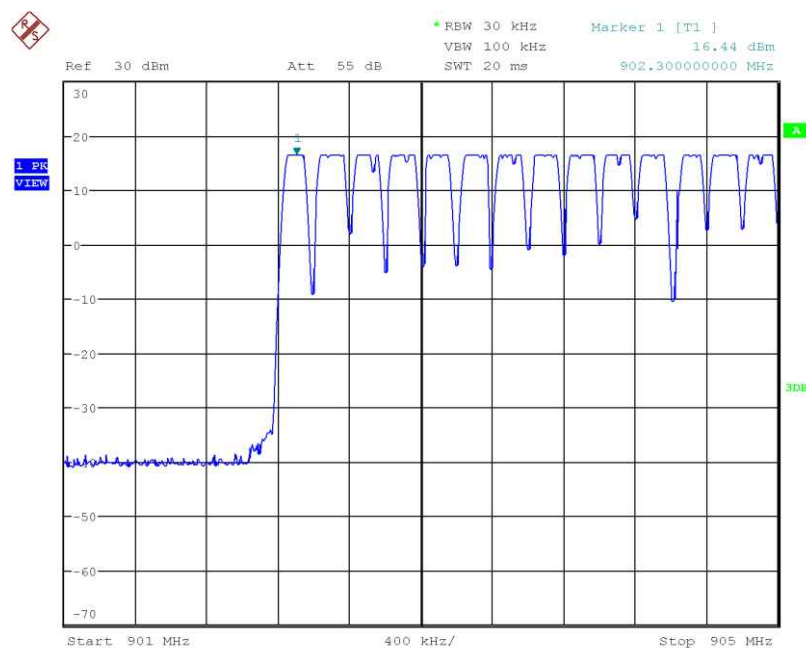
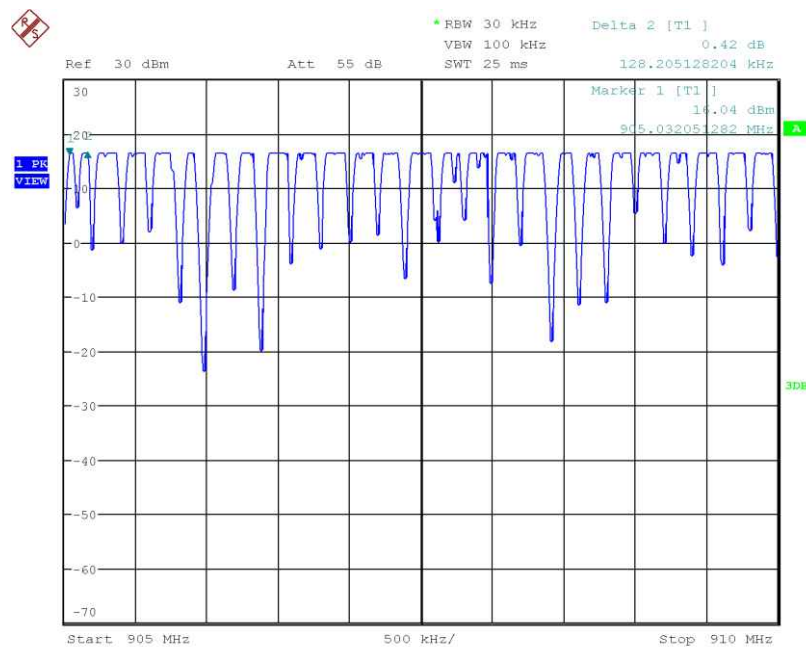


1.2.4 Number of hopping frequencies



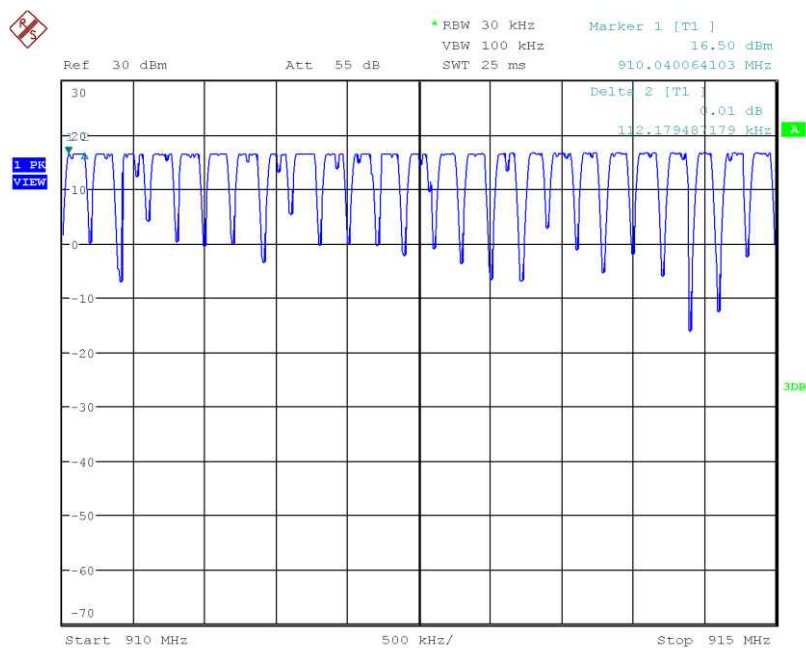
Date: 3.AUG.2021 21:32:22

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



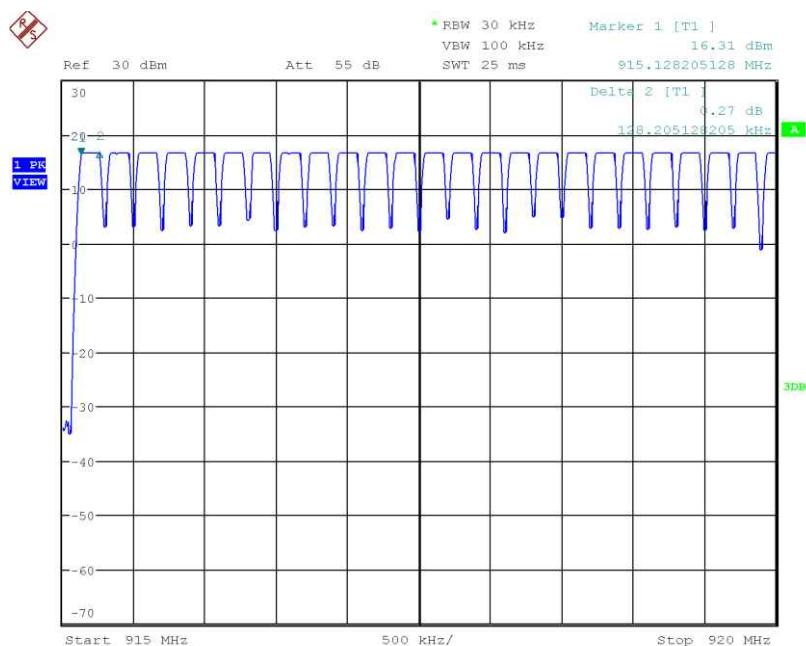
Date: 4.AUG.2021 10:56:08

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



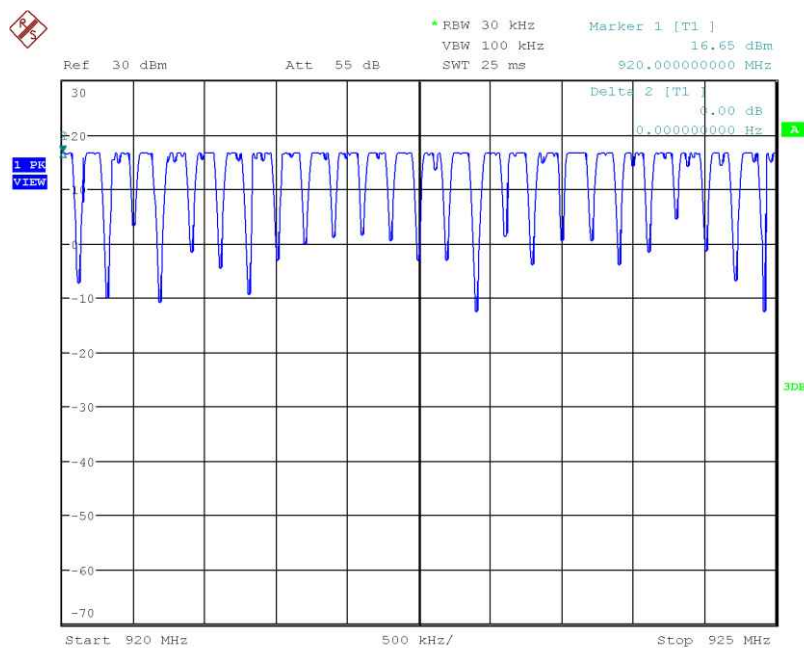
Date: 4.AUG.2021 11:02:00

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



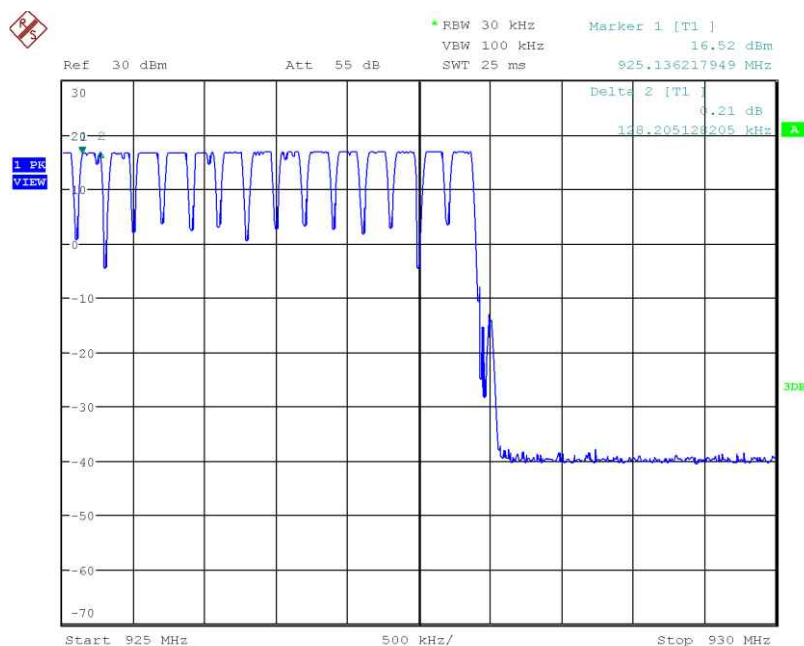
Date: 4.AUG.2021 11:40:51

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.

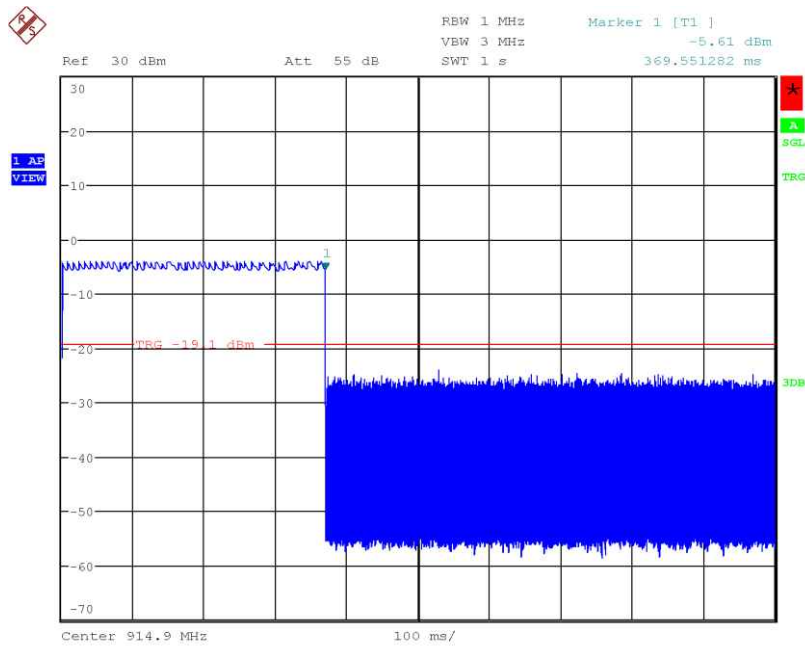


Date: 4.AUG.2021 11:55:38

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

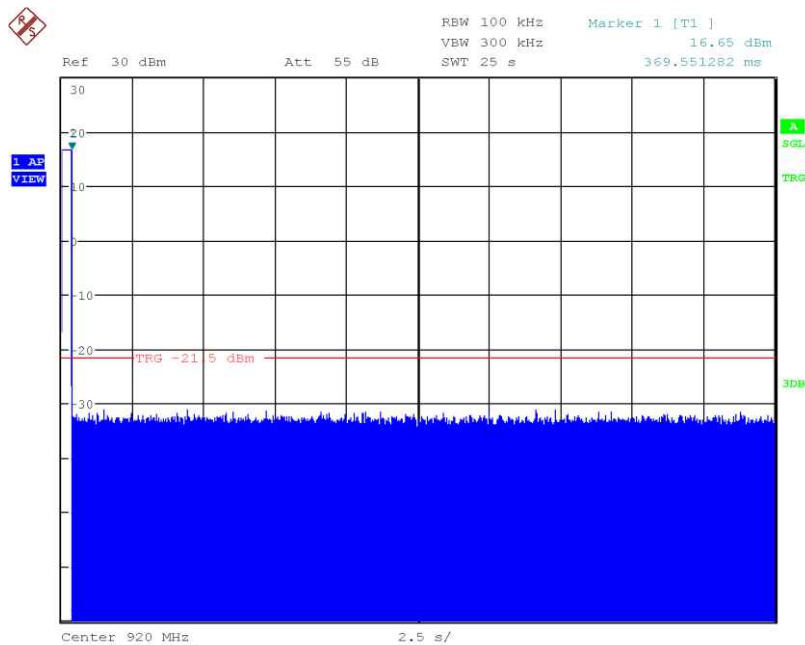
Conclusion: 128 channels are counted in total, which is more than the required 50 channels, if 20 dB BW is less than 250 kHz.

