

Annex 1: Measurement diagrams 20-1-0060701T49a-A1

Number of pages:	11	Date of Report:	2021-May-11
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:	VALEO Telematik und Akustik GmbH
Product:	Telematic Device		
Model:	ATM-02-ROW-R1		
FCC ID:	QWY-ATM2-R-13	IC:	--
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		

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1 Measurement diagrams

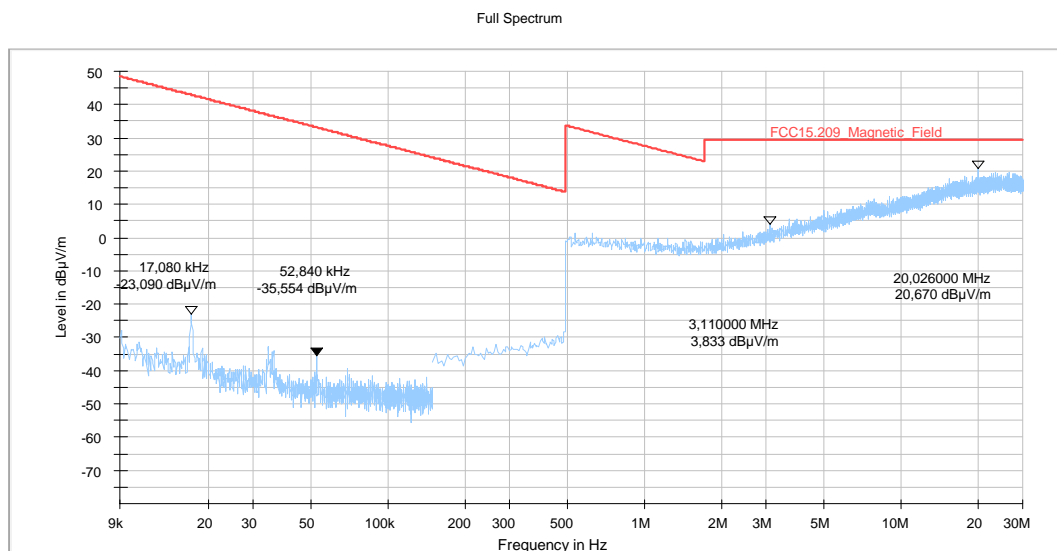
1.1 2.01_Magnetic_field_Emission_GSM_850_EUT_laying_ROW

Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Operator:	aho
Operating Mode:	Operation mode 1
Comment 2:	
Environmental Conditions::	Humidity : 45%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH



1.2 2.02_Magnetic_field_Emission_GSM_850_EUT_standing_ROW

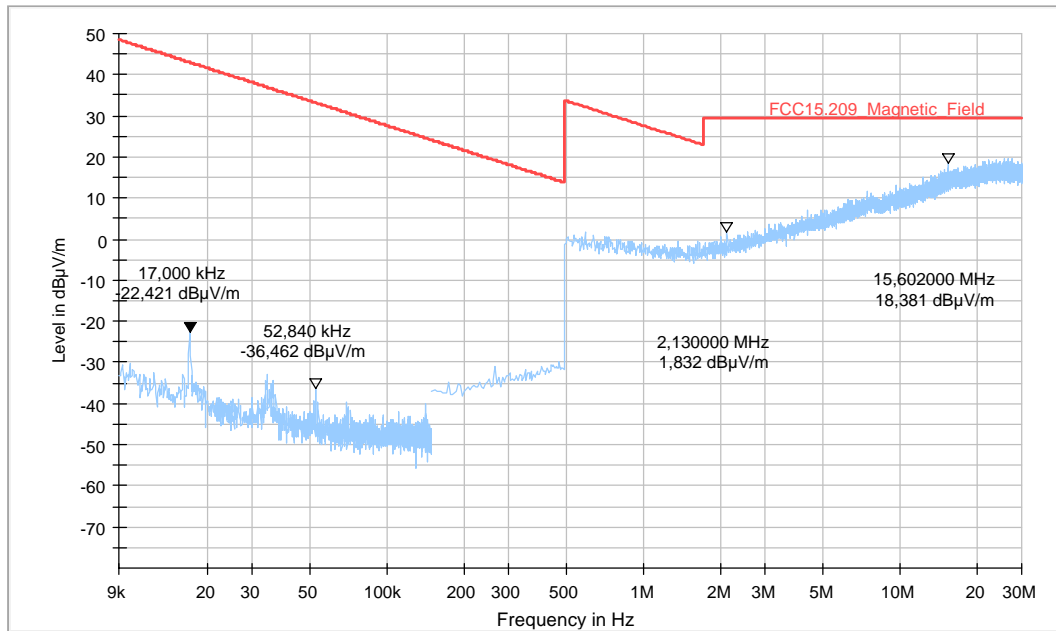
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Operator:	aho
Operating Mode:	Operation mode 1
Environmental Conditions::	Humidity : 45%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed
EUT Position	top, bottom, left, right

