

**TEST REPORT** 



Test report no.: 1-6743\_23-02-05-A

Testing laboratory			Applicant
cetecom advanced GmbH         Untertuerkheimer Strasse 6 – 10         66117 Saarbruecken / Germany         Phone:       + 49 681 5 98 - 0         Fax:       + 49 681 5 98 - 9075         Internet:       https://cetecomadvanced.com         e-mail:       mail@cetecomadvanced.com         Accredited Testing Laboratory:       The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2018-03) by the Deutsche Akkreditierungsstelle GmbH (DAkkS).         The accreditation is valid for the scope of testing procedures as stated in the accreditation certificate with the registration number:         D-PL-12047-01-00.         ISED Testing Laboratory Recognized Listing Number: DE0001         FCC designation number: DE0002			WSAUD A/S Nymøllevej 6 DK-3540 Lynge / DENMARK Phone: +45 4435 5600 Contact: Richard Rose e-mail: <u>richard.rose@wsa.com</u> Manufacturer WSAUD A/S Nymøllevej 6 DK-3540 Lynge / DENMARK
frequency devices RSS - 210 Issue 11 incl. Spectrum Management			ard/s Federal Regulations; Chapter I; Part 15 - Radio Felecommunications Radio Standards Specification Iratus: Category I Equipment
For further applied test stand	dards please refer to section 3	of this	s test report.
	Tes	st Ite	m
Kind of test item:	RF Module for Hearing Instru	ument	is a state of the
Model name: RF Module 12			
FCC ID: 2AXDT-RFM012			
ISED certification number:	26428-RFM012		
Frequency:	3.28 MHz		
Technology tested: Proprietary			
Antenna:	Integrated ferrite coil antenna		
Power supply: 3.30 V to 4.20 V DC by Li lon			ry

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

## Test report authorized:

0°C to +50°C

Christoph Schneider	
Lab Manager	
Radio Labs	

Temperature range:

# Test performed:

Hans-Joachim Wolsdorfer Lab Manager Radio Labs



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## 2 General information

## 2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. cetecom advanced GmbH does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item.

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### This test report replaces the test report with the number 1-6743\_23-02-05 and dated 2024-01-12.

### 2.2 Application details

Date of receipt of order:	2023-11-02
Date of receipt of test item:	2023-11-21
Start of test:*	2023-11-21
End of test:*	2023-11-23
Person(s) present during the test:	-/-

\*Date of each measurement, if not shown in the plot, can be requested. Dates are stored in the measurement software.

## 2.3 Test laboratories sub-contracted

None



# 3 Test standard/s, references and accreditations

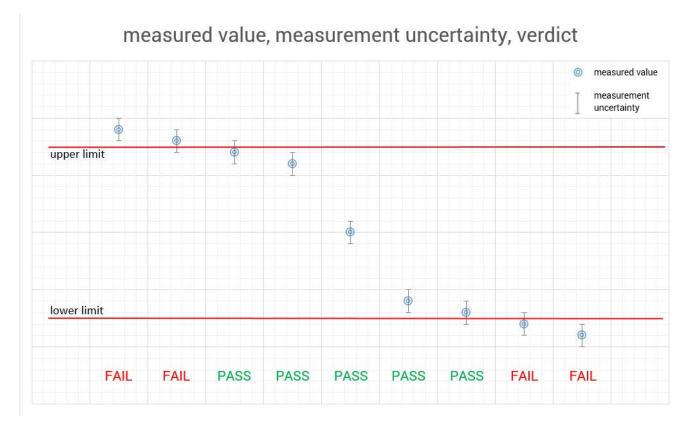
Test standard	Date	Description
FCC - Title 47 CFR Part 15		FCC - Title 47 of the Code of Federal Regulations; Chapter I; Part 15 - Radio frequency devices
RSS - 210 Issue 11 incl. Amendment	June 2024	Spectrum Management and Telecommunications Radio Standards Specification - Licence-Exempt Radio Apparatus: Category I Equipment
RSS - Gen Issue 5 incl. Amendment 1 & 2	February 2021	Spectrum Management and Telecommunications Radio Standards Specification - General Requirements for Compliance of Radio Apparatus
Guidance	Version	Description
ANSI C63.4-2014 ANSI C63.10-2013	-/- -/-	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 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices



# 4 Reporting statements of conformity – decision rule

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 3.

