

Annex 1: Measurement diagrams to
TEST REPORT
No.: 18-1-0093201T01a-C1

According to:
47 CFR Part 95
RSS-Gen Issue 5
RSS-251 Issue 2

for

s.m.s. smart microwave sensors GmbH

UMRR-11 Type 132 radar sensor

FCC ID: W34UMRR1184
IC: 10652A-UMRR1184



Laboratory Accreditation
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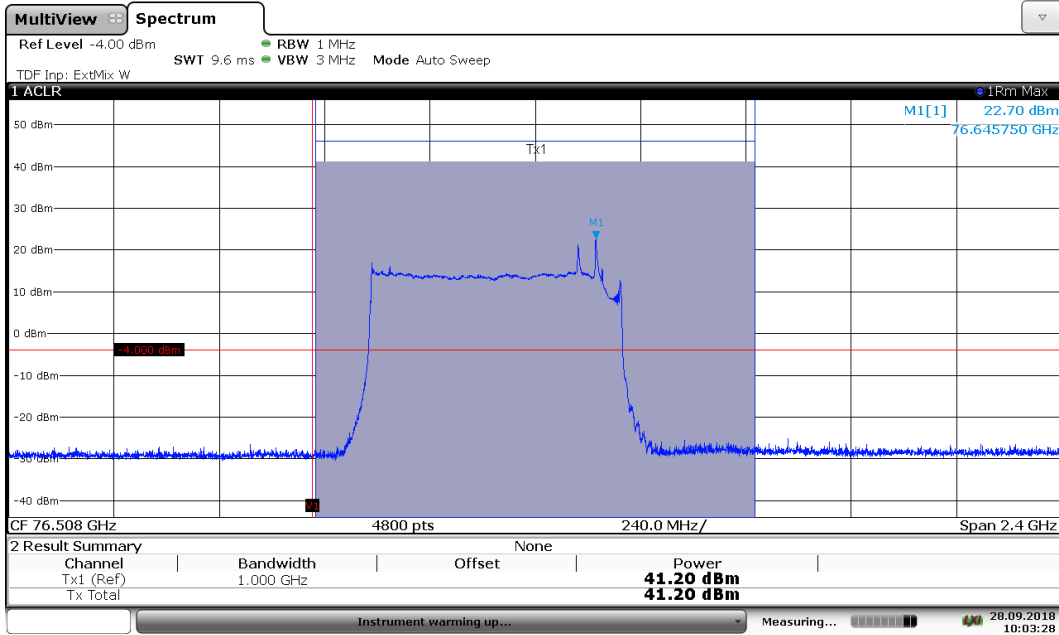
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1. Power density

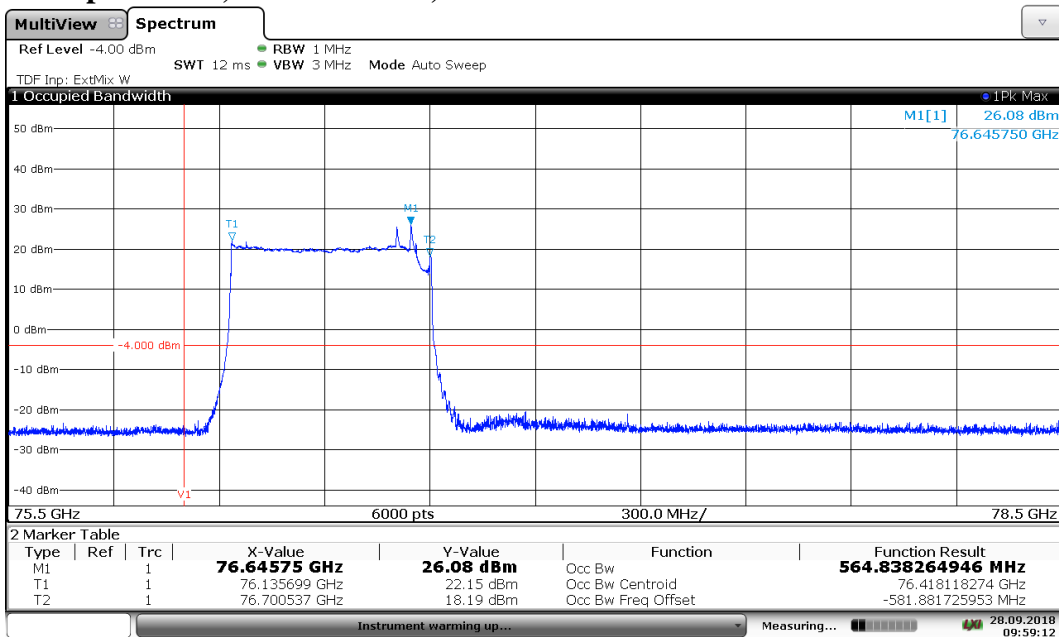
1.1. Op. Mode 1, RMS Detector, T_{nom}/V_{nom}



10:03:29 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

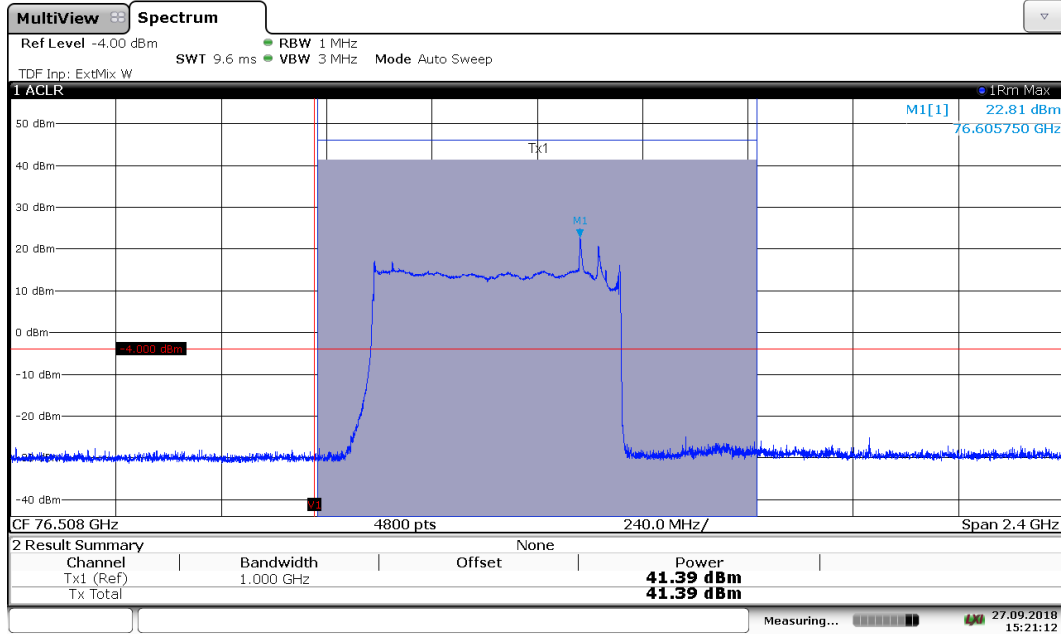
1.2. Op. Mode 1, Peak Detector, T_{nom}/V_{nom}



09:59:13 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

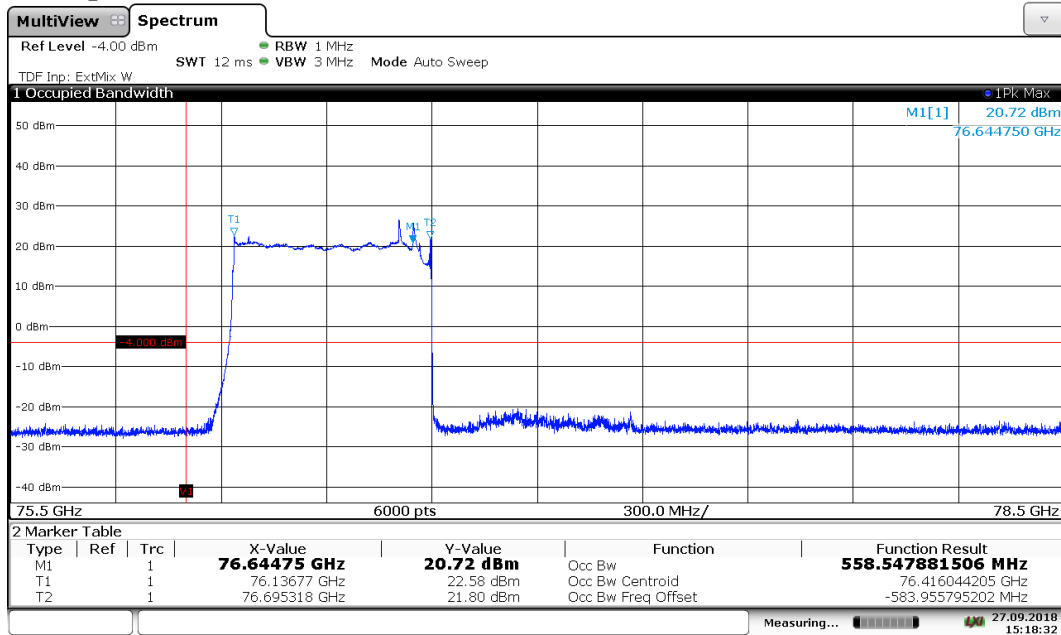
1.3. Op. Mode 1, RMS Detector, T_{min}/V_{min}



15:21:12 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

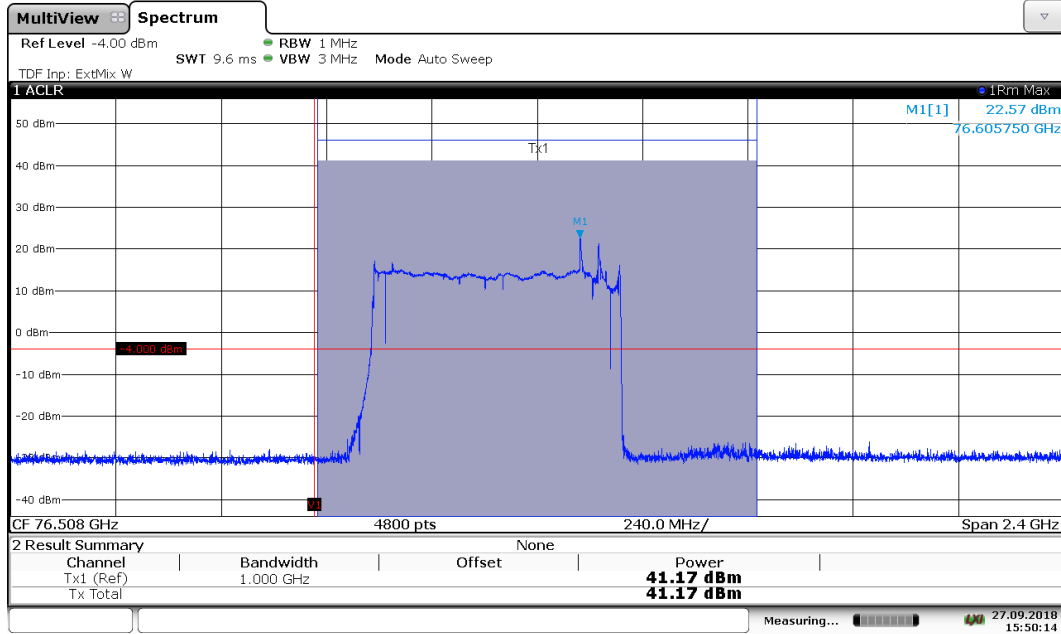
1.4. Op. Mode 1, Peak Detector, T_{min}/V_{min}



15:18:33 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

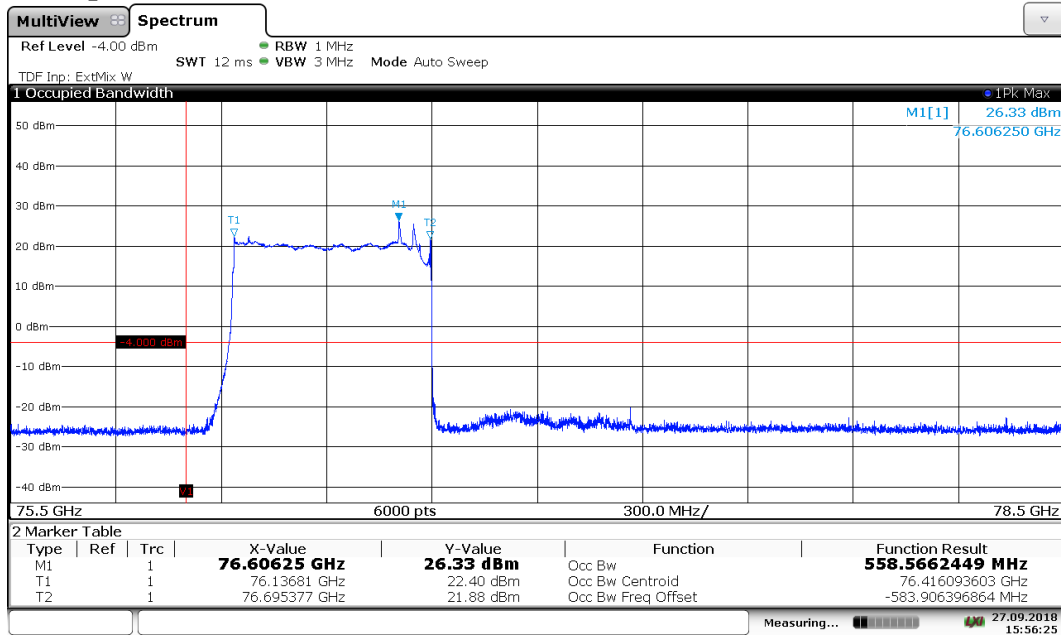
1.5. Op. Mode 1, RMS Detector, T_{min}/V_{nom}



15:50:15 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

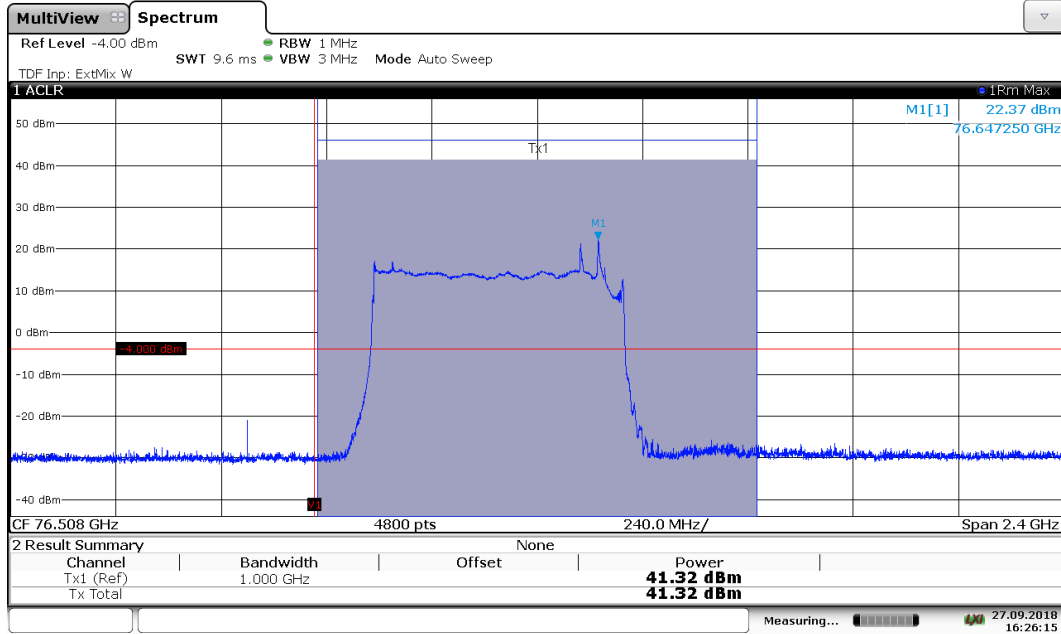
1.6. Op. Mode 1, Peak Detector, T_{min}/V_{nom}



15:56:25 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

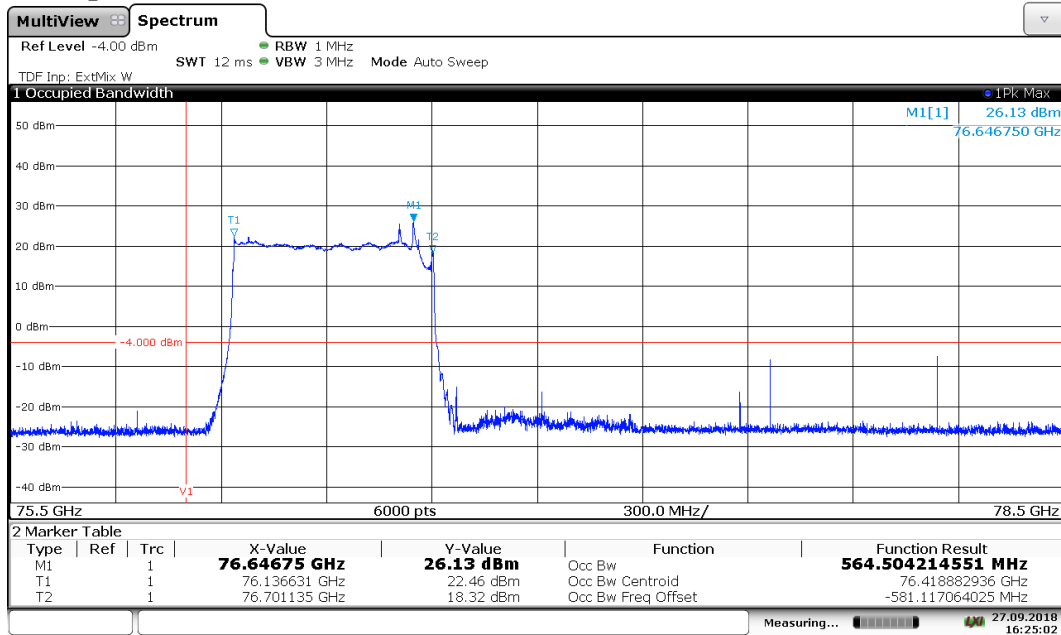
1.7. Op. Mode 1, RMS Detector, T_{min}/V_{max}



16:26:16 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

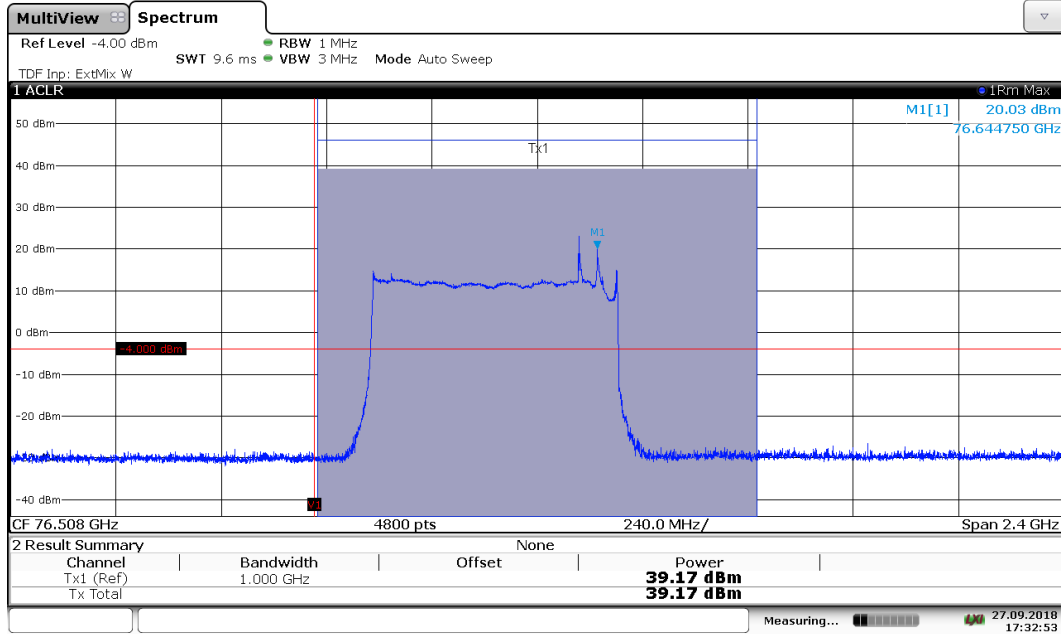
1.8. Op. Mode 1, Peak Detector, T_{min}/V_{max}



16:25:03 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

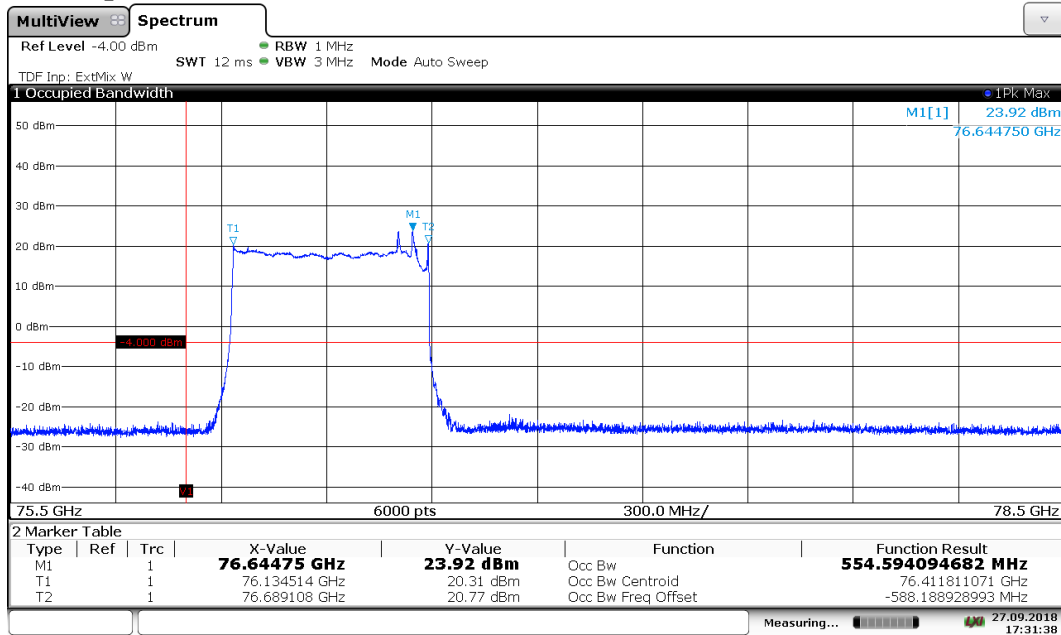
1.9. Op. Mode 1, RMS Detector, T_{max}/V_{min}



17:32:54 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

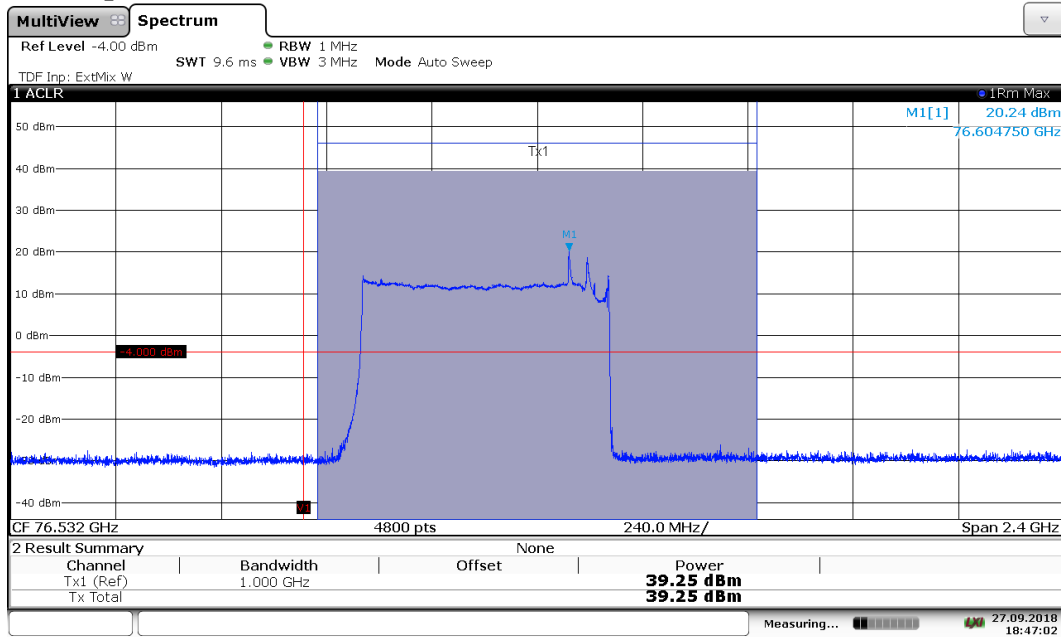
1.10. Op. Mode 1, Peak Detector, T_{max}/V_{min}



17:31:39 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

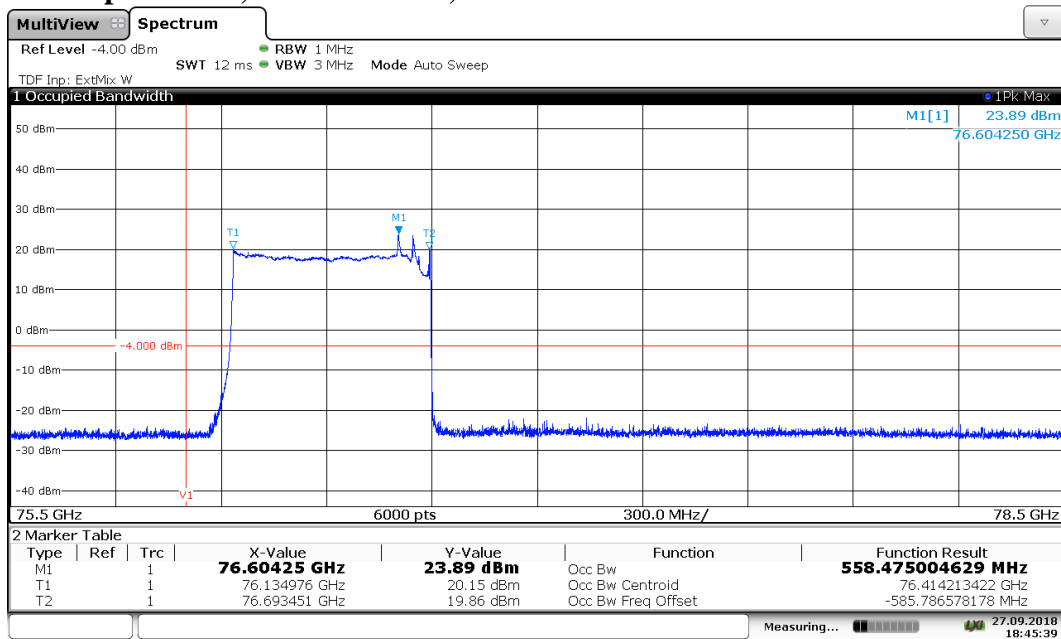
1.11. Op. Mode 1, RMS Detector, T_{max}/V_{nom}



18:47:02 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

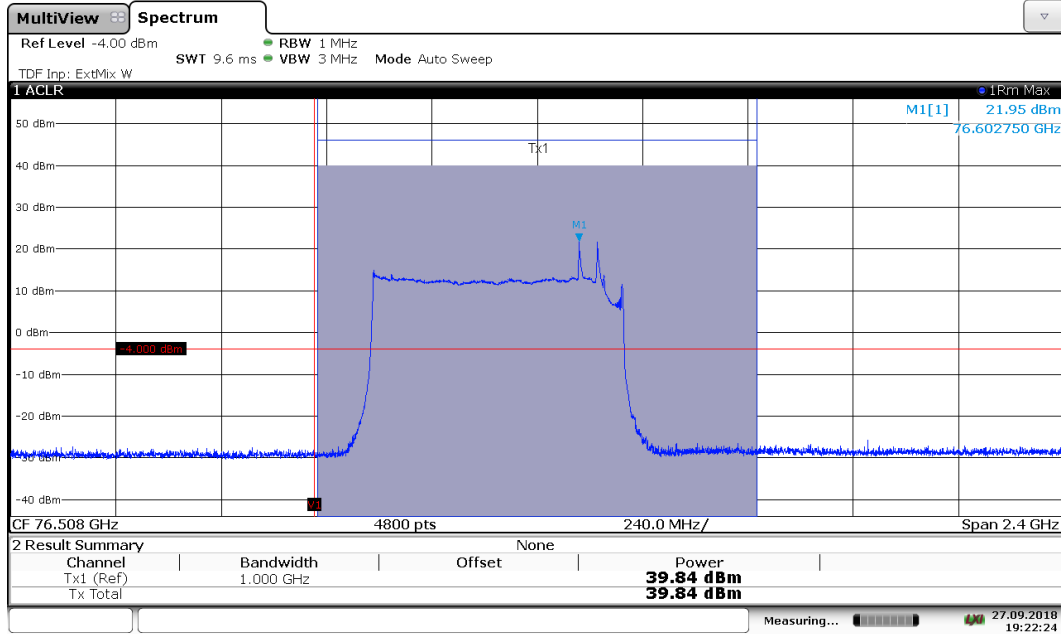
1.12. Op. Mode 1, Peak Detector, T_{max}/V_{nom}



18:45:39 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

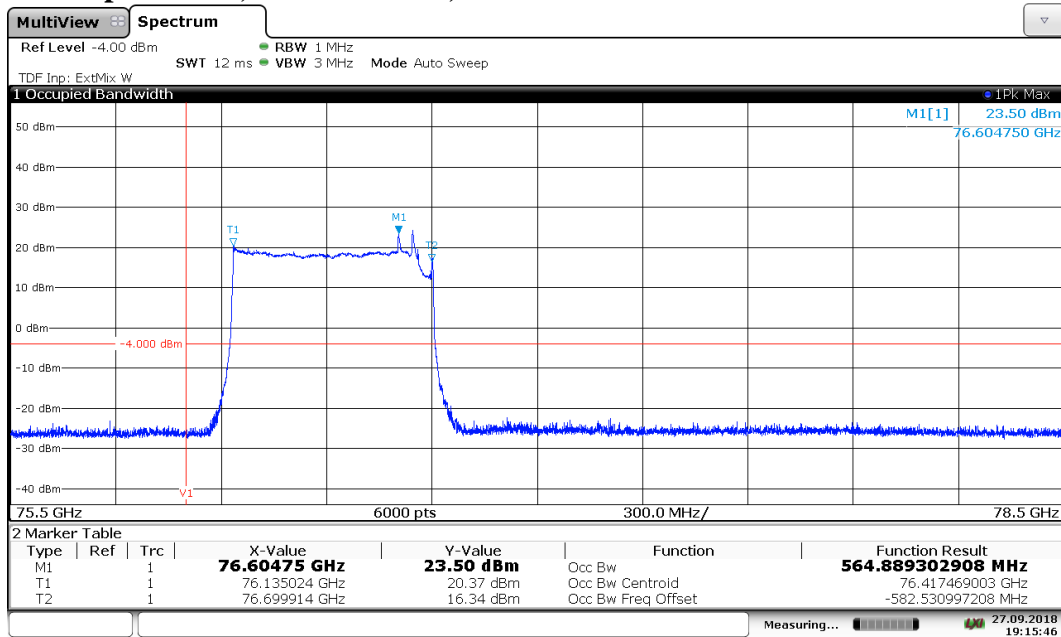
1.13. Op. Mode 1, RMS Detector, T_{max}/V_{max}



