

Measurement Methods

Determination of Field Strength Limit for FCC Part 24 Transmit Tests.

1. FCC Part 24.238 states that emissions shall be attenuated by at least $43 + 10 \log (P)$ dB below the transmitter power (P_t). However, this is defined for conducted antenna terminal measurements only and no limit for field strength is defined. As such an Open Area Test Site (OATS) was set up in order to determine the equivalent field strength limit at 3 meters.

A signal generator was set to transmit a power level sufficient to obtain a radiated ERP of $-43 + 10 \log (P)$ dB (-13dBm).

The resultant field strength was then measured at 3 meters. This was recorded as the 3 meter limit and used to make radiated spurious emission measurements against.