

Annex 1: Measurement diagrams to  
**TEST REPORT**  
 No.: 16-1-0050601T39a

According to:  
**FCC Regulations**  
 Part 22, Part 24







**IC-Regulations**  
 RSS-132 Issue 3, RSS-133 Issue 6,  
 RSS-Gen Issue 4

for

peiker acoustic GmbH & Co KG

**GSM/ WCDMA/ LTE Telematics US Module**  
**V1231-0**

FCC-ID: QWY-V1231-0  
 ISED ID: 6588A-V12310  
 PMN: V1231-0  
 HVIN: V1231-0

Laboratory Accreditation and Listings		
 Deutsche Akkreditierungsstelle D-PL-12047-01-01  Accredited EMC-Test Laboratory	 Industry Canada  Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions  Reg. No.: R-20013, C-20009, T-20006, G-20013
 AUTHORIZED RF LABORATORY	 Authorized Test Lab Lab Code: 20011130-00	 FEDERAL COMMUNICATIONS COMMISSION U.S.A. MRA US-EU 0003
accredited according to DIN EN ISO/IEC 17025		
<p align="center"><b>CETECOM GmbH</b>            Laboratory Radio Communications &amp; Electromagnetic Compatibility            Im Teelbruch 116 • 45219 Essen • Germany            Registered in Essen, Germany, Reg. No.: HRB Essen 8984            Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964            E-mail: info@cetecom.com • Internet: www.cetecom.com</p>		
Laboratory Accreditation and Listings		

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# 1. Measurement diagrams

## 1.1. Magnetic field strength measurements GSM850 Mode

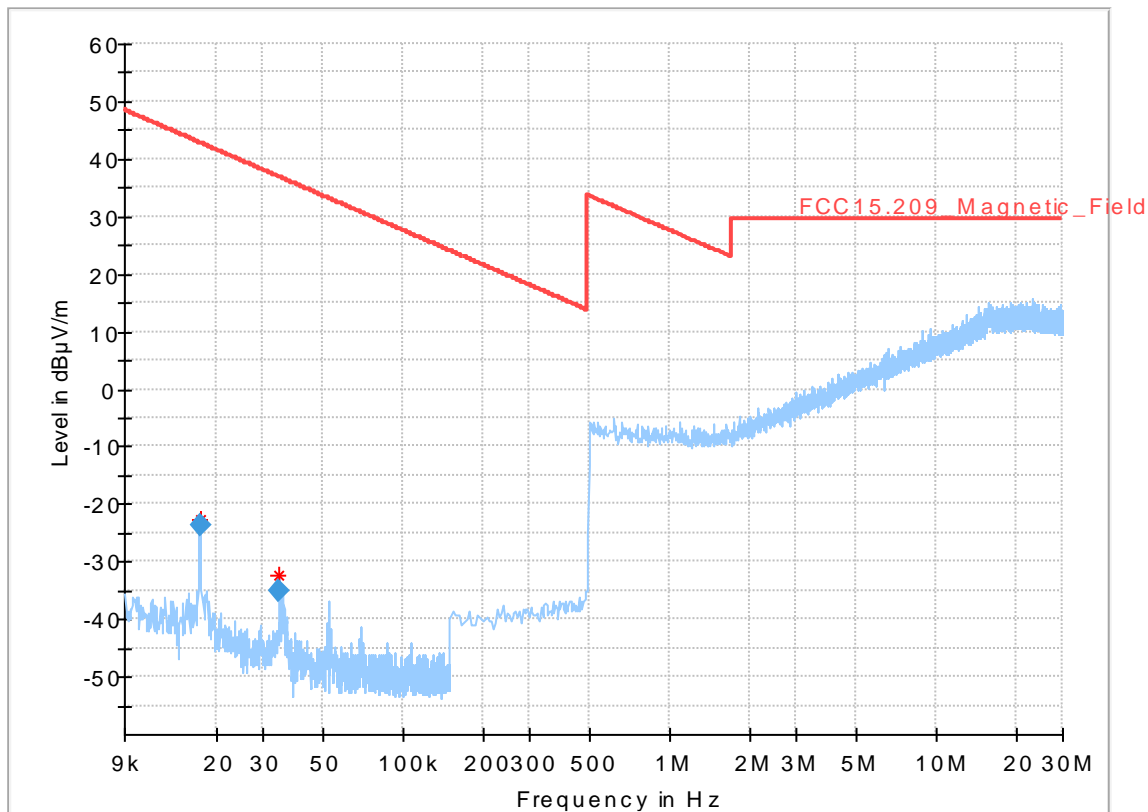
### Diagram No. 2.01a\_RSE\_R\_Ch128\_GPRS

Date:	03.04.2017	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
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 specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	
Operator:	Klv	
Operating conditions:	TX-on	
Power during tests:	12V DC	
Comment 1:	Channel 128	
Comment 2:	EUT standing	

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



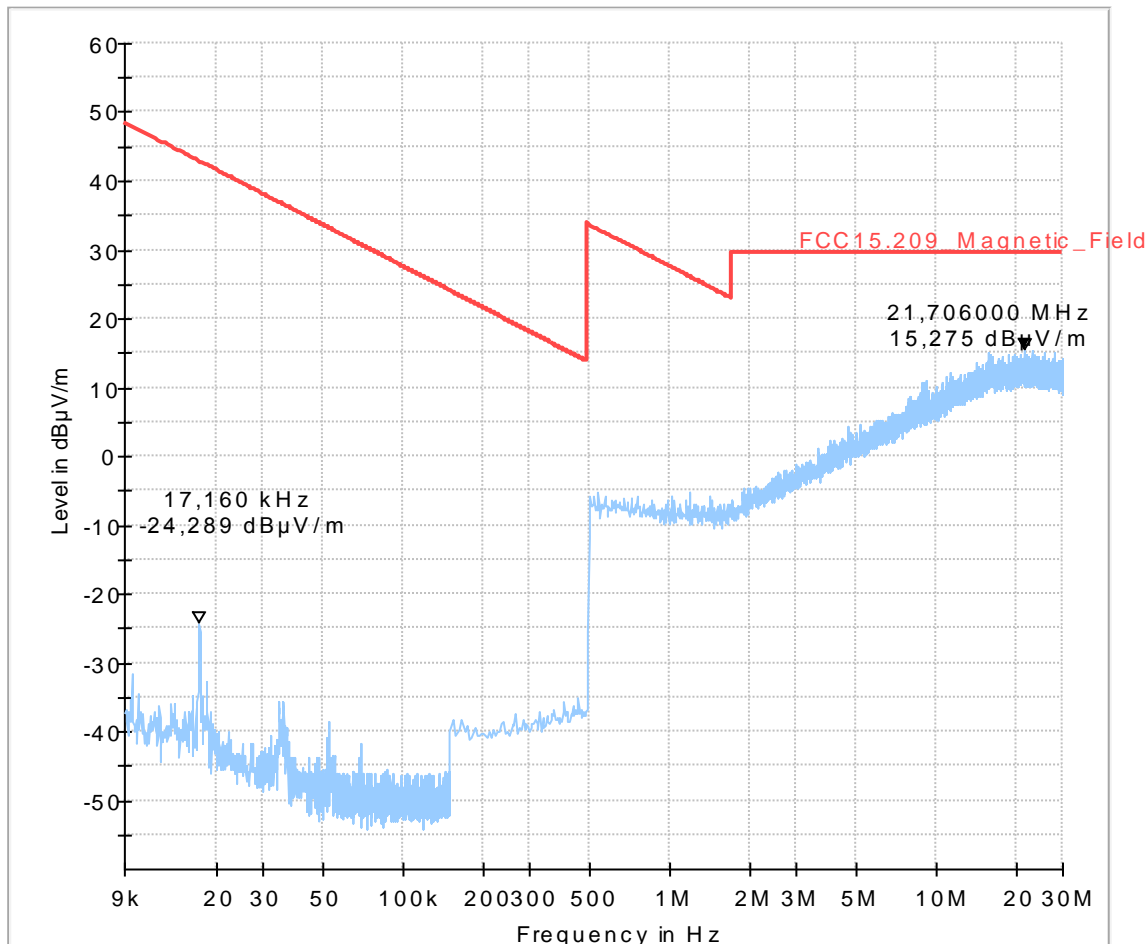
## 2.01b\_RSE\_R\_Ch128\_GPRS

### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical date:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	SLo
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	Channel 128
Comment 2:	EUT laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



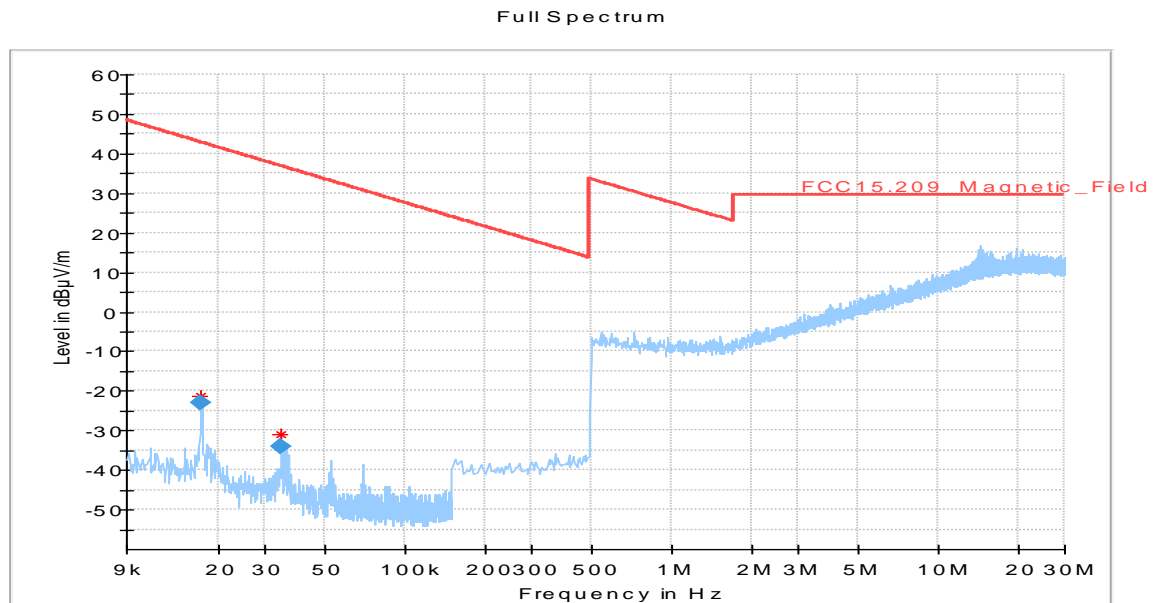
## Diagram No. 2.02a\_RSE\_R\_Ch192\_GPRS

Test description:	Date: 03.04.2017 Page 1 of 2
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	Klv
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	Channel 192
Comment 2:	EUT standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

### Full Spectrum



### Final Result

Frequency (MHz)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
0.017160	-22.89	42.91	65.79	1000.0	0.200	100.0	V	109.0	-58.7
0.034360	-34.13	36.88	71.00	1000.0	0.200	100.0	V	34.0	-59.5

## 2.02b\_RSE\_R\_Ch192\_GPRS

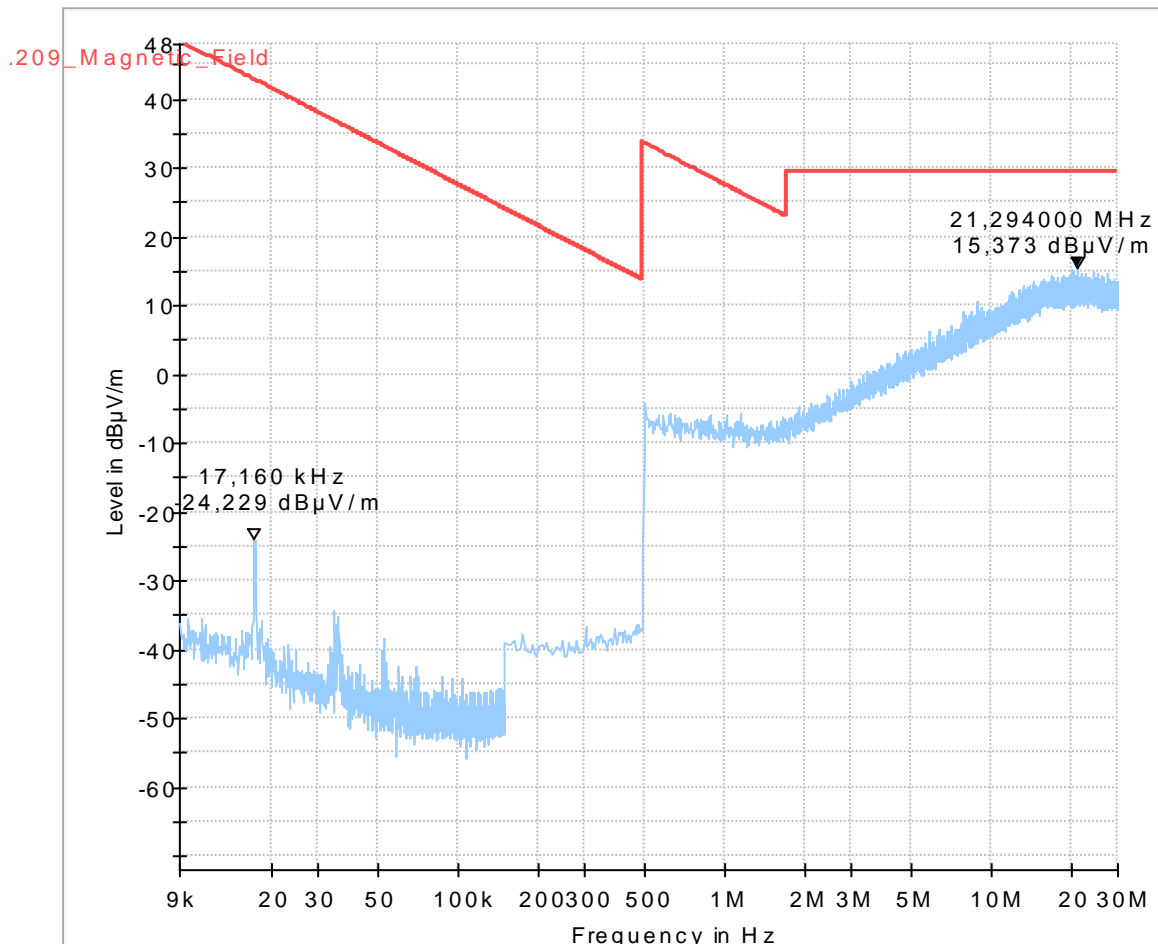
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical date:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	SLo
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	Channel 192
Comment 2:	EUT laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



## 2.03a\_RSE\_R\_Ch251\_GPRS

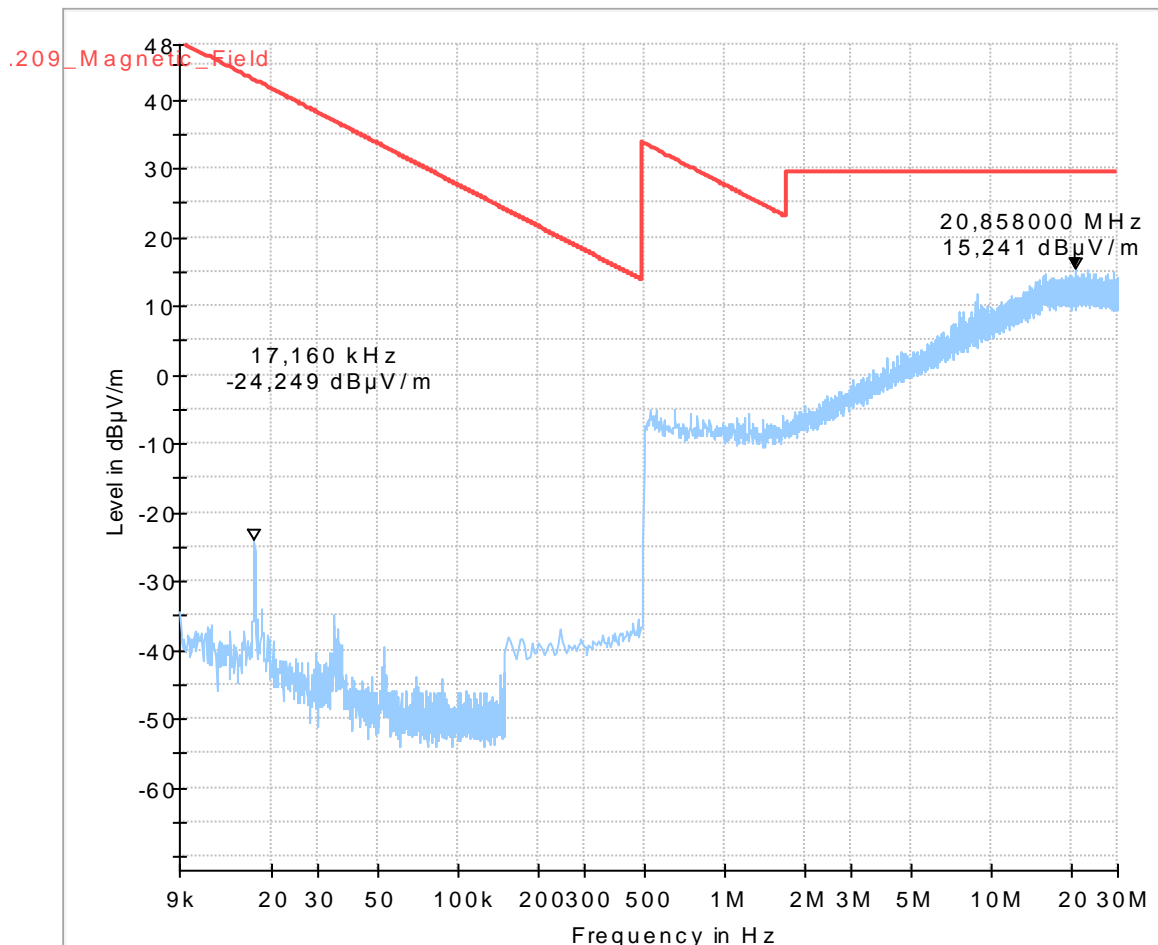
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical date:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	SLo
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	Channel 251
Comment 2:	EUT standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



## 2.03b\_RSE\_R\_Ch251\_GPRS

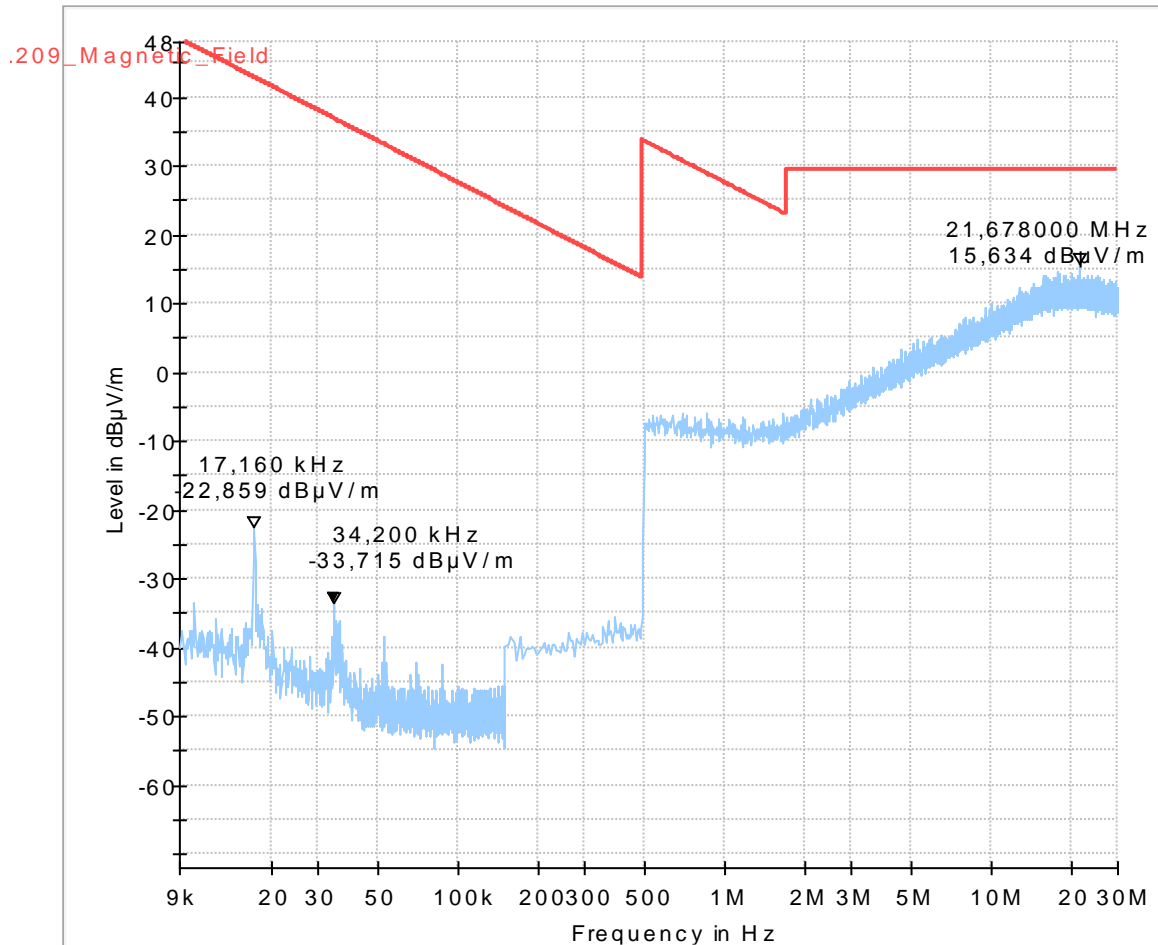
### Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of testsoftware:	EMC32 V9.25.0
Distance correction:	used accord. table, pls. see test report
Technical date:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	RI
Operating conditions:	TX-on
Power during tests:	12V DC
Comment 1:	Channel 251
Comment 2:	EUT laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-





