

Annex 1: Measurement diagrams 22-1-0030601T046a-A1

Number of pages:	47	Date of Report:	2023-Feb-16
Testing company:	cetecom advanced GmbH Im Teelbruch 116 45219 Essen Germany Tel. + 49 (0) 20 54 / 95 19-0 Fax: + 49 (0) 20 54 / 95 19-150	Applicant:	Continental Automotive Technologies GmbH
Product: Model:	Telematic Control Unit BSRF_EA_RW0		
FCC ID:	KR5-BSRFEARW0	IC:	--
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 Title 47 CFR, Chapter I, Subchapter D Part 90, Subpart I, General technical standards; Subpart S Private Land Mobile Radio Services ISED-Regulations, Radio Standards Specification RSS-Gen, Issue 5 General Requirements for Compliance of Radio Apparatus RSS-132, Issue 3 Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz RSS-133, Issue 6, Amendment 1 2 GHz Personal Communications Services RSS-139, Issue 3 Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz		

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1 Measurement diagrams

2.201_Traffic_mode_LTE_FDD_B02_CH_19100

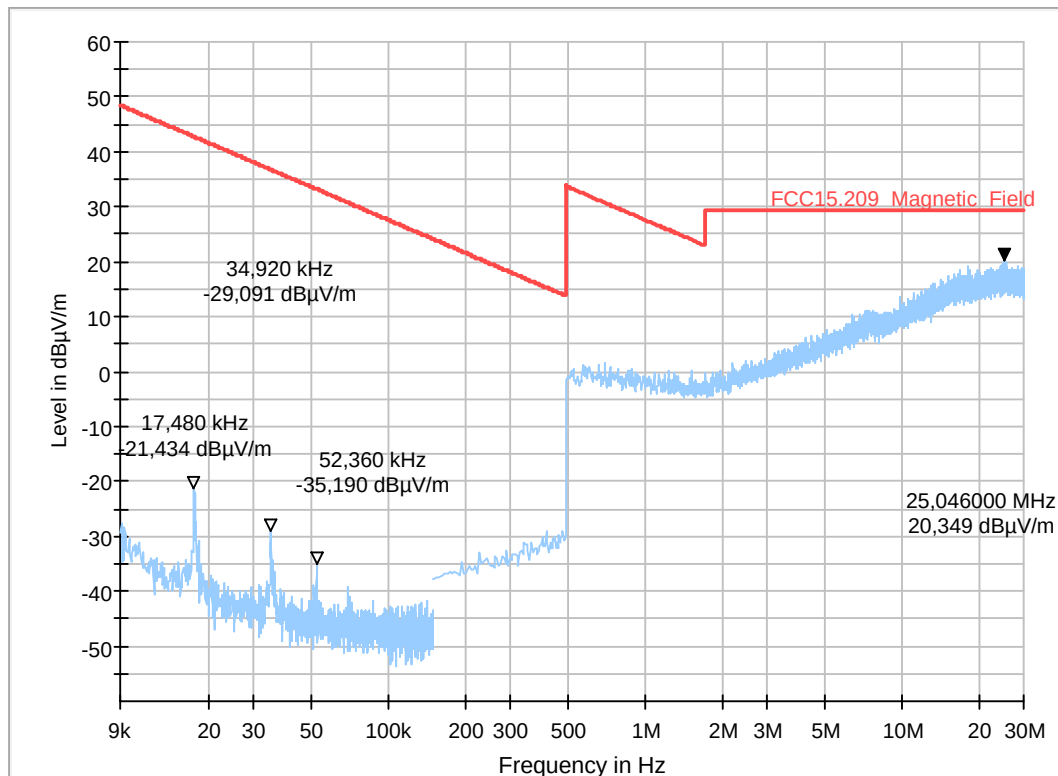
Common Information

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
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:	npe
Operating Mode:	LTE B02 TCH
Environmental Conditions:	Humidity : 50% rH; Temperature: 21 °C
EUT Setup:	2, laying
Verdict:	Passed

EUT Information

PMT number 22-1-00306S139_C01

Full Spectrum



2.401_Traffic_mode_LTE_FDD_B04_CH_20300

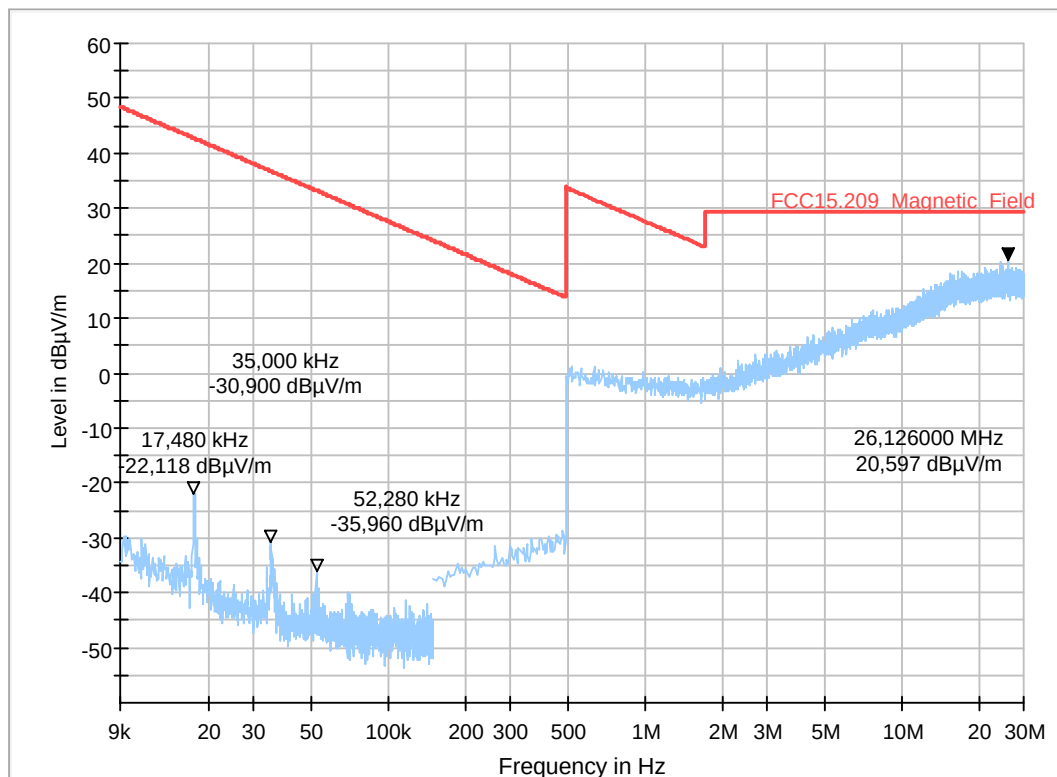
Common Information

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
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:	npe
Operating Mode:	LTE B04 TCH
Power during tests:	12V DC
Environmental Conditions:	Humidity : 50% rH; Temperature: 21 °C
EUT Setup:	2, laying
Verdict:	Passed

EUT Information

PMT number	22-1-00306S139_C01
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Full Spectrum



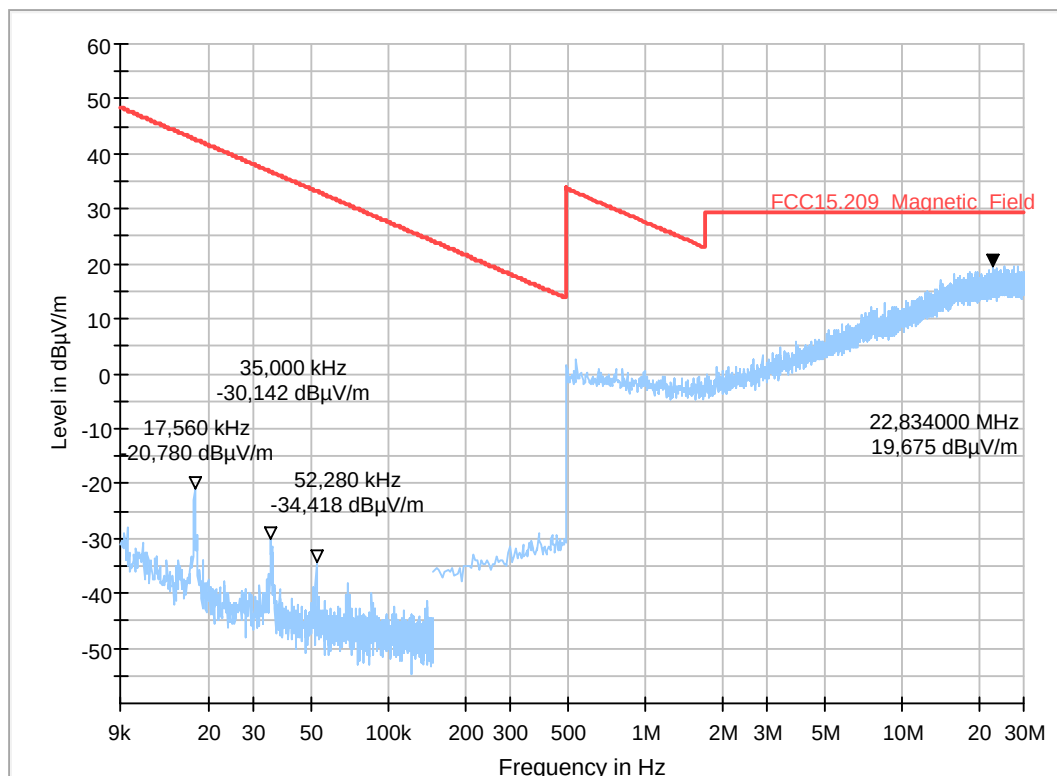
2.501_Traffic_mode_LTE_FDD_B05_CH_20450

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
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:	npe
Operating Mode:	LTE B05 TCH
Environmental Conditions:	Humidity : 50% rH; Temperature: 21 °C
EUT Setup:	2, laying
Verdict:	Passed

EUT Information

PMT number	22-1-00306S139_C01
	Full Spectrum



2.701_Traffic_mode_LTE_FDD_B07_CH_20850

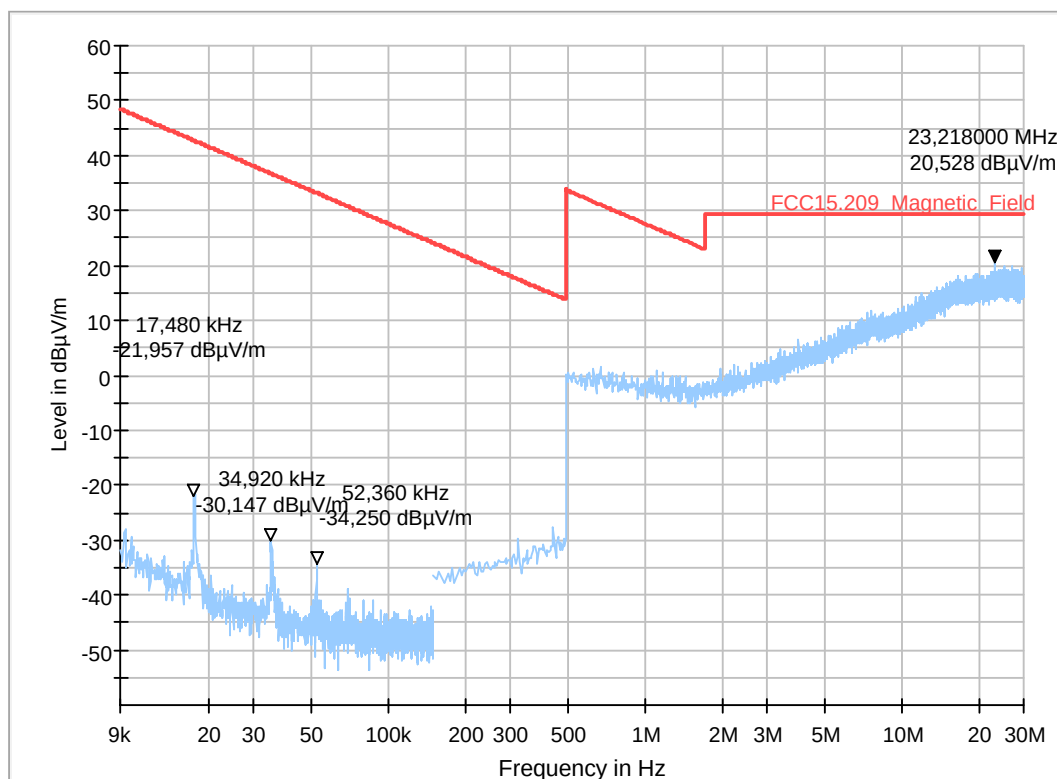
Common Information

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
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:	npe
Operating Mode:	LTE B07 TCH
Environmental Conditions:	Humidity : 50% rH; Temperature: 21 °C
EUT Setup:	2, laying
Verdict:	Passed

EUT Information

PMT number 22-1-00306S139_C01

Full Spectrum



8.02a_Traffic_mode_LTE_FDD_B02_CH_19100

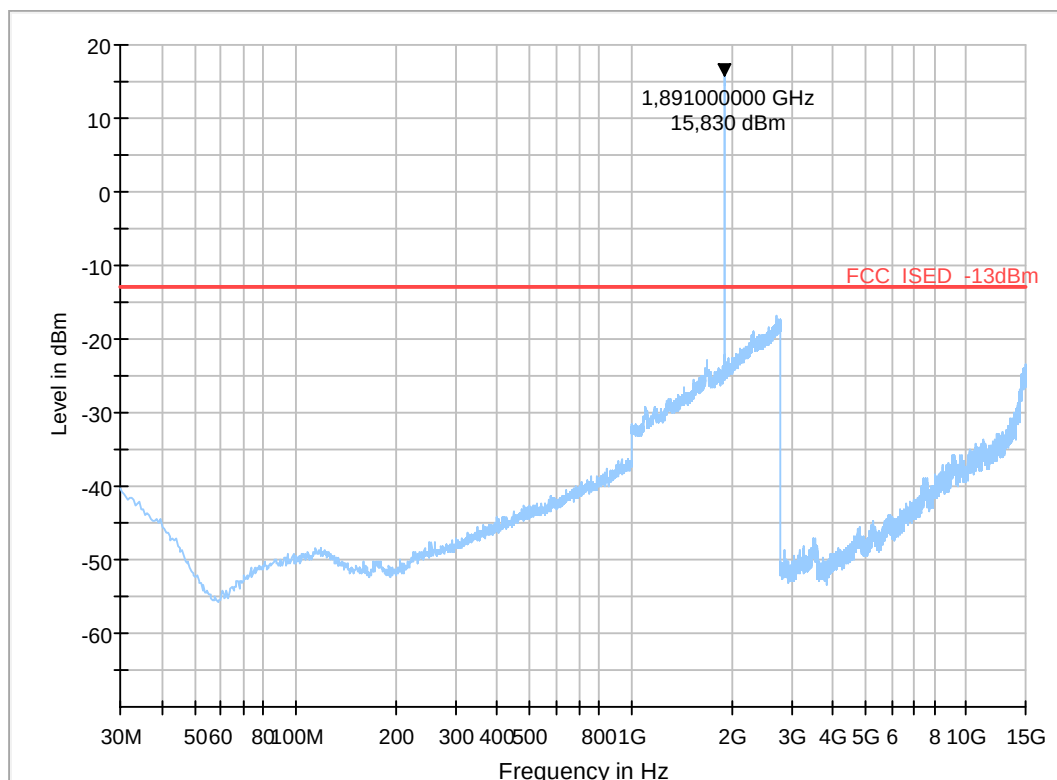
Common Information

Test Description:	Radiated Spurious Emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC FCC Part 27.53(h) AWS emission limits / RSS-139, Issue 3
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	LTE FDD2 I UL channel: 19100 I BW:20MHz I 1RB, low I QPSK
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	Aho
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



Remark: Emission at 1.891 GHz is uplink frequency of LTE FDD 2 and not related to result.

