# ROGERS LABS, INC.

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August 17, 2001

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

Applicant: Genex Electronics Co. LTD
3263 HA-AHN Industrial Zone
201 HA-AHN 3-Dong
Kwang Myung-City 423-754 Korea

RE: Correspondence Reference Number: 20262

Equipment: FCC ID: PM3 FRS 300

Gentlemen:

Please find enclosed the response to request for additional information regarding the submittal for grant of certification of this FRS unit.

A copy of the information request has been reproduced here for reference.

To: Scot Rogers, Rogers Labs, Inc
From: Diane Poole
dpoole@fcc.gov
FCC Application Processing Branch

Re: FCC ID PM3FRS300
Applicant: Genex Electronics Co. LTD
Correspondence Reference Number: 20262
731 Confirmation Number: EA100934

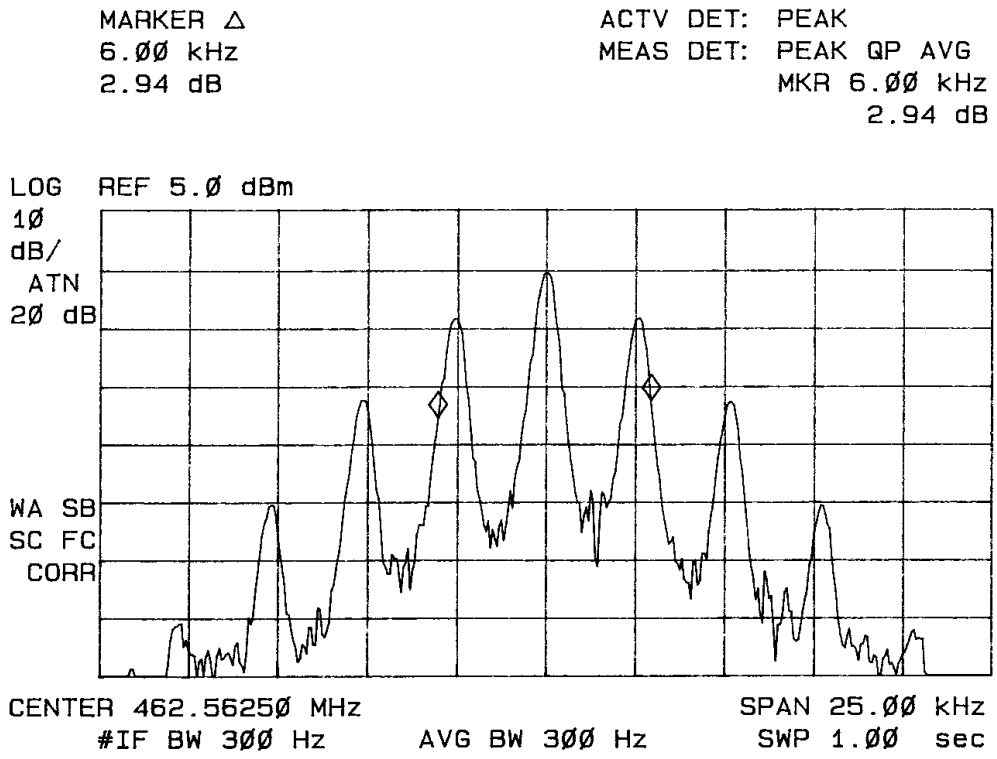
1. The ERP power for this device is .4 Watts (not .5 Watts as on technical spec).
2. Please retest the occupied bandwidth with span 5kHz/div.
3. Submit Radiated spurious Emission data using substitution method.

## *RESPONSE*

The EPR Power was measured using the following technique.

1. The EUT was placed on a turntable, located on the OATS, at a distance of three meters from the receiving antenna. The unit was powered on and transmitted a signal. This radiated signal strength was maximized and the amplitude level, as read from the spectrum analyzer, was recorded as 104.7 dBµV. The unit was removed from the turntable and replaced with a ½ wave dipole antenna (tuned to 460 MHz). A signal generator with amplifier and coaxial cable was used to energize the antenna. The amplitude was increased at the signal generator until the measured field strength read the same amplitude as that recorded for the EUT (104.7 dBµV). The energy required to produce the measured field strength was then recorded as 27.0 dBm.

2. The occupied bandwidth has been retaken with an audio input signal of 2500 Hz and is shown below. This measurement was made using indirect coupling of the output. There is no correlation of power shown on this plot.



3. The radiated spurious emissions data has been taken using the substitution method. Please note TIA/EIA-603 directs the radiated spurious emissions are emissions from the equipment when transmitting into a non-radiating load. The antenna system of the EUT is attached and cannot be replaced with a non-radiating load. Therefore, the spurious emissions data was taken with the EUT transmitting into the attached antenna. A ½ wave dipole antenna was used for the substitution antenna in the following data.

Channel 467.7125 MHz

| Frequency (MHz) | FSM EUT Horz. (dBµV) | Sub. Gen. Level (dBµV) | FSM Vert. (dBµV) | Sub. Gen. Level (dBµV) | Horizontal (dBc) | Vertical (dBc) |
|---|---|---|---|---|---|---|
| 467.7 | 89.8 | 119.0 | 104.7 | 134.0 | - | - |
| 935.4 | 35.1 | 65.7 | 41.0 | 80.8 | 53.3 | 53.2 |

A log periodic antenna was used for the substitution antenna for the following data.

| Frequency (MHz) | FSM EUT Horz. (dBµV) | Sub. Gen. Level (dBµV) | FSM Vert. (dBµV) | Sub. Gen. Level (dBµV) | Horizontal (dBc) | Vertical (dBc) |
|---|---|---|---|---|---|---|
| 1403.1 | 40.5 | 67.8 | 43.6 | 70.1 | 51.2 | 63.9 |
| 1870.9 | 39.3 | 69.0 | 40.3 | 70.5 | 50.0 | 63.5 |

We would greatly appreciate your prompt attention in this submittal. 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