eurofins | Product Service

FCC TEST REPORT

FCC 47 CFR Part 15C
Industry Canada RSS-210

Intentional radiator operating within the 902 – 928 MHz band

Report Reference No.....:	G0M-1410-4241-TFC249DT-V01
Testing Laboratory.....:	Eurofins Product Service GmbH
Address.....:	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation.....:	A2LA Accredited Testing Laboratory, Certificate No.: 1983.01 FCC Filed Test Laboratory, Reg.-No.: 96970 IC OATS Filing assigned code: 3470A
Applicant's name.....:	Kieback und Peter GmbH & Co. KG
Address.....:	Tempelhofer Weg 50 12347 Berlin GERMANY
Test specification:	
Standard.....:	47 CFR Part 15C RSS-210, Issue 8, 2010-12 RSS-Gen, Issue 3, 2010-12 ANSI C63.4:2009
Test scope…….....:	complete Radio compliance test
Equipment under test (EUT):	
Product description	Raumbediengerät
Model No.	RBW322-FTL-902
Additional Model(s)	None
Brand Name(s)	None
Hardware version	66735001/01
Firmware / Software version	GWC2.8.2.0-TCM300HW_TCM320HW-902Mhz
	FCC-ID: NY3RBW322MES IC: N/A
Test result	**Passed**

Possible test case verdicts:

- neither assessed nor tested .....: N/N
- required by standard but not appl. to test object.....: N/A
- required by standard but not tested.....: N/T
- not required by standard for the test object .....: N/R
- test object does meet the requirement.....: P (Pass)
- test object does not meet the requirement.....: F (Fail)

Testing:

Test Lab Temperature.....: 20 – 23 °C

Test Lab Humidity .....: 32 – 38 %

Date of receipt of test item .....: 2014-12-10

Date (s) of performance of tests .....: 2014-12-10

Compiled by ..... : Burkhard Pudell

Tested by (+ signature)..... : (Responsible for Test) Burkhard Pudell .....B. Pudell.....

Approved by (+ signature) ..... : Christian Weber .....C. Weber.....

Date of issue ..... : 2015-01-14

Total number of pages ..... : 40

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	Issue Date	Remarks	Revised by
01	2015-01-14	Initial Release	

REPORT INDEX

1 EQUIPMENT (TEST ITEM) DESCRIPTION 5

1.1 Photos – Equipment External 6
1.2 Photos – Equipment internal 8
1.3 Photos – Test setup 9
1.4 Supporting Equipment Used During Testing 10
1.5 Test Modes 11
1.6 Test Equipment Used During Testing 12
1.7 Sample emission level calculation 13

2 RESULT SUMMARY 14

3 TEST CONDITIONS AND RESULTS 15

3.1 Test Conditions and Results – Occupied Bandwidth 15
3.2 Test Conditions and Results – Fundamental field strength emissions 17
3.3 Test Conditions and Results – Emissions radiated outside the specified frequency band 19
3.4 Test Conditions and Results – Receiver radiated emissions 21

ANNEX A Transmitter radiated spurious emissions 23
ANNEX B Receiver radiated spurious emissions 35

1 Equipment (Test item) Description

Description	Raumbediengerät	
Model	RBW322-FTL-902	
Additional Model(s)	None	
Brand Name(s)	None	
Serial number	None	
Hardware version	66735001/01	
Software / Firmware version	GWC2.8.2.0-TCM300HW_TCM320HW-902Mhz	
FCC-ID	NY3RBW322MES	
IC	N/A	
Equipment type	End product	
Radio type	Transceiver	
Radio technology	custom	
Operating frequency range	902.875 MHz	
Assigned frequency band	902 - 928 MHz	
Frequency range	F_{MID}	902.875 MHz
Spreading	None	
Modulations	FSK	
Number of channels	1	
Channel spacing	None	
Number of antennas	1	
Antenna	Type	integrated
	Model	printed PCB antenna
	Manufacturer	Kieback und Peter GmbH & Co. KG
	Gain	10 dBi
Manufacturer	Kieback und Peter GmbH & Co. KG Tempelhofer Weg 50 12347 Berlin GERMANY	
Power supply	V_{NOM}	2.4 VDC (2x Lithium-Battery)
	V_{MIN}	N/A
	V_{MIN}	N/A
AC/DC-Adaptor	Model	N/A
	Vendor	N/A
	Input	N/A
	Output	N/A

1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
None				

***Note:** Use the following abbreviations:

AE : Auxiliary/Associated Equipment, or

SIM : Simulator (Not Subjected to Test)

CABL : Connecting cables

1.5 Test Modes

Mode #	Description	
TX	General conditions:	EUT powered by fully charged battery
	Radio conditions:	Mode = standalone transmit Modulation = 2-FSK Power level = Maximum
RX	General conditions:	EUT powered by fully charged battery
	Radio conditions:	Mode = standalone receive Modulation = 2-FSK

1.6 Test Equipment Used During Testing

Measurement Software			
Description	Manufacturer	Name	Version
EMC Test Software	Dare Instruments	Radimation	2014.1.15

Occupied Bandwidth					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2014-02	2015-02

Field strength emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 1	EF00062	-	-
Spectrum Analyzer	R&S	FSIQ26	EF00242	2014-03	2015-03
Biconical Antenna	R&S	HK 116	EF00186	2014-02	2016-02
LPD Antenna	R&S	HL 223	EF00202	2014-02	2016-02
LPD Antenna	R&S	HL 025	EF00014	2014-01	2016-01

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:

Reading on Analyzer (dBµV) + A.F. (dB) = Net field strength (dBµV/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:

Limit (dBµV/m) = 20*log (µV/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	=	47.5 dBµV/m	:	47.5 dBµV/m - 57.0 dBµV/m = -9.5 dB

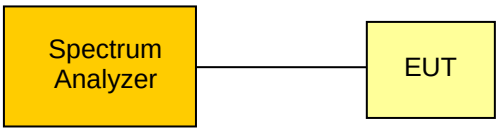
2 Result Summary

FCC 47 CFR Part 15C, IC RSS-210				
Product Specific Standard Section	**Requirement – Test**	**Reference Method**	**Result**	**Remarks**
RSS-Gen 4.6.1	Occupied Bandwidth	RSS-Gen 4.6.1	N/R	Informational only
FCC 15.249(a),(c),(e) IC RSS-210 A2.9(a)	Fundamental field strength emissions	ANSI C63.4	PASS	
FCC 15.249(a),(c),(d),(e) IC RSS-210 A2.9(a),(b)	Emission radiated outside the specified frequency band	ANSI C63.4	PASS	
IC RSS-210 Section 2.3 IC RSS-Gen 4.10 6.1	Receiver radiated spurious emissions	ANSI C63.4	PASS	
FCC § 15.207 IC RSS-Gen 7.2.4	AC power line conducted emissions	ANSI C63.4	N/R	EUT exclusively battery powered
Remarks:				

3 Test Conditions and Results

3.1 Test Conditions and Results – Occupied Bandwidth

Occupied Bandwidth acc. IC RSS-Gen		**Verdict: PASS**
Test according to measurement reference	Reference Method	
	RSS-Gen 4.6.1	
Test frequency range	Tested frequencies	
	F_{MID}	
EUT test mode	TX	
Limits		
None (Informational only)		
Test setup		



Test procedure

1. EUT set to test mode (Communication tester is used if needed)
2. Span set to at least twice the emission spectrum
3. Resolution bandwidth set to 1 % of span
4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function

Test results

Channel	Frequency [MHz]	Occupied Bandwidth [kHz]
F_{MID}	902.875	1002

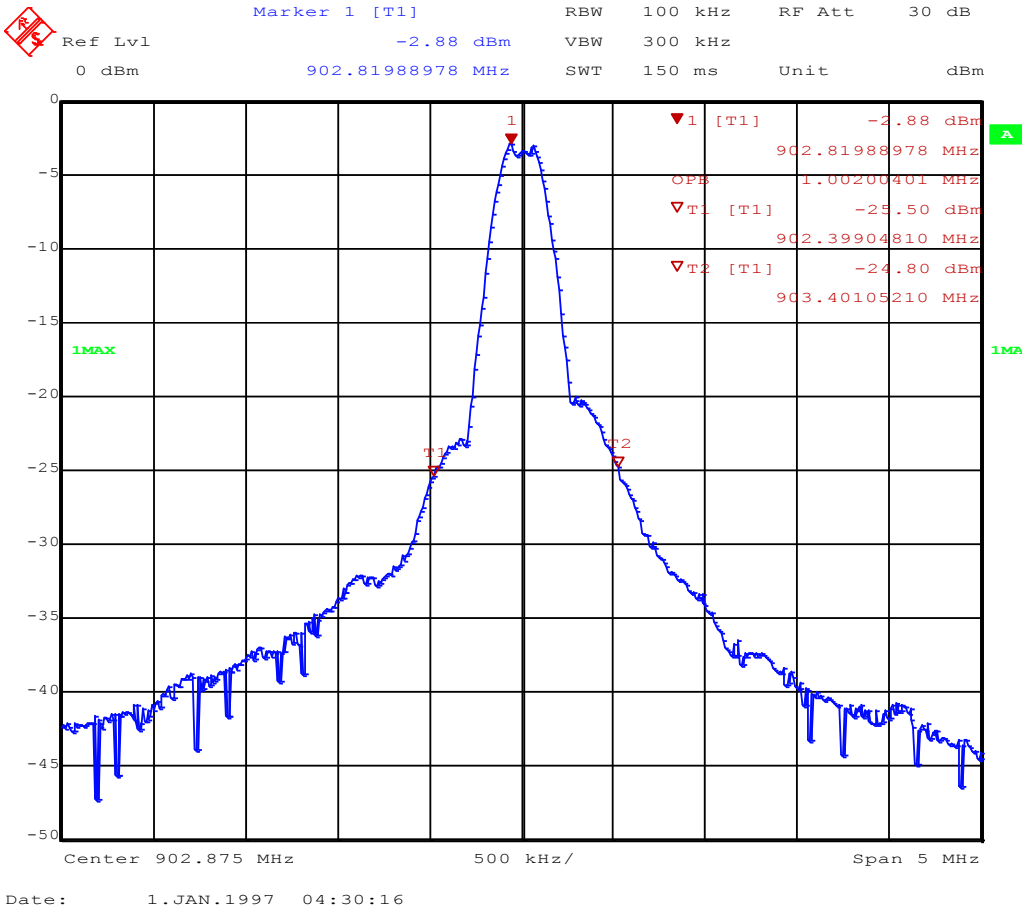
Comments: Measurement is applicable to all variants

