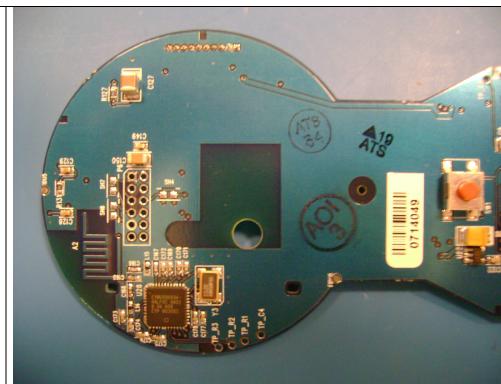
## Antenna information:

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

Scanpoint Remote PCBA, radio component side, closeup 1.

Cypress CWUSB6934 radio chip and antenna are on bottom left.



Picture of Cypress reference antenna design, from Cypress AN5032

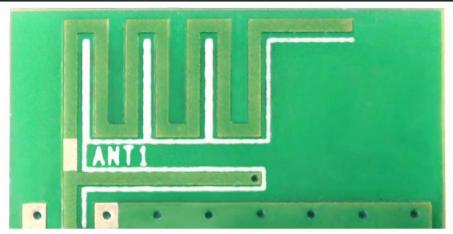
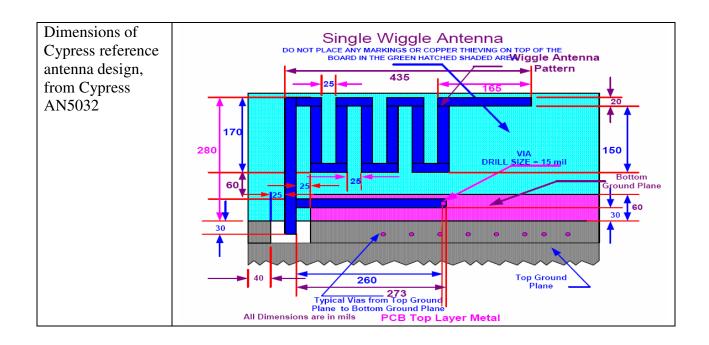
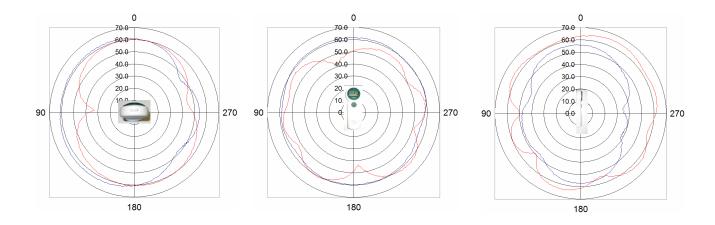


Figure 2. Single Wiggle Antenna Top Side as Implement ed on Cypress Reference Radio Module



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