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From: Generic Office of Engineering Technology [oetech@fccsun27w.fcc.gov]
Sent: Thursday, January 18, 2007 4:58 AM
To: wilson.loke@intertek.com
Subject: Response to Inquiry to FCC (Tracking Number 184618)

Inquiry:

FM transmitter (15.239)
FCC ID: POSEF-6307

The EUT is a FM transmitter under 15.239 from 88.1MHz to 107.9MHz. Since its operating frequency is from 88.1MHz to 107.9MHz within the band of 88MHz to 108MHz with the fundamental field strength less than 48dBuV/m at 3m, it is considered to fall in the scope of Category 1-15.239 FM transmitter.

The test procedure plan is listed in the following:

- i) Radiated emission
- ii) Bandwidth test

1) How does this device operate?

The device is operated as 88.1MHz to 107.9MHz FM transmitter and powered by 3.0Vdc through two AAA batteries or 3Vdc/12Vdc car adaptor. It transmits the audio signal from an external audio source such as MP3 player by a FM transmitter tuned from 88.1MHz to 107.9MHz and the audio signal can be received by a common FM Broadcasting Radio which is tuned to same transmitted frequency of the FM transmitter and regenerate the transmitted signal through the FM Broadcasting Radio.

2) Provide information on the device and its antenna.

*The device is a simple audio FM transmitter tuned from 88.1MHz to 107.9MHz to transmit an audio source, for example, MP3 player, to a FM Broadcasting Radio. The block diagram and circuit diagram are attached for your reference.
The antenna is an integral long wire antenna.*

The block diagram, circuit diagram and internal photo are provided

3) How is it installed?

It is very easy to install. It is powered by two AAA batteries or 3V/12V car adaptor . Before active the device, it is connected the audio input socket to the external audio source such as MP3 player. And then, switching on the device and the FM Broadcasting Radio. And then, playing the audio from the external audio source (MP3 player) Tuning the FM broadcasting radio to the frequencies which do not occupied by other FM broadcasted channel. After that, tuning the FM transmitter to that frequency, the audio signal from the external audio source will be heard.

4) What test procedure was used?

ANCI C63.4:2003.

5) If tested in a car, how was it configured/tested?

For the Car adaptor, we connected the Car adaptor and the 12V car battery and then put the EUT on a 0.8m height turntable 3m from antenna. The adaptor, MP3 player and EUT with 10cm separated distance. The test configuration photo is attached for your reference.

6) Was the tuning range properly verified? The test lab should indicate in the report that the tuning controls were manually adjusted to verify maximum tuning range.

Yes. The tuning range is from 88.1MHz to 107.9MHz. The tuning controls were manually adjusted.

7) Was the bandwidth properly tested with maximum audio input?

The maximum output Level of the typical device, ipod mp3 player is used.

8) Use a typical audio file from typical device

A typical audio file (pop music) from a typical device (ipod mp3 player) are used.

9) Provide the **test report**

Provided.

---Reply from Customer on 01/11/2007---

1) the antenna is a wire antenna and installed with the audio input wire within the audio input cable attached with device. (see photo attached. 2) No the antenna is not designed to be coupled to anything. It is stand alone wire antenna. 3) Sorry for wrong last submission. (without modulaton) The typical audio source, pop music, is modulated through the typical device, ipod mp3 player, at the maximum output setting/volume (450mV) and the rated maximum audio input of the device is 400mV. The new plot is attached.

Response:

Please go ahead and complete the file. Ensure that the test report includes the new bandwidth tests. Ensure that all exhibits comply with FCC rules and polices.

Do not reply to this message. Please select the [Reply to an Inquiry Response](#) link from the OET Inquiry System to add any additional information pertaining to this inquiry.