

# Test Report

No. 1-2922-26-01-02-TR1-R02

Aug 11, 2026

Applicant UAB Pulsetto

Product Model **Nerve stimulator  
Pulsetto FIT-X**

Procedure certification FCC ID: 2A5T3-BXNPU26V003

Classification JAB (Part 15 Class B Digital Device)

Test Standard(s) **ANSI C63.4a:2017**  
**FCC Title 47 CFR Part 15B**  
**ICES-003:Issue 7 (2020-10)**

Verdict ☒ PASS

Testing scope All applicable tests has been performed.

The test results relate only to devices specified in this document

This test report is electronically signed and valid without handwritten signature.  
Public keys for verification of the electronic signatures can be requested at the testing laboratory.



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## 1 Disclaimer

The test results of this test report relate exclusively to the test item specified in chapter "Test sample information". cetecom advanced does not assume responsibility for any conclusions and generalizations drawn from the test results regarding other specimens or samples of the type of equipment represented by the test item.

The testing service provided by cetecom advanced has been rendered under the current "General Terms and Conditions for cetecom advanced".

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The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 10 years at cetecom advanced.

**The current version of test report 1-2922-26-01-02\_TR1-R02 replaces the test report 1-2922-26-01-02\_TR1-R01 dated 2026-Jul-07. The replaced test report is herewith invalid.**

## 2 Related documents

| Document  | Content                | Reference                    | Total Pages |
|-----------|------------------------|------------------------------|-------------|
| Annex 101 | External Photographs   | 1-2922-26-01-02_TR1-A101-R01 | 4           |
| Annex 301 | Test setup Photographs | 1-2922-26-01-02_TR1-A301-R01 | 4           |

## 3 Document history

### 3.1 Current release

Release No.: R02  
 Date of release: Aug 11, 2026  
 Applied changes: -

### 3.2 Previous releases

| Release No. | Applied changes                                                                                    | Date of release |
|-------------|----------------------------------------------------------------------------------------------------|-----------------|
| R01         | -                                                                                                  | 2026-Jul-07     |
| R02         | Photographs inserted in separate attachments<br>Date removed from behind FCC Title 47 CFR Part 15B | 2026-Aug-11     |

## 4 Test laboratory

### 4.1 Contact information

cetecom advanced GmbH  
 Untertuerkheimer Str. 6-10  
 66117 Saarbruecken  
 Germany

### 4.2 Involved test locations

| <input type="checkbox"/> Saarbruecken lab                   | <input checked="" type="checkbox"/> Essen lab |
|-------------------------------------------------------------|-----------------------------------------------|
| Untertuerkheimer Str. 6-10<br>66117 Saarbruecken<br>Germany | Im Teelbruch 116<br>45219 Essen<br>Germany    |

### 4.3 Subcontracted laboratories

None

### 4.4 Laboratory listings and recognitions

|      | Saarbruecken | Essen        |
|------|--------------|--------------|
| FCC  | DE0002       | DE0003       |
| ISED | DE0001 3462C | DE0001 3462D |

### 4.5 Common report information

Version of report template: v26.0501

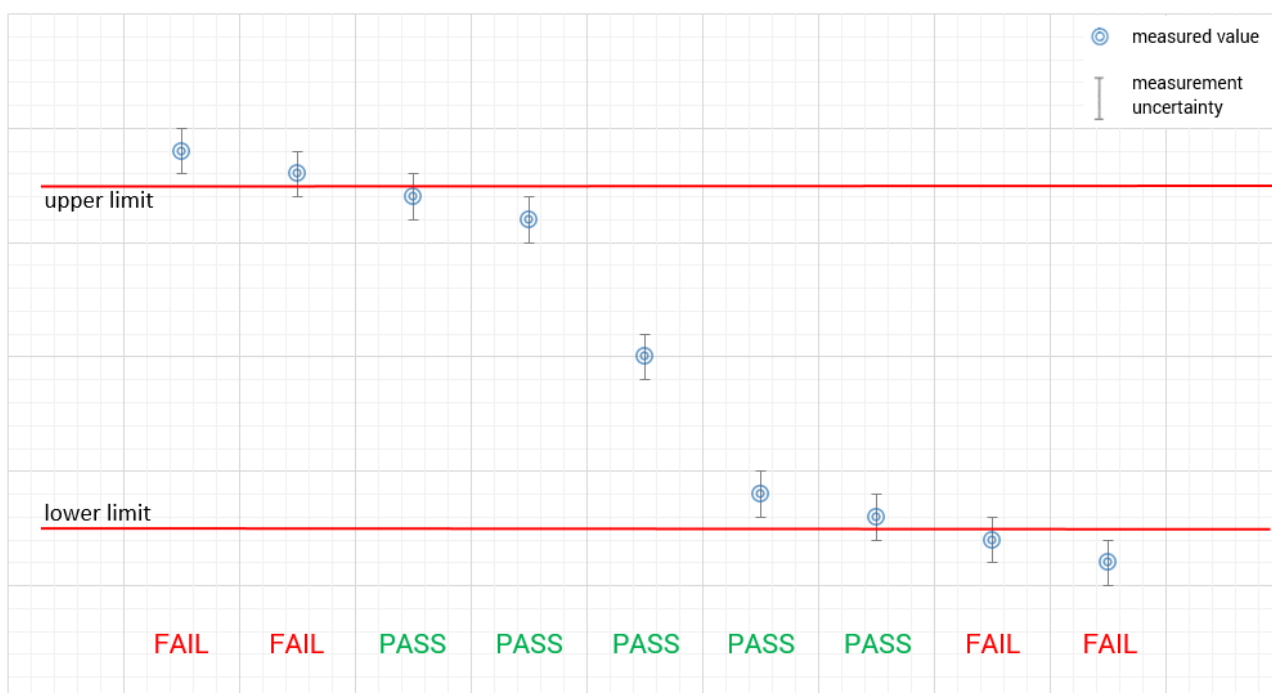
The period is used as a decimal separator and the comma as a thousand separator.

#### 4.6 Reporting statements of conformity – decision rule

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 8.1.

The measurement uncertainty is mentioned in this test report, see chapter 4.6, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong."

#### measured value, measurement uncertainty, verdict



#### Decision Rule for emission testing:

cetecom advanced GmbH follows [ILAC G8:2019 chapter 4.2.1 \(Simple Acceptance Rule\)](#) according to CISPR 16-4-2:  $U_{Lab} < U_{CISPR}$ . Therefore, the uncertainty is not considered for the statement of conformity in this test report.

## 4.7 Measurement uncertainty

| RF-Measurement               | Reference    | Frequency range  | Calculated uncertainty based on a confidence level of 95% |         | Remarks |
|------------------------------|--------------|------------------|-----------------------------------------------------------|---------|---------|
| Conducted emissions          | CISPR 16-2-1 | 150 kHz - 30 MHz | EMCR (120919):                                            | 3.28 dB | -       |
|                              |              |                  | LAB1 (225924):                                            | 2.42 dB |         |
| Radiated emissions Enclosure | CISPR 16-2-3 | 30 MHz - 300 MHz | SAC1 (225911):                                            | 4.69 dB | E-Field |
|                              |              |                  | SAC2 (225902):                                            | 3.06 dB |         |
|                              |              |                  | SAC3 (120901):                                            | 3.23 dB |         |
|                              |              | 300 MHz - 1 GHz  | SAC1 (225911):                                            | 4.27 dB |         |
|                              |              |                  | SAC2 (225902):                                            | 3.51 dB |         |
|                              |              |                  | SAC3 (120901):                                            | 3.57 dB |         |
|                              |              | 1 GHz - 6 GHz    | SAC1 (225912):                                            | 4.87 dB |         |
|                              |              |                  | SAC2 (225903):                                            | 4.32 dB |         |
|                              |              |                  | SAC3 (120902):                                            | 4.02 dB |         |
|                              |              | 6 GHz - 18 GHz   | SAC1 (225912):                                            | 5.72 dB |         |

## 4.8 Abbreviation and Legend of Measurement Equipment Calibration details

### Legend

| Abbreviation interval | Interval of calibration & Verification |
|-----------------------|----------------------------------------|
| 2W                    | 2 weeks                                |
| 12M                   | 12 months                              |
| 24M                   | 24 months                              |
| 36M                   | 36 months                              |
| 10Y                   | 10 Years                               |

| Abbreviation Check Type | Description                                |
|-------------------------|--------------------------------------------|
| cnn                     | Calibration and verification not necessary |
| cal                     | Calibration                                |
| calchk                  | Calibration plus intermediate Verification |
| chk                     | Verification                               |
| cpu                     | Verification before usage                  |