## 1.2. Magnetic field strength measurements GSM1900 Mode

### Diagram No. 2.10\_RSE\_R\_Ch512\_GPRS

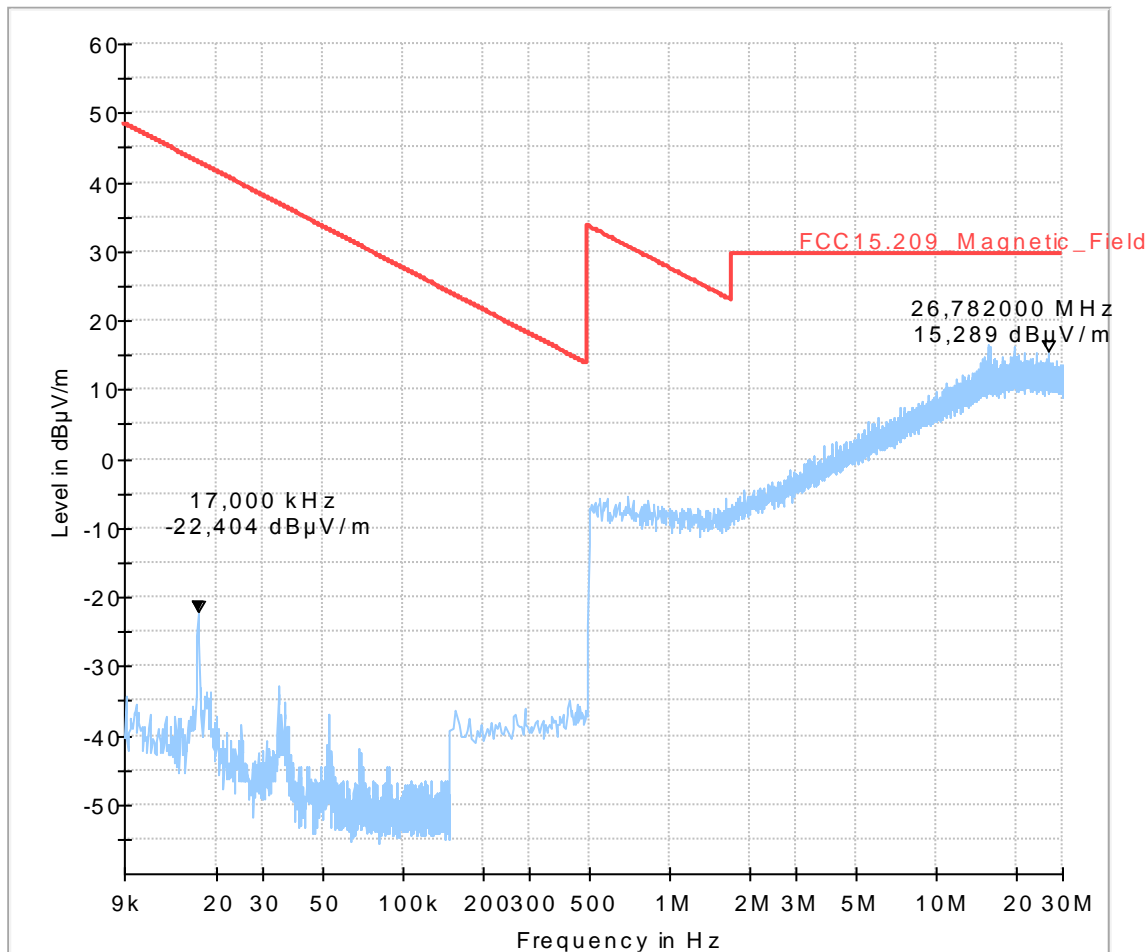
Test description:	Date: 14.04.2017 Page 1 of 5
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	MBe
Power during tests:	12V DC
Comment 1:	Channel low

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



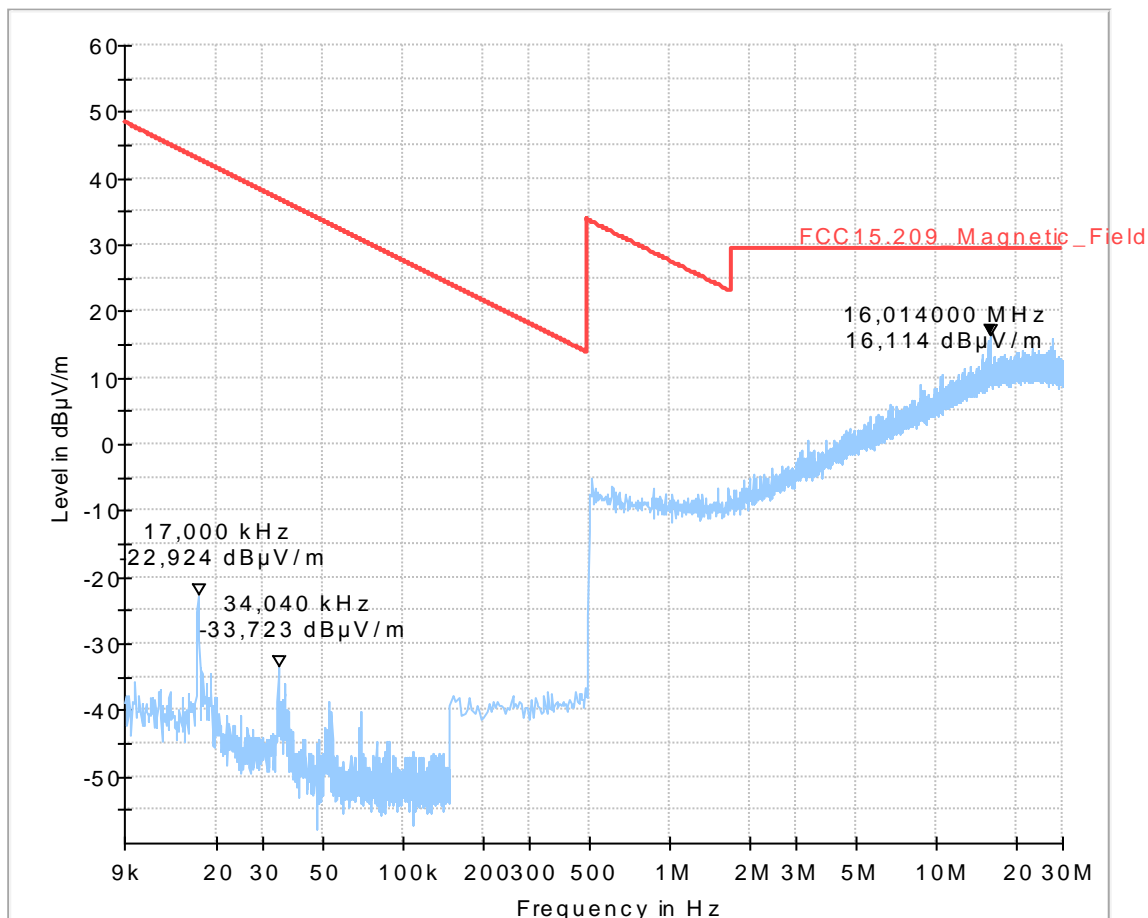
## Diagram No. 2.10b\_RSE\_R\_Ch512\_GPRS

Test description:	Date: 14.04.2017 Page 1 of 5
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator:	Afr
Power during tests:	12V DC
Comment 1:	Channel low
Comment 2:	DUT Laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



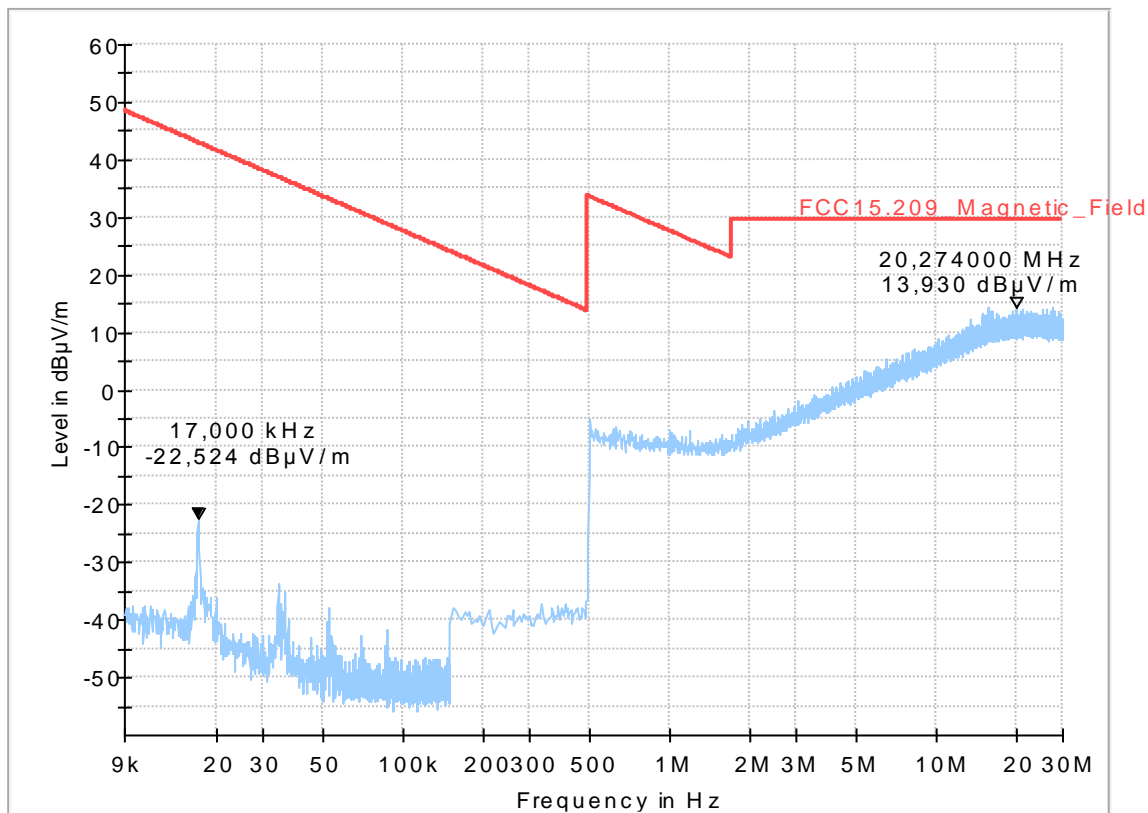
## Diagram No. 2.11\_RSE\_R\_Ch661\_GPRS

Test description: Test site and distance: Version of Testsoftware: Distance correction: Technical Data: Rec. antenna (pre-scan): Used filter: Test specification:	Date: 14.04.2017 Page 1 of 1 Magnetic Field Strength Measurement related to 30/300 m distance Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance EMC32 V9.25.0 used accord. table, pls. see test report Please see page 2 for detailed data of measurement setup height 1.00 m, parallel and 90° to EUT polarisation bypass FCC 15.205 § 15.209; RSS-Gen: Issue 4
Operator: Power during tests: Comment 1:	MBe 12V DC Channel mid

### EUT Information

Manufacturer: EUT: ----- HW version: SW version: Serial number: Connected Interfaces:  Power Supply: Comments:	peiker acustic GmbH & Co. KG V1231-0 ----- V1231-0_Ver.1 MPSS.TH.2.0.2-00256 004402580040446 Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables 12VDC -
---	--

Full Spectrum



## Diagram No. 2.11b\_RSE\_R\_Ch661\_GPRS

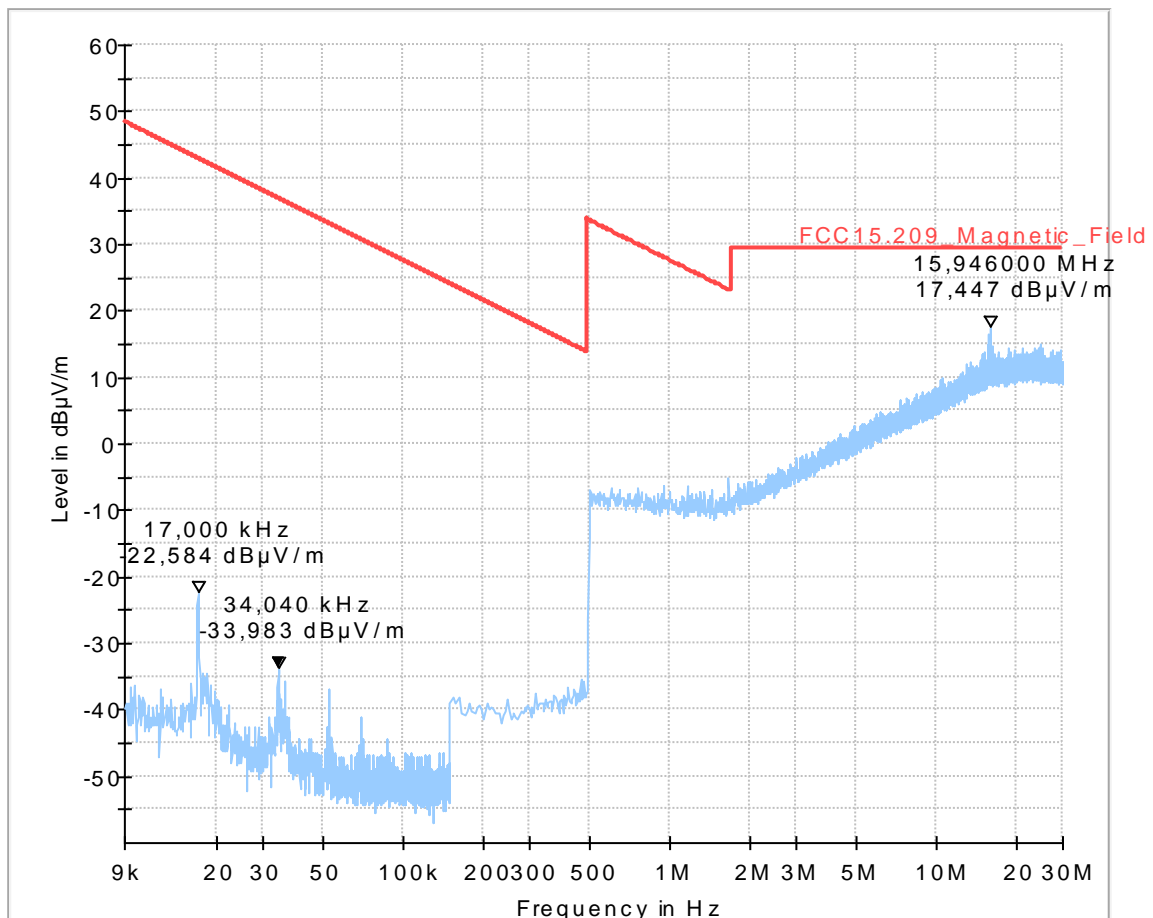
Test description:	Date: 14.04.2017 Page 1 of 3
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	AFr
Power during tests:	12V DC
Comment 1:	Channel middle
Comment 2:	DUT Laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



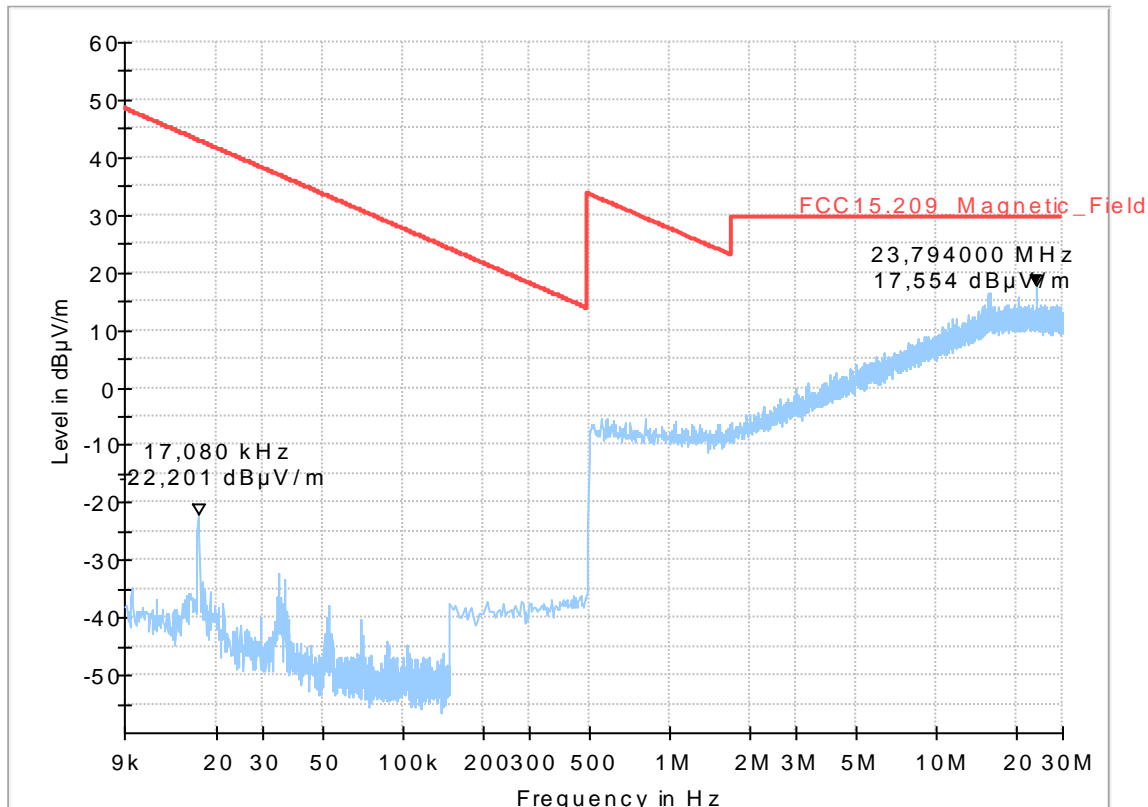
## Diagram No. 2.12\_RSE\_R\_Ch810\_GPRS

Date:	14.04.2017	Page 1 of 1
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V9.25.0	
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 specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 4	
Operator:	MBe	
Power during tests:	12V DC	
Comment 1:	Channel high	

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



## Diagram No. 2.12b\_RSE\_R\_Ch810\_GPRS

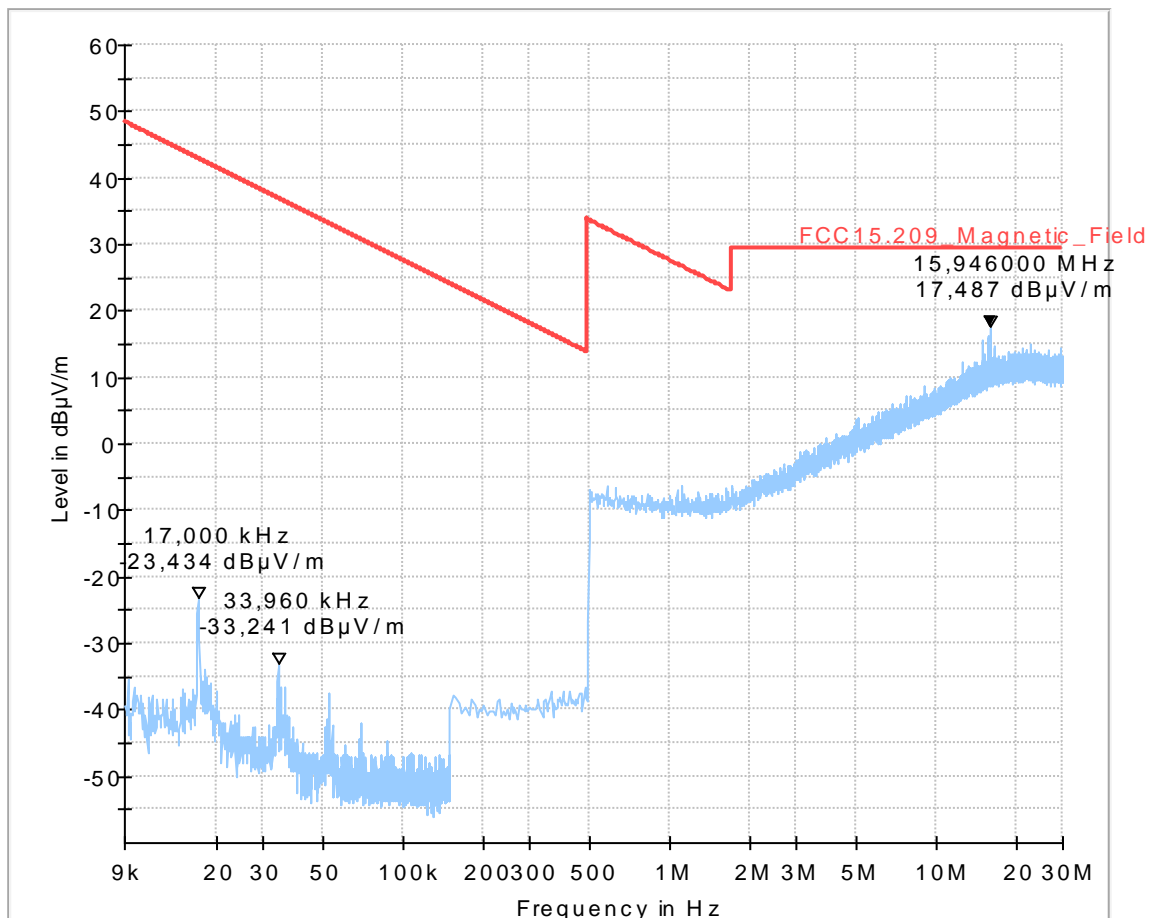
Test description:	Date: 14.04.2017 Page 1 of 3
Test site and distance:	Magnetic Field Strength Measurement related to 30/300 m distance
Version of Testsoftware:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Distance correction:	EMC32 V9.25.0
Technical Data:	used accord. table, pls. see test report
Rec. antenna (pre-scan):	Please see page 2 for detailed data of measurement setup
Used filter:	height 1.00 m, parallel and 90° to EUT polarisation
Test specification:	bypass
	FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator:	AFr
Power during tests:	12V DC
Comment 1:	Channel high
Comment 2:	DUT Laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### 1.3. Spurious emissions radiated (850 MHz operating mode)

## 8.01a\_RSE\_R\_Ch128\_GPRS

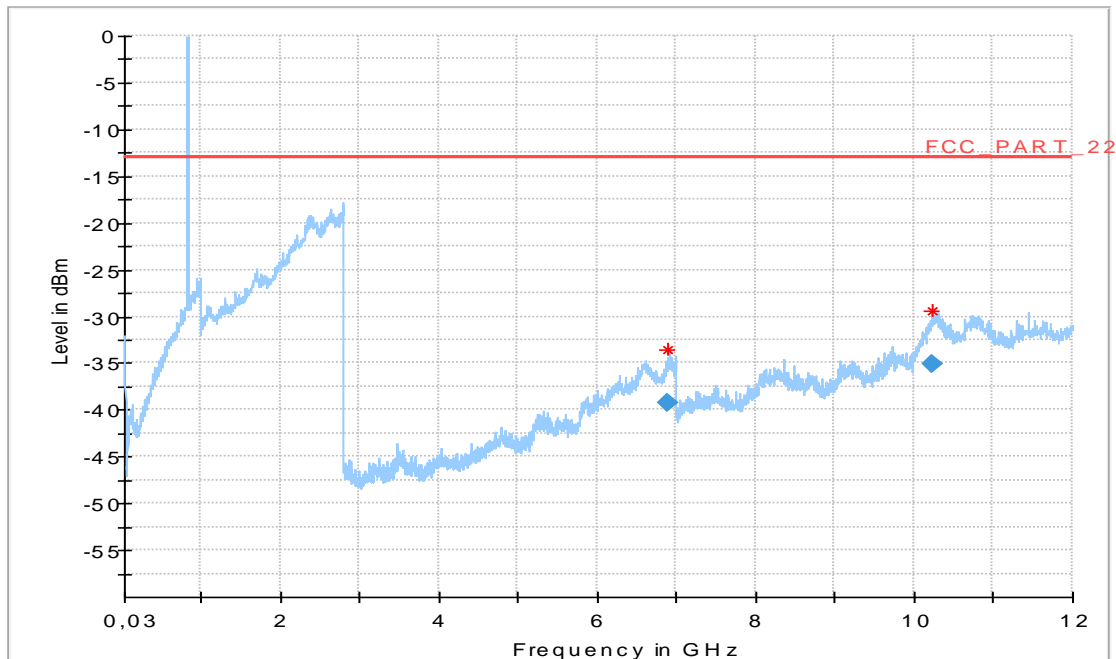
#### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917/ RSS-132
Test Case:	-
Operating Mode:	MS allocated UL channel 128
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Ch128
Comment:	DUT standing

