



Wireless test report – 370921-2TRFWL

370921-2TRFWL

Date of issue: April 29, 2019

Applicant:

Favero Electronics Srl Via R. Lombardi 64 31030 Arcade TV Italy

Product:

Bicycle Power sensor

Model:

ASSIOMA

FCC ID: 2ATKD-ASSIOMA

Specifications:

◆ FCC 47 CFR Part 15 Subpart C, §15.249

Operation in the 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHz and 24.0–24.25 GHz

◆ RSS-210, Issue 9, December 2016, Annex F

Devices operating in frequency bands 902–928, 2400–2483.5 and 5725–5875 MHz for any application

Test engineer(s): Daniele Guarnone, Wireless/EMC Specialist Signature:

Reviewed by: Paolo Barbieri, Wireless/EMC Specialist Signature:

Test location

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Province:	Via del Carroccio, 4
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Site number:	FCC Test Firm Registration Number: 682159

Tested by:	Avul Nzenza, EMC Specialist
Reviewed by:	Andrey Adelberg, Senior Wireless/EMC Specialist
Date:	March 6, 2019

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025.

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Section 1 Report summary

1.1 Applicant/Manufacturers

Company name	Favero Electronics Srl
Address	Via R. Lombardi 64
City	Treviso
Province/State	TV
Postal/Zip code	31030
Country	Italy

1.2 Test specifications

FCC 47 CFR Part 15, Subpart C, Clause 15.249	Operation in the 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHz and 24.0–24.25 GHz
RSS-210, Issue 9 Annex B.10	Devices operating in frequency bands 902–928, 2400–2483.5 and 5725–5875 MHz for any application

1.3 Test specifications

ANSI C63.10 v2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
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1.4 Statement of compliance

In the configuration tested, the EUT was found compliant.

Testing was completed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See “Summary of test results” for full details.

1.5 Exclusions

None

1.6 Test report revision history

Revision #	Details of changes made to test report
TRF	Original report issued

Section 2 Summary of test results

2.1 FCC Part 15 Subpart C – general requirements, test results

Part	Test description	Verdict
§15.207(a)	Conducted limits	Not applicable
§15.215(c)	20 dB emission bandwidth	Pass

Note: The EUT uses a 3.7 Vdc cell battery.

2.2 FCC Part 15 Subpart C – Intentional Radiators, test results

Part	Test description	Verdict
§15.249(a)	Field strength of fundamental and harmonics emissions	Pass
§15.249(d)	Spurious emissions (except harmonics)	Pass

2.3 IC RSS-GEN, Issue 5, test results

Clause	Test description	Verdict
6.7	Occupied bandwidth	Pass
7.3	Receiver Radiated Limits	Not applicable
7.4	Receiver Conducted Limits	Not applicable
8.8	AC power lines conducted emission limits	Not applicable

Note: 1 According to sections 5.2 and 5.3 of RSS-Gen, Issue 5 the EUT does not have a stand-alone receiver neither scanner receiver, therefore exempt from receiver requirements.
The EUT uses a 3.7 Vdc cell battery.

2.4 RSS-210, Issue 9, test results

Part	Test description	Verdict
§B.10 (a)	Field strength of fundamental and harmonics emissions	Pass
§B.10 (b)	Spurious emissions (except harmonics)	Pass

Section 3 Equipment under test (EUT) details

3.1 Sample information

Receipt date	April 17, 2019
Nemko sample ID number	#1

3.2 EUT information

Product name	Bicycle Power sensor
Model	ASSIOMA

3.3 Technical information

Operating band	2400–2483.5 MHz
Operating frequency range	2403–2480 MHz
Modulation type	FSK
Occupied bandwidth (99 %)	0.969 MHz
Emission designator	970KF7D
Power requirements	3.4–4.1 VDC (Battery)
Antenna information	The EUT uses a unique antenna coupling/ non-detachable antenna to the intentional radiator.

3.4 Product description and theory of operation

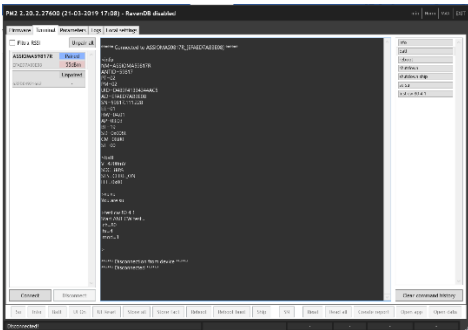
The E.U.T is a Power meter with sensors on both pedals, communicates via Bluetooth and ANT+ with bike computers

3.5 EUT exercise details

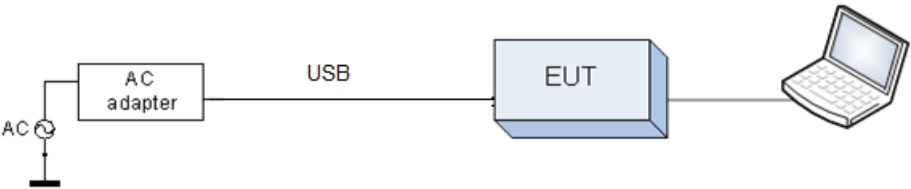
The unit is activated with a continuous transmissions signal using FSK modulation.

EUT was set to continuously transmit mode during tests, by test software provided by client.

These tools/scripts configure the radio modules to enable continuous transmission with the ability to adjust modulation, frequency and output power as required.



3.6 Block Diagram



Section 4 Engineering considerations

4.1 Modifications incorporated in the EUT

There were no modifications performed to the EUT during this assessment.
Just before the assessment, a cable was added to connect the unit to the computer.

4.2 Technical judgment

None

4.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 5 Test conditions

5.1 Atmospheric conditions

Temperature	18÷33 °C
Relative humidity	30÷60 %
Air pressure	980÷1060 hPa

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages $\pm 5\%$, for which the equipment was designed.

Section 6 Measurement uncertainty

6.1 Uncertainty of measurement

UKAS Lab 34 and TIA-603-B have been used as guidance for measurement uncertainty reasonable estimations with regards to previous experience and validation of data. Nemko Canada, Inc. follows these test methods in order to satisfy ISO/IEC 17025 requirements for estimation of uncertainty of measurement for wireless products.

Measurement uncertainty budgets for the tests are detailed below. Measurement uncertainty calculations assume a coverage factor of $K = 2$ with 95% certainty.

Table 6.1-1: Measurement uncertainty

EUT	Type	Test	Range and Setup features	Measurement Uncertainty	Notes
Transmitter	Conducted	Frequency error	0.001MHz ÷ 18 GHz	0.08 ppm	(1)
		Carrier power RF Output Power	1MHz ÷ 18 GHz With power meter	1.6 dB	(1)
			1MHz ÷ 18 GHz With spectrum/receiver	3.0 dB	(1)
		Conducted spurious emissions	1MHz ÷ 18 GHz	4.2 dB	(1)
		Dwell time	-	3%	(1)
		Hopping Frequency Separation	0.01MHz ÷ 18 GHz	1%	(1)
		Occupied Channel Bandwidth	0.01MHz ÷ 18 GHz	2%	(1)
		Modulation Bandwidth	0.01MHz ÷ 18 GHz	2%	(1)
	Radiated	Radiated spurious emissions	30MHz ÷ 18 GHz	6.0 dB	(1)
		Effective radiated power transmitter	30MHz ÷ 18 GHz	6.0 dB	(1)
Receiver	Radiated	Radiated spurious emissions	30MHz ÷ 18 GHz	6.0 dB	(1)
		Sensitivity measurement	1MHz ÷ 18 GHz	6.0 dB	(1)
	Conducted	Conducted spurious emissions	1MHz ÷ 18 GHz	4.2 dB	(1)

Section 7 Test equipment

7.1 Test equipment list

Table 7.1-1: Equipment list

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
EMI receiver 2 Hz ÷ 44 GHz	R&S	ESW44	101620	2018/05	2019/05
Broadband preamplifier	Schwarzbeck	BBV 9718	9718-137	2018/08	2019/08
Trilog Broadband Antenna	Schwarzbeck	VULB 9162	9162-025	2018/07	2021/07
Semi-anechoic chamber	Nemko	10m semi-anechoic chamber	530	2018/09	2021/09
Antenna mast	R&S	HCM	836 529/05	NCR	NCR
Controller	R&S	HCC	836 620/7	NCR	NCR
EMI receiver 9 kHz ÷ 3 GHz	R&S	ESCI	100888	2018/09	2019/09
LISN 9 kHz ÷ 30 MHz	R&S	ESH2-Z5	872 460/041	2018/09	2019/09
Climatic Chamber	ESPEC	ARS 1100	4100000067	2018/11	2019/11
EMI receiver 20 Hz ÷ 8 GHz	R&S	ESU8	100202	2019/01	2020/01
Bilog antenna 1 ÷ 18 GHz	Schwarzbeck	STLP 9148-123	123	2018/09	2021/09
Double Ridged Waveguide Horn	RF SPIN	DRH40	061106a40	2017/02	2020/02
Wide band Amplifier 18 GHz ÷ 40 GHz	MITEQ	AMF-5F-18004000-37-8P	128061	2018/09	2019/09
High pass filter	Wainwright Instruments	WHNX6-2555-3500-26500-60CC	01	2018/10	2020/10

Note: NCR - no calibration required, VOU - verify on use

Section 8 Testing data

8.1 FCC Clause 15.215(c) Emission bandwidth and RSS-Gen Clause 6.7 Occupied bandwidth

8.1.1 Definitions and limits

FCC Part 15.215(c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80 % of the permitted band in order to minimize the possibility of out-of-band operation.

RSS-Gen Clause 6.7 Occupied bandwidth

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth:

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.
- The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.
- The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

8.1.2 Test summary

Verdict	Pass		
Test date	August 28, 2018	Temperature	24 °C
Test engineer	Avul Nzenza	Air pressure	1011 mbar
Test location	Ottawa	Relative humidity	51.0 %

8.1.3 Observations, settings and special notes

Spectrum analyzer settings:

Resolution bandwidth:	3 kHz
Video bandwidth:	10 kHz
Detector mode:	Peak
Trace mode:	Max Hold
Function:	20 dB BW (for FCC); 99 % bandwidth (for IC)

8.1.4 Test data

Table 8.1-1: 20dB bandwidth results

Modulation	Frequency, MHz	20 dB bandwidth, kHz	Limit, kHz	Margin, KHz
ANT	2403	229	500	-271
	2441	225	500	-275
	2480	229.8	500	-270.2

Modulation	Frequency, MHz	20 dB bandwidth, kHz	Limit, kHz	Margin, KHz
ANT+	2457	225	500	-275

Table 8.1-2: 99% occupied bandwidth results

Modulation	Frequency, MHz	99% occupied bandwidth, MHz
ANT	2403	0.959
	2441	0.969
	2480	0.929

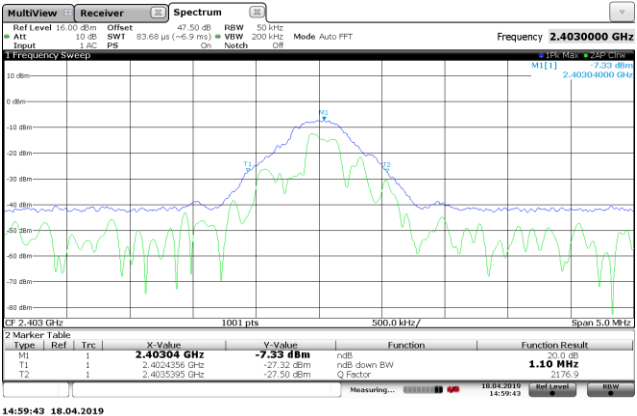
Modulation	Frequency, MHz	99% occupied bandwidth, MHz
ANT+	2457	0.959

Section 8
Test name
Specification

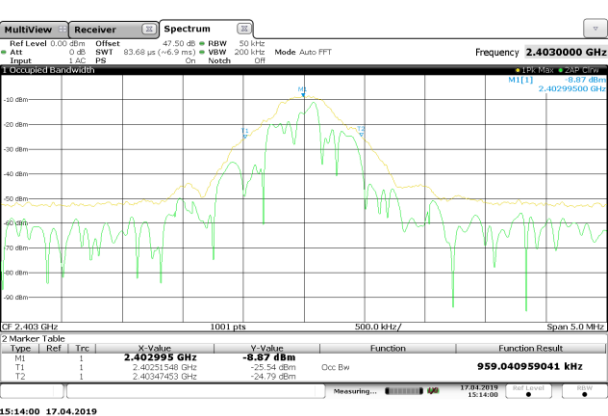
Testing data
FCC Clause 15.215(c) Emission Bandwidth and RSS Gen Clause 6.7 Occupied bandwidth
FCC Part 15 Subpart C and RSS-Gen, Issue 5



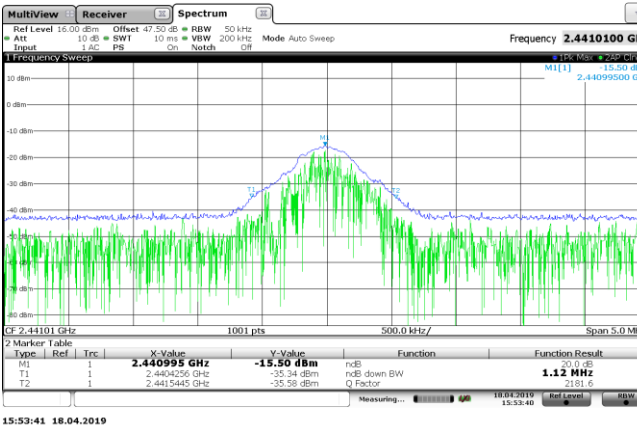
Note: there is no 99% occupied bandwidth limit in the standard's requirements, the measurement results provided for information purposes only.



