

#### 4.0 Out-of-Band Emissions at antenna terminal FCC 2.1051

##### 4.1 Requirement

The power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $(43 + 10 \log P)$  dB.

Note: That corresponds to the level of -13 dBm for any out-of-band and spurious emissions.

##### 4.2 Test Procedure

The EUT RF output was connected as shown on the diagram in sec.1.3.2. The EUT was setup to transmit the maximum power.

The spectrum analyzer resolution bandwidth (RBW) was set to 1 MHz in the PCS band and 100 kHz in the Cell band. For measurements at the band edges, the resolution bandwidth (RBW) was set to 100 kHz. Measurements were performed at three frequencies at the low, middle, and high channels for all modulations types.

Intermodulation was performed by injecting two modulated signals into the EUT. One signal was set at the bandedge of either the Up Link or Down Link band and the other signal was set 6 MHz away.

##### 4.3 Test Equipment

Rohde & Schwarz FSU26 Spectrum Analyzer

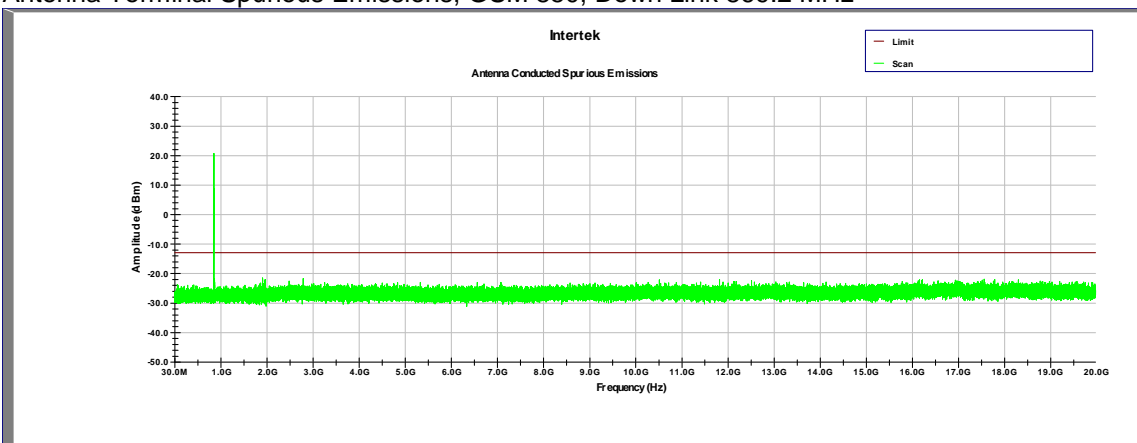
##### 4.4 Test Results

Refer to the following Graphs.

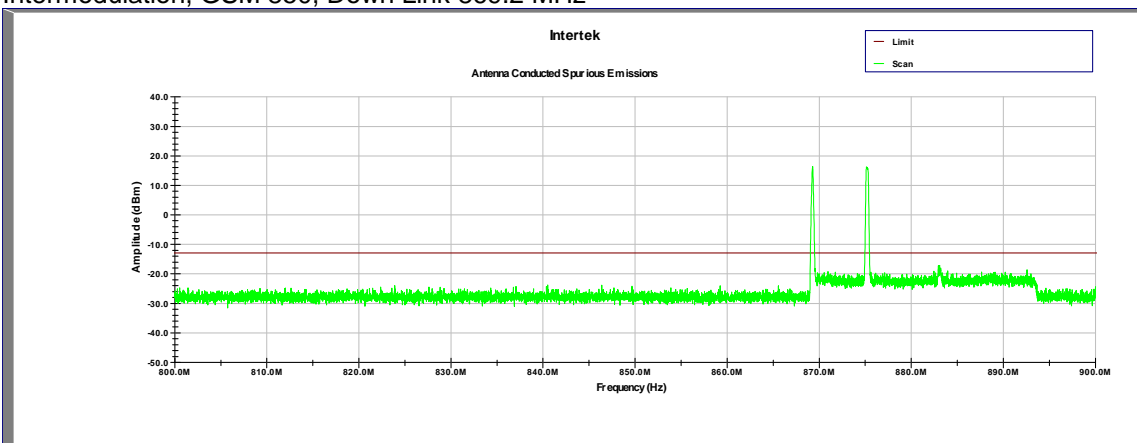
Result	Complies
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Graph 4.1 & 4.2

