



# TEST REPORT

**Test Report No. : UL-RPT-RP-13697467-1316-FCC**

**Applicant** : Boxine GmbH  
**Model No.** : 03-xxxx (colour coding)  
**FCC ID** : 2AU47-00002  
**Technology** : Intermodulations WLAN 2.4 GHz (802.11 b, g, n) & RFID-13.56 MHz  
**Test Standard(s)** : FCC Parts 15.205,15.209(a),15.225(d) & 15.247

For details of applied tests refer to test result summary

1. This test report shall not be reproduced in full or partial, without the written approval of UL International Germany GmbH.
2. The results in this report apply only to the sample tested.
3. The test results in this report are traceable to the national or international standards.
4. Test Report Version 1.0
5. Result of the tested sample: **PASS**

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Prepared by: Usta, Sercan  
Title: Laboratory Engineer  
Date: 09 July 2021

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Approved by: Ajit, Phadtare  
Title: Lead Test Engineer  
Date: 09 July 2021



Deutsche  
Akkreditierungsstelle  
D-PL-19381-02-00

This laboratory is accredited by DAkkS.  
The tests reported herein have been performed in  
accordance with its' terms of accreditation.

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## **1. Customer Information**

### **1.1.Applicant Information**

<b>Company Name:</b>	Boxine GmbH
<b>Company Address:</b>	Grafenberger Allee 120, 40237 Düsseldorf, GERMANY
<b>Company Phone No.:</b>	+49 211 73710100
<b>Company E-Mail:</b>	impressum@tonies.com
<b>Contact Person:</b>	Andrej Henkel
<b>Contact E-Mail Address:</b>	andrej.henkel@boxine.de
<b>Contact Phone No.:</b>	+49 211 542540-49

### **1.2.Manufacturer Information**

<b>Company Name:</b>	Boxine GmbH
<b>Company Address:</b>	Grafenberger Allee 120, 40237 Düsseldorf, GERMANY
<b>Company Phone No.:</b>	+49 211 73710100
<b>Company E-Mail:</b>	impressum@tonies.com
<b>Contact Person:</b>	Andrej Henkel
<b>Contact E-Mail Address:</b>	andrej.henkel@boxine.de
<b>Contact Phone No.:</b>	+49 211 542540-49

## **2. Summary of Testing**

### **2.1. General Information**

#### **Applied Standards**

<b>Specification Reference:</b>	47CFR15.247
<b>Specification Title:</b>	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.247
<b>Specification Reference:</b>	47CFR15.225
<b>Specification Title:</b>	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Section 15.225
<b>Specification Reference:</b>	47CFR15.205 and 47CFR15.209
<b>Specification Title:</b>	Code of Federal Regulations Volume 47 (Telecommunications): Part 15 Subpart C (Intentional Radiators) - Sections 15.205 and 15.209

#### **Location**

<b>Location of Testing:</b>	UL International Germany GmbH Hedelfinger Str. 61 70327 Stuttgart Germany
<b>Test Firm Registration:</b>	399704

#### **Date information**

<b>Order Date:</b>	29 January 2021
<b>EUT arrived:</b>	06 April 2021
<b>Test Dates:</b>	21 May 2021
<b>EUT returned:</b>	-/-

## **2.2. Summary of Test Results**

Clause	Measurement	Complied	Did not comply	Not performed	Not applicable
Part 15.247(d), 15.225(d), 15.209(a)(c) & 15.205	Transmitter Radiated Emissions <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Note(s):**

1. Intermodulation tests of WLAN 2.4 GHz (802.11 b, g, n) & RFID – 13.56 MHz.

## **2.3. Methods and Procedures**

<b>Reference:</b>	ANSI C63.10-2013
<b>Title:</b>	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
<b>Reference:</b>	FCC KDB 558074 D01 DTS Meas Guidance v05r02 April 2, 2019
<b>Title:</b>	Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating Under Section 15.247 of the FCC Rules

## **2.4. Deviations from the Test Specification**

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above.

### **3. Equipment Under Test (EUT)**

#### **3.1. Identification of Equipment Under Test (EUT)**

<b>Brand Name:</b>	Toniebox Starterset
<b>Model Name or Number:</b>	03-xxxx (colour coding)
<b>Serial Number:</b>	EMV 5 (Radiated Test Sample)
<b>MAC ID:</b>	90-E2-02-20-70-35 (TB 1.5 EMV US 1)
<b>Hardware Version Number:</b>	1.5
<b>Software Version Number:</b>	4.0.0
<b>FCC ID:</b>	2AU47-00002

<b>Brand Name:</b>	Boxine
<b>Model Name or Number:</b>	Tonie Figure
<b>Serial Number:</b>	Not stated
<b>Hardware Version Number:</b>	Not Stated
<b>Firmware Version Number:</b>	Not Stated
<b>Additional Details:</b>	Passive RFID-13.56 MHz Key

<b>Brand Name:</b>	Tonies
<b>Model Name or Number:</b>	DYS619-090150W-2
<b>Serial Number:</b>	DYS619-090150-16917A
<b>Hardware Version Number:</b>	1.0
<b>Additional Details:</b>	AC-DC Adapter- Switching Mode Power Supply 100-240 V AC / 0.5 A / 50Hz to 9 V DC / 1.5 A

#### **3.2. Description of EUT**

The equipment under test was a Toniebox Starterset consists of the Toniebox itself, a power supply including docking station DYS 619 and Tonie Lauscher (headset). Toniebox Starterset is an Audio system for children. Tonie figures to be purchased separately are placed on the Toniebox (TB).

An RFID receiver in the Toniebox reads the product ID from the figure (passive RFID chip in the Tonie figure). Via the WLAN module in the TB, the audio content is downloaded from the Boxine-Tonie cloud to the TB's internal memory (flash drive) via the Internet and played back via the TB speaker or Headphone.

