

TEST REPORT

of the accredited test laboratory

TÜV Nr.:INE-AT/FG-20/148E

Applicant: AKG Acoustics GmbH
Salzgasse 2
5400 Hallein, Austria

Tested Product: Body-worn wireless microphone transmitter

Product Name: DPT800 Band I

FCC-ID: V3TPT800

IC: 6132A-DPT800

Manufacturer: VTech Communications Ltd.
Xia Ling Bei Management Zone, Liaobu, Dongguan,
Guangdong Province
523411 China

Output power / field strength: 20 mW **power supply:** 3V DC via Battery
Channel separation: 350 kHz

Frequency range: 550,1 – 662,9 MHz
550,1 – 607,9 MHz according to FCC Part 15 and FCC Part 74
614,1 – 615,9 MHz according to FCC Part 15
653,1 – 657 MHz according to FCC Part 74
657 – 662,9 MHz according to FCC Part 15

Standard: EN 300 422-1 V2.1.2; 47 CFR Part 74 (Oct. 2019 Edition);
47 CFR Part 15 (Oct. 2019 Edition); RSS-210 Issue 10

Testing Laboratory,
Inspection Body,
Certification Body,
Calibration Laboratory,
VerifizierungsstelleNotified Body 0408
IC 2932K-1Non-executive
Board of Directors:
KR DI Johann
MarihartManagement:
DI Dr. Stefan Haas
Mag. Christoph
WenningerRegistered Office:
Deutschstrasse 10
1230 Vienna/AustriaBranch Offices:
www.tuv.at/standorteCompany Register
Court / - Number:
Vienna / FN 288476 fBank Details:
IBAN
AT131200052949001066
BIC BKAUATWWVAT ATU63240488
DVR 3002476TÜV AUSTRIA SERVICES GMBH
Test laboratory for EMC

Wolfram Topka, BSc.

examined by / Testing
Laboratory
TÜV AUSTRIA SERVICES
GMBH

11.02.2021

Ing. Wilhelm Seier

approved by / Testing
Laboratory
TÜV AUSTRIA SERVICES
GMBH

A publication of this test report is only permitted literally.

Copying or reproduction of partial sections needs a written permission of TÜV AUSTRIA
SERVICES GMBH.

The results of this test report only refer to the provided equipment.

Contents

	Designation	PAGE
1.	Applicant	3
2.	Description of EUT	4
3.	Standards / Final result	5
4.	Test results	
	List of measurements according to EN 300 422-1 V2.1.2	
	Transmitter parameters	
4.1	Frequency stability	6-10
4.2	Rated output power	11-14
4.3	Necessary bandwidth	15-39
4.4	Spurious emissions	40-48
4.5	Transmitter intermodulation distortion	49-52
	Receiver	
	Spurious emissions	---
	Receiver sensitivity	---
	Receiver adjacent channel selectivity	---
	Receiver blocking	---
Appendix	Designation	PAGES
1	Test equipment used	4
2	Photodocumentation	13

1. Applicant

Company: AKG Acoustics GmbH

Department: R&D

Address: Salzgasse 2
5400 Hallein, Austria

Contact person: Mr. Gabor Mikovics

EUT received on: 06.04.2020

Tests were performed on: 06.04. till 18.05.2020

2. Description of EUT

EUT:	Body-worn wireless microphone transmitter 'DPT 800 Band I'
Product name:	'DPT 800 Band I'
Serial Number:	Prototype
Manufacturer:	AKG Acoustics GmbH Salzgasse 2 5400 Hallein, Austria
Description:	AKG Acoustics GmbH provided the following configuration for the measurements: Prototype
Operating mode:	The measurements were carried out at the following running states: Transmitting
Technical data EUT:	Rated voltage: 3VDC Rated current: 500mA Rated frequency: DC Mains voltage during the tests: 3VDC via internal battery
Climatic conditions in the emc laboratory:	Relative humidity: 24% Temperature: 23°C

3. Standards / Final result

Name	Title	Deviation	Result
EN 300422-1 V2.1.2	Wireless Microphones; Audio PMSE up to 3 GHz; Part 1: Class A Receivers; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU	none	OK
47 CFR Part 15 (Oct. 2019 Edition)	RADIO FREQUENCY DEVICES	none	OK
47 CFR Part 74 (Oct. 2019 Edition)	EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES; Subpart H—Low Power Auxiliary Stations	none	OK
RSS-210 Issue 10	Licence-Exempt Radio Apparatus: Category I Equipment; Annex G—Low-Power Radio Apparatus Operating in the Television Bands	none	OK
Result: Opinions and interpretation of testing laboratory OK: EUT passed NOK: EUT failed			

4. TEST RESULT

4.1. Frequency stability

SUBCLAUSE 8.1

ETSI requirements – complete Band

Rated output power: 20 mW

Operating condition		Frequency Error kHz			Frequency Error ppm		
		550,1 MHz	605,9 MHz	662,9 MHz	550,1 MHz	605,9 MHz	662,9 MHz
T_{nom} (23)°C	V_{nom} (3)V	0	0	-1	0,00	0,00	-1,51
T_{min} (-10)°C	V_{min} (2,3)V	0	-0,5	0	0,00	-0,83	0,00
	V_{nom} (3)V	-0,5	0	-1	-0,91	0,00	-1,51
T_{max} (45)°C	V_{min} (2,3)V	-1	-2	-1	-1,82	-3,30	-1,51
	V_{nom} (3)V	-1	0	-1	-1,82	0,00	-1,51
Measurement uncertainty					$\pm 0,1$ ppm		

LIMIT

SUBCLAUSE 8.1.3

The frequency error shall not exceed 20 parts per million for frequencies below 1 GHz, 15 parts per million between 1 GHz and 2 GHz and 10 ppm above 2 GHz.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207; EMV-205; M-1200

Frequency stability

SUBCLAUSE 74.861 / G3.3 SUBCLAUSE 15.236

FCC/ISED requirements – complete band

Rated output power: 20 mW

Operating condition	Frequency Error kHz			Frequency Error ppm		
Operating voltage at 20°C ambient temperature	550,1 MHz	605,9 MHz	662,9 MHz	550,1 MHz	605,9 MHz	662,9 MHz
3 V	0	0	-1	0,00	0,00	-1,51
2,3 V	-0,5	-1	0	-0,91	-1,65	0,00
Measurement uncertainty				± 0,1 ppm		

Operating condition	Frequency Error kHz			Frequency Error ppm		
ambient temperature at 3V operating voltage	550,1 MHz	605,9 MHz	662,9 MHz	550,1 MHz	605,9 MHz	662,9 MHz
-30°C	-2	-1	-1,5	-3,64	-1,65	-2,26
-20°C	-1	0	-1	-1,82	0,00	-1,51
-10°C	-0,5	0	-1	-0,91	0,00	-1,51
0°C	-1	-1,5	0	-1,82	-2,48	0,00
10°C	-1	-0,5	1	-1,82	-0,83	1,51
20°C	0	0	-1	0,00	0,00	-1,51
30°C	0	-1	-1,5	0,00	-1,65	-2,26
40°C	-1	0	-1	-1,82	0,00	-1,51
50°C	-2	-1	-1,5	-3,64	-1,65	-2,26
Measurement uncertainty				± 0,1 ppm		

LIMIT

SUBCLAUSE 74.861(e)(4) / Table G.1

The frequency tolerance of the transmitter shall be 0,005 percent (50ppm).

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207; EMV-205; M-1200

Frequency stability

SUBCLAUSE 74.861 / G3.3 SUBCLAUSE 15.236

FCC/ISED requirements - 550,1 – 607,9 MHz according to FCC Part 15 and FCC Part 74

Rated output power: 20 mW

Operating condition	Frequency Error kHz			Frequency Error ppm		
Operating voltage at 20°C ambient temperature	550,1 MHz	579 MHz	607,9 MHz	550,1 MHz	579 MHz	607,9 MHz
3 V	-1	0,5	-1	-1,82	0,86	-1,65
2,3 V	-0,5	-1	0	-0,91	-1,73	0,00
Measurement uncertainty				± 0,1 ppm		

Operating condition	Frequency Error kHz			Frequency Error ppm		
ambient temperature at 3V operating voltage	550,1 MHz	579 MHz	607,9 MHz	550,1 MHz	579 MHz	607,9 MHz
-30°C	-2	-2	-1,5	-3,64	-3,45	-2,47
-20°C	-1	0	0	-1,82	0,00	0,00
-10°C	-0,5	-1	-1	-0,91	-1,73	-1,65
0°C	-1	-1,5	0	-1,82	-2,59	0,00
10°C	-1,5	0	1	-2,73	0,00	1,65
20°C	-1	0,5	-1	-1,82	0,86	-1,65
30°C	0	-1	-1,5	0,00	-1,73	-2,47
40°C	-1	0	-1	-1,82	0,00	-1,65
50°C	-2	-1	-1,5	-3,64	-1,73	-2,47
Measurement uncertainty				± 0,1 ppm		

LIMIT

SUBCLAUSE 74.861(e)(4) / Table G.1

The frequency tolerance of the transmitter shall be 0,005 percent (50ppm).

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207; EMV-205; M-1200

Frequency stability

SUBCLAUSE 74.861 / G3.3 SUBCLAUSE 15.236

FCC/ISED requirements - 614,1 – 615,9 MHz according to FCC Part 15

Rated output power: 20 mW

Operating condition	Frequency Error kHz		Frequency Error ppm	
	614,1 MHz	615,9 MHz	614,1 MHz	615,9 MHz
Operating voltage at 20°C ambient temperature				
3 V	-1	0	-1,63	0,00
2,3 V	-1,5	-1	-2,44	-1,62
Measurement uncertainty			± 0,1 ppm	

Operating condition	Frequency Error kHz		Frequency Error ppm	
	614,1 MHz	615,9 MHz	614,1 MHz	615,9 MHz
ambient temperature at 3V operating voltage				
-30°C	-2	-1	-3,26	-1,62
-20°C	-1	0	-1,63	0,00
-10°C	-0,5	0	-0,81	0,00
0°C	-1	-1,5	-1,63	-2,44
10°C	-1	-0,5	-1,63	-0,81
20°C	-1	0	-1,63	0,00
30°C	0	-1	0,00	-1,62
40°C	-1	-2	-1,63	-3,25
50°C	-2	-1	-3,26	-1,62
Measurement uncertainty			± 0,1 ppm	

LIMIT

SUBCLAUSE 74.861(e)(4) / Table G.1

The frequency tolerance of the transmitter shall be 0,005 percent (50ppm).

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207; EMV-205; M-1200

Frequency stability

SUBCLAUSE 74.861 / G3.3 SUBCLAUSE 15.236

FCC/ISED requirements - 653,1 – 657 MHz according to FCC Part 74
657 – 662,9 MHz according to FCC Part 15

Rated output power: 20 mW

Operating condition	Frequency Error kHz		Frequency Error ppm	
	653,1 MHz	662,9 MHz	653,1 MHz	662,9 MHz
Operating voltage at 20°C ambient temperature				
3 V	0	0	0,00	0,00
2,3 V	-0,5	-1	-0,77	-1,51
Measurement uncertainty			± 0,1 ppm	

Operating condition	Frequency Error kHz		Frequency Error ppm	
	653,1 MHz	662,9 MHz	653,1 MHz	662,9 MHz
ambient temperature at 3V operating voltage				
-30°C	-2	-1	-3,06	-1,51
-20°C	-1	0	-1,53	0,00
-10°C	-0,5	0	-0,77	0,00
0°C	-1	-1,5	-1,53	-2,26
10°C	-1	-0,5	-1,53	-0,75
20°C	0	0	0,00	0,00
30°C	0	-1	0,00	-1,51
40°C	-1	0	-1,53	0,00
50°C	-2	-1	-3,06	-1,51
Measurement uncertainty			± 0,1 ppm	

LIMIT

SUBCLAUSE 74.861(e)(4) / Table G.1

The frequency tolerance of the transmitter shall be 0,005 percent (50ppm).

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207; EMV-205; M-1200

4.2 Rated output power

SUBCLAUSE 8.2

Radiated Measurement - – complete band

Rated output power: 20 mW

Test conditions		Transmitter power (mW) (erp)		
		550,1 MHz	605,9 MHz	662,9 MHz
T _{nom} (23)°C	V _{nom} (3)V	22,4	18,2	12,3
Maximum deviation from rated output power under normal test conditions (%)		12	-9	-38,5
Measurement uncertainty		± 0,75 dB		

LIMIT

SUBCLAUSE 8.2.3

The measured value shall be within +20 % and -50 % of the manufacturers declared rated output power.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207

Rated output power

SUBCLAUSE 8.2

Radiated Measurement - 550,1 – 607,9 MHz according to FCC Part 15 and FCC Part 74

Rated output power: 20 mW

Test conditions		Transmitter power (mW) (erp)		
		550,1 MHz	579 MHz	607,9 MHz
T _{nom} (23)°C	V _{nom} (3)V	22,4	18,2	17,8
Maximum deviation from rated output power under normal test conditions (%)		12	-9	-11
Measurement uncertainty		± 0,75 dB		

LIMIT

SUBCLAUSE 8.2.3

The measured value shall be within +20 % and -50 % of the manufacturers declared rated output power.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207

Rated output power

SUBCLAUSE 8.2

Radiated Measurement - 614,1 – 615,9 MHz according to FCC Part 15

Rated output power: 20 mW

Test conditions		Transmitter power (mW) (erp)	
		614,1 MHz	615,9 MHz
T _{nom} (23)°C	V _{nom} (3)V	13,8	12,3
Maximum deviation from rated output power under normal test conditions (%)		-31	-38,5
Measurement uncertainty		± 0,75 dB	

LIMIT

SUBCLAUSE 8.2.3

The measured value shall be within +20 % and -50 % of the manufacturers declared rated output power.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207

Rated output power

SUBCLAUSE 8.2

Radiated Measurement - 653,1 – 657 MHz according to FCC Part 74
657 – 662,9 MHz according to FCC Part 15

Rated output power: 20 mW

Test conditions		Transmitter power (mW) (erp)	
		653,1 MHz	662,9 MHz
T _{nom} (23)°C	V _{nom} (3)V	15,8	12,3
Maximum deviation from rated output power under normal test conditions (%)		-21	-38,5
Measurement uncertainty		± 0,75 dB	

LIMIT

SUBCLAUSE 8.2.3

The measured value shall be within +20 % and -50 % of the manufacturers declared rated output power.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-207

4.3 NECESSARY BANDWIDTH

SUBCLAUSE 8.3

8.3.3.2 Limits

The transmitter output spectrum shall be within the mask defined in figure 4.

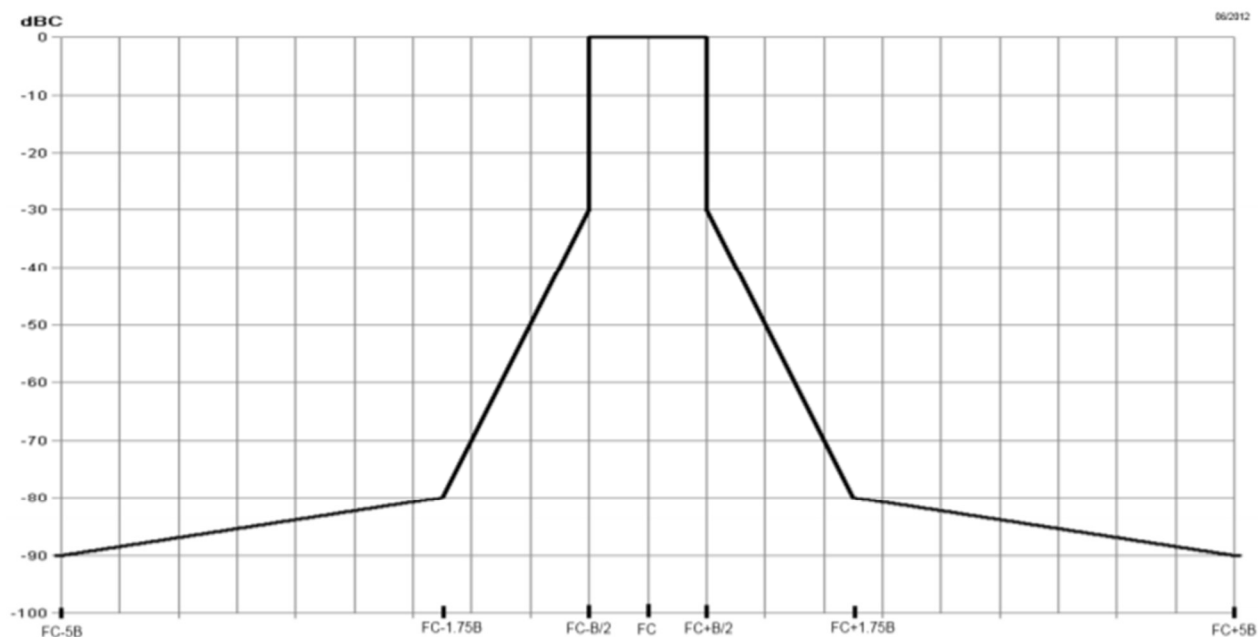


Figure 4: Spectrum mask for digital systems below 2 GHz

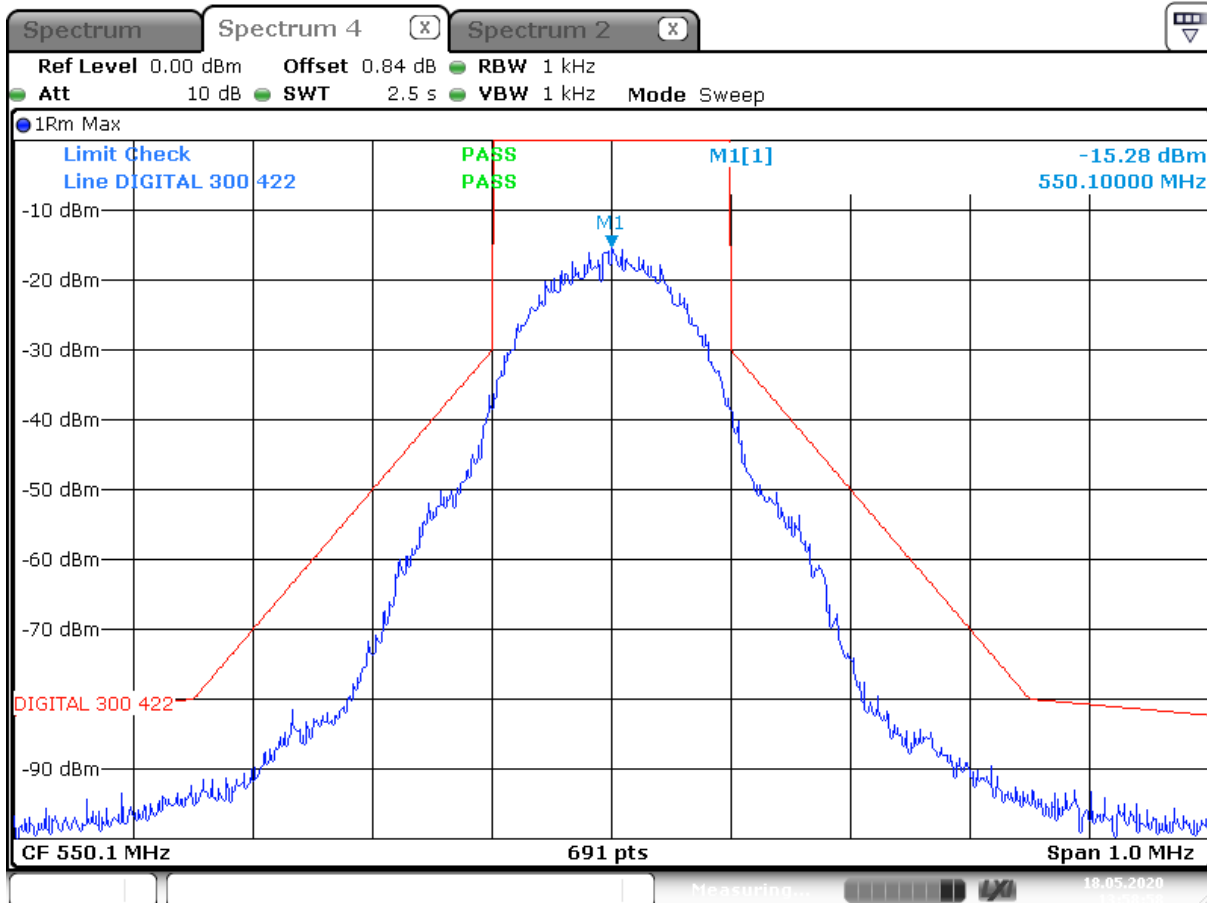
For the measurement uncertainty, see clause 10. The -90 dBc point shall be $FC \pm 5B$ from f_c measured with an average detector.

