



## Request for Additional Information for EMC Certification

Company:	Cal-Comp Electronics (Suzhou) Co., Ltd.	Composite Device:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
MT#:	24805	FCC Direct Filing:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
		Permit But Ask:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>
FCC ID:	VR2AV110	22/24		
UPN:	N/A	N/A		
FRN:	0017060930	Class II PC/Reassessment:	Yes: <input type="checkbox"/>	No: <input checked="" type="checkbox"/>

Dear Zi

Thank you for your application. In order for us to process your approval, the following must be addressed. Please provide a response in a timely manner to avoid delays or dismissals.

### Technical Review:

1. The Users Manual includes Hearing Aid Compatibility information; however, no HAC compliance test report has been submitted with this application. If this device is not HAC compliant, please remove the HAC information from the manual. If this device is HAC compliant, please submit the HAC compliance documentation.
2. The Users Manual SAR compliance information on page 2 of 31 has X's in the place of the SAR values and FCC ID. Since this information is being supplied in the manual, it must be correct. Please update the Manual to include the FCC ID number and the SAR values.
3. The Schematic diagram shows a USB circuit used for data communication and charging. The label contains an FCC ID (Certification) but does not contain the FCC logo. Please explain how the USB Computer Peripheral port complies with the FCC regulations (is this Certification or DoC)? If Certification, please provide Certification application for equipment class JBP. If this is DoC, please update the label and indicate the laboratory for which FCC DoC compliance was determined.
4. Please provide the antenna specifications document for the antenna used in this device.
5. The SAR measurements are not documented as in compliance or the FCC's 3G SAR measurement procedures. This device uses CDMA 2000 modulation, but the release is not documented in the SAR report, and all tests seem to have been performed in one combination of RC/SO. Please review the FCC's 3G SAR Measurement Procedure and revise the SAR report to show full compliance with all requirements for CDMA 2000 handset SAR testing. The FCC 3G SAR procedure can be located at: <https://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=26930&switch=P>
6. Please provide more legible scanned copies of the SAR probe and Dipole calibration certificates (the scanned copies in the SAR report are not legible).

If you have any questions or concerns, please contact us.

Thank you!

Jennifer Warnell  
TCB Administrator  
MET Laboratories, Inc.  
[tcbinfo@metlabs.com](mailto:tcbinfo@metlabs.com)  
[www.metlabs.com](http://www.metlabs.com)

Admin Review By: Jenn Warnell  
Technical Review By: Chris Harvey

*Please note that partial responses increase processing time and should not be submitted. The items indicated above must be provided before processing can continue on the above referenced application. Failure to provide the requested information in a timely manner may result in application dismissal.*

## Jenn Warnell

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**From:** Chris Harvey [charveyemc@gmail.com] on behalf of Chris Harvey [charvey@ieee.org]  
**Sent:** Wednesday, June 18, 2008 9:16 AM  
**To:** 'Zixiaogang(Emcite)'; Jenn Warnell  
**Cc:** Jennifer Sanchez; Angela Kekovski; Chris Harvey  
**Subject:** RE: EMC24805 - Request for Technical Information

Dear Zi Xiaogang, I have received your response and have the following additional items:

The original request for information had 6 items, but you responded only to 4 items.

Q1. The Users Manual includes Hearing Aid Compatibility information; however, no HAC compliance test report has been submitted with this application. If this device is not HAC compliant, please remove the HAC information from the manual. If this device is HAC compliant, please submit the HAC compliance documentation.

A1. [The content about the HAC had been removed from the UM.](#)

Item #1 closed.

Q2. The Users Manual SAR compliance information on page 2 of 31 has X's in the place of the SAR values and FCC ID. Since this information is being supplied in the manual, it must be correct. Please update the Manual to include the FCC ID number and the SAR values.

A2. [pls see the attached new version UM.](#)

Item #2 closed.

Q3. The Schematic diagram shows a USB circuit used for data communication and charging. The label contains an FCC ID (Certification) but does not contain the FCC logo. Please explain how the USB Computer Peripheral port complies with the FCC regulations (is this Certification or DoC)? If Certification, please provide Certification application for equipment class JBP. If this is DoC, please update the label and indicate the laboratory for which FCC DoC compliance was determined.

A3. [The USB port is just used for the charging only.](#)

[The Schematic Diagram shows a data circuit for the USB port. The Operational Description indicates:](#)

["USB connector is equipped for data communication and charger input."](#)

This item is not closed. Please address question #3.

