

May 7, 2001

Mr. Andy Leimer
Federal Communications Commission
Application Processing Branch
7435 Oakland Mills Road
Columbia, Maryland 21046

Re: Question from the FCC

FCC ID: O2SNURIT3010R
Correspondence Reference Number: 19073
731 Confirmation Number EA100123
Date of Original E-Mail: May 4, 2001

Dear Mr. Leimer:

Pursuant to your e-mail to Mr. John Carpino, Lipman USA, Inc., I am forwarding to you our responses to item 1. The relevant portions of the FCC's e-mail follow with our response inserted in the appropriate place:

-----Original Message-----
From: OET (<mailto:meteo.oetech@fccsun07w.fcc.gov>)
Sent: Friday, May 04, 2001 9:01 AM
To: jcarpino@lipmanusa.com
Subject: Spurious RE Measurements
To: John Carpino, Lipman USA, Inc.
From: Andy Leimer
aleimer@fcc.gov
FCC Application Processing Branch
Re: FCC ID O2SNURIT3010R
Applicant: Lipman USA, Inc
Correspondence Reference Number: 19073
731 Confirmation Number: EA100123

1) It appears that the spurious RE measurements were not done using the substitution method. Repeat the measurements using the substitution method using a procedure similar to that described in the ERP measurement portion of the Test Report. The substitution method measurements are described in the document TIA/EIA - 603 Section 2.2.12.

Response:

The NURIT 3010 was re-tested for spurious RE measurement using the substitution method using a procedure similar to that used in the ERP measurement and described in

the ERP measurement portion of the Test Report. A set of three reference dipoles, a horn antenna and a signal generator to duplicate the signal were used. Signals radiated from the NURIT 3010 on the fundamental frequency as well as second and third harmonic were evaluated by comparing to the signals transmitted from the reference dipoles. The antenna used for the first three harmonics were a set of three dipoles, $l = 17.9$ cm (first harmonic/fundamental), $l = 9.0$ cm (second harmonic), and $l = 6.0$ cm (third harmonic). For testing the higher frequencies, fourth and fifth harmonics, a horn antenna (gain) was used as replacement source of radiation thus substituting the NURIT 3010. The duplicated reading was then referenced to the dipole. Finally, the duplicated readings were converted to dB μ V/m.

The data after the re-test is presented in the following two tables:

Test Data using Substitution Method

Vertical polarization

f	ERP _v	E _v @3m	Limit	Margin
MHz	dBm	dB μ V/m	dB μ V/m	dB
1798.00	-29.2	68.2	78.3	10.1
2697.00	-27.2	70.1	78.3	8.2
3596.00	-42.3	55.1	78.3	23.2
4495.00	Noise Floor	Noise Floor	78.3	31.4

Horizontal polarization

f	ERP _v	E _v @3m	Limit	Margin
MHz	dBm	dB μ V/m	dB μ V/m	dB
1798.00	-61.4	35.9	78.3	42.4
2697.00	Noise Floor	Noise Floor	78.3	38.5
3596.00	Noise Floor	Noise Floor	78.3	32.2
4495.00	Noise Floor	Noise Floor	78.3	31.7

I trust that the above will answer your inquiry. If not, please feel free to contact me.

Regards,

Jayanta (Jay) K.Sarkar
 Director Technical Director, Standards and Certification