

Annex 4: Measurement diagrams  
to  
**TEST REPORT**  
No.: 6-0315-13-1-3a






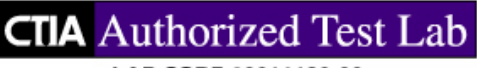
According to:  
**FCC Regulations**  
Part 22, Part 24

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

for

**Peiker acoustic GmbH & Co. KG**  
**GSM/W-CDMA/LTE module V1140-101**  
**+ Antenna US34105**  
(GSM/E-GPRS mode)

FCC-ID: QWY-V1140-101  
IC: 6588A-V1140101

Laboratory Accreditation and Listings			
 <b>Deutsche Akkreditierungsstelle</b> D-PL-12047-01-01	 <b>FEDERAL COMMUNICATIONS COMMISSION</b> • USA • Reg. No.: 736496 MRA US-EU 0003	 <b>Industry Canada</b> Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 <b>Voluntary Controls for Electromagnetic Emissions</b> Reg. No.: R-2666 C-2914, T-1967, G-301
 <b>AUTHORIZED RF LABORATORY</b>	 <b>LAB CODE 20011130-00</b>		
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>			

## Table of contents

<b>1. MEASUREMENT DIAGRAMS.....</b>	<b>3</b>
1.1. Spurious emissions radiated (850 MHz transmitting mode).....	3
1.2. Spurious emissions radiated (1900 MHz transmitting mode).....	7
1.3. Radiated emissions on 850 MHz transmitting band-edge.....	11
1.4. Radiated emissions on 1900 MHz transmitting band-edge.....	13
1.5. 26dBc Emission bandwidth .....	15
1.6. 99% Occupied bandwidth.....	21
1.7. Spurious emissions conducted (850 MHz transmitting mode) .....	25
1.8. Spurious emissions conducted (1900 MHz transmitting mode) .....	37
1.9. Conducted emissions on 850 MHz band-edge.....	49
1.10. Conducted emissions on 1900 MHz band-edge.....	53

# 1. Measurement diagrams

## 1.1. Spurious emissions radiated (850 MHz transmitting mode)

### 8.04\_RSE\_R\_Ch128\_GPRS

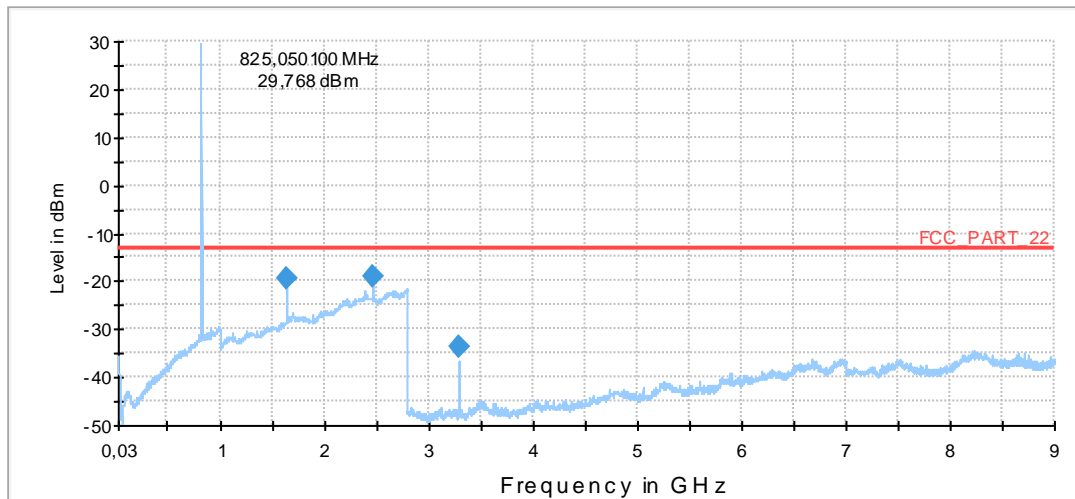
#### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 128
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 53%rH; Temperature: 24°C
Operator:	FTE

#### EUT Information

Manufacturer:	Peiker acustic GmbH & Co. KG
Model:	LTE-NAD solution
Type:	GSM/UMTS/LTE module
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	microphone + loudspeaker
Power Supply:	external 3.8V DC
Comments:	Testboard LP1307-1

030401\_FCC\_Part22\_GSM850\_TX\_all\_channels\_30M-12G



#### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1648.346693	-19.4	5000.0	1000.000	H	326.0	90.0	-63.4	6.4	-13.0
2472.795591	-18.8	5000.0	1000.000	H	39.0	90.0	-59.6	5.8	-13.0
3296.703407	-33.9	5000.0	1000.000	H	292.0	90.0	-95.7	20.9	-13.0

## 8.05\_Ch192\_GPRS

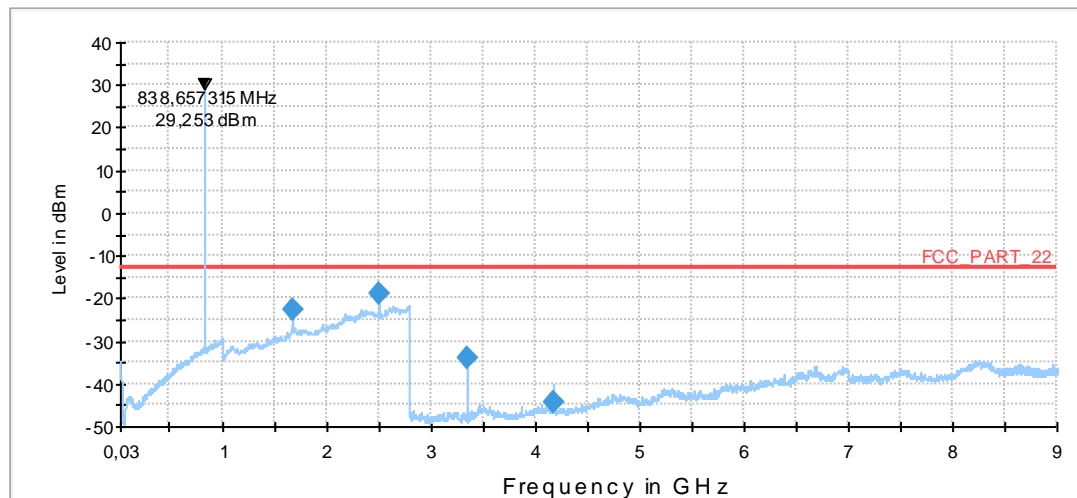
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 192
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 53%rH; Temperature: 24°C
Operator:	FTE

### EUT Information

Manufacturer:	Peiker acustic GmbH & Co. KG
Model:	LTE-NAD solution
Type:	GSM/UMTS/LTE module
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	microphone + loudspeaker
Power Supply:	external 3.8V DC
Comments:	Testboard LP1307-1

030401\_FCC\_Part22\_GSM850\_TX\_all\_channels\_30M-12G



### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1674.098196	-22.6	5000.0	1000.000	V	261.0	0.0	-63.1	9.6	-13.0
2510.771543	-19.1	5000.0	1000.000	V	302.0	0.0	-59.6	6.1	-13.0
3348.206413	-33.8	5000.0	1000.000	H	312.0	90.0	-95.6	20.8	-13.0
4184.559119	-44.6	5000.0	1000.000	V	270.0	0.0	-93.4	31.6	-13.0

## 8.06\_RSE\_R\_Ch251\_GPRS

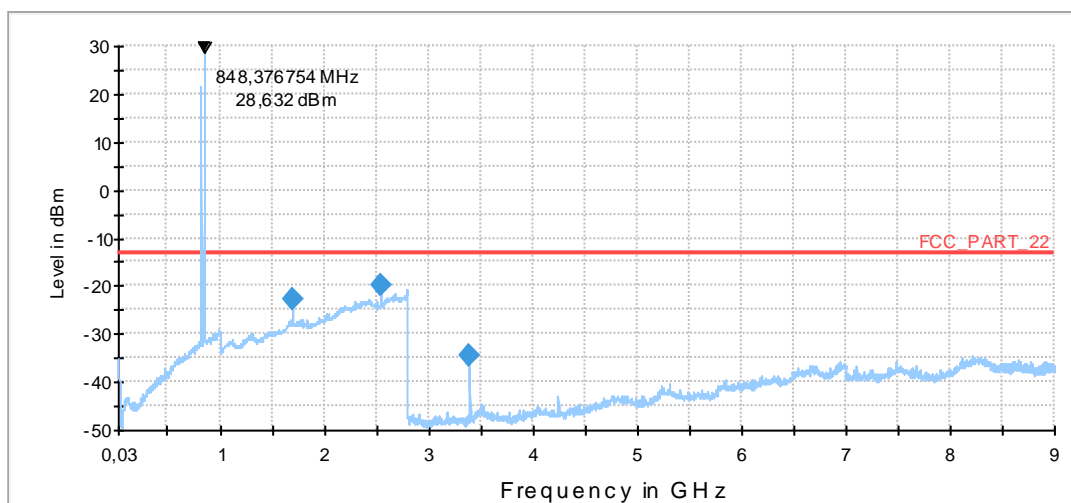
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 53%rH; Temperature: 24°C
Operator:	FTE

### EUT Information

Manufacturer:	Peiker acustic GmbH & Co. KG
Model:	LTE-NAD solution
Type:	GSM/UMTS/LTE module
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	microphone + loudspeaker
Power Supply:	external 3.8V DC
Comments:	Testboard LP1307-1

030401\_FCC\_Part22\_GSM850\_TX\_all\_channels\_30M-12G



### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1697.925852	-22.7	5000.0	1000.000	H	321.0	90.0	-62.8	9.7	-13.0
2546.503006	-19.7	5000.0	1000.000	H	302.0	90.0	-59.3	6.7	-13.0
3395.621243	-34.6	5000.0	1000.000	H	315.0	90.0	-95.4	21.6	-13.0

## 8.105\_Ch192\_GPRS\_retest

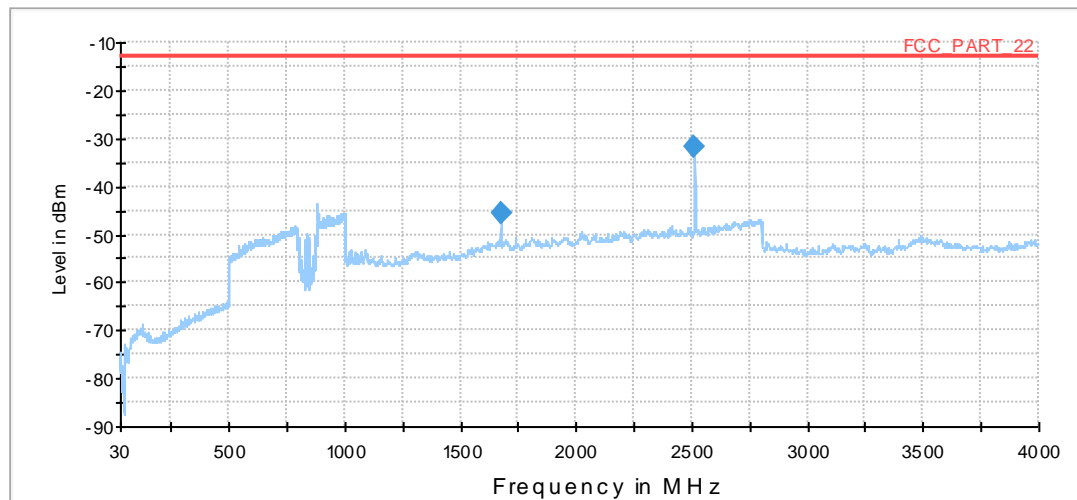
### Common Information

Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 192
Exclusionband:	835.2 - 838.8MHz
Environmental Conditions:	Humidity: 68%rH; Temperature: 20°C
Operator:	YZh

### EUT Information

Manufacturer:	Peiker acustic GmbH & Co. KG
Model:	LTE-NAD solution
Type:	GSM/UMTS/LTE module
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	microphone + loudspeaker
Power Supply:	external 3.8V DC
Comments:	Testboard LP1307-1, modified antenna

030401\_FCC\_Part22\_GSM850\_TX\_all\_channels\_30M-12G



### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1674.178356	-45.6	5000.0	3000.000	-7,0	90.0	-89.7	15.6	-30.0	---
2511.032064	-31.7	5000.0	3000.000	228,0	90.0	-85.9	1.7	-30.0	---

## 1.2. Spurious emissions radiated (1900 MHz transmitting mode)

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

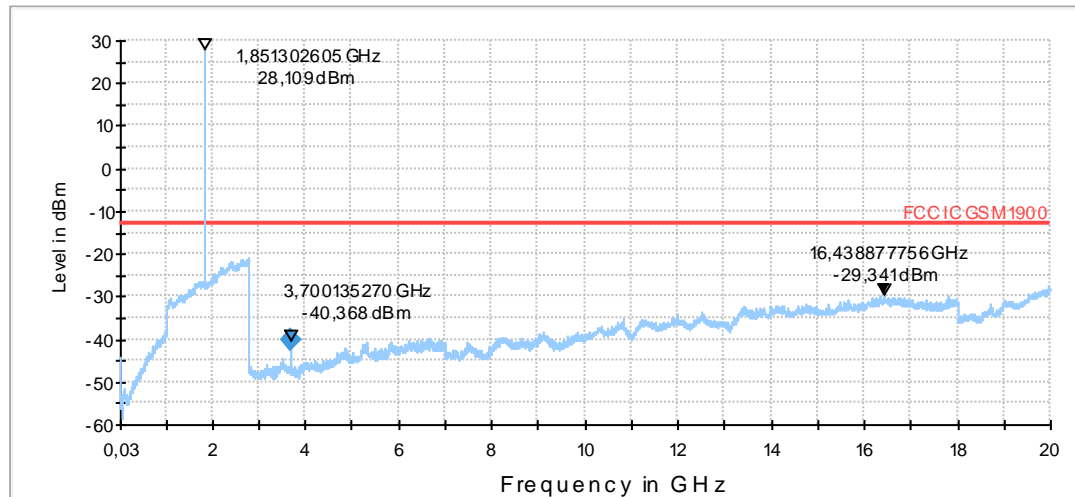
#### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GPRS 1900
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 53%rH; Temperature: 24°C
Operator:	Ada

#### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

030404\_FCC\_Part24\_GSM1900\_TX\_all\_channels\_30M-20G



#### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3700.135270	-40.4	5000.0	3000.000	H	91.0	90.0	-94.9	27.4	-13.0

## 8.14\_RSE\_R\_Ch661\_GPRS

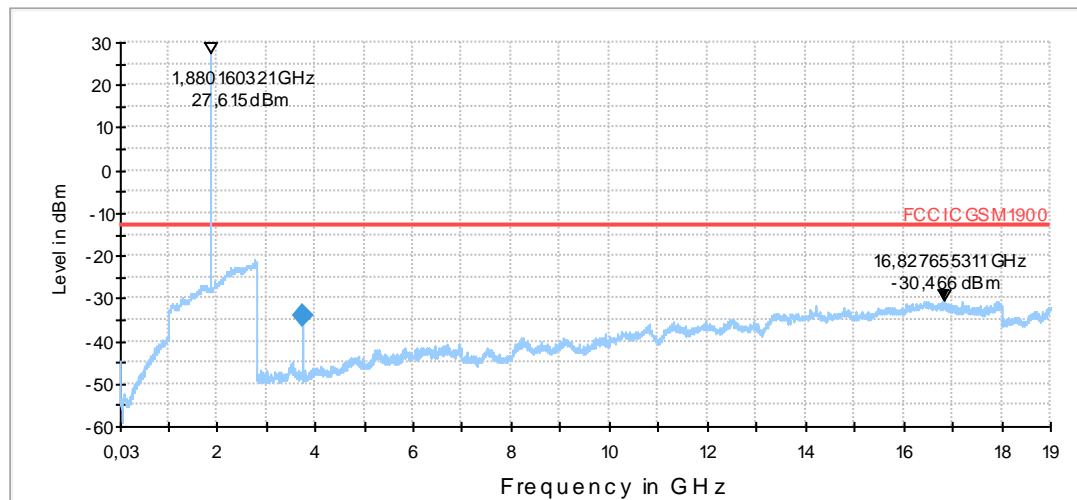
### Common Information

Test Description: Radiated Spurious Emissions GSM1900  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 24.238  
 Comm. Link: GPRS 1900  
 Operating Mode: TX-on, GPRS-Mode, CS1, channel 661  
 Exclusionband: 1850- 1910MHz  
 Environmental Conditions: Humidity:60%rH; Temperature: 25°C  
 Operator: Yzh

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

030404\_FCC\_Part24\_GSM1900\_TX\_all\_channels\_30M-20G



### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3759.974950	-33.9	5000.0	3000.000	H	70.0	90.0	-95.1	20.9	-13.0



## 8.15p\_RSE\_R\_Ch810\_GPRS

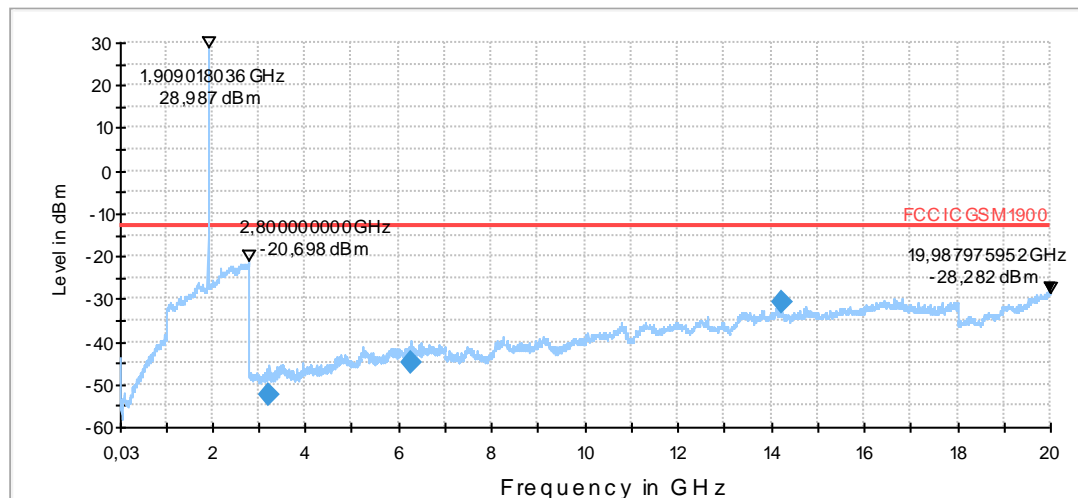
### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GPRS 1900
Operating Mode:	MS allocated channel 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 55%rH; Temperature: 24°C
Operator:	Lor

### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comment1:	IMEI no. 004402-58-000004-4
Comment2:	Antenna modified

030404\_FCC\_Part24\_GSM1900\_TX\_all\_channels\_30M-20G



### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3234.153307	-52.3	1000.0	1000.000	V	25.0	0.0	-95.4	39.3	-13.0
6260.696393	-44.7	1000.0	1000.000	V	148.0	90.0	-86.4	31.7	-13.0
14219.884770	-30.6	1000.0	1000.000	H	188.0	0.0	-73.9	17.6	-13.0

## 8.114\_RSE\_R\_Ch661\_GPRS\_retest

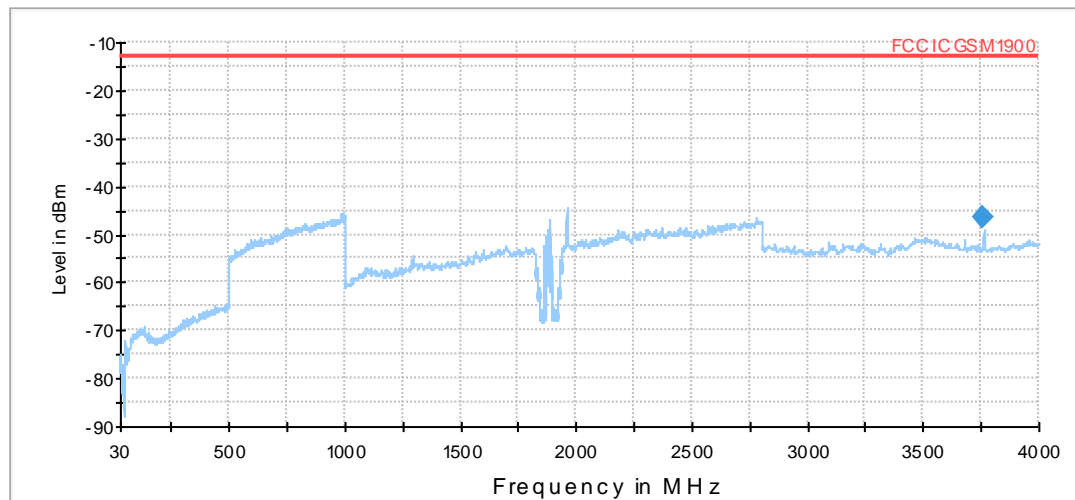
### Common Information

Test Description: Radiated Spurious Emissions GSM1900  
 Test Site Location: CETECOM GmbH Essen  
 Test Site: Fully Anechoic Room (FAR)  
 Test Standard: FCC Part 24.238  
 Comm. Link: GPRS 1900  
 Operating Mode: TX-on, GPRS-Mode, CS1, channel 661  
 Exclusionband: 1878.2 - 1881.8MHz  
 Environmental Conditions: Humidity: 68%rH; Temperature: 20°C  
 Operator: Yzh

