

Annex 1: Measurement diagrams

23-1-0014801T034_TR1-A201-R02

Number of pages:	51	Date of Report:	2024-Oct-25
Testing company:	cetecom advanced GmbH Untertuerkheimer Str. 6-10 66117 Saarbruecken GERMANY	Applicant:	VALEO Telematik und Akustik GmbH
Product: Model:	Antenna and Remote Telematics Integrated System ARTEMIS-NAR-01		
FCC ID:	QWY-ARTEMIS-NAR01	IC:	6588A-ARTEMISNAR1
		PMN:	ARTEMIS-NAR-01
		HVIN:	ARTEMIS-NAR-01
		FVIN:	E20 R550
Testing has been carried out in accordance with:	FCC Regulations Title 47 CFR, Chapter I, Subchapter A Part 15, Subpart C Intentional Radiators; § 15.209 Radiated emission limits; general requirements Title 47 CFR, Chapter I, Subchapter B Part 22, Subpart H Cellular Radiotelephone Service Part 24, Subpart E Paging and Radiotelephone Service Part 27, Subpart C Miscellaneous Wireless Communications Services ISED-Regulations, Radio Standards Specification RSS-Gen, Issue 5 General Requirements for Compliance of Radio Apparatus RSS-130, Issue 2 Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz RSS-132, Issue 4 Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz RSS-133, Issue 7 2 GHz Personal Communications Services RSS-139, Issue 4 Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz RSS-192, Issue 5 Flexible Use Broadband Equipment Operating in the Band 3450-3900 MHz RSS-198, Issue 1 Flexible Use Broadband Equipment Operating in the Band 3900-3980 MHz RSS-199, Issue 4 Broadband Radio Service (BRS) Equipment Operating in the Band 2500-2690 MHz		

Measurement diagrams

EUT Information for all following tests:

PMT number: 23-1-00148S176_C01
Power: 12 V DC

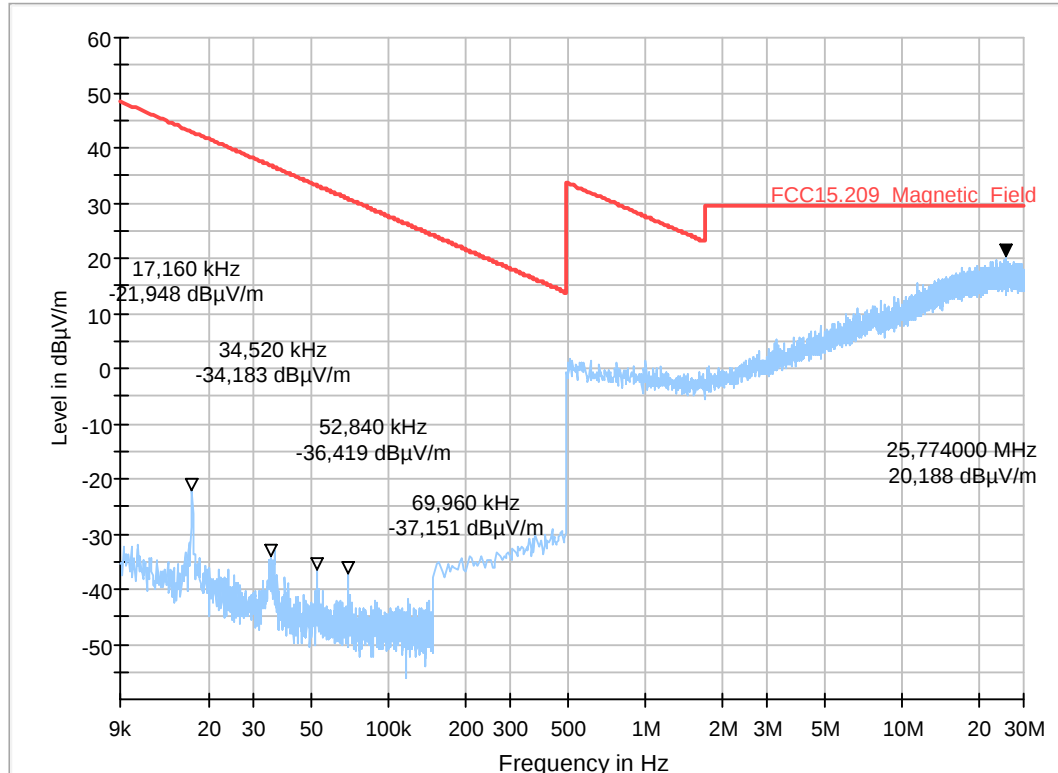
1.1 Magnetic field strength

2.201a_H_field_5G_NR_FDD_n2_CH_381500_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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n2_CH_381500
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

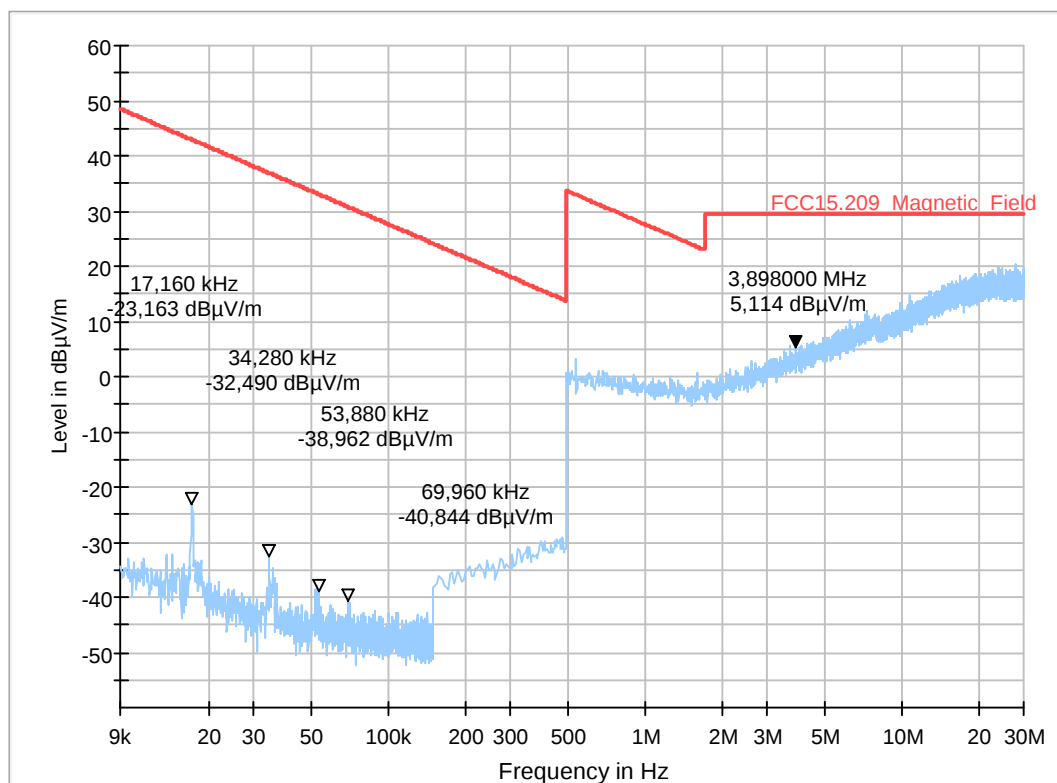


2.201b_H_field_5G_NR_FDD_n2_CH_381500_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n2_CH_381500
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

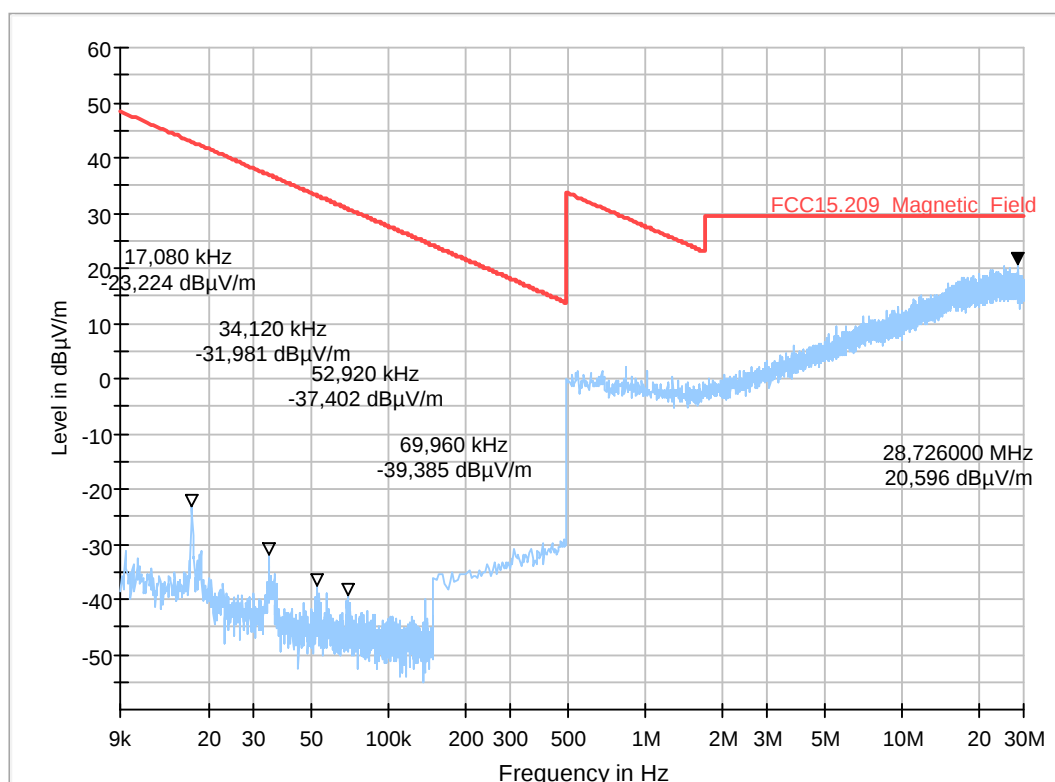


2.4101a_H_field_5G_NR_TDD_n41_CH_528000_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_TDD_n41_CH_528000
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

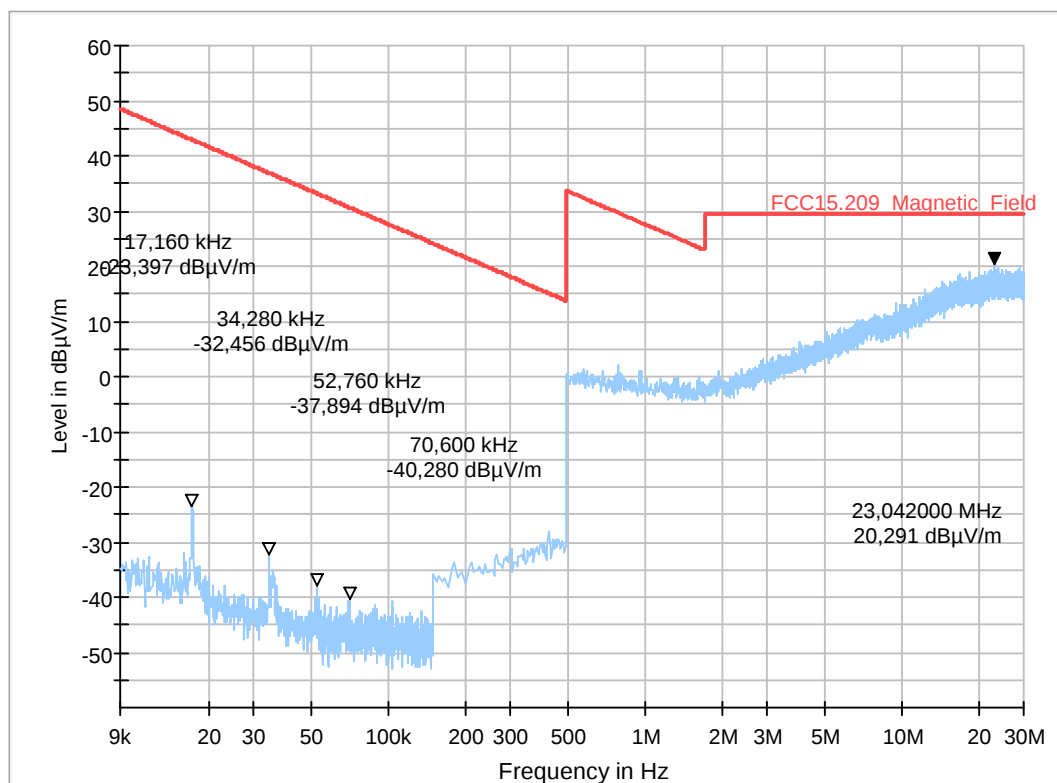


2.4101b_H_field_5G_NR_TDD_n41_CH_528000_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_TDD_n41_CH_528000
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

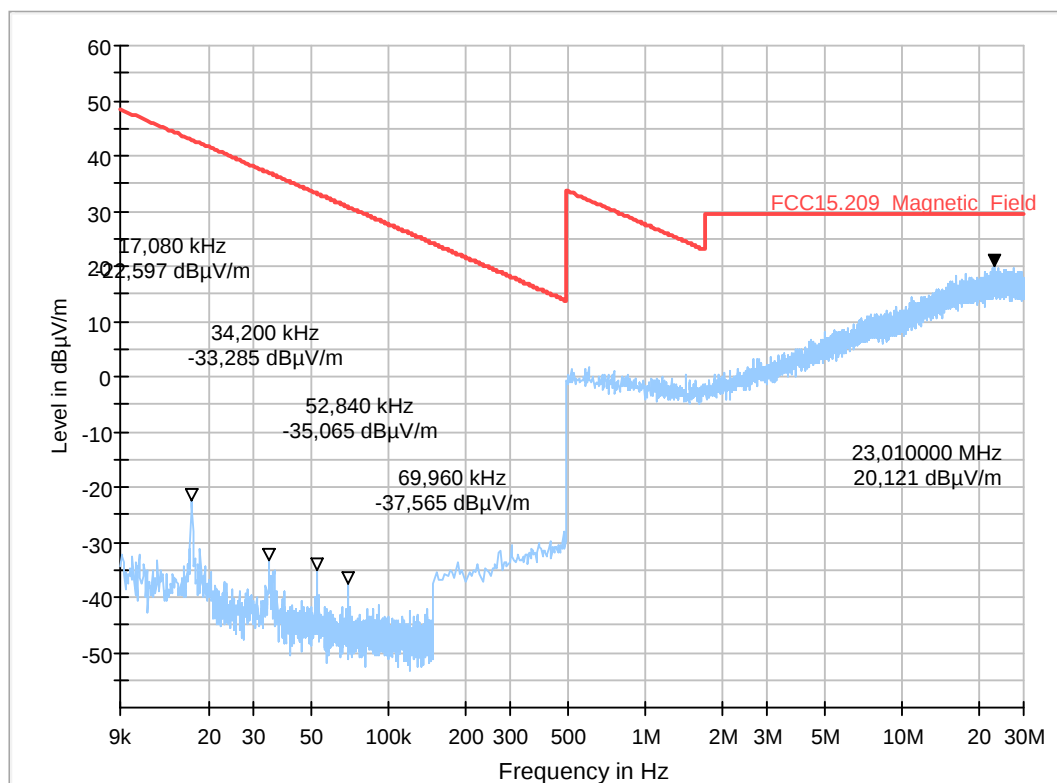


2.501a_Traffic_mode_5G_NR_FDD_n5_CH_167800_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n5_CH_167800
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

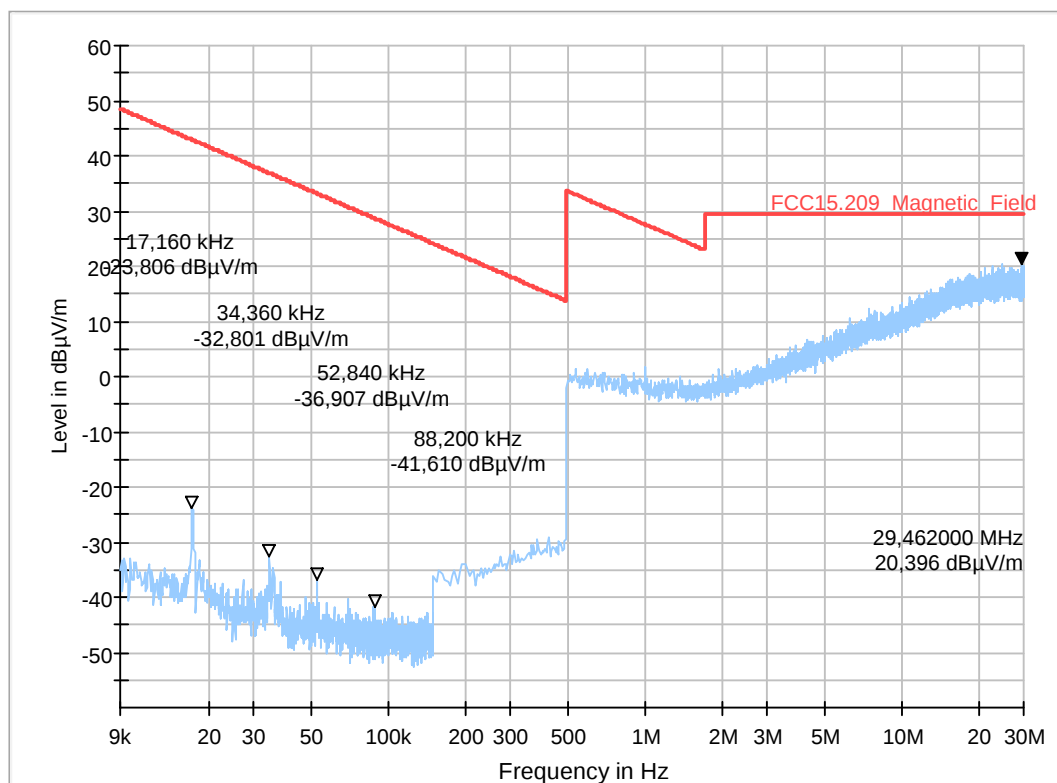


2.501b_Traffic_mode_5G_NR_FDD_n5_CH_167800_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n5_CH_167800
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