The measurement uncertainty is mentioned in this test report, see chapter 9, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 5% that the decision might be wrong."





# 5 Test environment

Temperature	:	T <sub>nom</sub> T <sub>max</sub> T <sub>min</sub>	<ul> <li>+22 °C during room temperature tests</li> <li>+50 °C during high temperature tests</li> <li>0 °C during low temperature tests</li> </ul>		
Relative humidity content	:		52 %		
Barometric pressure	:		1027 hpa		
Power supply	:	V <sub>nom</sub> V <sub>max</sub> V <sub>min</sub>	3.85 V DC by Li Ion battery 4.20 V 3.30 V		

# 6 Test item

# 6.1 General description

Kind of test item	:	RF Module for Hearing Instruments
Model name	:	RF Module 12
HMN	:	-/-
PMN	:	RF Module 12
HVIN	:	RFM012
FVIN	:	-/-
S/N serial number	:	GEP7205
Hardware status	:	H3424
Software status	:	-
Firmware status	:	RF FW: 1.0.120.0 REL
Frequency band	:	1.705 MHz – 30.0 MHz
Type of radio transmission Use of frequency spectrum		TDMA
Type of modulation	:	QPSK
Number of channels	:	1
Antenna	:	Integrated ferrite coil antenna
Power supply	:	3.30 V to 4.20 V DC by Li lon battery
Temperature range	:	0°C to +50°C

# 6.2 Additional information

The content of the following annexes is defined in the QA. It may be that not all of the listed annexes are necessary for this report, thus some values in between may be missing.

Test setup and EUT photos are included in test report:

1-6743\_23-02-02\_TR1-A101-R1 1-6743\_23-02-02\_TR1-A102-R1 1-6743\_23-02-05\_TR1-A103-R1



## 7 Description of the test setup

Typically, the calibrations of the test apparatus are commissioned to and performed by an accredited calibration laboratory. The calibration intervals are determined in accordance with the DIN EN ISO/IEC 17025. In addition to the external calibrations, the laboratory executes comparison measurements with other calibrated test systems or effective verifications. Weekly chamber inspections and range calibrations are performed. Where possible, RF generating and signaling equipment as well as measuring receivers and analyzers are connected to an external high-precision 10 MHz reference (GPS-based or rubidium frequency standard).

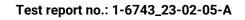
In order to simplify the identification of the equipment used at some special tests, some items of test equipment and ancillaries can be provided with an identifier or number in the equipment list below (Lab/Item).

Each block diagram listed can contain several test setup configurations. All devices belonging to a test setup are identified with the same letter syntax. For example: Column Setup and all devices with an A.

Agenda: Kind of Calibration

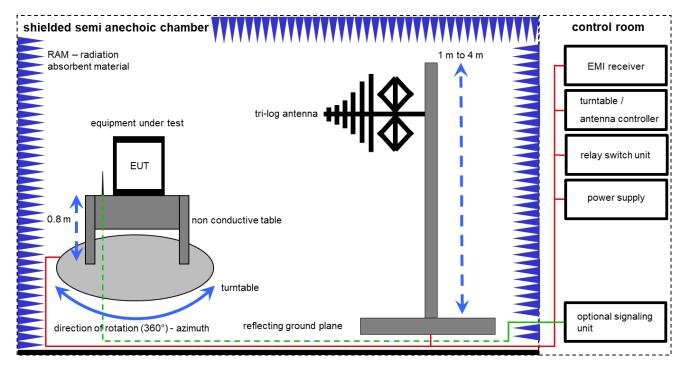
- k calibration / calibrated
- ne not required (k, ev, izw, zw not required)
- ev periodic self verification
- Ve long-term stability recognized
- vlkl! Attention: extended calibration interval
- NK! Attention: not calibrated

