

| <b>RADIO REPORT</b><br><b>FCC 47 CFR Part 15C</b><br><b>ISED Canada RSS-210</b><br><b>Operation within the 13.110 – 14.010 MHz band</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Report Reference No</b>                                                                                                              | G0M-1912-8673-TFC225RI-V02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Testing Laboratory</b>                                                                                                               | Eurofins Product Service GmbH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Address</b>                                                                                                                          | Storkower Str. 38c<br>15526 Reichenwalde<br>Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Accreditation</b>                                                                                                                    |    <br>DAkkS - Registration number : D-PL-12092-01-03 (ISED)<br>ISED Testing Laboratory site: 3470A-2<br>DAkkS - Registration number : D-PL-12092-01-04 (FCC)<br>FCC Filed Test Laboratory, Reg.-No.: 96970 |
| <b>Applicant</b>                                                                                                                        | W.O.M. WORLD OF MEDICINE GmbH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Address</b>                                                                                                                          | Salzufer 8<br>10587 Berlin<br>GERMANY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Test Specification</b>                                                                                                               | 47 CFR Part 15C<br>RSS-210, Issue 10, 2019-12<br>RSS-Gen, Issue 5, Amendment 1, 2019-03                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Non-Standard Test Method</b>                                                                                                         | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Equipment under Test (EUT):</b>                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Product Description</b>                                                                                                              | Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Model(s)</b>                                                                                                                         | FM300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Additional Model(s)</b>                                                                                                              | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Brand Name(s)</b>                                                                                                                    | PNEUMOCLEAR™                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Hardware Version(s)</b>                                                                                                              | Hardware traceability is constituted by serial number of device (assembled with processor board Toratex PXA320) SN: 1902CE0537                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Software Version(s)</b>                                                                                                              | 1.0.34.7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>FCC-ID</b>                                                                                                                           | 2AS5K-TSHW42                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>IC</b>                                                                                                                               | 25004-TSHW42A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Test Result</b>                                                                                                                      | <b>PASSED</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

Test Report No.: G0M-1912-8673-TFC225RI-V02

Eurofins Product Service GmbH  
Storkower Str. 38c, D-15526 Reichenwalde, Germany

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                               |                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Possible test case verdicts:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                               |                                                                                                                                                                                      |
| Required by standard but not tested                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/T                                           |                                                                                                                                                                                      |
| Not required by standard                                                                                                                                                                                                                                                                                                                                                                                                                                                       | N/R                                           |                                                                                                                                                                                      |
| Not applicable to EUT                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N/A                                           |                                                                                                                                                                                      |
| Test object does meet the requirement                                                                                                                                                                                                                                                                                                                                                                                                                                          | P(PASS)                                       |                                                                                                                                                                                      |
| Test object does not meet the requirement                                                                                                                                                                                                                                                                                                                                                                                                                                      | F(FAIL)                                       |                                                                                                                                                                                      |
| <b>Testing:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                               |                                                                                                                                                                                      |
| Test Lab Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 20 °C - 30 °C                                 |                                                                                                                                                                                      |
| Test Lab Humidity                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 25 % - 55 %                                   |                                                                                                                                                                                      |
| Date of receipt of test item                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2020-06-22                                    |                                                                                                                                                                                      |
| <b>Report:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                               |                                                                                                                                                                                      |
| Compiled by                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Florian Voigt                                 |                                                                                                                                                                                      |
| Tested by (+ signature)<br>(Responsible for Test)                                                                                                                                                                                                                                                                                                                                                                                                                              | Florian Voigt<br>supervised by<br>Toralf Jahn | <br><br>..... |
| Approved by (+ signature)<br>(Head of Lab)                                                                                                                                                                                                                                                                                                                                                                                                                                     | Christian Weber                               | <br>.....                                                                                       |
| Date of Issue                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2020-10-30                                    |                                                                                                                                                                                      |
| Total number of pages                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 44                                            |                                                                                                                                                                                      |
| <b>General Remarks:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                               |                                                                                                                                                                                      |
| <p>The test results presented in this report relate only to the object tested.</p> <p>The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.</p> <p>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p> |                                               |                                                                                                                                                                                      |
| <b>Additional Comments:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                               |                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                               |                                                                                                                                                                                      |

## VERSION HISTORY

| Version History |            |                                                                                                                                      |            |
|-----------------|------------|--------------------------------------------------------------------------------------------------------------------------------------|------------|
| Version         | Issue Date | Remarks                                                                                                                              | Revised By |
| 01              | 2020-09-09 | Initial Release                                                                                                                      |            |
| 02              | 2020-10-30 | Replaced document: G0M-1912-8673-TFC225RI-V01<br>Replaced by: G0M-1912-8673-TFC225RI-V02<br><br>Reason:<br>RSS-210 version corrected | T.Jahn     |

## ABBREVIATIONS AND ACRONYMS

| Acronyms         |                                                     |
|------------------|-----------------------------------------------------|
| Acronym          | Description                                         |
| EUT              | Equipment Under Test                                |
| FCC              | Federal Communications Commission                   |
| ISED             | Innovation, Science and Economic Development Canada |
| RBW              | Resolution bandwidth                                |
| RFID             | Radio Frequency Identification                      |
| RMS              | Root mean square                                    |
| VBW              | Video bandwidth                                     |
| V <sub>NOM</sub> | Nominal supply voltage                              |

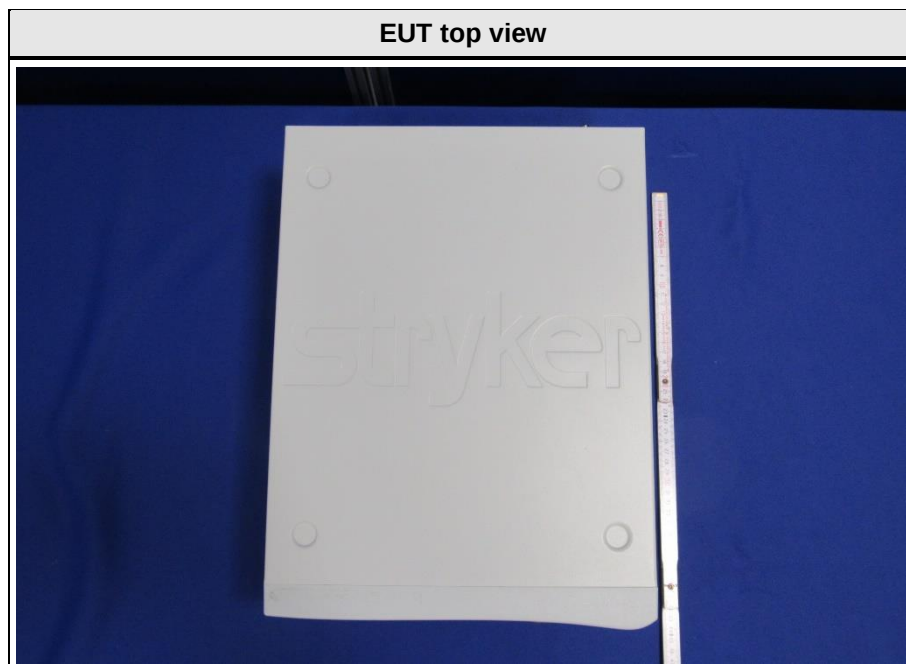
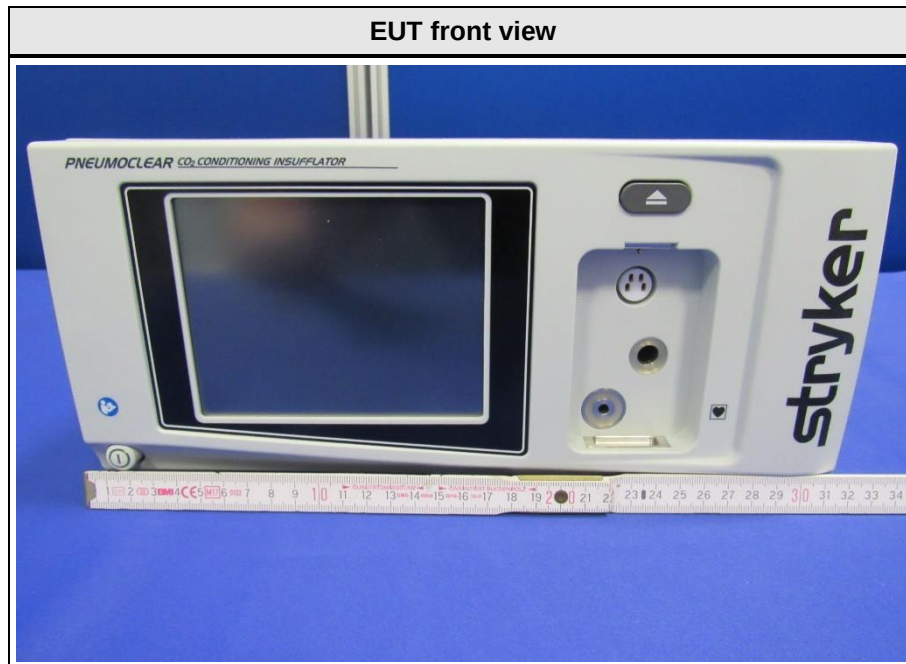
## REPORT INDEX

|          |                                                                                             |           |
|----------|---------------------------------------------------------------------------------------------|-----------|
| <b>1</b> | <b>Equipment (Test Item) Under Test.....</b>                                                | <b>6</b>  |
| 1.1      | Photos – Equipment External .....                                                           | 7         |
| 1.2      | Photos – Equipment Internal .....                                                           | 11        |
| 1.3      | Photos – Test Setup.....                                                                    | 22        |
| 1.4      | Support Equipment.....                                                                      | 25        |
| 1.5      | Test Modes .....                                                                            | 26        |
| 1.6      | Test Frequencies.....                                                                       | 27        |
| 1.7      | Sample emission level calculation.....                                                      | 28        |
| <b>2</b> | <b>Result Summary.....</b>                                                                  | <b>29</b> |
| <b>3</b> | <b>Test Conditions and Results.....</b>                                                     | <b>30</b> |
| 3.1      | Test Conditions and Results - Fundamental in-band field strength emissions .....            | 30        |
| 3.2      | Test Conditions and Results - Emissions radiated outside the specified frequency band ..... | 32        |
| 3.3      | Test Conditions and Results - AC powerline conducted emissions.....                         | 34        |
| ANNEX A  | Transmitter in-band emissions .....                                                         | 36        |
| ANNEX B  | Transmitter radiated spurious emissions.....                                                | 37        |

## 1 Equipment (Test Item) Under Test

|                          |                                                                                                                                |                               |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Description              | Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures                                              |                               |
| Model                    | FM300                                                                                                                          |                               |
| Additional Model(s)      | None                                                                                                                           |                               |
| Brand Name(s)            | PNEUMOCLEAR™                                                                                                                   |                               |
| Serial Number(s)         | 1902CE0537/ÄV2018-143                                                                                                          |                               |
| Hardware Version(s)      | Hardware traceability is constituted by serial number of device (assembled with processor board Toratex PXA320) SN: 1902CE0537 |                               |
| Software Version(s)      | 1.0.34.7                                                                                                                       |                               |
| PMN                      | TS-HW42                                                                                                                        |                               |
| HVIN                     | 1430                                                                                                                           |                               |
| FVIN                     | n/a                                                                                                                            |                               |
| HMN                      | FM300                                                                                                                          |                               |
| FCC-ID                   | 2AS5K-TSHW42                                                                                                                   |                               |
| IC                       | 25004-TSHW42A                                                                                                                  |                               |
| Equipment type           | End Product                                                                                                                    |                               |
| Radio type               | Transceiver                                                                                                                    |                               |
| Assigned frequency bands | 13.110 - 14.010 MHz                                                                                                            |                               |
| Radio technology         | RFID                                                                                                                           |                               |
| Modulation               | ASK                                                                                                                            |                               |
| Radio Module             | Type                                                                                                                           | RFID Module                   |
|                          | Model                                                                                                                          | TS-HW42                       |
|                          | Manufacturer                                                                                                                   | W.O.M. WORLD OF MEDICINE GmbH |
|                          | HW Version                                                                                                                     | 1430                          |
|                          | SW Version                                                                                                                     | PRV100                        |
|                          | FCC-ID                                                                                                                         | 2AS5K-TSHW42                  |
|                          | IC                                                                                                                             | 25004-TSHW42A                 |
| Antenna                  | Type                                                                                                                           | Integrated                    |
|                          | Model                                                                                                                          | TS-AH20                       |
|                          | Manufacturer                                                                                                                   | GiS GmbH                      |
|                          | Gain                                                                                                                           | Not specified                 |
| Supply Voltage           | V <sub>NOM</sub>                                                                                                               | 120 VAC                       |
| Operating Temperature    | T <sub>NOM</sub>                                                                                                               | 25 °C                         |
| AC/DC-Adaptor            | None                                                                                                                           |                               |
| Manufacturer             | W.O.M. WORLD OF MEDICINE GmbH<br>Salzufer 8<br>10587 Berlin<br>GERMANY                                                         |                               |

