

Annex 1: Measurement diagrams
to
TEST REPORT
No.: 2-0023-11-1-6a

According to:
FCC Regulations
Part 22 & Part 24
IC-Regulations
RSS-132 Issue 2 & RSS-133 Issue 5
RSS-Gen, Issue 3

for

Research In Motion Limited

Smartphone REA71UW in GSM Mode
FCC-ID: L6AREA70UW
IC-ID: 2503A-REA70UW







Laboratory Accreditation and Listings			
 Deutsche Akkreditierungsstelle D-PL-12047-01-01	 FEDERAL COMMUNICATIONS COMMISSION Reg. No.: 736496 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2665, R-2666 C-2914, T-1967, G-301
 WiFi <small>ALLIANCE</small>	 LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
CETECOM GmbH Laboratory Radio Communications & 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			

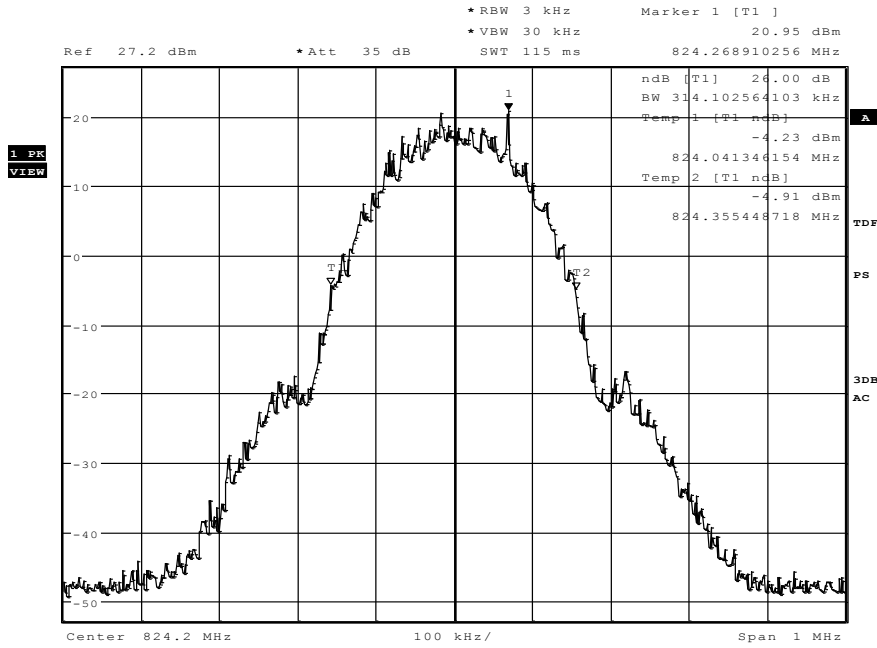
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1. Measurement results

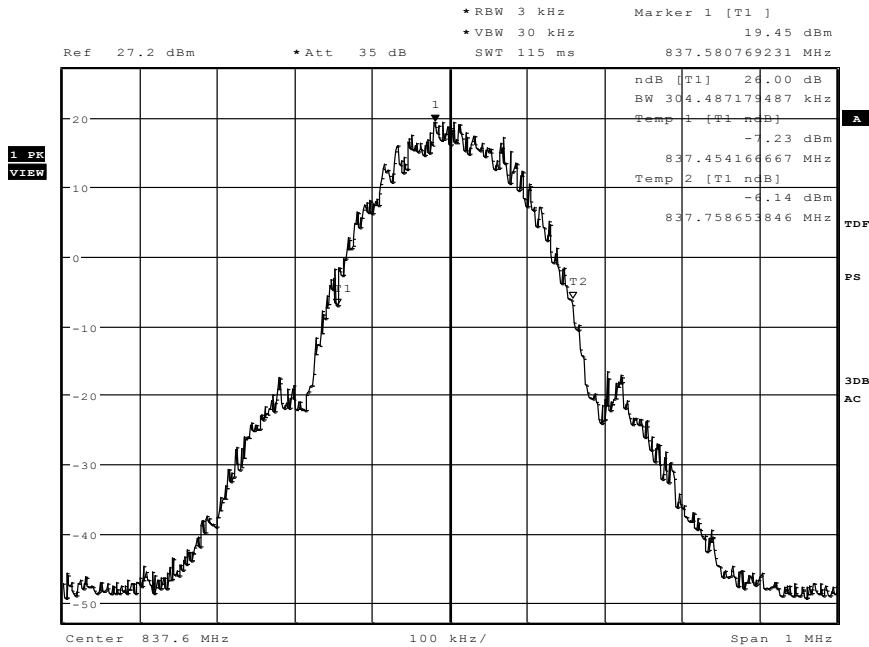
1.1. 26dBc Emission bandwidth

CS-GSM 850



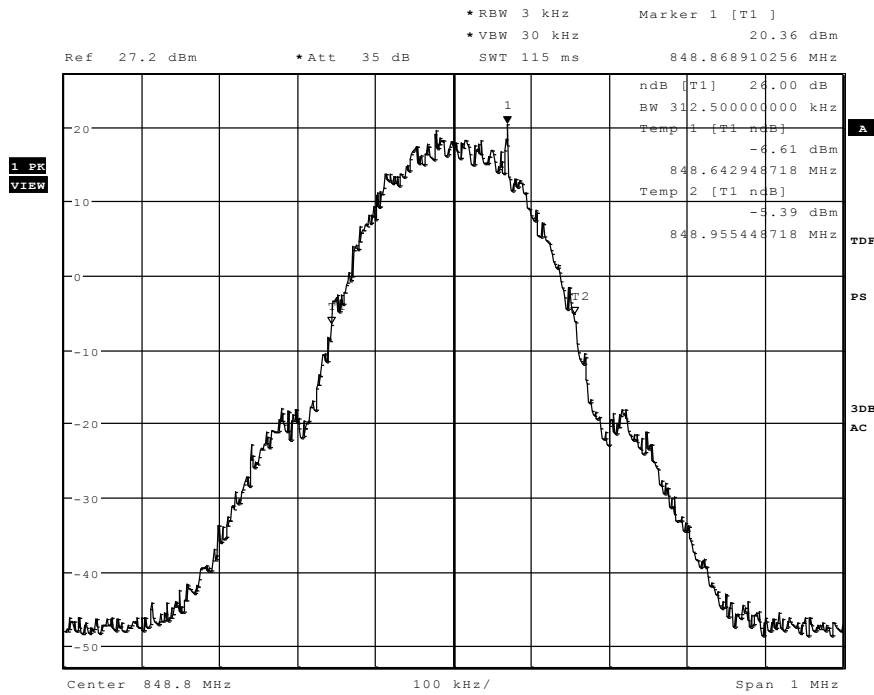
Date: 23.SEP.2011 19:16:19

Channel 128



Date: 23.SEP.2011 19:17:36

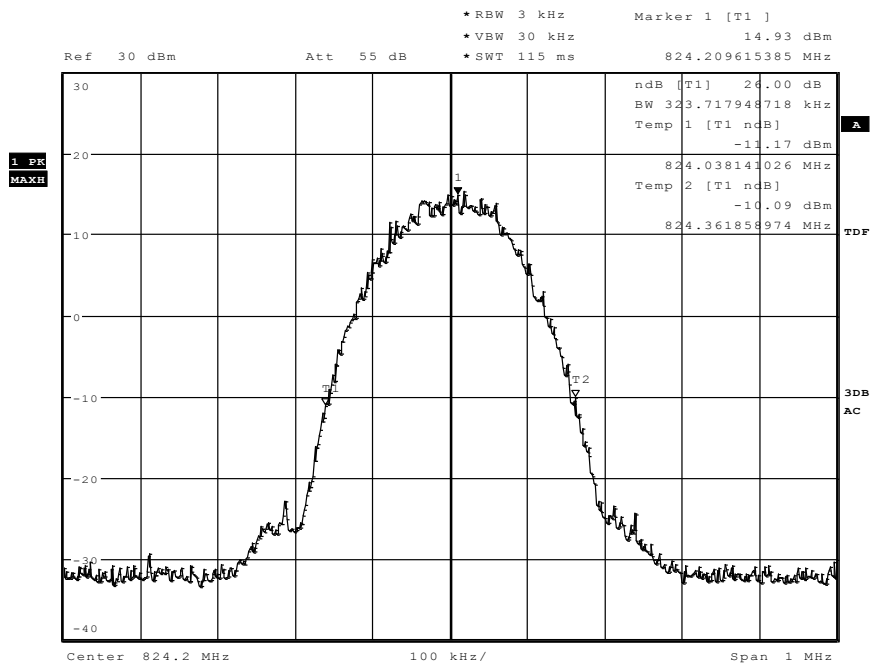
Channel 195



Date: 23.SEP.2011 19:20:37

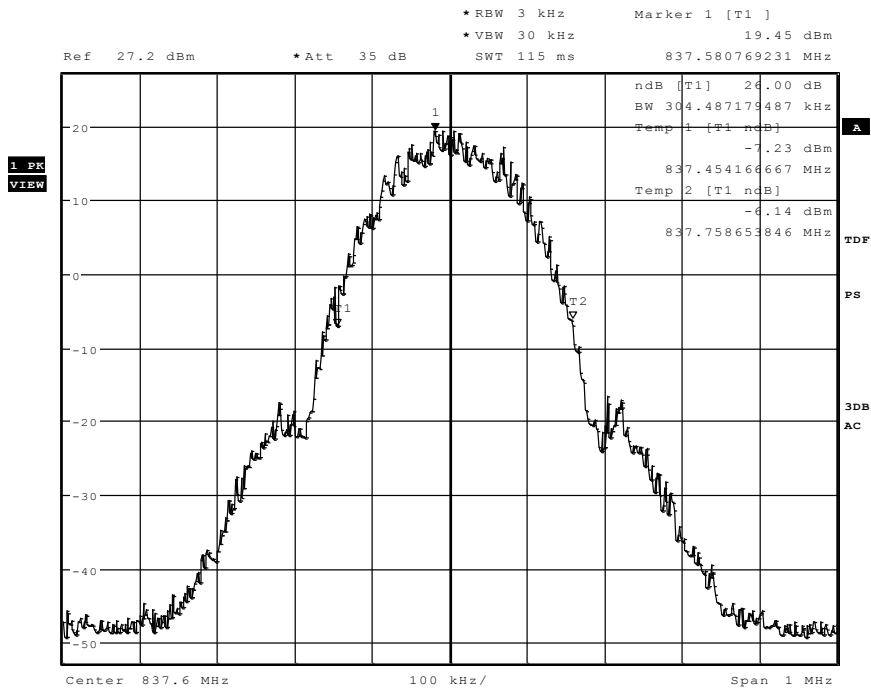
Channel 251

E-GPRS 850



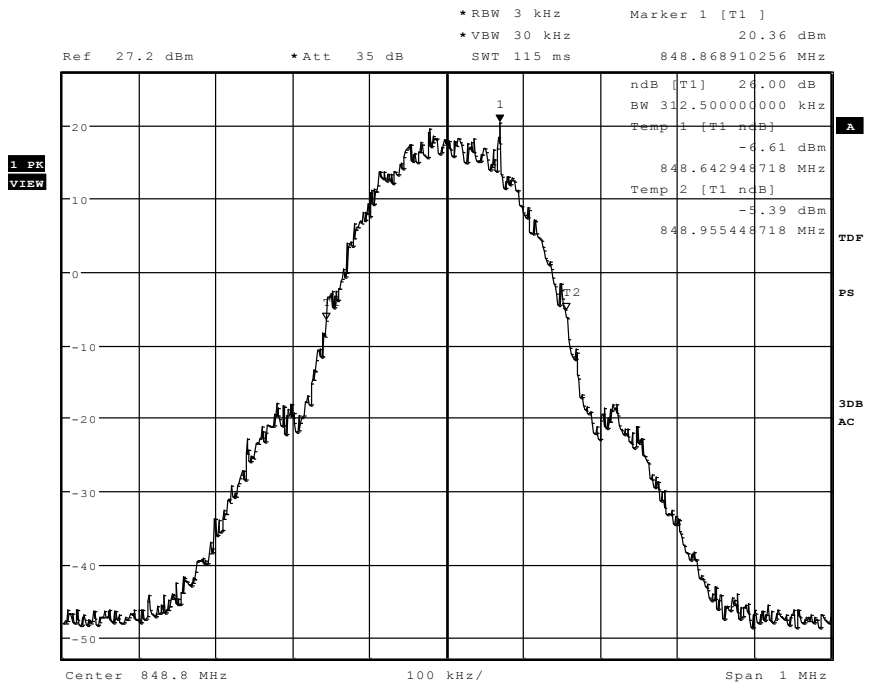
Date: 23.SEP.2011 16:46:36

Channel 128



Date: 23.SEP.2011 19:17:36

Channel 195



Date: 23.SEP.2011 19:20:37

Channel 251

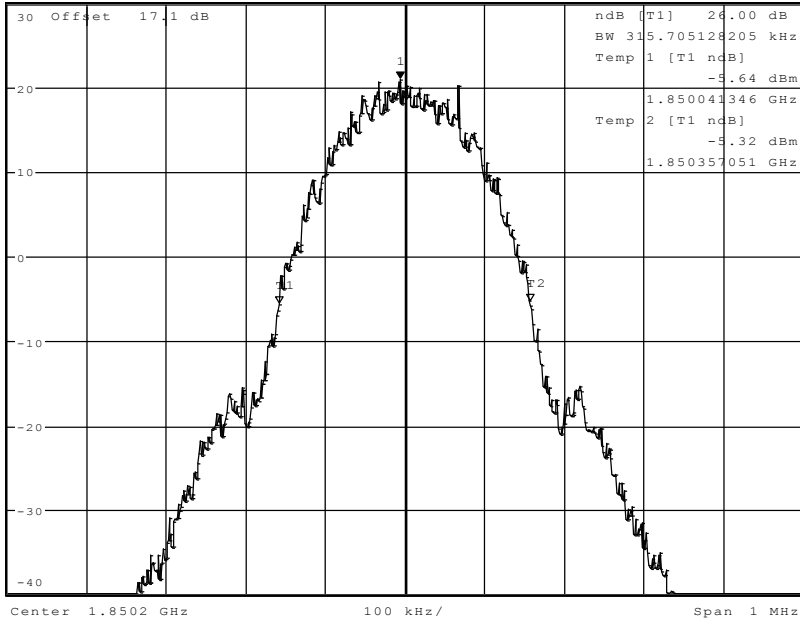
PCS 1900



ndB DOWN VALUE
26 dB

*RBW 3 kHz Marker 1 [T1]
*VBW 30 kHz 20.91 dBm
*SWT 115 ms 1.850193590 GHz

Ref 30 dBm Att 40 dB



Date: 17.SEP.2011 08:27:20

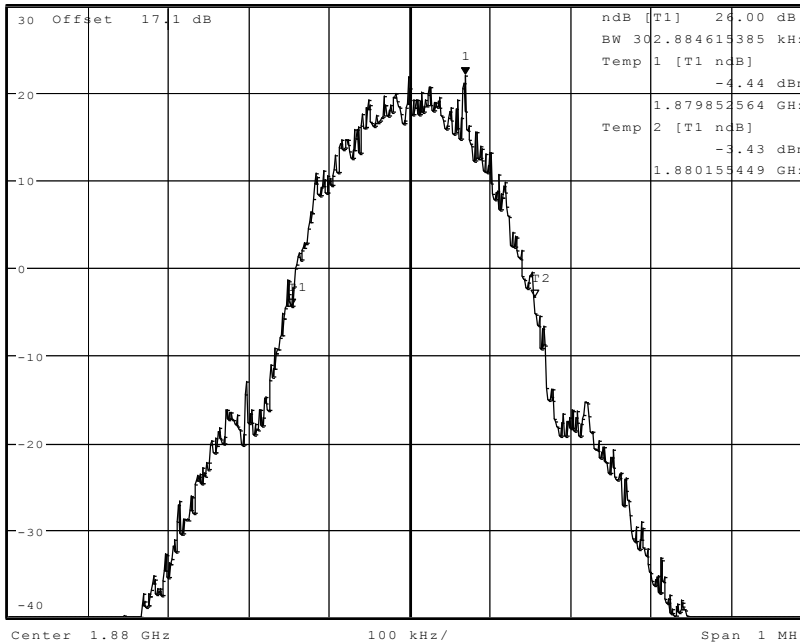
Channel 512



ndB DOWN VALUE
26 dB

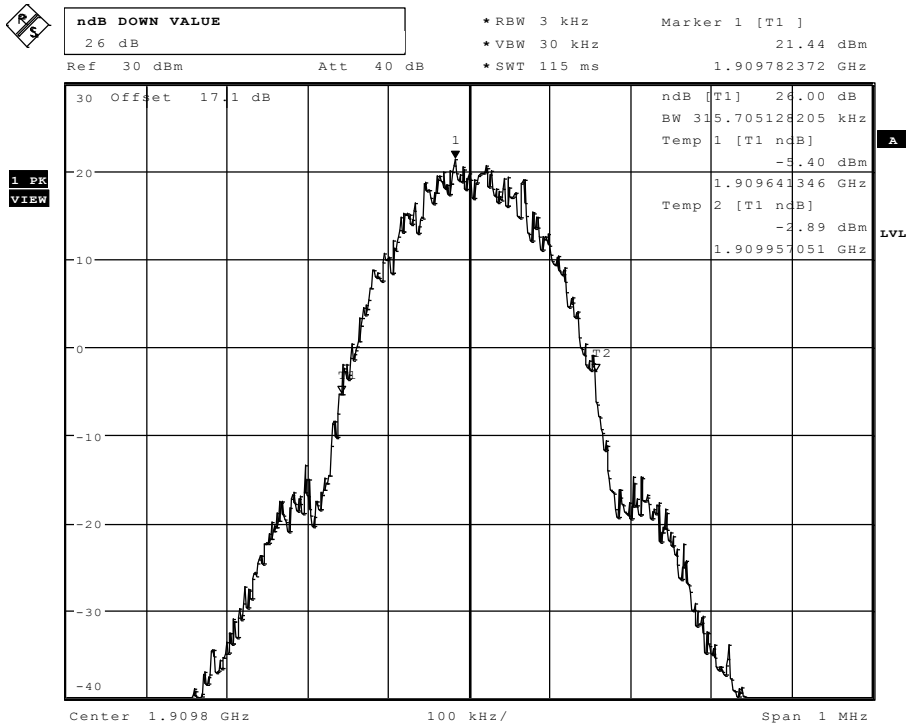
*RBW 3 kHz Marker 1 [T1]
*VBW 30 kHz 22.06 dBm
*SWT 115 ms 1.880068910 GHz

