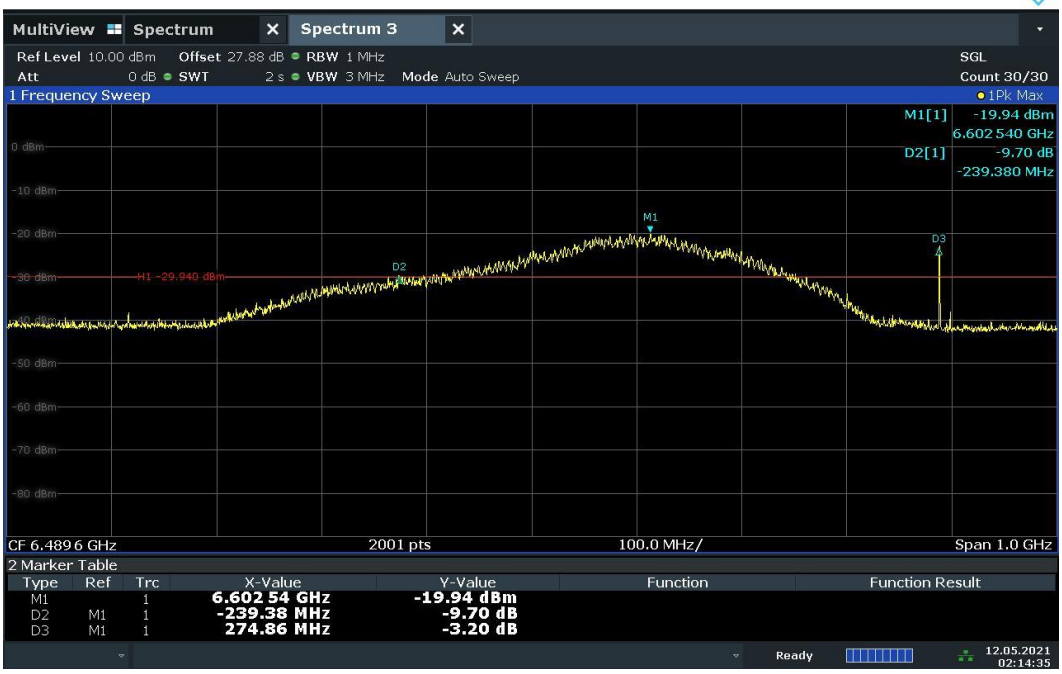
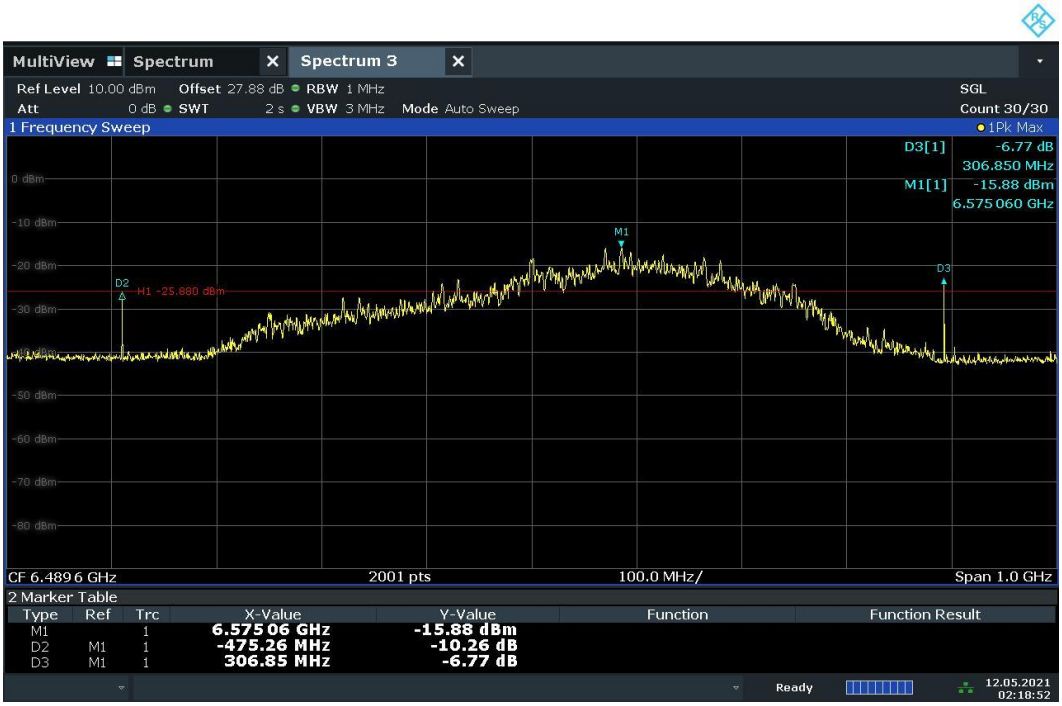
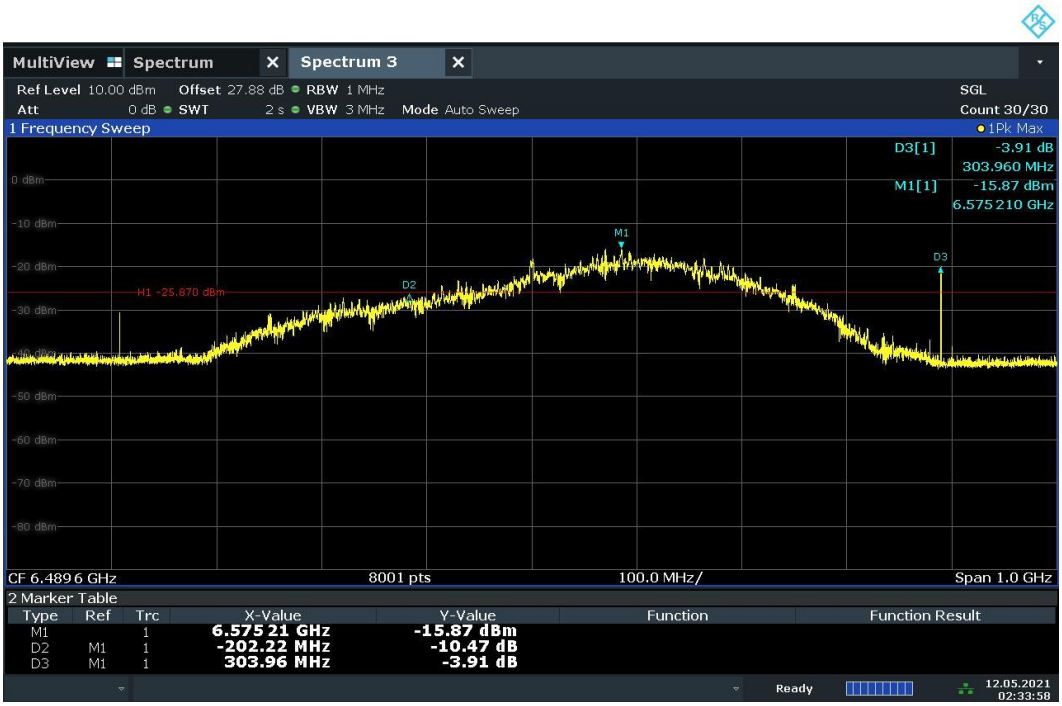
Plot 7-41. BANDWIDTH Plot – CH.5 – SP1 – Preamble 12



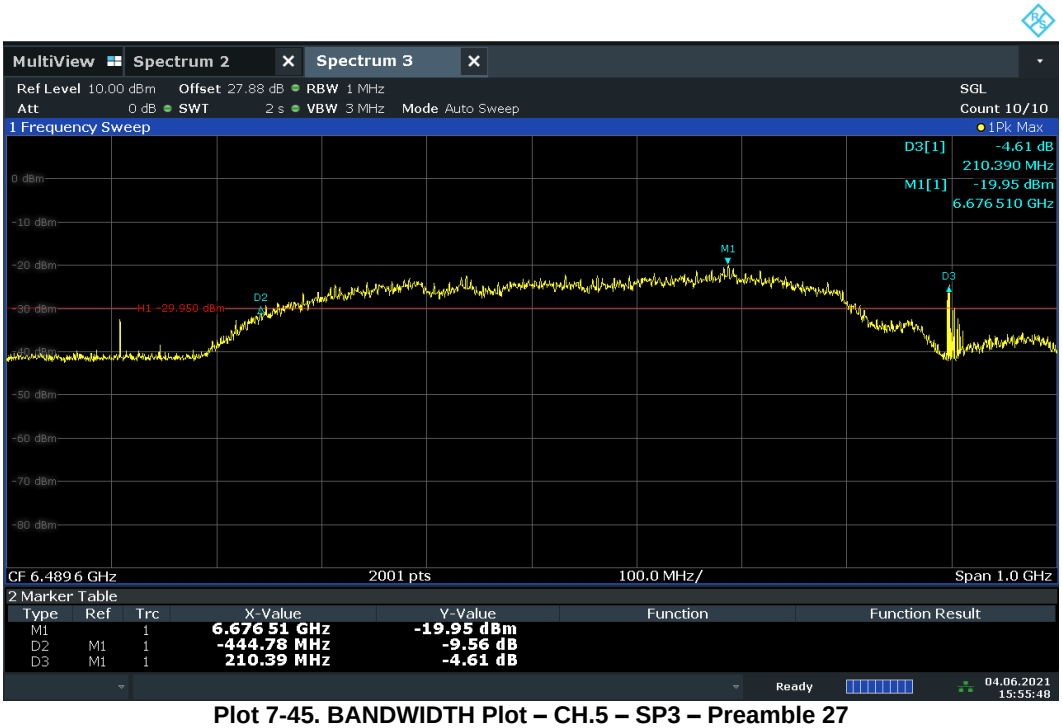
Plot 7-42. BANDWIDTH Plot – CH.5 – SP3 – Preamble 12



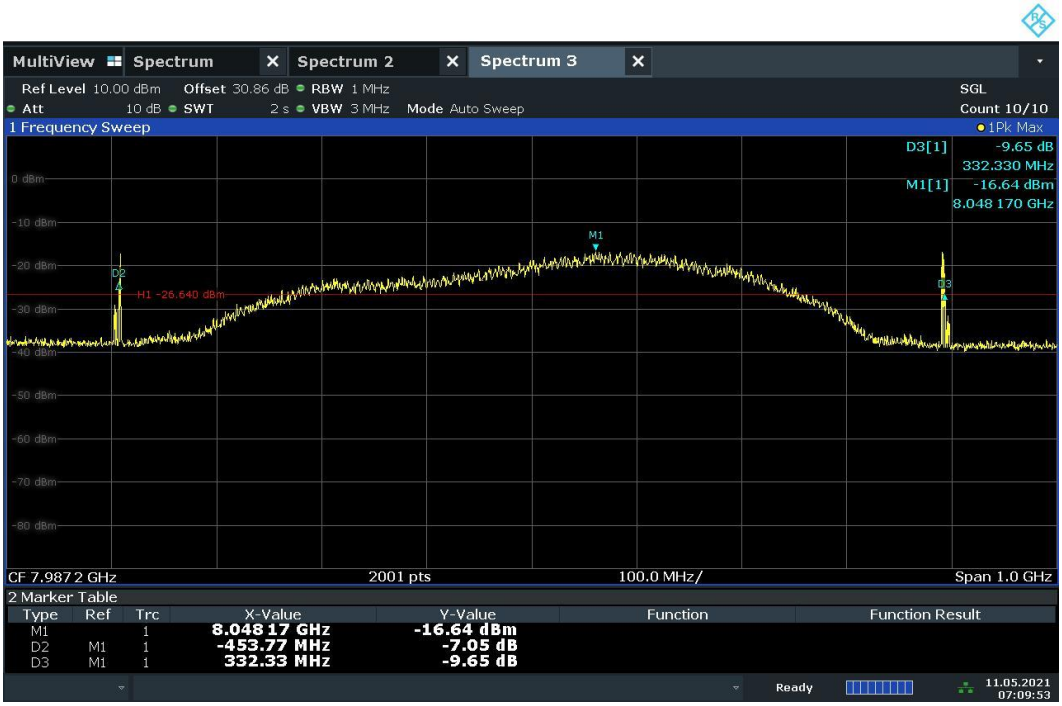
Plot 7-43. BANDWIDTH Plot – CH.5 - SP0 – Preamble 27



Plot 7-44. BANDWIDTH Plot – CH.5 – SP1 – Preamble 27

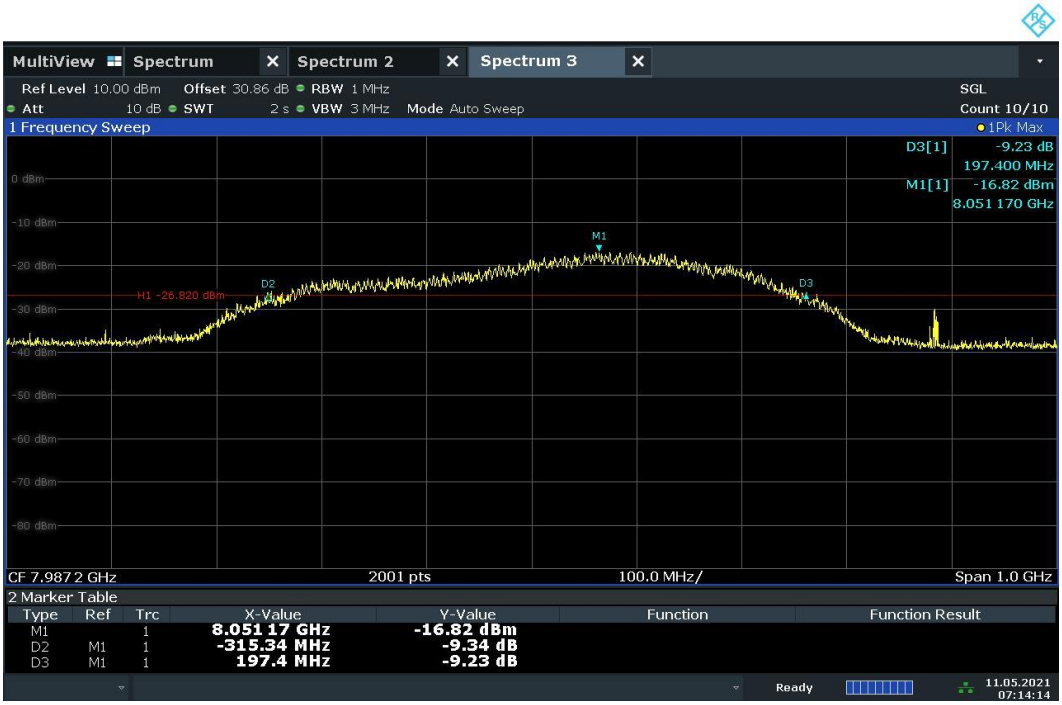


Plot 7-45. BANDWIDTH Plot – CH.5 – SP3 – Preamble 27

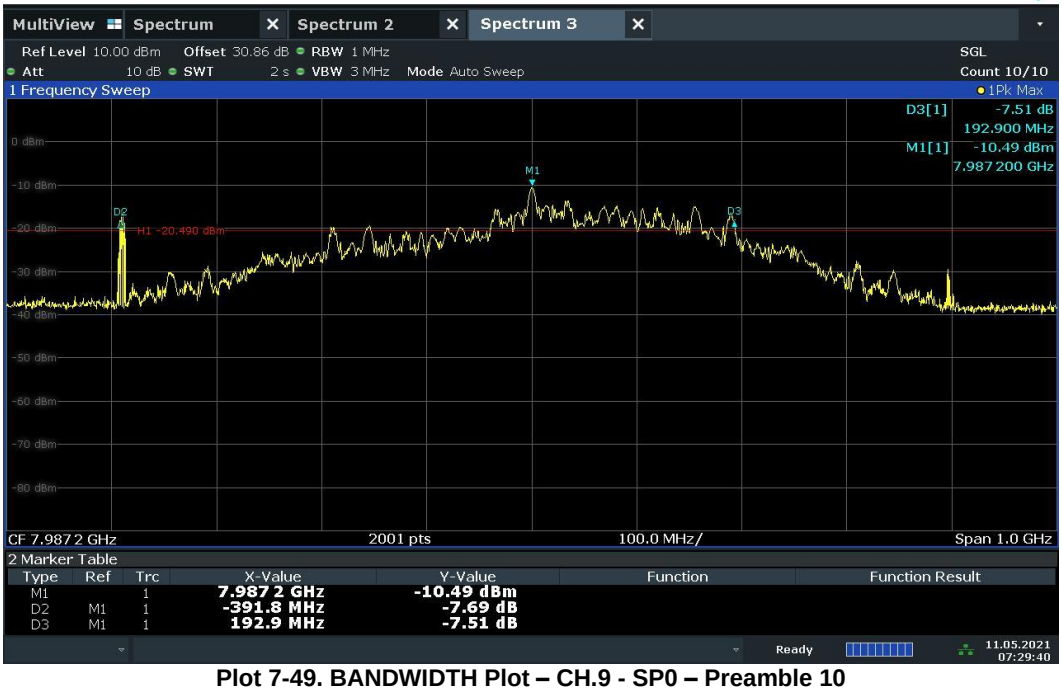


Plot 7-46. BANDWIDTH Plot – CH.9 - SP0 – Preamble 9

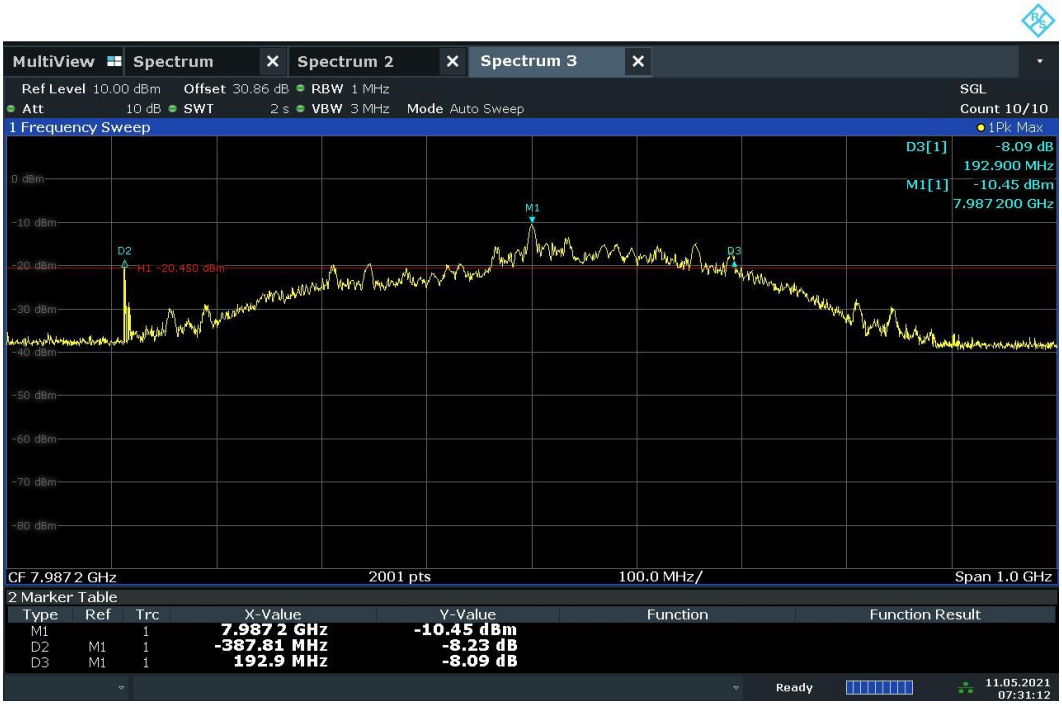
Plot 7-47. BANDWIDTH Plot – CH.9 – SP1 – Preamble 9



