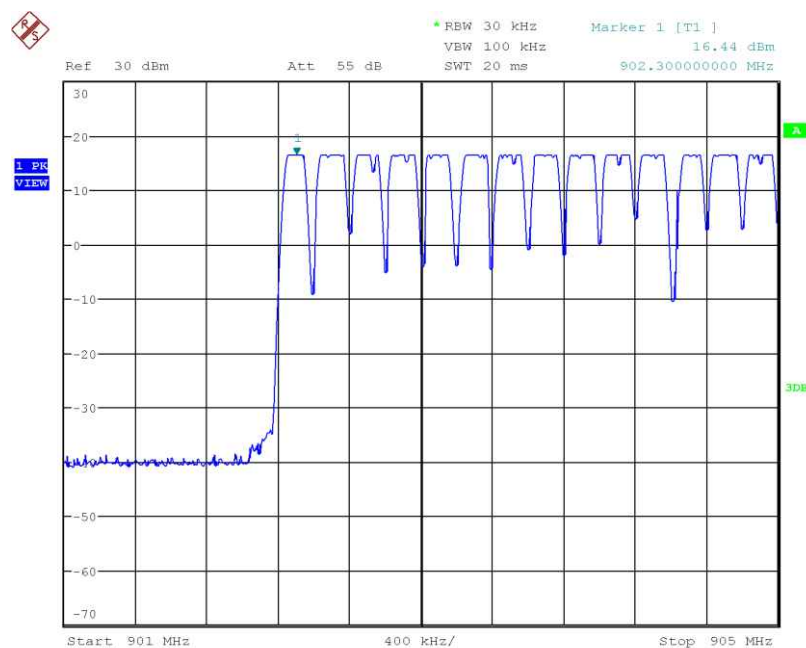
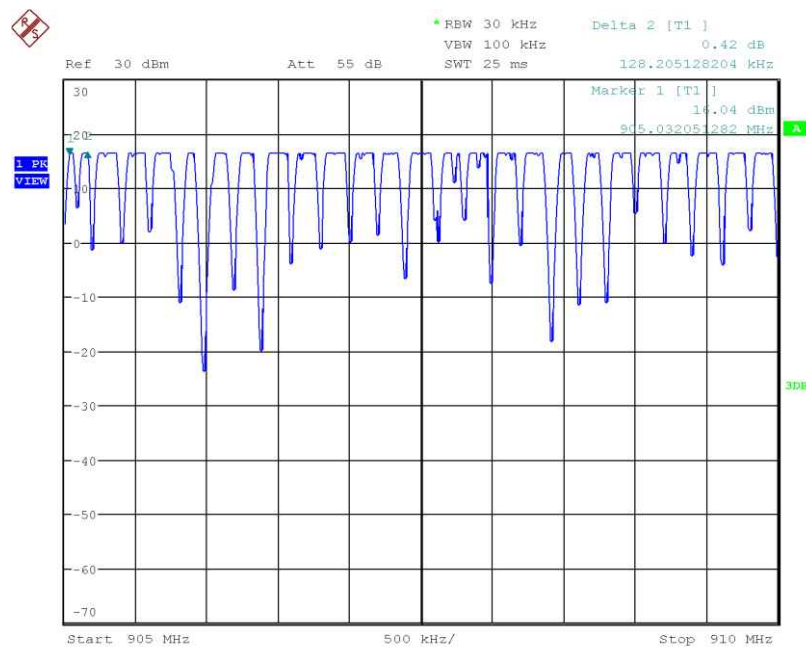


## 1.2.4 Number of hopping frequencies



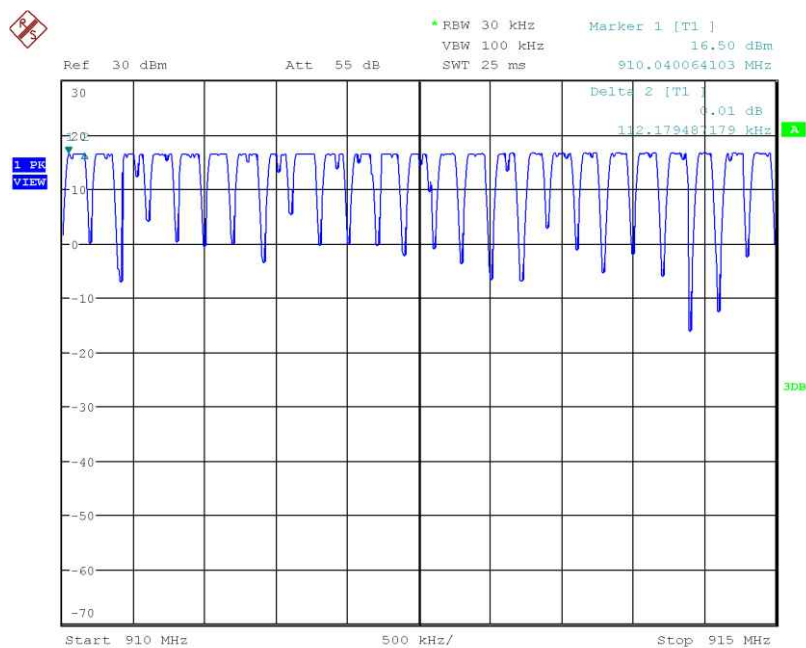
Date: 3.AUG.2021 21:32:22

Diagram 46. Frequency hopping activated. Overview 901 MHz to 905 MHz, in which 14 channels are counted.



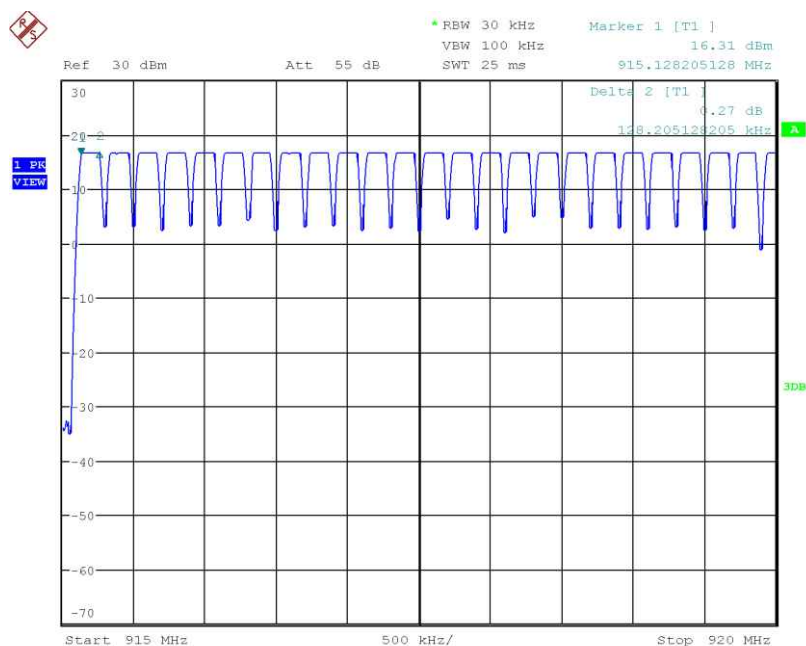
Date: 4.AUG.2021 10:56:08

Diagram 47. Frequency hopping activated. Overview 905 MHz to 910 MHz, in which 25 channels are counted.



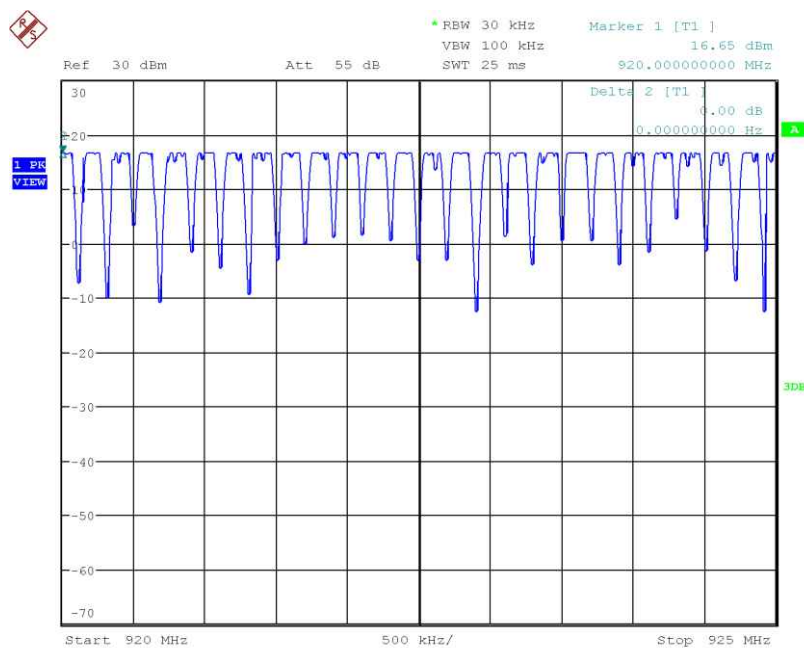
Date: 4.AUG.2021 11:02:00

Diagram 48. Frequency hopping activated. Overview 910 MHz to 915 MHz, in which 25 channels are counted.



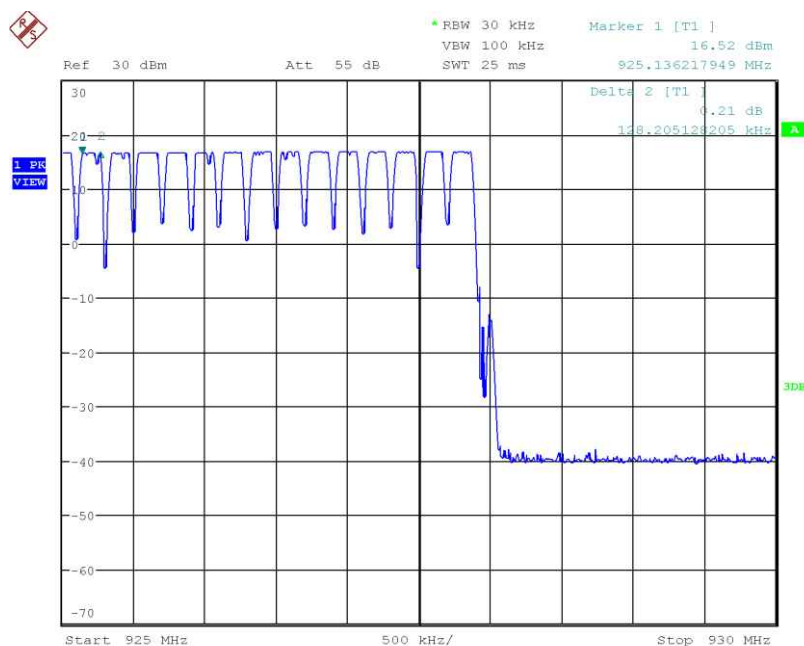
Date: 4.AUG.2021 11:40:51

Diagram 49. Frequency hopping activated. Overview 915 MHz to 920 MHz, in which 25 channels are counted.



Date: 4.AUG.2021 11:47:55

Diagram 50. Frequency hopping activated. Overview 920 MHz to 925 MHz, in which 25 channels are counted.

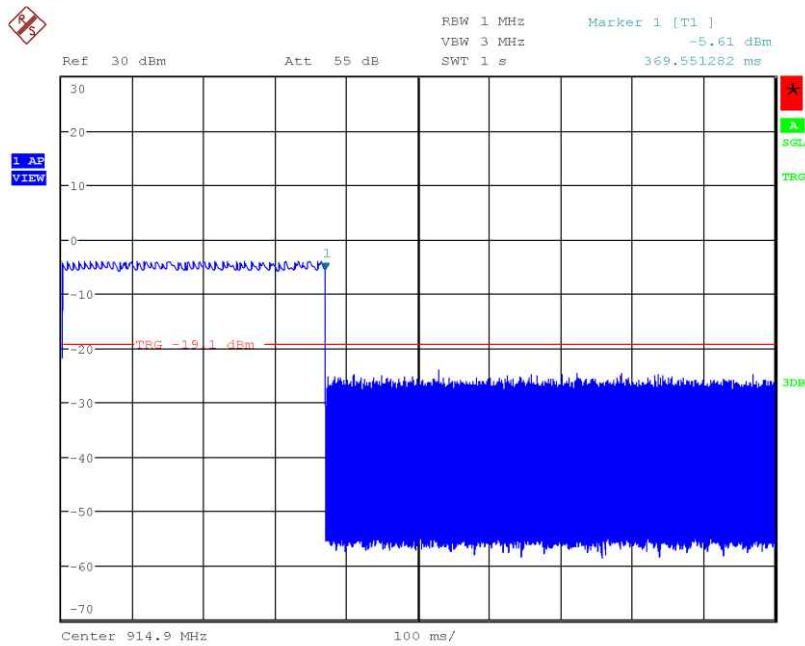


Date: 4.AUG.2021 11:55:38

Diagram 51. Frequency hopping activated. Overview 925 MHz to 930 MHz, in which 14 channels are counted.