- EK limited calibration
- zw cyclical maintenance (external cyclical maintenance)
- izw internal cyclical maintenance
- g blocked for accredited testing
- \*) next calibration ordered / currently in progress



# 7.1 Shielded semi anechoic chamber

The radiated measurements are performed in vertical and horizontal plane in the frequency range from 30 MHz to 1 GHz in semi-anechoic chambers. The EUT is positioned on a non-conductive support with a height of 0.80 m above a conductive ground plane that covers the whole chamber. The receiving antennas are conform to specifications ANSI C63. These antennas can be moved over the height range between 1.0 m and 4.0 m in order to search for maximum field strength emitted from EUT. The measurement distances between EUT and receiving antennas are indicated in the test setups for the various frequency ranges. For each measurement, the EUT is rotated in all three axes until the maximum field strength is received. The wanted and unwanted emissions are received by spectrum analyzers where the detector modes and resolution bandwidths over various frequency ranges are set according to requirement ANSI C63.



Measurement distance: tri-log antenna 10 meter EMC32 software version: 10.59.00

## FS = UR + CL + AF

(FS-field strength; UR-voltage at the receiver; CL-loss of the cable; AF-antenna factor)

### Example calculation:

FS  $[dB\mu V/m] = 12.35 [dB\mu V/m] + 1.90 [dB] + 16.80 [dB/m] = 31.05 [dB\mu V/m] (35.69 \mu V/m)$ 

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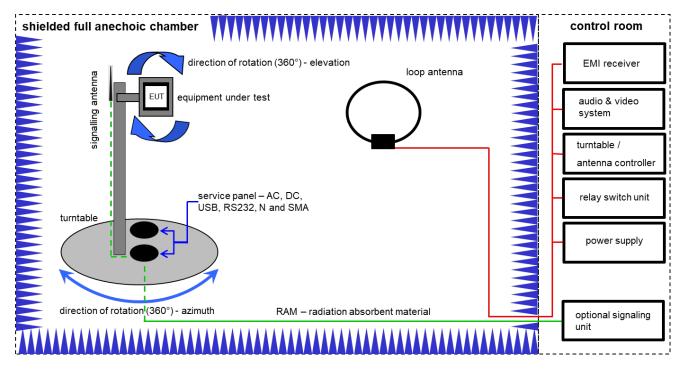
advanced



# Equipment table:

No.	Setup	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	Α	Switch-Unit	3488A	HP	2719A14505	300000368	ev	-/-	-/-
2	А	Semi anechoic chamber	3000023	MWB AG		300000551	ne	-/-	-/-
3	А	Analyzer-Reference- System (Harmonics and Flicker)	ARS 16/1	SPS	A3509 07/0 0205	300003314	vlKl!	29.12.2021	31.12.2023
4	Α	Antenna Tower	Model 2175	ETS-Lindgren	64762	300003745	izw	-/-	-/-
5	Α	Positioning Controller	Model 2090	ETS-Lindgren	64672	300003746	izw	-/-	-/-
6	Α	Turntable Interface- Box	Model 105637	ETS-Lindgren	44583	300003747	izw	-/-	-/-
7	А	TRILOG Broadband Test-Antenna 30 MHz - 3 GHz	VULB9163	Schwarzbeck Mess - Elektronik	295	300003787	vIKI!	23.05.2023	31.05.2025
8	Α	Turntable	2089-4.0	EMCO		300004394	ne	-/-	-/-
9	Α	PC	TecLine	F+W		300004388	ne	-/-	-/-
10	Α	EMI Test Receiver	ESR3	Rohde & Schwarz	102587	300005771	k	09.12.2022	31.12.2023

# 7.2 Shielded fully anechoic chamber



Measurement distance: loop antenna 3 meter / 1 meter

FS = UR + CA + AF

(FS-field strength; UR-voltage at the receiver; CA-loss of the signal path; AF-antenna factor)

<u>Example calculation</u>: FS [dB $\mu$ V/m] = 40.0 [dB $\mu$ V/m] + (-35.8) [dB] + 32.9 [dB/m] = 37.1 [dB $\mu$ V/m] (71.61  $\mu$ V/m)