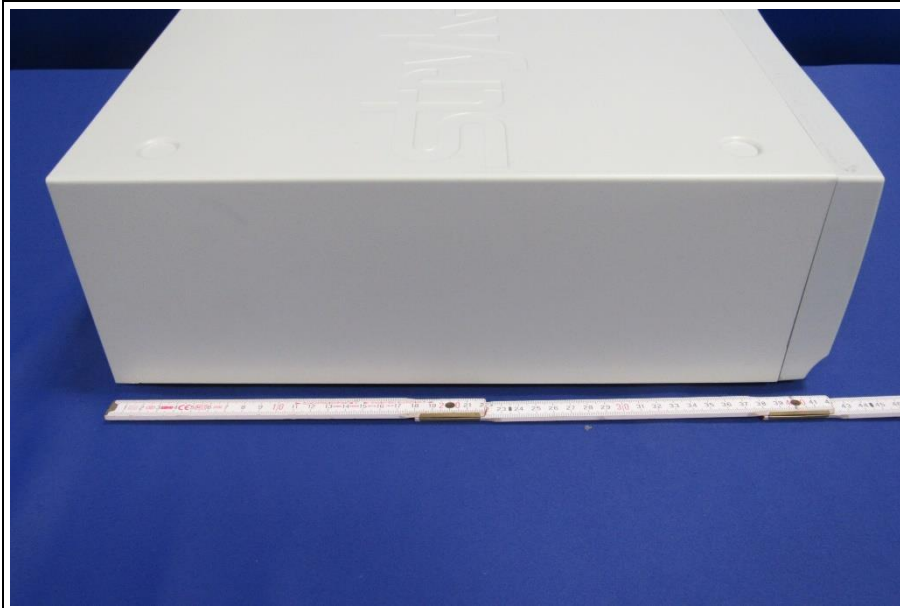
## 1.1 Photos – Equipment External



**EUT right side view**



**EUT left side view**



EUT back side view with labels



EUT bottom side view



AE Dummy LAP Adult

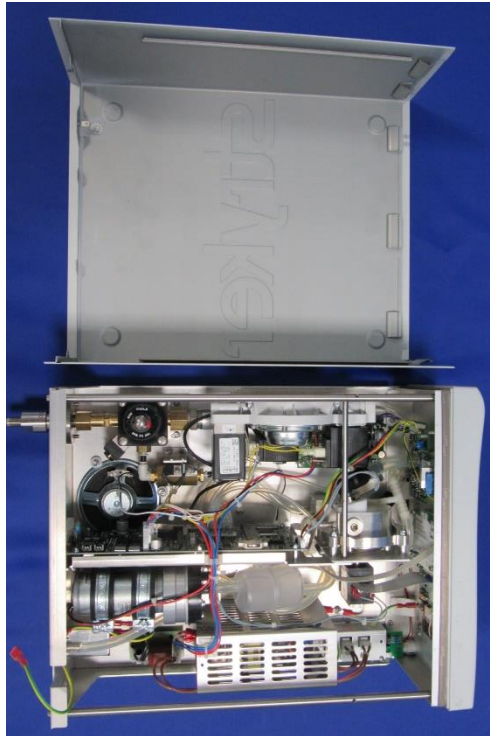


Test Report No.: G0M-1912-8673-TFC225RI-V02

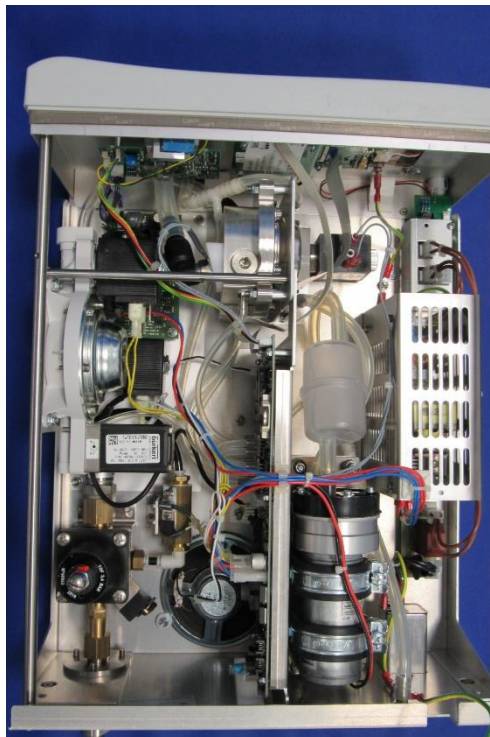
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## 1.2 Photos – Equipment Internal

