



# DIY2 revision F

## Printed Wi-Fi antenna datasheet

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## Introduction

This document provides a datasheet of printed Wi-Fi antenna (ANT20 as marked in the electrical schematic) which includes the RF parameters and graphs.

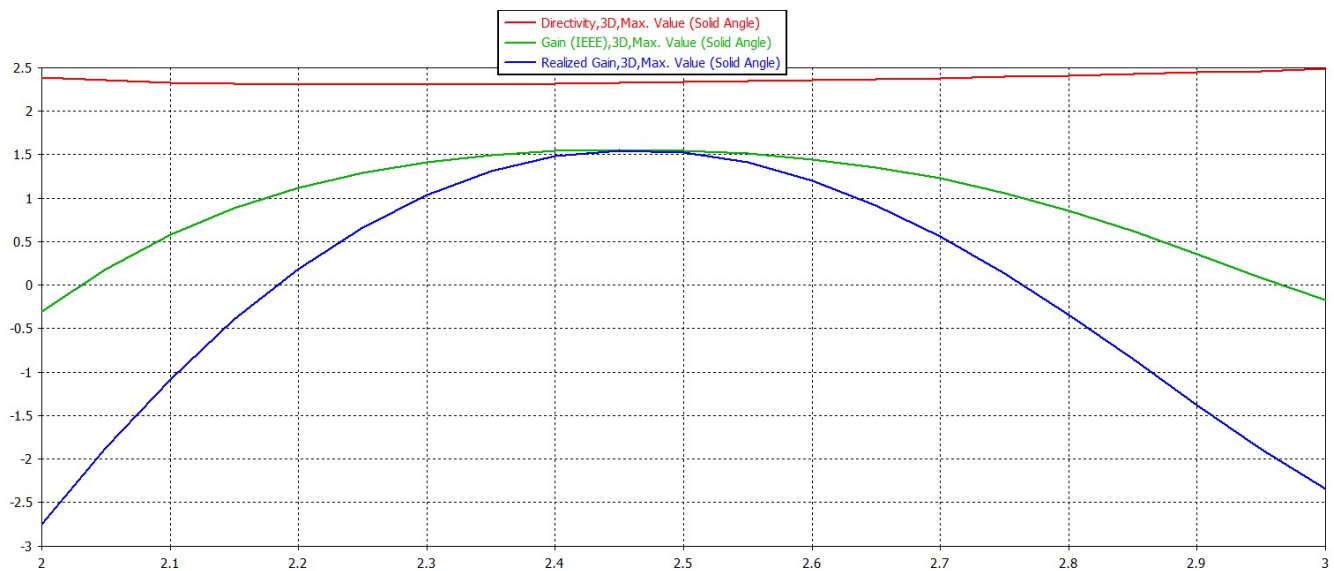
This antenna was designed and adapted to the product DIY2 rev. F

### Antenna's gain simulation note :

The DIY2 Rev. F board is produced out of a common PCB material of FR-4 family, such that a 3D EM simulation involves also the losses intrinsic to the PCB material in the transmission line and in the antenna's cavity. To account for the PCB's dielectric-losses and isolate the physical gain of the antenna (accounting for directivity and VSWR, for example) the antenna was simulated within a low-loss stackup (by setting  $\tan\delta \rightarrow 0$  and zeroing surface-roughness), while keeping the dielectric-coefficient  $\epsilon_r = 4.3$  to have similar VSWR, matching and other antenna's properties.

Maximum Realized Gain vs. Frequency: 1.5dBi

Maximum Directivity: 2.3 dBi





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