



15<sup>th</sup> April 2004

Mr. Andy Leimer  
 Equipment Authorization Branch  
 Federal Communications Commission Laboratory  
 7435 Oakland Mills Road  
 Columbia, MD 21046

Re: Form 731 Confirmation Number: EA841085 with FCC ID: AZ489FT3807.

Dear Mr. Leimer;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to the 6<sup>th</sup> April 2004 request for information in Correspondence Number 26620.

Q1) fyi user manual pg84 (.pdf pg92) says 800mhz antennas are compatible - seems incorrect.

R1) See the attached addendum Accessories Section of the User Manual with the additional antenna information.

Q2) SAR report 4.3 refers to "IEEE Head" which is not applicable for 150 MHz range - in future reports please clarify/revise this.

R2) We are taking your recommendation under consideration for future filings.

Q3) SAR report 4.3 has tissue composition for 300 MHz - what is composition for 150 MHz range?

R3) The table presented below presents simulant tissue composition for 150MHz and 300MHz. The simulant tissue used for both 300MHz and 150MHz meets the target parameters specified in FCC Supplement C.

	Tissue Ingredients (%)			
	300MHz		150MHz	
	Head	Body	Head	Body
Sugar	56.0	47.1	55.4	49.7
DGBE (Glycol)	NA	NA	NA	NA
De ionized -Water	37.5	49.48	38.35	46.2
Salt	5.4	2.32	5.15	2.8
HEC	1	1	1	1
Bact.	0.1	0.1	0.1	0.1

Q4) SAR system check reported expanded uncertainty is 17%. SAR sect. 4.1 has 1g SAR = 2.81 +/- 0.090 for body, and SAR = 2.83 +/- 0.020 for head. How are 0.09 and 0.02 derived, and how are these related to 17% sys. check uncertainty?

R4) Section 4.1 demonstrates compliance to the system verification guidance set forth in APPENDIX D in FCC Supplement C. The system performance results for each body location is compared to the system verification target results normalized to 1 watt as recommended by Supplement C. +/- 0.09 and +/- 0.02 reflect the delta from the presented multi-day median performance for each body location. For example: 2.81 +/- 0.09 represent a system performance range at the body of 2.72-2.90 for the five test days reported and also demonstrates adherence to the allowed 10% tolerance. The 17% expanded system uncertainty budget has no direct significance to the information presented in section 4.1.

Q5) For SAR sect. 5 - in future filings please consider to add sub-numbering here with correspondent row numbers in data matrices of sect. 7.

R5) We are taking your recommendation under consideration for future filings.

Q6) For this and future filings please include purpose and description of SAR shortened scan, including grid spacings for full vs shortened scans, etc.

R6) Part 1 of 2 Section 7.0 of the submitted report explains the purpose of the shortened scan and directs the reader to the DASY cube scan outputs in part 2 of 2 APPENDIX A which includes test parameters of the measured shortened scans for the worst case test configuration at each body location. The representative normal scan information is provided as well.

The shortened scan was previously requested via FCC correspondence 22631, dated 4/16/02, by Martin Perrine, regarding FCC ID: ABZ99FT5000, in order to validate Motorola's reported compliance results that are scaled to the maximum power of the DUT. The following is taken directly from correspondence 22631.

*4) Data to validate the calculation made to account for power drift. Please provide: a plot of conducted power versus time (at least 30 minutes) for each of the batteries, a "shortened " scan SAR measurement that focuses in on the hot spot and makes a measurement in minimal time. A measurement for the highest SAR point for body worn and held-to-face configurations should suffice. For reference purposes please repeat the original measurement to establish that the configuration is the same as previously reported.*

Motorola submitted a response to FCC correspondence 22631 on 4/26/02. The initial grant was issued on 5/3/2002. Please reference the submitted response along with the associated attachment entitled "Shortened scan results" for the format that was accepted. Motorola has subsequently included shortened scan information in the accepted format.

Q7) You applied for Part 80 and Part 90. There does not appear to be any information in the application to support Part 80. The User's Manual does not contain any Part 80 information. Please explain. In addition, the User's Manual should have a Part 80 channel utilization chart.

R7) The data provided in the Exhibit 6 of the in the submission either meets or exceeds the technical requirements for Rule Part 80. Also, see the attached addendum to the User Manual with the Rule Part 80 channel utilization chart.

Please contact me at (954) 723-5793 if you require any additional information.

Sincerely,

**/s/ Mike Ramnath (signed)**

Manager, Regulatory Compliance

Email: [Mike.Ramnath@motorola.com](mailto:Mike.Ramnath@motorola.com)