

Chris Harvey

From: Ricardo Orejas Rodríguez [rorejas@cetecom.es]
Sent: Friday, October 08, 2004 4:10 PM
To: Chris Harvey
Cc: Marianne Bosley
Subject: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Chris,

Do you have any example of the "MPE calculation for the GPRS handheld mode"? and FCC ID would be enough, because I have been checking about 20 applications from different companies for GSM/GPRS phones and I have not found something similar,

Thanks and best regards,

Ricardo Orejas
Type Approval Consultant

CETECOM - Spain
Phone: +34 952 619 317 - Email: rorejas@cetecom.es

-----Mensaje original-----

De: Chris Harvey [mailto:Chrisharveyemc@comcast.net]
Enviado el: viernes, 08 de octubre de 2004 20:25
Para: Ricardo Orejas Rodríguez
CC: 'Marianne Bosley'
Asunto: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Ricardo, there are still problems with what was provided.

From what I can tell, the 2 new SAR measurements are supposed to be in addition to the original measurements at the same channel and position. Unfortunately they replaced the original plots with the new ones. This is not a great deal as I can include both reports in the assessment. However, they have not provided the tissue dielectric measurements and the system validation data for the measurements performed on 10/08/04. These measurements are required to be submitted for each day on which SAR measurements are performed. I am also still waiting for the MPE calculation for the GPRS handheld mode of operation (requested twice before).

Please contact me if you have any questions. I am still awaiting for the above information.

Best regards,

Chris Harvey

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

From: Ricardo Orejas Rodríguez [mailto:rorejas@cetecom.es]
Sent: Friday, October 08, 2004 9:41 AM
To: Chris Harvey
Cc: Marianne Bosley
Subject: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286
Importance: High

Chris,

OK, I understand.

Attached you can find the test reports. Fortunately the sample was still in Taiwan and they have repeated some testing. Please check if it is OK, if so, I will wait for the certificate this afternoon, please try to provide it as soon as possible because I will be here just waiting for the certificate or your news.

<< File: SAR test report.pdf >>

If you have any doubt please do not hesitate to contact me

Regards,

Ricardo Orejas
Type Approval Consultant

CETECOM - Spain
Phone: +34 952 619 317 - Email: rorejas@cetecom.es

-----Mensaje original-----

De: Chris Harvey [mailto:Chrisarveyemc@comcast.net]
Enviado el: viernes, 08 de octubre de 2004 4:00
Para: Ricardo Orejas Rodríguez; M^a Gema Briseño Pascual
CC: 'Marianne Bosley'
Asunto: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Ricardo, I agree that this does seem strict, but these are the parameters we must operate under, and we are subjected to great scrutiny from the FCC. This requirement is located in OET 65 Supplement C 2001 page 49:

The SAR distribution may be plotted to verify the peak SAR locations with respect to the near-field exposure characteristics of the transmitter. All peaks within 2.0 dB (58.5%) of the highest peak identified by the interpolated data should be evaluated with a fine resolution volume scan to determine the highest one-gram averaged SAR (See Reference [19]).

The FCC requires that these 2nd hot-spots be documented. I agree that this is likely to be a similar low SAR value to the first peak on the same plot, but I am not allowed to deviate from the procedure. The test laboratory should be aware of the FCC requirements for 2nd hot-spot measurements.

Thank you for your understanding.

Best regards,

Chris Harvey

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

From: Ricardo Orejas Rodríguez [mailto:rorejas@cetecom.es]
Sent: Thursday, October 07, 2004 6:27 PM
To: Chris Harvey; M^a Gema Briseño Pascual
Cc: Marianne Bosley
Subject: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286
Importance: High

Hi Chris,

I have checked the test report and I have found what you are talking about. I think that you are being quite strict on this issue as you can see that the results are really far below of the limits, but I am not in position to discuss with you this as you are the expert and I am just learning about all FCC rules, items, etc...

I will try to find out an answer from the test laboratory and if they can not assure that testing was performed in the 2nd hot spot, we will send back the sample to the lab to test again SAR in that position but checking now all possible hot spots.

Anyway I will appreciate if you can inform to me where in FCC OET 65 Sup. is indicated this requirement because I have not been able to find it.

Best regards,

Ricardo

-----Mensaje original-----

De: Ricardo Orejas Rodríguez
Enviado el: jueves, 07 de octubre de 2004 21:54
Para: 'Chris Harvey'; M^a Gema Briseño Pascual
CC: 'Marianne Bosley'
Asunto: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Dear Chris,

Thanks for the information, could you please address me to the exact requirement in OET Bulletin 65 and where the problem appears in the test report?

