

FCC ID: PDEMEDIOL122EAS

Response to TCB findings 1

Hi Donna,

We have identified these issues following our review:

1. Please provide a description of the product as tested and deployed. We need a complete description of the cables attached to the transmitter (length, type, shielded/unshielded). We note that the manual says that two antennas are always used, but that the test configuration only includes one antenna. Please address this discrepancy.

Response - The EUT was setup as floor standing equipment with one pedestal connected to the Electronic Unit. Radiated emission testing was performed without an RF 12 - 14 MHz Isolator. (Refer to Appendix B - Test setup photographs and Appendix H - Technical manual)

CAT-5 cable, standard.

Cable length is 8.5 m and is equivalent to half wavelength for 13.56 MHz.

The cable is made of quad twisted pairs 100 ohm each -two twisted pairs in parallel (=50 ohm impedance) is used to conduct RF transmit power to pedestal antennas via standard RJ45 plug. The cable is unshielded. Leakage - according to Belden specification is less than -65 dB @ 13.56 MHz.

The rationale for testing the single unit is that each Pedestal (antenna) is an electrically independent unit, with its own electronics, power supply etc. we NEVER connect the Medio L122 (electronics box) to more than one pedestal (antenna). The Smarto L122 Product is the combination of one Medio L122 and one Pedestal. It is the Smarto Product we are seeking FCC certification of. This is how the product is sold.

2. 15.225 (b) requires that emissions appearing outside of the 13.553-13.567 band not exceed the 15.209 limits. Scaling the very low signal shown in the bandwidth photo up to the maximum peak level shown in test report of 96.1dBuV, it appears that the first few spurs of the fundamental outside of the band may exceed the limit. Please provide actual measured data for the first spurs outside the band on the high and low side. It may be to your benefit to acquire these readings at a 30 meter distance or to use the extrapolation factor allowed in 15.31 (f) (2).

Response - In response to you query regarding out of band emissions not exceeding the 15.209 limits: Normal bandwidth was used for the frequency band 9 kHz – 1000 Hz, except the frequency band 13.52 - 13.6 MHz (outside the operating frequency) was tested with the resolution bandwidth of 1 kHz and video bandwidth of 100 kHz. Plot 6 was plotted with lower resolution bandwidth (1kHz).

3. Please supply 3 (external, internal & test setup) separate PDF files for the photos.

Response – supplied.

4. The confidentiality request states that all photos shall be considered confidential. It is not permitted for the external and test setup photos to be confidential. Also internal photos can only be considered confidential if it is not possible to gain access to the interior or some form potting material is used. How is interior access achieved? Please supply a new confidentiality request.

Response - We of course respect FCC's rules relating to this. People can get access to the product, and there is no potting used, so we accept that the confidentiality does not apply.

5. Grantee code PDE and FRN 0004073201 are still assigned to Gemplus.

Response - I have contacted Bette Taube and she has indicated that the grantee code has now been assigned to TAGSYS. I have also checked this via the web page.

6. Please supply details of the antenna connector.

Response - The antenna connector is SMB plug. This plug is mating with SMB socket on adaptor board located in the bottom of pedestal. The other side of adaptor board is holding the RJ45 socket.

Best regards

Barry C. Quinlan
Certification Manager
Curtis-Straus TCB