From: Roland Gubisch ITS/ES-Box

Sent: Wednesday, October 23, 2002 11:34 PM

To: Julia Chu ITS/EMC-TPE

Cc: Danielle Gravelle ITS/ES-Box
Subject: RE: AboCom FCC ID: MQ4CBT1K

Dear Julia:

The attachments do not address the question #1 I raised, and I am concerned that my questions are not being understood. Let me ask them a different way.

- 1) The attachments are taken directly from the Bluetooth SIG specification. Can the client prove that this device complies with the Bluetooth SIG specification, by showing:
 - b) that it uses a chip which meets the Bluetooth specification?
 - c) that the chip been certified by the Bluetooth SIG?
- 2) I believe I understand your response to question #2. Please let me repeat it for you to confirm: The client wishes to have this product certified so that the user does not need any further certification.

If that is correct, then it must receive a Modular approval. In order to meet the requirements for Modular approval, the radiated emissions testing must be performed with the module outside of any enclosure. As requested earlier:

"Please clarify the radiated emissions test configuration, including the nature of the EUT housing (if any) during the test."

Thank you, Roland

----Original Message----

From: Julia Chu [mailto:jchu@itslabtest-twn.com]

Sent: Wednesday, October 23, 2002 5:34 AM

To: Roland Gubisch ITS/ES-Box Cc: Danielle Gravelle ITS/ES-Box Subject: RE: AboCom FCC ID: MQ4CBT1K

Dear Roland,

As per your review comments, for section 1, 2, please find the supplements attached provided by AboCom.

For your review comments for section 3, after further confirmed with our client, they expect this device applied for end product.

If you have further question, please feel free to let me know.

Best Regards,

Julia Chu

Intertek Testing Services Taiwan Ltd.

ETL SEMKO

Tel: (3) 519-1411 ex 304

Fax: (3) 519-1410 jchu@itslabtest-twn.com

www.etlsemko.com

----Original Message----

From: Roland Gubisch ITS/ES-Box [mailto:RWG@ETLSemko.com]

Sent: Sunday, October 20, 2002 6:58 AM

To: Julia Chu ITS/EMC-TPE

Cc: Tulip Hu ITS/EMC-TPE; Danielle Gravelle ITS/ES-Box

Subject: RE: AboCom FCC ID: MQ4CBT1K

Dear Julia:

Thank you for providing the client responses. We have the following comments:

- 1) description of pseudo-random hopping sequence is fine. Thank you.
- 2) 15.247(a)(1) and 2.1033(b)(10) requires the receiver input bandwidth to:
 - a) match the hopping channel bandwidth, and
- b) shift frequencies in synchronization with the transmitted signal.

The description provided by the client indicates that:

- a) the receiver bandwidth is always $2400-2500~\mathrm{MHz}$, rather than the channel bandwidth of $280~\mathrm{kHz}$, and
- b) the receiver bandwidth does not shift, but always remains at $2400-2500\ \mathrm{MHz}$.

This does not appear to satisfy the requirements. Please comment.

3) The response to comment #3 appears to indicate that the Client expects users to certify the final product that uses this module. Is that correct? If so, a Limited Modular Approval is appropriate for this module. Please confirm.

Thank you, Roland

----Original Message----

From: Julia Chu [mailto:jchu@itslabtest-twn.com]

Sent: Wednesday, October 16, 2002 2:59 AM

To: Roland Gubisch ITS/ES-Box

Cc: Tulip Hu ITS/EMC-TPE; Danielle Gravelle ITS/ES-Box

Subject: Re: AboCom FCC ID: MQ4CBT1K

Dear Roland,

As per your review comments for FCC ID: MQ4CBT1K, please find the explanation letter attached, which provided by AboCom, for your reference.

Additionally, did you receive the supplements of FCC ID: M4Y-00815 which revised the FCC ID no. per your requirements that I sent to you on 10/14, 2002?

If yes, are they acceptable? And when can we expect the Grant? Please kindly check it for us! Thank you for your help in advance.

If you have further question, please feel free to contact me.

Best Regards,
Julia Chu
Intertek Testing Services Taiwan Ltd.
ETL SEMKO
Tel: (3) 519-1411 ex 304
Fax: (3) 519-1410
jchu@itslabtest-twn.com
www.etlsemko.com

---- Original Message -----

From: "Roland Gubisch ITS/ES-Box" <RWG@ETLSemko.com>
To: "Julia Chu ITS/EMC-TPE" <jchu@itslabtest-twn.com>
Cc: "Danielle Gravelle ITS/ES-Box" <DGravelle@ETLSemko.com>

Sent: Saturday, October 12, 2002 1:41 AM

Subject: AboCom FCC ID: MQ4CBT1K

Dear Julia:

Technical review of this application is complete, and it appears to meet the criteria for certification. However, the following information is missing:

- 1) 15.247(a)(1) attestation of pseudorandom hopping sequence. The technical spec exhibit is generic to all Bluetooth devices, and there is no documentation supplied to demonstrate or attest compliance of this device with Bluetooth hopping parameters.
- 2) 15.247(a)(1) and 2.1033(b)(10) attestation that receiver bandwidth matches hopping channel bandwidth, and receiver input bandwidth hops in sync with transmitter. The technical spec exhibit is generic to all Bluetooth devices, and there is no documentation supplied to demonstrate or attest compliance of this device with Bluetooth hopping parameters.
- 3) If this CompactFlash Card is intended to be used in a variety of hosts, it should be authorized as a Modular Approval. The test report and exhibits support Modular Approval, for which radiated emissions shall be measured with the EUT outside of the host. The test report indicates that this was done. However, from the radiated setup photo, it appears that the EUT is inside an enclosure. Please clarify the radiated emissions test configuration, including the nature of the EUT housing (if any) during the test.

Thank you, Roland