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 550,1 MHz centered.



Date: 18 MAY 2020 13:58:59

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

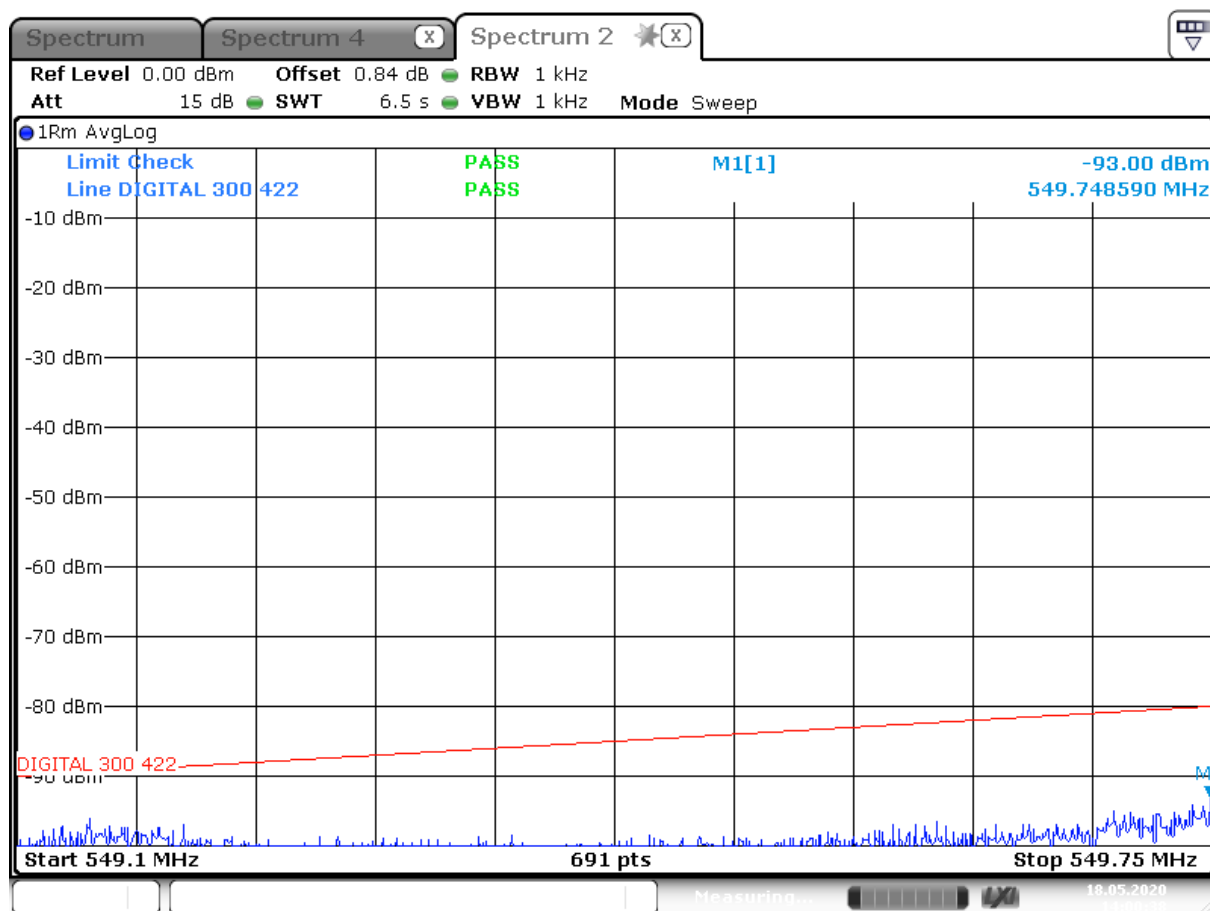
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 550,1 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:00:38

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

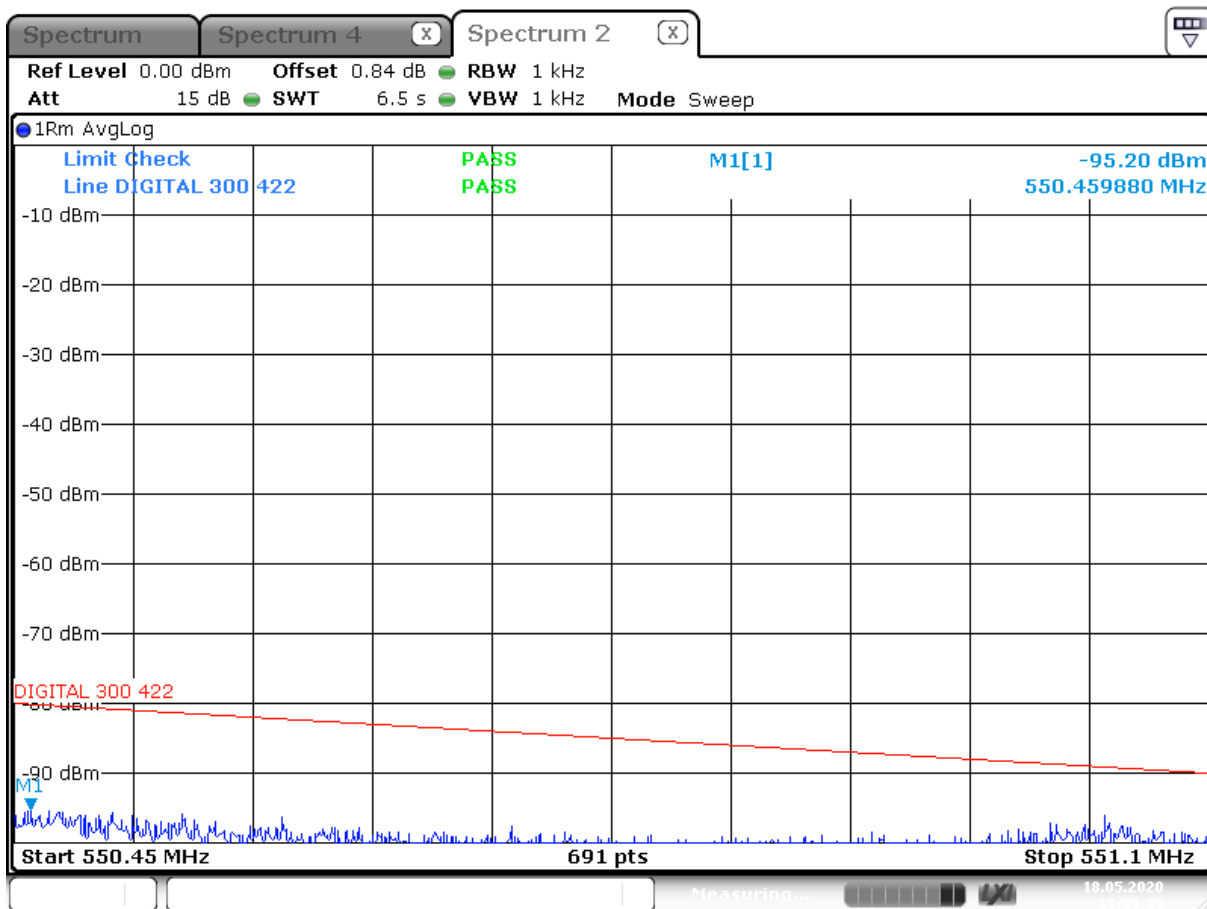
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 550,1 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 13:59:39

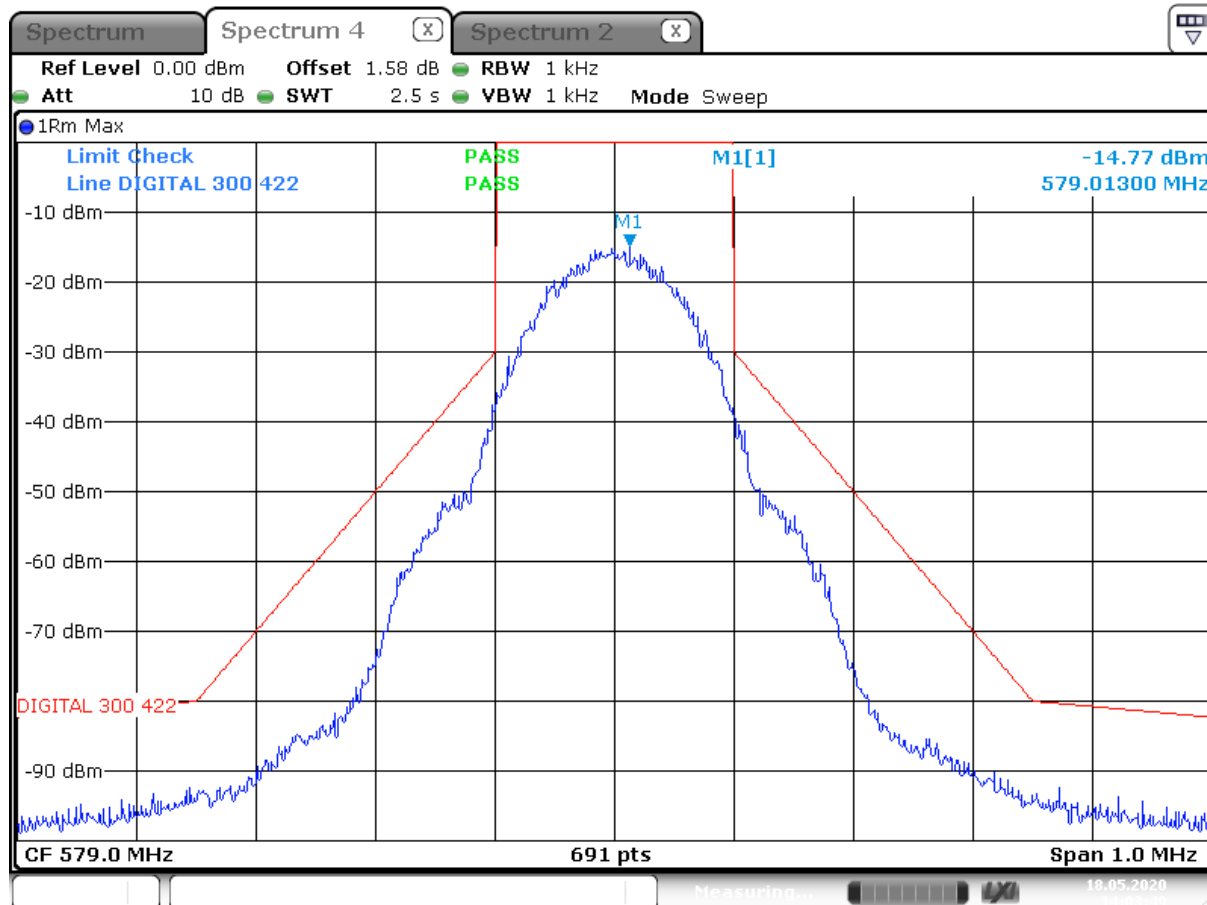
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 579 MHz centered.



Date: 18 MAY 2020 14:03:49

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

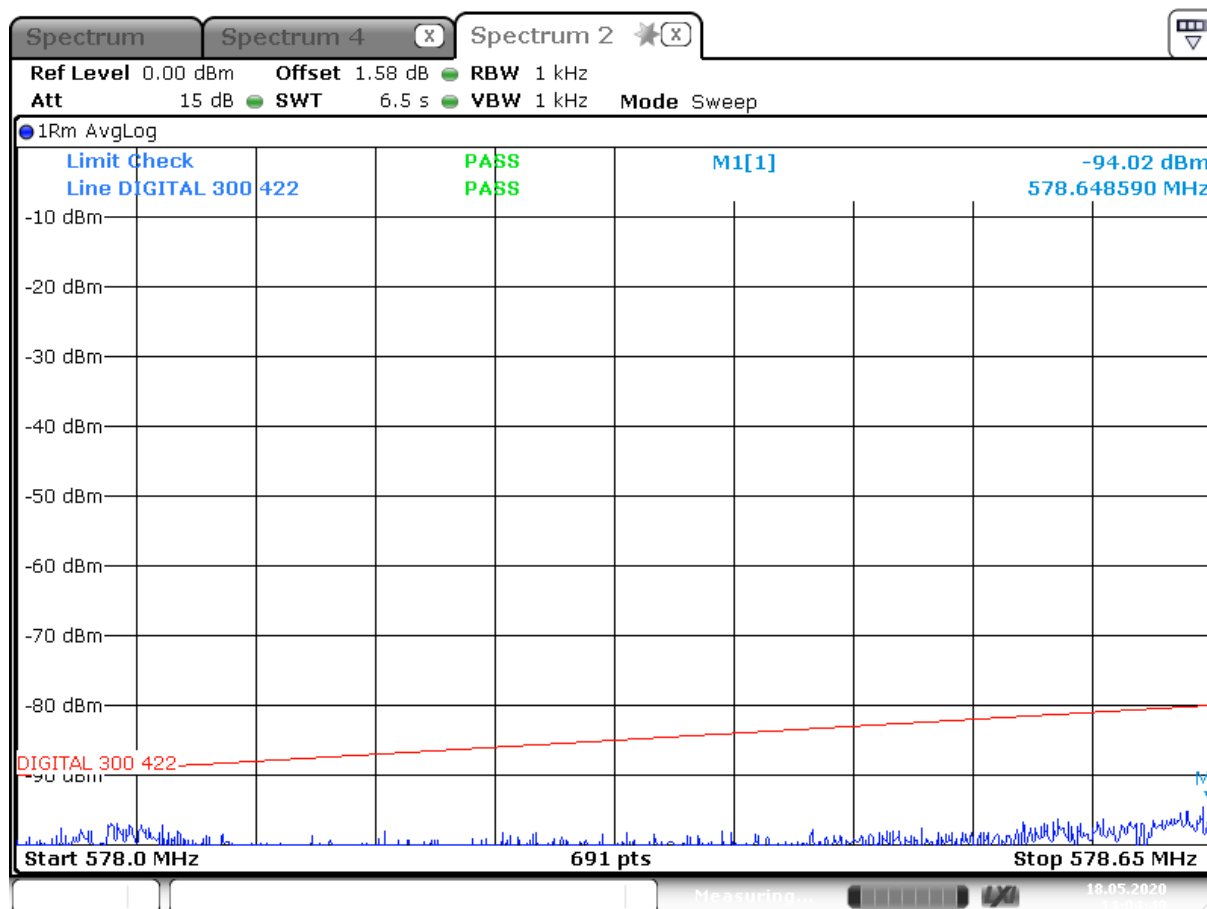
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 579 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:04:49

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 579 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:05:34

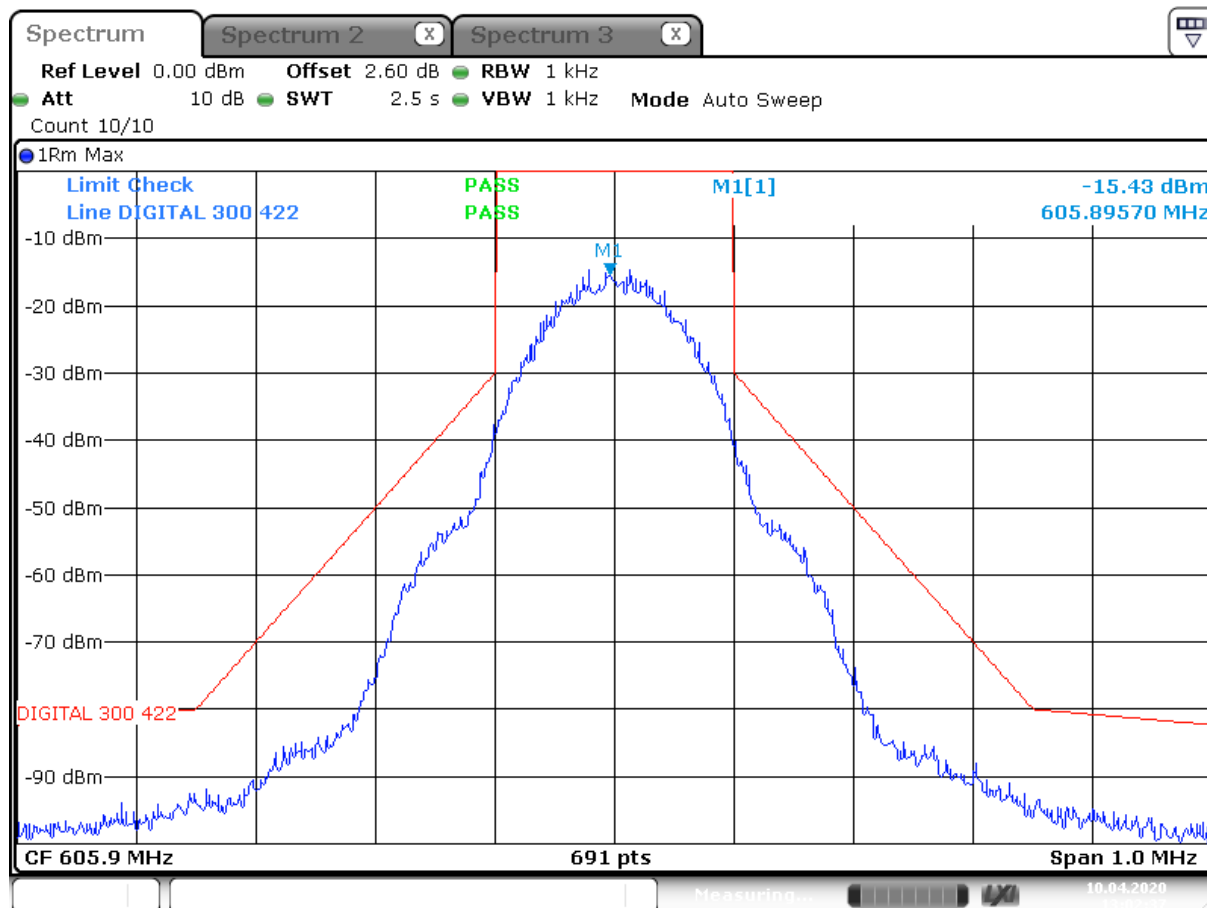
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 605,9 MHz centered.