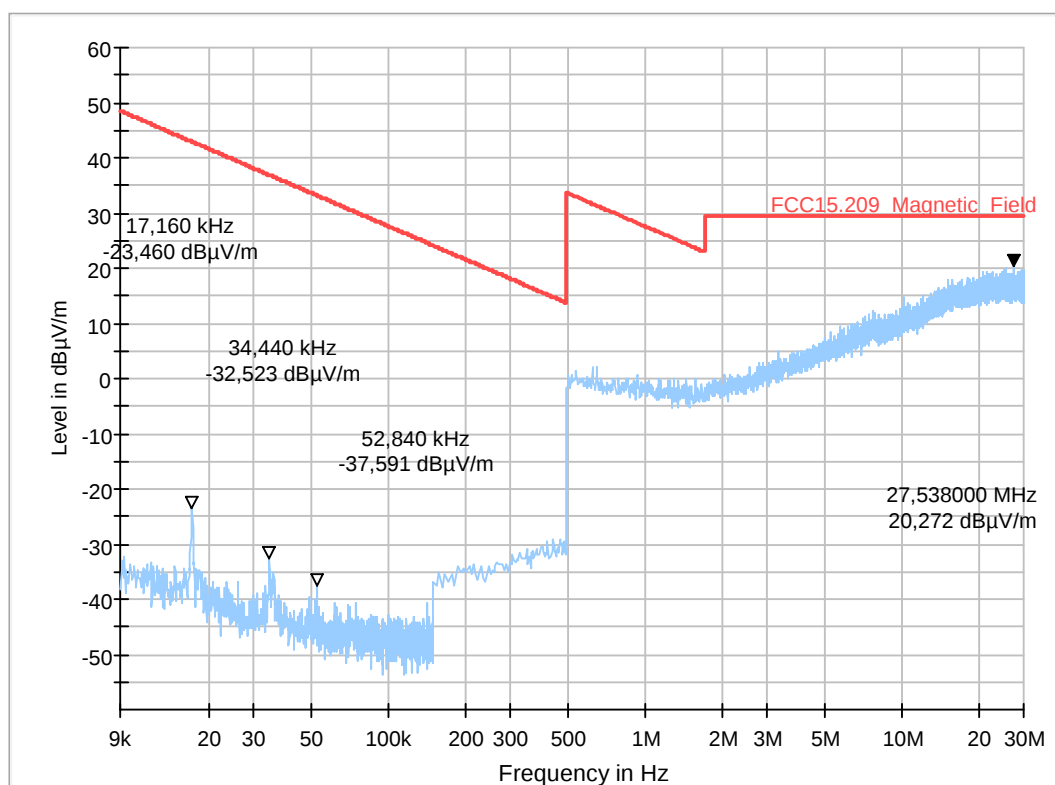


2.6601a_H_field_5G_NR_FDD_n66_CH_352000_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n66_CH_352000
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

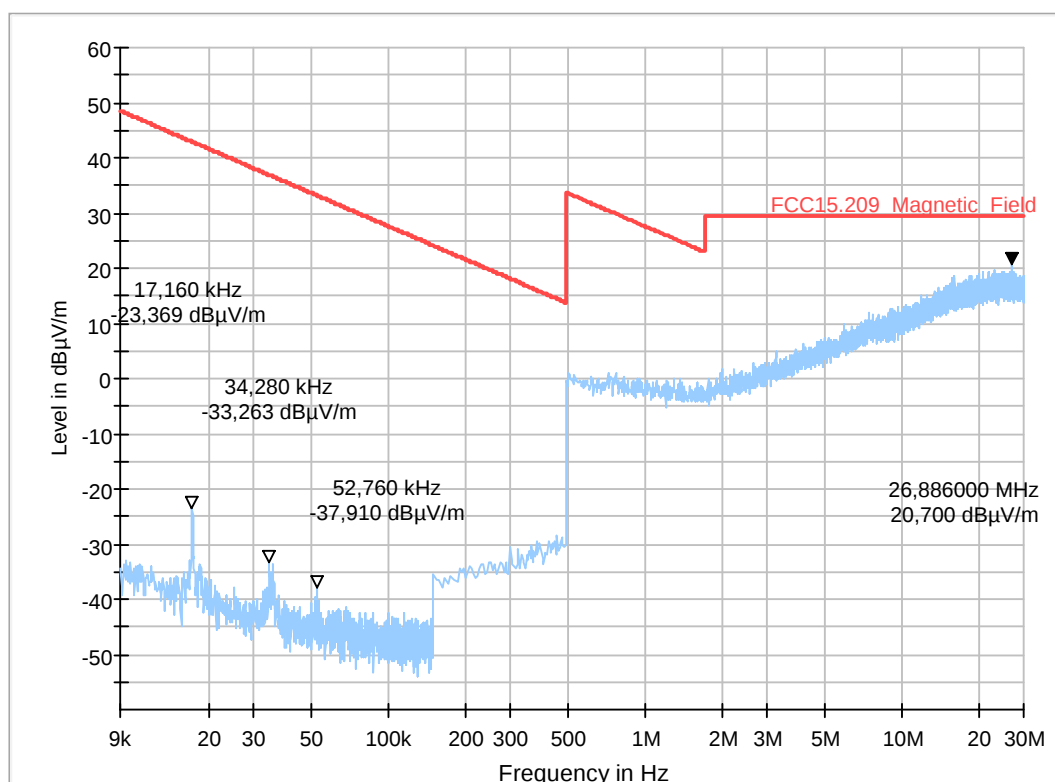


2.6601b_H_field_5G_NR_FDD_n66_CH_352000_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n66_CH_352000
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

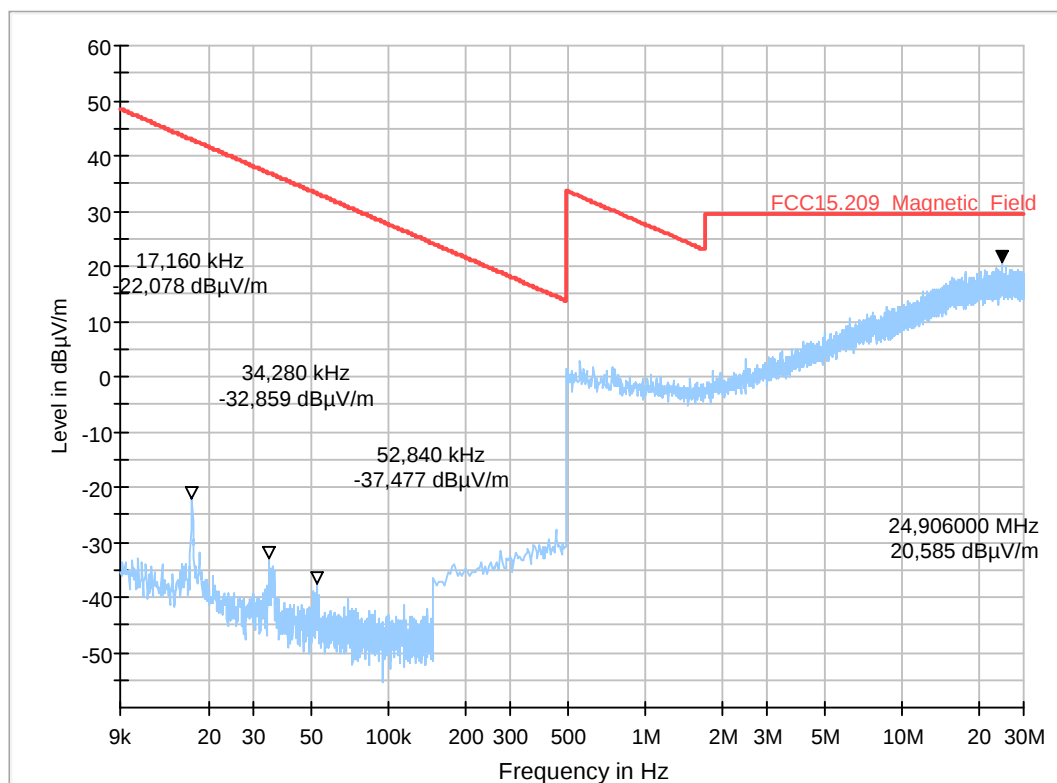


2.7101a_H_field_5G_NR_FDD_n71_CH_134100_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n71_CH_134100
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

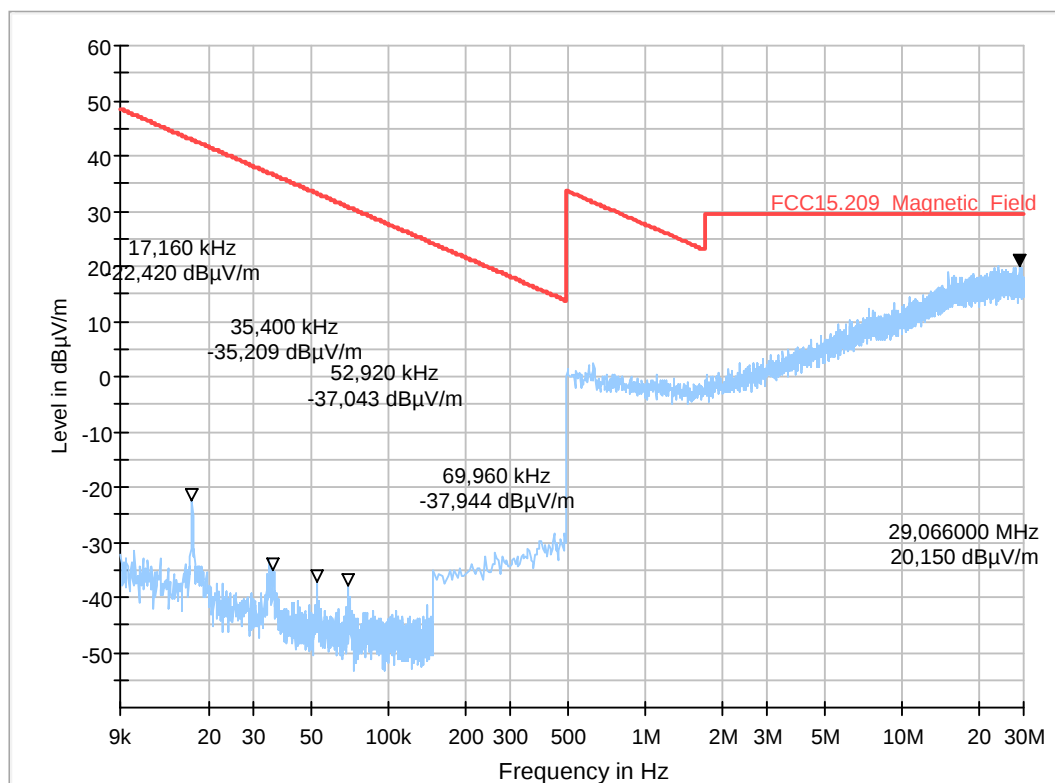


2.7101b_H_field_5G_NR_FDD_n71_CH_134100_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_FDD_n71_CH_134100
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

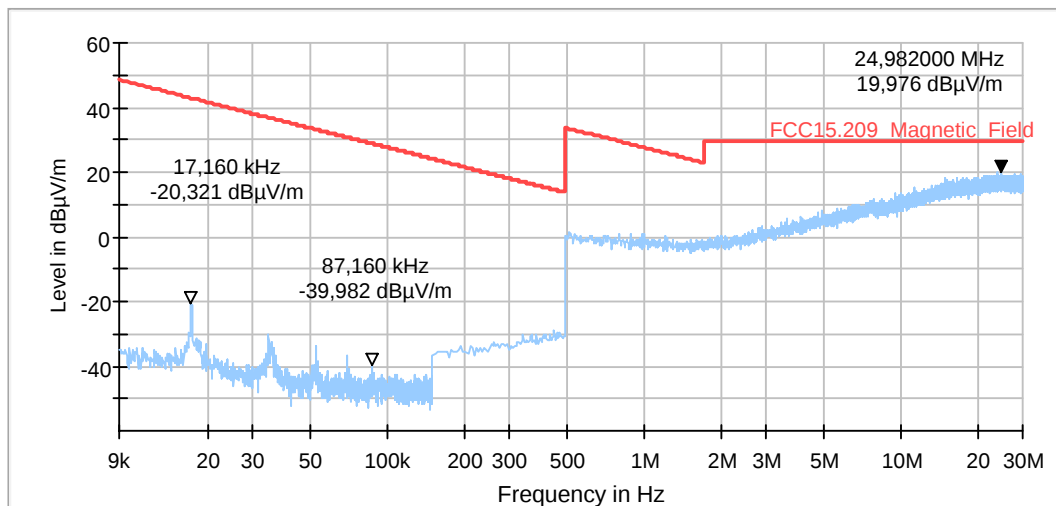


2.7701a_H_field_5G_NR_TDD_n77_CH_662000_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n41_CH_52800
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	2
Verdict:	Passed

Full Spectrum

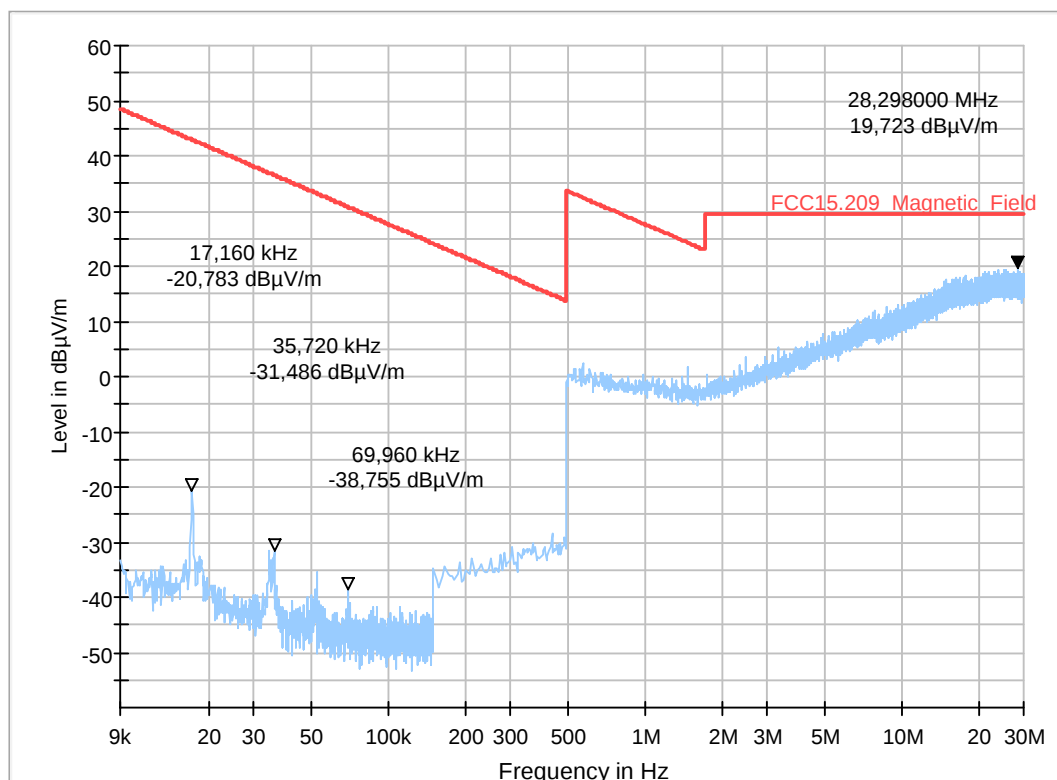


2.7701b_H_field_5G_NR_TDD_n77_CH_662000_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n77_CH_662000
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

