



ACCREDITED TESTING LABORATORY (NR. 312)
for Electromagnetic Compatibility
FCC Recognition as accredited EMC Test Laboratory No: 835627

TEST REPORT No. EMV-E 97a/22

Replacement of EMV-E97/22 issued 29. August 2022

Test procedure: Title 47 - Telecommunication
Chapter I - FEDERAL COMMUNICATIONS COMMISSION
Subchapter A - GENERAL
Part 15 - RADIO FREQUENCY DEVICES

The summary of the results can be found on page 2.

Ordered by: Taurob GmbH

Address: Perfektastraße 57/7
1230 Wien
Austria

On: Taurob Inspector Short Arm "D'Artagnan"

This report contains the pages 1 to 35.

Authorized person:

Ing. Thomas Nakovits

Test performed by:

Ing. Markus Winkler, MSc

Date: 2022-08-30
Internal Order Number: E-3048

Comments:

The test results refers exclusively to the tested subject.

The production or transmission of extracts of the present report is subject to authorization by the testing laboratory.
Akkreditierung Austria is a full member of the International Laboratory Accreditation Cooperation ILAC and a signatory of the MRA for "Testing, Calibration and Inspection".

1. Summary of all measurements and tests

Measurements according to FCC 47 CFR Part 15 Subpart B - Unintentional Radiators			
Chapter / Norm. Reference	Term	Details see chapter	Result
§15.107 ANSI C63.4-2014	Conducted limits - (AC power line)	4.1	PASS
§15.109 ANSI C63.4-2014	Radiated emission limits	4.2	PASS

Table 1: Summary Emission measurements

PASS	The DUT meets the requirements of the standard
FAIL	The DUT does not meet the requirements of the standard
n.a.	The Test is not applicable
n.p.	The Test was not performed

Table 2: General definitions for the report

Revision 97a/22 summary:

- Added FCC ID at chapter 3.1

All indications of Pass/Fail in this report are opinions expressed by Seibersdorf Laboratories based on interpretations and/or observations of test results.

2. Contents

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3. General information

3.1 Device under test (DUT)

DUT:	Taurob Inspector Short Arm "D'Artagnan"
FCC-ID:	2A8IYINSPECTOR
Serial number:	012
Hardware revision:	V4.0
Software revision:	- RCS V5.1 - ROS V5.0 - Ffmpeg V2.0 - Oven Media V2.0 - RTSP Proxy V2.1 - OnBoard PC V2.1 - U-ECU V1.2
Operating frequency band:	2.4 GHz (WLAN)
Year of manufacturing:	2021
Manufacturer:	Taurob Services S.A.S.
Address:	Zone Industrielle 31260 Salies du Salat France
Description:	Autonomous ground robot for routine operations and inspection on industrial sites.

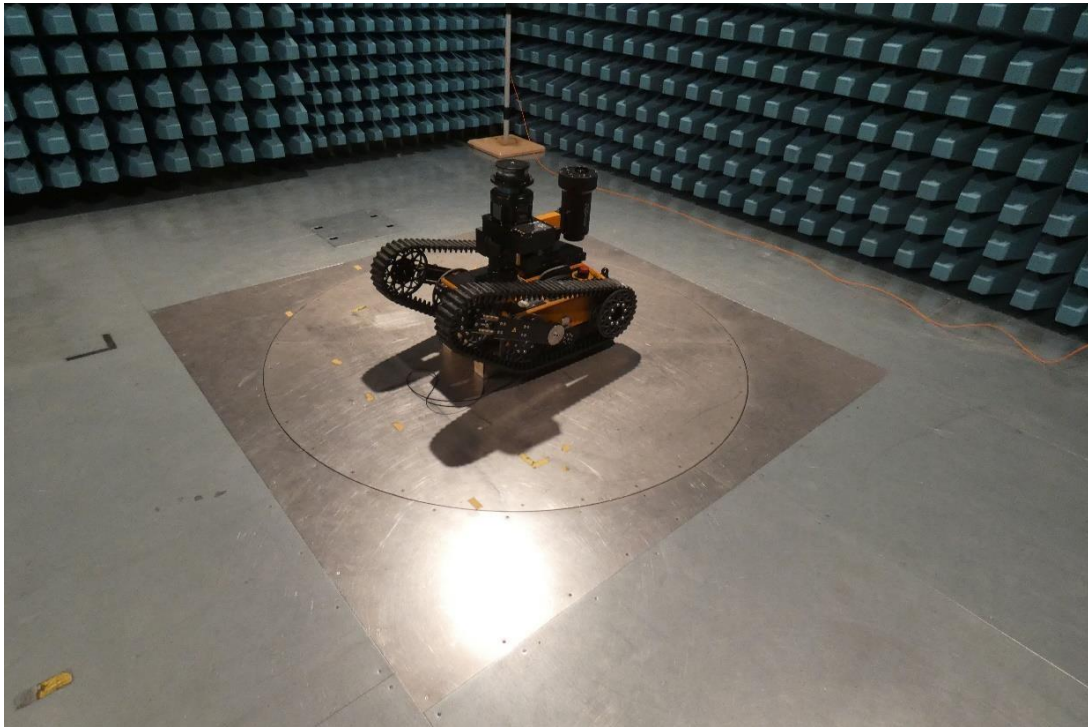


Photo 1: Device under test (DUT)

The device under test and all relevant information regarding the device under test were supplied by the customer.

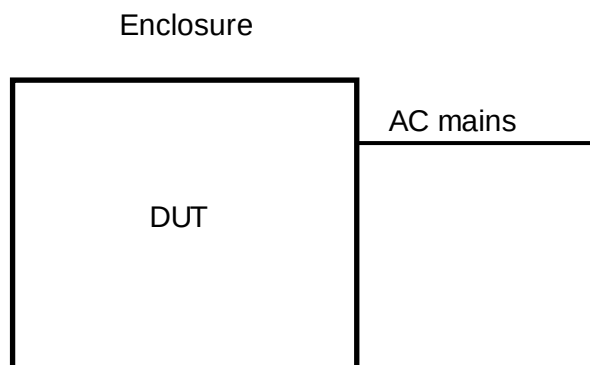
3.2 Test Configuration

The DUT was mounted by Anouar Dinar, Taurob GmbH and Markus Winkler, Seibersdorf Labor GmbH, in the Semi anechoic chamber (SAC3) and test room 1 of the EMC-Test Laboratory Seibersdorf.

3.2.1 General configuration

Following modes were tested

- Moving motors
- Continuous arm movement
- Charging and Flipper active



Type	Cable type / Comments
AC mains	3 x 1.25mm ² , unshielded

Table 3: Cable configuration

3.3 Standards / Documents

[1] Code of Federal Regulations

Title 47 - Telecommunication
Chapter I - FEDERAL COMMUNICATIONS COMMISSION
Subchapter A - GENERAL
Part 15 - RADIO FREQUENCY DEVICES

[2] ANSI C63.4-2014

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

[3] CISPR 16-1-1:2010-11

Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods - Part 1-1: Radio Disturbance and Immunity Measuring Apparatus - Measuring Apparatus, Ed. 3.1

[4] CISPR 16-1-2:2006-08

Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods - Part 1-2: Radio Disturbance and Immunity Measuring Apparatus - Ancillary equipment - Conducted disturbances, Ed. 1.2

[5] CISPR 16-1-4:2010-04

Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods - Part 1-4: Radio Disturbance and Immunity Measuring Apparatus - Ancillary equipment - Radiated disturbances, Ed. 3

[6] CISPR 16-2-1:2008 + A1:2010 + A2:2013

Specification for radio disturbance and immunity measuring apparatus and methods Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements

[7] CISPR 16-2-3:2010 + A1:2010 + A2:2014

Specification for radio disturbance and immunity measuring apparatus and methods Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements

3.4 Date and location of the measurements and tests

Date: 23 and 24 August 2022
Location: Semi anechoic chamber (SAC3)
Test room 1
EMC-Test Laboratory
2444 Seibersdorf
Austria

Temperature: 21°C – 25°C
Humidity: 35% - 50 % rel.

4. Measurements and tests – parameters and results

4.1 Measurement of the conducted emissions

4.1.1 Equipment

ID-No.	Identification	Type	SNo	Calibration Date	Calibration Interval	Manufacturer
E0127	EMI Test Receiver	ESIB26	100136	22 Feb. 2021	2 years	Rohde & Schwarz
E0500	V-LISN	ESH3-Z5	861189/0007	13 Aug. 2021	2 years	Rohde & Schwarz
E0915	EMC Measurement Software EMC32	V 10.60.10	100280/101333	---	---	Rohde & Schwarz
E1143	Thermo-Hygrometer Test Room 1	608-H2	34803740	04 July 2022	3 years	testo
LE0116	Semi Anechoic Chamber with Control Room, Test room 1 and Amplifier Room	SAC3+CR, TR1, AR	P28090	03 Feb. 2022	5 years	Albatross Projects

Table 4: Equipment

4.1.2 Procedure and setup

The measurement was done inside the test room 1 of the EMC-Test Laboratory Seibersdorf. Measurement procedure and setup were according to ANSI C63.4.