Ref 30 dBm Att 40 dB



Date: 17.SEP.2011 08:30:03

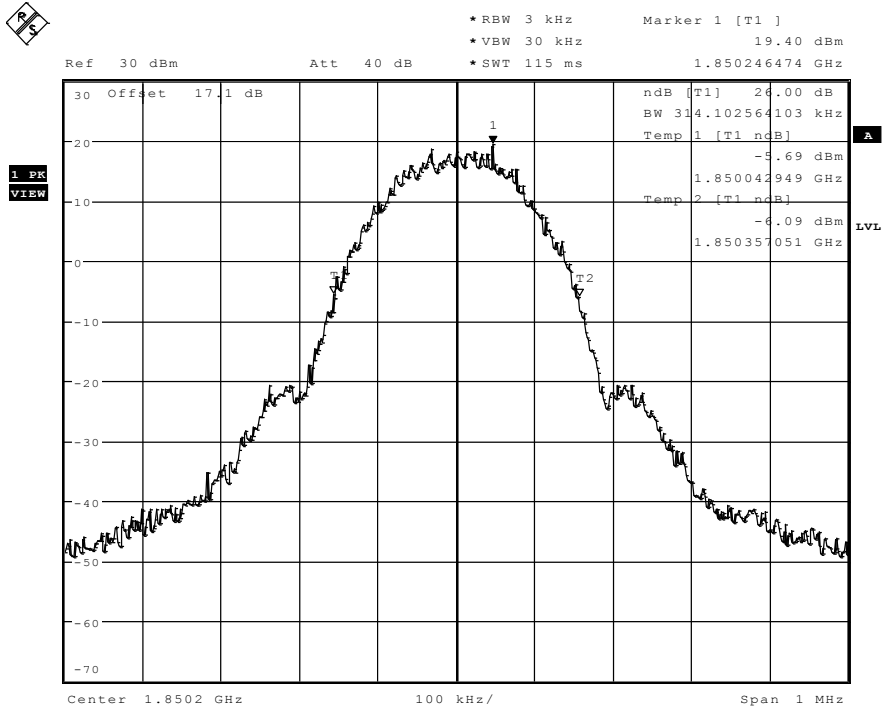
Channel 661



Date: 17.SEP.2011 08:41:37

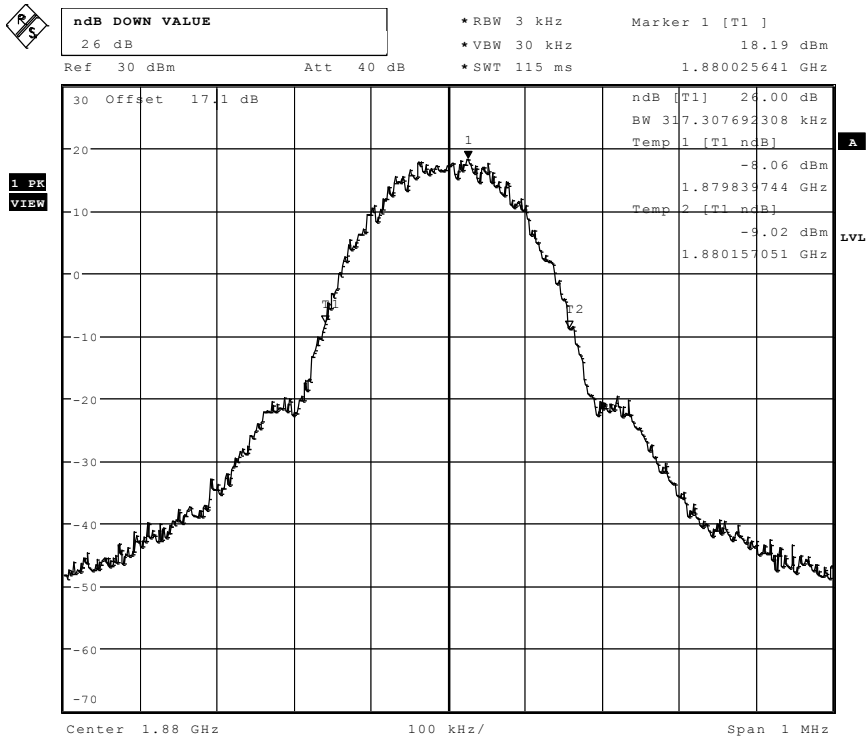
Channel 810

EGPRS_PCS



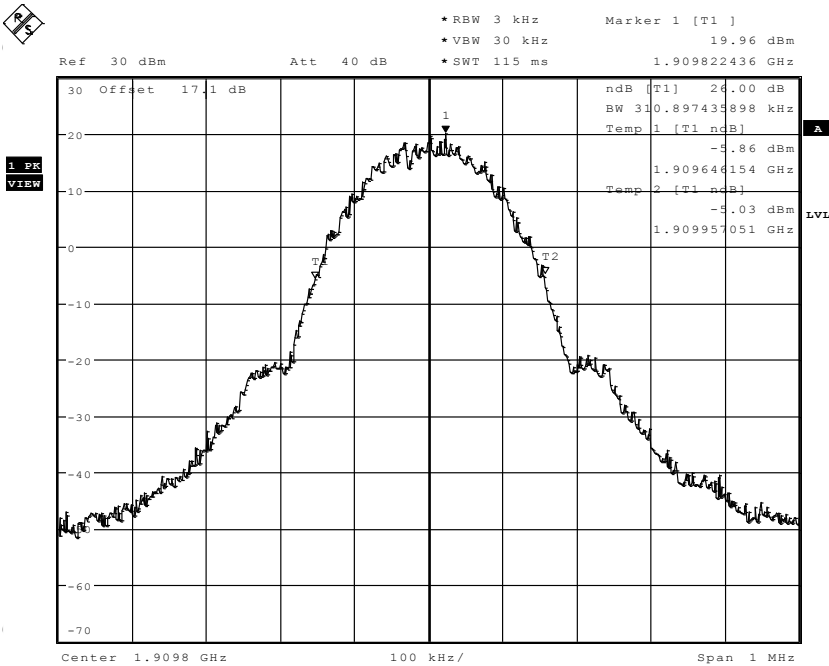
Date: 17.SEP.2011 10:36:31

Channel 512



Date: 17.SEP.2011 10:29:54

Channel 661

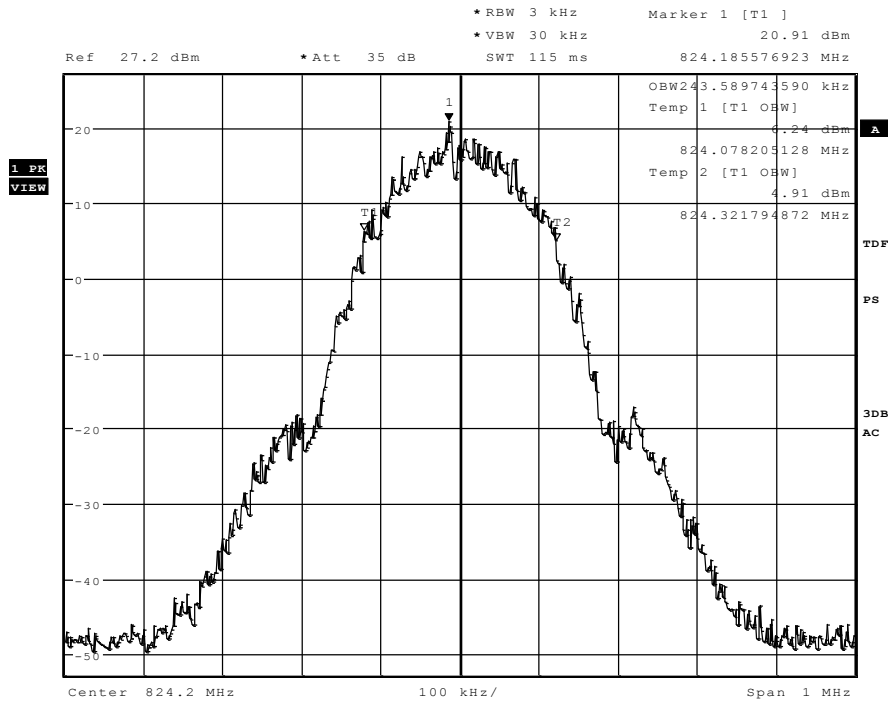


Date: 17.SEP.2011 09:56:21

Channel 810

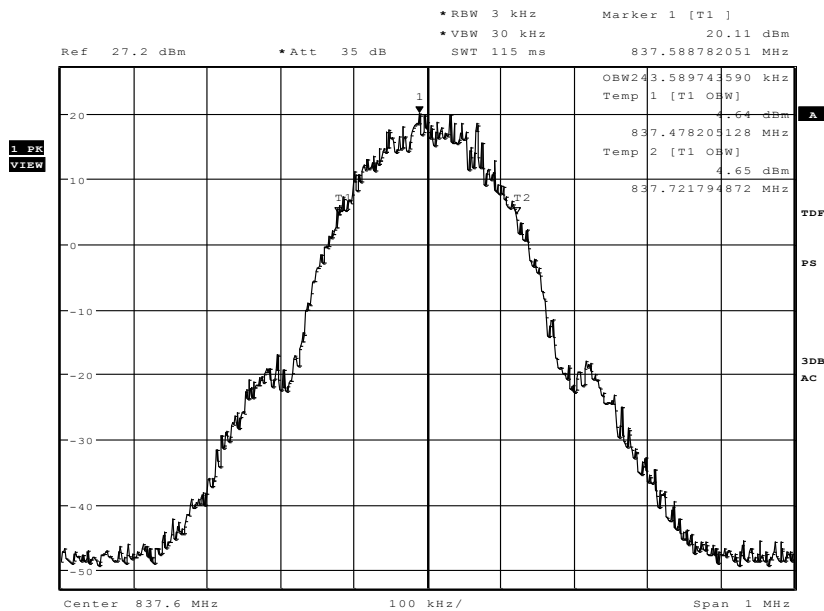
1.2. 99% Occupied bandwidth

CS-GSM 850



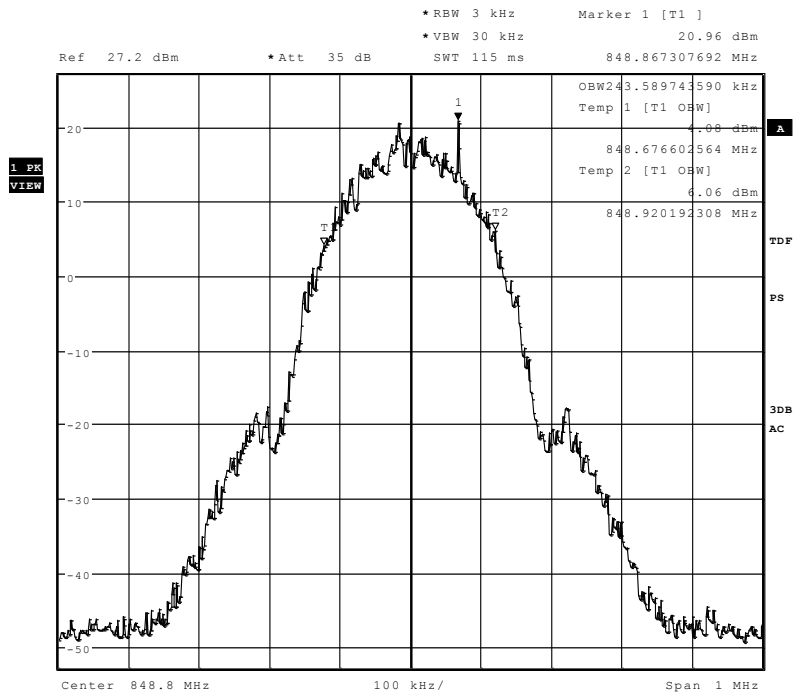
Date: 23.SEP.2011 19:15:21

Channel 128



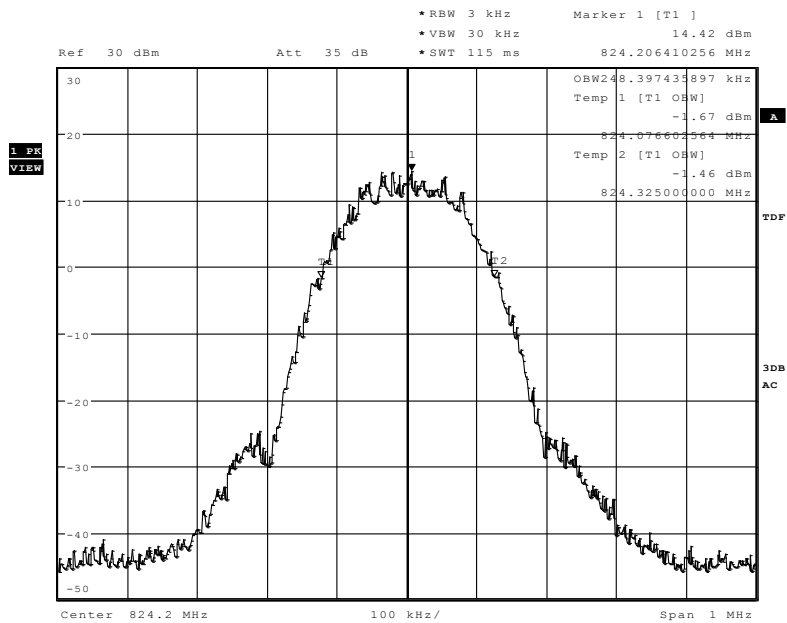
Date: 23.SEP.2011 19:18:33

Channel 195



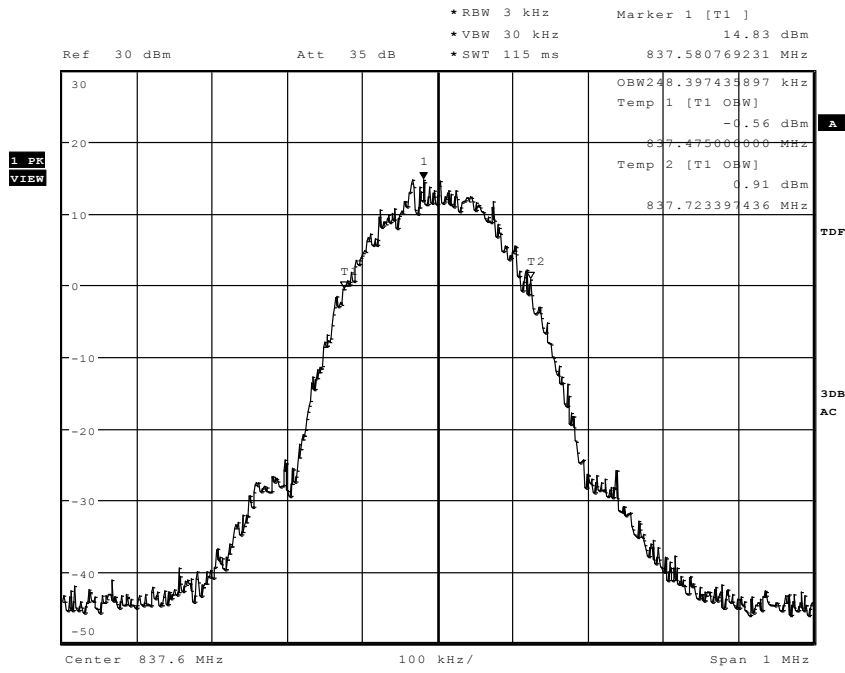
Date: 23.SEP.2011 19:19:27

Channel 251
E-GPRS 850



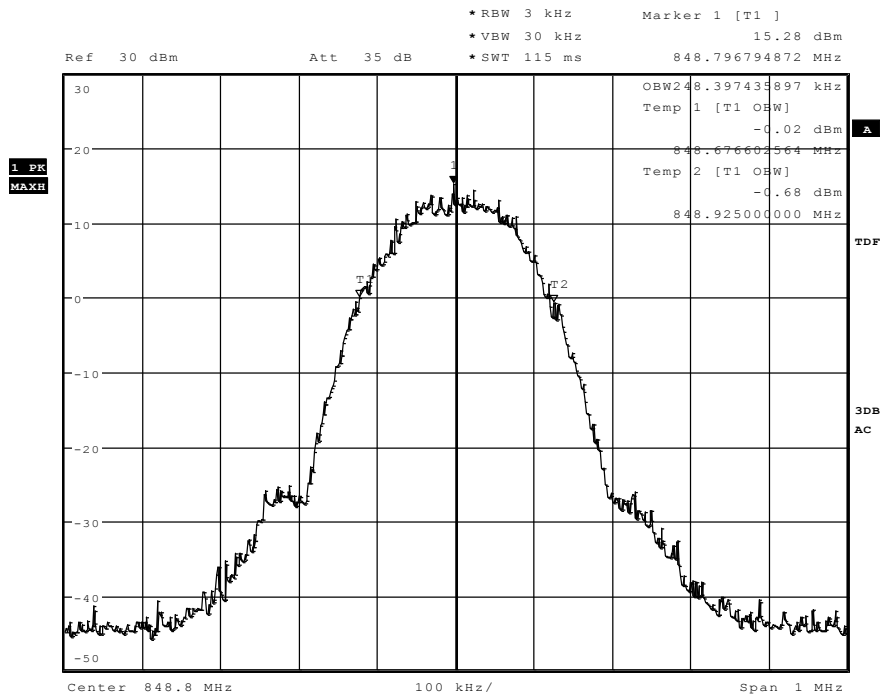
Date: 23.SEP.2011 16:50:16

Channel 128



Date: 23.SEP.2011 16:59:26

Channel 195



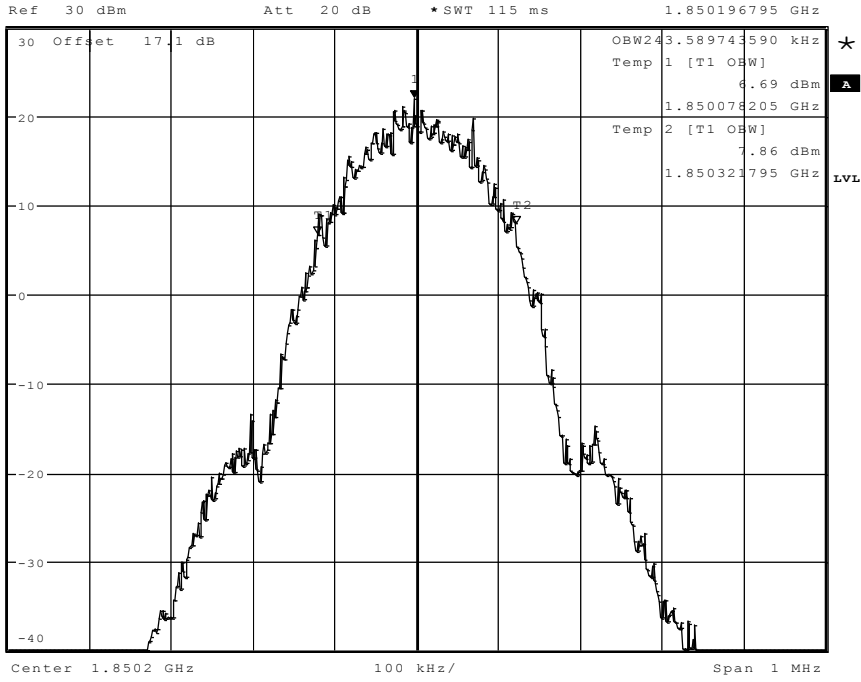
Date: 23.SEP.2011 17:35:11

Channel 251

PCS1900



*RBW 3 kHz Marker 1 [T1]
*VBW 30 kHz 21.94 dBm
*SWT 115 ms 1.850196795 GHz

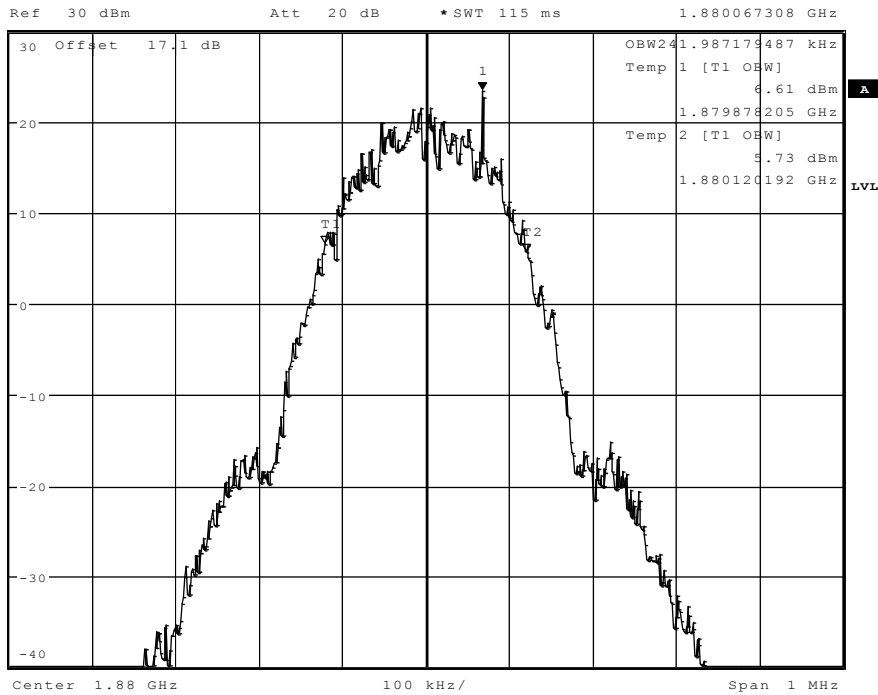


Date: 17.SEP.2011 08:18:37

Channel 512

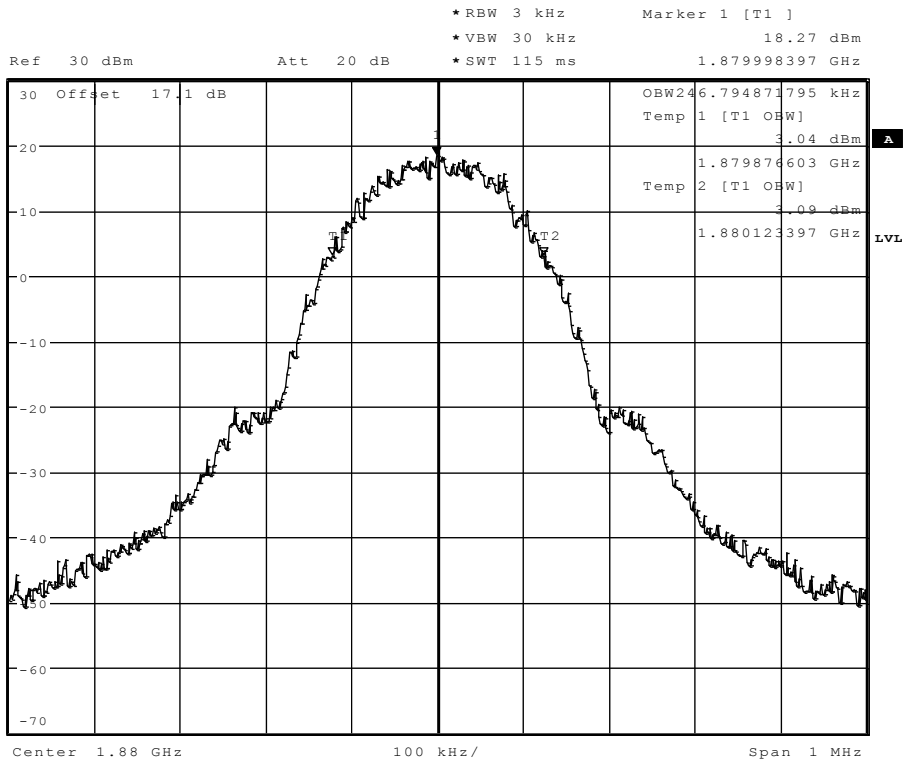


*RBW 3 kHz Marker 1 [T1]
*VBW 30 kHz 23.41 dBm
*SWT 115 ms 1.880067308 GHz



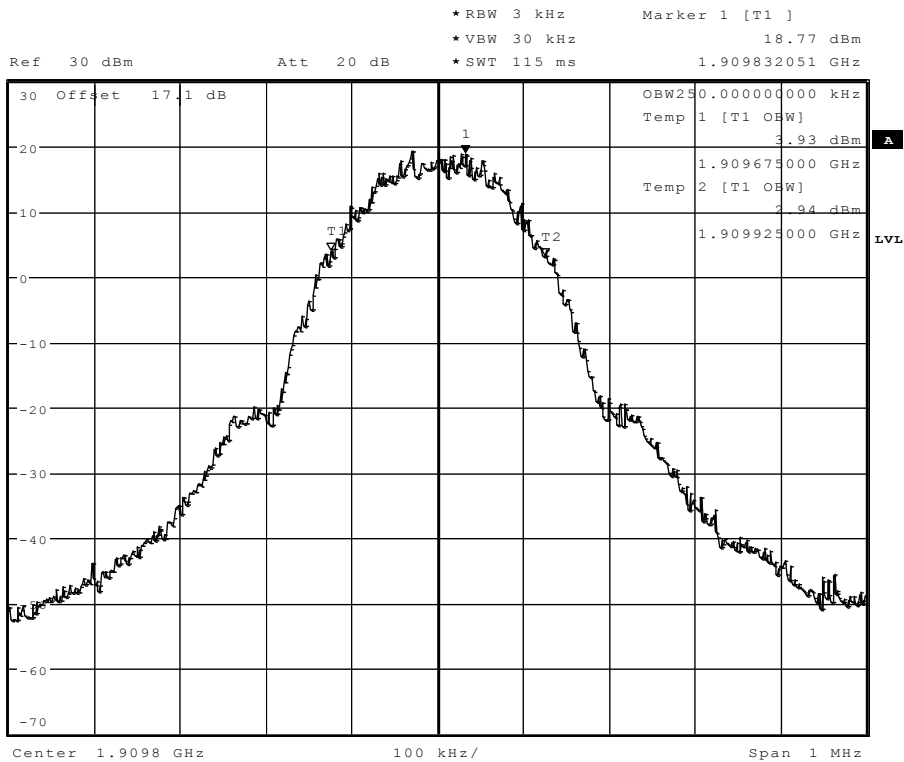
Date: 17.SEP.2011 08:35:46

Channel 661



Date: 17.SEP.2011 10:31:32

Channel 661

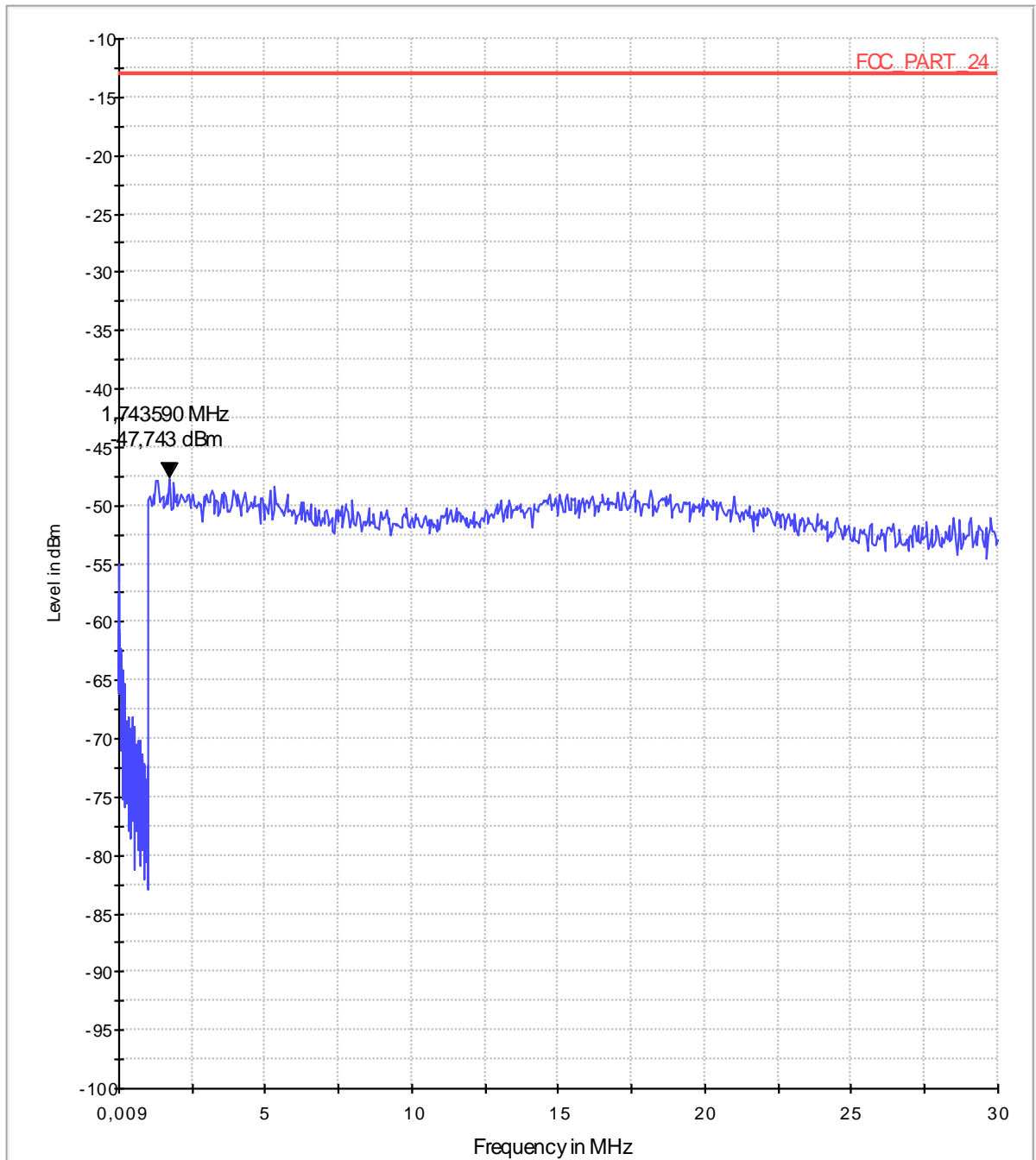


Date: 17.SEP.2011 09:54:45

Channel 810

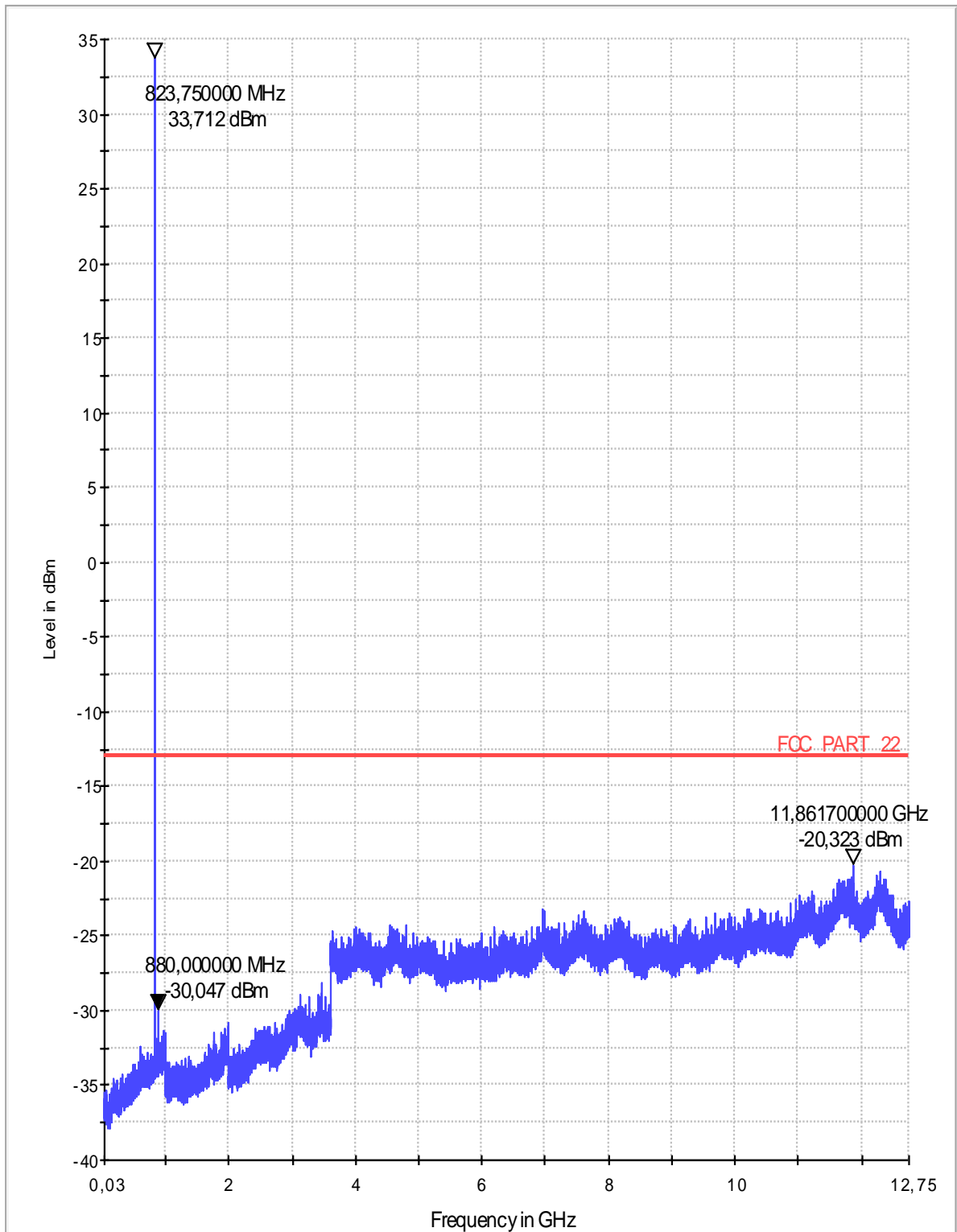
1.3. TX Spurious emissions conducted – GSM850 Mode