1.2.5 Time of occupancy



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

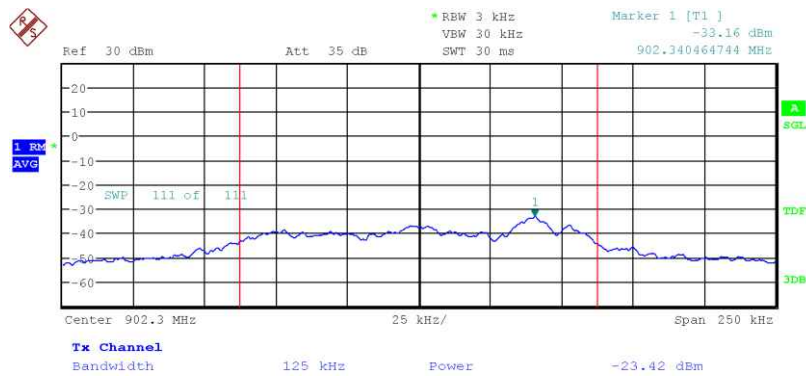
Diagram 52. Frequency hopping is activated. A single pulse width is less than 0.4 s.



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

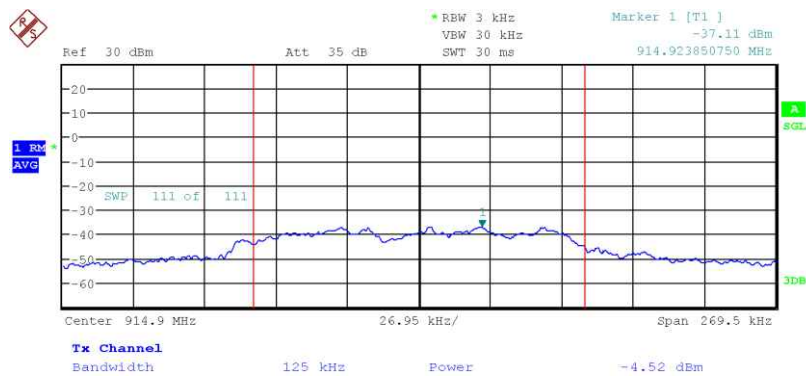
Diagram 53. Within an observation time of 25 s, only one pulse is captured at certain frequency

1.2.6 Max average output power conducted



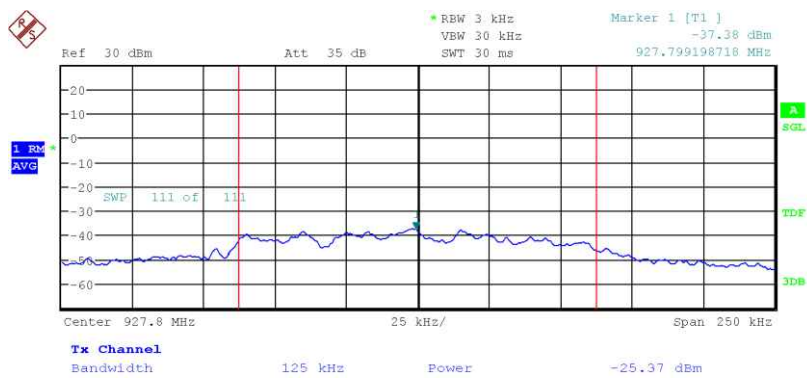
Date: 6.SEP.2021 19:10:50

Diagram 54. Average power on channel low



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

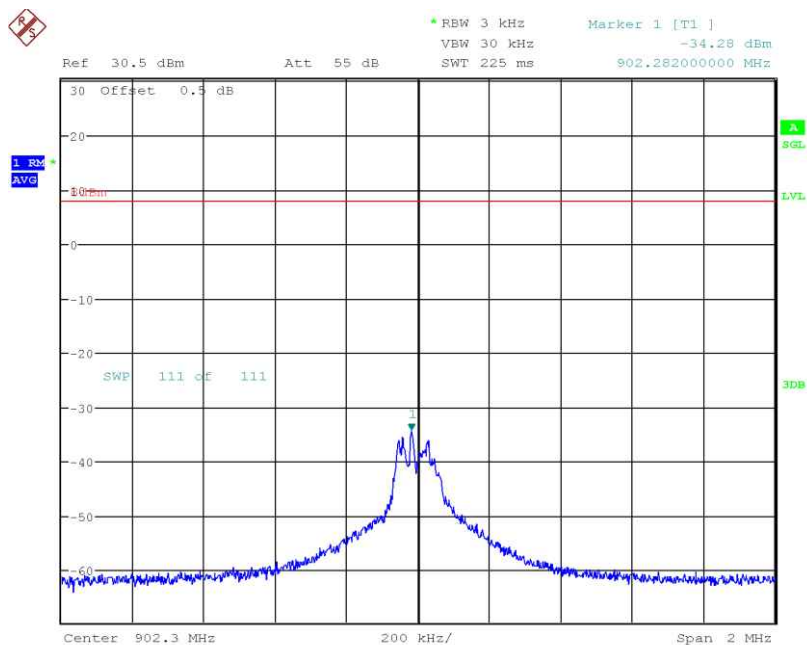
Diagram 55. Average power on channel middle



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

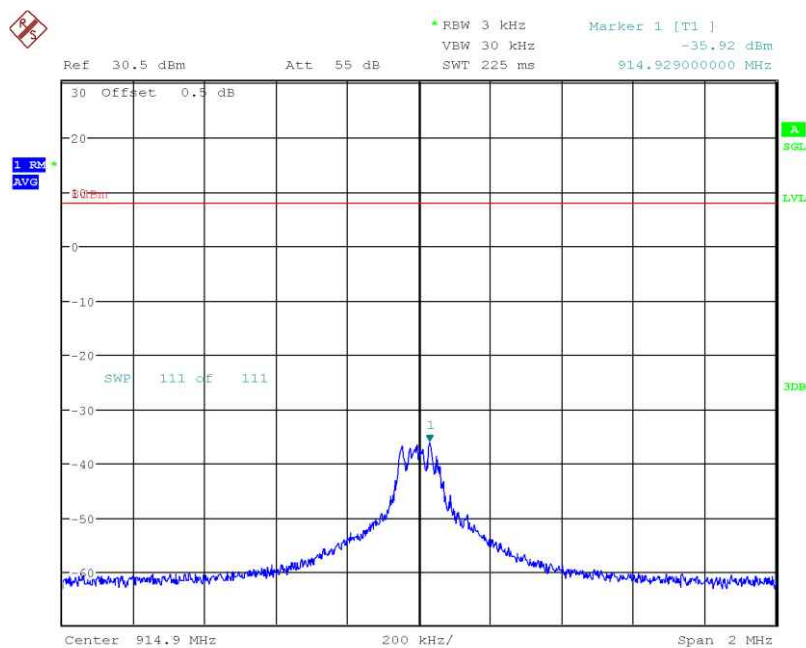
Diagram 56. Average power on channel high

