

FCC Test Report (Part 15C)

NFC



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Number of pages:	26	Project support engineer:	Oliver Flecke
Test period:	08-Oct to 12-Nov-2021		

Applicant:	Molex CVS Dabendorf GmbH, Märkische Straße 72, 15806 Zossen, Germany, Mr. Michael Schmidt		
Manufacturer:	Molex CVS Dabendorf GmbH, Märkische Straße 72, 15806 Zossen, Germany		
EUT identification:	Molex, WCH-304 (WCH-304a)		
FCC ID:	RK7WCH-304	ISED ID:	4774A-WCH304

Testing laboratory:	Molex CVS Lab, Molex CVS Bochum GmbH, Meesmannstr.103, 44807 Bochum, Germany		
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FCC designation no.:	DE0017	ISED recognition no.:	DE0015
Laboratory manager:	Robert Müller		

Test result:	The EUT complies with the requirements made in the referred test documents.
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Approver:	Ines Baufeld	Technical review:	Robert Müller
Title:	Laboratory Quality Manager	Title:	Laboratory Manager

Signature:		Signature:	
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Version History

Report Number	Date	Comment
LAB-341D (v1.0)	29-Nov-2021	1 st approved version
LAB-341D (v2.0)	02-Dec-2021	Correction of applied standards (RSS-210)
LAB-341D (v3.0)	02-Jun-2022	Update test setup description section 3.1

1. Summary for FCC Part 15C Test Report

Date of receipt	09-Aug-2021
Testing completed	12-Nov-2021
The customer's contact person	Michael Schmidt
Test samples / setup pictures	LAB-341D_RK7WCH-304_FCC_NFC_Test_Setup_Photos_v3.0
HW change / difference document	none
Notes	none

1.1. EUT and accessory information

The EUT is an inductive wireless power transfer device (wireless charger) with RFID system (NFC) operating at 13.56 MHz. The EUT is tested without mobile phone in a continuous NFC transmission mode with active modulation, configured via UART interface (Duty cycle of 100 %).

The following test samples provided by the customer were tested.

ID	Description	Manufacturer	Type	S/N	HW Version	SW Version
DAB210990E	WPT Device	Molex	WCH-304a	0000030D0470	H10	T019

The following accessories have been provided by the customer and belong to the equipment under test (EUT).

ID	Description	Manufacturer	Type	S/N	HW Version	SW Version
DAB2210000	DC power cable long	Molex				
DAB2210001	Cellular RF cable with Bias-T (50 Ω, 10 kΩ)	Molex	-	-	-	-

1.2. Technical characteristics

Power Supply [V]	Lead-acid battery (vehicle regulated) – 13.2 V DC		
Voltage Range [V]	$U_{nom} = 13.2$	$U_{min} = 11.1$	$U_{max} = 15.3$
NFC communication cut-off Voltage [V]	$U_{cut-off} = 6.2$ (NFC communication is stopped for $U < U_{cut-off}$)		
Temperatures Range [°C]	-20 .. +80		
Radio Type	NFC transceiver		
Operating Frequency [MHz]	13.56		
Operating Channels	Not channelized		
Antenna Type	Integral		
Antenna gain [dBi]	n.a.		
Product Category	RFID		
Modulation Type	ASK		
RFID Classification	Wideband (ISO14443, NFC...)		

Above technical information was provided by the applicant. For more details, please refer to the User's manual of the EUT.

1.3. Applied standards

Standard / Rule Part	Version	Year
CFR 47, FCC Part 15C	-	Nov-2021
ANSI C63.10	-	Jun-2013
ISED RSS-Gen	Issue 5 + AMD1 + AMD2	Feb-2021
ISED RSS-210	Issue 10	Dec-2019

Deviations or clarifications to these standards are noted in the related test result under “test method and limit”.

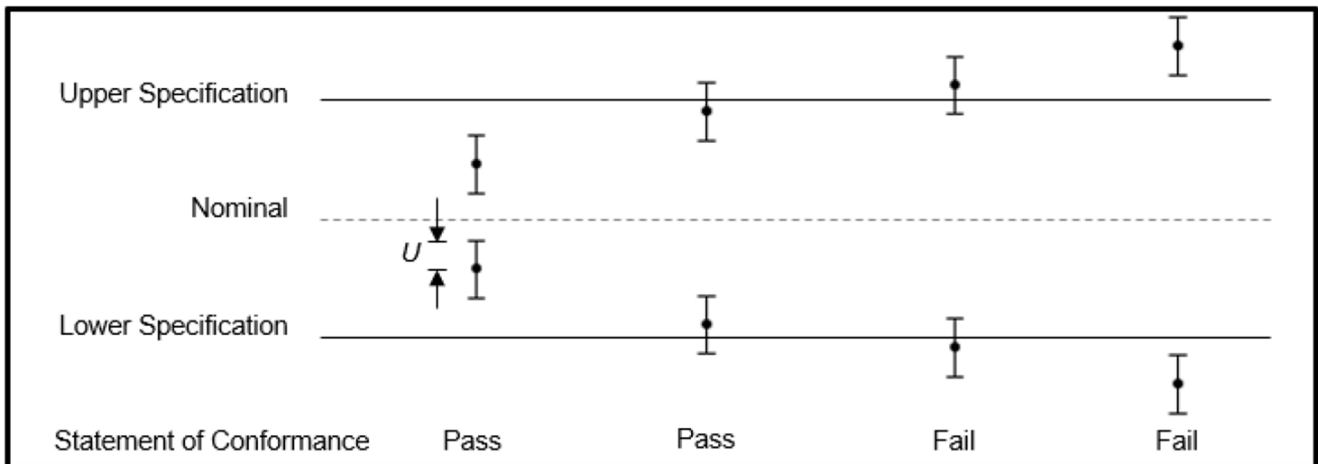
1.4. Measurement uncertainties

Parameter	Measurement Uncertainty	Maximum Uncertainty
Radio Frequency	$\pm 3.6 \times 10^{-7}$	$\pm 1 \times 10^{-5}$
Total RF Power, conducted	± 0.79 dB	± 1.5 dB
RF Power density, conducted	± 0.79 dB	± 3.0 dB
Spurious emissions, conducted	± 1.67 dB	± 3.0 dB
All emissions, radiated	± 5.38 dB	± 6.0 dB
Temperature	± 1.0 °C	± 3.0 °C
Humidity	± 2.0 %	± 5.0 %

These uncertainties represent an expanded uncertainty expressed approximately at the 95% confidence level using a coverage factor of $k=2$

1.5. Decision rule

Unless it is inherent in the requested customer specification or test standard, the “Binary Statement for Simple Acceptance” as defined in ILAC G8:2019 clause 4.2.1 is applied as decision rule for the conformity statement, see the following picture. Therefore, the measured values are compared directly with the limit values without taking the measurement uncertainty into account.