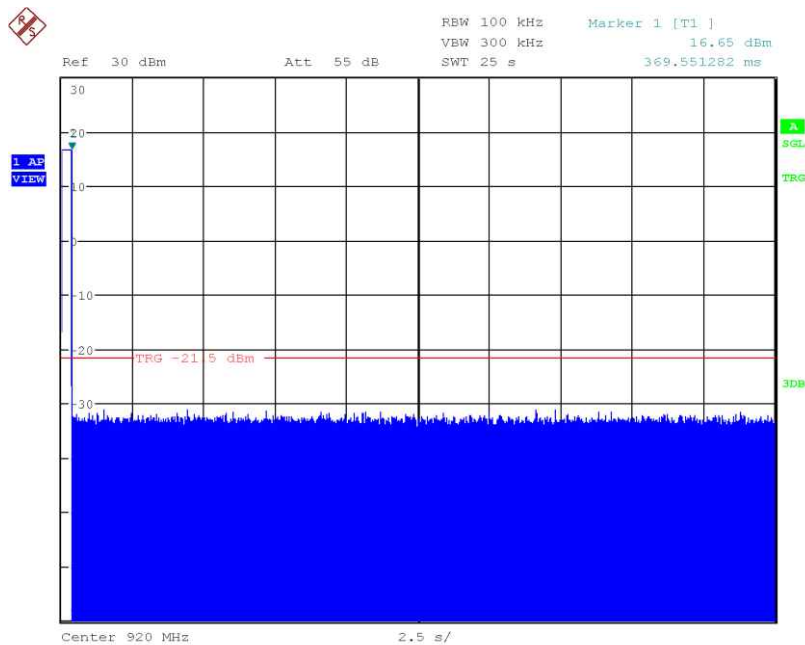
Conclusion: 128 channels are counted in total, which is more than the required 50 channels, if 20 dB BW is less than 250 kHz.

### 1.2.5 Time of occupancy



Date: 4.AUG.2021 12:06:28

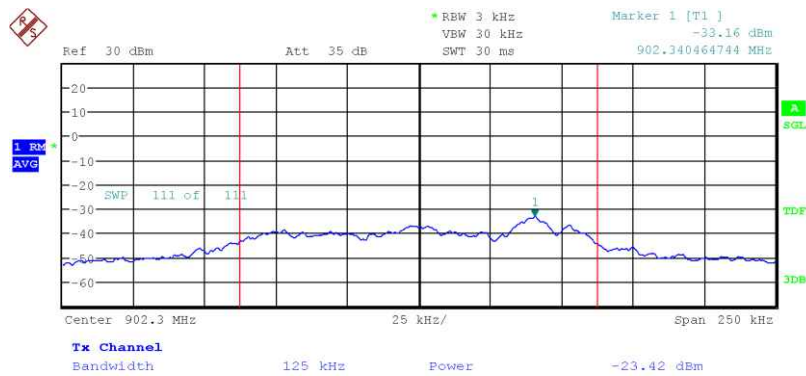
Diagram 52. Frequency hopping is activated. A single pulse width is less than 0.4 s.



Date: 4.AUG.2021 12:14:32

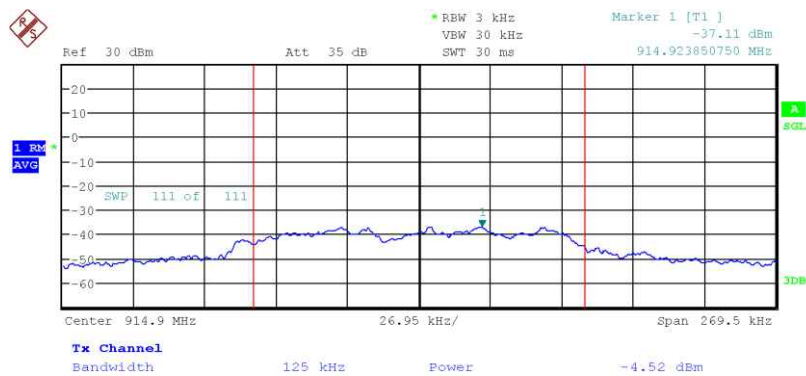
Diagram 53. Within an observation time of 25 s, only one pulse is captured at certain frequency

## 1.2.6 Max average output power conducted



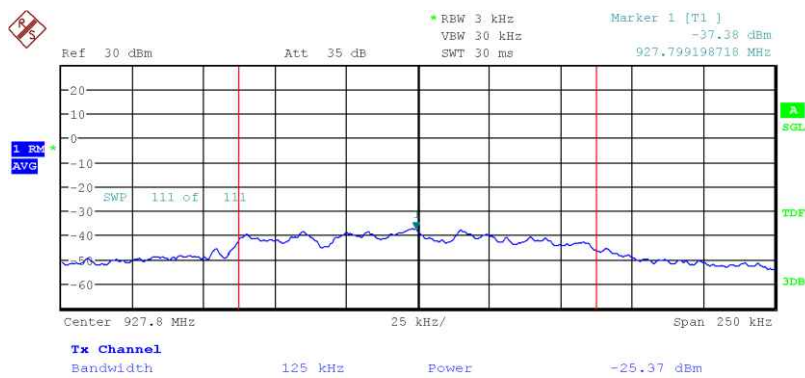
Date: 6.SEP.2021 19:10:50

Diagram 54. Average power on channel low



Date: 11.AUG.2021 16:42:58

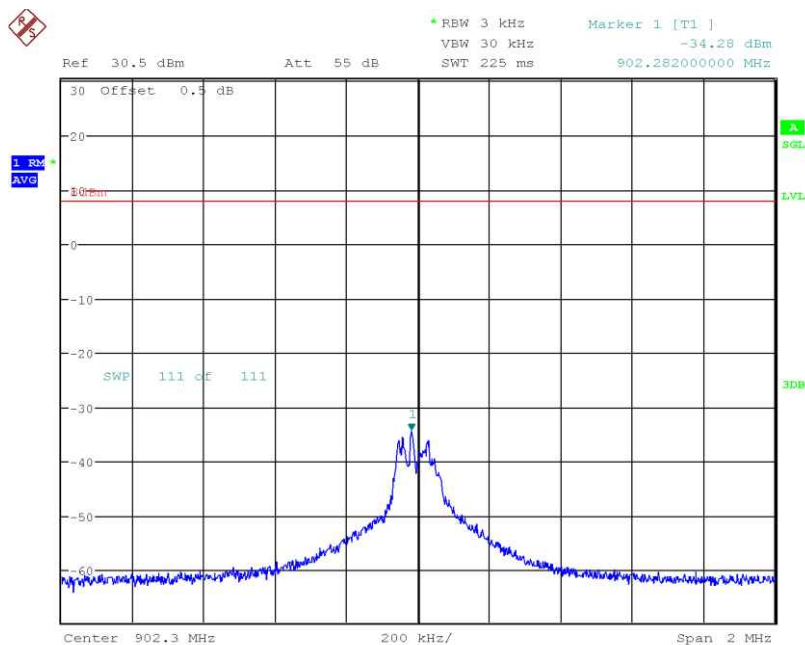
Diagram 55. Average power on channel middle



Date: 6.SEP.2021 19:14:02

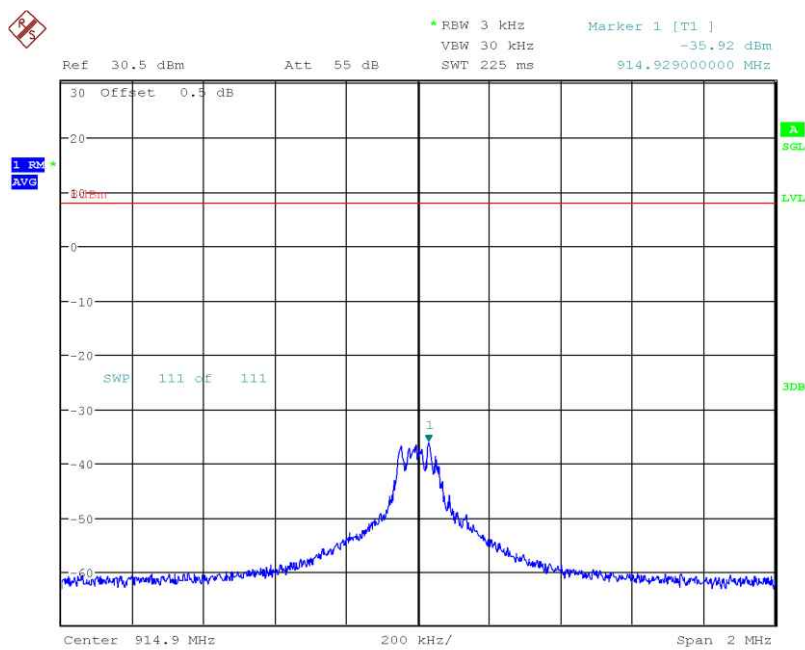
Diagram 56. Average power on channel high

