



FCC ID: PWO460001

IC ID: N/A

CT Project: P1350020

Technical Reviewer: Chris Harvey

Date: 8/16/2013

1. The Block Diagram contains operational blocks for the 2100 MHz but not for the paired 1700 MHz operation. The Block Diagram seems only to show amplification of the RF signals to the Inside Antenna (Downlink). Please update the Block Diagram exhibit.

CT: A new block diagram has been provided.

2. The Antenna Gain exhibit seems to only show the Uplink Frequencies and does not mention the Downlink frequency. Please correct and update any other exhibits that may need to be corrected with updated gain information.

CT: The uplink antenna gain is all that is listed or need on the MSCL document. The downlink antenna gains are contained in the MPE calculations document.

3. Please note that I will wait to review the MPE exhibit until the antenna gain issue has been resolved.

CT: Noted

4. The Test Result Summary on page 6 of the RF Test Report is clear, indicating all the tests that have been performed.

CT: Noted

5. The Out of Band Rejection test data seems to have errors in the band listings for many of the plots. The error of listing the frequency bands is also repeated throughout the other test data sections.

CT: Out of band rejection is based upon the spectrum blocks immediately adjacent to the allowable FCC frequency band and not the operational band of the EUT. There can and will be differences between the two. For example the FCC allows a rang of 776 – 787 MHz but to ensure there are no interference issues the industry has limited use to 777 – 787 MHz however the OOBE testing is performed based upon 776 – 787 MHz. .

6. In many locations throughout the report there are stated limits that have been calculated but these calculations have not been shown in the report (as examples, Conducted Spurious Emissions and Noise Limits). In all cases where a limit is calculated, the report must always show where this calculation is from and a sample calculation.

CT: The locations requiring gain calculations now contain formulas.

7. The Out Of Band Emissions test limit in the test report is stated as -19dBm (which seems to be an error and maybe from the Intermodulation requirements). Please confirm the OOBE test limit and correct as needed.

CT: 20.21(e)(8)(i)(E) Indicates that the OOBE limit is 6 dB more stringent than the FCC mobile Emissions Limit which is -13 dBm. This makes the limit -19 dBm.



8. When a KDB test guidance is specified, please indicate which document in that KDB is being referenced . For example on page 77, there is reference to KDB93510 has been made, but no indication of which document of version is being used. Please update throughout the report.

CT: The specific KDB version has been added.

9. The CDMA plots for occupied BW Output Uplink band shows an elevated skirt for all output plots.

CT: The CDMA signals show an Eb/No of greater than 20 dB which will allow for adjacent channels to operate without interference. This is perfectly acceptable and will within the "must be similar" guidelines.

10. For the Variable gain test performed for the Uplink band please also specify the RF Characteristics of the injected Downlink signal (Signal Generator 1).

CT: The device was tested per the required KDB and all signals both uplink and downlink are described therein. The KDB is referenced in the test report.

11. The Downlink Detection Time Limit is stated as 300mS, but should be 1 second. The Downlink restart time Test Results data unit should be Seconds, but is shown as mS.

CT: This has been corrected.

12. The Calibration for the Fluke Voltmeter is listed as due on 7/3/2013, but some of the testing is documented as being performed after that date. Please confirm that the data was collected with instrumentation that was in calibration.

CT: This device is under a 30-day calibration extension and has been noted as such.

CT -

Response by: John Erhard

Submitted by: Jennifer Sanchez

Date: 9/23/13