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4, modified antenna

030404\_FCC\_Part24\_GSM1900\_TX\_all\_channels\_30M-20G



### Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3759.744489	-46.4	5000.0	3000.000	50,0	90.0	-97.2	16.4	-30.0	---

### 1.3. Radiated emissions on 850 MHz transmitting band-edge

#### 9.02\_BE\_R\_Ch251\_GPRS

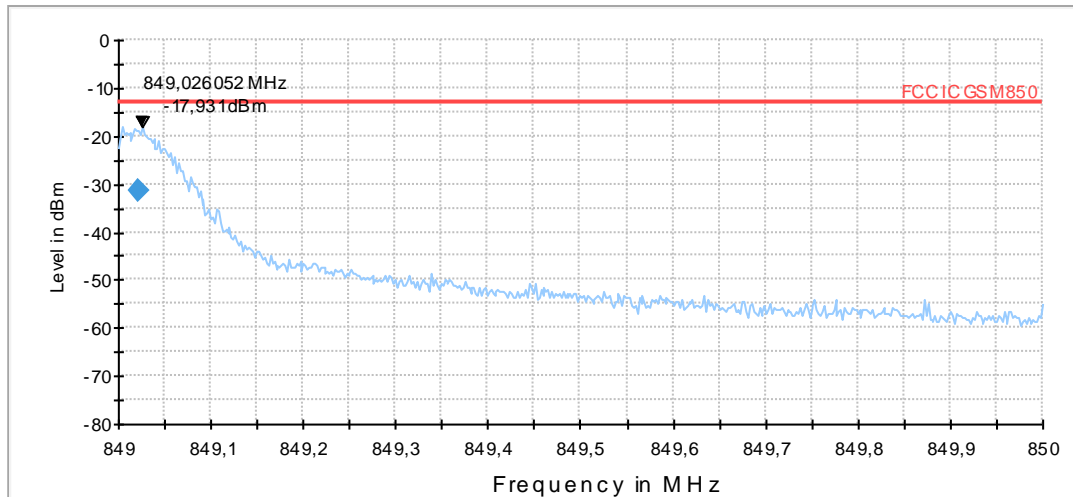
##### Common Information

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
Operating Mode:	MS allocated channel 251 (fc = 848.8MHz), Voice, PCL0 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 47%rH; Temperature: 20°C
Operator:	ADa

##### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

030403e\_FCC\_Part22\_GSM850\_TX\_high\_BE\_CMU\_RF3\_RF4\_no\_Contro



##### Final Result 1

Frequency (MHz)	RMS (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
849.022044	-31.2	10000.0	3.000	V	193.0	0.0	-76.1	18.2	-13.0

## 9.04\_BE\_R\_Ch128\_GPRS

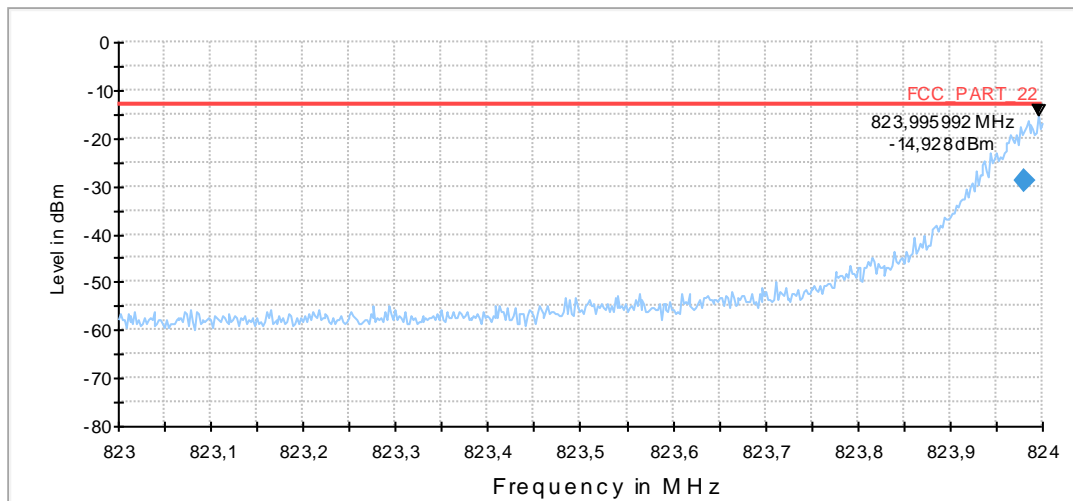
### Common Information

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
Operating Mode:	MS allocated channel 128 (fc = 824.2MHz), Voice, PCL5 (+33dBm)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 47%rH; Temperature: 20°C
Operator:	ADa

### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

030402e\_FCC\_Part22\_GSM850\_TX\_low\_BE\_CMU\_RF3\_RF4\_no\_Control



### Final Result 1

Frequency (MHz)	RMS (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
823.979960	-29.0	10000.0	3.000	H	-48.0	90.0	-75.9	16.0	-13.0

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

### 9.09\_BE\_R\_Ch512\_GPRS

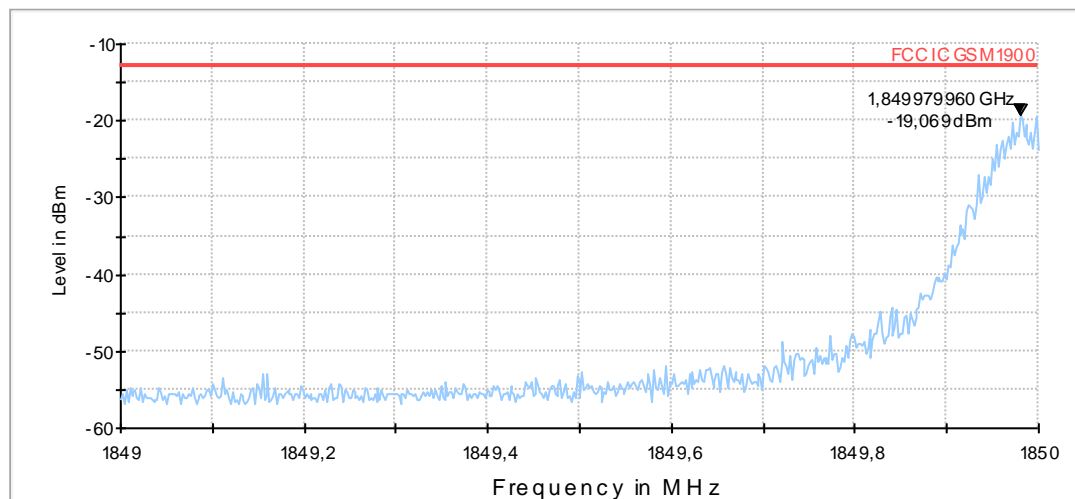
#### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GPRS1900 mode
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 54%rH; Temperature: 25.2°C
Operator:	Lor

#### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comment1:	IMEI no. 004402-58-000004-4
Comment2:	Antenna modified

030405\_FCC\_Part24\_GSM1900\_TX\_low\_ch\_band\_edge



## 9.10\_BE\_R\_Ch810\_GPRS

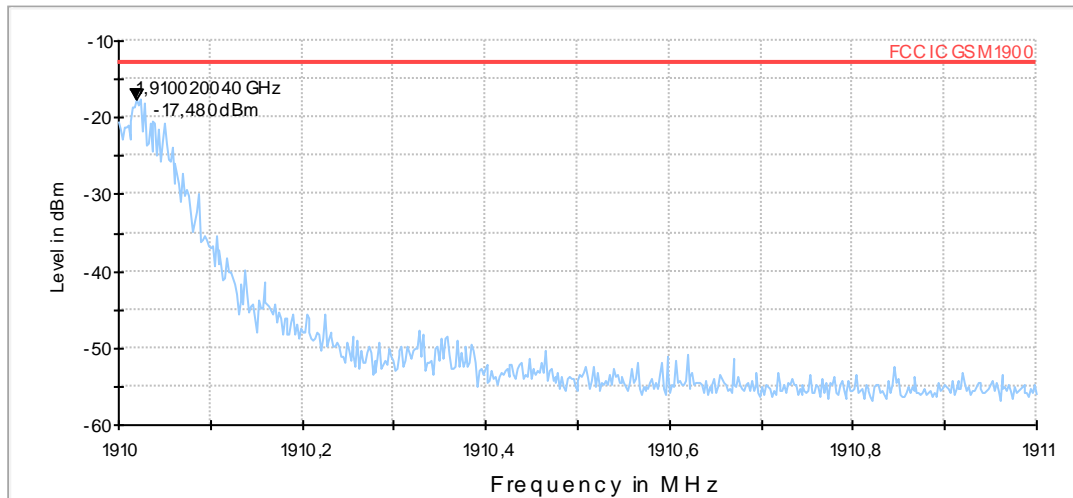
### Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900 GPRS
Operating Mode:	MS allocated channel 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 54%rH; Temperature: 25.4°C
Operator:	Lor

### EUT Information

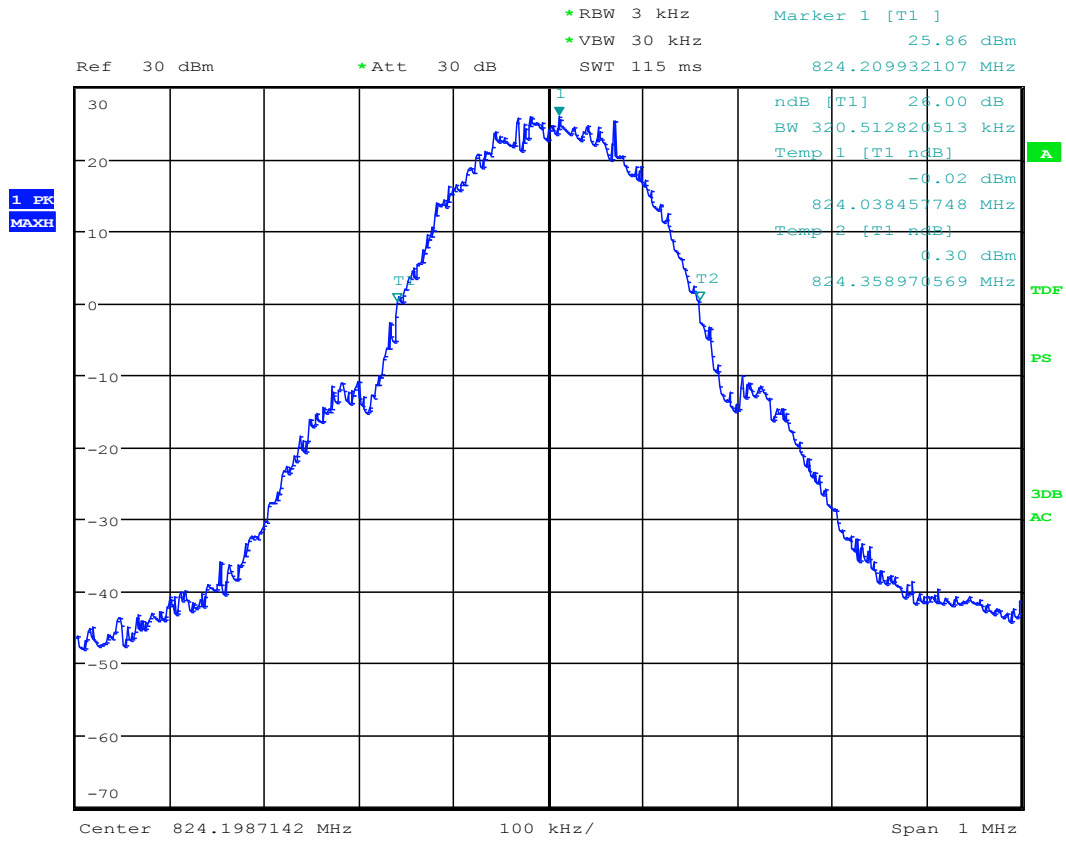
Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comment1:	IMEI no. 004402-58-000004-4
Comment2:	Antenna modified