This device supports WLAN 2.4 GHz 802.11 b-, g-, n-modes, operations in 2.4 – 2.4835 GHz ISM & WLAN 5GHz a-, n-modes, operations in U-NII-1 5 GHz bands.

#### **3.3. Modifications Incorporated in the EUT**

No modifications were applied to the EUT during testing.

### 3.4. Additional Information Related to Testing

<b>Technology Tested:</b>	WLAN (IEEE 802.11b,g,n) & RFID -13.56MHz				
<b>Type of Unit:</b>	Transceiver				
<b>Power Supply Type 1:</b>	AC-DC Adapter- Switching Mode Power Supply				
<b>Power Supply Requirement(s):</b>	100-240 V AC / 0.5 A / 50 Hz to 9 V DC / 1.5 A				
<b>Power Supply Type 2:</b>	Internal Rechargeable Battery via AC /DC Adapter				
<b>Power Supply Requirement(s):</b>	3.6 V DC / 0.1 A				
<b>Temperature Requirement(s):</b>	T <sub>nom</sub>	20°C			
	T <sub>min</sub>	5°C			
	T <sub>max</sub>	35°C			
<b>WLAN 2.4 GHz</b>					
<b>Type of Radio Device:</b>	Transceiver				
<b>Supported Data Rate(s):</b>	802.11b	1 Mbps & 11 Mbps			
	802.11g	54 Mbps			
	802.11n	MCS7 (65 Mbps)			
<b>Supported Modulation Type(s):</b>	802.11b	DBPSK & DQPSK			
	802.11g	64QAM			
	802.11n	64QAM			
<b>Worst Case Data Rate(s):</b>	802.11b	11 Mbps <sup>(Note 1)</sup>			
<b>Worst Case Modulation Type(s):</b>	802.11b	DQPSK <sup>(Note 1)</sup>			
<b>Nominal Channel Bandwidth:</b>	20 MHz				
<b>Transmit Frequency Range:</b>	2412 MHz to 2462 MHz				
<b>Transmit Channels Tested:</b>	<b>Channel ID</b>	<b>Channel Number</b>	<b>Channel Frequency (MHz)</b>		
	Top	11	2462 <sup>(Note 2)</sup>		
<b>RFID – 13.56 MHz</b>					
<b>Category of Equipment:</b>	Short Range Device				
<b>Transmit Frequency Range:</b>	13.56 MHz				
<b>Channel Spacing:</b>	Single channel device				

Intermodulation Transmit Channels Tested:	RFID 13.56 MHz	WLAN 2.4 GHz 802.11b	
	Channel Frequency (MHz)	Channel Number	Channel Frequency (MHz)
	13.56	11	2462 <sup>(Note 2)</sup>
(Note 1)			
As per applicant's declaration the EUT implements 802.11b mode 1 Mbps & 11 Mbps, 802.11g mode 54 Mbps and 802.11n mode MCS7. Multiple supported modulation schemes, nominal channel bandwidths were initially investigated to determine the above mentioned worst case data rates (terms highest output power, highest output power spectral density).			
(Note 2)			
<ul style="list-style-type: none"> <li>In accordance with FCC Part 15.247 &amp; ANSI C63.10-2013 Section 5.6. Table 4, the certification tests of the WLAN 2.4 GHz (802.11 b, g, n) were performed on 3 channels (Bottom: 2412 MHz   Middle : 2437 MHz   Top: 2462 MHz).</li> <li>For further details refer Report No: UL-RPT-RP-13697467-116-FCC   UL International Germany GmbH</li> <li>The results from the Top channel: 2462 MHz found to be worst case channel in terms highest output power and highest output power spectral density; therefore in accordance with ANSI C63.10-2013 Section 5.6.2 intermodulation radiated emissions have been performed only with EUT configured to : WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz</li> </ul>			

### **3.5. Support Equipment**

The following support equipment was used to exercise the EUT during testing:

#### **A. Support Equipment (In-house)**

Item	Description	Brand Name	Model Name or Number	Serial Number
1	WLAN Router Simulator	Rohde & Schwarz	CMW500	CMW500 166992
2	Horn Antenna	Schaffer	BHA9118	21220
3	RF Cable (DC-18 GHz)	N/A	N/A	N/A

#### **B. Support Equipment (Manufacturer supplied)**

Item	Description	Brand Name	Model Name or Number	Serial Number
-/-	-/-	-/-	-/-	-/-

## 4. Operation and Monitoring of the EUT during Testing

### 4.1. Operating Modes

The EUT was tested in the following operating mode(s):

Continuous simultaneous transmissions of WLAN 2.4 GHz & RFID 13.56 MHz

- WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz

### 4.2. Configuration and Peripherals

The EUT was tested in the following configuration(s):

#### EUT Power Supply:

- The EUT can be powered via either with AC/DC power adapter or rechargeable internal battery.
- The results from AC/DC power adapter found to be worst case (tends to produce maximum emissions); therefore, intermodulation radiated emissions have been performed only with EUT powered via AC/DC power adapter 120 VAC/60 Hz.

#### Test Mode Activations:

- Rohde & Schwarz CMW500 was used in WLAN Router simulator mode to create a WLAN network. The was EUT connected to this network.
- The WLAN 2.4 GHz transmitter test modes were configured to maximum supported power settings (PWR 0).
- For RFID 13.56 MHz test mode, the Tonie Figure was placed on the EUT; which then reads the product ID from the Tonie figure & activates the RFID communication.

