

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

<b>Number of pages:</b>	47	<b>Date of Report:</b>	2023-Feb-16
<b>Testing company:</b>	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	<b>Applicant:</b>	Continental Automotive Technologies GmbH
<b>Product:</b>	<b>Telematic Control Unit</b>		
<b>Model:</b>	<b>BSRF_EA_RWO</b>		
<b>FCC ID:</b>	KR5-BSRFEARWO	<b>IC:</b>	--
<b>Testing has been carried out in accordance with:</b>	<p><b>FCC Regulations</b></p> <p><b>Title 47 CFR, Chapter I, Subchapter A</b>          Part 15, Subpart C Intentional Radiators; § 15.209 Radiated emission limits; general requirements</p> <p><b>Title 47 CFR, Chapter I, Subchapter B</b>          Part 22, Subpart H Cellular Radiotelephone Service          Part 24, Subpart E Paging and Radiotelephone Service          Part 27, Subpart C Miscellaneous Wireless Communications Services</p> <p><b>Title 47 CFR, Chapter I, Subchapter D</b>          Part 90, Subpart I, General technical standards; Subpart S Private Land Mobile Radio Services</p> <p><b>ISED-Regulations, Radio Standards Specification</b></p> <p><b>RSS-Gen, Issue 5</b>          General Requirements for Compliance of Radio Apparatus</p> <p><b>RSS-132, Issue 3</b>          Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz</p> <p><b>RSS-133, Issue 6, Amendment 1</b>          2 GHz Personal Communications Services</p> <p><b>RSS-139, Issue 3</b>          Advanced Wireless Services (AWS) Equipment Operating in the Bands 1710-1780 MHz and 2110-2180 MHz</p>		

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# 1 Measurement diagrams

## 2.201\_Traffic\_mode\_LTE\_FDD\_B02\_CH\_19100

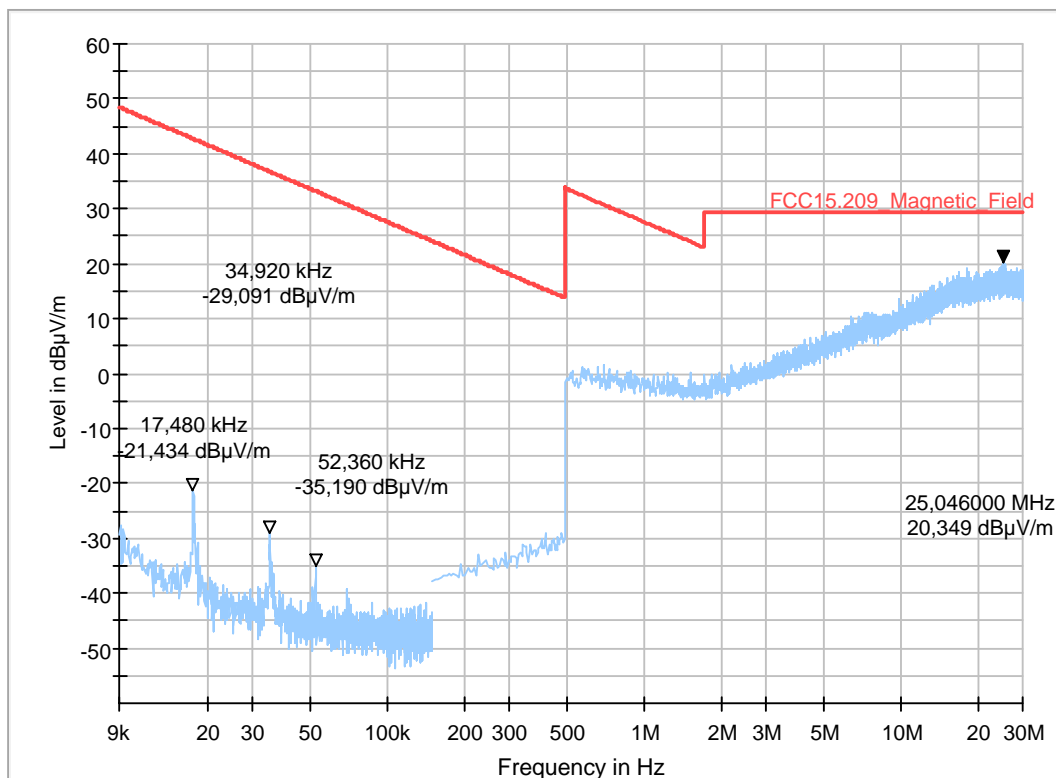
### Common Information

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

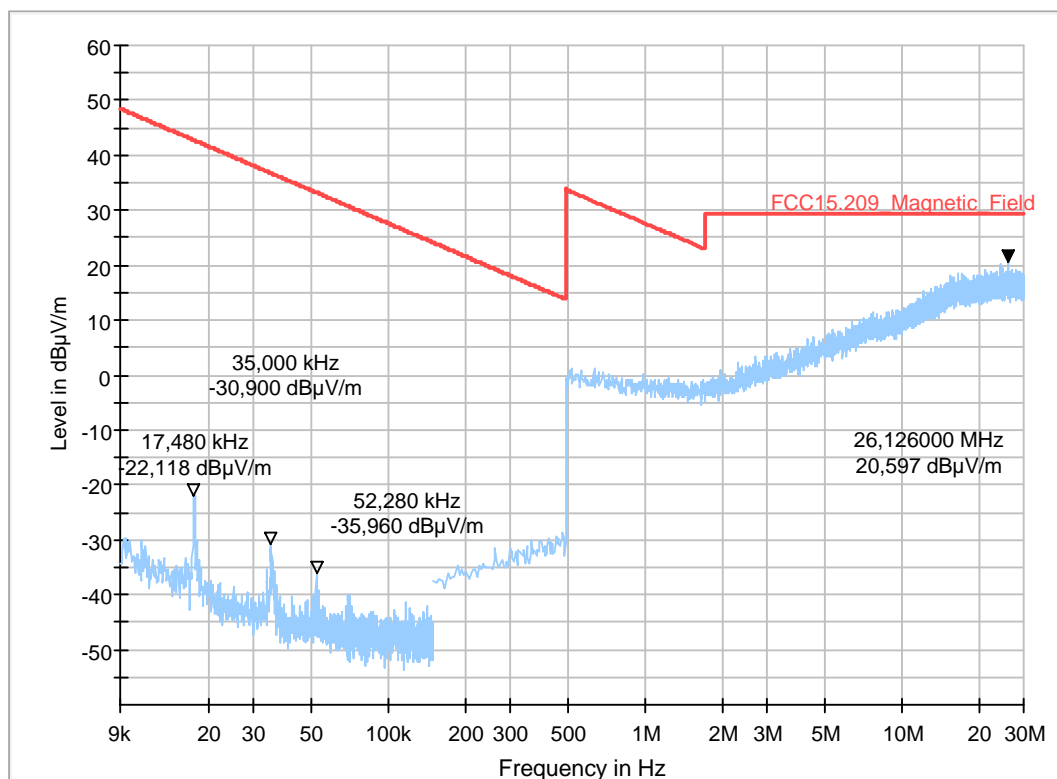
### Common Information

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



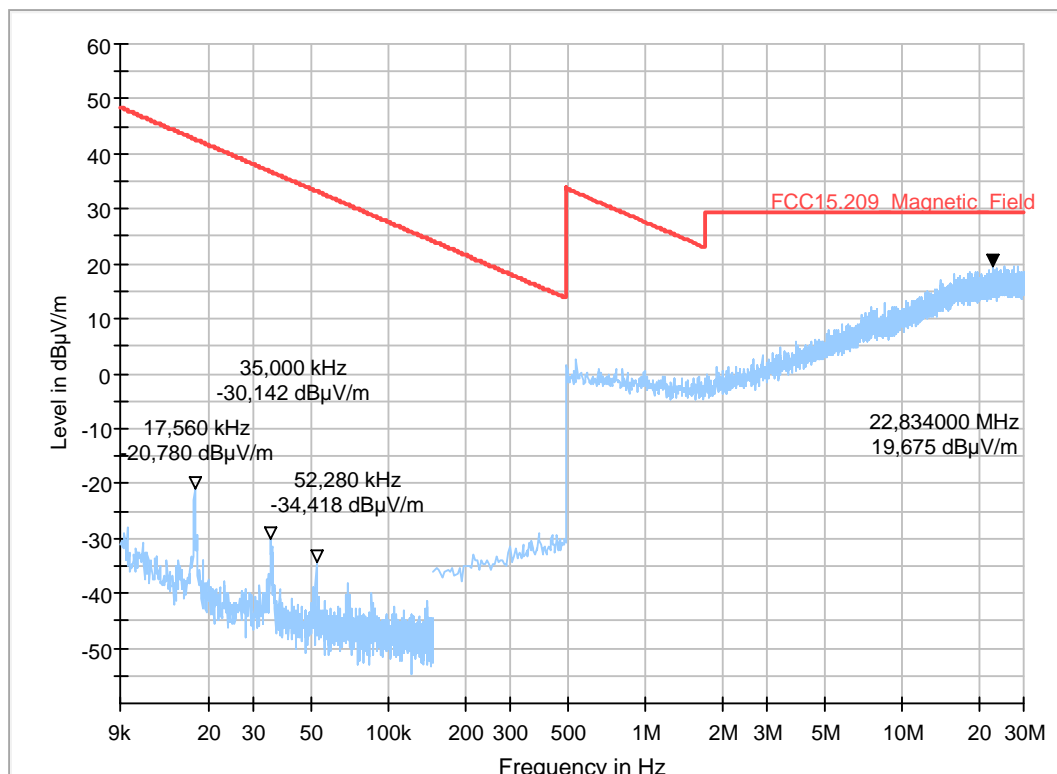
## 2.501\_Traffic\_mode\_LTE\_FDD\_B05\_CH\_20450

### 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

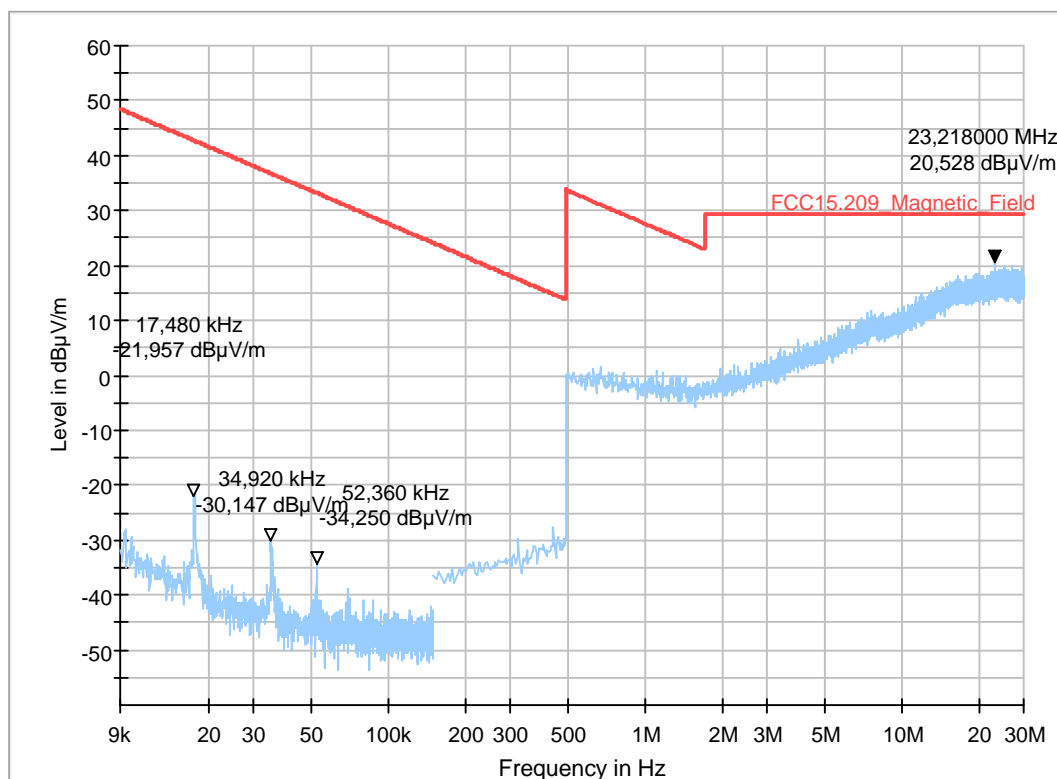
### Common Information

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

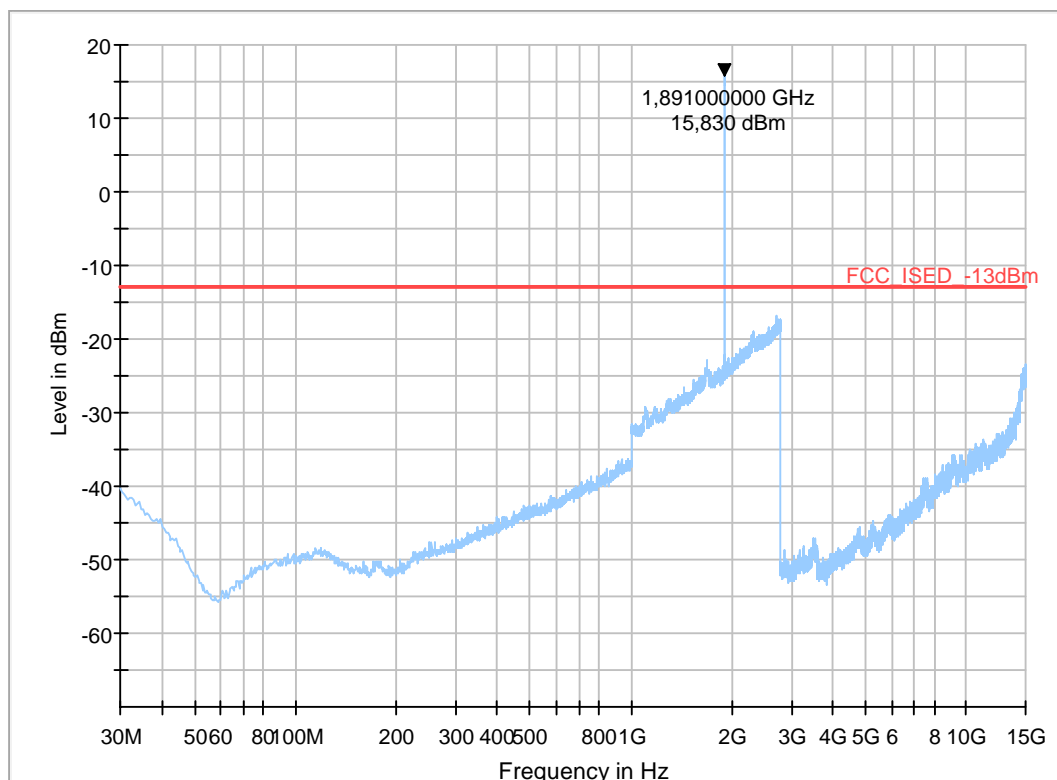
### Common Information

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   UL channel: 19100   BW:20MHz   1RB, low   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