### 1.2.7 Power spectral density (average)



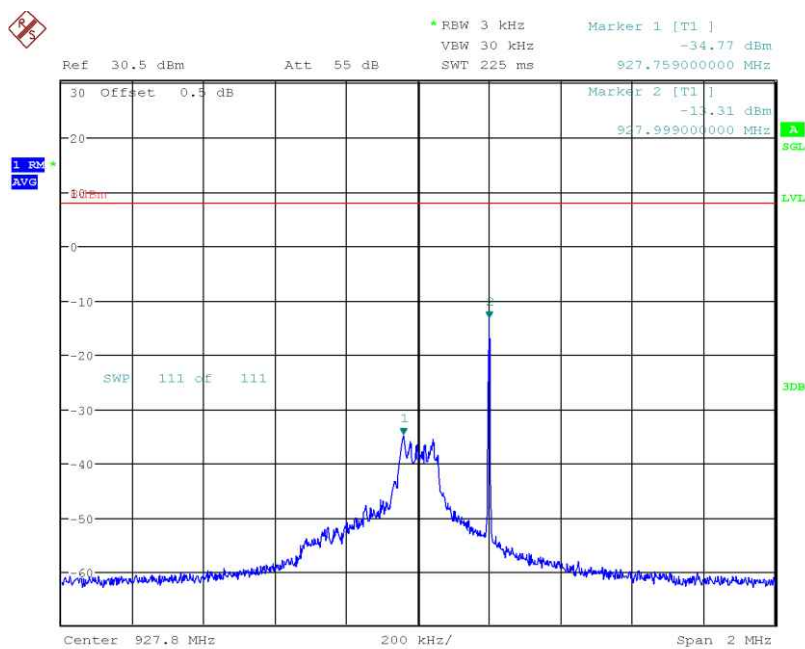
Date: 11.AUG.2021 16:19:00

Diagram 57. PSD at channel low



Date: 11.AUG.2021 16:20:50

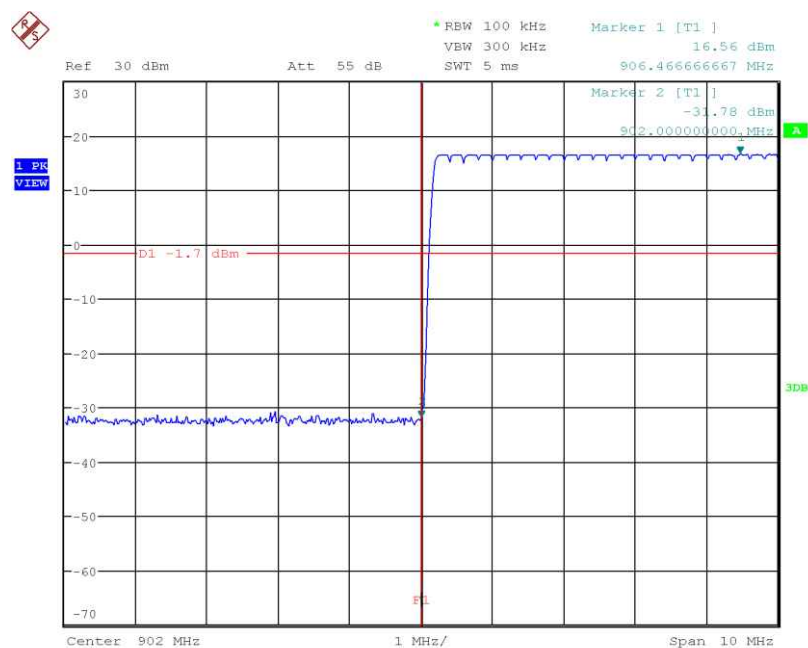
Diagram 58. PSD at channel middle



Date: 11.AUG.2021 16:14:33

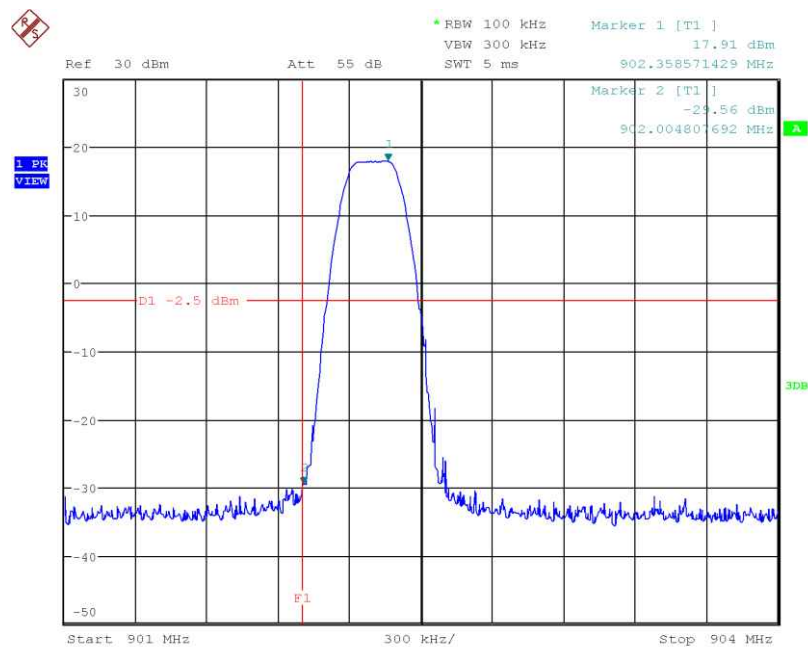
Diagram 59. PSD at channel high

## 1.2.8 Band edge



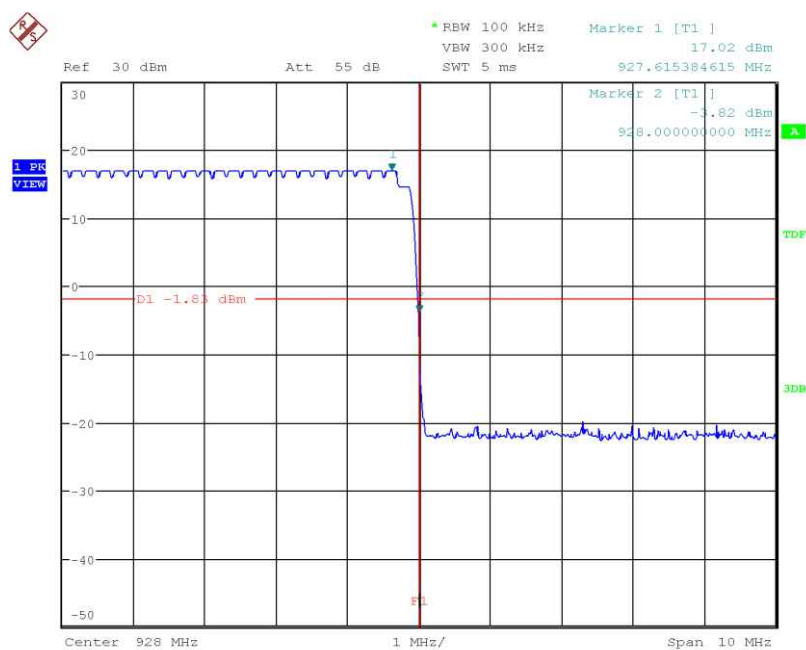
Date: 6.AUG.2021 16:47:48

Diagram 60. Band edge at channel low. Frequency hopping is activated



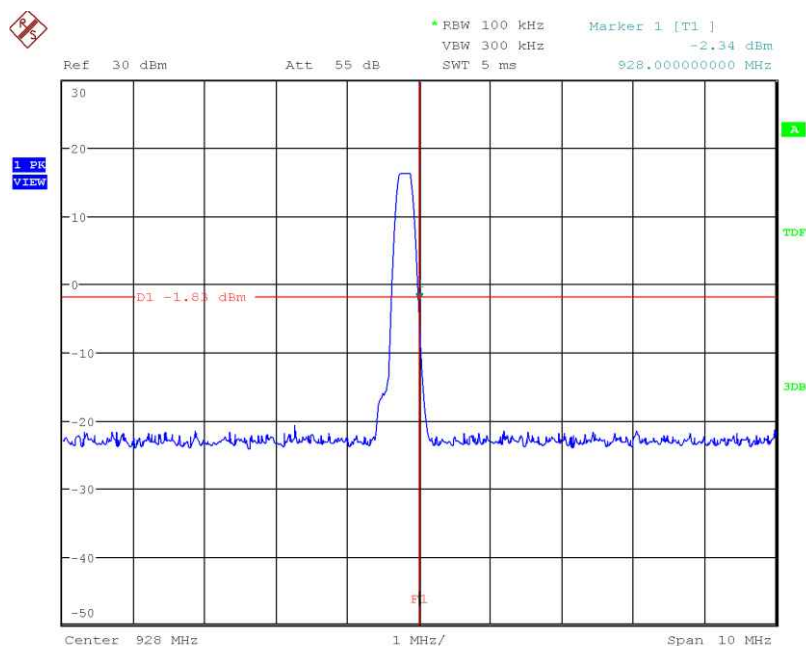
Date: 6.AUG.2021 14:48:46

Diagram 61. Band edge at channel low. Frequency hopping is deactivated



Date: 6.SEP.2021 18:47:20

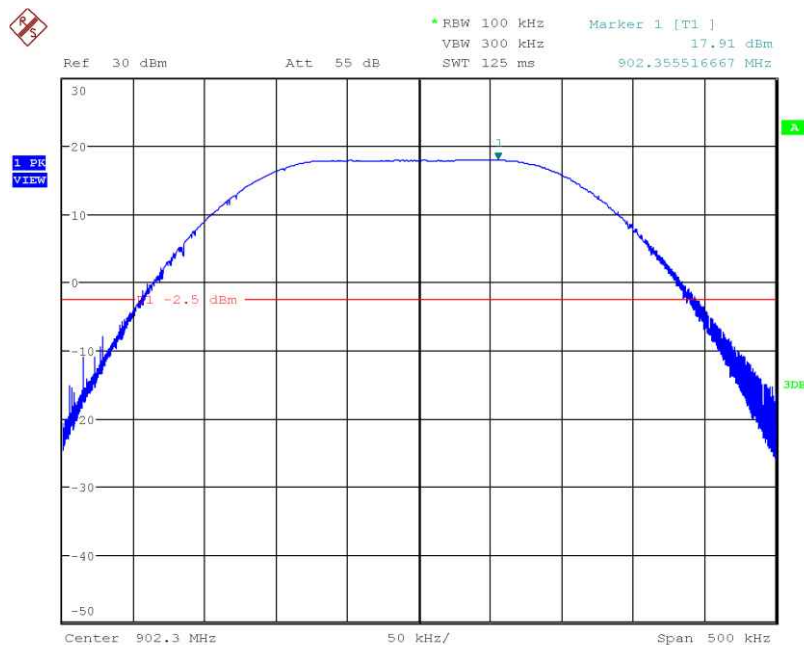
Diagram 62. Band edge at channel high. Frequency hopping is activated



Date: 6.SEP.2021 18:25:47

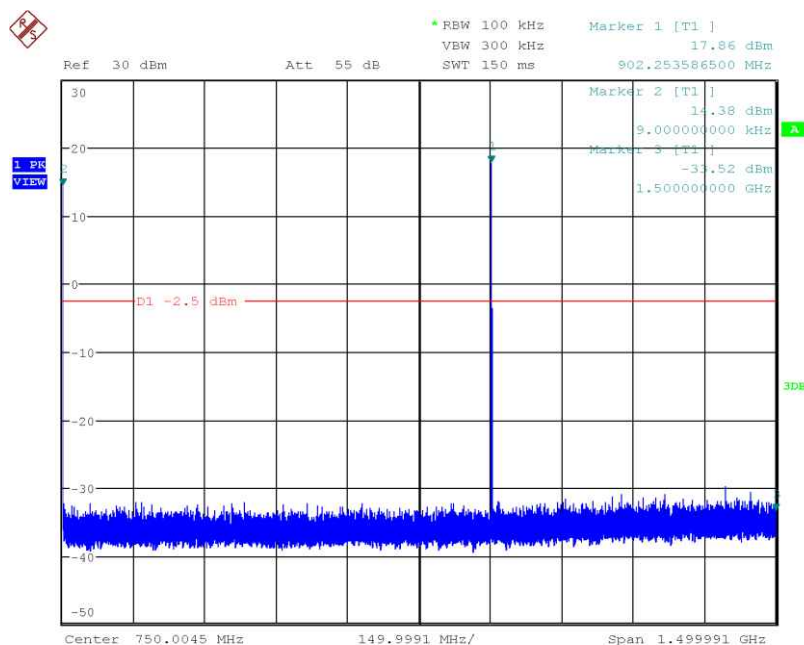
Diagram 63. Band edge at channel high. Frequency hopping is deactivated. Peak level at 18.02 dBm.

## 1.2.9 Conducted spurious emission



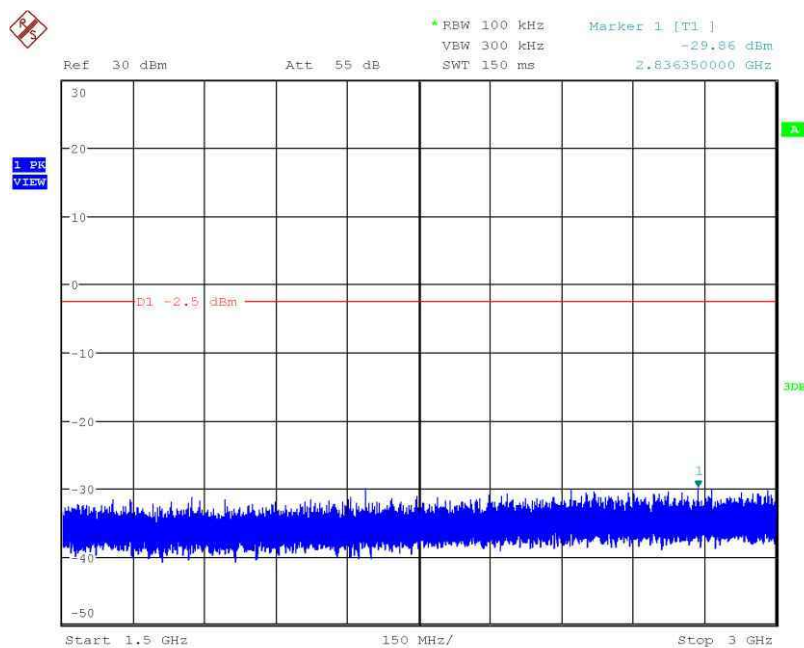
Date: 6.AUG.2021 14:40:38

Diagram 64. The fundamental emission level is at 18 dBm, thus the spurious emissions must be beneath -2 dBm, if the peak detector is applied.



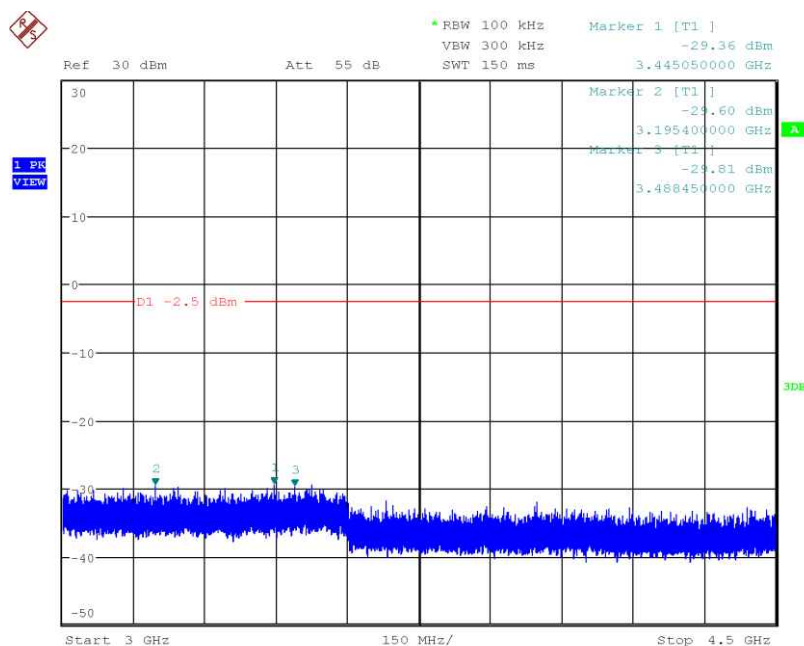
Date: 6.AUG.2021 14:39:09

Diagram 65. conducted spurious for channel low, from 9 kHz to 1.5 GHz. The peak at Marker 2 is intrinsic from the spectrum analyzer, which is irrelevant to the limit.



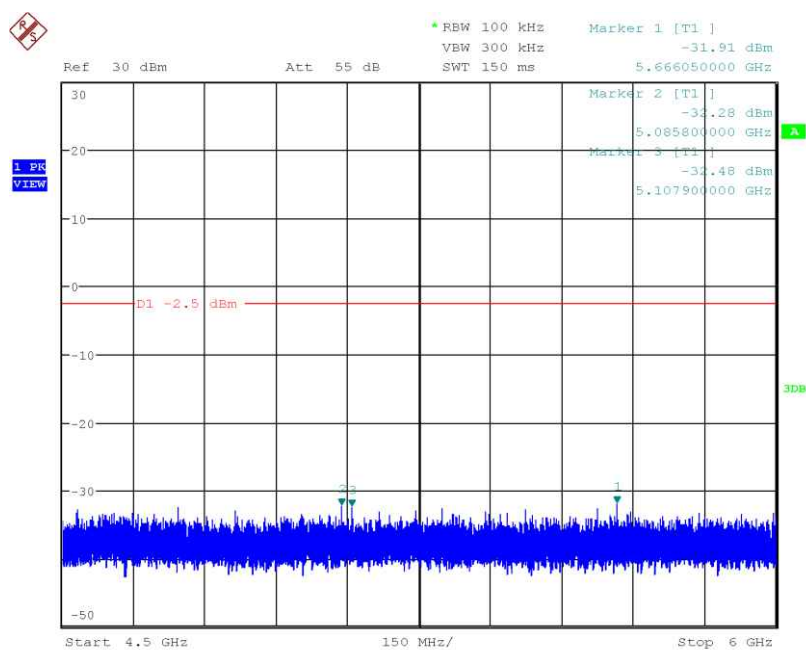
Date: 6.AUG.2021 14:41:13

Diagram 66. conducted spurious for channel low, from 1.5 GHz to 3 GHz.



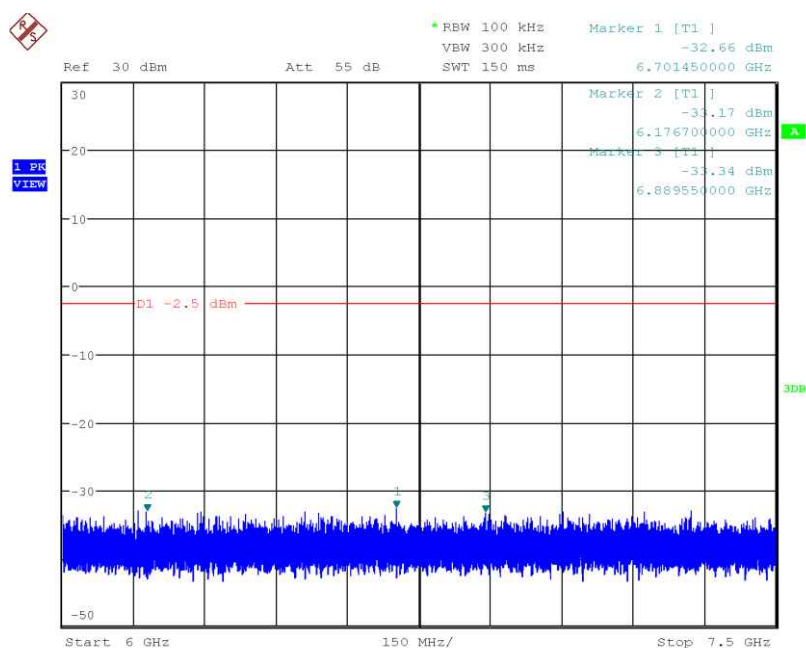
Date: 6.AUG.2021 14:42:27

Diagram 67. conducted spurious for channel low, from 3 GHz to 4.5 GHz.