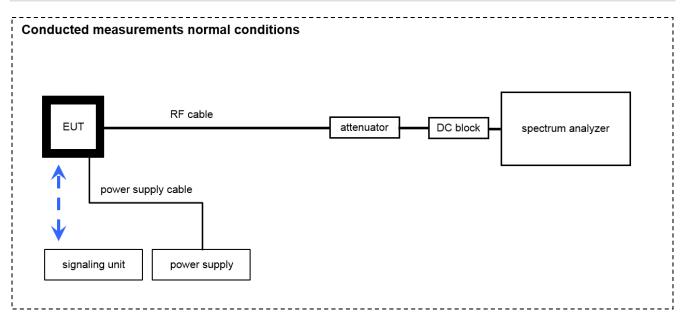
## Equipment table:

No.	Setup	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	А	Active Loop Antenna 9 kHz to 30 MHz	6502	EMCO	2210	300001015	vlKl!	02.08.2023	31.08.2025
2	Α	Anechoic chamber	FAC 3/5m	MWB / TDK	87400/02	300000996	ev	-/-	-/-
3	Α	Switch / Control Unit	3488A	HP	*	300000199	ne	-/-	-/-
4	А	EMI Test Receiver 20Hz- 26,5GHz	ESU26	R&S	100037	300003555	k	07.12.2022	31.12.2023
5	А	4U RF Switch Platform	L4491A	Agilent Technologies	MY50000037	300004509	ne	-/-	-/-
6	А	NEXIO EMV- Software	BAT EMC V2022.0.22.0	Nexio		300004682	ne	-/-	-/-

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# 7.3 RF measurements



### OP = AV + CA

(OP-output power; AV-analyzer value; CA-loss signal path)

### Example calculation:

OP [dBm] = 6.0 [dBm] + 11.7 [dB] = 17.7 [dBm] (58.88 mW)

### Equipment table:

No.	Setup	Equipment	Туре	Manufacturer	Serial No.	INV. No.	Kind of Calibration	Last Calibration	Next Calibration
1	Α	Loop Antenna		ZEG TS Steinfurt		400001208	ev	-/-	-/-
2	Α	RF Cable BNC	RG58	Huber & Suhner		400001209	ev	-/-	-/-
3	A	Signal analyzer	FSV30	Rohde&Schwarz	104365	300005923	k	13.12.2022	31.12.2023



## 8 Sequence of testing

# 8.1 Sequence of testing radiated spurious 9 kHz to 30 MHz

#### Setup

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

#### Premeasurement\*

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna height is 1 m.
- At each turntable position the analyzer sweeps with positive-peak detector to find the maximum of all emissions.

#### Final measurement

- Identified emissions during the pre-measurement are maximized by the software by rotating the turntable from 0° to 360°.
- Loop antenna is rotated about its vertical axis for maximum response at each azimuth about the EUT. (For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT)
- The final measurement is done in the position (turntable and elevation) causing the highest emissions with quasi-peak (as described in ANSI C 63.4).
- Final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. A plot with the graph of the premeasurement and the limit is stored.

\*)Note: The sequence will be repeated three times with different EUT orientations.



# 8.2 Sequence of testing radiated spurious 30 MHz to 1 GHz

#### Setup

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

#### Premeasurement

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna is polarized vertical and horizontal.
- The antenna height changes from 1 m to 3 m.
- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

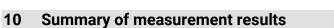
#### **Final measurement**

- The final measurement is performed for at least six highest peaks according to the requirements of the ANSI C63.4.
- Based on antenna and turntable positions at which the peak values are measured the software maximize the peaks by changing turntable position ± 45° and antenna height between 1 and 4 m.
- The final measurement is done with quasi-peak detector (as described in ANSI C 63.4).
- Final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit are recorded. A plot with the graph of the premeasurement with marked maximum final results and the limit is stored.



