Test report for

47 CFR Part 15 Subpart B

ICES-Gen, ICES-003

The RvA is signatory to ILAC - MRA

Product name	: RC-01-0202
Applicant	: ANTENNEX B.V.
FCC ID	: 2BEY8-RC010202
IC	: -

Test report No. : P000354978 001 Ver 2.0

Laboratory information

Accreditation

Kiwa Nederland B.V. complies with the accreditation criteria for test laboratories as laid down in ISO/IEC 17025:2017. The accreditation covers the quality system of the laboratory as well as the specific activities as described in the authorized annex bearing the accreditation number L248 and is granted by the Dutch Council For Accreditation (RvA: Raad voor Accreditatie).

Kiwa Nederland B.V. is designated by the FCC as an Accredited Test Firm for compliance testing of equipment subject to Certification under Parts 15 & 18. The Designation number is: NL0001.

Kiwa Nederland B.V. is a Wireless Device Testing laboratory recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.
The Industry Canada company number for Kiwa Nederland B.V. is: 4173A. The CABID is NL0001.

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Documentation

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Testing Location

Test Site	Kiwa Nederland B.V.
Test Site location	Wilmersdorf 50 7327 AC Apeldoorn The Netherlands Tel. +31 88 998 3393
Test Site FCC	NL0001
CABID	NL0001

Revision History

Version	Date	Remarks	By
v0.50	30-09-2024	First draft	LdG
v1.00	17-10-2024	Final release	LdG
V2.00	18-11-2024	Update limits in clause 3.1.1 and 3.2.1	LdG

Table of Contents

Summary of Test results

FCC	ISED	Description	Section in report	Verdict
15.109 (a)	ICES-003 Table 2	Radiated spurious emissions < 1GHz	3.1	Pass
15.109 (a)	ICES-003 Table 4	Radiated spurious emissions > 1GHz	3.2	Pass
15.107 (c)	ICES-003 Table 1	AC power-line conducted emissions	3.3	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:	ANTENNEX B.V.
Address:	Het Eeuwsel 57
Zip code:	5612 AS Eindhoven
Telephone:	+31 6 839 837 79
E-mail:	Tim.stek@antennex.tech
Contact name:	Tim Stek

1.2 Manufacturer

Manufacturer name:	ANTENNEX B.V.
Address:	Het Eeuwsel 57
Zip code:	5612 AS Eindhoven
Telephone:	+31 6 839 837 79
E-mail:	Tim.stek@antennex.tech
Contact name:	Tim Stek

1.3 Tested Equipment Under Test (EUT)

Product name:	The Wireless Connector
Brand name:	Antennex B.V.
FCC ID:	2BEY8-RC010202
IC:	-
Product type:	Reverberation Chamber
Model(s):	RC-01-0202
Batch and/or serial No.	RC010202-0001
Software version:	EMC Software Release
Hardware version:	EMC Prototype
Date of receipt	21/05/2024
Tests started:	21/05/2024
Testing ended:	17/09/2024

1.4 Product specifications of Equipment under test

The ANTENNEX Reverberation Chamber is a test chamber developed for mmWave (millimeterwave) applications. This test chamber enables the measurement and validation of radio performance, including Total Radiated Power (TRP) measurements. The chamber is equipped with features, such as a built-in calibration module and an intuitive touchscreen control system, making it a suitable tool for research, development, and quality control in mmWave applications.

Disclaimer: above info is declared by the applicant

The EUT is considered as a Class A device.

1.5 Environmental conditions

Test date	21/05/2024	22/05/2024	17/09/2024
Ambient temperature	21.7 °C	24.1 °C	21.3 °C
Humidity	59.2 %	49.9 %	60.3 %

1.6 Measurement standards

- ANSI C63.4:2014

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 B
- ICES-003 Issue 7
- ICES-Gen Issue 2

1.8 Observation and remarks

During the test the EUT is performing a “calibration sweep from 50-90 GHz”.

1.9 Conclusions

The sample of the product showed **NO NON-COMPLIANCES** to the specifications stated in paragraph 1.8 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 1.8 *"Applicable standards".*

All tests are performed by:

Name : L. de Groot

Review of test methods and report by:

Name : ing. M.H. Khan

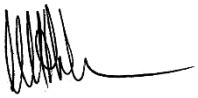
The above conclusions have been verified by the following signatory:

Date : 27-11-2024

Name : ing. M.H. Khan

Function : Test Engineer

Signature :



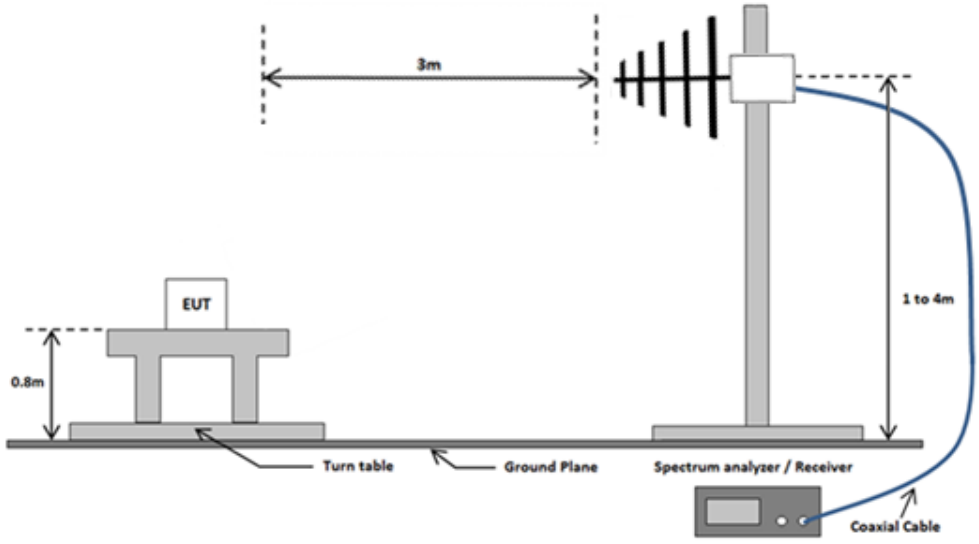
2 Test configuration of the Equipment Under Test

2.1 Test mode

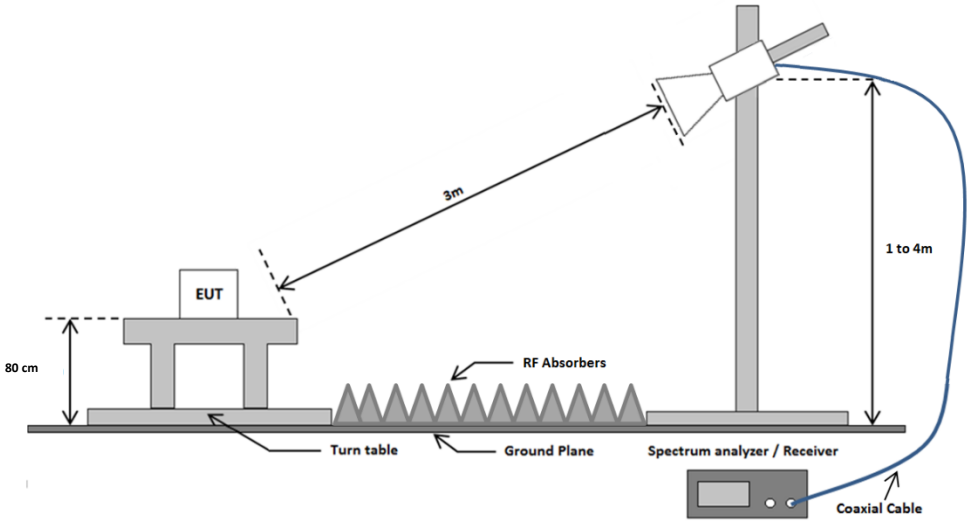
Mode 1: Calibration sweep 50-90 GHz

2.2 Test setups

2.2.1 Radiated emissions test setup 30 MHz - 1 GHz

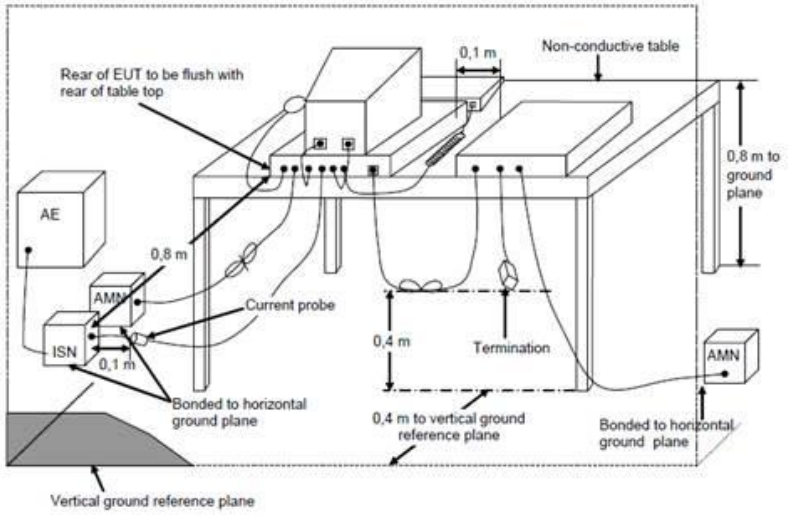


2.2.2 Radiated emissions test setup above 1 GHz



2.2.3 AC Power line conducted emissions test setup

Emissions test at AC mains



<<voeg hier een block diagram vd setup toe, vooral van belang bij veel aux items op usb, ethernet rs-232 poorten

Figure 1. EUT and auxiliary setup

List of used cables					
Number	**Function**	**From**	**To**	**Length**	**Remarks**
1	AC Power	mains 120Vac 60 Hz	EUT supply	< 3m	-

2.3 Test methodology.

The test methodology used is based on the requirements of 47 CFR Part 15, sections 15.31, 15.107 and 15.109, ICES-003 and ICES-Gen. The test methods, which have been used, are based on ANSI C63.4-2014.

2.4 Equipment modifications.

No modifications have been made to the equipment.

2.5 Equipment used in the test configuration

Description	Manufacturer	Model	ID	Cal. Done date	Cal. due date	Used at Par.
EMI Receiver	Rohde & Schwarz	ESR7	114870	09-2022	09-2024	3.1/3.2
Spectrum Analyzer	Rohde & Schwarz	FSV3044	114923	10-2023	10-2025	3.1
Biconical antenna + 6dB attenuator	EMCO	3109	107818	06-2022	06-2025	3.1
Logperiodic antenna	EMCO	3147	114385	02-2021	02-2026	3.1
Horn antenna	EMCO	3115	114607	01-2021	01-2025	3.1
Horn antenna	FLANN-MICROWAVE	20240-25	114518	NA*	NA*	3.1
Horn antenna	Scientific atlanta	12A-26	114487	NA*	NA*	3.1
Preamplifier 1-18 GHz	µComp Nordic	MCNA-40-0010800-25-10P	114771	08-2024	08-2025	3.1
Preamplifier 18-40 GHz	Schwarzbeck	BBV-9721	115026	06-2024	06-2025	3.1
Semi-Anechoic Chamber	ETS Lindgren	SAR	114624	03-2023	03-2026	3.1
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

*Note: Standard gain horn antennas do not need calibration
Conformance of the used measurement and test equipment with the requirements of ISO/IEC 17025:2017 has been confirmed before testing.
NA= Not Applicable

2.6 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

Except for Class A digital devices, the field strength of radiated emissions from an unintentional radiator shall not exceed the field strength levels specified in the following tables.
On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a CISPR quasi-peak detector function and related measurement bandwidths, unless otherwise specified.
Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function.
When average radiated emission measurements are specified in this part, there is also a limit on the peak level of the emissions. Unless otherwise specified, the limit on peak emissions is 20 dB above the average limit.
The product under test shall comply with both the average and the peak limits.

ICES-003 Issue 7 section 3.2.2
The quasi-peak limits for the electric component of the radiated field strength emitted from ITE or digital apparatus, within 30 MHz to 1 GHz, for a measurement distance of 3m are presented in table below.
At and above 1 GHz, except for outdoor units of home satellite receiving systems, the ITE or digital apparatus shall comply with the limits specified in table below up to the frequency F_M, which shall be determined. The product under test shall comply with both the average and the peak limits.

FCC 15.109(a)

Frequency (MHz)	Field strength (µV/meter)	Field strength (dBµV/m)	Measurement distance (meters)
30-88	298.5	49.5	3
88-216	501.2	54	3
216-960	699.8	56.9	3
Above 960	1000	60	3

ICES-003 tables 2, 4

Frequency (MHz)	Field strength (µV/meter)	Field strength (dBµV/m)	Measurement distance (meters)
30-88	316.2	50	3
88-216	501.2	54	3
216-230	699.8	56.9	3
230 -960	707.9	57	3
Above 960	1000	60	3

3.1.2 Measurement instruments

The measurement instruments are listed in chapter 2.5 of this report.

3.1.3 Test setup

The test setup is as shown in chapter 2.2.1 and 2.2.2 of this report.

3.1.4 Test procedure

30 MHz to 26.5 GHz: According to ANSI C63.4-2014, section 8.3

30 MHz to 1 GHz: IRN 441 – Method 1
1 GHz to 18 GHz: IRN 441 – Method 2
18 to 26.5 GHz: IRN 441– Method 3
26.5 to 40 GHz: IRN 441– Method 4

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 30MHz to the highest measurement frequency according to the table below. Final radiated emission measurements were made at 3m distance.

Highest internal frequency (F_X) [i]	Highest measurement frequency (F_M)
$F_X \leq 108$ MHz	1 GHz
108 MHz < $F_X \leq 500$ MHz	2 GHz
500 MHz < $F_X \leq 1$ GHz	5 GHz
$F_X > 1$ GHz	5 x F_X up to a maximum of 40 GHz
i. F_X is the highest fundamental frequency generated and/or used in the ITE or digital apparatus under test.	

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
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

Test results 30-1000 MHz

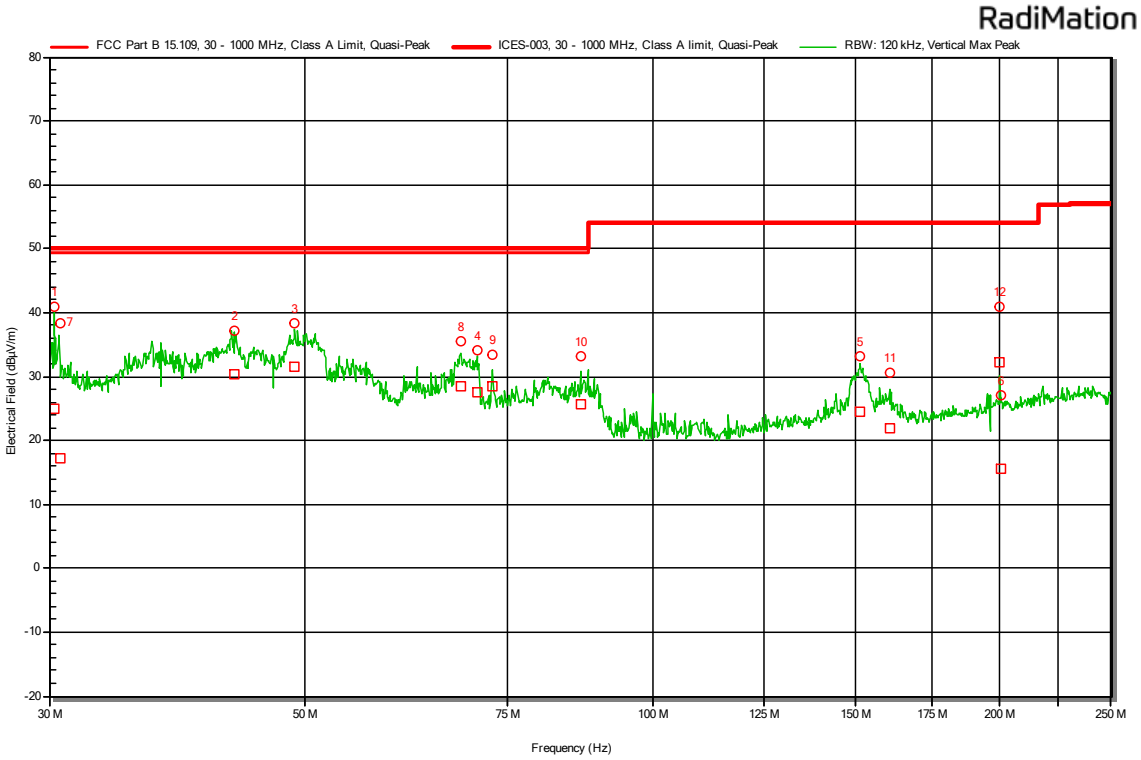
Frequency	Peak	Quasi-Peak	Quasi-Peak Limit	Status	Angle	Height	Polarization
30,328 MHz	40,9 dBµV/m	24,9 dBµV/m	50 dBµV/m	Pass	285 degrees	2,2 m	Vertical
43,480 MHz	37,2 dBµV/m	30,3 dBµV/m	50 dBµV/m	Pass	357 degrees	1,7 m	Vertical
48,948 MHz	38,3 dBµV/m	31,5 dBµV/m	50 dBµV/m	Pass	143 degrees	1 m	Vertical
70,537 MHz	34,2 dBµV/m	27,5 dBµV/m	50 dBµV/m	Pass	313 degrees	1,2 m	Vertical
151,297 MHz	33,1 dBµV/m	24,6 dBµV/m	54 dBµV/m	Pass	221 degrees	1 m	Vertical
200,489 MHz	27 dBµV/m	15,7 dBµV/m	54 dBµV/m	Pass	327 degrees	1,5 m	Vertical
30,719 MHz	38,3 dBµV/m	17,2 dBµV/m	50 dBµV/m	Pass	307 degrees	3,8 m	Horizontal
68,275 MHz	35,5 dBµV/m	28,5 dBµV/m	50 dBµV/m	Pass	356 degrees	2,8 m	Horizontal
72,673 MHz	33,3 dBµV/m	28,4 dBµV/m	50 dBµV/m	Pass	190 degrees	2,7 m	Horizontal
86,828 MHz	33,2 dBµV/m	25,7 dBµV/m	50 dBµV/m	Pass	354 degrees	2,2 m	Horizontal
160,70 MHz	30,6 dBµV/m	21,9 dBµV/m	54 dBµV/m	Pass	322 degrees	2 m	Horizontal
199,986 MHz	40,9 dBµV/m	32,3 dBµV/m	54 dBµV/m	Pass	201 degrees	1 m	Horizontal
309,606 MHz	27,5 dBµV/m	21,6 dBµV/m	57 dBµV/m	Pass	1 degrees	1,5 m	Vertical
399,984 MHz	44,7 dBµV/m	23,3 dBµV/m	57 dBµV/m	Pass	78 degrees	1,5 m	Vertical
499,996 MHz	42 dBµV/m	39,2 dBµV/m	57 dBµV/m	Pass	167 degrees	1,5 m	Vertical
600,005 MHz	38,9 dBµV/m	27,9 dBµV/m	57 dBµV/m	Pass	355 degrees	1 m	Vertical
854,91 MHz	41,6 dBµV/m	30,9 dBµV/m	57 dBµV/m	Pass	74 degrees	2,5 m	Vertical
965,683 MHz	42,7 dBµV/m	32,3 dBµV/m	60 dBµV/m	Pass	48 degrees	1,5 m	Vertical
284,282 MHz	29,6 dBµV/m	21,1 dBµV/m	57 dBµV/m	Pass	316 degrees	1 m	Horizontal
385,709 MHz	31,2 dBµV/m	21,4 dBµV/m	57 dBµV/m	Pass	222 degrees	3 m	Horizontal
458,488 MHz	34,8 dBµV/m	24,8 dBµV/m	57 dBµV/m	Pass	31 degrees	1,5 m	Horizontal
608,697 MHz	35,9 dBµV/m	25,7 dBµV/m	57 dBµV/m	Pass	33 degrees	1 m	Horizontal
738,545 MHz	39,4 dBµV/m	28 dBµV/m	57 dBµV/m	Pass	77 degrees	2 m	Horizontal
954,263 MHz	42,7 dBµV/m	32,1 dBµV/m	57 dBµV/m	Pass	264 degrees	3,5 m	Horizontal

Test results 1-40 GHz

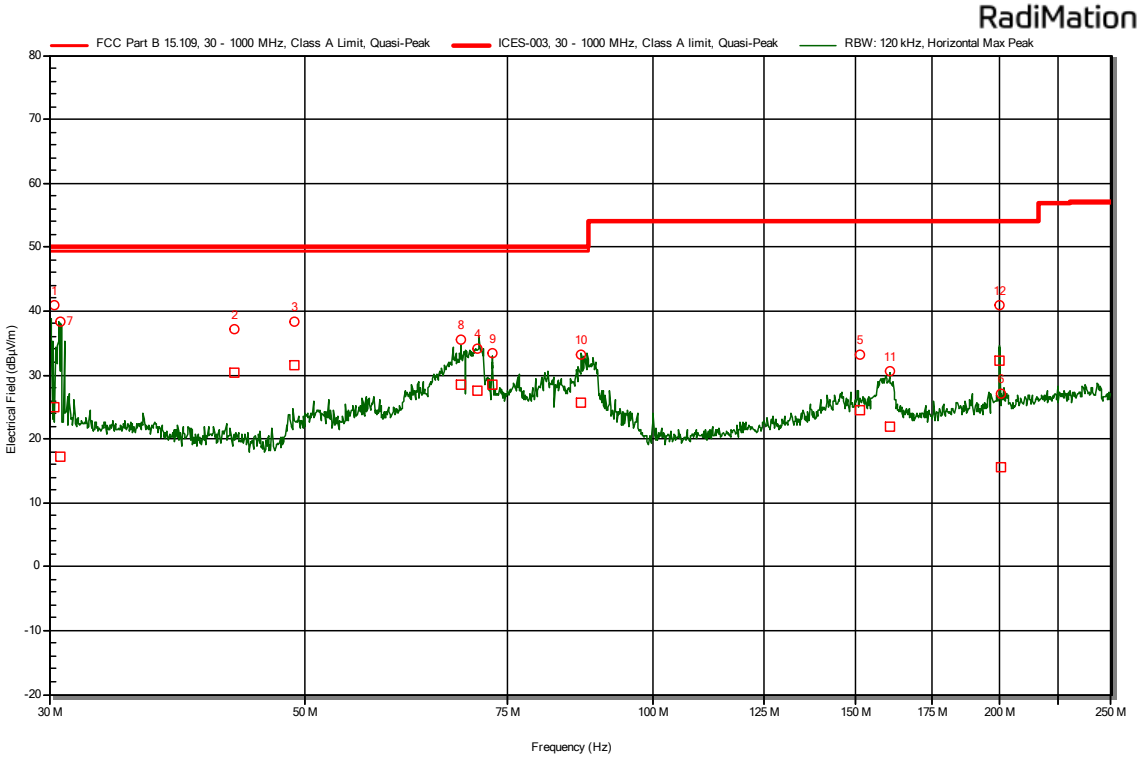
Frequency	Peak	Peak Limit	Average	Average Limit	Status	Angle	Height	Polarization
1,099 GHz	50,9 dBµV/m	80 dBµV/m	38,9 dBµV/m	60 dBµV/m	Pass	142 degrees	3,2 m	Vertical
2,7 GHz	50,5 dBµV/m	80 dBµV/m	47,4 dBµV/m	60 dBµV/m	Pass	109 degrees	1,1 m	Horizontal
4,866 GHz	46,7 dBµV/m	80 dBµV/m	34,5 dBµV/m	60 dBµV/m	Pass	239 degrees	1,2 m	Vertical
6,636 GHz	49,6 dBµV/m	80 dBµV/m	37,5 dBµV/m	60 dBµV/m	Pass	122 degrees	1,7 m	Horizontal
8,928 GHz	54,6 dBµV/m	80 dBµV/m	42,2 dBµV/m	60 dBµV/m	Pass	265 degrees	1,2 m	Vertical
12,435 GHz	57,2 dBµV/m	80 dBµV/m	44,3 dBµV/m	60 dBµV/m	Pass	237 degrees	1,2 m	Horizontal
13,210 GHz	56,4 dBµV/m	80 dBµV/m	44,4 dBµV/m	60 dBµV/m	Pass	92 degrees	3,2 m	Vertical
13,483 GHz	57,9 dBµV/m	80 dBµV/m	45,7 dBµV/m	60 dBµV/m	Pass	293 degrees	1,7 m	Vertical
20,711 GHz	41,6 dBµV/m	69,5 dBµV/m	29,7 dBµV/m	49,5 dBµV/m	Pass	172 degrees	3,7 m	Horizontal
18,449 GHz	41,3 dBµV/m	69,5 dBµV/m	29,3 dBµV/m	49,5 dBµV/m	Pass	243 degrees	4 m	Horizontal
26,385 GHz	44,9 dBµV/m	69,5 dBµV/m	32,5 dBµV/m	49,5 dBµV/m	Pass	230 degrees	3,8 m	Horizontal
20,868 GHz	42,3 dBµV/m	69,5 dBµV/m	29,7 dBµV/m	49,5 dBµV/m	Pass	92 degrees	3,7 m	Vertical
19,111 GHz	40,8 dBµV/m	69,5 dBµV/m	29 dBµV/m	49,5 dBµV/m	Pass	250 degrees	1,2 m	Horizontal
27,672 GHz	48,4 dBµV/m	69,5 dBµV/m	36,1 dBµV/m	49,5 dBµV/m	Pass	303 degrees	1 m	Vertical
31,490 GHz	50,2 dBµV/m	69,5 dBµV/m	37,4 dBµV/m	49,5 dBµV/m	Pass	278 degrees	1 m	Horizontal
37,953 GHz	57 dBµV/m	69,5 dBµV/m	44,2 dBµV/m	49,5 dBµV/m	Pass	246 degrees	1,2 m	Horizontal
39,166 GHz	56 dBµV/m	69,5 dBµV/m	43,8 dBµV/m	49,5 dBµV/m	Pass	302 degrees	3,5 m	Horizontal
39,641 GHz	55,1 dBµV/m	69,5 dBµV/m	42,6 dBµV/m	49,5 dBµV/m	Pass	55 degrees	3,8 m	Vertical

The results of the radiated emission tests are depicted in the tables above. A selection of plots is provided on the next pages.

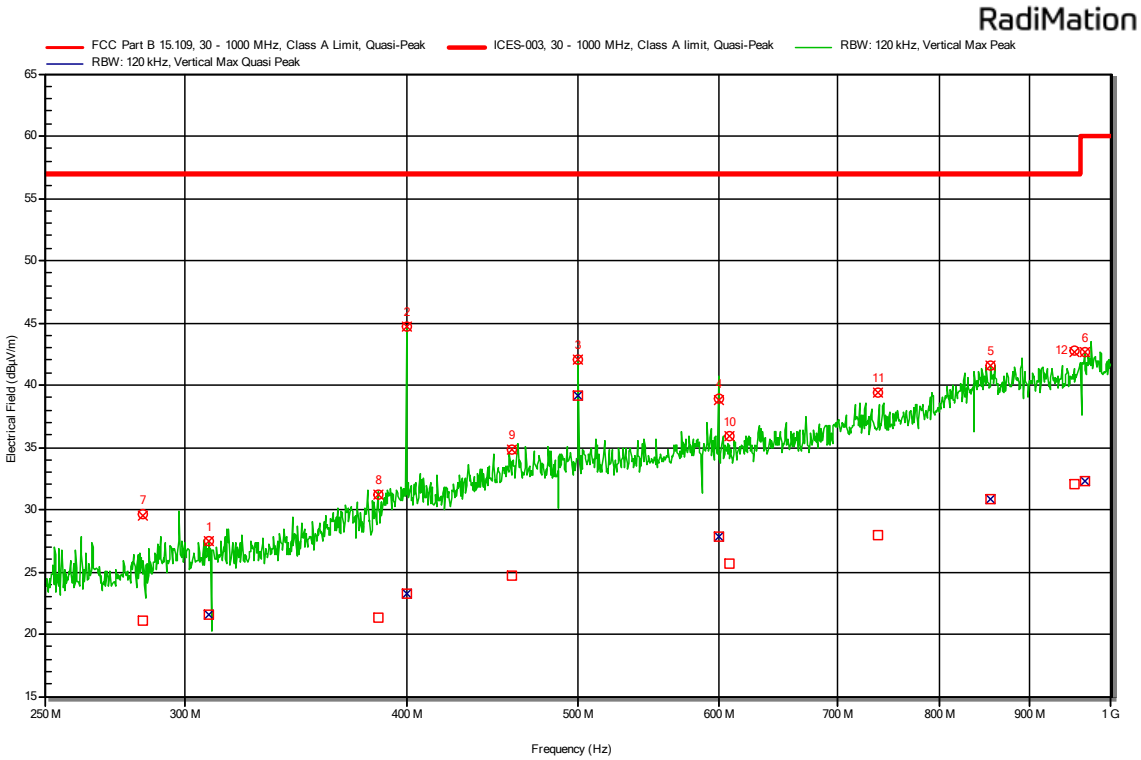
3.1.7 Plots of the Radiated Spurious Emissions Measurement



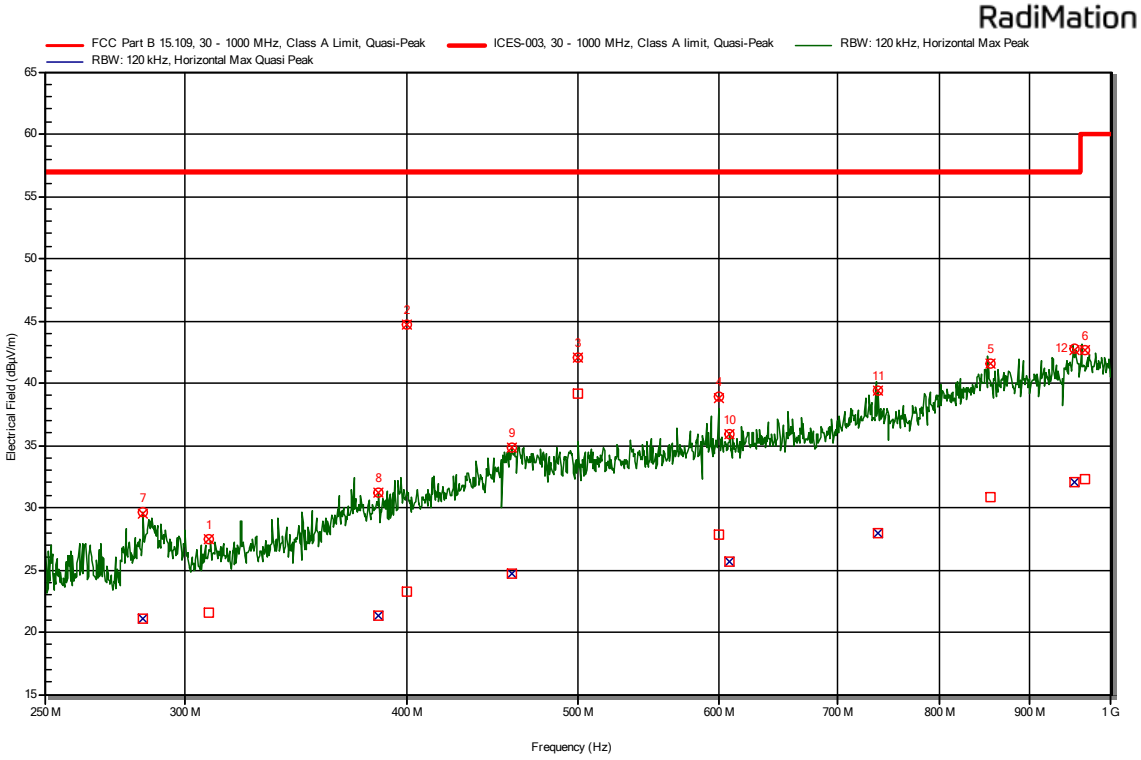
Plot 1a: radiated emissions of the EUT, Antenna vertical, in the range 30 – 250 MHz
(pre-scan peak values shown)



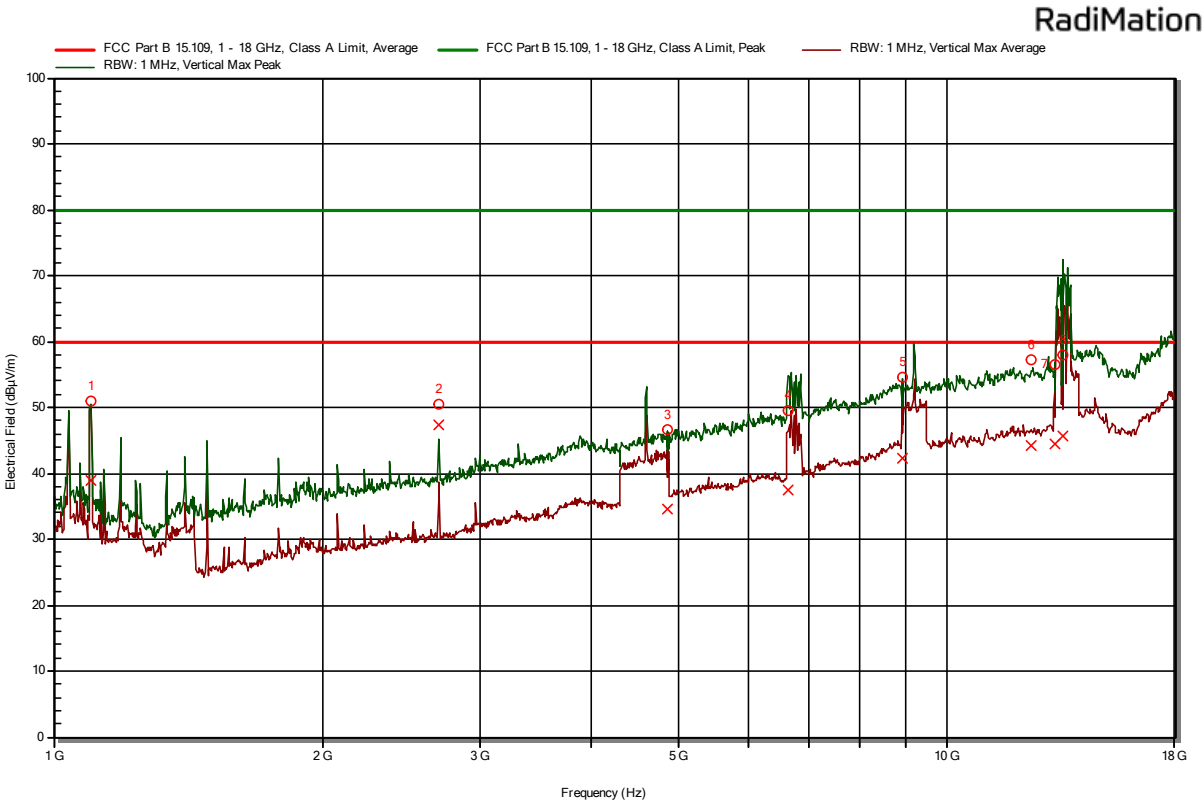
Plot 1b: radiated emissions of the EUT, Antenna horizontal, in the range 30 – 250 MHz
(pre-scan peak values shown)



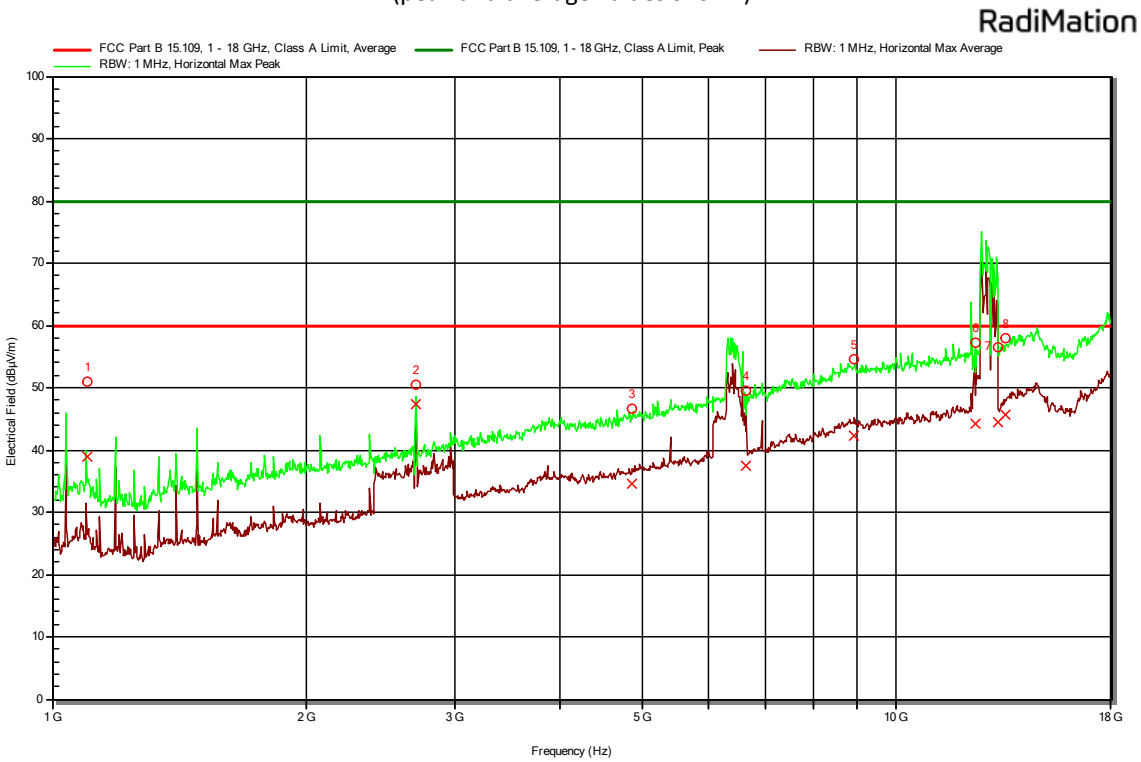
Plot 2a: radiated emissions of the EUT, Antenna vertical, in the range 250-1000 MHz (pre-scan peak values shown)



Plot 2b: radiated emissions of the EUT, Antenna horizontal, in the range 250-1000 MHz (pre-scan peak values shown)

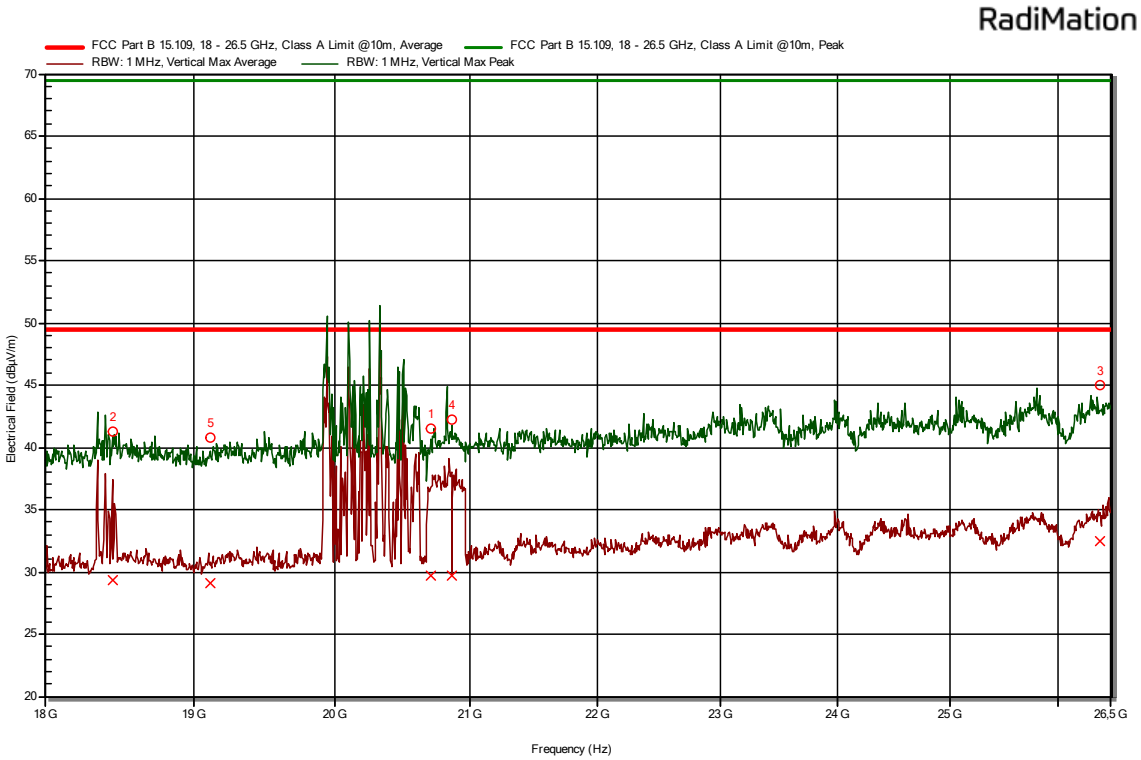


Plot 3a: radiated emissions of the EUT, Antenna vertical, in the range 1-18 GHz
(peak and average values shown)

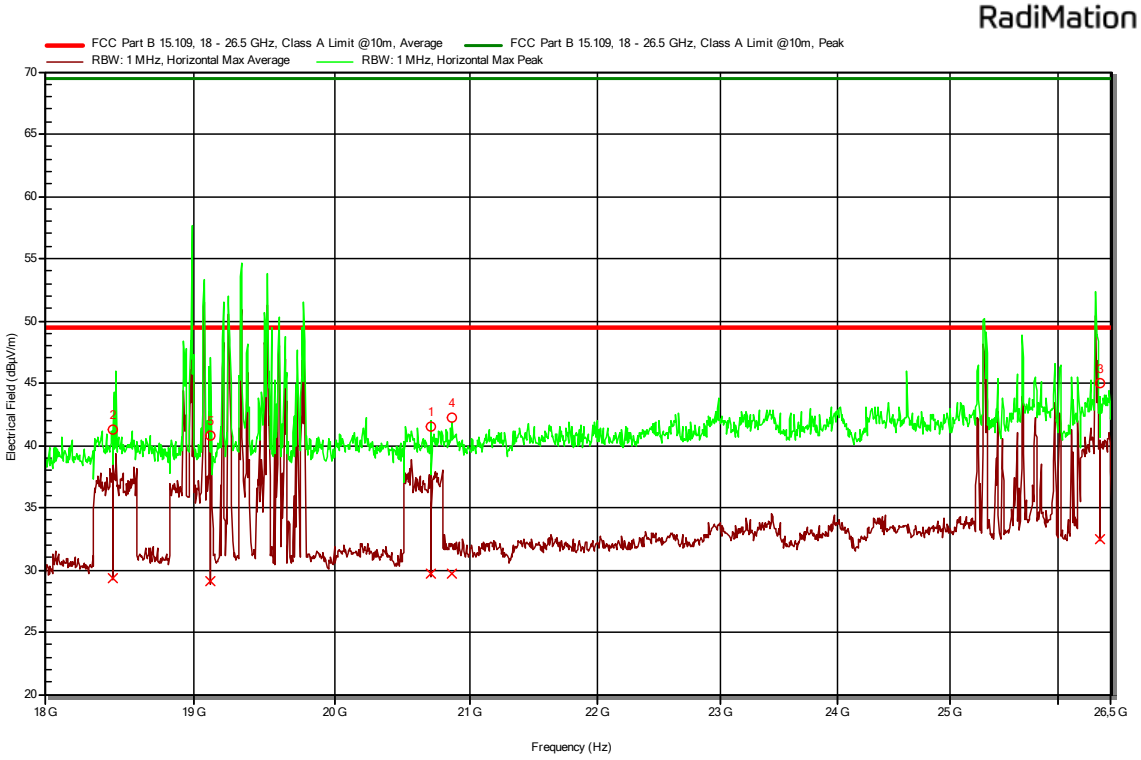


Plot 3b: radiated emissions of the EUT, Antenna horizontal, in the range 1-18 GHz
(peak and average values shown)

Note to results: Due to the sweeping functionality of the device, the peaks are detected shortly. In the final measurement therefore the peak will be missed.

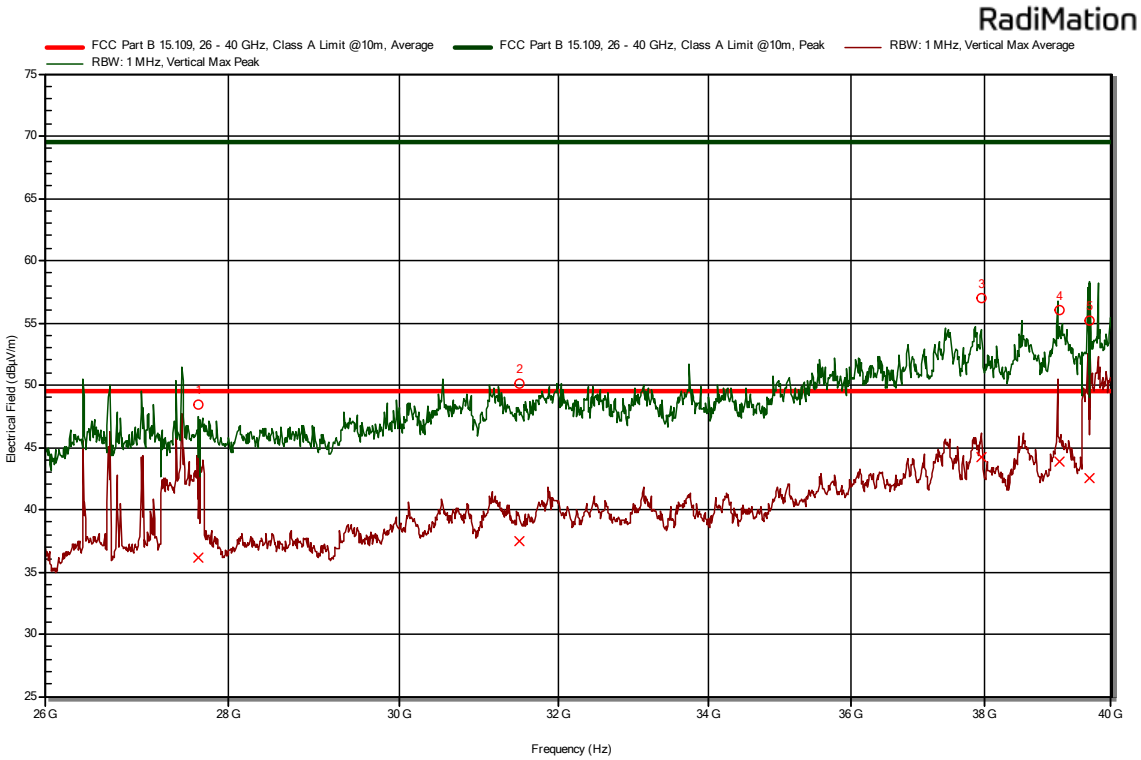


Plot 4a: radiated emissions of the EUT, Antenna vertical, in the range 18-26.5 GHz
(peak and average values shown)

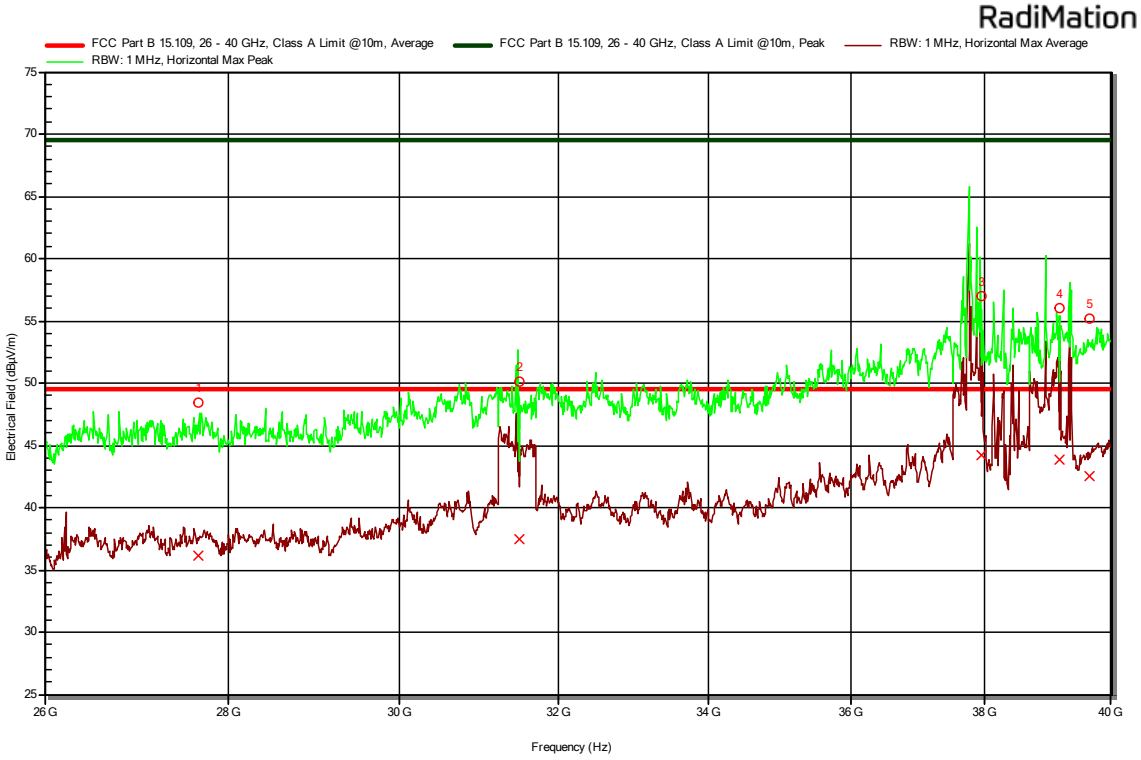


Plot 4b: radiated emissions of the EUT, Antenna horizontal, in the range 18-26.5 GHz
(peak and average values shown)

Note to results: Due to the sweeping functionality of the device, the peaks are detected shortly. In the final measurement therefore the peak will be missed.



Plot 5a: radiated emissions of the EUT, Antenna vertical, in the range 26.5-40 GHz
(peak and average values shown)



Plot 5b: radiated emissions of the EUT, Antenna horizontal, in the range 26.5-40 GHz
(peak and average values shown)

Note to results: Due to the sweeping functionality of the device, the peaks are detected shortly. In the final measurement therefore the peak will be missed.

3.2 AC Power-line conducted emissions

3.2.1 Limit

§ 15.107 (a)
Except for Class A digital devices, for equipment 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 µH/50 ohms line impedance stabilization network (LISN).

ICES-003 Issue 7 section 3.2.1

The ITE or digital apparatus shall comply with the conducted emission limits specified in table below at its AC mains power terminals. The product under test shall comply with both the quasi-peak and the average limits.

Where the product under test is powered through an external device (for example, through an external power supply, or by means of a device providing power over Ethernet to the product under test), the conducted emission limits apply at the AC mains power terminals of the external device, while this is powering the product under test: see ICES-Gen.

Frequency of Emission (MHz)	Conducted Limit (dBµV) Quasi-Peak	Conducted Limit (dBµV) Average
0.15 – 0.5	79	66
0.5 - 30	73	60

*Decreases with the logarithm of the frequency.

3.2.2 Measurement instruments

The measurement instruments are listed in chapter 2.5 of this report.

3.2.3 Test setup

The test setup is as shown in chapter 2.2.3 of this report.

3.2.4 Test procedure

According to ANSI C63.4: 2014, section 13.3

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

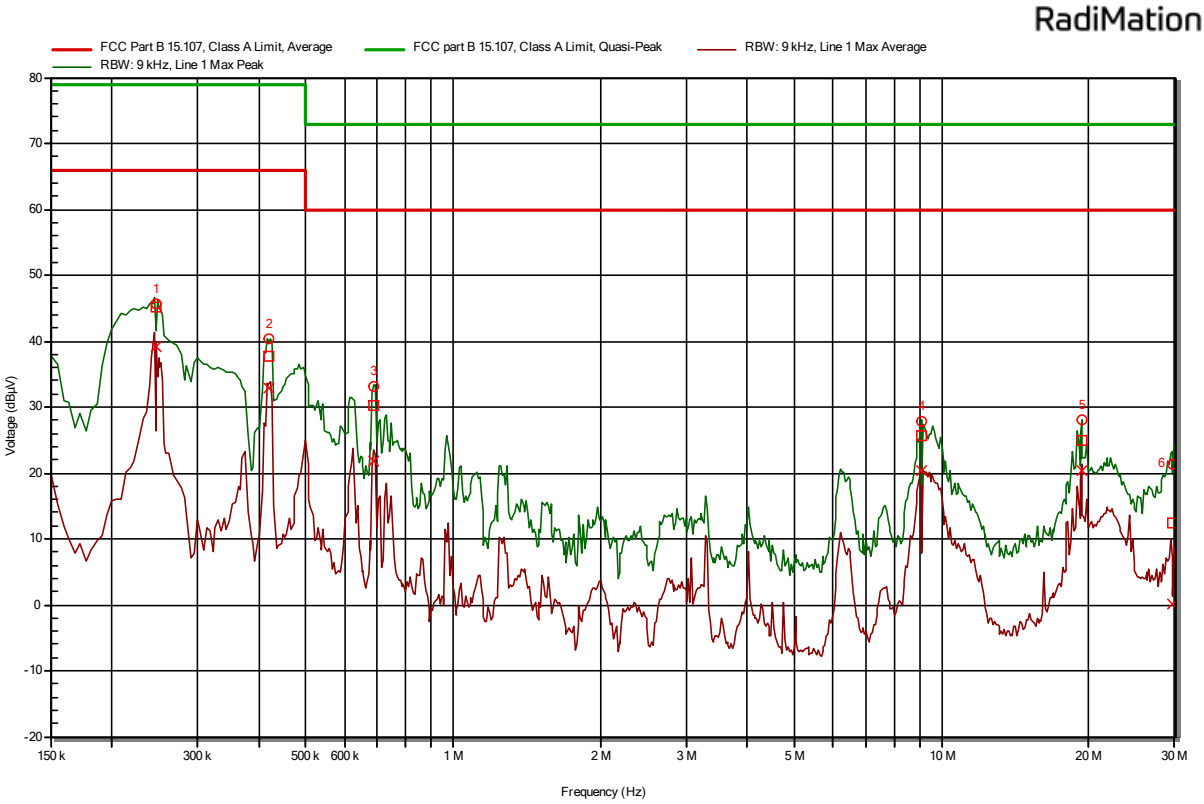
Line

Peak number	Frequency (MHz)	Peak (dBµV/m)	Average (dBµV/m)	Average Limit (dBµV/m)	Quasi-Peak (dBµV/m)	Quasi-Peak Limit (dBµV/m)
1	0.248	45.8	39.1	66	45.1	79
2	0.421	40.4	33	66	37.8	79
3	0.69	33.1	21.8	60	30.2	73
4	9.101	27.9	20.3	60	25.7	73
5	19.294	28	20.4	60	24.9	73
6	29.612	21.4	0.2	60	12.3	73

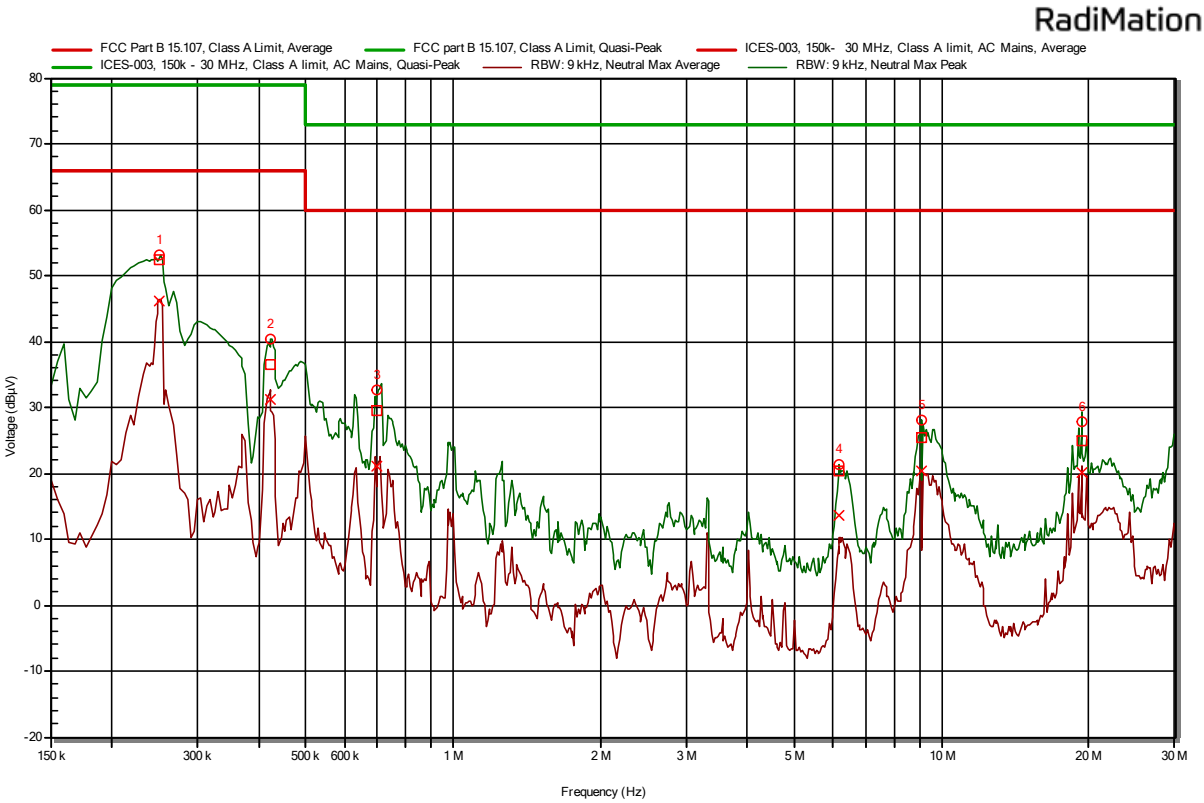
Neutral

Peak number	Frequency (MHz)	Peak (dBµV/m)	Average (dBµV/m)	Average Limit (dBµV/m)	Quasi-Peak (dBµV/m)	Quasi-Peak Limit (dBµV/m)
1	0.25	53.1	46.1	66	52.5	79
2	0.424	40.4	31.1	66	36.5	79
3	0.701	32.7	21.1	60	29.4	73
4	6.176	21.4	13.6	60	20.3	73
5	9.101	28.1	20.4	60	25.5	73
6	19.298	27.7	20.2	60	24.9	73

3.2.7 Plots of the AC mains conducted spurious measurement



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



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_{lisn} (dBµV) = U (dBµV) + 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

Field Strength Measurement:

E (dBµV/m) = U(dBµV) + AF (dB/m) + 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)** **ID: 114436** **VHA 9103 + BBA 9106** **SN: 9856**	**Cable loss (dB)** **Id: SAR cable**	**Corr. (dB)**
30	18.6	0.68	19.28
100	10.4	1.15	11.55
150	14.8	1.41	16.21
200	16.0	1.63	17.63
250	16.9	1.93	18.83

Frequency (MHz)	**Gain (dBi)** **ID: 114385** **EMCO LPDA** **SN: 9856**	**Cable loss (dB)** **Id: SAR cable**	**Corr. (dB)**
250	11.8	1.93	13.73
300	13	2.12	15.12
350	15.6	2.2	17.8
400	17.1	2.29	19.39
450	17.3	2.53	19.83
500	17.7	2.67	20.37
550	18.4	2.9	21.3
600	19.2	3.02	22.22
650	19.7	3.09	22.79
700	20.3	3.22	23.52
750	21.4	3.56	24.96
800	22	3.69	25.69
900	22.1	3.81	25.91
950	22.6	3.91	26.51
1000	22.5	4.3	26.8

Frequency (MHz)	AF (dB/m) TE 00531 Emco 3115 SN: 9412-4377	Gain (dB) TE 11132 Miteq JS4-18004000-30-8P-A1	Cable loss (dB) TE 01315	Corr. (dB)
1000	23,6	40,4	2,0	66
1500	25,1	40,5	2,4	68
2000	27,1	40,5	2,7	70,3
2500	28,6	40,7	3,2	72,5
3000	30,5	40,7	3,2	74,4
3500	31,2	40,7	3,4	75,3
4000	32,7	40,9	4,9	78,5
4500	32,4	40,9	4,4	77,7
5000	33,2	40,7	4,6	78,5
5500	34,0	40,5	4,5	79
6000	34,6	40,0	5,2	79,8
6500	34,3	39,4	5,9	79,6
7000	35,2	38,6	5,7	79,5
7500	36,4	39,2	5,9	81,5
8000	37,0	38,9	6,3	82,2
8500	37,5	38,4	6,4	82,3
9000	38,1	37,4	6,5	82
9500	37,8	37,0	7,1	81,9
10000	38,2	36,5	7,3	82
10500	38,1	36,7	7,6	82,4
11000	38,3	36,9	8,3	83,5
11500	38,5	37,6	8,1	84,2
12000	39,1	38,3	8,4	85,8
12500	38,7	38,5	8,3	85,5
13000	39,2	38,9	9,2	87,3
13500	40,5	40,2	8,3	89
14000	41,1	40,0	8,2	89,3
14500	41,4	40,1	8,2	89,7
15000	40,2	41,4	8,3	89,9
15500	37,9	41,4	8,6	87,9
16000	37,5	42,8	9,2	89,5
16500	38,6	42,3	8,8	89,7
17000	41,1	43,1	9,4	93,6
17500	42,7	43,2	9,4	95,3
18000	44,0	44,2	9,8	98

Frequency (MHz)	AF (dB/m) TE 00818 Flann 20240-25 SN: 163703	Gain (dB) TE 11131 Miteq JS4-18004000-30-8P-A1	Cable loss (dB) TE 01315	Corr. (dB)
18000	31,3	26,2	9,8	67,3
19000	31,5	26,1	9,6	67,2
20000	31,7	25,9	11	68,6
21000	31,9	24,3	10,7	66,9
22000	32,1	18,3	10,5	60,9
23000	32,2	18,9	10,8	61,9
24000	32,3	23,6	11,4	67,3
25000	32,4	24,5	11,6	68,5
26000	32,5	25,3	11,7	69,5

5 Photograph test setup

5.1 Photograph test setup Radiated Emissions

Photo 1 Photograph test setup radiated emissions 30-250 MHz, report section 3.1

Photo 2 Photograph test setup radiated emissions 250-1000 MHz, report section 3.1

Photo 3 Photograph test setup radiated emissions 1-18 GHz, report section 3.1

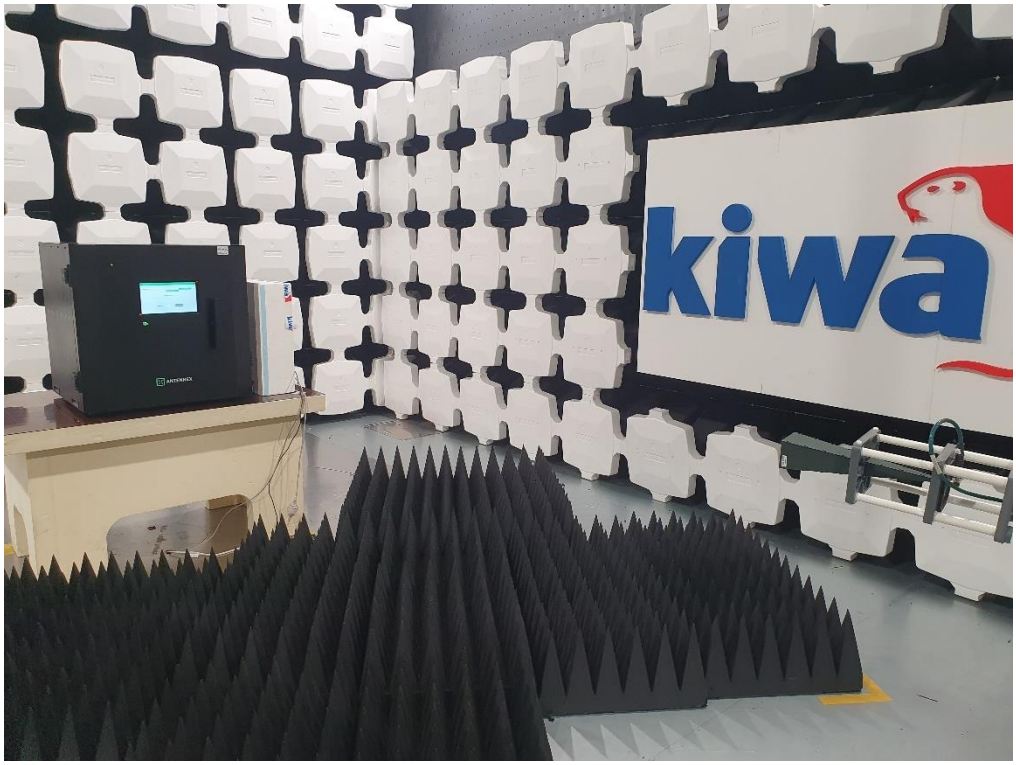


Photo 4 Photograph test setup radiated emissions 18-26.5 GHz, report section 3.1

Photo 5 Photograph test setup radiated emissions 26.5-40 GHz, report section 3.1

5.2 Photograph test setup, AC Power Line Conducted emissions

Photo 6: Photographs AC Power Line conducted emission, report section 3.3

<<END OF REPORT>>