#### Radiated Measurements:

- In accordance with ANSI C63.10 section 5.10.7, the EUT allows for the connection of external accessories, including external electrical control signals. Hence emission tests shall be performed with the EUT and accessories configured in a manner that tends to produce maximum emissions; therefore all radiated tests were with EUT powered via AC/DC power adapter 120 VAC / 60 Hz.
- Before starting final radiated spurious emission measurements “worst case verification” with the EUT in Standing-position & Laying-position was performed by Lab.
- The EUT in Laying-position was found to be the worst case therefore this report includes relevant results.
- The radiated measurements below 30 MHz were performed with the EUT positioned on the turn table and rotating 360 degrees while the loop antenna height was set to 80 cm.
- The radiated measurements above 30 MHz were performed with the EUT positioned on the turn table and rotating 360 degrees while the antenna height varies from 1 to 4 m over the measurement frequency range.
- R&S® EMC32 V10.60.10 Software was used for the Radiated spurious emission measurements.

## **5. Measurements, Examinations and Derived Results**

### **5.1. General Comments**

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to Section 6 *Measurement Uncertainty* for details.

In accordance with DAkkS requirements all the measurement equipment is on a calibration schedule. All equipment was within the calibration period on the date of testing.

## **5.2. Test Results**

### **5.2.1. Transmitter Radiated Emissions**

#### **Test Summary:**

<b>Test Engineer:</b>	Sercan Usta	<b>Test Date:</b>	21 May 2021
<b>Test Sample Serial Number:</b>	EMV 5 (Radiated Test Sample)		
<b>Test Site Identification</b>	SR 1/2		

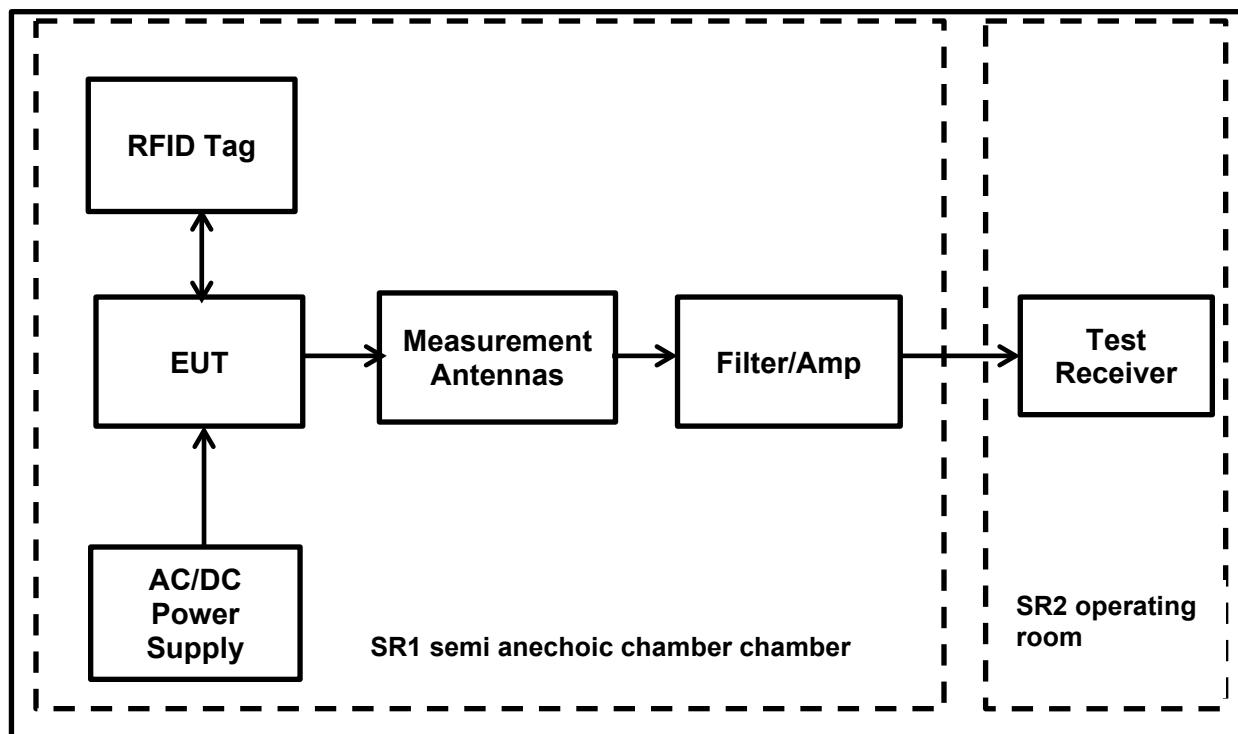
<b>FCC Reference:</b>	Parts 15.247(d), 15.225(d), 15.209(a) & 15.205
<b>Test Method Used:</b>	FCC KDB 558074 Sections 8.5 & 8.6 referencing ANSI C63.10 Sections 11.11 and 11.12 ANSI C63.10:2013 Sections 6.3 and 6.4
<b>Frequency Range</b>	9 kHz to 30 MHz