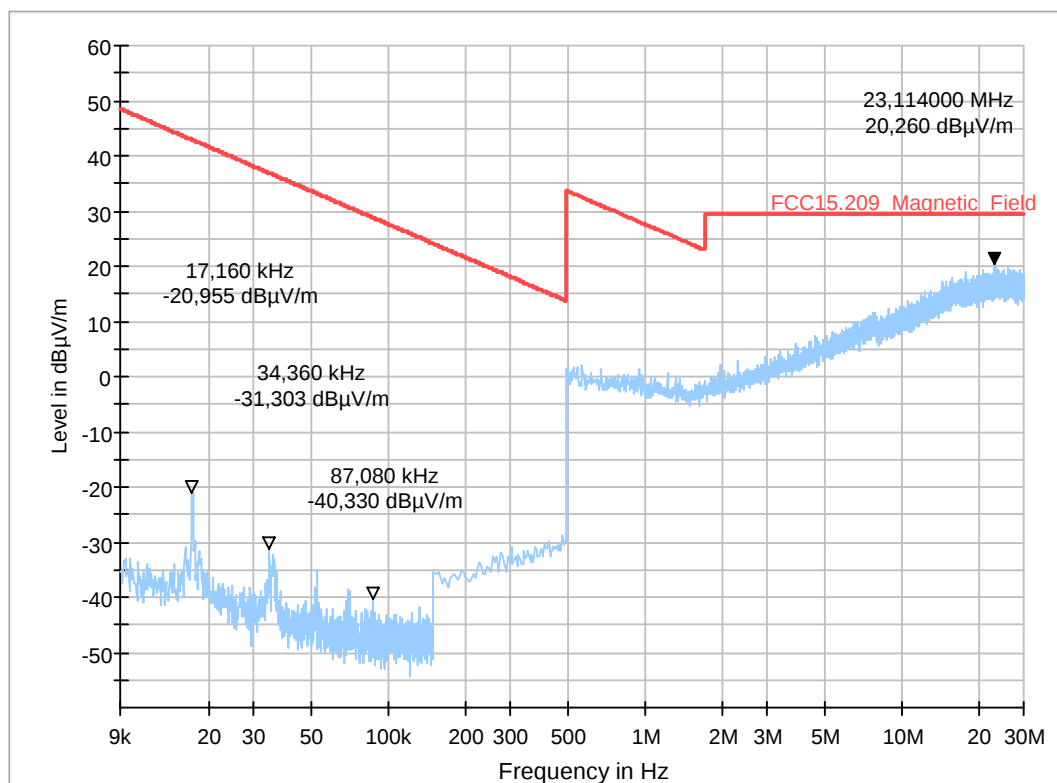


2.7701c_H_field_5G_NR_TDD_n77_CH_633666_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	PSt
Operating Mode:	5G_NR_TDD_n77_CH_633666
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

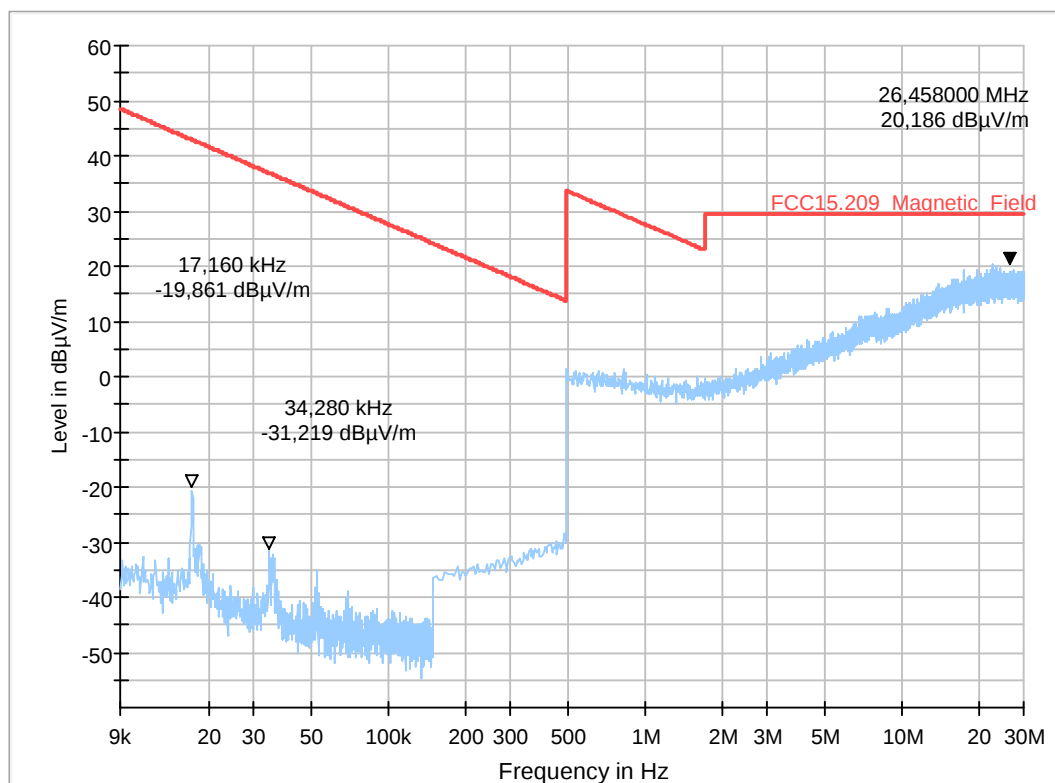


2.7701d_H_field_5G_NR_TDD_n77_CH_633666_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n77_CH_633666
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

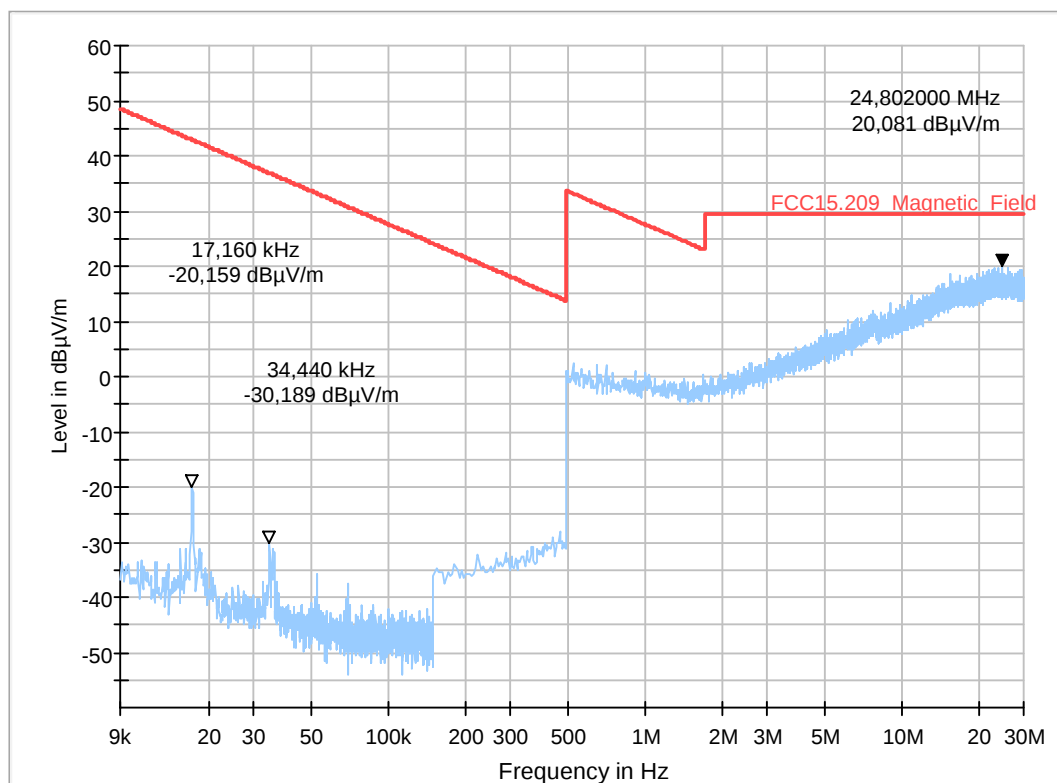


2.7801a_H_field_5G_NR_TDD_n78_CH_650332_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n78_CH_650332
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

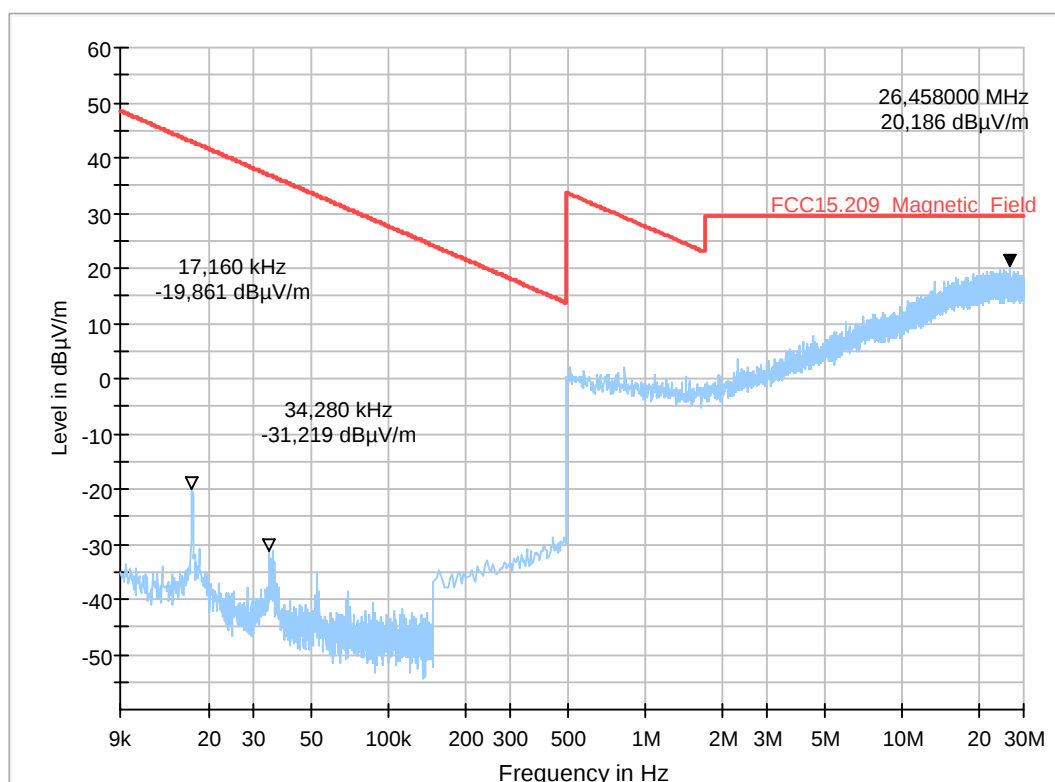


2.7801b_H_field_5G_NR_TDD_n78_CH_650332_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n78_CH_650332
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

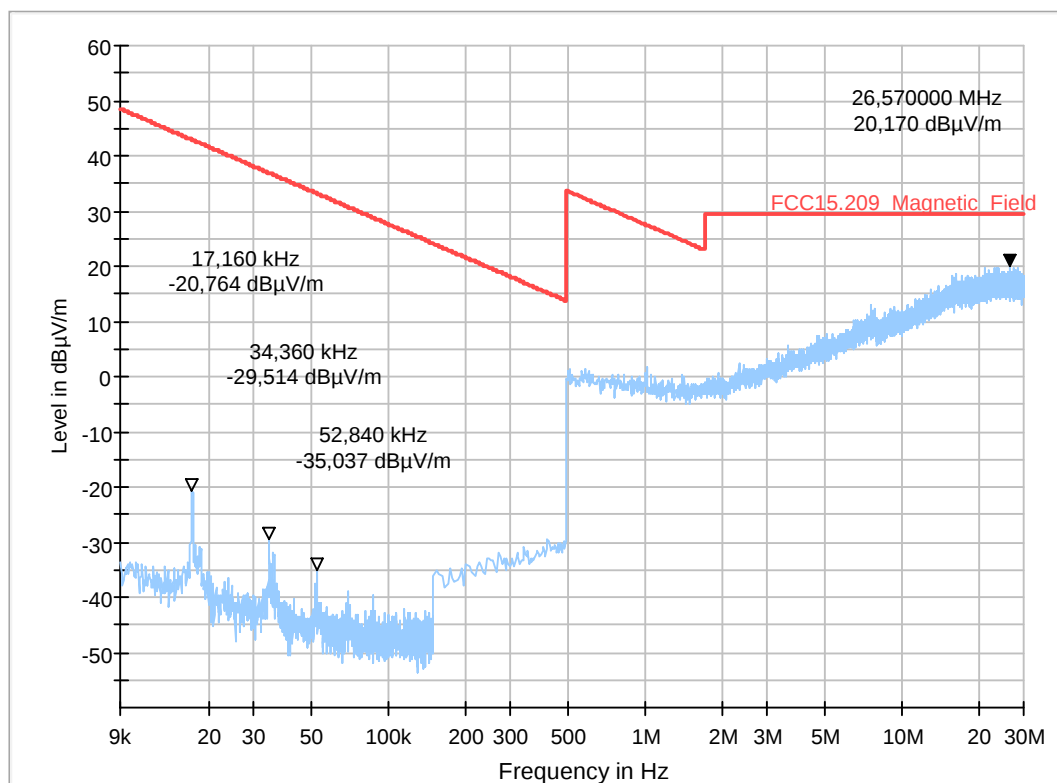


2.7801c_H_field_5G_NR_TDD_n78_CH_633666_lying

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n78_CH_633666
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

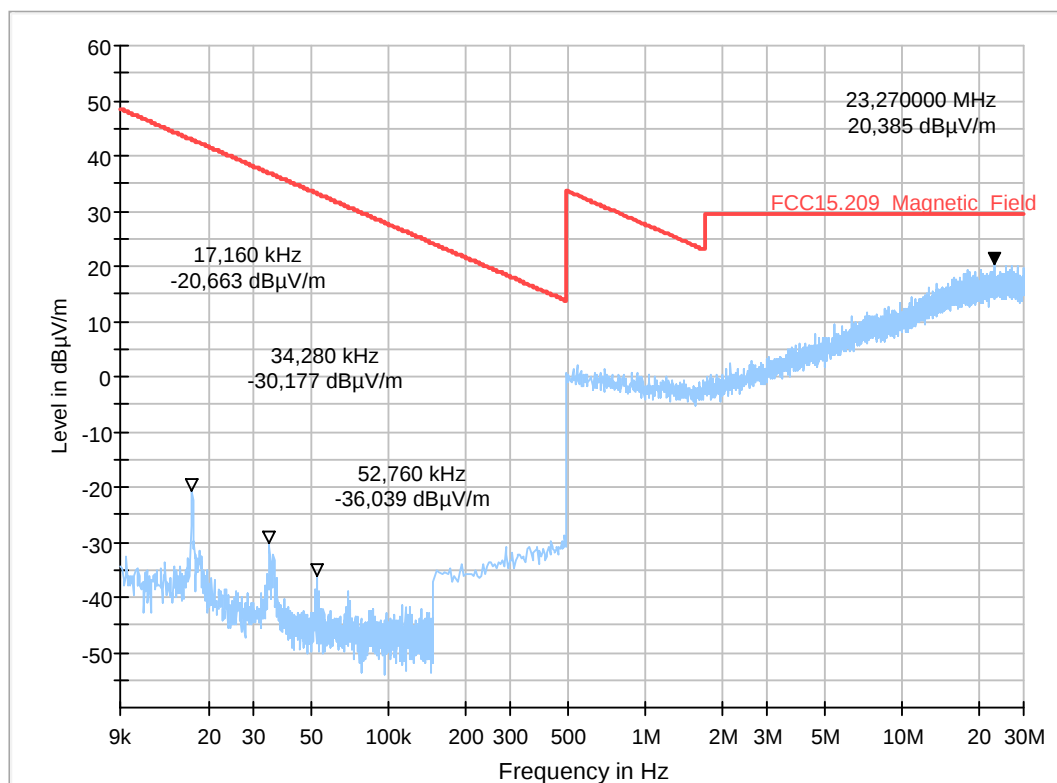


2.7801d_H_field_5G_NR_TDD_n78_CH_633666_standing

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 V10.60.20
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test Standard:	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operator:	TFra
Operating Mode:	5G_NR_TDD_n78_CH_633666
Environmental Conditions:	Humidity: 44% rH; Temperature: 20.2 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



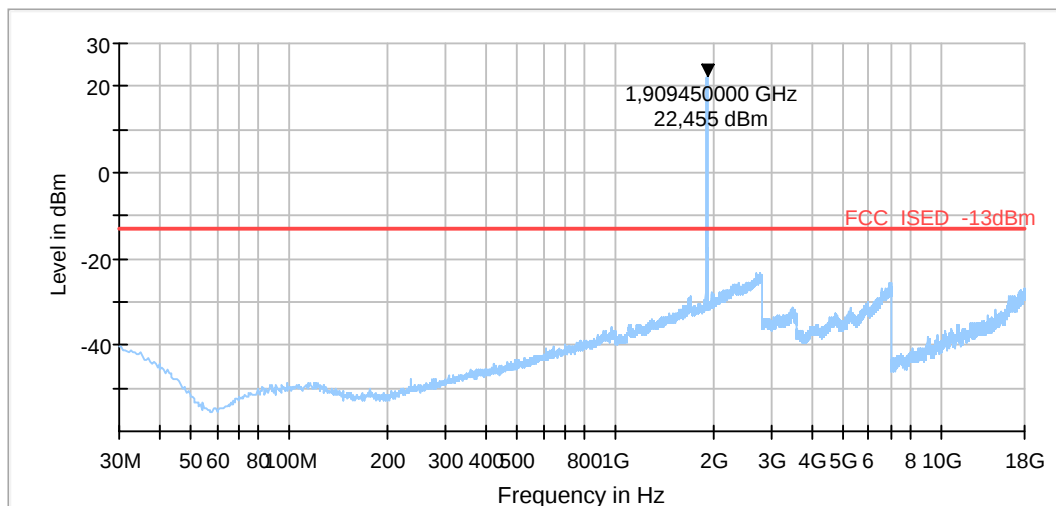
1.2 Radiated emissions

8.02a_Traffic_mode_5G_NR_FDD_n2_CH_381500_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
FCC Part 24 Test Standard:	FCC Part 24 / RSS-133
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	Traffic_mode_5G_NR_FDD_n2_CH_381500_lying
Operator:	MNu
Comment:	Humidity : 50%rH; Temperature: 20°C
EUT Setup:	01
Verdict:	Passed