Frequency range	0.15 to 30 MHz
Bandwidth	9 kHz
Stepsize	4 kHz
Detector pre- / final-measurement	PK / QP, AV
LISN used for AC supply lines	V-LISN

Table 5: Parameters

Frequency range (MHz)	Measurement uncertainty (dB)
0.15 to 30	+3.01 / -3.01

Table 6: Extended measurement uncertainty for V-LISN

4.1.3 Results

Operation Mode – Charging and Flipper active

Measurement at	Frequency range [MHz]	Measurement plot	Result
L	0.15 – 30	Chart 1, Table 8, Table 9	PASS
N		Chart 2, Table 10, Table 11	PASS

Table 7: Results FCC

4.1.4 Photos of the configurations

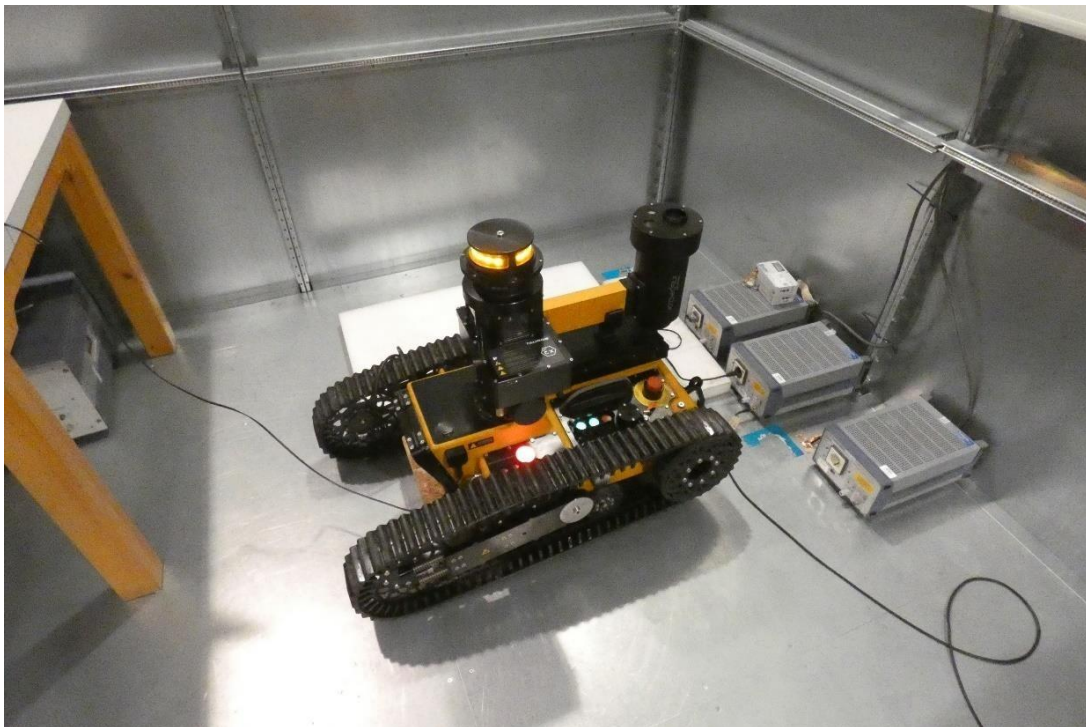
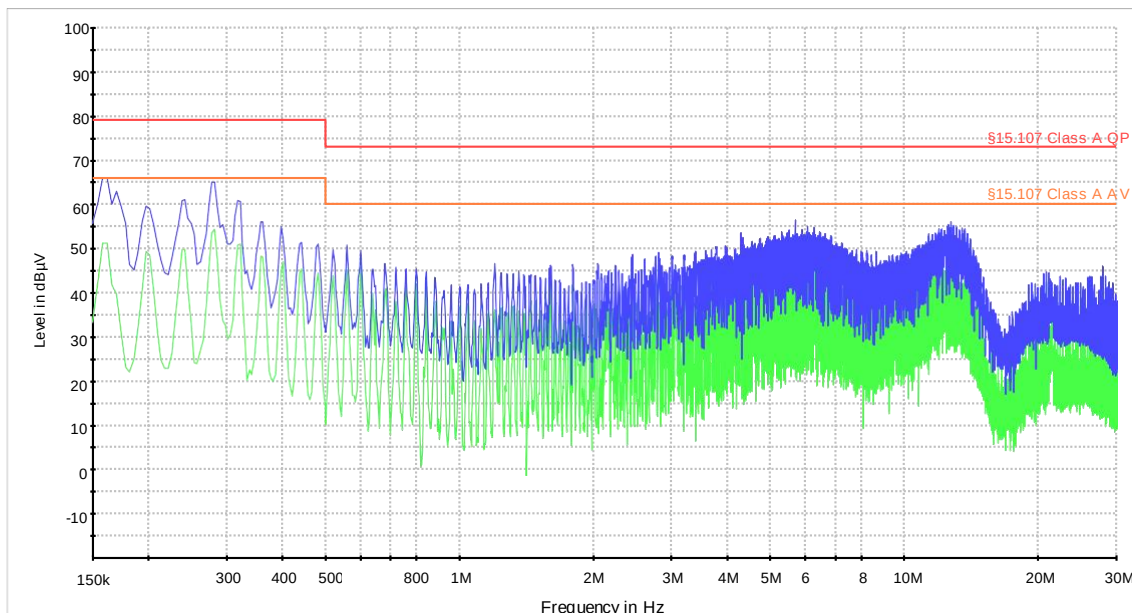


Photo 2: Setup in the test room 1

4.1.5 Charts



AVG_MAX H
PK+ MAX H
\$15.107 Class A QP
\$15.107 Class A AV

E-3048 taurob GmbH 24.08.2022 AH/MCI
Taurob Inspector Roboter
charging modus
20 L

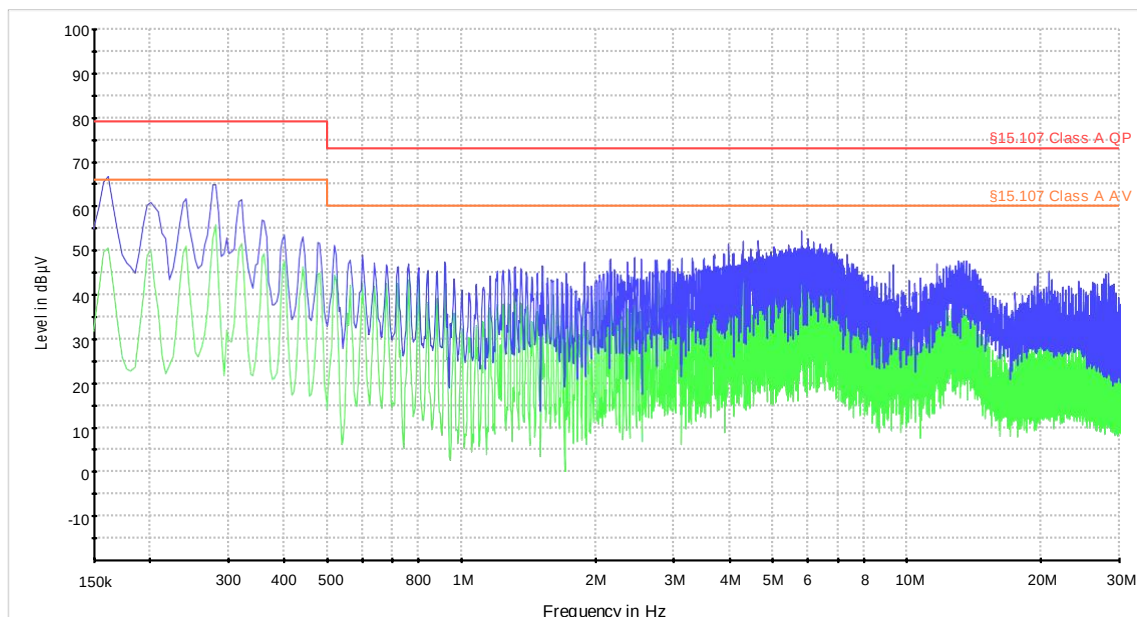
Chart 1: Conducted emissions 0.15 - 30 MHz, L

Frequency [MHz]	Peak [dBµV/m]	Meas. Time [ms]	Bandwidth [kHz]	Line	Margin – PK [dB]	Limit – QPK [dBµV/m]
no emissions with margin < 10dB to the limit measured						

Table 8: Final result, Conducted emissions 0.15 - 30 MHz, L, Peak

Frequency [MHz]	MaxAVG [dBµV]	Meas. Time [ms]	Bandwidth [kHz]	Line	Margin – AVG [dB]	Limit – AVG [dBµV]
no emissions with margin < 10dB to the limit measured						

Table 9: Final result, Conducted emissions 0.15 - 30 MHz, L, Average



AVG_MAX H
PK+ MAX H
§15.107 Class A QP
§15.107 Class A AV

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Taurob Inspector Roboter
charging modus
21 N

Chart 2: Conducted emissions 0.15 - 30 MHz, N

Frequency [MHz]	Peak [dBµV/m]	Meas. Time [ms]	Bandwidth [kHz]	Line	Margin – PK [dB]	Limit – QPK [dBµV/m]
no emissions with margin < 10dB to the limit measured						

Table 10: Final result, Conducted emissions 0.15 - 30 MHz, N, Peak

Frequency [MHz]	MaxAVG [dBµV]	Meas. Time [ms]	Bandwidth [kHz]	Line	Margin – AVG [dB]	Limit – AVG [dBµV]
no emissions with margin < 10dB to the limit measured						

Table 11: Final result, Conducted emissions 0.15 - 30 MHz, N, Average

4.2 Radiated emissions measurement

4.2.1 Equipment

Used from 30 to 1000 MHz

ID-No.	Identification	Type	SNo	Calibration Date	Calibration Interval	Manufacturer
E0915	EMC Measurement Software EMC32	V 10.40.10	100280/101333	---	---	Rohde & Schwarz
E1142	Thermo-Hygrometer SAC	608-H1	34803704	04 Jul. 2022	3 years	testo
LE0116	Semi Anechoic Chamber with Control Room, Test room 1 and Amplifier Room	SAC3+CR, TR1, AR	P28090	03 Feb. 2022	5 years	Albatross Projects
LE0139	EMI Test Receiver	ESW44	101676	12 Apr. 2022	1 year	Rohde & Schwarz
LE0373	TRILOG Broadband antenna	VULB 9162	489	16 Feb. 2022	1 year	Schwarzbeck

Table 12: Equipment

Used from 1000 to 40000 MHz

ID-No.	Identification	Type	SNo	Calibration Date	Calibration Interval	Manufacturer
E0567	Hornantenna	3115	9808-5569	17 Feb. 2022	2 years	EMCO
E0730	Pre-Amplifier	AWT-40039-33	FM5556	12 May 2021	2 years	Avantek
E0736	Pre-Amplifier	DBL-0218N308	018 0217	12 May 2021	2 years	Narda DBS Microwave
E0915	EMC Measurement Software EMC32	V 10.40.10	100280/101333	---	---	Rohde & Schwarz
E1142	Thermo-Hygrometer SAC	608-H1	34803704	04 Jul. 2022	3 years	testo
LE0116	Semi Anechoic Chamber with Control Room, Test room 1 and Amplifier Room	SAC3+CR, TR1, AR	P28090	03 Feb. 2022	5 years	Albatross Projects
LE0139	EMI Test Receiver	ESW44	101676	12 Apr. 2022	1 year	Rohde & Schwarz
LE0153	Horn Antenna	BBHA 9170	00898	07 Dec 2020	2 years	Schwarzbeck

Table 13: Equipment

4.2.2 Procedure and setup

The measurement was done inside the Semi anechoic chamber (SAC3) of the EMC-Test Laboratory Seibersdorf.