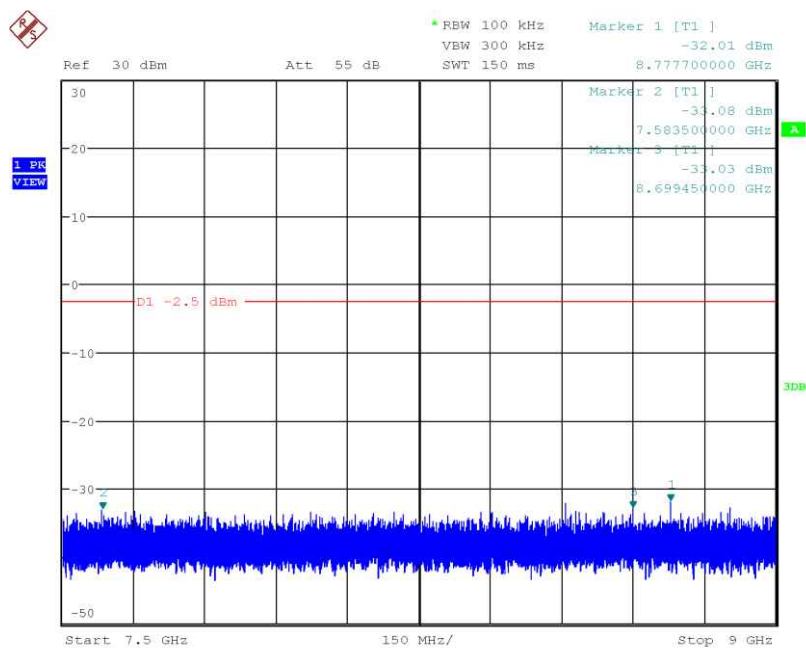
Date: 6.AUG.2021 14:43:22

Diagram 68. conducted spurious for channel low, from 4.5 GHz to 6 GHz.



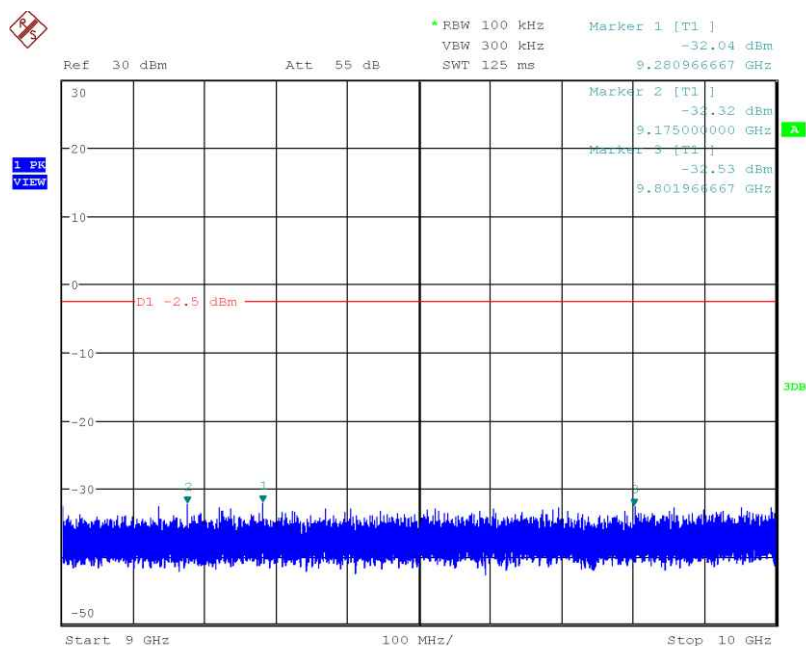
Date: 6.AUG.2021 14:43:59

Diagram 69. conducted spurious for channel low, from 6 GHz to 7.5 GHz



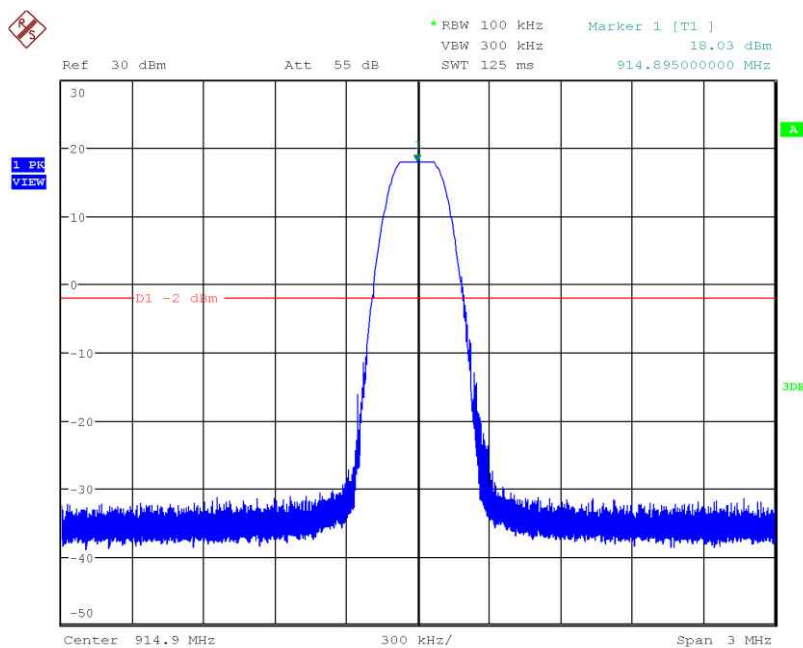
Date: 6.AUG.2021 14:44:45

Diagram 70. conducted spurious for channel low, from 7.5 GHz to 9 GHz



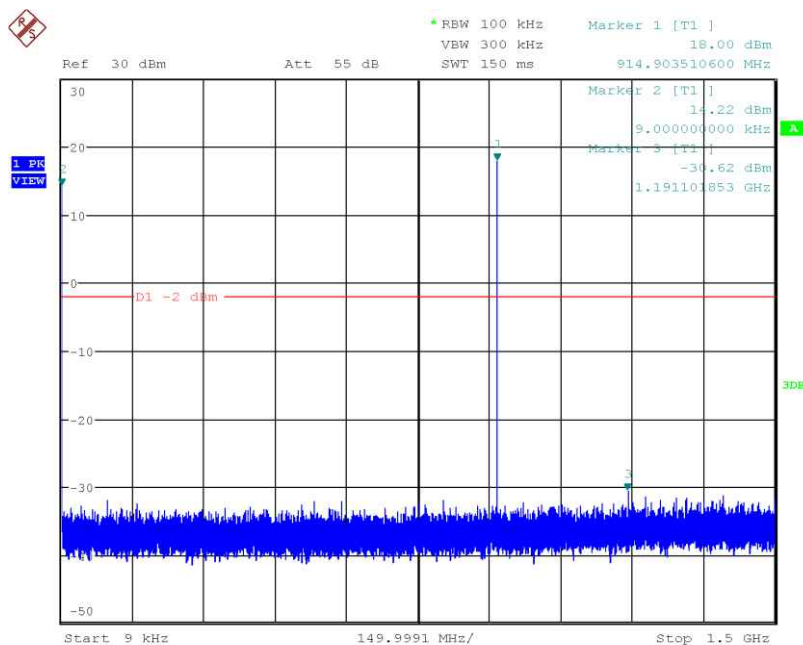
Date: 6.AUG.2021 14:45:31

Diagram 71. conducted spurious for channel low, from 9 GHz to 10 GHz



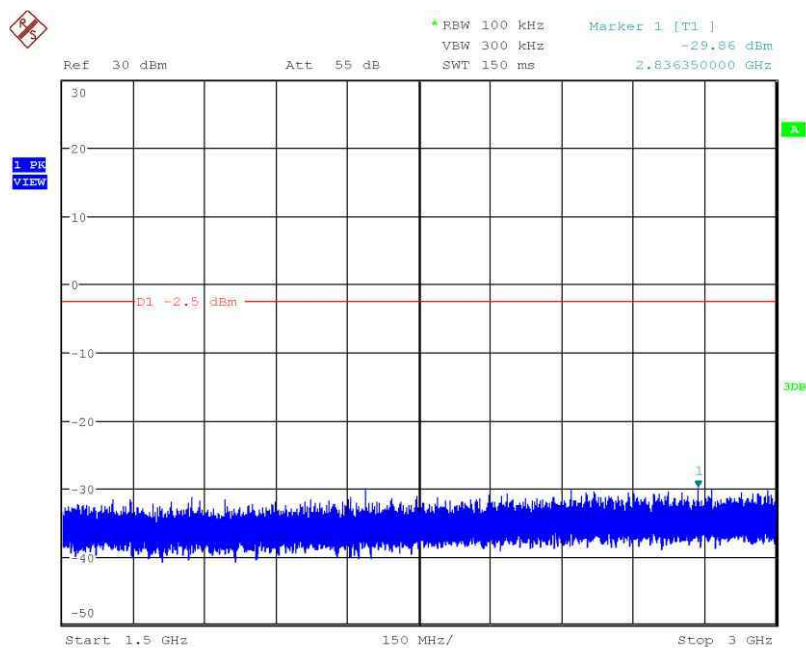
Date: 6.AUG.2021 14:50:47

Diagram 72. The fundamental emission level is at 18 dBm, thus the spurious emissions must be beneath -2 dBm, if the peak detector is applied.



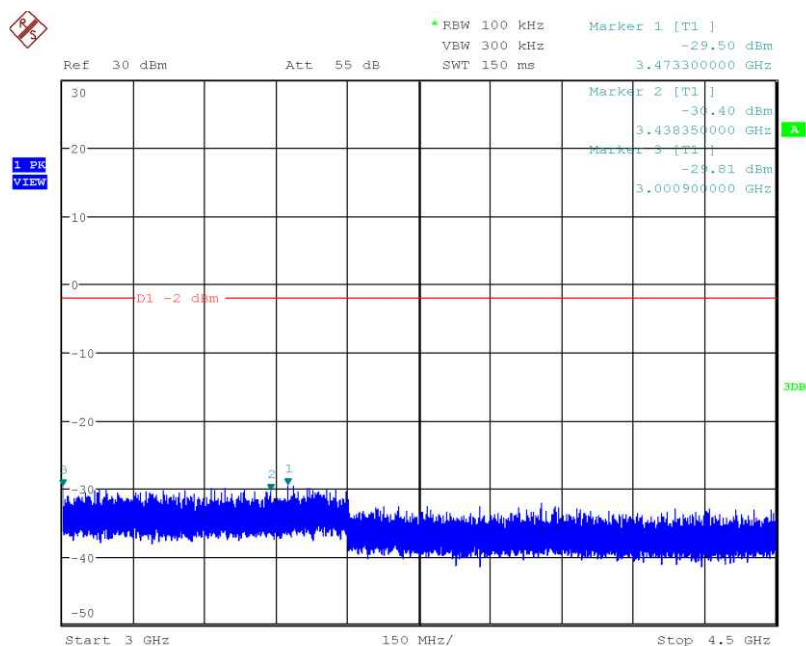
Date: 6.AUG.2021 14:51:27

Diagram 73. conducted spurious for channel middle, from 9 kHz to 1.5 GHz. The peak at Marker 2 is intrinsic from the spectrum analyzer, which is irrelevant to the limit.



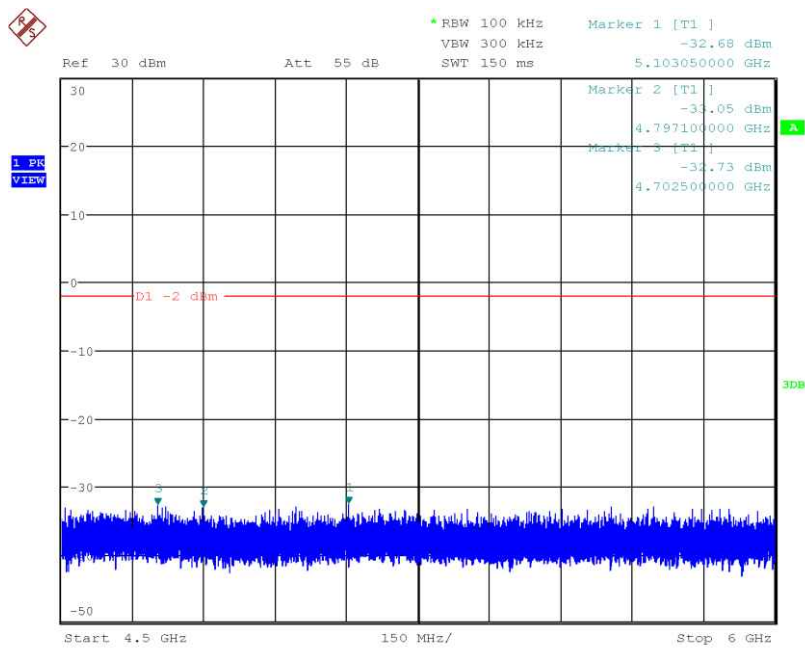
Date: 6.AUG.2021 14:41:13

Diagram 74. conducted spurious for channel middle, from 1.5 GHz to 3 GHz.



