

----- Original Message -----

From: Jack Tsai <jack@trclab.com.tw>
To: Mike Kuo <MikeKuo@CCSEMC.com>
Sent: Wednesday, December 12, 2001 8:52 AM
Subject: Fw: UAT Inc., FCC ID:PGCWL-2111, AN01T1427

> Re-sending!

>

>

> ----- Original Message -----

> From: Jack Tsai <jack@trclab.com.tw>
> To: Mike Kuo <MikeKuo@CCSEMC.com>
> Sent: Friday, December 07, 2001 10:03 AM
> Subject: Re: UAT Inc., FCC ID:PGCWL-2111, AN01T1427

>

>

> > Dear Mike,

> >

> > 1. Sure, the -14.93 dBm is conducted power on grant.

> > 2. Re-MPE calculation, see attachment.

> >

> > Best regards,

> >

> > Jack Tsai

> > ----- Original Message -----

> > From: Mike Kuo <MikeKuo@CCSEMC.com>
> > To: 'Jack Tsai' <jack@trclab.com.tw>
> > Sent: Friday, December 07, 2001 10:19 AM
> > Subject: RE: UAT Inc., FCC ID:PGCWL-2111, AN01T1427

> >

> >

> > > Dear Jack:

> > >

> > > Let us take a look the antenna conducted output power again.

> > >

> > > In the page 23 of test report, the max. radiated emission field strength

> > > is

> > > 84.30dBuV/m. To calculate the Antenna conducted output power, you used

> > > G=1

> > > and came out with 0.081mW as the antenna conducted output power.

> > >

> > > In the MPE calculation, you used 0.081mW as the max. conducted output

> > > power

> > > with the antenna gain of 4dBi to calculate the separation distance.

> > >

> > > My questions to you are :

> > >

> > > 1. The max. radiated emission field strength was measured with integral

> > > antenna of 4dBi gain. You should use 4dBi (2.512) to calculate the

> > > antenna

> > > conducted output power. The antenna conducted output power with
4dBi
> > > antenna gain is 3.2144E-05W or -14.93dBm. Since the Grant will
only
> list
> > > the antenna conducted output power, please confirm this number.
> > >
> > > 2. Based upon the max. conducted output power of -14.93dBm, you
need
to
> > redo
> > > the MPE calculation. Please provide it.
> > >
> > > Best Regards
> > >
> > > Mike Kuo / TCB Certifier

Dear Mike,

In responded to your question.

Q4: New product specification.
Q5: Re-do peak radiation emission.

See attachment!

Best regards,

Jack Tsai:

Dear Mike,

In response to your e-mial for Q3.

The attachment is re-do radiation emission. And detector mode of mesurement is QP and averager(above 1GHz).

Best regards,

Jack Tsai
Training Research Co., Ltd.
jack@trclab.com.tw

From: [Mike Kuo](#)
To: '[julian trc](#)'
Sent: Tuesday, October 16, 2001 6:50 AM
Subject: RE: FCC ID Application for AN01T1427(FCC ID:PGCWL-2111)

Dear Julian :

Answer to Question 1 and 2 are O.K.. This device will be certifier as DTS.

Your answer to question #3 can not be accepted. To measure spurious emission is a well established guideline for years, engineering justification on alternate measurement procedures can not be accepted. Please provide additional test data to comply the questions #3:

Question #3: Spurious Emission :There are two ways of measurement to comply with 15.247 (c) requirements. If antenna conducted method is used, the RBW shall be 100kHz and VBW > RBW, scan up to 10th harmonics. All harmonic / spurious emissions must be 20dB down of highest emission level measured with 100kHz RBW. Or if radiated measurement is used, the RBW =1MHz , VBW =10Hz. All harmonic / Spurious emission must comply with 15.209 requirements. In the page 28 of test report, RBW=VBW=3MHz was used during Radiated measurement. With this type of settings, it does not comply with measurement setup. In addition, there is no instrument setting information given for data presented in Section 5.5 of test report. Please redo the spurious emission measurement.

Best Regards

Mike Kuo / TCB Certifier

From: julian_trc [mailto:julian@trclab.com.tw]
Sent: Wednesday, October 15, 2008 12:29 AM
To: mikekuo@ccsemc.com
Subject: FCC ID Application for AN01T1427(FCC ID:PGCWL-2111)

Dear Mike,

for Question #1:Please provide Processing Gain Test Data, Jack gave me a pdf file and attach in this mail for the answer Question #1.

About Question #2:Output power:Radiated.....in the page 52 of test report is 4 dBi but 0 dBi antenna gain was used for calculation. Please explain. I attach the pdf file (filename Mpe) that is my colleagues answer and the item antenna should belong to EUT.

Question#3:Spurious Emission:In my opinion that reducing the resolution Bandwidth will reduce the noise floor and the measurement result is 2nd harmonic attenuation have been more than 20dB. the Spurious emission measurement come after in the chapter 5.5.

These are my answers. I hope they would not bother you a lot.

Question #1: Please provide Process Gain Test Data.

Question #2: Output power : Radiated measurement was used to measure output power. Since the conducted output power will be listed on the grant. The radiated measurement must be properly calculated using the antenna gain. On page 23 of test report, such calculated was made. However, the antenna gain as indicated in the 52 of test report is 4dBi but 0dBi antenna gain was used for calculation. Please explain.

Question #3: Spurious Emission : There are two ways of measurement to comply with 15.247 (c) requirements. If antenna conducted method is used, the RBW shall be 100kHz and VBW > RBW, scan up to 10th harmonics. All harmonic / spurious emissions must be 20dB down of highest emission level measured with 100kHz RBW. Or if radiated measurement is used, the RBW =1MHz , VBW =10Hz. All harmonic / Spurious emission must comply with 15.209 requirements.

In the page 28 of test report, RBW=VBW=3MHz was used during Radiated measurement. With this type of settings, it does not comply with measurement setup. In addition, there is no instrument setting information given for data presented in Section 5.5 of test report. Please redo the spurious emission measurement.

Question #4: Please provide Product specification which includes the design output power to verify the calculated antenna conducted output power which is -14.93dBm. (Radiated field strength 84.3dBuV/m @ 3 meter with 4dBi antenna Gain).

Question #5: In the redo-radiated emission file that you submitted, for above 1GHz measurement, you indicated Detector Mode: Average. I am assuming that the data reported for above 1 GHz are average readings. When you are using Average Readings to comply with 15.209 requirements, the peak limits also applied. Please provide the peak readings as well.

Best Regards

Mike Kuo / TCB Certifier

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.