19:22:24 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

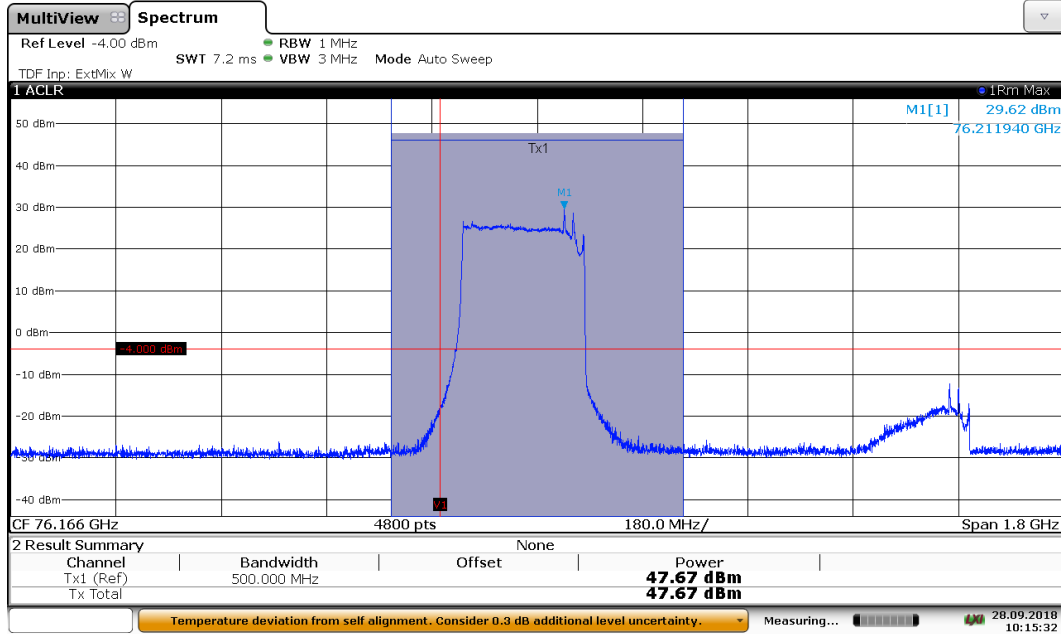
1.14. Op. Mode 1, Peak Detector, T_{max}/V_{max}



19:15:46 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

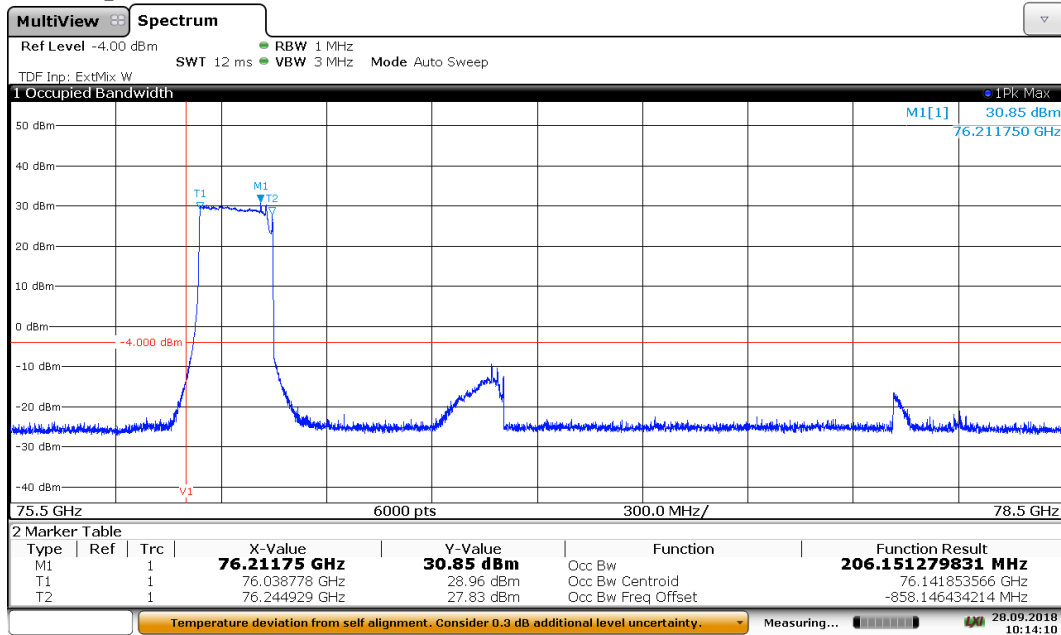
1.15. Op. Mode 2, FB Low, RMS Detector, T_{nom}/V_{nom}



10:15:32 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

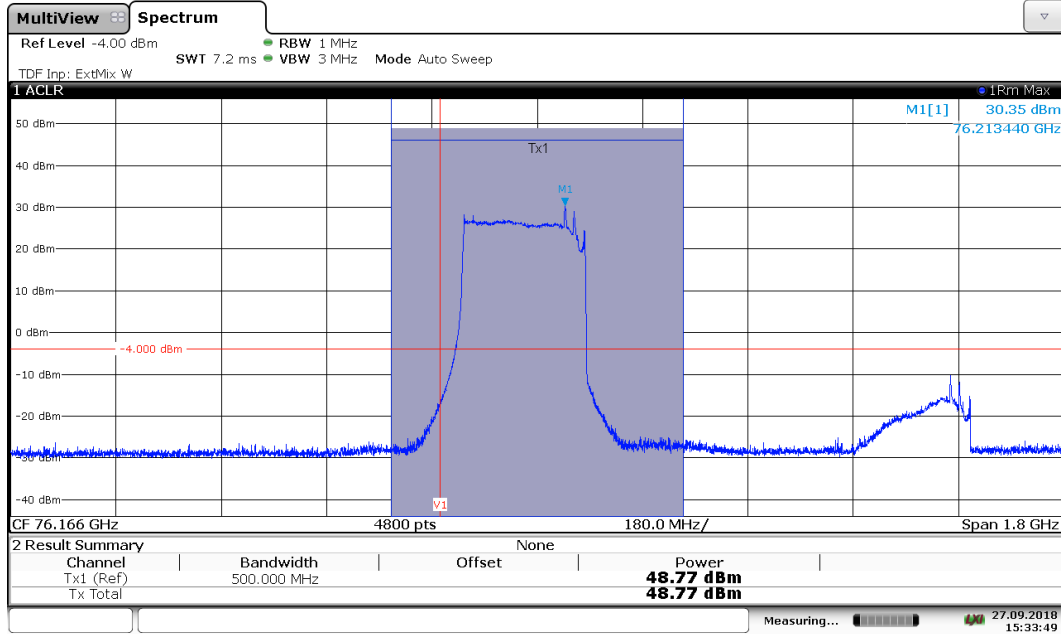
1.16. Op. Mode 2, FB Low, Peak Detector, T_{nom}/V_{nom}



10:14:10 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

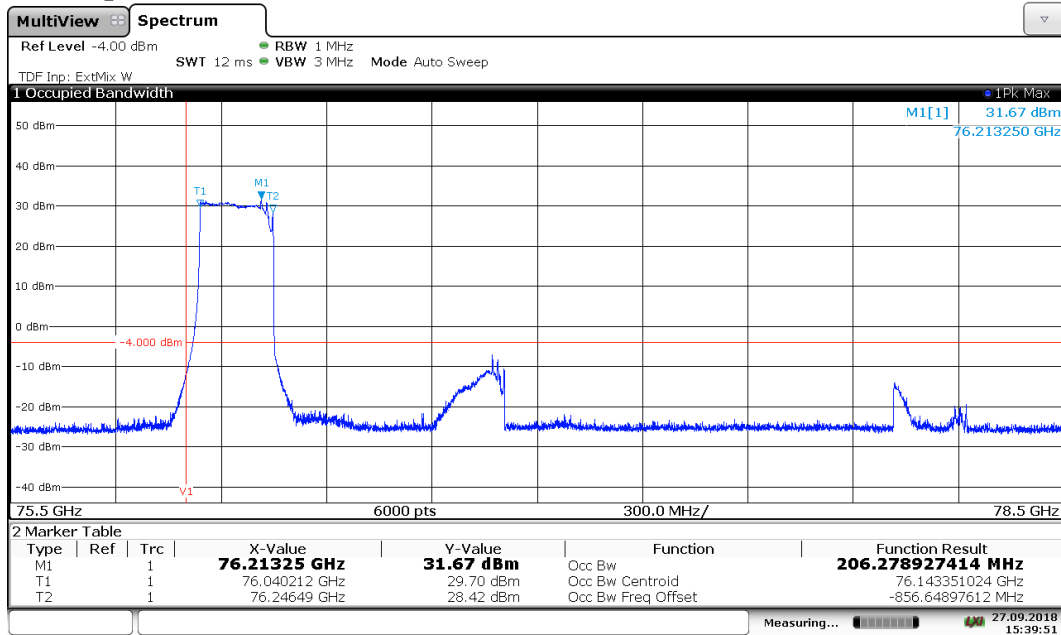
1.17. Op. Mode 2, FB Low, RMS Detector, T_{min}/V_{min}



15:33:49 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

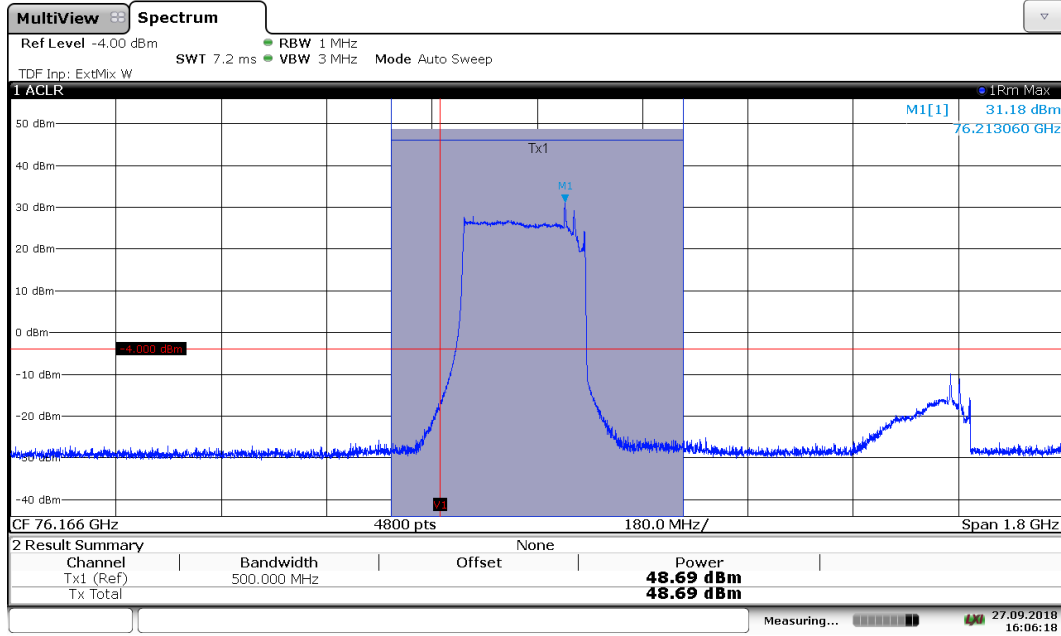
1.18. Op. Mode 2, FB Low, Peak Detector, T_{min}/V_{min}



15:39:52 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

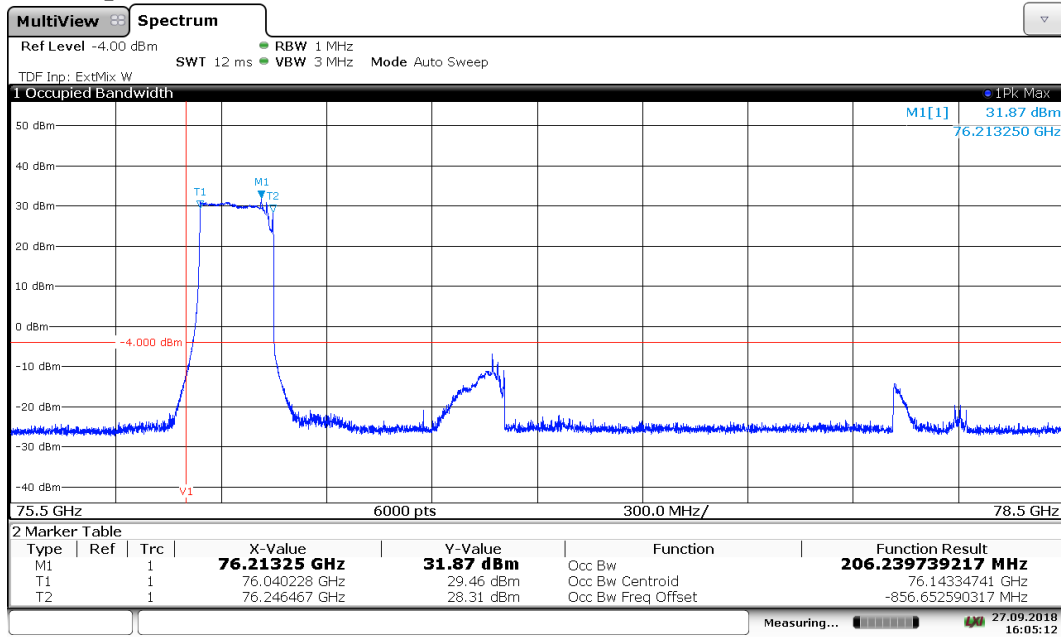
1.19. Op. Mode 2, FB Low, RMS Detector, T_{min}/V_{nom}



16:06:18 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

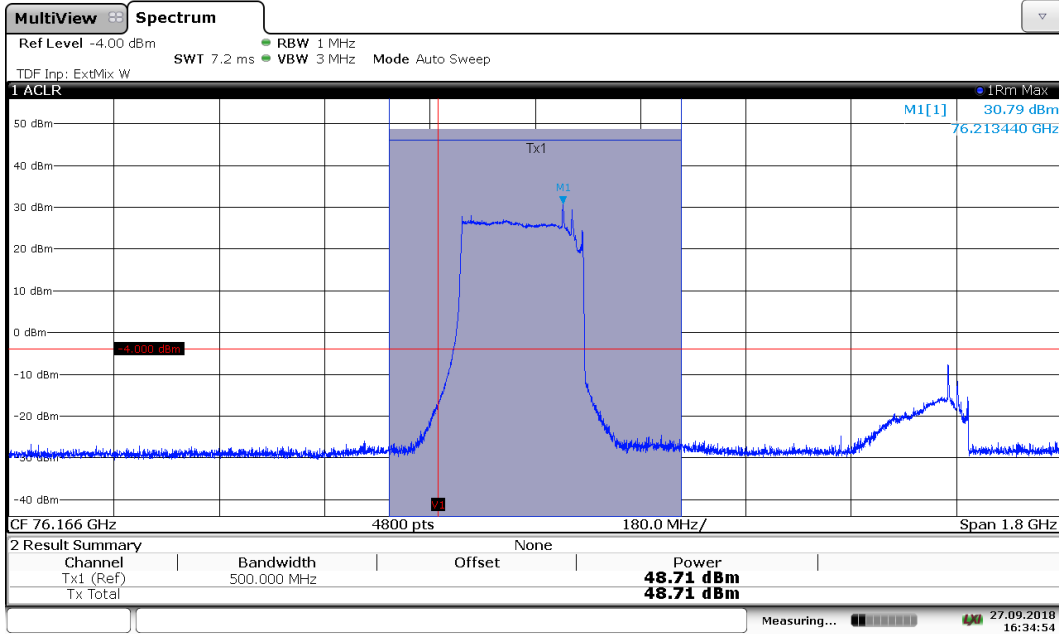
1.20. Op. Mode 2, FB Low, Peak Detector, T_{min}/V_{nom}



16:05:12 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

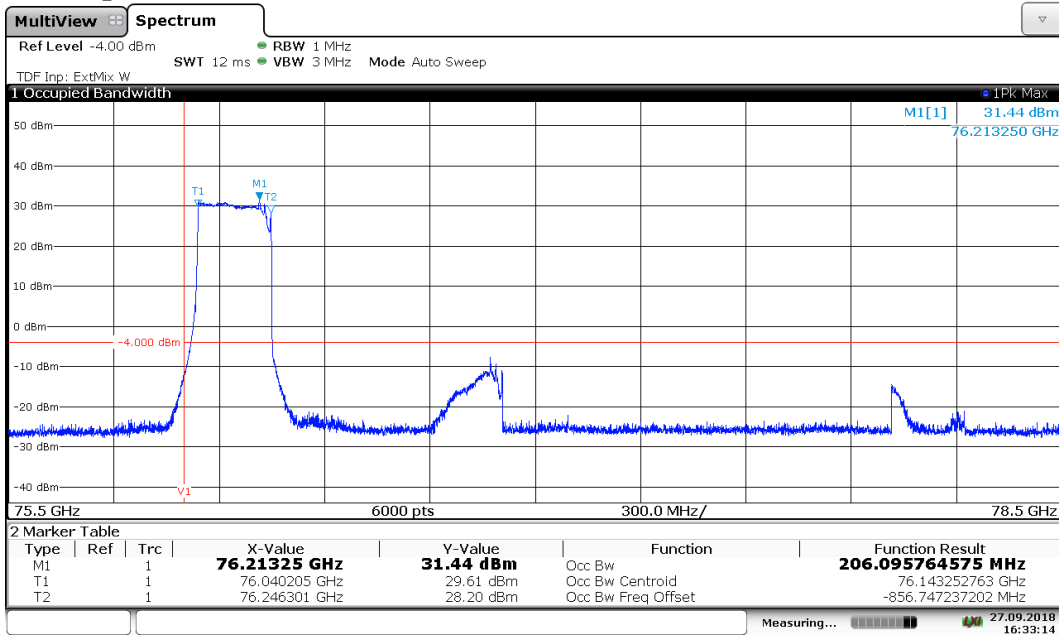
1.21. Op. Mode 2, FB Low, RMS Detector, T_{min}/V_{max}



16:34:54 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

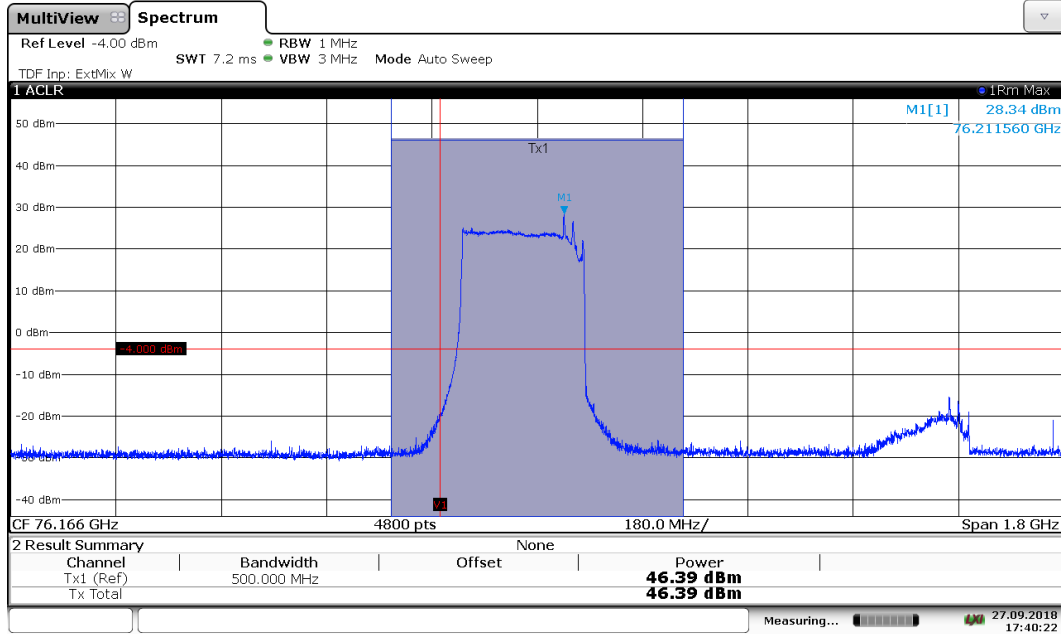
1.22. Op. Mode 2, FB Low, Peak Detector, T_{min}/V_{max}



16:33:14 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

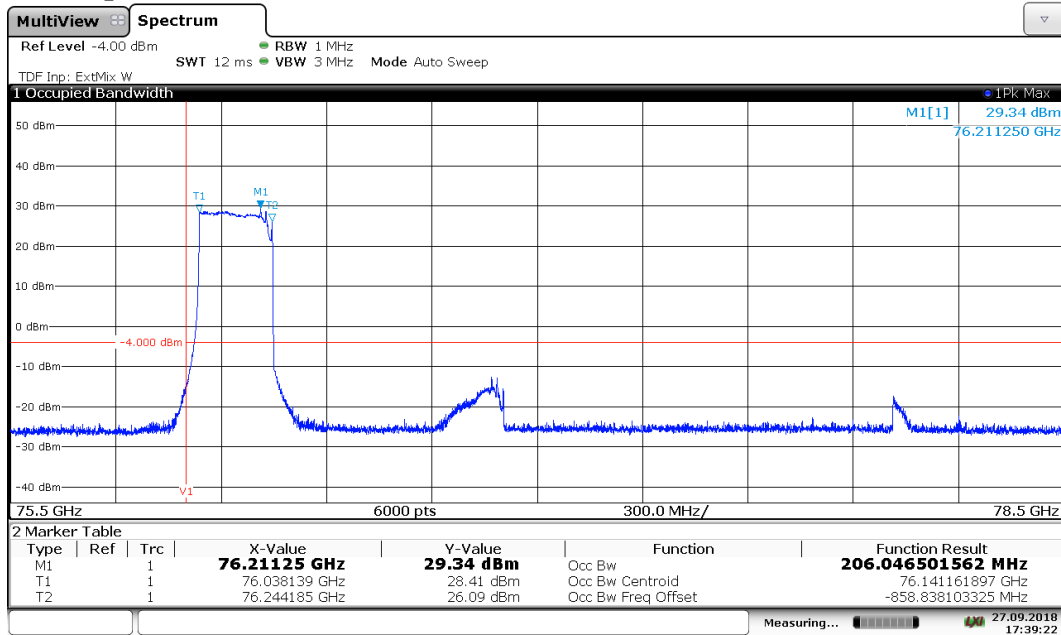
1.23. Op. Mode 2, FB Low, RMS Detector, T_{max}/V_{min}



17:40:22 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

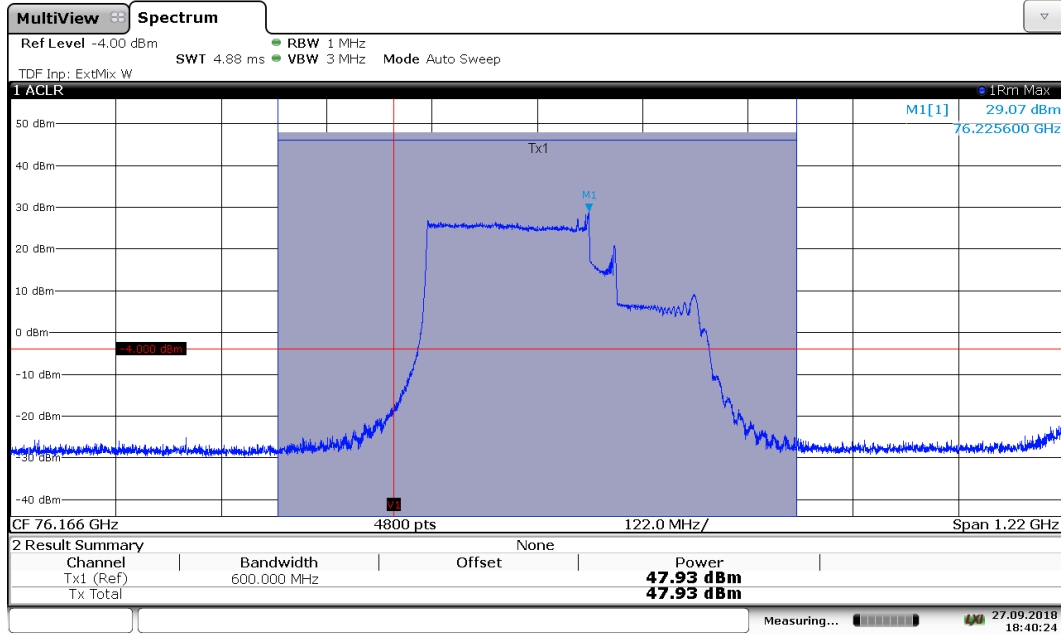
1.24. Op. Mode 2, FB Low, Peak Detector, T_{max}/V_{min}



17:39:23 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

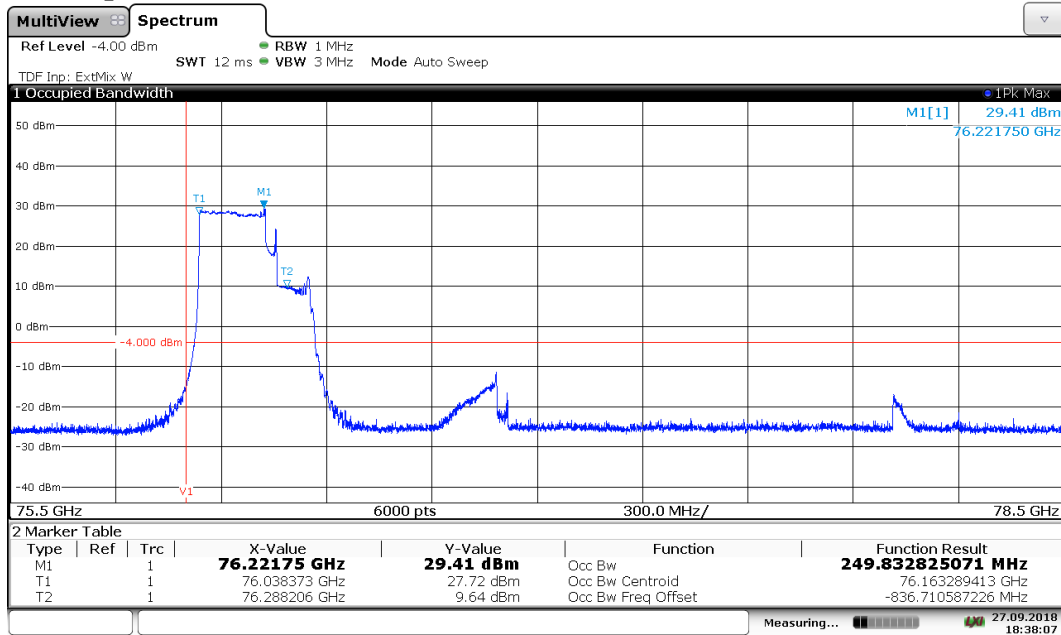
1.25. Op. Mode 2, FB Low, RMS Detector, T_{max}/V_{nom}



18:40:25 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

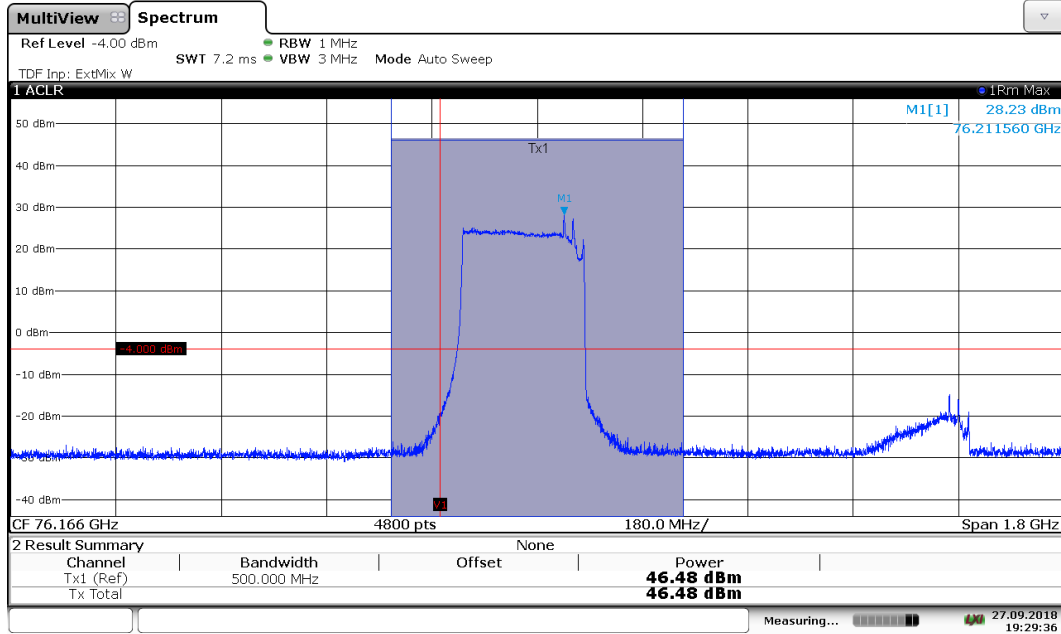
1.26. Op. Mode 2, FB Low, Peak Detector, T_{max}/V_{nom}



18:38:07 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

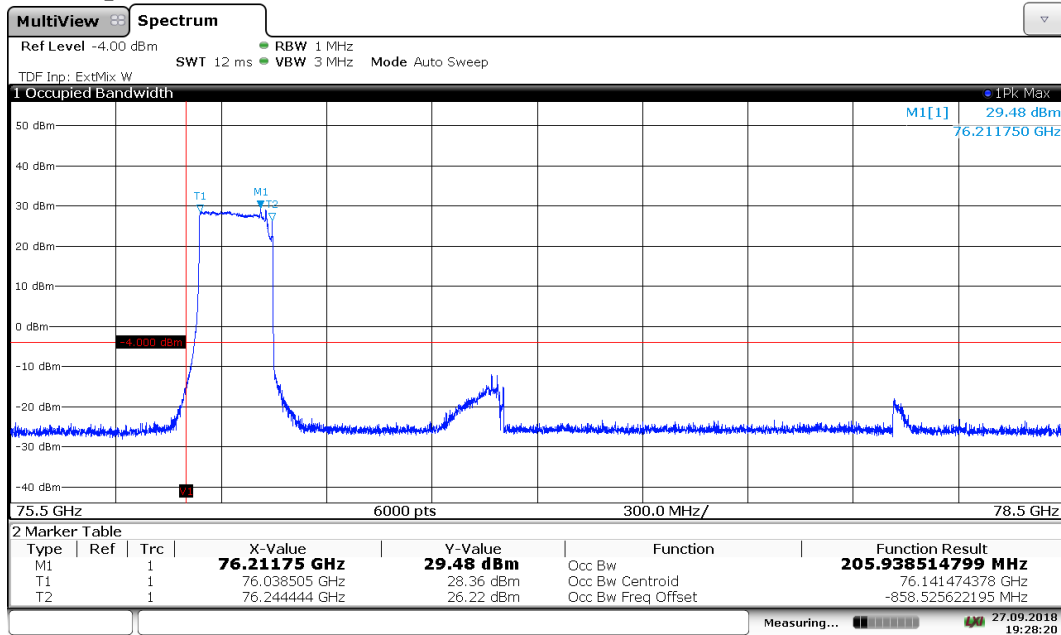
1.27. Op. Mode 2, FB Low, RMS Detector, T_{max}/V_{max}



19:29:37 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

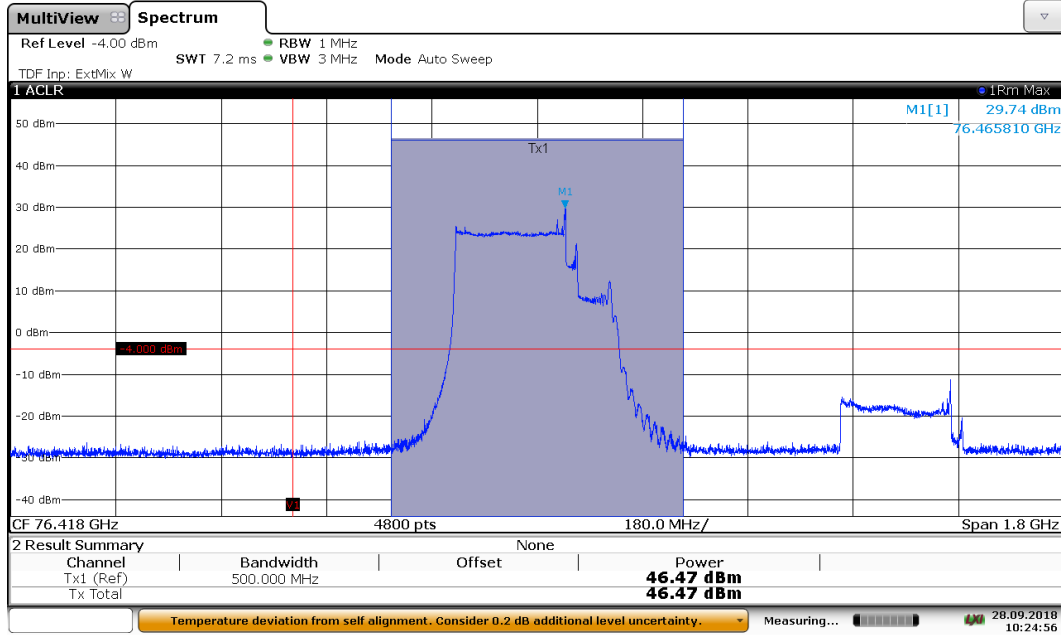
1.28. Op. Mode 2, FB Low, Peak Detector, T_{max}/V_{max}



