

Scott McCutchan

From: Scott McCutchan [scott@celectronics.com]
Sent: Monday, September 10, 2007 1:46 PM
To: 'rey@celectronics.com'
Cc: 'ruby@celectronics.com'; 'jeff@celectronics.com'
Subject: FCC ID: VEDSTAR1000C

Mr. Ramirez:

In order for processing of this certification application (FCC ID: VEDSTAR1000C) to continue, the following issue (s) will have to be addressed:

- 1) The FCC ID on the application form does not match the submitted sample FCC label. Please correct the application form or the sample label.
- 2) The authorization letter must be addressed to CETCB, and not the FCC, in the body of the letter.
- 3) Section 4.1 of the test report indicates that there is test data for alternate configurations. Please describe what these alternate configurations are; and what tests were performed in those configurations.
- 4) Section 4.1 of the test report states that the unit was tested in a stand-alone configuration; however, the test setup photos show two devices on the table. Please clarify.
- 5) Section 4.1.2 of the test report indicates that the device was connected to a 50 ohm terminator. Please describe what would normally connect to this port.
- 6) The conducted emission test on the antenna port was only performed on one channel. Data must be provided with the device transmitting on its low, middle and high channels. Please provide the additional data.
- 7) The occupied bandwidth plots indicate a bandwidth of about 180kHz; however, it appears that the bandwidth is closer to 400 kHz. Please provide new plots.
- 8) The power output measurements were made with a resolution bandwidth of 100 kHz. For these measurements, the RBW must be greater than the 20 dB occupied bandwidth of the emission being measured. Please provide new power output plots.
- 9) Please provide maximum permissible exposure (MPE) RF safety calculations.
- 10) Please indicate the antenna type, connector type, and antenna gain in dBi.
- 11) The channel separation plots indicate a separation of 4.1 MHz; however this is not possible, since there are 50 channels, and the frequency band is only 26 MHz. Please submit a new plot. Also, the measurements must be made with a resolution bandwidth greater than 1% of the frequency span.
- 12) For the average time of occupancy test, the data must show that the device does not occupy a channel for more than 0.4 seconds in a 20 second period for a device utilizing 50 channels. The plot submitted does not show this.
- 13) The plot showing the number of hopping channels does not show 50 channels. Each channel must appear on the plot(s). Also, the measurements must be made with a RBW greater than 1% of the frequency span.
- 14) The operational description should describe how the device meets the definition of a frequency hopping spread spectrum system as defined in section 2.1 of the FCC rules. (i.e. utilizes a pseudorandom hopping sequence (give example of sequence); each channel used equally on average; receiver input bandwidth matches the bandwidth of the

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transmitted signal; system receiver hops in synchronization with the transmitted signal, etc.)

15) The user's manual indicates that the device operates from 868 MHz to 928 MHz. The allowable frequency range is 902-928 MHz.

16) Since modifications to the device were required, please submit a letter from the manufacturer, stating the modifications that were made, and a statement that indicates said modifications will be implemented into all production units.

17) Please submit a letter from the manufacturer stating that this application has not been submitted to another TCB.

18) The application form does not indicate the power output of the device. Please update the form.

19) It is assumed that this device is being submitted as a "mobile" device; meaning that a 20 cm separation will be maintained between the antenna and all persons when operating. Please confirm that this is a mobile application; and, if so, the following statement must be placed in the user's manual:

CAUTION: To comply with FCC RF exposure compliance requirements, a separation distance of 20 cm must be maintained between the antenna of this device and all persons.

The item(s) indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 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. Please upload responses and/or exhibits to the electronic filing website. Your correspondence number is VEDSTAR1000C-1.

Best regards,

Scott McCutchan
Operations Manager
Compatible Electronics TCB