Q4. Please provide the antenna specifications document for the antenna used in this device.

A4. [pls see the attached antenna details.](#)

Item #4 closed.

Q5. The SAR measurements are not documented as in compliance or the FCC's 3G SAR measurement procedures. This device uses CDMA 2000 modulation, but the release is not documented in the SAR report, and all tests seem to have been performed in one combination of RC/SO. Please review the FCC's 3G SAR Measurement Procedure and revise the SAR report to show full compliance with all requirements for CDMA 2000 handset SAR testing. The FCC 3G SAR procedure can be located at: <https://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=26930&switch=P>

No response submitted. Item #5 not closed.

Q6. Please provide more legible scanned copies of the SAR probe and Dipole calibration certificates (the scanned copies in the SAR report are not legible).

No response submitted. Item #6 not closed.

Please let me know if you have any questions about the 3 open items above.

Best regards,

Chris Harvey

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**From:** Zixiaogang(Emcite) [mailto:zixiaogang@emcite.com]  
**Sent:** Wednesday, June 18, 2008 12:49 AM  
**To:** 'Jenn Warnell'  
**Cc:** 'Jennifer Sanchez'; 'Angela Kekovski'; 'Chris Harvey'  
**Subject:** 答复: EMC24805 - Request for Technical Information

Dear Jenn:

Pls see the answers as followings:

Question 1: The content about the HAC had been removed from the UM.

Question 2: pls see the attached new version UM.

Question 3: The USB port is just used for the charging only.

Question 4: pls see the attached antenna details.

If you have any question, pls let me know.

Thanks

With Best Regards.



GSM/UMTS Test Group

訾晓刚 Zi Xiaogang

E-mail: [zixiaogang@emcite.com](mailto:zixiaogang@emcite.com)

信息产业部通信计量中心 Telecommunication Metrology Center of MII

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Web: <http://www.emcite.com>

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发件人: Jenn Warnell [mailto:jwarnell@metlabs.com]  
发送时间: 2008年6月16日 22:32  
收件人: Zixiaogang(Emcite)  
抄送: Jenn Warnell; Jennifer Sanchez; Angela Kekovski; Chris Harvey  
主题: EMC24805 - Request for Technical Information

Hi Zi,

Please see the attached letter regarding some issues that our technical reviewer found with the application for Cal-Comp FCC ID: VR2AV110. Please let me know if you have any questions.

Thanks,

Jenn Warnell  
TCB Administrator/Documentation  
MET Laboratories, Inc.  
Phone: 410-949-1877

6/18/2008

## Jenn Warnell

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**From:** Zixiaogang(Emcite) [zixiaogang@emcite.com]  
**Sent:** Tuesday, June 24, 2008 7:54 PM  
**To:** Jenn Warnell  
**Cc:** Liming Xu; Angela Kekovski; Chris Harvey  
**Subject:** 转发: EMC24805 - Request for Technical Information  
**Attachments:** 2008SAR00021.pdf

Dear Jenn:  
For question3:  
I will check with the manufacture.  
But this USB port is used for the charging only.

For question5:  
This phone is not the 3G phone. it's only CDMA 2000 1X.

For question6:  
Pls see the attachment. It's the original test report.  
It's too big. Pls check the photo.  
Thanks.

With Best Regards.



GSM/UMTS Test Group

訾晓刚 Zi Xiaogang

E-mail: [zixiaogang@emcite.com](mailto:zixiaogang@emcite.com)

信息产业部通信计量中心 Telecommunication Metrology Center of MII

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Web: <http://www.emcite.com>

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发件人: Jenn Warnell [mailto:[jwarnell@metlabs.com](mailto:jwarnell@metlabs.com)]

发送时间: 2008年6月16日 22:32

收件人: Zixiaogang(Emcite)

抄送: Jenn Warnell; Jennifer Sanchez; Angela Kekovski; Chris Harvey

主题: EMC24805 - Request for Technical Information

Hi Zi,

Please see the attached letter regarding some issues that our technical reviewer found with the application for Cal-Comp FCC ID: VR2AV110. Please let me know if you have any questions.