030406\_FCC\_Part24\_GSM1900\_TX\_high\_ch\_band\_edge



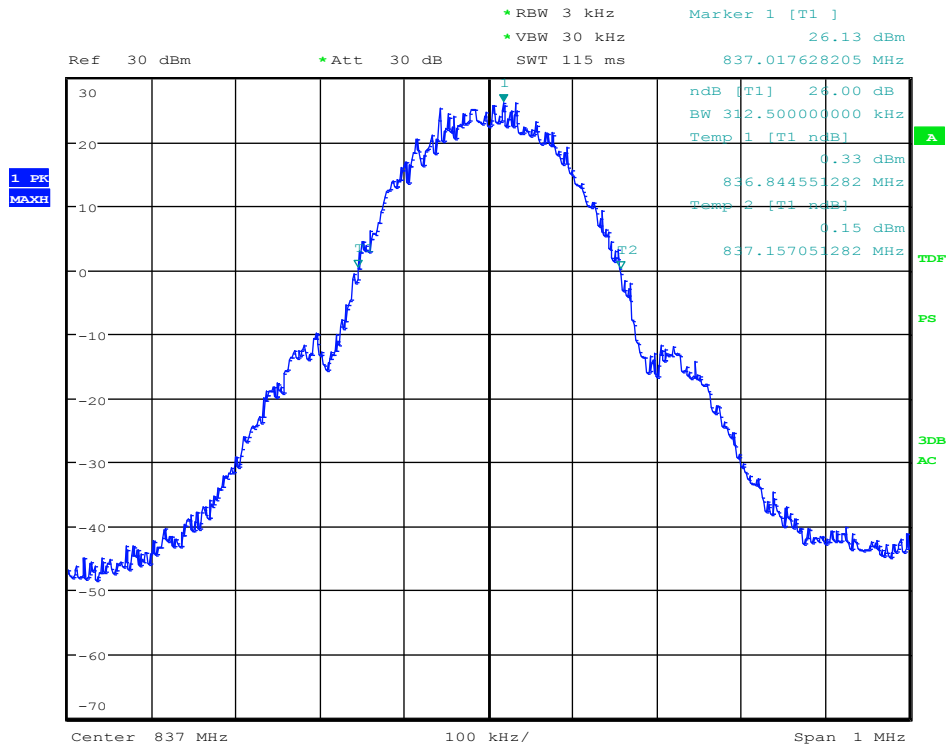
## 1.5. 26dBc Emission bandwidth

### 1.5.1. GPRS 850 MHz TX-Mode



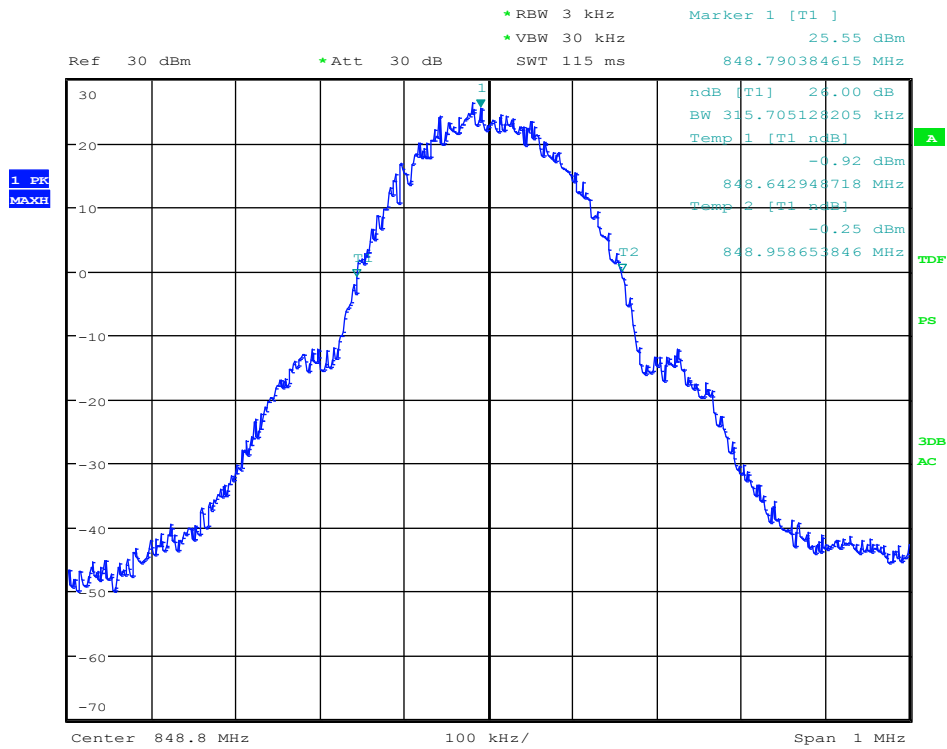
Date: 10.JUN.2013 12:16:13

Channel 128



Date: 10.JUN.2013 12:20:15

Channel 192

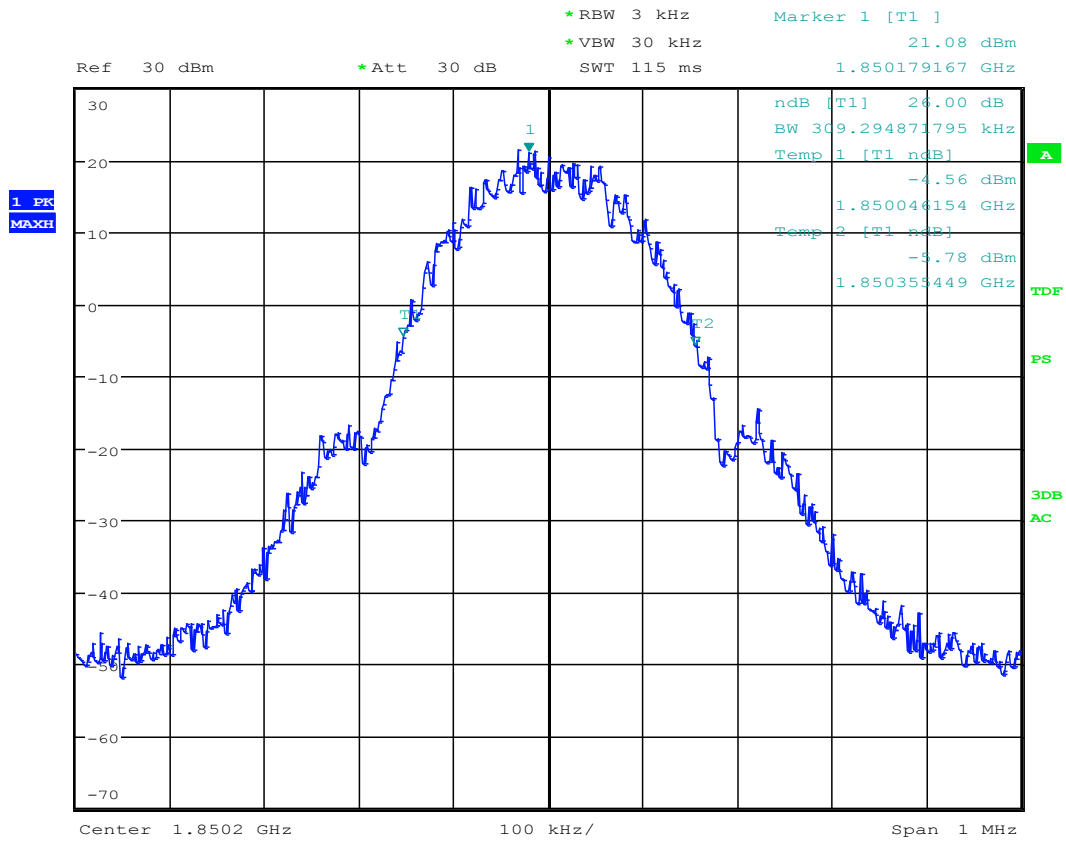


Date: 10.JUN.2013 12:22:00

Channel 251

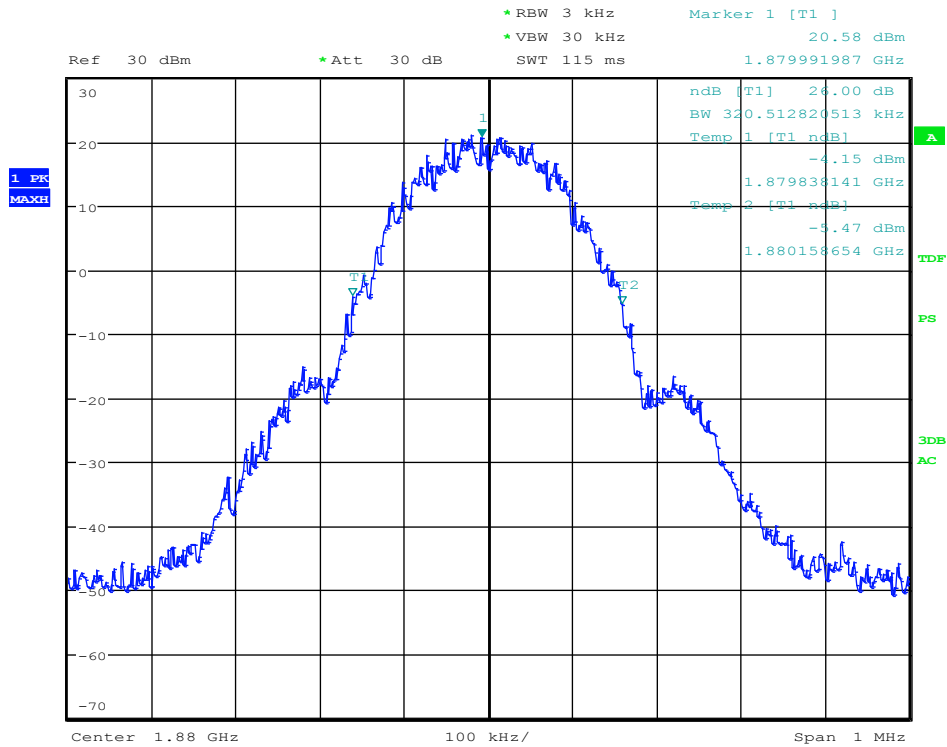


### 1.5.2. GPRS 1900 MHz TX-Mode



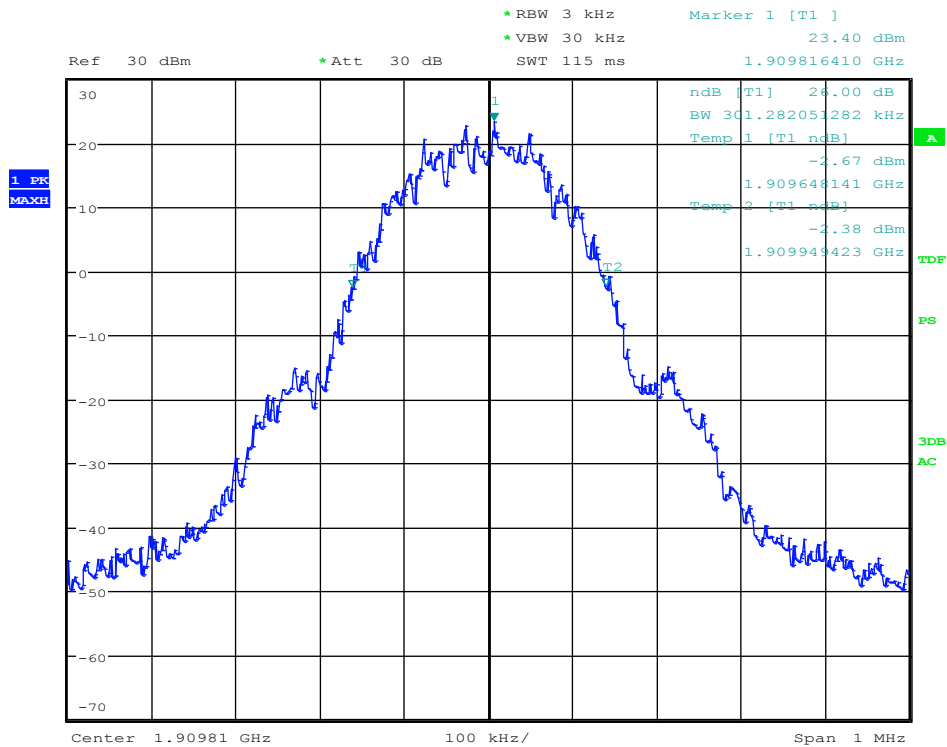
Date: 10.JUN.2013 12:54:16

Channel 512



Date: 10.JUN.2013 12:52:59

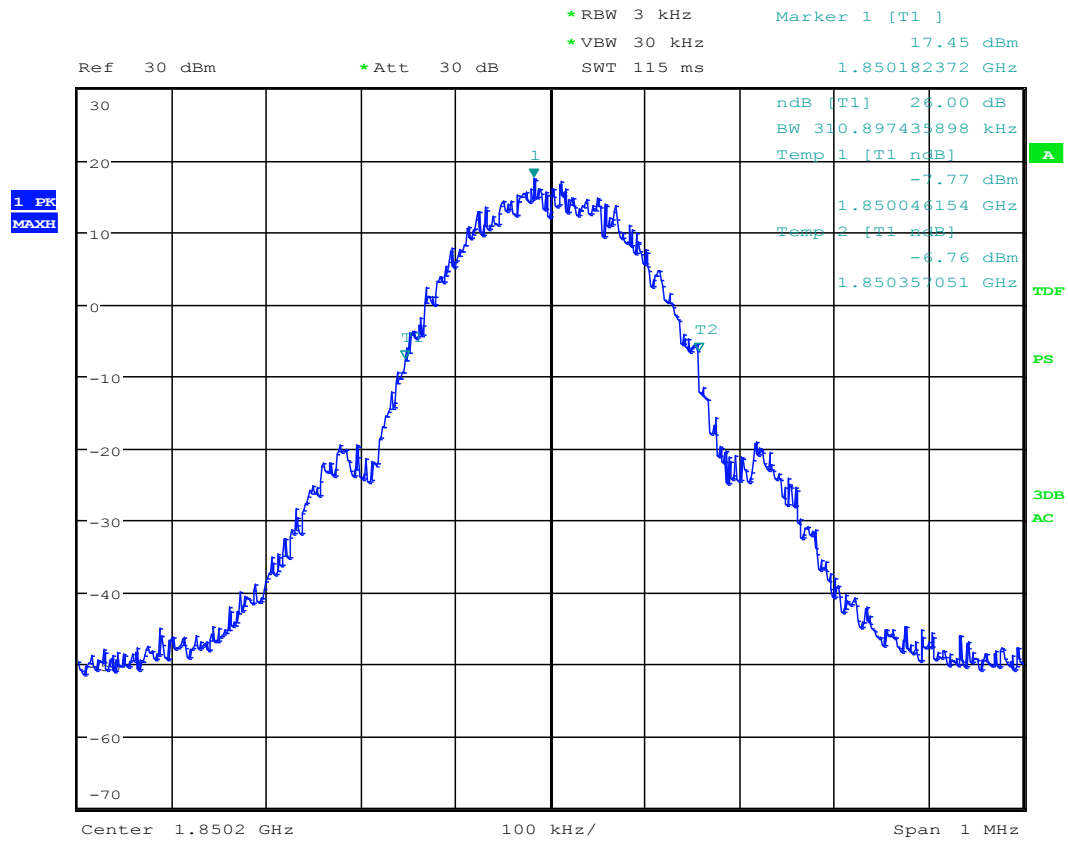
Channel 661



Date: 10.JUN.2013 12:48:10

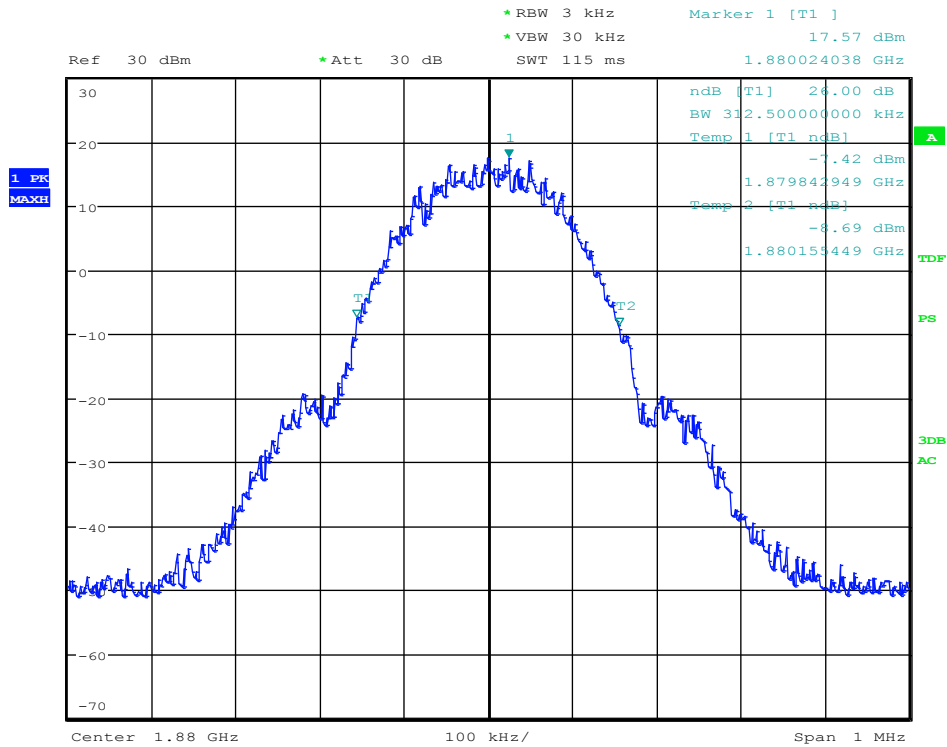
Channel 810

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



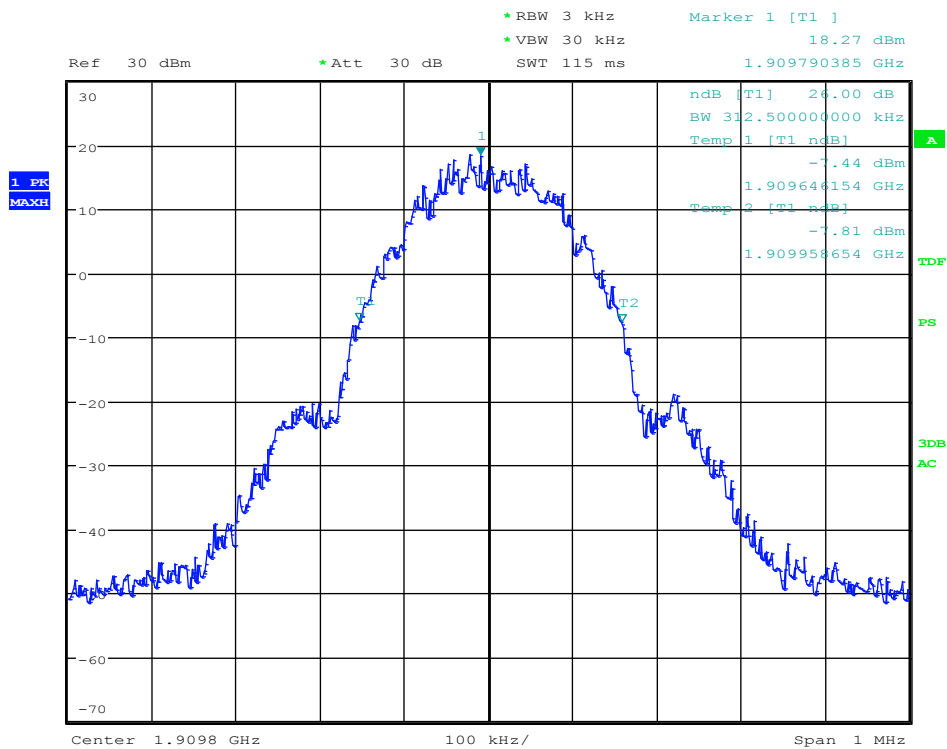
Date: 10.JUN.2013 12:56:24

Channel 512



Date: 10.JUN.2013 12:57:40

Channel 661

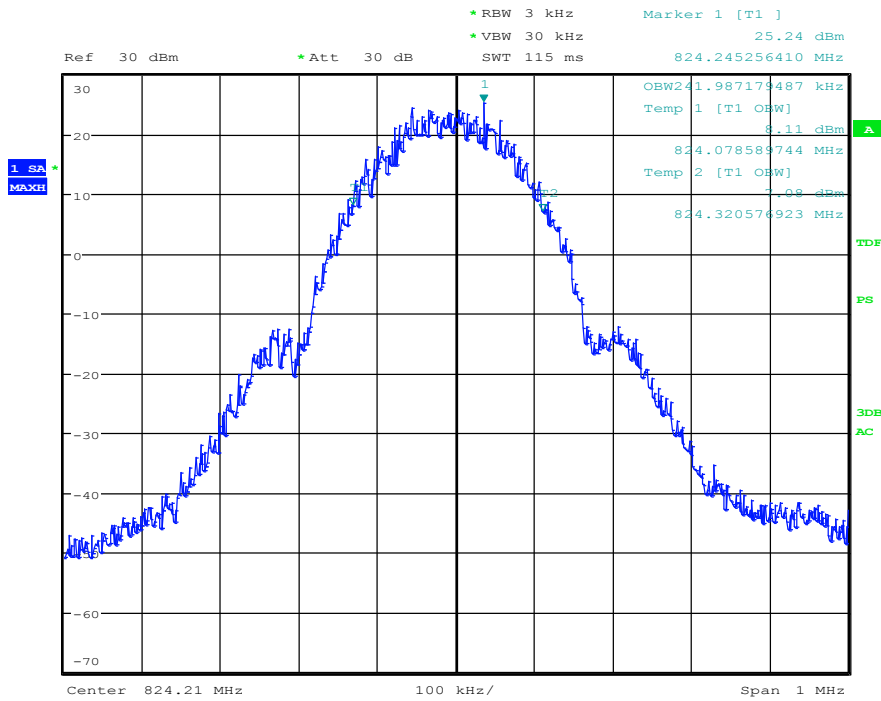


Date: 10.JUN.2013 12:58:54

Channel 810

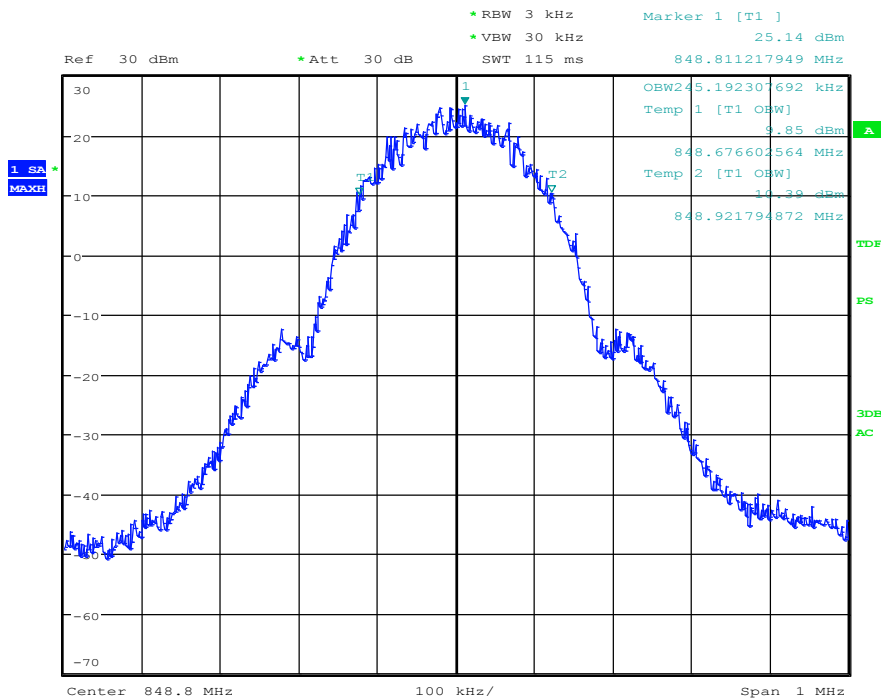
## 1.6. 99% Occupied bandwidth

### 1.6.1. GPRS 850 MHz TX-Mode



Date: 10.JUN.2013 12:32:50

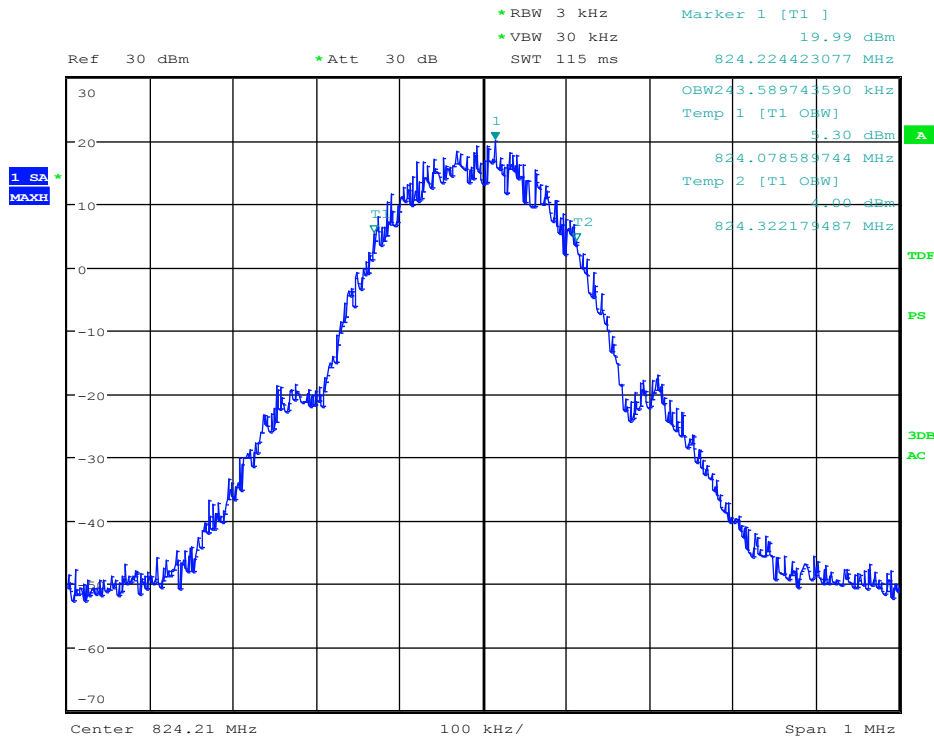
#### Channel 128



Date: 10.JUN.2013 12:31:14

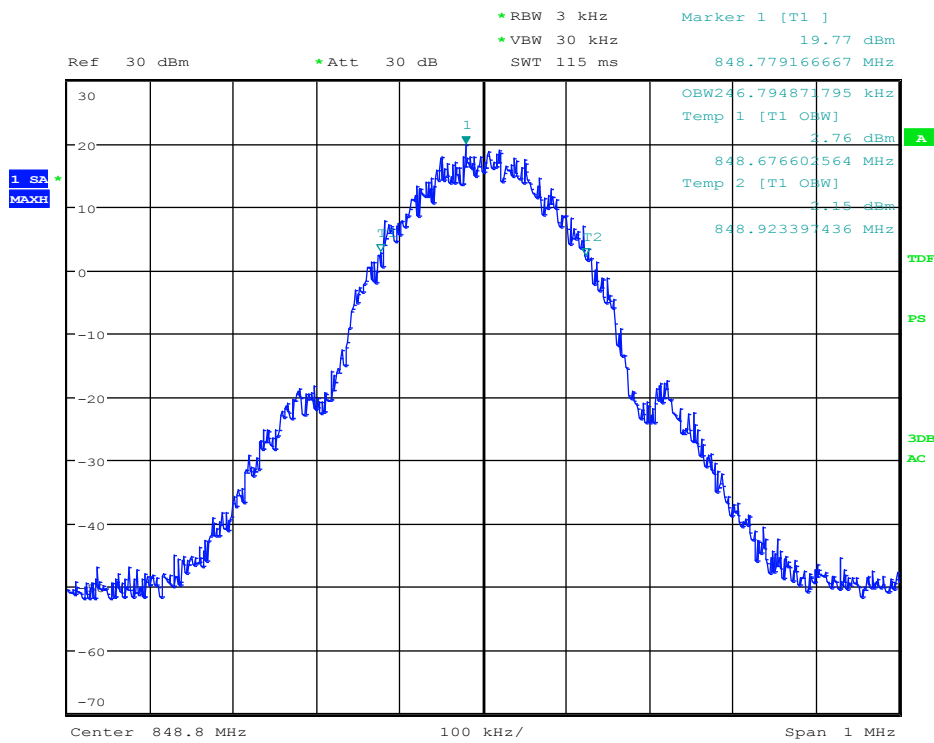
#### Channel 251

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



Date: 10.JUN.2013 12:36:23

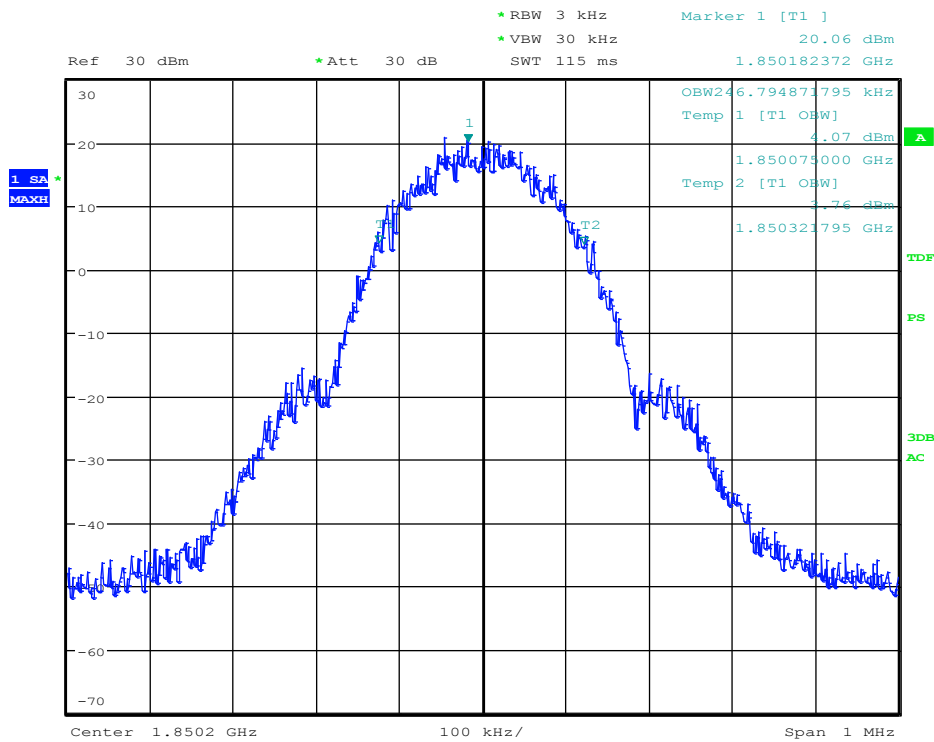
### Channel 128



Date: 10.JUN.2013 12:38:14

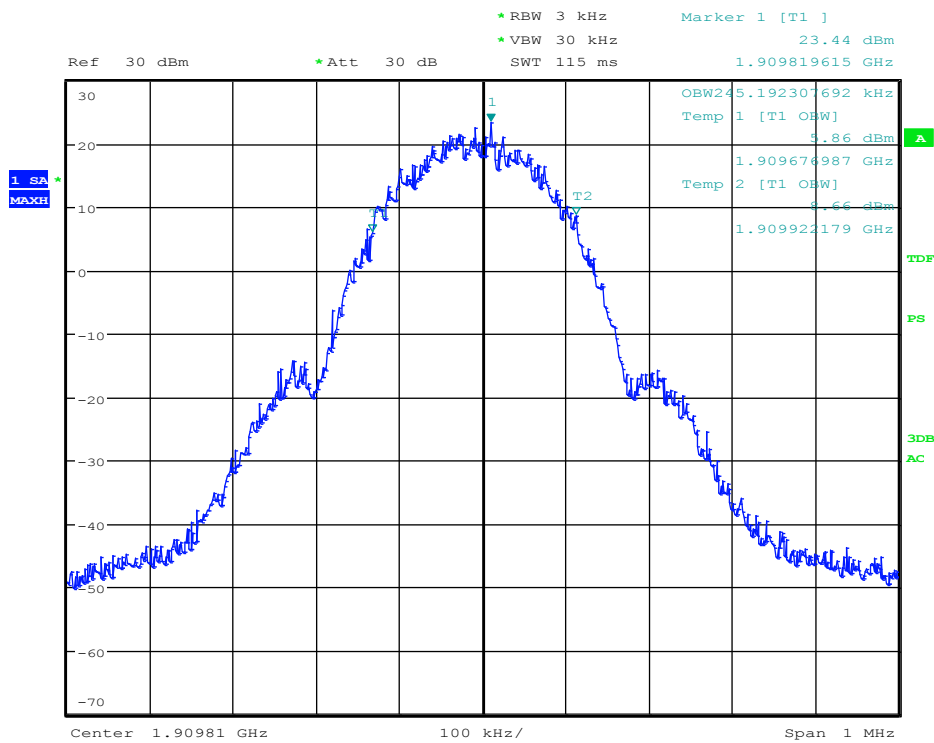
### Channel 251

### 1.6.3. GPRS 1900 MHz TX-Mode



Date: 10.JUN.2013 12:44:08

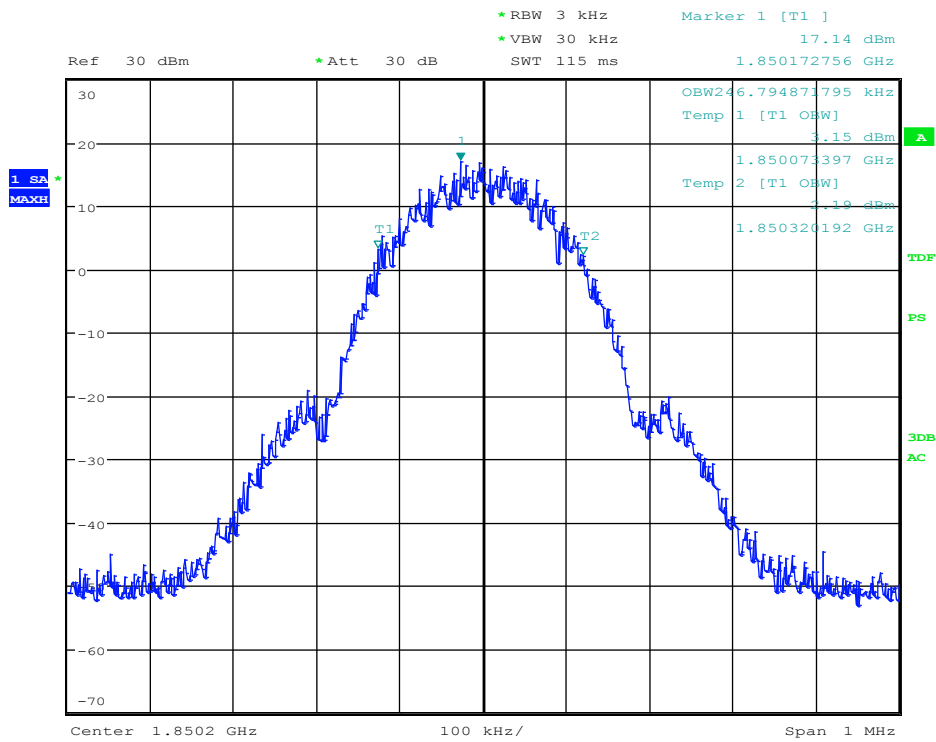
#### Channel 512



Date: 10.JUN.2013 12:46:30