Occupied Bandwidth - F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Burkhard Pudell
Test Conditions:	Tnom / Vnom
Mode:	SRD / 902.875 MHz / 2-FSK
Test Date:	2014-12-10
Verdict:	NONE (INFORMATION ONLY)
Note 1:	A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2:	OBW = 1002.004 kHz



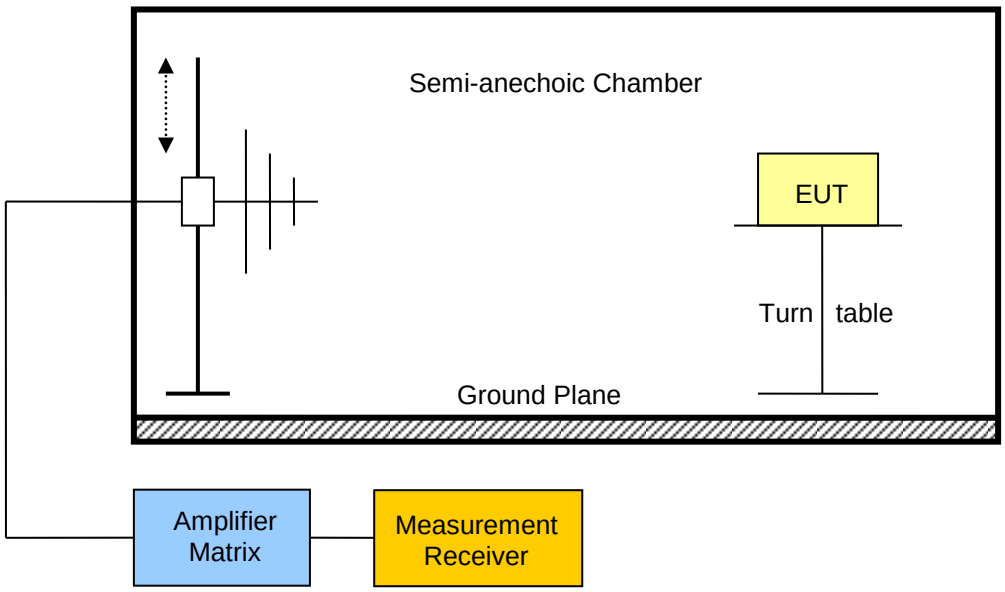
3.2 Test Conditions and Results – Fundamental field strength emissions

Field strength emissions acc. FCC 47 CFR 15.249 / IC RSS-210				**Verdict: PASS**
Test according referenced standards	Reference Method			
	FCC 15.249(a),(c),(e) / IC RSS-210 A2.9(a)			
Test according to measurement reference	Reference Method			
	ANSI C63.4			
Test frequency range	Tested frequencies			
	F_{MID}			
EUT test mode	TX			
Limits				
Frequency range [MHz]	Detector	Limit [mV/m]	Limit [dBµV/m]	Limit Distance [m]
902 – 928	Quasi-Peak	50	94	3
2400 – 2483.5	Average	50	94	3
5725 - 5875	Average	50	94	3

FCC 15.249(e) : for frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

Below 1GHz a CISPR quasi-peak detector is used.

Test setup



Test procedure								
1. EUT set to test mode 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to maximum emission levels								
Test results								
Channel	Frequency [MHz]	Emission [MHz]	Level [dbµV/m]	Detector	Pol.	Limit [dbµV/m]	Limit distance [m]*	Margin [dB]
EUT vertical								
F_{MID}	902.875	902.762	89.42	QP	ver	94	3	-4.58
F_{MID}	902.875	902.828	82.06	QP	hor	94	3	-11.94
EUT horizontal								
F_{MID}	902.875	902.830	79.21	QP	ver	94	3	-14.79
F_{MID}	902.875	902.814	92.47	QP	hor	94	3	-1.53
Comments: * Physical distance between EUT and measurement antenna.								

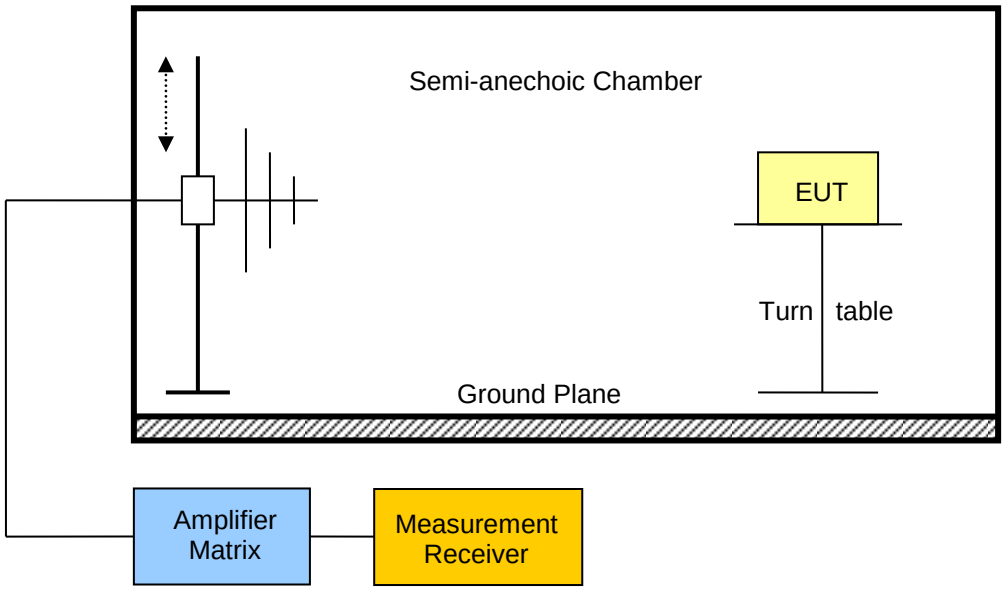
3.3 Test Conditions and Results – Emissions radiated outside the specified frequency band

Radiated out-of-band band emissions acc. FCC 47 CFR 15.249 / IC RSS-210				**Verdict: PASS**
Test according referenced standards		Reference Method		
		FCC 15.249(a),(c),(d),(e) / IC RSS-210 A2.9(a),(b)		
Test according to measurement reference		Reference Method		
		ANSI C63.4		
Test frequency range		Tested frequencies		
		30 MHz – 10th hamonic		
EUT test mode		TX		
Limits - Harmonics				
Frequency range [MHz]	Detector	Limit [µV/m]	Limit [dBµV/m]	Limit Distance [m]
902 – 928	Quasi-Peak	500	54	3
2400 – 2483.5	Average	500	54	3
5725 - 5875	Average	500	54	3
Limits - General				
Frequency range [MHz]	Detector	Limit [µV/m]	Limit [dBµV/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3

FCC 15.249(e) : for frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

Except the higher order harmonics, emission radiated outside the specified frequency band shall be attenuated by at least 50 dB below the level of the fundamental or to the general field strength limits listed in 15.209 / RSS-Gen, whichever is less stringent.

Test setup



Test procedure

5. EUT set to test mode
6. Span it set according to measurement range
7. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz
8. Markers are set to maximum emission levels

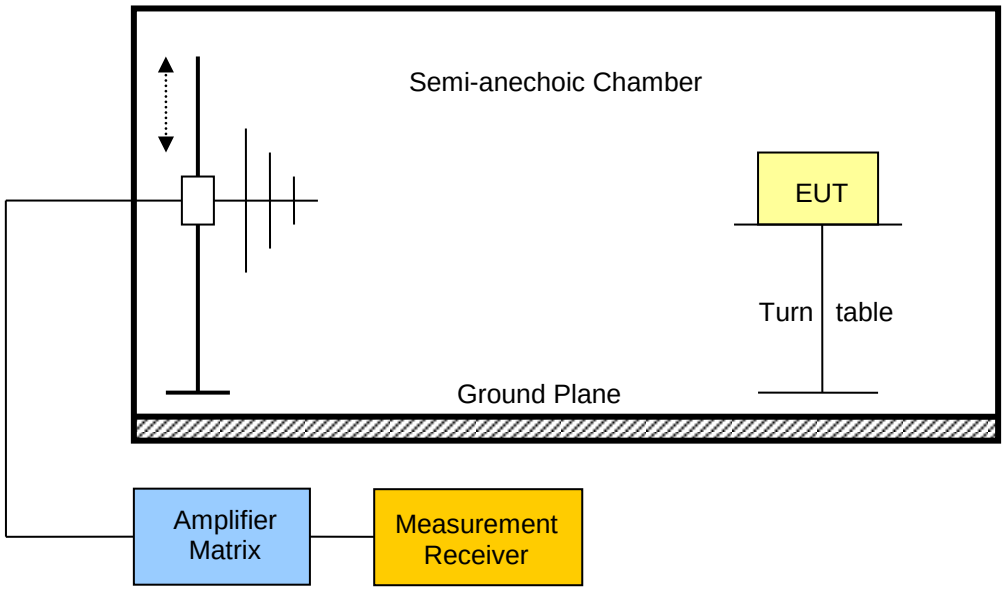
Test results

Channel	Frequency [MHz]	Emission [MHz]	Level [dbµV/m]	Detector	Pol.	Limit [dbµV/m]	Limit distance [m]*	Margin [dB]
EUT vertical								
F_{MID}	902.875	900.582	35.10	PK	ver	46	3	-10.90
F_{MID}	902.875	901.760	21.87	PK	hor	46	3	-24.13
EUT horizontal								
F_{MID}	902.875	901.640	33.22	PK	hor	46	3	-12.78

Comments: * Physical distance between EUT and measurement antenna.

