



TEST REPORT nr. R12089001

Federal Communication Commission (FCC)

Industry Canada (IC)

Test item

Description.....: Transceiver Unit
Trademark.....: AUTECH
Model/Type.....: Model FJR Type NF022

Test Specification

Standard: FCC Rules & Regulations, Title 47 (2011) - Part 15 paragraph(s) : 247(a), 247(b),
247(c), 209 and 207
RSS-210 (2010) – Annex 8

Client's name.....: AUTECH S.r.l.

Address: Via Pomaroli, 65 - 36030 Caldogno (VI) - ITALY

Manufacturer's name.: Same as client

Address:

Report

Tested by: G. Gandini - *Technician*

Approved by.....: R. Beghetto - *Laboratory Manager*

Date of issue.....: 11.02.13

Contents: 80 pages

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The test results presented in this report relate only to the item tested.



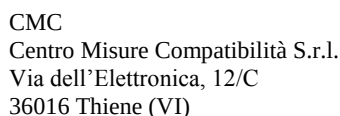
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1. Summary			
Standard: FCC Rules & Regulations, Title 47 RSS-210 (2007)			
Test specifications	Environmental Phenomena	Tests sequence	Result
FCC – Title 47 Part 15.203 and 15.204 IC – RSS-210	Antenna Requirement	1	Complies
FCC – Title 47 Part 15.247 IC – RSS-210 Annex 8	20 dB Bandwidth	2	Complies
IC – RSS-210 Annex 8	Occupied Bandwidth (99% BW)	3	Complies
FCC – Title 47 Part 15.247 IC – RSS-210 Annex 8	Channel Separation	4	Complies
FCC – Title 47 Part 15.247 IC – RSS-210 Annex 8	Time of Occupancy	5	Complies
FCC – Title 47 Part 15.247 IC – RSS-210 Annex 8	Number of Hopping Frequency	6	Complies
FCC – Title 47 Part 15.247 IC – RSS-210 Annex 8	Peak Output Power	7	Complies
FCC – Title 47 Part 15.247 IC – RSS-210 Annex 8	Band Edge	8	Complies
FCC – Title 47 Part 15.247 FCC – Title 47 Part 15.209 IC – RSS-210 Annex 8	Radiated Spurious	9	Complies

The Test Report was given to the Client representatives for necessary documentation of ratification of the tested equipment and it is valid for the FCC and IC certification.



Power supply..... : 7,2 Vdc from battery

Type of equipment : ☒ Transmitter Unit ☒ Receiver Unit
 ☒ Fixed station ☐ Portable station ☐ Mobile station

Alignment range..... : 915 - 928 MHz

Switching frequency : 915 - 928 MHz

Modulation : 19300 Baud RC-FSK

Information on antenna..... : ☐ Integrated
 ☐ Extern
 ☒ Other: Dedicated

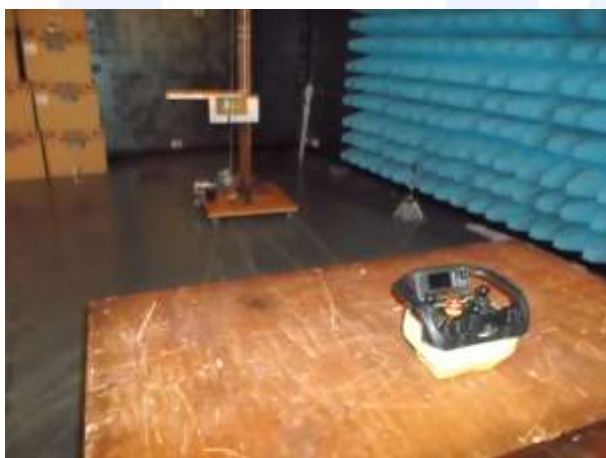
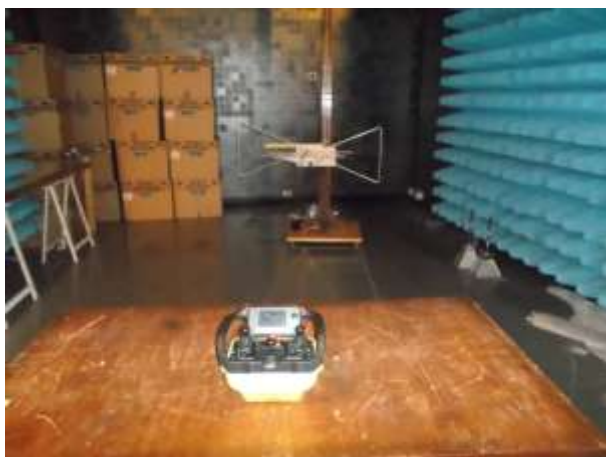
Company: CMC Centro Misure Compatibilità S.r.l.
Address: Via dell'Elettronica, 12/C – 36016 Thiene (VI) – ITALY

Date of receipt of test item	: 11.06.12
Testing start date.....	: 11.06.12
Testing end date.....	: 26.07.12
Samples tested nr.	: 1
Sampling procedure.....	: Equipment used for testing was picked up by the manufacturer, at the end of the production process with random criterion
Internal identification.....	: adhesive label with the product number P120639

—



5. Photograph(s) of EUT





6. Equipment list

<i>Id. number</i>	<i>Manufacturer</i>	<i>Model</i>	<i>Description</i>	<i>Serial number</i>	<i>Last calibration</i>	<i>Due date calibration</i>
CMC S108	Emco	3115	Horn antenna	9811-5622	April '10	April '13
CMC S124	Spin	AMTP42-20	Horn Antenna 18-26GHz	103	May '10	May '13
CMC S127	SCHAFFNER	HLA6120	Loop Antenna	1191	January '10	January '13
CMC S136	Schwarzbeck	VULB 9163	Broadband Antenna	9136-205	May '10	May '13
CMC S164	Rohde & Schwarz	ESU 26	EMC interference receiver	100052	January '12	January '13
CMC S206	Rohde & Schwarz	ESCI 7	EMC interference receiver	100781	March '12	March '13



7. Measurement uncertainty

Test	Expanded Uncertainty	note
Conducted Emission		
(50Ω/50μH AMN) - (9 kHz – 150 kHz)	±3.8 dB	1
(50Ω/50μH AMN) - (150 kHz – 30 MHz)	±3.4 dB	1
(Voltage probe) - (150 kHz – 30 MHz)	±3.0 dB	1
(50Ω/5μH AMN) - (150 kHz – 108 MHz)	±3.2 dB	1
Discontinuous Conducted Emission		
Conducted Emission (50Ω/50μH AMN) - (9 kHz – 150 kHz)	±3.8 dB	1
Conducted Emission (50Ω/50μH AMN) - (150 kHz – 30 MHz)	±3.4 dB	1
Disturbance Power (30 MHz – 300 MHz)		
	±3.2 dB	1
Radiated Emission		
(0,150 MHz – 30 MHz)	±4.5 dB	1
(30 MHz – 1000 MHz)	±4.8 dB	1
(1 GHz – 6 GHz)	±4.4 dB	1
Electromagnetic field EMF		
	±18.8 dB	1
Harmonic current emissions test		
	±2.4 %	1
Voltage fluctuation and flicker test		
	±6.0 %	1
Insertion loss test		
	±2.6 %	1
Radiated electromagnetic disturbance test (loop antenna)		
	±2.5 %	1
Radiated electromagnetic field immunity test		
	0.9 V/m at 3V/m	1
Pulse modulated radiated electromagnetic field immunity test		
	0.9 V/m at 3V/m	1
Injected currents immunity test		
	0.6 V at 3V	1
Bulk current		
	9 mA at 60 mA	1
Power frequency magnetic field immunity test		
	0.3 A/m at 3 A/m	1
Electrostatic discharge immunity test		
		2
Electrical fast transients / burst immunity test		
		2
Surge immunity test		
		2
Short interruption immunity test		
		2
Voltage transient emission test		
	±5 %	1
Transient immunity test		
		2

Notes

Note 1:

The expanded uncertainty reported according to EN55016-4-2(2004-10) is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of $p = 95\%$

Note 2:

It has been demonstrated that the used test equipment meets the specified requirements in the standard with at least a 95% confidence, covering factor $k = 2$.



8. Reference documents

Reference no.	Description
FCC Rules and Regulation Title 47 part 15 (2011)	--
RSS-210 Issue 7 – June 2010	Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment
ANSI C63.4	American National Standard for Methods of Measuring of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz – 40GHz
Internal Procedure PM001 rev. 2.0 (Quality Manual)	Measure Procedure
Internal procedure INC_M rev. 8.1 (Quality Manual)	Measurement uncertainty calculation



9. Deviation from test specification

In agreement with the client, emission tests were performed with peak detector .
At the frequencies where the measures exceed the limit or within 6dB from it, the test was repeated with quasi-peak detector and/or average detector.

10. Test case verdicts

Test case does not apply to the test object..... : N / N.A.

Test item does meet the requirement..... : P / Pass / Complies

Test item does not meet the requirement..... : F / Fail / Does not comply

Test not performed : NE / Not Executed

11. Results

In this clause tests results are reported.

All measurements are done in accordance with the Filling and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems DA-705

Measurement uncertainty is in accordance with document CMC INC_M rev. 8.1.



11.1 Antenna Requirements

Test configuration and test method

Test site

Laboratory

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 22 °C

Atmospheric pressure 100 kPa

Relative humidity 49 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.203 and 15.204
- RSS-210
- Internal Procedure PM001
- See clause 4 of this test report

Test Requirements

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

The use of a permanently attached antenna or of an antenna that uses unique coupling to the intentional radiator shall be considered sufficient comply with the provisions of this section.

The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

Test specification

Port: Antenna.

EUT exercising

See clause 4 of this test report

Result

Antenna Type	Gain	Remarks	Results
Dedicated	2 dBi	--	Complies

Remarks

//////////

Reference documents

See clause 8 of this test report

Result

The requirements are met



11.2 20dB Bandwidth

Test configuration and test method

Test site

Laboratory

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 24 °C

Atmospheric pressure 98 kPa

Relative humidity 46 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- RSS-210 Annex 8
- DA 00-705, march 30, 2000
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Result

Frequency	Graph(s)	Bandwidth	Remark
927,95 MHz	G12089037	22,2 kHz	--
921,50 MHz	G12089041	20,7 kHz	--
915,05 MHz	G12089046	22,3 kHz	--
Measurement uncertainty: ± 1 kHz			

Remarks

//////////

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result

The requirements are met



11.3 Occupied Bandwidth (99% BW)

Test configuration and test method

Test site

Laboratory

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 20 °C

Atmospheric pressure 98 kPa

Relative humidity 46 %

Test set-up and execution

- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Result

Frequency (MHz)	Graph(s)	Bandwidth	Remark
927,95 MHz	G12089039	28,4 kHz	
921,50 MHz	G12089043	26,6 kHz	
915,05 MHz	G12089048	26,9 kHz	
Measurement uncertainty: ± 1 kHz			

Remarks

//////////

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result

The requirements are met



11.4 Channel Separation

Test configuration and test method

Test site

Laboratory

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 22 °C

Atmospheric pressure 98 kPa

Relative humidity 48 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Acceptance limits

Limit: Minimum 25kHz or the 20dB Bandwidth of the hopping system

Result

Port	Graph(s)	Channel Separation	Remark
Enclosure	G12089062	205,9 kHz	--
Measurement uncertainty: ± 1 kHz			

Remarks

//////////

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result

The requirements are met



11.5 Time of Occupancy

Test configuration and test method

Test site

Laboratory

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 22 °C

Atmospheric pressure 98 kPa

Relative humidity 48 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Acceptance limits

The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period.

Result

Frequency (MHz)	Graph(s)	Dwell time	Remark
921,024	G12089063	20,3 ms	--

Frequency (MHz)	Time between two transmission	Nr. of hopping frequency	Nr. of transmission for channel	Time of Occupancy	Remarks
921,024	50,1 ms	64	$20s/0,0501/64 = 6,24$	$6,24 \times 20,3 = 126,7$ ms	--

Remarks //

Reference documents See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result The requirements are met



11.6 Number of Hopping Channels

Test configuration and test method

Test site

Auxiliary equipment

Laboratory

See clause 4 of this test report

Environmental conditions

Temperature 22 °C Atmospheric pressure 98 kPa Relative humidity 48 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Result

Port	Graph(s)	Number of Hopping Frequency	Remark
Enclosure	G12089059 G12089060 G12089061	64	--

Remarks

//////////

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result

The requirements are met



11.7 Peak Output Power

Test configuration and test method

Test site

Auxiliary equipment

Laboratory

See clause 4 of this test report

Environmental conditions

Temperature 22 °C Atmospheric pressure 99 kPa Relative humidity 48 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Acceptance limits

Frequency range	RF power output
915 – 928 MHz	1,0 W / 30dBm

Result

Frequency (MHz)	Polarization	Graphs	E (dBμV/m)	Peak Output Power (mW)	Remark
915,05	Horizontal	G12089031	106,12	7,6	--
915,05	Vertical	G12089032	110,73	21,9	--
921,50	Horizontal	G12089033	106,32	8,4	--
921,50	Vertical	G12089034	110,94	23,3	--
927,95	Horizontal	G12089035	105,93	7,6	--
927,95	Vertical	G12089036	110,02	19,4	--

Measurement uncertainty: ±3dBm



Remarks

$$P = (E \times d)^2 / (30 \times G)$$

Where:

E = the measured maximum fundamental field strength in V/m

G = the numeric gain of the transmitting antenna: 1,58 (2dBi)

d = the distance in meters from which the field strength was measured (3m)

P = the power in watts

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result

The requirements are met



11.8 Band Edge

Test configuration and test method

Test site

Laboratory

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 22 °C

Atmospheric pressure 99 kPa

Relative humidity 48 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Acceptance limits

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in section 15.209(a) is not required. In addition, radiated emission which fall in the restricted bands, as defined in section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (see section 15.205(c)).

Result

Frequency (MHz)	Graph(s)	Remark
915,05	G12089050	No Hopping
	G12089051	No Hopping
927,95	G12089052	No Hopping
	G12089053	No Hopping
915,05	G12089055	Hopping
	G12089057	Hopping
927,95	G12089056	Hopping
	G12089058	Hopping
--	G12089054	Hopping
Measurement uncertainty: ± 1 dB		



CMC
Centro Misure Compatibilità S.r.l.
Via dell'Elettronica, 12/C
36016 Thiene (VI)

Remarks

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Reference documents

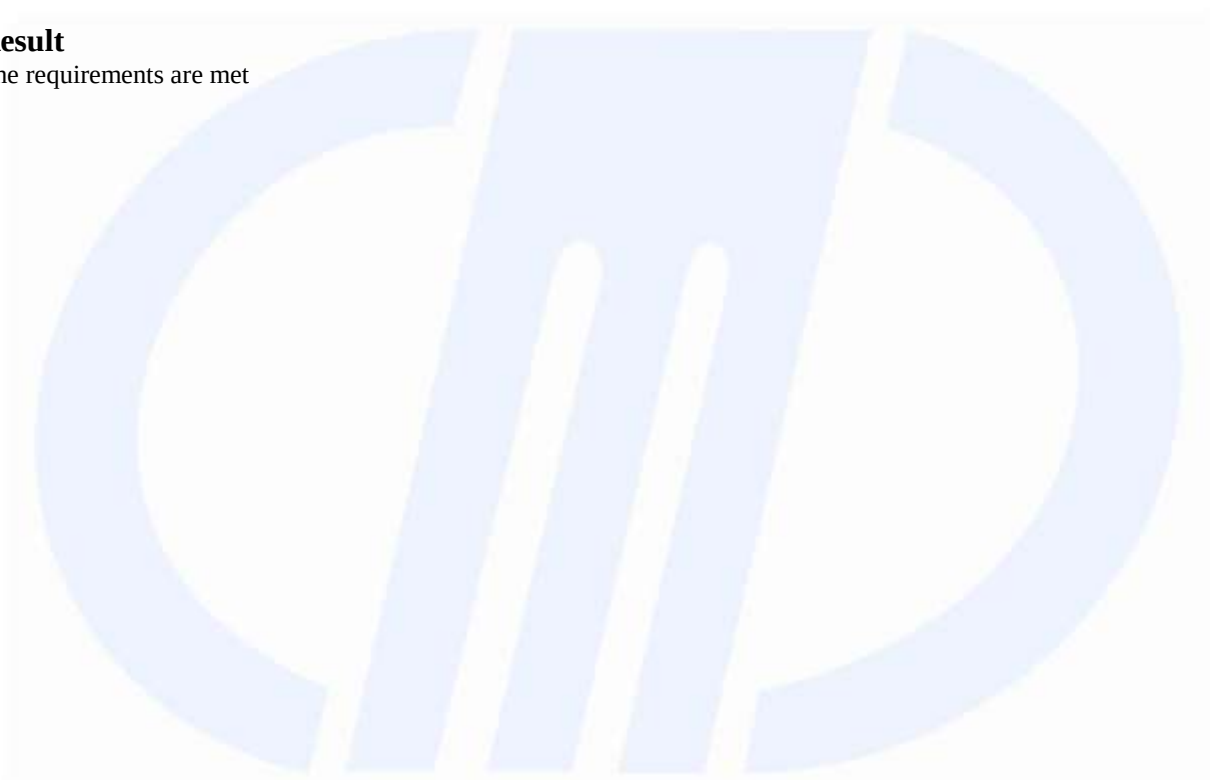
See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S206

Result

The requirements are met



CMC Centro Misure Compatibilità S.r.l.



11.9 Radiated Spurious (Transmitter)

Test configuration and test method

Test site

Semi-anechoic chamber

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 22 °C Atmospheric pressure 99 kPa Relative humidity 48 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.247(c) and Part 15.209
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Acceptance limits

In any 100kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in cl. 15.205(a), must also comply with the radiated emission limits specified in cl. 15.209(a) (see cl.15.205(c)).

Result

Frequency (MHz)	Antenna	Frequency Range (MHz)	Graph(s)	Remarks	Result
915,05	Loop Antenna	9kHz – 30MHz	G12089016	--	Complies
921,50	Loop Antenna	9kHz – 30MHz	G12089017	--	Complies
927,95	Loop Antenna	9kHz – 30MHz	G12089018	--	Complies

Frequency (MHz)	Polarization	Frequency Range (MHz)	Graph(s)	Remarks	Result
915,05	Vertical	30 – 1000	G12089001	--	Complies
915,05	Horizontal	30 – 1000	G12089002	--	Complies
921,50	Horizontal	30 – 1000	G12089003	--	Complies
921,50	Vertical	30 – 1000	G12089004	--	Complies
927,95	Vertical	30 – 1000	G12089005	--	Complies
927,95	Horizontal	30 – 1000	G12089006	--	Complies

Frequency (MHz)	Polarization	Frequency Range (GHz)	Graph(s)	Remarks	Result
927,95	Horizontal	1 - 10	G12089019	--	Complies
927,95	Vertical	1 – 10	G12089020	--	Complies
921,50	Vertical	1 – 10	G12089021	--	Complies
921,50	Horizontal	1 – 10	G12089022	--	Complies
915,05	Horizontal	1 – 10	G12089023	--	Complies
915,05	Vertical	1 - 10	G12089024	--	Complies



Nr.	AV level (dBμV/m)						AV Limits	Remark
Harmonics	915,05 MHz		921,5 MHz		927,95 MHz		(dBμV/m)	
	Frequency	(dBμV/m)	Frequency	(dBμV/m)	Frequency	(dBμV/m)		
II Harmonic	1830,083	53,1	1842,951	52,1	1855,923	52,1	54,00	--
III Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
IV Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
V Harmonic	4575,041	50,0	4607,423	47,8	4639,865	47,6	54,00	--
VI Harmonic	5490,426	50,0	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
VII Harmonic	6405,331	51,0	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
VIII Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
IX Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
X Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	54,00	--
Measurement Uncertainty: ±4dB								

Nr.	PK level (dBμV/m)						PK Limits	Remark
Harmonics	915,05 MHz		921,5 MHz		927,95 MHz		(dBμV/m)	
	Frequency	(dBμV/m)	Frequency	(dBμV/m)	Frequency	(dBμV/m)		
II Harmonic	1830,083	54,7	1842,951	53,6	1855,923	54,3	74,00	--
III Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
IV Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
V Harmonic	4575,041	53,8	4607,423	52,7	4639,865	52,6	74,00	--
VI Harmonic	5490,426	54,7	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
VII Harmonic	6405,331	54,4	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
VIII Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
IX Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
X Harmonic	--	More than 15dB below limit	--	More than 15dB below limit	--	More than 15dB below limit	74,00	--
Measurement Uncertainty: ±4dB								



Remarks

EUT was tested in 3 orthogonal planes. In results table are reported the worst case.

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

CMC S108, CMC S124, CMC S127, CMC S136, CMC S164

Measurement uncertainty: See clause 7 of this test report

Result

The requirements are met





11.10 Radiated Spurious (Receiver)

Test configuration and test method

Test site

Semi-anechoic chamber

Auxiliary equipment

See clause 4 of this test report

Environmental conditions

Temperature 20 °C

Atmospheric pressure 98 kPa

Relative humidity 50 %

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.209
- DA 00-705, march 30, 2000
- RSS-210 Annex 8
- Internal Procedure PM001
- See clause 4 of this test report

Test specification

Port: Antenna;

EUT exercising

See clause 4 of this test report

Acceptance limits

In any 100kHz bandwidth outside the frequency band at least 20dB below the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, as defined in cl. 15.205(a), must also comply with the radiated emission limits specified in cl. 15.209(a) (see cl.15.205(c)).

Result

Frequency (MHz)	Antenna	Frequency Range (MHz)	Graph(s)	Remarks	Result
915,05	Loop Antenna	9kHz – 30MHz	G12089013	--	Complies
921,50	Loop Antenna	9kHz – 30MHz	G12089014	--	Complies
927,95	Loop Antenna	9kHz – 30MHz	G12089015	--	Complies

Frequency (MHz)	Polarization	Frequency Range (MHz)	Graph(s)	Remarks	Result
927,95	Horizontal	30 – 1000	G12089007	--	Complies
927,95	Vertical	30 – 1000	G12089008	--	Complies
921,50	Vertical	30 – 1000	G12089009	--	Complies
921,50	Horizontal	30 – 1000	G12089010	--	Complies
915,05	Horizontal	30 – 1000	G12089011	--	Complies
915,05	Vertical	30 – 1000	G12089012	--	Complies

Frequency (MHz)	Polarization	Frequency Range (GHz)	Graph(s)	Remarks	Result
927,95	Horizontal	1 - 10	G12089025	--	Complies
927,95	Vertical	1 – 10	G12089026	--	Complies
921,50	Vertical	1 – 10	G12089027	--	Complies
921,50	Horizontal	1 – 10	G12089028	--	Complies
915,05	Horizontal	1 – 10	G12089029	--	Complies
915,05	Vertical	1 - 10	G12089030	--	Complies



Remarks

EUT was tested in 3 orthogonal planes. In results table are reported the worst case.

Reference documents

See clause 8 of this test report

Test equipment used (Id number – see clause 6 of this test report)

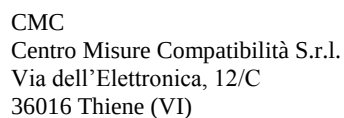
CMC S108, CMC S124, CMC S127, CMC S136, CMC S164

Measurement uncertainty: See clause 7 of this test report

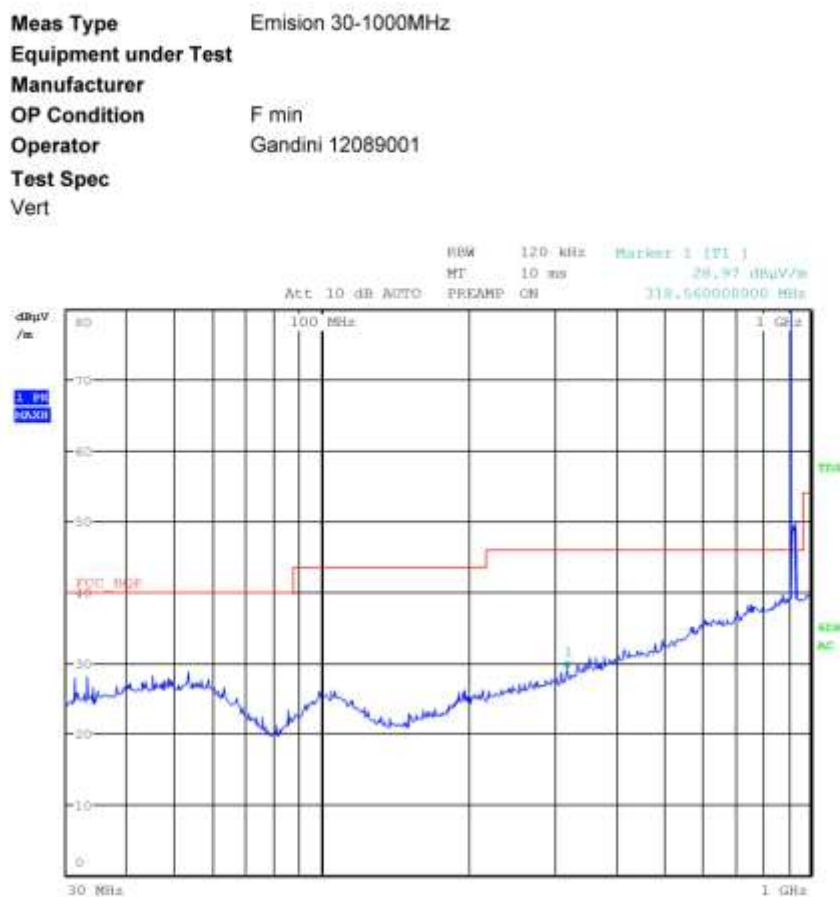
Result

The requirements are met





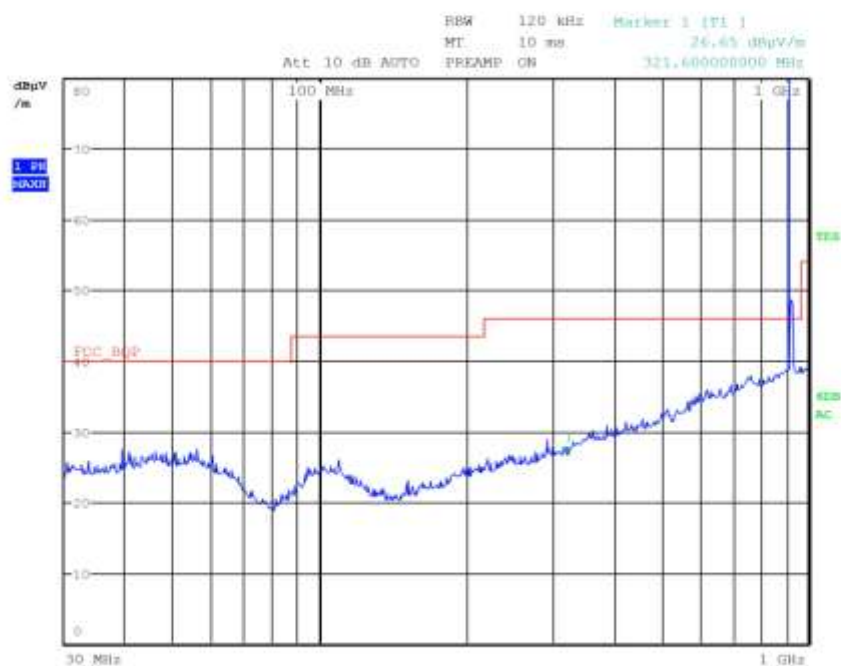
G12089001





G12089002

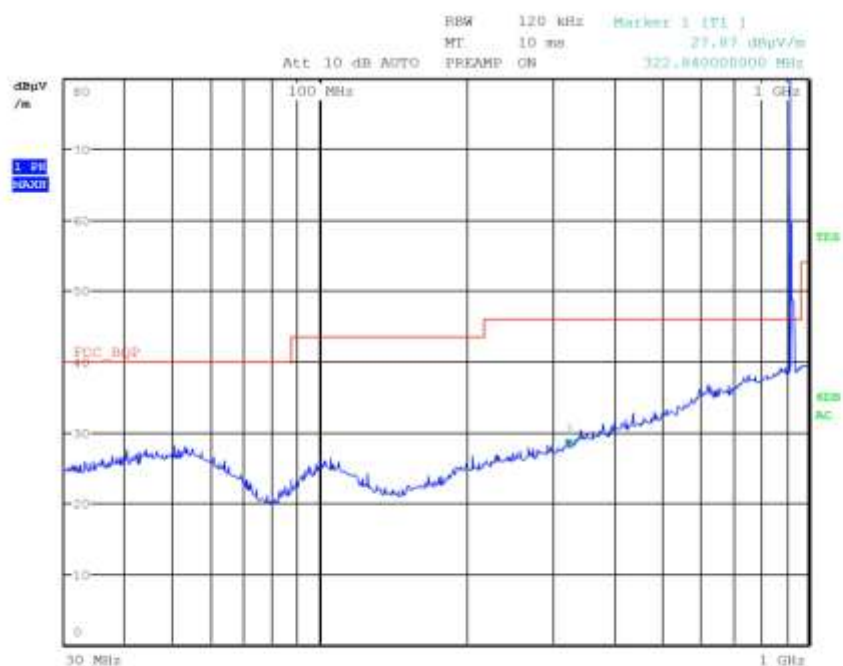
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089002
Test Spec
Horiz





G12089003

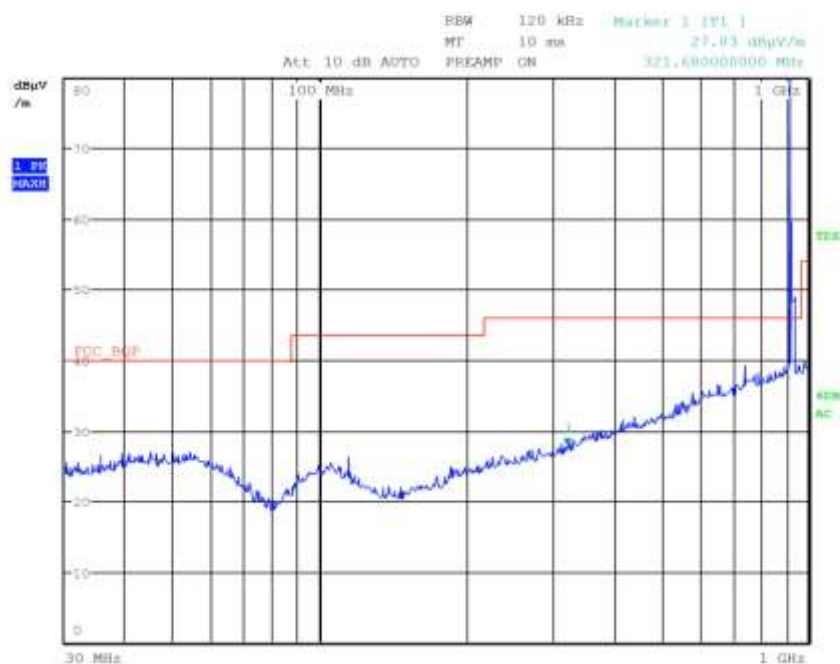
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089003
Test Spec
Horiz





G12089004

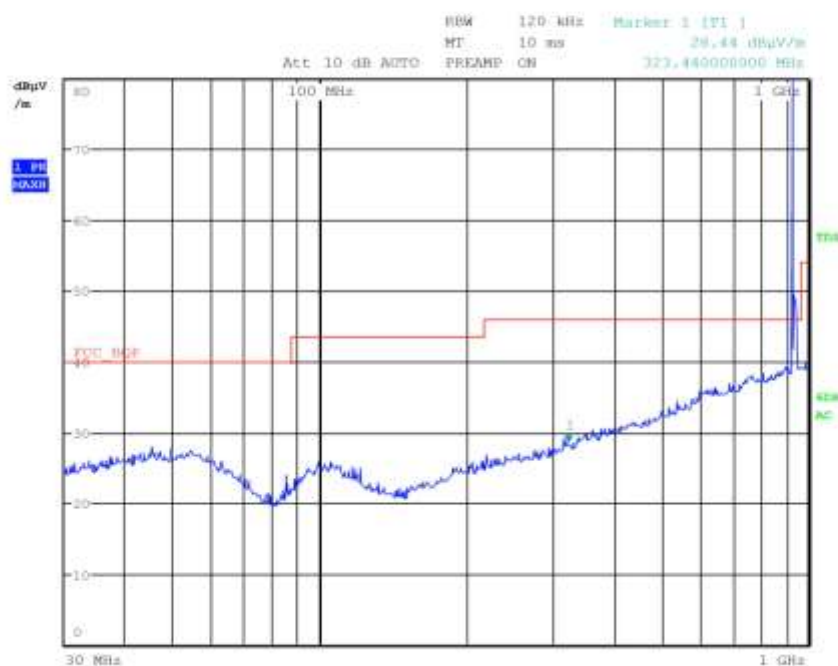
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089004
Test Spec
Vert





G12089005

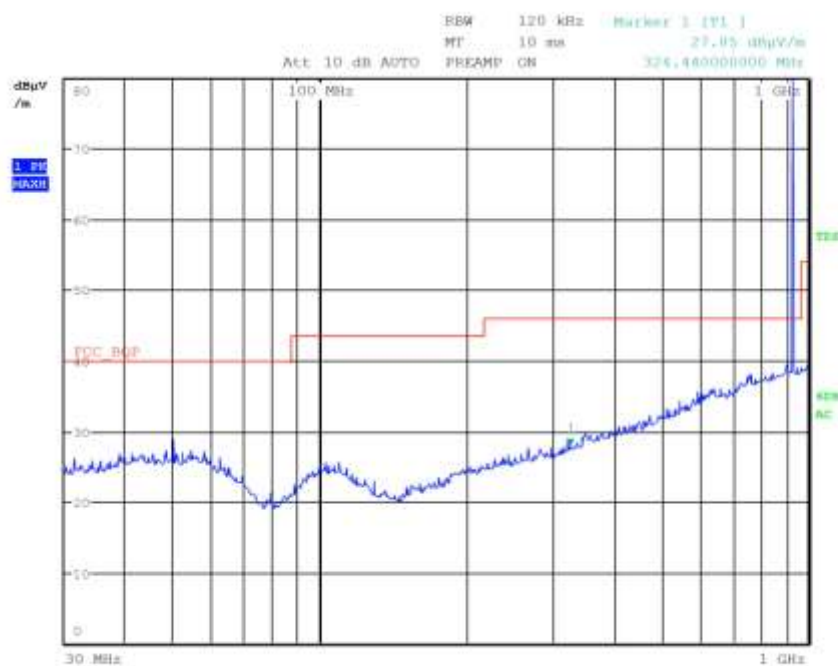
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089005
Test Spec
Vert

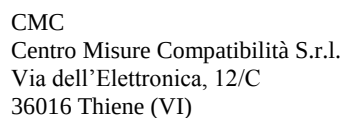




G12089006

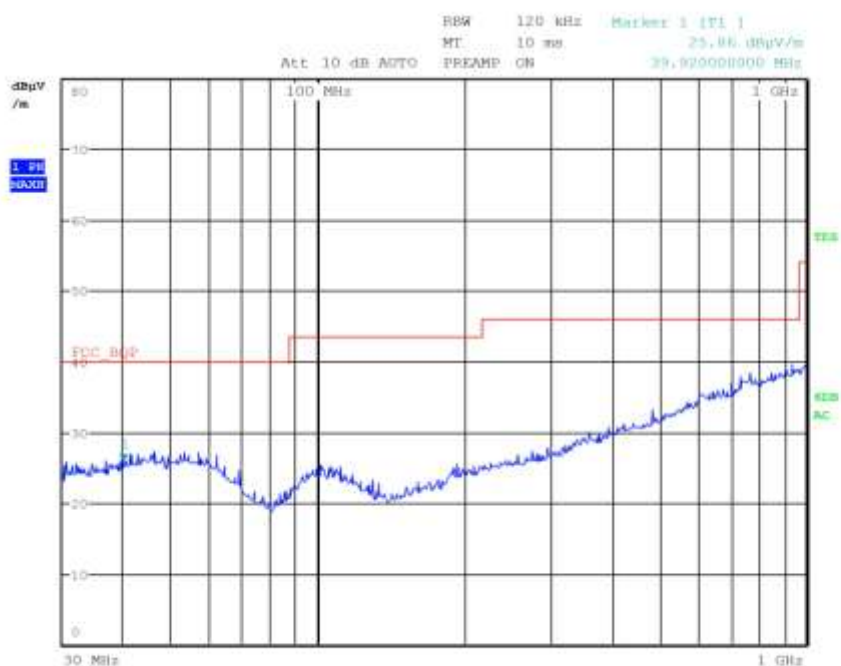
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089006
Test Spec
Horiz

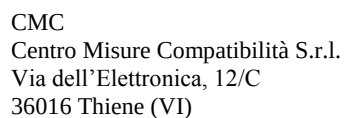




G12089007

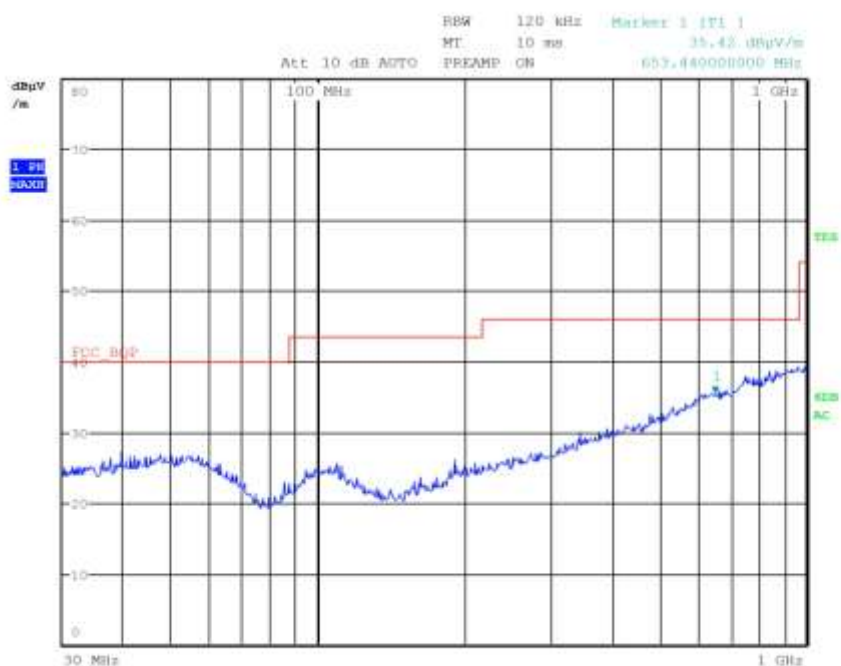
Meas Type	Emission 30-1000MHz
Equipment under Test	
Manufacturer	
OP Condition	In Rx - F max
Operator	Gandini 12089007
Test Spec	
Horiz	





G12089008

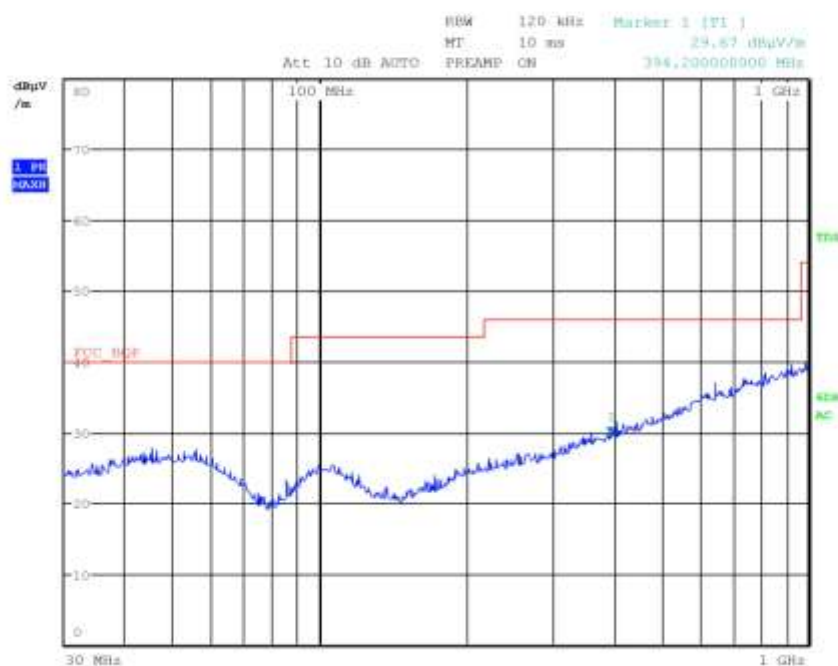
Meas Type	Emission 30-1000MHz
Equipment under Test	
Manufacturer	
OP Condition	In Rx - F max
Operator	Gandini 12089008
Test Spec	
Vert	





G12089009

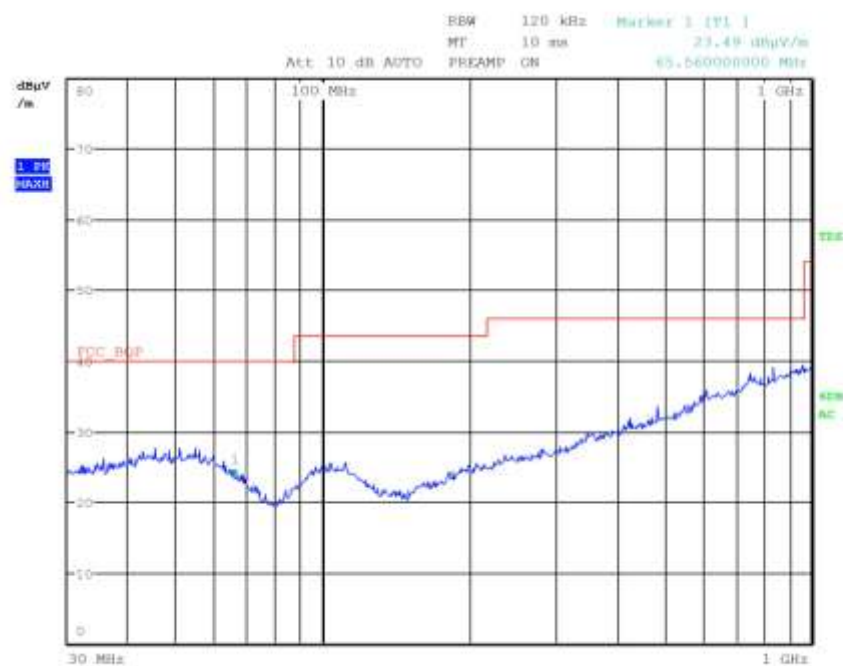
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F med
Operator Gandini 12089009
Test Spec
Vert





G12089010

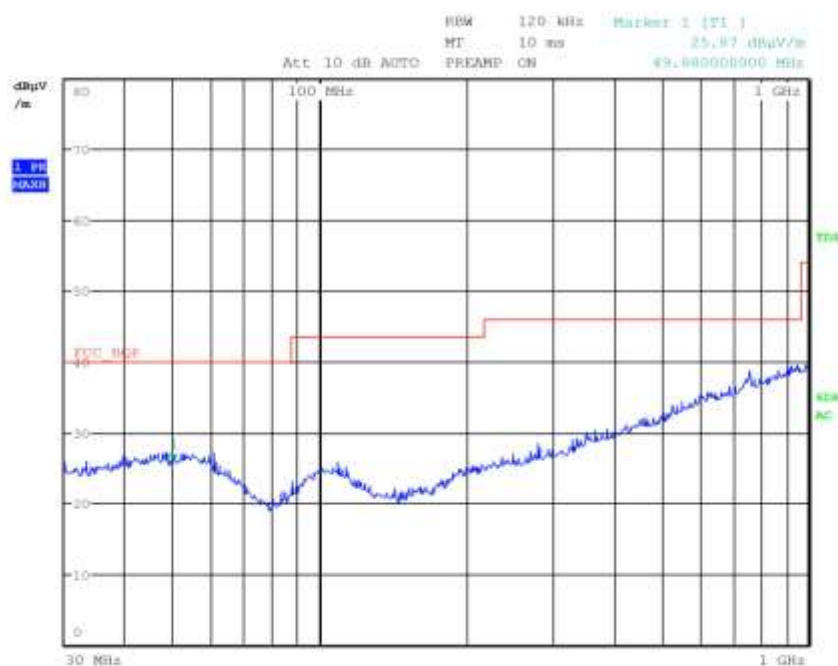
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F med
Operator Gandini 12089010
Test Spec
Horiz

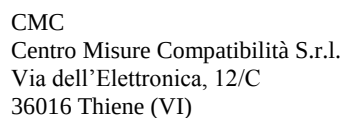




G12089011

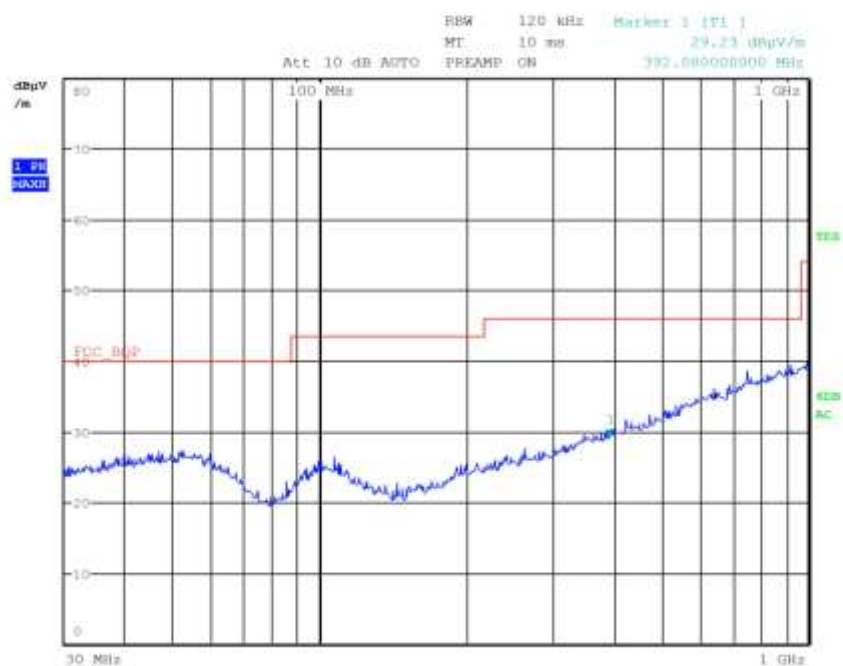
Meas Type Emission 30-1000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F min
Operator Gandini 12089011
Test Spec
Horiz

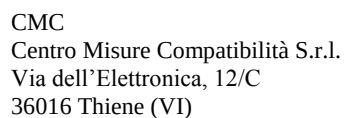




G12089012

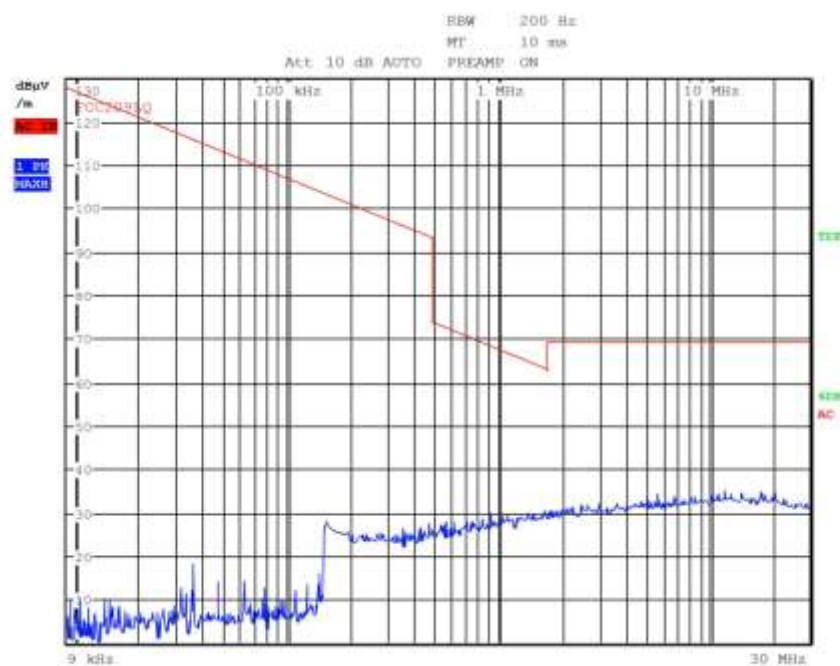
Meas Type	Emission 30-1000MHz
Equipment under Test	
Manufacturer	
OP Condition	In Rx - F min
Operator	Gandini 12089012
Test Spec	
Vert	





G12089013

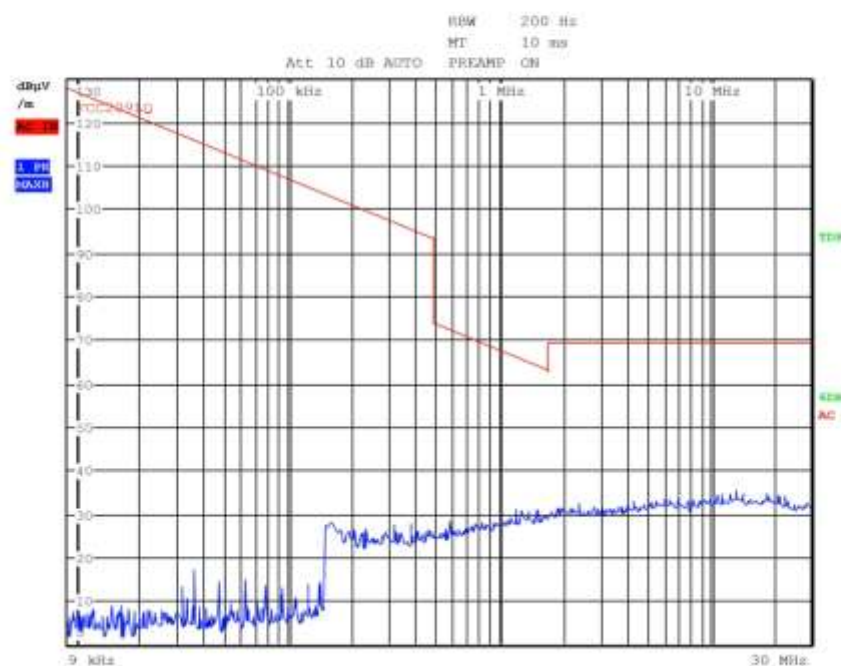
Meas Type	Emission 0.009-30MHz
Equipment under Test	
Manufacturer	
OP Condition	In Rx - F min
Operator	Gandini 12089013
Test Spec	
Loop	





G12089014

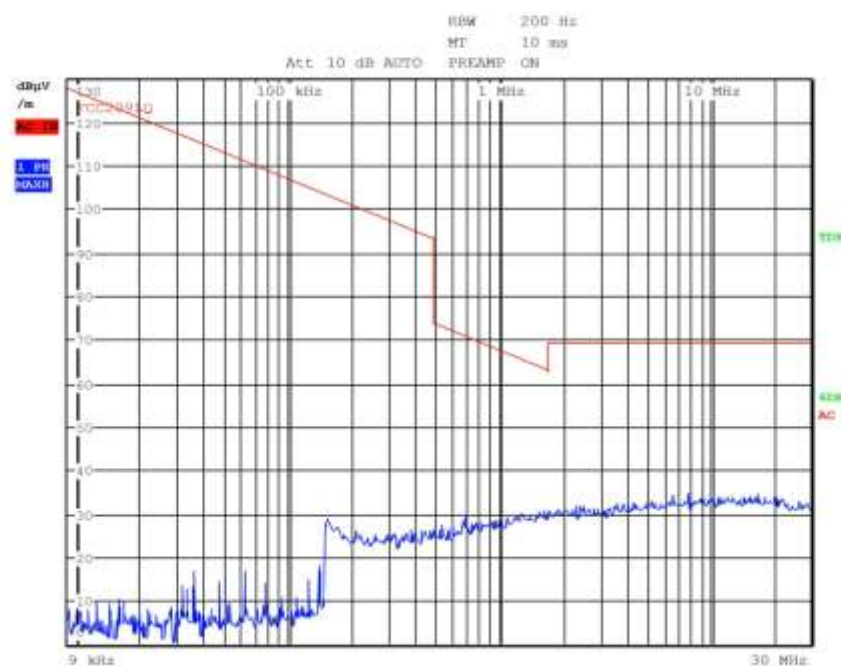
Meas Type Emission 0.009-30MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F med
Operator Gandini 12089014
Test Spec
Loop





G12089015

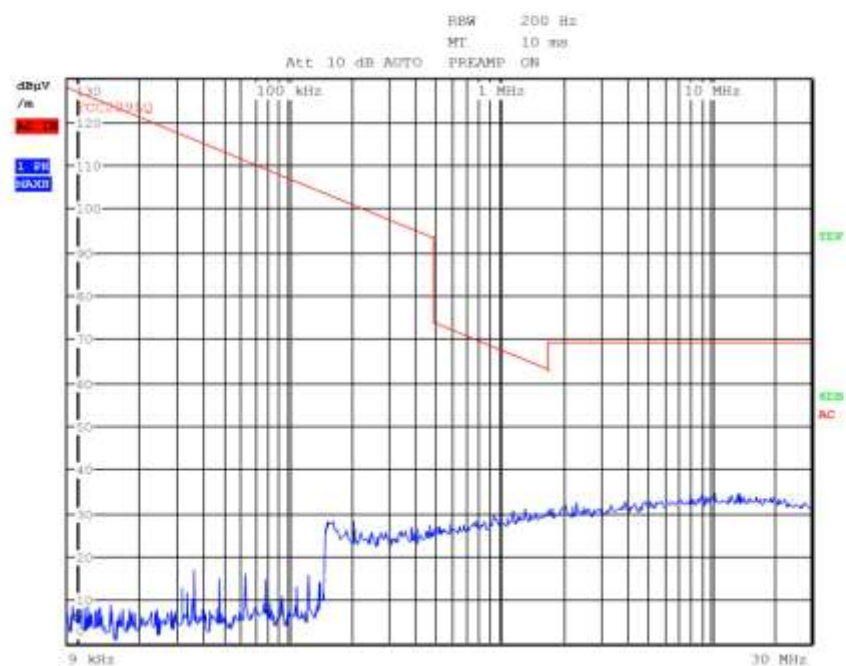
Meas Type Emission 0.009-30MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F max
Operator Gandini 12089015
Test Spec
Loop





G12089016

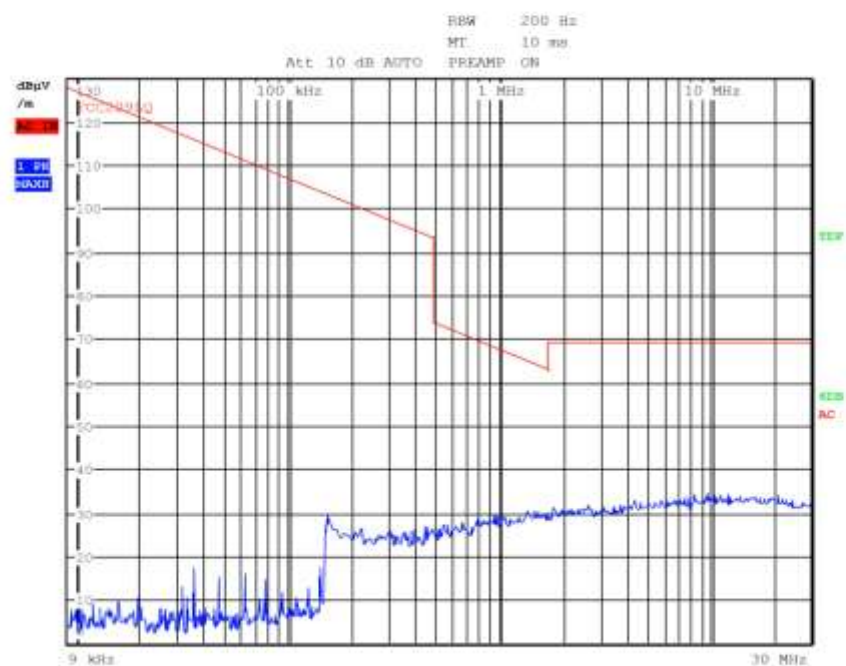
Meas Type Emission 0.009-30MHz
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089016
Test Spec
Loop





G12089017

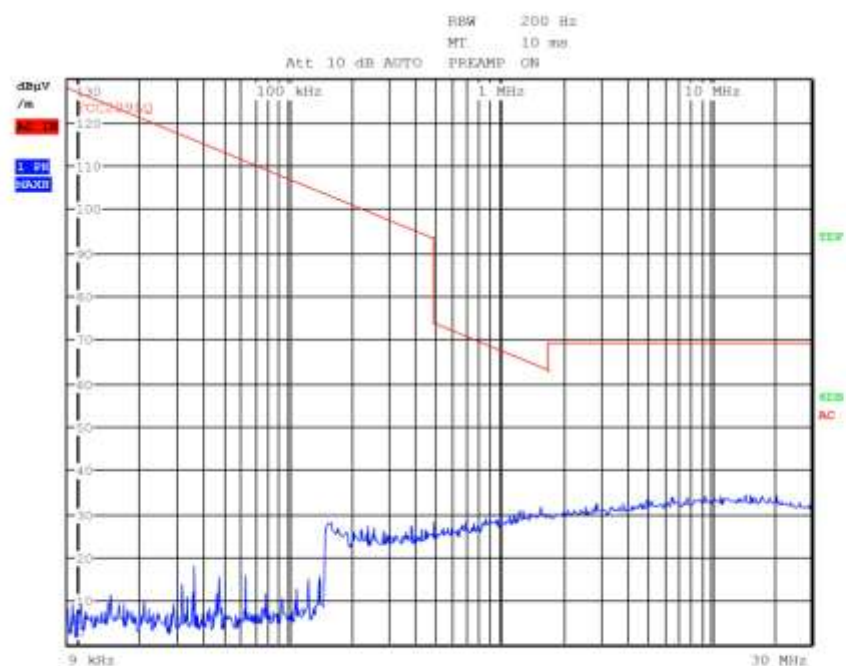
Meas Type Emission 0.009-30MHz
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089017
Test Spec
Loop





G12089018

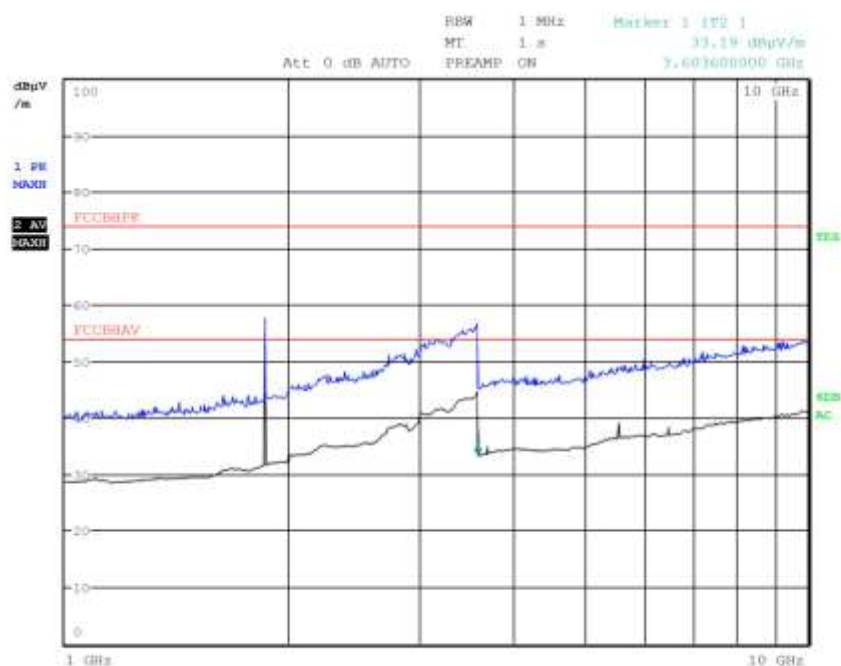
Meas Type Emission 0.009-30MHz
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089018
Test Spec
Loop





G12089019

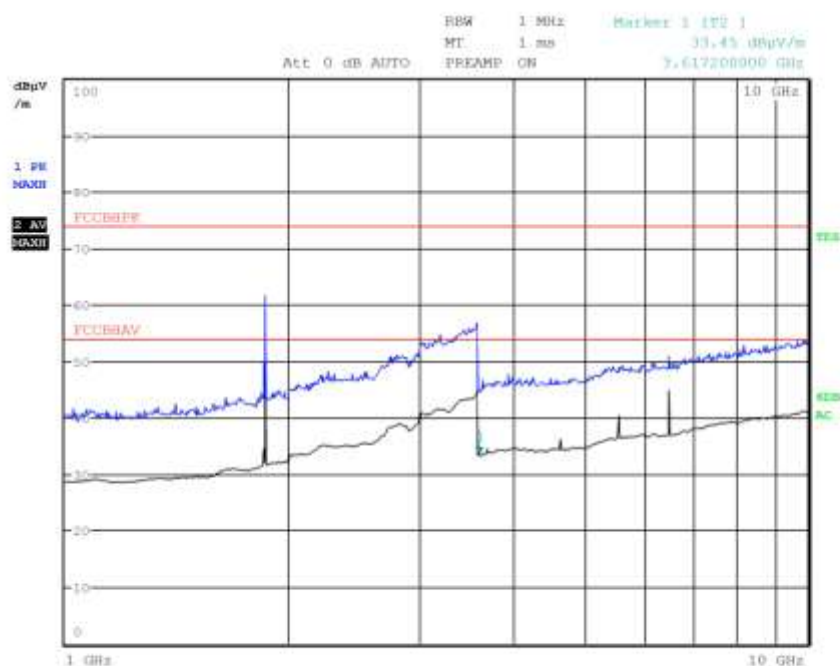
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089019
Test Spec
Horiz





G12089020

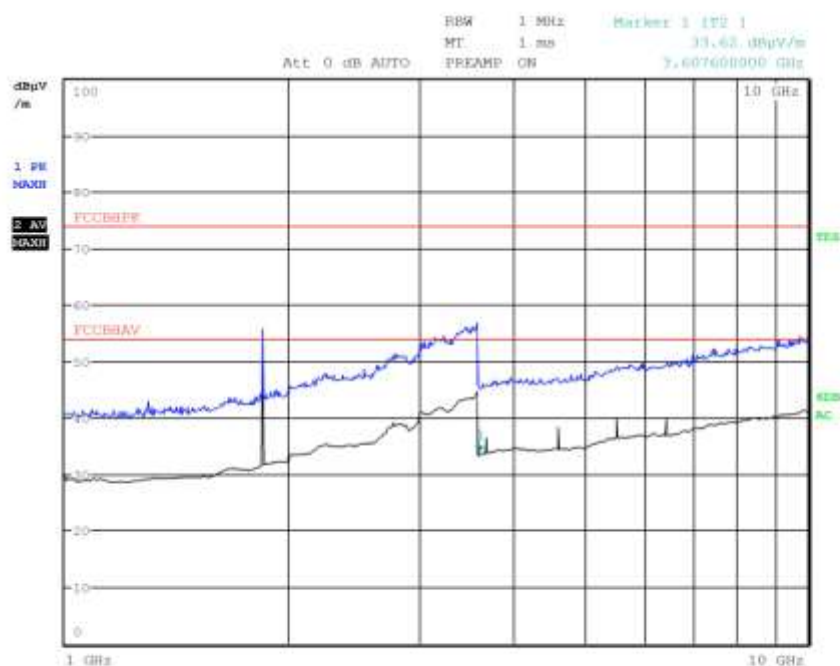
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089020
Test Spec
Vert





G12089021

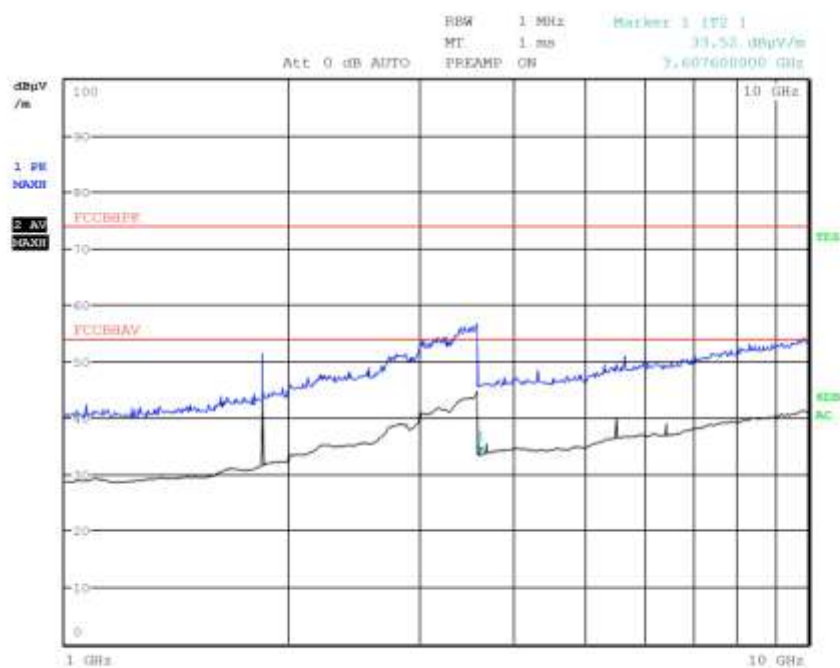
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089021
Test Spec
Vert





G12089022

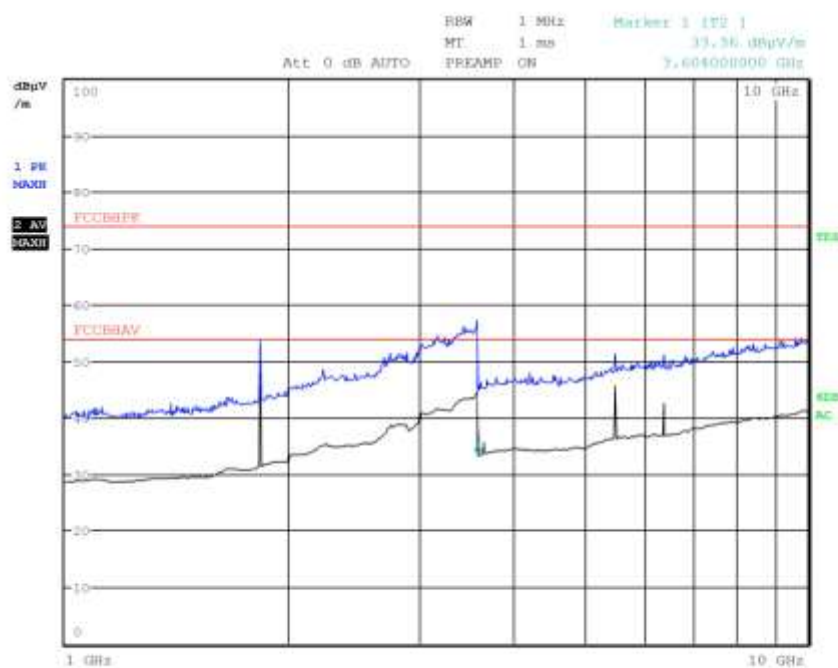
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089022
Test Spec
Horiz





G12089023

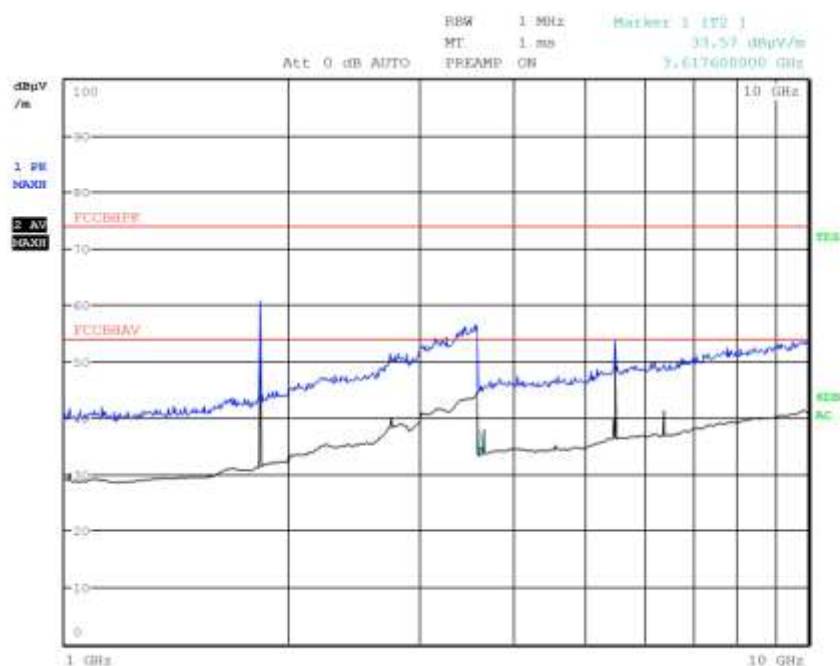
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089023
Test Spec
Horiz





G12089024

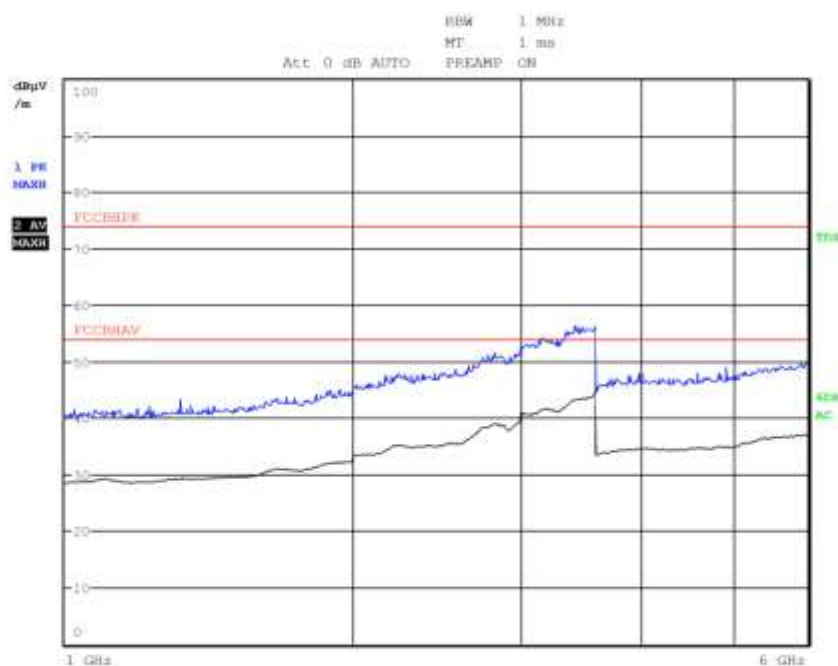
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089024
Test Spec
Vert





G12089025

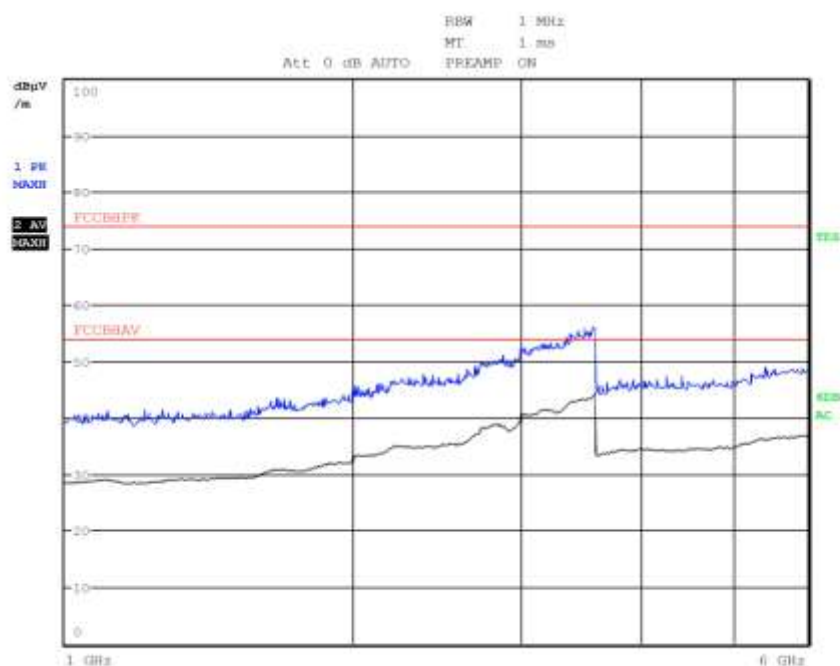
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F min
Operator Gandini 12089025
Test Spec
Vert





G12089026

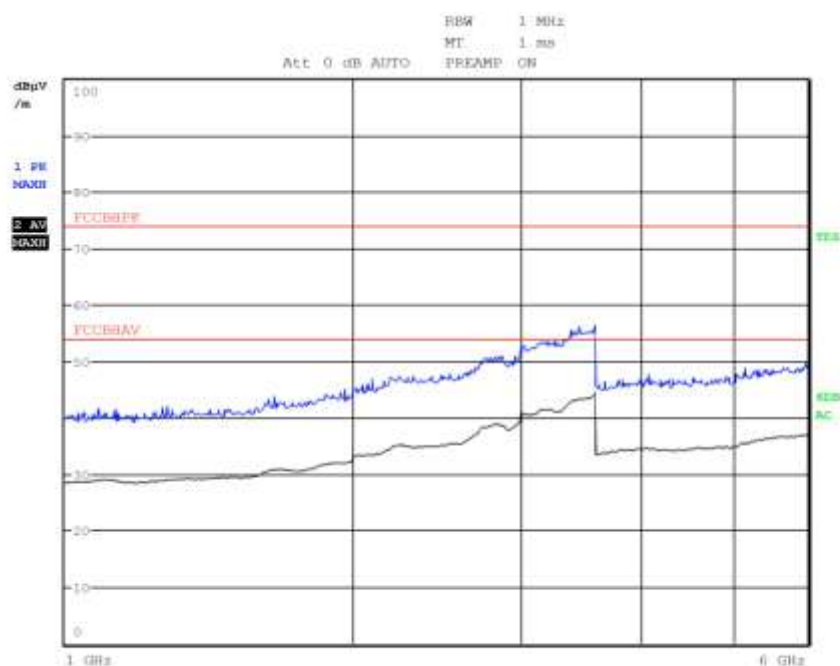
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F min
Operator Gandini 12089026
Test Spec
Horiz





G12089027

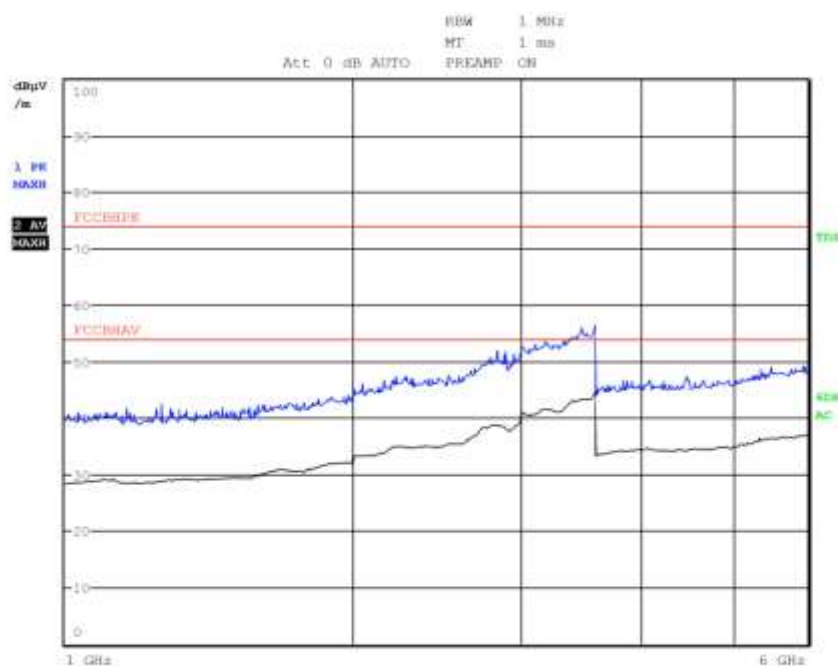
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F med
Operator Gandini 12089027
Test Spec
Horiz





G12089028

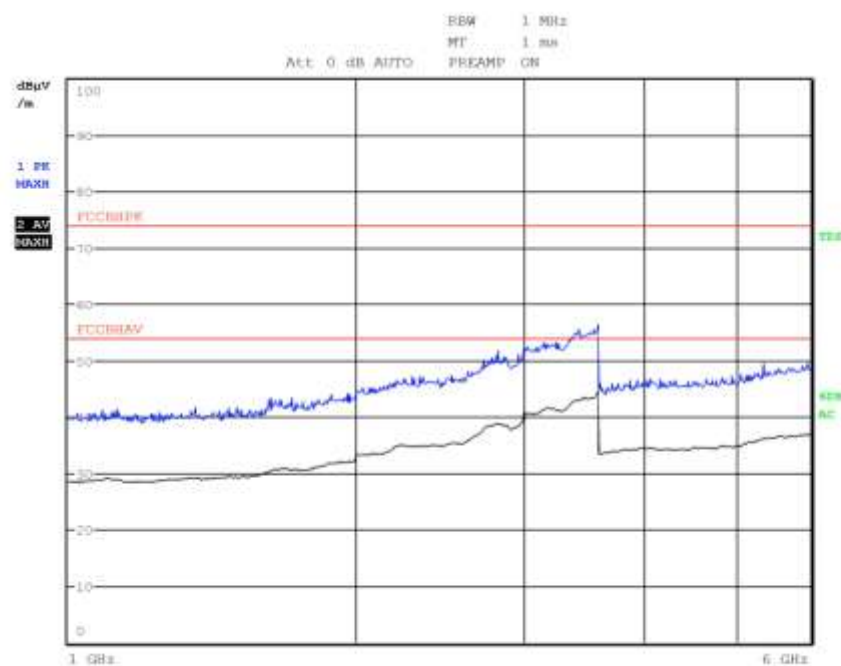
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F med
Operator Gandini 12089028
Test Spec
Vert





G12089029

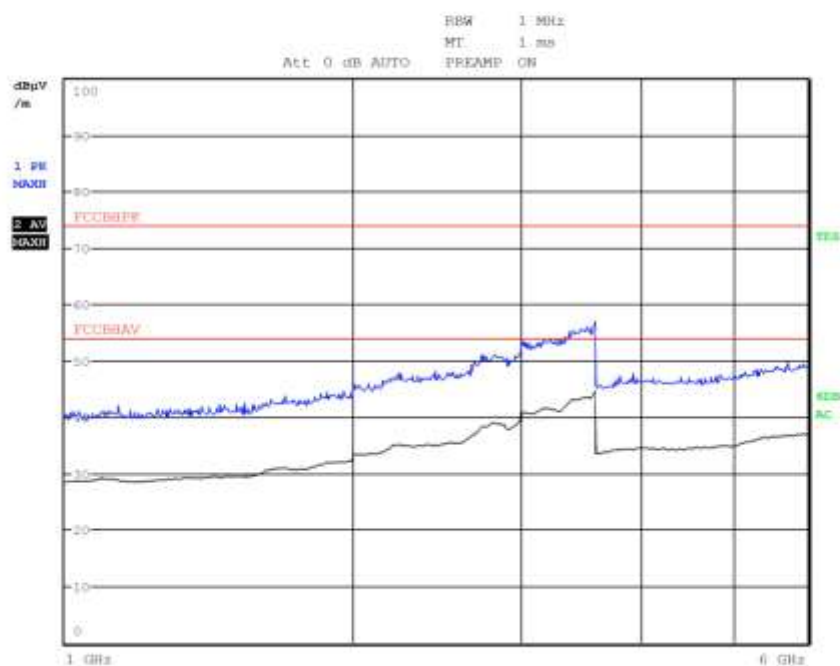
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F max
Operator Gandini 12089029
Test Spec
Vert





G12089030

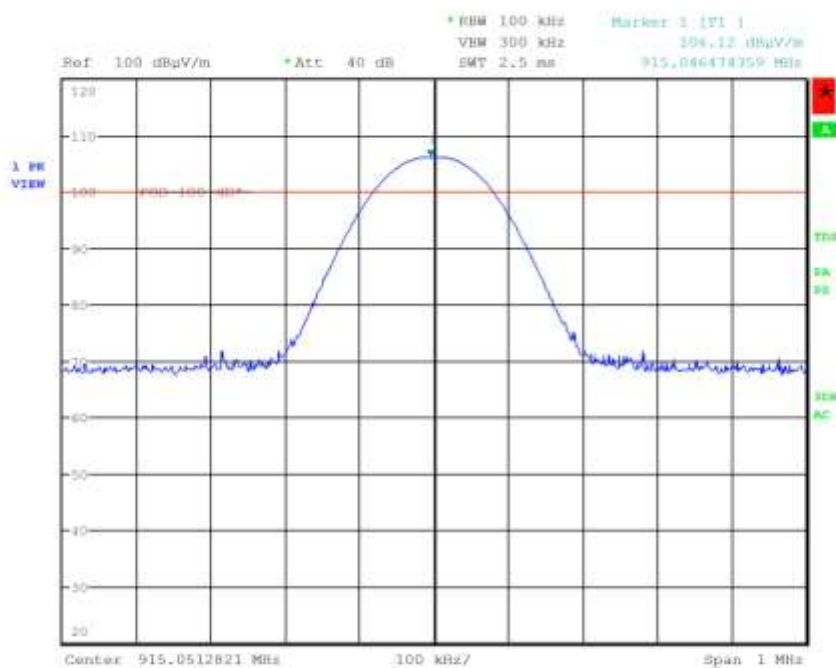
Meas Type Emission 1000-10000MHz
Equipment under Test
Manufacturer
OP Condition In Rx - F max
Operator Gandini 12089030
Test Spec
Horiz





G12089031

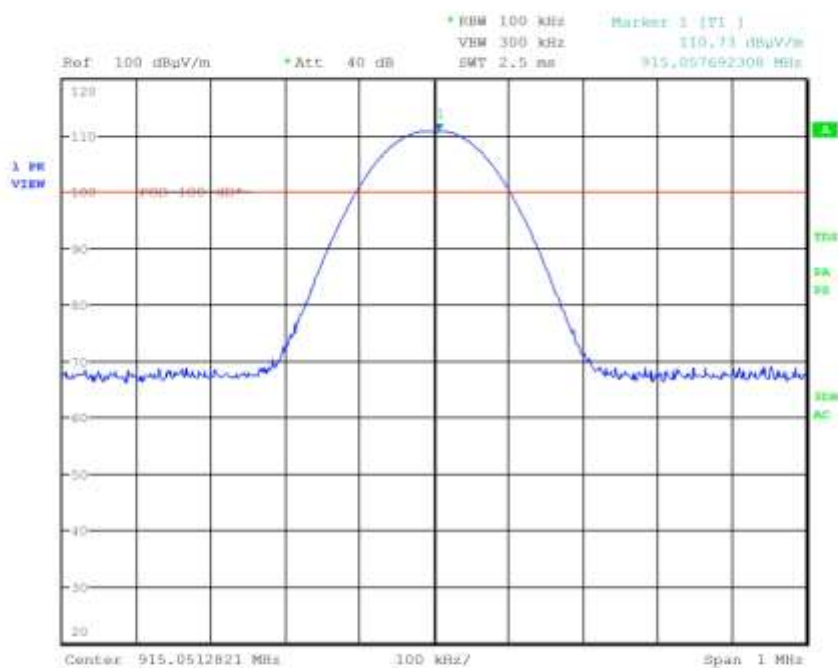
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089031
Test Spec
Horiz





G12089032

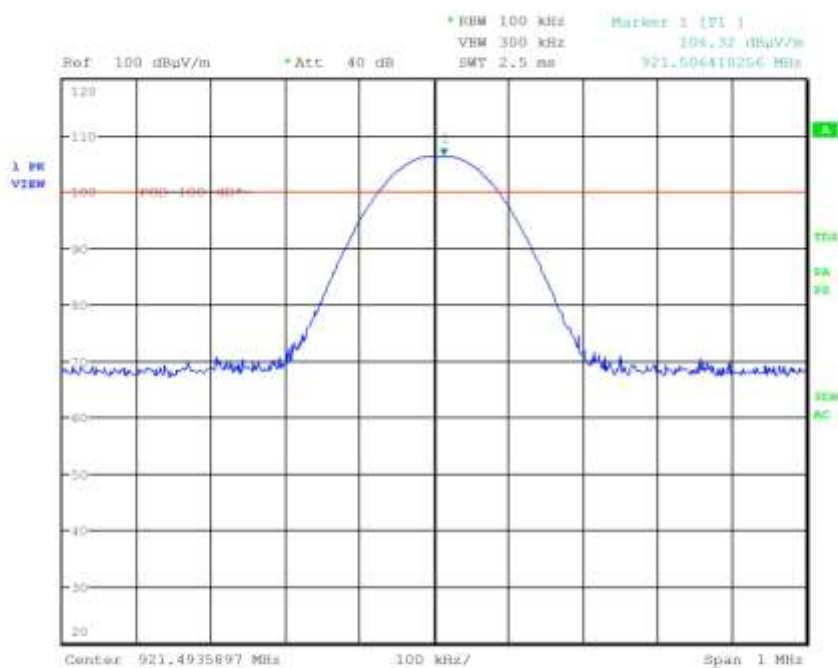
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089032
Test Spec
Vert

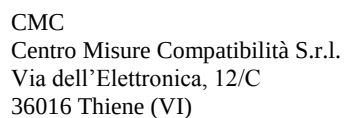




G12089033

Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089033
Test Spec
Horiz





RBW 100 kHz Marker 1 [F1]
 VBW 300 kHz 110.98 dBμV/m
 SMT 2.5 ns 921.504807692 MHz

Span 1 MHz

Ref 100 dBuV/m * Att 40 dB * BW 100 kHz Marker 1 [T1] 110.98 dBuV/m
 VEM 300 kHz SWT 2.5 ms 921.4935897 MHz

1 PR VIEW

120
110
100
90
80
70
60
50
40
30
20

110.98 dBuV/m

1

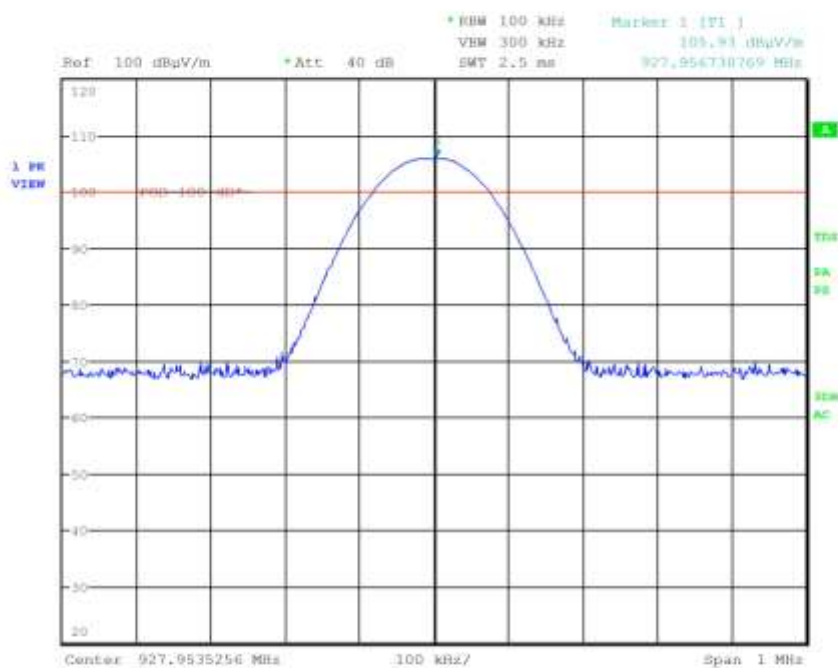
921.4935897 MHz

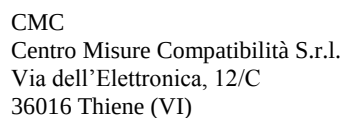
Center 921.4935897 MHz 100 kHz/ Span 1 MHz



G12089035

Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089035
Test Spec
Horiz





RBW 100 kHz
 VBW 300 kHz
 SMT 2.5 ns

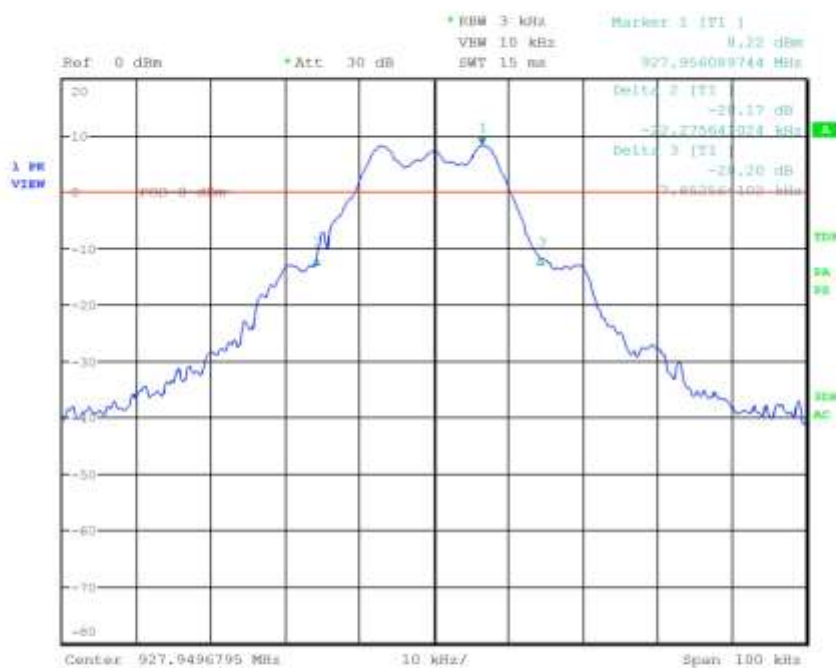
Marker 1 [T1]
 110.02 dBμV/m
 927.942307692 MHz

Span 1 MHz



G12089037

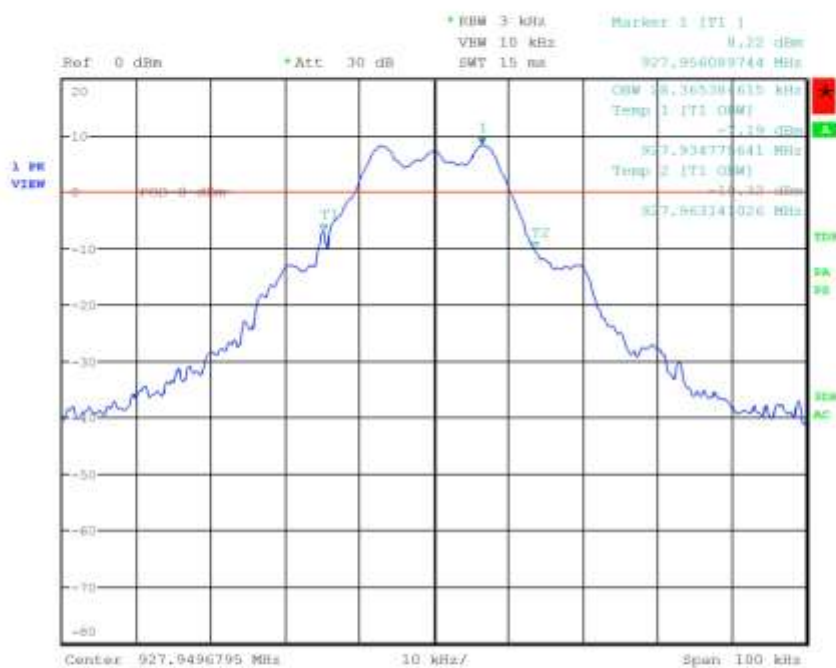
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089037
Test Spec
Horiz





