

Test report for

47 CFR Part 15 Subpart C

RSS-247, RSS-Gen



Product name : CowManager Gate
Applicant : CowManager B.V.
FCC ID : Y8K-CMG
IC : 22382-CMG

Test report No. : P000396789 002 Ver 3.00

Laboratory information

Accreditation

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Testing Location

Test Site	Kiwa Nederland B.V.
Test Site location	Wilmersdorf 50 7327 AC Apeldoorn The Netherlands Tel. +31 88998 3393
Test Site FCC	NL0001
CABID	NL0001

Revision History

Version	Date	Remarks	By
v0.50	14-02-2025	First draft	AWM
v1.00	27-05-2025	Final release	AWM
v2.00	05-06-2025	Updated EUT info in 1.3	AWM
v3.00	18-09-2025	Updated EUT info, removed emissions designator, updated antenna calibration data, updated test result tables in 3.1.6	AWM

Table of Contents

Revision History	2
Summary of Test results	4
1 General Description	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Tested Equipment Under Test (EUT)	5
1.3.1 Auxiliary items	6
1.4 Product specifications of Equipment under test	7
1.5 Environmental conditions	7
1.6 Measurement standards	7
1.7 Applicable standards	7
1.8 Observation and remarks	7
1.9 Modifications to the EUT (Equipment Under Test)	7
1.10 Conclusions	8
2 Test configuration of the Equipment Under Test	9
2.1 Test mode	9
2.2 Test setups	9
2.3 Equipment used in the test configuration	13
2.4 Sample calculations	13
3 Test results	14
3.1 Radiated spurious emissions	14
3.1.1 Limit	14
3.1.2 Measurement instruments	14
3.1.3 Test setup	14
3.1.4 Test procedure	15
3.1.5 Measurement Uncertainty	15
3.1.6 Test results	16
3.1.7 Plots of the Radiated Spurious Emissions Measurement	18
3.2 AC Power-line conducted emissions	22
3.2.1 Limit	22
3.2.2 Measurement instruments	22
3.2.3 Test setup	22
3.2.4 Test procedure	22
3.2.5 Measurement uncertainty	22
3.2.6 AC Power Line Conducted emission data of the EUT, results	23
3.2.7 Plots of the AC mains conducted spurious measurement	24
4 Sample calculations	25

Summary of Test results

FCC	ISED	Description	Section in report	Verdict
15.247(d) 15.225(d) 15.209 (a)	RSS-Gen 8.9	Radiated spurious emissions	3.1	Pass
15.207 (c)	RSS-Gen 8.8	AC power-line conducted emissions	3.2	Pass

Decision rule: Pass/Fail decisions are based on measurement results without taking into account measurement uncertainty.

1 General Description

1.1 Applicant

Client name:	CowManager B.V.
Address:	Gerverscop 9, Harmelen, The Netherlands
Zip code:	3481 LT
Telephone:	+31 348 443840
E-mail:	certification@cowmanager.com
Contact name:	Natasha Pasricha

1.2 Manufacturer

Manufacturer name:	CowManager B.V.
Address:	Gerverscop 9, Harmelen, The Netherlands
Zip code:	3481 LT
Telephone:	+31 348 443840
E-mail:	certification@cowmanager.com
Contact name:	Natasha Pasricha

1.3 Tested Equipment Under Test (EUT)

Product name:	CowManager Gate
Brand name:	CowManager®
FCC ID:	Y8K-CMG
IC:	22382-CMG
Product description:	A gating system for livestock, optimized for sorting cows. Purpose to isolate specific cows from a herd to a holding area for further tasks, such as examination or treatment.
Variant model(s):	CMG 2W 1.0
Batch and/or serial No.	0123F177C4ECCAE4
Software version:	2025.01.30
Hardware version:	CMG-1000
Date of receipt:	31-01-2025
Tests started:	03-02-2025
Testing ended:	03-03-2025

1.3.1 Auxiliary items

AUX1

Product name:

Notebook

Product type:

Lenovo IdeaPad Flex3

Remarks:

Connects to EUT Ethernet port.

1.4 Product specifications of Equipment under test

Tx Frequency:	RFID:134.2 kHz
Rx frequency:	RFID:134.2 kHz ZigBee : 2400-2480 MHz
Occupied channel width:	--
Antenna type:	ZigBee: Patch antenna array. RFID:Coil antenna
Antenna gain:	ZigBee: Single patch 6 dBi, Summed Patched 12 dBi. RFID: --
Type of modulation:	ZigBee: QPSK RFID: FDX-B Animal Identification Protocol
Emission designator	134KM1D

Disclaimer: The operating frequency bands are declared by the applicant

1.5 Environmental conditions

Normal test conditions:

Temperature (*) : +15°C to +25°C

Relative humidity(*) : 20 % to 75 %

1.6 Measurement standards

- ANSI C63.10-2020
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02

1.7 Applicable standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.207
- FCC Part 15 Subpart C §15.209
- FCC Part 15 Subpart C §15.225
- FCC Part 15 Subpart C §15.247
- RSS-Gen Issue 5

1.8 Observation and remarks

The EUT is a floor standing EUT, with the EUT frame meant to be grounded when installed.

1.9 Modifications to the EUT (Equipment Under Test)

EUT was modified with metal cover plates behind/on the back of the RFID reader panels. These panels are at a specified length of 5 cm from the front of the RFID panel to the inside edge of the fold of the panel. The outside edge is at 6.5 cm. A power supply was changed on the EUT. The new model is: MDR-60-24.

1.10 Conclusions

The sample of the product showed **NO NON-COMPLIANCES** to the specifications stated in paragraph 1.7 of this report.

The results of the test as stated in this report, are exclusively applicable to the product items as identified in this report. Kiwa Nederland B.V. accepts no responsibility for any properties of product items in this test report, which are not supported by the tests as specified in paragraph 1.7 "*Applicable standards*".

All tests are performed by:

Name : ing. A.W. Mostert

Review of test methods and report by:

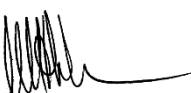
Name : ing. Maaz. H. Khan

The above conclusions have been verified by the following signatory:

Date : 28-10-2025

Name : ing. M.H. Khan

Function : Test Engineer

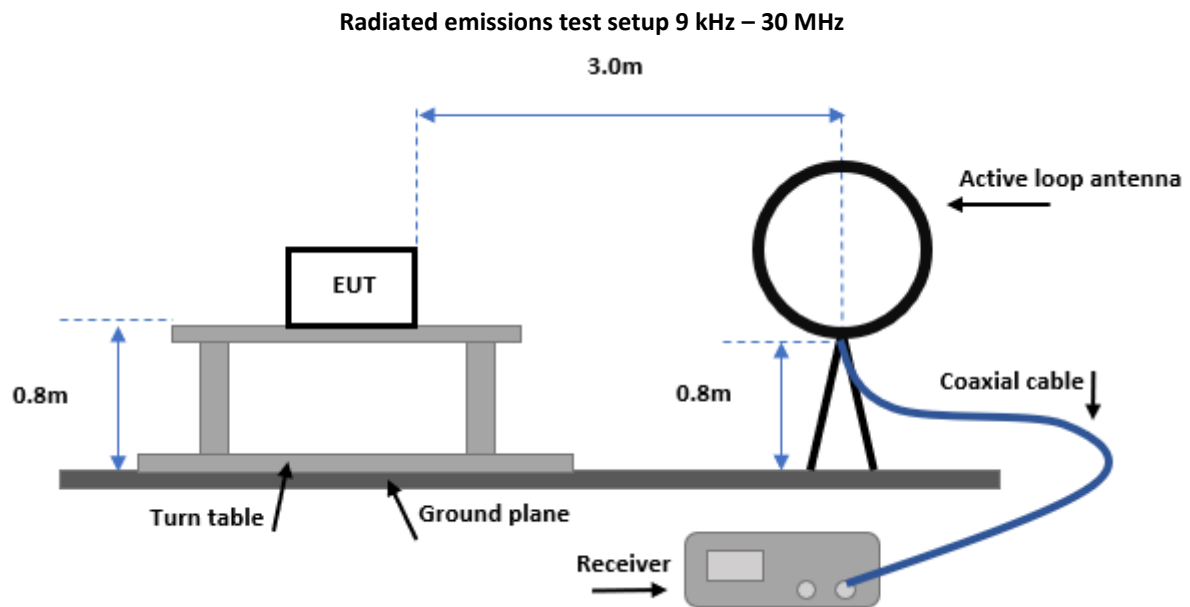
Signature : 