19:28:20 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

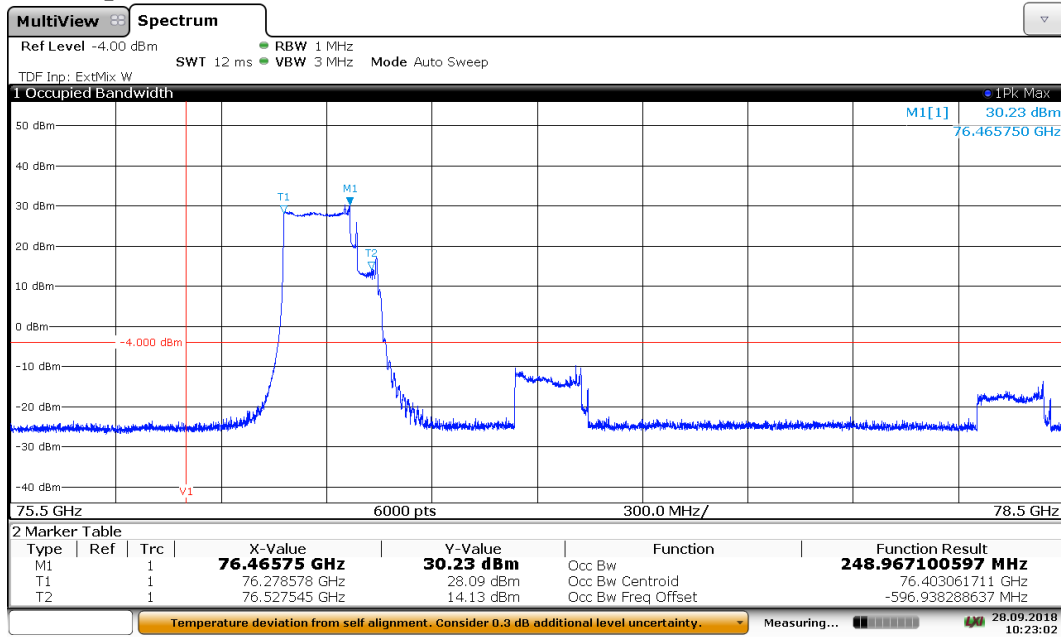
1.29. Op. Mode 2, FB Default, RMS Detector, T_{nom}/V_{nom}



10:24:56 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

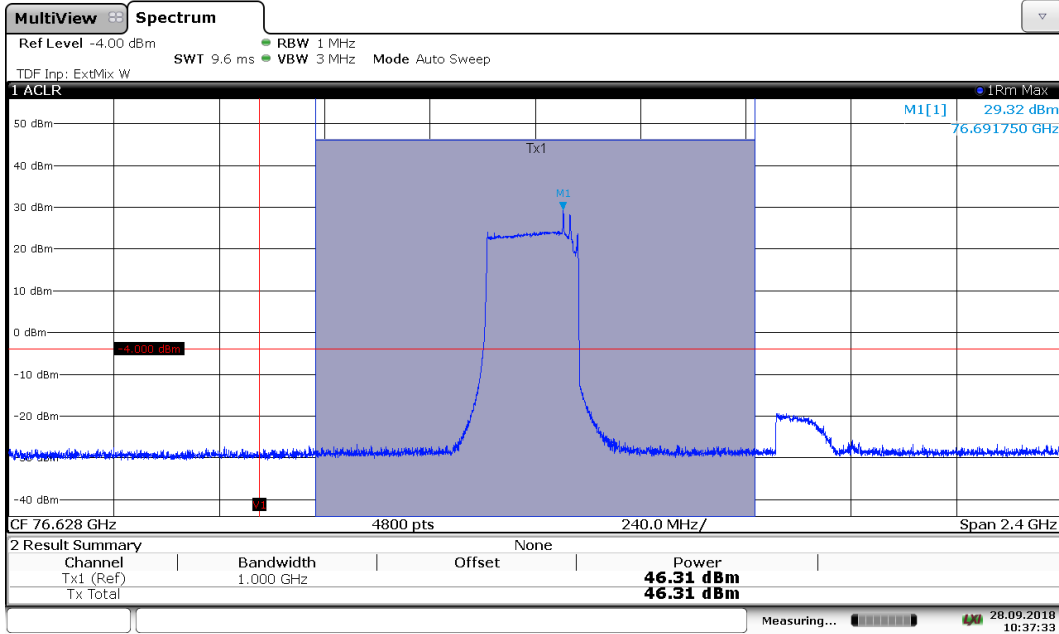
1.30. Op. Mode 2, FB Default, Peak Detector, T_{nom}/V_{nom}



10:23:02 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

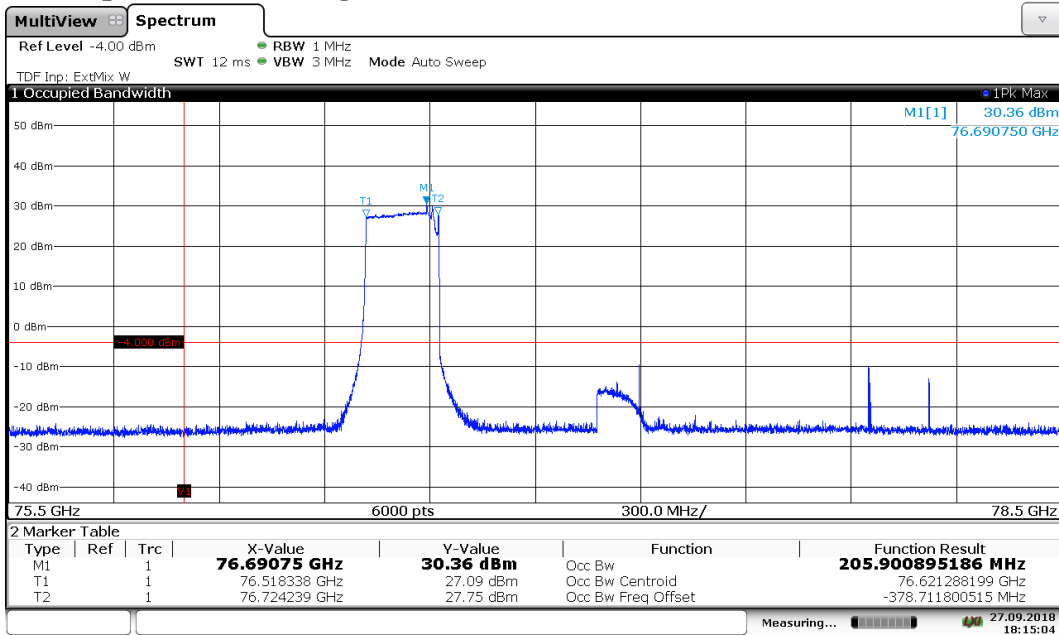
1.31. Op. Mode 2, FB High, RMS Detector, T_{nom}/V_{nom}



10:37:34 28.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

1.32. Op. Mode 2, FB High, Peak Detector, T_{nom}/V_{nom}



18:15:04 27.09.2018

* -4 dB is a ref line, not a limit line. Limit: 50 dBm (Average), 55 dBm (Peak).

2. Modulation characteristics

2.1. Op. Mode 1, Peak Detector, T_{nom}/V_{nom}

See diagram 1.2

2.2. Op. Mode 2, FB Low, Peak Detector, T_{nom}/V_{nom}

See diagram 1.16

2.3. Op. Mode 2, FB Low, Peak Detector, T_{nom}/V_{nom}

See diagram 1.30

2.4. Op. Mode 2, FB High, Peak Detector, T_{nom}/V_{nom}

See diagram 1.32

3. Occupied bandwidth

3.1. Op. Mode 1, Peak Detector, T_{nom}/V_{nom}

See diagram 1.2

3.2. Op. Mode 1, Peak Detector, T_{min}/V_{min}

See diagram 1.4

3.3. Op. Mode 1, Peak Detector, T_{min}/V_{nom}

See diagram 1.6

3.4. Op. Mode 1, Peak Detector, T_{min}/V_{max}

See diagram 1.8

3.5. Op. Mode 1, Peak Detector, T_{max}/V_{min}

See diagram 1.10

3.6. Op. Mode 1, Peak Detector, T_{max}/V_{nom}

See diagram 1.12

3.7. Op. Mode 1, Peak Detector, T_{max}/V_{max}

See diagram 1.14

3.8. Op. Mode 2, FB Low, Peak Detector, T_{nom}/V_{nom}

See diagram 1.16

3.9. Op. Mode 2, FB Low, Peak Detector, T_{min}/V_{min}

See diagram 1.18

3.10. Op. Mode 2, FB Low, Peak Detector, T_{min}/V_{nom}

See diagram 1.20

3.11. Op. Mode 2, FB Low, Peak Detector, T_{min}/V_{max}

See diagram 1.22

3.12. Op. Mode 2, FB Low, Peak Detector, T_{max}/V_{min}

See diagram 1.24

3.13. Op. Mode 2, FB Low, Peak Detector, T_{max}/V_{nom}

See diagram 1.26

3.14. Op. Mode 2, FB Low, Peak Detector, T_{max}/V_{max}

See diagram 1.28

3.15. Op. Mode 2, FB Default, Peak Detector, T_{nom}/V_{nom}

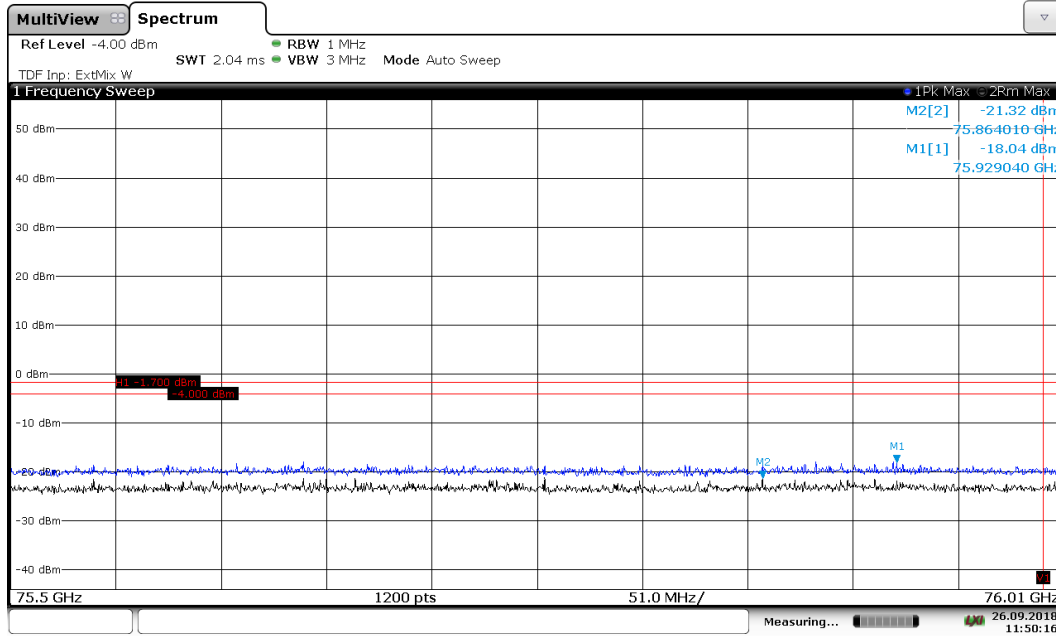
See diagram 1.30

3.16. Op. Mode 2, FB High, Peak Detector, T_{nom}/V_{nom}

See diagram 1.32

4. Field strength of emissions (band edge)

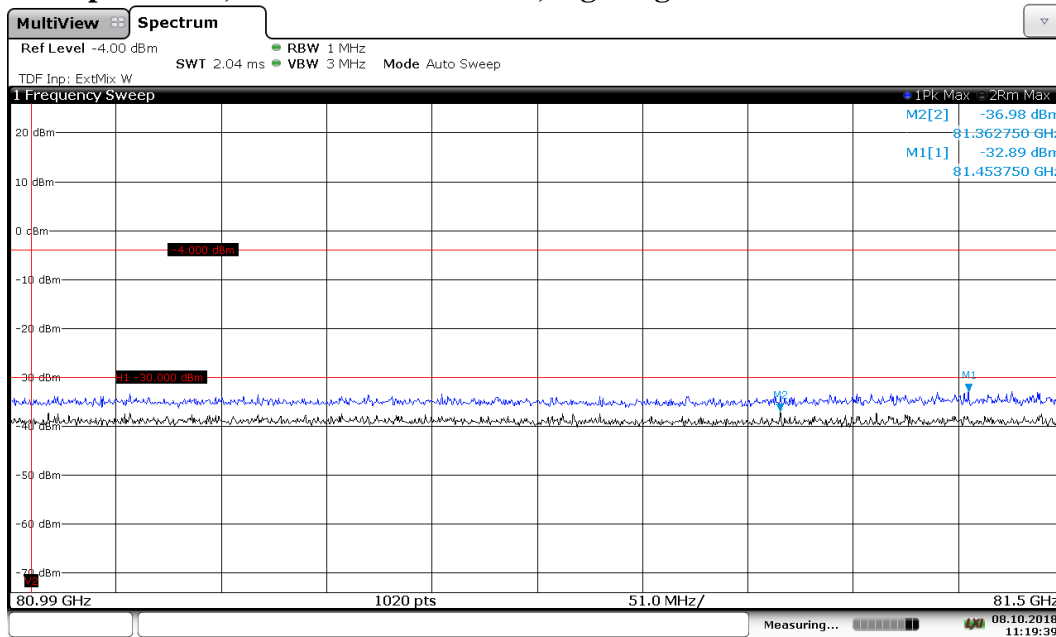
4.1. Op. Mode 1, Peak + RMS Detector, low edge



11:50:17 26.09.2018

* -4 dB is a ref line, not a limit line. Limit is the second line.

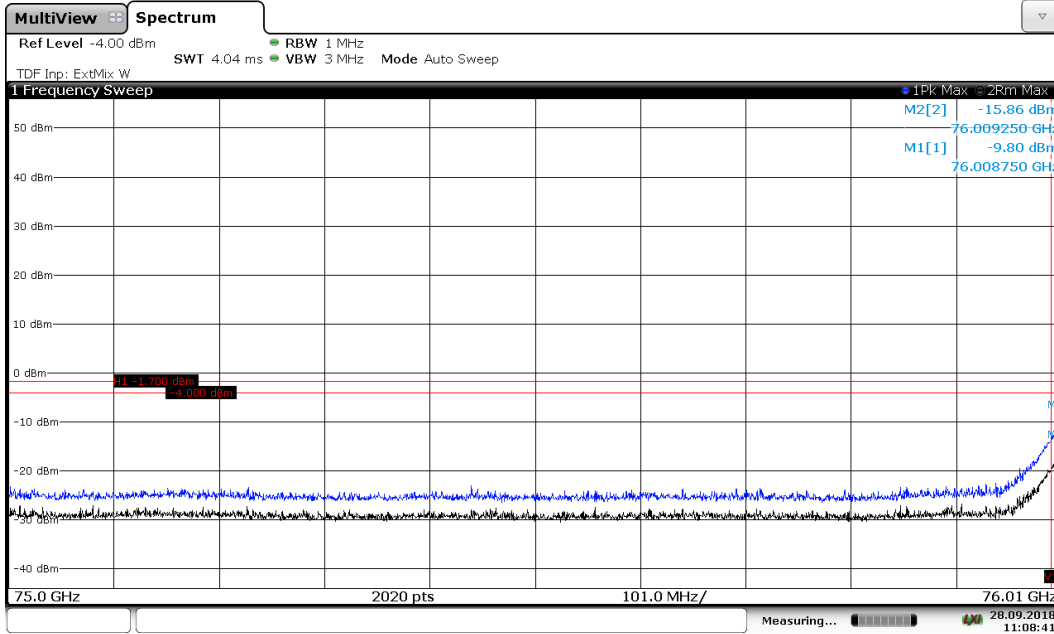
4.2. Op. Mode 1, Peak + RMS Detector, high edge



11:19:41 08.10.2018

* -4 dB is a ref line, not a limit line. Limit is the second line.

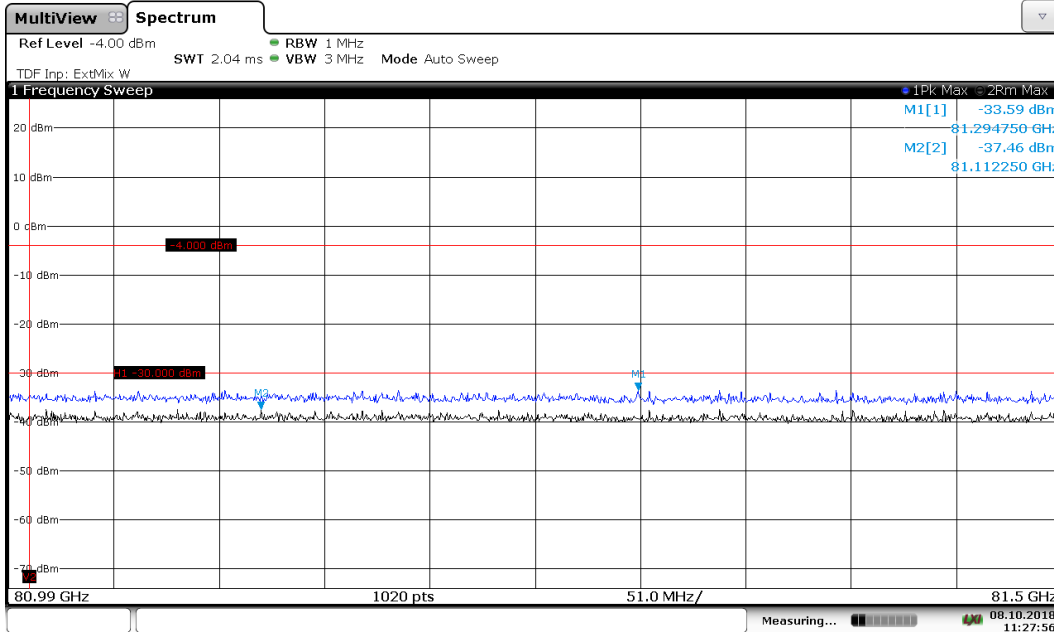
4.3. Op. Mode 2, FB Low, Peak + RMS Detector, low edge



11:08:41 28.09.2018

* -4 dB is a ref line, not a limit line. Limit is the second line.

4.4. Op. Mode 2, FB High, Peak + RMS Detector, high edge



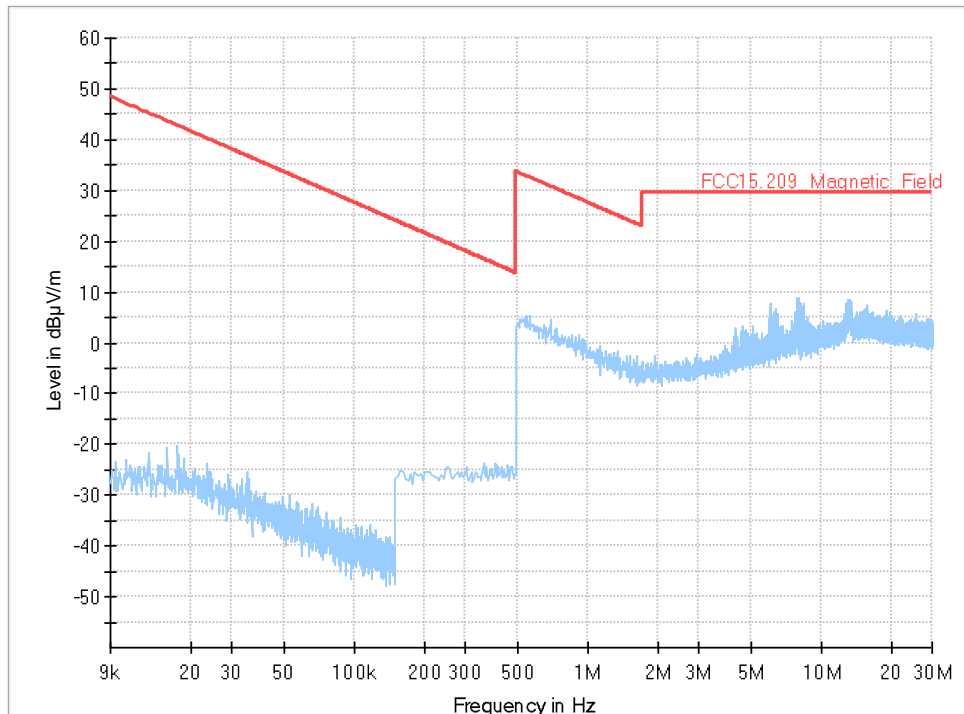
11:27:56 08.10.2018

* -4 dB is a ref line, not a limit line. Limit is the second line.

