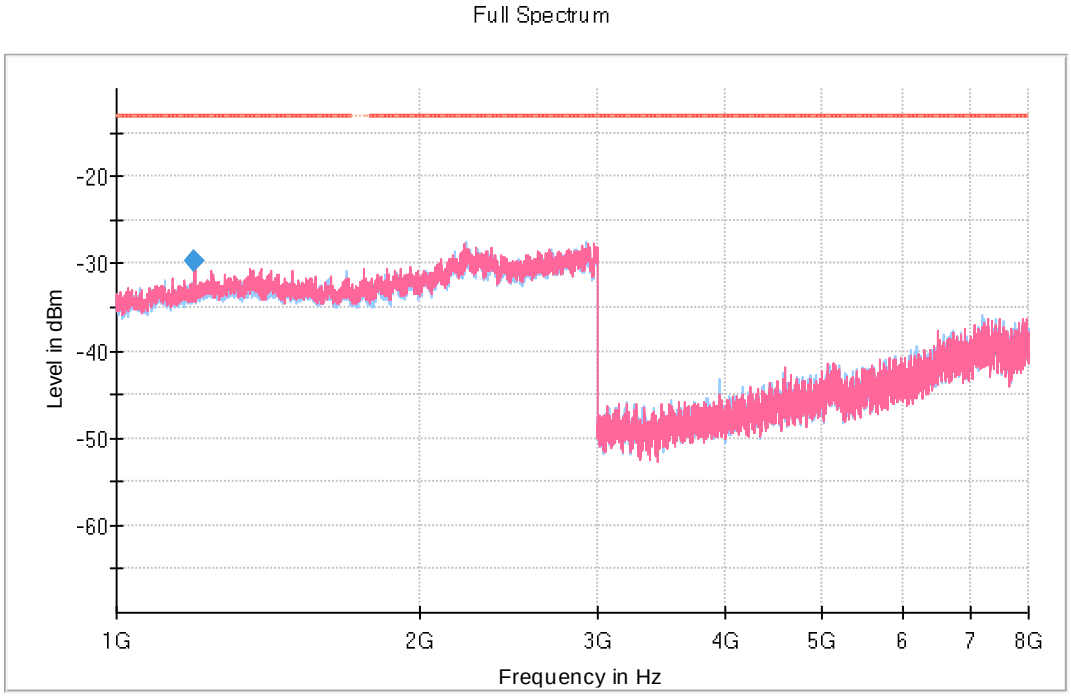
- High Channel:



**LTE Cat 1bis Band 13:**

**INTERNAL ANTENNA:**

A preliminary scan determined the BW=5 MHz, QPSK, RB Size 1, RB Offset 2 as the worst case. The next results are for this worst-case configuration.

**Frequency range 30 MHz - 1 GHz:**

**- Low Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Pol |
|---|---|---|---|---|
| 775.445000 | -17.64 | -13.00 | 4.64 | H |

**- Middle Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Pol |
|---|---|---|---|---|
| 790.419375 | -23.26 | -13.00 | 10.26 | H |

**- High Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Pol |
|---|---|---|---|---|
| 791.965313 | -26.68 | -13.00 | 13.68 | H |

**Frequency range 1 - 8 GHz:**

**- Low Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Pol |
|---|---|---|---|---|
| 1563.333333 | -25.62 | -13.00 | 12.62 | H |

**- Middle Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Pol |
|---|---|---|---|---|
| 1568.333333 | -27.18 | -13.00 | 14.18 | H |

**- High Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Pol |
|---|---|---|---|---|
| 1571.400000 | -28.57 | -13.00 | 15.57 | H |

Measurement uncertainty (dB) < ±5.35 for f < 1 GHz
< ±4.32 for f ≥ 1 GHz up to 8 GHz

***Verdict***

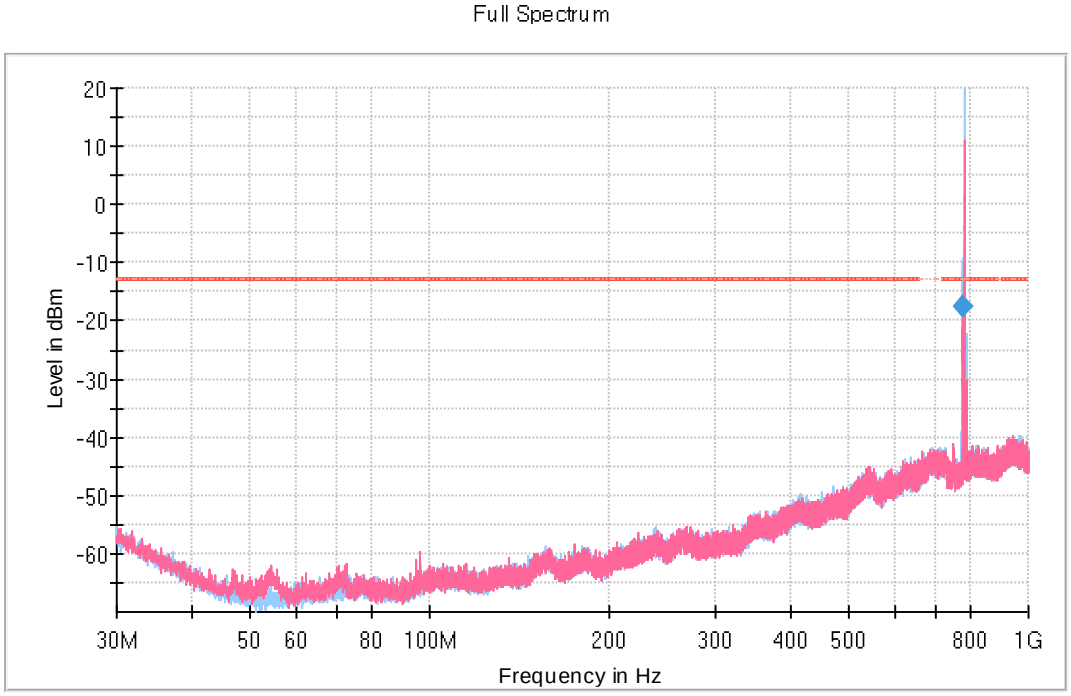
Pass

| Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|---|---|---|---|---|---|
| 30 MHz - 1 GHz | 30.312 kHz | PK+ | 1 MHz | Coupled | 0 dB |
| 763 MHz - 806 MHz | 1.344 kHz | PK+ | 6.25 kHz | Coupled | 0 dB |
| 1 GHz - 8 GHz | 218.75 kHz | PK+ | 100 kHz | 1 s | 0 dB |
| 1.559 GHz - 1.61 GHz | 1.594 kHz | PK+ | 1 MHz | 1 s | 0 dB |

**LTE Cat 1bis Band 13:**

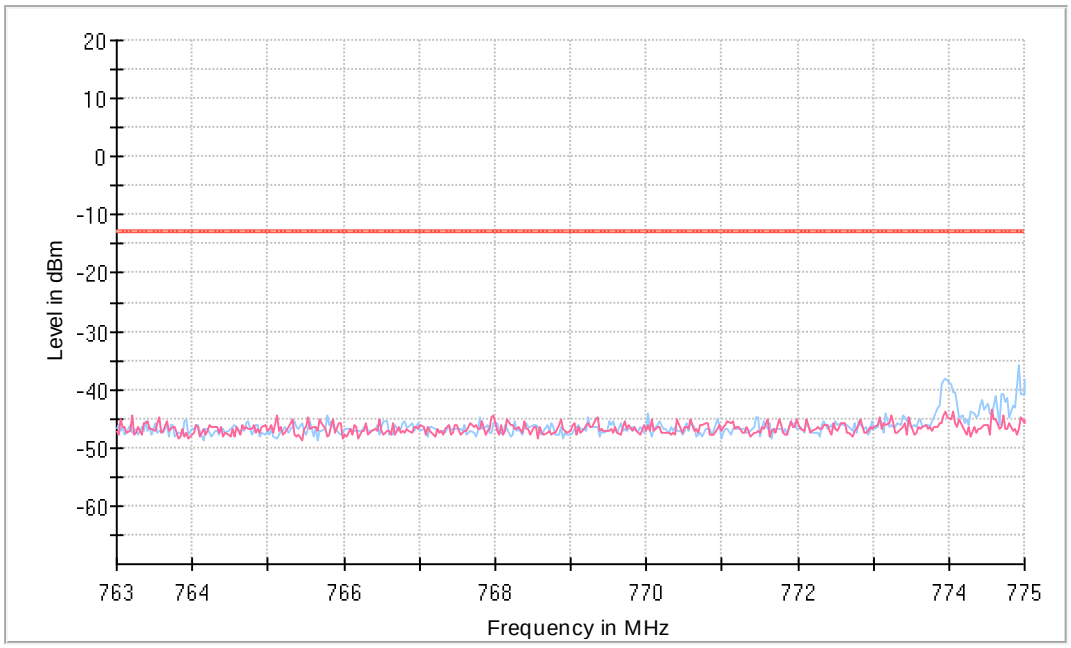
**FREQUENCY RANGE 30 MHz - 1 GHz:**

- Low Channel:

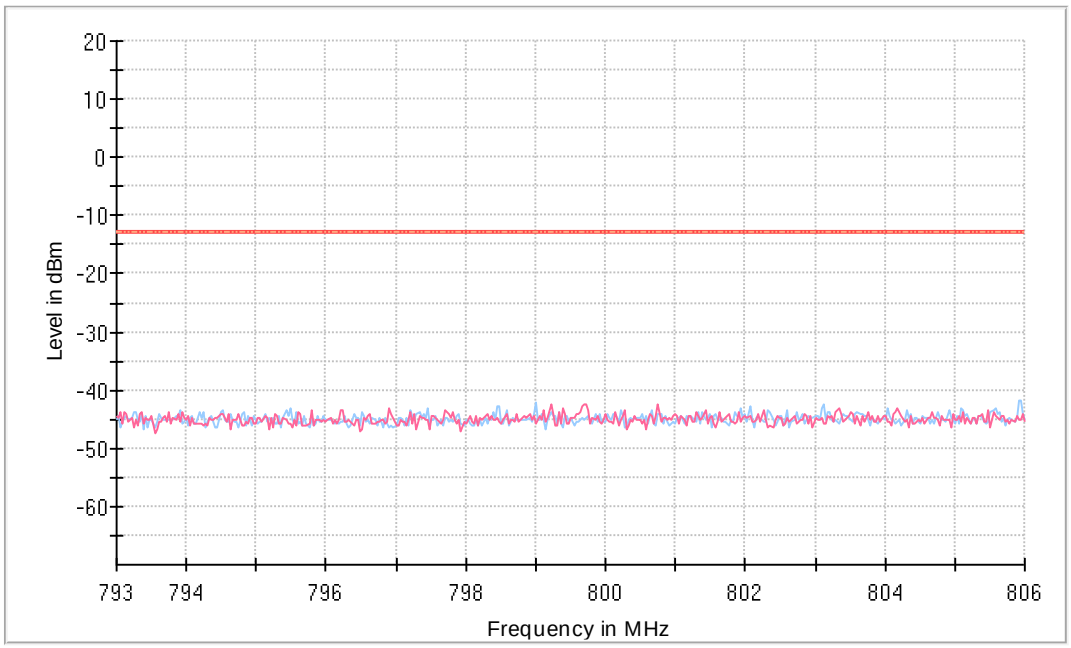



The peak above the limit is the carrier frequency.

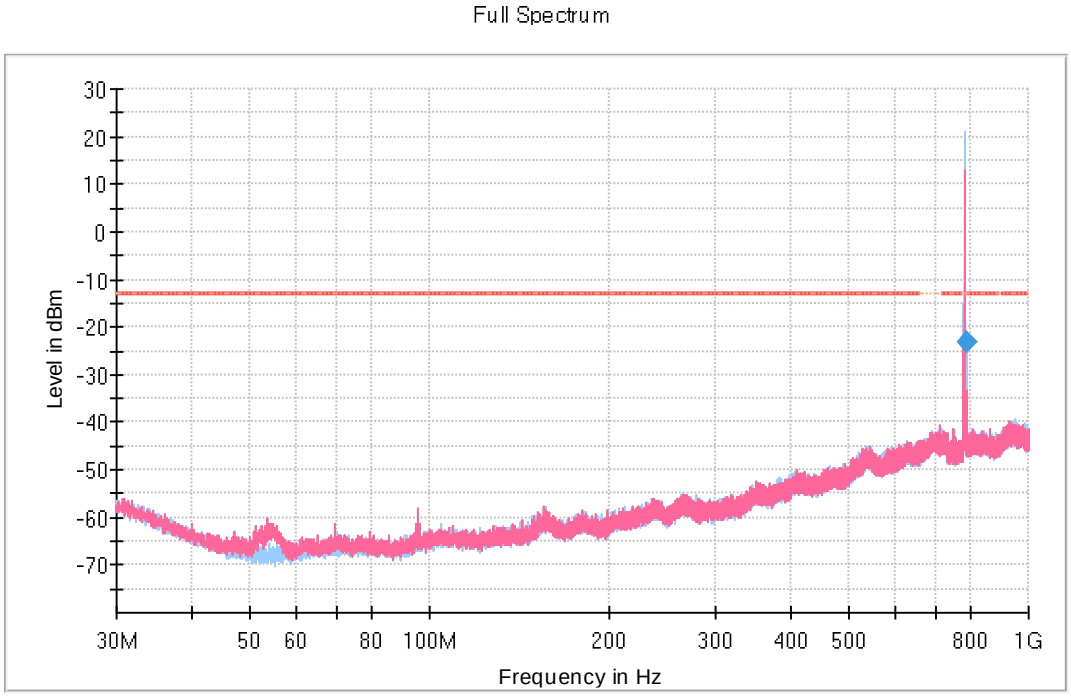
Full Spectrum



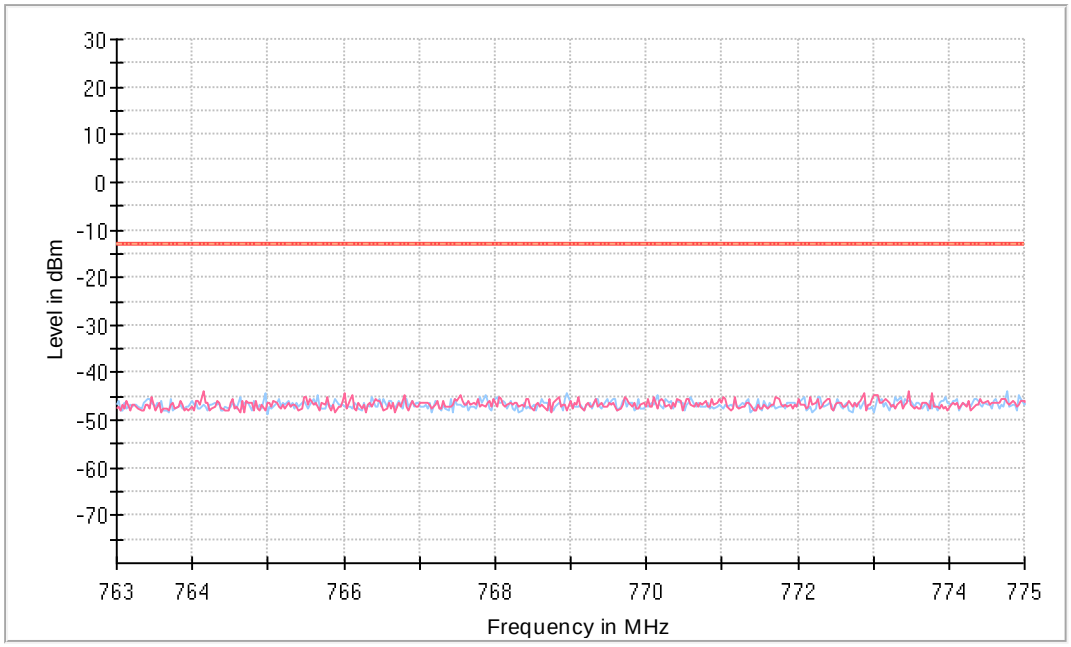

Full Spectrum



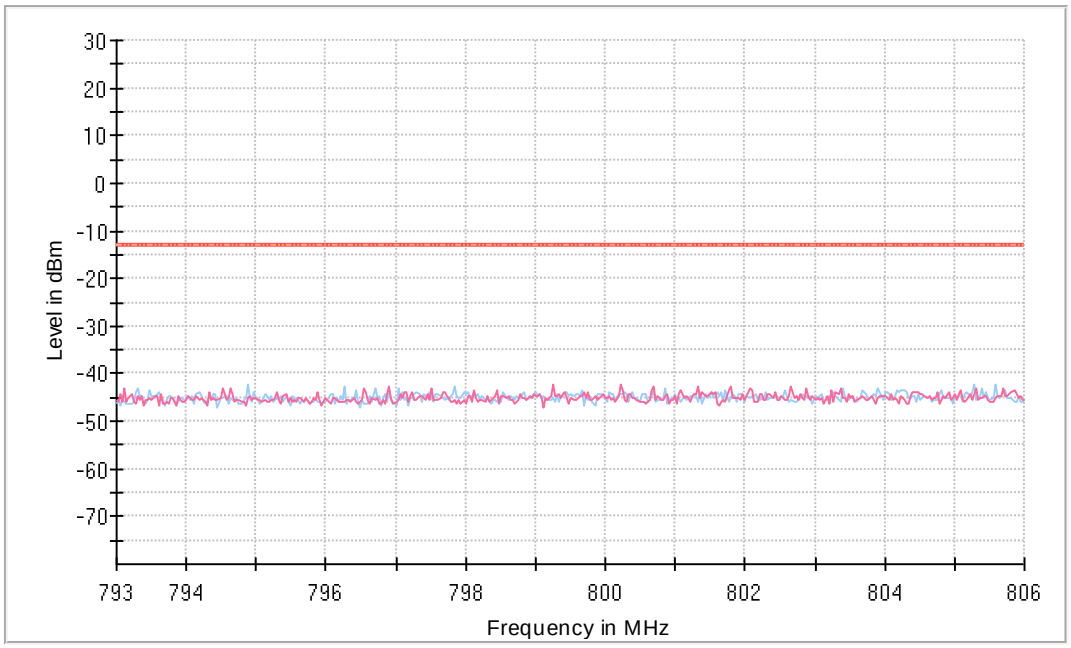
- Middle Channel:



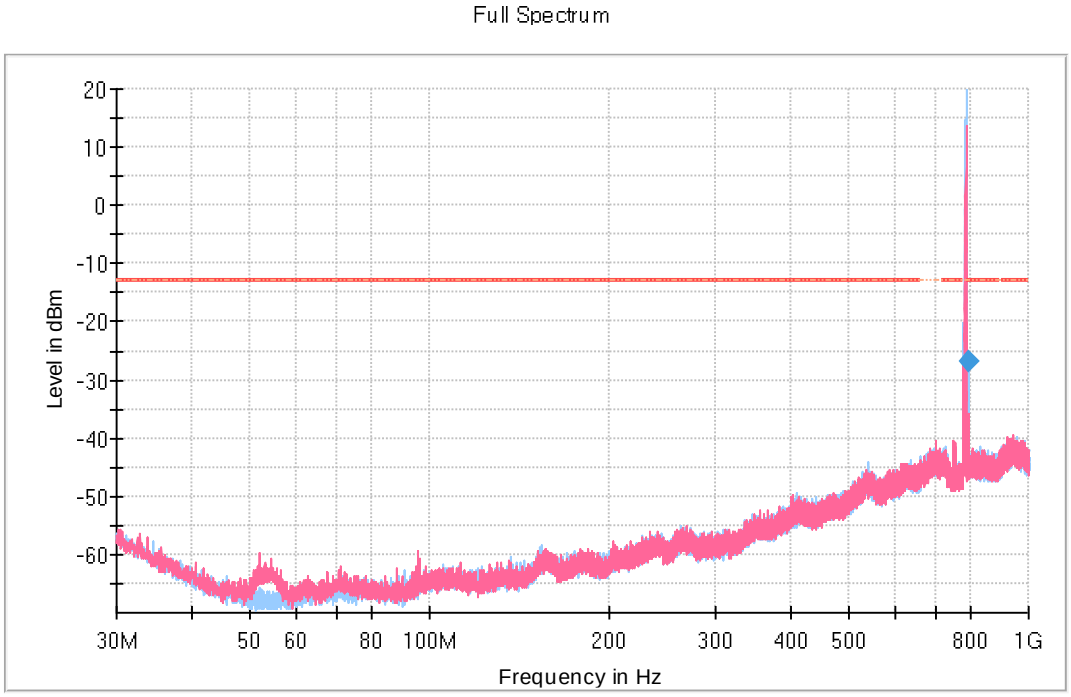

The peak above the limit is the carrier frequency.



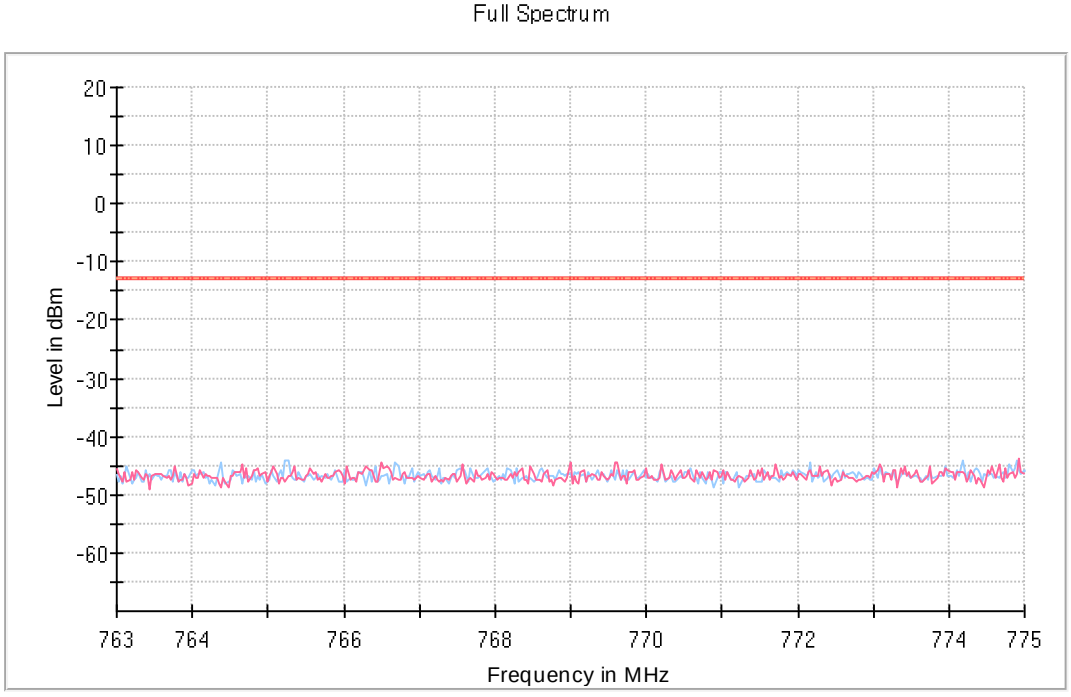
Full Spectrum



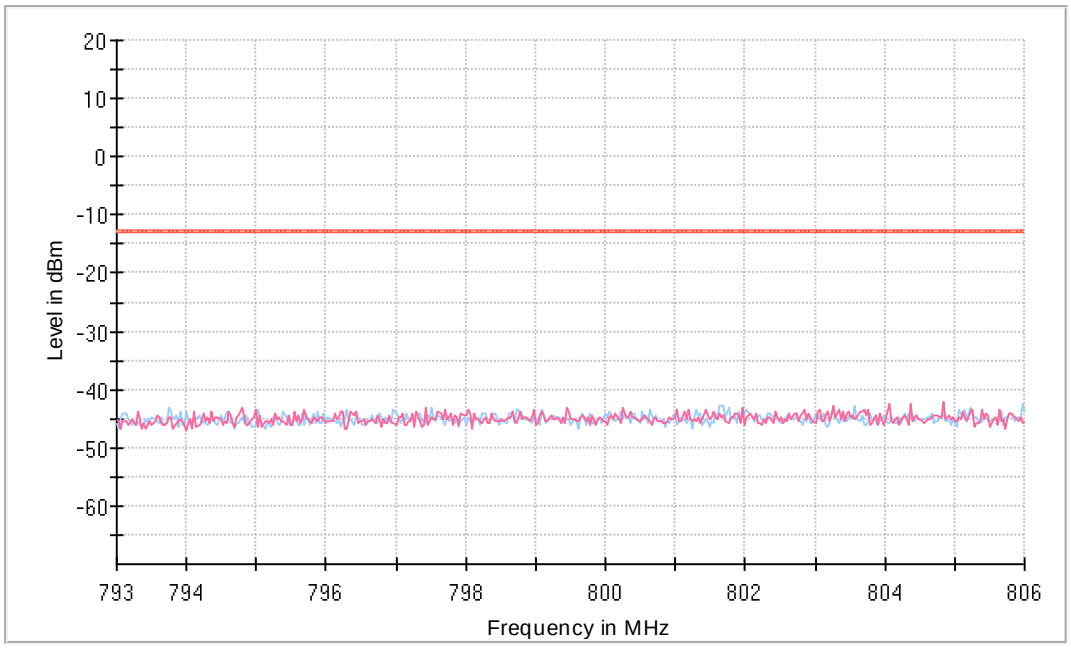
- High Channel:




The peak above the limit is the carrier frequency.

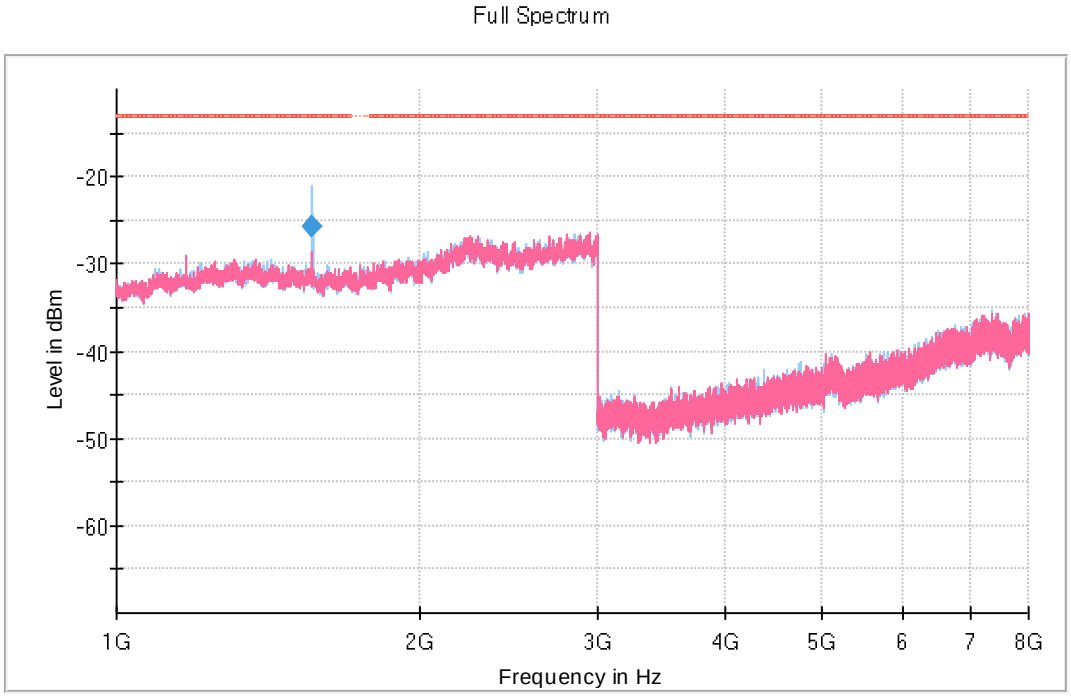


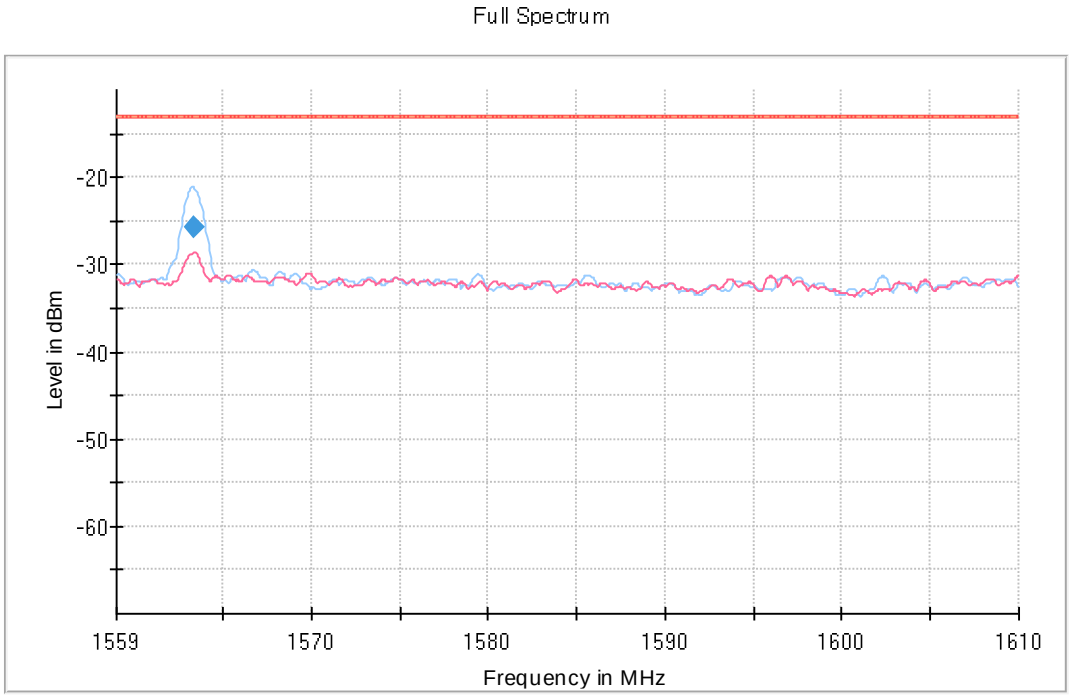
Full Spectrum



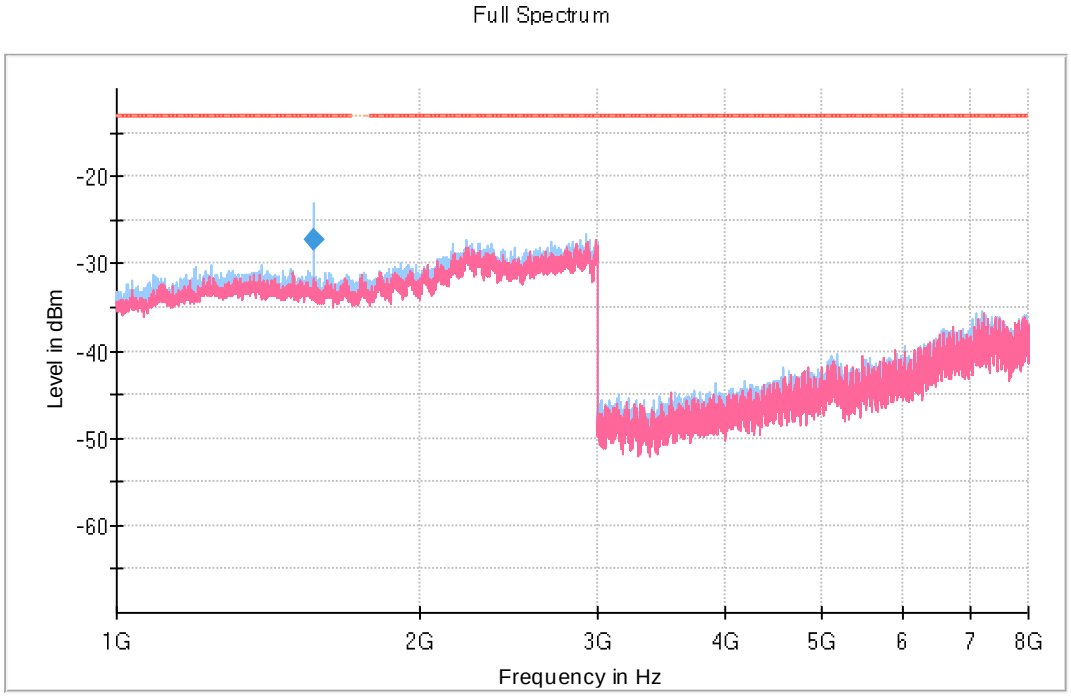
## FREQUENCY RANGE 1 - 8 GHz:

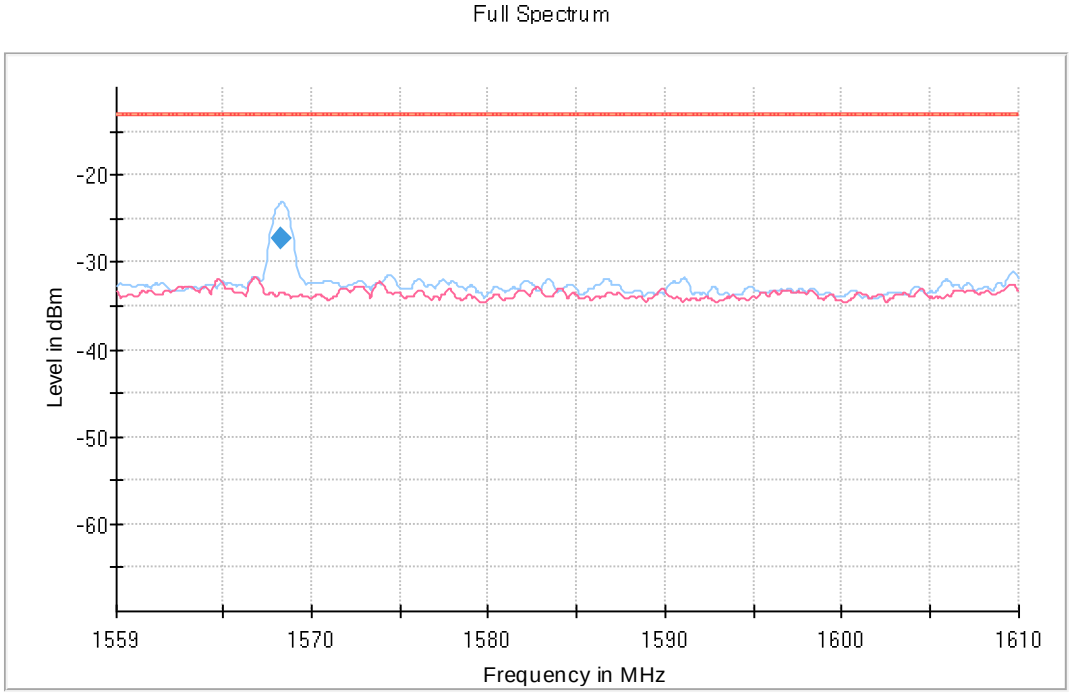
- Low Channel:



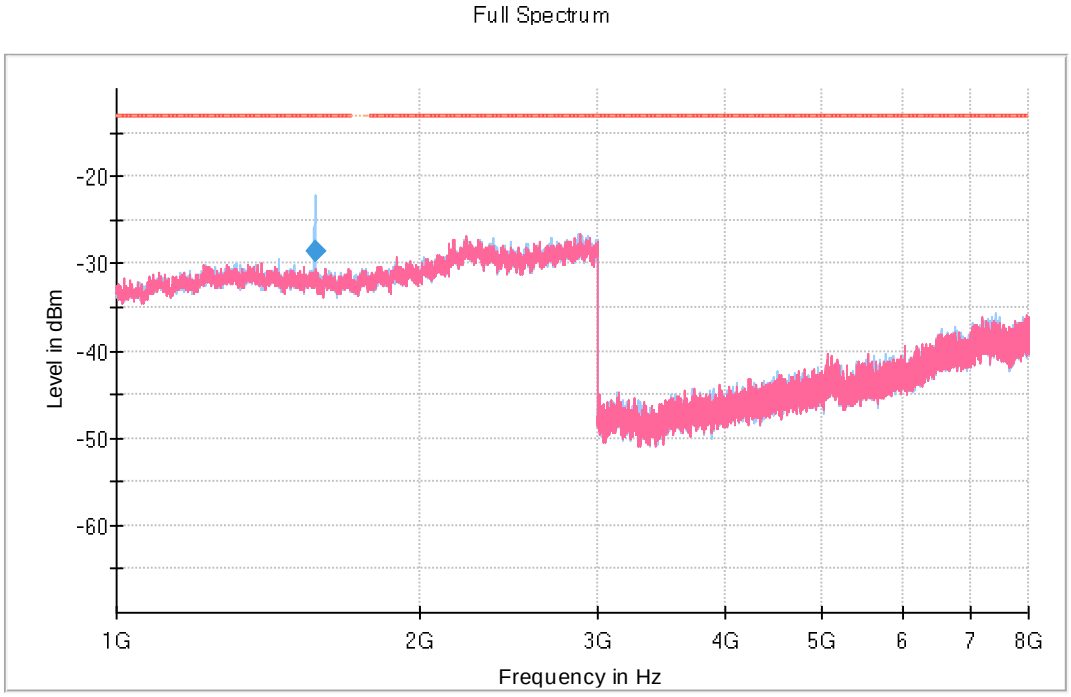



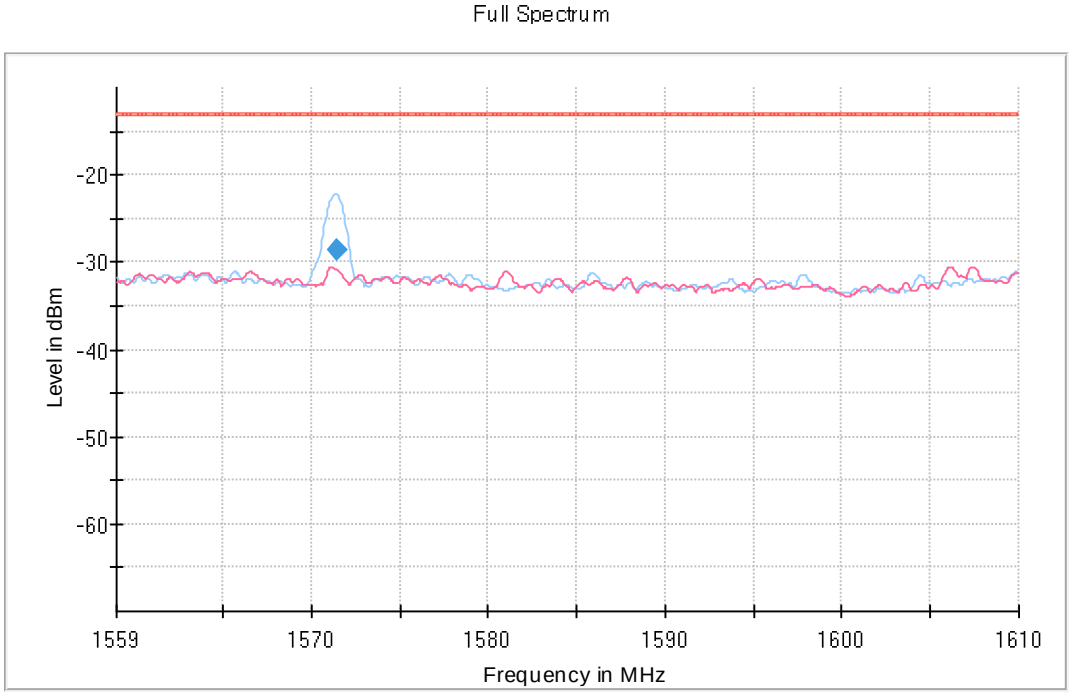
- Middle Channel:



- High Channel:



**LTE Cat 1bis Band 66:**

**INTERNAL ANTENNA:**

A preliminary scan determined the BW=15 MHz, QPSK, RB Size 1, RB Offset 37 as the worst-case. The next results are for this worst-case configuration.

**Frequency range 30 MHz - 1 GHz:**

**- Low Channel:**

No spurious frequencies at less than 20 dB below the limit.

**- Middle Channel:**

No spurious frequencies at less than 20 dB below the limit.

**- High Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Spurious frequency (MHz) | E.I.R.P (dBm) | Polarization | Detector |
|---|---|---|---|
| | | | Peak |

**Frequency range 1 - 18 GHz:**

**- Low Channel:**

No spurious frequencies at less than 20 dB below the limit.

**- Middle Channel:**

No spurious frequencies at less than 20 dB below the limit.

**- High Channel:**

Spurious frequencies at less than 20 dB below the limit:

| Spurious frequency (MHz) | E.I.R.P (dBm) | Polarization | Detector |
|---|---|---|---|
| | | | Peak |
| | | | Peak |
| | | | Peak |

| | |
|---|---|
| Measurement Uncertainty (dB) | <± 5.35 for f < 1 GHz<br><± 4.32 for f ≥ 1 GHz up to 18 GHz |

***Verdict***

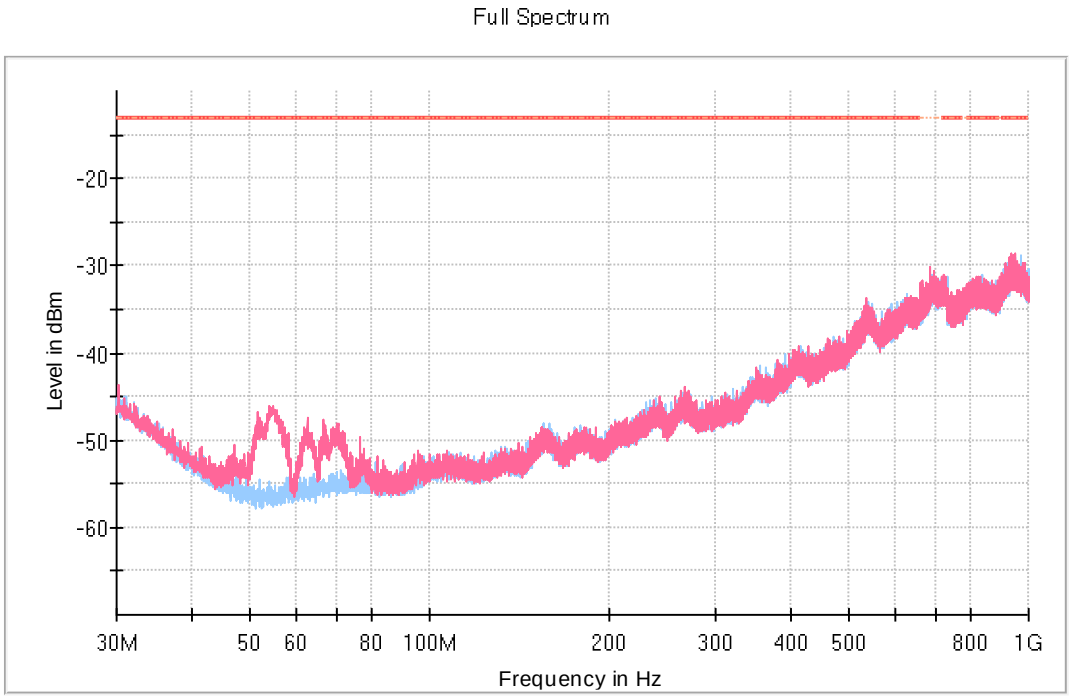
Pass

| Subrange | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|---|---|---|---|---|---|
| 30 MHz - 1 GHz | 30.312 kHz | PK+ | 1 MHz | Coupled | 0 dB |
| 1 GHz - 3 GHz | 62.5 kHz | PK+ | 1 MHz | 1 s | 0 dB |
| 3 GHz - 17 GHz | 437.5 kHz | PK+ | 1 MHz | 1 s | 0 dB |
| 17 GHz - 18 GHz | 31.25 kHz | PK+ | 1 MHz | 1 s | 0 dB |