2 Test configuration of the Equipment Under Test

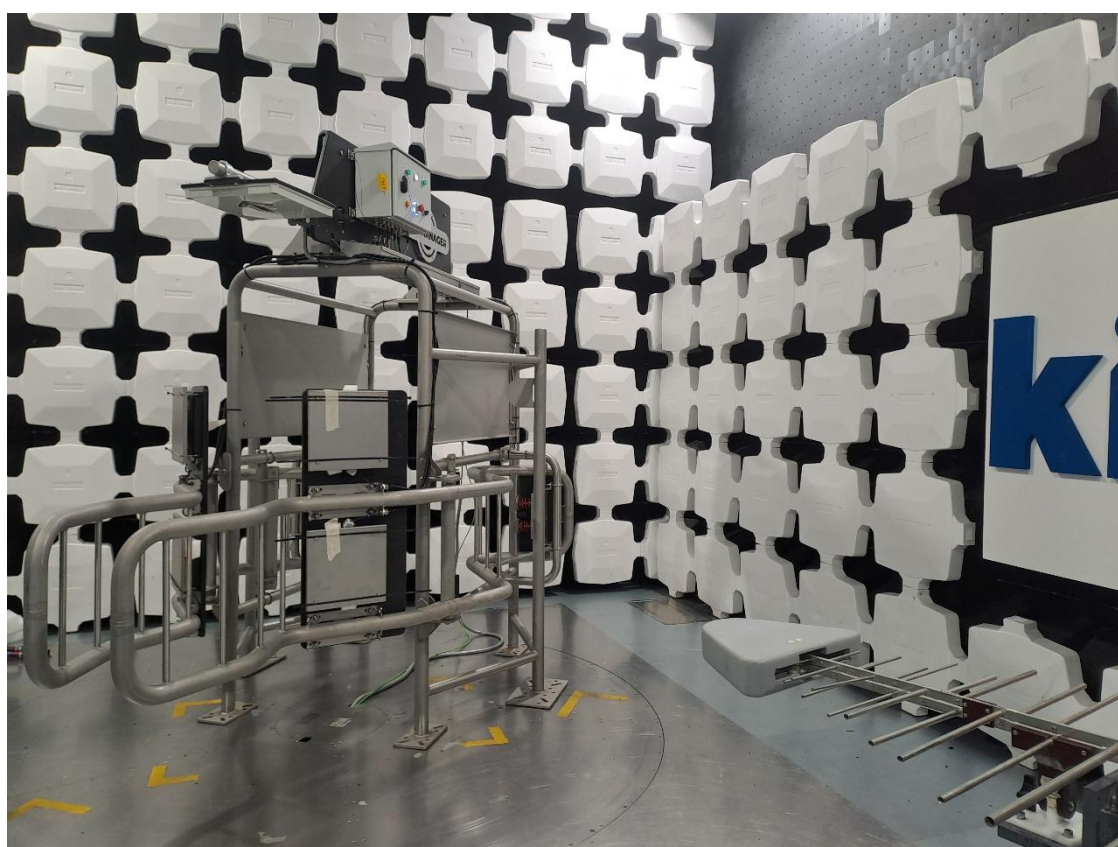
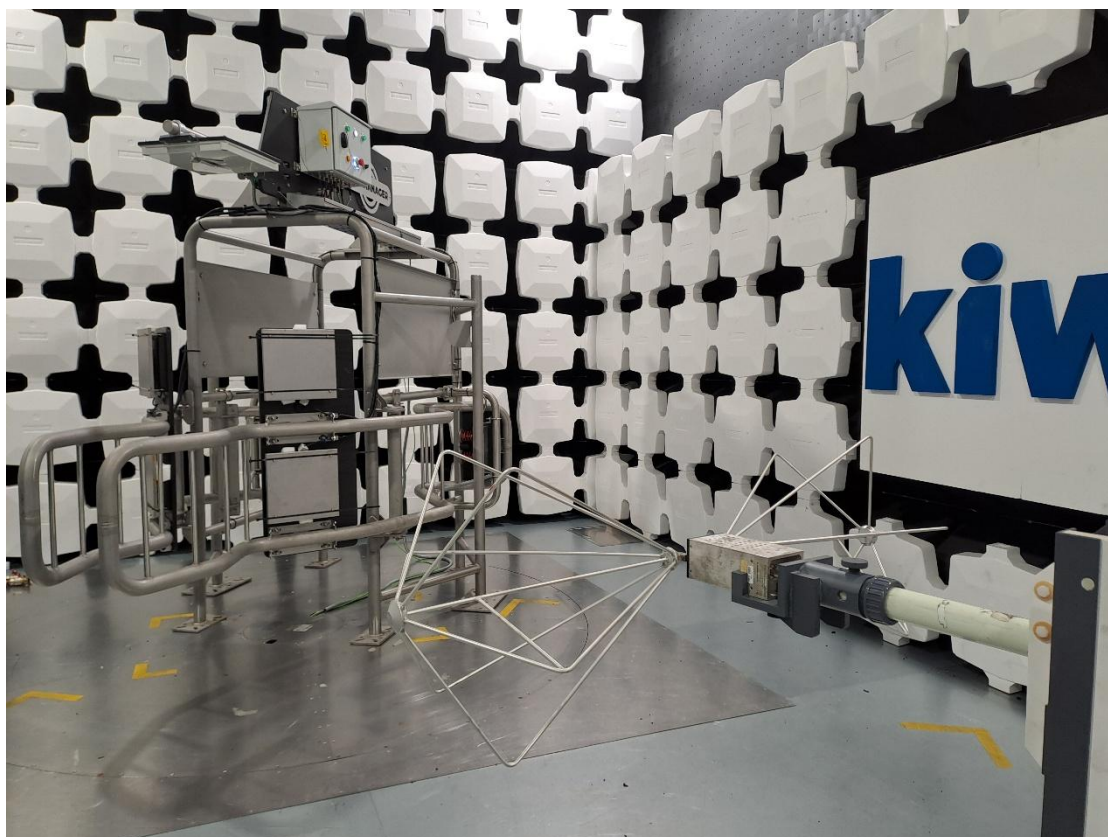
2.1 Test mode

The EUT was set up with 4 RFID tags on the 4 RFID tag readers. The Zigbee panel was turned on with the system always being in receive mode. The IR sensor was blocked to simulate a cow inside the gate.