G12089039

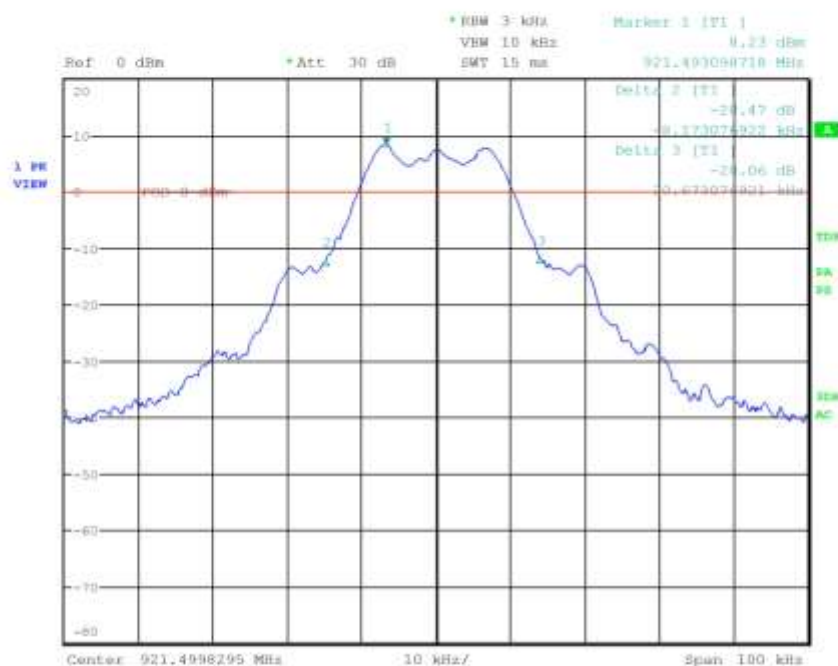
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089039
Test Spec
Horiz





G12089041

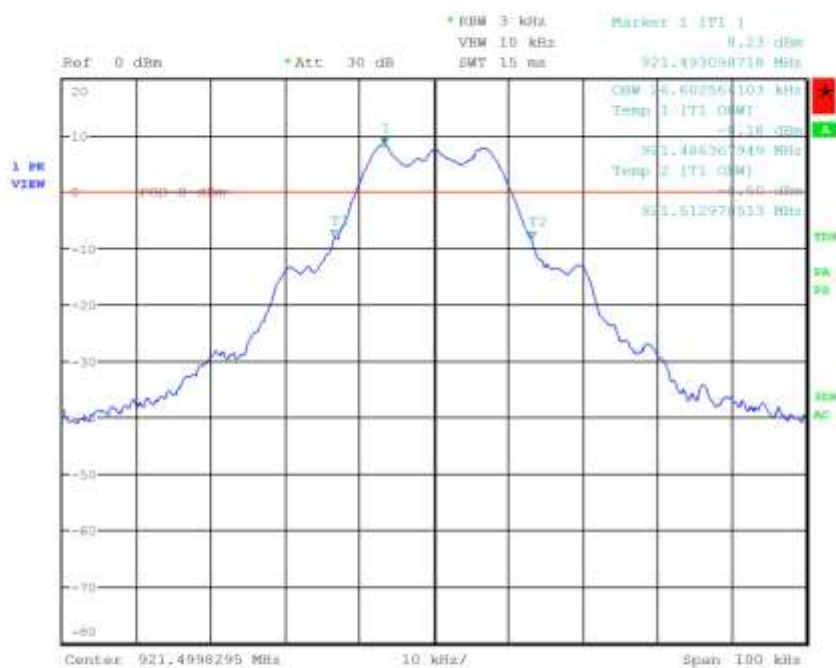
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089041
Test Spec
Horiz





G12089043

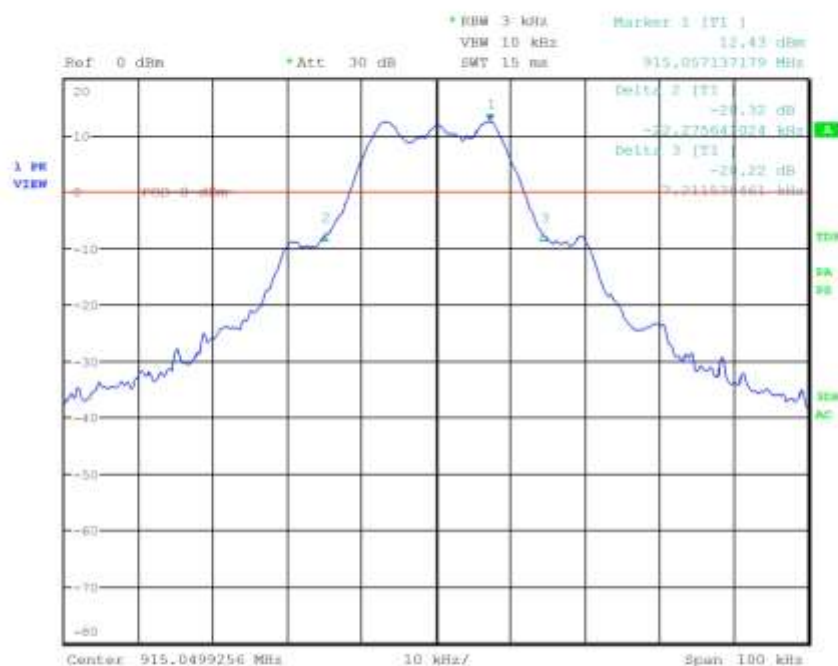
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F med
Operator Gandini 12089043
Test Spec
Horiz

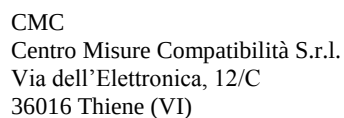




G12089046

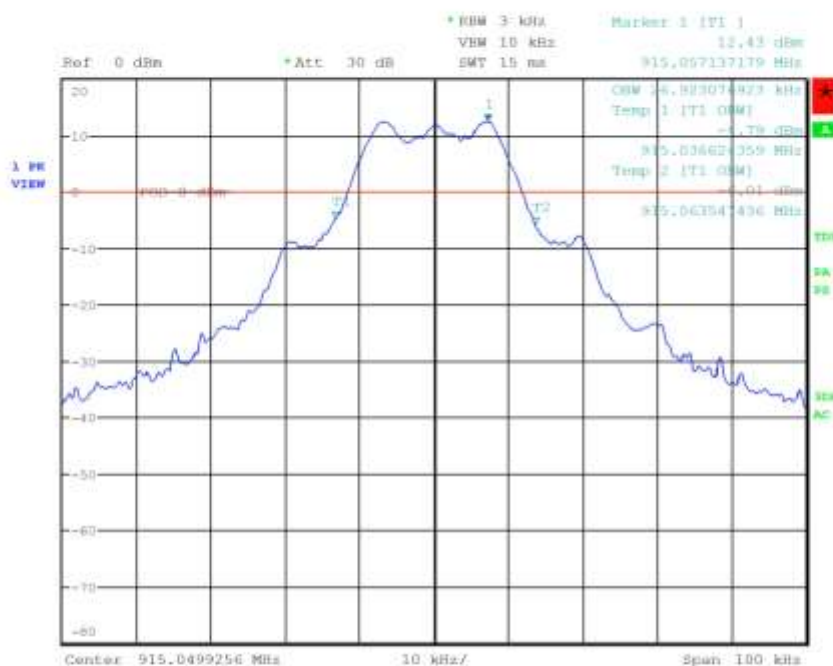
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089046
Test Spec
Vert





G12089048

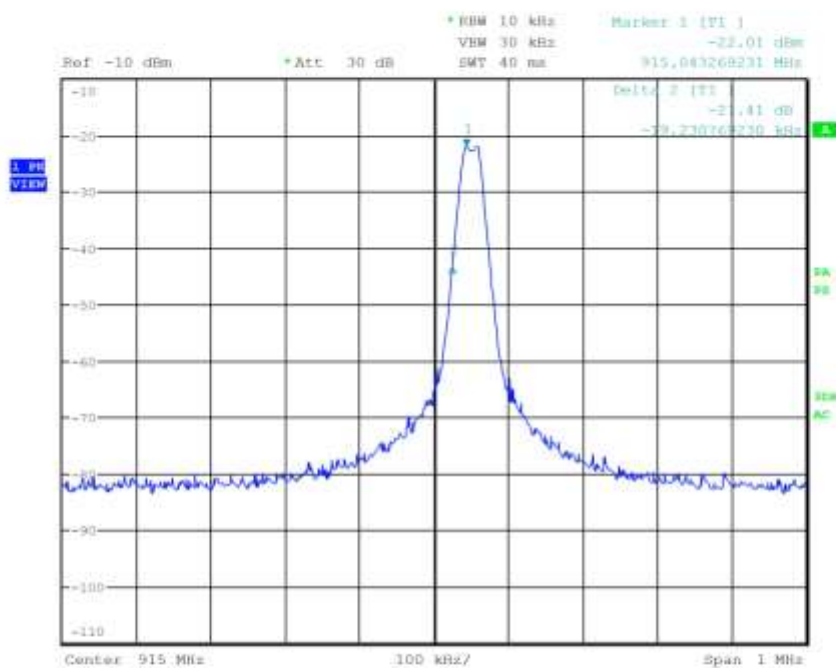
Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	F min
Operator	Gandini 12089048
Test Spec	
Vert	





G12089050

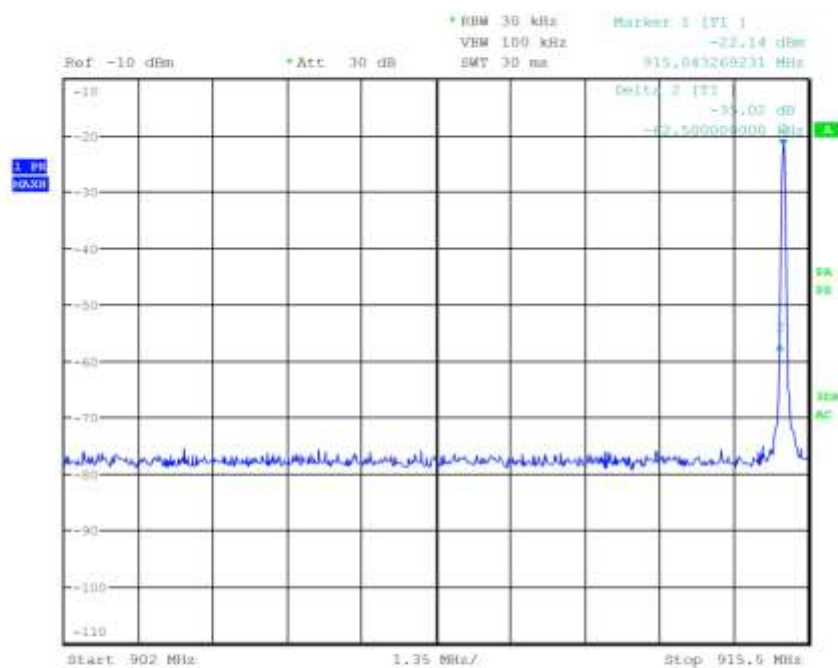
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089050
Test Spec





G12089051

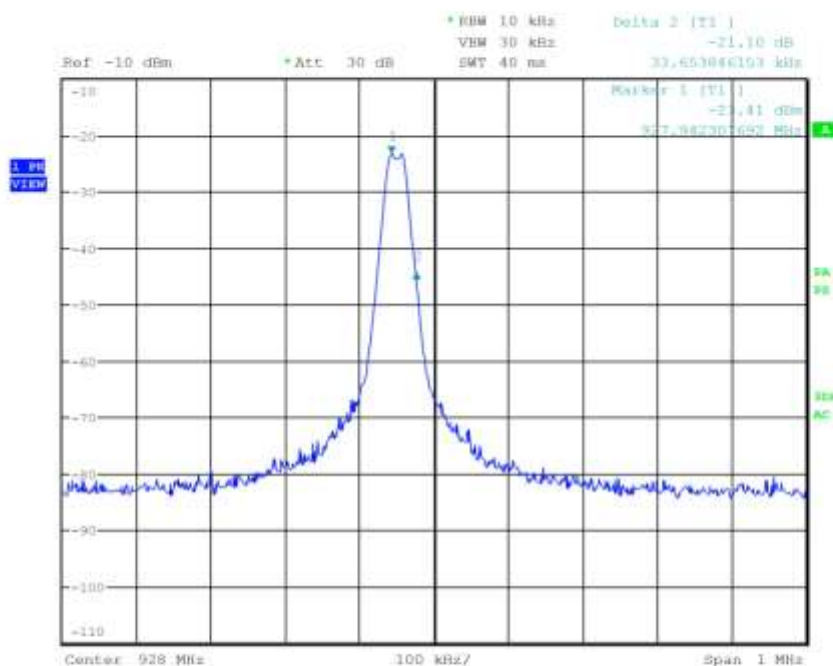
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089051
Test Spec





G12089052

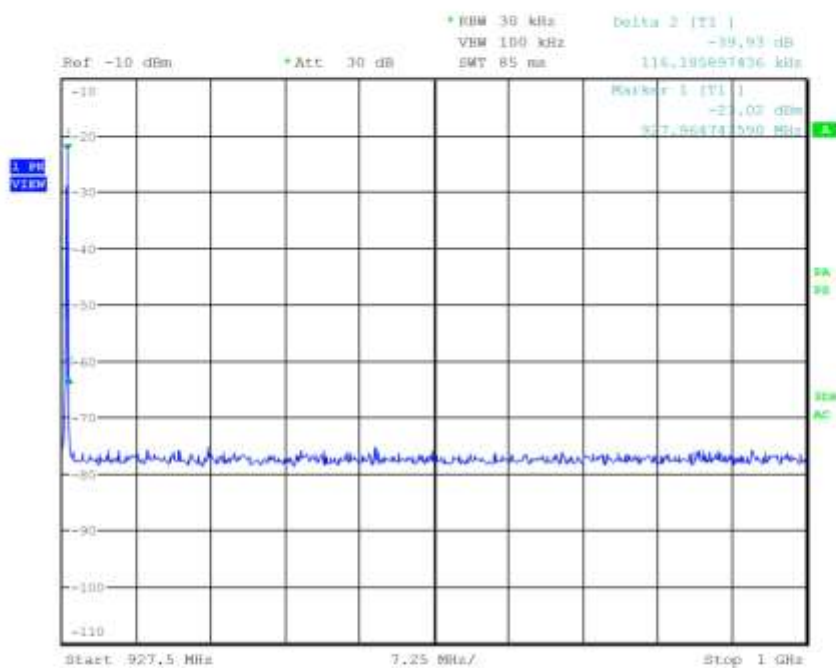
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089052
Test Spec





G12089053

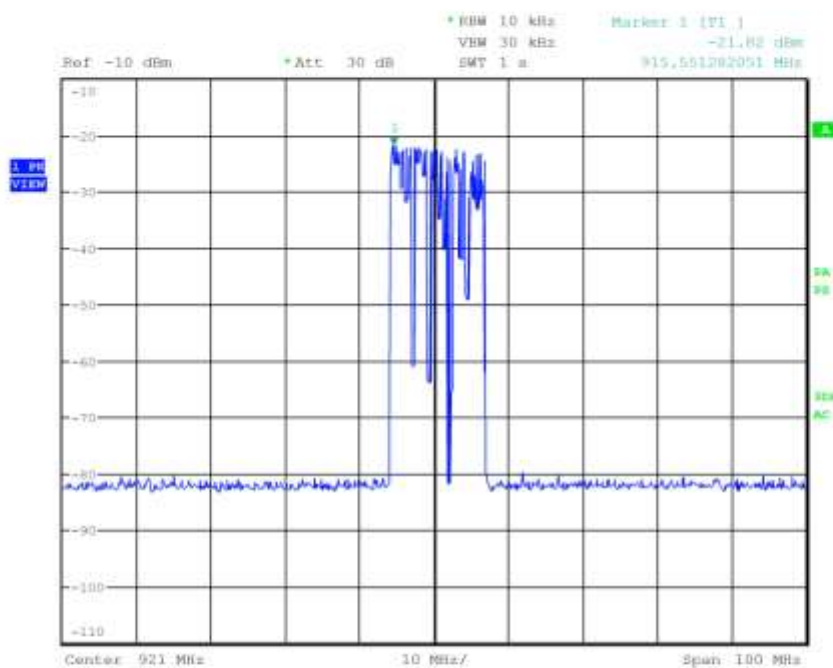
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089053
Test Spec