1.2.7 Power spectral density (average)



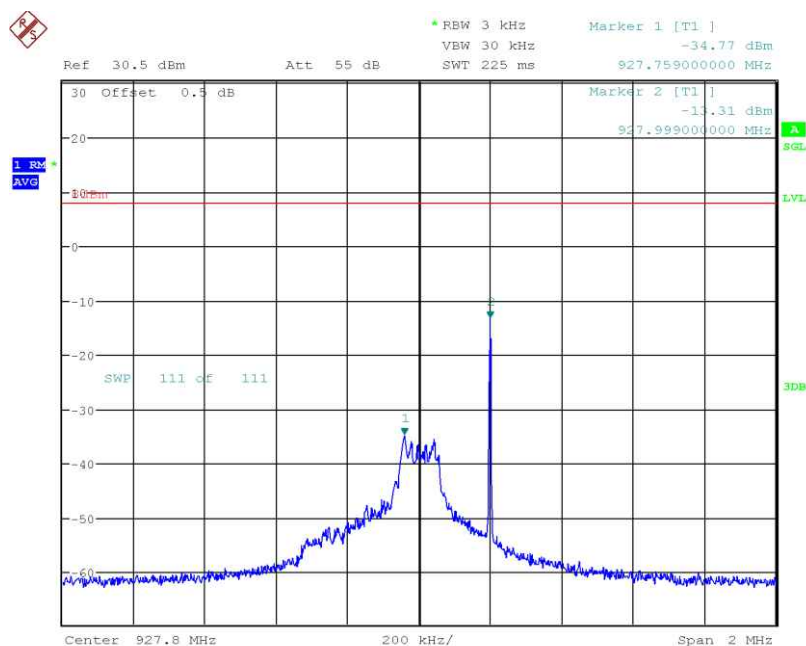
Date: 11.AUG.2021 16:19:00

Diagram 57. PSD at channel low



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

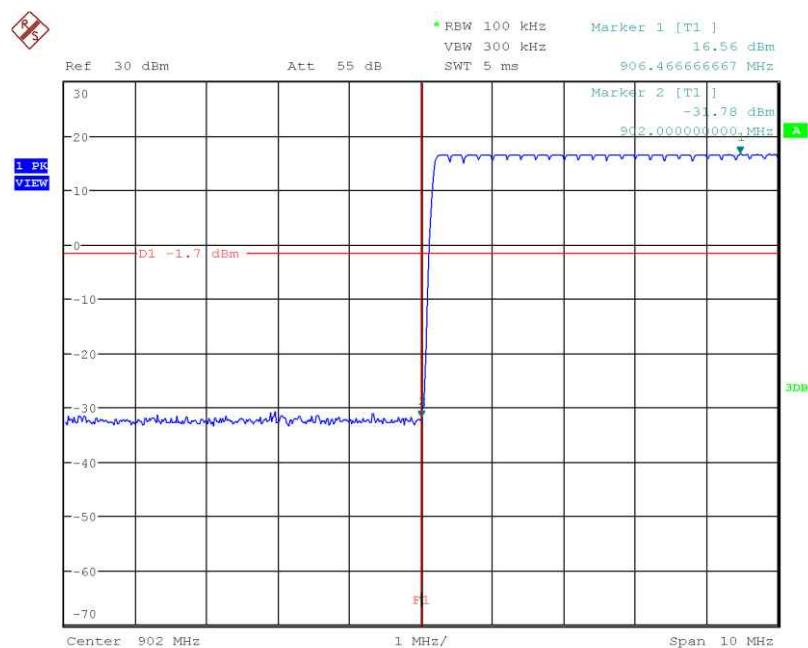
Diagram 58. PSD at channel middle



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

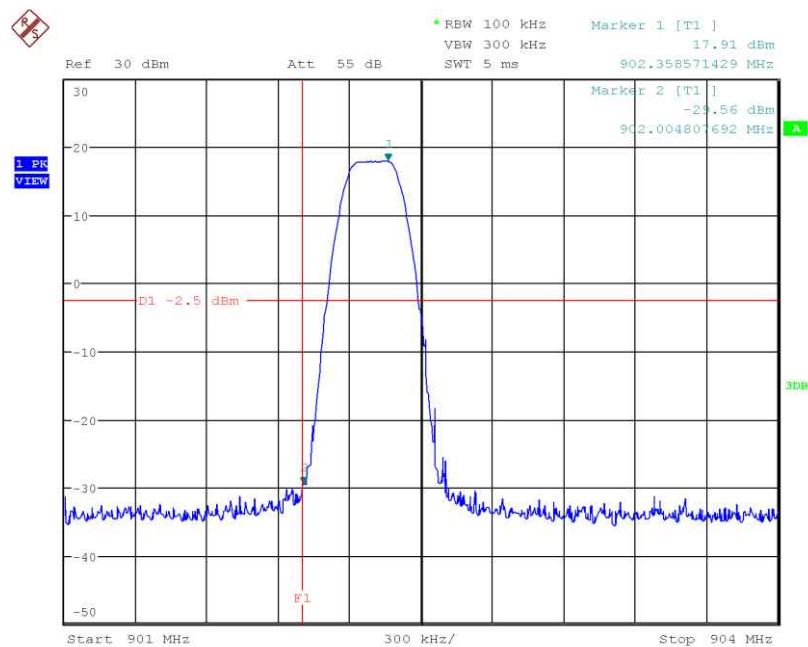
Diagram 59. PSD at channel high

1.2.8 Band edge



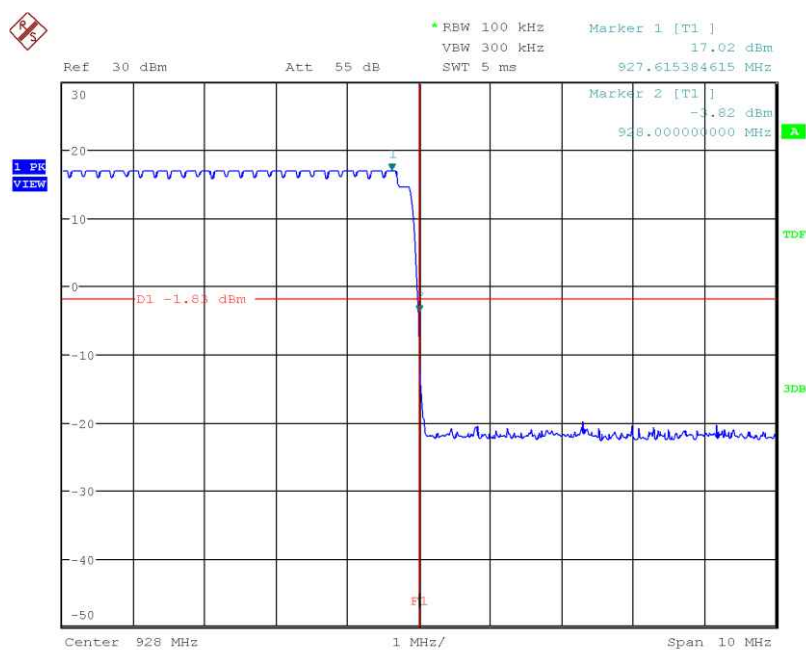
Date: 6.AUG.2021 16:47:48

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



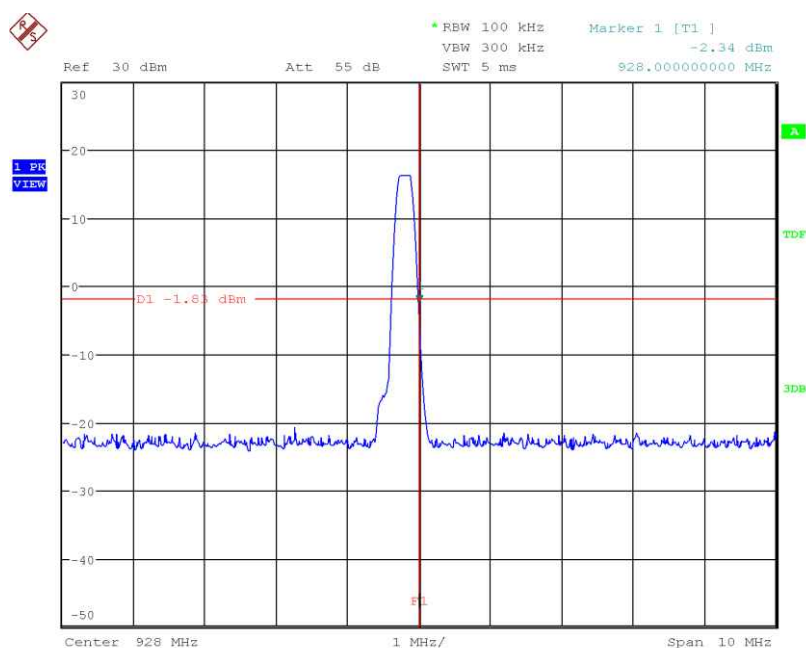
Date: 6.AUG.2021 14:48:46

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



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

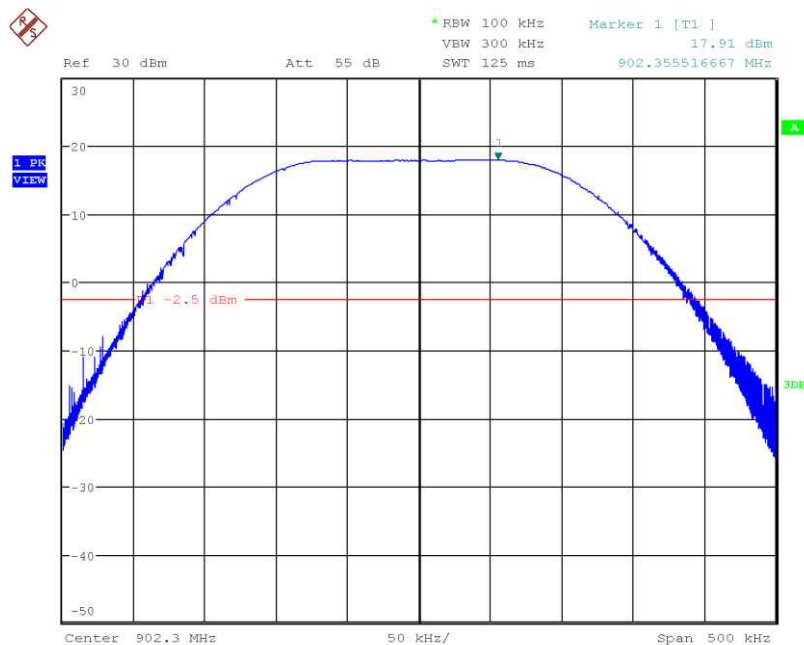
Diagram 62. Band edge at channel high. Frequency hopping is activated



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

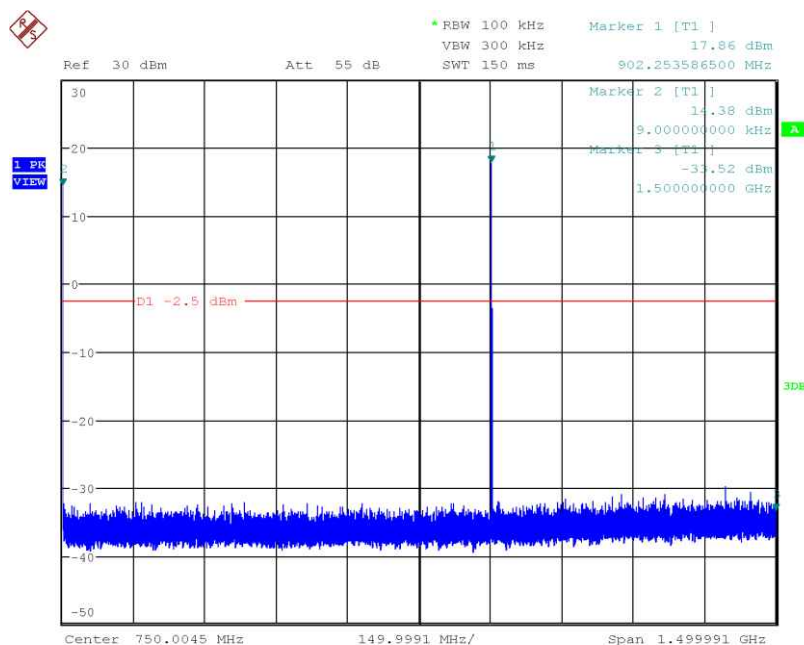
Diagram 63. Band edge at channel high. Frequency hopping is deactivated. Peak level at 18.02 dBm.

1.2.9 Conducted spurious emission



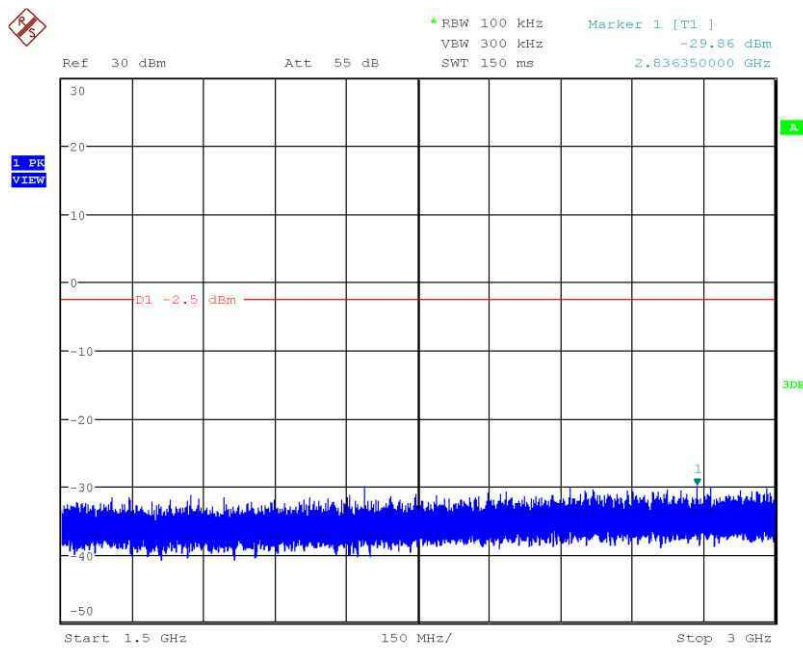
Date: 6.AUG.2021 14:40:38

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.



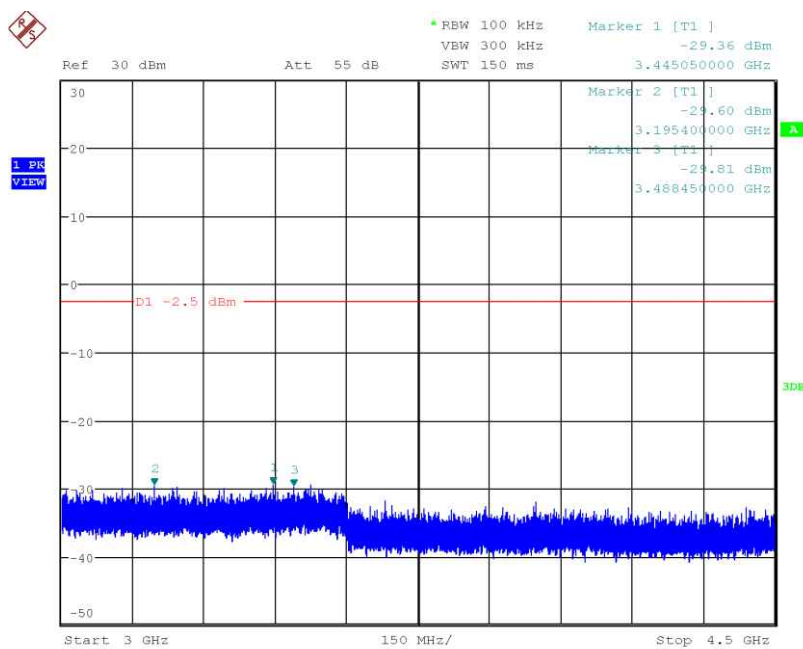
Date: 6.AUG.2021 14:39:09

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.



