

RADIO REPORT FCC 47 CFR Part 15C ISED Canada RSS-247 Frequency hopping systems operating within the 2400.0 MHz - 2483.5 MHz MHz band	
Report Reference No	G0M-2012-9513-TFC247BT-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	    DAkkS - Registration number : D-PL-12092-01-03 (ISED) ISED Testing Laboratory site: 3470A-2 DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Kamstrup A/S
Address	Industrivej 28 8660 Skanderborg DENMARK
Test Specification	47 CFR Part 15C RSS-247, Issue 2, 2017-02 RSS-Gen, Issue 5, Amendment 1, 2019-03
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	READY Converter for US/Canada market
Model(s)	READY Converter
Additional Model(s)	None
Brand Name(s)	None
Hardware Version(s)	55501913 B1
Software Version(s)	50981678 B1 / 55142208 A1
FCC ID	OUY-READYAMR4
IC	22376-READYAMR4
Test Result	PASSED

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 °C - 30 °C	
Test Lab Humidity	15 % - 35 %	
Date of receipt of test item	2021-01-11	
Report:		
Compiled by	Florian Voigt	
Tested by (+ signature) (Responsible for Test)	Florian Voigt	
Approved by (+ signature) (Deputy Head of Lab)	Toralf Jahn	
Date of Issue	2021-05-07	
Total number of pages	47	
General Remarks:		
The test results presented in this report relate only to the object tested. The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.		
Additional Comments:		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2021-05-07	Initial Release	

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
BR	Basic Rate (Bluetooth)
EDR	Enhanced Data Rate (Bluetooth)
EUT	Equipment Under Test
FCC	Federal Communications Commission
ISED	Innovation, Science and Economic Development Canada
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V _{NOM}	Nominal supply voltage

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1 Equipment (Test Item) Under Test

Description	READY Converter for US/Canada market	
Model	READY Converter	
Additional Model(s)	None	
Brand Name(s)	None	
Serial Number(s)	12345678	
Hardware Version(s)	55501913 B1	
Software Version(s)	50981678 B1 / 55142208 A1	
PMN	6696-40020	
HVIN	READY Converter	
FVIN	50981678 / 55142208	
HMN	n/a	
FCC ID	OUY-READYAMR4	
IC	22376-READYAMR4	
Equipment type	End Product	
Radio type	Transceiver	
Assigned frequency bands	2400.0 MHz - 2483.5 MHz	
Radio technology	Bluetooth	
Modulation	GFSK	
Number of antenna ports	1	
Radio Module	Type	Bluetooth and LE module
	Model	PAN10a
	Manufacturer	Panasonic
	HW Version	Not specified
	SW Version	Not specified
	FCC-ID	T7VPAN10
	IC	216Q-PAN10
Antenna	Type	Integrated
	Model	ANT2012
	Manufacturer	Yageo
	Gain	0.9 dBi
Battery Supply Voltage	V _{NOM}	Not specified
USB Supply Voltage	V _{NOM}	5 VDC
Operating Temperature	T _{NOM}	25 °C
AC/DC-Adaptor	None	
Manufacturer	Kamstrup A/S Industrivej 28 8660 Skanderborg DENMARK	

1.1 Photos – Equipment External

EUT FRONT

EUT TOP

EUT BOTTOM**EUT LEFT**

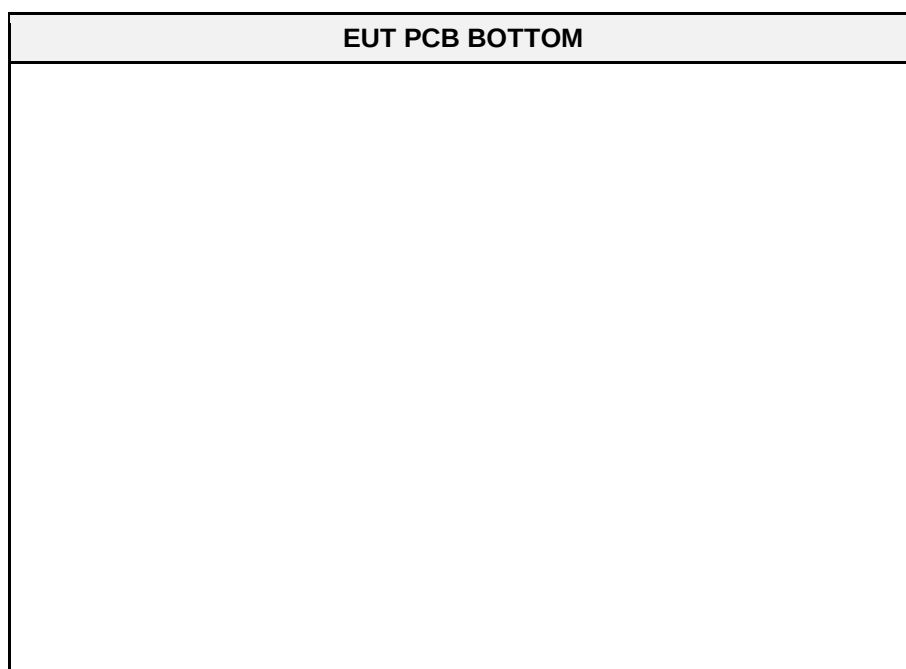
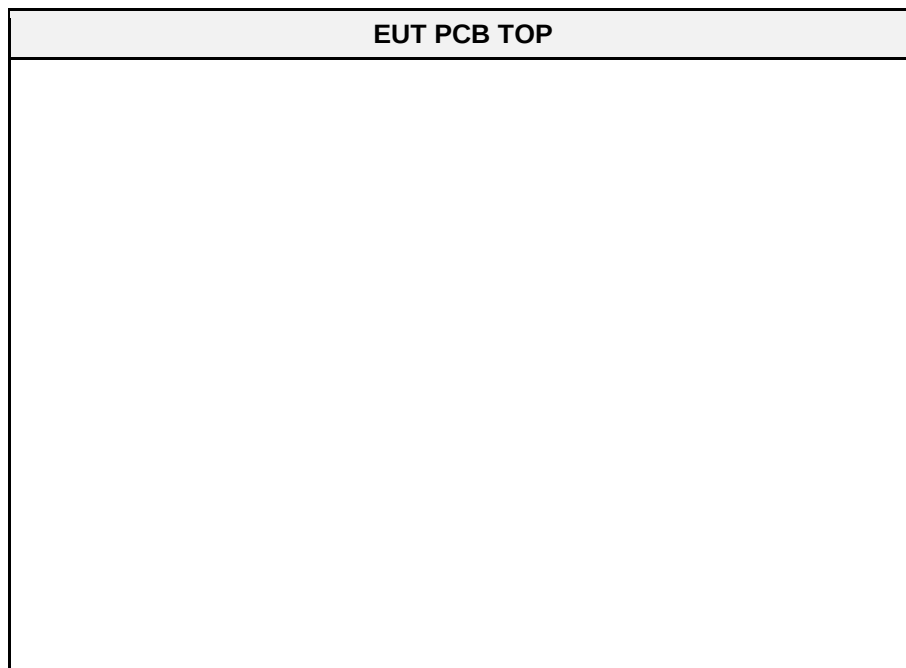
EUT RIGHT

EUT BACK

Antennas, left: drive by antenna, right: walk by antenna (SRD)

USB cable and EUT

1.2 Photos – Equipment Internal



EUT PCB TOP CLOSE VIEW



Comment: Picture is provided by the customer

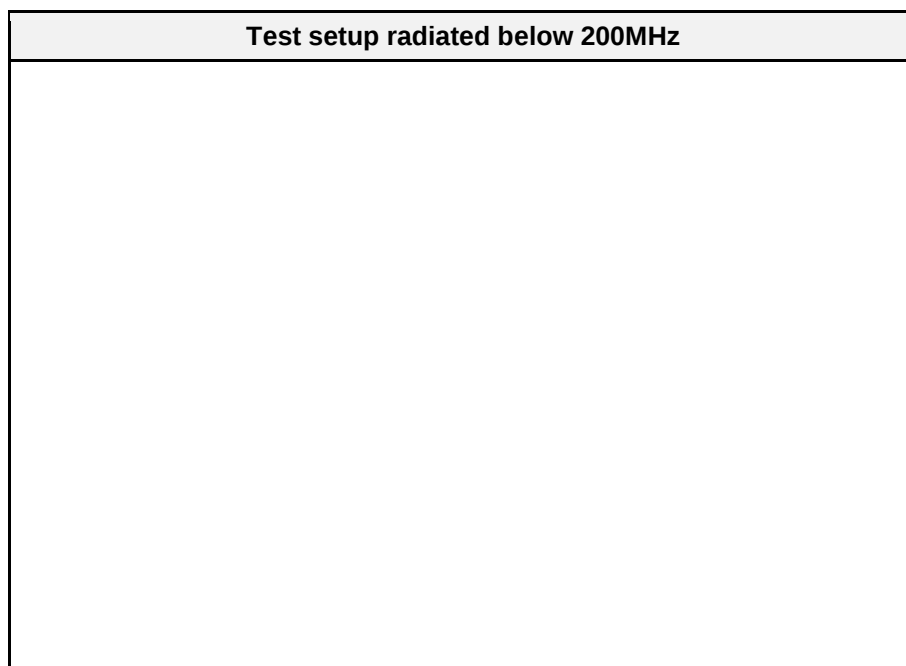
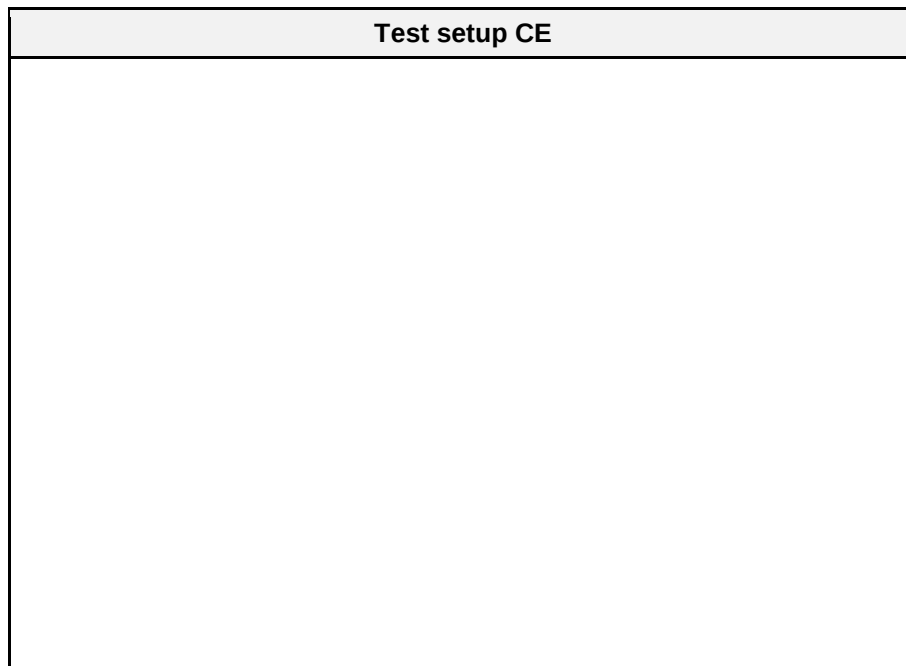
RF-MODULE PCB WITHOUT SHIELDING



Comment: Picture is provided by the customer

BLUETOOTH MODULE

1.3 Photos – Test Setup



Test setup radiated 200 to 1000MHz**Test setup radiated 1 to 17GHz**

Test setup radiated above 17GHz

1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
SIM	Communication Tester	R&S	CBT	
AE	USB - AC/DC adapter	Ktec	KSAS006050010D5IJ	Charging device during radiated and conducted mains measurements
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.5 Test Modes

Mode	Description
DH5 Single	Mode = Transmit Modulation = GFSK Spreading = None Packet type = DH5 Duty cycle = 78%
Receive	Mode = Receive (Scan)
Comment:	

1.6 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx	39	2441
F2	Rx	0 - 78	2402 - 2480
Comment:	Channel 39 is selected as the worst-case test frequency from the modular approval test report because Channel 39 resulted in the highest peak conducted output power.		

1.7 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBμV. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

$$\text{Reading on Analyzer (dB}\mu\text{V)} + \text{A.F. (dB/m)} = \text{Net field strength (dB}\mu\text{V/m)}$$

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBμV/m). The FCC limits are given in units of μV/m. The following formula is used to convert the units of μV/m to dBμV/m:

$$\text{Limit (dB}\mu\text{V/m)} = 20 \cdot \log(\mu\text{V/m})$$

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

Reading + AF	= Net Reading	:	Net reading - FCC limit	= Margin
+21.5 dBμV + 26 dB/m	= 47.5 dBμV/m	:	47.5 dBμV/m - 57.0 dBμV/m	= -9.5 dB

2 Result Summary

FCC 47 CFR Part 15C, ISED RSS-247				
Product Standard Reference	Requirement	Reference Method	Result	Remarks
ISED RSS-Gen, Issue 5 (section 6.7)	Occupied Bandwidth	ANSI C63.10-2013	N/R	Informational only
FCC § 15.247(a)(1) ISED RSS-247 § 5.1 Issue 2	20 dB Bandwidth	ANSI C63.10-2013	N/T	
FCC § 15.247(a)(1)(iii) ISED RSS-247, Issue 2 (section 5.1)	Number of hopping frequencies	ANSI C63.10-2013	N/T	
FCC § 15.247(a)(1) ISED RSS-247, Issue 2 (section 5.1)	Frequency hopping channel separation	ANSI C63.10-2013	N/T	
FCC § 15.247(a)(1)(iii) ISED RSS-247, Issue 2 (section 5.1)	Time of occupancy (Dwell time)	ANSI C63.10-2013	N/T	
FCC § 15.247(b) ISED RSS-247, Issue 2 (section 5.4)	Maximum peak conducted power	ANSI C63.10-2013	N/T	
FCC § 15.207 ISED RSS-247, Issue 2 (section 3.1)	AC power line conducted emissions	ANSI C63.10-2013	PASS	
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Band edge compliance	ANSI C63.10-2013	N/T	
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Conducted spurious emissions	ANSI C63.10-2013	N/T	
FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 (section 6.13)	Transmitter radiated spurious emissions	ANSI C63.10-2013	PASS	
ISED RSS-247, Issue 2 (section 3.1)	Receiver radiated spurious emissions	ANSI C63.10-2013	PASS	
Comment:				

Possible Test Case Verdicts	
PASS	Test object does meet the requirements
FAIL	Test object does not meet the requirements
N/T	Required by standard but not tested
N/R	Not required by standard for the test object

3 Test Conditions and Results

3.1 Test Conditions and Results - AC powerline conducted emissions

3.1.1 Information

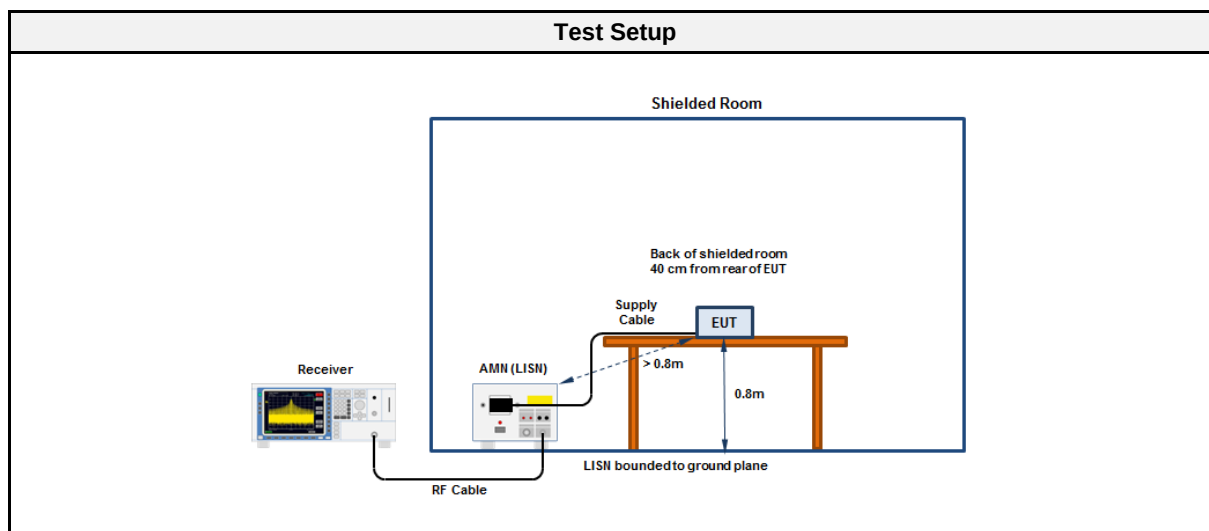
Test Information	
Reference	FCC § 15.207; ISED RSS-247, Issue 2 (section 3.1)
Measurement Method	ANSI C63.10 6.2
Measurement Uncertainty	± 3.82 dB
Operator	Florian Voigt
Date	2021-03-24

3.1.2 Limits

Limits		
Frequency [MHz]	Quasi-Peak [dBμV]	Average [dBμV]
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50

* Limit decreases linearly with the logarithm of the frequency

3.1.3 Setup



3.1.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2020.1.8

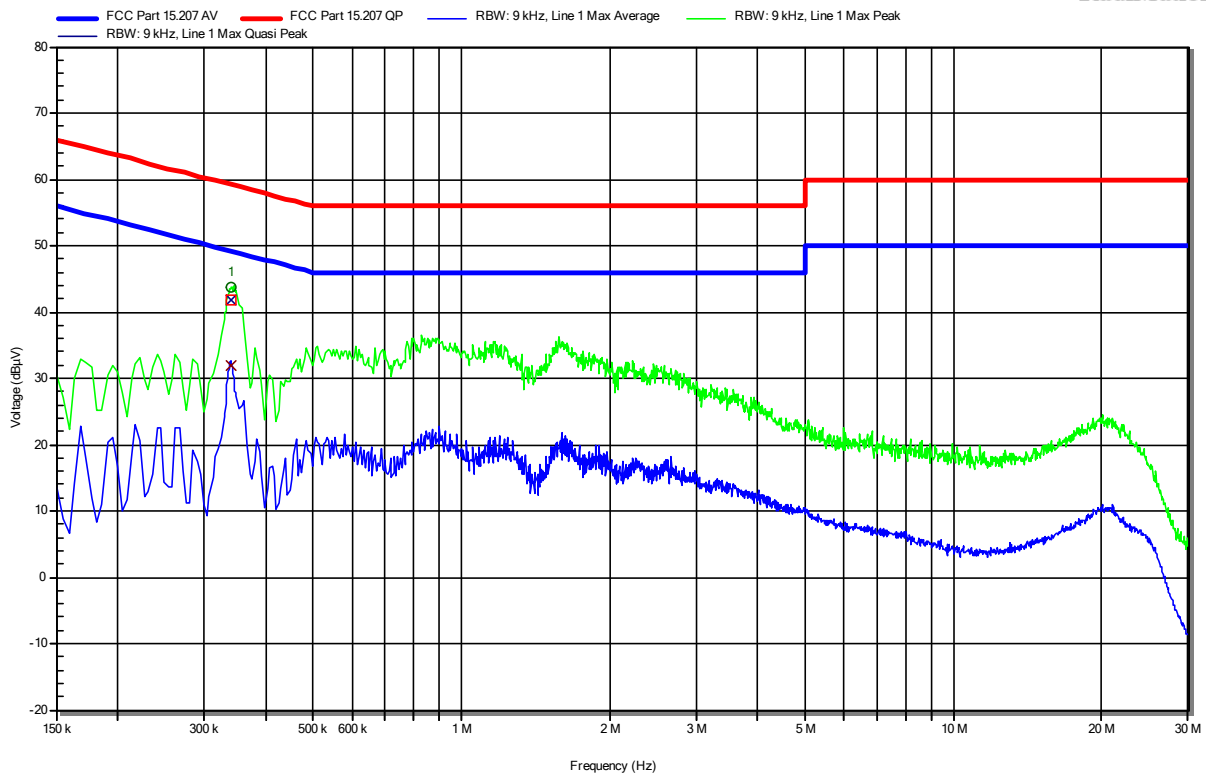
Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESR7	EF00943	2020-07	2021-07
Pulse Limiter	R&S	ESH3-Z2	EF01222	2020-07	2021-07
LISN	Schwarzbeck	NSLK 8127 RC	EF01592	2020-07	2021-07

**Conducted emissions at the mains power port
according to 47 CFR Part 15.247, RSS-247, Issue 2**

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date: 2021-03-24
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120 VAC converted to 5.0 VDC
 LISN: Schwarzbeck NSLK 8127 RC L
 Operational Mode & EUT Configuration: BT: 2441MHz, DH5, SRD: 912.5MHz
 Note 1:

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RadiMation



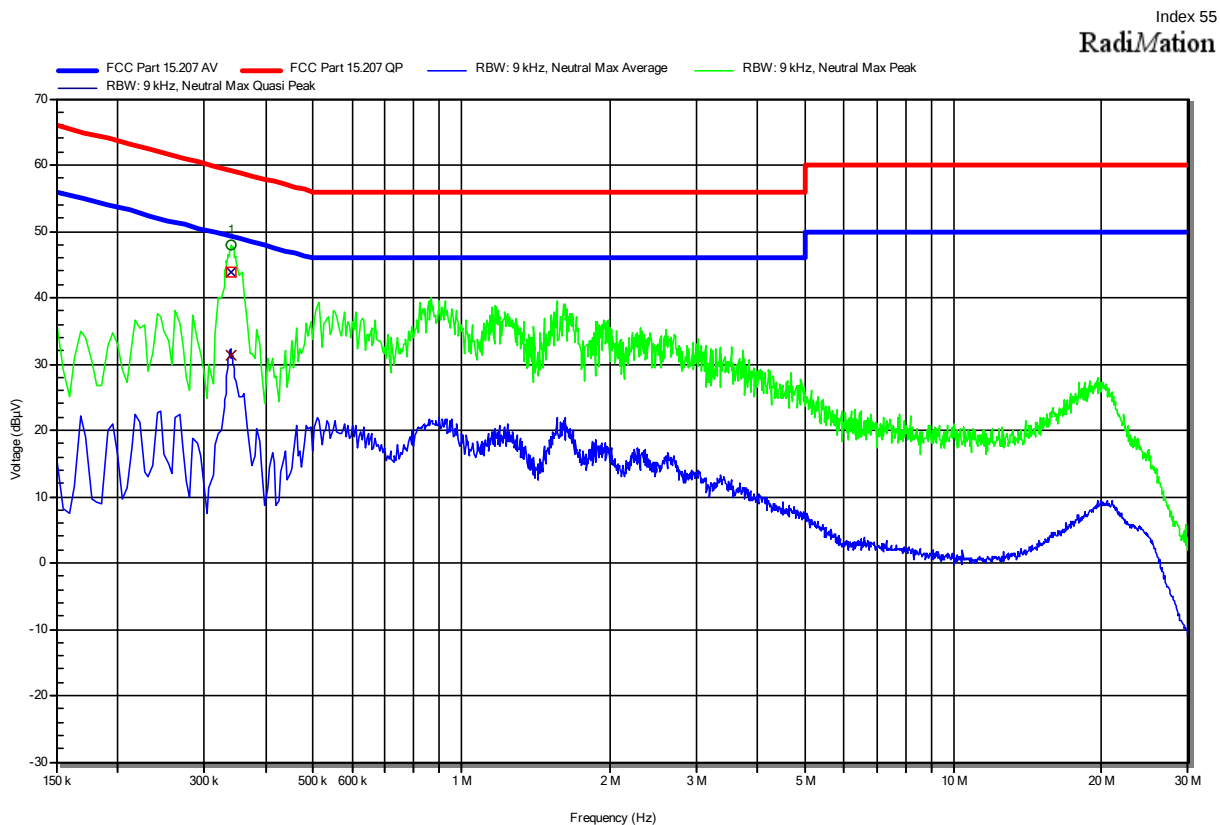
Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	340.8 kHz	41.84 dBµV	59.18 dBµV	-17.34 dB	Pass	Line 1
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	340.8 kHz	32.03 dBµV	49.18 dBµV	-17.16 dB	Pass	Line 1

Test Report No.: G0M-2012-9513-TFC247BT-V01

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

**Conducted emissions at the mains power port
according to 47 CFR Part 15.247, RSS-247, Issue 2**

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Test Date: 2021-03-24
 Operating Conditions: ambient temperature: 22 °Celsius
 power input: 120 VAC converted to 5.0 VDC
 LISN: Schwarzbeck NSLK 8127 RC N
 Operational Mode & EUT Configuration: BT: 2441MHz, DH5, SRD: 912.5MHz
 Note 1:



Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	LISN
1	340.8 kHz	43.79 dBµV	59.18 dBµV	-15.39 dB	Pass	Neutral
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	340.8 kHz	31.42 dBµV	49.18 dBµV	-17.76 dB	Pass	Neutral

3.2 Test Conditions and Results - Transmitter radiated emissions

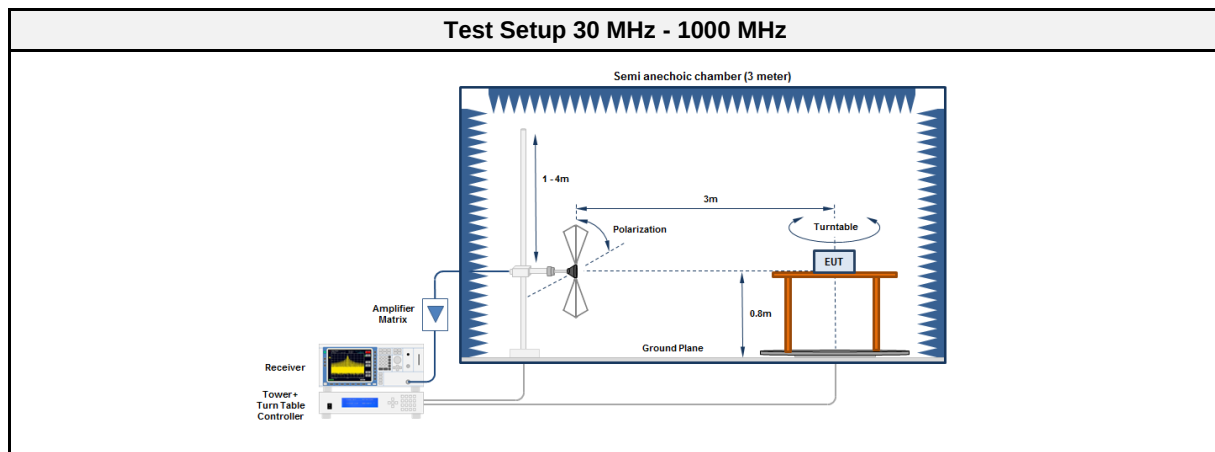
3.2.1 Information

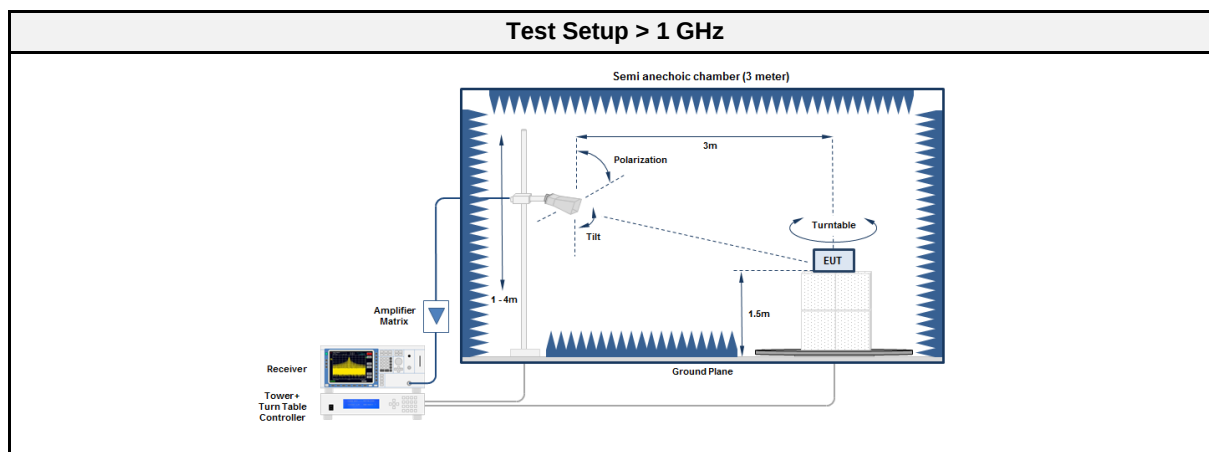
Test Information	
Reference	FCC § 15.247(d); FCC § 15.209; ISED RSS-Gen, Issue 5 (section 6.13)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6
Operator	Florian Voigt
Date	2021-03-17

3.2.2 Limits

Limits			
Frequency range [MHz]	Detector	Field strength [$\mu\text{V/m}$]	Measurement distance [m]
0.009 - 0.09	Average	2400/F[kHz]	300
0.09 - 0.110	Quasi-Peak	2400/F[kHz]	300
0.110 - 0.490	Average	2400/F[kHz]	300
0.490 - 1.705	Quasi-Peak	24000/F[kHz]	30
1.705 - 30.0	Quasi-Peak	30	30
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.2.3 Setup





3.2.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2020.1.8

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2020-06	2021-06
Antenna	R&S	HK 116	EF00030	2019-04	2022-04
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2020-06	2021-06
Antenna	Schwarzbeck	BBHA 9120D	EF01561	2020-10	2021-10
Antenna	Amplifier Research	AT4560	EF00302	2019-05	2021-05

3.2.5 Procedure

Test Procedure 30 MHz - 1000 MHz
1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m 5. All significant emissions are measured again using the corresponding final detector

Test Procedure > 1 GHz
1. EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m 5. All significant emissions are measured again using the corresponding final detector

3.2.6 Results

Test Results - DH5						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
2441	1522.8	41.41	pk	ver	74.00	-32.59

3.3 Test Conditions and Results - Receiver radiated emissions

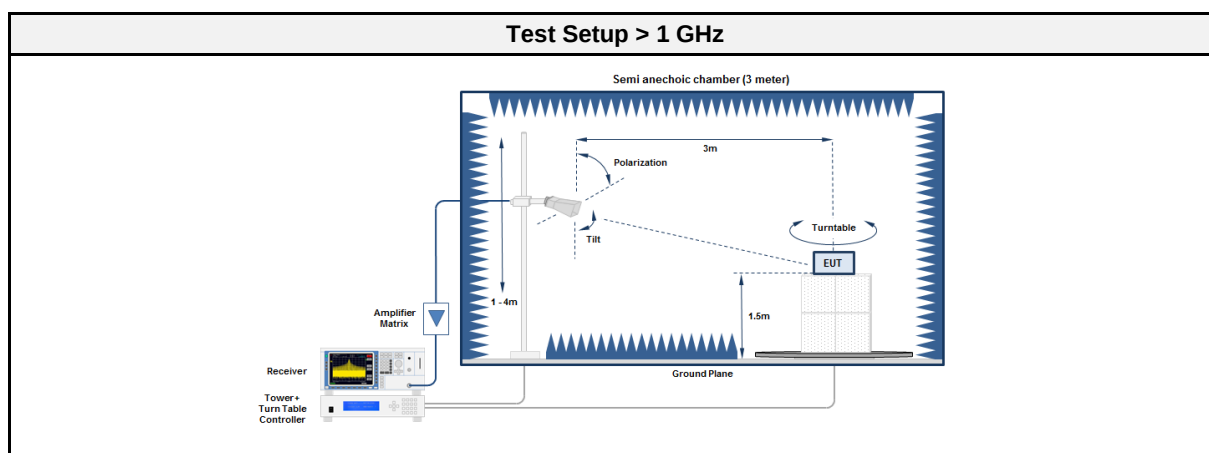
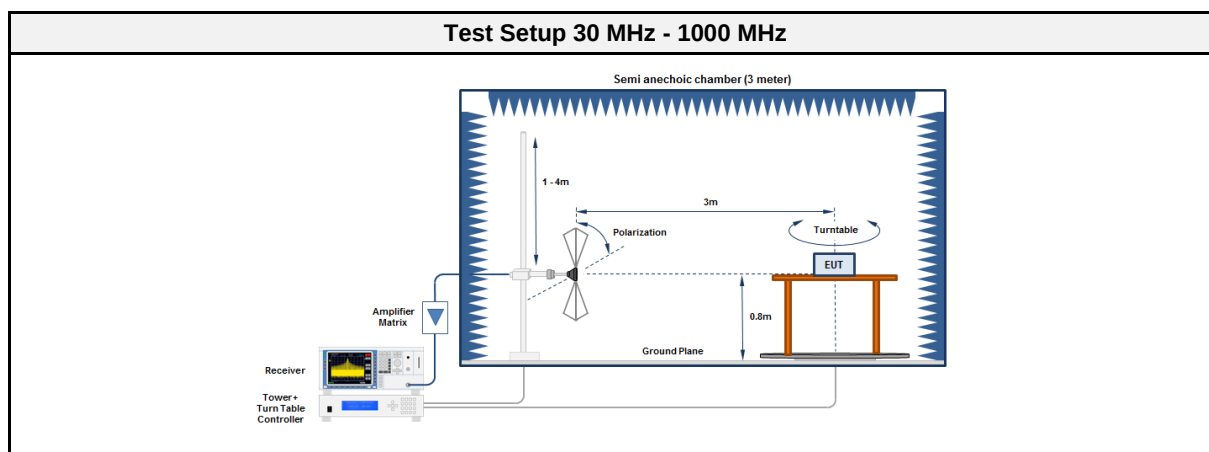
3.3.1 Information

Test Information	
Reference	ISED RSS-247, Issue 2 (section 3.1)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.5, 6.6
Operator	Florian Voigt
Date	2021-03-22

3.3.2 Limits

Limits			
Frequency range [MHz]	Detector	Field strength [$\mu\text{V/m}$]	Measurement distance [m]
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

3.3.3 Setup



3.3.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2020.1.8

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2020-06	2021-06
Antenna	R&S	HK 116	EF00030	2019-04	2022-04
Antenna	R&S	HL 223	EF00187	2019-05	2022-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2020-06	2021-06
Antenna	Schwarzbeck	BBHA 9120D	EF01561	2020-10	2021-10

3.3.5 Procedure

Test Procedure 30 - 1000 MHz	
1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m 5. All significant emissions are measured again using the corresponding final detector	

Test Procedure > 1 GHz	
1. EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m 5. All significant emissions are measured again using the corresponding final detector	

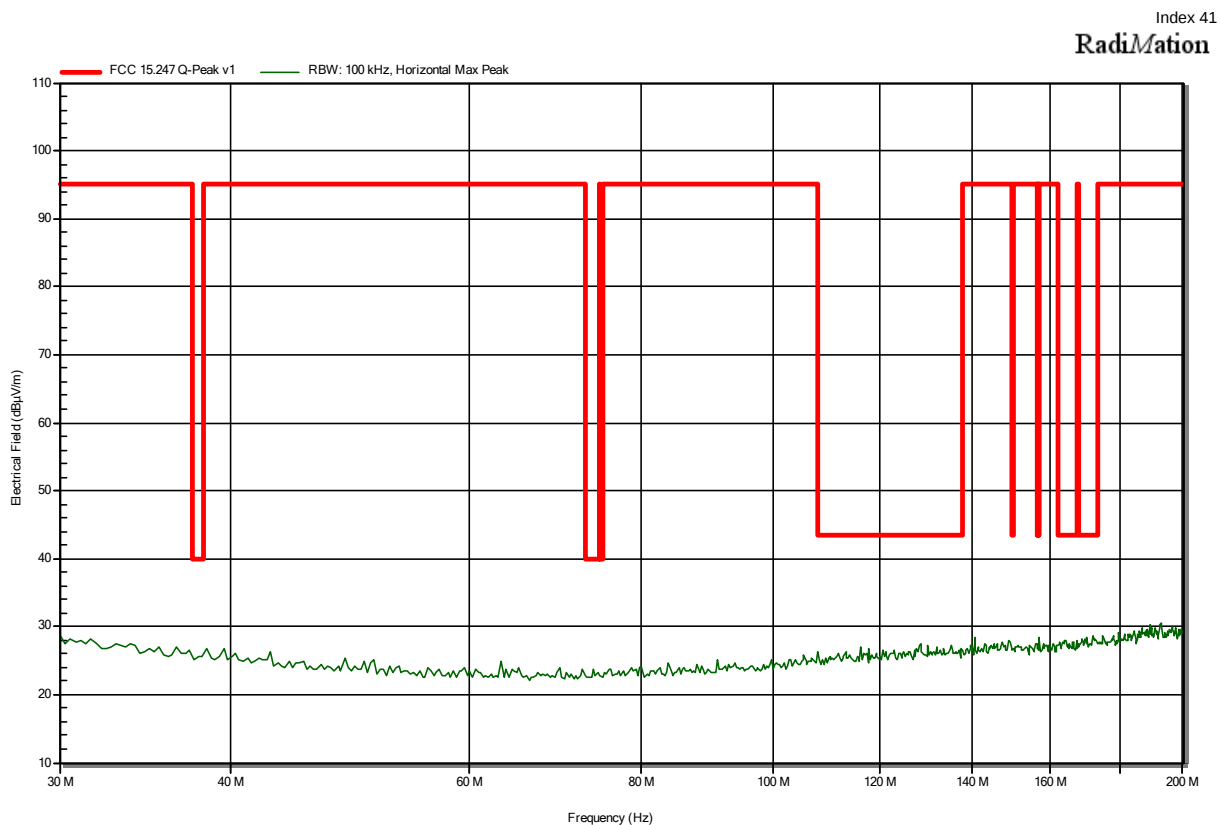
3.3.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
2402 - 2480	287.179	16.65	pk	ver	46.00	-29.35
2402 - 2480	14514	39.98	avg	hor	53.98	-14.00
2402 - 2480	14521	39.29	avg	ver	53.98	-14.69

ANNEX A Transmitter spurious emissions

Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:

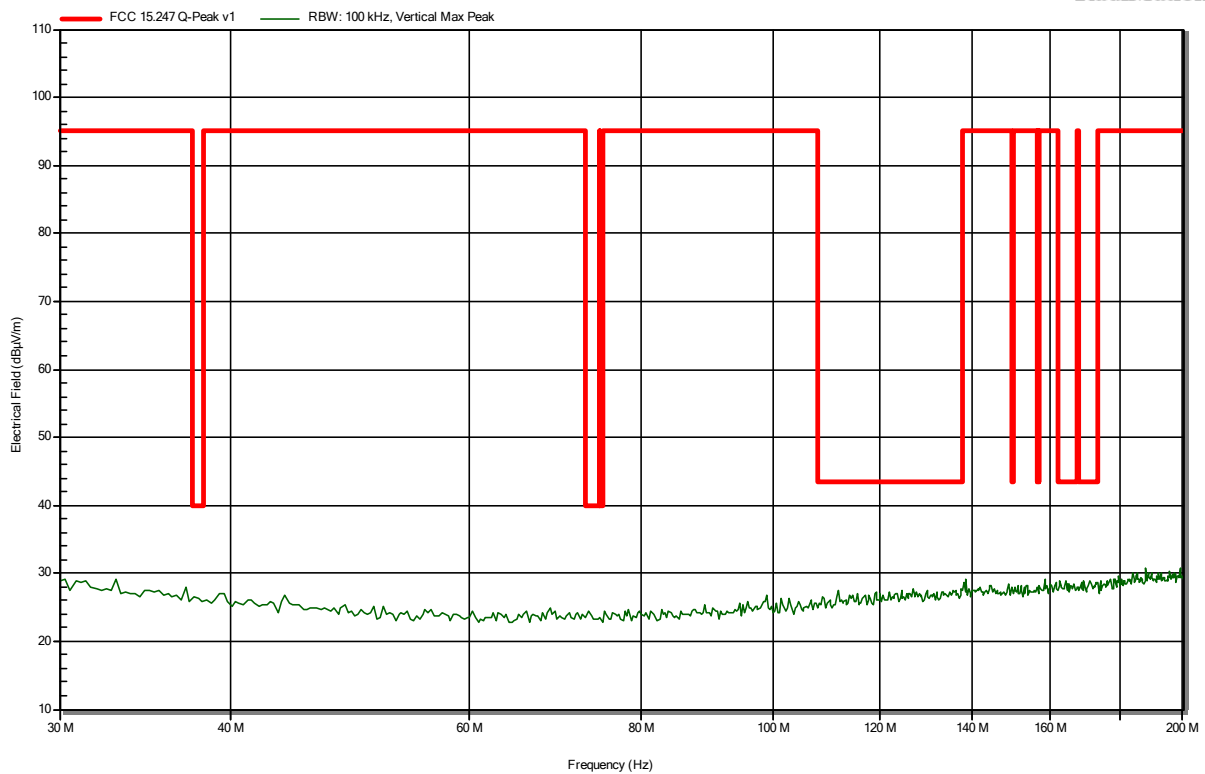


Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:

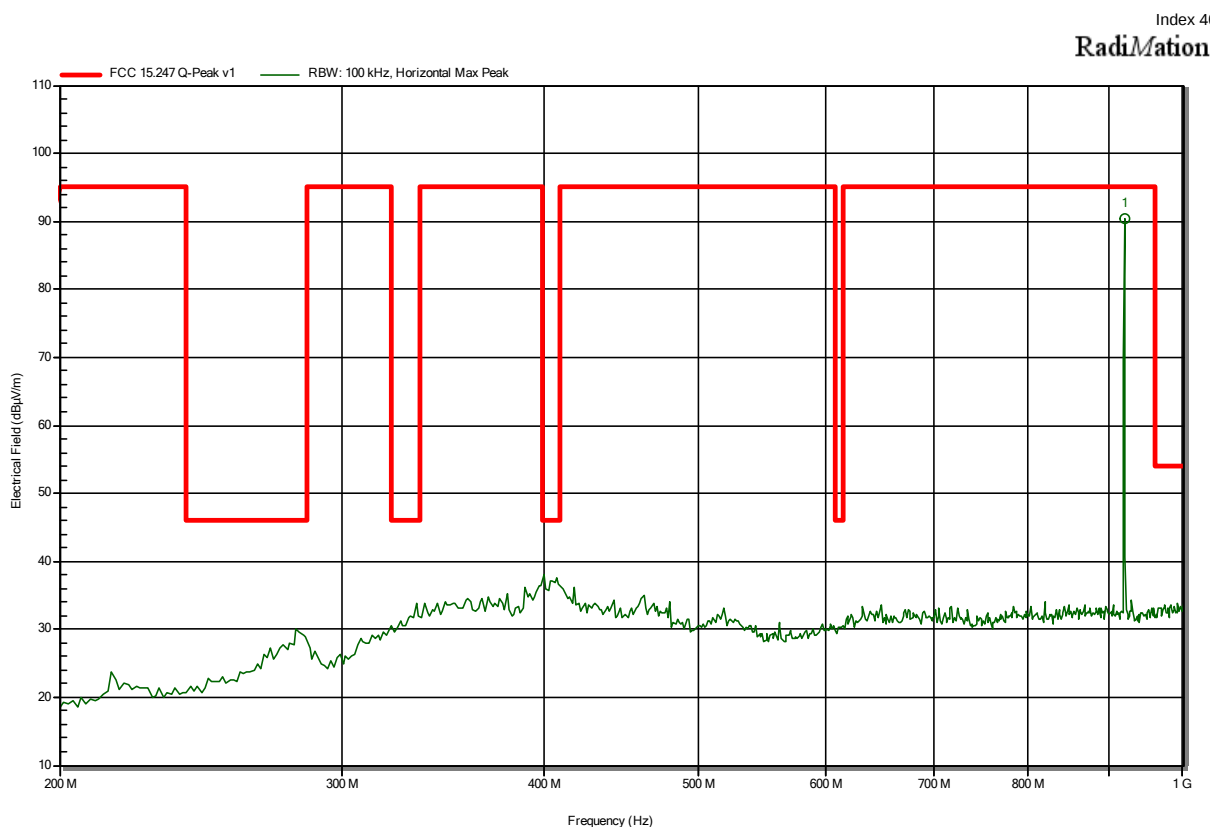
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RadiMation



Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

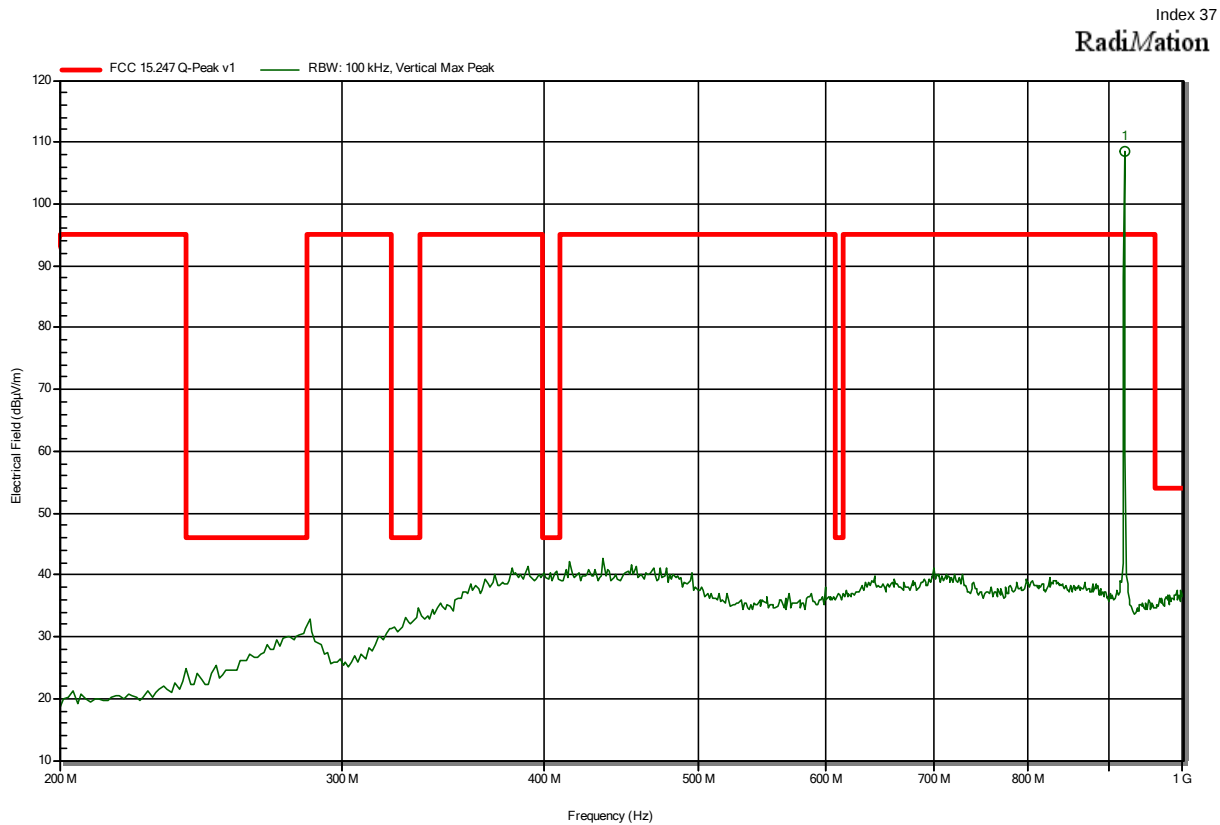
Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note: Marker1 is SRD carrier



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
919.231 MHz	90.46 dBμV/m			SRD carrier

Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

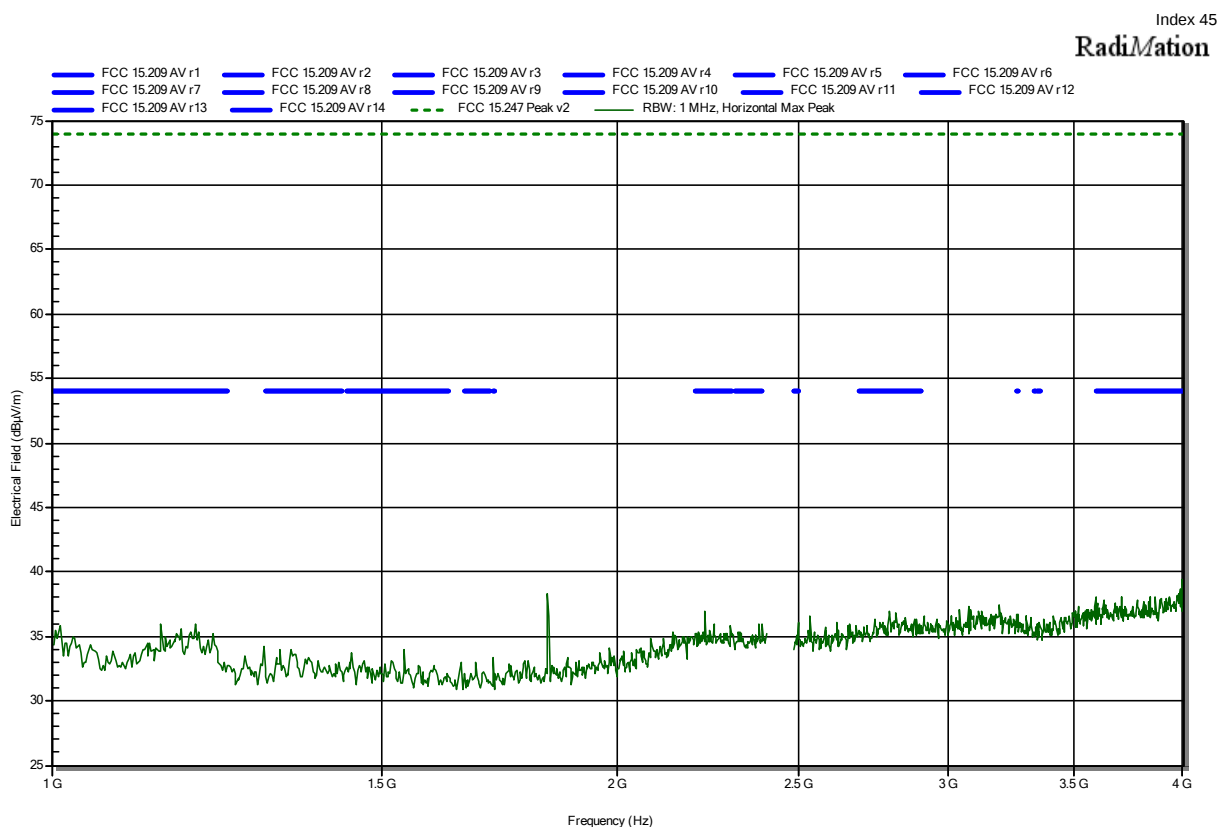
Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note: Marker1 is SRD carrier



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
919.231 MHz	108.5 dBµV/m			SRD carrier

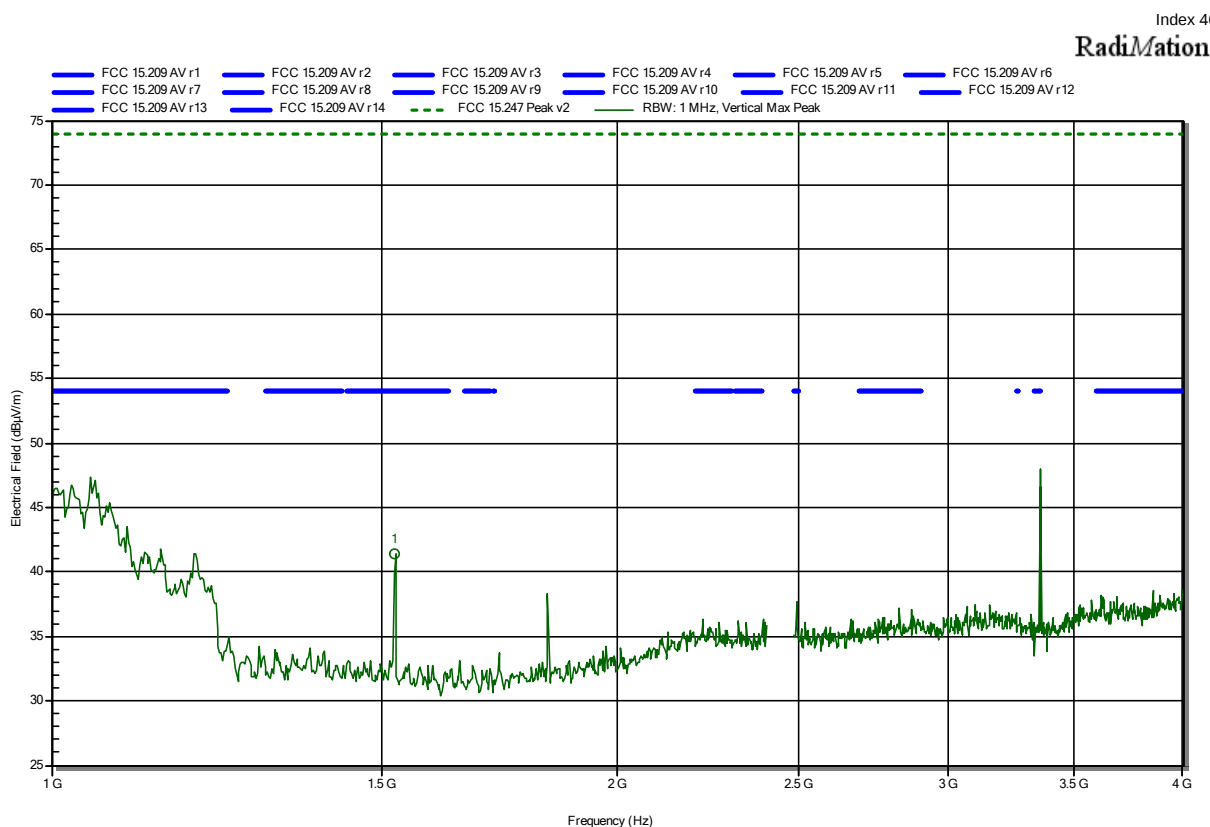
Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:



Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

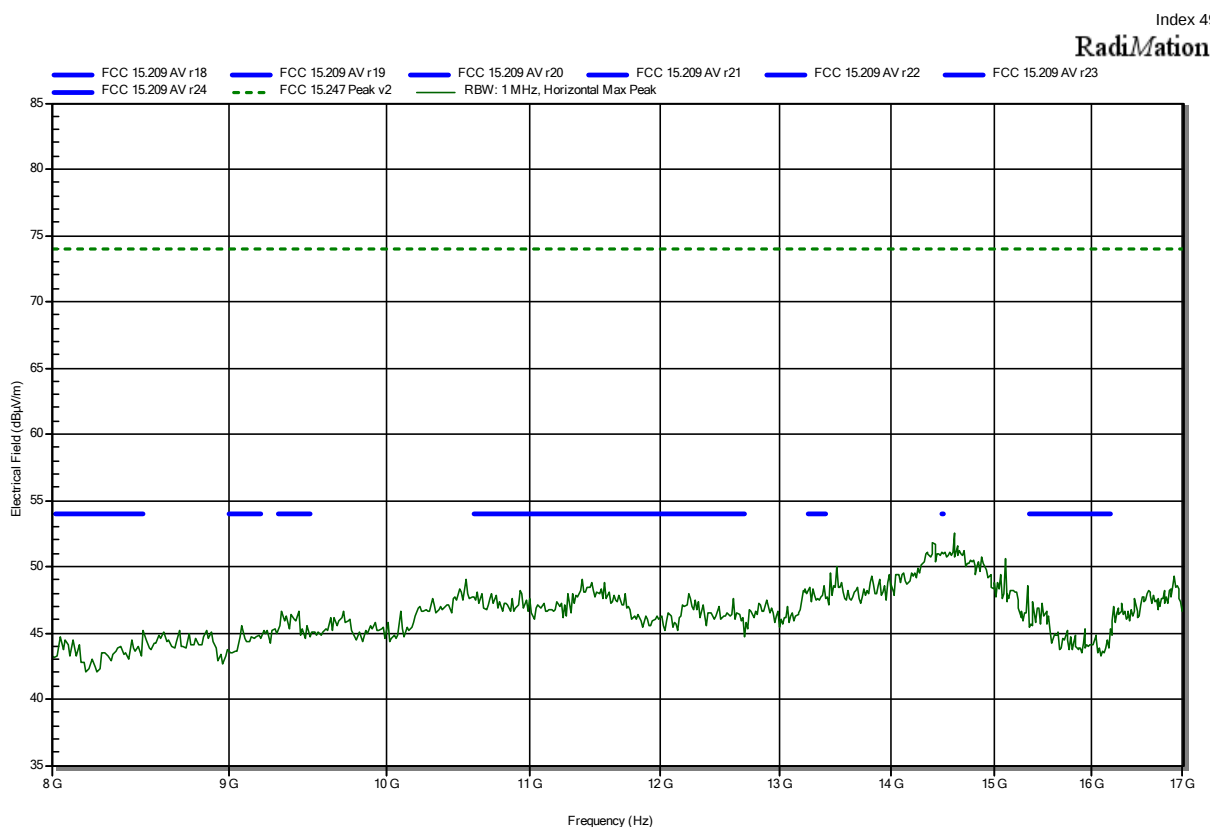
Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.5228 GHz	41.41 dBµV/m	74 dBµV/m	-32.59 dB	Pass

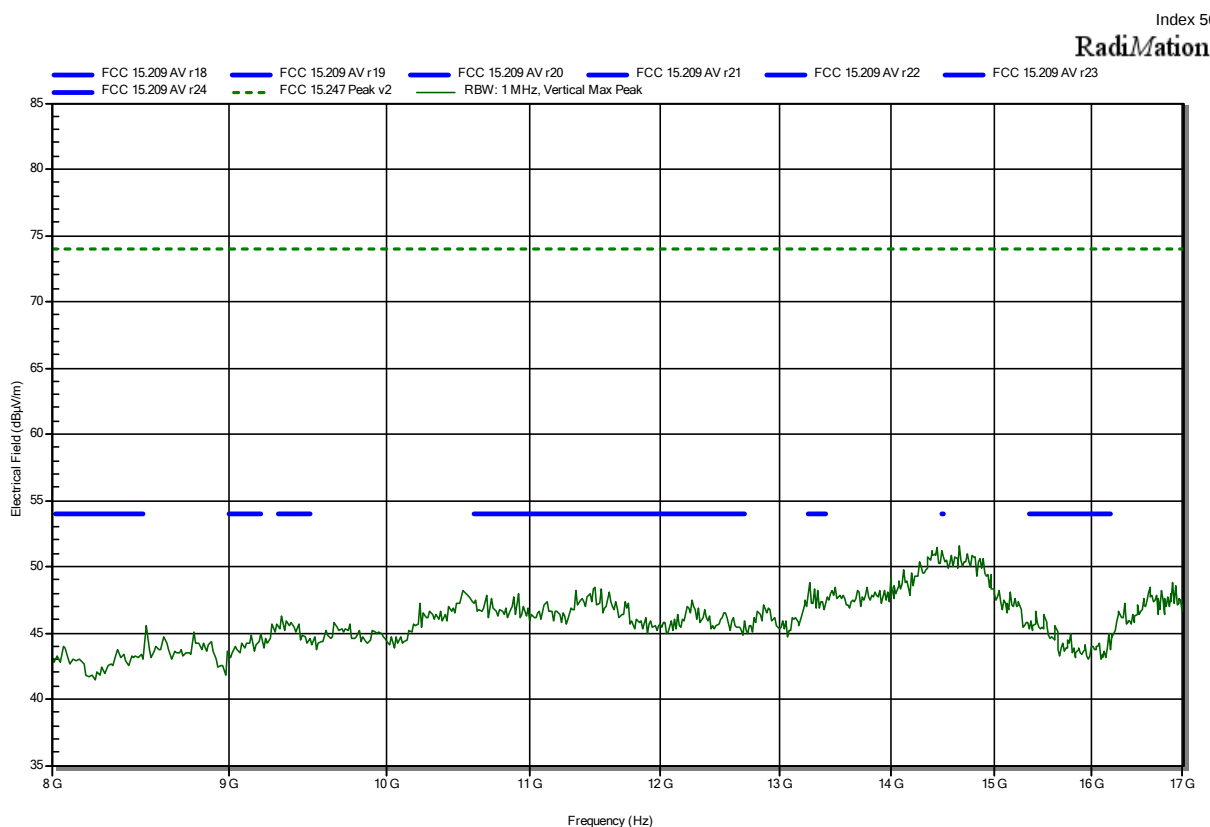
Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:



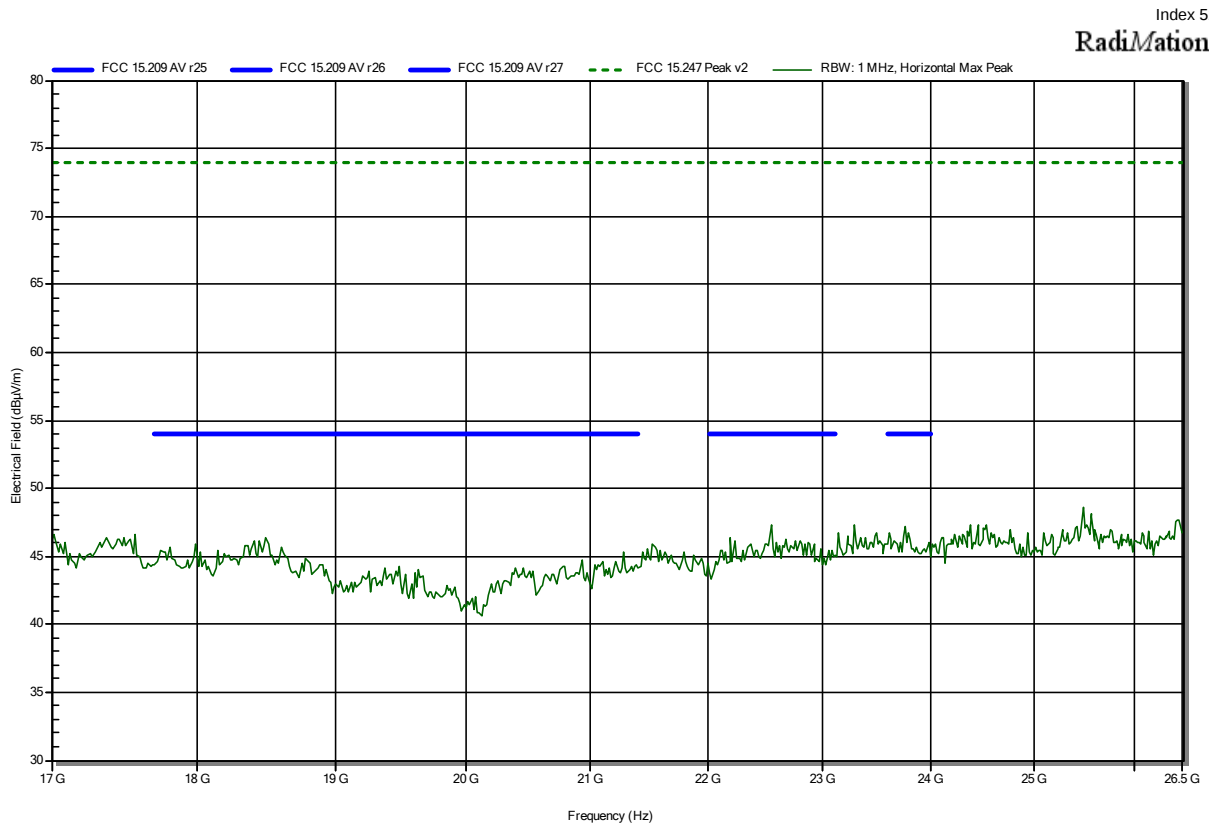
Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:



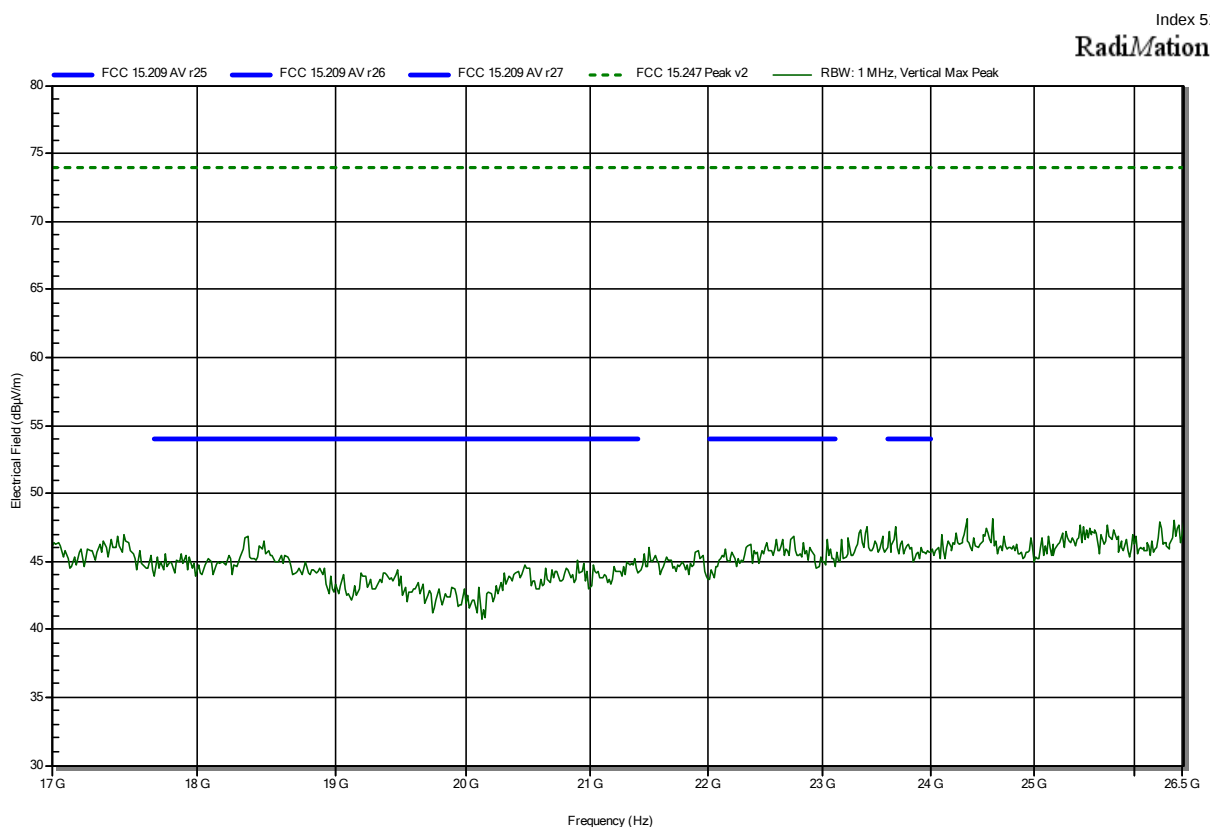
Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Amplifier Research AT4560, Horizontal
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:



Radiated Spurious Emissions according to 47 CFR Part 15.247, RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.6V DC
 Antenna: Amplifier Research AT4560, Vertical
 Measurement distance: 3 m
 Mode: Tx; BT 2441MHz, DH5, SRD 918.5MHz, EUT ver
 Test Date: 2021-03-17
 Note:



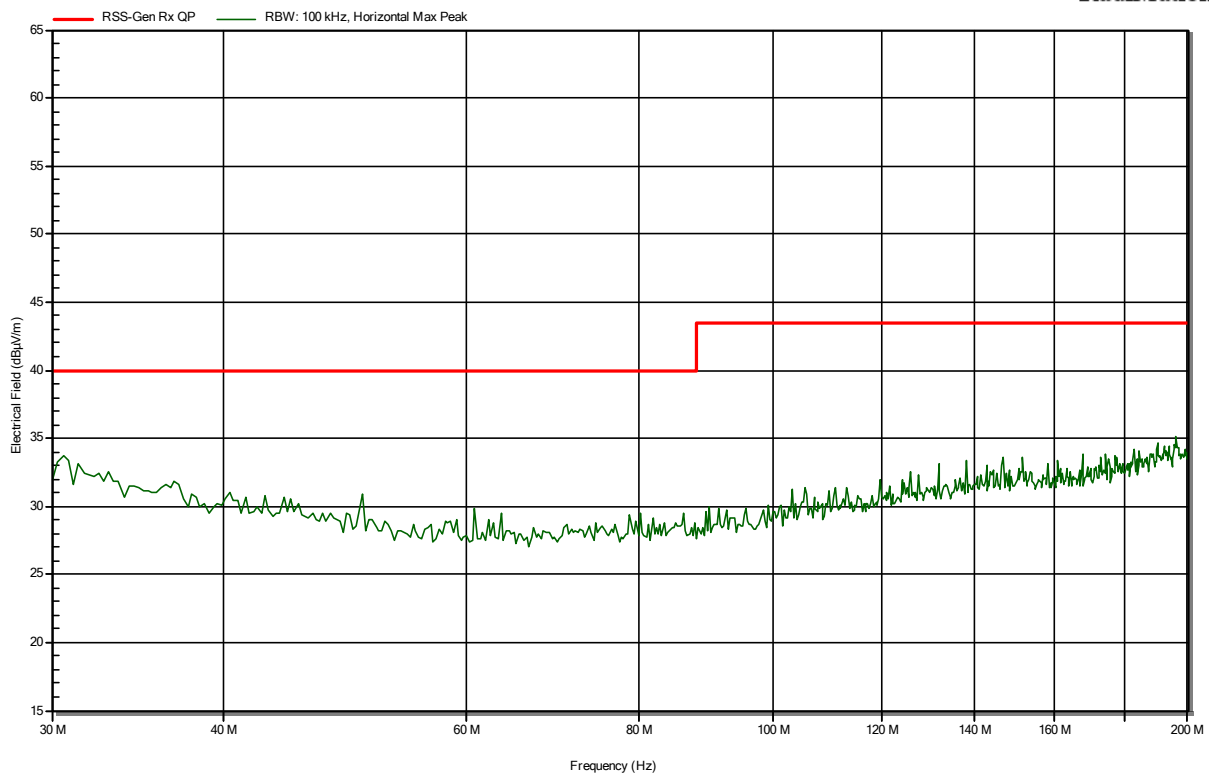
ANNEX B Receiver spurious emissions

Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:

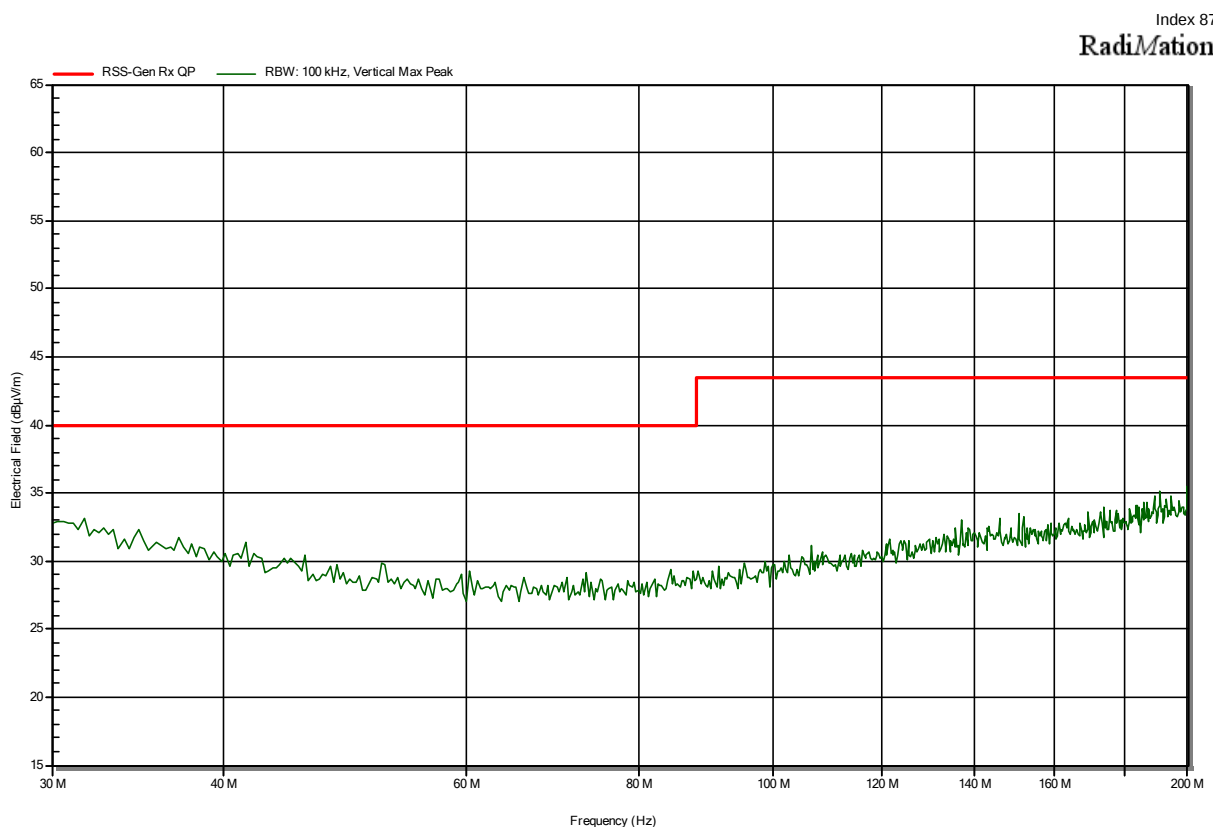
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RadiMation



Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HK 116, Vertical
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:

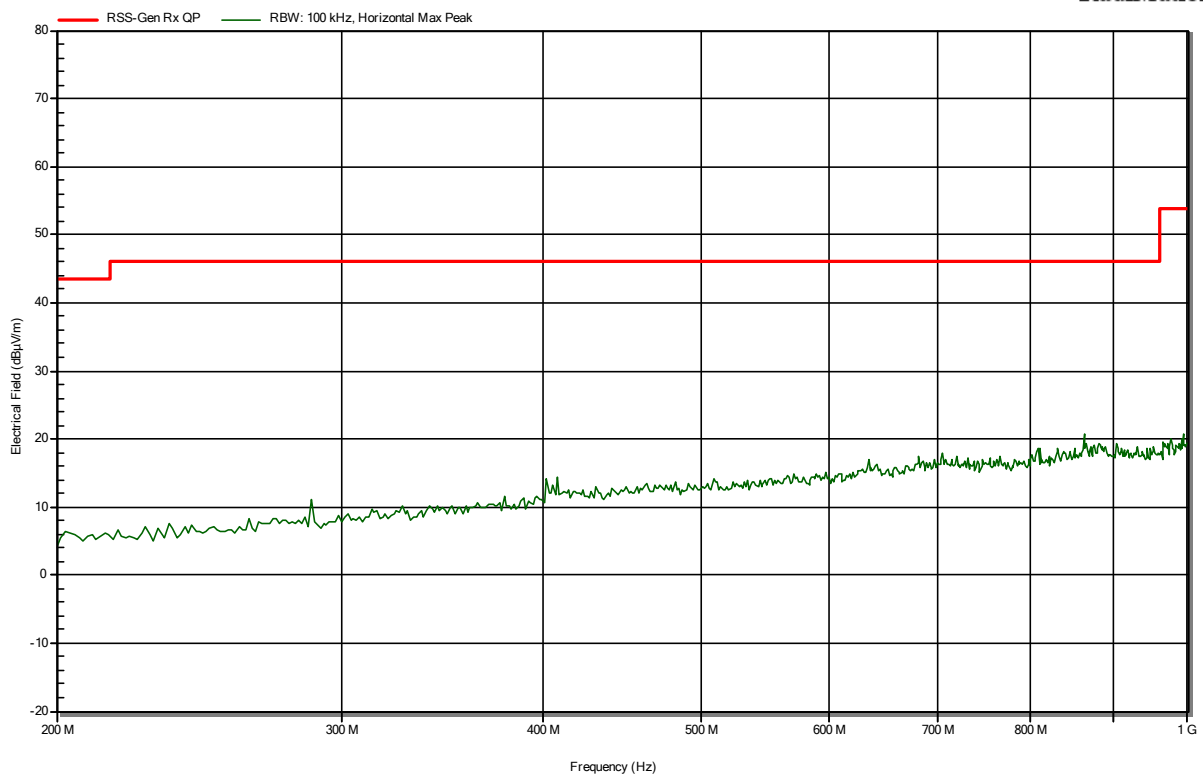


Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:

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RadiMation

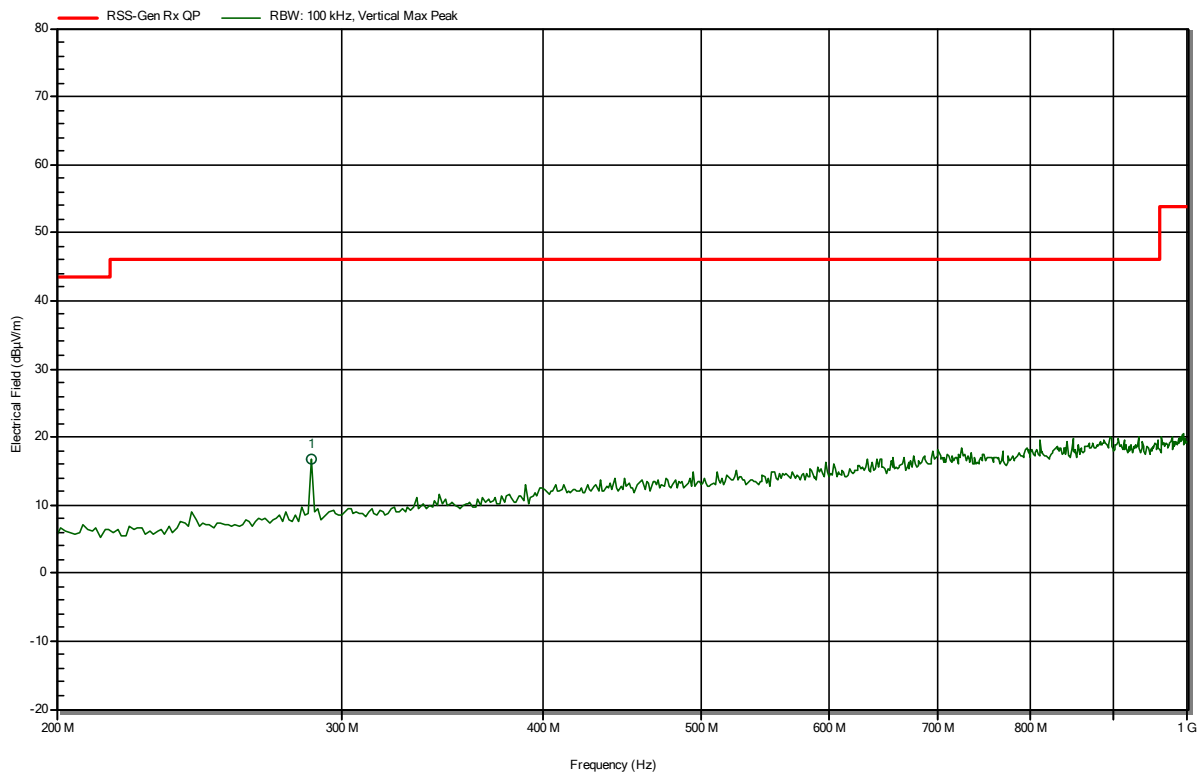


Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:

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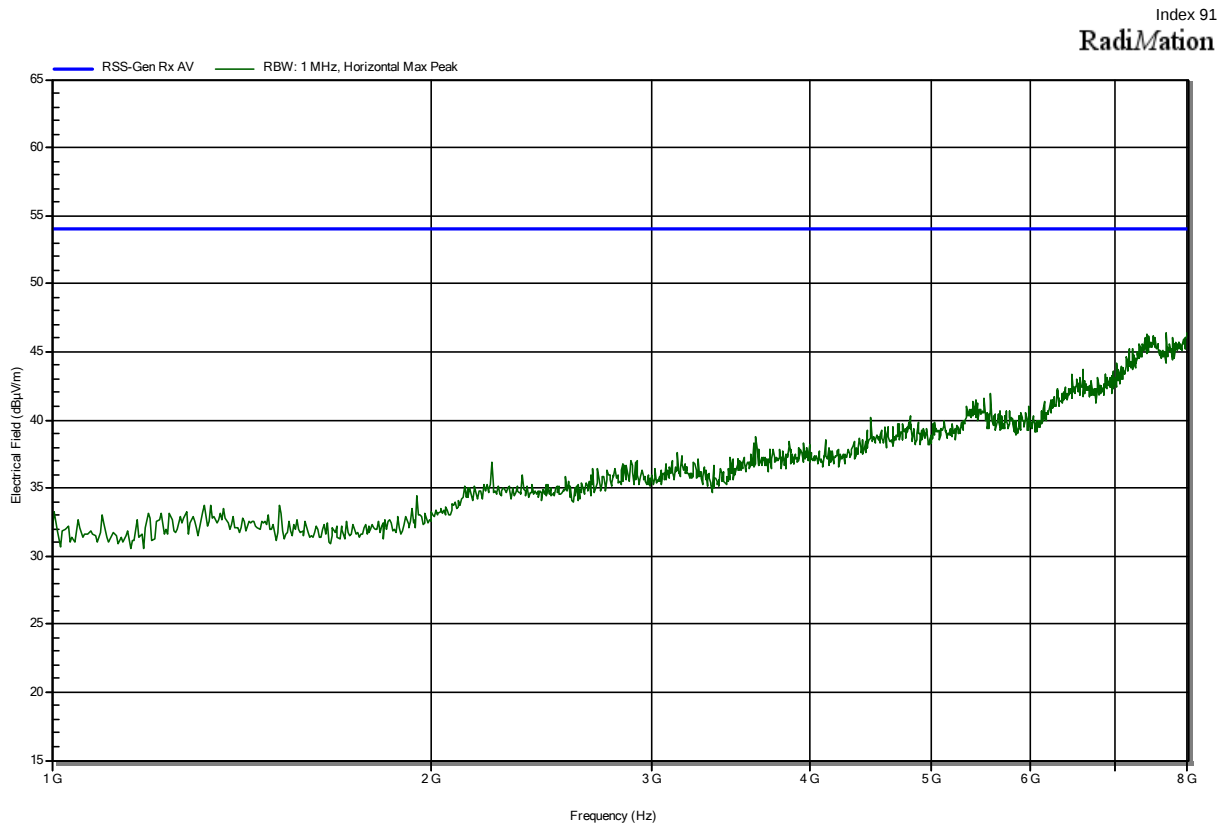
RadiMation



