


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-1510-5135-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	EMKA Beschlagteile GmbH & Co. KG
Address	Langenberger Straße 32 42551 Velbert GERMANY
Test specification:	
Standard..... :	47 CFR Part 15C RSS-210, Issue 8, 2010-12 RSS-Gen, Issue 4, 2014-11 ANSI C63.4:2014
Test scope..... :	complete Radio compliance test
Equipment under test (EUT):	
Product description	AgentE-radino AccessPoint USA/SGP
Model No.	3000-U981-02
Additional Model(s)	None
Brand Name(s)	EMKA
Hardware version	901.355A001
Firmware / Software version	350000092
	FCC-ID: 2AGCT-U98102 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 : 2015-10-27

Date (s) of performance of tests : 2015-10-27 - 2015-10-28

Compiled by : Burkhard Pudell

Tested by (+ signature) : Burkhard Pudell *B. Pudell*

(Responsible for Test)

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

(Head of Lab)

Date of issue : 2015-11-18

Total number of pages : 44

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	2015-11-18	Initial Release	

REPORT INDEX

1	EQUIPMENT (TEST ITEM) DESCRIPTION	5
1.1	Photos – Equipment External	6
1.2	Photos – Equipment internal	9
1.3	Photos – Test setup	12
1.4	Supporting Equipment Used During Testing	13
1.5	Test Modes	14
1.6	Test Equipment Used During Testing	15
1.7	Sample emission level calculation	16
2	RESULT SUMMARY	17
3	TEST CONDITIONS AND RESULTS	18
3.1	Test Conditions and Results – Occupied Bandwidth	18
3.2	Test Conditions and Results – Fundamental field strength emissions	20
3.3	Test Conditions and Results – Emissions radiated outside the specified frequency band	22
3.4	Test Conditions and Results – Receiver radiated emissions	24
3.5	Test Conditions and Results – AC power line conducted emissions	26
ANNEX A	Transmitter radiated spurious emissions	29
ANNEX B	Receiver radiated spurious emissions	37

1 Equipment (Test item) Description

Description	AgentE-radino AccessPoint USA/SGP	
Model	3000-U981-02	
Additional Model(s)	None	
Brand Name(s)	EMKA	
Serial number	None	
Hardware version	901.355A001	
Software / Firmware version	350000092	
FCC-ID	2AGCT-U98102	
IC	N/A	
Equipment type	End product	
Radio type	Transceiver	
Radio technology	custom	
Operating frequency range	922.5 MHz	
Assigned frequency band	902 - 928 MHz	
Frequency range	F _{MID}	922.5 MHz
Spreading	None	
Modulations	GFSK	
Number of channels	1	
Channel spacing	None	
Number of antennas	1	
Antenna	Type	external dedicated
	Model	ANT-868-CW-RAH
	Manufacturer	Linx Technologies
	Gain	0.6 (peak) dBi
Manufacturer	EMKA Beschlagteile GmbH & Co. KG Langenberger Straße 32 42551 Velbert GERMANY	
Power supply	V _{NOM}	12 - 24 VDC
	V _{MIN}	12 VDC
	V _{MIN}	24 VDC
AC/DC-Adaptor	Model	SYS1308-2424-W3E (changed polarity)
	Vendor	Sunny
	Input	100 - 240V AC
	Output	24

1.4 Supporting Equipment Used During Testing

Product Type*	Device	Manufacturer	Model No.	Comments
None				
<p>*Note: Use the following abbreviations:</p> <p>AE : Auxiliary/Associated Equipment, or</p> <p>SIM : Simulator (Not Subjected to Test)</p> <p>CABL : Connecting cables</p>				

1.5 Test Modes

Mode #	Description	
Single	General conditions:	EUT powered by AC/DC - Adapter
	Radio conditions:	Mode = standalone transmit Modulation = GFSK Power level = Maximum
Receive	General conditions:	EUT powered by AC/DC - Adapter
	Radio conditions:	Mode = standalone receive Modulation = GFSK

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	2015-02	2016-02

Field strength emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Semi-anechoic chamber	Frankonia	AC 1	EF00062	-	-
Spectrum Analyzer	R&S	FSIQ26	EF00242	2015-04	2016-04
Biconical Antenna	R&S	HK 116	EF00012	2013-02	2016-02
LPD Antenna	R&S	HL 223	EF00187	2014-03	2017-03
LPD Antenna	R&S	HL 025	EF00327	2015-10	2018-10

AC powerline conducted emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
AMN	R&S	ESH2-Z5	EF00182	2014-11	2016-11
EMI Test Receiver	R&S	ESCS 30	EF00295	2014-10	2015-10

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 dB μ V. 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:

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

Net:

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

Limit:

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

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

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:

$$\begin{array}{rclcl} \text{Reading} & + & \text{AF} & = & \text{Net Reading} & : & \text{Net reading - FCC limit} & = & \text{Margin} \\ 21.5 \text{ dB}\mu\text{V} & + & 26 \text{ dB} & = & 47.5 \text{ dB}\mu\text{V/m} & : & 47.5 \text{ dB}\mu\text{V/m} - 57.0 \text{ dB}\mu\text{V/m} & = & -9.5 \text{ dB} \end{array}$$

2 Result Summary

FCC 47 CFR Part 15C, IC RSS-210				
Product Specific Standard Section	Requirement – Test	Reference Method	Result	Remarks
RSS-Gen 6.6	Occupied Bandwidth	RSS-Gen 6.6	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 7.1	Receiver radiated spurious emissions	ANSI C63.4	PASS	
FCC § 15.207 IC RSS-Gen 8.8	AC power line conducted emissions	ANSI C63.4	PASS	
Remarks:				

3 Test Conditions and Results

3.1 Test Conditions and Results – Occupied Bandwidth

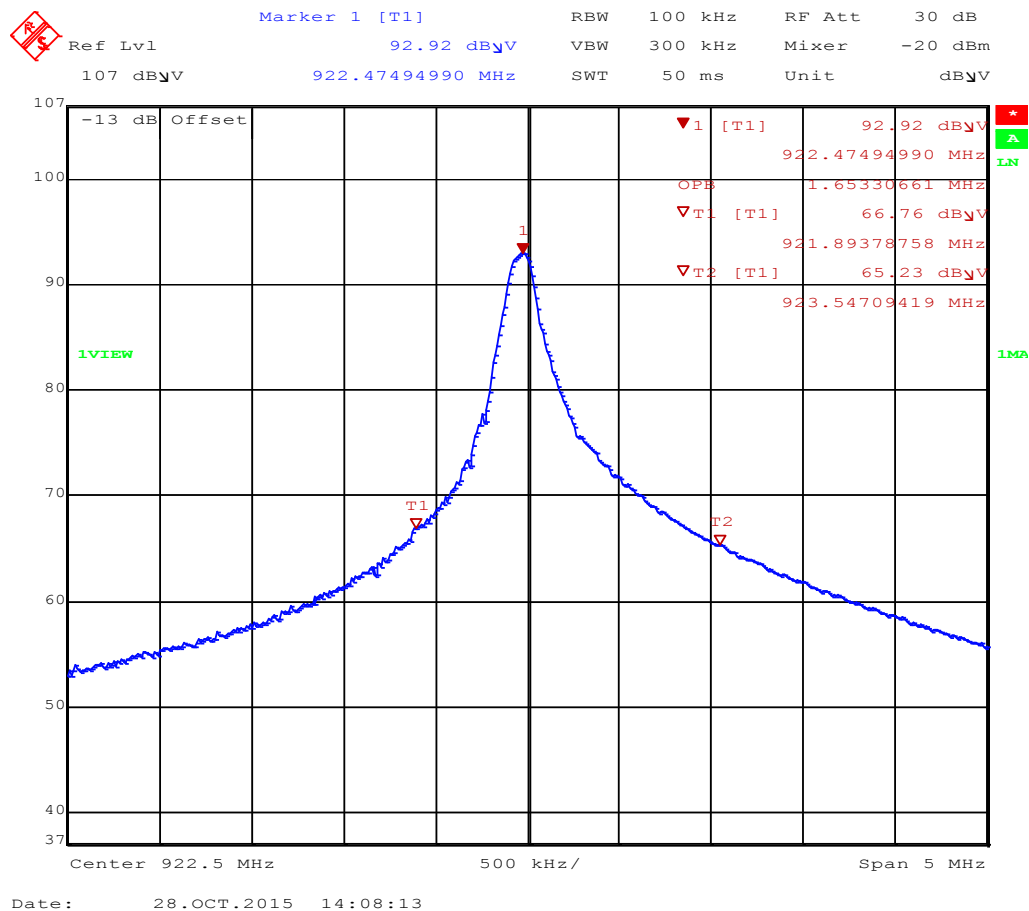
Occupied Bandwidth acc. to IC RSS-Gen			Verdict: PASS
Test according to measurement reference	Reference Method		
	RSS-Gen 6.6		
Test frequency range	Tested frequencies		
	F _{MID}		
EUT test mode	Single		
Limits			
None (Informational only)			
Test setup			
<div><div>Spectrum Analyzer</div><div>EUT</div></div>			
Test procedure			
<div>1. EUT set to test mode (Communication tester is used if needed)</div> <div>2. Span set to at least twice the emission spectrum</div> <div>3. Resolution bandwidth set to 1 % of span</div> <div>4. Occupied Bandwidth (99 %) measurement with spectrum analyzer built in measurement function</div>			
Test results			
Channel	Frequency [MHz]	Occupied Bandwidth [kHz]	
F _{MID}	922.5	1653	
Comments: Measurement is applicable to all variants			

Occupied Bandwidth - F_{MID}

Occupied Bandwidth acc. to RSS-Gen

Project Number: G0M-1510-5135

Applicant: In-Circuit GmbH
EUT Name: Access Point
Model: 3000-U981-02
Test Site: Eurofins Product Service GmbH
Operator: Burkhard Pudell
Test Conditions: Tnom / Vnom
Mode: SRD / 922.5 MHz / GFSK
Test Date: 2015-10-28
Verdict: NONE (INFORMATION ONLY)
Note 1: A spectrum analyzer with an integrated 99% power bandwidth function is used
Note 2: OBW = 1.653 MHz



