



FCC ID: AQE-AD511

IC ID: 10133A-AD511

CT Project: TCB-p11c0005

From: Chris Harvey

Date: June 13, 2012

- 1.) The Operational Description exhibit states max +13.5dBm maximum input to antenna for gain test, but what about operation? How is the RF power into this unit regulated/restricted?

CT – The EUT is designed to operate with an Iridium handset which has a maximum power of 13.5 dBm. Power is restricted by this method.

- 2.) This device comes in 2 parts which are connected by cable.... A bias box (power) and the antenna. The FCC ID label is located on the power supply unit, but shouldn't this be on the main antenna/amp unit?

CT – This is a composite system where the main component, which will be near the user, is the power distribution block therefore this is where the label is placed.

- 3.) Many Iridium devices operate from 1616 – 1626.5 MHz, but this stops at 1621 MHz. Please confirm operation and update exhibits as needed (including test if needed).

CT – This is correct and additional test data for 1626.5 MHz has been added to the FCC Part 25 and RSS – 170 test reports.

- 4.) If this device does actually stop at 1621 MHz, what happens if someone operates an Iridium handset in the 1621 – 1626.5 MHz range?

CT – See answer 3

- 5.) The FCC prescribes the TIA 603 substitution method for licensed service radiated power measurements, which seems not to have been used for the EIRP measurements in this application. Please either justify or correct.

CT – The test report template used is for mobile earth stations which are verification only devices and do not contain all the same items necessary for certification test reports. The testing was performed correctly. This was done for the Peak Output Power only as the remaining tests the substitution method would be completely impractical.

- 6.) The test report states in several places that a signal generator provided a simulated satellite signal, but this signal, characteristics or power levels are not documented in the test report.

CT – This information has been added to the test report.

- 7.) I am removing the 'obsolete' External Photos from review.

CT – Noted

- 8.) The manual does not have any mounting separation requirements for RF Exposure. FCC MPE Calculations have not been provided and there is no guidance on mounting separation from persons. This is an RF Exposure requirement for FCC.

CT – An updated version of the manual with the RF separation distance has been provided.



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- 9.) The test report documents again do not provide much information about the requirements for which you are documenting compliance. The test procedures lack detail. The limits are not clearly stated. You test reports should always state the detailed requirements to which you are testing, and limits to be met, actual procedure used, and example calculations (as needed) and results.

CT – As many of the measurements are radiated and the description of the testing indicates that all cable losses and antenna correction factors are input directly into the spectrum analyzer there is no final manipulation or re-characterizing of the data therefore there are no sample calculations to provide except the limits for frequency stability.

Response by: John Erhard

Submitted by: Amanda Reed

Date: 6/28/13