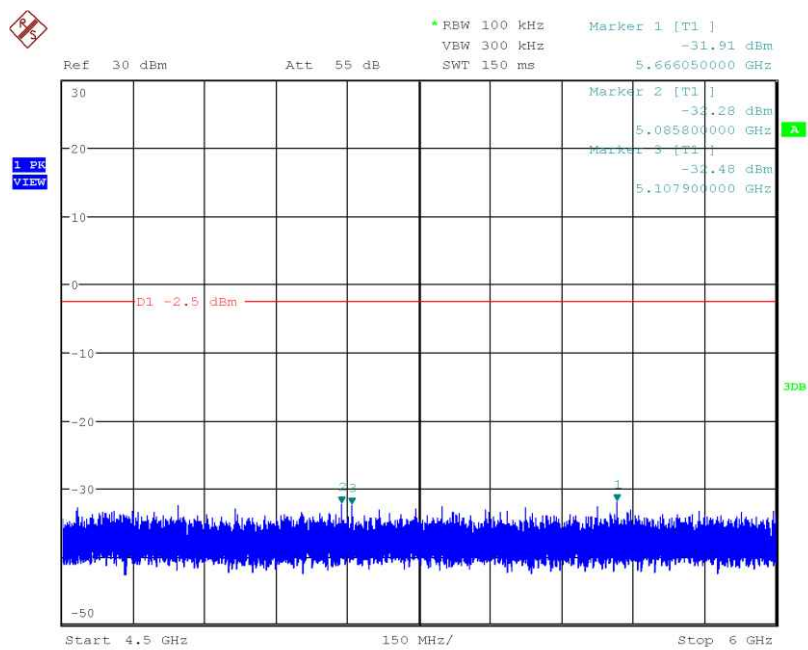
Date: 6.AUG.2021 14:41:13

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



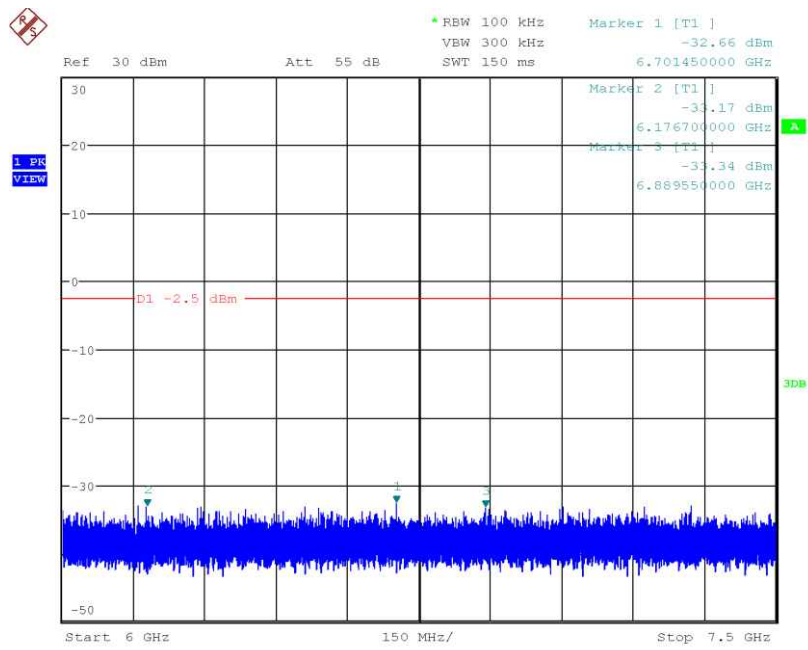
Date: 6.AUG.2021 14:42:27

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



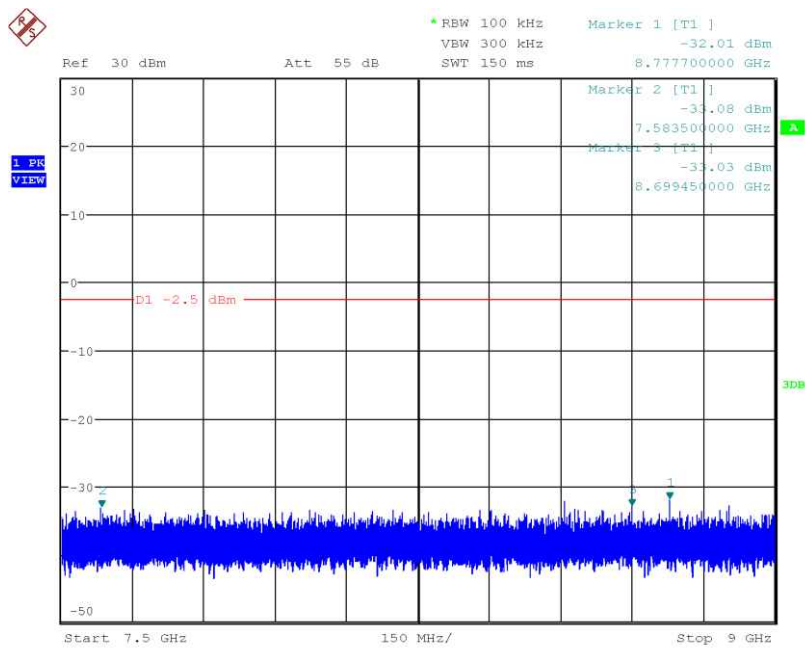
Date: 6.AUG.2021 14:43:22

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



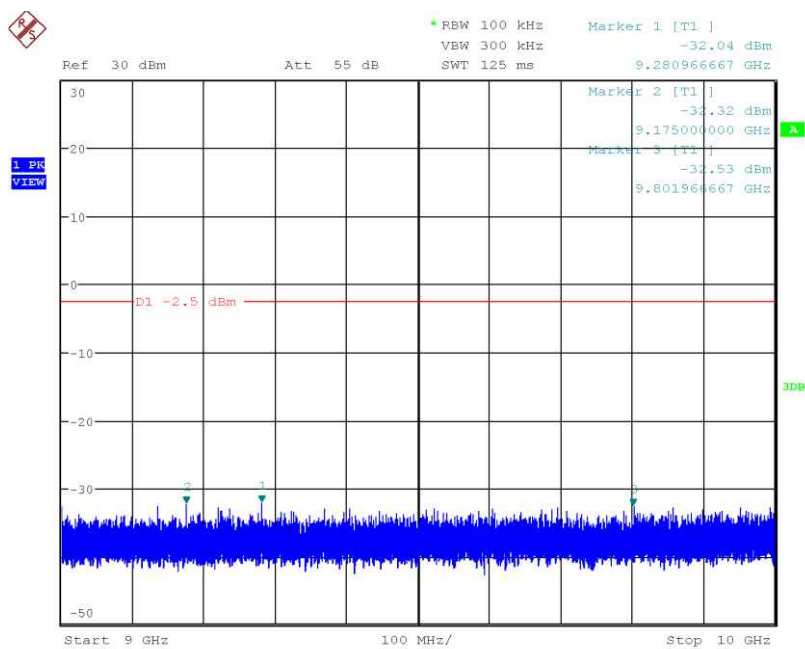
Date: 6.AUG.2021 14:43:59

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



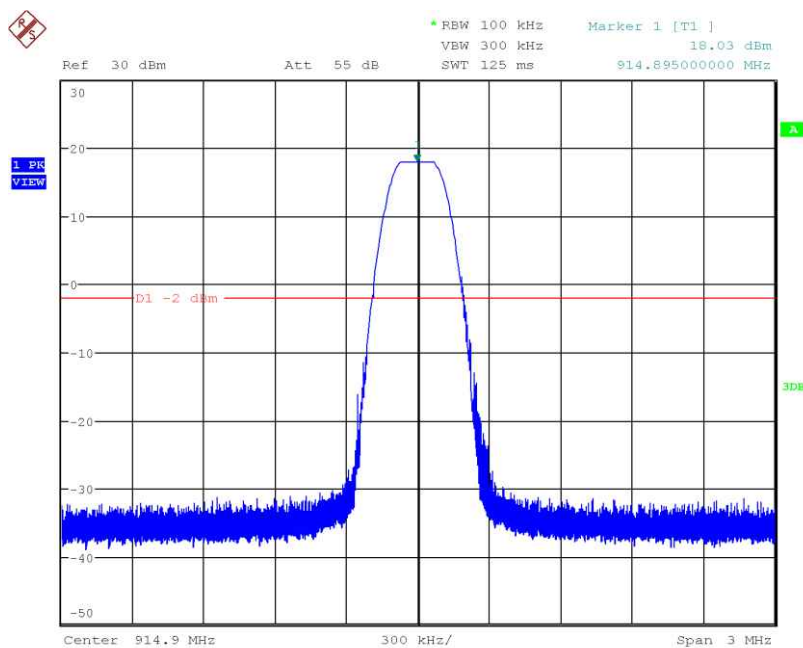
Date: 6.AUG.2021 14:44:45

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



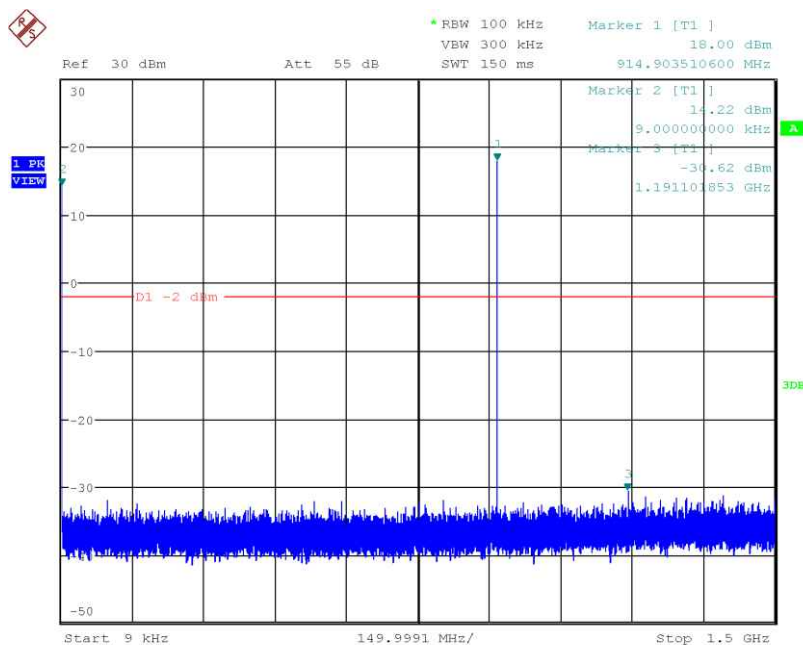
Date: 6.AUG.2021 14:45:31

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



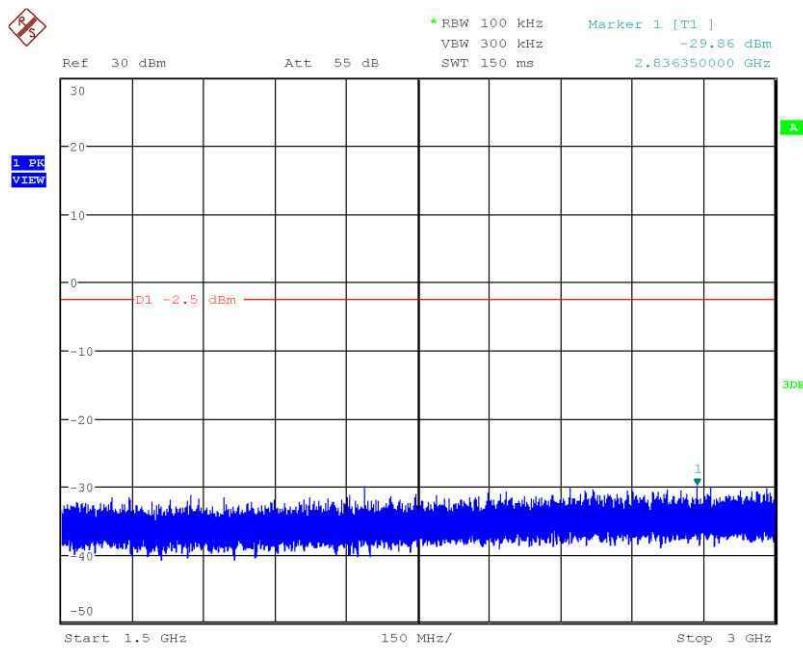
Date: 6.AUG.2021 14:50:47

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.



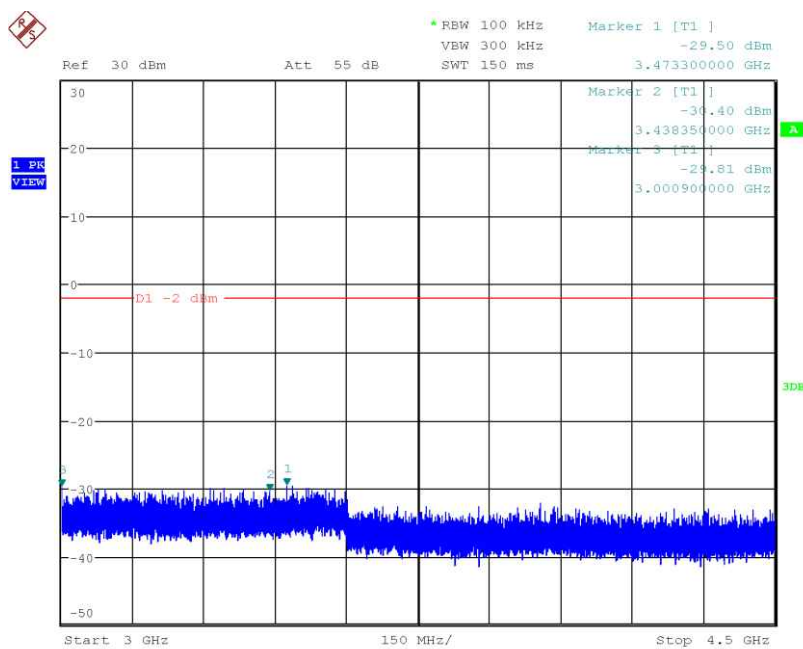
Date: 6.AUG.2021 14:51:27

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.