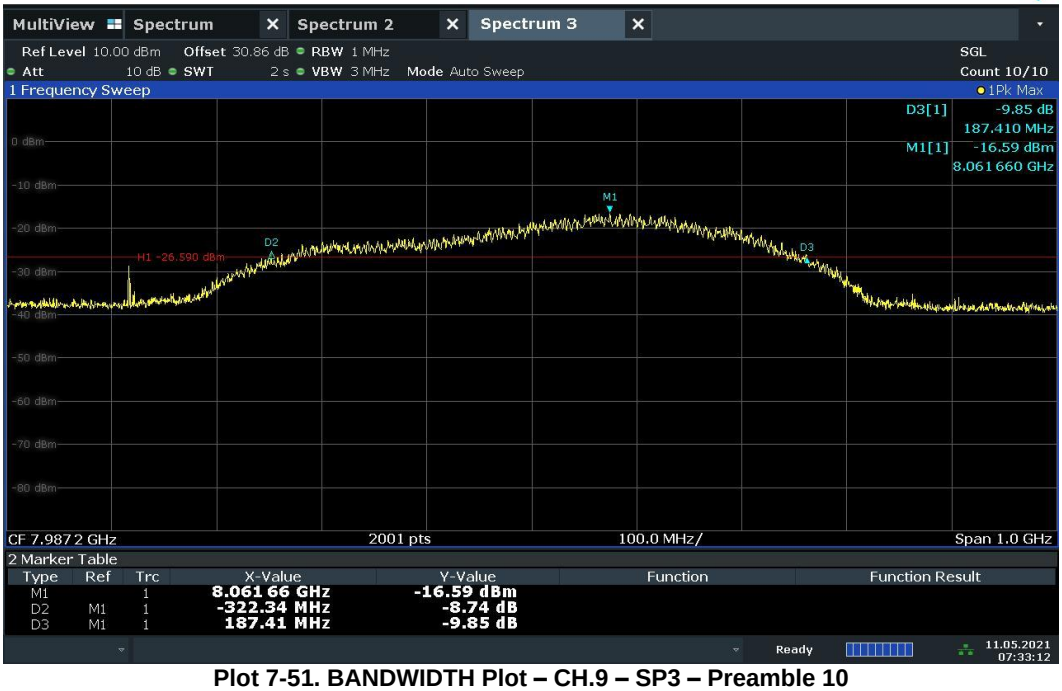
Plot 7-48. BANDWIDTH Plot – CH.9 – SP3 – Preamble 9



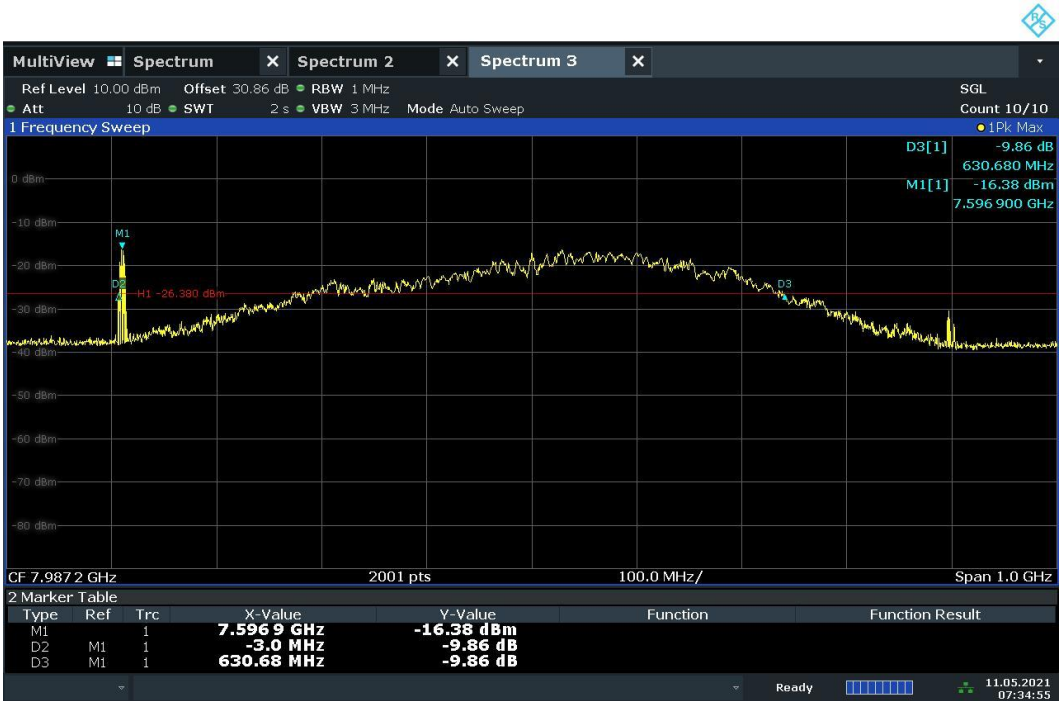
Plot 7-49. BANDWIDTH Plot – CH.9 - SP0 – Preamble 10



Plot 7-50. BANDWIDTH Plot – CH.9 – SP1 – Preamble 10

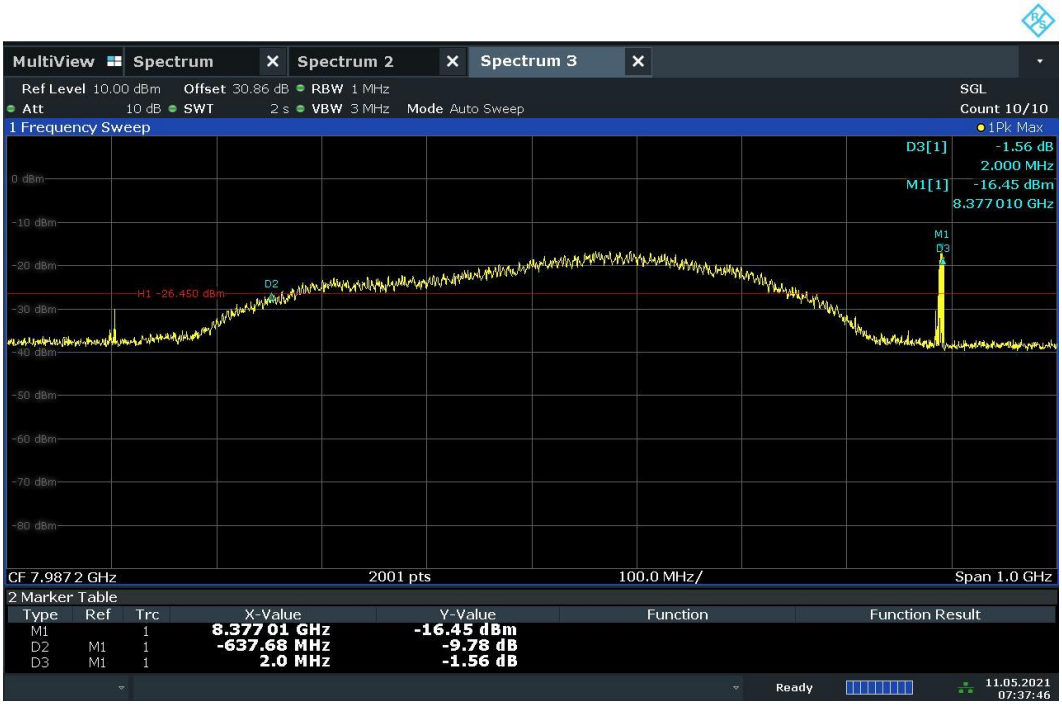


Plot 7-51. BANDWIDTH Plot – CH.9 – SP3 – Preamble 10

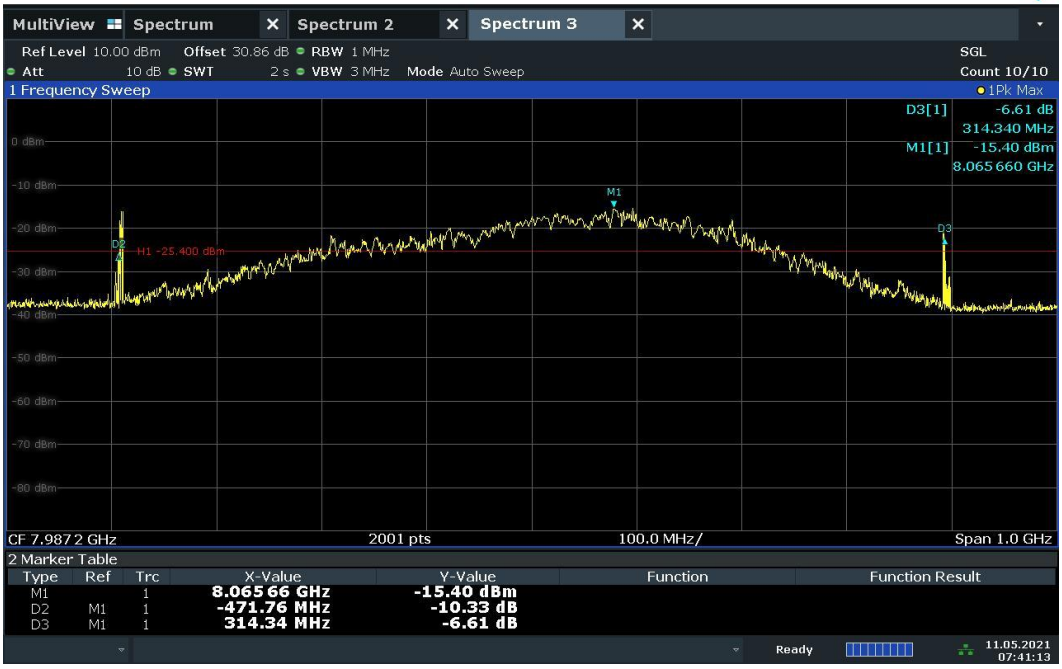


Plot 7-52. BANDWIDTH Plot – CH.9 - SP0 – Preamble 11

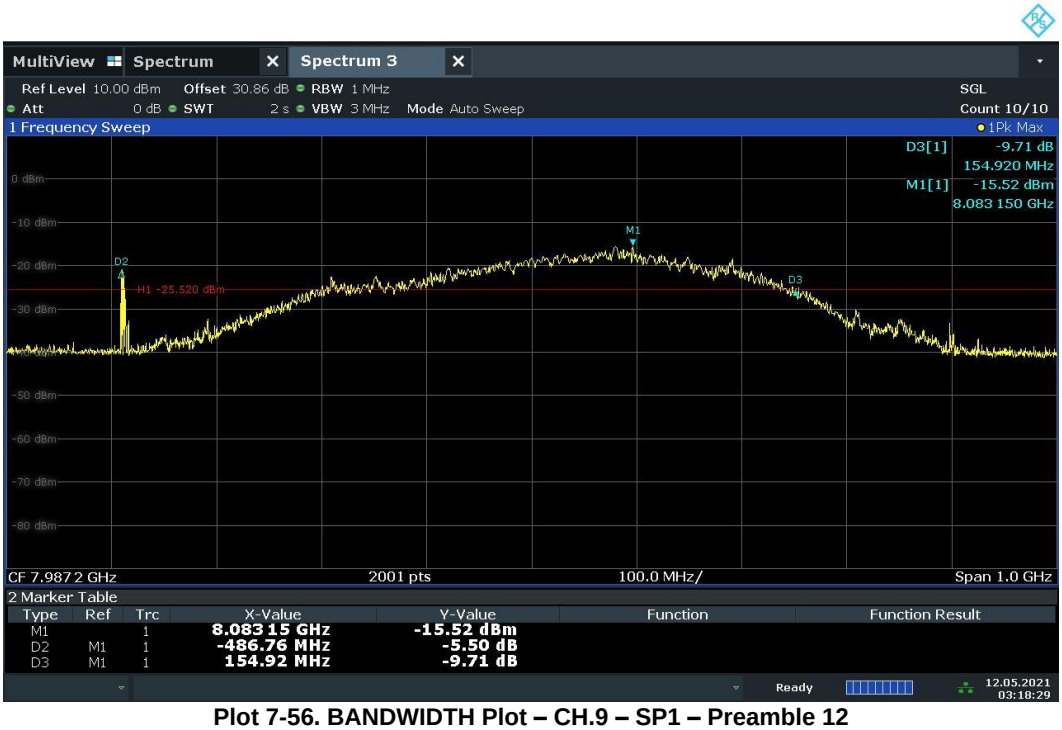
Plot 7-53. BANDWIDTH Plot – CH.9 – SP1 – Preamble 11



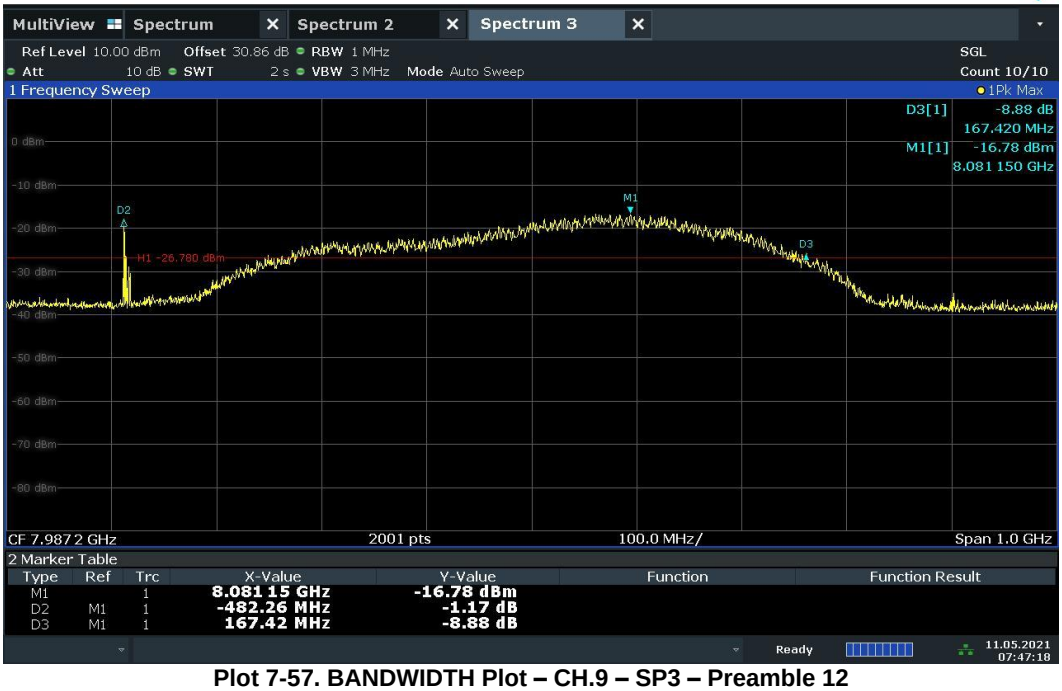
Plot 7-54. BANDWIDTH Plot – CH.9 – SP3 – Preamble 11



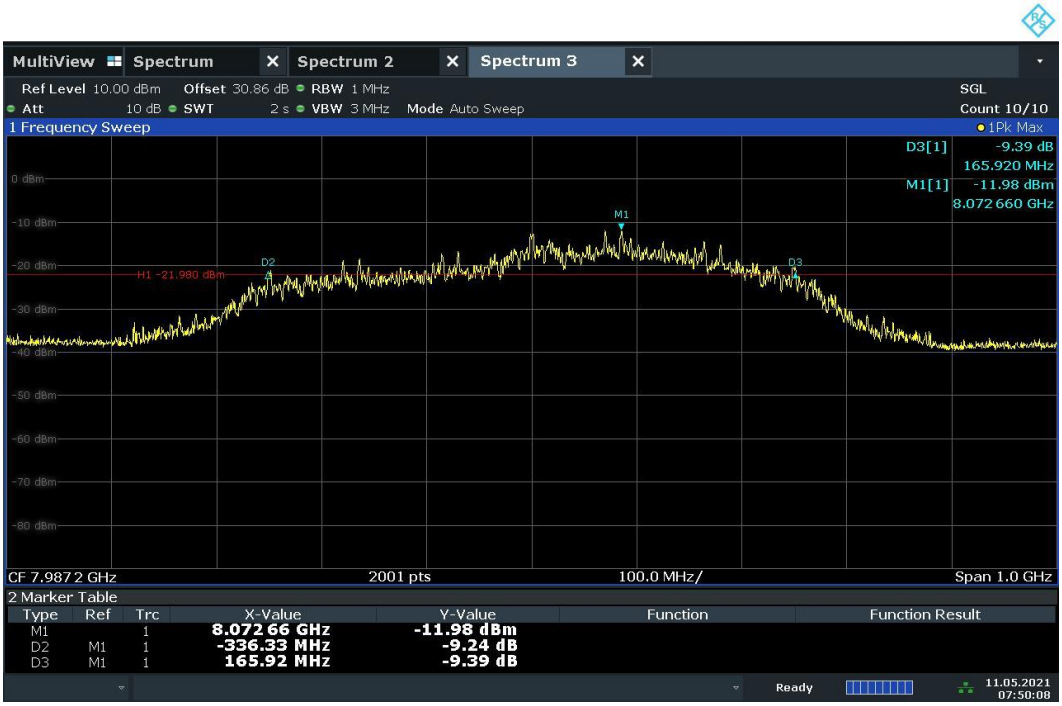
Plot 7-55. BANDWIDTH Plot – CH.9 - SP0 – Preamble 12