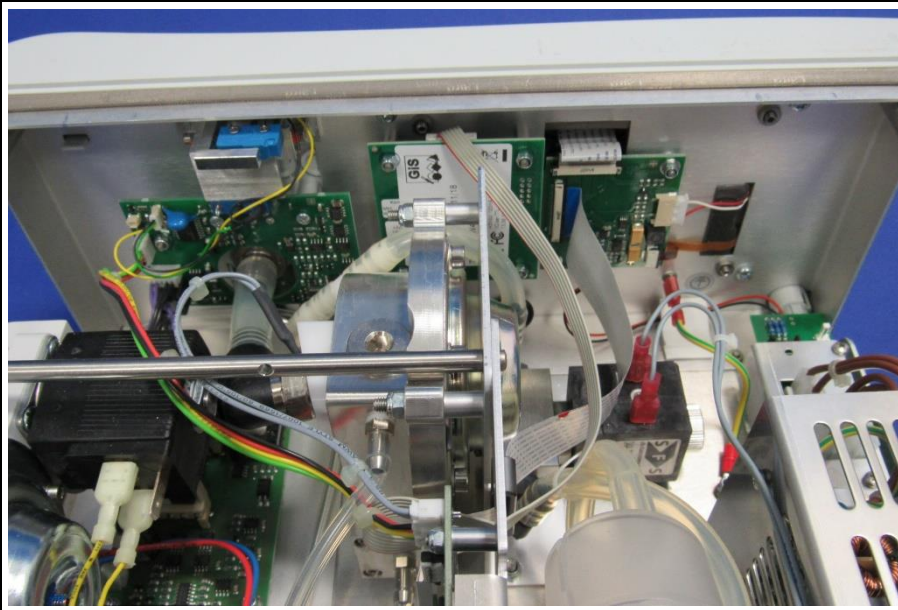
**EUT top view with removed cover**



**EUT internal top view**



**EUT view A**



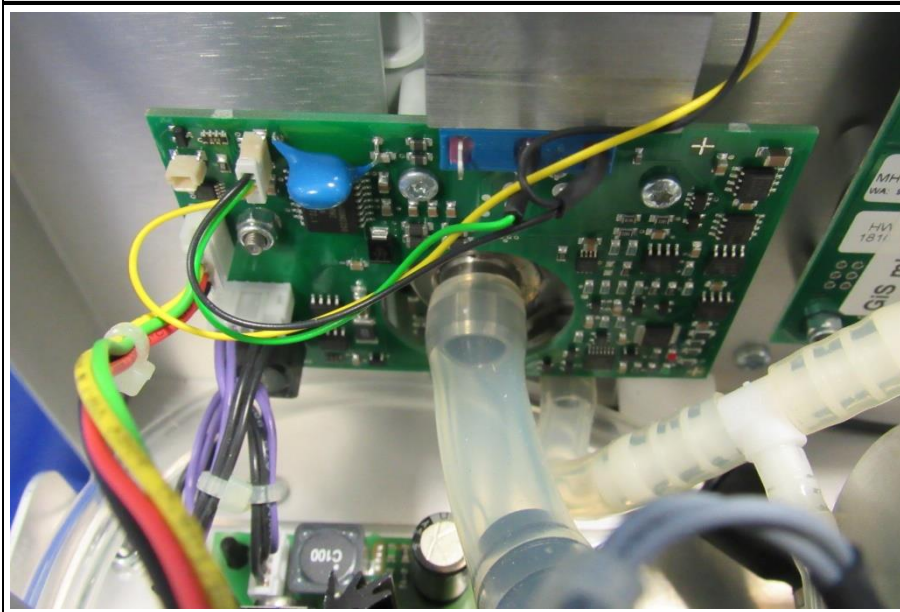
**EUT view on radio module A**



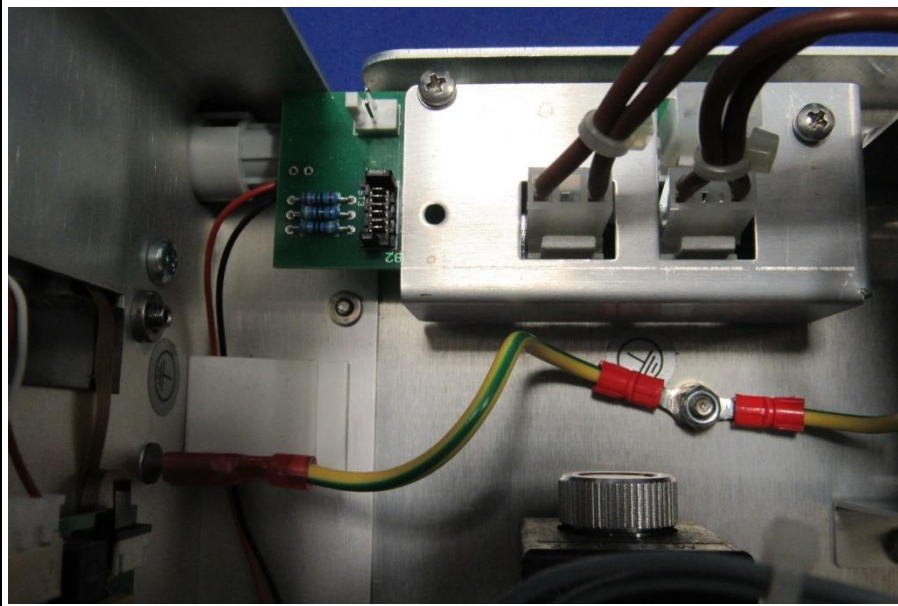
EUT view on RFID antenna



EUT view B



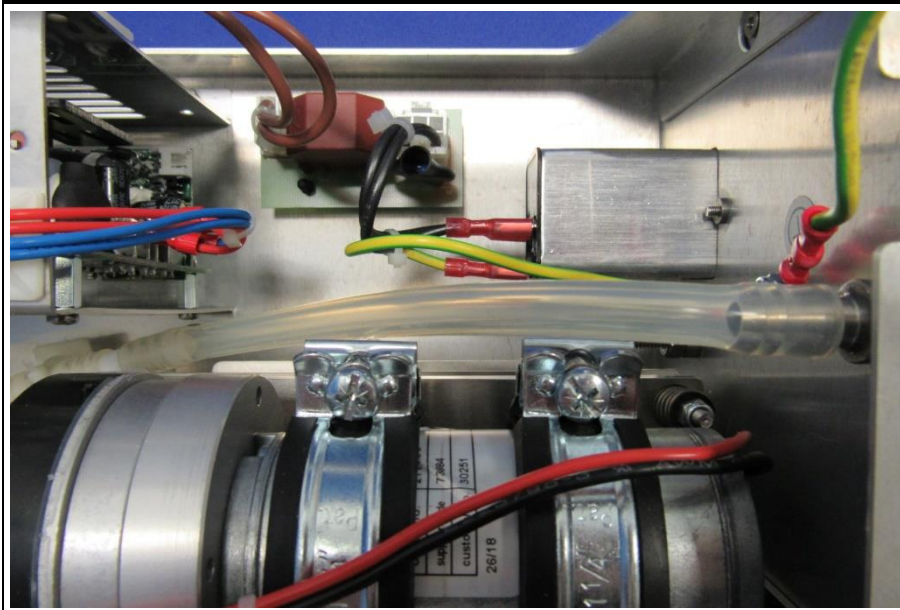
EUT view C



EUT view D



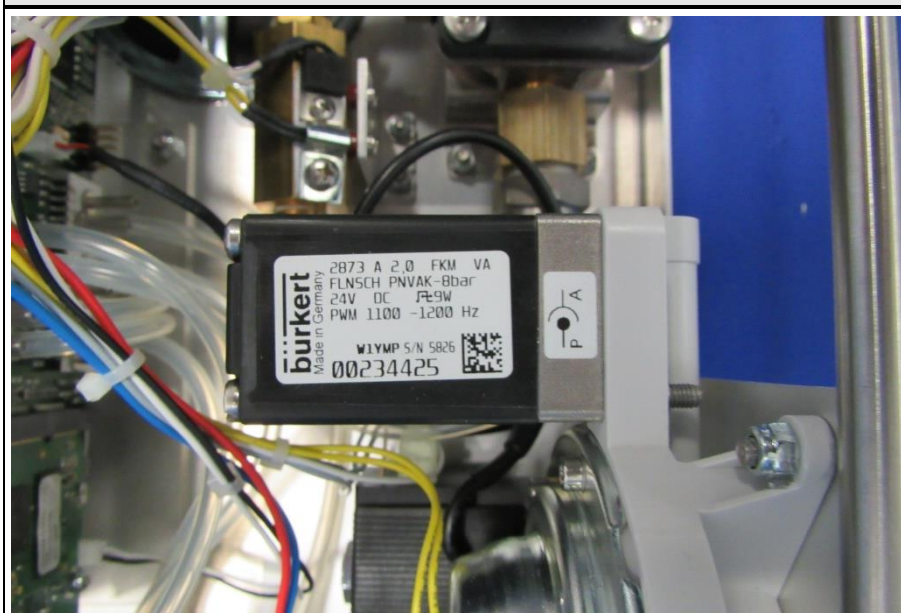
EUT view E



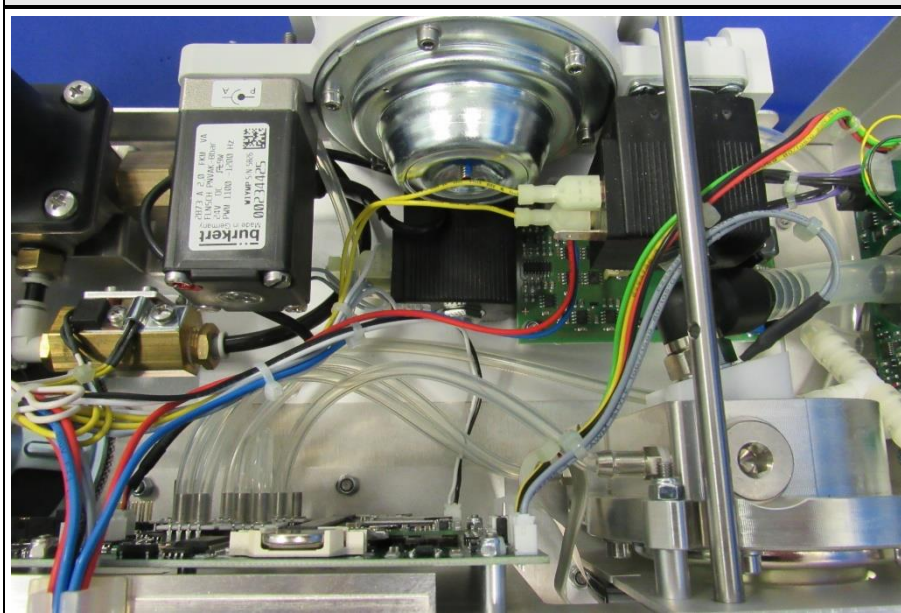
EUT view F



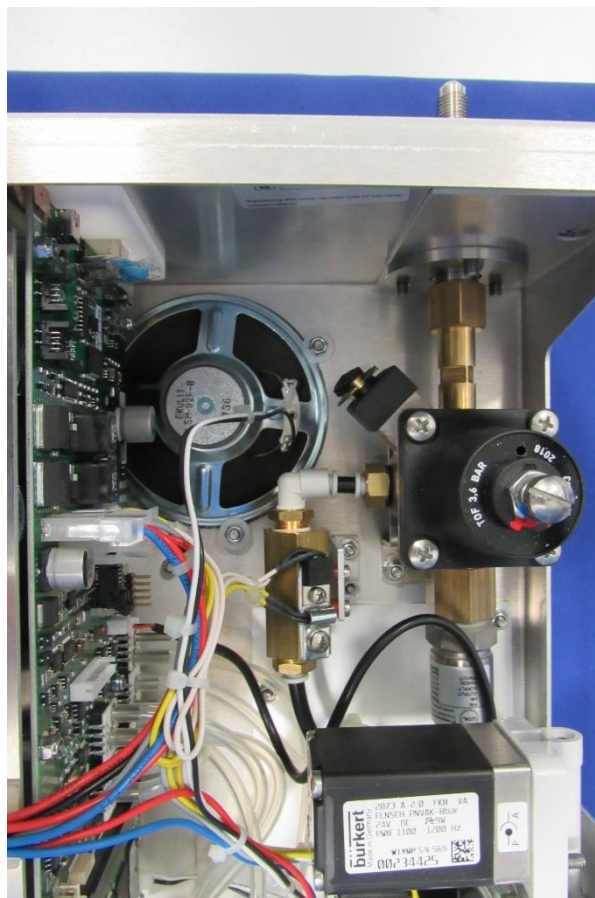
EUT view G



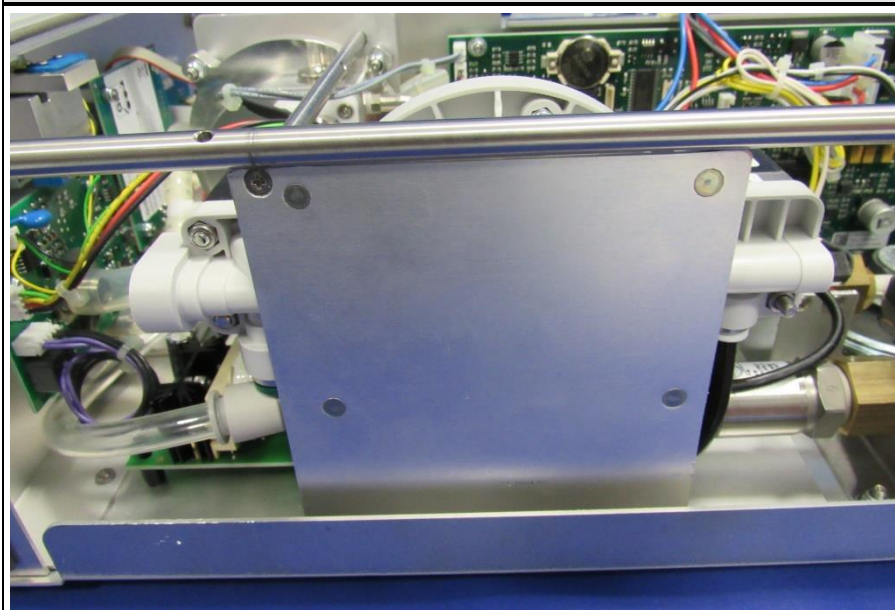
EUT view H



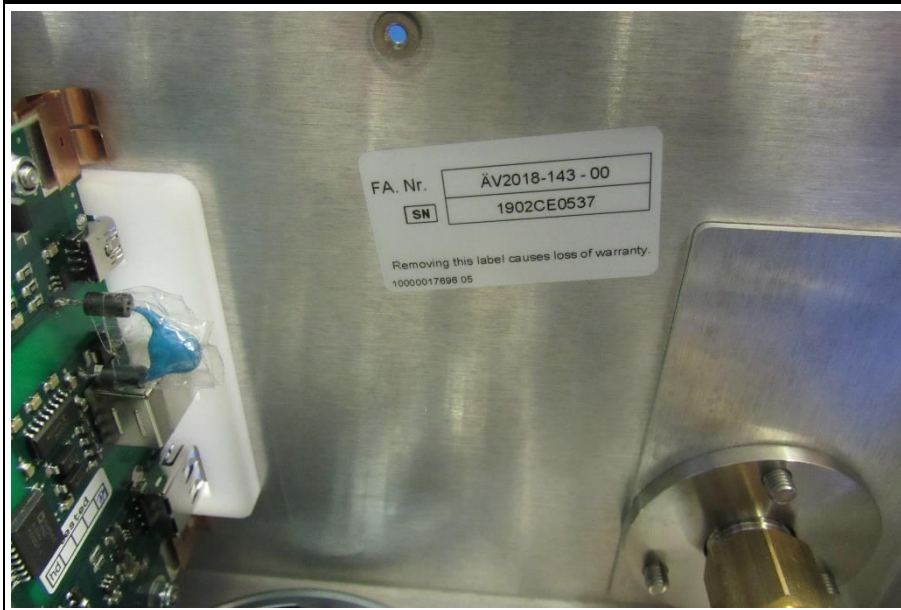
EUT view I



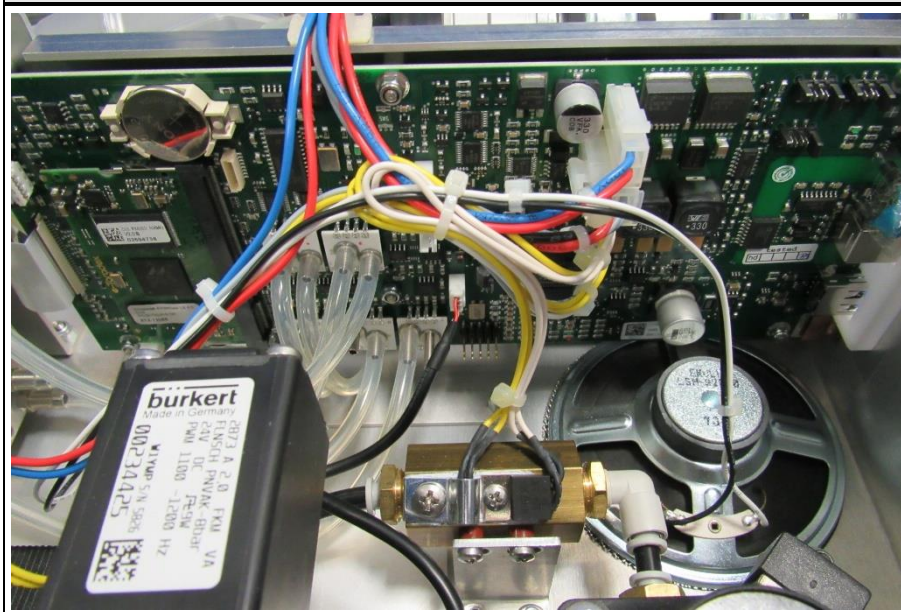
EUT view J



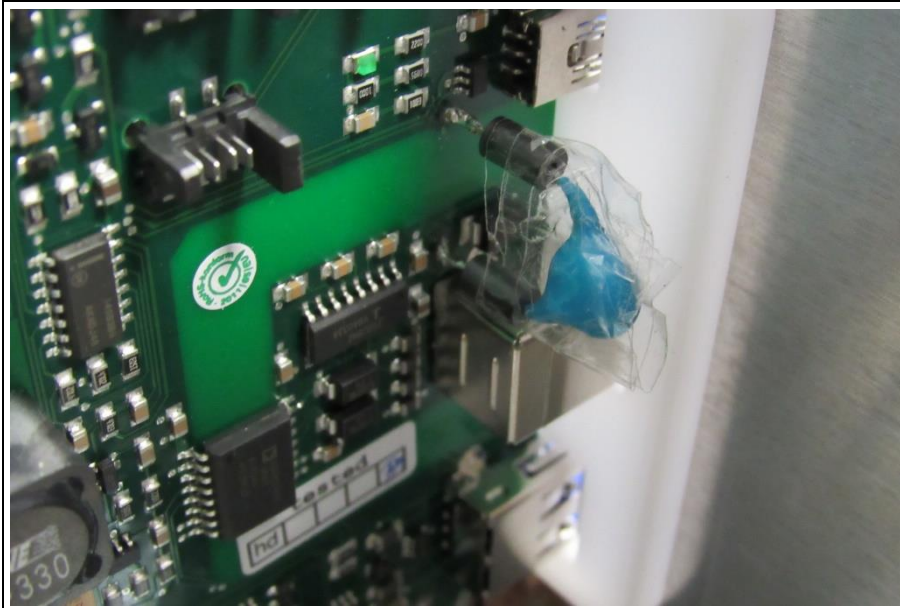
EUT view K



EUT view L



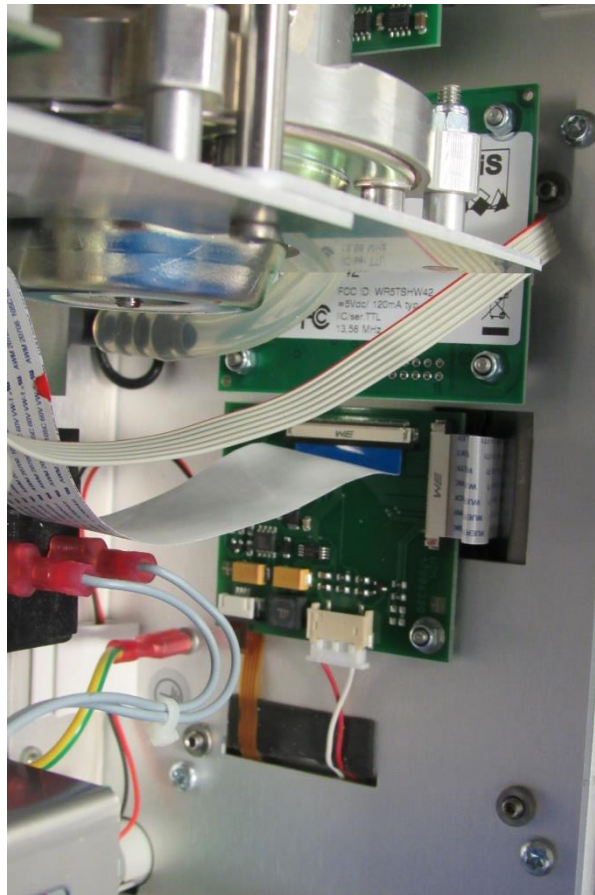
EUT view M



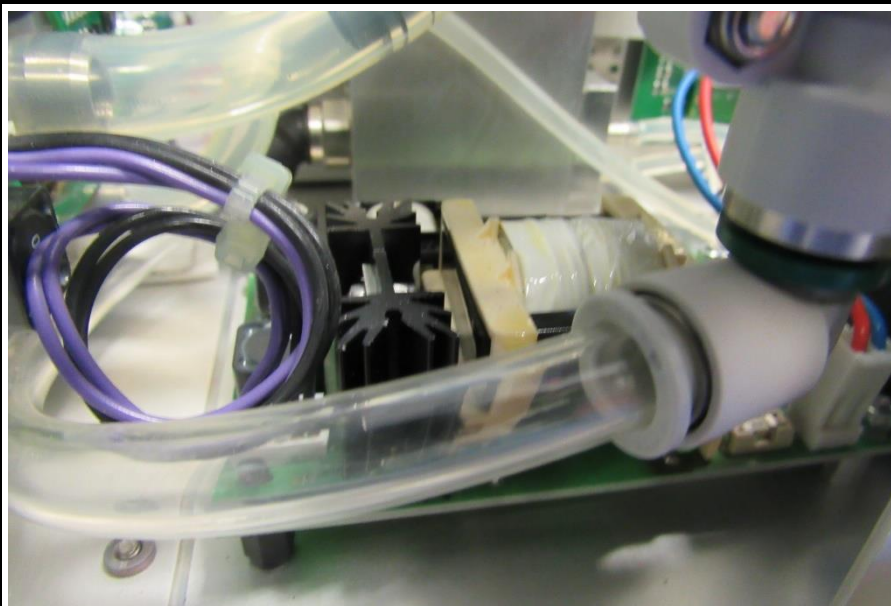
EUT view N



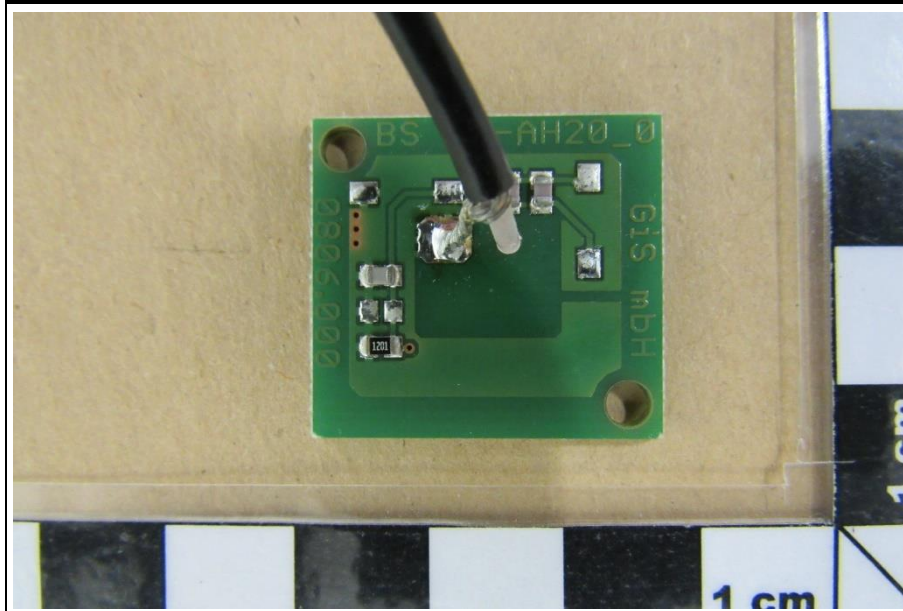
EUT view O



EUT view P



Antenna top view

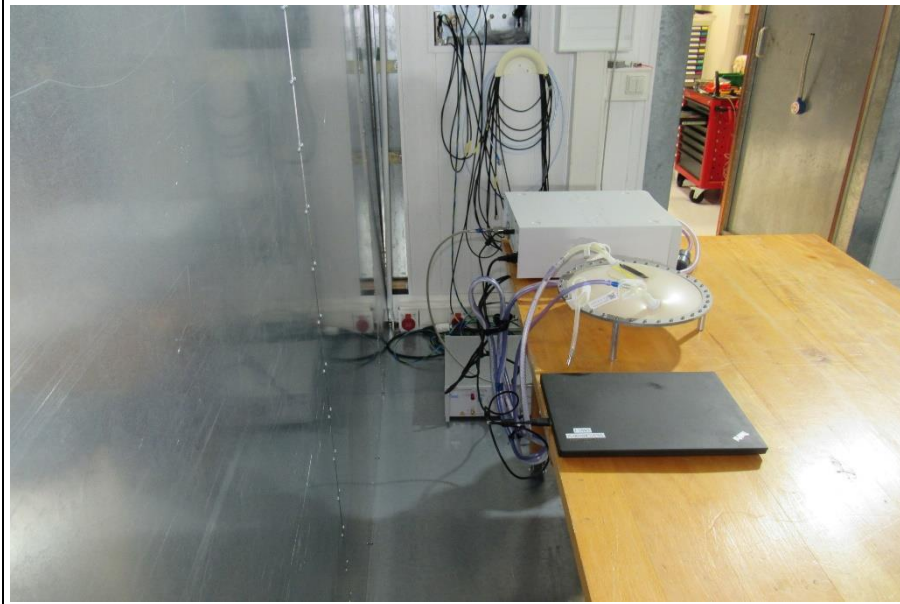


Antenna bottom view



### 1.3 Photos – Test Setup

CE test setup view A



CE test setup view B



**Radiated test setup below 30 MHz**



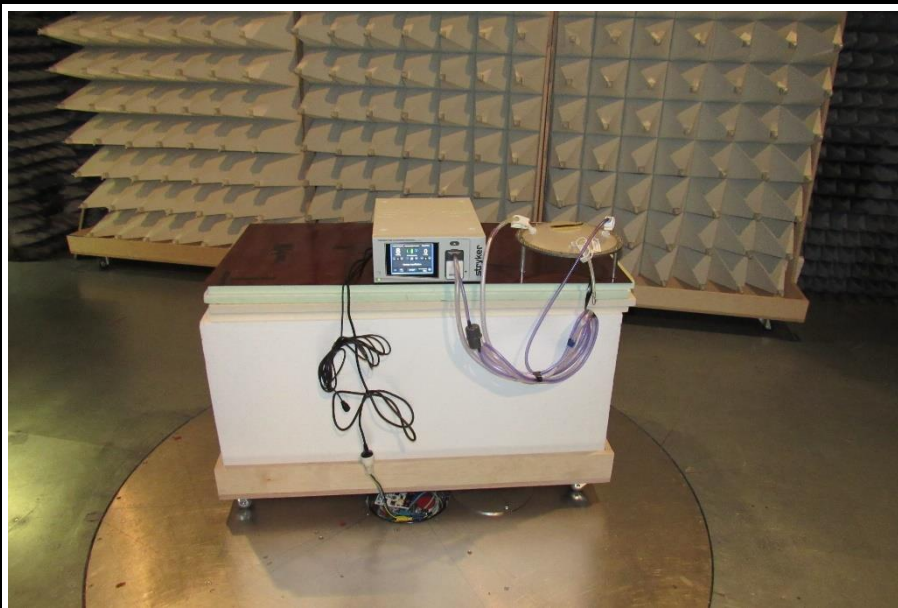
**Radiated test setup view above 30 MHz - EUT hor**



**Radiated test setup view above 30 MHz - EUT ver**



**Radiated test setup EUT view**



#### 1.4 Support Equipment

| Product Type | Device              | Manufacturer                        | Model   | Comment |
|--------------|---------------------|-------------------------------------|---------|---------|
| AE           | Dummy LAP Adult     | W.O.M. WORLD<br>OF<br>MEDICINE GmbH | 2200376 |         |
| AE           | CO2 gas tank        | ---                                 | ---     |         |
| Description: |                     |                                     |         |         |
| AE           | Auxiliary Equipment |                                     |         |         |
| SIM          | Simulator           |                                     |         |         |
| CBL          | Connecting Cable    |                                     |         |         |
| SFT          | Software            |                                     |         |         |
| Comment:     |                     |                                     |         |         |

## 1.5 Test Modes

| Mode     | Description                                               |
|----------|-----------------------------------------------------------|
| Transmit | Mode = Transmit<br>Modulation = ASK<br>Duty cycle = 100 % |
| Comment: |                                                           |

## 1.6 Test Frequencies

| Designator | Mode    | Channel | Frequency [MHz] |
|------------|---------|---------|-----------------|
| F1         | Tx / Rx | 0       | 13.56           |

## 1.7 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBμV. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

$$\text{Reading on Analyzer (dB}\mu\text{V)} + \text{A.F. (dB/m)} = \text{Net field strength (dB}\mu\text{V/m)}$$

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBμV/m). The FCC limits are given in units of μV/m. The following formula is used to convert the units of μV/m to dBμV/m:

$$\text{Limit (dB}\mu\text{V/m)} = 20 \cdot \log(\mu\text{V/m})$$

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

|                      |               |   |                           |           |
|----------------------|---------------|---|---------------------------|-----------|
| Reading + AF         | = Net Reading | : | Net reading - FCC limit   | = Margin  |
| +21.5 dBμV + 26 dB/m | = 47.5 dBμV/m | : | 47.5 dBμV/m - 57.0 dBμV/m | = -9.5 dB |

## 2 Result Summary

| FCC 47 CFR Part 15C, ISED RSS-210                        |                                                        |                  |        |                                    |
|----------------------------------------------------------|--------------------------------------------------------|------------------|--------|------------------------------------|