Test Report No.: G0M-1510-5135-TFC249DT-V01

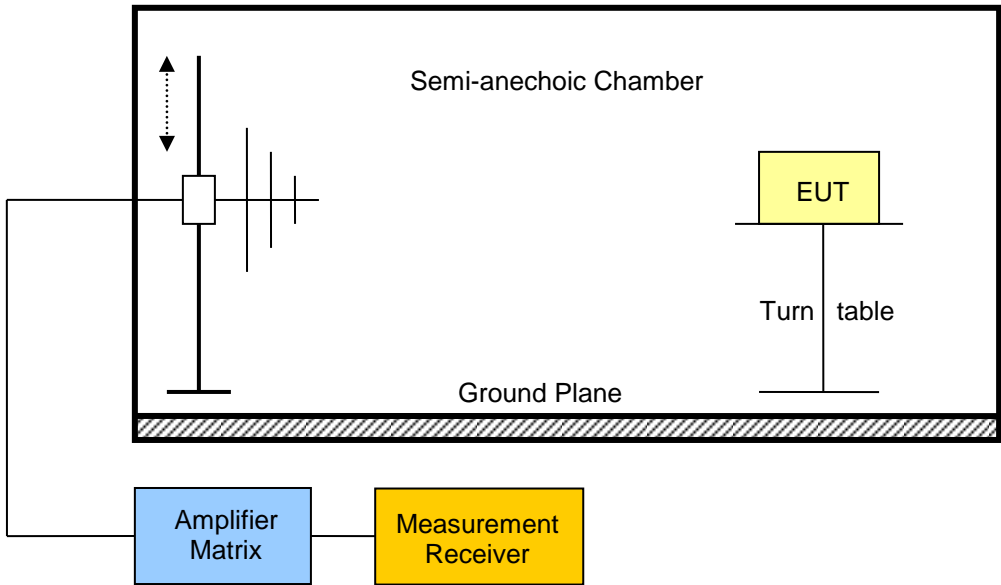
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

3.2 Test Conditions and Results – Fundamental field strength emissions

Field strength emissions acc. to 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	Single			
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.

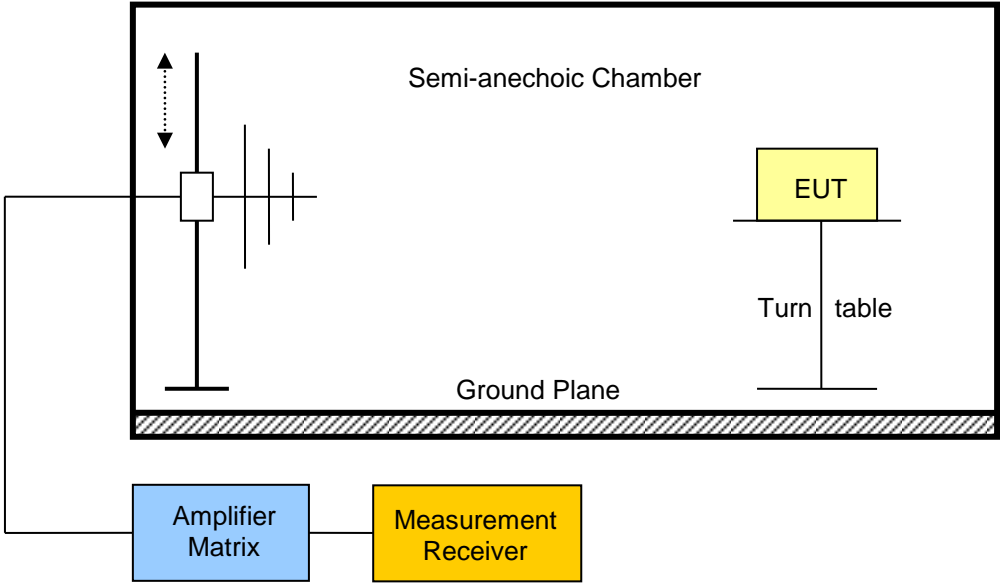
Below 1GHz a CISPR quasi-peak detector is used.

Test setup	
	

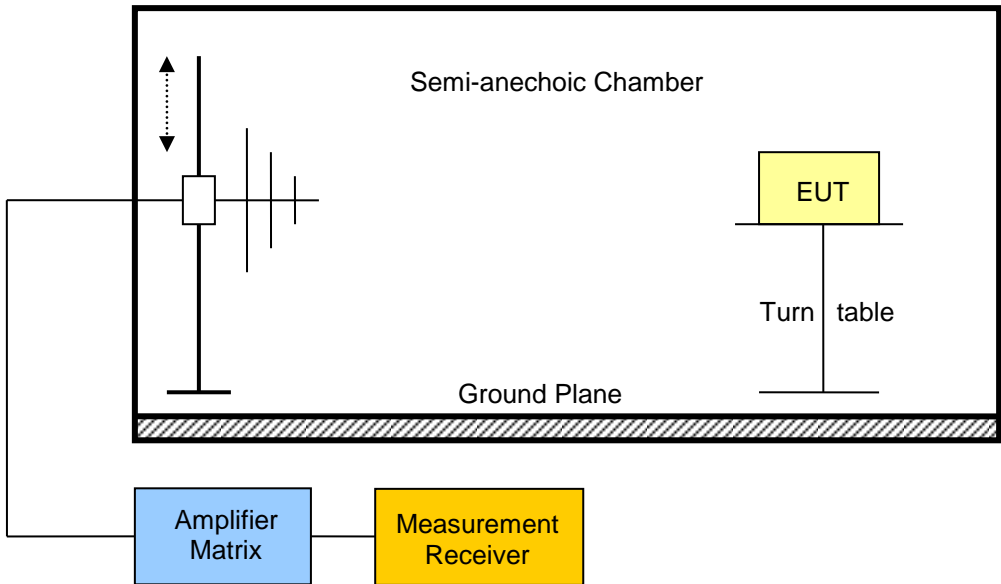
Test procedure								
<ol style="list-style-type: none"> 1. EUT set to test mode 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peak detector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to maximum emission levels 								
Test results								
Channel	Frequency [MHz]	Emission [MHz]	Level [db μ V/m]	Detector	Pol.	Limit [db μ V/m]	Limit distance [m]*	Margin [dB]
F _{MID}	922.5	922.488	87.53	qp	ver	94	3	-6.47
F _{MID}	922.5	922.488	92.43	qp	hor	94	3	-1.57
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. to 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 – 10 th hamonic			
EUT test mode	Single			
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								
<ol style="list-style-type: none"> EUT set to test mode Span it set according to measurement range 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 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]
F _{MID}	922.5	928	40.45	pk	ver	46.00	3	-05.55
F _{MID}	922.5	928	43.53	pk	hor	46.00	3	-02.47
F _{MID}	922.5	1840	51.07	pk	ver	74.00	3	-22.93
F _{MID}	922.5	1845	58.28	pk	hor	74.00	3	-15.72
F _{MID}	922.5	1845	53.71	avg	hor	54.00	3	-00.29
F _{MID}	922.5	3688	50.55	pk	ver	74.00	3	-23.45
F _{MID}	922.5	3690	56.30	pk	hor	74.00	3	-17.70
F _{MID}	922.5	3690	50.43	avg	hor	54.00	3	-03.57
F _{MID}	922.5	4608	45.17	pk	ver	74.00	3	-28.83
F _{MID}	922.5	5528	46.60	pk	ver	74.00	3	-27.40
Comments: * Physical distance between EUT and measurement antenna.								

3.4 Test Conditions and Results – Receiver radiated emissions

Receiver radiated emissions acc. to 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 – 5 th Harmonic			
EUT test mode	Receive			
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]	Level [db μ V/m]	Detector	Pol.	Limit [db μ V/m]	Limit distance [m]*	Margin [dB]
F _{MID}	922.5	167.7	33.98	pk	hor	43.50	3	-09.52
F _{MID}	922.5	3898	44.55	pk	hor	53.98	3	-09.43
F _{MID}	922.5	7456	51.70	pk	ver	53.98	3	-02.28
F _{MID}	922.5	7704	52.59	pk	hor	53.98	3	-01.39
Comments: * Physical distance between EUT and measurement antenna.								

