CMC Centro Misure Compatibilità S.r.l.
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LAB N° 0168

Independent Testing Laboratory
Accredited by ACCREDIA according to UNI CEI EN ISO/IEC 17025 cert. nr. 0168

TEST REPORT nr. R15093801

Federal Communication Commission (FCC)

Test item

Description .....: TRANSCEIVER UNIT
Trademark .....: ELCA
Model/Type .....: AT MITO-VETTA 915
FCC ID .....: 2ABS7-ATMIVE915

Test Specification

Standard .....: FCC Rules & Regulations, Title 47:2014
Part 15 paragraph(s): 203, 204, 207, 209 and 249

Client's name .....: ELCA S.r.l.
Address .....: Via del Commercio, 7/B – 36065 Mussolente (VI) – ITALY

Manufacturer's name : Same as client
Address .....: --

Report

Tested by .....: A. Bertezzolo – *Technician*

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

Date of issue .....: 04.08.15
Contents .....: 44 pages

Index

1. Summary

Standard:

FCC Rules & Regulations, Title 47:2014
Part 15 paragraph(s): 203, 204, 207, 209 and 249

Test specifications	*Environmental Phenomena*	*Tests sequence*	*Result*
Part 15.203	Antenna requirements	1	Complies
Part 15.207	Conducted emissions	--	N.A. (+)
Part 15.209	Radiated emissions	3	Complies
Part 15.209 and 15.249	Peak Output Power	4	Complies
Part 15.249 (d)	Band edge	5	Complies
Part 15.209	Spurious emission	6	Complies

(+) Devices which only employ battery power. See FCC Part 15.207 (c)

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 certification

2. Description of Equipment under test (EUT)

Power supply	:	3,7 Vdc from battery
Serial Number	:	--
Type of equipment	:	☑ Transmitter Unit
		☑ Receiver Unit
Type of station	:	❑ Fixed station
		❑ Portable station
		☑ Mobile station
Nominal frequency	:	920,575 MHz

2.1 Test Site

Company	:	CMC Centro Misure Compatibilità S.r.l.
Address	:	Via dell'Elettronica, 12/C
		36016 Thiene (VI) – ITALY
Test site facility's FCC registration number	:	271947

3. Testing and sampling

Date of receipt of test item	:	13.05.15
Testing start date	:	18.05.15
Testing end date	:	30.06.15
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 P150545

4. Operative conditions

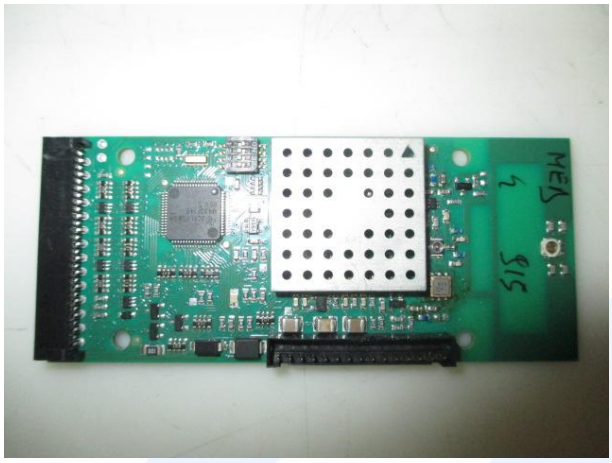
EUT exercising	:	EUT in continuous transmission at maximum power

5. Photograph(s) of EUT

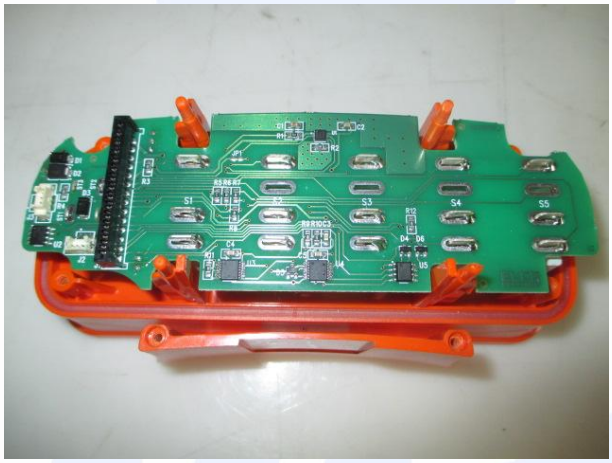
5.1 Photograph(s) of EUT






ELCA SWE-01 Z2 _/_
C678715



6. Equipment list

Id. number	*Manufacturer*	*Model*	*Description*	*Serial number*	*Last calibration*	*Due date calibration*
CMC S010	Rohde & Schwarz	ESH3-Z2	Impulses Limiting Device	- - -	January '15	January '16
CMC S108	EMCO	3115	Horn Antenna	9811-5622	May '13	May '16
CMC S127	Schaffner	HLA6120	Loop Antenna	1191	January '13	January '16
CMC S136	Schwarzbeck	VULB 9163	Broadband Antenna	9136-205	May '13	May '16
CMC S164	Rohde & Schwarz	ESU26	EMC interference receiver	100052	January '15	January '16
CMC S200	Schwarzbeck	NSLK 8128	V-LISN	8128-273	January '15	January '16
CMC S227	Rohde & Schwarz	ESR7	EMI Test Receiver 7GHz	101121	January '15	January '16

7. Measurement uncertainty

Test	Expanded Uncertainty	note
Conducted Emission		
(50Ω/50µH AMN) - (9 kHz – 150 kHz)	±3.6 dB	1
(50Ω/50µH AMN) - (150 kHz – 30 MHz)	±3.0 dB	1
(Voltage probe) - (150 kHz – 30 MHz)	±2.8 dB	1
(50Ω/5µH AMN) - (150 kHz – 108 MHz)	±2.6 dB	1
Discontinuous Conducted Emission		
Conducted Emission (50Ω/50µH AMN) - (150 kHz – 30 MHz)	±3.0 dB	1
Disturbance Power (30 MHz – 300 MHz)	±3.7 dB	1
Radiated Emission		
(0,150 MHz – 30 MHz)	±4.0 dB	1
(30 MHz – 1000 MHz)	±4.3 dB	1
(1 GHz – 6 GHz)	±4.5 dB	1
Electromagnetic field EMF	±10.5 %	1
Harmonic current emissions test	±1.8 %	1
Voltage fluctuation and flicker test	±2.6 %	1
Insertion loss test	±2.0 dB	1
Radiated electromagnetic disturbance test (loop antenna)	±2.1 dB	1
Radiated electromagnetic field immunity test	0.81 V/m at 3V/m	1
Pulse modulated radiated electromagnetic field immunity test	0.81 V/m at 3V/m	1
Injected currents immunity test	0.45 V at 3V	1
Bulk current	3.7 mA at 60 mA	1
Power frequency magnetic field immunity test	0.1 A/m at 10 A/m	1
Effective radiated power (F < 1GHz)	±4.3 dB	1
Effective radiated power (F > 1GHz)	±3.7 dB	1
Frequency error	< 1x10-7	1
Modulation bandwidth	< 1x10-7	1
Conducted RF power and spurious emission	±0.7 dB	1
Adjacent channel power	±1.2 dB	1
Blocking	±1.2 dB	1
Electrostatic discharge immunity test		2
Electrical fast transients / burst immunity test		2
Surge immunity test		2
Pulse magnetic field immunity test		2
Damped oscillatory magnetic field immunity test		2
Short interruption immunity test		2
Voltage transient emission test	±2.2 %	1
Transient immunity test		2

Notes

Note 1:
The expanded uncertainty reported according to EN55016-4-2:2011 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 15:2014	--
ANSI C63.4:2009	American National Standard for Methods of Measuring of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz – 40 GHz
Internal Procedure PM001 rev. 2.0 (Quality Manual)	Measure Procedure
Internal procedure INC_M rev. 8.2 (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 6 dB from it, the test was repeated with quasi-peak detector and/or average detector.

10. Test case verdicts

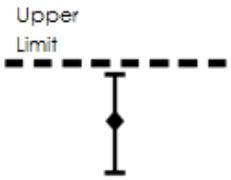
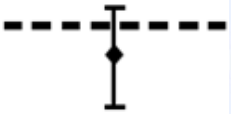
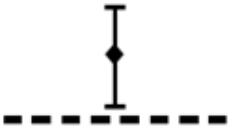
Test case does not apply to the test object ..... : N.A.
Test item does meet the requirement ..... : Complies
Test item does not meet the requirement..... : Does not comply
Test not performed ..... : N.E.

11. Results

In this clause tests results are reported.

Measurement uncertainty is in accordance with document CMC INC_M rev. 8.2.