### Antenna Terminal Spurious Emissions, GSM 850, Down Link 869.2 MHz

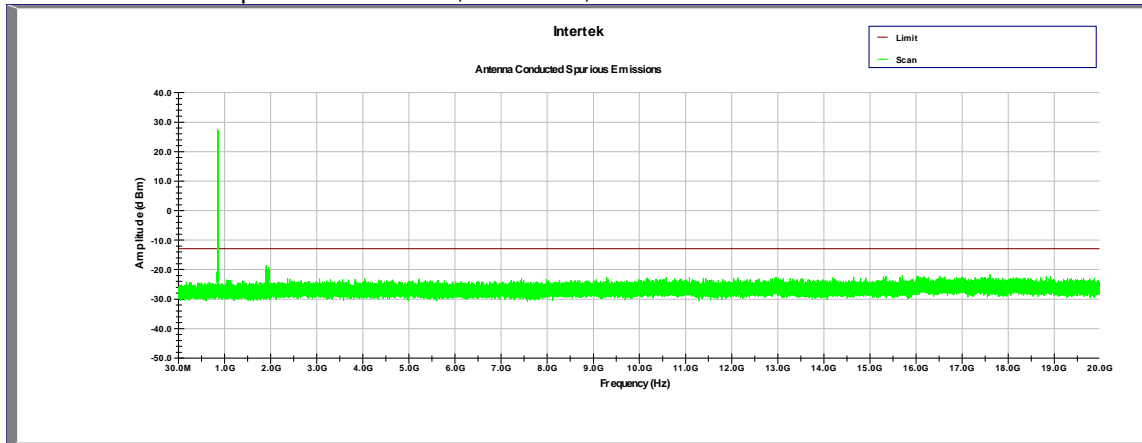


### Intermodulation, GSM 850, Down Link 869.2 MHz

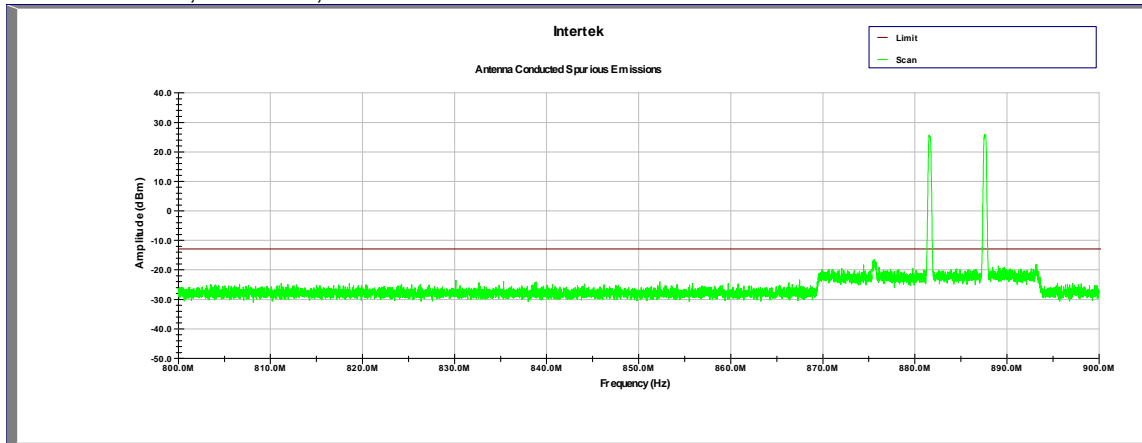


Graph 4.3 & 4.4

Antenna Terminal Spurious Emissions, GSM 850, Down Link 881.6 MHz

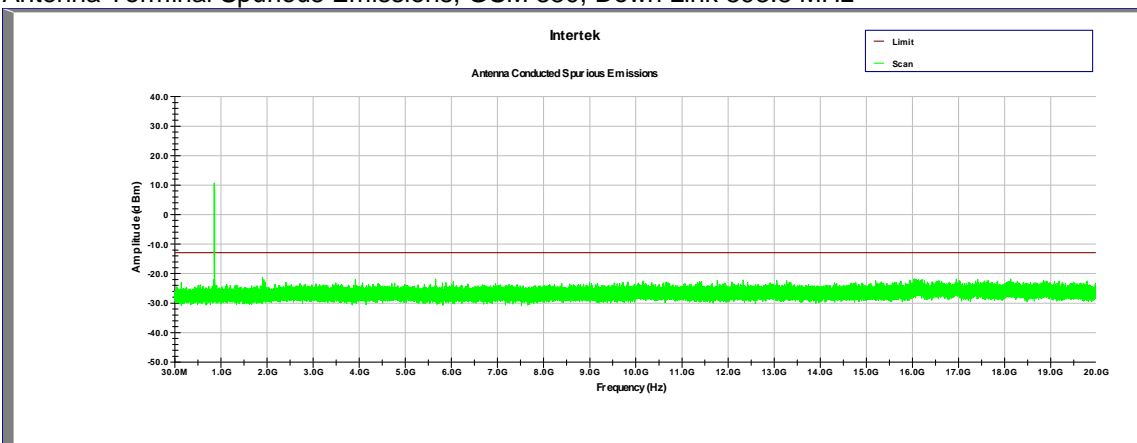


Intermodulation, GSM 850, Down Link 881.6 MHz

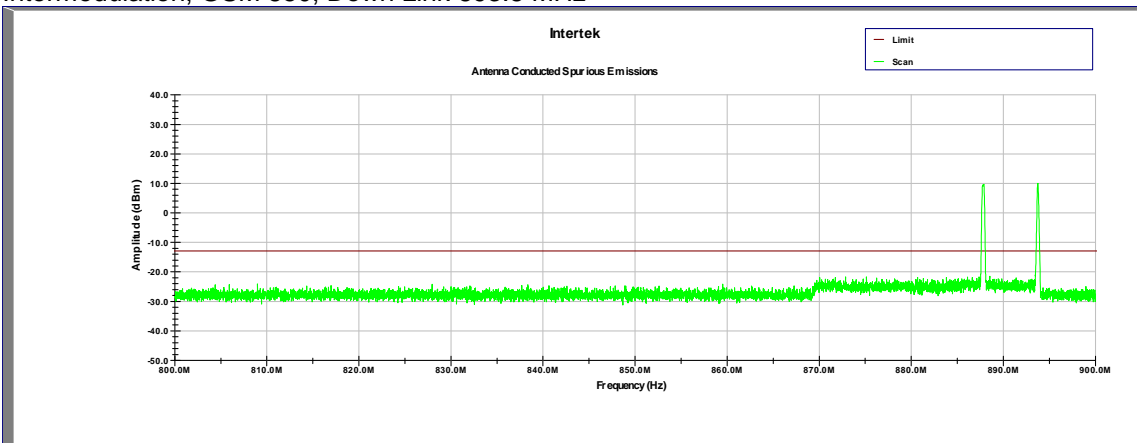


Graph 4.5 & 4.6

