

## Chris Harvey

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**From:** SS <ssliou@etc.org.tw>  
**Sent:** Friday, March 25, 2011 7:44 AM  
**To:** Chris Harvey  
**Cc:** 'cindy'; Charvey-tcb@ccsemc.com; Lucy Tsai  
**Subject:** --Unscanned-- Re: --Unscanned-- Re: TOA Corporation, Certification No.: 1599B-WM5225, Assessment NO.: AN11I3681, Notice#1  
**Attachments:** Exhibit-D-Test Report Cover Sheet\_rev.pdf; Exhibit-F-Test Report\_rev2.pdf; Exhibit-O-Tune\_Up Procedure\_rev.pdf  
**Importance:** High

Dear Chris,

For 1599B-WM5225, there are some revised documents attached. The questions are almost the same with 1599B-WM5265 so I send you the same relating documents. Please kindly have a review soon. Thank you very much!!

Best regards,



S. S. Liou  
Section Manager  
EMC Testing Dept. II  
Electronics Testing Center, Taiwan  
Tel: +886-2-26023052 ext. 20  
Email: [ssliou@etc.org.tw](mailto:ssliou@etc.org.tw)  
URL: <http://www.etc.org.tw>

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

**From:** [SS](#)  
**To:** [Chris Harvey](#) ; ['cindy'](#) ; [Charvey-tcb@ccsemc.com](mailto:Charvey-tcb@ccsemc.com)  
**Cc:** [William Graff](#)  
**Sent:** Tuesday, February 22, 2011 9:08 AM  
**Subject:** Re: --Unscanned-- Re: TOA Corporation, Certification No.: 1599B-WM5225, Assessment NO.: AN11I3681, Notice#1

Dear Chris,

1. Please provide a table of the 64 assigned frequencies compared to the rotary switch positions. The Manual has a table of frequencies that does not seem to match the available frequencies in this application (576-606MHz and 614-698MHz).

A: The frequency table depends on customer required marketing region to assign and the band will comply with regulation requirement. For USA and Canada only frequency bands 576-606MHz and 614-698MHz are available.

2. The RF Power Measurement procedure for fundamental emission and spurious describes the use of the substitution Method of measurement as required by the FCC, but the test equipment list and the test setup diagrams do not show the use of the substitution antenna in place of the EUT.

A: The test equipment list was revised. A note about the substitution antenna configuration was added to the test setup diagrams. Please refer to the revised test report.

3. The Occupied Bandwidth plots have been measured using a 10kHz RBW, but the BW used should be as close as possible to 1% of the emission Bandwidth (likely to be 2kHz for this device.)

A: The occupied bandwidth plots were updated with 3kHz RBW. Please refer to the revised test report.

4. Please provide the Tune-Up Procedure and Schematic Diagram exhibits for this device as required by FCC 2.1033.

A: Provided as attached.

Note: Components are changed depending on the frequency band selected according to country regulations. For USA and Canada only frequency bands 576-606MHz and 614-698MHz are available.

5. The online application form listed the power of the 576 – 606 MHz band as 0.8912 W but I will correct to **0.0089W**.

A: OK. Thank you for your help.

In addition, the user manual and ID label were also revised. Please find them as attached.

Best regards,



S. S. Liou  
Section Manager  
EMC Testing Dept. II  
Electronics Testing Center, Taiwan  
Tel: +886-2-26023052 ext. 20  
Email: [ssliou@etc.org.tw](mailto:ssliou@etc.org.tw)  
URL: <http://www.etc.org.tw>

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

**From:** [Chris Harvey](#)  
**To:** 'cindy'; [Charvey-tcb@ccsemc.com](mailto:Charvey-tcb@ccsemc.com)  
**Cc:** 'R00/劉尚昇'; 'William Graff'  
**Sent:** Thursday, February 17, 2011 8:50 PM  
**Subject:** RE: --Unscanned-- Re: TOA Corporation, Certification No.: 1599B-WM5225, Assessment NO.: AN11I3681, Notice#1

Cindy, I can not find the original email, but it looks like the content of that request was as follows:

Dear SS,

You are listed as the Technical Contact for the above referenced TCB application. The following item(s) need(s) to be resolved before the review can be continued:

1. Please provide a table of the 64 assigned frequencies compared to the rotary switch positions. The Manual has a table of frequencies that does not seem to match the available frequencies in this application (576-606MHz and 614-698MHz).
2. The RF Power Measurement procedure for fundamental emission and spurious describes the use of the substitution Method of measurement as required by the FCC, but the test equipment list and the test setup diagrams do not show the use of the substitution antenna in place of the EUT.
3. The Occupied Bandwidth plots have been measured using a 10kHz RBW, but the BW used should be as close as possible to 1% of the emission Bandwidth (likely to be 2kHz for this device.)
4. Please provide the Tune-Up Procedure and Schematic Diagram exhibits for this device as required by FCC 2.1033.
5. The online application form listed the power of the 576 – 606 MHz band as 0.8912 W but I will correct to **0.0089W**.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 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. Revised documentation should not be emailed, but instead should be submitted through “Add Attachment” function at the UL-CCS website. Please have your Assessment Number and FCC ID/IC Certification number handy. You may use the following link: <https://cert.ccsemc.com/filing/>

Best regards,

Chris Harvey  
[Charvey-tcb@ccsemc.com](mailto:Charvey-tcb@ccsemc.com)

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**From:** cindy [mailto:cindy628@etc.org.tw]  
**Sent:** Thursday, February 17, 2011 1:27 AM  
**To:** Charvey-tcb@ccsemc.com  
**Cc:** R00/劉尚昇  
**Subject:** Re: --Unscanned-- Re: TOA Corporation, Certification No.: 1599B-WM5225, Assessment NO.: AN1113681, Notice#1

Dear Chris,  
We only received the model:WM5225 IC application Notice,  
But did not receive notice of the FCC application,  
The FCC application assesment number is AN11T0029,  
Please kindly help check ,thanks.