3.5 Test Conditions and Results – AC power line conducted emissions

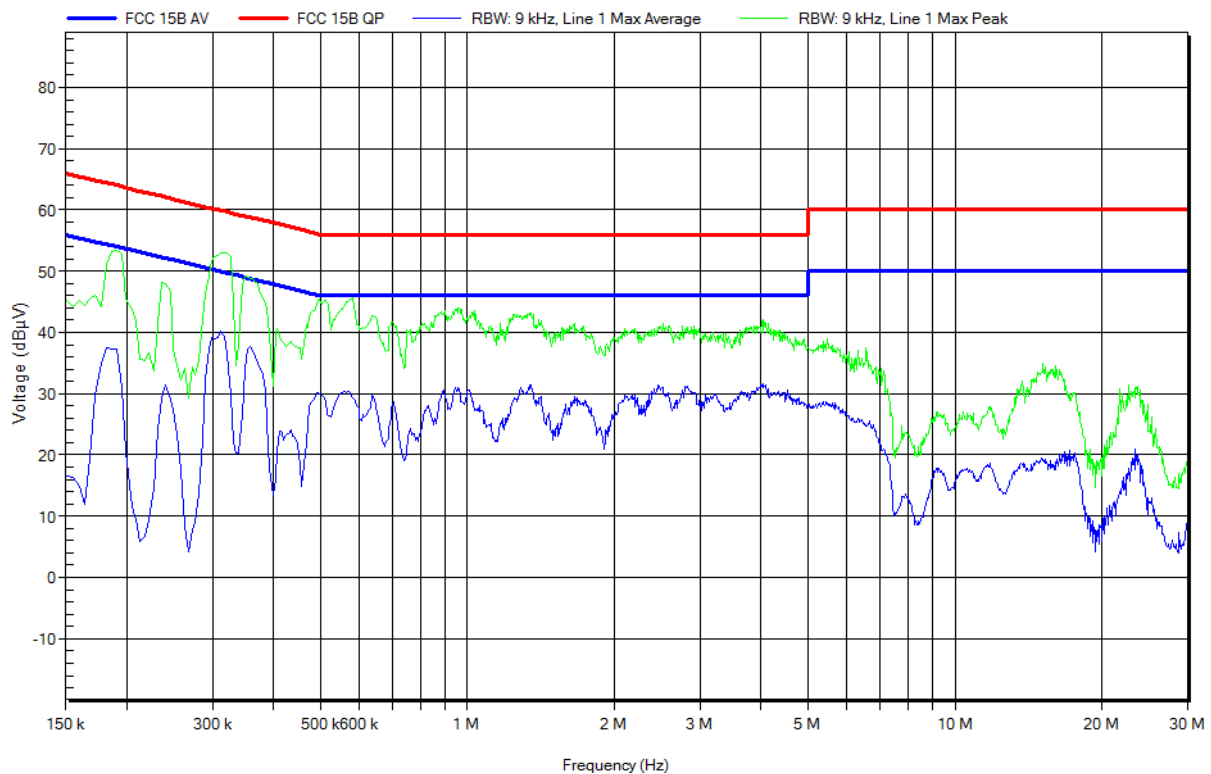
Power line conducted emissions acc. to FCC 47 CFR 15.207 / IC RSS-Gen				Verdict: PASS	
Test according referenced standards		Reference Method			
		ANSI C63.4			
Fully configured sample scanned over the following frequency range		Frequency range			
		0.15 MHz to 30 MHz			
Points of Application		Application Interface			
AC Mains		LISN			
EUT test mode		AC-Powerline			
Limits and results					
Frequency [MHz]	Quasi-Peak [dBµV]	Result	Average [dBµV]	Result	
0.15 to 5	66 to 56*	PASS	56 to 46*	PASS	
0.5 to 5	56	PASS	46	PASS	
5 to 30	60	PASS	50	PASS	
Comments:					
* Limit decreases linearly with the logarithm of the frequency.					

Conducted Emissions
EMI voltage test in the ac-mains according to FCC Part 15b

Project number: G0M-1510-5135

Applicant: EMKA Beschlagteile GmbH & Co. KG
 EUT Name: Accesspoint 922.5 MHz, Access Unit Wireless USA/Canada
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 24°C, Unom: 12 VDC via RS485
 LISN: ESH2-Z5 L
 Mode: RS485 + CAN + RX/TX
 Test Date: 2015-11-06
 Note:

Index 9

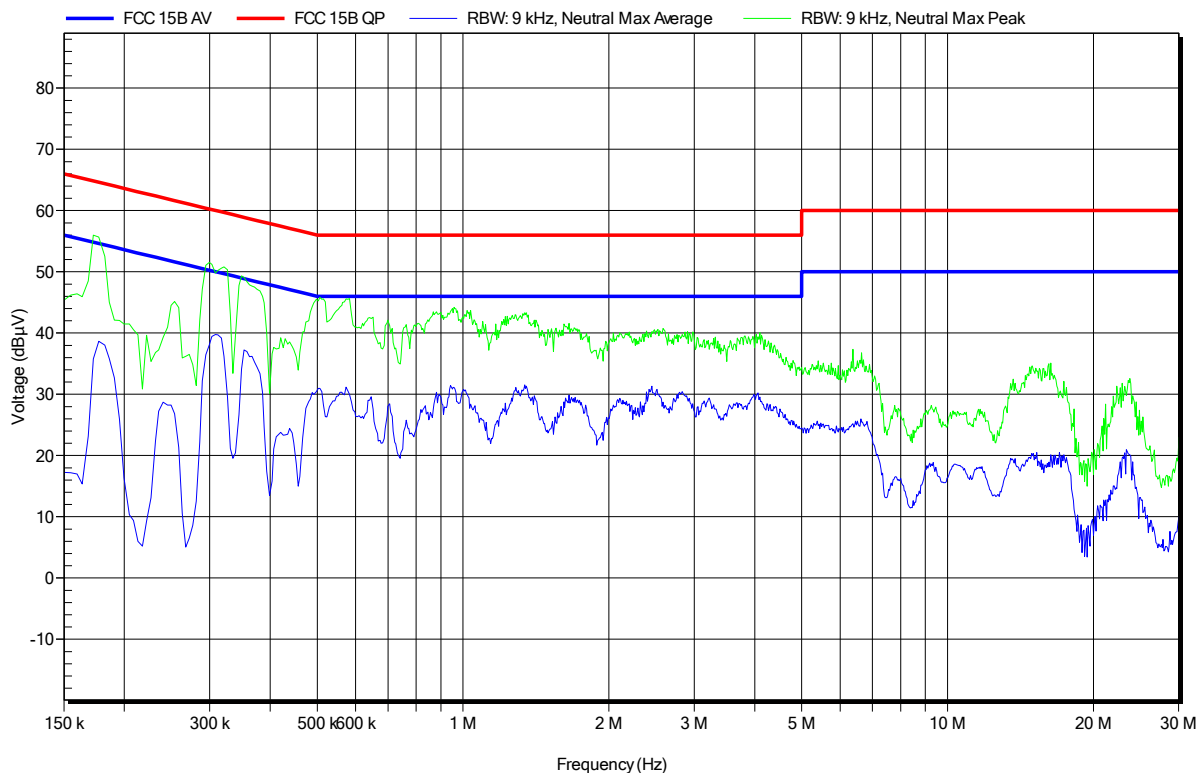


Conducted Emissions
EMI voltage test in the ac-mains according to FCC Part 15b

Project number: G0M-1510-5135

Applicant: EMKA Beschlagteile GmbH & Co. KG
 EUT Name: Accesspoint 922.5 MHz, Access Unit Wireless USA/Canada
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Belz
 Test Conditions: Tnom: 24°C, Unom: 12 VDC via RS485
 LISN: ESH2-Z5 N
 Mode: RS485 + CAN + RX/TX
 Test Date: 2015-11-06
 Note:

Index 8



Test Report No.: G0M-1510-5135-TFC249DT-V01

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

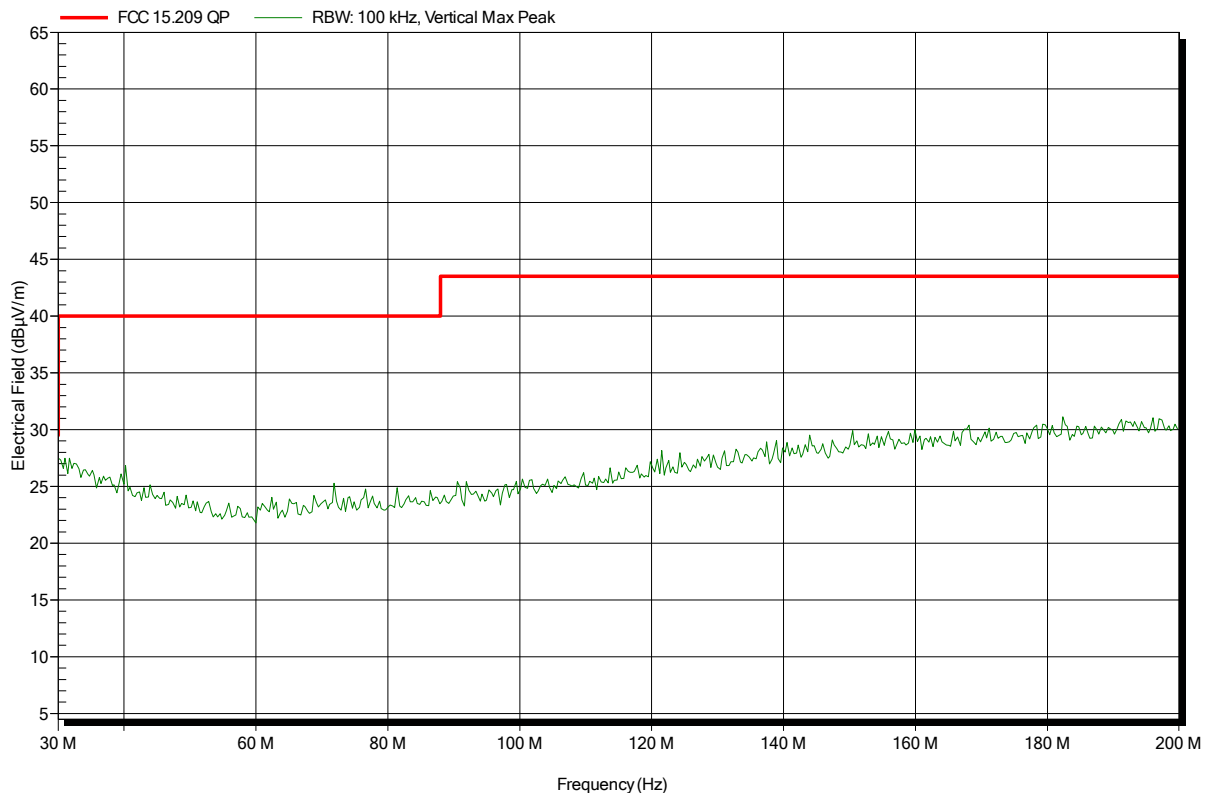
ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant:	In-Circuit GmbH
EUT Name:	AgentE-radino AccessPoint USA/SGP
Model:	3000-U981-02
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 24.0 V DC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; SRD; 922.5 MHz; GFSK, TX-mode
Test Date:	2015-10-27
Note:	EUT horizontal; ANT ver