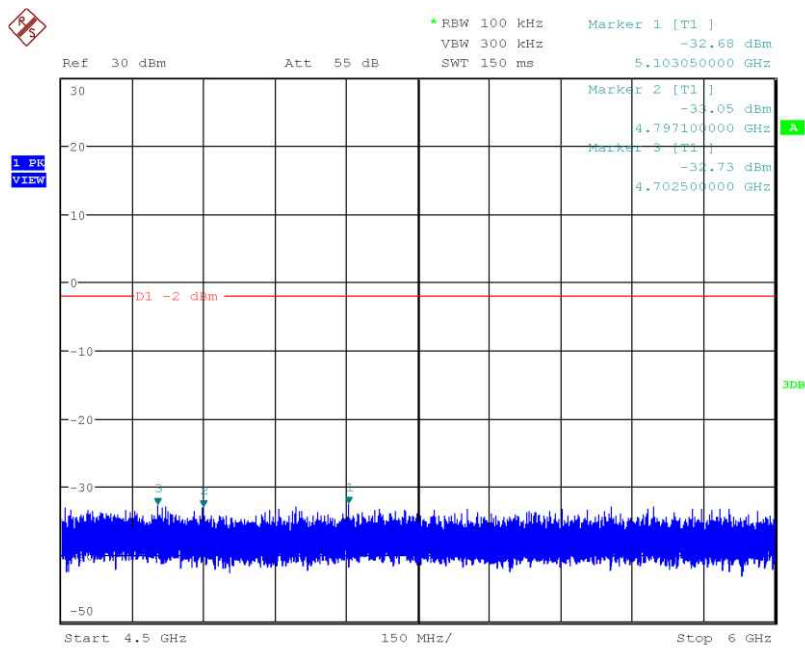
Date: 6.AUG.2021 14:41:13

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



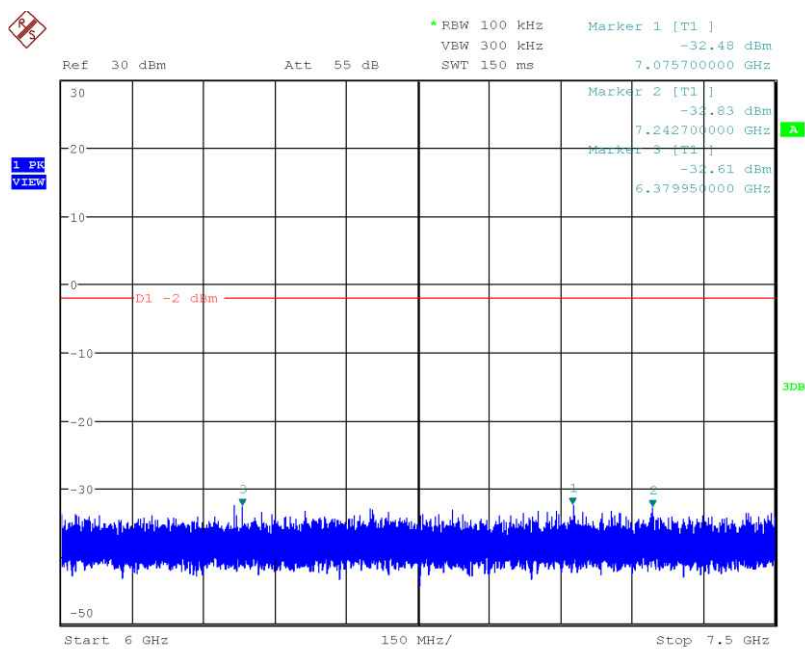
Date: 6.AUG.2021 14:54:09

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



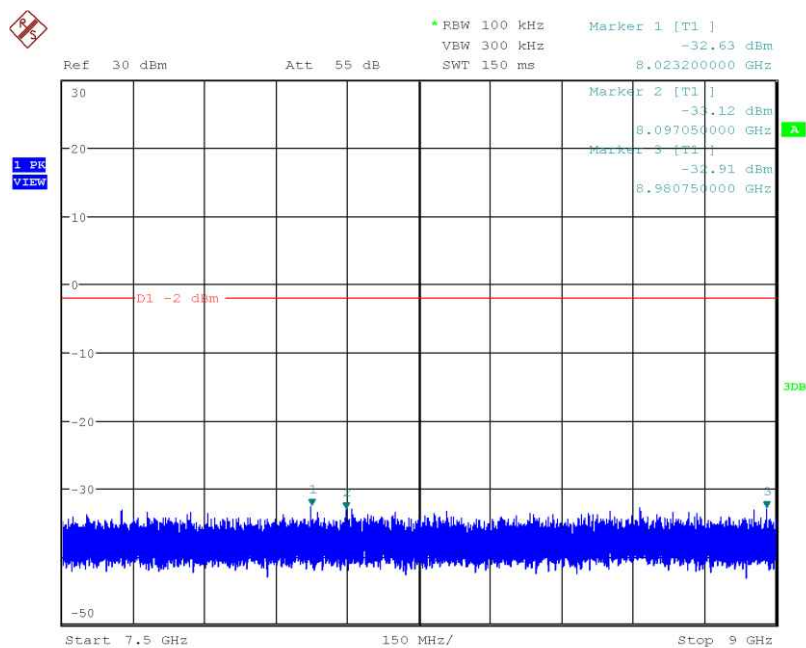
Date: 6.AUG.2021 14:54:49

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



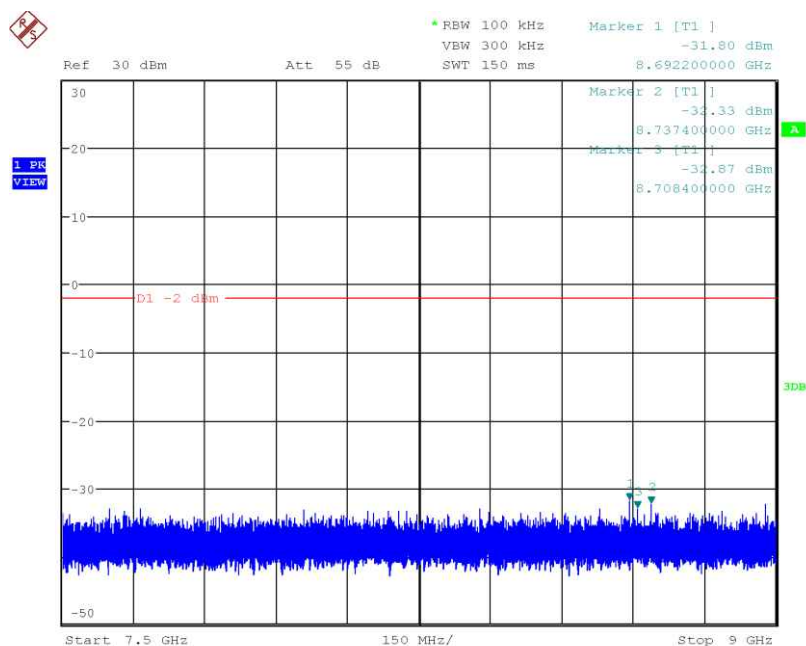
Date: 6.AUG.2021 14:55:55

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



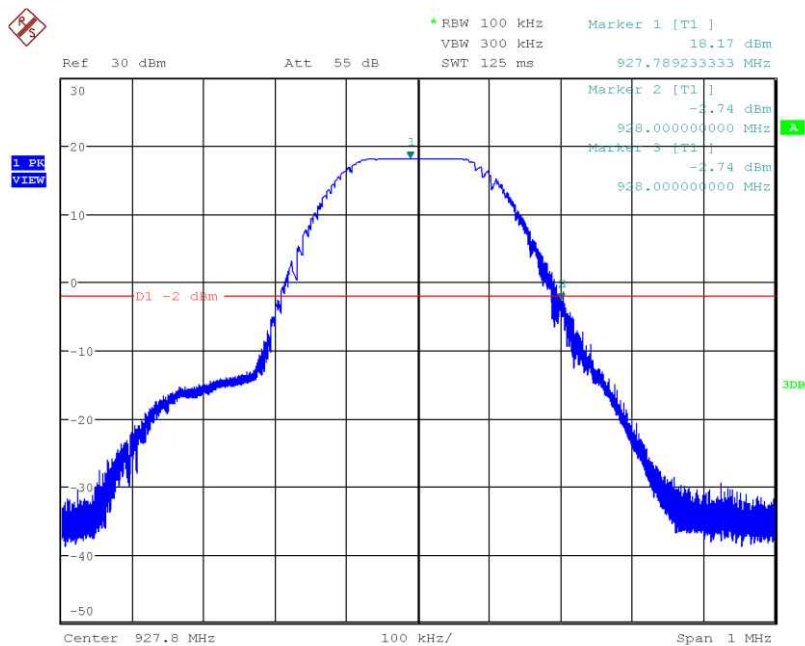
Date: 6.AUG.2021 14:56:40

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



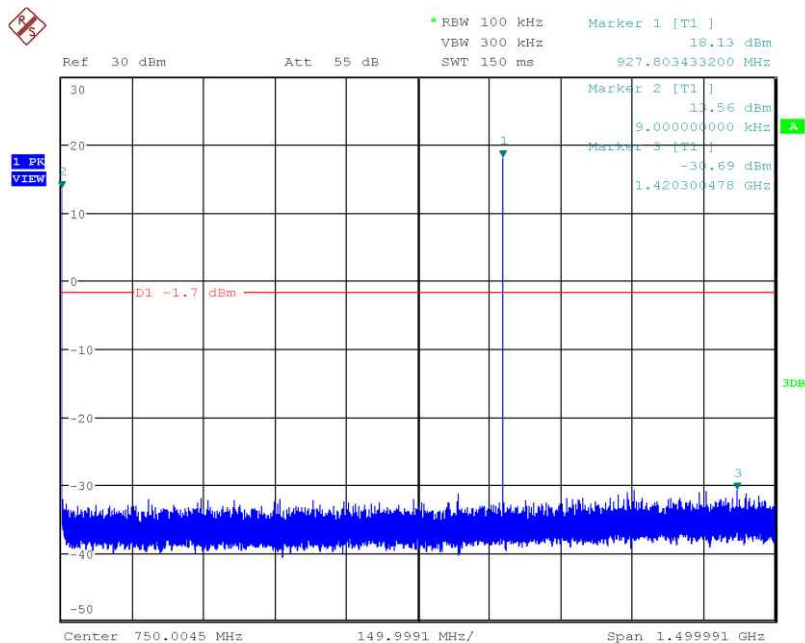
Date: 6.AUG.2021 14:57:30

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



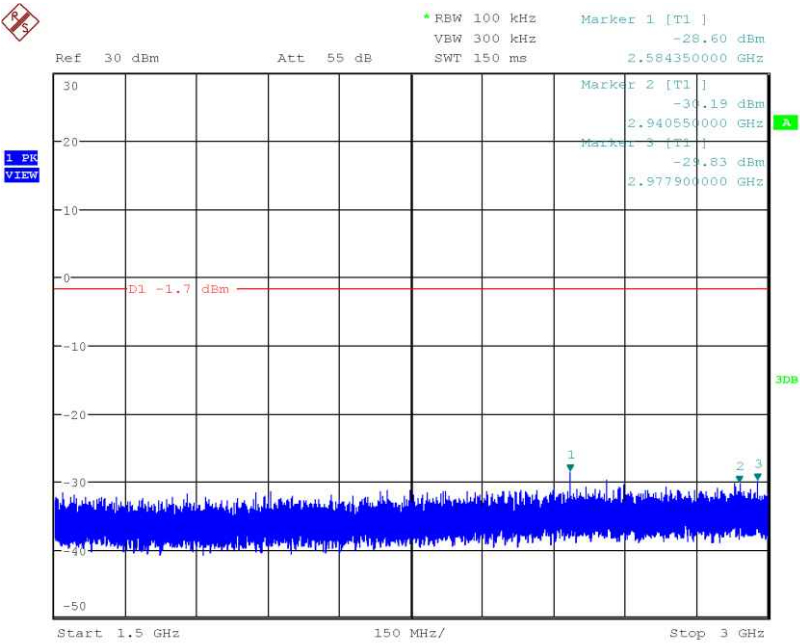
Date: 6.AUG.2021 14:59:08

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.



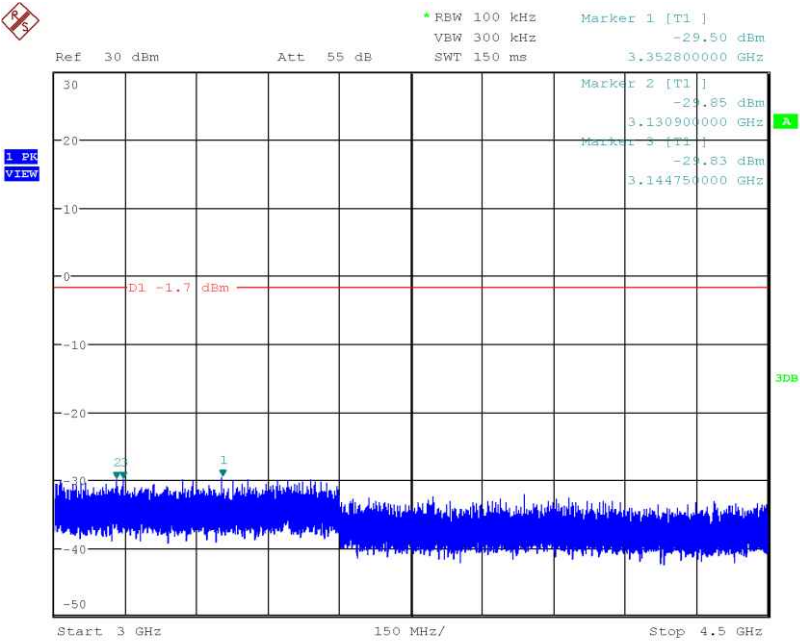
Date: 6.AUG.2021 15:38:48

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.