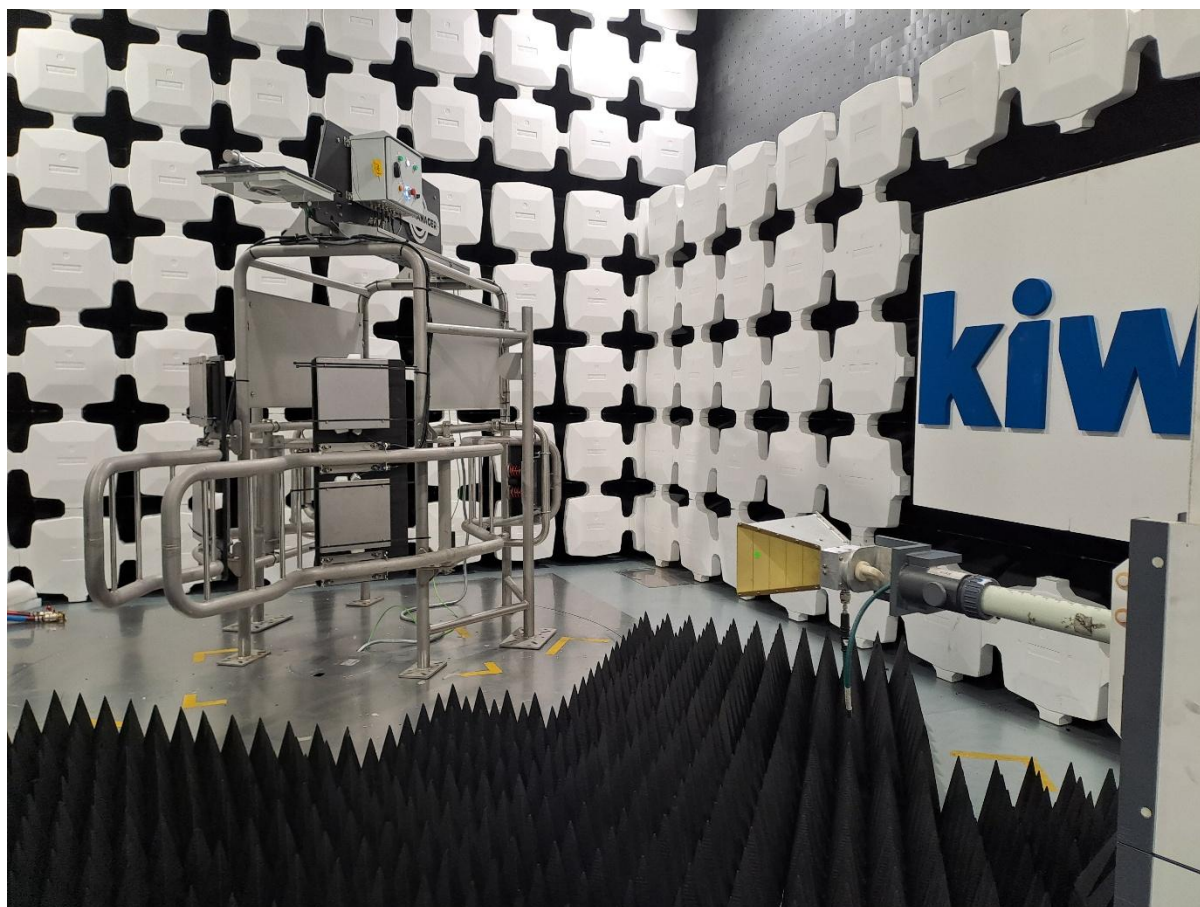
2.2 Test setups



Radiated emissions test setup 30 MHz - 1 GHz

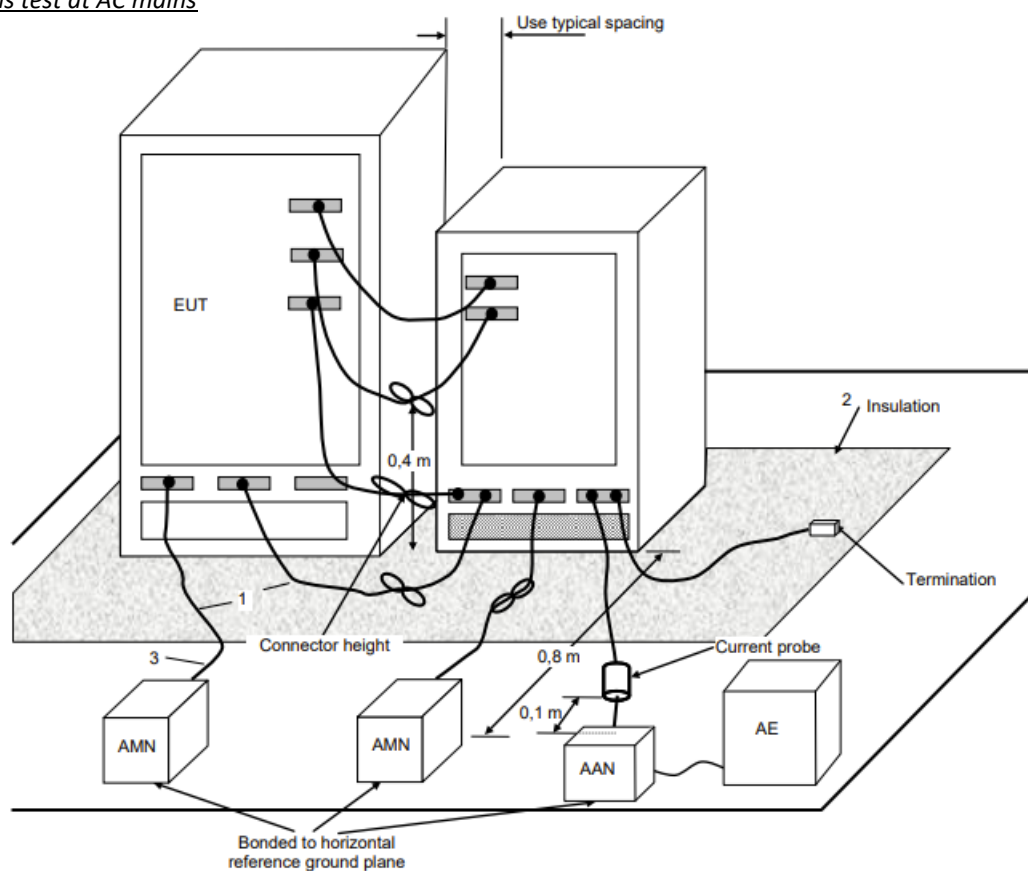


Radiated emissions test setup above 1 GHz



AC Power line conducted emissions test setup

Emissions test at AC mains



List of used cables					
Number	Function	From	To	Length	Remarks
1	AC Power	mains 120Vac 60 Hz	AC Mains	< 3m	-
2	Ethernet	EUT	AUX1	<3m	-

2.3 Equipment used in the test configuration

Description	Manufacturer	Model	ID	Cal. Done date	Cal. due date	Used at Par.
EMI Test receiver	Rohde & Schwarz	EPL1000	115435	12-2024	12-2025	3.2
EMI Receiver	Rohde & Schwarz	ESR7	114870	12-2024	12-2025	3.1
Spectrum Analyzer	Rohde & Schwarz	FSV3044	114923	10-2023	10-2025	3.1
Biconical antenna + 6dB attenuator	EMCO	3109	107818	09-2024	09-2025	3.1
Logperiodic antenna	EMCO	3147	114385	02-2021	02-2026	3.1
Horn antenna	EMCO	3115	114607	01-2025	01-2028	3.1
Preamplifier 1-18 GHz	µComp Nordic	MCNA-40-0010800-25-10P	114771	08-2024	08-2025	3.1
Semi-Anechoic Chamber	ETS Lindgren	SAR	114624	03-2023	03-2026	3.1 - 3.2
Test software	Raditeq	Radimation Version 2023.2.3	--	--	--	3.1 - 3.2
LISN /Two line V-network	Rohde & Schwarz	ENV 216	114379	11-2023	11-2025	3.2

2.4 Sample calculations

All formulas for data conversions and conversion factors are reported in chapter 4 of this test report.

3 Test results

3.1 Radiated spurious emissions

3.1.1 Limit

FCC 15.209(a)

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance(m)
0.009 – 0.490	2400/F(kHz)	$20 \cdot \{\log[2400] - \log[F(\text{kHz})]\}$	300*
0.490 – 1.705	24000/F(kHz)	$20 \cdot \{\log[24000] - \log[F(\text{kHz})]\}$	30*
1.705 – 30.0	30	29.5	30*
30 -88	100	40	3
88 - 216	150	43,5	3
216-960	200	46	3
Above 960	500	54	3

*Note: Measured values in the plots 9 kHz to 30 MHz corrected to 30m or 300m limit distance according to the method described in ANSI C63.10-2020, clause 6.4

RSS-GEN

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Magnetic field strength (H-Field) (μA/m)	Magnetic field strength (H-Field) (dBμA/m)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance(m)
0.009 – 0.490	6.37/F (kHz)	$20 \cdot \{\log[6.37] - \log[F(\text{kHz})]\}$	N.A.	$20 \cdot \{\log[6.37] - \log[F(\text{kHz})]\} + 51.5$	300*
0.490 – 1.705	63.7/F (kHz)	$20 \cdot \{\log[63.7] - \log[F(\text{kHz})]\}$	N.A.	$20 \cdot \{\log[63.7] - \log[F(\text{kHz})]\} + 51.5$	30*
1.705 - 30	0.08	-21.9	N.A.	29.6	30*
30 -88	N.A.	N.A.	100	40	3
88 - 216	N.A.	N.A.	150	43,5	3
216-960	N.A.	N.A.	200	46	3
Above 960	N.A.	N.A.	500	54	3

*Note: Measured values in the plots 9 kHz to 30 MHz corrected to 30m or 300m limit distance according to the method described in ANSI C63.10-2020, clause 6.4.

3.1.2 Measurement instruments

The measurement instruments are listed in chapter 2.3 of this report.

3.1.3 Test setup

The test setup is as shown in chapter 2.2 of this report.

3.1.4 Test procedure

9 kHz – 30 MHz: According to ANSI C63.10-2020, section 6.4

30 MHz to 26.5 GHz: According to ANSI C63.10-2020, section 6.5 and 6.6

9 kHz to 30 MHz: IRN 441 – Method 10

30 MHz to 1 GHz: IRN 441 – Method 1

1 GHz to 18 GHz: IRN 441– Method 2

18 to 26 GHz: IRN 441– Method 3

In case of handheld and/or body-worn equipment, the EUT's orientation (X, Y, Z) was varied in order to ensure that maximum emission amplitudes were attained. In all other cases the associated cabling and the EUT orientation was varied for maximum emissions.