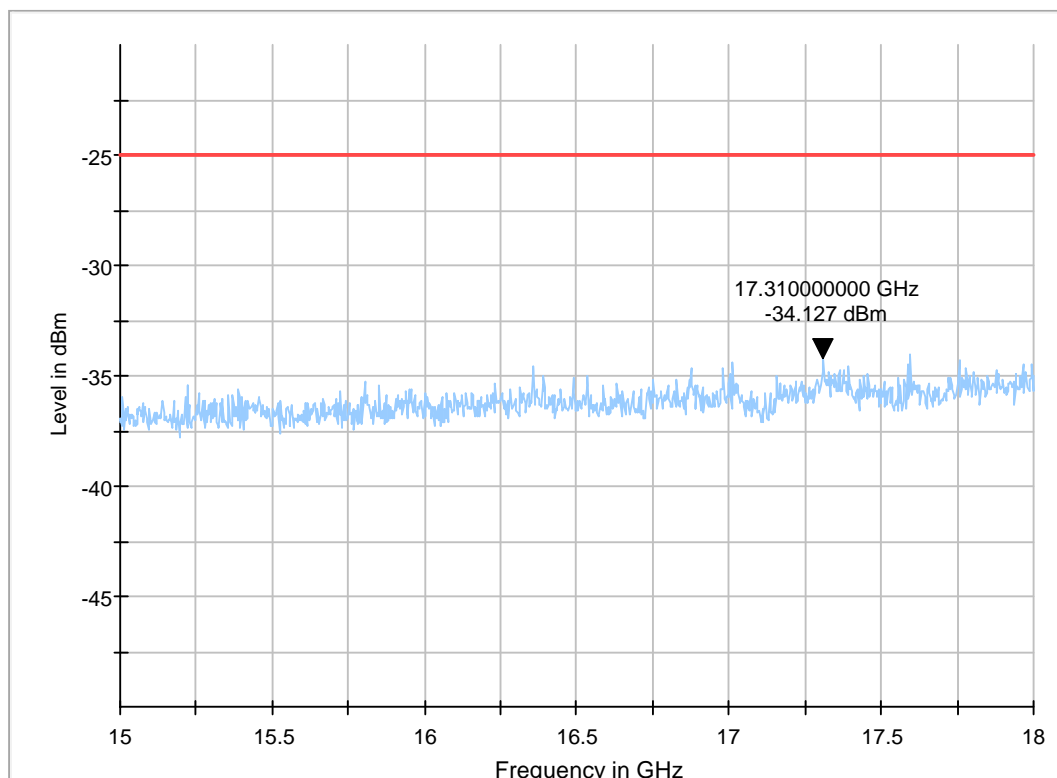
### Common Information

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

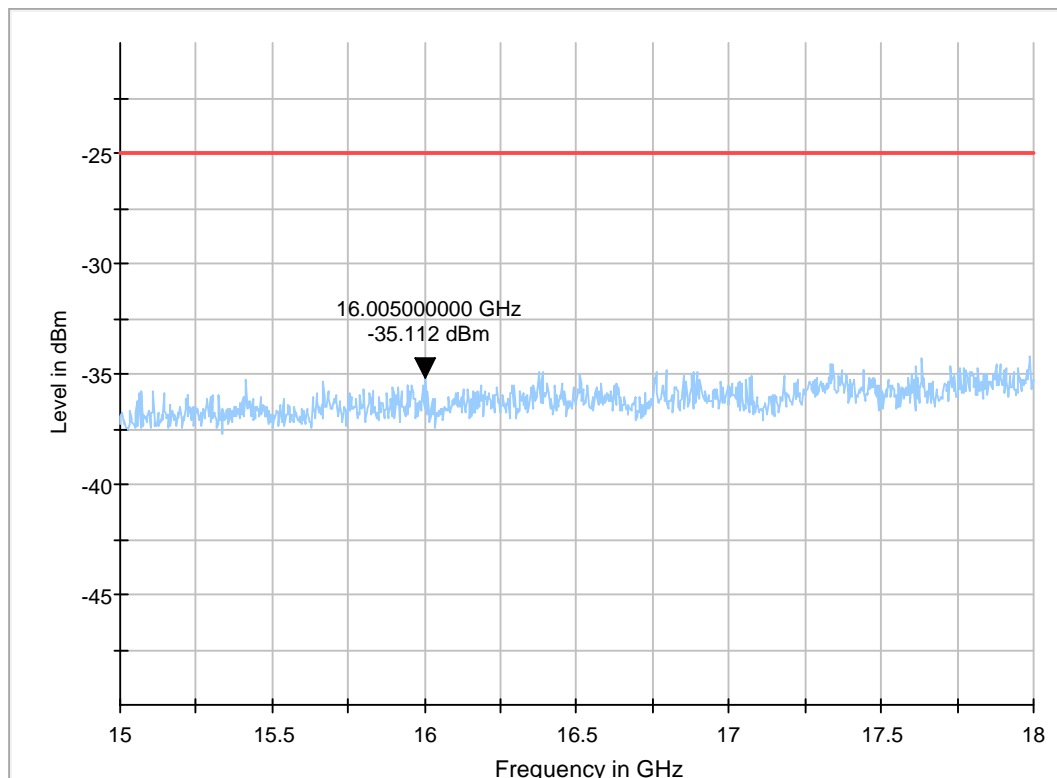
### Common Information

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

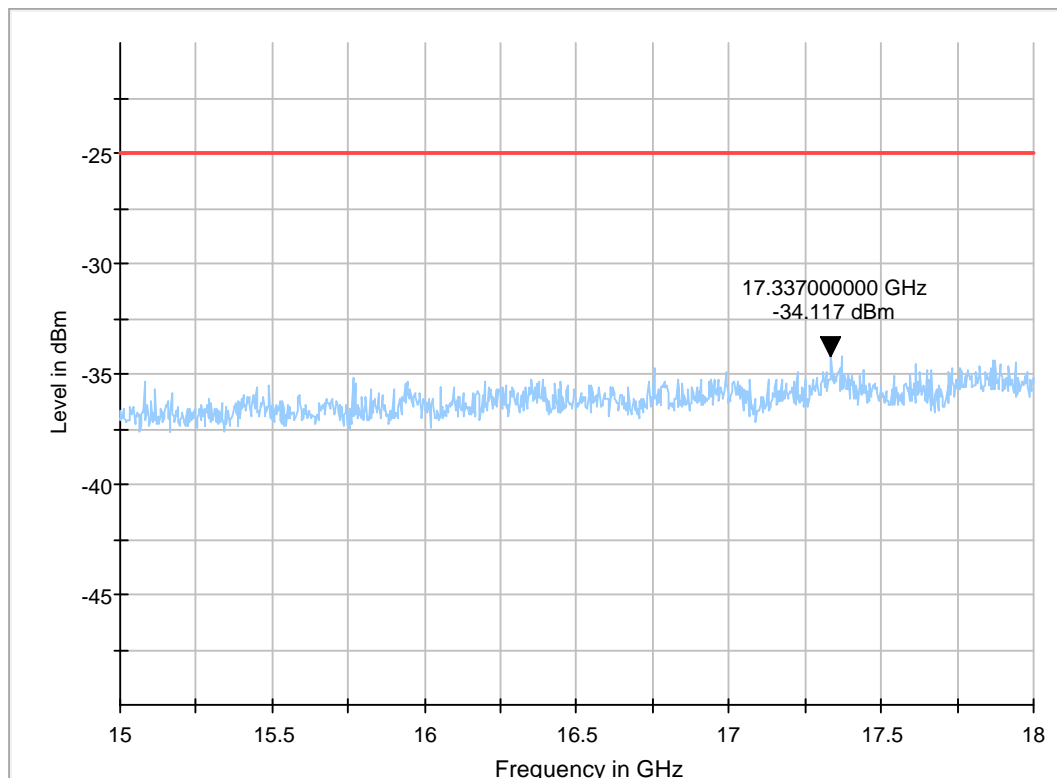
### Common Information

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

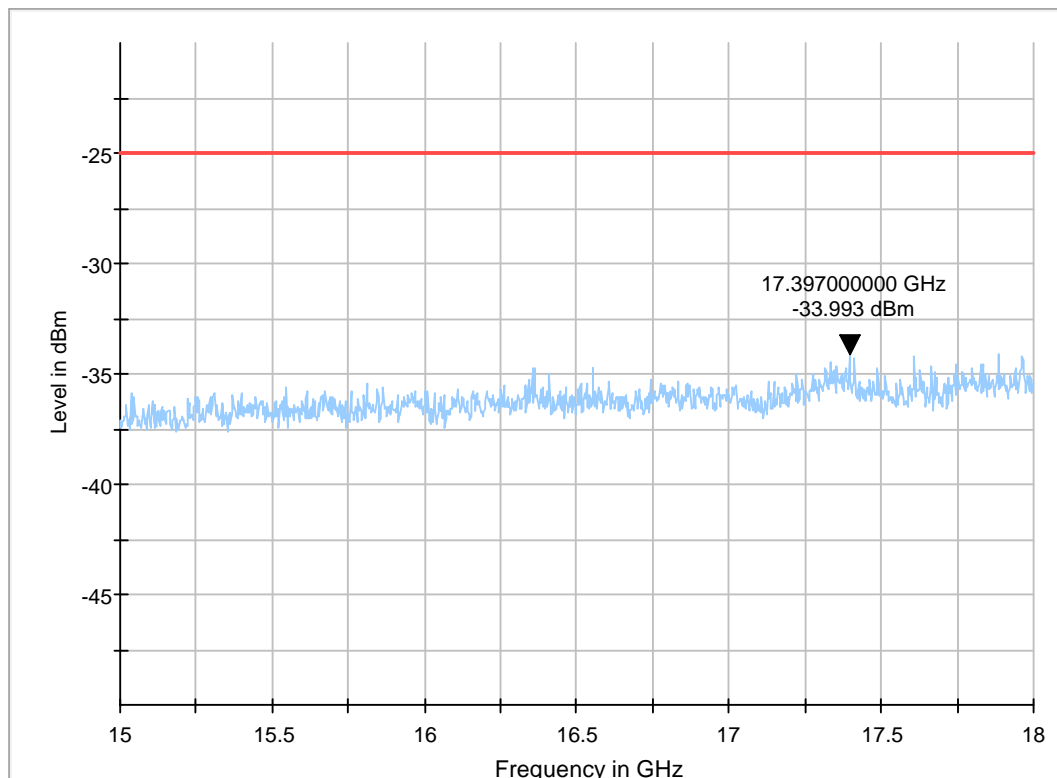
### Common Information

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

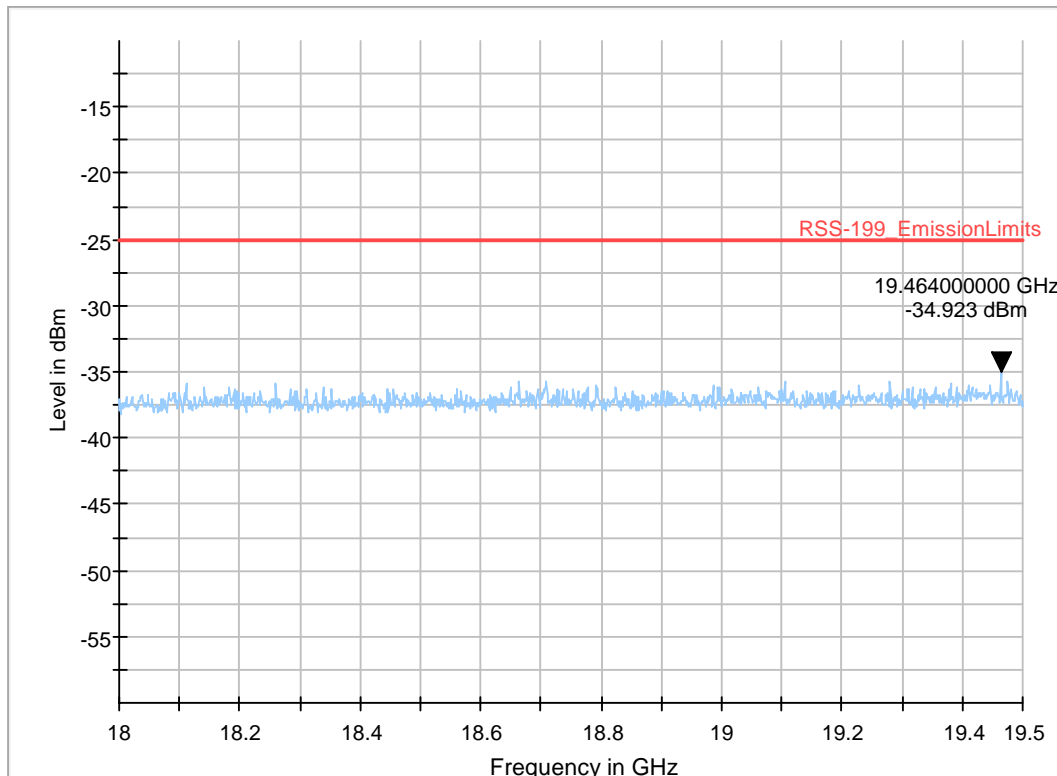
## Common Information

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