3.4 Test Conditions and Results – Receiver radiated emissions

Receiver radiated emissions acc. IC RSS-210				**Verdict: PASS**
Test according referenced standards	Reference Method			
	IC RSS-210 A8.5			
Test according to measurement reference	Reference Method			
	ANSI C63.4			
Test frequency range	Tested frequencies			
	30 MHz – 3th Harmonic			
EUT test mode	RX			
Limits				
Frequency range [MHz]	Detector	Limit [µV/m]	Limit [dBµV/m]	Limit Distance [m]
30 – 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 – 1000	Quasi-Peak	500	54	3
> 1000	Average	500	54	3
Test setup				



Test procedure
1. EUT set to receive mode (Communication tester is used if needed) 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to peak emission levels

Test results

Channel	Frequency [MHz]	Emission [MHz]	Emission Level [dbµV/m]	Pol.	Det.	Limit [µV/m]	Margin [µV/m]
F_{MID}	902.875	3796	43.96	ver	PK	54	-10.04
F_{MID}	902.875	3814	43.75	hor	PK	54	-10.25

Comments: * Physical distance between EUT and measurement antenna.

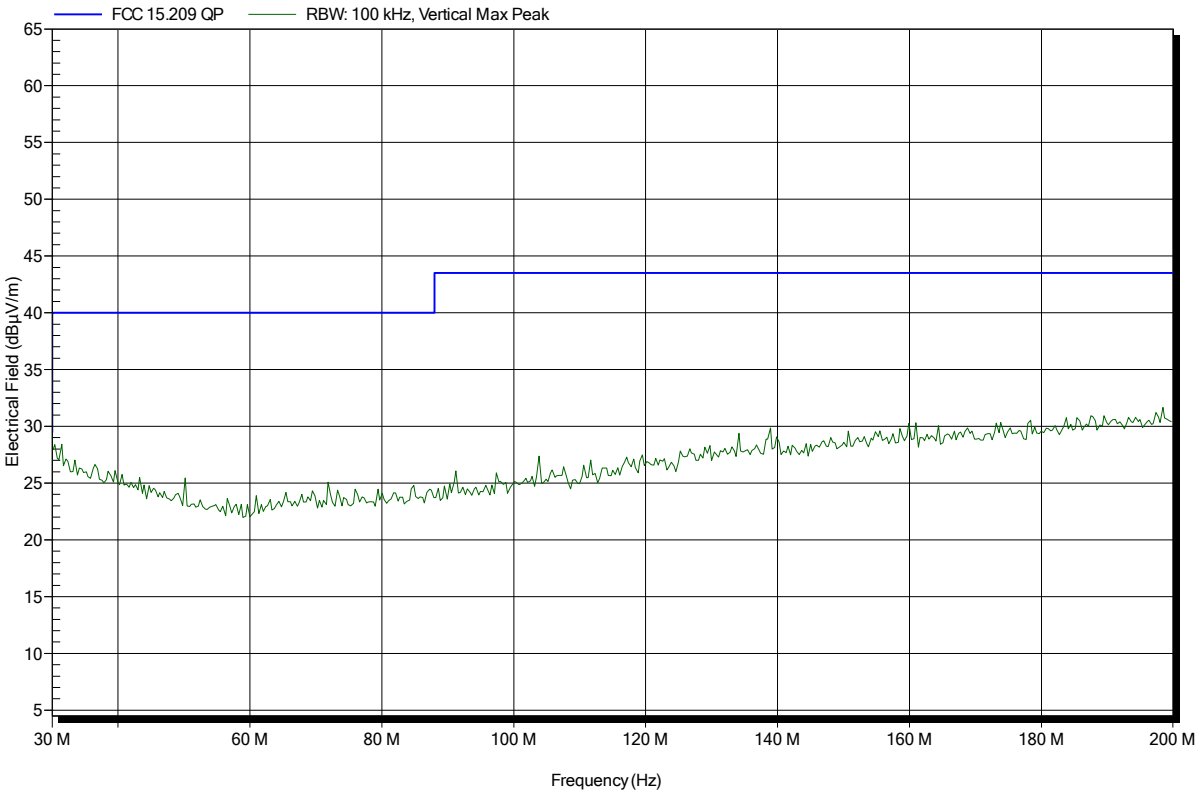
ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 77

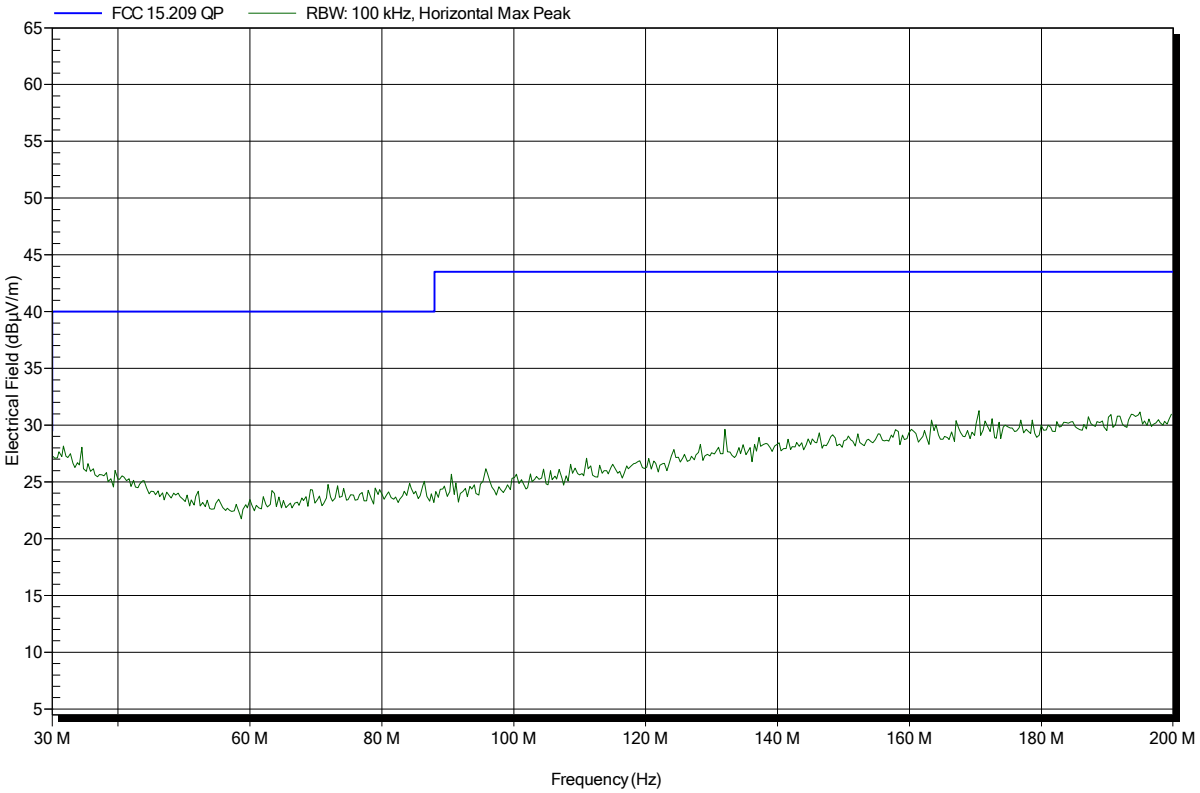


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 78

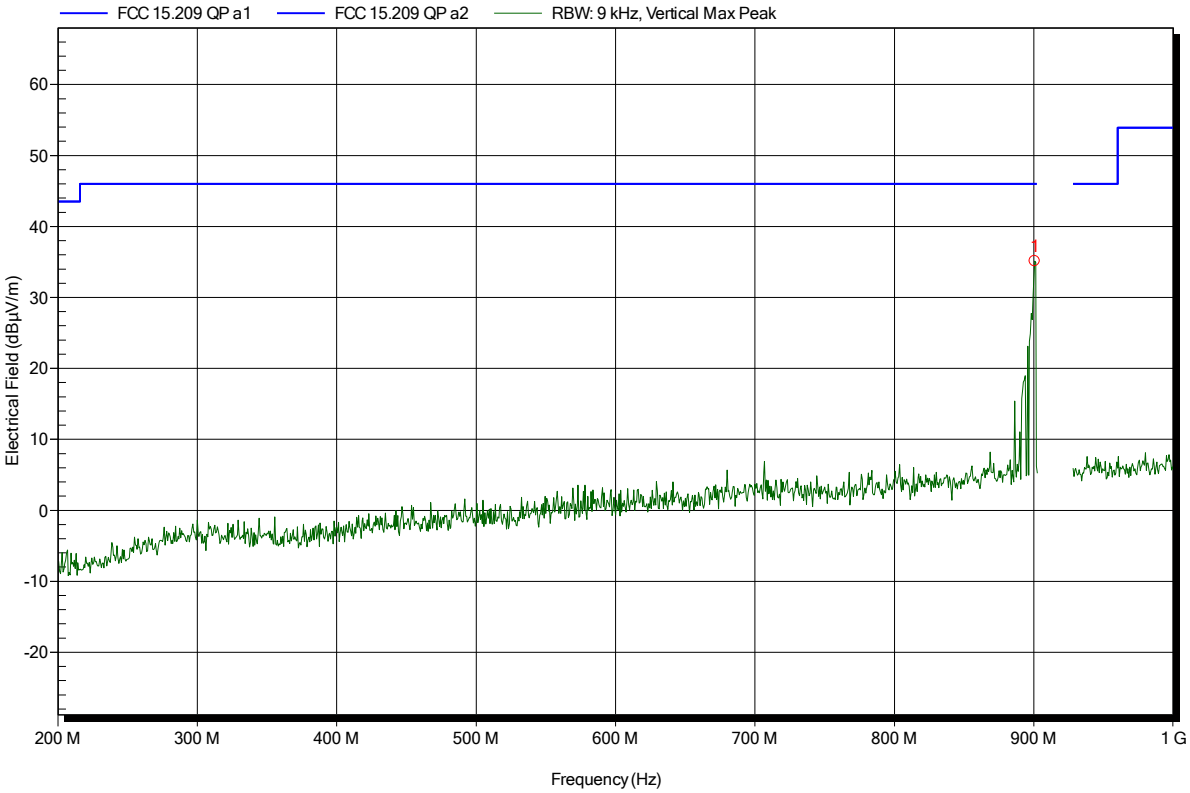


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2015-01-07
Note:	EUT vertical