5. Field strength of emissions (radiated spurious)

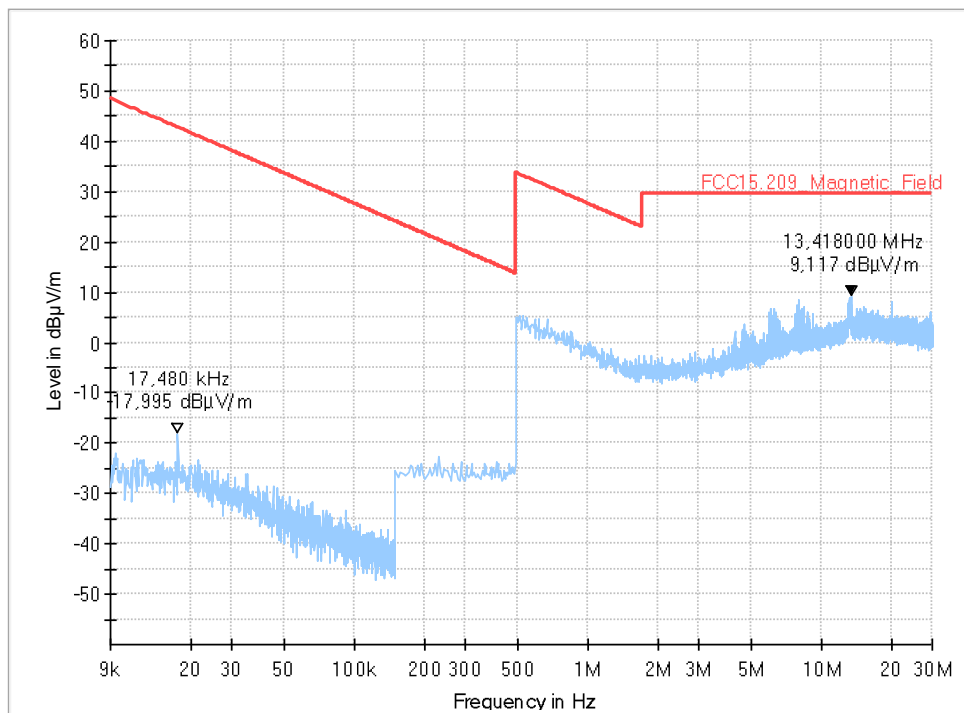
5.1. Mode 1, 9 kHz – 30 MHz, laying

Full Spectrum



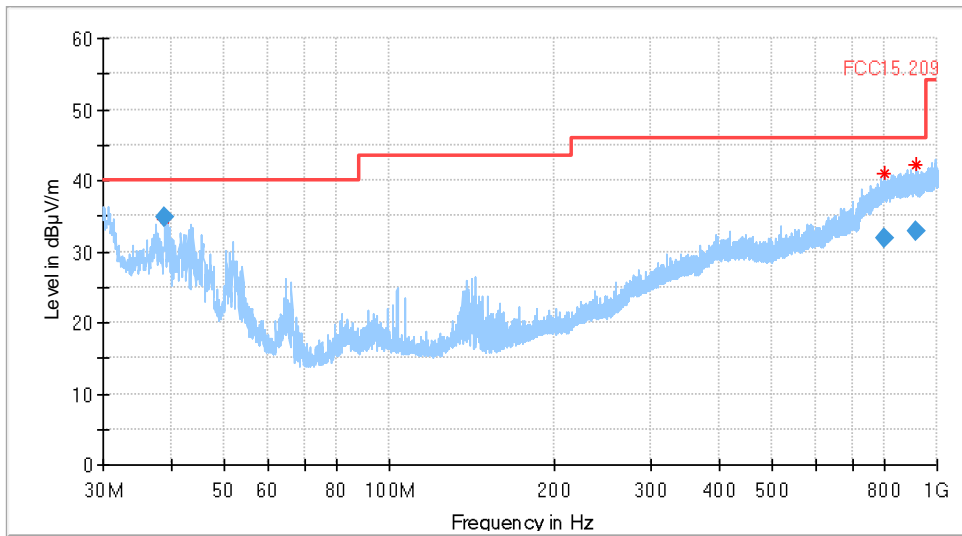
5.2. Mode 1, 9 kHz – 30 MHz, standing

Full Spectrum



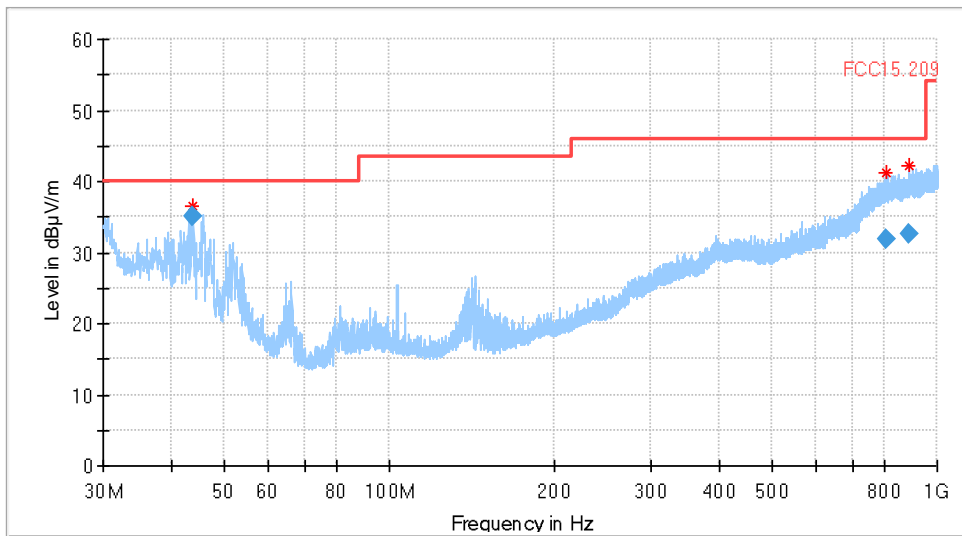
5.3. Mode 1, 30 MHz – 960 MHz, laying

Full Spectrum

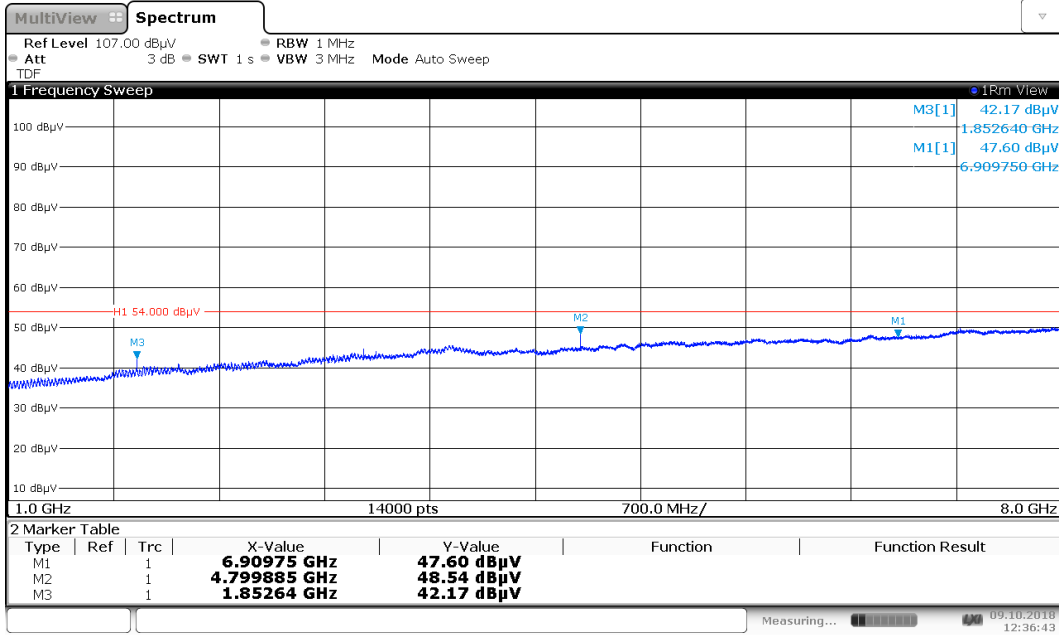


5.4. Mode 1, 30 MHz – 960 MHz, standing

Full Spectrum

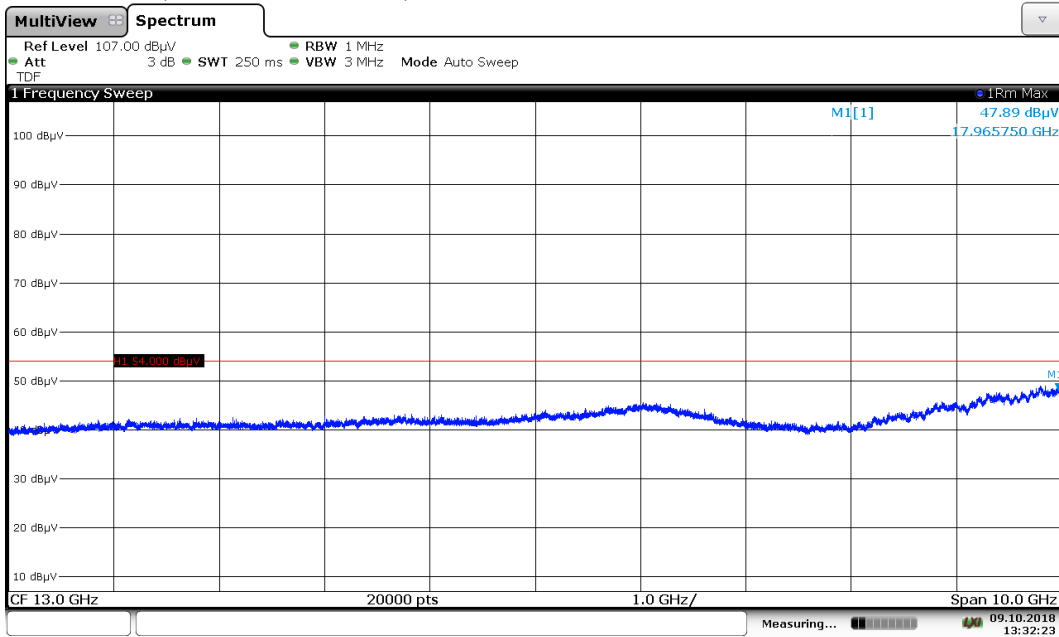


5.5. Mode 1, 960 MHz – 8 GHz, ANT VER + HOR



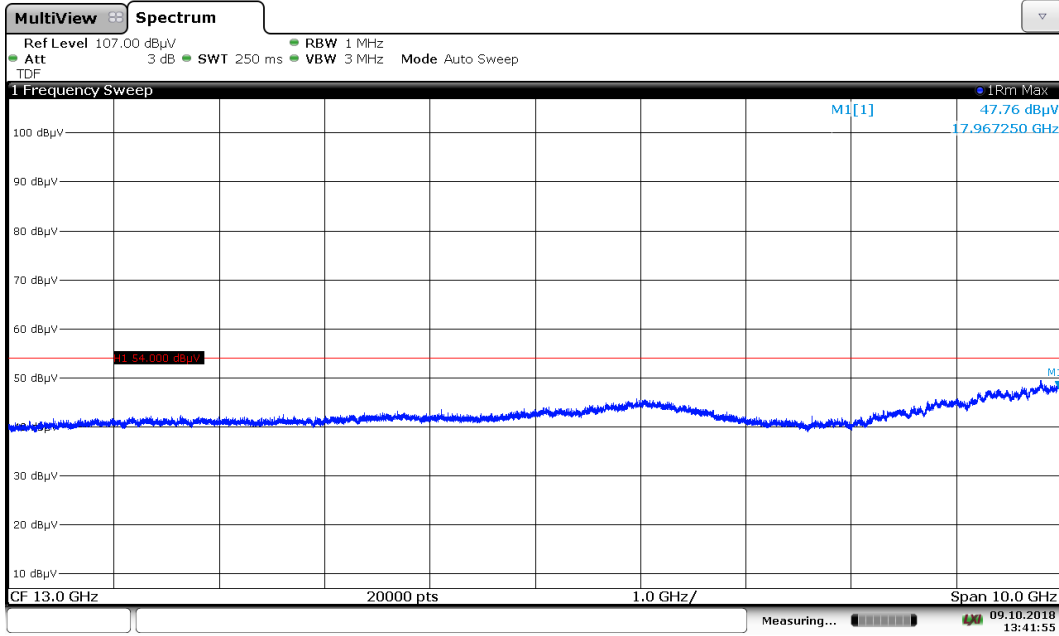
12:36:45 09.10.2018

5.6. Mode 1, 8 GHz – 18 GHz, ANT VER



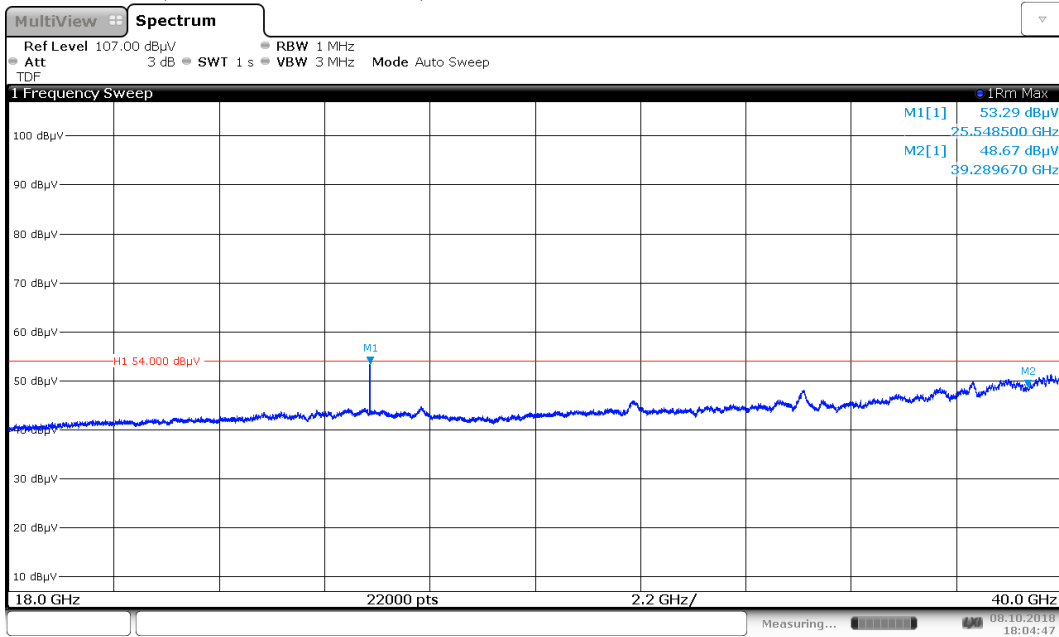
13:32:23 09.10.2018

5.7. Mode 1, 8 GHz – 18 GHz, ANT HOR



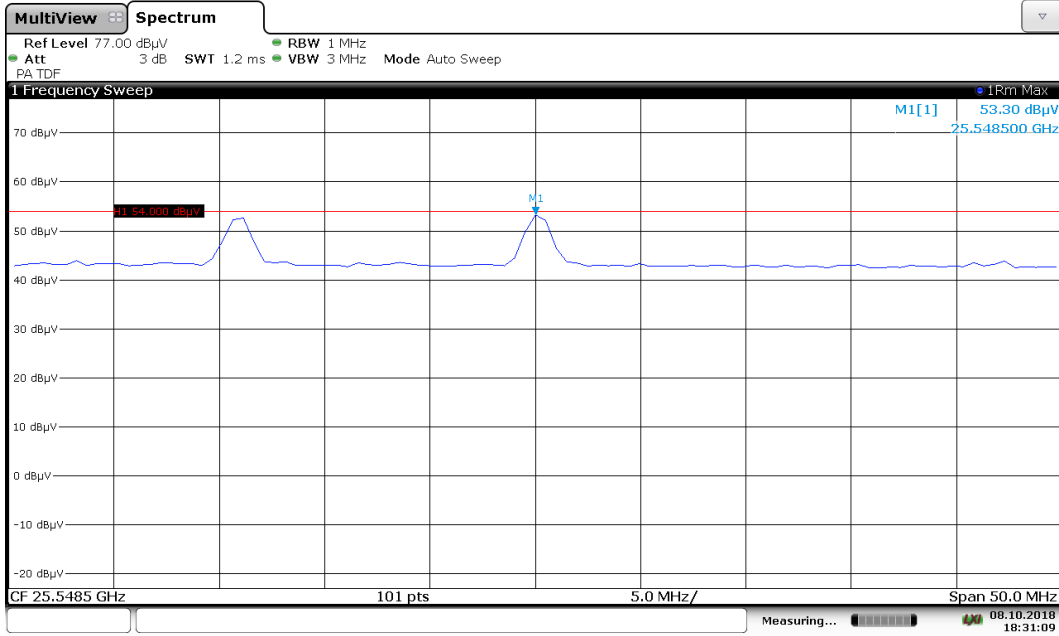
13:41:55 09.10.2018

5.8. Mode 1, 18 GHz – 40 GHz, ANT HOR + VER



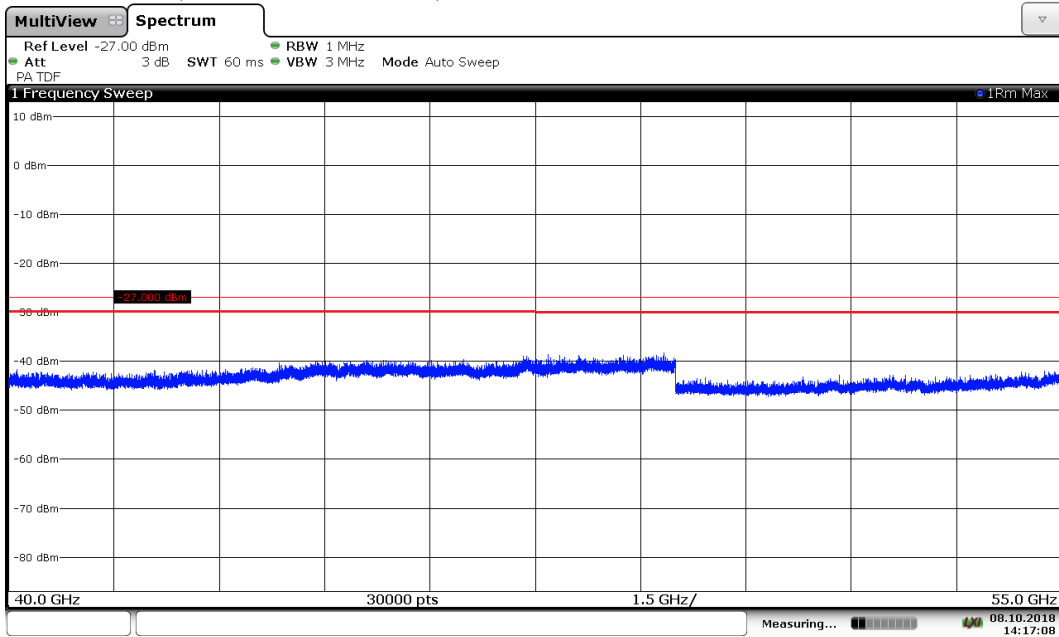
18:04:48 08.10.2018

5.9. Peak investigation for the diagram 5.8, ANT HOR + VER



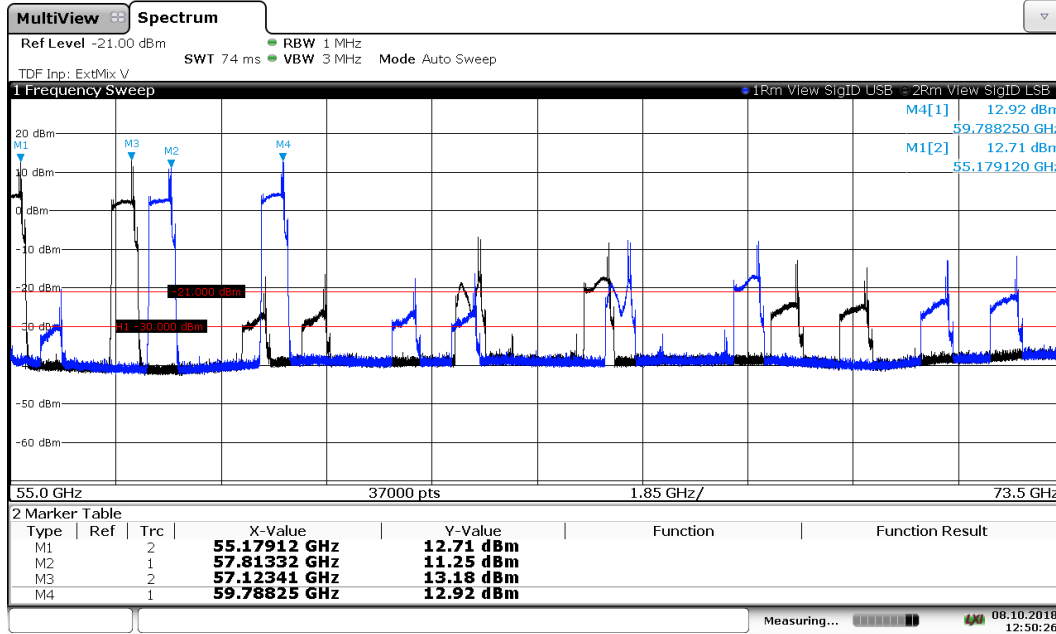
18:31:09 08.10.2018

5.10. Mode 1, 40 GHz – 55 GHz, ANT HOR + VER



14:17:09 08.10.2018

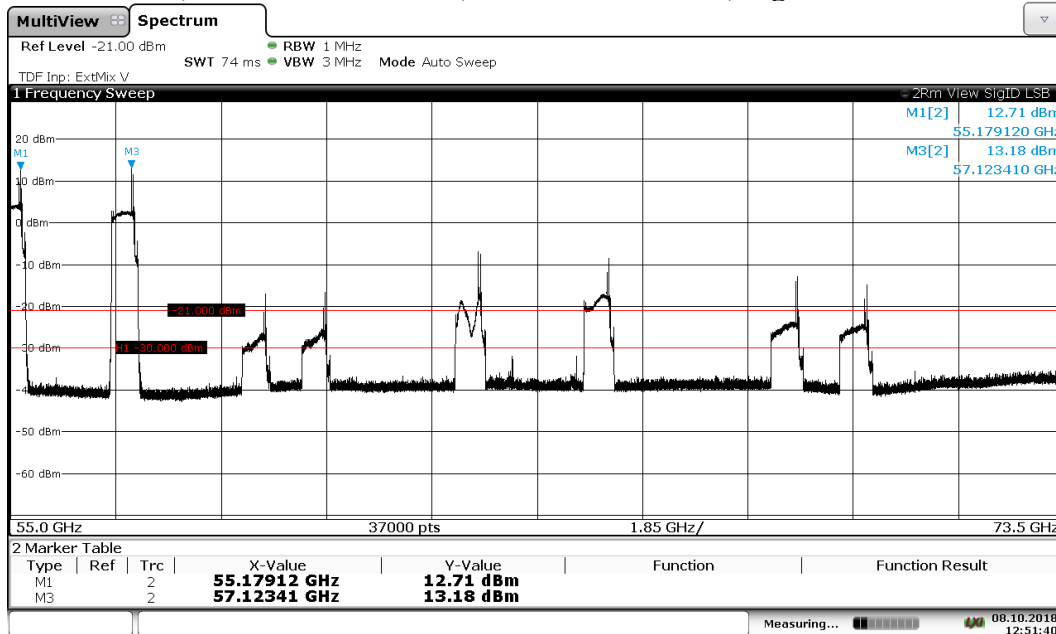
5.11. Mode 1, 55 GHz – 73.5 GHz, ANT HOR + VER, SigID USB + LSB



12:50:27 08.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

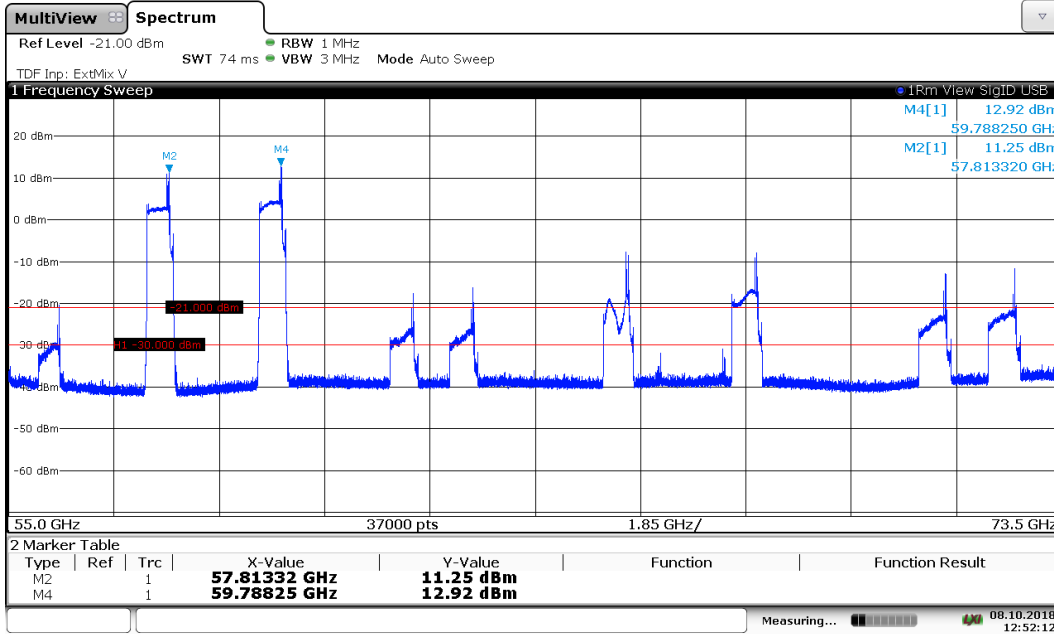
5.12. Mode 1, 55 GHz – 73.5 GHz, ANT HOR + VER, SigID LSB



12:51:40 08.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

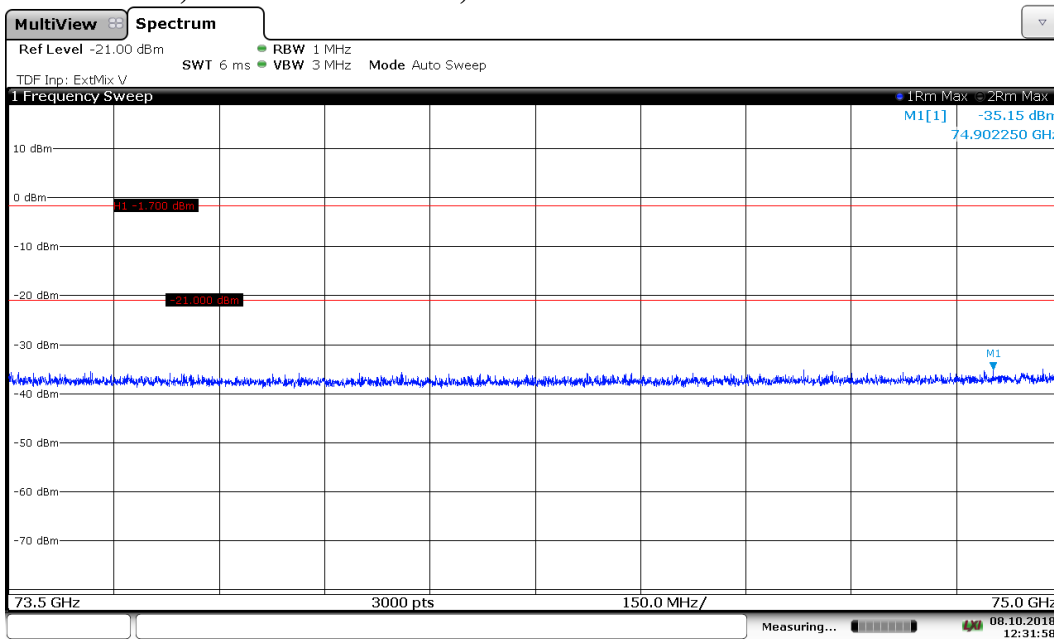
5.13. Mode 1, 55 GHz – 73.5 GHz, ANT HOR + VER, SigID USB



12:52:13 08.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

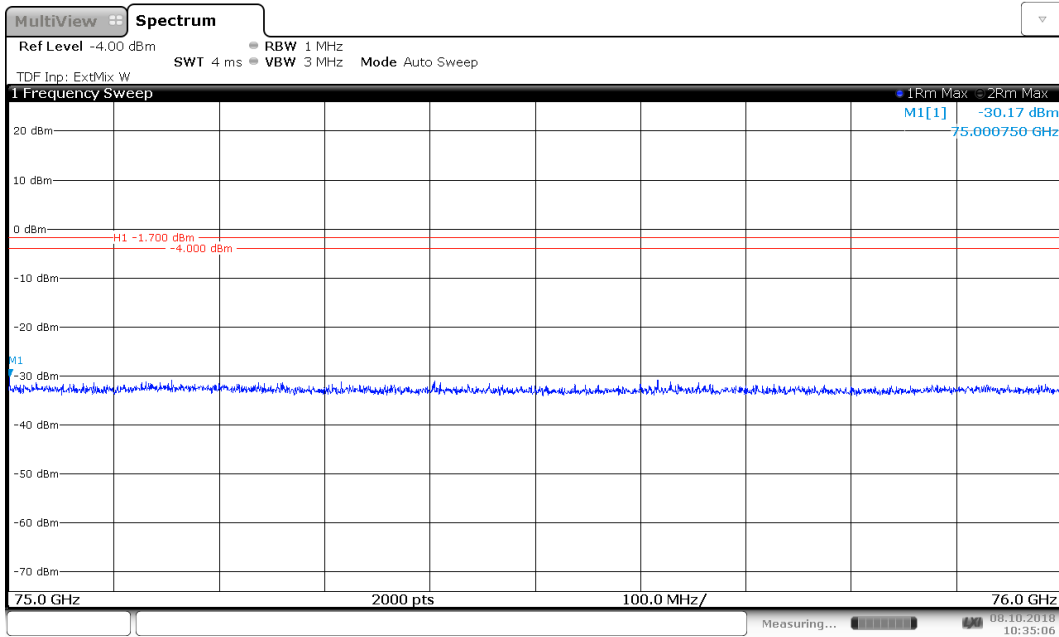
5.14. Mode 1, 73.5 GHz – 75 GHz, ANT HOR + VER



12:31:58 08.10.2018

*-21 dB is a ref line, not a limit line. Limit is the second line.

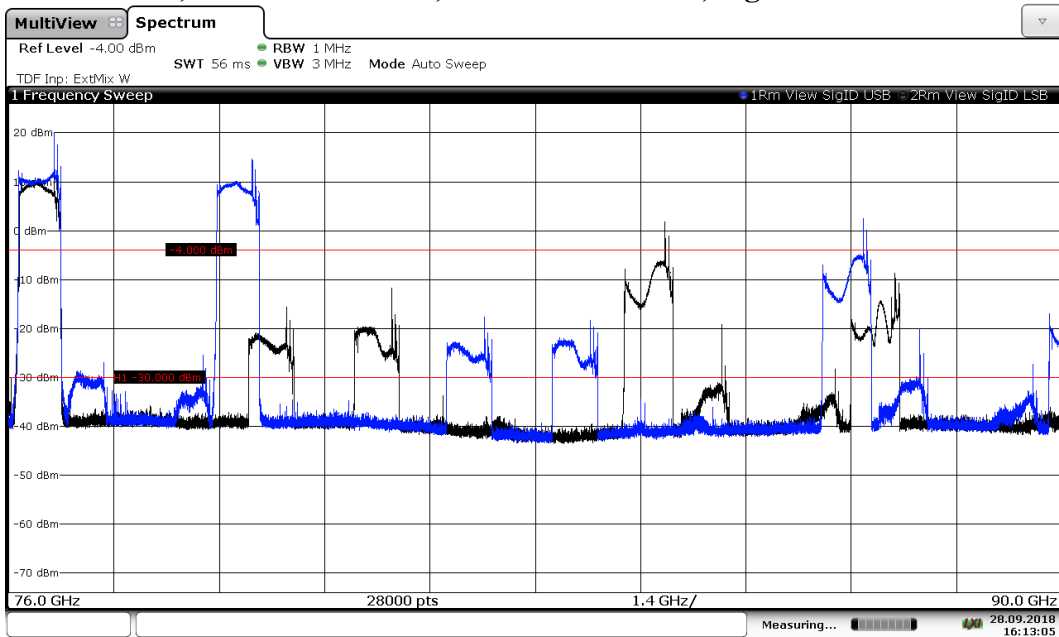
5.15. Mode 1, 75 GHz – 76 GHz, ANT HOR + VER



10:35:06 08.10.2018

-4 dB is a ref line, not a limit line. Limit is the second line.

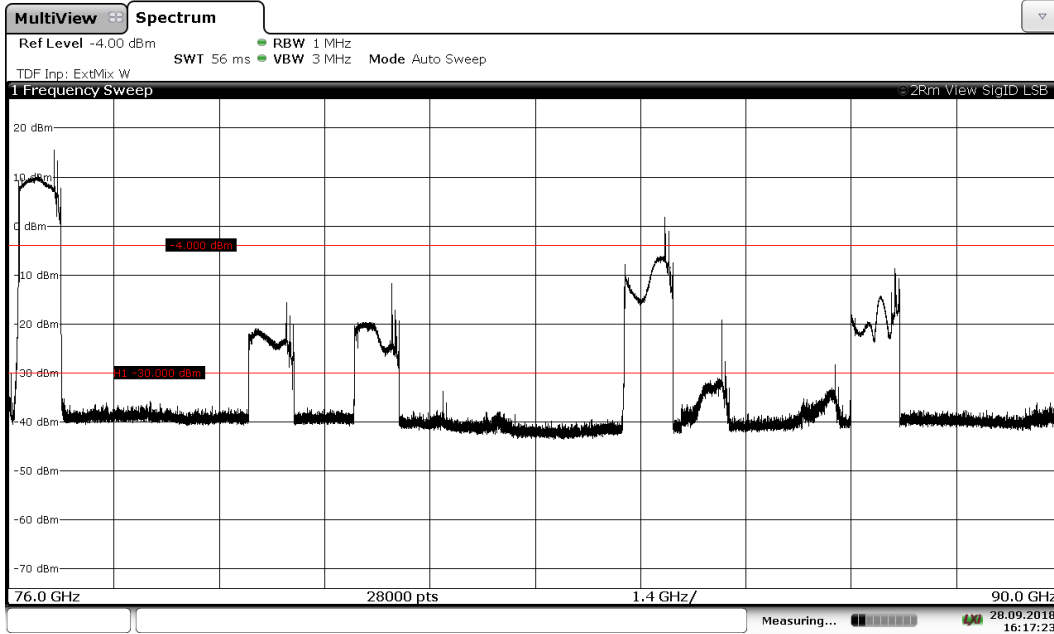
5.16. Mode 1, 76 GHz – 90 GHz, ANT HOR + VER, SigID USB + LSB



16:13:05 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. Here you can see a real signal by 76.365 GHz. -4 dB is a ref line, not a limit line. Limit is the second line.

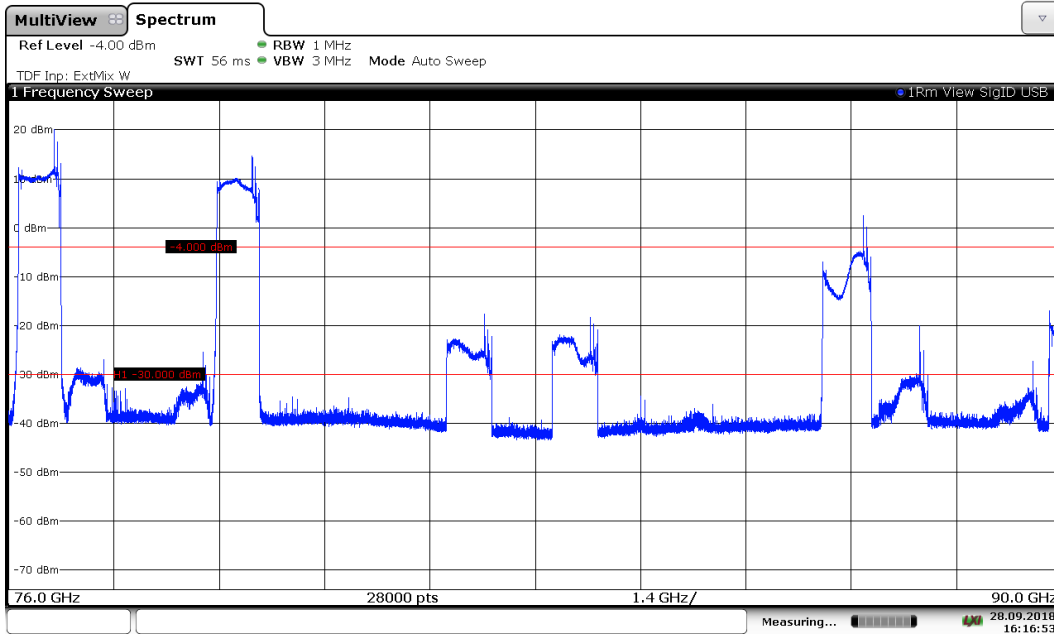
5.17. Mode 1, 76 GHz – 90 GHz, ANT HOR + VER, SigID LSB



16:17:24 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. Here you can see a real signal by 76.365 GHz. -4 dB is a ref line, not a limit line. Limit is the second line.

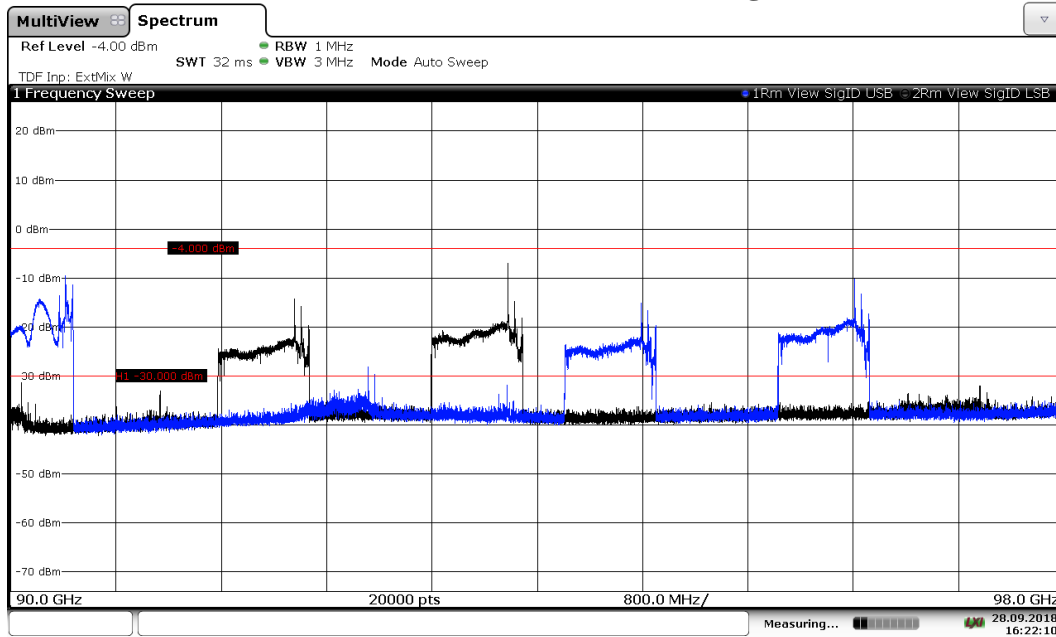
5.18. Mode 1, 76 GHz – 90 GHz, ANT HOR + VER, SigID USB



16:16:53 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. Here you can see a real signal by 76.365 GHz. -4 dB is a ref line, not a limit line. Limit is the second line.

