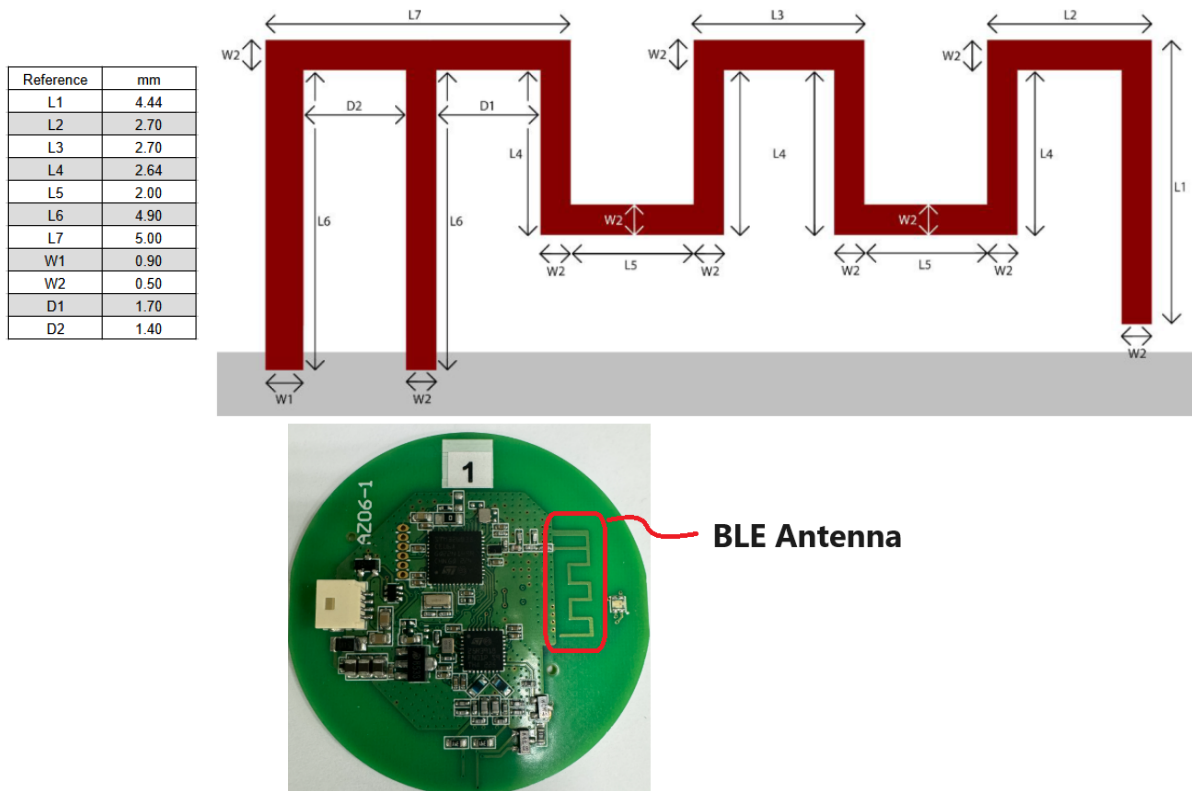
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Date: 2025-09-04

1. Antenna General Description

ITEM	Antenna Spec.					
Model Name	2.4GHz MIFA PCB Antenna					
Center Frequency	Horizontal			Vertical		
	2400MHz	2450MHz	2500MHz	2400MHz	2450MHz	2500MHz
	-4.09 dBi	-5.82 dBi	-6.51 dBi	-15.11 dBi	-14.91dBi	-18.73 dBi
MAX Gain	-4.09 dBi (declared by applicant)					
Polarization	Horizontal and Vertical					

2. Antenna Physical Design

- Dimension : 14.4 mm × 4.9 mm
- Type of antenna structure : MIFA antenna
- Antenna photo :



3. Reference Design Guideline

This antenna was designed based on STMicroelectronics STM32WB Antenna Design Guideline (AN5129), and adapted to the PCB form factor of this project.