Thanks,

Jenn Warnell  
TCB Administrator/Documentation  
MET Laboratories, Inc.  
Phone: 410-949-1877  
Fax: 410-354-3313  
[www.metlabs.com](http://www.metlabs.com)

6/25/2008

## Jenn Warnell

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**From:** Chris Harvey [charveyemc@gmail.com] on behalf of Chris Harvey [charvey@ieee.org]  
**Sent:** Friday, June 27, 2008 12:19 PM  
**To:** 'Zixiaogang(Emcite)'; Jenn Warnell  
**Cc:** Liming Xu; Angela Kekovski  
**Subject:** RE: EMC24805 - Request for Technical Information #3

Zi, your new SAR report has better Calibration certificates, but still does not reference the FCC 3G Policy. I see that you have responded stating that your device is not a 3G device, but you use the CDMA 2000 1x technology which is required to comply with the FCC 3G RF Exposure requirements. Please see page 7 of the FCC policy I have forwarded to you earlier:

Q5. The SAR measurements are not documented as in compliance or the FCC's 3G SAR measurement procedures. This device uses CDMA 2000 modulation, but the release is not documented in the SAR report, and all tests seem to have been performed in one combination of RC/SO. Please review the FCC's 3G SAR Measurement Procedure and revise the SAR report to show full compliance with all requirements for CDMA 2000 handset SAR testing. The FCC 3G SAR procedure can be located at: <https://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=26930&switch=P>  
No response submitted. Item #5 not closed.

When submitting the new SAR information, please be aware that the FCC has a 4MB maximum file size per file. Please separate the file into multiple parts, each less than 4MB.

Please let me know if you do not understand this requirement.

Best regards,

Chris Harvey

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**From:** Zixiaogang(Emcite) [mailto:zixiaogang@emcite.com]  
**Sent:** Tuesday, June 24, 2008 7:54 PM  
**To:** 'Jenn Warnell'  
**Cc:** 'Liming Xu'; 'Angela Kekovski'; 'Chris Harvey'  
**Subject:** 转发: EMC24805 - Request for Technical Information

Dear Jenn:  
For question3:  
I will check with the manufacture.  
But this USB port is used for the charging only.

For question5:  
This phone is not the 3G phone. it's only CDMA 2000 1X.

For question6:  
Pls see the attachment. It's the original test report.  
It's too big. Pls check the photo.  
Thanks.

With Best Regards.



GSM/UMTS Test Group

訾晓刚 Zi Xiaogang

6/27/2008

## Jenn Warnell

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**From:** Chris Harvey [charveyemc@gmail.com]  
**Sent:** Tuesday, July 08, 2008 10:50 AM  
**To:** 'xuezhenn'; charveyemc@gmail.com  
**Cc:** Jenn Warnell; 'Steven Song'; 'Zixiaogang(Gmail)'; Liming Xu  
**Subject:** RE: EMC24805 - Request for Technical Information #3

Dear Xue Zhen, I have reviewed the revised SAR report.

The Original SAR report No. 2008SAR00021stated:

*“For SAR test, the maximum power output is very important and essential; it is identical under the measurement uncertainty. It is proper to use typical Test Mode 3 (FW RC3, RVS RC3, SO55) as the worst case for SAR test.*

*Under the loop back mode between mobile station and CMU200, the transmitter continuously emits with maximum power more strong than voice mode, so the SAR test was done with loop back mode.”*

The revised SAR report No. 2008SAR00021s now states

*“According to the output power measurement results, SAR for head exposure configurations is measured in RC3 with the EUT configured to transmit at full rate using loopback Service Option SO55. SAR for Body exposure configurations is measured in RC3 with the EUT configured to transmit at full rate on FCH with all other code channels disabled using TDSO / SO32.”*

The revised report does not contain any new test data, but indicates that the mode of operation is different than originally stated. While you have modified the description of test to include the 3G policy, there has been no new data. Please explain this change of description without new data.

Best regards,

Chris Harvey

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**From:** xuezhenn [mailto:xuezhenn@emcrite.com]  
**Sent:** Friday, July 04, 2008 6:55 AM  
**To:** charveyemc@gmail.com; charvey@ieee.org  
**Cc:** 'Jenn Warnell'; 'Steven Song'; 'Zixiaogang(Gmail)'; 'Liming Xu'  
**Subject:** re: EMC24805 - Request for Technical Information #3

Dear Harvey,

I'm sorry that our SAR engineer has made a mistake to use the old report, please find the attached file for the correct one.

Thanks.

