

Annex 1: Measurement diagrams 18-1-0173201T47a-C3-A1

Number of pages:	13	Date of Report:	2021-Jan-05
Testing company:	CETECOM GmbH Im Teelbruch 116 45219 Essen Germany Tel. + 49 (0) 20 54 / 95 19-0 Fax: + 49 (0) 20 54 / 95 19-150	Applicant:	Actia Nordic AB
Test Object / Tested Device(s):	Telematics Device / 103250101		
FCC ID:	2AGKK103250101		
Testing has been carried out in accordance with:	Title 47 CFR, Chapter I FCC Regulations, Subchapter B Part 22 Subpart H, Part 24 Subpart E, Part 27 Subpart C RSS-130 Issue 2, RSS-132 Issue 5, RSS-133 Issue 6, RSS-139 Issue 3 RSS Gen Issue 5 Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".		



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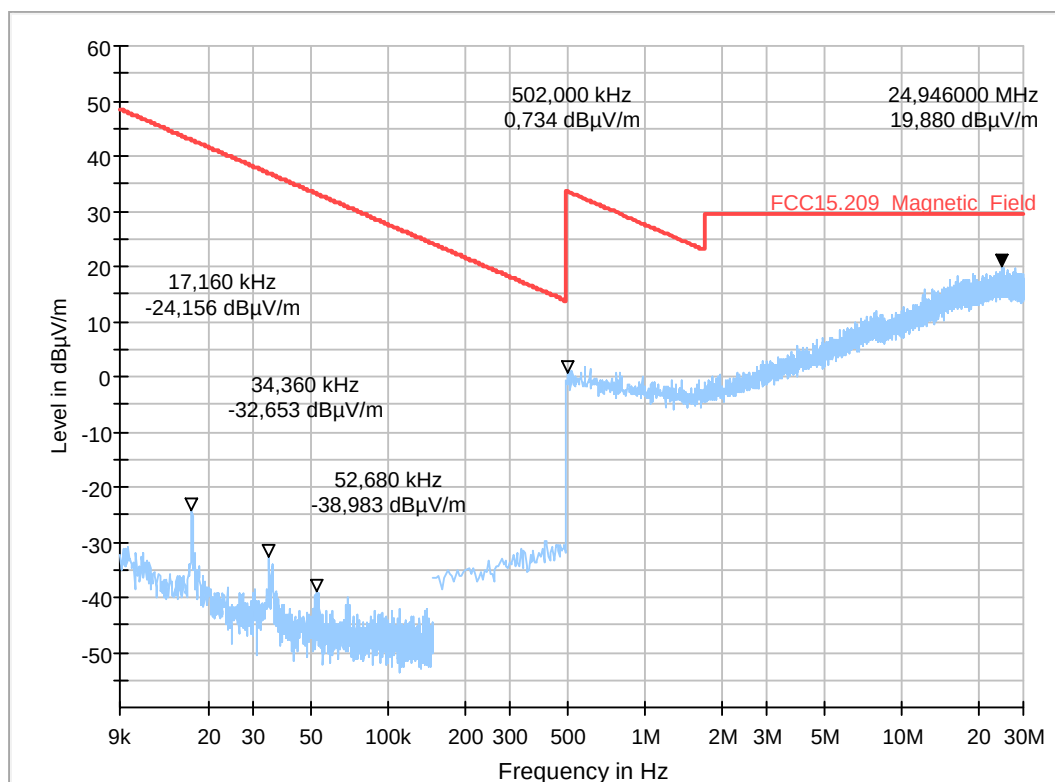
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1 Measurement diagrams

2.01_Magnetic_Emission_GSM_850_EUT_laying

Common information	
Test Description	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site	SAC1
Test Standard	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operation Mode	1
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	TFra
Verdict	Passed
Comment	EUT Elevation: 0°(Laying)
EUT information	
PMT sample No	18-1-01732S32

Full Spectrum



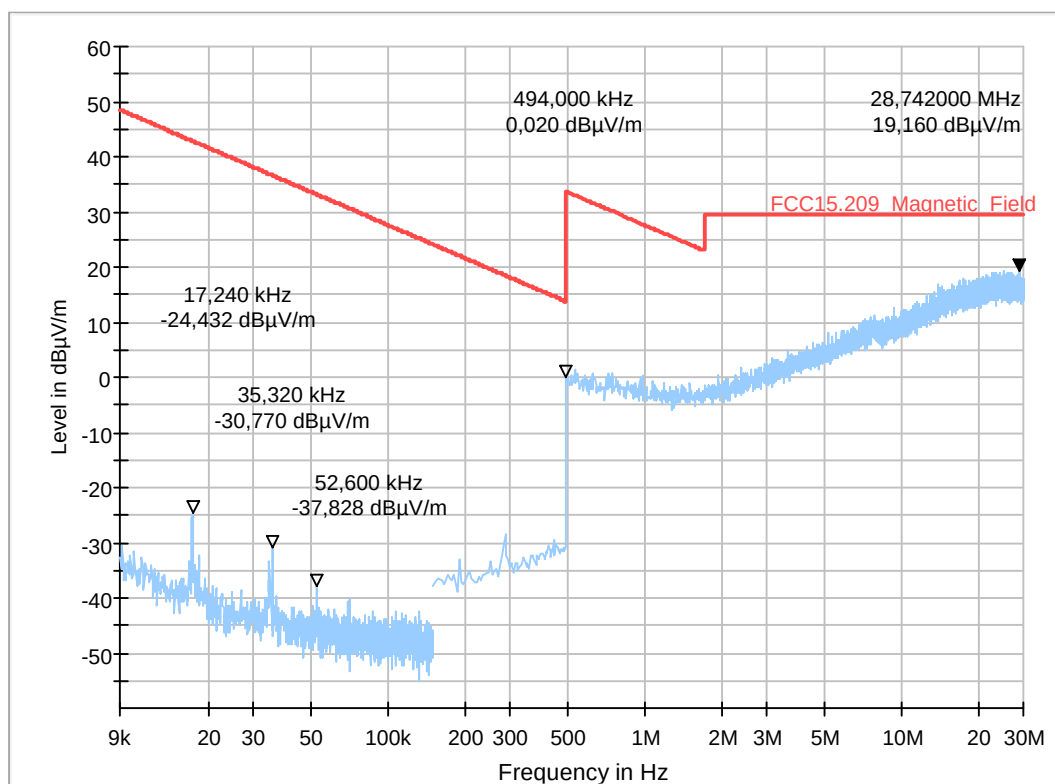
Remarks:

- There is no Critical frequency found.

2.02_Magnetic_Emission_GSM_850_EUT_standing

Common information	
Test Description	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site	SAC1
Test Standard	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operation Mode	1
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	TFra
Verdict	Passed
Comment	EUT Elevation: 90°(Standing)
EUT information	
PMT sample No	18-1-01732S32

Full Spectrum



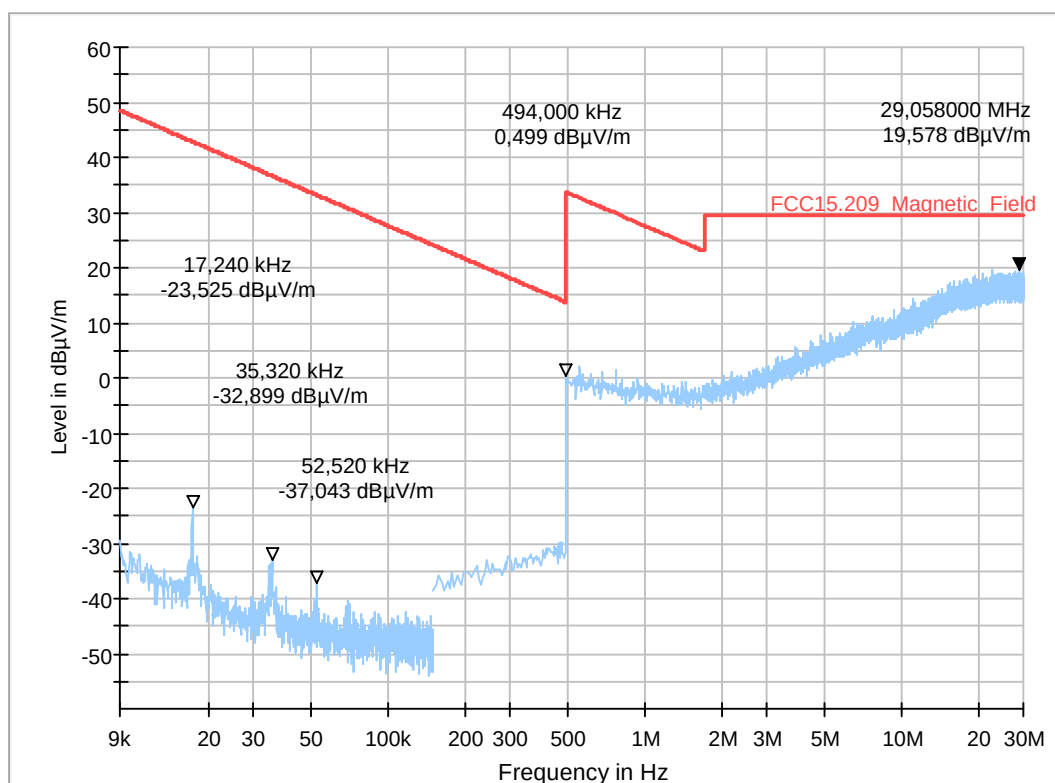
Remarks:

- There is no Critical frequency found.

2.03_Magnetic_Emission_GSM_1900_EUT_laying

Common information	
Test Description	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site	SAC1
Test Standard	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operation Mode	2
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	TFra
Verdict	Passed
Comment	EUT Elevation: 0°(Laying)
EUT information	
PMT sample No	18-1-01732S32