Measurement procedure and setup were according to the standard ANSI C63.4.

Frequency range	30 to 1000 MHz
Bandwidth	120 kHz
Step size	40 kHz
Pre-/Final-Detector measurement	PK / QPK
Measurement distance	3 m
Measurement time	PK: 10 ms / QP: 1 s
Orientations	0° - 360°
Height scan	1 m – 4 m
Tilt Antenna	no
Frequency range	1000 to 40000 MHz
Bandwidth	1 MHz
Step size	400 kHz
Detector measurement	AVG
Measurement distance	3 m
Measurement time	50 ms
Orientations	0° - 360°
Height scan	1 m – 4 m
Tilt Antenna	yes
Scan method	Fast Fourier Transformation (FFT)
Maximum hold scans	10

Table 14: Parameters

Frequency range (MHz)	Measurement uncertainty (dB)
30 – 200	+4.03 / -4.03
200 – 1000	+3.31 / -3.35
1000 – 6000	+4.59 / -4.75
1000 – 18000	+4.73 / -4.81
18000 – 40000	+5.62 / -5.69

Table 15: Extended measurement uncertainty

4.2.3 Results

Operation Mode – Moving motors

Orientation [°]	Polarization	Frequency range [MHz]	Measurement plot	Result
0 - 360	Horizontal	30 - 1000	Chart 3; Table 19	PASS
0 - 360	Vertical	30 - 1000	Chart 4; Table 20	PASS
0 - 360	Horizontal	1000 - 18000	Chart 5; Table 21	PASS
0 - 360	Vertical	1000 - 18000	Chart 6; Table 22	PASS
0 - 360	Horizontal	18000 - 40000	Chart 7; Table 23	PASS
0 - 360	Vertical	18000 - 40000	Chart 8; Table 24	PASS

Table 16: Results

Operation Mode – Continuous arm movement

Orientation [°]	Polarization	Frequency range [MHz]	Measurement plot	Result
0 - 360	Horizontal	30 - 1000	Chart 9, Table 25	PASS
0 - 360	Vertical	30 - 1000	Chart 10, Table 26	PASS
0 - 360	Horizontal	1000 - 18000	Chart 11, Table 27	PASS
0 - 360	Vertical	1000 - 18000	Chart 12, Table 28	PASS
0 - 360	Horizontal	18000 - 40000	Chart 13, Table 29	PASS
0 - 360	Vertical	18000 - 40000	Chart 14, Table 30	PASS

Table 17: Results

Operation Mode – Charging and Flipper active

Orientation [°]	Polarization	Frequency range [MHz]	Measurement plot	Result
0 - 360	Horizontal	30 - 1000	Chart 15, Table 31	PASS
0 - 360	Vertical	30 - 1000	Chart 16, Table 32	PASS
0 - 360	Horizontal	1000 - 18000	Chart 17, Table 33	PASS
0 - 360	Vertical	1000 - 18000	Chart 18, Table 34	PASS
0 - 360	Horizontal	18000 - 40000	Chart 19, Table 35	PASS
0 - 360	Vertical	18000 - 40000	Chart 20, Table 36	PASS