$U = 95\%$ expanded measurement uncertainty

1.6. Risk Assessment

Following the guidance of ILAC G8:2019 clause 5.2, the level of specific risk of False Accept or False Reject considering different decision rules and respectively expanded measurement uncertainties can be expressed as follows.

Decision Rule	Distance of Measurement Value to Limit	Probability of wrong Conformity Statement
6 Sigma	3 x Measurement Uncertainty	< 1 ppm
3 Sigma	1.5 x Measurement Uncertainty	< 0.16 %
ILAC G8:2009 Rule	1 x Measurement Uncertainty	< 2.5 %
ISO 14253.1:2017	0.83 x Measurement Uncertainty	< 5 %
Simple Acceptance, ILAC G8:2009 4.2.1	Measurement Value on Limit Line	50 % "worst case" scenario

1.7. Summary of test results

Section	Section in CFR 47	Section in RSS-Gen	Section in RSS-210	Name of the test	Result
3	15.225 (a)(b)(c)	-	B.6 (a)	Field strength in the 13.56 MHz band	PASSED
4	15.225 (d), 15.209	8.9	-	Radiated emissions below 30 MHz	PASSED
5	15.225 (d), 15.209	8.9	-	Radiated emissions above 30 MHz	PASSED
6	15.225 (e)	8.11	B.6 (b)	Frequency stability, temperature variation	PASSED
7	15.225 (e)	8.11	B.6 (b)	Frequency stability, voltage variation	PASSED
-	15.207	8.8	-	AC powerline conducted emissions	NA
8	15.215 (c)	6.7	-	Occupied bandwidth	PASSED

PASSED: The EUT complies with the essential requirements in the standard.

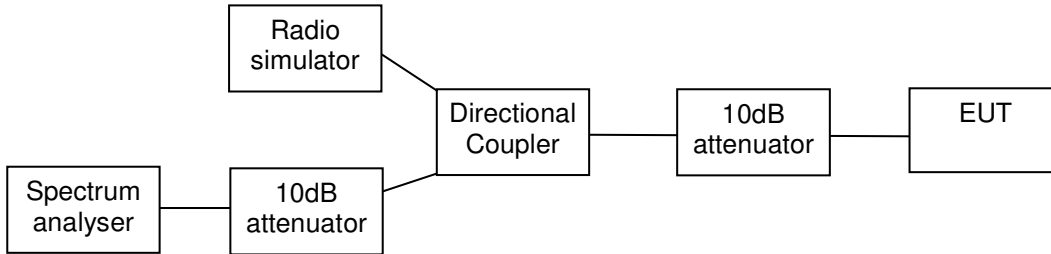
FAILED: The EUT does not comply with the essential requirements in the standard.

NP: The test was not performed.

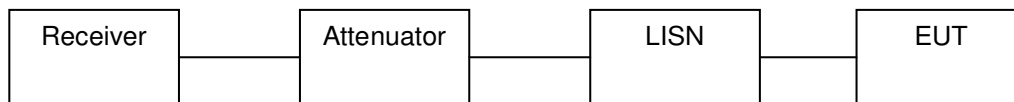
NA: The test was not applicable.

2. Test setups

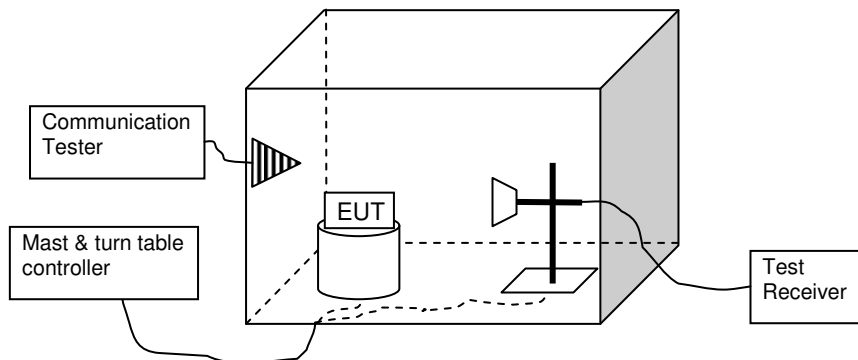
2.1. Conducted RF test setup (Setup 1)



2.2. Conducted AC power line emissions test setup (Setup 2)



2.3. Radiated emissions test setup (Setup 3)



3. Field strength in the 13.56 MHz band

EUT with DUT number	DAB210990E
Accessories with DUT numbers	DAB2210000, DAB2210001
Operation voltage [V] / [Hz]	13.2 V / DC
Result	PASSED
Remarks	none
Temp [°C] / humidity [%RH]	22.1 / 39
Date of measurement	02-Nov-2021
Test Responsible	Jürgen Mitterer
Test system SW version	Rohde & Schwarz EMC32 / 10.60.20

3.1. Test method and limit

The measurement is made according to ANSI C63.10 and RSS-Gen as follows:

- ⇒ The measurement distance is 3 m with a shielded loop antenna. The magnetic field to electric field conversion factor is 51.5 dB ($\text{dB}\mu\text{A}/\text{m} = \text{dB}\mu\text{V}/\text{m} - 51.5 \text{ dB}$).
- ⇒ The Limit has been adjusted with the distance correction factor according to 15.31(f)(2). (+40 dB for 30 m distance and +80 dB for 300 m distance)
- ⇒ The measurement is divided into the Preliminary Measurement and the Final Measurement. The Preliminary Measurement and the Final Measurement are performed with the measuring antenna at 1m height. The equipment under test (EUT) is located on an 80 cm table, which is rotated by 360 degrees. The DUT is positioned in horizontal and vertical position on the test table.
- ⇒ During the Preliminary Measurement, the suspected frequencies are searched by using the PK detector and the measuring antenna is turned in 2 vertical positions (x-, y-pos) to find out worst case position¹⁾. In the Final Measurement the exact frequency and amplitude of these emissions are re-measured by using the applicable QP and AV detector.
- ⇒ The Final Measurement is performed if the Preliminary Measurement results are closer than 20 dB to the permissible limit.
- ⇒ The measurement results are obtained as described in the following formula: $E [\text{dB}\mu\text{V}/\text{m}] = U_{\text{RX}} + A_{\text{CF}}$
Where U_{RX} is receiver reading and A_{CF} is total correction factor including cable loss, antenna factor and preamplifier gain ($A_{\text{CF}} = L_{\text{CABLES}} + \text{AF} - G_{\text{PREAMP}}$).
- ⇒ Example values and calculation for one final QP measurement frequency at 13.55 MHz, see result in 3.2:
 $E [\text{dB}\mu\text{V}/\text{m}] = 42.28 + 20.90 = 63.18$

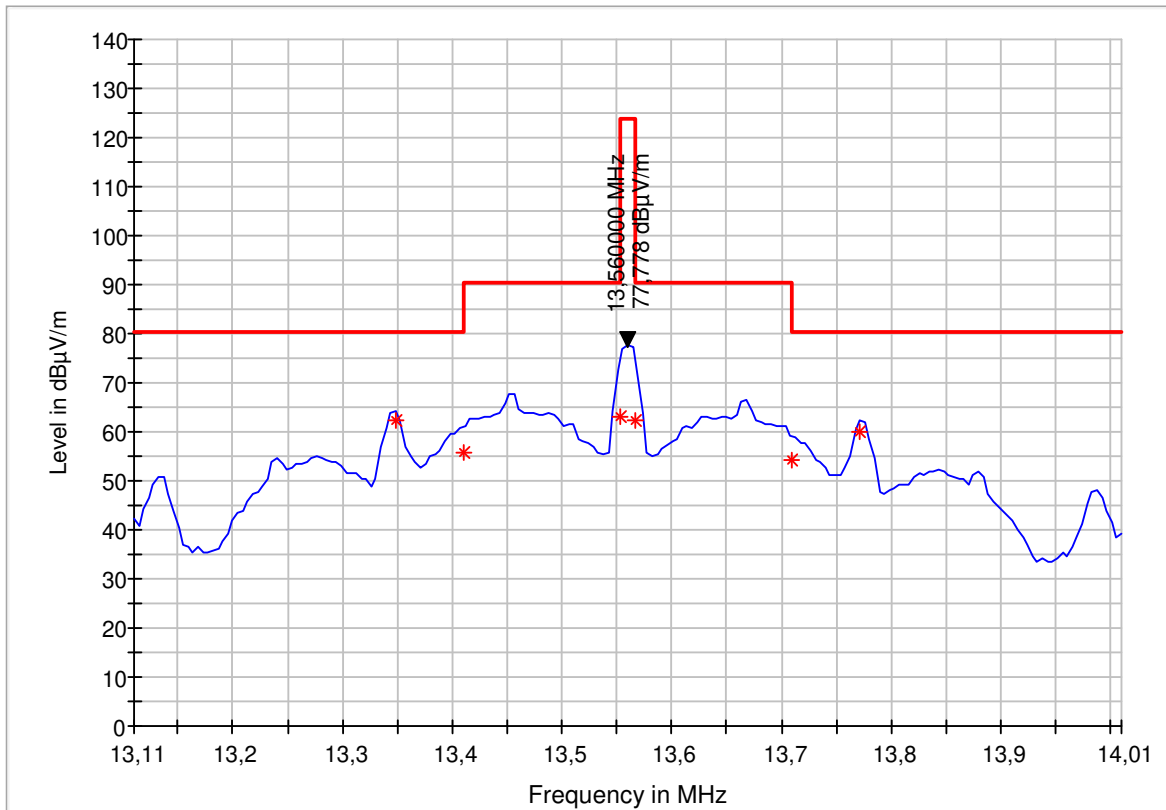
- 1) Note: The position DUT vertical / Antenna vertical has been determined as worst-case position compared to position DUT horizontal / Antenna horizontal.

Limits for field strength (13.56 MHz band) measurements (3 m measurement distance)

Frequency range [MHz]	Limit [$\text{dB}\mu\text{A}/\text{m}$]	Limit [$\text{dB}\mu\text{V}/\text{m}$]	Detector
13.553 - 13.567	15.848 * 100	84 + 40 dB	QP
13.410 - 13.553	334 * 100	50.5 + 40 dB	QP
13.567 - 13.710			QP
13.110 - 13.410	106 * 100	40.5 + 40 dB	QP
13.710 - 14.010			QP

3.2. Test results (FCC/ISED)

Peak detector (RBW 10 kHz)



Quasi-Peak detector (RBW 9 kHz)

Frequency [MHz]	Level [dBµV/m]	Transducer [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Azimuth [deg]	Polarisation	Elevation [deg]	Result
13.348350	62.39	20.90	80.50	18.11	100.0	-1.0	Vertical	90.0	PASSED
13.410000	55.84	20.90	80.50	24.66	100.0	-1.0	Vertical	90.0	PASSED
13.552950	63.18	20.90	90.50	27.32	100.0	-1.0	Vertical	90.0	PASSED
13.567050	62.24	20.90	90.50	28.26	100.0	-1.0	Vertical	90.0	PASSED
13.710000	54.04	20.90	80.50	26.46	100.0	-2.0	Vertical	90.0	PASSED
13.771500	60.11	20.90	80.50	20.39	100.0	-1.0	Vertical	90.0	PASSED

No further emissions found less than 20 dB to the regulatory limit and no emission found in the restricted bands of operation.

