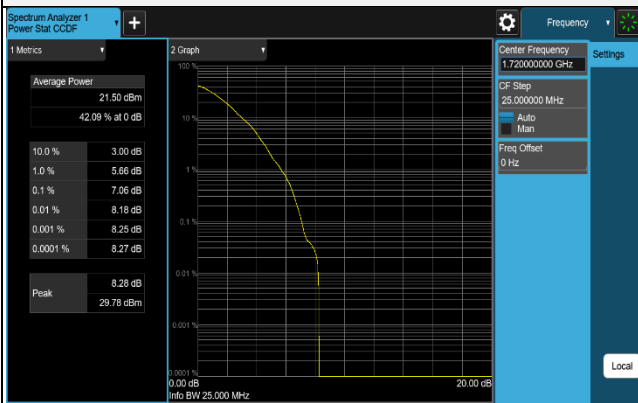


LTE Band 66 (Channel Bandwidth 20MHz)

Test Condition	Channel	Frequency (MHz)	Measure. Value (dB)	Limit (dB)	Result
QPSK	132072	1720	5.63	13	Pass
QPSK	132322	1745	5.82	13	Pass
QPSK	132572	1770	5.37	13	Pass
16QAM	132072	1720	6.96	13	Pass
16QAM	132322	1745	6.76	13	Pass
16QAM	132572	1770	6.55	13	Pass
64QAM	132072	1720	7.06	13	Pass
64QAM	132322	1745	6.88	13	Pass
64QAM	132572	1770	6.50	13	Pass

Spectrum Plot of Worst Value

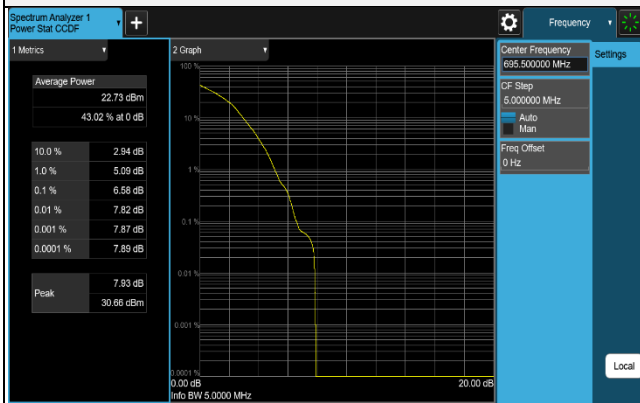


64QAM CH 132072 (1720MHz)

LTE Band 71 (Channel Bandwidth 5MHz)

Test Condition	Channel	Frequency (MHz)	Measure. Value (dB)	Limit (dB)	Result
QPSK	133147	665.5	4.94	13	Pass
QPSK	133297	680.5	5.21	13	Pass
QPSK	133447	695.5	5.34	13	Pass
16QAM	133147	665.5	5.83	13	Pass
16QAM	133297	680.5	6.43	13	Pass
16QAM	133447	695.5	6.58	13	Pass
64QAM	133147	665.5	6.09	13	Pass
64QAM	133297	680.5	6.43	13	Pass
64QAM	133447	695.5	6.57	13	Pass

Spectrum Plot of Worst Value

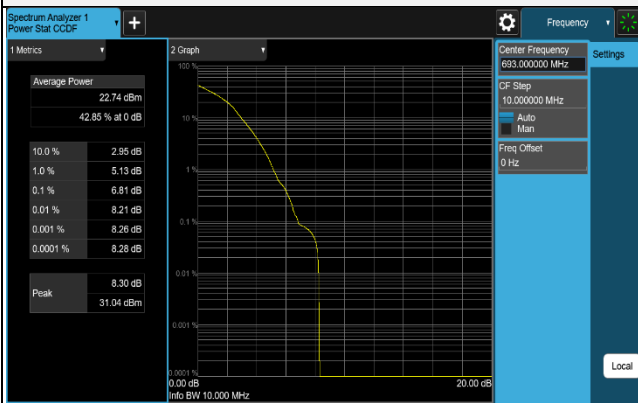


16QAM CH 133447 (695.5MHz)

LTE Band 71 (Channel Bandwidth 10MHz)

Test Condition	Channel	Frequency (MHz)	Measure. Value (dB)	Limit (dB)	Result
QPSK	133172	668	4.73	13	Pass
QPSK	133297	680.5	5.25	13	Pass
QPSK	133422	693	5.40	13	Pass
16QAM	133172	668	5.94	13	Pass
16QAM	133297	680.5	6.50	13	Pass
16QAM	133422	693	6.81	13	Pass
64QAM	133172	668	6.09	13	Pass
64QAM	133297	680.5	6.50	13	Pass
64QAM	133422	693	6.57	13	Pass

Spectrum Plot of Worst Value

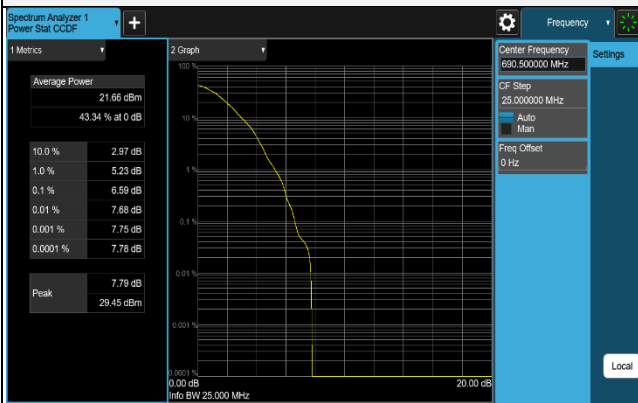


16QAM CH 133422 (693MHz)

LTE Band 71 (Channel Bandwidth 15MHz)

Test Condition	Channel	Frequency (MHz)	Measure. Value (dB)	Limit (dB)	Result
QPSK	133197	670.5	4.66	13	Pass
QPSK	133297	680.5	5.25	13	Pass
QPSK	133397	690.5	5.18	13	Pass
16QAM	133197	670.5	5.63	13	Pass
16QAM	133297	680.5	6.14	13	Pass
16QAM	133397	690.5	6.40	13	Pass
64QAM	133197	670.5	6.12	13	Pass
64QAM	133297	680.5	6.39	13	Pass
64QAM	133397	690.5	6.59	13	Pass

Spectrum Plot of Worst Value

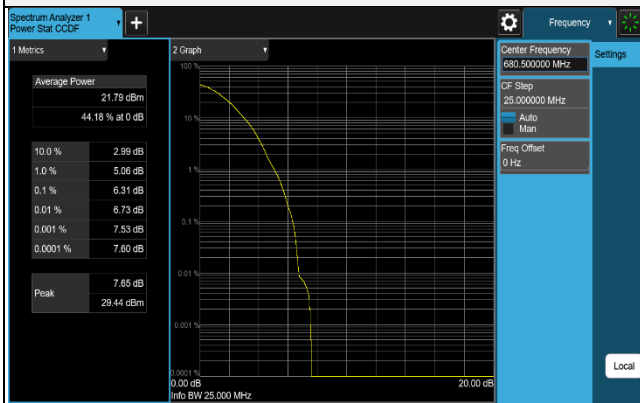


64QAM CH 133397 (690.5MHz)

LTE Band 71 (Channel Bandwidth 20MHz)

Test Condition	Channel	Frequency (MHz)	Measure. Value (dB)	Limit (dB)	Result
QPSK	133222	673	4.83	13	Pass
QPSK	133297	680.5	5.06	13	Pass
QPSK	133372	688	5.16	13	Pass
16QAM	133222	673	5.71	13	Pass
16QAM	133297	680.5	6.05	13	Pass
16QAM	133372	688	6.15	13	Pass
64QAM	133222	673	6.15	13	Pass
64QAM	133297	680.5	6.31	13	Pass
64QAM	133372	688	6.24	13	Pass

Spectrum Plot of Worst Value



64QAM CH 133297 (680.5MHz)

4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

For LTE Band 4, LTE Band 66:

According to FCC 27.53(h), for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log (P)$ dB.

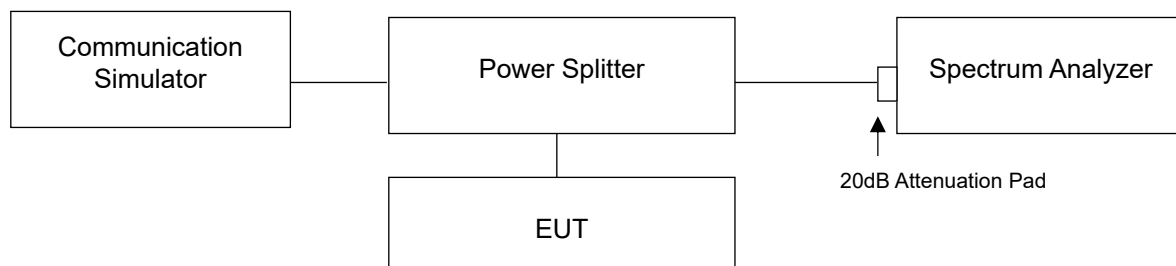
For LTE Band 7:

According to FCC 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least $55 + 10 \log (P)$ dB. The emission limit equal to -25dBm .

For LTE Band 12, LTE Band 17, LTE Band 71:

According to FCC 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. The limit of emissions is equal to -13 dBm .

4.7.2 Test Setup



4.7.3 Test Procedure

- a. All measurements were done at low, middle and high channels operational frequency range.
- b. Measuring frequency range is from 9kHz to 7GHz / 8GHz / 9GHz / 18GHz / 26GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

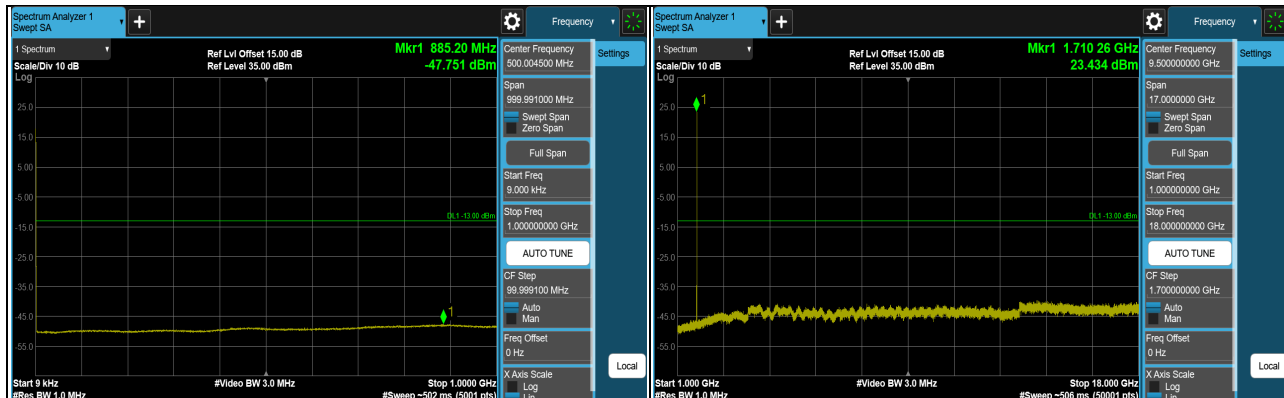
4.7.4 Test Results

LTE Band 4 (Channel Bandwidth 1.4MHz)

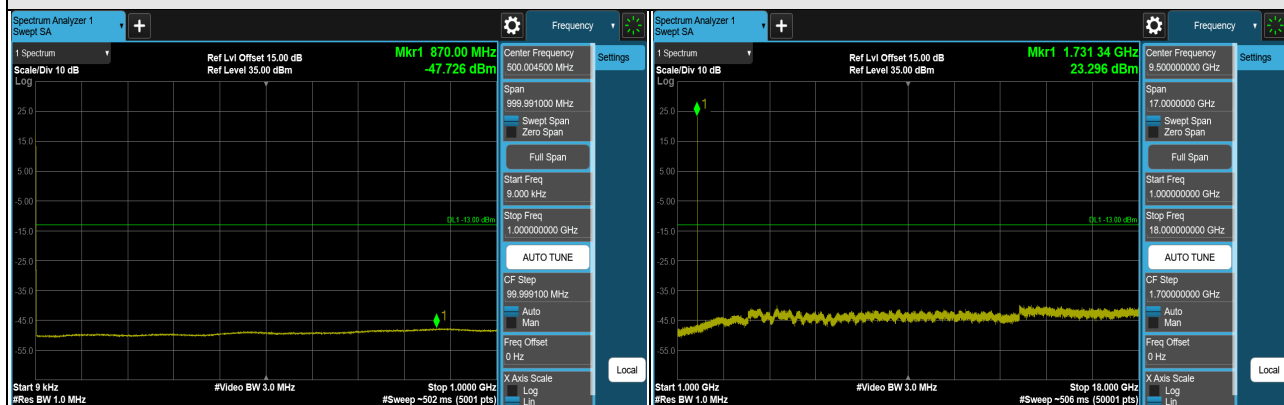


*The 9kHz signal over the limit is from Spectrum.

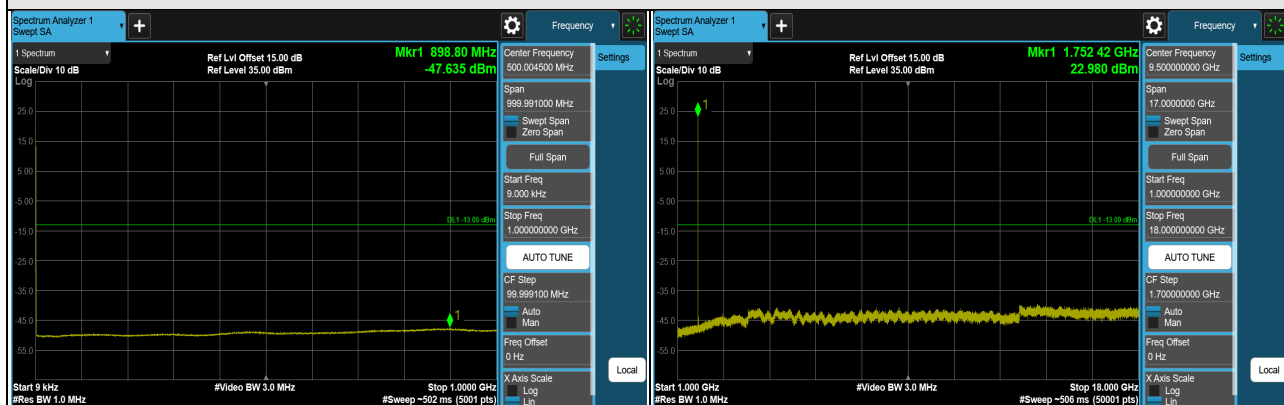
LTE Band 4 (Channel Bandwidth 3MHz)



CH 19965 (1711.5MHz)



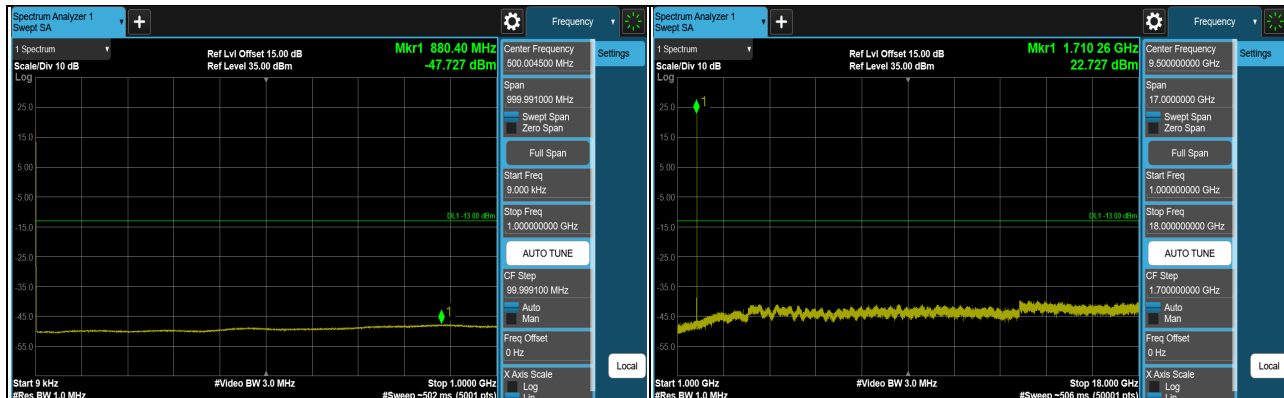
CH 20175 (1732.5MHz)



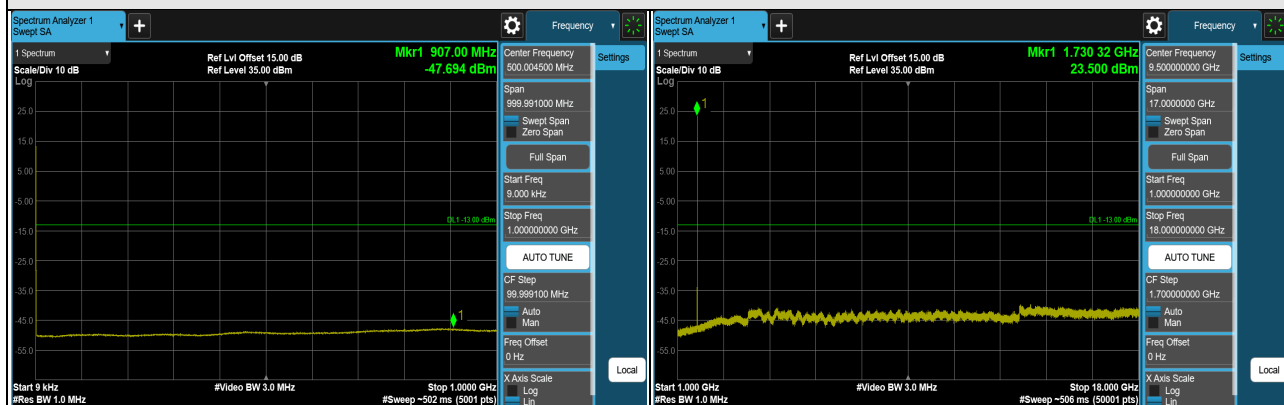
CH 20385 (1753.5MHz)

*The 9kHz signal over the limit is from Spectrum.

LTE Band 4 (Channel Bandwidth 5MHz)



CH 19975 (1712.5MHz)



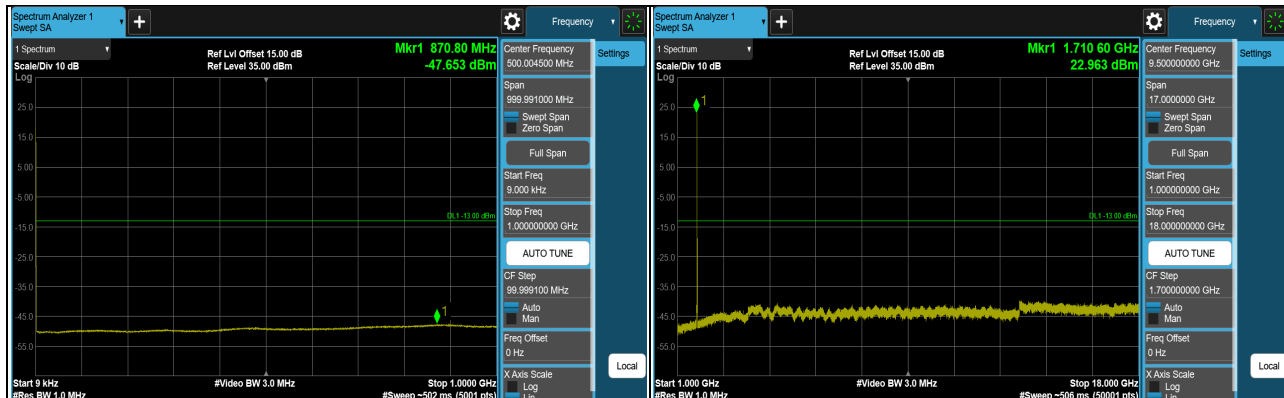
CH 20175 (1732.5MHz)



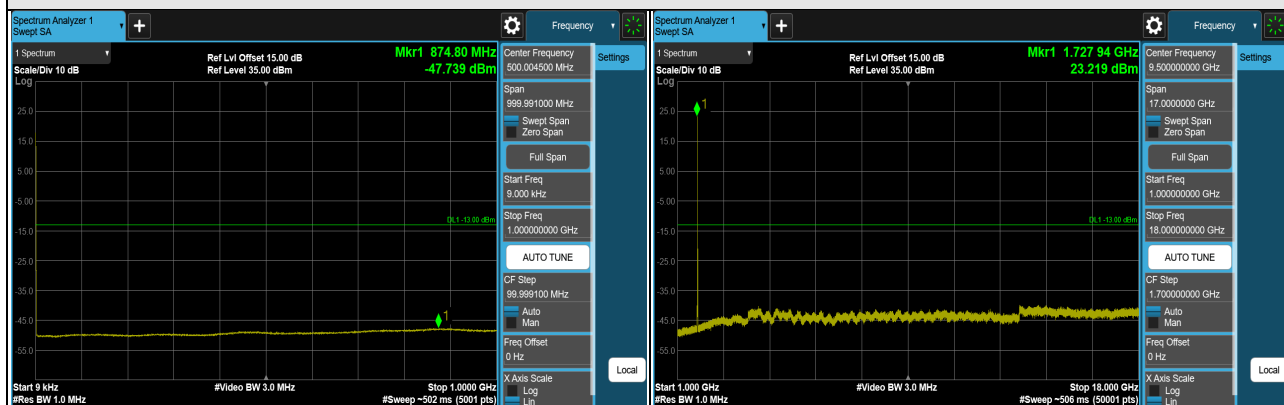
CH 20375 (1752.5MHz)

*The 9kHz signal over the limit is from Spectrum.

LTE Band 4 (Channel Bandwidth 10MHz)



CH 2000 (1715MHz)



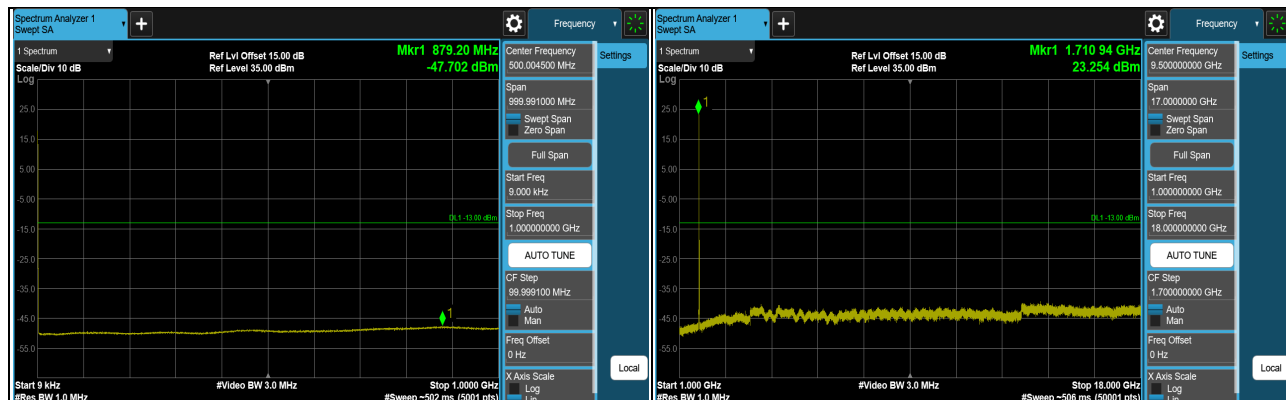
CH 20175 (1732.5MHz)



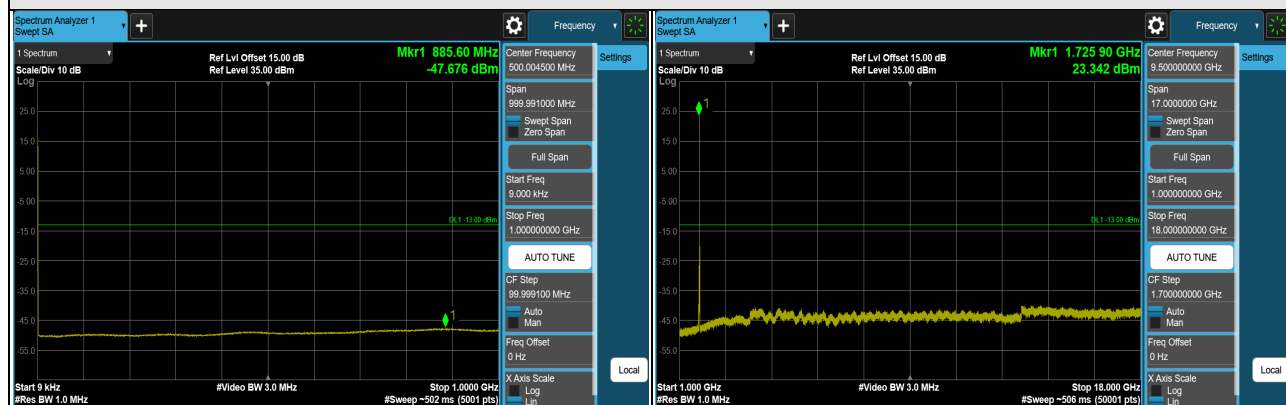
CH 20350 (1750MHz)

*The 9kHz signal over the limit is from Spectrum.

LTE Band 4 (Channel Bandwidth 15MHz)



CH 2025 (1717.5MHz)



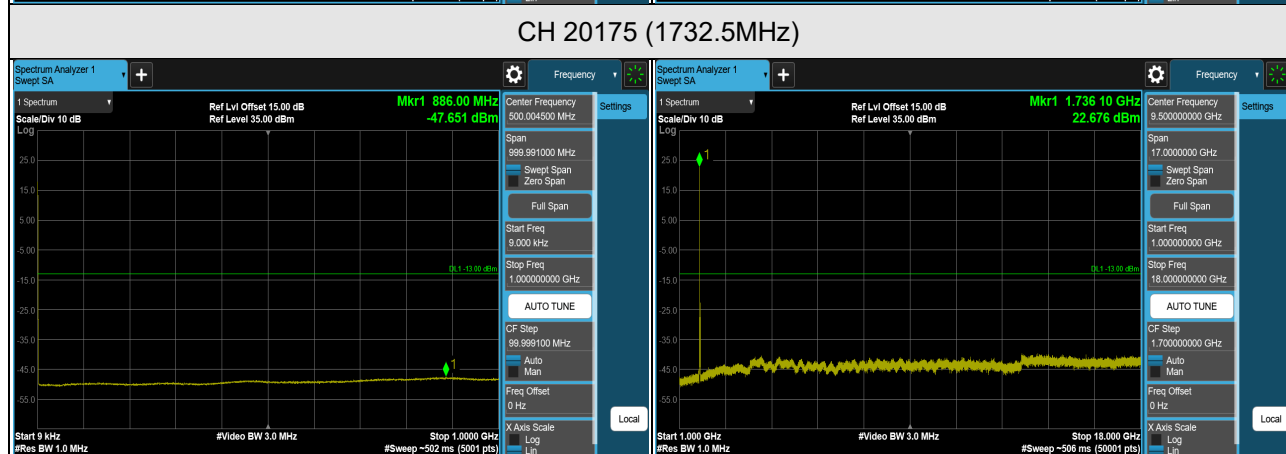
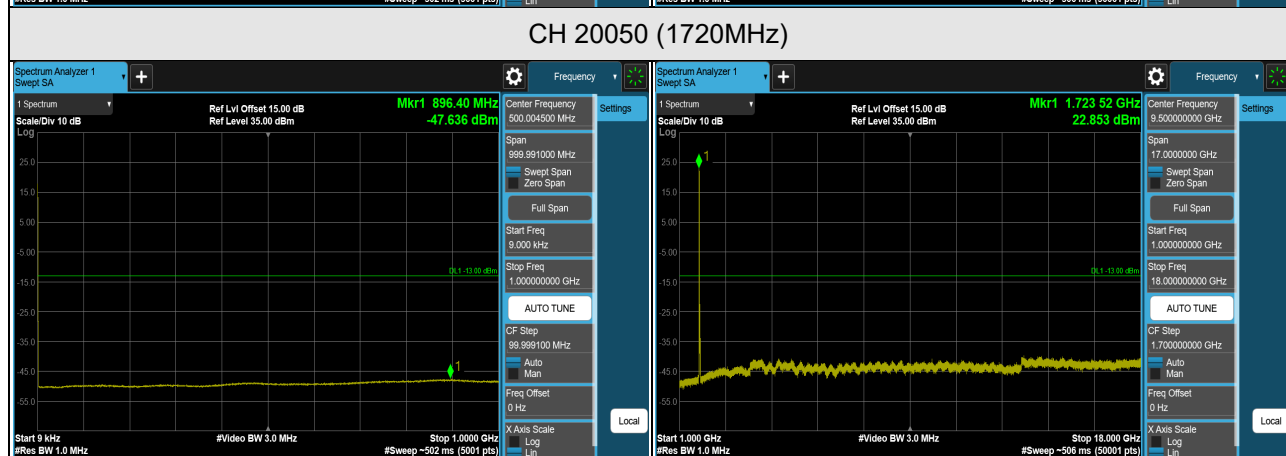
CH 20175 (1732.5MHz)



CH 20325 (1747.5MHz)

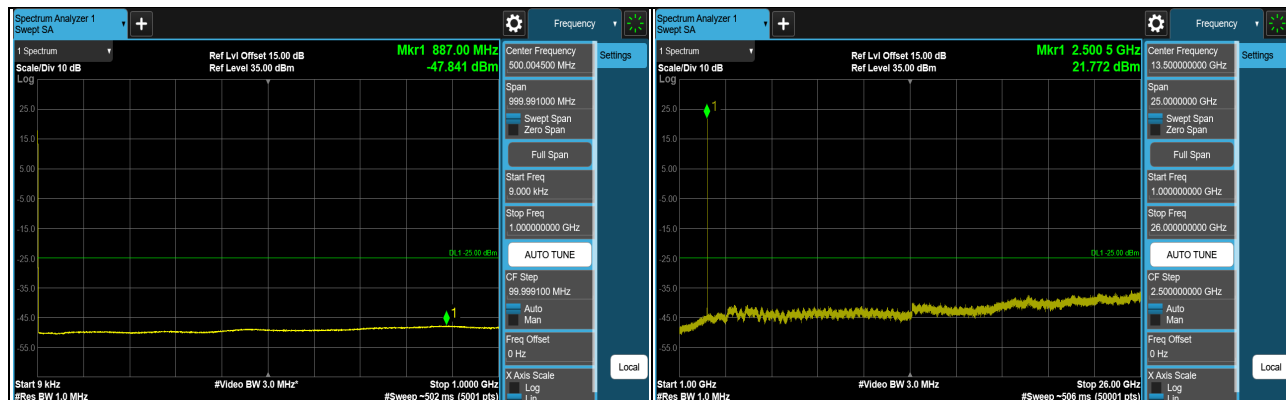
*The 9kHz signal over the limit is from Spectrum.

LTE Band 4 (Channel Bandwidth 20MHz)



*The 9kHz signal over the limit is from Spectrum.

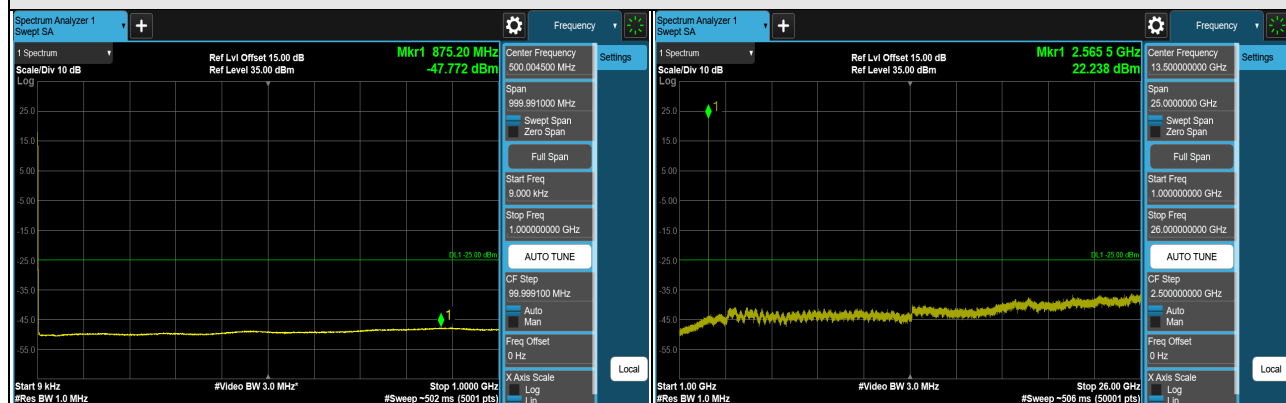
LTE Band 7 (Channel Bandwidth 5MHz)



CH 2075 (2502.5MHz)



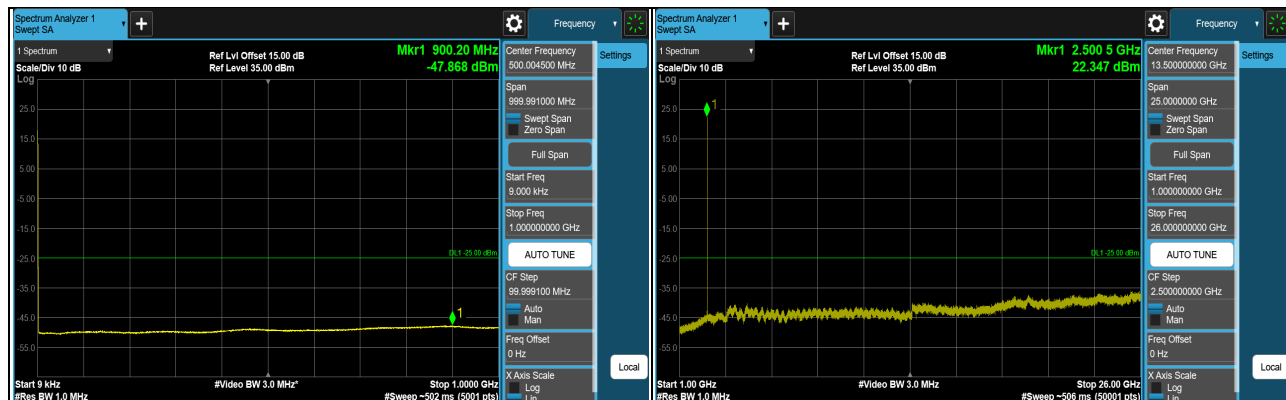
CH 2110 (2535MHz)



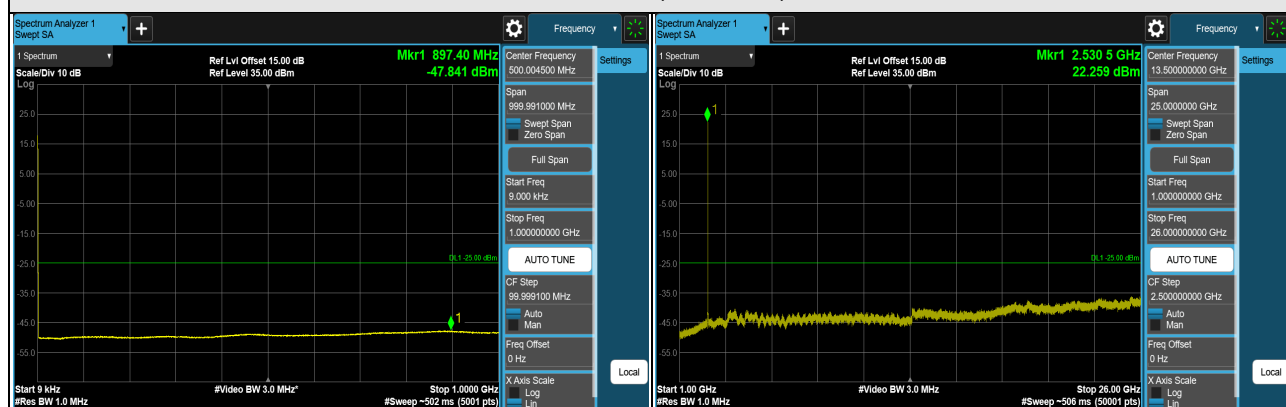
CH 21425 (2567.5MHz)

*The 9kHz signal over the limit is from Spectrum.

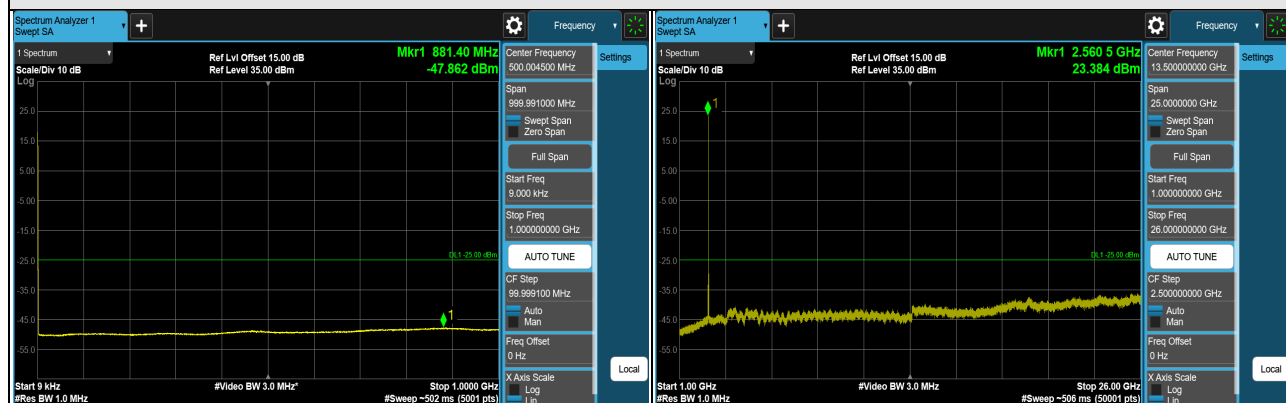
LTE Band 7 (Channel Bandwidth 10MHz)



CH 20800 (2505MHz)



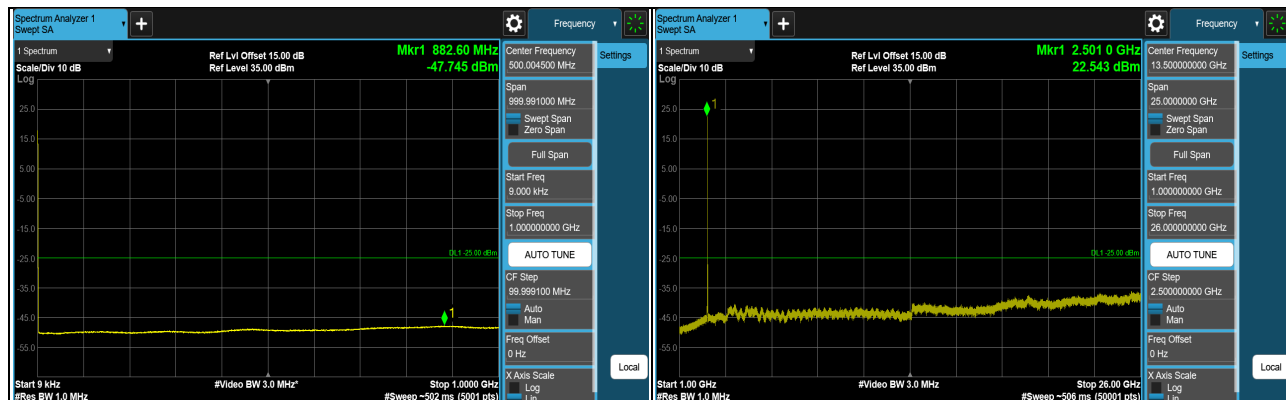
CH 21100 (2535MHz)



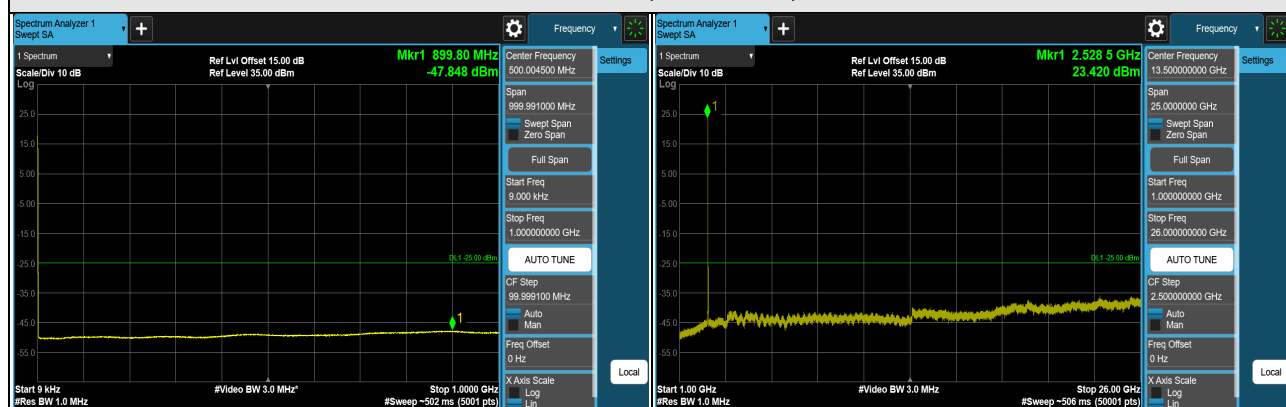
CH 21400 (2565MHz)

*The 9kHz signal over the limit is from Spectrum.

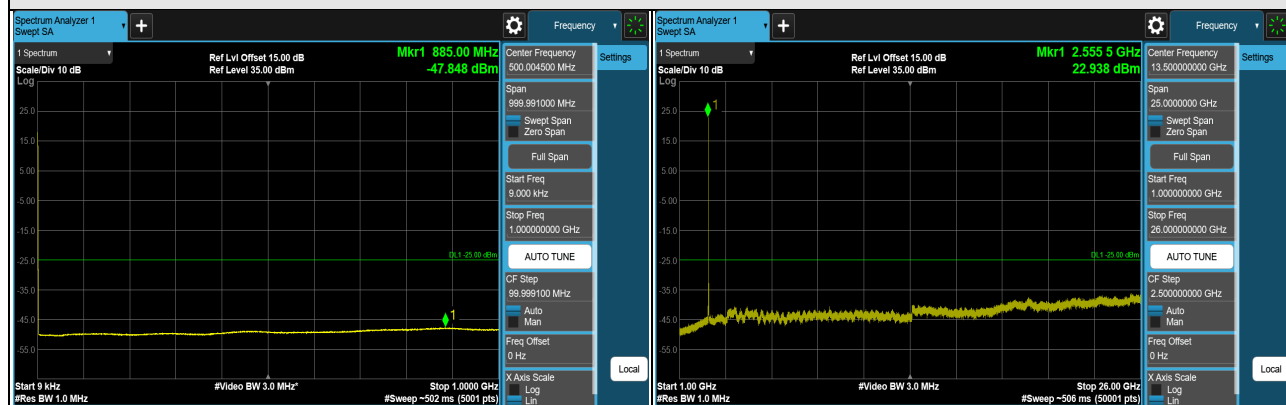
LTE Band 7 (Channel Bandwidth 15MHz)



CH 20825 (2507.5MHz)



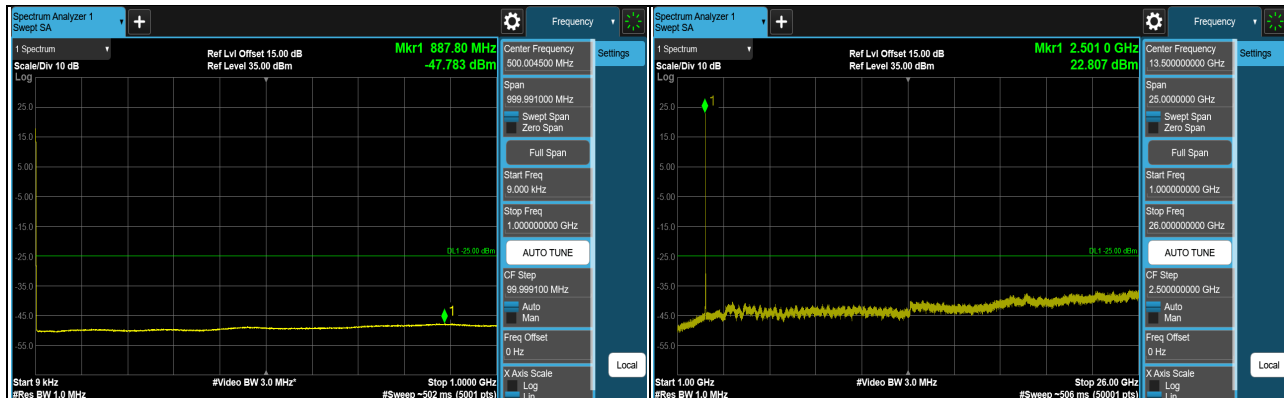
CH 21100 (2535MHz)



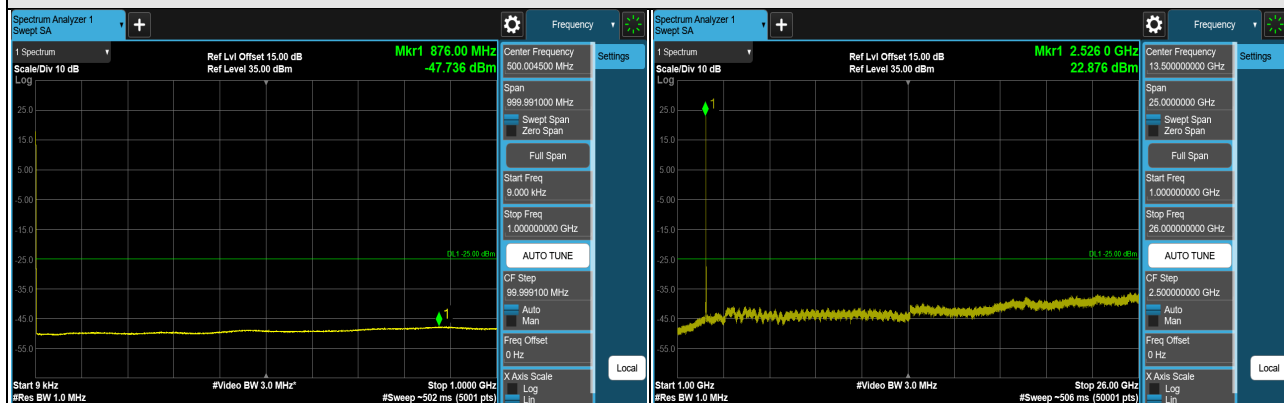
CH 21375 (2562.5MHz)

*The 9kHz signal over the limit is from Spectrum.

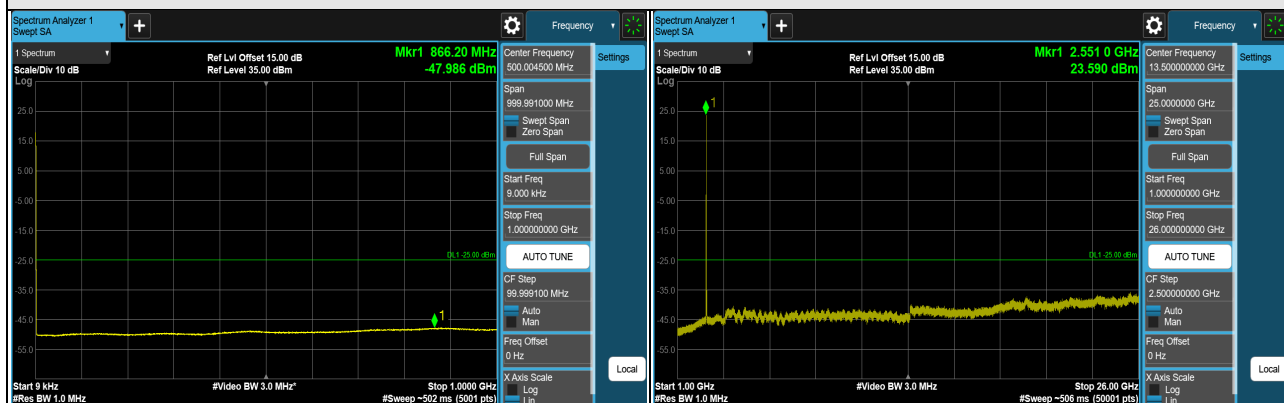
LTE Band 7 (Channel Bandwidth 20MHz)



CH 20850 (2510MHz)



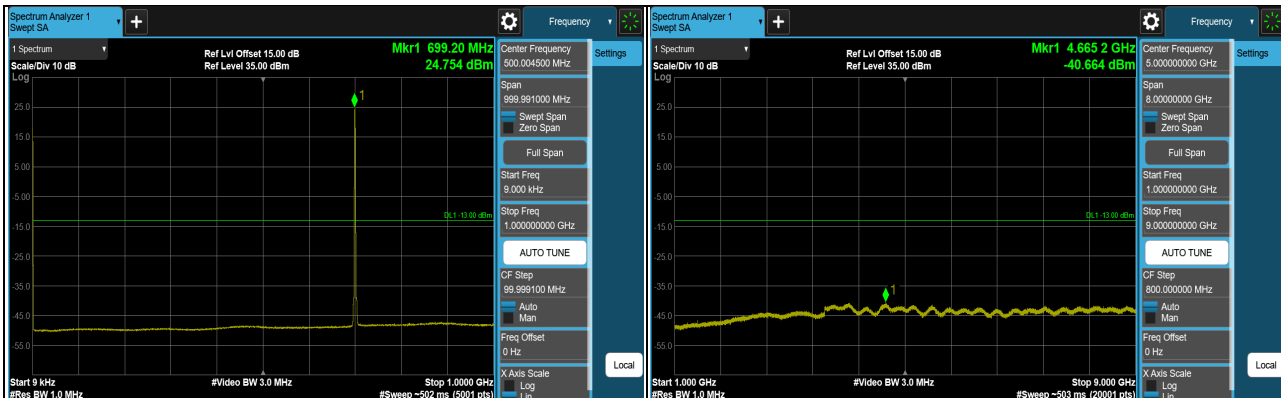
CH 21100 (2535MHz)



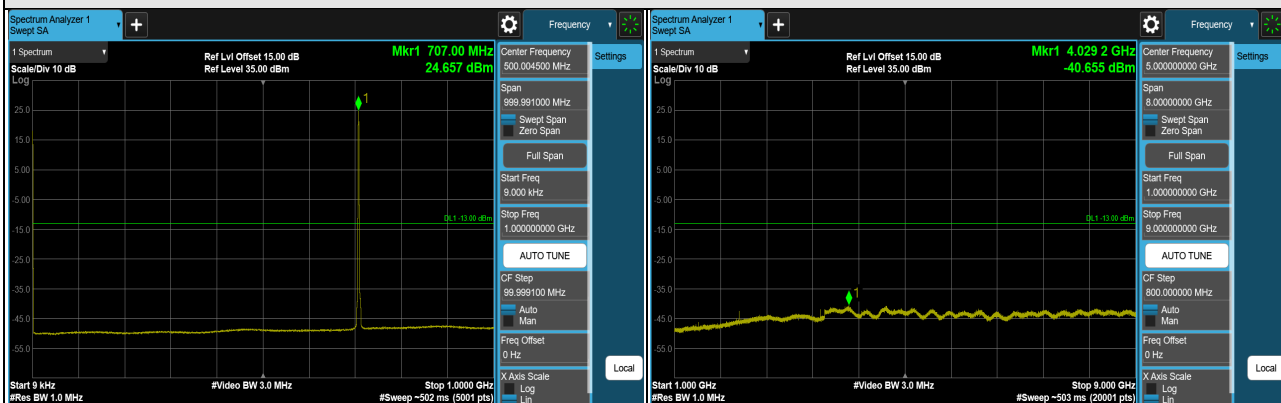
CH 21350 (2560MHz)

*The 9kHz signal over the limit is from Spectrum.

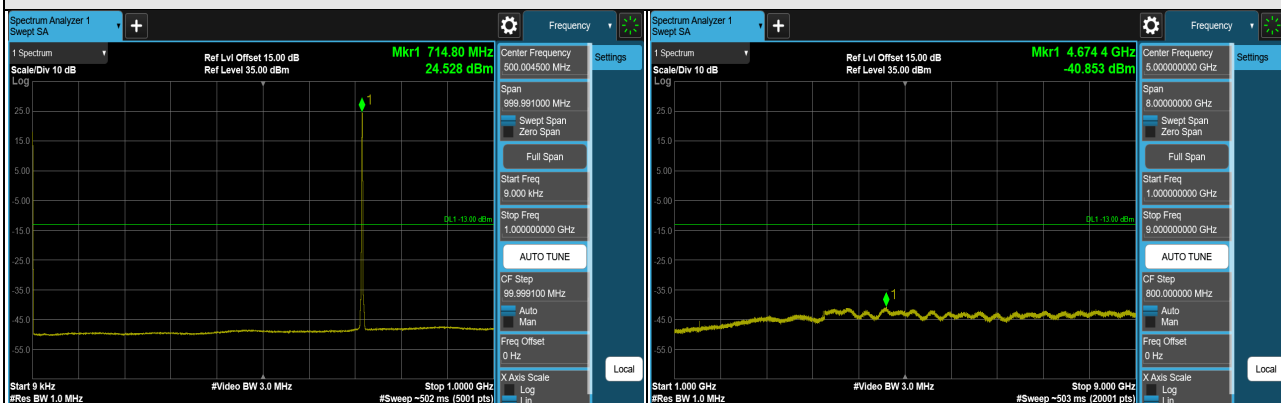
LTE Band 12 (Channel Bandwidth 1.4MHz)



CH 23017 (699.7MHz)



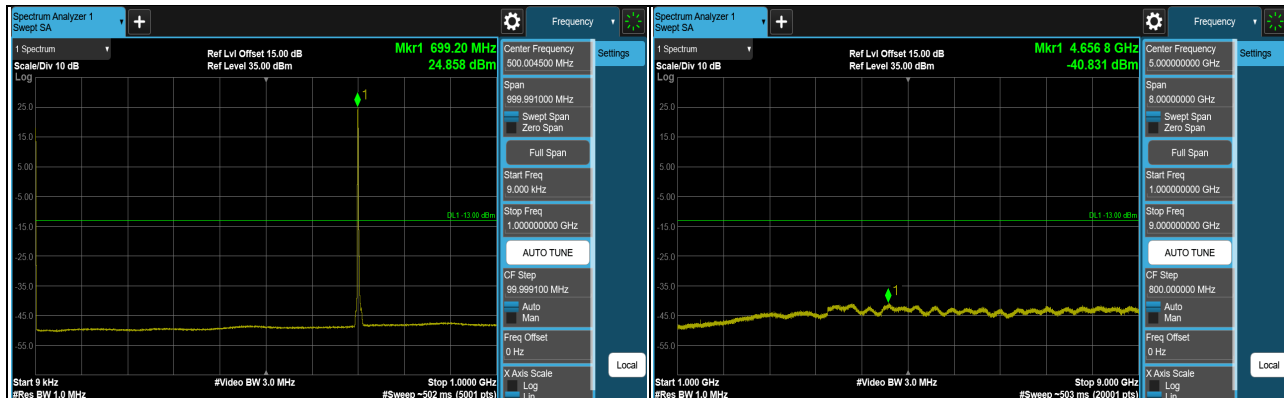
CH 23095 (707.5MHz)



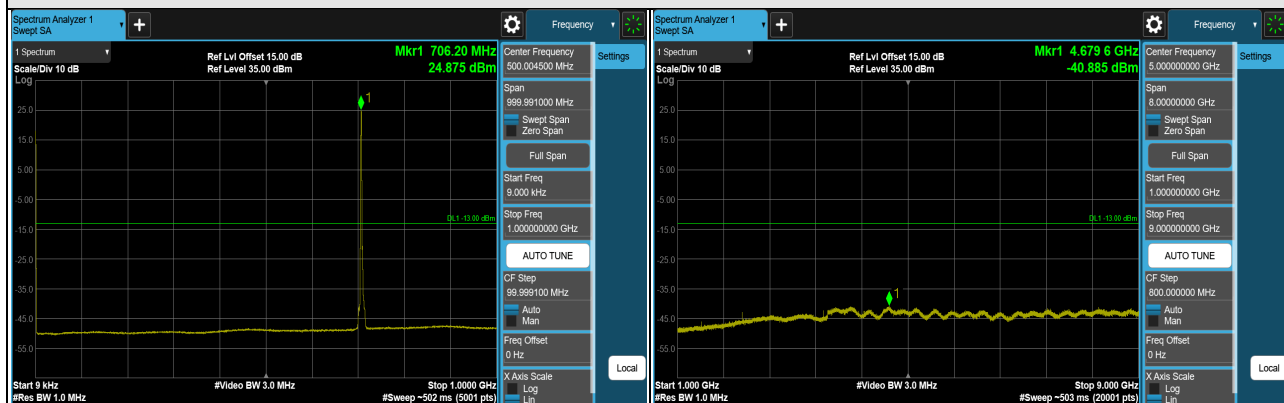
CH 23173 (715.3MHz)

*The 9kHz signal over the limit is from Spectrum.

LTE Band 12 (Channel Bandwidth 3MHz)



CH 23025 (700.5MHz)



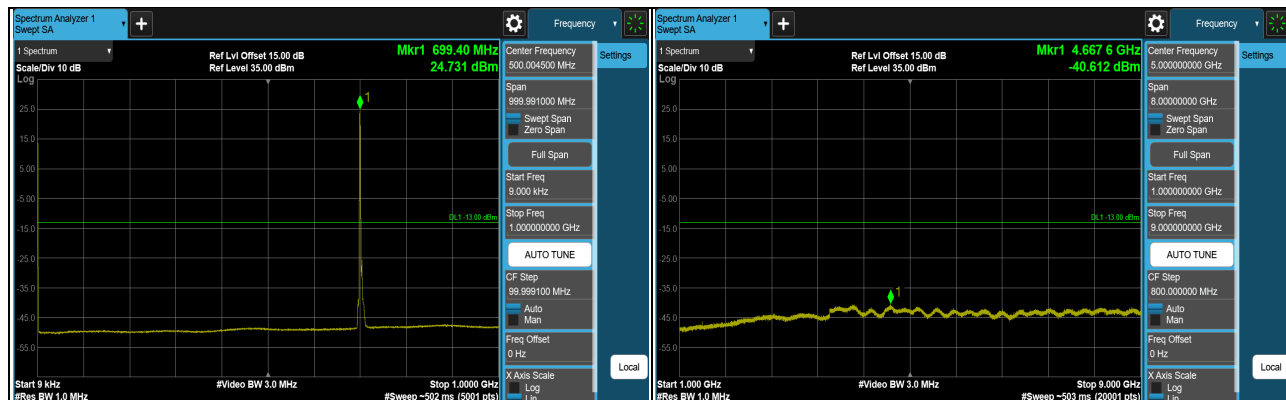
CH 23095 (707.5MHz)



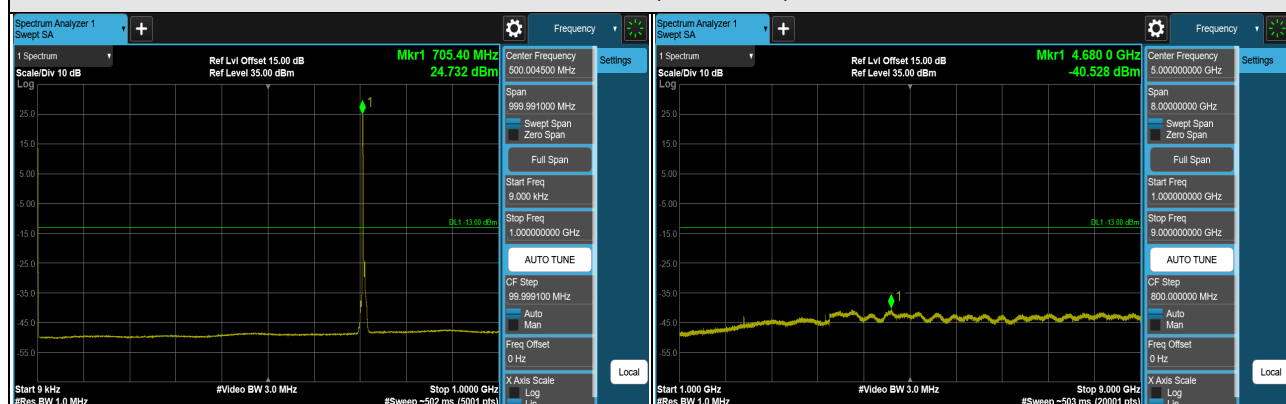
CH 23165 (714.5MHz)

*The 9kHz signal over the limit is from Spectrum.

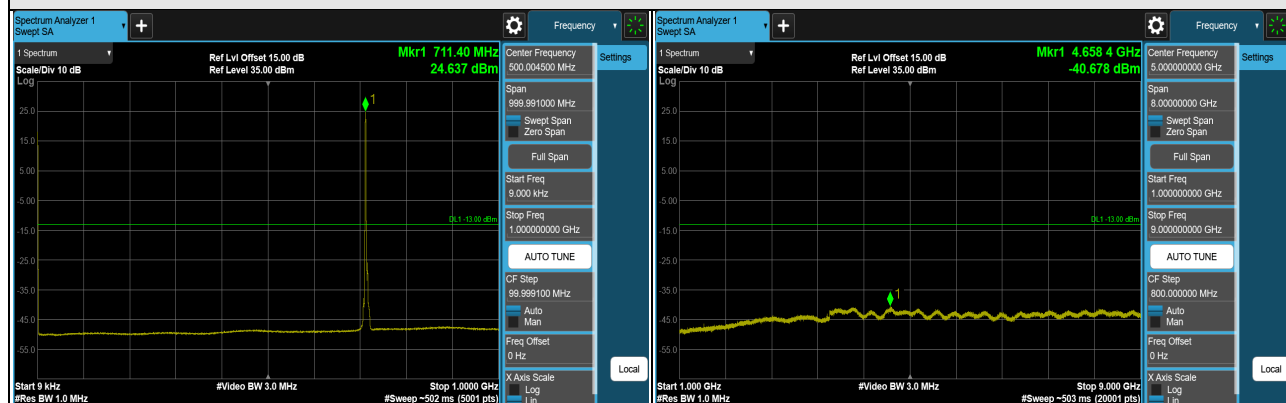
LTE Band 12 (Channel Bandwidth 5MHz)



CH 23035 (701.5MHz)



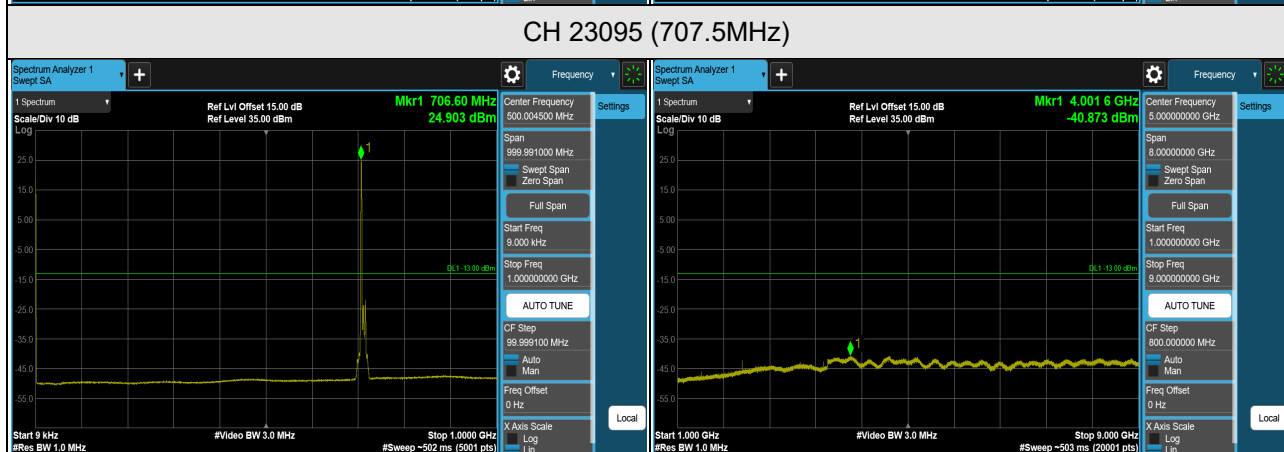
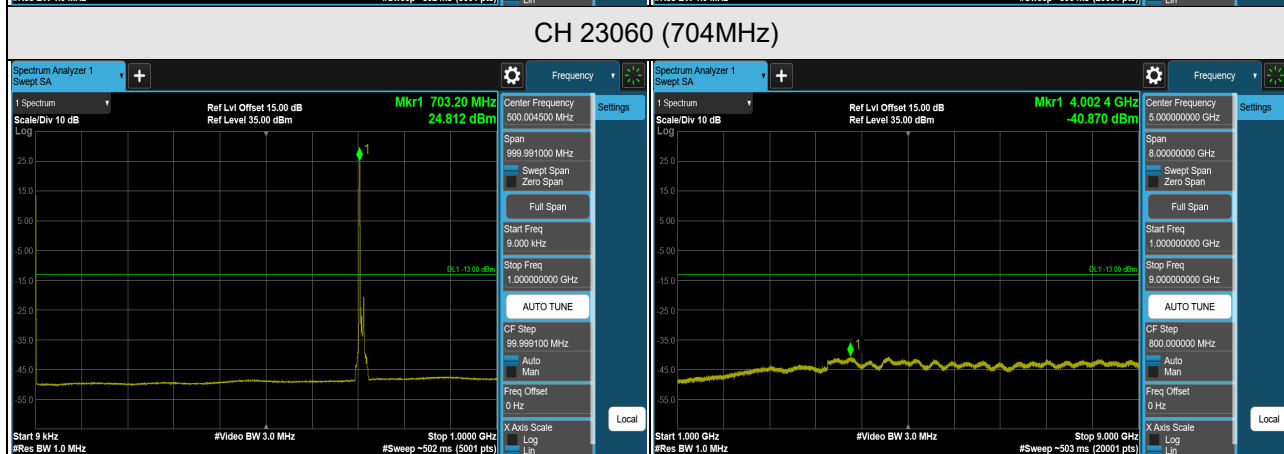
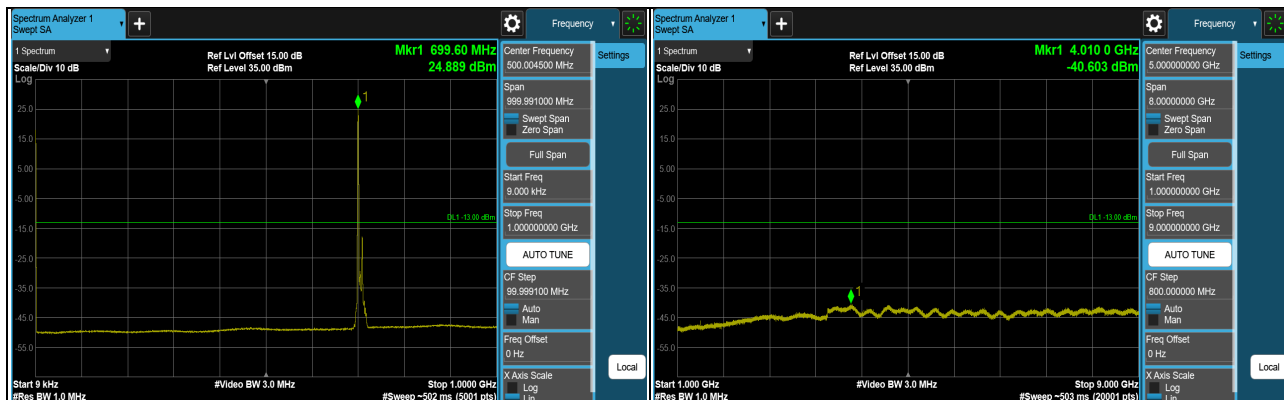
CH 23095 (707.5MHz)



CH 23155 (713.5MHz)

*The 9kHz signal over the limit is from Spectrum.

LTE Band 12 (Channel Bandwidth 10MHz)



*The 9kHz signal over the limit is from Spectrum.