The spectrum was examined from 0.009 MHz to 10 times X GHz, not more than the 10th harmonic of the highest intentional generated frequency (X GHz). Final radiated emission measurements were made at 3m distance.

The 6 highest emission amplitudes relative to the appropriate limit were recorded in this report. Field strength values of radiated emissions at frequencies not listed in the tables are more than 20 dB below the applicable limit.

3.1.5 Measurement Uncertainty

Frequency range	Polarization	Uncertainty
9 kHz – 30 MHz	--	±1.6 dB
30 – 200 MHz	Horizontal	±4.5 dB
	Vertical	±5.4 dB
200 -1000 MHz	Horizontal	±3.6 dB
	Vertical	±4.6 dB
1 – 18 GHz	Horizontal	±5.7 dB
	Vertical	±5.7 dB
18 – 26.5 GHz	Horizontal	±4.9 dB
	Vertical	±4.9 dB

3.1.6 Test results

9-150 kHz Perpendicular

Peak Number	Frequency	Quasi-Peak	Average	Peak	Peak Limit	Quasi-Peak Limit	Average Limit	Status	Height
1	134.408 kHz	23.3 dBμV/m	21.8 dBμV/m	23.8 dBμV/m	45.1 dBμV/m	25.1 dBμV/m	25.1 dBμV/m	Pass	1 m

Note: In the frequency range of 110 – 490 kHz, the average detector is considered against the limit.

Note: Measured at 3 meter distance and corrected to 300 meters using a conversion factor of -80.

9-150 kHz Parallel

Peak Number	Frequency	Quasi-Peak	Average	Peak	Peak Limit	Quasi-Peak Limit	Average Limit	Status	Height
1	134.427 kHz	26.3 dBμV/m	24.9 dBμV/m	26.8 dBμV/m	45.1 dBμV/m	25.1 dBμV/m	25.1 dBμV/m	Pass	1 m

Note: In the frequency range of 110 – 490 kHz, the average detector is considered against the limit.

Note: Measured at 3 meter distance and corrected to 300 meters using a conversion factor of -80.

150 – 3000 kHz Perpendicular

Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Status	Distance	Height
1	668.644 kHz	14.4 dBμV/m	31.1 dBμV/m	Pass	30 m	1 m

Note: Measured at 3 meter distance and corrected to 30 meters using a conversion factor of -40.

150 – 3000 kHz Parallel

Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Status	Distance	Height
1	668.644 kHz	20 dBμV/m	31.1 dBμV/m	Pass	30 m	1 m

Note: Measured at 3 meter distance and corrected to 30 meters using a conversion factor of -40.

30 – 250 MHz

Peak Number	Frequency	Peak	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Status	Status	Height	Polarization
1	50.036 MHz	37.7 dBμV/m	31.8 dBμV/m	40 dBμV/m	Pass	Pass	2 m	Vertical
2	76.161 MHz	35.2 dBμV/m	25.3 dBμV/m	40 dBμV/m	Pass	Pass	3.2 m	Vertical
3	149.99 MHz	36.4 dBμV/m	32.9 dBμV/m	40 dBμV/m	Pass	Pass	1.5 m	Vertical
4	196.548 MHz	37.7 dBμV/m	31.4 dBμV/m	40 dBμV/m	Pass	Pass	2.7 m	Vertical
5	100.009 MHz	38.1 dBμV/m	34.4 dBμV/m	40 dBμV/m	Pass	Pass	1.8 m	Horizontal
6	186.726 MHz	37.8 dBμV/m	33.2 dBμV/m	40 dBμV/m	Pass	Pass	2.5 m	Horizontal

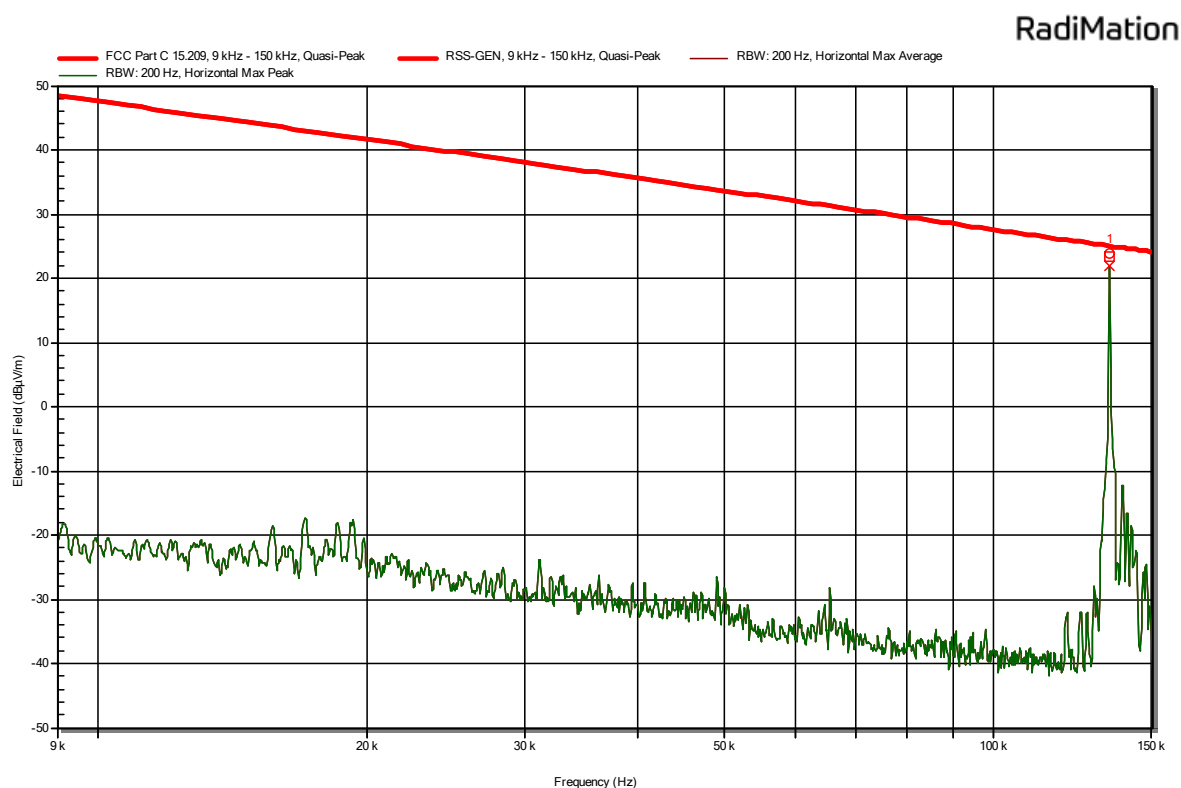
250 – 1000 MHz

Peak Number	Frequency	Peak	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Status	Status	Height	Polarization
1	329.22 MHz	44.1 dBμV/m	38.8 dBμV/m	46 dBμV/m	Pass	Pass	2 m	Vertical
2	500.015 MHz	44.4 dBμV/m	40.7 dBμV/m	46 dBμV/m	Pass	Pass	1 m	Vertical
3	525.006 MHz	43 dBμV/m	39.6 dBμV/m	46 dBμV/m	Pass	Pass	1.25 m	Vertical
4	550.013 MHz	43.8 dBμV/m	40.6 dBμV/m	46 dBμV/m	Pass	Pass	1.25 m	Vertical
5	600.027 MHz	41.2 dBμV/m	38 dBμV/m	46 dBμV/m	Pass	Pass	1 m	Vertical
6	550.006 MHz	47.8 dBμV/m	44.4 dBμV/m	46 dBμV/m	Pass	Pass	1.25 m	Horizontal
7	600.047 MHz	42.1 dBμV/m	38.5 dBμV/m	46 dBμV/m	Pass	Pass	1 m	Horizontal