Table 18: Results

4.2.4 Photos of the configurations

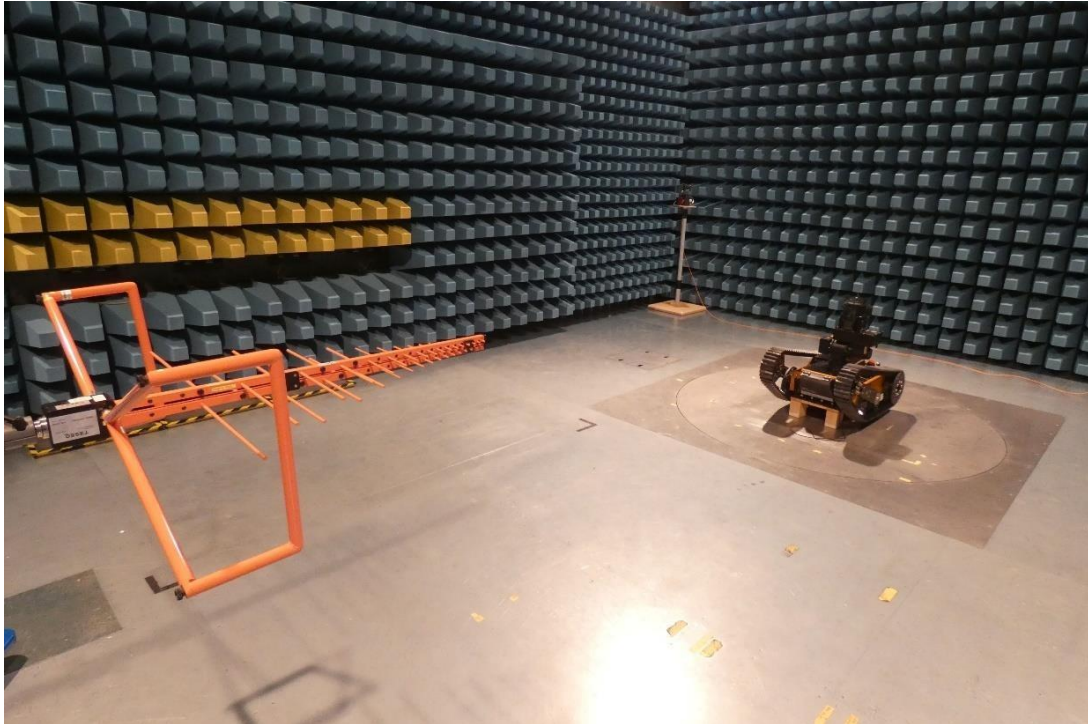


Photo 3: Setup in the semi anechoic chamber from 30 – 1000 MHz

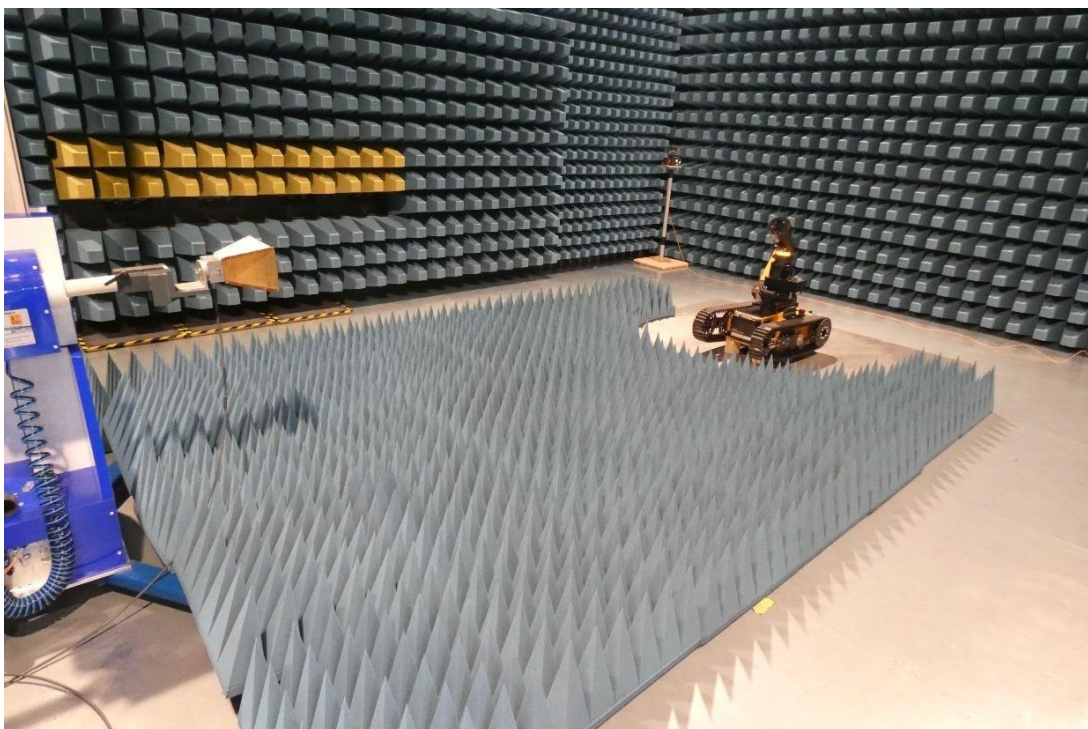


Photo 4: Setup in the semi anechoic chamber from 1000 – 18000 MHz

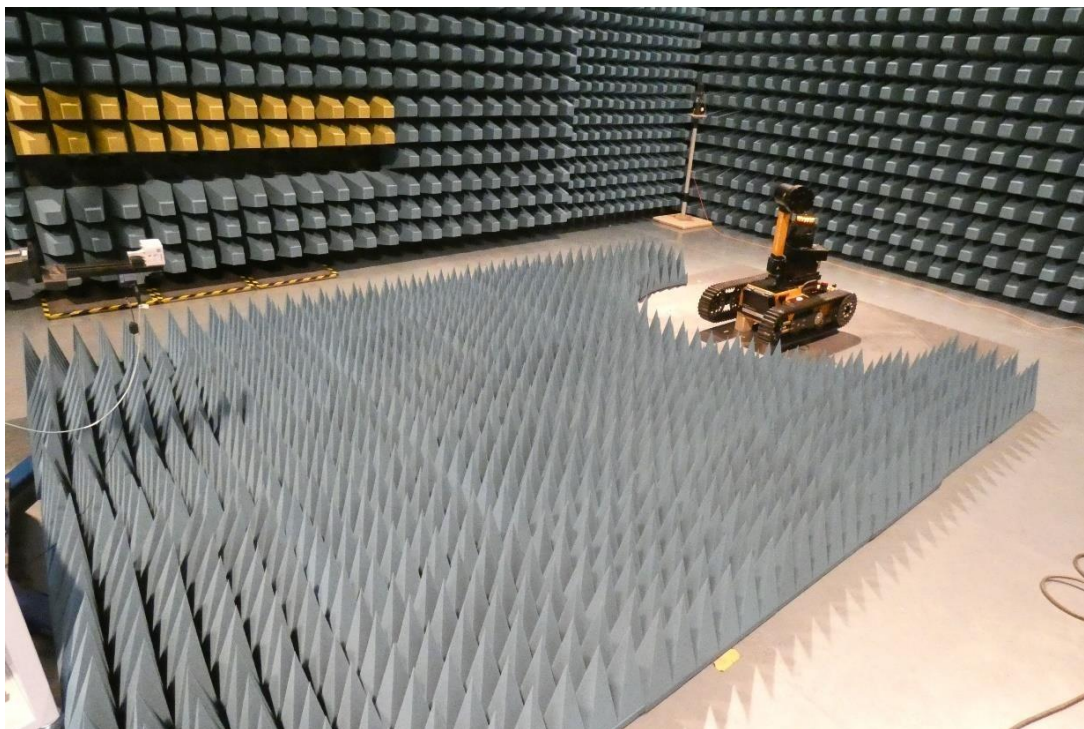
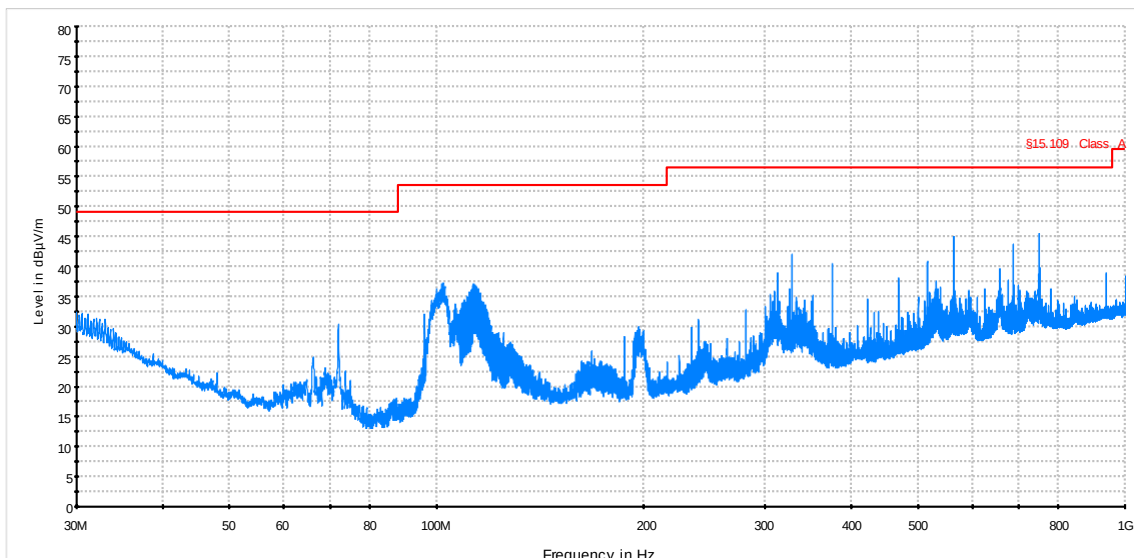


Photo 5: Setup in the semi anechoic chamber from 18000 – 40000 MHz

4.2.5 Charts



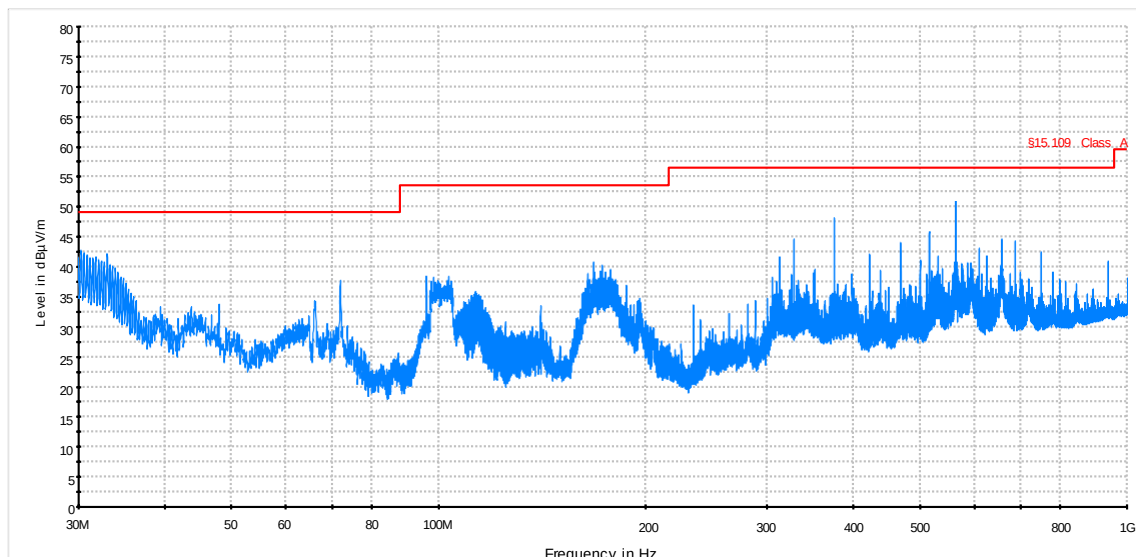
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
driving modus
03 1-4m 0°-360° H

— Preview Result 1H -PK+
§15.109 Class A

Chart 3: Radiated emissions, 30 - 1000 MHz, horizontal

Frequency [MHz]	PK [dBµV/m]	Meas. Time [s]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin –PK [dB]	Limit – QPK [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 19: Peak result, 30-1000 MHz, horizontal



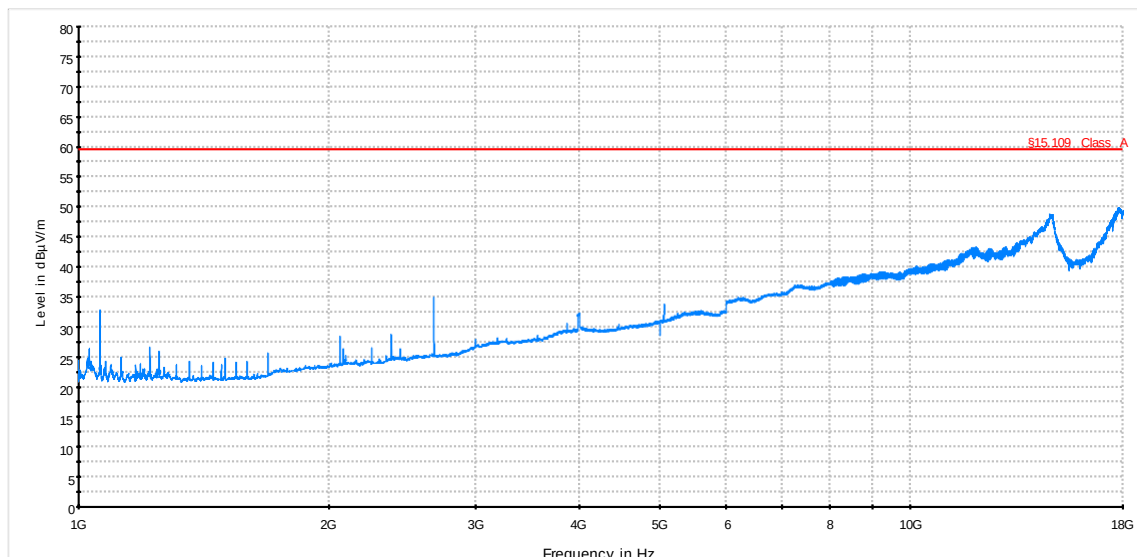
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
driving modus
02 1-4m 0°-360° V

— Previe w Result 1V -PK+
— §15.109 Class A

Chart 4: Radiated emissions, 30 - 1000 MHz, vertical

Frequency [MHz]	PK [dBµV/m]	Meas. Time [s]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin –PK [dB]	Limit – QPK [dBµV/m]
30.27	42.7	0.1	120	180.0	100.0	6.3	49.0
30.30	41.9	0.1	120	180.0	100.0	7.1	49.0
30.57	42.0	0.1	120	180.0	100.0	7.0	49.0
30.60	42.2	0.1	120	180.0	100.0	6.8	49.0
30.87	41.7	0.1	120	180.0	100.0	7.3	49.0
30.90	41.8	0.1	120	180.0	100.0	7.2	49.0
33.03	42.1	0.1	120	90.0	100.0	6.9	49.0
562.47	49.2	0.1	120	90.0	100.0	7.2	56.4
562.50	50.7	0.1	120	90.0	100.0	5.7	56.4
562.53	49.5	0.1	120	90.0	100.0	6.9	56.4