## 4.9 Abbreviations

|          |   |                                           |
|----------|---|-------------------------------------------|
| AE       | - | Auxiliary equipment                       |
| AEC      | - | Auxiliary equipment from cetecom advanced |
| CAB      |   | Connected cable                           |
| DUT      | - | Device under Test                         |
| EMC      | - | Electromagnetic Compatibility             |
| EUT      | - | Equipment under Test                      |
| FCC      | - | Federal Communication Commission          |
| HW       | - | Hardware Status                           |
| ISED     | - | Innovation, Science and Economic Canada   |
| Inv. No. | - | Inventory number                          |
| MSE      |   | Measurement and signaling equipment       |
| NA       | - | not applicable                            |
| NP       | - | not performed                             |
| S/N      | - | Serial Number                             |
| SW       | - | Software Status                           |
| VAR      | - | Variant                                   |

## 5 Client information

### 5.1 Applicant

Name: UAB Pulsetto

Address: Liepų g. 83  
LT-92195 Klaipėda  
Lithuania

Contact Person: Balis Susnys  
Contact Person's Email: balis@pulsetto.tech

### 5.2 Manufacturer

Name: UAB Pulsetto

Address: Liepų g. 83  
LT-92195 Klaipėda  
Lithuania

## 6 Test sample information

The data about the test samples is given/supplied by the customer and not under control by cetecom advanced GmbH.

### 6.1 Test Item (declared by applicant)

|                                |                                                                                                                                                                                                                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product:</b>                | Nerve stimulator                                                                                                                                                                                                                                                                                |
| <b>Model:</b>                  | Pulsetto FIT-X                                                                                                                                                                                                                                                                                  |
| <b>Type:</b>                   | PLST_FITX                                                                                                                                                                                                                                                                                       |
| <b>Equipment mobility:</b>     | <input checked="" type="checkbox"/> Portable use<br><input type="checkbox"/> Fixed Use<br><input type="checkbox"/> Vehicular Use<br><input type="checkbox"/> Line available for further definition                                                                                              |
| <b>Typical Environment:</b>    | <input checked="" type="checkbox"/> Residential, commercial and light industry<br><input type="checkbox"/> Industrial<br><input type="checkbox"/> Line available for further definition                                                                                                         |
| <b>Mounting position:</b>      | <input type="checkbox"/> Tabletop<br><input type="checkbox"/> Floor standing<br><input type="checkbox"/> Wall mounted<br><input checked="" type="checkbox"/> Neck-worn<br><input type="checkbox"/> Line available for further definition                                                        |
| <b>Size [LxWxH]:</b>           | 14.0 cm x 14.0 cm x 6.0 cm                                                                                                                                                                                                                                                                      |
| <b>Additional information:</b> | - Test set-up / cabling / operating modes of EUT during tests acc. to customer requirements<br>- This is a class B digital device:<br>- The instructions furnished the user shall include a statement acc. to §15.105 of the used FCC rules<br>- maximum cable lengths declared by manufacturer |

|                                                    |                                                                                                                                                                                                           |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Highest internal frequency of digital part:</b> | <input type="checkbox"/> < 108 MHz<br><input type="checkbox"/> < 1,200 MHz<br><input checked="" type="checkbox"/> ≤ 3,600 MHz<br><input type="checkbox"/> > 3,600 MHz<br><input type="checkbox"/> unknown |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                         |                                                                                                                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Radio frequency:</b> | <input type="checkbox"/> The Device does not include any radio functionality<br><input checked="" type="checkbox"/> The Device does include radio functionality, these are not considered in this report<br>Additional information: |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Power Supply:**

EUT powered by:

☒ AC Mains Defined Input range: 120 V – 230 V / 50 – 60 Hz

**Testing performed at:**
☒ 120 V ☒ 1 ph. (L1, N) ☐ 50 Hz

☐ 230 V ☐ 3 ph. (L1, L2, L3, N) ☒ 60 Hz

☐ 400 V ☐ 3 ph. (L1, L2, L3)

☐ 480 V ☐ PE

☐ Various Settings used during test, see test chapters for details

☐ DC Mains Defined Input range: V – V

**Testing performed at:**
☐ V ☐ Ground

☐ Via Power Supply ☐ Via PoE ☐ Via USB Connection

☐ Various Settings used during test, see test chapters for details

☐ Battery

☐ V ☐ Type:

☐ internal ☐ external ☐ rechargeable

☐ Line available for further definition

Additional information:

**Ports:**

| Kind of Port                                                  | Name                                | Max cable length | Connected during test               |                          |                          |                          |
|---------------------------------------------------------------|-------------------------------------|------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
|                                                               |                                     |                  | c                                   | nc                       | s                        | o                        |
| <input type="checkbox"/> The Device does not contain any port |                                     | -                | -                                   | -                        | -                        | -                        |
| Power                                                         | USB-C                               | unknown          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Additional information:-                                      |                                     |                  |                                     |                          |                          |                          |
| Remarks:                                                      | c = port connected during test      |                  |                                     |                          |                          |                          |
|                                                               | nc = port not connected during test |                  |                                     |                          |                          |                          |
|                                                               | s = port for service only           |                  |                                     |                          |                          |                          |
|                                                               | o = port for outdoor cable          |                  |                                     |                          |                          |                          |

## 6.2 Equipment under test

### 6.2.1 EUT

| EUT No. *) | Product          | Model          | Type      | SN    | HW             | SW                            |
|------------|------------------|----------------|-----------|-------|----------------|-------------------------------|
| EUT 1      | Nerve Stimulator | Pulsetto FIT-X | PLST_FITX | --**) | PTT03-0-001_v1 | pulsetto_v3_fw_v1<br>.0.1_0.9 |

\*) EUT short description is used to simplify the identification of the EUT in this test report.

\*\*\*) Not specified by customer

### 6.2.2 Auxiliary equipment (AE)

| AE No. *) | Auxiliary Equipment | Model      | SN | HW | SW |
|-----------|---------------------|------------|----|----|----|
| AE 1      | Wall Charger        | XY-2288_PD | -- | -- | -- |

\*) AE short description is used to simplify the identification of the auxiliary equipment in this test report.

### 6.2.3 Connected cables (CAB)

| CAB No. *) | Cable Type | Connectors / Details | Length |
|------------|------------|----------------------|--------|
| Cab 1      | USB        | USB-C/USB-C          | 100 cm |

\*) CAB short description is used to simplify the identification of the connected cables in this test report.

### 6.2.4 Set-ups

| Set-Up No. *) | Combination of EUT, AE, CAB, SW | Description               |
|---------------|---------------------------------|---------------------------|
| 1             | EUT 1 + AE 1 + CAB 1            | Used for all measurements |
| -             | -                               | -                         |

\*) Set-up No. is used to simplify the identification of one or more Set-up of EUT, AE, SW, CAB in this test report

### 6.2.5 Operation modes

| OP-Mode No. *) | Operating mode(s)           | Detailed Description                                                                                         |
|----------------|-----------------------------|--------------------------------------------------------------------------------------------------------------|
| 1              | Stimulation + Charging Mode | Stimulation active during the measurements.<br>Batterie charging during the measurements<br>BLE switched off |
| -              | -                           | -                                                                                                            |

\*) OP-Mode short description is used to simplify the identification of one or more Operating Modes used during testing in this test report

## 7 Application details

### 7.1 Scheduling

Date of sample reception: 2026-Jun-17  
Date(s) of test: 2026-Jun-18

### 7.2 Climatic data

Temperature: 23.0 °C to 24.0 °C  
Relative. humidity: 37.0 %rH to 38.0 %rH

### 7.3 Opinions and interpretations

None

### 7.4 Modifications

None

## 8 Measurement details

### 8.1 Test methodology

The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2018-03) by the Deutsche Akkreditierungsstelle GmbH (DAkkS).

The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with the registration number D-PL-12047-01-00.

| Applied test method, standard, rule | Description                                                                                                                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ANSI C63.4a:2017                    | American National Standard for methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz<br>Amendment 1: Test Site Validation |
| FCC Title 47 CFR Part 15B           | Federal Communications Commission 47 code of federal regulations<br>Part 15: Radio frequency devices                                                                                                     |
| ICES-003:Issue 7 (2020-10)          | Information Technology Equipment (Including Digital Apparatus)                                                                                                                                           |

### 8.2 Test results summary

| Test case                                      | Port      | Reference in FCC ☒          | Reference in ISSED ☒ | Remark | Result |
|------------------------------------------------|-----------|-----------------------------|----------------------|--------|--------|
| Conducted interference voltage                 | AC input  | §15.107                     | ICES-003, Issue 7    | –      | PASS   |
| Radiated field strength emissions 30MHz – 1GHz | Enclosure | §15.109<br>§15.33<br>§15.35 | ICES-003, Issue 7    | –      | PASS   |
| Radiated field strength emissions above 1GHz   | Enclosure | §15.109<br>§15.33<br>§15.35 | ICES-003, Issue 7    | –      | PASS   |

#### Remarks:

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| NA <sub>1</sub> | Not tested as not required by applied standard          |
| NA <sub>2</sub> | Not applicable because port does not exist              |
| NA <sub>3</sub> | Not applicable because port only for services           |
| NA <sub>4</sub> | Not applicable because port lengths not longer than 3m  |
| NA <sub>5</sub> | Not tested because used frequency < 108 MHz             |
| NA <sub>6</sub> | Not applicable because the device is for vehicular use  |
| NP <sub>1</sub> | Not tested because excluded / not requested by customer |

Remarks:



#### 8.4.2 Measurement Protocol(s)

|                                 |                          |                   |                       |
|---------------------------------|--------------------------|-------------------|-----------------------|
| <b>Measurement No.</b>          | P3M1                     |                   |                       |
| <b>Environmental conditions</b> |                          | <b>Tested at:</b> | <b>Allowed range:</b> |
|                                 | Temperature:             | 23.0 °C           | 15.0 °C – 35.0 °C     |
|                                 | Humidity:                | 38.0 %rH          | 30% rH – 60% rH       |
| <b>Test date</b>                | 2026-Jun-18              |                   |                       |
| <b>Operator</b>                 | Wolfgang Markus          |                   |                       |
| <b>EUT power supply:</b>        | AC 120 V / 60 Hz (L1, N) |                   |                       |
| <b>Operating mode</b>           | 01                       |                   |                       |
| <b>Setup</b>                    | 01                       |                   |                       |
| <b>Remarks</b>                  |                          |                   |                       |

| Diagram | Detector                                 | Tested line(s) | Result |
|---------|------------------------------------------|----------------|--------|
| 1.01    | <input checked="" type="checkbox"/> Peak | L1, N          | PASS   |
|         | <input checked="" type="checkbox"/> CAV  |                |        |
|         | <input type="checkbox"/> CAV             |                |        |
|         | <input checked="" type="checkbox"/> QP   |                |        |
|         | pre-scan                                 |                |        |
|         | final scan                               |                |        |

Remark: -

### 8.4.3 Plot/Diagram

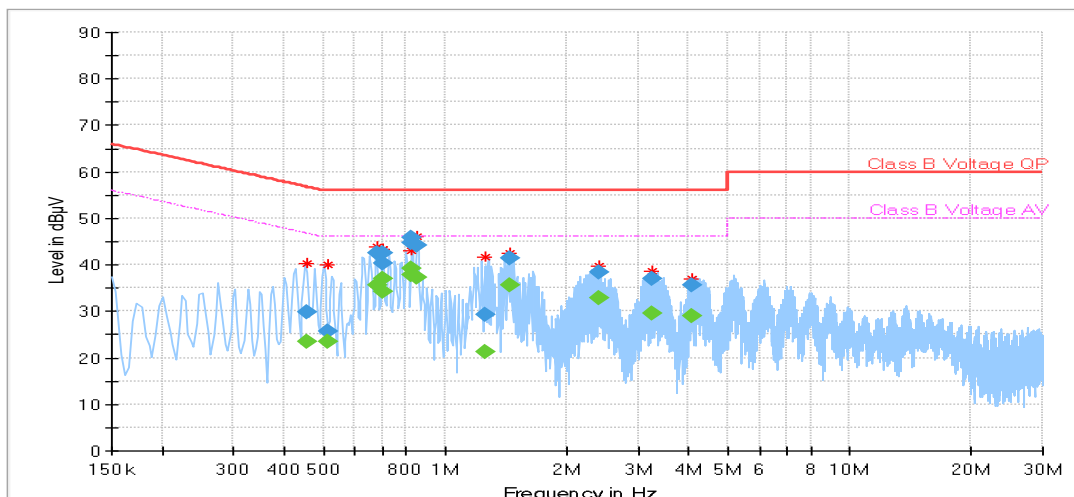
## 1.01

### Common Information

Test Description: Conducted Voltage Measurement Class B  
 Test Site Location: Conducted Emission, CETECOM GmbH Essen  
 Test Software: R&S EMC32 v9.15  
 Test Standard: FCC 15.107, FCC 15.207  
 Operating Mode: 01  
 Measured on line: N/L1  
 Diagram details: Shows the peak values as a sum of measured ports in maxhold mode

Environmental Conditions: Humidity: 38 %rH; Temperature: 23 °C  
 Operator: Mar  
 EUT Setup: 01  
 Verdict: Passed

Full Spectrum



### Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | PE  | Corr. (dB) |
|-----------------|------------------|-----------------|--------------|-------------|-----------------|-----------------|------|-----|------------|
| 0.458281        | ---              | 23.45           | 46.72        | 23.27       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.458281        | 29.72            | ---             | 56.72        | 27.00       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.514063        | ---              | 23.39           | 46.00        | 22.61       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.514063        | 25.59            | ---             | 56.00        | 30.41       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.678281        | ---              | 35.65           | 46.00        | 10.35       | 1000.0          | 9.000           | N    | GND | 0.3        |
| 0.678281        | 42.51            | ---             | 56.00        | 13.49       | 1000.0          | 9.000           | N    | GND | 0.3        |
| 0.699844        | 42.65            | ---             | 56.00        | 13.35       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.699844        | ---              | 36.96           | 46.00        | 9.04        | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.705625        | ---              | 34.24           | 46.00        | 11.76       | 1000.0          | 9.000           | N    | GND | 0.2        |
| 0.705625        | 40.29            | ---             | 56.00        | 15.71       | 1000.0          | 9.000           | N    | GND | 0.2        |
| 0.824844        | 44.62            | ---             | 56.00        | 11.38       | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.824844        | ---              | 37.96           | 46.00        | 8.04        | 1000.0          | 9.000           | L1   | GND | 0.1        |
| 0.827188        | 45.73            | ---             | 56.00        | 10.27       | 1000.0          | 9.000           | N    | GND | 0.2        |
| 0.827188        | ---              | 39.33           | 46.00        | 6.67        | 1000.0          | 9.000           | N    | GND | 0.2        |
| 0.850625        | ---              | 37.30           | 46.00        | 8.70        | 1000.0          | 9.000           | N    | GND | 0.2        |
| 0.850625        | 44.09            | ---             | 56.00        | 11.91       | 1000.0          | 9.000           | N    | GND | 0.2        |
| 1.261406        | ---              | 21.22           | 46.00        | 24.78       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 1.261406        | 29.25            | ---             | 56.00        | 26.75       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 1.452188        | ---              | 35.65           | 46.00        | 10.35       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 1.452188        | 41.45            | ---             | 56.00        | 14.55       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 2.405313        | 38.26            | ---             | 56.00        | 17.74       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 2.405313        | ---              | 32.80           | 46.00        | 13.20       | 1000.0          | 9.000           | L1   | GND | 0.2        |
| 3.258438        | ---              | 29.47           | 46.00        | 16.53       | 1000.0          | 9.000           | N    | GND | 0.4        |
| 3.258438        | 36.87            | ---             | 56.00        | 19.13       | 1000.0          | 9.000           | N    | GND | 0.4        |
| 4.089531        | ---              | 28.87           | 46.00        | 17.13       | 1000.0          | 9.000           | N    | GND | 0.4        |
| 4.089531        | 35.60            | ---             | 56.00        | 20.40       | 1000.0          | 9.000           | N    | GND | 0.4        |

## Hardware Setup: EMI conducted\ESH2-Z5 - [EMI conducted]

Subrange 1

Frequency Range: 9 kHz - 30 MHz

Receiver: ESCS 30 [ESCS 30]  
@ GPIB0 (ADR 19), SN 0, FW 2.30 02.01 02.36

Signal Path: ESH2-Z5 Kabeldämpfung  
FW 1.0  
Correction Table: Conducted Voltage ESH2-Z5 cable loss

LISN: ESH2-Z5  
Correction Table (Line 0): 4-Line-LISN ESH2-Z5 Line L1  
Correction Table (Line 1): 4-Line-LISN ESH2-Z5-Voltage-Division-Factor  
  
Correction Table (Line 2): 4-Line-LISN ESH2-Z5-Voltage-Division-Factor  
  
Correction Table (Line 3): 4-Line-LISN ESH2-Z5-Voltage-Division-Factor

### 8.4.4 Limits

| Frequency Range [MHz] | Class B <input checked="" type="checkbox"/> |                | Class A <input type="checkbox"/> |                |
|-----------------------|---------------------------------------------|----------------|----------------------------------|----------------|
|                       | Quasi-Peak [dBμV]                           | Average [dBμV] | Quasi-Peak [dBμV]                | Average [dBμV] |
| 0.15 – 0.5            | 66 to 56                                    | 56 to 46       | 79                               | 66             |
| 0.5 – 5.0             | 56                                          | 46             | 73                               | 60             |
| 5.0 – 30.0            | 60                                          | 50             | 73                               | 60             |

### 8.4.5 Result

| EMISSION requirement           | Port     | Reference in FCC <input checked="" type="checkbox"/> | Reference in ISCED <input checked="" type="checkbox"/> | Remark | Result |
|--------------------------------|----------|------------------------------------------------------|--------------------------------------------------------|--------|--------|
| Conducted interference voltage | AC input | §15.107                                              | ICES-003 Issue 7                                       | --     | PASS   |

## 8.4.6 Measurement location and Equipment list

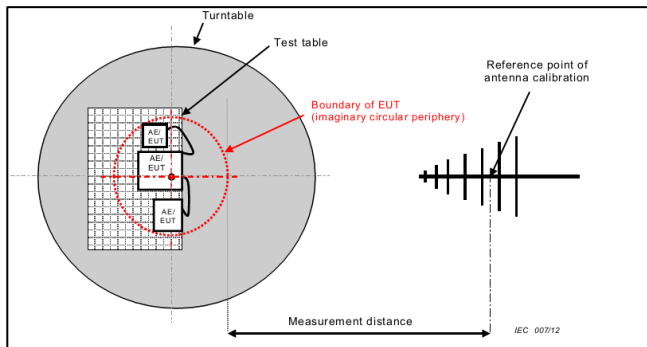
| ID    | Description                                 | Manufacturer                       | SerNo       | CheckType     | Last Check                           | Interval             | Next check                           |
|-------|---------------------------------------------|------------------------------------|-------------|---------------|--------------------------------------|----------------------|--------------------------------------|
|       | 120919 - ESS EMCR - Conducted Emission      |                                    |             | Ver.          | chk: 2025-Dec-23                     | chk: 12M             | chk: 2026-Dec-23                     |
| 20007 | Single-Line V-Network ESH3-Z6               | Rohde & Schwarz Messgerätebau GmbH | 892563/002  | Cal.          | cal: 2026-May-06<br>chk:             | cal: 12M             | cal: 2027-May-06                     |
| 20033 | RF-current probe ESH2-Z1                    | Rohde & Schwarz Messgerätebau GmbH | 879581/18   | Cal.          | cal: 2026-May-05<br>chk:             | cal: 36M             | cal: 2029-May-05                     |
| 20051 | VHF-Current Probe ESV-Z1                    | Rohde & Schwarz Messgerätebau GmbH | 872421      | Ver. Pre Test | chk:                                 |                      |                                      |
| 20099 | Passive Voltage Probe ESH2-Z3               | Rohde & Schwarz Messgerätebau GmbH | 299.7810.52 | Ver. Pre Test | chk:                                 |                      |                                      |
| 20100 | Passive Voltage Probe TK 9416               | Schwarzbeck MESS-ELEKTRONIK OHG    | without     | Ver. Pre Test | chk:                                 |                      |                                      |
| 20300 | Two-Line V-Network (LISN) ESH3-Z5           | Rohde & Schwarz Messgerätebau GmbH | 892 239/020 | Cal.          | cal: 2026-May-07<br>chk:             | cal: 12M             | cal: 2027-May-07                     |
| 20348 | Shielded Room EMI conducted                 | Albatross Projects GmbH            | without     | None          | cal: -<br>chk: -                     | cal: -<br>chk: -     | cal: -<br>chk: -                     |
| 20373 | Single-Line V-Network ESH3-Z6               | Rohde & Schwarz Messgerätebau GmbH | 100535      | Cal.          | cal: 2026-May-06<br>chk:             | cal: 12M             | cal: 2027-May-06                     |
| 20468 | Digital Multimeter Fluke 112                | Fluke Deutschland GmbH             | 90090455    | Cal.          | cal: 2024-May-14<br>chk:             | cal: 36M             | cal: 2027-May-14                     |
| 20533 | Impedance Stabilization Network ISN T200A   | Teseq GmbH                         | 25706       | Ver.          | chk:                                 | chk: 12M             |                                      |
| 20534 | Impedance Stabilization Network ISN T400A   | Teseq GmbH                         | 24881       | Ver.          | chk:                                 | chk: 12M             |                                      |
| 20535 | Impedance Stabilization Network ISN T800    | Teseq GmbH                         | 26321       | Ver.          | chk:                                 | chk: 12M             |                                      |
| 20536 | Impedance Stabilization Network ISN ST08    | Teseq GmbH                         | 25867       | Cal. & Ver.   | cal: 2026-May-05<br>chk: 2025-Sep-16 | cal: 36M<br>chk: 12M | cal: 2029-May-05<br>chk: 2026-Sep-16 |
| 20541 | Impedance Stabilization Network ISN T8-Cat6 | Teseq GmbH                         | 26373       | Ver.          | chk: 2008-Sep-08                     | chk: 12M             |                                      |
| 20556 | Thermo-/Hygrometer WS-9400                  | Conrad Electronic GmbH             | without     | Ver.          | chk: 2026-Mar-13                     | chk: 12M             | chk: 2027-Mar-13                     |
| 80676 | Measurement Software EMC32 (MCE - EMCR)     | Rohde & Schwarz Messgerätebau GmbH | v9.15.00    | None          | cal: -<br>chk: -                     | cal: -<br>chk: -     | cal: -<br>chk: -                     |

## 8.5 Radiated field strength emissions 30 MHz – 1 GHz

### 8.5.1 Description of the general test setup and methodology, see below example:

Test site: Measurements between 30 MHz and 1 GHz are performed in the NSA compliant Semi Anechoic Chamber (SAC) according to EMC basic standard. The test site is compliant to CISPR 16-1-4:2019 chap. 5.3, ANSI C63.4:2014 chap. 5.4.2 to 5.4.4 and ANSI (IEEE) C63.4a:2017

#### Schematic:



#### Testing method:

##### Setup:

- The equipment is set up to simulate normal operation mode as described in the user manual or defined by the manufacturer.
- If the EUT is a tabletop system, a nonconducting table with 0.8 m height is used, which is placed on the ground plane.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables are positioned to simulate normal operation conditions as described in ANSI C 63.4.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- Measurement distance is 10 m or 3 m (see ANSI C 63.4) – see test details.
- EUT is set into operation.

##### Step 1 / Premeasurement:

- Pre-measurement, variation of turntable positions:
- The EUT is set in the worst-case operating mode determined.
- The tests are also carried out as a pre-measurement with peak detector (PK), repetitive scan and max-hold mode.
- Azimuth step of turntable = 90°, antenna heights = 1.0 m & 1.82 m, both polarizations (H/V). If the mounting/usual operating position is defined, the under and the top side of the EUT/test set-up will not be measured. The results are documented in a diagram. The peak values shown in this graphic are not finally maximized. Peak values closer than 20 dB to the limit line are displayed explicitly in a table. If no critical frequencies are found (margin to limit >20 dB) the final measurement must be conducted at at least 6 (highest measured or randomly selected, if noise only) peaks.

##### Step 2 / Final measurement:

- Based on the exploratory measurements, the most critical frequencies are re-measured by maintaining the EUT's worst-case operation mode, cable position, etc. either in 5 m or 3 m semi-anechoic room.
- Final measurement: For the critical frequencies a maximum search is done with PK and CISPR QP detectors: First a frequency zoom within +/- 1.2 MHz (= 10\*IF-BW) of the critical frequencies, then the EUT/test set-up is rotated continuously (if applicable, the EUT orientation will be changed to measure the under and the top side) and the antenna height changed between 1 m & 4 m in order to find the worst case position. The final measurement with the QP detector is carried out in this position and the values are stored in the final result table, which can be found after the diagram.

## 8.5.2 Formula and Example calculation

$$E_C = E_R + AF + C_L + D_F - G_A \quad (1)$$

$$M = L_T - E_C \quad (2)$$

AF = Antenna factor

C<sub>L</sub> = Cable loss

D<sub>F</sub> = Distance correction factor (if used)

E<sub>C</sub> = Electrical field – corrected value

E<sub>R</sub> = Receiver reading

G<sub>A</sub> = Gain of pre-amplifier (if used)

L<sub>T</sub> = Limit

M = Margin

All units are dB-units, positive margin means value is below limit.

List with correction factors (examples)

| Frequency [MHz] | CL [dB] | AF [1/m] |
|-----------------|---------|----------|
| 30.000          | 0.20    | 12.30    |
| 500.000         | 1.90    | 16.80    |
| 1000.000        | 2.50    | 23.30    |

Example calculation:

For example, at 500 MHz the measured Voltage (E<sub>R</sub>) is 12.35 dBμV, the loss of the cable (C<sub>L</sub>) is 1.90 dB and the antenna factor (AF) is 16.80 dB (m<sup>-1</sup>) the result will be calculated:

$$E_C [\text{dB}\mu\text{V/m}] = 12.35 [\text{dB}\mu\text{V}] + 1.90 [\text{dB}] + 16.80 [\text{dB (m}^{-1})] = \mathbf{31.05 [\text{dB}\mu\text{V/m}]} \quad (35.69 \mu\text{V/m})$$

### 8.5.3 Measurement Protocol(s)

|                                 |                          |                  |                      |
|---------------------------------|--------------------------|------------------|----------------------|
| <b>Measurement No.</b>          | P1M1                     |                  |                      |
| <b>Environmental conditions</b> |                          | <b>Tested at</b> | <b>Allowed range</b> |
|                                 | Temperature:             | 24.0 °C          | 15.0 °C – 35.0 °C    |
|                                 | Humidity:                | 37.0 %rH         | 30.0% rH – 60.0% rH  |
| <b>Test date</b>                | 2026-Jun-18              |                  |                      |
| <b>Operator</b>                 | Wolfgang Markus          |                  |                      |
| <b>EUT power supply:</b>        | AC 120 V / 60 Hz (L1, N) |                  |                      |
| <b>Operating mode</b>           | 01                       |                  |                      |
| <b>Setup</b>                    | 01                       |                  |                      |
| <b>Remarks</b>                  |                          |                  |                      |

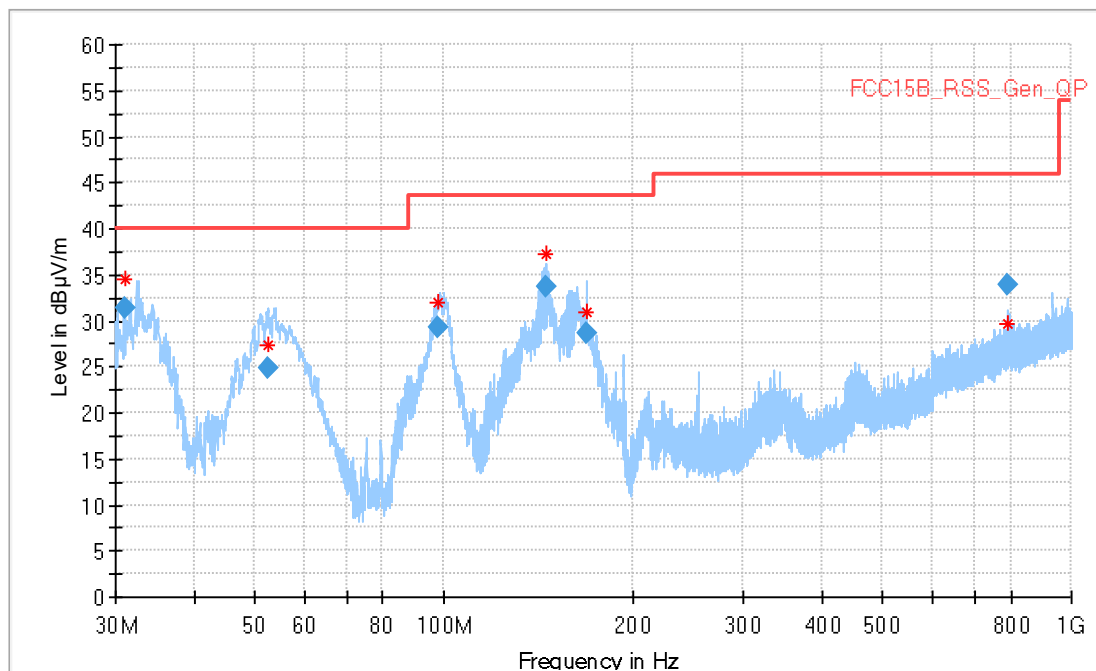
| Diagram |              | Measurement Details                                                                         | Result |
|---------|--------------|---------------------------------------------------------------------------------------------|--------|
| 3.01    | EUT position | <input checked="" type="checkbox"/> Mounting position / usual operating position is defined | PASS   |
|         |              | <input type="checkbox"/> Mounting position / usual operating position undefined             |        |
|         |              | <input type="checkbox"/> standing <input type="checkbox"/> laying                           |        |

Remark: -

## Common Information

|                           |                                         |
|---------------------------|-----------------------------------------|
| Test Description:         | Date: 18.06.2026                        |
| Test Site:                | Electric Field Strength Measurement     |
| Test Location:            | Semi Anechoic Chamber 1 (SAC1)          |
| Version of Testsoftware:  | cetecom advanced GmbH, Essen            |
| Test Specification:       | EMC32 V10.60.20                         |
| Operating Mode:           | FCC Part 15B, 15.109, ICES-003; Class B |
| Used Filter:              | 01                                      |
| Measured side(s):         | none                                    |
| Distance correction:      | front, right, rear, left                |
| Environmental conditions: | no                                      |
| Operator:                 | Humidity: 37 %rH; Temperature: 24 °C    |
|                           | Mar                                     |

Full Spectrum



— Preview Result 1-PK+      \* Critical\_Freqs PK+  
— FCC15B\_RSS\_Gen\_QP      ◆ Final\_Result QPK

## Final\_Result

| Frequency (MHz) | QuasiPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Bandwidth (h) | Height (t) | Pol | Azimuth (h) | Corr. (dB/m) |
|-----------------|--------------------|----------------|-------------|---------------|------------|-----|-------------|--------------|
| 30.992000       | 31.44              | 40.00          | 8.56        | 120.000       | 100.0      | V   | -30.0       | 19           |
| 52.520000       | 24.77              | 40.00          | 15.23       | 120.000       | 103.0      | V   | 35.0        | 7            |
| 98.072000       | 29.34              | 43.50          | 14.16       | 120.000       | 100.0      | V   | 239.0       | 11           |
| 145.148000      | 33.61              | 43.50          | 9.89        | 120.000       | 108.0      | V   | 124.0       | 10           |
| 169.316000      | 28.73              | 43.50          | 14.77       | 120.000       | 100.0      | V   | 161.0       | 12           |
| 792.504000      | 33.91              | 46.00          | 12.09       | 120.000       | 189.0      | V   | 257.0       | 24           |

## Test Receiver/Spectrum Analyzer Settings

### EMI Auto Test Template: 01 - RE FCC15B Class B 30 MHz - 1 GHz

Hardware Setup: ESR7 FCC 3m dbuV  
 Measurement Type: Open-Area-Test-Site (SAC/FAR)  
 Frequency Range: 30 MHz - 1 GHz  
 Graphics Level Range: 25 dBμV/m - 65 dBμV/m

Preview Measurements:  
 Scan Test Template: ESR7 EMI Scan\_Fast\_FCC\_30M-1G\_PK\_3m

| Subrange                             | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|--------------------------------------|-----------|-----------|---------|------------|--------|
| Receiver: [ESU 40]<br>30 MHz - 1 GHz | 40 kHz    | PK+       | 120 kHz | 0,0001 s   | 20 dB  |

Frequency Zoom:  
 Zoom Scan Template: ESR7 EMI Scan\_Zoom\_FCC\_30M-1G\_PK\_3m

Adjustment:  
 Template for Single Meas.: ESR7 EMI Scan\_Search\_FCC\_30M-1G\_PK\_3m

Final Measurements:  
 Template for Single Meas.: ESR7 EMI Scan\_Final\_FCC\_30M-1G\_PK\_3m

| Subrange                             | Step Size | Detectors | IF BW   | Meas. Time | Preamp |
|--------------------------------------|-----------|-----------|---------|------------|--------|
| Receiver: [ESU 40]<br>30 MHz - 1 GHz | 40 kHz    | QPK       | 120 kHz | 1 s        | 20 dB  |

### 8.5.5 Limits

| Frequency Range [MHz] | Class B ☒ (3 meters) |                   | Class A ☐ (3 meters) |                   |
|-----------------------|----------------------|-------------------|----------------------|-------------------|
|                       | Limit<br>[μV/m]      | Limit<br>[dBμV/m] | Limit<br>[μV/m]      | Limit<br>[dBμV/m] |
| 30 - 88               | 100                  | 40.0              | 282                  | 49.0              |
| 88 - 216              | 150                  | 43.5              | 473                  | 53.5              |
| 216 - 960             | 200                  | 46.0              | 661                  | 56.4              |
| 960 - 1000            | 500                  | 54.0              | 944                  | 59.5              |

### 8.5.6 Result / Test Plan

| EMISSION requirement                                   | Port      | Reference<br>in FCC | Reference<br>in ISED | Result |
|--------------------------------------------------------|-----------|---------------------|----------------------|--------|
| Radiated field strength<br>emissions 30 MHz – 1000 MHz | Enclosure | §15.109             | ICES-003<br>Issue 7  | PASS   |

## 8.5.7 Measurement location and Equipment list

| ID    | Description                                 | Manufacturer                       | SerNo                  | CheckType     | Last Check               | Interval         | Next check       |
|-------|---------------------------------------------|------------------------------------|------------------------|---------------|--------------------------|------------------|------------------|
|       | 225911 - ESS SAC1 - Radiated Emission <1GHz |                                    |                        | Ver.          | chk: 2026-Apr-15         | chk: 12M         | chk: 2027-Apr-15 |
| 25311 | EMI Test Receiver ESU40                     | Rohde & Schwarz Messgerätebau GmbH | 100285                 | Cal.          | cal: 2026-May-07<br>chk: | cal: 24M         | cal: 2028-May-07 |
| 25316 | Multifunction AC/DC Power Source Netwave 20 | EM TEST GmbH                       | V1227113059            | Cal.          | cal: 2025-Jun-07<br>chk: | cal: 36M         | cal: 2028-Jun-07 |
| 25348 | EMI Test Receiver ESR7                      | Rohde & Schwarz Messgerätebau GmbH | 101600                 | Cal.          | cal: 2025-May-07<br>chk: | cal: 24M         | cal: 2027-May-07 |
| 25352 | Open Switch and control Platform OSP120     | Rohde & Schwarz Messgerätebau GmbH | 101542-rV              | Ver. Pre Test |                          |                  |                  |
| 25357 | Ultrabroadband Antenna HL562E               | Rohde & Schwarz Messgerätebau GmbH | 100824                 | Cal.          | cal: 2024-Jan-17<br>chk: | cal: 36M         | cal: 2027-Jan-17 |
| 25358 | Semi Anechoic Chamber SAC1                  | Albatross Projects GmbH            | P27281-016             | Cal.          | cal: 2022-Aug-12<br>chk: | cal: 120M        | cal: 2032-Aug-12 |
| 25360 | Antenna Mast BAM 4.5-P                      | maturo GmbH                        | BAM 4.5-P/091/17791115 | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25361 | Controller NCD                              | maturo GmbH                        | NCD/202/17791115       | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25362 | Test Table PTT1.5x1.0x0.8-S_127             | maturo GmbH                        | without                | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25363 | Turn Table TT4.0-4t                         | maturo GmbH                        | TT4.0-4t/553/17791115  | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25376 | Measurement Software EMC32 [SAC1]           | Rohde & Schwarz Messgerätebau GmbH | v10.60.20              | Ver. Pre Test |                          | chk:             |                  |

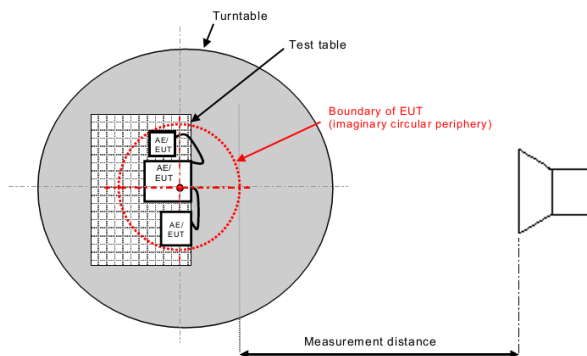
## 8.6 Radiated field strength emissions above 1 GHz

### 8.6.1 Description of the general test setup and methodology, see below example:

Measurements above 1 GHz are performed in the Semi Anechoic Chamber (SAC) with additional floor absorber ( $\Rightarrow$  FAC).

This site is compliant to CISPR 16-1-4:2019+A1:2020 and ANSI (IEEE) C63.25.1-2018 chapter 5.1 (a), method acc. to CISPR 16-1-4:2010 + Cor.1:2010 + A1:2012 + A2:2017, chapter 8.3.3. The measurement distance was set to 3 meters for frequencies up to 18 GHz and 2 meters above 18 GHz. Horn antennas are used for frequency range 1 GHz to 40 GHz. The EUT is aligned within 3 dB beam width of the measurement antenna with three orthogonal axis measurements on the EUT. Evaluating the emissions must be done first by an exploratory emissions measurement and a final measurement for most critical frequencies.

#### Schematic:



#### Testing method above 1 GHz:

##### Step 1 - Exploratory, preliminary measurements:

Pre-measurement, variation of turntable positions: The EUT is set in the determined worst case operating mode. The tests are carried out as a pre-measurement with PK and CISPR AV detectors, repetitive scan and max-hold mode, azimuth step of turntable =  $15^\circ$ , antenna height = 1.0 m & 1.82 m, both polarizations (H/V). If the mounting/usual operating position is defined, the under and the top side of the EUT/test set-up will not be measured. If required, a height scan of the RX-Antenna is also performed (Step size =  $0.8 \times$  smallest applicable w) while aimed to the EUT. The results are documented in a diagram with separate traces for each detector, upper trace = PK, lower trace = CISPR AV. The values shown in this graphic are not finally maximized. Values closer than 20 dB to the corresponding limit line are displayed explicitly in a table which will be used for the final measurement. If no critical peaks are found (margin to limit  $>20$  dB) the final measurement must be conducted at at least 6 (highest measured or randomly selected, if noise only) peaks.

##### Step 2 - Final measurement:

Based on the exploratory measurements, the most critical frequencies are re-measured with a maximum search with PK and CISPR AV detectors:

First a frequency zoom within  $\pm 10$  MHz ( $=10 \times \text{IF-BW}$ ) of the critical frequencies, then the EUT/test set-up will be rotated continuously within  $\pm 15^\circ$  of the detected critical turntable position, (if applicable, the EUT orientation will be changed to measure the under and the top side) and the antenna height changed between 1 m & 4 m while aimed to the EUT in order to find the worst case position. The final measurements with PK and CISPR AV detectors are carried out in this position and the values are stored in the final result table, which can be found after the diagram.

### 8.6.2 Formula:

$$E_C = E_R + A_F + C_L + D_F - G_A \quad (1)$$

$$M = L_T - E_C \quad (2)$$

$E_C$  = Electrical field – corrected value

$E_R$  = Receiver reading

$M$  = Margin

$L_T$  = Limit

$A_F$  = Antenna factor

$C_L$  = Cable loss

$D_F$  = Distance correction factor (if used)

$G_A$  = Gain of pre-amplifier (if used)

All units are dB-units, positive margin means value is below limit.

### 8.6.3 Sample Calculation:

| Raw Value<br>[dB $\mu$ V/m] | Antenna factor | Distance correction<br>[dB] | Cable Loss + Pre-<br>Amplifier | Resulting correction value<br>[dB] | Final result<br>[dB $\mu$ V/m] |
|-----------------------------|----------------|-----------------------------|--------------------------------|------------------------------------|--------------------------------|
| 29.37                       | 41.20          | –                           | 24.28                          | 16.92                              | 46.3                           |

### 8.6.4 Measurement Protocol(s)

|                                 |                          |                  |                      |
|---------------------------------|--------------------------|------------------|----------------------|
| <b>Measurement No.</b>          | P2M1                     |                  |                      |
| <b>Environmental conditions</b> | Temperature:             | <b>Tested at</b> | <b>Allowed range</b> |
|                                 |                          | 24.0 °C          | 15.0 °C – 35.0 °C    |
|                                 | Humidity:                | 37.0 %rH         | 30.0% rH – 60.0% rH  |
| <b>Test date</b>                | 2026-Jun-18              |                  |                      |
| <b>Operator</b>                 | Wolfgang Markus          |                  |                      |
| <b>EUT power supply:</b>        | AC 120 V / 60 Hz (L1, N) |                  |                      |
| <b>Operating mode</b>           | 01                       |                  |                      |
| <b>Setup</b>                    | 01                       |                  |                      |
| <b>Remarks</b>                  |                          |                  |                      |

| Diagram | Measurement Details |                                                                                             | Result |
|---------|---------------------|---------------------------------------------------------------------------------------------|--------|
| 4.01    | EUT position        | <input checked="" type="checkbox"/> Mounting position / usual operating position is defined | PASS   |
|         |                     | <input type="checkbox"/> Mounting position / usual operating position undefined             |        |
|         |                     | <input type="checkbox"/> standing <input type="checkbox"/> laying                           |        |