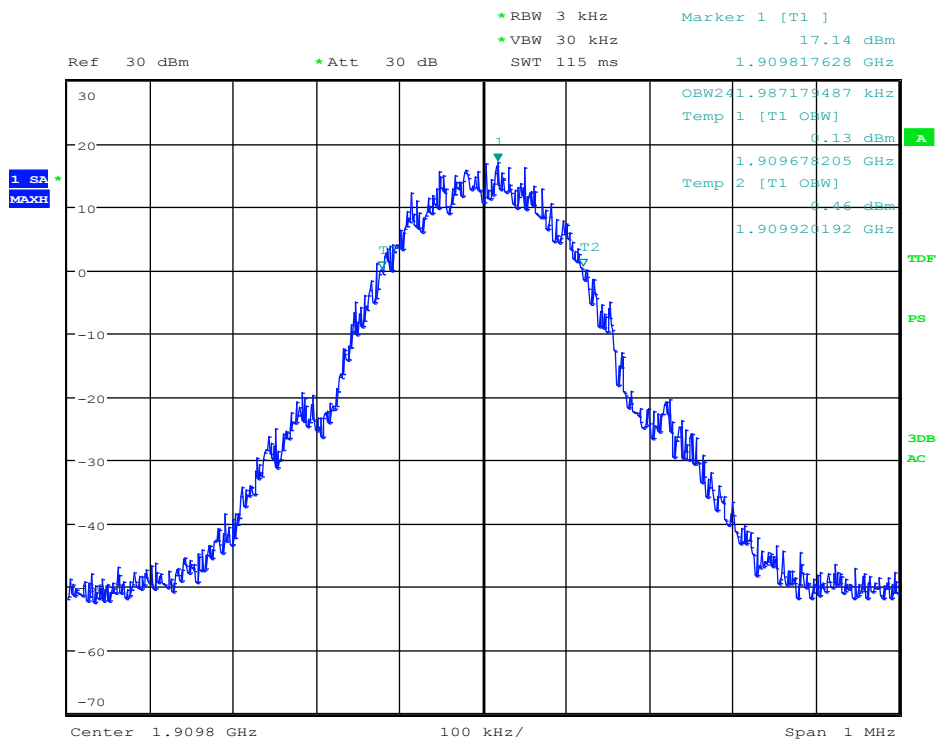
#### Channel 810

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



Date: 10.JUN.2013 13:00:57

### Channel 512



Date: 10.JUN.2013 12:59:45

### Channel 810



## 1.7. Spurious emissions conducted (850 MHz transmitting mode)

### 36.01\_RSE\_CH128\_GPRS\_Sweep1

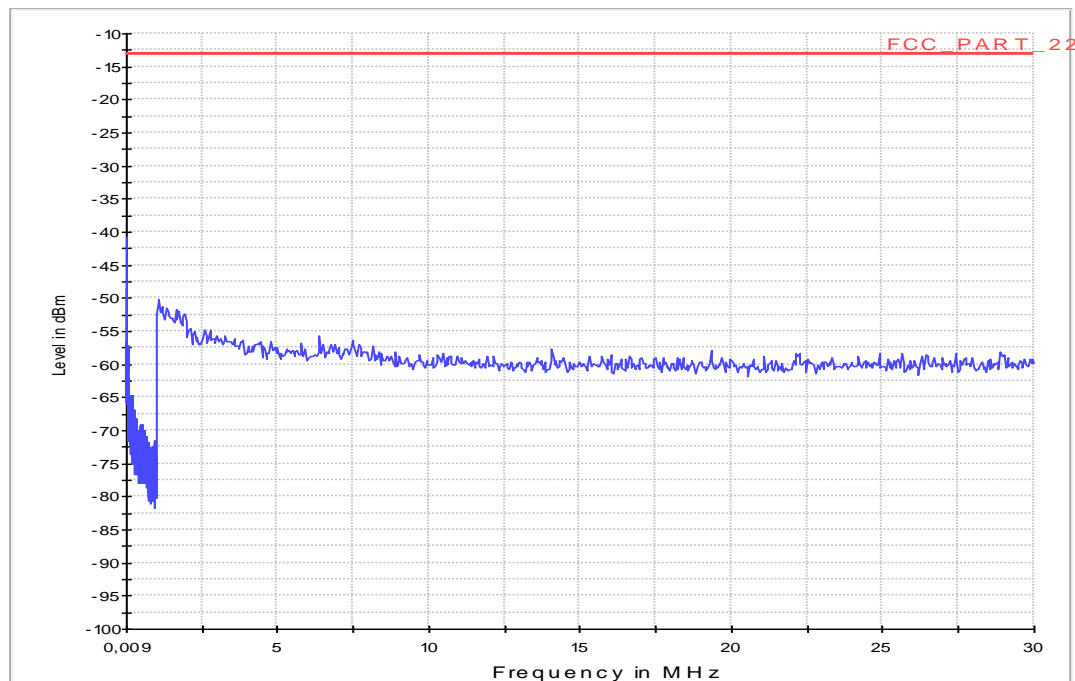
#### Common Information

Test Description:	Conducted TX unwanted emissions (Out-of-Band)
Test Site:	Radio Lab1, CETECOM GmbH, Essen, Germany
Test Standard:	FCC Part 22
Operation mode:	TX- GPRS-Mode, Channel low = 128
Environment Conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

#### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_1



#### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.02\_RSE\_CH128\_GPRS\_Sweep2

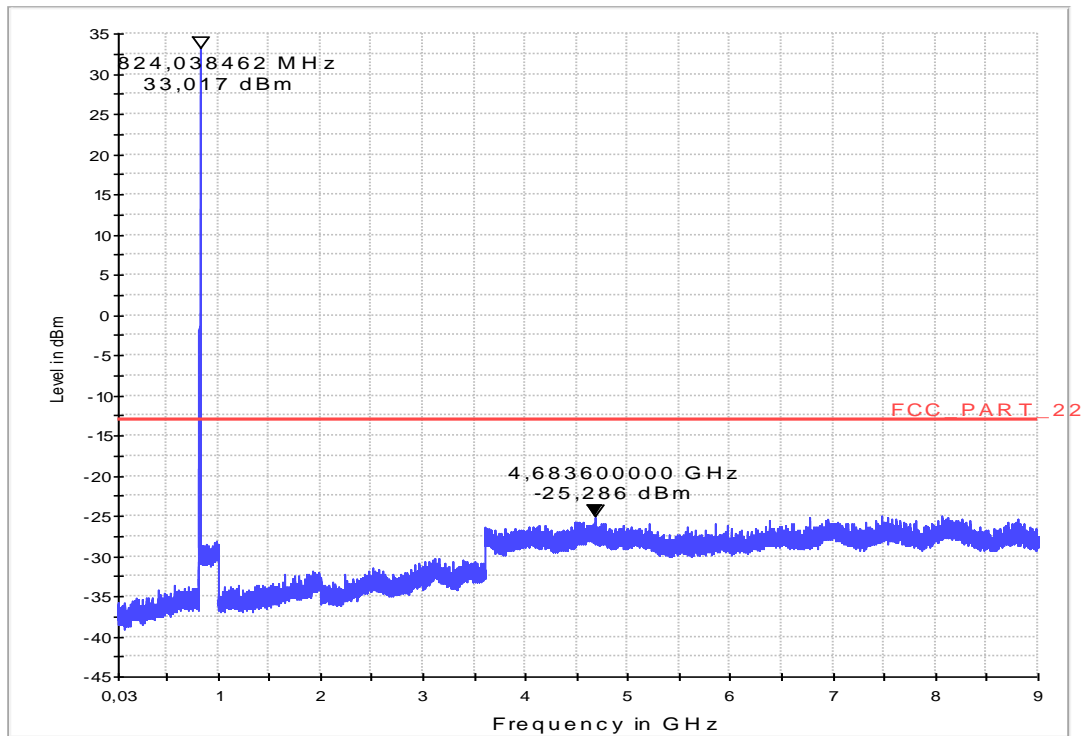
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- GPRS-Mode, Channel low = 128  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 820 MHz	316 kHz	PK+	1 MHz	10 s	0 dB
820 MHz - 1 GHz	288,462 kHz	PK+	1 MHz	2 s	0 dB
1 GHz - 9 GHz	400 kHz	PK+	1 MHz	100 s	0 dB

## 36.03\_RSE\_CH192\_GPRS\_Sweep1

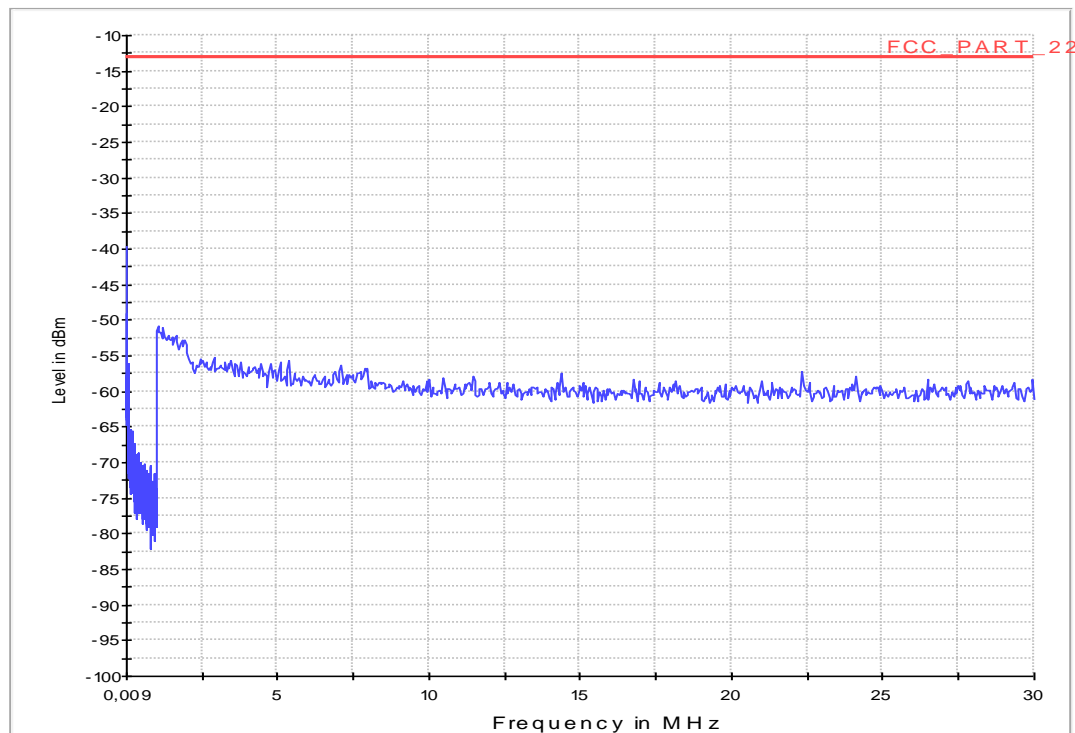
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- GPRS-Mode, Channel middle = 192  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.04\_RSE\_CH192\_GPRS\_Sweep2

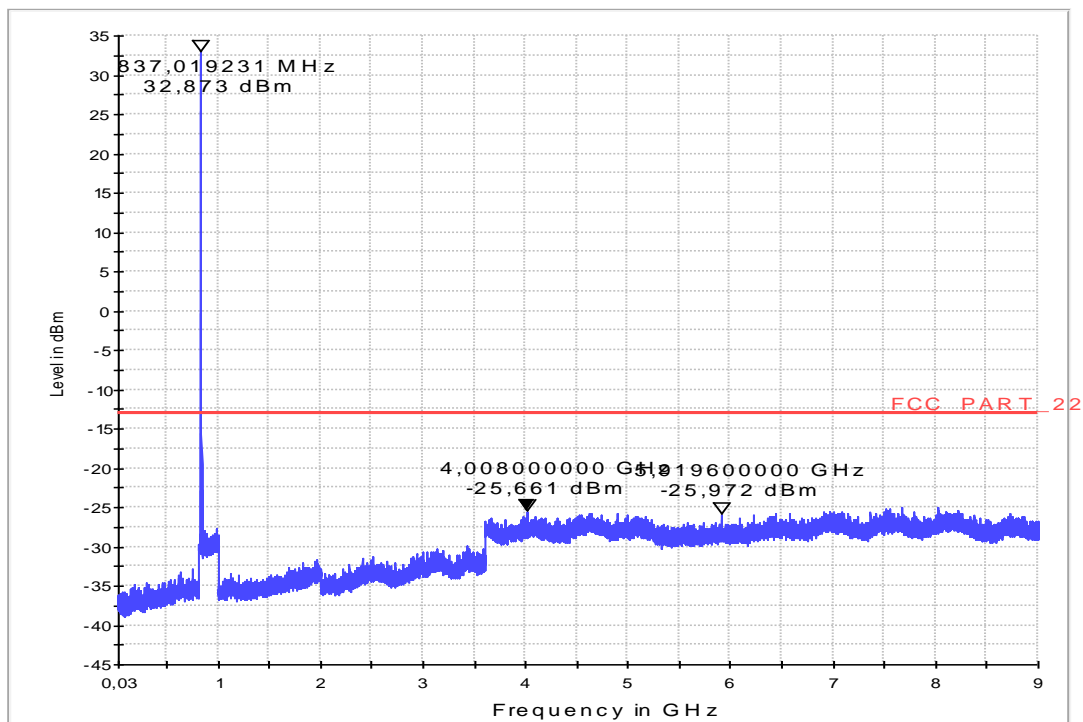
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- GPRS-Mode, Channel middle = 192  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 820 MHz	316 kHz	PK+	1 MHz	10 s	0 dB
820 MHz - 1 GHz	288,462 kHz	PK+	1 MHz	2 s	0 dB
1 GHz - 9 GHz	400 kHz	PK+	1 MHz	100 s	0 dB