### Antenna Terminal Spurious Emissions, GSM 850, Down Link 893.8 MHz

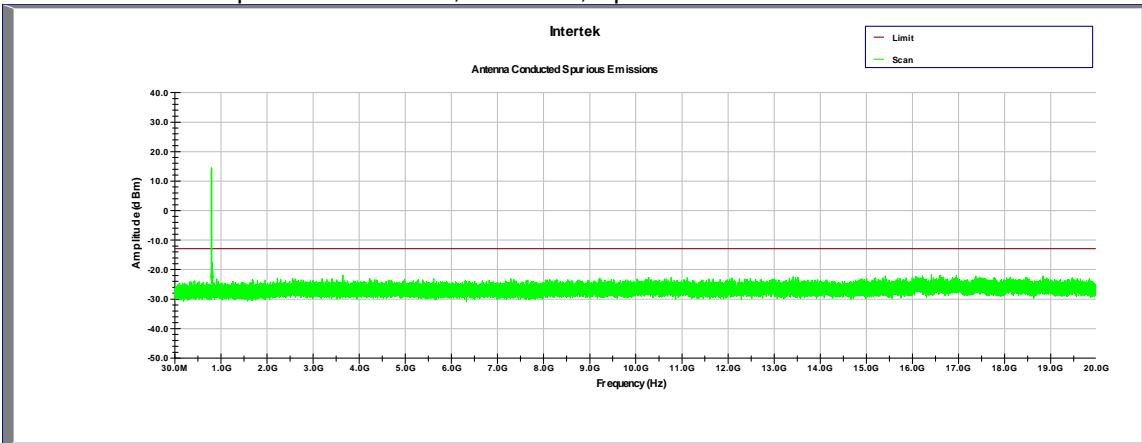


### Intermodulation, GSM 850, Down Link 893.8 MHz

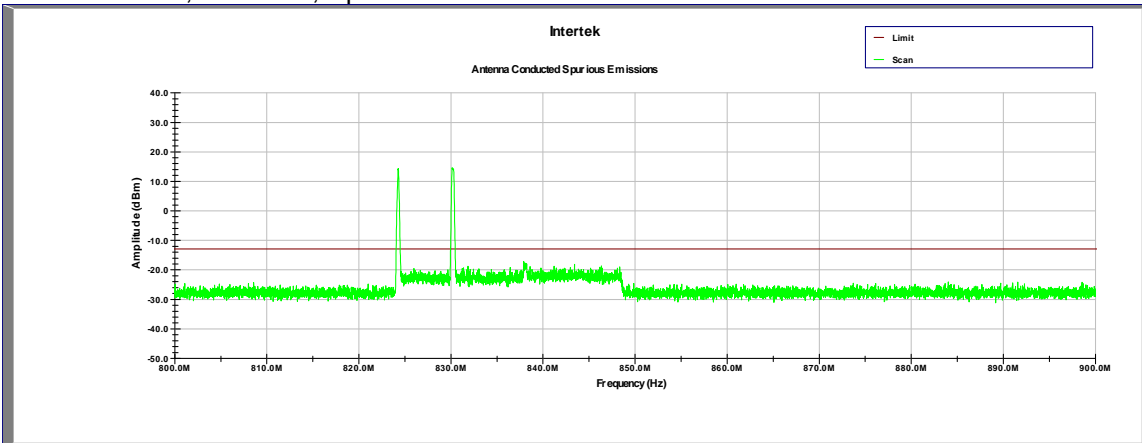


Graph 4.7 & 4.8

Antenna Terminal Spurious Emissions, GSM 850, Up Link 824.2 MHz

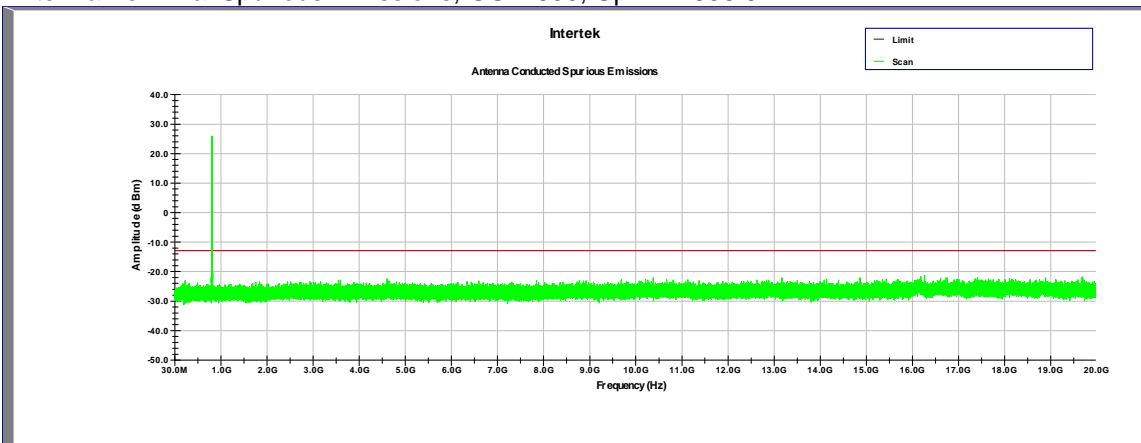


Intermodulation, GSM 850, Up Link 824.2 MHz

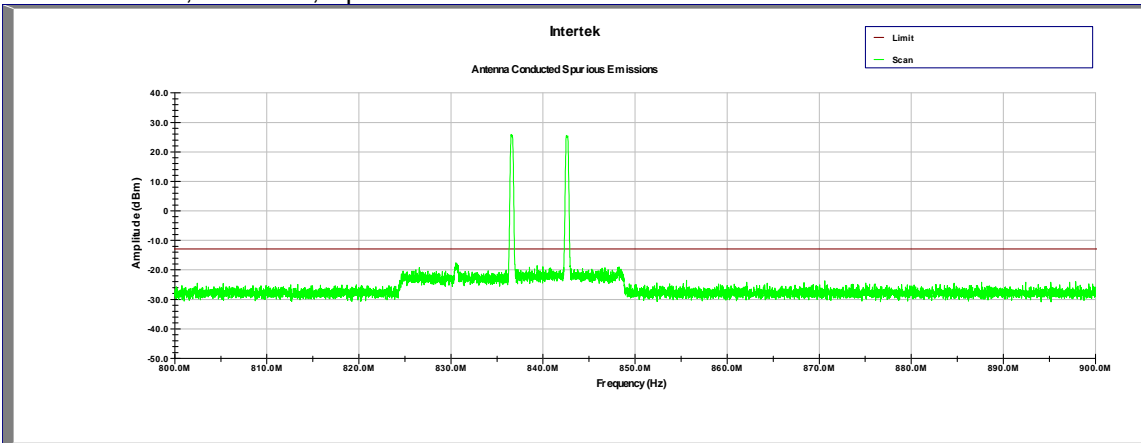


Graph 4.9 & 4.10

### Antenna Terminal Spurious Emissions, GSM 850, Up Link 836.6 MHz

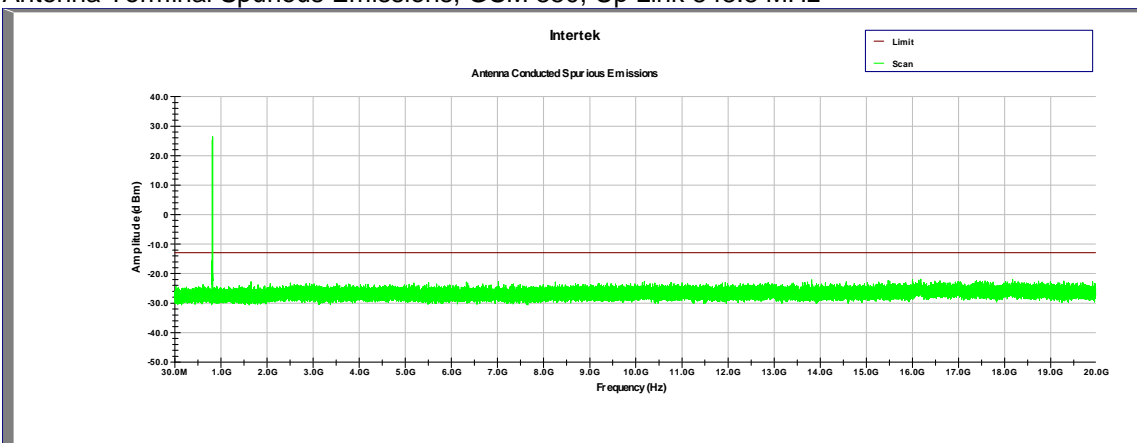