Full Spectrum



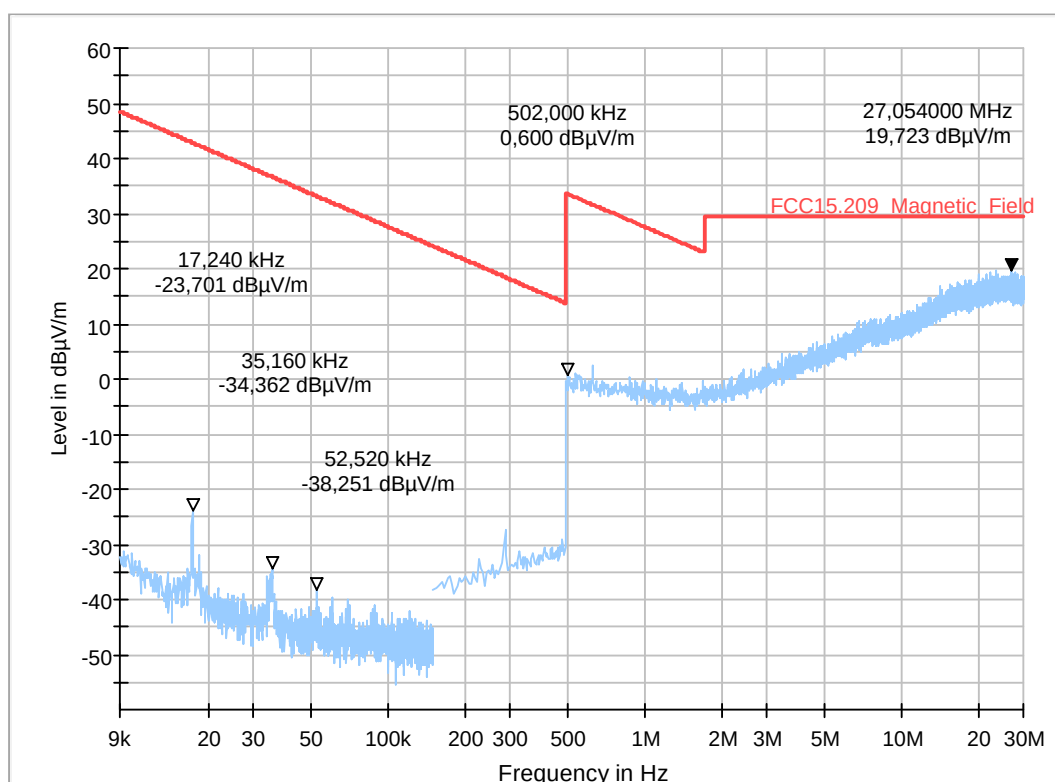
Remarks:

- There is no Critical frequency found.

2.04_Magnetic_Emission_GSM_1900_EUT_standing

Common information	
Test Description	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site	SAC1
Test Standard	FCC 15.205 § 15.209; RSS-Gen: Issue 5
Operation Mode	2
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	TFra
Verdict	Passed
Comment	EUT Elevation: 90°(Standing)
EUT information	
PMT sample No	18-1-01732S32

Full Spectrum

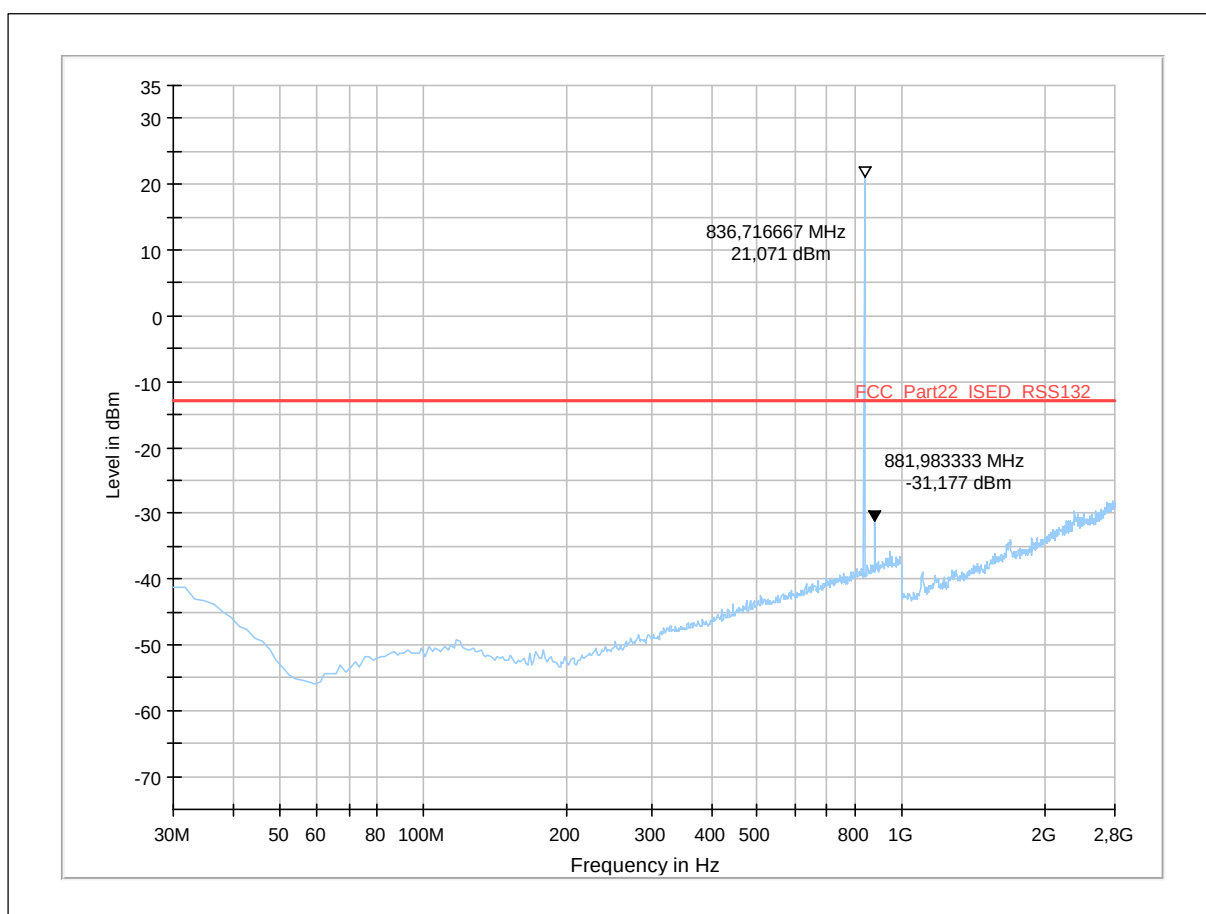


Remarks:

- There is no Critical frequency found.

8.01a_Traffic_mode_GSM_850_Channel_189_UL_836.4MHz_30MHz_2.8GHz

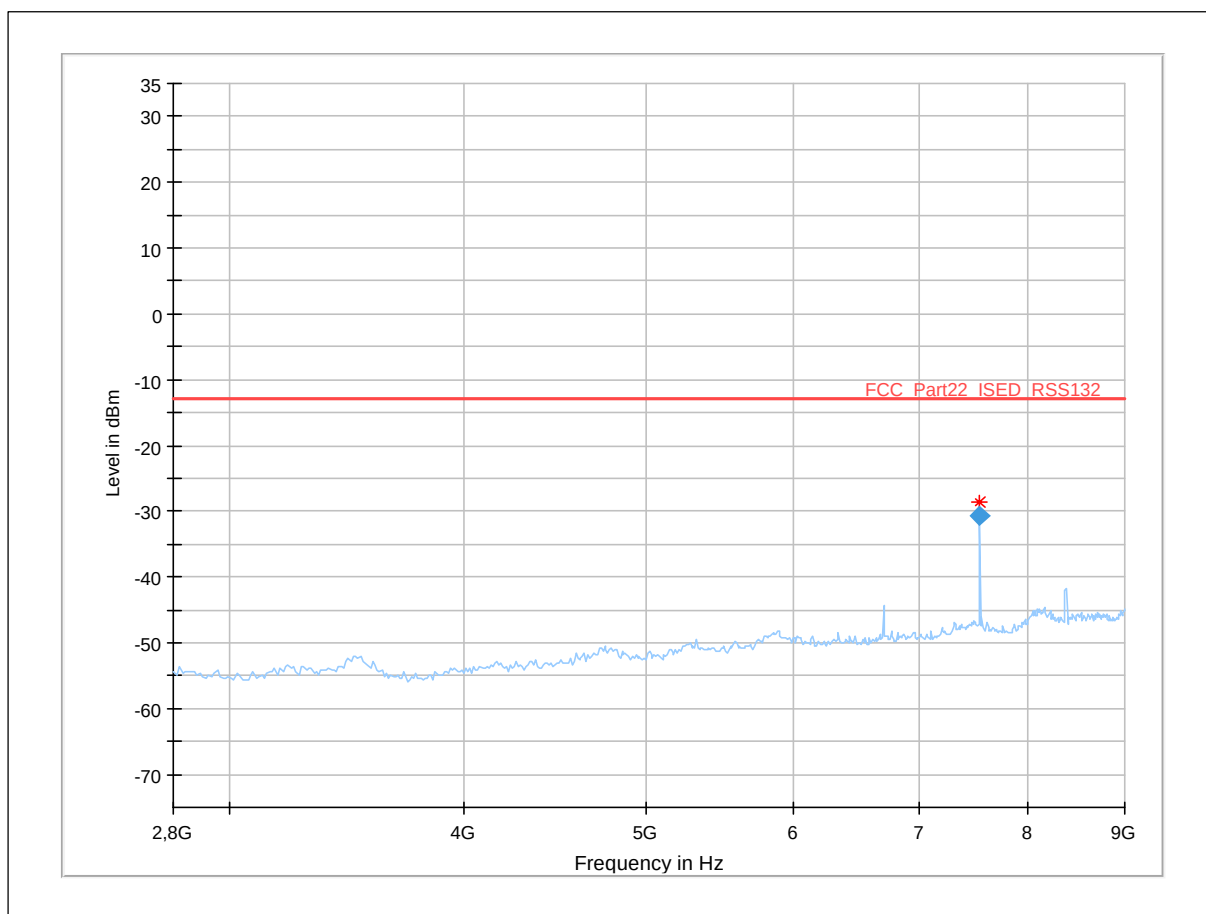
Common information	
Test Description	Radiated Spurious Emission
Test Site	FAC1
Operation Mode	1
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	HEI
Verdict	Passed
Test Completed	08.01.2020 19:49:38
EUT information	
PMT sample No	18-1-01732S32


Remarks:

- Emission at 836.716667 MHz is Uplink frequency of GSM 850, not related to Results.