## 36.05\_RSE\_CH251\_GPRS\_Sweep1

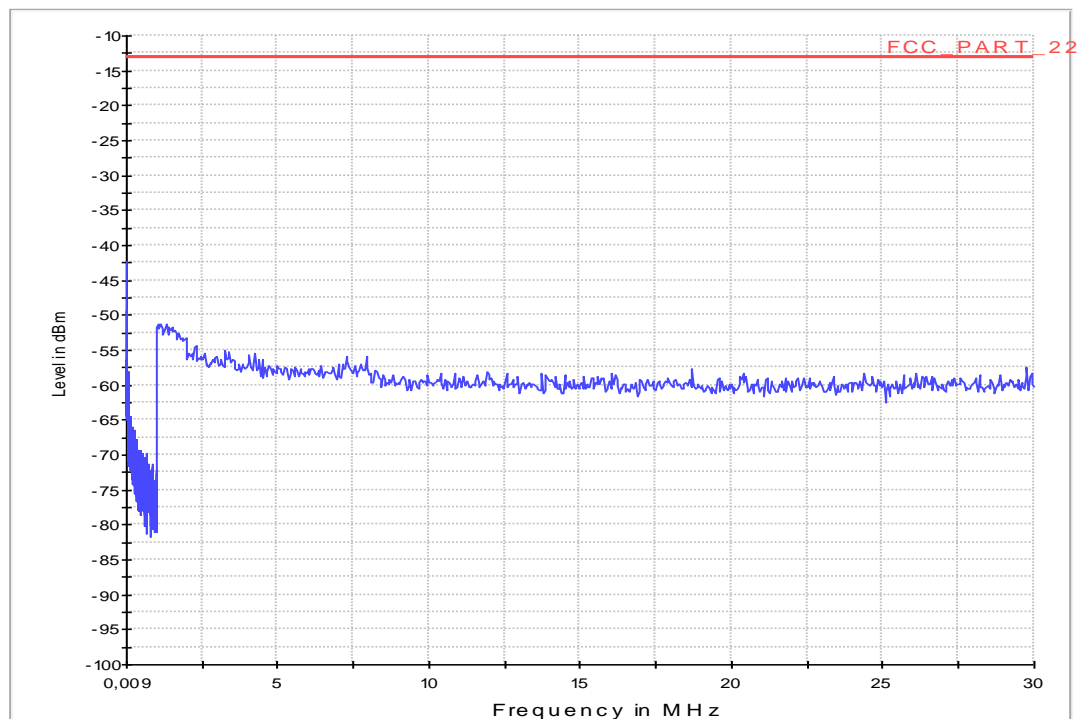
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- GPRS-Mode, Channel high = 251  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

## 36.06\_RSE\_CH251\_GPRS\_Sweep2

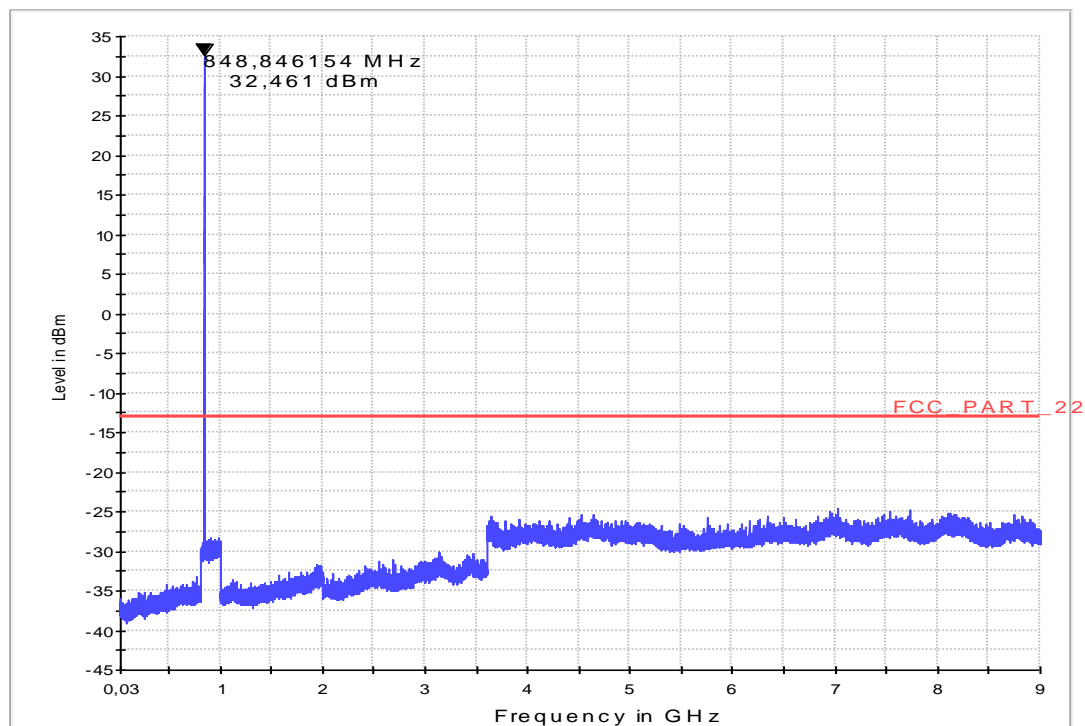
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- GPRS-Mode, Channel high = 251  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 820 MHz	316 kHz	PK+	1 MHz	10 s	0 dB
820 MHz - 1 GHz	288,462 kHz	PK+	1 MHz	2 s	0 dB
1 GHz - 9 GHz	400 kHz	PK+	1 MHz	100 s	0 dB

### 36.07\_RSE\_CH128\_EGPRS\_Sweep1

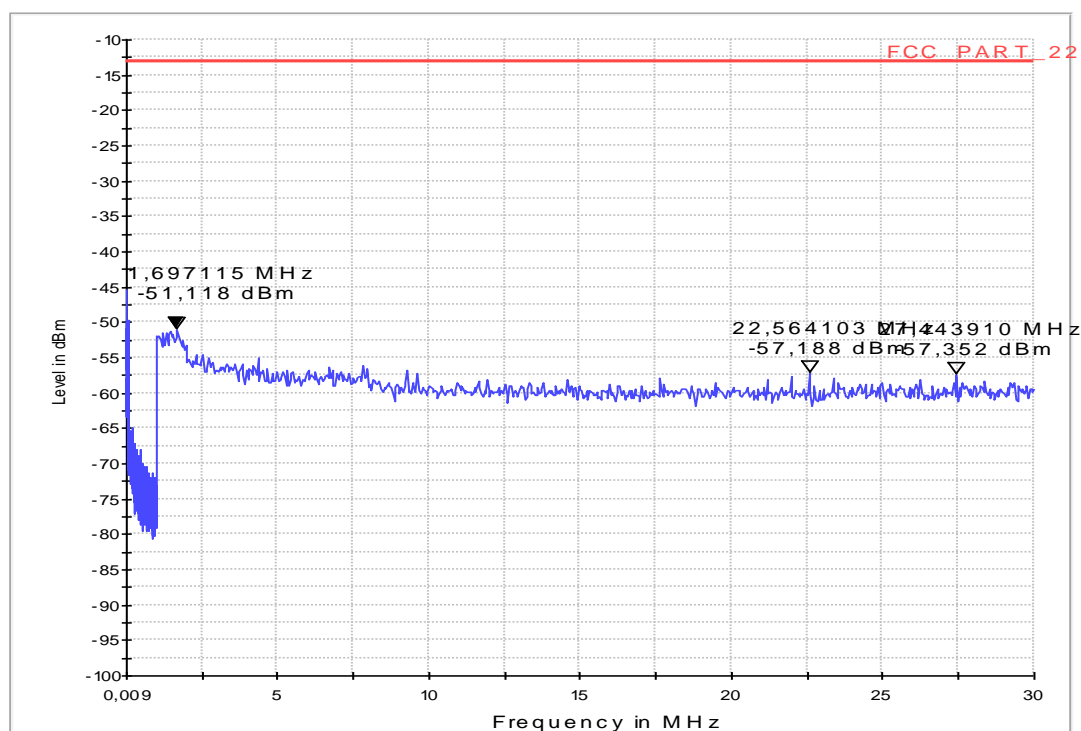
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- E-GPRS Mode, Channel low = 128  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



#### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.08\_RSE\_CH128\_EGPRS\_Sweep2

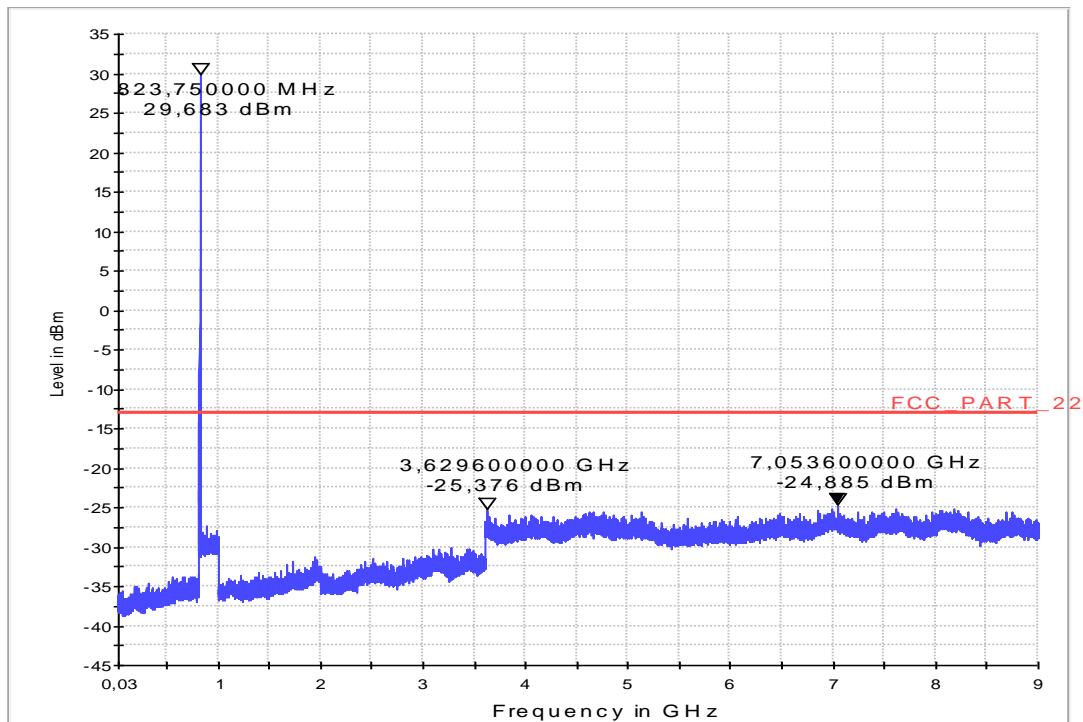
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- E-GPRS Mode, Channel low = 128  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 820 MHz	316 kHz	PK+	1 MHz	10 s	0 dB
820 MHz - 1 GHz	288,462 kHz	PK+	1 MHz	2 s	0 dB
1 GHz - 9 GHz	400 kHz	PK+	1 MHz	100 s	0 dB



### 36.09\_RSE\_CH192\_EGPRS\_Sweep1

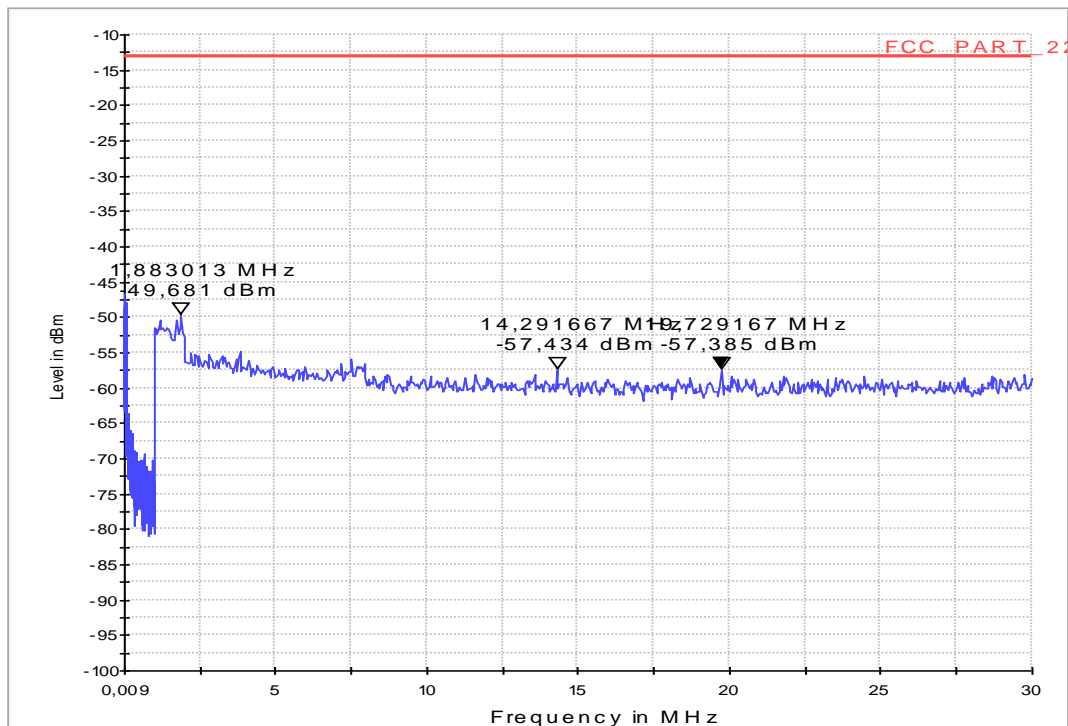
**Common Information**

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- E-GPRS Mode, Channel middle = 192  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

**EUT Information**

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



**Sweep Setup: Sweep\_1 [EMI radiated]**

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.10\_RSE\_CH192\_EGPRS\_Sweep2

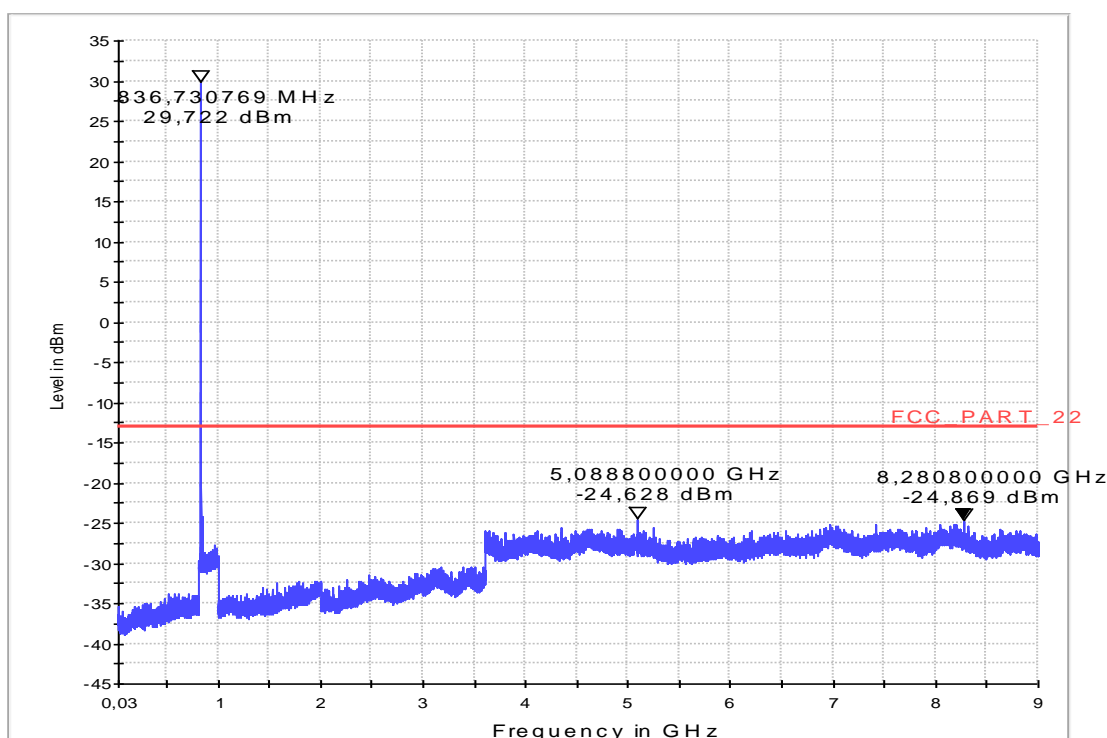
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- E-GPRS Mode, Channel middle = 192  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 820 MHz	316 kHz	PK+	1 MHz	10 s	0 dB
820 MHz - 1 GHz	288,462 kHz	PK+	1 MHz	2 s	0 dB
1 GHz - 9 GHz	400 kHz	PK+	1 MHz	100 s	0 dB

## 36.11\_RSE\_CH251\_EGPRS\_Sweep1

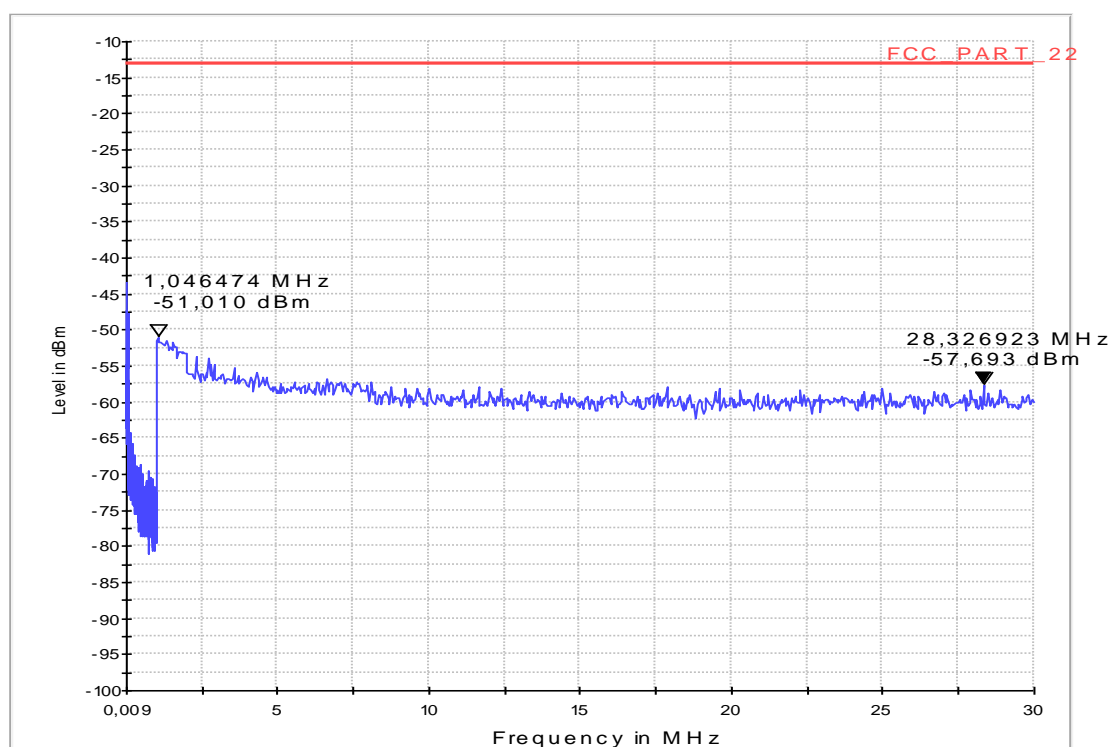
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- E-GPRS Mode, Channel high = 251  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.12\_RSE\_CH251\_EGPRS\_Sweep2

