Testing Tomorrow's Technology

April 3, 2009

Rich Fabina
ATCB

RE: ATCB007444 – Original Equipment Application

FCC ID: W79SQ3P0011031 for Y Soft Americas, Inc. , Response to April 3, 2009 Comments Letter

1. Please provide a block diagram showing all oscillator frequencies in this transmitter in accordance with 2.1033(b)(5) of the FCC Rules. The submitted block diagram showed no oscillators in it. UPLOADED

2. For radiated emissions measurements on this transmitter, please confirm that the EUT was rotated through 360 degrees and oriented in 3 orthogonal axes to maximize emissions as required by ANSI C63.4-2003 in Sections 8.3.1.2 and 13.1.4.1, respectively. If it was not, please maximize emissions from this transmitter in this manner and, if no difference in results is noted, please state this was done. If a difference in results is noted, please provide an amended test report. The EUT was rotated 360 degrees with the turntable to maximize emissions. Due to not being a hand-held portable device the EUT was tested in the position that is going to be used most likely in the field, as shown in the photos.

3. For radiated emissions on this transmitter below 30 MHz, please confirm that the loop antenna was rotated about it axes in both horizontal and vertical polarities to maximize emissions as specified in ANSI C63.4-2003 in Section 8.2.1. If it was not, please maximize emissions from this transmitter in this manner and, if no difference in results is noted, please state this was done. If a difference in result is noted, please provide an amended test report. The loop antenna was rotated in both H/V polarities to maximize emissions.

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4. Please describe the signal being emitted by this transmitter during radiated emissions testing. The operational description states it transmits once every 100 milliseconds for only 10 milliseconds, once every 100 milliseconds for approximately 57 milliseconds or once for only 500 milliseconds when commanded to interact with a transponder. These short transmission durations will make maximizing emissions very difficult even if a CW emission is emitted during these time periods. The transmitter was set to operate by the client in a continuous mode during the radiated emissions testing with a CW signal.

5. The radiated emissions test result shown in Figure 5 does not match the level reported in Table 3 of the submitted test report. For example, Figure 5 shows a level of 40.15 dBuV/m but Table 3 shows a level of 0.15 dBuV/m. Please fix this and also the calculations below Table 3 in an amended test report. REPORT CORRECTED.

6. Please provide the resolution bandwidth of the measuring instrument used during the AC line conducted emissions tests. 9 kHz BW and 30 kHz VBW. It's in 2.5 Test Procedure. Also included in 2.11 Power Line Conducted Emissions.

7. Please have the applicant or his agent provide a cover letter describing which of the transmitter variants and antenna types is used in this device. The four transmitter variants and antenna types are listed in the submitted operational description. The OEM module used in the Y Soft product is the Model 3131A iClass OEM 50 and the antenna used is the 3101A as described in the test report. The operational description has been revised to include only the relevant OEM model and antenna.

8. Please have the third party confidentiality request letter submitted by HID Corporation clarified to describe what exhibits they want held confidential. What exhibits are the description of the iCLASS OEM Module, circuit functions, how the device operates, ground system and antenna? If these are all contained in the operational description, have this letter amended to ask for confidentiality of the operational description, the block diagram and the schematics. If other exhibits are involved, they must be identified properly in a confidentiality request letter. CORRECTED CONFIDENTIALITY REQUEST UPLOADED.

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9. For Your Information - The emission limits in Section 15.225 of the FCC Rules for a 13.56 MHz transmitter are more like an emission mask used for licensed transmitters. Each section of the spectrum defined in the rules must meet the specified radiated emission limit. What you have chosen to do is show that the highest emission from this transmit meets the lowest emission level in this mask which is 40.5 not 50.4 dBuV/m @ 30 meters as shown in paragraph c of Section 15.255. Your test results should state what you have chosen to do in a note after the test results in Table 3 of the test report. NOTED – THANK YOU.

10. For Your Information – The FCC test site registration for United States Technology is going to expire in approximately 60 days. Please do not let this registration expire because no grants can be posted when a test site registration has expired for United States Technology. Also check on the IC test site registration for United States Technology. ATCB has had several clients whose IC test site registration has expired without their knowledge. IC does not send a reminder email like the FCC. One client waited 5 weeks for IC to reregister their test site after it has expired. That meant that a grant for IC waited 5 weeks for that lab's client. Please don't let that happen to United States Technology. NOTED: THANK YOU!!

Best Regards,

Sandi McEnery
Manager
(Agent for Y-Soft America's Inc.)

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