Sweep_1



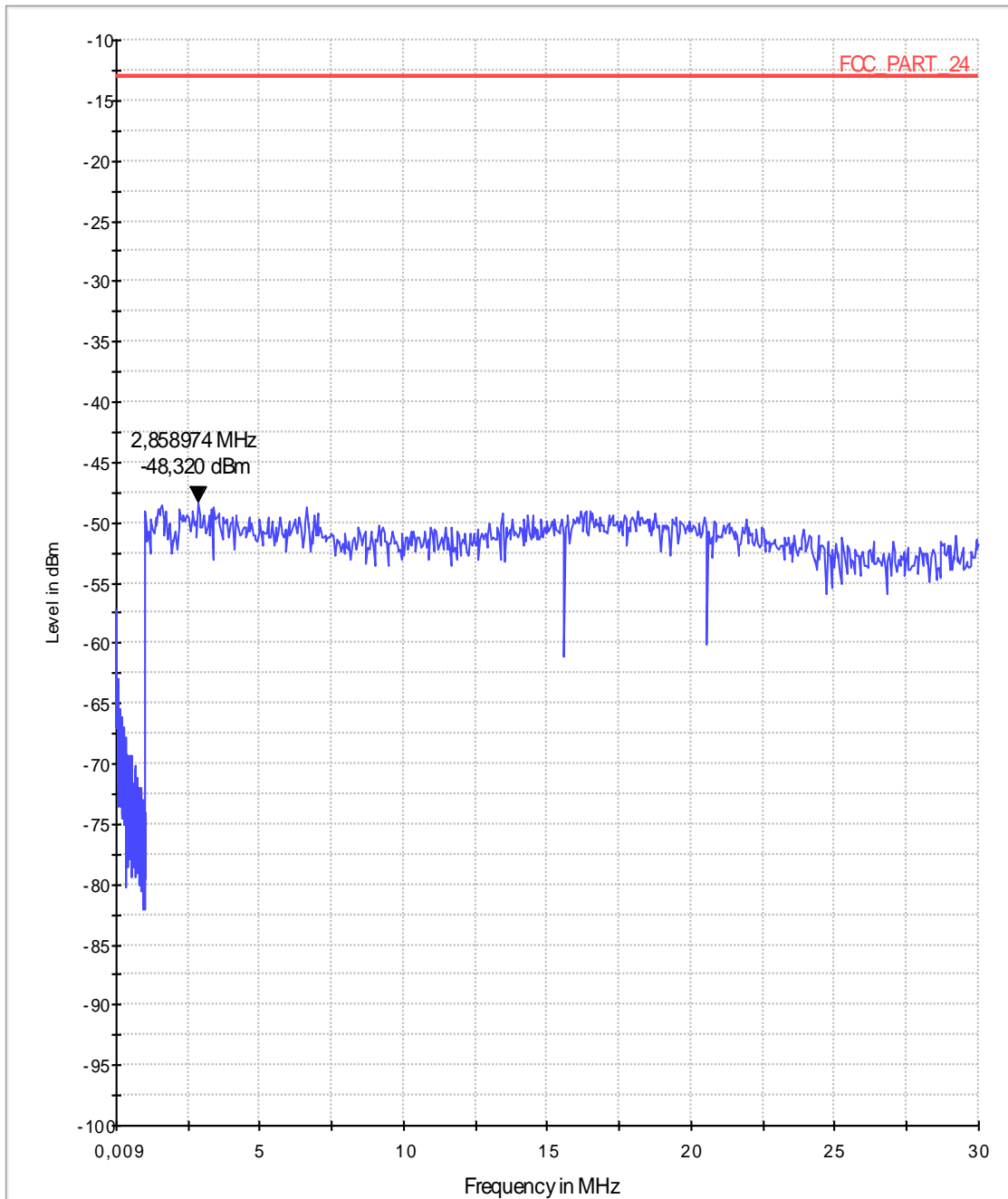
Channel 128

Sweep_2



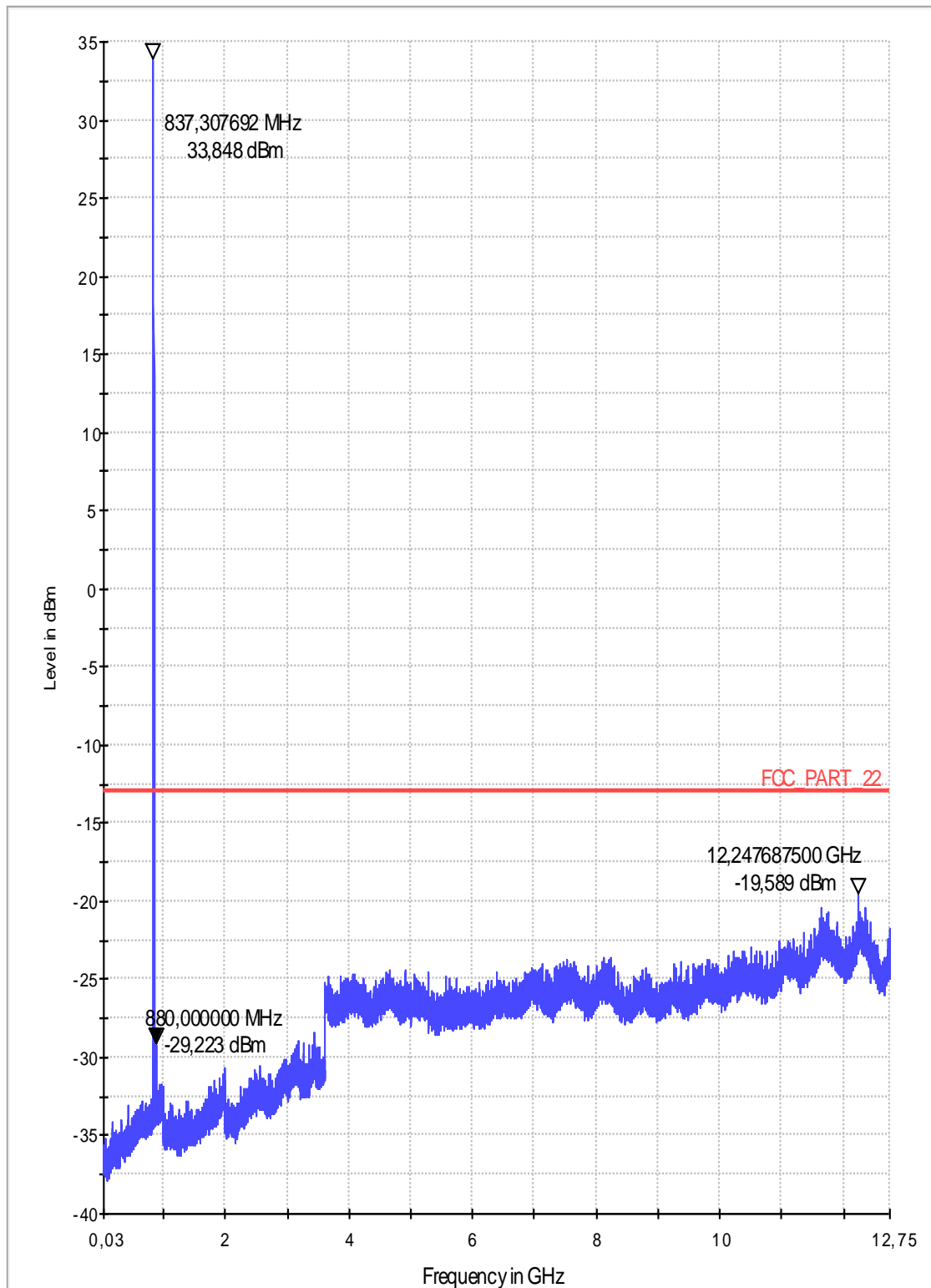
Channel 128

Sweep_1



Channel 195

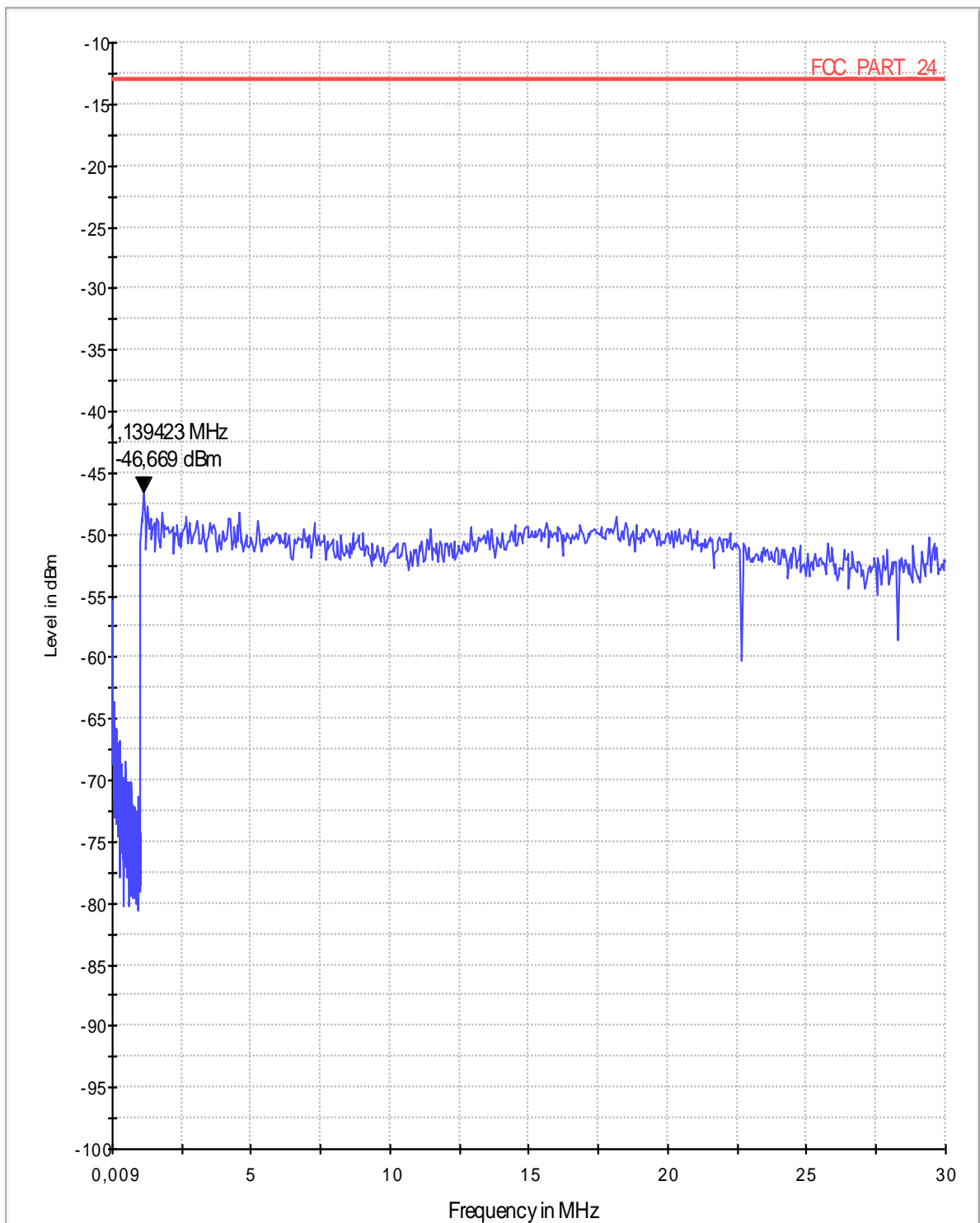
Sweep_2



Channel 195

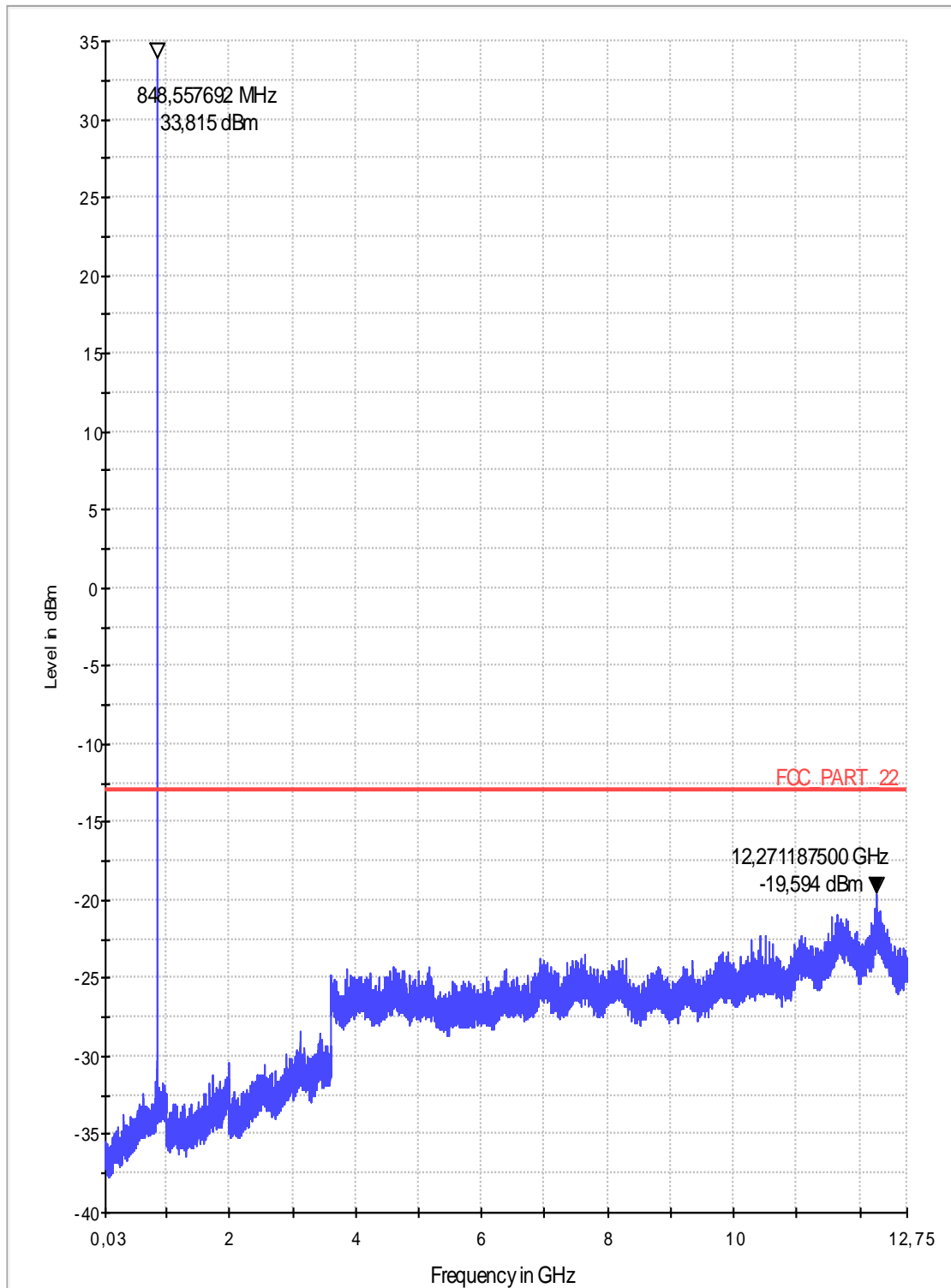
Remark: Visible here the BCCH frequency 880,00 MHz.

Sweep_1



Channel 251

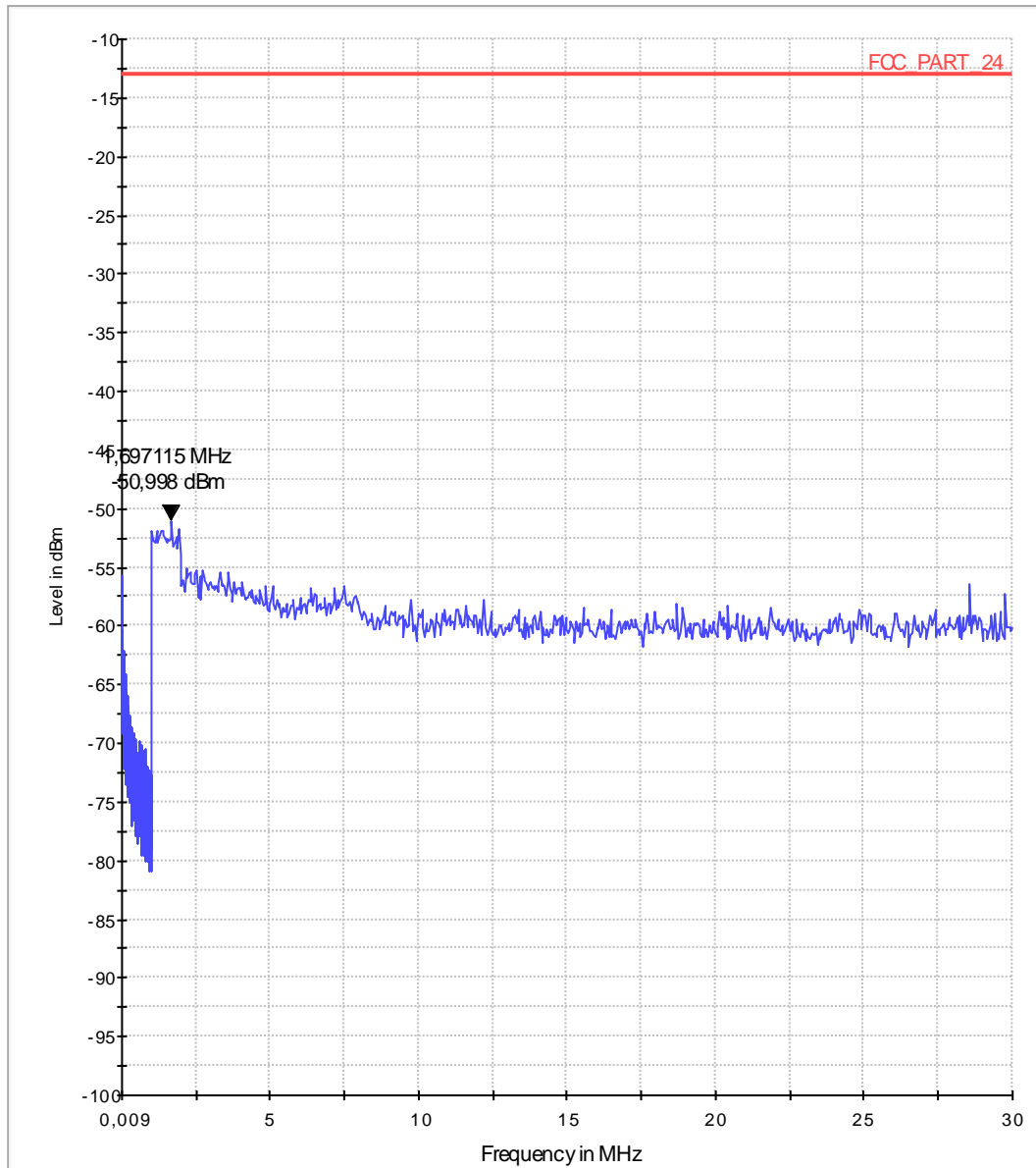
Sweep_2



Channel 251

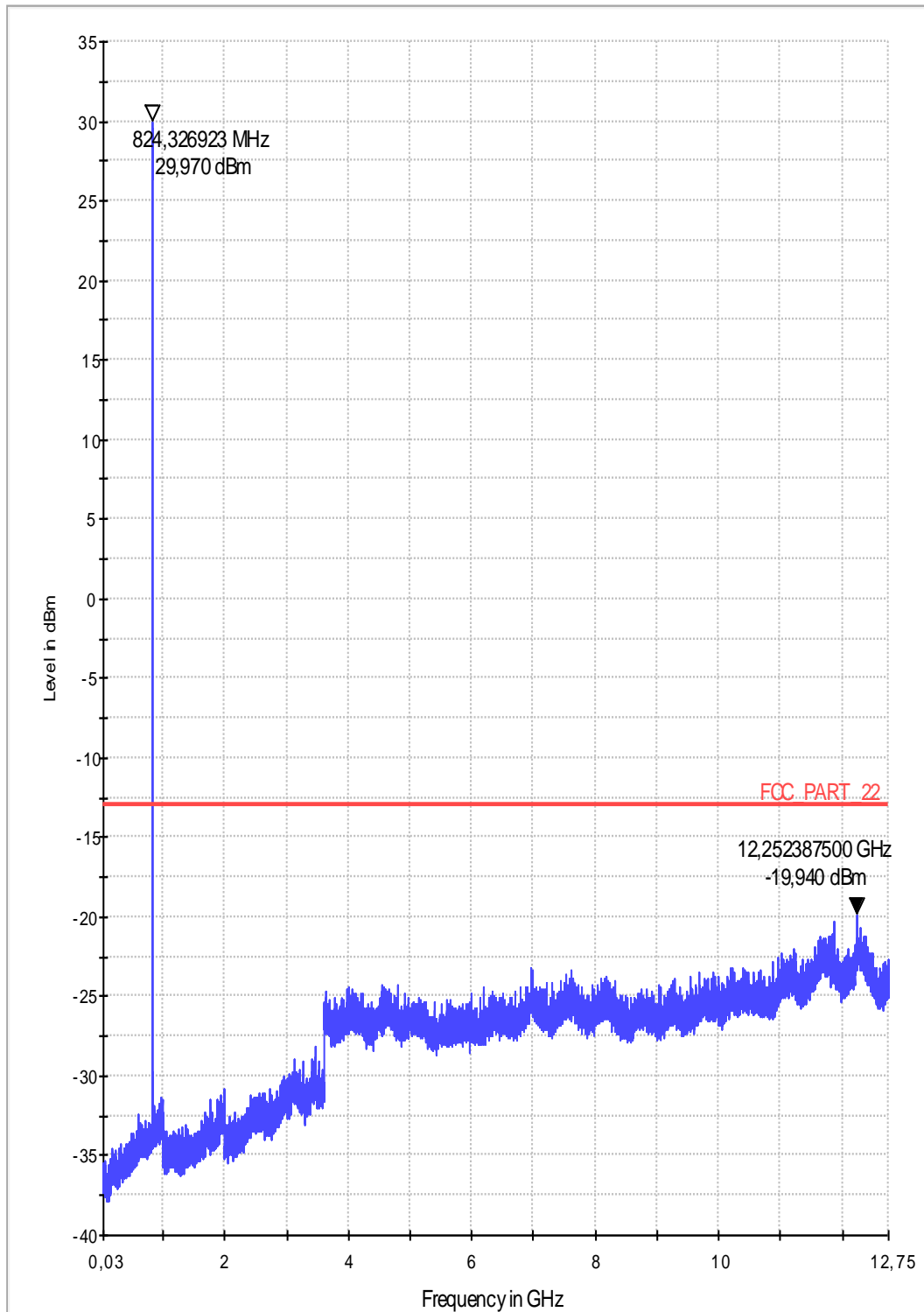
1.3.1. TX Spurious emissions conducted – EGPRS 850 Mode

Sweep_1



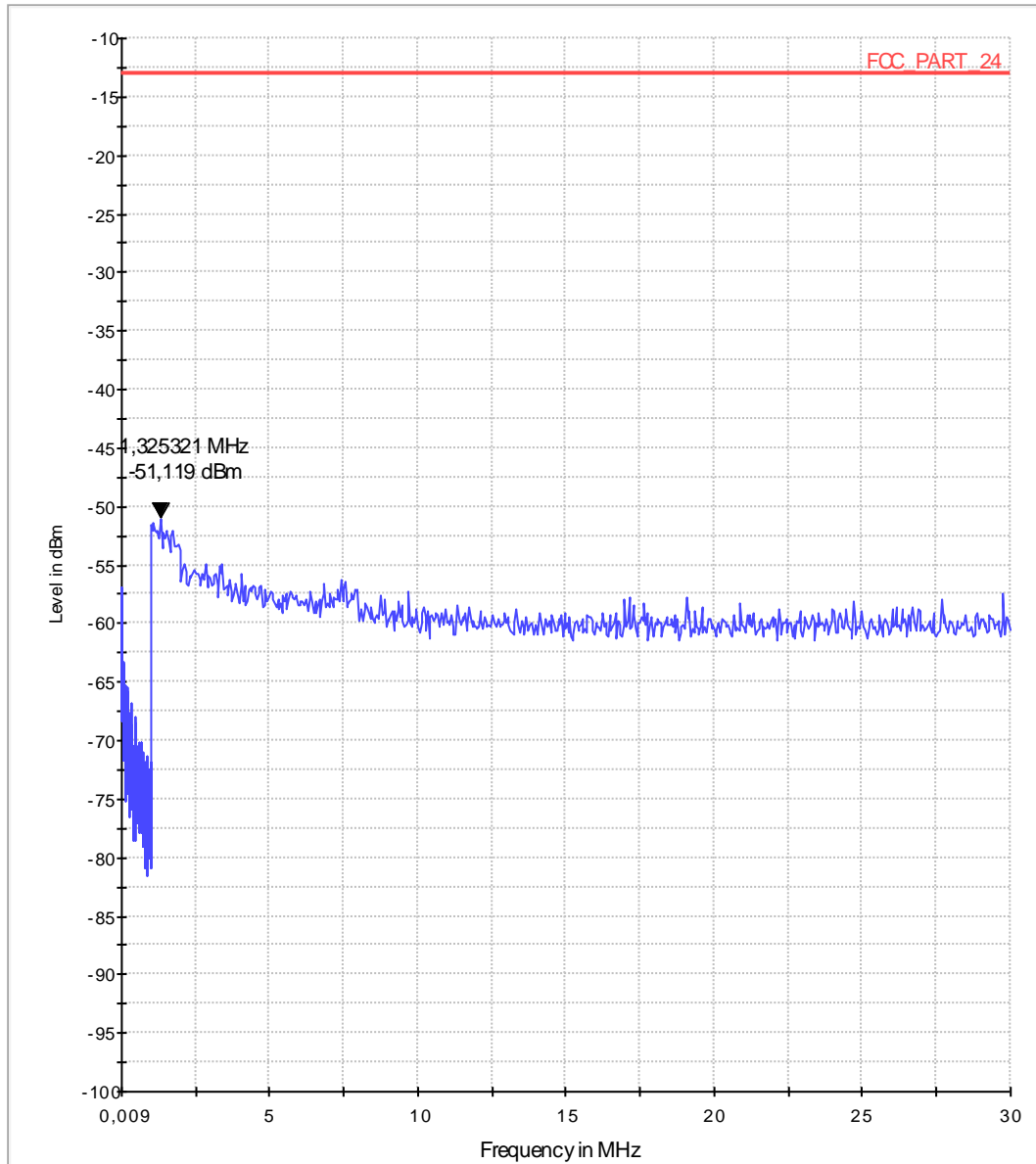
Channel 128

Sweep_2



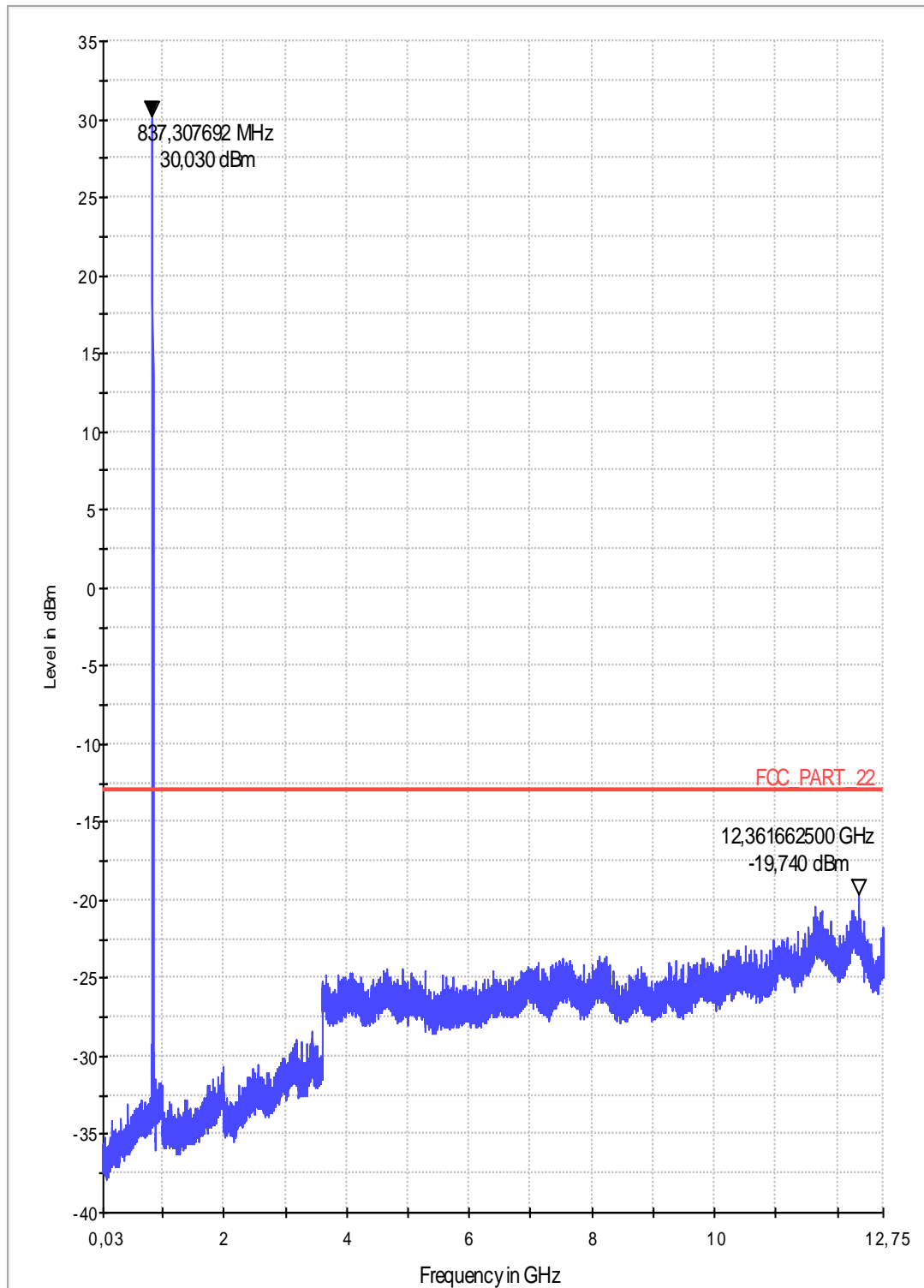
Channel 128

Sweep_1



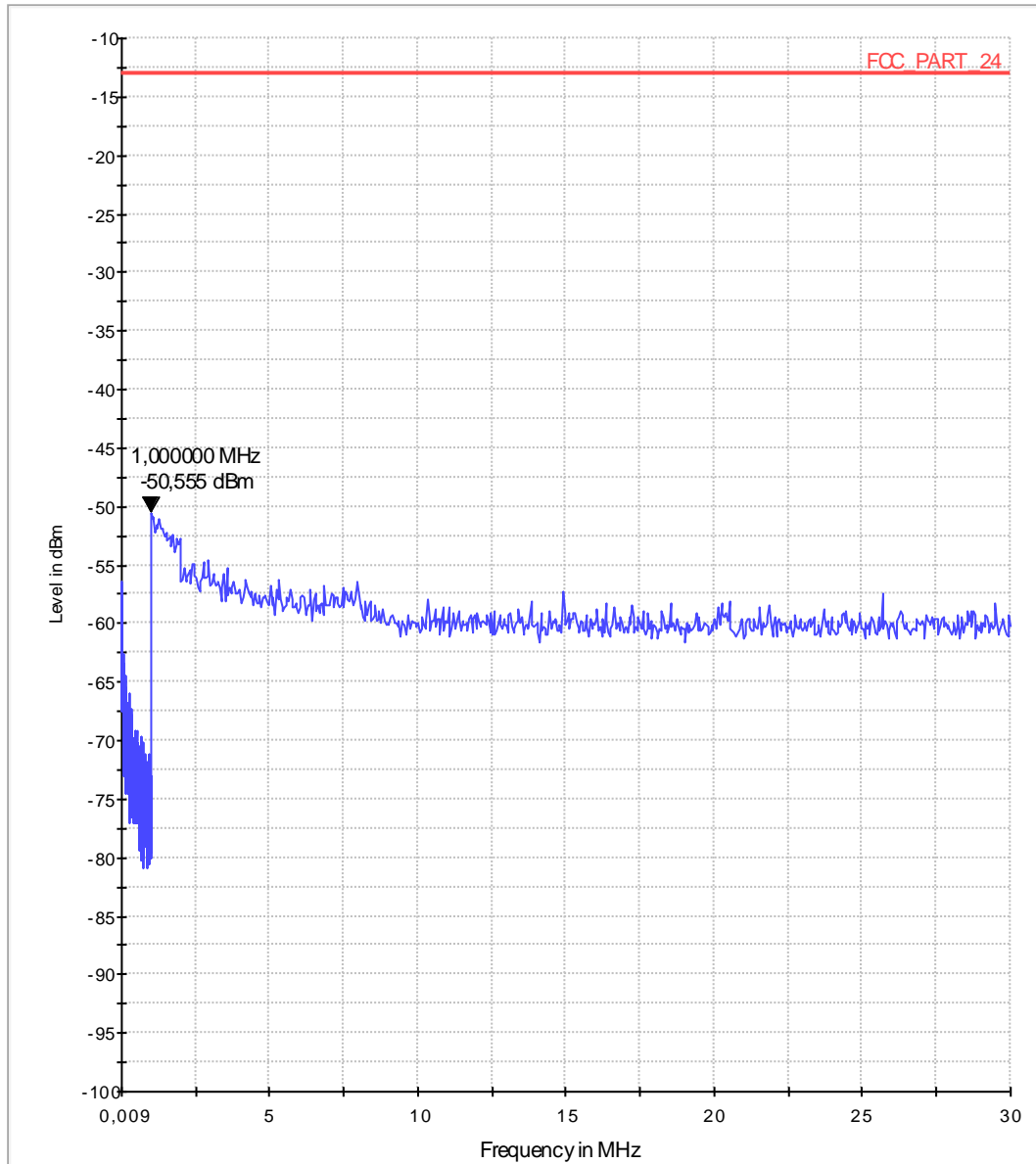
Channel 195

Sweep_2



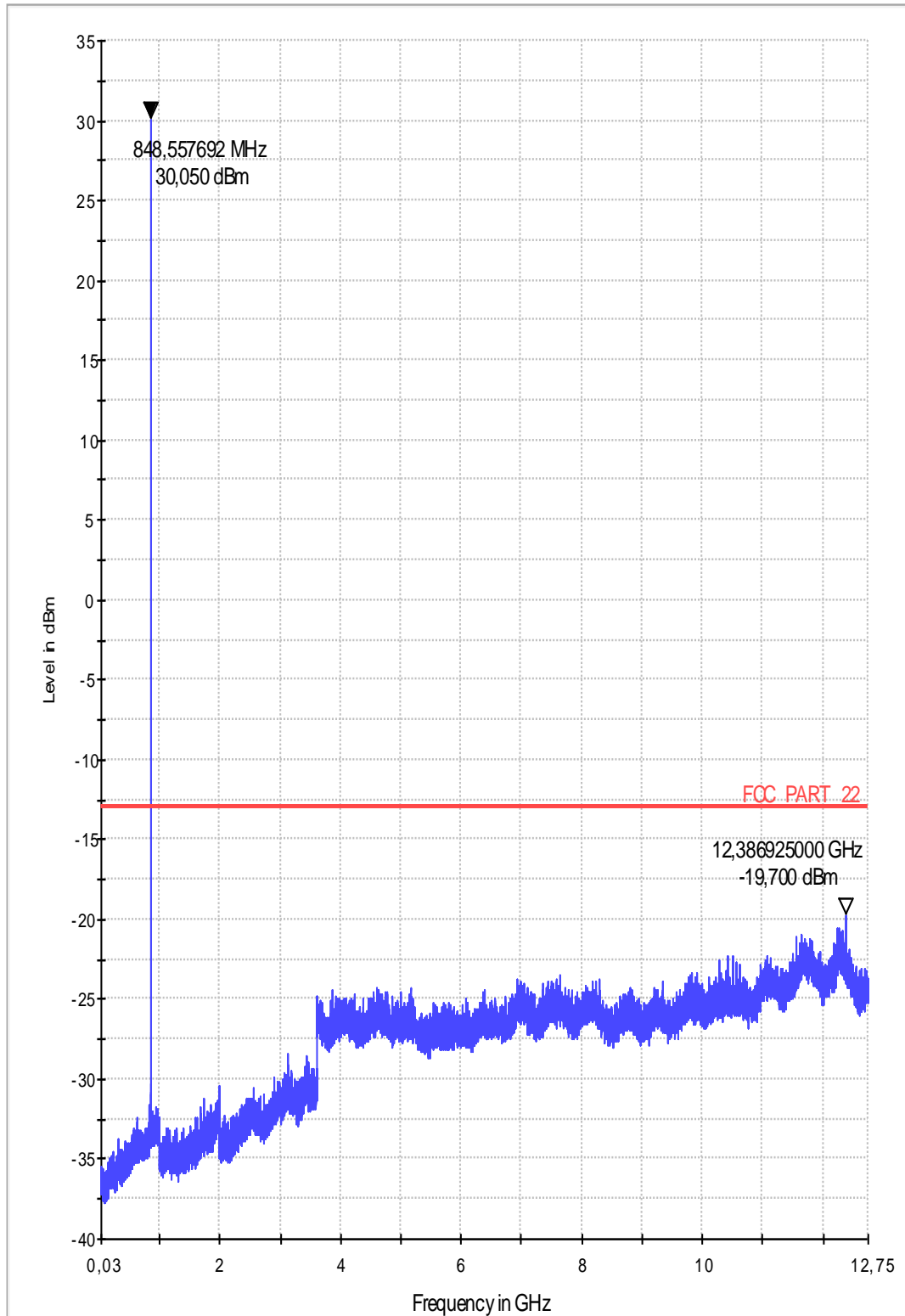
Channel 195

Sweep_1



Channel 251

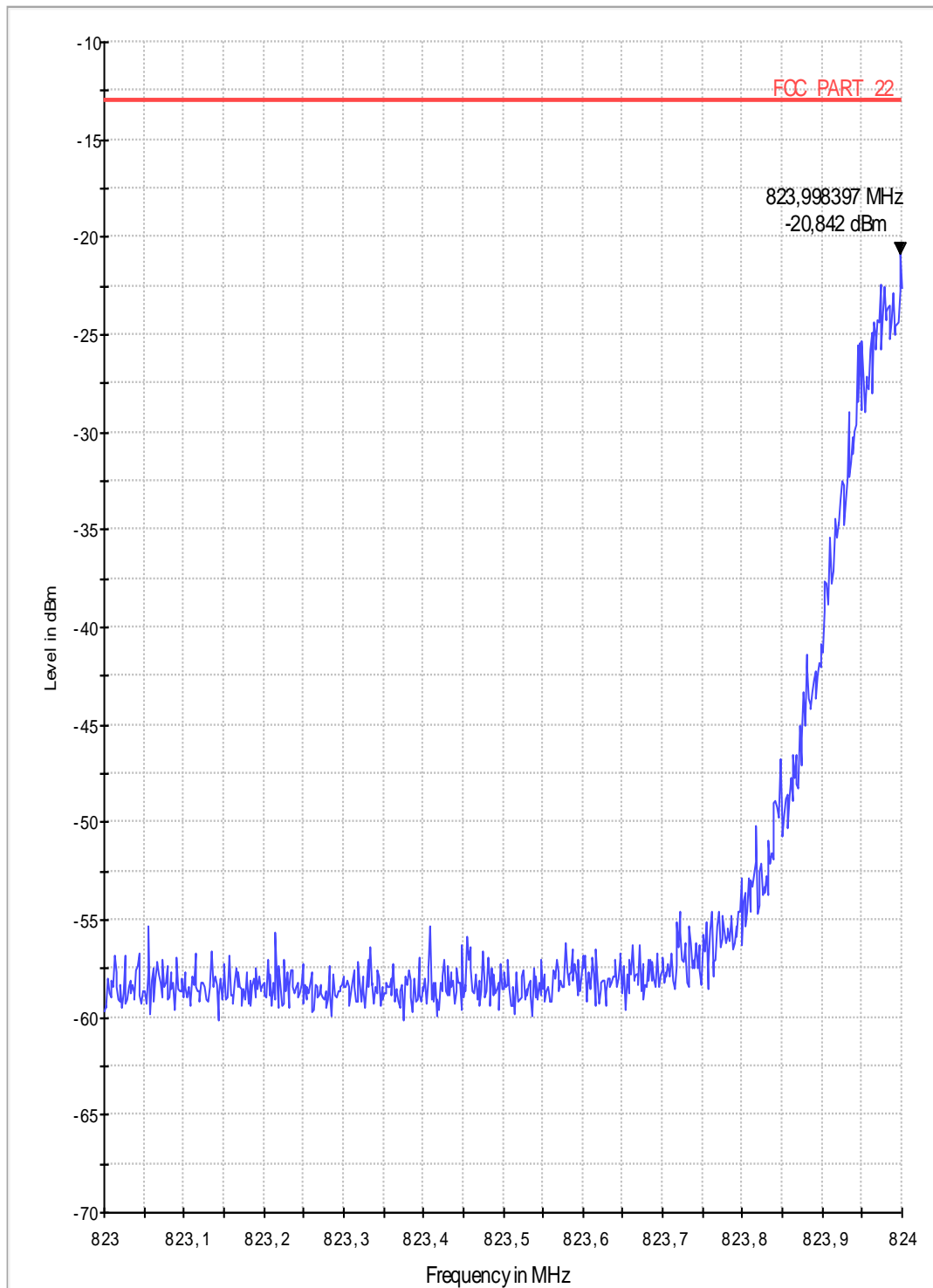
Sweep_2



Channel 251

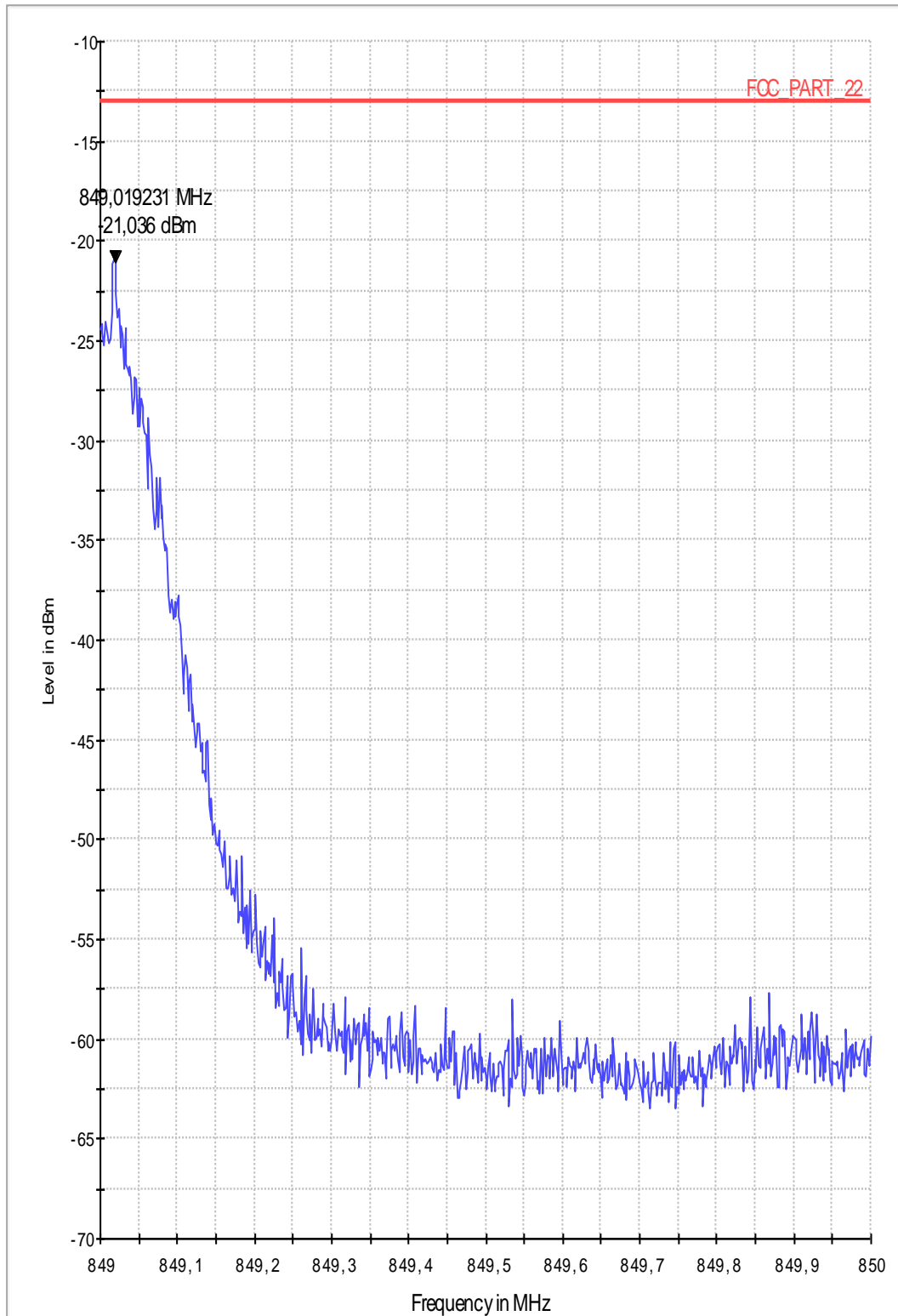
1.3.2. Band-Edge compliance conducted– GSM850