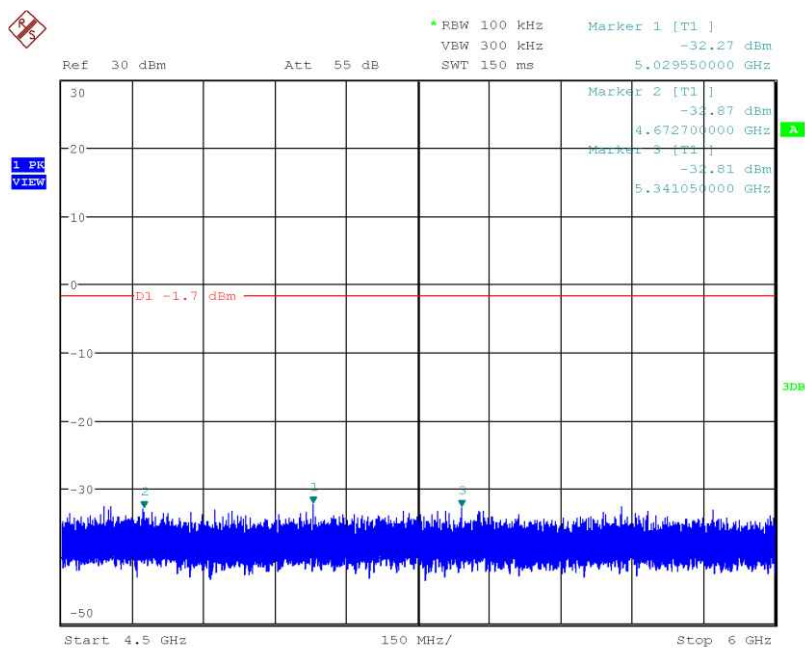
Date: 6.AUG.2021 15:39:47

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



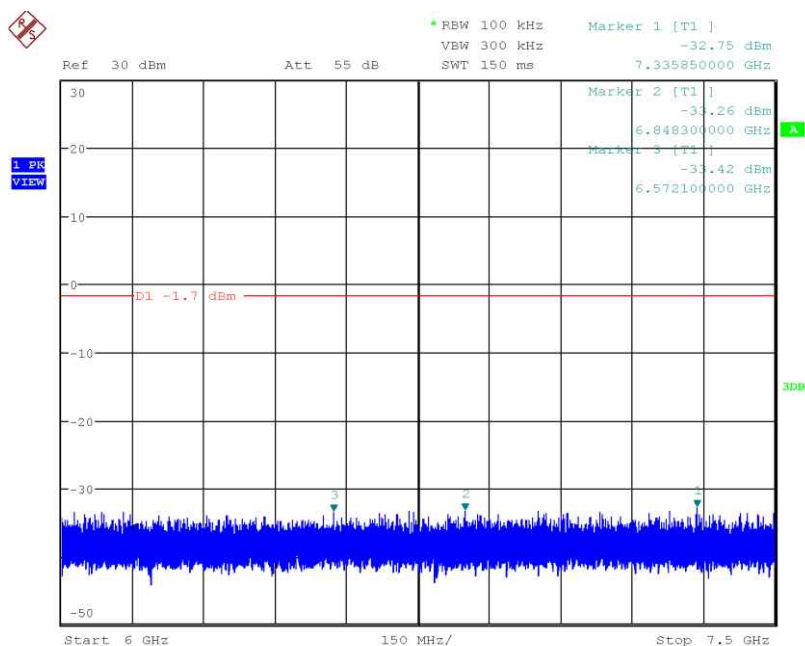
Date: 6.AUG.2021 15:41:06

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



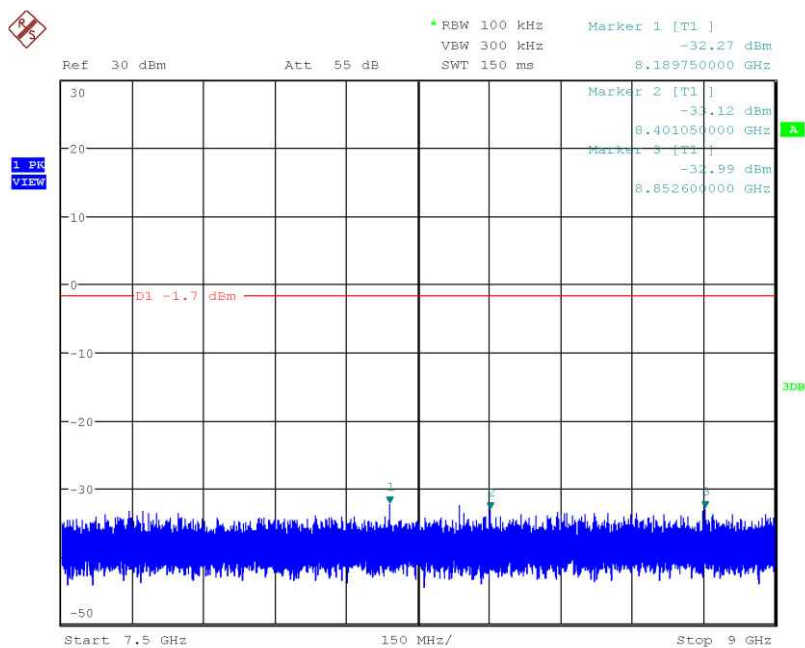
Date: 6.AUG.2021 15:41:48

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



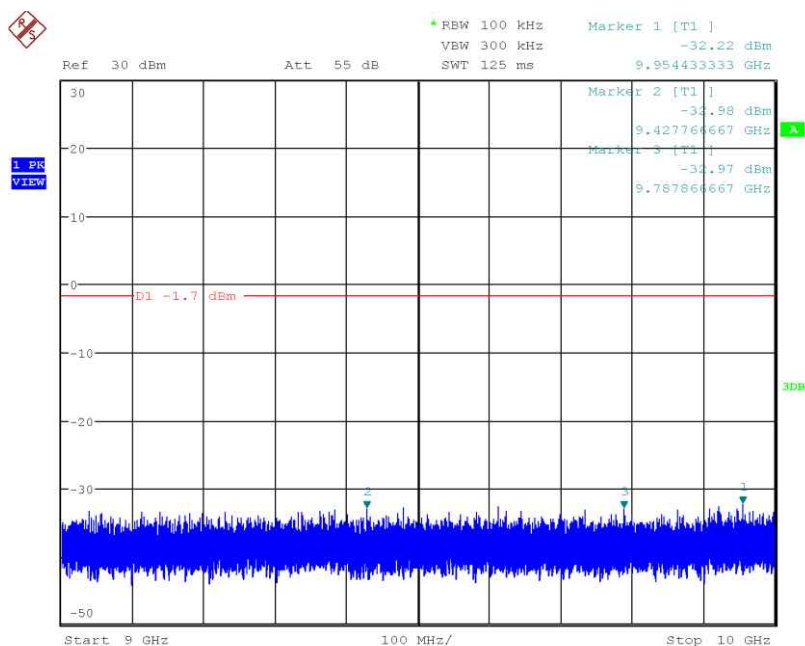
Date: 6.AUG.2021 15:42:32

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

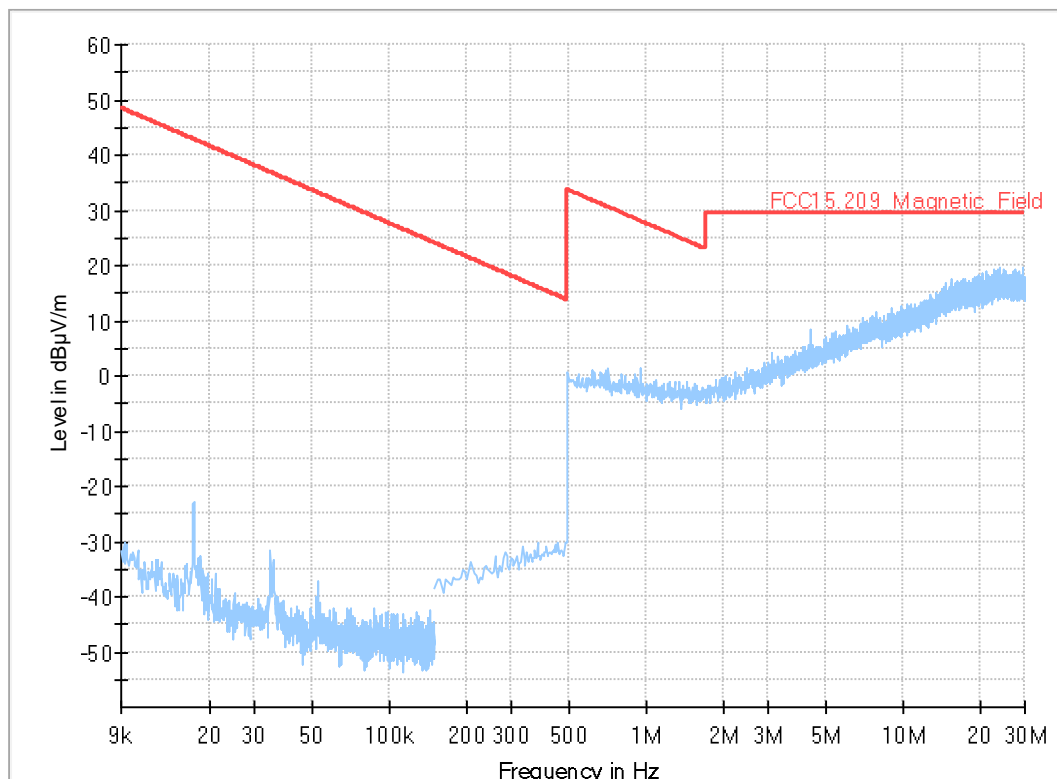


Diagram 2.02_RSE_FHSS_Fmid_Iying

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

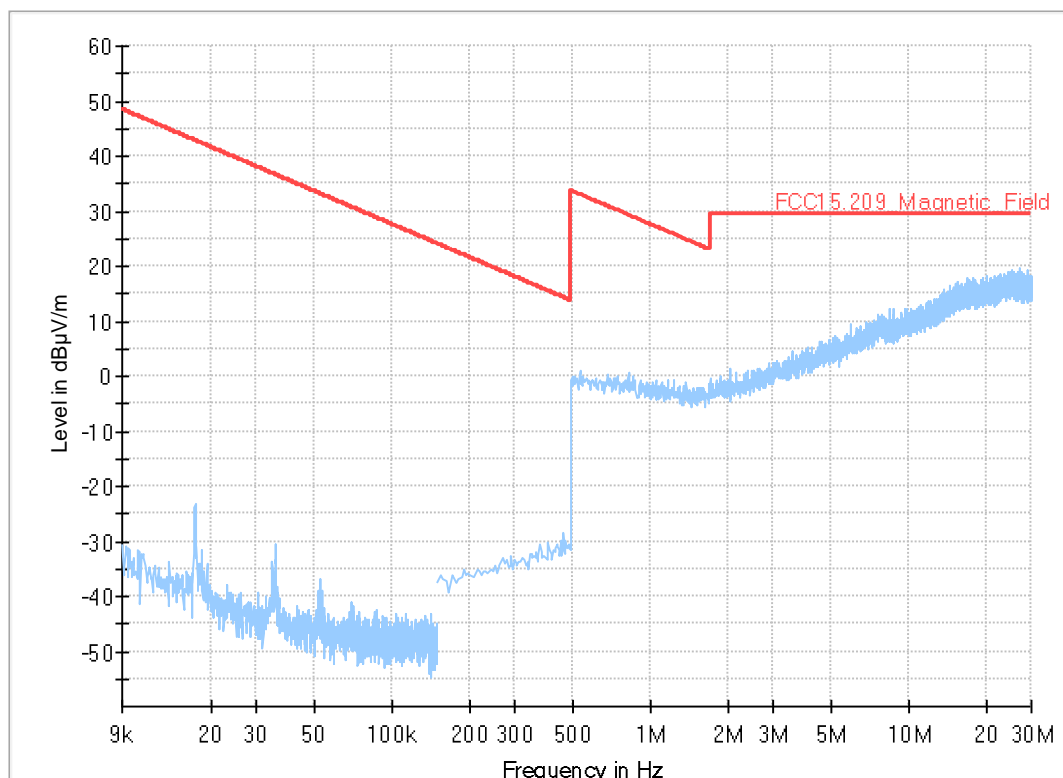
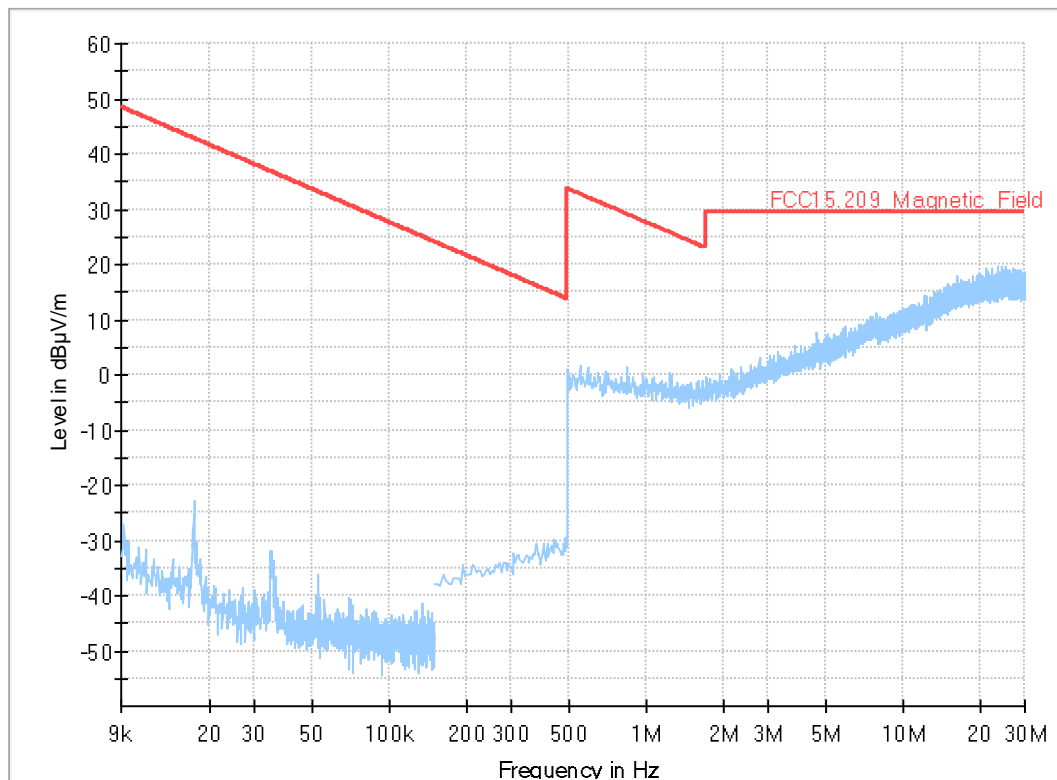


Diagram 2.03_RSE_FHSS_Fhigh_lying

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.