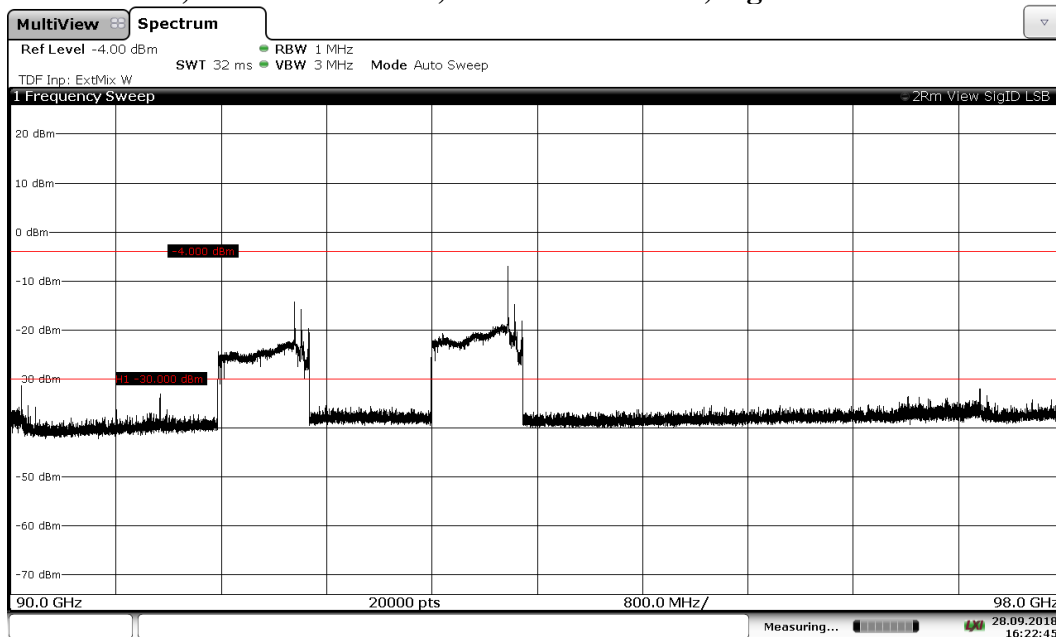
5.19. Mode 1, 90 GHz – 98 GHz, ANT HOR + VER, SigID USB + LSB



16:22:11 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

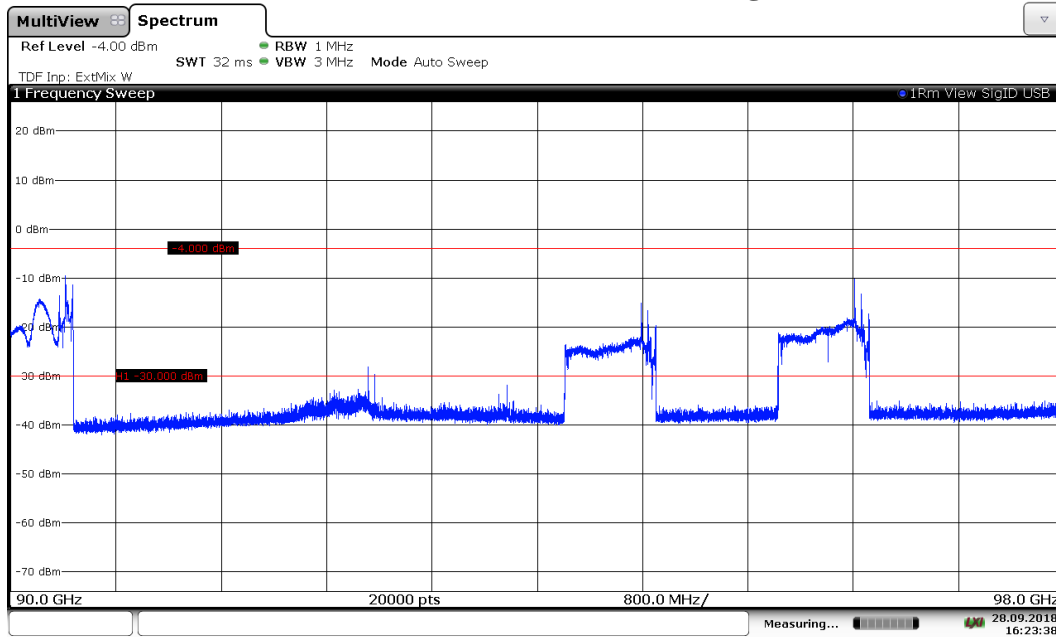
5.20. Mode 1, 90 GHz – 98 GHz, ANT HOR + VER, SigID LSB



16:22:46 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

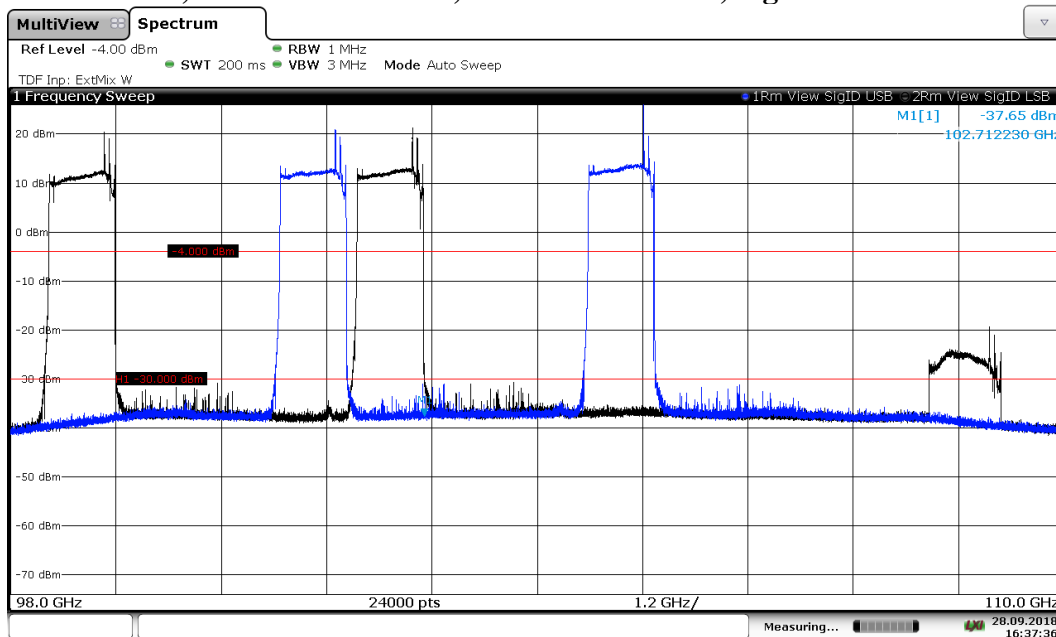
5.21. Mode 1, 90 GHz – 98 GHz, ANT HOR + VER, SigID USB



16:23:39 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

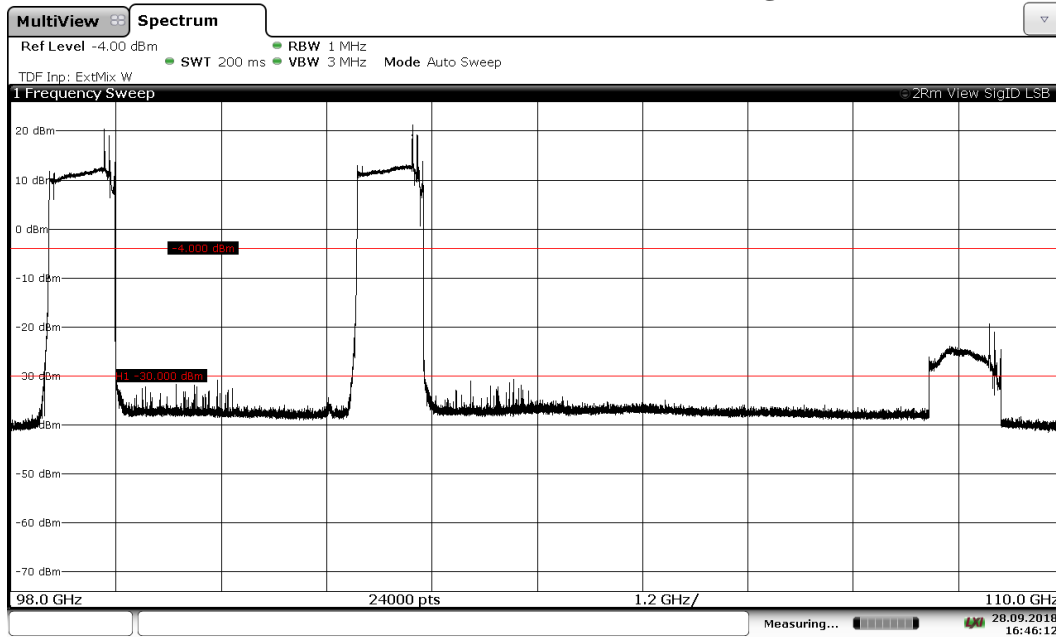
5.22. Mode 1, 98 GHz – 110 GHz, ANT HOR + VER, SigID USB + LSB



16:37:37 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

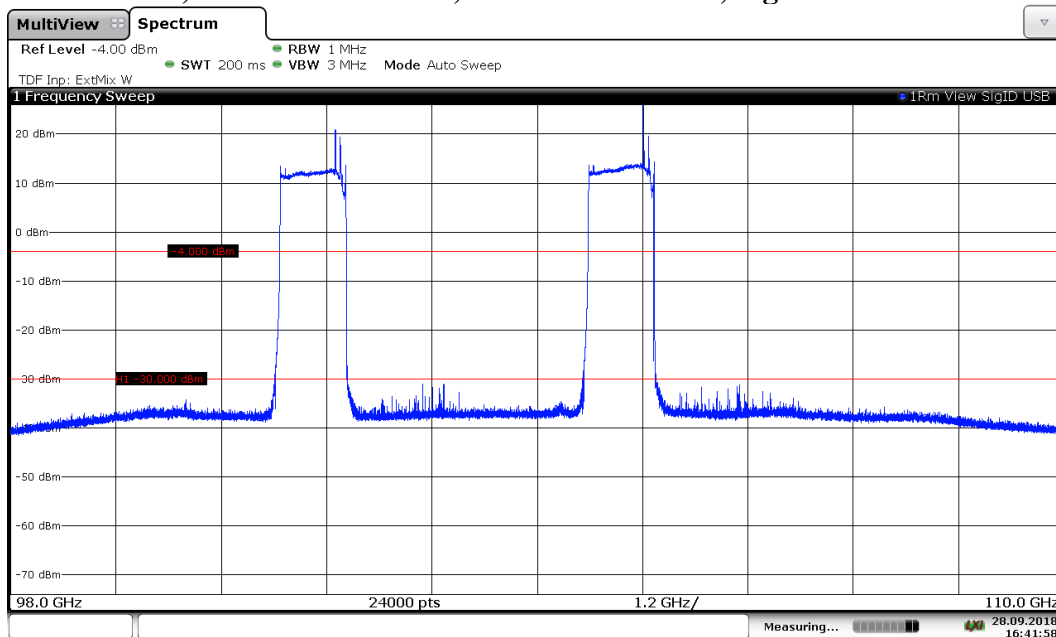
5.23. Mode 1, 98 GHz – 110 GHz, ANT HOR + VER, SigID LSB



16:46:12 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

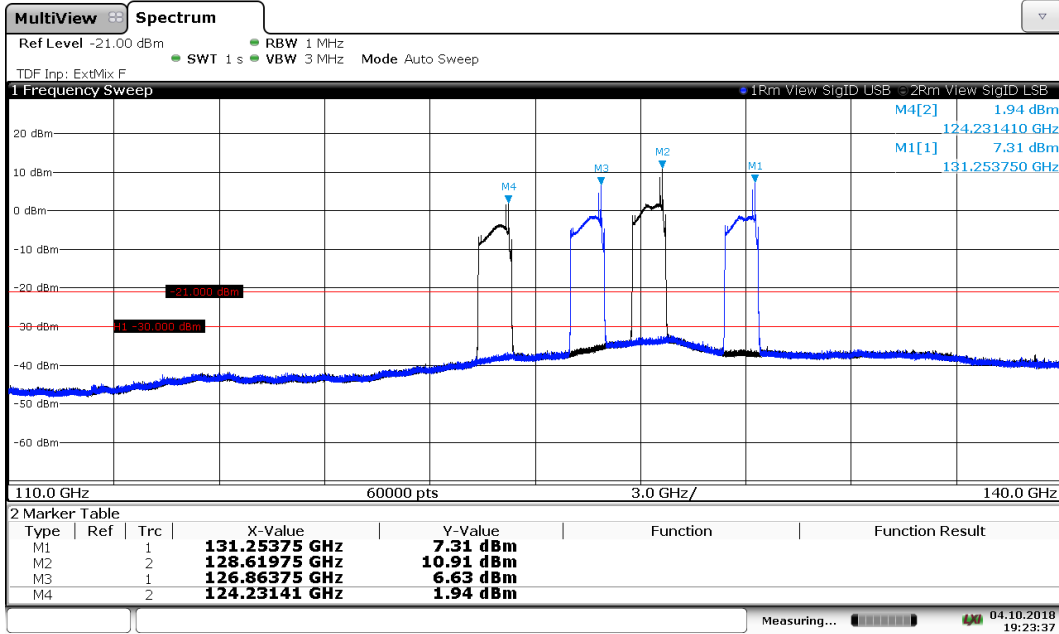
5.24. Mode 1, 98 GHz – 110 GHz, ANT HOR + VER, SigID USB



16:41:58 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

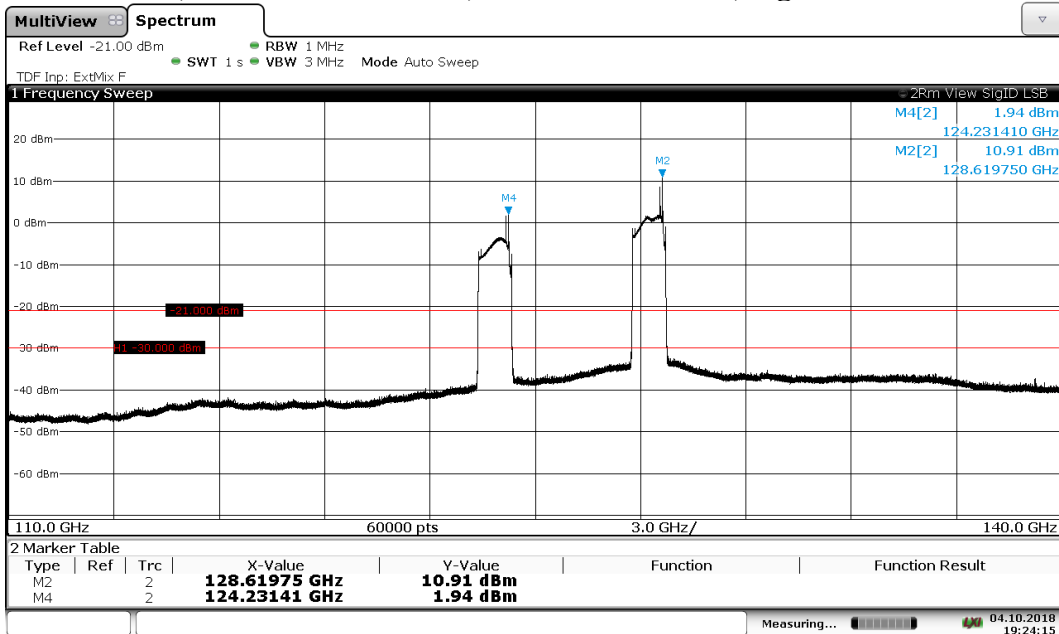
5.25. Mode 1, 110 GHz – 140 GHz, ANT HOR + VER, SigID USB + LSB



19:23:38 04.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

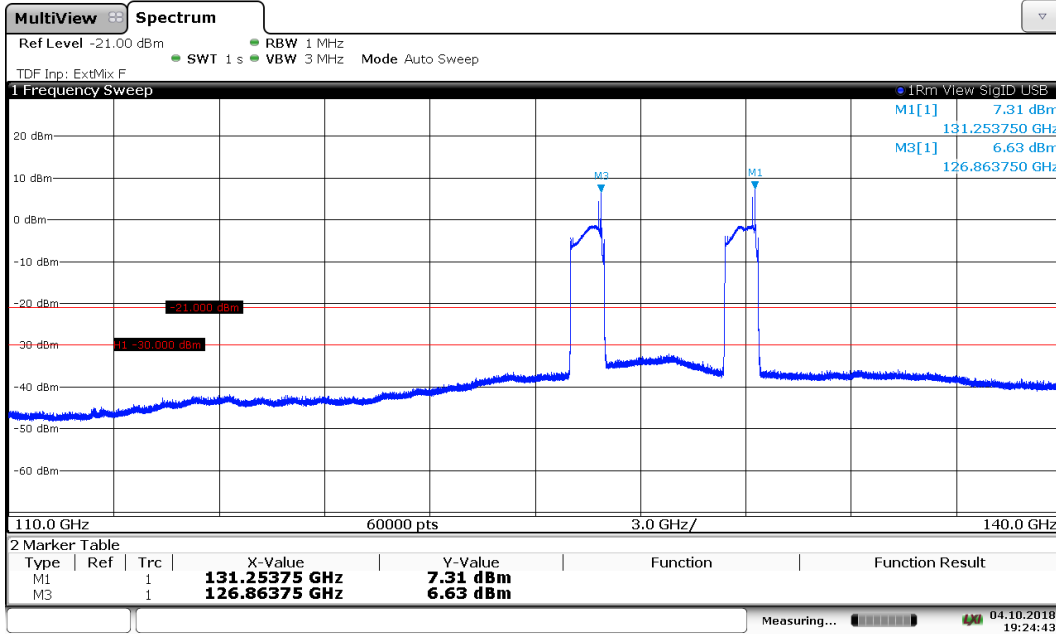
5.26. Mode 1, 110 GHz – 140 GHz, ANT HOR + VER, SigID LSB



19:24:15 04.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

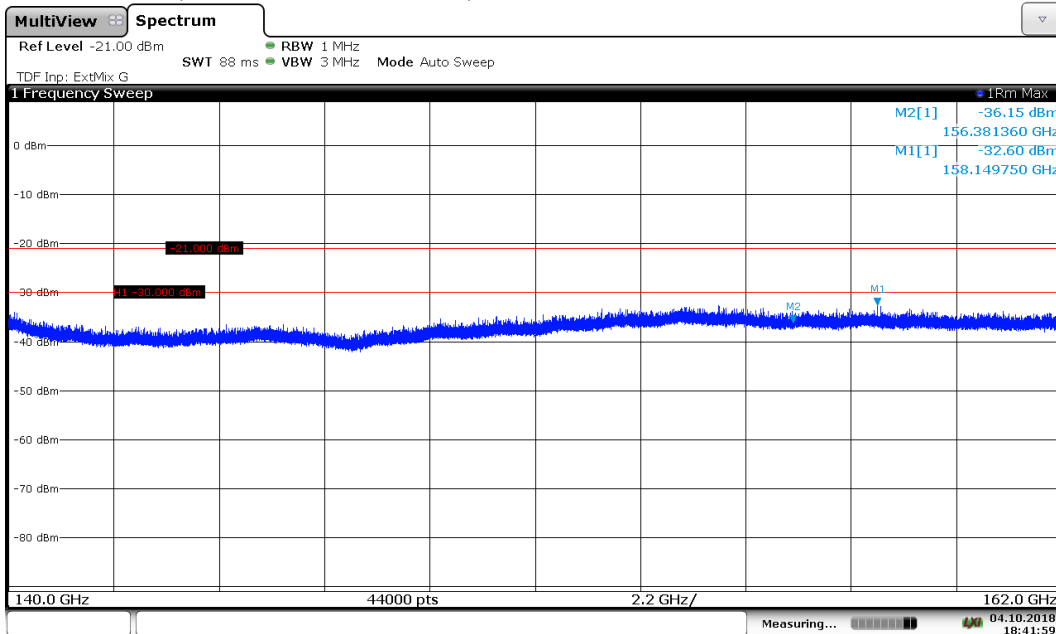
5.27. Mode 1, 110 GHz – 140 GHz, ANT HOR + VER, SigID USB



19:24:44 04.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

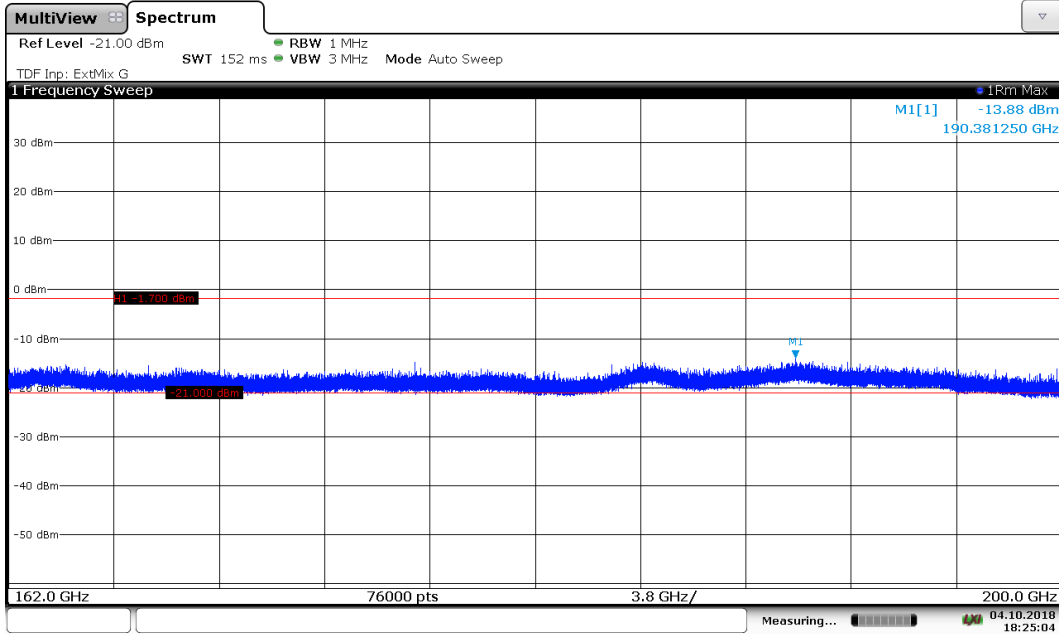
5.28. Mode 1, 140 GHz – 162 GHz, ANT HOR + VER



18:41:59 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line.

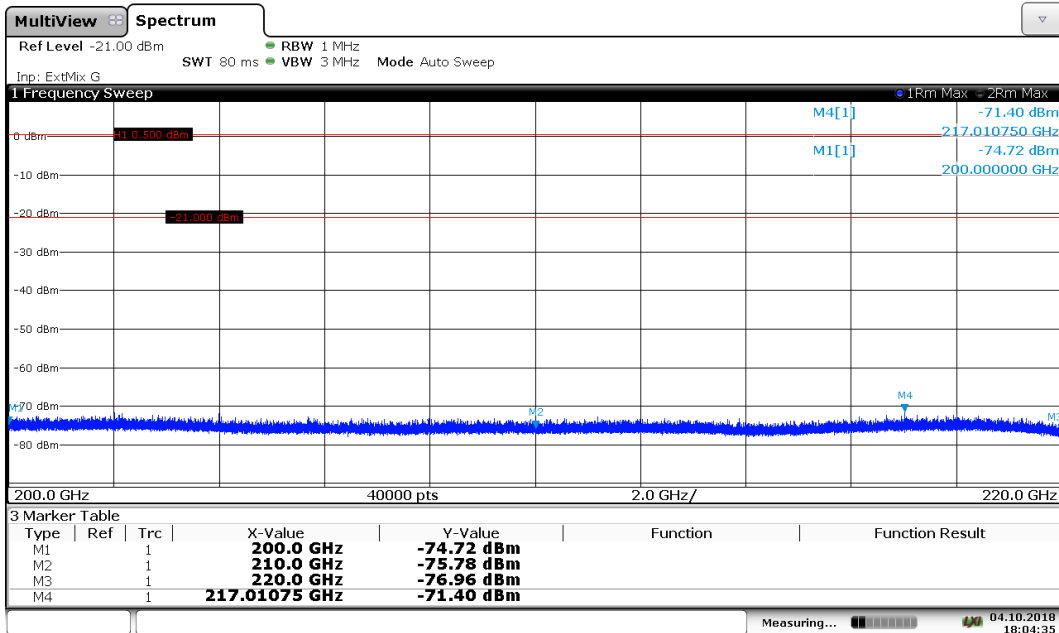
5.29. Mode 1, 162 GHz – 200 GHz, ANT HOR + VER



18:25:04 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line.

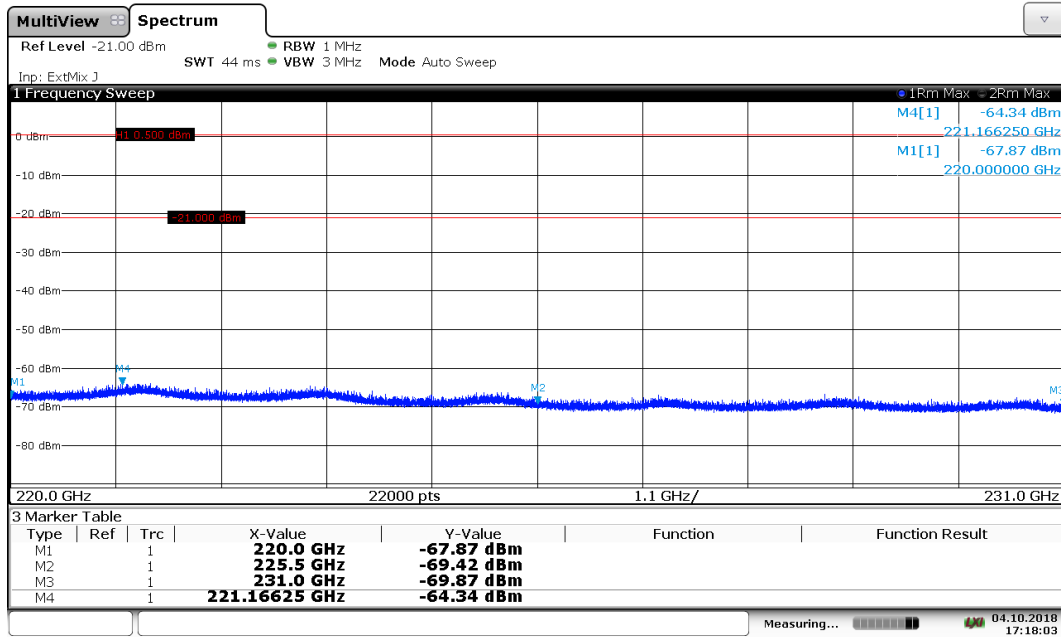
5.30. Mode 2, 200 GHz – 220 GHz, ANT HOR + VER



18:04:35 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line. See subsection 5.8.6. in the main report.

5.31. Mode 1, 220 GHz – 231 GHz, ANT HOR + VER

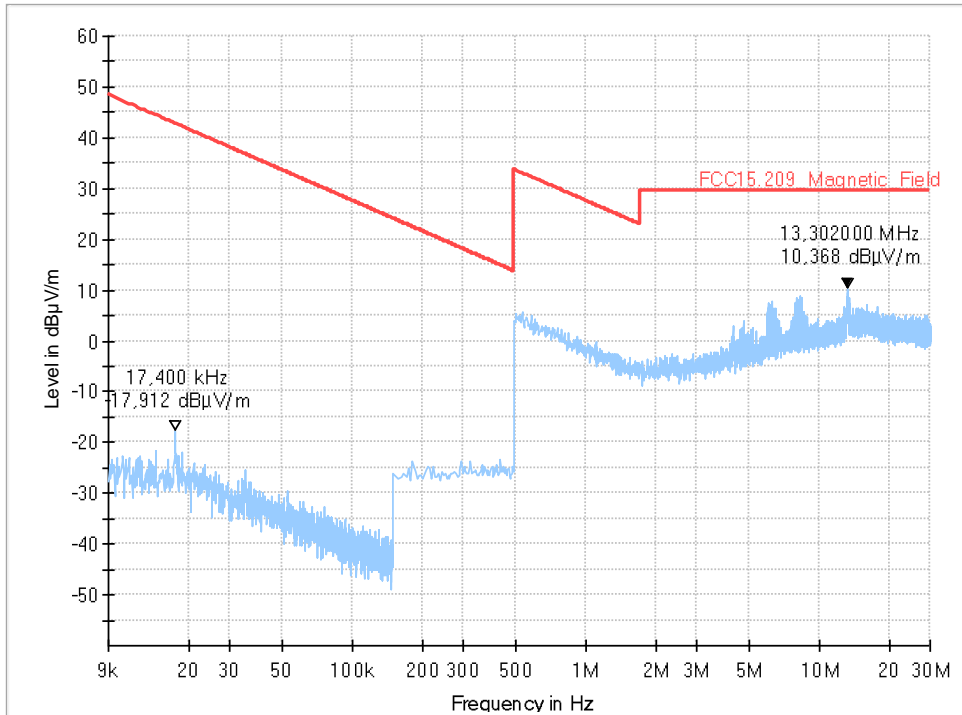


17:18:04 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line. See subsection 5.8.6. in the main report.

