# ROGERS LABS, INC.

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June 3, 2008

Federal Communications Commission
Equipment Approval Services
P.O. Box 35815
Pittsburgh, PA 15251-3315

Correspondence Reference Number 35492

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

Equipment: FCC ID: DBZUM450E
FCC Rules: Part 2 and 74

Copy of requested information:
Based upon our review of this application we have the following questions:

1) The test report and Form-731 has 470.1 MHz as low freq. - however user manual shows 471.1 MHz as low freq.; please explain and/or revise filing where appropriate.
2) Please explain specific frequency sub-range versions requested under this FCC ID and specific electrical / hardware differences between each.

Response

1) The submitted owner manual contained a type error in the frequency tables. These errors have been corrected. Please replace the submitted manual with the revised attached manual as the equipment functions over the frequency range as reported in the test report and 731 form of 470.1-537.5 MHz.
2) Functionally, there is no difference between units in any given group (Block number). All of the functional parameters such as power output, occupied bandwidth, spectral purity, etc. are identical for all, no matter what the operating frequency. All products are comprehensively tested before shipment to guarantee that units operating in different frequency "blocks" (each 25.6 MHz wide) are indistinguishable. Structurally, only small differences in the values of a few "select" components are found between units within a particular group (Block number). In the case of the application of interest, the matrix of select part values appears as the shown in the table below. Values for capacitors in pF, inductors in nHy, and for the ceramic resonators MHz (related to frequency range of the block). These "select" part values are always defined in a table found in the schematic for the product. As demonstrated the overall range of adjustment within any group (Block number) is less than 2:1, well within the range of adjustment traditionally accomplished by use of trimmer capacitors and variable (slug tuned) inductors. Of course, the

purpose is the same - to center the tuned circuits on the block (sub-band) of interest. It is the use of the fixed value parts in these locations eliminates the problems associated with traditional variable components when subjected to vibration, thermal cycling, aging, etc. Otherwise, the units are identical in design and construction. All units are built from the same schematic on the same printed circuit board with all other circuit components the same.

| | | C1 | C15 | C2 | C5 | C6 | C10 | C12 | C13 | C17 | L9 | L4 | L2 | L3 | L1 | L6 | L17 | C28 | ISOL | PESI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UM450E | BK479 | 7 | 5 | 2.7 | 10 | 4.7 | .8 | 1.6 | 7 | 33 | 68 | 82 | 15 | 15 | 18 | 15 | 100 | 3 | SXI479 | SYC550 |
| | BK19 | 6 | 5 | 2.4 | 8.2 | 7 | .8 | 3 | 8.2 | 22 | 68 | 82 | 15 | 15 | 18 | 15 | 100 | 3 | SXI499 | SYC570 |
| | BK20 | 5 | 5 | 2.4 | 8.2 | 3.3 | .7 | 1.5 | 8.2 | 15 | 56 | 82 | 15 | 15 | 18 | 15 | 100 | 3 | SXI525 | SYC600 |

Should you require any further information, please contact the undersigned.

Thank you for your consideration in this matter.

Sincerely,

Scot D Rogers

Scot Rogers
Rogers Labs, Inc.
Enclosures