

Antenna information:

The radio's antenna is a fixed printed circuit board antenna based on the design described in Cypress application note "WirelessUSB™ Antenna Design Layout Guidelines - AN5032".

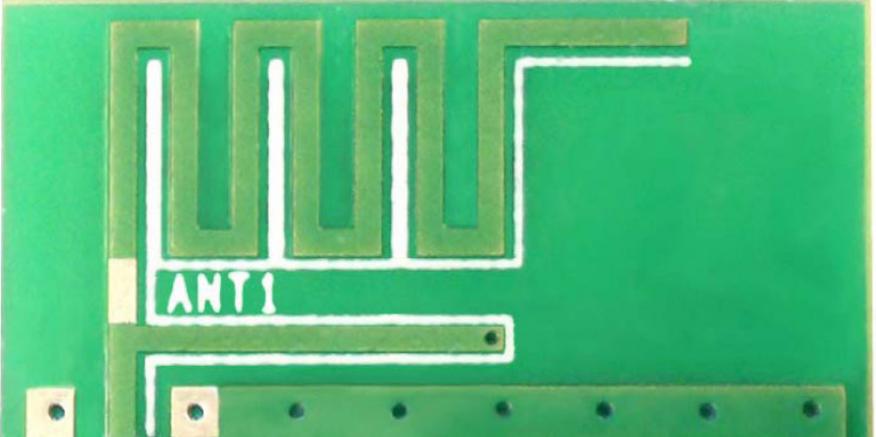
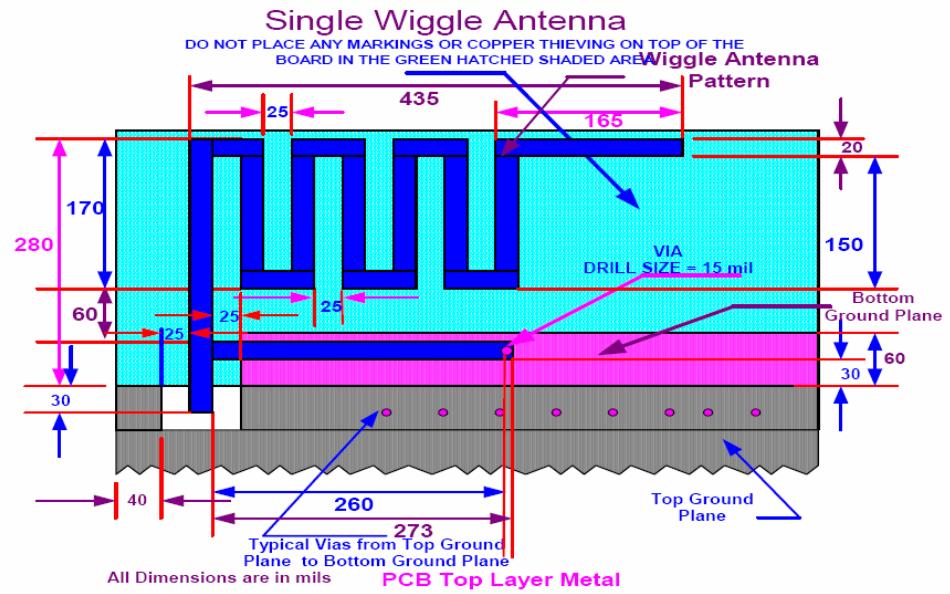
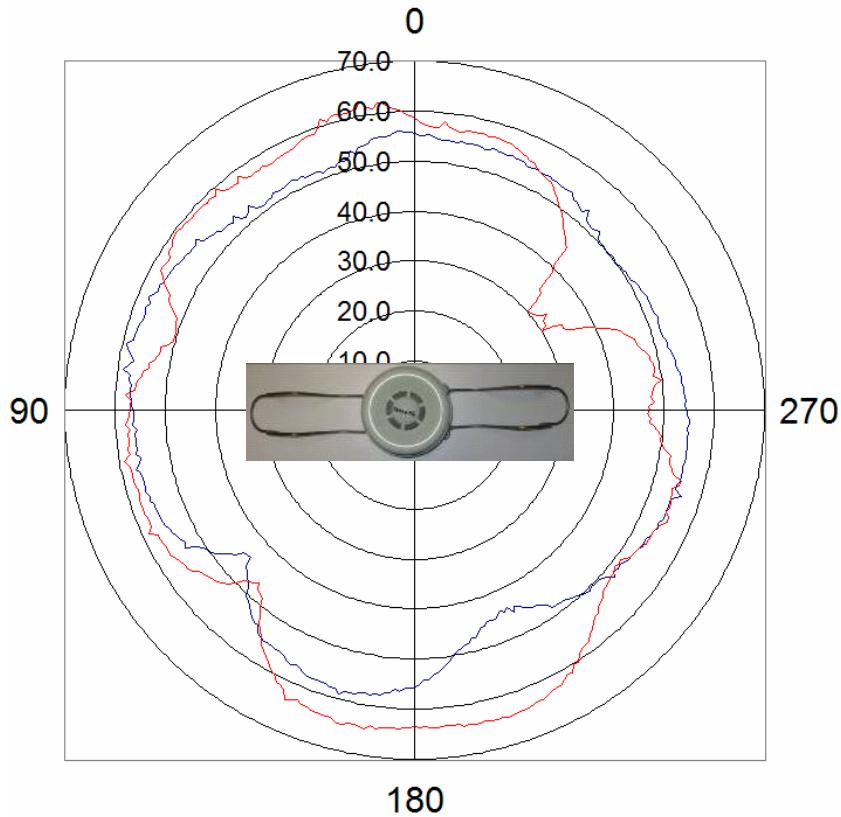
<p>FloSensor PCBA, component side. Closeup of radio circuit.</p>	 A photograph of a green printed circuit board (PCBA) showing the component side. In the center, there is a radio module with various components like resistors (R27, R73, R76), capacitors (C92, C95, C81, C88, C89, C90, C91, C93, C94, C96, C97, C98), and inductors (L25, X2). A zigzag-shaped antenna trace is visible on the right side. A barcode sticker with the number "0716068" is attached to the board. A circular stamp with the text "AT5" is also present.
<p>Picture of Cypress reference antenna design, from Cypress AN5032</p>	 A photograph of a green printed circuit board (PCBA) showing a single wiggle antenna design. The antenna is labeled "ANT1" and consists of a series of four rectangular segments that curve back and forth. The board also features a ground plane and some other circuitry. Two small yellow rectangular pads are located near the base of the antenna.

Figure 2. Single Wiggle Antenna Top Side as Implemented on Cypress Reference Radio Module

Dimensions of Cypress reference antenna design, from Cypress AN5032



The beam patterns have been characterized during testing at NWEMC. In the following diagrams, the blue trace represents vertical polarity and the red trace represents horizontal polarity.



Antenna Gain

Conducted Output Power (per Verathon): 1mW

ScanPoint Remote:

Field Strength of the Fundamental: 93.5 dBuV/m

Calculated EIRP of Fundamental: -1.73 dBm

Conducted Output Power (per Verathon): 1mW = 0 dBm

Antenna Gain: -1.73 dBi

FloSensor:

Field Strength of the Fundamental: 92.8 dBuV/m

Calculated EIRP of Fundamental: -2.43 dBm

Conducted Output Power (per Verathon): 1mW = 0 dBm

Antenna Gain: -2.43 dBi