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



#### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Corr. (dB)
6900.571142	-	26.22	5000.0	V	89.0	-84.9
10236.823647	13.00	22.08	5000.0	H	337.0	-77.9

## 8.01b\_RSE\_R\_Ch128\_GPRS

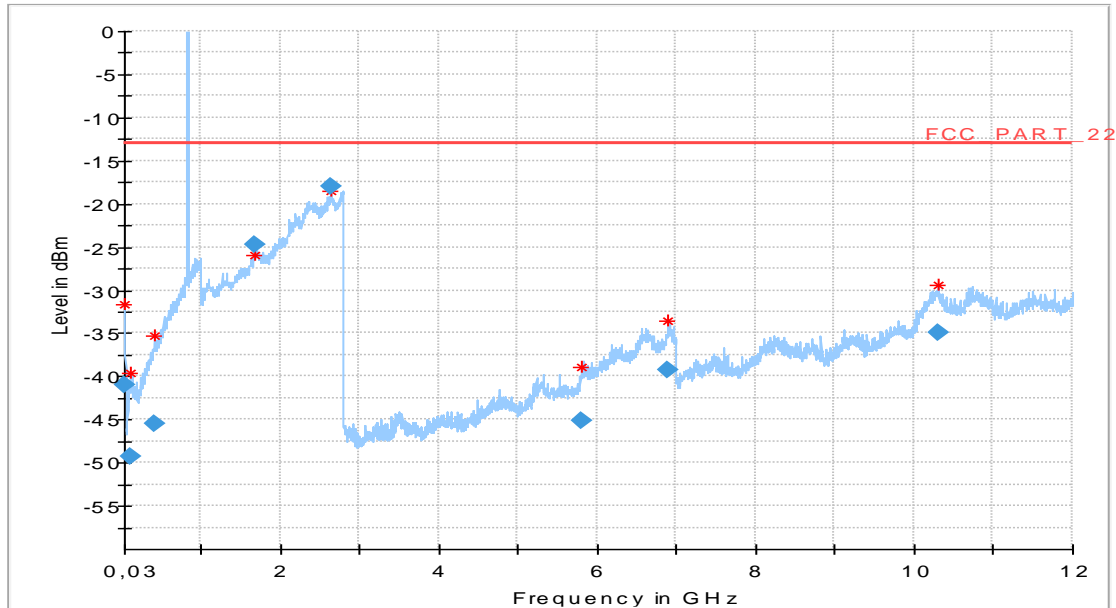
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917/ RSS-132
Test Case:	-
Operating Mode:	MS allocated UL channel 128
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Ch128
Comment:	DUT laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Corr. (dB)
30.140281	-	28.01	5000.0	H	-2.0	-76.4
115.881763	-	36.22	5000.0	H	203.0	-85.7
404.198397	-	32.47	5000.0	V	-48.0	-82.4
1671.472946	-	11.67	5000.0	H	26.0	-63.1
2632.695391	-	5.06	5000.0	H	88.0	-58.7
5791.372745	-	32.16	5000.0	V	247.0	-88.1
6899.909819	-	26.26	5000.0	H	174.0	-84.9
10298.84769	-	21.98	5000.0	H	286.0	-77.8
5	13.00					



## 8.02a\_RSE\_R\_Ch192\_GPRS

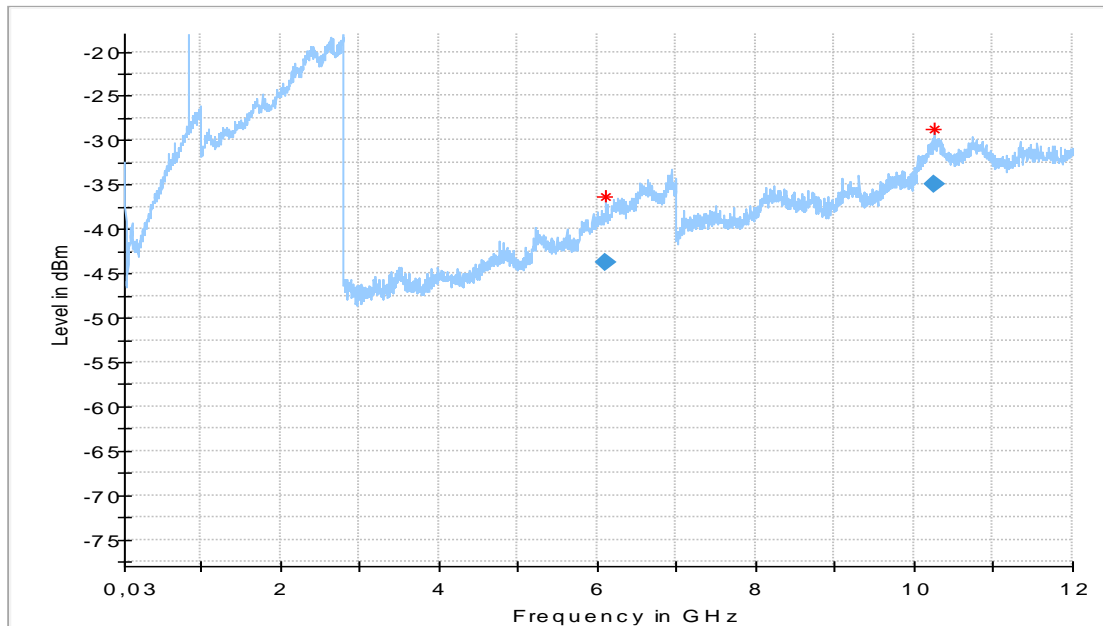
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917/ RSS-132
Test Case:	-
Operating Mode:	MS allocated UL channel 251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Ch192
Comment:	DUT standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Corr. (dB)
6108.567134	-	30.71	5000.0	V	321.0	-87.4
10246.703407	13.00	21.98	5000.0	V	202.0	-77.8

## 8.02b\_RSE\_R\_Ch192\_GPRS

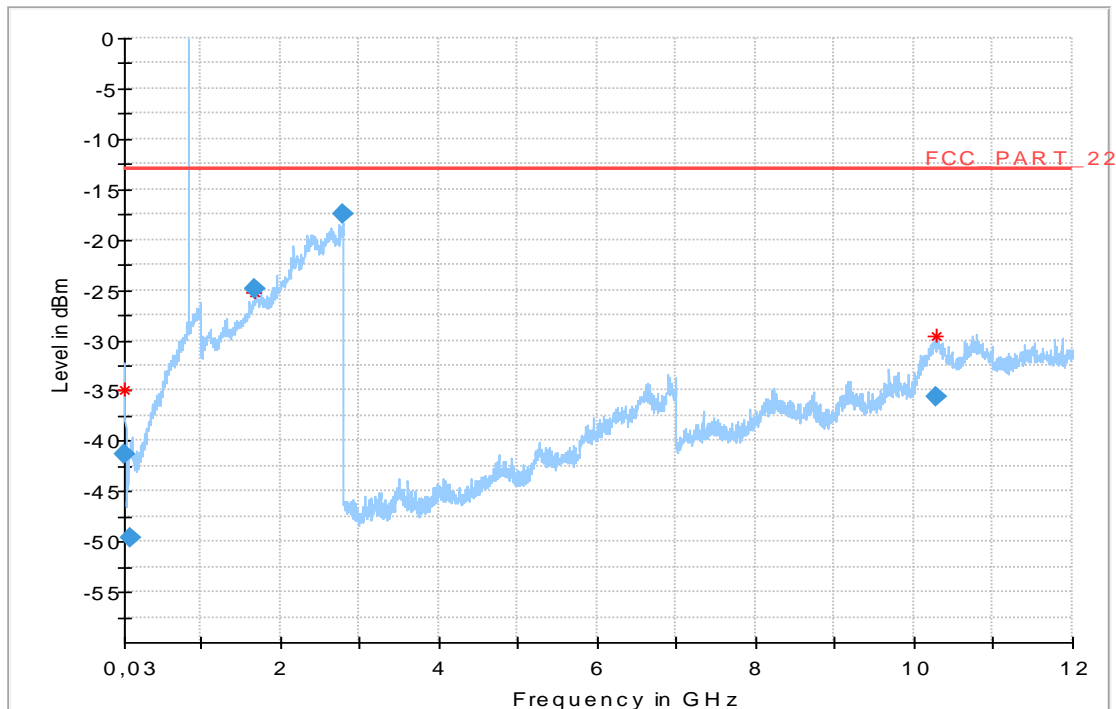
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917/ RSS-132
Test Case:	-
Operating Mode:	MS allocated UL channel 192
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Ch192
Comment:	DUT laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Corr. (dB)
30.911823	-	28.33	5000.0	V	67.0	-76.8
115.160321	-	36.56	5000.0	V	-13.0	-85.7
1675.541082	-	11.98	5000.0	V	337.0	-63.1
2798.446894	-	4.45	5000.0	H	-13.0	-57.1
10278.34669	-	22.56	5000.0	H	91.0	-77.8
3	13.00					

## 8.03a\_RSE\_R\_Ch251\_GPRS

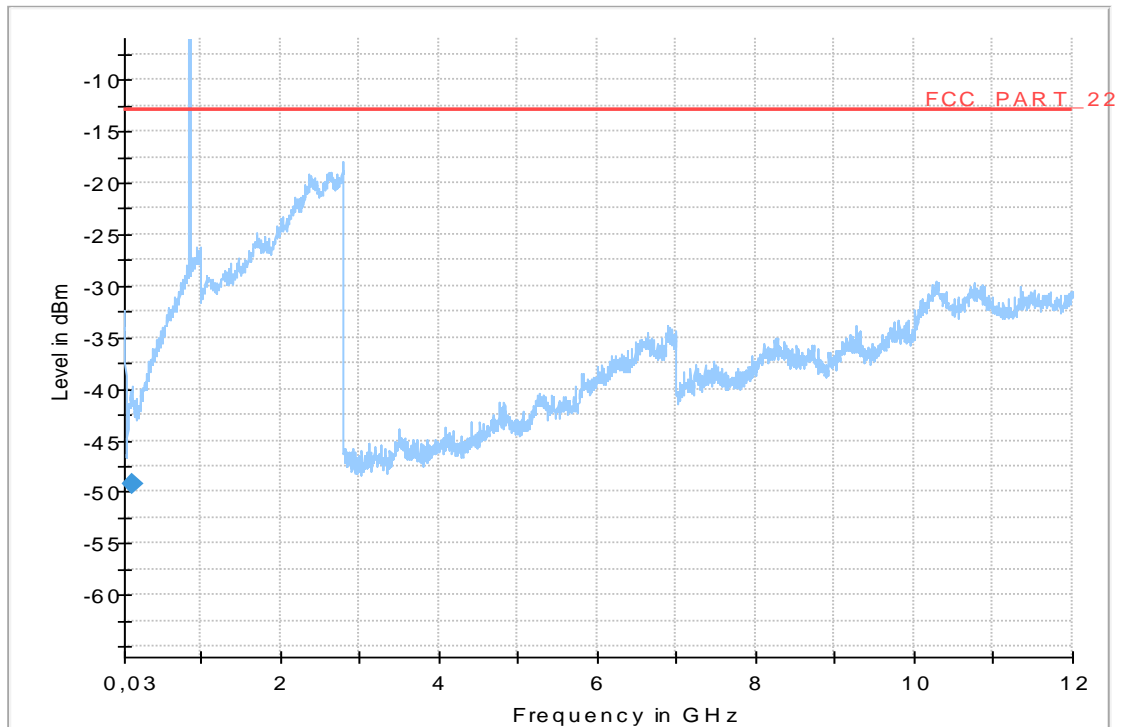
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917/ RSS-132
Test Case:	-
Operating Mode:	MS allocated UL channel 251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Ch251
Comment:	DUT standing

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Corr. (dB)
118.987976	-	36.19	5000.0	H	222.0	-85.6

## 8.03b\_RSE\_R\_Ch251\_GPRS

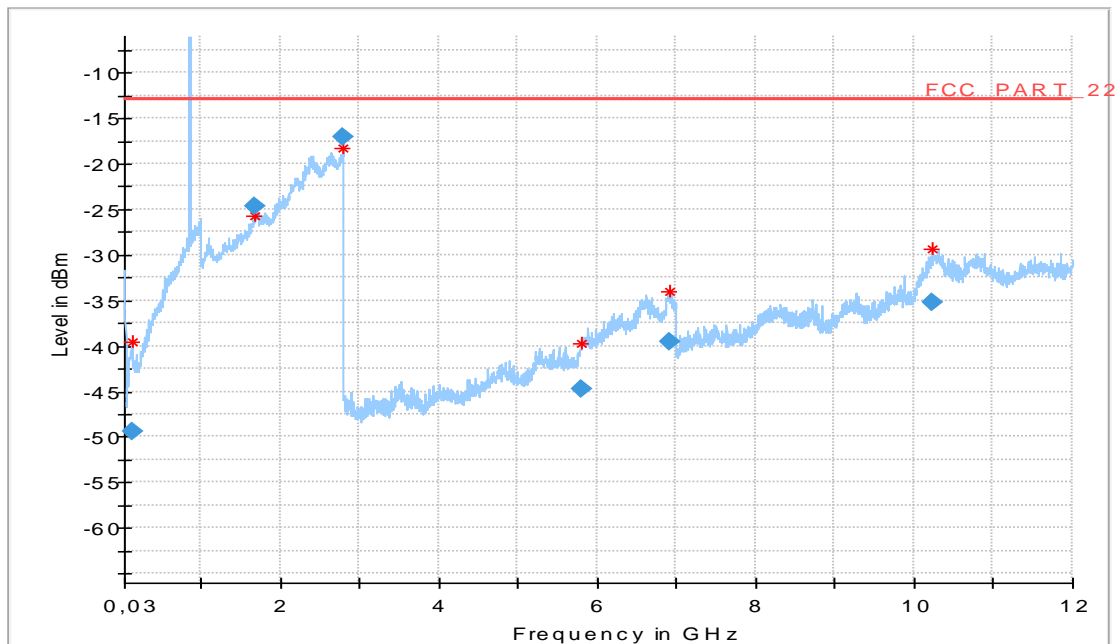
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917/ RSS-132
Test Case:	-
Operating Mode:	MS allocated UL channel 128,190,251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Ch251
Comment:	DUT laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Corr. (dB)
119.869740	-	36.34	5000.0	H	212.0	-85.6
1667.985972	-	11.74	5000.0	V	146.0	-63.2
2790.030060	-	3.98	5000.0	V	252.0	-57.2
5796.523046	-	31.72	5000.0	V	45.0	-87.9
6913.336673	-	26.59	5000.0	V	80.0	-84.9
10224.018036	13.00	22.19	5000.0	H	247.0	-77.9

## 1.4. Spurious emissions radiated (1900 MHz operating mode)

### 8.10\_RSE\_R\_Ch512\_GPRS\_standing

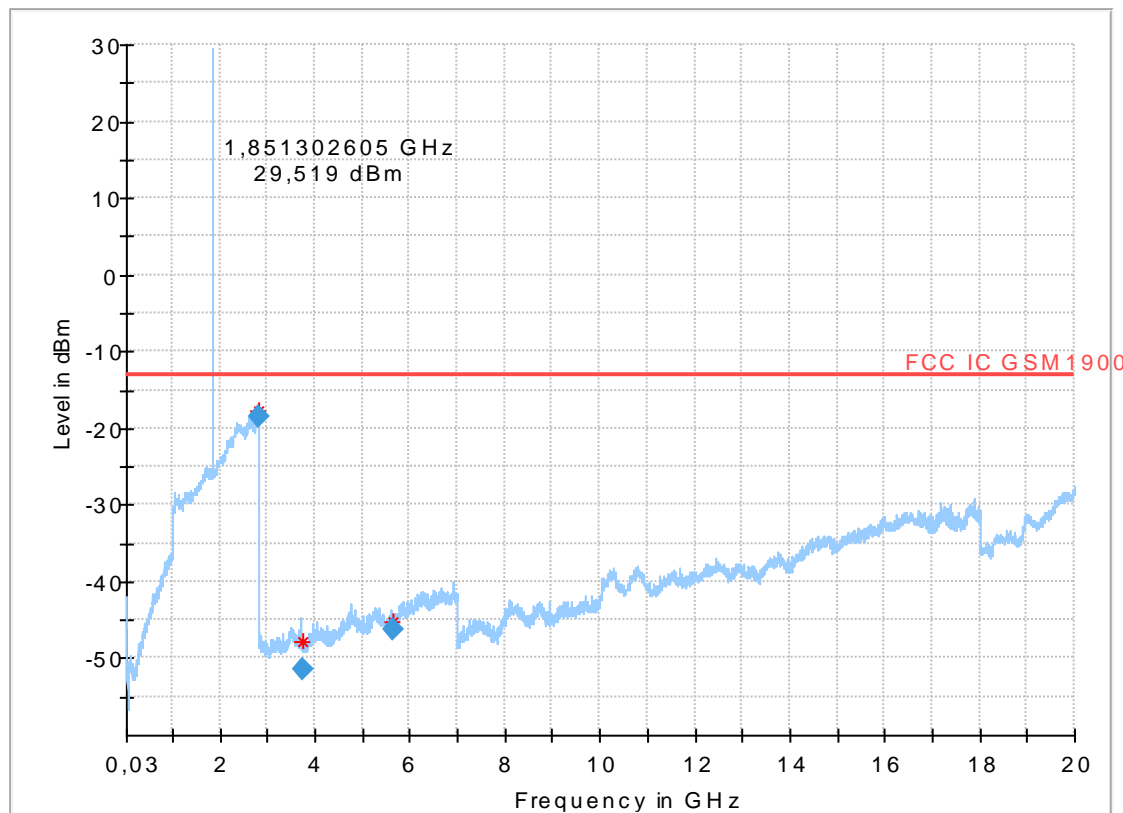
#### Common Information

Test Description:	Radiated Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238/ RSS-133
Test Case:	-
Operating Mode:	MS allocated UL channel 512
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT Standing

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



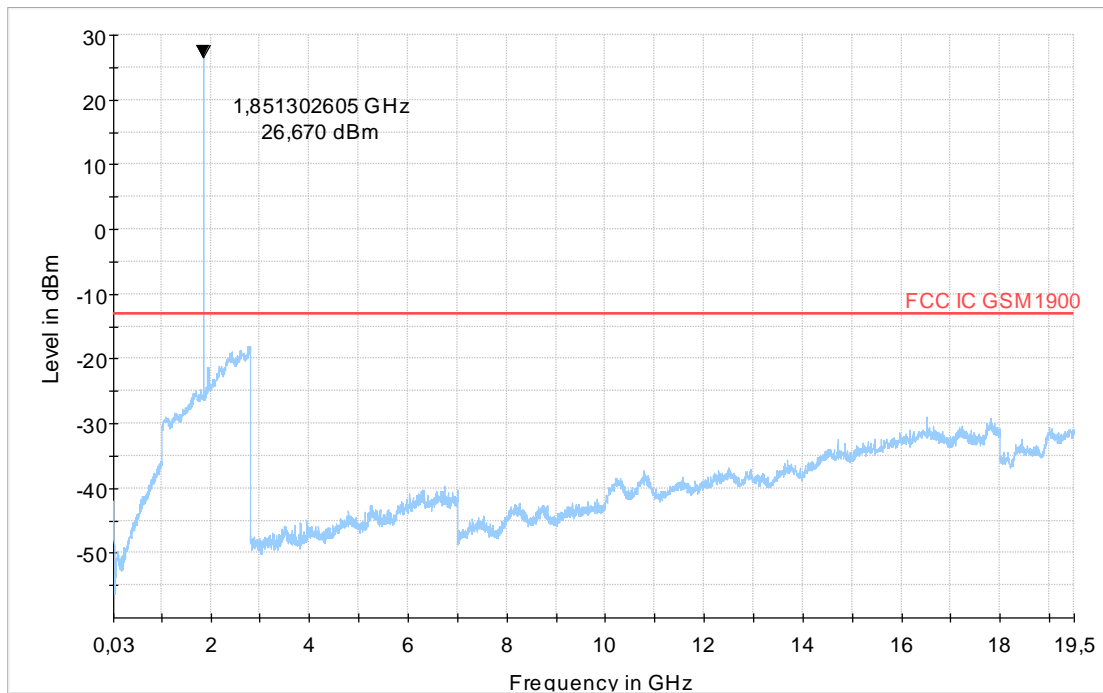
## 8.13\_RSE\_R\_Ch512\_GPRS\_laying

### Common Information

Test Description:	Radiated Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238/ RSS-133
Test Case:	-
Operating Mode:	MS allocated UL channel 512
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



## 8.11\_RSE\_R\_Ch661\_GPRS\_Standing

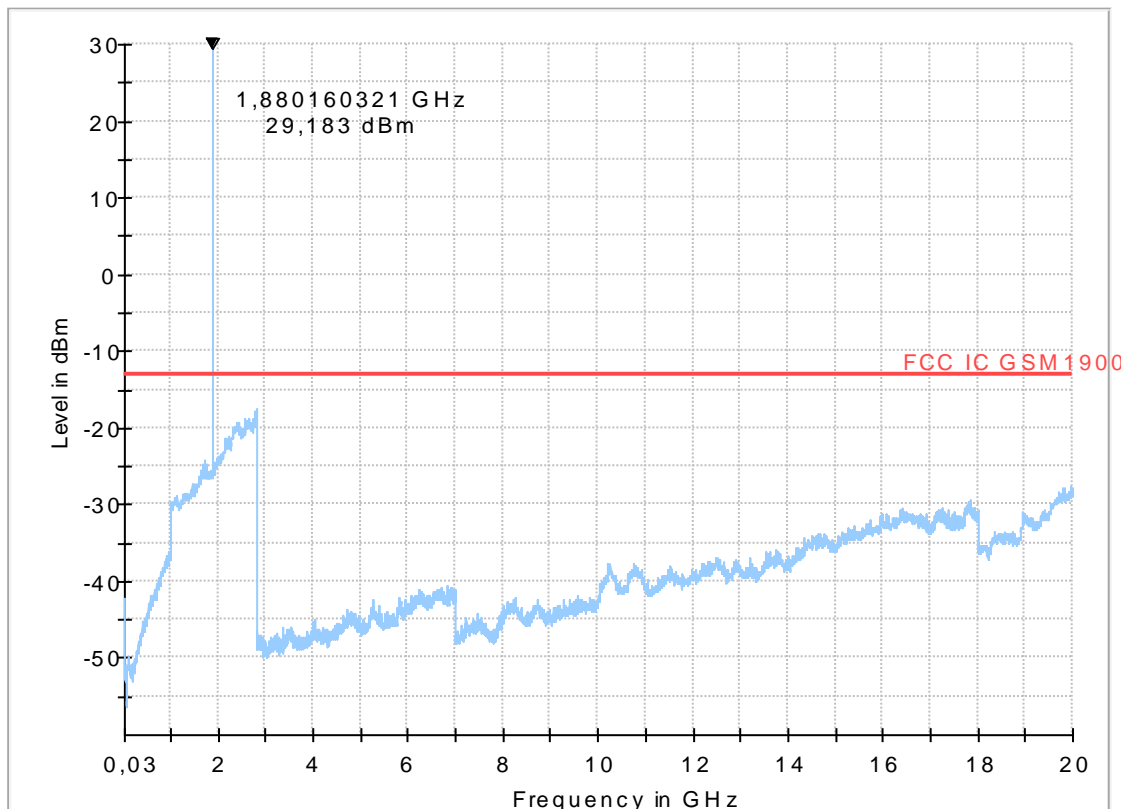
### Common Information

Test Description:	Radiated Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238/ RSS-133
Test Case:	-
Operating Mode:	MS allocated UL channel 661
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT Standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