#### **Environmental Conditions:**

<b>Temperature (°C):</b>	23.8
<b>Relative Humidity (%):</b>	40.3

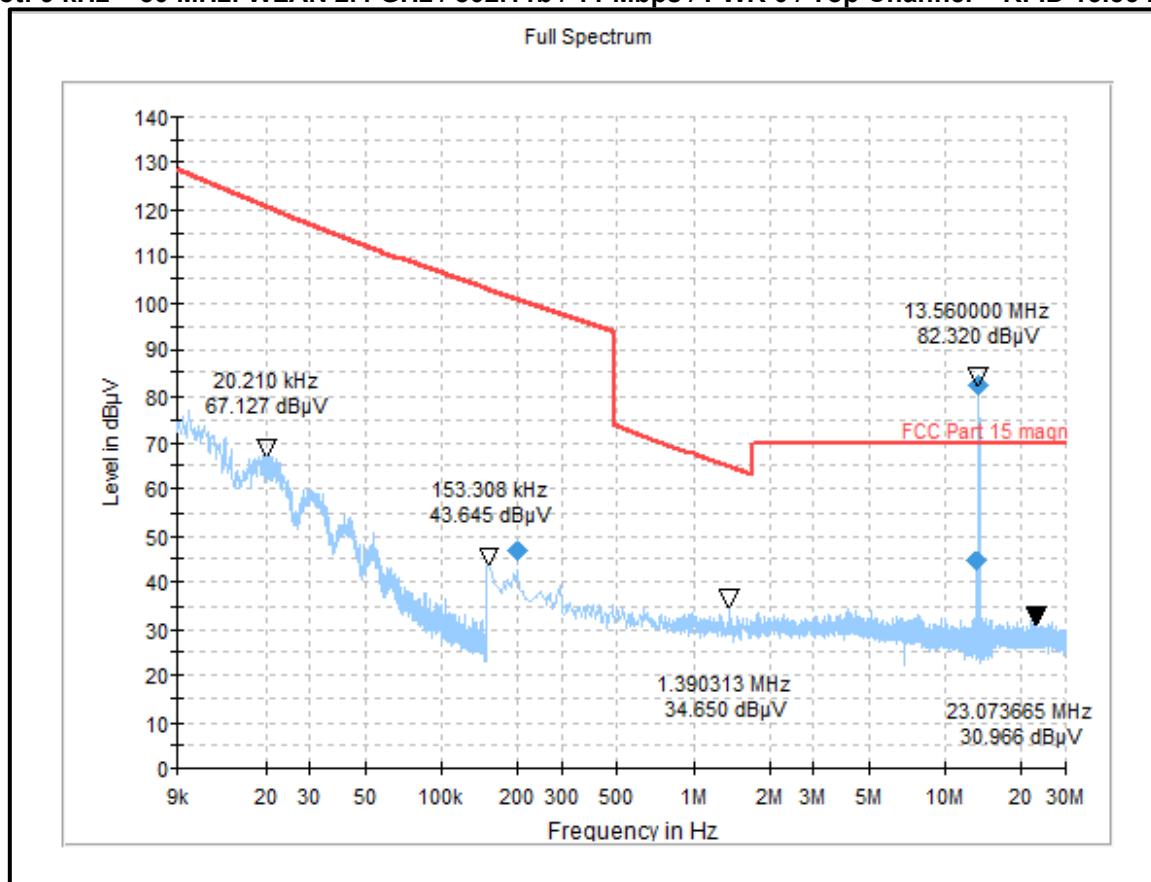
#### **Note(s):**

1. In accordance with FCC KDB 414788 D01 Radiated Test Site & ANSI C63.10 clause 5.2 an alternative test site that can demonstrate equivalence to a open area test site may be used. Therefore, the measurement was performed in a Semi Anechoic Chamber. (The OATS / SAC comparison data is available upon request).
2. The limits are specified at a test distances of 30 and 300 metres. However, as specified in FCC Section 15.31 (f)(2) & ANSI C63.10 clause 6.4.3, measurements may be performed at a closer distance and the measured level extrapolated to the specified measurement distance using the method described in clauses 6.4.4, specifically sub-clause 6.4.4.1 which specifies that the measured level shall be extrapolated to the specified distance by conservatively presuming that the field strength decays at 40 dB/decade.
3. Therefore, the limit values are extrapolated to a measurement distance of 3 m.
  - 9 kHz- 490 kHz: limits extrapolated from 300 m to 3 m by adding 80 dB at 40 dB /decade.
  - 490 kHz-1705 kHz: limits extrapolated from 30 m to 3 m by adding 40 dB at 40 dB /decade.
4. Measurements below 30 MHz were performed in a semi-anechoic chamber SR1/ 2 (Asset Number 1603665) at a distance of 3 m. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. The measurement loop antenna height was 1 m.
5. Pre-scans were performed and markers placed on the highest measured levels. The test receiver was set to:
  - Frequency range: 9 kHz-150kHz : RBW: 300 Hz /VBW: 1 kHz
  - Frequency range: 150 kHz – 30 MHz: RBW: 10 kHz /VBW: 30 kHz
  - Detector: Max-Peak detector
  - Trace Mode: Max Hold
6. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
7. All other emissions shown on the pre-scans were investigated and found to be > 20 dB below the applicable limits.
8. The emissions shown at frequencies approximately 13.56 MHz on the 9 kHz to 30 MHz plot are the EUT's RFID 13.56 MHz fundamental for the tested channel.

**Transmitter Radiated Emissions (continued)****Test Setup:**

**Transmitter Radiated Emissions (continued)****Results: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

Frequency (MHz)	Loop Antenna Orientation	MaxPeak Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
0.199	0° to EUT	46.67	100.67	54.00	Complied
13.215	90° to EUT	44.54	70.00	25.46	Complied

**Plot: 9 kHz – 30 MHz: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

*Note: This plot is a pre-scan and for indication purposes only.  
For final measurements, see accompanying table.*

**Result: Pass**

**Transmitter Radiated Emissions (continued)****Test Summary:**

<b>Test Engineer:</b>	Sercan Usta	<b>Test Date:</b>	21 May 2021
<b>Test Sample Serial Number:</b>	EMV 5 (Radiated Test Sample)		
<b>Test Site Identification</b>	SR 1/2		

