

## Chris Harvey

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**From:** SS [ssliou@etc.org.tw]  
**Sent:** Wednesday, June 30, 2010 10:56 PM  
**To:** charvey-tcb@ccsemc.com  
**Cc:** R00/黃心怡; lucy.tsai@ccsemc.com; claire.hoque@ccsemc.com; chris.harvey@ccsemc.com  
**Subject:** --Unscanned-- Re: TAIWAN MICRO VOICE ELECTRON CO.,LTD., FCC ID: YFITMVS982010051, Assessment NO.: AN10T0446, Notice#1

**Importance:** High

**Attachments:** Exhibit-D-ID\_Label for TX.pdf; Exhibit-D-ID\_Label for RX.pdf; Exhibit-C-Test\_Report rev.pdf; Exhibit-K-Operation Description rev.pdf; Exhibit-G-Schematics rev.pdf; Exhibit-A-Block\_Diagram rev.pdf



Exhibit-D-ID\_Label for TX.pdf... Exhibit-D-ID\_Label for RX.pdf... Exhibit-C-Test\_Report rev.pdf... Exhibit-K-Operation Description rev.pdf... Exhibit-G-Schematics rev.pdf... Exhibit-A-Block\_Diagram rev.pdf...

Dear Charvey,

1. The power threshold  $60/f(\text{GHz}) = 60/0.190903 = 314.3 \text{ mW}$ .  
The EUT output power is 43.651mW which is less than it, then no SAR test required.
2. Revised label provided. The statement have been removed.
3. Revised operation description provided.
4. These two models share the identical circuit design and the only difference is the model name and trade name.
5. The neck tie microphone is the antenna of the transmitter. Please refer to the external photo exhibit.
6. Revised circuit diagram and block diagram provided. The RX portion have been removed.
7. The test data of frequency stability vs. supplied voltage have been provided.
8. The label of receiver provided.
9. The test report has been corrected accordingly.
10. The emission mask plot and bandwidth plot have been revised with a modulated carrier signal. Please refer to revised test report.

Please kindly have a review soon. Thank you in advance.

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: <charvey-tcb@ccsemc.com>  
To: <ssliou@etc.org.tw>  
Cc: <chris.harvey@ccsemc.com>; <claire.hoque@ccsemc.com>; <lucy.tsai@ccsemc.com>  
Sent: Thursday, June 03, 2010 9:22 PM  
Subject: TAIWAN MICRO VOICE ELECTRON CO.,LTD., FCC ID: YFITMVS982010051, Assessment NO.: AN10T0446, Notice#1

> Dear SS Liou,

>

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

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> 1. Please address RF Exposure issues for the Body-worn transmitter. If SAR does not apply to this device, please provide a justification.

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> 2. The device being approved is a licensed, Part 74 Wireless Microphone transmitter body pack. The label contains the FCC Part 15 two-part statement, but this transmitter device is not subject to Part 15. Please either justify having that part 15 statements on the label or provide a replacement label with that statement removed.

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> 3. The Operational Description exhibit does not provide any technical description of the operation of this transmitter. The operational Description exhibit typically includes the information required by FCC 2.1033 (6) through (10):

> (6) Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

> (7) Maximum power rating as defined in the applicable part(s) of the rules.

> (8) The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.

> (9) Tune-up procedure over the power range, or at specific operating power levels.

> (10) A schematic diagram and a description of all circuitry and devices provided for determining and stabilizing frequency, for suppression of spurious radiation, for limiting modulation, and for limiting power.

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> 4. Additionally there have been 2 different label samples provided for models THUN-1000 and WSR-98SW, but does not explain the difference between the 2 models. Please explain the difference between the 2 models.

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> 5. Please provide an antenna location, description and specification for this device.

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> 6. The schematic Diagram exhibit seems to include the Transmitter Circuit, but also the circuit for a Receiver. Since the device being approved is a Transmitter Body Pack, the receiver circuit is not part of the device being approved. Please review the schematic and ensure that only the transmitter circuit is included.

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> 7. The frequency stability test indicates that the test was performed to the battery end-point, but does not specify what the nominal voltage or what voltage is considered the battery end-point. Please specify the voltages in the test report.

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> 8. It appears that the megaphone shown in the manual is the associated receiver for the transmitter of this application. Please confirm how this receiver, which is subject to FCC Part 15 Subpart B, is or will be an FCC approved device. It may be helpful to provide a sample of the label for the receiver.

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> 9. The RF test report lists the power limit from FCC 74.861(e)(1)(ii) as 250mW, but that limit only applies to devices in the frequency bands of 470-608 and 614-806 MHz. The appropriate power limit section for this 190.903MHz transmitter is FCC 74.861(e)(1)(i), and is 50mW. Please correct the test report.

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> 10. The Emission Mask plot on page 19 of 25 in the RF test report seems to only show an unmodulated carrier signal in relation to the mask of FCC 74.861(e)(6). Please provide plots showing compliance

> with the mask with modulation applied to the carrier.  
>  
> 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.  
>  
> Best regards,  
>  
> Chris Harvey  
> Charvey-tcb@ccsemc.com  
>  
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