8.03a_Traffic_mode_LTE_FDD_B02_CH_19100

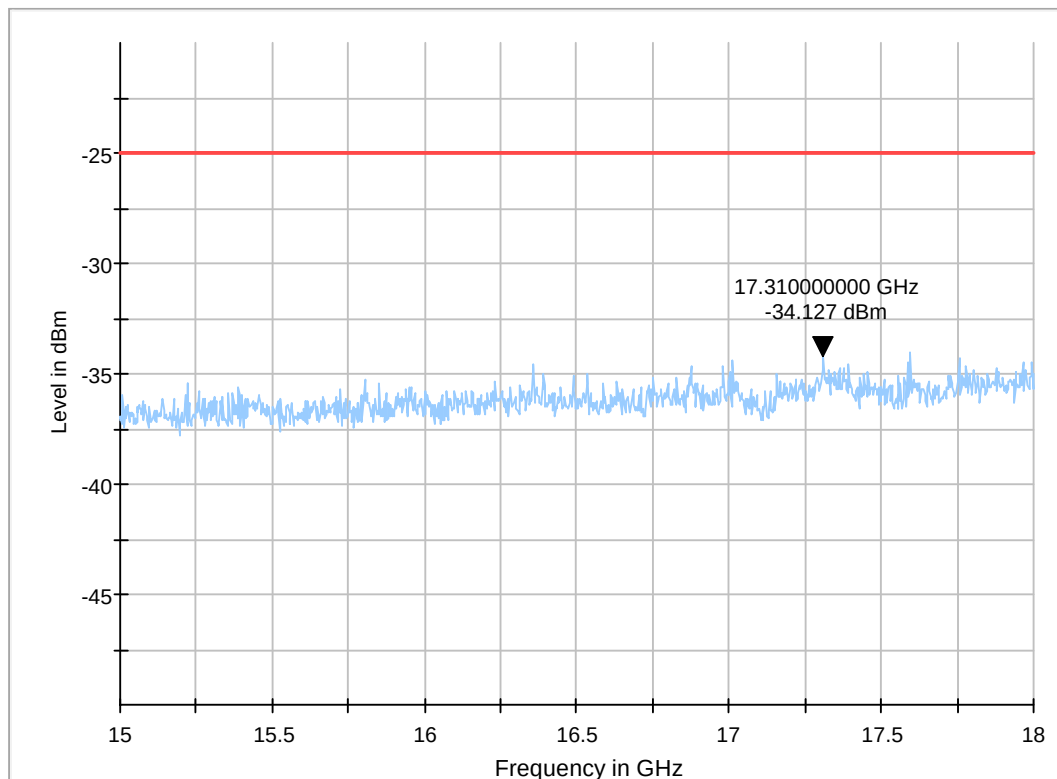
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
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Full Spectrum



8.03b_Traffic_mode_LTE_FDD_B02_CH_19100

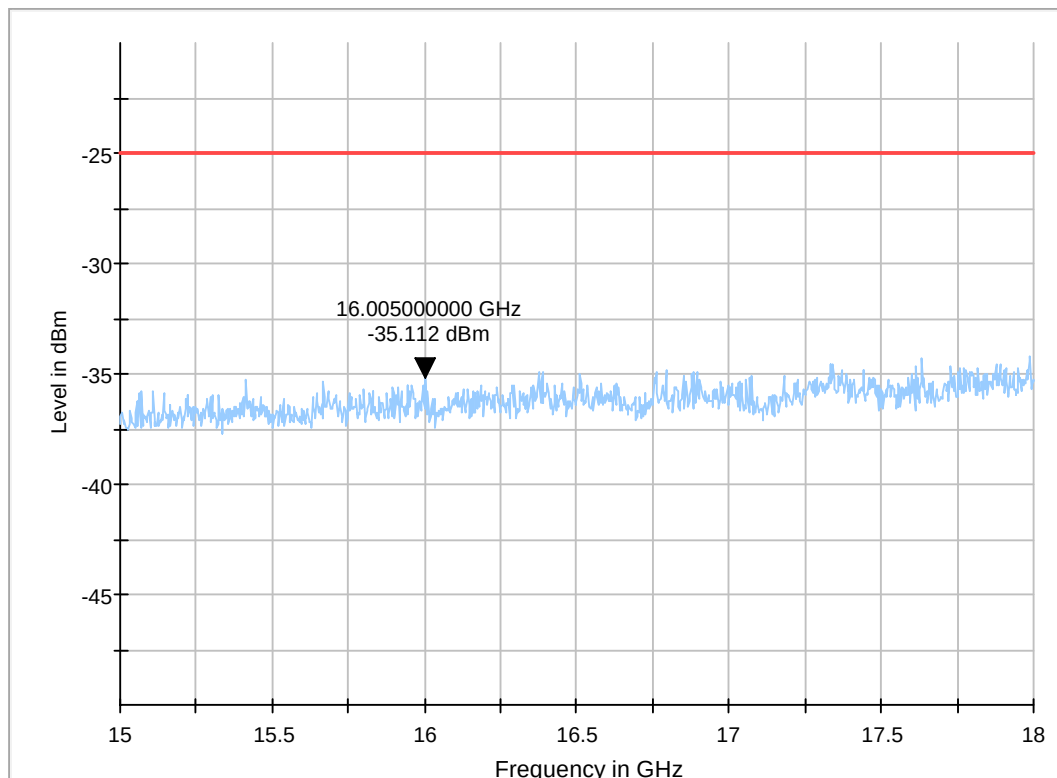
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.03c_Traffic_mode_LTE_FDD_B02_CH_19100

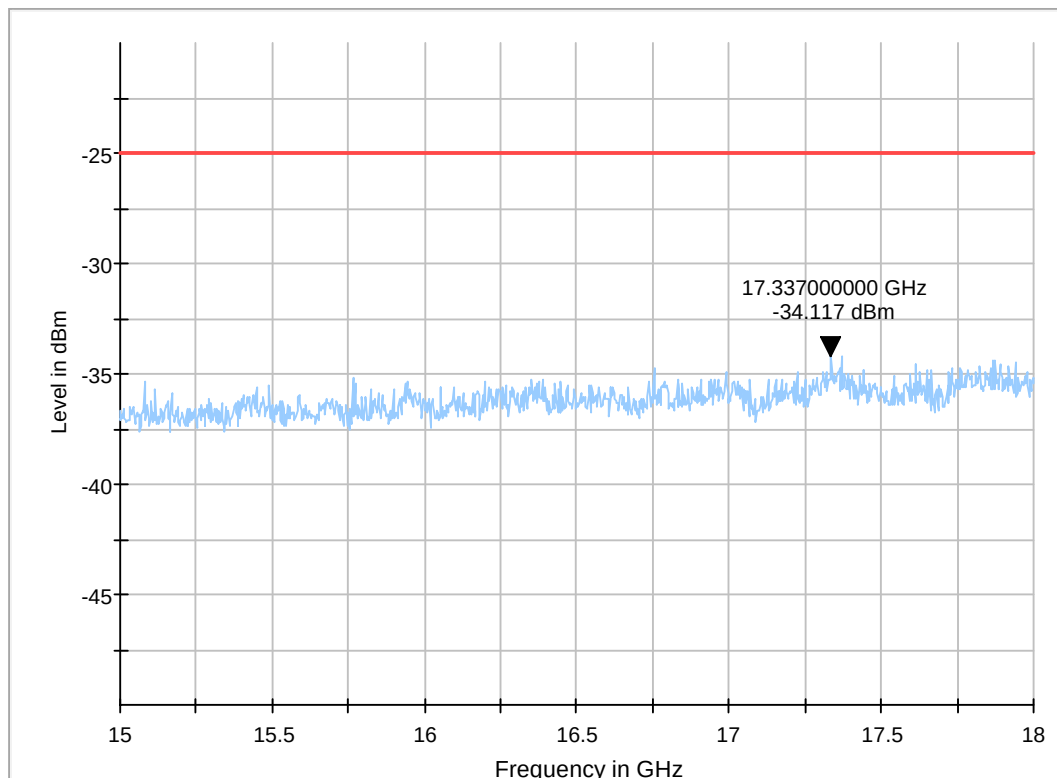
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.03d_Traffic_mode_LTE_FDD_B02_CH_19100

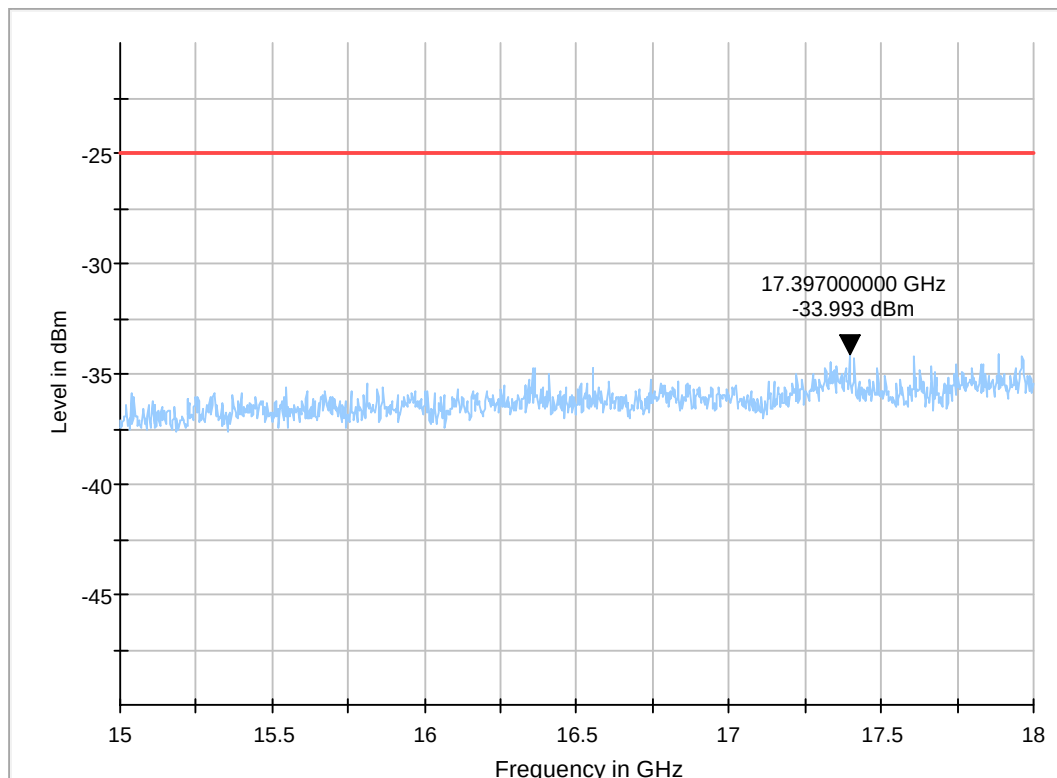
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.04a_Traffic_mode_LTE_FDD_B02_CH_19100

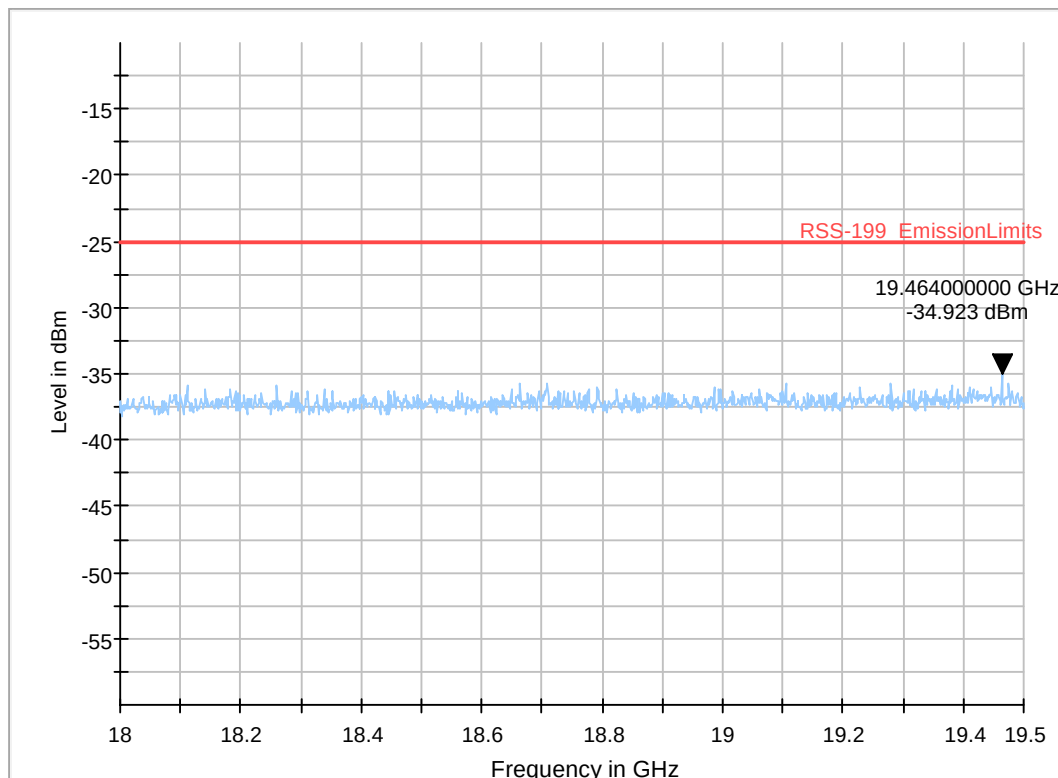
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Setup:	EUT laying, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.04b_Traffic_mode_LTE_FDD_B02_CH_19100

