To: Gregory Czumak

Subject: RE: Additional Follow-Up Questions Regarding FCC ID: BEJKE990D

Dear, Gregory Czumak

Thank you for your quick and kind responses.
We attached the revised documents and our replies are as follows..

We hope that the below responses are sufficient to continue with the review of this model.

We are waiting for your response.
If you have more questions or comments, please let me know ASAP.

BR

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1. My original question #1 is as follows, with answers to your questions inserted therein. Please contact me with any additional questions.

Regarding your answer to question #1, the EDGE data submitted in the revised report seems to indicate that the **conducted** output power level for 850EDGE is less than 2 dB below the corresponding output level for 850GSM (compare the plots on pages 37 and 38. In other words, the conducted power levels for 850GSM and 850EDGE are less than 2 dB apart.). In such a case, SAR data for 850EDGE must also be provided, in accordance with FCC policy. Please address. While 850EDGE EMC data was provided, 850EDGE SAR data was not submitted. Because the EDGE conducted output power level is within 2 dB of the GSM conducted output power level, SAR must be tested in EDGE mode, in the worst-case configurations identified in the GSM/GPRS SAR tests. Please submit this SAR data.

- **The power of page37 and 38 is not the correct channel power.**
- **For this reason, We retest the conducted power of 850EDGE/850GPRS and revised the test report (refer to conducted power table on page 15 of 63).**
- **Because the EDGE conducted output power level is less than max 5.46 dB of the GSM conducted output power level, we didn't carry out SAR test in EDGE mode.**
- **Because we applied the wrong chamber loss, we retest the ERP of the 850EDGD and revised the test report. (refer to page 1 and16 of 63).**

2. My original question #2 follows, with answers to your questions inserted therein.

Regarding your answer to question #1, the EDGE data submitted in the revised report seems to indicate that the **conducted** output power level for 1900EDGE is more than 2.5 dB lower than the corresponding level for 1900GSM. If this is correct, please verify the accuracy of the EIRP measurements, as they show the difference to be less than 0.2 dB apart. In other words, why are the EIRP measurements for GSM and EDGE nearly the same level, while the conducted output power levels are 2.65 dB apart (compare the plots on pages 41 and 42)?

- **The power of page41 and 42 is not the accurate channel power.**
- **For this reason, We retest the conducted power of 1900EDGE/19000GPRS and revised the test report(refer to conducted power table on page 15 of 63).**
- **Because we applied the wrong chamber loss, we retest the EIRP of the 1900EDGD and revised the test report. (refer to page 1 and 17 of 63).**

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From: PCTEST TCB [mailto:pctesttcb@pctestlab.com]
Sent: Tuesday, December 18, 2007 8:06 AM

Subject: Additional Follow-Up Questions Regarding FCC ID: BEJKE990D

Dear

Thank you for your response to the referenced application. Please see below follow-up question pertaining to your submittal.

Follow-Up RT:

1. My original question #1 is as follows, with answers to your questions inserted therein. Please contact me with any additional questions.

Regarding your answer to question #1, the EDGE data submitted in the revised report seems to indicate that the **conducted** output power level for 850EDGE is less than 2 dB below the corresponding output level for 850GSM (compare the plots on pages 37 and 38. In other words, the conducted power levels for 850GSM and 850EDGE are less than 2 dB apart.). In such a case, SAR data for 850EDGE must also be provided, in accordance with FCC policy. Please address. While 850EDGE EMC data was provided, 850EDGE SAR data was not submitted. Because the EDGE conducted output power level is within 2 dB of the GSM conducted output power level, SAR must be tested in EDGE mode, in the worst-case configurations identified in the GSM/GPRS SAR tests. Please submit this SAR data.

2. My original question #2 follows, with answers to your questions inserted therein.

Regarding your answer to question #1, the EDGE data submitted in the revised report seems to indicate that the **conducted** output power level for 1900EDGE is more than 2.5 dB lower than the corresponding level for 1900GSM. If this is correct, please verify the accuracy of the EIRP measurements, as they show the difference to be less than 0.2 dB apart. In other words, why are the EIRP measurements for GSM and EDGE nearly the same level, while the conducted output power levels are 2.65 dB apart (compare the plots on pages 41 and 42)?

If you have any questions, please do not hesitate to contact us. Thank you.