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.3 2.03_Magnetic_field_Emission_GSM_1900_EUT_laying_ROW

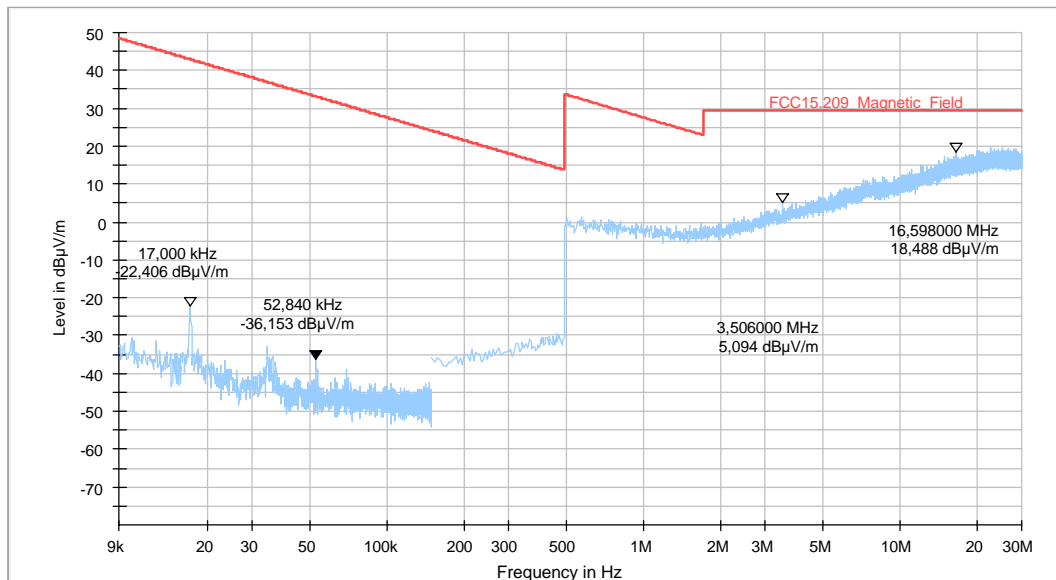
Common Information

Test Description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test Site Location:	Ref.-Nr. 441 Semi Anechoic Chamber (SAC1) with 3 m measurement distance
Version of Testsoftware:	EMC32 V10.50.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used Filter:	bypass
Test Standard:	FCC 15.205 § 15.209
Operator:	aho
Operating Mode:	Operation mode 2
Environmental Conditions::	Humidity : 45%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed
EUT Position	top, bottom, left, right
Comment	worst case has been found by EUT Laying position

EdUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.4 8.01_Traffic_mode_GSM_850_Channel_128_UL_824.2 MHz

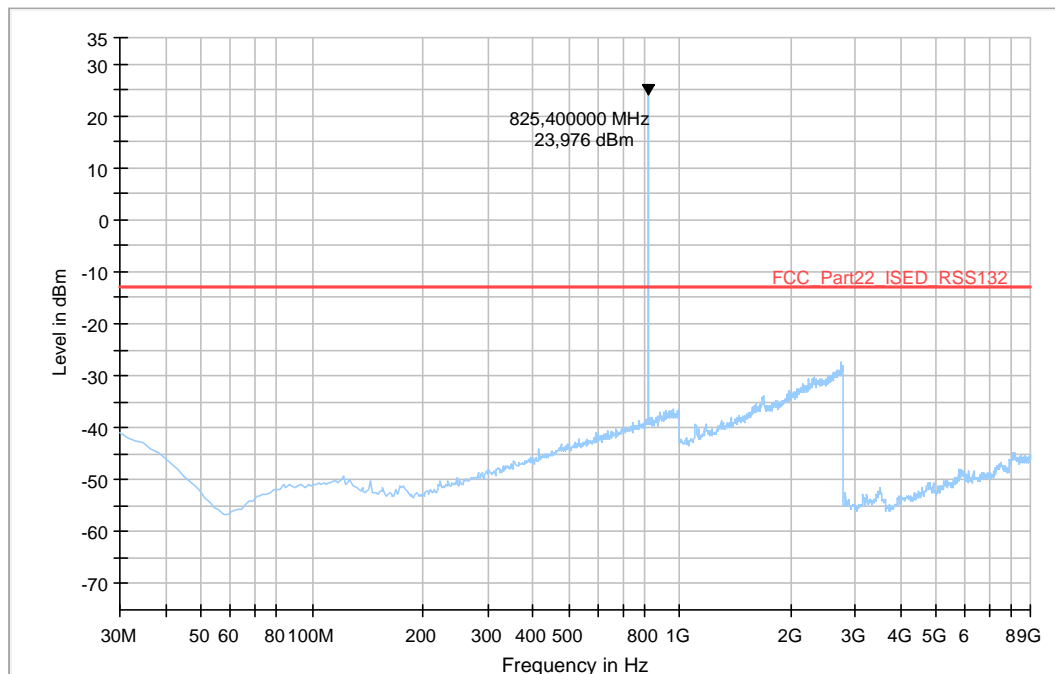
Common Information

Test Description:	Radiated emission related to 1m
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 22.917
Antenna polarisation:	vertical / horizontal
Operating Mode:	GSM 850_CH:128
Operator:	Aho
Comment:	--
Environmental Conditions:	Humidity : 40%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.5 8.02_Traffic_mode_GSM_1900_Channel_512_UL_1850.2MHz

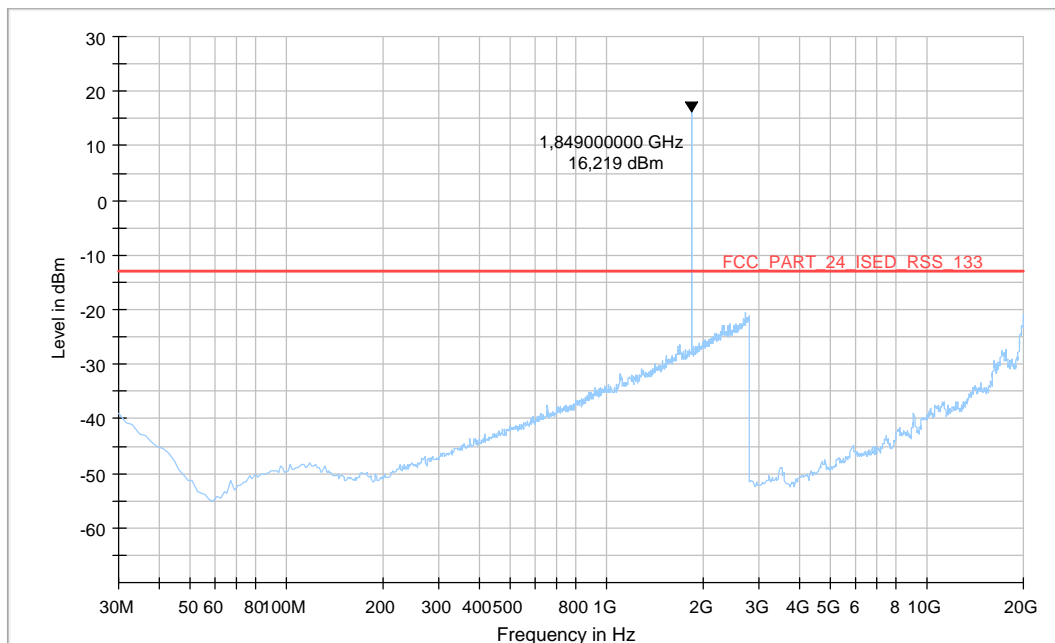
Common Information

Test Description:	Radiated emission related to 1m
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 24.238 Broadband PCS
Antenna polarisation:	vertical / horizontal
Operating Mode:	GSM 1900_CH:512
Operator:	Aho
Comment:	--
Environmental Conditions:	Humidity : 40%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.6 9.1900_Band-Edge_Channel_512_UL_1850.2MHz

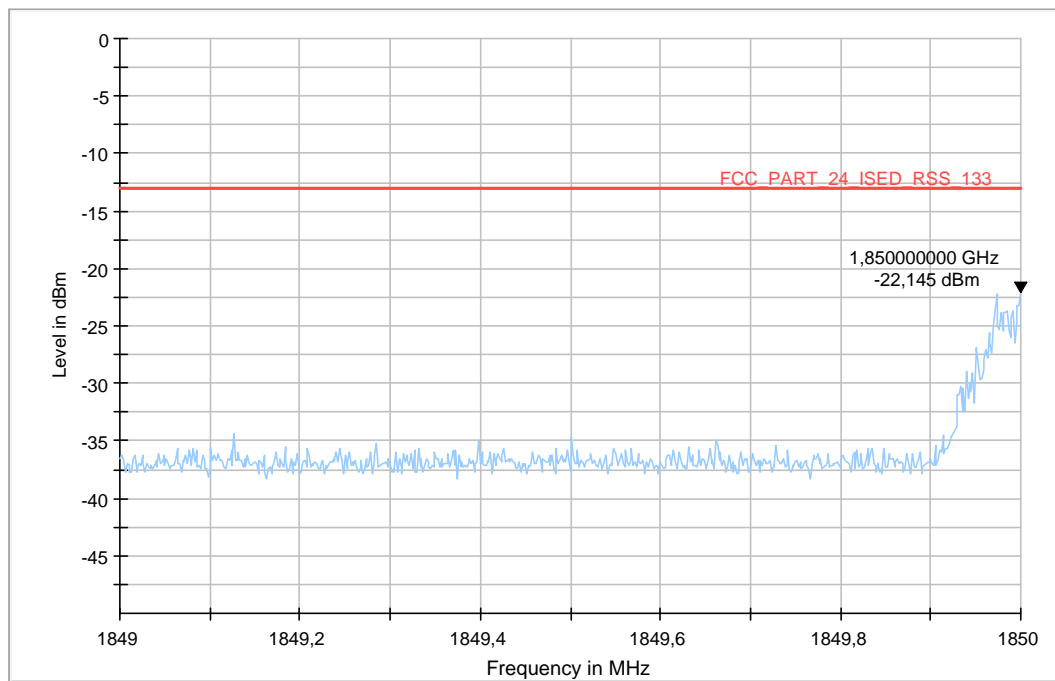
Common Information

Test Description:	Radiated Emission
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 24.238
Test Case:	Band Edge Compliance
Operating Mode:	GSM 1900_CH:512
Environmental Conditions:	Humidity : 40%rH; Temperature: 20°C
Operator:	Aho
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.7 9.1901_Band-Edge_Channel_810_UL_1909.8MHz

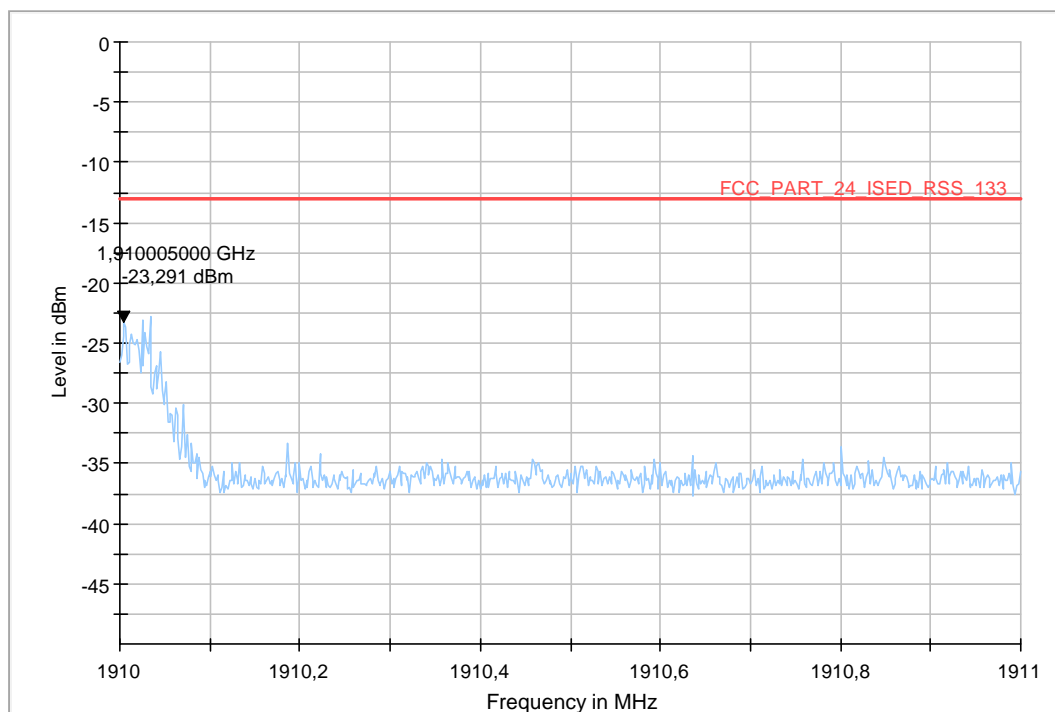
Common Information

Test Description:	Radiated Emission
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 24.238
Test Case:	Band Edge Compliance
Operating Mode:	GSM 1900_CH:810
Environmental Conditions:	Humidity : 40%rH; Temperature: 20°C
Operator:	Aho
EUT Setup:	1
Verdict:	Passed
Comment:	

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.8 9.850_Band-Edge_Channel_128_UL_824.2MHz