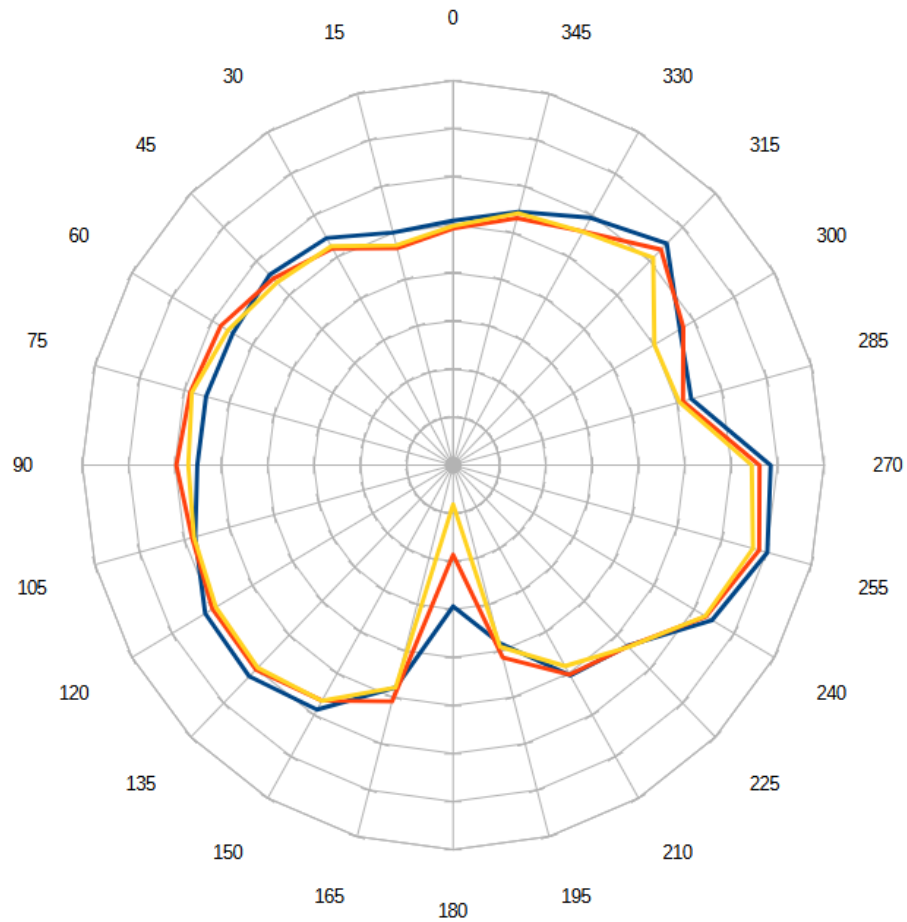
4. Compliance Statement

- The antenna is fixed and not user replaceable.
- The operating frequency is limited to the BLE band (2400–2483.5 MHz), in compliance with FCC Part 15.247.
- The antenna gain is declared as -4.09 dBi, and total radiated power is within FCC/CE regulatory limits.

Horizontal: 2400 MHz 、 2450 MHz 、 2500 MHz

Power (dBm)

Max: 0 Min: -40 Scale: 5/div 、

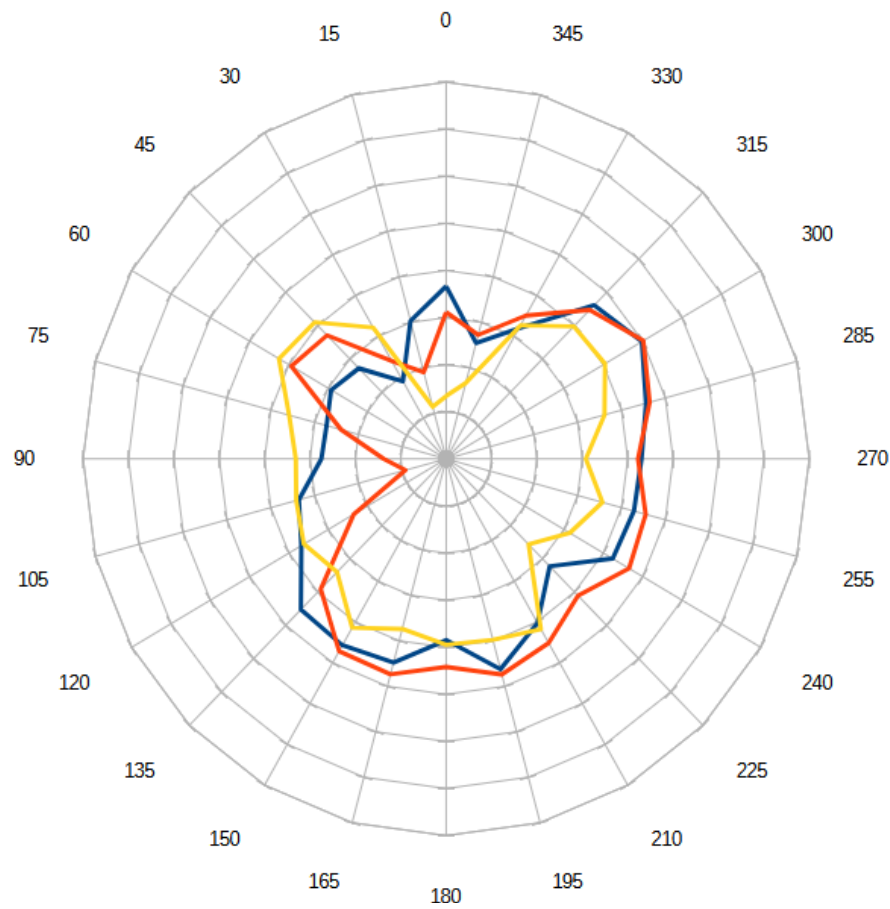


Frequency (MHz)	Gain(dB)		
	Max	Min	Avg
2400	-4.09	-25.32	-12.32
2450	-5.82	-30.68	-12.75
2500	-6.51	-35.91	-13.51

Vertical: 2400 MHz 、 2450 MHz 、 2500 MHz

Power (dBm)

Max: 0 Min: -30 Scale: 5/div



Frequency (MHz)	Gain(dB)		
	Max	Min	Avg
2400	-15.11	-30.48	-21.50
2450	-14.91	-35.37	-21.86
2500	-18.73	-34.28	-23.27