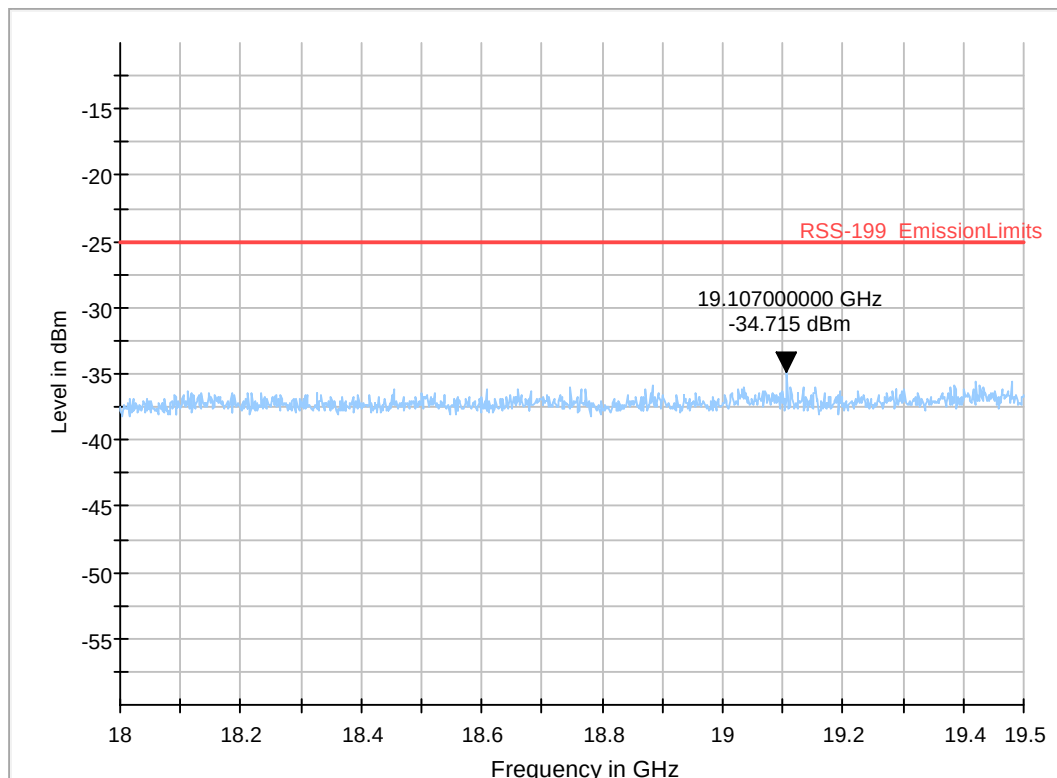
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Setup:	EUT standing, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.04c_Traffic_mode_LTE_FDD_B02_CH_19100

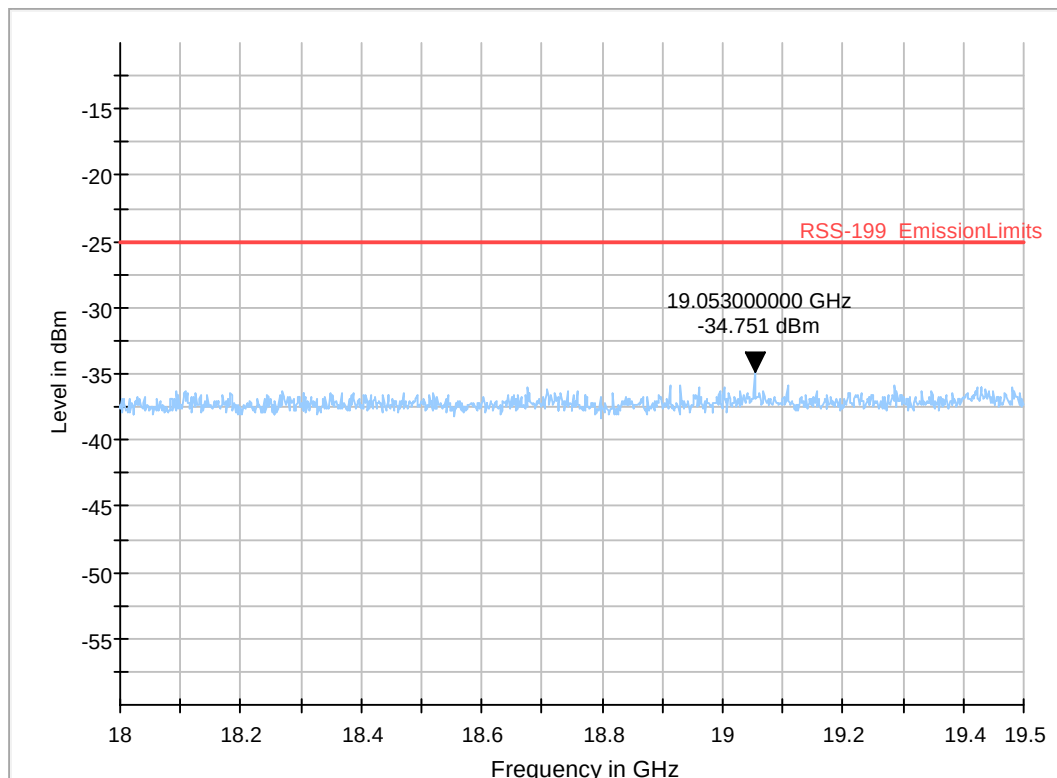
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.04d_Traffic_mode_LTE_FDD_B02_CH_19100

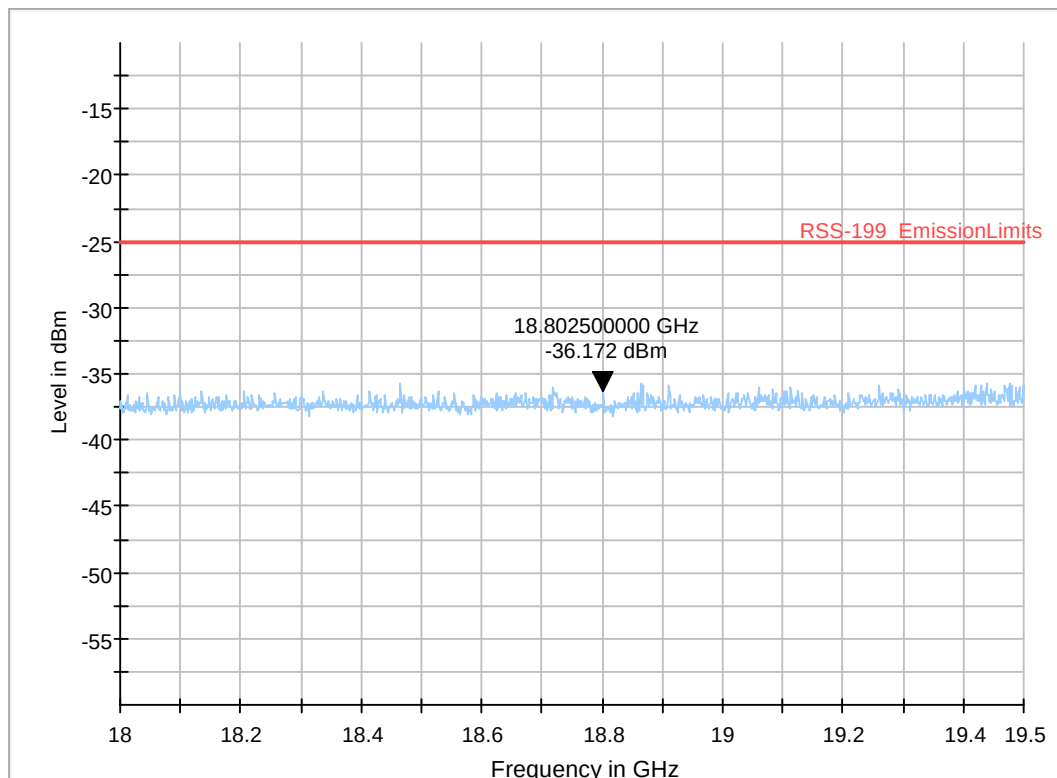
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 24
Comm. Link:	LTE B02
Operating Mode:	MS allocated channel 19100, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.05_Traffic_mode_LTE_FDD_B04_CH_20300

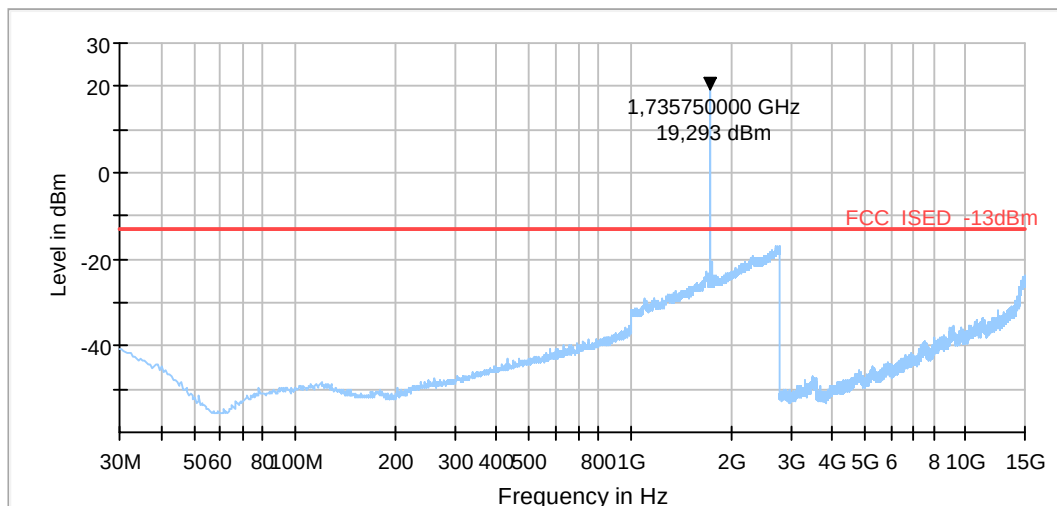
Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Chamber
Test Standard:	FCC FCC Part 27.53(h) AWS emission limits / RSS-139, Issue 3
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.60.20
Operating Mode:	LTE FDD4 UL channel: 20300 BW:20MHz 1RB, low QPSK
Operator:	npe
EUT Setup:	2
Environmental Conditions:	Humidity : 40% rH; Temperature: 19 °C
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



Remark: Emission at 1.736 GHz is uplink frequency of LTE FDD 4 and not related to result.

8.06a_Traffic_mode_LTE_FDD_B04_CH_20300

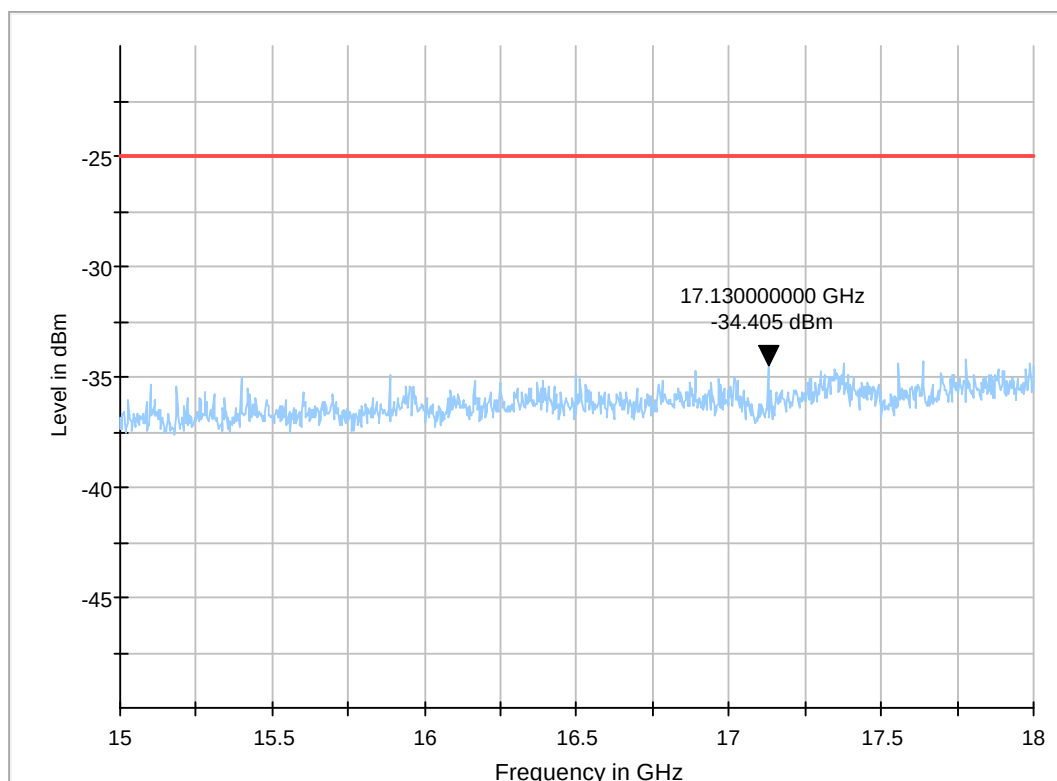
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B04
Operating Mode:	MS allocated channel 20300, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.06b_Traffic_mode_LTE_FDD_B04_CH_20300

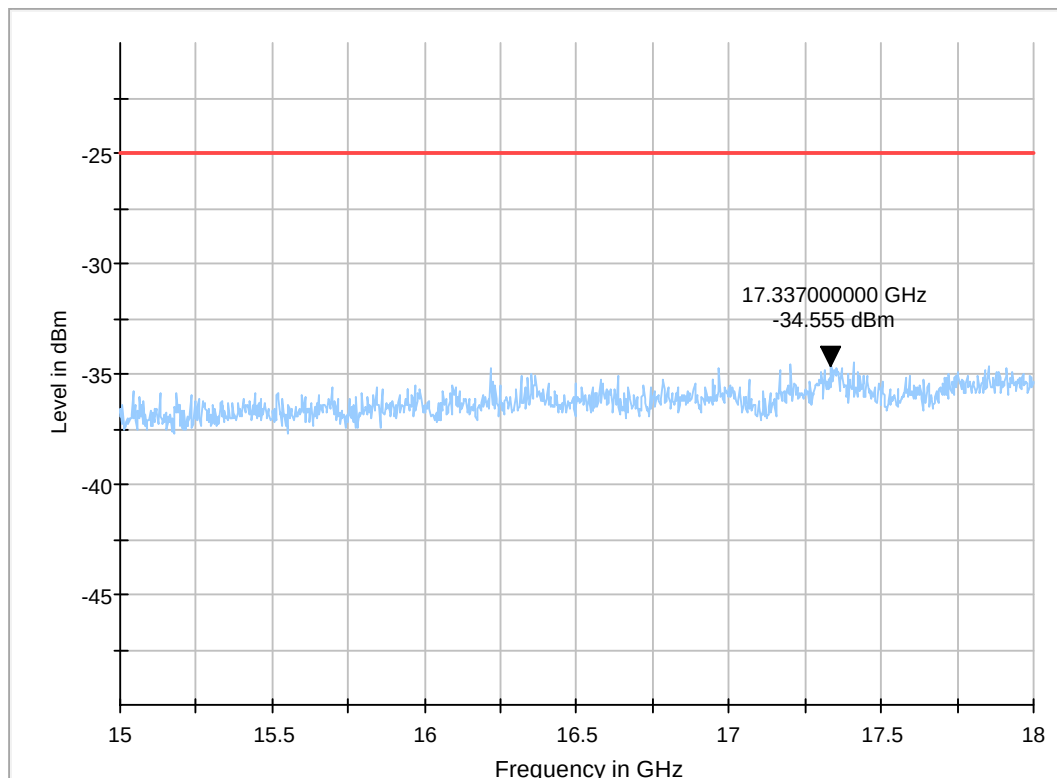
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B04
Operating Mode:	MS allocated channel 20300, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.06c_Traffic_mode_LTE_FDD_B04_CH_20300

