
From: 라상경
Sent: Friday, March 26, 2010 1:56 PM
To: PCTEST TCB/CB; 이재우
Cc: PCTEST - Gregory Czumak; PCTEST - Randy Ortanez; PCTEST - Channy Park; PCTEST - Gregory Snyder; PCTEST - Mia Kang
Subject: Re: Follow Up Questions Regarding FCC ID : A3LRMC30C1 3-26-10

Thanks Gregory for your quick review

Concerning the following labelling issue

I checked the requirements and the equipment is met the following optional thing

As an option to placing the FCC label on the exterior of the device, the FCC label may be placed in a user accessible area if the following conditions are met:

- The device is handheld (notebook computers are considered as handheld);

-> This device is handheld

- The FCC identifier is visible at the time of purchase. Marketing the device without the battery installed when the label is in the battery compartment is acceptable. The FCC ID on the box, or additional documentation directing the user where to find the FCC label, also satisfies this requirement;

-> Without or with battery installed, the label is visible

- The user accessible area must not require any special tools for access, and the FCC label must not be placed on a removable part;

-> No need to special tools for access

- The FCC ID, Model Number, or FCC logo must be on the label and must meet all general labelling requirements or policies that apply for Certification, Verification or DoC.

-> Above requirements is placed on the label

Thanks and please review above things and let me know

Thanks again for your quick review

Just for your reference, it is scheduled to launch this unit Monday morning

Sang Kyung, Ra

라 상 경 (Ra, Sang Kyung)/General Manager

Head of QA Lab America

Samsung Electronics America,

18600 Broadwick St., Rancho Dominguez, CA 90220

TEL : +1-310-900-5250

FAX : +1-310-537-5500

C.P : +1-714-882-0231

[e-mail:raaaa@samsung.com](mailto:raaaa@samsung.com)

sangra@sea.samsung.com

aurora@naver.com

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

Sender : PCTEST TCB/CB<pctesttcb@pctestlab.com> pctesttcb@pctestlab.com

Date : 2010-03-26 10:31 (GMT-07:00)

Title : Follow Up Questions Regarding FCC ID : A3LRMC30C1 3-26-10

Dear Mr. Lee,

Thank you for your email.

1. Regarding your response to 3, please note the following:
 - a. You ask: **Is there any regulation for exception for cellular phones?, if you have please provide to us.** Please see the September '06 TCB Conference Call Minutes (attached), pp. 4-5.
 - b. You also state: **as you can see Permanently and readily visible is important 2 things. but there is other sentence about readily visible at 2.925-(2), this is not a prerequisite for grant of equipment authorization. In spite of this sentence of FCC 2.925-(2) , if we have to put FCC ID on out side, we will do that.**

You are misinterpreting the statement in the Rule:

(2) As used here, readily visible means that the nameplate or nameplate data must be visible from the outside of the equipment

enclosure. It is preferable that it be visible at all times during normal installation or use, but **this is not a prerequisite for grant of equipment authorization.**

So, it is not a prerequisite that the nameplate info (including the FCC ID) be visible during installation or usage. It is required that it be readily visible at the time of purchase (per 2.925(d)). However, I have researched the issue on the FCC KDB, and found 784748 D01 Labelling Part 15 &18 Guidelines v07, also attached, which states on p.4:

As an option to placing the FCC label on the exterior of the device, the FCC label may be placed in a user accessible area if the following conditions are met:

- The device is handheld (notebook computers are considered as handheld);
- The FCC identifier is visible at the time of purchase. Marketing the device without the battery installed when the label is in the battery compartment is acceptable. The FCC ID on the box, or additional documentation directing the user where to find the FCC label, also satisfies this requirement;
- The user accessible area must not require any special tools for access, and the FCC label must not be placed on a removable part;
- The FCC ID, Model Number, or FCC logo must be on the label and must meet all general labelling requirements or policies that apply for Certification, Verification or DoC.

So, the FCC is now accepting the FCC ID inside the battery compartment for any Part 15/18 handheld device that meets the specified criteria. It is not necessary to place the FCC ID on the outside of the EUT. **Please submit a statement verifying that the label will be readily visible at the time of purchase since it is located in the battery compartment, and the EUT is marketed without the battery installed** (similar to the label letter Samsung always sends with its cell phone applications).

2. We are awaiting the FCC's response to our KDB inquiry regarding the necessity of SAR testing, and will inform you of their answer as soon as we receive it.

Sincerely,

Gregory Czumak
Senior Certification Engineer
PCTEST TCB

From: JayWoo Lee [mailto:jaywoo.lee@samsung.com]
Sent: Friday, March 26, 2010 9:22 AM
To: SangKyung Ra; mia@pctestlab.com; randy@pctestlab.com; channy@pctestlab.com; gregory@pctestlab.com; pctesttcb@pctestlab.com; 업창섭; Seob Lee; Seon Taeg Jin; '김현우'
Subject: Follow Up Questions Regarding FCC ID : A3LRMC30C1

to : PC Test Lab
from : Jaywoo lee(samsung electronics)

Dear Sir

I send Follow Up Questions Regarding FCC ID : A3LRMC30C1

Especially #3 about FCC ID mark is very important.

and also let me know the complete schedule.

