ROGERS LABS, INC.

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June 6, 2006

Timco Engineering Inc. 849 NW State Road 45 Newberry, FL 32669

Applicant: Lectrosonics, Inc. 581 Laser Road Rio Rancho, NM 87124

Job Number	531UC6
Equipment:	FCC ID: DBZSMQ
FCC Rules:	Part 2 and 74

Gentlemen:

Copy of requested information

Correspondence Reference Number:	30979
731 Confirmation Number:	EA425912

1) The device has 16 frequency blocks and the User's Manual indicates that the blocks of operation are stamped on the device. This implies that there are multiple devices to cover all frequencies applied for in the application. All variations of a device must be electrically identical to have one FCC ID. Please explain.

2) Application has listed frequencies:

537.6 - 608

614 - 793.5

944.1 - 951.9

Per operating instructions exhibit, it appears this device actually operates only in further subdivided transmit bands:

537.6 563.1	691.2 716.7
563.2 588.7	716.8 742.3
588.8 607.9 and 614.1-614.3	742.4 767.9
614.4 639.9	768 793.5
640 665.5	944.1 951.9
665.6 691.1	

If not in filing already, please explain rationale for testing SAR only at 947 MHz and 742, 755, 768 MHz.

## Response:

The device is manufactured in frequency blocks, which are electrically identical in every way except in the selection of certain passive component "trim" values in tuned circuits. In this way, the units are built on exactly the same printed circuit boards, using the same schematic, and are tuned for the subband they are intended to cover as marked on the housing. Although variable trimmers could be used to tune a unit to any sub band, fixed trim values are used instead of variable trimmers to improve stability and long-term reliability. The range of the trim values is very small.

Since the units are all ordered and sold using the same model number, it makes sense to have a single FCC ID, and to test representative samples of the full range - the low, mid, and high blocks. We have received approval for more than 50 similar transmitters in the past using this approach, with the "variation" between blocks being no different from that traditionally achieved using variable capacitors and inductors. There has never been a problem in practice since all devices are fully tested during manufacture to ensure compliance with part 74 requirements. In addition, not all of the possible frequency blocks are actually produced since some fall into spectrum for which there is no Part 74 usage. Currently, only blocks 21-29 and 37 are available.

Per 47 CFR 1.1307(b) it appears that Part 74 Subpart H devices (under which this device falls) are "categorically excluded" from routine environmental evaluation since they are not listed in table 1 in that paragraph nor called out in 1.1307(b)(2).

Response about SAR testing from Cell tech labs.

Our e-field probe is calibrated by the probe manufacturer with 900MHz conversion factors. Conversion factors for 750MHz are numerically assessed also by the probe manufacturer. In this case, we were able to perform SAR evaluations for the 944.1-951.9 MHz and 742.4-793.5 MHz frequency bands respectively, with having 900MHz and 835MHz dipoles. It appears however, that Block 30 (768.0-793.5 MHz) was inadvertently excluded in the SAR evaluation process, being within the parameters of our measurement equipment. We do not have a dipole constructed or calibrated to perform system performance checks for the 537.6-607.9 MHz and 614.1-742.3 MHz frequency bands. Our numerically assessed 450MHz probe conversion factors have a maximum frequency validity of +/- 50MHz as stipulated by the probe manufacturer and therefore we were unable to conduct a system performance check using our 450MHz dipole for the 537.6-607.9 MHz and 614.1-742.3 MHz frequency bands. For Block 37 we tested 947MHz. The operating frequency in this band is 944.1-951.9 MHz, which is less than 10 MHz. Therefore only mid channel was required to be tested based on FCC OET 65, Supplement C. Ultimately, based on the SAR evaluation results provided in the filing, the measured SAR levels were worst-case for the 900MHz frequency band, and it is our engineering judgment based on the SAR results that SAR levels evaluated for the 500/600/700MHz bands would be lower than the 900 band.

Should you require any further information, please contact the undersigned. Thank you for your consideration in this matter. Sincerely,

Scot DRogers

Scot Rogers Rogers Labs, Inc. Enclosures