Table 20: Peak result, 30-1000 MHz, vertical



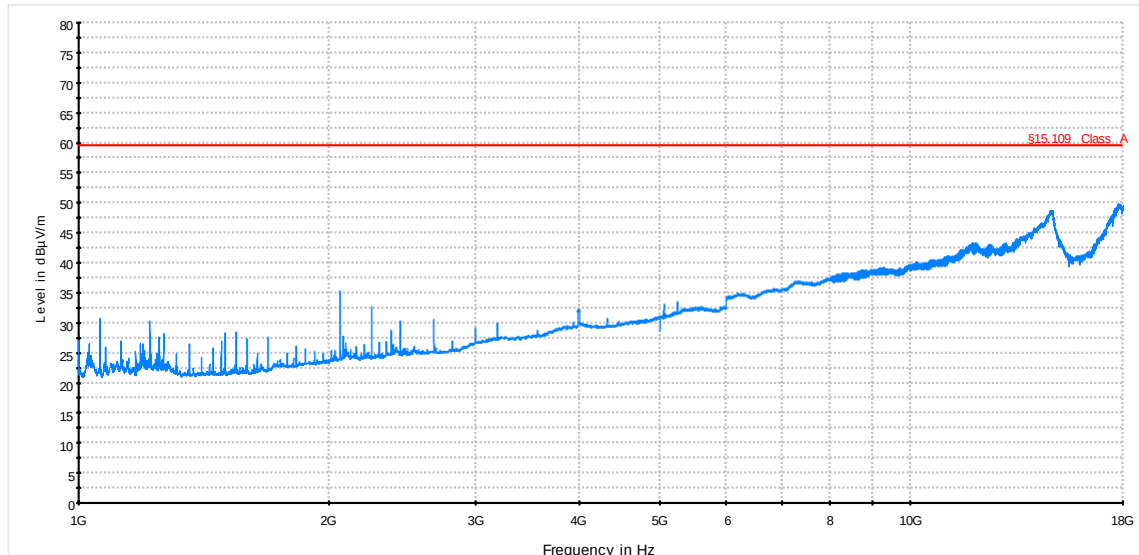
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Taurob Inspector Roboter
driving modus
08 1-4m 0°-360° H

— Previe w Result 1-AVG
— 15.109 Class A

Chart 5: Radiated emissions, 1000 - 18000 MHz, horizontal

Frequency [MHz]	AVG [dBµV/m]	Meas. Time [ms]	Bandwidth [MHz]	Azimuth [deg]	Height [cm]	Margin –AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 21: Average result, 1000 - 18000 MHz, horizontal



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Taurob Inspector Roboter

driving modus

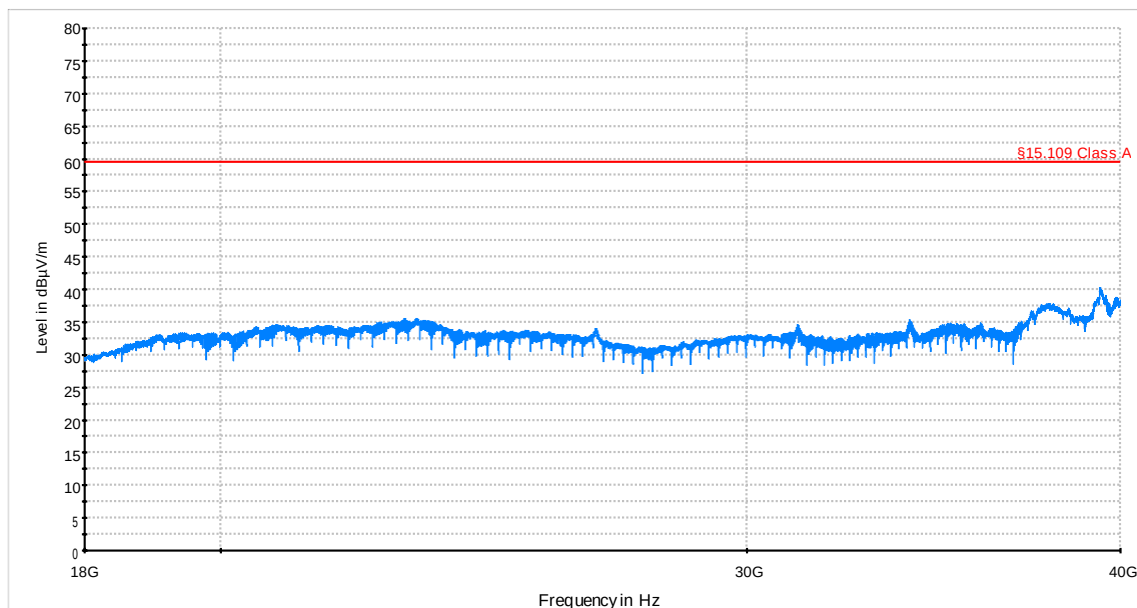
09 1-4m 0°-360° V

— Previe w Result 1-AVG
— §15.109 Class A

Chart 6: Radiated emissions, 1000 - 18000 MHz, vertical

Frequency [MHz]	AVG [dBµV/m]	Meas. Time [ms]	Bandwidth [MHz]	Azimuth [deg]	Height [cm]	Margin –AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 22: Average result, 1000 - 18000 MHz, vertical



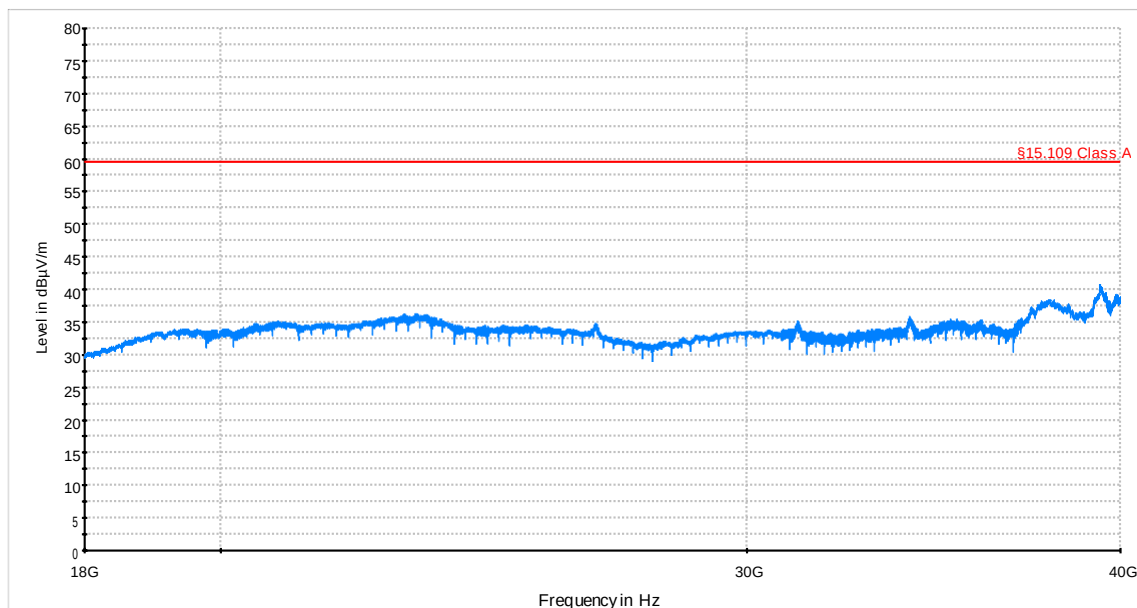
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
driving modus
11 1-4m 0°-360° H

— §15.109 Class A
— AVG_MAX H

Chart 7: Radiated emissions, 18000 - 40000 MHz, horizontal

Frequency [MHz]	MaxAVG [dBµV/m]	Meas. Time [ms]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 23: Average result, 18000 - 40000 MHz, horizontal



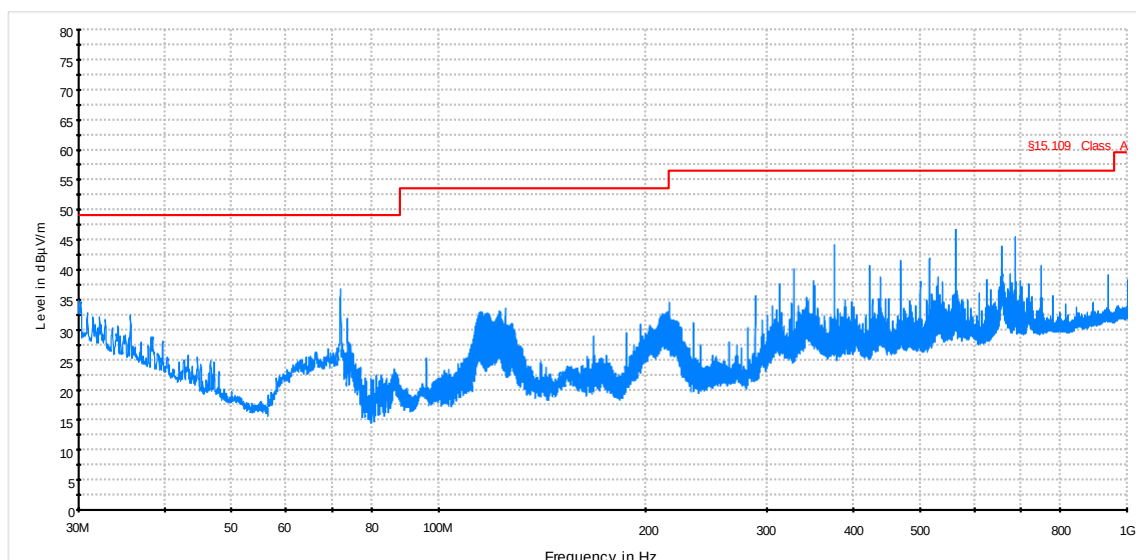
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
driving modus
10 1-4m 0°-360° V

— §15.109 Class A
— AVG_MAX H

Chart 8: Radiated emissions, 18000 - 40000 MHz, vertical

Frequency [MHz]	MaxAVG [dBμV/m]	Meas. Time [ms]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – AVG [dB]	Limit – AVG [dBμV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 24: Average result, 18000 - 40000 MHz, vertical