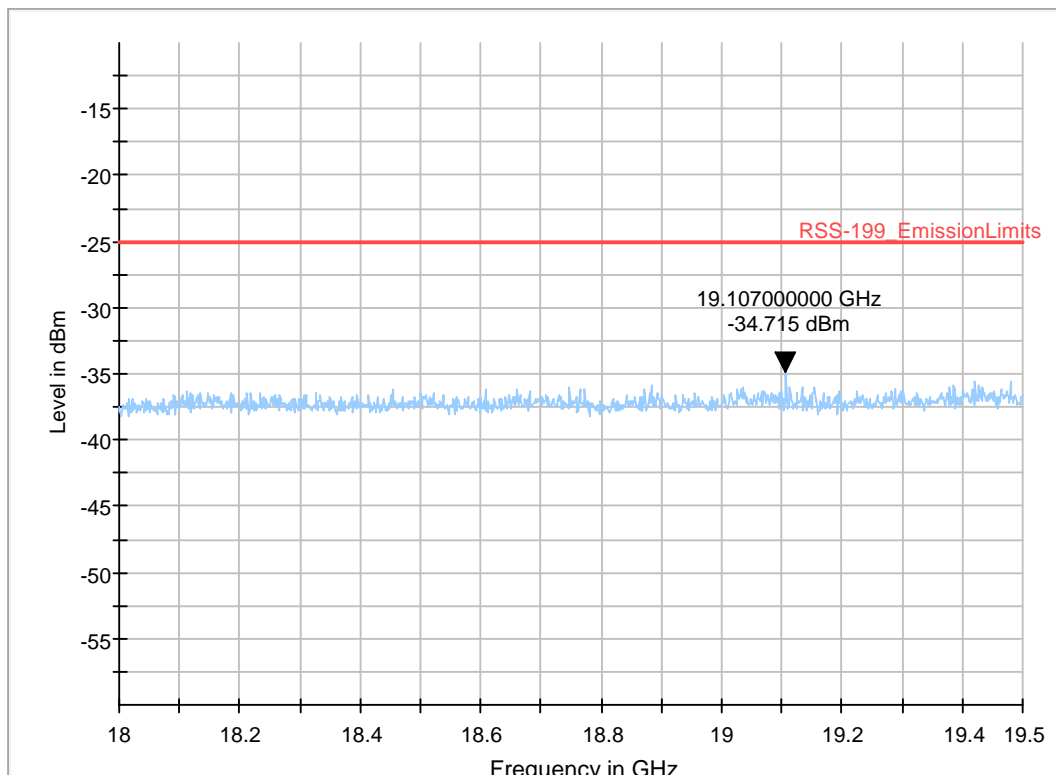
## Common Information

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

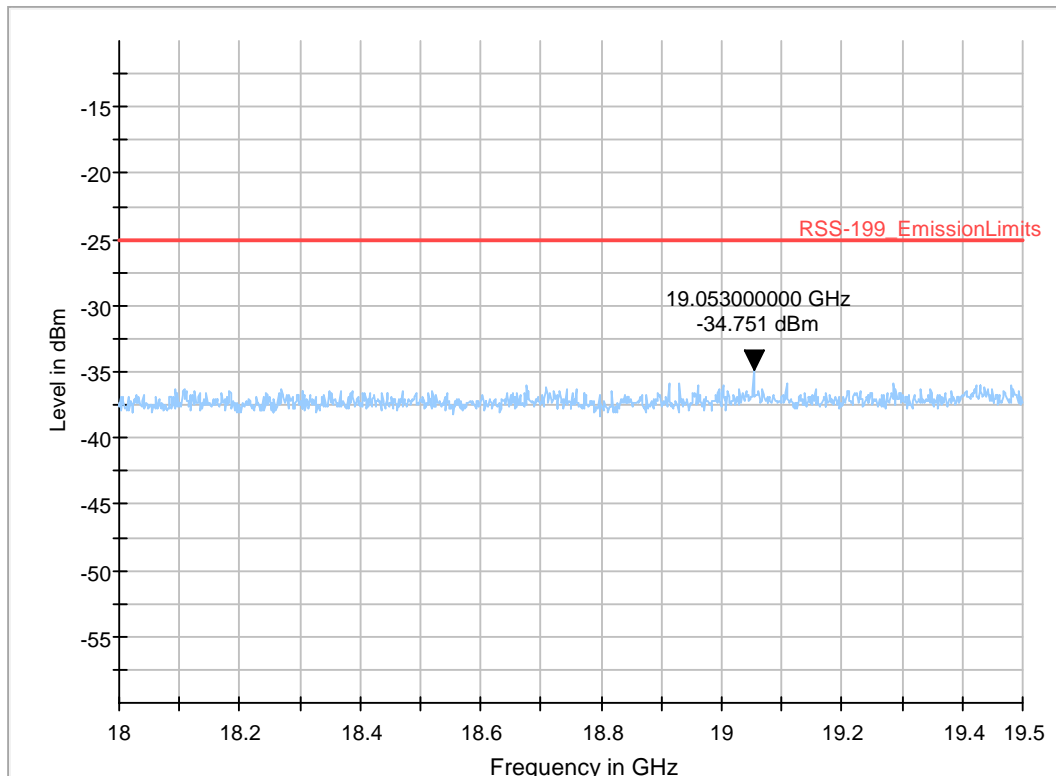
## Common Information

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

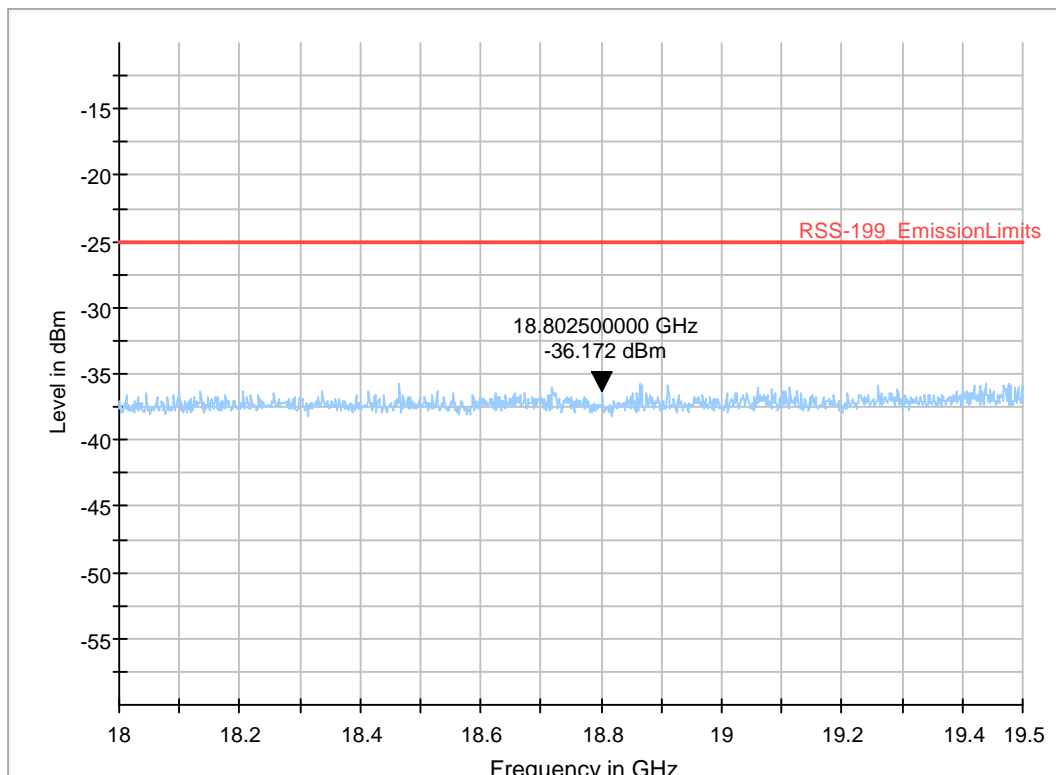
## Common Information

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



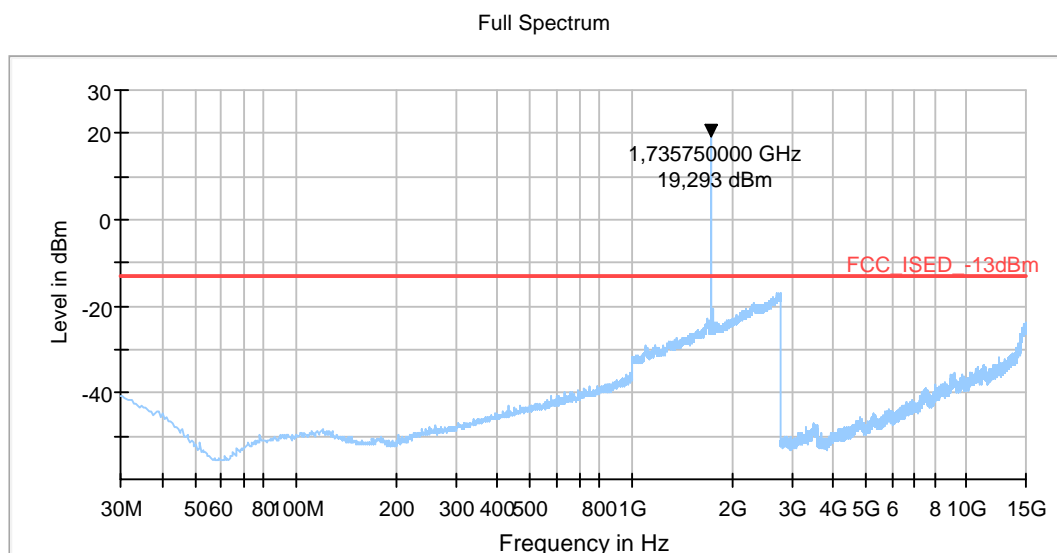
## 8.05\_Traffic\_mode\_LTE\_FDD\_B04\_CH\_20300

### 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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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