Date: 10 APR 2020 13:02:37

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

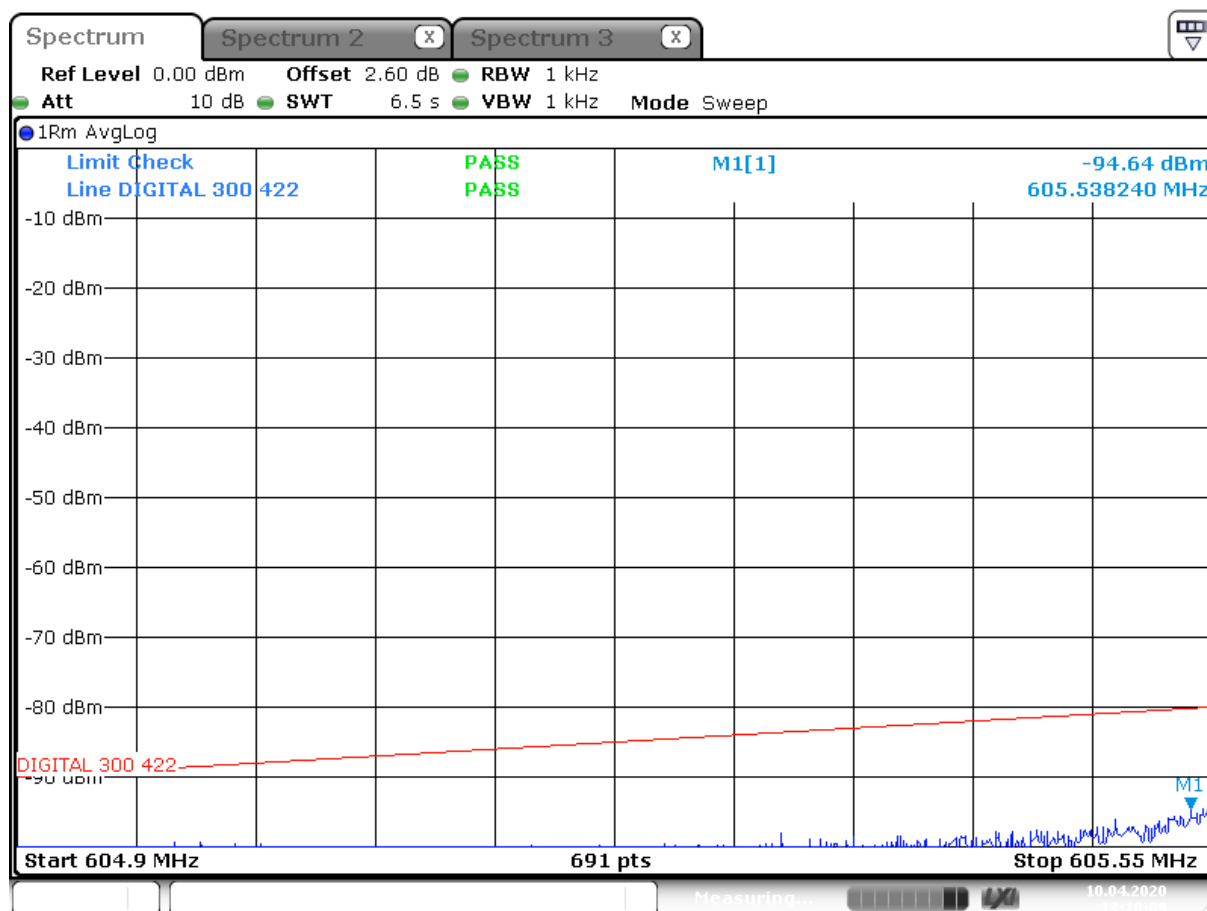
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 605,9 MHz

Left -90 dBc Point measured with average detector



Date: 10 APR 2020 13:10:10

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

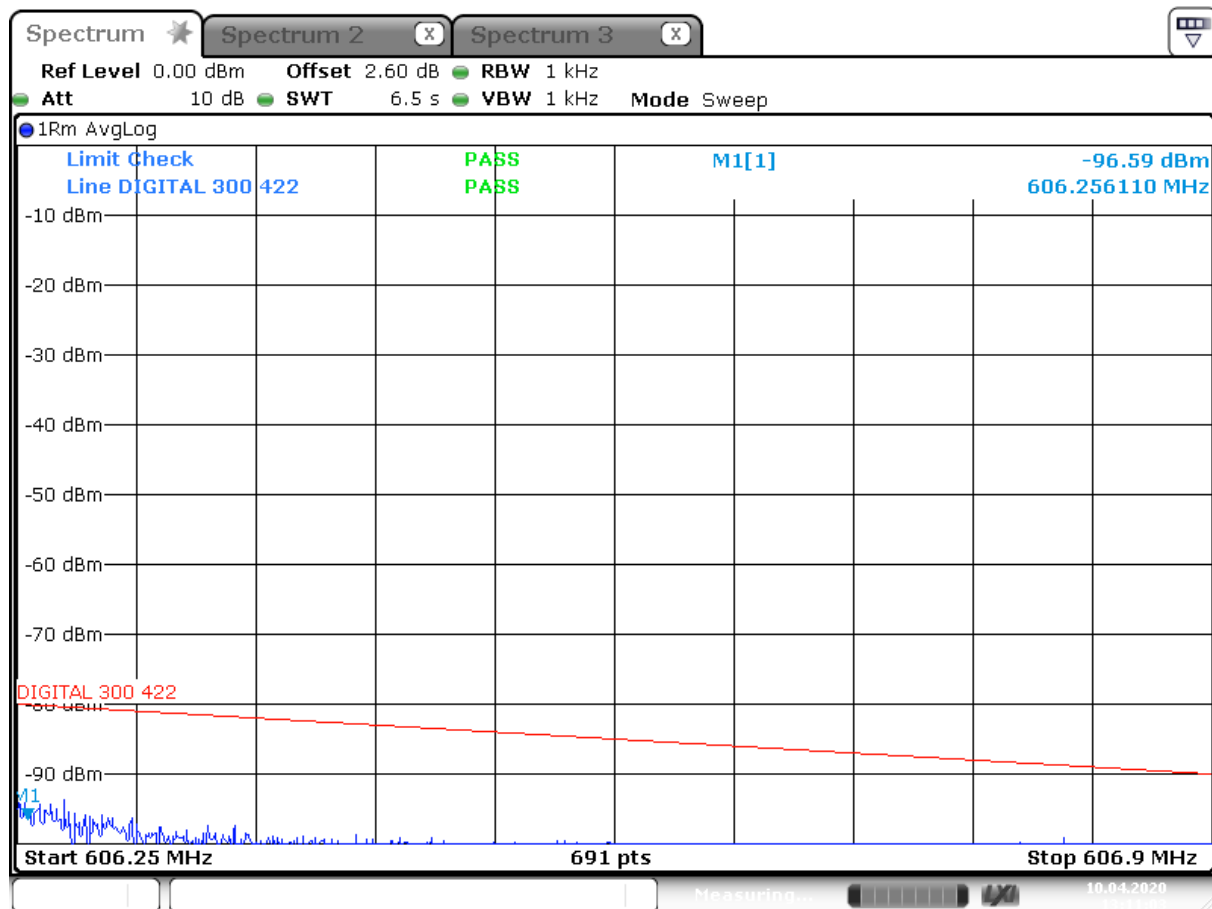
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 605,9 MHz

Right -90 dBc Point measured with average detector



Date: 10 APR 2020 13:11:03

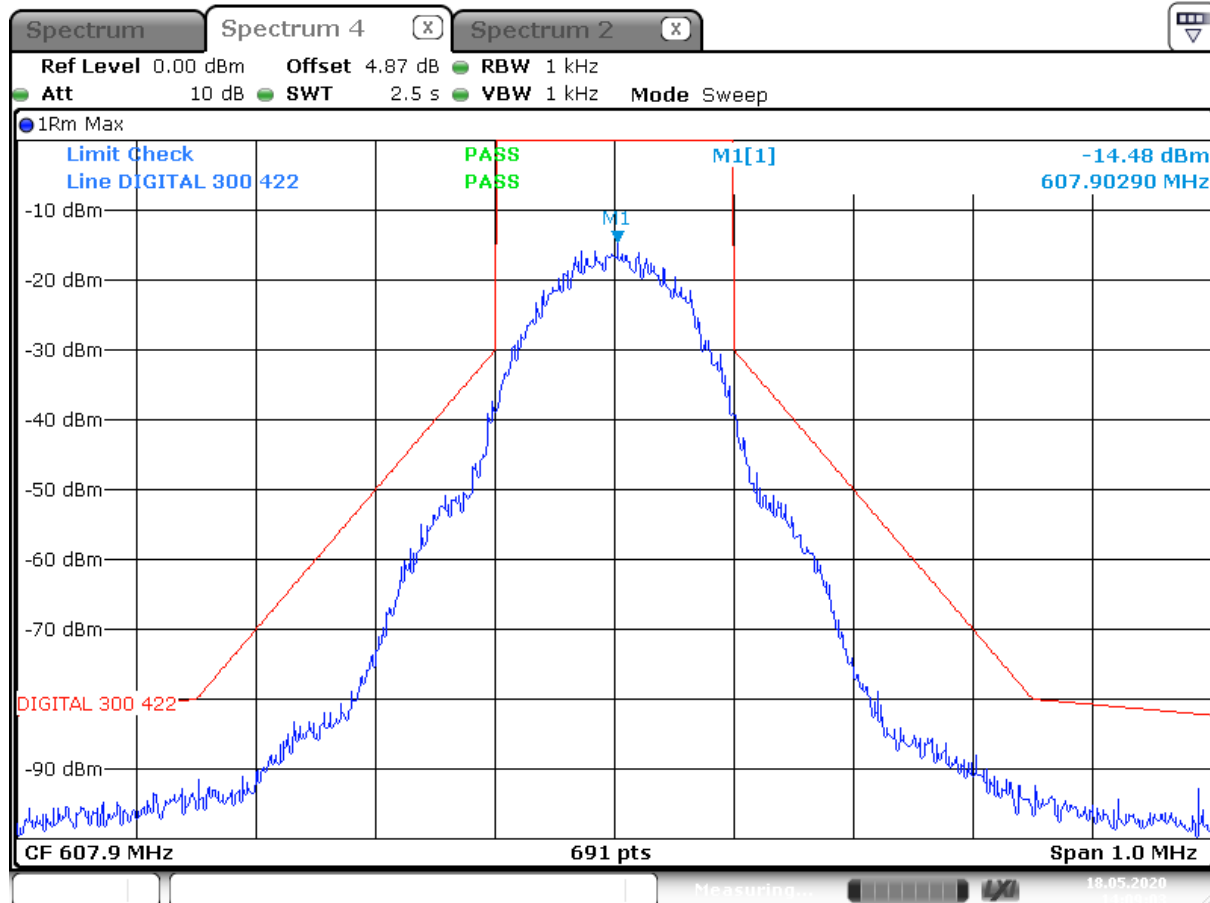
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 607,9 MHz centered.



Date: 18 MAY 2020 14:09:03

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

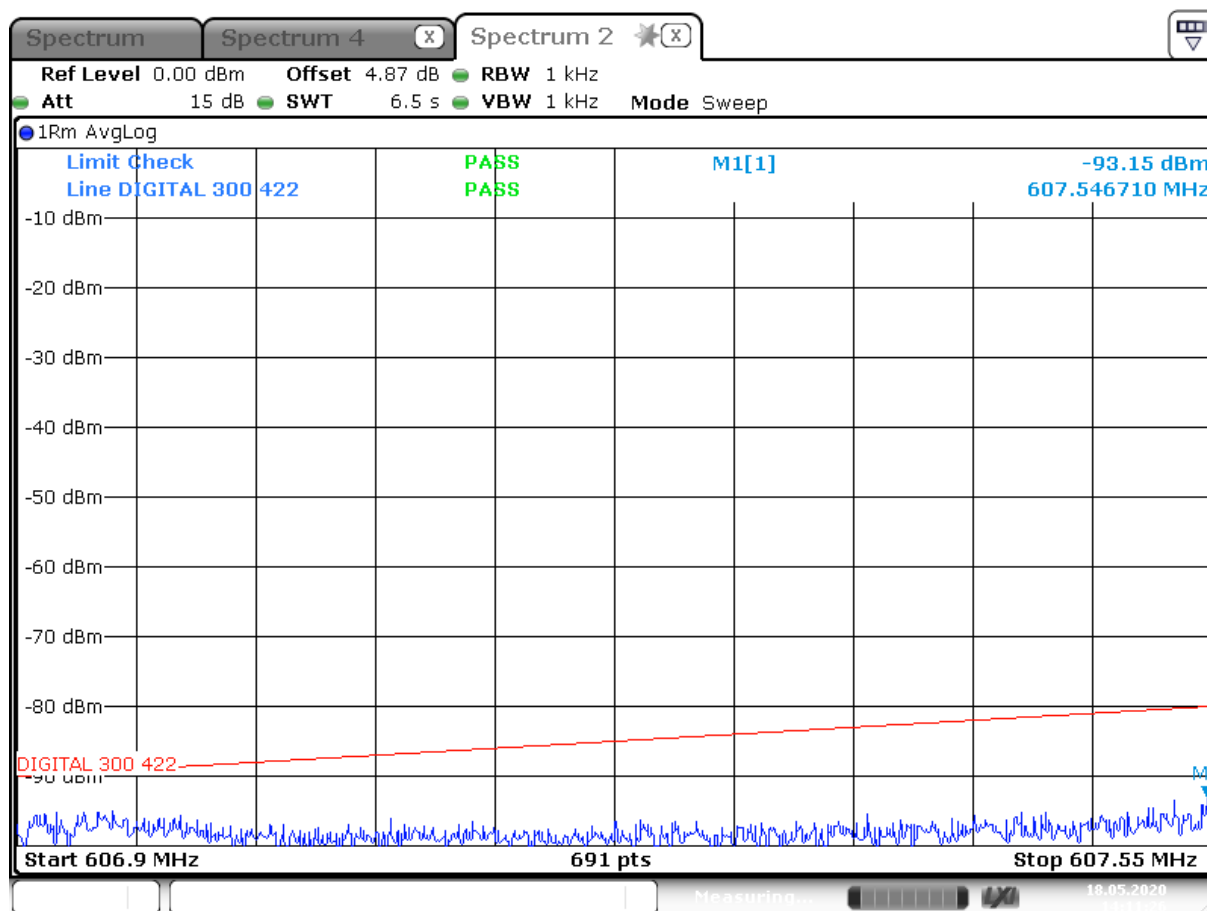
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 607,9 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:11:26

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

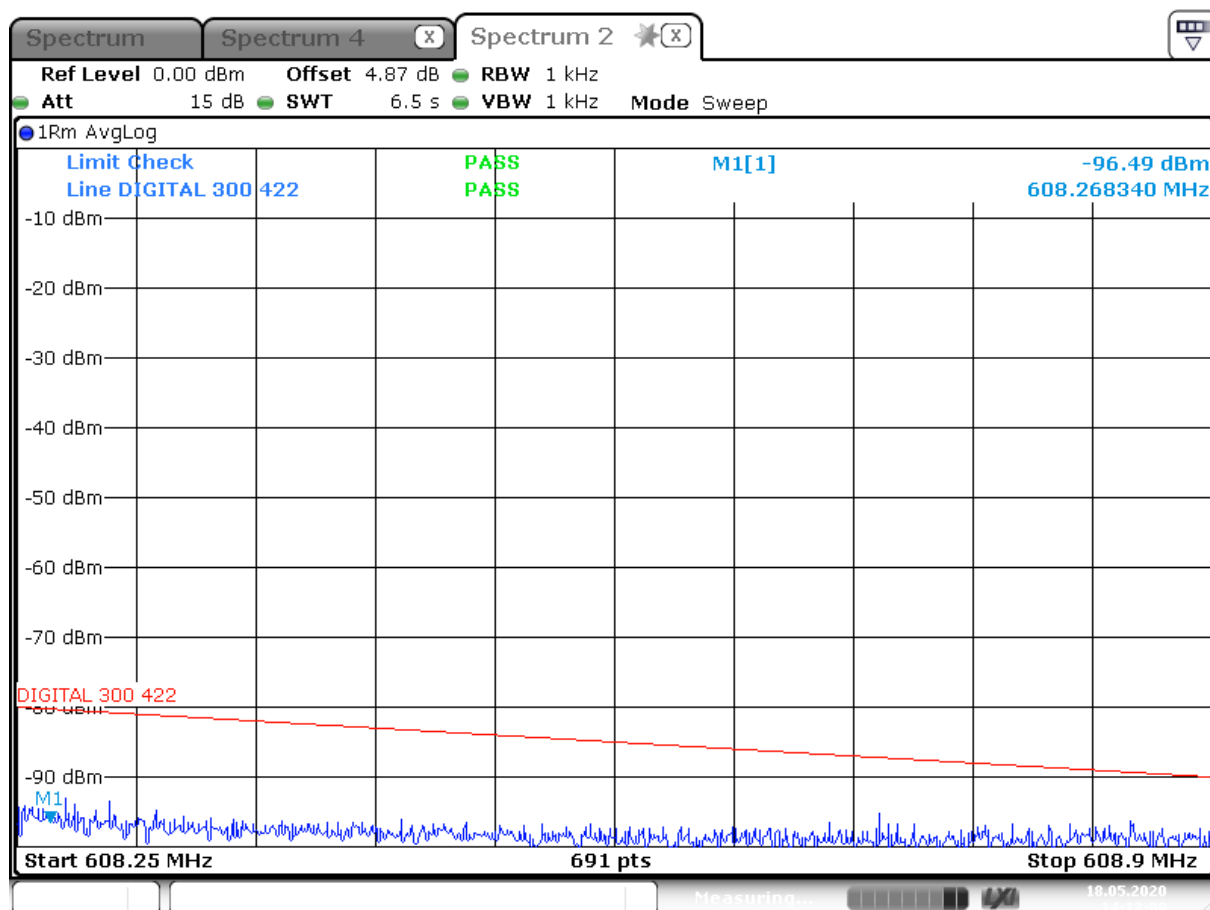
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 607,9 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:12:10

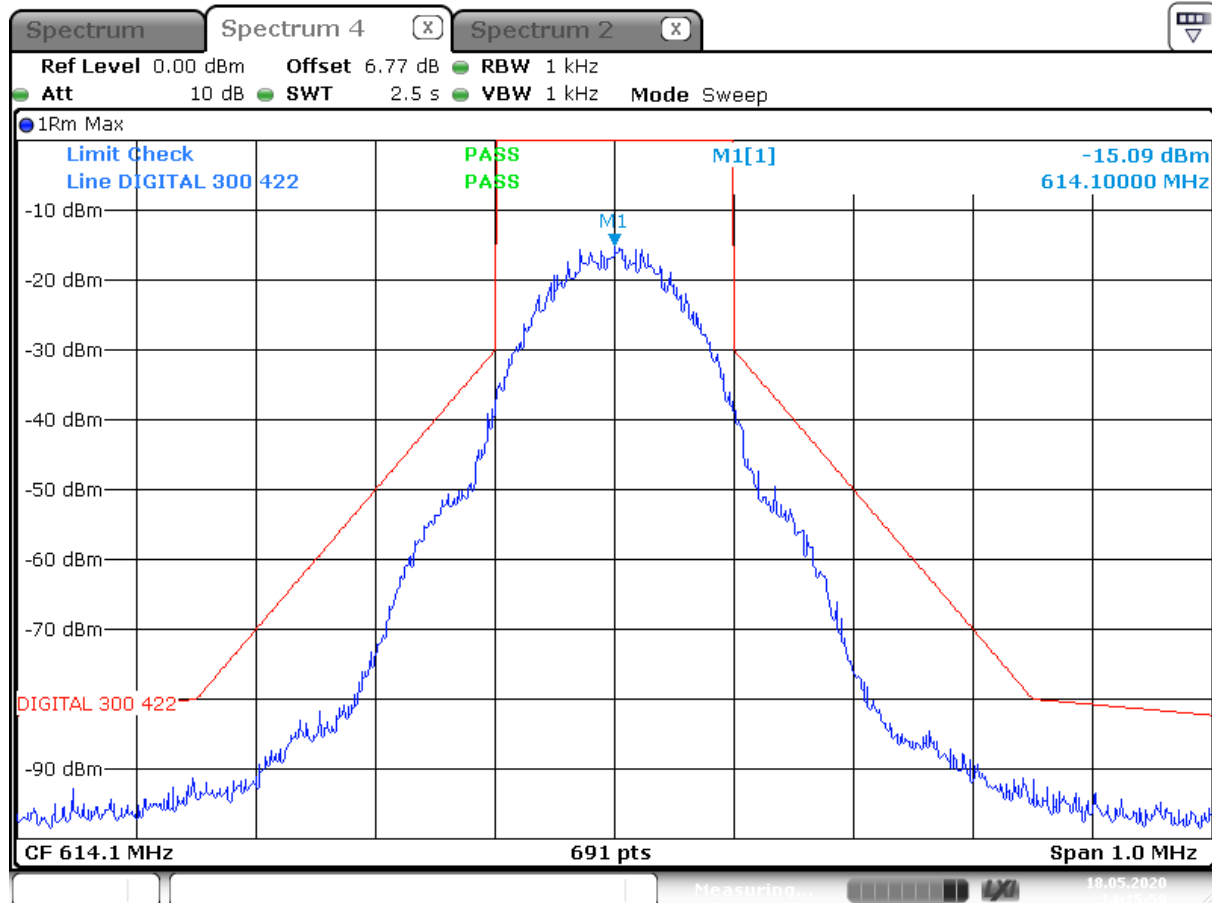
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 614,1 MHz centered.



Date: 18 MAY 2020 14:15:59

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

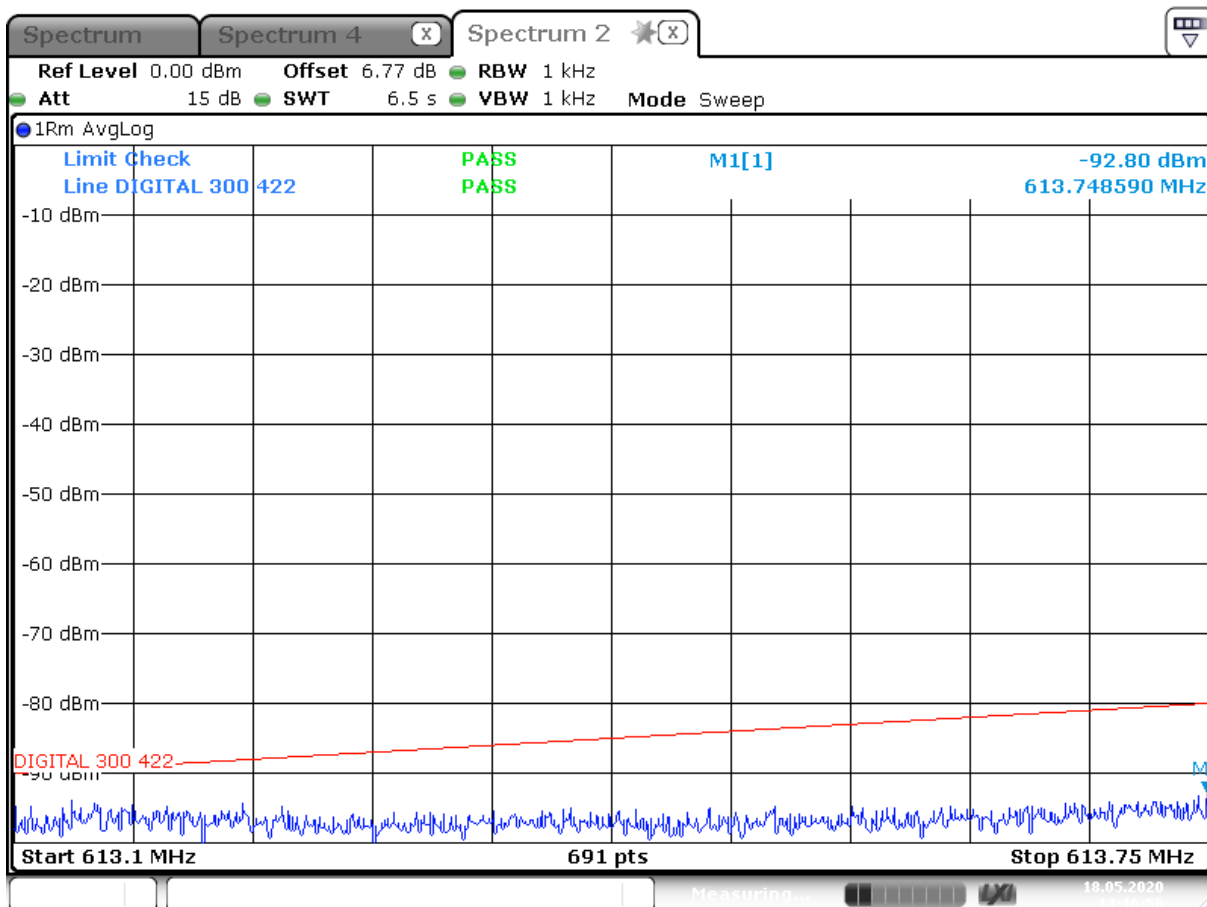
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 614,1 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:16:57

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

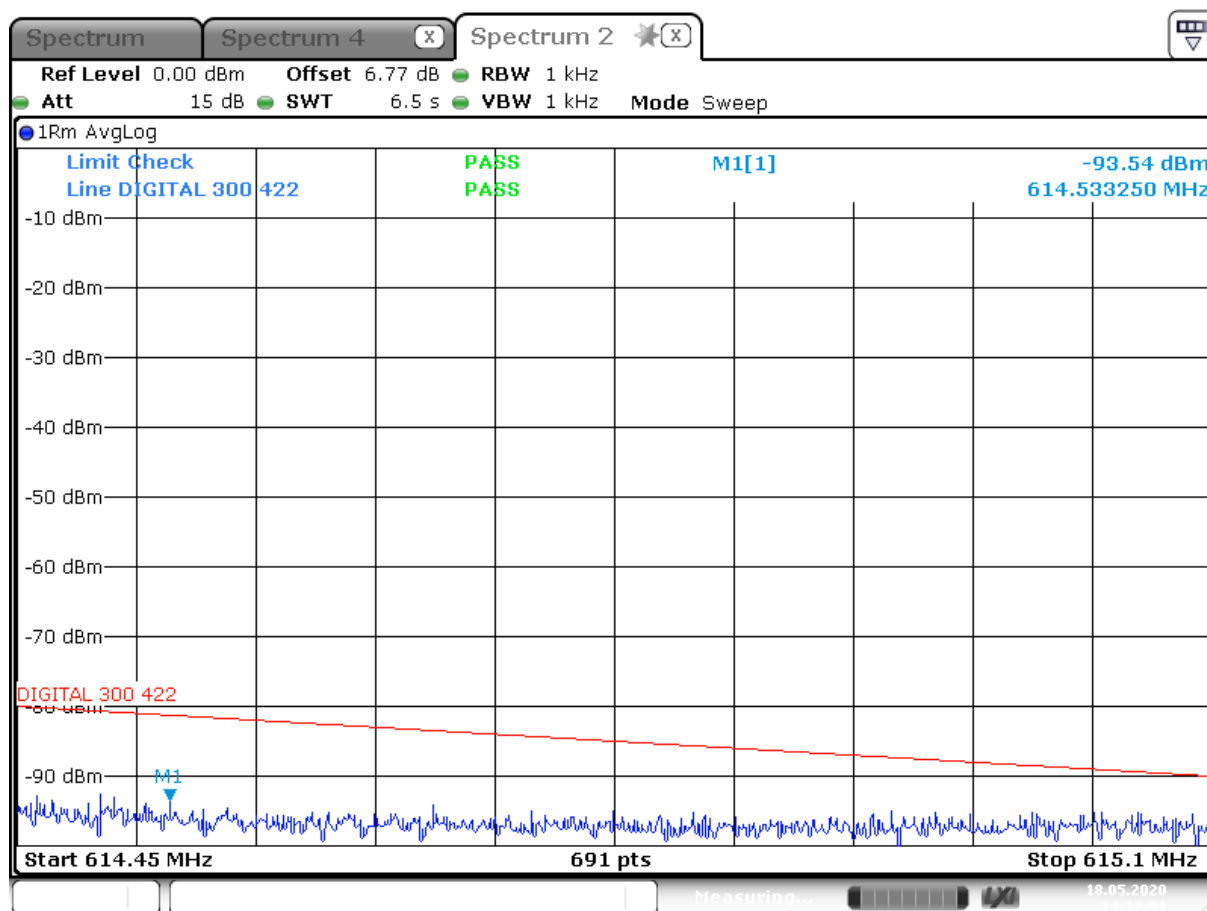
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 614,1 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:17:52

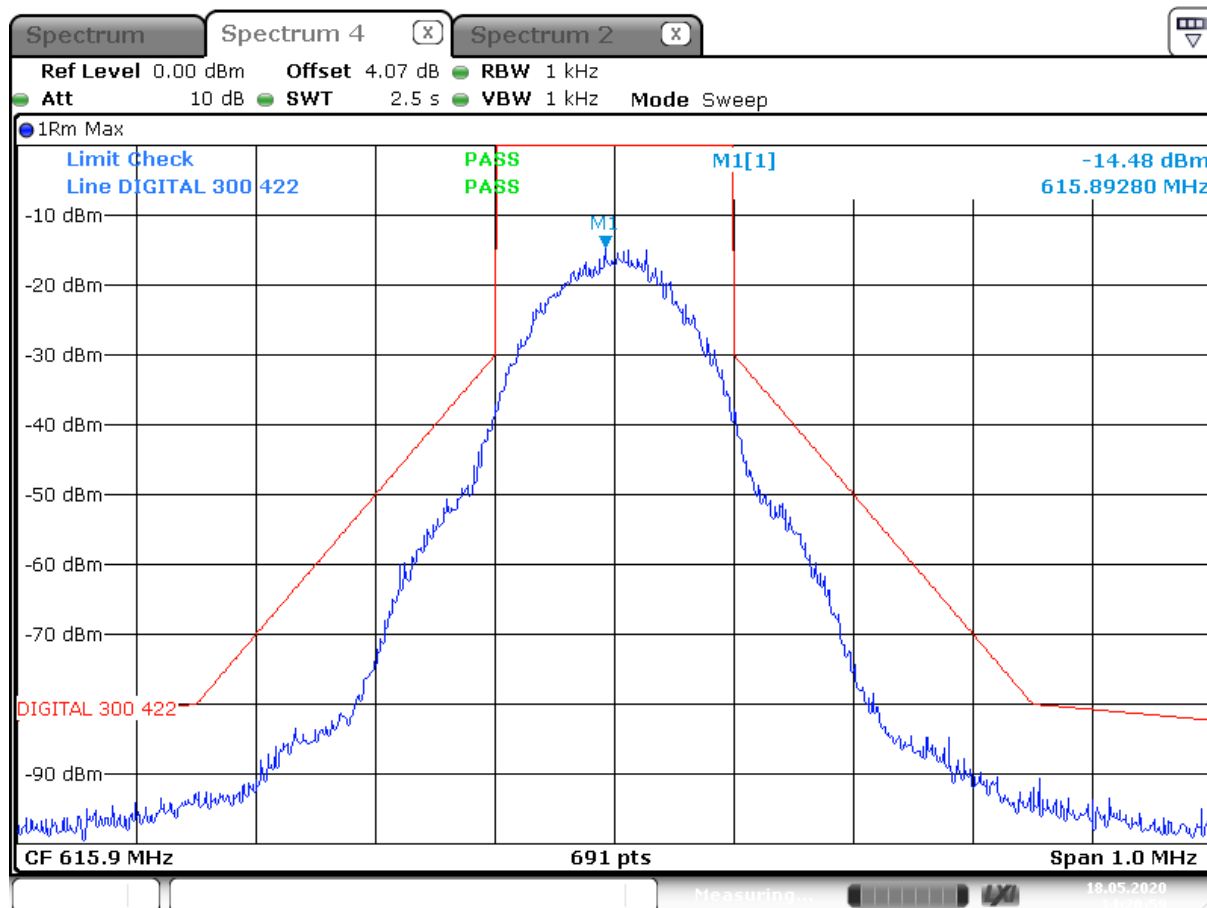
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 615,9 MHz centered.



Date: 18 MAY 2020 14:20:59

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

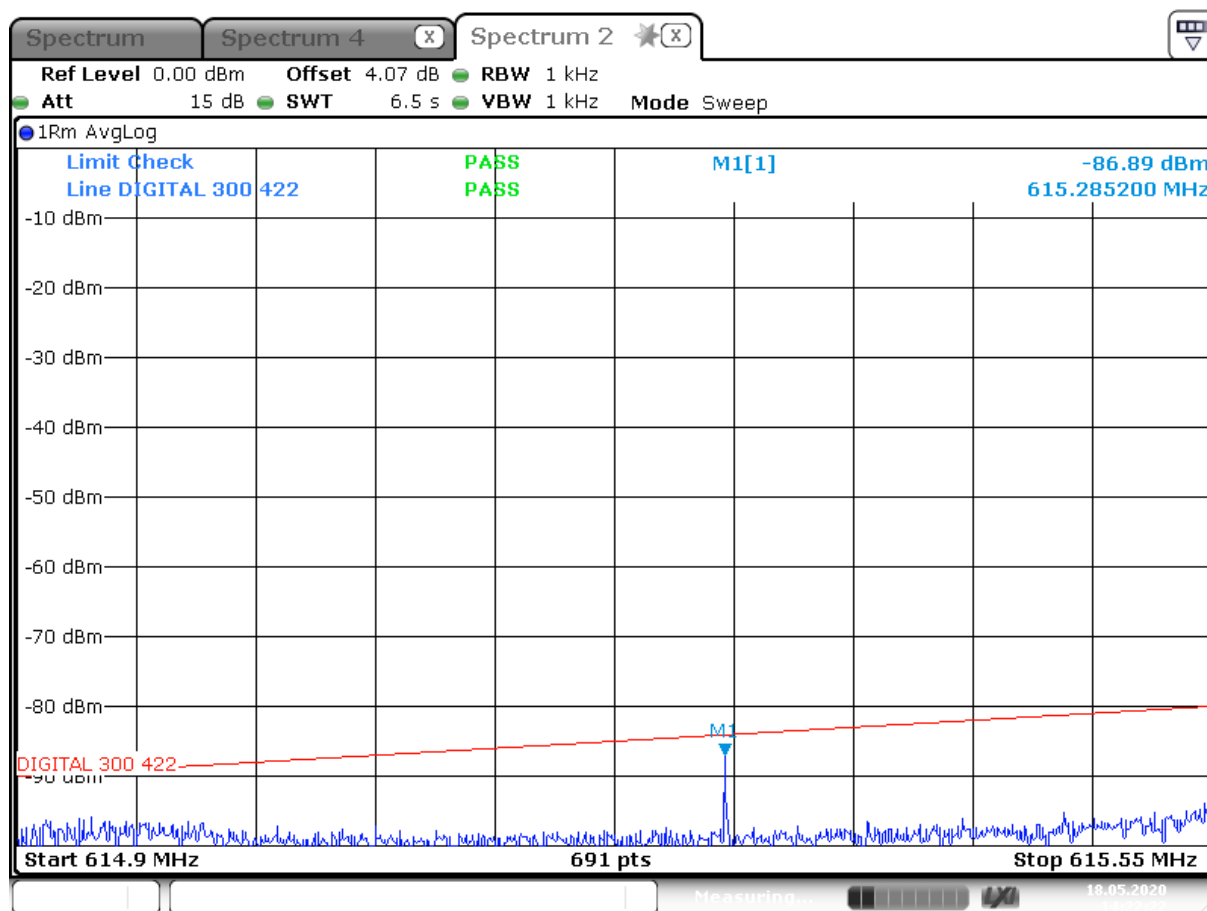
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 615,9 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:22:22

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

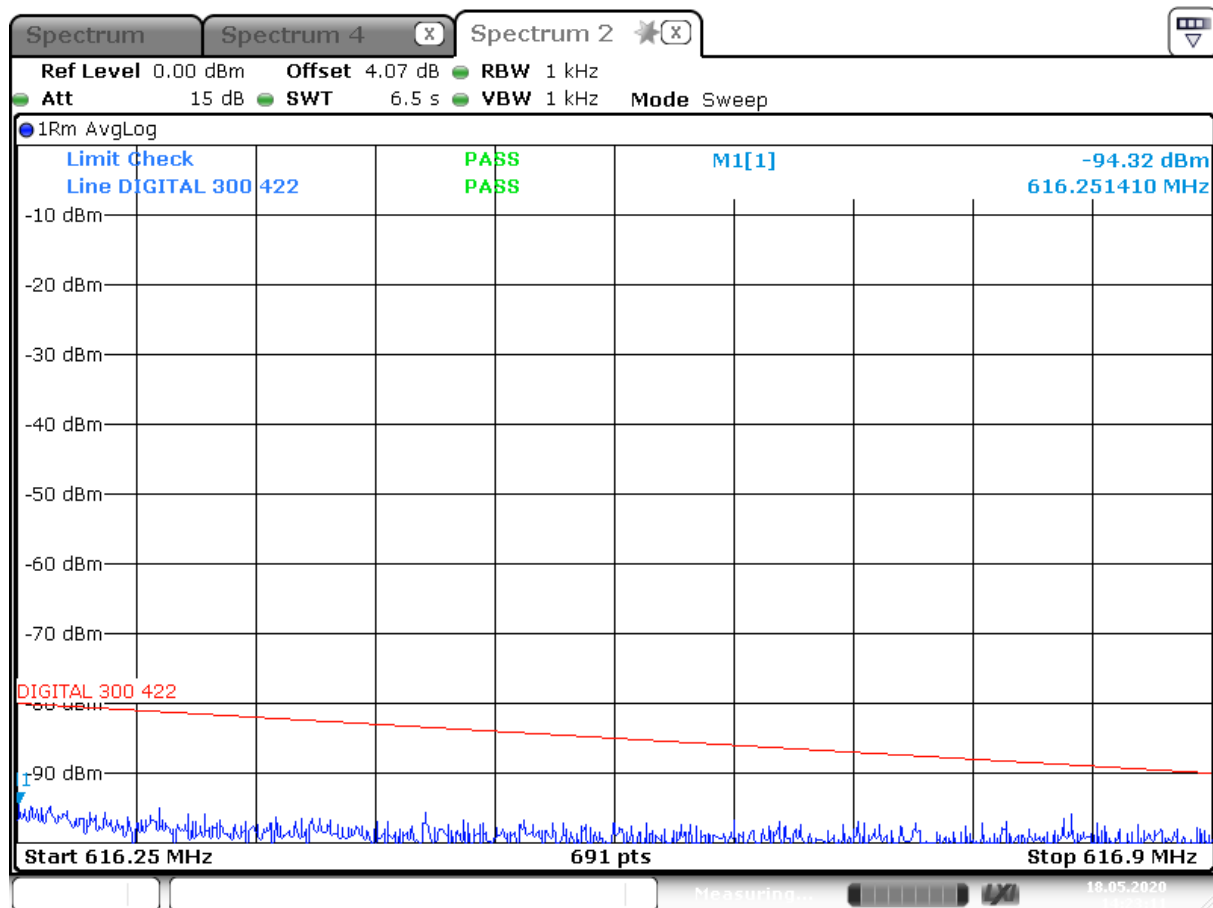
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 615,9 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:23:12

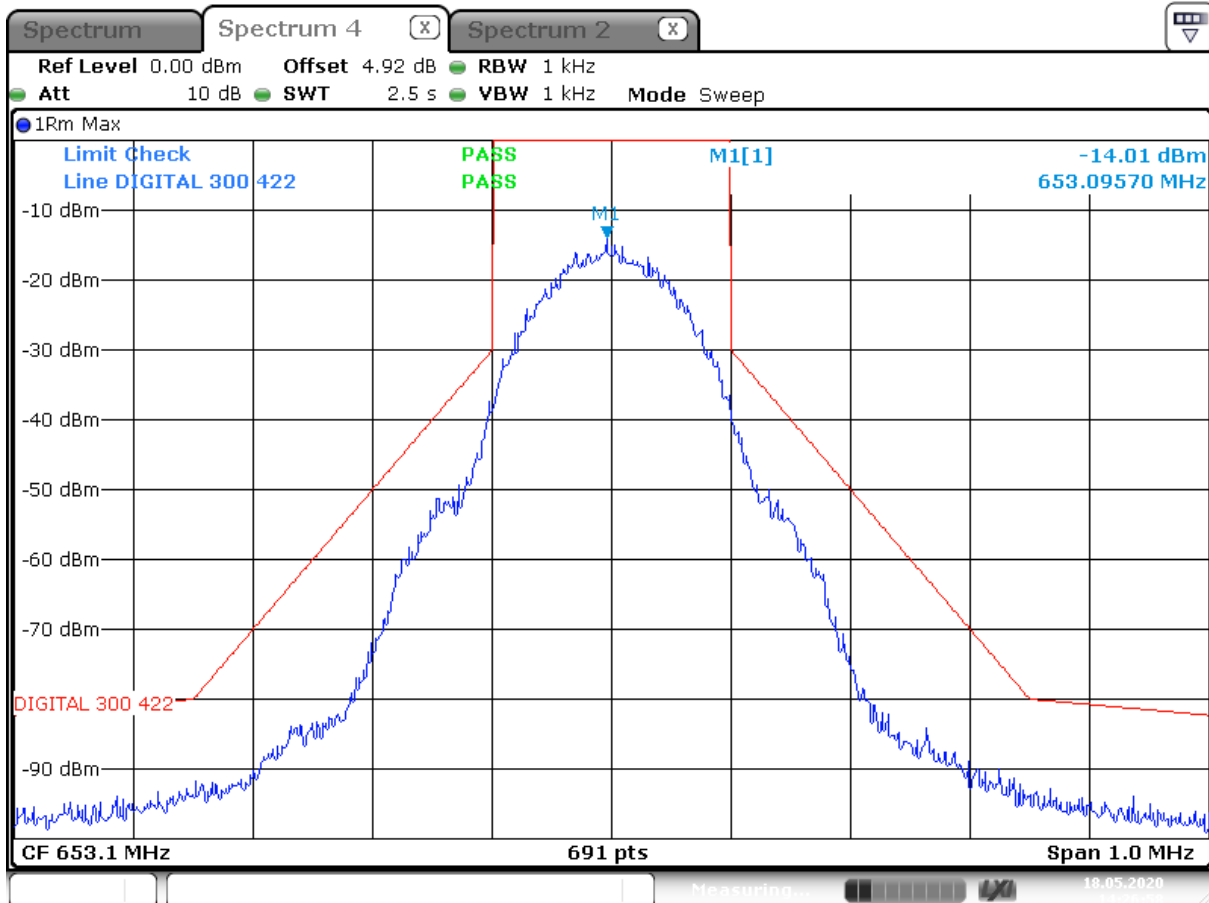
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal @ 653,1 MHz centered.



Date: 18 MAY 2020 14:26:58

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

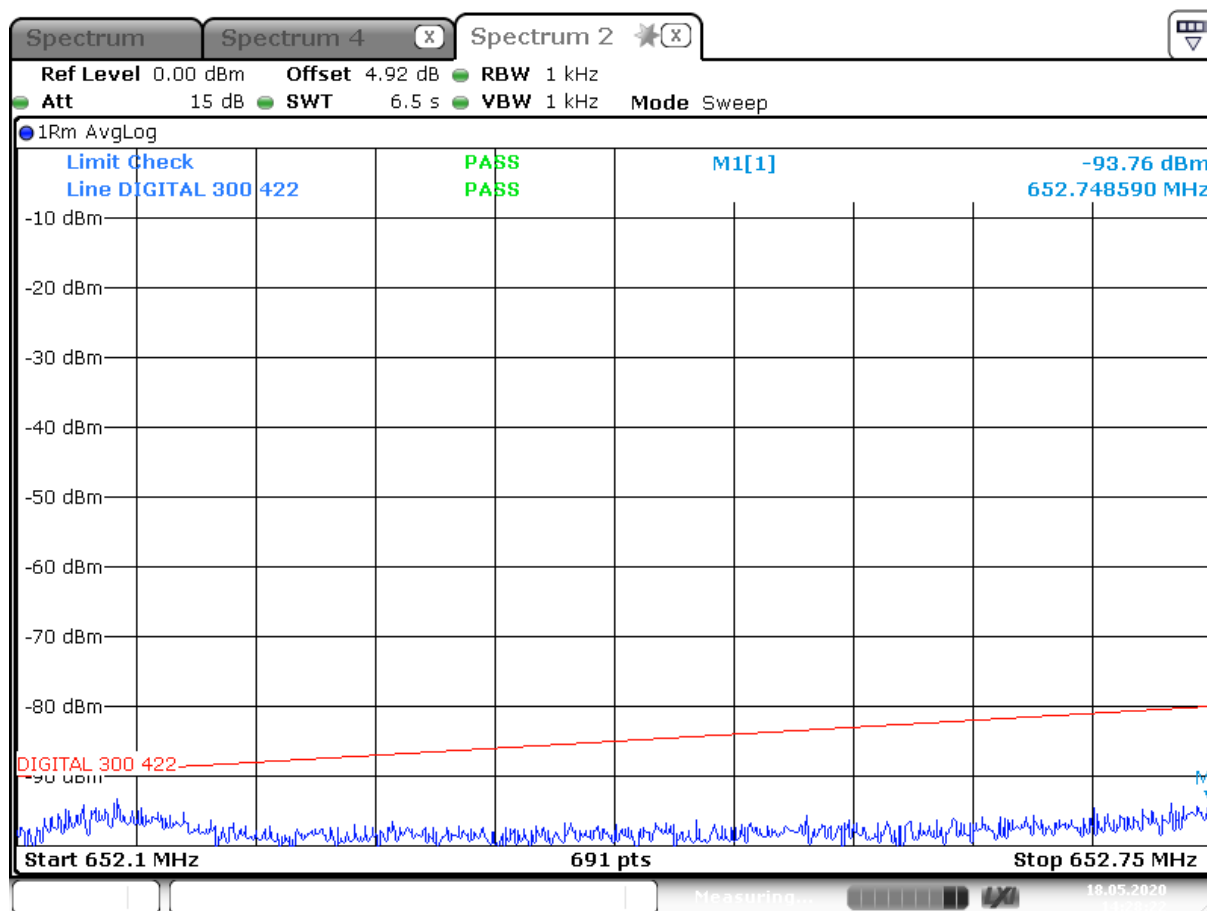
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 653,1 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:28:22

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

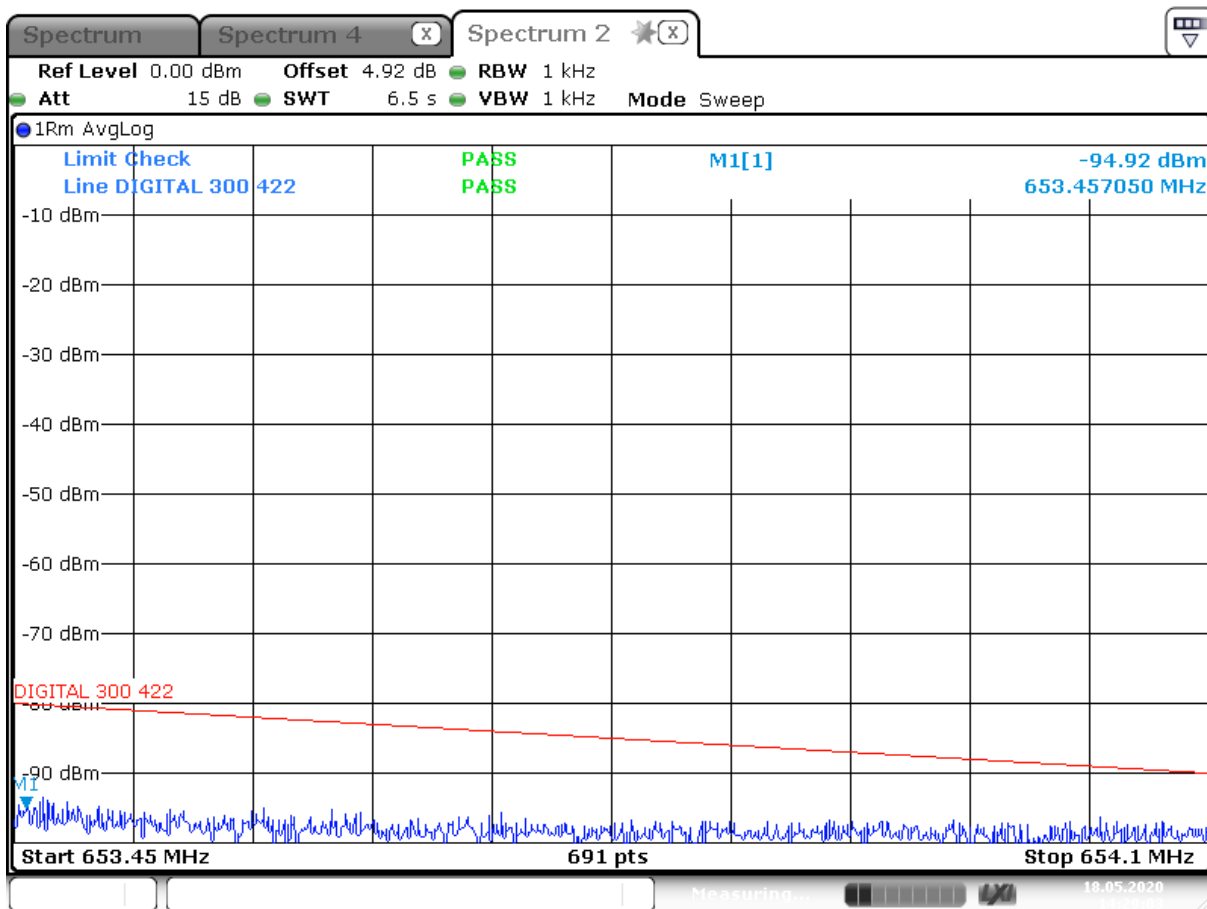
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 653,1 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:29:03

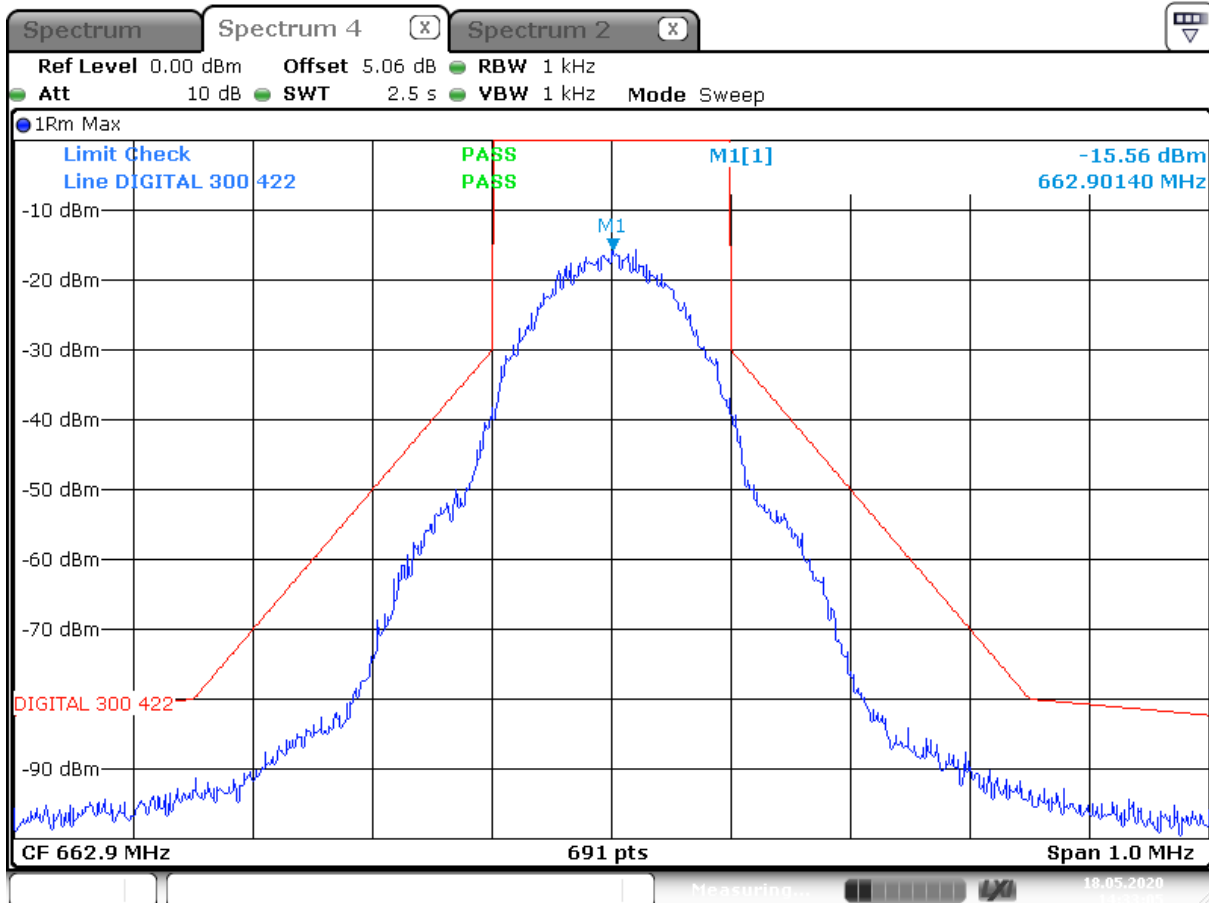
TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with weighted 1kHz signal @ 662,9 MHz centered.



Date: 18 MAY 2020 14:33:05

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

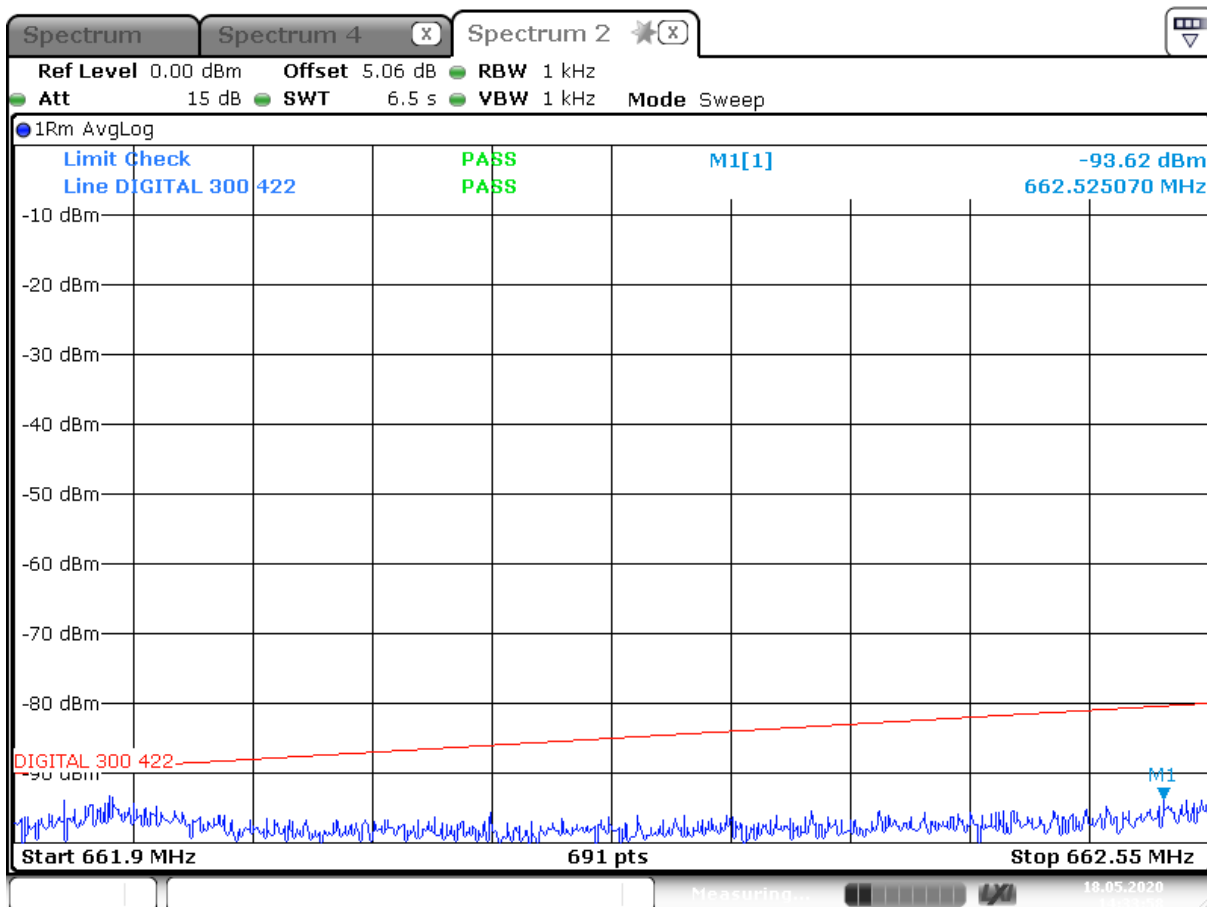
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 662,9 MHz

Left -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:33:59

TEST EQUIPMENT USED: EMV-205

NECESSARY BANDWIDTH

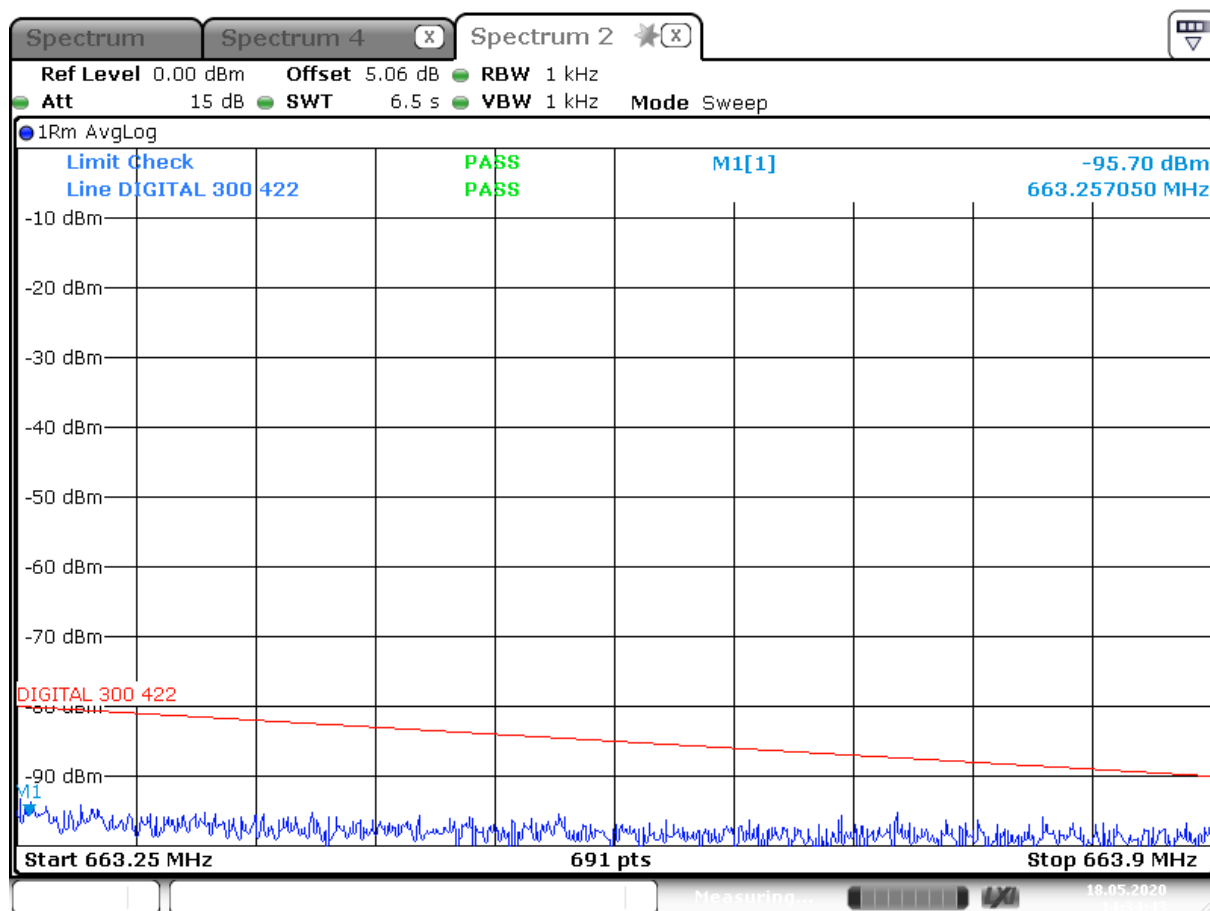
SUBCLAUSE 8.3

Rated output power: 20 mW

Measurement with 1kHz signal

Transmitter frequency 662,9 MHz

Right -90 dBc Point measured with average detector



Date: 18 MAY 2020 14:34:43

TEST EQUIPMENT USED: EMV-205

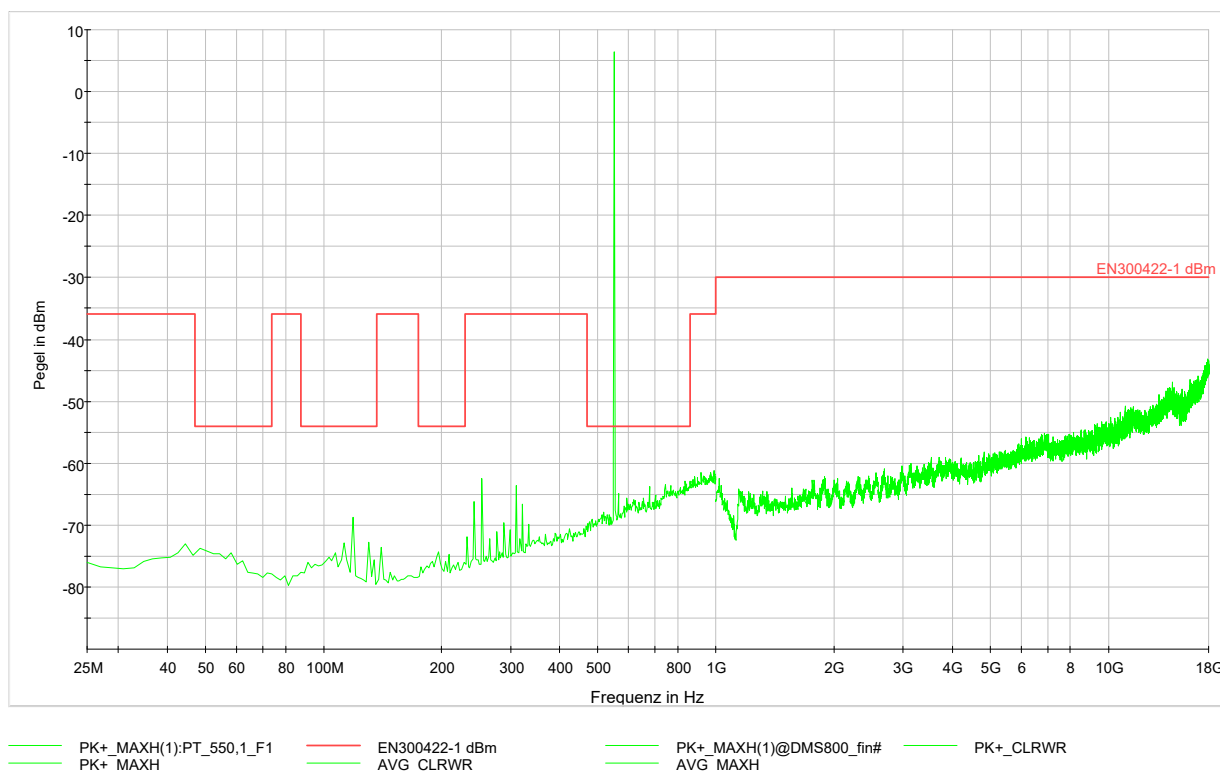
4.4 TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 550,1 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

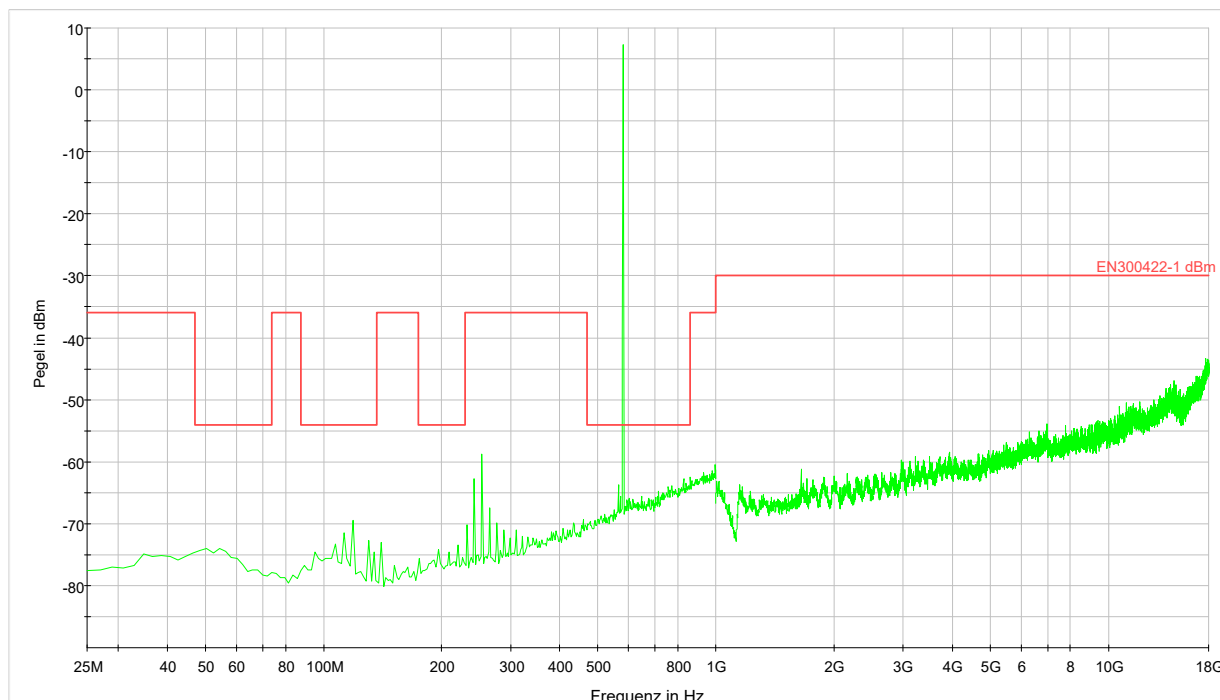
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 579 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



— PK+_MAXH(1):PT_579_F1 — EN300422-1 dBm — PK+_MAXH(1):DMS800_fin# — PK+_CLRWR
— PK+_MAXH — AVG_CLRWR — AVG_MAXH

LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

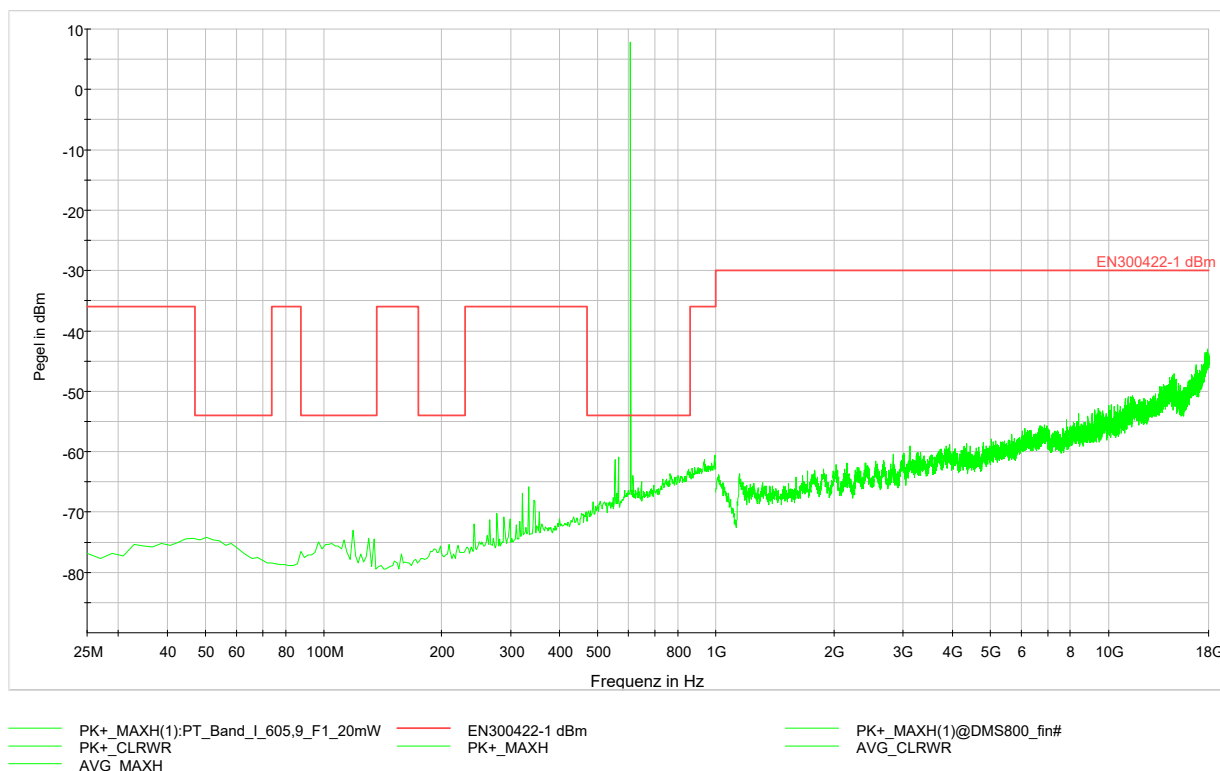
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 605,9 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

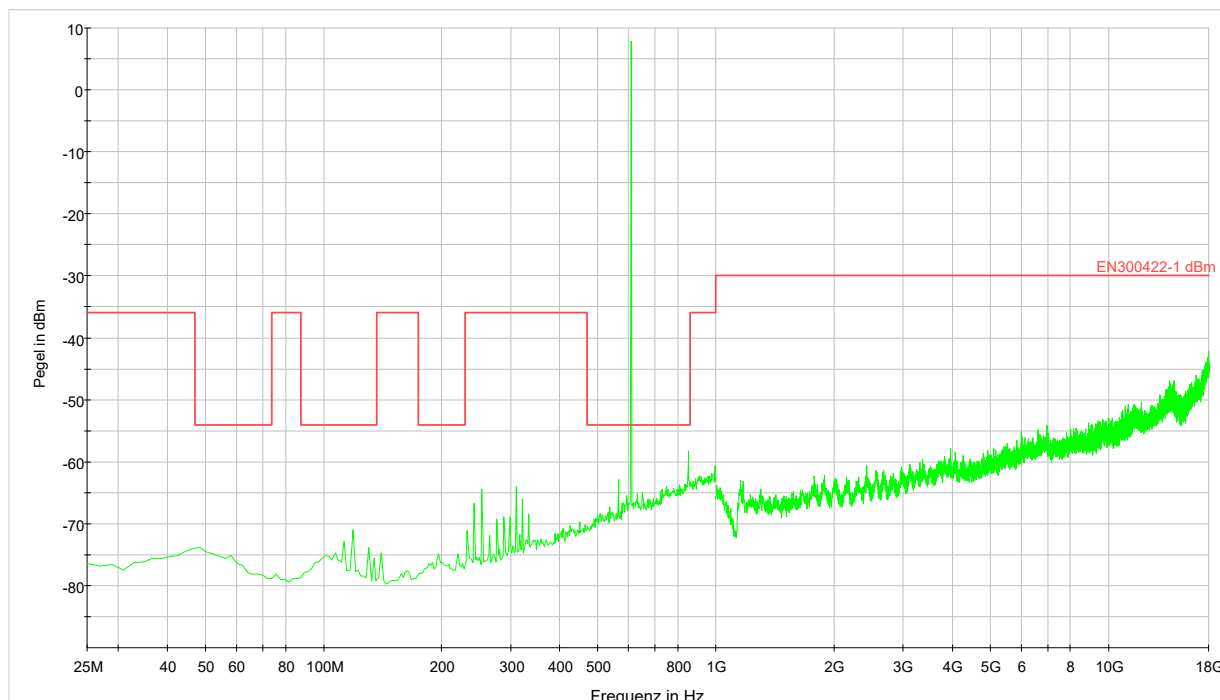
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 607,9 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



— PK+_MAXH(1):PT_607,9_F1
 — EN300422-1 dBm
 — PK+_MAXH(1):DMS800_fin#
 — PK+_CLRWR
— PK+_MAXH
 — AVG_CLRWR
 — AVG_MAXH

LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

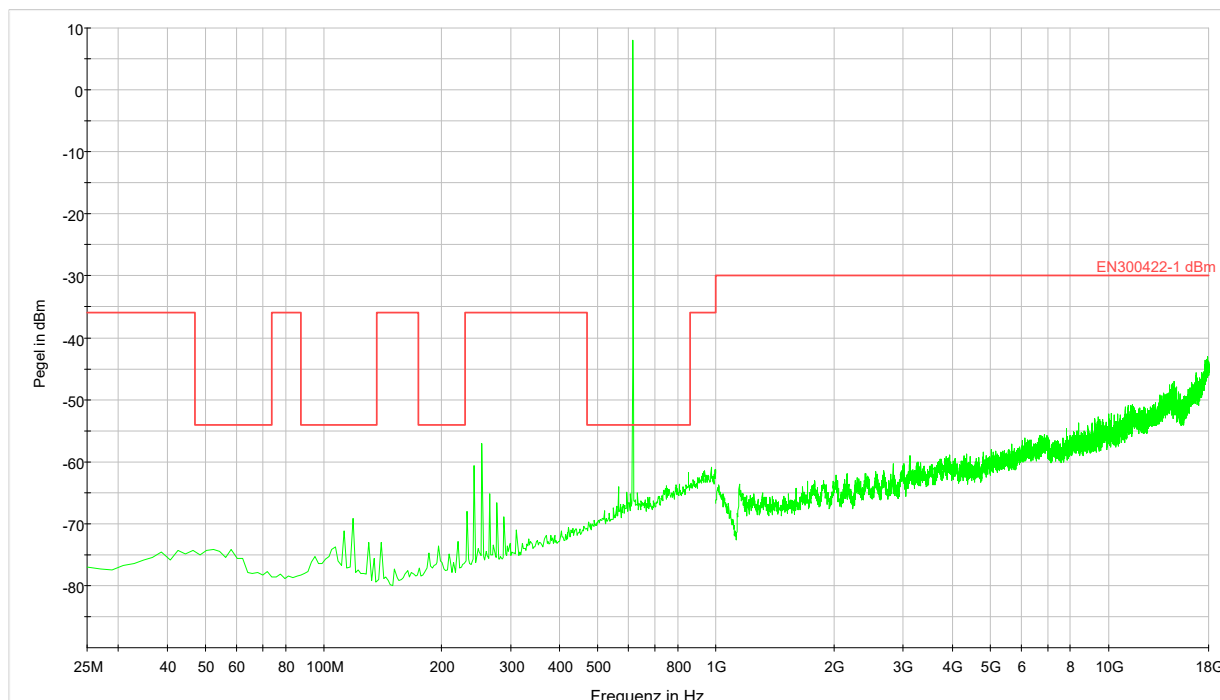
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 614,1 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



PK+_MAXH(1):PT_614,1_F1 EN300422-1 dBm PK+_MAXH(1):DMS800_fin# PK+_CLRWR
PK+_MAXH AVG_CLRWR AVG_MAXH

LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

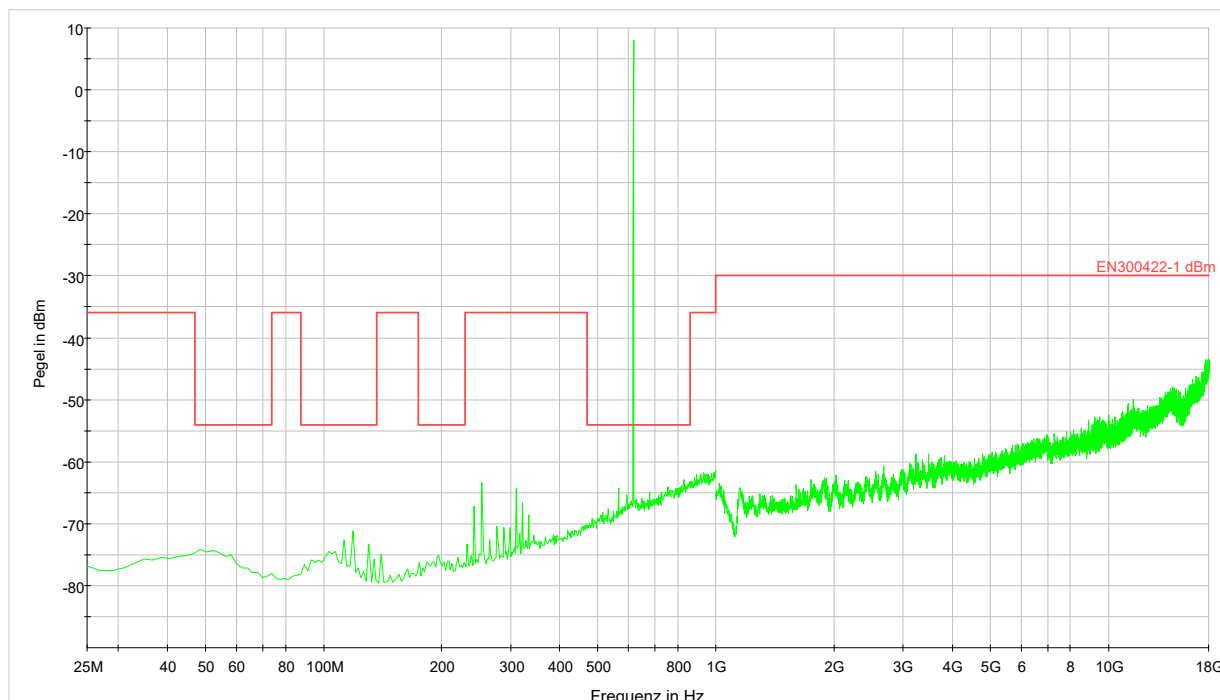
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 615,9 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

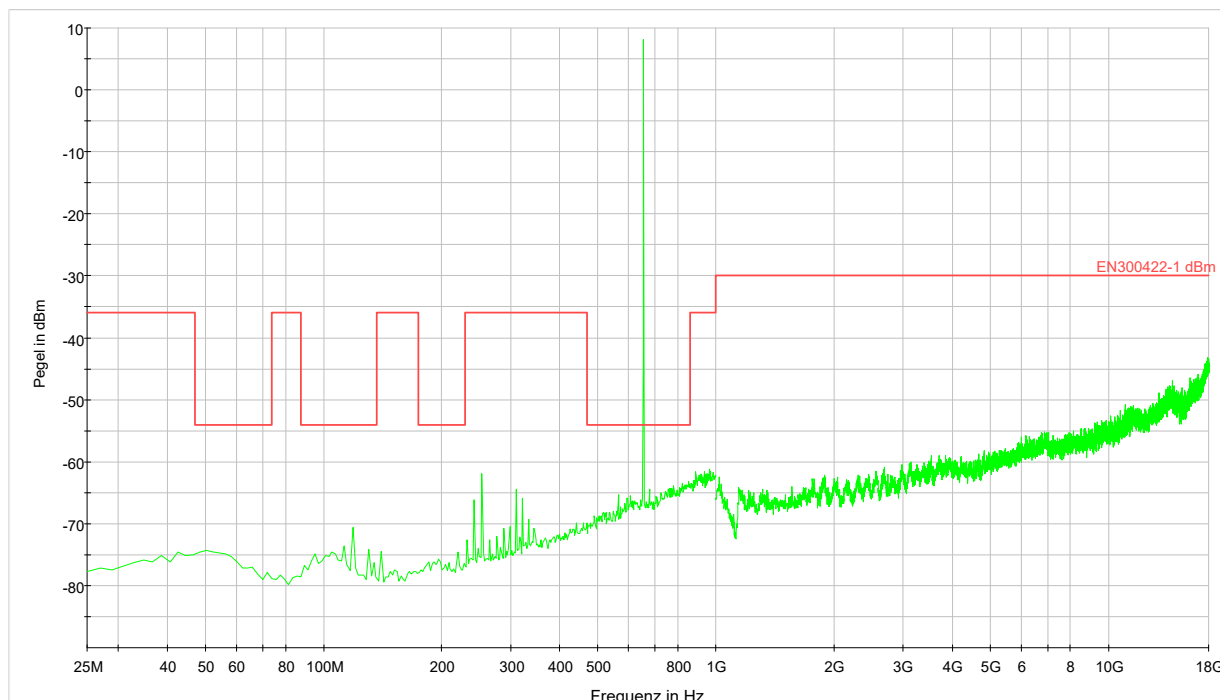
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 653,1 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



PK+_MAXH(1):PT_653,1_F1 EN300422-1 dBm PK+_MAXH(1):DMS800_fin# PK+_CLRWR
PK+_MAXH AVG_CLRWR AVG_MAXH

LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

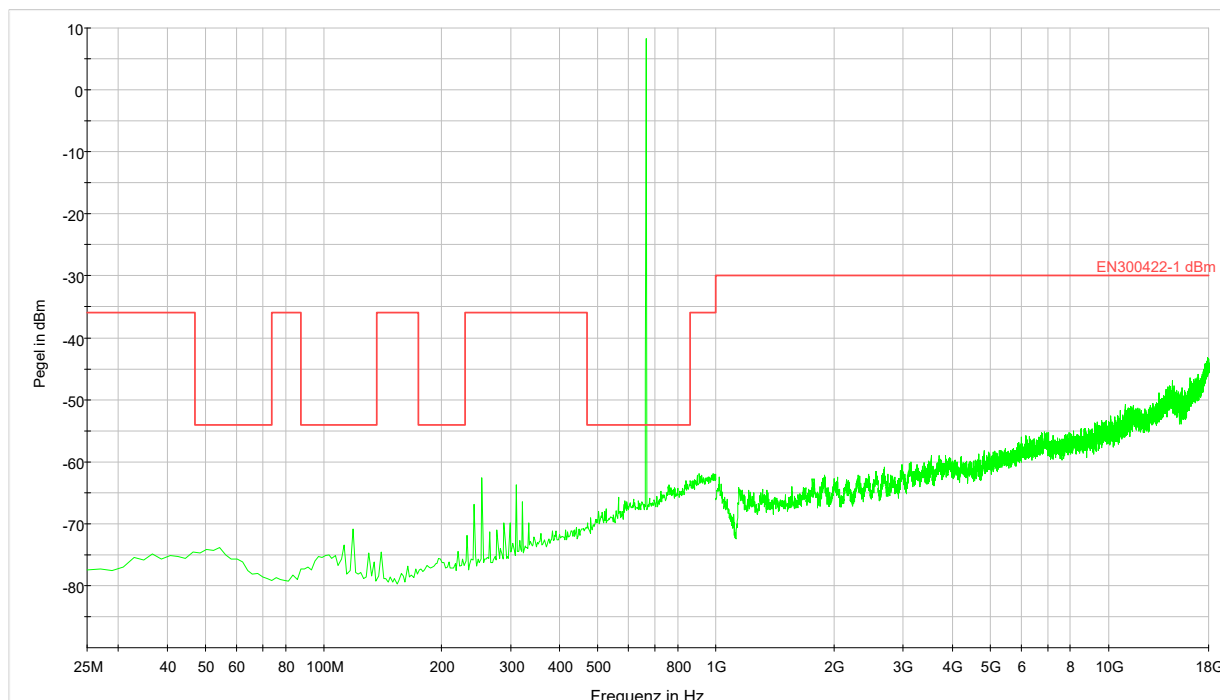
TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter operating at 662,9 MHz

Rated output power: 20 mW

Modulation: unmodulated carrier



PK+_MAXH(1):PT_662,9_F1 EN300422-1 dBm PK+_MAXH(1):DMS800_fin# PK+_CLRWR
PK+_MAXH AVG_CLRWR AVG_MAXH

LIMIT

SUBCLAUSE 8.4.3

47 MHz to 74 MHz 87,5 MHz to 137 MHz 174 MHz to 230 MHz 470 MHz to 862 MHz	Other frequencies $\leq$ 1000 MHz	Frequencies > 1000 MHz
4,0 nW (-54 dBm)	250 nW (-36 dBm)	1,00 μ W (-30 dBm)

Spurious Emissions were investigated up to the 10th harmonic of the fundamental and compliance is demonstrated with ETSI EN 300 422-1 according to KDB 206256 D01.

Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-112/1; NT-131/1; NT-139; NT-337; NT-207

TRANSMITTER SPURIOUS EMISSIONS radiated

SUBCLAUSE 8.4

Operating mode: transmitter standby

Because the transmitter is operating after switching on, there is no standby mode available and no measurement was performed.

4.5 Transmitter intermodulation distortion

SUBCLAUSE 8.5

Radiated measurement – complete band

Unwanted Signal	TX-IMD (dBc)		
	550,1 MHz	605,9 MHz	663 MHz
fw + 5 MHz	60	55	57
fw – 5 MHz	55	56	58
Measurement uncertainty	± 3dB		

LIMIT

SUBCLAUSE 8.5.3

The maximum resulting IMD product shall be at least 40 dB below the output power of the DUT.

Measuring equipment used:

NT-100; NT-111/1; NT-112/1; NT-113/1; NT-131/1; NT-210; NT-310; NT-310/1; EMV-205

Transmitter intermodulation distortion

SUBCLAUSE 8.5

Radiated measurement - 550,1 – 607,9 MHz according to FCC Part 15 and FCC Part 74

Unwanted Signal	TX-IMD (dBc)		
	550,1 MHz	579 MHz	607,9MHz
fw + 5 MHz	60	56	55
fw – 5 MHz	55	55	56
Measurement uncertainty	± 3dB		

LIMIT

SUBCLAUSE 8.5.3

The maximum resulting IMD product shall be at least 40 dB below the output power of the DUT.

Measuring equipment used:

NT-100; NT-111/1; NT-112/1; NT-113/1; NT-131/1; NT-210; NT-310; NT-310/1; EMV-205

Transmitter intermodulation distortion

SUBCLAUSE 8.5

Radiated measurement - 614,1 – 615,9 MHz according to FCC Part 15

Unwanted Signal	TX-IMD (dBc)	
	614,1	615,9
fw + 5 MHz	56	57
fw – 5 MHz	56	56
Measurement uncertainty	± 3dB	

LIMIT

SUBCLAUSE 8.5.3

The maximum resulting IMD product shall be at least 40 dB below the output power of the DUT.

Measuring equipment used:

NT-100; NT-111/1; NT-112/1; NT-113/1; NT-131/1; NT-210; NT-310; NT-310/1; EMV-205

Transmitter intermodulation distortion

SUBCLAUSE 8.5

Radiated measurement - 653,1 – 657 MHz according to FCC Part 74
657 – 662,9 MHz according to FCC Part 15

Unwanted Signal	TX-IMD (dBc)	
	653,1	662,9
fw + 5 MHz	57	57
fw – 5 MHz	59	58
Measurement uncertainty	± 3dB	

LIMIT

SUBCLAUSE 8.5.3

The maximum resulting IMD product shall be at least 40 dB below the output power of the DUT.

Measuring equipment used:

NT-100; NT-111/1; NT-112/1; NT-113/1; NT-131/1; NT-210; NT-310; NT-310/1; EMV-205

Appendix 1

Test equipment used

Division:
Industry & Energy

Department: FG

Test report number:
INE-AT/FG-20/148E

Page: 1 of 4

Date: 11.02.2021

☐	Anechoic Chamber with 3m measurement distance	NT-100	☐	Power quality analyzer Fluke 1760 (complete set)	NT-160 - NT-173
☐	Stripline according to ISO 11452-5	NT-108	☐	Spectrumanalyzer – FSP7 9 kHz – 7 GHz	NT-200
☐	MA4000 - Antenna mast 1 - 4 m height	NT-110/1	☐	ESCI - Test receiver 9 kHz - 7 GHz	NT-203/1
☐	DS - Turntable 0 - 400 ° Azimuth	NT-111/1	☐	ESI26 – Test receiver 20 Hz – 26,5 GHz	NT-207
☐	CO3000 Controller Mast+Turntable	NT-112/1	☐	Digital Radio Tester CMW500	NT-208/1
☐	HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121	☐	Noise-gen., ITU-R 559-2 20 Hz – 20 kHz	NT-209
☐	FMZB1513 - Loop Antenna 9 kHz - 30 MHz	NT-122/1	☐	CMTA - Radiocommunication analyzer ; 0,1 - 1000 MHz	NT-210
☐	HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123	☐	3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211
☐	3121C - Dipole Antenna 28 - 1000 MHz	NT-124	☐	Digital Radio Tester Aeroflex 3920	NT-212/1
☐	3115 - Horn Antenna 1 - 18 GHz (immunity)	NT-125	☐	Mixer M28HW 26,5 GHz - 40 GHz	NT-214
☐	3116 - Horn Antenna 18 - 40 GHz	NT-126	☐	RubiSource T&M Timing reference	NT-216
☐	SAS-200/543 - Bicon. Antenna 20 MHz - 300 MHz	NT-127	☐	Radiocommunicationanalyzer SWR 1180 MD	NT-217
☐	AT-1080 - Log. Per. Antenna 80 - 1000 MHz	NT-128	☐	Mixer M19HWD 40 GHz – 60 GHz	NT-218
☐	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-129	☐	Mixer M12HWD 60 GHz – 90 GHz	NT-219
☐	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-130	☐	DSO9104 Digital scope	NT-220/1
☐	3146 - Log. Per. Antenna 200 – 1000 MHz	NT-131	☐	TPS 2014 Digital scope	NT-222
☐	VULB 9163 Trilog Antenna 30 – 3000 MHz	NT-131/1	☐	Artificial Ear according to IEC 60318	NT-224
☐	Loop Antenna H-Field	NT-132	☐	1 kHz Sound calibrator	NT-225
☐	Horn Antenna 500 MHz - 2900 MHz	NT-133	☐	B10 - Harmonics and flicker analyzer	NT-232
☐	Horn Antenna 500 MHz - 6000 MHz	NT-133/1	☐	SRM-3006 Spectrumanalyzer	NT-233/1a
☐	Log. per. Antenna 800 MHz - 2500 MHz	NT-134	☐	E-field probe SRM 75 MHz – 3 GHz	NT-234
☐	Log. per. Antenna 800 MHz - 2500 MHz	NT-135	☐	Field Meter NBM-500 incl. E- and H-Field probes	NT-240a-e
☐	BiConiLog Antenna 26 MHz – 2000 MHz	NT-137	☐	Hall-Teslameter ETM-1	NT-241
☐	Conical Dipol Antenna PCD8250	NT-138	☐	EFA-3 H-field- / E-field probe	NT-243
☐	HF 906 - Horn Antenna 1 - 18 GHz (emission)	NT-139	☐	EHP-50F H-field- / E-field probe	NT-243/1
☐	HZ-1 Antenna tripod	NT-150	☐	Field Meter EMR-200 100 kHz – 3 GHz	NT-244
☐	BN 1500 Antenna tripod	NT-151	☐	E-field probe 100 kHz – 3 GHz	NT-245
☐	Ant. tripod for EN61000-4-3 Model TP1000A	NT-156	☐	H-field probe 300 kHz – 30 MHz	NT-246

Appendix 1 (continued)

Test equipment used

☐ E-field probe 3 MHz – 18 GHz	NT-247	☐ T82-50 RF-Amplifier 2 GHz – 8 GHz	NT-331
☐ H-field probe 27 MHz – 1 GHz	NT-248	☐ 500W1000M7 - RF-Amplifier 80 - 1000 MHz / 500 W	NT-332
☐ ELT-400 1 Hz – 400 kHz	NT-249	☐ AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333
☐ MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250	☐ APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334
☐ FCC-203I EM Injection clamp	NT-251	☐ Preamplifier 1 GHz - 4 GHz	NT-335
☐ FCC-203I-DCN Ferrite decoupling network	NT-252	☐ Preamplifier for GPS MKU 152 A	NT-336
☐ PR50 Current Probe	NT-253	☐ Preamplifier 100 MHz – 23 GHz	NT-337
☐ i310s Current Probe	NT-254/1	☐ DC Block 10 MHz – 18 GHz Model 8048	NT-338
☐ Fluke 87 V True RMS Multimeter	NT-260	☐ 2-97201 Electronic load	NT-341
☐ Model 2000 Digital Multimeter	NT-261	☐ TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344
☐ Fluke 87 V Digital Multimeter	NT-262/1	☐ TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345
☐ ESH2-Z5-U1 Artificial mains network 4x25A	NT-300	☐ VDS 200 Mobil-impuls-generator	NT-350
☐ ESH3-Z5-U1 Artificial mains network 2x10A	NT-301	☐ LD 200 Mobil-impuls-generator	NT-351
☐ ESH3-Z6-U1 Artificial mains network 1x100A	NT-302	☐ MPG 200 Mobil-Impuls-Generators	NT-352
☐ ESH3-Z6-U1 Artificial mains network 1x100A	NT-302a	☐ EFT 200 Mobil-impuls-generator	NT-353
☐ PHE 4500/B Power amplifier	NT-304	☐ AN 200 S1 Artificial Network	NT-354
☐ EZ10 T-Artificial Network	NT-305	☐ FP-EFT 32M 3 ph. Coupling filter (Burst)	NT-400/1
☐ SMG - Signal generator 0,1 - 1000 MHz	NT-310	☐ PHE 4500 - Mains impedance network	NT-401
☐ SMA100A - Signal generator 9 kHz - 6 GHz	NT-310/1	☐ IP 6.2 Coupling filter for data lines (Surge)	NT-403
☐ RefRad Reference generator	NT-312	☐ TK 9421 High Power Volt. Probe 150 kHz - 30 MHz	NT-409
☐ SMP 02 Signal generator 10 MHz - 20 GHz	NT-313	☐ ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
☐ 40 MHz Arbitrary Generator TGA1241	NT-315	☐ IP 4 - Capacitive clamp (Burst)	NT-411
☐ Artificial mains network NSLK 8127-PLC	NT-316	☐ Highpass-Filter 100 MHz – 3 GHz	NT-412
☐		☐ Highpass-Filter 600 MHz – 4 GHz	NT-413
☐ PSURGE 4.1 Surge generator	NT-324	☐ Highpass-Filter 1250 MHz – 4 GHz	NT-414
☐ IMU4000 Immunity test system	NT-325/1	☐ Highpass-Filter 1800 MHz – 16 GHz	NT-415
☐ VCS 500-M6 Surge-Generator	NT-326		
☐ Oscillatory Wave Simulator incl. Coupling networks	NT-328a+b+c		
☐ BTA-250 - RF-Amplifier 9 kHz - 220 MHz / 250 W	NT-330		

Division:
Industry & Energy

Department: FG

Test report number:
INE-AT/FG-20/148E

Page: 2 of 4

Date: 11.02.2021

Appendix 1 (continued)

Test equipment used

☐	Highpass-Filter 3500 MHz – 18 GHz	NT-416	☐	FCC-801-AF10 Coupling decoupling network	NT-461	Division: Industry & Energy
☐	RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417	☐	FCC-801-S25 Coupling decoupling network	NT-462	Department: FG
☐	RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418	☐	FCC-801-T4 Coupling decoupling network	NT-463	Test report number: INE-AT/FG-20/148E
☐	RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419	☐	FCC-801-C1 Coupling decoupling network	NT-464	Page: 3 of 4
☐	RF-Attenuator 20 dB DC - 1000 MHz / 25 W	NT-421	☐	SW 9605 - Current probe 150 kHz – 30 MHz	NT-465/1	Date: 11.02.2021
☐	RF-Attenuator 30 dB DC - 1000 MHz / 1 W	NT-423	☐	95242-1 – Current probe 1 MHz – 400 MHz	NT-468	
☐	RF-Attenuator 30 dB	NT-424	☐	94106-1L-1 – Current probe 100 kHz – 450 MHz	NT-471	
☐	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-425	☐	GA 1240 Power amplifier according to EN 61000-4-16	NT-480	
☐	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-426	☐	Coupling networks according to EN 61000-4-16	NT-481 - NT-483	
☐	RF-Attenuator 6 dB	NT-428	☐	Van der Hoofden Test Head	NT-484	
☐	RF-Attenuator 0 dB - 81 dB	NT-429	☐	EMC Video/Audiosystem	NT-511/1	
☐	WRU 27 - Band blocking 27 MHz	NT-430	☐	ES-K1 Version 1.71 SP2 Test software	NT-520	
☐	WHJ450C9 AA - High pass 450 MHz	NT-431	☐	EMC32 Version 10.60.15 Test software	NT-520/1	
☐	WHJ250C9 AA - High pass 250 MHz	NT-432	☐	SRM-TS Version 1.3 software for SRM-3000	NT-522	
☐	RF-Load 150 W	NT-433	☐	SRM-TS Version 1.3.1 software for SRM-3006	NT-522/1	
☐	Impedance transducer 1:4 ; 1:9 ; 1:16	NT-435	☐	Spitzenberger und Spies Test software V4.1	NT-525	
☐	RF-Attenuator DC – 18 GHz 6 dB	NT-436	☐	Noise power test apparatus according to EN 55014	NT-530	
☐	RF-Attenuator DC – 18 GHz 6 dB	NT-437	☐	Vertical coupling plane (ESD)	NT-531	
☐	RF-Attenuator DC – 18 GHz 10 dB	NT-438	☐	Test cable #4 for EN 61000-4-6	NT-553	
☐	RF-Attenuator DC – 18 GHz 20 dB	NT-439	☐	Test cable #3 for conducted emission	NT-554	
☐	I+P 7780 Directional coupler 100 - 2000 MHz	NT-440	☐	Test cable #5+#6 ESD-cable (2x470k)	NT-555 + NT-556	
☐	ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441	☐	Test cable #8 Sucoflex 104EA	NT-559	
☐	Power Divider 6 dB/1 W/50 Ohm	NT-443	☐	Test cable #9 (for outdoor measurements)	NT-580	
☐	Directional coupler 0,1 MHz – 70 MHz	NT-444	☐	Test cable #10 (for outdoor measurements)	NT-581	
☐	Directional coupler 0,1 MHz – 70 MHz	NT-445	☐	Test cable #13 Sucoflex 104PE	NT-584	
☐	Tube imitations according to EN 55015	NT-450	☐	Test cable #21 for SRM-3000	NT-592	
☐	FCC-801-M3-16A Coupling decoupling network	NT-458	☐	Shield chamber	NT-600	
☐	FCC-801-M2-50A Coupling decoupling network	NT-459	☐	Climatic chamber	M-1200	
☐	FCC-801-M5-25 Coupling decoupling network	NT-460				

Appendix 1 (continued)