Full Spectrum

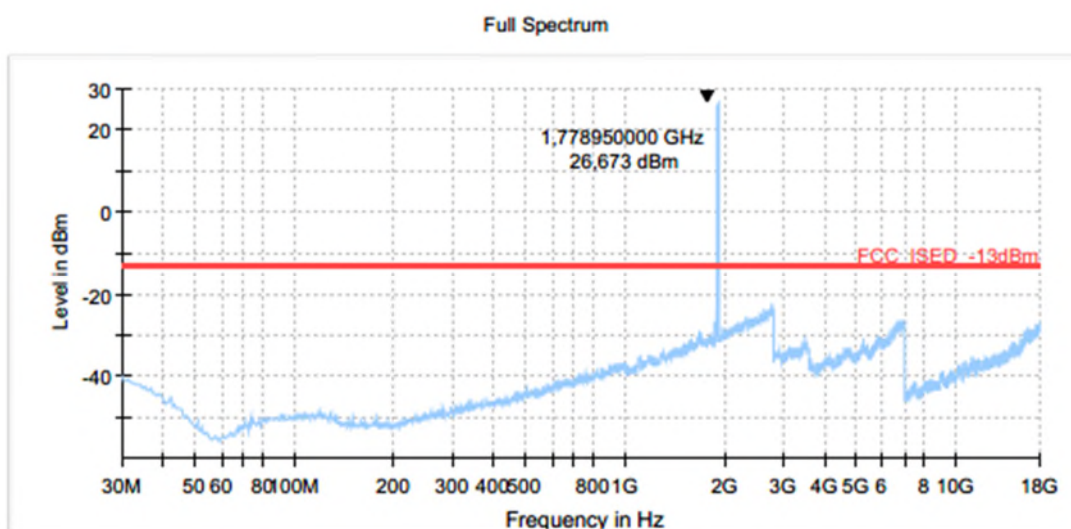


Remark: emission at 1.9 GHz is the carrier frequency of NR Band 2 and not relevant to the limit

8.02b_Traffic_mode_5G_NR_FDD_n2_CH_381500_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 24 / RSS-133
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_FDD_n2_CH_381500_standing
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed



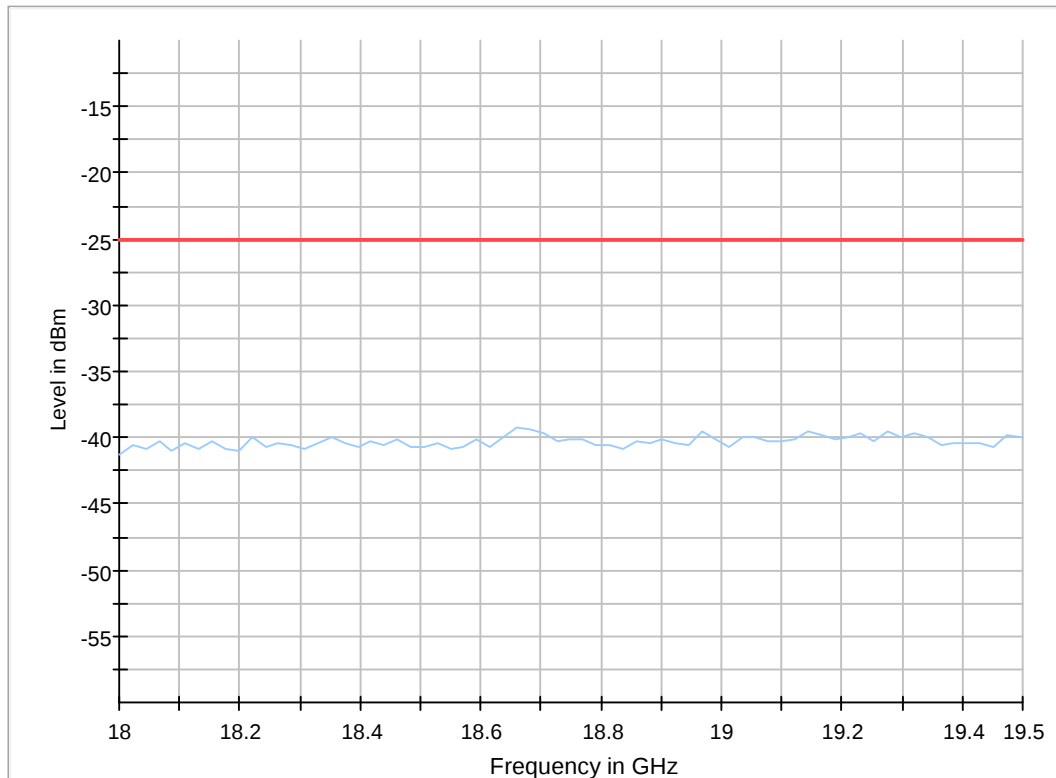
Remark: emission at 1.9 GHz is the carrier frequency of NR Band 2 and not relevant to the limit

8.02c_Traffic_mode_5G_NR_FDD_n2_CH_381500_AntH

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetekom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24 / RSS-133
Operating Mode:	5G NR FDD n2 CH 381500
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



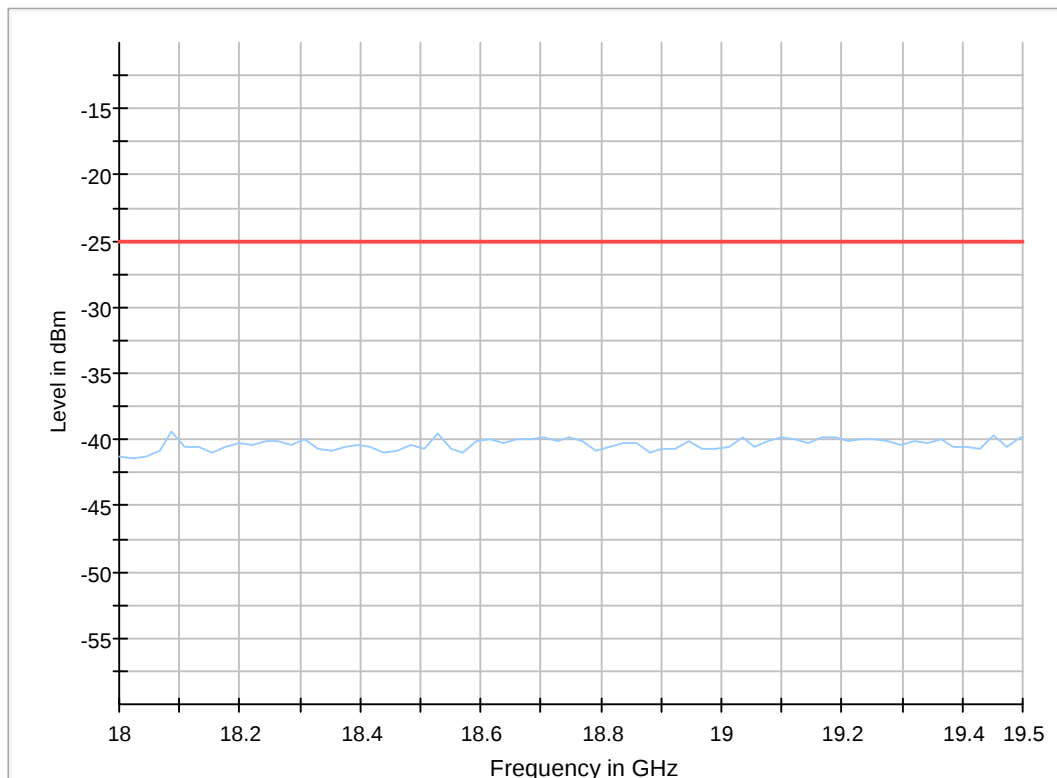
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.02d_Traffic_mode_5G_NR_FDD_n2_CH_381500_AntV

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetekom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24 / RSS-133
Operating Mode:	5G NR FDD n2 CH 381500
Antenna Position:	vertical
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



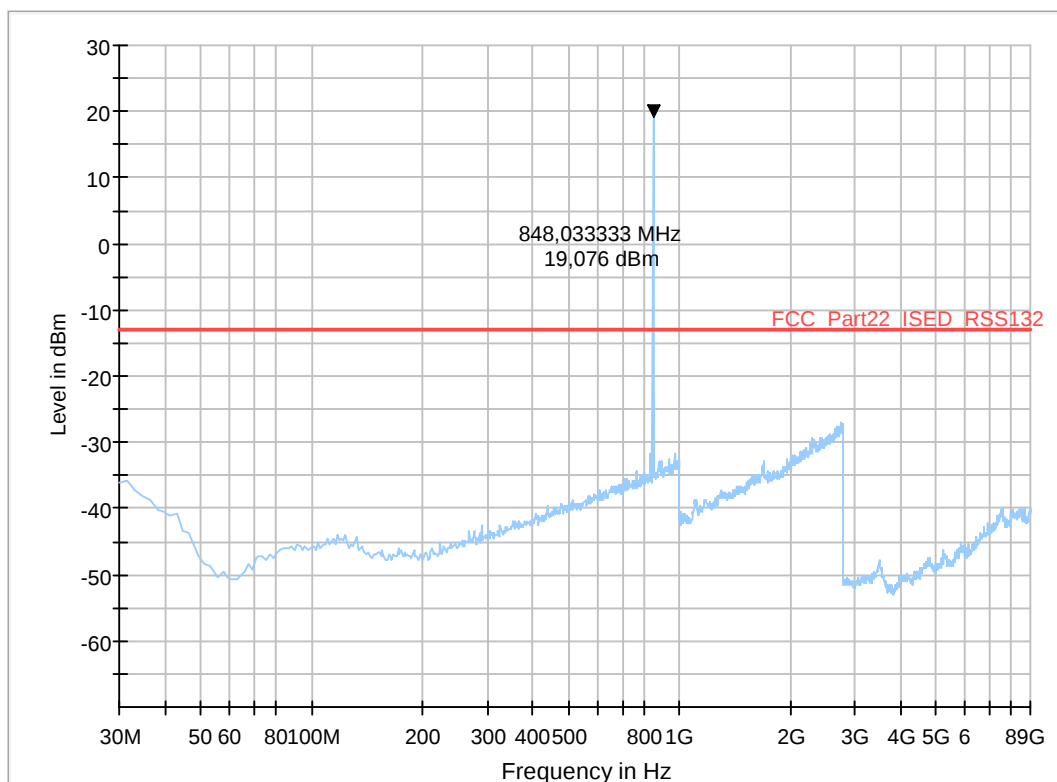
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.05a_Traffic_mode_5G_NR_FDD_n5_CH_167800_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC Part 22 / RSS-132
Antenna polarisation:	vertical / horizontal
Operating Mode:	5G_NR_FDD_n5_CH_167800_lying
Operator:	MNu/ASa
EUT Setup:	01
Verdict:	Passed

Full Spectrum



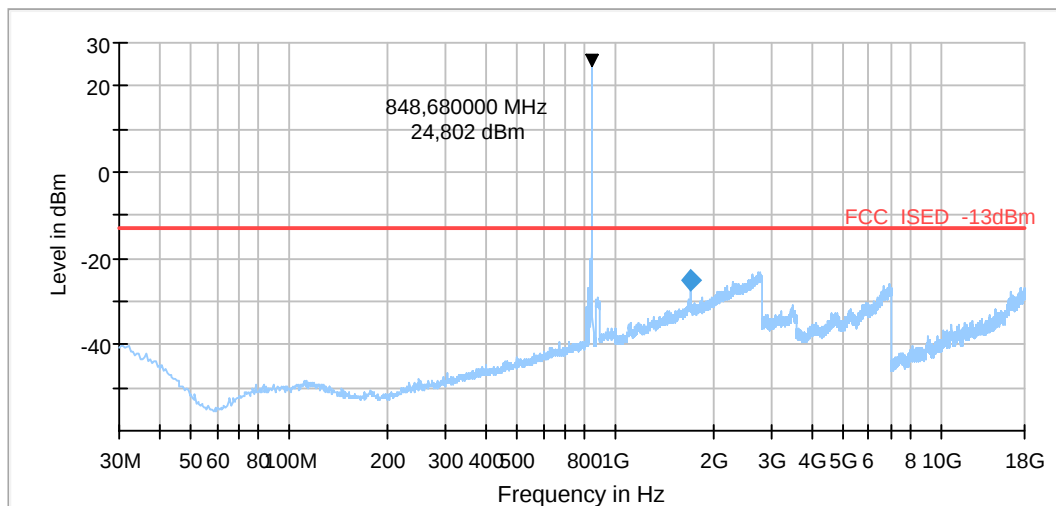
Remark: emission at 848 MHz is the carrier frequency of NR Band 5 and not relevant to the limit

8.05b_Traffic_mode_5G_NR_FDD_n5_CH_167800_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part .22 / RSS-132
Antenna polarisation:	vertical / horizontal
Measurement software version:	EMC32 V10.60.20
Operating Mode:	5G_NR_FDD_n5_CH_167800_standing
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



Final Result

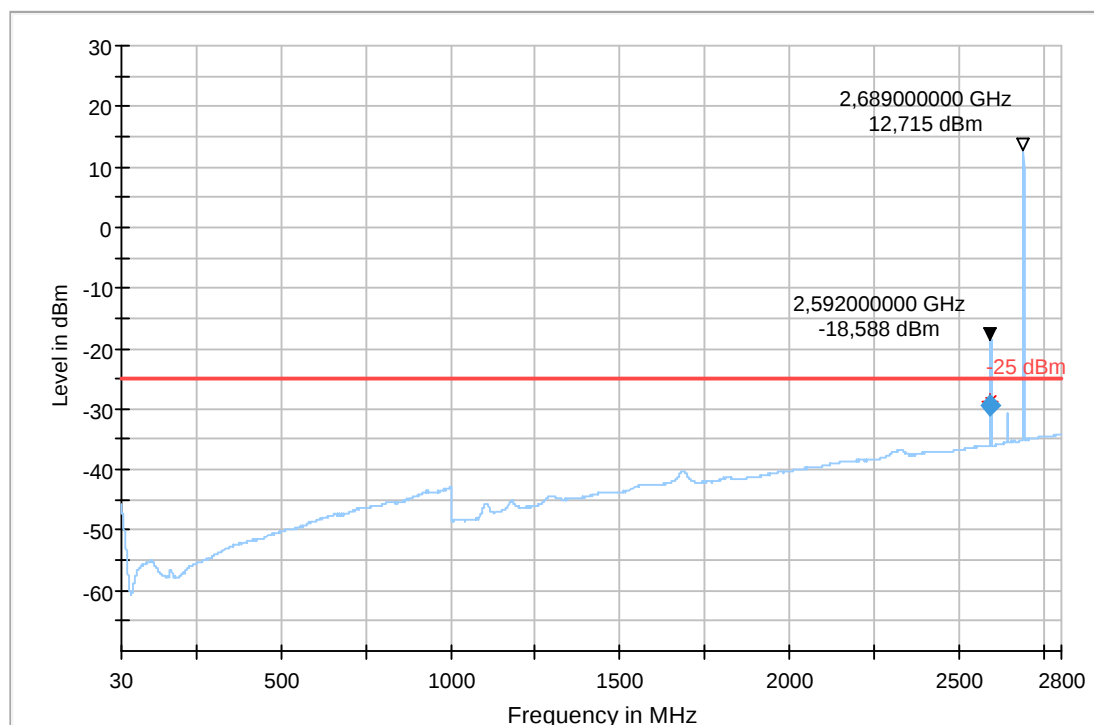
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1696.517857	-25.07	-13.00	12.07	100.0	1000.000	155.0	H	31.0	0.0	-61.1

8.41a_Traffic_mode_5G_NR_TDD_n41_CH_528000_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-199
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n41_CH_528000_lying
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	2
Verdict:	Passed

Full Spectrum



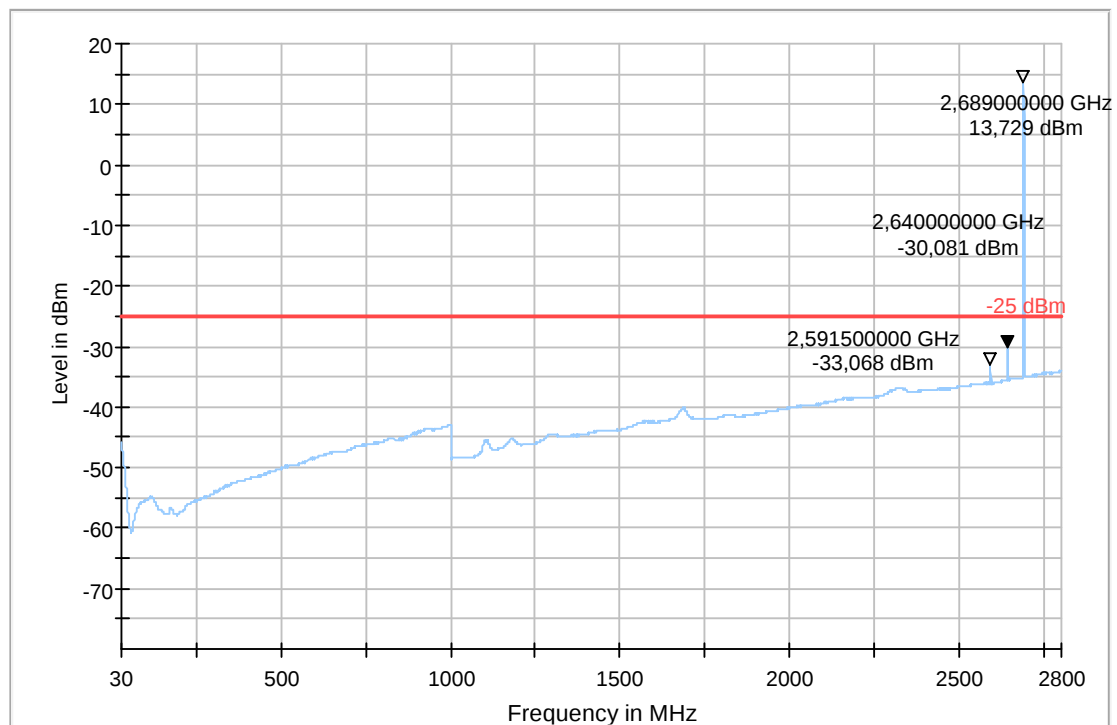
Remark: emission at 2.6 GHz is the carrier frequency of NR Band 41 and not relevant to the limit. Emission at 2.5 GHz is within band (2496 MHz to 2690 MHz) and not relevant to the limit.