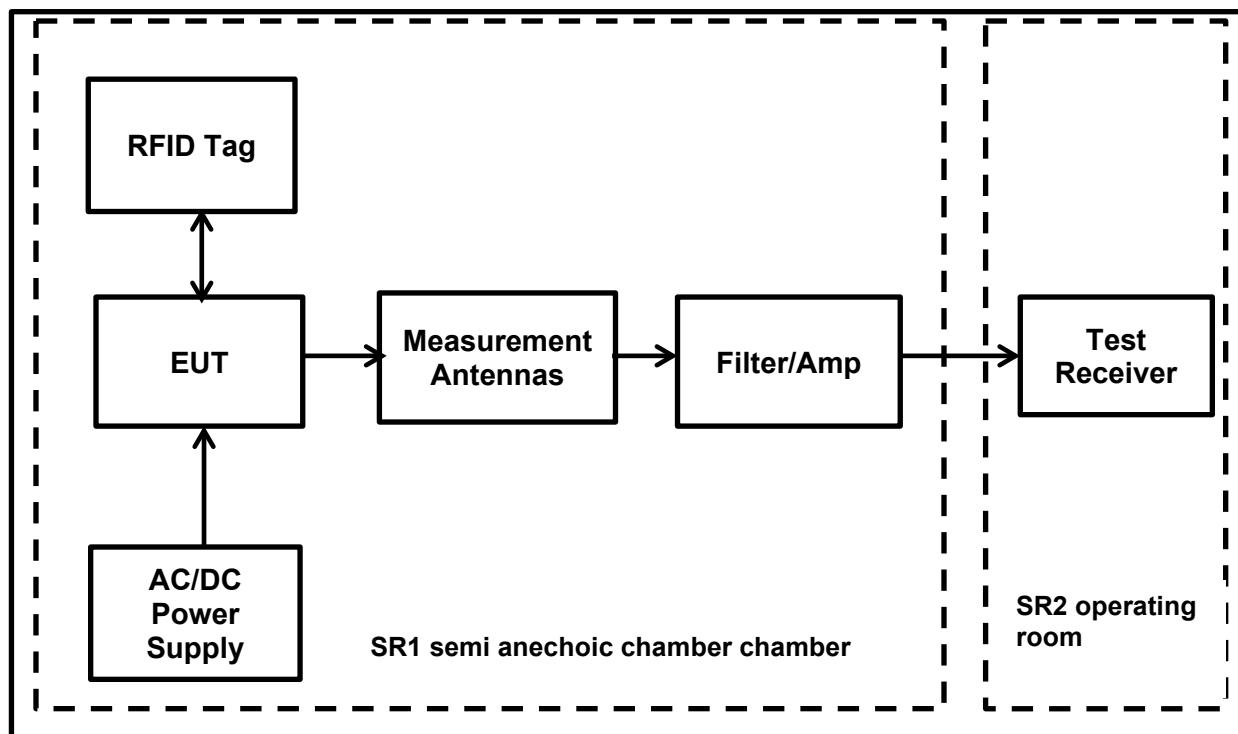
<b>FCC Reference:</b>	Parts 15.247(d), 15.225(d), 15.209(a) & 15.205
<b>Test Method Used:</b>	FCC KDB 558074 Sections 8.5 & 8.6 referencing ANSI C63.10 Sections 11.11 and 11.12 ANSI C63.10:2013 Sections 6.3 and 6.5
<b>Frequency Range</b>	30 MHz to 1000 MHz