Test equipment used

☐	Anechoic Chamber 3 m / 5 m measuring distance	EMV-100	☐	Log.per Antenna 0,7 – 9 GHz STLP9149	EMV-305
☐	Turntabel 6 m diameter	EMV-101	☐	HF- Amplifier 9 kHz-250 MHz BBA150 (low noise)	EMV-306
☐	Antenna mast + controller	EMV-102+ EMV-103	☐	ISO11451-2 TLS 10 kHz – 30 MHz	EMV-307
☐	EMC Video/Audiosystem	EMV-104	☐	Load Dump Generator LD 200N	EMV-350
☐	EMC Software EMC32 Version 10.60.15	EMV-105	☐	Ultra Compact Symulator UCS 200N100	EMV-351
☐	Hornantenna 1 – 18 GHz HF 907	EMV-110	☐	Automotive Power fail module PFM 200N100.1	EMV-352
☐	Antennapre.amp. 1 – 18 GHz ERZ-LNA0200-1800-30-2	EMV-111	☐	Voltage Drop Symulator VDS 200Q100	EMV-353
☐	Trilog Antenna 30-3000 MHz VULB9163	EMV-112	☐	Arb. Generator AutoWave	EMV-354
☐	Monopol 9 kHz – 30 MHz VAMP 9243	EMV-113	☐	Ultra Compact Symulator UCS 500N7	EMV-355
☐	Antennapre.amp 18 – 40 GHz BBV 9721	EMV-114	☐	Coupling decoupling network CNI 503B7 / 32 A	EMV-356
☐	Hornantenna 200 – 2000 MHz AH-220	EMV-115	☐	Coupling decoupling network CNI 503B7 / 63 A	EMV-357
☐	DC Artificial Network PVDC 8300	EMV-150	☐	Telecom Surge Generator TSurge 7	EMV-358
☐	AC Artificial Network NNLK 8121 RC	EMV-151	☐	Coupling decoupling network CNI 508N2	EMV-359
☐	EMI Receiver ESR26	EMV-200	☐	Coupling decoupling network CNV 504N2.2	EMV-360
☐	Signalgenerator 9 kHz – 40 GHz N5173B	EMV-201	☐	Immunity generator NSG4060/NSG4060-1	EMV-361
☐	GPS Frequency normal B-88	EMV-202	☐	Coupling network CDND M316-2	EMV-362
☐	DC Power supply N5745A	EMV-203	☐	Coupling network CT419-5	EMV-363
☐	Spektrum Analyzator FSV40	EMV-205	☐	ESD Generator NSG 437	EMV-364
☐	Thd Multimeter Model 2015	EMV-206	☐	Pulse Limiter VTSD 9561-F BNC	EMV-405
☐	Poweramplifier PAS15000	EMV- 207/abc	☐	Transient emission BSM200N40+BS200N100	EMV- 450+451
☐	Inrush Current Source	EMV- 208/abc	☐	Cap. Coupling Clamp HFK	EMV-455
☐	Arb.-generator Sycore	EMV-209	☐	Mag. Field System MS100N+MC26100+MC2630	EMV- 456-458
☐	Harmonics/Flicker analyzer ARS 16/3	EMV-210	☐	Coupling network CDN M2-100A	EMV-459
☐	HF- Amplifier 9 kHz-250 MHz BBA150	EMV-300	☐	Coupling network CDN M3-32A	EMV-460
☐	HF- Amplifier 80 -1000 MHz BBA150	EMV-301	☐	Coupling network CDN M5-100A	EMV-461
☐	HF- Amplifier 0,8 - 6 GHz BBA150	EMV-302	☐	Current Clamp CIP 9136A	EMV-462
☐	High Power Ant. 20-200 MHz HPBA-2510	EMV-303/1	☐	DC Artificial Network HV-AN 150	EMV- 464+465
☐	Log.per Antenna 80-2700 MHz STLP 9128 E special	EMV-304	☐	Coupling Clamp EM 101	EMV-466
			☐	Decoupling Clamp FTC 101	EMV-467
			☐	Power attenuator 10 dB / 250 Watt	EMV-469/2

Division:
Industry & Energy

Department: FG

Test report number:
INE-AT/FG-21/148E

Page: 4 of 4

Date: 11.02.2021

Appendix 2 Photodocumentation

Description: top view

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 1 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: side view

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 2 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: Front view

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 3 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: Back view

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 4 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: Battery case opened

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 5 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: PCB back side

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 6 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: PCB back side shielding detached

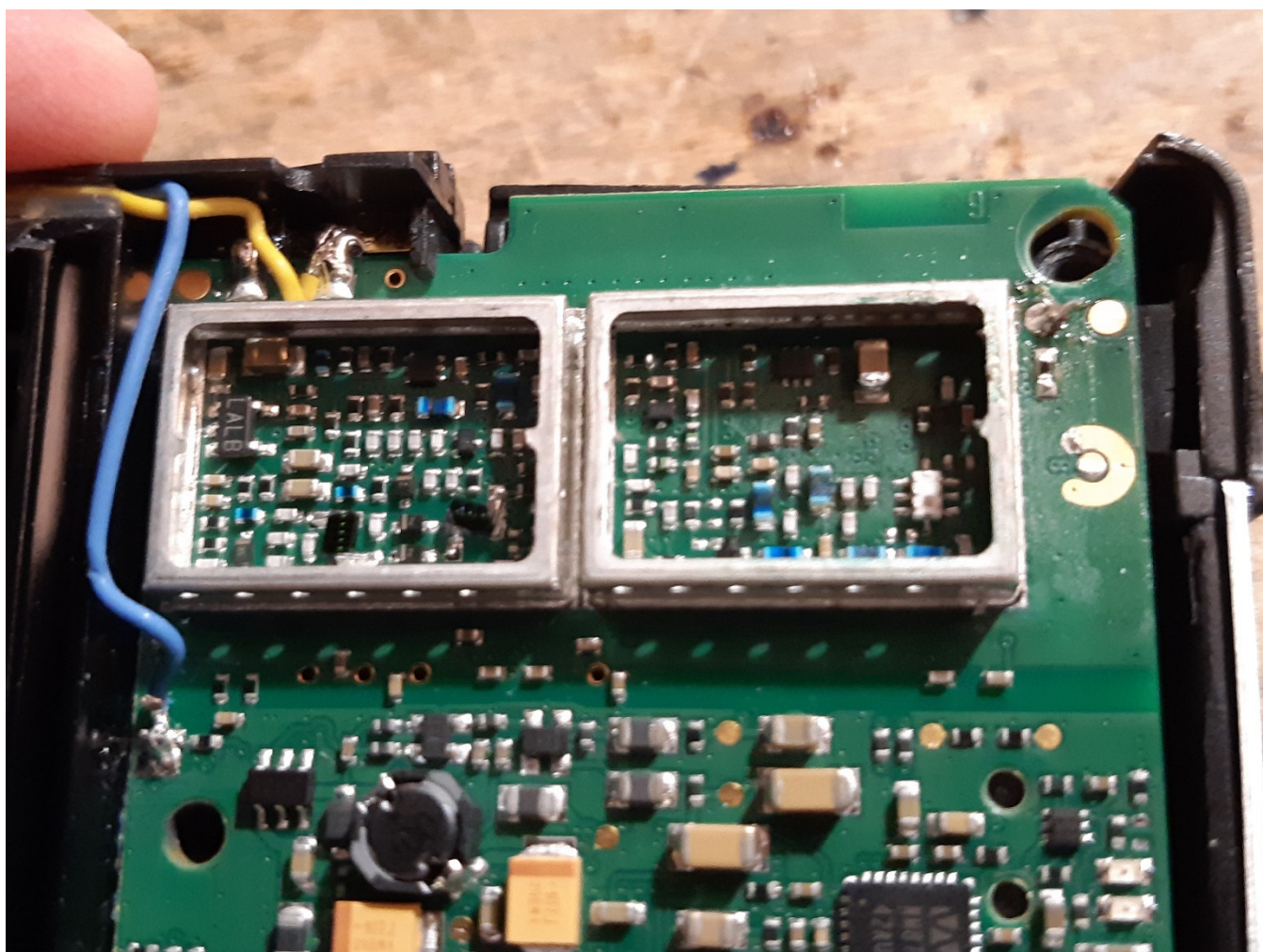
Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 7 of 13

Date: 11.02.2021



Appendix 2

Photodocumentation

Description: PCB front side

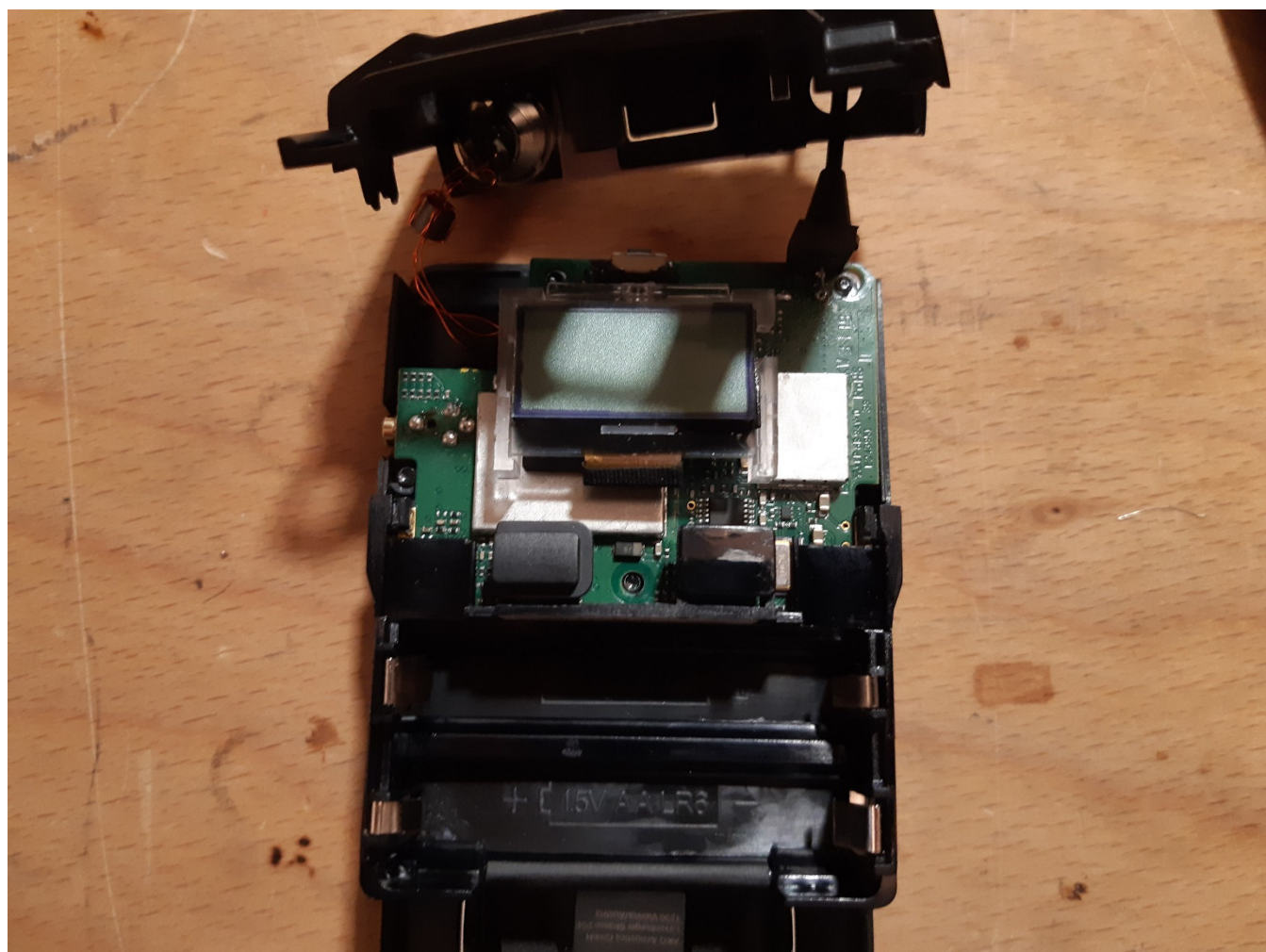
Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 8 of 13

Date: 11.02.2021



Appendix 2

Photodocumentation

Description: PCB front side display removed

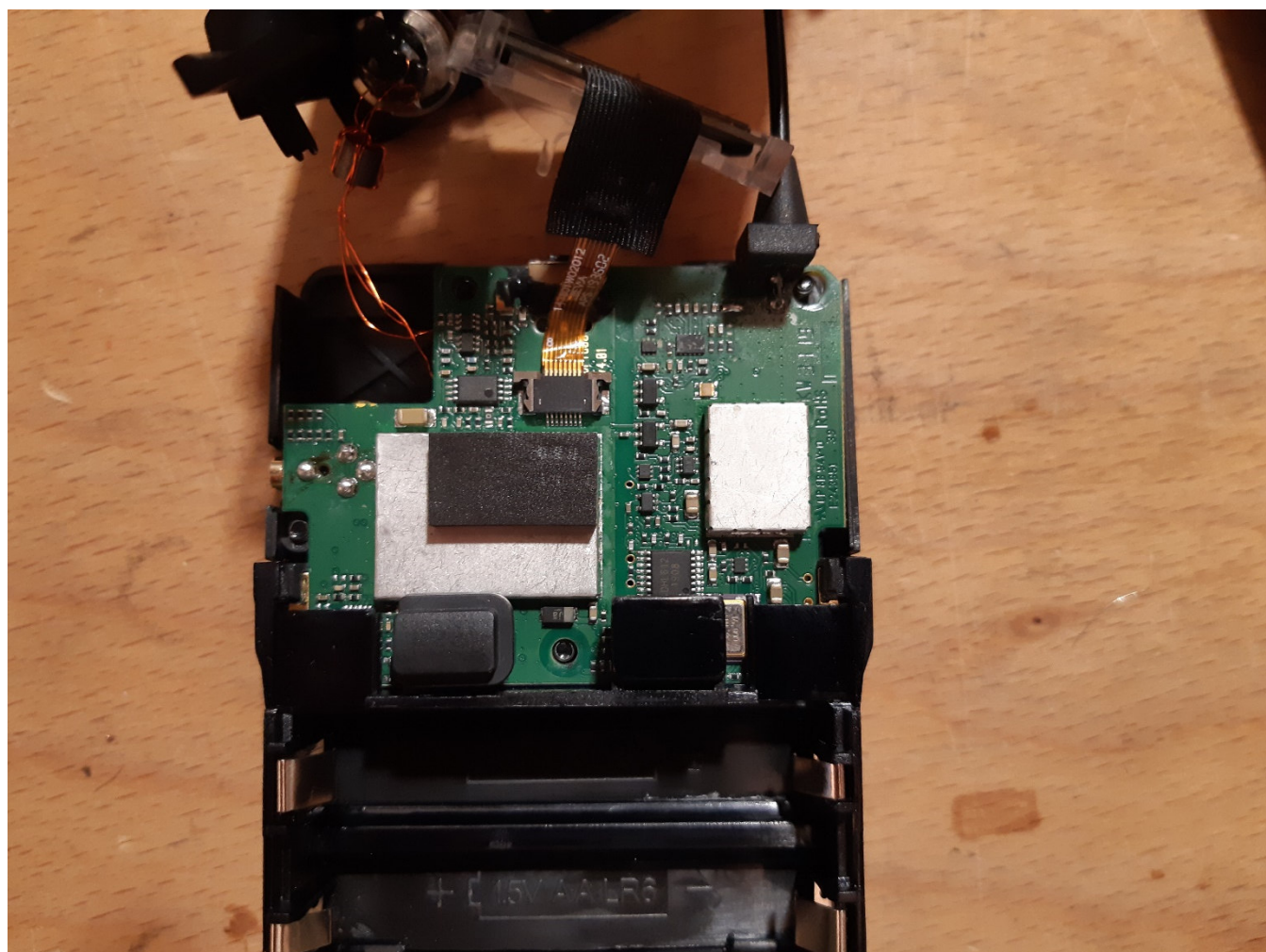
Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 9 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: PCB front side shielding detached

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 10 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: Labels

Division:
Industry & Energy

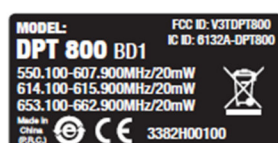
Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 11 of 13

Date: 11.02.2021

P/N: 5048322



P/N: 5048326

P/N: 5048323



P/N: 5048325



P/N: 5048324



Appendix 2

Photodocumentation

Description: Test setup above 1 GHz

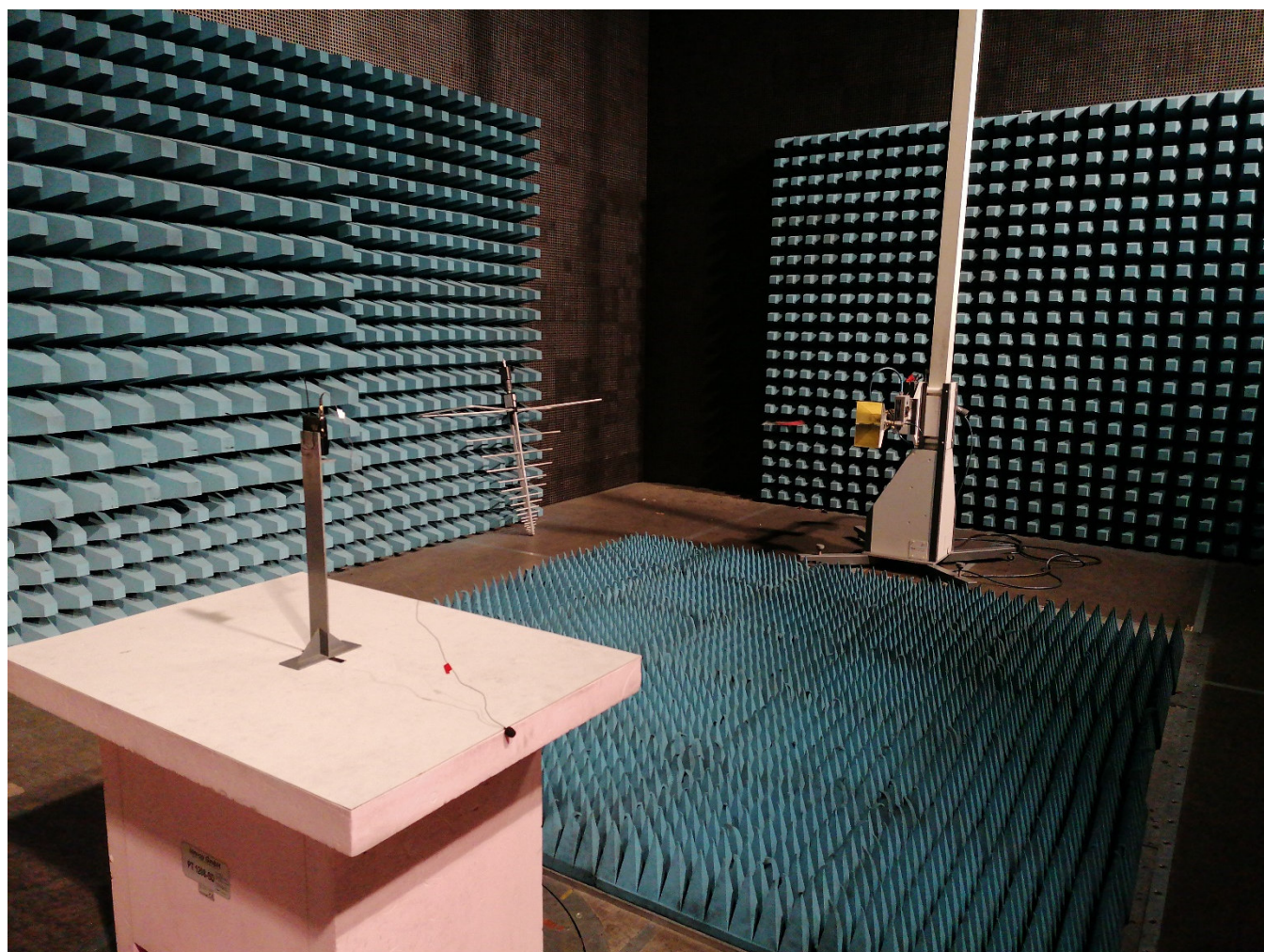
Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 12 of 13

Date: 11.02.2021



Appendix 2 Photodocumentation

Description: Test setup below 1GHz

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-20/148E

Page: 13 of 13

Date: 11.02.2021