# 9 Measurement uncertainty

Measurement uncertainty						
Test case	Uncertainty					
Occupied bandwidth	± used RBW					
Field strength of the fundamental	± 3 dB					
Field strength of the harmonics and spurious	± 3 dB					
Receiver spurious emissions and cabinet radiations	± 3 dB					
Conducted limits	± 2.6 dB					



No deviations from the technical specifications were ascertained
There were deviations from the technical specifications ascertained
This test report is only a partial test report. The content and verdict of the performed test cases are listed below.

TC Identifier	Description	Verdict	Date	Remark
RF-Testing	CFR Part 15 RSS 210 Issue 11 RSS Gen Issue 5	See table!	2024-09-12	-/-

Test specification clause	Test case	Temperature conditions	Power source conditions	с	NC	NA	NP	Remark
RSS Gen Issue 5 (6.7)	Occupied bandwidth	Nominal	Nominal	$\boxtimes$				-/-
§ 15.209 RSS-210, Issue 11, B.3 Band a.	Field strength of the fundamental	Nominal	Nominal	$\boxtimes$				-/-
§ 15.209 RSS Gen Issue 5 (6.13)	Field strength of the harmonics and spurious	Nominal	Nominal	$\boxtimes$				-/-
§15.107 §15.207 RSS Gen Issue 5 (7.2)	Conducted limits	Nominal	Nominal			$\boxtimes$		Battery powered only!

**Note:** NA = Not applicable; NP = Not performed; C = Compliant; NC = Not compliant

# 11 Additional comments

Reference documents:	None
Special test descriptions:	None
Configuration descriptions:	None

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# 12 Measurement results

# 12.1 Occupied bandwidth

### Measurement:

The emission bandwidth (x dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated x dB below the maximum inband spectral density of the modulated signal.

Measurement parameters			
Detector:	Peak		
Resolution bandwidth:	1 % - 5 % of the occupied bandwidth		
Video bandwidth:	≥ 3x RBW		
Trace mode:	Max hold		
Analyser function:	99 % power function		
Used test setup:	See sub clause 7.3A		
Measurement uncertainty:	See sub clause 9		

## Limit:

-/-	IC
-/-	-/-

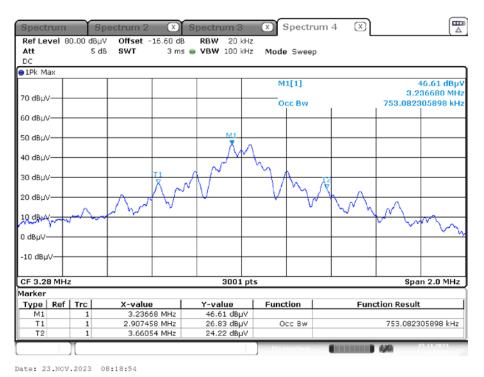
### Result:

99% emission bandwidth		
MI e2e 20 ms random payload	753.08 kHz	
MI e2e 5 ms random payload	774.40 kHz	

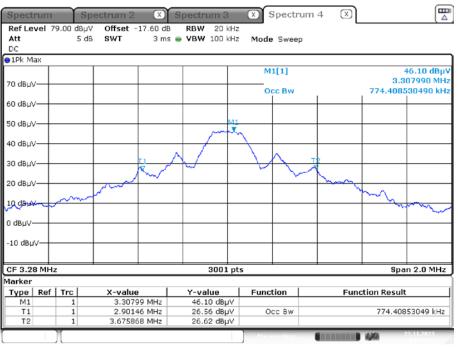


## Plot:

## Plot 1: 99 % emission bandwidth MI e2e 20 ms random payload



Plot 2: 99 % emission bandwidth MI e2e 5 ms random payload



Date: 23.NOV.2023 08:35:23



# **12.2 Field strength of the fundamental**

### Measurement:

The maximum detected field strength for the carrier signal.