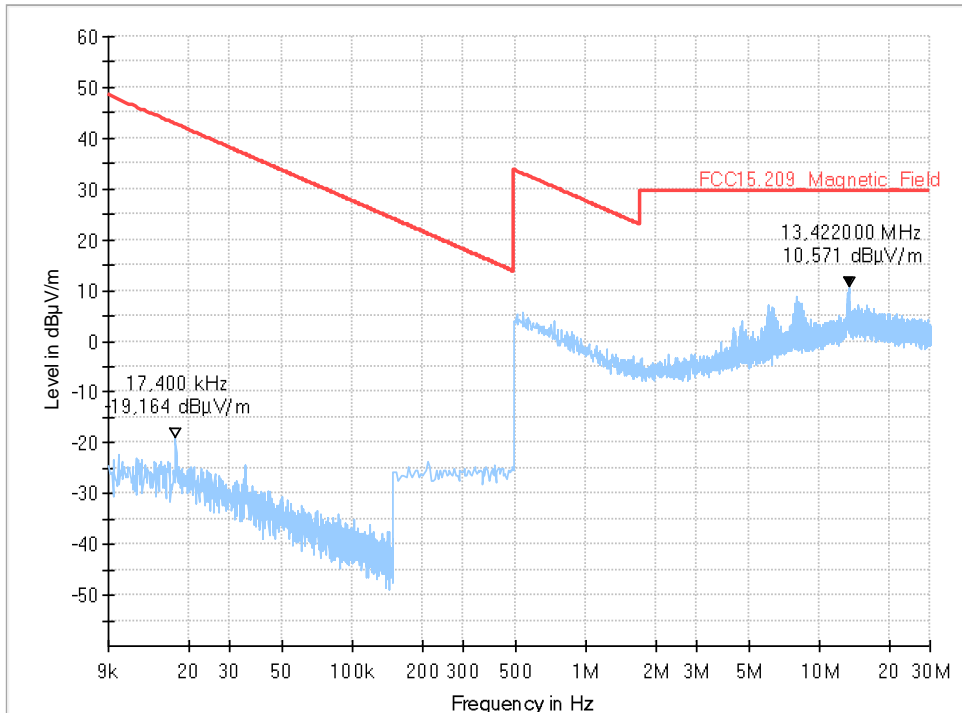
5.32. Mode 2, 9 kHz – 30 MHz, laying

Full Spectrum



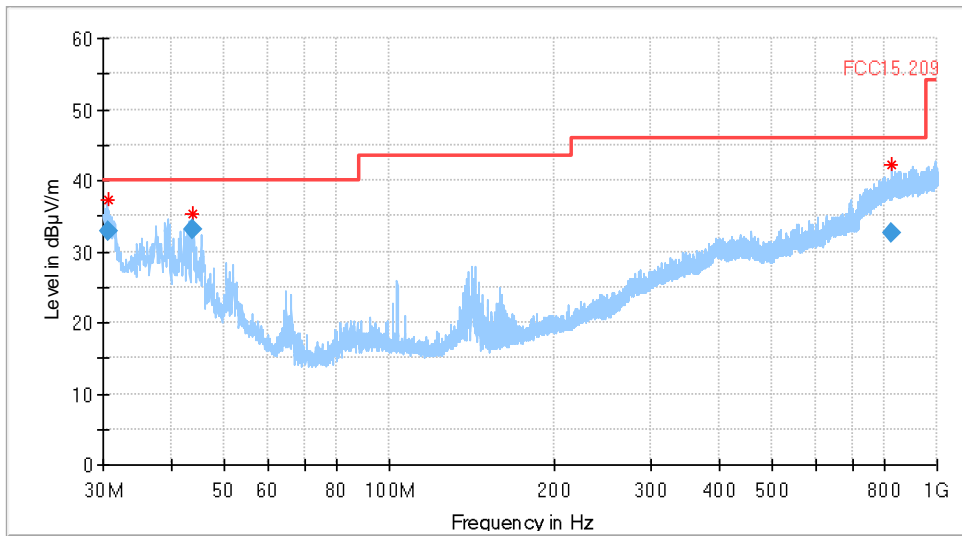
5.33. Mode 2, 9 kHz – 30 MHz, standing

Full Spectrum



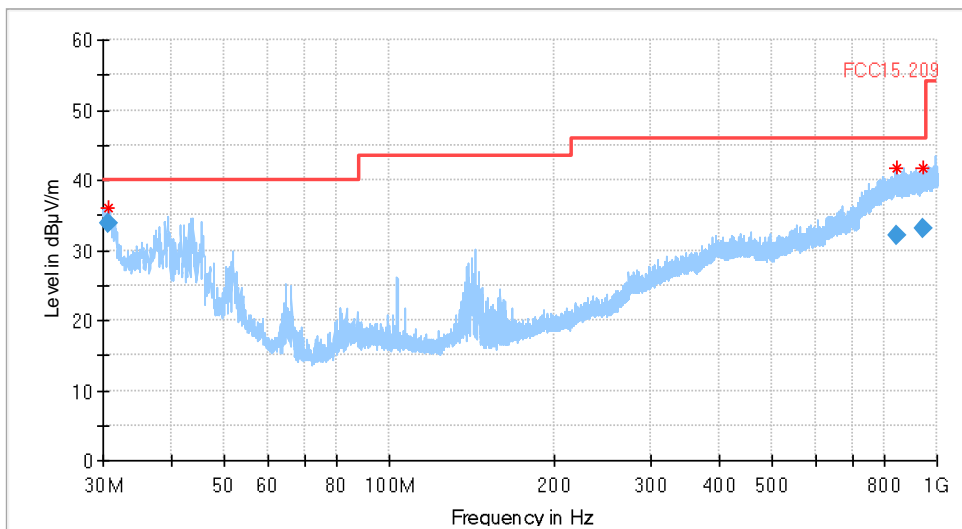
5.34. Mode 2, 30 MHz – 960 MHz, laying

Full Spectrum

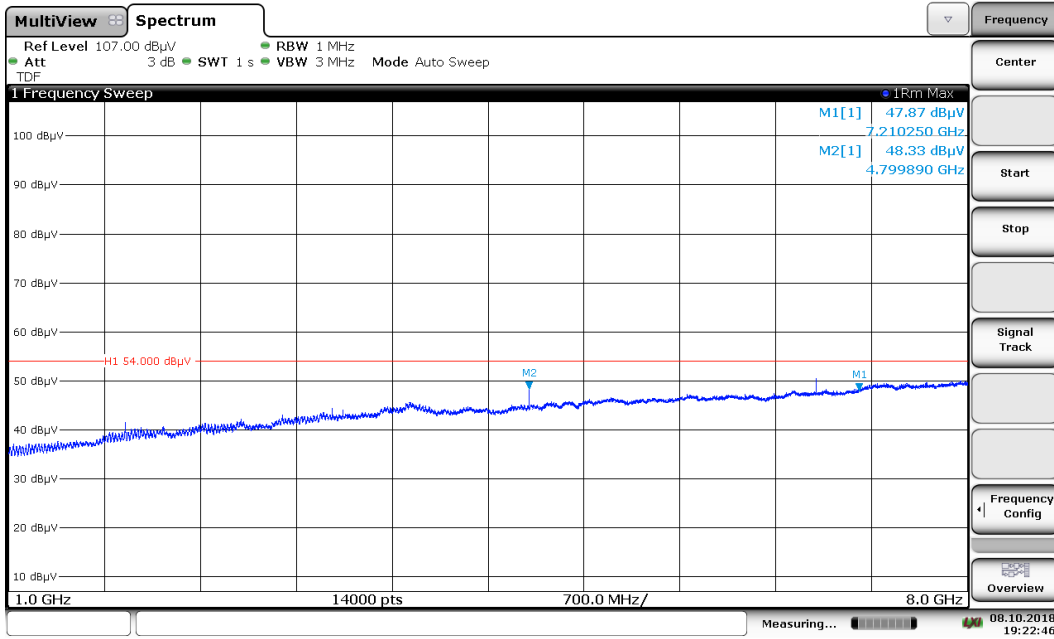


5.35. Mode 2, 30 MHz – 960 MHz, standing

Full Spectrum

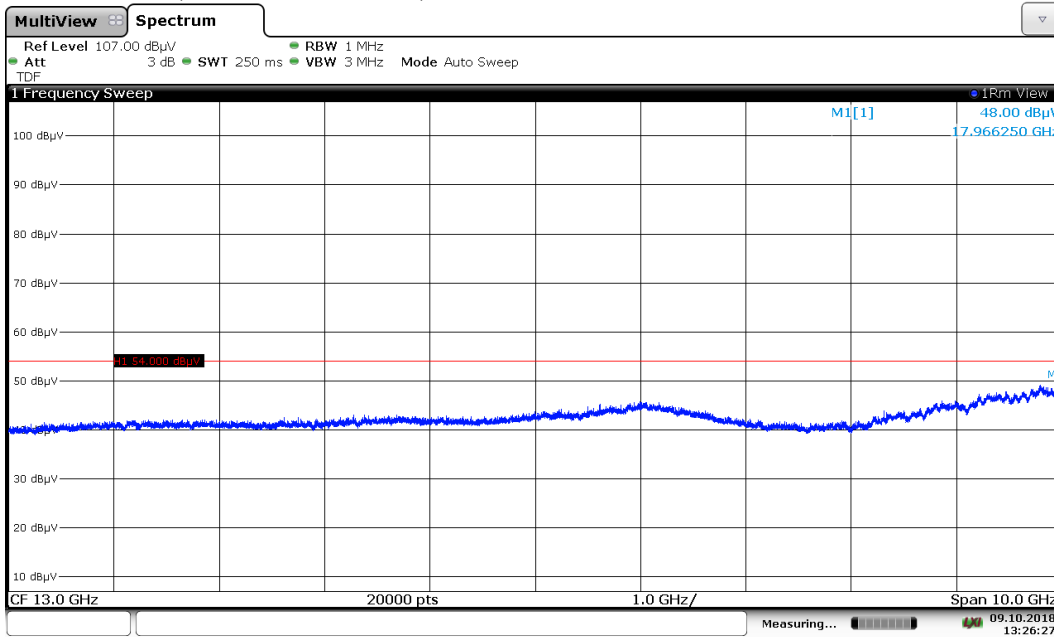


5.36. Mode 2, 960 MHz – 8 GHz, ANT VER + HOR



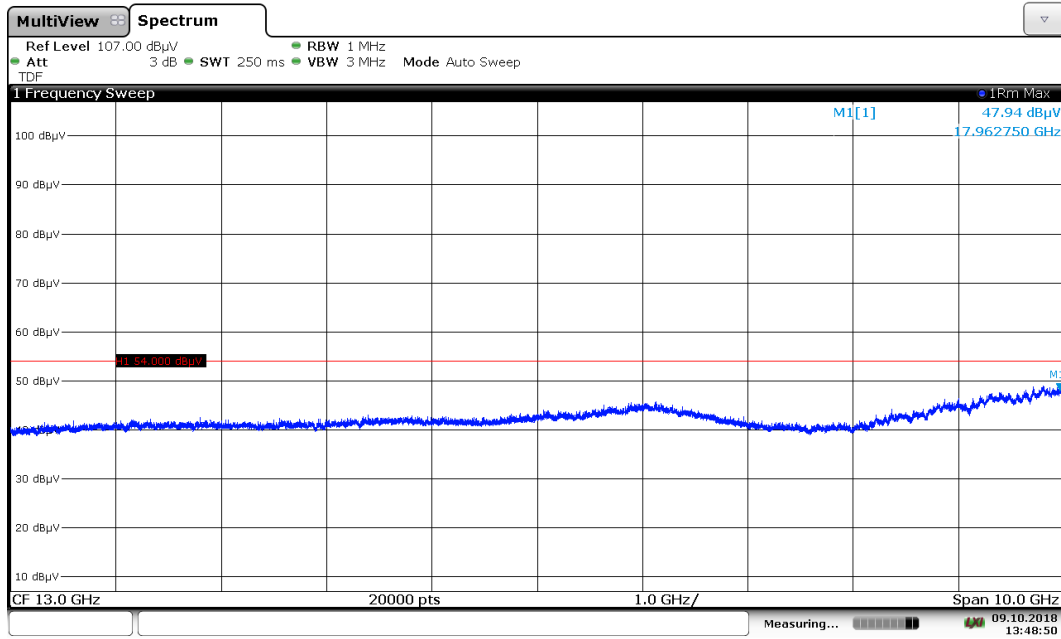
19:22:46 08.10.2018

5.37. Mode 2, 8 GHz – 18 GHz, ANT VER



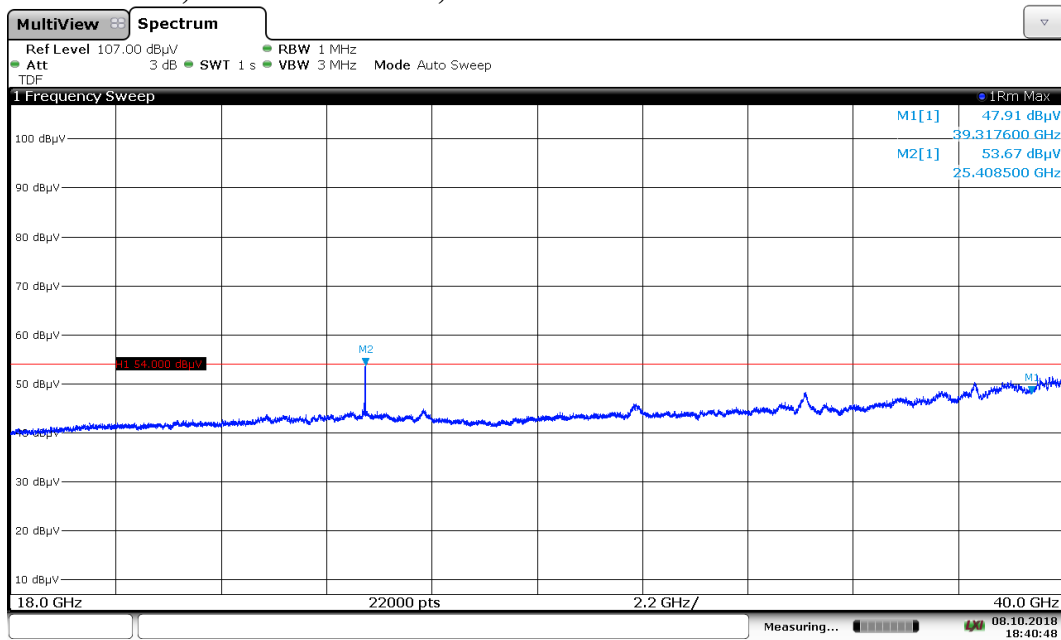
13:26:27 09.10.2018

5.38. Mode 2, 8 GHz – 18 GHz, ANT HOR



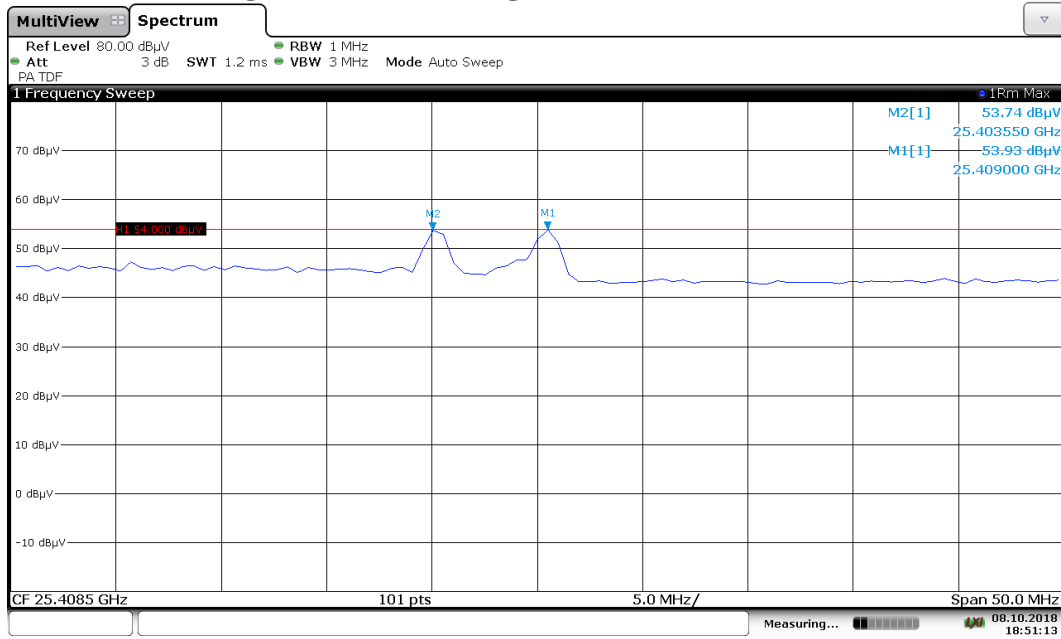
13:48:50 09.10.2018

5.39. Mode 2, 18 GHz – 40 GHz, ANT HOR + VER



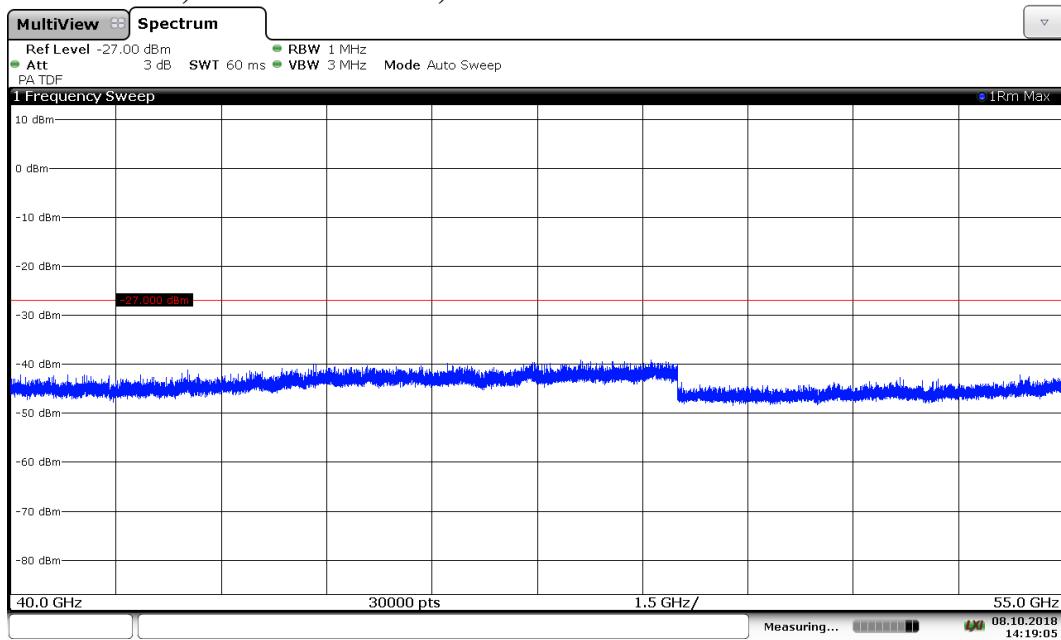
18:40:49 08.10.2018

5.40. Peak investigation from the diagram 5.39, ANT HOR + VER



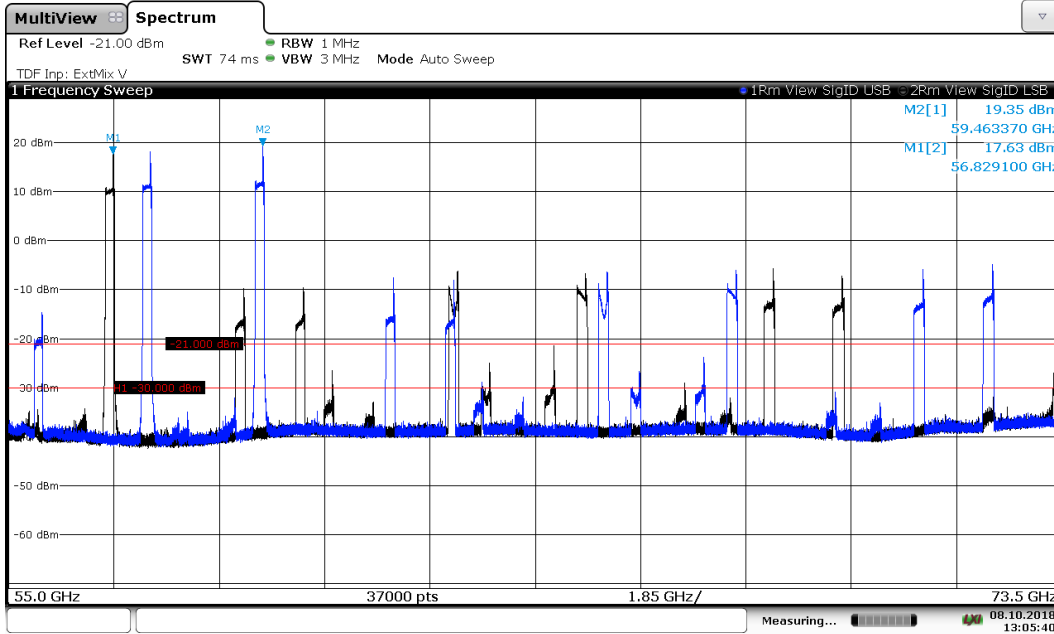
18:51:13 08.10.2018

5.41. Mode 2, 40 GHz – 55 GHz, ANT HOR + VER



14:19:06 08.10.2018

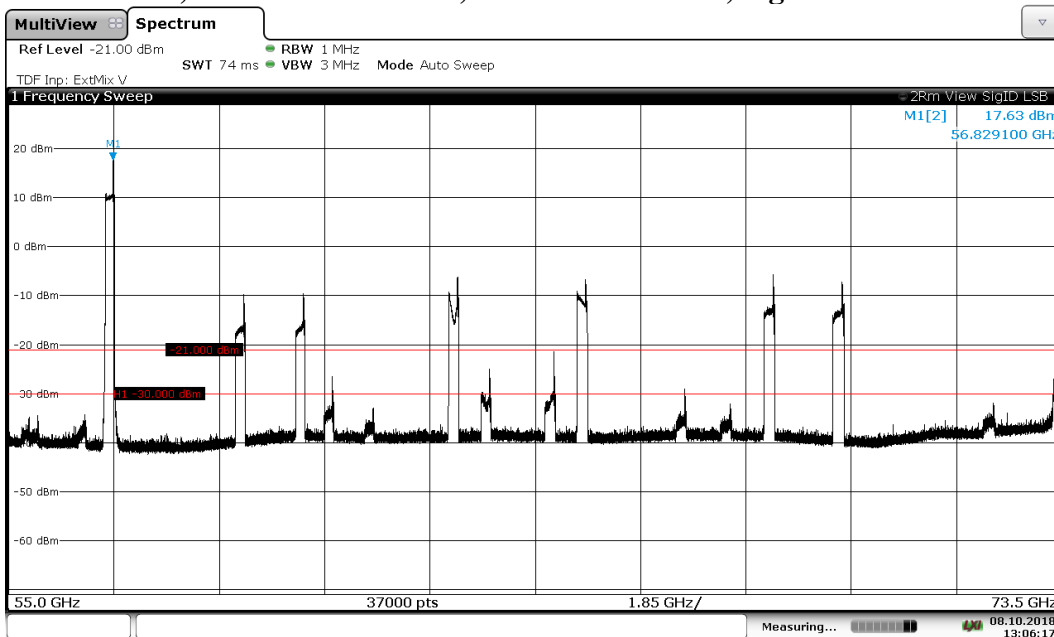
5.42. Mode 2, 55 GHz – 73.5 GHz, ANT HOR + VER, SigID USB + LSB



13:05:41 08.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

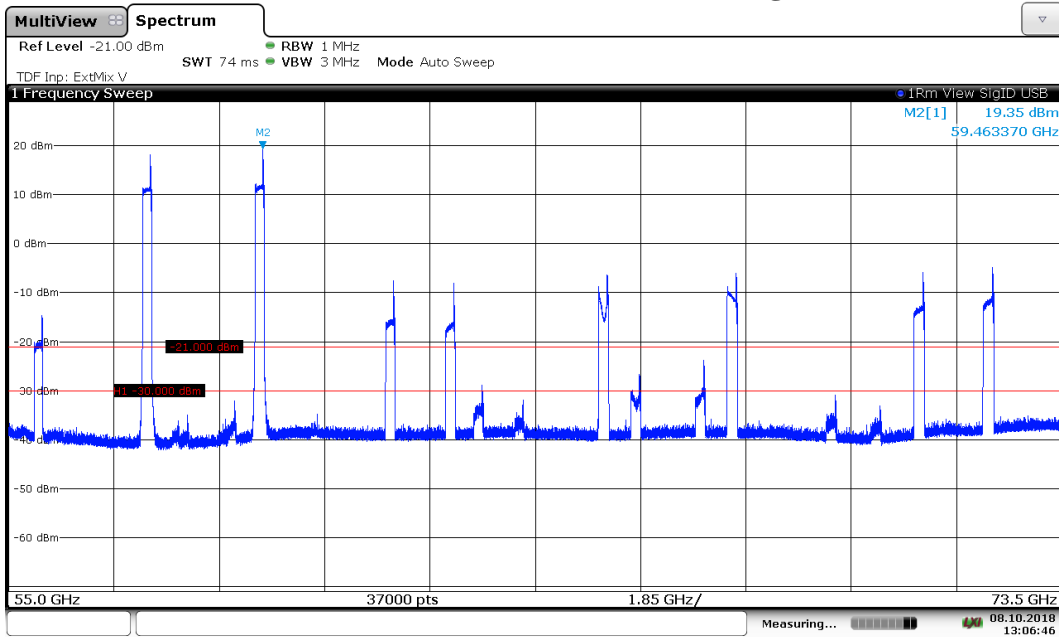
5.43. Mode 2, 55 GHz – 73.5 GHz, ANT HOR + VER, SigID LSB



13:06:17 08.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

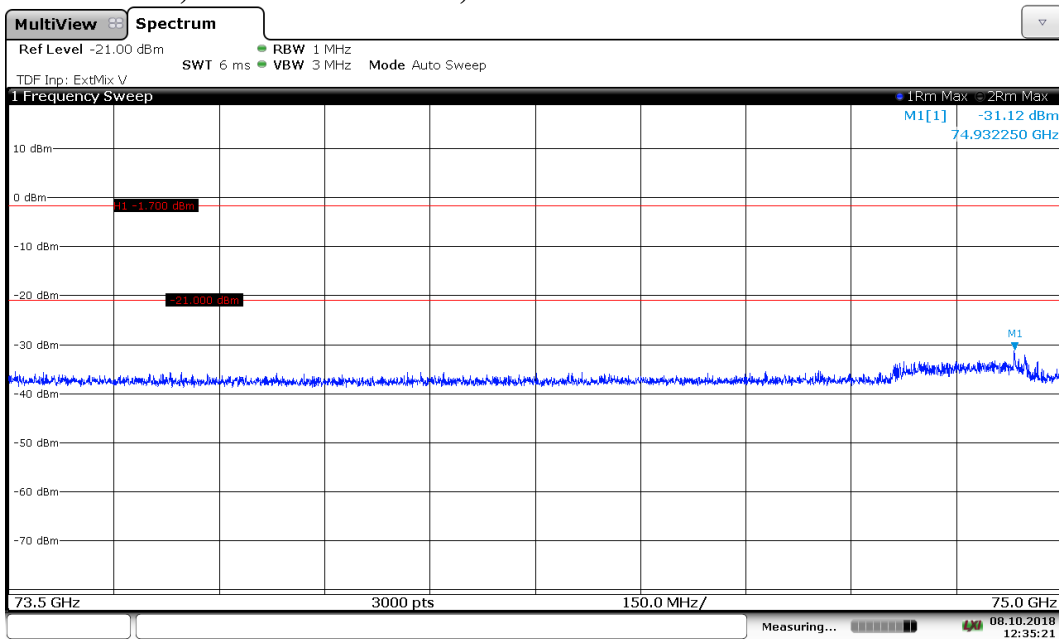
5.44. Mode 2, 55 GHz – 73.5 GHz, ANT HOR + VER, SigID USB



13:06:47 08.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

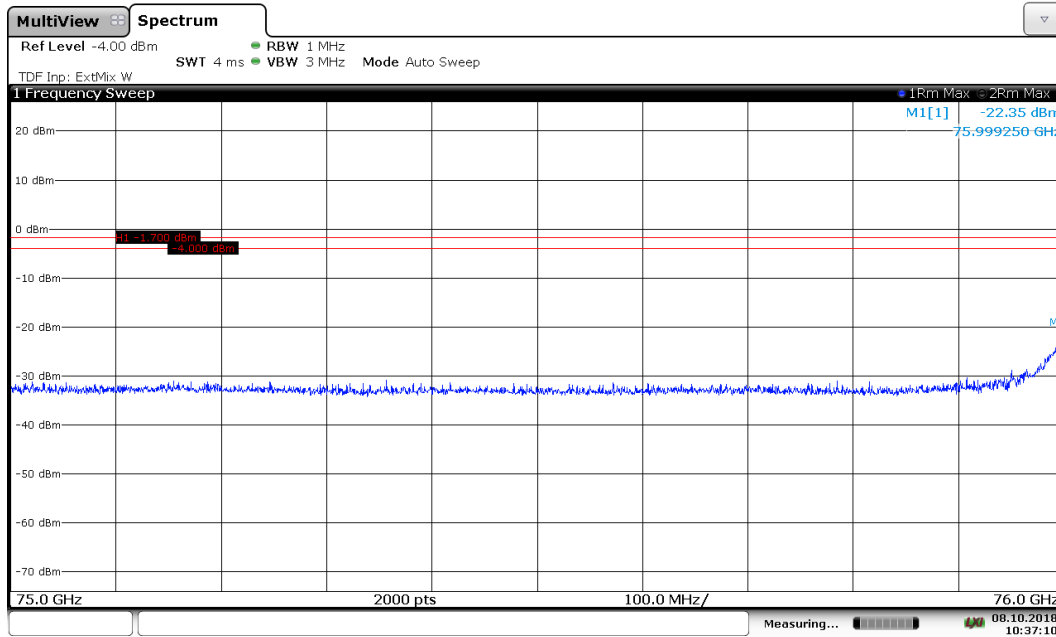
5.45. Mode 2, 73.5 GHz – 75 GHz, ANT HOR + VER



12:35:21 08.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line.

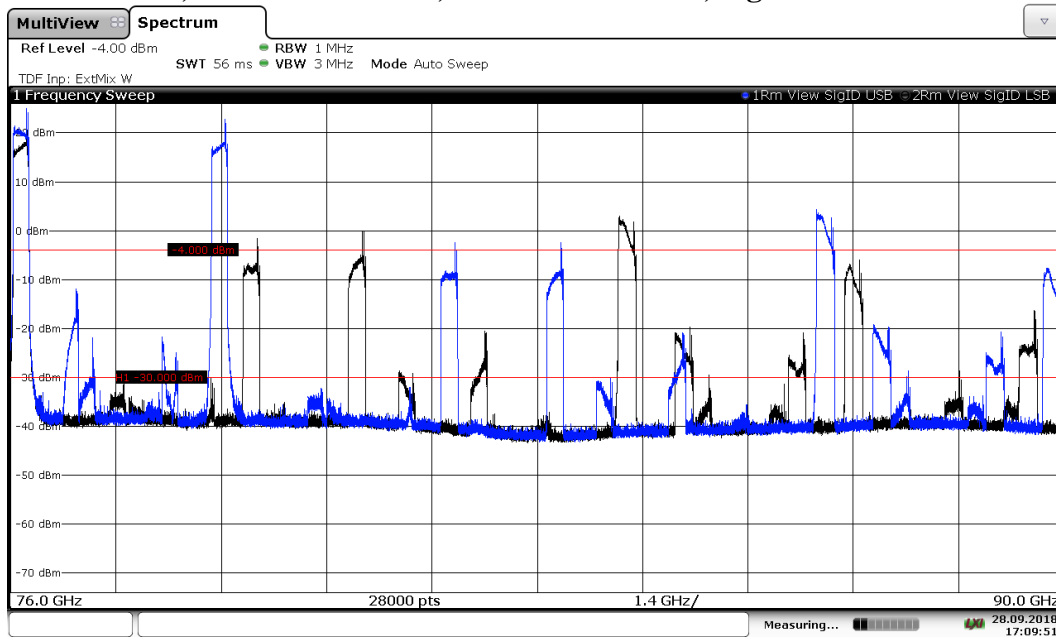
5.46. Mode 2, 75 GHz – 76 GHz, ANT HOR + VER



10:37:10 08.10.2018

* -4 dB is a ref line, not a limit line. Limit is the second line.

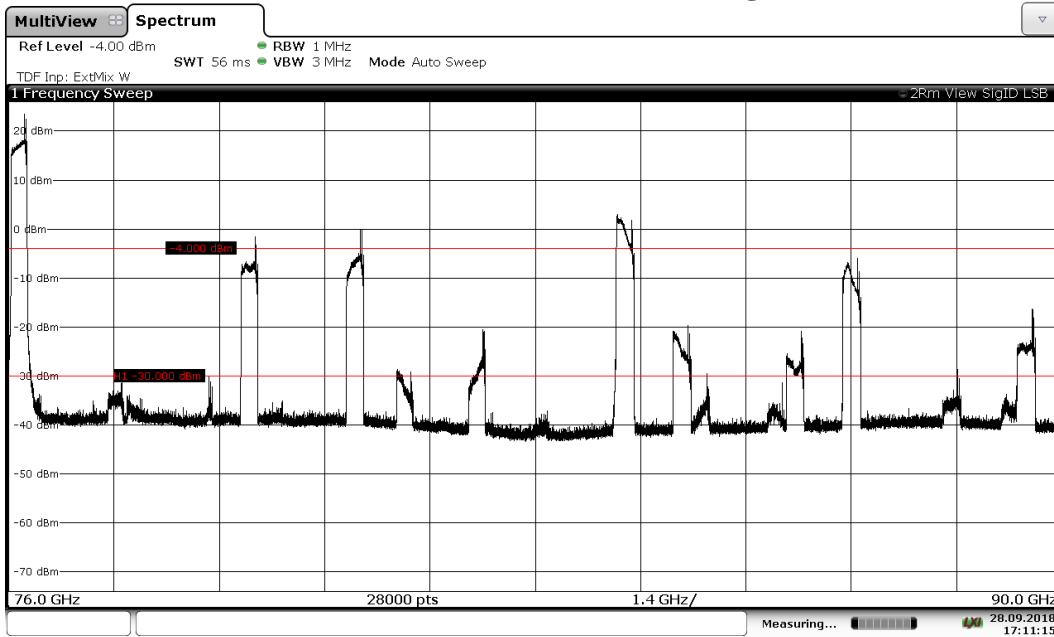
5.47. Mode 2, 76 GHz – 90 GHz, ANT HOR + VER, SigID USB + LSB



17:09:51 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Here you can see a real signal by 76.125 GHz. Limit is the second line.

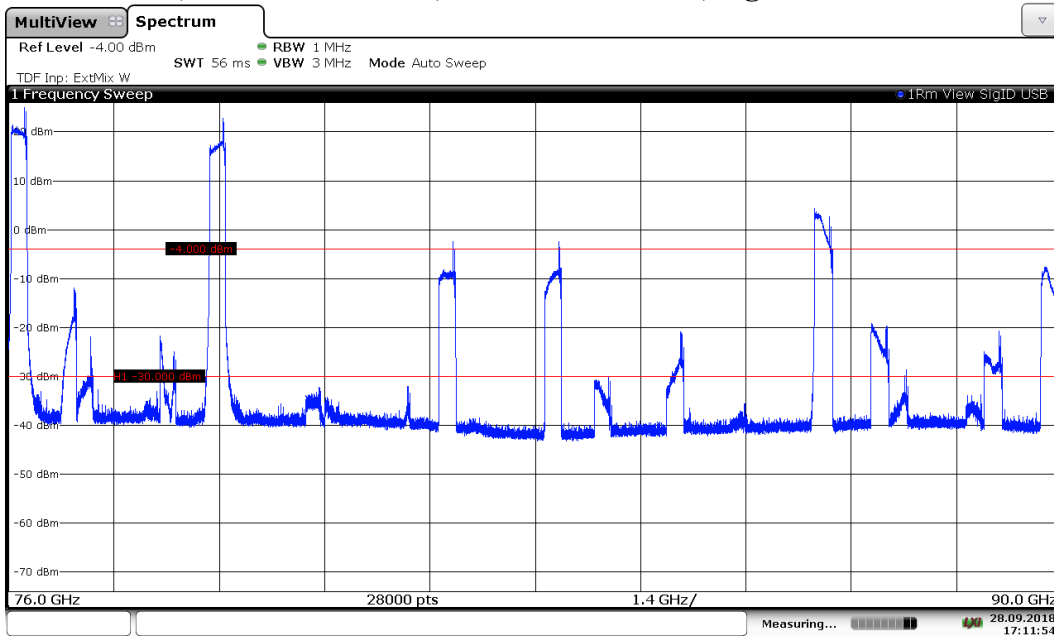
5.48. Mode 2, 76 GHz – 90 GHz, ANT HOR + VER, SigID LSB



17:11:16 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Here you can see a real signal by 76.125 GHz. Limit is the second line.