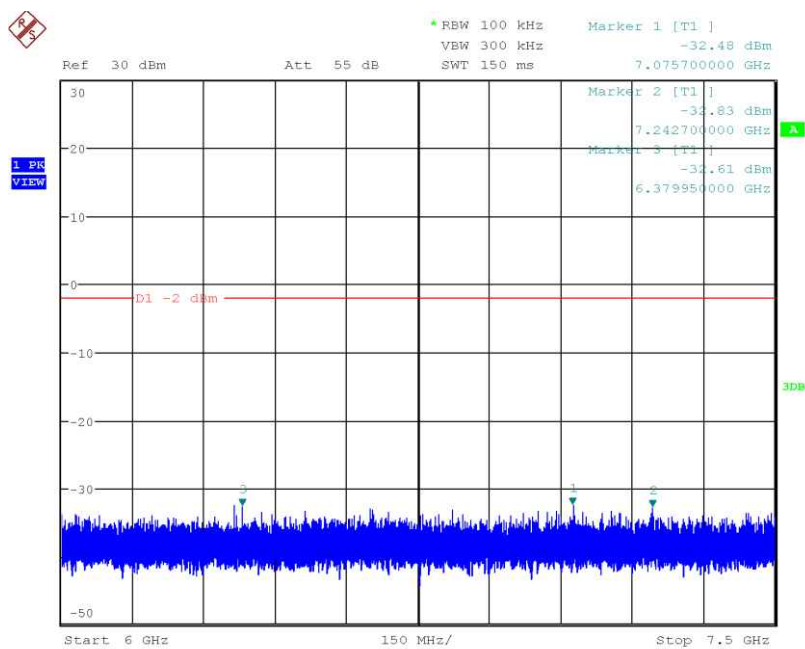
Date: 6.AUG.2021 14:54:09

Diagram 75. conducted spurious for channel middle, from 3 GHz to 4.5 GHz.



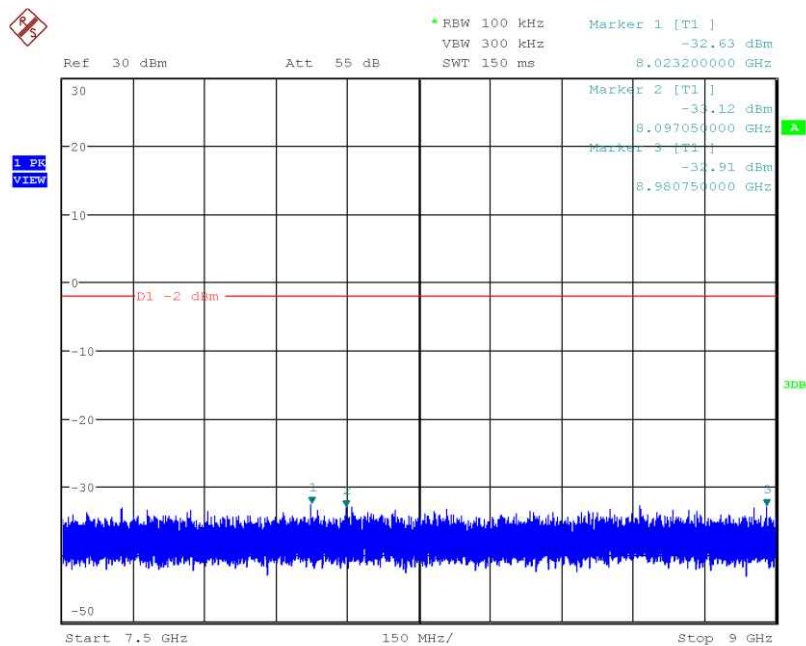
Date: 6.AUG.2021 14:54:49

Diagram 76. conducted spurious for channel middle, from 4.5 GHz to 6 GHz



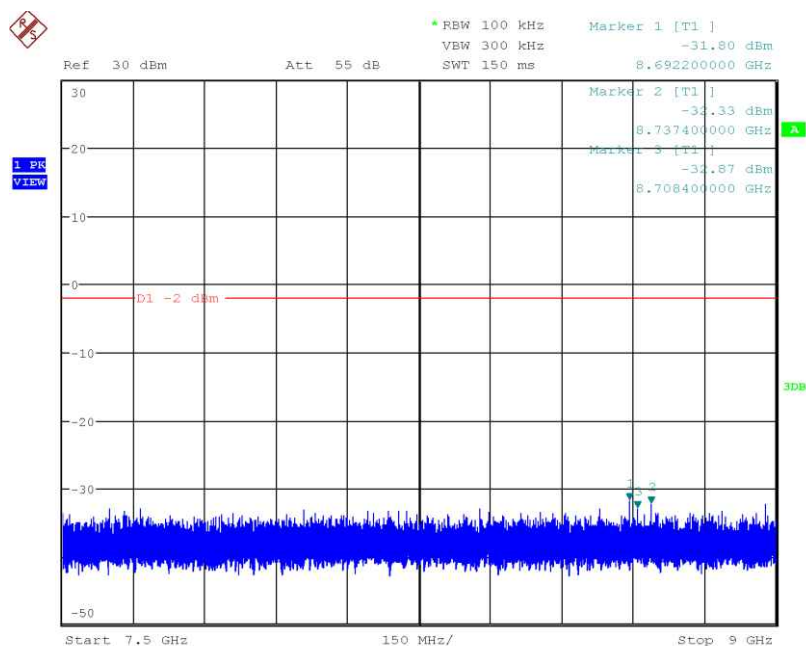
Date: 6.AUG.2021 14:55:55

Diagram 77. conducted spurious for channel middle, from 6 GHz to 7.5 GHz



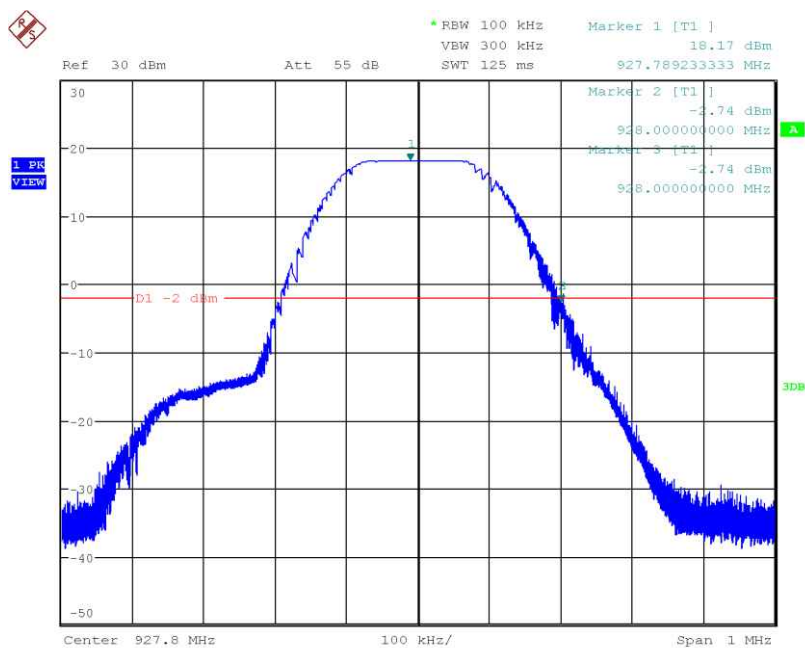
Date: 6.AUG.2021 14:56:40

Diagram 78. conducted spurious for channel middle, from 7.5 GHz to 9 GHz



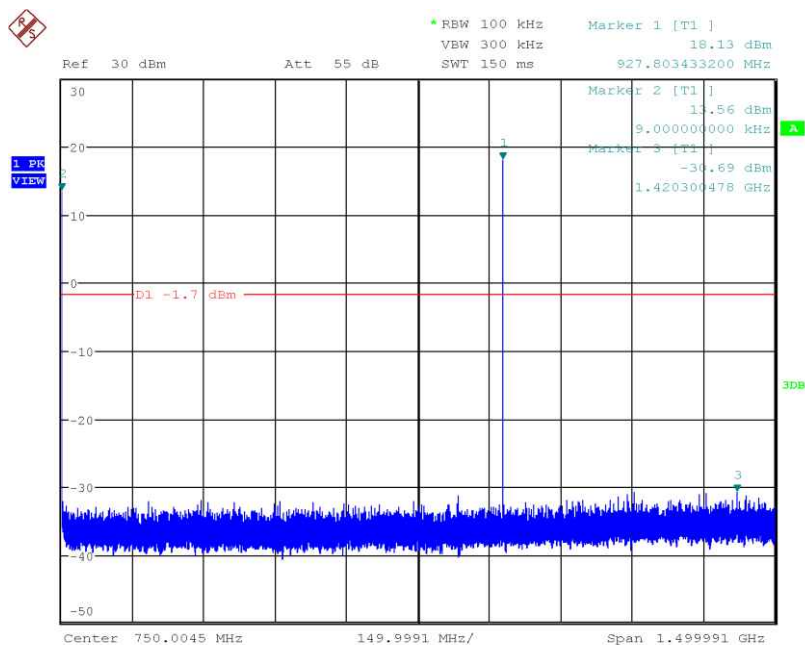
Date: 6.AUG.2021 14:57:30

Diagram 79. conducted spurious for channel middle, from 9 GHz to 10 GHz



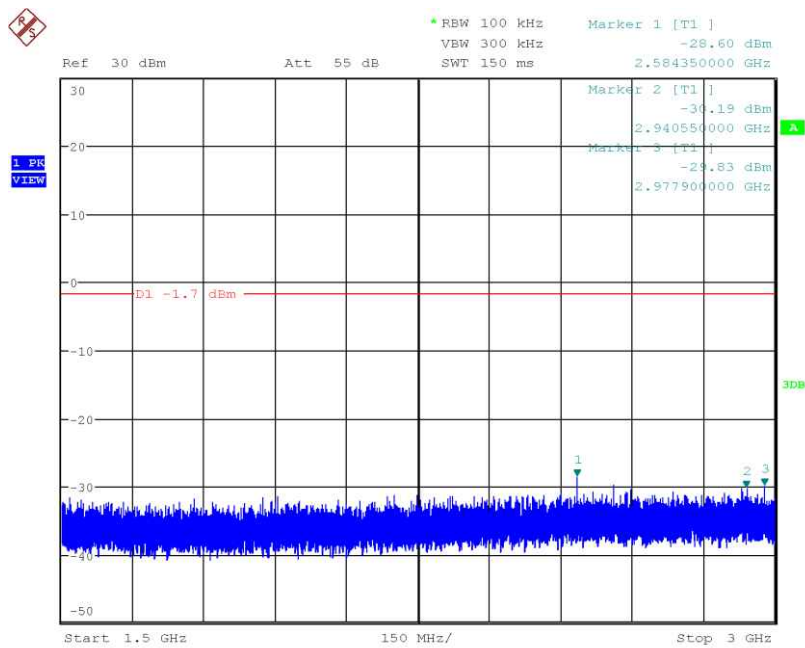
Date: 6.AUG.2021 14:59:08

Diagram 80. The fundamental emission level is at 18 dBm, thus the spurious emissions must be beneath -2 dBm, if the peak detector is applied.



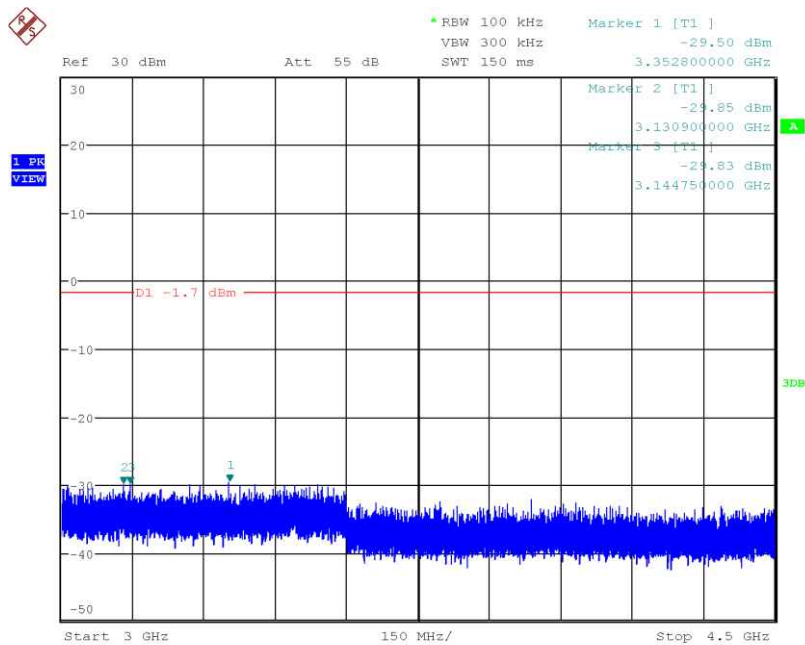
Date: 6.AUG.2021 15:38:48

Diagram 81. conducted spurious for channel high, from 9 kHz to 1.5 GHz. The peak at Marker 2 is intrinsic from the spectrum analyzer, which is irrelevant to the limit.