Measurement parameters			
Detector:	Quasi peak / peak (worst case)		
Resolution bandwidth:	120 kHz		
Video bandwidth:	> 3x RBW		
Trace mode: Max hold			

## <u>Limit:</u>

FCC				
Frequency	Field strength	Measurement distance		
(MHz)	(µV/m)	(m)		
1.705 - 30.0	30	30		

IC				
Frequency	Field strength	Measurement distance		
(MHz)	(µV/m)	(m)		
1.705 - 10.0	100	30		

## **Recalculation:**

According to ANSI C63.10				
Frequency	Formula	Correction value		
3.28MHz	$\begin{split} FS_{limit} &= FS_{max} - 40 \log \left( \frac{d_{nearried}}{d_{measure}} \right) - 20 \log (\frac{d_{limit}}{d_{nearried}}) \\ FS_{limit} & \text{is the calculation of field strength at the limit distance,} \\ & \text{expressed in dB}_{\mu}V/m \\ FS_{max} & \text{is the measured field strength, expressed in dB}_{\mu}V/m \\ d_{nearfield} & \text{is the } \lambda/2\pi \text{ distance} \\ d_{measure} & \text{is the distance of the measurement point from EUT} \\ d_{limit} & \text{is the reference limit distance} \end{split}$	-52.8 dB from 1 m to 30 m		



## **Results FCC:**

MI e2e 20 ms random payload

Field strength of the fundamental					
Frequency	3.28 MHz				
Distance	@1m	@ 30 m			
Measured / calculated value (peak measurement)	46.5 dBµV/m	-6.3 dBµV/m			
Measured / calculated value (QP measurement)	41.0 dBµV/m	-11.8 dBµV/m			

# MI e2e 5 ms random payload

Field strength of the fundamental				
Frequency	3.28 MHz			
Distance	@1m	@ 30 m		
Measured / calculated value (peak measurement)	46.1 dBµV/m	-6.7 dBµV/m		
Measured / calculated value (QP measurement)	42.2 dBµV/m	-10.6 dBµV/m		

### Results IC:

MI e2e 20 ms random payload

Field strength of the fundamental							
Frequency	3.28	MHz					
Distance	@1m	@ 30 m					
Measured / calculated value (peak measurement)	-5.0 dBµA/m	-57.8 dBµA/m					
Measured / calculated value (QP measurement)	-10.5 dBµA/m	-63.3 dBµA/m					

# MI e2e 5 ms random payload

Field strength of the fundamental						
Frequency	3.28	MHz				
Distance	@1m	@ 30 m				
Measured / calculated value (peak measurement)	-5.4 dBµA/m	-58.2 dBµA/m				
Measured / calculated value (QP measurement)	-9.3 dBµA/m	-62.1 dBµA/m				



# **12.3 Field strength of the harmonics and spurious**

### Measurement:

The maximum detected field strength for the harmonics and spurious.

Measurement parameters				
Detector:	Quasi peak / average or			
Delector.	peak (worst case – pre-scan)			
	F < 150 kHz: 200 Hz			
Resolution bandwidth:	150 kHz < F < 30 MHz: 9 kHz			
	30 MHz < F < 1 GHz: 120 kHz			
	F < 150 kHz: 1 kHz			
Video bandwidth:	150 kHz < F < 30 MHz: 100 kHz			
	30 MHz < F < 1 GHz: 300 kHz			
Trace mode:	Max hold			
Lload tost acture:	9 kHz to 30 MHz: see sub clause 7.2A			
Used test setup:	30 MHz to 1 GHz: see sub clause 7.1A			
Measurement uncertainty:	See sub clause 9			

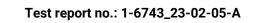
### Limit:

FCC							
Frequency	Field strength	Measurement distance					
(MHz)	(μV/m)	(m)					
0.009 - 0.490	2400/F(kHz)	300					
0.490 - 1.705	24000/F(kHz)	30					
1.705 – 30	30 (29.5 dBµV/m)	30					
30 - 88	100 (40 dBµV/m)	3					
88 - 216	150 (43.5 dBµV/m)	3					
216 - 960	200 (46 dBµV/m)	3					

	IC	
Frequency	Field strength	Measurement distance
(MHz)	(µA/m)	(m)
0.009 - 0.490	6.37/F (F in kHz)	300
0.490 - 1.705	63.7/F (F in kHz)	30
1.705 – 30	0.08 (-22 dBµA/m)	30

