TEST REPORT

of the accredited test laboratory

TÜV Nr.:INE-AT/FG-18/177

Applicant:	AKG Acoustics GmbH Salzgasse 2 5400 Hallein, Austria
Tested Product:	Hand-held digital wireless microphone transmitter, Model: 'DMS300-HT300'
FCC-ID:	API-HT300
IC-ID:	6132A-HT300
Manufacturer:	VTech Communications Ltd. Xia Ling Bei Management Zone, Liaobu, Dongguan, Guangdong Province 523411 China

Output power / field strength:	3,02 mW cond.	**power supply:**	3 VDC internal battery
Frequency range:	2402 - 2480 MHz	**Channel separation:**	1 MHz
Standard:	FCC: 47 CFR Part 15 (October 1, 2017 edition) RSS-247 Issue 2, February 2017		

TUV Austria Services GmbH
Test laboratory for EMC

Supervisor of EMC-laboratory:

Ing. Wilhelm Seier

Rundsiegel

16.11.2018

checked by:

Ing. Michael Emminger

Copy Nbr.: 01

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Ambient temperature: 23°C Relative humidity: 54%

Contents

	Designation	PAGE
1.	Applicant	3
2.	Description of EUT	4
3.	Standards / Final result	5
4.	Test results	
	List of measurements according to 47 CFR 15 and RSS-247	
4.1	Test object data	6
4.2	Number of channels and channel spacing	7
4.3	6 dB Bandwidth	8-10
4.4	Maximum Peak RF Power Output (eirp)	11
4.5	Power Spectral Density	12-14
4.6	Out-of-band Emissions	15
4.7	Emissions in restricted bands	16-20
4.8	Maximum permissible exposure	21

Appendix	Designation	PAGES
1	Test equipment used	4
2	Photodocumentation	8

Ambient temperature: 23°C Relative humidity: 54%

1. Applicant

Company:	AKG Acoustics GmbH
Department:	R&D
Address:	Salzgasse 2 5400 Hallein, Austria
Contact person:	Mr. Gabor Mikovics

EUT received on:	16.10.2018
Tests were performed on:	09.11. till 14.11.2018

2. Description of EUT

EUT:	Hand-held digital wireless microphone transmitter 'DMS300-HT300'
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: test-firmware running, transmitting continuously
Technical data EUT:	Rated voltage: 3VDC Rated current: 210mA Rated frequency: DC Mains voltage during the tests: 3VDC internal battery
Climatic conditions in the emc laboratory:	Relative humidity: 54% Temperature: 23°C

Ambient temperature: 23°C Relative humidity: 54%

3. Standards / Final result

Name	Title	Deviation	Result
Title 47 CFR Part 15 October 1st 2017 edition	RADIO FREQUENCY DEVICES	none	OK
RSS-247 Issue 2, February 2017	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices	none	OK

Result: Opinions and interpretation of testing laboratory
OK: EUT passed
NOK: EUT failed

Ambient temperature: 23°C Relative humidity: 54%

4. TEST RESULTS

4.1. TEST OBJECT DATA

General EUT Description

This wireless microphone transmitter is working together with an associated receiver. In fact both are transceiver, because the communication link on the 2.4 GHz frequency band is bidirectional.

2.1033 (c) Technical description

2.1033 (4) Type of emission: 652KF1D – Channel spacing 1 MHz

2.1033 (5) Frequency range: 2402 to 2480 MHz (channel center frequencies).

2.1033 (6) Power range and Controls: The maximum peak output power is 3,02 mW and there is no power regulation.

2.1033 (7) Maximum output power rating: 3,02 mW.

2.1033 (8) DC Voltage and Current: 3V DC from internal battery
maximum current consumption: 210 mA

RSS-135 This standard does not apply to:
1.1.(a) a receiver that scans radio frequencies for the purpose of enabling its associated transmitter to avoid transmitting in an occupied frequency but which does not have the capability of decoding the message (e.g. converting it to audio voice) contained in the radio signal

Worst case Spurious Emissions: 39,7 dBµV/m Average.

Tests were performed November 9th till November 13th 2018.

Ambient temperature: 23°C Relative humidity: 54%

4.2. Number of channels and channel spacing § 2.1033

Conducted Measurement

Rated output power: 3,02 mW

There are 79 Channels used, starting at 2402 till 2480 MHz each separated by 1 MHz channel spacing.

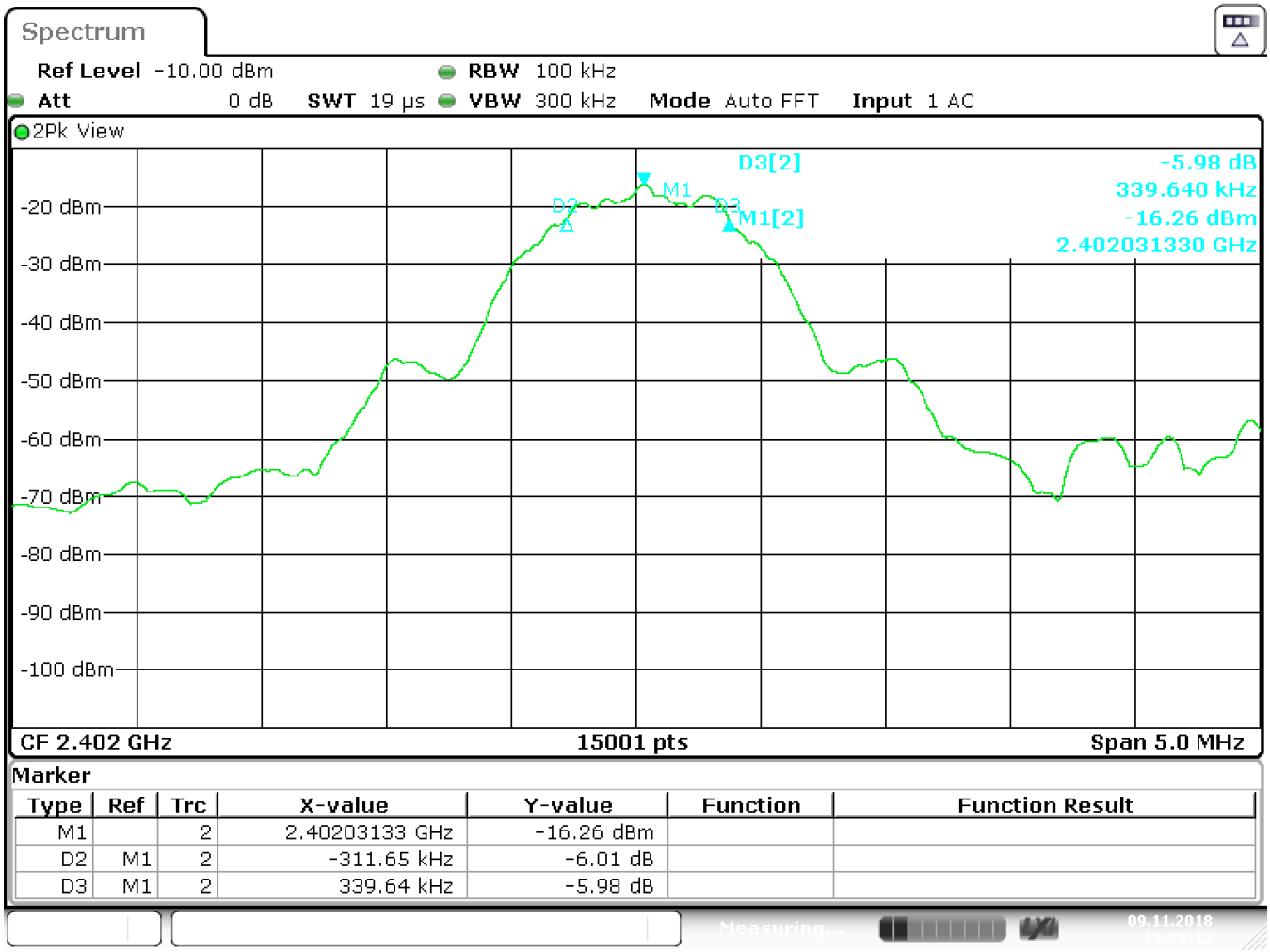
Test Equipment used: N/A

Ambient temperature: 23°C Relative humidity: 54%

4.3. 6dB Bandwidth **§ 15.247(a)(2) 5.2(1)**

Radiated Measurement

Rated output power: 3,02 mW 2402 MHz center frequency



Date: 9.NOV.2018 15:28:12

6dB Bandwidth: 651 kHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(1)**

Under normal test conditons	6 dB Bandwidth at least 500 kHz

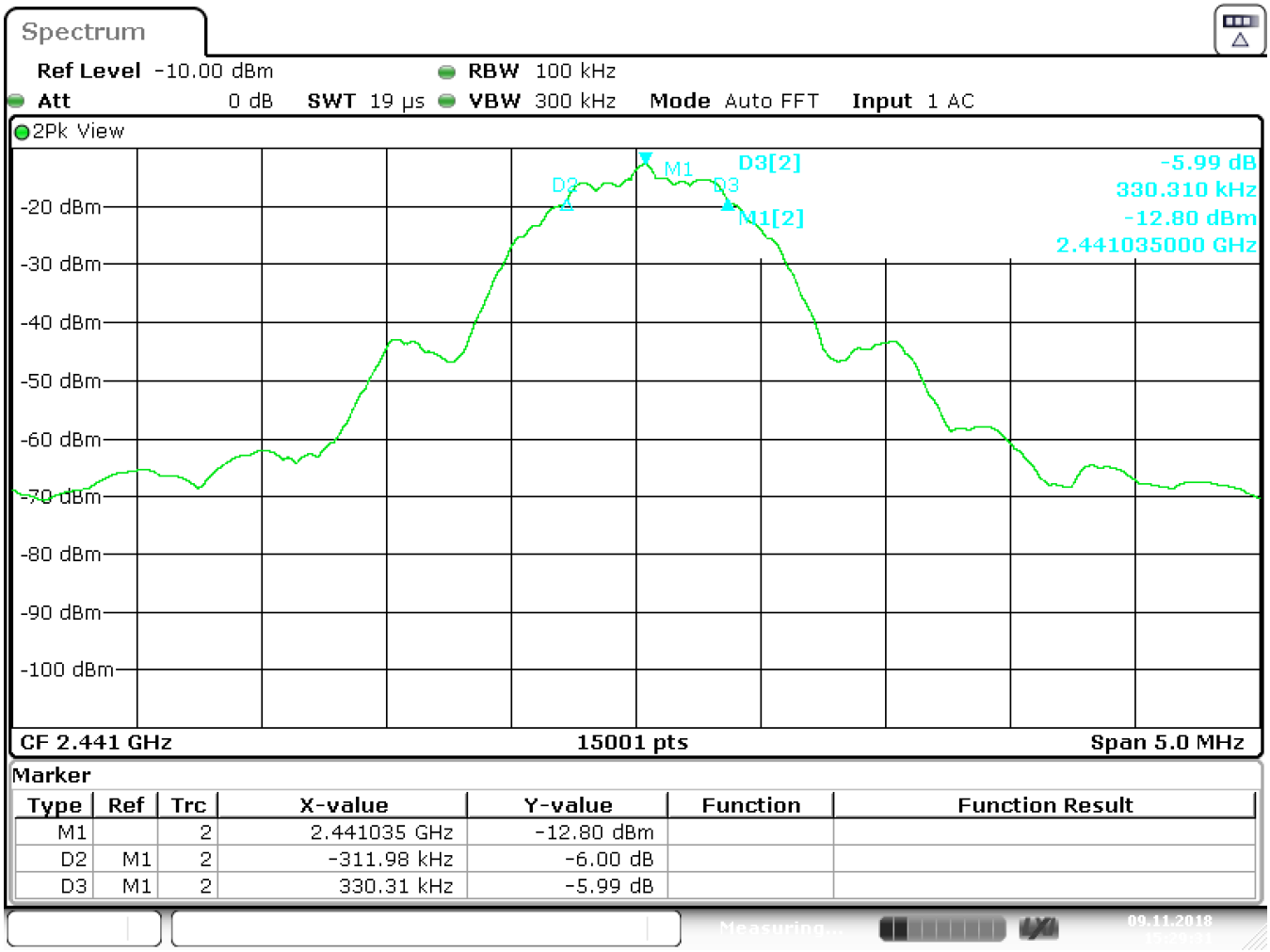
Test Equipment used: EMV-200

Ambient temperature: 23°C Relative humidity: 54%

6dB Bandwidth **§ 15.247(a)(2)**
5.2(1)

Radiated Measurement

Rated output power: 3,02 mW 2441 MHz center frequency



Date: 9.NOV.2018 15:29:32

6dB Bandwidth: 642 kHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(1)**

Under normal test conditons	6 dB Bandwidth at least 500 kHz

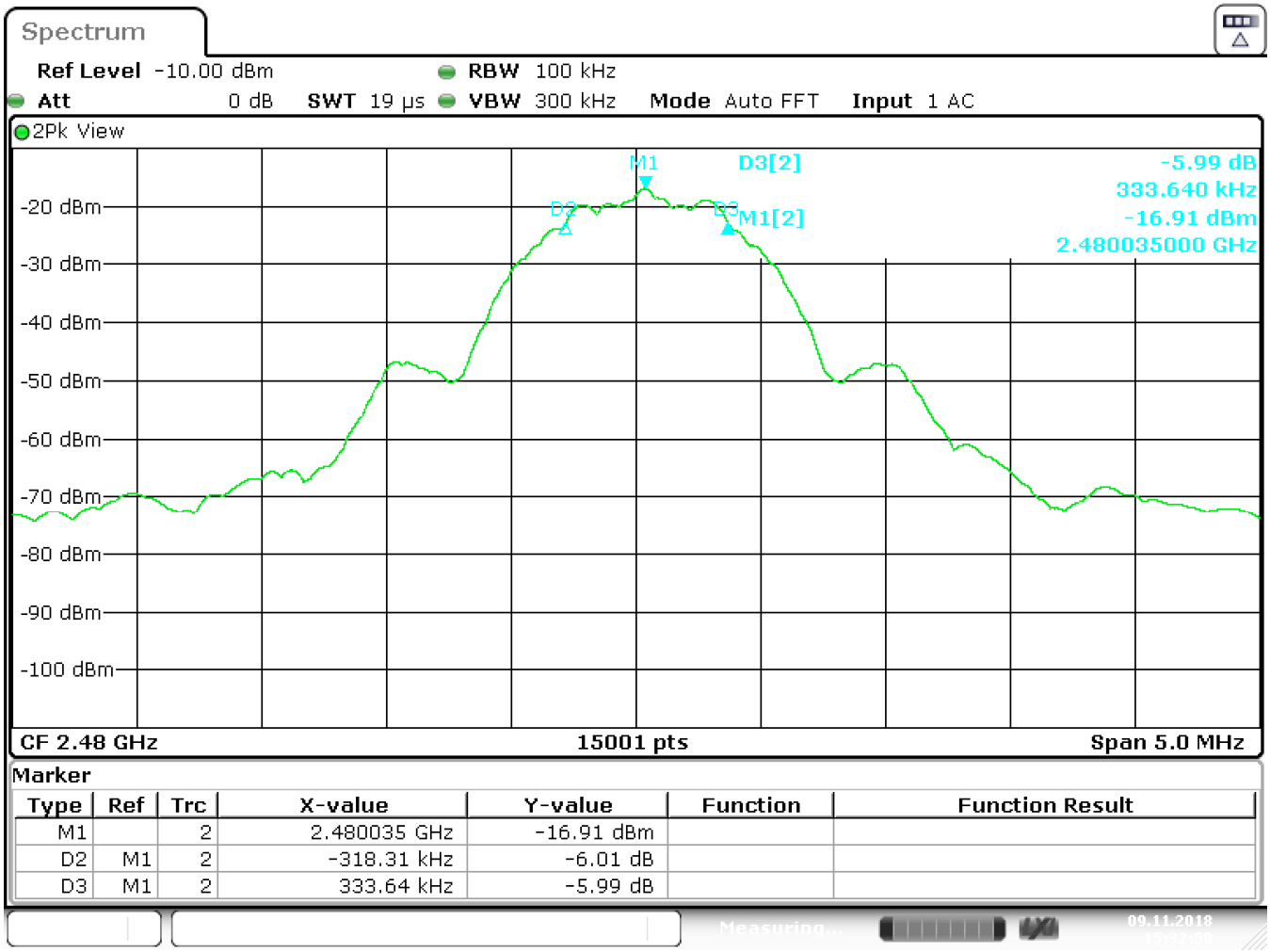
Test Equipment used: EMV-200

Ambient temperature: 23°C Relative humidity: 54%

6dB Bandwidth **§ 15.247(a)(2)**
5.2(1)

Radiated Measurement

Rated output power: 3,02 mW 2480 MHz center frequency



Date: 9.NOV.2018 15:32:59

6dB Bandwidth: 652 kHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(1)**

Under normal test conditons	6 dB Bandwidth at least 500 kHz

Test Equipment used: EMV-200

Ambient temperature: 23°C Relative humidity: 54%

4.4. Maximum Peak RF Power Output (radiated) **§ 15.247(b)(3) 5.4(4)**

e.i.r.p. Measurement

Rated output power: 3,02 mW

Test conditions		Transmitter power (mW)		
		2402 MHz	2440 MHz	2480 MHz
T_{nom} (23)°C	V_{nom} (3) V	3,02	2,88	1,91
Maximum deviation from rated output power under normal test conditions (dB)		0,0	-0,2	-2,0
Measurement uncertainty		± 0,75 dB		

LIMIT **SUBCLAUSE 15.247(b)(3) – 5.4(4)**

Under normal test conditons	1W conducted (4W eirp)

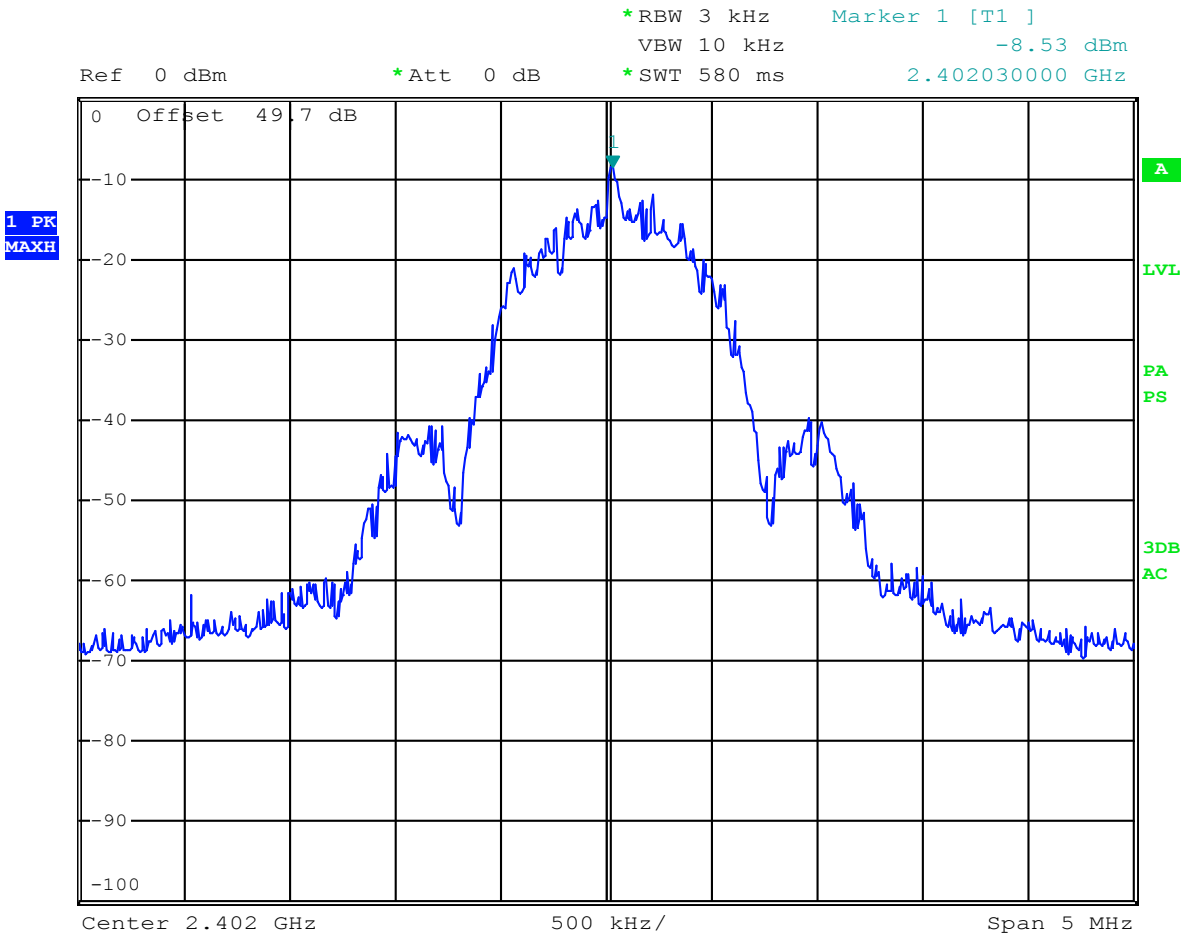
Test Equipment used: NT-100; NT-110; NT-129; NT-207

Ambient temperature: 23°C Relative humidity: 54%

4.5. Power spectral density (radiated) § 15.247(e) 5.2(2)

e.i.r.p. Measurement

Rated output power: 3,02 mW 2402 MHz center frequency



Date: 13.NOV.2018 10:43:03

Power Spectral density: -8,53 dBm @ 2402,03 MHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(2)**

Under normal test conditons	+8dBm in any 3 kHz band

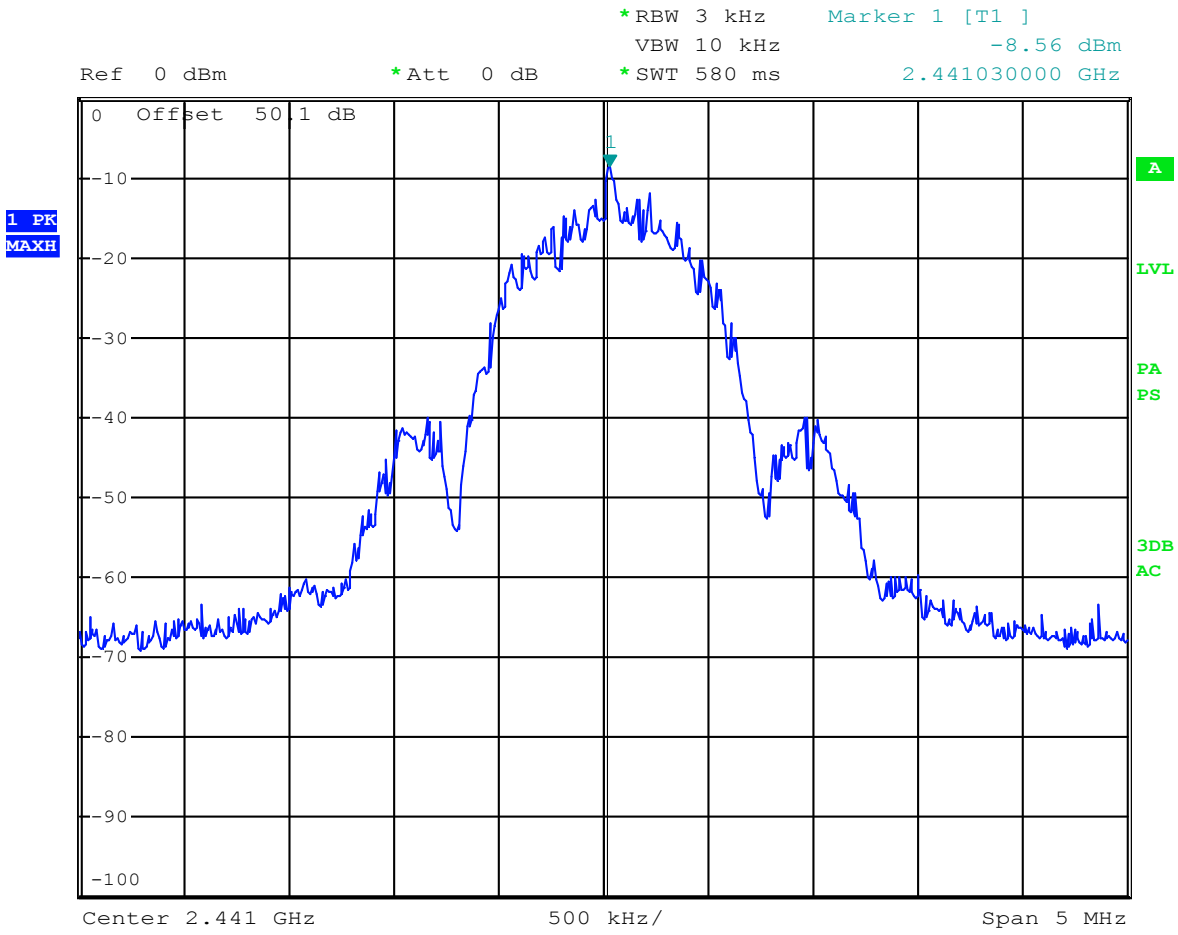
Test Equipment used: NT-203/1

Ambient temperature: 23°C Relative humidity: 54%

Power spectral density (radiated) **§ 15.247(e)**
5.2(2)

e.i.r.p. Measurement

Rated output power: 3,02 mW 2441 MHz center frequency



Date: 13.NOV.2018 10:44:07

Power Spectral density: -8,56 dBm @ 2441,03 MHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(2)**

Under normal test conditons	+8dBm in any 3 kHz band

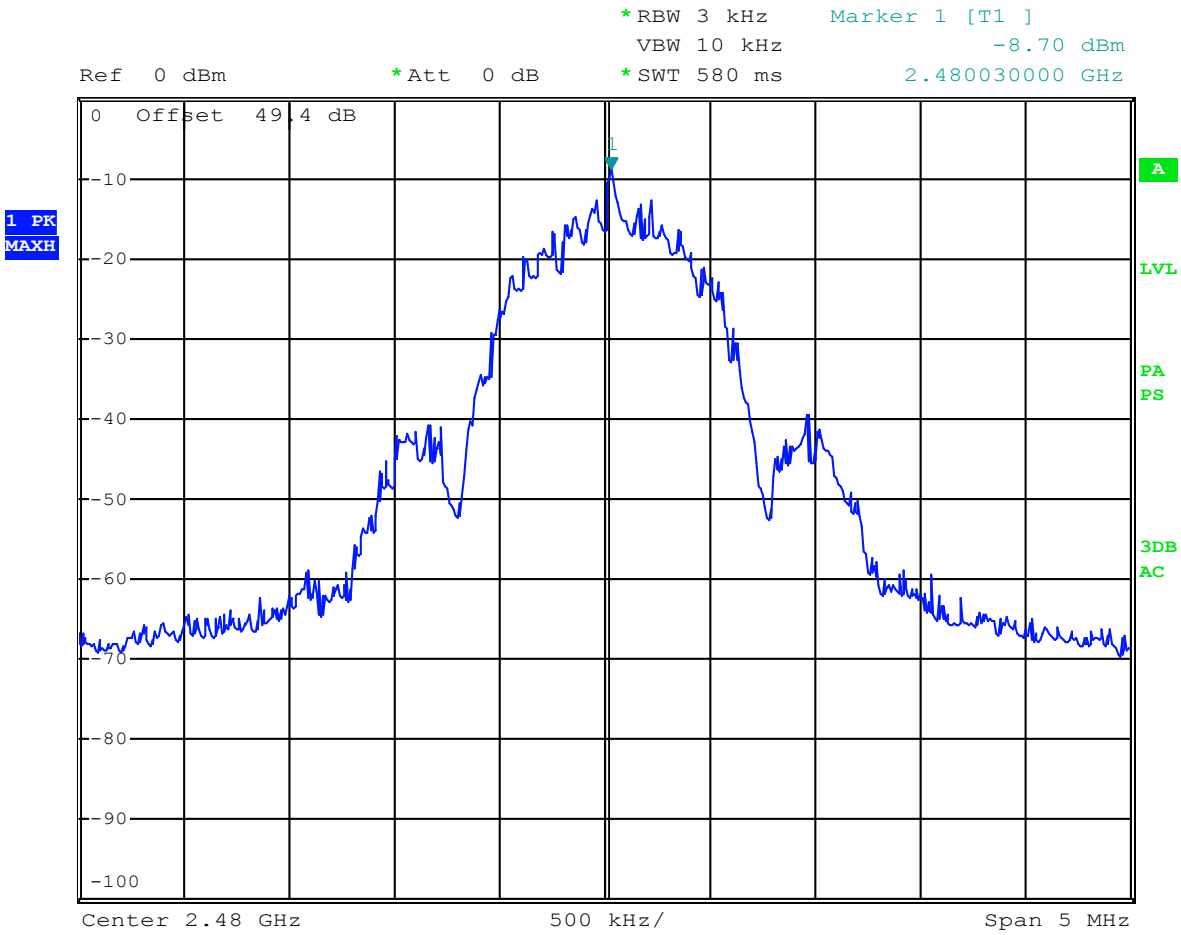
Test Equipment used: NT-203/1

Ambient temperature: 23°C Relative humidity: 54%

Power spectral density (radiated) **§ 15.247(e)**
5.2(2)

e.i.r.p. Measurement

Rated output power: 3,02 mW 2480 MHz center frequency



Date: 13.NOV.2018 10:49:33

Power Spectral density: -8,70 dBm @ 2480,03 MHz

LIMIT **SUBCLAUSE 15.247(e) – 5.2(2)**

Under normal test conditons	+8dBm in any 3 kHz band

Test Equipment used: NT-203/1

Ambient temperature: 23°C Relative humidity: 54%

4.6. Out-of-band Emission **§ 15.247(d)**
Unwanted Emissions **5.5**

Radiated Measurement

See 15.209 measurements in chapter 4.7 of this report.

LIMIT **SUBCLAUSE 15.247(d) – 5.5**

In any 100 kHz bandwidth outside the frequency band in which the radio device is operating.	At least 20dB below the power in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

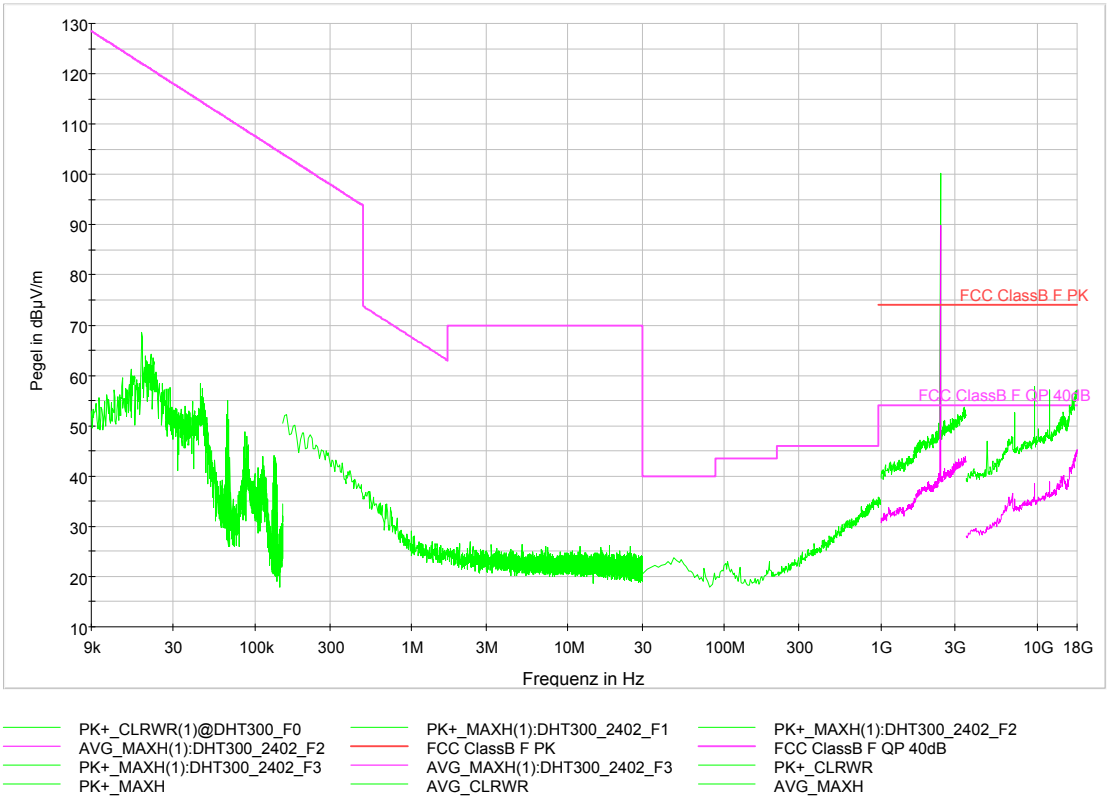
Test Equipment used: N/A

Ambient temperature: 23°C Relative humidity: 54%

4.7. Emissions in restricted bands **§ 15.209(a)**
Emissions falling within restricted frequency bands **RSS-Gen**

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 2402 MHz



Worst case emission: Average 39,3 dBµV/m @ 12010 MHz
Remark:Although the measurement above ends at 18 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

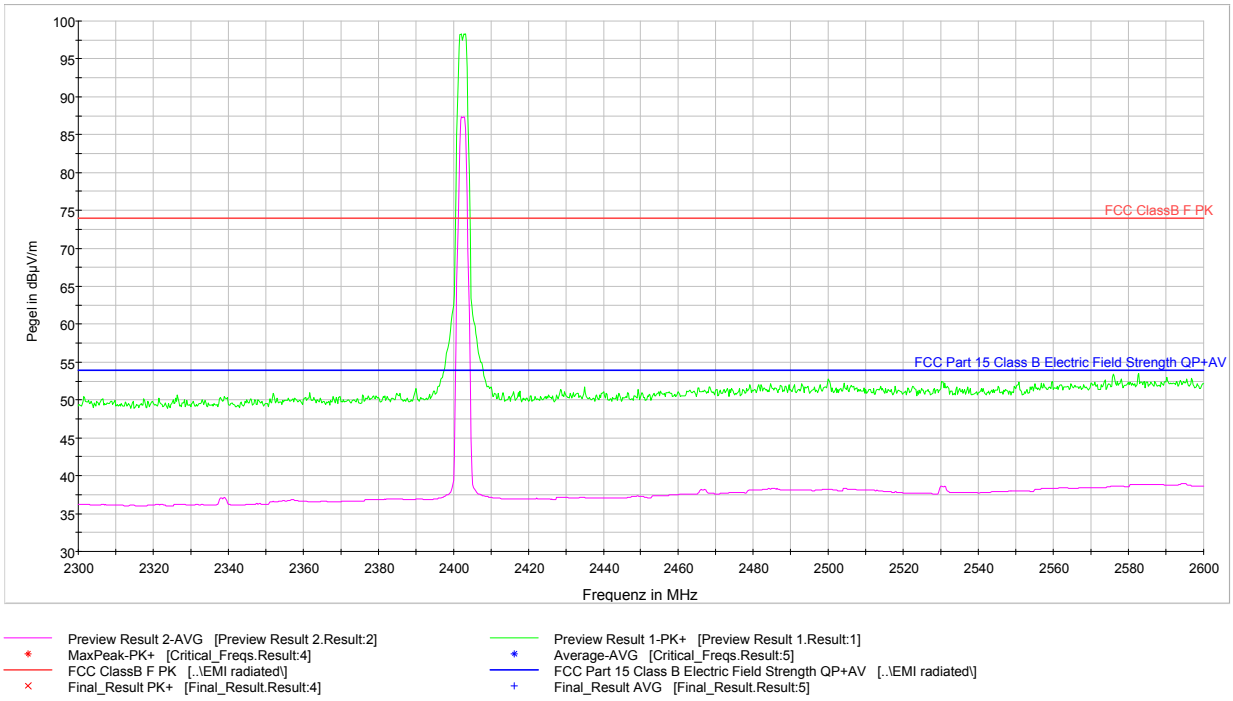
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-114; EMV-200; EMV-205; NT-122; NT-126; NT-416

Ambient temperature: 23°C Relative humidity: 54%

Emissions in restricted bands **§ 15.209(a)**
Emissions falling within restricted frequency bands **RSS-Gen**

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: 2402 MHz



In normal operation the EUT always operates on two RF channels alternately, switching at a rate of 20 milliseconds. As worst case scenario the two lowest channels were used.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edges of the nearest restricted bands: 2390 MHz and 2483,5 MHz.

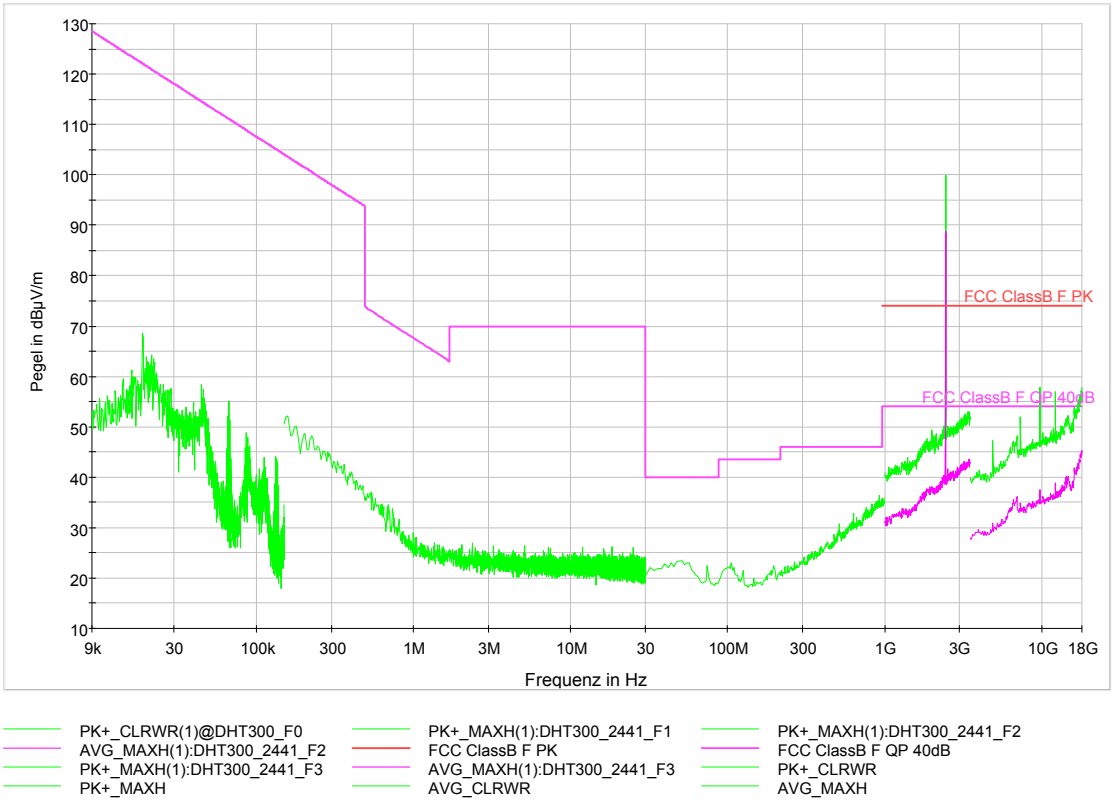
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Ambient temperature: 23°C Relative humidity: 54%

Emissions in restricted bands **§ 15.209(a)**
Emissions falling within restricted frequency bands **RSS-Gen**

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 2441 MHz



Worst case emission: Average 39,4 dBµV/m @ 12205 MHz
Remark:Although the measurement above ends at 18 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

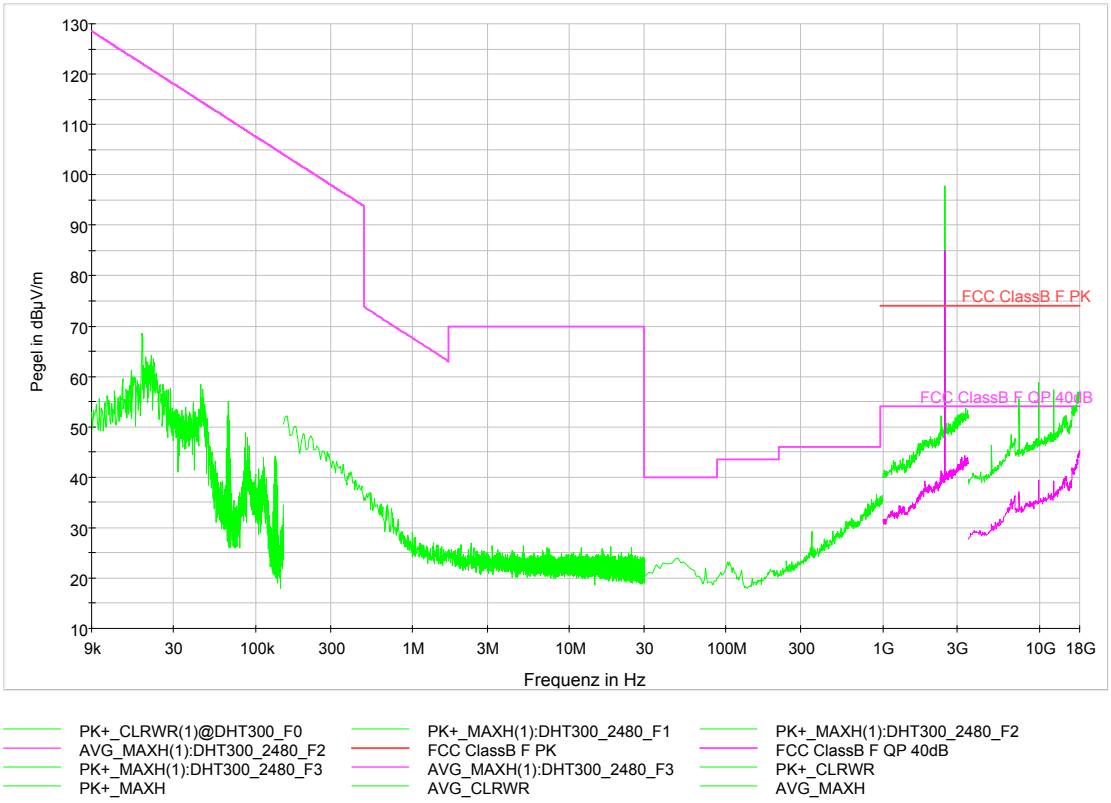
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-114; EMV-200; EMV-205; NT-122; NT-126; NT-416

Ambient temperature: 23°C Relative humidity: 54%

Emissions in restricted bands **§ 15.209(a)**
Emissions falling within restricted frequency bands **RSS-Gen**

Measurement with Peak-Detector (green line) and Average detector (magenta line):

Setup: 2480 MHz



Worst case emission: Average 39,7 dBµV/m @ 12400 MHz
Remark:Although the measurement above ends at 18 GHz, all measurements were performed up to the thenth harmonics of the transmitter frequency.

LIMIT **SUBCLAUSE 15.209(a) – RSS-Gen**

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

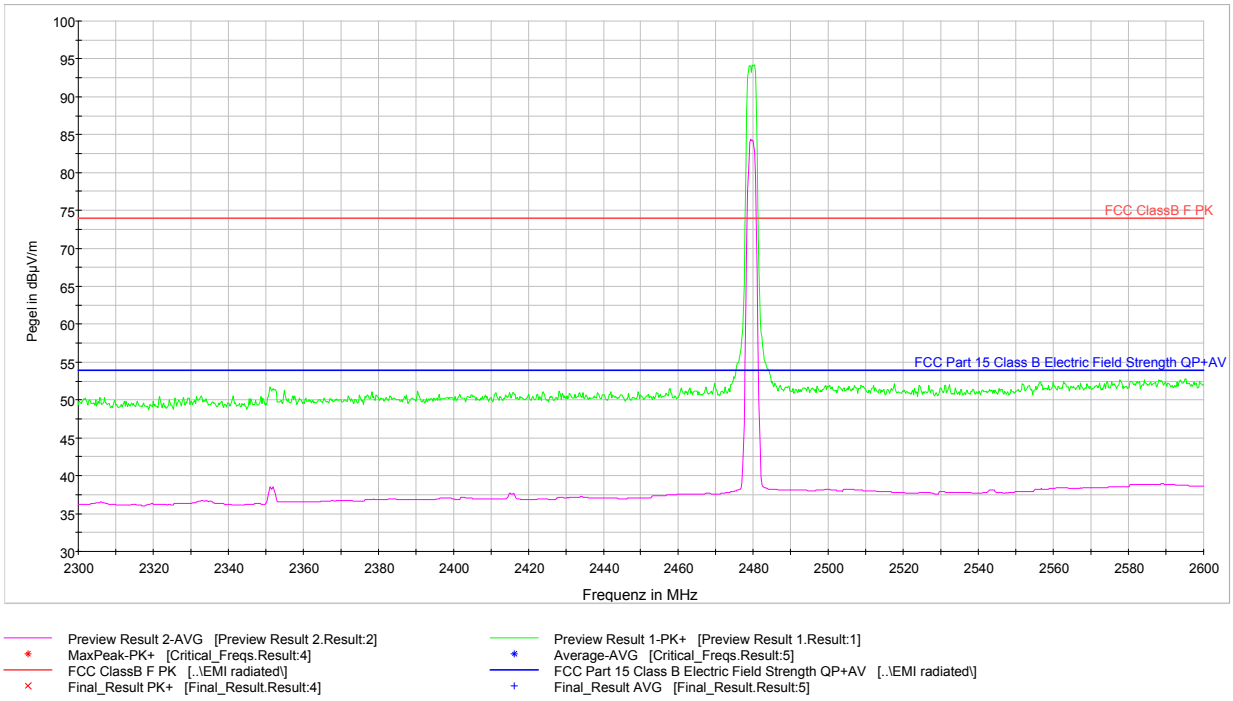
Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-111; EMV-112; EMV-114; EMV-200; EMV-205; NT-122; NT-126; NT-416

Ambient temperature: 23°C Relative humidity: 54%

Emissions in restricted bands § 15.209(a)
Emissions falling within restricted frequency bands RSS-Gen

Measurement with Peak-Detector (green line) and Average detector (magenta line): Band Edge requirement

Setup: 2480 MHz



In normal operation the EUT always operates on two RF channels alternately, switching at a rate of 20 milliseconds. As worst case scenario the two highest channels were used.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Band edges of the nearest restricted bands: 2390 MHz and 2483,5 MHz.

Test Equipment used: EMV-100; EMV-101; EMV-102; EMV-103; EMV-105; EMV-110; EMV-200

Ambient temperature: 23°C Relative humidity: 54%

4.8. Maximum permissible Exposure § 15.247(i)

This kind of radio equipment is categorically excluded from routine environmental evaluation.

Appendix 1
Test equipment used

☐	Anechoic Chamber with 3m measurement distance	NT-100
☐	Stripline according to ISO 11452-5	NT-108
☐	MA4000 - Antenna mast 1 - 4 m height	NT-110/1
☐	DS - Turntable 0 - 400 ° Azimuth	NT-111/1
☐	CO3000 Controller Mast+Turntable	NT-112/1
☐	HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121
☐	FMZB1513 - Loop Antenna 9 kHz - 30 MHz	NT-122/1
☐	HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123
☐	3121C - Dipole Antenna 28 - 1000 MHz	NT-124
☐	3115 - Horn Antenna 1 - 18 GHz (immunity)	NT-125
☐	3116 - Horn Antenna 18 - 40 GHz	NT-126
☐	SAS-200/543 - Bicon. Antenna 20 MHz - 300 MHz	NT-127
☐	AT-1080 - Log. Per. Antenna 80 - 1000 MHz	NT-128
☐	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-129
☐	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-130
☐	3146 - Log. Per. Antenna 200 – 1000 MHz	NT-131
☐	VULB 9163 Trilog Antenna 30 – 3000 MHz	NT-131/1
☐	Loop Antenna H-Field	NT-132
☐	Horn Antenna 500 MHz - 2900 MHz	NT-133
☐	Horn Antenna 500 MHz - 6000 MHz	NT-133/1
☐	Log. per. Antenna 800 MHz - 2500 MHz	NT-134
☐	Log. per. Antenna 800 MHz - 2500 MHz	NT-135
☐	BiConiLog Antenna 26 MHz – 2000 MHz	NT-137
☐	Conical Dipol Antenna PCD8250	NT-138
☐	HF 906 - Horn Antenna 1 - 18 GHz (emission)	NT-139
☐	HZ-1 Antenna tripod	NT-150
☐	BN 1500 Antenna tripod	NT-151
☐	Ant. tripod for EN61000-4-3 Model TP1000A	NT-156
☐	Power quality analyzer Fluke 1760 (complete set)	NT-160 - NT-173
☐	Spectrumanalyzer – FSP7 9 kHz – 7 GHz	NT-200
☐	ESCI - Test receiver 9 kHz - 7 GHz	NT-203/1
☐	ESI26 – Test receiver 20 Hz – 26,5 GHz	NT-207
☐	Digital Radio Tester CTS55	NT-208
☐	Noise-gen., ITU-R 559-2 20 Hz – 20 kHz	NT-209
☐	CMTA - Radiocommunication analyzer ; 0,1 - 1000 MHz	NT-210
☐	3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211
☐	Digital Radio Tester Aeroflex 3920	NT-212/1
☐	Mixer M28HW 26,5 GHz - 40 GHz	NT-214
☐	RubiSource T&M Timing reference	NT-216
☐	Radiocommunicationanalyzer SWR 1180 MD	NT-217
☐	Mixer M19HWD 40 GHz – 60 GHz	NT-218
☐	Mixer M12HWD 60 GHz – 90 GHz	NT-219
☐	DSO9104 Digital scope	NT-220/1
☐	TPS 2014 Digital scope	NT-222
☐	Artificial Ear according to IEC 60318	NT-224
☐	1 kHz Sound calibrator	NT-225
☐	B10 - Harmonics and flicker analyzer	NT-232
☐	SRM-3006 Spectrumanalyzer	NT-233/1a
☐	E-field probe SRM 75 MHz – 3 GHz	NT-234
☐	Field Meter NBM-500 incl. E- and H-Field probes	NT-240a-e
☐	Hall-Teslameter ETM-1	NT-241
☐	EFA-3 H-field- / E-field probe	NT-243
☐	EHP-50F H-field- / E-field probe	NT-243/1
☐	Field Meter EMR-200 100 kHz – 3 GHz	NT-244
☐	E-field probe 100 kHz – 3 GHz	NT-245
☐	H-field probe 300 kHz – 30 MHz	NT-246

Division:
Industry & Energy

Department: FG

Test report number:
INE-AT/FG-18/177

Date: 16.11.2018

Checked by: _____

Appendix 1 (continued)
Test equipment used

☐	E-field probe 3 MHz – 18 GHz	NT-247
☐	H-field probe 27 MHz – 1 GHz	NT-248
☐	ELT-400 1 Hz – 400 kHz	NT-249
☐	MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250
☐	FCC-203I EM Injection clamp	NT-251
☐	FCC-203I-DCN Ferrite decoupling network	NT-252
☐	PR50 Current Probe	NT-253
☐	i310s Current Probe	NT-254/1
☐	Fluke 87 V True RMS Multimeter	NT-260
☐	Model 2000 Digital Multimeter	NT-261
☐	Fluke 87 V Digital Multimeter	NT-262/1
☐	ESH2-Z5-U1 Artificial mains network 4x25A	NT-300
☐	ESH3-Z5-U1 Artificial mains network 2x10A	NT-301
☐	ESH3-Z6-U1 Artificial mains network 1x100A	NT-302
☐	ESH3-Z6-U1 Artificial mains network 1x100A	NT-302a
☐	PHE 4500/B Power amplifier	NT-304
☐	EZ10 T-Artificial Network	NT-305
☐	SMG - Signal generator 0,1 - 1000 MHz	NT-310
☐	SMA100A - Signal generator 9 kHz - 6 GHz	NT-310/1
☐	RefRad Reference generator	NT-312
☐	SMP 02 Signal generator 10 MHz - 20 GHz	NT-313
☐	40 MHz Arbitrary Generator TGA1241	NT-315
☐	Artificial mains network NSLK 8127-PLC	NT-316
☐	ESD 30 System up to 25 kV	NT-321
☐	PSURGE 4.1 Surge generator	NT-324
☐	IMU4000 Immunity test system	NT-325/1
☐	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
☐	T82-50 RF-Amplifier 2 GHz – 8 GHz	NT-331
☐	500W1000M7 - RF-Amplifier 80 - 1000 MHz / 500 W	NT-332
☐	AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333
☐	APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334
☐	Preamplifier 1 GHz - 4 GHz	NT-335
☐	Preamplifier for GPS MKU 152 A	NT-336
☐	Preamplifier 100 MHz – 23 GHz	NT-337
☐	DC Block 10 MHz – 18 GHz Model 8048	NT-338
☐	2-97201 Electronic load	NT-341
☐	TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344
☐	TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345
☐	VDS 200 Mobil-impuls-generator	NT-350
☐	LD 200 Mobil-impuls-generator	NT-351
☐	MPG 200 Mobil-Impuls-Generators	NT-352
☐	EFT 200 Mobil-impuls-generator	NT-353
☐	AN 200 S1 Artificial Network	NT-354
☐	FP-EFT 32M 3 ph. Coupling filter (Burst)	NT-400/1
☐	PHE 4500 - Mains impedance network	NT-401
☐	IP 6.2 Coupling filter for data lines (Surge)	NT-403
☐	TK 9421 High Power Volt. Probe 150 kHz - 30 MHz	NT-409
☐	ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
☐	IP 4 - Capacitive clamp (Burst)	NT-411
☐	Highpass-Filter 100 MHz – 3 GHz	NT-412
☐	Highpass-Filter 600 MHz – 4 GHz	NT-413
☐	Highpass-Filter 1250 MHz – 4 GHz	NT-414
☐	Highpass-Filter 1800 MHz – 16 GHz	NT-415

Appendix 1 (continued)
Test equipment used

☐	Highpass-Filter 3500 MHz – 18 GHz	NT-416
☐	RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417
☐	RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418
☐	RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419
☐	RF-Attenuator 20 dB DC - 1000 MHz / 25 W	NT-421
☐	RF-Attenuator 30 dB DC - 1000 MHz / 1 W	NT-423
☐	RF-Attenuator 30 dB	NT-424
☐	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-425
☐	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-426
☐	RF-Attenuator 6 dB	NT-428
☐	RF-Attenuator 0 dB - 81 dB	NT-429
☐	WRU 27 - Band blocking 27 MHz	NT-430
☐	WHJ450C9 AA - High pass 450 MHz	NT-431
☐	WHJ250C9 AA - High pass 250 MHz	NT-432
☐	RF-Load 150 W	NT-433
☐	Impedance transducer 1:4 ; 1:9 ; 1:16	NT-435
☐	RF-Attenuator DC – 18 GHz 6 dB	NT-436
☐	RF-Attenuator DC – 18 GHz 6 dB	NT-437
☐	RF-Attenuator DC – 18 GHz 10 dB	NT-438
☐	RF-Attenuator DC – 18 GHz 20 dB	NT-439
☐	I+P 7780 Directional coupler 100 - 2000 MHz	NT-440
☐	ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441
☐	Power Divider 6 dB/1 W/50 Ohm	NT-443
☐	Directional coupler 0,1 MHz – 70 MHz	NT-444
☐	Directional coupler 0,1 MHz – 70 MHz	NT-445
☐	Tube imitations according to EN 55015	NT-450
☐	FCC-801-M3-16A Coupling decoupling network	NT-458
☐	FCC-801-M2-50A Coupling decoupling network	NT-459
☐	FCC-801-M5-25 Coupling decoupling network	NT-460
☐	FCC-801-AF10 Coupling decoupling network	NT-461
☐	FCC-801-S25 Coupling decoupling network	NT-462
☐	FCC-801-T4 Coupling decoupling network	NT-463
☐	FCC-801-C1 Coupling decoupling network	NT-464
☐	SW 9605 - Current probe 150 kHz – 30 MHz	NT-465/1
☐	95242-1 – Current probe 1 MHz – 400 MHz	NT-468
☐	94106-1L-1 – Current probe 100 kHz – 450 MHz	NT-471
☐	GA 1240 Power amplifier according to EN 61000-4-16	NT-480
☐	Coupling networks according to EN 61000-4-16	NT-481 - NT-483
☐	Van der Hoofden Test Head	NT-484
☐	EMC Video/Audiosystem	NT-511/1
☐	ES-K1 Version 1.71 SP2 Test software	NT-520
☐	EMC32 Version 10.40.00 Test software	NT-520/1
☐	SRM-TS Version 1.3 software for SRM-3000	NT-522
☐	SRM-TS Version 1.3.1 software for SRM-3006	NT-522/1
☐	Spitzenberger und Spies Test software V4.1	NT-525
☐	Noise power test apparatus according to EN 55014	NT-530
☐	Vertical coupling plane (ESD)	NT-531
☐	Test cable #4 for EN 61000-4-6	NT-553
☐	Test cable #3 for conducted emission	NT-554
☐	Test cable #5+#6 ESD-cable (2x470k)	NT-555 + NT-556
☐	Test cable #8 Sucoflex 104EA	NT-559
☐	Test cable #9 (for outdoor measurements)	NT-580
☐	Test cable #10 (for outdoor measurements)	NT-581
☐	Test cable #13 Sucoflex 104PE	NT-584
☐	Test cable #21 for SRM-3000	NT-592
☐	Shield chamber	NT-600
☐	Climatic chamber	M-1200

Appendix 1 (continued)
Test equipment used

☐	Anechoic Chamber 3 m / 5 m measuring distance	EMV-100
☐	Turntabel 6 m diameter	EMV-101
☐	Antenna mast 1 – 4 m	EMV-102
☐	Mast and Turntable controller FC-06	EMV-103
☐	EMC Video/Audiosystem	EMV-104
☐	EMC Software EMC32 Version 10.40.00	EMV-105
☐	Hornantenna 1 – 18 GHz HF 907	EMV-110
☐	Antennapre.amp. 1 – 18 GHz ERZ-LNA0200-1800-30-2	EMV-111
☐	Trilog Antenna 30-3000 MHz VULB9163	EMV-112
☐	Monopol 9 kHz – 30 MHz VAMP 9243	EMV-113
☐	Antennapre.amp 18 – 40 GHz BBV 9721	EMV-114
☐	Hornantenna 200 – 2000 MHz AH-220	EMV-115
☐	DC Artificial Network PVDC 8300	EMV-150
☐	AC Artificial Network NNLK 8121 RC	EMV-151
☐	EMI Receiver ESR26	EMV-200
☐	Signalgenerator 9 kHz – 40 GHz N5173B	EMV-201
☐	GPS Frequency normal B-88	EMV-202
☐	DC Power supply N5745A	EMV-203
☐	Spektrum Analyzator FSV40	EMV-205
☐	Thd Multimeter Model 2015	EMV-206
☐	Poweramplifier PAS15000	EMV-207/abc
☐	Inrush Current Source	EMV-208/abc
☐	Arb.-generator Sycore	EMV-209
☐	Harmonics/Flicker analyzer ARS 16/3	EMV-210
☐	HF- Ampflifier 9 kHz-250 MHz BBA150	EMV-300
☐	HF- Amplifier 80 -1000 MHz BBA150	EMV-301
☐	HF- Amplifier 0,8 - 6 GHz BBA150	EMV-302
☐	High Power Ant. 20-200 MHz VHBD 9134	EMV-303
☐	Log.per Antenna 80-2700 MHz STLP 9128 E special	EMV-304
☐	Log.per Antenna 0,7 – 9 GHz STLP9149	EMV-305
☐	HF- Ampflifier 9 kHz-250 MHz BBA150 (low noise)	EMV-306
☐	Load Dump Generator LD 200N	EMV-350
☐	Ultra Compact Symulator UCS 200N100	EMV-351
☐	Automotive Power fail module PFM 200N100.1	EMV-352
☐	Voltage Drop Symulator VDS 200Q100	EMV-353
☐	Arb. Generator AutoWave	EMV-354
☐	Ultra Compact Symulator UCS 500N7	EMV-355
☐	Coupling decoupling network CNI 503B7 / 32 A	EMV-356
☐	Coupling decoupling network CNI 503B7 / 63 A	EMV-357
☐	Telecom Surge Generator TSurge 7	EMV-358
☐	Coupling decoupling network CNI 508N2	EMV-359
☐	Coupling decoupling network CNV 504N2.2	EMV-360
☐	Immunity generator NSG4060/NSG4060-1	EMV-361
☐	Coupling network CDND M316-2	EMV-362
☐	Coupling network CT419-5	EMV-363
☐	ESD Generator NSG 437	EMV-364
☐	Pulse Limiter VTSD 9561-F BNC	EMV-405
☐	Transient emission BSM200N40+BS200N100	EMV-450+451
☐	Cap. Coupling Clamp HFK	EMV-455
☐	Mag. Field System MS100N+MC26100+MC2630	EMV-456-458
☐	Coupling network CDN M2-100A	EMV-459
☐	Coupling network CDN M3-32A	EMV-460
☐	Coupling network CDN M5-100A	EMV-461
☐	Current Clamp CIP 9136A	EMV-462
☐	DC Artificial Network HV-AN 150	EMV-464+465
☐	Coupling Clamp EM 101	EMV-466
☐	Decoupling Clamp FTC 101	EMV-467
☐	Power attenuator 10 dB / 250 Watt	EMV-469/2

Appendix 2
Photodocumentation

Description: External view #1

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-18/177

Date: 16.11.2018

checked by: _____

Appendix 2
Photodocumentation

Description: External view #2

Appendix 2
Photodocumentation

Description: Battery compartment opened

Appendix 2
Photodocumentation

Description: Internal view #1

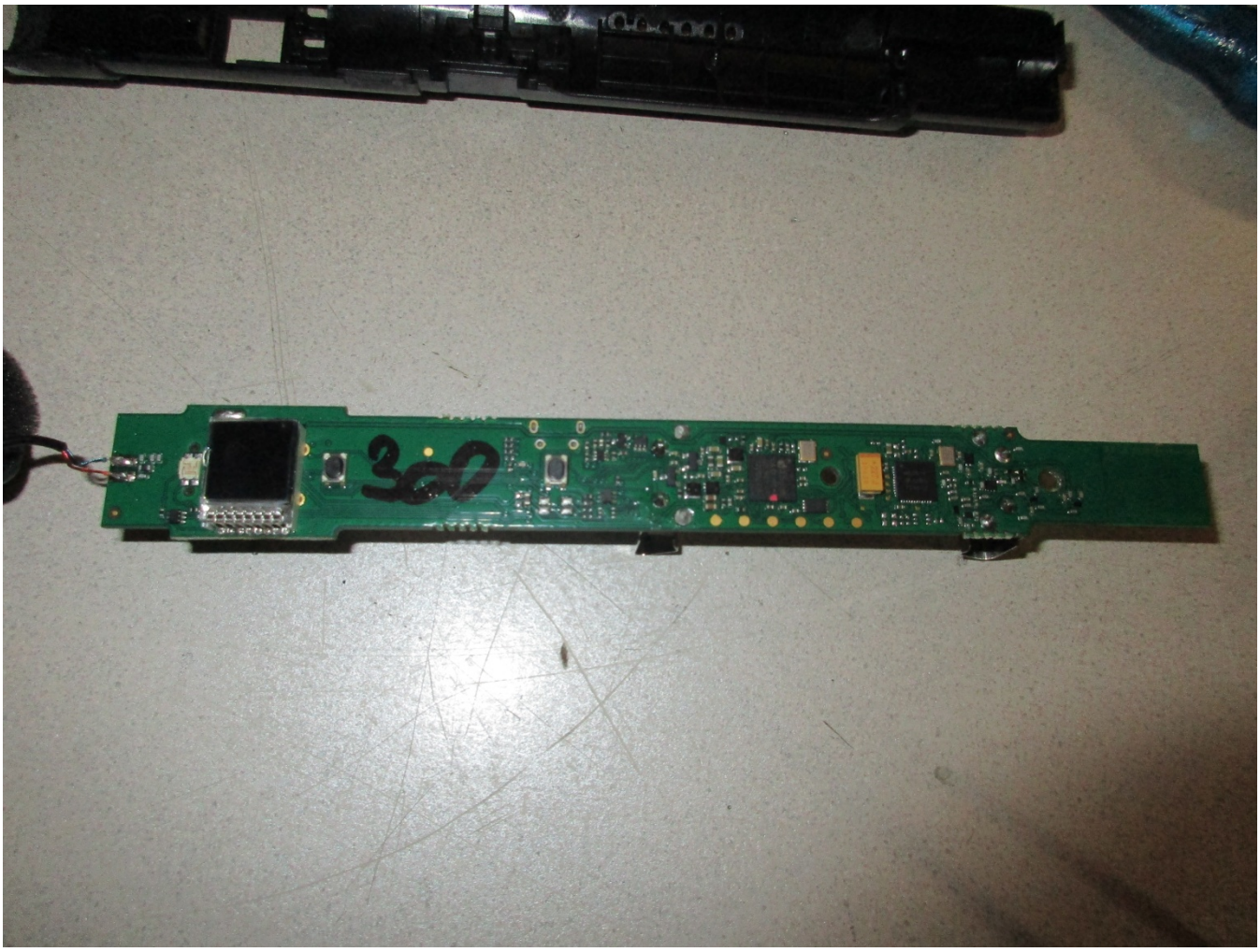
Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-18/177

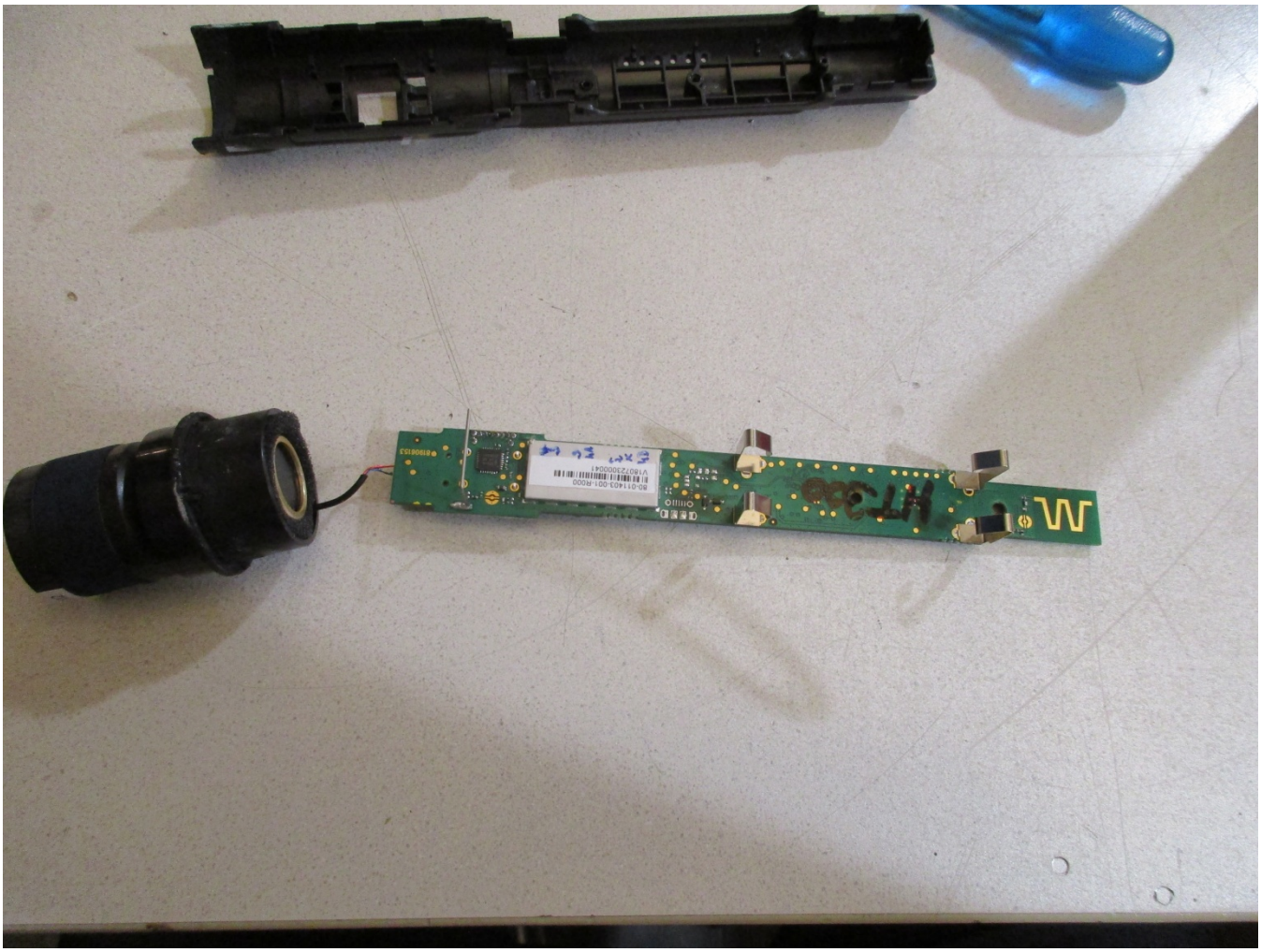
Date: 16.11.2018

checked by: _____



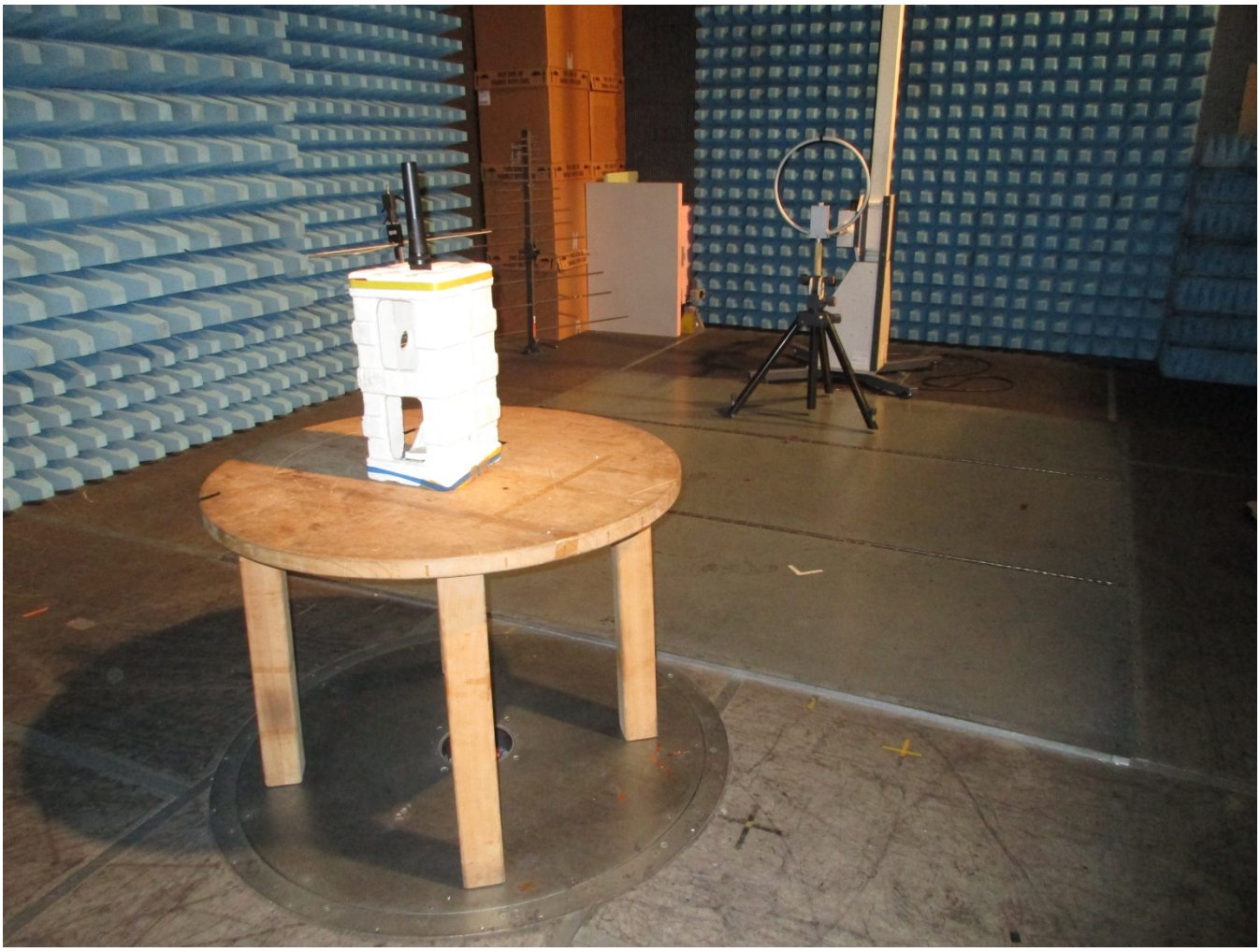
Appendix 2
Photodocumentation

Description: Internal view #1



Appendix 2
Photodocumentation

Description: Test setup up to 30 MHz



Appendix 2
Photodocumentation

Description: Test setup 30 MHz - 1 GHz

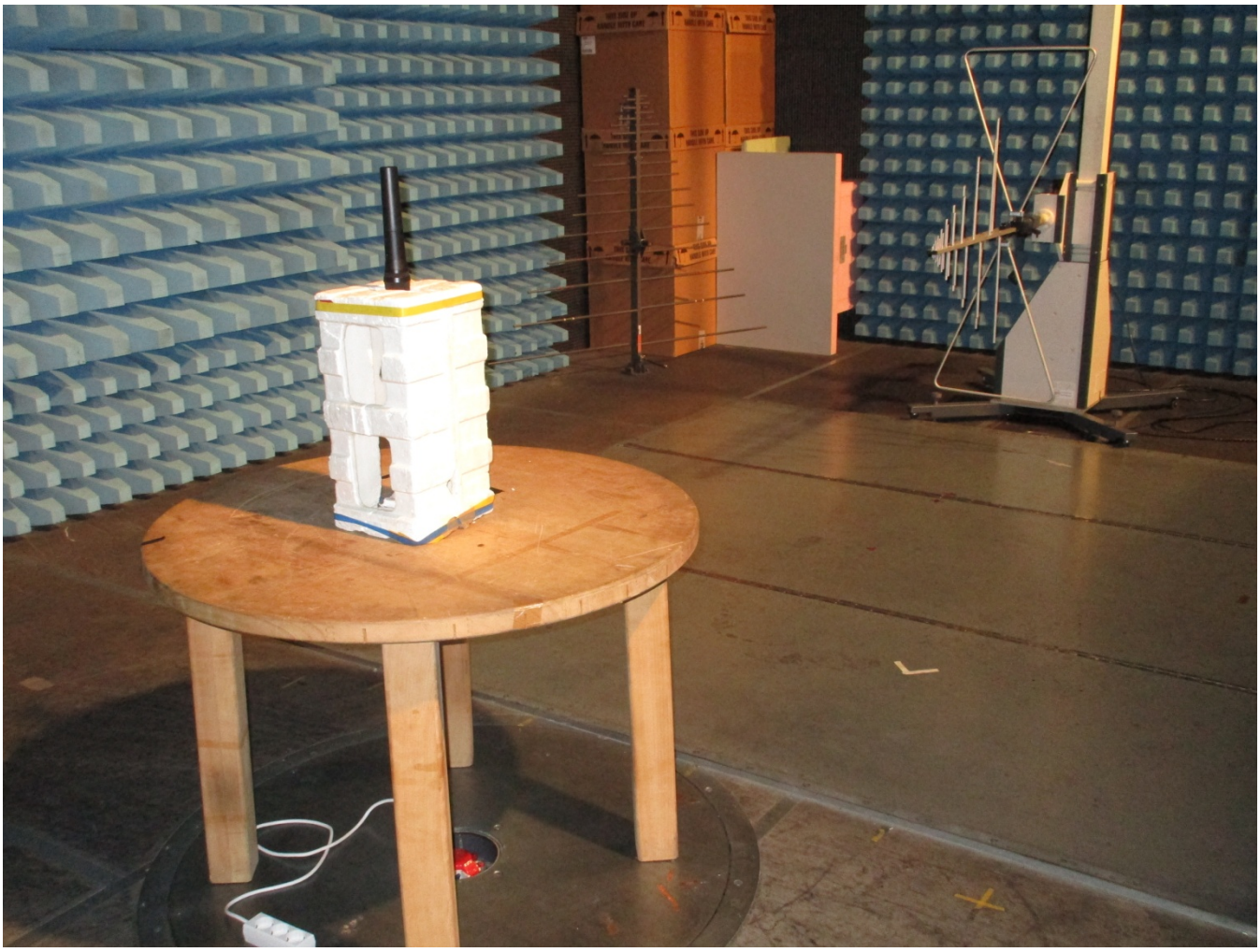
Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-18/177

Date: 16.11.2018

checked by: _____



Appendix 2
Photodocumentation

Description: Test setup above 1 GHz

Division:
Industry & Energy

Department: FG

Test report reference:
INE-AT/FG-18/177

Date: 16.11.2018

checked by: _____