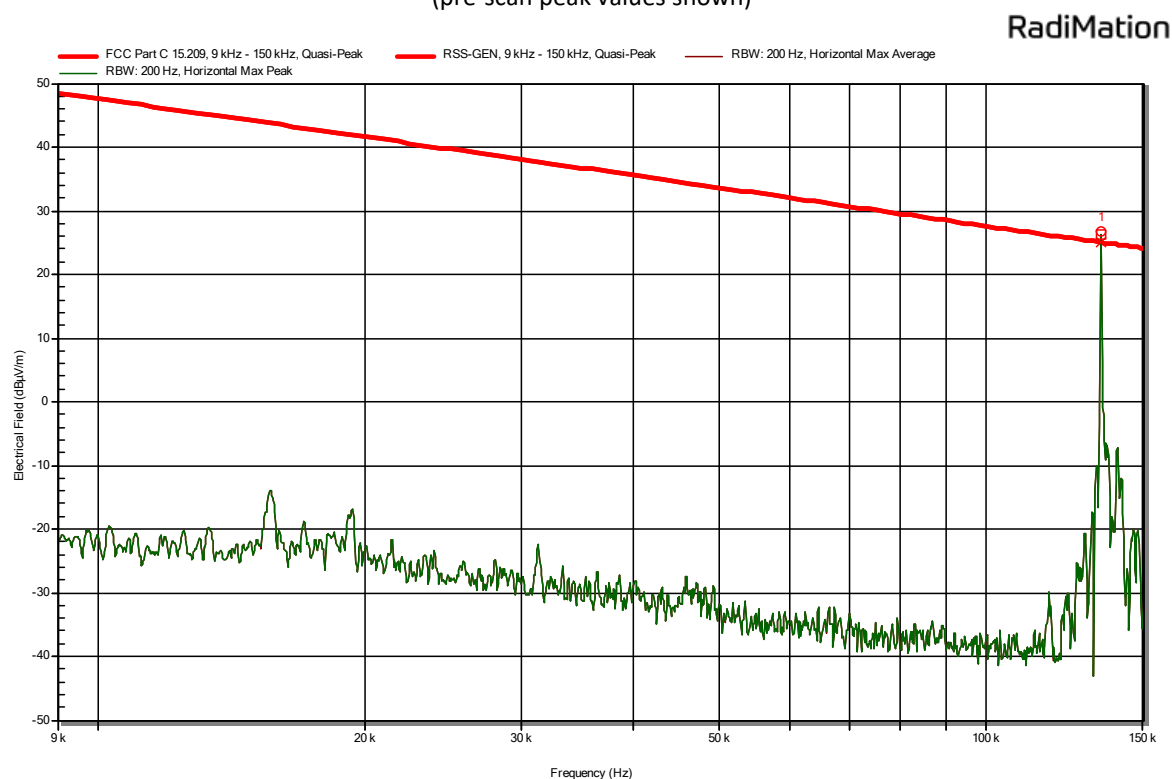
1 – 18 GHz

Peak Number	Frequency	Peak	Peak Limit	Average	Average Limit	Average Status	Status	Height	Polarization
1	1.737 GHz	42.9 dBμV/m	74 dBμV/m	31.7 dBμV/m	54 dBμV/m	Pass	Pass	1.25 m	Vertical
2	14.693 GHz	59.8 dBμV/m	74 dBμV/m	47.9 dBμV/m	54 dBμV/m	Pass	Pass	3.25 m	Vertical

3.1.7 Plots of the Radiated Spurious Emissions Measurement

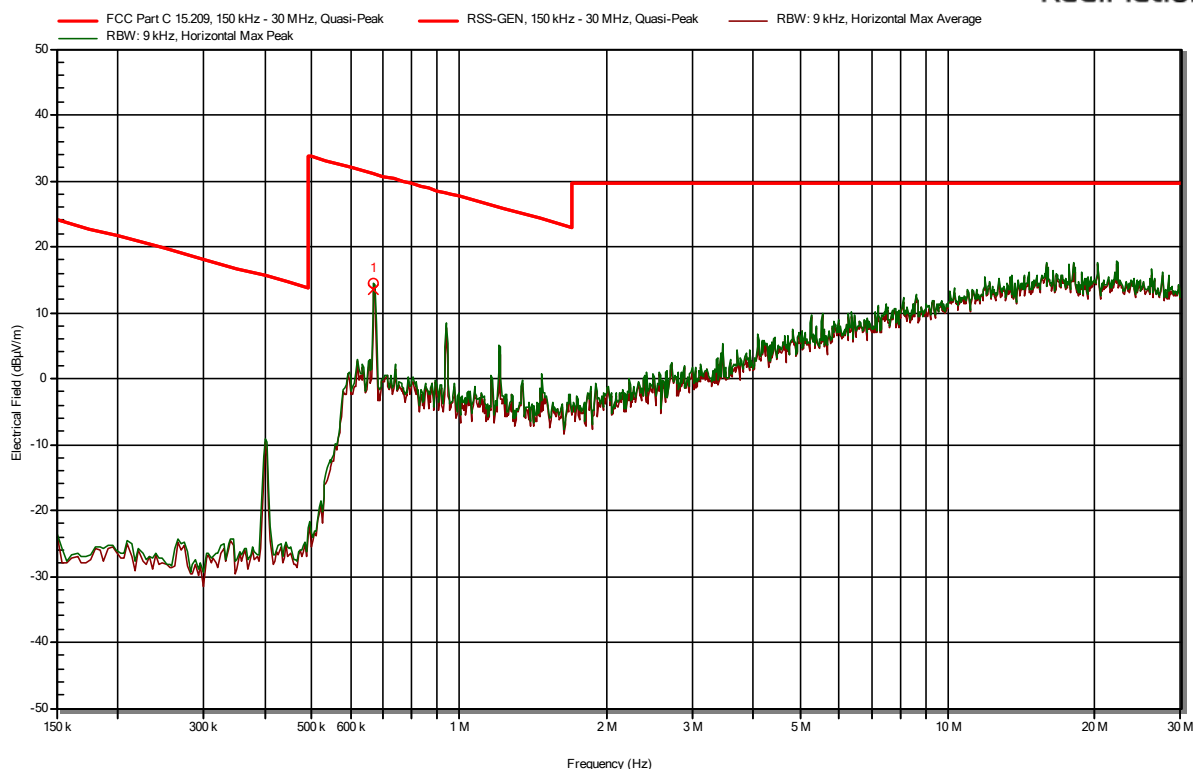


Plot 1a: radiated emissions of the EUT, Antenna perpendicular, in the range 9 – 150KHz
(pre-scan peak values shown)



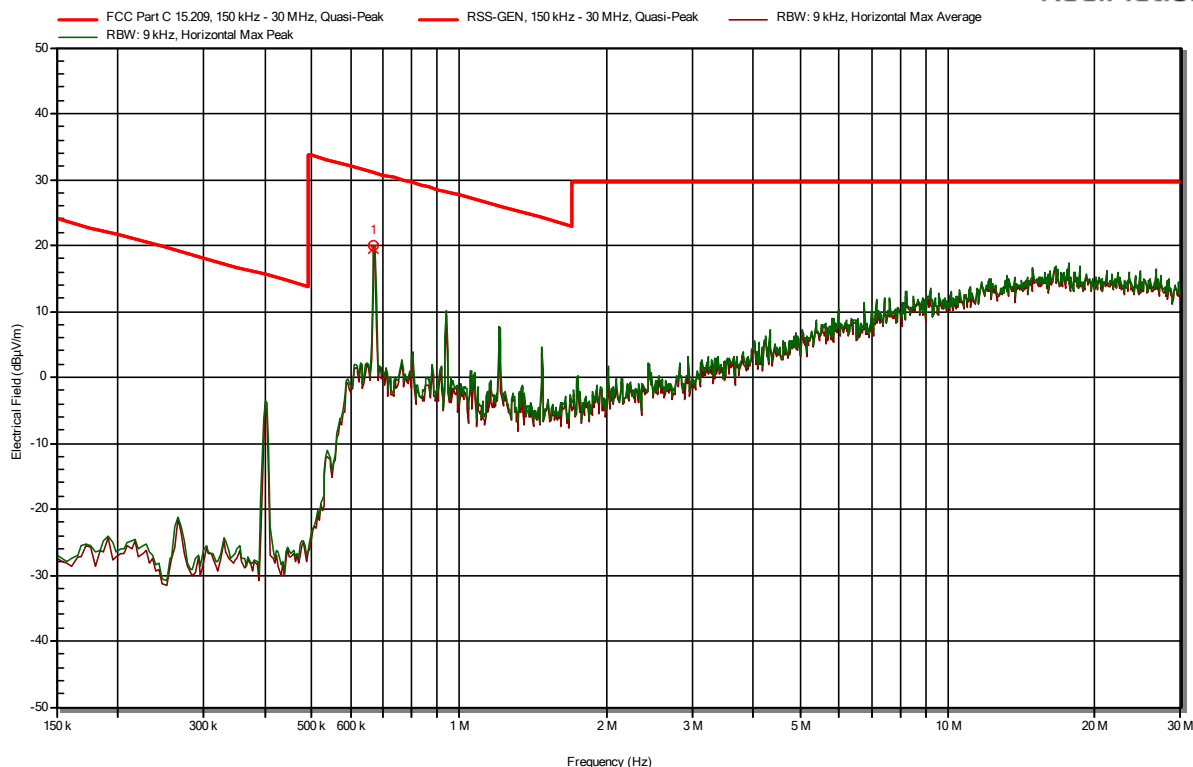
Plot 1b: radiated emissions of the EUT, Antenna parallel, in the range 9 – 150KHz
(pre-scan peak values shown)