Sweep_3a_Band_Edge_Channel_128_PK



Band Edge Channel 128

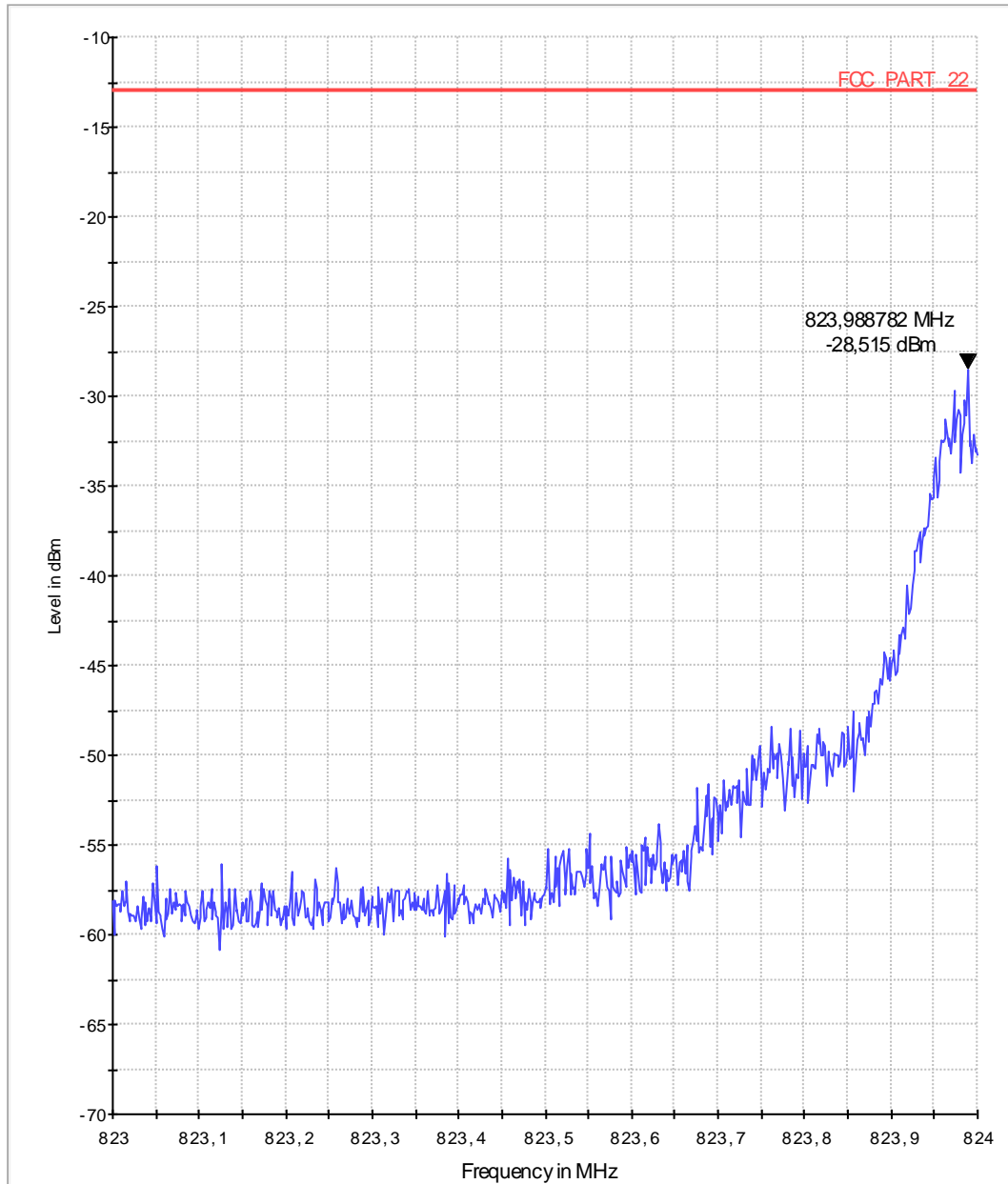
Sweep_4a_Band_Edge_Channel_251_PK



Band Edge Channel 251

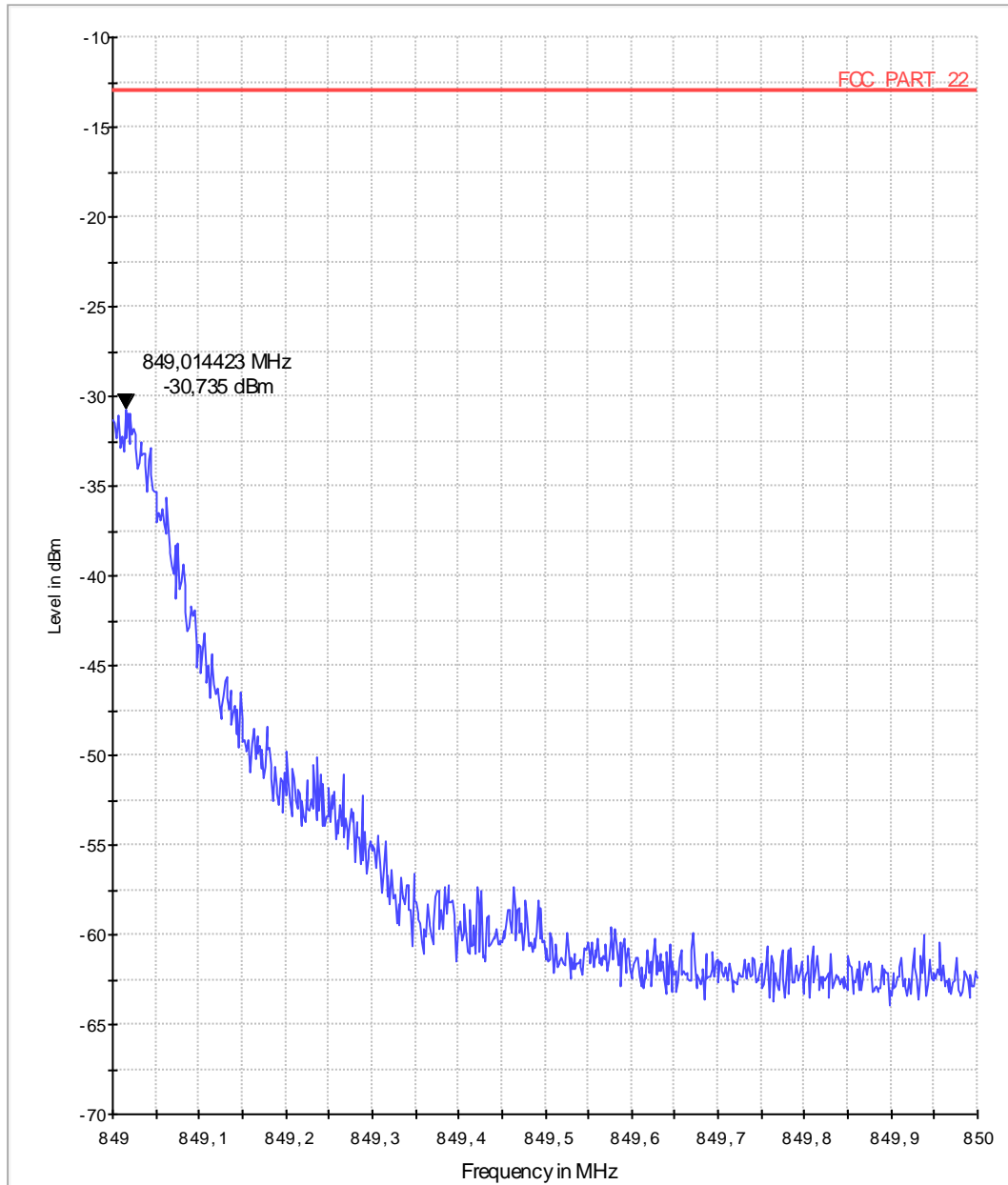
1.4. Band-Edge compliance conducted- EGPRS 850

Sweep_3a_Band_Edge_Channel_128_PK



Band Edge Channel 128

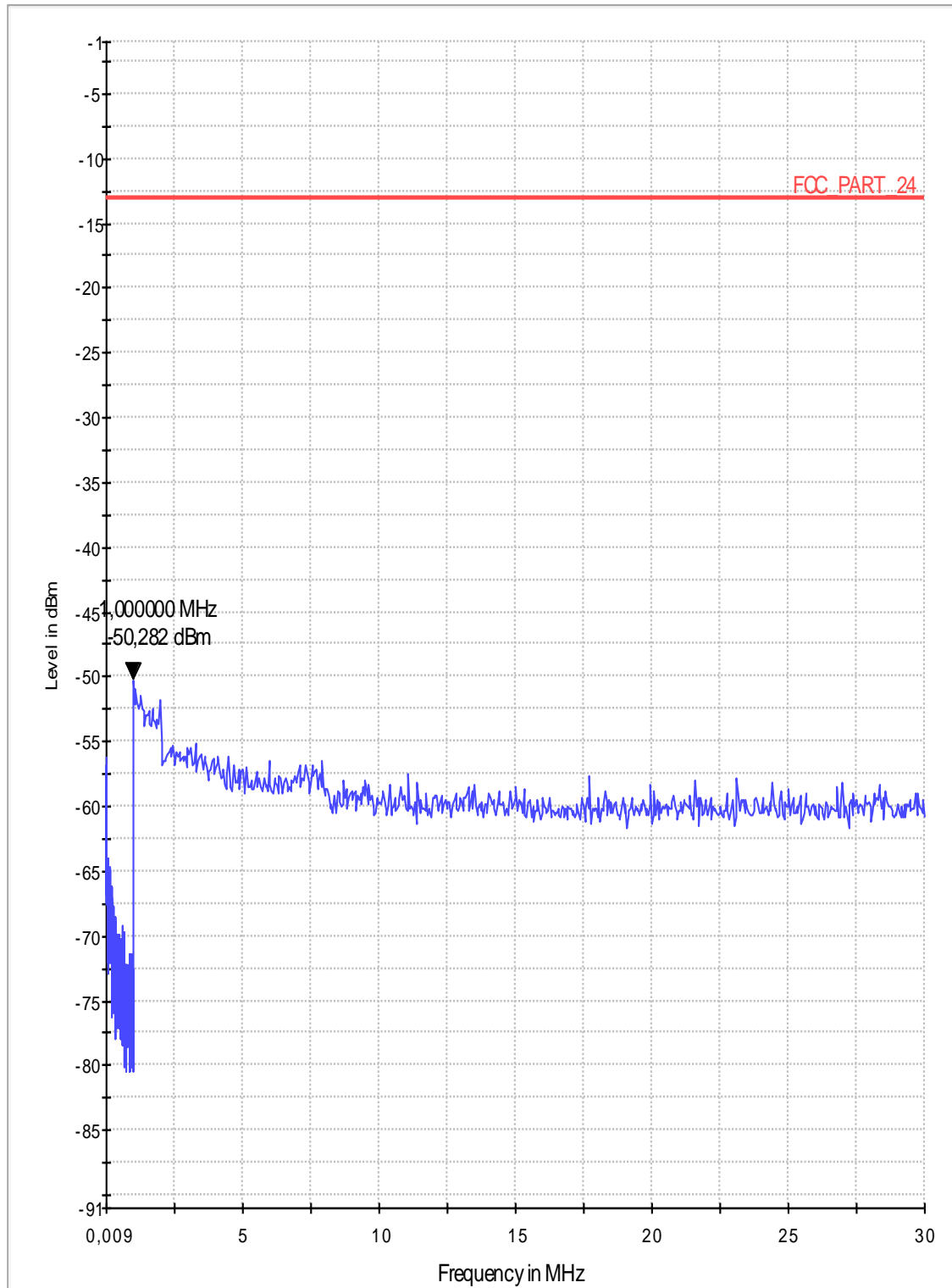
Sweep_4a_Band_Edge_Channel_251_PK



Band Edge Channel 251

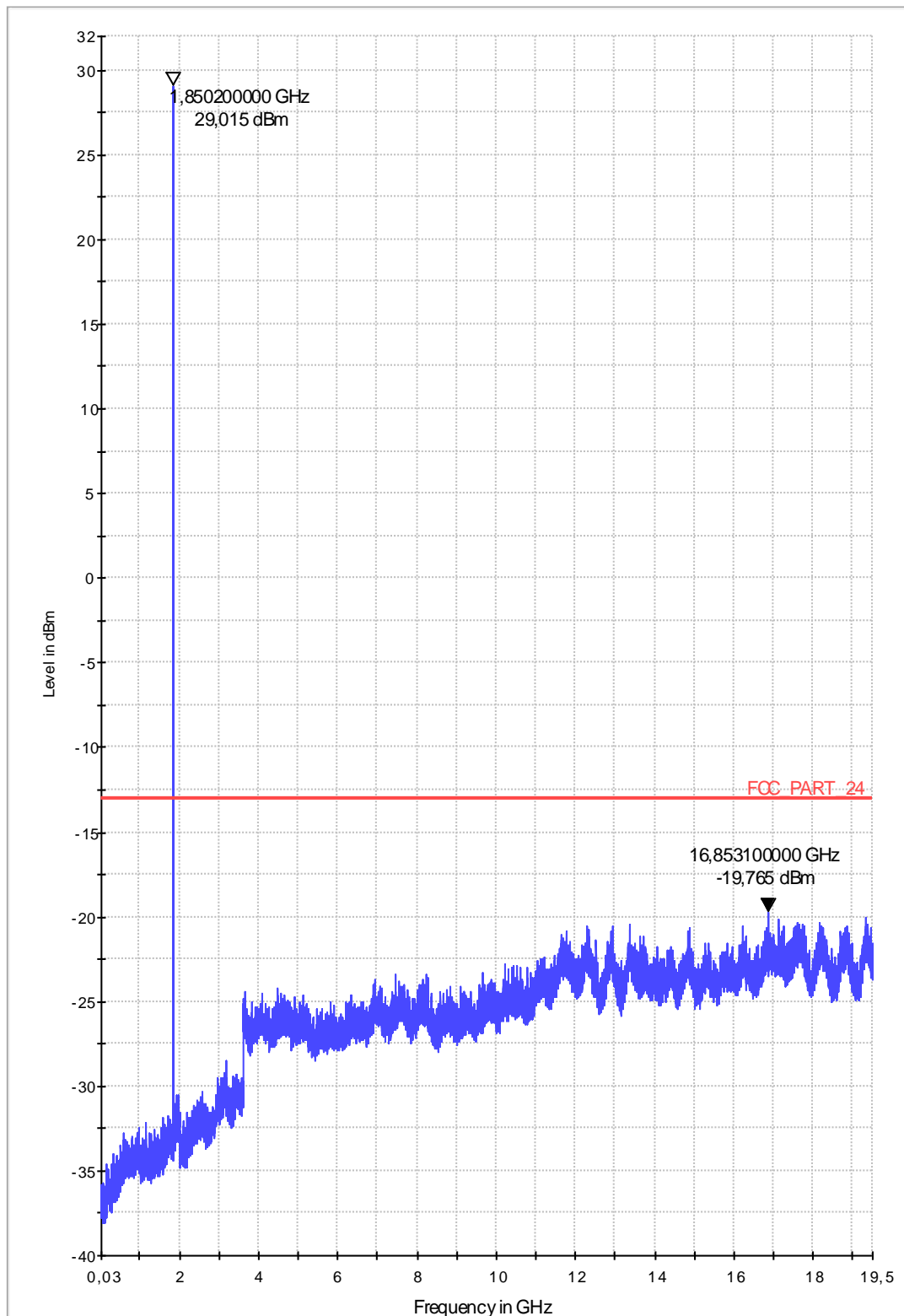
1.5. TX Spurious emissions conducted – GSM1900 Mode