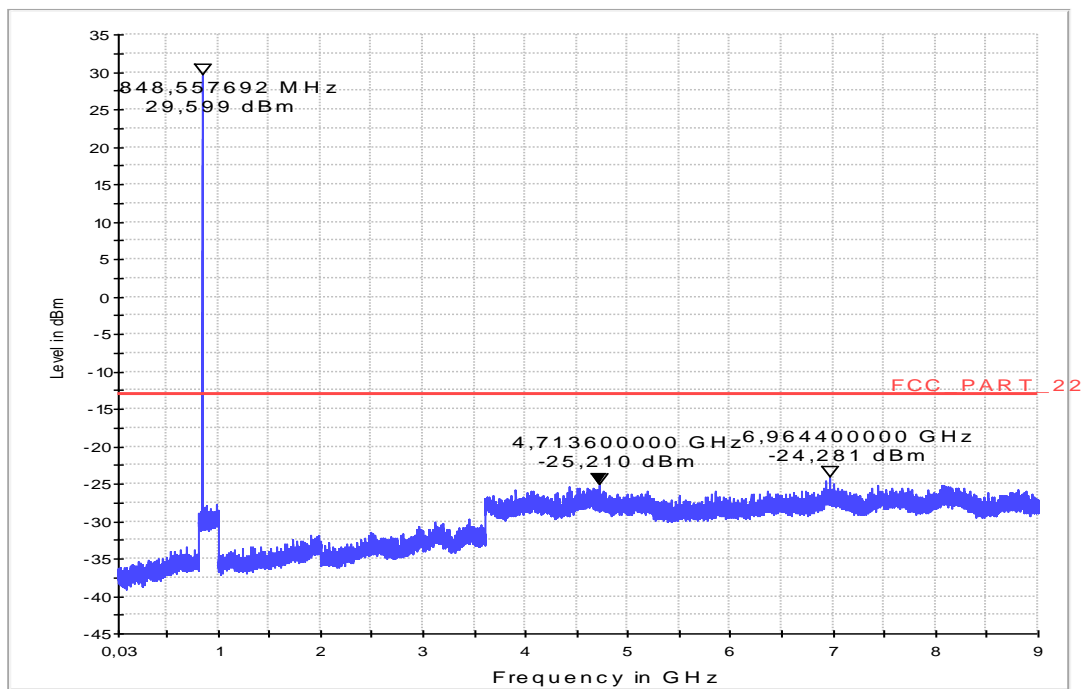
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 22  
 Operation mode: TX- E-GPRS Mode, Channel high = 251  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 820 MHz	316 kHz	PK+	1 MHz	10 s	0 dB
820 MHz - 1 GHz	288,462 kHz	PK+	1 MHz	2 s	0 dB
1 GHz - 9 GHz	400 kHz	PK+	1 MHz	100 s	0 dB

## 1.8. Spurious emissions conducted (1900 MHz transmitting mode)

### 36.20\_RSE\_Ch512\_GPRS\_Sweep1

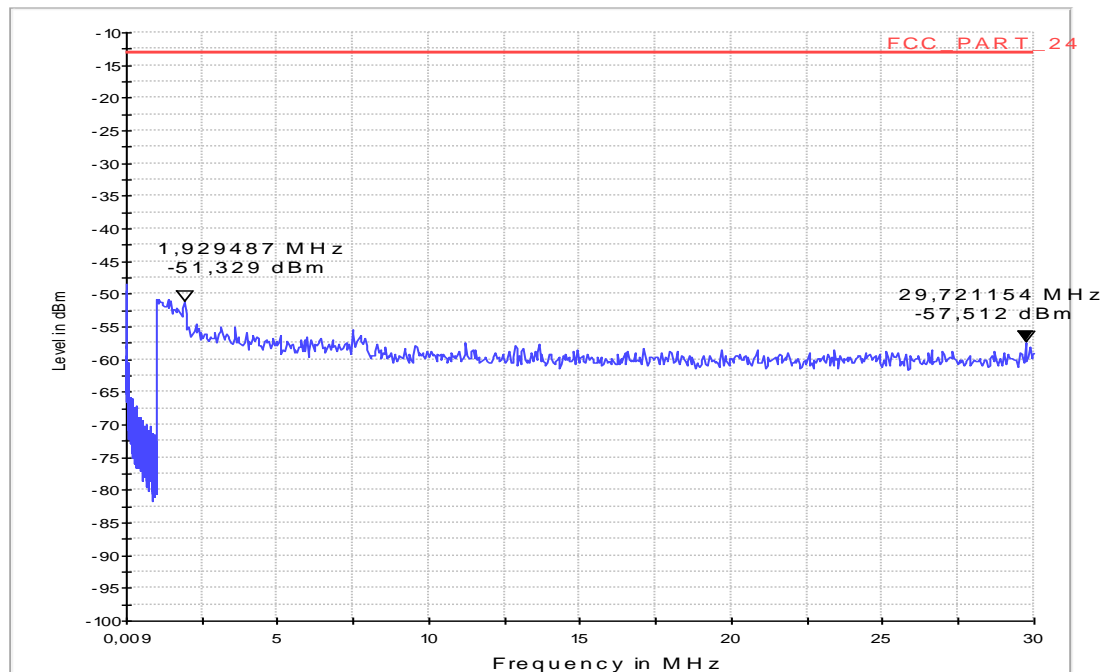
#### Common Information

Test Description:	Conducted TX unwanted emissions (Out-of-Band)
Test Site:	Radio Lab1, CETECOM GmbH, Essen, Germany
Test Standard:	FCC Part 24
Operation mode:	TX- GPRS-Mode, Channel low = 512
Environment Conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

#### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_1



#### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.21\_RSE\_Ch512\_GPRS\_Sweep2

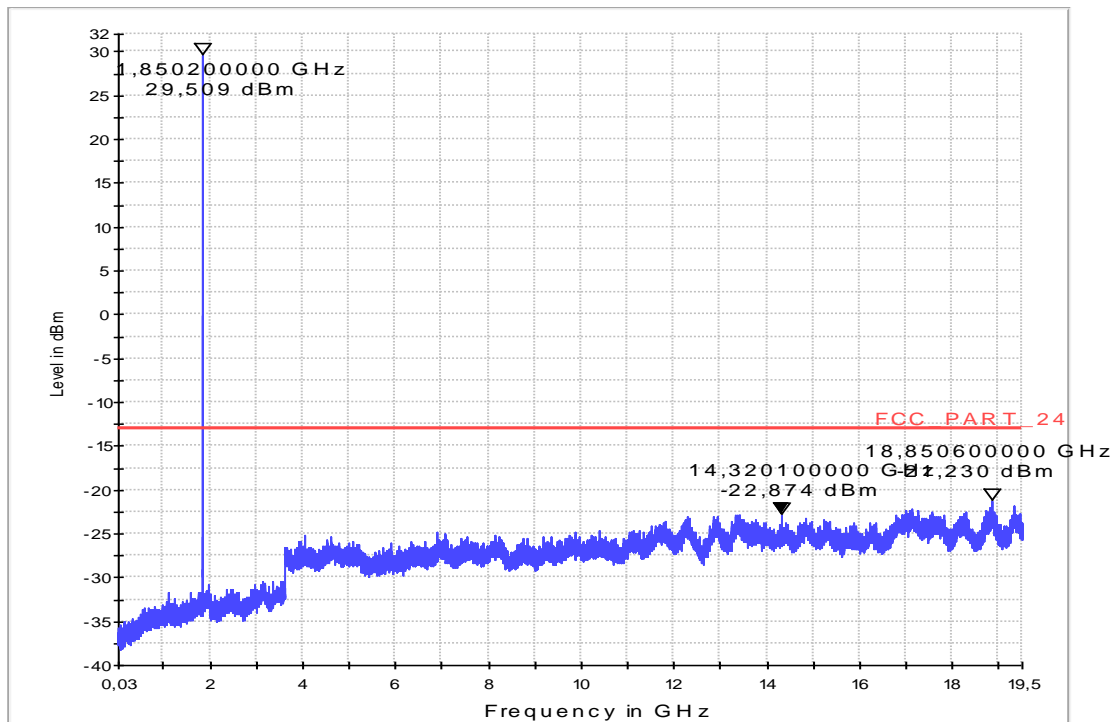
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- GPRS-Mode, Channel low = 512  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB

## 36.22\_RSE\_Ch661\_GPRS\_Sweep1

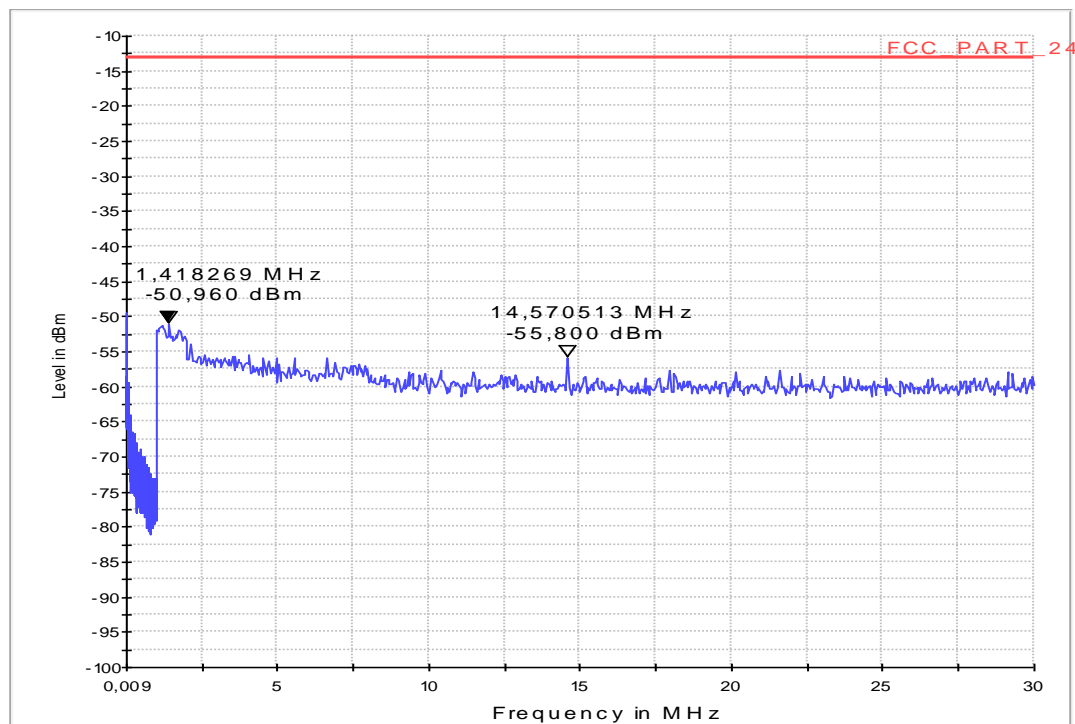
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- GPRS-Mode, Channel middle = 661  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.23\_RSE\_Ch661\_GPRS\_Sweep2

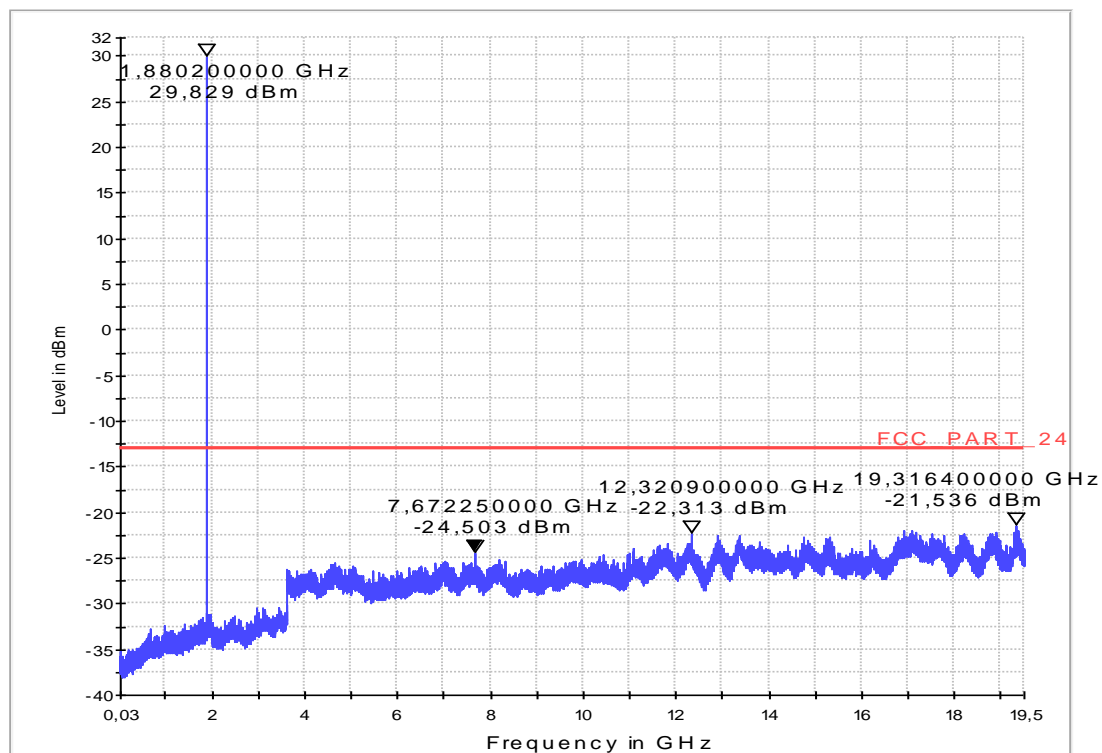
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- GPRS-Mode, Channel middle = 661  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB



## 36.24\_RSE\_Ch810\_GPRS\_Sweep1

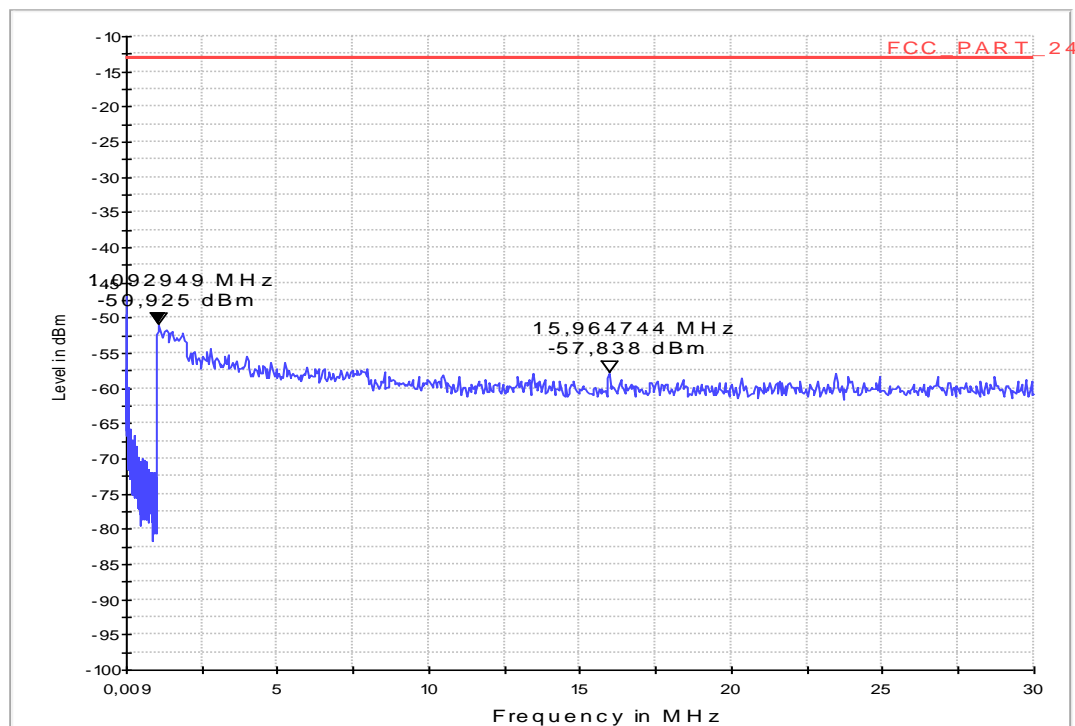
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- GPRS-Mode, Channel high = 810  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.25\_RSE\_Ch810\_GPRS\_Sweep2

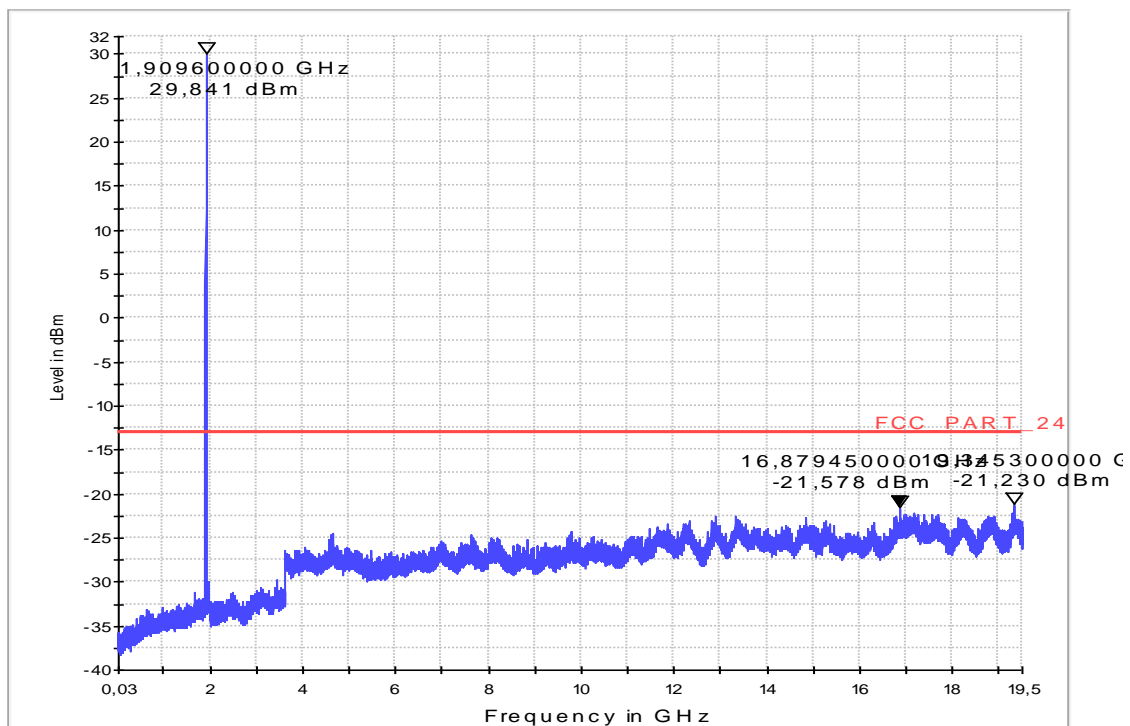
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- GPRS-Mode, Channel high = 810  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB

### 36.26\_RSE\_Ch512\_EGPRS\_Sweep1

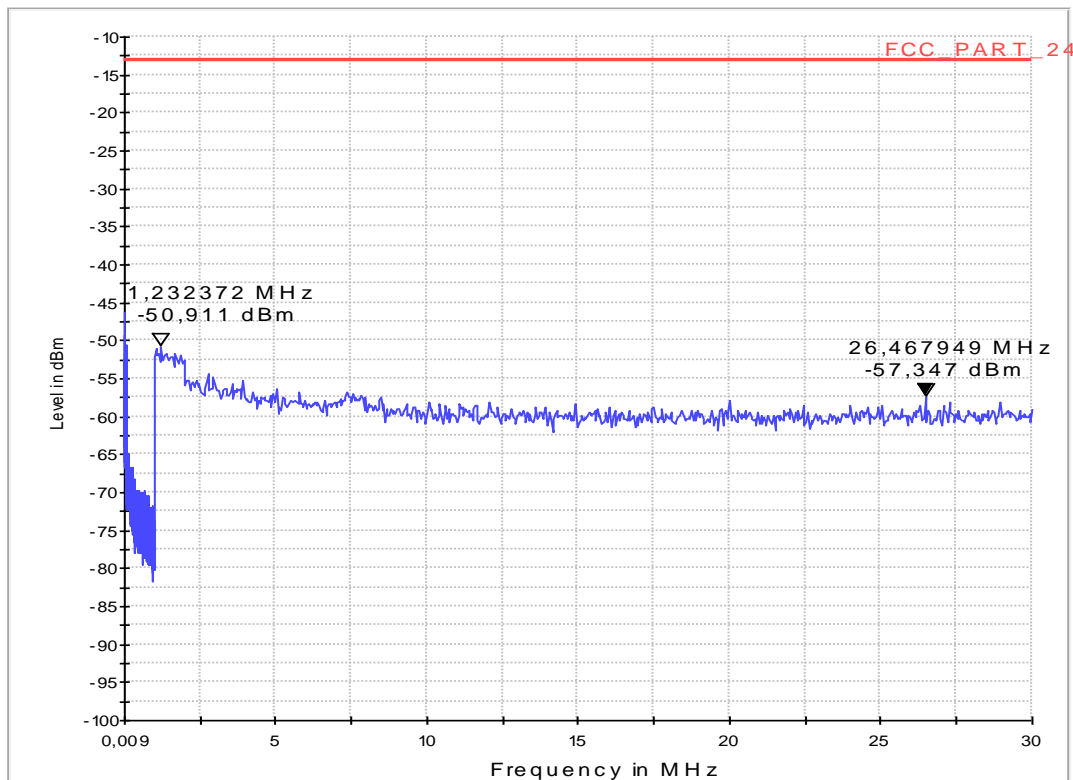
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- E-GPRS Mode, Channel low = 512  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



#### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.27\_RSE\_Ch512\_EGPRS\_Sweep2

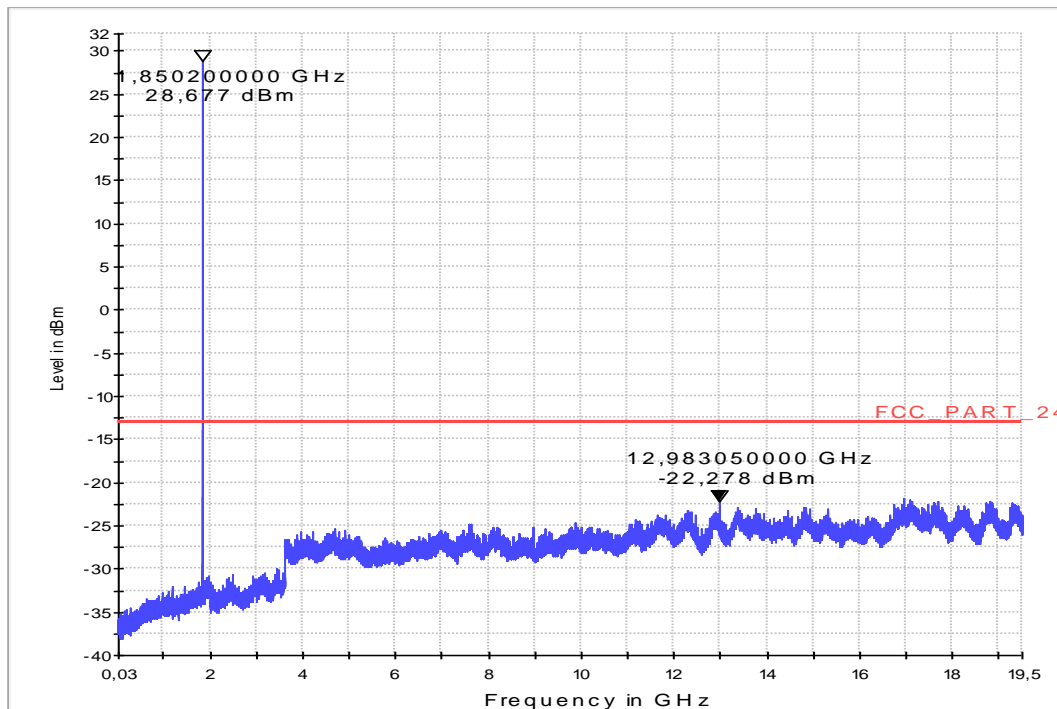
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- E-GPRS Mode, Channel low = 512  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB

## 36.28\_RSE\_Ch661\_EGPRS\_Sweep1

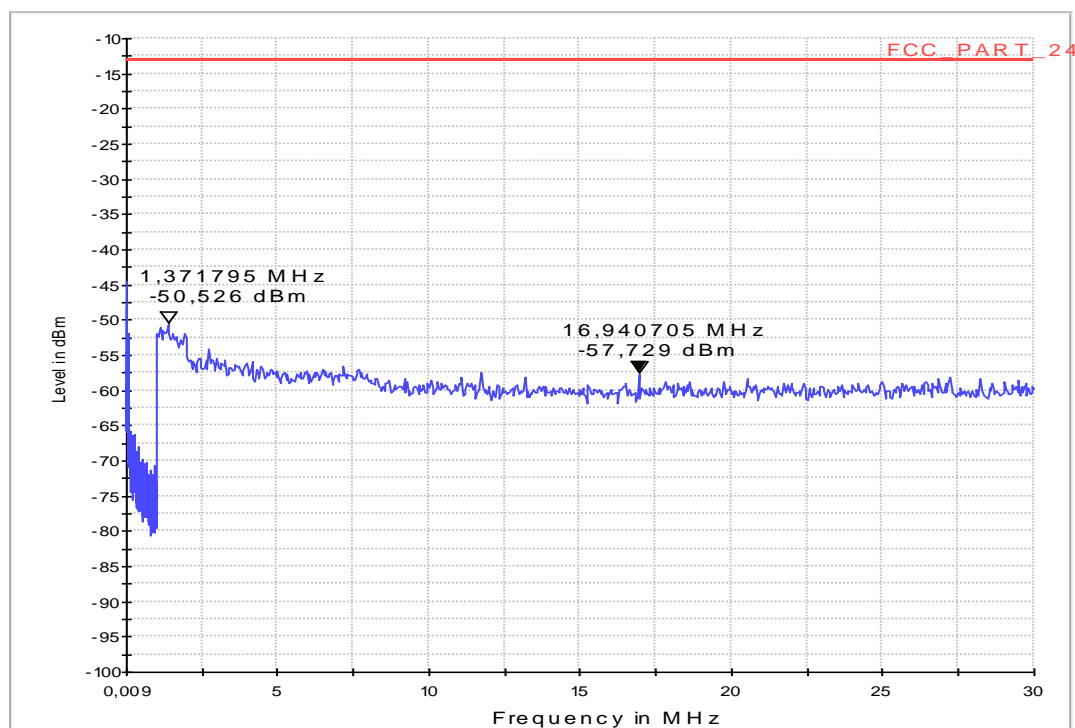
### Common Information

Test Description:	Conducted TX unwanted emissions (Out-of-Band)
Test Site:	Radio Lab1, CETECOM GmbH, Essen, Germany
Test Standard:	FCC Part 24
Operation mode:	TX- E-GPRS Mode, Channel middle = 661
Environment Conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_1



### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

### 36.29\_RSE\_Ch661\_EGPRS\_Sweep2

#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- E-GPRS Mode, Channel middle = 661  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

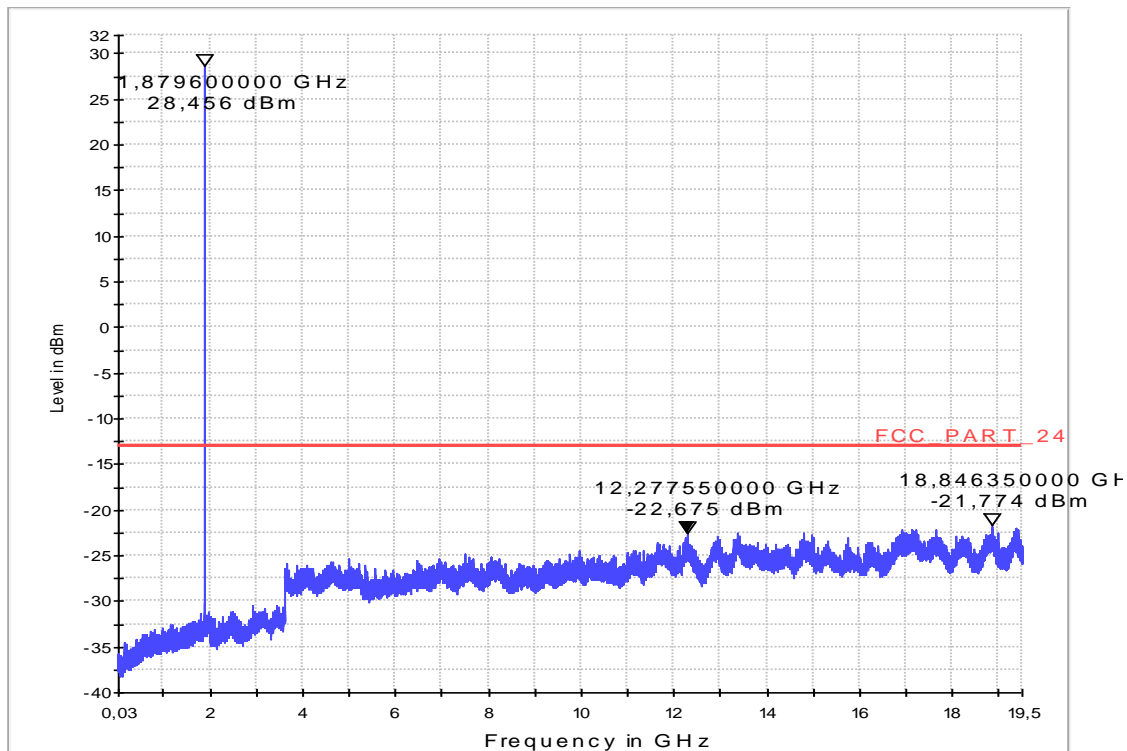
#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE

---

EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



#### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB

### 36.30\_RSE\_Ch810\_EGPRS\_Sweep1

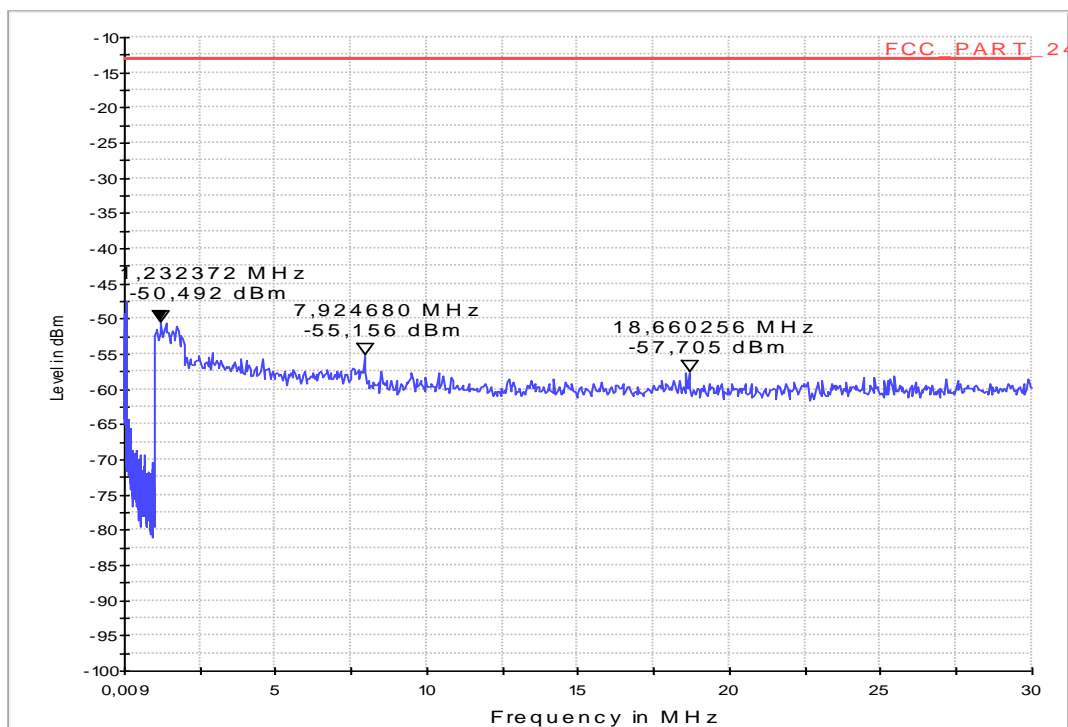
#### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- E-GPRS Mode, Channel high = 810  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_1



#### Sweep Setup: Sweep\_1 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
9 kHz - 1 MHz	792,8 Hz	PK+	1 kHz	10 s	0 dB
1 MHz - 30 MHz	46,474 kHz	PK+	100 kHz	5 s	0 dB

## 36.31\_RSE\_Ch810\_EGPRS\_Sweep2

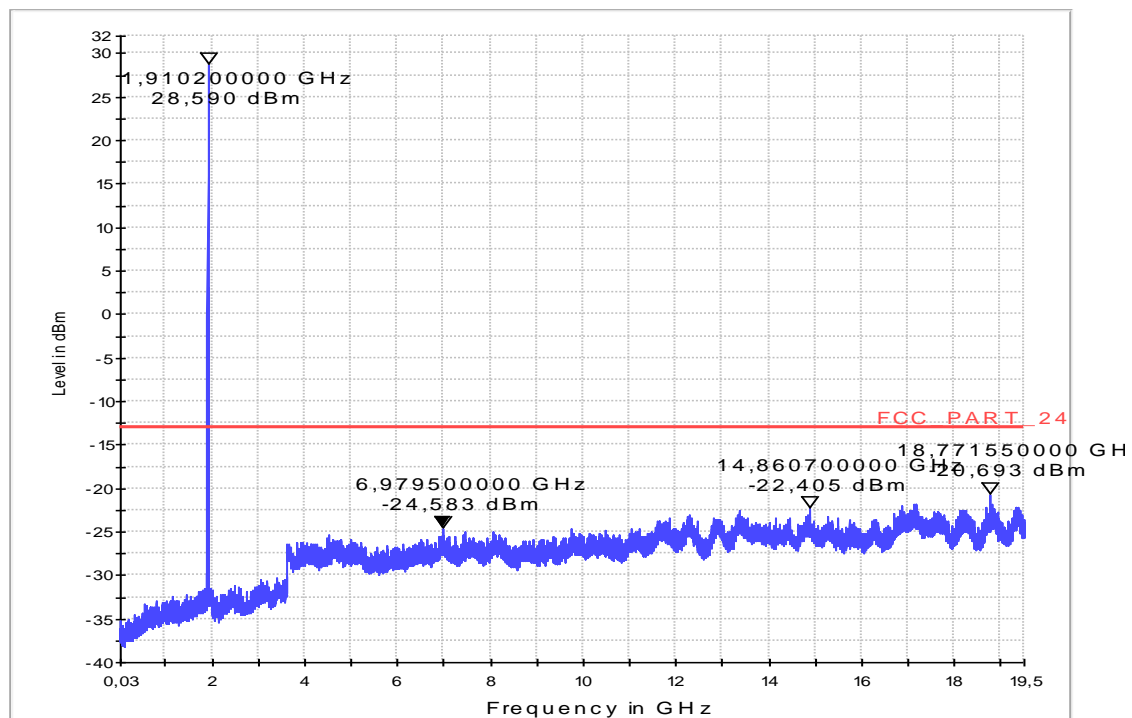
### Common Information

Test Description: Conducted TX unwanted emissions (Out-of-Band)  
 Test Site: Radio Lab1, CETECOM GmbH, Essen, Germany  
 Test Standard: FCC Part 24  
 Operation mode: TX- E-GPRS Mode, Channel high = 810  
 Environment Conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_2



### Sweep Setup: Sweep\_2 [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
30 MHz - 1 GHz	388 kHz	PK+	1 MHz	100 s	0 dB
1 GHz - 2,5 GHz	600 kHz	PK+	1 MHz	15 s	0 dB
2.5 GHz - 19,5 GHz	850 kHz	PK+	1 MHz	150 s	0 dB



## 1.9. Conducted emissions on 850 MHz band-edge

### 37.01\_BE\_CH128\_GPRS\_AV

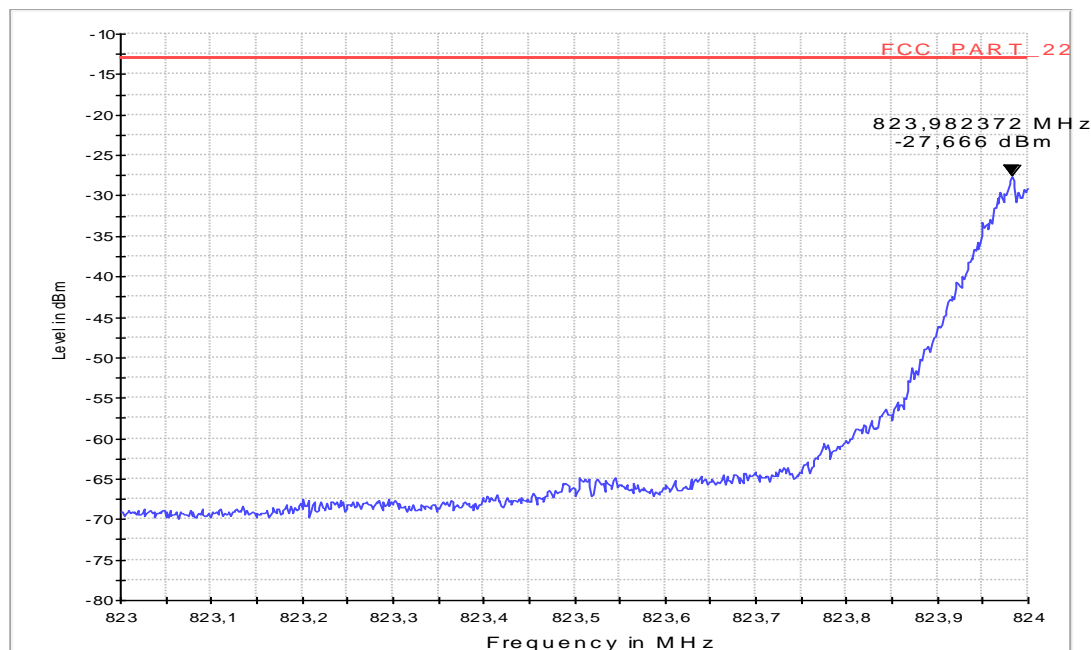
#### Common Information

Test Description: Band-Edge compliance - TX Spurious Emission conducted §2.1051  
 Test Site: Radio laboratory 1  
 Test Standard: FCC Part 22  
  
 Operation mode: TX - GPRS Mode, low channel = 128  
 Environmental conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: Average detector

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_3b\_Band\_Edge\_Channel\_128\_AV



#### Sweep Setup: Sweep\_3b\_Band\_Edge\_Channel\_128\_AV [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
823 MHz - 824 MHz	1,603 kHz	RMS	3 kHz	70 s	0 dB

### 37.02\_BE\_CH251\_GPRS\_AV

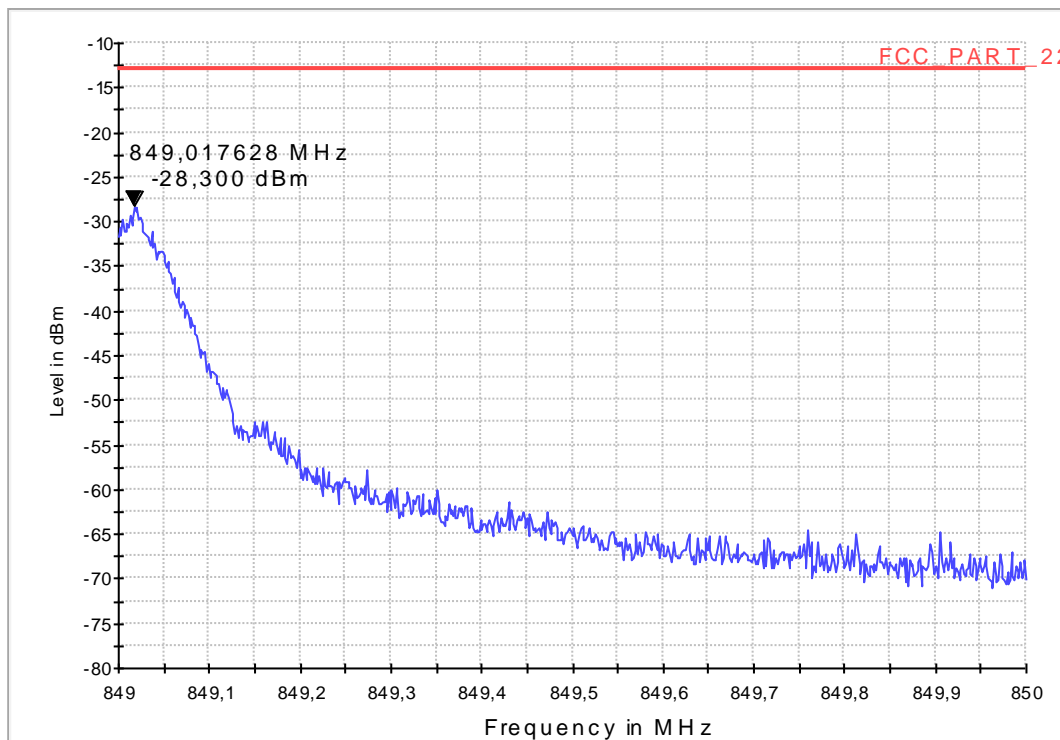
#### Common Information

Test Description:	Band-Edge compliance - TX Spurious Emission conducted §2.1051
Test Site:	Radio laboratory 1
Test Standard:	FCC Part 22
Operation mode:	TX - GPRS Mode, high channel = 251
Environmental conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