### Intermodulation, GSM 850, Up Link 836.6 MHz

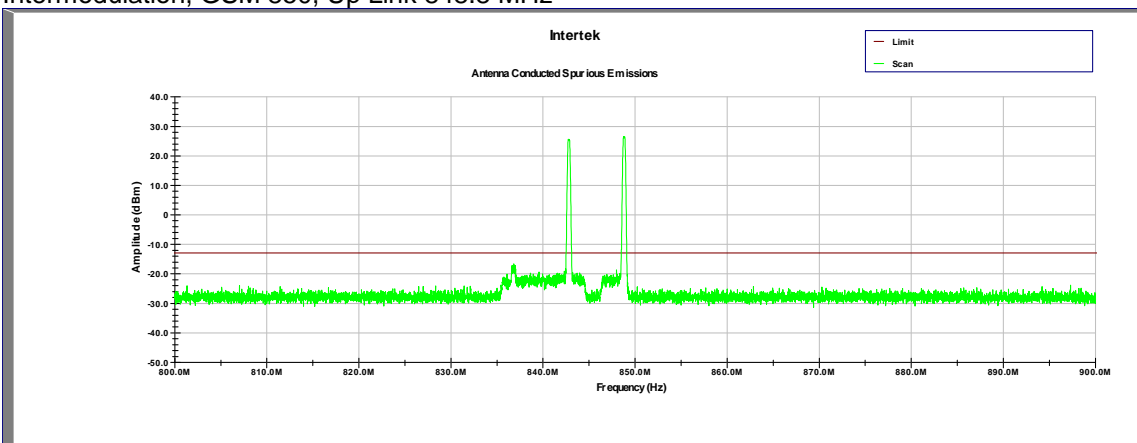


Graph 4.11 & 4.12

### Antenna Terminal Spurious Emissions, GSM 850, Up Link 848.8 MHz

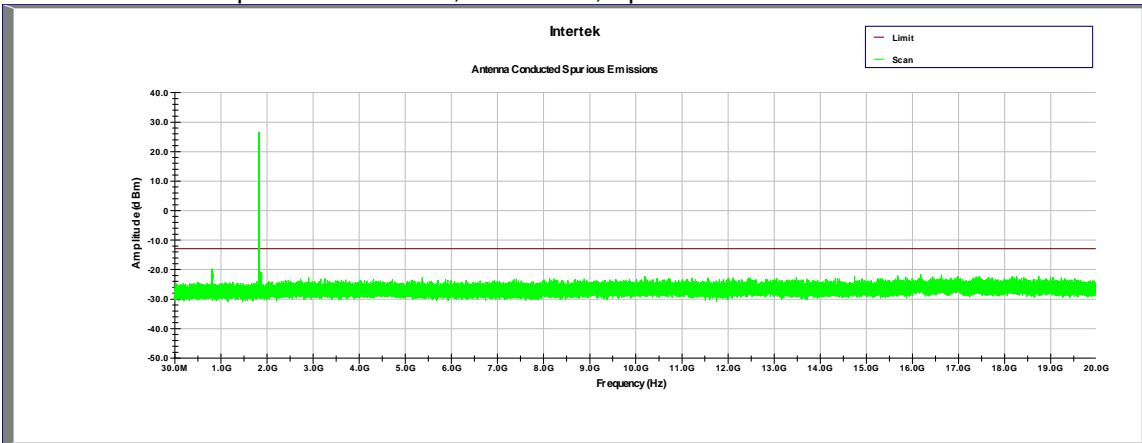


### Intermodulation, GSM 850, Up Link 848.8 MHz

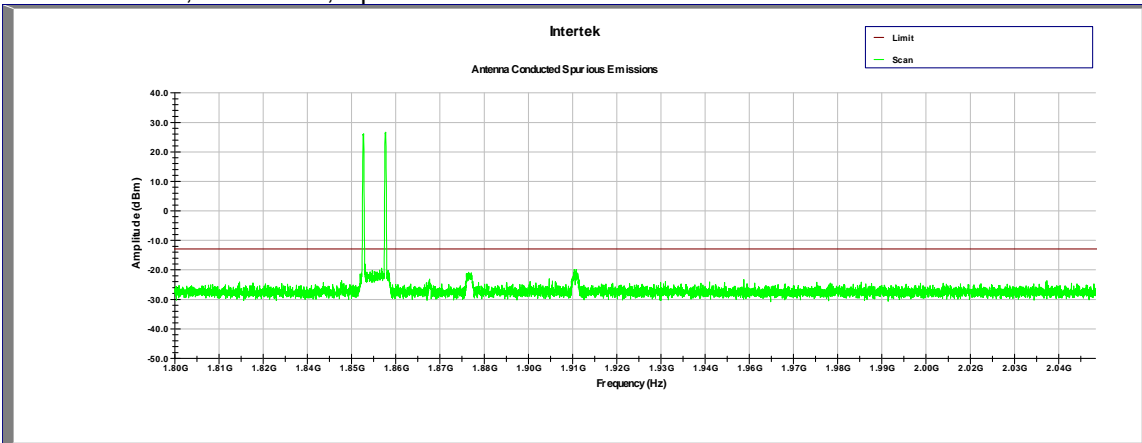


Graph 4.13 & 4.14

Antenna Terminal Spurious Emissions, GSM 1900, Up Link 1851.25 MHz



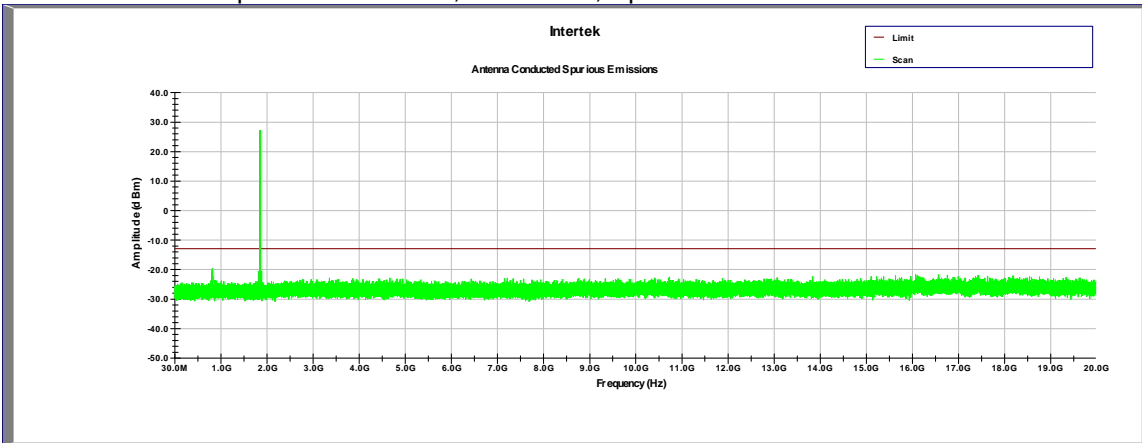
Intermodulation, GSM 1900, Up Link 1851.25 MHz