Sweep_1



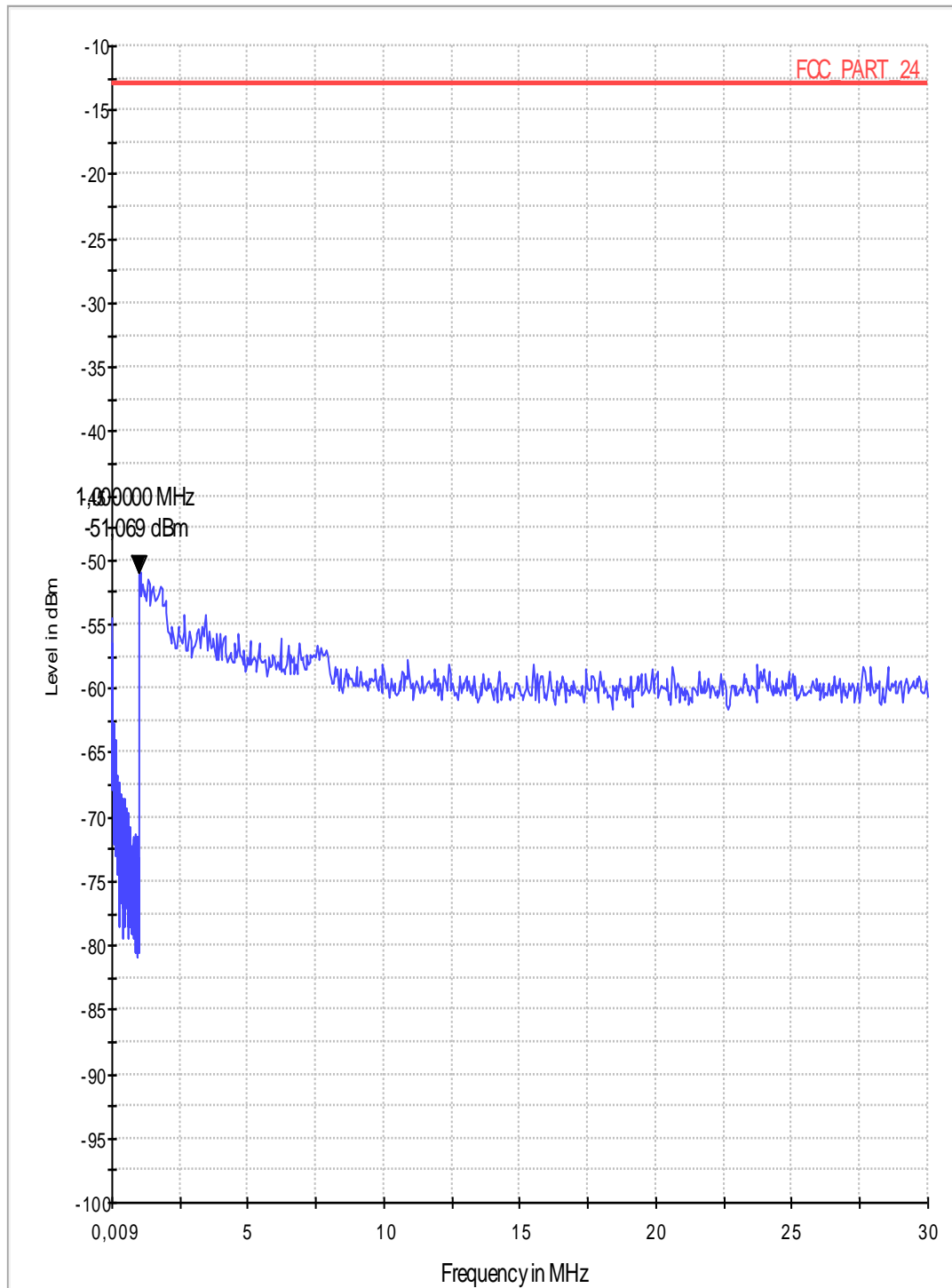
Channel 512

Sweep_2



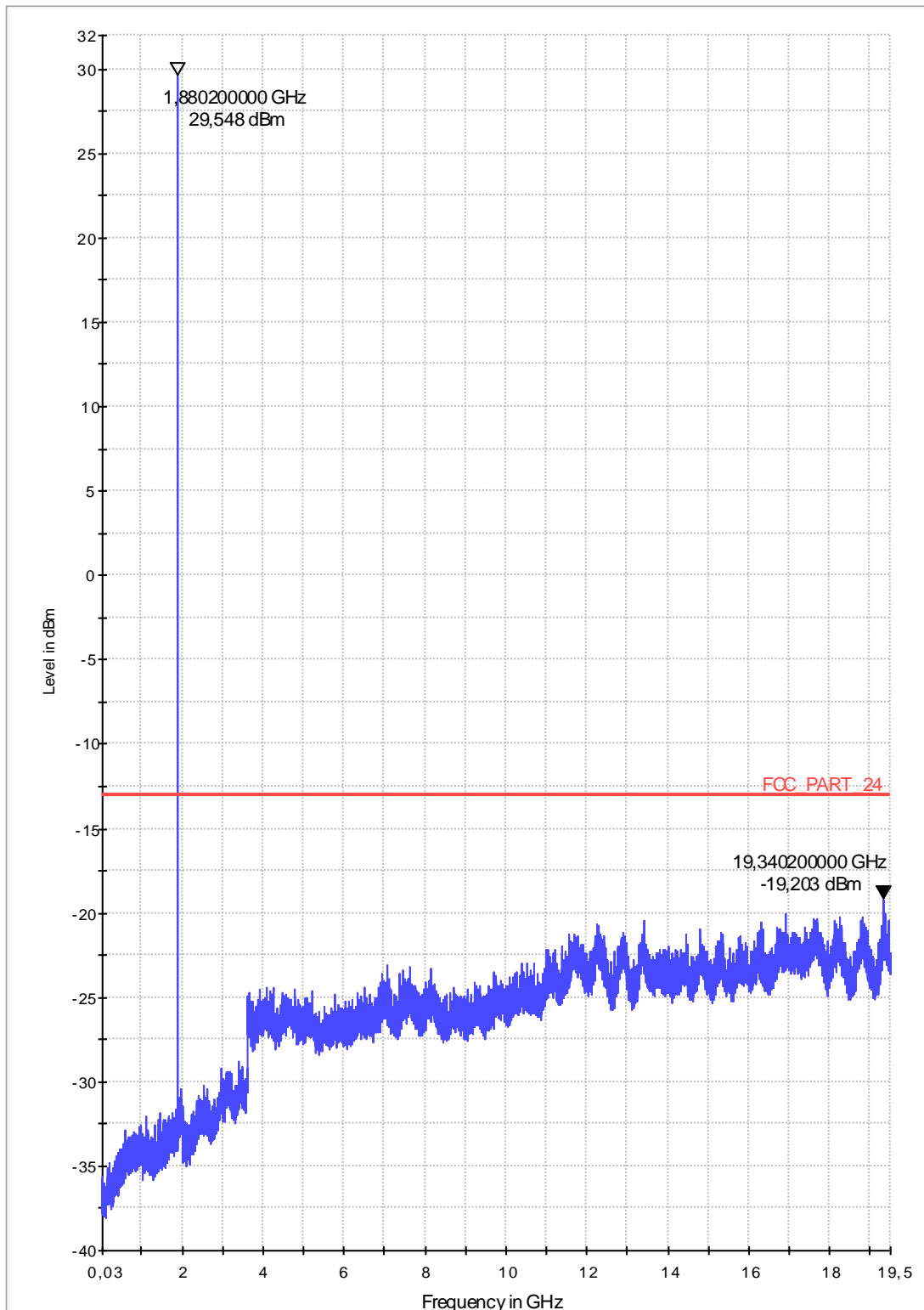
Channel 512

Sweep_1



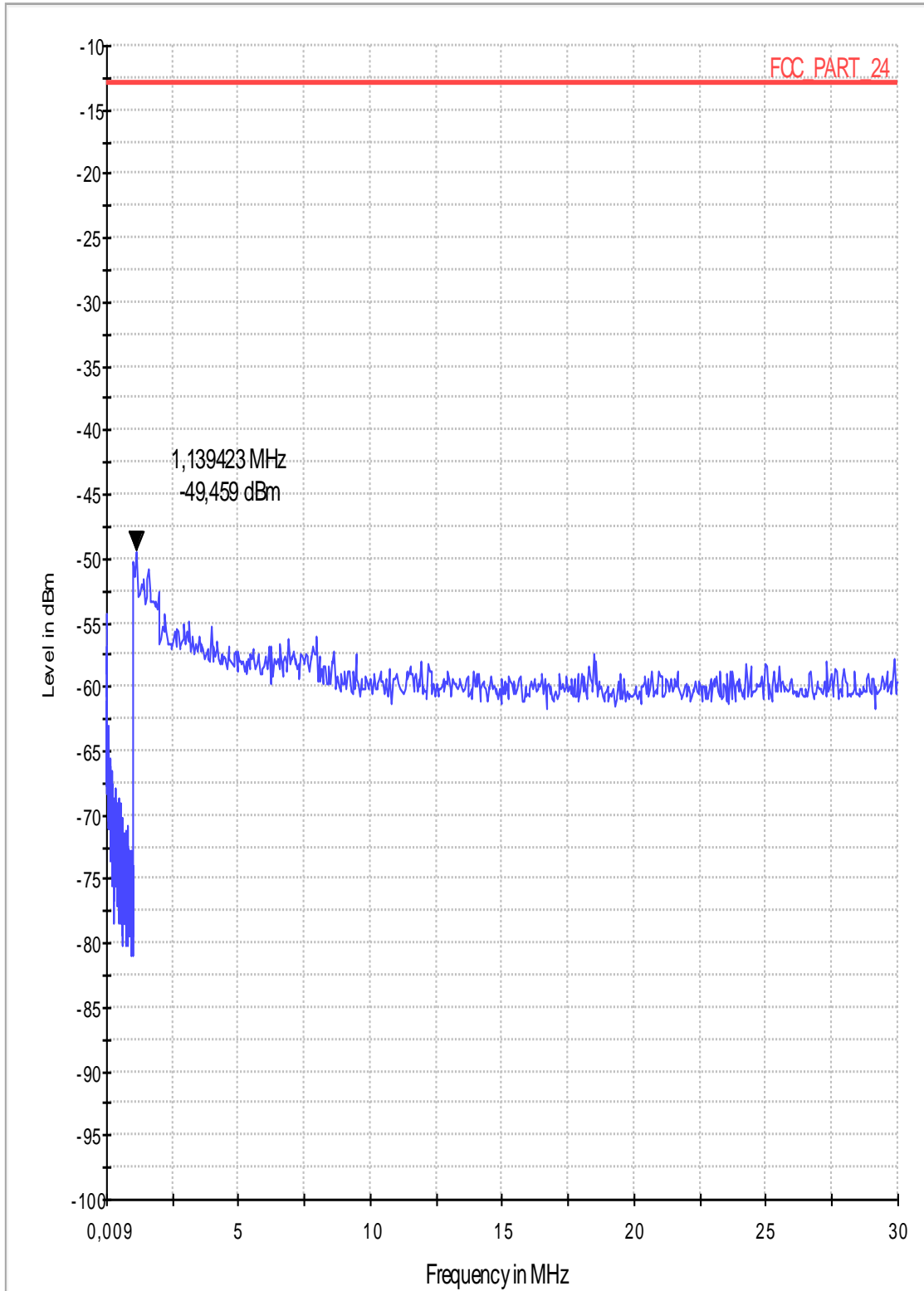
Channel 661

Sweep_2



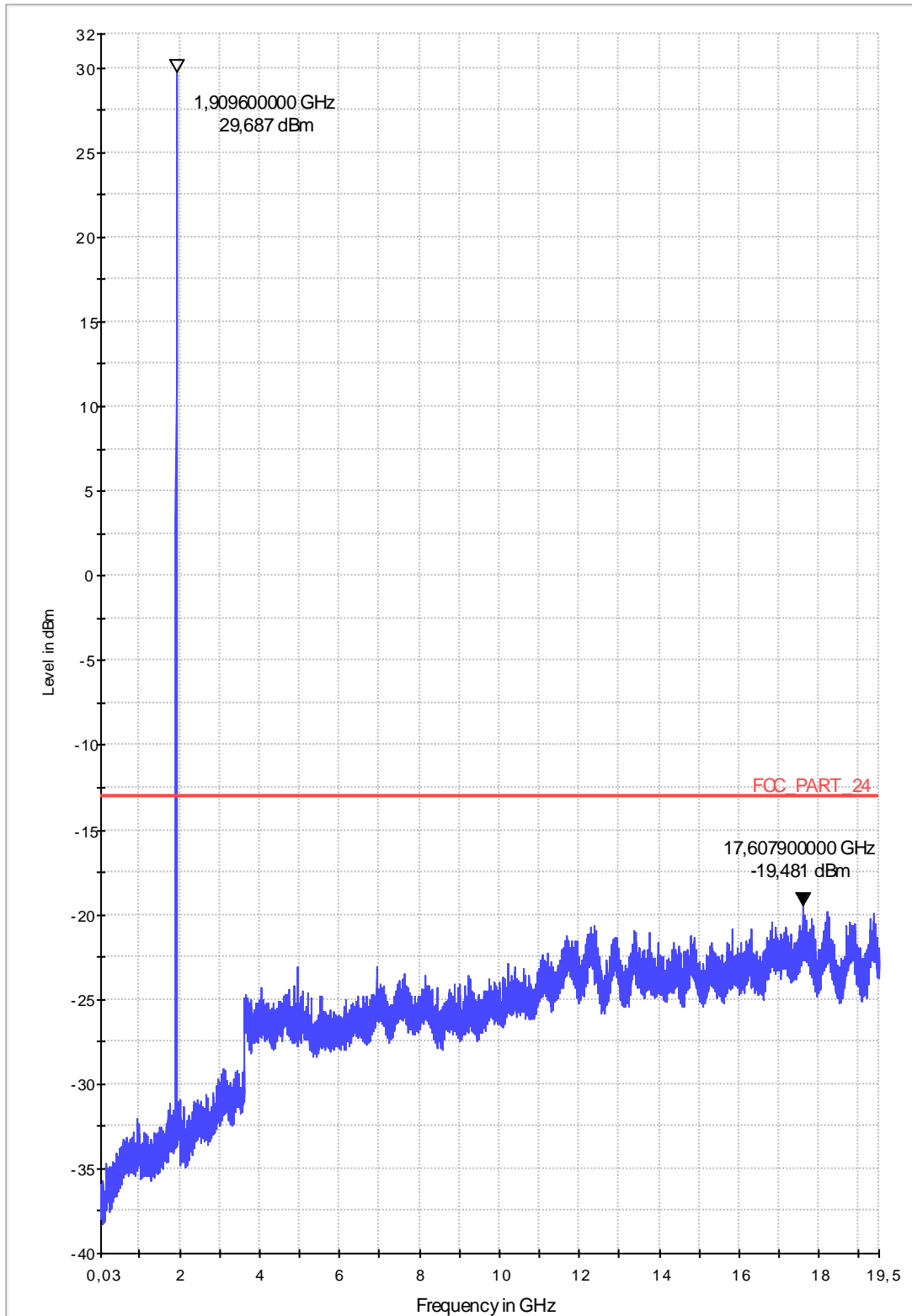
Channel 661

Sweep_1



Channel 810

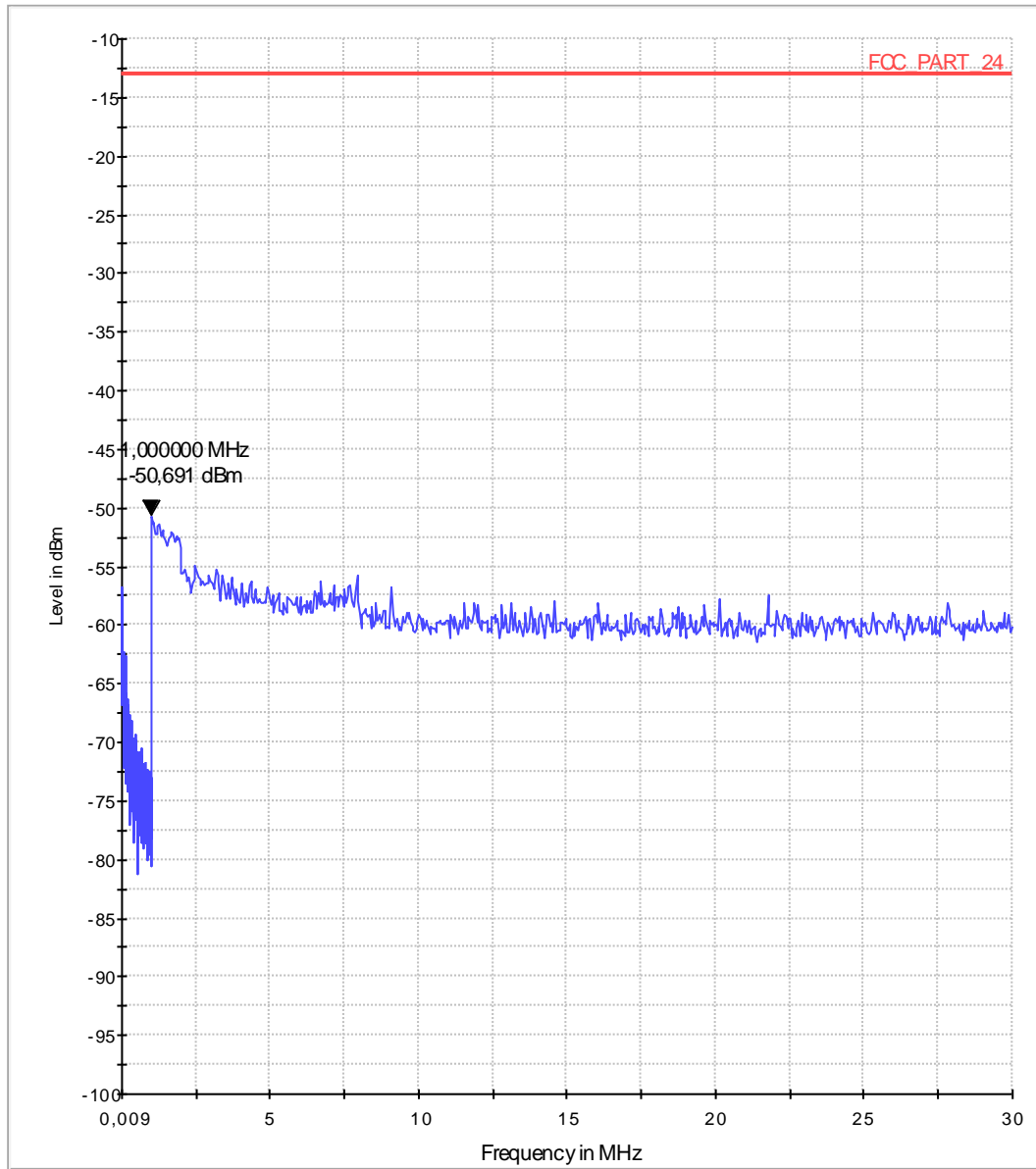
Sweep_2



Channel 810

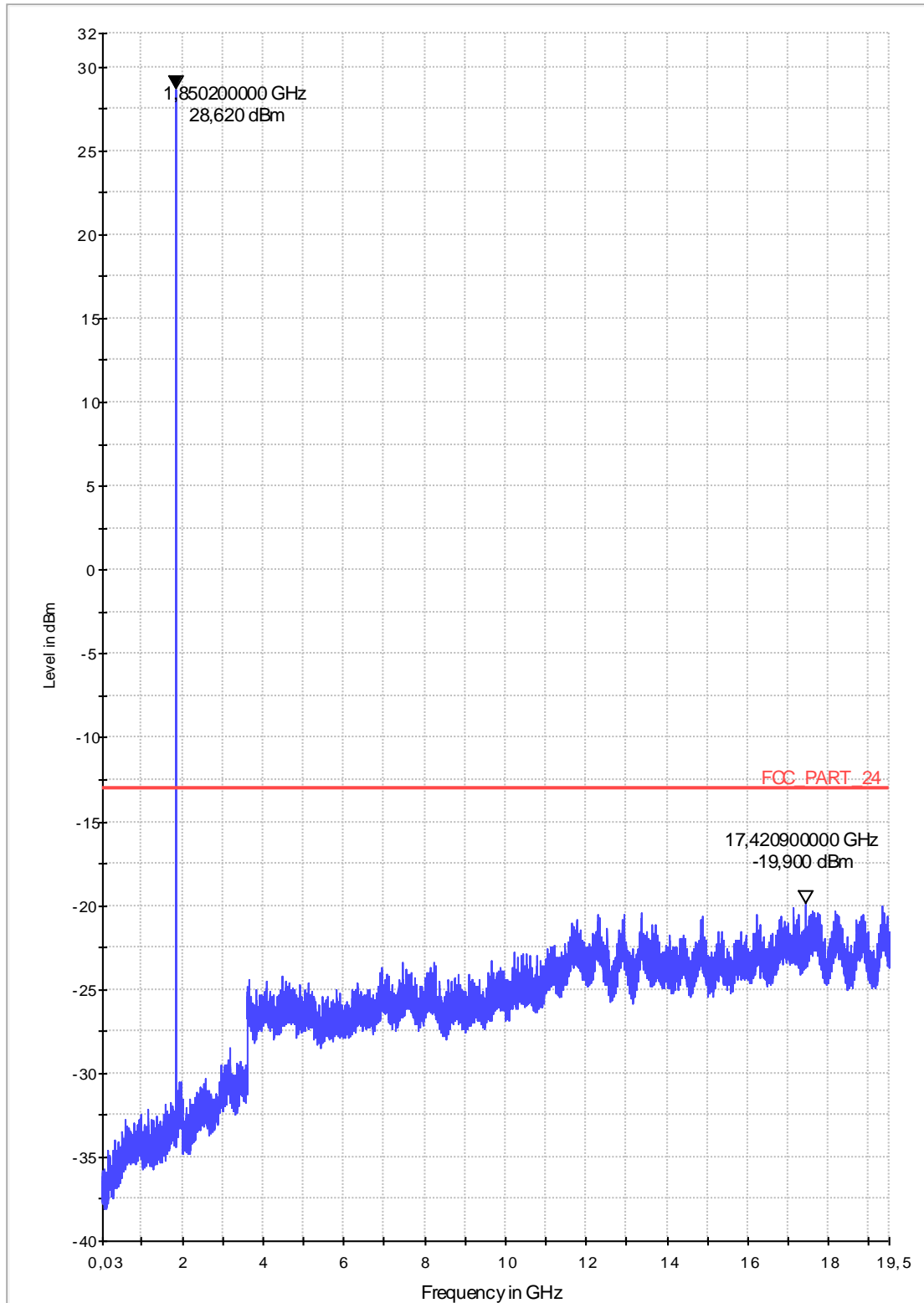
1.5.1. TX Spurious emissions conducted – EGPRS 1900 Mode

Sweep_1



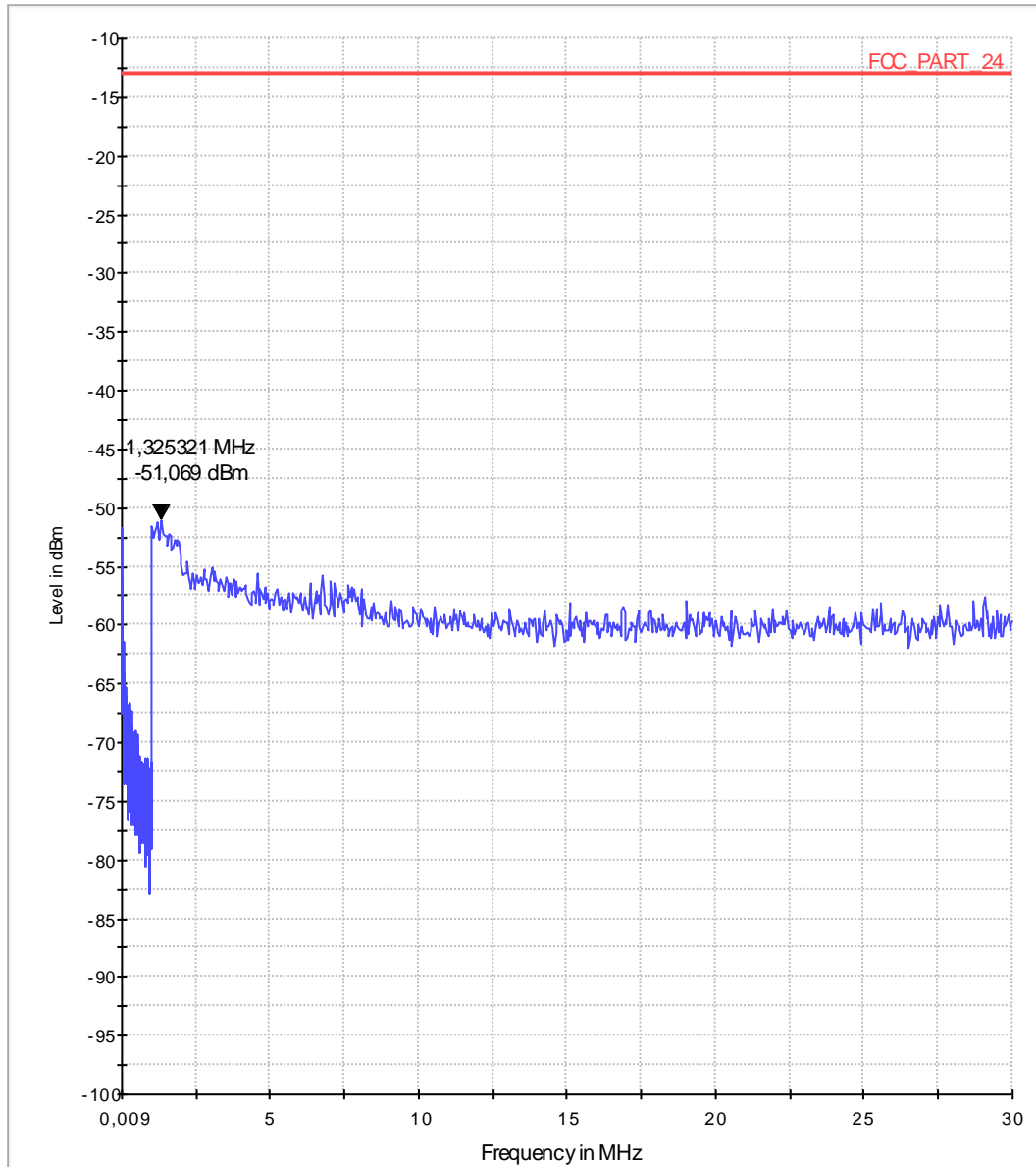
Channel 512

Sweep_2



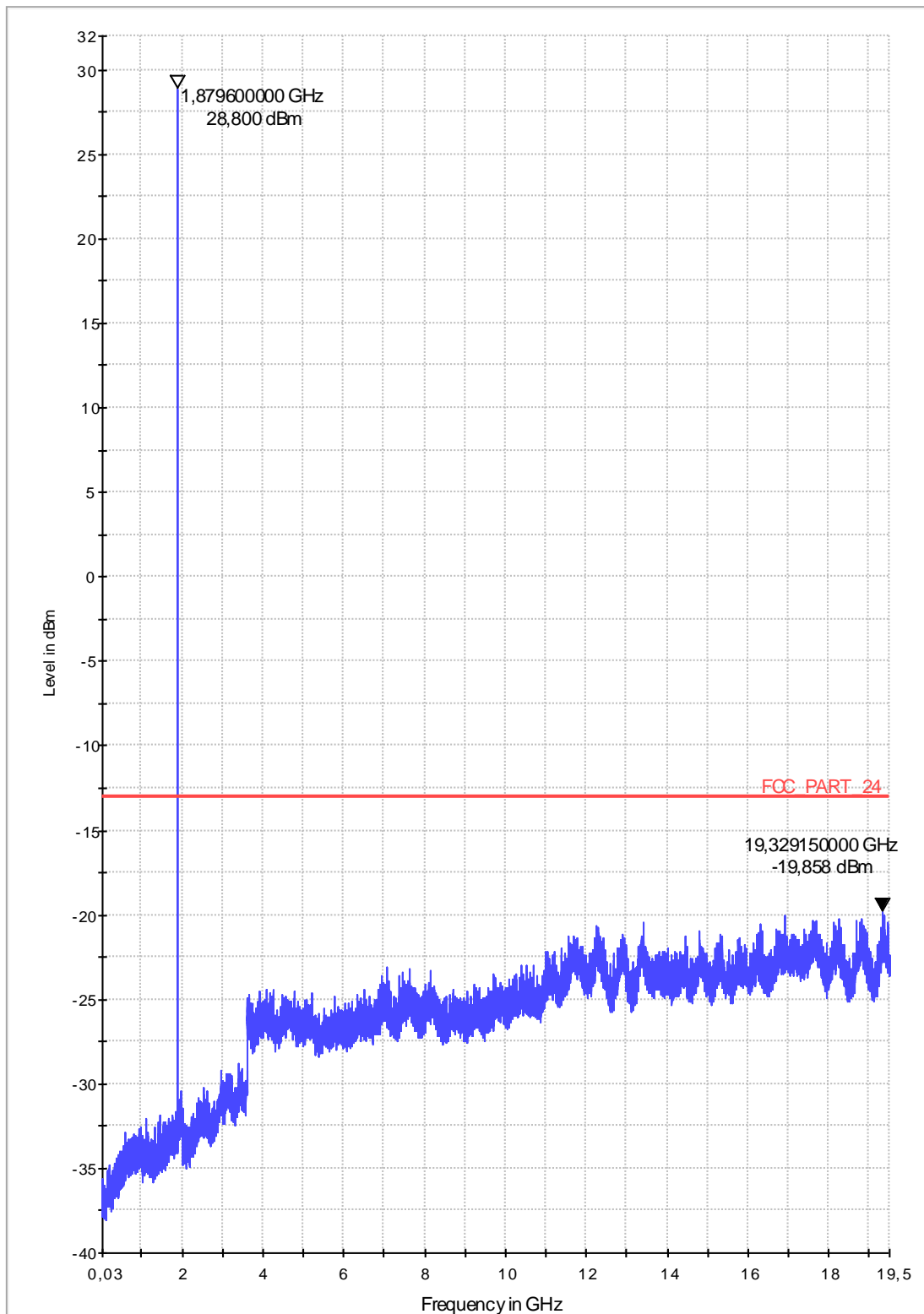
Channel 512

Sweep_1



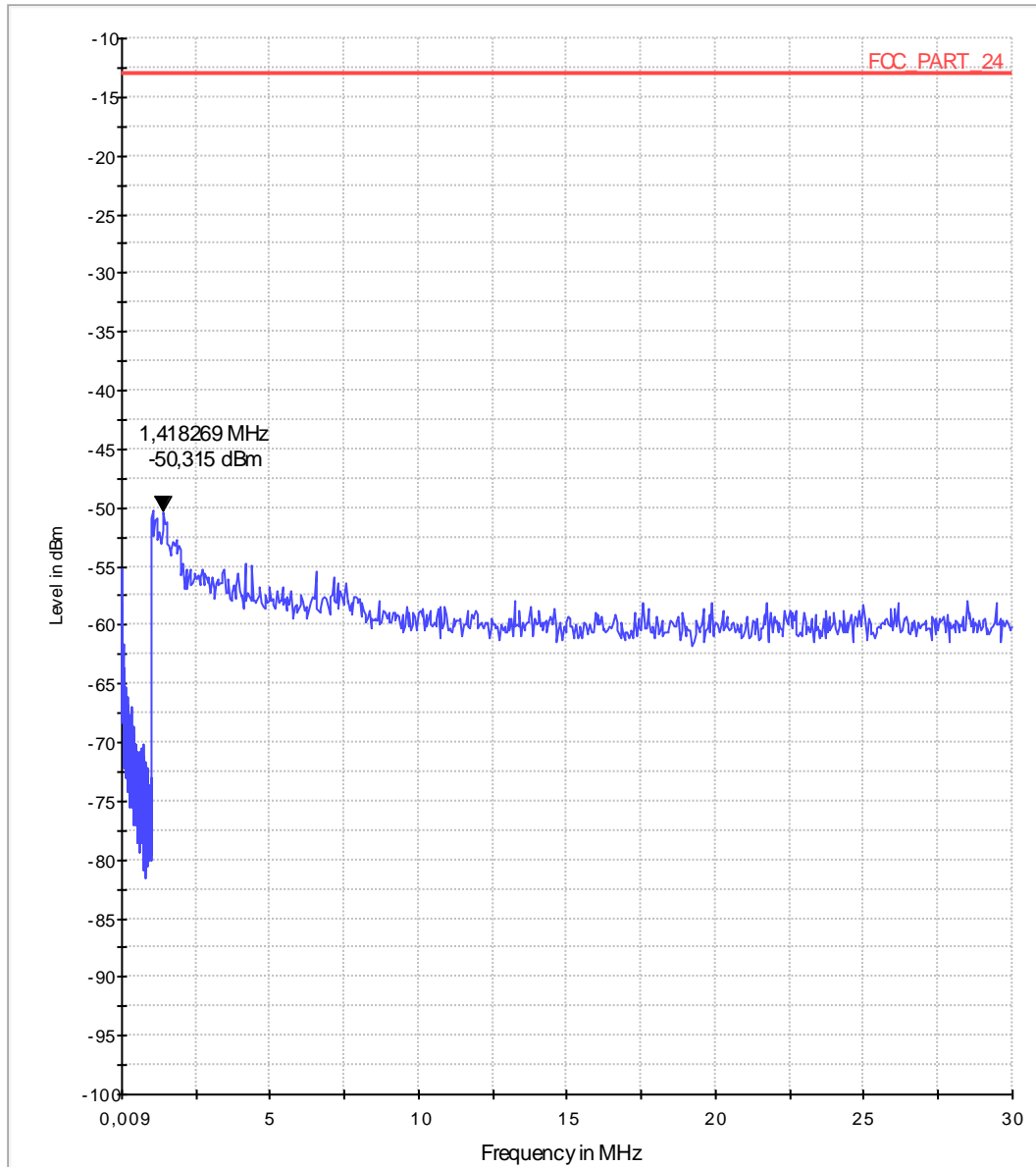
Channel 661

Sweep_2



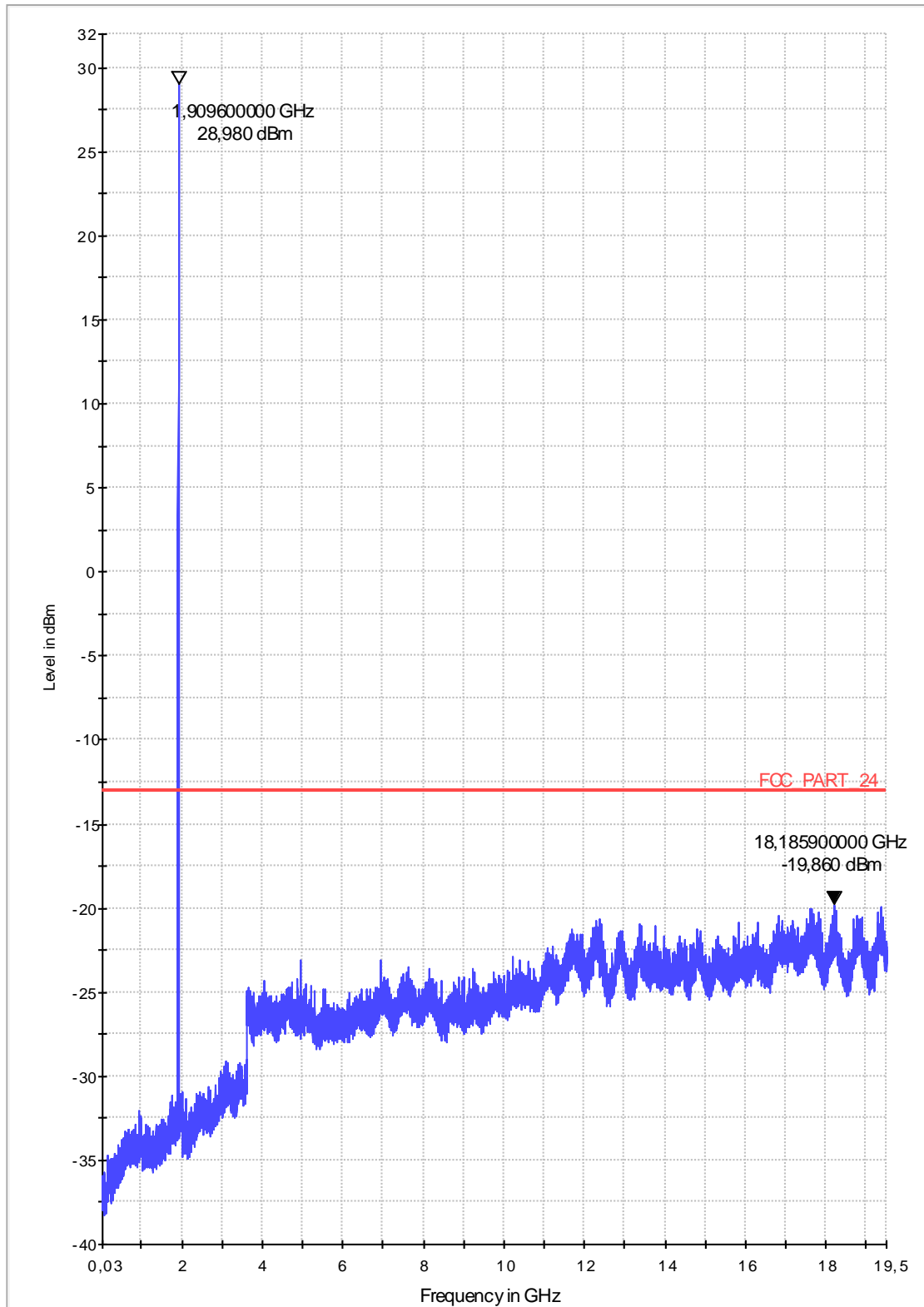
Channel 661

Sweep_1



Channel 810

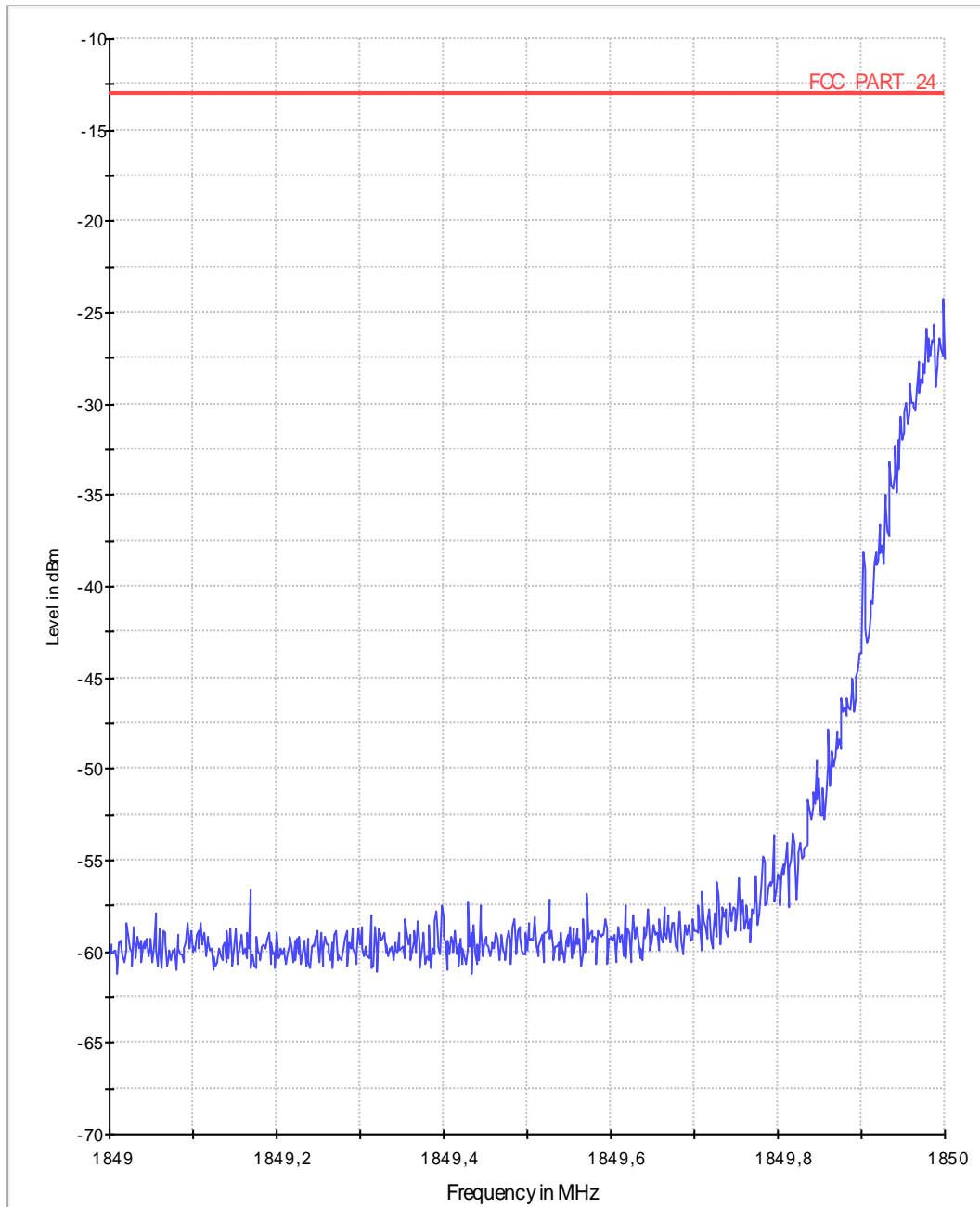
Sweep_2



Channel 810

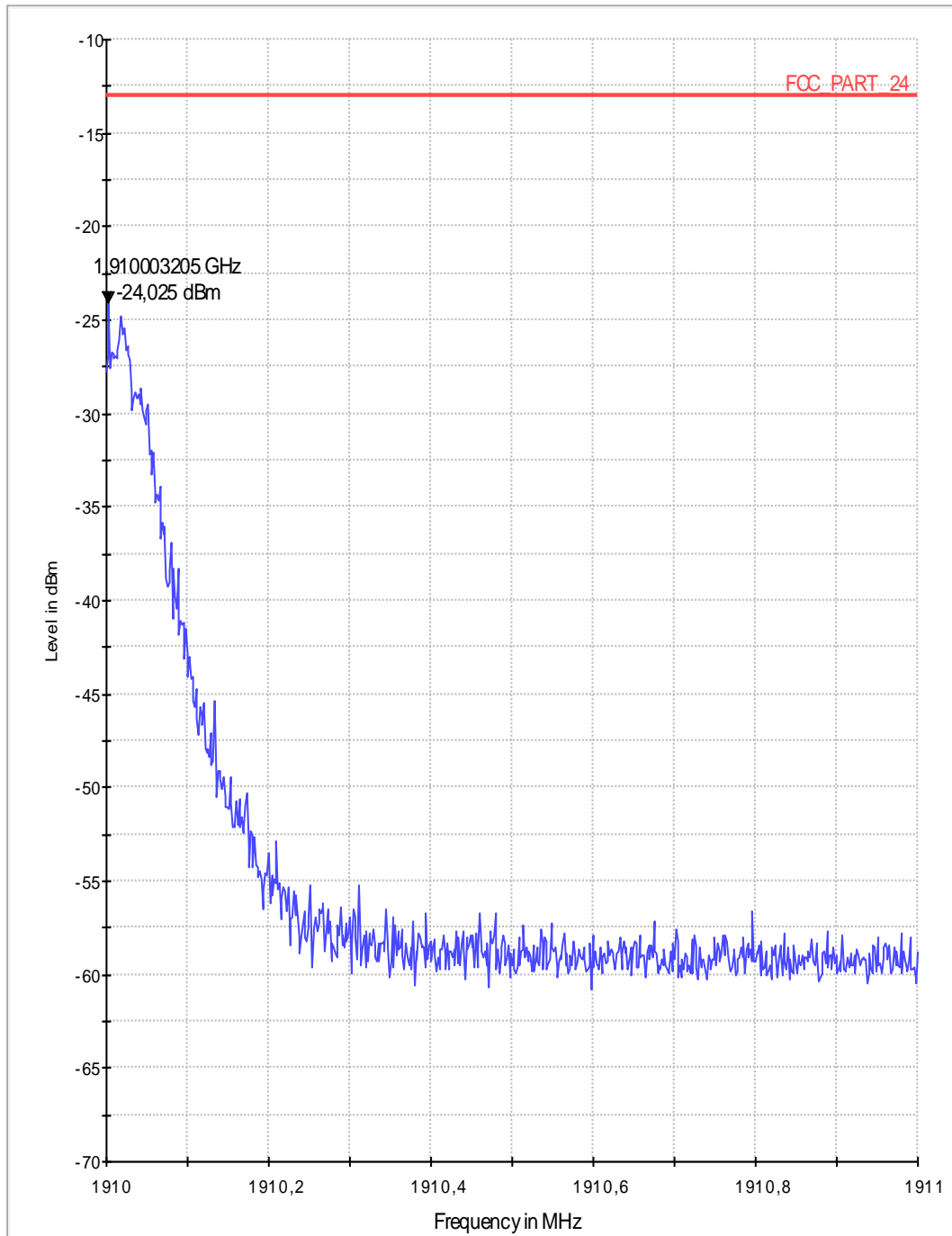
1.5.2. Band-Edge compliance conducted – GSM1900