1. Regarding your response to question #2, you have submitted both a Part 15B report and also a label showing the FCC DoC logo. Is the peripheral portion (JBP) of the EUT to be authorized under Certification or DoC? If Certification, then the FCC DoC logo must be removed from the label- please revise and resubmit it. Alternatively, if the JBP is to be authorized under DoC, then you do not have to submit the Part 15B test report. Please clarify.

=> **This EUT is for DOC,**
The reason why i sent to you was just to show this model pass FCC part 15B Test.

2. Regarding your response to question #2, the Part 15B report submitted uses an insufficient test set up. ANSI C63.4 requires that a peripheral (in this case, the EUT) be connected to a pc, along with at least one other peripheral. Regardless of your answer to question #1 (above), this test report does not demonstrate compliance, and testing must be re-performed with a compliant test set up. If the answer to question #1 is Certification, please submit the revised Part 15B report. If the answer to question #1 is DoC, then you must keep the revised test report on file. Please address.

=> **This EUT is for DOC,**

I'll keep revised test report on file

3. Regarding your response to question #4, the revised photos show the FCC ID on the outside of the EUT (as required), however, it is also still shown on the revised label. Please confirm that this is intended.

=>Yes it is intended, and There is some issues about Label. Please see below

(Original question)

The FCC ID label may only be placed in the battery compartment of **cellular phones**- all other devices, such as the EUT, must display the FCC ID label on the exterior of the EUT. Please revise the label location photo to show a location on the exterior, and confirm its placement there.

1) Is there any regulation for exception for cellular phones?, if you have please provide to us,

- Same as mobile phone, EUT Back cover could be removed very easily, if some user removes back cover the FCC ID will remove together. so if we have to put FCC ID permanently, I have to put FCC ID on label

Next is Label regulation of FCC

as you can see **Permanently** and **readily visible** is important 2 things.

but there is other sentence about **readily visible** at 2.925-(2), this is not a prerequisite for grant of equipment authorization.

In spite of this sentence of FCC 2.925-(2) , if we have to put FCC ID on out side, we will do that.

§ 2.925 Identification of equipment.

(d) In order to validate the grant of equipment authorization, the nameplate or label shall be **permanently affixed**

to the equipment and shall be **readily visible** to the purchaser at the time of purchase.

(1) As used here, permanently affixed means that the required nameplate data is etched, engraved, stamped, indelibly printed,

or otherwise permanently marked on a permanently attached part of the equipment enclosure.

Alternatively, the required

information may be permanently marked on a nameplate of metal, plastic, or other material fastened to the equipment

enclosure by welding, riveting, etc., or with a permanent adhesive. Such a nameplate must be able to last the expected lifetime

of the equipment in the environment in which the equipment will be operated and must not be readily detachable.

(2) As used here, readily visible means that the nameplate or nameplate data must be visible from the outside of the equipment

enclosure. It is preferable that it be visible at all times during normal installation or use, but **this is not a prerequisite for grant of equipment authorization.**

4. The Dates of Test listed on p. 4 and the Date of Issue on p. 1 of the revised Part 15C report are the same as on the original report. If new testing has been performed since those dates, please revise the report to reflect them and resubmit it.

=> Sorry, I miss to send new Test report, Please see attached file _RMC30C1_Part 15 Revise

5. The Operational Description states that the EUT "supports the antenna diversity function (Optimal Antenna selection) during receiving and transmission." No other information about this is provided in the Operational Description, nor do the block diagram or the 15C test report provide any information about this. Does the EUT employ MIMO? If so, all transmit chains must be tested, both individually and summed, and data submitted for them. Please see the attached pages from the October '07 TCB Workshop.

=> This EUT has just one antenna and it does not support MIMO technology.

6. Regarding your response to question #9, please note that FCC policy requires that the target value be obtained from the dipole calibration report, and not the theoretical IEEE 1528 values.
7. Regarding the request you make in your response to question #9, we have sent a TCB KDB question to the FCC regarding the necessity of SAR testing for the EUT. We will inform you of their response as soon as we receive it. Please note that the FCC ID to which you refer was granted in February '09, while the FCC released new Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies in November '09.

=> please let me know the necessity of SAR testing for the this EUT

If we have to provide SAR TEST report with target value be obtained from the dipole calibration report,

I have to request SAR Test to you(PC TEST LAB)

in this case how long does it take?

The item indicated above must be submitted before processing can continue on the above referenced application.

