

Subject: Re: QBODVM192
Date: Tue, 14 May 2002 00:26:55 -0700
From: Dennis Ward <dennis@yosemite.net>
Organization: dt Associates
To: yitoh@a-pex.co.jp

Hi Yukari

My appologies. Thanks for the update. I will be looking for the your updates.

However, please be aware that on page 18 that the 150.45Mhz vertical reading is a corrected 33.8 dB, however, 635 MHz vertical is 35.9 and 847MHz vertical is 37dB. These are failing readings because the verrtical spurious emissions are greater than the vertical fundamental reading..

What must be remembered is that the FCC says that, NO spurious reading can be higher than any fundamental reading when using the same detector. It is not only the highest fundamental reading that cannot be exceeded, it is that no spurious reading can be higher than the fundamental including the lowest fundamental reading. This means in the vertical polarity, no other vertical reading of any spurious emission can be higher than any of the vertical fundamental readings. The same goes for horizontal. The report has several instances where spurious emissions exceed the fundamental being measured. This constitutes an automatic failure of the device.

Again. please note that on page 38 of the report vertical fundamental of 222MHz reads 28.2dB and the 889MHz spurious emissions read 29.5 dB. Also, for horizontal 222 MHz reads 31.9 and 50MHz reads. This is a failure because an unwanted emission is higher than the fundamental.

If you wish to try to justify the readings that are above the fundamental then an explanation within the test of the report must be provided. You must explain how you have determined that the unwanted emissions are not a harmonic nor a spuious emission produced by an intermod or other product of the intentional radiator. You must explain, in the text of the report what steps you took to verify these statemtents and yo must give some engineering evidence that the failing readings are not related in any way shape or form to the fundamental operating frequency. For example, the failing 50 MHz reading could be a by product of the 150MHz fundamental or it could be a byproduct of the 150MHz and the 3.5MHz crystal (appears to be 3.5Mhz) in the modem. The 889.9MHz could very possibly be a by product or even the fourth harmonic of the 222.45 MHz fundamental. What steps did you take, what measurements did you make and what evidence do you have to support that these are in fact not realated to the either of the fundamental frequencies?

All of these items and all of these apparent failing readings must be addressed before it can be said that this device is not failing because of the unwanted emissions exceeding the fundamental. The easiest way however, is to provide passing test data rather than a lengthy engineering analyzis of why these unwanted emissions are not fundamental realated issues.

Hope this helps.

Thanks
Dennis
dward@americantcb.com

yitoh@a-pex.co.jp wrote:

> Dear Dennis,
>
> Thank you for your follow-up e-mail for the above application.
>
> First of all, please send e-mail regarding QBODVM192 attention to me, not
> our Ms. Kanako Sanda. I am in charge of this project.
> Thank you for your understanding.
>
> Secondly, as I informed you by my e-mail of May 8, 2002, I already uploaded
> our first reply to your comments on May 8 2002.
> We are now waiting for your comments to the reply. Did you check it
> already?
>
> Please let us know your opinion about our reply.
>
> Best regards,
>
> Yukari Ito
> A-Pex International Co., Ltd.
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>
> > Hello Mr. Imamura
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> > Last week I sent a request for information on the above ID. I also
>
> informed you that
>
> > the device as it stands now is not compliant with the FCC rules. This is
>
> a follow up
>
> > email to see if you have made any progress on getting this device
>
> compliant and
>
> > obtainin the information requested.
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> >
>
> > thanks
>
> > Dennis
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> > dward@americantcb.com
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>
> > Dennis Ward wrote:
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>

> > > > Hello Mr. Imamura
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> > > > I hate to be the bearer of bad news, but the above application fails
>
> and
>
> > > > cannot be granted. I have attached the explanation for your review.
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> > > > Basically speaking, CFR47 Part 15.209 states that absolutely no
>
> unwanted
>
> > > > spuriour emission may exceed or be higher than the fundamental. On
>
> > > > pages 18, 37, 38 and 39 of your report there are a number of spurious
>
> > > > emissions that exceed the fundamental. This measn the device is not
>
> > > > compliant with the rules and will have to be fixed and retested. I
>
> have
>
> > > > another question about the 'set' of station and mobile modems as they
>
> > > > are sold.
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> > > > When you have addressed these issues, please upload the corrections
>
> and
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> > > > I will proceed with teh review.
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>
> > > > thanks
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> > > > Dennis Ward
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> > > > dward@americantcb.com
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> > > > Name: 5-7-02 QBODVM192 rqst
>
> for info.PDF
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> > > > 5-7-02 QBODVM192 rqst for info.PDF Type: Acrobat
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> (application/pdf)
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> > > > Encoding: base64

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