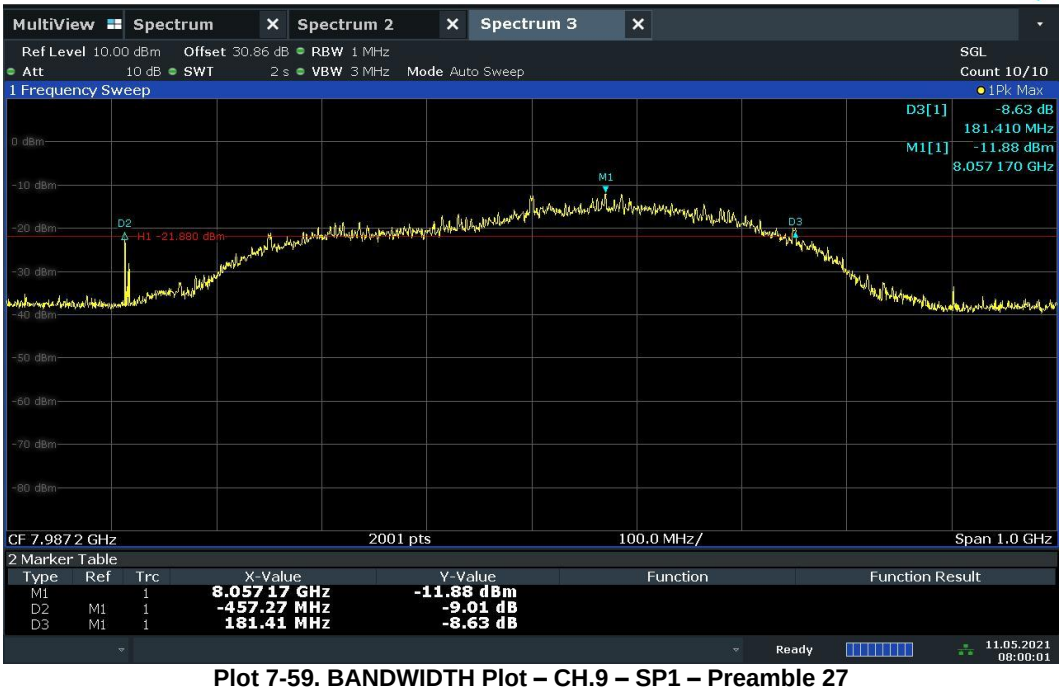
Plot 7-56. BANDWIDTH Plot – CH.9 – SP1 – Preamble 12



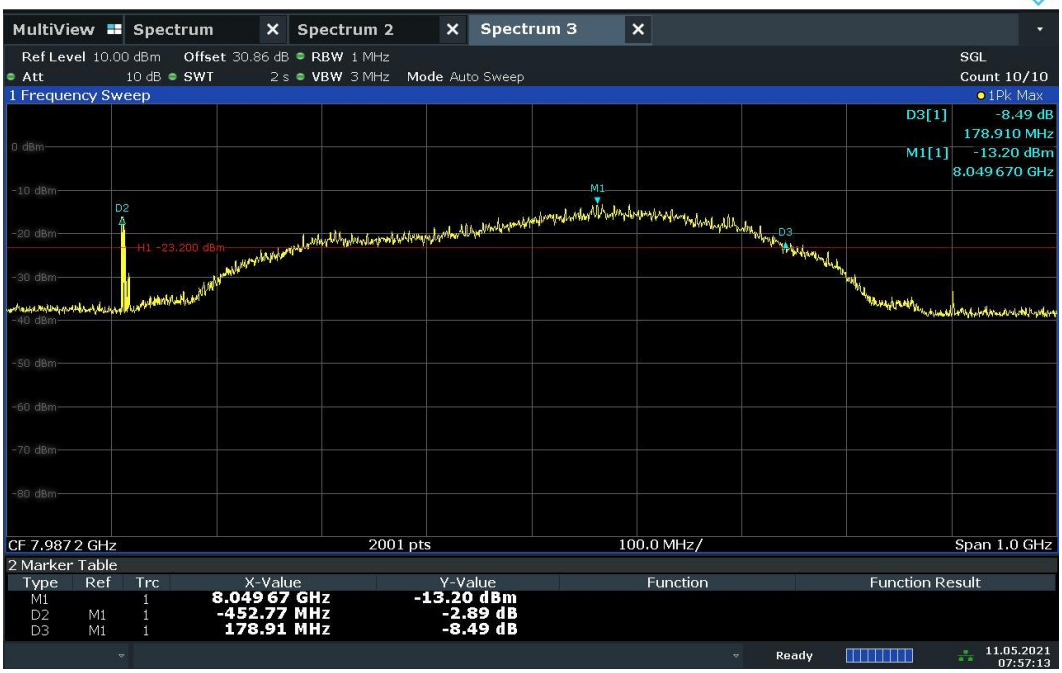
Plot 7-57. BANDWIDTH Plot – CH.9 – SP3 – Preamble 12



Plot 7-58. BANDWIDTH Plot – CH.9 - SP0 – Preamble 27



Plot 7-59. BANDWIDTH Plot – CH.9 – SP1 – Preamble 27



Plot 7-60. BANDWIDTH Plot – CH.9 – SP3 – Preamble 27

7.3 Cessation Time

§15.519(a)(1)

Test Overview and Limit

§15.519(a)(1) A UWB device operating under the provisions of this section shall transmit only when it is sending information to an associated receiver. The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgment from the associated receiver that its transmission is being received an acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

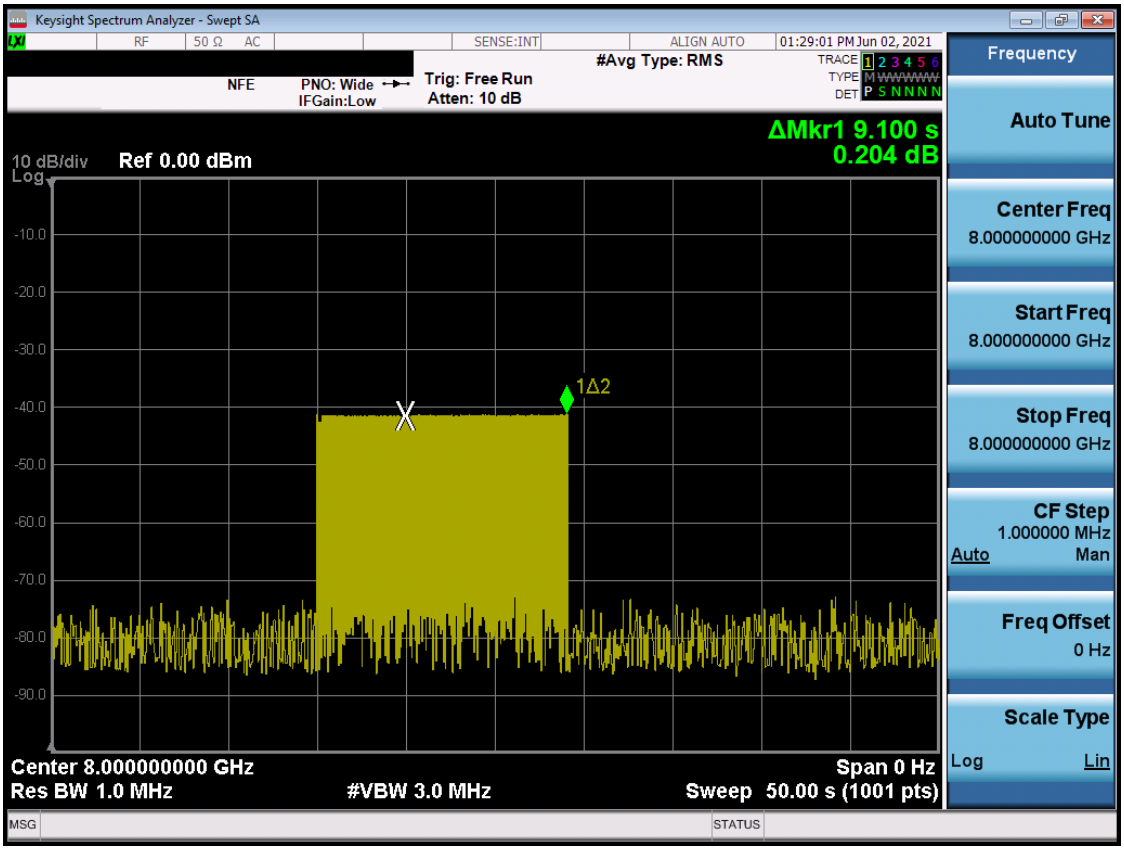
Test Settings

1. RBW = 1MHz
2. VBW = 3MHz
3. Span = 0 Span Mode
4. Sweep time shall be sufficient to demonstrate EUTs compliance with the rule part.
5. Vertical Markers are placed to indicate the point in which the receiver ceases acknowledging the EUT and the point 10s after.

Test Setup

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

Figure 7-2. Test Instrument and Measurement Setup



Plot 7-61. Cessation Time Plot

7.4 Peak Power and Maximum Average Emissions

§15.519(e), §15.519(c)

Test Overview and Limit

15.519 (3)(e) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, fM. That limit is 0 dBm EIRP.

15.519 (3)(c) The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

Frequency in MHz	EIRP in dBm
3100 - 10600	-41.3

Test Procedures Used

ANSI C63.10-2013

Test Settings

Peak:

1. Analyzer frequency set to the frequency of the radiated spurious emission of interest
2. RBW = 50MHz, VBW = 80MHz
3. Detector = Peak
4. Sweep time = auto coupled
5. Trace mode = max hold
6. Trace was allowed to stabilize

Average:

1. Analyzer frequency set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz, VBW = 3MHz
3. Detector = Average-RMS (for Average)
4. Sweep time = 2s
5. Sweep Points = 2001 (1ms integration period per measurement bin)
6. Trace mode = max hold
7. Trace was allowed to stabilize

RESULTS – BPRF

ANT	CH	MODE	Preamble	Meas. Ant.	FM [GHz]	Peak power [dBm/50MHz]	Peak limit [dBm/50MHz]	Margin [dB]
1	5	SP0	9	H	6.729	-2.67	0.00	-2.67
	9	SP0	10	H	7.984	-1.69	0.00	-1.69
2	5	SP0	12	V	6.618	-4.47	0.00	-4.47
	9	SP1	9	V	8.002	-3.78	0.00	-3.78

Table 7-4. BPRF Highest Peak Power Results

ANT	CH	MODE	Preamble	Meas. Ant.	FM [GHz]	Average power [dBm]	Average limit [dBm]	Margin [dB]
1	5	SP3	12	H	6.685	-42.90	-41.3	-1.60
	9	SP1	11	H	8.111	-43.01	-41.3	-1.71
2	5	SP3	10	V	6.601	-42.92	-41.3	-1.62
	9	SP3	9	V	8.041	-42.81	-41.3	-1.51

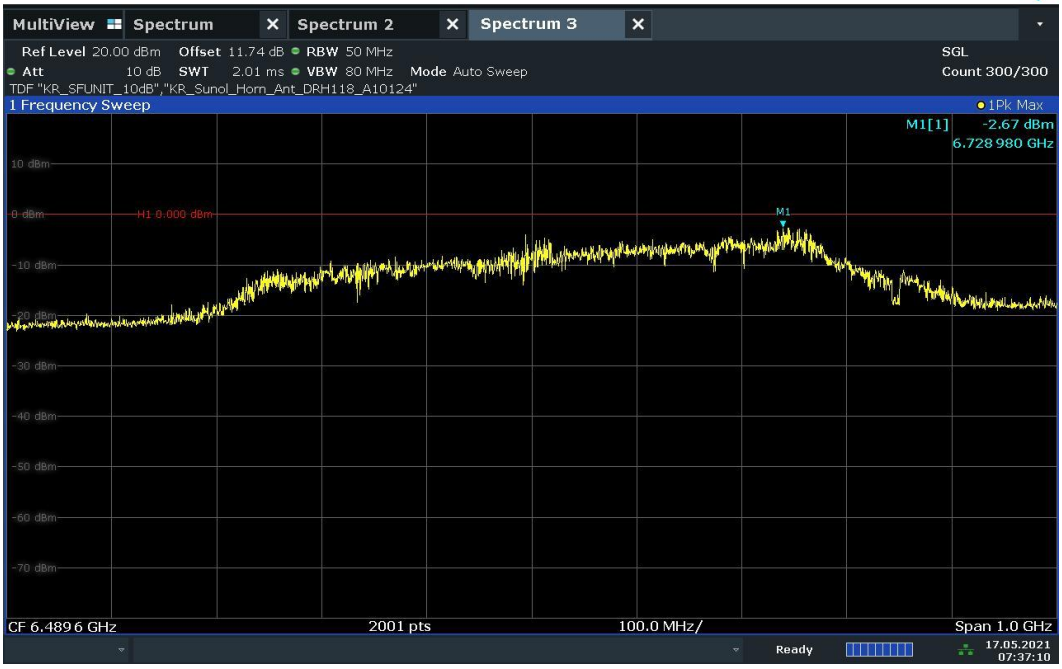
Table 7-5. BPRF Highest Average Power Results

Sample Calculation:

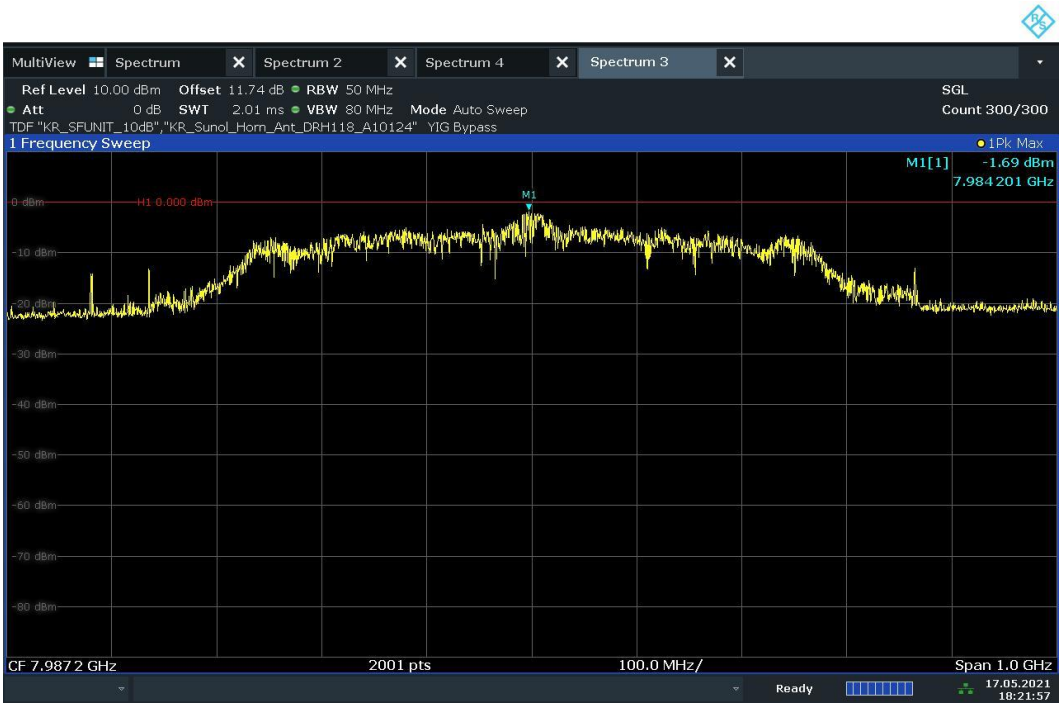
The raw radiated spurious level is converted to field strength in dBuV/m. Then, the EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter

.

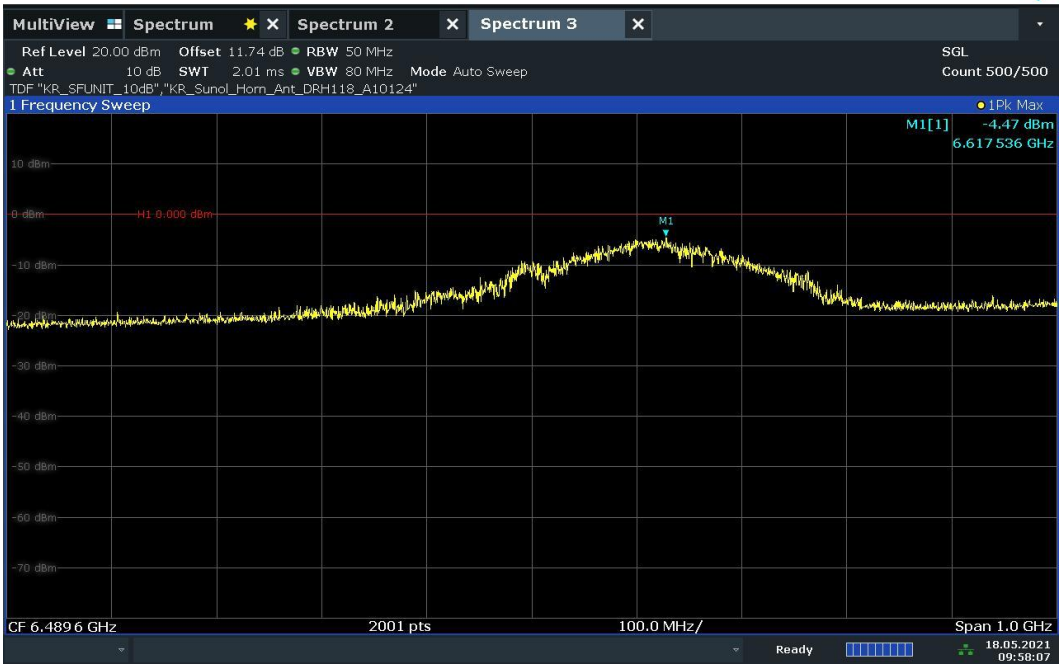
RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8