Best Regards,  
Cindy

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

**From:** "SS" <[ssliou@etc.org.tw](mailto:ssliou@etc.org.tw)>

**To:** <[charvey-tcb@ccsemc.com](mailto:charvey-tcb@ccsemc.com)>

**Cc:** R00/黃心怡 <[cindy628@etc.org.tw](mailto:cindy628@etc.org.tw)>, R00/張文雄 <[vincentchang@etc.org.tw](mailto:vincentchang@etc.org.tw)>

**Sent:** Thu, 17 Feb 2011 12:07:35 +0800

**Subject:** --Unscanned-- Re: TOA Corporation, Certification No.: 1599B-WM5225, Assessment NO.: AN11I3681, Notice#1

Dear Chris,

> 1.) If RF Pout is to be measured using the substitution method, then the  
> report must clearly state the test equipment used. Substitutrion method  
> requires the use of two antennas within each frequency band of interest.  
> FYI: a direct conducted measurement may be used instead.

A: A tuned dipole antenna was used. The test equipment list was revised.  
Please refer to the revised test report.

> 2.) Please provide a table of assigned frequencies per 6.2. Kindly note  
> the restrictions shown in Section 5.7.

A: The frequency table depends on customer required marketing region to  
assign and the band will comply with regulation requirement. For USA and  
Canada only frequency bands 576-606MHz and 614-698MHz are available.

> 3.) Please state the occupied bandwidth in terms of values measured and  
> applied to 2M+2DK as specified in Section 5.5. Digital modulation  
> techniques should not apply.

A: According to the values measured  $2M+2DK=2 \times (6\text{kHz}) + 2 \times (50\text{kHz}) \times 1 = 112\text{kHz}$ .

> 4.) For Occupied Bandwidth plots, a RBW as close to, but not less than 1%  
> of emission bandwidth should be chosen. For emissions which do not exceed  
> 200KHz, a RBW close to 2KHz should be chosen. It should be possible to see  
> the 2500Hz tone modulation products within the FM signal.

A: The occupied bandwidth plots were revised with the RBW set to 3kHz.  
Please refer to the revised test report.

> 5.) The Canada company listing for ETC may need to be updated:

>  
> Electronics Testing Center  
> NO. 8, Lane 29, Wen-Ming Rd. Lo-Shan  
> Tsun, Kui-Shan Hsiang, Taoyan Hsien ROC Taiwan [ 2949A ]  
>  
> Electronics testing center, Taiwan  
> # 34, Lin 5, Dingfu Tsuen, Linkou Shiang  
> Taipei County 24442 Taiwan [8641A ]

A: The filing # is 2949A-1. Please refer to attached file of IC search  
result.

> 6.) Please provide a tune-up procedure for this product. I need to confirm  
> that this device was tuned up to the maximum possible power per section  
> 5.2.

A: Provided as attached.

Note: Components are changed depending on the frequency band selected according to country regulations. For USA and Canada only frequency bands 576-606MHz and 614-698MHz are available.

> 7.) Please provide the compliance statement required by Section 5.4.

A: Please refer to attached the revised user manual. The compliance statement already exists.

In addition, the Canadian representation letter, RSS-102 Annex C and ID label were also revised. Please find them as attached.

Best regards,

S. S. Liou  
Section Manager  
EMC Testing Dept. II  
Electronics Testing Center, Taiwan  
Tel: +886-2-26023052 ext. 20  
Email: ssliou@etc.org.tw  
URL: <http://www.etc.org.tw>

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

From: <william.graff@ccsemc.com>  
To: <ssliou@etc.org.tw>  
Cc: <william.graff@tw.ul.com>  
Sent: Tuesday, January 18, 2011 3:10 PM  
Subject: TOA Corporation, Certification No.: 1599B-WM5225, Assessment NO.: AN11I3681, Notice#1

> Greetings S.S.,

>

> I have a few comments on this filing. Please refer to RSS-123

>

> 1.) If RF Pout is to be measured using the substitution method, then the  
> report must clearly state the test equipment used. Substitution method  
> requires the use of two antennas within each frequency band of interest.  
> FYI: a direct conducted measurement may be used instead.

> 2.) Please provide a table of assigned frequencies per 6.2. Kindly note  
> the restrictions shown in Section 5.7.

> 3.) Please state the occupied bandwidth in terms of values measured and  
> applied to 2M+2DK as specified in Section 5.5. Digital modulation  
> techniques should not apply.

> 4.) For Occupied Bandwidth plots, a RBW as close to, but not less than 1%  
> of emission bandwidth should be chosen. For emissions which do not exceed  
> 200KHz, a RBW close to 2KHz should be chosen. It should be possible to see  
> the 2500Hz tone modulation products within the FM signal.

> 5.) The Canada company listing for ETC may need to be updated:

>

> Electronics Testing Center  
> NO. 8, Lane 29, Wen-Ming Rd. Lo-Shan  
> Tsun, Kui-Shan Hsiang, Taoyan Hsien ROC Taiwan [ 2949A ]

>

> Electronics testing center, Taiwan  
> # 34, Lin 5, Dingfu Tsuen, Linkou Shiang

> Taipei County 24442 Taiwan [8641A ]

>

> 6.) Please provide a tune-up procedure for this product. I need to confirm  
> that this device was tuned up to the maximum possible power per section  
> 5.2.

> 7.) Please provide the compliance statement required by Section 5.4.

>

> Best Regards,

> Bill Graff

>

> The items indicated above must be submitted before processing can continue  
> on the above referenced application. Failure to provide the requested  
> information within 30 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.

>