**Environmental Conditions:**

<b>Temperature (°C):</b>	23.8
<b>Relative Humidity (%):</b>	40.3

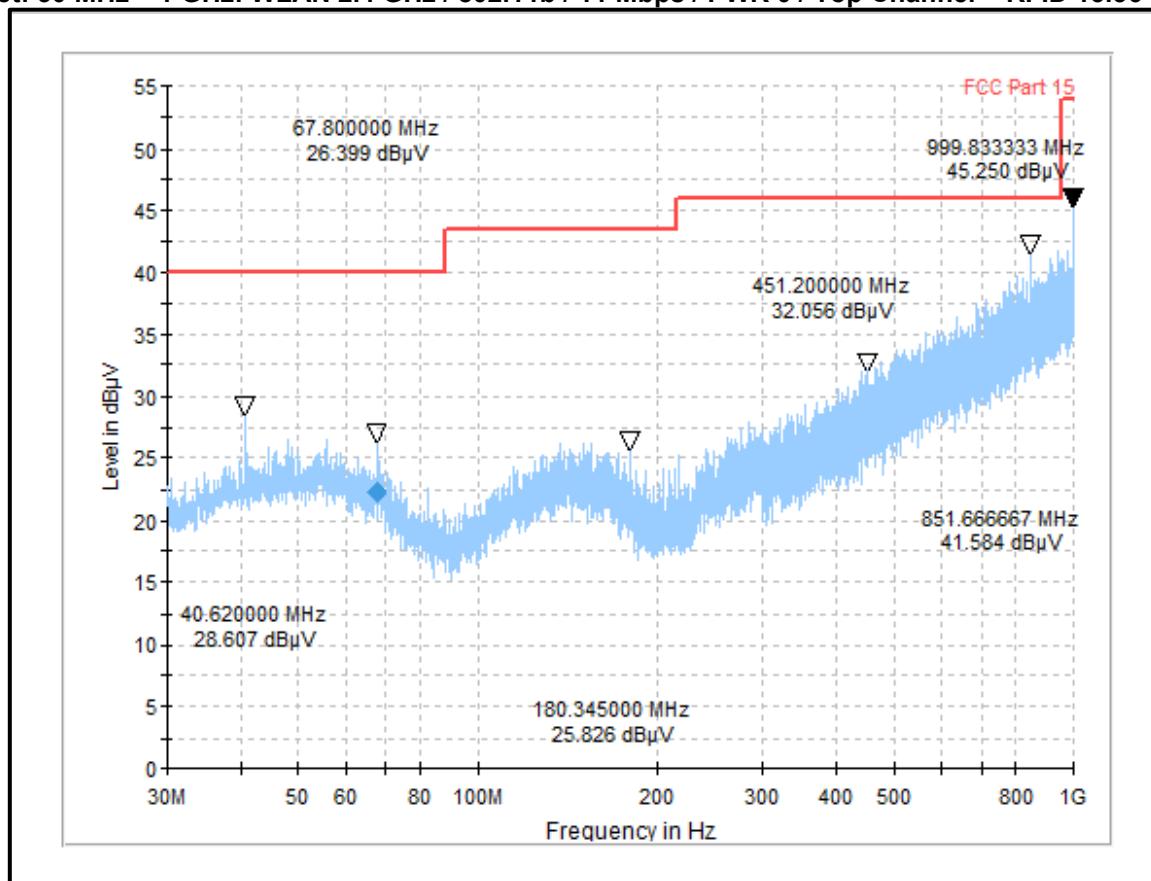
**Note(s):**

1. Measurements below 1 GHz were performed in a semi-anechoic chamber SR1/ 2 (Asset Number 1603665) at a distance of 3 m. The EUT was placed at a height of 80 cm above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 m to 4 m.
2. Pre-scans were performed and markers placed on the highest measured levels. The test receiver resolution bandwidth was set to 100 kHz and video bandwidth 300 kHz. A peak detector was used, sweep time was set to auto and trace mode was Max Hold.
3. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
4. All other emissions shown on the pre-scans were investigated and found to be > 20 dB below the applicable limits.

**Transmitter Radiated Emissions (continued)****Test Setup:**

**Transmitter Radiated Emissions (continued)****Results: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

Frequency (MHz)	Antenna Polarization	MaxPeak Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
67.800	Vertical	22.30	40.00	17.70	Complied

**Plot: 30 MHz – 1 GHz: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

*Note: This plot is a pre-scan and for indication purposes only.  
For final measurements, see accompanying table.*

**Result: Pass**

**Transmitter Radiated Emissions (continued)****Test Summary:**

<b>Test Engineer:</b>	Sercan Usta	<b>Test Date:</b>	21 May 2021
<b>Test Sample Serial Number:</b>	EMV 5 (Radiated Test Sample)		
<b>Test Site Identification</b>	SR 1/2		

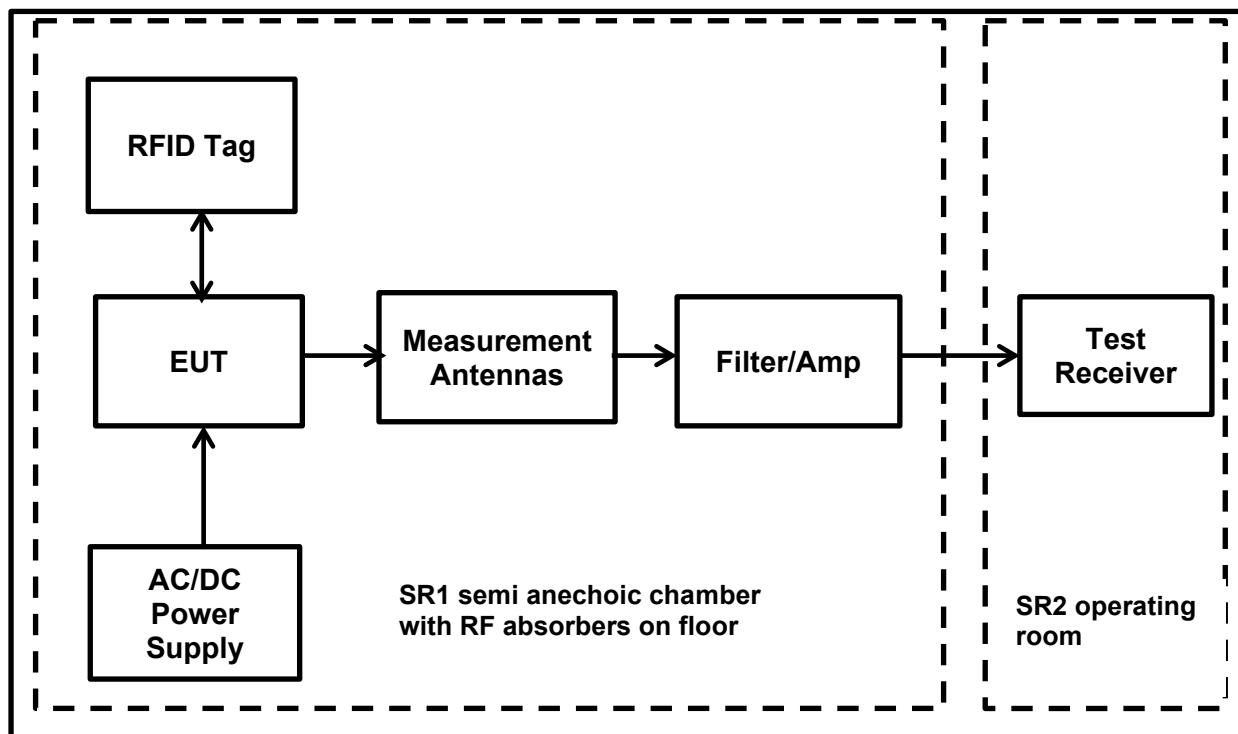
<b>FCC Reference:</b>	Parts 15.247(d), 15.225(d), 15.209(a) & 15.205
<b>Test Method Used:</b>	FCC KDB 558074 Sections 8.5 & 8.6 referencing ANSI C63.10 Sections 11.11 and 11.12 ANSI C63.10:2013 Sections 6.3 and 6.6
<b>Frequency Range</b>	1 GHz to 25 GHz