Index 94



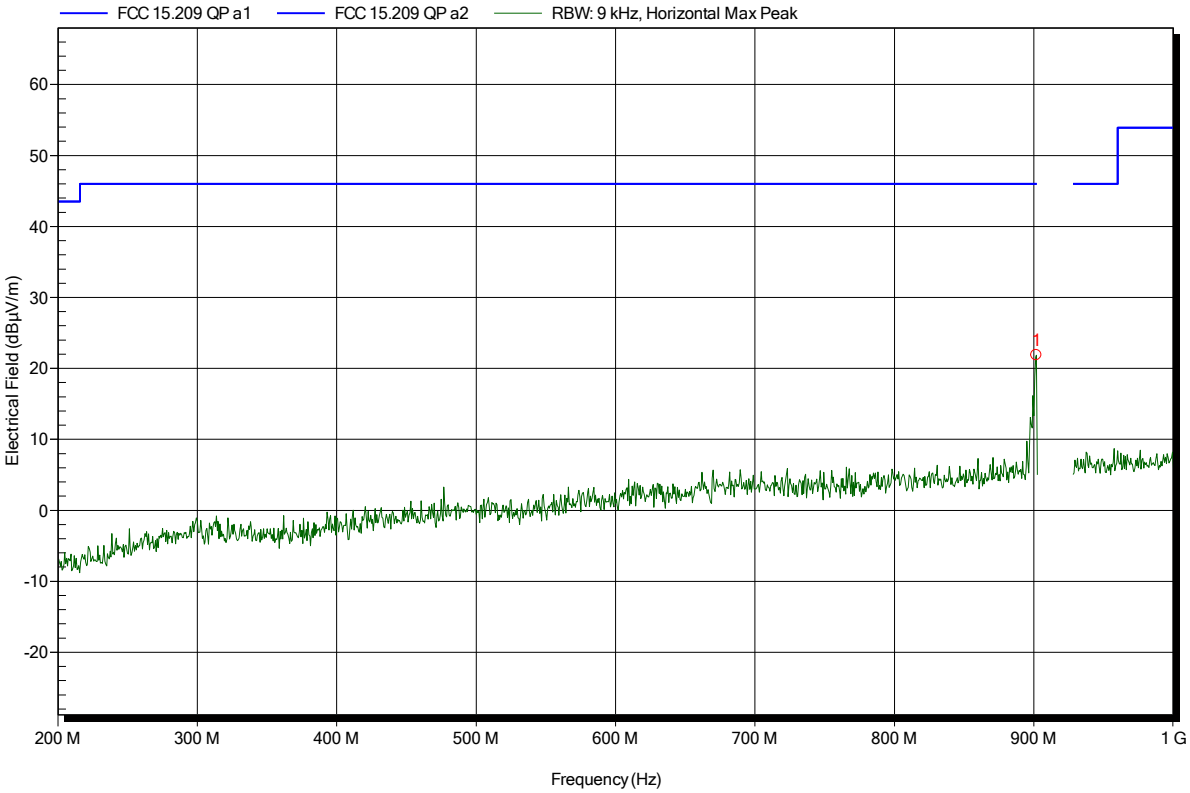
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
900.582 MHz	35.1 dBµV/m	46 dBµV/m	-10.9 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2015-01-07
Note:	EUT vertical

Index 95



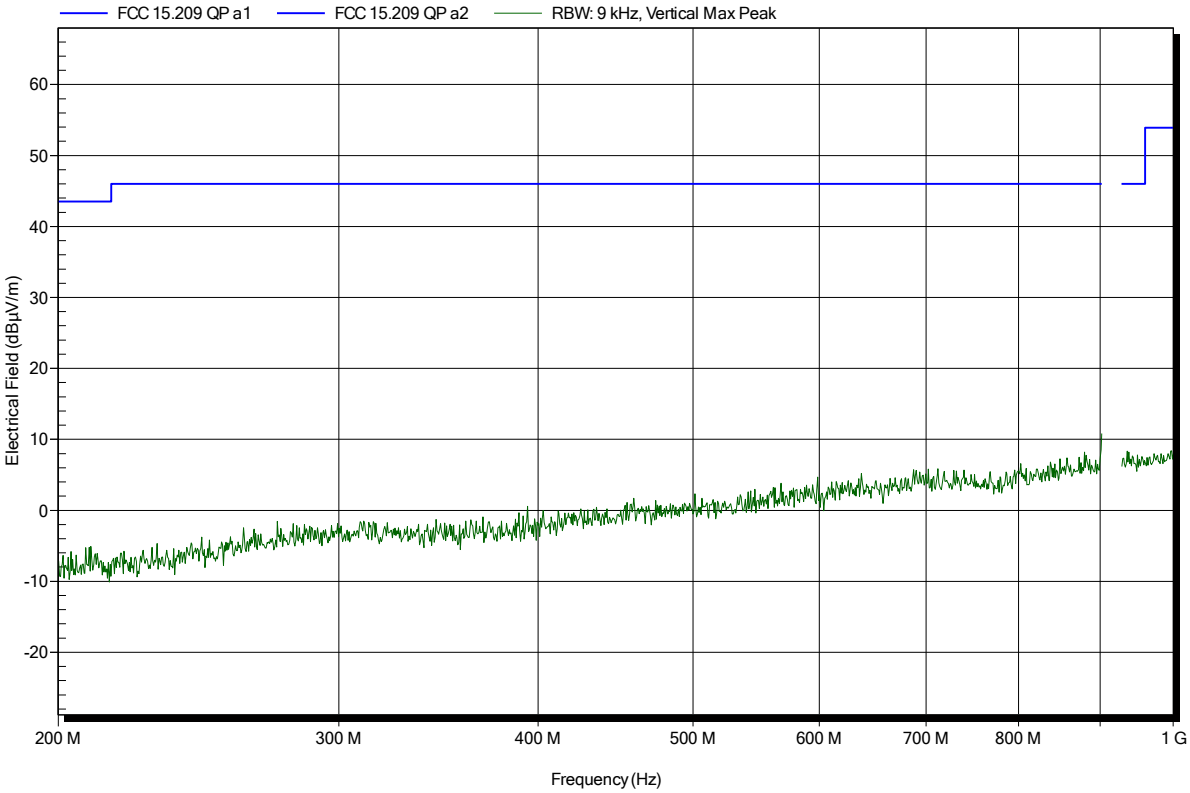
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
901.76 MHz	21.87 dBµV/m	46 dBµV/m	-24.13 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2015-01-07
Note:	EUT horizontal

Index 97

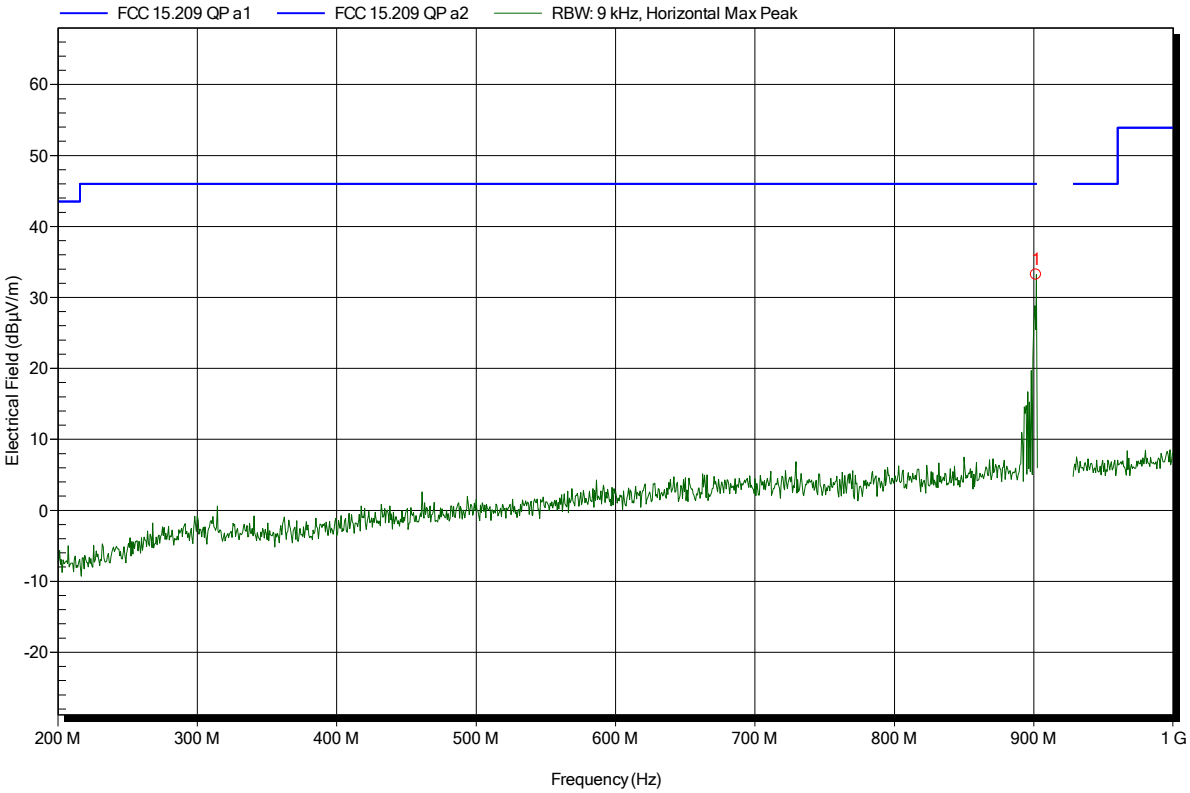


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2015-01-07
Note:	EUT horizontal