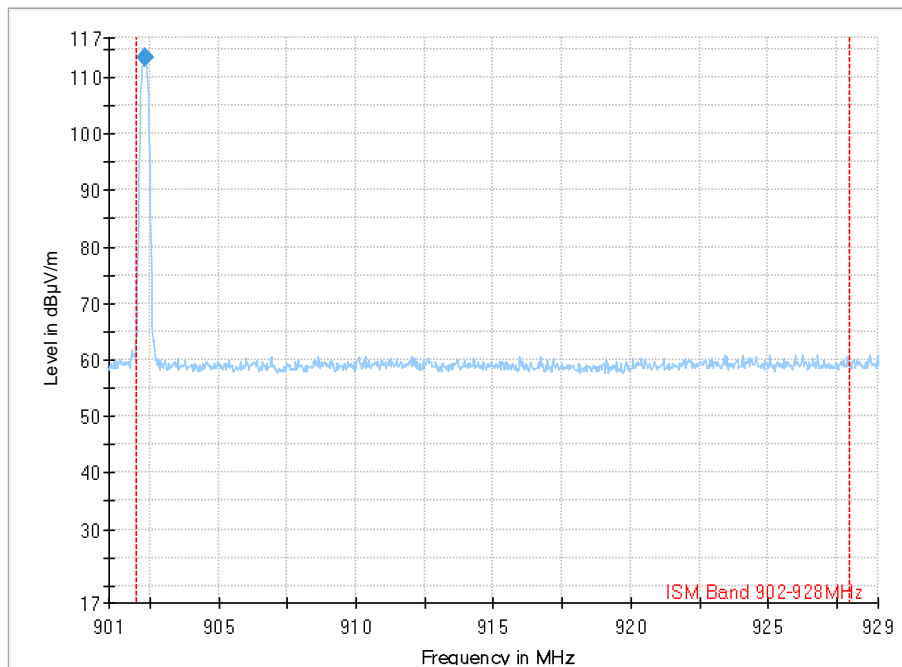
Full Spectrum



1.2.10.2 Frequency range 30 MHz – 1 GHz

Diagram 3.01_carrier_FHSS_Flow_standing

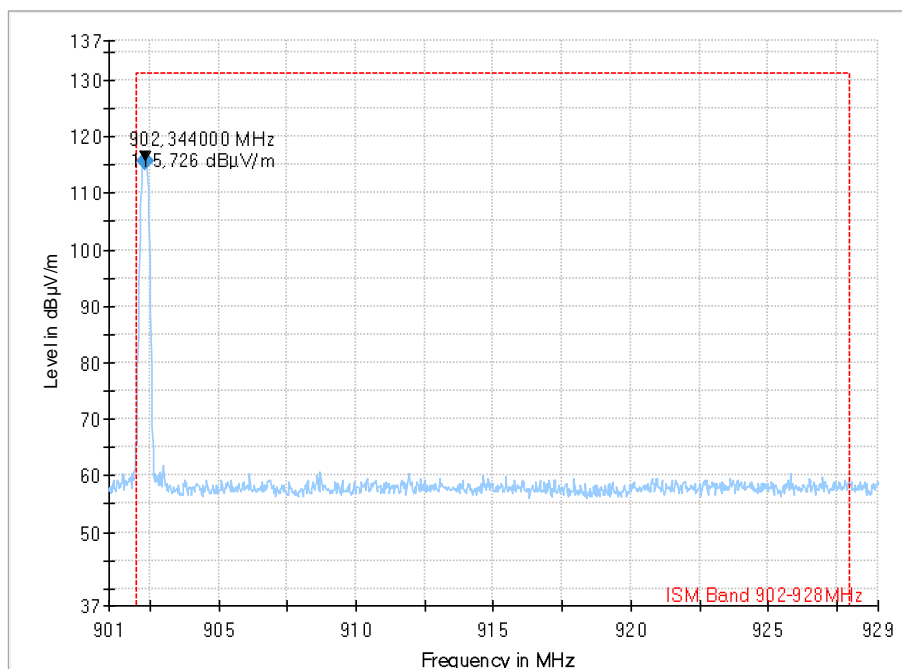
Full Spectrum



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

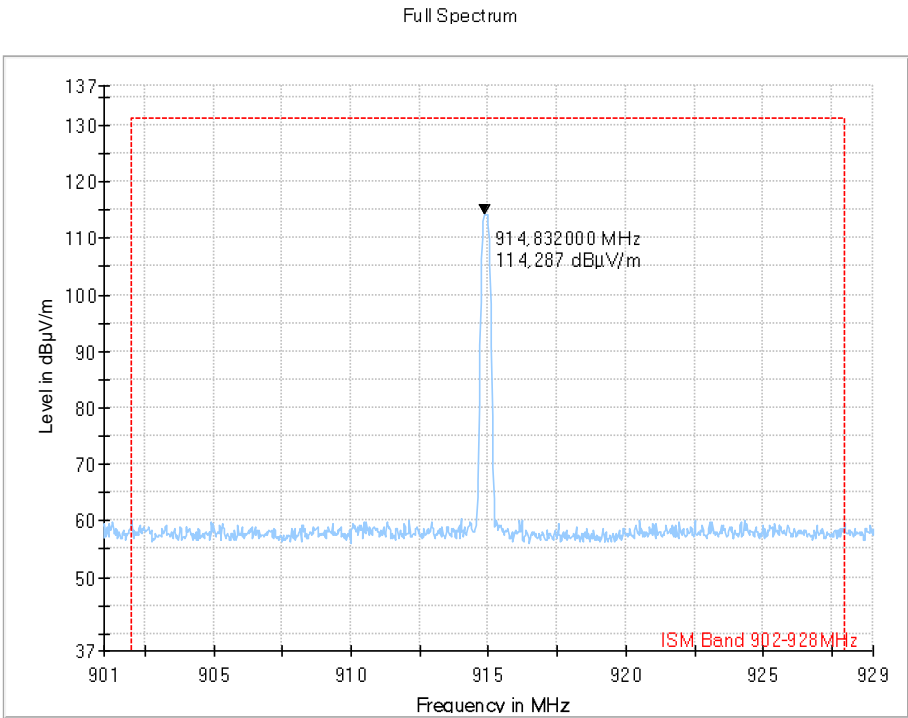


Diagram 3.04_carrier_FHSS_Fhigh_lying

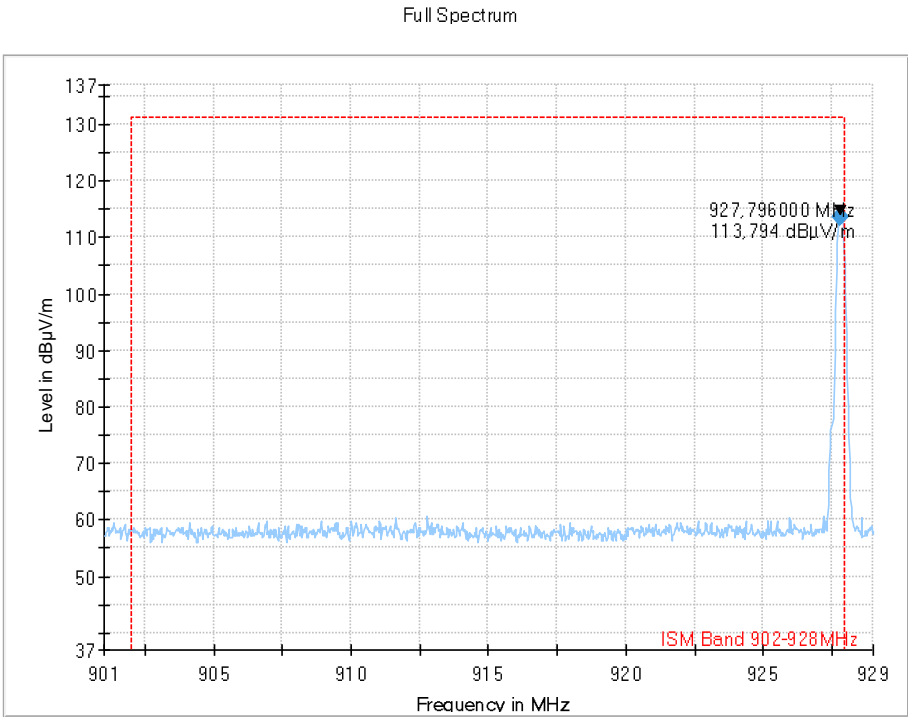


Diagram 3.10_RSE_FHSS_Flow_Iying

Full Spectrum

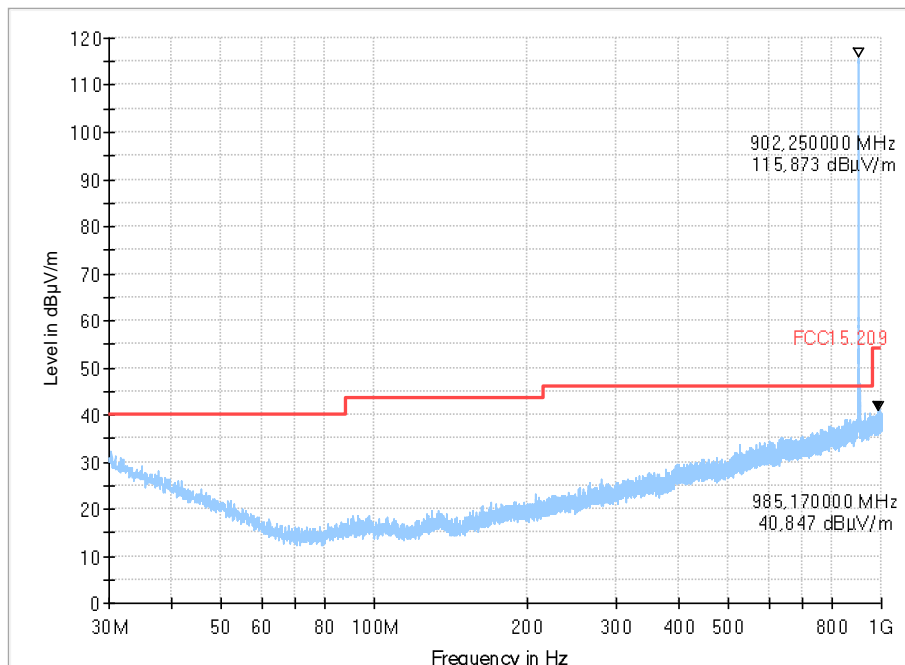


Diagram 3.11_RSE_FHSS_Fmid_Iying

Full Spectrum

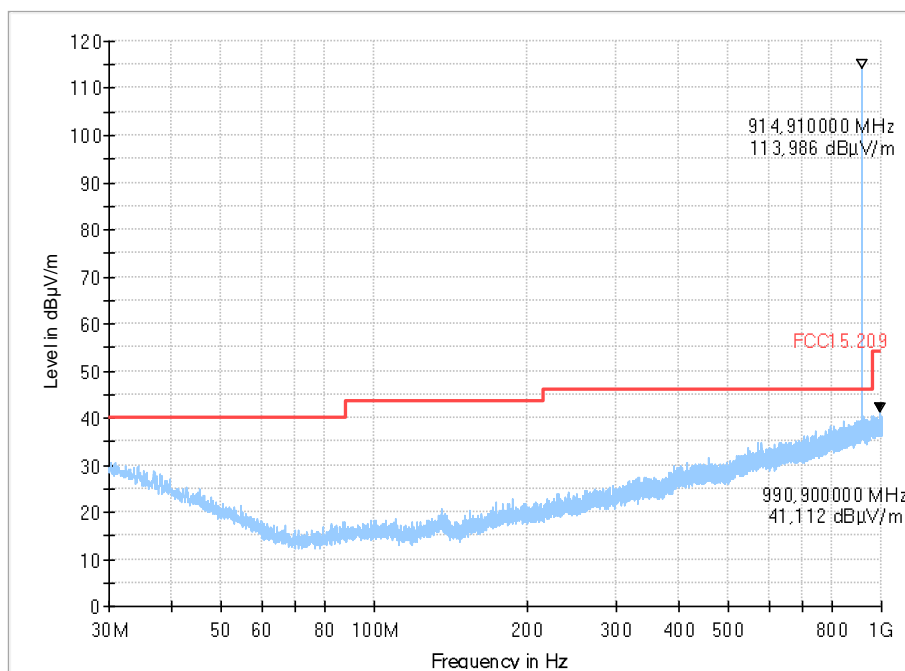