8.41a_Traffic_mode_5G_NR_TDD_n41_CH_528000_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-199
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n41_CH_528000_lying
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	2
Verdict:	Passed

Full Spectrum



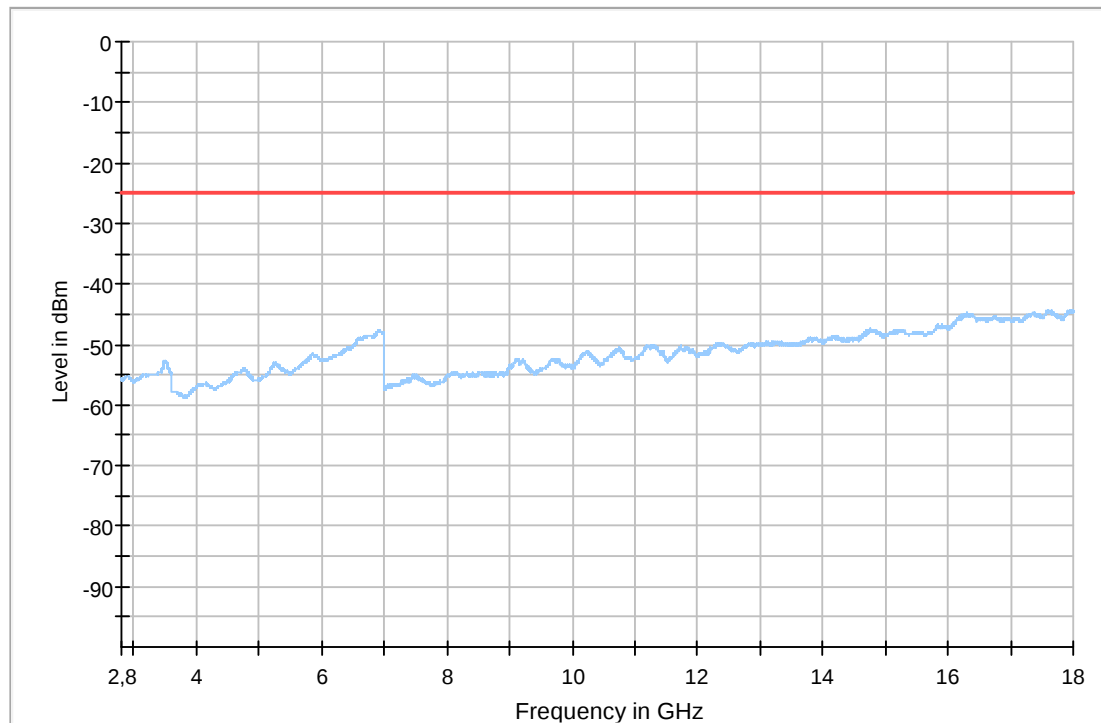
Remark: emission at 2.6 GHz is the carrier frequency of NR Band 41 and not relevant to the limit. Emission at 2.5 GHz is within band (2496 MHz to 2690 MHz) and not relevant to the limit.

8.41b_Traffic_mode_5G_NR_TDD_n41_CH_528000_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-199
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n41_CH_528000_standing
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

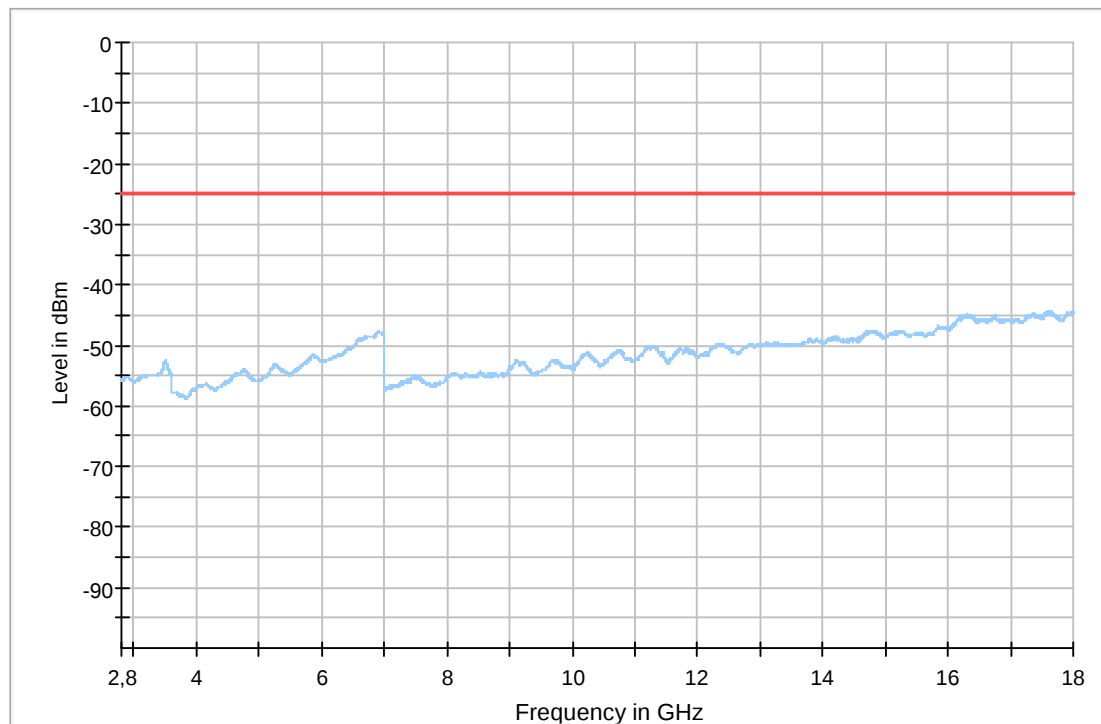


8.41b_Traffic_mode_5G_NR_TDD_n41_CH_528000_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-199
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n41_CH_528000_standing
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed

Full Spectrum

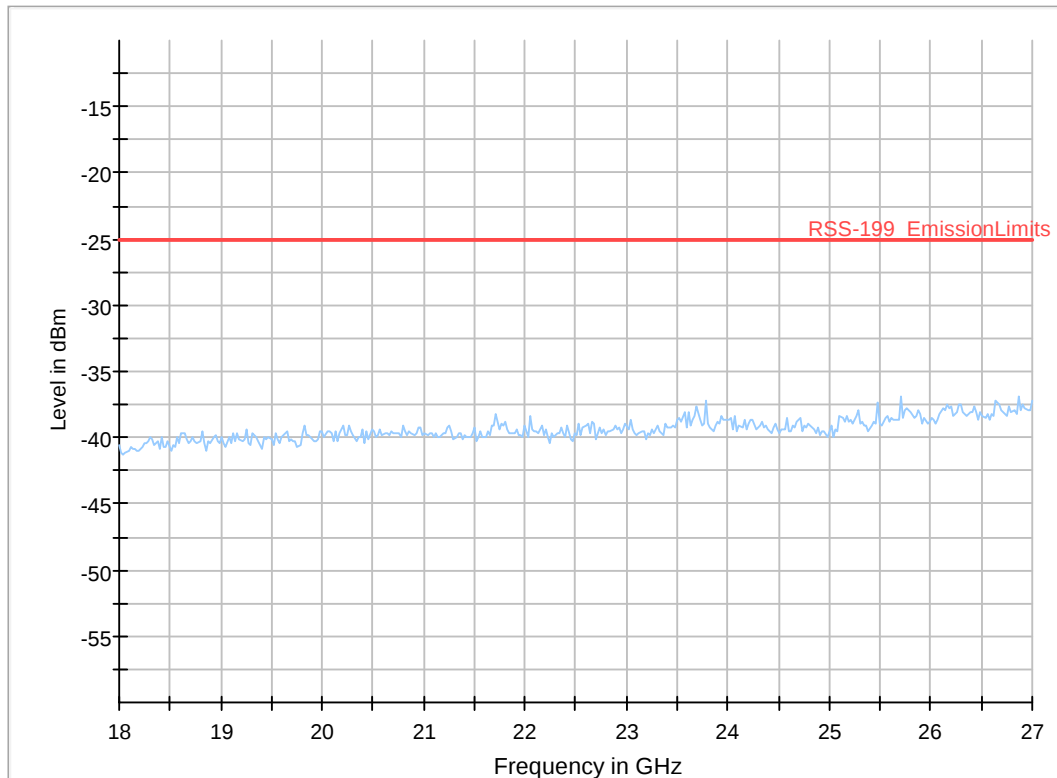


8.41c_Traffic_mode_5G_NR_TDD_n41_CH_528000_AntH

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-199
Operating Mode:	5G_NR_TDD_n41_CH_528000_AntH
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum

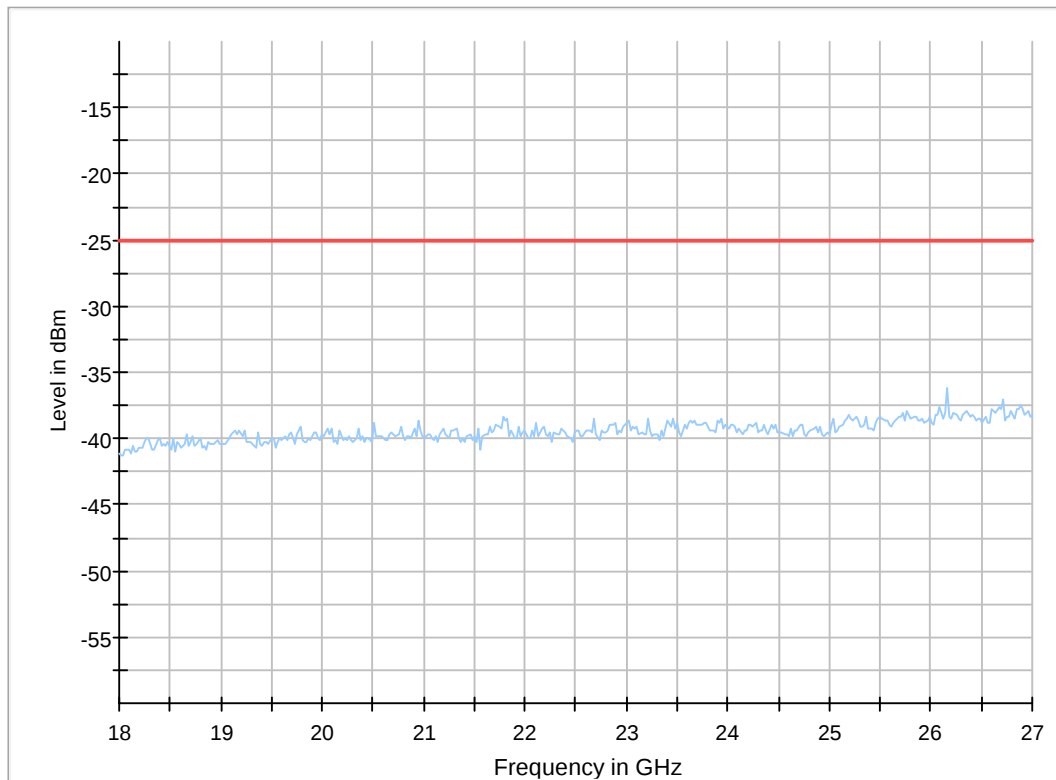


8.41d_Traffic_mode_5G_NR_TDD_n41_CH_528000_AntV

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-199
Operating Mode:	5G_NR_TDD_n41_CH_528000_AntV
Antenna Position:	vertical
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum

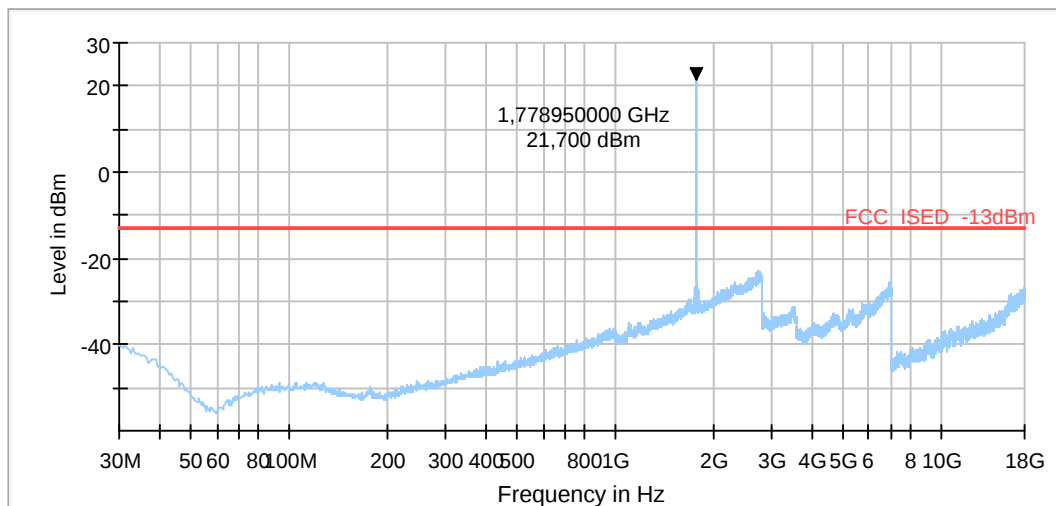


8.66a_Traffic_mode_5G_NR_FDD_n66_CH_352000_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-139
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_FDD_n66_CH_352000_lying
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	2
Verdict:	Passed

Full Spectrum



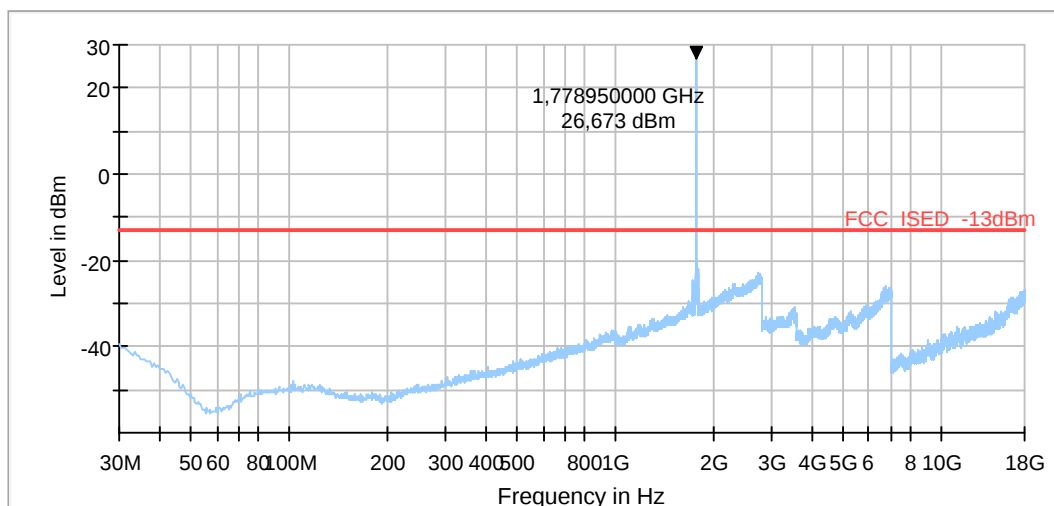
Remark: emission at 1.7 GHz is the carrier frequency of NR Band 66 and not relevant to the limit

8.66b_Traffic_mode_5G_NR_FDD_n66_CH_352000_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-139
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_FDD_n66_CH_352000_standing
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