BR

Xue Zhen

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发件人: Chris Harvey [mailto:charveyemc@gmail.com] 代表 Chris Harvey  
发送时间: 2008年7月2日 23:12  
收件人: 'Zixiaogang(Gmail)'; 'Jenn Warnell'  
抄送: charveyemc@gmail.com  
主题: RE: EMC24805 - Request for Technical Information #3

7/9/2008

Dear Zi,

Thank you for your response. I have reviewed the replacement SAR test report you have provided. This replacement SAR report (#2008SAR00017) documents testing of a handset using the FCC's 3G guide tested in May 2008, when the original SAR report (2008SAR00021) documented testing of an handset not using the FCC's 3G guide tested in June 2008. It appears as though the testing to the 3G Measurement policy was performed before my request of June 16, 2008. The SAR values of the 2008SAR00017 test report are lower than the values in the 2008SAR00021, and so are the measured power levels. It appears as though the SAR testing in 2008SAR00017 was performed using lower power settings than is documented in the RF report. The FCC requires that the testing for SAR be performed with the correct procedures (of the 3G Policy) with the power settings equal to or higher (with justification) than the power in the RF report. Is it possible that earlier May SAR testing was performed before the power was adjusted or modifications were performed to the EUT?

Please provide new SAR compliance documentation of this handset using the FCC's 3G policy with the power settings equal to or higher than the RF power in the RF report.

Best regards,

Chris Harvey

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**From:** Zixiaogang(Gmail) [mailto:zixiaogang@gmail.com]  
**Sent:** Tuesday, July 01, 2008 5:01 AM  
**To:** 'Jenn Warnell'  
**Cc:** 'Chris Harvey'; charveyemc@gmail.com  
**Subject:** 转发: EMC24805 - Request for Technical Information #3

Dear Chris and Jenn:  
Pls see the attached SAR test report for AV110 FCC certificate.  
Pls check it. If no problem, ple help me get the FCC Grant soon.  
Thanks

With Best Regards.



GSM/UMTS Test Group

訾晓刚 Zi Xiaogang

E-mail: [zixiaogang@emcitem.com](mailto:zixiaogang@emcitem.com)

信息产业部通信计量中心 Telecommunication Metrology Center of MII

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Fax. +86 10 62304793

Web: <http://www.emcitem.com>

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发件人: xuezhen [mailto:xuezhen@emcitem.com]  
发送时间: 2008年7月1日 16:33  
收件人: 'Zixiaogang(Emcite)'  
抄送: 'Zixiaogang(Gmail)'  
主题: re: EMC24805 - Request for Technical Information #3

Revised SAR report, downsized.

**BR**

**Xue Zhen**

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发件人: Zixiaogang(Emcite) [mailto:zixiaogang@emcitem.com]  
发送时间: 2008年6月28日 9:23

7/9/2008

## Jenn Warnell

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**From:** Zixiaogang(Gmail) [zixiaogang@gmail.com]  
**Sent:** Tuesday, July 08, 2008 9:01 PM  
**To:** 'Chris Harvey'; 'xuezhen'  
**Cc:** Jenn Warnell; 'Steven Song'; Liming Xu  
**Subject:** 答复: EMC24805 - Request for Technical Information #3

Dear Chris:  
Pls see the opinion from our SAR test engineer.  
I think that the test report is right.  
Then pls tell me your opinion in time.  
Because this project is so urgent.  
Thanks

“Sorry for the confuse of the old version test report.  
For this model, we do the SAR test following the new FCC requirement about 3G devices from the beginning, that is:  
we check the output power at varies configuration and make sure that RC3/S055 and TDS0/S032 are suitable for Head and Body SAR test respectively.  
Unfortunately we didn't put these results in our old test report which use an old template.

Now we add the full output power test results in the test report 2008SAR00021s, and we also modified the corresponding description.  
Hope this will solve the problem.”

With Best Regards.



GSM/UMTS Test Group

瞿晓刚 Zi Xiaogang

E-mail: [zixiaogang@emcitem.com](mailto:zixiaogang@emcitem.com)

信息产业部通信计量中心 Telecommunication Metrology Center of MII

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发件人: Chris Harvey [<mailto:charveyemc@gmail.com>]  
发送时间: 2008年7月8日 22:50  
收件人: 'xuezhen'; [charveyemc@gmail.com](mailto:charveyemc@gmail.com)  
抄送: 'Jenn Warnell'; 'Steven Song'; 'Zixiaogang(Gmail)'; 'Liming Xu'  
主题: RE: EMC24805 - Request for Technical Information #3

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*Under the loop back mode between mobile station and CMU200, the transmitter continuously emits with*