8.01b_Traffic_mode_GSM_850_Channel_189_UL_836.4MHz

Common information	
Test Description	Radiated Spurious Emission
Test Site	FAC1
Test Standard	FCC Part 22.917(a)
Operation Mode	1
Environmental Conditions	Humidity : 40% rH; Temperature: 21 °C
Operator	LKu
Verdict	PASSED
Test Completed	09.01.2020 09:11:51
EUT information	
PMT sample No	18-1-01732S32

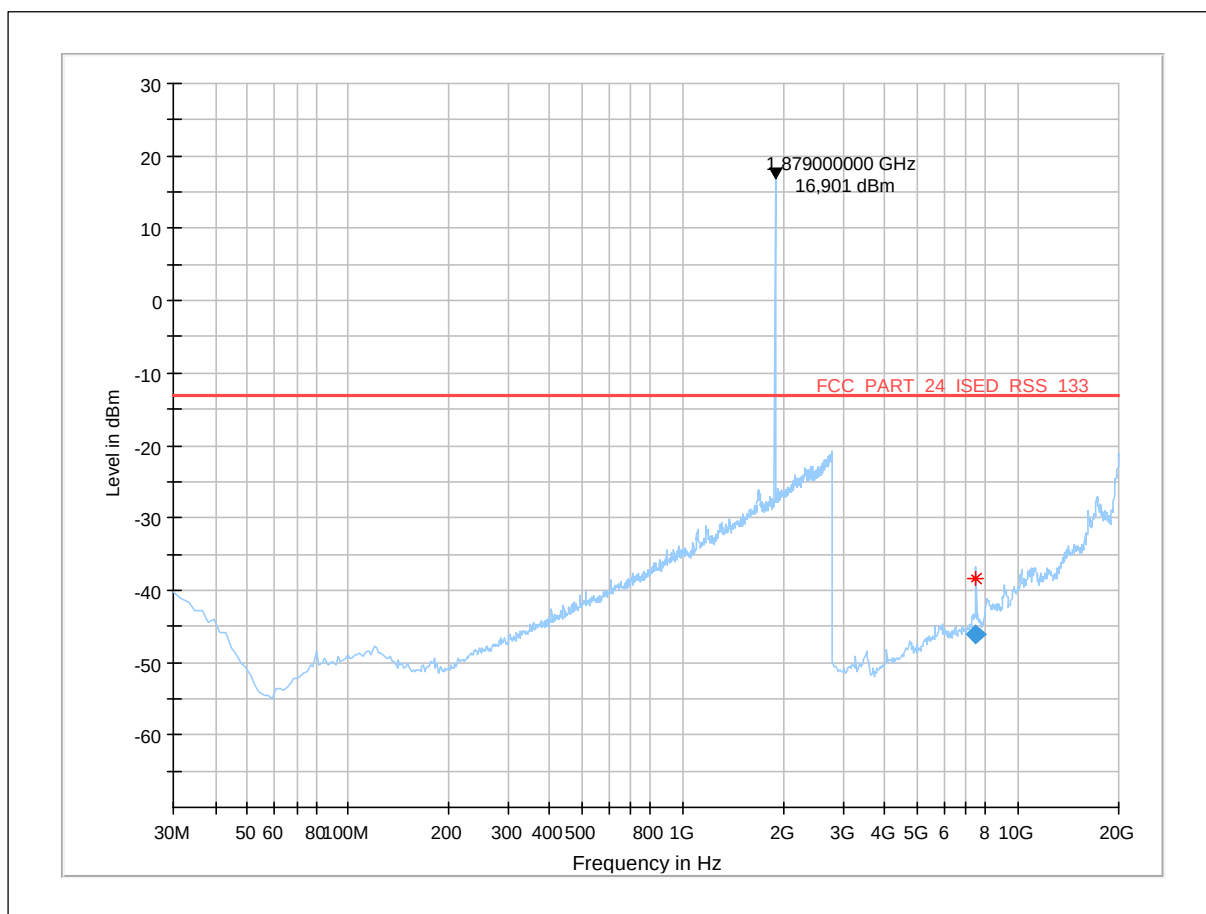


MaxPeak

Frequency [MHz]	MaxPeak [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Pol	Azimuth [deg]	Elevation [deg]	Results
7533.6	-30.7	-13	17.7	155	V	298	0	PASSED

8.02_Traffic_mode_GSM_1900_Channel_661_UL_1880.0MHz

Common information	
Test Description	Radiated Spurious Emission
Test Site	FAC1
Test Standard	FCC FCC Part 24.238 Broadband PCS
Operation Mode	2
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	HEI
Verdict	PASSED
Test Completed	08.01.2020 20:45:14
EUT information	
PMT sample No	18-1-01732S32



Remarks:

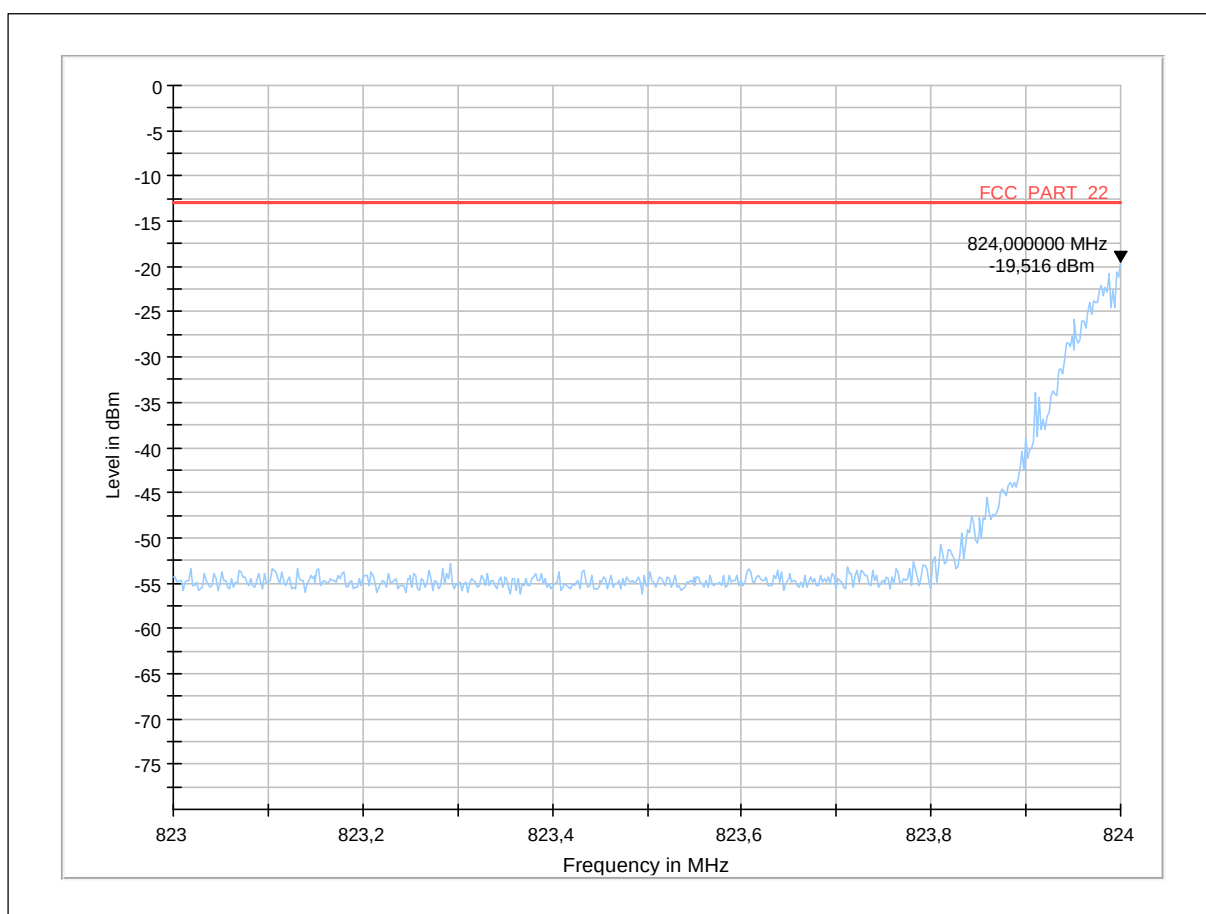
- Emission at 1.879000000 GHz is Uplink frequency of GSM 1900, not related to Results.

MaxPeak

Frequency [MHz]	MaxPeak [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Pol	Azimuth [deg]	Elevation [deg]	Results
7497.7	-46.16	-13	33.16	155	V	343	0	PASSED

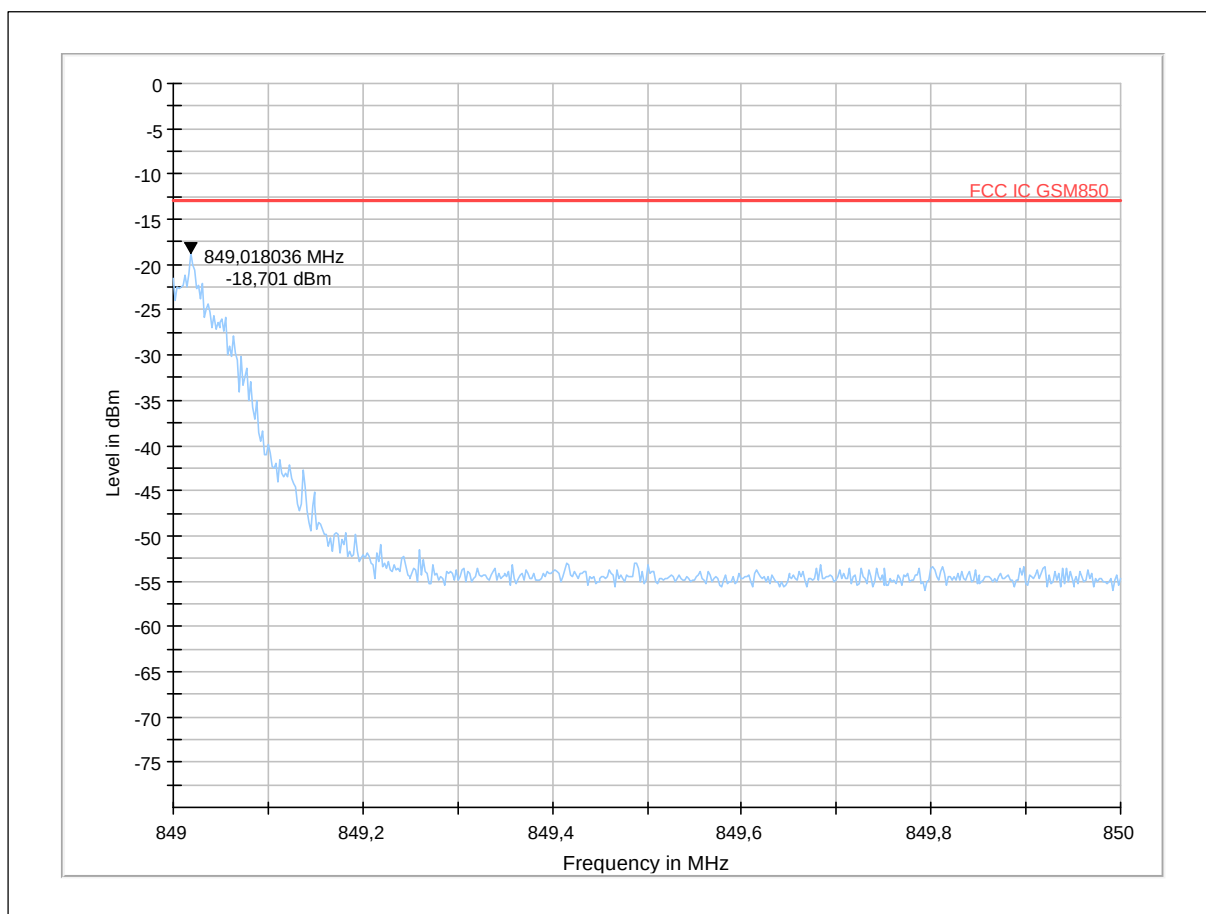
9.1201_Band-Edge_Channel_128_UL_824.2 MHz