| Product Standard Reference                               | Requirement                                            | Reference Method | Result | Remarks                            |
| RSS-Gen 6.7                                              | Occupied Bandwidth                                     | ANSI C63.10-2013 | N/R    | Informational only                 |
| FCC 15.225(a-c)<br>ISED RSS-210<br>B.6(a)j.              | Fundamental in-band field strength emissions           | ANSI C63.10-2013 | PASS   |                                    |
| FCC 15.225(d)<br>FCC 15.209<br>ISED RSS-210<br>B.6(a)iv. | Emission radiated outside the specified frequency band | ANSI C63.10-2013 | PASS   |                                    |
| FCC 15.225(e)<br>ISED RSS-210 B.6                        | Frequency stability                                    | ANSI C63.10-2013 | N/T    |                                    |
| ISED RSS-Gen 4.10<br>ISED RSS-Gen 7.1                    | Receiver radiated spurious emissions                   | ANSI C63.10-2013 | N/R    | Permanently co-located transmitter |
| 47 CFR 15.207<br>RSS-Gen 8.8                             | AC power line conducted emissions                      | ANSI C63.10-2013 | PASS   |                                    |
| Comment:                                                 |                                                        |                  |        |                                    |

| Possible Test Case Verdicts |                                              |
|-----------------------------|----------------------------------------------|
| PASS                        | Test object does meet the requirements       |
| FAIL                        | Test object does not meet the requirements   |
| N/T                         | Required by standard but not tested          |
| N/R                         | Not required by standard for the test object |

### 3 Test Conditions and Results

#### 3.1 Test Conditions and Results - Fundamental in-band field strength emissions

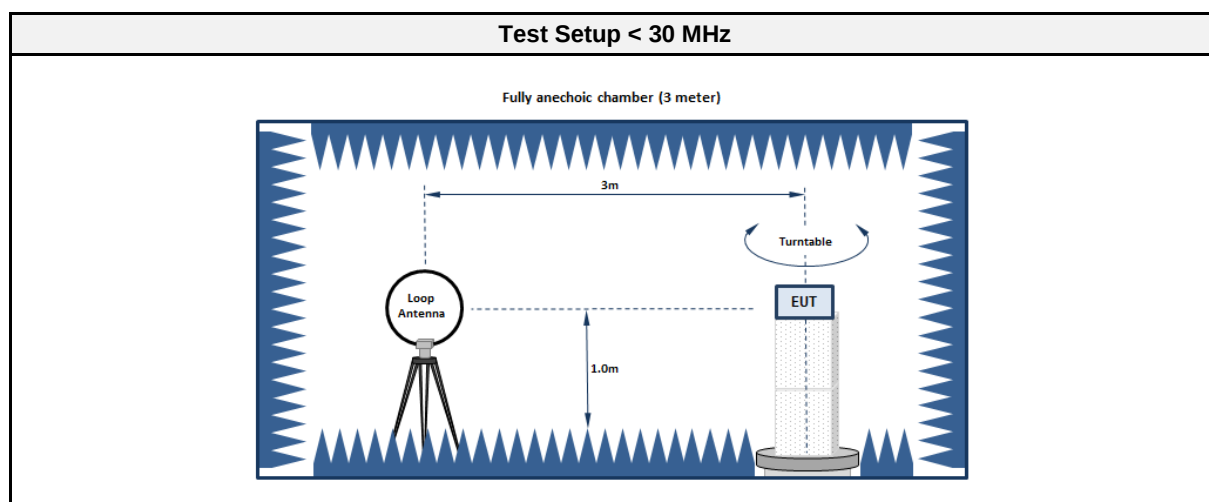
##### 3.1.1 Information

| Test Information           |                                         |
|----------------------------|-----------------------------------------|
| Product Standard Reference | FCC 15.225(a-c) / ISED RSS-210 B.6(a)i. |
| Measurement Method         | Radiated                                |
| Measurement uncertainty    | $\leq 5.76\text{dB}$                    |

##### 3.1.2 Limits

| Limits                             |                           |                                    |                    |
|------------------------------------|---------------------------|------------------------------------|--------------------|
| Frequency range [MHz]              | Limit [ $\mu\text{V/m}$ ] | Limit [ $\text{dB}\mu\text{V/m}$ ] | Limit Distance [m] |
| 13.553 - 13.567                    | 15848                     | 84                                 | 30                 |
| 13.410 - 13.553<br>13.567 - 13.710 | 334                       | 50.5                               | 30                 |
| 13.110 - 13.410<br>13.710 - 14.010 | 106                       | 40.5                               | 30                 |

##### 3.1.3 Setup



##### 3.1.4 Equipment

| Test Software |                  |            |          |
|---------------|------------------|------------|----------|
| Description   | Manufacturer     | Name       | Version  |
| EMC Software  | DARE Instruments | RadiMation | 2020.1.8 |

| Test Equipment    |                |              |            |           |          |
|-------------------|----------------|--------------|------------|-----------|----------|
| Description       | Manufacturer   | Model        | Identifier | Cal. Date | Cal. Due |
| Spectrum analyzer | R&S            | FSU43        | EF01631    | 2020-07   | 2021-07  |
| Anechoic chamber  | Frankonia GmbH | AC 2         | EF00196    | ---       | ---      |
| Antenna           | R&S            | HFH2-Z2      | EF00184    | 2017-12   | 2020-12  |
| Cable             | Huber+Suhner   | Sucoflex 100 | EF00779    | 2018-10   | 2020-10  |