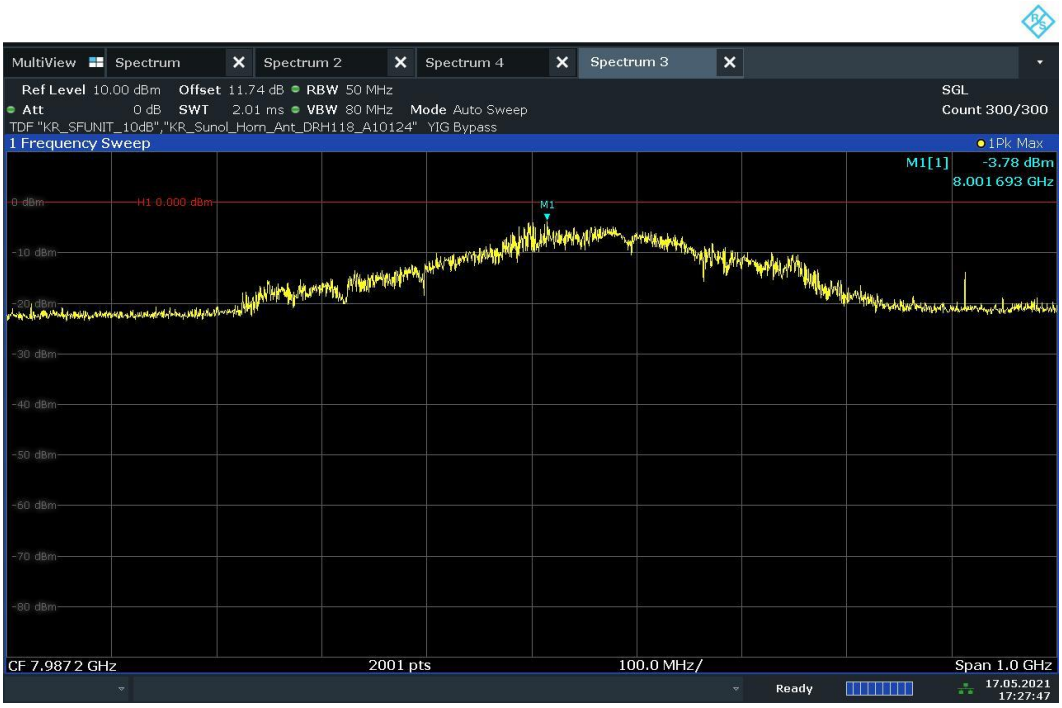
Plot 7-62. UWB Peak Power Measurement - ANT 1 - CH.5 – BPRF



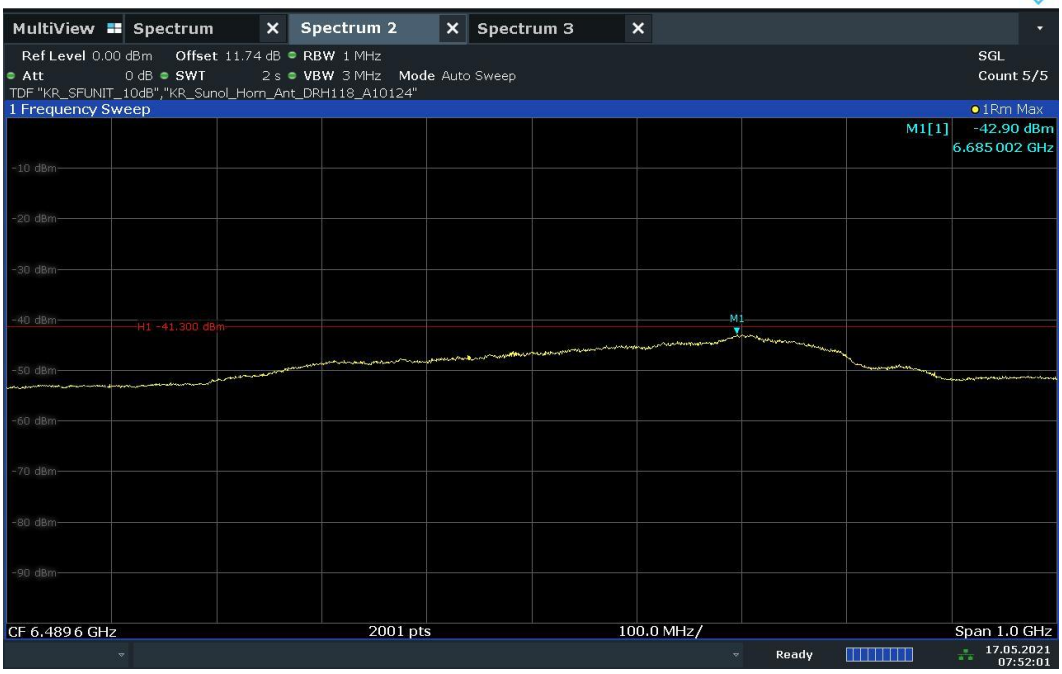
Plot 7-63. UWB Peak Power Measurement - ANT 1 - CH.9 – BPRF



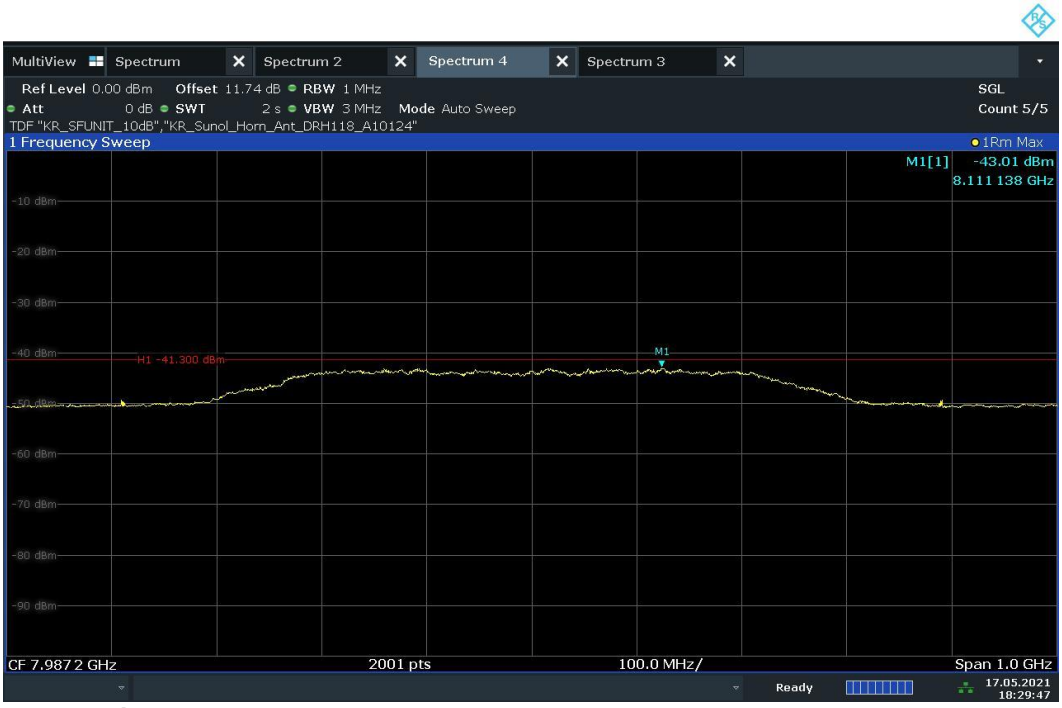
Plot 7-64. UWB Peak Power Measurement - ANT 2 - CH.5 – BPRF



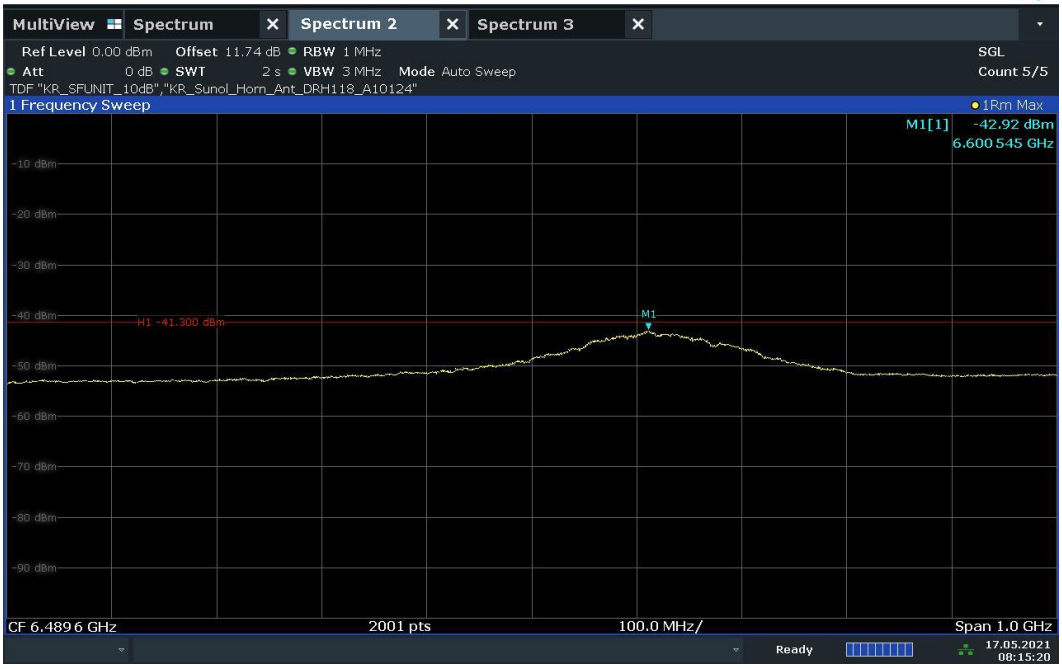
Plot 7-65. UWB Peak Power Measurement - ANT 2 - CH.9 – BPRF



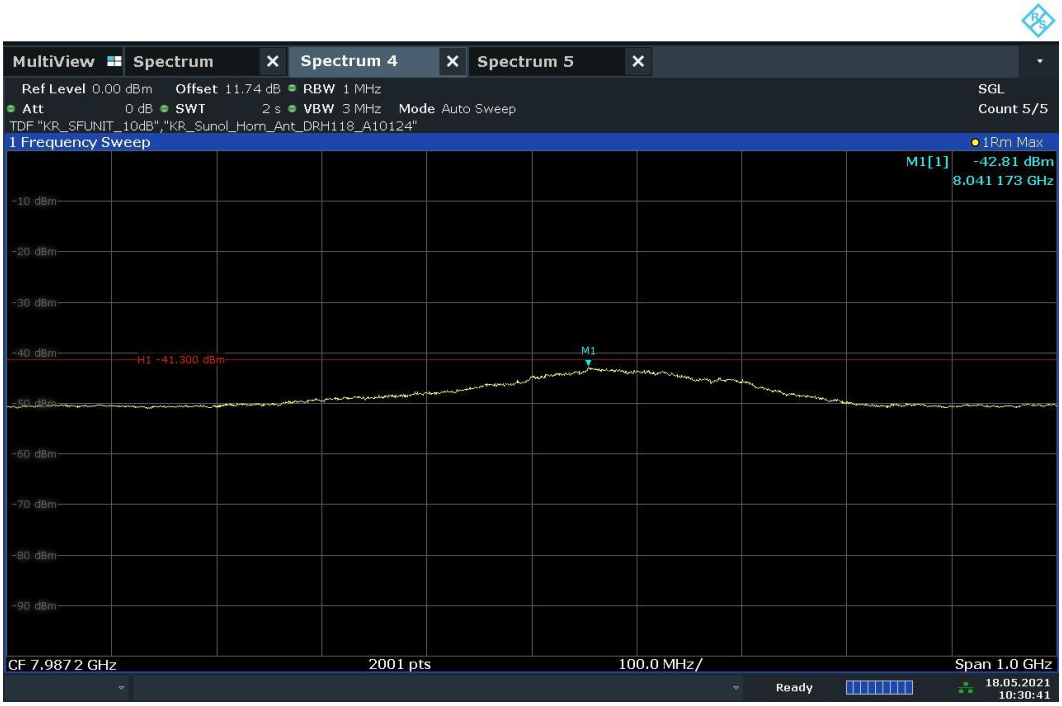
Plot 7-66. UWB Average Power Measurement - ANT 1 - CH.5 – BPRF



Plot 7-67. UWB Average Power Measurement - ANT 1 - CH.9 – BPRF



Plot 7-68. UWB Average Power Measurement - ANT 2 - CH.5 - BPRF



Plot 7-69. UWB Average Power Measurement - ANT 2 - CH.9 – BPRF

RESULTS – HPRF

ANT	CH	MODE	Preamble	Meas. Ant.	FM [GHz]	Peak power [dBm/50MHz]	Peak limit [dBm/50MHz]	Margin [dB]
1	5	SP0	27	H	6.737	-7.05	0.00	-7.05
	9	SP0	27	H	8.108	-5.96	0.00	-5.96
2	5	SP0	27	V	6.612	-5.82	0.00	-5.82
	9	SP0	27	H	8.105	-6.80	0.00	-6.80

Table 7-6. HPRF Highest Peak Power Results

ANT	CH	MODE	Preamble	Meas. Ant.	FM [GHz]	Average power [dBm]	Average limit [dBm]	Margin [dB]
1	5	SP3	27	H	6.698	-42.81	-41.3	-1.51
	9	SP1	27	H	8.108	-43.18	-41.3	-1.88
2	5	SP3	27	V	6.602	-43.09	-41.3	-1.79
	9	SP3	27	H	8.042	-42.90	-41.3	-1.60

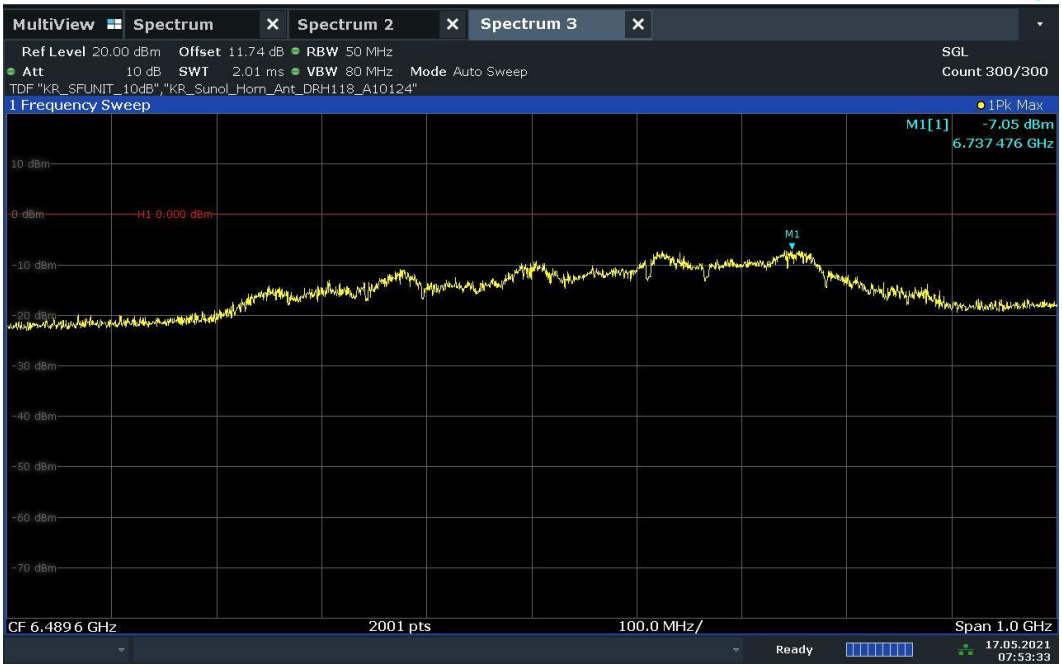
Table 7-7. HPRF Highest Average Power Results

Sample Calculation

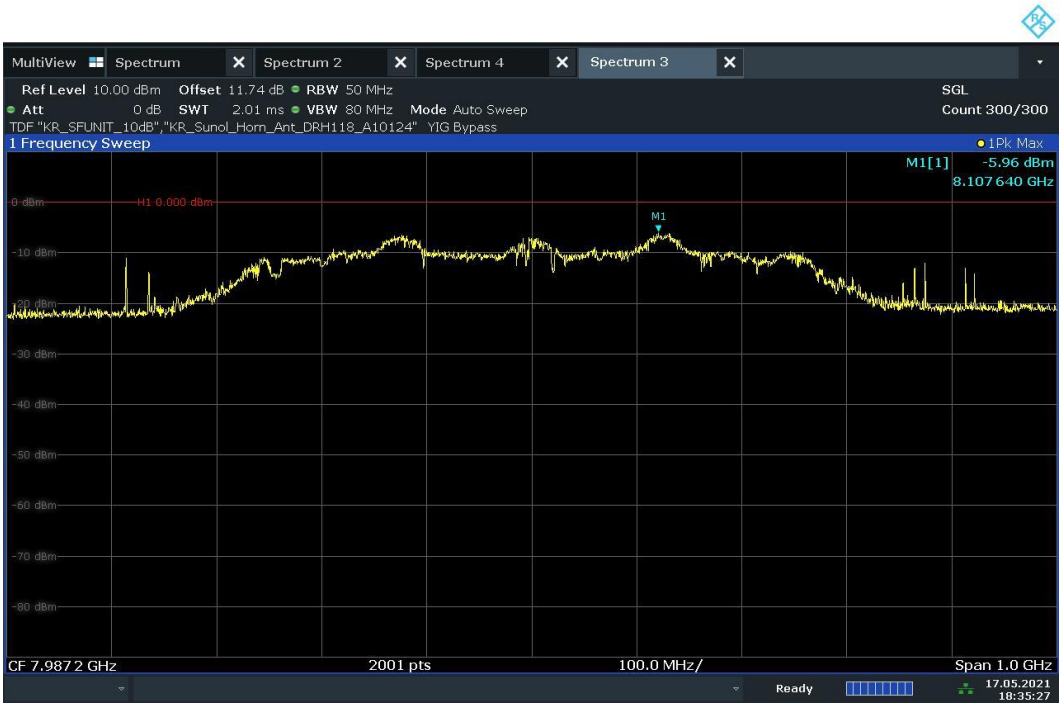
The raw radiated spurious level is converted to field strength in dBuV/m. Then, the EIRP level is calculated by applying the additional factors shown below for a test distance of 3 meter

