Compliance Testing, LLC
Previously Flom Test Lab

CB-7.2.1 – Technical Review RT Form

FCC ID: 2AEAL-SB-850-1900
IC ID:
CT Project: P14c0008

From: Shawn McMillen

Date: 4/3/15

1--The EIRP tables on page 16 of the EMC report are incomplete.
GC: The EIRP tables are not required and have been removed from the rev 3 version of the report.

2--Please note that the reference level for conducted spurious emissions should be set so that the peak of the carrier is within 6dB of the reference level to insure that out of band emissions are not suppressed. Also note that the conducted spurious emissions may have been performed with the carrier at full power as the plots show that the level of the fundamental is far below what the spectral density would be based on the power levels provided. In addition it is unclear as to why a video averaging was performed in conjunction with a peak detector for these out of band emissions.
GC: Noted.
In evaluating the conducted spurious emission plots The peak emissions were greater than 20 dB below the limit of -13 dBm. The video averaging used would not have caused any emission to be over the limit. Therefor there is no reason to repeat the data.

3--Please check the output plot for WCDMA 1850-1915MHz found on page 62 of the EMC report as it is inconsistent with the other plots provided. Also the signal into the BDA should be similar to that of the signal coming out.
GC: The slope seen in the output plot on page 62 is due to the bandpass rolling off at the band edge. Refer to the Authorized Frequency Band plot on page 10 of the test report for details.

SM 4/7/15 --**Please note that the center frequencies being chosen for the various bandwidth should be such that the radio meets the out of band emissions at the band edge. For the particular on in question the center of the spectrum window is at 1915MHz which is the edge of the band. This carrier is centered at 1915MHz and as such half of the carrier is outside the authorized band. This is for noting purposes only and for future filings.**

GC: noted

4--The maximum output on the label is listed as 33dBm and the gain is 70dB which is inconsistent with the data provided. Also the label and location picture needs to be redone as it in illegible when zoomed in.
Sabino: On the label, I rounded up the maximum gain because 66dB sounded strange, so I rounded it up to 70, but I have changed it to 66 now (I don't really want to round it down to 65, as the equipment can do better than that). The maximum output power is 20 dBm, that was indeed an error on the label, so I also changed that value to 20.

5--Please check the confidentiality documents as short term is requested for certain documents and should be on a separate request letter.
Sabino: Given the clarifications in the document you sent me, I reverted back the standard Short Term and Long Term requests (it would be too cumbersome to request an NDA from all installers)

6--The internal photos need to include the inside of the form factor.
Sabino: For the internal photos, I checked the FCC website and for industrial boosters they're exactly like mine (PCB only), so I'd like to submit them as they are please. See the attached examples (I'm attaching just two examples but there are many more that have the internal pictures document just show the PCB, as I'd like to do).

7--The RF exposure information needs to be in the user's manual. i.e. the 20cm separation requirement.
Sabino: The RF exposure warning has been added to the user manual.

Response by:

Submitted by:

Date: