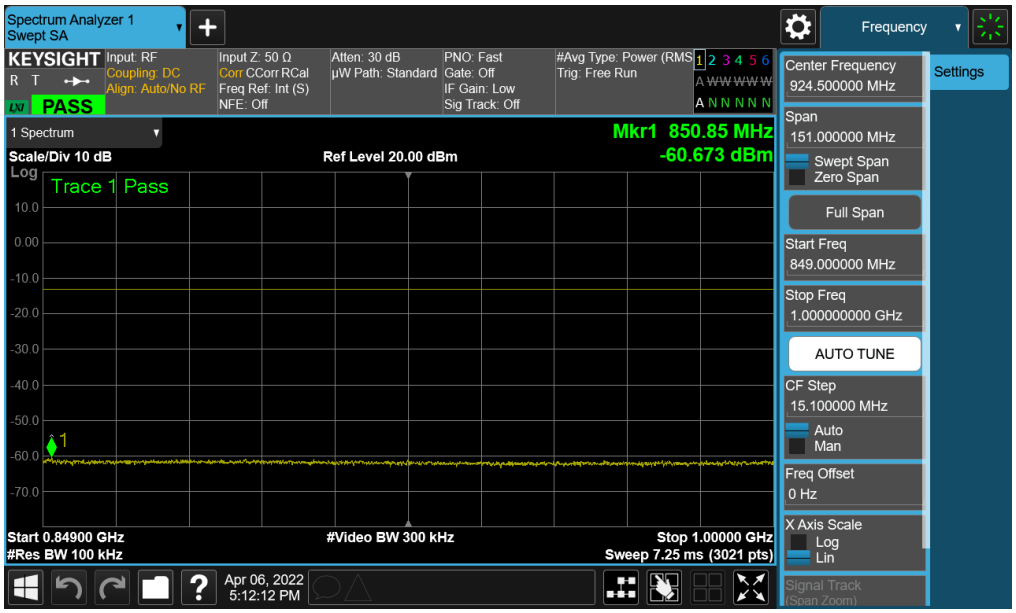
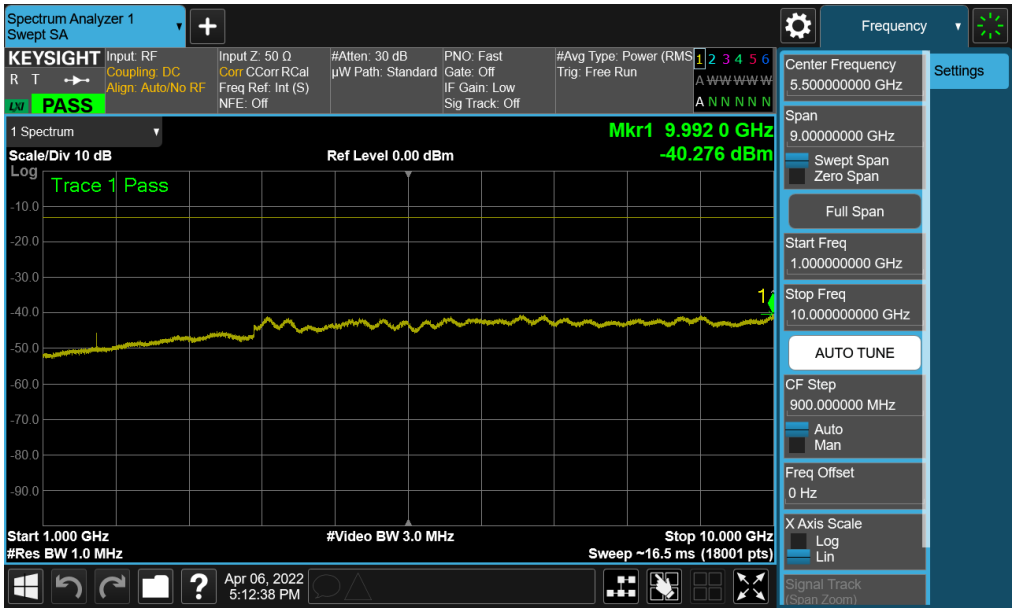
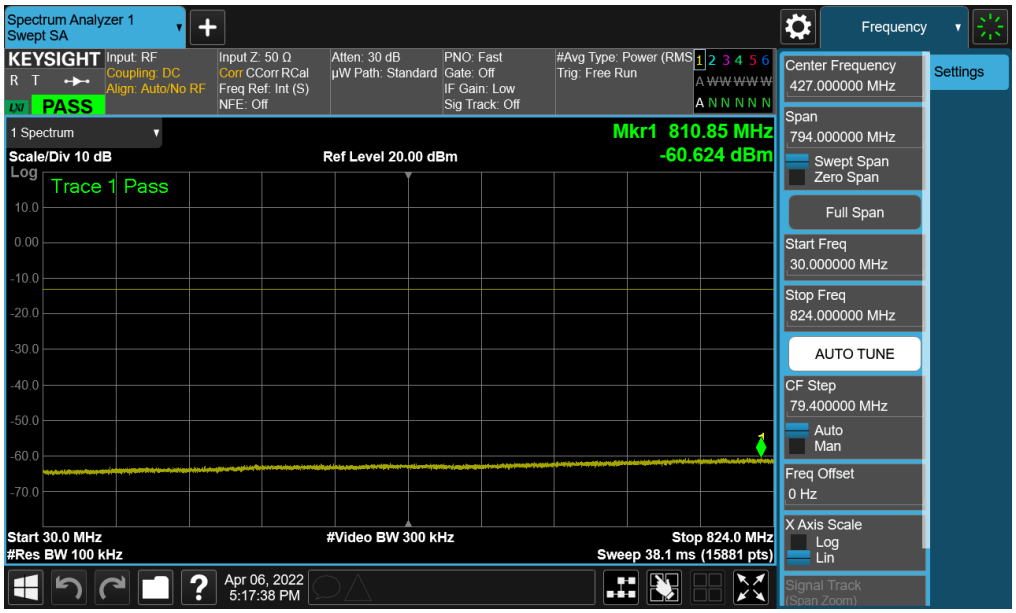


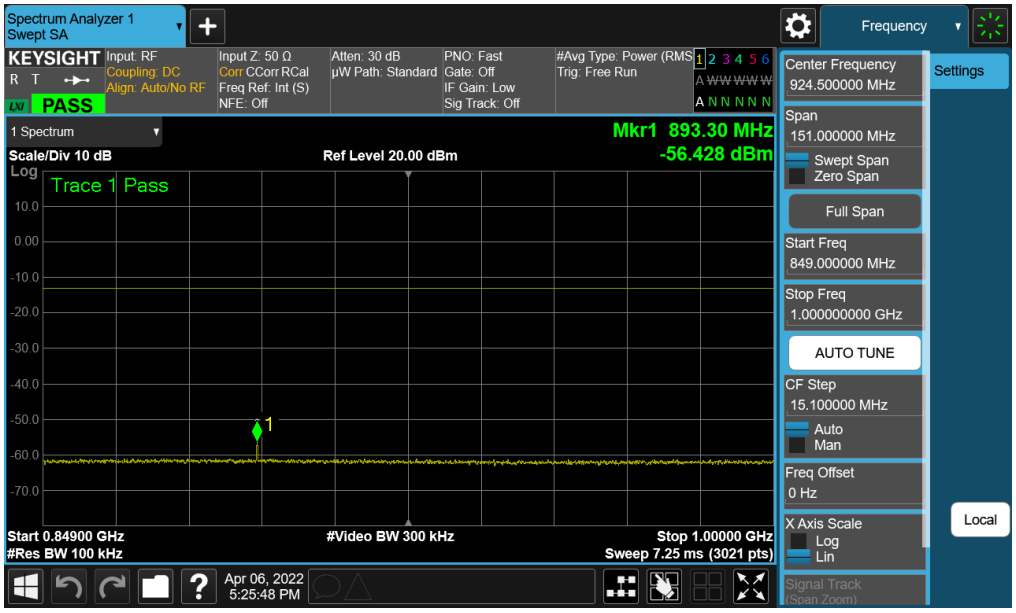
Plot 7-39. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel)



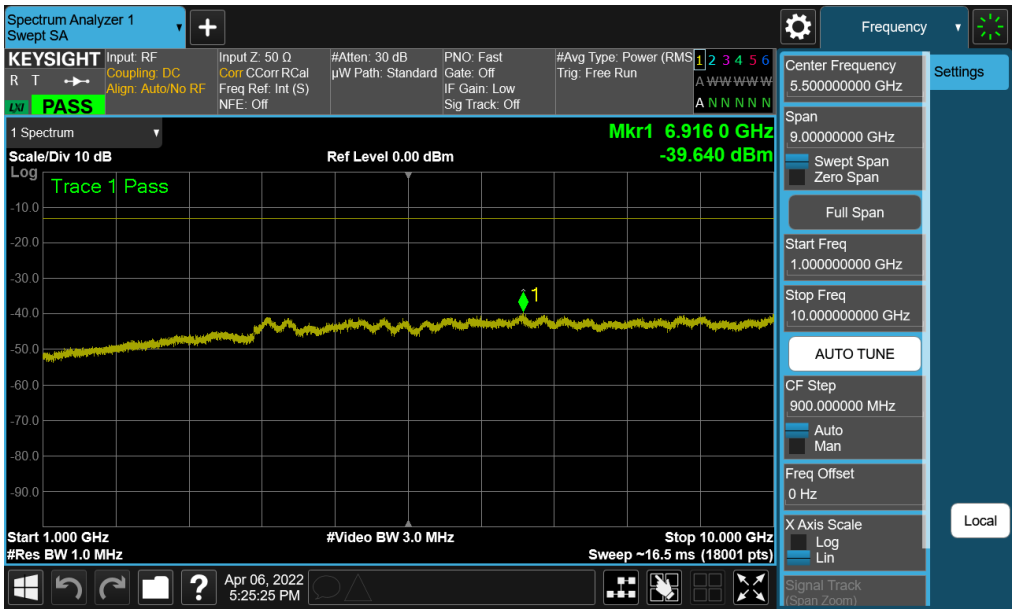
Plot 7-40. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel)



Plot 7-41. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - High Channel)

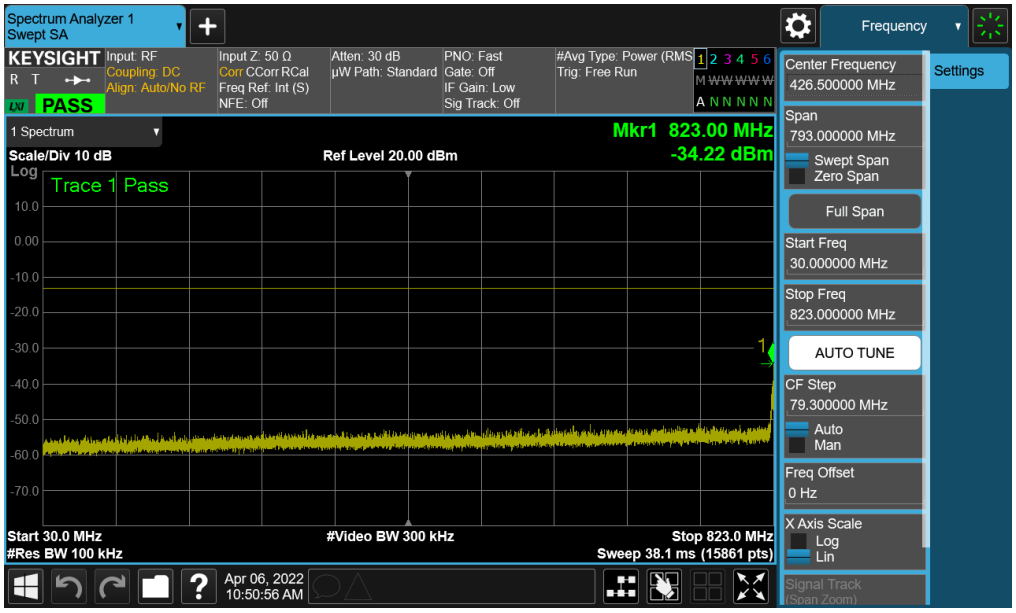


Plot 7-42. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - High Channel)

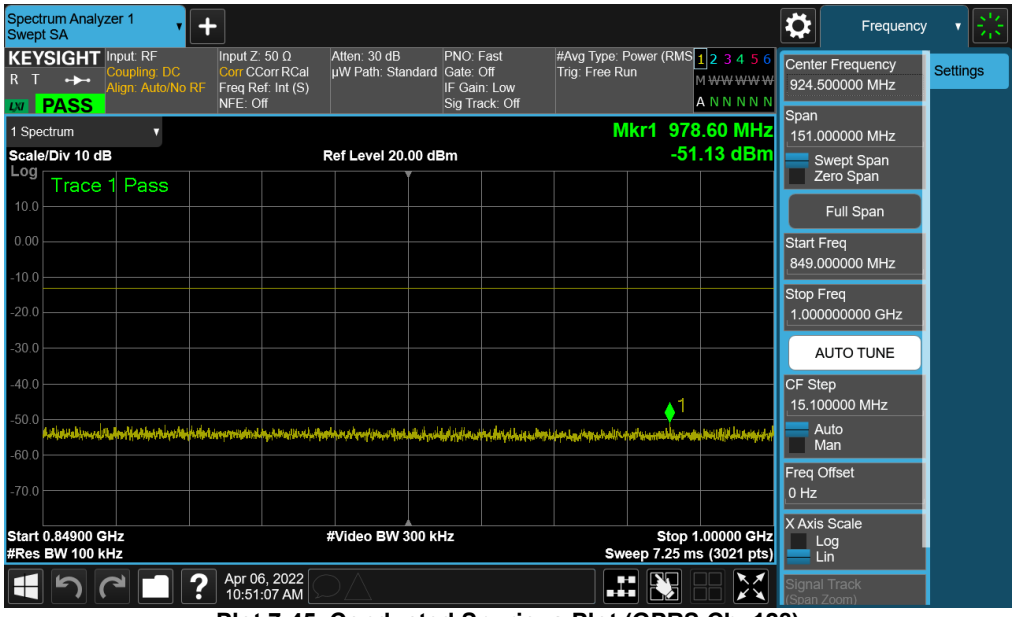


Plot 7-43. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - High Channel)

GSM/GPRS Cell

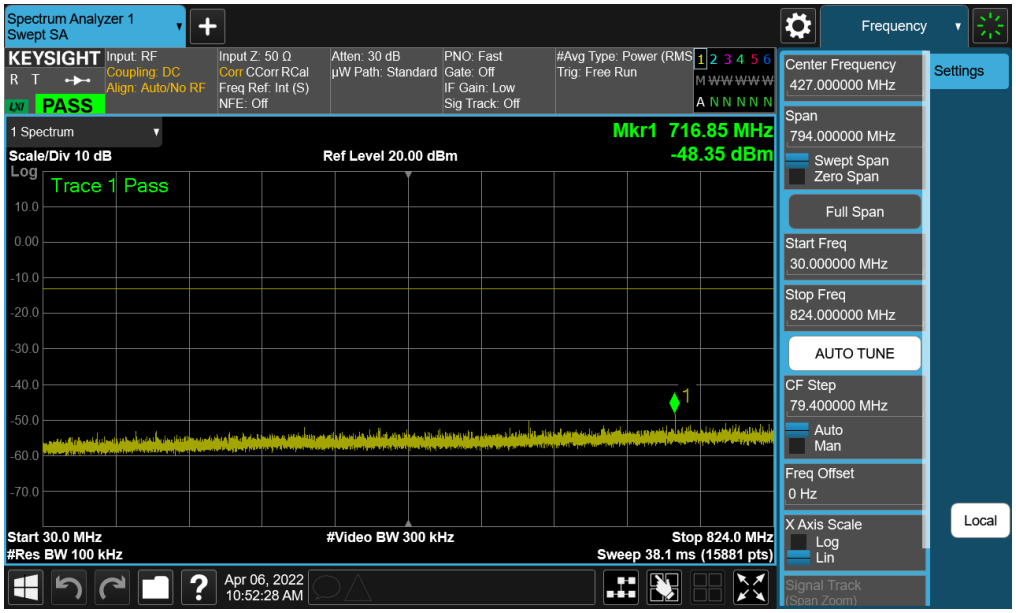


Plot 7-44. Conducted Spurious Plot (GPRS Ch. 128)

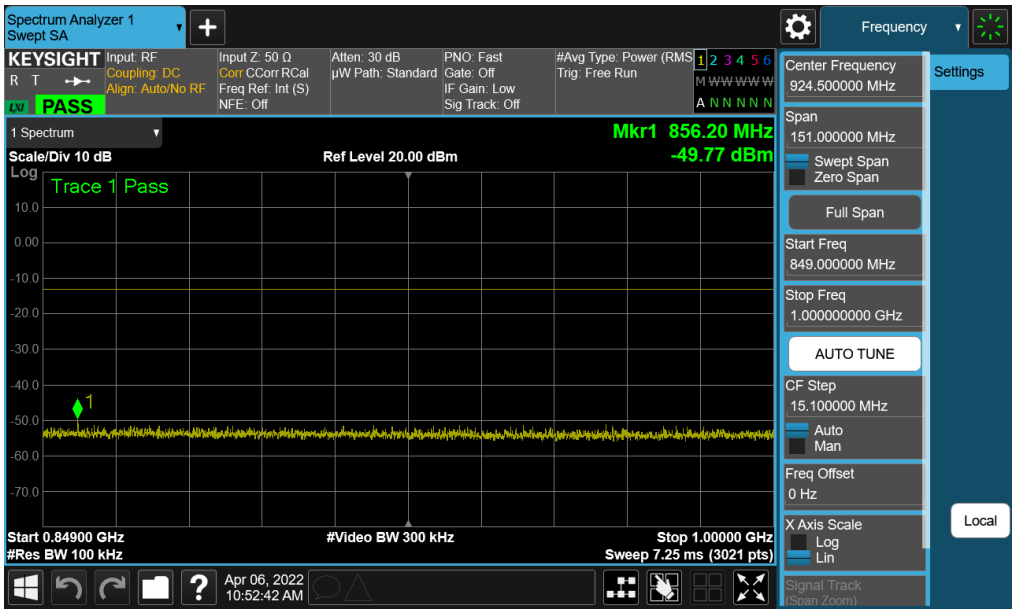


Plot 7-45. Conducted Spurious Plot (GPRS Ch. 128)

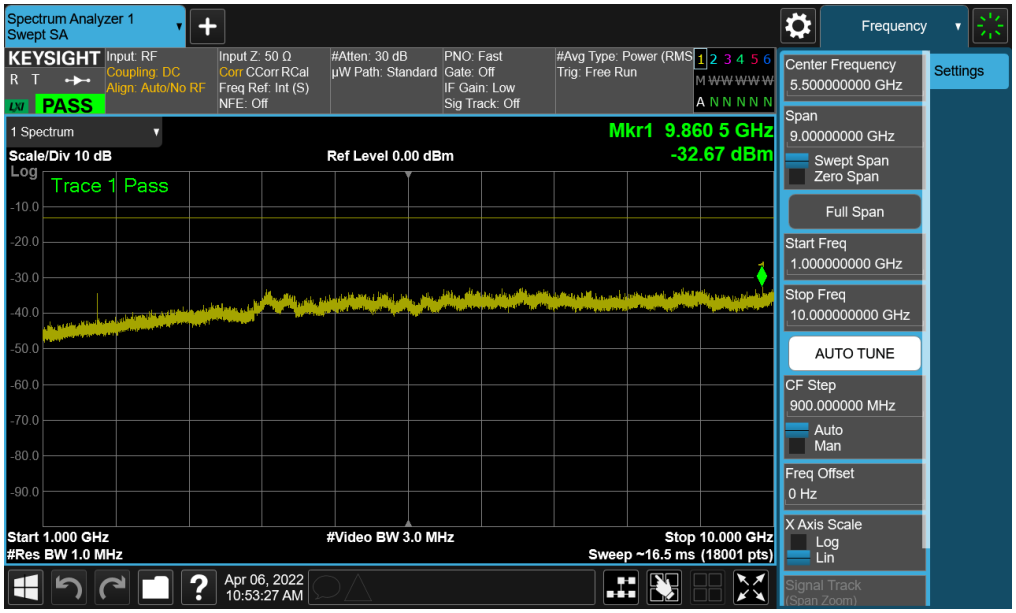
Plot 7-46. Conducted Spurious Plot (GPRS Ch. 128)



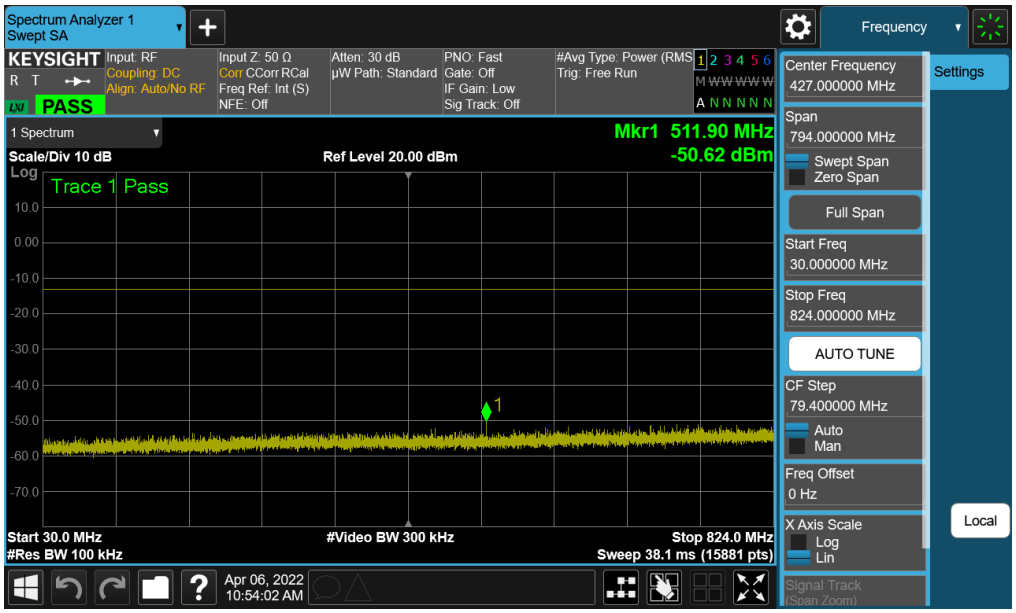
Plot 7-47. Conducted Spurious Plot (GPRS Ch. 190)



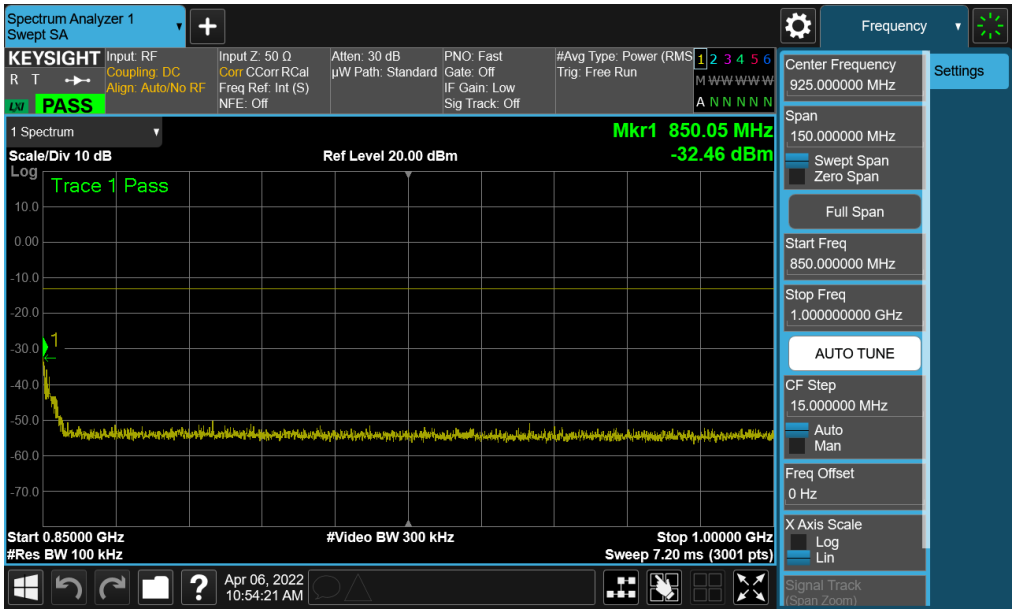
Plot 7-48. Conducted Spurious Plot (GPRS Ch. 190)



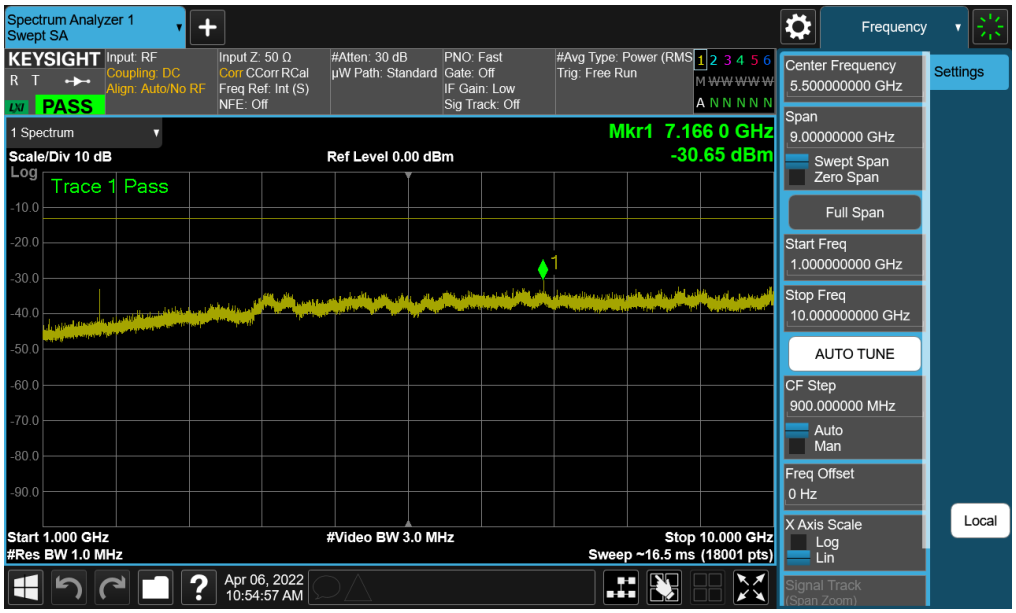
Plot 7-49. Conducted Spurious Plot (GPRS Ch. 190)



Plot 7-50. Conducted Spurious Plot (GPRS Ch. 251)

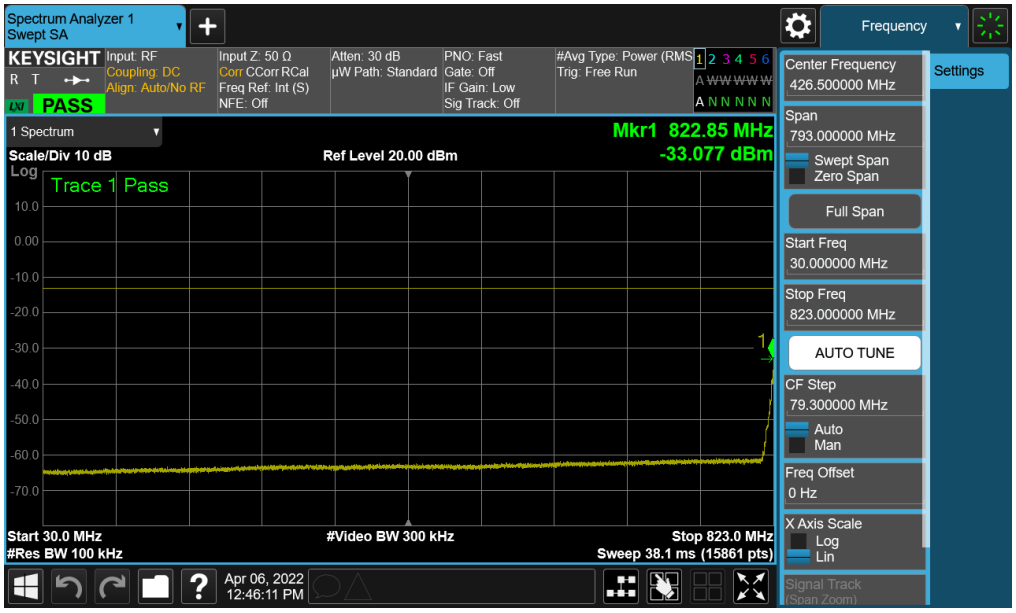


Plot 7-51. Conducted Spurious Plot (GPRS Ch. 251)

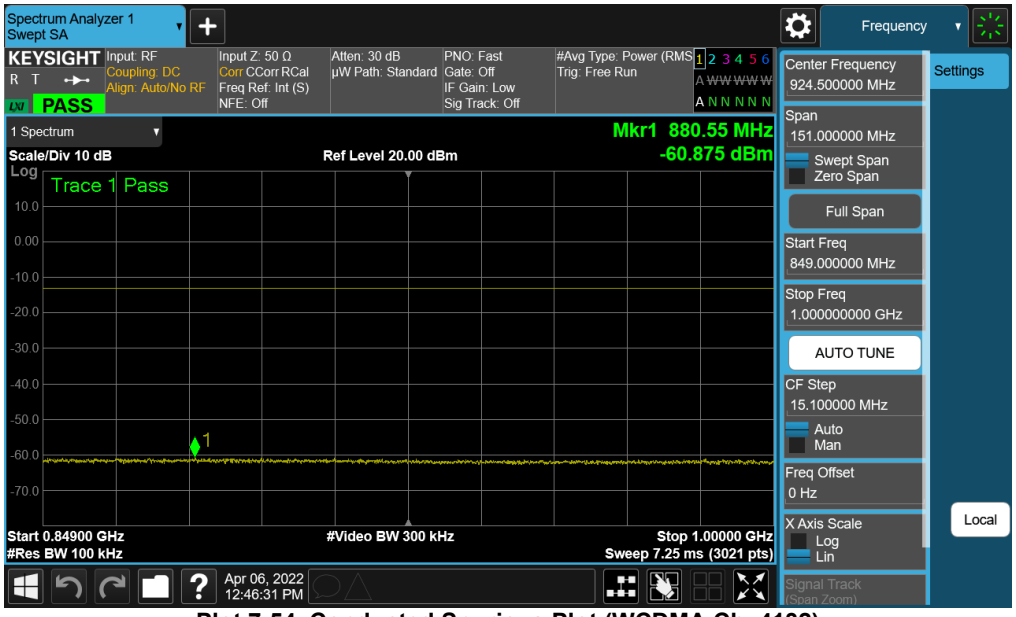


Plot 7-52. Conducted Spurious Plot (GPRS Ch. 251)

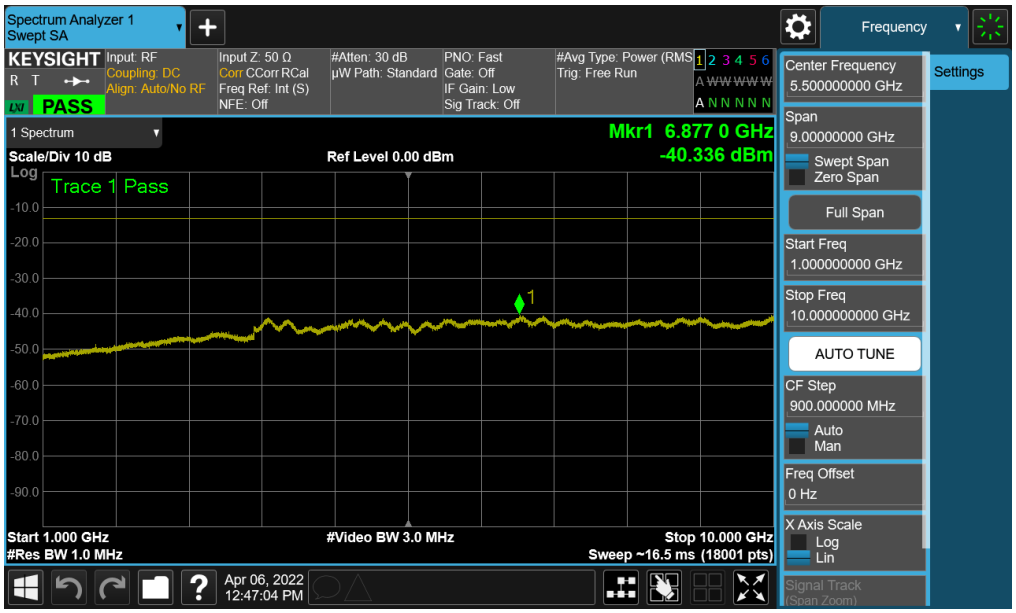
WCDMA Cell



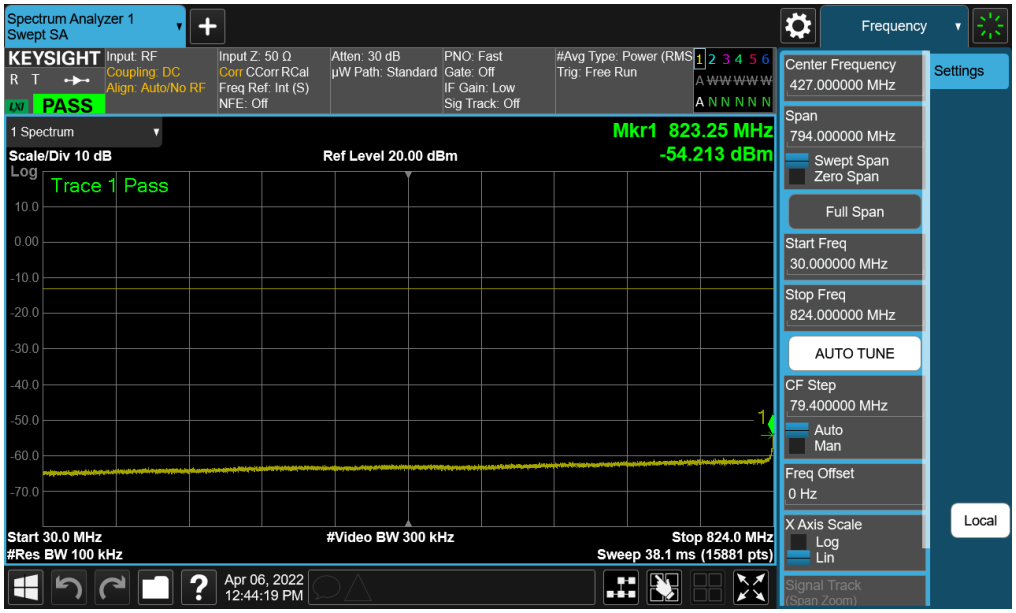
Plot 7-53. Conducted Spurious Plot (WCDMA Ch. 4132)



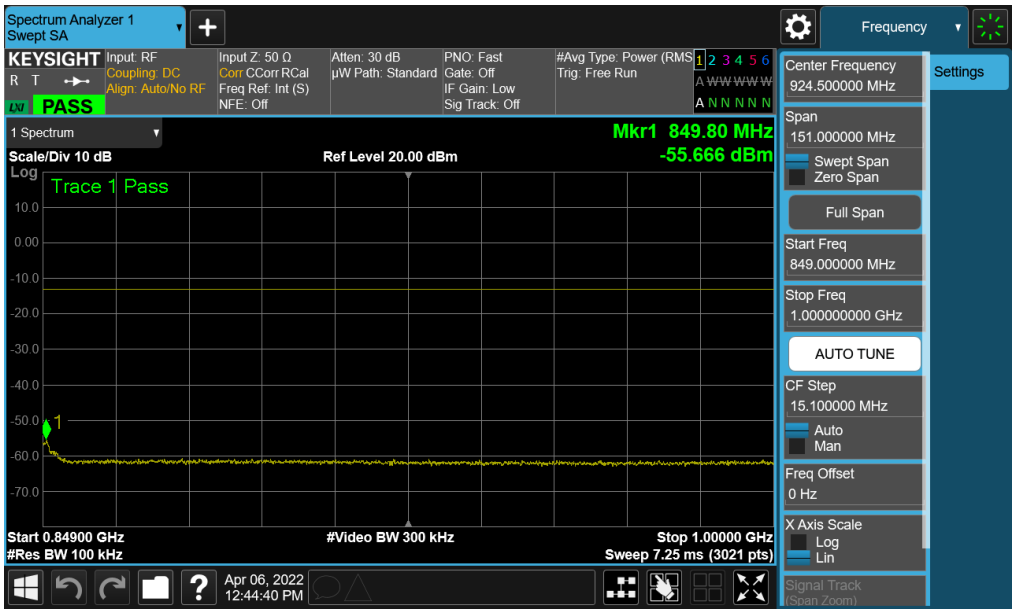
Plot 7-54. Conducted Spurious Plot (WCDMA Ch. 4132)



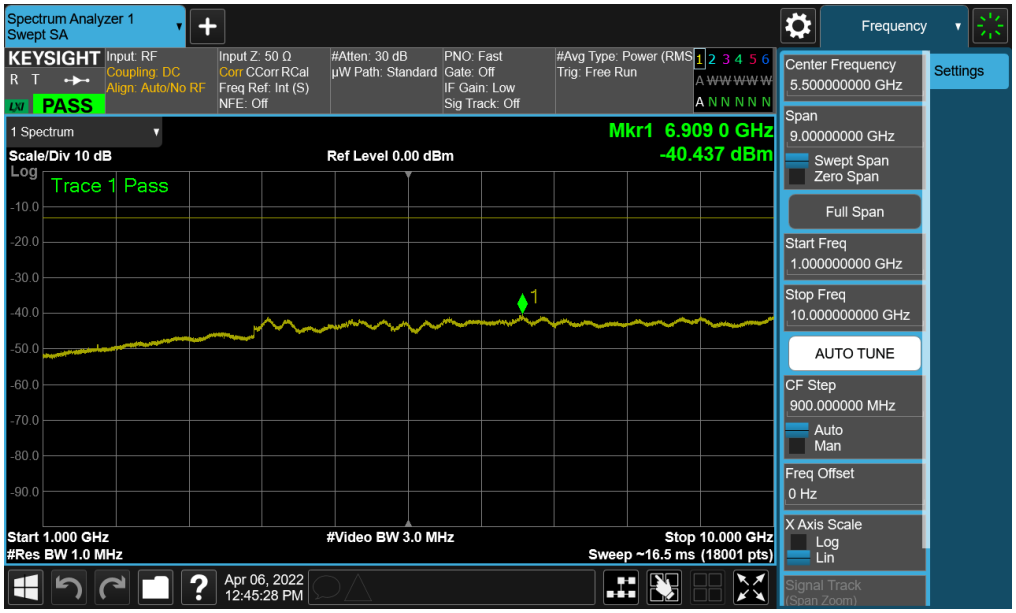
Plot 7-55. Conducted Spurious Plot (WCDMA Ch. 4132)



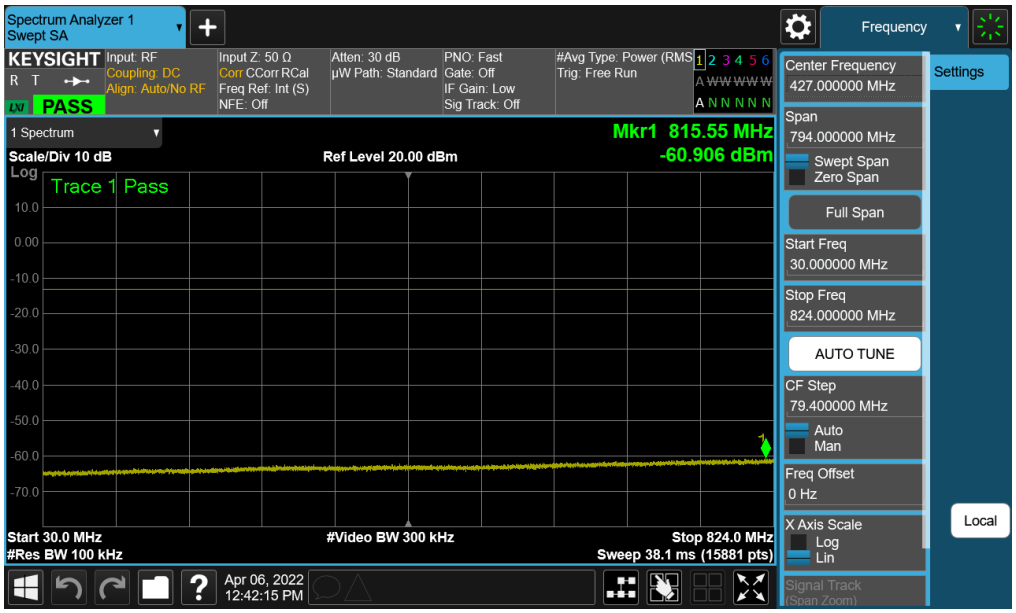
Plot 7-56. Conducted Spurious Plot (WCDMA Ch. 4183)



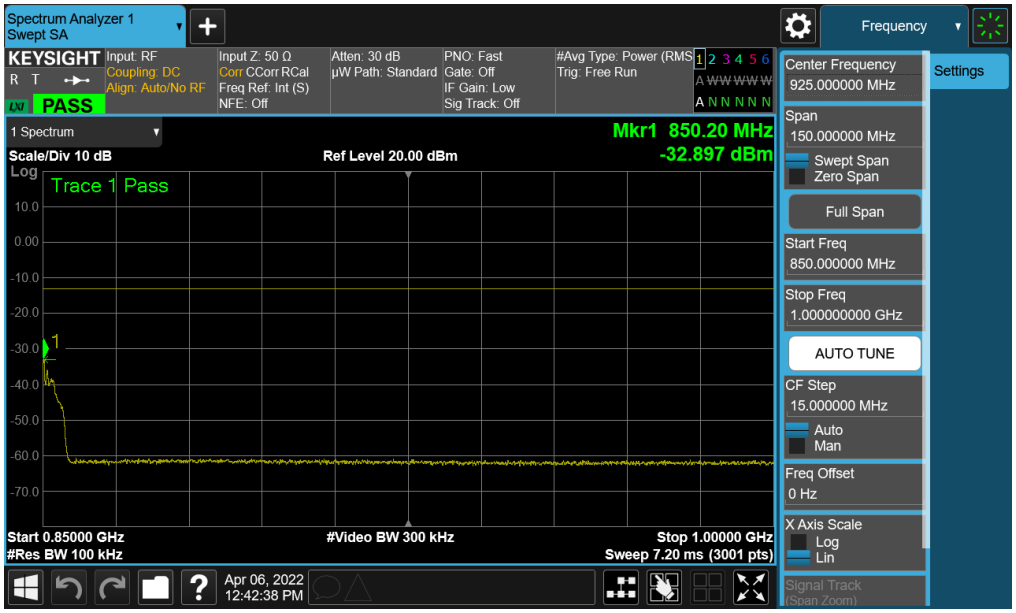
Plot 7-57. Conducted Spurious Plot (WCDMA Ch. 4183)



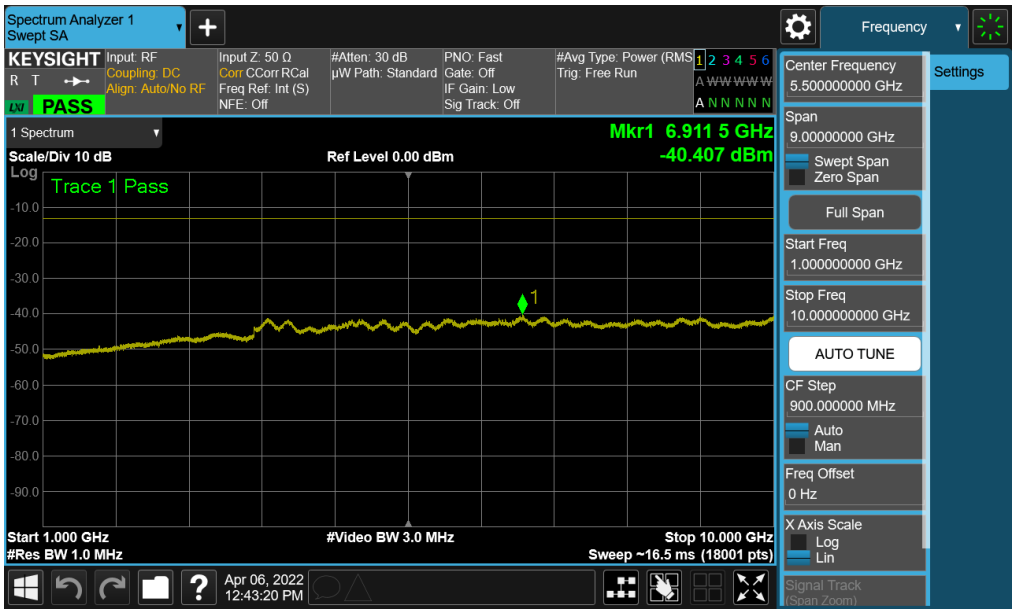
Plot 7-58. Conducted Spurious Plot (WCDMA Ch. 4183)



Plot 7-59. Conducted Spurious Plot (WCDMA Ch. 4233)



Plot 7-60. Conducted Spurious Plot (WCDMA Ch. 4233)



Plot 7-61. Conducted Spurious Plot (WCDMA Ch. 4233)

7.4 Band Edge Emissions at Antenna Terminal

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

The minimum permissible attenuation level of any spurious emission is 43 + 10 log$_{10}$(P$_{[Watts]}$), where P is the transmitter power in Watts.

Test Procedure Used

ANSI C63.26-2015 – Section 5.7.3

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW ≥ 1% of the emission bandwidth
4. VBW ≥ 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

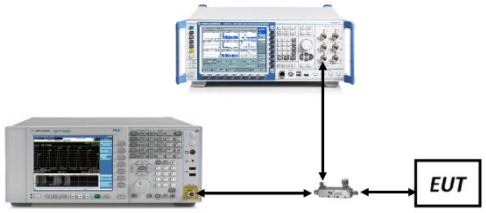


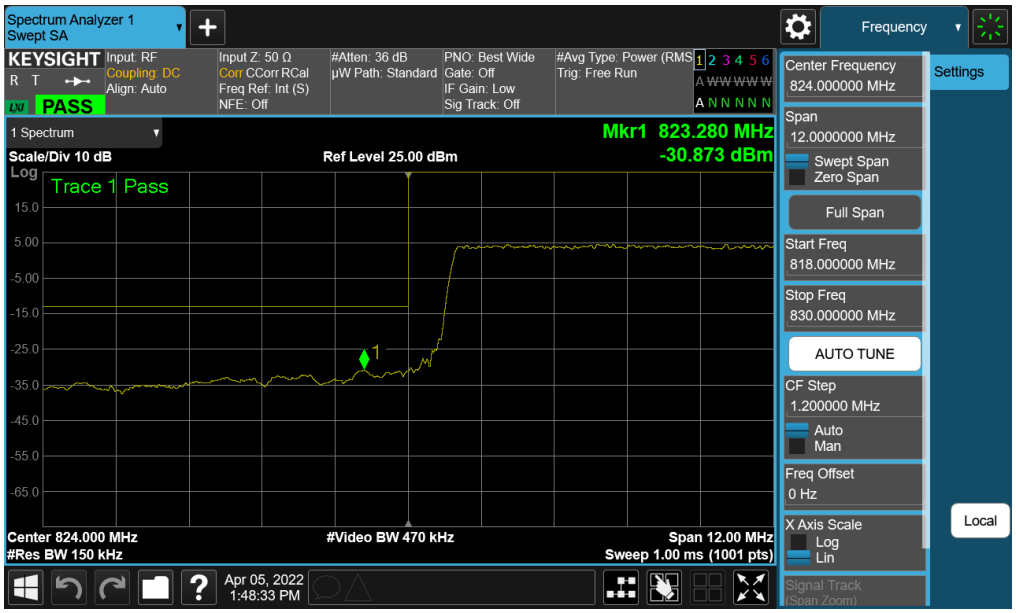
Figure 7-3. Test Instrument & Measurement Setup

Test Notes

1. Per 22.917(b) and RSS-132(5.5), in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

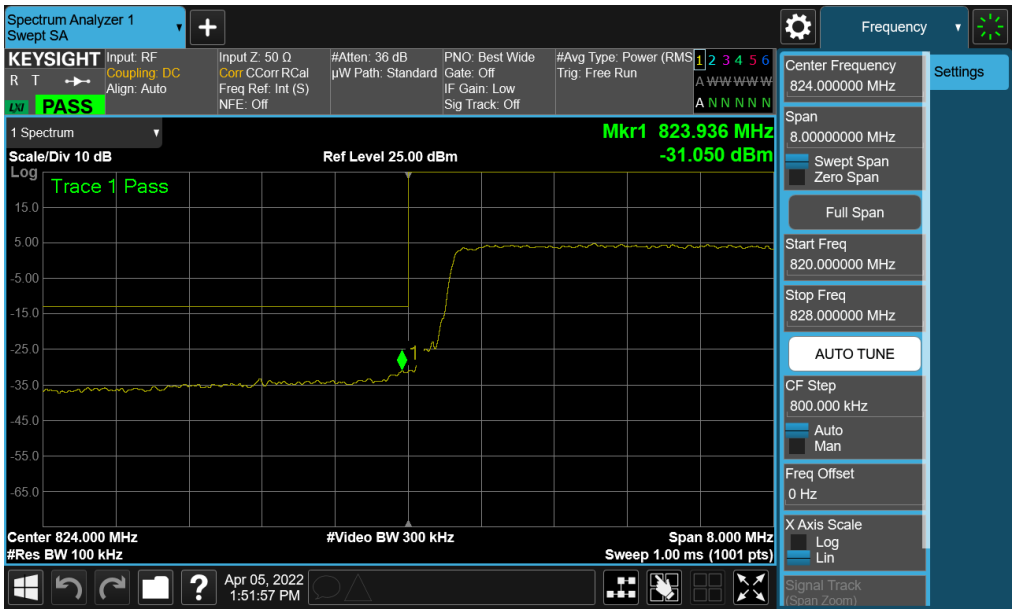
2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

LTE Band 26/5

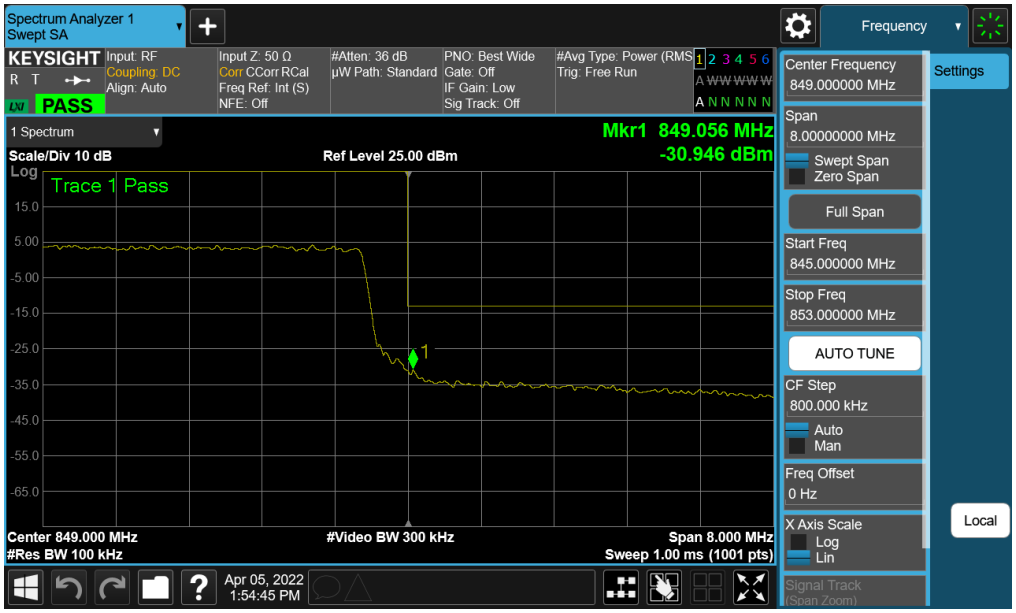


Plot 7-62. Lower Band Edge Plot (LTE Band 26 - 15MHz QPSK – Full RB)

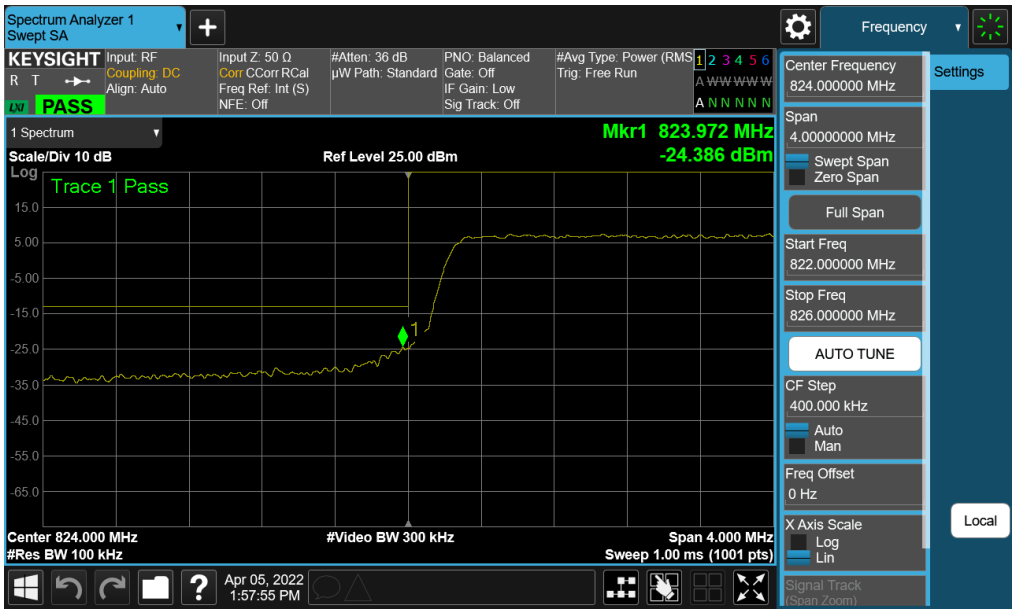
Plot 7-63. Upper Band Edge Plot (LTE Band 26 - 15MHz QPSK – Full RB)



Plot 7-64. Lower Band Edge Plot (LTE Band 26/5 - 10MHz QPSK – Full RB)

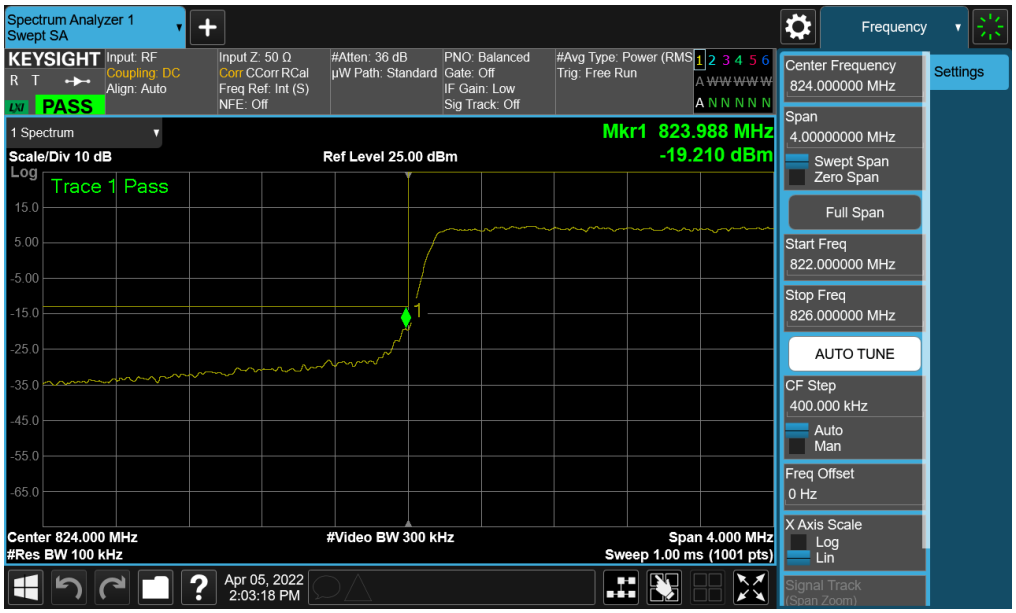


Plot 7-65. Upper Band Edge Plot (LTE Band 26/5 - 10MHz QPSK – Full RB)

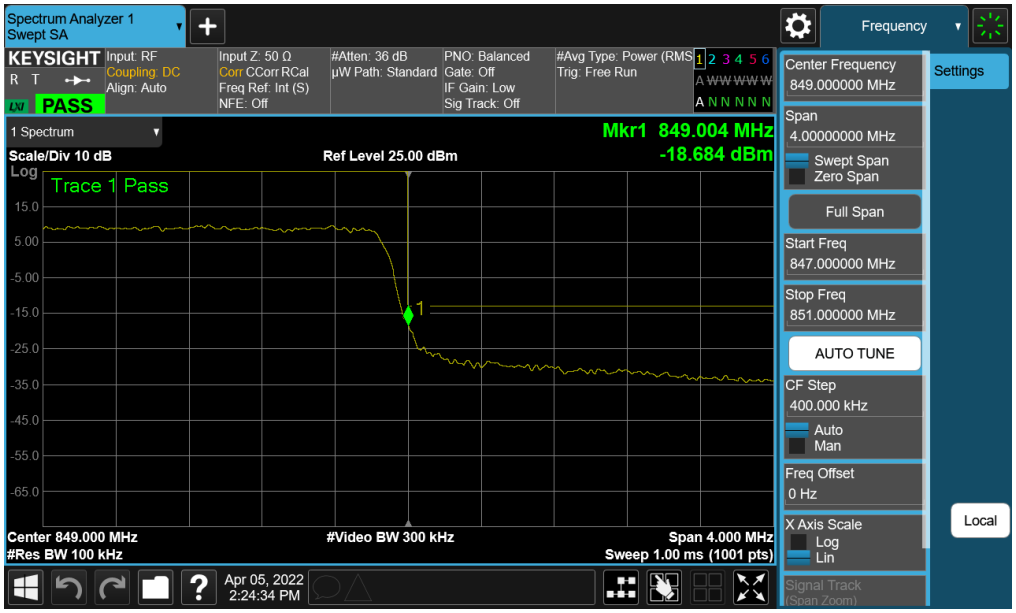


Plot 7-66. Lower Band Edge Plot (LTE Band 26/5 - 5MHz QPSK – Full RB)

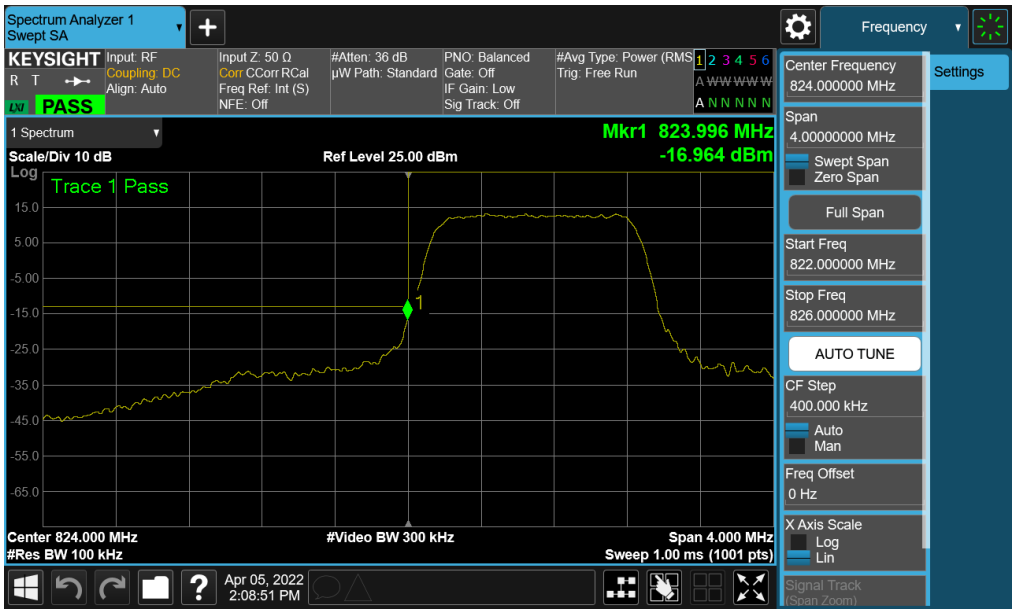
Plot 7-67. Upper Band Edge Plot (LTE Band 26/5 - 5MHz QPSK – Full RB)



Plot 7-68. Lower Band Edge Plot (LTE Band 26/5 - 3MHz QPSK – Full RB)



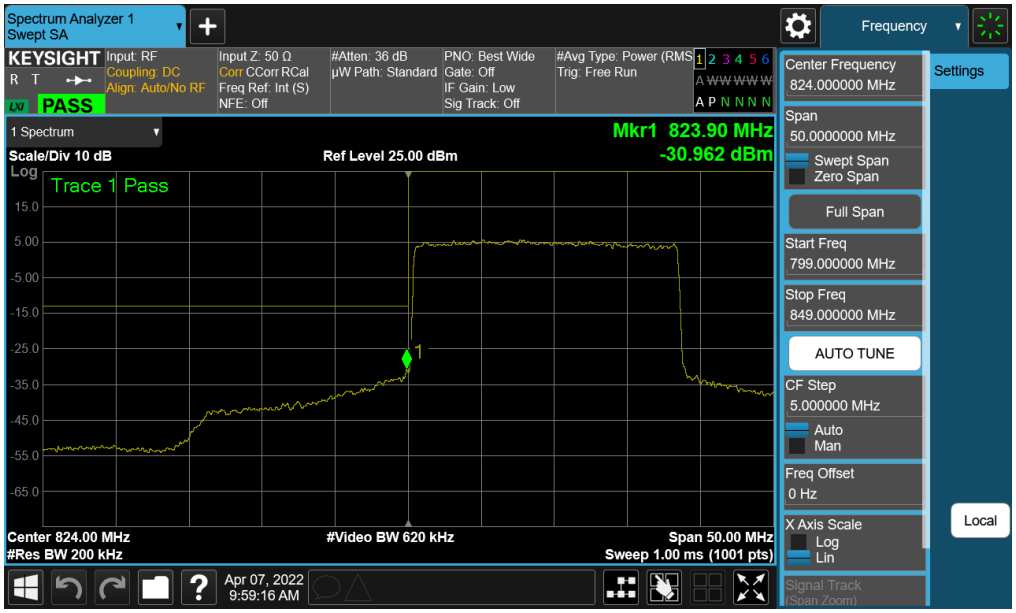
Plot 7-69. Upper Band Edge Plot (LTE Band 26/5 - 3MHz QPSK – Full RB)



Plot 7-70. Lower Band Edge Plot (LTE Band 26/5 – 1.4MHz QPSK – Full RB)

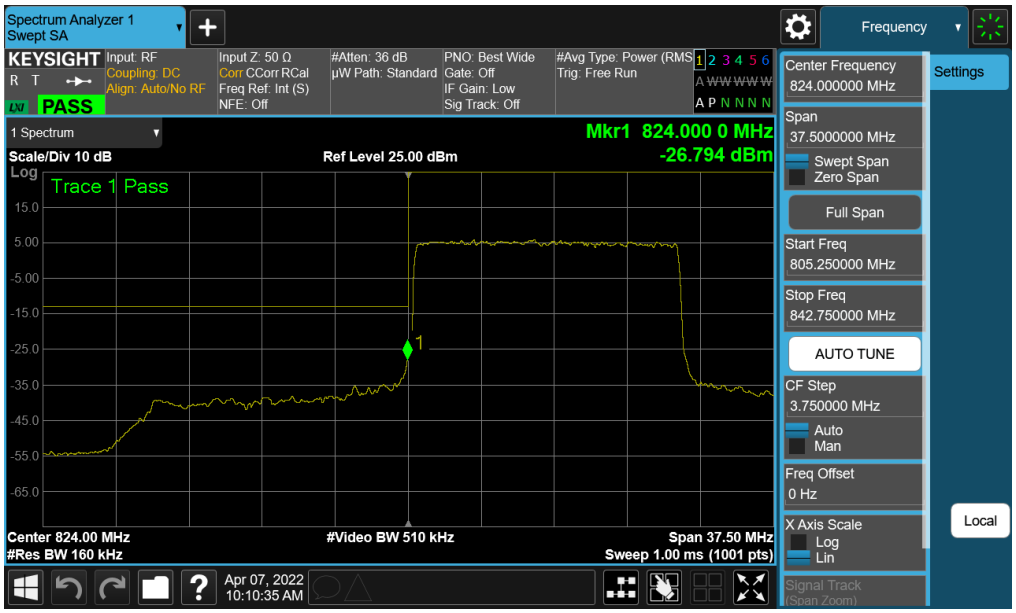
Plot 7-71. Upper Band Edge Plot (LTE Band 26/5 – 1.4MHz QPSK – Full RB)

NR Band n5

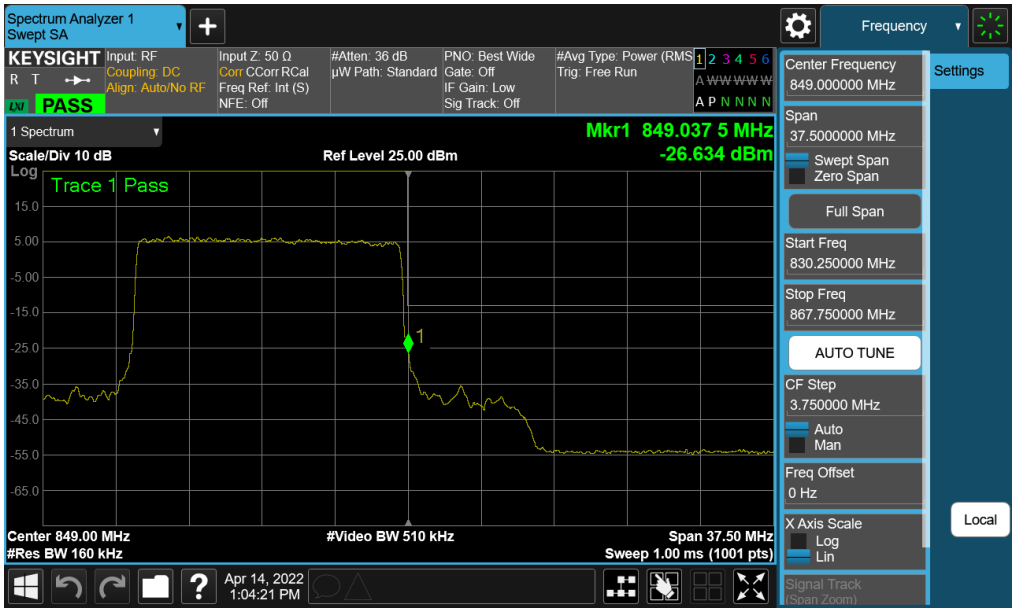


Plot 7-72. Lower Band Edge Plot (NR Band n5 – 20.0MHz - Full RB)

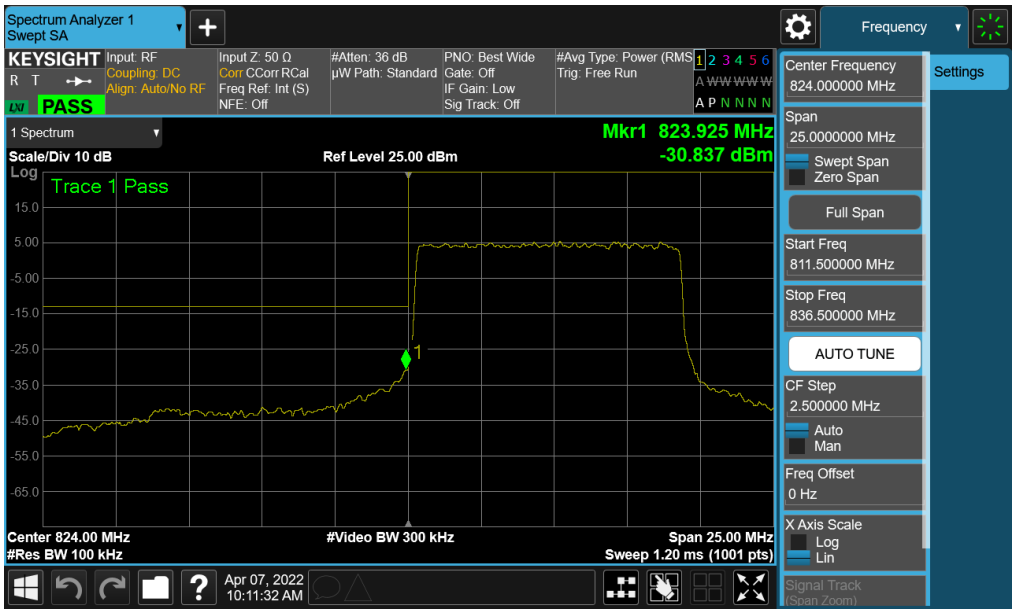
Plot 7-73. Upper Band Edge Plot (NR Band n5 – 20.0MHz - Full RB)



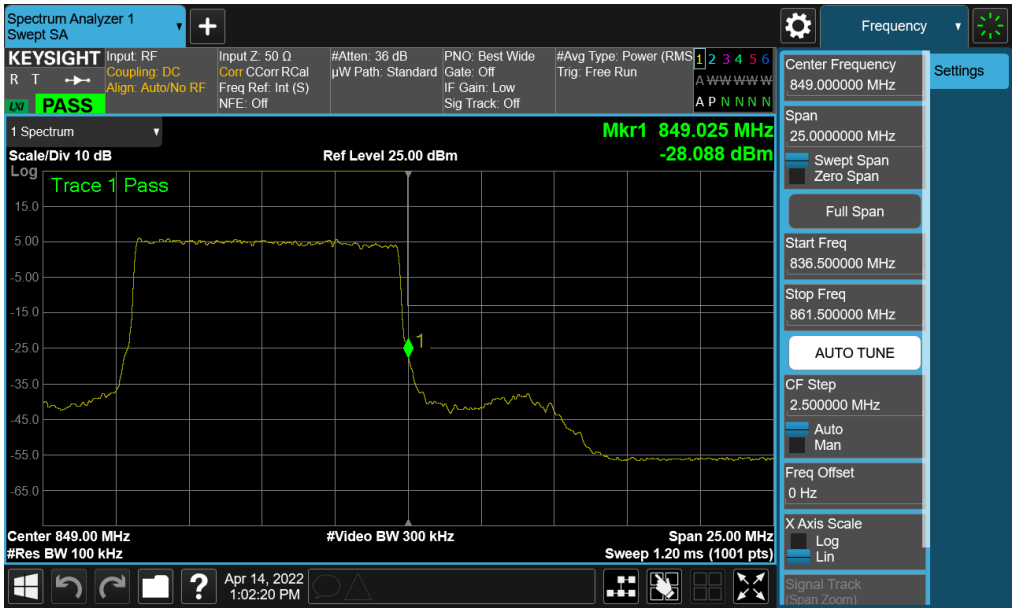
Plot 7-74. Lower Band Edge Plot (NR Band n5 – 15.0MHz - Full RB)



Plot 7-75. Upper Band Edge Plot (NR Band n5 – 15.0MHz - Full RB)



Plot 7-76. Lower Band Edge Plot (NR Band n5 – 10.0MHz - Full RB)



Plot 7-77. Upper Band Edge Plot (NR Band n5 – 10.0MHz - Full RB)