4. Radiated emissions below 30 MHz

EUT with DUT number	DAB210990E
Accessories with DUT numbers	DAB2210000, DAB2210001
Operation voltage [V] / [Hz]	13.2 V / DC
Result	PASSED
Remarks	none
Temp [°C] / humidity [%RH]	22.1 / 39
Date of measurement	02-Nov-2021
Test Responsible	Jürgen Mitterer
Test system SW version	Rohde & Schwarz EMC32 / 10.60.20

4.1. Test method and limit

The measurement is made according to ANSI C63.10 and RSS-Gen as follows:

- ⇒ The measurement distance is 3 m with a shielded loop antenna. The magnetic field to electric field conversion factor is 51.5 dB ($\text{dB}\mu\text{A}/\text{m} = \text{dB}\mu\text{V}/\text{m} - 51.5 \text{ dB}$).
- ⇒ The Limit has been adjusted with the distance correction factor according to 15.31(f)(2). (+40 dB for 30 m distance and +80 dB for 300 m distance)
- ⇒ The measurement is divided into the Preliminary Measurement and the Final Measurement. The Preliminary Measurement and the Final Measurement are performed with the measuring antenna at 1m height. The equipment under test (EUT) is located on an 80 cm table, which is rotated by 360 degrees. The DUT is positioned in horizontal and vertical position on the test table.
- ⇒ During the Preliminary Measurement, the suspected frequencies are searched by using the PK detector and the measuring antenna is turned in 2 vertical positions (x-, y-pos) to find out worst case position¹⁾. In the Final Measurement the exact frequency and amplitude of these emissions are re-measured by using the applicable QP and AV detector.
- ⇒ The Final Measurement is performed if the Preliminary Measurement results are closer than 20 dB to the permissible limit.
- ⇒ The measurement results are obtained as described in the following formula: $E [\text{dB}\mu\text{V}/\text{m}] = U_{\text{RX}} + A_{\text{CF}}$
Where U_{RX} is receiver reading and A_{CF} is total correction factor including cable loss, antenna factor and preamplifier gain ($A_{\text{CF}} = L_{\text{CABLES}} + \text{AF} - G_{\text{PREAMP}}$).
- ⇒ Example values and calculation for one final QP measurement frequency at 12.92 MHz, see result in 4.2:
 $E [\text{dB}\mu\text{V}/\text{m}] = 28.00 + 20.90 = 48.90$

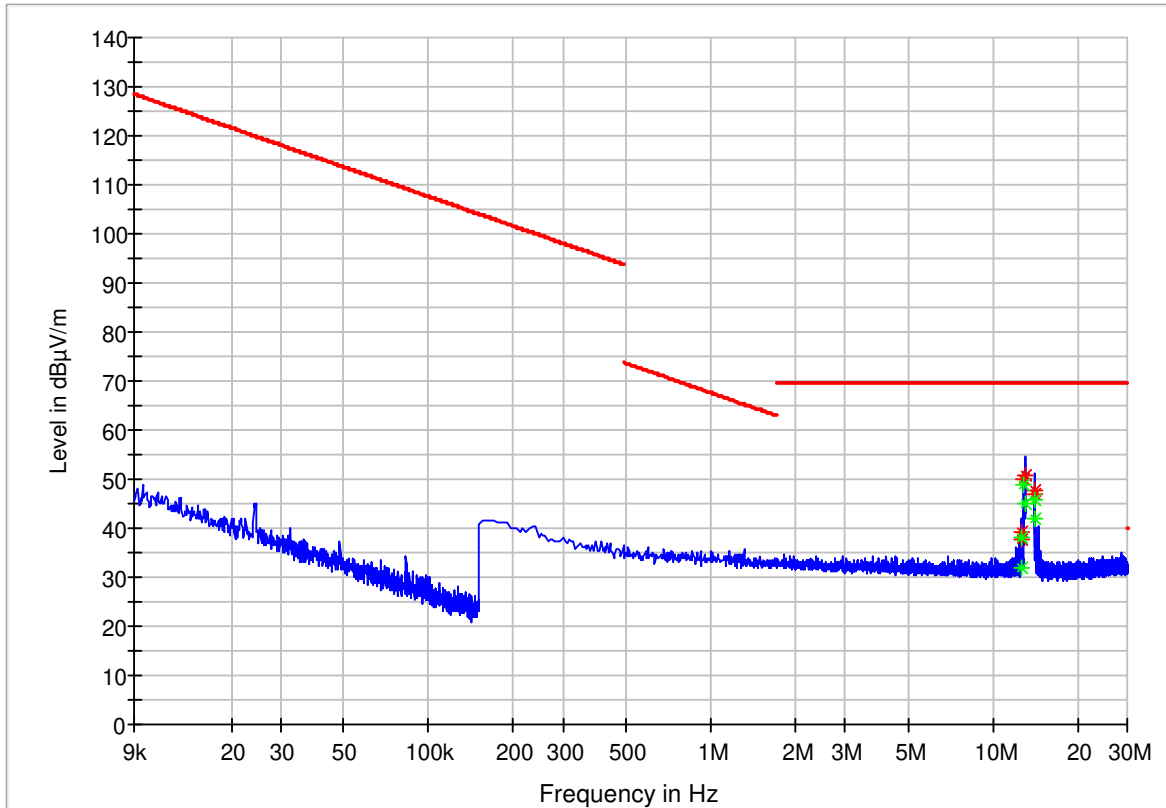
- 2) Note: The position DUT vertical / Antenna vertical has been determined as worst-case position compared to position DUT horizontal / Antenna horizontal.

