

Spectrum Technology, Inc.
Reply to TCB Technical Review Findings of Jan. 20, 2004

FCC ID: AZ489FT7008
Date: February 5, 2004

Our reply to your preliminary findings is noted in blue text beneath each Finding.

Specification	Finding
OET 65 Supplement C EAB Part 22/24 SAR Review Reminder Sheet	Q1) Please provide a discussion harmonizing the conducted powers stated in the EMC and SAR report. FCC Requirement: "Conducted power in SAR report should be greater than or equal to what's in EMC report, but not exceeding tune-up/tolerance" The supplemental EMC Report for FCC ID: AZ489FT7008 indicates output power was provided by the Motorola SAR lab on 9/06/03 – 9/08/03 & 10/02/03. The SAR report doesn't contain power measurements that match EMC report. The SAR report has power slump data measured with a thermocouple sensor (fine for relative measurement). The EMC report has average power readings using Gigatronics power meter and sensor (that provide more accurate measurement of modulated signals). The SAR Report should contain similar measurements. <i>R1) Please see the revised Test Report "Exhibit 06 g20 GPRS Supplemental Test Report Rev2.doc", attached with revised conducted power output which harmonized with the SAR report. The HP power meter used to take the power slump data measurements presented in the submitted EME report was set up to measure the applicable modulated signals. The specifications for both the HP power meter and the thermocouple sensor suggest that they both perform power measurements of modulated signals sufficiently. The S.A.R. Assessments were done using the maximum reported power output of the device.</i>
47 CFR 22.913a 47 CFR 24.232b	Q2) "Part 22/24 limits are in terms of ERP and EIRP, as measured using substitution method not calculation...Please submit (Part 22, 24 handsets) radiated power using substitution method." No ERP of fundamental data for GSM (see 47 CFR 22.913a), no EIRP for PCS (see 24.232b). Calculations from conducted data not allowed. Must be radiated measurement using substitution method of TIA / EIA 603 2.2.12. We received a request from the FCC last August: Please see the revised test report reporting the measured ERP and EIRP in accordance with ANSI/TIA 603-B-2002. <i>R2) Please see the revised Test Report "Exhibit 06 g20 GPRS Supplemental Test Report Rev2.doc", attached with substitution ERP & EIRP measurements per ANSI/TIA 603-B-2002.</i>
OET 65 Supplement C EAB Part 22/24 SAR Review Reminder Sheet	Q3) SAR report used 12.5% scaling factor or 1:8 which is typical for GSM. Please confirm 1:8 data only mode rather than the more typical 2:8 or 3:8 for GPRS is accurately representative for this product. <i>R3) Please see the Motorola letter attached "FT7008 Resp to TCB .doc", addressing this issue and confirming 1:8 data only mode.</i>

Please feel free to contact me should you require any further information.

Best Regards,

Rod Munro