.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

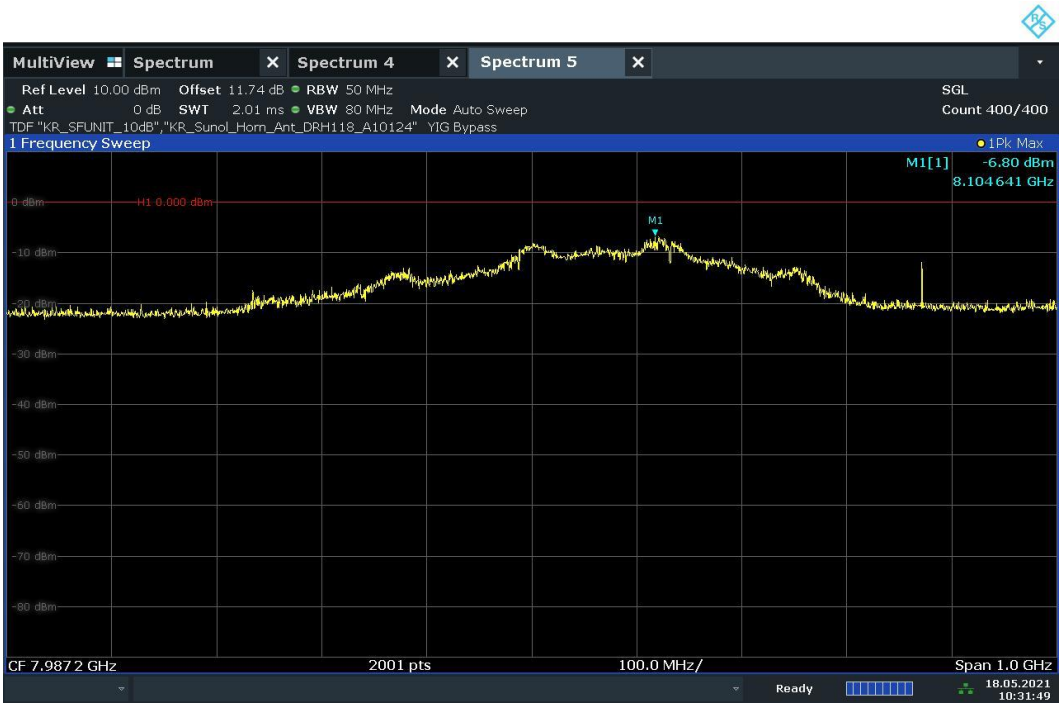


Plot 7-70. UWB Peak Power Measurement - ANT 1 - CH.5 – HPRF

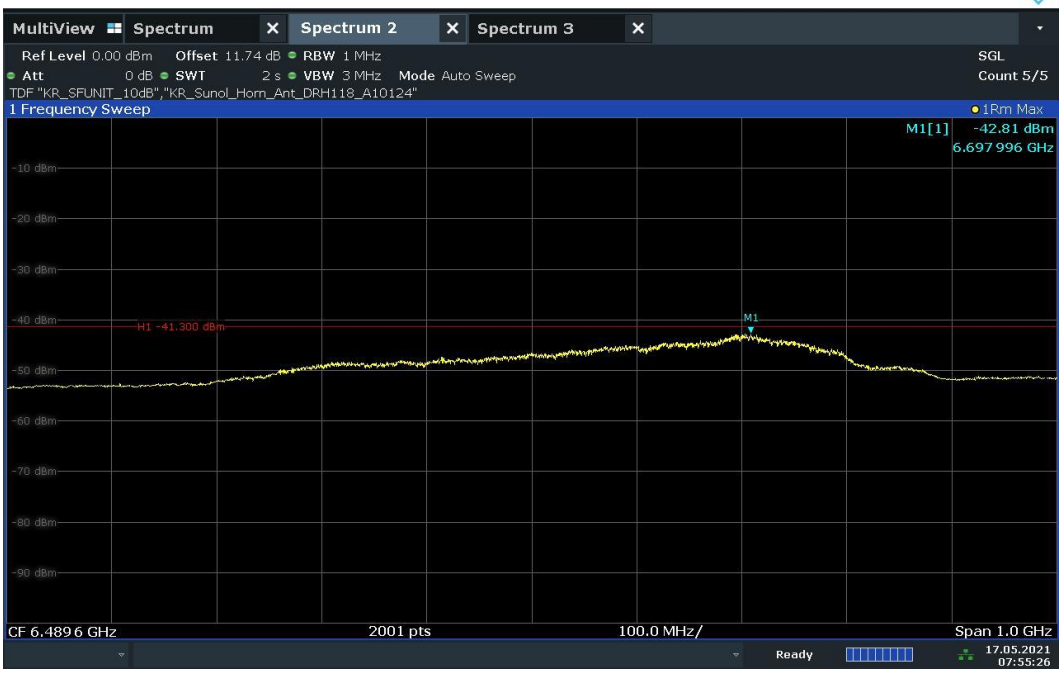


Plot 7-71. UWB Peak Power Measurement - ANT 1 - CH.9 – HPRF

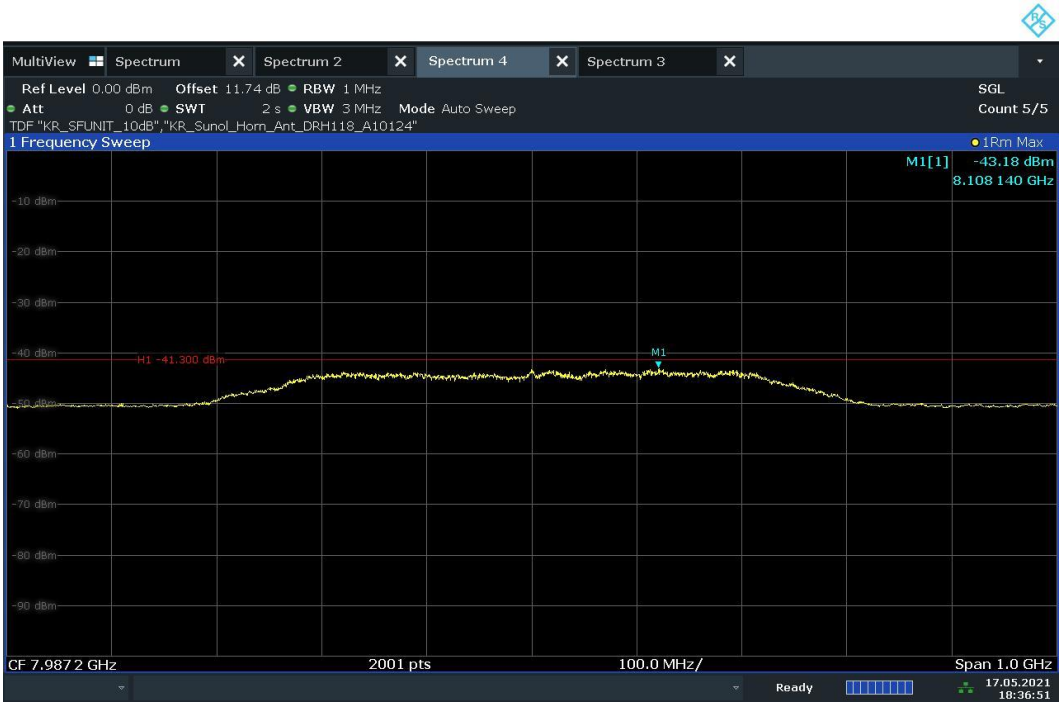
Plot 7-72. UWB Peak Power Measurement - ANT 2 - CH.5 – HPRF



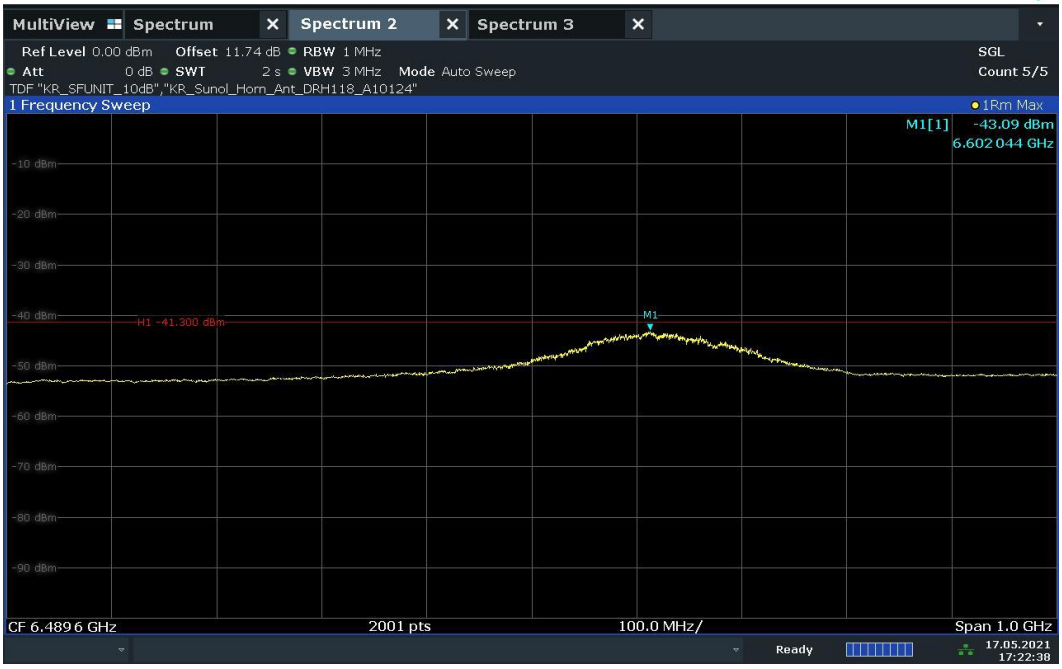
Plot 7-73. UWB Peak Power Measurement - ANT 2 - CH.9 – HPRF



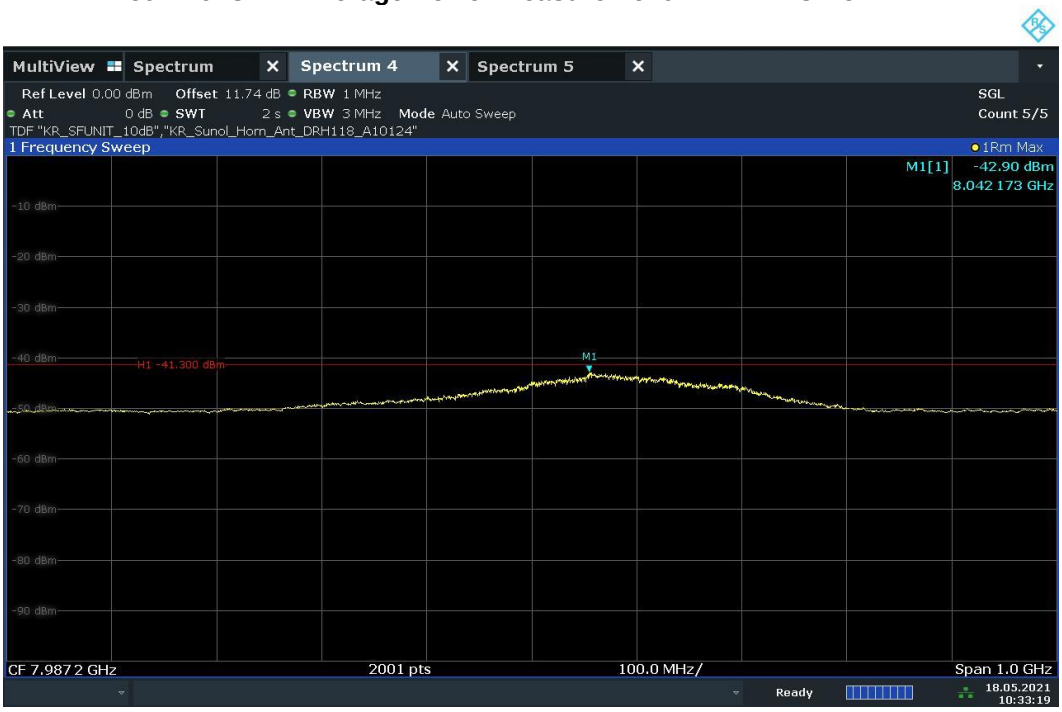
Plot 7-74. UWB Average Power Measurement - ANT 1 - CH.5 – HPRF



Plot 7-75. UWB Average Power Measurement - ANT 1 - CH.9 – HPRF



Plot 7-76. UWB Average Power Measurement - ANT 2 - CH.5 – HPRF



Plot 7-77. UWB Average Power Measurement - ANT 2 - CH.9 – HPRF

7.5 Radiated Measurement Data above 960MHz

§15.519 (c), §15.519(d), §15.209(a)

Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at maximum power and at the appropriate frequencies. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

§15.519(c)

Frequency in MHz	EIRP in dBm
960-1610	-75.3
1610-1990	-63.3
1990-3100	-61.3
3100-10600	-41.3
Above 10600	-61.3

Table 7-8. Above 960MHz Average Limits

§15.519(d)

Frequency in MHz	EIRP in dBm
1164-1240	-85.3
1559-1610	-85.3

Table 7-9. Above 960MHz Average Limits

Test Procedures Used

ANSI C63.10-2013

Test Settings

Average EIRP Measurements

1. Analyzer frequency set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz (30kHz for emissions in the GPS bands)
3. VBW = 3MHz (100kHz for the emissions in the GPS bands)
4. Detector = RMS
5. Sweep time = auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown test setup photos provided.

Test Notes

1. All modes of operation and settings (Preamble, Packet Type, etc) were investigated and the worst-case emissions are reported.
2. The RBW for measurements in the GPS Bands were reduced to 30kHz in order to prove compliance.
3. 1000 ~ 18000 MHz and above 18000 MHz pre-scan plots were conducted at 0.7 and 0.6 meter respectively. The plots are only for the purpose of spurious emission identification.
4. All final measurements were made at 0.7 meters.
5. All readings are calibrated by a signal generator with accuracy traceable to the National Institute of Standards and Technology (NIST).
6. AFCL (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB)

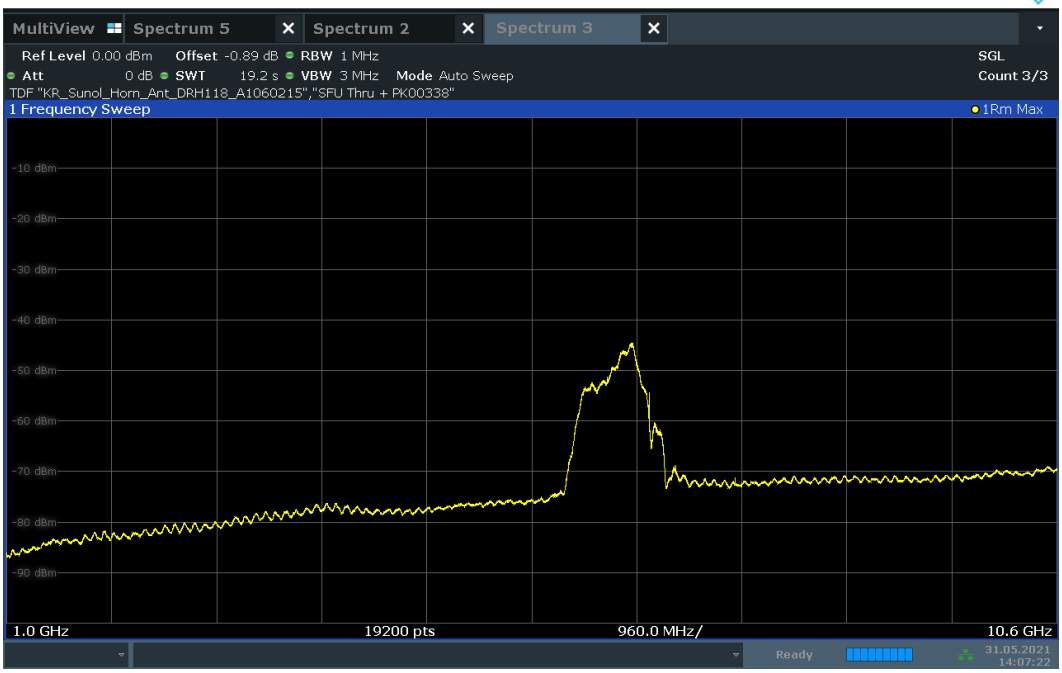
Sample Calculation

The raw radiated spurious level is converted to field strength in dBuV/m. Then, the EIRP RSE level is calculated by applying the additional factors shown below for a test distance of 3 meter

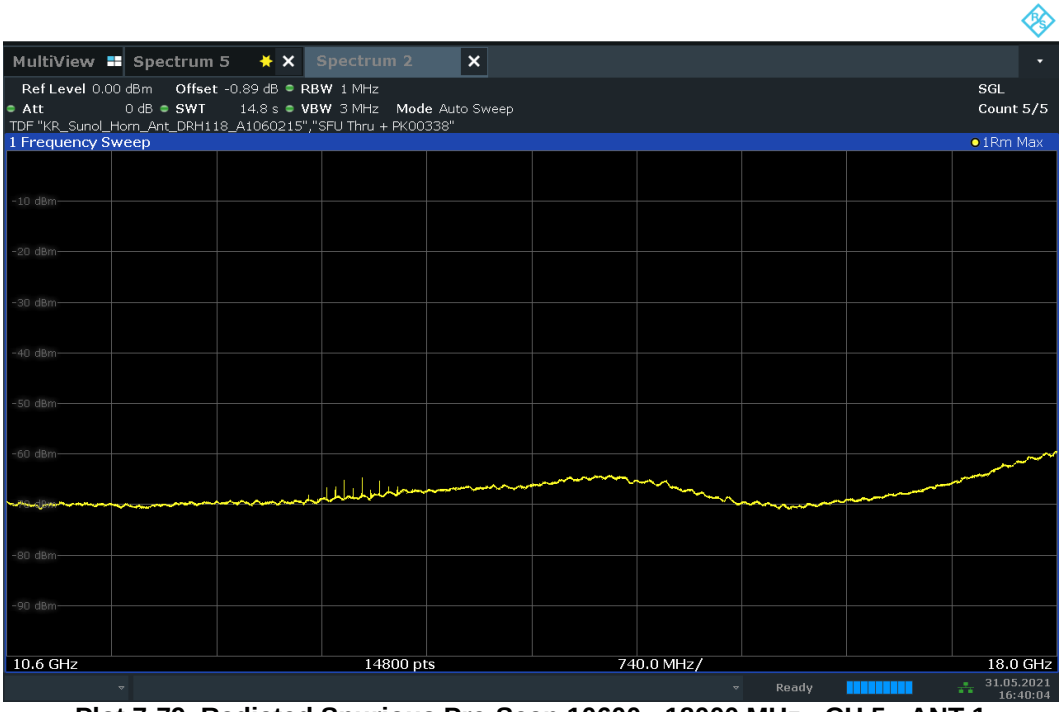
.