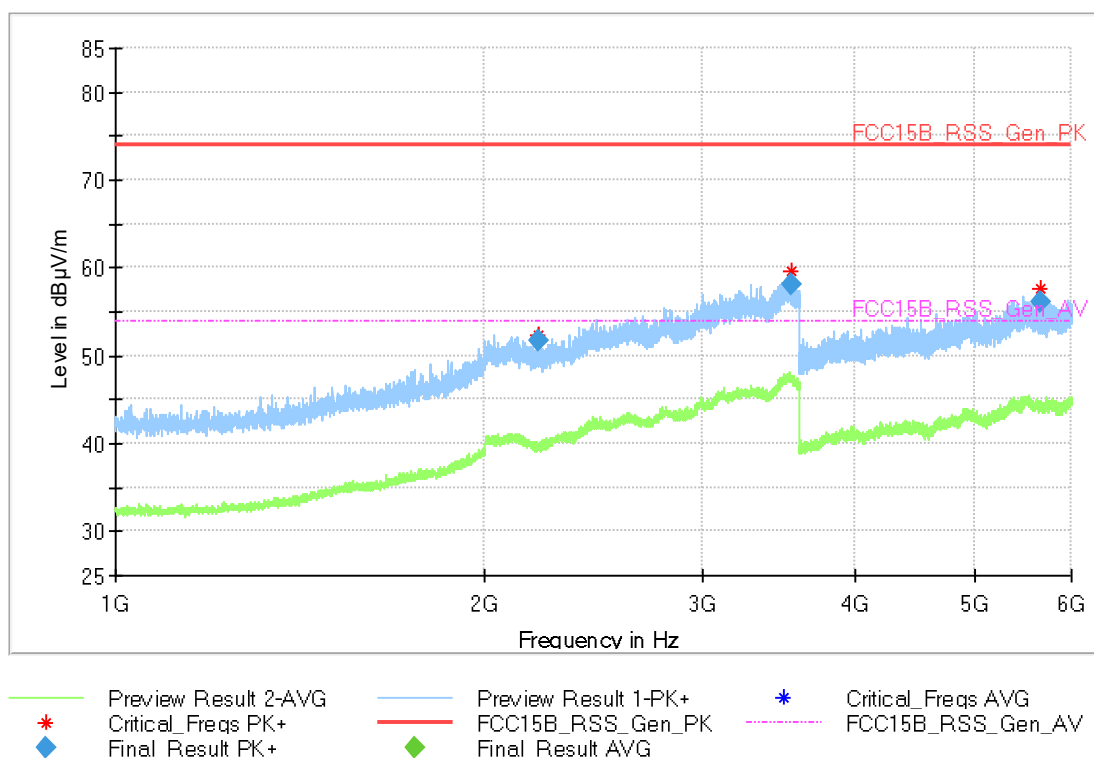
Remark: -

## 4.01

### Common Information

|                           |                                         |
|---------------------------|-----------------------------------------|
| Test Description:         | Date: 18.06.2026                        |
| Test Site:                | Electric Field Strength Measurement     |
| Test Location:            | Semi Anechoic Chamber 1 (SAC1)          |
| Version of Testsoftware:  | cetecom advanced GmbH, Essen            |
| Test Specification:       | EMC32 V10.60.20                         |
| Operating Mode:           | FCC Part 15B, 15.109, ICES-003; Class B |
| Used Filter:              | 01                                      |
| Measured side(s):         | none                                    |
| Distance correction:      | front, right, rear, left                |
| Environmental conditions: | no                                      |
| Operator:                 | Humidity: 37 %rH; Temperature: 24 °C    |
|                           | Mar                                     |

Full Spectrum



### Final\_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Bandwidth h | Height t | Pol | Azimuth h | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|----------|-----|-----------|--------------|
| 2207.820000     | 51.73            | 74.00          | 22.27       | 1000.000    | 123.0    | V   | 290.0     | 35           |
| 3550.300000     | 58.14            | 74.00          | 15.86       | 1000.000    | 306.0    | V   | 88.0      | 40           |
| 5653.620000     | 56.09            | 74.00          | 17.91       | 1000.000    | 223.0    | H   | 29.0      | 46           |

## Test Receiver/Spectrum Analyzer Settings

### EMI Auto Test Template: 02 - RE FCC15B Class B 1 GHz - 6 GHz

Hardware Setup: ESR7 FCC 3m dbuV  
 Measurement Type: Open-Area-Test-Site (SAC/FAR)  
 Frequency Range: 1 GHz - 6 GHz  
 Graphics Level Range: 25 dBµV/m - 85 dBµV/m

Preview Measurements:  
 Scan Test Template: ESR7 EMI Scan\_Fast\_FCC\_1\_6G\_PK\_AV\_3m

| Subrange                            | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|-------------------------------------|-----------|-----------|-------|------------|--------|
| Receiver: [ESU 40]<br>1 GHz - 6 GHz | 400 kHz   | PK+ ; AVG | 1 MHz | 0,0001 s   | 20 dB  |

Frequency Zoom:  
 Zoom Scan Template: ESR7 EMI Scan\_Zoom\_FCC\_1\_6G\_PK\_AV\_3m

Adjustment:  
 Template for Single Meas.: ESR7 EMI Scan\_Search\_FCC\_1\_6G\_PK\_AV\_3m

Final Measurements:  
 Template for Single Meas.: ESR7 EMI Scan\_Final\_FCC\_1\_6G\_PK\_AV\_3m

| Subrange                            | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|-------------------------------------|-----------|-----------|-------|------------|--------|
| Receiver: [ESU 40]<br>1 GHz - 6 GHz | 400 kHz   | PK+ ; AVG | 1 MHz | 0,1 s      | 20 dB  |

|                                 |                          |        |                      |
|---------------------------------|--------------------------|--------|----------------------|
| <b>Measurement No.</b>          | P2M2                     |        |                      |
| <b>Environmental conditions</b> | <b>Tested at</b>         |        | <b>Allowed range</b> |
|                                 | Temperature:             | 24 °C  | 15.0 °C – 35.0 °C    |
|                                 | Humidity:                | 37 %rH | 30.0% rH – 60.0% rH  |
| <b>Test date</b>                | 2026-Jun-18              |        |                      |
| <b>Operator</b>                 | Wolfgang Markus          |        |                      |
| <b>EUT power supply:</b>        | AC 120 V / 60 Hz (L1, N) |        |                      |
| <b>Operating mode</b>           | 01                       |        |                      |
| <b>Setup</b>                    | 01                       |        |                      |
| <b>Remarks</b>                  |                          |        |                      |

| Diagram |              | Measurement Details                                                                         | Result |
|---------|--------------|---------------------------------------------------------------------------------------------|--------|
| 4.02    | EUT position | <input checked="" type="checkbox"/> Mounting position / usual operating position is defined | PASS   |
|         |              | <input type="checkbox"/> Mounting position / usual operating position undefined             |        |
|         |              | <input type="checkbox"/> standing <input type="checkbox"/> laying                           |        |

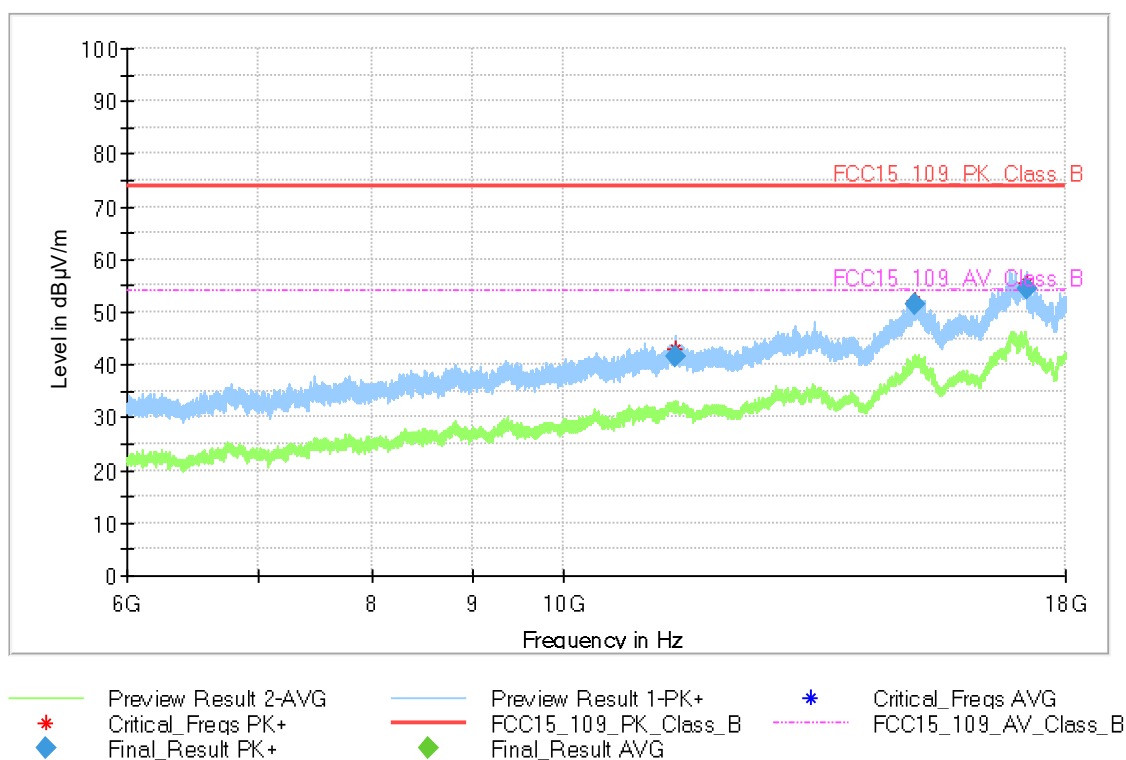
Remark: -

## 4.02

### Common Information

|                           |                                         |
|---------------------------|-----------------------------------------|
| Test Description:         | Date: 18.06.2026                        |
| Test Site:                | Electric Field Strength Measurement     |
| Test Location:            | Semi Anechoic Chamber 1 (SAC1)          |
| Version of Testsoftware:  | cetecom advanced GmbH, Essen            |
| Test Specification:       | EMC32 V10.60.20                         |
| Operating Mode:           | FCC Part 15B, 15.109, ICES-003; Class B |
| Used Filter:              | 01                                      |
| Measured side(s):         | none                                    |
| Distance correction:      | front, right, rear, left                |
| Environmental conditions: | no                                      |
| Operator:                 | Humidity: 37 %rH; Temperature: 24 °C    |
|                           | Mar                                     |

Full Spectrum



### Final\_Result

| Frequency (MHz) | MaxPeak (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Bandwidth h | Height t | Pol | Azimuth h | Corr. (dB/m) |
|-----------------|------------------|----------------|-------------|-------------|----------|-----|-----------|--------------|
| 11392.991800    | 41.48            | 74.00          | 32.52       | 1000.000    | 124.0    | H   | 201.0     | 0            |
| 15089.193533    | 51.43            | 74.00          | 22.57       | 1000.000    | 122.0    | H   | -3.0      | 7            |
| 17188.202400    | 54.32            | 74.00          | 19.68       | 1000.000    | 267.0    | H   | -18.0     | 11           |

## Test Receiver/Spectrum Analyzer Settings

### EMI Auto Test Template: 03 - FSU26 RE FCC15B Class B 6-18GHz

Hardware Setup: FSU26 1-18GHz Mast 1  
 Measurement Type: Open-Area-Test-Site (SAC/FAR)  
 Frequency Range: 6 GHz - 18 GHz  
 Graphics Level Range: 0 dB $\mu$ V/m - 100 dB $\mu$ V/m

Preview Measurements:  
 Sweep Test Template: FCC Pre-Sweep 6-18GHz Mast 1

| Subrange                             | Step Size | Detectors | Bandwidth | Sweep Time | Preamp |
|--------------------------------------|-----------|-----------|-----------|------------|--------|
| Receiver: [FSU 26]<br>6 GHz - 18 GHz | 400 kHz   | PK+ ; AVG | 1 MHz     | 3 s        | 0 dB   |

Frequency Zoom:  
 Zoom Sweep Template: FCC Zoom-Sweep 6-18GHz Mast 1

Adjustment:  
 Template for Single Meas.: FCC Search PK AV 100ms

Final Measurements:  
 Template for Single Meas.: FCC Final Scan 6-18GHz - Mast 1

| Subrange                             | Step Size | Detectors | IF BW | Meas. Time | Preamp |
|--------------------------------------|-----------|-----------|-------|------------|--------|
| Receiver: [FSU 26]<br>6 GHz - 18 GHz | 400 kHz   | PK+ ; AVG | 1 MHz | 0,1 s      | 0 dB   |

### 8.6.7 Limits

| Frequency Range | Class B <input checked="" type="checkbox"/> (3 meters) |                         | Class A <input type="checkbox"/> (3 meters) |                         | Detector |
|-----------------|--------------------------------------------------------|-------------------------|---------------------------------------------|-------------------------|----------|
|                 | Limit<br>[ $\mu$ V/m]                                  | Limit<br>[dB $\mu$ V/m] | Limit<br>[ $\mu$ V/m]                       | Limit<br>[dB $\mu$ V/m] |          |
| Above 1000 MHz  | 500                                                    | 54                      | 950                                         | 59.5                    | Average  |
|                 | 5000                                                   | 74                      | 9500                                        | 79.5                    | Peak     |

### 8.6.8 Result

| EMISSION requirement                                | Port      | Reference<br>in FCC | Reference<br>in ISED | Result |
|-----------------------------------------------------|-----------|---------------------|----------------------|--------|
| Radiated field strength<br>emissions above 1000 MHz | Enclosure | §15.109             | ICES-003<br>Issue 7  | PASS   |

## 8.6.9 Measurement location and Equipment list

| ID    | Description                                 | Manufacturer                       | SerNo                  | CheckType     | Last Check               | Interval         | Next check       |
|-------|---------------------------------------------|------------------------------------|------------------------|---------------|--------------------------|------------------|------------------|
|       | 225912 - ESS SAC1 - Radiated Emission >1GHz |                                    |                        | Ver.          | chk: 2025-Mar-12         | chk: 24M         | chk: 2027-Mar-12 |
| 25311 | EMI Test Receiver ESU40                     | Rohde & Schwarz Messgerätebau GmbH | 100285                 | Cal.          | cal: 2026-May-07<br>chk: | cal: 24M         | cal: 2028-May-07 |
| 25316 | Multifunction AC/DC Power Source Netwave 20 | EM TEST GmbH                       | V1227113059            | Cal.          | cal: 2025-Jun-07<br>chk: | cal: 36M         | cal: 2028-Jun-07 |
| 25348 | EMI Test Receiver ESR7                      | Rohde & Schwarz Messgerätebau GmbH | 101600                 | Cal.          | cal: 2025-May-07<br>chk: | cal: 24M         | cal: 2027-May-07 |
| 25352 | Open Switch and control Platform OSP120     | Rohde & Schwarz Messgerätebau GmbH | 101542-rV              | Ver. Pre Test | chk:                     |                  |                  |
| 25358 | Semi Anechoic Chamber SAC1                  | Albatross Projects GmbH            | P27281-016             | Cal.          | cal: 2022-Aug-12<br>chk: | cal: 120M        | cal: 2032-Aug-12 |
| 25360 | Antenna Mast BAM 4.5-P                      | maturo GmbH                        | BAM 4.5-P/091/17791115 | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25361 | Controller NCD                              | maturo GmbH                        | NCD/202/17791115       | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25362 | Test Table PTT1.5x1.0x0.8-S_127             | maturo GmbH                        | without                | None          | cal: -<br>chk: -         | cal: -<br>chk: - | cal: -<br>chk: - |
| 25364 | Double-Ridged Horn Antenna HF 907           | Rohde & Schwarz Messgerätebau GmbH | 102488                 | Cal.          | cal: 2024-Sep-11<br>chk: | cal: 36M         | cal: 2027-Sep-11 |
| 25376 | Measurement Software EMC32 [SAC1]           | Rohde & Schwarz Messgerätebau GmbH | v10.60.20              | Ver. Pre Test | chk:                     |                  |                  |
| 25417 | Spectrum Analyser FSU26                     | Rohde & Schwarz Messgerätebau GmbH | 200413                 | Cal.          | cal: 2025-May-08<br>chk: | cal: 24M         | cal: 2027-May-08 |

- END OF TEST REPORT -