## Result:

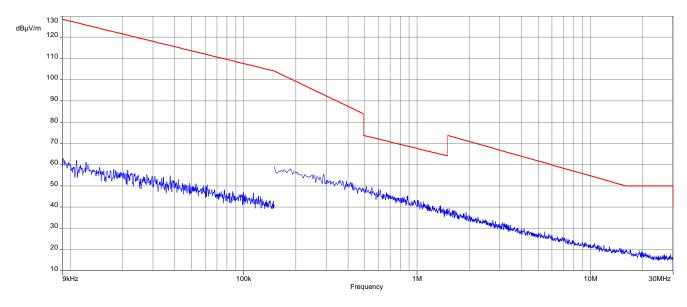
Detected emissions valid for all modes						
Frequency (MHz)DetectorResolution bandwidth (kHz)Detected value						
All detected peak emissions below 30 MHz are more than 20 dB below the average limit.						
For emis	sions above 30 MHz, please	look at the table below the 1	GHz plot.			



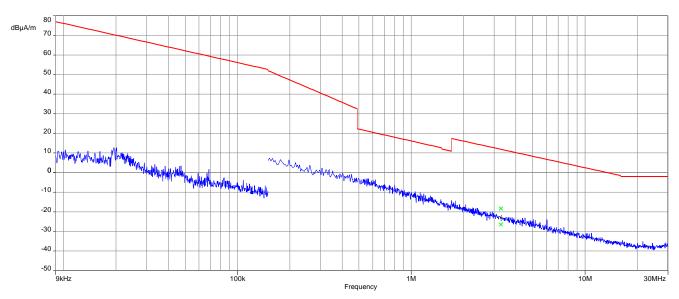


Plots: MI e2e 20 ms random payload

Plot 1: 9 kHz – 30 MHz, magnetic emissions FCC

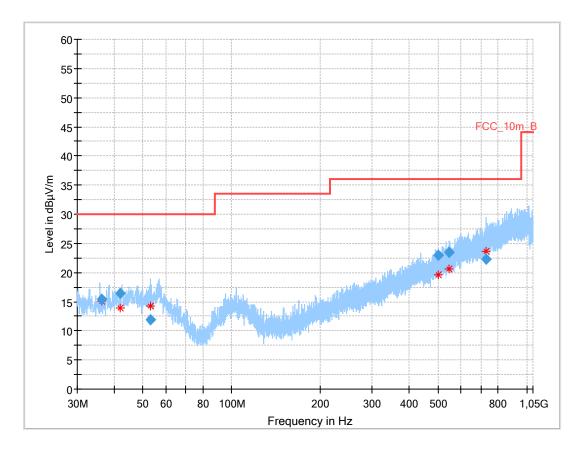


Plot 2: 9 kHz - 30 MHz, magnetic emissions IC





## Plot 3: 30 MHz - 1 GHz, vertical and horizontal polarisation



## Final\_Result

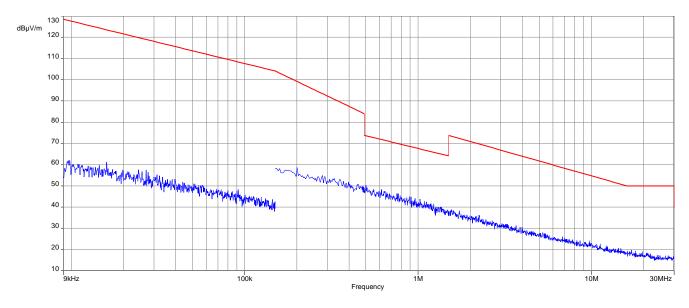
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.233	15.46	30.0	14.5	1000	120.0	195.0	V	59	13
42.002	16.42	30.0	13.6	1000	120.0	121.0	V	12	15
53.247	11.84	30.0	18.2	1000	120.0	162.0	V	63	15
501.268	22.89	36.0	13.1	1000	120.0	113.0	V	52	20
546.099	23.48	36.0	12.5	1000	120.0	141.0	V	211	20
729.919	22.26	36.0	13.7	1000	120.0	195.0	V	142	23