RSE EIRP (dBm) = Analyzer Level (dBm) + 107 + AFCL (dB/m) + 20Log(Dm) – 104.8

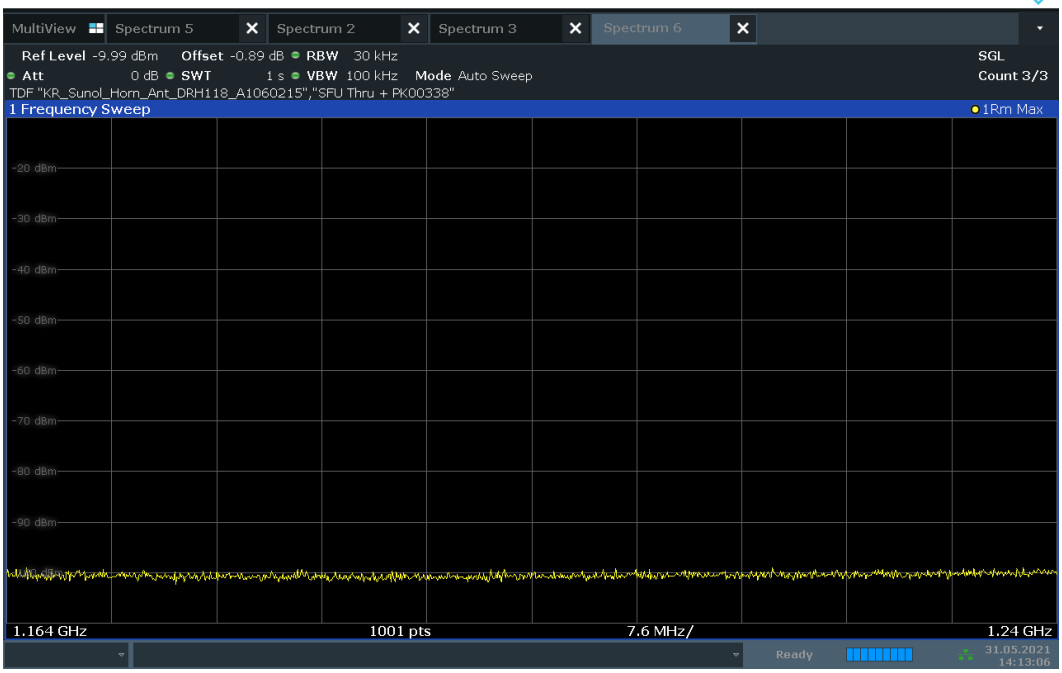
Channel 5 ANTENNA 1:



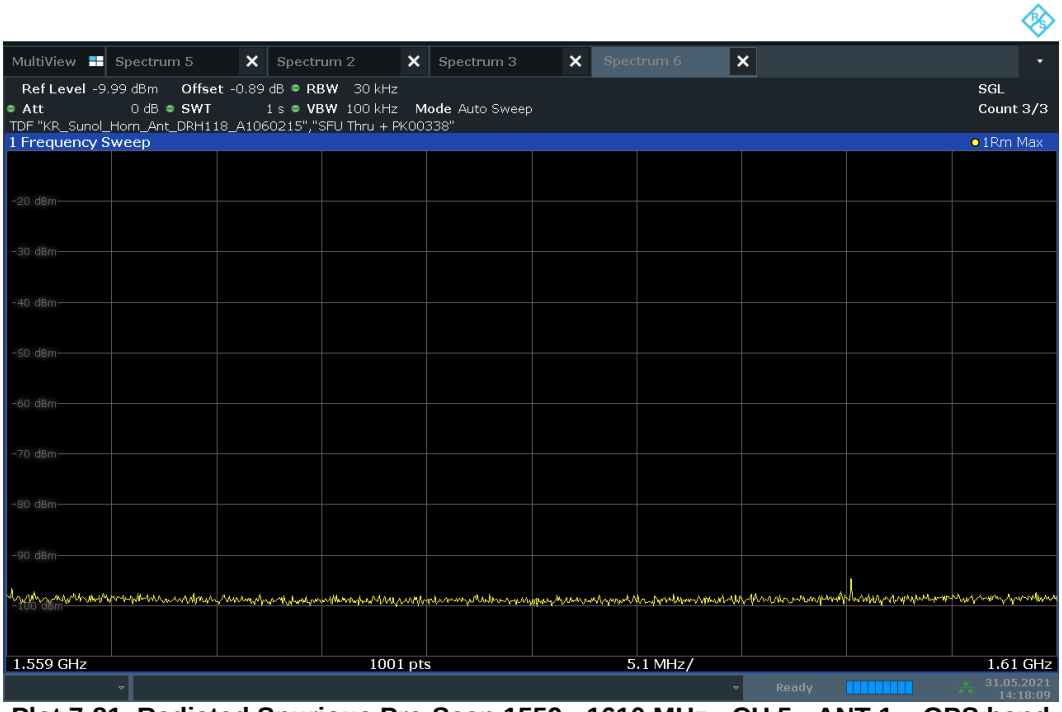
Plot 7-78. Radiated Spurious Pre-Scan 1000 - 10600 MHz - CH.5 - ANT 1



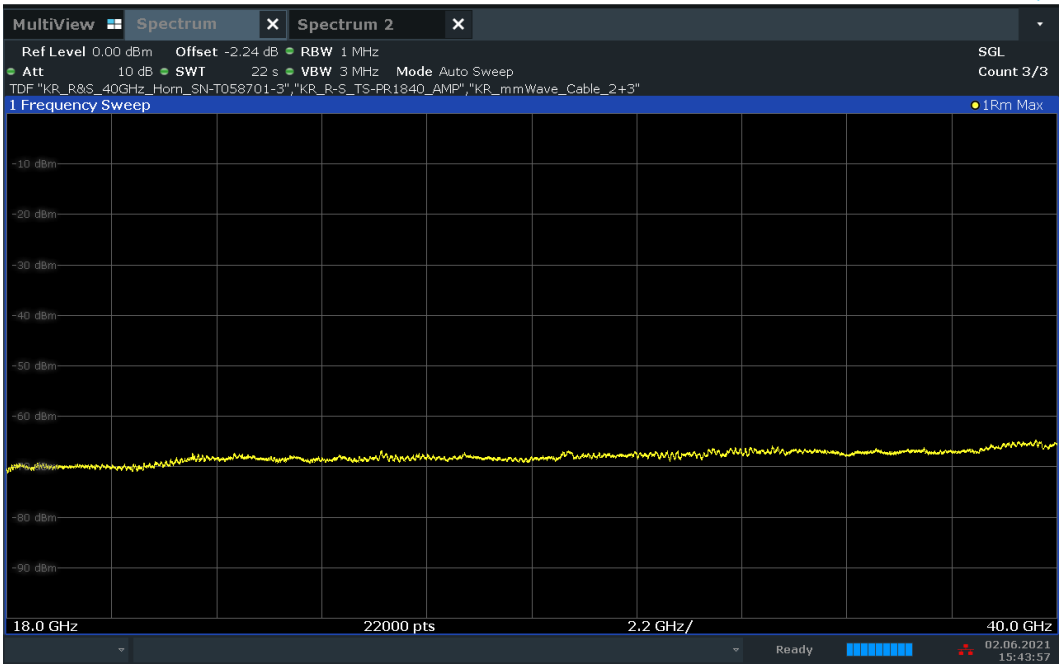
Plot 7-79. Radiated Spurious Pre-Scan 10600 - 18000 MHz - CH.5 - ANT 1



Plot 7-80. Radiated Spurious Pre-Scan 1164 - 1240 MHz - CH.5 - ANT 1 – GPS band



Plot 7-81. Radiated Spurious Pre-Scan 1559 - 1610 MHz - CH.5 - ANT 1 – GPS band



Plot 7-82. Radiated Spurious Pre-Scan 18 – 26.5 GHz - CH.5 - ANT 1

Channel	5
Frequency	6500
Preamble ID	12
Config	SP3

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5460	RMS	V	-	-	-74.56	-1.23	-12.64	-76.69	-41.30	-35.39
8000	RMS	V	-	-	-75.06	4.10	-12.64	-71.86	-41.30	-30.56
10600	RMS	V	-	-	-75.82	7.28	-12.64	-69.43	-41.30	-28.13
12979	RMS	V	150	224	-72.90	8.67	-12.64	-65.13	-61.30	-3.83
14742	RMS	V	-	-	-75.80	12.40	-12.64	-64.30	-61.30	-3.00

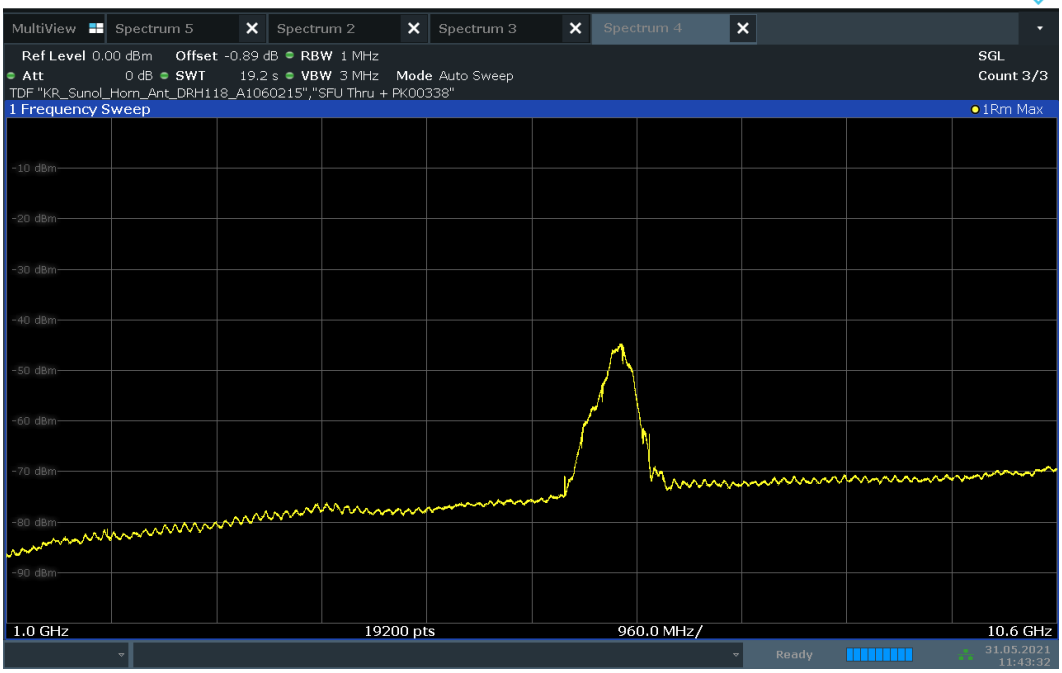
Table 7-10. Radiated Spurious Emissions CH. 5 – ANT1

Channel	5
Frequency	6500
Preamble ID	12
Config	SP3

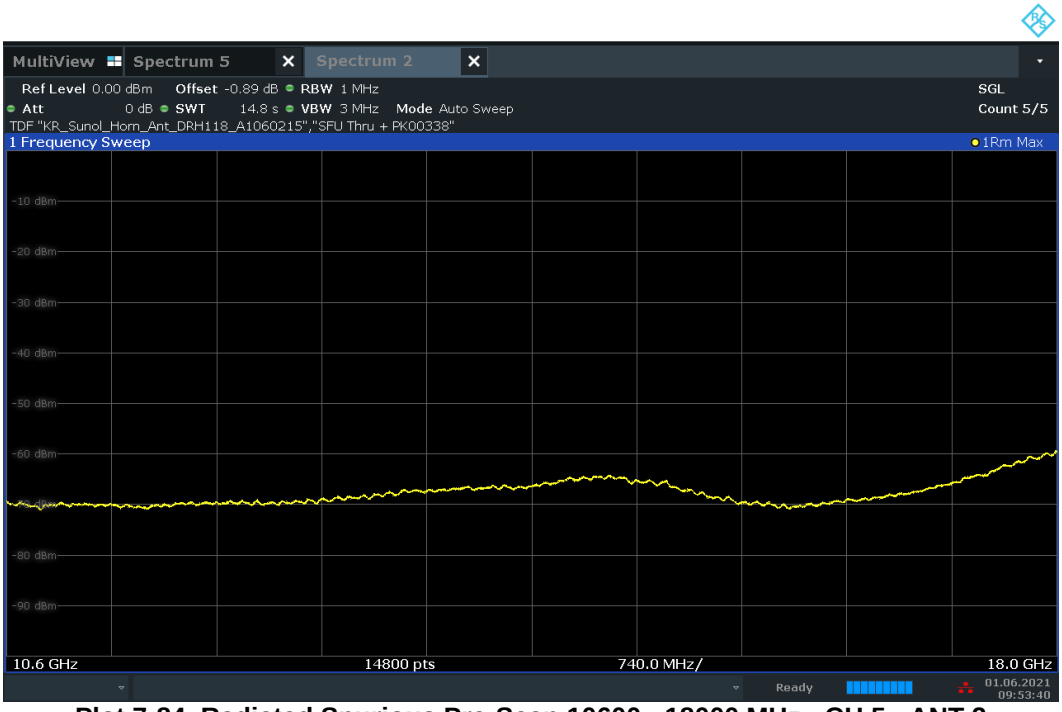
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1165	RMS	V	-	-	-86.52	-11.69	-12.64	-99.11	-85.30	-13.81
1219	RMS	V	-	-	-86.63	-11.49	-12.64	-99.02	-85.30	-13.72
1237	RMS	V	-	-	-86.81	-11.40	-12.64	-99.11	-85.30	-13.81
1559	RMS	V	-	-	-86.99	-9.28	-12.64	-97.17	-85.30	-11.87
1600	RMS	V	-	-	-84.35	-9.42	-12.64	-94.67	-85.30	-9.37
1610	RMS	V	-	-	-86.99	-9.49	-12.64	-97.38	-85.30	-12.08

Table 7-11. Radiated Spurious Emissions CH. 5 – ANT1 – GPS BANDs

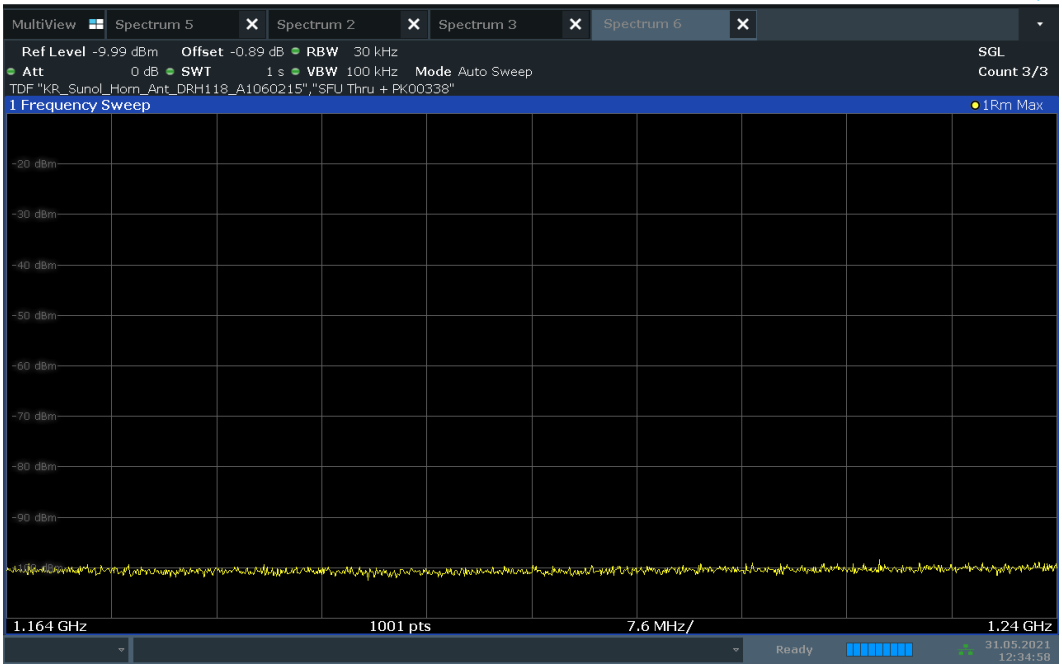
Channel 5 ANTENNA 2:



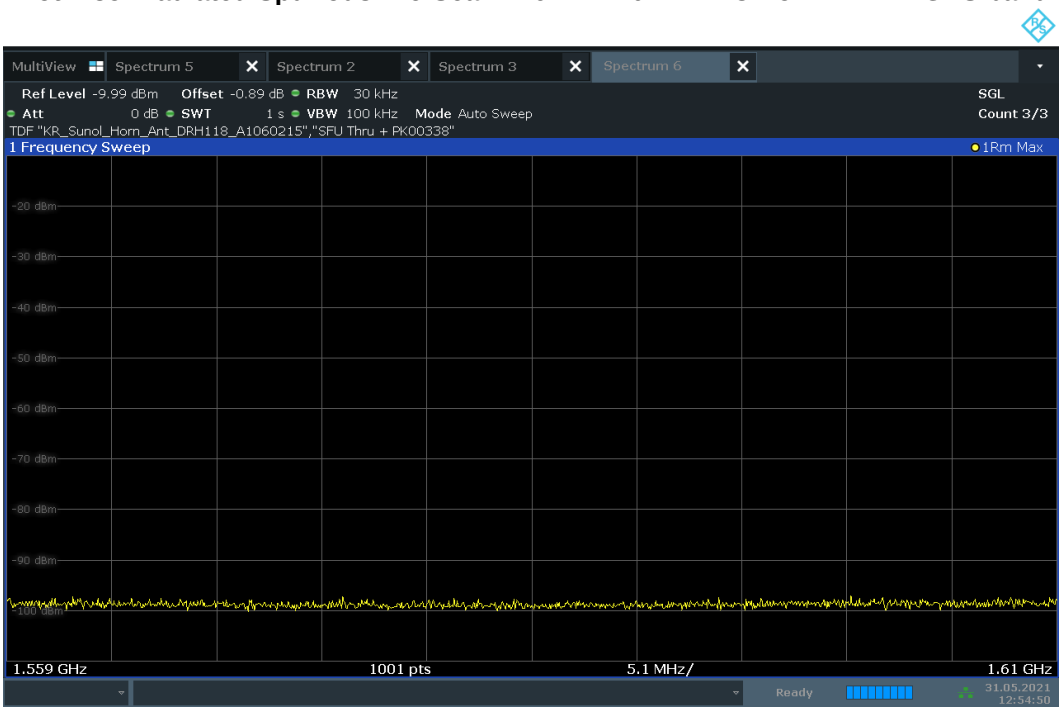
Plot 7-83. Radiated Spurious Pre-Scan 1000 - 10600 MHz - CH.5 - ANT 2