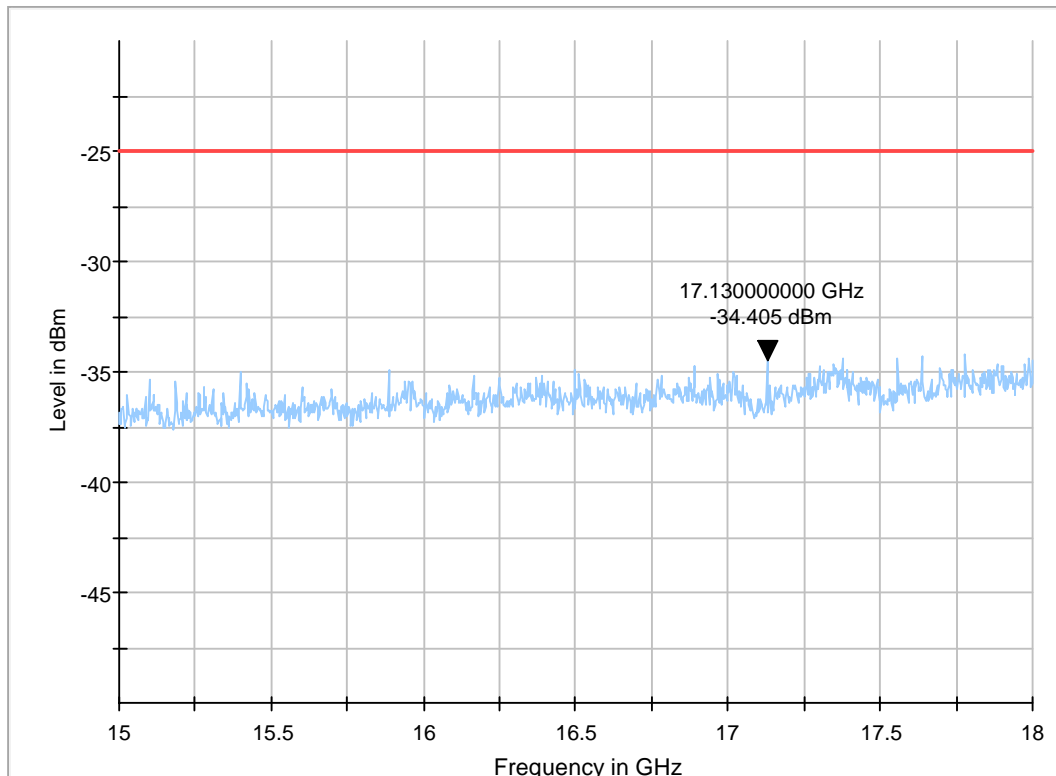
## Common Information

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

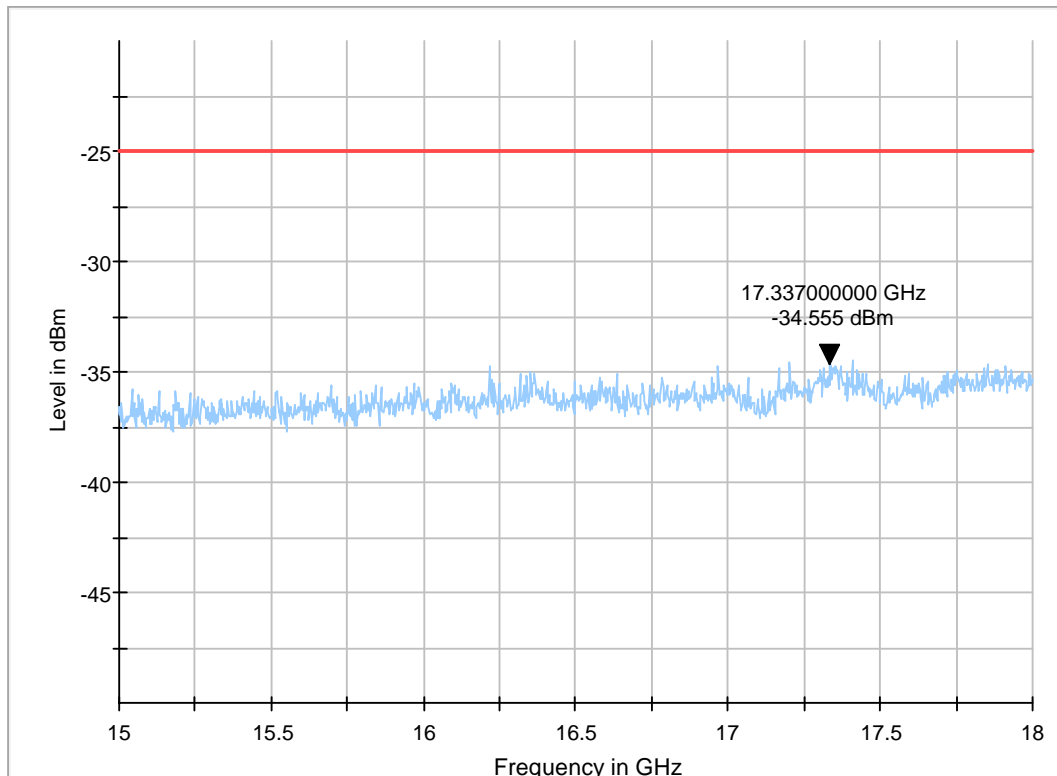
## Common Information

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

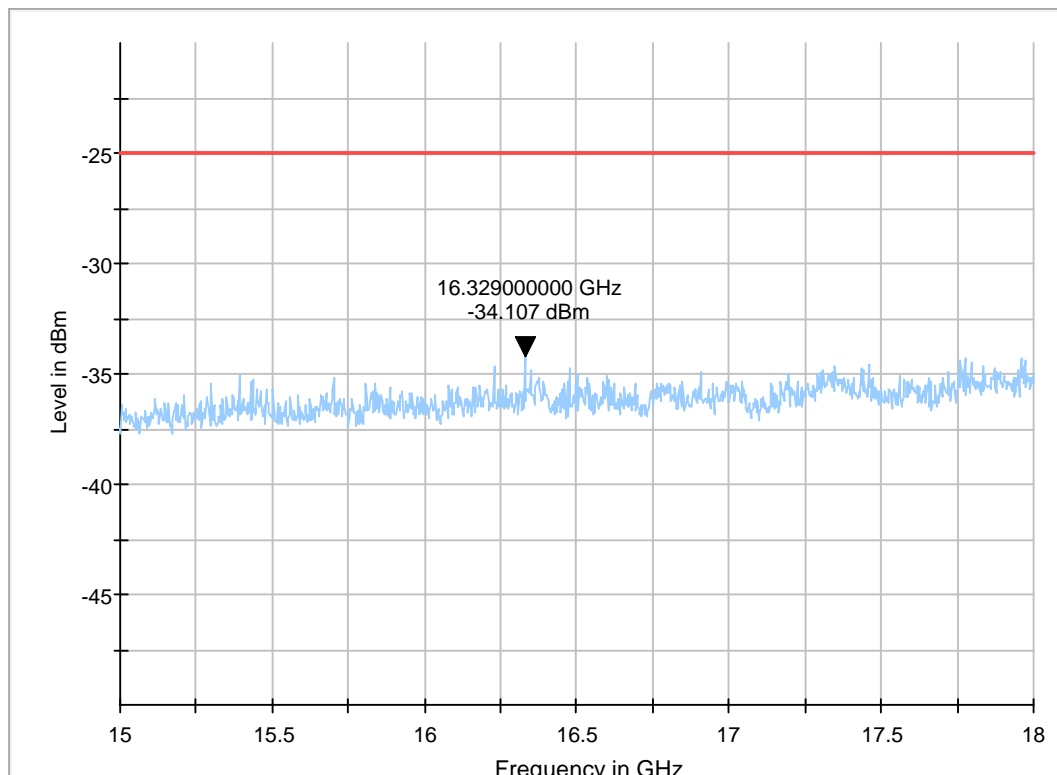
### Common Information

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

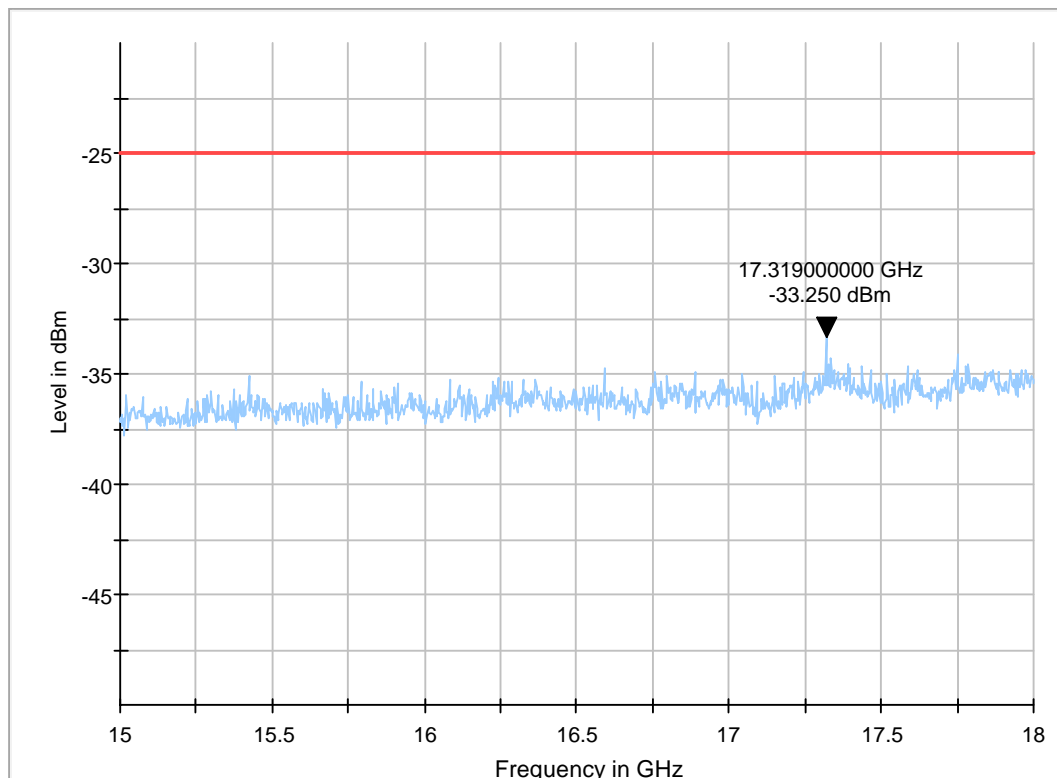
### Common Information

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



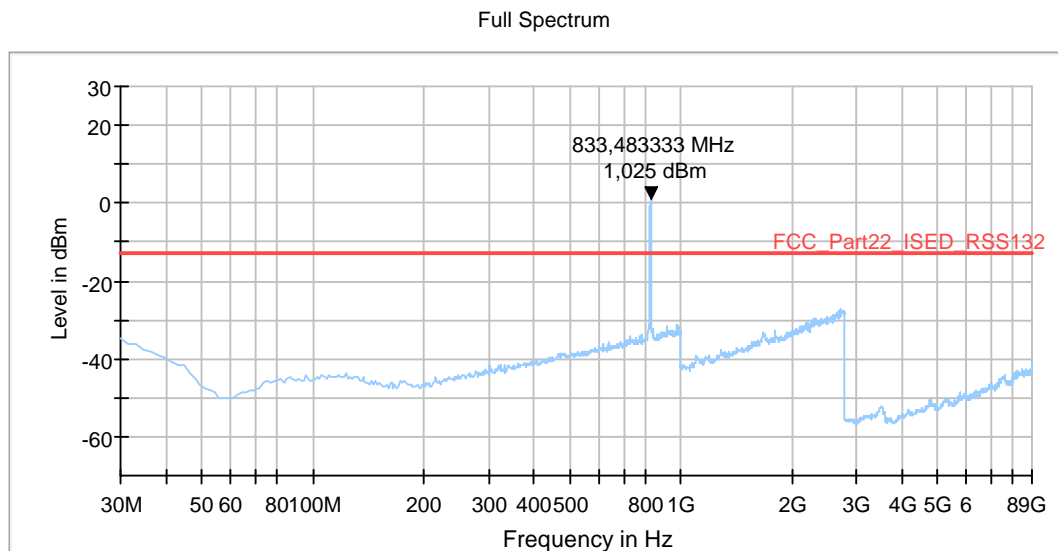
## 8.07\_Traffic\_mode\_LTE\_FDD\_B05\_CH\_20450

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

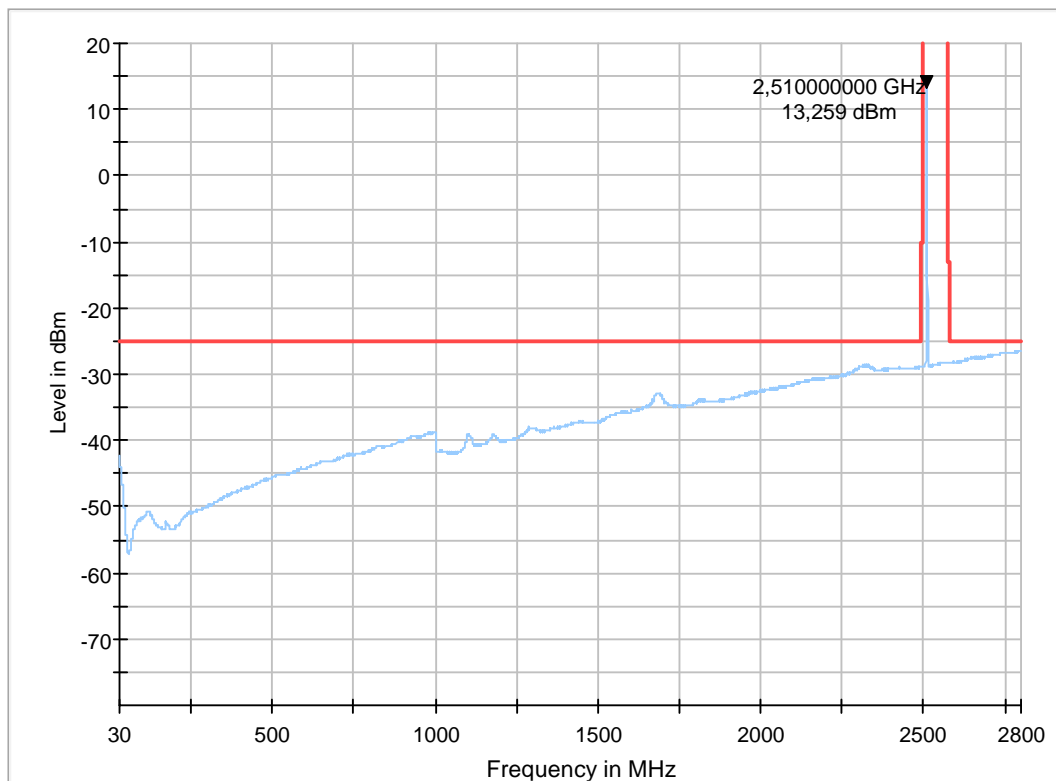
## 8.08\_Traffic\_mode\_LTE\_FDD\_B07\_CH\_20850

### 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



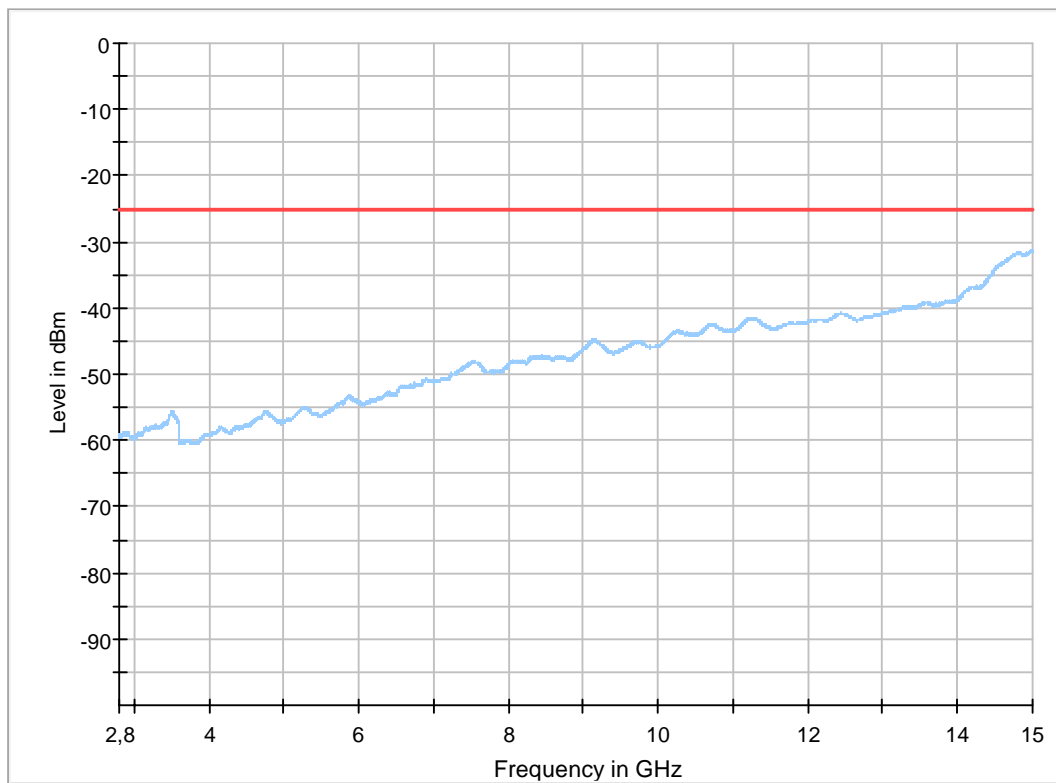
## 8.09\_Traffic\_mode\_LTE\_FDD\_B07\_CH\_20850

