



Date: 8th July 2004

Diane Poole
 Authorization & Evaluation Division
 Federal Communications Commission Laboratory
 7435 Oakland Mills Road
 Columbia, MD 21046

Re: Form 731 Confirmation Number: **EA854588** with **FCC ID: AZ489FT5829**.

Dear Miss Poole,

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to your 16th June 2004 request for information via correspondence number **26993**.

Q1). Please restate all simultaneous transmission conditions. Discussion on page 5 of 40 of Part 1 of the SAR report was difficult to understand and appears to only mentions 12 second transient situation. Also, does the voice mode mentioned in point 5) refer to both GSM and WLAN voice modes?

Additionally, the Appendix G contains simultaneous SAR for GSM 900 mode and WLAN 5200. Is this a 12 second transient or continuous condition? Are there similar modes for GSM 850 and 1900 and WLAN 2400? Provide SAR results as applicable.

R1). The device is capable of performing transitional "handovers" from either GSM to WLAN or WLAN to GSM transmission modes without dropping a call. These transitional "handover" modes are referred to as "Hand In" and "Hand Out" modes and are described in Table 1 below. Note, that if the radio is in data mode, no handover can be performed from WLAN to GSM modes or vice versa.

The computational assessments for the simultaneous SAR for GSM 900 and WLAN 5200 modes presented in APPENDIX G reflect the 12 second transient condition. There are similar modes for GSM 850, 1900, and WLAN 2400. However, based on the individual assessments of these modes, the worst case was determined to be GSM 900 and WLAN 5200. Appendix G describes in detail the SAR calculation used for this mode.

A summary of the simultaneous transmit modes for this device is presented below in table 1.

Table 1: Description of Simultaneous Transmit Modes

Mode	Description	Duration
Hand-In	GSM voice to WLAN voice transition	12 seconds

Hand-OUT	WLAN voice to GSM voice transition	12 seconds
Simultaneous Transmit (GSM +WLAN)	WLAN can be 2412 – 2472 MHz 802.11b/g) or 5180 – 5320 MHz(802.11a) GSM can be any of the four bands 824.2-848.8 MHz 880.2-914.8 MHz 1710.2-1784.8 MHz 1850.2-1909.8 MHz	For WLAN 14.3% for 11 Mbps (802.11b) 14.3% for 36 Mbps (802.11g) 14.3% for 36 Mbps (802.11a) FOR GSM 1:8 for voice mode

Q2). Can the device be used at the head with the flip cover closed? The device shape on contour plots do not seem to agree with set up photos. If so please provide corresponding SAR results.

R2). The device is not intended to be used at the head with the flip closed. The relevant contour plots presented in the submitted report depicting a device with the flip closed was due to inadvertent selections of the incorrect device contour. The applicable sections of the revised report are attached with the relevant plots corrected.

Q3). Please explain the large increase in SAR seen without an "attachment" on table 10 on page 30 of 40 (1.37 SAR).

R3). Engineering judgment suggest that the loading effect presented by "attachments" redistributes the currents that affect SAR and does so to varying degrees depending on the specific design and layout of the device under test. Historically, Motorola's iDEN products have exhibited this type of performance characteristic with similar attached accessories. The increase in SAR demonstrated during assessments without an "attachment" is a function of the products' inherent performance.

Q4) Please explain details of the 5 GHz scans which are different from conventional plots such as "use of SAR calculator tool", difference in shape of the device.

R4) Although standardized methods of measuring S.A.R. exist for frequencies in the range 300 - 3000 MHz, standard methods have not yet been defined for the 3 - 6 GHz range. Changes to the zoom scan volume and post-processing are needed at this frequency range and these features are not currently available in the DASY3 system used to assess S.A.R. compliance performance of this device. SPEAG no longer supports software update requests and thus Motorola developed a proposed methodology and a "SAR calculator tool" for measuring and calculating S.A.R at these frequencies. As stated in part 1 of 5 section 7.0 of the submitted report, APPENDIX G presents among other details, Motorola's procedure for assessing S.A.R. performance in the 5GHz band and the rationale for the methodology. Please refer to Appendix G (Part 5 of 5 of the submitted

report) for additional details.

If you have any questions, please call me at 954-723-5793.

Sincerely,
/s/ Mike Ramnath (signed)
Manager, Regulatory Compliance
Email: mike.ramnath@motorola.com