Index 96



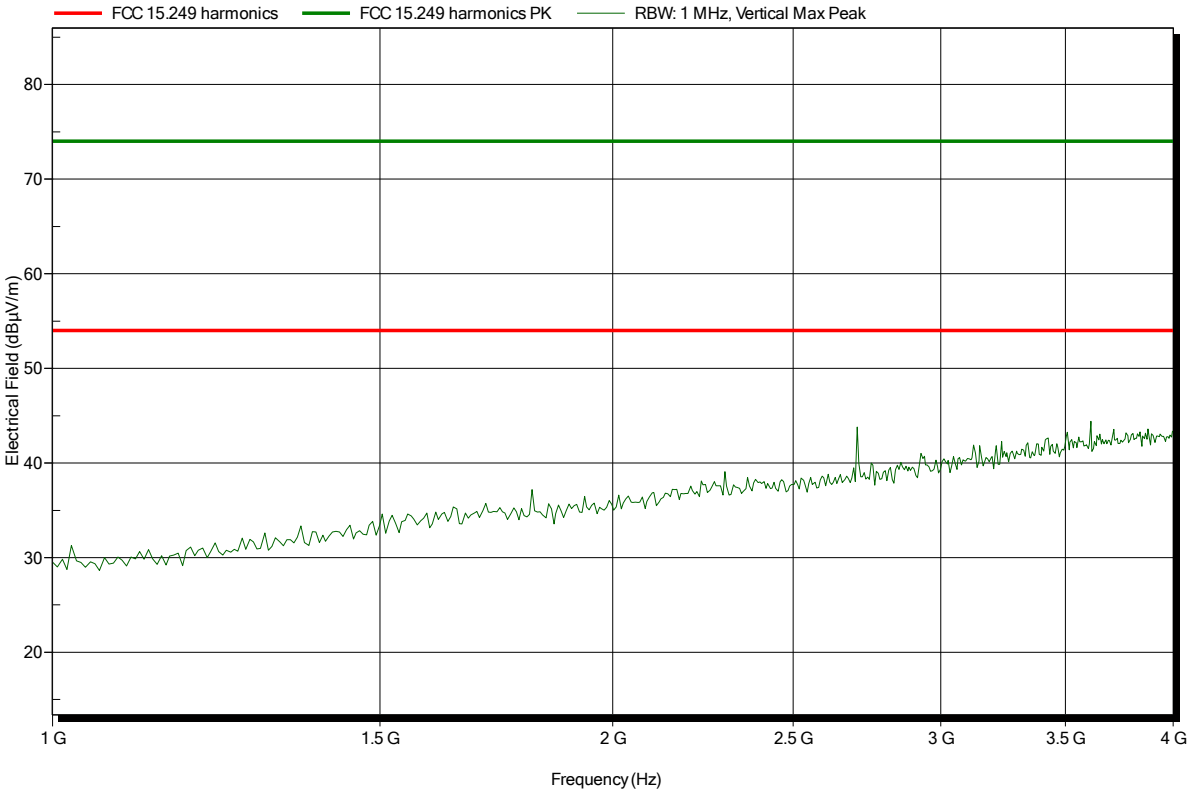
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
901.64 MHz	33.22 dBµV/m	46 dBµV/m	-12.78 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 79

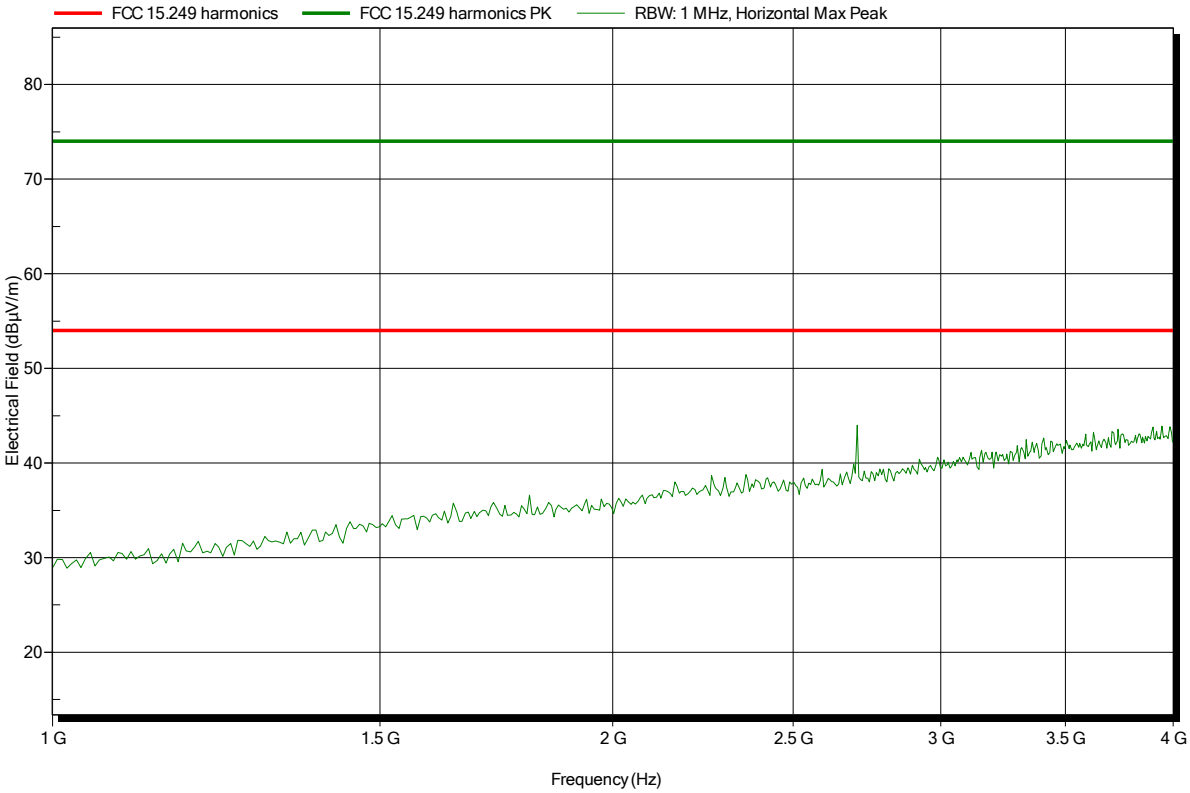


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 81

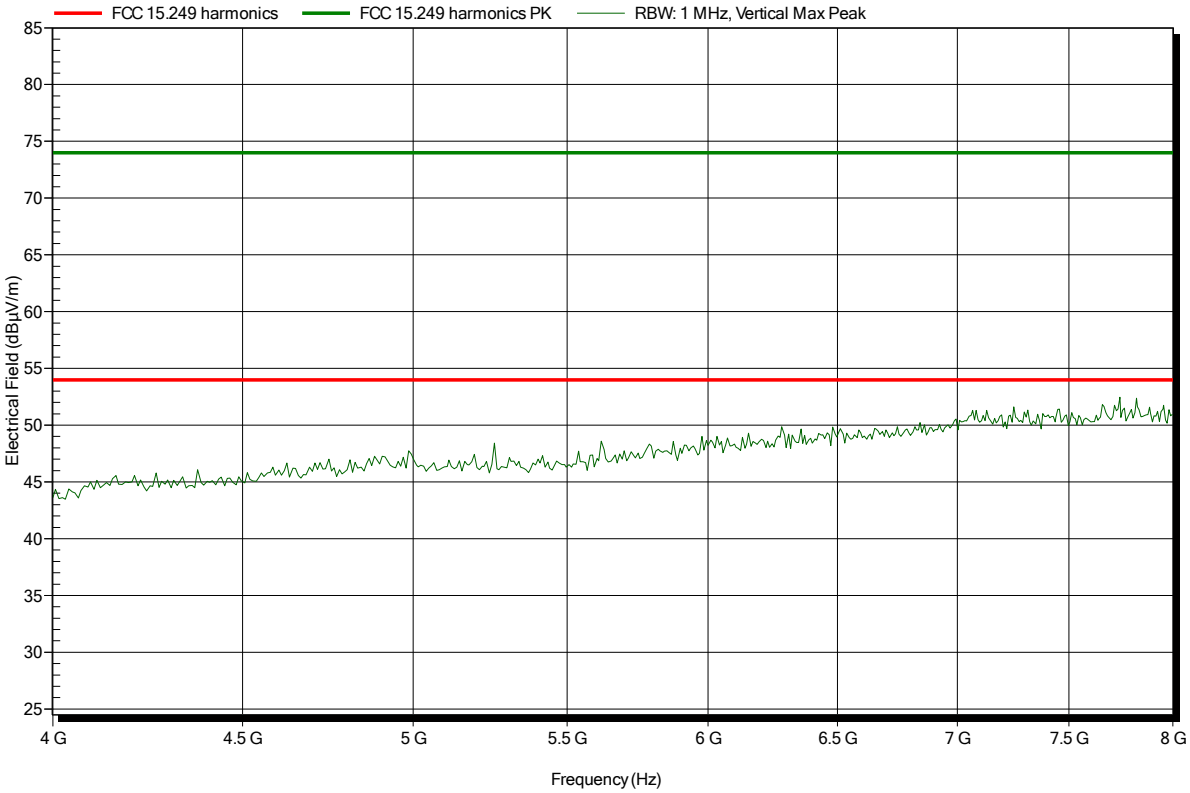


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 80

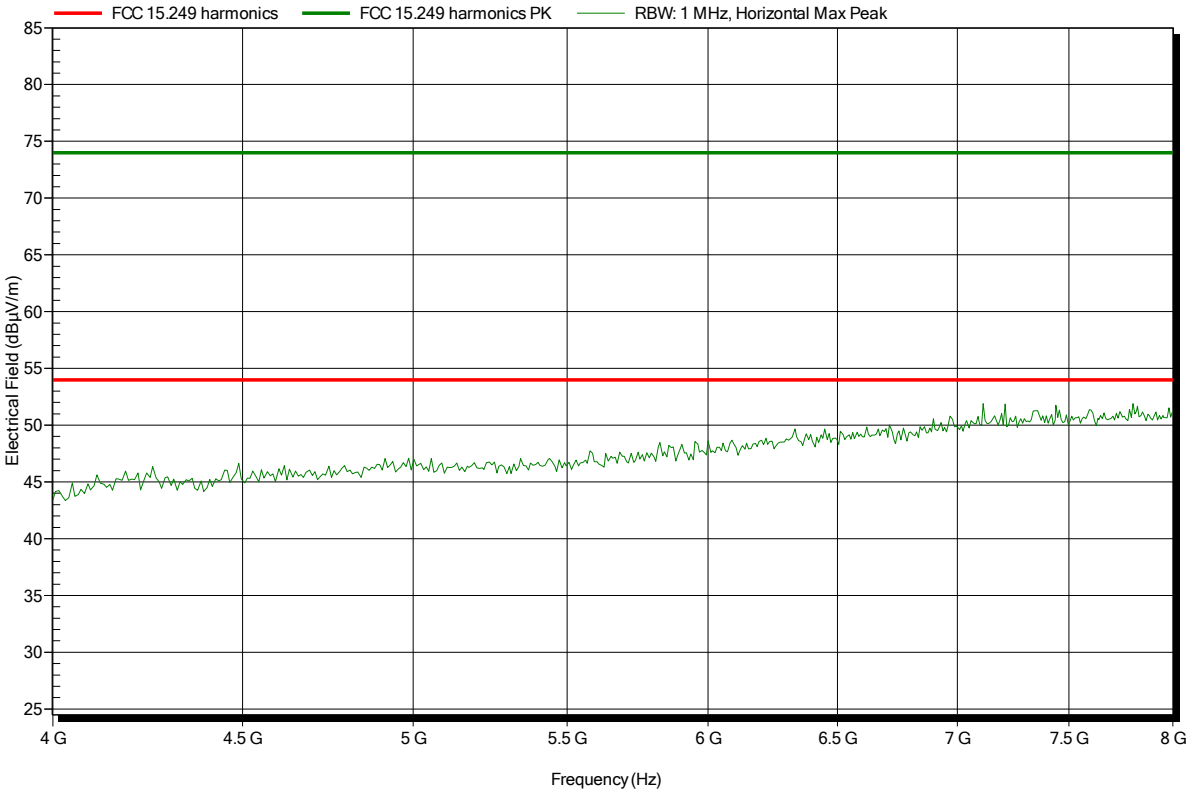


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 82

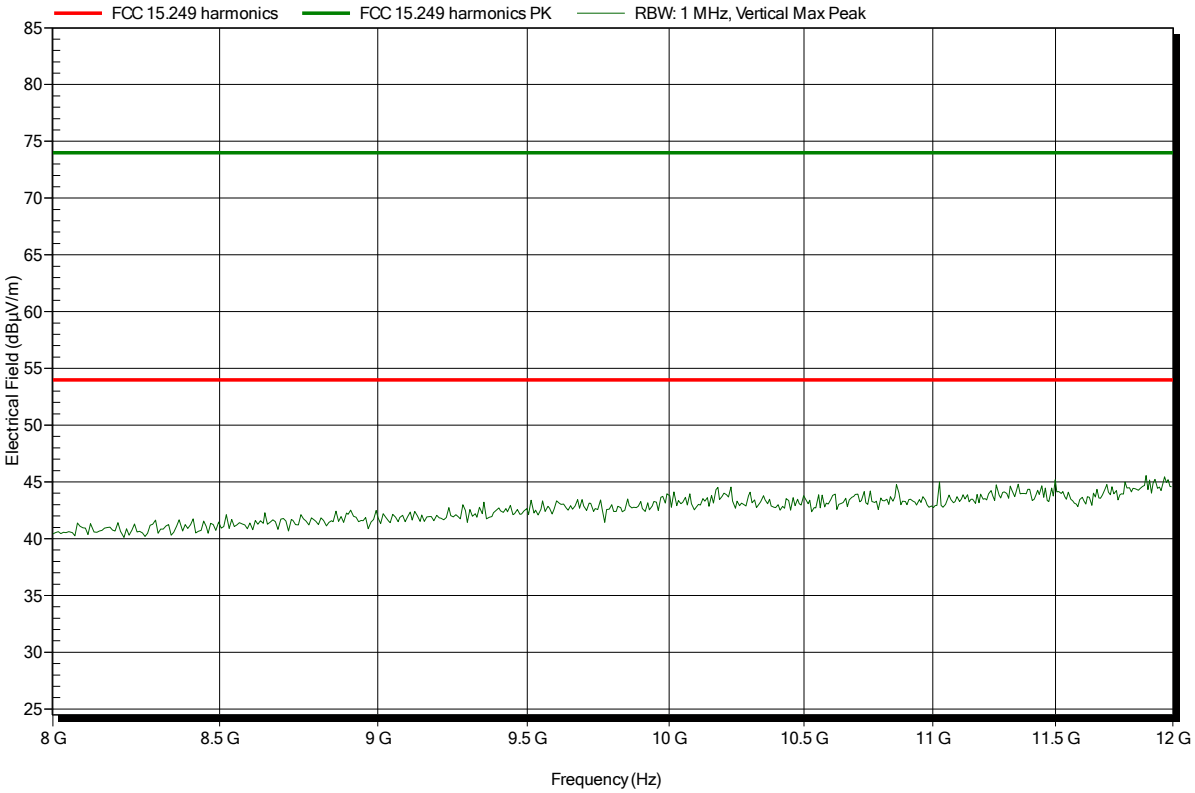


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 84

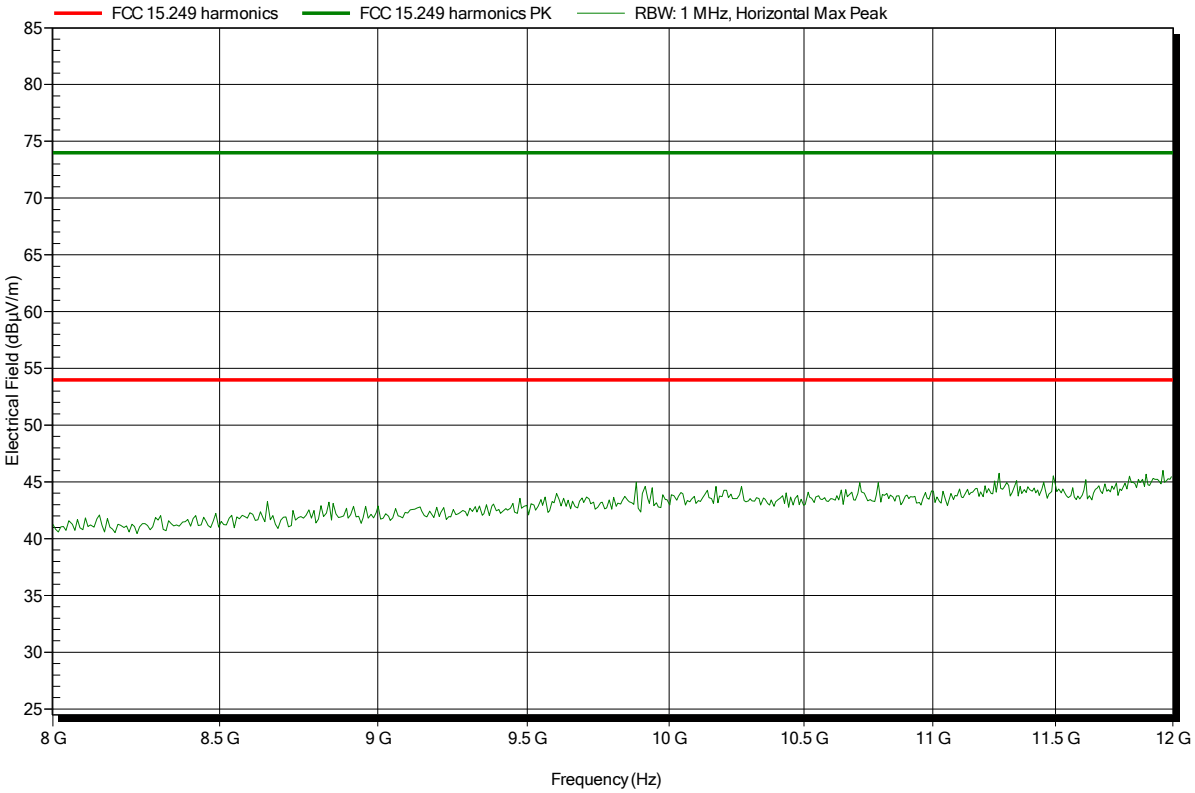


Spurious emissions according to FCC part 15 Subpart C § 15.249

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; SRD; 902.875 MHz; 2-FSK- Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 83



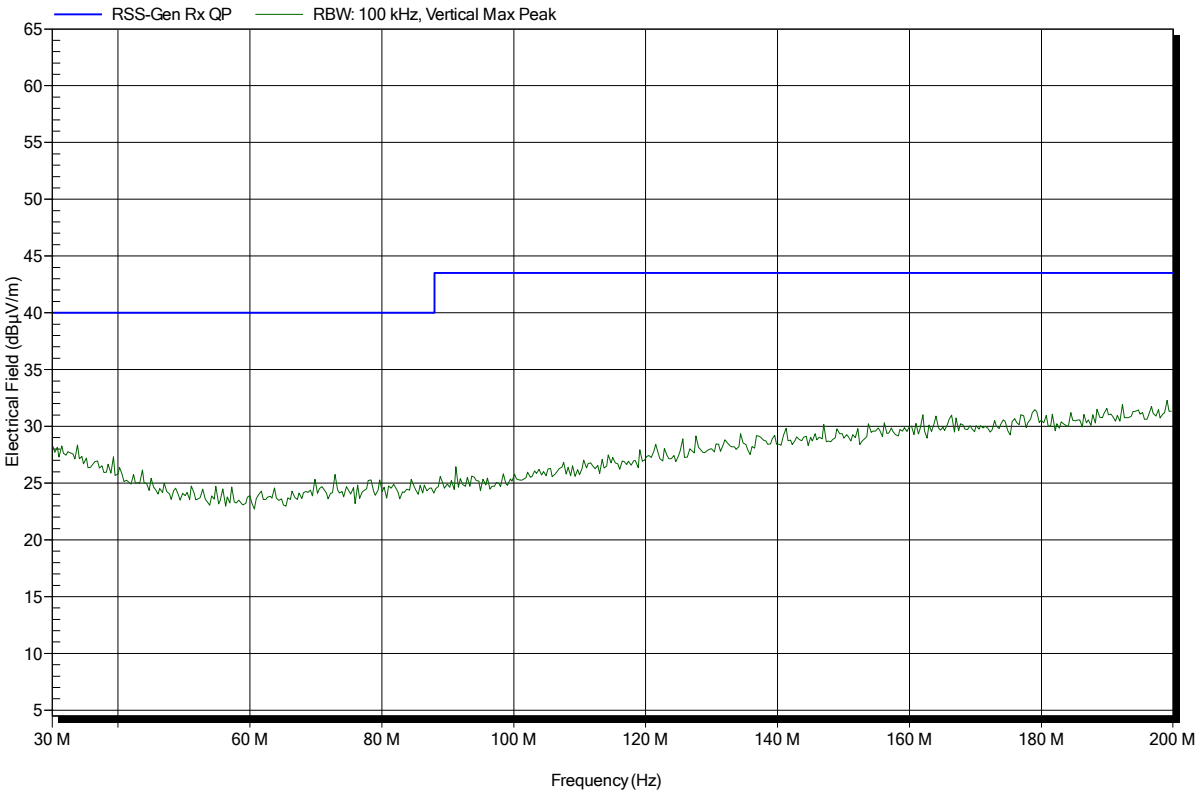
ANNEX B Receiver radiated spurious emissions

Spurious emissions according to IC RSS-Gen

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	RX; SRD; 902.875 MHz; RX-Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 75

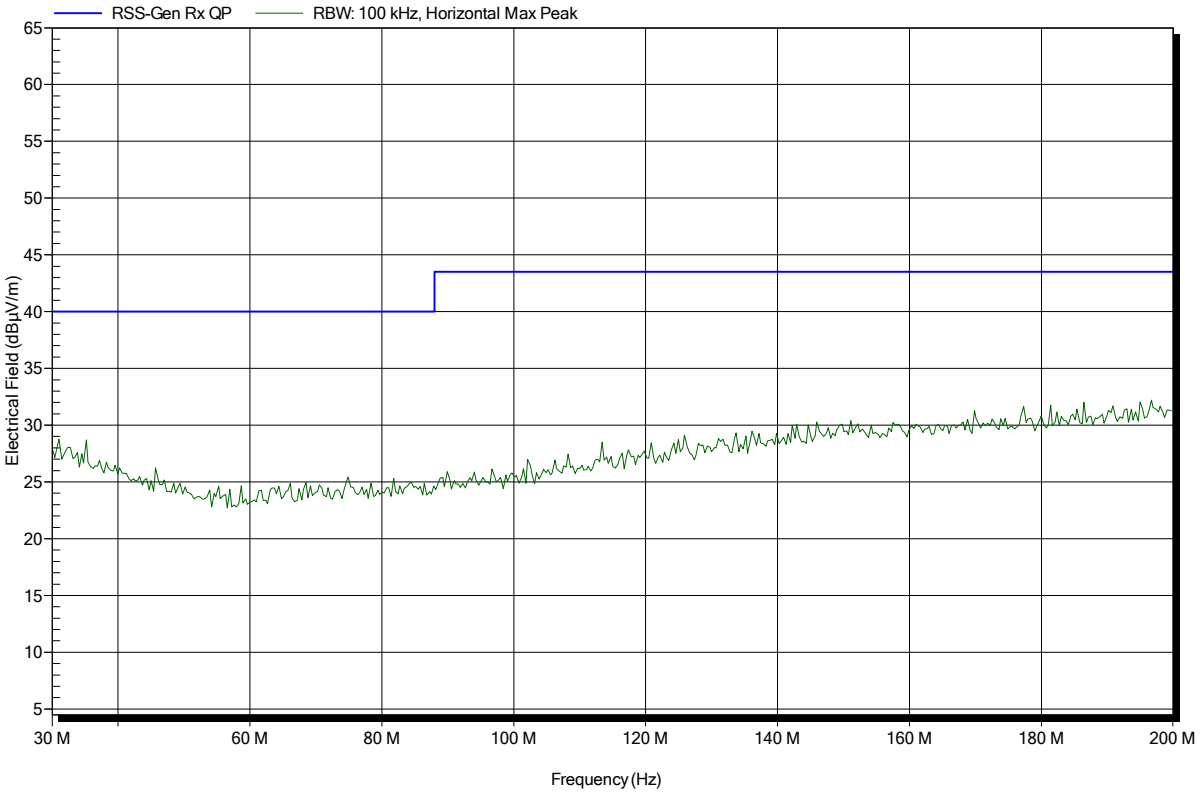


Spurious emissions according to IC RSS-Gen

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	RX; SRD; 902.875 MHz; RX-Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 76

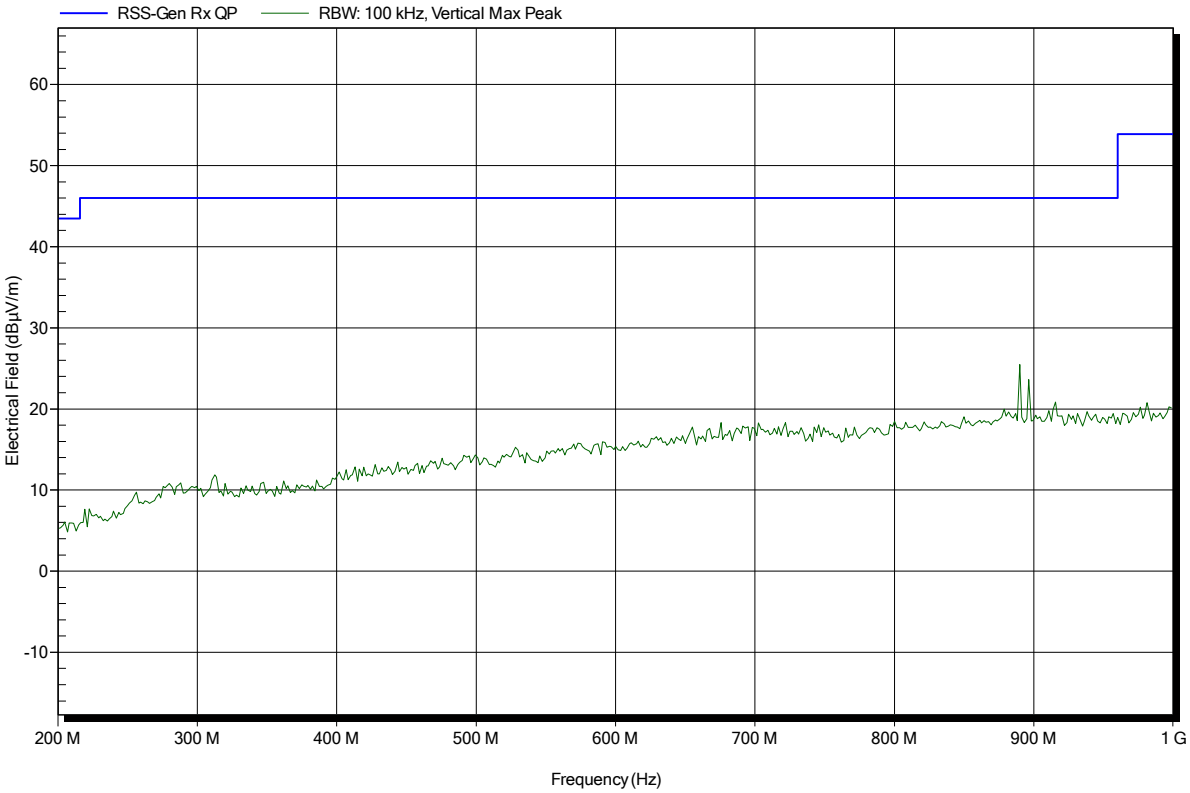


Spurious emissions according to IC RSS-Gen

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	RX; SRD; 902.875 MHz; RX-Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 73