G12089054

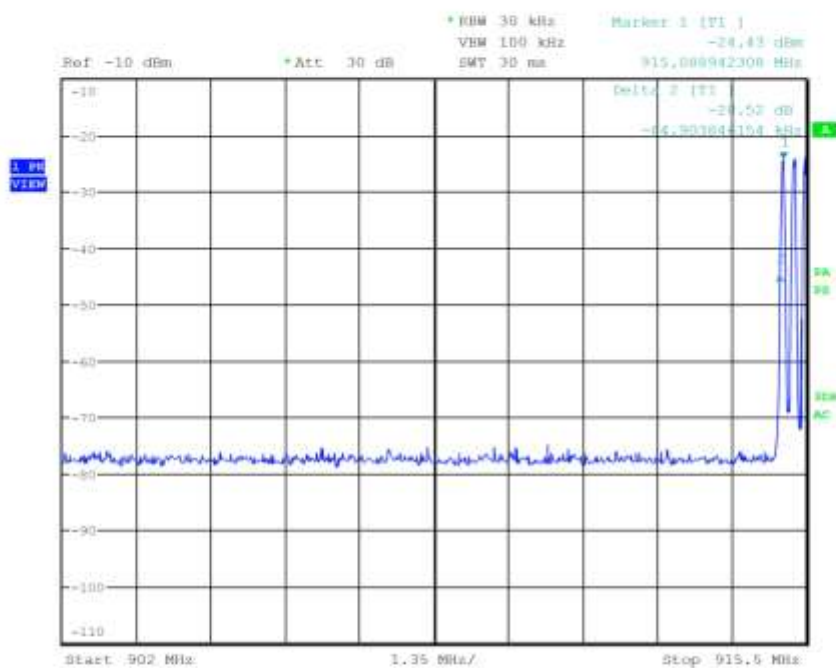
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Hopping
Operator Gandini 12089054
Test Spec





G12089055

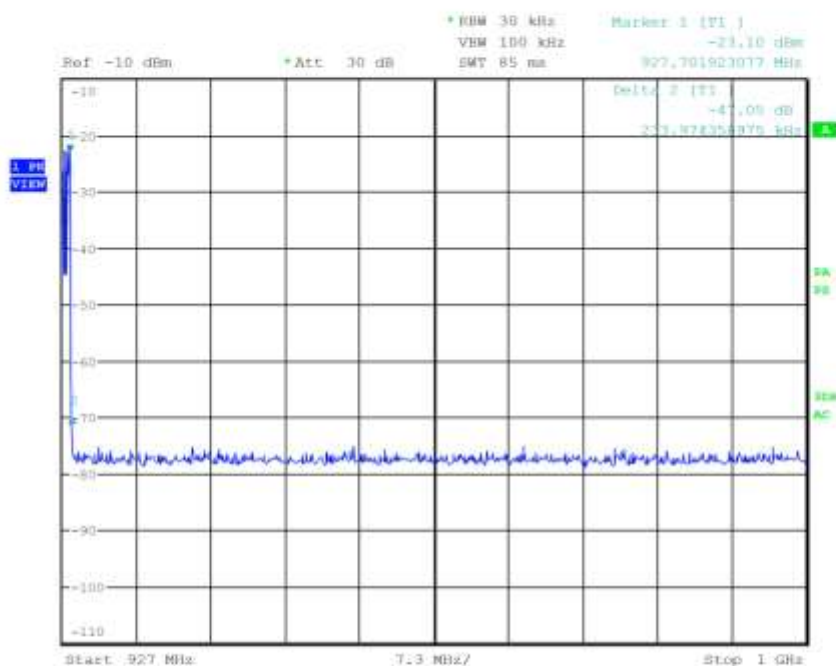
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Fmin
Operator Gandini 12089055
Test Spec





G12089056

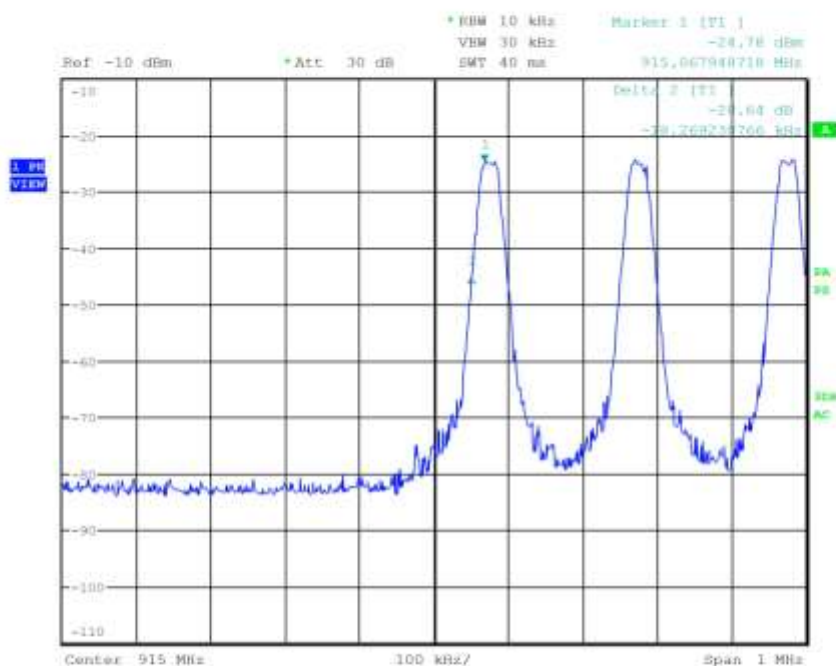
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Fmax
Operator Gandini 12089056
Test Spec





G12089057

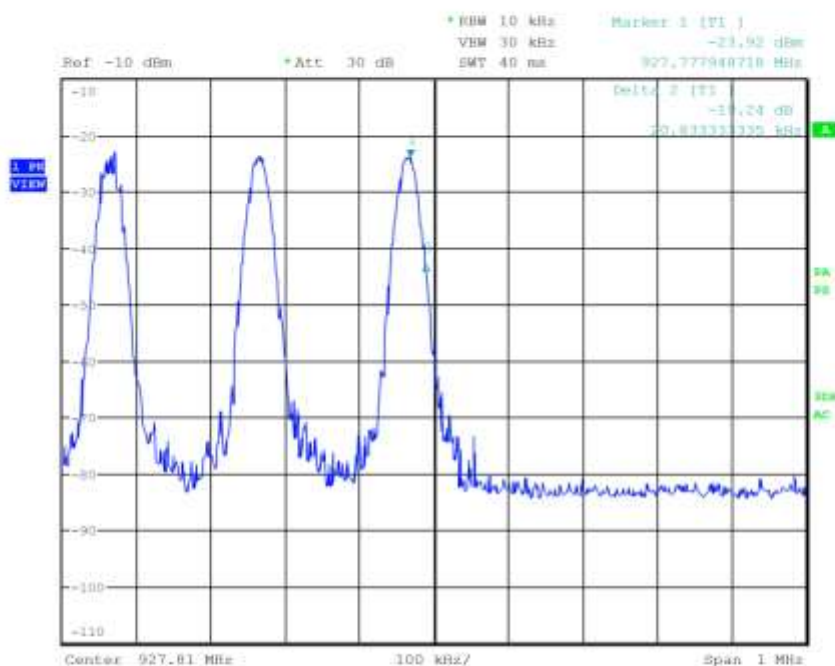
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F min
Operator Gandini 12089057
Test Spec





G12089058

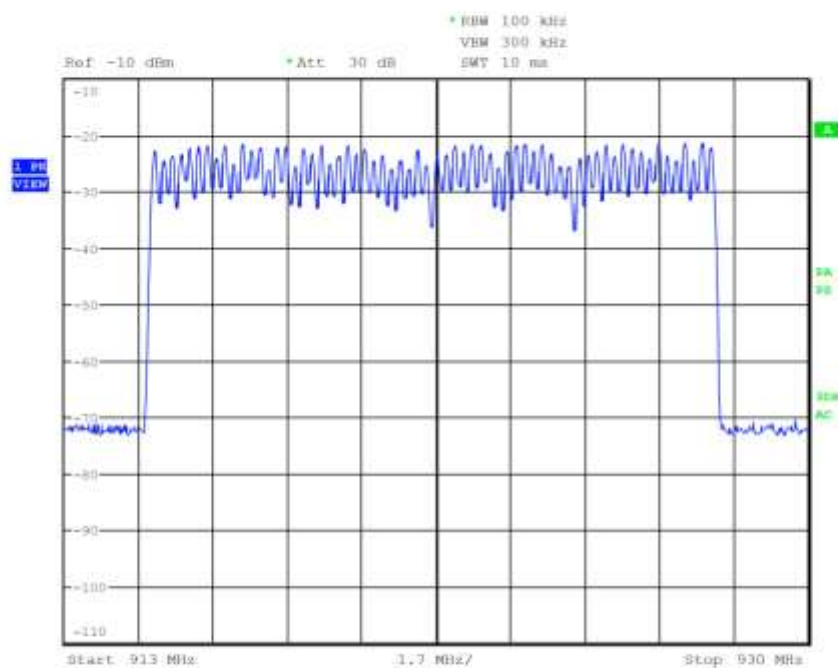
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition F max
Operator Gandini 12089058
Test Spec





G12089059

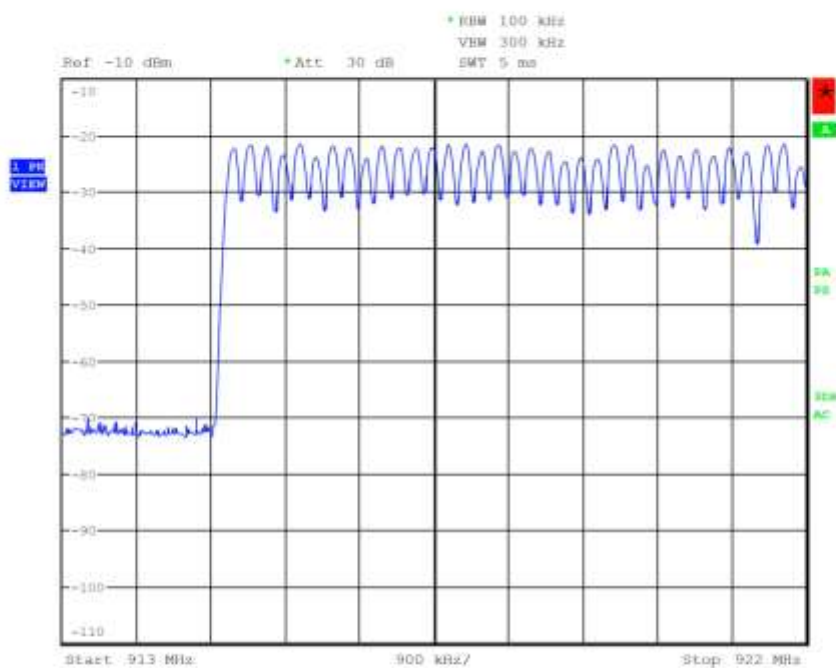
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Hopping
Operator Gandini 12089059
Test Spec





G12089060

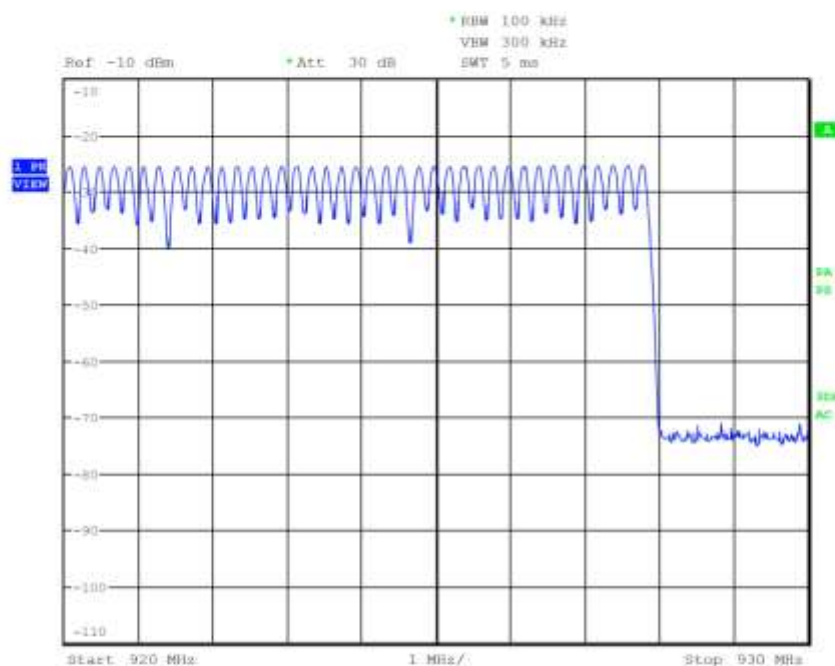
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Hopping
Operator Gandini 12089060
Test Spec





G12089061

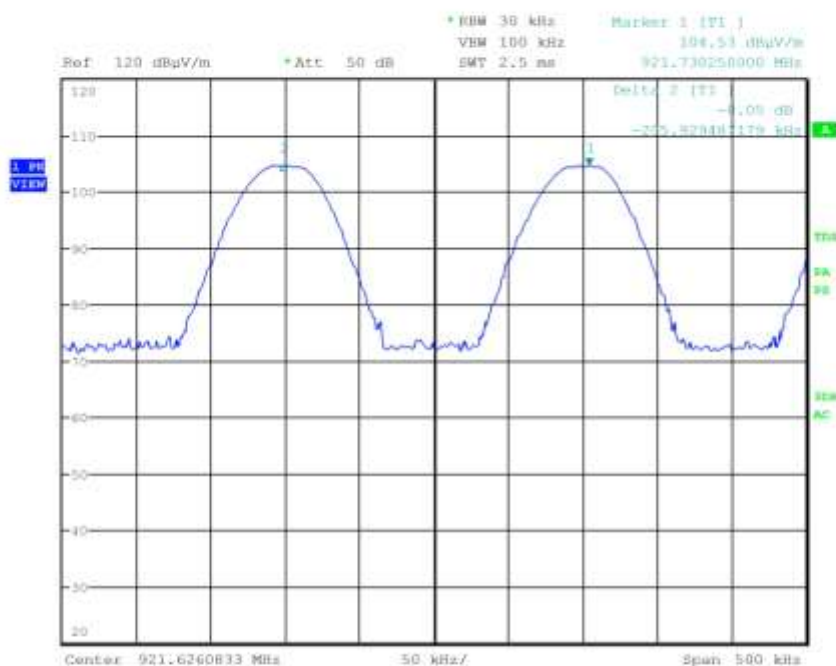
Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Hopping
Operator Gandini 12089061
Test Spec





G12089062

Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Hopping
Operator Gandini 12089062
Test Spec





G12089063

Meas Type Emission
Equipment under Test
Manufacturer
OP Condition Hopping
Operator Gandini 12089063
Test Spec