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
287.179 MHz	16.65 dBµV/m	46 dBµV/m	-29.35 dB	Pass

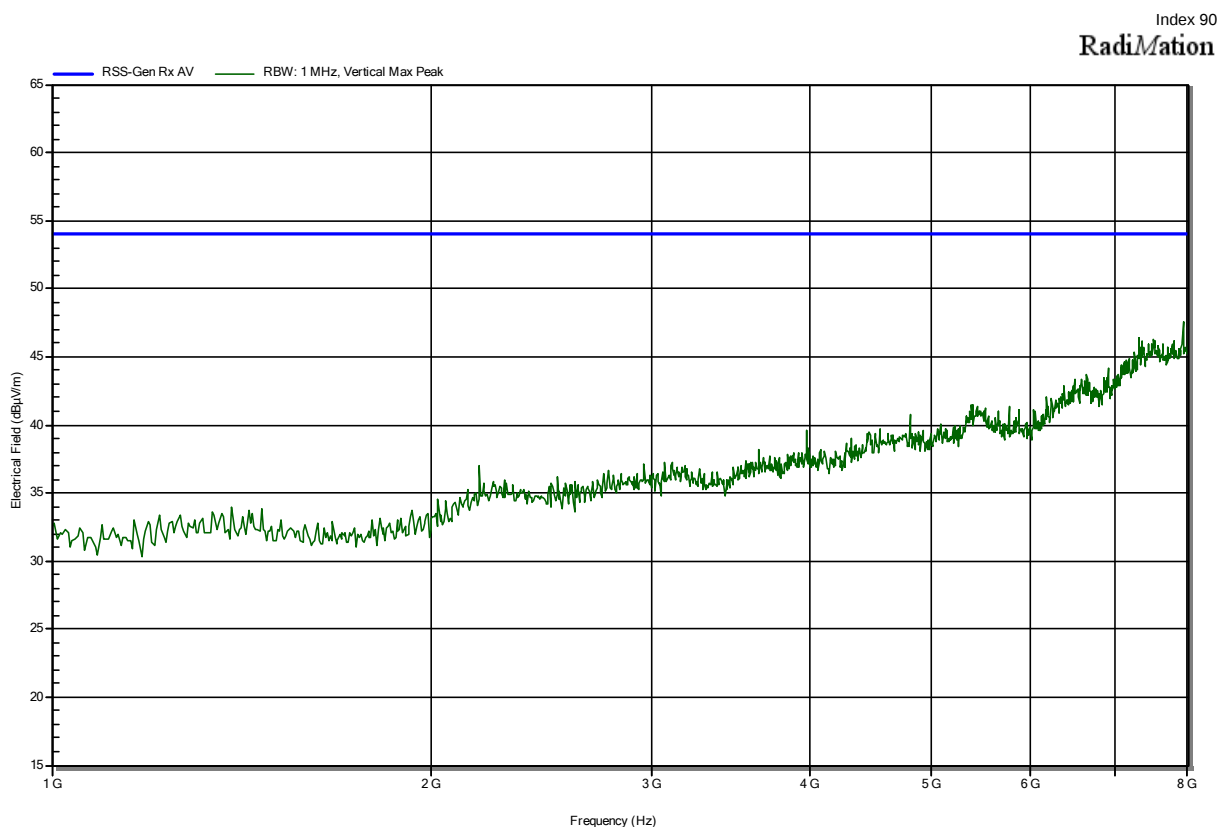
Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:



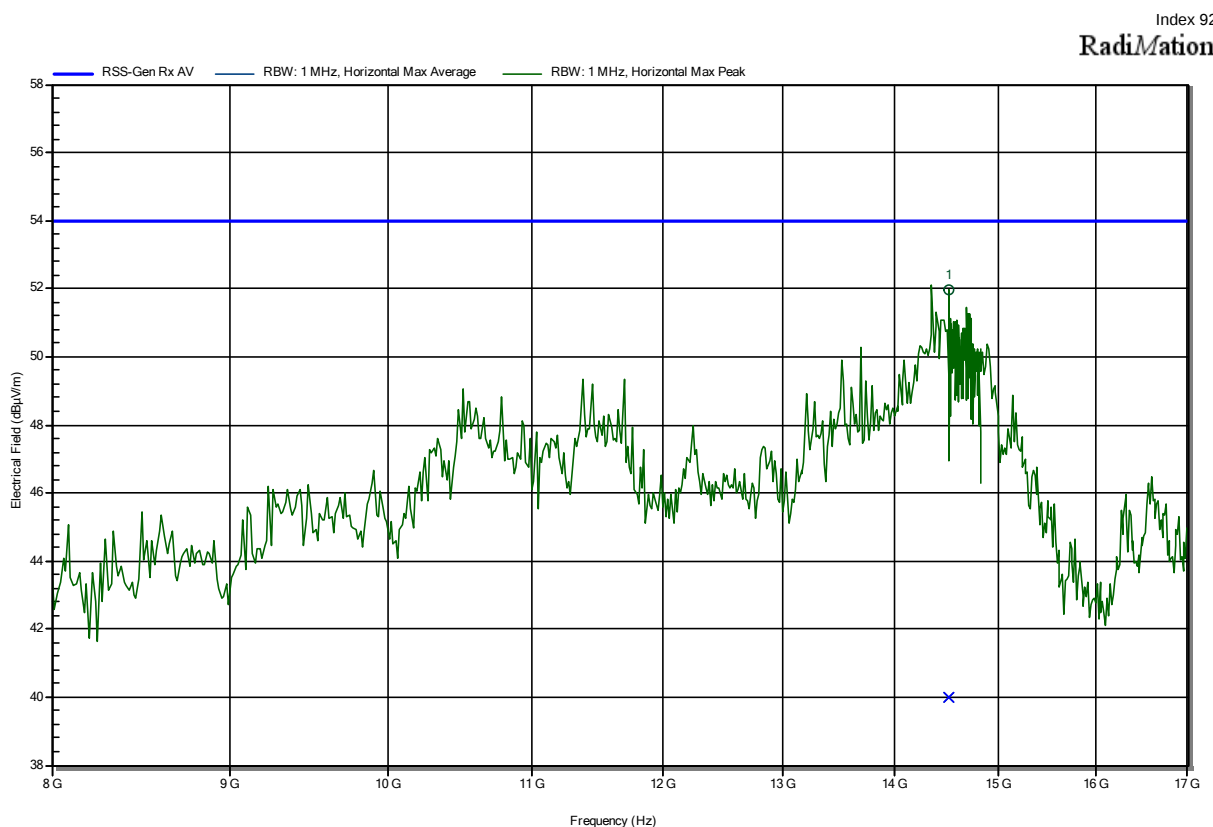
Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:



Radiated Spurious Emissions according to RSS-247, Issue 2

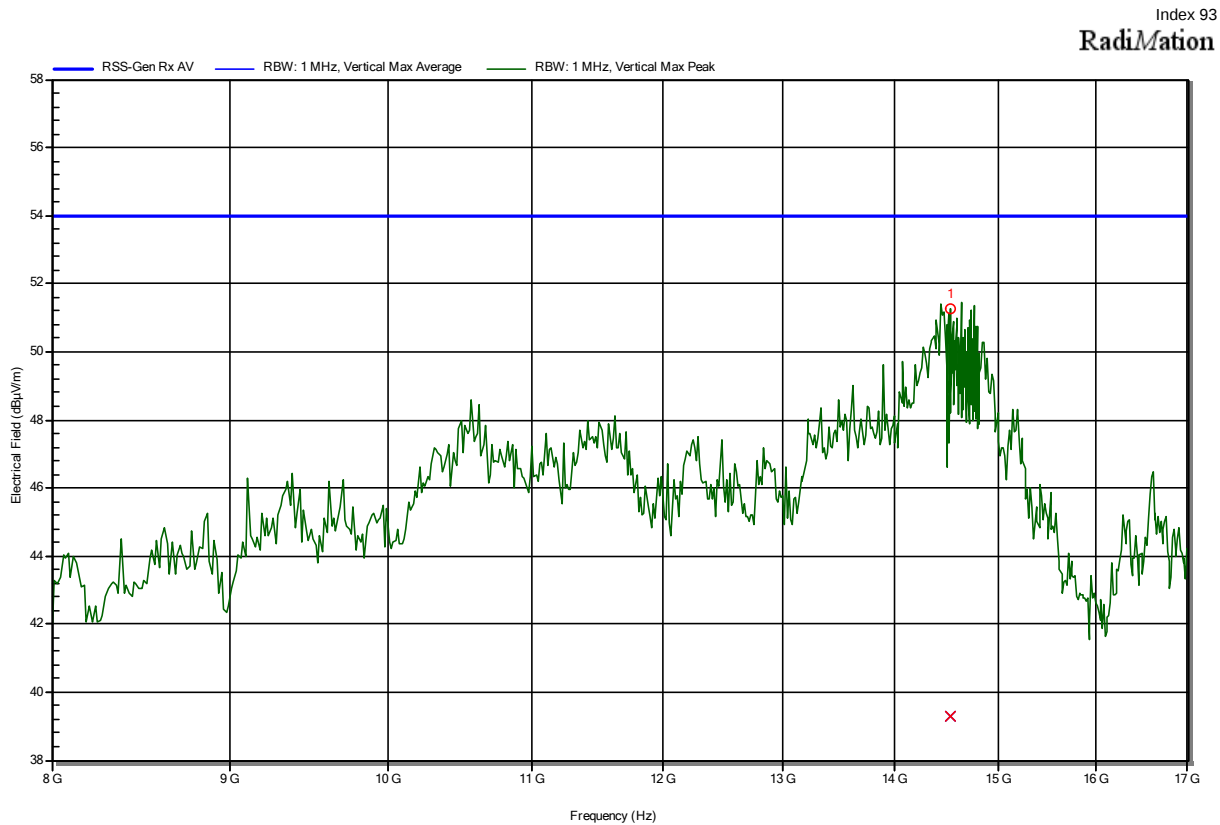
Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READy Converter for US/Canada market
 Model: READy Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Horizontal
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:



Frequency	Average	Average Limit	Average Difference	Average Status
14.514 GHz	39.98 dBµV/m	53.98 dBµV/m	-14 dB	Pass

Radiated Spurious Emissions according to RSS-247, Issue 2

Project Number: G0M-2012-9513
 Applicant: Kamstrup A/S
 Model Description: READY Converter for US/Canada market
 Model: READY Converter
 Test Sample ID: 32714
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Voigt
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 24 °Celsius, Vnom: 3.6V DC
 Antenna: Rohde & Schwarz BBHA 9120D, Vertical
 Measurement distance: 3 m
 Mode: Rx; BT Scan mode, EUT ver
 Test Date: 2021-03-22
 Note:



Frequency	Average	Average Limit	Average Difference	Average Status
14.521 GHz	39.29 dBµV/m	53.98 dBµV/m	-14.69 dB	Pass

=== END OF TEST REPORT ===