Index 41

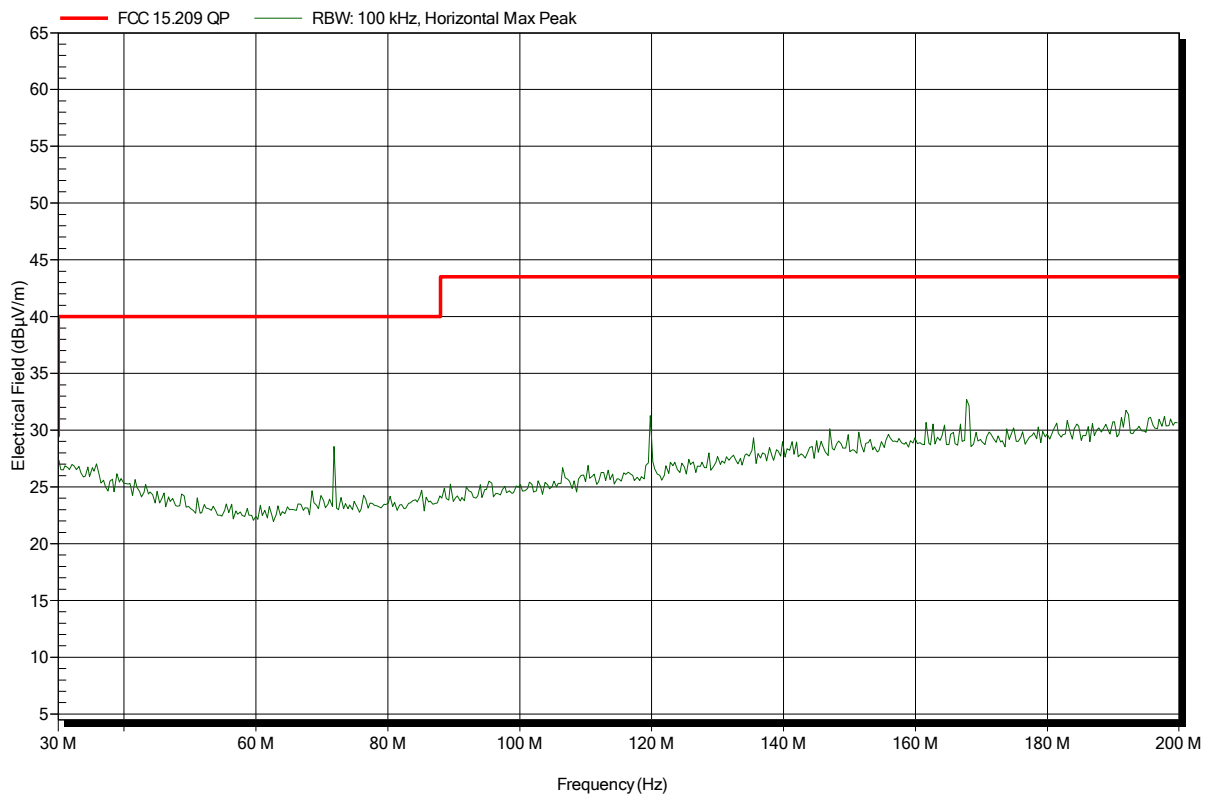


Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: TX; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 42

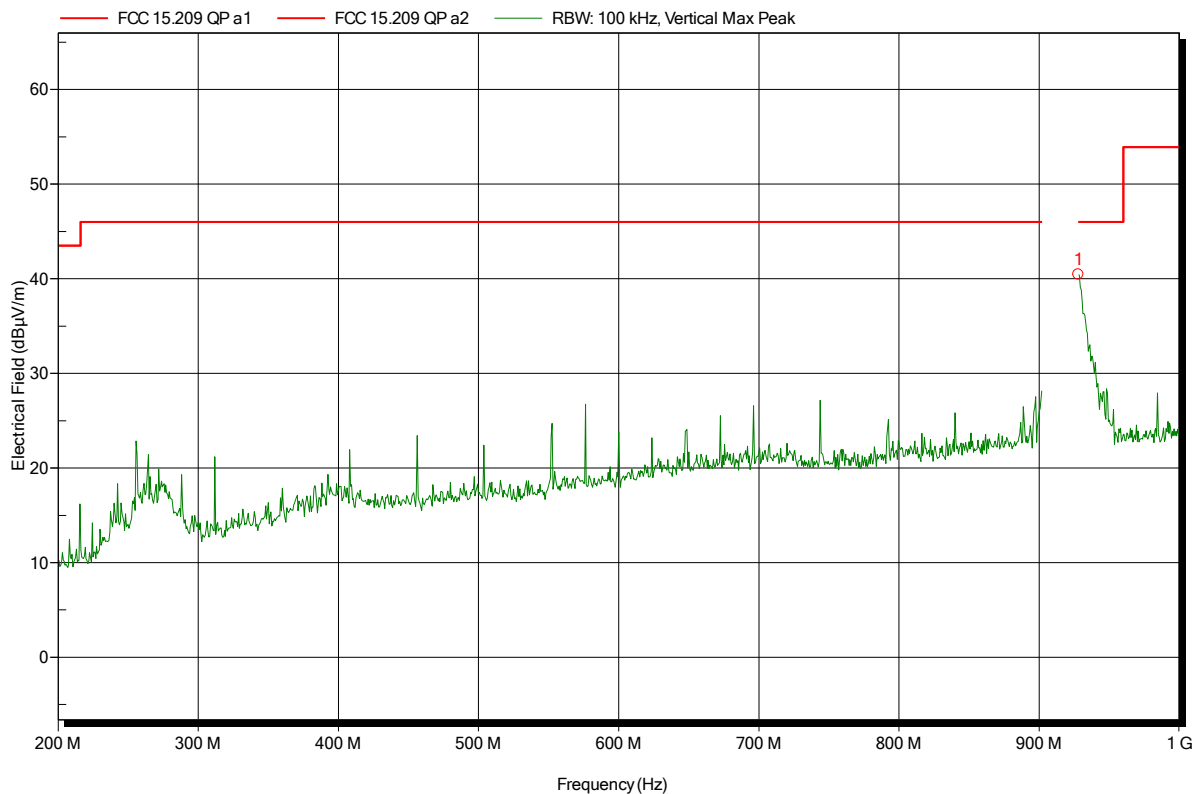


Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 30



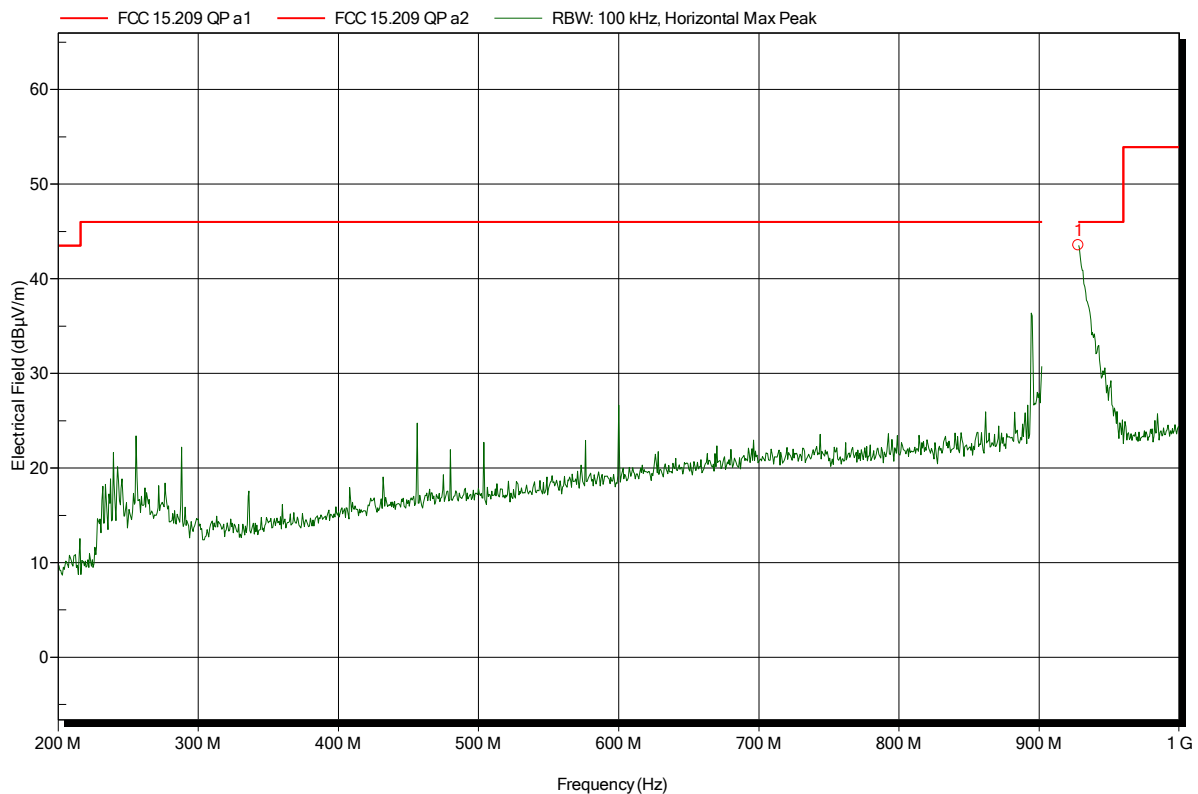
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
928 MHz	40.45 dBµV/m	46 dBµV/m	-5.55 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 29



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
928.072 MHz	43.53 dBµV/m	46 dBµV/m	-2.47 dB	Pass