### 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

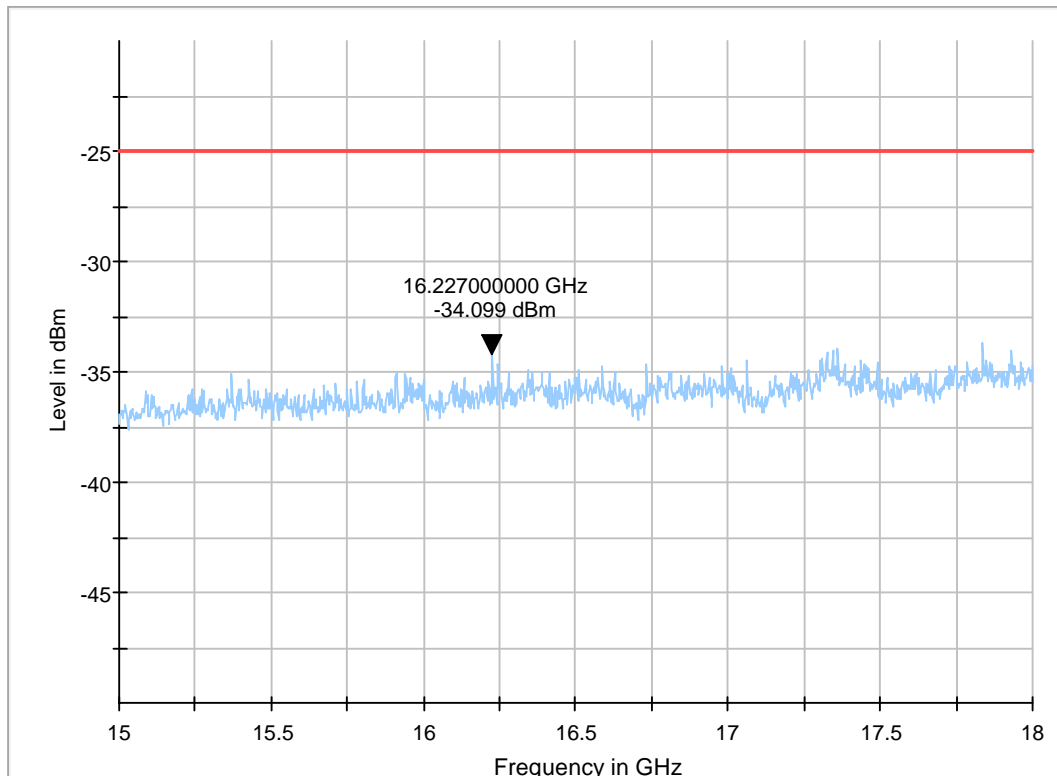
## Common Information

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

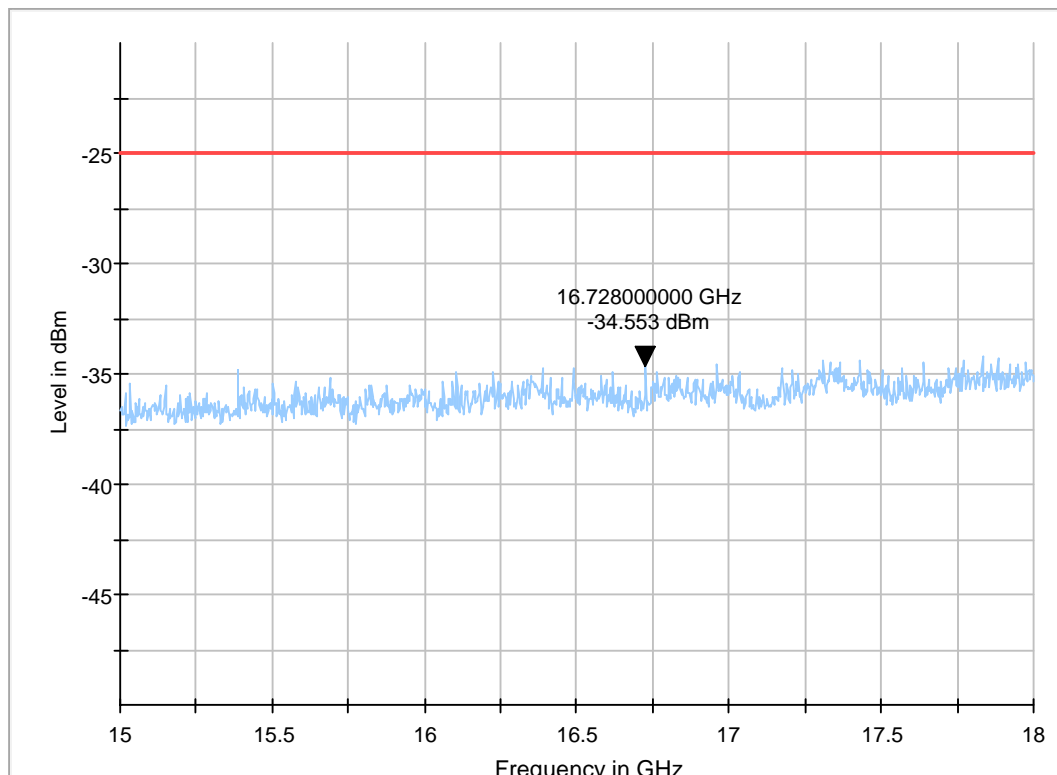
### Common Information

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

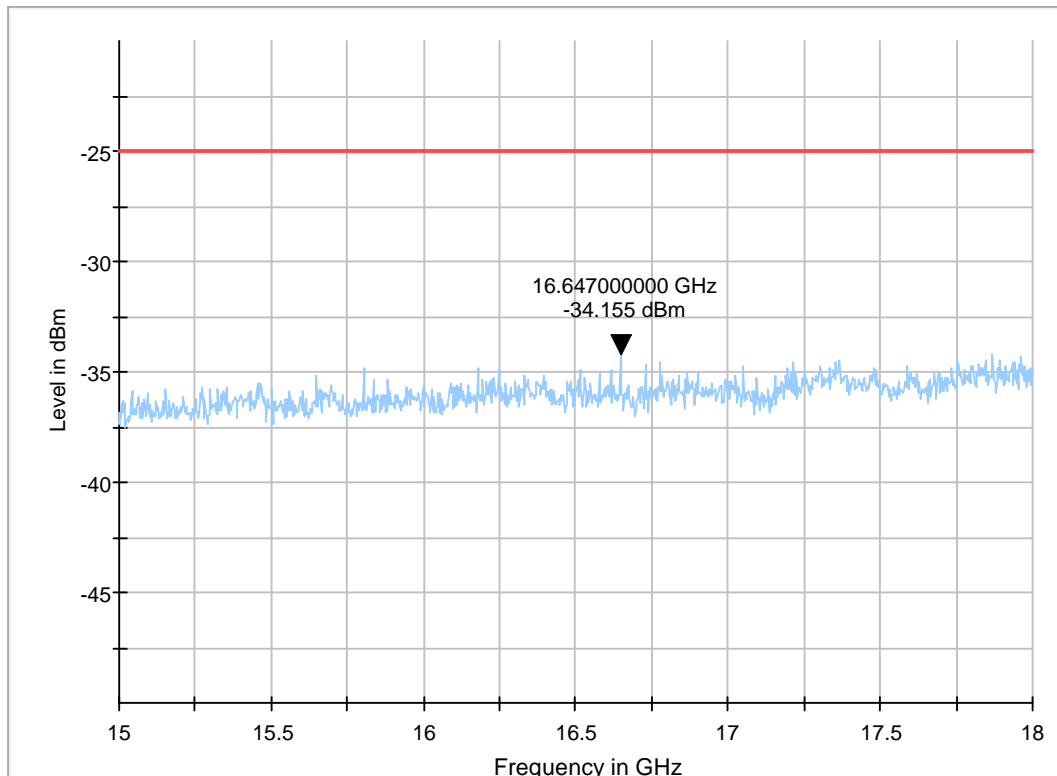
## Common Information

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

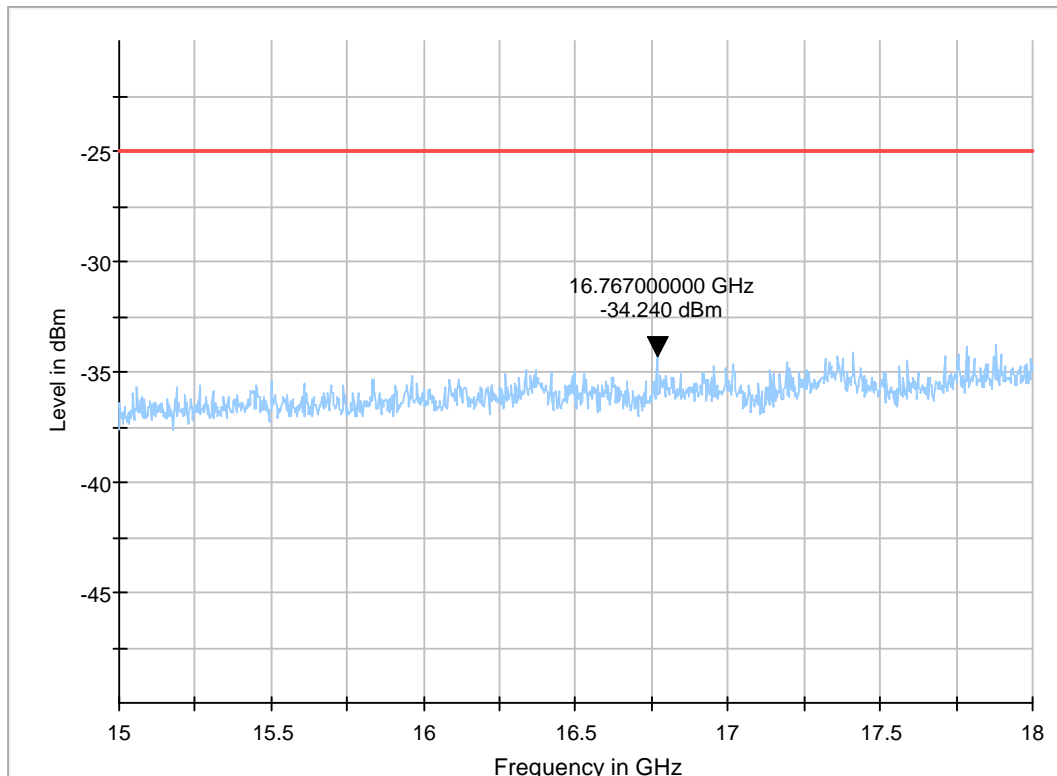
## Common Information

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

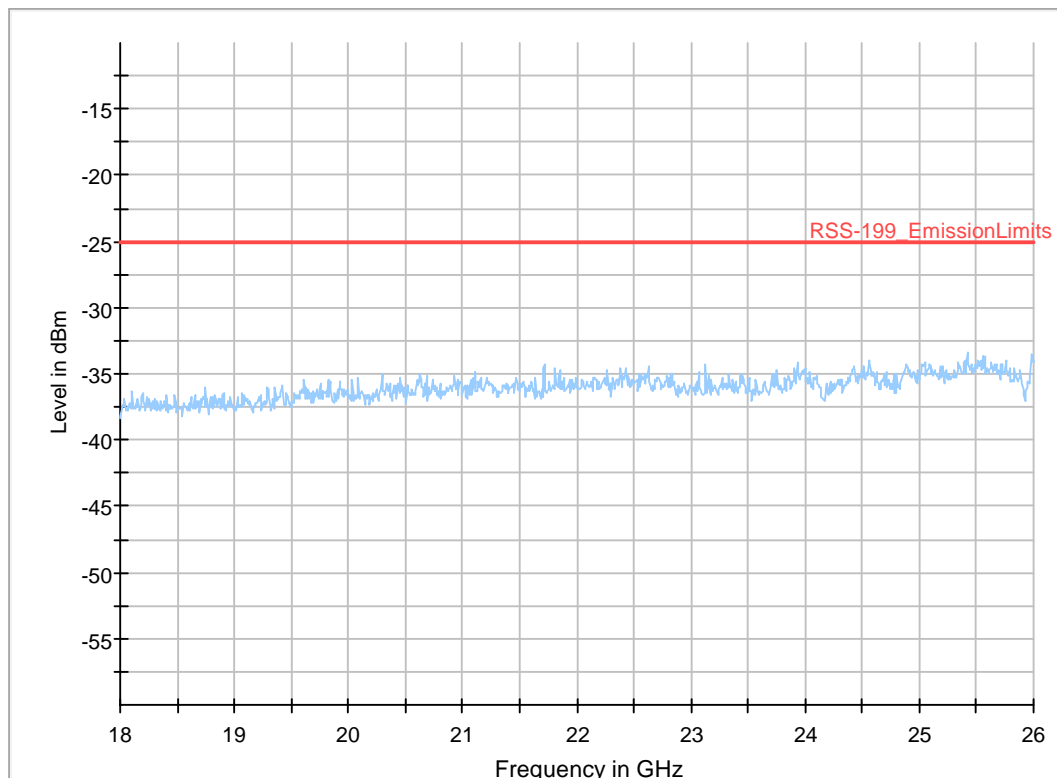
### Common Information

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

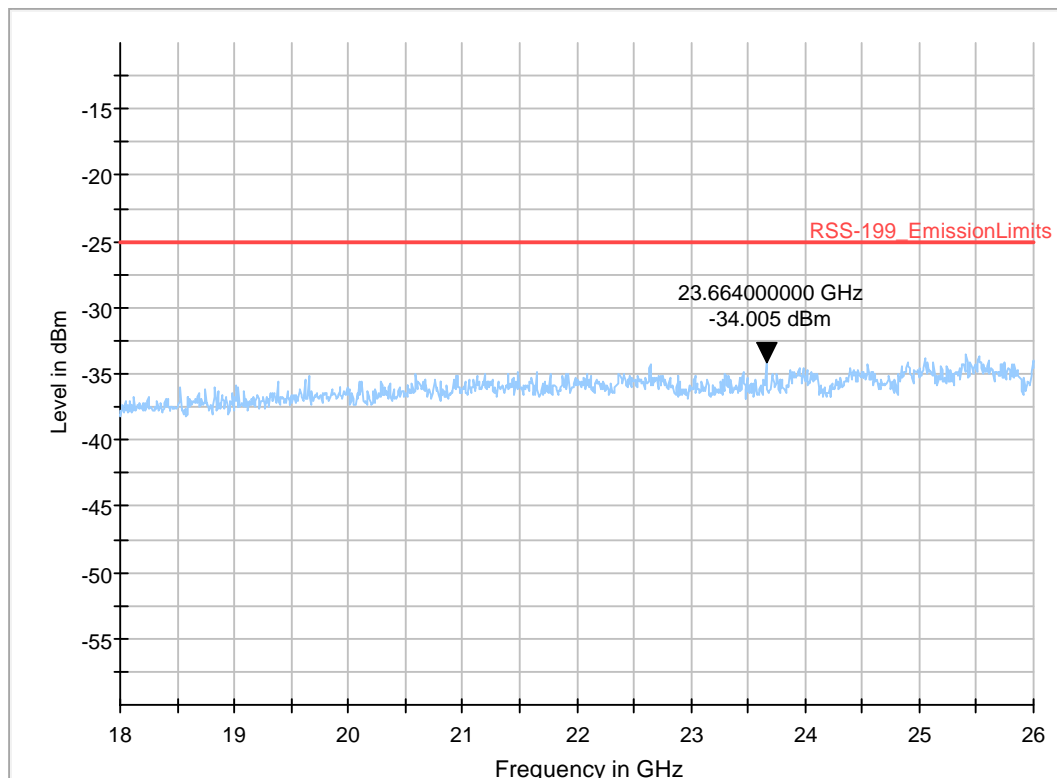
### Common Information

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

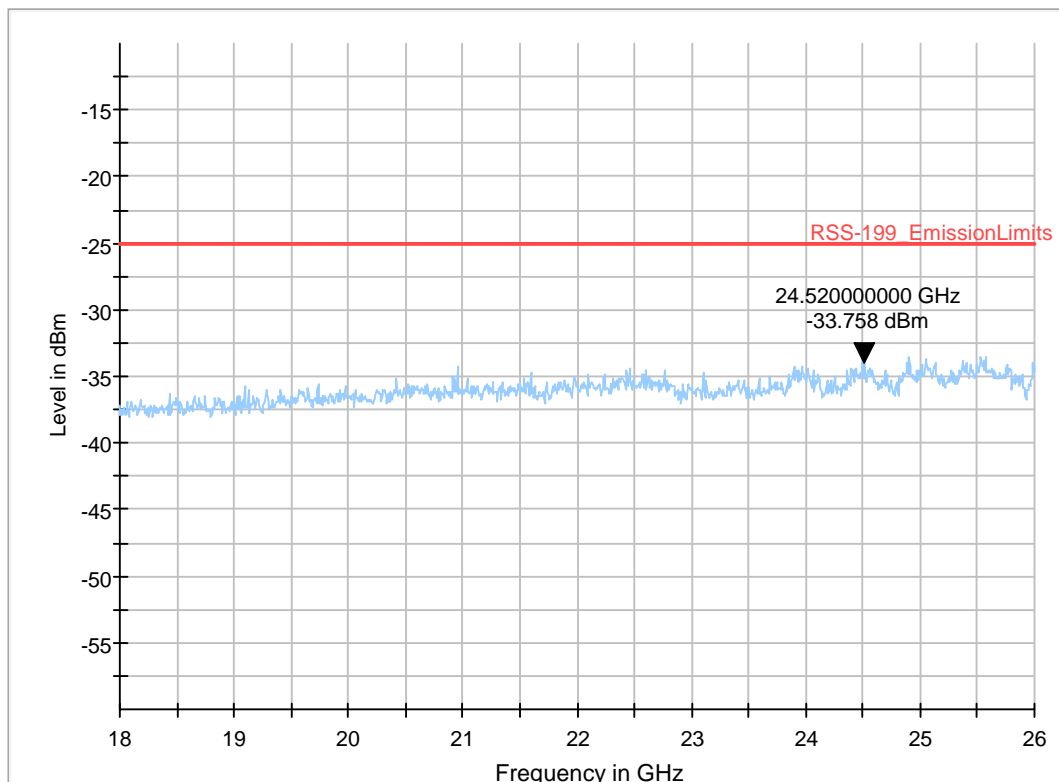
## Common Information

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