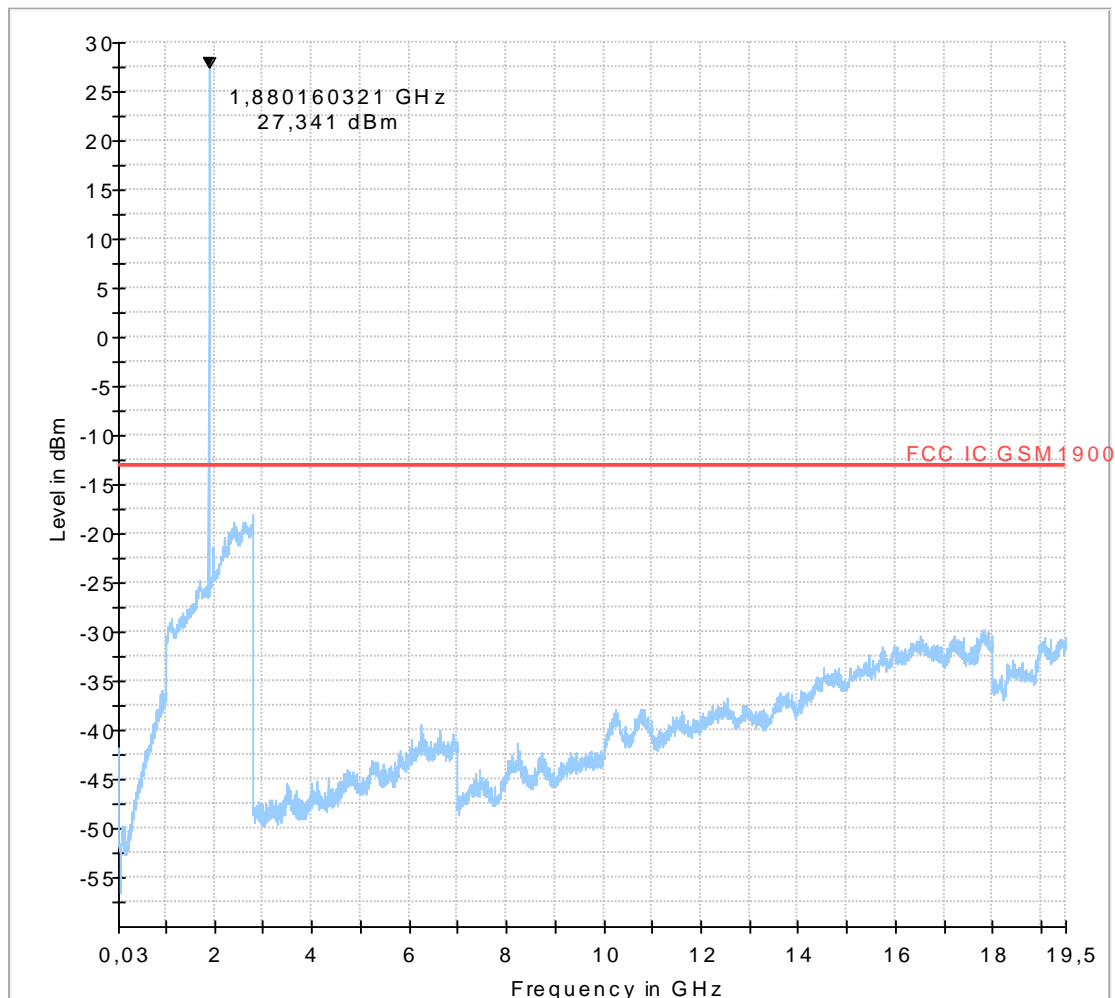
## 8.14\_RSE\_R\_Ch661\_GPRS\_Laying

### Common Information

Test Description:	Radiated Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238/ RSS-133
Test Case:	-
Operating Mode:	MS allocated UL channel 661
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT Laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-





## 8.12\_RSE\_R\_Ch810\_GPRS\_Standing

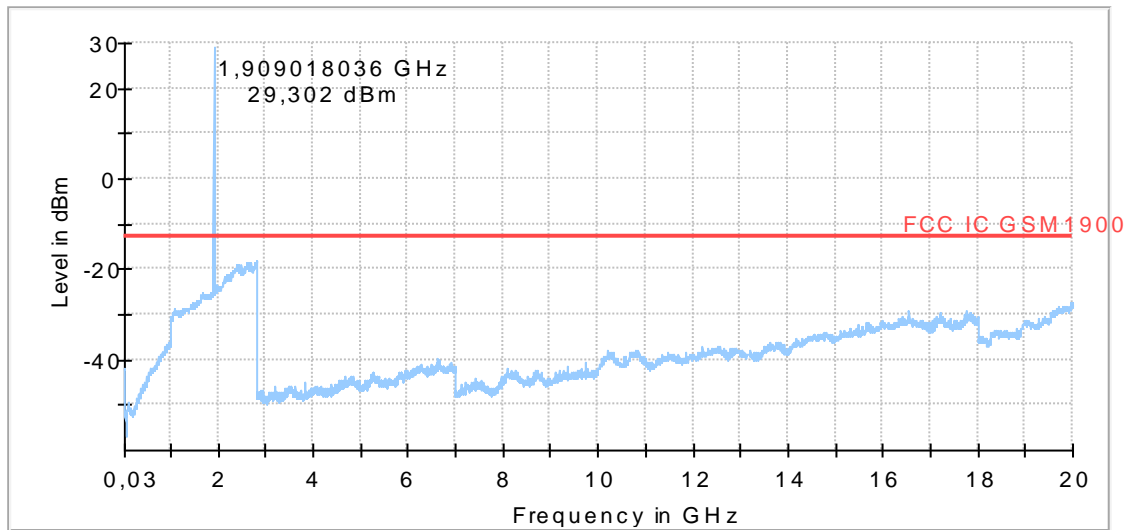
### Common Information

Test Description:	Radiated Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238/ RSS-133
Test Case:	-
Operating Mode:	MS allocated UL channel 810
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	SLo
Operator:	DUT standing

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



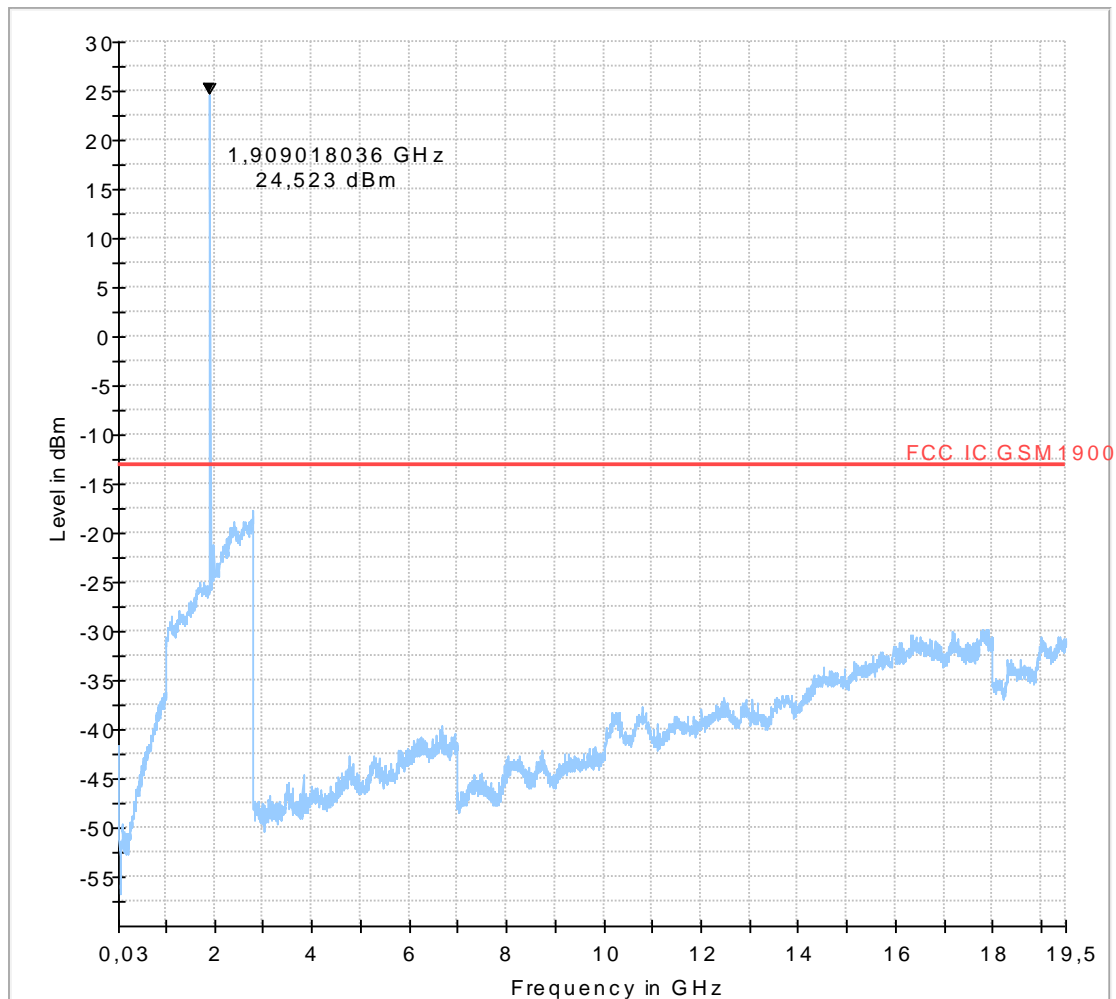
## 8.15\_RSE\_R\_Ch810\_GPRS\_laying

### Common Information

Test Description:	Radiated Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238/ RSS-133
Test Case:	-
Operating Mode:	MS allocated UL channel 810
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	SLo
Operator:	DUT laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



## 1.5. Radiated emissions on 850 MHz operating mode band-edge

### 9.01a\_RSE\_R\_Ch128\_GPRS

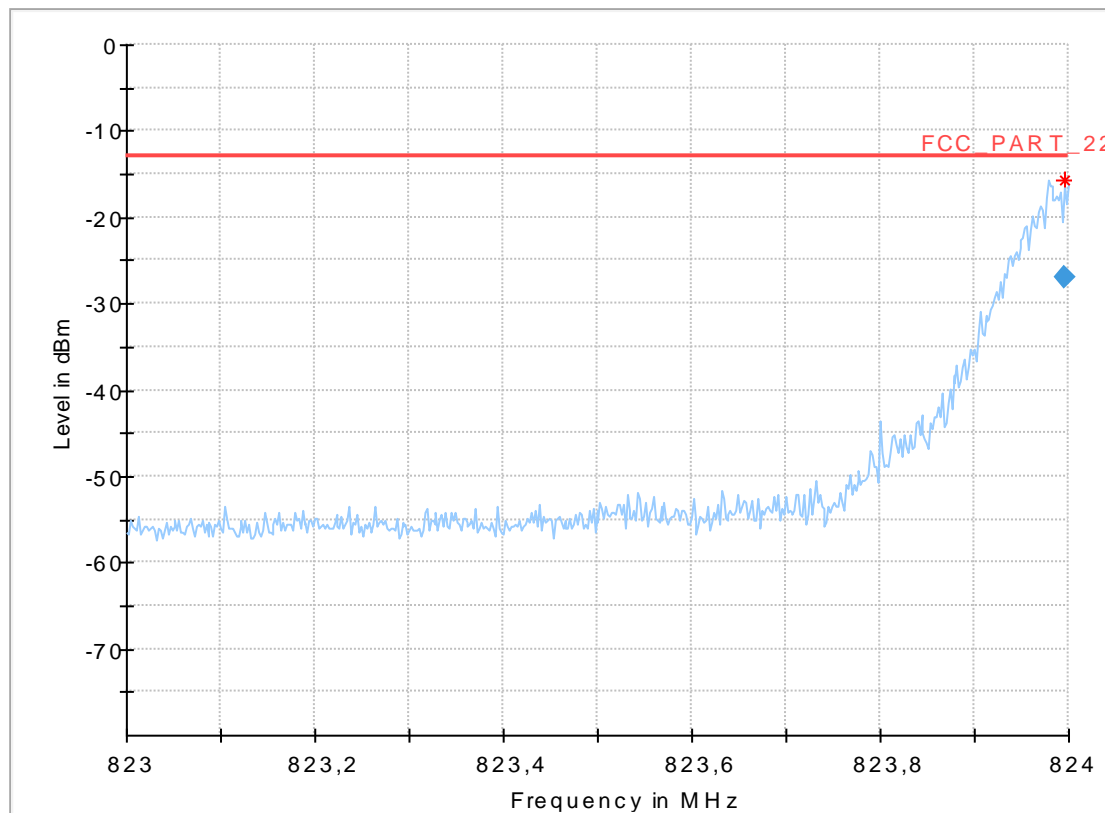
#### Common Information

Test Description:	Radiated Band Edge Compliance GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917/ RSS-132
Operating Mode:	MS allocated channel 128 (fc = 824.2MHz), PCL5 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Channel 128
Comment:	DUT Standing

#### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



## 9.01b\_RSE\_R\_Ch128\_GPRS

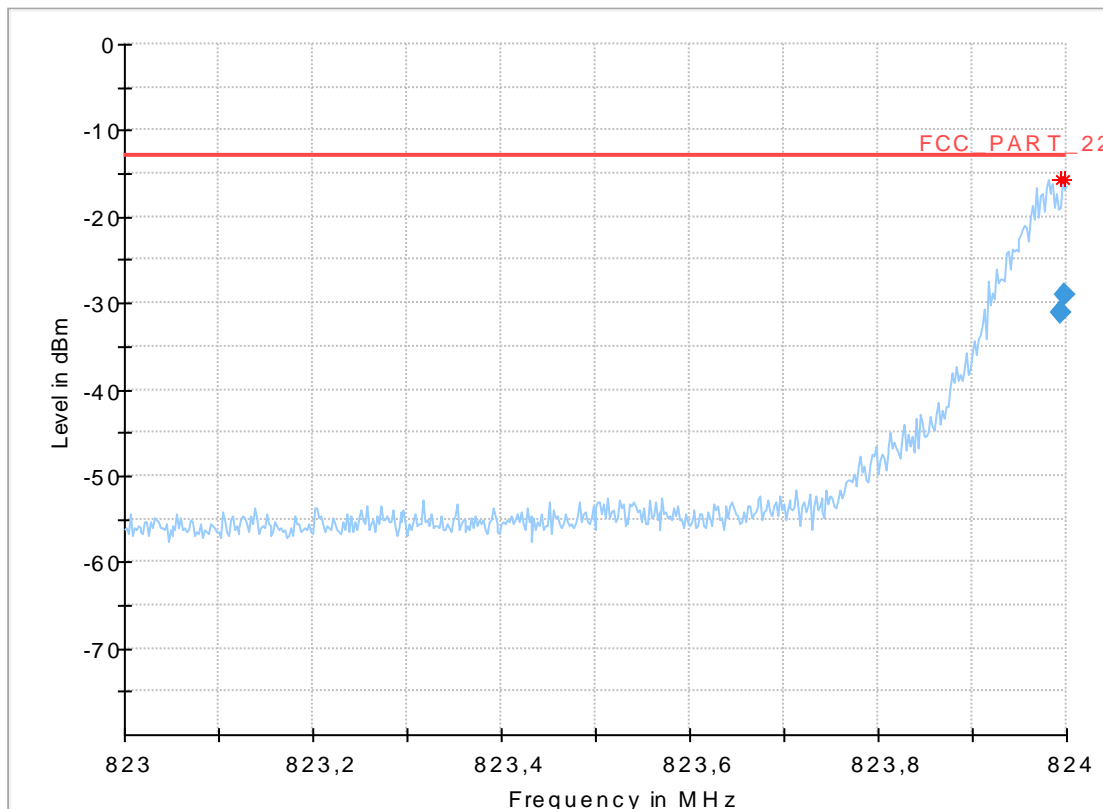
### Common Information

Test Description:	Radiated Band Edge Compliance GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917/ RSS-132
Operating Mode:	MS allocated channel 128 (fc = 824.2MHz), PCL5 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Channel 128
Comment:	DUT Laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
823.993988	-13.00	18.03	10000.0	V	-20.0	0.0	-75.8

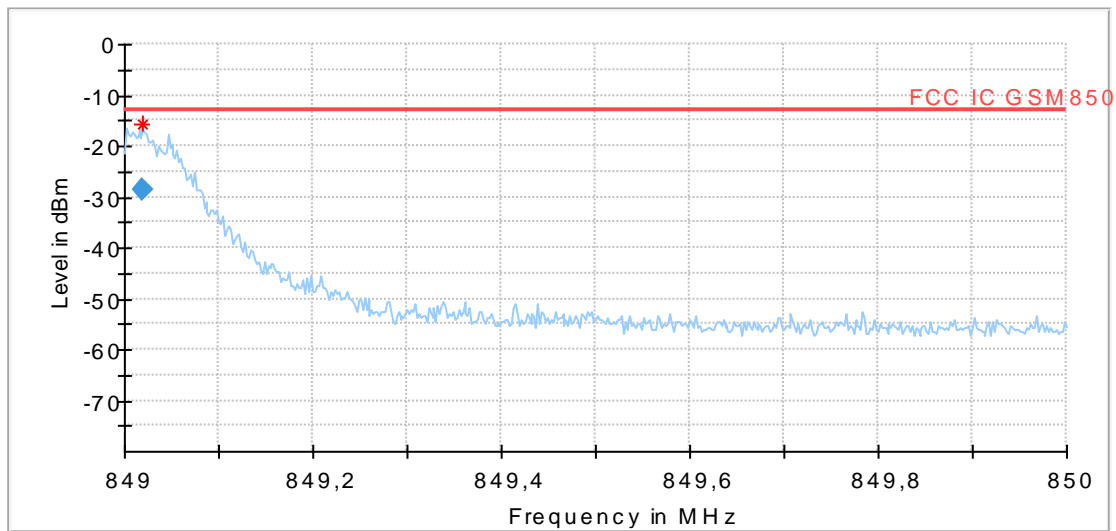
823.997996	-	13.00	16.14	10000. 0	V	0.0	0.0	-75.8
------------	---	-------	-------	-------------	---	-----	-----	-------

### 9.02a\_RSE\_R\_Ch251\_GPRS

#### Common Information

Test Description:	Radiated Band Edge Compliance GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917/ RSS-132
Operating Mode:	MS allocated channel 251 (fc = 848.8MHz), PCL0 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Channel 251
Comment:	DUT Standing

Full Spectrum



## 9.02b\_RSE\_R\_Ch251\_GPRS

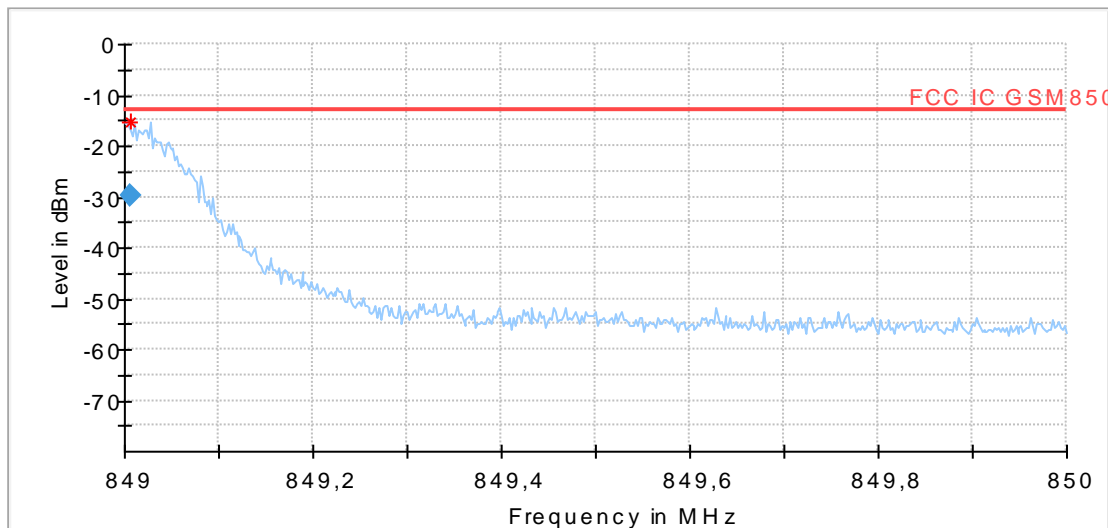
### Common Information

Test Description:	Radiated Band Edge Compliance GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917/ RSS-132
Operating Mode:	MS allocated channel 251 (fc = 848.8MHz), PCL0 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	DLe
Comment:	Channel 251
Comment:	DUT Laying

### EUT Information

Manufacturer:	peiker acustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-

Full Spectrum



### Final Result

Frequency (MHz)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
849.006012	-13.00	16.69	10000.0	V	-1.0	0.0	-75.9

## 1.6. Radiated emissions on 1900 MHz transmitting band-edge

### 9.09a\_BE\_R\_Ch512\_GPRS\_Laying

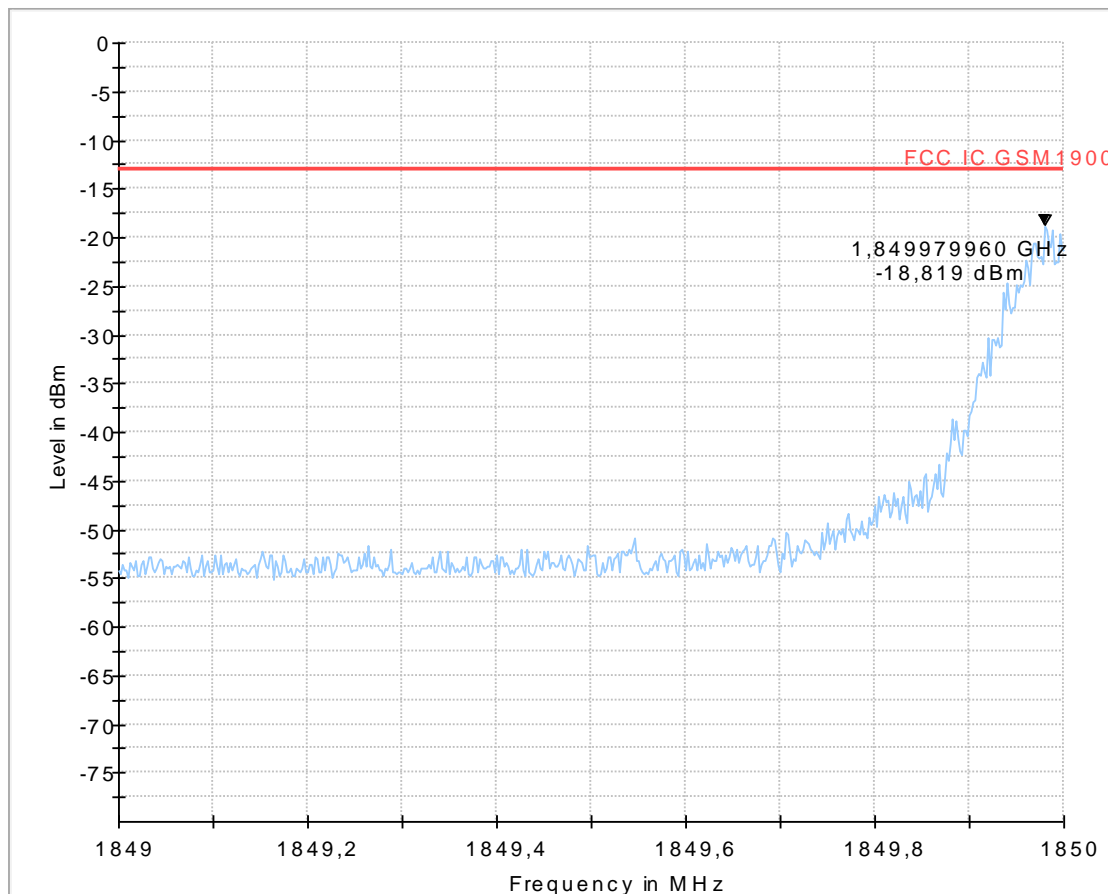
#### Common Information

Test Description: Radiated Spurious Emissions GSM1900  
Test Site Location: CETECOM GmbH Essen  
Test Site: Fully Anechoic Room (FAR)  
Test Standard: FCC Part 24.238/ RSS-133  
Comm. Link: GSM1900, Voice/EDGE  
Operating Mode: MS allocated channel 512 (UL = 1850.2MHz)