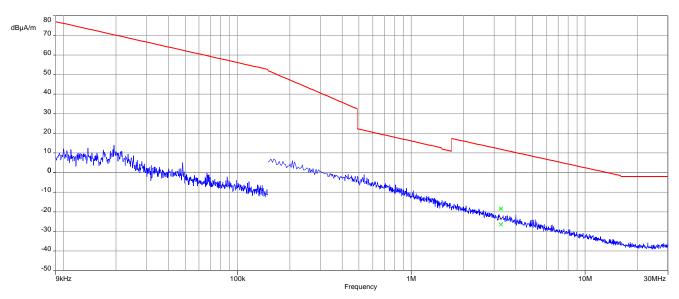


## Plots: MI e2e 5 ms random payload

Plot 1: 9 kHz – 30 MHz, magnetic emissions FCC

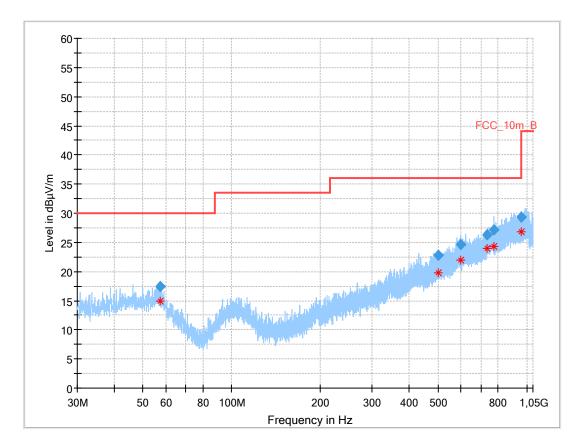


Plot 2: 9 kHz - 30 MHz, magnetic emissions IC





## Plot 3: 30 MHz - 1 GHz, vertical and horizontal polarisation



### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
57.450	17.42	30.0	12.6	1000	120.0	195.0	V	52	15
502.670	22.78	36.0	13.2	1000	120.0	141.0	V	-37	20
598.269	24.56	36.0	11.4	1000	120.0	107.0	V	-37	22
733.811	26.28	36.0	9.7	1000	120.0	195.0	Н	232	23
772.967	27.13	36.0	8.9	1000	120.0	195.0	V	232	24
958.153	29.28	36.0	6.7	1000	120.0	102.0	Н	17	25



# 13 Observations

No observations except those reported with the single test cases have been made.



# 14 Glossary

EUT	Equipment under test
DUT	Device under test
UUT	Unit under test
GUE	
ETSI	GNSS User Equipment
ETSI	European Telecommunications Standards Institute European Standard
FCC	Federal Communications Commission
FCC ID	
	Company Identifier at FCC
PMN	Industry Canada Product marketing name
HMN	
HVIN	Host marketing name Hardware version identification number
FVIN	Firmware version identification number
EMC	Electromagnetic Compatibility
HW SW	Hardware Software
Inv. No.	Inventory number Serial number
S/N or SN	
C	Compliant
NC	Not compliant
NA	Not applicable
NP	Not performed
PP	Positive peak
QP	Quasi peak
AVG	Average
00	Operating channel
OCW OBW	Operating channel bandwidth Occupied bandwidth
OBW	Occupied bandwidth Out of band
DFS	Dynamic frequency selection
CAC	Channel availability check
OP	Occupancy period
NOP	Non occupancy period
DC	Duty cycle
PER	Packet error rate
CW	Clean wave
MC	Modulated carrier
WLAN	Wireless local area network
RLAN	Radio local area network
DSSS	Dynamic sequence spread spectrum
OFDM	Orthogonal frequency division multiplexing
FHSS	Frequency hopping spread spectrum
GNSS	Global Navigation Satellite System
C/N <sub>0</sub>	Carrier to noise-density ratio, expressed in dB-Hz
U/110	סמודוכו נס חטופר מכוופונץ דמנוט, באטובפפרע ווו משדוב



# 15 Document history

Version	Applied changes	Date of release
-/-	Initial release	2024-01-12
А	Update to RSS-210 Issue 11, editorial changes	2024-09-12