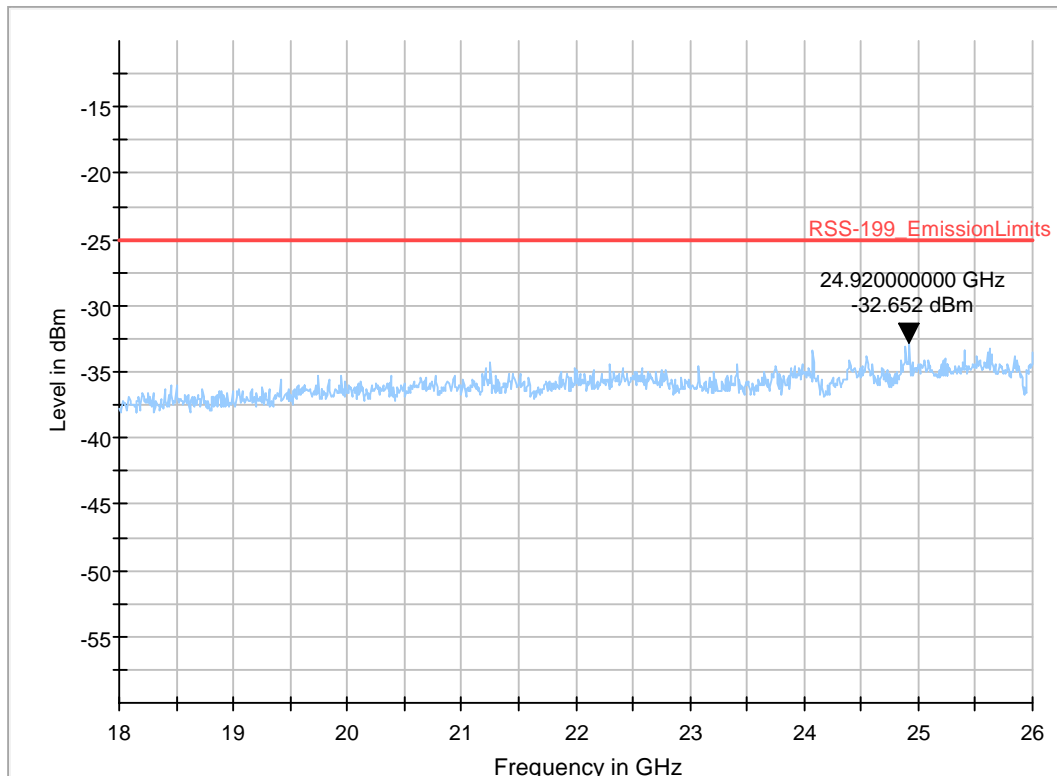
## Common Information

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

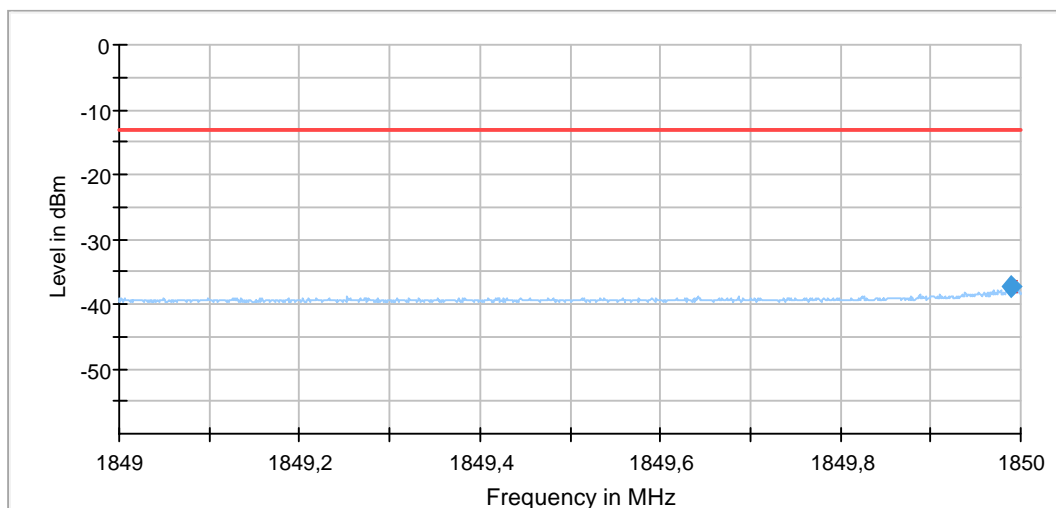
### Common Information

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
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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)
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

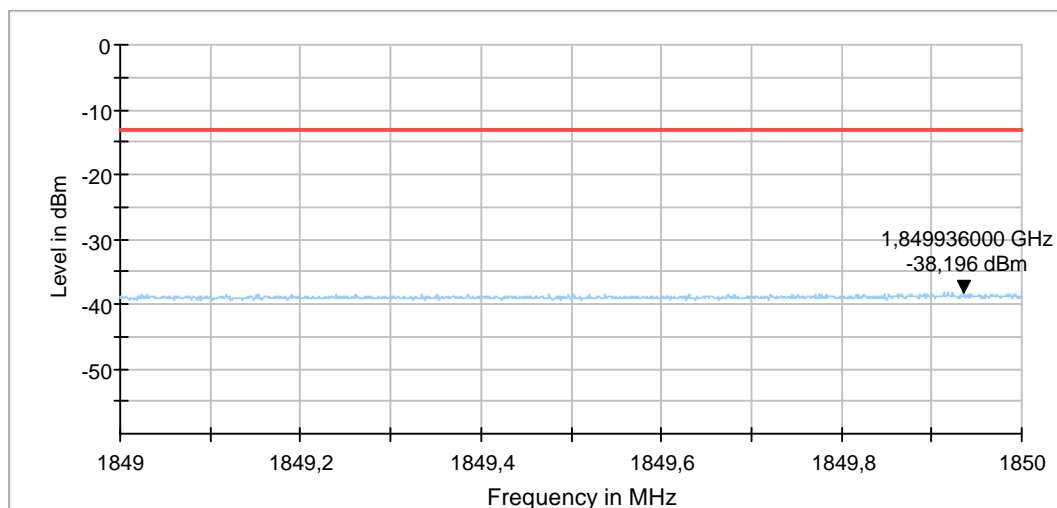
## Common Information

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

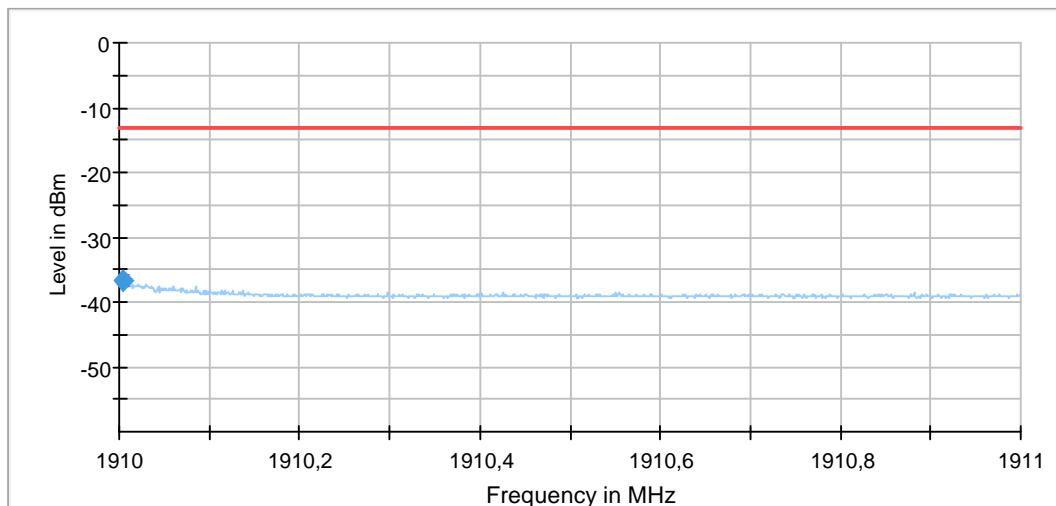
### Common Information

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

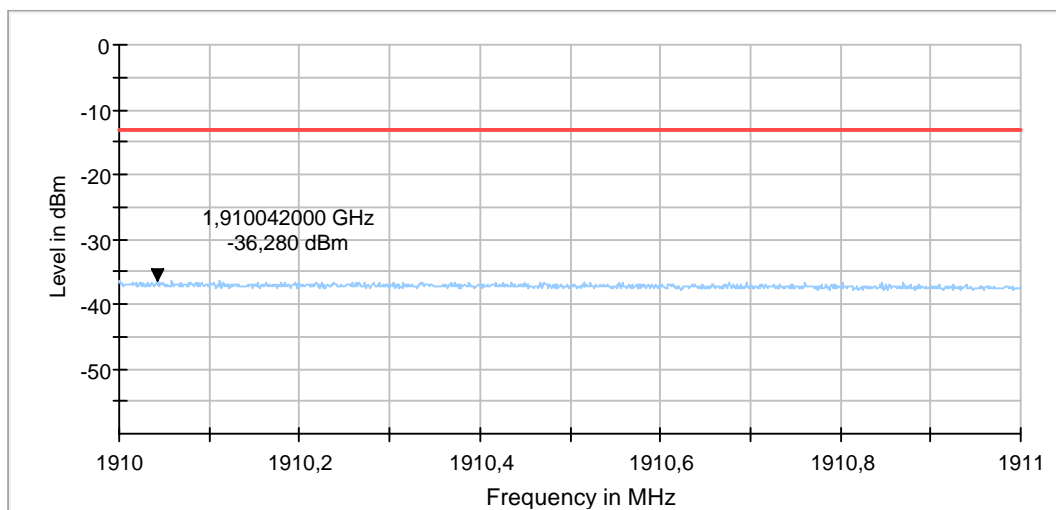
### Common Information

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



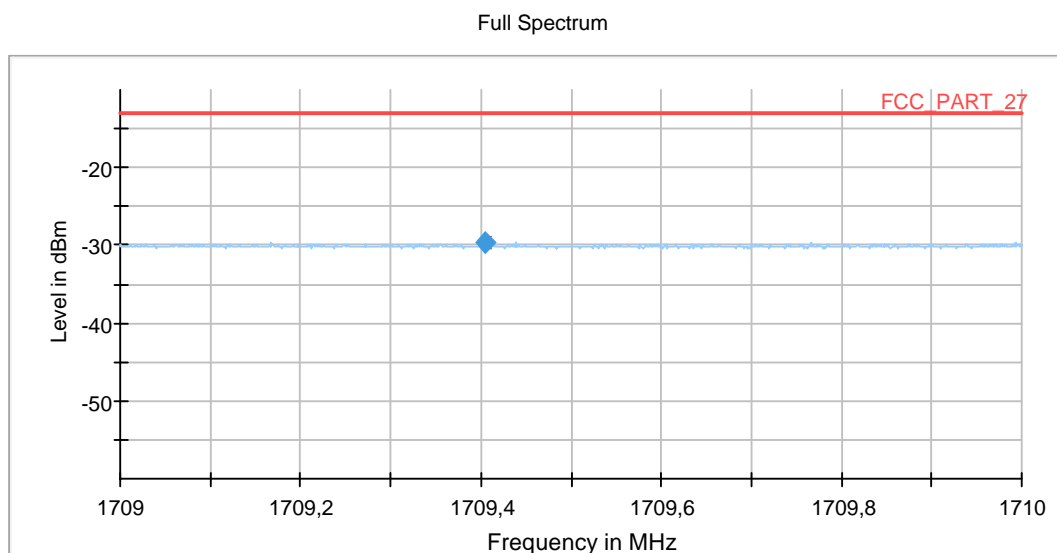
# 9.401\_Bandedge\_low\_LTE\_FDD\_B04\_CH\_low\_RB\_1\_low

