MOTOROLA

Date: February 12, 2001.

Mr. Andy Leimer and Mr. Kwok Chan
Authorization & Evaluation Division
Federal Communications Commission Laboratory
7435 Oakland Mills Road
Columbia, MD 21046

Re: Correspondence Number 17711 regarding 731 Confirmation Number EA99152

Gentlemen;

This correspondence is provided in response to the request for information dated January 16, 2001 concerning transmitter with FCC ID: AZ492FT5802.

Q1. The SAR report indicates this device uses a transmitter that operates at 25% duty factor. The OEM transmitter, L6AR902M-2-O, was originally granted without duty factor restriction; please provide the applicable supporting info to qualify for source-based time-averaging.

A1. The OEM transmitter has a newer version of radio code since its original grant. This version of code (2.0.19) restricts the HDT to a maximum transmit duty cycle of 25%. i.e. 1 data burst can only occur for 0.96ms, and then the unit waits at minimum 2.88s (3*0.96ms) before the next transmission. This information was provided by the OEM Product Manager from Research In Motion (RIM)

Q2. Please provide photos for the two holsters described in the SAR report. SAR was tested with the front of the device facing the user's body, placed in one of the holsters (FLN9623A). Please indicate on the photos or with separate illustrations that the device, by design, can only be inserted into these two holsters with its front facing the user. Otherwise, test in the other configurations would be needed.

A2. Two photos are submitted at this time and both photos indicate that the HDT will only fit in the holster with the keypad facing the user.

Photo 1 illustrates a side view of the HDT515 with Holster FLN9623A.

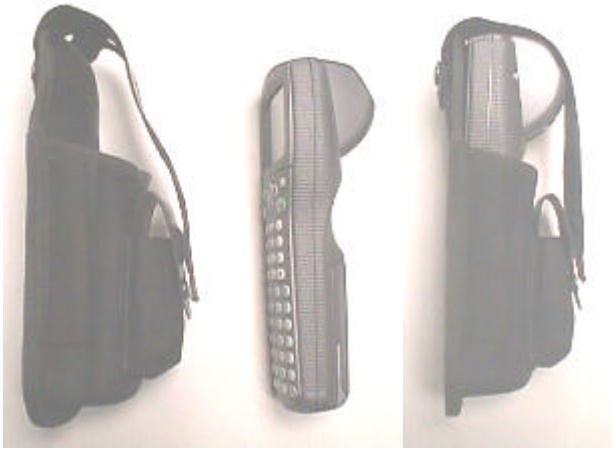

Photo 2 illustrates a side view of the HDT515 with Holster FLN9202A.

Q3. The SAR repot describes holster FLN9202A has an additional strap with three metallic buttons on it but the other holster (FLN9623A) has been used for the SAR tests. Please verify that the metallic buttons on the holster that has not been tested do not affect the SAR results measured using FLN9623A and the two holsters are otherwise the same. If not, additional SAR tests may be needed.

A3. Holsters FLN9202A and FLN9623A were both tested as indicated in the SAR report, Revision A, Dec. 12, 2000 (refer to section 5.0). However, only the holster that caused the highest measured SAR was reported. Refer to A5 for data comparison.

Q4. FYI - The dielectric constant used in the SAR tests is lower than those usually used at this frequency, please use appropriate parameters for future filings. Since it is not expected to result in non-compliance issues, additional tests are not requested.

A4. No response is required.

Q5. The device was tested for SAR at 120 mW conducted output. The original filing for the OEM transmitter is rated at 2.0 W. The output used in the SAR tests corresponds to a duty factor of 6%, which is substantially lower than the 25% duty factor indicated in the SAR report. Please repeat all applicable SAR tests using the actual duty factor and signal timing sequences applicable for this device or at least repeat a subset of the tests to demonstrate that SAR scaling is appropriate for this device.

A5. Hardware and software modified to provide sustained transmission in the native signaling mode, 25% maximum duty cycle, was not available at the time of test. An acceptable alternative was to test at 500mW CW, which is equivalent to 2W maximum output power at a 25% maximum duty cycle. The data below was measured with the HDT515 operating at 500mW in CW mode and demonstrates that the Power**:** SAR scaling is appropriate for this device. Scaling was calculated in section 7.2 of the SAR report.

Holster	Power	SAR measured	SAR maximum calculated
FLN9623A	0.120W	0.03 mW/g	0.13 mW/g
FLN9623A	0.500W	0.14 mW/g	0.14 mW/g
FLN9202A	0.500W	0.13 mW/g	0.13 mW/g

Q6. FYI - The SAR report has indicated this device has been tested with respect to occupational exposure limit. Please be aware that if the device complies with general population exposure limit, there is no need to use a more relaxed limit that could require additional operating restrictions.

A6. At this time Motorola would like to exercise the opportunity to revise the exposure limit for this device to “General Population at 1.6 mW/g”. A revised SAR report (revision B) to reflect this change is submitted at this time.

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

Regards,
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