













3000 Bristol Circle, Oakville, Ontario, Canada L6H 6G4

Telephone (905) 829-1570 Facsimile (905) 829-8050

Website: www.ultratech-labs.com Email: vhk.ultratech@sympatico.ca Oct. 06,2000

## **Federal Communications Commission**

Attention: Mr. Frank Coperich

Ref.: FCC ID: F3JMX1111

Correspondence Reference Number: 15560

731 Confirmation No.: EA98047

Dear Mr. Coperich,

We finally got all the correction in the User's Manual from the manufacturer per your request. Please the revised manual in the users manual folder.

This concerns your questions and request for the above reference application:

(1) On our EMC test report, the technician (Hung) measured the power as 27 dBm (0.5 W) at lowest channel frequency, 26.6 dBm at the middle channel frequency and 24.8 dBm at the highest channel frequency. In the SAR test, the other technician (Jay) measured the RF power only in the middle channel frequency as 26.5 dBm. The error between 2 technician is only 0.1 dB which is within an acceptable tolerance. In fact, the SAR technician should record the maximum power level of 0.5 Watts since both technicians test on the same radio sample.

The SAR tests were performed with lowest, middle and highest channel frequencies which shall cover all variation of power through out the band.

Remark: As matter of fact, the SAR tests were performed with the original rf output power programmed at 0.65 Watts, but it failed at this power rating.

Therefore, the manufacturer decided to drop the rf output power so that it passed at the smallest margin as shown.

In CDMA and AMPS mode, the average power is dropped down because of the characteristics of modulation.

Maxon has ERP power measured at Hyak Laboratories (Springfield, VA, USA) and the test results provided are as follows:

 Channel Frequency
 ERP Measurements

 824.9750 MHz
 23.31 dBm or 214.3 mW

 836.4951 MHz
 23.37 dBm or 217.3 mW

 848.9940 MHz
 23.23 dB m or 210.4 mW

- (2) Attached in the Test Report folder, please find the SAR test report and data with body tissue for EUT with the body worn carry case. Test was found to comply.
- (3) Please find attached the page #5 of the revised User's Manual with warning for bodyworn SAR compliance applicable to this specific leather case only.
- (4) At this present time, only one battery is available. Therefore, other batteries can not be tested. The manufacturer has removed the other optional batteries from the Revised User's Manual.
- (5) This retractable antenna was tested for SAR before the submission to FCC. But it was found to exceed the SAR limit. The manufacturer decided not to supply this antenna with the EUT. Therefore, it shall be also removed from all advertising literature, users' manual and ant technical description materials.

Best Regards

Tri Luu, P.Eng.
Vice President of Engineering