**Environmental Conditions:**

<b>Temperature (°C):</b>	23.8
<b>Relative Humidity (%):</b>	40.3

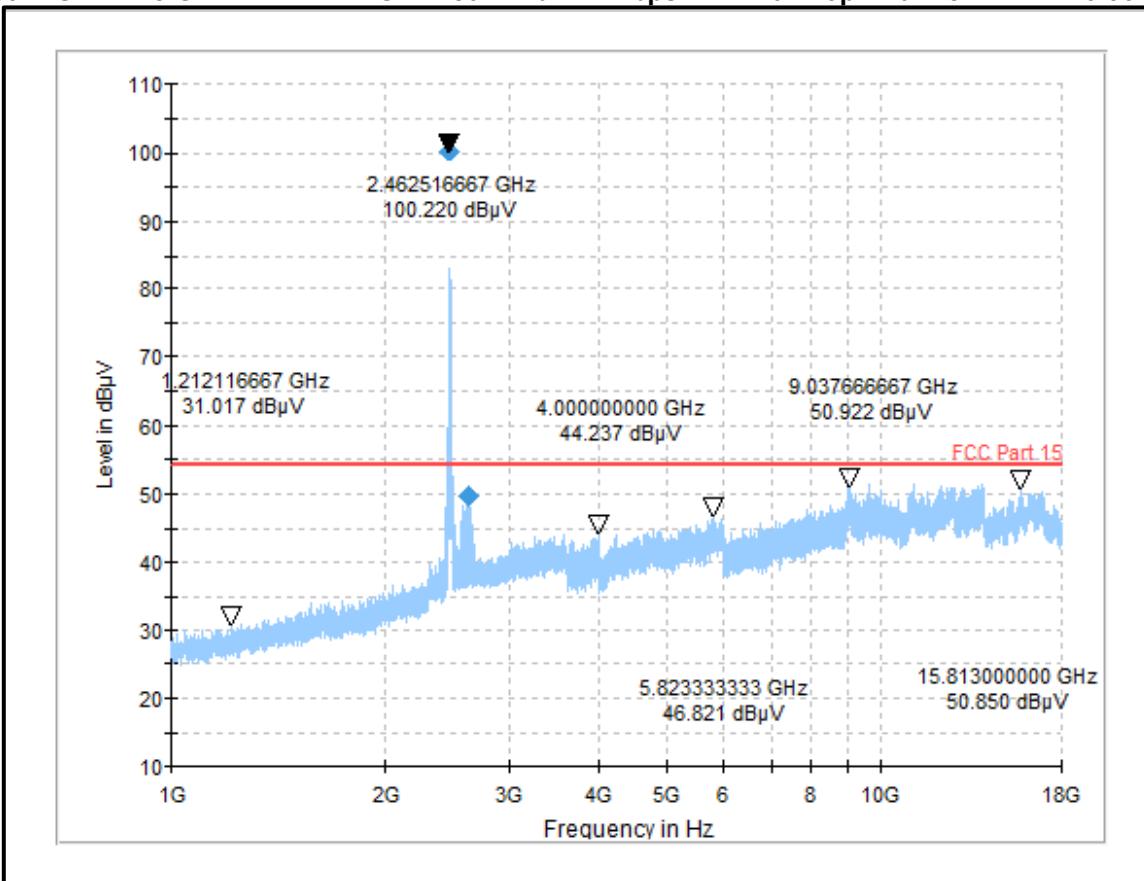
**Note(s):**

1. Pre-scans above 1 GHz were performed in a semi-anechoic chamber SR1/ 2 (Asset Number 1603665) with absorber on the floor at a distance of 3 m. The EUT was placed at a height of 1.5 m above the test chamber floor in the centre of the chamber turntable. All measurement antennas were placed at a fixed height of 1.5 m above the test chamber floor, in line with the EUT. Final measurements above 1 GHz were performed in a semi-anechoic chamber SR1/ 2 (Asset Number 1603665) with absorber on the floor at a distance of 3 m. The EUT was placed at a height of 1.5 m above the reference ground plane in the centre of the chamber turntable. Maximum emission levels were determined by height searching the measurement antenna over the range 1 m to 4 m.
2. Pre-scans were performed and a marker placed on the highest measured level of the appropriate plot. The test receiver resolution bandwidth was set to 1 MHz and video bandwidth 3 MHz. The sweep time was set to auto.
3. The emissions shown at frequencies approximately 2.4 GHz to 2.4835 GHz on the 1 GHz to 18 GHz plots are the EUT's WLAN 2.4 GHz for the tested channel.
4. The final measured value, for the given emission, in the table below incorporates the calibrated antenna factor and cable loss.
5. All other emissions shown on the 1 GHz – 18 GHz pre-scan plot were investigated and found to be below the measurement system noise floor.
6. \*In accordance with ANSI C63.10 Section 6.6.4.3 (Note 1), if the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.
7. All emissions shown on the above 18 GHz pre-scan plots were investigated and found to be below system noise floor.

**Transmitter Radiated Emissions (continued)****Test Setup:**

**Transmitter Radiated Emissions (continued)****Results: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

Frequency (MHz)	Antenna Polarization	MaxPeak Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
2619.43	Horizontal	49.80	54.00	4.20	Complied*