FCC and ISED limits for radiated emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit [$\mu\text{V}/\text{m}$]	Limit [$\text{dB}\mu\text{V}/\text{m}$]	Detector
0.009 - 0.09	$10000 * 2400 / f[\text{kHz}]$	128.5 - 93.8	AV
0.09 - 0.11			QP
0.11 - 0.19			AV
0.19 - 0.49			AV
0.490 - 1.705	$100 * 24000 / f[\text{kHz}]$	73.8 - 63.0	QP
1.705 - 30.0	$100 * 30$	69.5	QP

4.2. Test results (FCC, ISED)

Peak detector (< 150 kHz: RBW 200 Hz, > 150 kHz: RBW 10 kHz)



Quasi-Peak detector (< 150 kHz: RBW 200 Hz, >150 kHz: RBW 9 kHz)

Frequency [MHz]	Level [dBµV/m]	Transducer [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Azimuth [deg]	Polarisation	Elevation [deg]	Result
12.605631	32.01	20.90	69.54	37.53	100.0	15.0	Vertical	90.0	PASSED
12.712792	38.08	20.90	69.54	31.46	100.0	165.0	Vertical	90.0	PASSED
12.923800	48.90	20.90	69.54	20.64	100.0	181.0	Vertical	90.0	PASSED
13.029746	44.97	20.90	69.54	24.57	100.0	180.0	Vertical	90.0	PASSED
14.089672	41.90	20.90	69.54	27.64	100.0	0.0	Vertical	90.0	PASSED
14.194978	45.86	20.90	69.54	23.68	100.0	15.0	Vertical	90.0	PASSED

No further emissions found less than 20 dB to the regulatory limit and no emission found in the restricted bands of operation.

Average detector (< 150 kHz: RBW 200Hz, > 150 kHz: RBW 9 kHz)

Frequency [MHz]	Level [dBµV/m]	Transducer [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Azimuth [deg]	Polarisation	Elevation [deg]	Result
12.605631	37.85	20.90	69.54	31.69	100.0	15.0	Vertical	90.0	PASSED
12.712792	39.18	20.90	69.54	30.36	100.0	165.0	Vertical	90.0	PASSED
12.923800	49.84	20.90	69.54	19.70	100.0	181.0	Vertical	90.0	PASSED

13.029746	50.85	20.90	69.54	18.69	100.0	180.0	Vertical	90.0	PASSED
14.089672	47.80	20.90	69.54	21.74	100.0	0.0	Vertical	90.0	PASSED
14.194978	46.81	20.90	69.54	22.73	100.0	15.0	Vertical	90.0	PASSED

No further emissions found less than 20 dB to the regulatory limit and no emission found in the restricted bands of operation.

5. Radiated emissions above 30 MHz

EUT with DUT number	DAB210990E
Accessories with DUT numbers	DAB2210000, DAB2210001
Operation voltage [V] / [Hz]	13.2 V / DC
Result	PASSED
Remarks	none
Temp [°C] / humidity [%RH]	22 / 36,5
Date of measurement	09-Nov-2021
Test Responsible	Jürgen Mitterer
Test system SW version	Rohde & Schwarz EMC32 / 10.60.20

5.1. Test method and limit

The measurement is made according to ANSI C63.10 and RSS-Gen as follows:

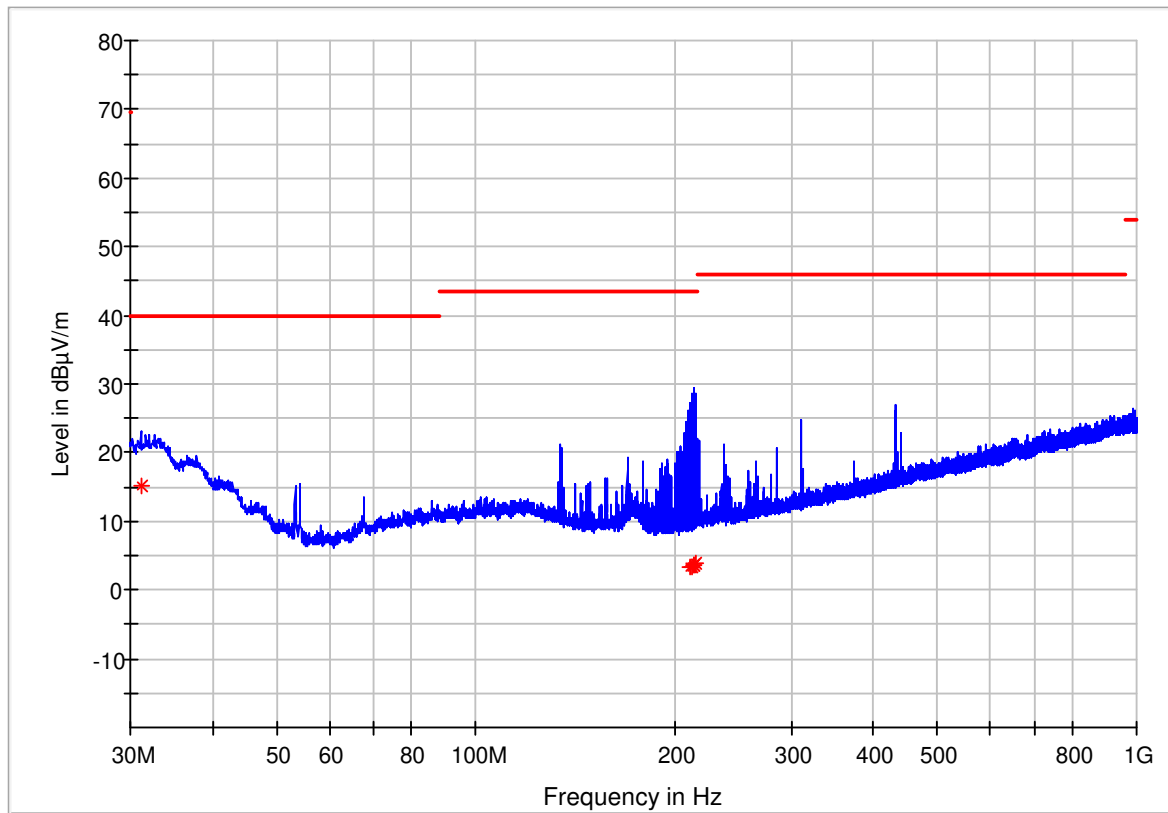
- ⇒ The EUT is placed on a nonconductive plate in the centre of the turntable.
- ⇒ The measurement is divided into the Preliminary Measurement and the Final Measurement.
The Preliminary Measurement and the Final Measurement is performed in 3 m distance without floor absorbers by rotating the turntable of 360 degrees and moving the antenna height between 1-4 m.
- ⇒ During the Preliminary Measurement the suspected frequencies are searched by using the PK detector.
In the Final Measurement the exact frequency and amplitude of these emissions are re-measured by using the applicable QP detector.
- ⇒ The Final Measurement is performed if the Preliminary Measurement results are closer than 20 dB to the permissible limit.
- ⇒ The measurement results are obtained as described in the following formula: $E \text{ [dB}\mu\text{V/m]} = U_{RX} + A_{CF}$
Where U_{RX} is receiver reading and A_{CF} is total correction factor including cable loss, antenna factor and preamplifier gain ($A_{CF} = L_{CABLES} + AF - G_{PREAMP}$).
- ⇒ Example values and calculation for one final QP measurement frequency at 31.16 MHz, see result in 5.2:
 $E \text{ [dB}\mu\text{V/m]} = 32.76 - 17.70 = 15.06$

