

# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

June 11, 2004

RE: IKUSI – Angel Iglesias

FCC ID: PVTTR800-US

After a review of the submitted information, I have a few comments on the above referenced Application.

## Administrative Issues

1) It appears that a modular request is being made for this application. Please note that the FCC requires that a modular request letter be provided that addresses each point from the public notice (i.e., each requirement listed and a description of how the device complies with each).

Response: Please refer to the revised modular request letter uploaded with this response.

2) For Part 15 devices, a list of the actual operating frequencies should be included. Additionally, the lowest and highest operational frequencies should be reported on the 731 form. Please correct.

Response: Please refer to the revised operational description and 731 form uploaded with this response.

3) The test report lists this as a code DSR, which is reserved for devices falling under 15.231. This device should be listed as a DXT. Please correct.

Response: Please excuse the error, and refer to the revised test report, and 731 form, uploaded with this response.

4) The schematic only provides reference designators and does not provide values. Please provide a schematic that includes the values.

Response: The codes for the component values were on the original schematics, however please refer to the revised schematics exhibit uploaded with this response for the schematics and the codifications reference document.

5) Information mentions the device was tested for Part 15 Verification requirements. However the manual appears to be missing the information required by 15.105.

Response: Please refer to the revised manual uploaded with this response.

6) FYI....An RF exposure exhibit is not necessary for 15.249. This exhibit has not been evaluated.

Response: Noted, thank you.

## Technical Issues

7) AC powerline conducted method mentions the use of a high pass filter. Please explain how this was taken into consideration for measurements from 150 kHz to 400 kHz.

Response: Incorrect verbiage was utilized. Please refer to the revised report uploaded with this response.

# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

8) Please explain why the device appears different in the conducted photographs from the radiated photographs.

Response: The module is battery powered; to enable it for AC testing, a client's profile was used to supply AC voltage to the module for testing purposes.

9) Duty cycle calculations may only be based upon a worse case period of time as 100 msec. Please correct all aspects of the test report affected (harmonics, etc.). The correction factor should be  $(20 \log .249) = 12.1 \text{ dB}$ .

Response: Noted, and applied to spurious peak measurements above 1 GHz.

10) Review of Table 5.2 – 5.8. For 15.249, average measurements may only be used for  $> 1 \text{ GHz}$ . Measurements of the fundamental may be in peak or QP values only. 114 dBuV/m does not apply at the fundamental frequency and applying an average duty cycle calculation is not allowed at the fundamental, but may be used for measurements  $> 1 \text{ GHz}$ . Note that a QP detector may be used, however the repetition rate must be in excess of 20 Hz. The duty cycle present does not meet this requirement either. From the information shown, this device does not meet the limits. Note that changes to the fundamental will also require remeasurement of harmonics.

Response: 114 dBuV/m was removed, and the power was reduced through modifications in resistors: R16 to 39 ohm, and R15 to 100K ohm, remeasured as peak, with average calculated 12.1 dB less duty cycle.

11) For average measurements above 1 GHz, note using a reduced VBW should not be used since the emissions are pulsed. Average results should be obtained by correcting the peak measurement by the appropriate duty cycle. Please correct.

Response: Please refer to the revised test report uploaded with this response.

Timothy R. Johnson  
Examining Engineer

mailto: [tjohnson@AmericanTCB.com](mailto:tjohnson@AmericanTCB.com)

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination.