

TEST REPORT

of the accredited test laboratory

TÜV Nr.:INE-AT/FG-21/174

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Business Area
Industry & Energy Austria

Technik

TÜV®

Applicant: SES-imagotag GmbH
Kalsdorfer Strasse 12
A – 8072 Fernitz-Mellach

Tested Product: HMS RC1

Manufacturer: SES-imagotag GmbH
Kalsdorfer Strasse 12
A – 8072 Fernitz-Mellach

Output power 4,46 mW eirp **power supply:** 3 VDC via Battery

Frequency range: 2402 - 2480 MHz **Channel separation:** 2 MHz

Accredited Standards: FCC: 47 CFR Part 15 (eCFR 28.06.2021)
RSS-247 Issue 2, February 2017
ANSI C63.10-2013



Testing Laboratory,
Inspection Body,
Certification Body,
Calibration Laboratory,
Verifizierungsstelle

Notified Body 0408

Non-executive
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Marihart

Management:
DI Dr. Stefan Haas
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TÜV AUSTRIA SERVICES GMBH

Test laboratory for EMC

Wolfram Topka, BSc.

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Laboratory
TÜV AUSTRIA SERVICES
GMBH



09.09.2021

Ing. Andreas Malek

approved by / Testing
Laboratory
TÜV AUSTRIA SERVICES
GMBH

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

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1. Applicant

Company: SES-imagotag GmbH

Department: Product & Project Manager

Address: A – 8072 Fernitz-Mellach; Kalsdorfer Strasse 12

Contact person: Miss. Tamara Risek Gmajnic

EUT received on: 30.08.2021

Tests were performed on: 30.08.2021 & 06.09.2021

2. Description of EUT

EUT: HMS RC1

Model: HRC1-BT01-A

Serial Number: 07RC1S02201-L330049283

Manufacturer: SES-imagotag GmbH

Description: SES-imagotag GmbH provided the following configuration for the measurements:

Prototype with special firmware for continuous transmission

Operating mode: The measurements were carried out at the following running states:
test-firmware running, transmitting continuously

Technical data EUT: Rated voltage: 3VDC
Rated frequency: DC
Mains voltage during the tests: 3VDC

Climatic conditions in the emc laboratory: Relative humidity: 25%
Temperature: 25°C

3. Standards / Final result

Name	Title	Deviation	Result
FCC: 47 CFR Part 15 (eCFR 28.06.2021)	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
ANSI C63.10-2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices	none	OK
<p>Result: Opinions and interpretation of testing laboratory OK: EUT passed NOK: EUT failed</p>			

4. TEST RESULTS

4.1. TEST OBJECT DATA

General EUT Description

2.1033 (c) Technical description

2.1033 (4) Type of emission: 1M05F1D – Channel spacing 2 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 4,46 mW and there is no power regulation.

2.1033 (7) Maximum output power rating: 4,46 mW.

2.1033 (8) DC Voltage and Current: 3V DC

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: 49,141 dB μ V/m Average at 4,879GHz.

Tests were performed August 30th till September 6th 2021.

4.2. Number of channels and channel spacing

§ 2.1033

Conducted Measurement

Rated output power: 4,46 mW

There are 40 Channels used starting at 2402 till 2480 MHz each separated by 2 MHz channel spacing.

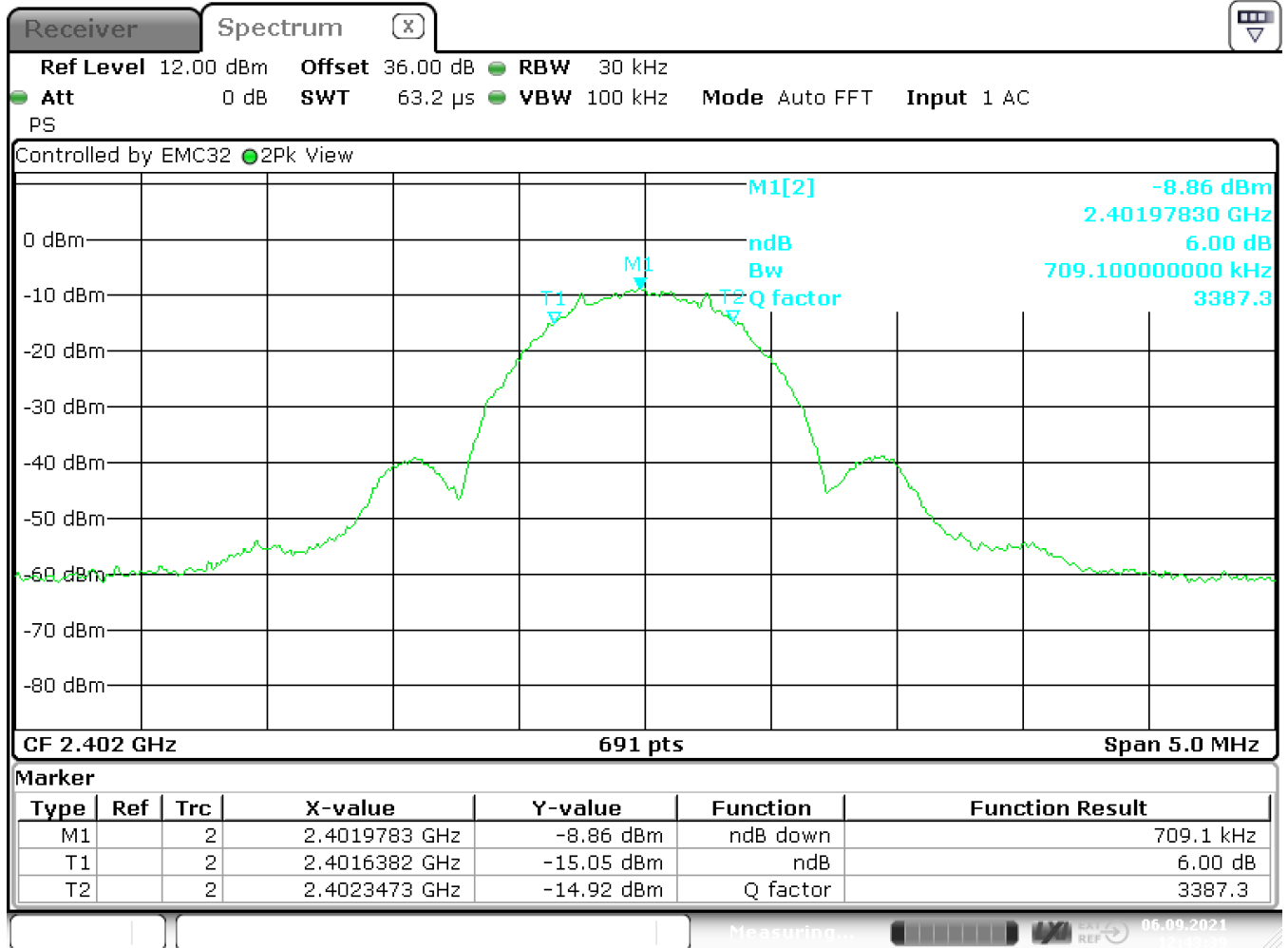
Test Equipment used: N/A

4.3. 6 dB Bandwidth

**§ 15.247(a)(2)
5.2.a)**

Radiated Measurement

Rated output power: 4,46 mW Channel 0 (2402 MHz center frequency)



Date: 6.SEP.2021 12:43:38

6dB Bandwidth: 709,1 kHz

LIMIT SUBCLAUSE 15.247(e) – 5.2.a)

Under normal test conditons	6 dB Bandwidth at least 500 kHz
-----------------------------	---------------------------------

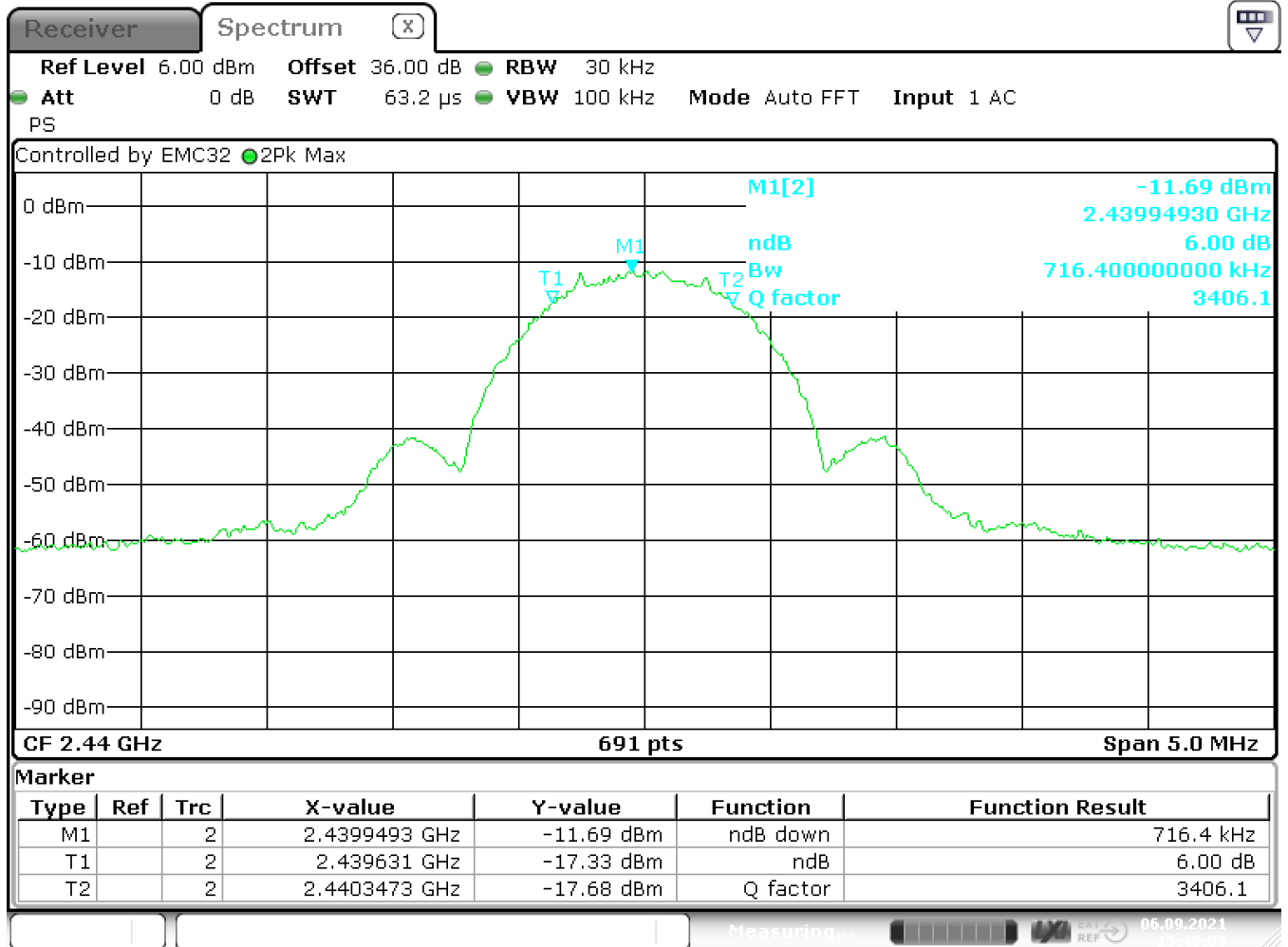
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

6 dB Bandwidth

**§ 15.247(a)(2)
5.2.a)**

Radiated Measurement

Rated output power: 4,46 mW Channel 19 (2440 MHz center frequency)



Date: 6.SEP.2021 15:48:08

6dB Bandwidth: 716,4 kHz

LIMIT SUBCLAUSE 15.247(e) – 5.2.a)

Under normal test conditons	6 dB Bandwidth at least 500 kHz
-----------------------------	---------------------------------

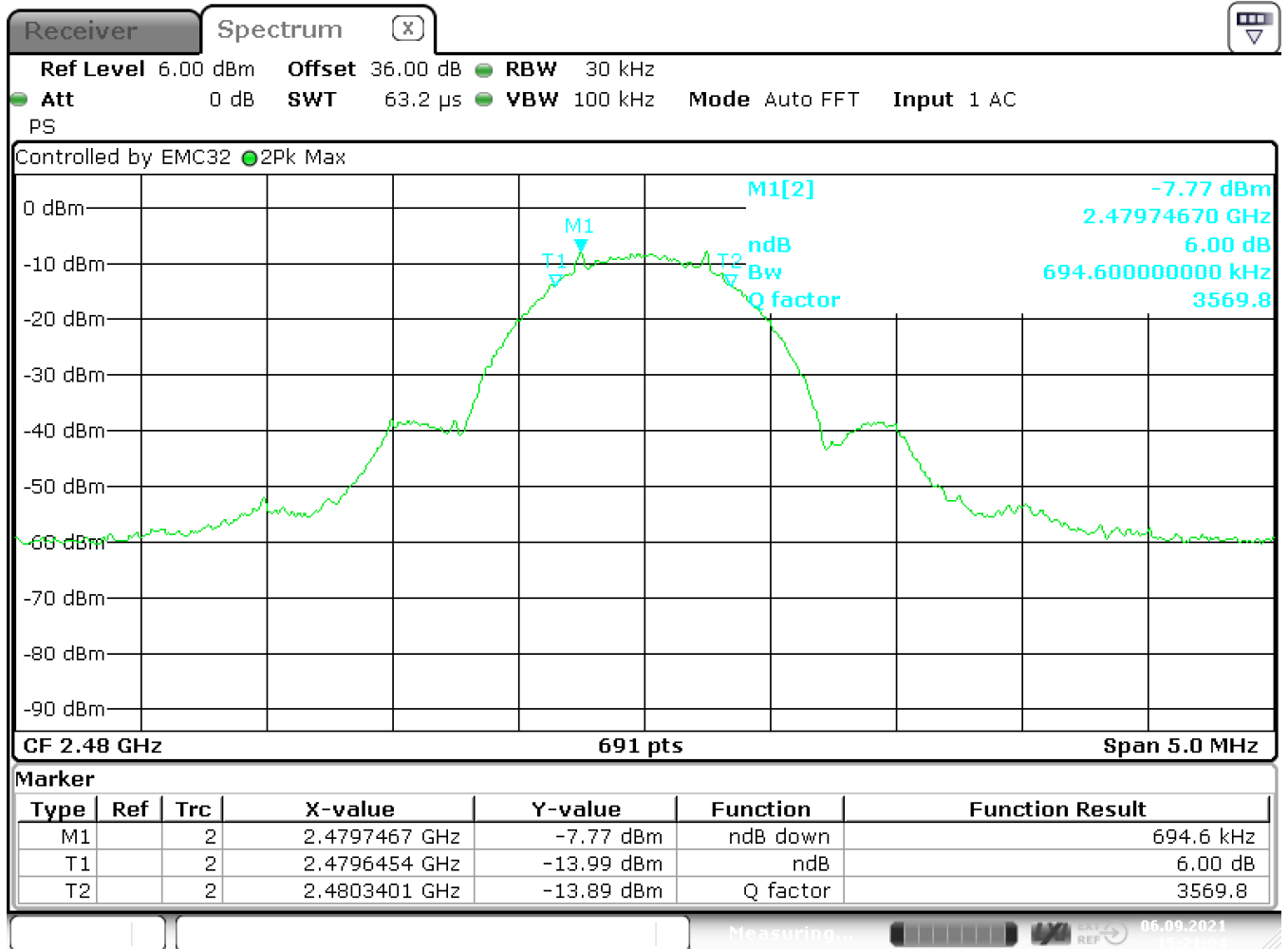
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

6 dB Bandwidth

§ 15.247(a)(2)
5.2.a)

Radiated Measurement

Rated output power: 4,46 mW Channel 39 (2480 MHz center frequency)



Date: 6.SEP.2021 15:21:04

6dB Bandwidth: 694,6 kHz

LIMIT SUBCLAUSE 15.247(e) – 5.2.a)

Under normal test conditons	6 dB Bandwidth at least 500 kHz
-----------------------------	---------------------------------

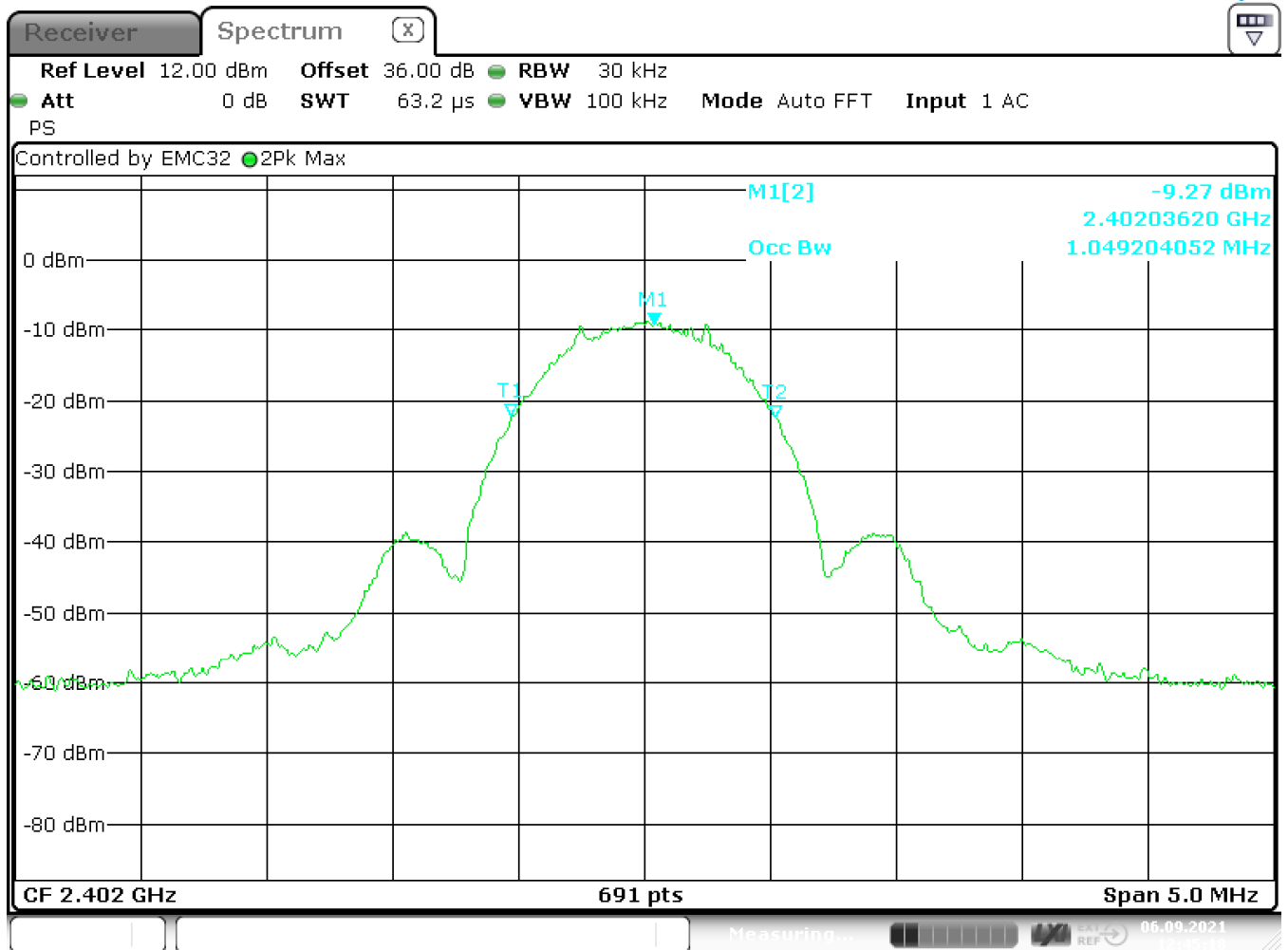
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

4.4. 99% Bandwidth

RSS 247

Radiated Measurement

Rated output power: 4,46 mW Channel 0 (2402 MHz center frequency)



Date: 6.SEP.2021 12:45:18

99% Bandwidth: 1049,2 kHz

LIMIT RSS 247

None; for IC reporting purposes only

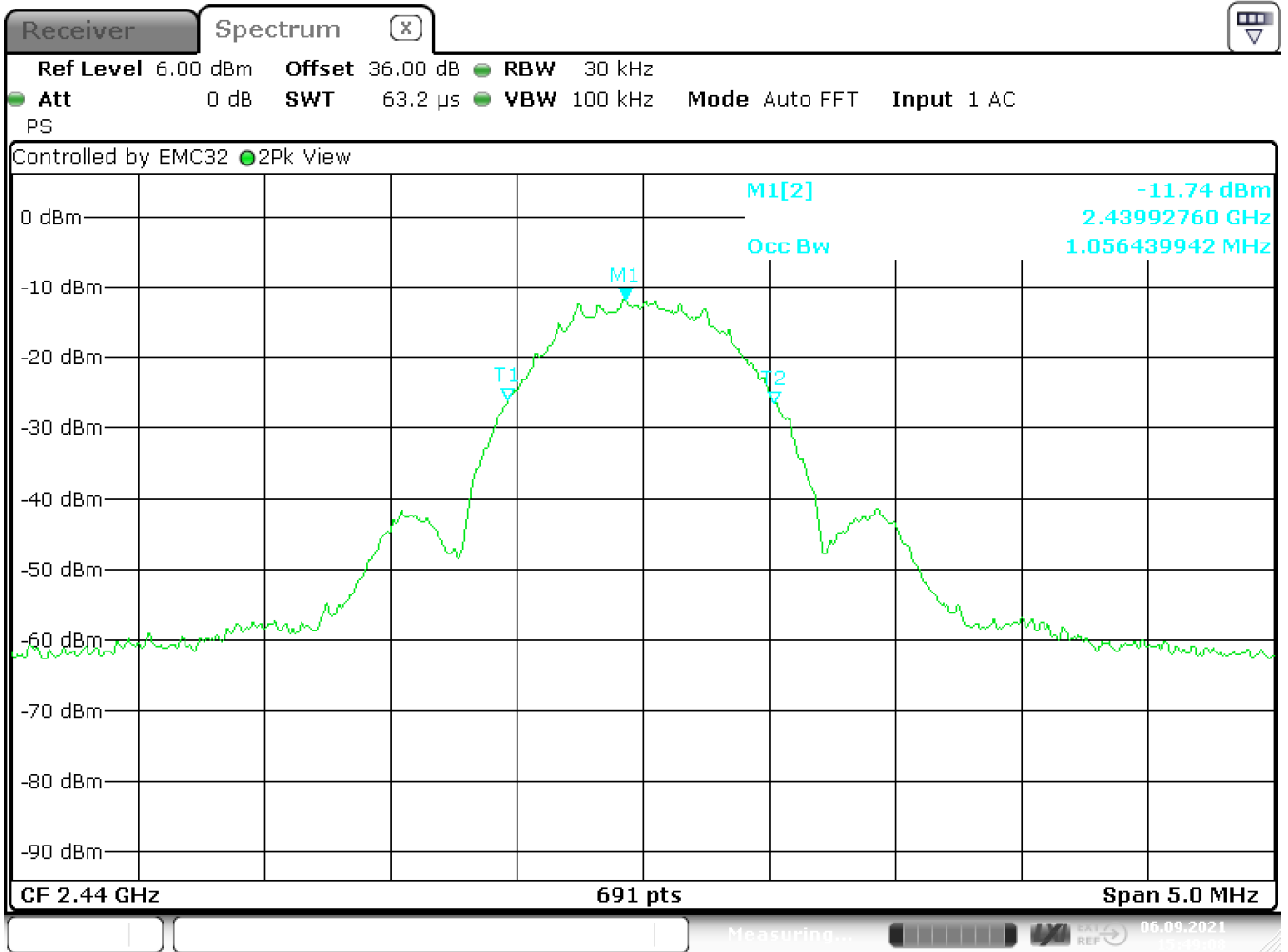
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

99% Bandwidth

RSS 247

Radiated Measurement

Rated output power: 4,46 mW Channel 19 (2440 MHz center frequency)



Date: 6.SEP.2021 15:49:09

99% Bandwidth: 1056,43 kHz

LIMIT RSS 247

None; for IC reporting purposes only

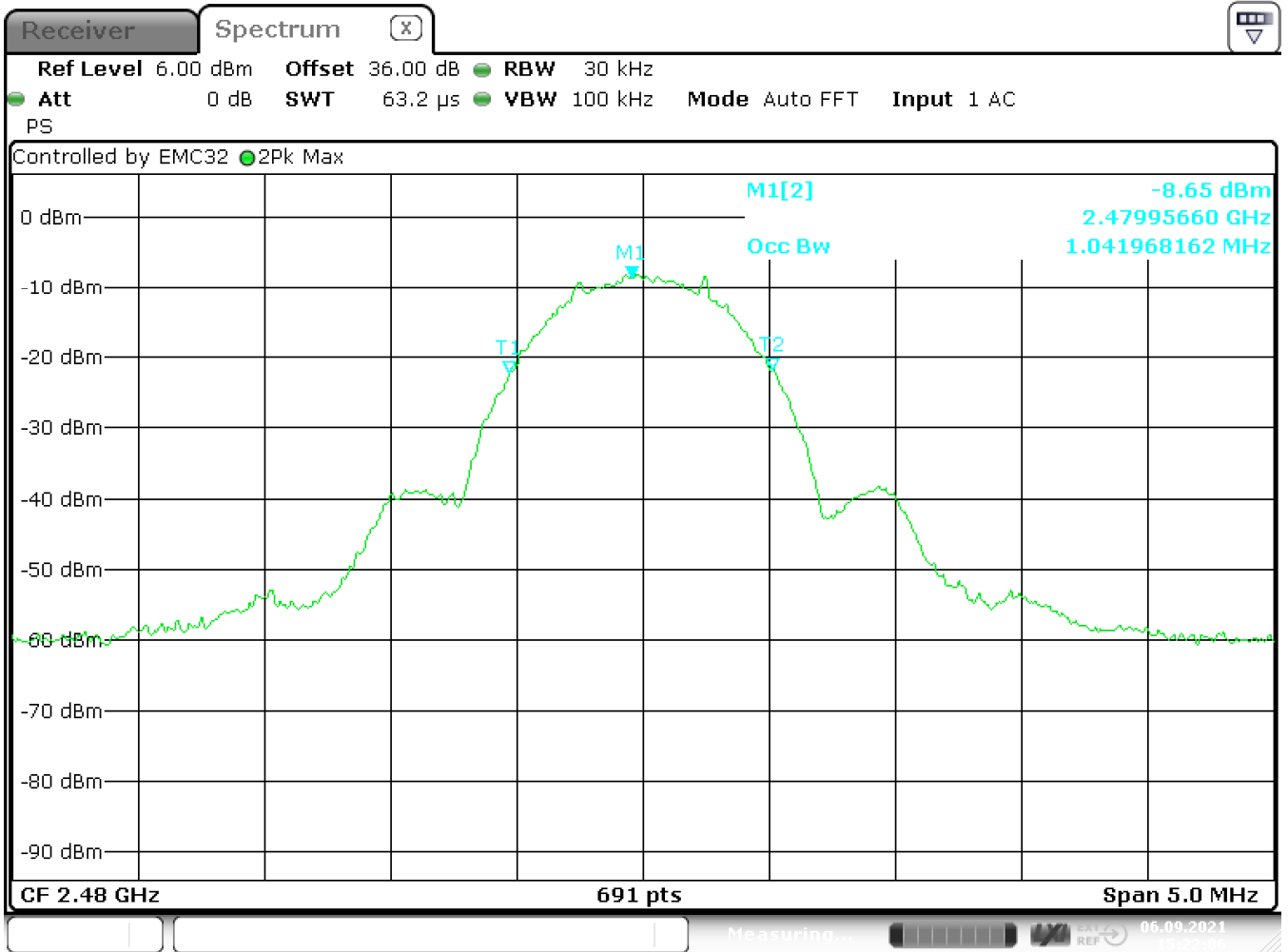
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

99% Bandwidth

RSS 247

Radiated Measurement

Rated output power: 4,46 mW Channel 39 (2480 MHz center frequency)



Date: 6.SEP.2021 15:22:07

99% Bandwidth: 1041,96 kHz

LIMIT RSS 247

None; for IC reporting purposes only

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

4.5. Maximum Peak RF Power Output (radiated)

**§ 15.247(b)(3)
 5.4.4**

Radiated Measurement

Rated output power: 4,46 mW

Test conditions		Transmitter power (mW)		
		2402 MHz	2440 MHz	2480 MHz
T _{nom} (25)°C	V _{nom} (3) V	3,98	4,26	4,46
Maximum deviation from rated output power under normal test conditions (dB)		-0,5	-0,2	0
Measurement uncertainty		± 0,75 dB		

LIMIT SUBCLAUSE 15.247(b)(3) – 5.4.4

Under normal test conditons	1W conducted (4W eirp)
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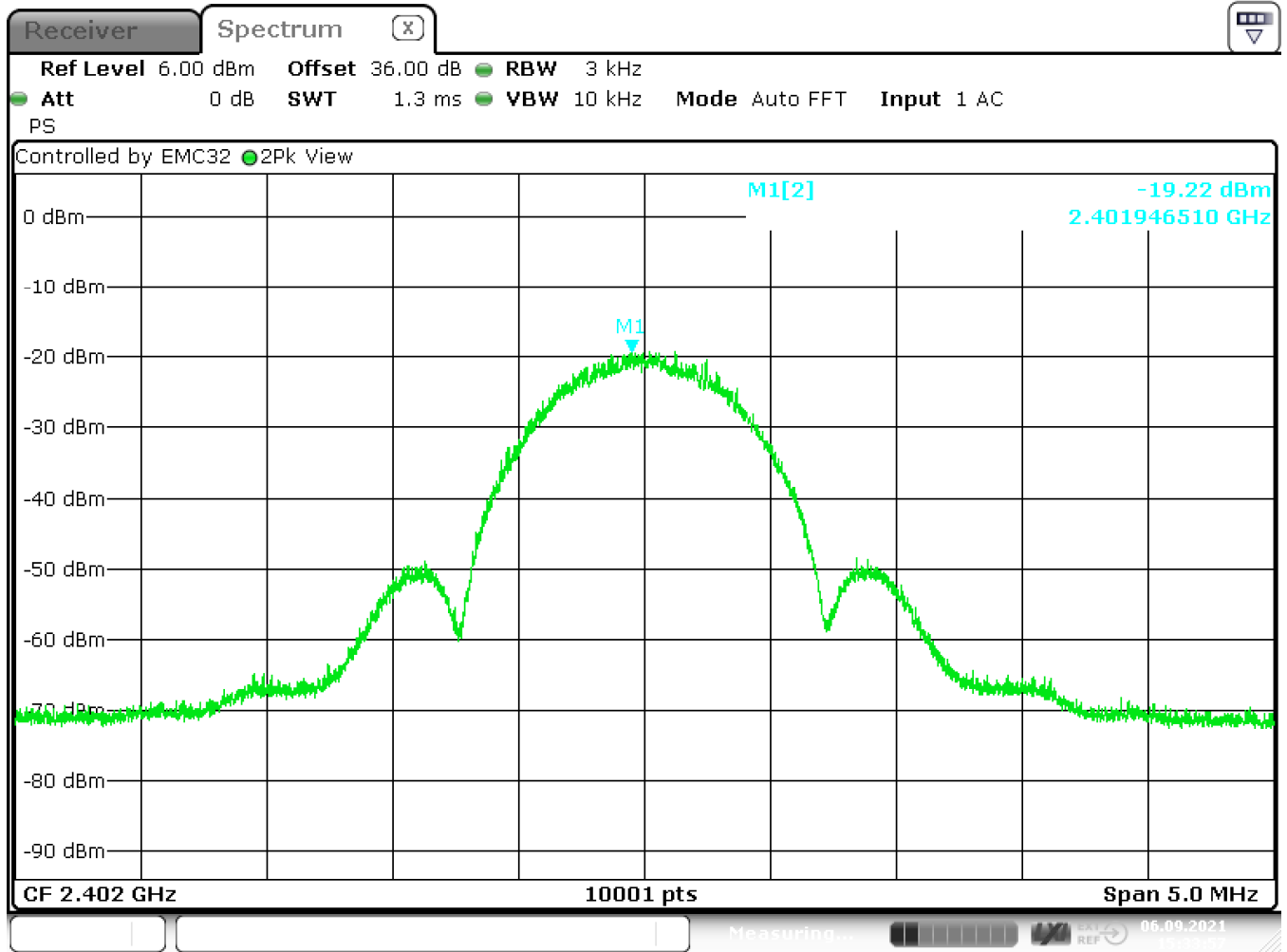
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

4.6. Power spectral density (radiated)

**§ 15.247(e)
 5.2.2**

Radiated Measurement

Rated output power: 4,46 mW Channel 0 (2402 MHz center frequency)



Date: 6.SEP.2021 15:33:57

Power Spectral density: -19,22 dBm @ 2401,94 MHz

LIMIT SUBCLAUSE 15.247(e) – 5.2 b)

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

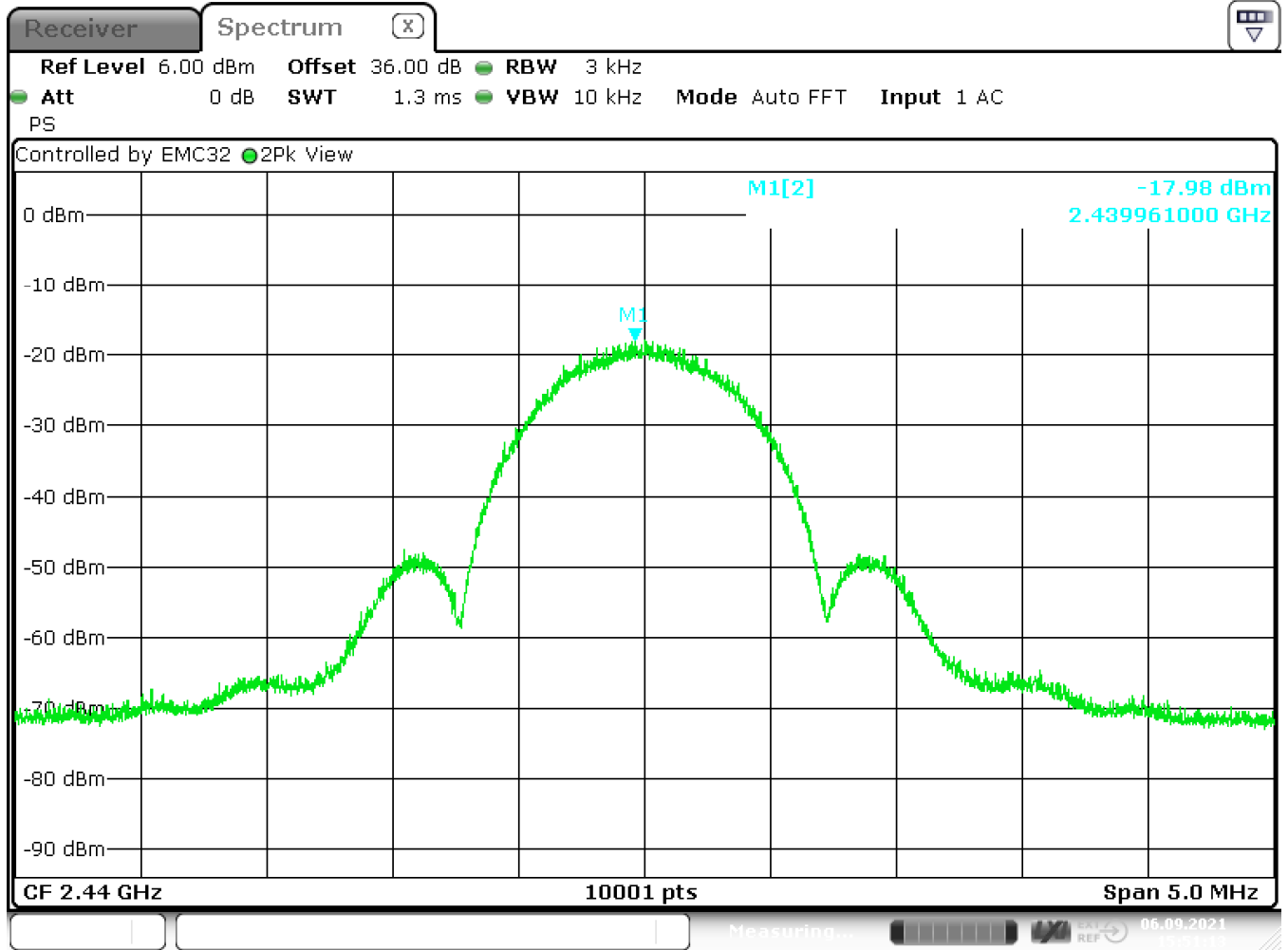
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

Power spectral density (radiated)

**§ 15.247(e)
 5.2 b)**

Radiated Measurement

Rated output power: 4,46 mW Channel 19 (2440 MHz center frequency)



Date: 6.SEP.2021 15:51:14

Power Spectral density: -17,98 dBm @ 2439,96 MHz

LIMIT SUBCLAUSE 15.247(e) – 5.2 b)

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

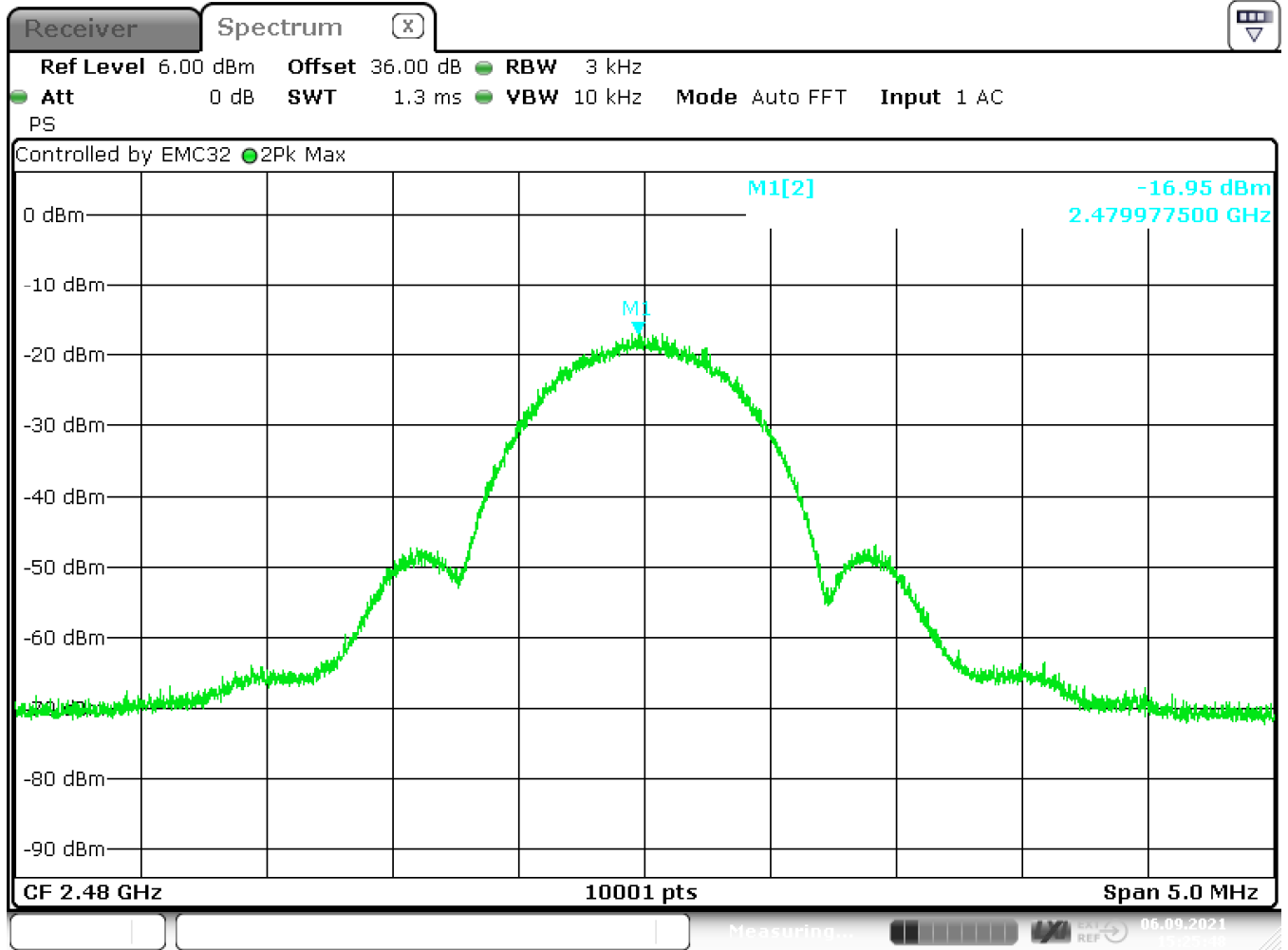
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

Power spectral density (radiated)

**§ 15.247(e)
 5.2 b)**

Radiated Measurement

Rated output power: 4,46 mW Channel 39 (2480 MHz center frequency)



Date: 6.SEP.2021 15:25:49

Power Spectral density: -16,95 dBm @ 2479,97 MHz

LIMIT SUBCLAUSE 15.247(e) – 5.2 b)

Under normal test conditons	+8dBm in any 3 kHz band
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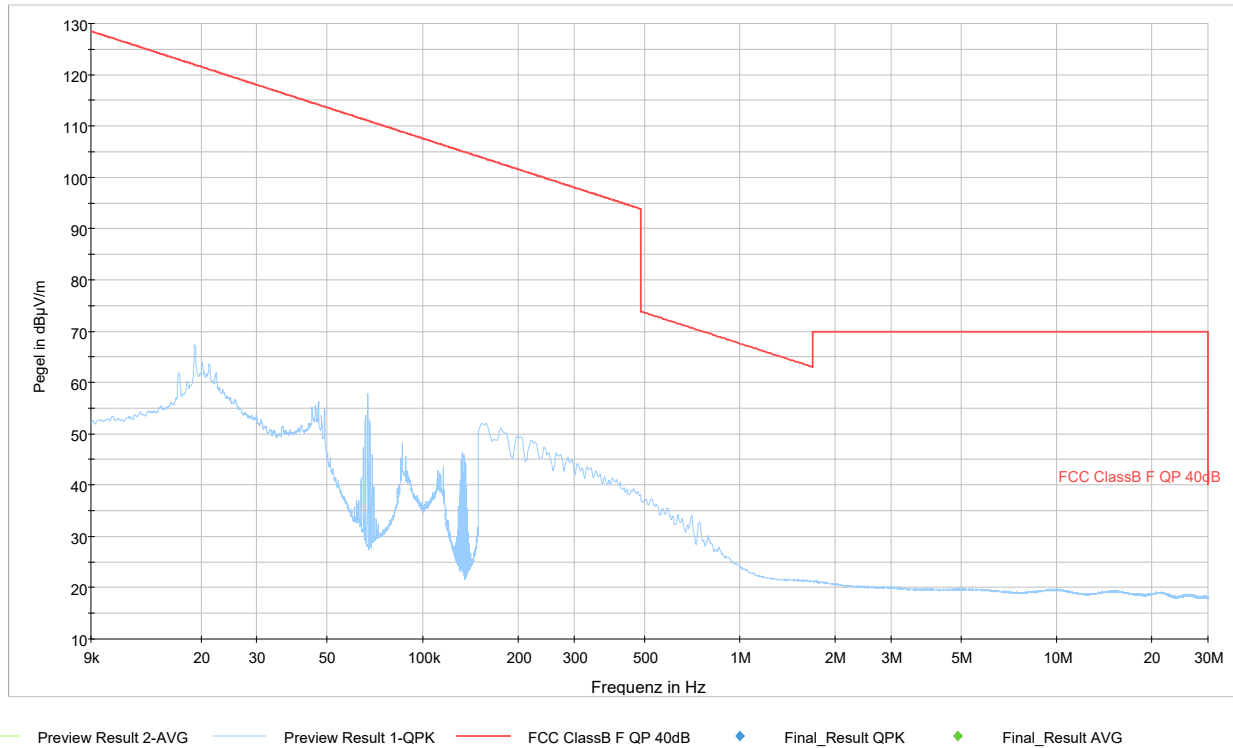
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-139; NT-207/1;

4.7. Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement 150 kHz – 30 MHz

Setup: CH 0: 2402 MHz



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

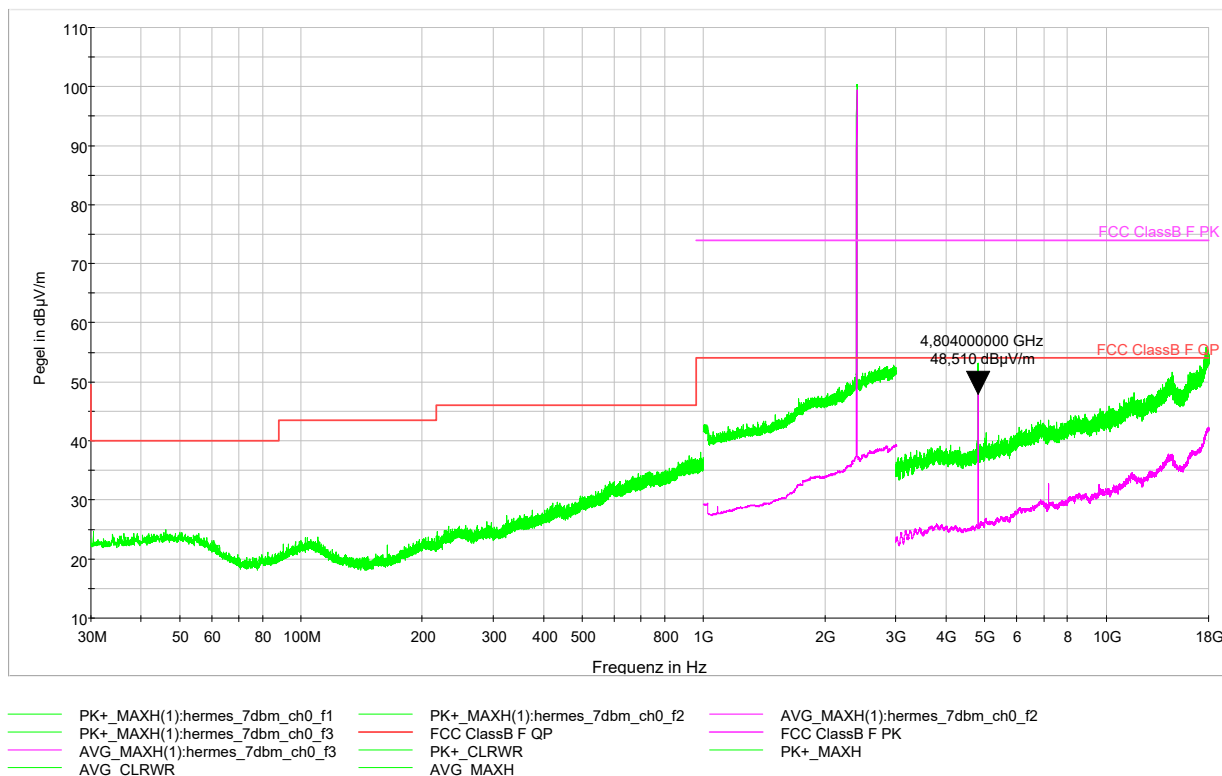
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-132; NT-207/1;

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

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

Setup: CH 0: 2402 MHz



Worst case emission: Average @ 4804,0 MHz: 48,51 dBµV/m

Remark: Although the measurement above ends at 18 GHz, all measurements were performed up to the tenth harmonics of the transmitter frequency.

LIMIT SUBCLAUSE 15.209(a) – RSS-Gen

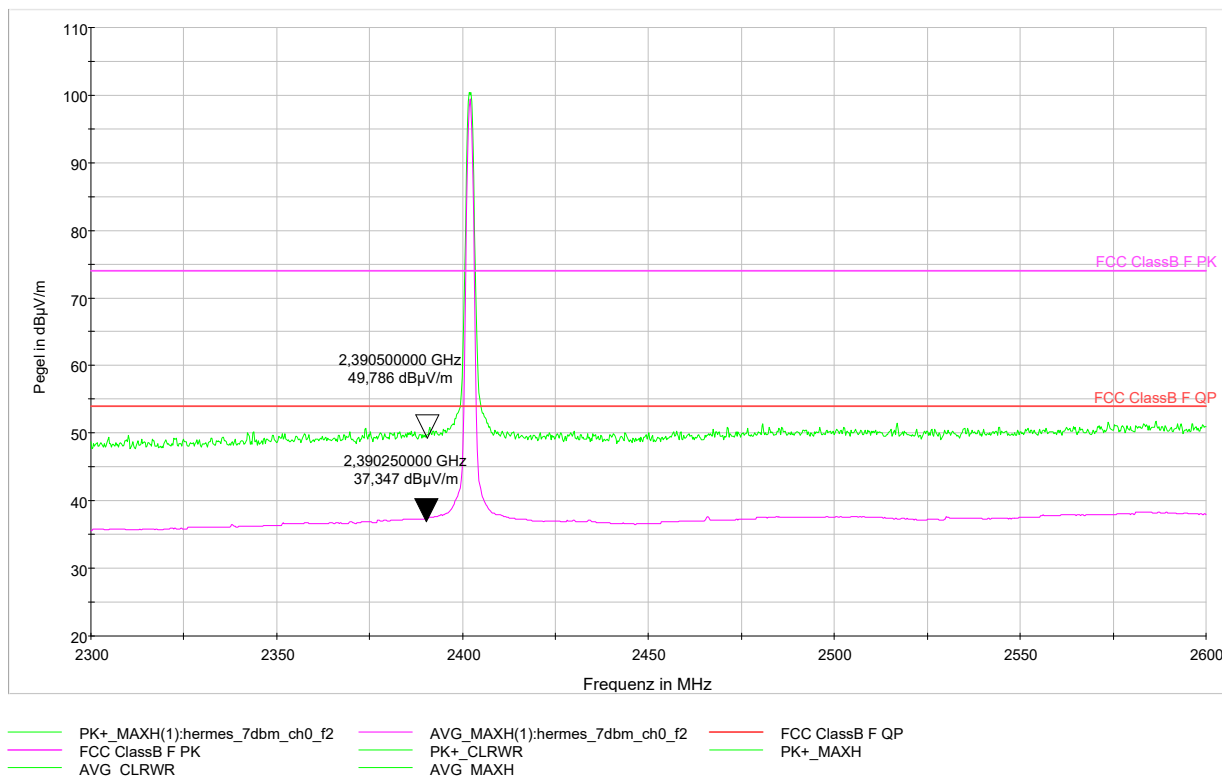
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

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

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: CH 0: 2402 MHz



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.

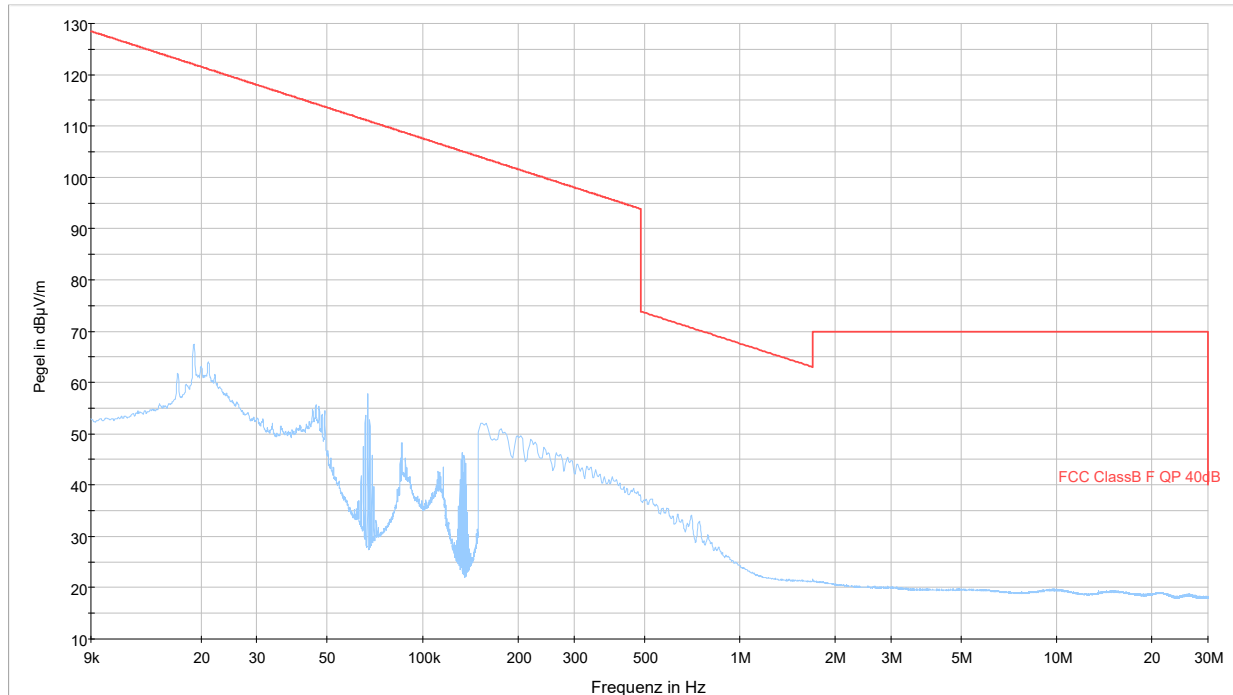
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-131/1; NT-139; NT-207/1;

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement 150 kHz – 30 MHz

Setup: CH 19: 2440 MHz



Preview Result 2-AVG Preview Result 1-QPK FCC ClassB F QP 40dB Final_Result QPK Final_Result AVG

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

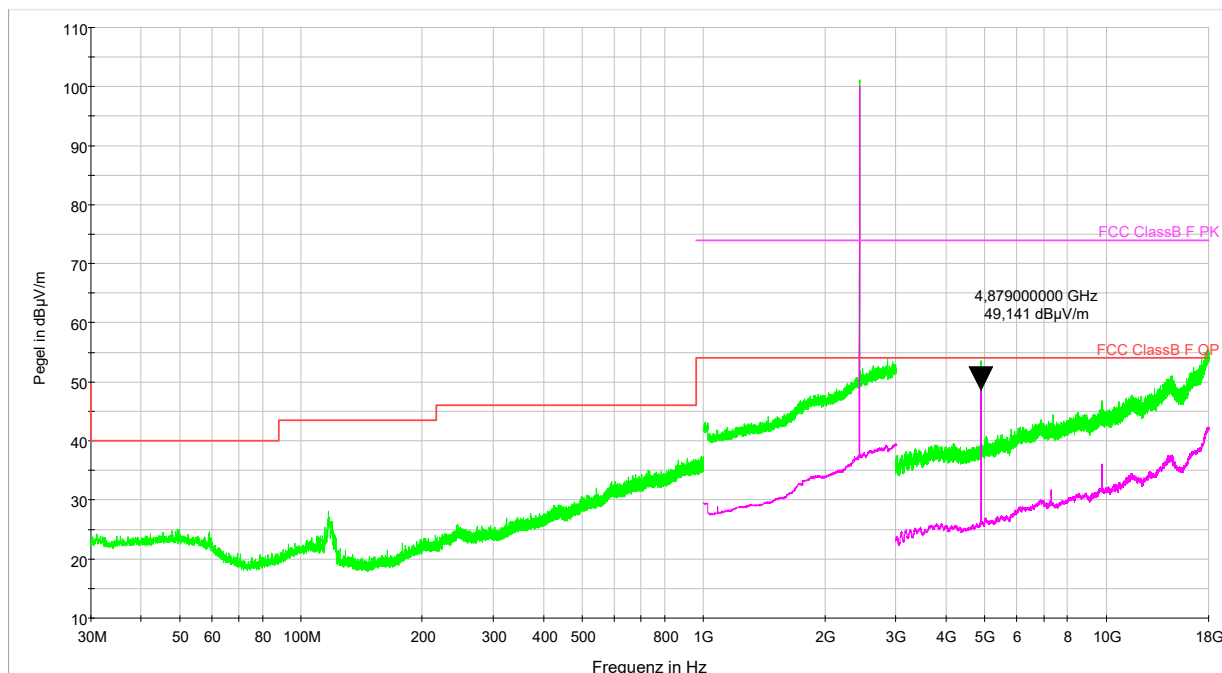
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-132; NT-207/1;

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

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

Setup: CH 19: 2440 MHz



- PK+ _MAXH(1);hermes_7dbm_ch19_f1
- PK+ _MAXH(1);hermes_7dbm_ch19_f2
- PK+ _MAXH(1);hermes_7dbm_ch19_f3
- PK+ _MAXH(1);hermes_7dbm_CH19_f2
- AVG _MAXH(1);hermes_7dbm_ch19_f1
- AVG _MAXH(1);hermes_7dbm_CH19_f2
- AVG _MAXH(1);hermes_7dbm_CH19_f3
- AVG _MAXH(1);hermes_7dbm_CH19_f2
- AVG _CLRWR
- AVG _CLRWR
- AVG _MAXH
- AVG _MAXH
- FCC ClassB F QP
- FCC ClassB F PK
- PK+ _MAXH

Worst case emission: Average @ 4879,0 MHz: 49,141 dBµV/m

Remark: Although the measurement above ends at 18 GHz, all measurements were performed up to the tenth 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

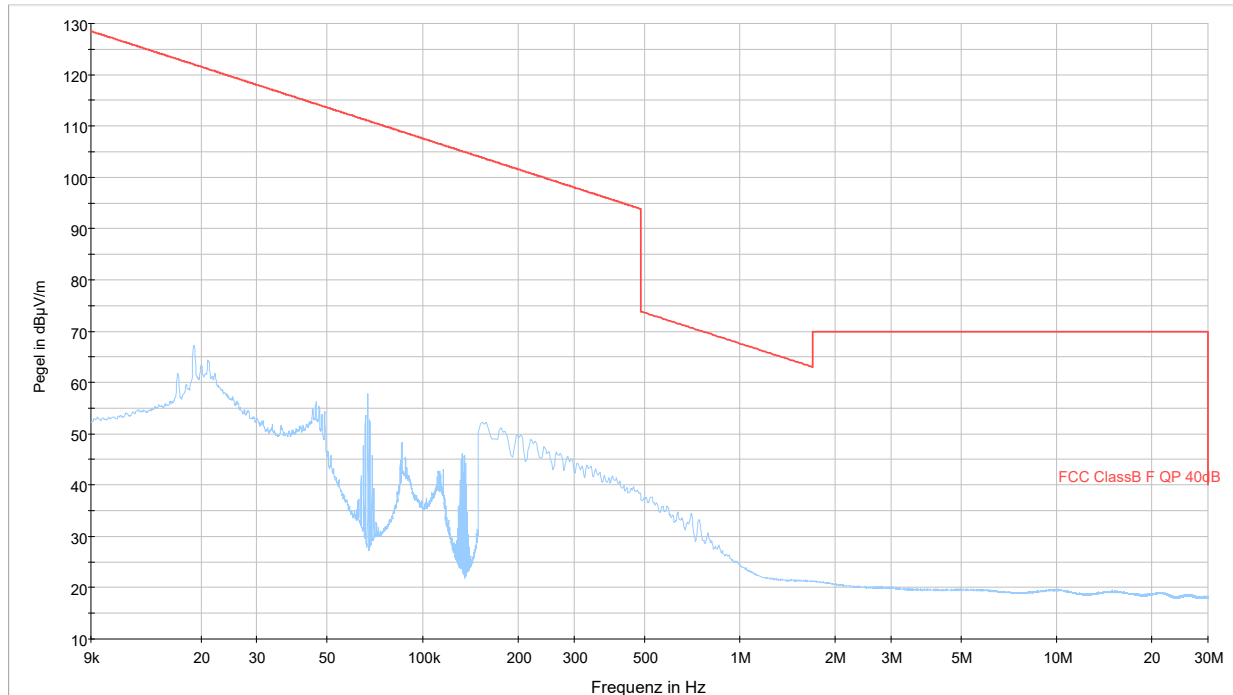
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-131/1; NT-139; NT-207/1;

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

Measurement 150 kHz – 30 MHz

Setup: CH 39: 2480 MHz



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

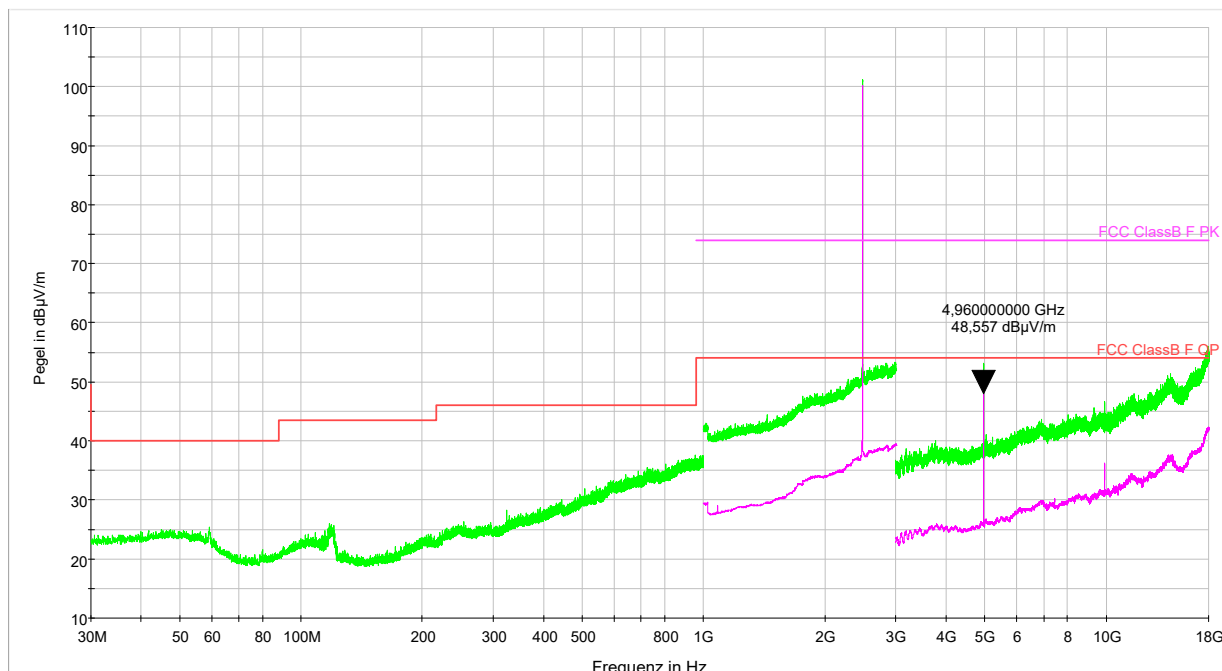
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-132; NT-207/1;

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

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

Setup: CH 39: 2480 MHz



- PK+ _MAXH(1)@Hermes_Rail_FCC
- PK+ _MAXH(1):hermes_7dbm_ch39_f3
- AVG _MAXH(1):hermes_7dbm_ch39_f3
- AVG_CLRWR
- PK+ _MAXH(1):hermes_7dbm_ch39_f2
- FCC ClassB F QP
- PK+ _CLRWR
- AVG_MAXH
- AVG _MAXH(1):hermes_7dbm_ch39_f2
- FCC ClassB F PK
- PK+ _MAXH

Worst case emission: Average @ 4960,0 MHz: 48,557 dBµV/m

Remark: Although the measurement above ends at 18 GHz, all measurements were performed up to the tenth 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

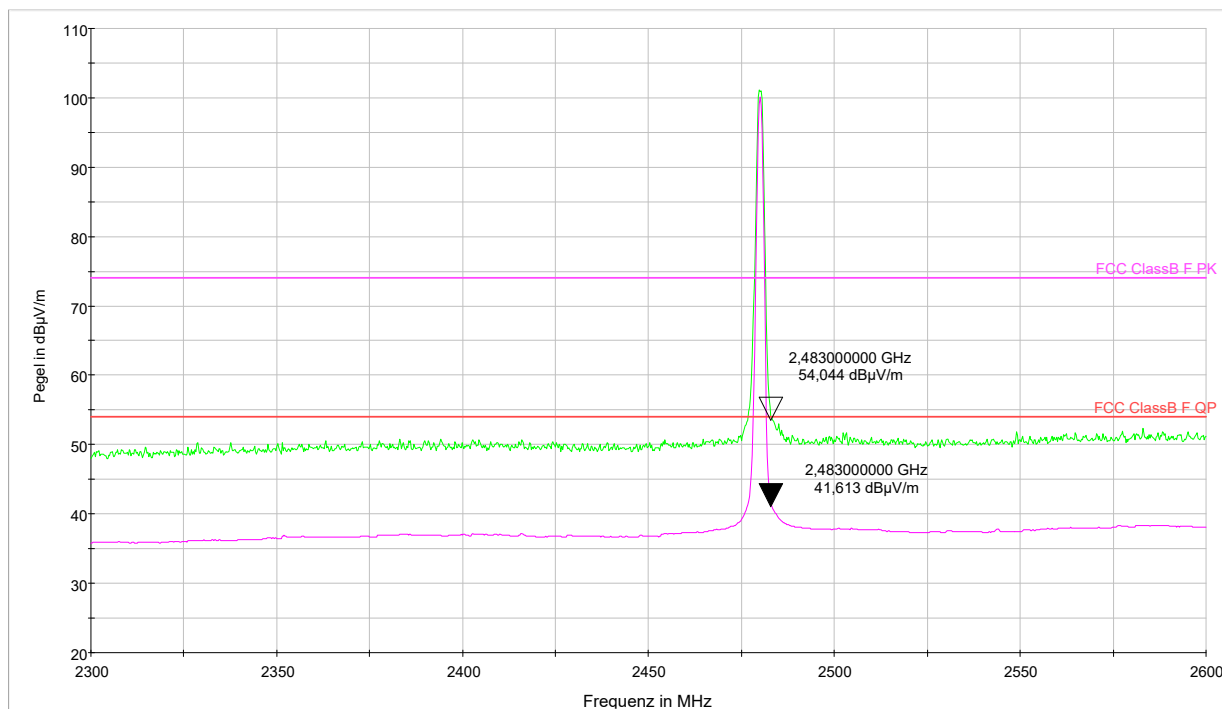
Test Equipment used: NT-100; NT-110/1; NT-111/1; NT-131/1; NT-139; NT-207/1;

Emissions in restricted bands
Emissions falling within restricted frequency bands

§ 15.209(a)
RSS-Gen

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

Setup: CH 39: 2480 MHz



— PK+_MAXH(1)@Hermes_Rail_FCC
 — AVG_MAXH(1)@Hermes_Rail_FCC
 — FCC ClassB F QP
 — FCC ClassB F PK
— PK+_CLRWR
 — PK+_MAXH
 — AVG_CLRWR
 — AVG_MAXH

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: NT-100; NT-110/1; NT-111/1; NT-131/1; NT-139; NT-207/1;

Appendix 1

Test equipment used

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

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

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<input type="checkbox"/>	Highpass-Filter 3500 MHz – 18 GHz	NT-416	Industry & Energy
<input type="checkbox"/>	RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417	Department: FG
<input type="checkbox"/>	RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418	Test report number: INE-AT/FG-21/174
<input type="checkbox"/>	RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419	Page: 3 of 4
<input type="checkbox"/>	RF-Attenuator 20 dB DC - 1000 MHz / 25 W	NT-421	Date: 09.09.2021
<input type="checkbox"/>	RF-Attenuator 30 dB DC - 1000 MHz / 1 W	NT-423	
<input type="checkbox"/>	RF-Attenuator 30 dB	NT-424	
<input type="checkbox"/>	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-425	
<input type="checkbox"/>	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-426	
<input type="checkbox"/>	RF-Attenuator 6 dB	NT-428	
<input type="checkbox"/>	RF-Attenuator 0 dB - 81 dB	NT-429	
<input type="checkbox"/>	WRU 27 - Band blocking 27 MHz	NT-430	
<input type="checkbox"/>	WHJ450C9 AA - High pass 450 MHz	NT-431	
<input type="checkbox"/>	WHJ250C9 AA - High pass 250 MHz	NT-432	
<input type="checkbox"/>	RF-Load 150 W	NT-433	
<input type="checkbox"/>	Impedance transducer 1:4 ; 1:9 ; 1:16	NT-435	
<input type="checkbox"/>	RF-Attenuator DC – 18 GHz 6 dB	NT-436	
<input type="checkbox"/>	RF-Attenuator DC – 18 GHz 6 dB	NT-437	
<input type="checkbox"/>	RF-Attenuator DC – 18 GHz 10 dB	NT-438	
<input type="checkbox"/>	RF-Attenuator DC – 18 GHz 20 dB	NT-439	
<input type="checkbox"/>	I+P 7780 Directional coupler 100 - 2000 MHz	NT-440	
<input type="checkbox"/>	ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441	
<input type="checkbox"/>	Power Divider 6 dB/1 W/50 Ohm	NT-443	
<input type="checkbox"/>	Directional coupler 0,1 MHz – 70 MHz	NT-444	
<input type="checkbox"/>	Directional coupler 0,1 MHz – 70 MHz	NT-445	
<input type="checkbox"/>	Tube imitations according to EN 55015	NT-450	
<input type="checkbox"/>	FCC-801-M3-16A Coupling decoupling network	NT-458	
<input type="checkbox"/>	FCC-801-M2-50A Coupling decoupling network	NT-459	
<input type="checkbox"/>	FCC-801-M5-25 Coupling decoupling network	NT-460	
<input type="checkbox"/>	FCC-801-AF10 Coupling decoupling network	NT-461	
<input type="checkbox"/>	FCC-801-S25 Coupling decoupling network	NT-462	
<input type="checkbox"/>	FCC-801-T4 Coupling decoupling network	NT-463	
<input type="checkbox"/>	FCC-801-C1 Coupling decoupling network	NT-464	
<input type="checkbox"/>	SW 9605 - Current probe 150 kHz – 30 MHz	NT-465/1	
<input type="checkbox"/>	95242-1 – Current probe 1 MHz – 400 MHz	NT-468	
<input type="checkbox"/>	94106-1L-1 – Current probe 100 kHz – 450 MHz	NT-471	
<input type="checkbox"/>	GA 1240 Power amplifier according to EN 61000-4-16	NT-480	
<input type="checkbox"/>	Coupling networks according to EN 61000-4-16	NT-481 - NT-483	
<input type="checkbox"/>	Van der Hoofden Test Head	NT-484	
<input type="checkbox"/>	EMC Video/Audiosystem	NT-511/1	
<input type="checkbox"/>	ES-K1 Version 1.71 SP2 Test software	NT-520	
<input type="checkbox"/>	EMC32 Version 10.60.15 Test software	NT-520/1	
<input type="checkbox"/>	SRM-TS Version 1.3 software for SRM-3000	NT-522	
<input type="checkbox"/>	SRM-TS Version 1.3.1 software for SRM-3006	NT-522/1	
<input type="checkbox"/>	Spitzenberger und Spies Test software V4.1	NT-525	
<input type="checkbox"/>	Noise power test apparatus according to EN 55014	NT-530	
<input type="checkbox"/>	Vertical coupling plane (ESD)	NT-531	
<input type="checkbox"/>	Test cable #4 for EN 61000-4-6	NT-553	
<input type="checkbox"/>	Test cable #3 for conducted emission	NT-554	
<input type="checkbox"/>	Test cable #5+#6 ESD-cable (2x470k)	NT-555 + NT-556	
<input type="checkbox"/>	Test cable #8 Sucoflex 104EA	NT-559	
<input type="checkbox"/>	Test cable #9 (for outdoor measurements)	NT-580	
<input type="checkbox"/>	Test cable #10 (for outdoor measurements)	NT-581	
<input type="checkbox"/>	Test cable #13 Sucoflex 104PE	NT-584	
<input type="checkbox"/>	Test cable #21 for SRM-3000	NT-592	
<input type="checkbox"/>	Shield chamber	NT-600	
<input type="checkbox"/>	Climatic chamber	M-1200	

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

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