

Annex A - Spurious Emissions at Antenna Terminals

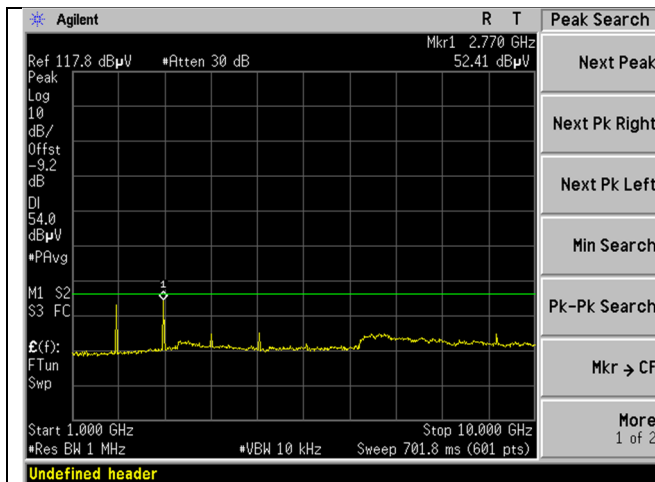
Naming Convention

Radio (BLE)_Channel (Low Ch, Mid Ch, High Ch)_Frequency (MHz)_Rate (1Mbit)_Measurement (15.209)_Range (MHz, GHz, Lower Band Edge, Upper Band Edge)

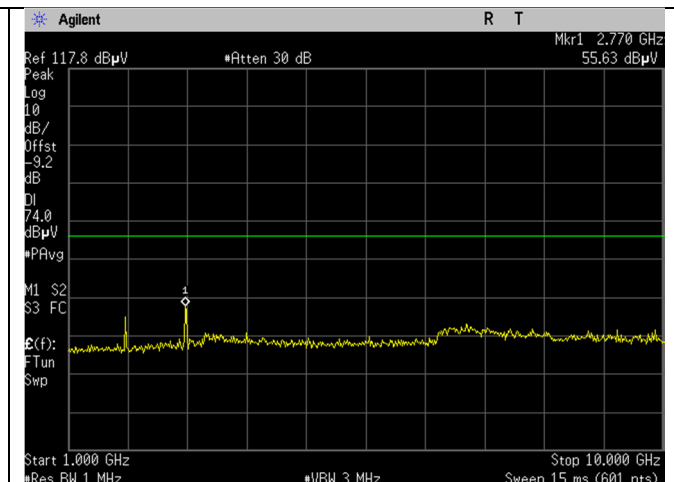
Note for 15.209 measurements: below measurements are in units of dBuV/m at 3meters. These measurements are performed conducted in lieu of radiated as permitted by ANSI C63.10-2013. The following formula was used in making such conversions:

Above 1GHz: $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{m}]) + 104.77$, where E is field strength and d is distance at which the field strength limit is specified in the applicable requirements. $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d = 3 \text{ m}$. Straight conversion between $E[\text{dB}\mu\text{V}/\text{m}]$ and $\text{EIRP}[\text{dBm}] = 107$. Thus offset for dBuV/m at 3meters is $95.2 - 107 + \text{antenna gain}$.

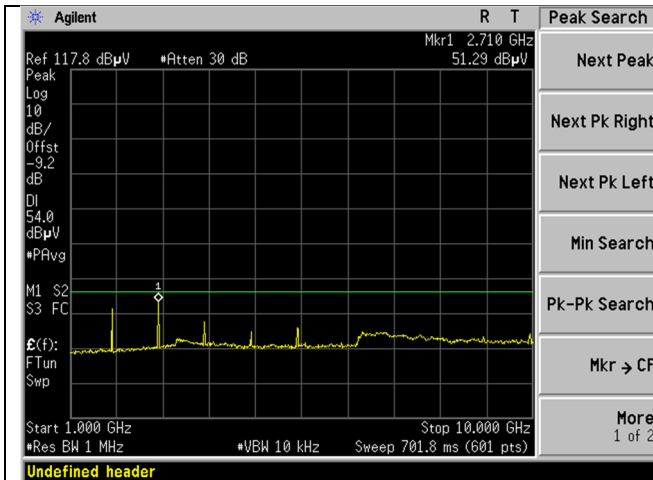
Below 1GHz: above is true in addition to adding ground plane contribution of 4.7dB. thus offset for dBuV/m at 3meters is $95.2 - 107 + 4.7 + \text{antenna gain}$.