Test Report No.: G0M-1510-5135-TFC249DT-V01

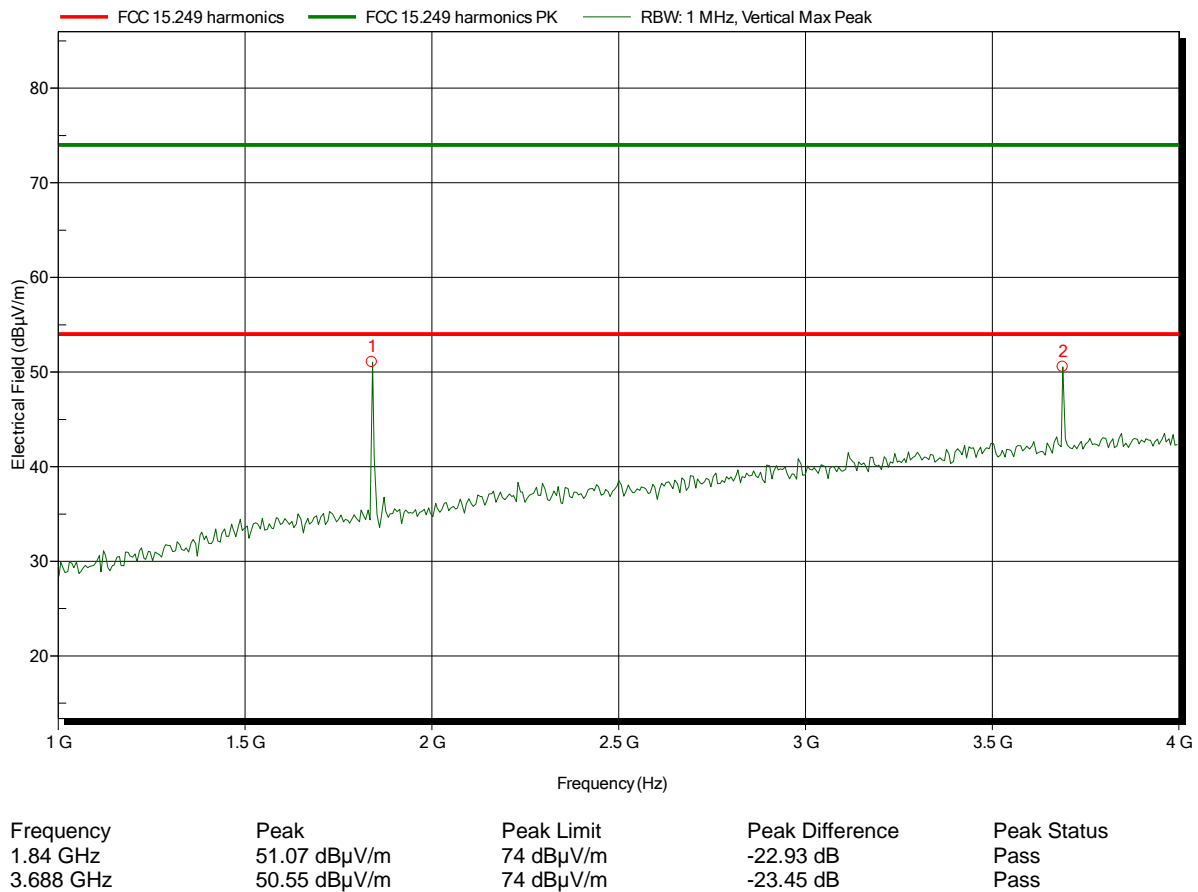
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Order number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: Tx; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 31



Test Report No.: G0M-1510-5135-TFC249DT-V01

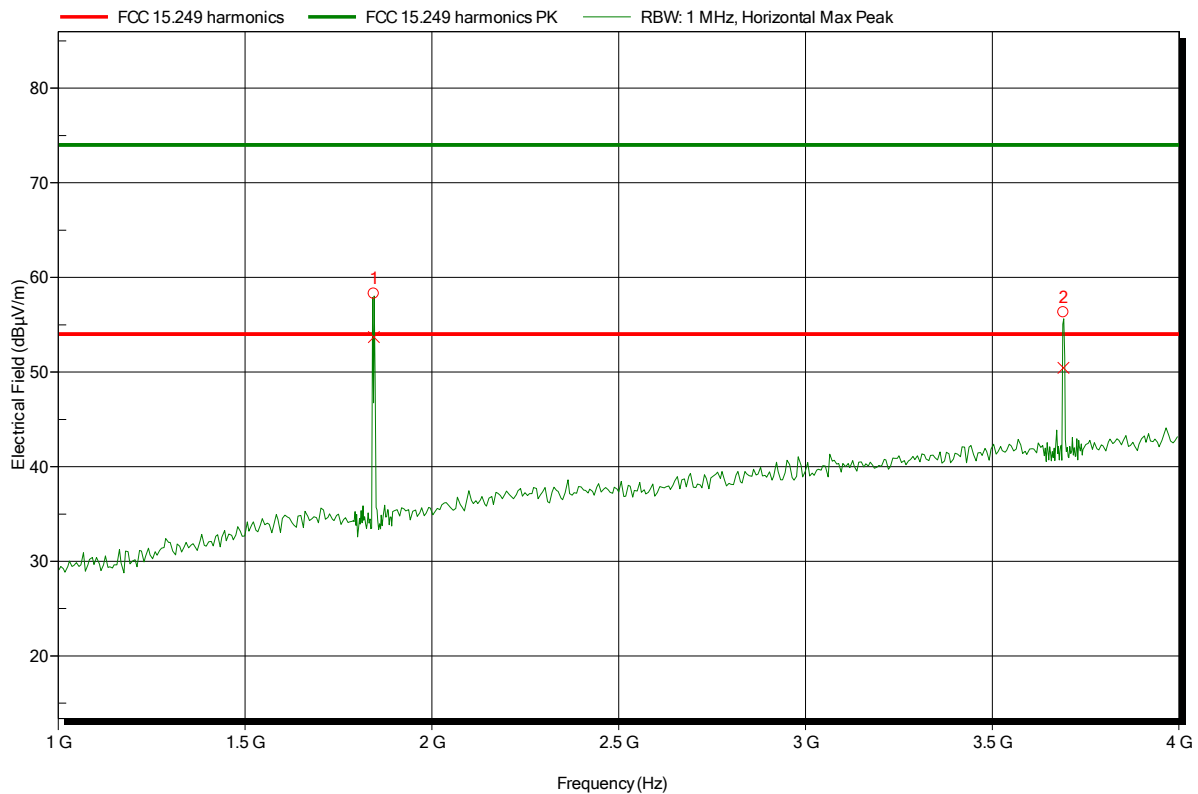
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Order number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: Tx; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 32



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.845 GHz	58.28 dBµV/m	74 dBµV/m	-15.72 dB	Pass
3.69 GHz	56.3 dBµV/m	74 dBµV/m	-17.7 dB	Pass

Frequency	Average	Average Limit	Average Difference	Average Status
1.845 GHz	53.71 dBµV/m	54 dBµV/m	-0.29 dB	Pass
3.69 GHz	50.43 dBµV/m	54 dBµV/m	-3.57 dB	Pass

Test Report No.: G0M-1510-5135-TFC249DT-V01

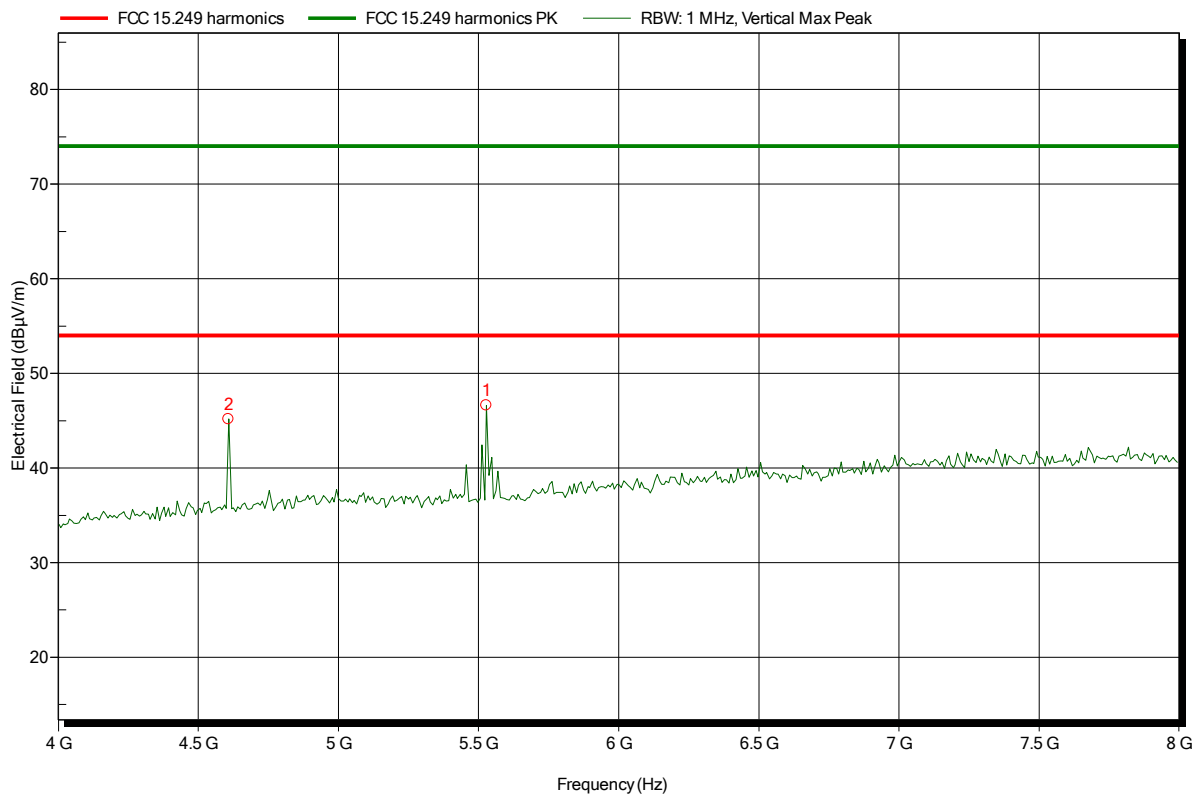
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 35



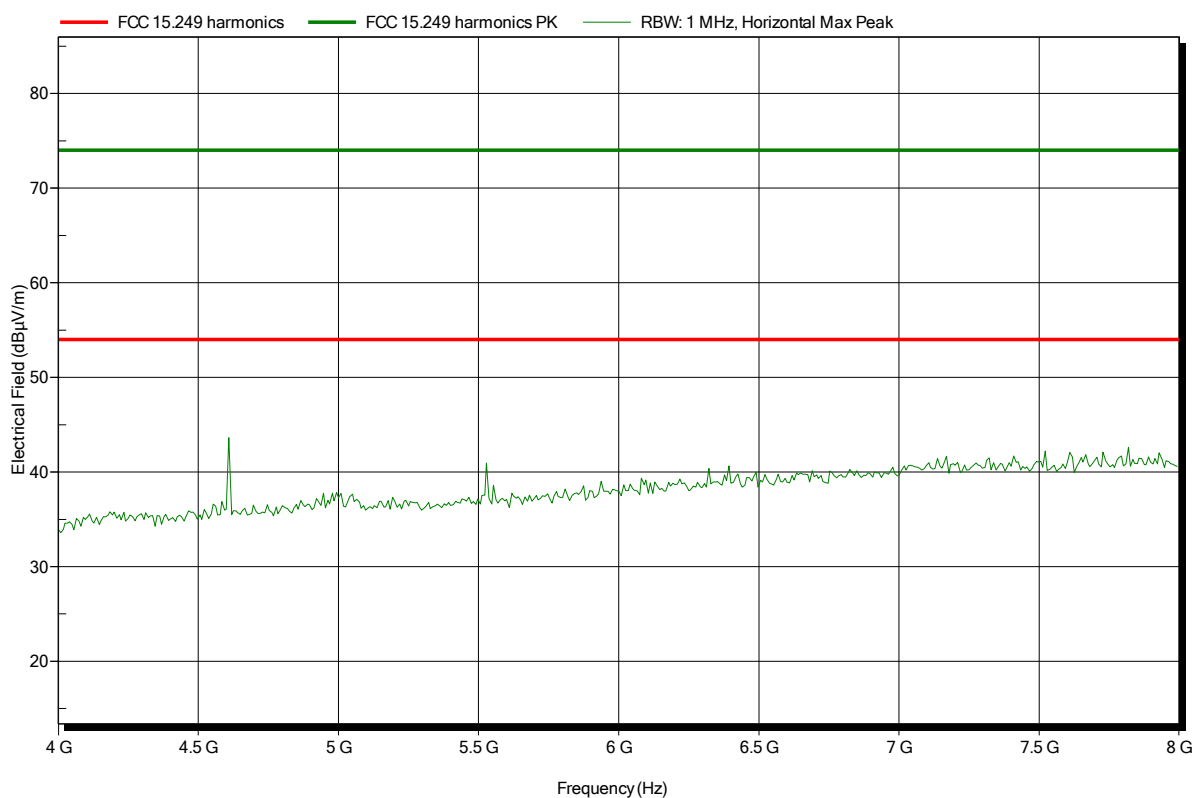
Frequency	Peak	Peak Limit	Peak Difference	Status
4.608 GHz	45.17 dBµV/m	74 dBµV/m	-28.83 dB	Pass
5.528 GHz	46.6 dBµV/m	74 dBµV/m	-27.4 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.249, IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; SRD; 922.5 MHz; GFSK, TX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 36



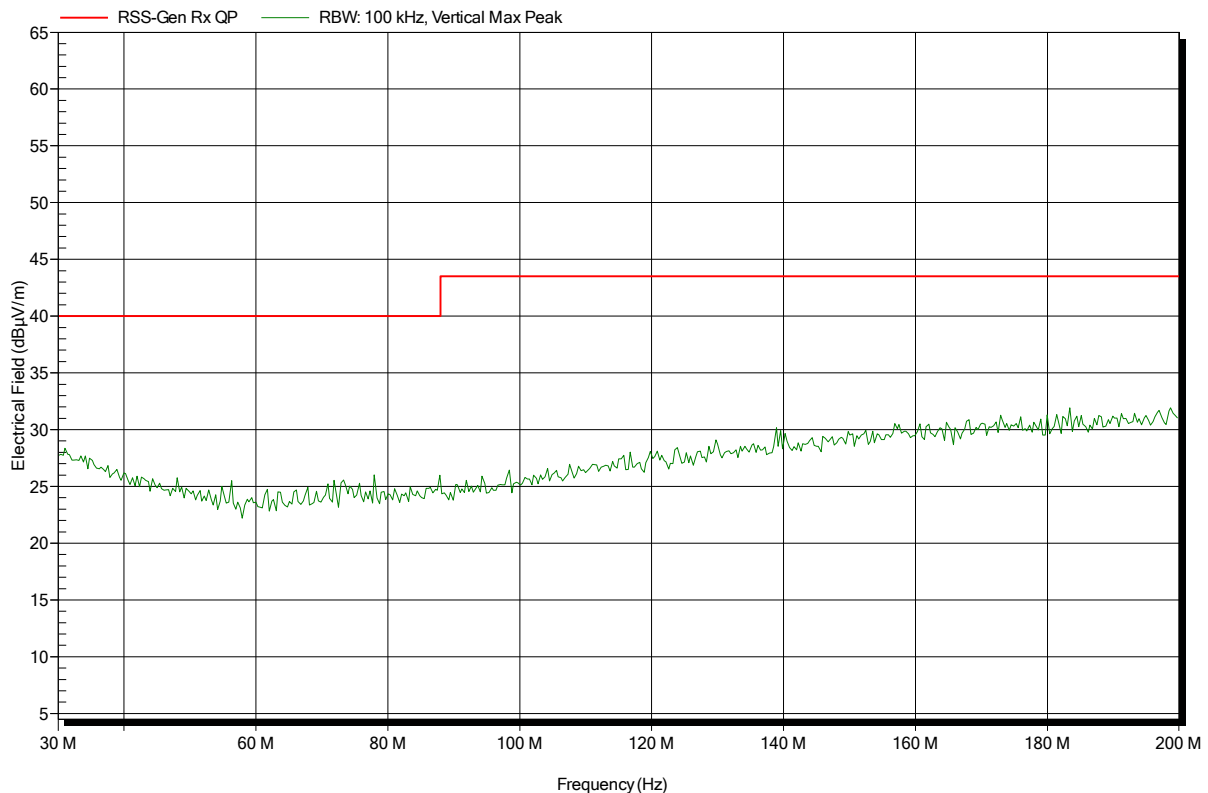
ANNEX B Receiver radiated spurious emissions

Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant:	In-Circuit GmbH
EUT Name:	AgentE-radino AccessPoint USA/SGP
Model:	3000-U981-02
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 24.0 V DC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	RX; SRD; 922.5 MHz; GFSK, RX-mode
Test Date:	2015-10-27
Note:	EUT horizontal; ANT ver

Index 30

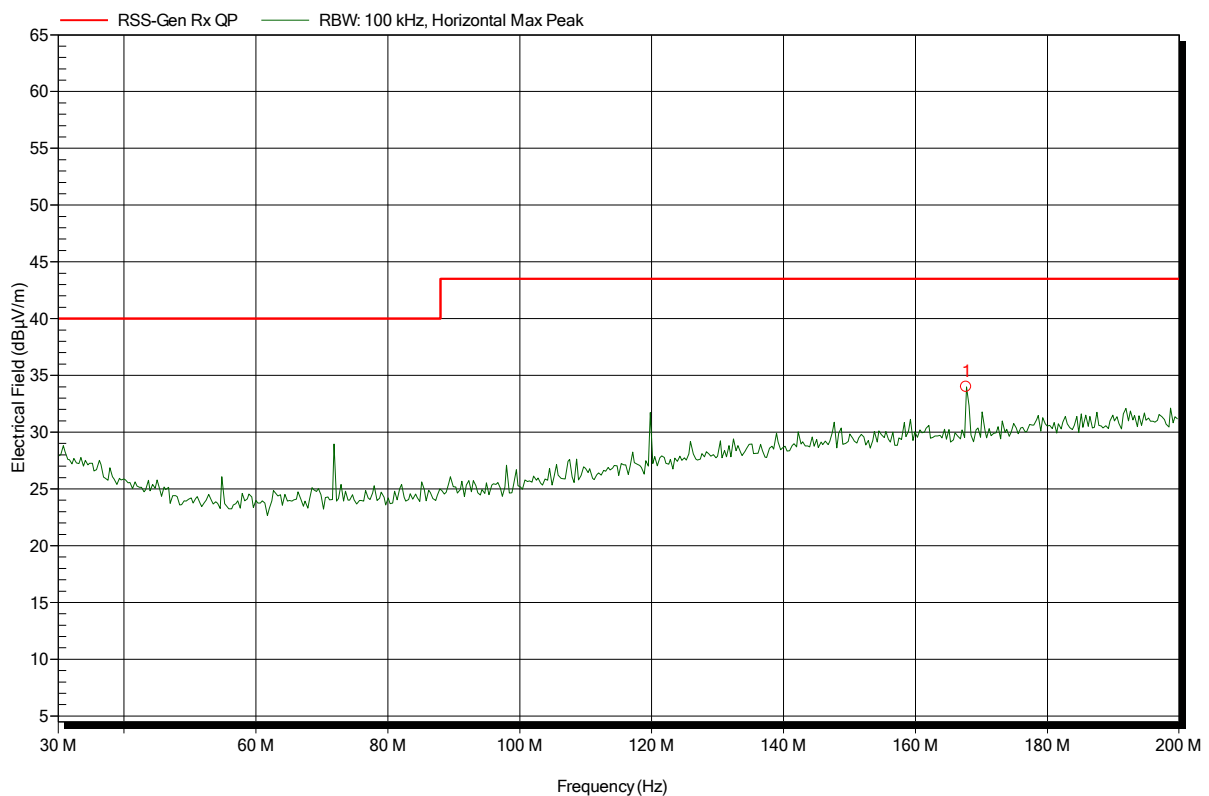


Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: RX; SRD; 922.5 MHz; GFSK, RX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 31