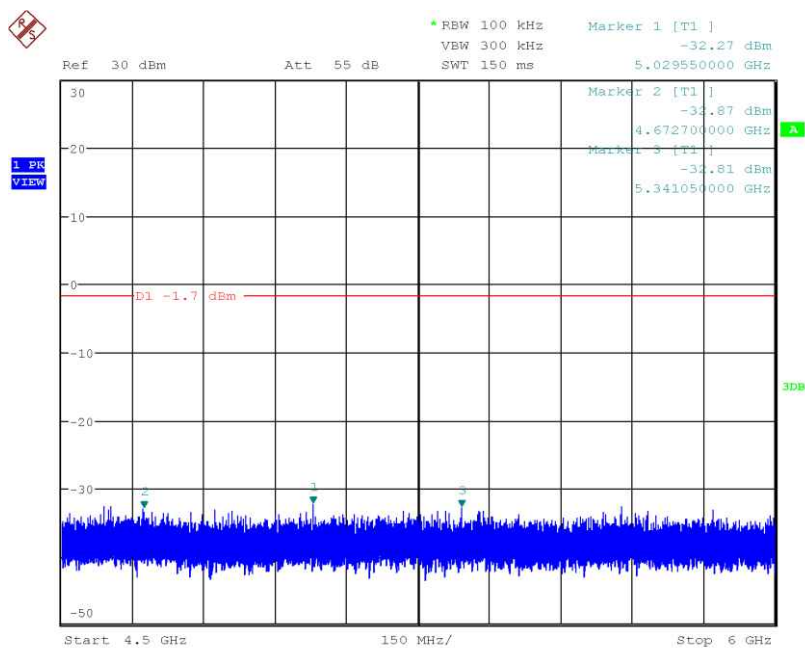
Date: 6.AUG.2021 15:39:47

Diagram 82. conducted spurious for channel high, from 1.5 GHz to 3 GHz.



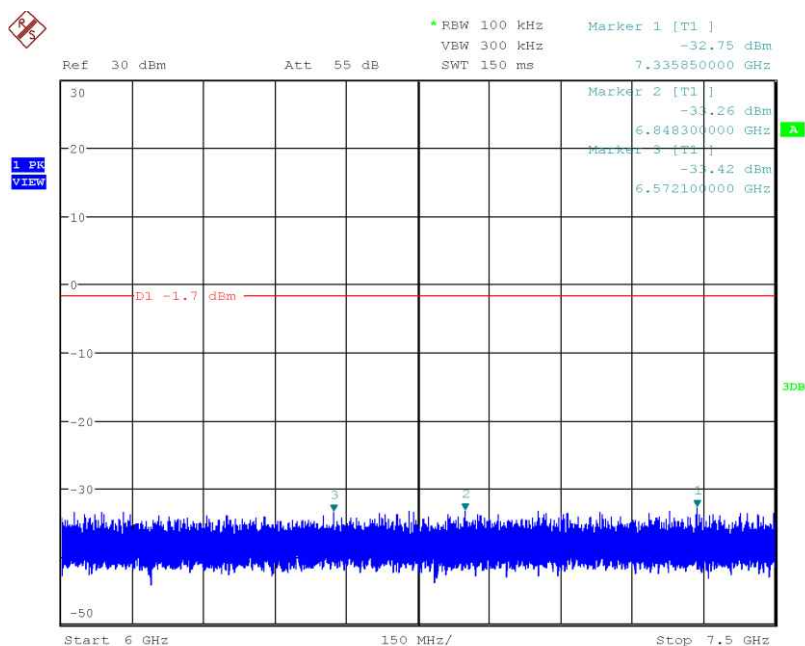
Date: 6.AUG.2021 15:41:06

Diagram 83. conducted spurious for channel high, from 3 GHz to 4.5 GHz.



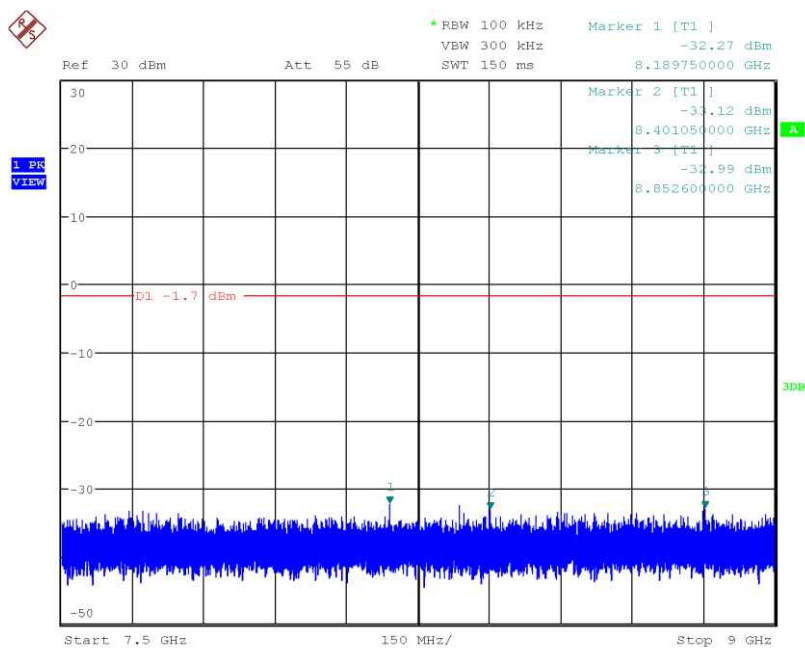
Date: 6.AUG.2021 15:41:48

Diagram 84. conducted spurious for channel high, from 4.5 GHz to 6 GHz



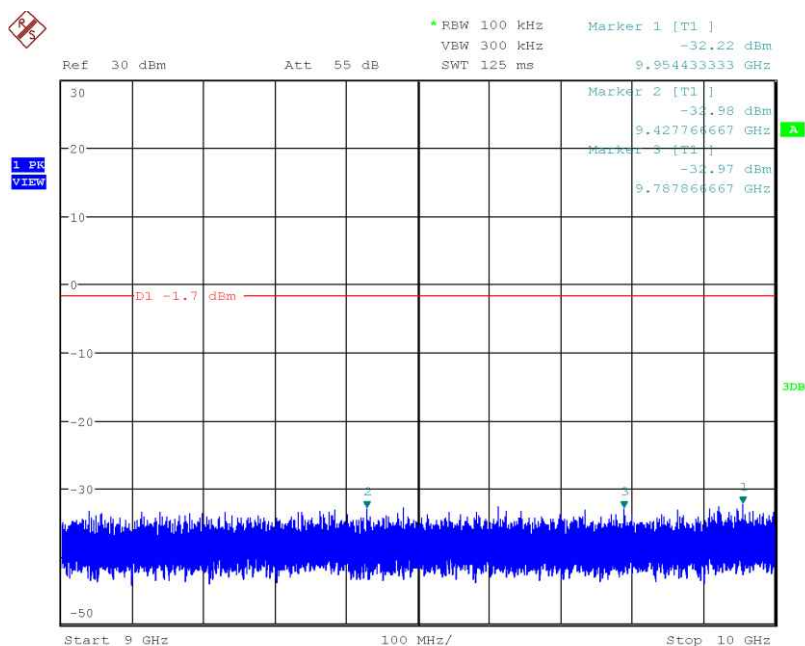
Date: 6.AUG.2021 15:42:32

Diagram 85. conducted spurious for channel high, from 6 GHz to 7.5 GHz



Date: 6.AUG.2021 15:43:10

Diagram 86. conducted spurious for channel high, from 7.5 GHz to 9 GHz



Date: 6.AUG.2021 15:43:55

Diagram 87. conducted spurious for channel high, from 9 GHz to 10 GHz

## 1.2.10 Radiated spurious emission

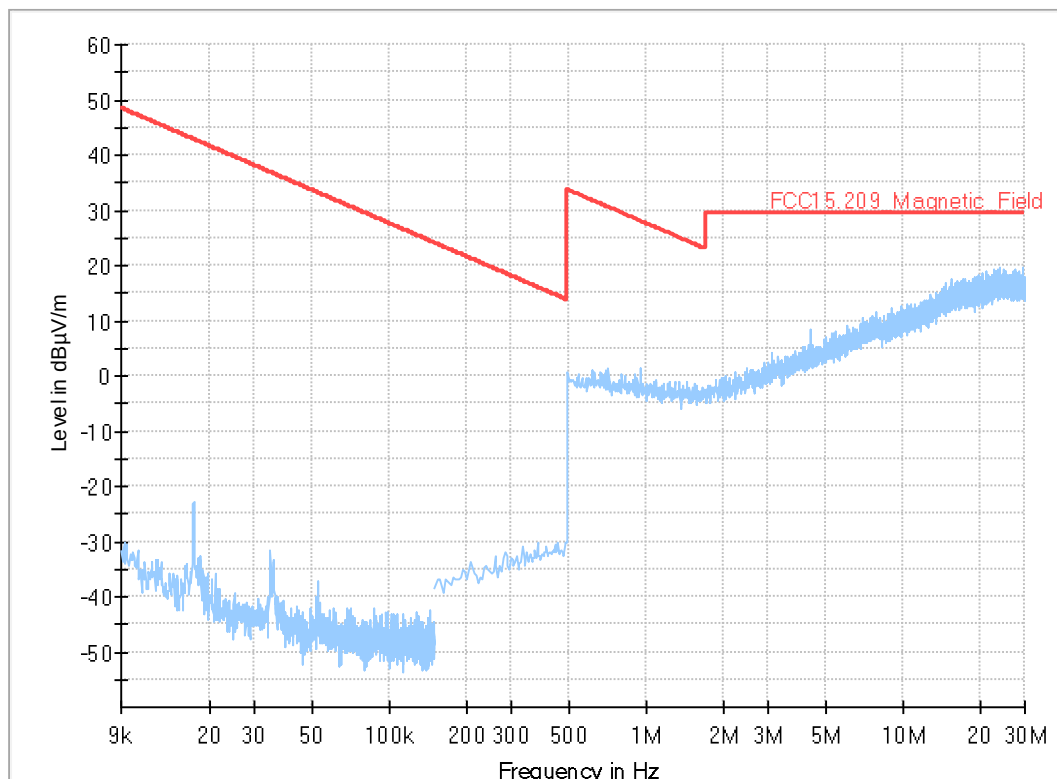
### 1.2.10.1 Frequency range 9 kHz – 30 MHz

## Diagram 2.01\_RSE\_FHSS\_Flow\_lying

### Common Information

|                            |                                                                             |
|----------------------------|-----------------------------------------------------------------------------|
| Test Description:          | Magnetic Field Strength Measurement related to 30/300 m distance            |
| Test Site Location:        | Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance     |
| Version of Testsoftware:   | EMC32 V10.50.0                                                              |
| Distance correction:       | used accord. table, pls. see test report                                    |
| Rec. antenna (pre-scan):   | height 1.00 m, parallel and 90° to EUT polarisation                         |
| Used Filter:               | bypass                                                                      |
| Test Standard:             | FCC § 15.209; RSS-Gen: Issue 5                                              |
| Operator:                  | GHu/PGrundmann                                                              |
| Operating Mode:            | TX FHSS mode, channel low                                                   |
| Power during tests:        | Battery                                                                     |
| Environmental Conditions:: | Humidity : 60%rH; Temperature: 21°C                                         |
| Verdict:                   | Passed                                                                      |
| Comment:                   | The EUT is tested at lying position only, which is the worst case position. |

Full Spectrum

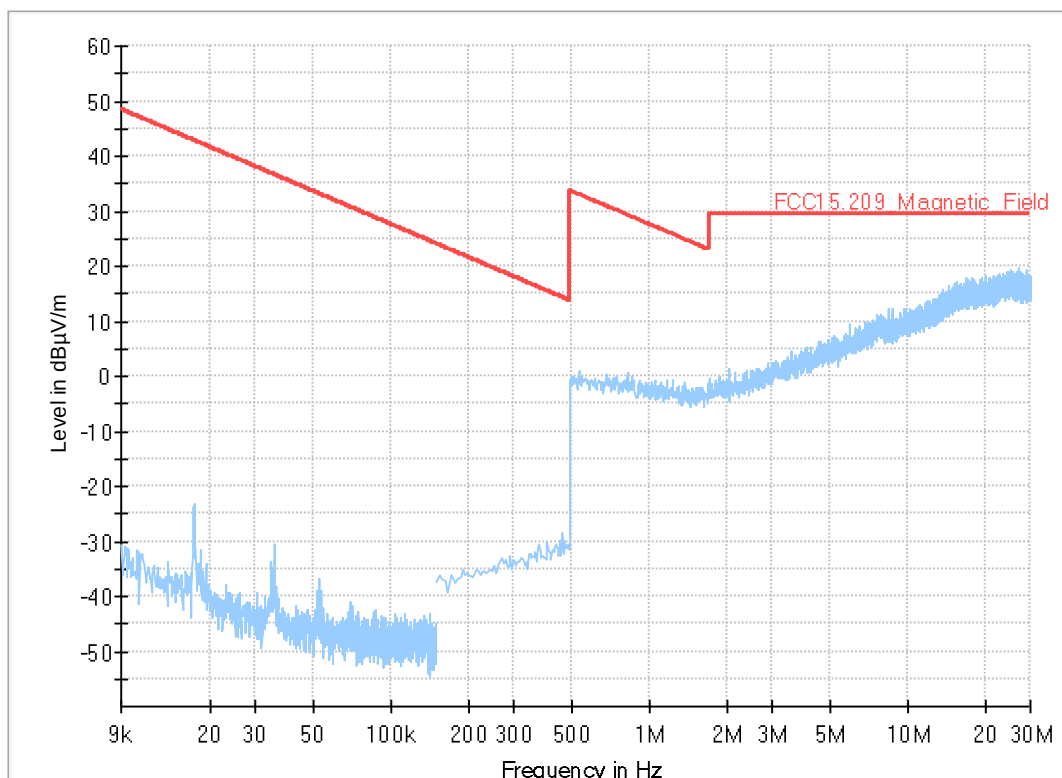


## Diagram 2.02\_RSE\_FHSS\_Fmid\_lying

### Common Information

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Test Description:         | Magnetic Field Strength Measurement related to 30/300 m distance            |
| Test Site Location:       | Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance     |
| Version of Testsoftware:  | EMC32 V10.50.0                                                              |
| Distance correction:      | used accord. table, pls. see test report                                    |
| Rec. antenna (pre-scan):  | height 1.00 m, parallel and 90° to EUT polarisation                         |
| Used Filter:              | bypass                                                                      |
| Test Standard:            | FCC § 15.209; RSS-Gen: Issue 5                                              |
| Operator:                 | GHu/PGrundmann                                                              |
| Operating Mode:           | TX FHSS mode, channel middle                                                |
| Power during tests:       | Battery                                                                     |
| Environmental Conditions: | Humidity : 60%rH; Temperature: 21°C                                         |
| Verdict:                  | Passed                                                                      |
| Comment:                  | The EUT is tested at lying position only, which is the worst case position. |

