Correspondence Summary Q & A

February 9, 2005

SUBJECT: AMPERION, INC - FCC ID: SKIWAG311

1. TCB Question: Block diagram: It is shown that this device has 5GHz capability. The application was only made for 2.4GHz. Please explain.

Answer:

Other models in the product family will include 802.11a (5 GHz) as well as 2.4GHz radios. The model being certified uses 2.4GHz only.

2. TCB Question: Amplifier: Please explain compliance with part 15.204 (particularly paragraph (d), labeling etc.). Is the amplifier always sold with the transmitter (as a system)? Can it be sold separately, as an option as stated in the test report? No info on the amplifier was found in the manual. Please provide detailed specification on the amplifier (incl. Schematic, block diagram, etc.)

Answer:

The amplifier is manufactured by YDI, information is provided as attached. Amperion will not sell the amplifier other than with the system, however it may not be included in every system that is sold as it will be optional. Where appropriate, data has been included with and without the amplifier. We would like the unit to be certified with the note that it may be used with or without the amp. Amperion provides the system and its NEMA enclosure, the amplifier will not be sold as a component, it will be assembled into the device. Labeling per paragraph (d)(2) is not applicable to this device.

Follow-up TCB question: There is problem here with section 2.924. Two FCCIDs would be required to achieve the applicant's marketing goal. The device with the amplifier is not electrically identical to the device without the amplifier.

Answer:

For FCC certification, the applicant wishes to not use the version without the amplifier. All units for the US will include the amplifier.

3. TCB Question: Form 731: The frequency band that can be authorized for the system comprising of the radio and amplifier is 2412-2457MHz. Please explain how the unit will not operate on channel 11. The user cannot be held responsible for operation outside the authorized band. This is the responsibility of the grantee.

Answer:

The channel will be removed in firmware.

4. TCB Question: Part 15.207: Please justify compliance for this section. Alternatively, please justify exemption from the requirements.

Answer:

Line conducted data has been added to the test report, additionally the unit has been modified to include a schaffner line filter which allows the device to comply with Class B conducted limits.

5. TCB Question: Band-edges compliance in restricted band above 2.4835GHz per part 15.205, 15.209, and 15.35(b): Page 33 of 49 Measurement bandwidth: Please explain when the video filter of 300kHz is used? Is it used for Pk above 1GHz? The data on the plots are expressed in dBuV. Please explain.

Answer:

The 300kHz video filter is used only below 1GHz, 3MHz is used above 1GHz along with a 1MHz IF bandwidth.

The dBuV shown reflects dBuV/m @ 3 meters, cable, amplifier, and antenna corrections are included in the EMI receiver's software.

TIMCO ENGINEERING INC. 849 NW State Road 45 Newberry, Florida 32669 http://www.timcoengr.com 888.472.2424 F 352.472.2030 tei@timcoengr.com