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Taurob Inspector Roboter

moving armmodus

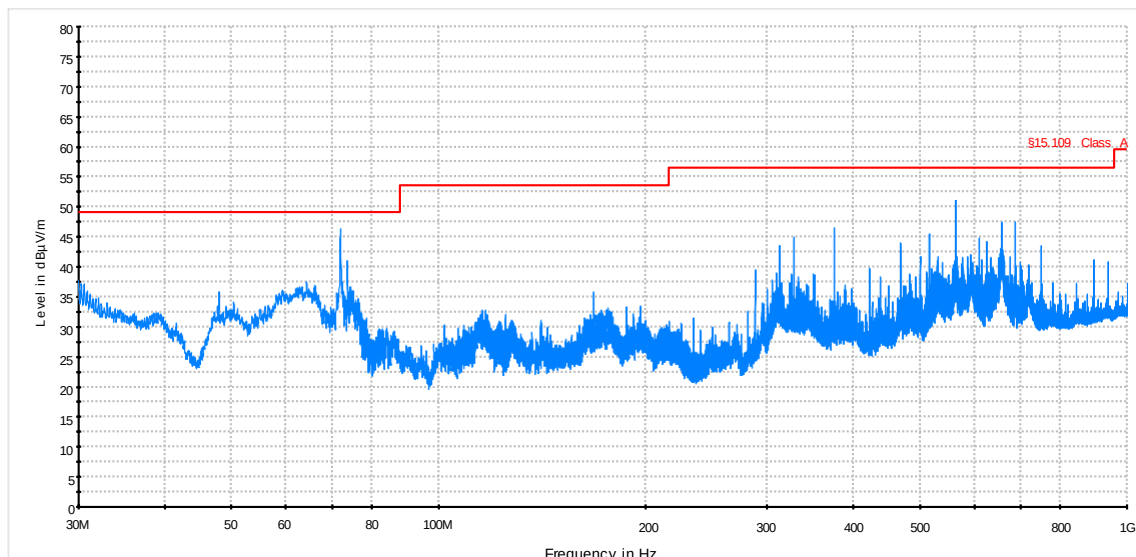
04 1-4m 0°-360° H

— Previe w Result 1H -PK+
— 515.109 Class A

Chart 9: Radiated emissions, 30 - 1000 MHz, horizontal

Frequency [MHz]	PK [dBµV/m]	Meas. Time [s]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin –PK [dB]	Limit – QPK [dBµV/m]
72.00	35.9	0.1	120	180.0	100.0	13.1	49.0
72.03	36.8	0.1	120	180.0	100.0	12.2	49.0
72.06	35.8	0.1	120	180.0	100.0	13.2	49.0
375.00	44.2	0.1	120	90.0	100.0	12.2	56.4
562.47	45.2	0.1	120	90.0	100.0	11.2	56.4
562.50	46.7	0.1	120	90.0	100.0	9.7	56.4
562.53	45.6	0.1	120	90.0	100.0	10.8	56.4
656.25	43.9	0.1	120	90.0	100.0	12.5	56.4
687.48	45.3	0.1	120	90.0	100.0	11.1	56.4
687.51	45.5	0.1	120	90.0	100.0	10.9	56.4

Table 25: Peak result, 30-1000 MHz, horizontal



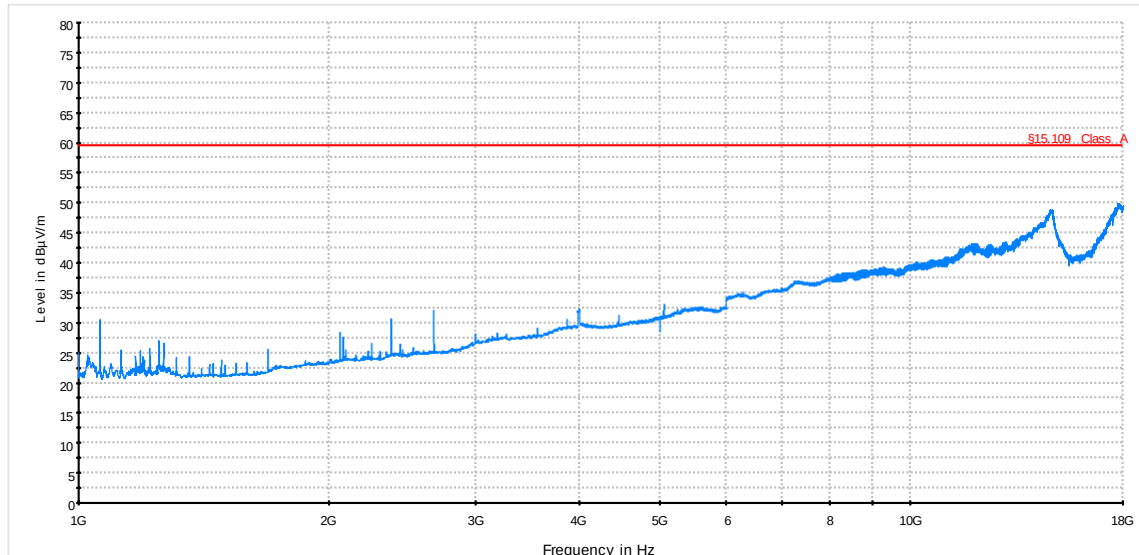
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
moving arm modus
05 1-4m 0°-360° V

— Previe w Result 1V -PK+
— §15.109 Class A

Chart 10: Radiated emissions, 30 - 1000 MHz, vertical

Frequency [MHz]	PK [dBµV/m]	Meas. Time [s]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – PK [dB]	Limit – QPK [dBµV/m]
71.94	42.4	0.1	120	180.0	100.0	6.6	49.0
71.97	44.1	0.1	120	180.0	100.0	4.9	49.0
72.00	45.2	0.1	120	180.0	100.0	3.8	49.0
72.03	46.2	0.1	120	180.0	100.0	2.8	49.0
72.06	45.2	0.1	120	180.0	100.0	3.8	49.0
72.09	44.1	0.1	120	180.0	100.0	4.9	49.0
72.12	44.0	0.1	120	180.0	100.0	5.0	49.0
72.15	43.5	0.1	120	180.0	100.0	5.5	49.0
562.50	51.0	0.1	120	0.0	100.0	5.4	56.4
562.53	49.8	0.1	120	90.0	100.0	6.6	56.4

Table 26: Peak result, 30-1000 MHz, vertical



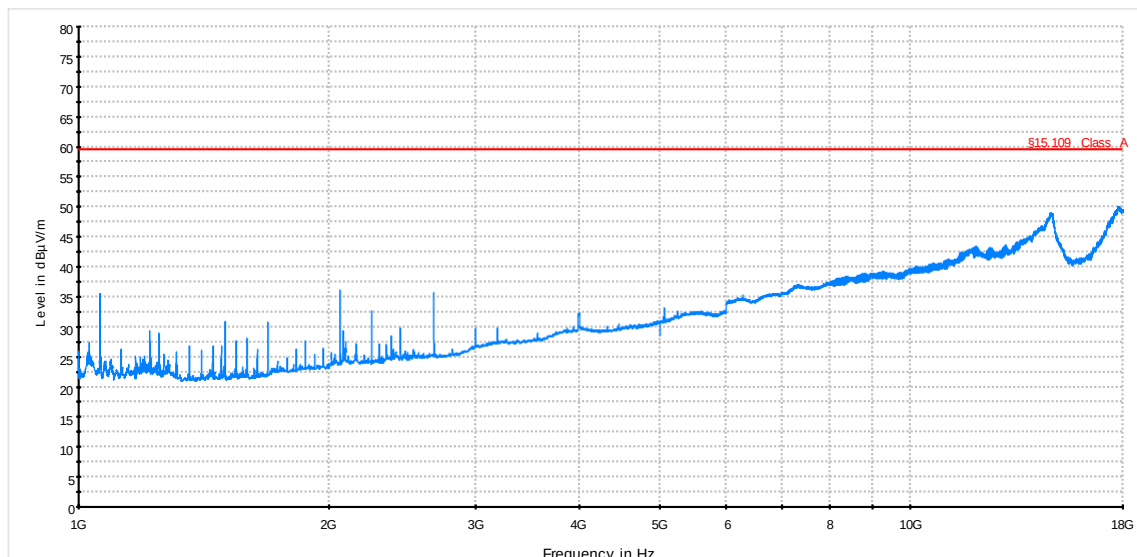
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
moving arm modus
07 1-4m 0°-360° H

— Previe w Result 1-AVG
— §15.109 Class A

Chart 11: Radiated emissions, 1000 - 18000 MHz, horizontal

Frequency [MHz]	AVG [dBμV/m]	Meas. Time [ms]	Bandwidth [MHz]	Azimuth [deg]	Height [cm]	Margin –AVG [dB]	Limit – AVG [dBμV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 27: Average result, 1000 - 18000 MHz, horizontal



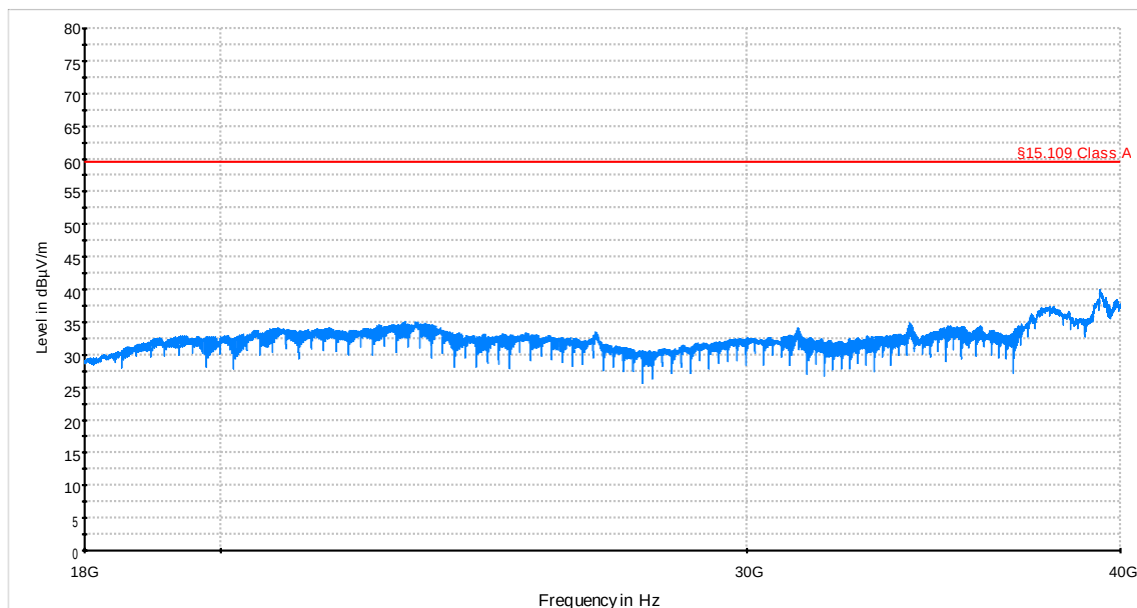
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
moving arm module
06 1-4m 0°-360° V

— Previe w Result 1-AVG
— 15.109 Class A

Chart 12: Radiated emissions, 1000 - 18000 MHz, vertical

Frequency [MHz]	AVG [dBµV/m]	Meas. Time [ms]	Bandwidth [MHz]	Azimuth [deg]	Height [cm]	Margin –AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 28: Average result, 1000 - 18000 MHz, vertical



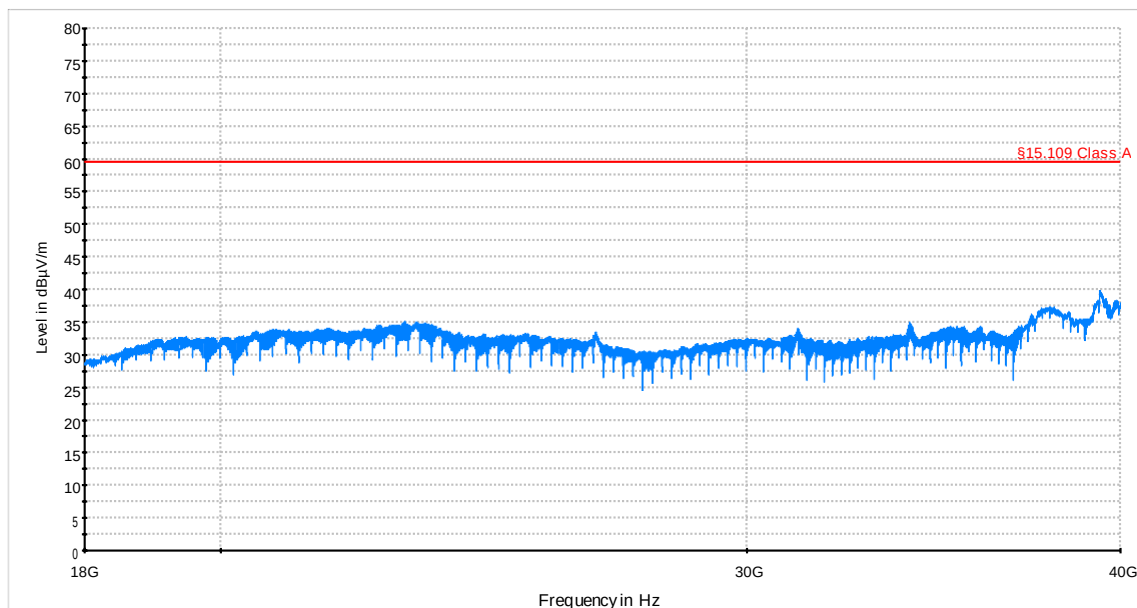
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
moving arm modus
12 1-4m 0°-360° H

— §15.109 Class A
— AVG_MAX H

Chart 13: Radiated emissions, 18000 - 40000 MHz, horizontal

Frequency [MHz]	MaxAVG [dBµV/m]	Meas. Time [ms]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 29: Average result, 18000 - 40000 MHz, horizontal



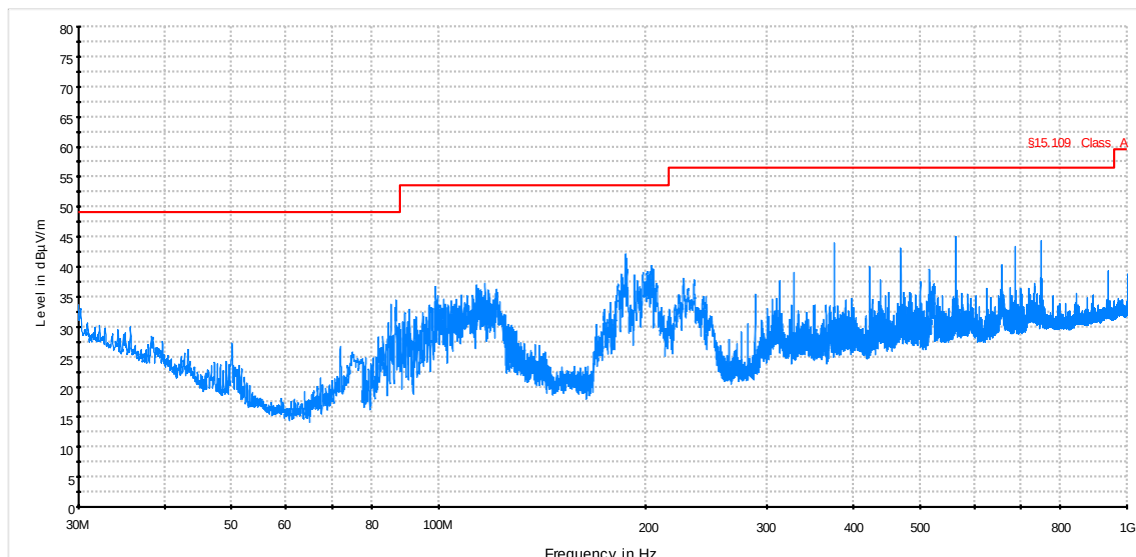
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Roboter
moving arm modus
13 1-4m 0°-360° V

— §15.109 Class A
— AVG_MAX H

Chart 14: Radiated emissions, 18000 - 40000 MHz, vertical

Frequency [MHz]	MaxAVG [dBμV/m]	Meas. Time [ms]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – AVG [dB]	Limit – AVG [dBμV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 30: Average result, 18000 - 40000 MHz, vertical



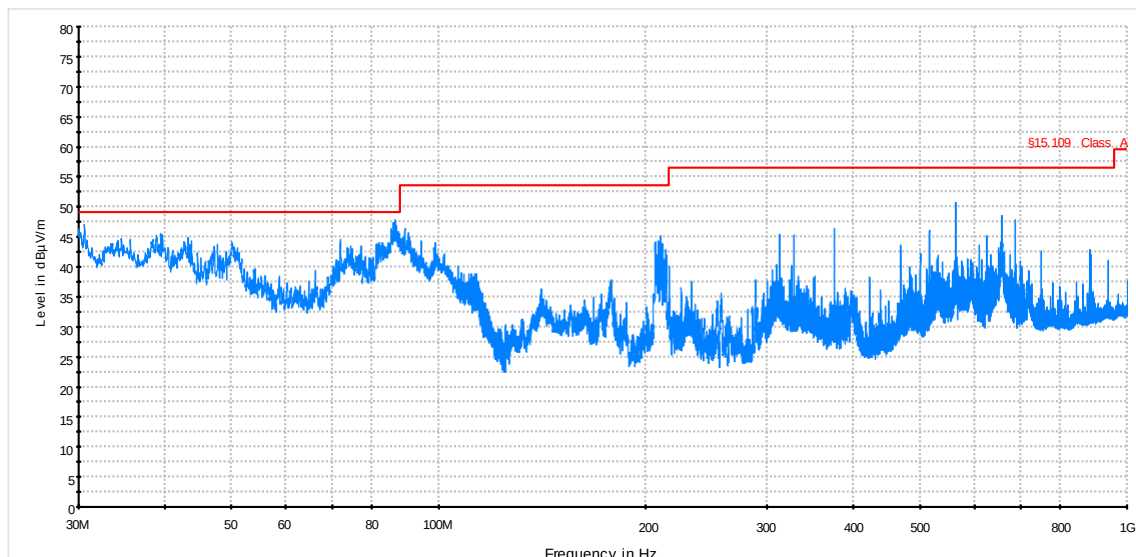
E-3048 taurob GmbH 24.08.2022 AH/MCI
Taurob Inspector Robot
charging modus
19 1-4m 0°-360° H

— Previe w Result 1H -PK+
— §15.109 Class A

Chart 15: Radiated emissions, 30 - 1000 MHz, horizontal

Frequency [MHz]	PK [dBμV/m]	Meas. Time [s]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin –PK [dB]	Limit – QPK [dBμV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 31: Peak result, 30-1000 MHz, horizontal



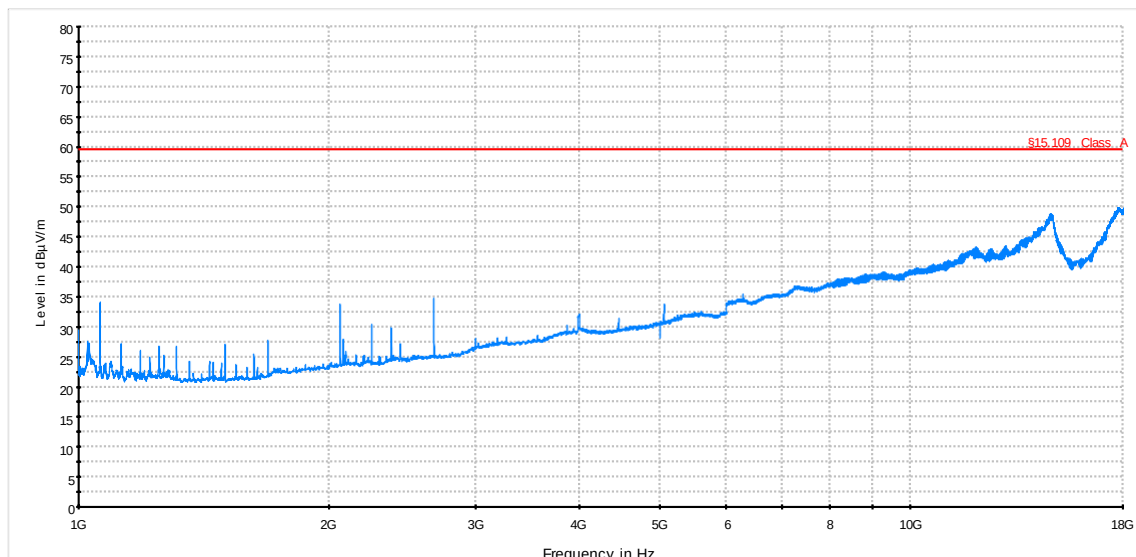
E-3048 taurob GmbH 24.08.2022 AH/MCI
Taurob Inspector Roboter
chargingmodus
18 1-4m 0°-360° V