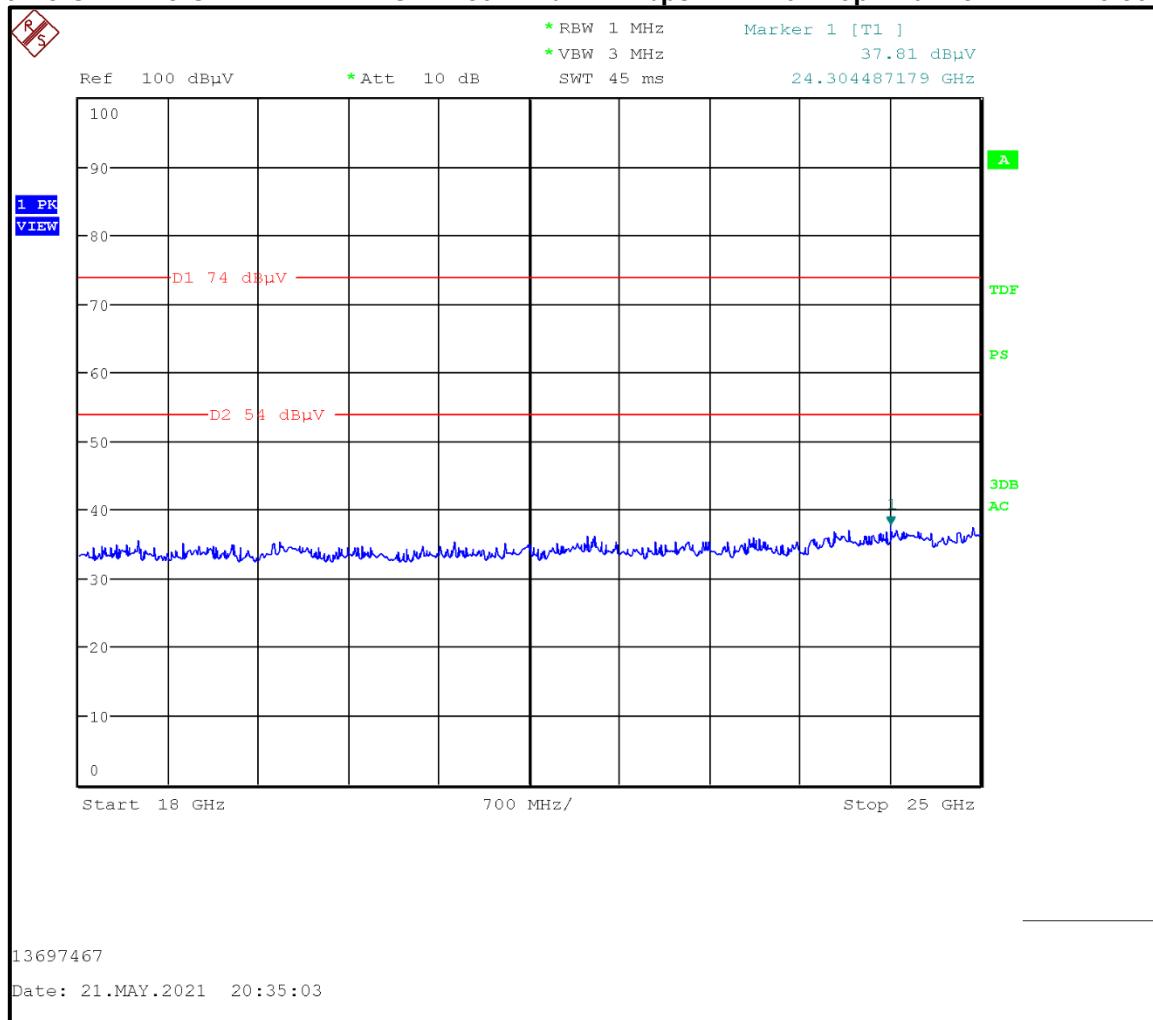
**Plot: 1 GHz – 18 GHz: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

*Note: This plot is a pre-scan and for indication purposes only.  
For final measurements, see accompanying table.*

**Result: Pass**

**Transmitter Radiated Emissions (continued)****Results: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

Frequency (MHz)	Antenna Polarization	MaxPeak Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Result
No critical spurious emissions were found					

**Plot: 18 GHz – 25 GHz: WLAN 2.4 GHz / 802.11b / 11 Mbps / PWR 0 / Top Channel + RFID 13.56 MHz**

*Note: This plot is a pre-scan and for indication purposes only.  
For final measurements, see accompanying table.*

**Result: Pass**

## **6.Measurement Uncertainty**

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Confidence Level (%)	Calculated Uncertainty
Radiated Spurious Emissions	95%	±3.10 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty the published guidance of the appropriate accreditation body is followed.

## 7.Used equipment

### Test site: SR 1/2

ID	Manufacturer	Type	Model	Serial	Calibration Date	Cal. Cycle (months)
1	Rohde & Schwarz	Antenna, Loop	HFH2-Z2	831247/012	10/07/2020	36
377	BONN Elektronik	Amplifier, Low Noise Pre	BLMA 0118-1A	025294B	08/07/2020	12
423	Bonn Elektronik	Amplifier, Low Noise Pre	BLMA 1840-1A	55929	09/07/2020	12
460	Deisel	Turntable	DT 4250 S	n/a	n/a	n/a
452	Schwarzbeck	Antenna, Trilog Broadband	VULB 9168	9168-240	02/09/2020	24
496	Rohde & Schwarz	Antenna, log. - periodical	HL050	100297	05/08/2020	36
607	Schwarzbeck	Antenna broadband horn antenna	BBHA 9170	9170-561	15/10/2019	36
587	Maturo	antenna mast, tilting	TAM 4.0-E	011/7180311	n/a	n/a
588	Maturo	Controller	NCD	029/7180311	n/a	n/a
591	Rohde & Schwarz	Receiver	ESU 40	100244/040	07/07/2020	12
608	Rohde & Schwarz	Switch Matrix	OSP 120	101227	lab verification	n/a
628	Maturo	Antenna mast	CAM 4.0-P	224/19590716	n/a	n/a
629	Maturo	Kippeinrichtung	KE 2.5-R-M	MAT002	n/a	n/a
-/-	Testo	Thermo-Hygrometer	608-H1	01	lab verification	n/a
328	SPS	AC/DC power distribution system	PAS 5000	A2464 00/2 0200	lab verification	n/a
1603665	Siemens Matsushita Components	semi-anechoic chamber SR1/2	-/-	B83117-A1421-T161	n/a	n/a

## 8. Report Revision History

Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	24	-	Initial Version

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