## 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

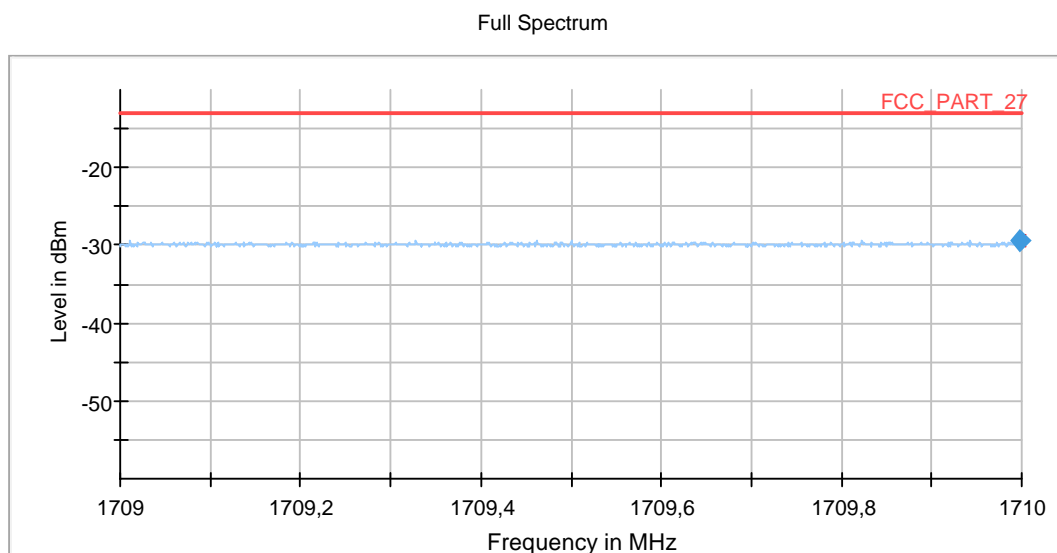
# 9.402\_Bandedge\_low\_LTE\_FDD\_B04\_CH\_low\_RB\_Full

## 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

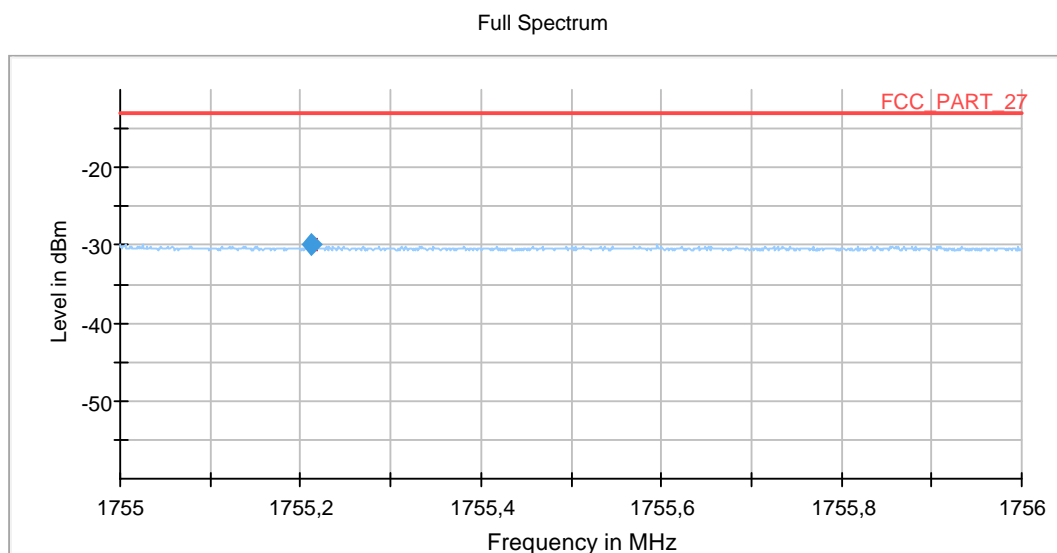
## 9.403\_Bandedge\_high\_LTE\_FDD\_B04\_CH\_high\_RB\_1\_high

### 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

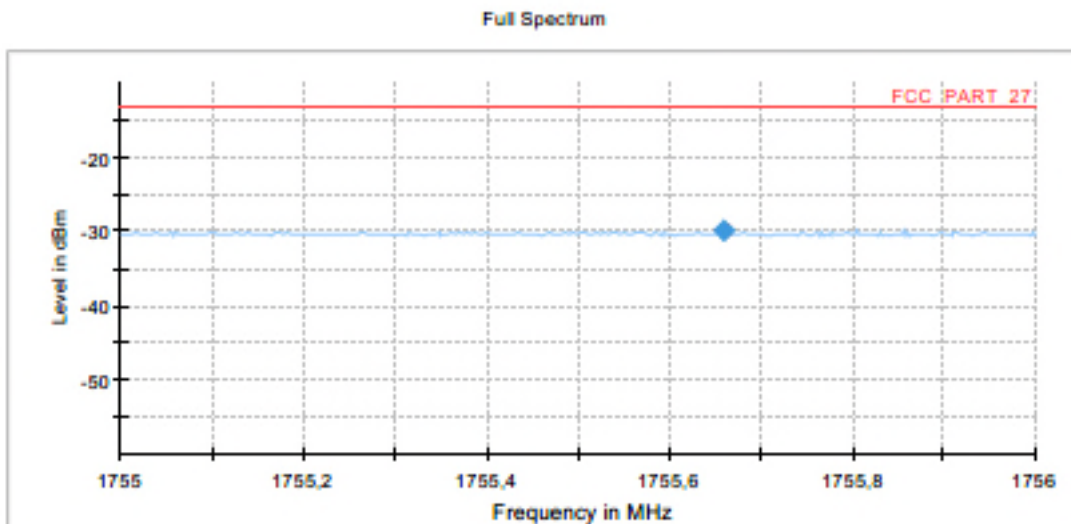
# 9.404\_Bandedge\_high\_LTE\_FDD\_B04\_CH\_high\_RB\_Full

## 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

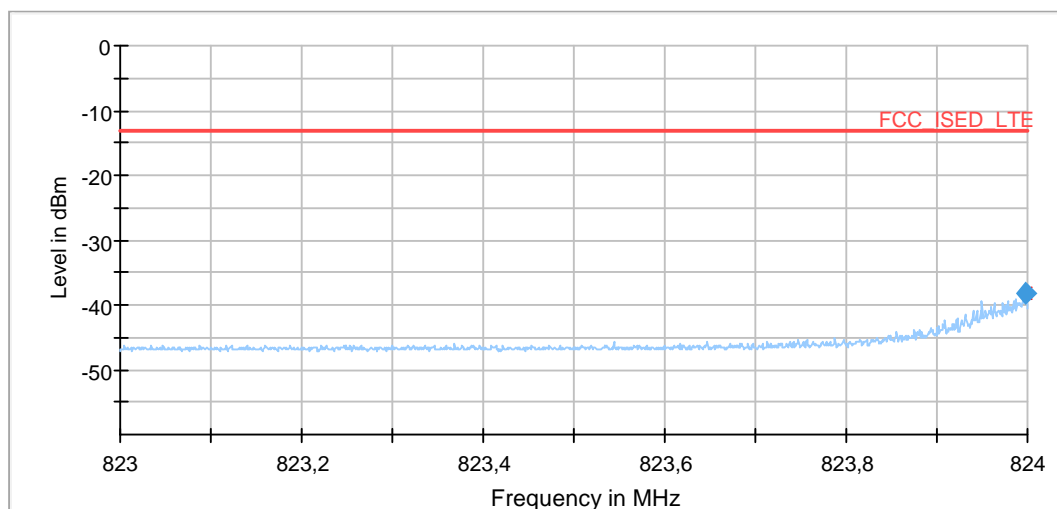
## Common Information

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 | UL channel:20450 | BW10MHz | 1RB, low | 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



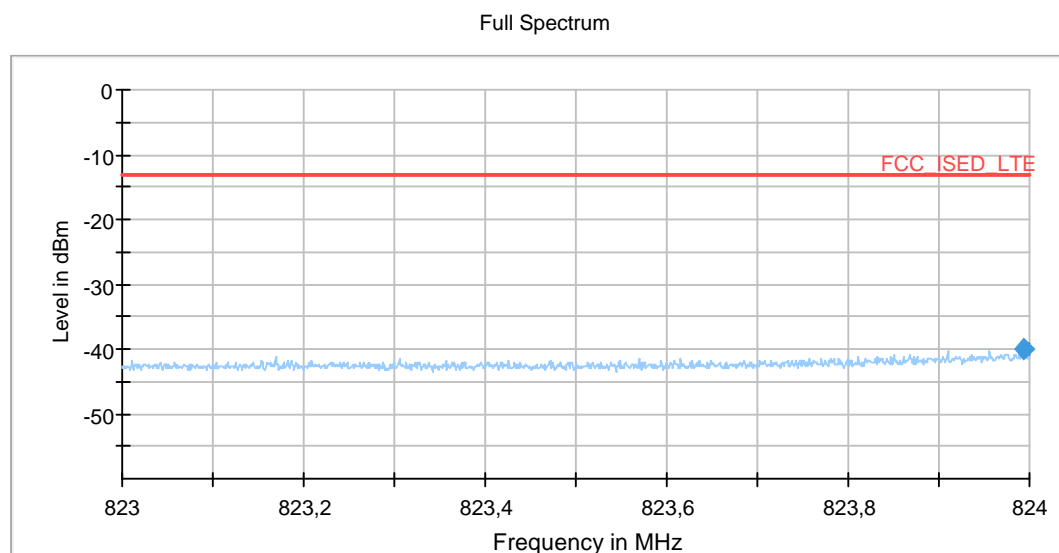
# 9.502\_Bandedge\_low\_LTE\_FDD\_B05\_CH\_low\_RB\_Full