Exclusionband: 1850- 1910MHz  
Environmental Conditions: Humidity: 40%RH; Temperature: 19°C  
Operator: SLo  
Comment: DUT laying

#### EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG  
EUT: V1231-0  
-----  
HW version: V1231-0\_Ver.1  
SW version: MPSS.TH.2.0.2-00256  
Serial number: 004402580040446  
Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables  
Power Supply: 12VDC  
Comments: -



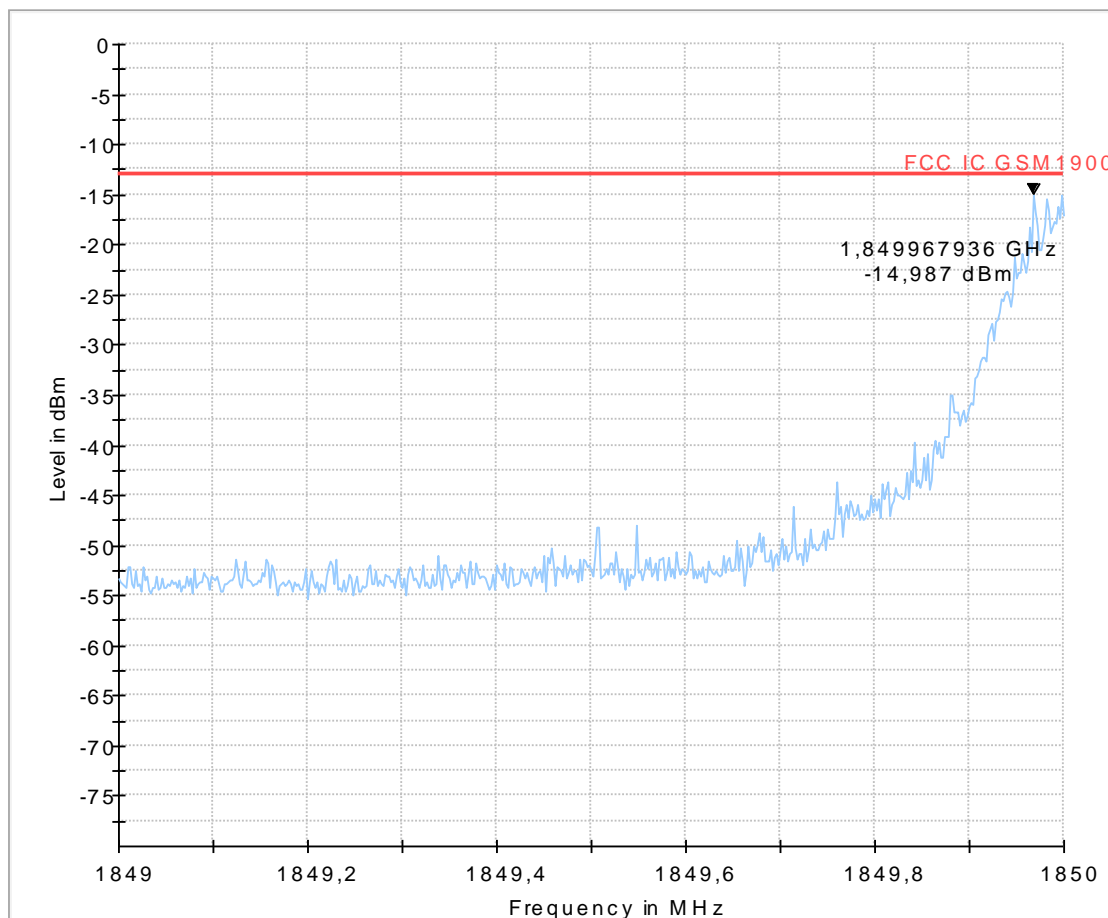
## 9.09b\_BE\_R\_Ch512\_GPRS\_Standing

### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238/ RSS-133
Comm. Link:	GSM1900, Voice/EDGE
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT standing

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-





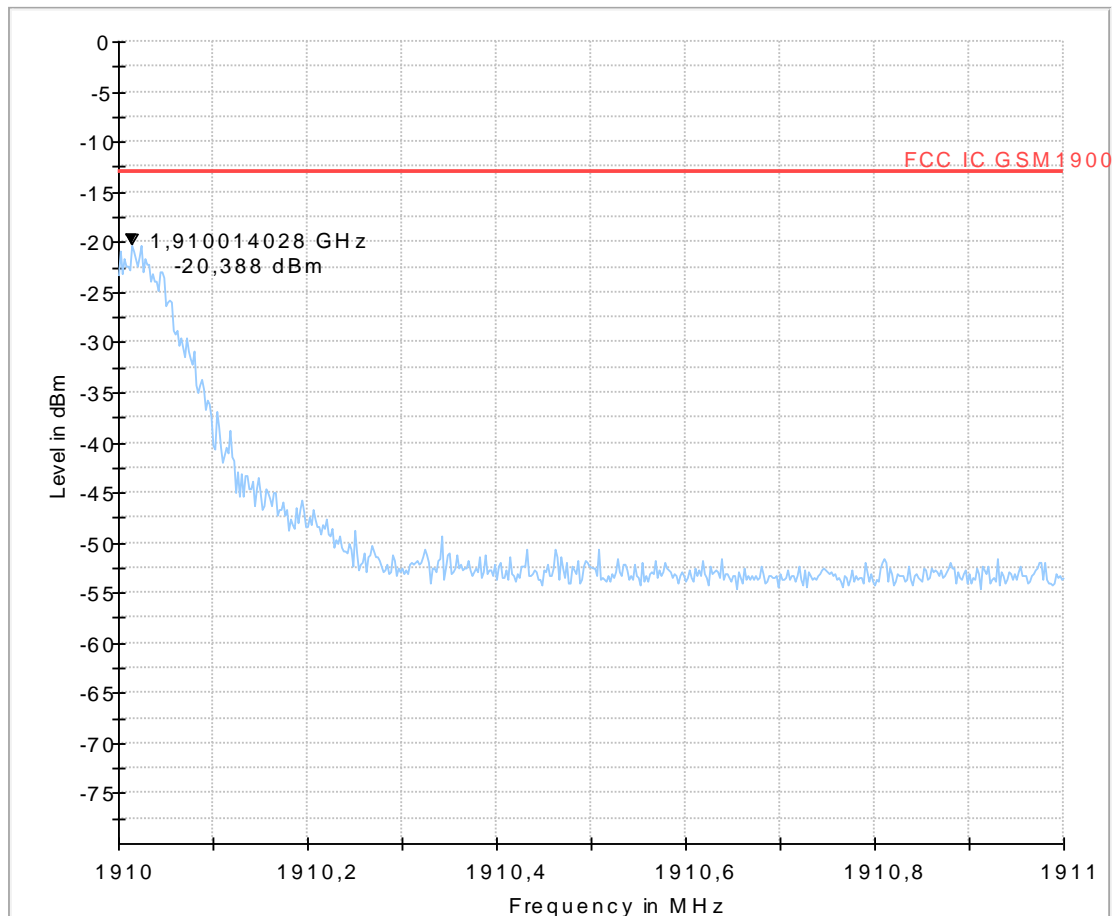
## 9.10a\_BE\_R\_Ch810\_GPRS\_laying

### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238/ RSS-133
Comm. Link:	GSM1900, GPRS
Operating Mode:	MS allocated channel 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT laying

### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



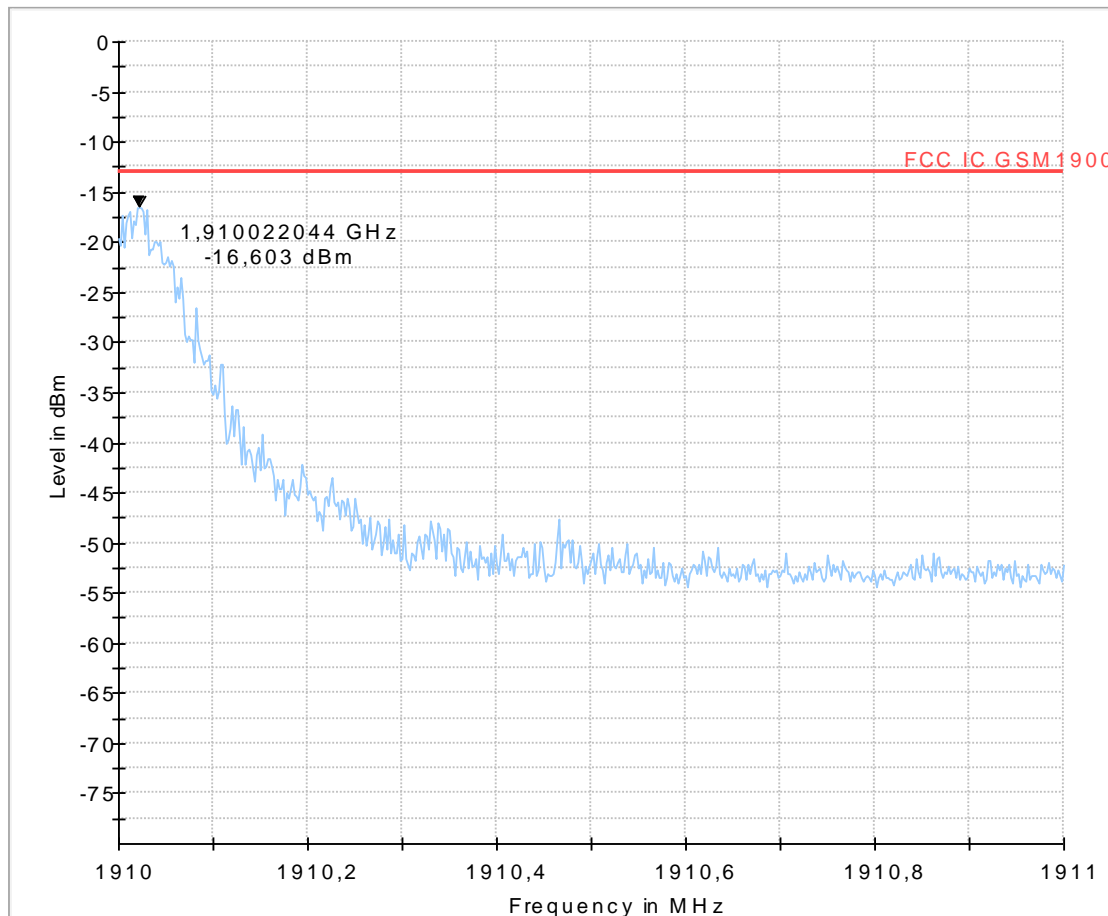
## 9.10b\_BE\_R\_Ch810\_GPRS\_standing

### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238/ RSS-133
Comm. Link:	GSM1900, GPRS
Operating Mode:	MS allocated channel 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 40%rH; Temperature: 19°C
Operator:	SLo
Comment:	DUT standing

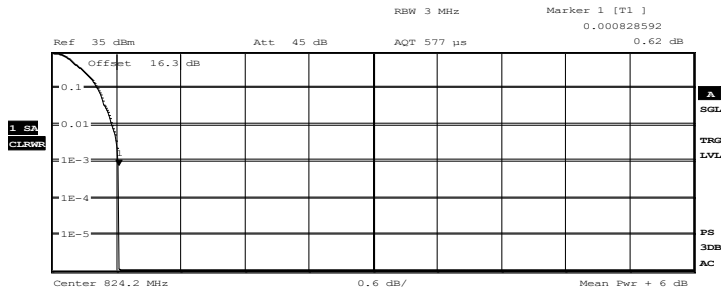
### EUT Information

Manufacturer:	peiker acoustic GmbH & Co. KG
EUT:	V1231-0
-----	
HW version:	V1231-0_Ver.1
SW version:	MPSS.TH.2.0.2-00256
Serial number:	004402580040446
Connected Interfaces:	Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply:	12VDC
Comments:	-



## 1.7. Power Measurements and PAPR-Value

### 1.7.1. GSM 850 (GMSK Modulation)



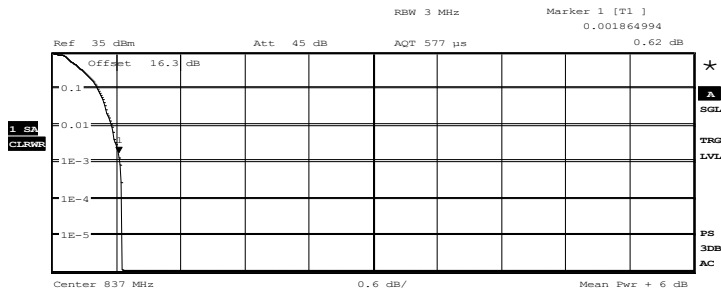
Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

Trace 1  
 Mean 31.95 dBm  
 Peak 32.57 dBm  
 Crest 0.62 dB

10 % 0.42 dB  
 1 % 0.56 dB  
 .1 % 0.62 dB  
 .01 % 0.63 dB

Date: 5.APR.2017 12:04:00

**Diagram 1: Channel 128**



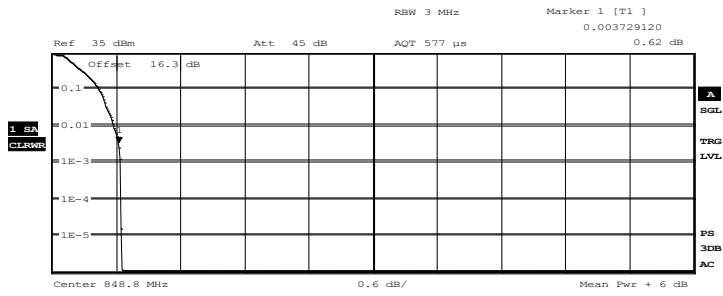
Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

Trace 1  
 Mean 31.85 dBm  
 Peak 32.50 dBm  
 Crest 0.65 dB

10 % 0.42 dB  
 1 % 0.56 dB  
 .1 % 0.63 dB  
 .01 % 0.65 dB

Date: 5.APR.2017 12:06:51

**Diagram 2: Channel 192**



Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

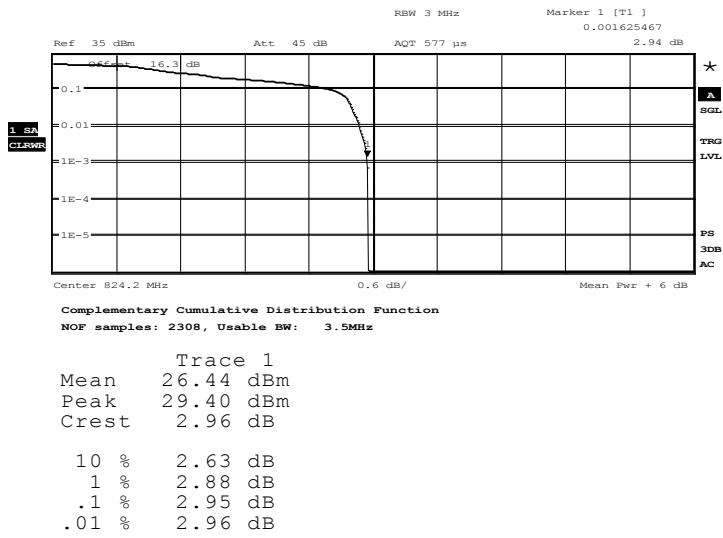
Trace 1  
 Mean 31.93 dBm  
 Peak 32.57 dBm  
 Crest 0.64 dB

10 %	0.43 dB
1 %	0.57 dB
.1 %	0.63 dB
.01 %	0.64 dB

Date: 5.APR.2017 12:08:11

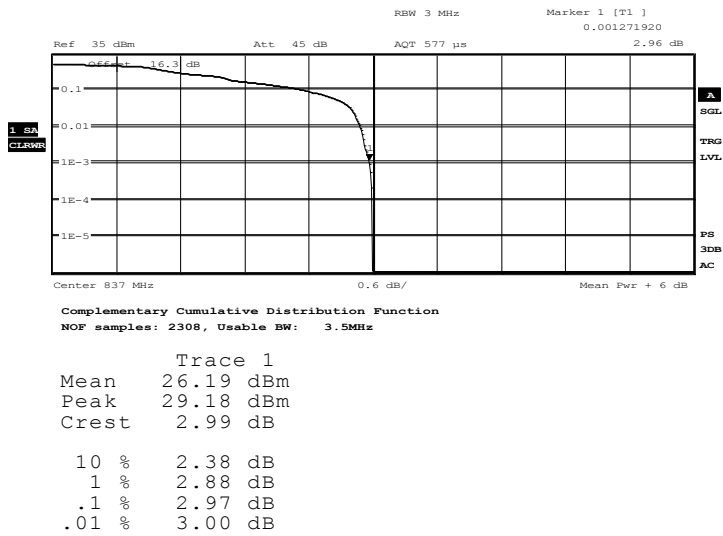
**Diagram 3: Channel 251**

1.7.2. GSM 850 (8-PSK Modulation)



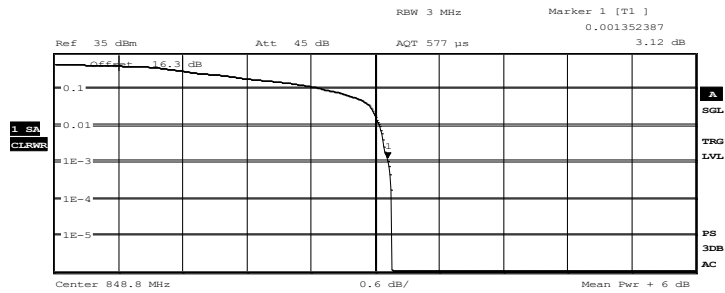
Date: 5.APR.2017 11:53:31

Diagram 4: Channel 128



Date: 5.APR.2017 11:56:58

Diagram 5: Channel 192



Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

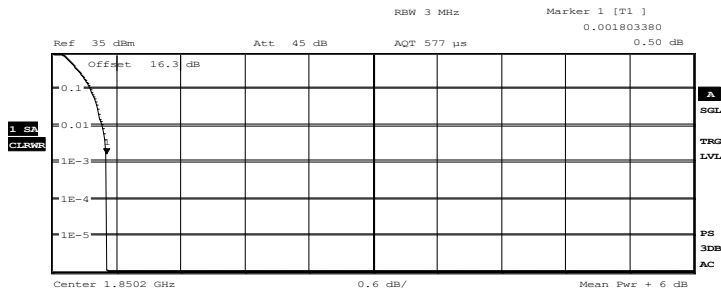
Trace 1  
 Mean 26.17 dBm  
 Peak 29.33 dBm  
 Crest 3.15 dB

10 %	2.54 dB
1 %	3.05 dB
.1 %	3.13 dB
.01 %	3.15 dB

Date: 5.APR.2017 11:58:25

**Diagram 6: Channel 251**

### 1.7.3. GSM 1900 (GMSK Modulation)



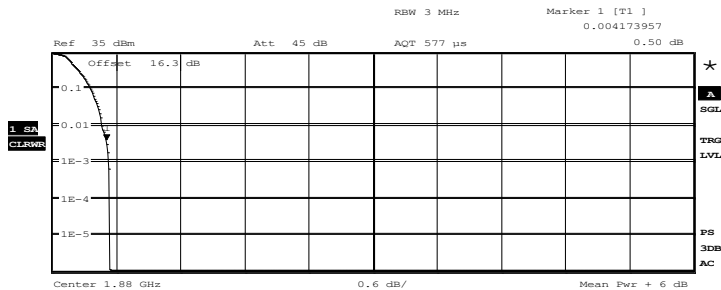
Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

Trace 1  
 Mean 29.24 dBm  
 Peak 29.75 dBm  
 Crest 0.51 dB

10 %	0.36 dB
1 %	0.46 dB
.1 %	0.50 dB
.01 %	0.51 dB

Date: 5.APR.2017 12:12:34

**Diagram 7: Channel 512**



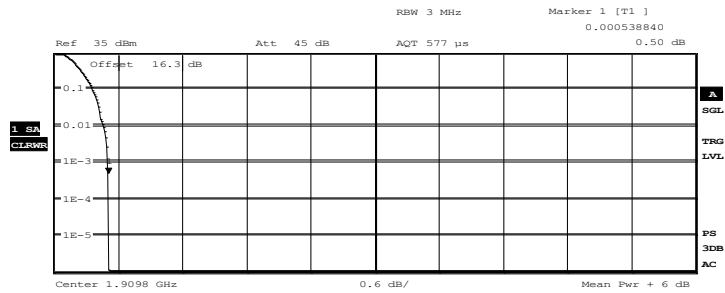
Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

Trace 1  
 Mean 28.72 dBm  
 Peak 29.25 dBm  
 Crest 0.53 dB

10 %	0.36 dB
1 %	0.46 dB
.1 %	0.53 dB
.01 %	0.54 dB

Date: 5.APR.2017 12:15:09

**Diagram 8: Channel 661**



Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

Trace 1  
 Mean 28.33 dBm  
 Peak 28.83 dBm  
 Crest 0.50 dB

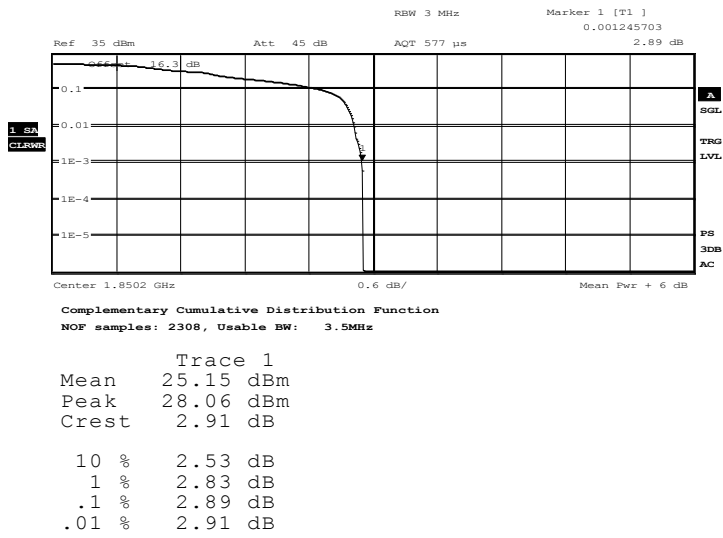
10 %	0.36 dB
1 %	0.46 dB
.1 %	0.50 dB
.01 %	0.51 dB