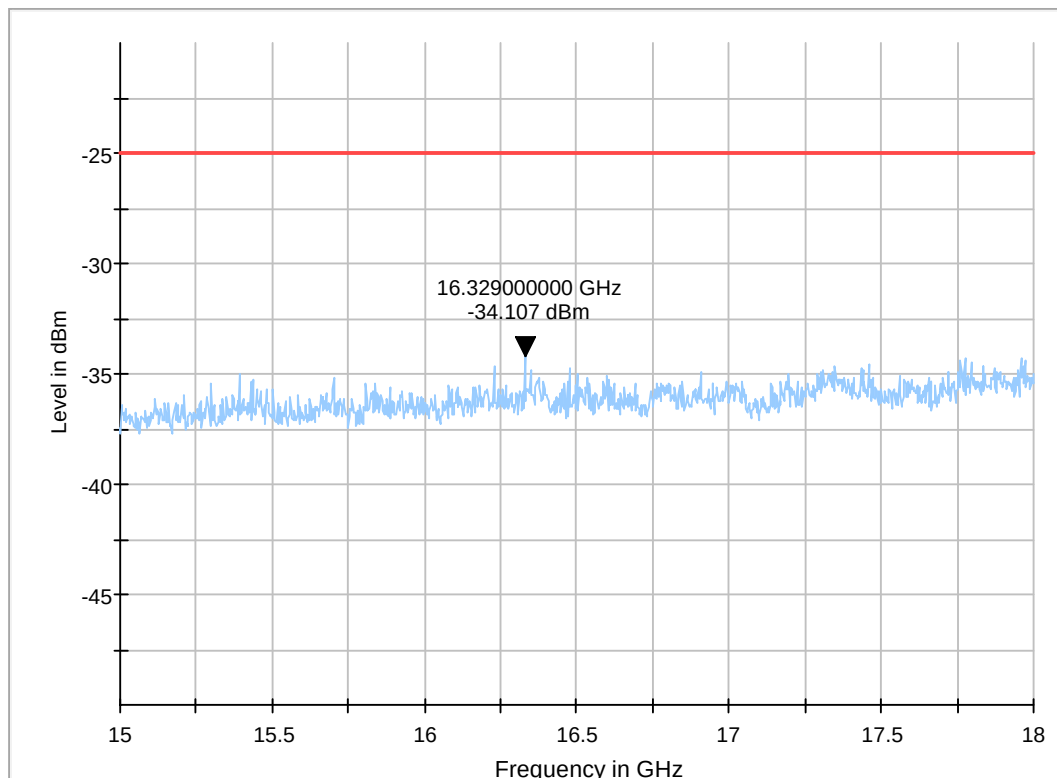
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B04
Operating Mode:	MS allocated channel 20300, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.06d_Traffic_mode_LTE_FDD_B04_CH_20300

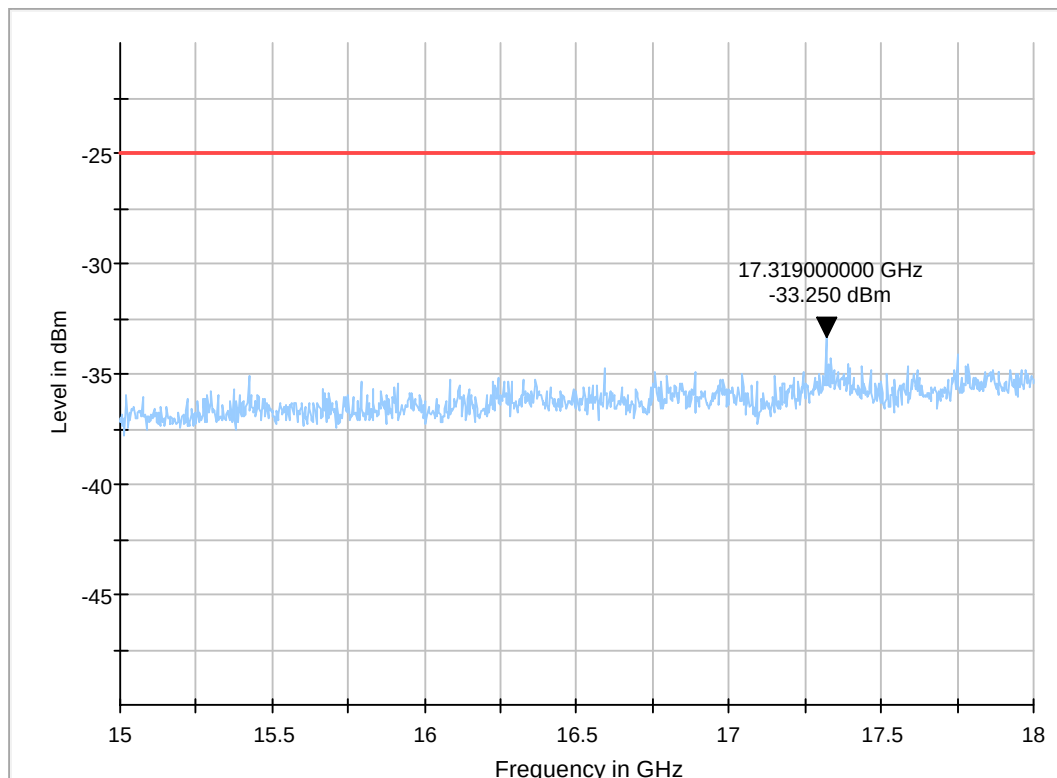
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B04
Operating Mode:	MS allocated channel 20300, 1RB@0
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.07_Traffic_mode_LTE_FDD_B05_CH_20450

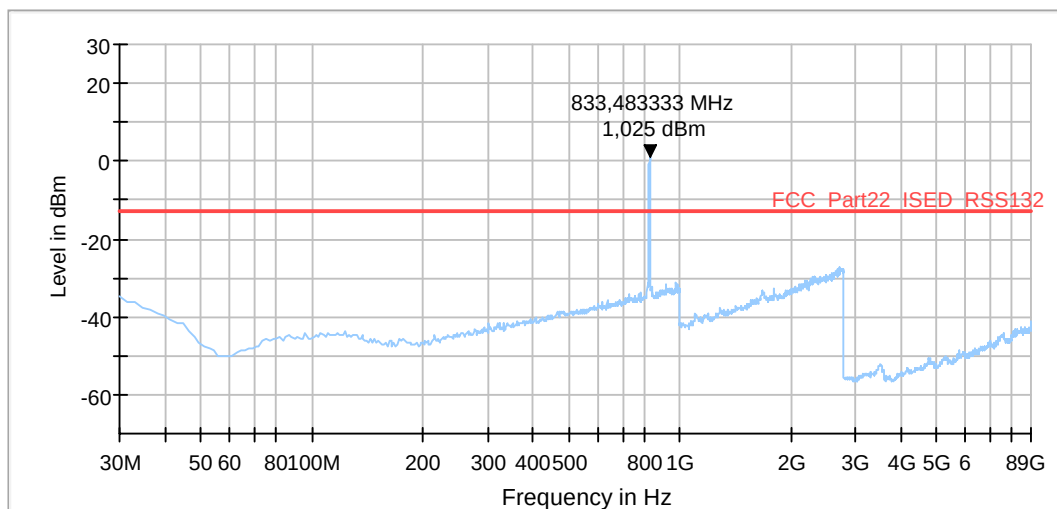
Common Information

Test Description:	Radiated emission related to 1m
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC FCC Part 22
Antenna polarisation:	vertical / horizontal
Operating Mode:	LTE FDD5 UL channel: 20450 BW:10MHz 1RB, low QPSK
Operator:	npe
Environmental Conditions::	Humidity : 40% rH; Temperature: 19 °C
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



Remark: Emission at 833.48 GHz is uplink frequency of LTE FDD 5 and not related to result.

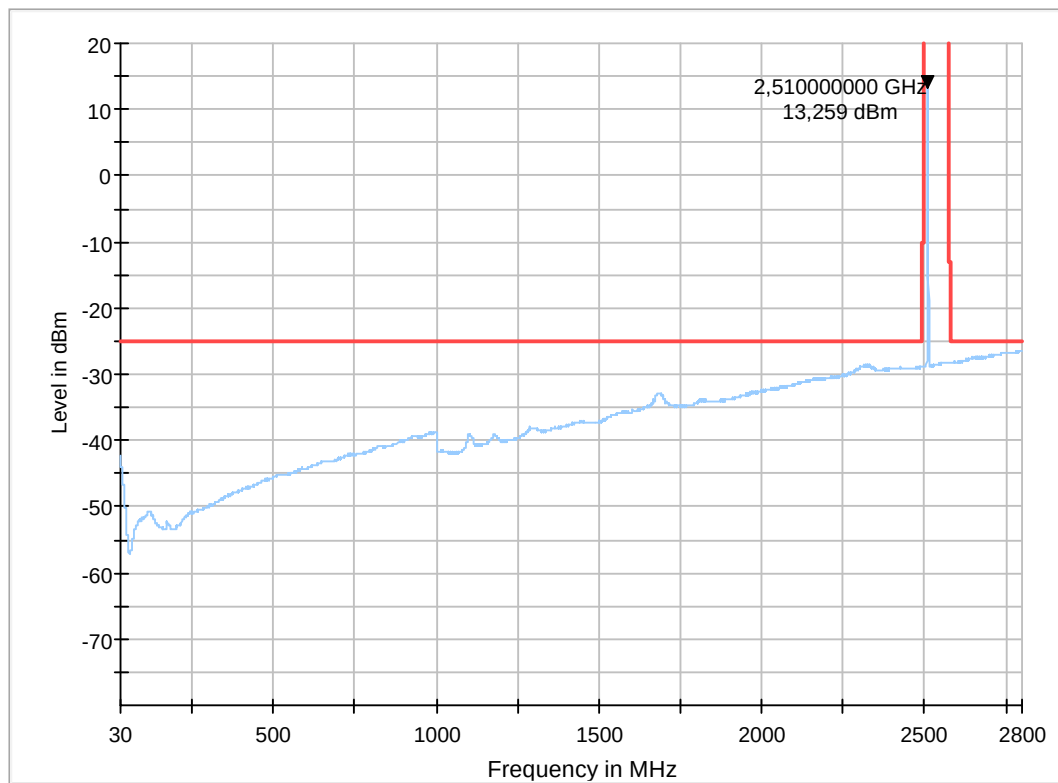
8.08_Traffic_mode_LTE_FDD_B07_CH_20850

Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band 7
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC Part 27.53(l)(4) / RSS-130 Mobile stations limits
Operating Mode:	LTE FDD7 UL channel: 20850 BW:20MHz 1RB, Mid QPSK
Environmental Conditions::	Humidity : 40% rH; Temperature: 19 °C
Test SW Version:	EMC32 V10.60.20
Operator:	npe
Remarks:	EUT - laying/standing position
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
	Full Spectrum



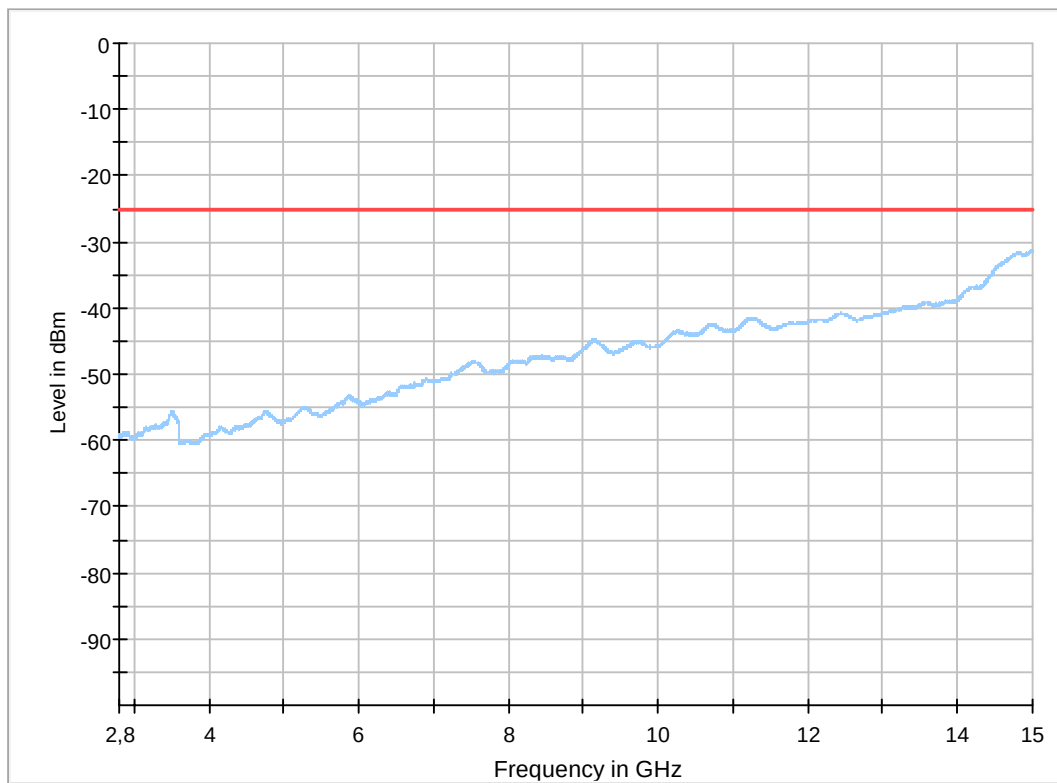
8.09_Traffic_mode_LTE_FDD_B07_CH_20850

Common Information

Test Description:	-
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	-
Test Case:	-
Operating Mode:	LTE FDD7 UL channel: 20850 BW:20MHz 1RB, Mid QPSK
Environmental Conditions::	Humidity : 50% rH; Temperature: 21 °C
Operator:	SOz
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
	Full Spectrum



8.10a_Traffic_mode_LTE_FDD_B07_CH_20850

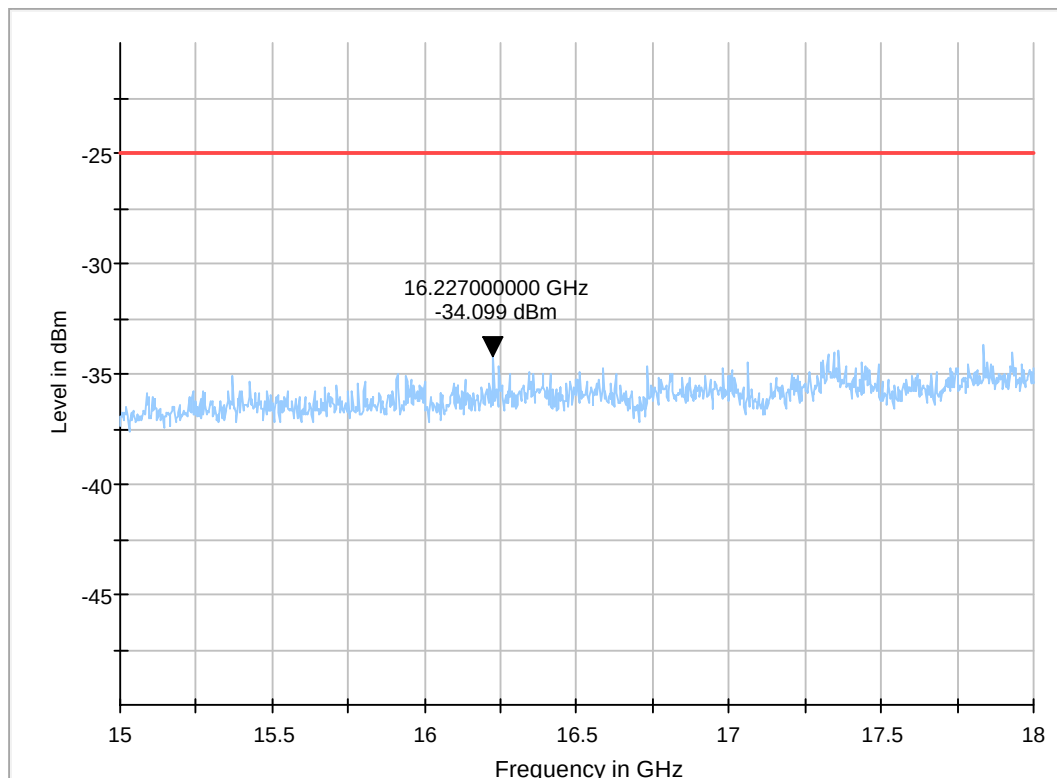
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.10b_Traffic_mode_LTE_FDD_B07_CH_20850