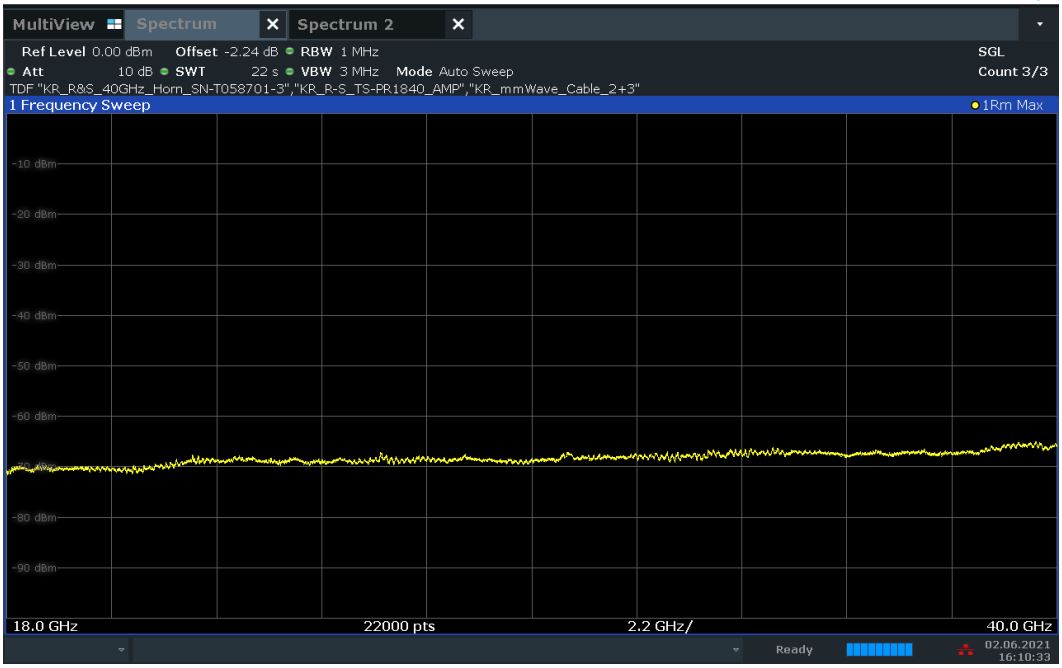
Plot 7-84. Radiated Spurious Pre-Scan 10600 - 18000 MHz - CH.5 - ANT 2



Plot 7-85. Radiated Spurious Pre-Scan 1164 - 1240 MHz - CH.5 - ANT 2 – GPS band



Plot 7-86. Radiated Spurious Pre-Scan 1559 - 1610 MHz - CH.5 - ANT 2 – GPS band



Plot 7-87. Radiated Spurious Pre-Scan 18 – 26.5 GHz - CH.5 - ANT 2

Channel	5
Frequency	6500
Preamble ID	10
Config	SP3

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
5460	RMS	H	-	-	-74.36	-1.23	-12.64	-76.49	-41.30	-35.19
8000	RMS	H	-	-	-74.89	4.10	-12.64	-71.69	-41.30	-30.39
10200	RMS	H	-	-	-76.06	6.58	-12.64	-70.38	-41.30	-29.08
10600	RMS	H	-	-	-74.37	5.79	-12.64	-69.48	-41.30	-28.18
14566	RMS	H	-	-	-75.74	12.16	-12.64	-64.48	-61.30	-3.18

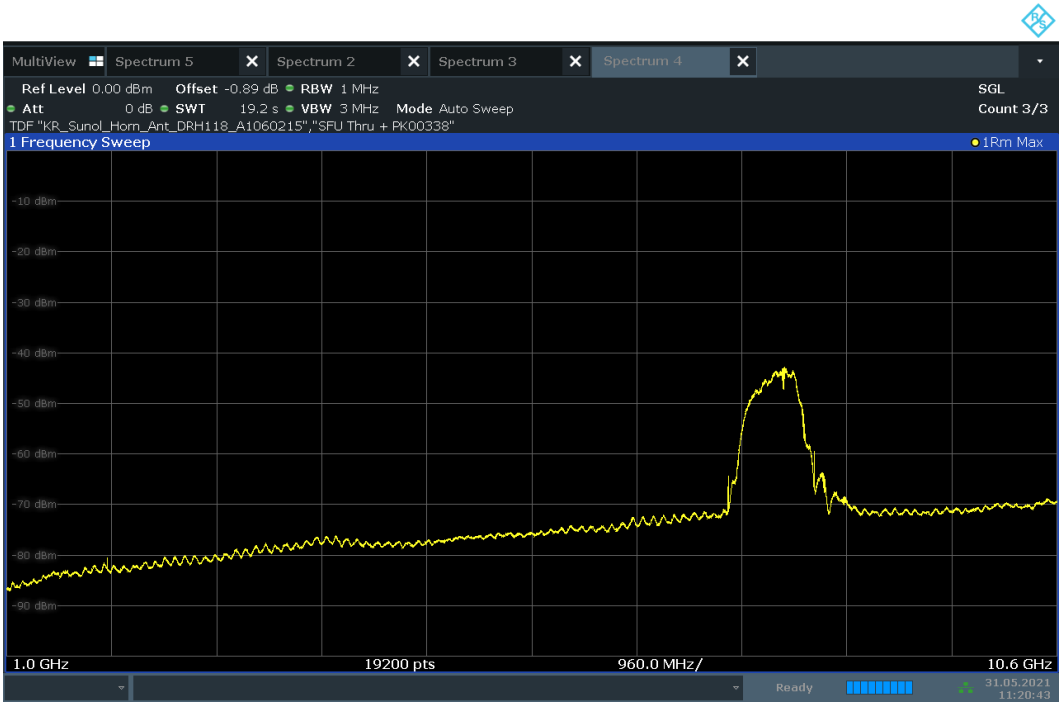
Table 7-12. Radiated Spurious Emissions CH. 5 – ANT2

Channel	5
Frequency	6500
Preamble ID	10
Config	SP3

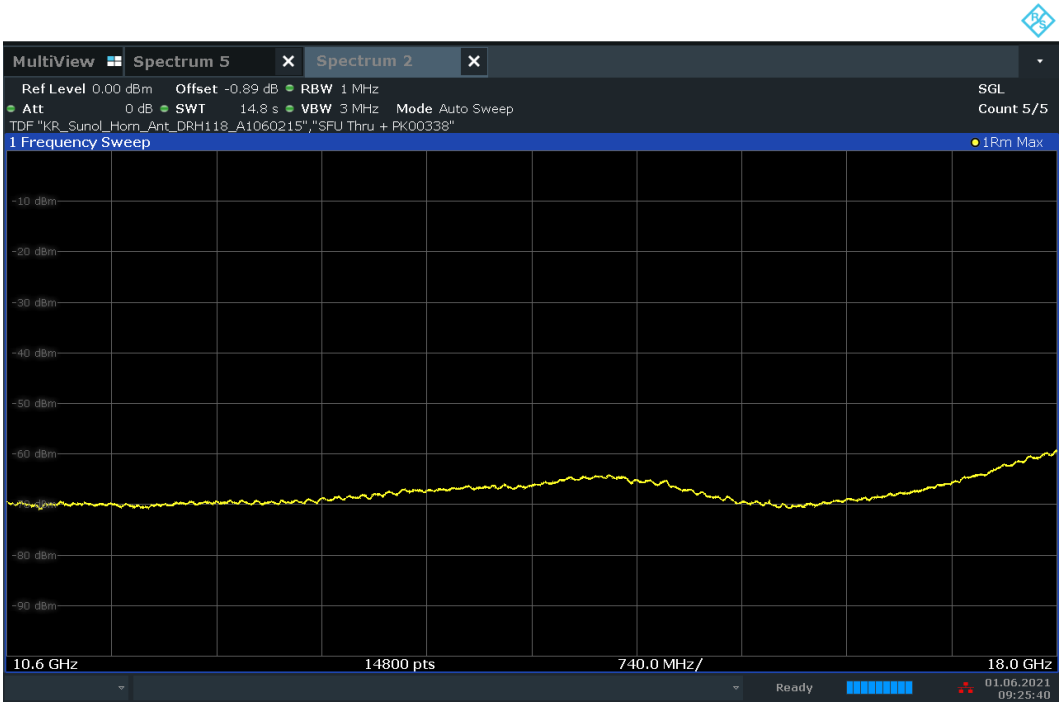
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1217	RMS	H	-	-	-86.66	-11.50	-12.64	-99.06	-85.30	-13.76
1227	RMS	H	-	-	-86.09	-11.45	-12.64	-98.44	-85.30	-13.14
1238	RMS	H	-	-	-86.55	-11.39	-12.64	-98.84	-85.30	-13.54
1562	RMS	H	-	-	-87.05	-9.28	-12.64	-97.23	-85.30	-11.93
1575	RMS	H	-	-	-87.05	-9.31	-12.64	-97.26	-85.30	-11.96
1600	RMS	H	-	-	-86.81	-9.42	-12.64	-97.13	-85.30	-11.83

Table 7-13. Radiated Spurious Emissions CH. 5 – ANT2 – GPS BANDs

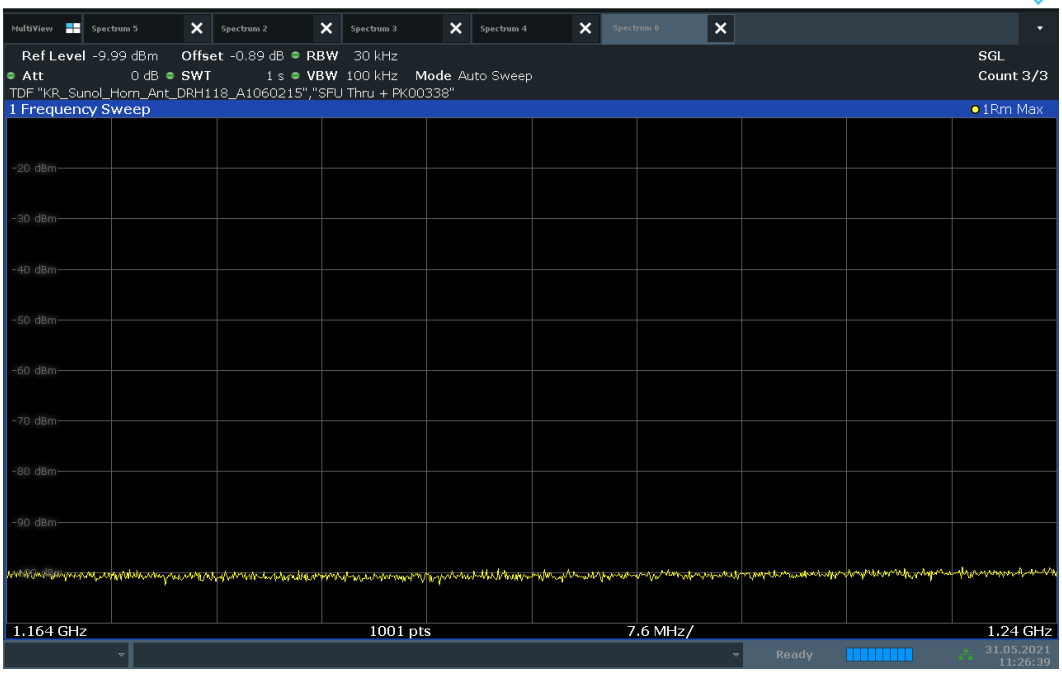
Channel 9 ANTENNA 1:



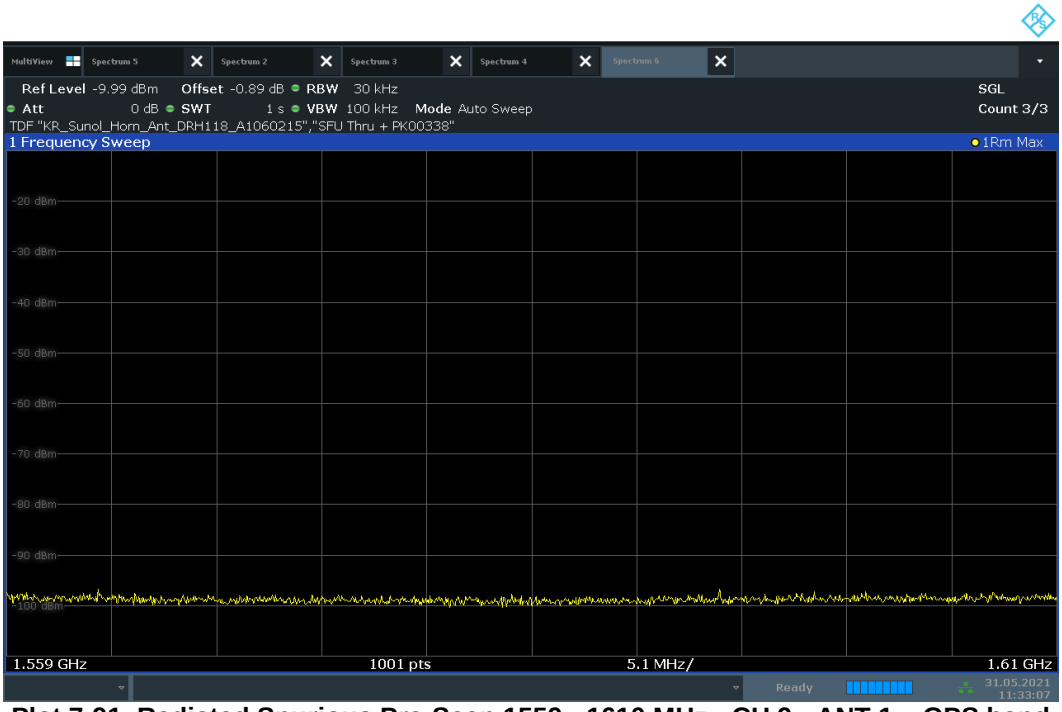
Plot 7-88. Radiated Spurious Pre-Scan 1000 - 10600 MHz - CH.9 - ANT 1



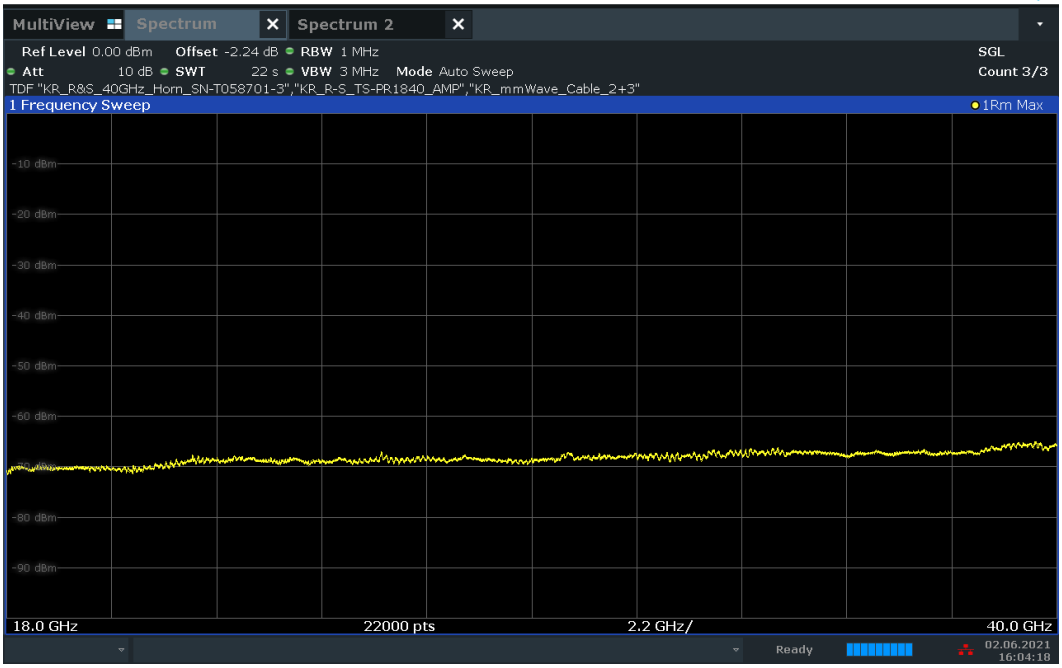
Plot 7-89. Radiated Spurious Pre-Scan 10600 - 18000 MHz - CH.9 - ANT 1



Plot 7-90. Radiated Spurious Pre-Scan 1164 - 1240 MHz - CH.9 - ANT 1 – GPS band



Plot 7-91. Radiated Spurious Pre-Scan 1559 - 1610 MHz - CH.9 - ANT 1 – GPS band



Plot 7-92. Radiated Spurious Pre-Scan 18 – 26.5 GHz - CH.9 - ANT 1

Channel	9
Frequency	8000
Preamble ID	11
Config	SP1

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1050	RMS	H	-	-	-72.74	-12.18	-12.64	-85.82	-75.30	-10.52
2908	RMS	H	-	-	-72.91	-6.19	-12.64	-80.00	-61.30	-18.70
6731	RMS	H	-	-	-74.67	2.81	-12.64	-72.76	-41.30	-31.46
10600	RMS	H	-	-	-75.85	7.28	-12.64	-69.47	-41.30	-28.17
14791	RMS	H	-	-	-75.94	12.36	-12.64	-64.48	-61.30	-3.18

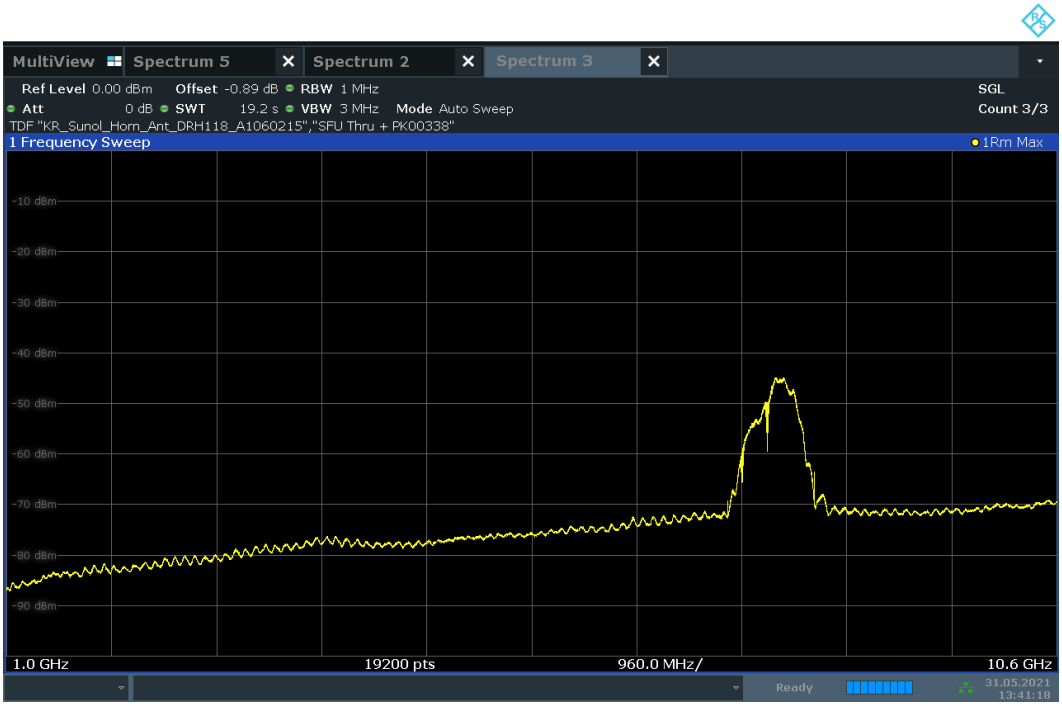
Table 7-14. Radiated Spurious Emissions CH. 9 – ANT1

