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December 13, 2001

RE: American Telecommunications Certification Body Inc.

FCC ID: MSQAPEAC300

Dear Timothy:

After the review of your comments we'd received on the Dec 3, 2001. We have made some modifications upon your advice; the modifications are summarized as follows:

1. The EUT, an access point is ordinary connected to the HUB and can be works alone without computer, it isn't be considered to a PC peripheral. The Part 15 DoC is not applicable in this case.
2. The justification mentioned will be removed and the new internal photographs will be provided in the attachment.
3. We will suggest the manufacturer to modify the data in the manual, see the "Statement of Declaration" in the attachment.
4. The power listed on the form 731 is 0.0408(watts), which can be found in our report page 31.
5. The output power on the manual is the power of the final stage amplifier from its specification sheet found in the WWW (http://pdfserv.maxim-ic.com/arpdf/MAX2242.pdf) is 20dBm (100mW). We did our measure on the 3rd RF switch by conducted means and the reading is 23mW. Then the power is dissipated throughout the circuit: impedance matching circuit, low pass filter, RF switching and coupling capacitors. In addition, in order to prevent the 3rd order harmonic exceeding the limitation, lower down the input level of the power amplifier is necessary. The value on the manual is misplaced and we will suggest the manufacturer to modify the value to "less than 50mW".
6. As shown on the schematic (P.4), the switch control (SW_CON) act as a switch drives the QS1 if its unique antenna is fitted in. It should not be operated if an antenna other than the manufacturer is inserted. The external antenna of this jack is still in developing. If any other antenna is brought to the market in the future, an authorization will carry out separately.
7. The EUT have 2 antennnae, horizontal and vertical PCB dipole antennae. We'd performed tests on 3 channels (CH.1,6,11) specified by the FCC in order to find the maximum emissions. The measure of the MPE is conducted with the maximum combination found in the tests, by

$$S = \frac{PG}{4\pi R^2} = \frac{16.11 \times 1.315}{4\pi (20)^2} = 4.215 \times 10^{-3}\, mW / cm^2$$

8. Firstly, We set the center of the spectrum to the 2.4835GHz and the span 100MHz, then the bandedge of the emission willl display on the screen. We find that the bandedge is inside the envelope made of 2.4GHz~2.4835GHz. We demonstrate on the report page 46.
9. Both RBW and VBW settings on our measure is 100kHz. This is the setting more severe than the RBW=1MHz and VBW=10Hz stated in the rule. That means if the EUT pass our test. It can be also pass the standard stated in the rule.
10. The test configuration photos are exhibited in the page 10 (Conducted emissions) and page 25 (Spurious emissions) of our report.

The matters needed with the modified report are attached with this reply.

Should you have any questions, please feel free to contact us. Thanks for your kindly consideration.

Sincerely yours,

Eric Wong

Testing Engineer

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