Common information	
Test Description	Radiated Band Edge Compliance GSM850
Test Site	FAC1
Operation Mode	GSM 850 low Channel_128
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	LKu
Verdict	Passed
Test Completed	09.01.2020 09:46:26
EUT information	
PMT sample No	18-1-01732S32



9.1202_Band-Edge_Channel_251_UL_848.8 MHz

Common information	
Test Description	Radiated Band Edge Compliance GSM850
Test Site Location	CETECOM GmbH Essen
Test Site	FAC1
Operation Mode	GSM 850 high Channel_251
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	LKu
Verdict	PASSED
Test Completed	09.01.2020 10:10:59
EUT information	
PMT sample No	18-1-01732S32

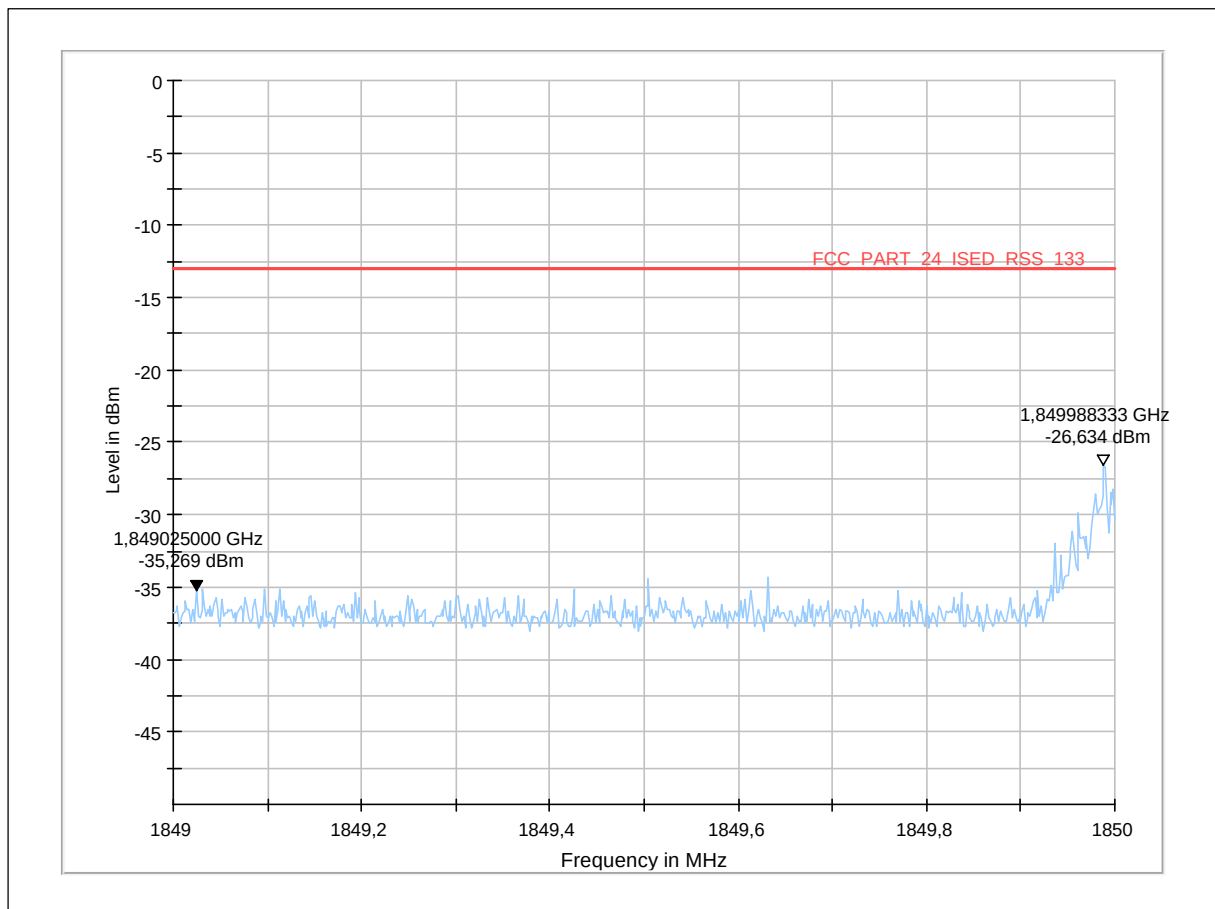


MaxPeak

Frequency [MHz]	MaxPeak [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Pol	Azimuth [deg]	Elevation [deg]	Results
849.006	-17.75	-13	4.75	155	H	132	0	PASSED