Sincerely,

Gregory Czumak
Senior Certification Engineer
PCTEST TCB

From: JayWoo Lee
Sent: Thursday, March 25, 2010 6:21 AM
To: 라상경; 엄창섭; mia@pctestlab.com; randy@pctestlab.com; channy@pctestlab.com; gregory@pctestlab.com
Subject: Fwd: (Re): Follow Up _ FCC ID : A3LRMC30C1

To : PC TEST LAB
From : Jaywoo Lee_Samsung electronics

Dear sir

I send FCC ID :A3LRMC30C1 Follow up
Please check below and attached file for A3LEMC30C1.

Please let me know the complete schedule.

1. Please submit a copy of the test lab's ISO/IEC 17025 Scope of Accreditation, demonstrating the lab's capability to perform 15.247 testing and SAR testing. Please note that ISO/IEC Guide 65 requires that a TCB only accept data from a test lab with demonstrated proficiency in the testing methods required. Typically, ISO/IEC 17025 accreditation to the applicable standards is used to demonstrate this proficiency. Absent such accreditation, PCTEST TCB has a procedure for the eventual acceptance of test data, but this requires inter-lab comparison testing prior to that acceptance.

For Kolas certification based on, the Lap contains all equipments for test, but the Test Lap doesn't contain Antenna for 10th harmonic detects for 2.4GHz. When we need to test that frequency, we rent the antenna.

In this Audio amplifier we check every frequency, required from FCC Standard, no frequency over 5th Harmonic frequency was detected you can find ISO/IEC 17025 Scope at 7,9 page on attached Kolas lap certificaion

=> Please see attached file : KOLAS_ NEMKO Certification

2. The EUT connects to a pc, therefore it is a pc peripheral subject to either DoC or

Certification. If DoC is chosen, please confirm that the 15B testing has been performed at a lab accredited to ISO/IEC 17025 and submit a revised label showing the DoC logo. In addition, please revise the user's manual to show the required DoC information. If Certification is chosen, please submit a Part 15B test report.

Please see attached file : FCC Part B Report

Label (FCC DOC)

Manual (RMC30C1) _there is also marked ICES-003

3.The confidentiality request lists the Parts List. A Parts List is not required for Part 15 devices, therefore, no Parts List will be uploaded to the FCC. Please revise the confidentiality request, removing the reference to the Parts List.

-> I remove "part list" form confidential letter

please check attached confidential letter

4. The FCC ID label may only be placed in the battery compartment of cellular phones- all other devices, such as the EUT, must display the FCC ID label on the exterior of the EUT. Please revise the label location photo to show a location on the exterior, and confirm its placement there.

=> Please see attached file : FCC ID mark (i'll print FCC ID outside)

5. The highest measured output power is 16.23 dBm, but the Operational Description states that the output power should not exceed 20 dBm. If levels of up to 20 dBm are possible, test data at this power level must be provided. Please address.

=> See attached file : operation description

This device can not be exceed 17dBm.

The former description 20dBm is just for approval output power.

6. For the radiated emission tests, please confirm that the EUT was tested in 3 orthogonal planes, as required.

(→ The EUT was test in three orthogonal planes.

Please see the note 4 at page 18, 60, 77 on part 15 Report.

The comments regarding three orthogonal test was recorded.

7. The following tests were performed incorrectly: 6 dB bandwidth; Power Spectral Density; Spurious RF Conducted Emissions; and Band edge Emissions. An average detector was used, while the FCC test procedure requires a peak detector for each of these tests. Please re-perform these tests using a peak detector and submit new data.

→ Please see the revised part 15 subpart C test report.

8. Please provide average conducted output power measurement data at all of the data rates prescribed in the FCC's 802.11 SAR testing procedure, so that the correct channel/data rates required for SAR testing can be determined. If any of the required SAR measurement data was not included in the report, please also provide this additional data.

→ If the SAR test is required, the average conducted output power measurement data will be included in the SAR report.

9. Table 8.2 of the SAR report lists the dipole target value as 13.1 mW/g.rj Where does this value come from? The dipole calibration report only provides the nominal Head target, but no the nominal Body target. Please submit a copy of the dipole's calibration report that includes the nominal Body target.

→ The target value as 13.1 mW/kg was derived from the IEEE Std 1528-2003 " Numerical reference SAR values (W/kg) for reference dipole and flat phantom"

The reference SAR value is 52.4 W/kg at 2450 MHz

250 mW power was used for validation source and it is 1/4 of 1W.

$52.4 \text{ W/kg} / 4 = 13.1 \text{ W/kg} = 13.1 \text{ mW/g}$

Regarding the SAR testing, we have searched the similar device to the EUT and found the philips model (FCC ID: PT5TSU9300).

It used the MPE calculation instead of SAR testing for their remote controller.

Could you confirm whether the MPE calculation is acceptable to the Samsung's EUT or not?

If it is acceptable, please find the attached MPE data.

10. SAR testing was performed on 1/19/10 and 1/20/10, but SAR System Verification test results were only submitted for 1/19/10. Please submit SAR System Verification test results for 1/20/10.

→ If the SAR test is required, we will perform the SAR System Verification test for each date.

Jaywoo.Lee
Engineer
R&D Solution Group
VD Division,
Samsung Electronics