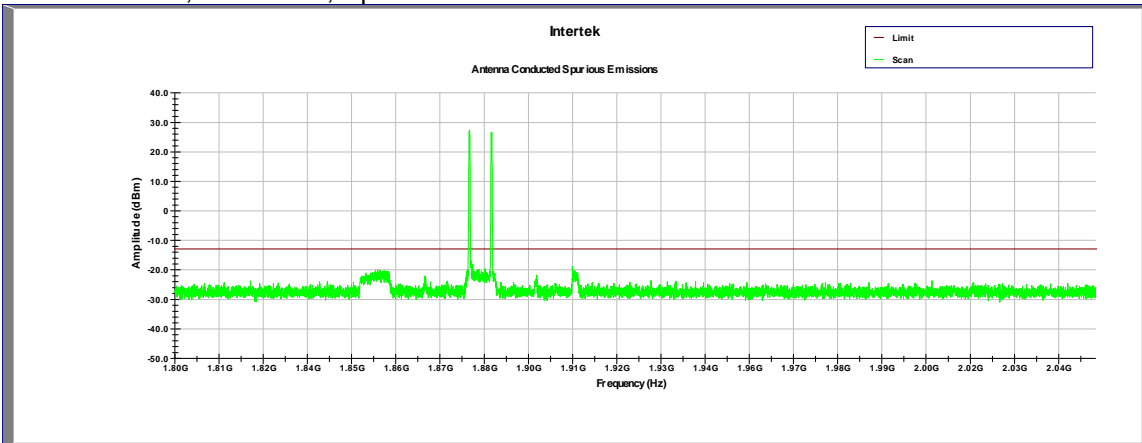


Graph 4.15 & 4.16

Antenna Terminal Spurious Emissions, GSM 1900, Up Link 1880 MHz

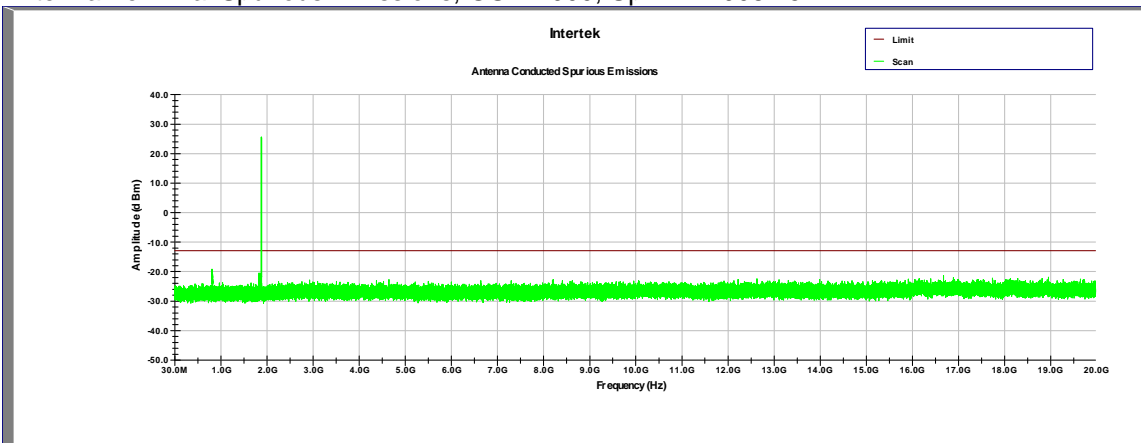


Intermodulation, GSM 1900, Up Link 1880 MHz

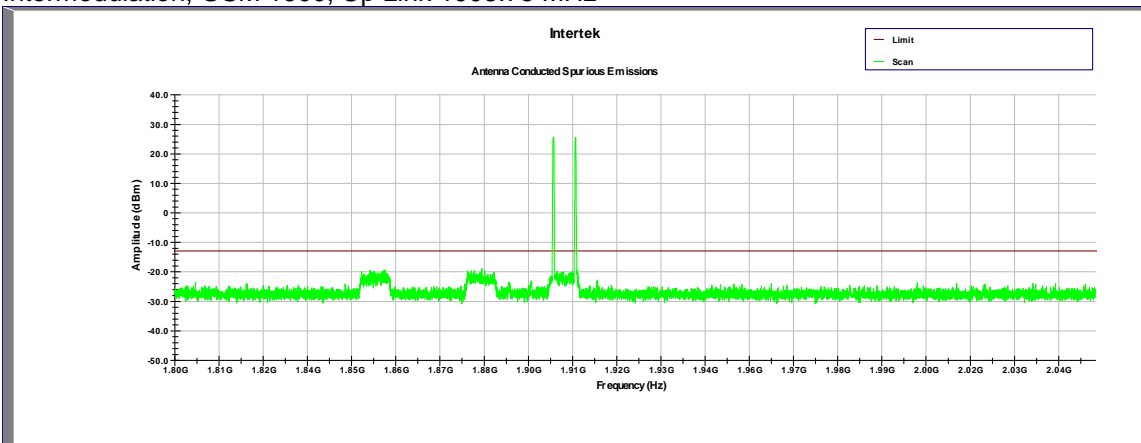


Graph 4.17 & 4.18

Antenna Terminal Spurious Emissions, GSM 1900, Up Link 1908.75 MHz

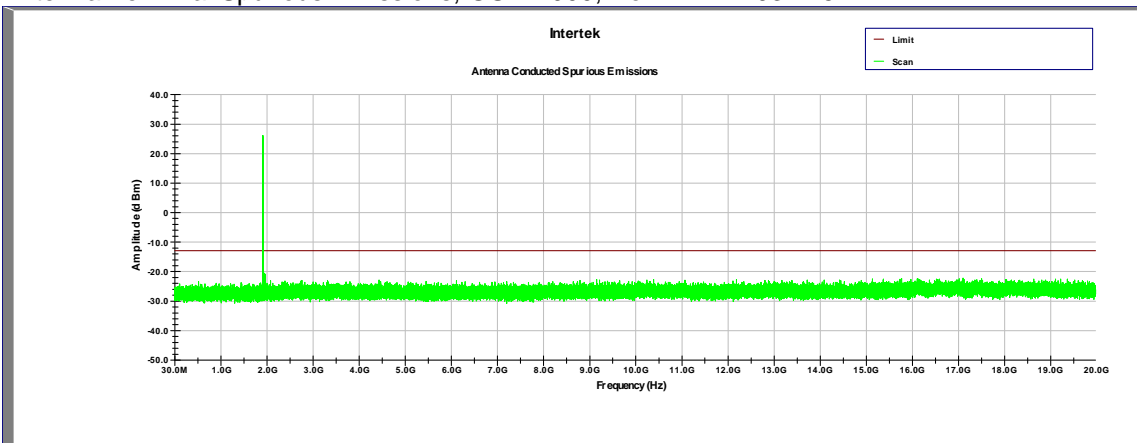


Intermodulation, GSM 1900, Up Link 1908.75 MHz

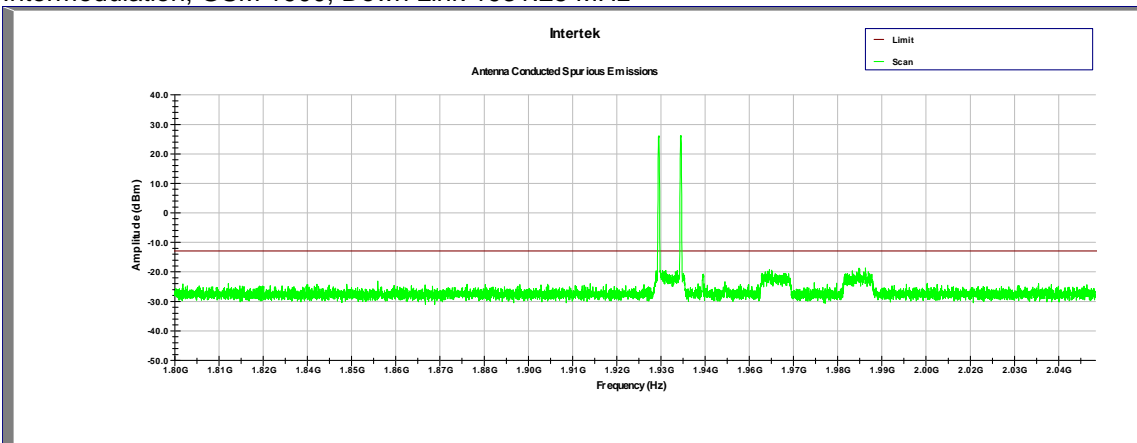


Graph 4.19 & 4.20

Antenna Terminal Spurious Emissions, GSM 1900, Down Link 1931.25 MHz