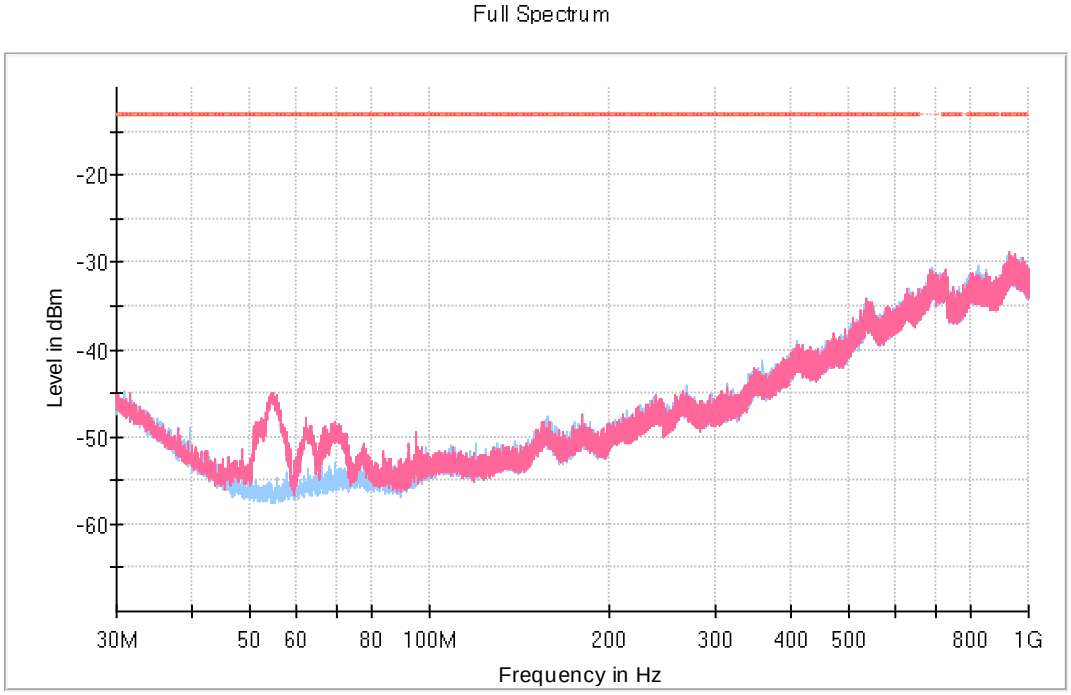
**LTE Cat 1bis Band 66:**

**FREQUENCY RANGE 30 MHz - 1 GHz:**

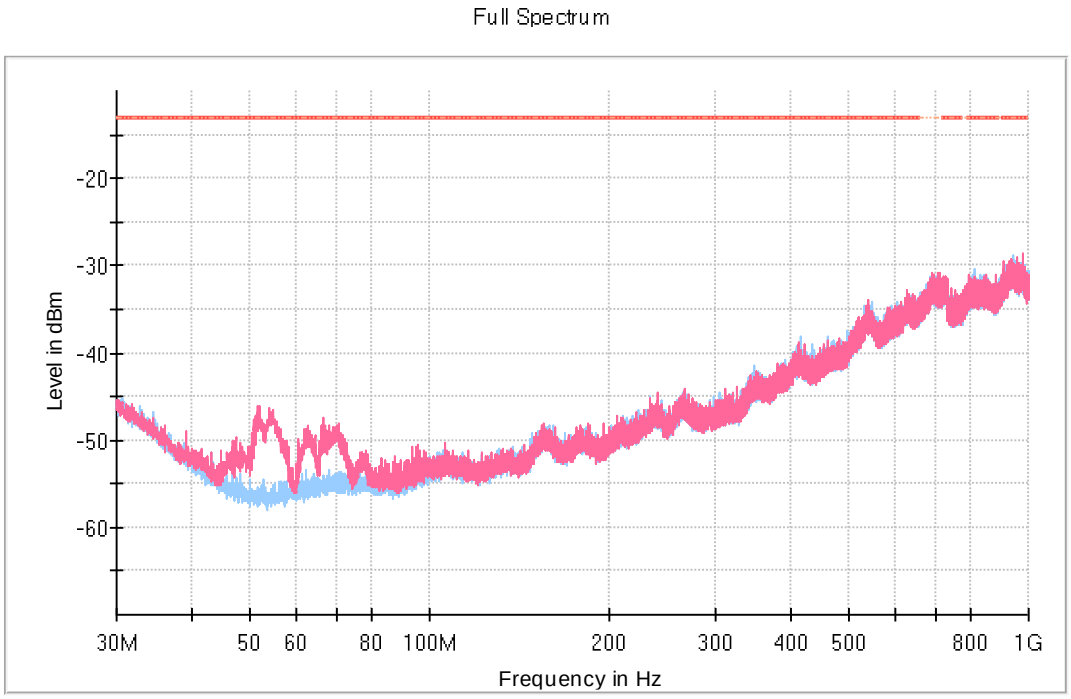
- Low Channel:



- Middle Channel:

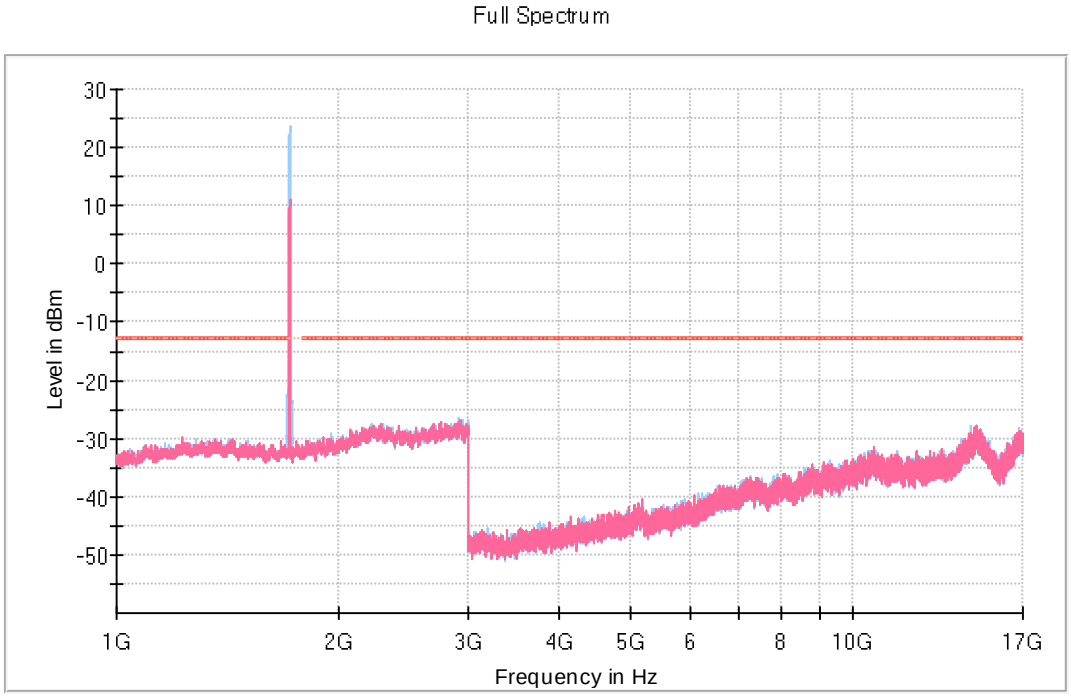


- High Channel:

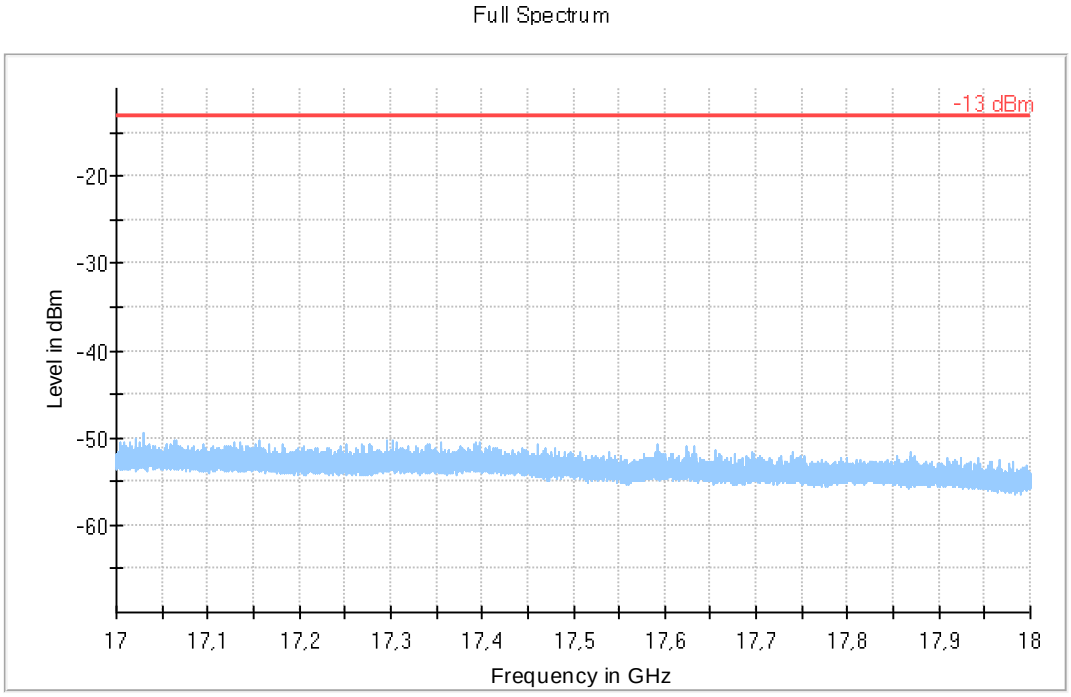


## FREQUENCY RANGE 1 - 18 GHz:

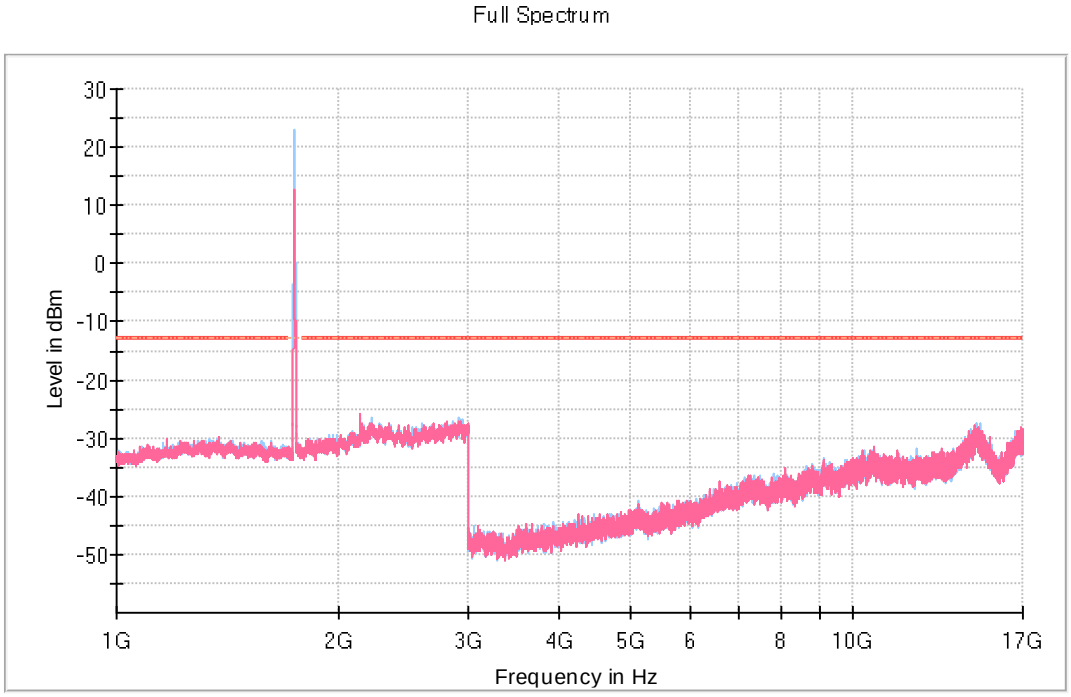
- Low Channel:



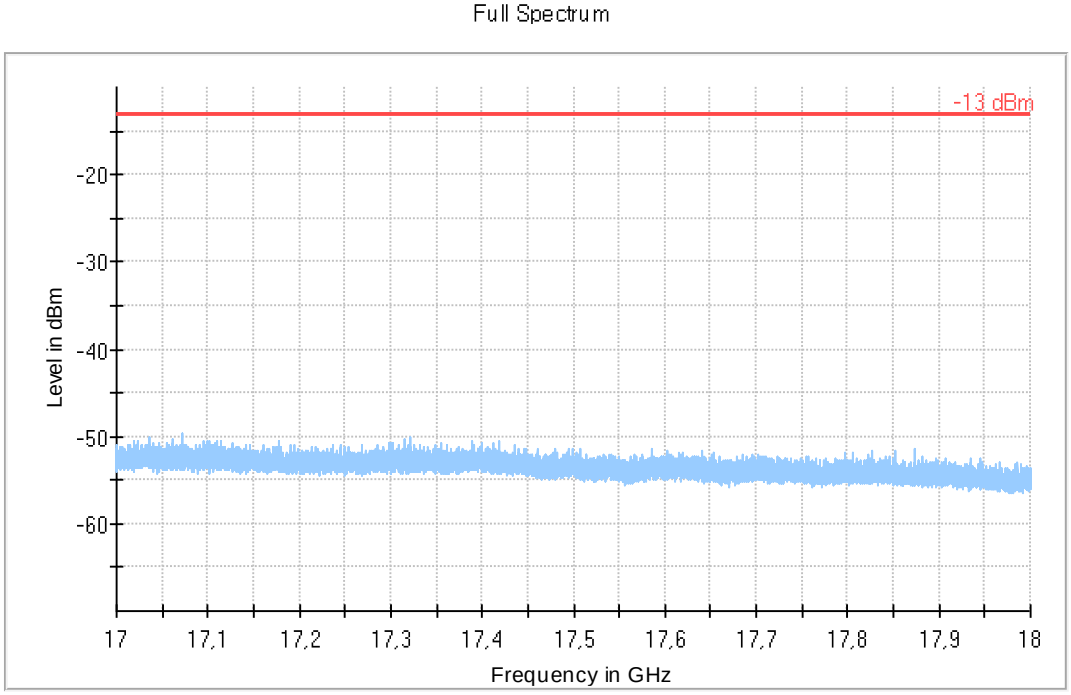

The higher peak is the carrier frequency.



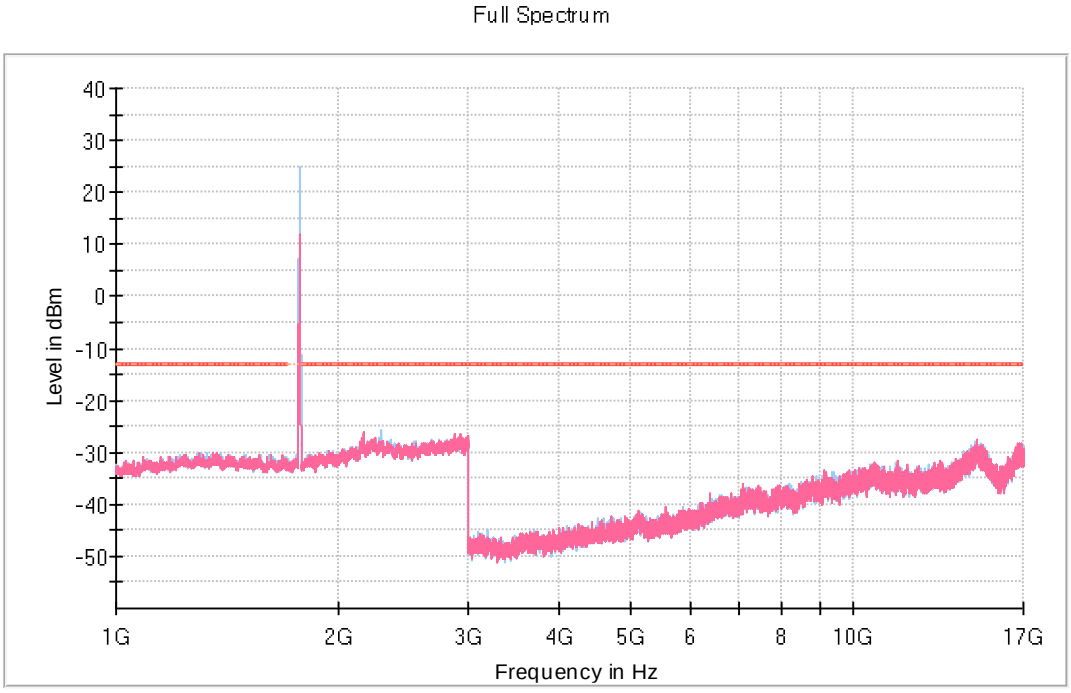
- Middle Channel:

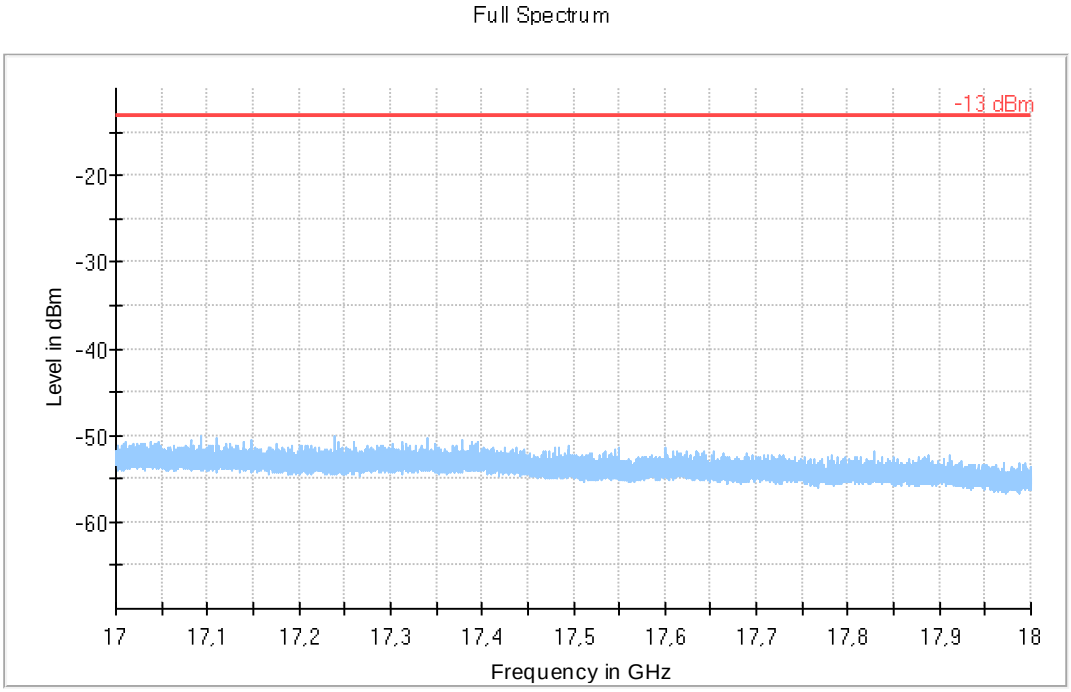



The higher peak is the carrier frequency.



- High Channel:




The higher peak is the carrier frequency.