Date: 5.APR.2017 12:17:30

**Diagram 9: Channel 810**

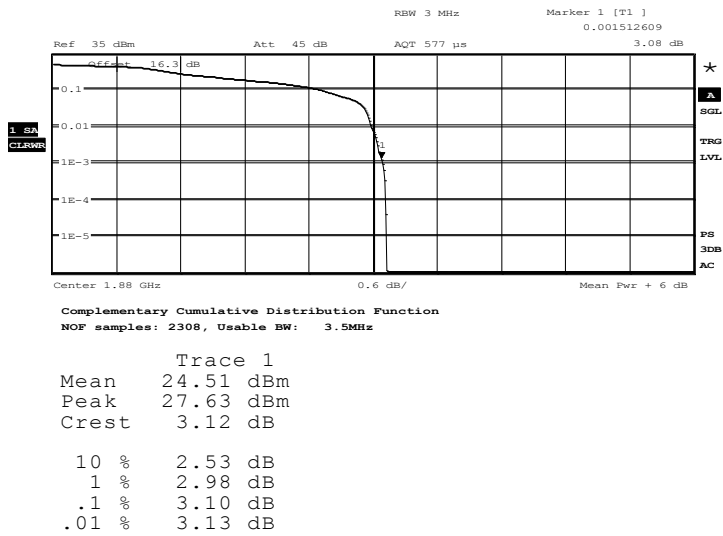


### 1.7.4. GSM 1900 (8-PSK Modulation)



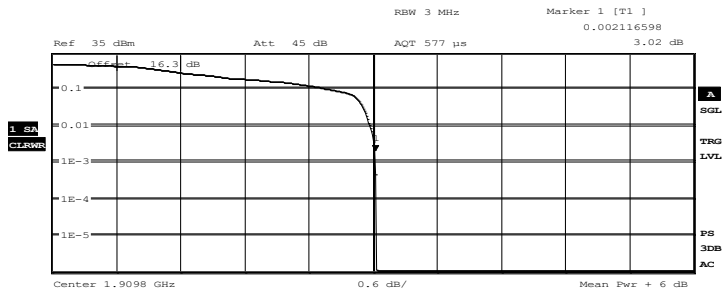
Date: 5.APR.2017 12:23:06

**Diagram 10: Channel 512**



Date: 5.APR.2017 12:25:45

**Diagram 11: Channel 661**



Complementary Cumulative Distribution Function  
 NOF samples: 2308, Usable BW: 3.5MHz

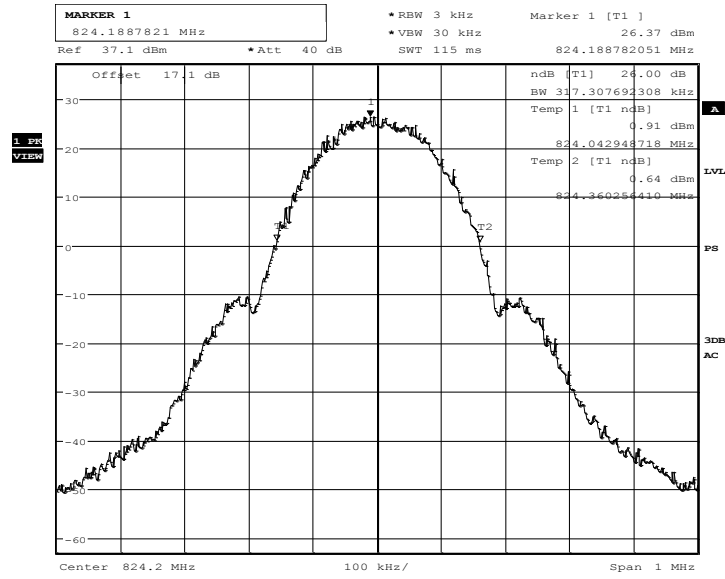
Trace 1	
Mean	24.18 dBm
Peak	27.21 dBm
Crest	3.03 dB
10 %	2.62 dB
1 %	2.97 dB
.1 %	3.03 dB
.01 %	3.04 dB