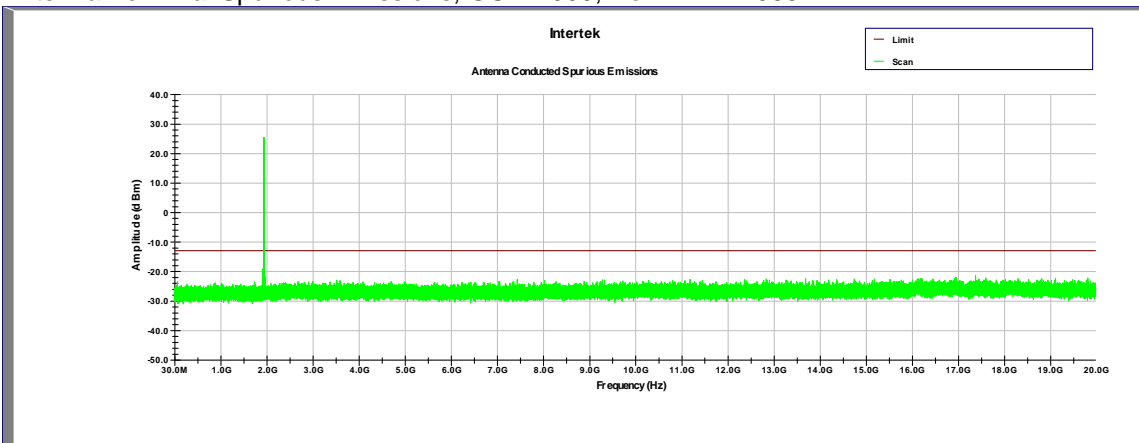


Intermodulation, GSM 1900, Down Link 1931.25 MHz

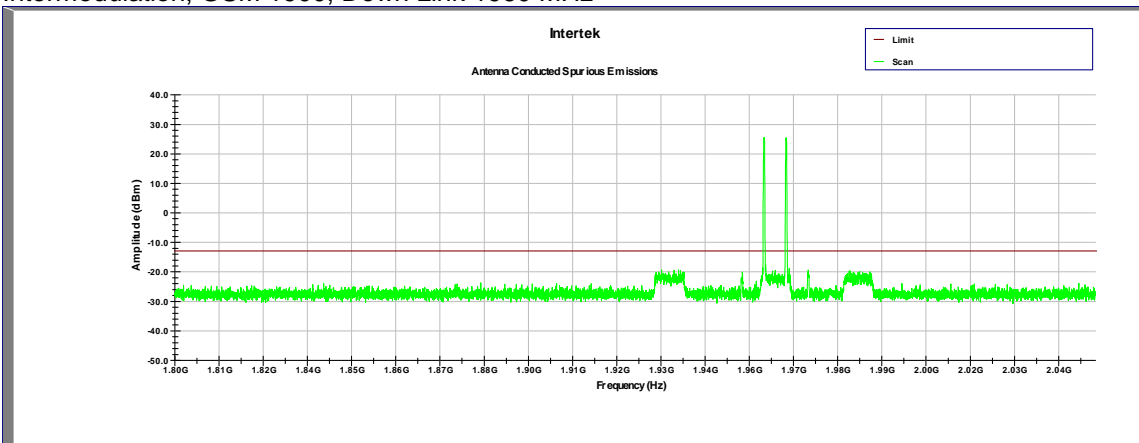


Graph 4.21 & 4.22

Antenna Terminal Spurious Emissions, GSM 1900, Down Link 1960 MHz

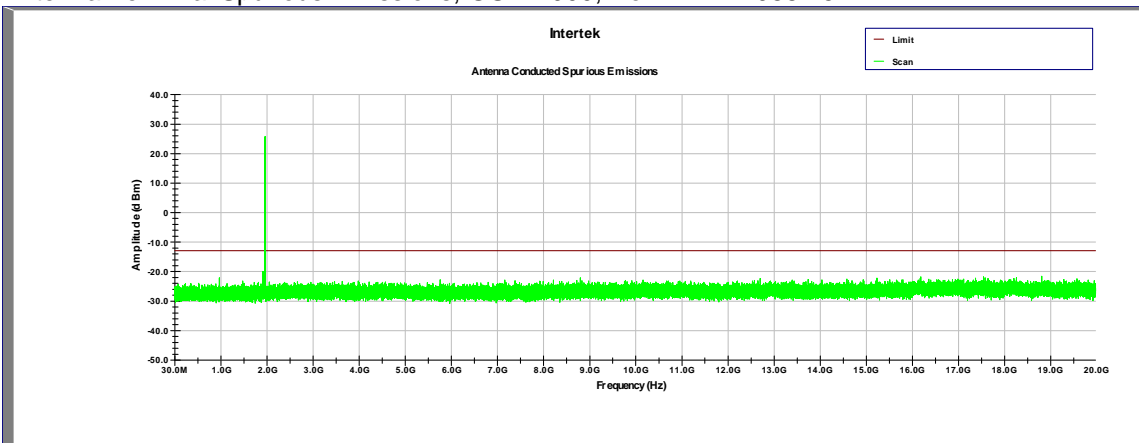


Intermodulation, GSM 1900, Down Link 1960 MHz

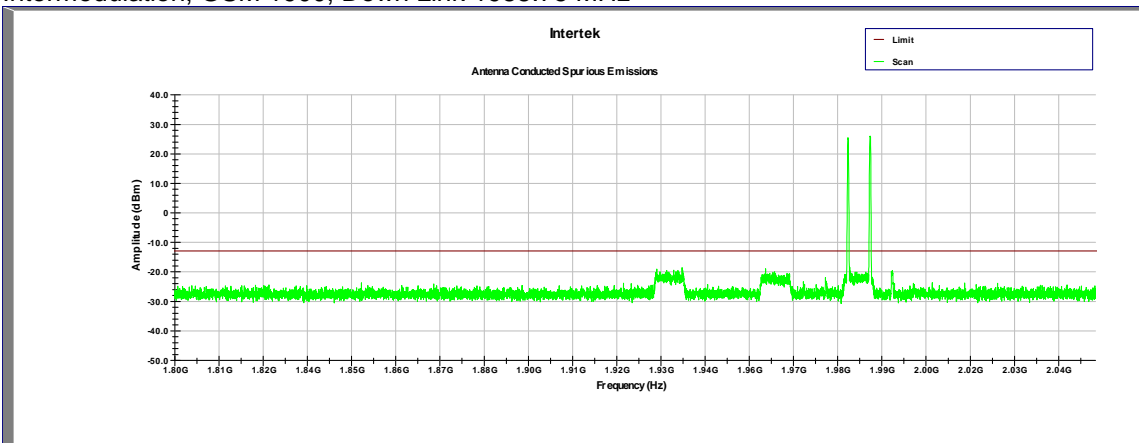


Graph 4.23 & 4.24

Antenna Terminal Spurious Emissions, GSM 1900, Down Link 1988.75 MHz

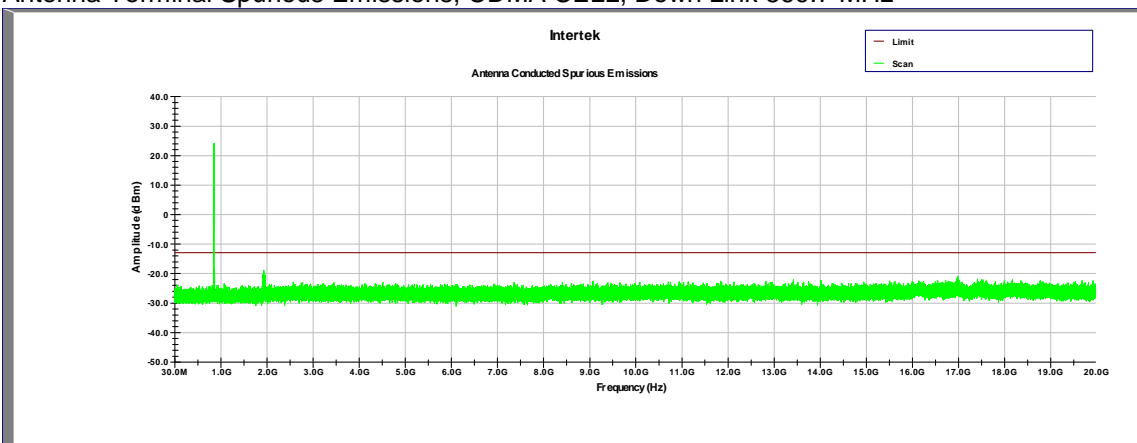


