From: Greg Snyder

Sent: Friday, February 19, 2010 7:45 PM

**To:** 'Gregory Czumak' **Subject:** RE: ACJ9TGCF-527

Hi Greg.

Please see below.

Thanks Greg

From: Gregory Czumak

Sent: Friday, February 19, 2010 2:42 PM

**Subject:** ACJ9TGCF-527

## RT Questions:

- 1. Please provide additional external photos of the EUT showing all sides of the device. Ext Photos have been sent
- 2. Please provide the gain of all Part 15 antennas used by the EUT. Antenna gains are located in the MPE report
- 3. Please submit the MPE report for the EUT. Please see the revised MPE test report
- 4. The PCE, NII, DTS and DSS reports all contain data plots that are time-stamped with test dates that do not match the test dates shown on p.1 of the reports (some are several years off). Please confirm that the test dates on p.1 of the reports are correct, or else revise them accordingly. If any testing was performed more than 1 year ago, please confirm that the data is still applicable to the EUT. The PCE test report has been updated with the correct plots. The WLAN and UNII reports have been updated to cover the correct test dates. The data plots included for the DSS are the same module that has been used in previous application and the data remains representative for this application.
- 5. If the +/- 0.7 dB nominal power tolerance specified in the PCE tune- up procedure is applied, the following output power levels are less than the lowest specified acceptable power level: cellular CDMA, cellular GSM, PCS CDMA, PCS GSM (all channels for each). Please address. The powers have been updated to reflect this module. The previous powers reported were form and previous version of this module.
- 6. On pages 23-25 of the PCE report, the dBc levels in the tables are not correct, based

on the reported emission levels. Please revise. The PCE reports has been revised to correct these three table.

- 7. The NII EMC report measures the 26 dBc bandwidths, but does not use these values to calculate the transmit power limits (the power data is not compared to any limit to demonstrate compliance). Please revise the report to include the calculated transmit power limits, so that the measured levels can be shown to be compliant. The power limitations based on the 26dB bandwidth have been added to the revised UNII test report.
- 8. On pages 50-51 of the NII EMC report, because the peak excursion values are shown as negative numbers the Margins associated with them are all incorrect. Please revise. The UNII report has been revised to correct the peak excursion numbers to absolute values.
- 9. In the DTS report, are the output power measurements peak or average? Please specify. They appear to be average measurements, however, the EUT does not comply with the 30 dBc bandedge limit in all modes of operation (see Plots 6-75 and 6-76). As a result, the output power measurements must be peak. If this is the case, please provide peak output power measurement data. Peak powers have been added to the revised DTS report.
- 10. In the DTS report, the spurious RF conducted measurements for 5 GHz operation must be performed up thru 40 GHz. This was not done in Plots 6-84, 6-86 and 6-88. Please provide the additional required data from 27-40 GHz. I note that the DL in these plots appears to be set at more than 30 dBc, even taking into account the 1 MHz RBW (instead of 100 kHz) correction. The additional plots covering up to 40GHz for the conducted spurious have been added to the revised WLAN report.
- 11. For NII and DTS operation, please confirm that the single chain output power levels reported represent the highest output levels. In other words, please confirm that the reported levels exceed the levels of the 2 chains transmitting simultaneously and summed together. Otherwise, please provide output power measurement data for each chain while they are transmitting simultaneously, and mathematically sum their outputs to provide the true peak output levels of the EUT. It's confirmed that the output powers of the individual chain transmissions remain slightly higher than with both Chain A and Chain B transmitting simultaneously for MIMO operation. The mathematically summed output powers of both chains have been added to the MPE test report for the worst case and separate MPE calculations have been made using the summed MIMO powers.
- 12. FYI: the text at the top of several pages in the NII report (e.g., p.35) does not reference the hi band.
- 13. FYI: in the future, the RFx warning statement in the user's manual should indicate

<u>how</u> the user can comply with the 20 cm minimum separation distance requirement (e.g., "this minimum required separation distance is maintained when the device is used in a normal operating configuration.").