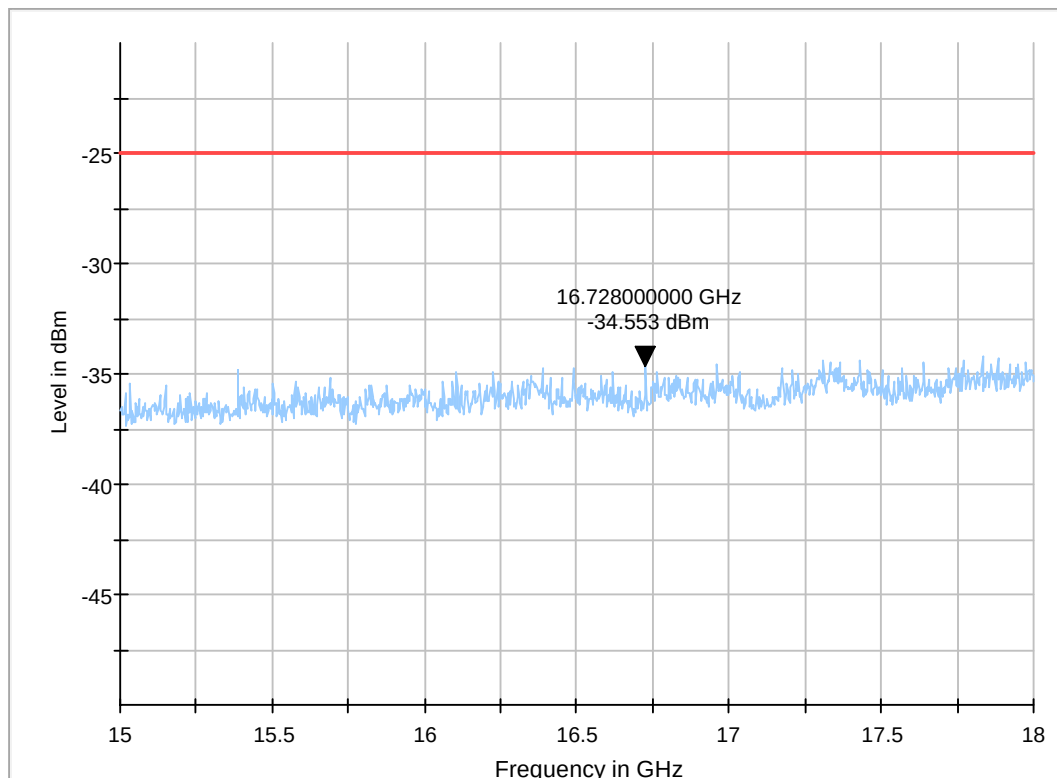
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.10c_Traffic_mode_LTE_FDD_B07_CH_20850

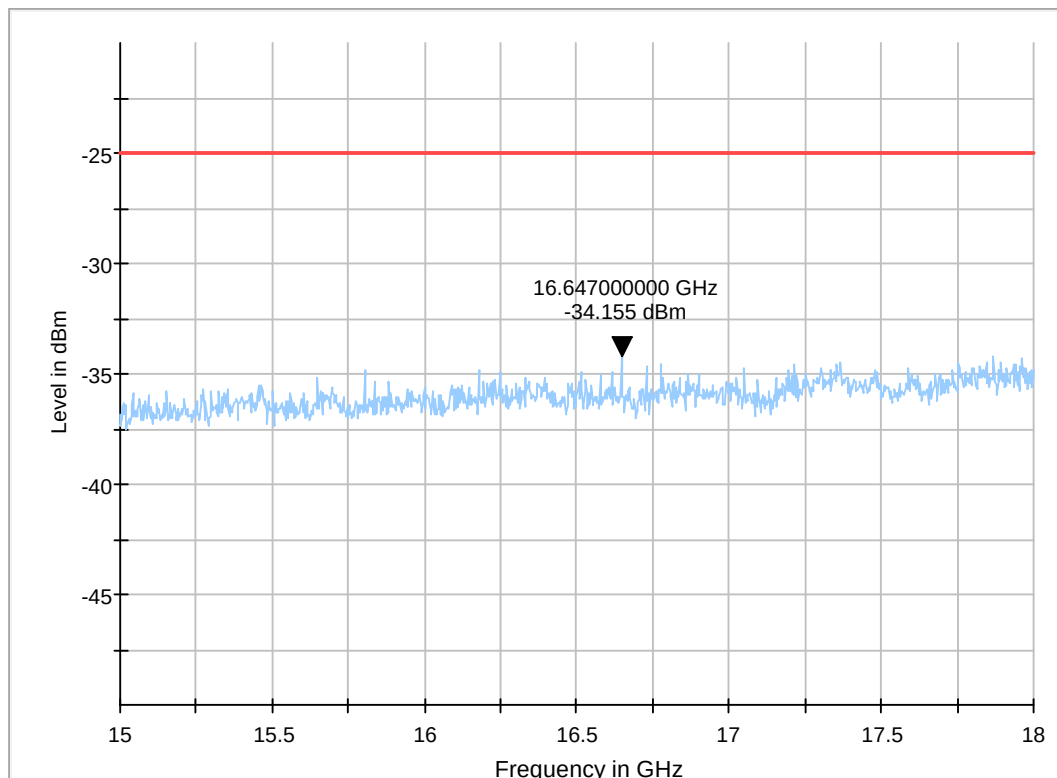
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.10d_Traffic_mode_LTE_FDD_B07_CH_20850

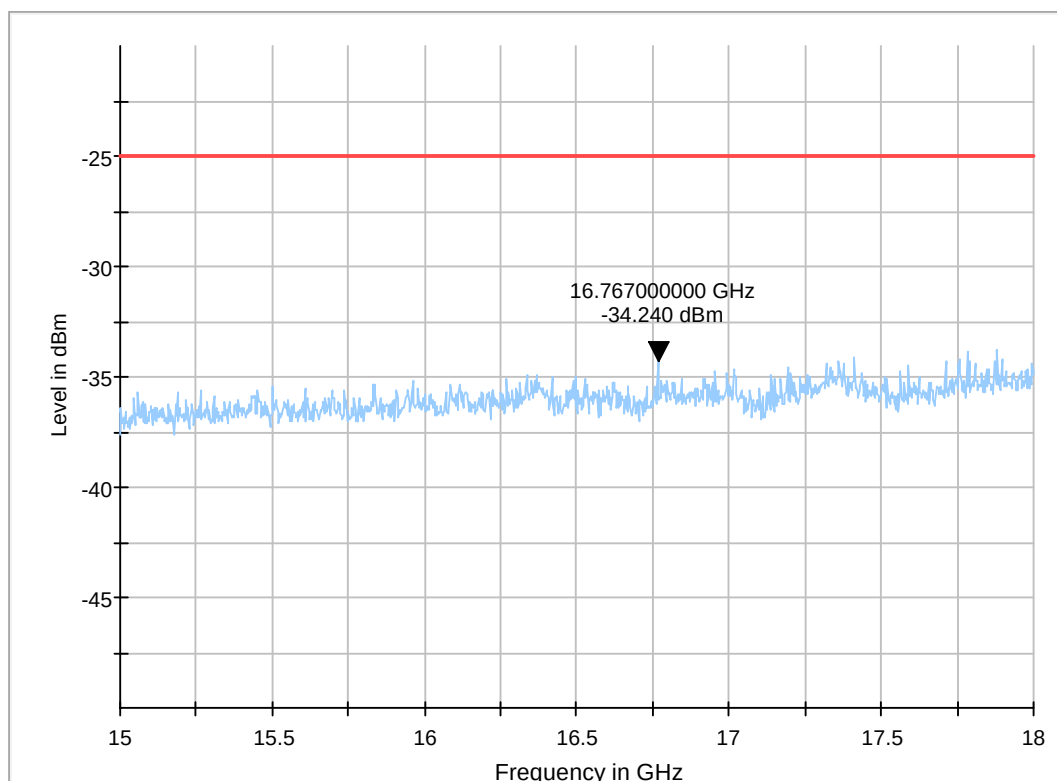
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.11a_Traffic_mode_LTE_FDD_B07_CH_20850

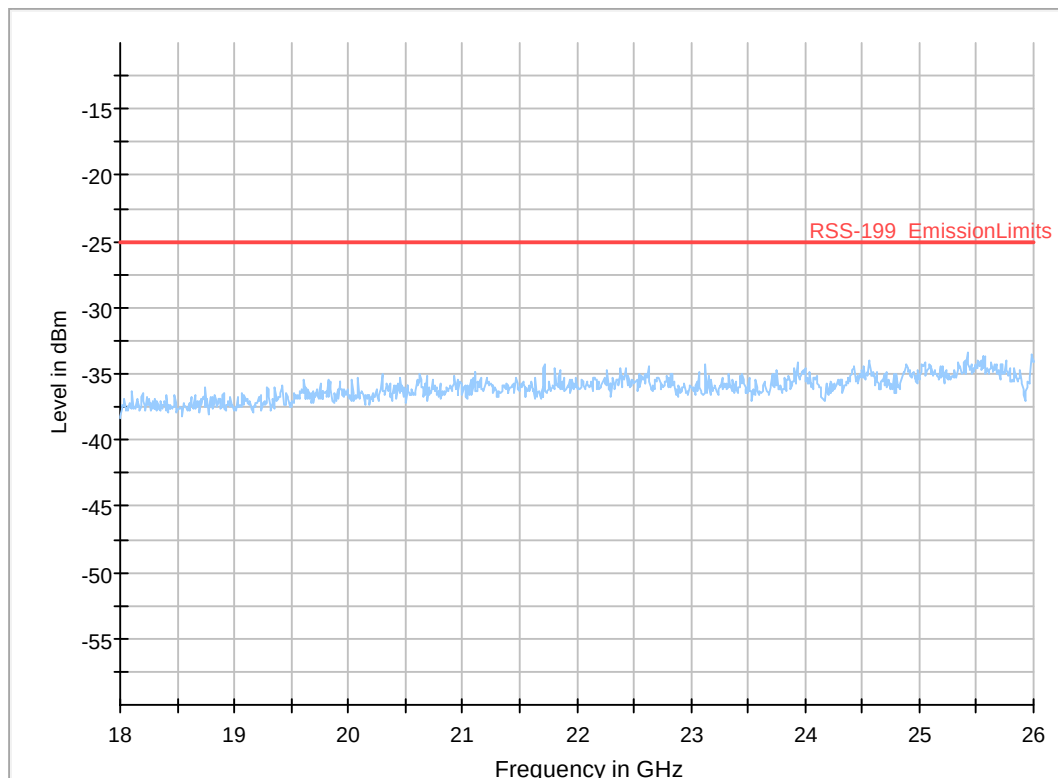
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT laying, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.11b_Traffic_mode_LTE_FDD_B07_CH_20850

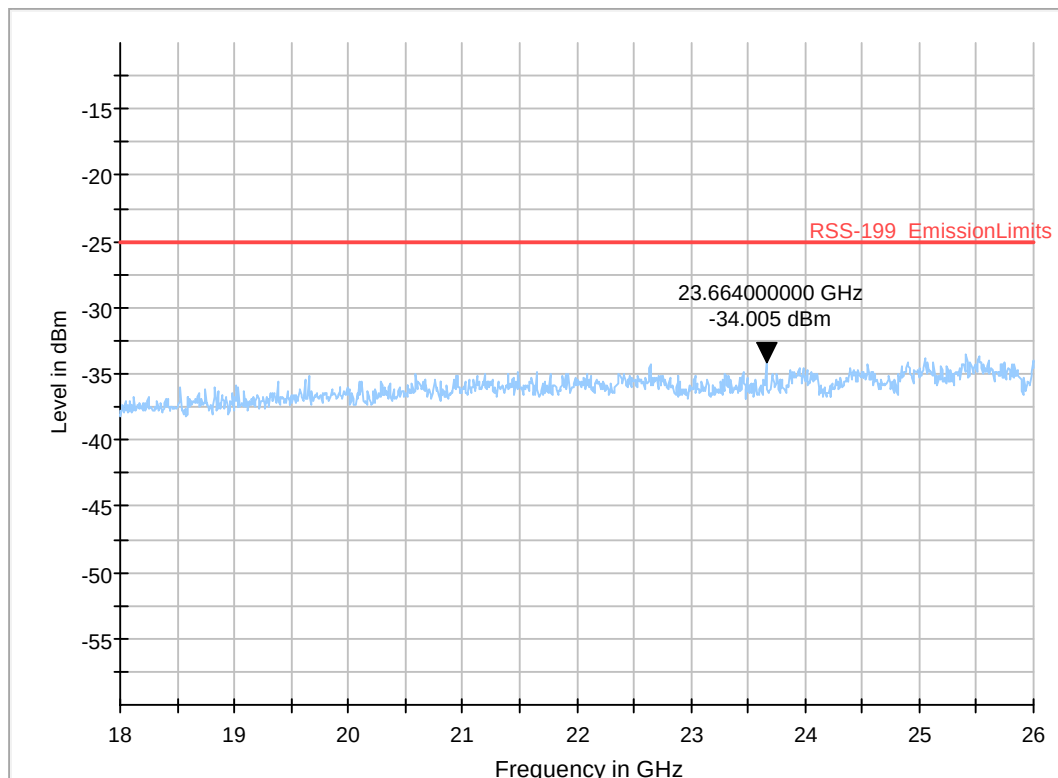
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant hor
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.11c_Traffic_mode_LTE_FDD_B07_CH_20850