Channel 3 20 dB bandwidth sample plot



Channel 3 99% bandwidth sample plot



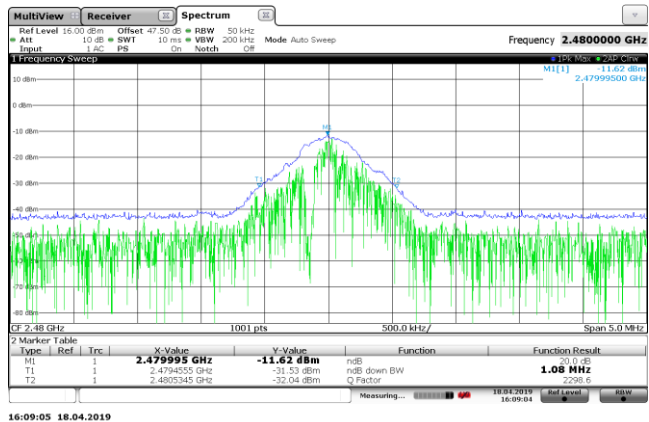
Channel 40: 20 dB bandwidth sample plot



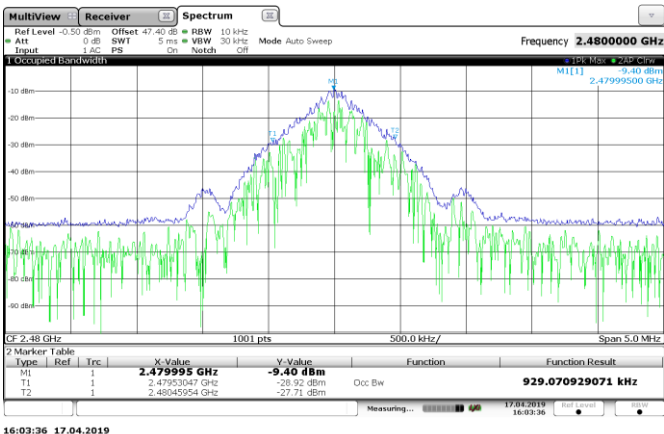
Channel 40 99% bandwidth sample plot

Section 8
Test name
Specification

Testing data
FCC Clause 15.215(c) Emission Bandwidth and RSS Gen Clause 6.7 Occupied bandwidth
FCC Part 15 Subpart C and RSS-Gen, Issue 5



Channel 80 20 dB bandwidth sample plot



Channel 80 99% bandwidth sample plot

Table 8.1-3: 20 dB bandwidth results

Frequency, MHz	20 dB bandwidth, kHz
2403	1110
2441	1120
2480	1080

Notes: None

Table 8.1-4: 99% bandwidth results

Frequency, MHz	99 % occupied bandwidth, kHz
2403	959.04
2441	969.03
2480	929.07

Notes: None

8.2 FCC Clause 15.249(a) and RSS-210 B.10 (a) Field strength of fundamental and harmonics emissions

8.2.1 Definitions and limits

In addition to the provisions of §15.205 and RSS Gen the field strength of emissions from intentional radiators operated under this section shall not exceed the following:

Table 8.2-1: Field strength limits

Fundamental frequencies (MHz)	Field strength of fundamental		Field strength of harmonics	
	(mV/m)	(dBμV/m)	(μV/m)	(dBμV/m)
902–928	50	94	500	54
2400–2483.5	50	94	500	54
5725–5875	50	94	500	54
24.0–24.25*	250	108	2500	68

Note: * - Only FCC band.

(e) As shown in §15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter (128 dBμV/m) at 3 meters along the antenna azimuth.

8.2.2 Test summary

Verdict	Pass		
Test date	April 29, 2019	Temperature	24 °C
Test engineer	Avul Nzenza	Air pressure	1011 mbar
Test location	Ottawa	Relative humidity	51.0 %

8.2.3 Observations, settings and special notes

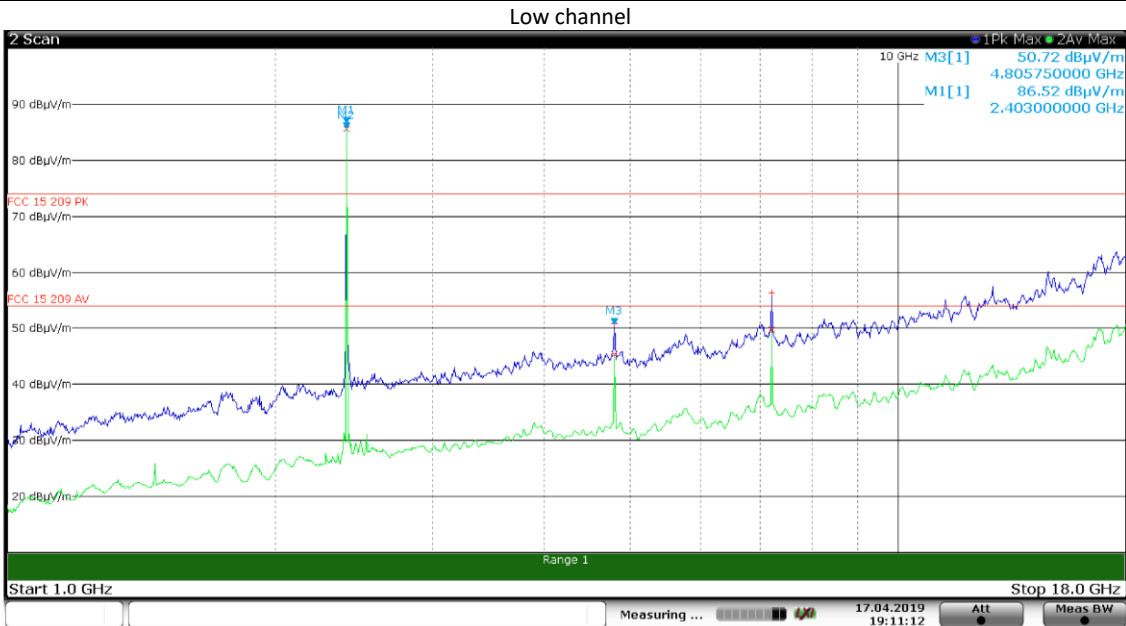
- The spectrum was searched from 30 MHz to the 10th harmonic at a distance of 3 m.
- The test was performed with vertical and horizontal antenna polarizations and the EUT was measured on three orthogonal axis, only the highest emissions were reported.

Spectrum analyzer/receiver settings:

Resolution bandwidth:	1 MHz
Video bandwidth:	3 MHz
Detector mode:	Peak
Trace mode:	Max Hold
Average measurements:	Average Results were measured

8.2.4 Test data, continued

Section 8 Radiated measurement ANT horizontal polarization

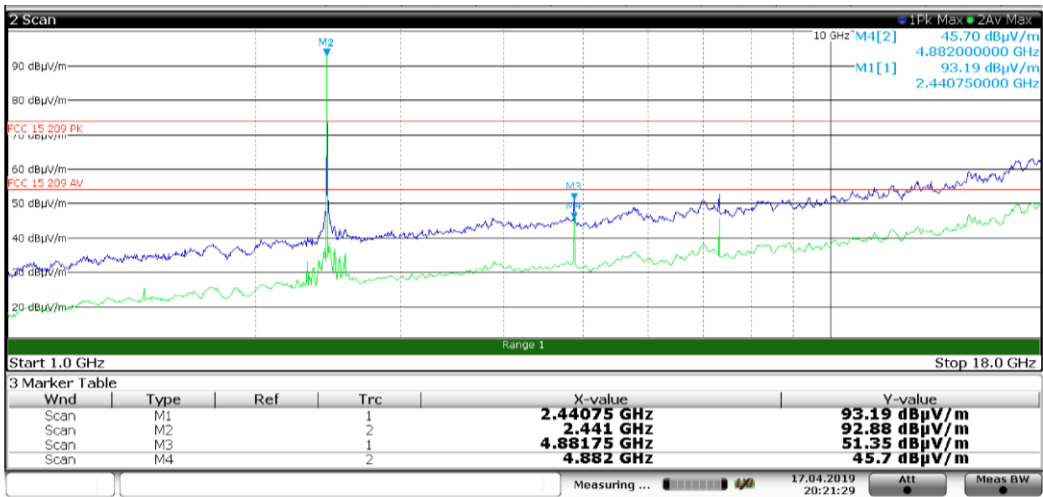


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Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2403.0000	86.6	114.0	-27.4	Pk
2403.0000	85.6	94.0	-8.4	Av
4806.0000	45.4	54.0	-8.6	Av
4806.0000	50.9	74.0	-23.1	Pk
7209.0000	56.4	74.0	-17.6	Pk
7209.0000	49.8	54.0	-4.2	Av

Section 8 Radiated measurement ANT horizontal polarization

Mid channel

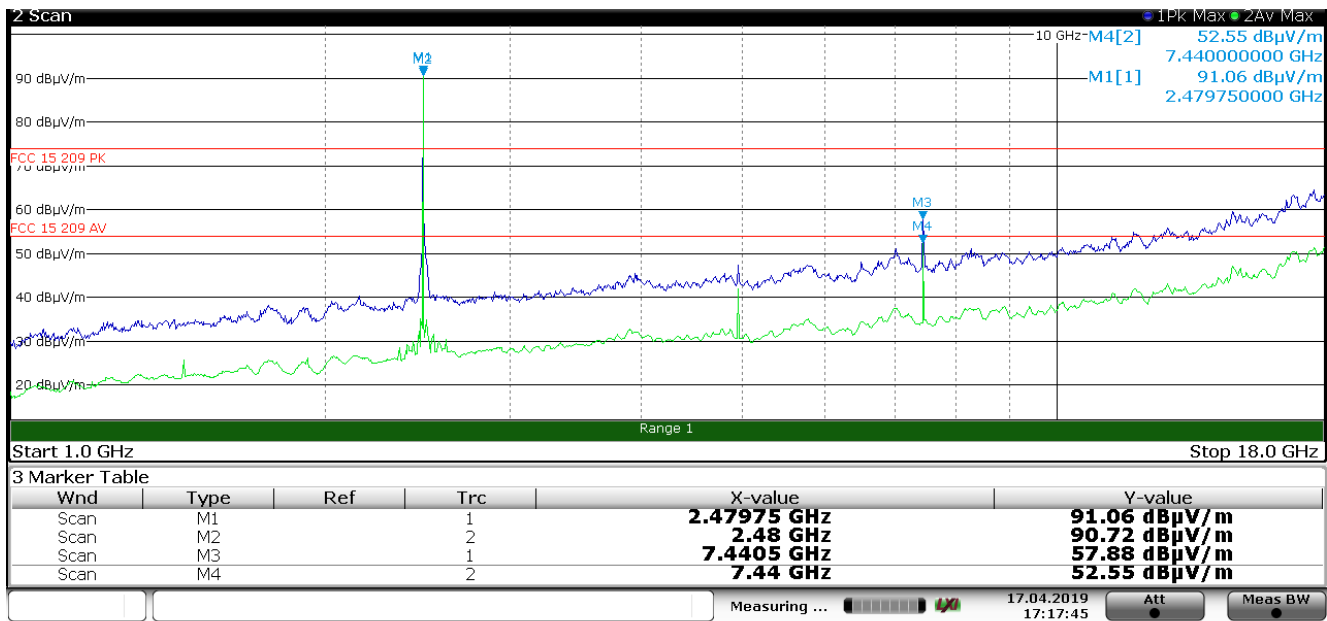


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Frequency	Level	Limit	Margin	Detector
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	
2441	93.2	114	-20.8	PK
2441	92.9	94	-1.1	AV
4882	45.7	54	-8.3	AV
4882	51.3	74	-22.7	PK

