

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

From: [PCTEST TCB/CB](#)

To: [HCT- Hyun-A Jang](#)

Sent: Wednesday, November 24, 2010 12:59 PM

Subject: Questions Regarding FCC ID: BEJL05C

To: Ms. Hyun-A Jang/ HCT
From: Mr. Mark Czumak/ PCTEST TCB

RE: FCC ID: BEJL05C

Applicant: LG Electronics Inc.

Correspondence Reference Number: BEJ101361

Confirmation Number: Y1011231361-62

Date of Original Email: November 23, 2010

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. Page 2 of the operation description document describes the enabling of EUT GSM capability. Please verify that GSM functionality is not enabled in the EUT.
==> This device does not support GSM functionality.

2. According to the conducted power tables provided in the SAR and EMC test reports it appears that MPR is not implemented in a standard manner. Please provide justification for this implementation.
==> We've got the response from LG for the MPR implementation.

The reason of different result on 34.121 5.2B TC can be explained by enhanced MPR.

E-MPR algorithm is E-DPDCH power Scaling is considered on MPR calculation. The MPR values of 34.121 5.2B TC doesn't consider E-DPDCH power scaling which is mandatory by 25.214 section 5.1.2.5. Expected MPR values by Spec might be slightly different than the actual transmitted waveform after E_DPDCH power scaling.

The cubic metric value for the actual transmitted waveform after E-DPDCH scaling is quite different than that original expected waveform by table C.11.1.3 of 34.121. So MPR estimation will be different. The MPR value for the original transmitted waveform with B_{ed}/B_c ($B_{ed} = 56/75$, giving $B_{ed}/B_c = 84/15$) = $84/15$ is 2 dB in step4 , but after E-DPDCH was scaled down to $53/15$ the MPR value became 1 dB according to cubic metric for example.

MPR definition in the Spec gives an upper for possible power reduction. The max power reduction of nominal max power is 2 dB rather than strictly 2 dB reduction. This is according to the definition of MPR in 25.101 section 6.2.2.

We're working on application note for this issue.

3. Due to the small footprint, USB modems require a 7x7x7 SAR zoom scan. Please revise the SAR test report SAR plots using this size scan.
==> We remeasured the SAR testing with 7x7x7 zoom scan.

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

Sincerely,

Mark Czumak
Certification Engineer

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