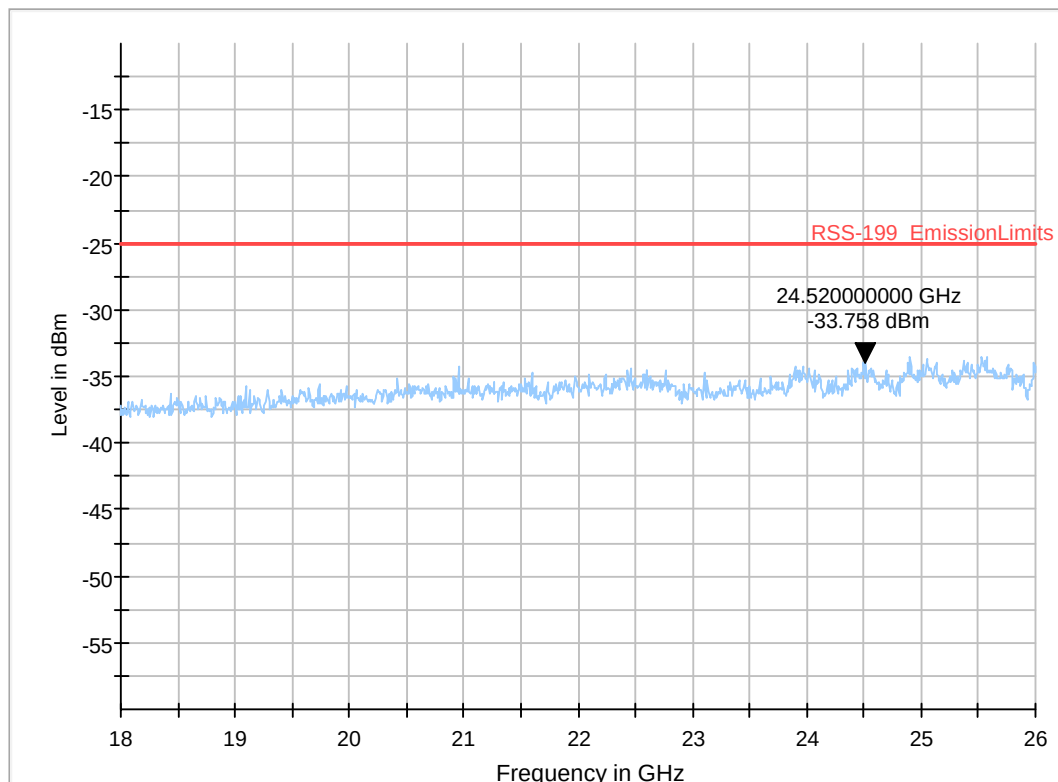
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45%rH; Temperature: 21°C
Operator:	npe
Set-up:	EUT laying, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



8.11d_Traffic_mode_LTE_FDD_B07_CH_20850

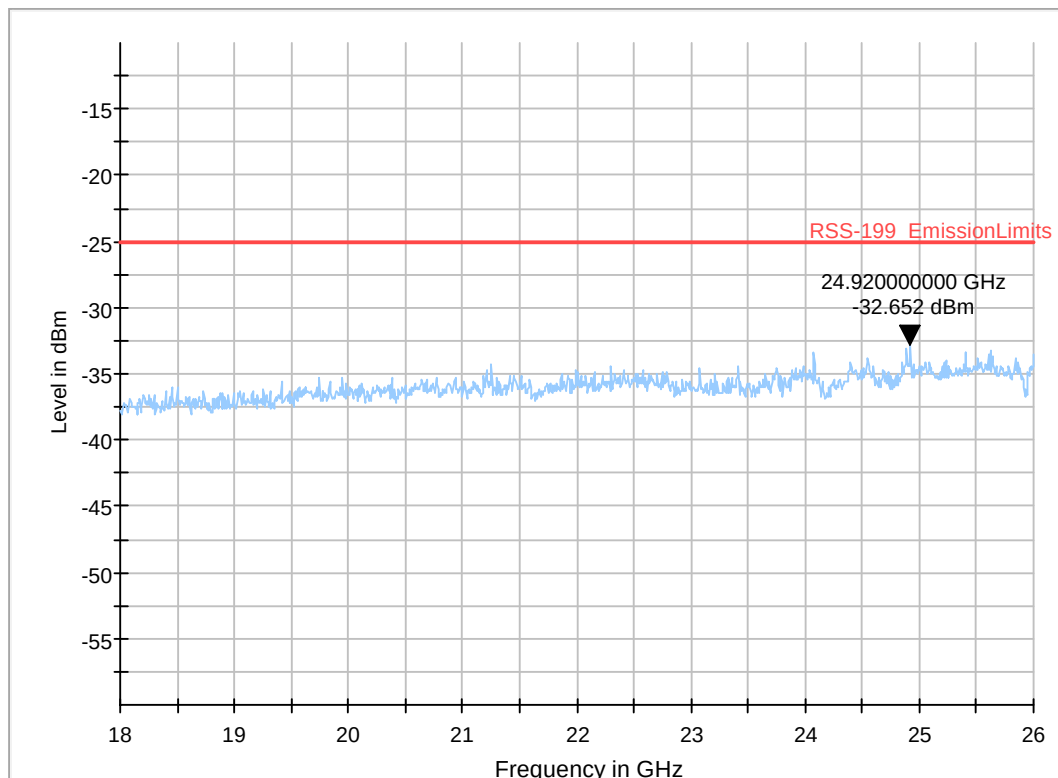
Common Information

Test Description:	Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR2)
Test Standard:	FCC Part 27.53 (m)(4)/ RSS-139
Comm. Link:	LTE B07
Operating Mode:	MS allocated channel 20850, 1RB@50
Exclusionband:	--
Environmental Conditions:	Humidity: 45% rH; Temperature: 21 °C
Operator:	npe
Set-up:	EUT standing, Ant ver
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT Sample Nr.	22-1-00306S58_C01
Comments:	--

Full Spectrum



9.201_Bandedge_low_LTE_FDD_B02_CH_low_RB_1_low

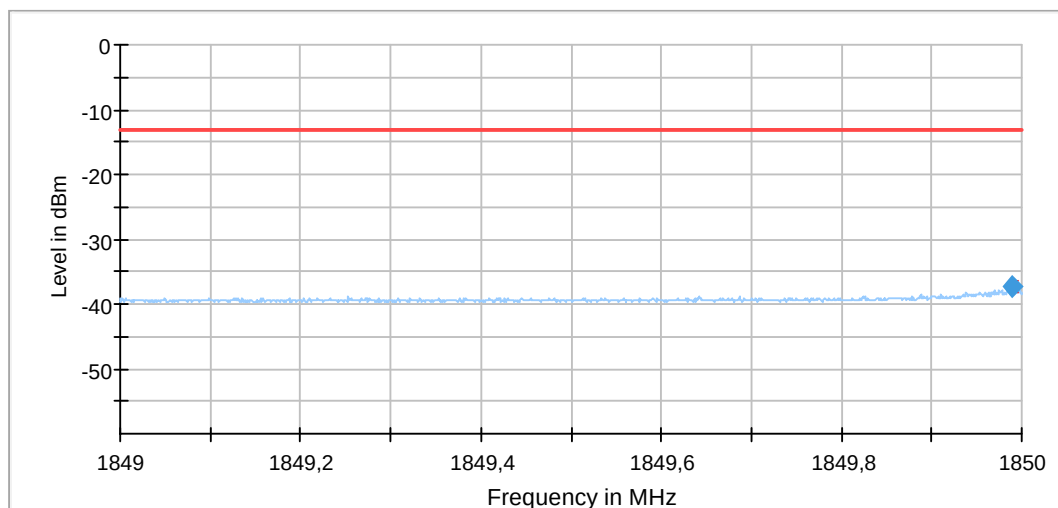
Common Information

Test Description: -
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: -
 Test Case: -
 Operating Mode: LTE FDD2 | UL channel: 18700 | BW:20MHz | 1RB, low | QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01

Full Spectrum



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1849.989000	-37.23	-13.00	24.23	500.0	200.000	V	93.0	0.0	-62

9.202_Bandedge_low_LTE_FDD_B02_CH_low_RB_Full

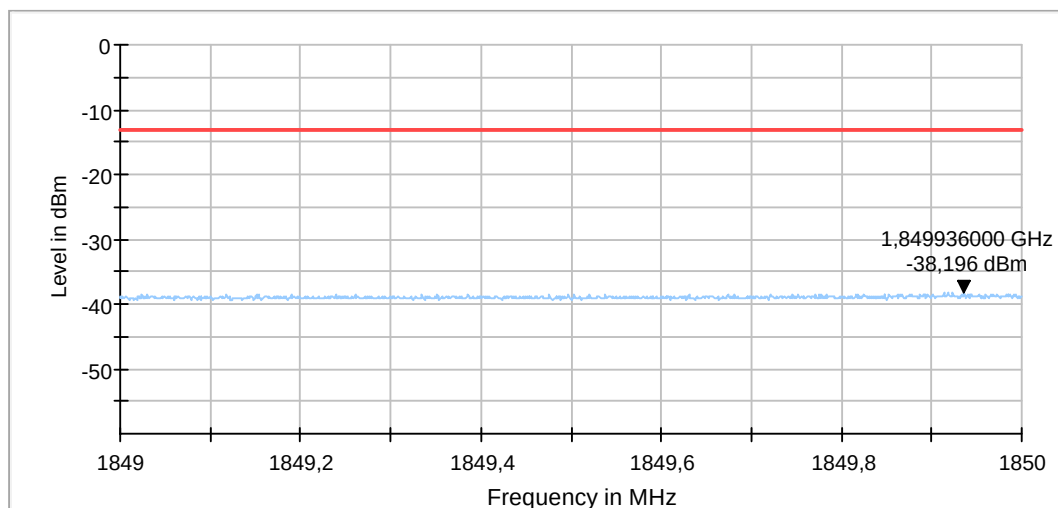
Common Information

Test Description:	-
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	-
Test Case:	-
Operating Mode:	LTE FDD2 UL channel: 18700 BW:20MHz 100RB QPSK
Environmental Conditions:	Humidity : 40% rH; Temperature: 20 °C
Operator:	Aho
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



9.203_Bandedge_high_LTE_FDD_B02_CH_high_RB_1_high

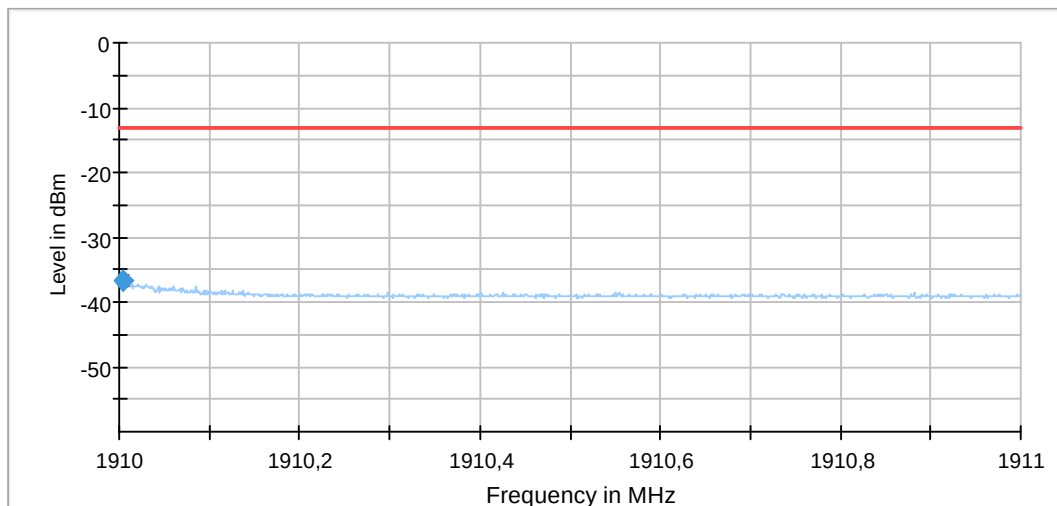
Common Information

Test Description: -
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: -
 Test Case: -
 Operating Mode: LTE FDD2 | UL channel: 19100 | BW:20MHz | 1RB, High | QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01

Full Spectrum



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1910.005000	-36.66	-13.00	23.66	500.0	200.000	H	146.0	90.0	-61

9.204_Bandedge_high_LTE_FDD_B02_CH_high_RB_Full

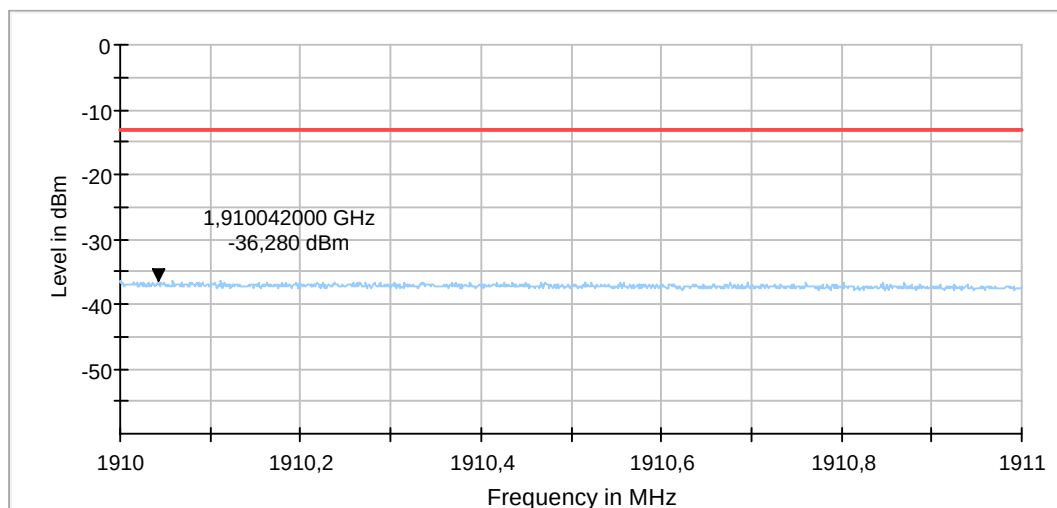
Common Information

Test Description:	-
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	-
Test Case:	-
Operating Mode:	LTE FDD2 UL channel: 19100 BW:20MHz 100RB QPSK
Environmental Conditions:	Humidity : 40% rH; Temperature: 20 °C
Operator:	Aho
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



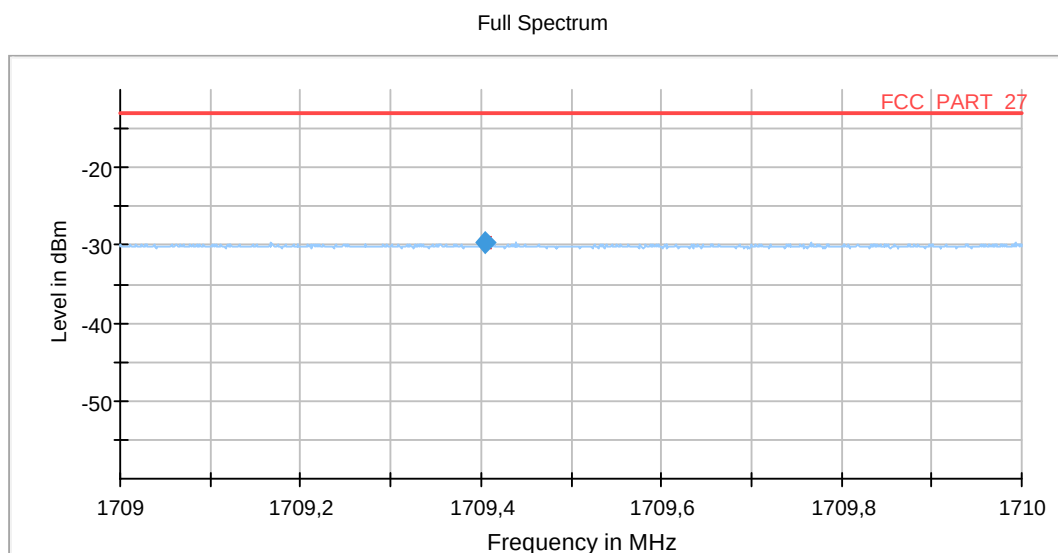
9.401_Bandedge_low_LTE_FDD_B04_CH_low_RB_1_low