— Previe w Result 1V -PK+
— 51.109 Class A

Chart 16: Radiated emissions, 30 - 1000 MHz, vertical

Frequency [MHz]	PK [dBµV/m]	Meas. Time [s]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin –PK [dB]	Limit – QPK [dBµV/m]
30.60	46.8	0.1	120	0.0	100.0	2.2	49.0
30.63	47.0	0.1	120	0.0	100.0	2.0	49.0
86.04	47.2	0.1	120	180.0	100.0	1.8	49.0
86.07	46.5	0.1	120	180.0	100.0	2.5	49.0
86.52	47.5	0.1	120	180.0	100.0	1.5	49.0
86.55	47.7	0.1	120	180.0	100.0	1.3	49.0
86.49	46.6	0.1	120	180.0	100.0	2.4	49.0
86.58	46.9	0.1	120	180.0	100.0	2.1	49.0
86.70	46.5	0.1	120	180.0	100.0	2.5	49.0
86.73	46.9	0.1	120	270.0	100.0	2.1	49.0

Table 32: Peak result, 30-1000 MHz, vertical



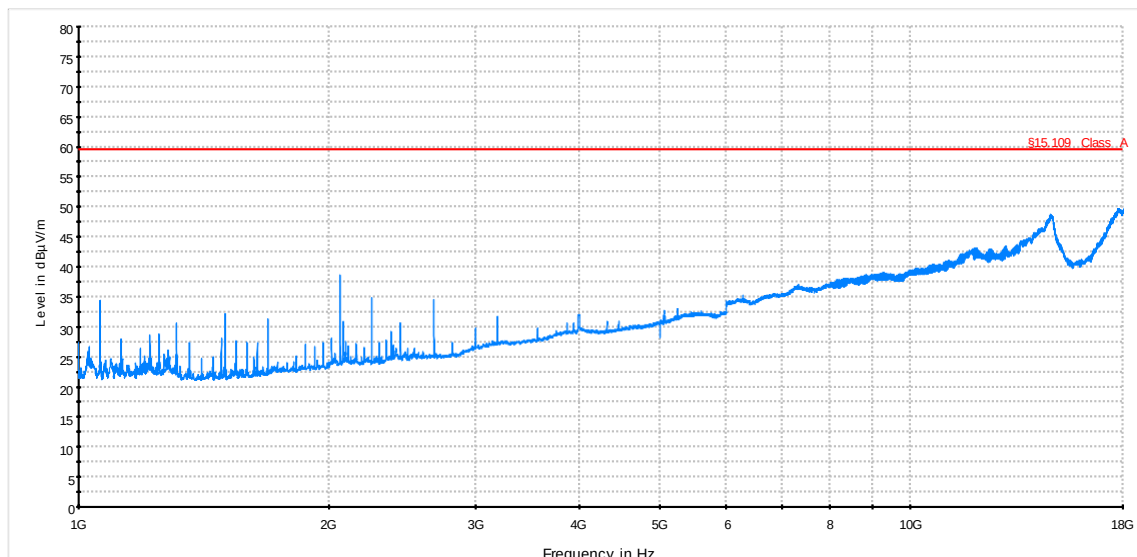
E-3048 taurob GmbH 24.08.2022 AH/MCI
Taurob Inspector Roboter
chargingmodus
16 1-4m 0°-360° H

— Previe w Result 1-AVG
— §15.109 Class A

Chart 17: Radiated emissions, 1000 - 18000 MHz, horizontal

Frequency [MHz]	AVG [dBμV/m]	Meas. Time [ms]	Bandwidth [MHz]	Azimuth [deg]	Height [cm]	Margin –AVG [dB]	Limit – AVG [dBμV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 33: Average result, 1000 - 18000 MHz, horizontal



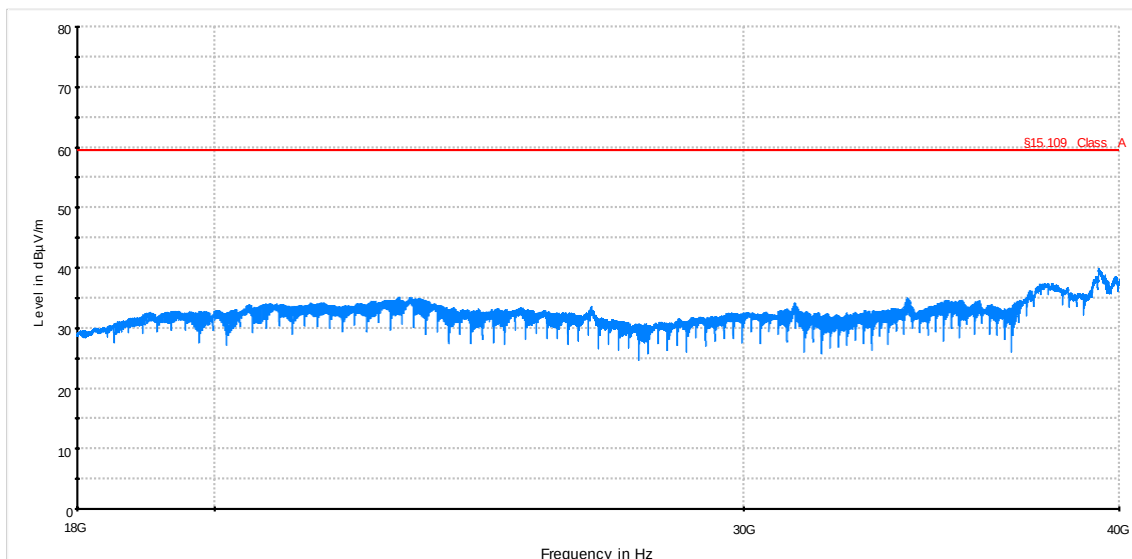
E-3048 taurob GmbH 24.08.2022 AH/MCI
Taurob Inspector Roboter
chargingmodus
17 1-4m 0°-360° V

— Previe w Result 1-AVG
— 15.109 Class A

Chart 18: Radiated emissions, 1000 - 18000 MHz, vertical

Frequency [MHz]	AVG [dBµV/m]	Meas. Time [ms]	Bandwidth [MHz]	Azimuth [deg]	Height [cm]	Margin –AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 34: Average result, 1000 - 18000 MHz, vertical



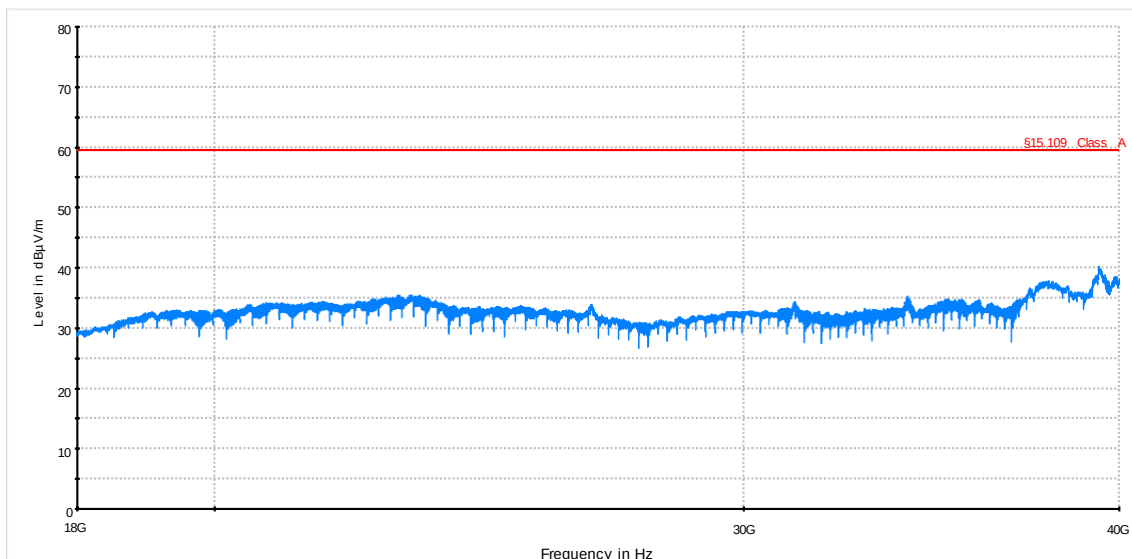
E-3048 taurob GmbH 23.08.2022 AH/MCI
Taurob Inspector Robder
chargingmodus
15 1-4m 0°-360° H

— §15.109 Class A
— AVG_MAX H

Chart 19: Radiated emissions, 18000 - 40000 MHz, horizontal

Frequency [MHz]	MaxAVG [dBμV/m]	Meas. Time [ms]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – AVG [dB]	Limit – AVG [dBμV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 35: Average result, 18000 - 40000 MHz, horizontal



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Taurob Inspector Robder
chargingmodus
14 1-4m 0°-360° V

— §15.109 Class A
— AVG_MAX H

Chart 20: Radiated emissions, 18000 - 40000 MHz, vertical

Frequency [MHz]	MaxAVG [dBµV/m]	Meas. Time [ms]	Bandwidth [kHz]	Azimuth [deg]	Height [cm]	Margin – AVG [dB]	Limit – AVG [dBµV/m]
no emissions with margin < 10dB to the limit or noise level							

Table 36: Average result, 18000 - 40000 MHz, vertical