Full Spectrum

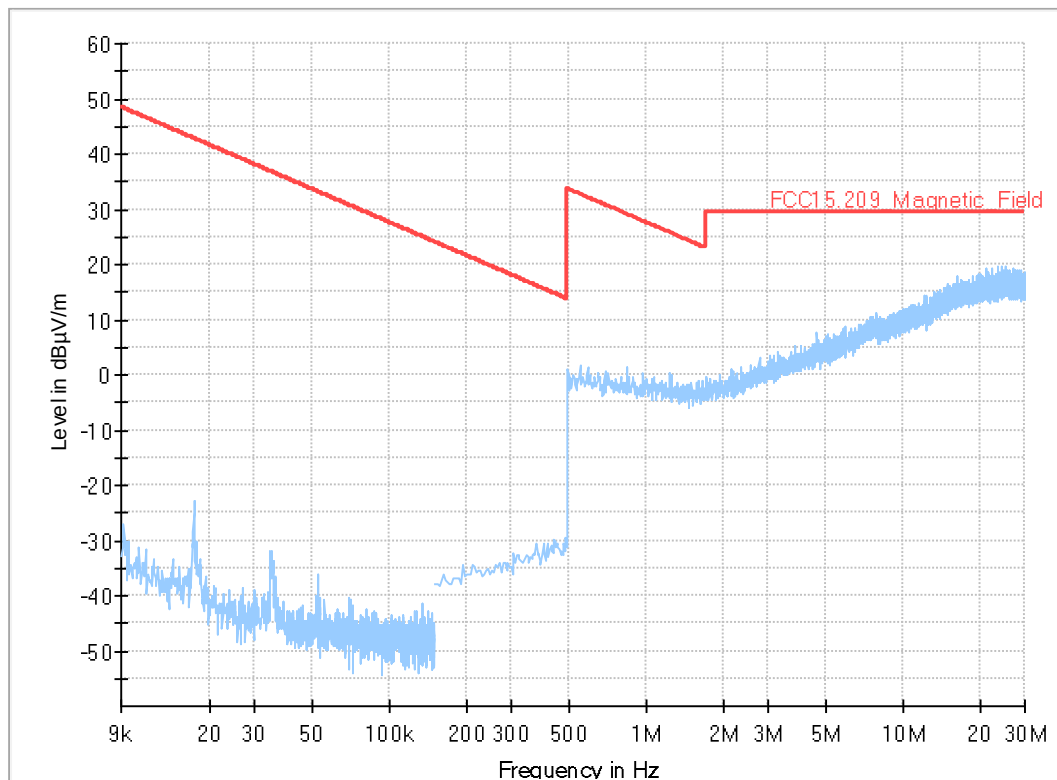


## Diagram 2.03\_RSE\_FHSS\_Fhigh\_lying

### Common Information

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Test Description:         | Magnetic Field Strength Measurement related to 30/300 m distance            |
| Test Site Location:       | Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance     |
| Version of Testsoftware:  | EMC32 V10.50.0                                                              |
| Distance correction:      | used accord. table, pls. see test report                                    |
| Rec. antenna (pre-scan):  | height 1.00 m, parallel and 90° to EUT polarisation                         |
| Used Filter:              | bypass                                                                      |
| Test Standard:            | FCC § 15.209; RSS-Gen: Issue 5                                              |
| Operator:                 | GHu/PGrundmann                                                              |
| Operating Mode:           | TX FHSS mode, channel low                                                   |
| Power during tests:       | Battery                                                                     |
| Environmental Conditions: | Humidity : 60%rH; Temperature: 21°C                                         |
| Verdict:                  | Passed                                                                      |
| Comment:                  | The EUT is tested at lying position only, which is the worst case position. |

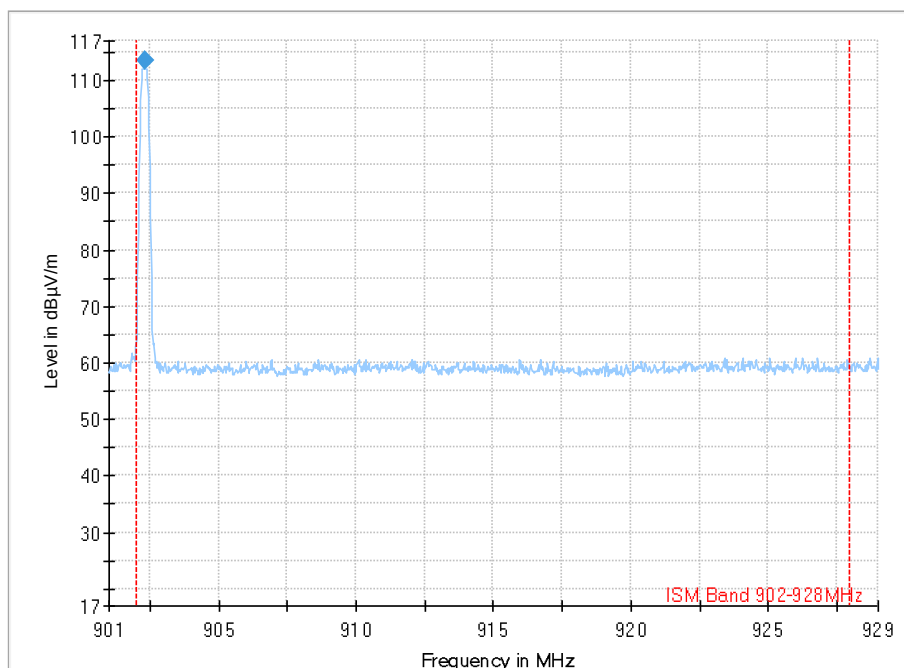
Full Spectrum



## 1.2.10.2 Frequency range 30 MHz – 1 GHz

## Diagram 3.01\_carrier\_FHSS\_Flow\_standing

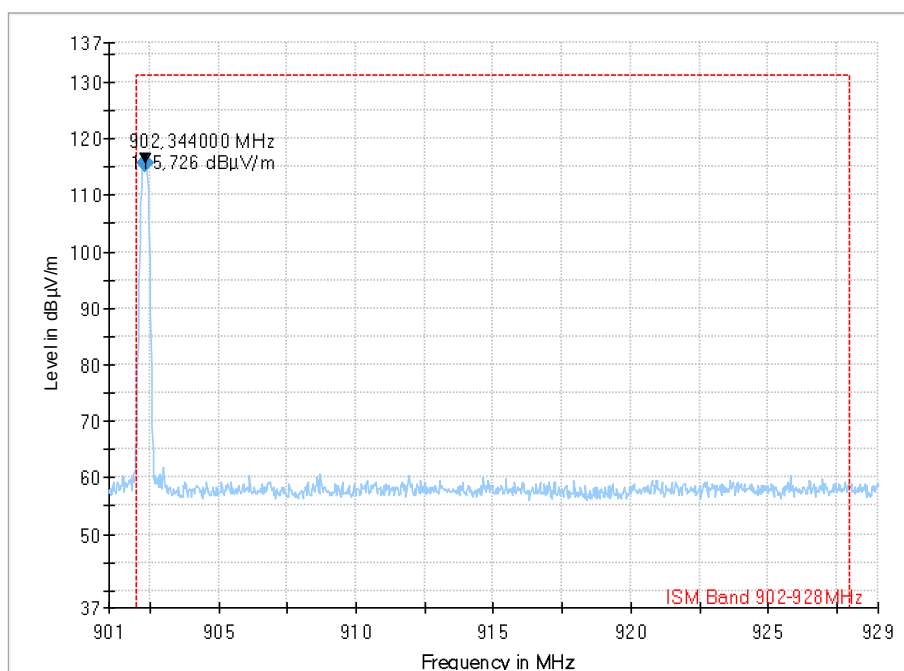
Full Spectrum



Remark: The peak emission level is at 902.3 MHz, 113.53 dBμV/m.

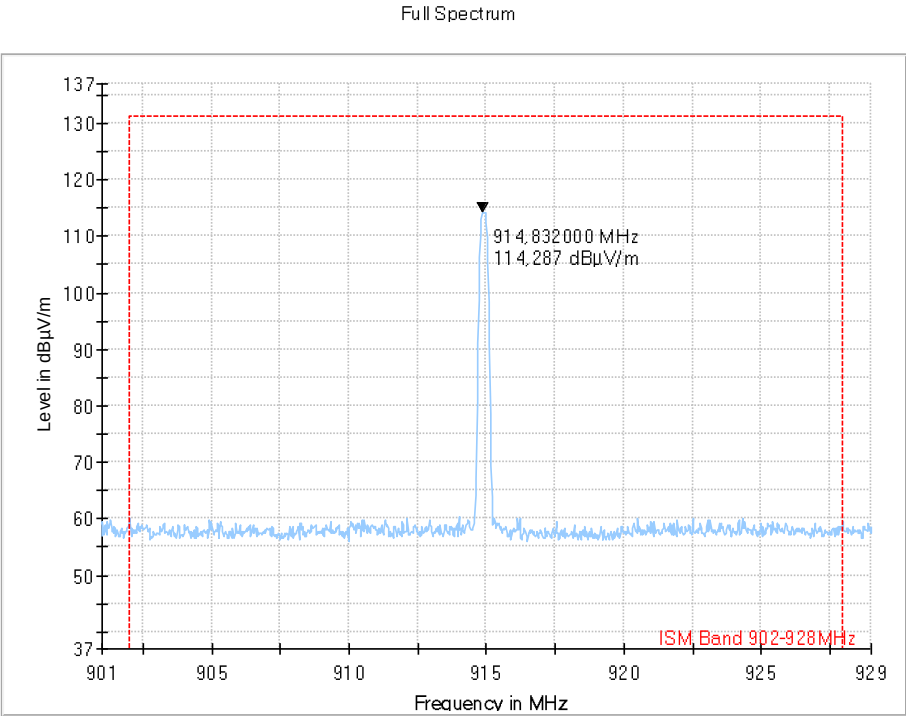
## Diagram 3.02\_carrier\_FHSS\_Flow\_lying