Common Information

Test Description: -
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: -
 Test Case: -
 Operating Mode: LTE FDD4 | UL channel:20050 | BW20MHz | 1RB, low | QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1709.404000	-29.68	-13.00	16.68	700.0	200.000	V	223.0	90.0	-62

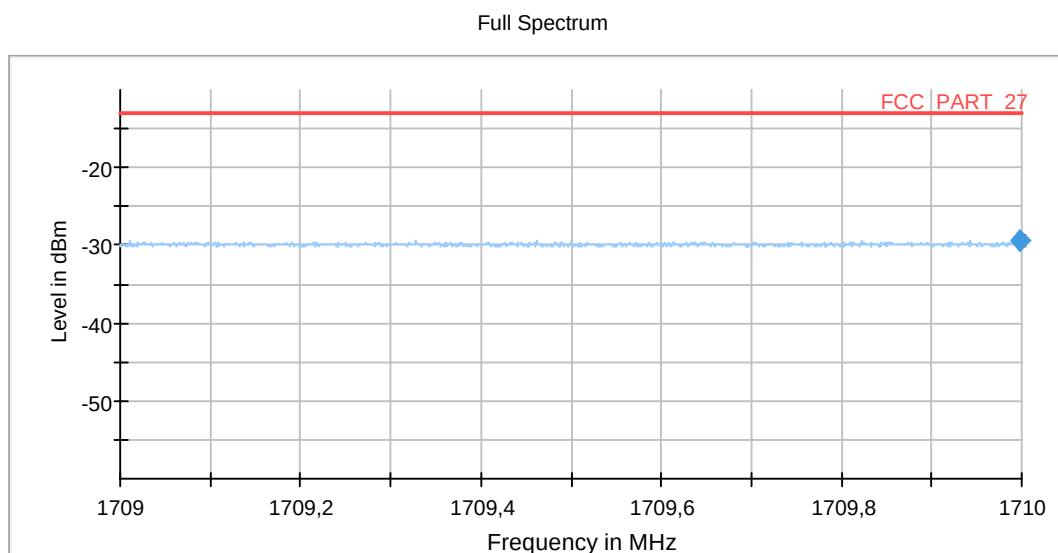
9.402_Bandedge_low_LTE_FDD_B04_CH_low_RB_Full

Common Information

Test Description: -
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: -
 Test Case: -
 Operating Mode: LTE FDD4 | UL channel:20050 | BW20MHz | 100RB | QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1709.998000	-29.47	-13.00	16.47	700.0	200.000	H	159.0	90.0	-62

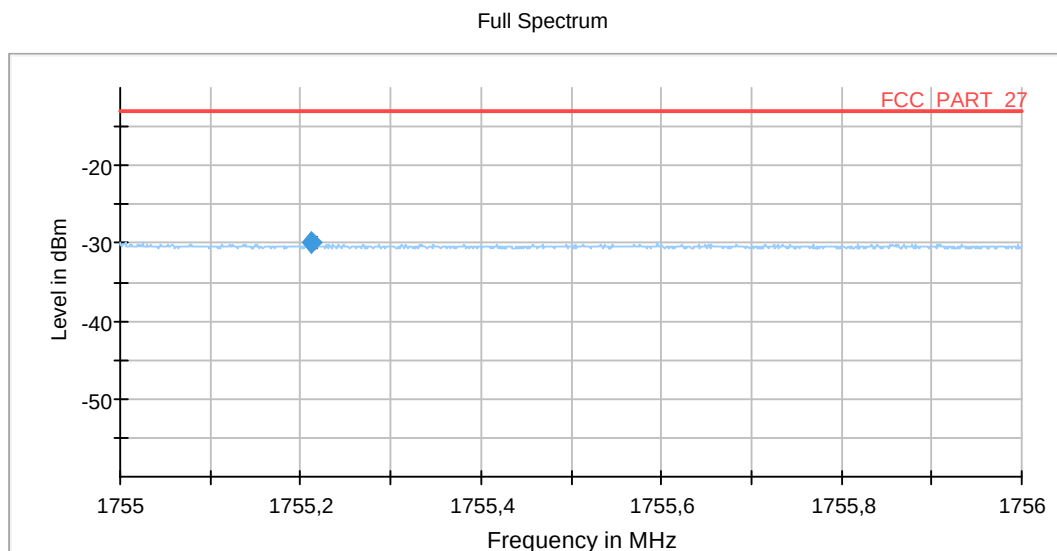
9.403_Bandedge_high_LTE_FDD_B04_CH_high_RB_1_high

Common Information

Test Description: -
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: -
 Test Case: -
 Operating Mode: LTE FDD4 | UL channel:20300 | BW20MHz | 1RB, High | QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1755.213000	-29.88	-13.00	16.89	700.0	200.000	H	332.0	90.0	-62

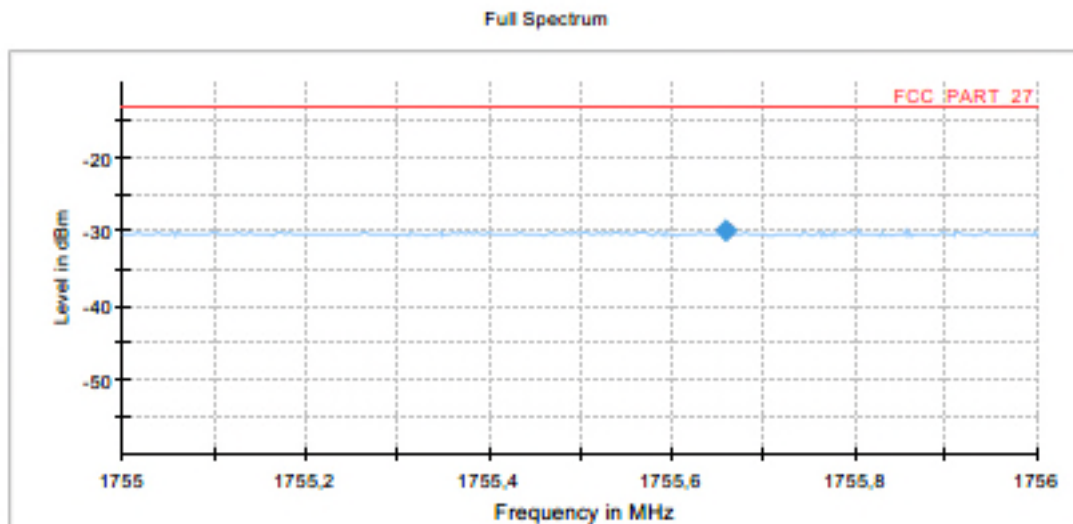
9.404_Bandedge_high_LTE_FDD_B04_CH_high_RB_Full

Common Information

Test Description: -
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: -
 Test Case: -
 Operating Mode: LTE FDD4 | UL channel:20300 | BW20MHz | 100RB | QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01



Final_Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
1755.659000	-29.98	-13.00	16.98	700.0	200.000	H	14.0	90.0	-62

9.501_Bandedge_low_LTE_FDD_B05_CH_low_RB_1_low

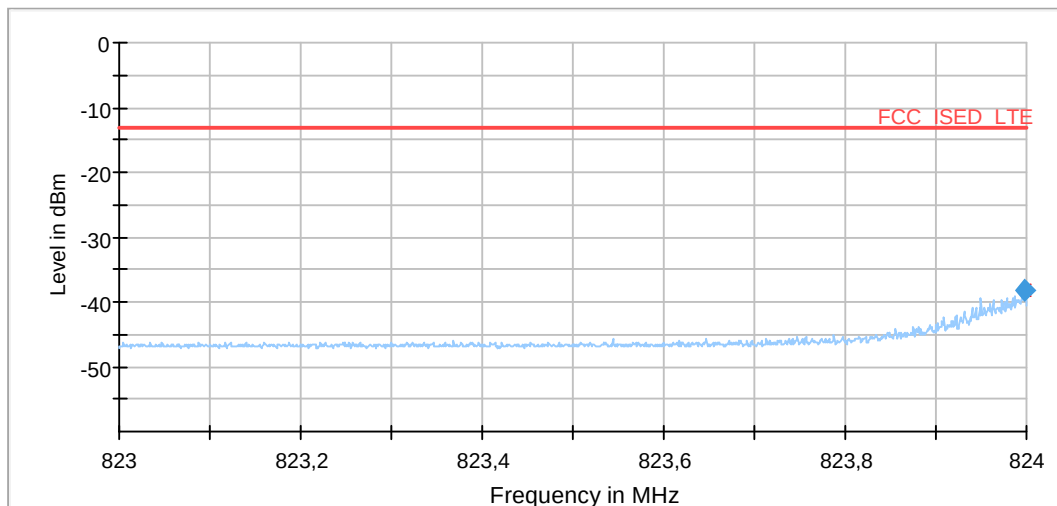
Common Information

Test Description: Band-Edge low - Radiated Spurious Emissions LTE Band V
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
 Test Standard: FCC Part 22.917(a) / RSS-132
 Operating Mode: LTE FDD5 I UL channel:20450 I BW10MHz I1RB, low I QPSK
 Environmental Conditions: Humidity : 40% rH; Temperature: 20 °C
 Test SW Version: EMC32 V10.60.20
 Operator: Aho
 EUT Setup: 2
 Verdict: Passed

EUT Information

PMT number: 22-1-00306S139_C01

Full Spectrum



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
823.998000	-38.12	-13.00	25.12	500.0	100.000	H	38.0	90.0	-76.3

9.502_Bandedge_low_LTE_FDD_B05_CH_low_RB_Full

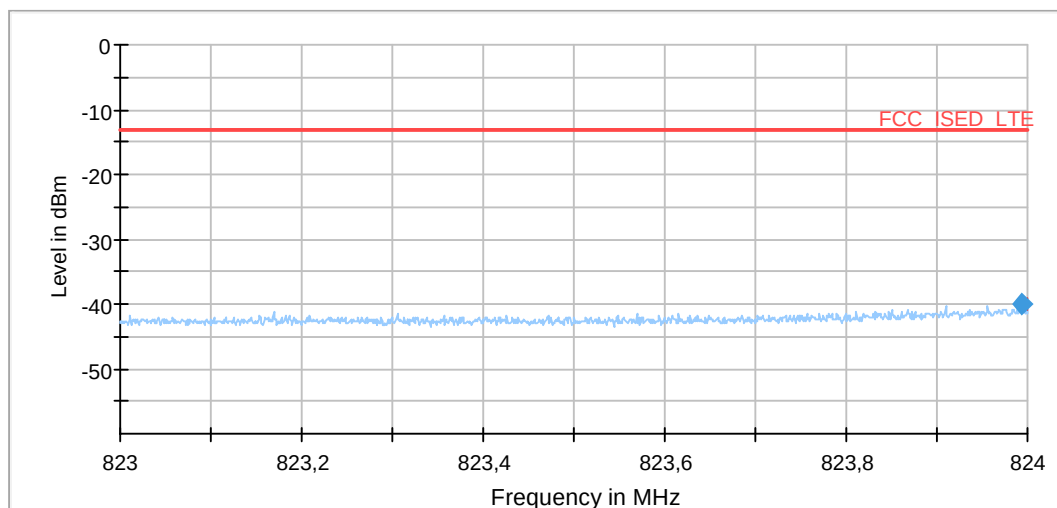
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC Part 22.917(a) / RSS-132
Operating Mode:	LTE FDD5 UL channel:20450 BW10MHz 50RB QPSK
Environmental Conditions:	Humidity : 40% rH; Temperature: 20 °C
Test SW Version:	EMC32 V10.60.20
Operator:	Aho
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



Final Result

Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
823.994000	-40.05	-13.00	27.05	500.0	100.000	H	46.0	90.0	-76.3

9.503_Bandedge_low_LTE_FDD_B05_CH_high_RB_1_high

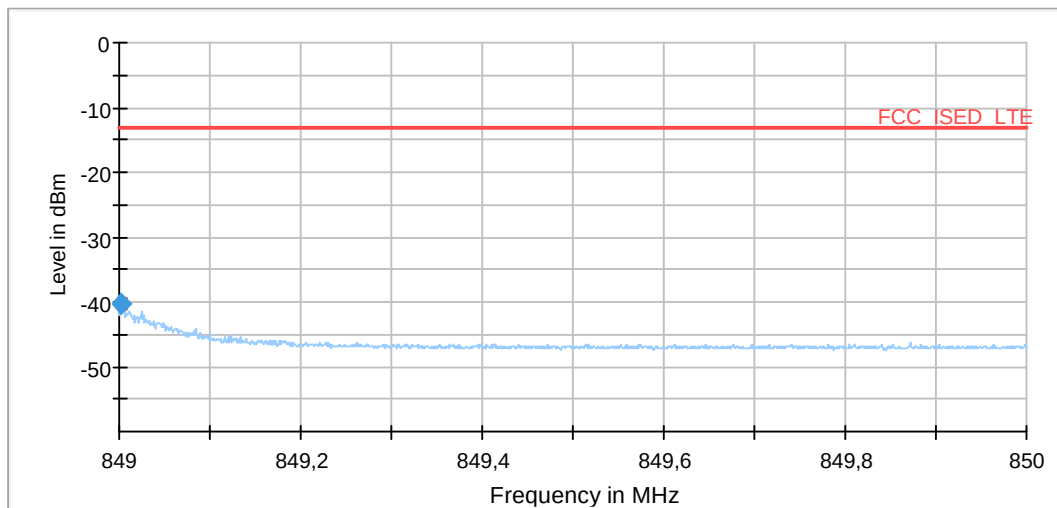
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC Part 22.917(a) / RSS-132
Operating Mode:	LTE FDD5 UL channel:20450 BW10MHz 1RB High QPSK
Environmental Conditions::	Humidity : 40% rH; Temperature: 20 °C
Test SW Version:	EMC32 V10.60.20
Operator:	Aho
EUT Setup:	2
Verdict:	Passed

EUT Information

PMT number:	22-1-00306S139_C01
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Full Spectrum