RadiMation



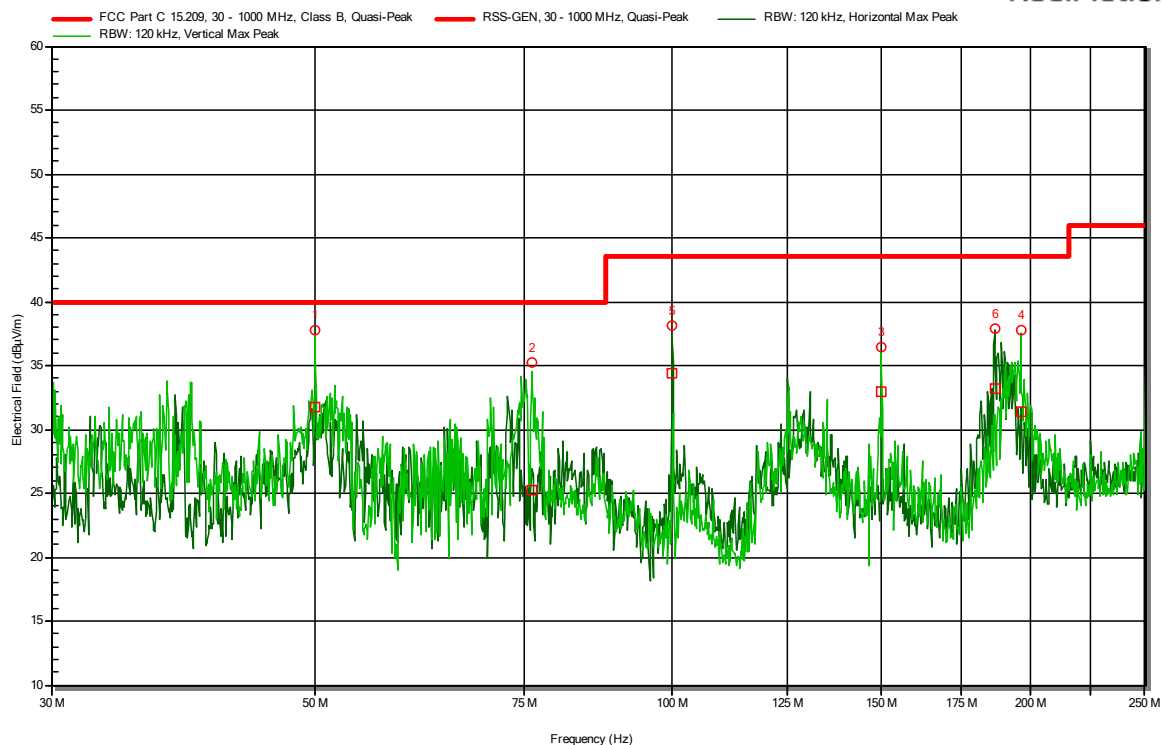
Plot 2a: radiated emissions of the EUT, Antenna perpendicular, in the range 150KHz-30 MHz
(pre-scan peak values shown)

RadiMation



Plot 2b: radiated emissions of the EUT, Antenna parallel, in the range 150KHz-30 MHz
(pre-scan peak values shown)

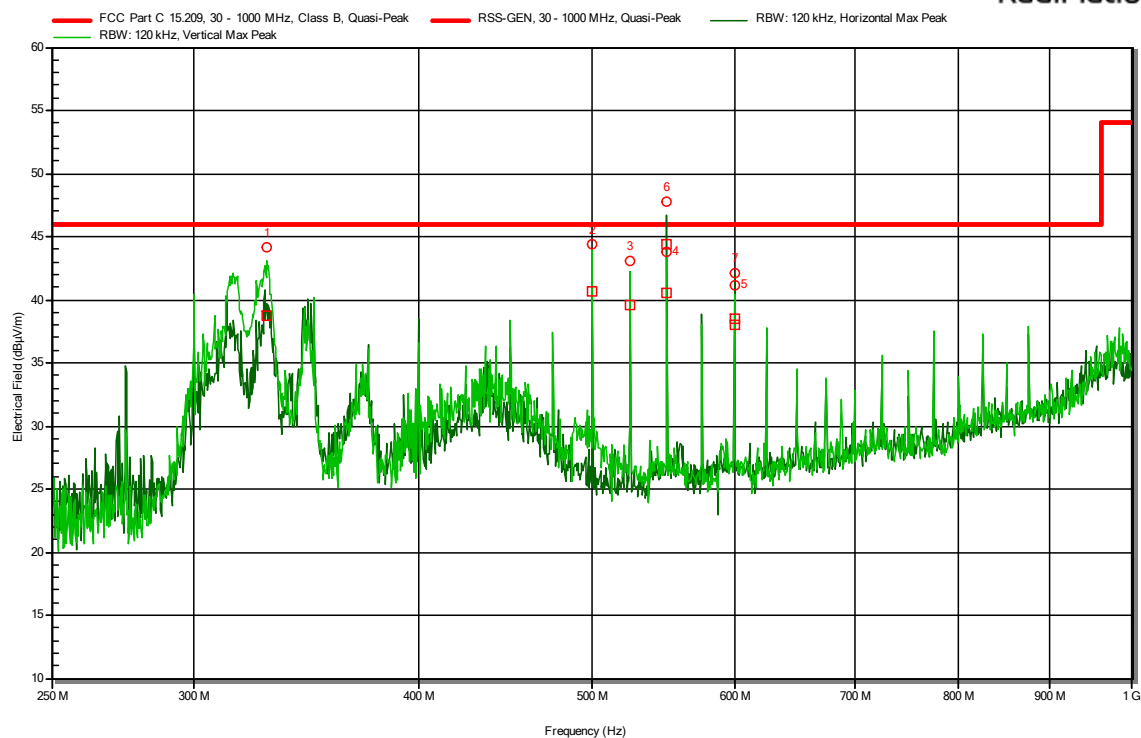
RadiMation



Plot 3: radiated emissions of the EUT, in the range 30 – 250 MHz
(pre-scan peak values shown)

Note: RSS-GEN is not applicable.

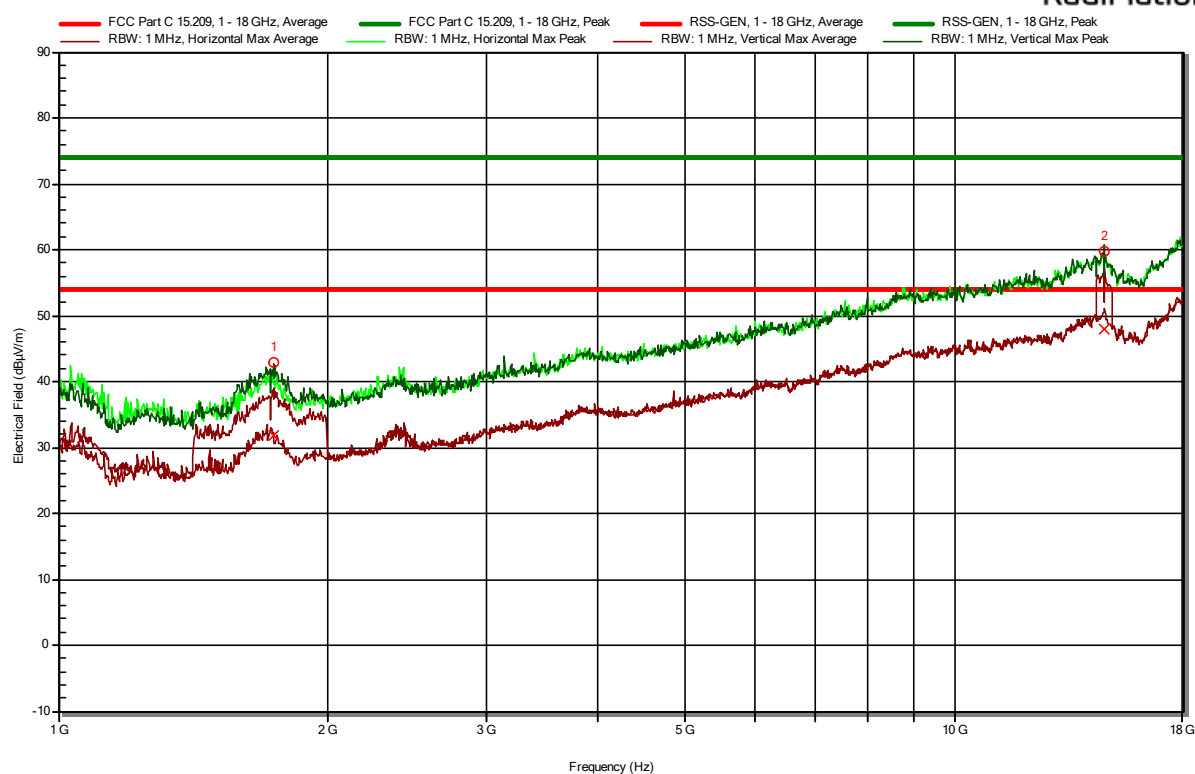
RadiMation



Plot 4: radiated emissions of the EUT, in the range 250-1000 MHz
(pre-scan peak values shown)

Note: RSS-GEN is not applicable.

