

REPORT ON SPURIOUS EMISSIONS

Tests to 5GHz were done to identify any spurious radiation for measurement on the three-meter range. To ensure no spurious emissions were missed the transmitter was placed eight inches away from an antenna attached to the spectrum analyzer. The noise floor of the spectrum analyzer is below the spurious limit of the radiated limits from 15.109 including approximate losses per table to account for the test setup. An additional verification of adequate noise floor is that the noise floor is greater than 20dB below the measured transmitter fundamental. (The difference between the measured transmitter level and the spurious limit is 20 dB at 390 MHz.) The setup is just used to find spurious signals in order that they may be measured. For OHD's reference the limits are:

70 to 130 MHz limit $125\mu\text{V} / \text{meter} = -65 \text{ dBm} / \text{m}$

260 to 470 MHz limit $375 \text{ to } 1250\mu\text{V} / \text{meter} = -55 \text{ to } -45 \text{ dBm} / \text{m}$
@390 mHz limit $917\mu\text{V} / \text{m} = -47.7 \text{ dBm} / \text{m}$

Above 470 MHz limit $1250\mu\text{V} / \text{meter} = -45 \text{ dBm} / \text{m}$

All emissions in the included plots other than the identified fundamental and harmonics are ambient signals. The transmitter was switched on and off to ensure the emissions seen were ambient signals. Plots of some of the spurious test are included for illustration.