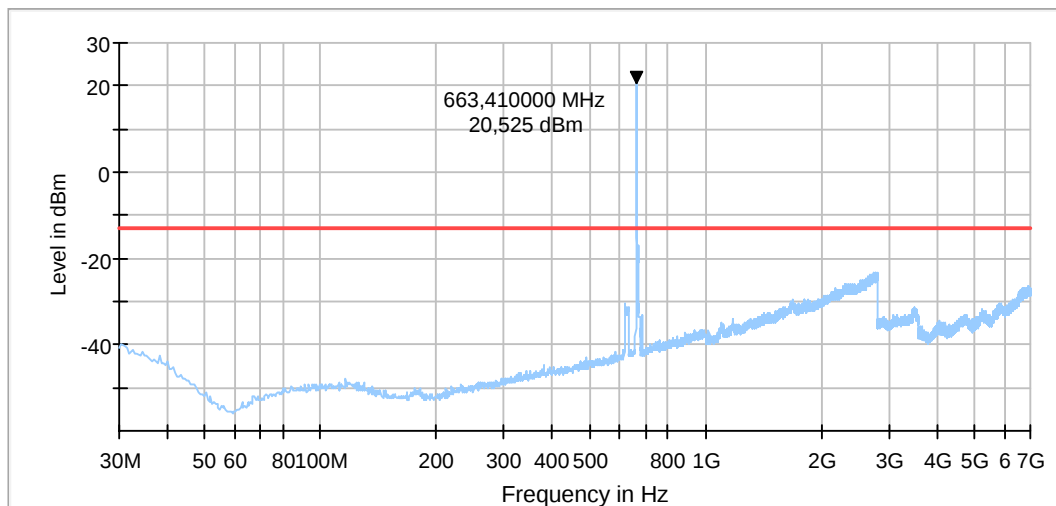
Remark: emission at 1.7 GHz is the carrier frequency of NR Band 66 and not relevant to the limit

8.71a_Traffic_mode_5G_NR_FDD_n71_CH_134100_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-130
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_FDD_n71_CH_134100_lying
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	2
Verdict:	Passed

Full Spectrum



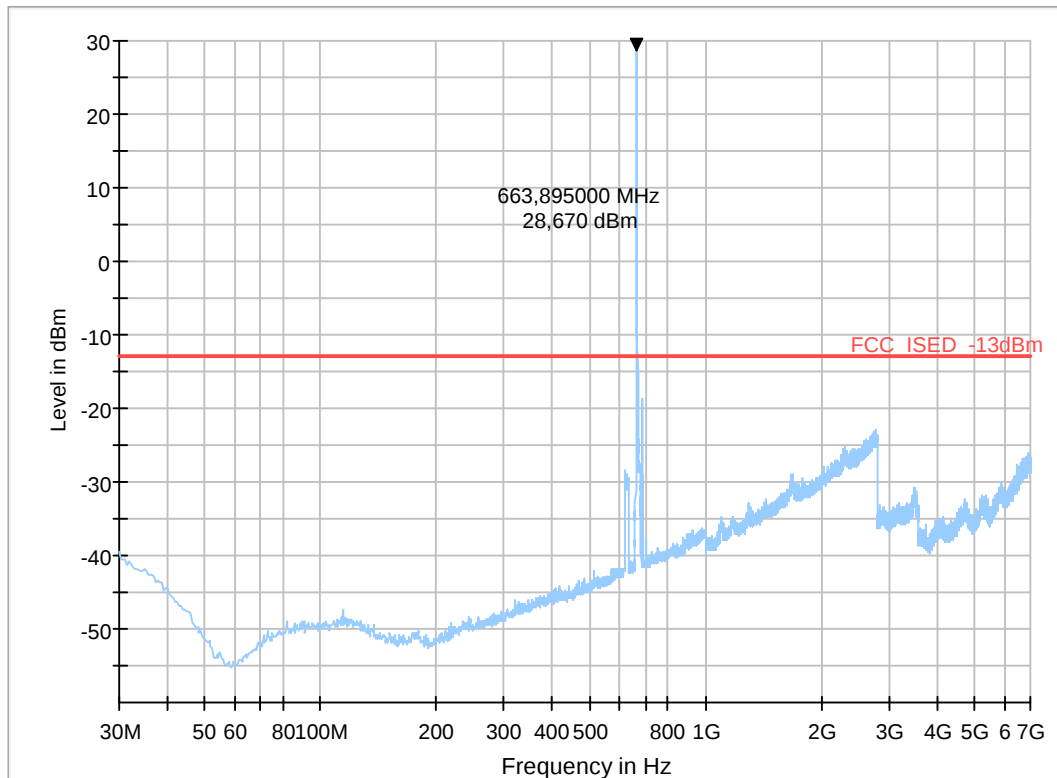
Remark: emission at 663 MHz is the carrier frequency of NR Band 71 and not relevant to the limit

8.71b_Traffic_mode_5G_NR_FDD_n71_CH_134100_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-130
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_FDD_n71_CH_134100_standing
Operator:	TFra
Environmental Conditions:	Humidity: 39 %rH; Temperature: 21°C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



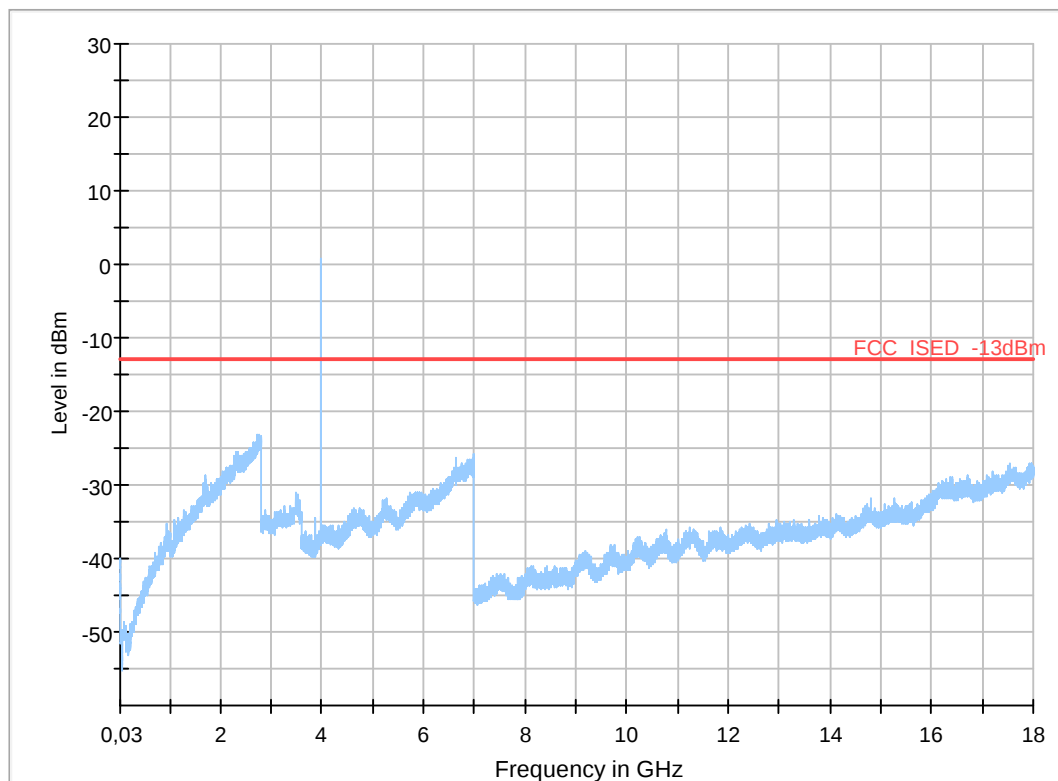
Remark: emission at 663 MHz is the carrier frequency of NR Band 71 and not relevant to the limit

8.77a_Traffic_mode_5G_NR_TDD_n77_CH_662000_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-198
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n77_CH_662000_lying
Operator:	Maa
Environmental Conditions:	Humidity: 40 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



Remark: emission at 3.9 GHz is the carrier frequency of NR Band 77 and not relevant to the limit

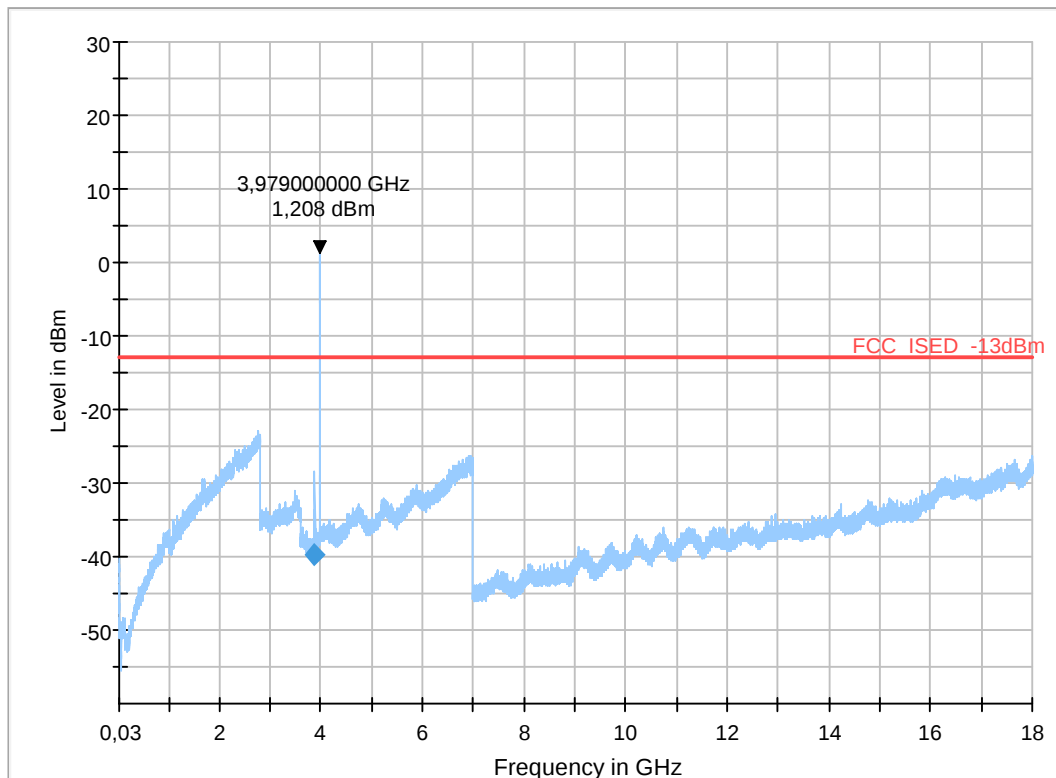
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.77b_Traffic_mode_5G_NR_TDD_n77_CH_662000_standin g

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-198
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n77_CH_662000_standing
Operator:	PSt/Maa
Environmental Conditions:	Humidity: 50 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



Remark: emission at 3.9 GHz is the carrier frequency of NR Band 77 and not relevant to the limit

Final Result

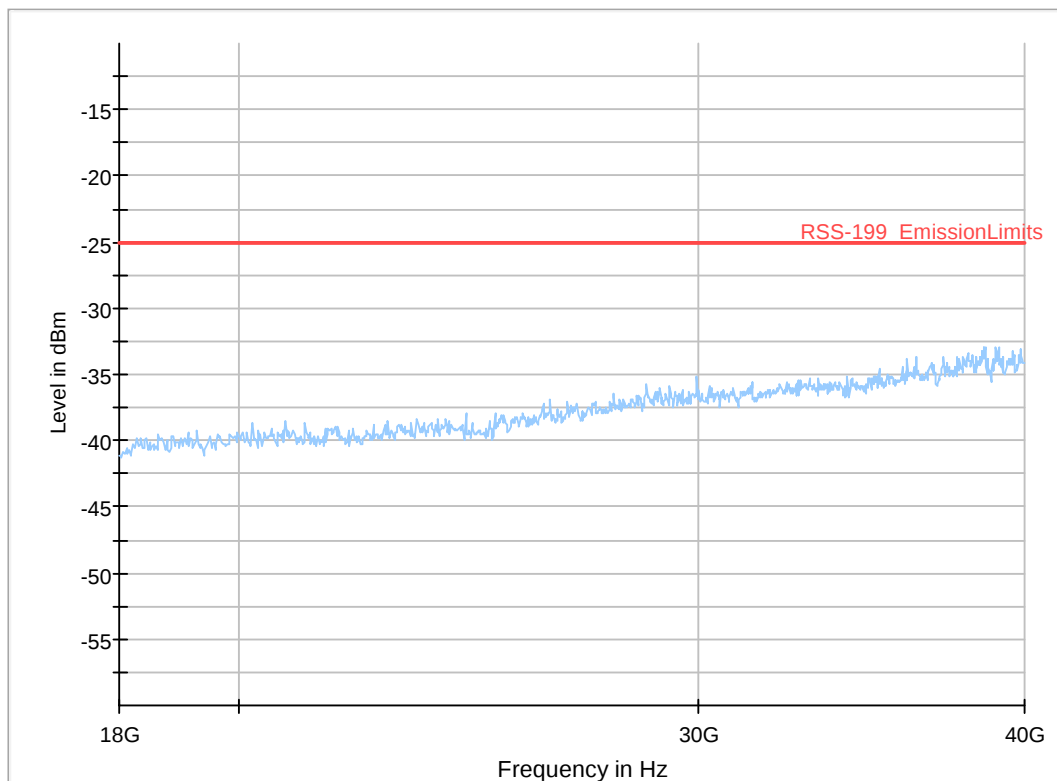
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin	Meas. Time (ms)	Bandwidth	Height	Pol	Azimuth	Elevation	Corr. (dB)	Comment
3879.033333	-39.72	-13.00	26.72	100.0	1000.000	155.0	V	212.0	0.0	-85.0	17:44:50 - 23.05.2024

8.77c_Traffic_mode_5G_NR_TDD_n77_CH_662000_AntH

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-198
Operating Mode:	5G_NR_TDD_n77_CH_662000_AntH
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



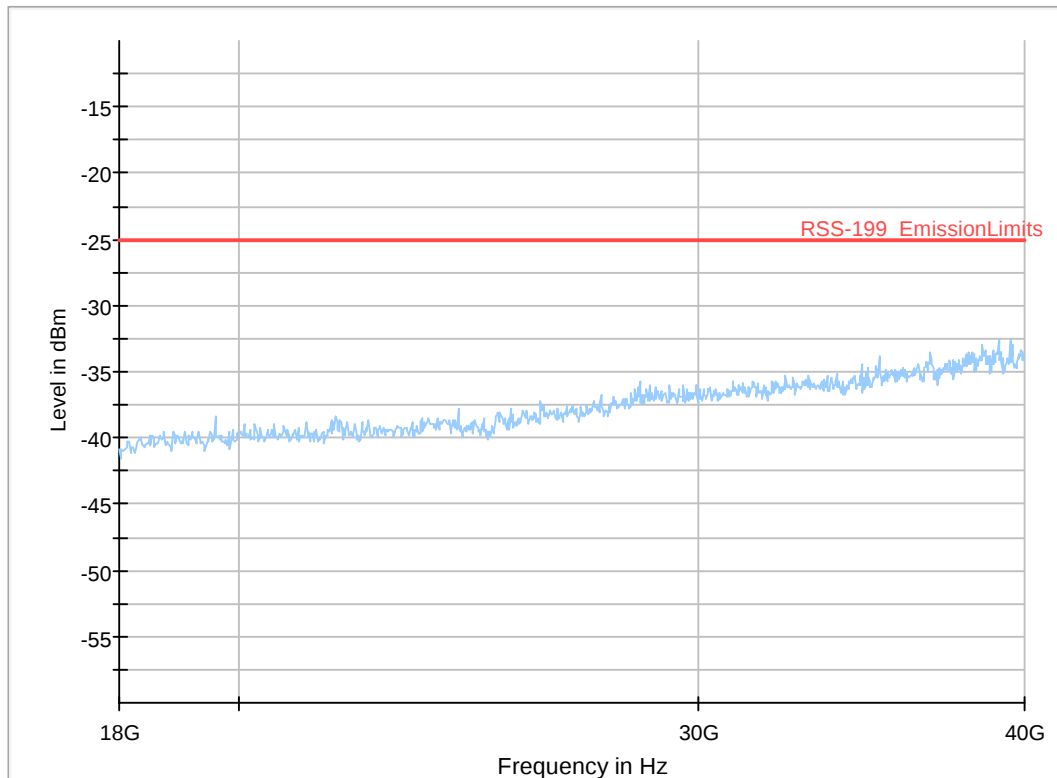
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.77d_Traffic_mode_5G_NR_TDD_n77_CH_662000_AntV

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-198
Operating Mode:	5G_NR_TDD_n77_CH_662000_AntV
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