FCC and ISED limits for radiated emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit [$\mu\text{V/m}$]	Limit [dB $\mu\text{V/m}$]	Detector
30 – 88	100	40	QP
88 – 216	150	43.5	QP
216 – 960	200	46	QP
960 – 1000	500	54	QP

5.2. Test results (FCC, ISED)

Peak detector (< 300 MHz: RBW 300 kHz, > 300 MHz: RBW 1 MHz)



Quasi-Peak detector (RBW 120 kHz)

Frequency [MHz]	Level [dBµV/m]	Transducer [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Azimuth [deg]	Polarisation	Result
31.160250	15.06	-17.70	40.00	24.94	296.0	285.0	Horizontal	PASSED
210.302050	3.36	-27.90	43.52	40.16	244.0	127.0	Horizontal	PASSED
211.792700	3.43	-27.80	43.52	40.09	243.0	135.0	Horizontal	PASSED
213.071650	3.54	-27.70	43.52	39.98	243.0	128.0	Horizontal	PASSED
214.055100	3.70	-27.60	43.52	39.82	266.0	121.0	Horizontal	PASSED
215.438650	3.88	-27.30	43.52	39.64	243.0	135.0	Horizontal	PASSED

No further emissions found less than 20 dB to the regulatory limit and no emission found in the restricted bands of operation.

6. Frequency stability, temperature variation

EUT with DUT number	DAB210990E
Accessories with DUT numbers	DAB2210000, DAB2210001
Operation voltage [V] / [Hz]	13.2 V / DC
Result	PASSED
Remarks	none
Temp [°C] / humidity [%RH]	23.7 / 46.3
Date of measurement	08-Oct-2021
Test Responsible	Jürgen Mitterer
Test system SW version	Emissions_Radio_CEFCC / 1.8

6.1. Test reference and limit

The measurement is made according to ANSI C63.10 and RSS-210 as follows:

- ⇒ The EUT is placed in the chamber.
- ⇒ The climate chamber temperature is set to the maximum value and allowed to stabilize.
- ⇒ The transmit frequency is measured.
- ⇒ Temperature is lowered to the next temperature value and allowed to stabilize.
- ⇒ The steps 3-4 are repeated for each temperature.

FCC, ISED limits for frequency stability, temperature variation measurements

Frequency Deviation [%]
+/- 0.01

6.2. Test results (FCC, ISED)

Temperature [°C]	Time [min]	Frequency [MHz]	Deviation [%]	Result
50	0	13.55982	0.0014	PASSED
	2	13.55974	0.0019	PASSED
	5	13.55986	0.0011	PASSED
	10	13.56004	0.0003	PASSED
40	0	13.55951	0.0036	PASSED
	2	13.56000	0.0000	PASSED
	5	13.55988	0.0009	PASSED
	10	13.55992	0.0006	PASSED
30	0	13.56018	0.0014	PASSED
	2	13.56018	0.0014	PASSED
	5	13.56024	0.0018	PASSED
	10	13.56000	0.0000	PASSED
20	0	13.56014	0.0011	PASSED
	2	13.56022	0.0017	PASSED
	5	13.55988	0.0009	PASSED
	10	13.56026	0.0019	PASSED
10	0	13.56006	0.0004	PASSED
	2	13.56004	0.0003	PASSED
	5	13.55978	0.0017	PASSED
	10	13.55965	0.0025	PASSED
0	0	13.55996	0.0003	PASSED
	2	13.56004	0.0003	PASSED
	5	13.56012	0.0009	PASSED
	10	13.55992	0.0006	PASSED
-10	0	13.55982	0.0014	PASSED
	2	13.56018	0.0014	PASSED
	5	13.56004	0.0003	PASSED
	10	13.55990	0.0007	PASSED
-20	0	13.56014	0.0011	PASSED
	2	13.56022	0.0017	PASSED
	5	13.55988	0.0009	PASSED
	10	13.56026	0.0019	PASSED
-30	0	13.55978	0.0017	PASSED
	2	13.55986	0.0011	PASSED
	5	13.56004	0.0003	PASSED
	10	13.55982	0.0014	PASSED

7. Frequency stability, voltage variation

EUT with DUT number	DAB210990E
Accessories with DUT numbers	DAB2210000, DAB2210001
Operation voltage [V] / [Hz]	13.2 V / DC
Result	PASSED
Remarks	none
Temp [°C] / humidity [%RH]	25 / 46.3
Date of measurement	08-Oct-2021
Test Responsible	Jürgen Mitterer
Test system SW version	Emissions_Radio_CEFCC / 1.8

7.1. Test reference and limit

The measurement is made according to ANSI C63.10 and RSS-210 as follows:

- ⇒ The EUT is placed in the chamber.
- ⇒ The climate chamber temperature is set to 20°C allowed to stabilize.
- ⇒ The EUT is connected to an adjustable power supply.
- ⇒ The frequency stability was measured at nominal voltage and at 85 % and 115 %.

FCC, ISED limits for frequency stability, voltage variation measurements

Frequency Deviation [%]
+ \- 0.01

7.2. Test results (FCC, ISED)

Voltage [V]	Frequency [MHz]	Deviation [%]	Result
Nominal (13.2)	13.55969	0.0022	PASSED
Minimum (11.1)	13.56010	0.0007	PASSED
Maximum (15.3)	13.55982	0.0014	PASSED

8. Occupied bandwidth

EUT with DUT number	DAB210990E
Accessories with DUT numbers	DAB2210000, DAB2210001
Operation voltage [V] / [Hz]	13.2 V / DC
Result	PASSED
Remarks	none
Temp [°C] / humidity [%RH]	21.7 / 35.5
Date of measurement	12-Nov-2021
Test Responsible	Jürgen Mitterer
Test system SW version	Emissions_Radio_CEFCC / 1.8

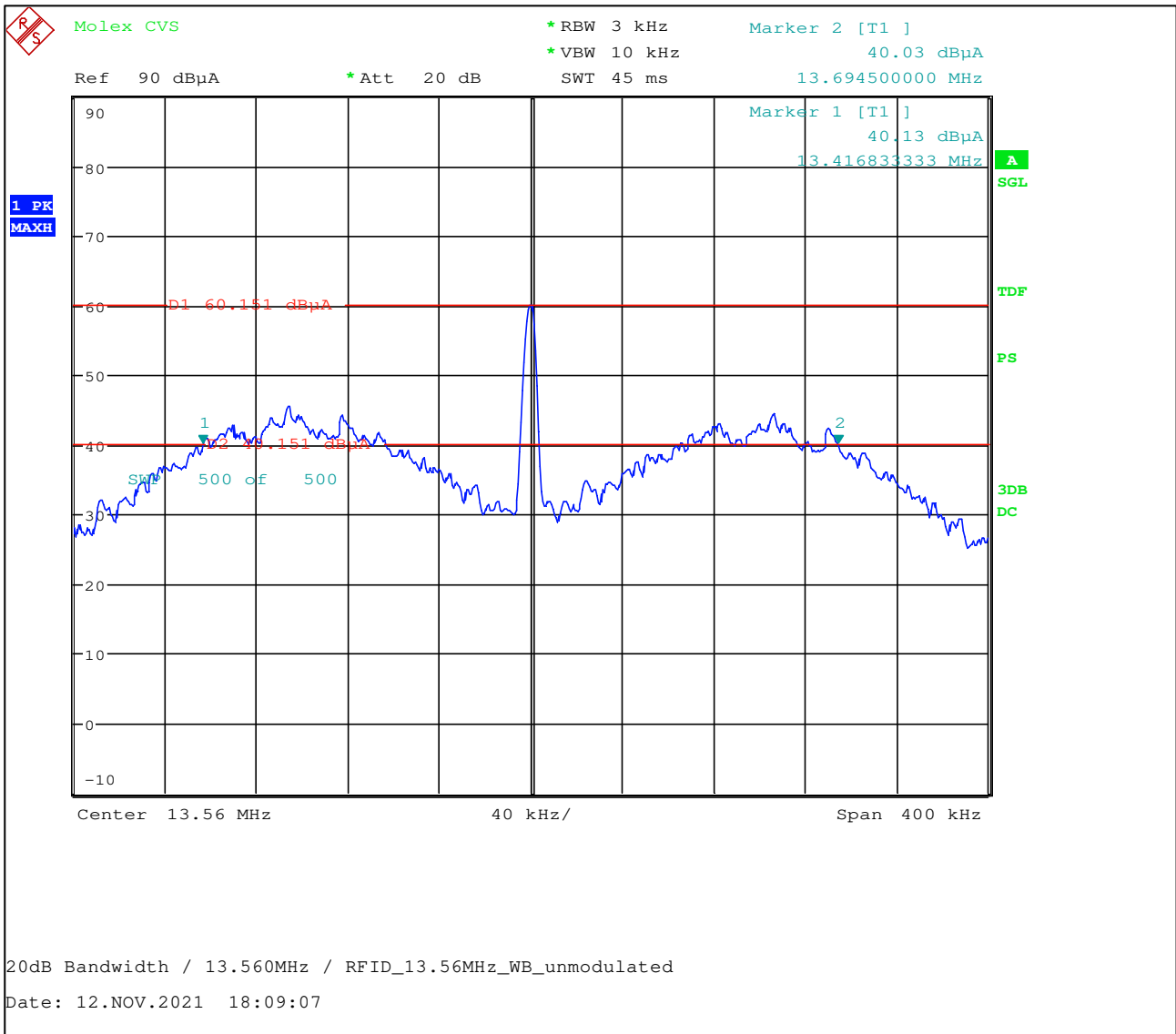
8.1. Test method and limit

The measurement is made according to FCC 15.215(c) and RSS-Gen.