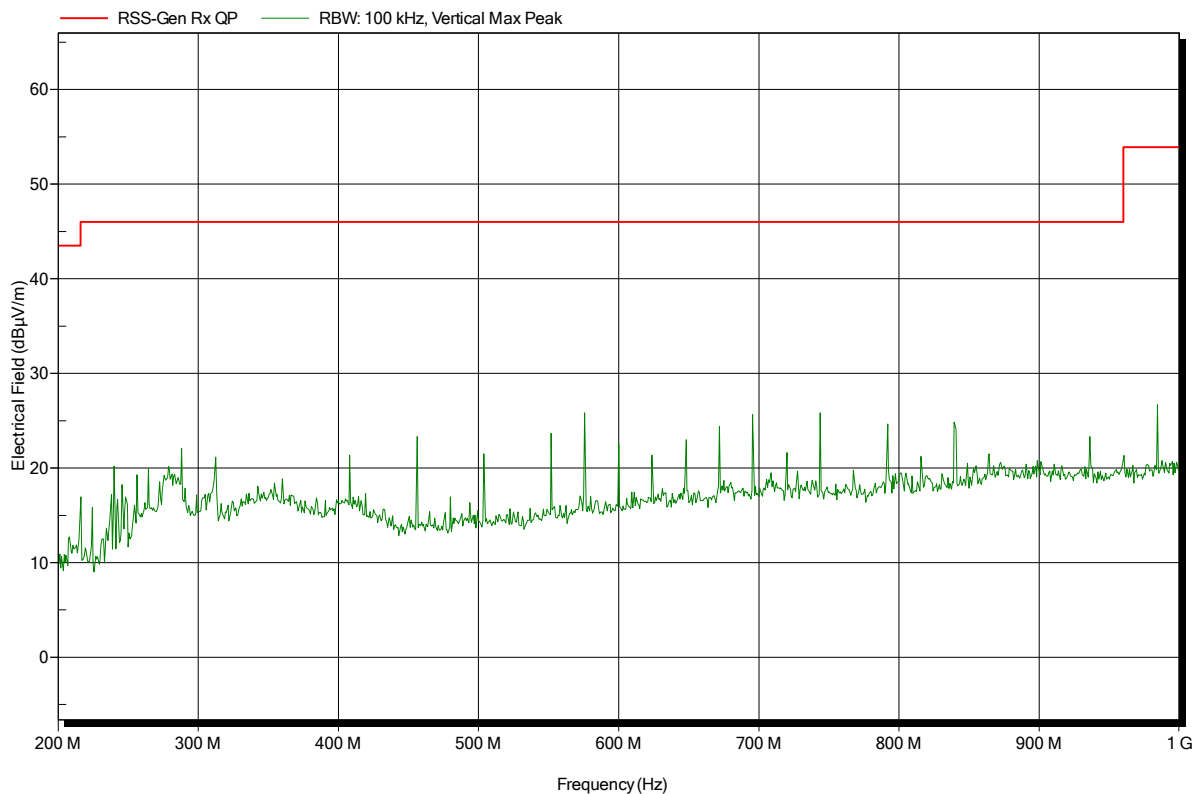
Frequency	Peak	Peak Limit	Peak Difference	Status
167.7 MHz	33.98 dBµV/m	43.5 dBµV/m	-9.52 dB	Pass

Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant:	In-Circuit GmbH
EUT Name:	AgentE-radino AccessPoint USA/SGP
Model:	3000-U981-02
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 24.0 V DC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	RX; SRD; 922.5 MHz; GFSK, RX-mode
Test Date:	2015-10-27
Note:	EUT horizontal; ANT ver

Index 18

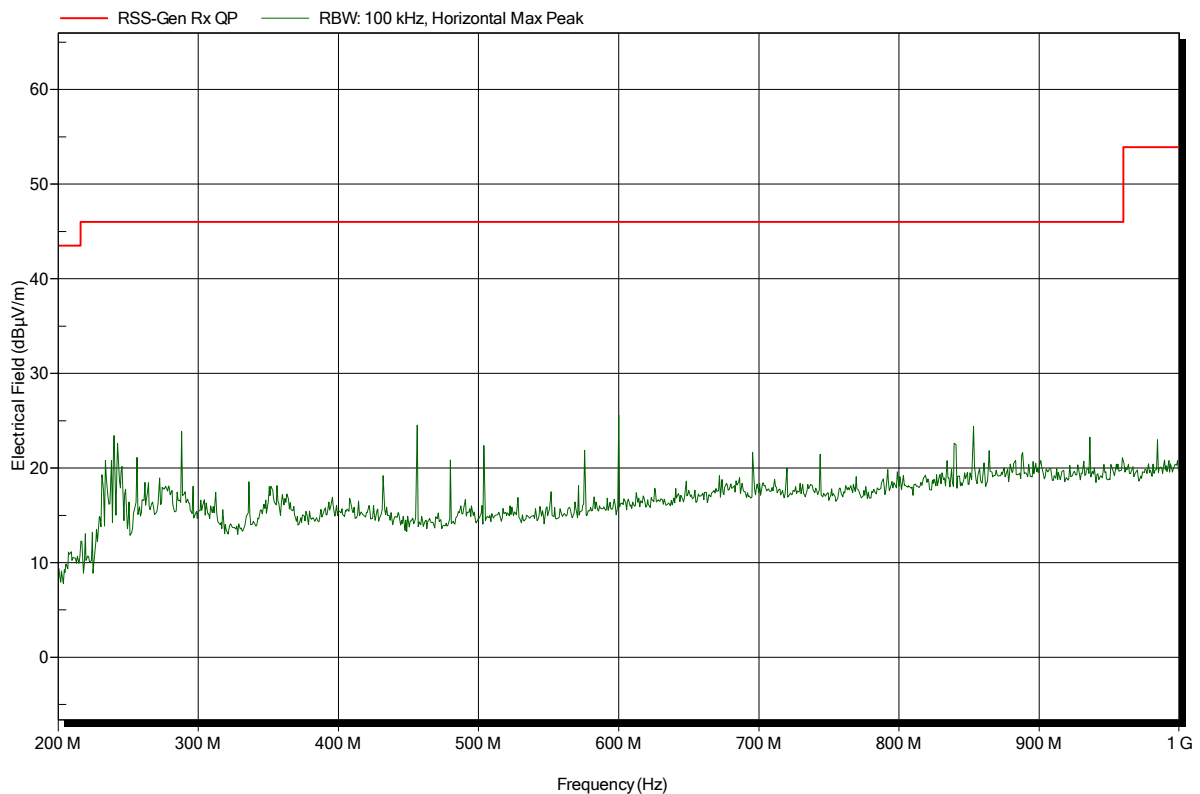


Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant:	In-Circuit GmbH
EUT Name:	AgentE-radino AccessPoint USA/SGP
Model:	3000-U981-02
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Pudell
Test Conditions:	Tnom: 24°C, Vnom: 24.0 V DC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	RX; SRD; 922.5 MHz; GFSK, RX-mode
Test Date:	2015-10-27
Note:	EUT horizontal; ANT ver

Index 19

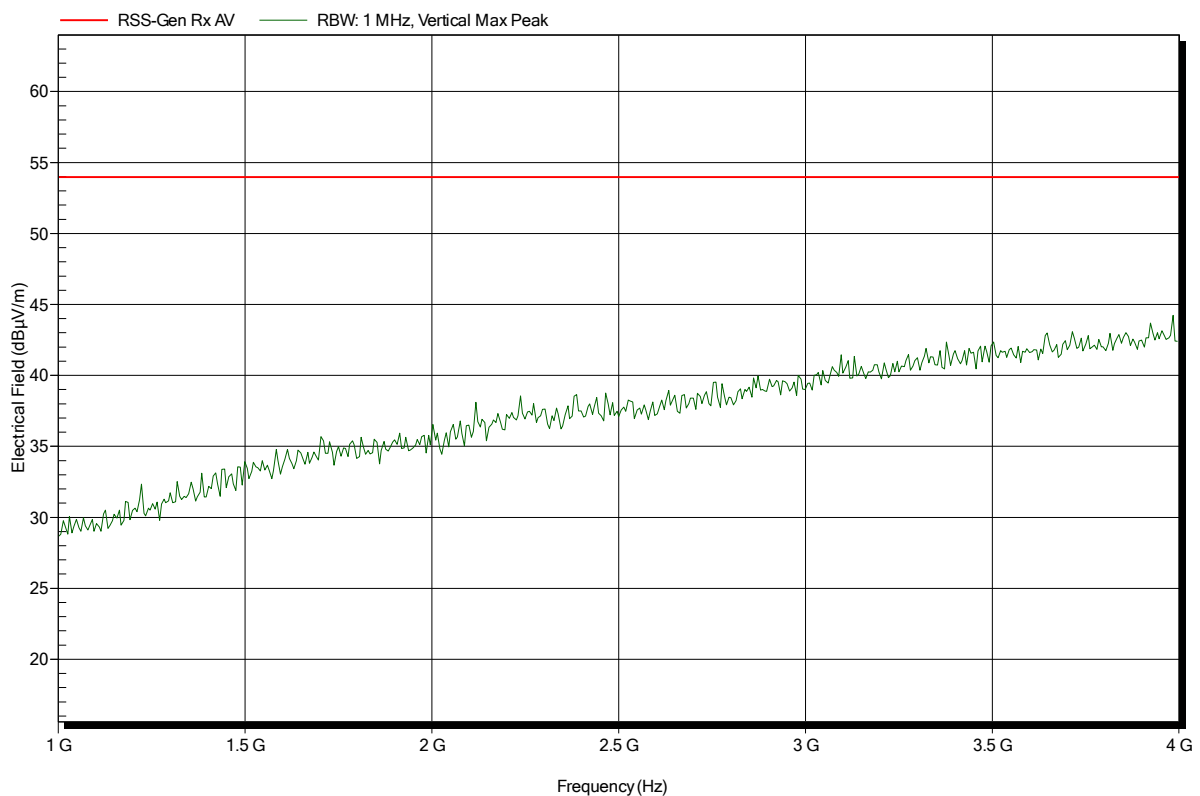


Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: RX; SRD; 922.5 MHz; GFSK, RX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 27