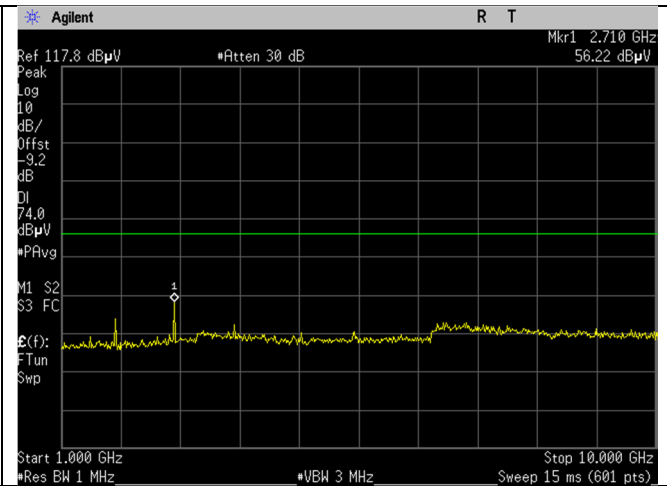
High Ch_925.5MHz_15.209_1-10GHz_avg



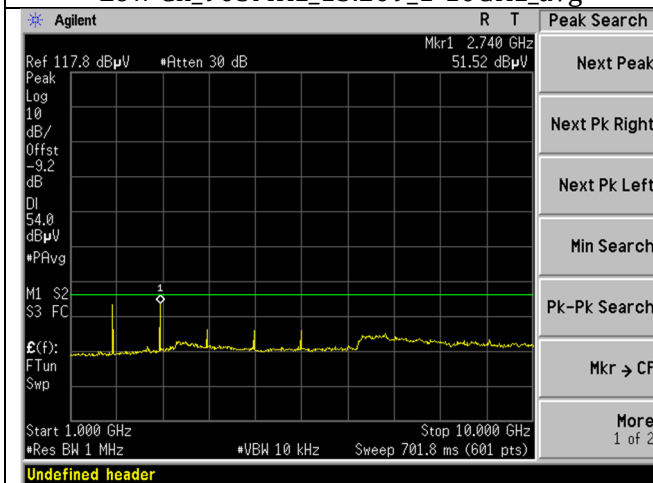
High Ch_925.5MHz_15.209_1-10GHz_peak



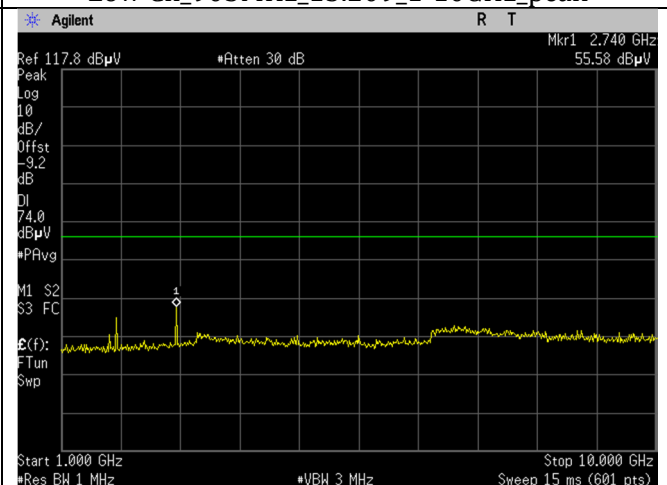
Low Ch_903MHz_15.209_1-10GHz_avg



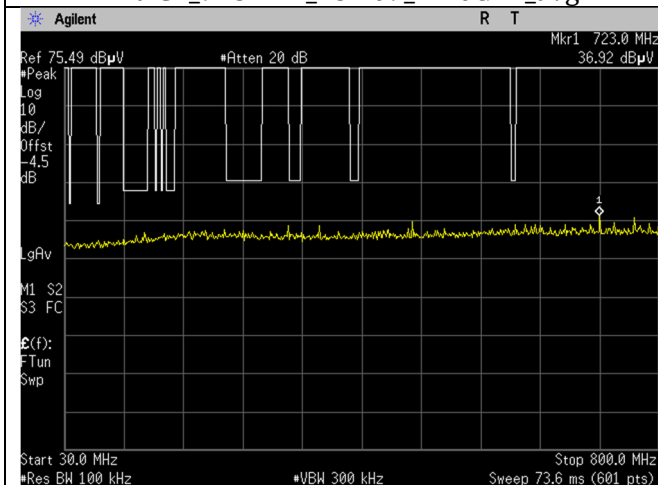
Low Ch_903MHz_15.209_1-10GHz_peak



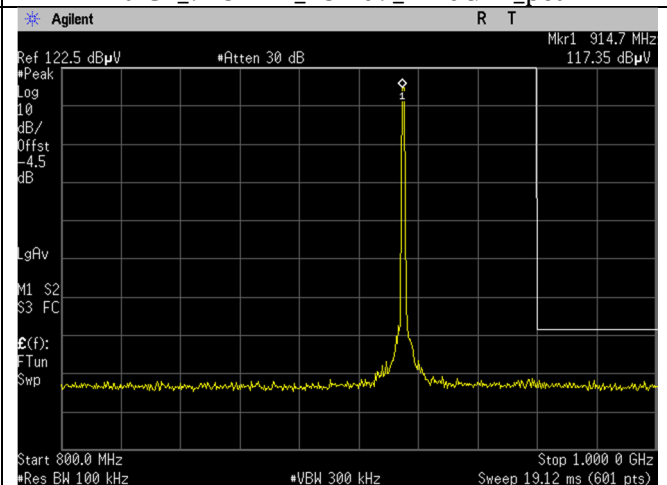
Mid Ch_915MHz_15.209_1-10GHz_avg