Section 8 Radiated measurement ANT horizontal polarization

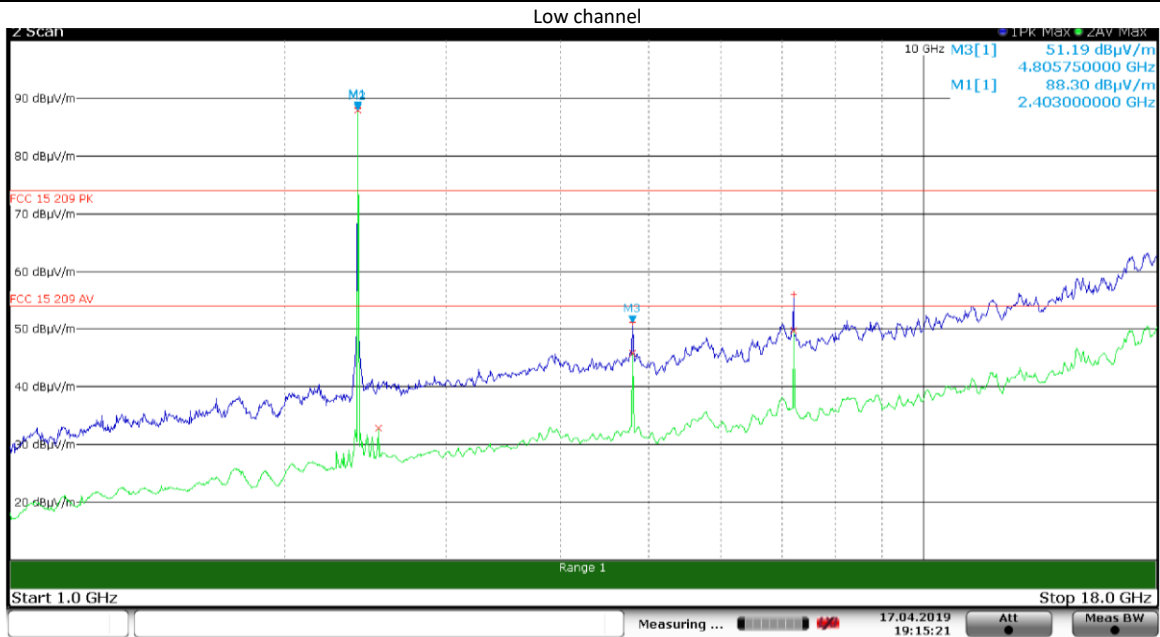
High channel



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Frequency	Level	Limit	Margin	Detector
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	
2480	91.1	114	-22.9	PK
2480	90.7	94	-3.3	AV
7440	57.8	74	-16.2	PK
7440	52.5	54	-1.5	AV

Section 8 Radiated measurement ANT vertical polarization

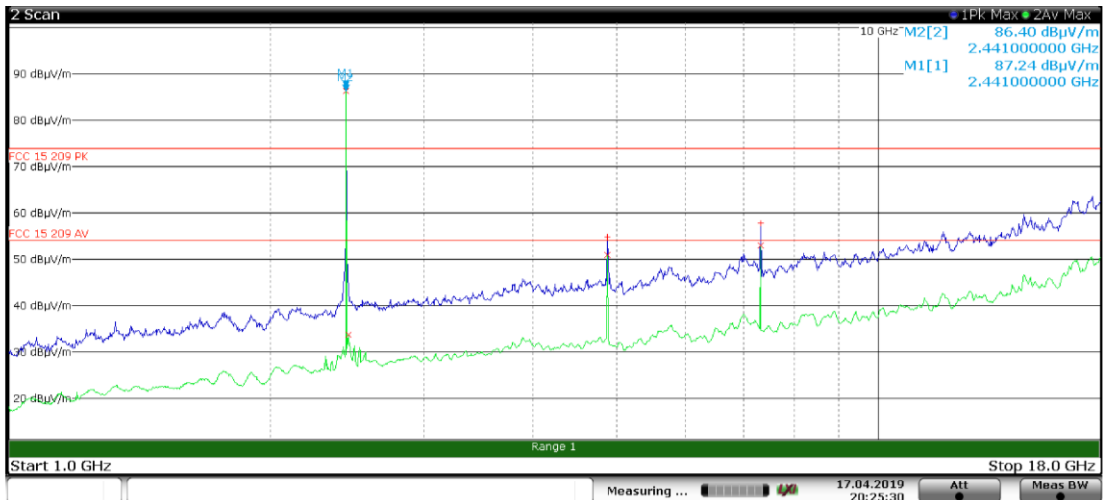


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Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
2403.0000	88.3	114.0	-25.7	Pk
2403.0000	87.9	94.0	-6.1	Av
2531.0000	32.9	54.0	-21.1	Av
4806.0000	51.2	74.0	-22.8	Pk
4806.0000	45.9	54.0	-8.1	Av
7209.0000	56.0	74.0	-18.0	Pk
7209.0000	49.9	54.0	-4.1	Av

Section 8 Radiated measurement ANT vertical polarization

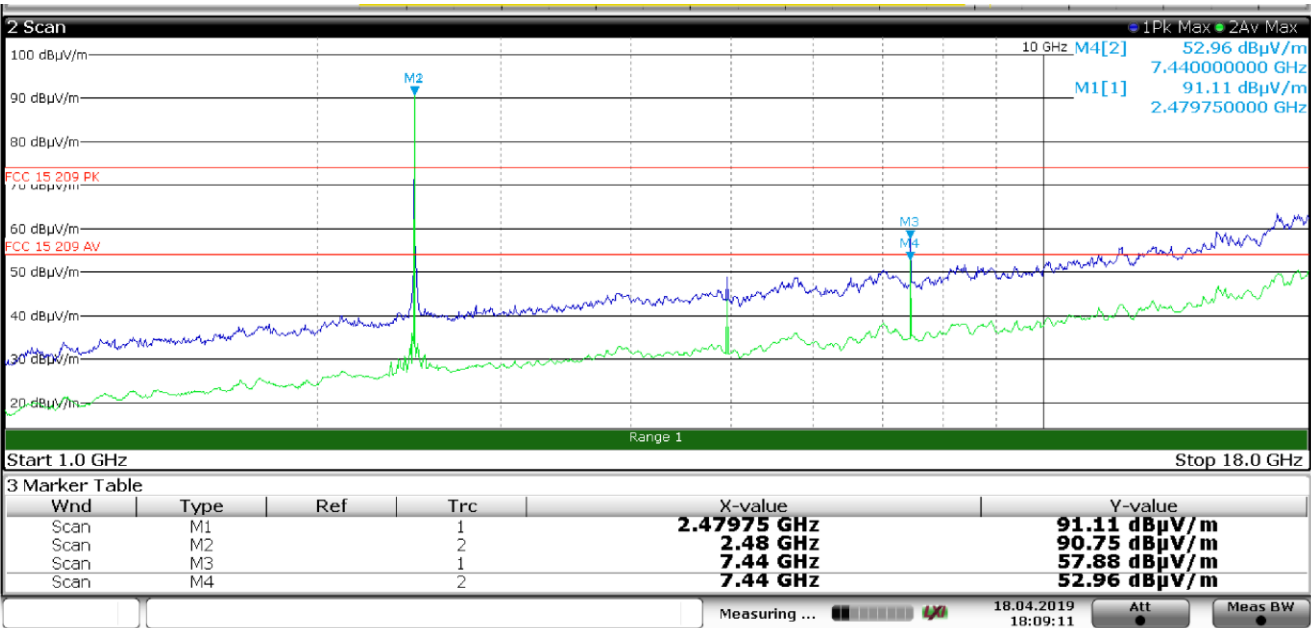
Mid channel



20:25:30 17.04.2019

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2441.0000	87.3	114.0	-26.7	Pk
2441.0000	86.4	94.0	-7.6	Av
2457.0000	33.6	54.0	-20.4	Av
4882.0000	50.9	54.0	-3.1	Av
4882.0000	54.8	74.0	-19.2	Pk
7323.0000	57.8	74.0	-16.2	Pk
7323.0000	52.9	54.0	-1.1	Av

Section 8 Radiated measurement ANT vertical polarization
High channel

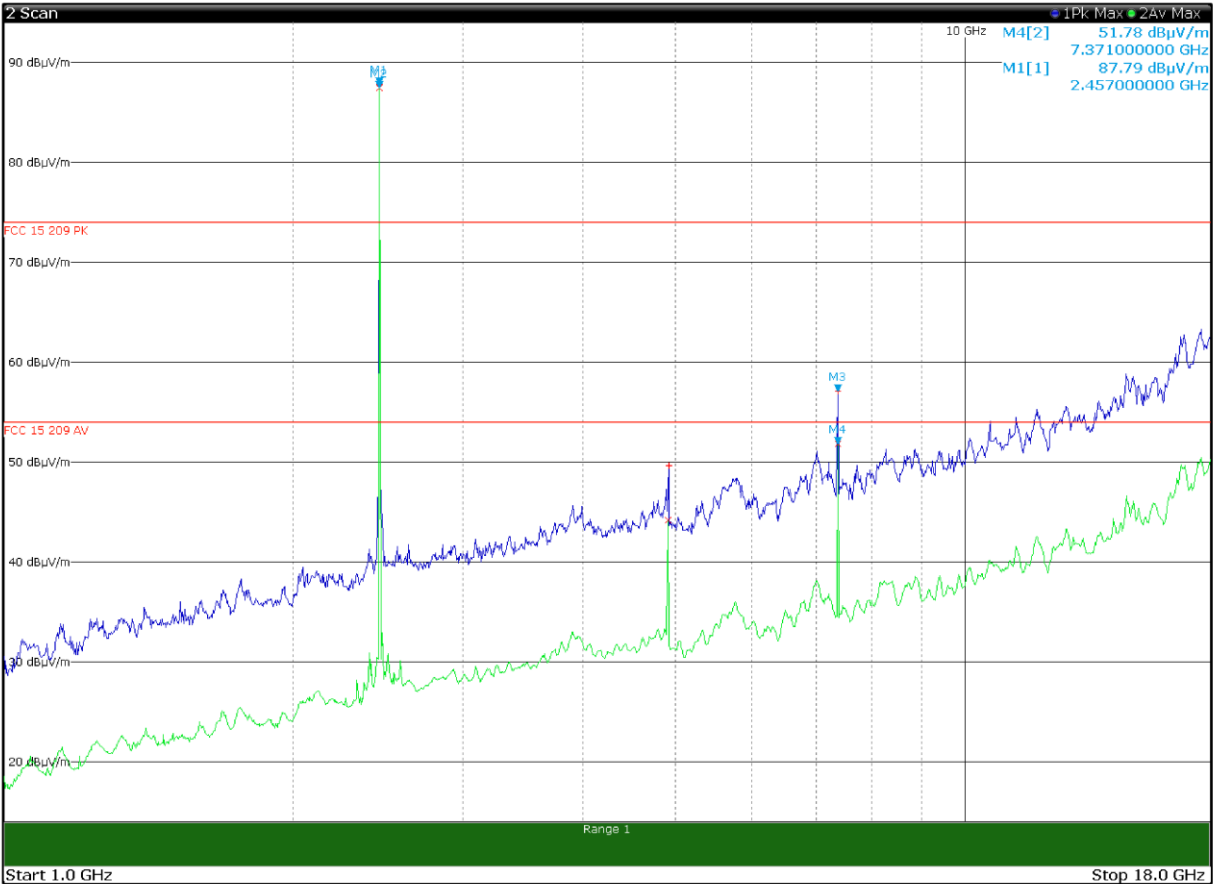


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Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2480	91.1	114	-22.9	PK
2480	90.7	94	-3.3	AV
7440	57.8	74	-16.2	PK
7440	53	54	-1	AV

Section 8 Radiated measurement ANT Horizontal

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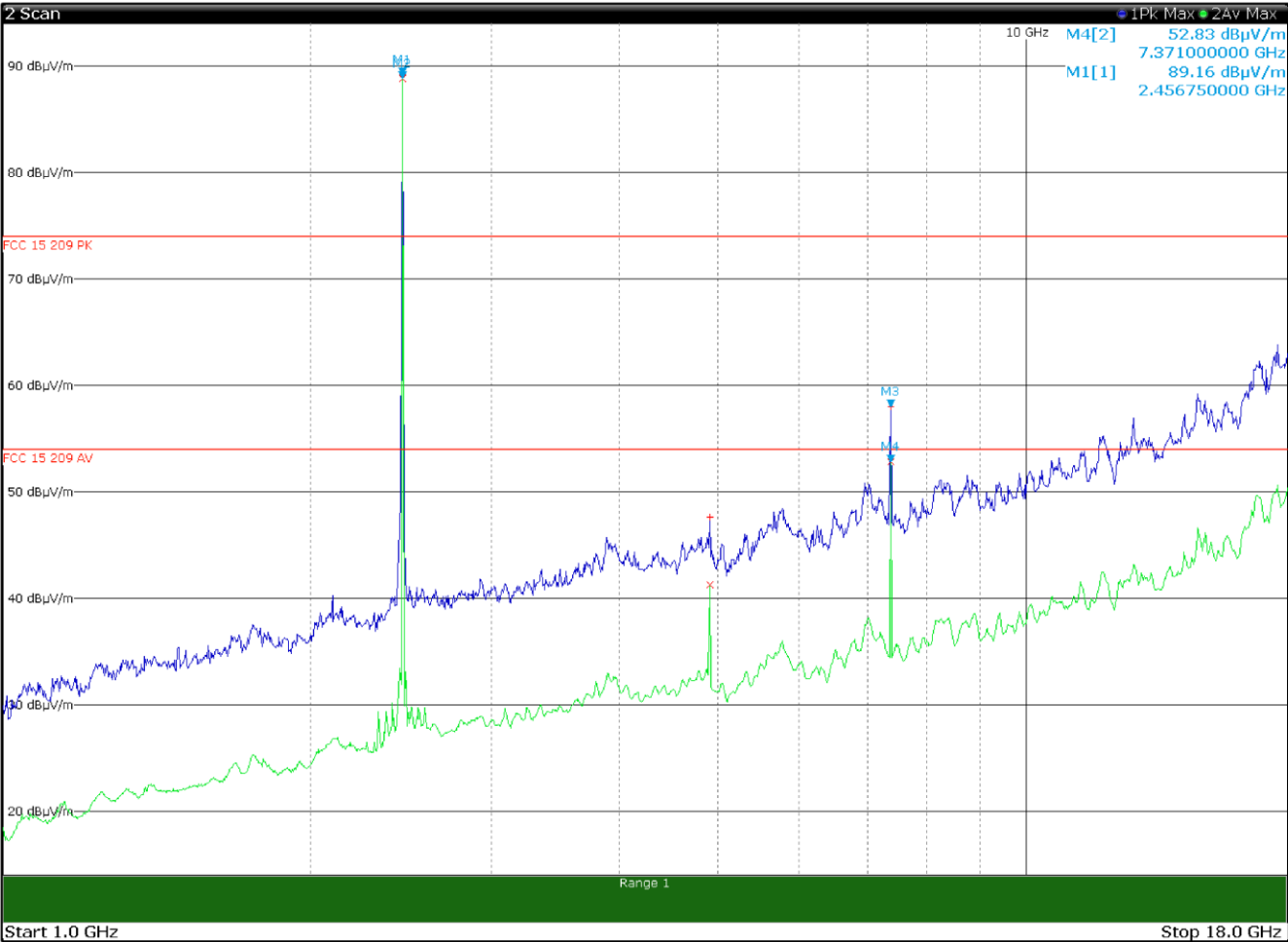
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Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
2457.0000	87.5	94.0	-6.5	Av
2457.0000	87.8	114.0	-26.2	Pk
4914.0000	44.2	54.0	-9.8	Av
4914.5000	49.7	74.0	-24.3	Pk
7371.0000	57.2	74.0	-16.8	Pk
7371.0000	51.8	54.0	-2.2	Av

Section 8 Radiated measurement ANT VERTICAL

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Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2457.0000	89.2	114.0	-24.8	Pk
2457.0000	88.9	94.0	-5.1	Av
4913.7500	47.7	74.0	-26.3	Pk
4914.0000	41.3	54.0	-12.7	Av
7370.5000	58.1	74.0	-15.9	Pk
7371.0000	52.9	54.0	-1.1	Av

8.3 FCC Clause 15.249(d) and RSS-210 B.10 (b) Spurious emissions

8.3.1 Definitions and limits

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 FCC §15.209 and RSS-Gen, whichever is the lesser attenuation.

Table 8.3-1: Field strength of spurious emissions

Frequency (MHz)	Field strength		Measurement distance (m)
	($\mu\text{V/m}$)	(dB $\mu\text{V/m}$)	
30–88	100	40.0	3
88–216	150	43.5	3
216–960	200	46.0	3
above 960	500	54.0	3

Notes:

- In the emission table above, the tighter limit applies at the band edges.
- For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.

8.3.2 Test summary

Verdict	Pass		
Test date	April 19, 2019	Temperature	24 °C
Test engineer	Daniele Guarnone	Air pressure	1011 mbar
Test location	Biassono	Relative humidity	51.0 %

8.3.3 Observations, settings and special notes

The spectrum was searched from 30 MHz to the 10th harmonic at a distance of 3 m.

The test was performed with vertical and horizontal antenna polarizations and the EUT was measured on three orthogonal axis, only the highest emissions were reported.

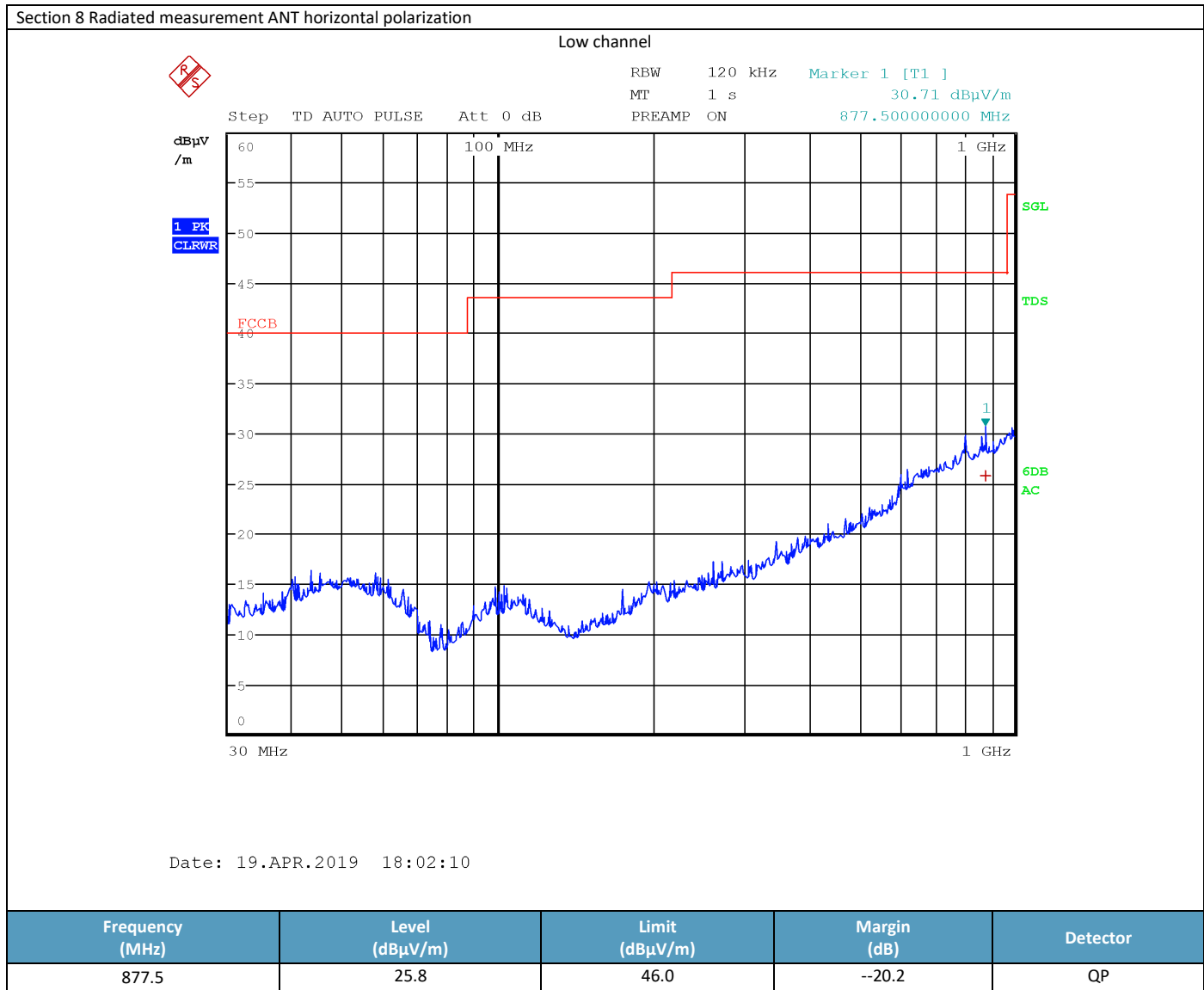
Spectrum analyzer/receiver settings for frequencies below 1 GHz:

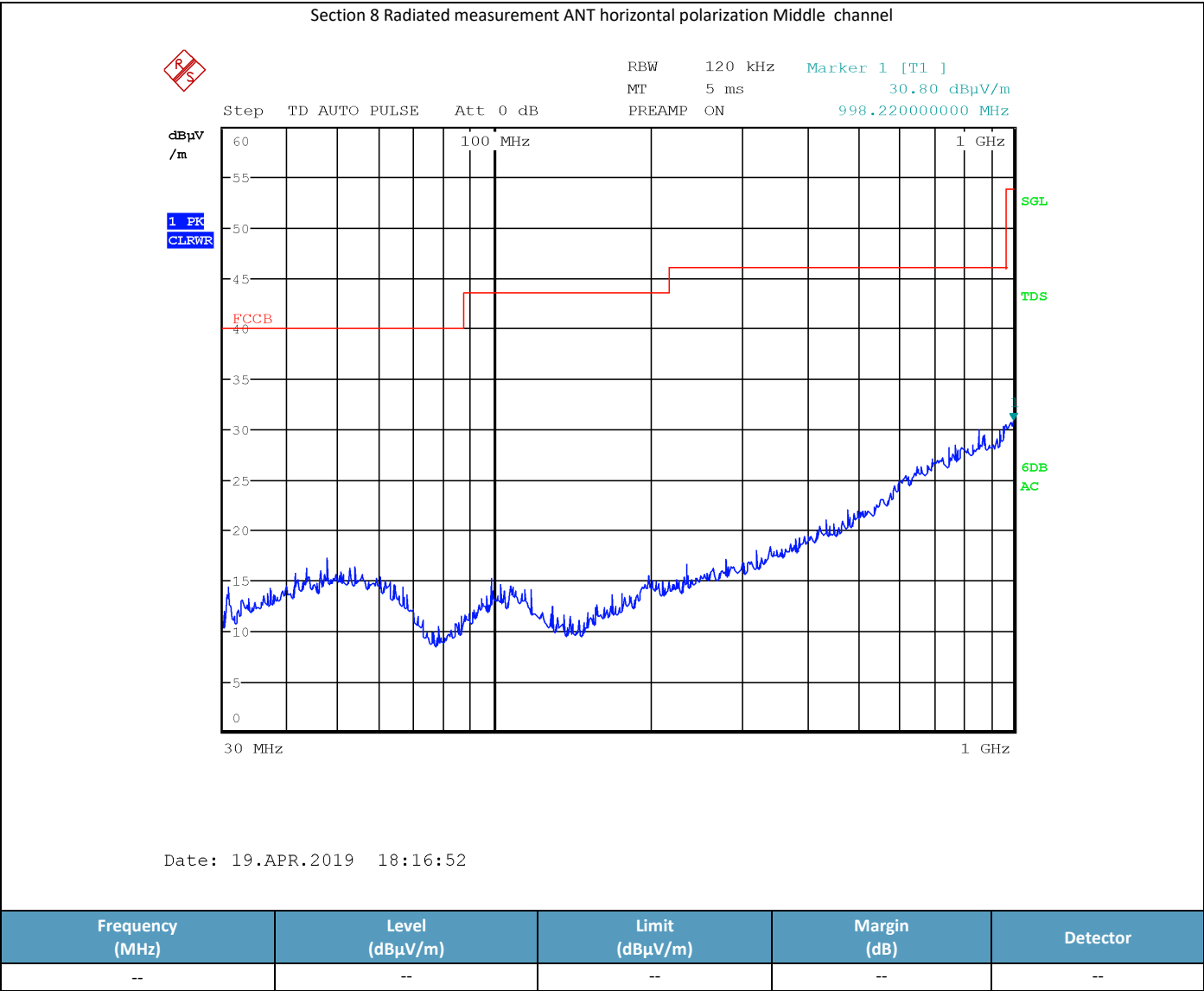
Resolution bandwidth:	120 kHz
Video bandwidth:	300 kHz
Detector mode:	Quasi-Peak
Trace mode:	Max Hold

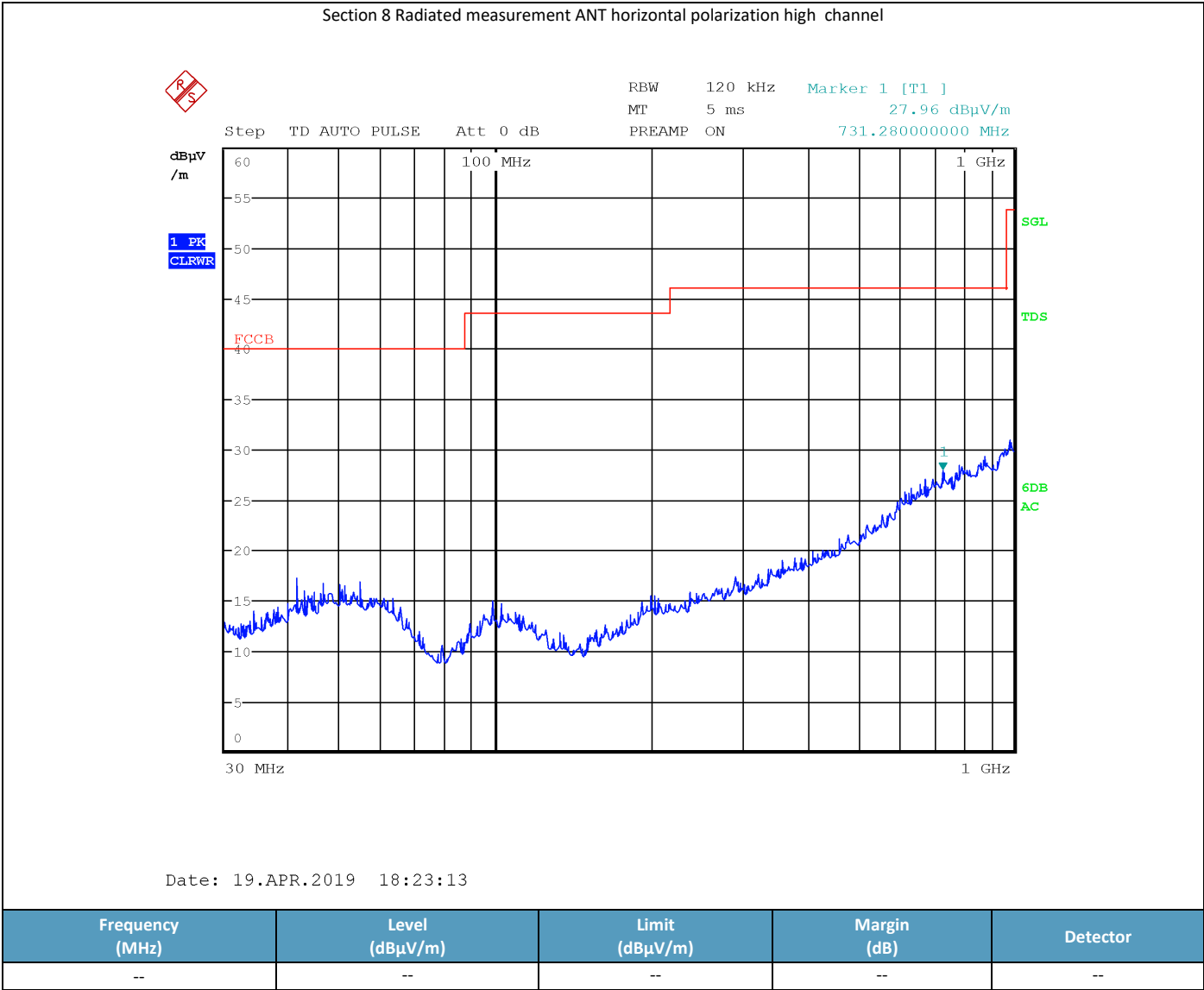
Spectrum analyzer/receiver settings for frequencies above 1 GHz:

Resolution bandwidth:	1 MHz
Video bandwidth:	3 MHz
Detector mode:	Peak
Trace mode:	Max Hold
Average measurements:	Average Results were measured

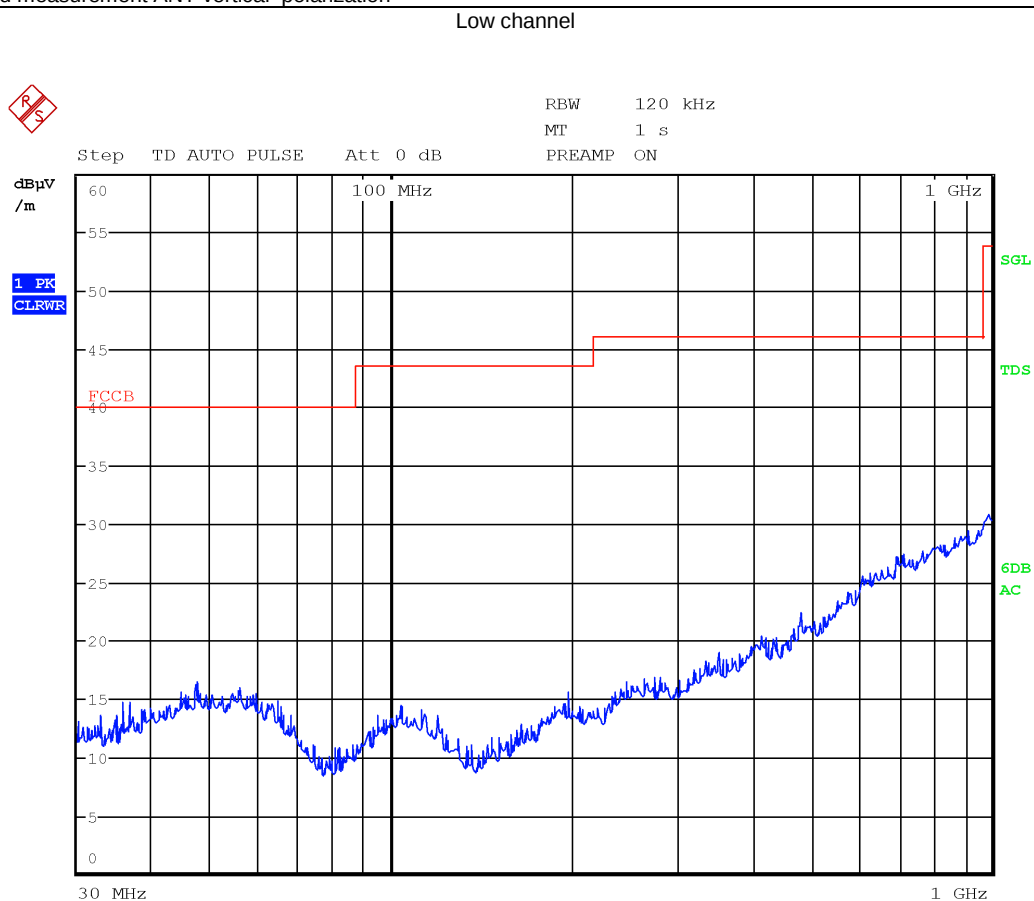
8.3.4 Test data







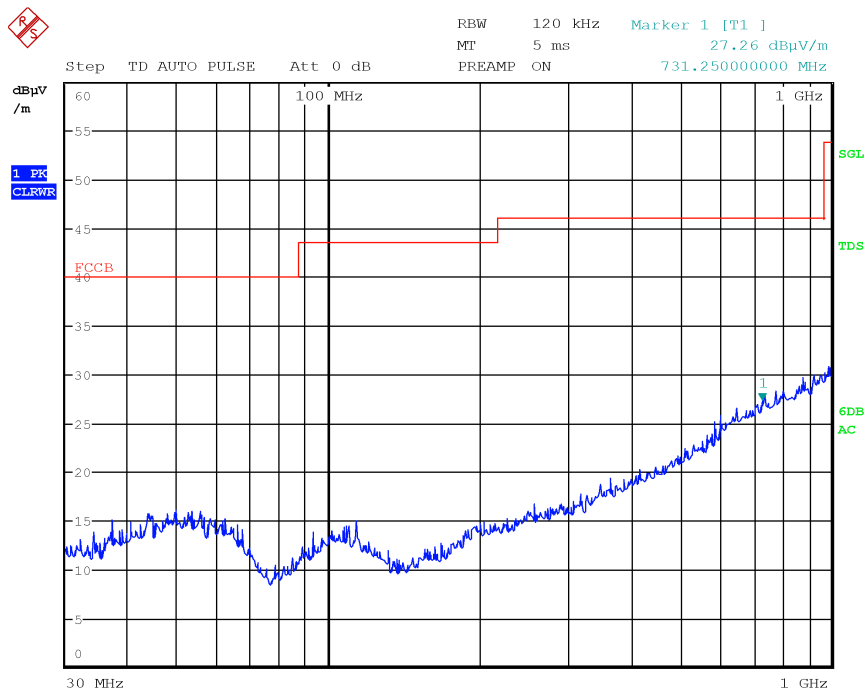
Section 8 Radiated measurement ANT vertical polarization



Date: 19.APR.2019 17:54:35

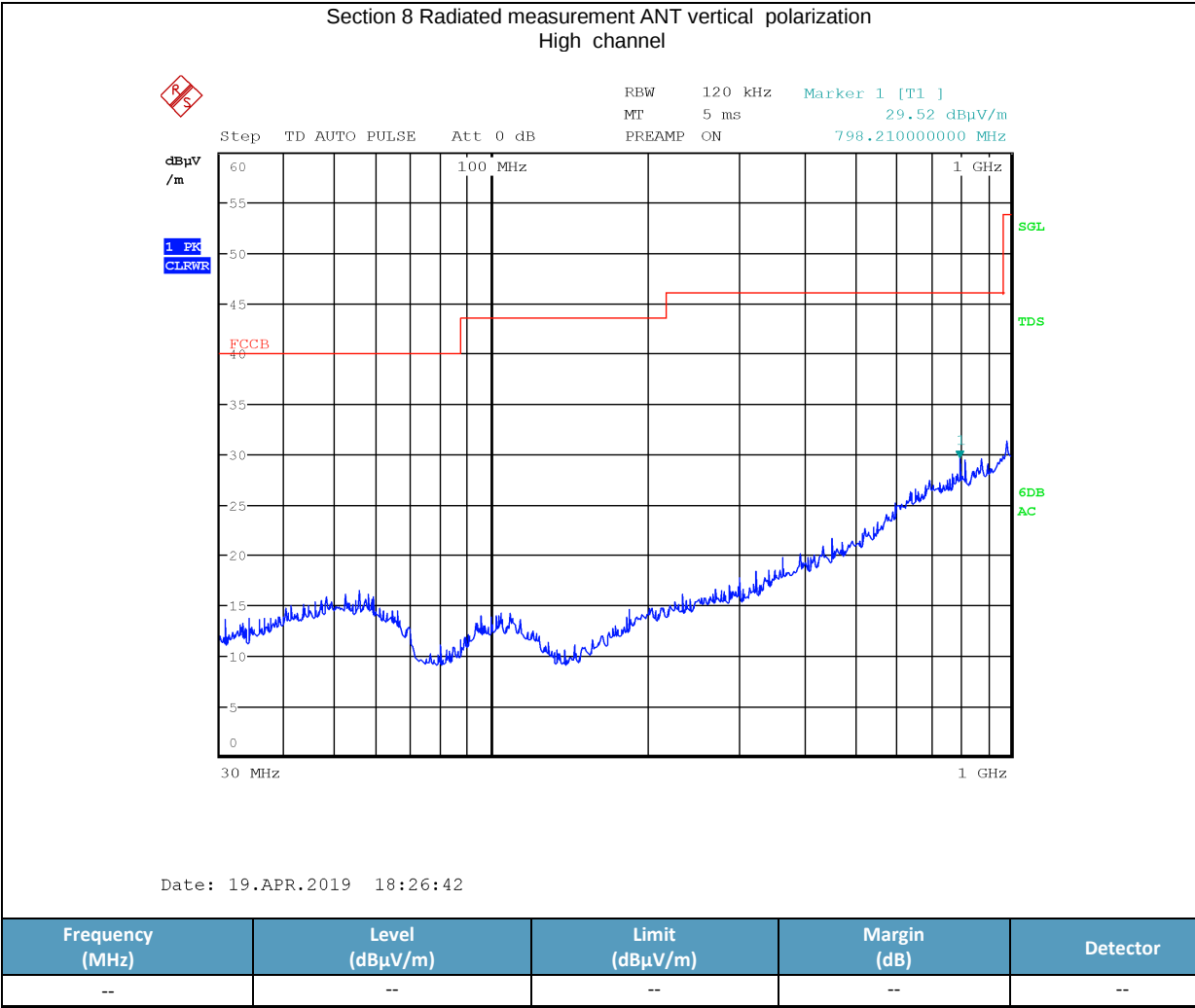
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
--	--	--	--	--

Section 8 Radiated measurement ANT vertical polarization
Middle channel



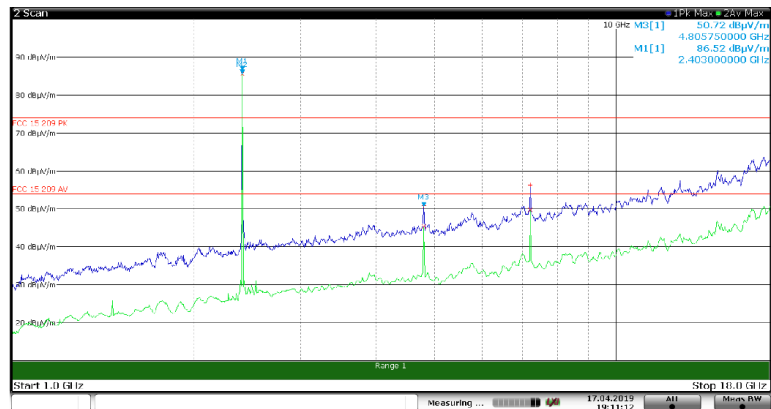
Date: 19.APR.2019 18:20:14

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
--	--	--	--	--

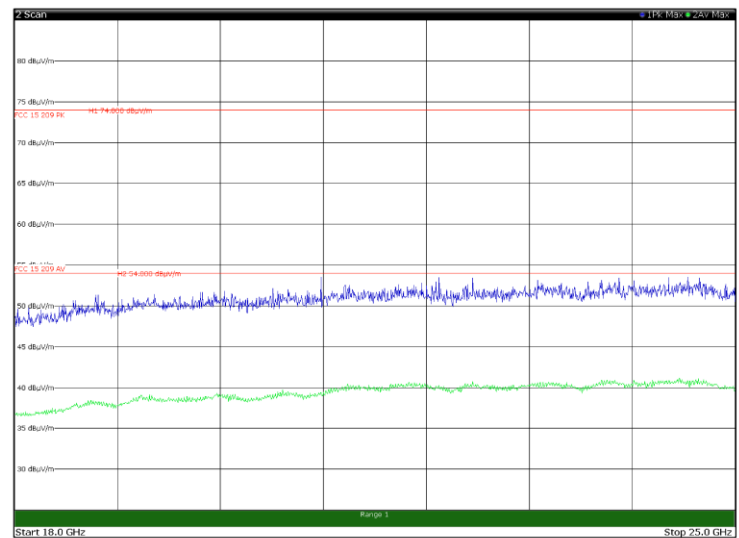


Section 8 Radiated measurement ANT horizontal polarization

Low channel



19:11:12 17.04.2019



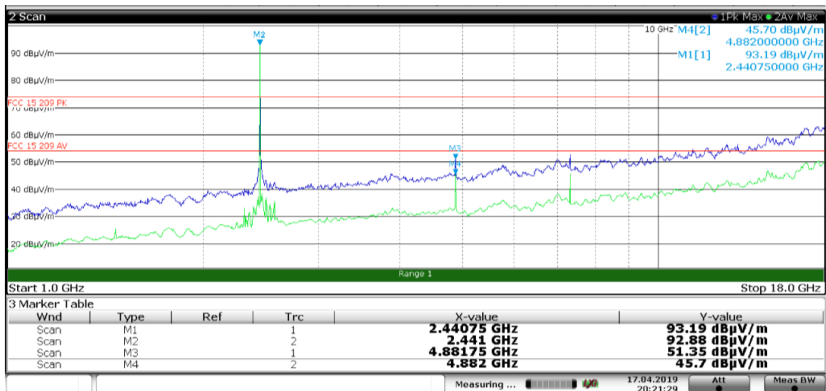
18:26:01 30.04.2019

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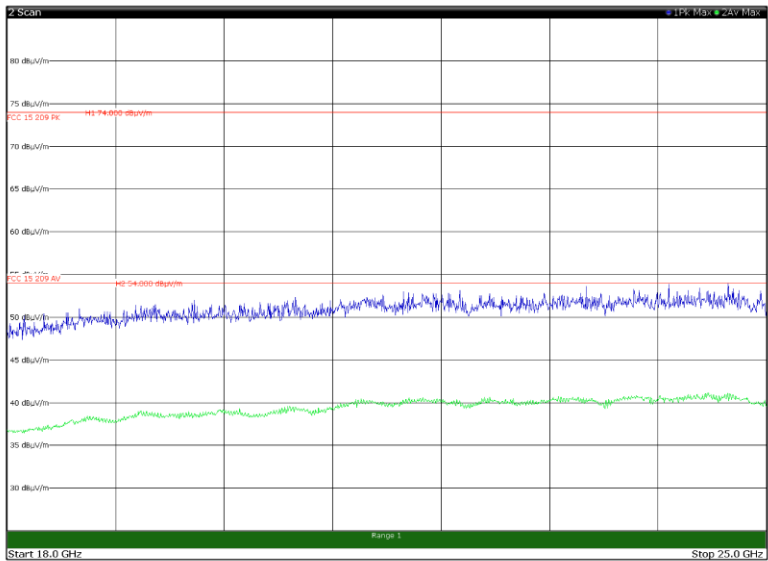
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2403.0000	86.6	114.0	-27.4	Pk
2403.0000	85.6	94.0	-8.4	Av
4806.0000	45.4	54.0	-8.6	Av
4806.0000	50.9	74.0	-23.1	Pk
7209.0000	56.4	74.0	-17.6	Pk
7209.0000	49.8	54.0	-4.2	Av

Section 8 Radiated measurement ANT horizontal polarization

Mid channel



20:21:29 17.04.2019

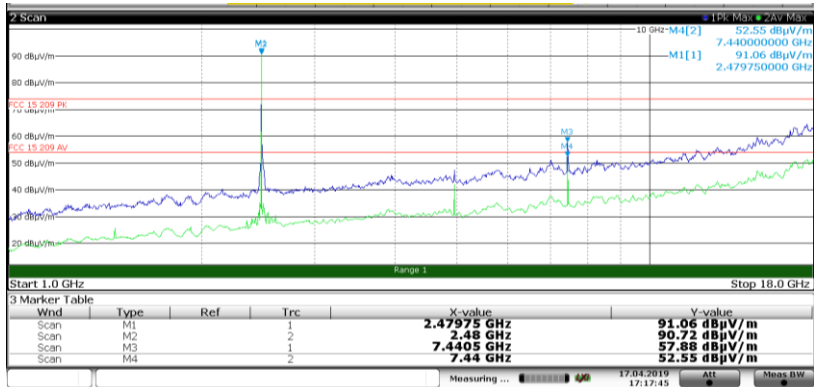


18:28:19 30.04

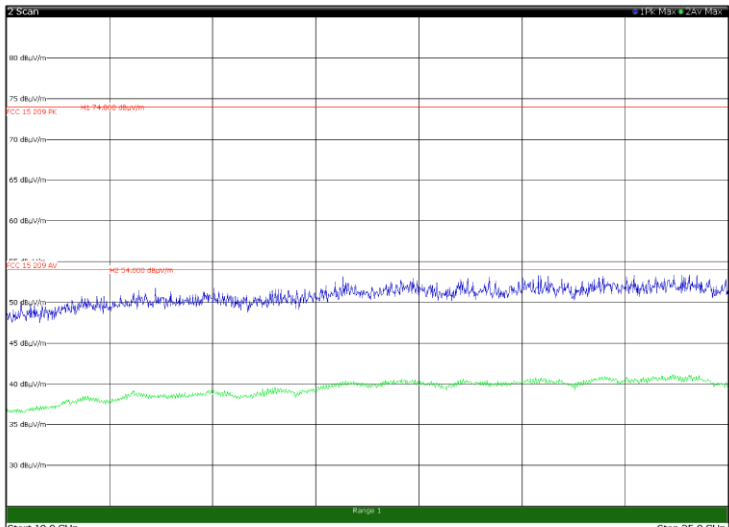
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Section 8 Radiated measurement ANT horizontal polarization

High channel



17:17:45 17.04.2019



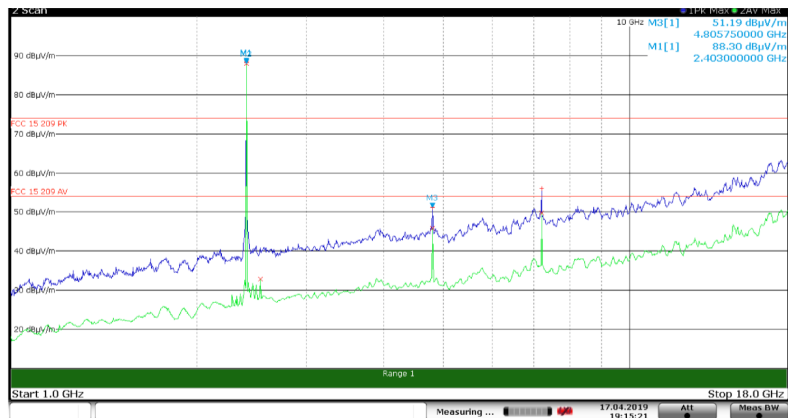
18:31:37 30.04.2019

Page 1 / 1

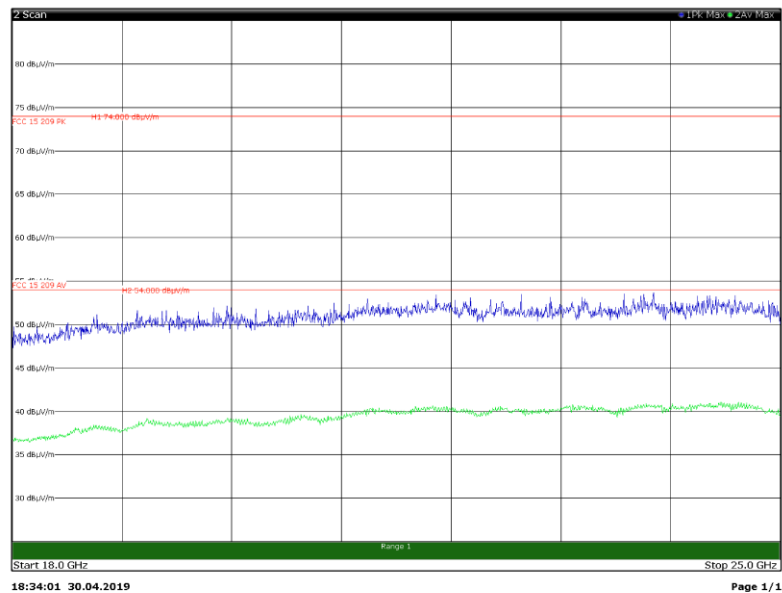
Frequency	Level	Limit	Margin	Detector
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	
2480	91.1	114	-22.9	PK
2480	90.7	94	-3.3	AV
7440	57.8	74	-16.2	PK
7440	52.5	54	-1.5	AV

Section 8 Radiated measurement ANT vertical polarization

Low channel



19:15:21 17.04.2019



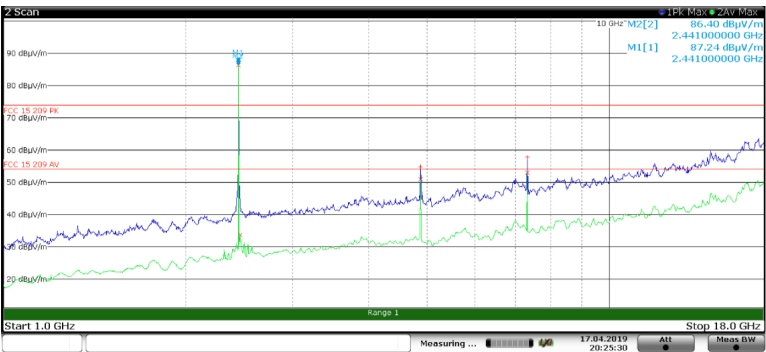
18:34:01 30.04.2019

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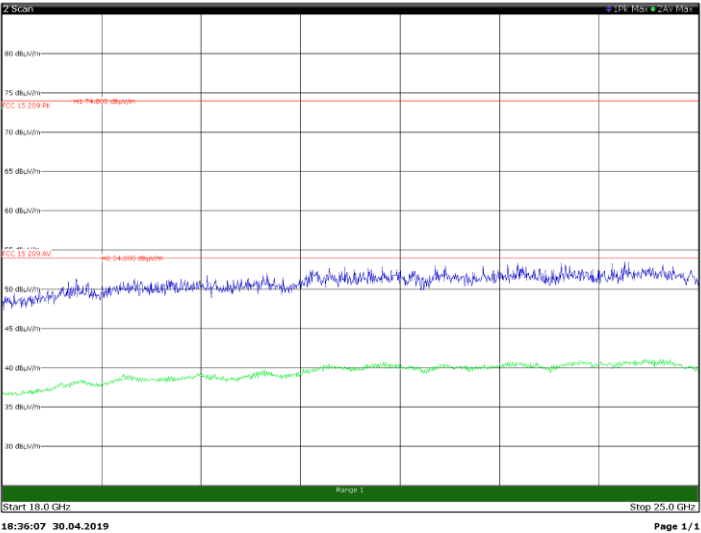
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2403.0000	88.3	114.0	-25.7	Pk
2403.0000	87.9	94.0	-6.1	Av
2531.0000	32.9	54.0	-21.1	Av
4806.0000	51.2	74.0	-22.8	Pk
4806.0000	45.9	54.0	-8.1	Av
7209.0000	56.0	74.0	-18.0	Pk
7209.0000	49.9	54.0	-4.1	Av

Section 8 Radiated measurement ANT vertical polarization

Mid channel



20:25:30 17.04.2019



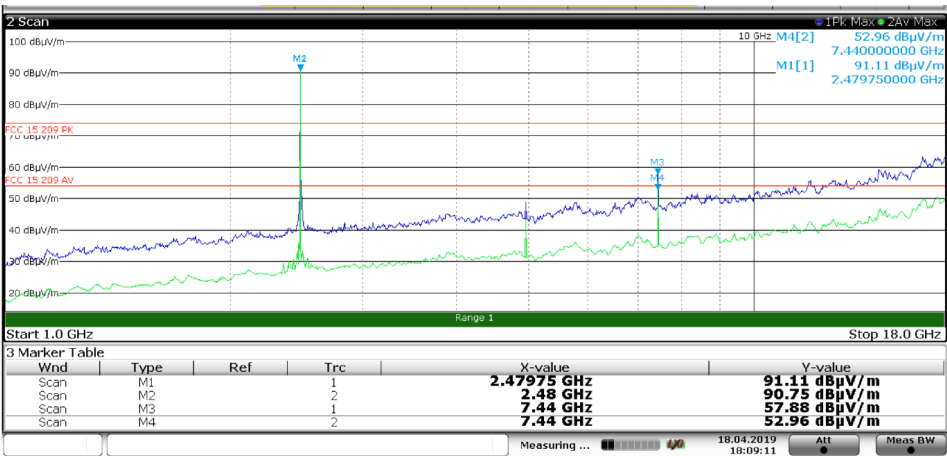
18:36:07 30.04.2019

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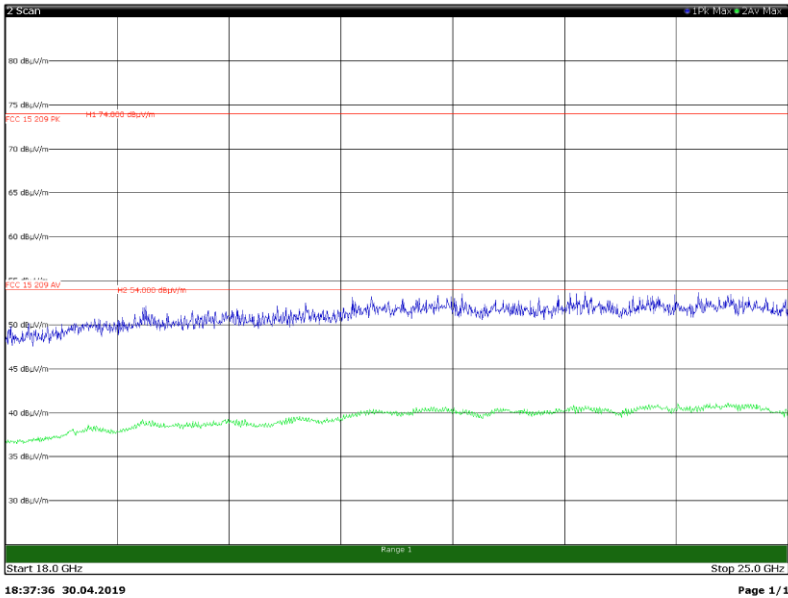
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2441.0000	87.3	114.0	-26.7	Pk
2441.0000	86.4	94.0	-7.6	Av
2457.0000	33.6	54.0	-20.4	Av
4882.0000	50.9	54.0	-3.1	Av
4882.0000	54.8	74.0	-19.2	Pk
7323.0000	57.8	74.0	-16.2	Pk
7323.0000	52.9	54.0	-1.1	Av

Section 8 Radiated measurement ANT vertical polarization

High channel



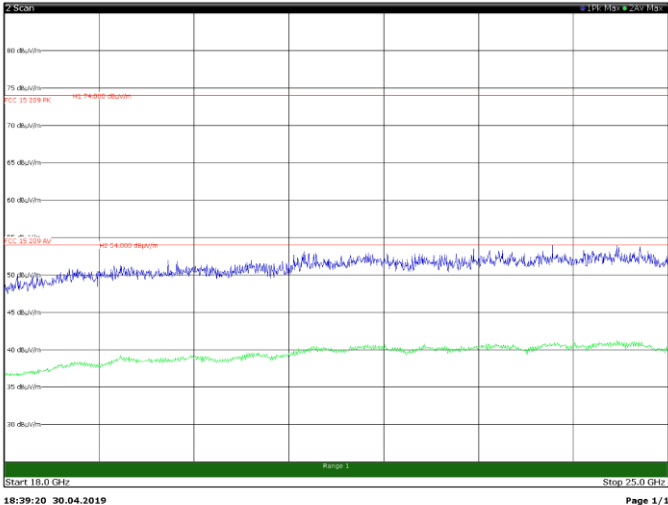
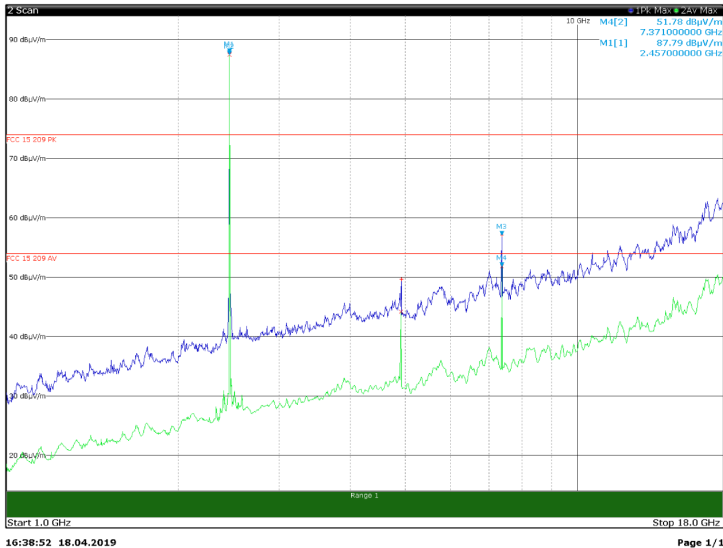
18:09:11 18.04.2019



Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detect or
2480	91.1	114	-22.9	PK
2480	90.7	94	-3.3	AV
7440	57.8	74	-16.2	PK
7440	53	54	-1	AV

Section 8 Radiated measurement ANT Horizontal

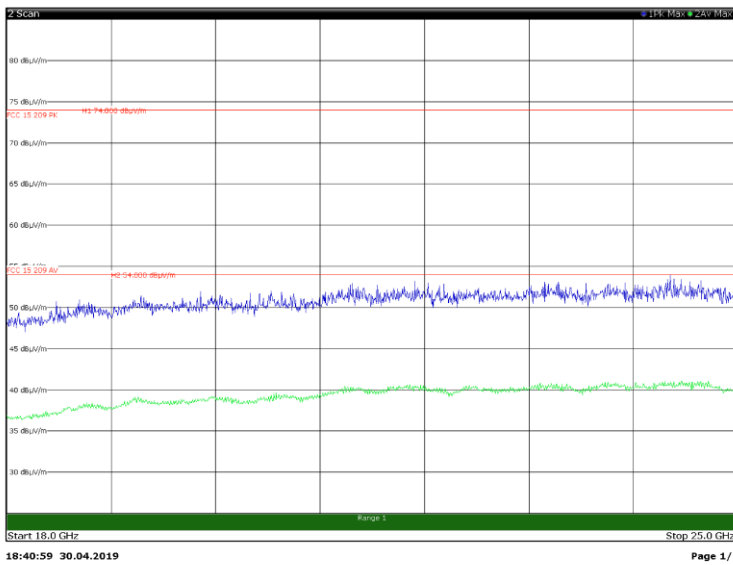
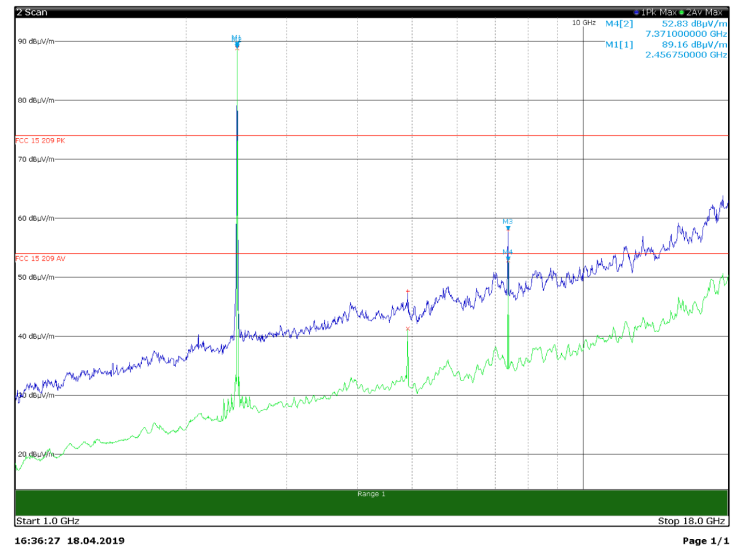
CH 57



Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2457.0000	87.5	94.0	-6.5	Av
2457.0000	87.8	114.0	-26.2	Pk
4914.0000	44.2	54.0	-9.8	Av
4914.5000	49.7	74.0	-24.3	Pk
7371.0000	57.2	74.0	-16.8	Pk
7371.0000	51.8	54.0	-2.2	Av

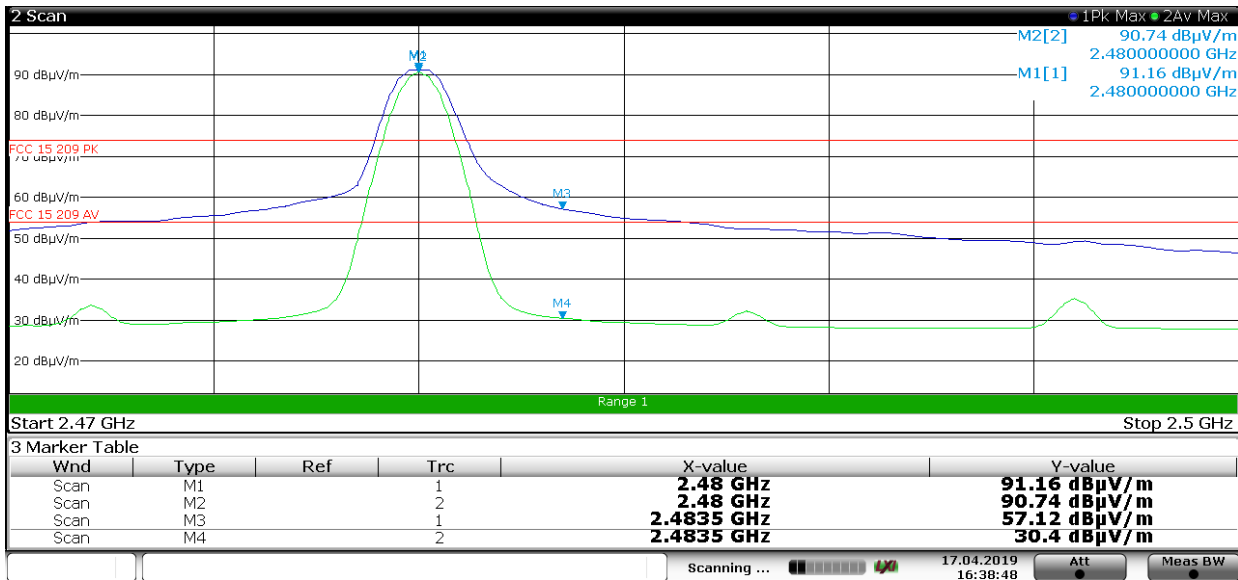
Section 8 Radiated measurement ANT VERTICAL

CH 57



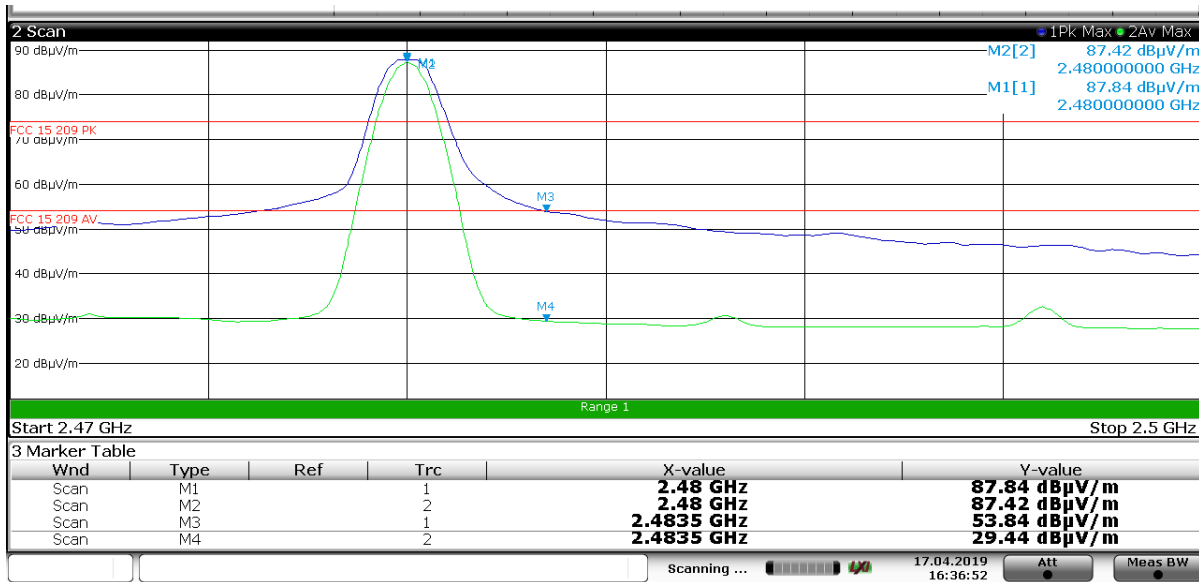
Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
2457.0000	89.2	114.0	-24.8	Pk
2457.0000	88.9	94.0	-5.1	Av
4913.7500	47.7	74.0	-26.3	Pk
4914.0000	41.3	54.0	-12.7	Av
7370.5000	58.1	74.0	-15.9	Pk
7371.0000	52.9	54.0	-1.1	Av

6.10.5 Restricted-band band-edge measurements protocol AT, horizontal channel 80



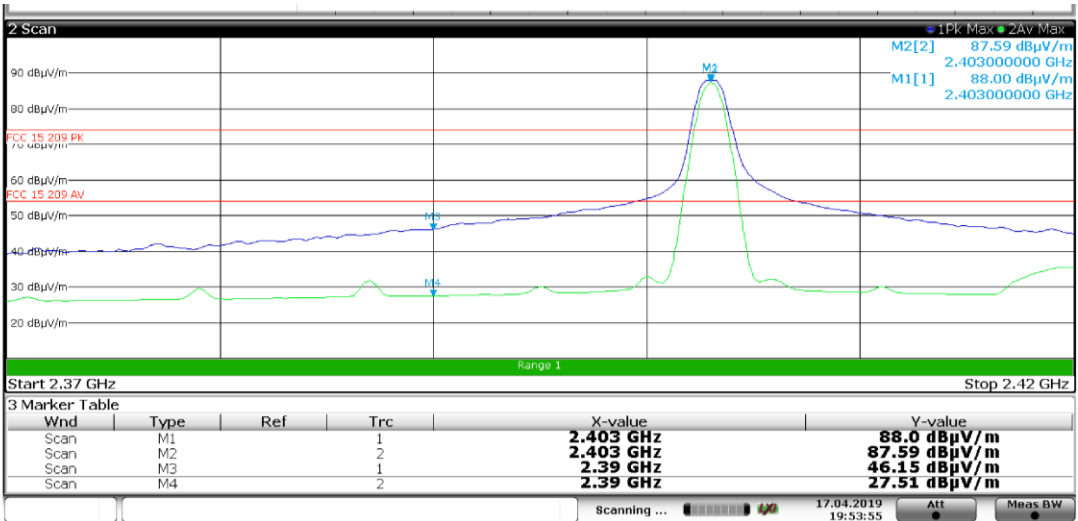
16:38:48 17.04.2019

6.10.5 Restricted-band band-edge measurements protocol AT, vertical channel 80



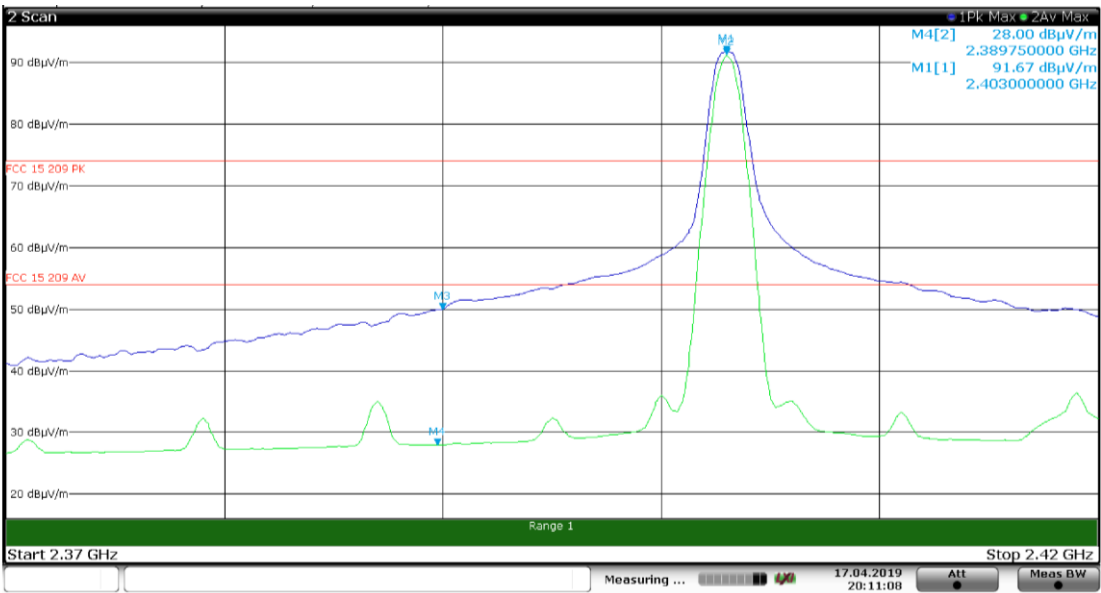
16:36:53 17.04.2019

6.10.5 Restricted-band band-edge measurements protocol AT, vertical channel 3



19:53:55 17.04.2019

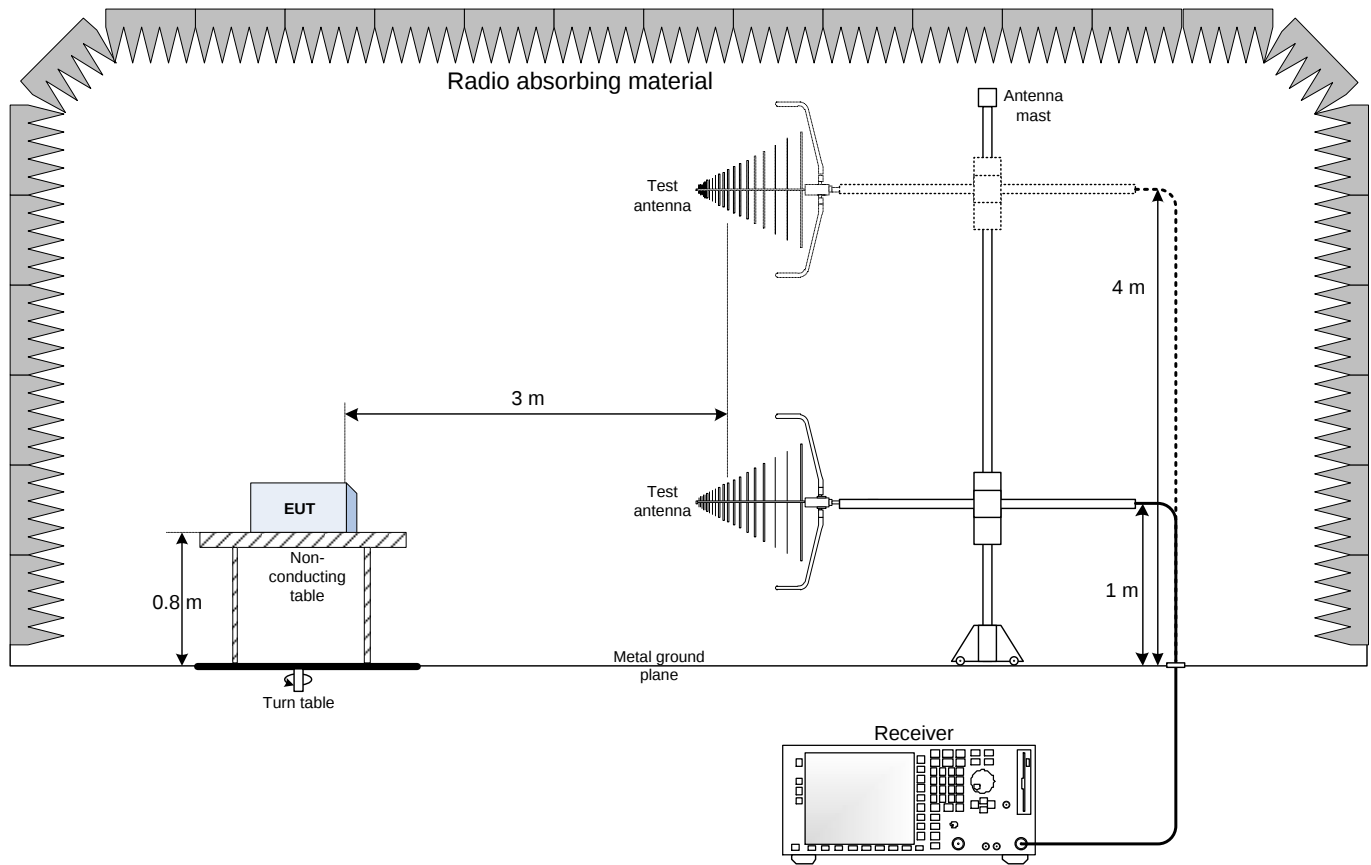
6.10.5 Restricted-band band-edge measurements protocol AT, horizontal channel 3



20:11:09 17.04.2019

Section 9 Block Figures of test set-ups

9.1 Radiated emissions set-up for frequencies below 1 GHz



9.2 Radiated emissions set-up for frequencies above 1 GHz

