

To Whom It May Concern:

As per FCC Public Notice # DA 00-1407: Requirement #3:

The Equipment Under Test (EUT), which was qualified as an RF modular at Compatible Electronics, Inc. on (Date), was tested in the following configuration:

Setup #1:

The RF Module was setup outside a Desktop configuration. The RF Module was connected to a Mini PCI to CardBus extender (Adapter #1), via the Mini PCI connector. The Mini PCI to CardBus extender was then connected to a CardBus to PCI adapter (Adapter #2), which was connected to the PCI Bus of the Desktop computer. Both, adapter and extender were copper shielded and grounded (Chassis Ground) in order to prevent radiated emissions getting out of the desktop computer via the extender and possibly out of the RF Module. In order to test the RF module, half of the Extender was outside the desktop computer. Because of this particular setup, the other half of the extender was grounded to Chassis ground using copper tape. The Module's own RF Shielding was NOT connected to chassis ground. The tabs of the Mini PCI Module were connected to Chassis ground. In a real notebook computer environment, these tabs connect the digital ground of the Mini PCI Card to Chassis ground.

Setup #2:

The RF Module was setup inside a Desktop configuration. The RF Module was connected to a PCI Caddy, which is a Mini PCI to PCI card adapter. The TX Antenna of the RF Module is mechanically attached to the PCI Caddy on the outside of the metal slot. The antenna was mechanically design to be at a 90 degree angle from the backside of the desktop computer in order to avoid breaking the antenna when located close to a wall or any other objects. Consequently when RF emission measurements were taken in this setup, the 90 degree angle of the antenna (which was originally the same antenna gain as setup #1) was causing many more additional RF reflections with respect to the back of the desktop computer (which was metal). Because of this very specific test setup, (plus our marketing strategy of the 90 degree angle antenna) the only way to comply FCC Subpart C regulations, was to REDUCE the ANTENNA GAIN (antenna Gain= -4dbi) in order to keep the same RF output power used in setup #1.

Furthermore, it was proven that the worst-case scenario was in setup #1 due to the higher antenna gain & also the PCI Bus clock of the desktop computer was physically longer with respect to the load (RF Module)

Setup #1 used an ANTENNA GAIN of 0dbi

Please see Compatible Electronics Test Reports/Packages for Photographs and Data.

