

Chris Harvey

From: SS-Seednet <ssliou@seed.net.tw>
Sent: Thursday, May 01, 2014 12:45 PM
To: Harvey, Christopher
Cc: Harvey, Christopher; Hoque, Claire; danieljoonpark@hotmail.com; R00 高澤琪 Doris
Subject: Re: Wahoo Fitness LLC, //PADWF109 //AN14T0158 Notice #2
Attachments: Declaration.pdf; Exhibit-C-Test_Report_rev2.pdf

Dear Harvey,

Reply as below.

1. Bluetooth LE, while can be approved under the FCC Digital Transmission System (DTS) rules of 15.247, the technology uses Frequency Hopping Spread Spectrum (FHSS) Techniques operating in 40 channels. Were the spurious emission tested while the device was hopping in BLE mode?

[ETC] In spurious emission test of BLE mode we set the EUT in the low, middle and high channel for pretest and choose the worst case for final test. In fact there is no significant difference between these cases so we choose channel middle for final test.

2. Please get a signed statement from the applicant that the ANT+ mode of operation for this device will only ever operate at a single channel of 2457MHz.

[ETC] Provided as attached.

3. Your revised RF report shows revised Radiated Spurious emissions of BLE mode (Test Mode: Band Edge/Channel low and High (BLE Mode) with similar emissions to the ANT+ mode, which you state only operates at 2457MHz. Why would the spurious band-edge emissions of BLE mode operating at 2402 MHz and 2480 MHz be almost the same as ANT+ mode at 2457 MHz?

[ETC] Retest of ANT+ mode was performed and the results show it was different from BLE mode. Test report was revised.

4. You have updated the report to provide revised Radiated Spurious emissions on pages 38-41. Please note that the Radiated data in ANT+ model on pages 22 & 23 (fundamental) and pages 24 & 25 (harmonics) have almost identical Peak and Average measurement data, but the new data for Radiated Spurious emissions on pages 40 - 41 for Band Edge in ANT+ mode have data that is now 20dB higher in Peak than in Average. This still does not make sense [ETC] Retest data was added in the revised test report. In fact there is no signal in the band-edge. The data was the noise floor.

5. The Test Setup Photos show this device only flat on the table. Please describe how you changed the orientation from flat on the table onto its side and top edge for the other 2 orientations? (It seems like this device would fall over and not stay in the other orientations, and there is nothing else in the photos that would help support this device in the other orientations).

[ETC] We use a piece of wood (cuboid) for supporting the EUT. The EUT was stick on the wood with double-sided tape.

BR

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30週年慶網站:

<http://www.etc.org.tw/etc/etc30th/HOME/HOME.html>

-----原始郵件-----

From: Chris.Harvey@ul.com

Sent: Tuesday, April 29, 2014 12:10 AM

To: ssliou@etc.org.tw

Cc: Chris.Harvey@ul.com ; claire.hoque@ul.com ; danieljoonpark@hotmail.com ; ssliou@seed.net.tw

Subject: Wahoo Fitness LLC, //PADWF109 //AN14T0158 Notice #2

Dear SS Liou,

Thank you for your replies. There are still several items that need to be addressed:

1. Bluetooth LE, while can be approved under the FCC Digital Transmission System (DTS) rules of 15.247, the technology uses Frequency Hopping Spread Spectrum (FHSS) Techniques operating in 40 channels. Were the spurious emission tested while the device was hopping in BLE mode?
2. Please get a signed statement from the applicant that the ANT+ mode of operation for this device will only ever operate at a single channel of 2457MHz.
3. Your revised RF report shows revised Radiated Spurious emissions of BLE mode (Test Mode: Band Edge/Channel low and High (BLE Mode) with similar emissions to the ANT+ mode, which you state only operates at 2457MHz. Why would the spurious band-edge emissions of BLE mode operating at 2402 MHz and 2480 MHz be almost the same as ANT+ mode at 2457 MHz?
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5. The Test Setup Photos show this device only flat on the table. Please describe how you changed the orientation from flat on the table onto its side and top edge for the other 2 orientations? (It seems like this device would fall over and not stay in the other orientations, and there is nothing else in the photos that would help support this device in the other orientations).

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender. Revised documentation should not be emailed, but instead should be submitted through "Add Attachment" function at the UL-CCS website. Please have your Assessment Number and FCC ID/IC Certification number handy. You may use the following link: <https://cert.ccsemc.com/filing/>

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No virus found in this message.

Checked by AVG - www.avg.com

Version: 2014.0.4570 / Virus Database: 3920/7388 - Release Date: 04/24/14 Internal Virus Database is out of date.