## 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



## 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

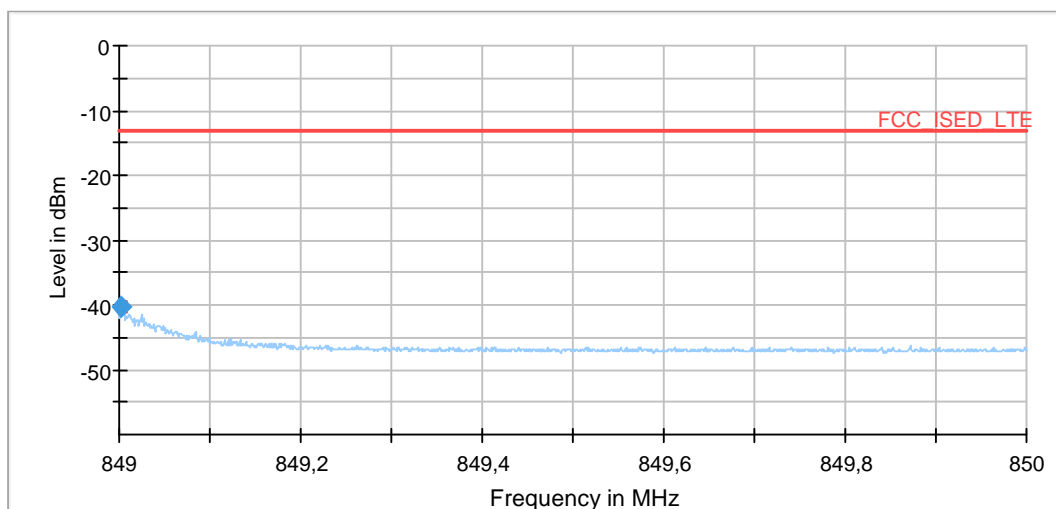
### Common Information

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

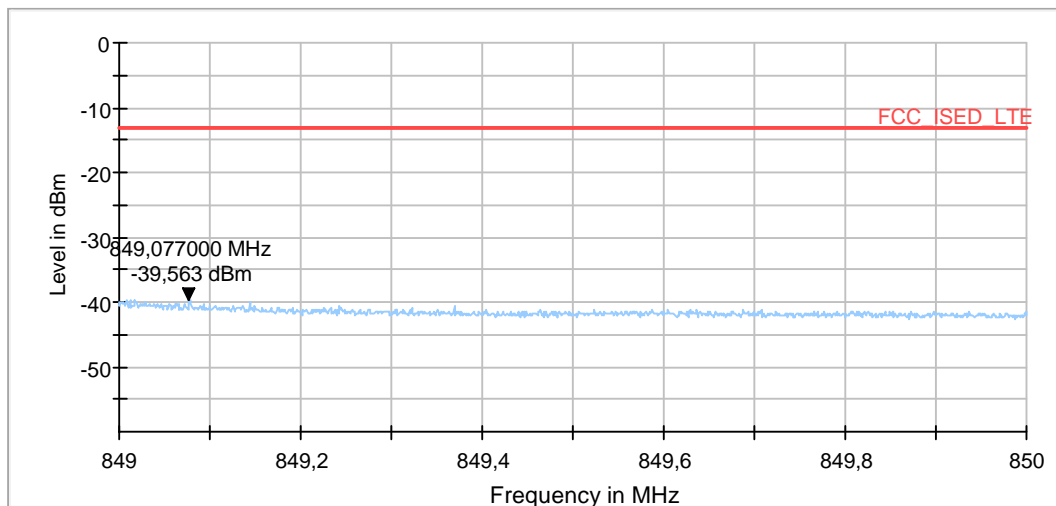
### Common Information

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

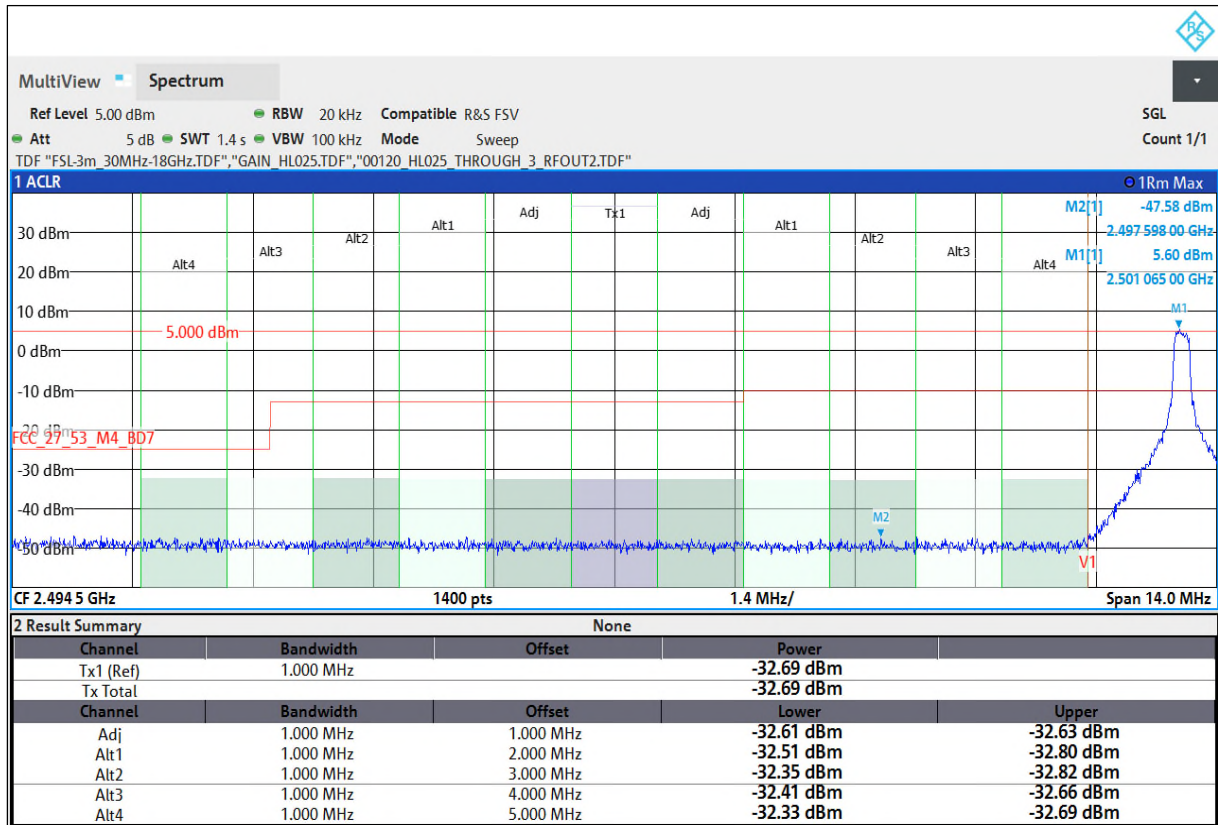
### EUT Information

PMT number:	22-1-00306S139_C01
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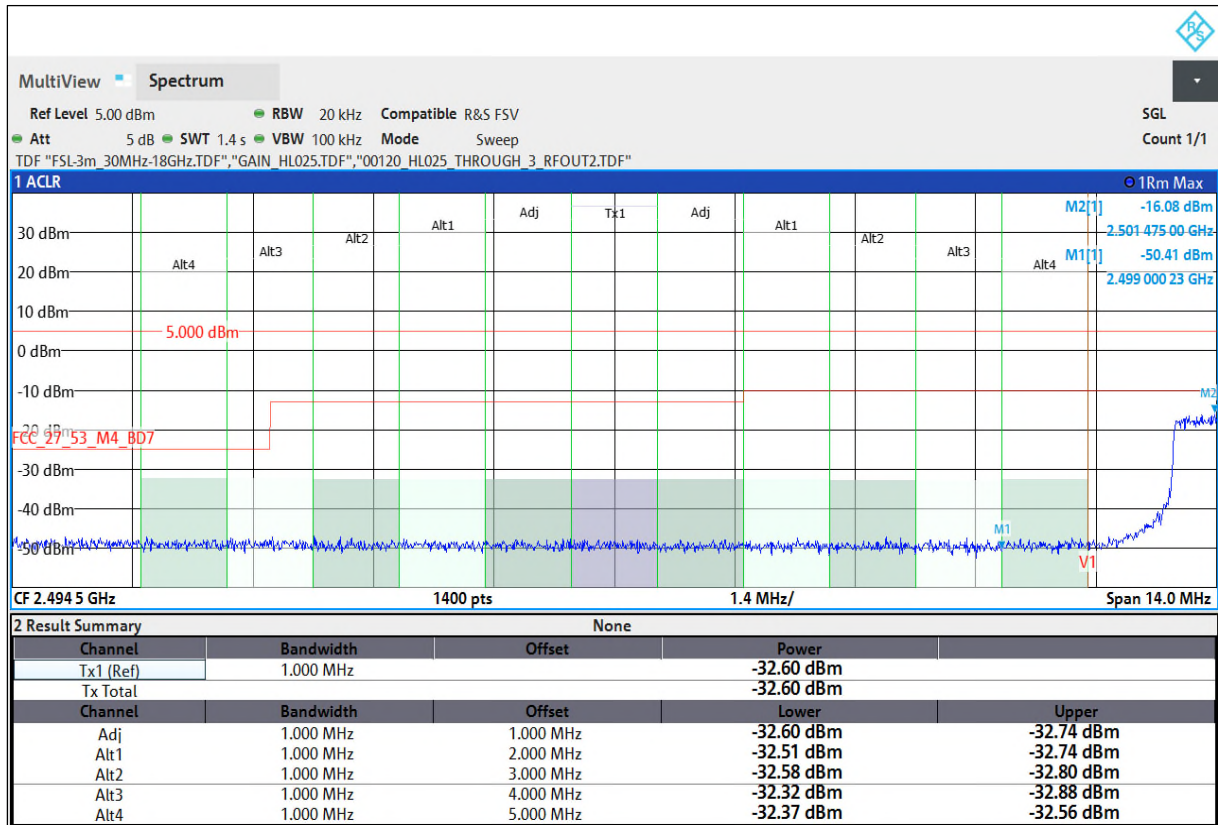
Full Spectrum



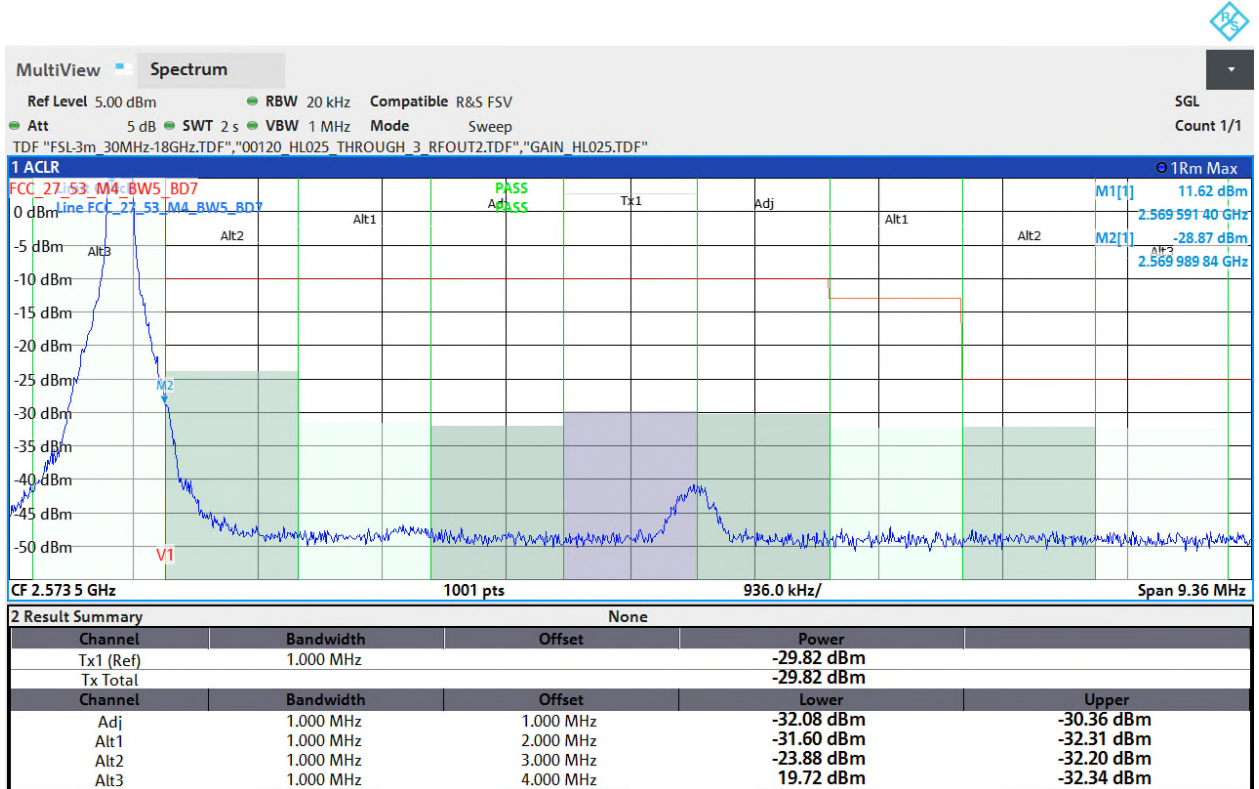
### 9.701\_BE\_low\_ch\_20850\_BW20M\_1RB\_low



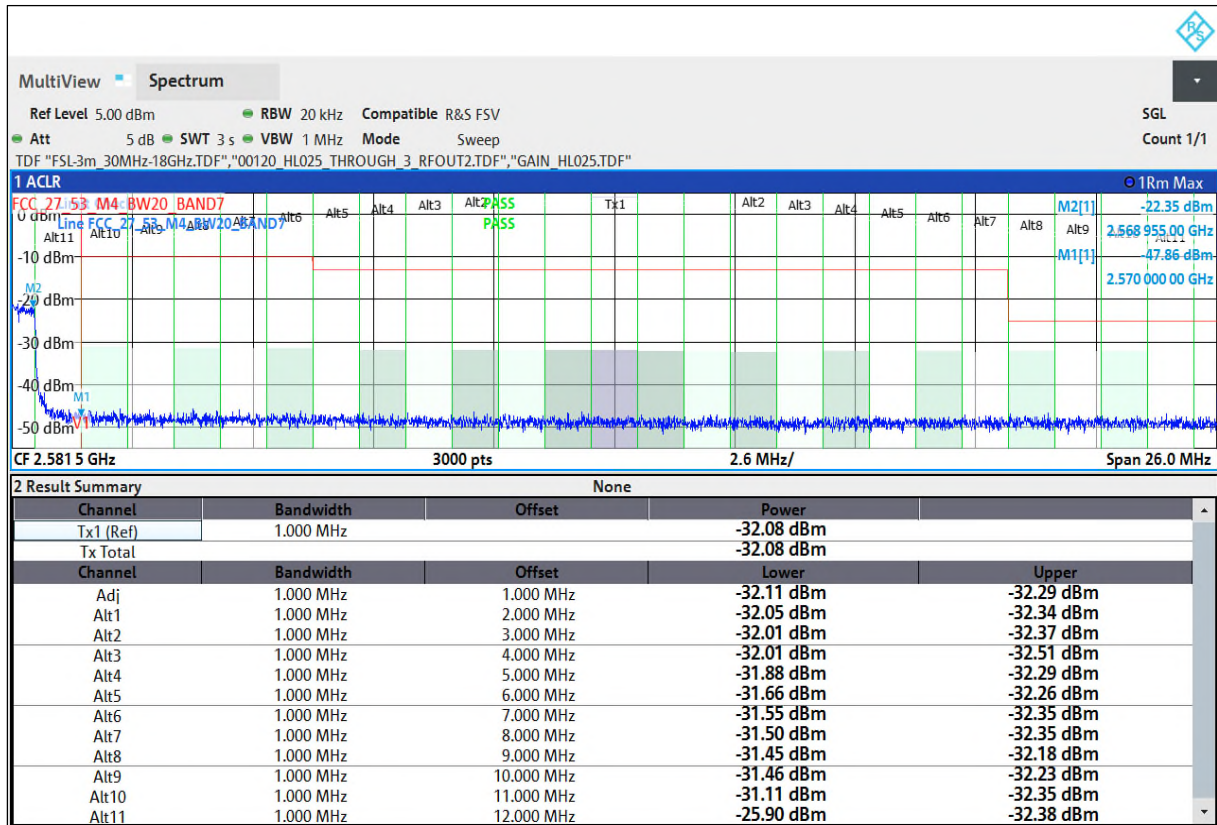
### 9.702\_BE\_low\_ch\_20850\_BW20M\_Full\_RB



### 9.703\_BE\_high\_ch\_21350\_BW20M\_1RB\_high



### 9.704\_BE\_high\_ch\_21350\_BW20M\_Full\_RB



End Of Annex 1