RadiMation



Plot 5: radiated emissions of the EUT, in the range 1 – 18 GHz
(peak and average values shown)
Note: RSS-GEN is not applicable.

3.2 AC Power-line conducted emissions

3.2.1 Limit

According to 15.207 (a), (c)

An intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN).

Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

Since the FCC and RSS limits are exactly the same, the plots only show FCC limits.

Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 ¹	56 to 46 ¹
0.5 – 5	56	46
5 – 30	60	50

Note 1: The level decreases linearly with the logarithm of the frequency.

3.2.2 Measurement instruments

The measurement instruments are listed in chapter 2.3 of this report.

3.2.3 Test setup

The test setup is as shown in chapter 2.2 of this report.

3.2.4 Test procedure

According to ANSI C63.10-2020 Section 6.2
IRN 439 – Method 1

3.2.5 Measurement uncertainty

+/- 3.6 dB

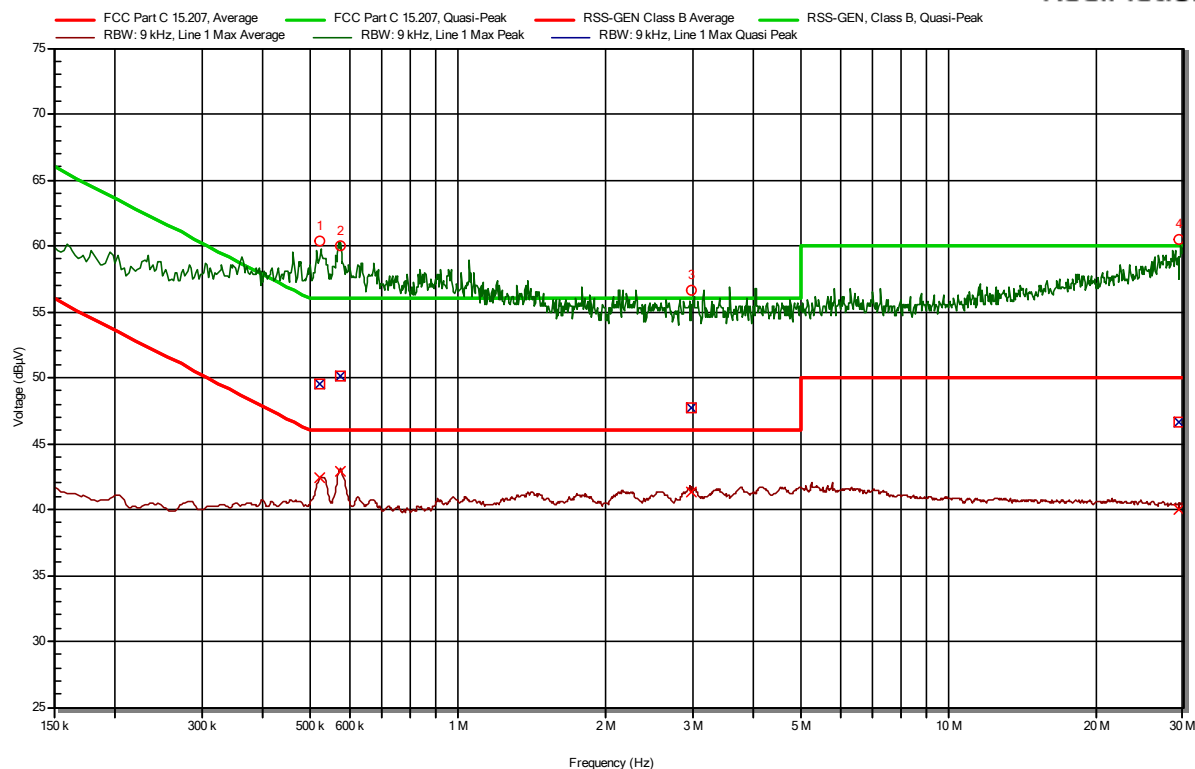
3.2.6 AC Power Line Conducted emission data of the EUT, results

Peak Number	Frequency	Peak	Peak Limit	Average	Average Limit	Average Status	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Status	Status	LISN
1	523.5 kHz	60.4 dBμV	73 dBμV	42.4 dBμV	46 dBμV	Pass	49.5 dBμV	56 dBμV	Pass	Pass	Line 1
2	575.25 kHz	60 dBμV	73 dBμV	42.9 dBμV	46 dBμV	Pass	50.1 dBμV	56 dBμV	Pass	Pass	Line 1
3	2.978 MHz	56.6 dBμV	73 dBμV	41.4 dBμV	46 dBμV	Pass	47.7 dBμV	56 dBμV	Pass	Pass	Line 1
4	29.409 MHz	60.5 dBμV	73 dBμV	40 dBμV	50 dBμV	Pass	46.7 dBμV	60 dBμV	Pass	Pass	Line 1

Peak Number	Frequency	Peak	Peak Limit	Average	Average Limit	Average Status	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Status	Status	LISN
1	570.75 kHz	59.7 dBμV	73 dBμV	42.4 dBμV	46 dBμV	Pass	49.6 dBμV	56 dBμV	Pass	Pass	Neutral
2	1.313 MHz	57.6 dBμV	73 dBμV	40.6 dBμV	46 dBμV	Pass	47.2 dBμV	56 dBμV	Pass	Pass	Neutral
3	2.985 MHz	56.2 dBμV	73 dBμV	41.3 dBμV	46 dBμV	Pass	47.5 dBμV	56 dBμV	Pass	Pass	Neutral
4	29.778 MHz	59.7 dBμV	73 dBμV	40.1 dBμV	50 dBμV	Pass	46.8 dBμV	60 dBμV	Pass	Pass	Neutral

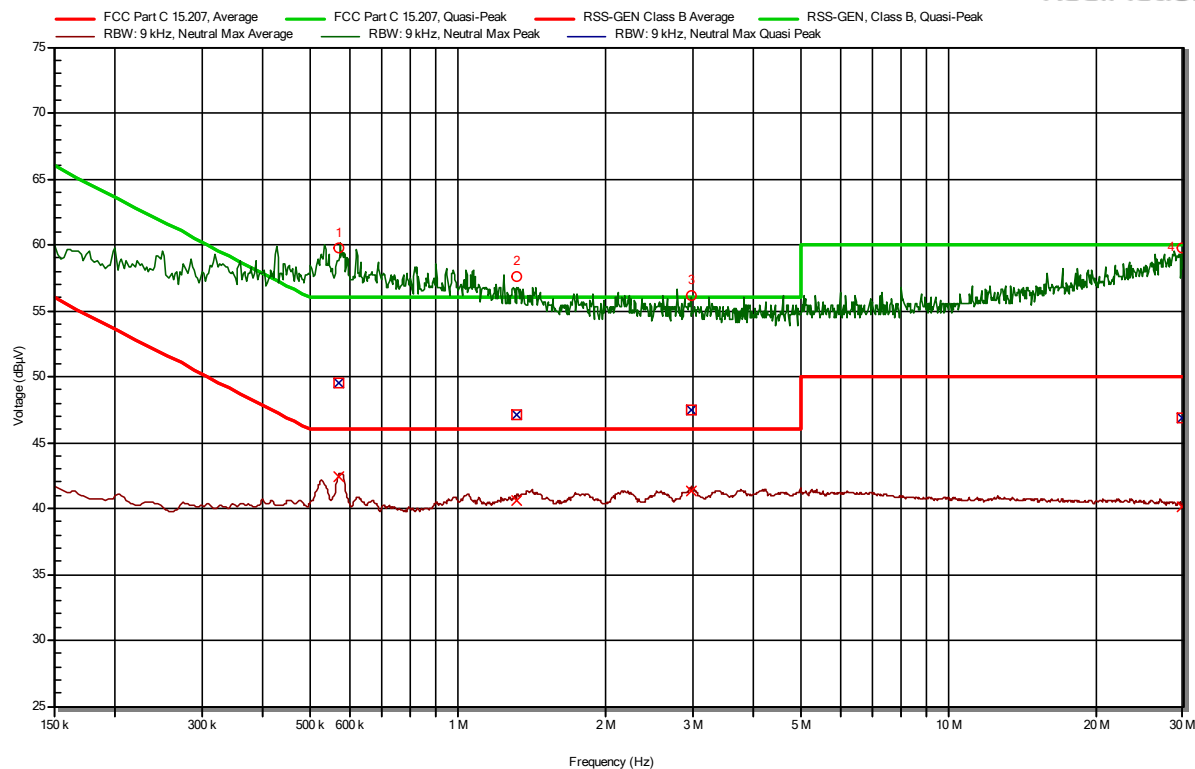
3.2.7 Plots of the AC mains conducted spurious measurement