Sincerely,
Gregory Czumak
Quality Manager
Senior Certification Engineer

> ----- Original Message -----
> **From:**
> **To:** 'PCTEST TCB'
> **Sent:** Wednesday, December 12, 2007 1:26 PM
> **Subject:** RE: Questions Regarding FCC ID: BEJKE990D
>
> Dear, Gregory Czumak
>
> We have questions about your comments and send this e-mail.

1. **Regarding your #1 comment,**
   - ð **GSM850 ERP is 29.29 dBm, and EDGE850 is 29.14 dBm. They show the difference to be less than 0.2 dB apart.**
   - ð **Why the difference is 2 dB. Please explain to us detail.**
   - ð **We tested EDGE850 and provided the test data.**
2. **Regarding your #2 comment,**
   - ð **GSM1900 ERP is 26.30 dBm, and EDGE1900 is 26.17 dBm. They show the difference to be less than 0.2 dB apart.**
   - ð **Why the difference is 2.5 dB. Please explain to us detail**.

Please, Re-check the report.
If you have any comments or explanations about my e-mail, Please let me know ASAP\
BR
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From: PCTEST TCB [mailto:pctesttcb@pctestlab.com]
Sent: Wednesday, December 12, 2007 7:25 AM
Subject: RE: Questions Regarding FCC ID: BEJKE990D

Dear,

Thank you for your response to the referenced application. Please see below follow-up question pertaining to your submittal.

Follow-Up RT:

1. Regarding your answer to question #1, the EDGE data submitted in the revised report seems to indicate that the conducted output power level for 850EDGE is less than 2 dB below the corresponding output level for 850GSM. In such a case, SAR data for 850EDGE must also be provided, in accordance with FCC policy. Please address.

2. Regarding your answer to question #1, the EDGE data submitted in the revised report seems to indicate that the conducted output power level for 1900EDGE is more than 2.5 dB lower than the corresponding level for 1900GSM. If this is correct, please verify the accuracy of the EIRP measurements, as they show the difference to be less than 0.2 dB apart.

If you have any questions, please do not hesitate to contact us. Thank you.

Sincerely,
Gregory Czumak
Quality Manager
Senior Certification Engineer

Sent: Tuesday, December 11, 2007 4:56 AM
To: 'PCTEST TCB'
Subject: Re: Questions Regarding FCC ID: BEJKE990D

Dear PCTEST,

Thanks very much for your support.

According to your request so resend the e-mail and attachment file.

- BT_ Attestation Statement
- KE990d_BT Circuit description
- KE990d_RF Report Rev. 1

If you have questions or comments on this application, please do not hesitate to conatct us.

Best Regards,

*** Have a nice day~~~~~

----- Original Message -----
From: PCTEST TCB
Sent: Saturday, December 08, 2007 8:00 AM
Subject: Questions Regarding FCC ID: BEJKE990D

To: HCT
From: PCTEST TCB

RE: FCC ID: BEJKE990D

Applicant: LG Electronics Inc.

Correspondence Reference Number: BEJ71002
Confirmation Number: 712031002-04
Date of Original Email: December 7 , 2007

Subject: Request for additional information

In regards to your recent TCB application referenced above, we kindly request that you provide the following additional information.

1. Throughout the application EDGE operation is referenced, however, there is no EDGE data in the EMC report. Please submit EDGE EMC data (ERP/EIRP and bandedge plots) for both bands.
-> Please find the revised attachment file. [File Name: KE990d_RF Report Rev. 1]

2. Please submit the Operational Description and the schematic diagram for the Bluetooth transmitter.

-> Please find the attachment file. [File Name: KE990d_BT Circuit description]

3. Please address the following requirements for the Bluetooth transmitter, found in Section 15.247(a)(1):
   A) Is the hopping sequence is pseudorandom?
      -> Yes
   B) Are all channels are used equally on average?
      -> Yes
   C) Does the receiver input bandwidth equal the transmit bandwidth?
      -> Yes
   D) Does the receiver hop in sequence with the transmit signal?
      -> Yes

4. Please address Sections 15.247(g) and (h) for the Bluetooth transmitter.

-> Please find the attachment file. [File Name: BT_ Attestation Statement]

5. FYI: in the future, for bandedge measurements, please put the marker on the highest emission point outside of the band, and not necessarily right at the bandedge.

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

Sincerely,

Gregory Czumak
Quality Manager
Senior Certification Engineer

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gregory@pctestlab.com