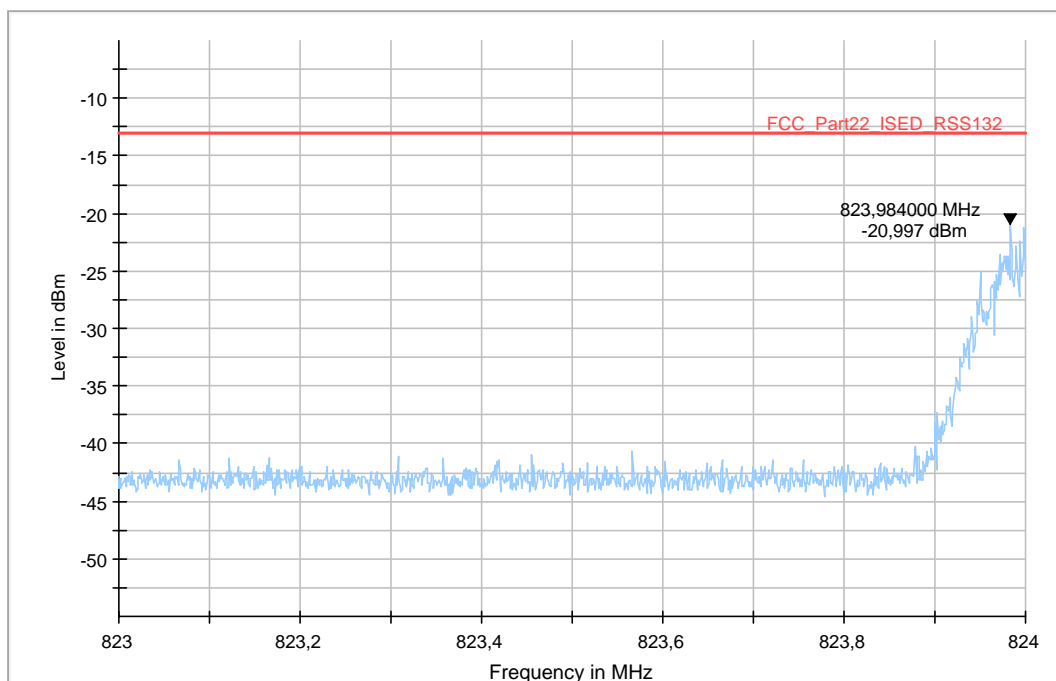
Common Information

Test Description:	Radiated Emission
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 22.917(a)
Antenna polarisation:	vertical / horizontal
Operating Mode:	GSM 850_CH:128
Operator:	Aho
Comment:	
Environmental Conditions:	Humidity : 40%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



1.9 9.851_Band-Edge_Channel_251_UL_848.8MHz

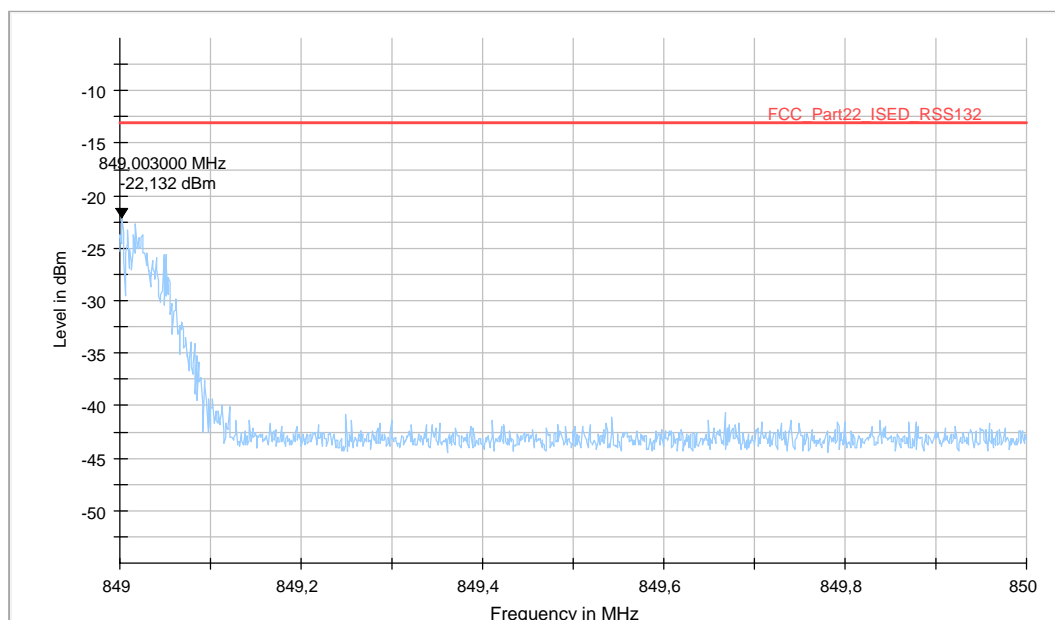
Common Information

Test Description:	Radiated emission related to 1m
Test Site:	Fully Anechoic Chamber (FAC1) - EMC32 V10.50.0
Test Standard:	FCC Part 22.917(a)
Antenna polarisation:	vertical / horizontal
Operating Mode:	GSM 850_CH:251
Operator:	Aho
Comment:	
Environmental Conditions:	Humidity : 40%rH; Temperature: 20°C
EUT Setup:	1
Verdict:	Passed

EUT Information

PMT number:	20-1-00607S223_C01
Manufacturer:	VALEO Telematik und Akustik GmbH

Full Spectrum



End Of Annex 1