RadiMation



Pre-scan plot with peak detector of the AC Power-line Conducted emissions on **Phase**

RadiMation



Pre-scan plot with peak detector of the AC Power-line Conducted emissions on **Neutral**

4 Sample calculations

All formulas for data conversions and conversion factors are reported in this chapter.

Conducted emission Measurement:

$$U_{\text{lisn}} (\text{dB}\mu\text{V}) = U (\text{dB}\mu\text{V}) + \text{Corr. (dB)}$$

Where:

U = Measuring receiver voltage

LISN insertion loss = Voltage division factor of LISN

Corr. = sum of single correction factors of used LISN, cables and pulse limiter.

Linear interpolation will be used for frequencies in between the values in the table.

Frequency (MHz)	Voltage division LISN (db)	Cable loss (dB)	Corr. (dB)
	114379 SN: 230000813 Rohde & Schwarz ENV 216	TE 11134	
0,15	9.7	0.02	9.72
0,2	9.68	0.03	9.71
0,3	9.68	0.03	9.71
0,5	9.69	0.08	9.77
0,7	9.69	0.25	9.94
0,8	9.69	0.25	9.94
1	9.68	0.11	9.79
2	9.7	0.15	9.85
3	9.71	0.21	9.92
5	9.72	0.21	9.93
7	9.76	0.25	10.01
8	9.77	0.25	10.02
10	9.77	0.29	10.06
15	9.84	0.34	10.18
20	9.88	0.37	10.25
25	9.97	0.43	10.4
30	10.08	0.45	10.53

Magnetic field strength measurement:

$$H \left[dB \left(\mu \frac{A}{m} \right) \right] = V[dB(\mu V)] + L_c[dB] + AF^H \left[\frac{dB}{\Omega m} \right]$$

Where:

H is the magnetic field strength (to be compared to the limit)

V is the voltage level measured by the receiver or spectrum analyzer

L_c is the cable loss

AF^H is the magnetic antenna factor

Frequency (MHz)	AF	300m to 3m and 30m to 3m correction	CL (dB)	Corr. (dB)
	114515 EMCO 6505 S/N:9112-2710		SAR cable	
0.009	18.49	104.956	0.7	-85.8
0.01	17.64	104.041	0.05	-86.4
0.02	13.23	98.02	0.07	-84.7
0.03	11.65	94.498	0.1	-82.7
0.04	10.97	91.999	0.1	-80.9
0.1	10.14	84.041	0.1	-73.8
0.2	10.01	78.02	0.1	-67.9
0.5	9.95	50.061	0.1	-40
1	9.91	44.041	0.2	-33.9
3	9.93	34.498	0.2	-24.4
5	9.93	30.061	0.3	-19.8
10	9.75	24.041	0.6	-13.7
15	9.29	20.519	0.9	-10.3
20	8.57	18.02	1	-8.5
25	7.55	16.082	0.7	-7.8
27	7.01	15.413	1.2	-7.2
30	6.03	14.498	1	-7.5

Field Strength Measurement:

$$E \text{ (dB}\mu\text{V/m)} = U \text{ (dB}\mu\text{V)} + AF \text{ (dB/m)} + \text{Corr. (dB)}$$

Where:

E = Electric field strength

U = Measuring receiver voltage

AF = Antenna factor

CL = Cable loss

Corr. = sum of single correction factors of used cable and amplifier (if applicable).

Linear interpolation will be used for frequencies in between the values in the table.

Tables shows an extract of the values.

Frequency (MHz)	AF (dB/m)	Cable loss (dB)	Attenuator	Corr. (dB)
	ID: 107818 EMCO 3109	Id: 114928	ID:114525 Hewlett Packet	
30	13.5	1.8	6	21.3
100	9.2	2.7	6	17.9
150	12.6	3.2	6	21.8
200	13.6	3.6	6	23.2
250	15.2	4.3	6	25.5

Frequency (MHz)	AF (dB/m)	Cable loss (dB)	Corr. (dB)
	ID: 114385 EMCO LPDA	Id: 114928	
250	11.8	4.3	16.1
300	13	5.1	18.1
350	14.2	5.8	20.0
400	15.6	7.3	22.9
450	17.1	7.9	25.0
500	17.3	8.0	25.3
550	17.7	8.0	25.7
600	18.4	7.7	26.1
650	19.2	7.5	26.7
700	19.7	7.7	27.4
750	20.3	7.9	28.2
800	21.4	8.2	29.6
850	22.0	8.7	30.7
900	22.1	8.9	31.0
950	22.6	9.2	31.8
1000	22.5	9.6	32.1

Frequency (MHz)	AF (dB/m)	Gain (dB)	Cable loss (dB)	Corr. (dB)
	114607 Emco 3115 SN: 9412-4377	114690 µComp Nordic MCNA-40-0010800-25-10P	114691	
1000	23.6	45.1	2.1	-19.4
2000	27.1	44.7	3.3	-14.3
3000	30.5	44.2	4.2	-9.5
4000	32.7	43.5	4.9	-5.9
5000	33.2	43.1	5.6	-4.3
6000	34.6	43.0	6.3	-2.1
7000	35.2	42.9	6.4	-1.3
8000	37.0	43.3	7.2	0.9
9000	38.1	43.3	7.9	2.7
10000	38.2	43.0	8.2	3.4
11000	38.3	42.9	8.7	4.1
12000	39.1	42.6	9.0	5.5
13000	39.2	43.6	9.8	5.4
14000	41.1	44.3	9.7	6.5
15000	40.2	44.4	10.4	6.2
16000	37.5	44.3	10.8	4.0
17000	41.1	44.5	11.4	8.0
18000	44.0	44.9	11.4	10.5

Frequency (MHz)	AF (dB/m)	Gain (dB)	Cable loss (dB)	Corr. (dB)
	Kiwa ID: 114518 Flann 20240-25 SN: 163703	Kiwa ID: Schwarzbeck BBV 9721	114691	
18000	31.3	34.5	11.4	8.2
19000	31.5	34.9	11.2	7.8
20000	31.7	34.1	11.6	9.2
21000	31.9	33.6	12.1	10.4
22000	32.1	33.6	12.4	10.9
23000	32.2	33.3	13.6	12.5
24000	32.3	32.3	13.5	13.5
25000	32.4	33.0	13.4	12.8
26000	32.5	32.9	13.7	13.3

Frequency (MHz)	AF (dB/m)	Gain (dB)	Cable loss (dB)	Corr. (dB)
	Kiwa ID: 114487 Scientific Atlanta	Kiwa ID: Schwarzbeck BBV 9721	114691	
26000	35.3	32.9	13.7	16.1
27000	35.4	32.6	14.9	17.7
28000	35.6	32.6	14.4	17.4
29000	35.9	32.9	14.6	17.6
30000	36.2	32.7	15.2	18.7
31000	36.1	32.9	14.9	18.1
32000	36.0	33.8	16.7	18.9
33000	36.2	34.8	16.8	18.2
34000	36.3	35.5	15.9	16.7
35000	36.4	35.5	17.5	18.4
36000	36.5	34.6	17.9	19.8
37000	36.6	33.6	18.2	21.2
38000	36.8	32.5	17.7	22.0
39000	37.0	32.1	17.7	22.6
40000	37.2	29.9	19.0	26.3

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