Sweep_3a_Band_Edge_Channel_512_PK



Band Edge Channel 512

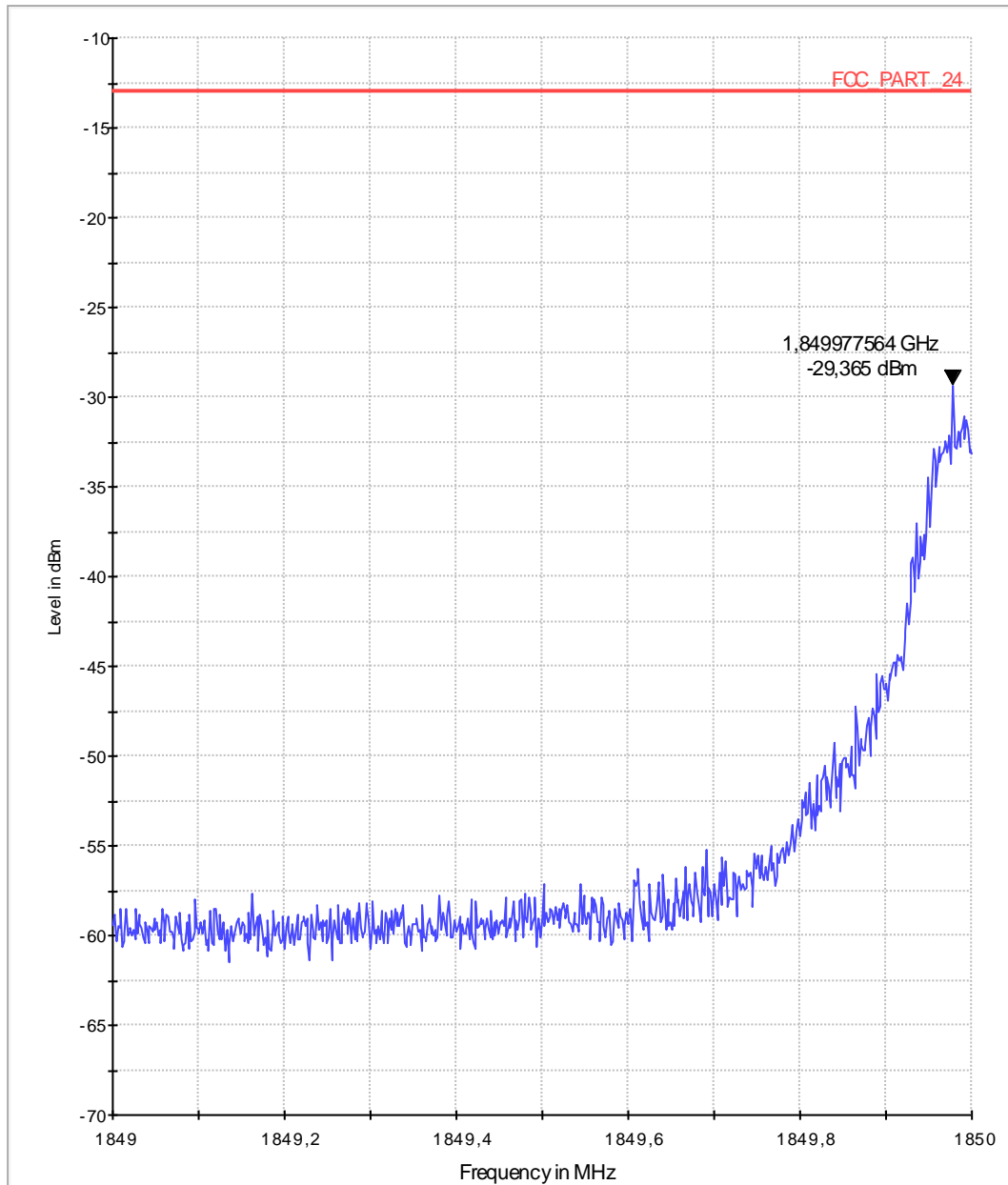
Sweep_4a_Band_Edge_Channel_810_PK



Band Edge Channel 810

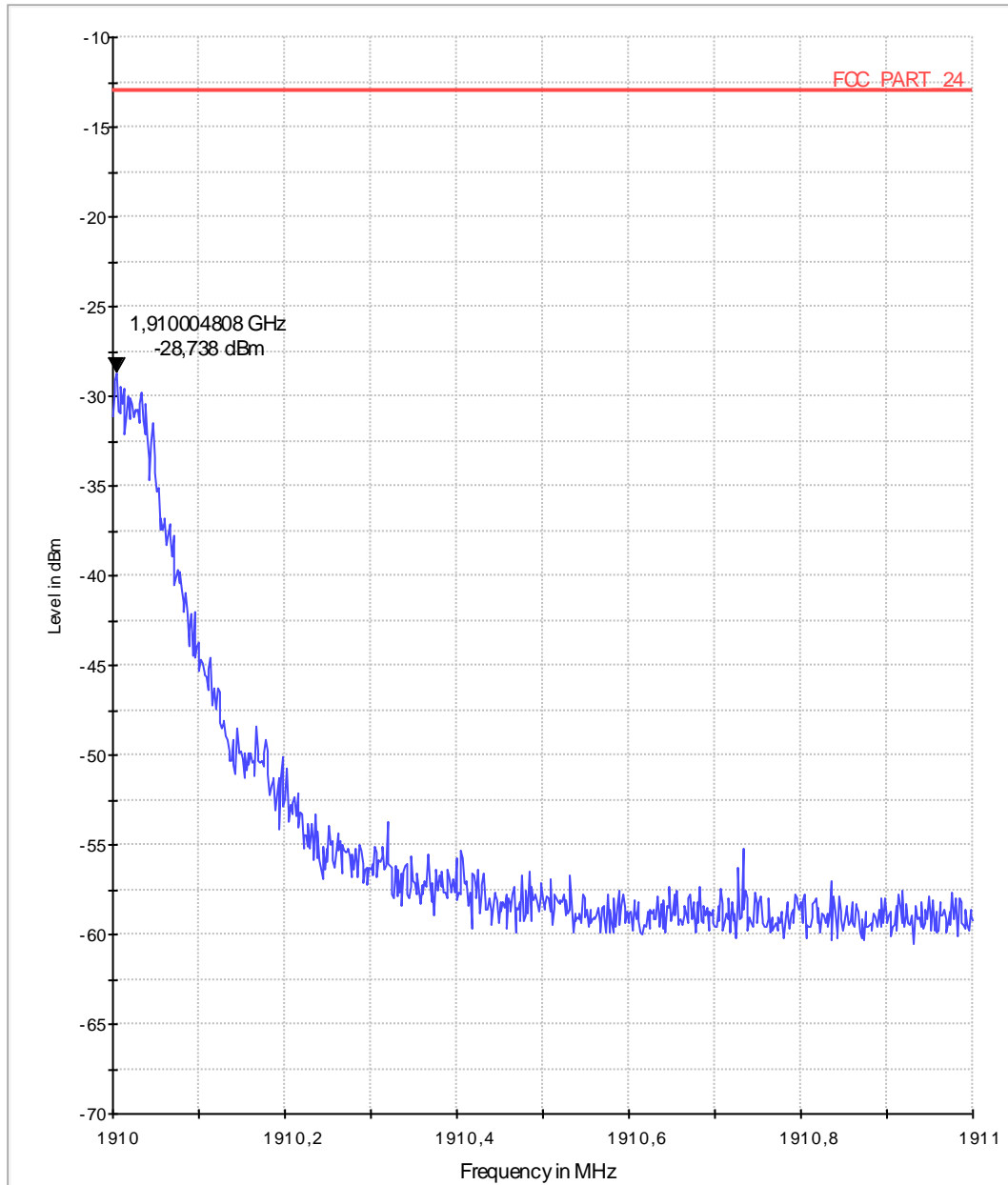
1.5.3. Band-Edge compliance conducted– EGPRS 850

Sweep_3a_Band_Edge_Channel_512_PK



Band Edge Channel 512

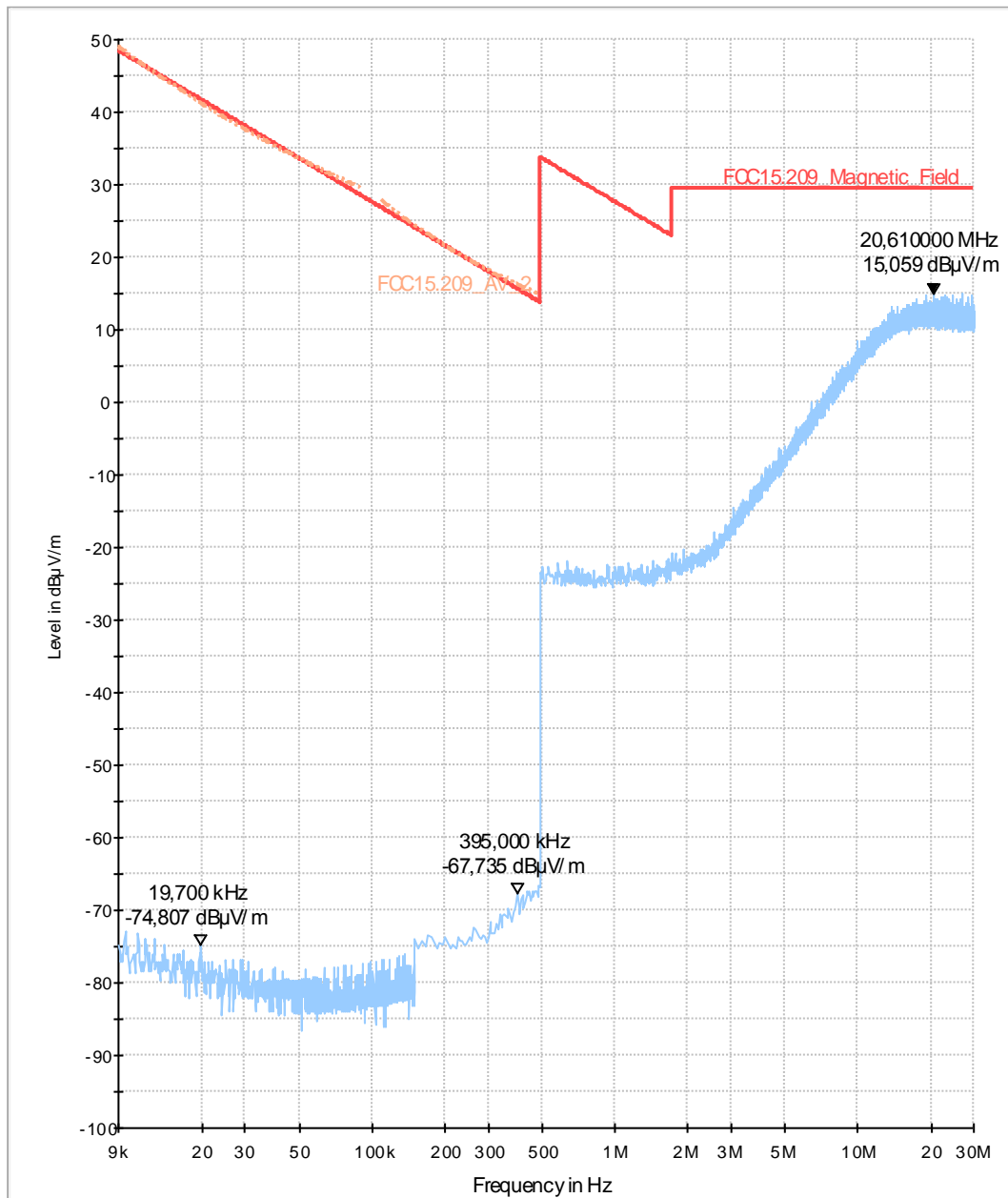
Sweep_4a_Band_Edge_Channel_810_PK



Band Edge Channel 810

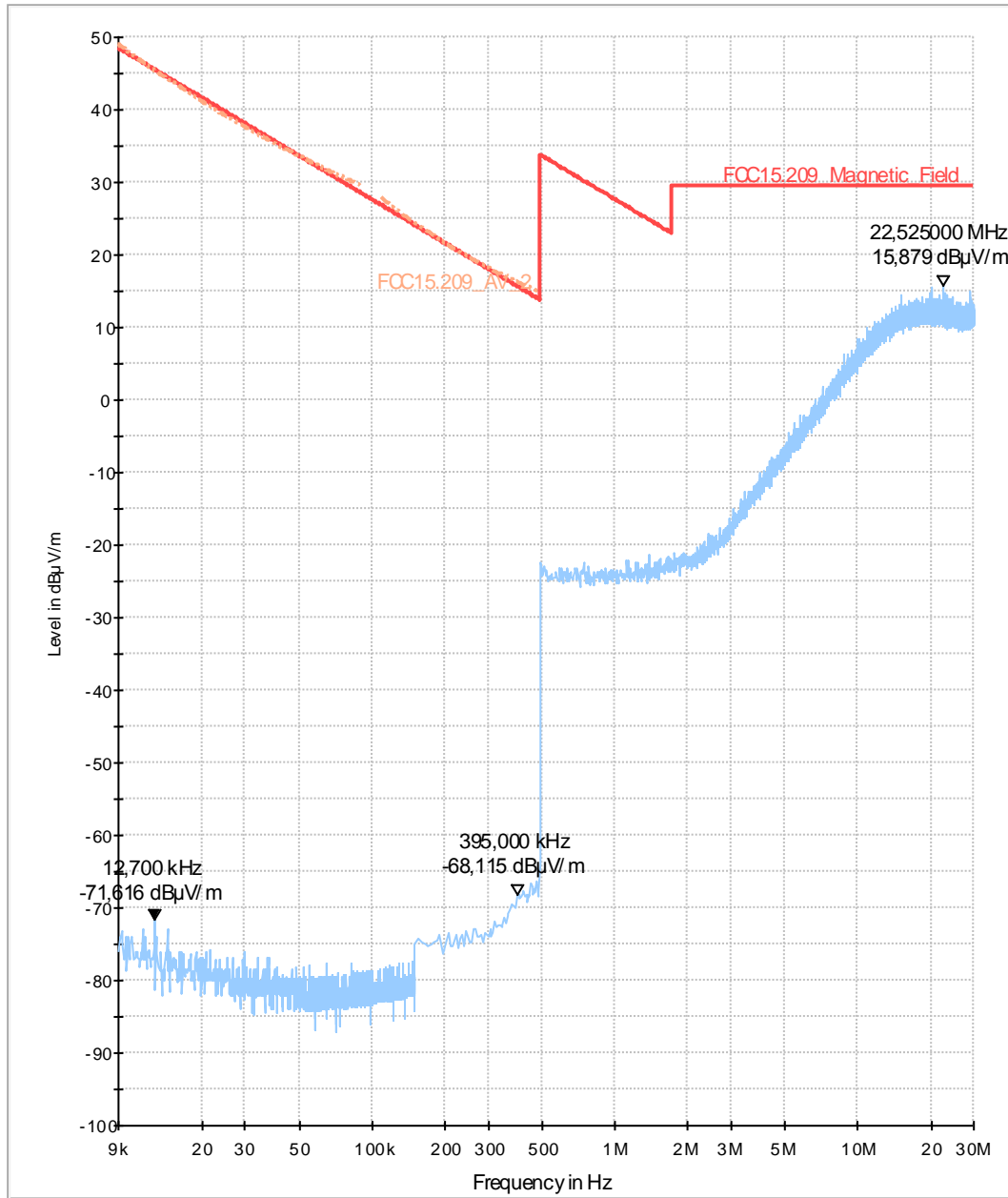
1.6. Radiated magnetic field strength – GSM 850 Mode

FCC15.209_magn hor+vert



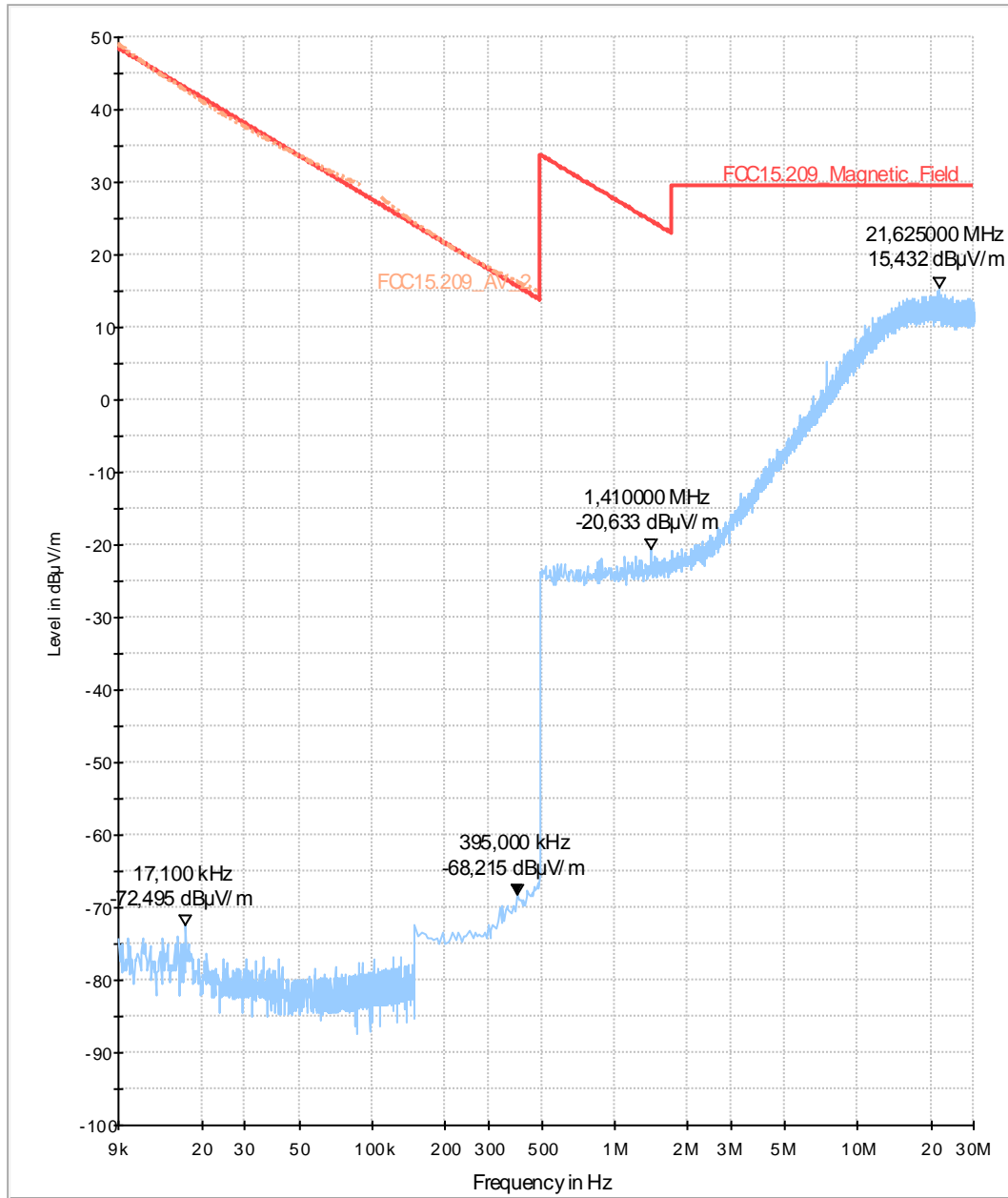
Channel 128

FCC15.209_magn hor+vert



Channel 190

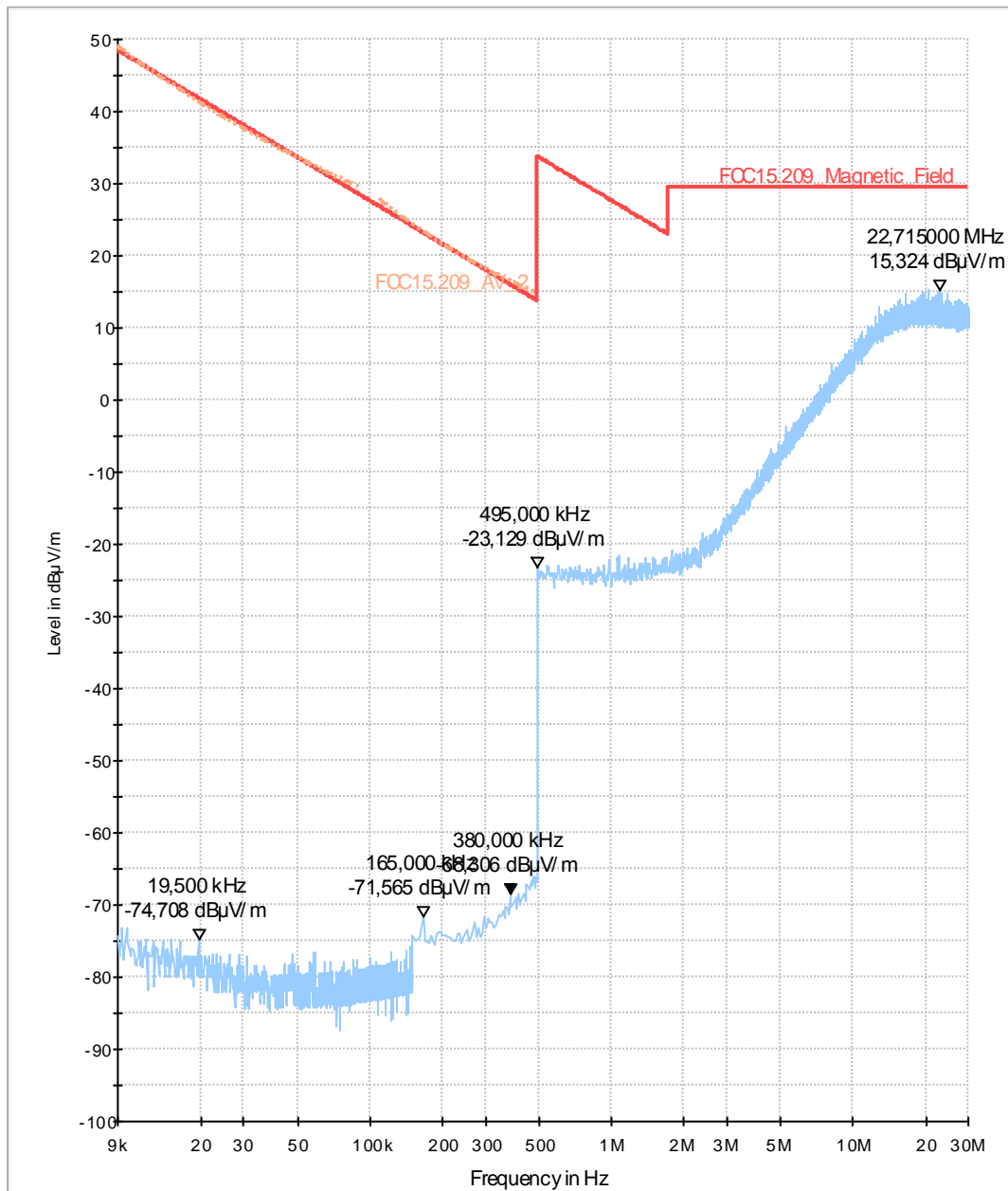
FCC15.209_magn hor+vert



Channel 251

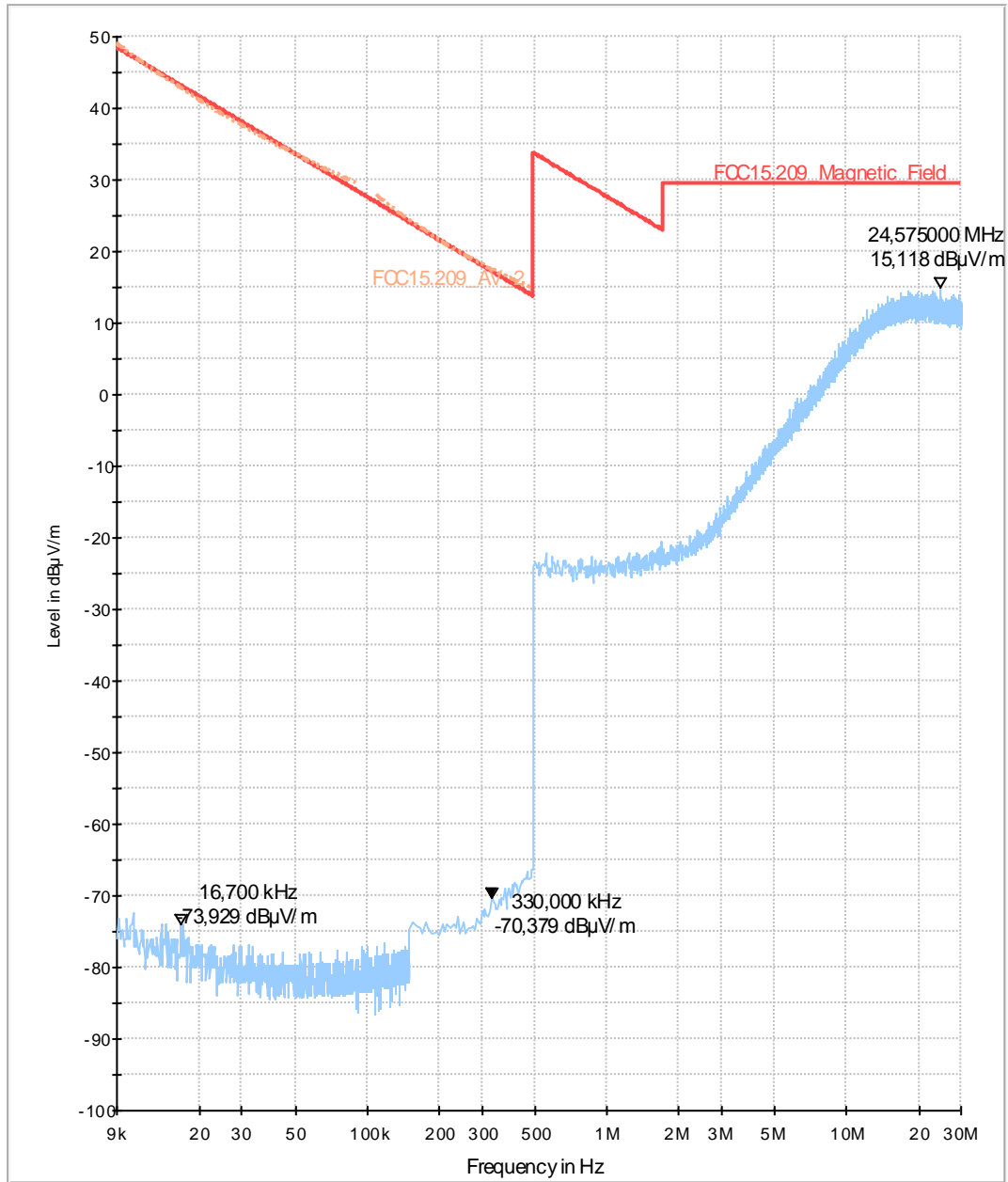
1.7. Radiated magnetic field strength – E-GPRS 850 Mode