Intermodulation, GSM 1900, Down Link 1988.75 MHz

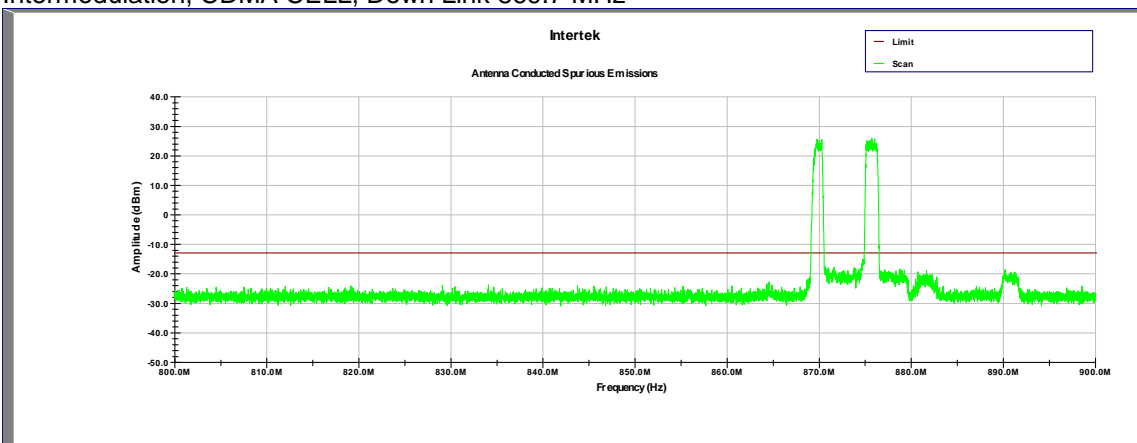


Graph 4.25 & 4.26

Antenna Terminal Spurious Emissions, CDMA CELL, Down Link 869.7 MHz

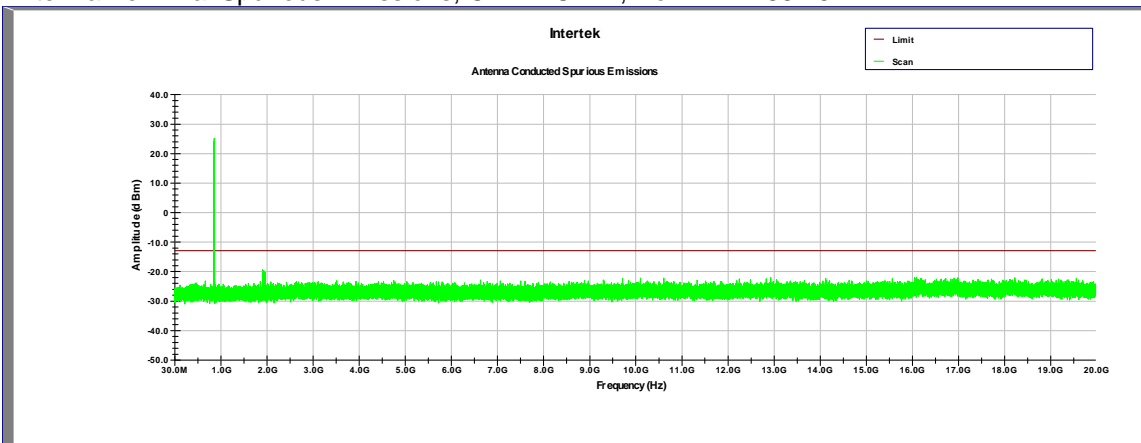


Intermodulation, CDMA CELL, Down Link 869.7 MHz

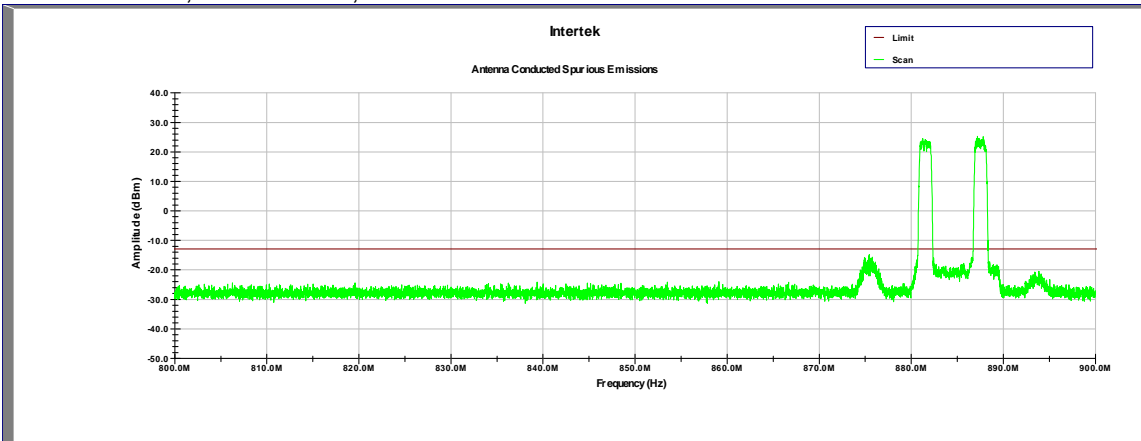


Graph 4.27 & 4.28

Antenna Terminal Spurious Emissions, CDMA CELL, Down Link 881.52 MHz

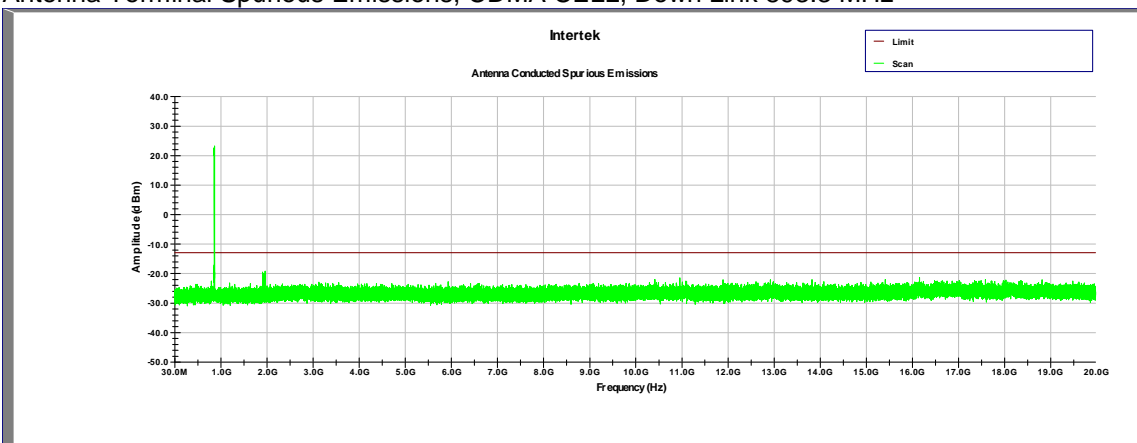


Intermodulation, CDMA CELL, Down Link 881.52 MHz

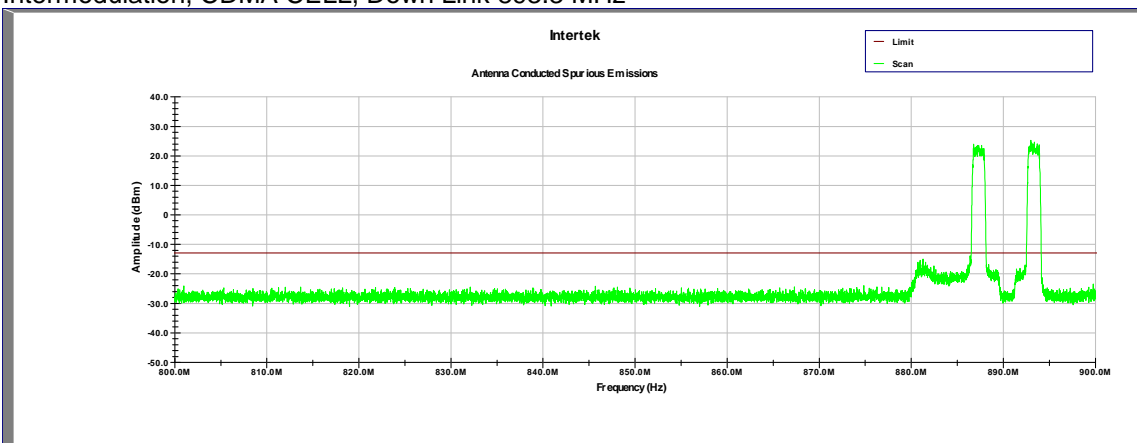