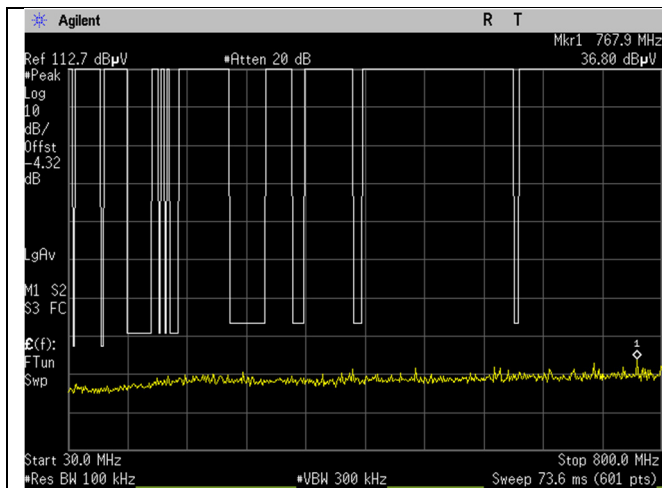
Mid Ch_915MHz_15.209_1-10GHz_peak



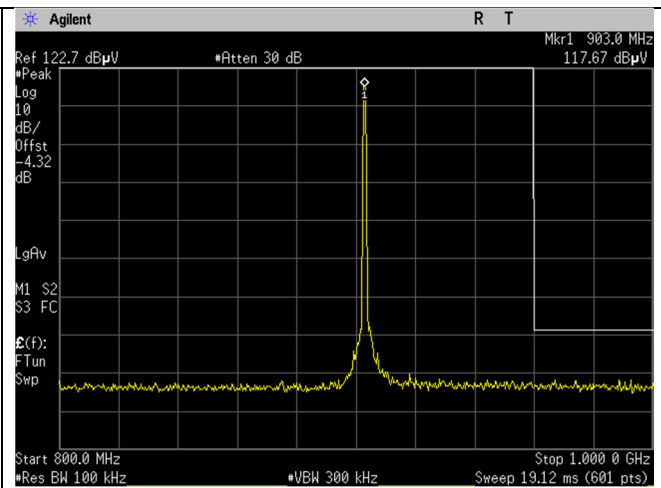
Mid Ch_915MHz_15.209_30MHz-800MHz



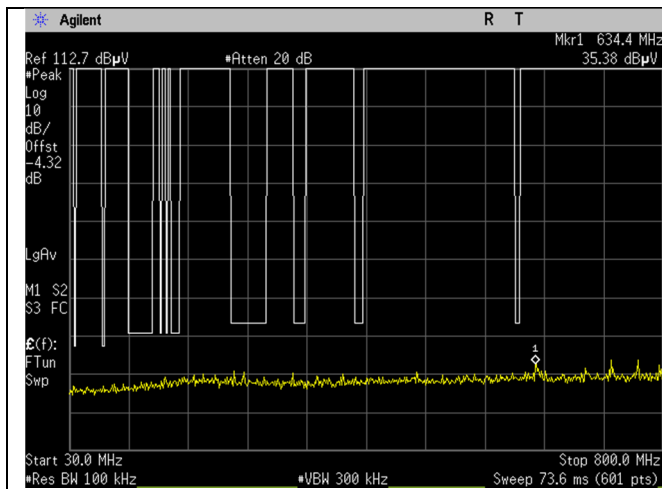
Mid Ch_915MHz_15.209_800MHz-1GHz



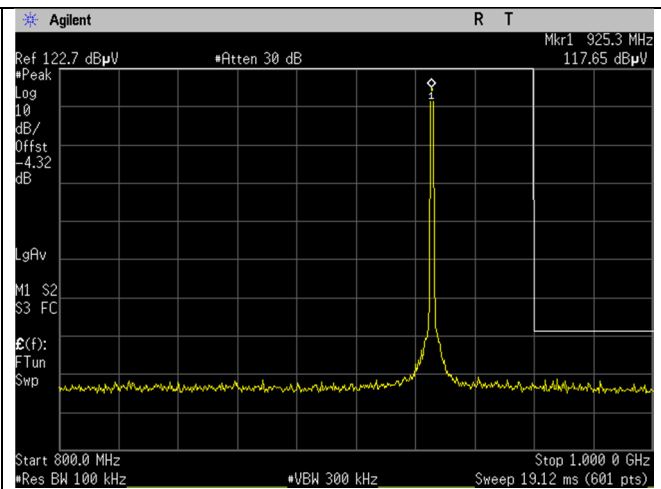
Low Ch_903MHz_15.209_30MHz-800MHz



Low Ch_903MHz_15.209_800MHz-1GHz



High Ch_925.5MHz_15.209_30MHz-800MHz



High Ch_925.5MHz_15.209_800MHz-1GHz