

Chris Harvey

From: 이영택 <yt183@e-ctk.com>
Sent: Saturday, March 26, 2011 4:01 AM
To: charvey-tcb@ccsemc.com
Cc: CHARVEY@ieee.org; lucy.tsai@ccsemc.com
Subject: RE: Woongjin System & Technology Co., Ltd., FCC ID: WLFSTM-7700, Assessment NO.: AN10T1259-1263, Notice#4
Attachments: WLAN SAR.zip; Test Report_GSM_modified3.pdf; Test Report_RFID_modified3.pdf; Test Setup Photo_STM-7700_modified.pdf

Dear Chris Harvey

1. Your revised SAR report contains no SAR compliance documentation for the WLAN Transmitter. Stand Alone SAR is required for transmitters whose power is above the 60/f power threshold. The report correctly documents that the WLAN Max Power is 16.64dBm (46mW) which is over the 60/f ($60/2.4\text{GHz}=25\text{mW}$). Since the RF power of the WLAN transmitter is over the 25mW power threshold, stand alone SAR is required for the WLAN transmitter.

- [Attached the WLAN SAR report.](#)

2. ANSI C63.10 specifies the following procedure for loop antenna measurements:
For measurements below 30 MHz, a calibrated loop antenna as specified in 4.5.1 shall be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. For certain applications, the loop antenna may also need to be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop shall be 1 m above the ground.

The photographs of the antenna show the vertical polarization, but you have indicated that you also changed this loop in the horizontal polarity, which is not acceptable. You have stated in the test report that the receiving antenna is varied from 1m to 4m, which is not correct for a loop antenna. You have not stated that the antenna was rotated along its vertical axis, which is required.

- [Attached a corrected RFID Test Report.](#)

3. The GSM RF Report now lists a substitution procedure for making the measurements, but the measurement tables do not include any of the expected measurement data (Signal Generator setting, substitution antenna gain and cable losses). Please update the GSM RF test report to include these data for both the ERP/EIRP fundamental emissions and the Spurious Emissions.

- [Attached a corrected GSM Test Report.](#)

Please review the attached report and reply if you would like to make any corrections.
Thank you.

Best regards,
Young-Taek

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

From: charvey-tcb@ccsemc.com [<mailto:charvey-tcb@ccsemc.com>]
Sent: Thursday, February 17, 2011 1:21 AM
To: ytl83@e-ctk.com
Cc: CHARVEY@IEEE.ORG; lucy.tsai@ccsemc.com
Subject: Woongjin System & Technology Co., Ltd., FCC ID: WLFSTM-7700, Assessment NO.:
AN10T1259-1263, Notice#4

Dear Young-taek Lee,

I have received your response to Notice #3. The following items still need to be
resolved before the review can be continued:

1. Your revised SAR report contains no SAR compliance documentation for the WLAN
Transmitter. Stand Alone SAR is required for transmitters whose power is above the 60/f
power threshold. The report correctly documents that the WLAN Max Power is 16.64dBm
(46mW) which is over the 60/f ($60/2.4\text{GHz}=25\text{mW}$). Since the RF power of the WLAN
transmitter is over the 25mW power threshold, stand alone SAR is required for the WLAN
transmitter.
2. ANSI C63.10 specifies the following procedure for loop antenna measurements:

For measurements below 30 MHz, a calibrated loop antenna as specified in 4.5.1 shall be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth position around the EUT. For certain applications, the loop antenna may also need to be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop shall be 1 m above the ground.

The photographs of the antenna show the vertical polarization, but you have indicated that you also changed this loop in the horizontal polarity, which is not acceptable. You have stated in the test report that the receiving antenna is varied from 1m to 4m , which is not correct for a loop antenna. You have not stated that the antenna was rotated along its vertical axis, which is required.

3. The GSM RF Report now lists a substitution procedure for making the measurements, but the measurement tables do not include any of the expected measurement data (Signal Generator setting, substitution antenna gain and cable losses). Please update the GSM RF test report to include these data for both the ERP/EIRP fundamental emissions and the Spurious Emissions.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender. Revised documentation should not be emailed, but instead should be submitted through "Add Attachment" function at the UL-CCS website. Please have your Assessment Number and FCC ID/IC Certification number handy. You may use the following link: <https://cert.ccsemc.com/filing/>

Best regards,

Chris Harvey

Charvey-tcb@ccsemc.com