9.504_Bandedge_high_LTE_FDD_B05_CH_high_RB_Full

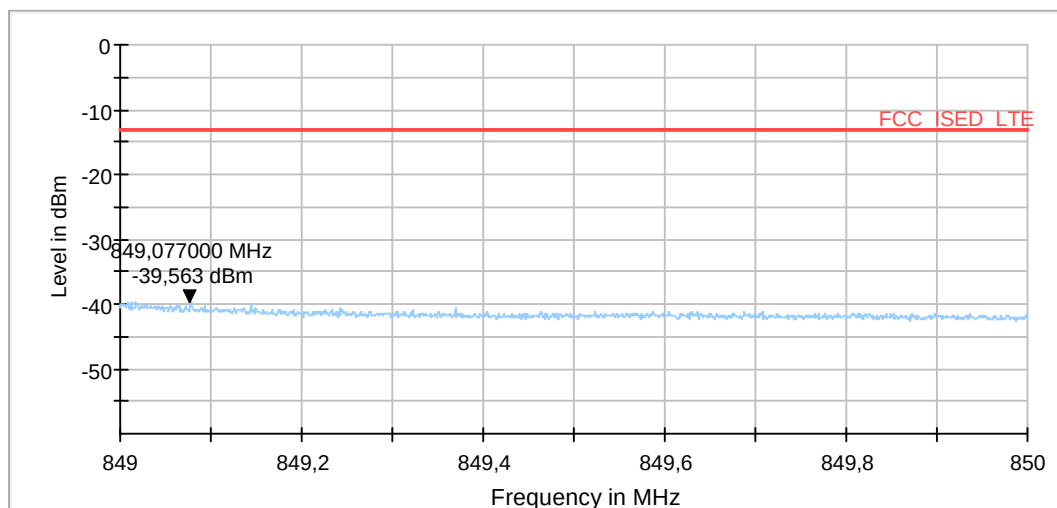
Common Information

Test Description:	Band-Edge low - Radiated Spurious Emissions LTE Band V
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.60.20
Test Standard:	FCC Part 22.917(a) / RSS-132
Operating Mode:	LTE FDD5 UL channel:20450 BW10MHz 50RB QPSK
Environmental Conditions::	Humidity : 40% rH; Temperature: 20 °C
Test SW Version:	EMC32 V10.60.20
Operator:	Aho
EUT Setup:	2
Verdict:	Passed

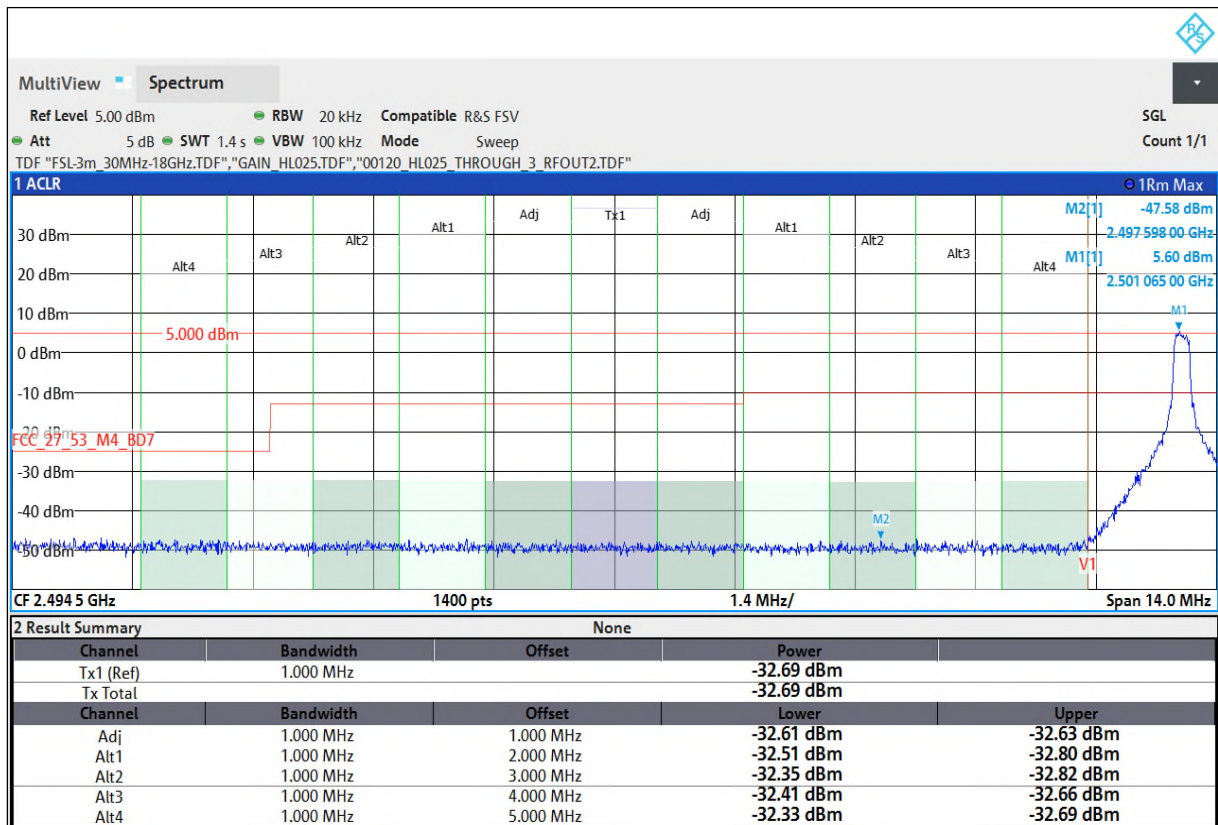
EUT Information

PMT number:	22-1-00306S139_C01
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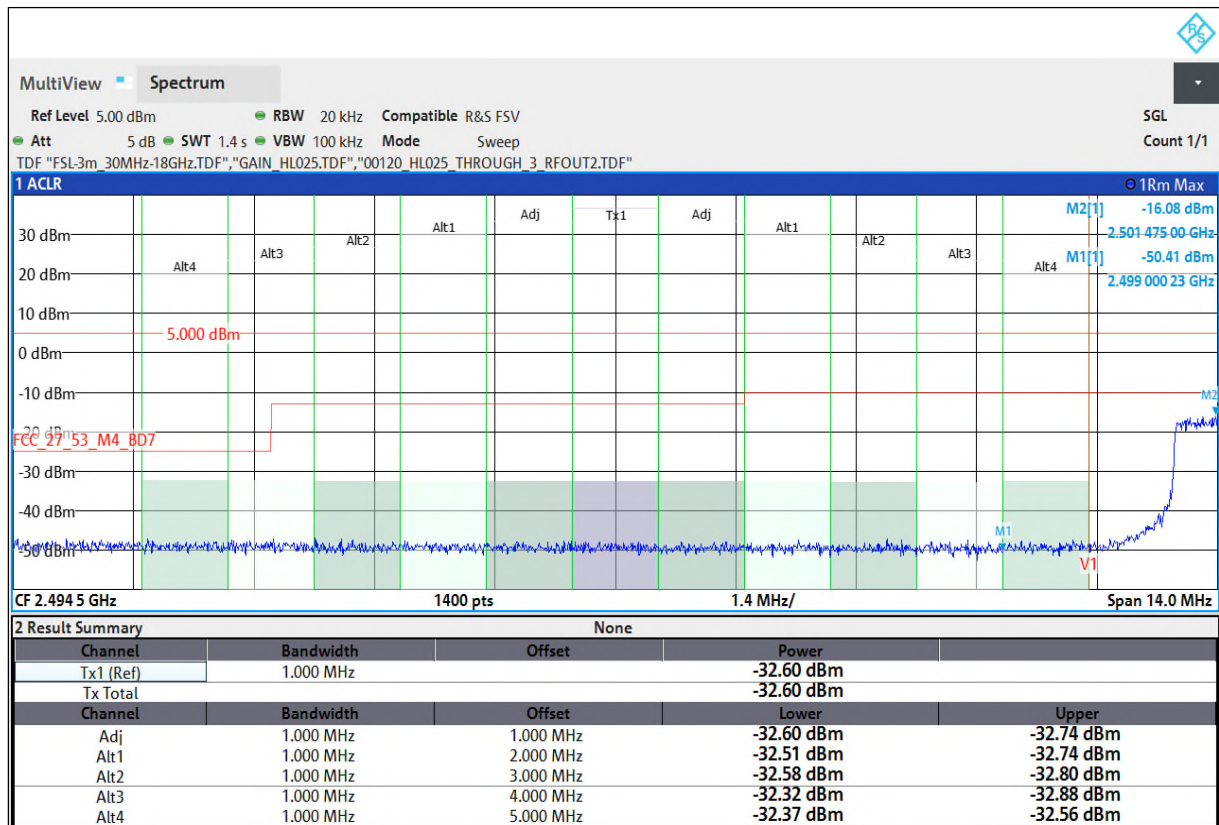
Full Spectrum



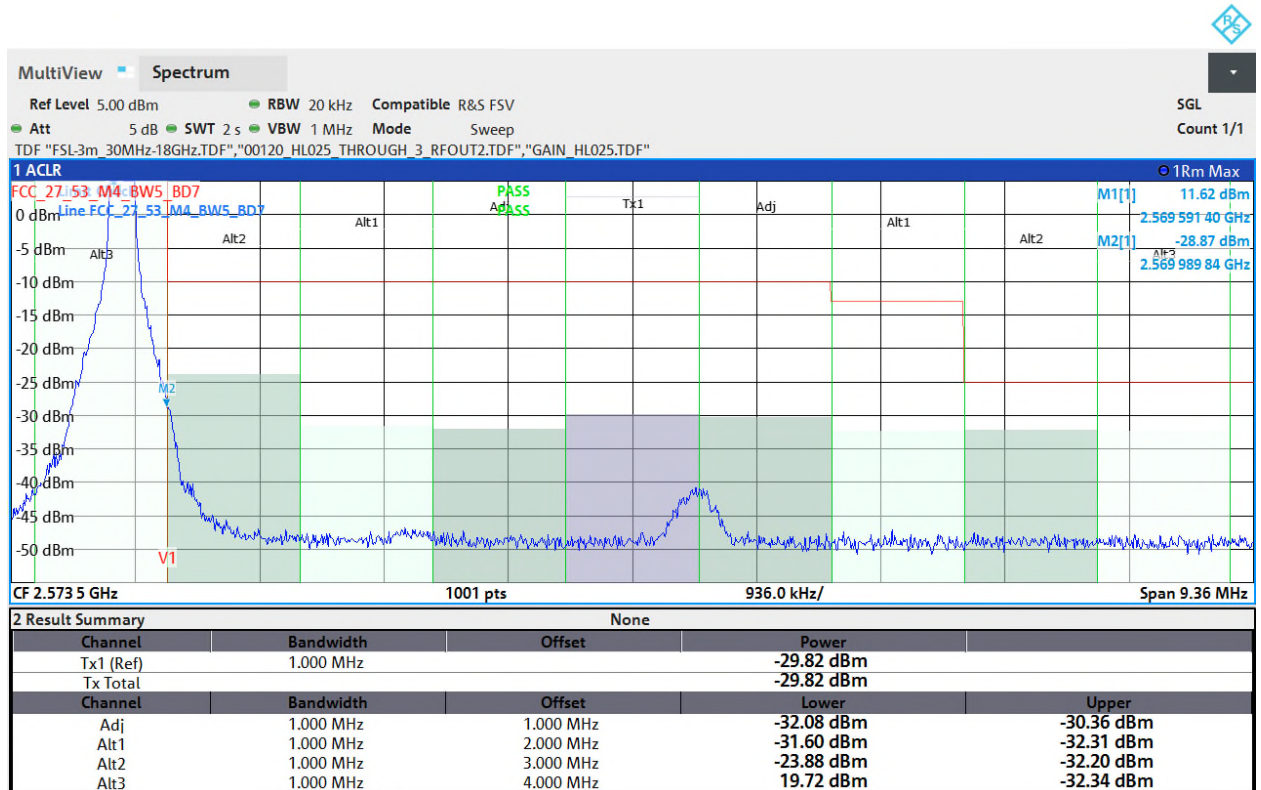
9.701_BE_low_ch_20850_BW20M_1RB_low



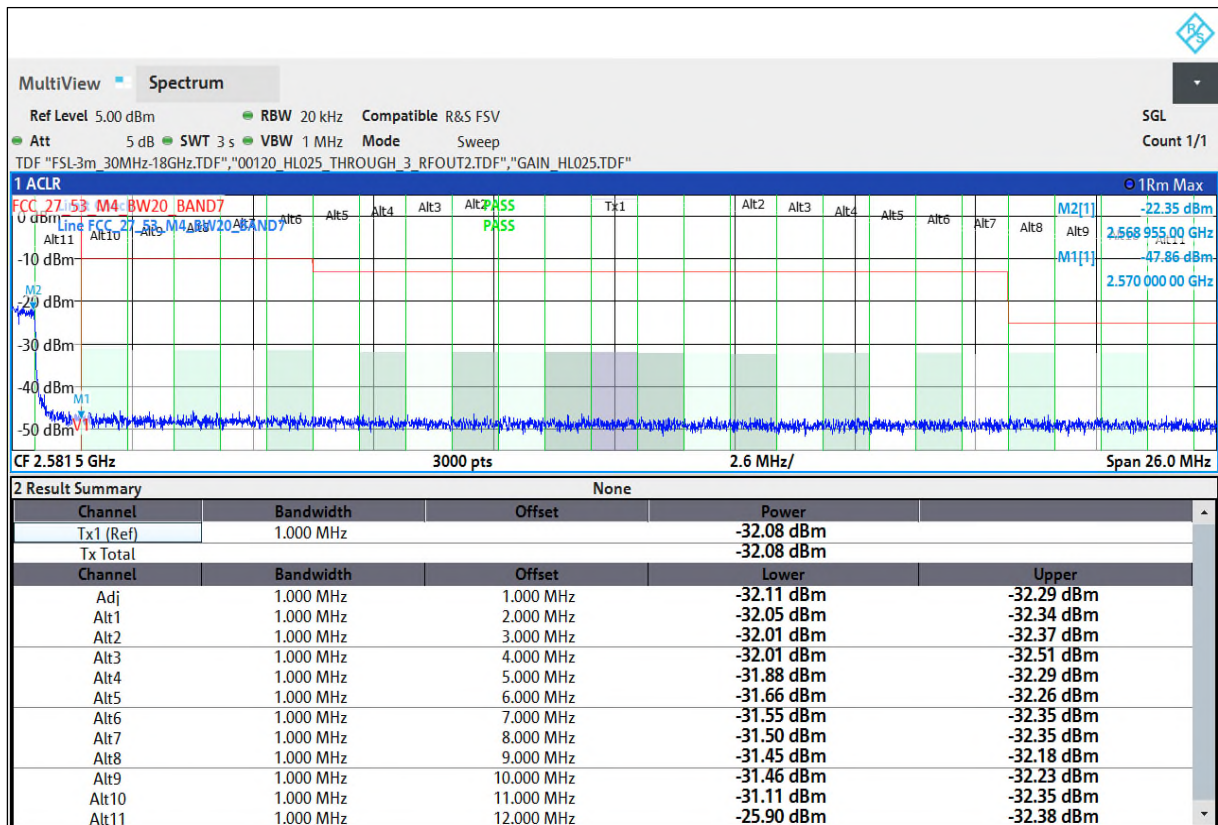
9.702_BE_low_ch_20850_BW20M_Full_RB



9.703_BE_high_ch_21350_BW20M_1RB_high



9.704_BE_high_ch_21350_BW20M_Full_RB



End Of Annex 1