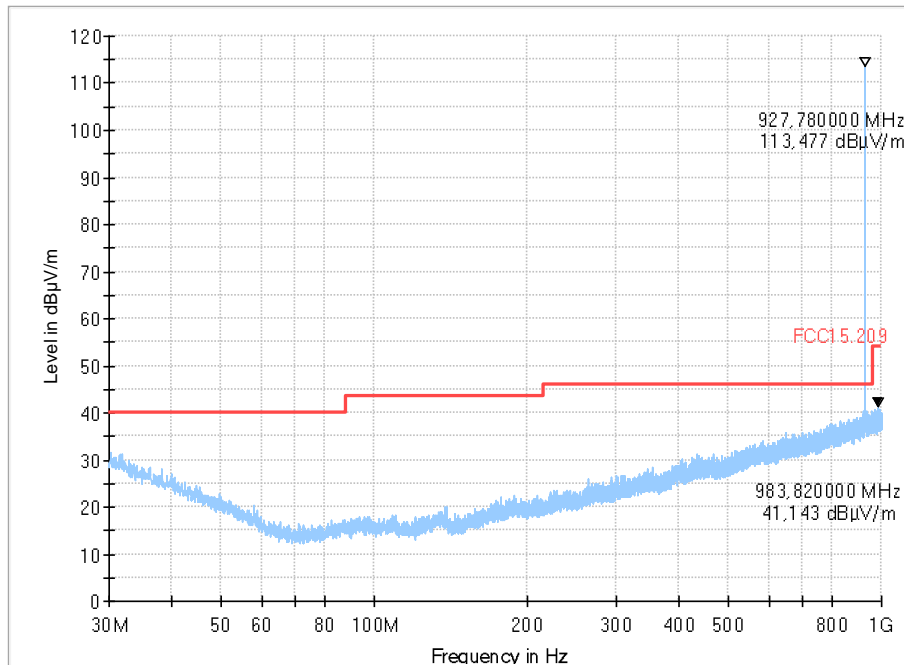


Diagram 3.12_RSE_FHSS_Fhigh_lying

Full Spectrum



1.2.10.3 Frequency range 1 GHz – 9.5 GHz

Diagram 8.01_RSE_FHSS_Flow_1-9.5GHz

Full Spectrum

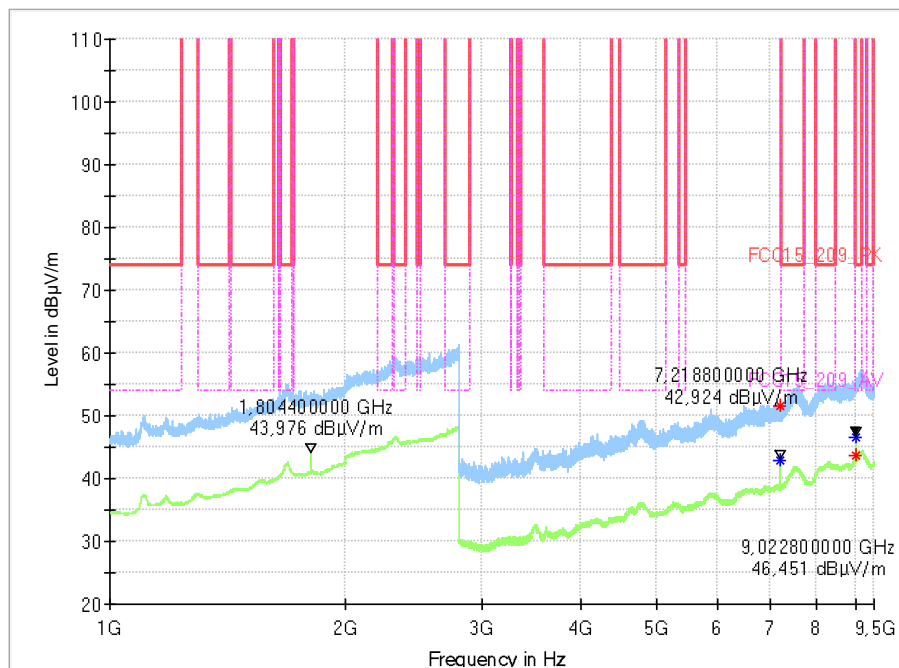


Diagram 8.03a_RSE_FHSS_Fmid_1-2.8GHz

Full Spectrum

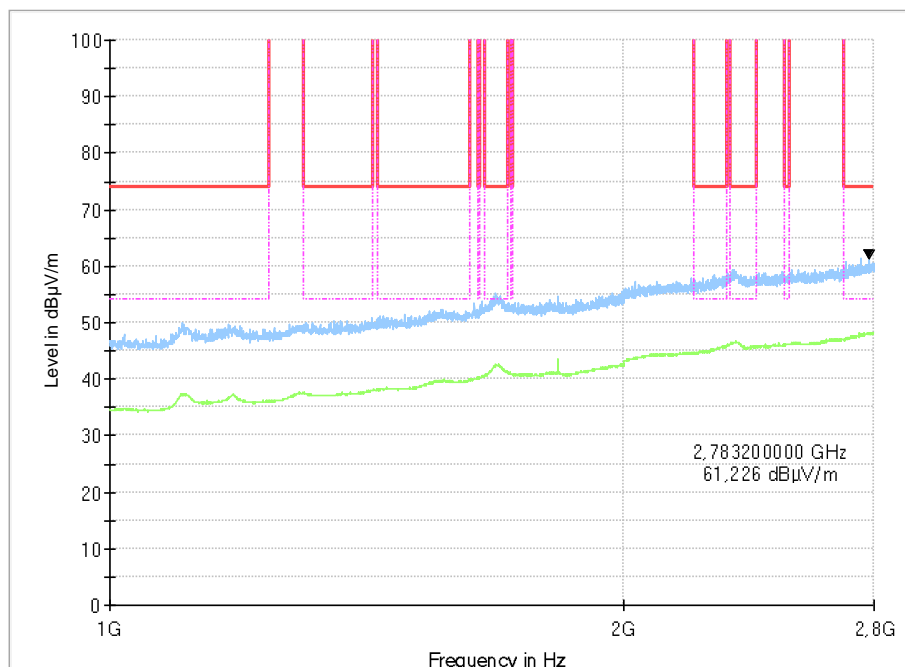


Diagram 8.03b_RSE_FHSS_Fmid_2.8-9GHz

Full Spectrum

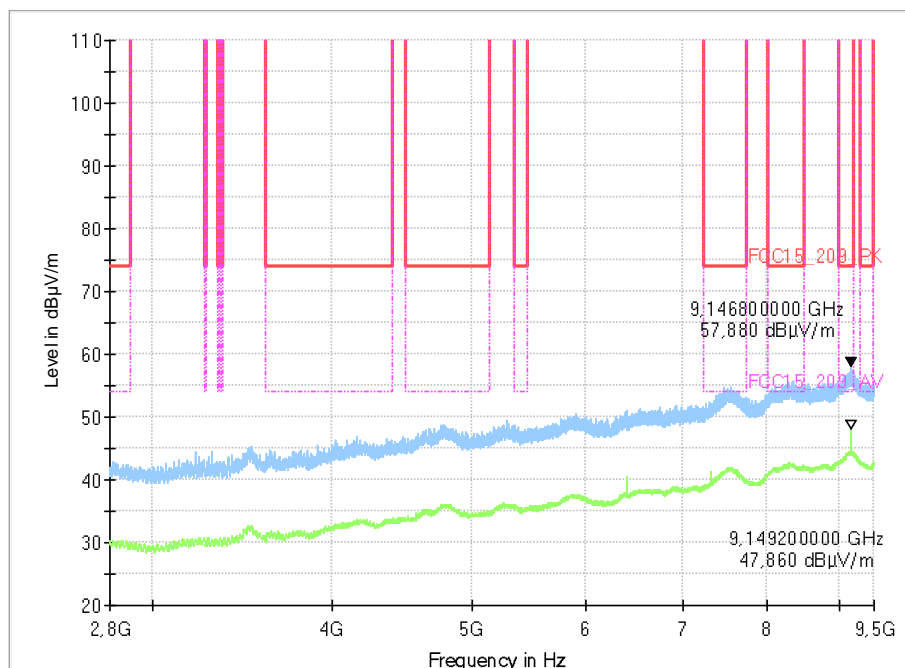
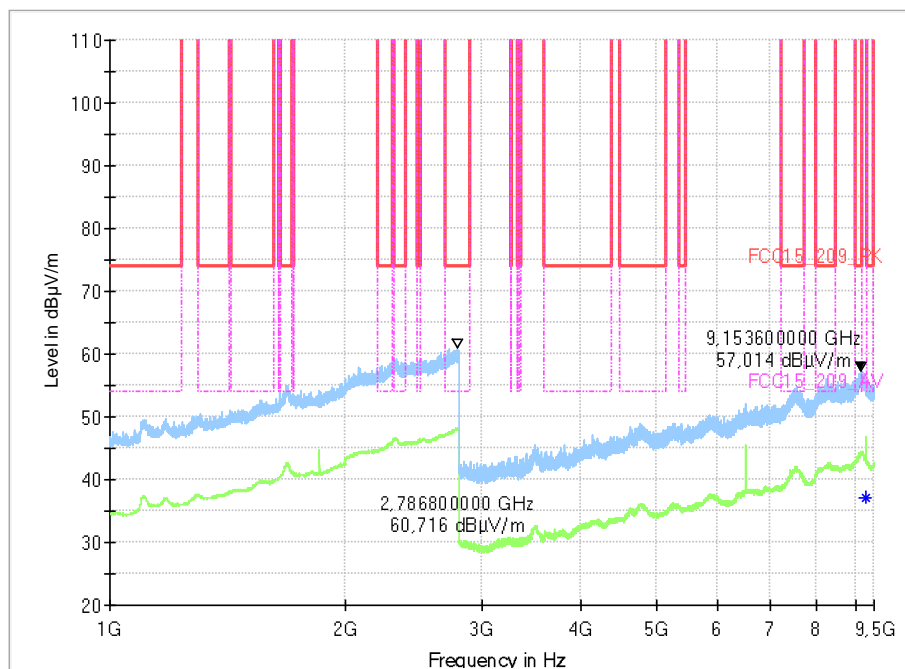


Diagram 8.02_RSE_FHSS_Fhigh_1-9.5GHz

Full Spectrum



End of Annex 1