

Response to TCB Findings

1. Only the power cable appears to be attached to the device during radiated emissions test. Please explain why the data input port was not populated.

Response: The reason there was no data cable is that baseband data is expected to flow to and from a carrier board. The only data interconnect on the OEM100 is a board to board stacking connector; there is no connector for a cable. This is consistent with the description of a carrier board in the hardware manual (see page 7).

2. Please supply the 20dB bandwidth plot for the module. The data is mentioned in the report, but the plot is missing.

Response: 20dB plot supplied.

3. Have all the tests presented in this report been performed at nominal voltage of 3.6V, including previous test data used? The voltage variation data suggests that at lower voltages the power levels will drop. Please clarify.

Response: The eut has a built in threshold which does not allow it to stay on beyond a certain value. All new testing was performed at the nominal value. The CEMI data is supplied in the report. In the previous application the node was battery powered only so CEMI was not done. For modular testing, it was determined that a 3.6V input to the module provided the highest output power. All testing performed specifically on the module was done at 3.6V. Antenna port conducted data for the module was taken from the original node application which was tested with a 3V battery. The maximum deviation in the POP of the device due to voltage input variations (table pg 15) is 10.8dB with the minimum power at 1.6V and the maximum at 3.6V. Since the device at 3V passed the limit by more than 20dB, the boost in power caused by 3.6V operation will be well within the limit.