Judgement of compliance:

Case 1	Case 2	Case 3	Case 4
			
The sample complies with the requirement.	The sample complies with the requirement.	The sample does not comply with the requirement.	The sample does not comply with the requirement.
The measurement results is within the specification limit when the measurement uncertainty is taken into account.	It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty although the measurement result is below the limit.	It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty also the measurement result is upper the limit.	The measurement results is outside the specification limit when the measurement uncertainty is taken into account.

In agreement with ILAC-G8: 03/2009 Guidelines on the Reporting of Compliance with Specification.

11.1 Antenna requirements

Test set-up and execution

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

Test configuration and test method

Test site:
Laboratory

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

--
Measurement uncertainty: See clause 7 of this test report

Test specification

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 a unique coupling to the intentional radiator shall be considered sufficient to 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 a 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

Environmental conditions

Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
22	100	45

Result

Antenna Type	*External R.F. power amplifier*	*Gain*	*Remarks*	*Results*
Integral antenna	Not Present	--	--	Complies

Result: The requirements are met

11.2 Radiated emissions

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part. 15.209
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site:
Semi-anechoic chamber

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S108, CMC S127, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Enclosure
Frequency range: 0,009 MHz – 1000 MHz
Antenna polarization: Horizontal (H) – Vertical (V)
EUT – Antenna distance: 3 m

Environmental conditions

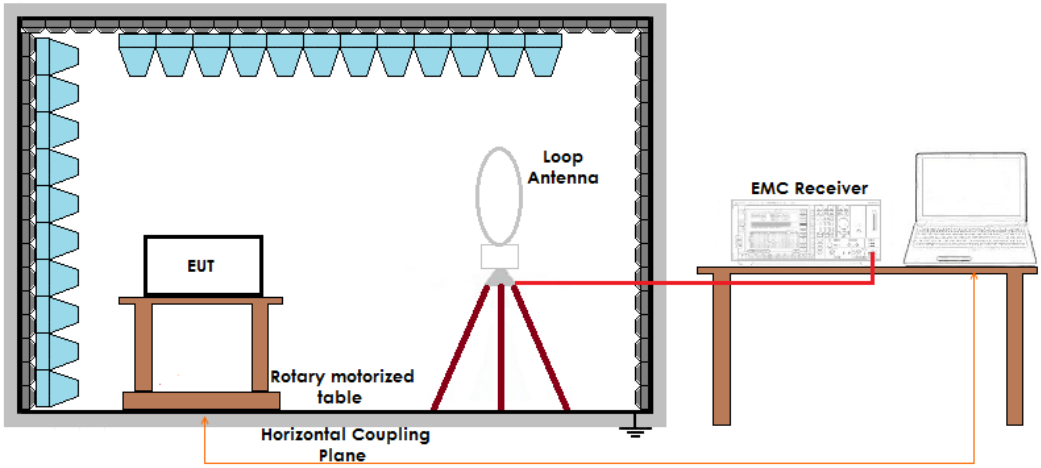
Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
22	100	45

Acceptance limits

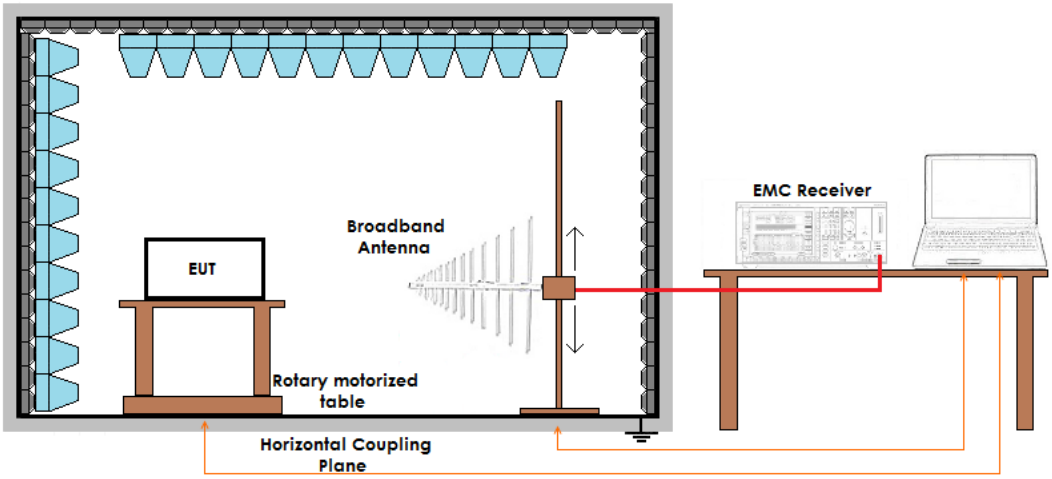
Frequency range (MHz)	*Limits [dB(µV/m)]*
0,009 to 0,490	128,51 to 93,80
0,490 to 1,705	73,80 to 62,97
1,705 to 30	69,54
30 to 88	40
88 to 216	43,52
216 to 960	46,02
Above 960	53,98
Remarks: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.	

Setup

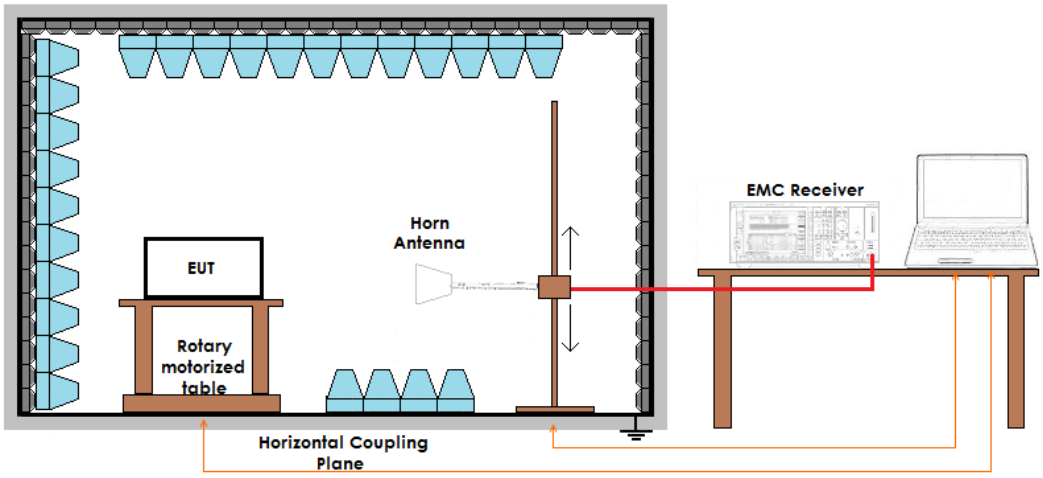
Frequency ≤ 30 MHz



Frequency ≤ 1 GHz



Frequency > 1 GHz



Result

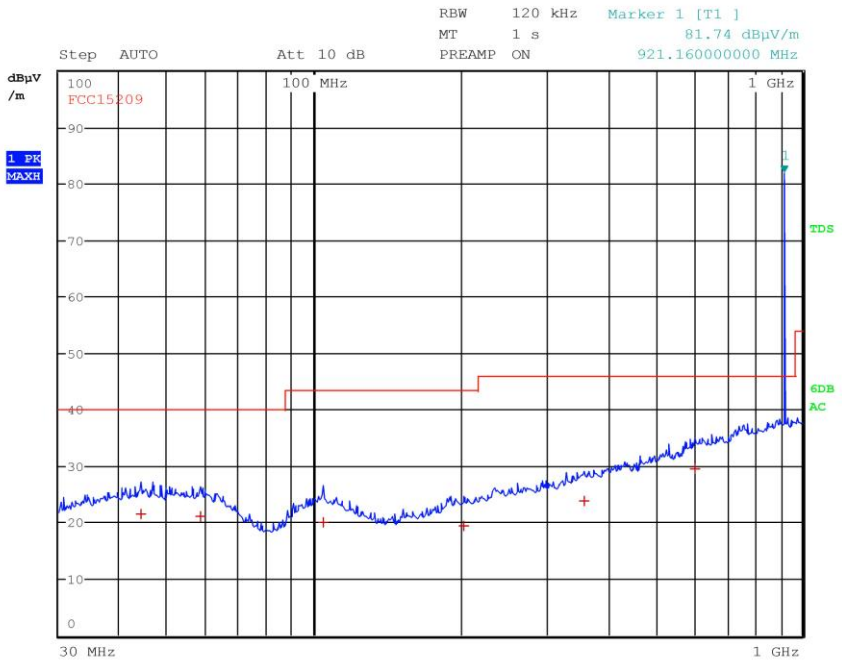
Polarization	*Frequency Range (MHz)*	*Graphs*	*Remarks*	*Result*
Loop	0,009 – 30	G15093826	Worst case	Complies
V	30 – 1000	G15093819	Lowest frequency	Complies
H	30 – 1000	G15093818	Lowest frequency	Complies
V	30 – 1000	G15093814	Medium frequency	Complies
H	30 – 1000	G15093815	Medium frequency	Complies
V	30 – 1000	G15093809	Highest frequency	Complies
H	30 – 1000	G15093808	Highest frequency	Complies
H	1000 – 10000	G15093824	Worst case	Complies
V	1000 – 10000	G15093825	Worst case	Complies
Remarks: --				

Graphs Legend
PK: Peak; QP [1s] (quasi-peak at 1 second) values are marked with a +
AV: Average; AV [1s] (average at 1 second) values are marked with a x

Graphs

G15093808

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938108
Test Spec	



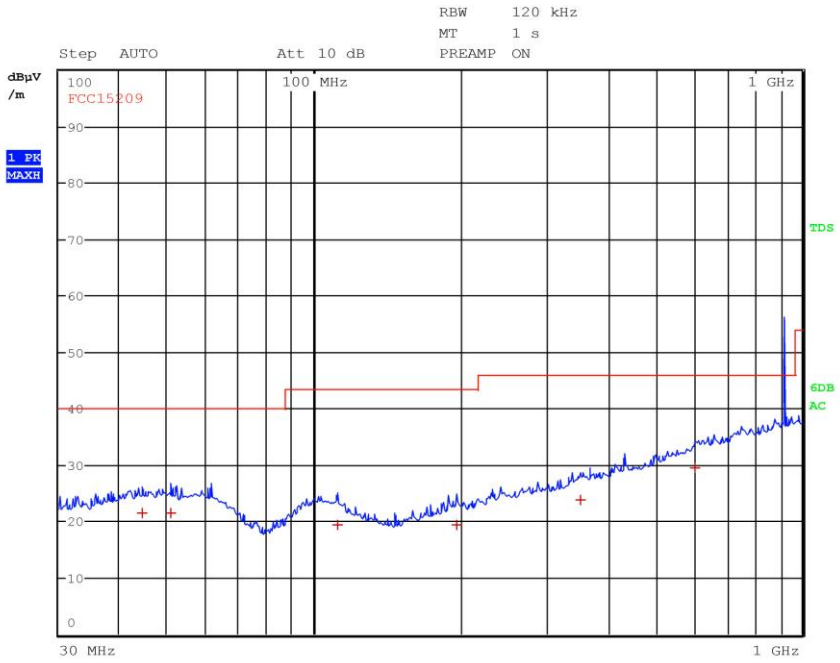
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	44.160000000 MHz	21.60	Quasi Peak	-18.40
1	58.600000000 MHz	21.15	Quasi Peak	-18.85
1	104.560000000 MHz	20.00	Quasi Peak	-23.52
1	202.960000000 MHz	19.39	Quasi Peak	-24.13
1	357.600000000 MHz	23.78	Quasi Peak	-22.24
1	604.640000000 MHz	29.49	Quasi Peak	-16.53

G15093809

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938109
Test Spec	



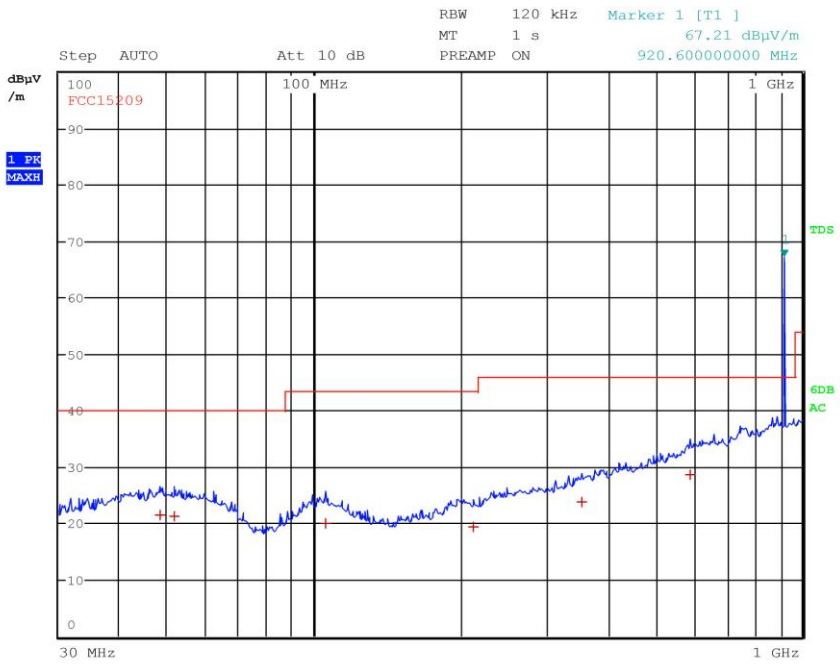
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	44.440000000 MHz	21.56	Quasi Peak	-18.44
1	50.880000000 MHz	21.47	Quasi Peak	-18.53
1	111.800000000 MHz	19.36	Quasi Peak	-24.16
1	195.720000000 MHz	19.38	Quasi Peak	-24.14
1	352.000000000 MHz	23.77	Quasi Peak	-22.25
1	601.480000000 MHz	29.51	Quasi Peak	-16.51

G15093814

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938114
Test Spec	



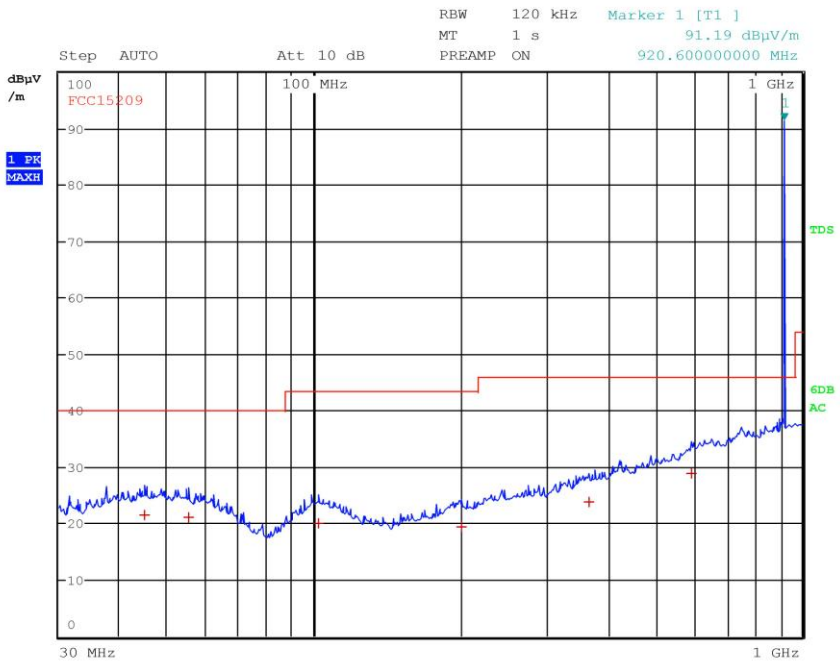
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	48.280000000 MHz	21.56	Quasi Peak	-18.44
1	51.600000000 MHz	21.36	Quasi Peak	-18.64
1	105.440000000 MHz	20.01	Quasi Peak	-23.51
1	212.160000000 MHz	19.44	Quasi Peak	-24.08
1	353.280000000 MHz	23.83	Quasi Peak	-22.19
1	590.840000000 MHz	28.74	Quasi Peak	-17.28

G15093815

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938115
Test Spec	



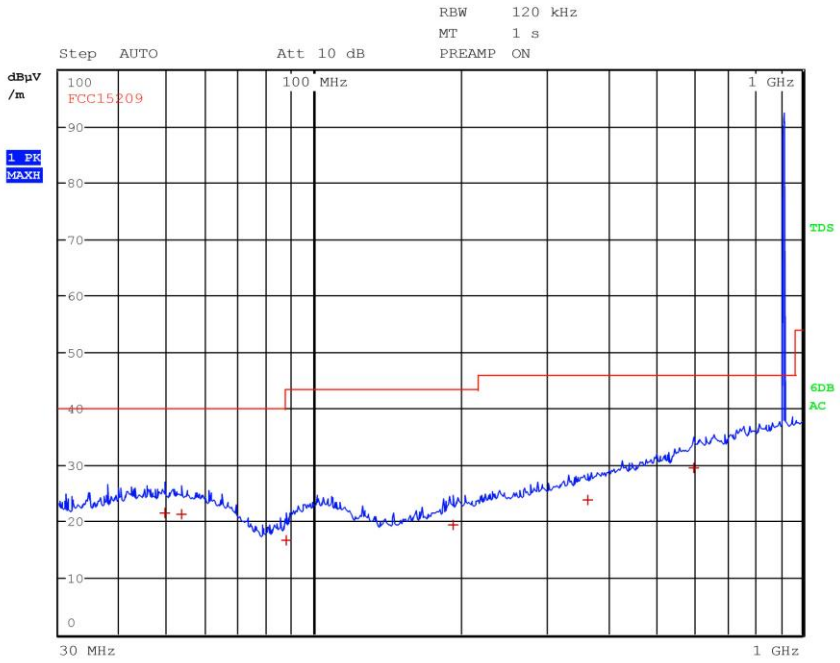
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	44.800000000 MHz	21.57	Quasi Peak	-18.43
1	55.240000000 MHz	21.12	Quasi Peak	-18.88
1	101.880000000 MHz	20.06	Quasi Peak	-23.46
1	200.560000000 MHz	19.34	Quasi Peak	-24.18
1	366.240000000 MHz	23.94	Quasi Peak	-22.08
1	594.320000000 MHz	28.82	Quasi Peak	-17.20

G15093818

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938118
Test Spec	



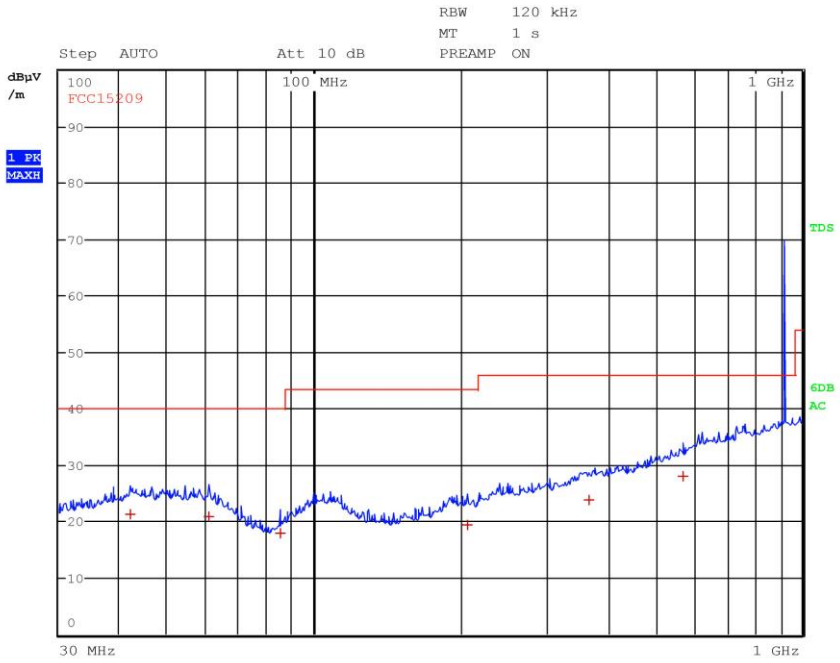
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	49.360000000 MHz	21.52	Quasi Peak	-18.48
1	53.360000000 MHz	21.30	Quasi Peak	-18.70
1	87.600000000 MHz	16.75	Quasi Peak	-23.25
1	192.880000000 MHz	19.45	Quasi Peak	-24.07
1	363.200000000 MHz	23.93	Quasi Peak	-22.09
1	600.080000000 MHz	29.51	Quasi Peak	-16.51

G15093819

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938119
Test Spec	



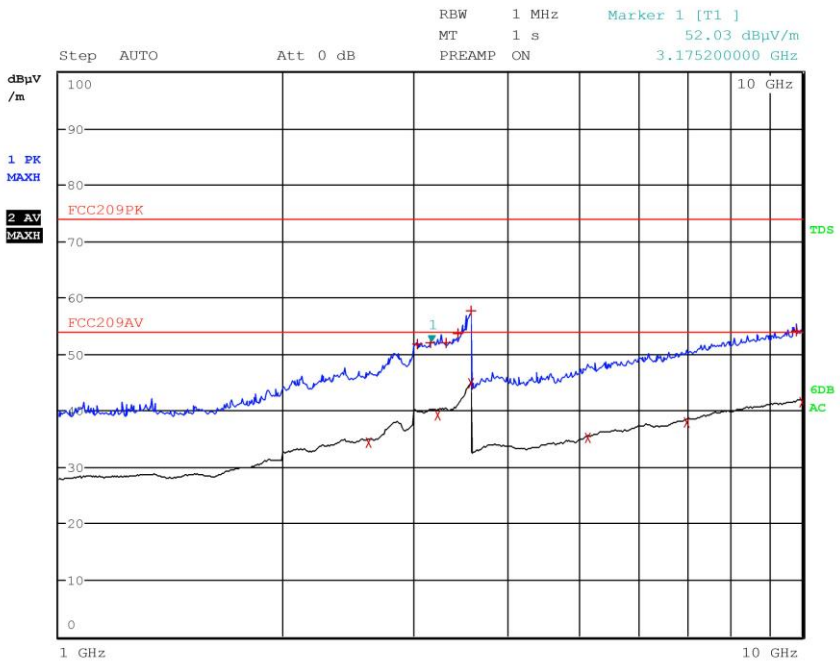
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 6

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
1	41.960000000 MHz	21.28	Quasi Peak	-18.72
1	60.840000000 MHz	20.93	Quasi Peak	-19.07
1	85.080000000 MHz	17.99	Quasi Peak	-22.01
1	206.120000000 MHz	19.34	Quasi Peak	-24.18
1	365.800000000 MHz	23.93	Quasi Peak	-22.09
1	568.760000000 MHz	28.03	Quasi Peak	-17.99

G15093824

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938124
Test Spec	



Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938124
Test Spec	

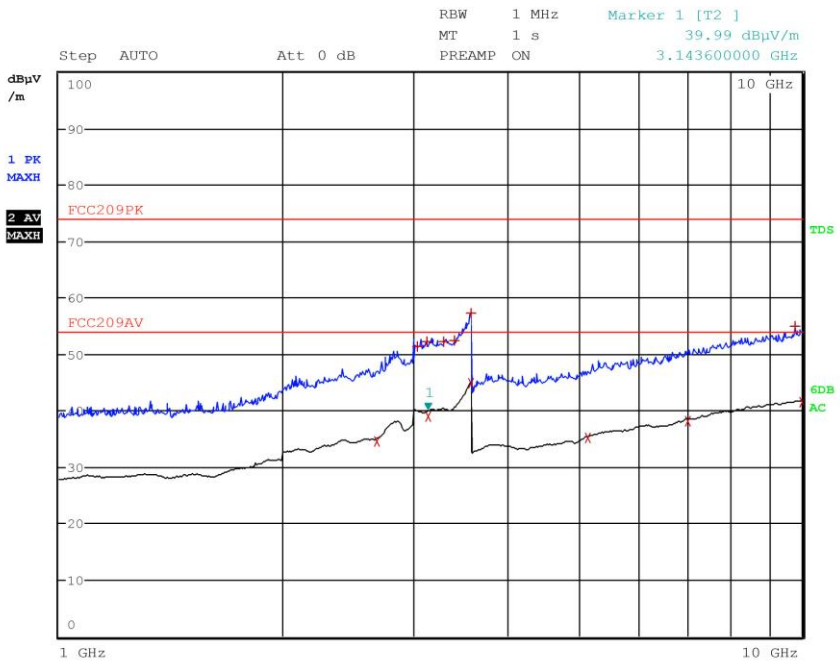
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 12

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	2.614400000 GHz	34.45	Average	-19.55
1	3.036400000 GHz	51.87	Max Peak	-22.13
1	3.159600000 GHz	52.01	Max Peak	-21.99
2	3.235200000 GHz	39.27	Average	-14.73
1	3.322000000 GHz	51.94	Max Peak	-22.06
1	3.440800000 GHz	53.60	Max Peak	-20.40
1	3.594800000 GHz	57.59	Max Peak	-16.41
2	3.598400000 GHz	44.84	Average	-9.16
2	5.138000000 GHz	35.25	Average	-18.75
2	6.978000000 GHz	37.94	Average	-16.06
1	9.801200000 GHz	54.12	Max Peak	-19.88
2	9.983600000 GHz	41.51	Average	-12.49

G15093825

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938125
Test Spec	



Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938125
Test Spec	

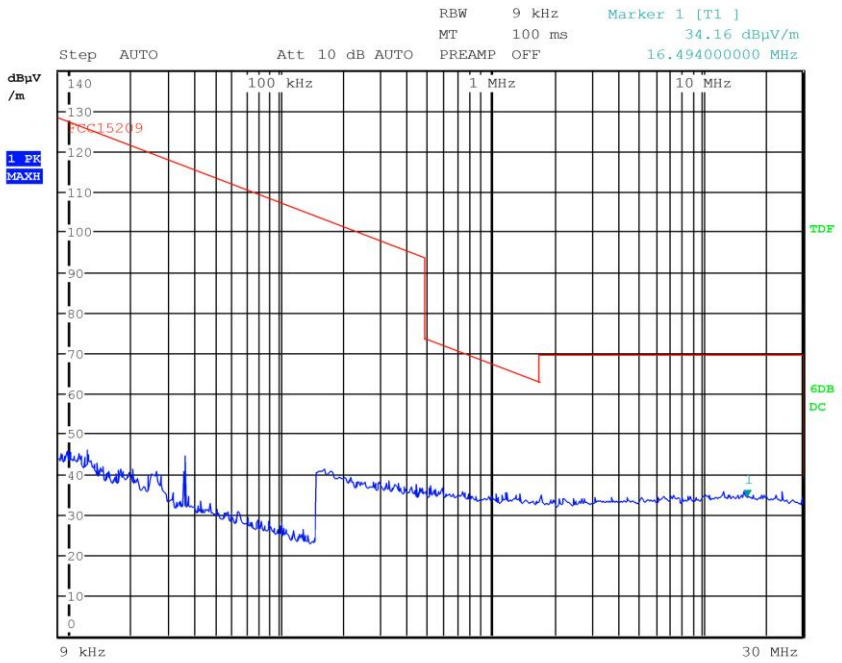
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 12

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	2.676400000 GHz	34.52	Average	-19.48
1	3.041200000 GHz	51.46	Max Peak	-22.54
1	3.123200000 GHz	52.19	Max Peak	-21.81
2	3.143600000 GHz	39.01	Average	-14.99
1	3.298800000 GHz	52.26	Max Peak	-21.74
1	3.405200000 GHz	52.40	Max Peak	-21.60
1	3.592400000 GHz	57.34	Max Peak	-16.66
2	3.596800000 GHz	44.81	Average	-9.19
2	5.138400000 GHz	35.28	Average	-18.72
2	7.004800000 GHz	38.11	Average	-15.89
1	9.795200000 GHz	54.91	Max Peak	-19.09
2	9.989200000 GHz	41.50	Average	-12.50

G15093826

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938126
Test Spec	



Final Measurement

Meas Time:	1 s
Margin:	20 dB
Subranges:	0

Result: The requirements are met

11.3 Peak Output Power

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.209 and Part 15.249
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site:
Semi-anechoic chamber

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S108, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Enclosure
Antenna polarization: Horizontal (H) – Vertical (V)
EUT – Antenna distance: 3 m

Environmental conditions

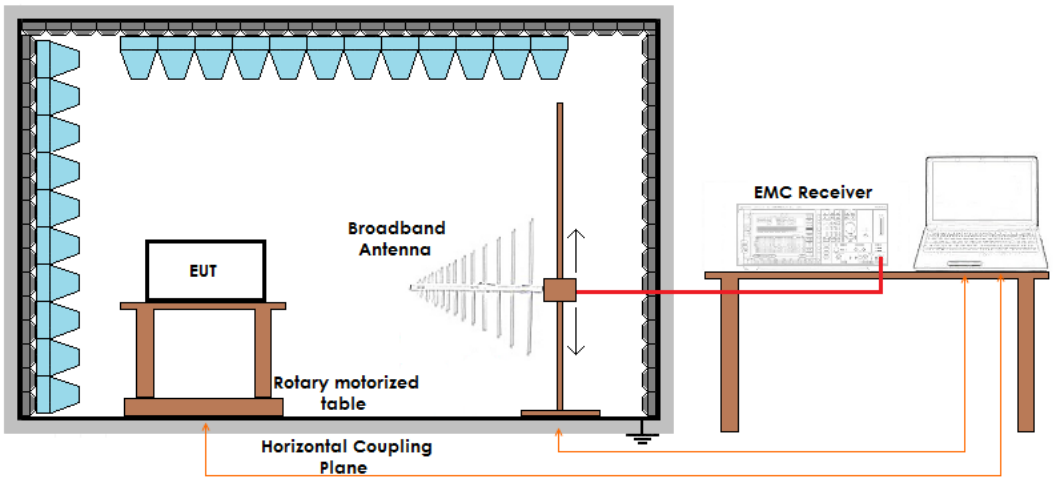
Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
22	101	45

Acceptance limits

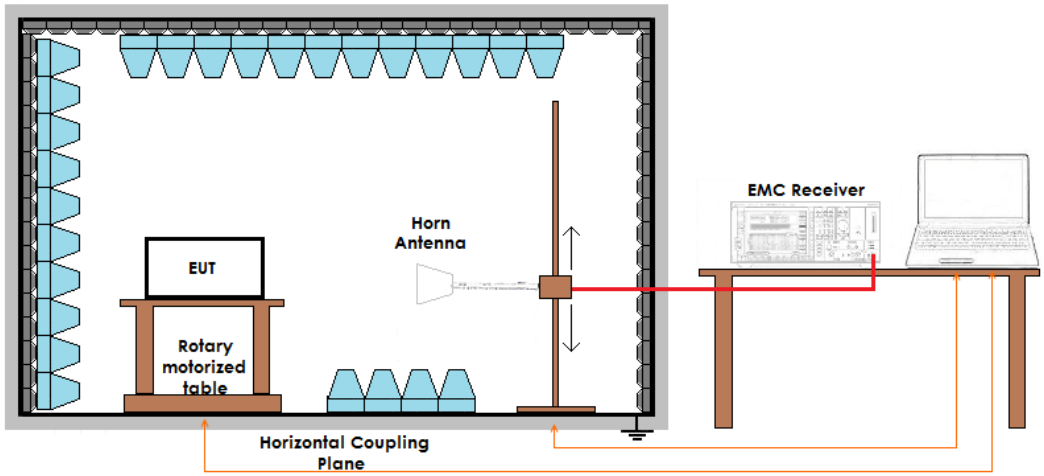
Frequency range (MHz)	*RF Power Output dB(µV/m)*
902 – 928	94

Setup

Frequency ≤ 1 GHz



Frequency > 1 GHz



Result

Frequency (MHz)	*Polarization*	*Graphs*	*Measured QP level (dBµV/m)*	*Peak Output Power (mW)*	*Remarks*
920,008	Vertical	G15093802	93,68	0,700	Worst case
920,602	Vertical	G15093804	91,73	0,447	Worst case
921,153	Vertical	G15093807	88,73	0,224	Worst case

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 (0 dBi)

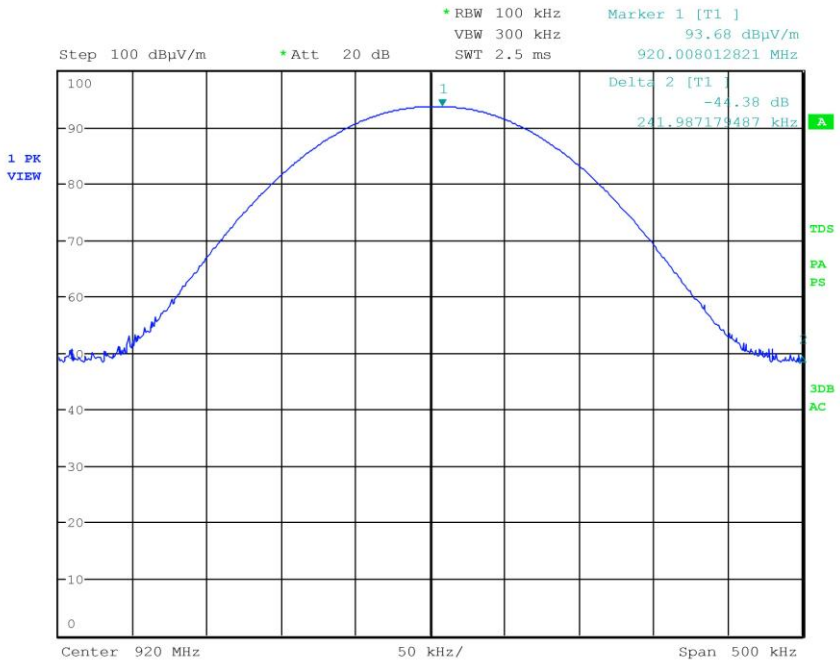
d = the distance in meters from which the field strength was measured (3 m)

P = the power in watts

Graphs

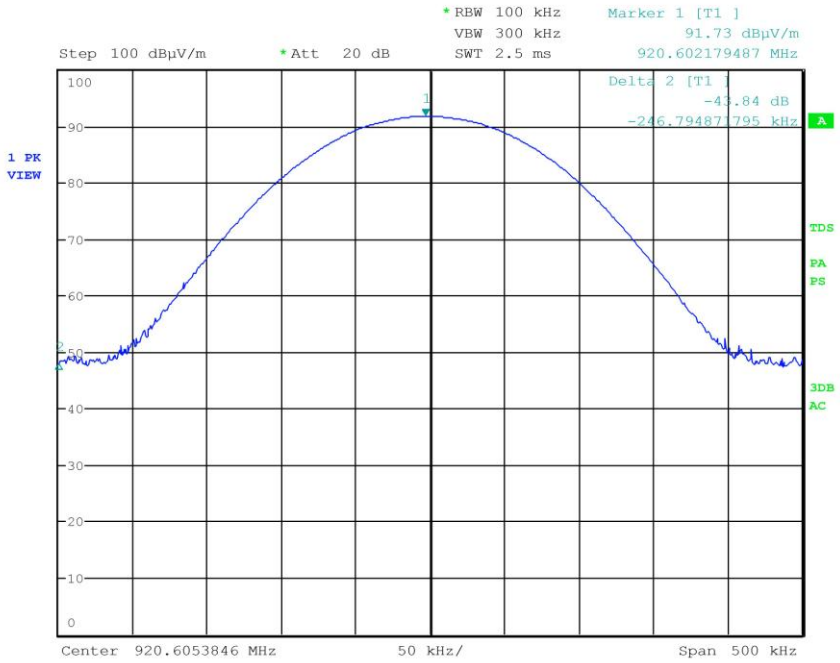
G15093802

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938102
Test Spec	



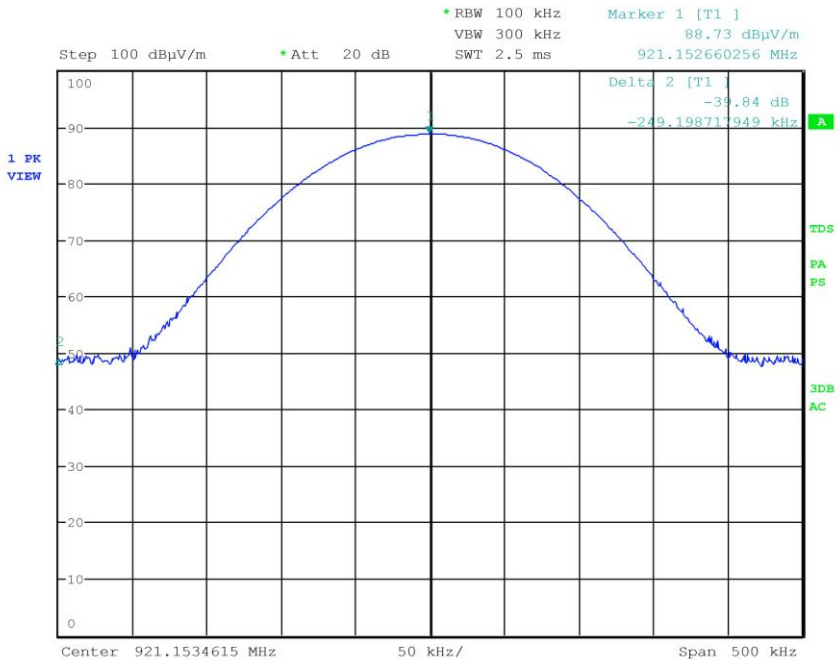
G15093804

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938104
Test Spec	



G15093807

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938107
Test Spec	



Result: The requirements are met

11.4 Band edge

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.249 (d)
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site:
Laboratory

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S108, CMC S136, CMC S164, CMC S206
Measurement uncertainty: See clause 7 of this test report

Test specification

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation

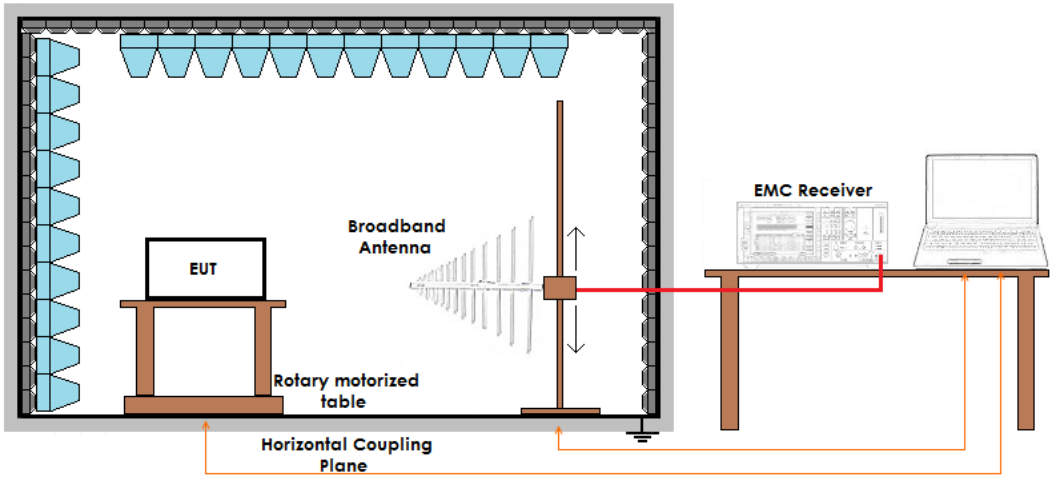
Environmental conditions

Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
22	100	45

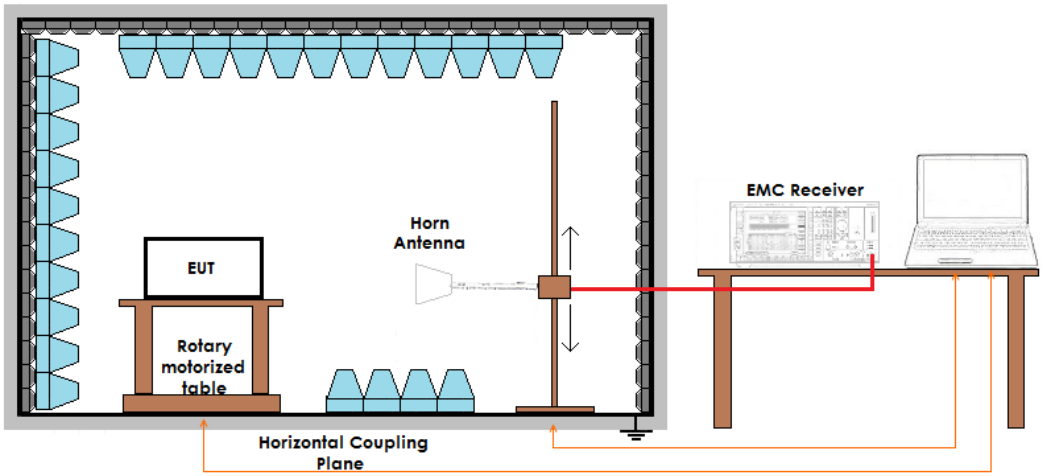
Acceptance limits: operation within the band 902 – 928 MHz

Setup

Frequency ≤ 1 GHz



Frequency > 1 GHz



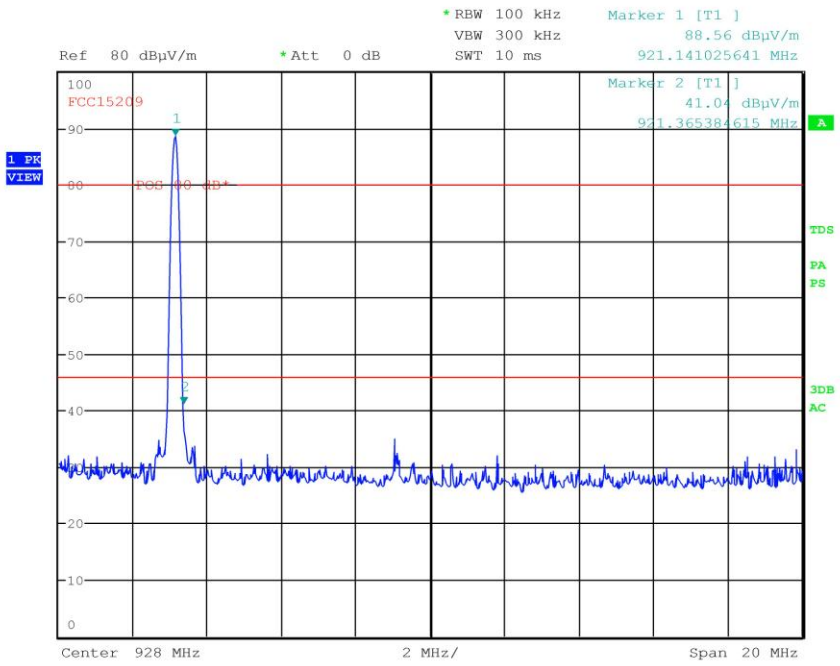
Result

Frequency (MHz)	*Graph(s)*	*Results*	
920,000	G15093822 G15093823	F_L: 919,708 MHz	Complies
921,150	G15093812 G15093813	F_H: 921,365 MHz	Complies

Graphs

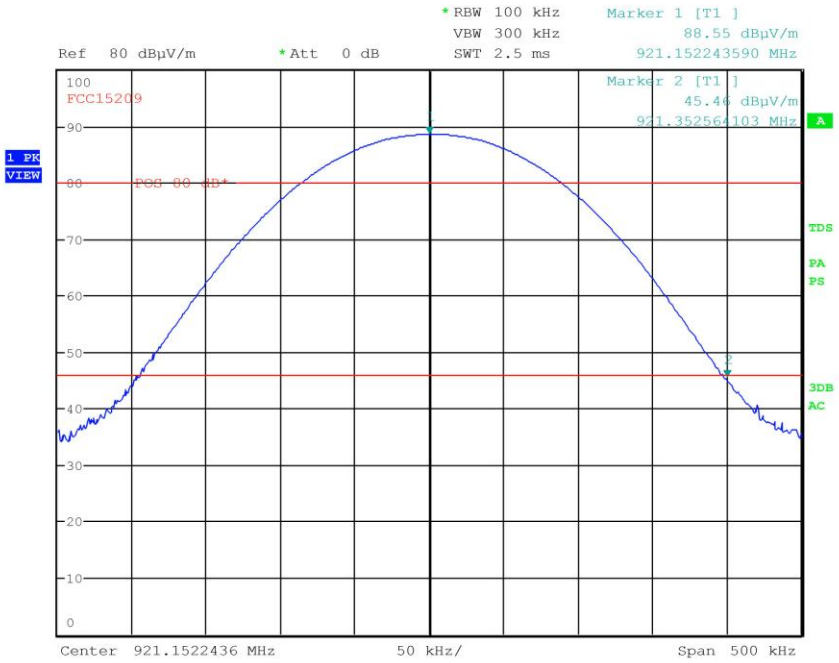
G15093812

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938112
Test Spec	

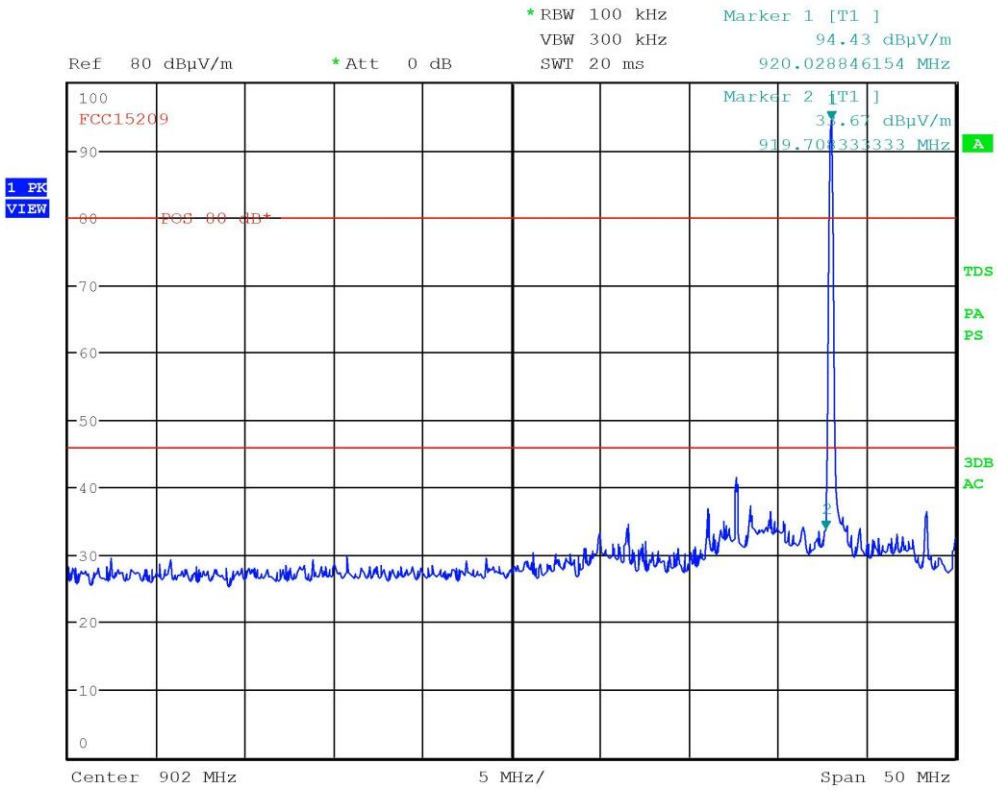


G15093813

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938113
Test Spec	

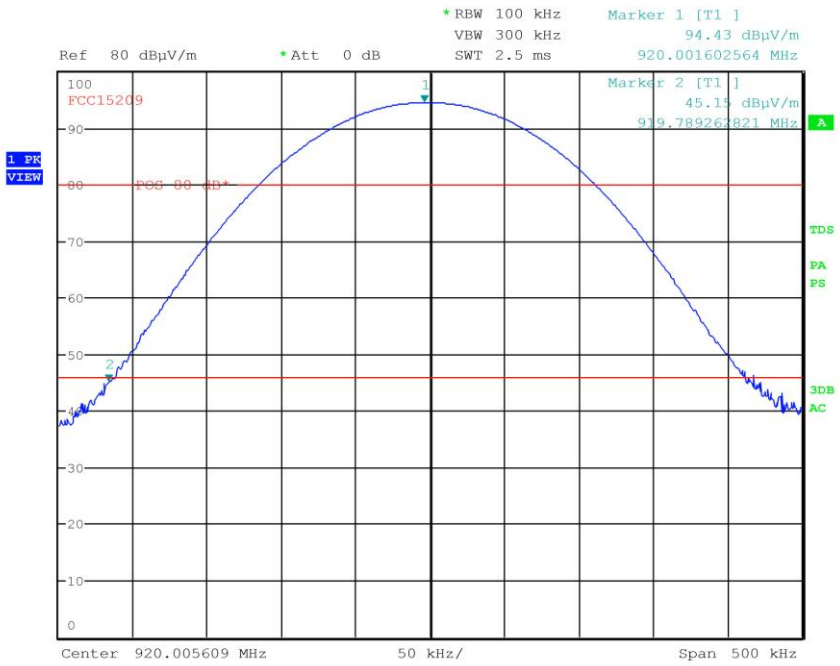


G15093822



G15093823

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938123
Test Spec	



Result: The requirements are met

11.5 Spurious Emission

Test set-up and execution

- FCC Rules and Regulation; Titles 47 Part 15.209
- Internal procedure PM001
- See clause 4 of this test report

Test configuration and test method

Test site:
Semi-anechoic chamber

Auxiliary equipment:
See clause 4 of this test report

EUT exercising

See clause 4 of this test report

Test equipment used

CMC S108, CMC S136, CMC S164
Measurement uncertainty: See clause 7 of this test report

Test specification

Port: Enclosure
Antenna polarization: Horizontal (H) – Vertical (V)
EUT – Antenna distance: 3 m
Detector AV + Peak

Environmental conditions

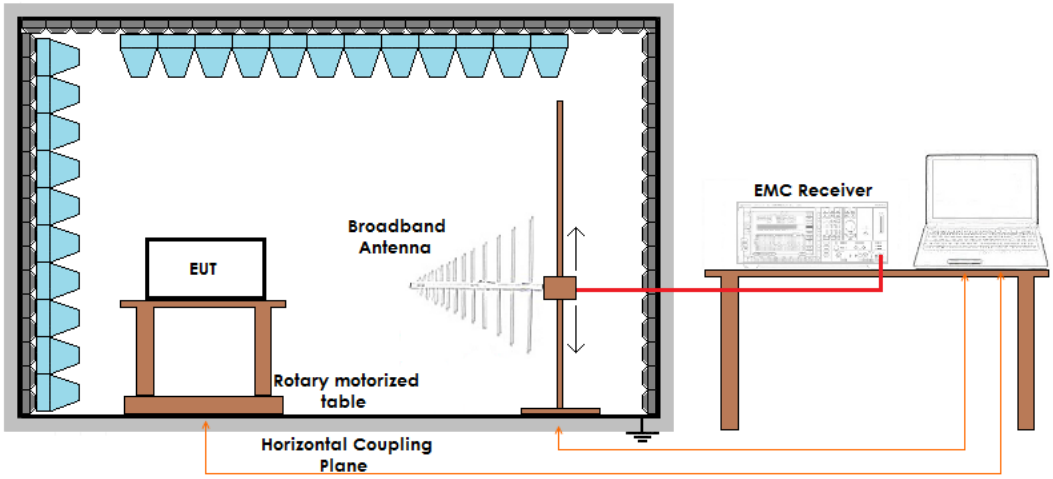
Temperature (°C)	*Atmospheric pressure (kPa)*	*Relative humidity (%)*
22	101	45

Acceptance limits

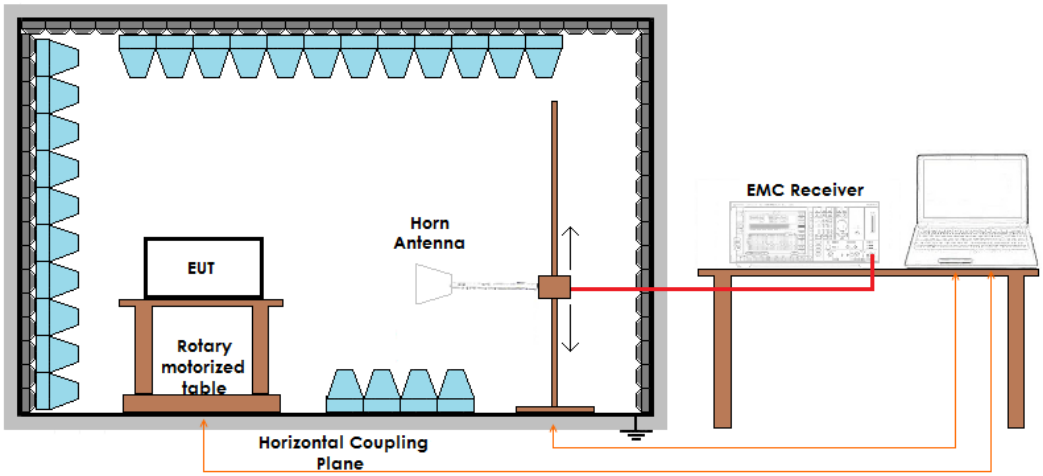
Frequency (MHz)	*AV limits [dB(µV/m)]*	*Peak limits [dB(µV/m)]*
> 1000	54	74

Setup

Frequency ≤ 1 GHz



Frequency > 1 GHz



Graph:	G15093824 and G15093825

Result – AV detector

Harmonic	Limits (dBµV/m)	Level (dBµV/m)			Results
		920,000 MHz	920,600 MHz	921,150 MHz	
II	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
III	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
IV	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
V	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
VI	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
VII	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
VIII	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
IX	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
X	54	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values					

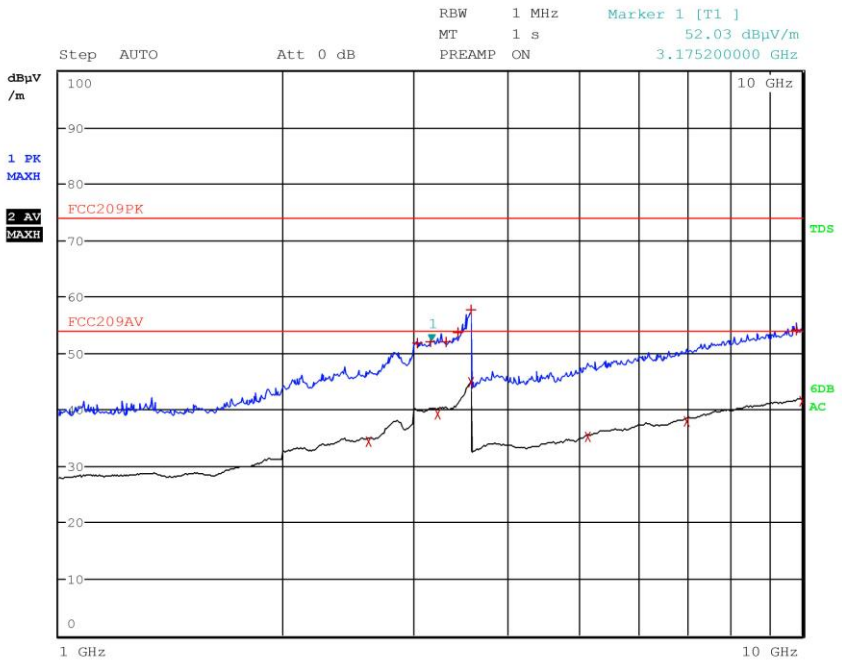
Result – Peak detector

Harmonic	Limits (dBµV/m)	Level (dBµV/m)			Results
		920,000 MHz	920,600 MHz	921,150 MHz	
II	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
III	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
IV	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
V	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
VI	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
VII	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
VIII	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
IX	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
X	74	More than 20 dB below limit	More than 20 dB below limit	More than 20 dB below limit	Complies
Remarks: EUT was tested in 3 orthogonal planes. The results in this table show the highest values					

Graphs

G15093824

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938124
Test Spec	



Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938124
Test Spec	

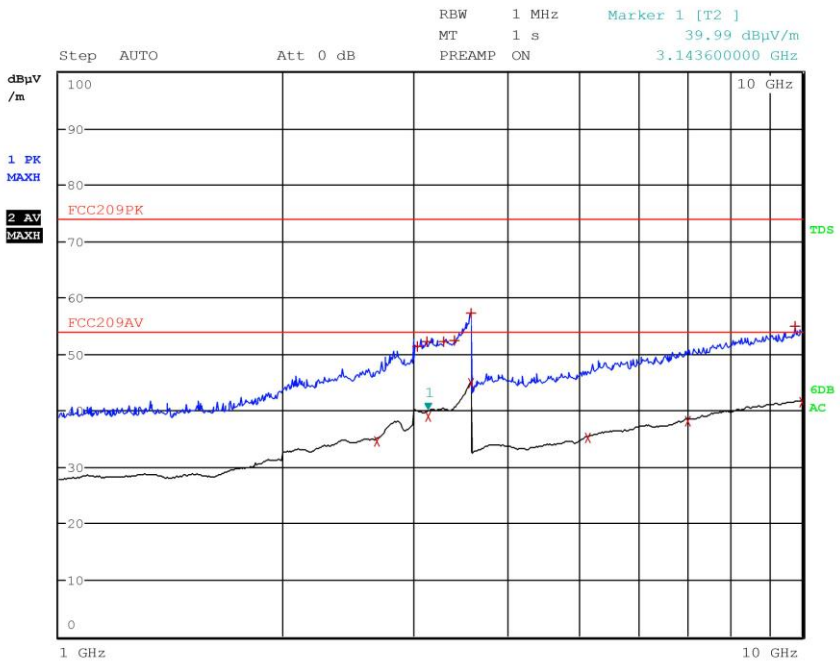
Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 12

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	2.614400000 GHz	34.45	Average	-19.55
1	3.036400000 GHz	51.87	Max Peak	-22.13
1	3.159600000 GHz	52.01	Max Peak	-21.99
2	3.235200000 GHz	39.27	Average	-14.73
1	3.322000000 GHz	51.94	Max Peak	-22.06
1	3.440800000 GHz	53.60	Max Peak	-20.40
1	3.594800000 GHz	57.59	Max Peak	-16.41
2	3.598400000 GHz	44.84	Average	-9.16
2	5.138000000 GHz	35.25	Average	-18.75
2	6.978000000 GHz	37.94	Average	-16.06
1	9.801200000 GHz	54.12	Max Peak	-19.88
2	9.983600000 GHz	41.51	Average	-12.49

G15093825

Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938125
Test Spec	



Meas Type	Emission
Equipment under Test	
Manufacturer	
OP Condition	
Operator	Bertezzolo 150938125
Test Spec	

Final Measurement

Meas Time: 1 s
Margin: 20 dB
Subranges: 12

Trace	Frequency	Level (dBµV/m)	Detector	Delta Limit/dB
2	2.676400000 GHz	34.52	Average	-19.48
1	3.041200000 GHz	51.46	Max Peak	-22.54
1	3.123200000 GHz	52.19	Max Peak	-21.81
2	3.143600000 GHz	39.01	Average	-14.99
1	3.298800000 GHz	52.26	Max Peak	-21.74
1	3.405200000 GHz	52.40	Max Peak	-21.60
1	3.592400000 GHz	57.34	Max Peak	-16.66
2	3.596800000 GHz	44.81	Average	-9.19
2	5.138400000 GHz	35.28	Average	-18.72
2	7.004800000 GHz	38.11	Average	-15.89
1	9.795200000 GHz	54.91	Max Peak	-19.09
2	9.989200000 GHz	41.50	Average	-12.50

Result: The requirements are met