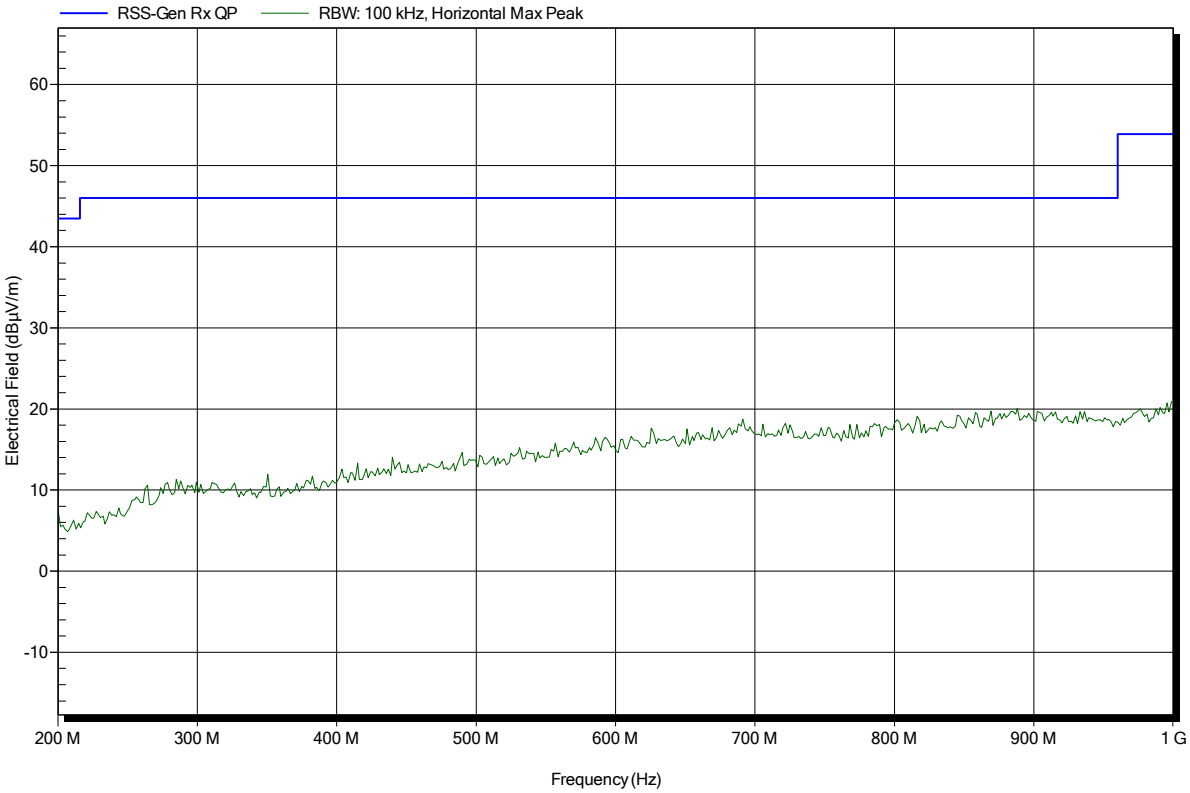


Spurious emissions according to IC RSS-Gen

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	RX; SRD; 902.875 MHz; RX-Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 74

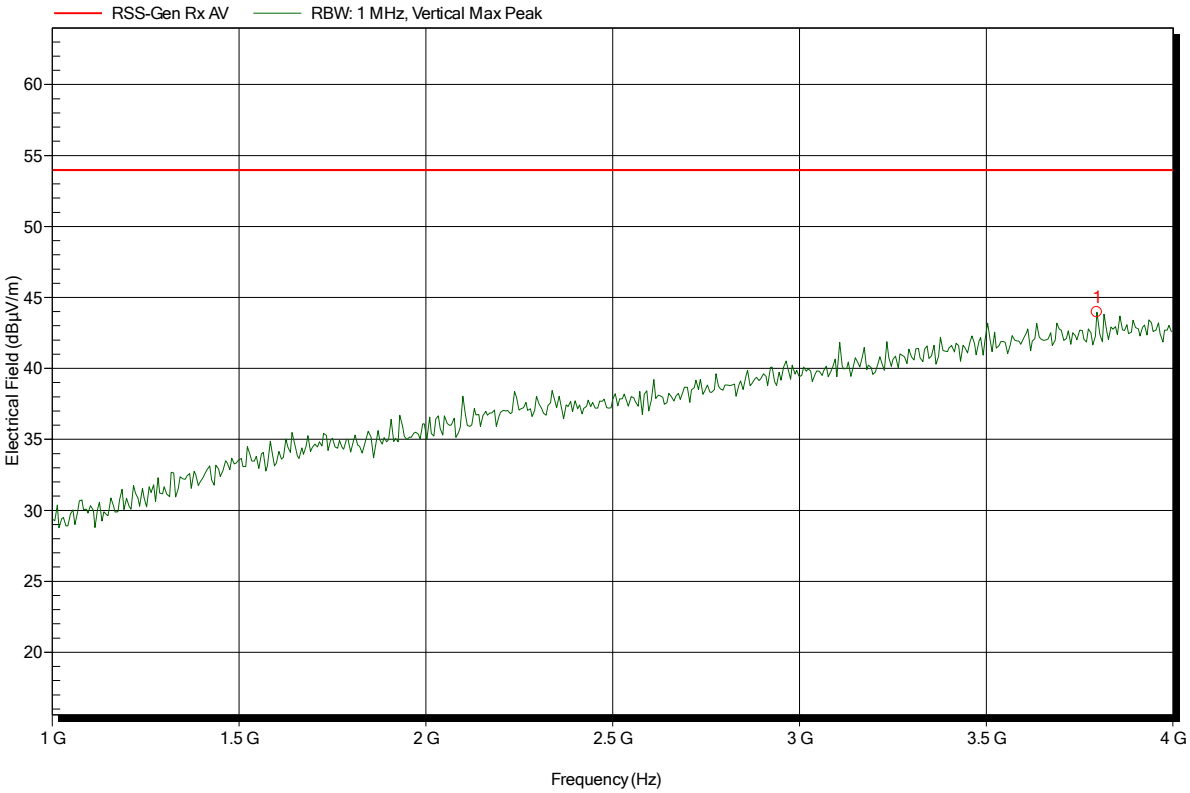


Spurious emissions according to IC RSS-Gen

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	3 m
Mode:	RX; SRD; 902.875 MHz; RX-Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 71



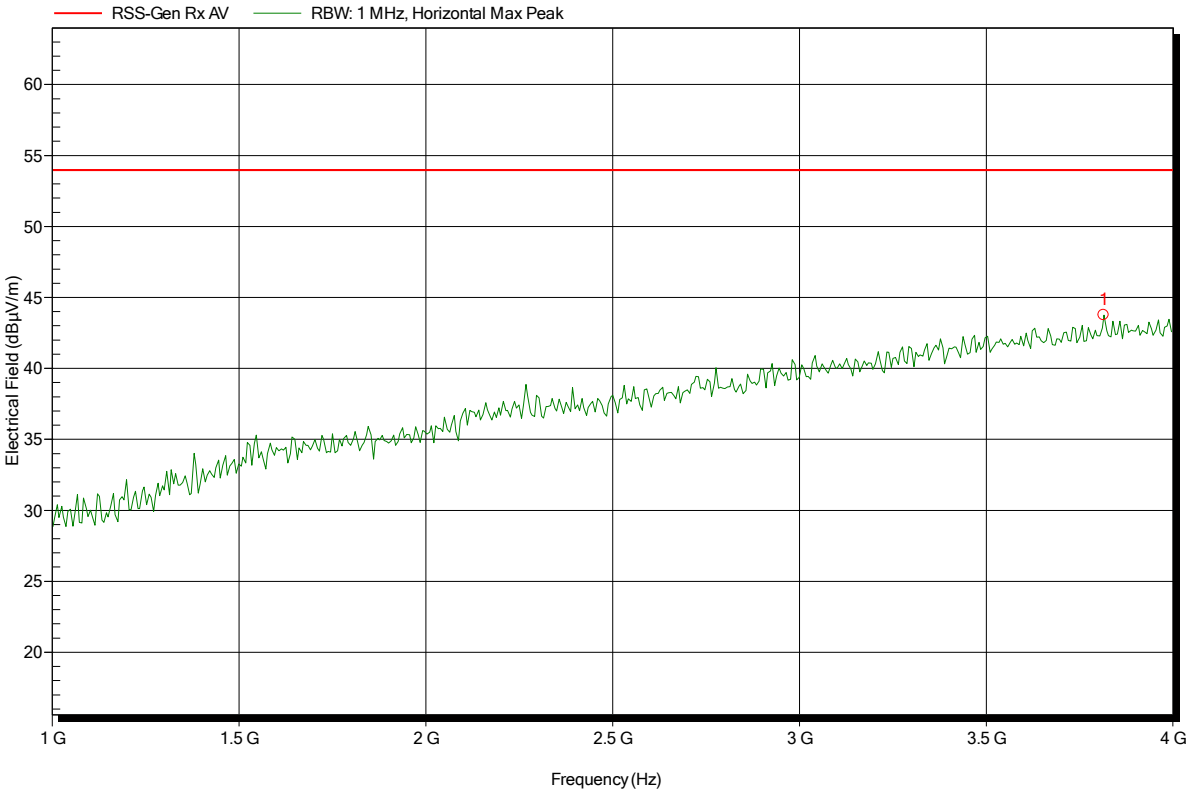
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.796 GHz	43.96 dBµV/m	53.98 dBµV/m	-10.02 dB	Pass

Spurious emissions according to IC RSS-Gen

Project number: G0M-1410-4241

Applicant:	Kieback und Peter GmbH & Co. KG
EUT Name:	Raumbediengerät
Model:	RBW322-FTL-902
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 2.4 VDC
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	RX; SRD; 902.875 MHz; RX-Mode
Test Date:	2014-12-10
Note:	EUT vertical

Index 72



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.814 GHz	43.75 dBµV/m	53.98 dBµV/m	-10.23 dB	Pass