Date: 5.APR.2017 12:28:52

**Diagram 12: Channel 810**

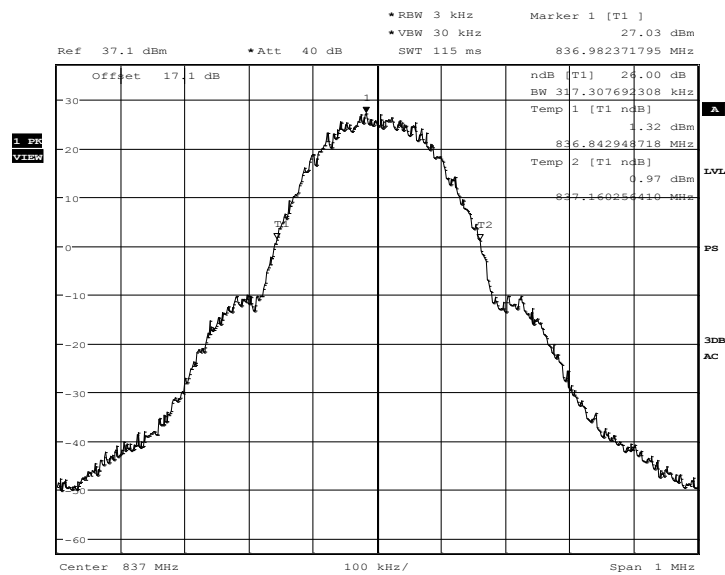
## 1.8. 26dBc Emission bandwidth

### 1.8.1. GPRS 850 MHz TX-Mode



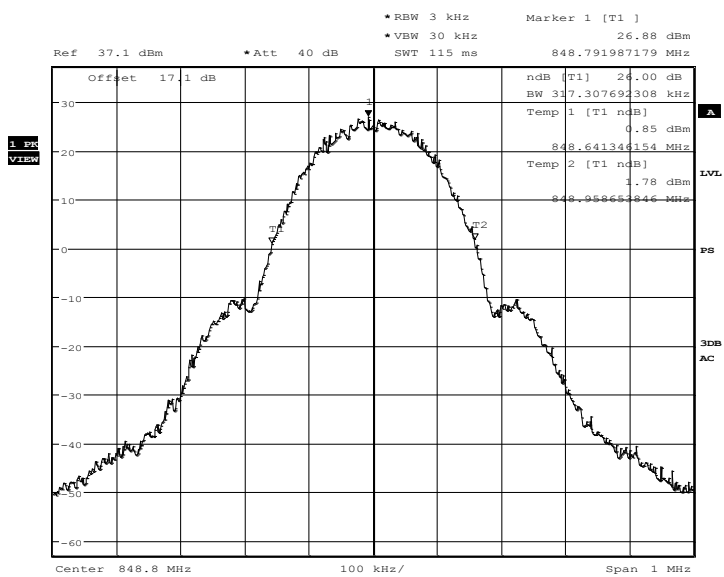
Date: 29.APR.2017 13:08:15

Diagram 13: Channel 128



Date: 29.APR.2017 13:16:08

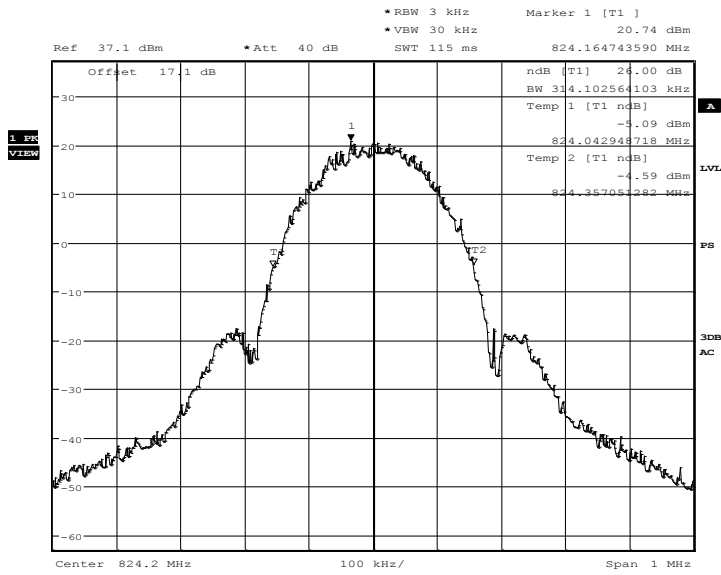
Diagram 14: Channel 192



Date: 29.APR.2017 13:22:03

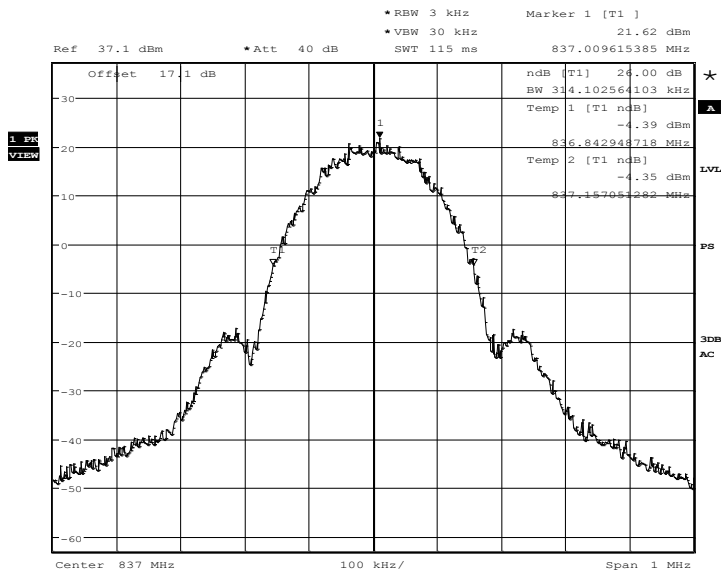
**Diagram 15: Channel 251**

### 1.8.2. E-GPRS 850 MHz TX-Mode



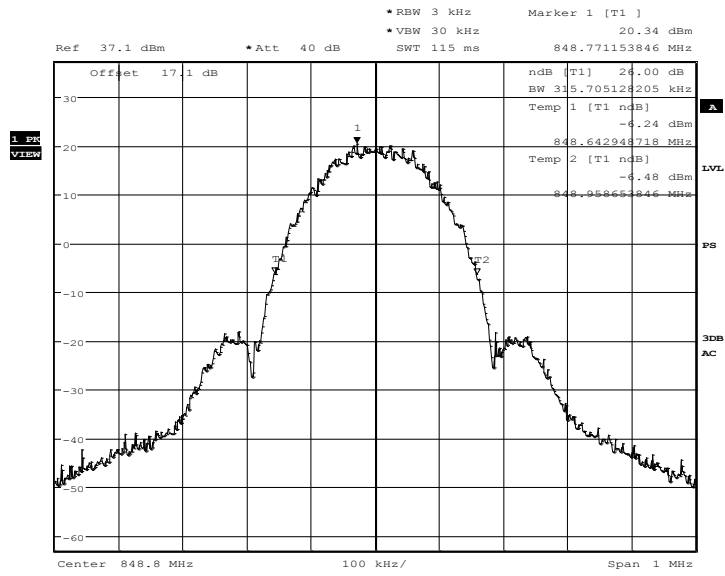
Date: 29.APR.2017 13:34:10

Diagram 16: Channel 128



Date: 29.APR.2017 13:31:26

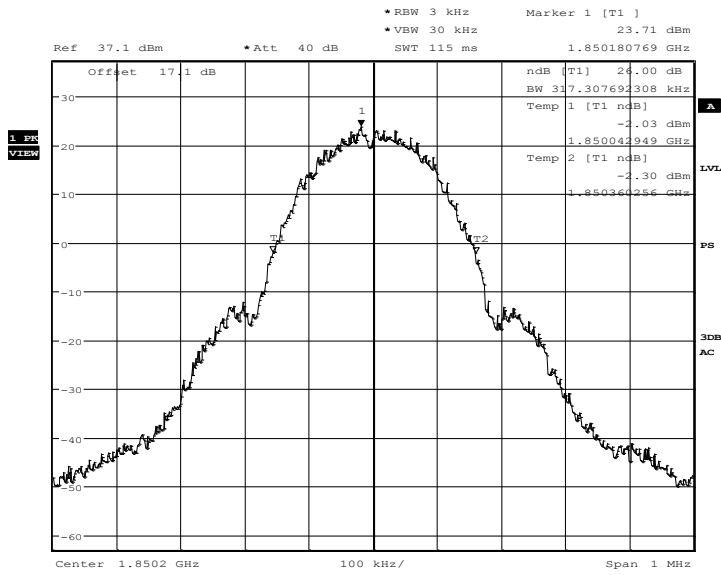
Diagram 17: Channel 192



Date: 29.APR.2017 13:27:12

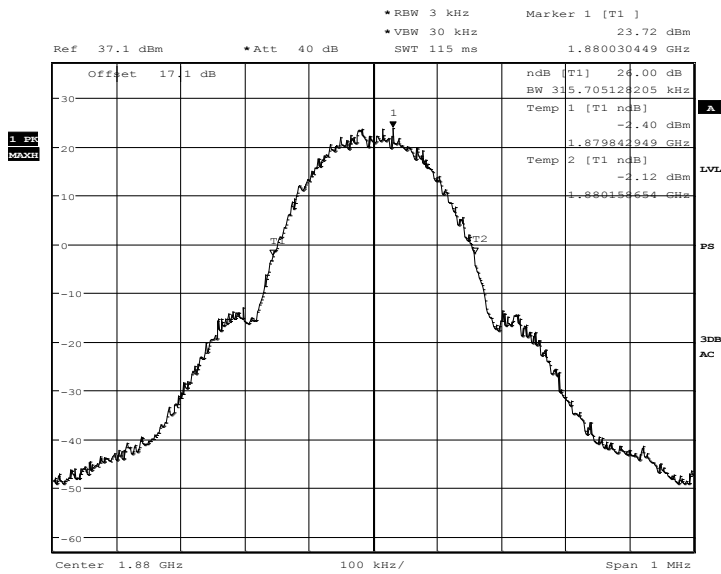
**Diagram 18: Channel 251**

### 1.8.3. GPRS 1900 MHz TX-Mode



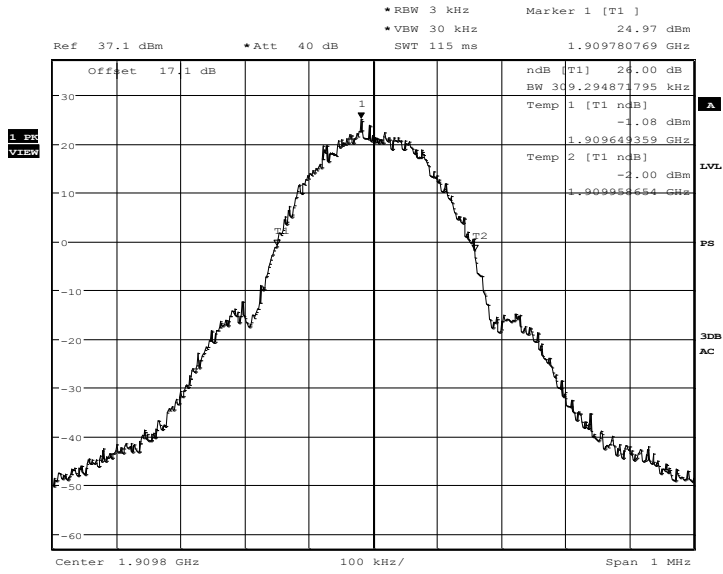
Date: 29.APR.2017 14:53:32

**Diagram 19: Channel 512**



Date: 29.APR.2017 14:43:38

**Diagram 20: Channel 661**

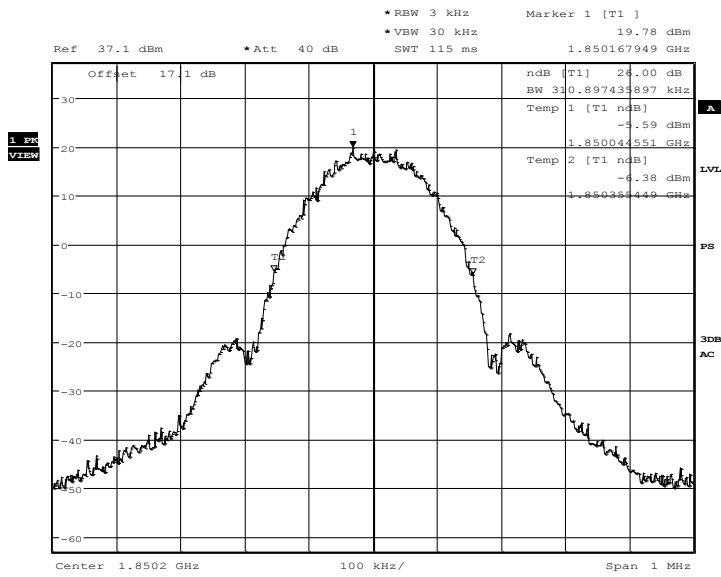


Date: 29.APR.2017 14:35:11

**Diagram 21: Channel 810**

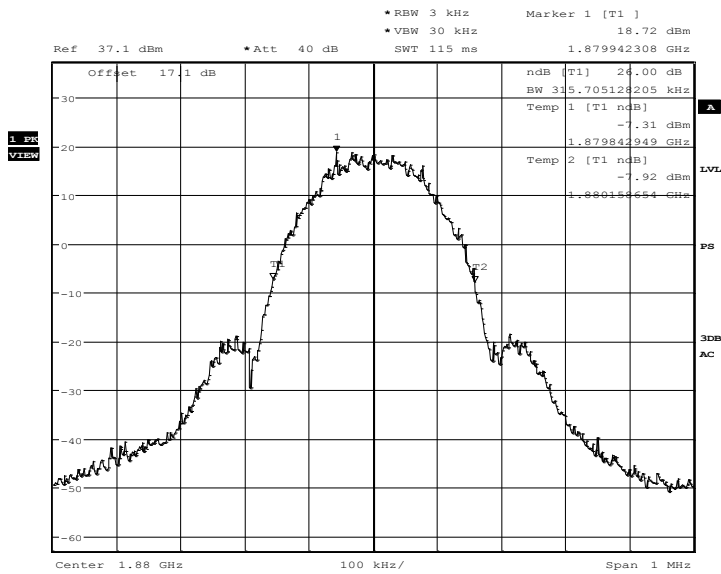


### 1.8.4. E-GPRS 1900 MHz TX-Mode



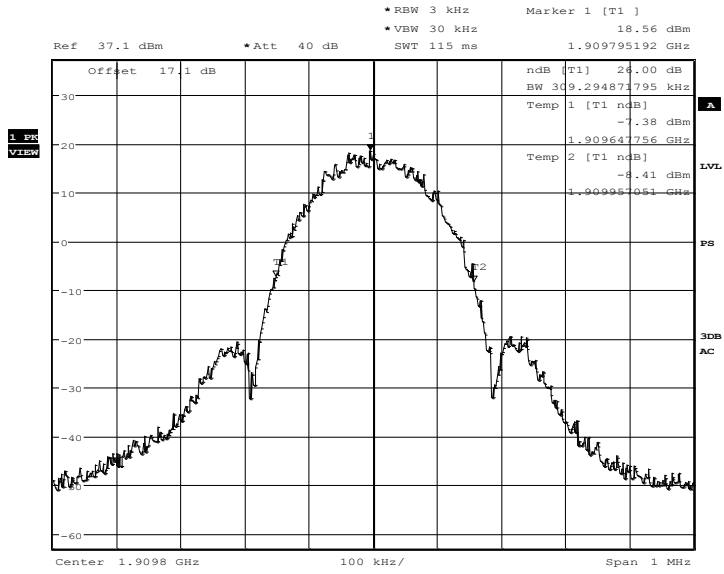
Date: 29.APR.2017 14:59:24

Diagram 22: Channel 512



Date: 29.APR.2017 15:04:39

Diagram 23: Channel 661

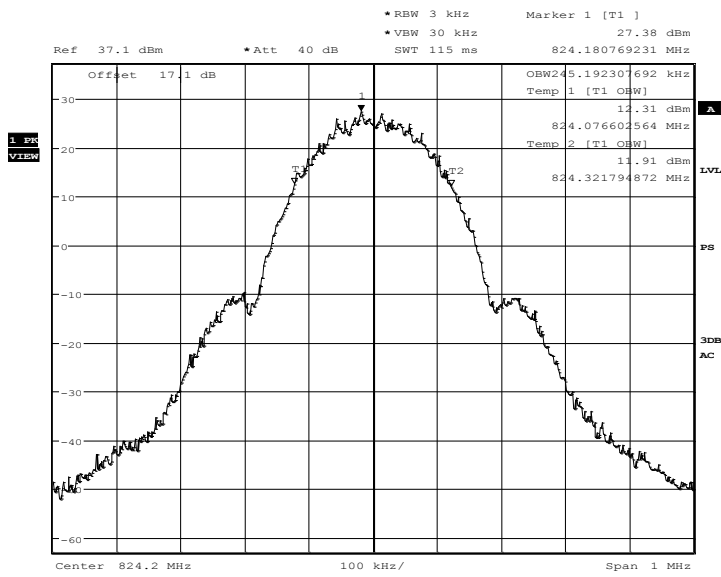


Date: 29.APR.2017 15:09:21

Diagram 24: Channel 810

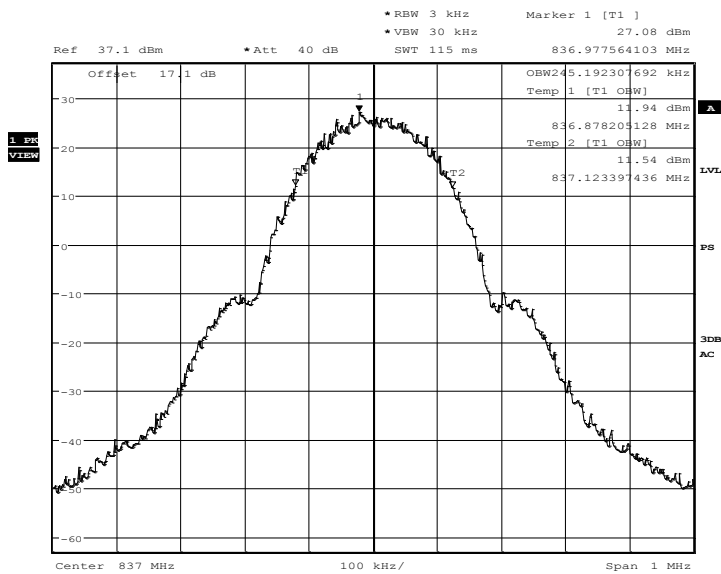
## 1.9. 99% Occupied bandwidth

### 1.9.1. GPRS 850 MHz TX-Mode



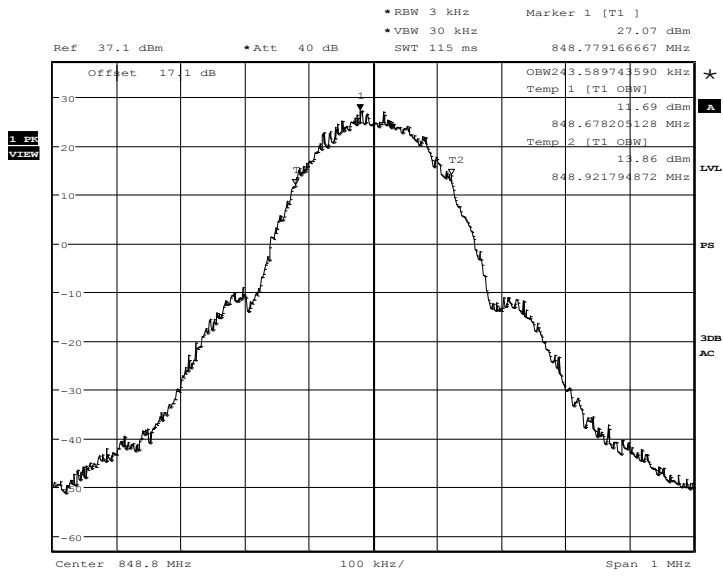
Date: 29.APR.2017 14:02:10

Diagram 25: Channel 128



Date: 29.APR.2017 13:58:00

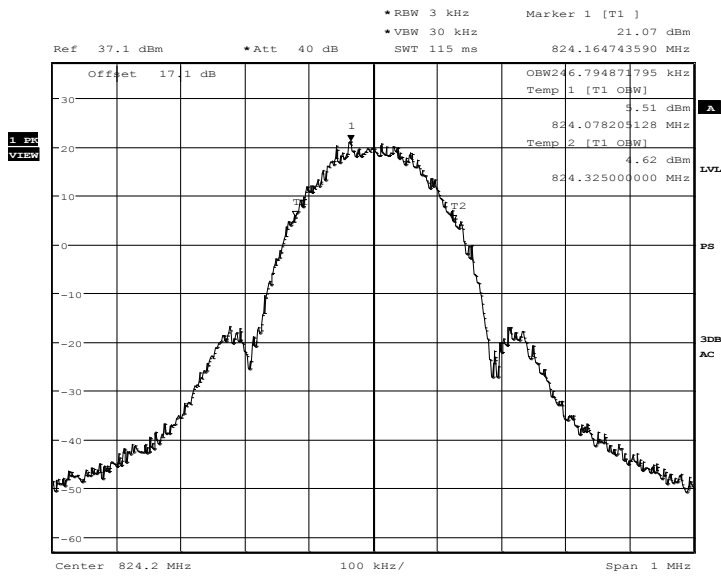
Diagram 26: Channel 192



Date: 29.APR.2017 13:53:31

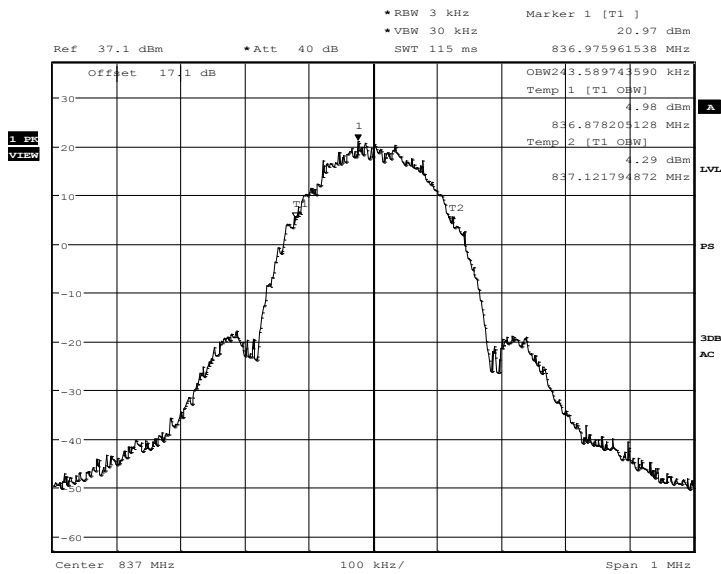
**Diagram 27: Channel 251**

1.9.2. E-GPRS 850 MHz TX-Mode



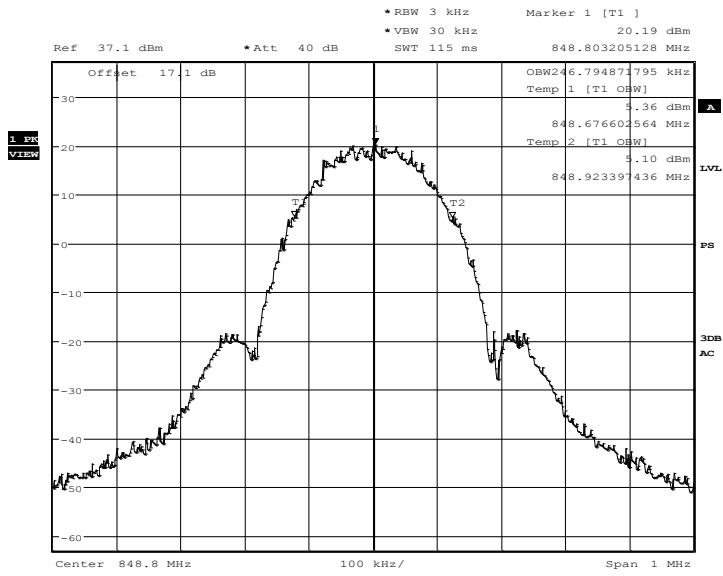
Date: 29.APR.2017 13:41:28

Diagram 28: Channel 128



Date: 29.APR.2017 13:45:00

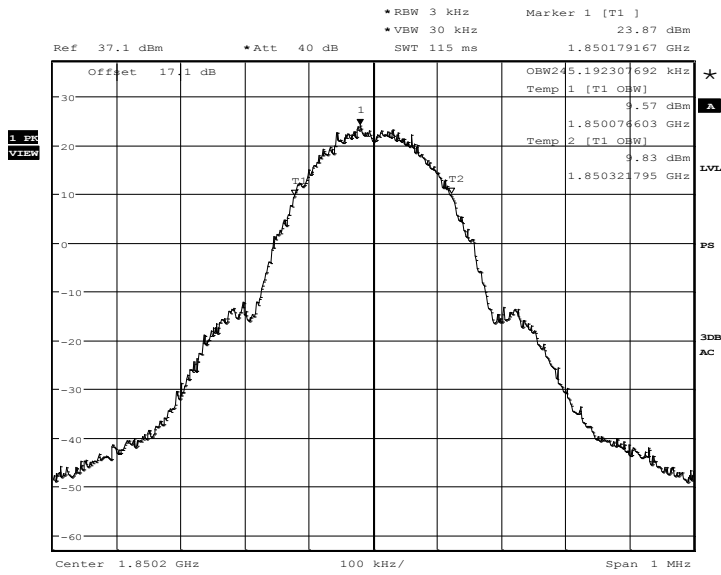
Diagram 29: Channel 192



Date: 29.APR.2017 13:48:22

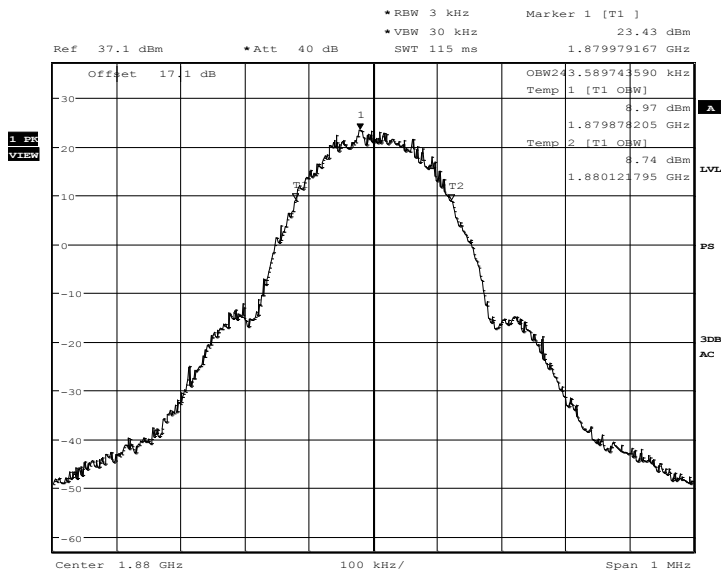
**Diagram 30: Channel 251**

### 1.9.3. GPRS 1900 MHz TX-Mode



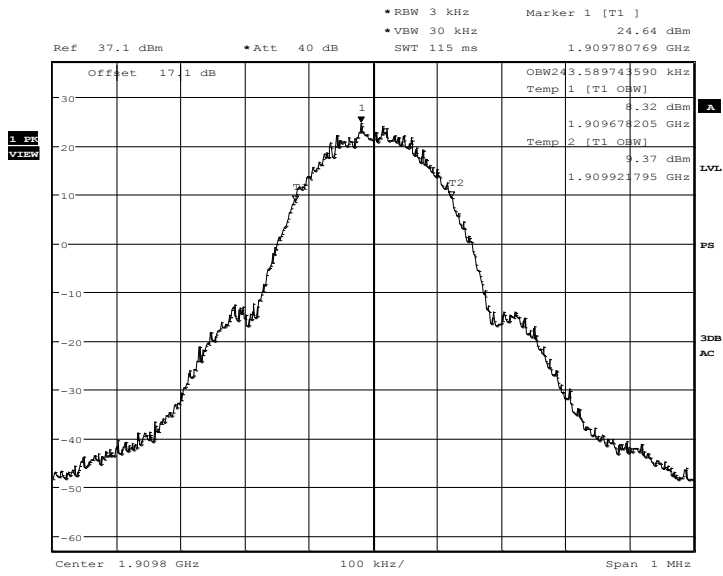
Date: 29.APR.2017 14:19:14

Diagram 31: Channel 512



Date: 29.APR.2017 14:24:45

Diagram 32: Channel 661

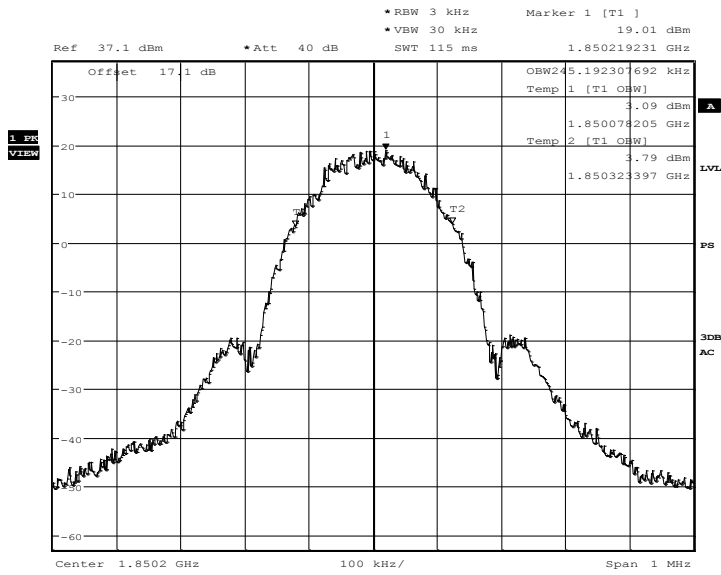


Date: 29.APR.2017 14:31:51

**Diagram 33: Channel 810**

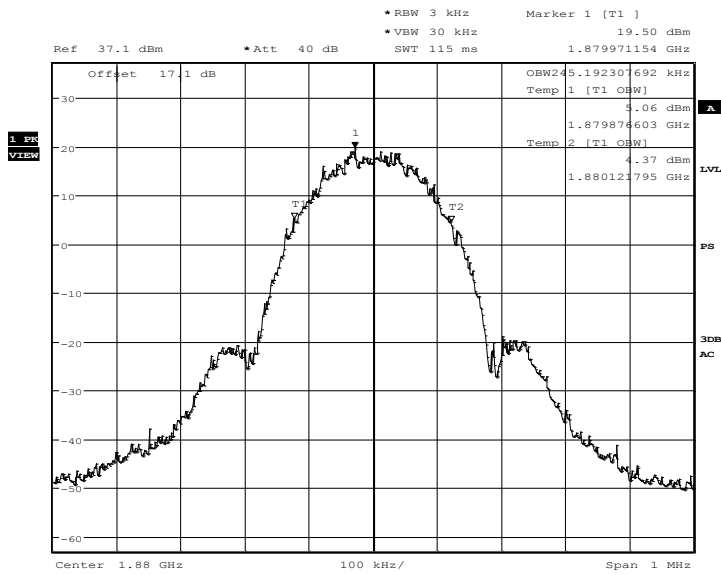


### 1.9.4. E-GPRS 1900 MHz TX-Mode



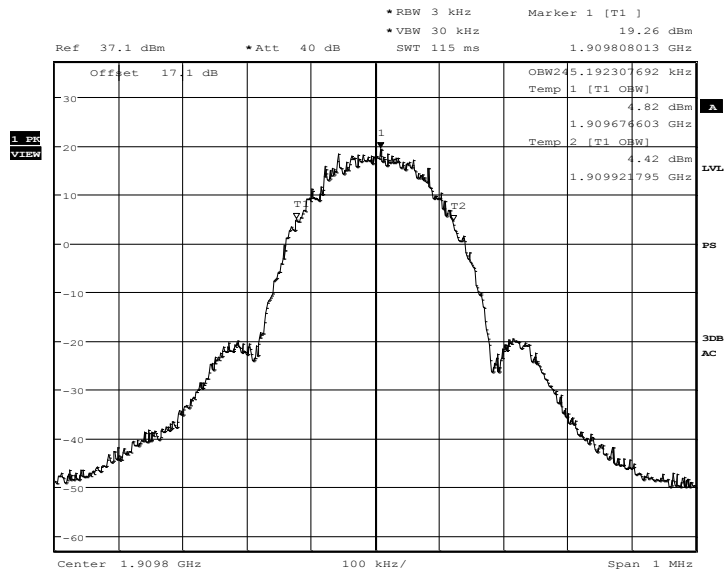
Date: 29.APR.2017 15:26:45

**Diagram 34: Channel 512**



Date: 29.APR.2017 15:22:15

**Diagram 35: Channel 661**



Date: 29.APR.2017 15:17:14

**Diagram 36: Channel 810**

### 1.10. Spurious emissions conducted on 850MHz (GPRS operating mode)

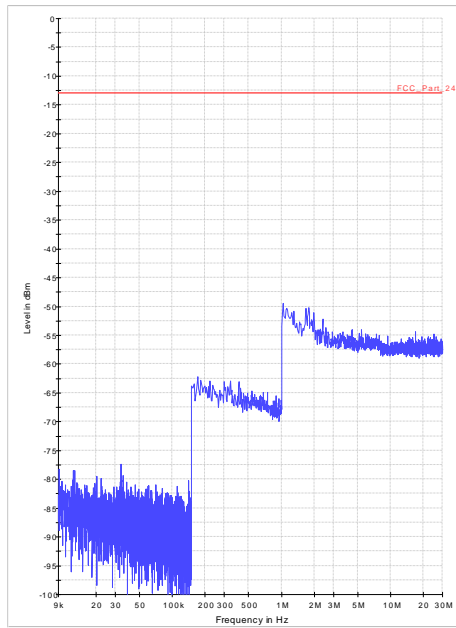


Diagram 36.01: Channel 128 – Sweep 1