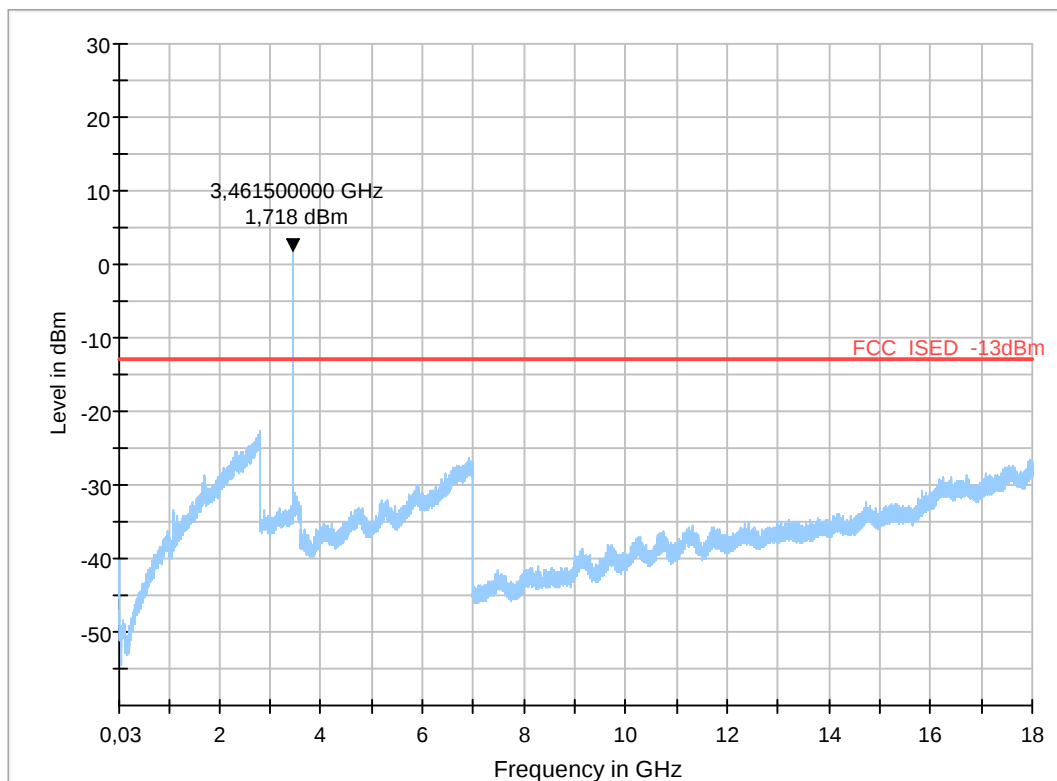
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.77e_Traffic_mode_5G_NR_TDD_n77_CH_633666_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-192
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n77_CH_633666_lying
Operator:	Maa
Environmental Conditions:	Humidity: 40 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



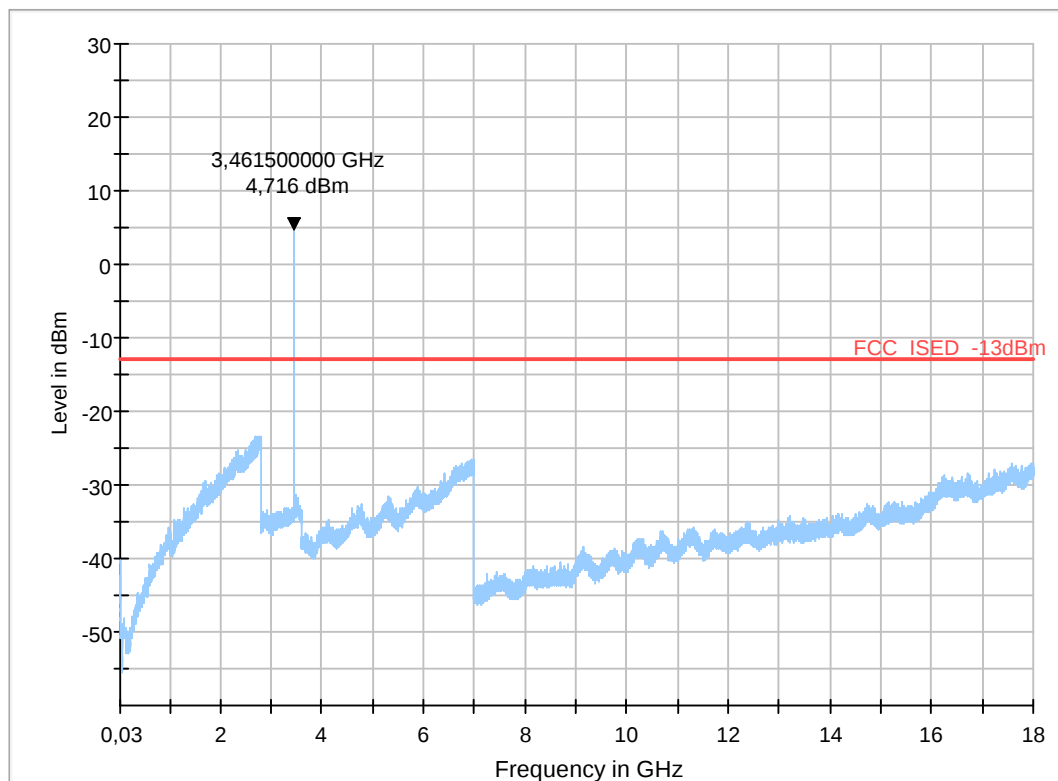
Remark: emission at 3.4 GHz is the carrier frequency of NR Band 77 and not relevant to the limit

8.77f_Traffic_mode_5G_NR_TDD_n77_CH_633666_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-192
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n77_CH_633666_standing
Operator:	PSt/Maa
Environmental Conditions:	Humidity: 50 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



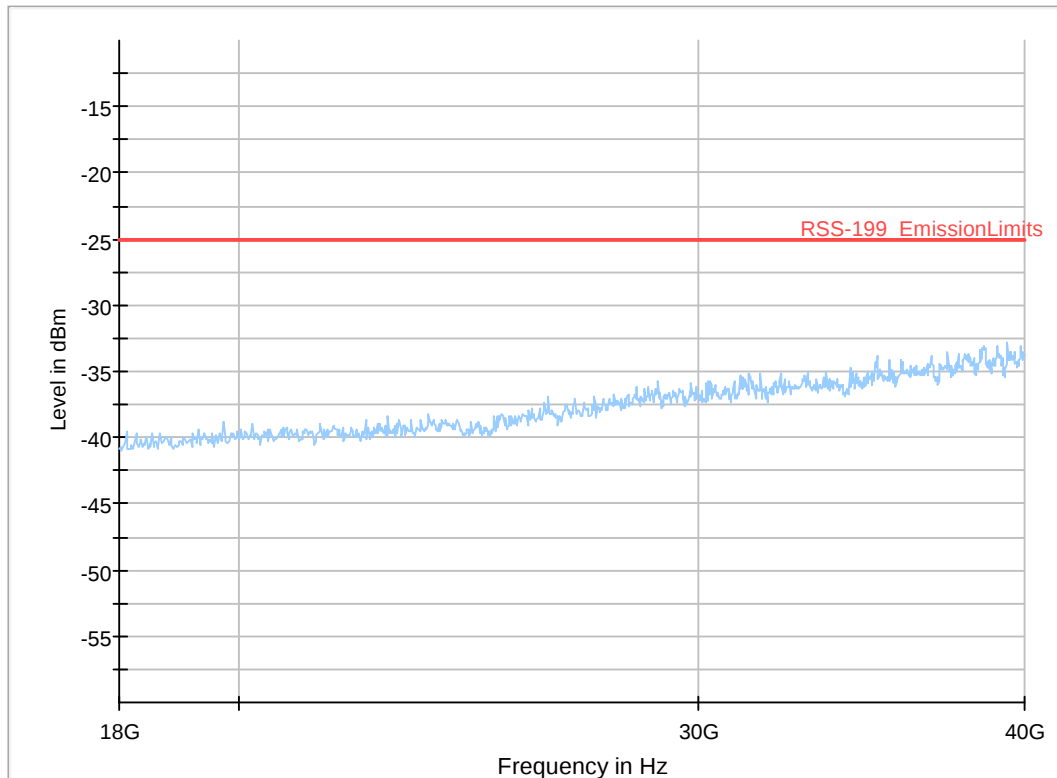
Remark: emission at 3.4 GHz is the carrier frequency of NR Band 77 and not relevant to the limit

8.77g_Traffic_mode_5G_NR_TDD_n77_CH_633666_AntH

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-192
Operating Mode:	5G_NR_TDD_n77_CH_633666_AntH
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



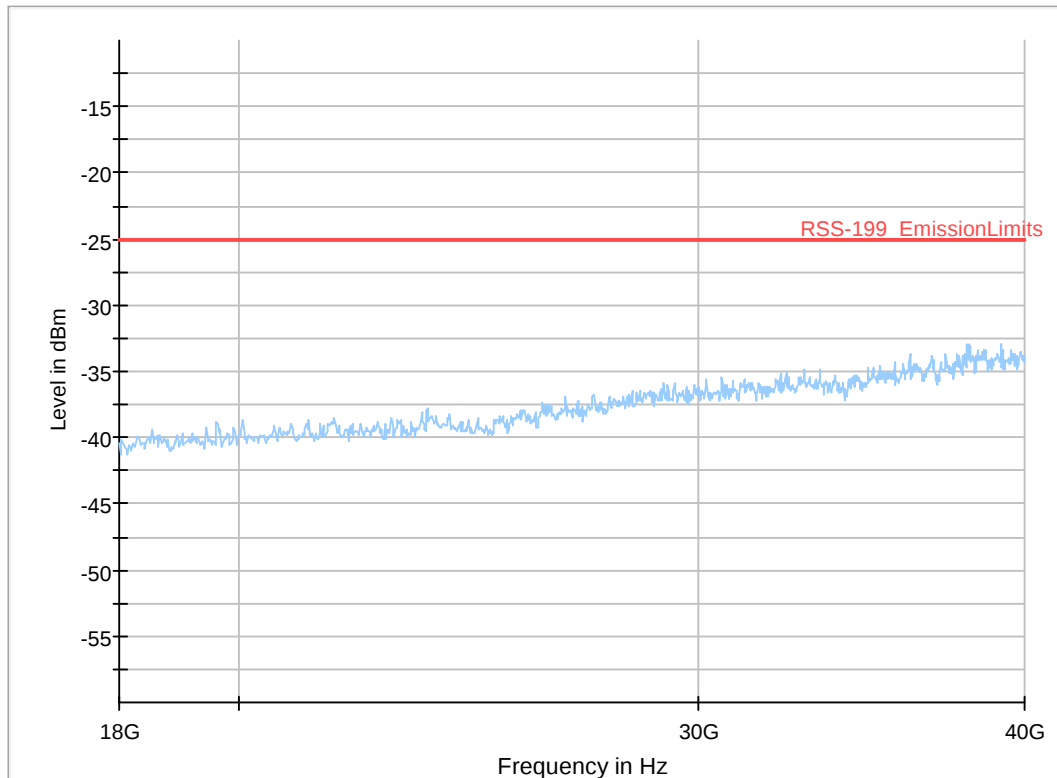
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.77h_Traffic_mode_5G_NR_TDD_n77_CH_633666_AntV

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-192
Operating Mode:	5G_NR_TDD_n77_CH_633666_AntV
Antenna Position:	vertical
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



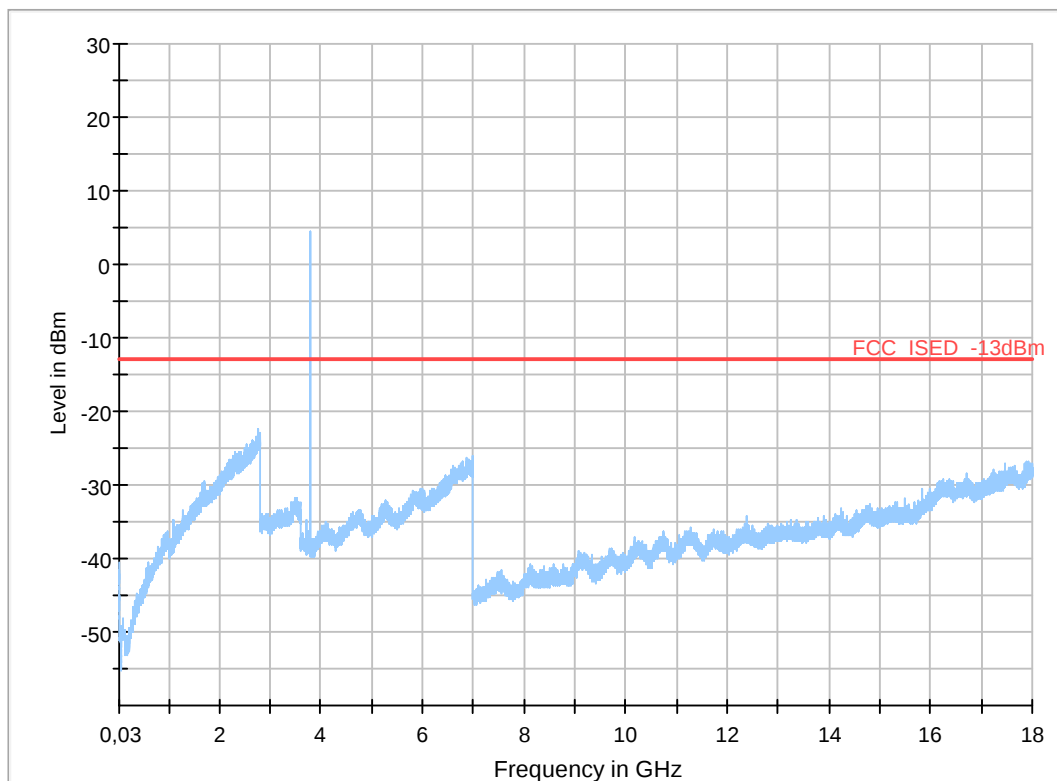
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.78a_Traffic_mode_5G_NR_TDD_n78_CH_650332_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-192
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n78_CH_650332_lying
Operator:	Maa
Environmental Conditions:	Humidity: 40 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



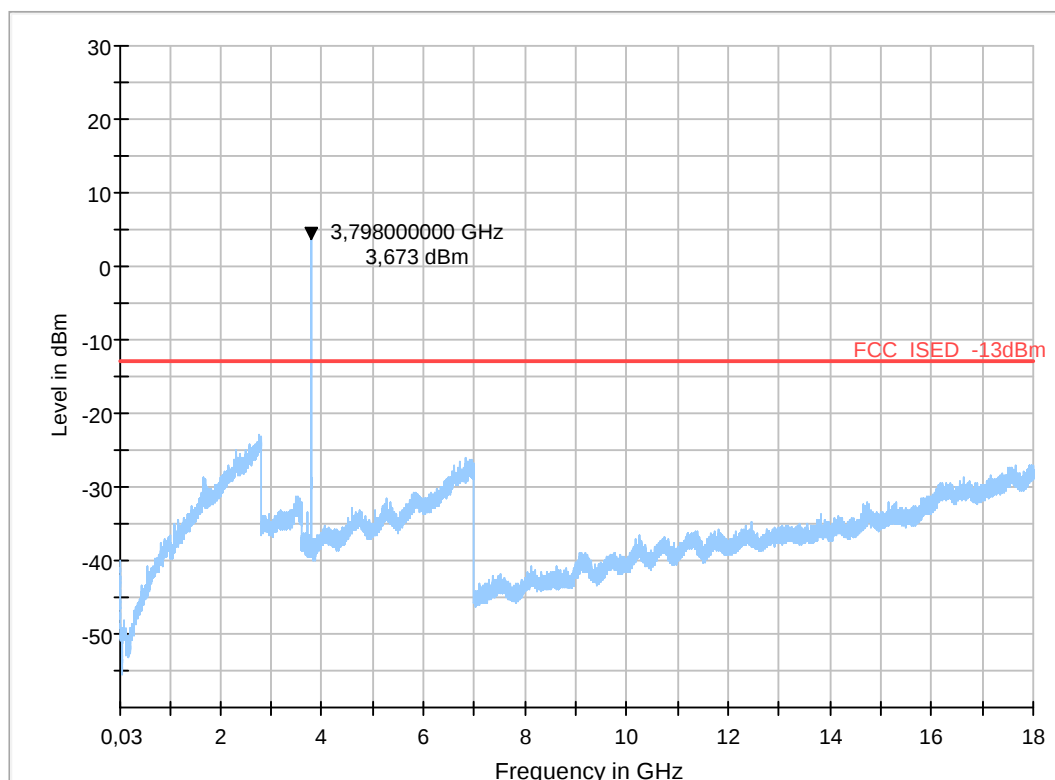
Remark: emission at 3.7 GHz is the carrier frequency of NR Band 78 and not relevant to the limit

8.78b_Traffic_mode_5G_NR_TDD_n78_CH_650332_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-192
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n78_CH_650332_standing
Operator:	PSt/Maa
Environmental Conditions:	Humidity: 50 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