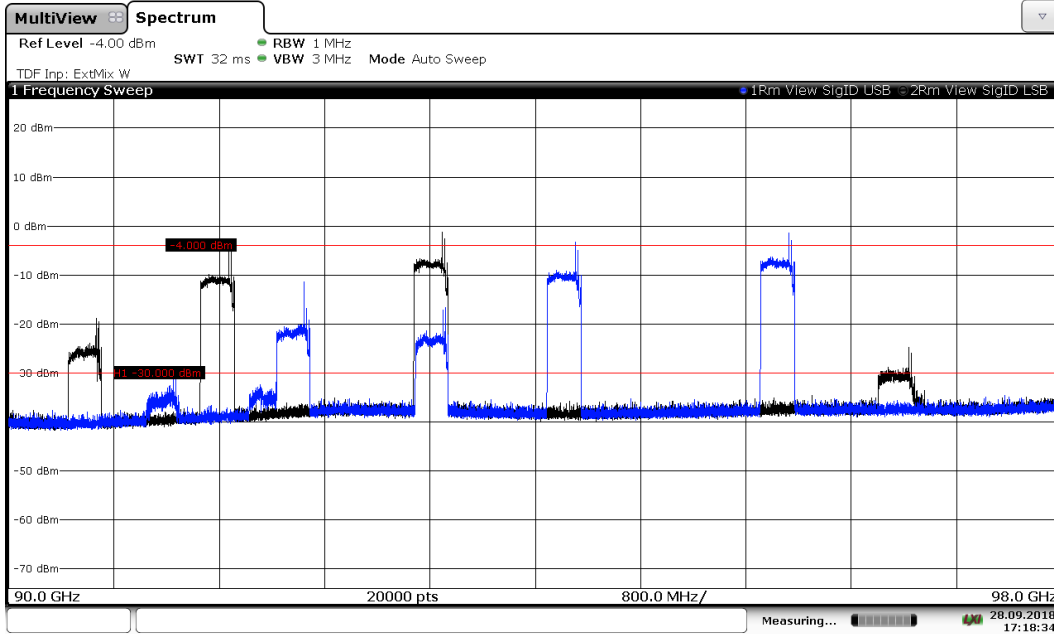
5.49. Mode 2, 76 GHz – 90 GHz, ANT HOR + VER, SigID USB



17:11:54 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Here you can see a real signal by 76.125 GHz. Limit is the second line.

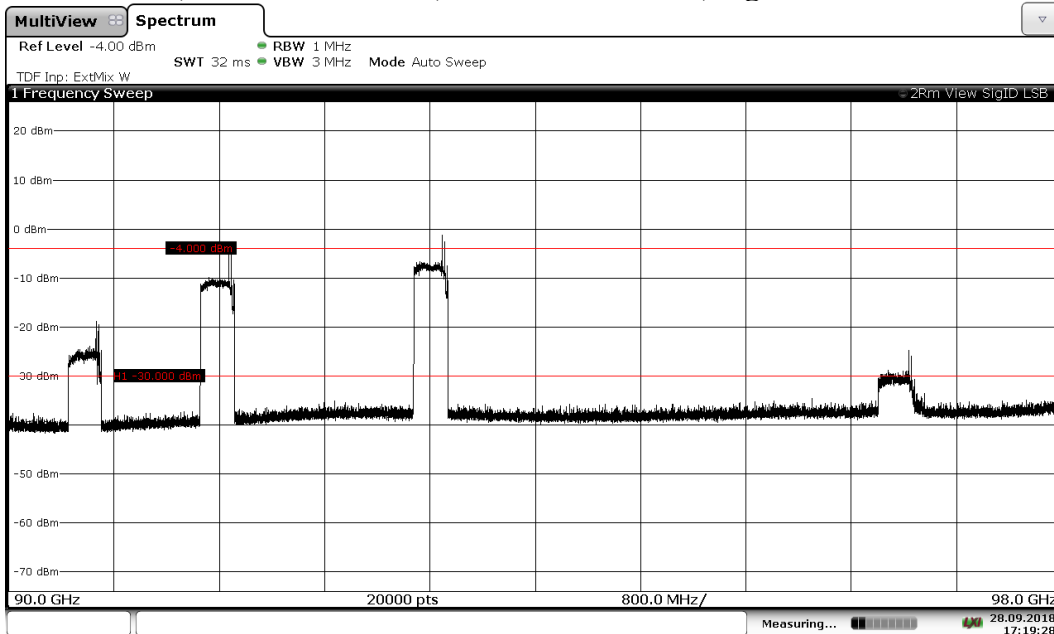
5.50. Mode 2, 90 GHz – 98 GHz, ANT HOR + VER, SigID USB + LSB



17:18:34 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

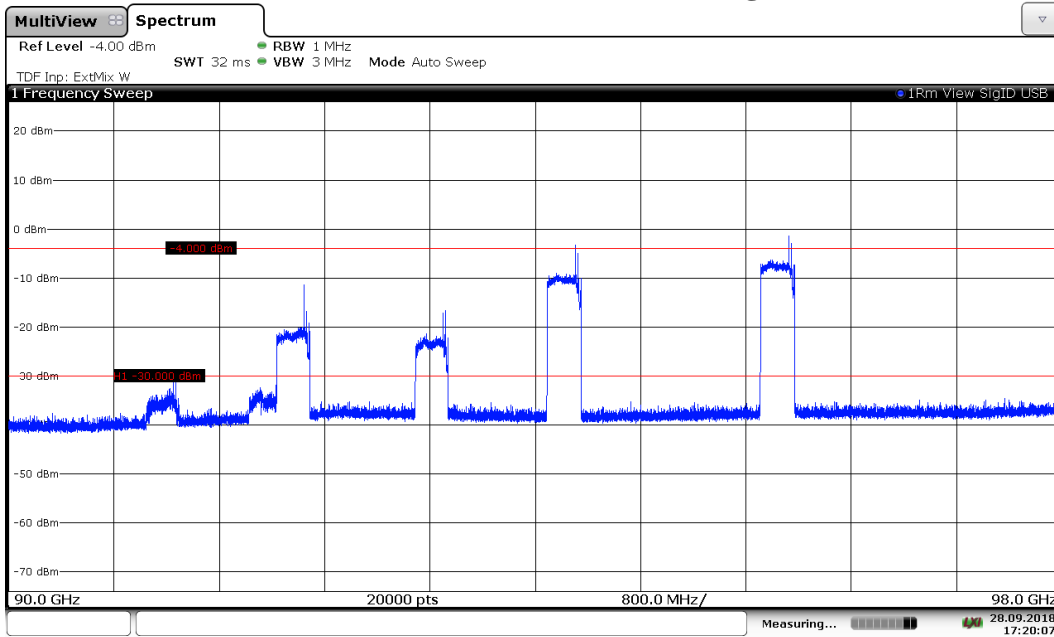
5.51. Mode 2, 90 GHz – 98 GHz, ANT HOR + VER, SigID LSB



17:19:29 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

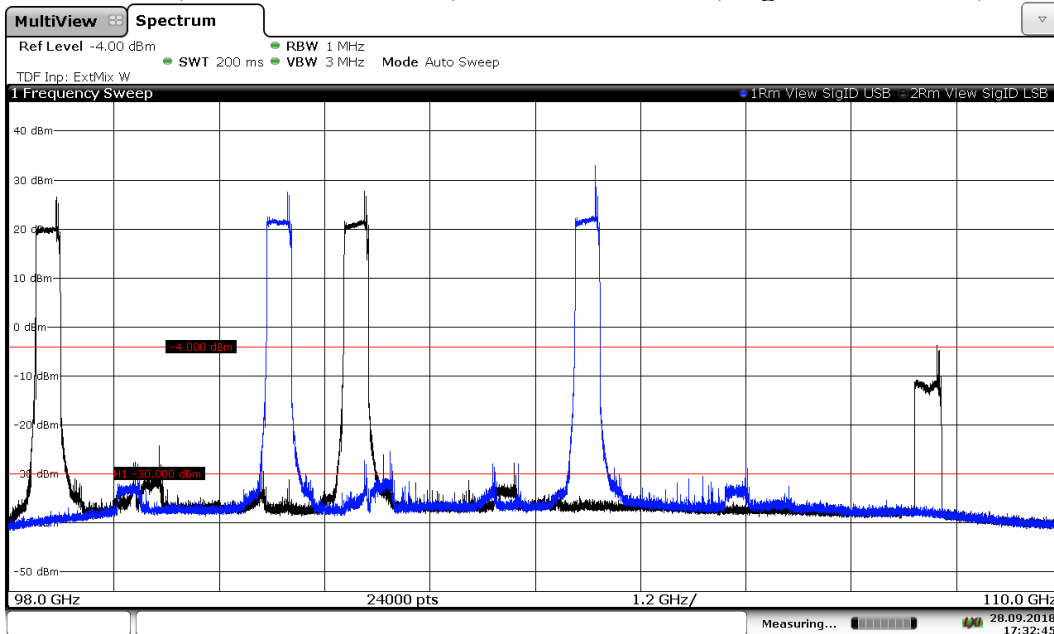
5.52. Mode 2, 90 GHz – 98 GHz, ANT HOR + VER, SigID USB



17:20:07 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

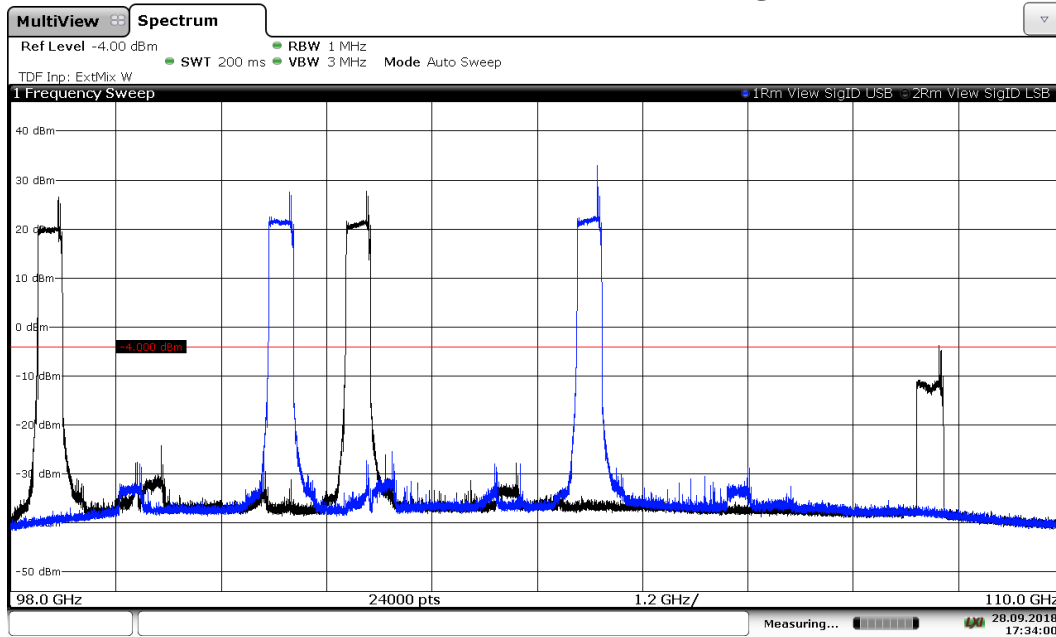
5.53. Mode 2, 98 GHz – 110 GHz, ANT HOR + VER, SigID USB + LSB, with limit line



17:32:45 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line. Limit is the second line.

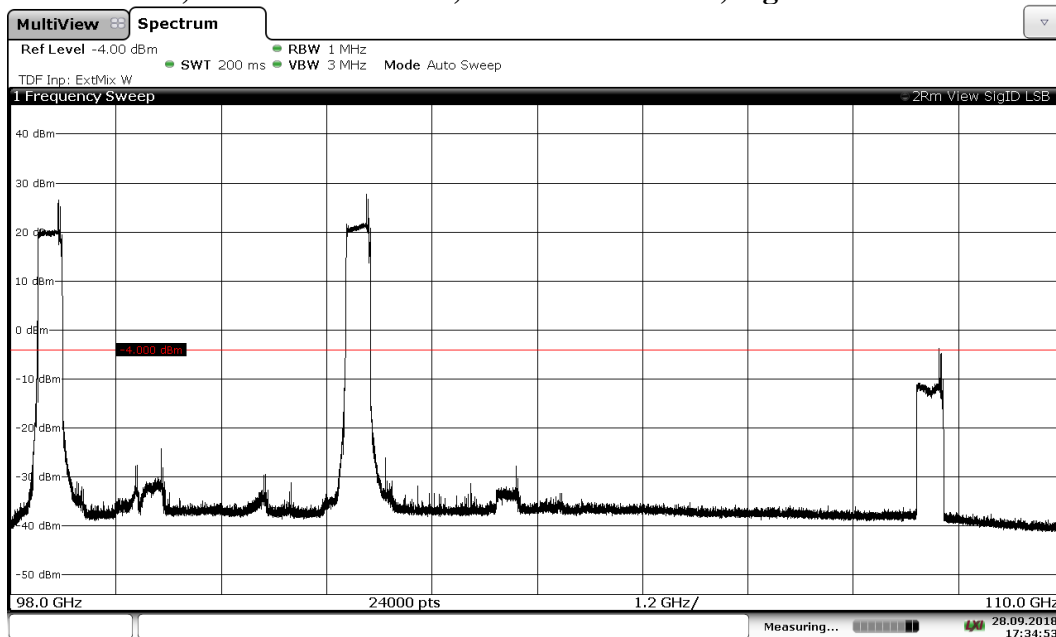
5.54. Mode 2, 98 GHz – 110 GHz, ANT HOR + VER, SigID USB + LSB, without limit line



17:34:00 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line.

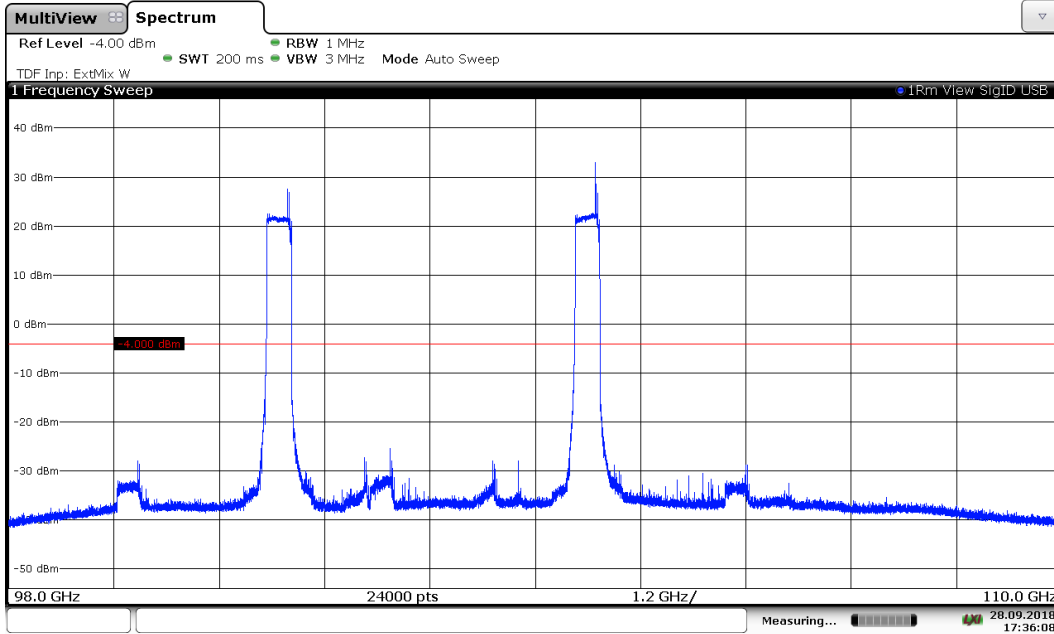
5.55. Mode 2, 98 GHz – 110 GHz, ANT HOR + VER, SigID LSB



17:34:53 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line.

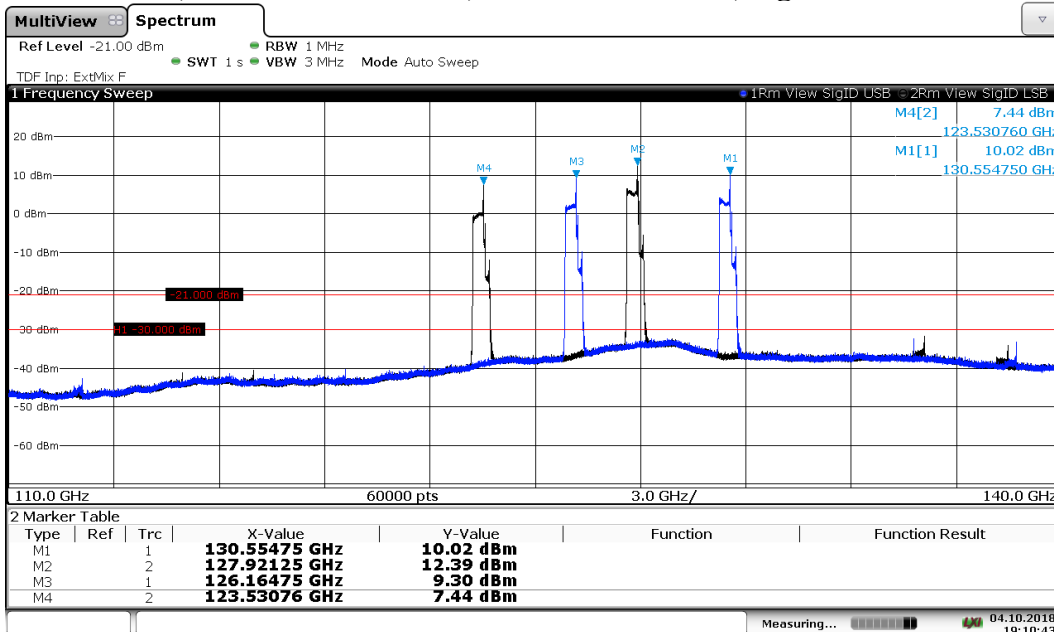
5.56. Mode 2, 98 GHz – 110 GHz, ANT HOR + VER, SigID USB



17:36:08 28.09.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -4 dB is a ref line, not a limit line.

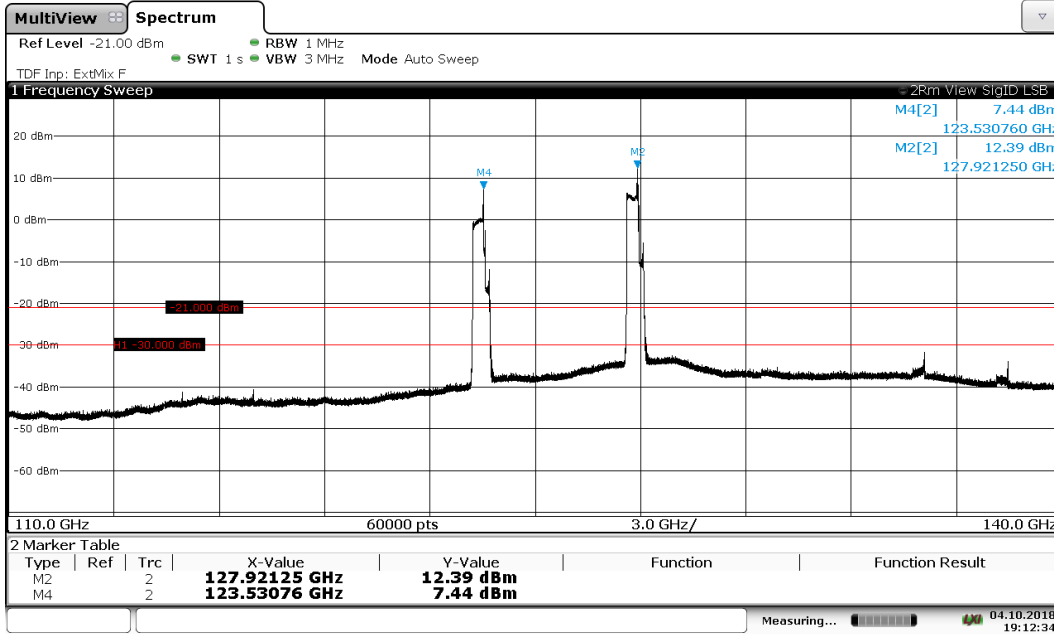
5.57. Mode 2, 110 GHz – 140 GHz, ANT HOR + VER, SigID USB + LSB



19:10:43 04.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

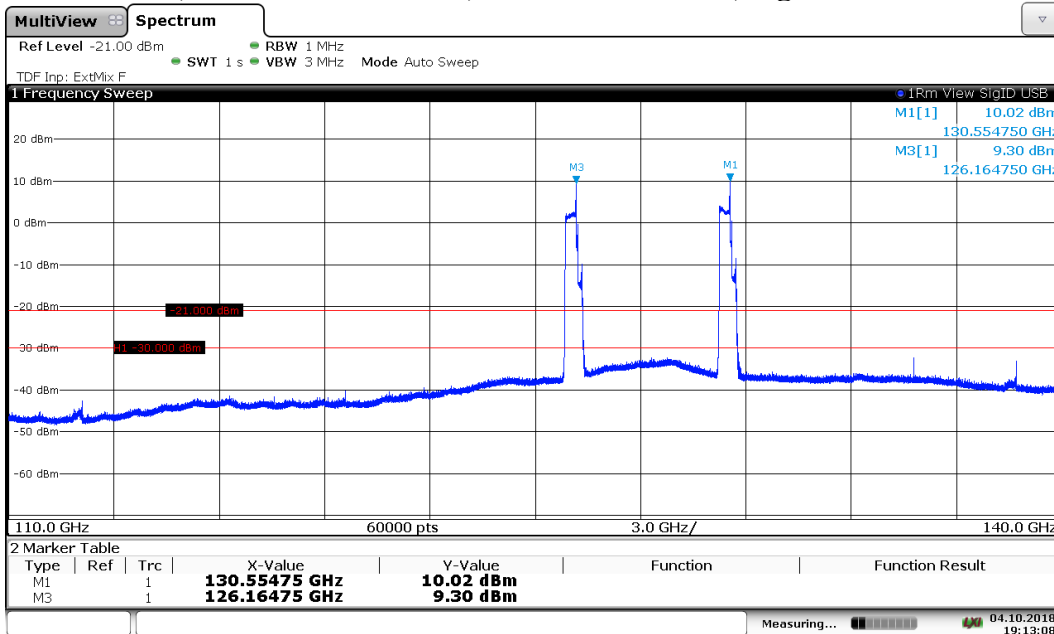
5.58. Mode 2, 110 GHz – 140 GHz, ANT HOR + VER, SigID LSB



19:12:34 04.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

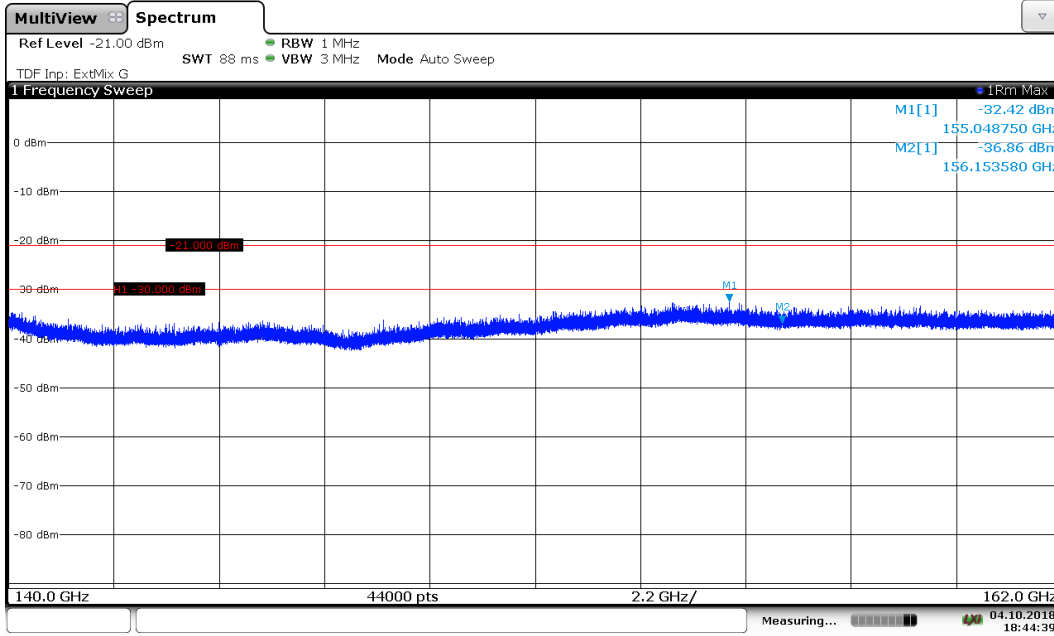
5.59. Mode 2, 110 GHz – 140 GHz, ANT HOR + VER, SigID USB



19:13:08 04.10.2018

* Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSB traces have the same position on the frequency axis. See subsection 5.8.6. in the main report. -21 dB is a ref line, not a limit line. Limit is the second line.

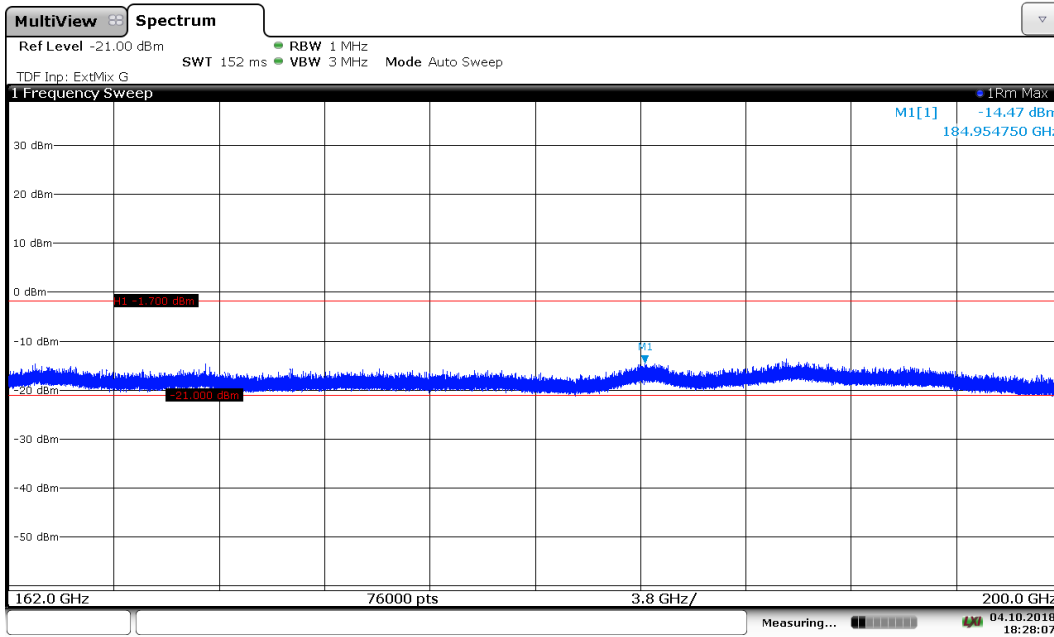
5.60. Mode 2, 140 GHz – 162 GHz, ANT HOR + VER



18:44:40 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line.

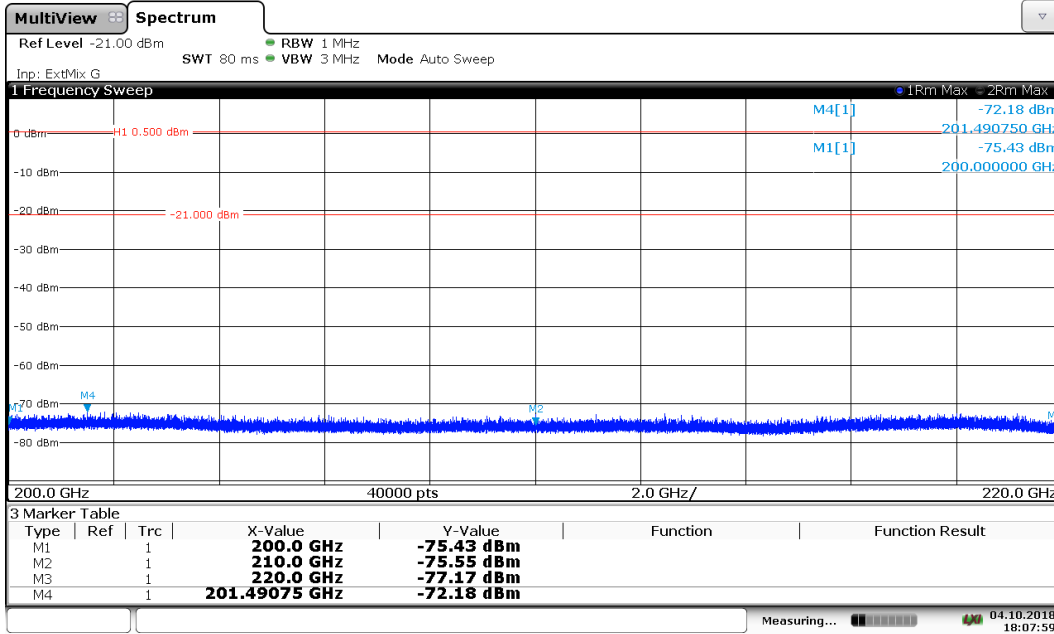
5.61. Mode 2, 162 GHz – 200 GHz, ANT HOR + VER



18:28:07 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line.

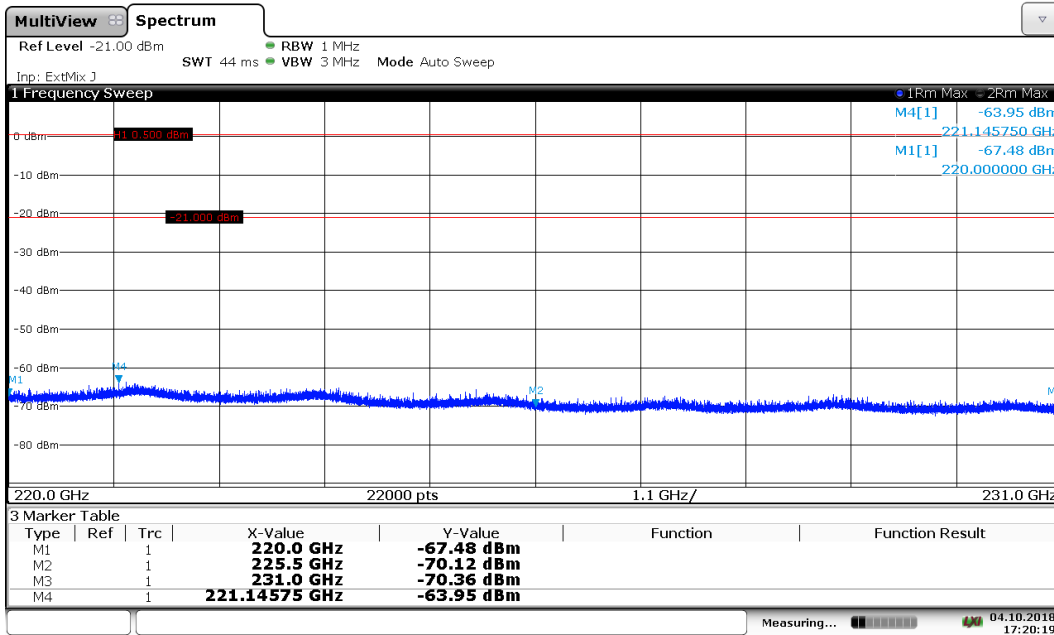
5.62. Mode 2, 200 GHz – 220 GHz, ANT HOR + VER



18:07:59 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line. See subsection 5.8.6. in the main report.