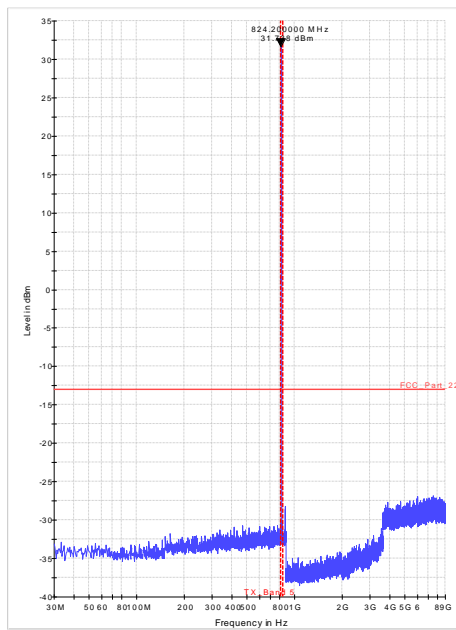


Diagram 36.02: Channel 128 – Sweep 2

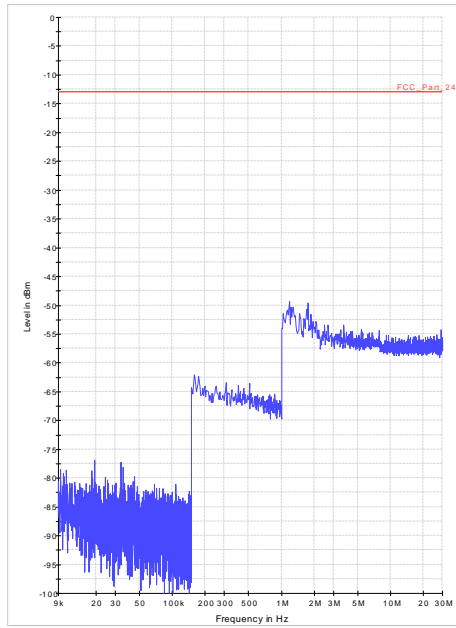


Diagram 36.03: Channel 192 – Sweep1

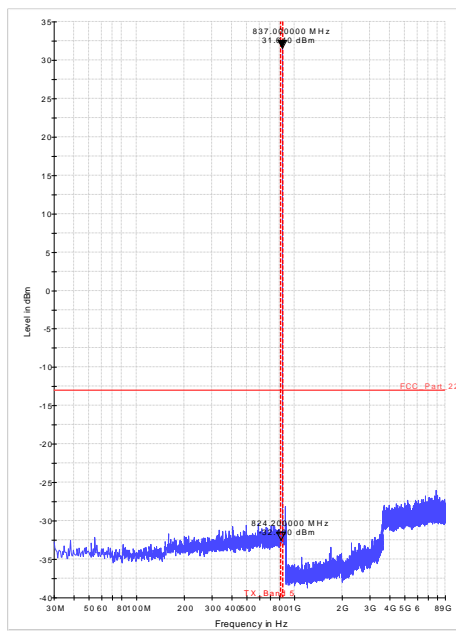


Diagram 36.04: Channel 192 – Sweep2

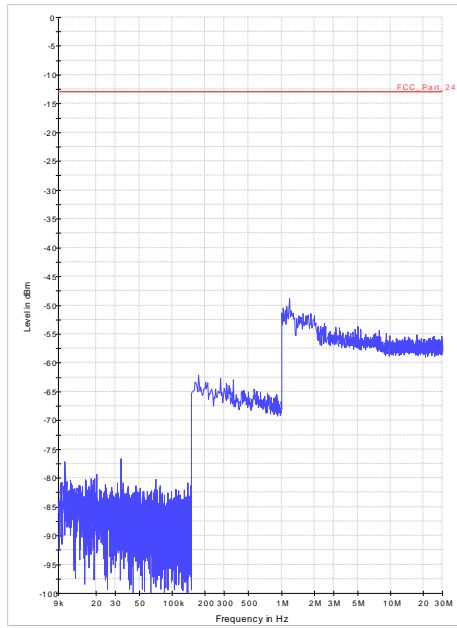


Diagram 36.05: Channel 251 – Sweep3

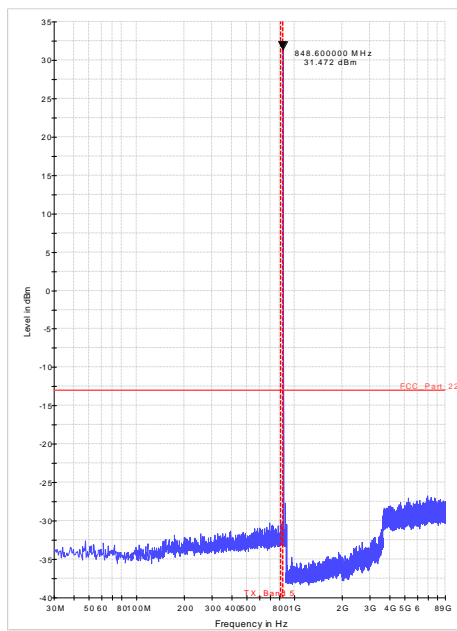


Diagram 36.06: Channel 251 – Sweep3

### 1.11. Spurious emissions conducted on 850 MHz (8-PSK operating mode)

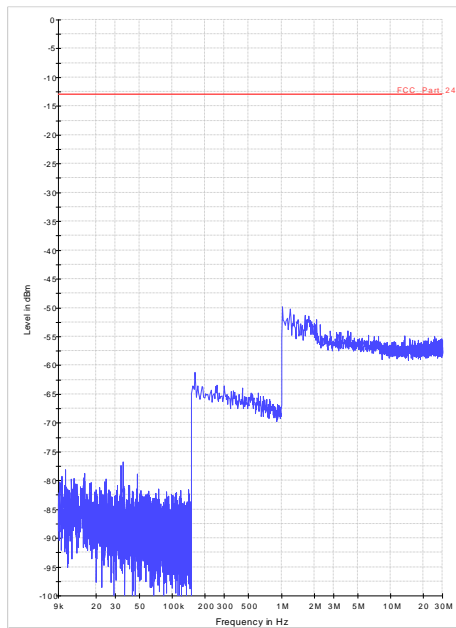


Diagram 36.07: Channel 128

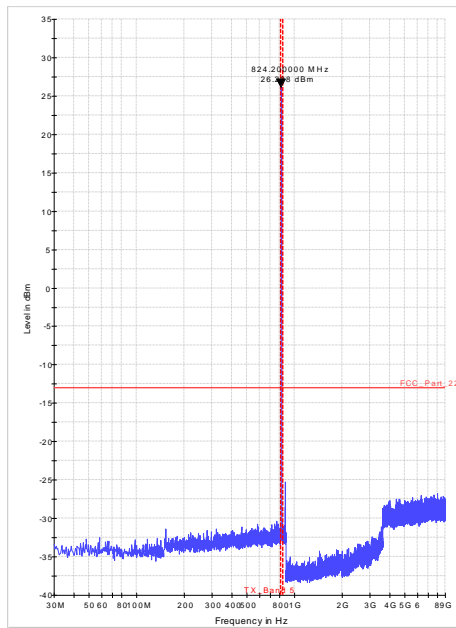


Diagram 36.08: Channel 128

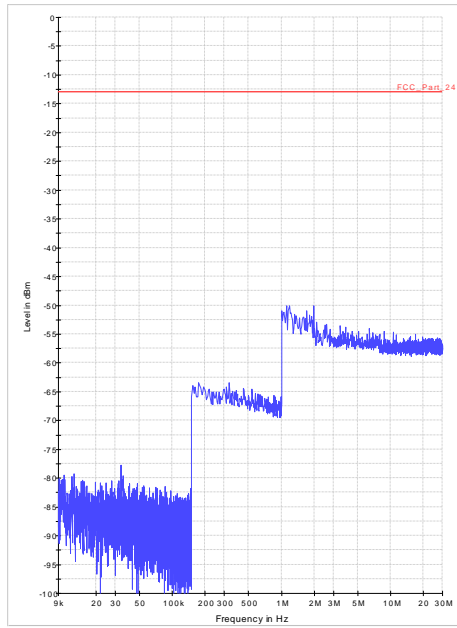


Diagram 36.09: Channel 192

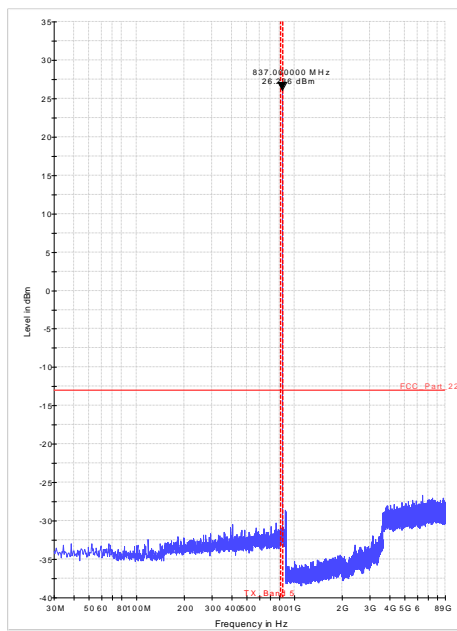


Diagram 36.10: Channel 192

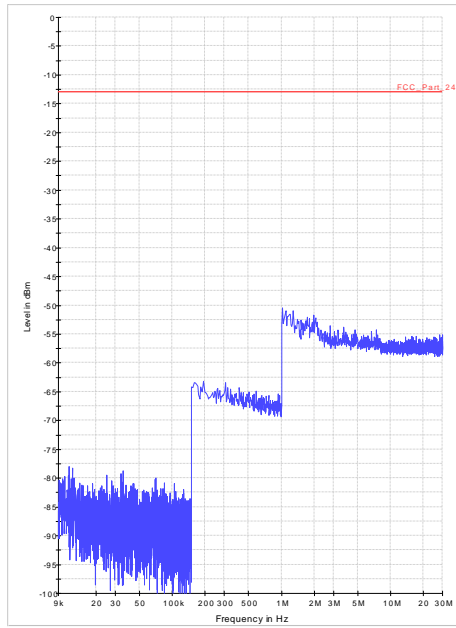


Diagram 36.11: Channel 251

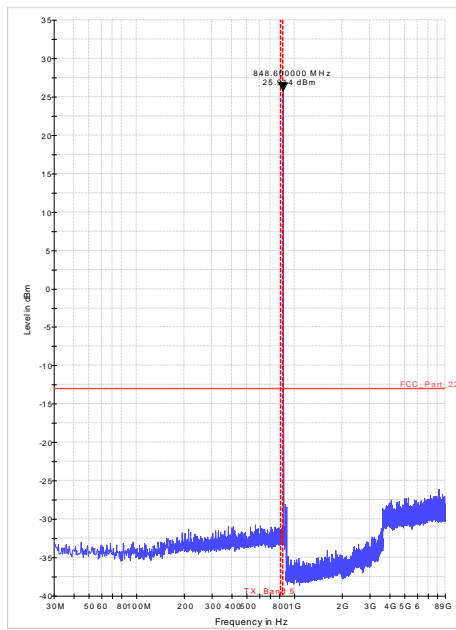


Diagram 36.12: Channel 251



### 1.12. Spurious emissions conducted on 1900 MHz (GPRS operating mode)

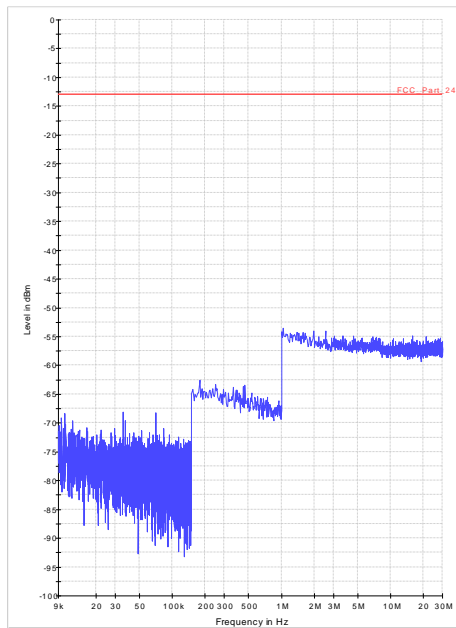


Diagram 36.20: Channel 512 – Sweep1

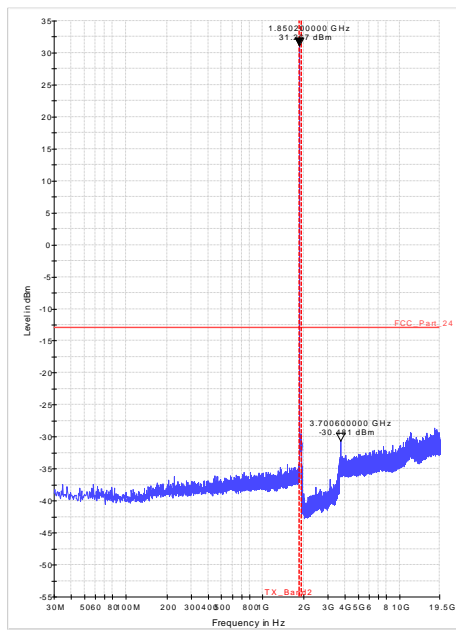


Diagram 36.21: Channel 512 – Sweep2

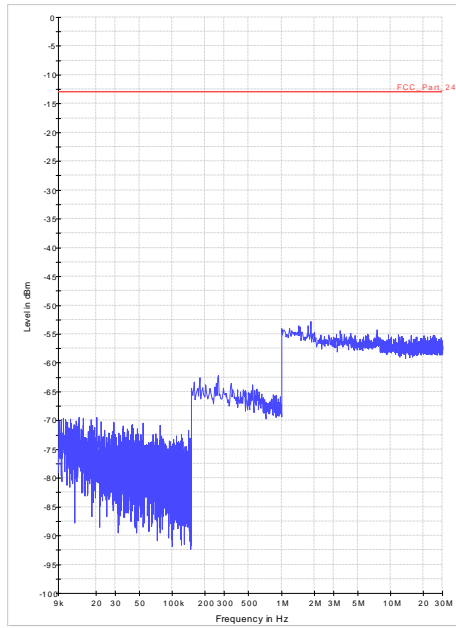


Diagram 36.22: Channel 661 – Sweep1

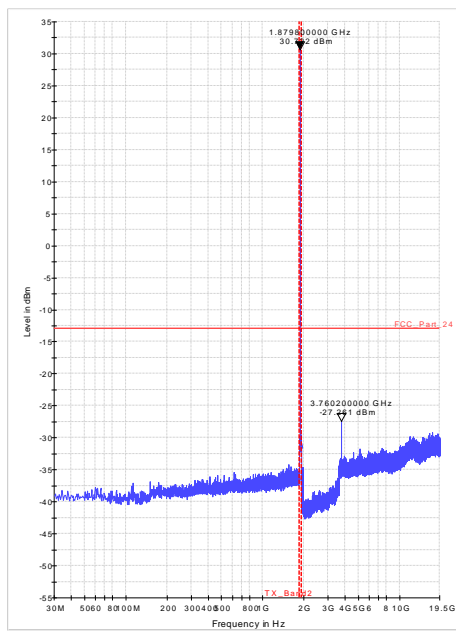


Diagram 36.23: Channel 661 – Sweep2

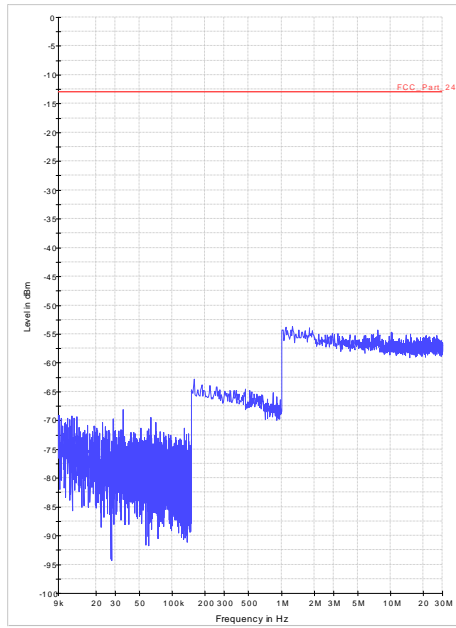


Diagram 36.24: Channel 810 – Sweep 1

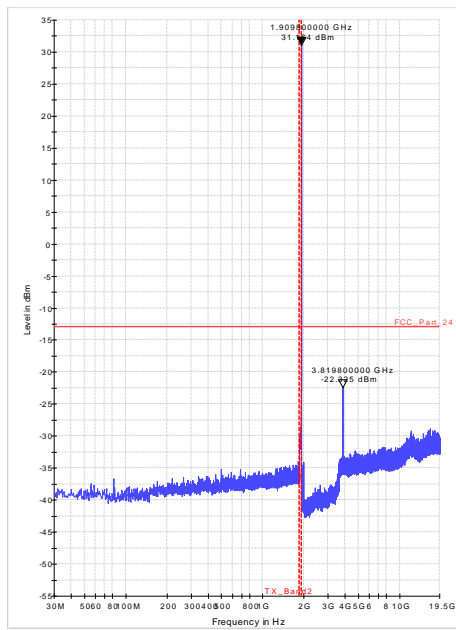


Diagram 36.25: Channel 810 – Sweep 2

### 1.13. Spurious emissions conducted on 1900 MHz (8-PSK operating mode)

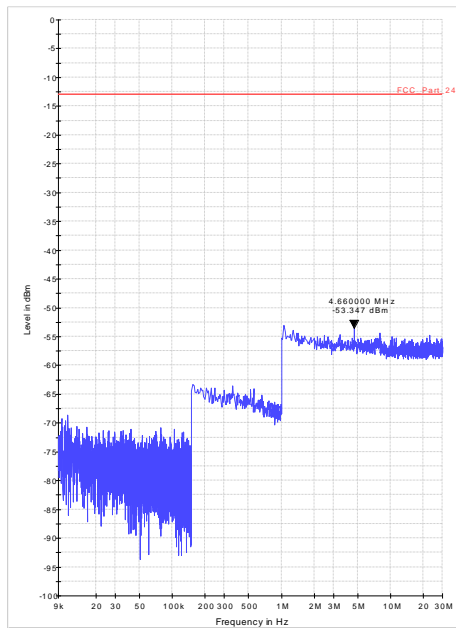


Diagram 36.26: Channel 512 – Sweep1

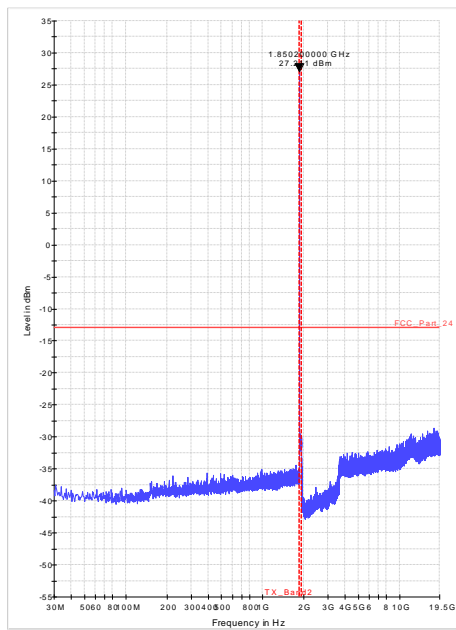


Diagram 36.27: Channel 512 – Sweep2

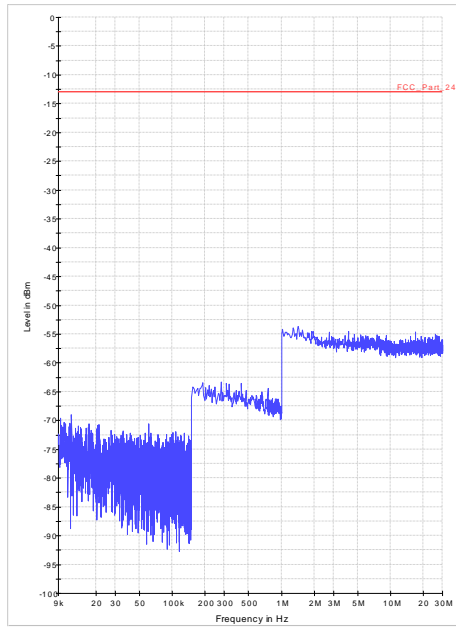


Diagram 36.28: Channel 661 – Sweep1

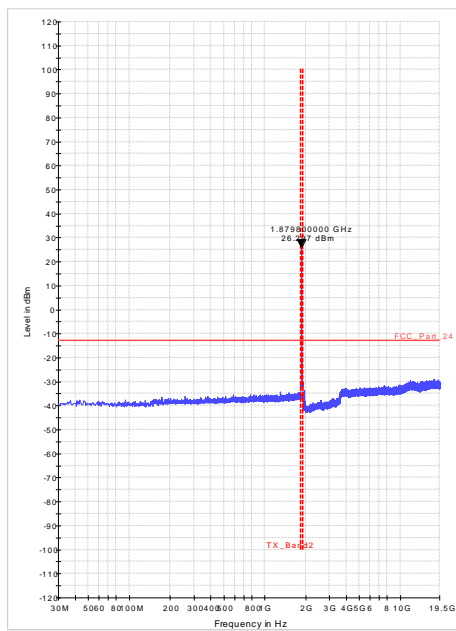


Diagram 36.29: Channel 661 – Sweep2

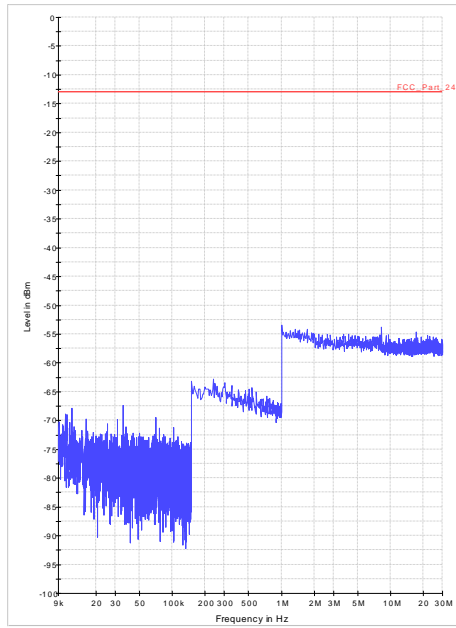


Diagram 36.30: Channel 810 – Sweep 1

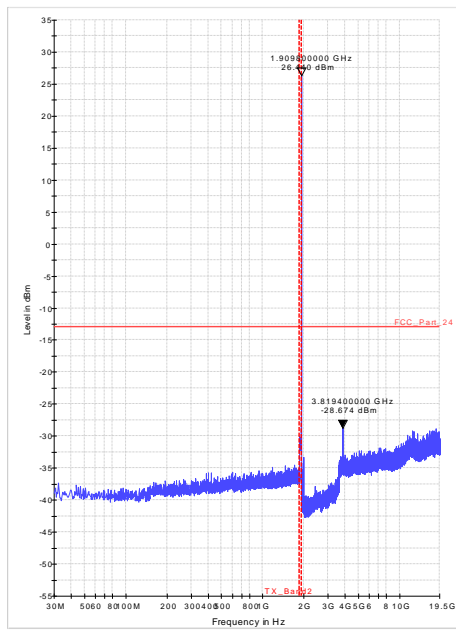


Diagram 36.31: Channel 810 – Sweep 2

### 1.14. Band-edge conducted emissions on 850 MHz (GPRS operating mode)

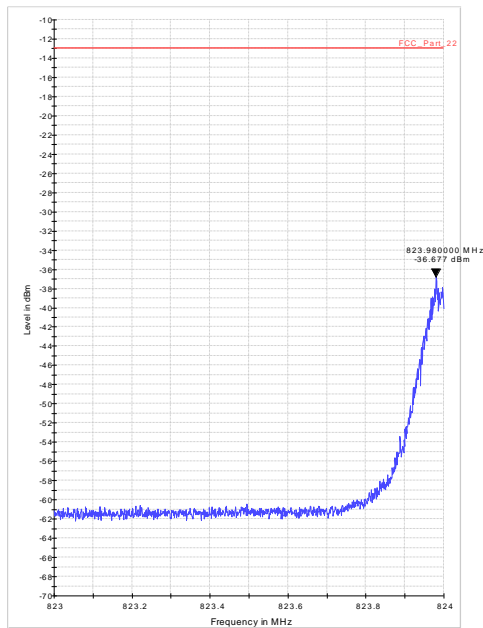


Diagram 37.01: Channel 128

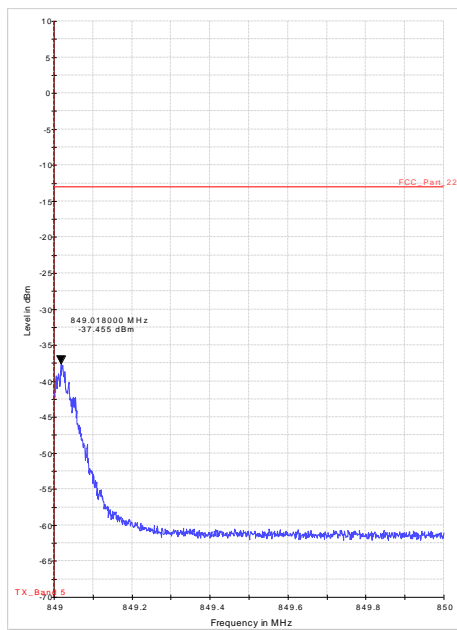


Diagram 37.02: Channel 251

### 1.15. Band-edge conducted emissions on 850 MHz (8-PSK operating mode)

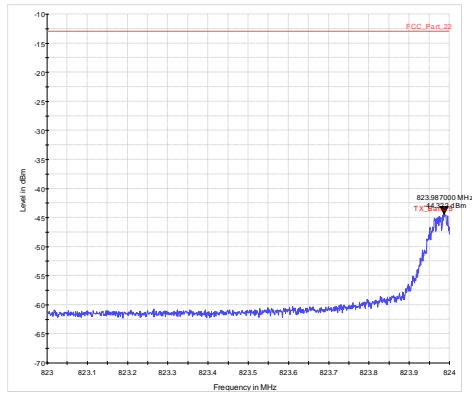


Diagram 37.03: Channel 128

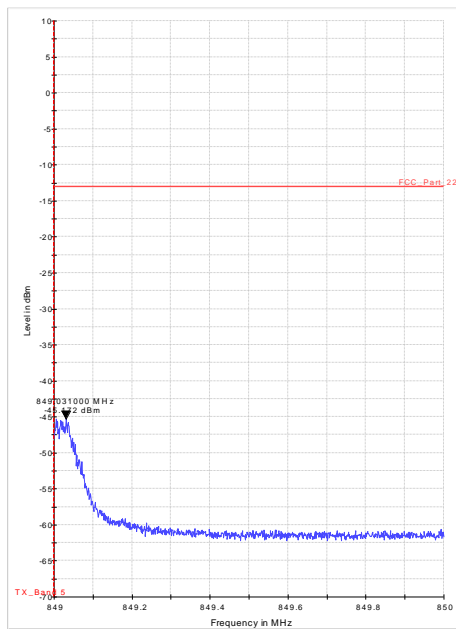


Diagram 37.04: Channel 251



### 1.16. Band-edge conducted emissions on 1900MHz (GPRS operating mode)

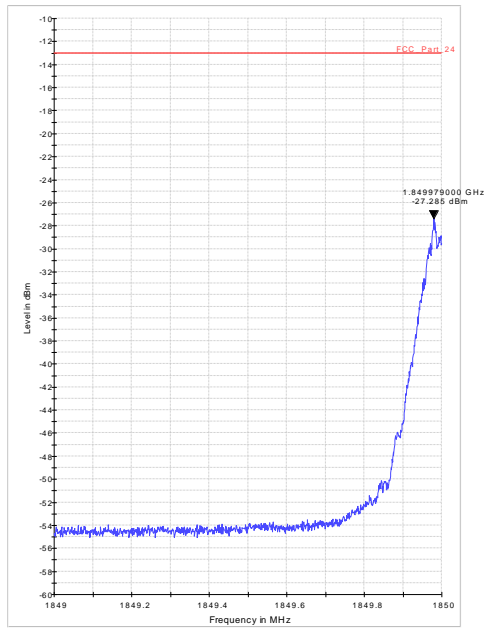


Diagram 37.10: Channel 512

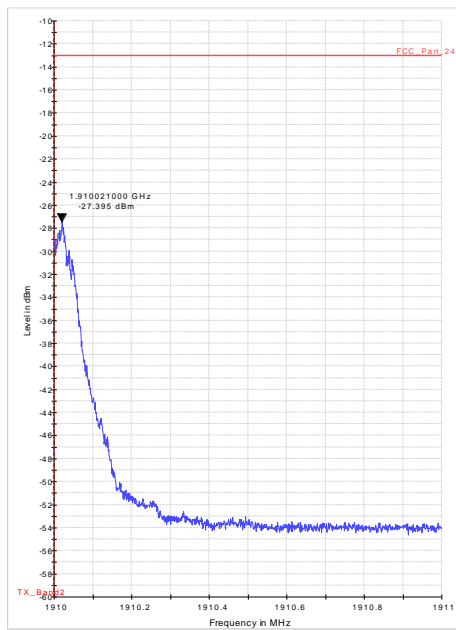


Diagram 37.11: Channel 810

### 1.17. Band-edge conducted emissions on 1900MHz (8-PSK operating mode)

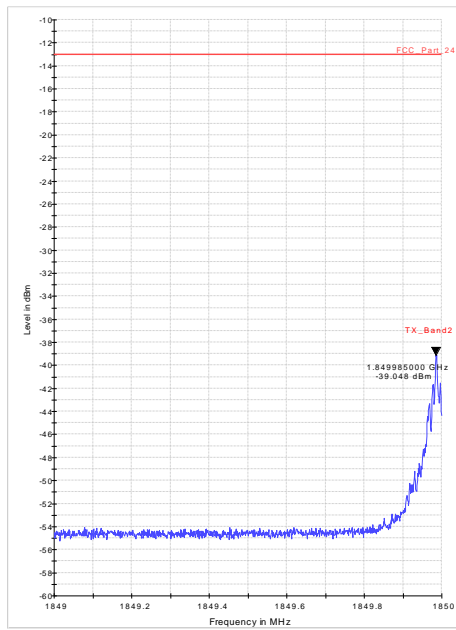


Diagram 37.12: Channel 512

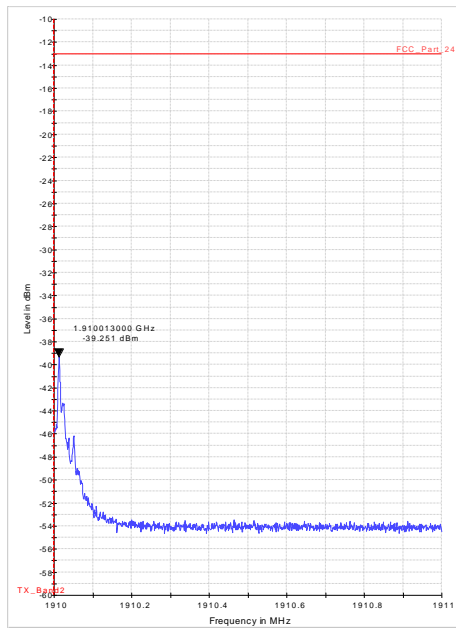


Diagram 37.13: Channel 810