Full Spectrum

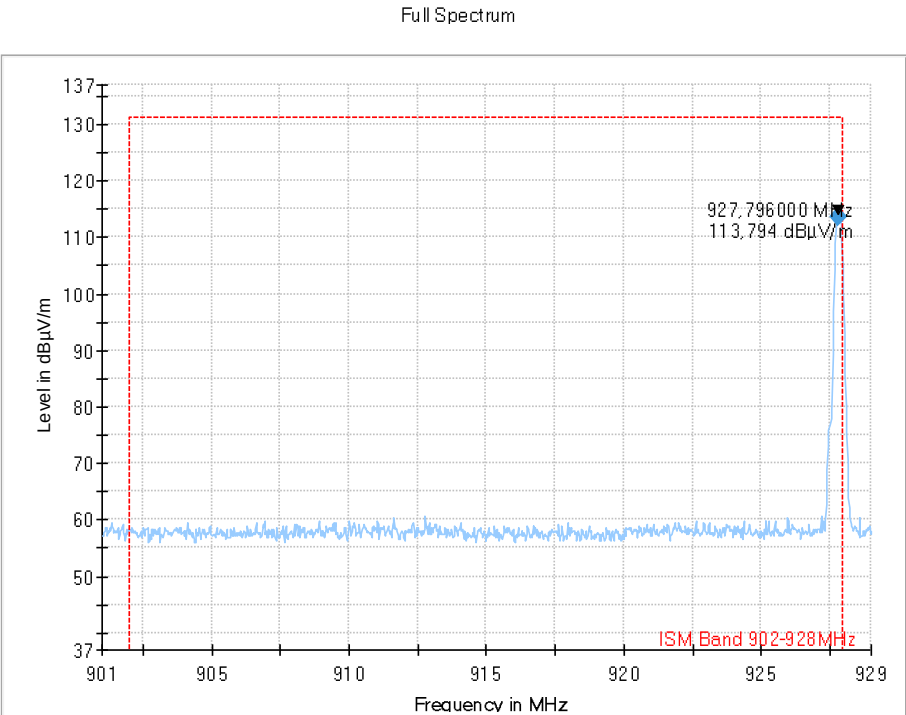


**Conclusion:** The worst case position is determined to be the lying position.

### Diagram 3.03\_carrier\_FHSS\_Fmid\_lying

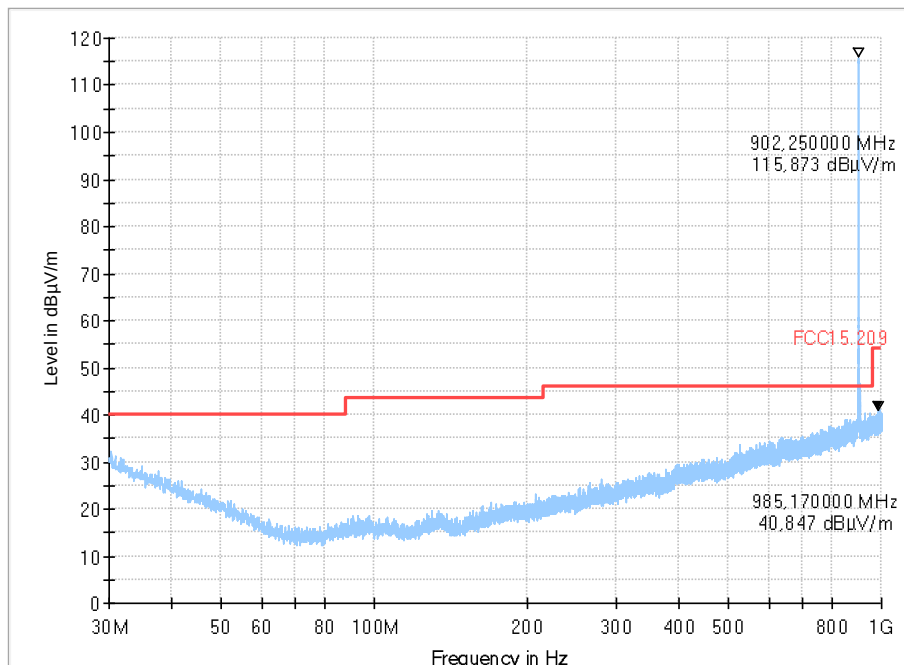


### Diagram 3.04\_carrier\_FHSS\_Fhigh\_lying



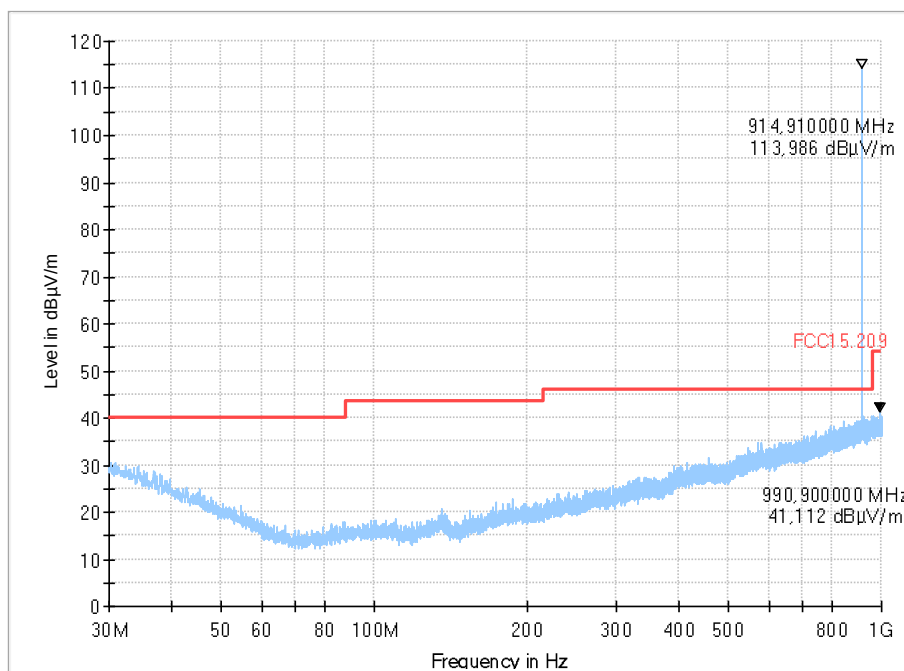
### Diagram 3.10\_RSE\_FHSS\_Flow\_Iying

Full Spectrum



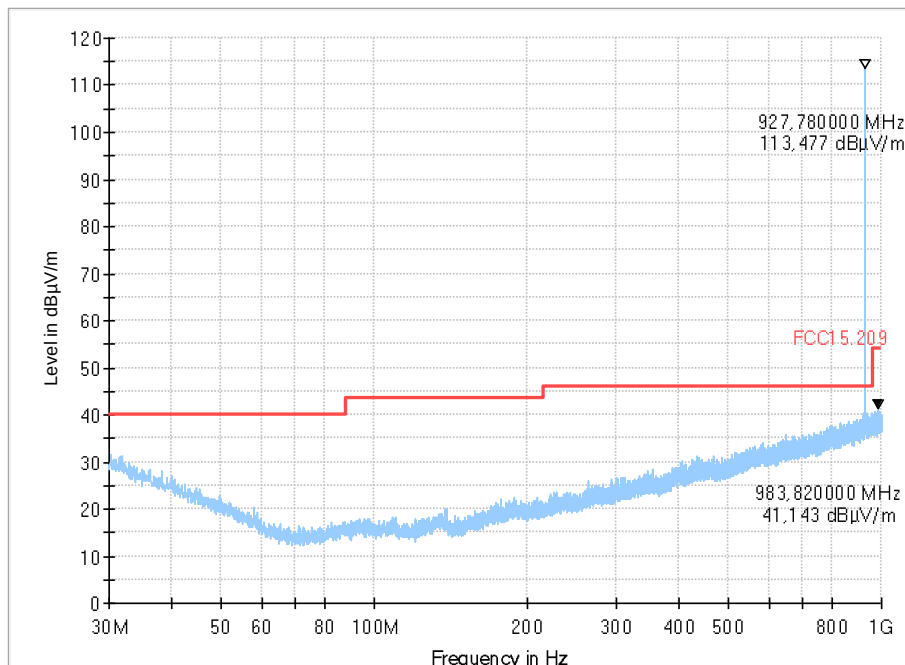
### Diagram 3.11\_RSE\_FHSS\_Fmid\_Iying

Full Spectrum



## Diagram 3.12\_RSE\_FHSS\_Fhigh\_lying

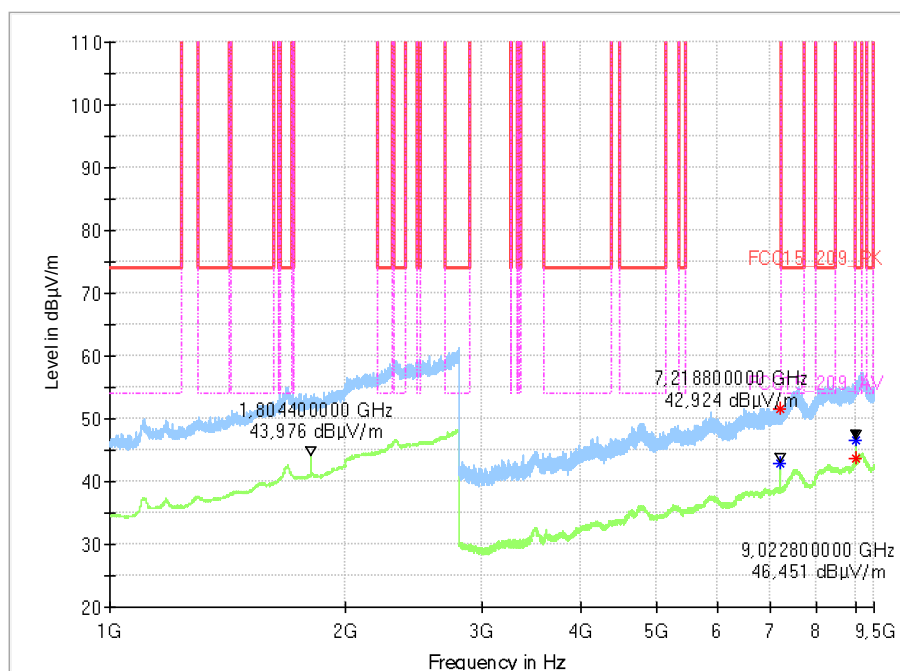
Full Spectrum



### 1.2.10.3 Frequency range 1 GHz – 9.5 GHz

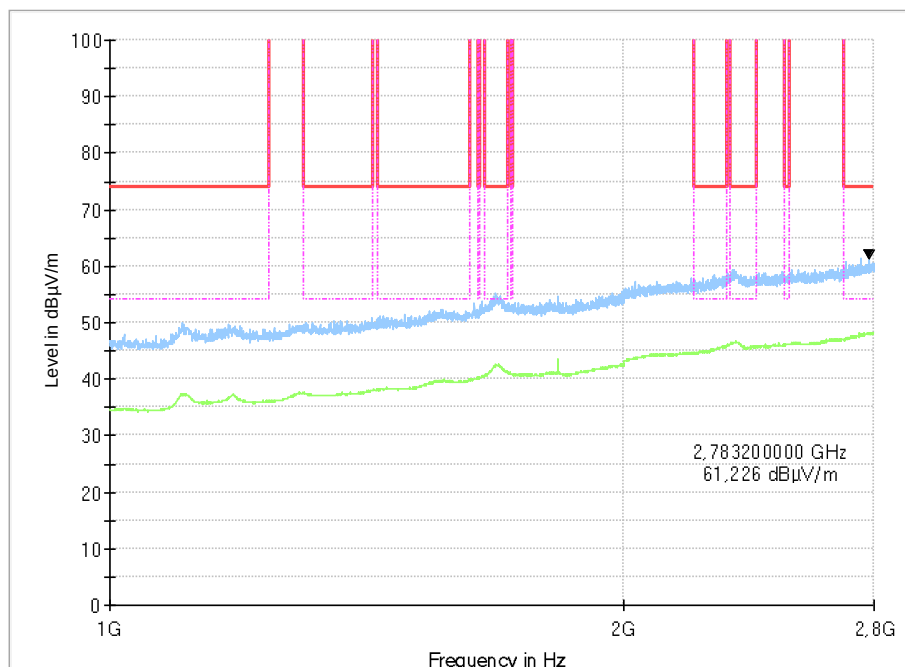
## Diagram 8.01\_RSE\_FHSS\_Flow\_1-9.5GHz

Full Spectrum



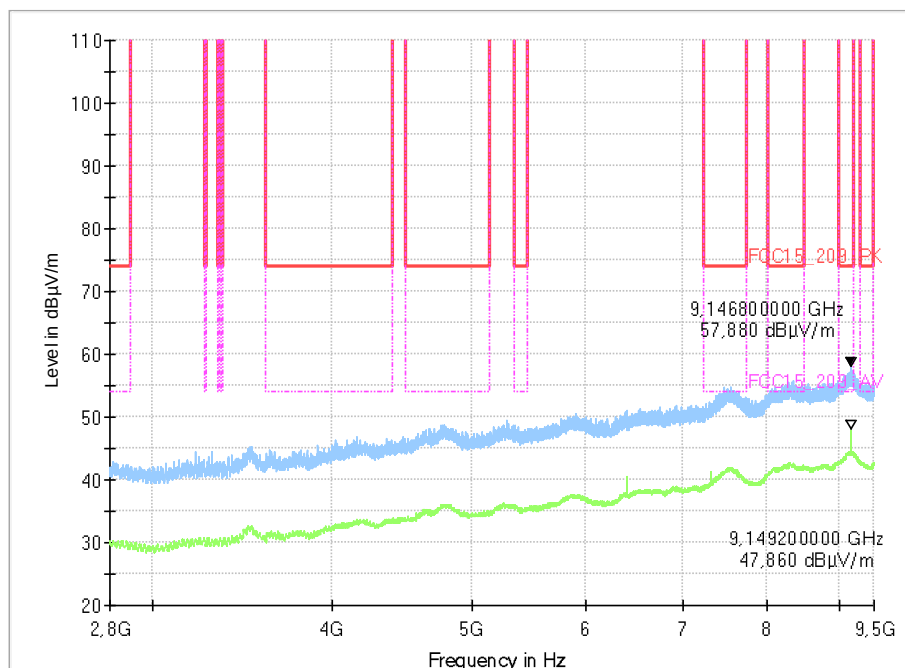
## Diagram 8.03a\_RSE\_FHSS\_Fmid\_1-2.8GHz

Full Spectrum



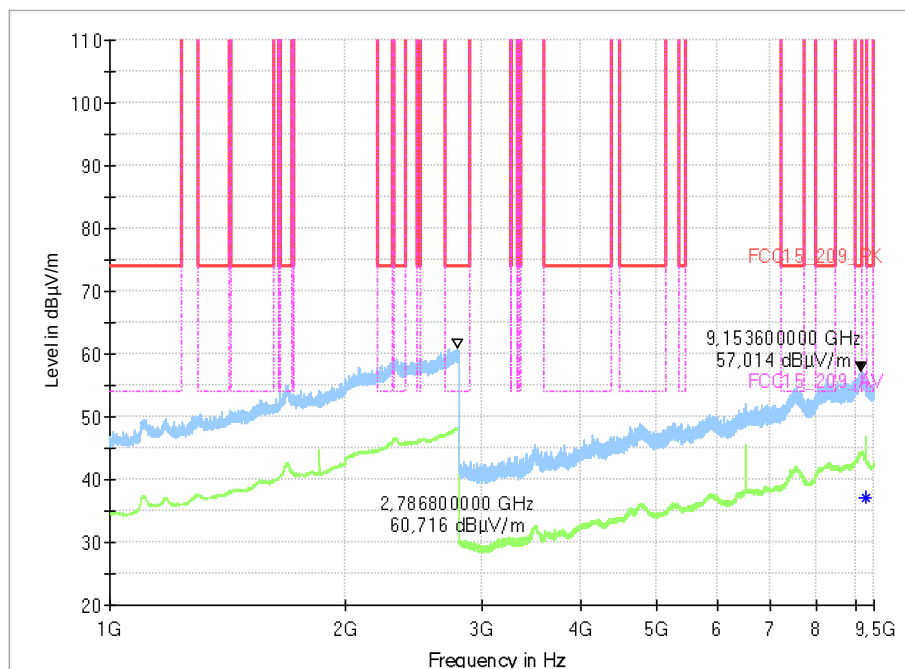
## Diagram 8.03b\_RSE\_FHSS\_Fmid\_2.8-9GHz

Full Spectrum



## Diagram 8.02\_RSE\_FHSS\_Fhigh\_1-9.5GHz

Full Spectrum



End of Annex 1