FCC15.209_magn hor+vert



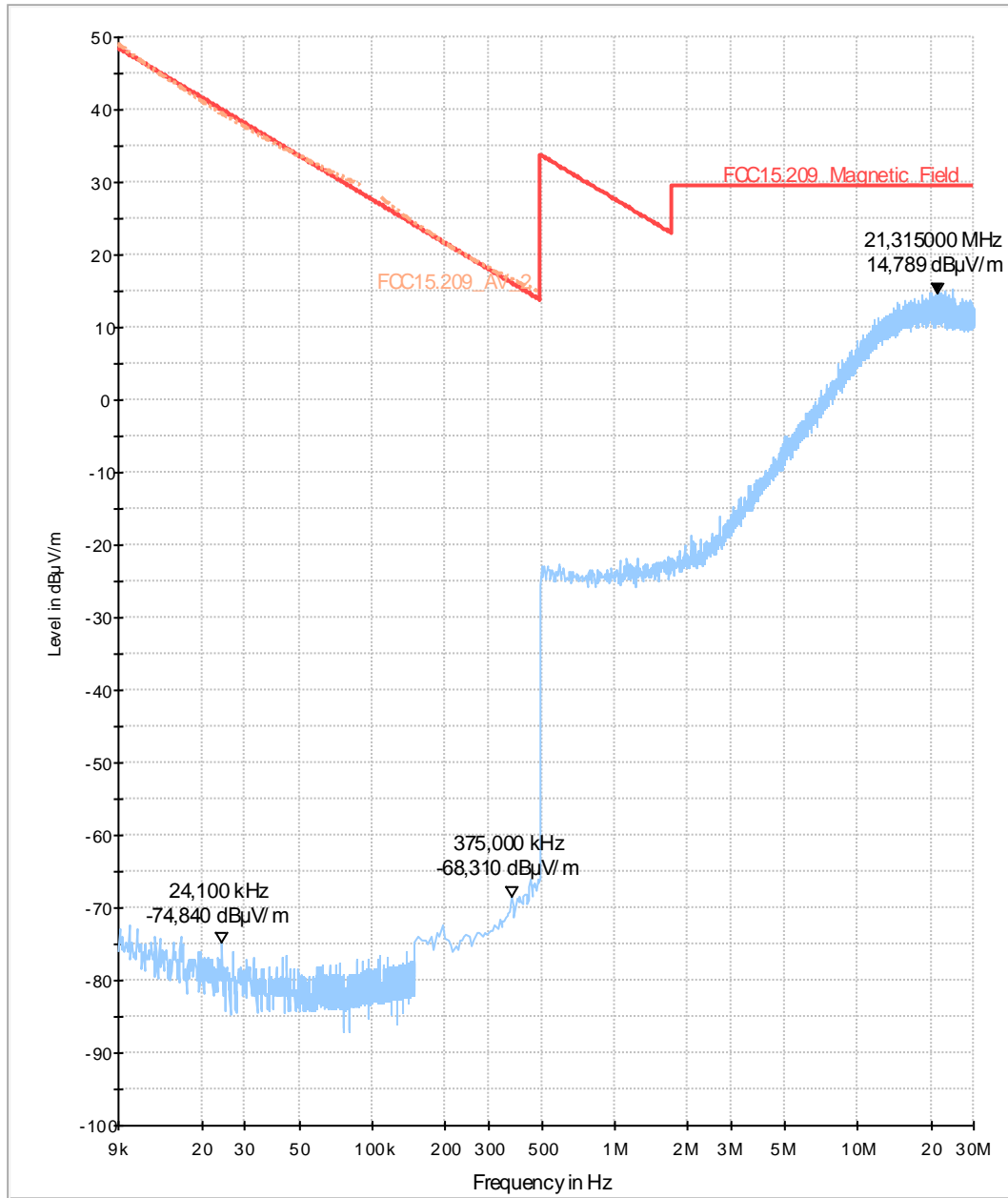
Channel EGPRS 128

FCC15.209_magn hor+vert



Channel EGPRS 190

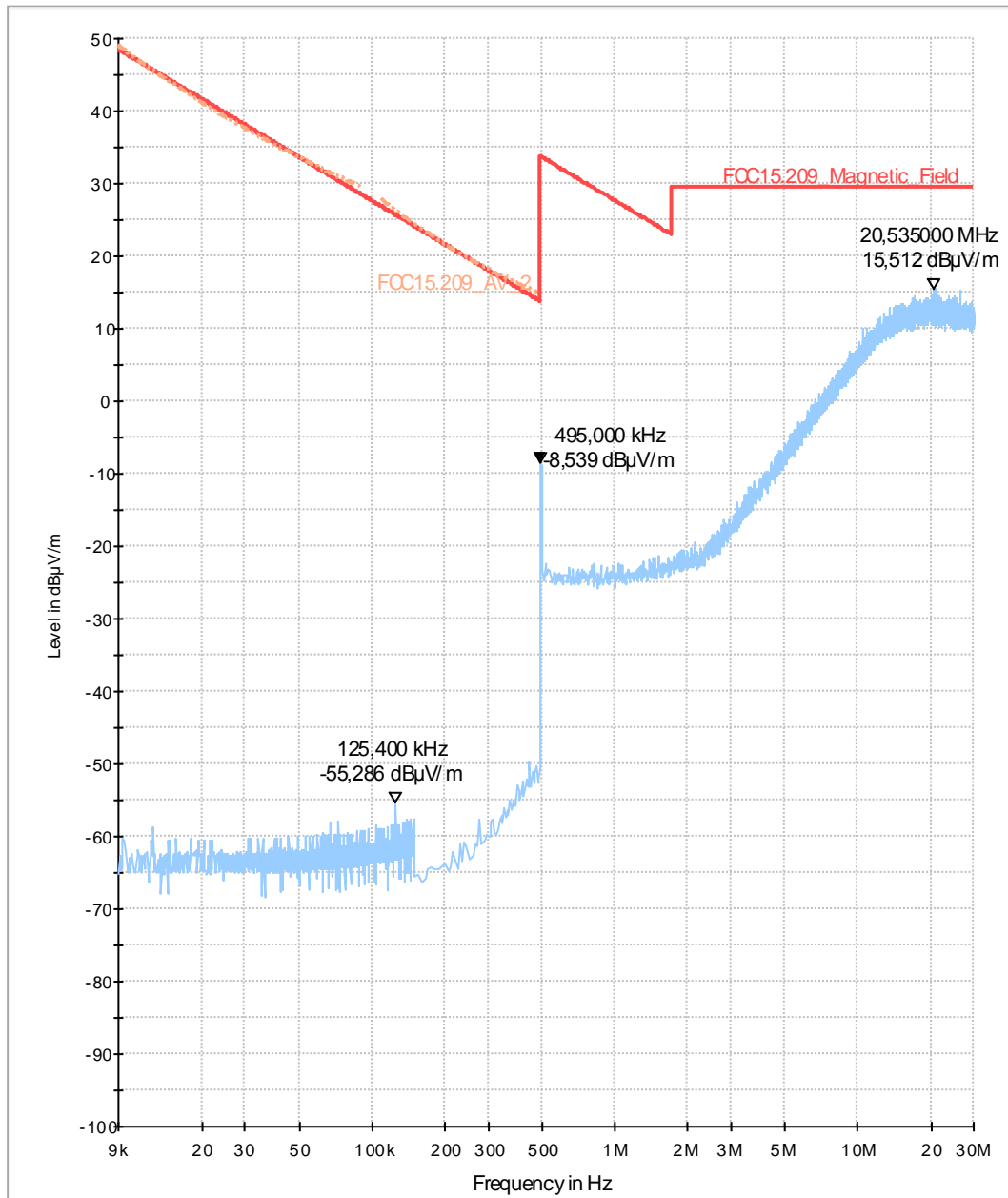
FCC15.209_magn hor+vert



Channel EGPRS 251

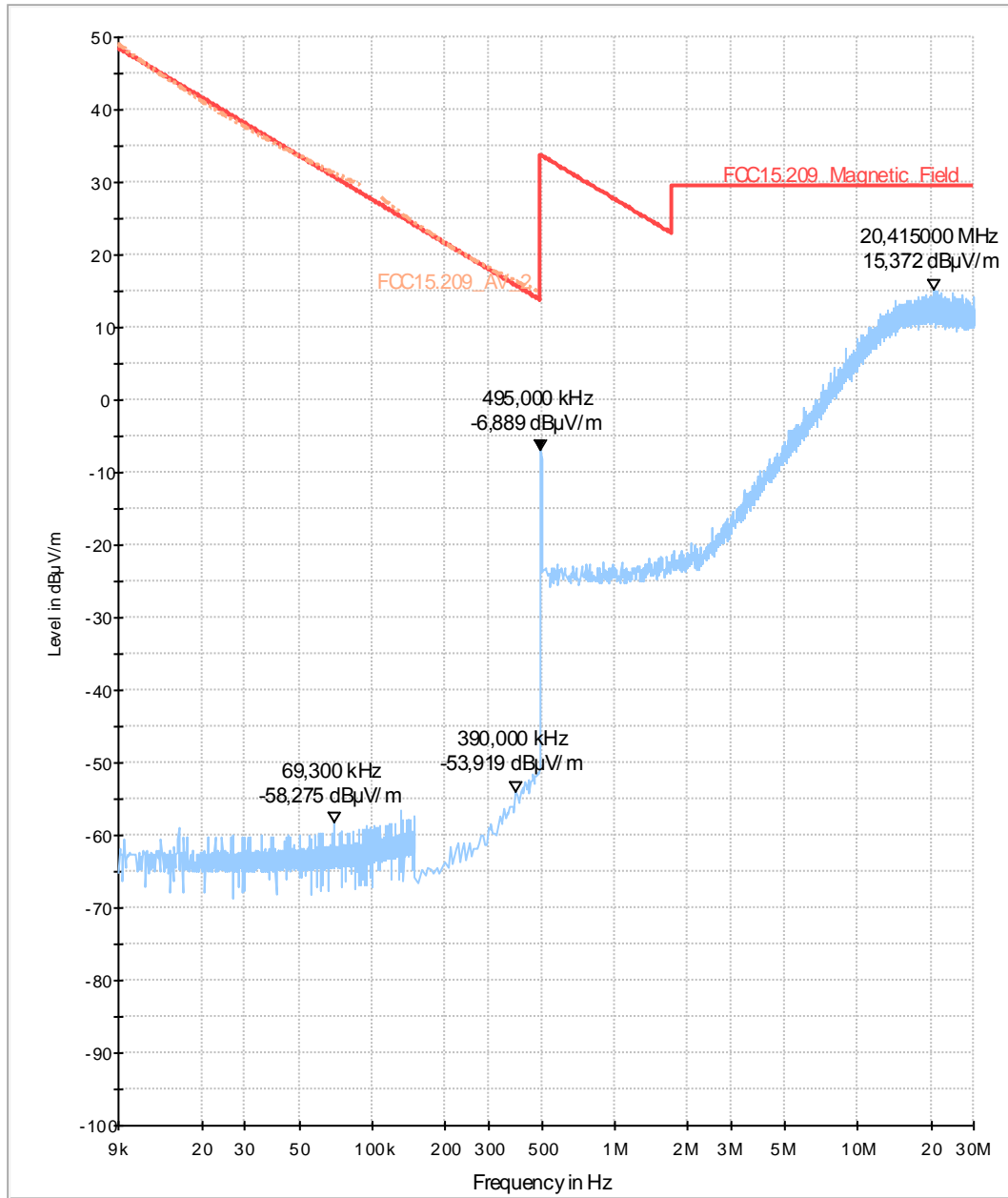
1.8. Radiated magnetic field strength – GSM 1900 Mode

FCC15.209_magn hor+vert



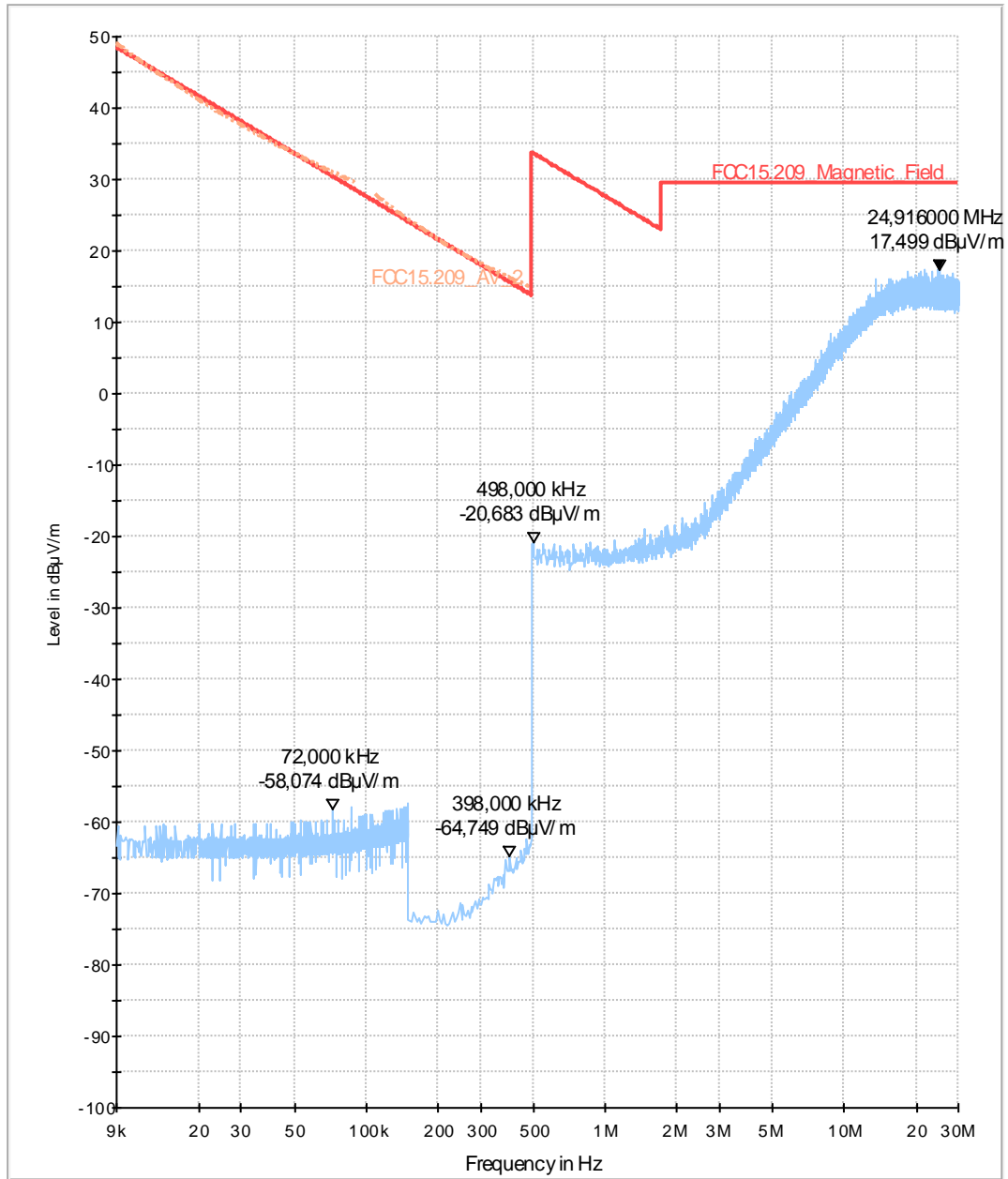
Channel 512

FCC15.209_magn hor+vert



Channel 661

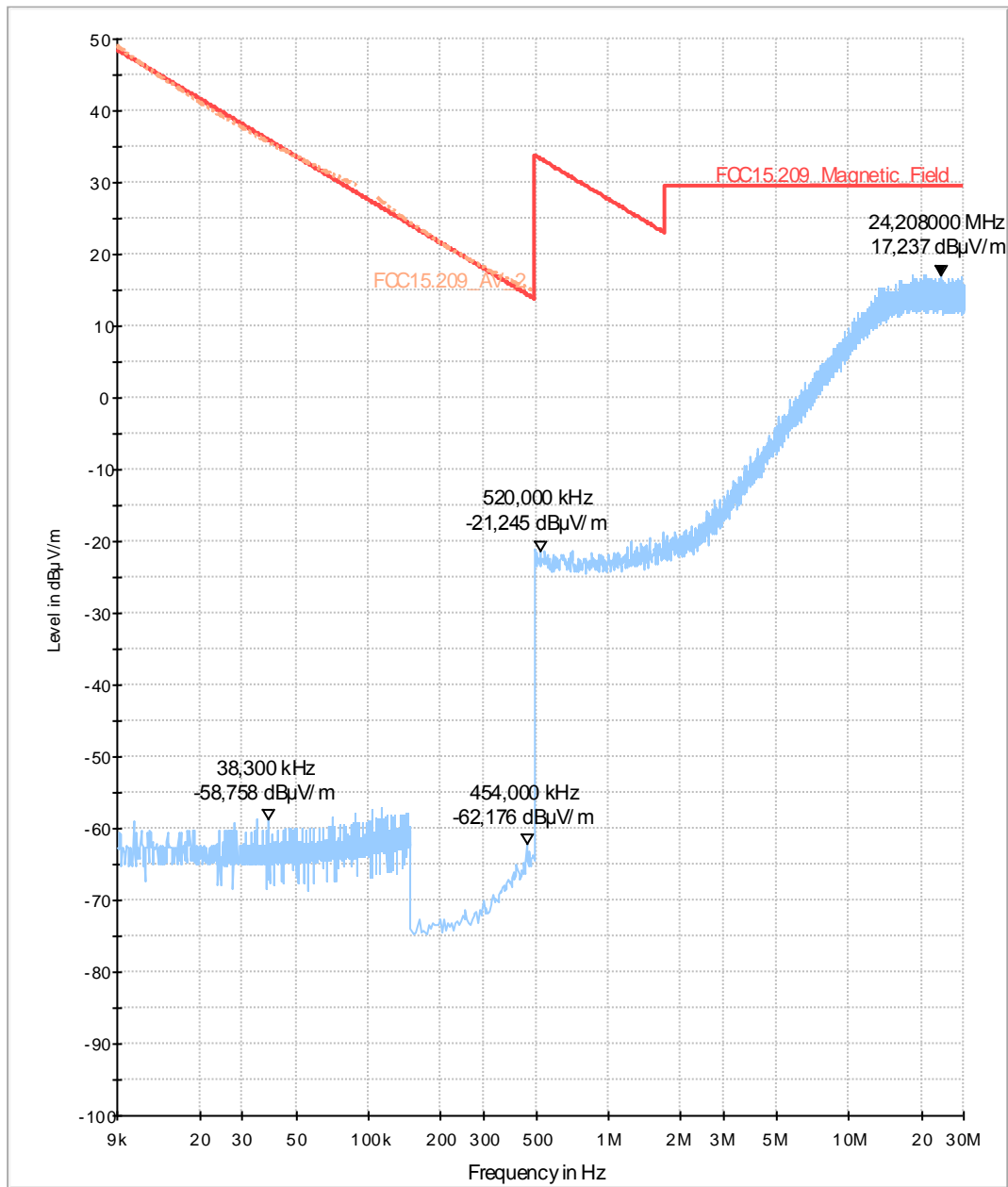
FCC15.209_magn hor+vert



Channel 810

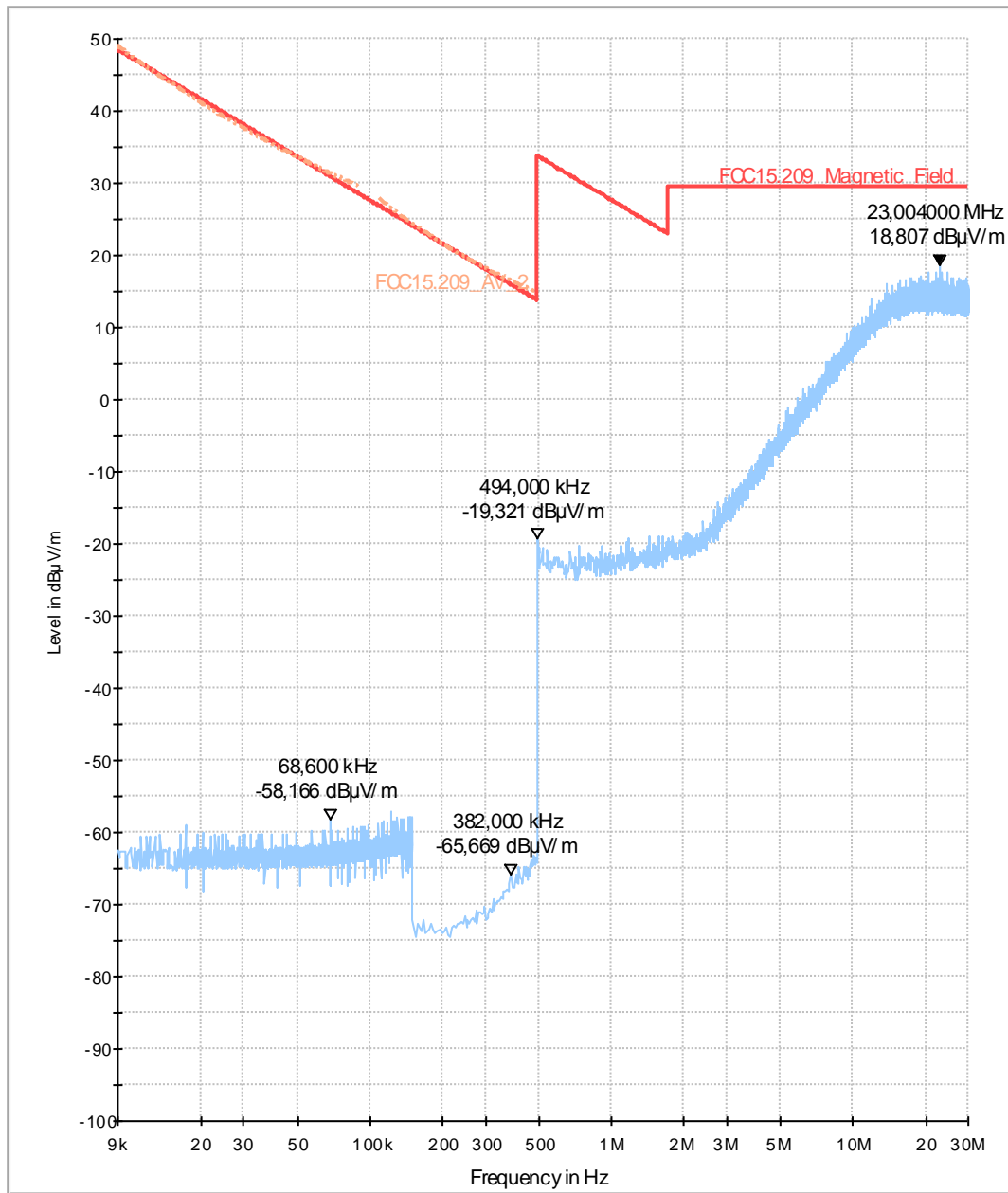
1.9. Radiated magnetic field strength – E-GPRS 1900 Mode

FCC15.209_magn hor+vert



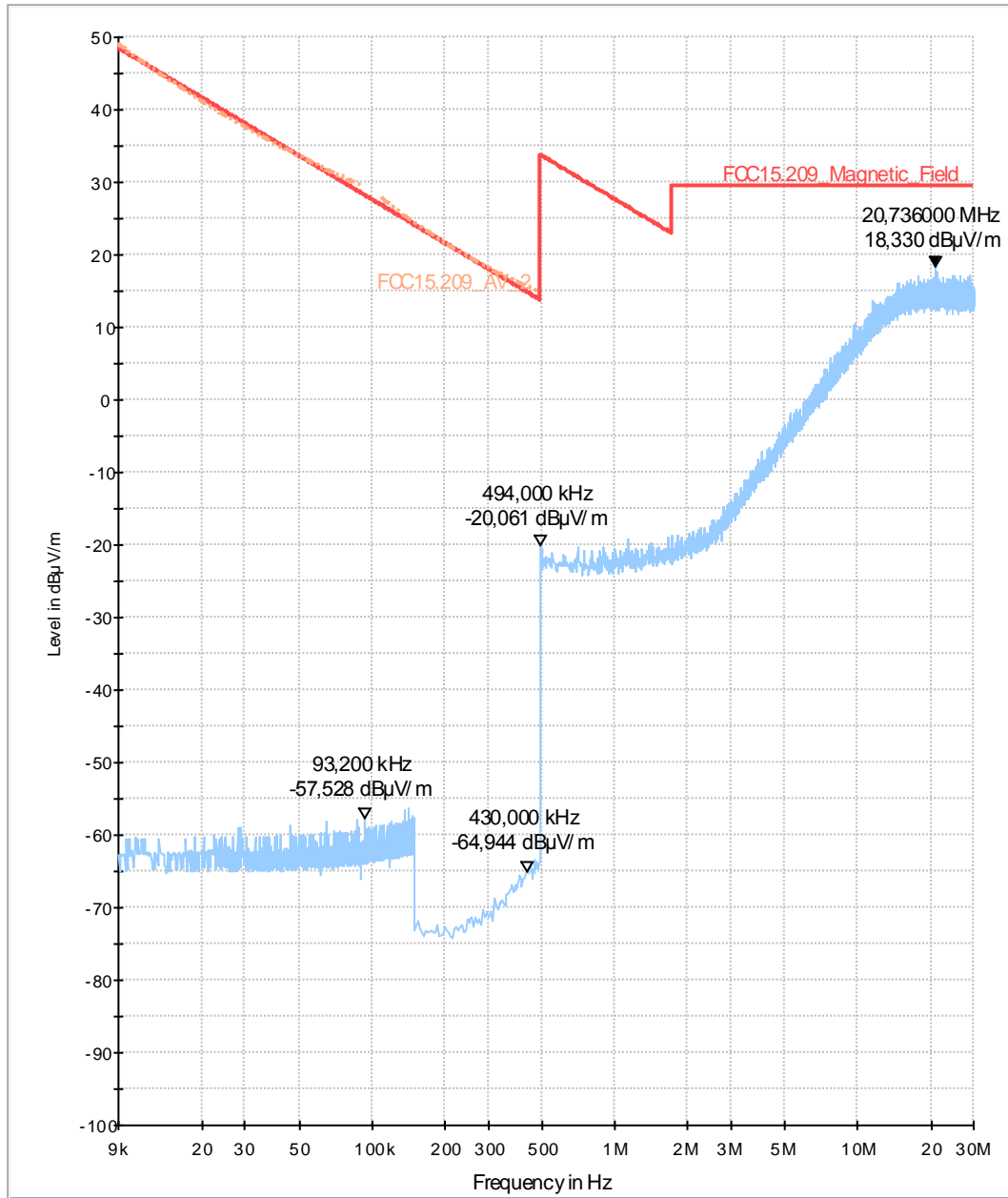
Channel EGPRS 512

FCC15.209_magn hor+vert



Channel EGPRS 661

FCC15.209_magn hor+vert



Channel EGPRS 810

1.10. Radiated spurious emissions – GSM850

8.01_FCC_Part22_GSM850_GSMK_Ch128

Common Information

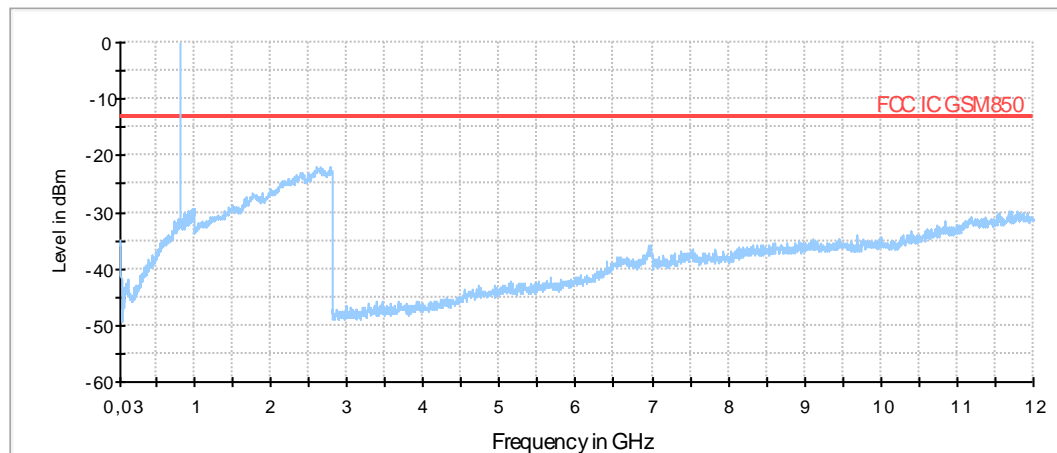
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	GSM850 Voice
Operating Mode:	MS allocated UL channel 128
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 65%rH; Temperature: 20°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	-

030401a_FCC_Part22_GSM850_TX_Ch128_30M-12G



8.02_FCC_Part22_GSM850_GSMK_Ch190

Common Information

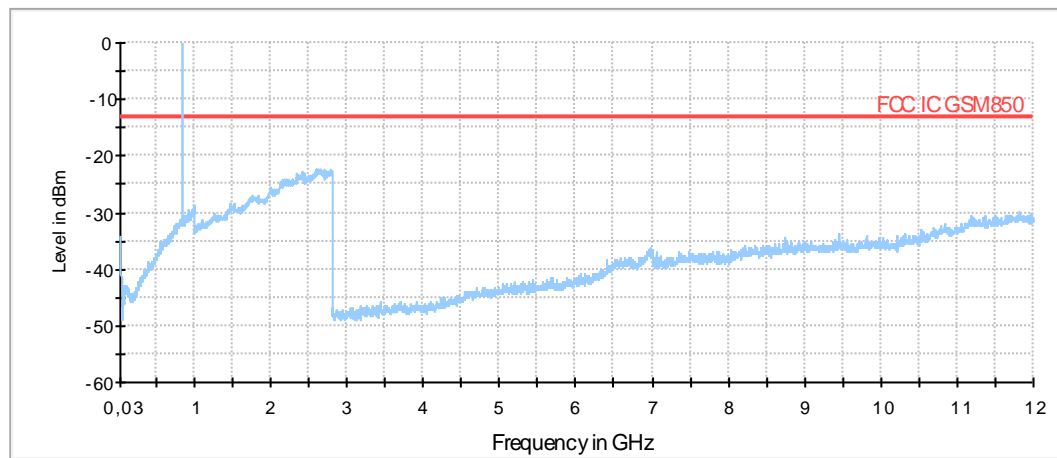
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	GSM850 Voice
Operating Mode:	MS allocated UL channel 190
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 65%rH; Temperature: 20°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	

030401b_FCC_Part22_GSM850_TX_Ch190_30M-12G



8.03_FCC_Part22_GSM850_GSMK_Ch251

Common Information

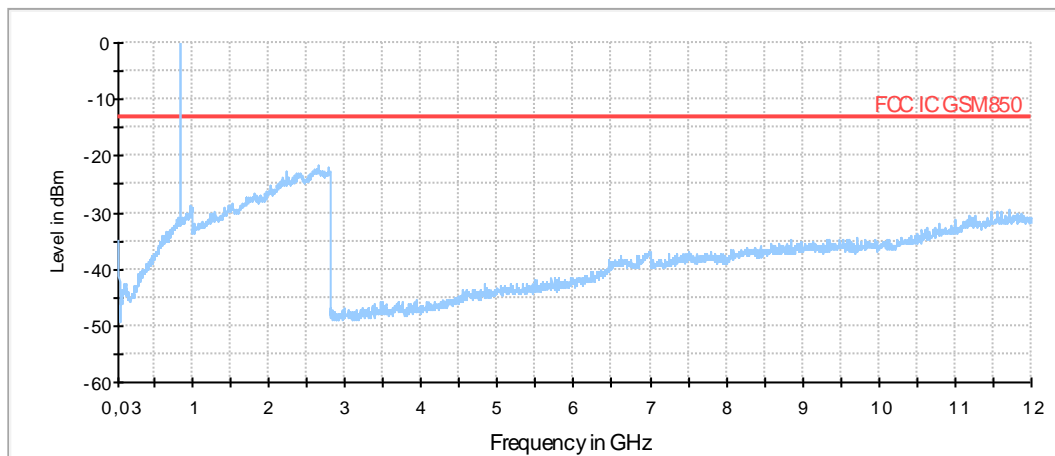
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	GSM850 Voice
Operating Mode:	MS allocated UL channel 251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 65%rH; Temperature: 20°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	