Channel	9
Frequency	8000
Preamble ID	11
Config	SP1

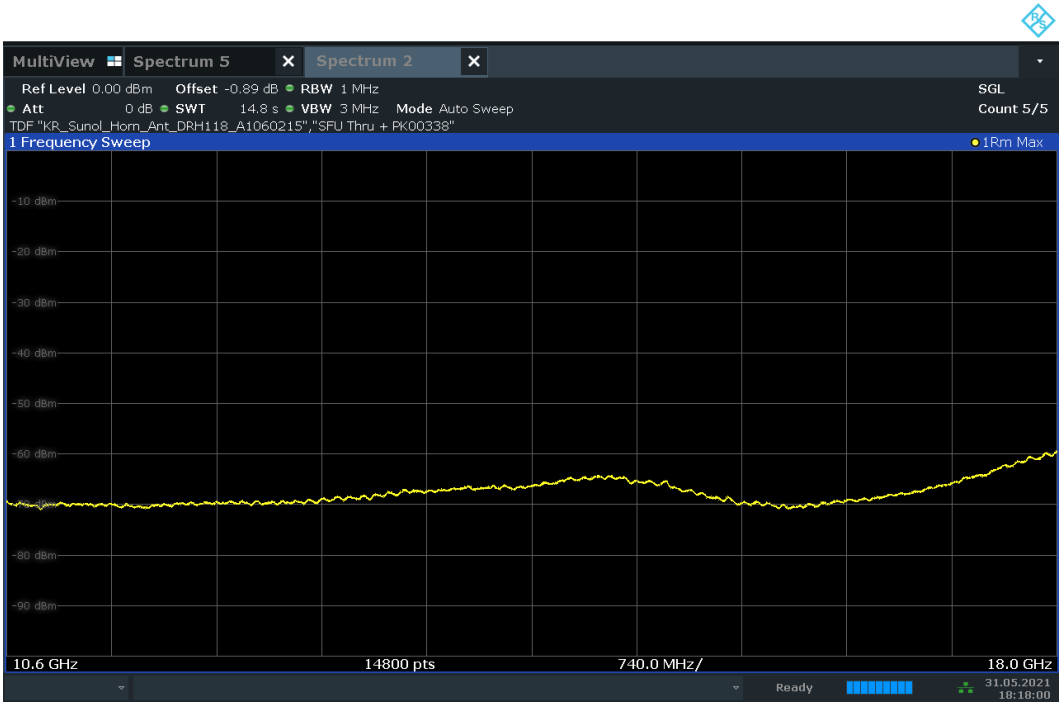
Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1199	RMS	H	-	-	-86.72	-11.60	-12.64	-99.22	-85.30	-13.92
1233	RMS	H	-	-	-86.64	-11.41	-12.64	-98.95	-85.30	-13.65
1239	RMS	H	-	-	-86.76	-11.38	-12.64	-99.04	-85.30	-13.74
1563	RMS	H	-	-	-86.59	-9.28	-12.64	-96.77	-85.30	-11.47
1593	RMS	H	-	-	-86.55	-9.39	-12.64	-96.84	-85.30	-11.54
1600	RMS	H	-	-	-86.87	-9.42	-12.64	-97.19	-85.30	-11.89

Table 7-15. Radiated Spurious Emissions CH. 9 – ANT1 – GPS BANDs

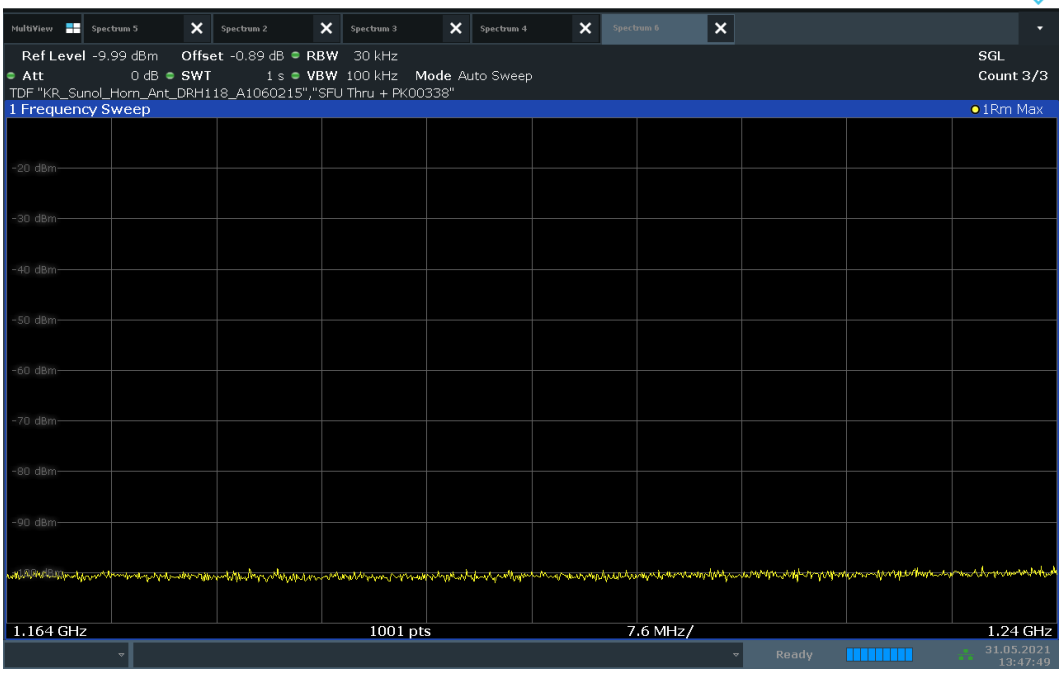
Channel 9 ANTENNA 2:



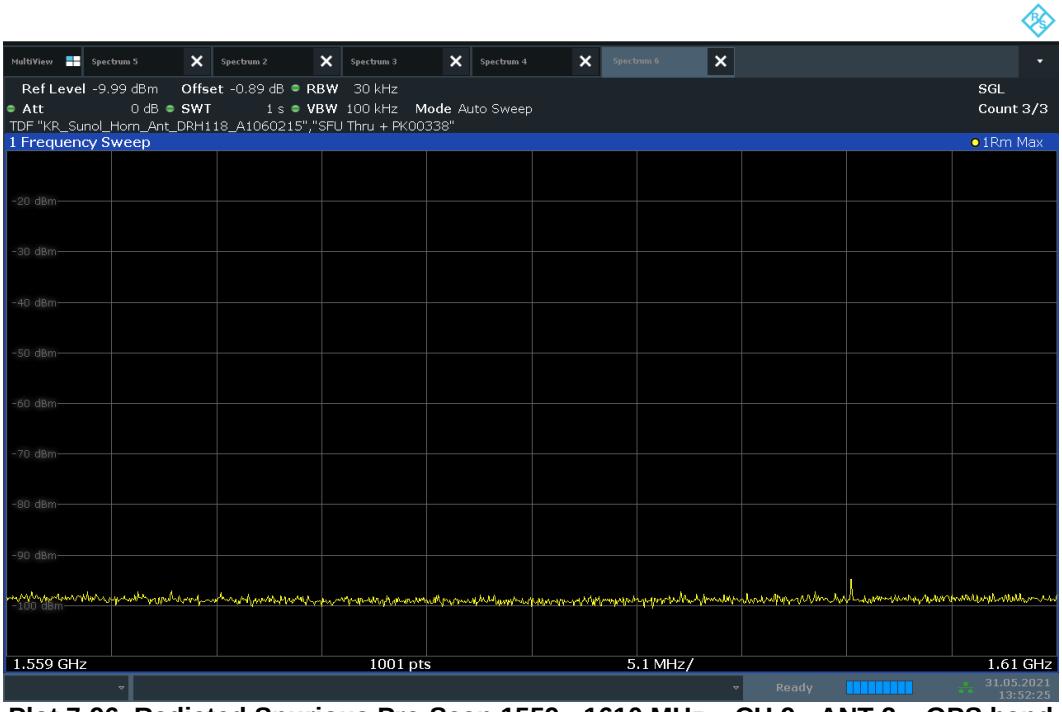
Plot 7-93. Radiated Spurious Pre-Scan 1000 - 10600 MHz - CH.9 - ANT 2



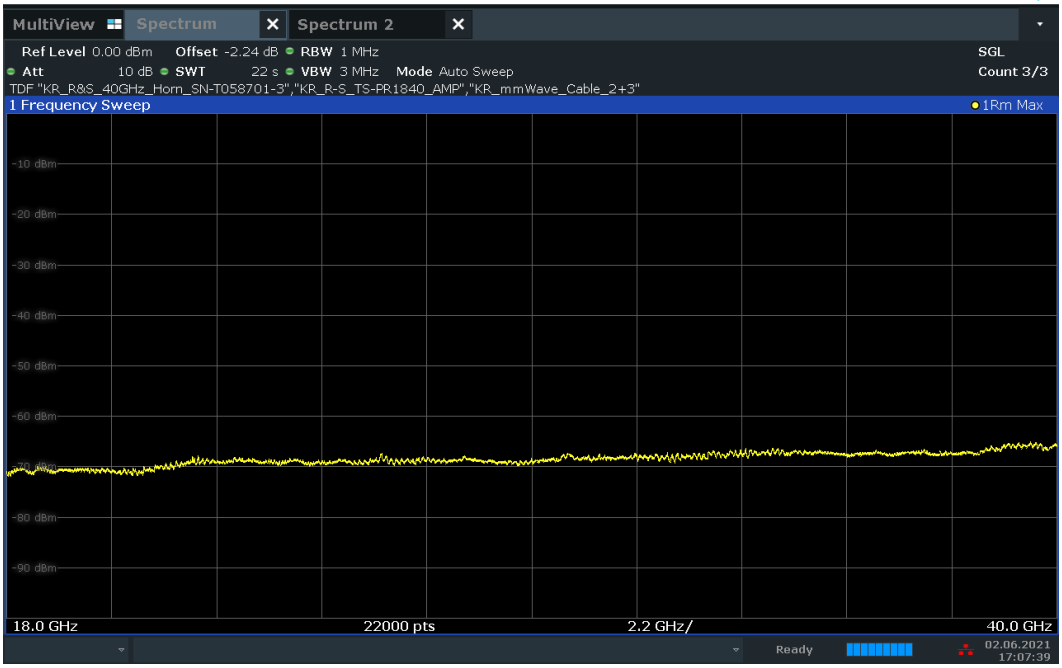
Plot 7-94. Radiated Spurious Pre-Scan 10600 - 18000 MHz - CH.9 - ANT 2



Plot 7-95. Radiated Spurious Pre-Scan 1164 - 1240 MHz - CH.9 - ANT 2 – GPS band



Plot 7-96. Radiated Spurious Pre-Scan 1559 - 1610 MHz – CH 9 - ANT 2 – GPS band



Plot 7-97. Radiated Spurious Pre-Scan 18 – 26.5 GHz - CH.9 - ANT 2

Channel	9
Frequency	8000
Preamble ID	12
Config	SP3

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1410	RMS	V	-	-	-73.28	-9.75	-12.64	-83.93	-75.30	-8.63
2540	RMS	V	-	-	-72.88	-6.75	-12.64	-80.53	-61.30	-19.23
6500	RMS	V	-	-	-75.16	0.83	-12.64	-75.23	-41.30	-33.93
10600	RMS	V	-	-	-74.37	5.79	-12.64	-69.48	-41.30	-28.18
14775	RMS	V	-	-	-75.76	12.36	-12.64	-64.30	-61.30	-3.00

Table 7-16. Radiated Spurious Emissions CH. 9 – ANT2

Channel	9
Frequency	8000
Preamble ID	12
Config	SP3

Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Dist. Corr. Factor [dB]	Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1181	RMS	V	-	-	-86.61	-11.67	-12.64	-99.18	-85.30	-13.88
1229	RMS	V	-	-	-86.72	-11.44	-12.64	-99.06	-85.30	-13.76
1239	RMS	V	-	-	-86.42	-11.38	-12.64	-98.70	-85.30	-13.40
1567	RMS	V	-	-	-86.97	-9.29	-12.64	-97.16	-85.30	-11.86
1591	RMS	V	-	-	-87.01	-9.38	-12.64	-97.29	-85.30	-11.99
1600	RMS	V	-	-	-84.45	-9.42	-12.64	-94.77	-85.30	-9.47

Table 7-17. Radiated Spurious Emissions CH. 9 – ANT2 – GPS BANDs

7.6 Radiated Spurious Emissions Measurements – Below 1GHz

§15.209(a), §15.519(c); RSS-Gen [8.9]

Test Overview and Limit

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for radiated spurious emissions. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR and Table 6 of RSS-Gen (8.10) must not exceed the limits shown in Table 7-18 per Section 15.209 and RSS-Gen (8.9).

Frequency	Field Strength [µV/m]	Measured Distance [Meters]
0.009 – 0.490 MHz	2400/F (kHz)	300
0.490 – 1.705 MHz	24000/F (kHz)	30
1.705 – 30.00 MHz	30	30
30.00 – 88.00 MHz	100	3
88.00 – 216.0 MHz	150	3
216.0 – 960.0 MHz	200	3
Above 960.0 MHz	500	3

Table 7-18. Radiated Limits

Test Procedures Used

ANSI C63.10-2013

Test Settings

Quasi-Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 120kHz (for emissions from 30MHz – 1GHz)
3. Detector = quasi-peak
4. Sweep time = auto couple
5. Trace mode = max hold
6. Trace was allowed to stabilize

Test Setup

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

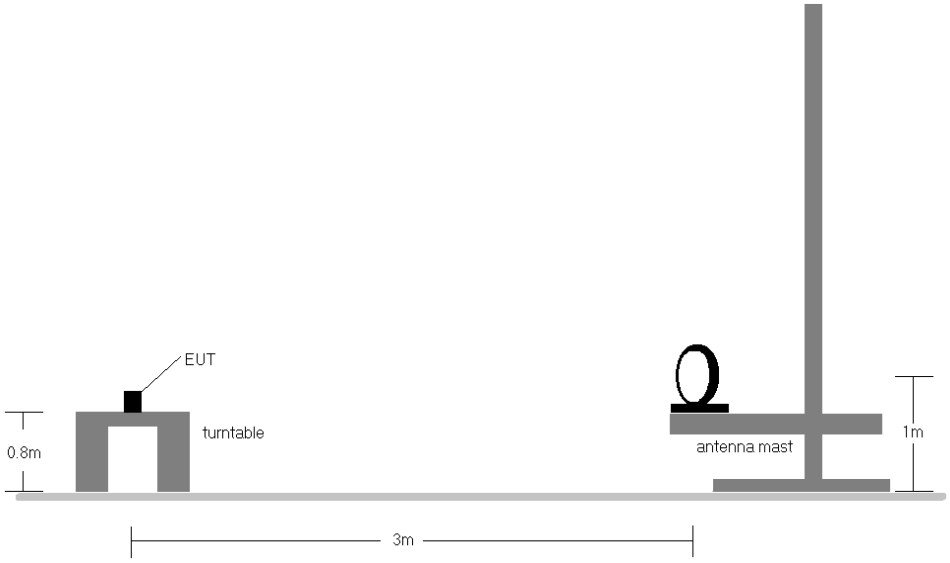


Figure 7-3. Radiated Test Setup < 30Mhz

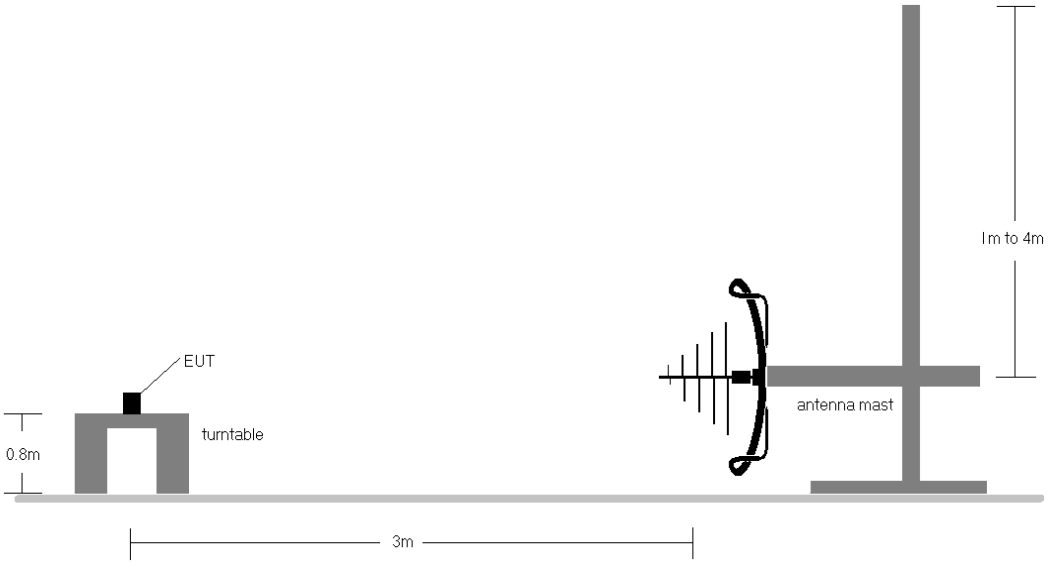


Figure 7-4. Radiated Test Setup < 1GHz

Test Notes

1. All emissions lying in restricted bands specified in §15.205 and RSS-Gen(8.10) are below the limit shown in Table 7-15.
2. The broadband receive antenna is manipulated through vertical and horizontal polarizations during the tests. The EUT is manipulated through three orthogonal planes.
3. The spectrum is investigated using a peak detector and final measurements are recorded using CISPR quasi peak detector. The worst-case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
4. Emissions were measured at a 3 meter test distance.
5. Emissions are investigated while operating on the center channel of the mode, band, and modulation that produced the worst case results during the transmitter spurious emissions testing.
6. No spurious emissions were detected within 20dB of the limit below 30MHz.
7. The results recorded using the broadband antenna is known to correlate with the results obtained by using a tuned dipole with an acceptable degree of accuracy. The VSWR for the measurement antenna was found to be less than 2:1.
8. The wide spectrum spurious emissions plots shown on the following pages are used only for the purpose of emission identification. There were no emissions detected in the 30MHz – 1GHz frequency range, as shown in the subsequent plots.