### 3.1.5 Procedure

| Test Procedure |                                                                                             |
|----------------|---------------------------------------------------------------------------------------------|
| 1.             | EUT set to test mode                                                                        |
| 2.             | Span it set according to measurement range                                                  |
| 3.             | Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector |
| 4.             | Below 30MHz an extrapolation according ANSI 63.10; 6.4.4.2 is used.                         |

### 3.1.6 Results

| Test Results  |                |                       |          |              |                       |        |
|---------------|----------------|-----------------------|----------|--------------|-----------------------|--------|
| Channel [MHz] | Emission [MHz] | Level @ 30 m [dBμV/m] | Detector | Polarization | Limit @ 30 m [dBμV/m] | Margin |
| 13.56         | 13.56          | 15.9                  | Peak     | N/A          | 84                    | -68.11 |

## 3.2 Test Conditions and Results - Emissions radiated outside the specified frequency band

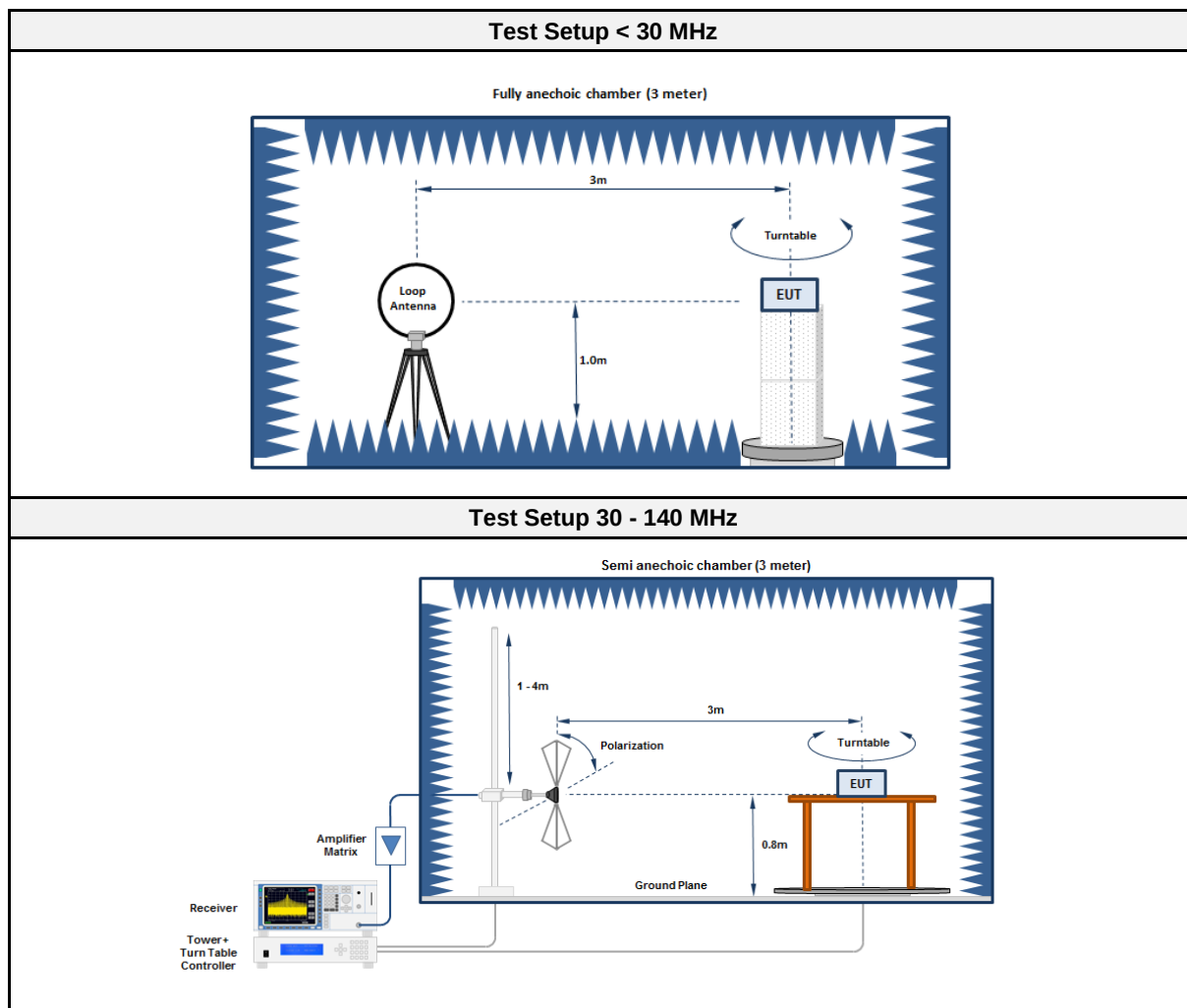
### 3.2.1 Information

| Test Information           |                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Product Standard Reference | FCC 15.225(d) / ISED RSS-210 B.6(a)iv.                                                                                  |
| Measurement Method         | Radiated                                                                                                                |
| Measurement uncertainty    | $0.009 \leq f < 30 \text{ MHz}: \leq 5.76 \text{ dB}$<br>$30 \text{ MHz} \leq f < 200 \text{ MHz}: \leq 5.1 \text{ dB}$ |

### 3.2.2 Limits

| Limits                |            |                           |                                    |                    |
|-----------------------|------------|---------------------------|------------------------------------|--------------------|
| Frequency range [MHz] | Detector   | Limit [ $\mu\text{V/m}$ ] | Limit [ $\text{dB}\mu\text{V/m}$ ] | Limit Distance [m] |
| 0.009 - 0.490         | Quasi-Peak | $2400/F[\text{kHz}]$      | 48.5 - 13.8                        | 300                |
| 0.490 - 1.705         | Quasi-Peak | $2400/F[\text{kHz}]$      | 13.8 - 2.97                        | 30                 |
| 1.705 - 30            | Quasi-Peak | 30                        | 29.5                               | 30                 |
| 30 - 88               | Quasi-Peak | 100                       | 40                                 | 3                  |
| 88 - 216              | Quasi-Peak | 150                       | 43.5                               | 3                  |

### 3.2.3 Setup



### 3.2.4 Equipment

| Test Software |                  |            |          |
|---------------|------------------|------------|----------|
| Description   | Manufacturer     | Name       | Version  |
| EMC Software  | DARE Instruments | RadiMation | 2015.2.4 |

| Test Equipment < 30 MHz |                |              |            |           |          |
|-------------------------|----------------|--------------|------------|-----------|----------|
| Description             | Manufacturer   | Model        | Identifier | Cal. Date | Cal. Due |
| Spectrum analyzer       | R&S            | FSU43        | EF01631    | 2020-07   | 2021-07  |
| Anechoic chamber        | Frankonia GmbH | AC2          | EF00196    | ---       | ---      |
| Antenna                 | R&S            | HFH2-Z2      | EF00184    | 2017-12   | 2020-12  |
| Cable                   | Huber+Suhner   | Sucoflex 100 | EF00779    | 2018-10   | 2020-10  |

| Test Equipment 30 - 140 MHz |              |                |            |           |          |
|-----------------------------|--------------|----------------|------------|-----------|----------|
| Description                 | Manufacturer | Model          | Identifier | Cal. Date | Cal. Due |
| Anechoic Chamber            | Frankonia    | AC1            | EF00062    | 2018-07   | 2021-07  |
| Measurement Receiver        | R&S          | N9038A-526/WXP | EF01070    | 2020-06   | 2021-06  |
| Antenna                     | R&S          | HK116          | EF00030    | 2019-04   | 2022-04  |

### 3.2.5 Procedure

| Test Procedure                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. EUT set to test mode</li> <li>2. Span it set according to measurement range</li> <li>3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz</li> <li>4. Below 30MHz an extrapolation according ANSI 63.10; 6.4.4.2 is used.</li> <li>5. Markers are set to maximum emission levels</li> </ol> |

### 3.2.6 Results

| Test Results  |                |                |          |              |                |             |
|---------------|----------------|----------------|----------|--------------|----------------|-------------|
| Channel [MHz] | Emission [MHz] | Level [dBμV/m] | Detector | Polarization | Limit [dBμV/m] | Margin [dB] |
| 13.56         | 30.18          | 34.13          | qpk      | ver          | 40.00          | -05.87      |
| 13.56         | 30.48          | 33.78          | qpk      | ver          | 40.00          | -06.22      |
| 13.56         | 30.841         | 33.21          | qpk      | ver          | 40.00          | -06.79      |
| 13.56         | 30.901         | 32.54          | qpk      | ver          | 40.00          | -07.46      |
| 13.56         | 31.441         | 34.06          | qpk      | ver          | 40.00          | -05.94      |
| 13.56         | 32.402         | 32.90          | qpk      | ver          | 40.00          | -07.10      |
| 13.56         | 32.702         | 33.49          | qpk      | ver          | 40.00          | -06.51      |
| 13.56         | 129.973        | 33.93          | qpk      | hor          | 43.50          | -09.57      |
| 13.56         | 139.46         | 25.15          | qpk      | hor          | 43.50          | -18.35      |

### 3.3 Test Conditions and Results - AC powerline conducted emissions

#### 3.3.1 Information

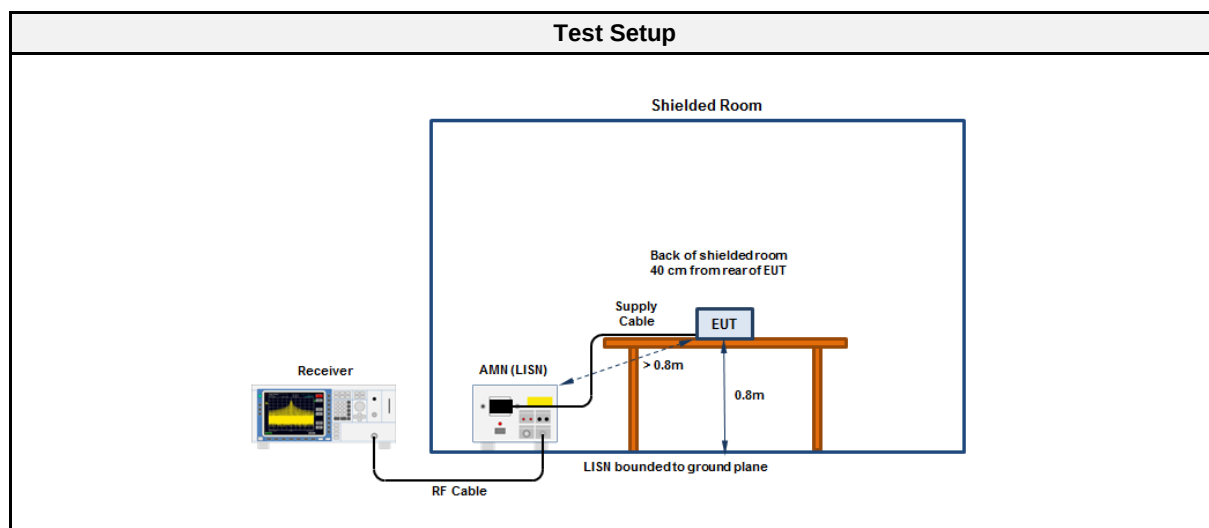
| Test Information        |                                     |
|-------------------------|-------------------------------------|
| Reference               | FCC § 15.207; ISED RSS-Gen, Issue 5 |
| Measurement Method      | ANSI C63.10 6.2                     |
| Measurement uncertainty | ≤ 3.82                              |
| Operator                | Florian Voigt                       |
| Date                    | 2020-08-26                          |

#### 3.3.2 Limits

| Limits          |                   |                |
|-----------------|-------------------|----------------|
| Frequency [MHz] | Quasi-Peak [dBμV] | Average [dBμV] |
| 0.15 - 0.5      | 66 - 56*          | 56 - 46*       |
| 0.5 - 5         | 56                | 46             |
| 5 - 30          | 60                | 50             |

\* Limit decreases linearly with the logarithm of the frequency

#### 3.3.3 Setup



#### 3.3.4 Equipment

| Test Software |                  |            |           |
|---------------|------------------|------------|-----------|
| Description   | Manufacturer     | Name       | Version   |
| EMC Software  | DARE Instruments | RadiMation | 2016.1.10 |

