

August 24, 2006

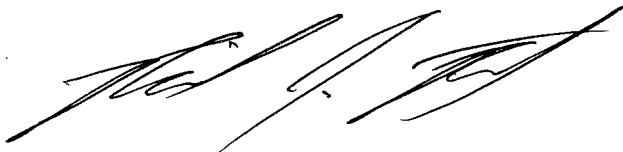
RE: hField Technologies

FCC ID: UILHFWG10

Please see comments and attachments below regarding the above referenced application.

1. **Q:** Kindly provide better external photos showing front, back and all sides of this device.  
**A:** Please refer to attached files named External photos\EUT, front view.JPG, External photos\EUT, rear top view.JPG, External photos\EUT, rear view.JPG, External photos\EUT, side view.JPG, and External photos\EUT, side view 2.JPG for updated external photos.
2. **Q:** Please provide better internal photos of this device. FCC requirements are for internal photos to show front and back of all PC boards in sufficient detail to identify major components. If RF shields are in place, these must be removed prior to any photography.  
**A:** Please refer to attached files named Internal photos\Close up circuit board, bottom view 2.JPG, Internal photos\Close up circuit board, top side.JPG, Internal photos\Close up circuit, bottom side 1.JPG, Internal photos\EUT, bottom view.JPG, Internal photos\EUT, General layout.JPG, Internal photos\EUT, Internal bottom view circuit board.JPG, Internal photos\EUT, Internal layout.JPG, Internal photos\EUT, Internal top view circuit board.JPG, and Internal photos\EUT, top view.JPG.
3. **Q:** It appears that this device may be larger than the palm of the hand. Therefore, the two-part label of 15.19(a)(3) should appear on the device.  
**A:** Please refer to attached files named hField fcc label.pdf, hField\placement2a.jpg, and hField\placement3a.jpg for labelling clarification.
4. **Q:** Rule 15.31(m) specifies the number of channels to be tested for compliance. Please review. It appears that only two channels have been tested. Typically, WiFi devices within the 2412-2462 MHz band will use channels 1, 6, and 11.  
**A:** Data in response to other comments have been performed and provided on Channels 1, 6, and 11.
5. **Q:** Form 731 indicates that this device transmits using 39.8 mW of RF power. I do not find details of the RF power measurement within this Test Report. Please review and kindly indicate where I may find this information. Please note that for WiFi, RF power changes with modulation. Typically, different data rates produce different RF powers by design. Kindly show all details of the power measurement methodology within the Test Report.  
**A:** Please refer to file named RF Power Output Measurement.pdf.
6. **Q:** For this RF category "Mobile" device, please provide an RF Exposure exhibit indicating the expected RF exposure at 20 cm with this antenna.  
**A:** Please refer to file named RF Exposure Evaluation.pdf.
7. **Q:** Please provide conducted RF Spurious Emissions test results for this device to the 10<sup>th</sup> harmonic.  
**A:** Please refer to file named Conducted RF Spurious Emissions Measurement.pdf.

8. **Q:** Please provide additional information as to the measurement system sensitivity and test equipment setup to show that compliance with the 500 $\mu$ V limit with a 1MHz RBW shall be maintained within all restricted bands of 15.205. As an example, please provide instrumentation settings, cable loss, antenna factors, and instrument noise floor readings with a 1MHz RBW demonstrating that this equipment has sufficient sensitivity to measure 500 $\mu$ V at 3 meters within the 17.7 – 21.4 GHz band of 15.205.
- A:** Please see attached file named Spurious Radiated Measurement.pdf for revised Report of Measurements for Radiated Emissions.
9. **Q:** Spectral Power Density must be measured with a 3kHz RBW and a sweep time of 1 second per 3kHz of span. A typical measurement is a 500 second sweep with a 1.5MHz span. This measurement assumes that an always-on CW signal is available for the full 500 seconds. No pulsing is permitted.
- A:** Please refer to file named Spectral Power Density Measurement.pdf.
10. **Q:** Your Figures 13 and 14 show an “averaging factor” of 20dB, but I am unsure where or how it was derived. Please review your Test Report.
- A:** The response for question number 8 resolves this, so please disregard this data.



Richard J. Reitz  
Corporate Laboratory Manager  
[rreitz@retlif.com](mailto:rreitz@retlif.com)  
Phone: 631-737-1500 x 28  
Fax: 631-737-1497