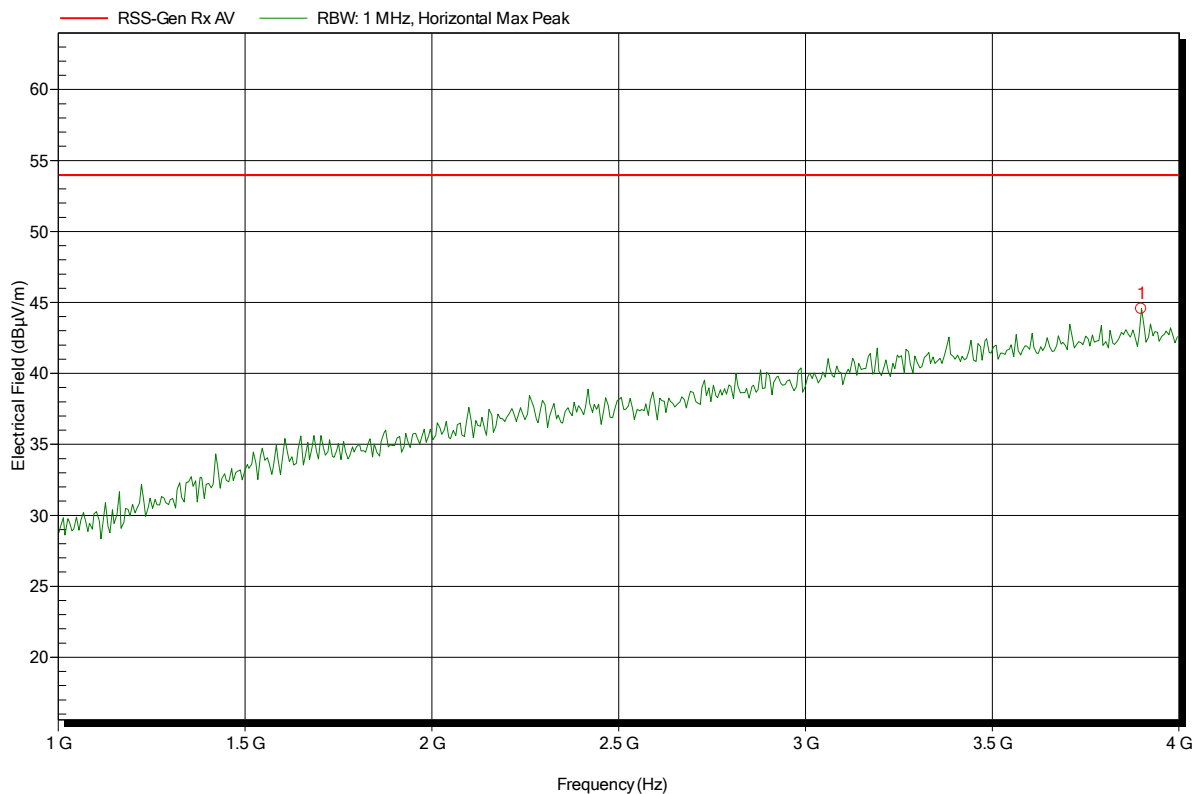


Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: RX; SRD; 922.5 MHz; GFSK, RX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 28



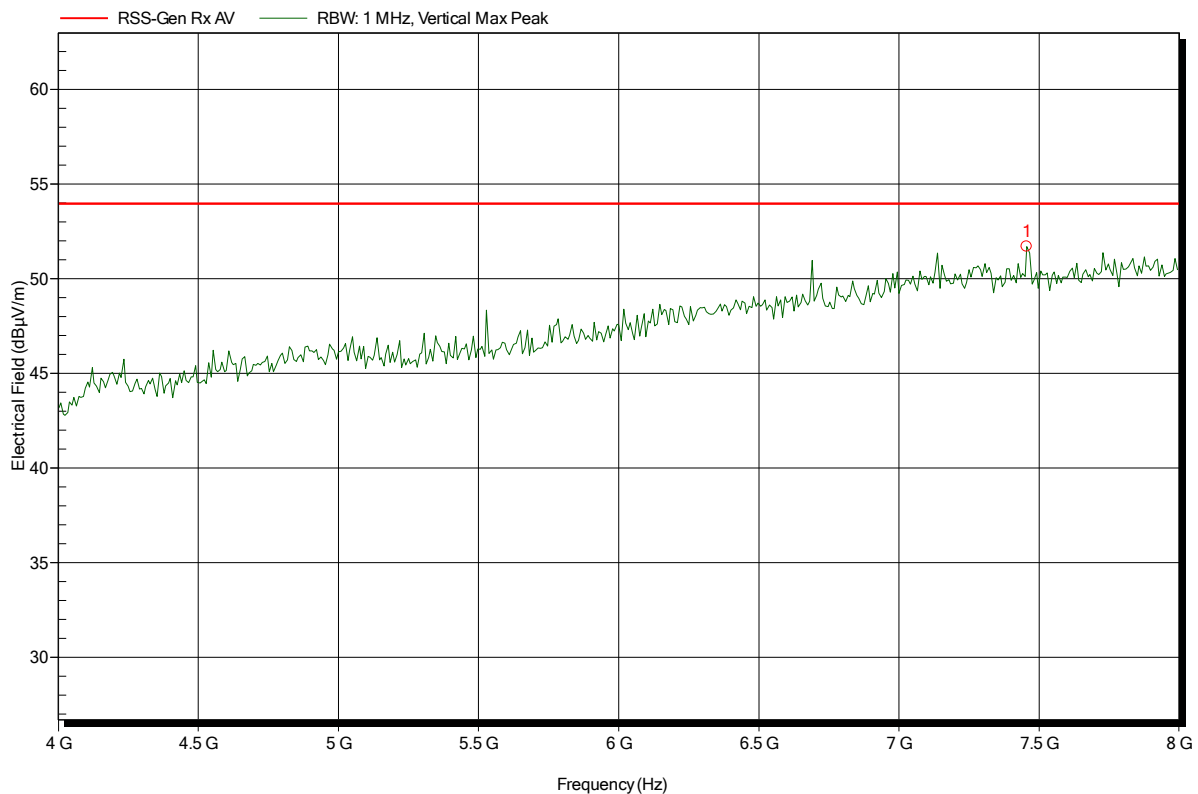
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.898 GHz	44.55 dBµV/m	53.98 dBµV/m	-9.43 dB	Pass

Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: RX; SRD; 922.5 MHz; GFSK, RX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 26



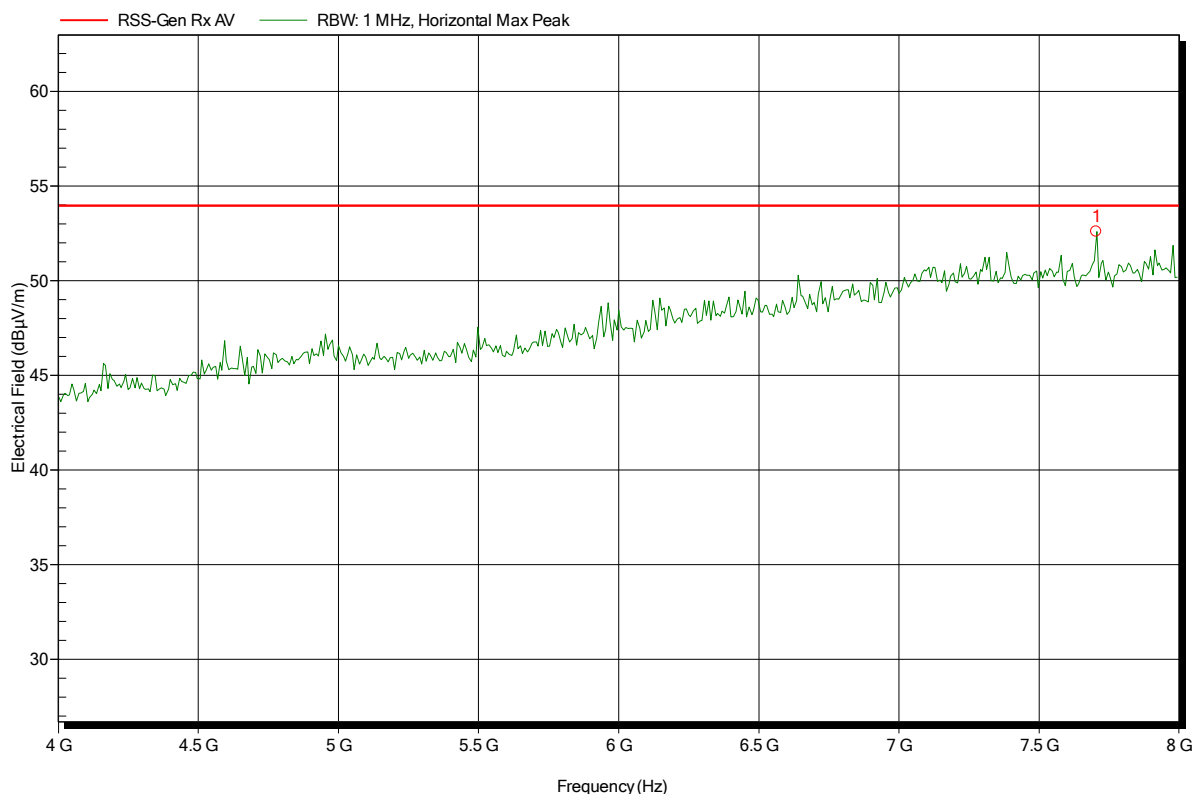
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.456 GHz	51.7 dBµV/m	53.98 dBµV/m	-2.28 dB	Pass

Spurious emissions according to IC RSS-210 I8 A1

Project number: G0M-1510-5134

Applicant: In-Circuit GmbH
 EUT Name: AgentE-radino AccessPoint USA/SGP
 Model: 3000-U981-02
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Pudell
 Test Conditions: Tnom: 24°C, Vnom: 24.0 V DC
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: RX; SRD; 922.5 MHz; GFSK, RX-mode
 Test Date: 2015-10-27
 Note: EUT horizontal; ANT ver

Index 29



Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.704 GHz	52.59 dBµV/m	53.98 dBµV/m	-1.39 dB	Pass