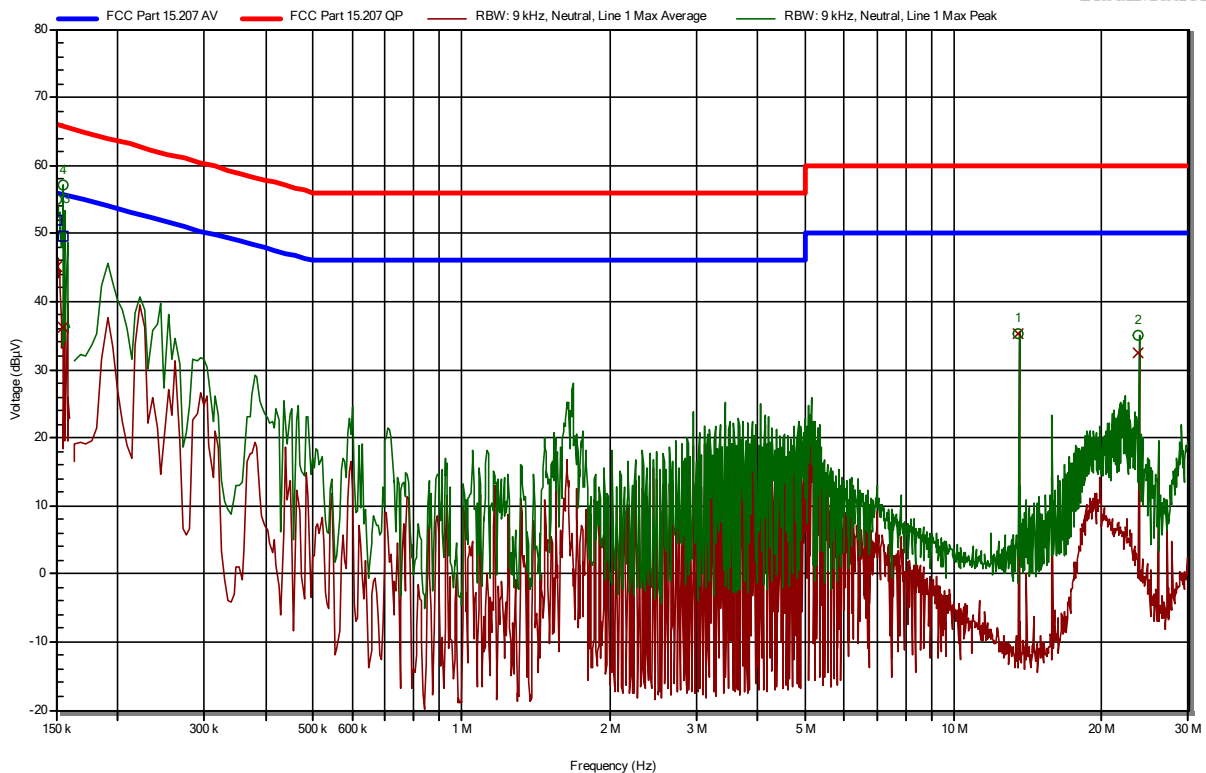
| Test Equipment    |              |              |            |           |          |
|-------------------|--------------|--------------|------------|-----------|----------|
| Description       | Manufacturer | Model        | Identifier | Cal. Date | Cal. Due |
| LISN              | Schwarzbeck  | NSLK 8127 RC | EF01592    | 2020-07   | 2021-07  |
| Pulse Limiter     | R&S          | ESH3-Z2      | EF01222    | 2020-07   | 2021-07  |
| EMI Test Receiver | R&S          | ESR7         | EF00943    | 2020-07   | 2021-07  |

## Conducted emissions at the mains power port according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project Number: G0M-1912-8673  
 Applicant: W.O.M. WORLD OF MEDICINE GmbH  
 Model Description: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures  
 Model: FM300  
 Test Sample ID: 29984  
 Test Site: Eurofins Product Service Germany  
 Operator: Mr. Voigt  
 Test Date: 2020-08-26  
 Operating Conditions: ambient temperature: 22.8 °C  
 power input: 120 VAC  
 LISN: Schwarzbeck NSLK 8127 RC L  
 Mode: RFID 13.56MHz, ASK  
 Applied to Port: Mains

Index 9

**RadiMation**



| Peak Number | Frequency  | Quasi-Peak | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status | LISN   |
|-------------|------------|------------|------------------|-----------------------|-------------------|--------|
| 3           | 150 kHz    | 51.97 dBμV | 66 dBμV          | -14.03 dB             | Pass              | Line 1 |
| 4           | 154.95 kHz | 49.5 dBμV  | 65.73 dBμV       | -16.23 dB             | Pass              | Line 1 |

| Peak Number | Frequency  | Average    | Average Limit | Average Difference | Average Status | LISN    |
|-------------|------------|------------|---------------|--------------------|----------------|---------|
| 1           | 13.56 MHz  | 35.26 dBμV | 50 dBμV       | -14.74 dB          | Pass           | Neutral |
| 2           | 23.775 MHz | 32.57 dBμV | 50 dBμV       | -17.43 dB          | Pass           | Line 1  |
| 3           | 150 kHz    | 45.12 dBμV | 56 dBμV       | -10.88 dB          | Pass           | Line 1  |
| 4           | 154.95 kHz | 36.19 dBμV | 55.73 dBμV    | -19.54 dB          | Pass           | Line 1  |

Test Report No.: G0M-1912-8673-TFC225RI-V02

Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

## ANNEX A Transmitter in-band emissions

### Spurious emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project number: G0M-1912-8673

Applicant: W.O.M. WORLD OF MEDICINE GmbH  
EUT Name: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures

Model: FM300

Test Site: Eurofins Product Service Germany

Operator: Mr. Voigt

Test Conditions: Tnom: 22.8 °C, Vnom: 120 VAC

Antenna: HFH2-Z2

Measurement distance: 3 m converted to 30 m

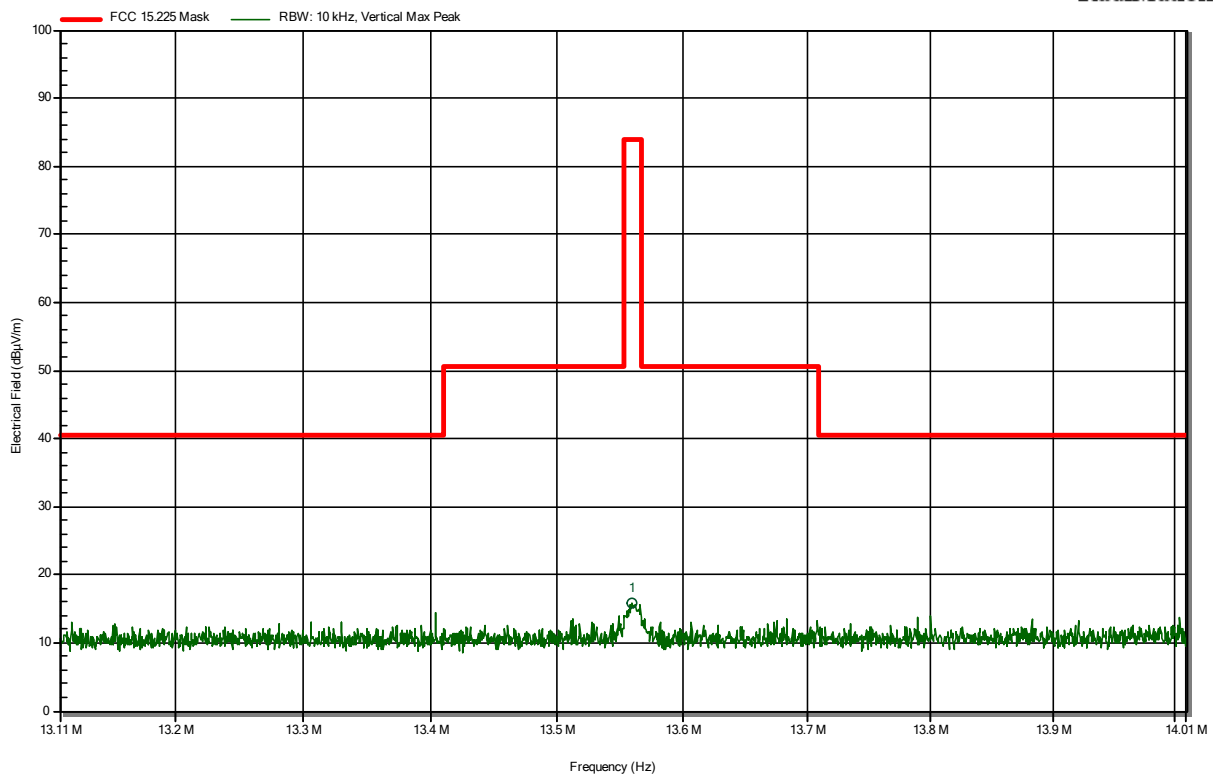
Mode: TX; RFID 13.56MHz, ASK, EUT ver

Test Date: 2020-08-28

Note:

Index 12

RadiMation



| Frequency | Peak        | Peak Limit | Peak Difference | Peak Status |
|-----------|-------------|------------|-----------------|-------------|
| 13.56 MHz | 15.9 dBµV/m | 84 dBµV/m  | -68.11 dB       | Pass        |

## ANNEX B Transmitter radiated spurious emissions

### Spurious emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project number: G0M-1912-8673

Applicant: W.O.M. WORLD OF MEDICINE GmbH  
EUT Name: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures

Model: FM300

Test Site: Eurofins Product Service Germany

Operator: Mr. Voigt

Test Conditions: Tnom: 22.8 °C, Vnom: 120 VAC

Antenna: HFH2-Z2

Measurement distance: 3 m converted to 300 m

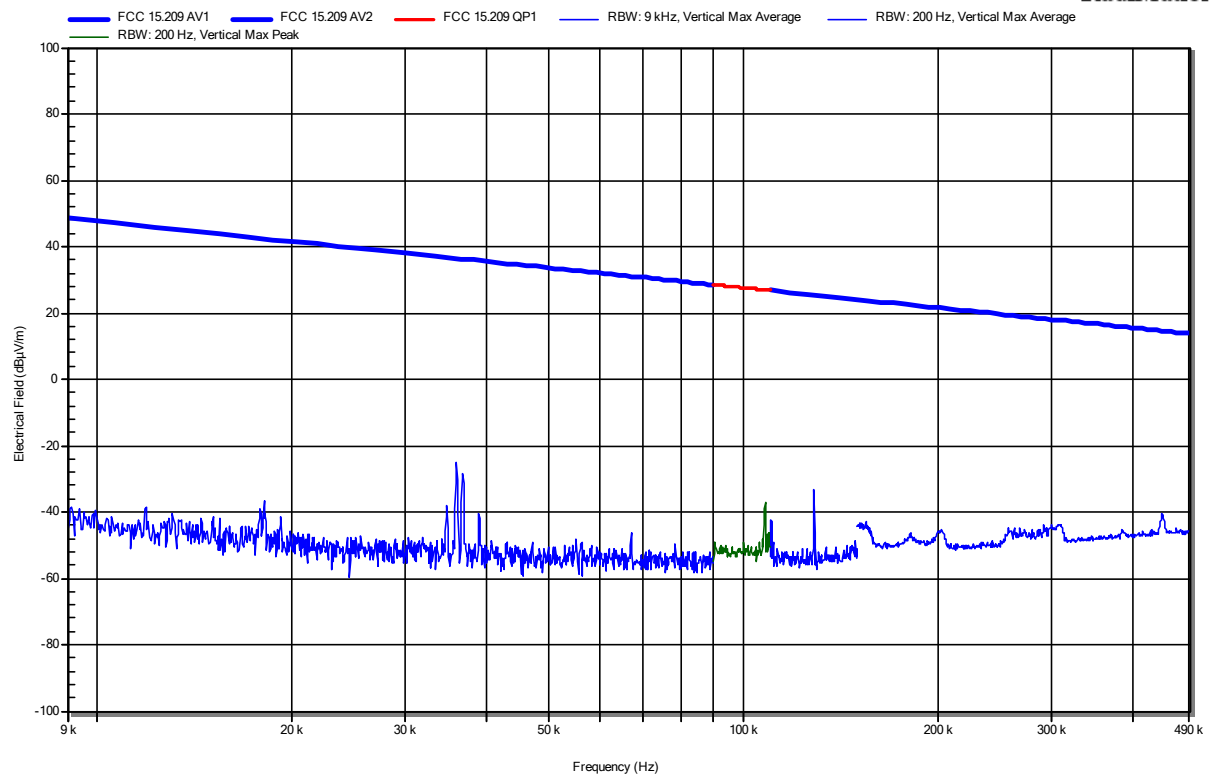
Mode: TX; RFID 13.56MHz, ASK, EUT hor

Test Date: 2020-08-28

Note:

Index 13

RadiMation



## Spurious emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project number: G0M-1912-8673

Applicant: W.O.M. WORLD OF MEDICINE GmbH  
EUT Name: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures

Model: FM300

Test Site: Eurofins Product Service Germany

Operator: Mr. Voigt

Test Conditions: Tnom: 22.8 °C, Vnom: 120 VAC

Antenna: HFH2-Z2

Measurement distance: 3 m converted to 300 m

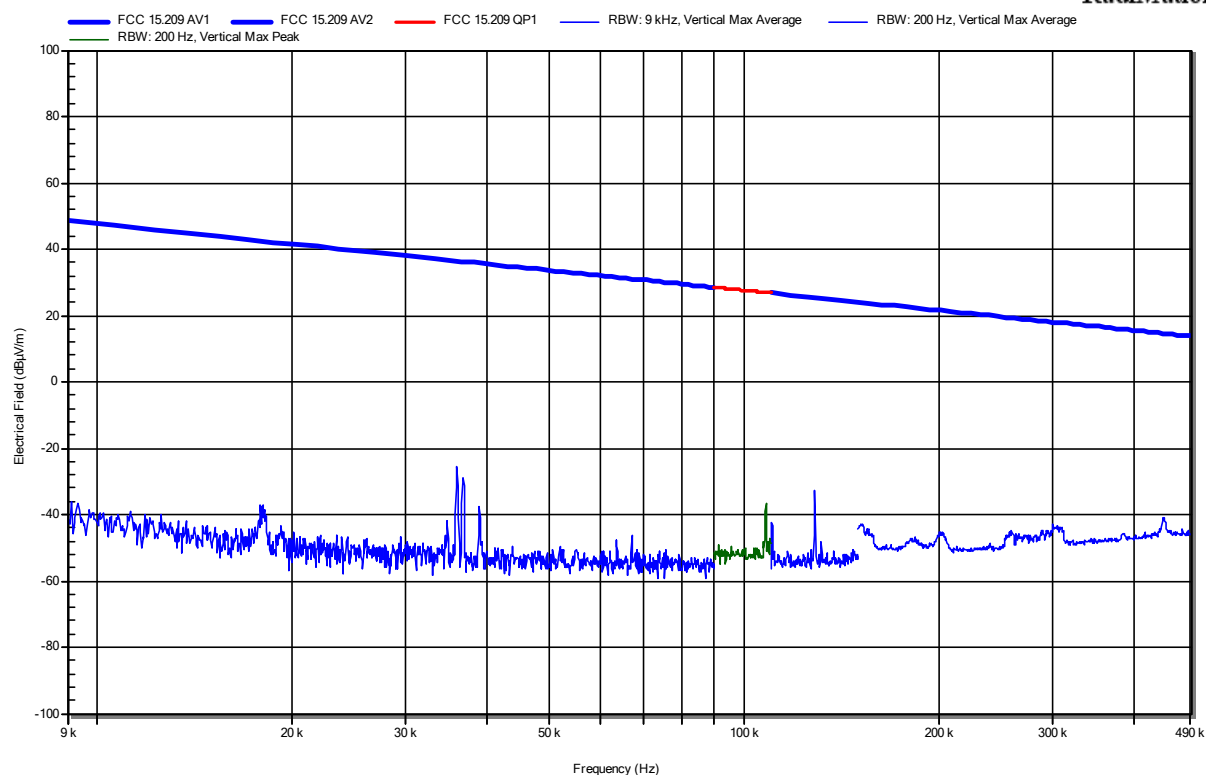
Mode: TX; RFID 13.56MHz, ASK, EUT ver

Test Date: 2020-08-28

Note:

Index 10

RadiMation



## Spurious emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project number: G0M-1912-8673

Applicant: W.O.M. WORLD OF MEDICINE GmbH  
EUT Name: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures

Model: FM300

Test Site: Eurofins Product Service Germany

Operator: Mr. Voigt

Test Conditions: Tnom: 22.8 °C, Vnom: 120 VAC

Antenna: HFH2-Z2

Measurement distance: 3 m converted to 30 m

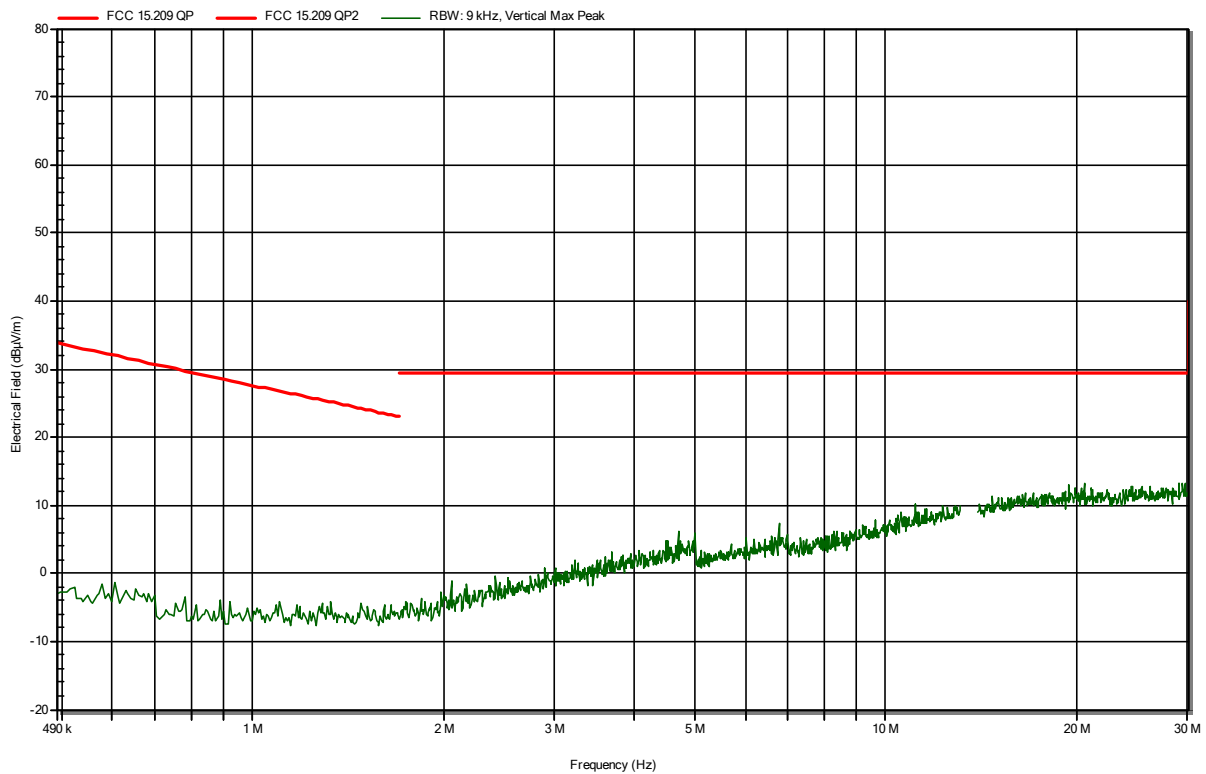
Mode: TX; RFID 13.56MHz, ASK, EUT hor

Test Date: 2020-08-28

Note:

Index 14

RadiMation



## Spurious emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project number: G0M-1912-8673

Applicant: W.O.M. WORLD OF MEDICINE GmbH  
EUT Name: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures

Model: FM300

Test Site: Eurofins Product Service Germany

Operator: Mr. Voigt

Test Conditions: Tnom: 22.8 °C, Vnom: 120 VAC

Antenna: HFH2-Z2

Measurement distance: 3 m converted to 30 m

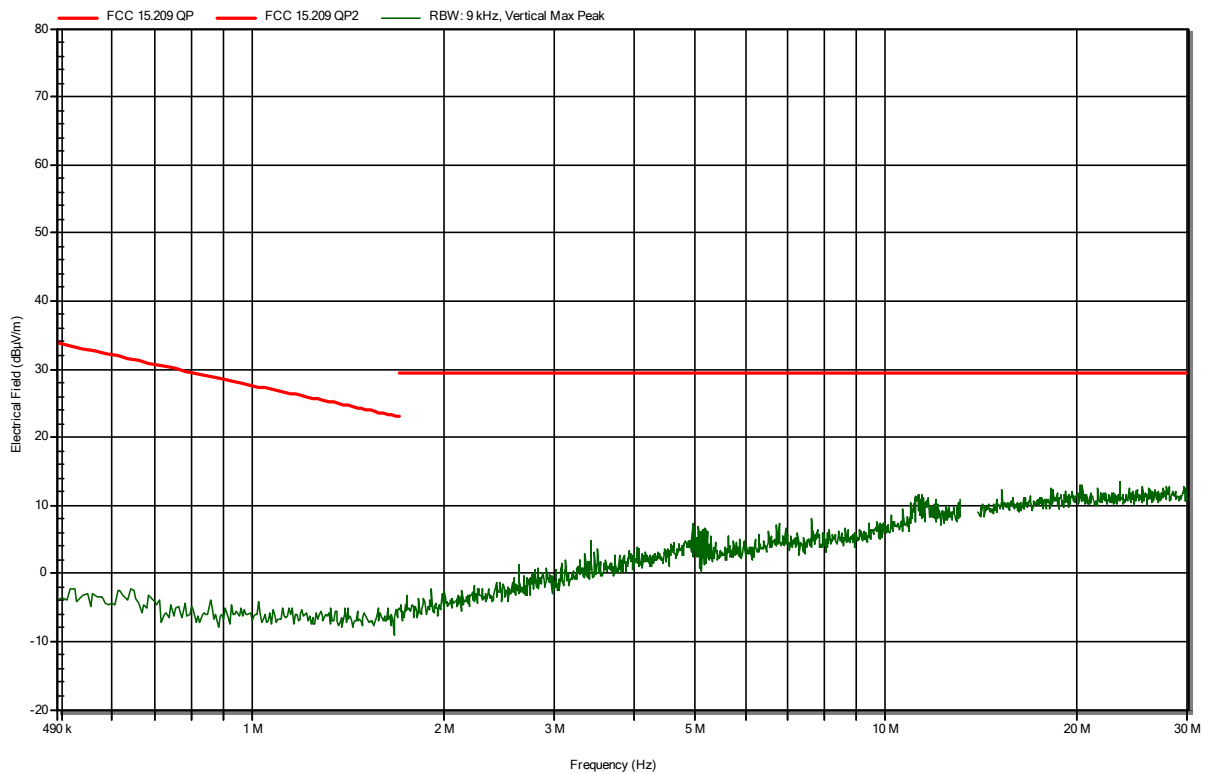
Mode: TX; RFID 13.56MHz, ASK, EUT ver

Test Date: 2020-08-28

Note:

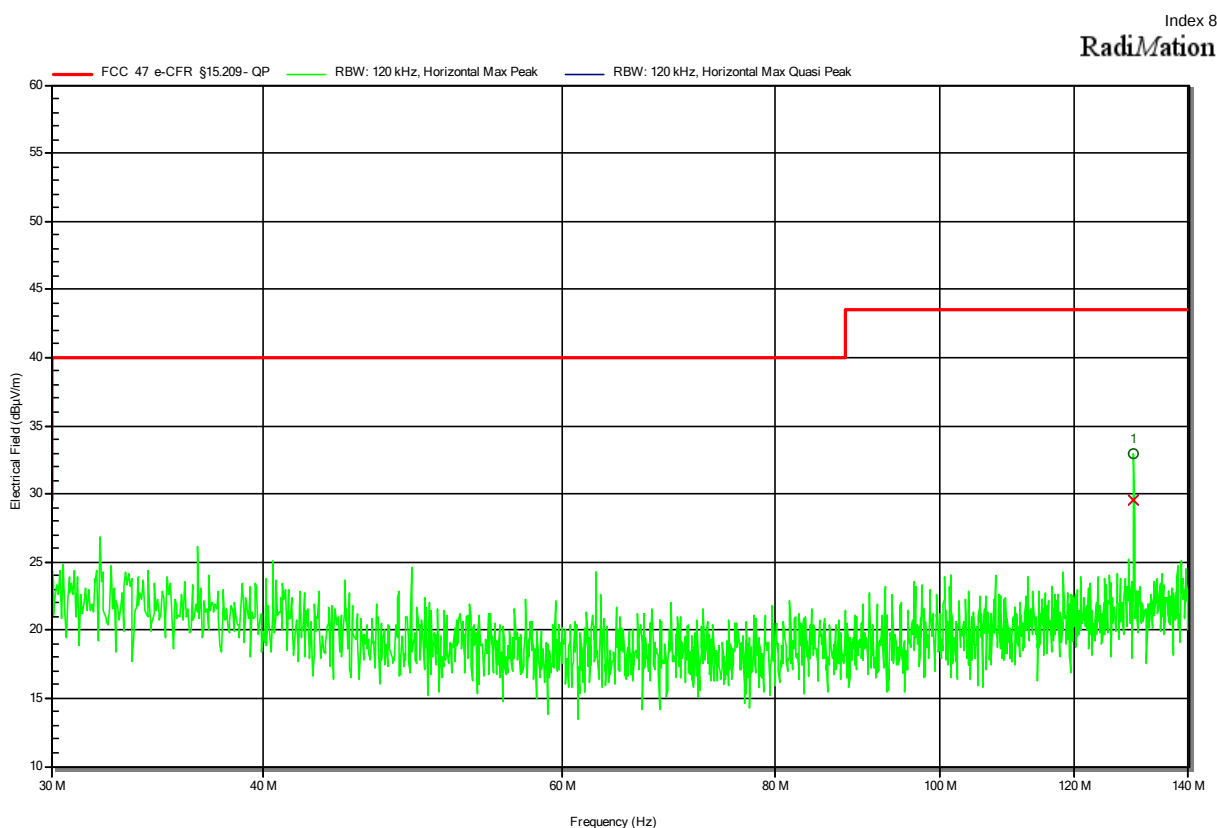
Index 11

Radiation



## Radiated emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

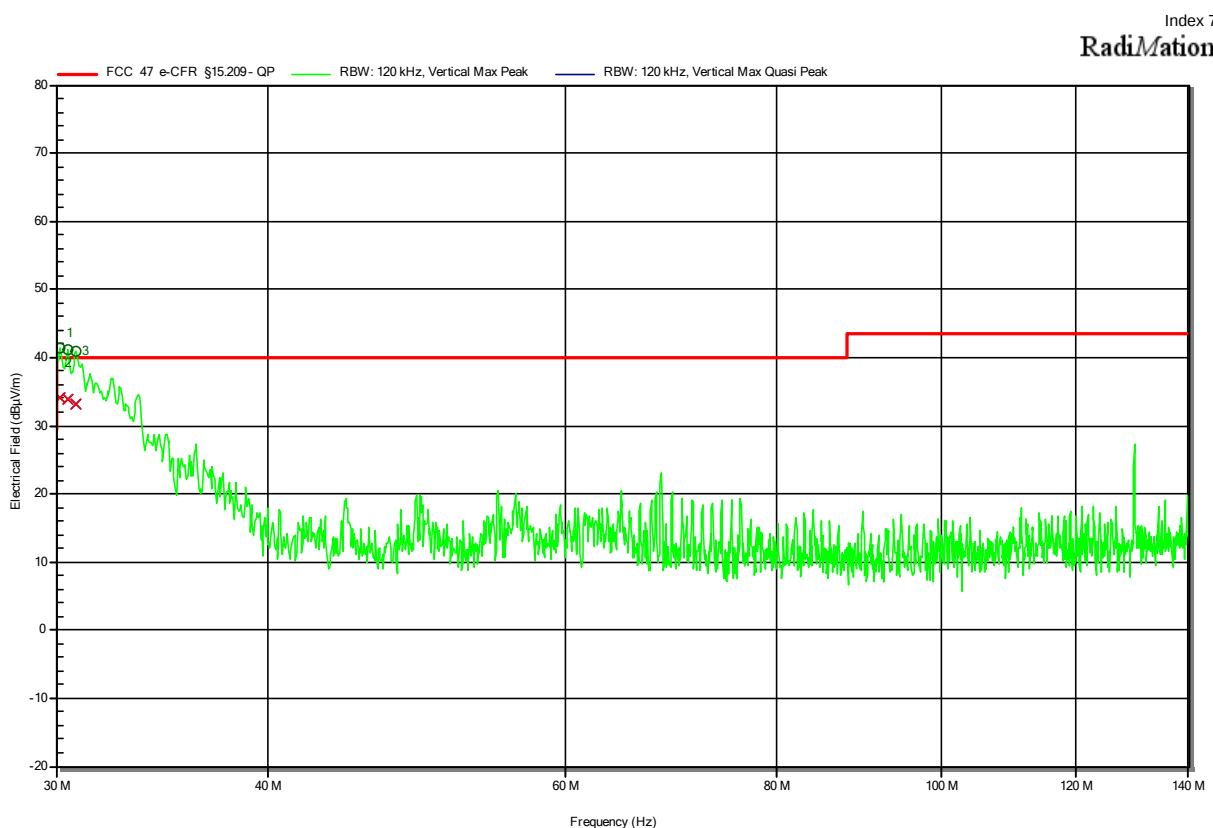
Project Number: G0M-1912-8673  
 Applicant: W.O.M. WORLD OF MEDICINE GmbH  
 Model Description: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures  
 Model: FM300  
 Test Sample ID: 29984  
 Test Site: Eurofins Product Service Germany  
 Operator: Mr. Voigt  
 Test Date: 2020-08-26  
 Operating Conditions: ambient temperature: 22.8 °C  
 power input: 120 VAC  
 Antenna: Rohde & Schwarz HK 116, Horizontal  
 Measurement Distance: 3m  
 Mode: RFID 13.56MHz, ASK, EUT hor  
 Note 1:



| Peak Number | Frequency   | Quasi-Peak   | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status | Angle     | Height |
|-------------|-------------|--------------|------------------|-----------------------|-------------------|-----------|--------|
| 1           | 129.973 MHz | 29.59 dBµV/m | 43.5 dBµV/m      | -13.91 dB             | Pass              | 0 degrees | 1 m    |

## Radiated emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

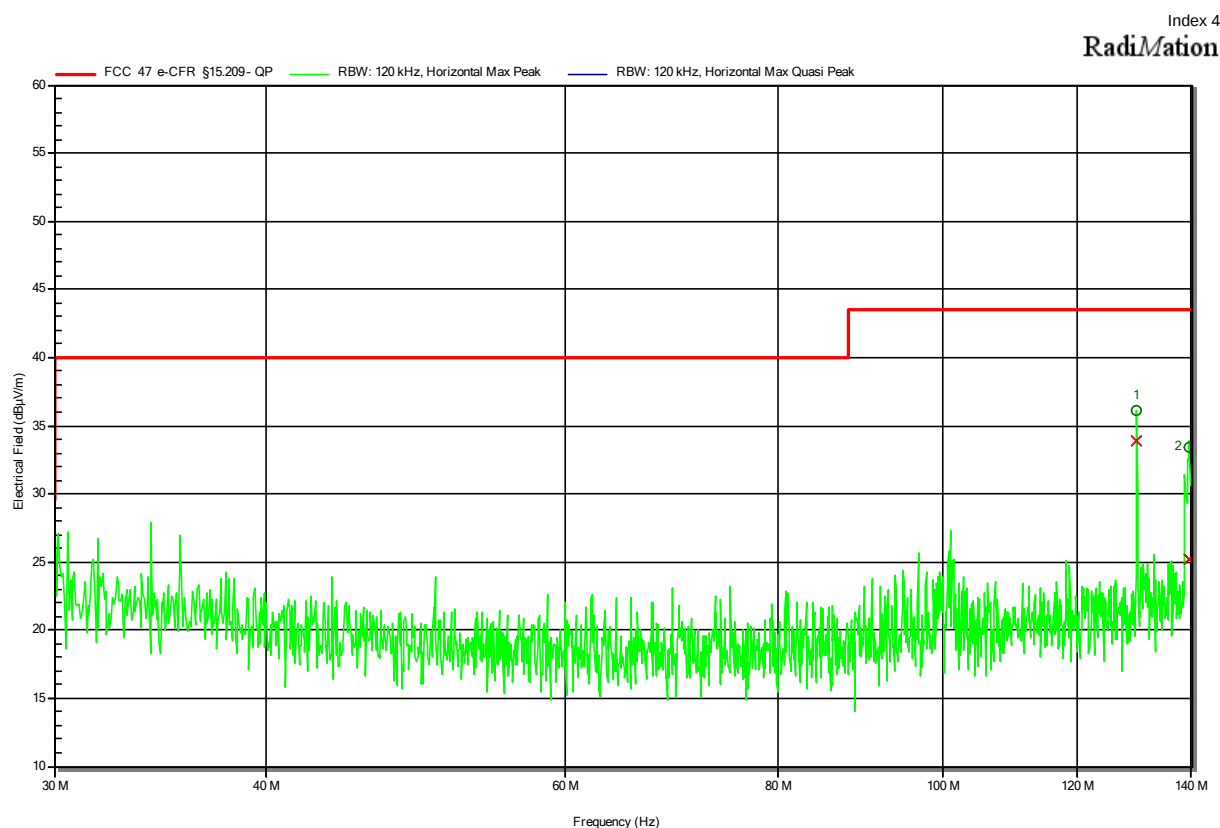
Project Number: G0M-1912-8673  
 Applicant: W.O.M. WORLD OF MEDICINE GmbH  
 Model Description: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures  
 Model: FM300  
 Test Sample ID: 29984  
 Test Site: Eurofins Product Service Germany  
 Operator: Mr. Voigt  
 Test Date: 2020-08-26  
 Operating Conditions: ambient temperature: 22.8 °C  
 power input: 120 VAC  
 Antenna: Rohde & Schwarz HK 116, Vertical  
 Measurement Distance: 3m  
 Mode: RFID 13.56MHz, ASK, EUT hor  
 Note 1:



| Peak Number | Frequency  | Quasi-Peak   | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status | Angle     | Height |
|-------------|------------|--------------|------------------|-----------------------|-------------------|-----------|--------|
| 1           | 30.18 MHz  | 34.13 dBµV/m | 40 dBµV/m        | -5.87 dB              | Pass              | 0 degrees | 1 m    |
| 2           | 30.48 MHz  | 33.78 dBµV/m | 40 dBµV/m        | -6.22 dB              | Pass              | 0 degrees | 1 m    |
| 3           | 30.841 MHz | 33.21 dBµV/m | 40 dBµV/m        | -6.79 dB              | Pass              | 0 degrees | 1 m    |

## Radiated emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project Number: G0M-1912-8673  
 Applicant: W.O.M. WORLD OF MEDICINE GmbH  
 Model Description: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures  
 Model: FM300  
 Test Sample ID: 29984  
 Test Site: Eurofins Product Service Germany  
 Operator: Mr. Voigt  
 Test Date: 2020-08-26  
 Operating Conditions: ambient temperature: 22.8 °C  
 power input: 120 VAC  
 Antenna: Rohde & Schwarz HK 116, Horizontal  
 Measurement Distance: 3m  
 Mode: RFID 13.56MHz, ASK, EUT ver  
 Note 1:

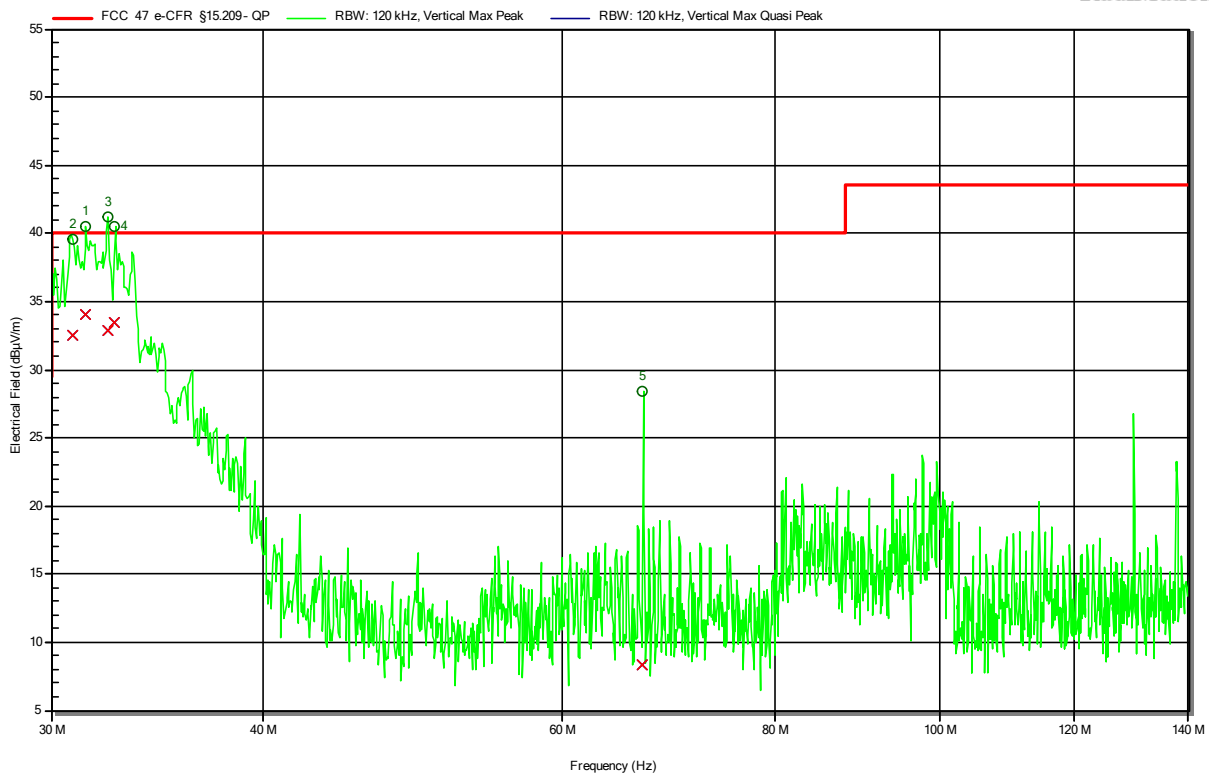


## Radiated emissions according to FCC 47 CFR 15.225, RSS-210, Issue 10

Project Number: G0M-1912-8673  
 Applicant: W.O.M. WORLD OF MEDICINE GmbH  
 Model Description: Insufflator for Laparoscopy, Vessel Harvesting, Colorectal and Cardiac Procedures  
 Model: FM300  
 Test Sample ID: 29984  
 Test Site: Eurofins Product Service Germany  
 Operator: Mr. Voigt  
 Test Date: 2020-08-26  
 Operating Conditions: ambient temperature: 22.8 °C  
 power input: 120 VAC  
 Antenna: Rohde & Schwarz HK 116, Vertical  
 Measurement Distance: 3m  
 Mode: RFID 13.56MHz, ASK, EUT ver  
 Note 1:

Index 6

RadiMation



| Peak Number | Frequency  | Quasi-Peak   | Quasi-Peak Limit | Quasi-Peak Difference | Quasi-Peak Status | Angle     | Height |
|-------------|------------|--------------|------------------|-----------------------|-------------------|-----------|--------|
| 1           | 31.441 MHz | 34.06 dBµV/m | 40 dBµV/m        | -5.94 dB              | Pass              | 0 degrees | 1 m    |
| 2           | 30.901 MHz | 32.54 dBµV/m | 40 dBµV/m        | -7.46 dB              | Pass              | 0 degrees | 1 m    |
| 3           | 32.402 MHz | 32.9 dBµV/m  | 40 dBµV/m        | -7.1 dB               | Pass              | 0 degrees | 1 m    |
| 4           | 32.702 MHz | 33.49 dBµV/m | 40 dBµV/m        | -6.51 dB              | Pass              | 0 degrees | 1 m    |
| 5           | 66.867 MHz | 8.33 dBµV/m  | 40 dBµV/m        | -31.67 dB             | Pass              | 0 degrees | 1 m    |

Test Report No.: G0M-1912-8673-TFC225RI-V02

Eurofins Product Service GmbH  
 Storkower Str. 38c, D-15526 Reichenwalde, Germany