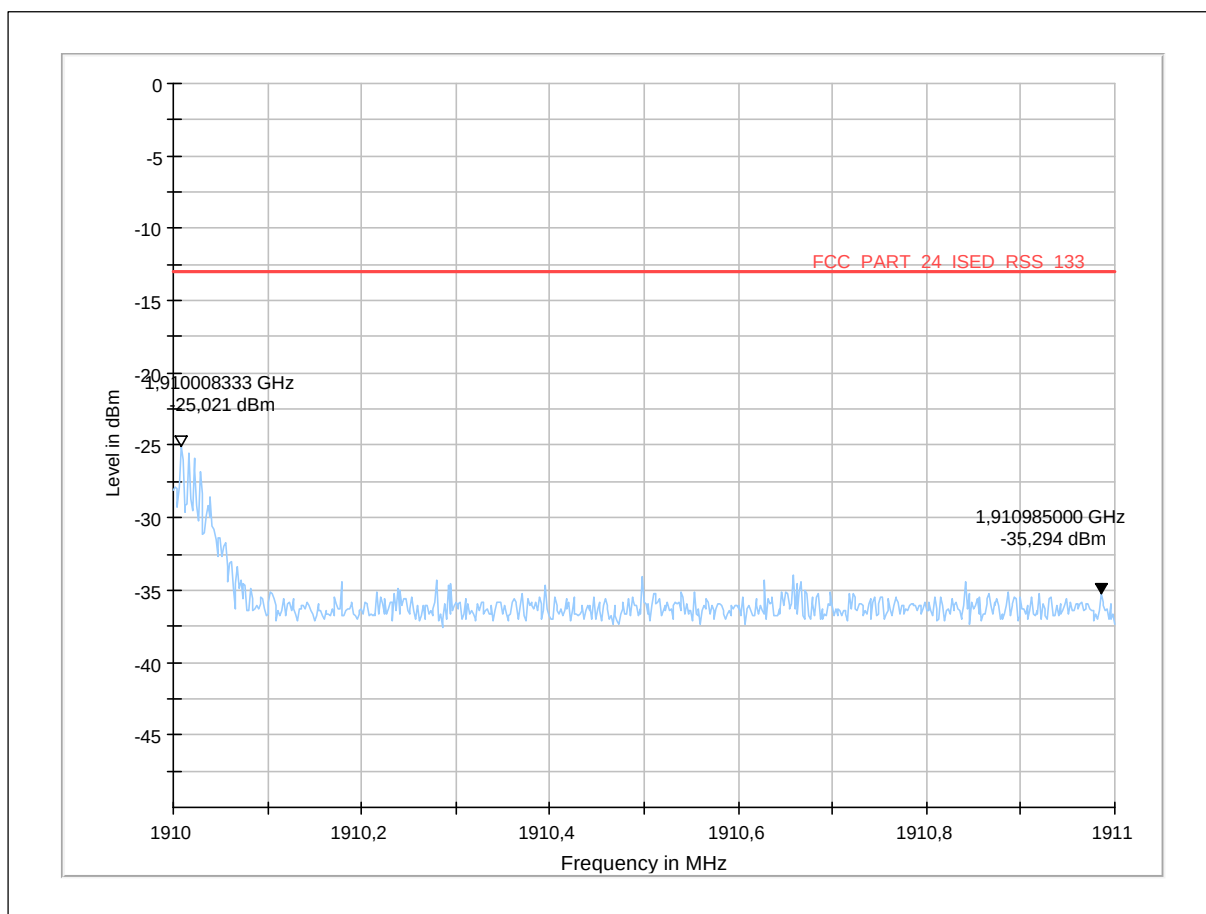
9.1203_Band-Edge_Channel_512_UL_1850.2MHz

Common information	
Test Description	Radiated Band Edge Compliance GSM1900
Test Site Location	CETECOM GmbH Essen
Test Site	Fully Anechoic Room (FAR1) - 10.50.3
Operation Mode	GSM 1900 low Channel_512
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	HEI
Verdict	PASSED
Test Completed	08.01.2020 21:19:09
EUT information	
PMT sample No	18-1-01732S32



9.1204_Band-Edge_Channel_810_UL_1909.8MHz

Common information	
Test Description	Radiated Band Edge Compliance GSM1900
Test Site Location	CETECOM GmbH Essen
Test Site	Fully Anechoic Room (FAR1) - 10.50.3
Operation Mode	GSM 1900 high Channel_810
Environmental Conditions	Humidity : 45% rH; Temperature: 18 °C
Operator	HEI
Verdict	PASSED
Test Completed	08.01.2020 21:05:37
EUT information	
PMT sample No	18-1-01732S32



End of Annex 1