5.63. Mode 2, 220 GHz – 231 GHz, ANT HOR + VER

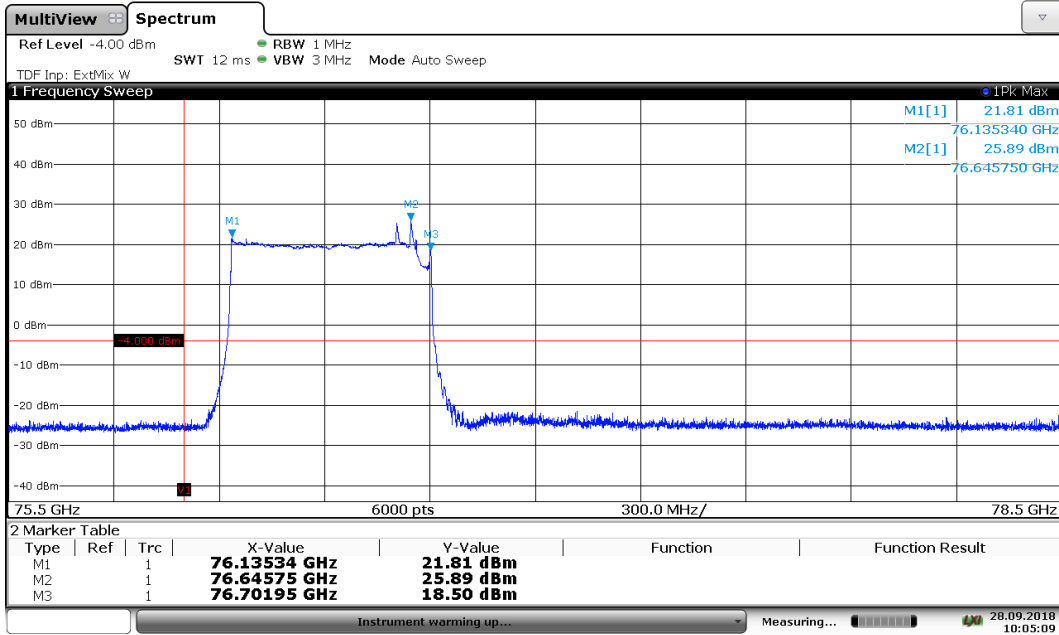


17:20:20 04.10.2018

* -21 dB is a ref line, not a limit line. Limit is the second line. See subsection 5.8.6. in the main report.

6. Frequency stability

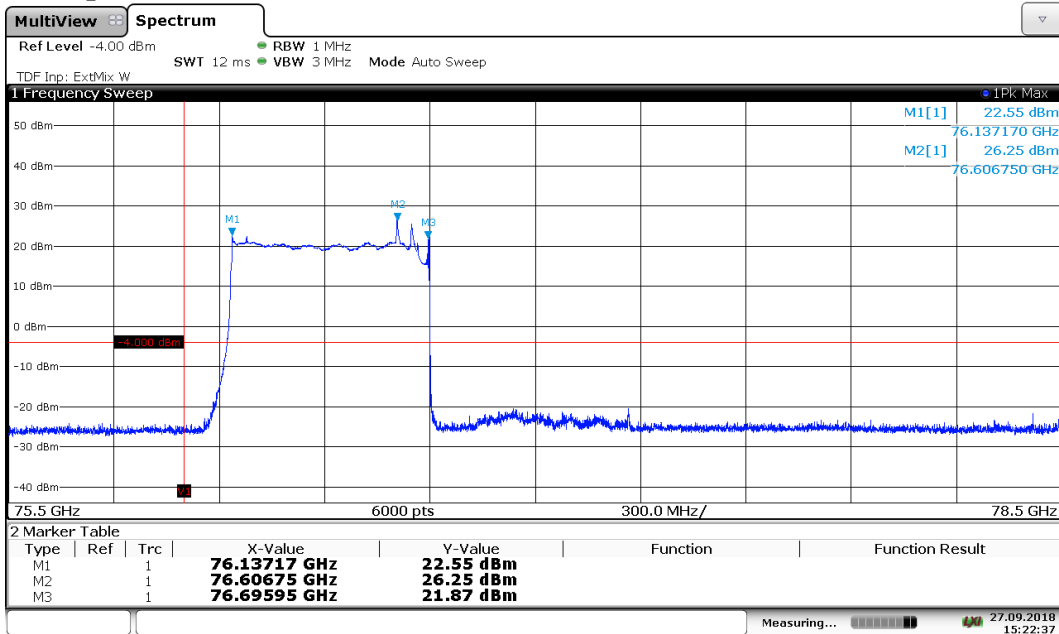
6.1. Op. Mode 1, T_{nom}/V_{nom}



10:05:10 28.09.2018

* -4 dB is a ref line, not a limit line.

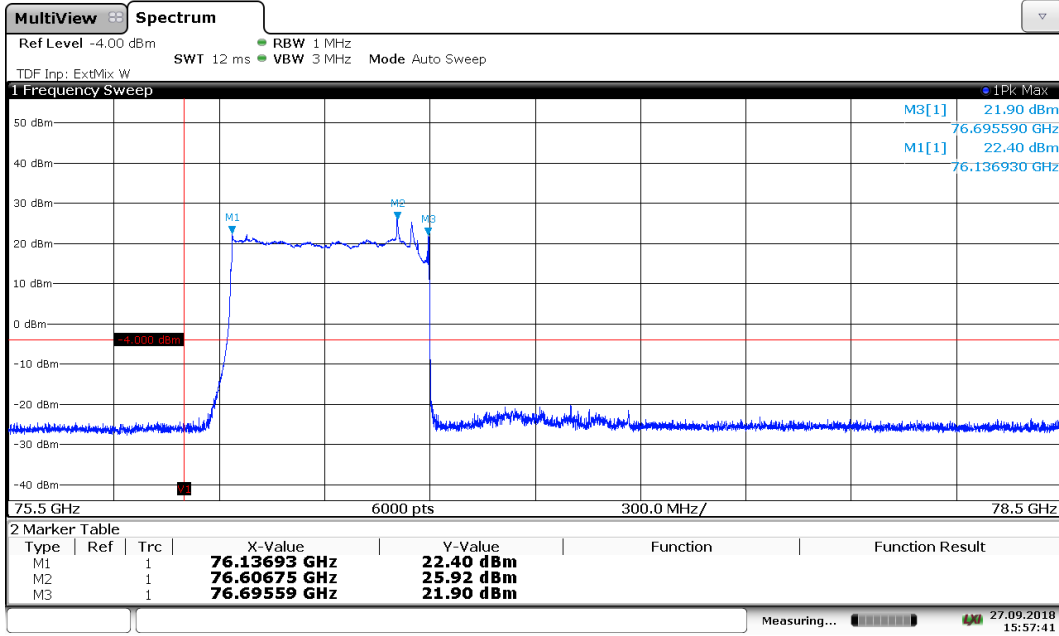
6.2. Op. Mode 1, T_{min}/V_{min}



15:22:37 27.09.2018

* -4 dB is a ref line, not a limit line.

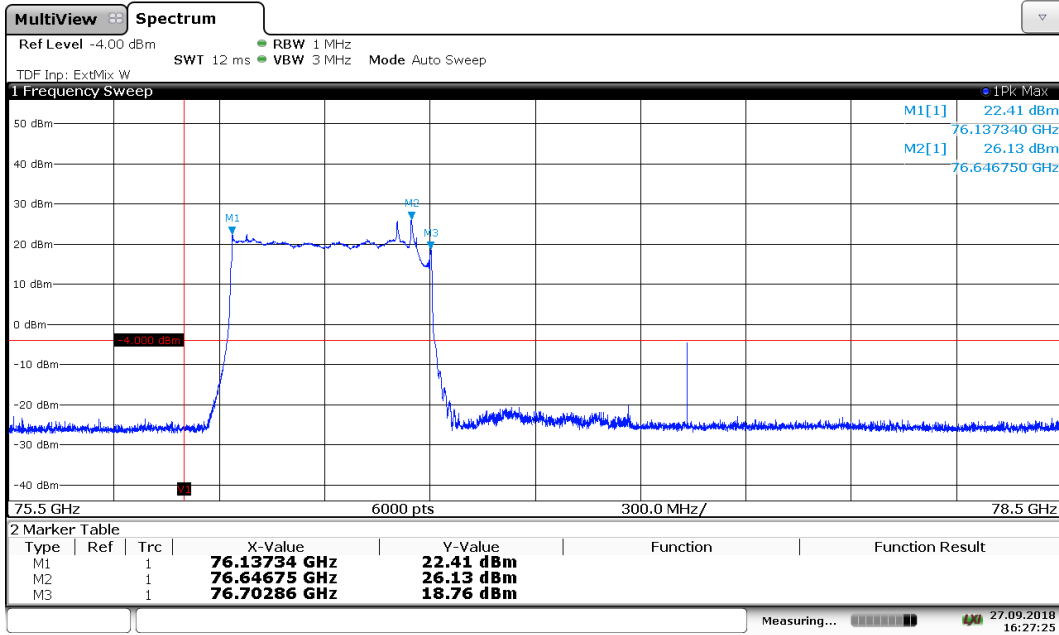
6.3. Op. Mode 1, T_{min}/V_{nom}



15:57:41 27.09.2018

* -4 dB is a ref line, not a limit line.

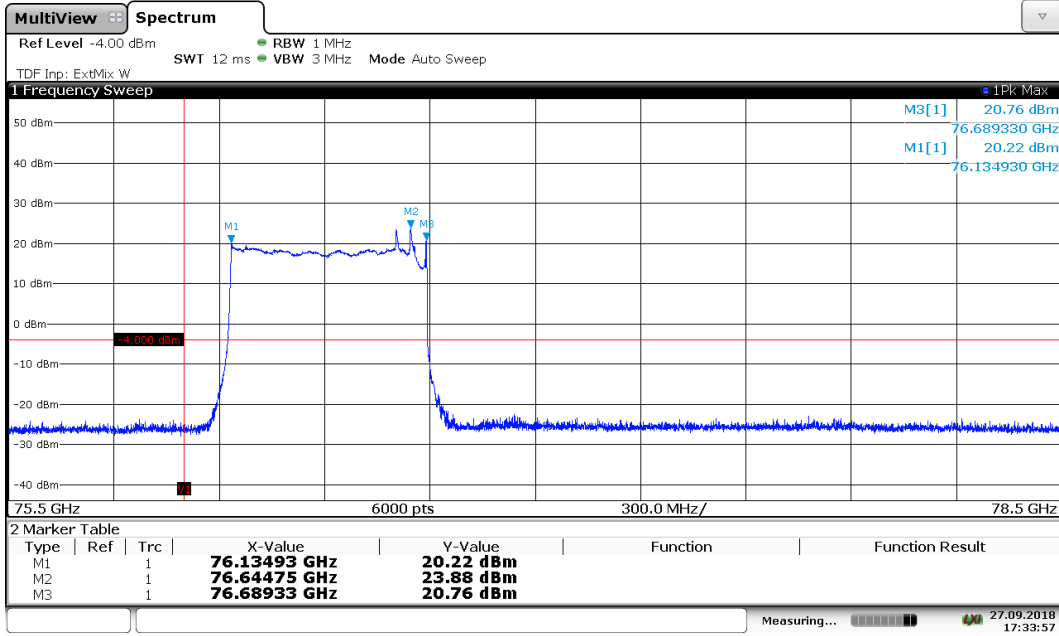
6.4. Op. Mode 1, T_{min}/V_{max}



16:27:26 27.09.2018

* -4 dB is a ref line, not a limit line.

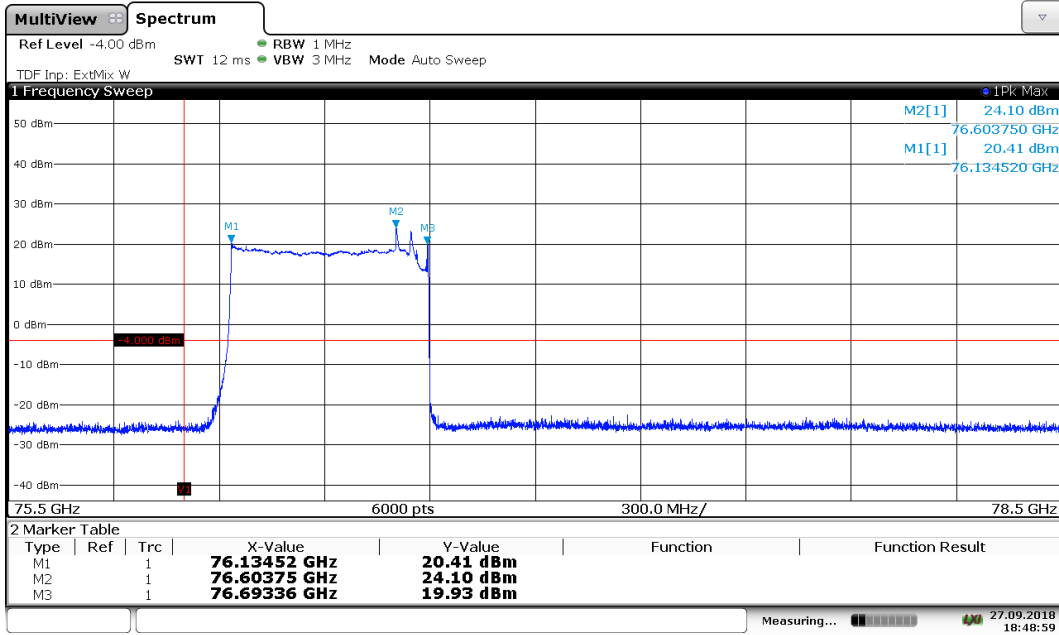
6.5. Op. Mode 1, T_{max}/V_{min}



17:33:57 27.09.2018

* -4 dB is a ref line, not a limit line.

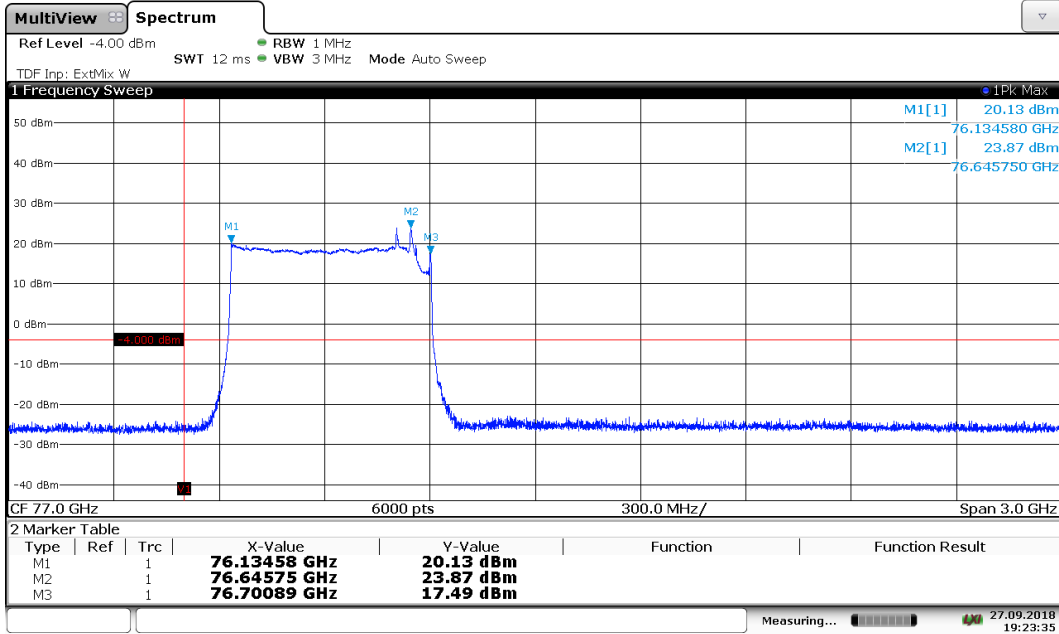
6.6. Op. Mode 1, T_{max}/V_{nom}



18:48:59 27.09.2018

* -4 dB is a ref line, not a limit line.

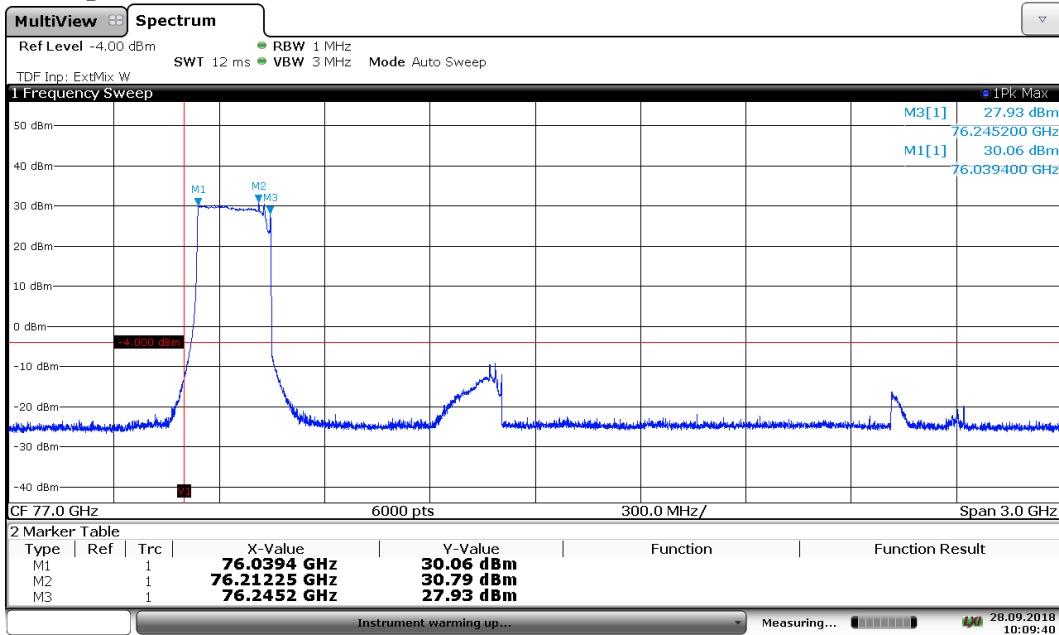
6.7. Op. Mode 1, T_{max}/V_{max}



19:23:35 27.09.2018

* -4 dB is a ref line, not a limit line.

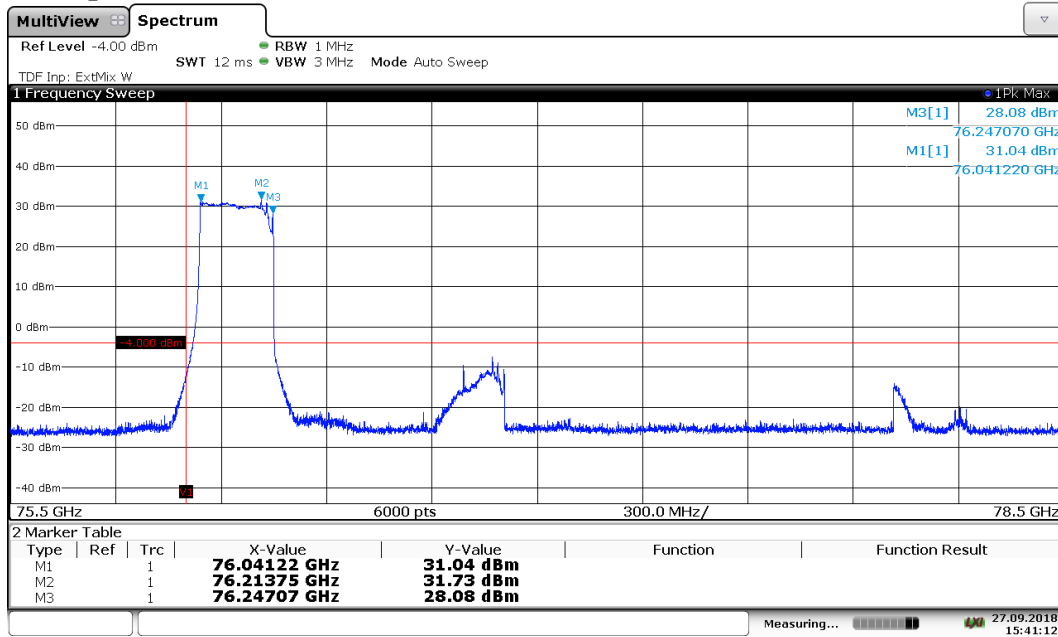
6.8. Op. Mode 2, FB Low, T_{nom}/V_{nom}



10:09:40 28.09.2018

* -4 dB is a ref line, not a limit line.

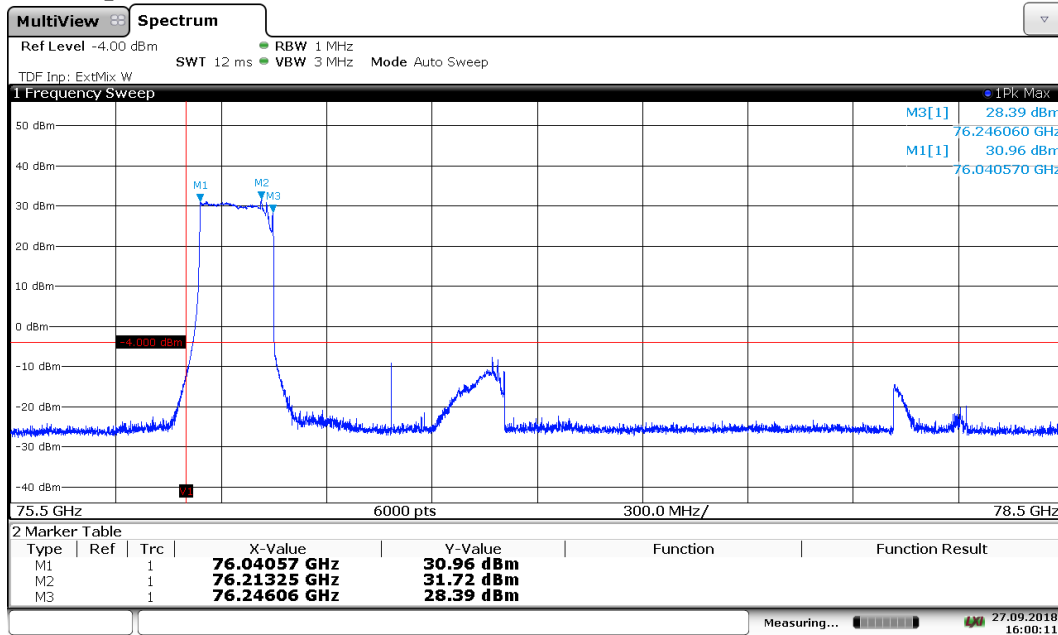
6.9. Op. Mode 2, FB Low, T_{min}/V_{min}



15:41:12 27.09.2018

* -4 dB is a ref line, not a limit line.

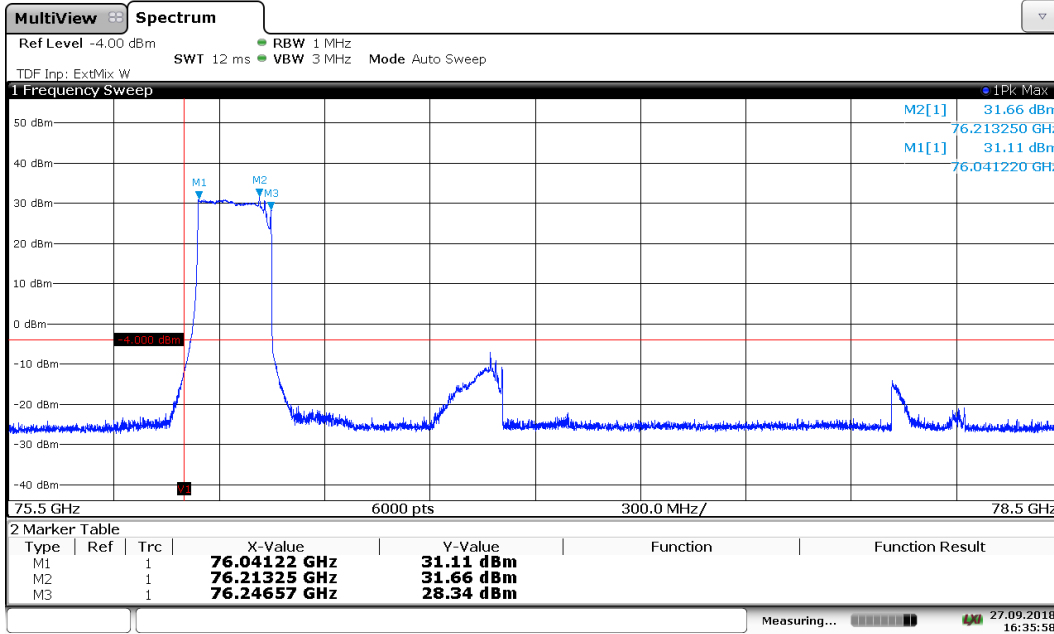
6.10. Op. Mode 2, FB Low, T_{min}/V_{nom}



16:00:12 27.09.2018

* -4 dB is a ref line, not a limit line.

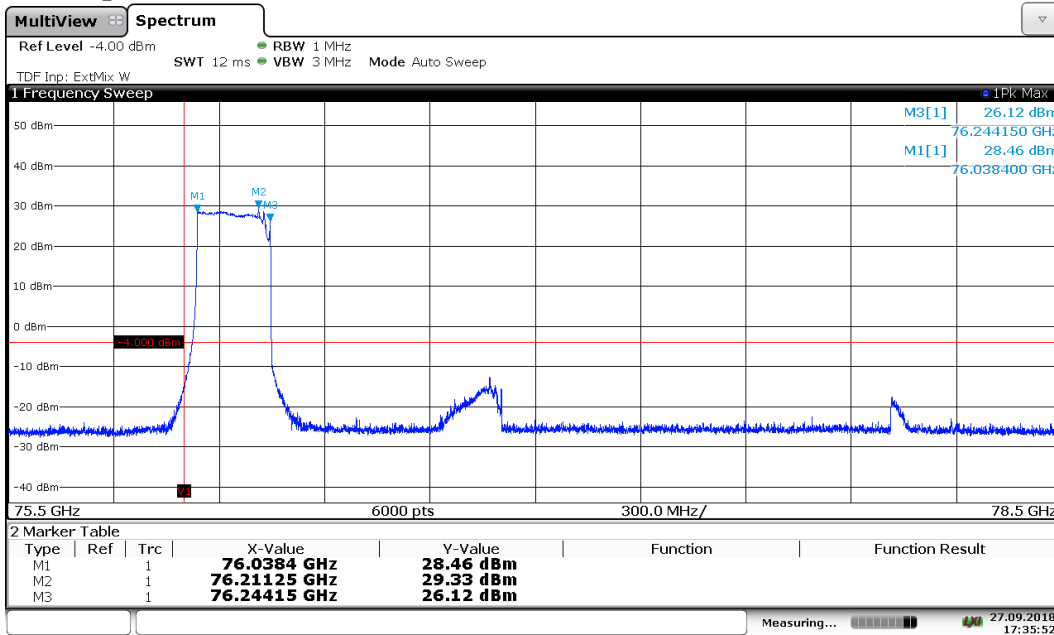
6.11. Op. Mode 2, FB Low, T_{min}/V_{max}



16:35:59 27.09.2018

* -4 dB is a ref line, not a limit line.

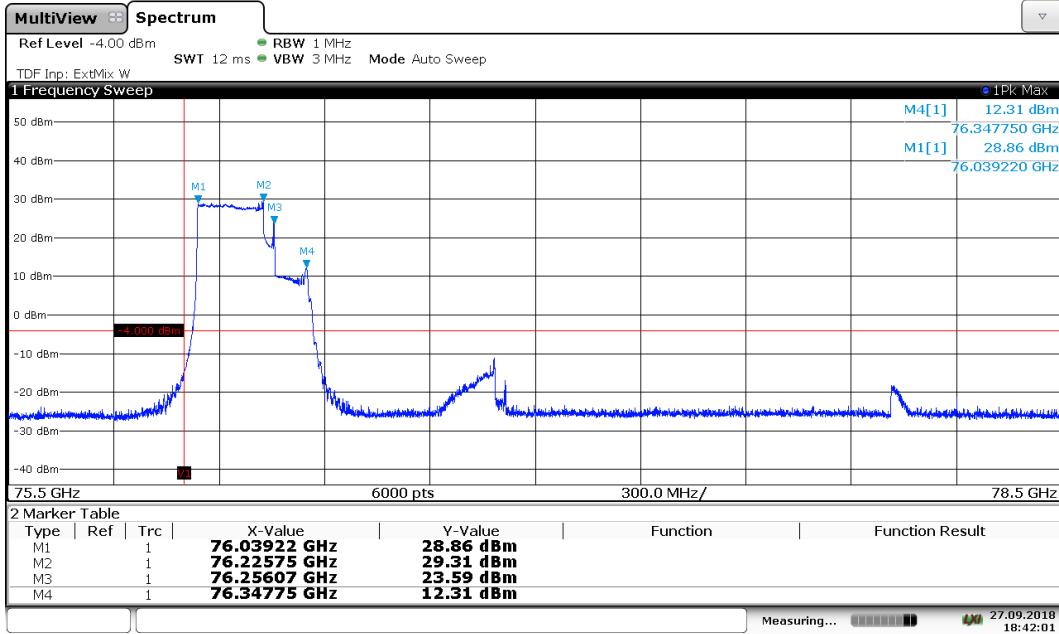
6.12. Op. Mode 2, FB Low, T_{max}/V_{min}



17:35:52 27.09.2018

* -4 dB is a ref line, not a limit line.

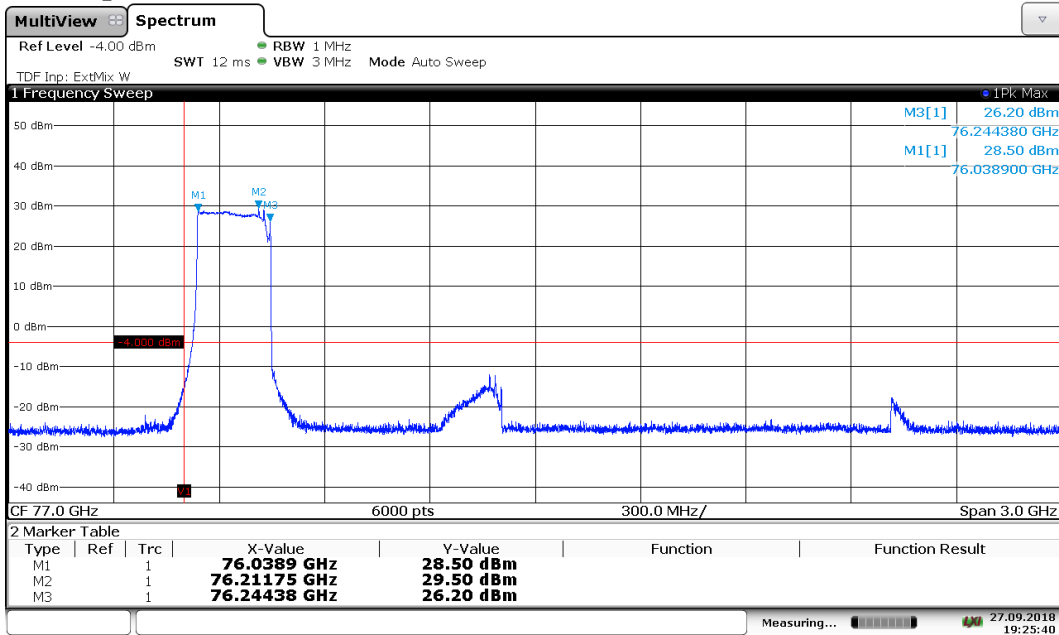
6.13. Op. Mode 2, FB Low, T_{max}/V_{nom}



18:42:01 27.09.2018

* -4 dB is a ref line, not a limit line.

6.14. Op. Mode 2, FB Low, T_{max}/V_{max}



19:25:40 27.09.2018

* -4 dB is a ref line, not a limit line.