Chris Harvey
From: Chris Harvey
Sent: Wednesday, April 18, 2001 9:02 AM
To: 'Alice Wong'; TCB INFO
Cc: Chris Harvey; Marianne Bosley; Greg Czumak; EED - Choy, Kitty
Subject: RE: MGA Entertainment FCC ID:LU9243632 Request for Technical MET#10810

Alice,

I did not receive a response to my question number 6 about the schematics. Please provide a clearer/legible schematic diagram.

Your description of the antenna manipulation did not include any indication that the antenna is rotated throughout the vertical axis as well as the polarity. Please reference ANSI C63.4:1992 for this procedure and ensure that you have manipulated the antenna correctly.

Also, please note that since this device is also a digital device, is class B and does not connect to a computer, it is required to comply with the Class B Verification Technical and Administrative requirements. Please be sure that you are providing your customer with guidance on the requirements of FCC Rule Parts 15.21 and 15.105 for information required in the Users Manual. You do not need to provide this information to MET since I am not reviewing the application for Digital Device Compliance, and that they are provided with documentation about the Compliance with the Technical requirements (i.e. radiated limits 30MHz to 1GHz).

As soon as I can review the new schematics, this application can be granted.

Best regards,

Chris Harvey

Chris Harvey
EMC Lab Director
MET Laboratories, Inc.
1-800-638-6057
charvey@metlabs.com
www.metlabs.com

-----Original Message-----
From: Alice Wong [SMTP:alice_wong@hkstc.com]
Sent: Wednesday, April 18, 2001 5:35 AM
To: tcbinfo@metlabs.com
Cc: charvey@metlabs.com; mbosley@metlabs.com; Greg Czumak; EED - Choy, Kitty
Subject: Re: MGA Entertainment FCC ID:LU9243632 Request for Technical

Dear Chris,

Thank you for your e-mail.

FCC ID: LU9243632
MGA Entertainment (HK) Ltd.

1) Active loop antenna is used model: 6502
s/n: 1189-2424, Manufacturer: EMCO.

Preview test are performed to determine the "worse case" mode of operation,
with the EUT operating in worst case, emissions from the unit are maximized

by adjusting the polarization and height of the receive antenna and rotating
the EUT on the turntable. Manipulating the system cable also maximizes EUT
emission.

2) For the section 12.219, frequency range of measurement is between 0.1MHz
and 30MHz. ***[Chris Harvey]*** I will assume that this was supposed to be 15.219.

3) The EUT antenna is 2 meter long signal wire cable (D#1mm) connect to PCB
and 0.9 meter long signal wire cable connect to ground.

4) & 5) Please see attached file for revised user manual.

6) The EUT is a digital device and compliance FCC CFR 47 15.109, However no
emissions detected within 20dB of the FCC limits, so no indicate the test
result on the report.

7) The EUT is operated by internal battery power only, therefore power line
conducted emissions was deemed unnecessary and need customer correct the
users manual.

Have a nice day

Best Regards
Alice

----- Original Message -----
From: "Ms. Shirley Tsang" <shirley_tsang@hkstc.com>
To: "Alice Wong" <alice_wong@hkstc.com>
Sent: Tuesday, April 17, 2001 8:57 AM
Subject: Fw: MGA Entertainment FCC ID:LU9243632 Request for Technical

>
> ----- Original Message -----
> From: TCB INFO <tcbinfo@metlabs.com>
> To: <Alice_wong@hkstc.com>
> Cc: <kitty_choy@hkstc.com>; Marianne Bosley <MBosley@metlabs.com>; Greg
> Czumak <GCzumak@metlabs.com>
> Sent: 2001/mm/17 01:26
> Subject: MGA Entertainment FCC ID:LU9243632 Request for Technical
>
>
> > Alice, I have reviewed the MGA Entertainment Application for FCC ID
> > LU9243632 (MET#10810) and have discovered the following items that need
to
> > be cleared before the application can be granted:
> >

> > 1) the Antennas for measurement do not include antennas that can measure
> > Radiated signals below 25MHz. Please indicate the antenna used for
> > measurement and an indication if this antenna is a loop or Rod antenna per
> > FCC requirements. Also, please provide the antenna manipulation procedure
> > below 30MHz.
> >
> > 2) Please provide the frequency range of measurements per 15.33 (range
> > specified does not seem correct).
> >
> > 3) The EUT Antenna is specified as 2 meters in the report and 2cm per the
> > circ description document. Please clarify.
> >
> > 4) FCC 15.203 requires that devices that operate under FCC 15.219 are
> > provided with guidance to the user about the use of the proper antenna for
> > compliance. THere apperas to be no such guidance in the users manual.
> > Please correct this discrepancy.
> >
> > 5) The setup photo shows the EUT antenna as being laid across the
> > measurement table, however the Users Manual indicates that the antenna
> > should be hung upright to provide the "brightest" signal. Please correct
> > this discrepancy.
> >
> > 6) Please provide clearer schematic Diagrams. The Schematics provided are
> > not legible and raise some questions. It appears as though this device
> may
> > also be a Digital Device (can not determine due to unclear schematics)
> which
> > may require compliance with FCC Subpart B for a Digital Device Class B
> > Verification.
> >
> > 7) Please clarify the Power to the EUT. If this allows provisions for AC
> > connection or an AC/DC adaptor, then measurements for Conducted Emissions
> > per FCC 15.207 are required.
> >
> > Best regards,
> >
> > Chris Harvey
> > tcbinfo@metlabs.com << File: Manual.pdf >>