

Helen Zhao

To: Y. G. Gwon

Subject: RE: Bluebird Soft Inc., FCC ID: SS4BIP12X0, Assessment NO.: AN05T4453, Notice#1

From: Y. G. Gwon

Sent: Sunday, January 16, 2005 10:24 PM

To: Helen Zhao

Subject: Re: Bluebird Soft Inc., FCC ID: SS4BIP12X0, Assessment NO.: AN05T4453, Notice#1

Hi Helen,

Thank you for your comment and I would like to answer your questions as following.

Q3: As you can see in the setup photo, the PDA communicated with Access Point (AP). We tried so many times for matching low/middle/high channel between PDA and AP and then spurious radiated emission was performed after matching channel. It is not easy matching channel and the test result of conducted RF parameter with PDA or with Laptop shall be same.

Q5: Thanks for your comment. Attached please find revised a test report.

Best Regards,
Y.G. Gwon
ONETECH Testing & Eval. Lab.

From: [Helen Zhao](#)

To: [Y. G. Gwon](#)

Sent: Saturday, January 15, 2005 7:17 AM

Subject: RE: Bluebird Soft Inc., FCC ID: SS4BIP12X0, Assessment NO.: AN05T4453, Notice#1

Dear Mr. Gwon,

Regarding Q3: OK, you can test antenna port RF conducted testing inside the PC. Please modify section 5.3 of the test report to clearly indicate that "the RF Parameters have to be tested with software for controlling channel number, modulated and unmodulated RF signal so on, but the software cannot install into this PDA because of operating system. So the RF Parameters were tested with Laptop computer and the spurious and radiated emissions were tested with PDA." But I am just curious. If the test program could not work with PDA OS, how could you change the channel number when you did radiated spurious emission test with the WLAN module inside the PDA, since the report does show low, middle and high channel radiated emission test data? If you can change the channel in radiated emission test, why couldn't you do the same thing in RF conducted testing?

Regarding Q5: Please see attached file for details. Please read Section 1 - Definition carefully, you will find MPE is only for mobile device (with more than 20cm separation distance), and SAR is for portable device (within 20cm separation distance). Your device is a portable device, but hand-held, so not subject to SAR evaluation.

Best Regards,
Helen

-----Original Message-----

From: Y. G. Gwon

Sent: Friday, January 14, 2005 3:04 AM

To: Helen Zhao

Subject: Re: Bluebird Soft Inc., FCC ID: SS4BIP12X0, Assessment NO.: AN05T4453, Notice#1

Hi Helen,

Thank you for quick response and kind comments.

1/17/2005

Regarding Q3, it is not possible for testing of RF parameter without PC, because the RF module should be operated with window OS, but the PDA is operated MS Activesync OS only. So we have to test RF parameter with PC using a test jig. And we inserted RF Module into the PDA and then tested spurious radiated emission and conducted emission. I do not know how to clear your comment. Please inform me how to clear your comment.

Regarding Q5, enclosed please find a revised manual. I searched WLAN device on the FCC web site and I found almost product mentioned MPE in the test report. If you want to delete MPE calculation in our test report, I will do that, but I really want to know what kind of device shall be mentioned MPE in the test report. Do you have any information? Please send that to me.

Have a great weekend!

Best Regards,
Y.G. Gwon
ONETECH Testing & Eval. Lab.

> Subject: Bluebird Soft Inc., FCC ID: SS4BIP12X0, Assessment NO.:

> AN05T4453, Notice#1

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> Question #1: The user manual indicated that the device can be connected to a PC, please note the digital portion requires DoC or FCC certification. If it is under DoC scheme, please provide DoC letter, and add FCC DoC logo on the FCC ID label format; if it needs certification, a composite device filing is necessary. You may need to file one more application under Equipment Class of JBP under the same FCC ID.

> ==> This device is an industrial PDA. So the device is a Class A Equipment and application procedure is subject to verification.

> Question #2: Page 7 of the test report indicated that output power is 15dBm, but the test results show the highest power output is 18.4 dBm. Please revise the test report.

> ==> Enclose please revised test report, but RF Output specification of this device is 15dBm. So I mentioned RF power 15dBm.

> Question #3: Section 5.3 Mode of operation during the test indicated that "during the test WLAN was actually installed in the PC". Please note the EUT is the PDA with WLAN module. Without WLAN module, this PDA is just a digital device. You were testing the WLAN module, not the PDA with WLAN module, which is not acceptable. Please explain.

> ==> As you know, the RF Parameters have to be tested with software for controlling channel number, modulated and unmodulated RF signal so on, but the software cannot install into this PDA because of operating system. So the RF Parameters were tested with Laptop computer and the spurious and radiated emissions were tested with PDA. Do you think I have to revise section 5.3 in our test report?

> Question #4: This device is hand-held device, please explain why you did not test in three-orthogonal planes.

> ==> Enclosed please find a revised test report.

> Question #5: This device is a portable device, not a mobile device, MPE calculation is not applicable, please remove MPE calculation from the test report.

> ==> I know mobile and portable device have to be met the requirement of RF Exposure. In this case we have to calculate MPE. Do you think I have to delete MPE calculation? If I have to delete this section, please send me more detail material which kind of equipment have to calculate MPE.

> Question #6: Please correct the typo on page 11 of the test report. The due date has already passed.

> ==> Enclosed please find a revised test report.

> Question #7: There are several pages, e.g. page 12, 16, etc, showing 821.11b, please revise.

> ==> Enclosed please find a revised test report.

> Best Regards,

> Helen Zhao

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> The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.