FCC and ISED limits for occupied bandwidth measurements

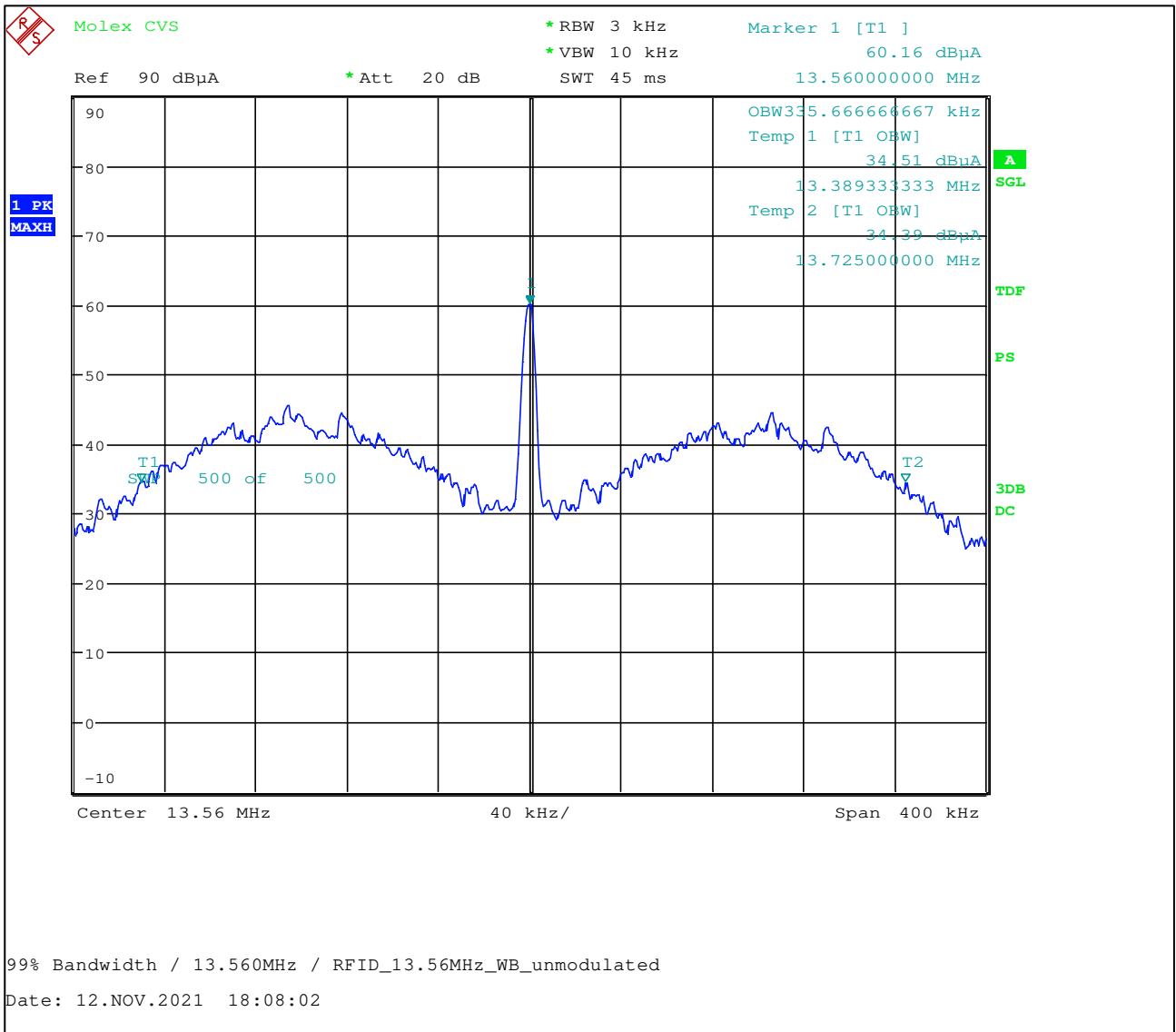
20 dB Bandwidth Limit [MHz]	99 % Bandwidth Limit [MHz]
N.A.	N.A.

8.2. Test results 20dB OBW



Frequency [MHz]	20 dB Bandwidth [kHz]
13.56	277.7

8.3. Test results 99% OBW



Frequency [MHz]	99 % Bandwidth [kHz]
13.56	335.7

9. Test Equipment

9.1. Conducted Radio

Equipment	Manufacturer	Type	SERIAL-NO.	Actual Calibration	Next Calibration
Signal Generator	ROHDE & SCHWARZ	SMP02	828269/008	12.05.2020	12.05.2023
Signal Generator	ROHDE & SCHWARZ	SMB100A	181275	12.05.2021	12.05.2022
Vector Signal Generator	ROHDE & SCHWARZ	SMBV100A	263158	11.05.2021	11.05.2022
EMI Test Receiver	ROHDE & SCHWARZ	ESU26	100077	12.05.2021	12.05.2022
Vector Signal Generator	ROHDE & SCHWARZ	SMJ100A	100845	16.05.2020	16.05.2022
Power Supply	Hewlett Packard - Agilent	E3632A	MY40011318	11.05.2020	11.05.2023
Temp. / Humidity Logger	Lufft	Opus 10	13262	21.01.2020	21.01.2023
Climatic Chamber	Vötsch	VT4002	521/85094	06.10.2020	06.10.2022

9.2. Radiated Emission

Equipment	Manufacturer	Type	SERIAL-NO.	Actual Calibration	Next Calibration
Antenna	Schwarzbeck Mess-Elektronik	FMZB_1519	1519-056	22.07.2020	22.07.2023
Signal Generator	ROHDE & SCHWARZ	SMP02	828269/008	12.05.2020	12.05.2023
Signal Generator	ROHDE & SCHWARZ	SML01	100652	11.05.2021	11.05.2024
Power Supply	Hewlett Packard - Agilent	E3632A	KR75303301	11.05.2020	11.05.2022
Field Analyzer	Wandel & Goltermann	EMR20	P-0030	30.10.2020	30.10.2023
Antenna	ROHDE & SCHWARZ	HL025	359012/006		
Temp. / Humidity Logger	Lufft	Opus 10	13262	21.01.2020	21.01.2023
Antenna	ROHDE & SCHWARZ	HL562	100191	01.10.2021	01.10.2024
Antenna	ROHDE & SCHWARZ	HK-116: 20-300MHz	825177/0017	07.12.2018	07.12.2021
Antenna	ROHDE & SCHWARZ	HK-116: 20-300MHz	100401	21.08.2020	21.08.2023
Antenna	ROHDE & SCHWARZ	HL223	832369/006	26.04.2019	26.04.2022
Antenna	Schwarzbeck	UBA 9116	9116-396	27.07.2020	27.07.2023
Antenna	Emco	3115	9810-5588	24.03.2021	24.03.2024
Antenna	Schwarzbeck	BBHA-9120-D	01617	09.04.2019	09.04.2022
Antenna	ROHDE & SCHWARZ	HL223	100731	07.12.2018	07.12.2021
Antenna	Schwarzbeck Mess-Elektronik	VAMP 9243	9243-486	25.05.2021	25.05.2024
Isotropic Electric Field Probe	Wandel & Goltermann	Type 8	M-0082	30.10.2020	30.10.2023
Signal Generator	ROHDE & SCHWARZ	SMB100A	181275	12.05.2021	12.05.2022
EMI Test Receiver	ROHDE & SCHWARZ	ESW44	101733	28.05.2021	28.05.2022

End of Report