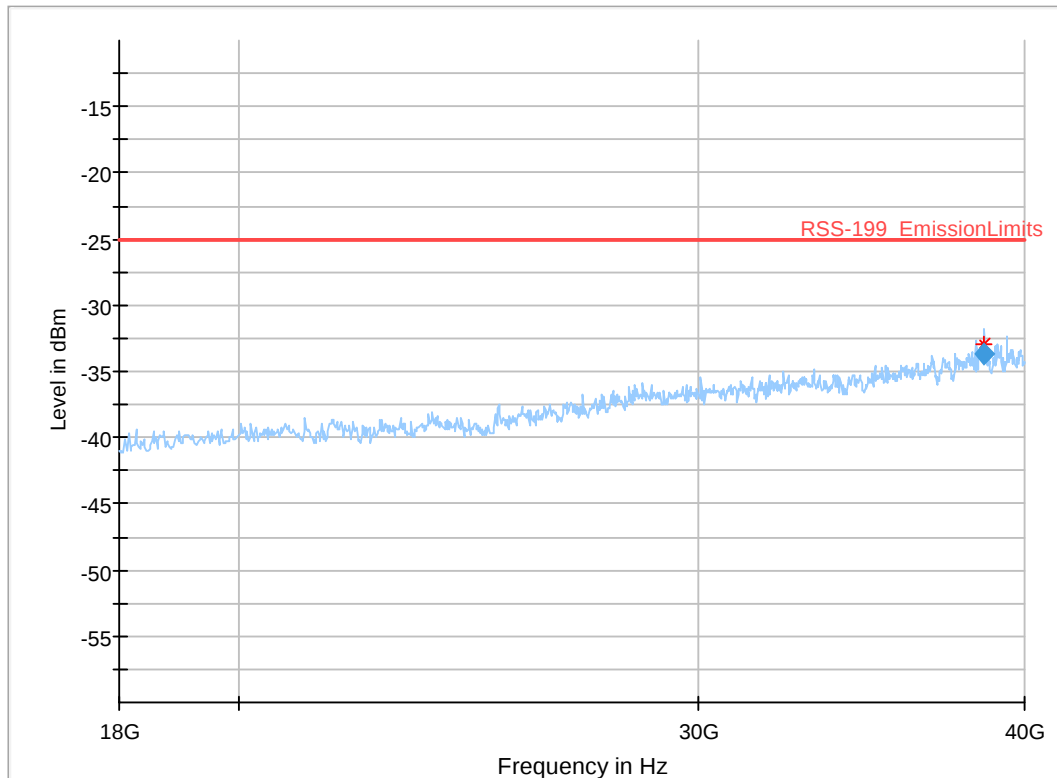
Remark: emission at 3.7 GHz is the carrier frequency of NR Band 78 and not relevant to the limit

8.78c_Traffic_mode_5G_NR_TDD_n78_CH_650332_AntH

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-192
Operating Mode:	5G_NR_TDD_n78_CH_650332_AntH
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



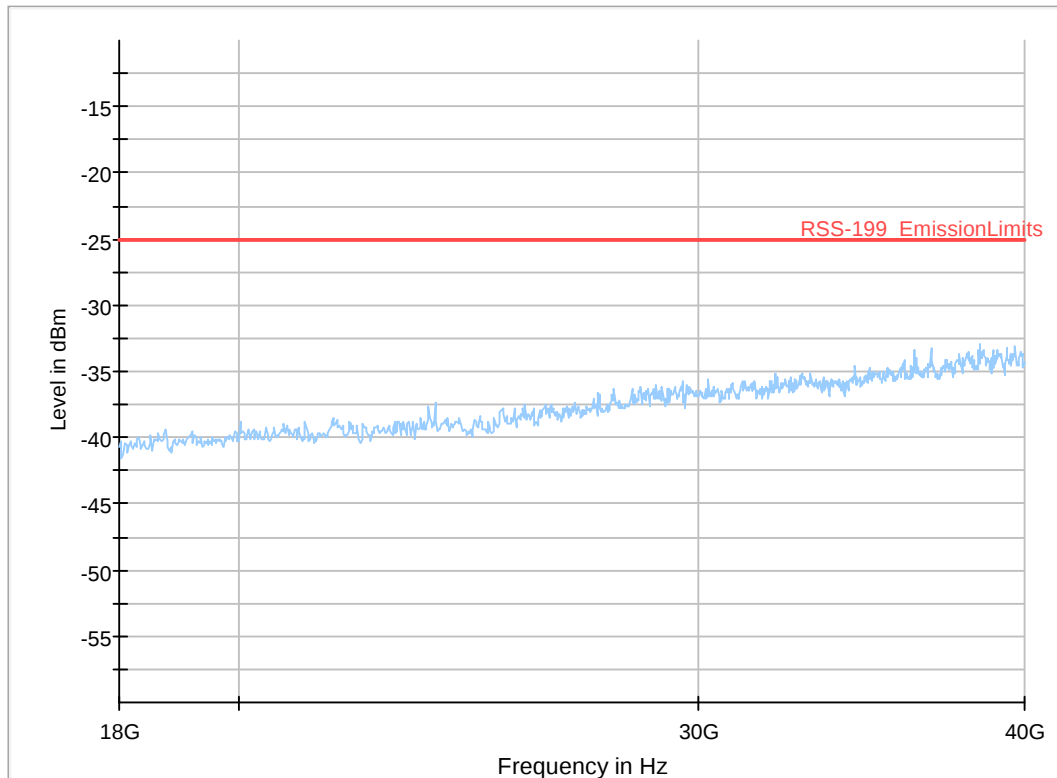
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.78d_Traffic_mode_5G_NR_TDD_n78_CH_650332_AntV

Common Information

Test Description:	Radiated Spurious Emissions 5G NR FDD n78
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-192
Operating Mode:	5G_NR_TDD_n78_CH_650332_AntV
Antenna Position:	vertical
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSI
Set-up:	1
Verdict:	Passed

Full Spectrum



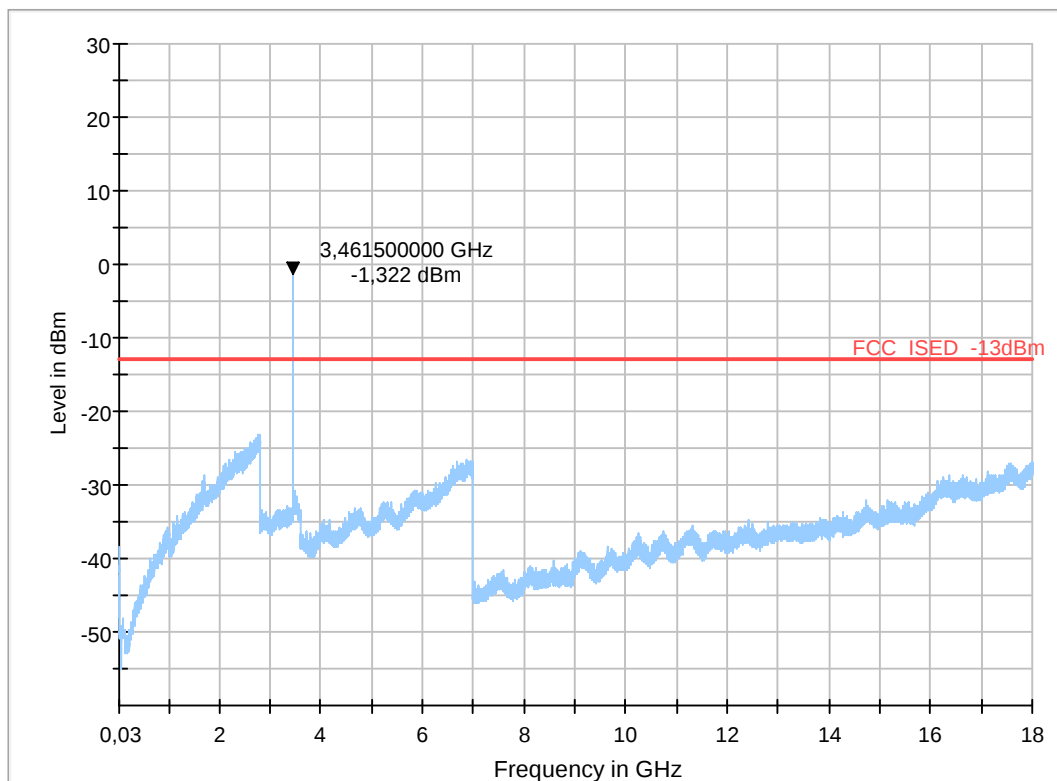
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.78e_Traffic_mode_5G_NR_TDD_n78_CH_633666_lying

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-192
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n78_CH_633666_lying
Operator:	Maa
Environmental Conditions:	Humidity: 40 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



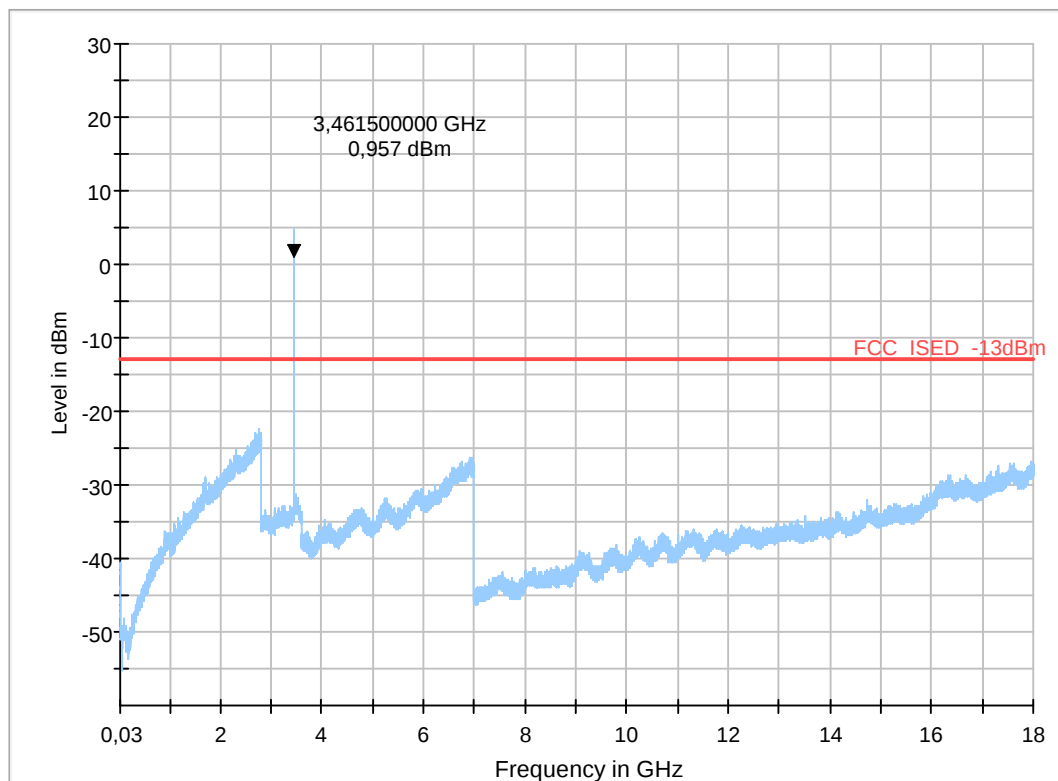
Remark: emission at 3.4 GHz is the carrier frequency of NR Band 78 and not relevant to the limit

8.78f_Traffic_mode_5G_NR_TDD_n78_CH_633666_standing

Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC Part 27 / RSS-192
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	5G_NR_TDD_n78_CH_633666_standing
Operator:	Maa
Environmental Conditions:	Humidity: 40 % rH; Temperature: 20 °C
EUT Setup:	1
Verdict:	Passed

Full Spectrum



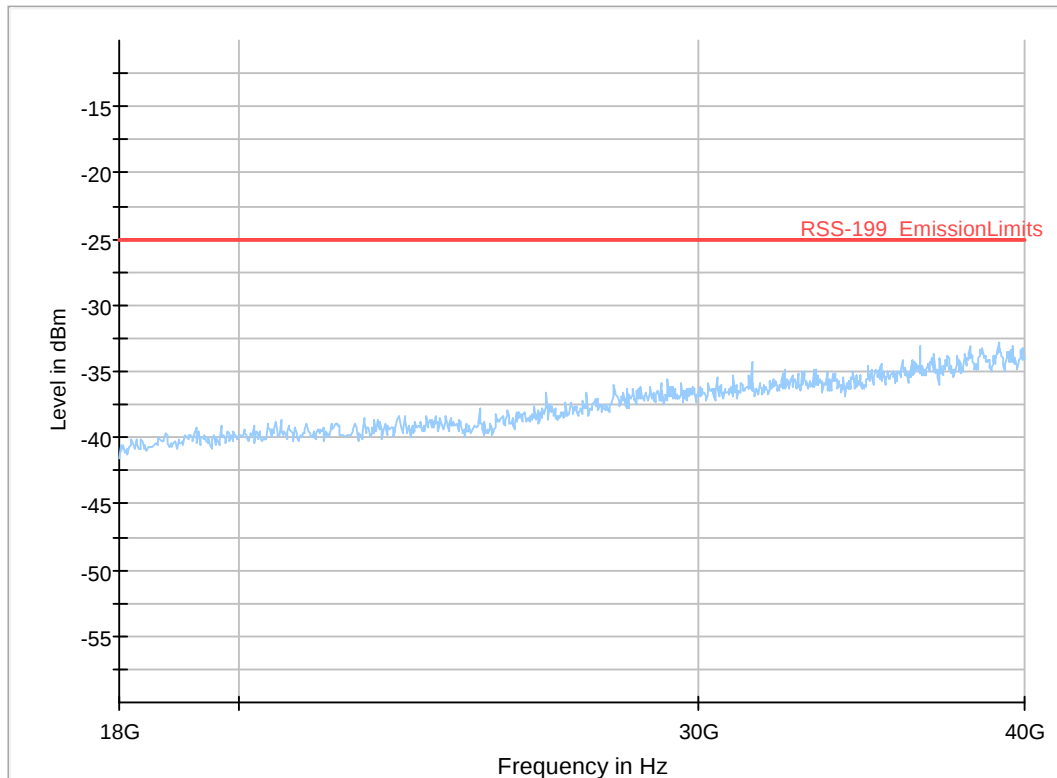
Remark: emission at 3.4 GHz is the carrier frequency of NR Band 78 and not relevant to the limit

8.78g_Traffic_mode_5G_NR_TDD_n78_CH_633666_AntH

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-192
Operating Mode:	5G_NR_TDD_n78_CH_633666_AntH
Antenna Position:	horizontal
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



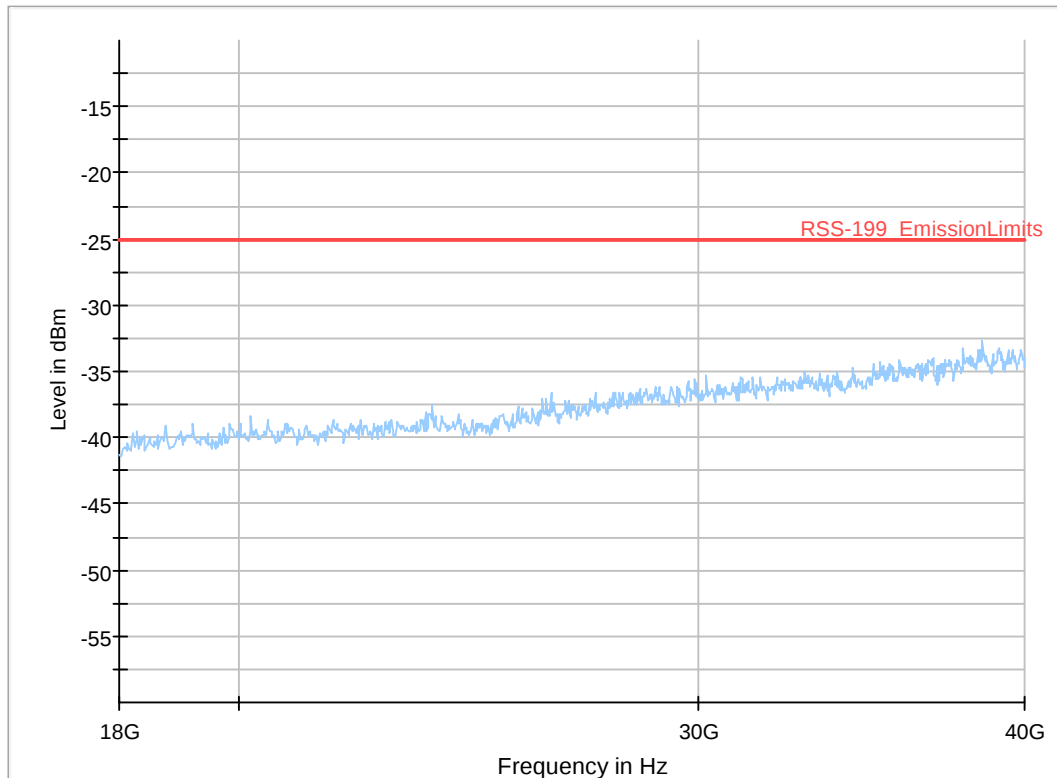
Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

8.78h_Traffic_mode_5G_NR_TDD_n78_CH_633666_AntV

Common Information

Test Description:	Radiated Emissions
Test Site Location:	cetecom advanced GmbH
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27 / RSS-192
Operating Mode:	5G_NR_TDD_n78_CH_633666_AntV
Antenna Position:	vertical
Environmental Conditions:	Humidity: 41%rH; Temperature: 22.8°C
Operator:	PSt
Set-up:	1
Verdict:	Passed

Full Spectrum



Remark: limit lies at -13 dBm and not at -25 dBm as shown in diagram

End Of Annex 1