

7. TESTS RESULTS, EMISSIONS (FCC)

7.1 Radiated Emissions, FCC CFR47 Part 15.235

As a precursor to formal 10m Open Area Test Site [OATS] Radiated Emissions testing, an evaluation of the EUT's radiated emissions was made within the screened room, the measuring antenna being positioned approximately 3m from the periphery of the EUT. It was observed that radiated emissions were present.

The EUT was then moved to the OATS and set up on a non-conductive table positioned centrally on a turntable..

Formal radiated emissions measurements were then made on a 10 metre OATS [in accordance with the requirements of ANSI C63.4-1992] over the frequency range 25MHz - 1GHz. Utilising a Receiver [operated in the Quasi-Peak Detector Function and 120kHz Bandwidth], a Bi-Log Antenna, Antenna Mast and EUT Turntable [800mm above the Ground Plane]. The measuring antenna height [between 1000 and 4000mm] and polarisation [vertical or horizontal] and turntable azimuth [0 - 360 degrees] was optimised to produce the maximum measured signal level. Cable losses and antenna correction factors were then added to the measured signal levels to produce final dB μ V/m test results. Cable loss and antenna factors are shown at Appendix D.

The test results are shown in graphical form at Appendix C.

Examination of Figure 1 shows that the significant emission in the band 26.96-27.28 MHz does not exceed 10,000 microvolts/meter [80 dB μ V/m] measured satisfying the Radiated Emissions requirements of FCC CFR47 15.235 (a).

Examination of Figure 2 shows that the significant emission band width complies with the 10kHz requirements satisfying the band edge requirements of FCC CFR47 15.235(b).

Examination of Figure 1 shows that the significant emissions [greater than 20 microvolts/meter] measured satisfying the Radiated Emissions requirements of FCC CFR47 15.235(b).

All other requirements of FCC CFR47 15.235 were also satisfactorily met.