#### EUT Information

Manufacturer:	Peiker acustic GmbH & Co. KG
Model:	LTE-NAD solution
Type:	GSM/UMTS/LTE module
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	-
Power Supply:	external 3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_4b\_Band\_Edge\_Channel\_251\_AV



#### Sweep Setup: Sweep\_4b\_Band\_Edge\_Channel\_251\_AV [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

<b>Subrange</b>	<b>Step Size</b>	<b>Detectors</b>	<b>Bandwidth</b>	<b>Sweep Time</b>	<b>Preamp</b>
849 MHz - 850 MHz	1,603 kHz	RMS	3 kHz	70 s	0 dB

### 37.03\_BE\_CH128\_EGPRS\_PK

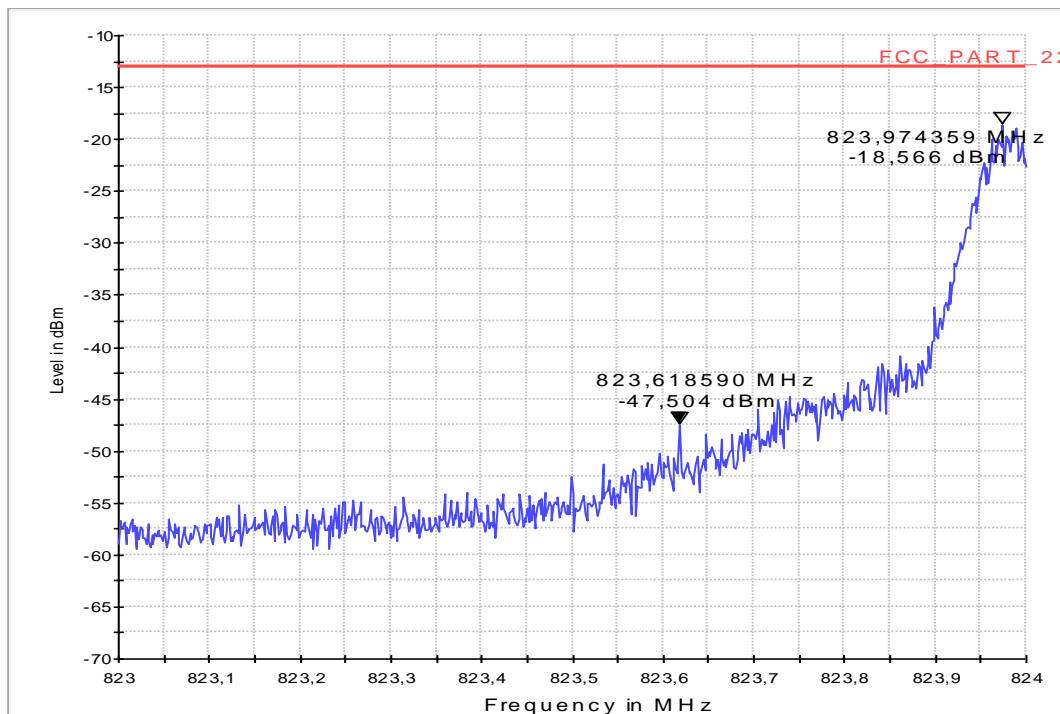
**Common Information**

Test Description: Band-Edge compliance - TX Spurious Emission conducted §2.1051  
 Test Site: Radio laboratory 1  
 Test Standard: FCC Part 22  
 Operation mode: TX - E-GPRS Mode, low channel = 128  
 Environmental conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

**EUT Information**

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_3a\_Band\_Edge\_Channel\_128\_PK



**Sweep Setup: Sweep\_3a\_Band\_Edge\_Channel\_128\_PK [EMI radiated]**

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
823 MHz - 824 MHz	1,603 kHz	PK+	3 kHz	70 s	0 dB

## 37.04\_BE\_CH251\_EGPRS\_PK

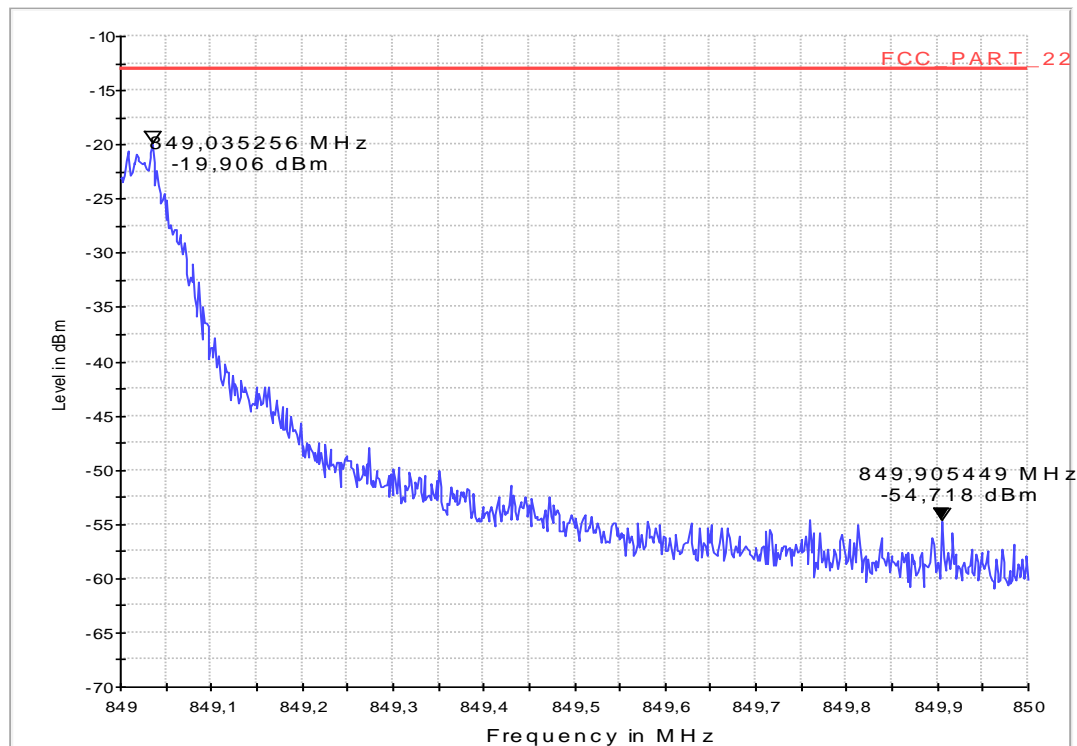
### Common Information

Test Description:	Band-Edge compliance - TX Spurious Emission conducted §2.1051
Test Site:	Radio laboratory 1
Test Standard:	FCC Part 22
Operation mode:	TX - E-GPRS Mode, high channel = 251
Environmental conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_4a\_Band\_Edge\_Channel\_251\_PK



### Sweep Setup: Sweep\_4a\_Band\_Edge\_Channel\_251\_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
849 MHz - 850 MHz	1,603 kHz	PK+	3 kHz	70 s	0 dB

### 1.10. Conducted emissions on 1900 MHz band-edge

#### 37.10\_BE\_Ch512\_GPRS\_PK

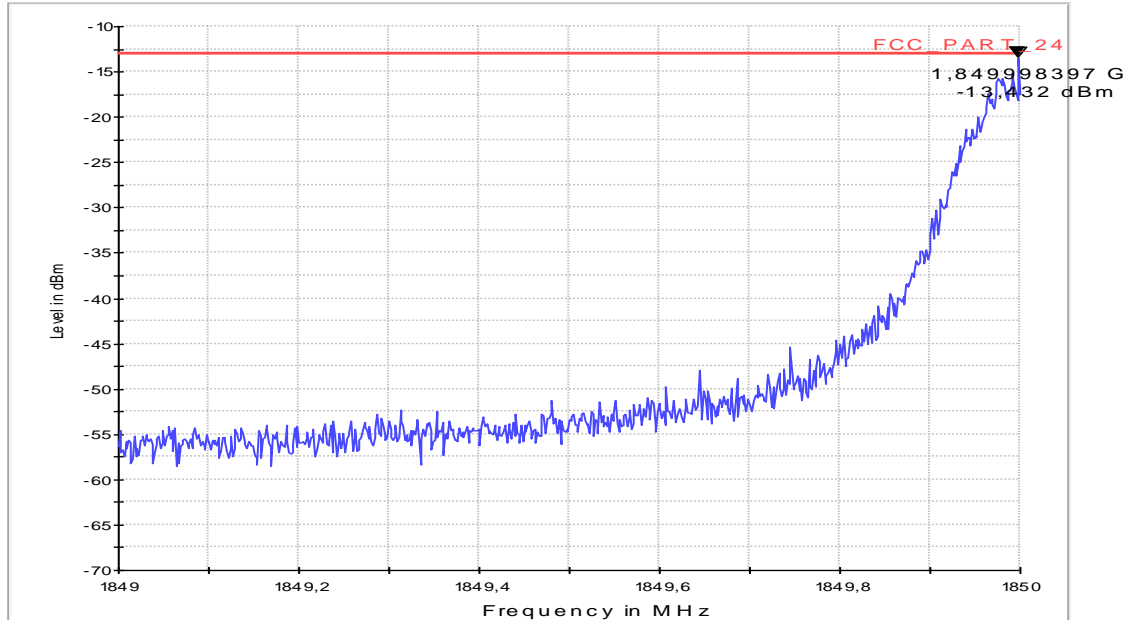
##### Common Information

Test Description:	Band-Edge compliance - TX Spurious Emission conducted §2.1051
Test Site:	Radio laboratory 1
Test Standard:	FCC Part 24
Operation mode:	TX - GPRS Mode, low channel = 512
Environmental conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

##### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_3a\_Band\_Edge\_Channel\_512\_PK



##### Sweep Setup: Sweep\_3a\_Band\_Edge\_Channel\_512\_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.849 GHz - 1,85 GHz	1,603 kHz	PK+	3 kHz	70 s	0 dB

### 37.11\_BE\_Ch810\_GPRS\_PK

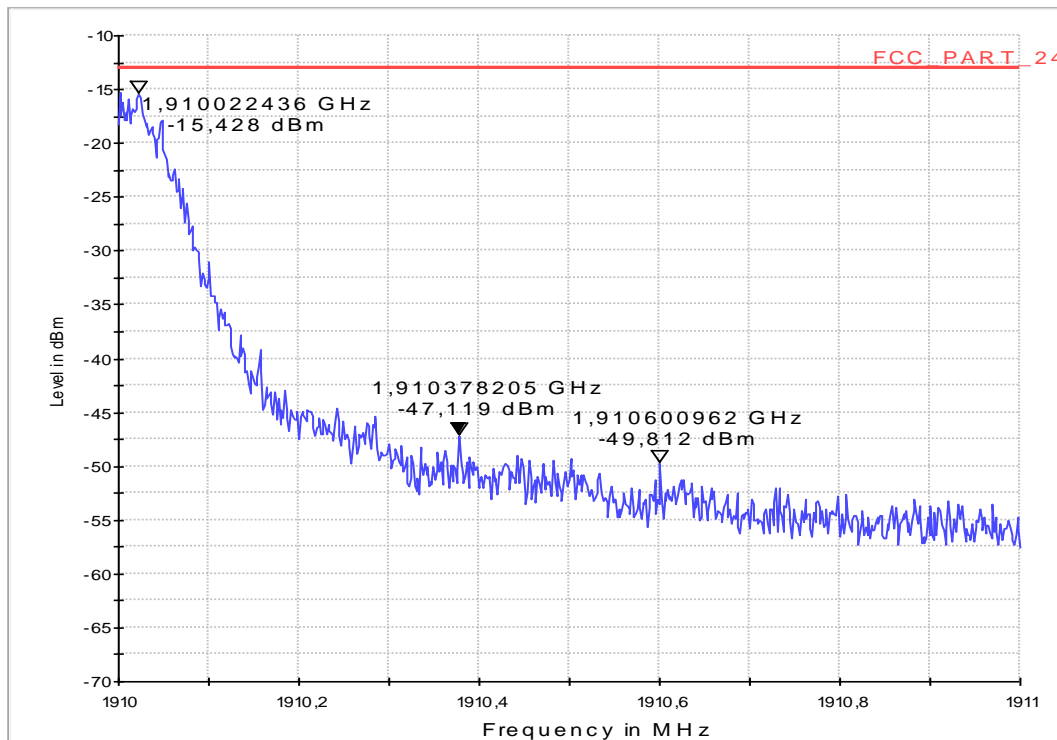
#### Common Information

Test Description:	Band-Edge compliance - TX Spurious Emission conducted §2.1051
Test Site:	Radio laboratory 1
Test Standard:	FCC Part 24
Operation mode:	TX - GPRS Mode, high channel = 810
Environmental conditions:	Tnom, Vnom
Operator Name:	Lor
Comment:	--

#### EUT Information

Manufacturer:	Peiker
Model:	Wireless Module
Type:	GSM/E-GPRS/W-CDMA/LTE
-----	
EUT:	PKD0424AB0o
HW version:	3.0
SW version:	M9615A-CETWTAZM-5.0.17006
SVN:	-
Config:	-
Serial number:	US#405V1140-101HW1613
Connected Interfaces:	-
Power Supply:	3.8V DC
Comments:	IMEI no. 004402-58-000004-4

Sweep\_4a\_Band\_Edge\_Channel\_810\_PK



#### Sweep Setup: Sweep\_4a\_Band\_Edge\_Channel\_810\_PK [EMI radiated]

Hardware Setup:	31_ESU_Conducted_FCC_Part_15_22_24
Receiver:	[ESU 40]
Level Unit:	dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.91 GHz - 1,911 GHz	1,603 kHz	PK+	3 kHz	70 s	0 dB

### 37.12\_BE\_Ch512\_EGPRS\_PK

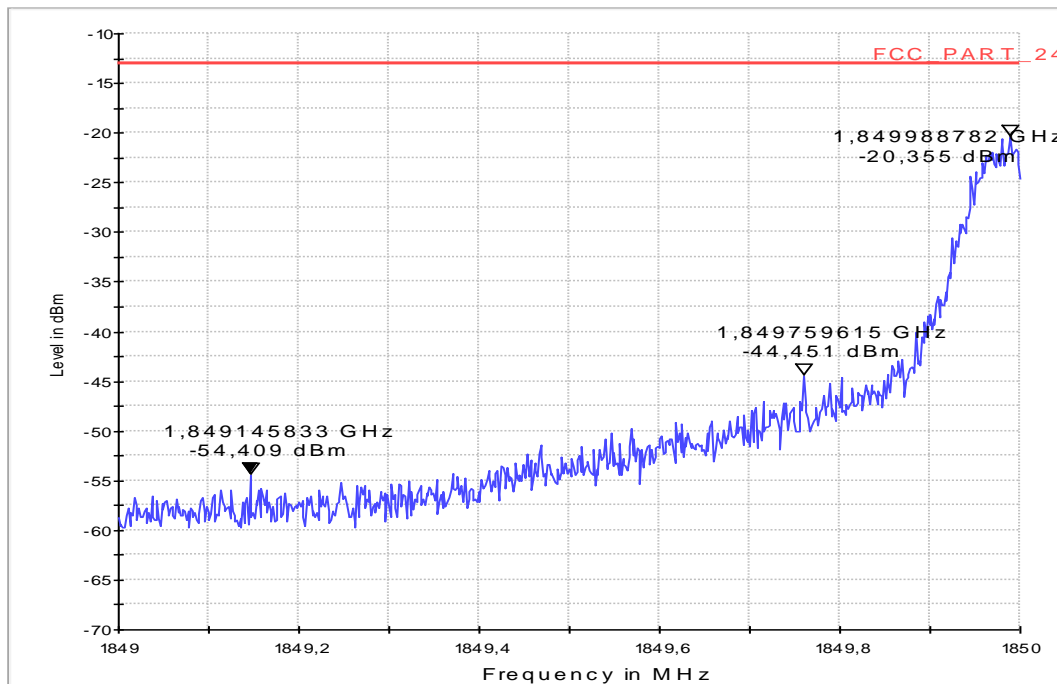
#### Common Information

Test Description: Band-Edge compliance - TX Spurious Emission conducted §2.1051  
 Test Site: Radio laboratory 1  
 Test Standard: FCC Part 24  
  
 Operation mode: TX - E-GPRS Mode, low channel = 512  
 Environmental conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE  
 -----  
 EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_3a\_Band\_Edge\_Channel\_512\_PK



#### Sweep Setup: Sweep\_3a\_Band\_Edge\_Channel\_512\_PK [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.849 GHz - 1,85 GHz	1,603 kHz	PK+	3 kHz	70 s	0 dB

### 37.13\_BE\_Ch810\_EGPRS\_PK

#### Common Information

Test Description: Band-Edge compliance - TX Spurious Emission conducted §2.1051  
 Test Site: Radio laboratory 1  
 Test Standard: FCC Part 24

Operation mode: TX - E-GPRS Mode, high channel = 810  
 Environmental conditions: Tnom, Vnom  
 Operator Name: Lor  
 Comment: --

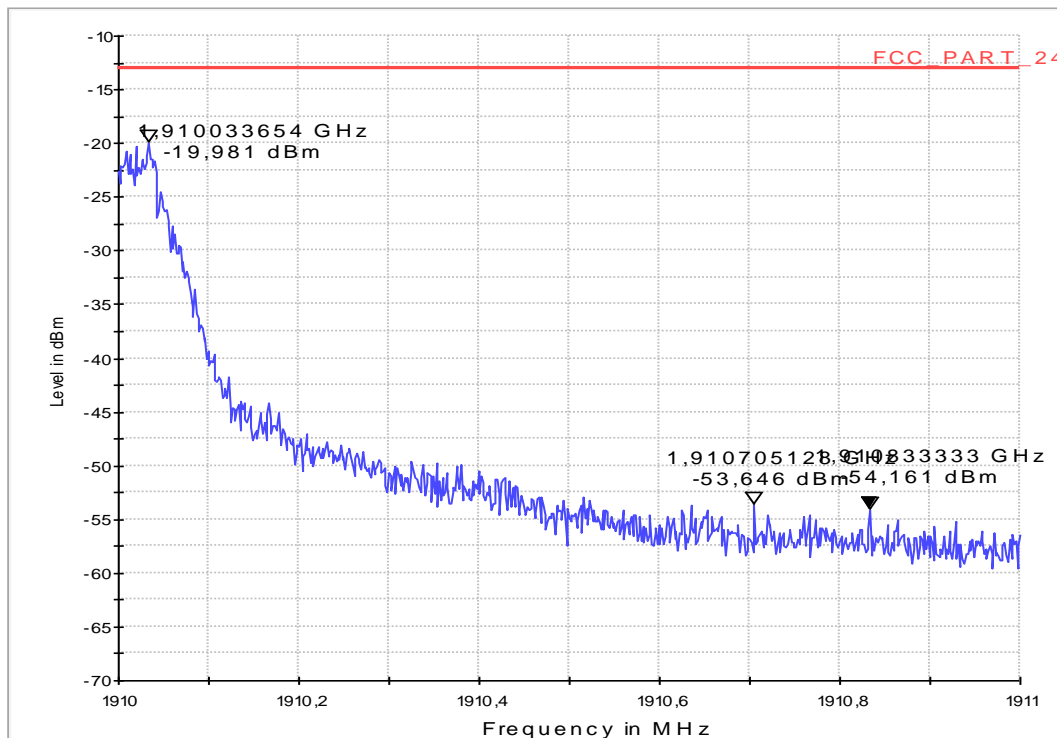
#### EUT Information

Manufacturer: Peiker  
 Model: Wireless Module  
 Type: GSM/E-GPRS/W-CDMA/LTE

---

EUT: PKD0424AB0o  
 HW version: 3.0  
 SW version: M9615A-CETWTAZM-5.0.17006  
 SVN: -  
 Config: -  
 Serial number: US#405V1140-101HW1613  
 Connected Interfaces: -  
 Power Supply: 3.8V DC  
 Comments: IMEI no. 004402-58-000004-4

Sweep\_4a\_Band\_Edge\_Channel\_810\_PK



#### Sweep Setup: Sweep\_4a\_Band\_Edge\_Channel\_810\_PK [EMI radiated]

Hardware Setup: 31\_ESU\_Conducted\_FCC\_Part\_15\_22\_24  
 Receiver: [ESU 40]  
 Level Unit: dBm

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
1.91 GHz - 1,911 GHz	1,603 kHz	PK+	3 kHz	70 s	0 dB