030401c_FCC_Part22_GSM850_TX_Ch251_30M-12G



1.11. Band-Edge compliance radiated GSM850 Mode

8.01a_FCC_Part22_GSM850_GSMK_Ch128_band_edge

Common Information

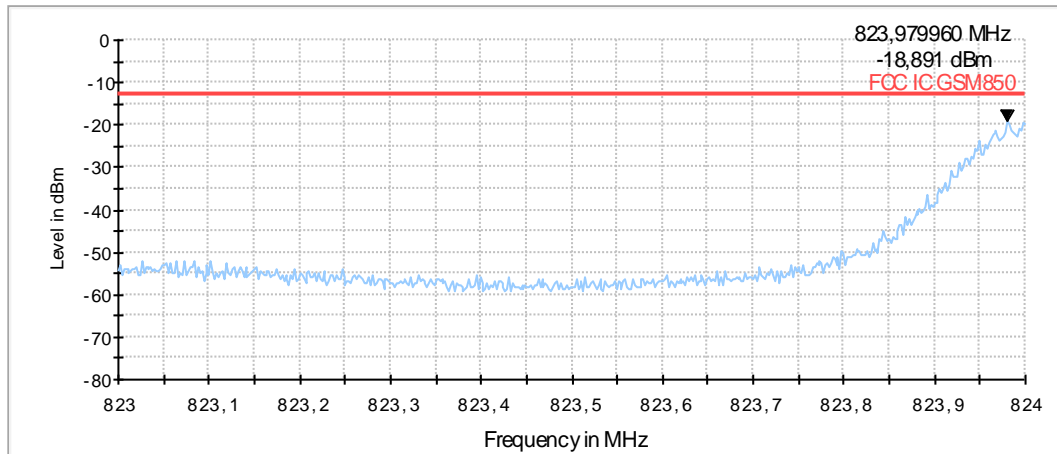
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 190
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 65%rH; Temperature: 20°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	-

030402_FCC_Part22_GSM850_TX_low_channel_band_edge



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
---	---	---	---		---	---	---	---	---

8.03a_FCC_Part22_GSM850_GSMK_Ch251_band_edge

Common Information

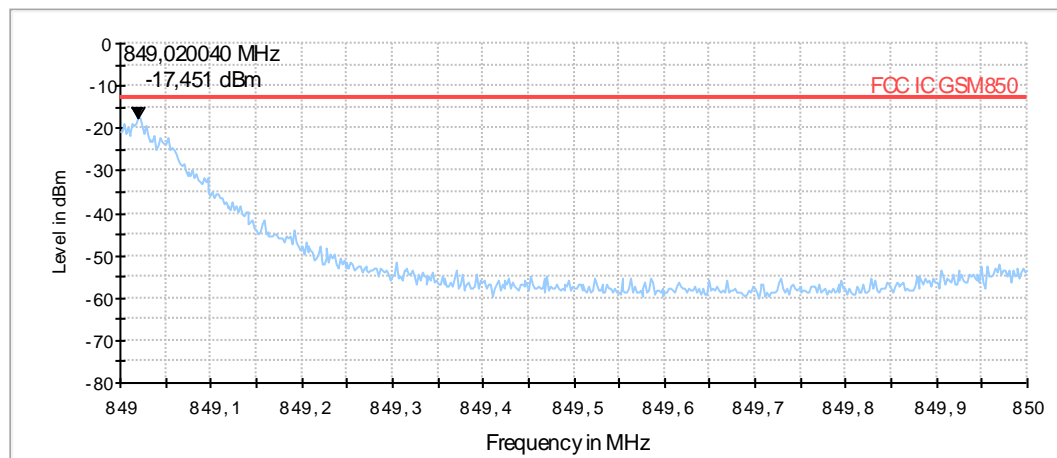
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 65%rH; Temperature: 20°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS1 (HDW-15766-005)
Power Supply:	Real battery, fully charged before test
Comments:	

030403_FCC_Part22_GSM850_TX_high_channel_band_edge



1.12. Radiated spurious emissions – E-GPRS 850

2-0023-11-1-6a, CETECOM GmbH

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8.04_FCC_Part22_GSM850_EGPRS_Ch128

Common Information

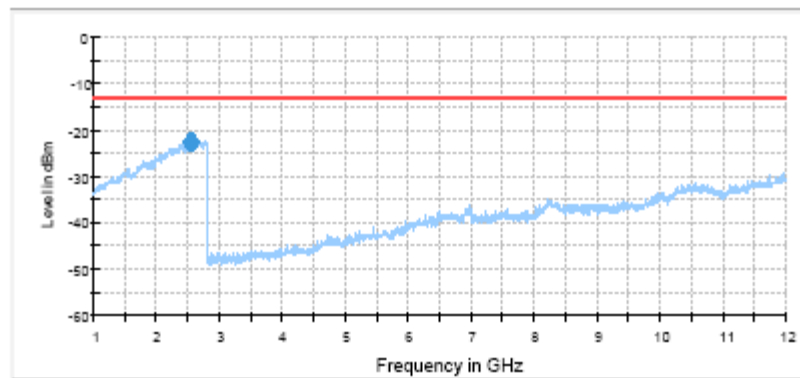
Test Description: Radiated Emissions GSM850
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part22.917
 Test Case: -
 Operating Mode: MS allocated UL channel 128; 8DPSKSK, MSC10, MCS5
 Exclusionband: 824 - 849MHz
 Environmental Conditions: Humidity: 73%rH; Temperature: 19°C
 Operator: Jess

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type: -

 EUT: REA71UW 125
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004402241090749 (CETECOM Sample 28)
 Connected Interfaces: HS2 (HDW-24529-001 Hoisdien)
 Power Supply: Real battery, fully charged before test
 Comments:

030401d_FCC_Part22_GSM850_TX_Ch128_30M-12G_EGPRS



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
2548.306613	-22.8	5000.0	1000.000	H	220.0	90.0	-59.3	9.8	-13.0

12.09.2011

13:06:44

8.05_FCC_Part22_GSM850_EGPRS_Ch190

Common Information

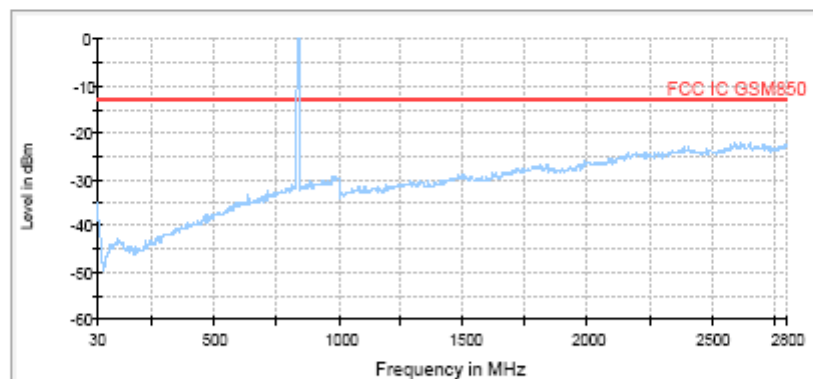
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	GSM850 EGPRS
Operating Mode:	MS allocated UL channel 190; 8DPSKSK, MSC10, MCS5
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 73%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS2 (HDW-24529-001 Hoisdien)
Power Supply:	Real battery, fully charged before test
Comments:	

030401e_FCC_Part22_GSM850_TX_Ch190_30M-12G_EGPRS



8.06_FCC_Part22_GSM850_EGPRS_Ch251

Common Information

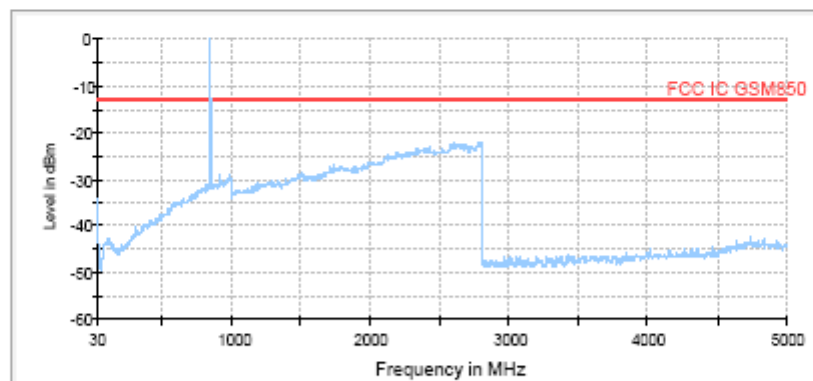
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	GSM850 EGPRS
Operating Mode:	MS allocated UL channel 251; 8DPSKSK, MSC10, MCS5
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 73%rH; Temperature: 19°C
Operator:	Jess

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS2 (HDW-24529-001 Hoisdien)
Power Supply:	Real battery, fully charged before test
Comments:	

030401e_FCC_Part22_GSM850_TX_Ch190_30M-12G_EGPRS



1.13. Band-Edge compliance radiated E-GPRS850 Mode

2-0023-11-1-6a, CETECOM GmbH

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8.04a_FCC_Part22_GSM850_EGPRS_Ch128_band_edge

Common Information

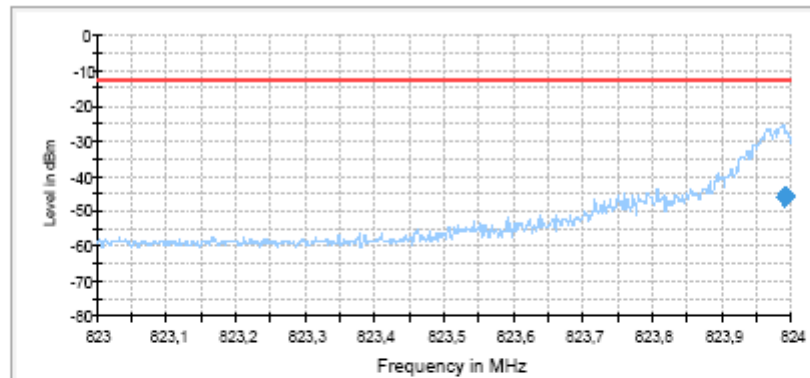
Test Description: Radiated Spurious Emissions GSM850
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 22.917
 Comm. Link: GSM850 EGPRS
 Operating Mode: MS allocated UL channel 251; 8DPSKSK, MSC10, MCS5
 Exclusionband: 824 - 849MHz
 Environmental Conditions: Humidity: 73%rH; Temperature:19°C
 Operator: dpa

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type:

EUT: REA71UW 125
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004402241090749 (CETECOM Sample 26)
 Connected Interfaces: HS3 (HDW-24529-001) AAC
 Power Supply: Real battery, fully charged before test
 Comments:

030402b_FCC_Part22_GSM850_TX_low_channel_band_edge_EGPRS



Final Result 1

Frequency (MHz)	Average (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
823.991984	-45.9	10000.0	3.000	V	304.0	90.0	-75.9	32.9	-13.0

12.09.2011

18:42:33

8.06a_FCC_Part22_GSM850_EGPRS_Ch251_band_edge

Common Information

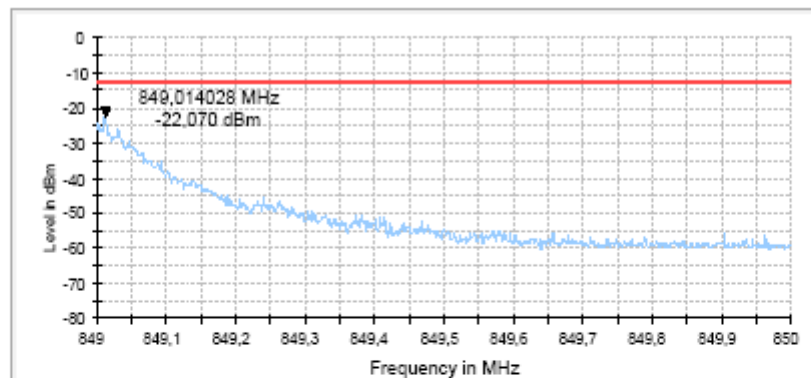
Test Description:	Radiated Spurious Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917
Comm. Link:	GSM850 EGPRS
Operating Mode:	MS allocated UL channel 251; 8DPSKSK, MSC10, MCS5
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 73%rH; Temperature: 19°C
Operator:	dpa

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 28)
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030403b_FCC_Part22_GSM850_TX_high_channel_band_edge_EGPRS



1.14. Radiated spurious emissions – GSM 1900

8.07_FCC_Part22_GSM1900_Voice_Ch512_Rev2

Common Information

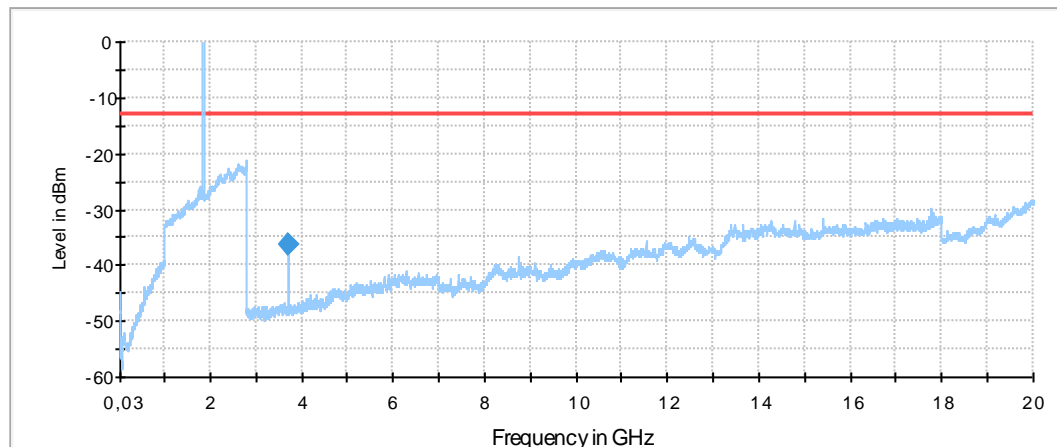
Test Description: Radiated Spurious Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24.238
 Comm. Link: GSM1900, Voice
 Operating Mode: MS allocated channel 512 (UL = 1850.2MHz)
 Exclusionband: 1850- 1910MHz
 Environmental Conditions: Humidity: 66%rH; Temperature: 19°C
 Operator: Kta

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type:

 EUT: REA71UW 125; Rev2
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004401138459470
 Connected Interfaces: HS3 (HDW-24529-001) AAC
 Power Supply: Real battery, fully charged before test
 Comments:

030404a_FCC_Part24_GSM1900_TX_Ch512_30M-20G_Voice



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3699.984970	-36.4	5000.0	3000.000	H	-23.0	0.0	-94.9	23.4	-13.0

8.08_FCC_Part22_GSM1900_Voice_Ch661_Rev2

Common Information

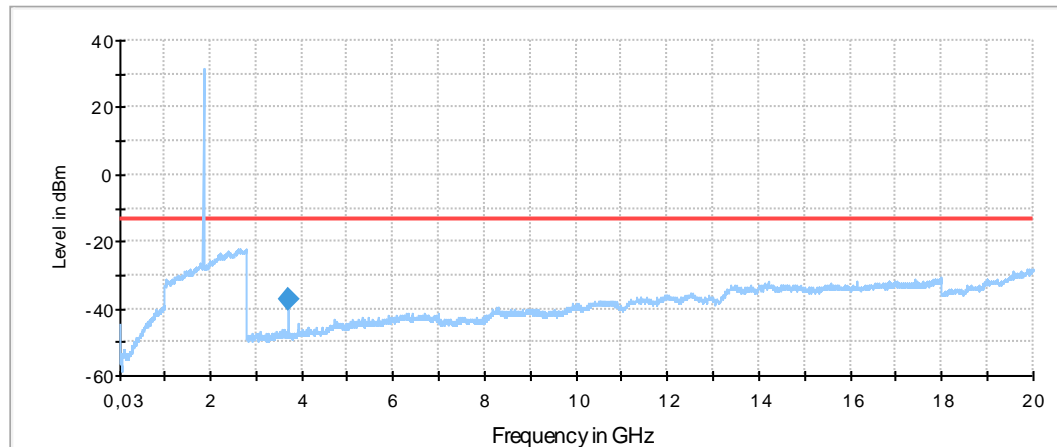
Test Description: Radiated Spurious Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24.238
 Comm. Link: GSM1900, Voice
 Operating Mode: MS allocated channel, 661(UL = 1880.0MHz)
 Exclusionband: 1850- 1910MHz
 Environmental Conditions: Humidity: 66%rH; Temperature: 19°C
 Operator: kta

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type:

EUT: REA71UW 125; Rev2
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004401138459470
 Connected Interfaces: HS3 (HDW-24529-001) AAC
 Power Supply: Real battery, fully charged before test
 Comments:

030404b_FCC_Part24_GSM1900_TX_Ch661_30M-20G_Voice



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3700.315631	-37.3	5000.0	3000.000	H	-23.0	0.0	-94.9	24.3	-13.0

8.09_FCC_Part22_GSM1900_Voice_Ch810_Rev2

Common Information

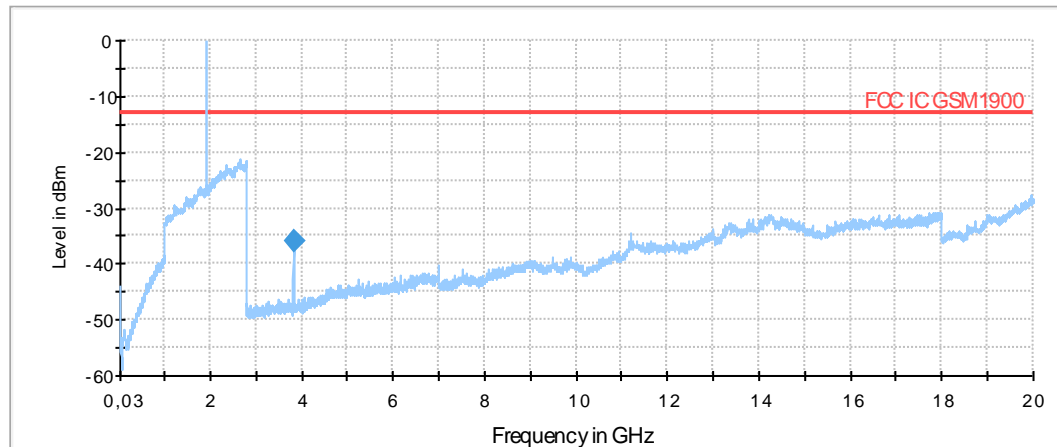
Test Description: Radiated Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part24.238
 Test Case: -
 Operating Mode: MS allocated UL channel 810
 Exclusionband: 1850 - 1910MHz
 Environmental Conditions: Humidity: 62%rH; Temperature: 19°C
 Operator: kta

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry

 EUT: REA71UW 125
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004402241090749 (CETECOM Sample 26)
 Connected Interfaces: HS3 (HDW-24529-001) AAC
 Power Supply: Real battery, fully charged before test
 Comments:

030404c_FCC_Part24_GSM1900_TX_Ch810_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)
3819.844690	-35.9	5000.0	3000.000	H	-6.0	0.0	-95.8	22.9	-13.0

1.15. Band-Edge compliance radiated - GSM1900 Mode

8.07a_FCC_Part22_GSM1900_Voice_Ch512_band_edge_rev2

Common Information

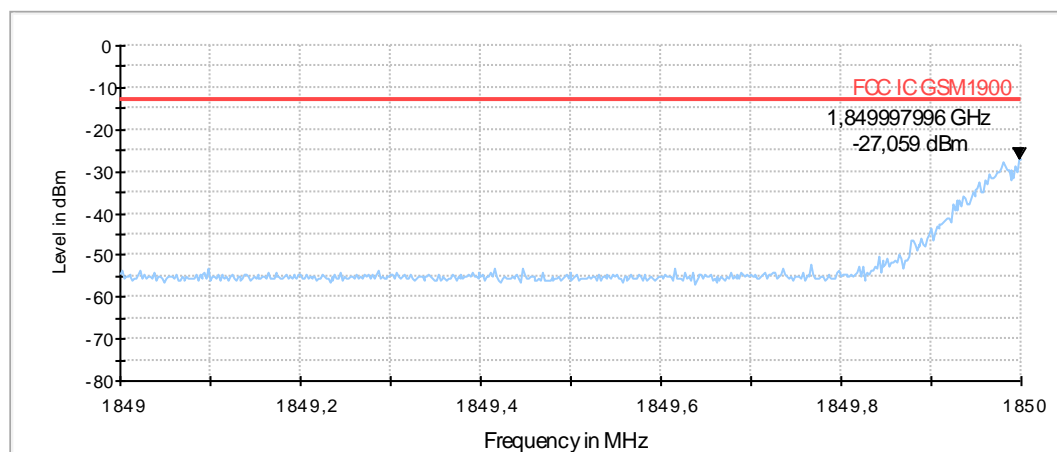
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part24.238
Test Case:	-
Operating Mode:	MS allocated UL channel 512,661,810
Exclusionband:	1850 - 1910MHz
Environmental Conditions:	Humidity: 62%rH; Temperature: 19°C
Operator:	kta

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	

030405_FCC_Part24_GSM1900_TX_low_channel_band_edge



8.09a_FCC_Part22_GSM1900_Voice_Ch810_band_edge

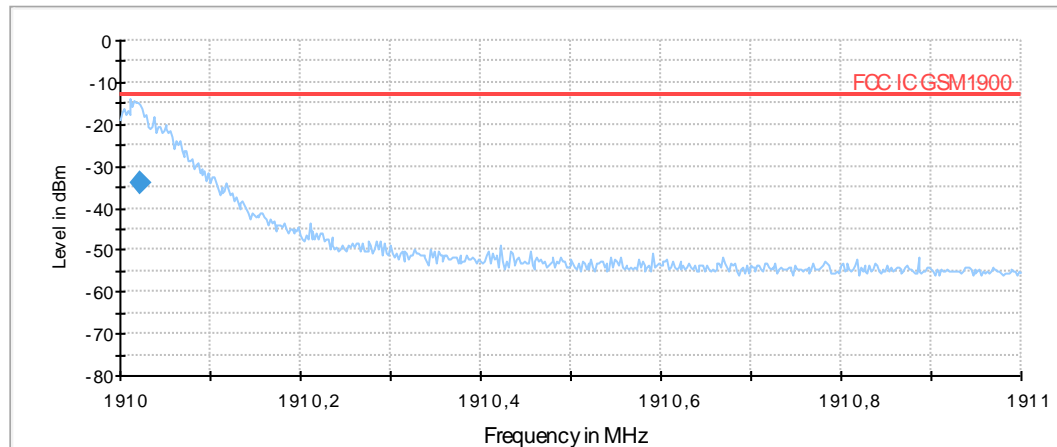
Common Information

Test Description: Radiated Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part24.238
 Test Case: -
 Operating Mode: MS allocated UL channel 810
 Exclusionband: 1850 - 1910MHz
 Environmental Conditions: Humidity: 62%rH; Temperature: 19°C
 Operator: kta

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type: -----
 EUT: REA71UW 125
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004402241090749 (CETECOM Sample 26)
 Connected Interfaces: HS3 (HDW-24529-001) AAC
 Power Supply: Real battery, fully charged before test
 Comments:

030406_FCC_Part24_GSM1900_TX_high_channel_band_edge



Final Result 1

Frequency (MHz)	Average (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1910.022044	-34.2	10000.0	3.000	H	214.0	0.0	-62.7	21.2	-13.0

1.16. Radiated spurious emissions – E-GPRS 1900

2-0023-11-1-6a, CETECOM GmbH

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8.10_FCC_Part22_GSM1900_EGPRS_Ch512_Rev2

Common Information

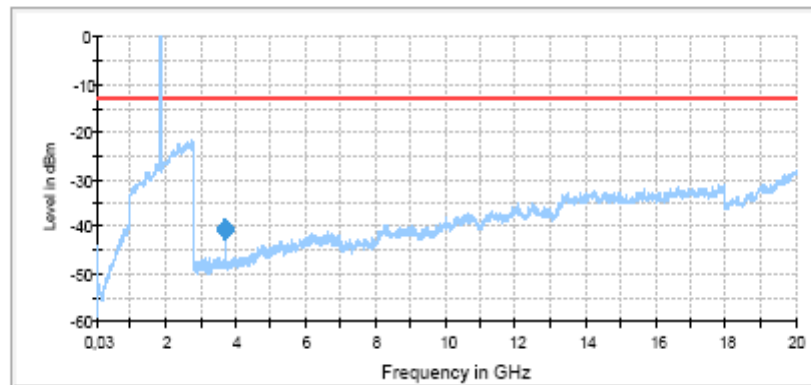
Test Description: Radiated Spurious Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24.238
 Comm. Link: GSM1900 EGPRS
 Operating Mode: MS allocated channel 512
 Exclusionband: 1850- 1910MHz
 Environmental Conditions: Humidity: 73%RH; Temperature:19°C
 Operator: dpa

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type:

EUT: REA71UW 125; Rev2
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004401138459470
 Connected Interfaces: HS2 (HDW-24529-001 Hoisden)
 Power Supply: Real battery, fully charged before test
 Comments:

030404d_FCC_Part24_GSM1900_TX_Ch512_30M-20G_EGPRS



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3700.205411	-40.5	5000.0	3000.000	V	-13.0	90.0	-94.9	27.5	-13.0

12.09.2011

19:14:18

8.11_FCC_Part22_GSM1900_EGPRS_Ch661_Rev2

Common Information

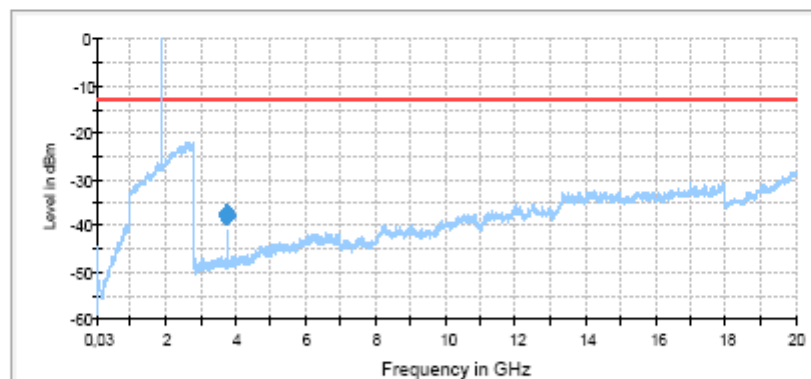
Test Description: Radiated Spurious Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24.238
 Comm. Link: GSM1900 EGPRS
 Operating Mode: MS allocated channel 661(UL = 1880.0MHz)
 Exclusionband: 1850- 1910MHz
 Environmental Conditions: Humidity: 73%rH; Temperature:19°C
 Operator: dpa

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type:

EUT: REA71UW 125; Rev2
 EUT additional information: -
 HW version: CFR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004401138459470
 Connected Interfaces: HS2 (HDW-24529-001 Hoisden)
 Power Supply: Real battery, fully charged before test
 Comments:

030404d_FCC_Part24_GSM1900_TX_Ch512_30M-20G_EGPRS

**Final Result 1**

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3760.195391	-37.6	5000.0	3000.000	H	-8.0	0.0	-95.1	24.6	-13.0

8.12_FCC_Part22_GSM1900_EGPRS_Ch810_Rev2

Common Information

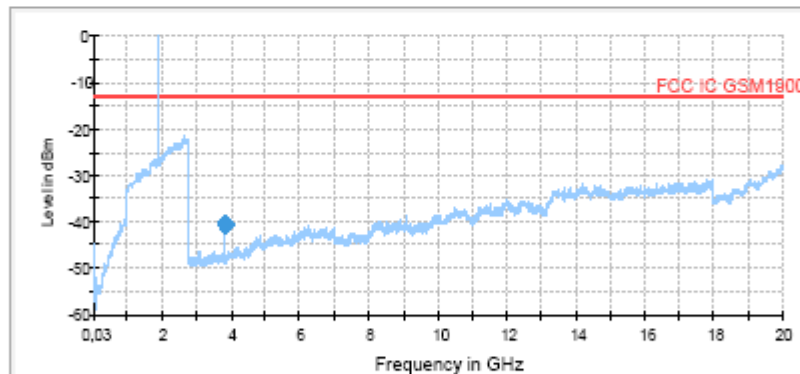
Test Description: Radiated Spurious Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24.238
 Comm. Link: GSM1900, EGPRS, 8DPSKSK, MSC10, MCS5
 Operating Mode: MS allocated channel 810 (UL = 1909.8MHz)
 Exclusionband: 1850- 1910MHz
 Environmental Conditions: Humidity: 69%rH; Temperature: 19°C
 Operator: Kta

EUT Information

Manufacturer: Research in Motion
 Model: Blackberry
 Type:

 EUT: REA71UW 125; Rev2
 EUT additional information: -
 HW version: CPR 18127 R032
 SW version: ASY-39829-001
 Additional SW: -
 Config: -
 Serial number: 004401139459470
 Connected Interfaces: HS2 (HDW-24529-001 Hoisden)
 Power Supply: Real battery, fully charged before test
 Comments:

030404f_FCC_Part24_GSM1900_TX_Ch810_30M-20G_EGPRS

**Final Result 1**

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3820.285571	-40.5	5000.0	3000.000	H	3.0	0.0	-95.1	27.5	-13.0

1.17. Band-Edge compliance radiated - E-GPRS 1900 Mode

8.10a_FCC _Part22_GSM1900_EGPRS_Ch512_band_edge_Rev2

Common Information

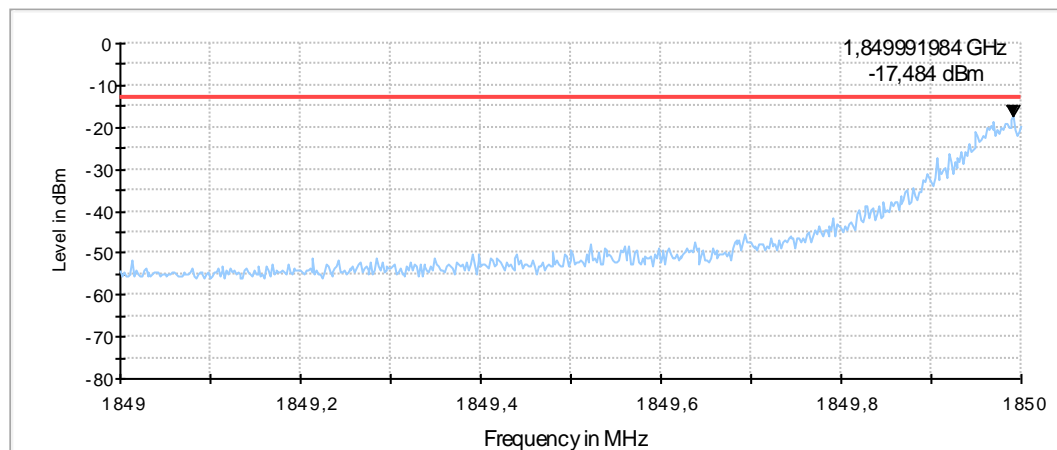
Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900, EGPRS
Operating Mode:	MS allocated channel 512 (UL = 1850.2MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 73%rH; Temperature:19°C
Operator:	dpa

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004402241090749 (CETECOM Sample 26)
Connected Interfaces:	HS3 (HDW-24529-001) AAC
Power Supply:	Real battery, fully charged before test
Comments:	

030405b_FCC_Part24_GSM1900_TX_low_channel_band_edge_EGPRS



8.12a_FCC _Part22_GSM1900_EGPRS_Ch810_band_edge_Rev2

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, EGPRS, 8DPSKSK, MSC10, MCS5
Operating Mode:	MS allocated channel , 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 69%rH; Temperature: 19°C
Operator:	Kta

EUT Information

Manufacturer:	Research in Motion
Model:	Blackberry
Type:	

EUT:	REA71UW 125; Rev2
EUT additional information:	-
HW version:	CPR 18127 R032
SW version:	ASY-39829-001
Additional SW:	-
Config:	-
Serial number:	004401138459470
Connected Interfaces:	HS2 (HDW-24529-001 Hoisden)
Power Supply:	Real battery, fully charged before test
Comments:	

030406_FCC_Part24_GSM1900_TX_high_channel_band_edge