Regarding the user's manual please check page 48 of the document attached and please let me know if this is acceptable.

thanks and best regards,

Ricardo Orejas
Type Approval Consultant

CETECOM - Spain
Phone: +34 952 619 317 - Email: rorejas@cetecom.es

-----Mensaje original-----

De: Chris Harvey [<mailto:Chrisharveyemc@comcast.net>]
Enviado el: jueves, 07 de octubre de 2004 21:46
Para: Ricardo Orejas Rodríguez; M^a Gema Briseño Pascual
CC: 'Marianne Bosley'
Asunto: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Ricardo, I have received your responses to the issues raised. I can accept all except for the SAR 2nd hot-spot issue.

Body-worn SAR is required because the phone could be used when it is in the pocket or using a third-party holster. However, your explanation of the Body-worn GPRS operation is acceptable, since it is not likely that GPRS operation, when the user is looking at the LCD screen, would be used next to the body. Please provide the Users Manual with the appropriate warning against using GPRS mode next to body. However, the 2nd hot-spot issue remains and needs to be addressed. We can not issue the Certification until this issue is resolved.

Please contact me if you have any further questions.

Best regards,

Chris Harvey
charvey@ieee.org <<mailto:charvey@ieee.org>>
443-622-3300

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

From: Ricardo Orejas Rodríguez [mailto:rorejas@cetecom.es]

Sent: Thursday, October 07, 2004 2:34 PM

To: Chris Harvey

Cc: Marianne Bosley

Subject: RE: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Importance: High

Hi Chris,

Thanks for your e-mail. Please find below the answers to your questions:

1. Please provide the Tune-up procedure for this device as required by FCC 2.1033.

Please find attached the document.

[<< File: Tune up procedure.pdf >>](#)

2. Please provide the Emission Designator for this device (there are Types of Modulations listed in the test report but these do not meet the requirements for Emission Designator). Also please explain the use of the Q7W in the emission as GMSK is typically GXW).

The emission designator is 300KGXW. This has been modified in the attached test report.

[<< File: Part 24 Test report v2.pdf >>](#)

3. The test report appears to have a typographical error in the FCC ID, using a number '1' instead of a capital letter 'I'.

This has been also modified in the test report.

4. The SAR report appears to document only testing in GSM 1 time slot mode. This device is capable of GPRS Class 10, which uses 2 time-slots for transmission. Please provide SAR compliance documentation for this mode of operation in the body-worn configurations, unless this device used in GPRS mode while held to the ear. Worst case scaling would still appear to be compliant with the SAR limits.

5. The SAR measurement plot for Right Head Cheek CH512 seems to show 2 hot-spot peaks. Please confirm that measurements have been performed on the 2nd hot-spot(s) as required by FCC OET 65 Supplement C.

a) Due to the time difference I have not been able to contact the Taiwanese lab to check this issue. Besides we thought that, as this equipment is not commercialised with any belt- clip or similar accessory, SAR testing in body-worn configuration was not needed for GPRS operation. Please take this in consideration and if it possible issue the certificate.

b) If not possible DAI has prepared a second version of the user's manual in which they prevent to the user to use the GPRS capability while the equipment is located in the waist or head. We think that this should be enough to address this issue.

[<< File: User's manual 2.pdf >>](#)

The issue is that DAI needs the certificate today due to commercialisation requirements so we hope that explanation given in a) (preferred option) or alternative solution given in b) are acceptable to issue the certificate.

Please let me know your comments and if possible send to me the certificate.

If you have any doubt please do not hesitate to contact us.

Thank you very much in advance and best regards,

Ricardo

-----Mensaje original-----

De: Chris Harvey [mailto:Chrisharveyemc@comcast.net]

Enviado el: jueves, 07 de octubre de 2004 16:31

Para: Ricardo Orejas Rodríguez

CC: M^a Gema Briseño Pascual; 'Marianne Bosley'

Asunto: Additional Information needed Dai Telecom FCC ID: RI7G83 MT#16286

Ricardo & Gema,

I have performed the review of the above referenced application and have the following items that need to be addressed before the review can be completed:

1. Please provide the Tune-up procedure for this device as required by FCC 2.1033.
2. Please provide the Emission Designator for this device (there are Types of Modulations listed in the test report but these do not meet the requirements for Emission Designator). Also please explain the use of the Q7W in the emission as GMSK is typically GXW).
3. The test report appears to have a typographical error in the FCC ID, using a number '1' instead of a capital letter "I".
4. The SAR report appears to document only testing in GSM 1 time slot mode. This device is capable of GPRS Class 10, which uses 2 time-slots for transmission. Please provide SAR compliance documentation for this mode of operation in the body-worn configurations, unless this device used in GPRS mode while held to the ear. Worst case scaling would still appear to be compliant with the SAR limits.
5. The SAR measurement plot for Right Head Cheek CH512 seems to show 2 hot-spot peaks. Please confirm that measurements have been performed on the 2nd hot-spot(s) as required by FCC OET 65 Supplement C.

Please let me know if you have any questions about the items needed.

Best regards,

Chris Harvey
charvey@ieee.org
443-622-3300