Graph 4.29 & 4.30

Antenna Terminal Spurious Emissions, CDMA CELL, Down Link 893.3 MHz



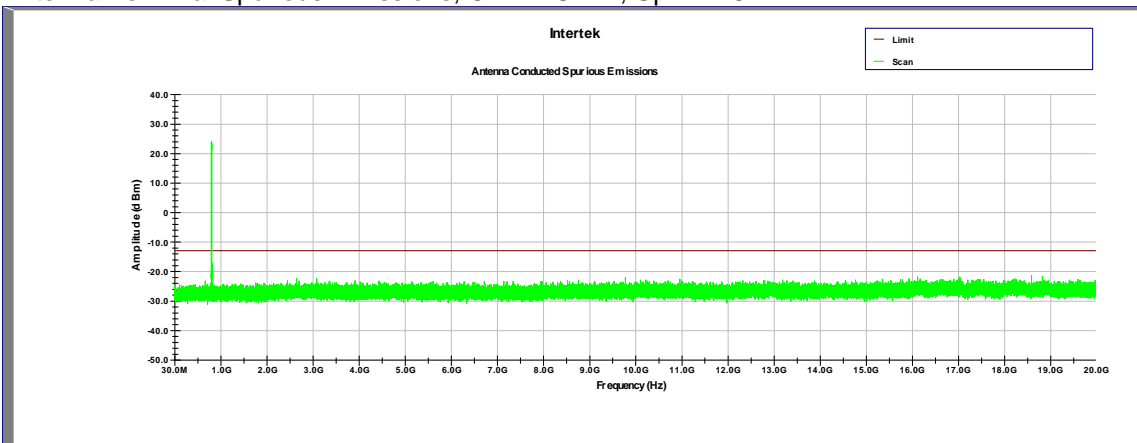
Intermodulation, CDMA CELL, Down Link 893.3 MHz



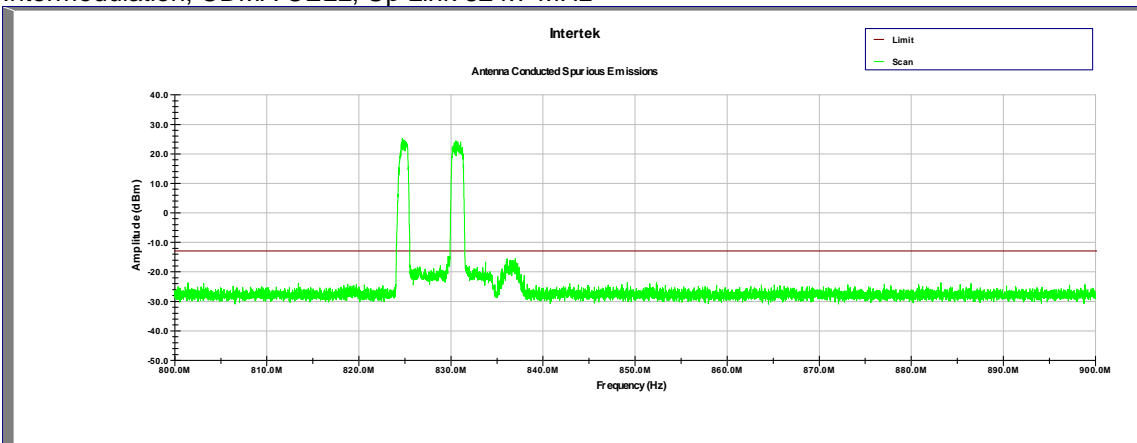


Graph 4.31 & 4.32

Antenna Terminal Spurious Emissions, CDMA CELL, Up Link 824.7 MHz

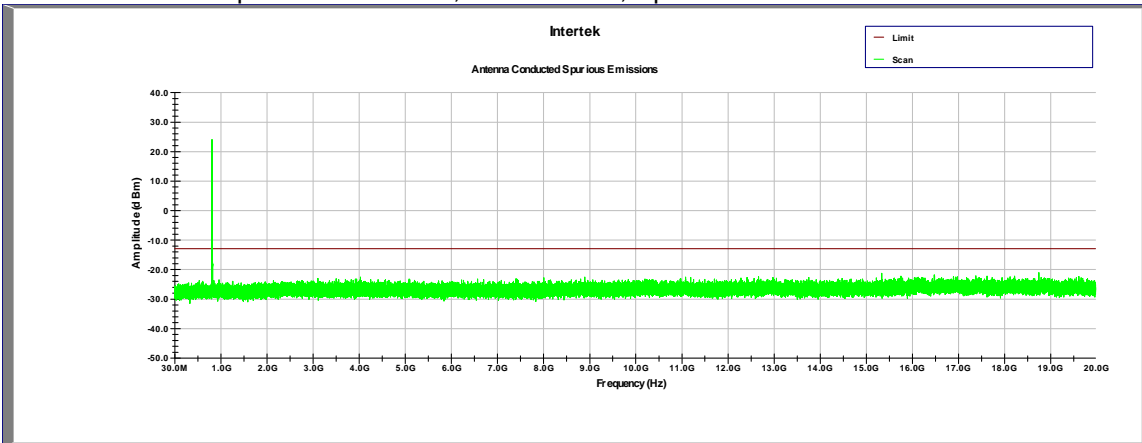


Intermodulation, CDMA CELL, Up Link 824.7 MHz



Graph 4.33 & 4.34

Antenna Terminal Spurious Emissions, CDMA CELL, Up Link 836.5 MHz



Intermodulation, CDMA CELL, Up Link 836.5 MHz

