

FCC TEST REPORT	
FCC 47 CFR Part 15C	
Digital transmission systems operating within the 2400 – 2483.5 MHz band	
Report Reference No.....	G0M-1505-4730-TFC247ZB-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
Applicant's name	Atmel Automotive GmbH
Address.....	Koenigsbruecker Str. 61 01099 Dresden GERMANY
Test specification:	
Standard	47 CFR Part 15C KDB Publication No. 558074 D01 v03r02 ANSI C63.4:2009
Test scope.....	complete Radio compliance test
Equipment under test (EUT):	
Product description	ATSAMR21 Smart Connect Module with solder mount footprint
Model No.	ATSAMR21G18-MR210UA
Additional Model(s)	None
Brand Name(s)	ATMEL
Hardware version	1.0
Firmware / Software version	Test FW REV2755
	FCC-ID: VNR-ATSAMR210UA-0
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: 2015-05-08

Date (s) of performance of tests: 2015-05-11 - 2015-05-27

Compiled by: Matthias Handrik

Tested by (+ signature).....: Wilfried Treffke *W. Treffke*

(Responsible for Test)

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

Date of issue: 2015-07-24

Total number of pages: 210

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.

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Additional comments:

Version History

Version	Issue Date	Remarks	Revised by
01	2015-07-24	Initial Release	

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1 Equipment (Test item) Description

Description	ATSAMR21 Smart Connect Module with solder mount footprint	
Model	ATSAMR21G18-MR210UA	
Additional Model(s)	None	
Brand Name(s)	ATMEL	
Serial number	None	
Hardware version	1.0	
Software / Firmware version	Test FW REV2755	
FCC-ID	VNR-ATSAMR210UA-0	
Equipment type	Radio module	
Radio type	Transceiver	
Radio technology	IEEE 802.15.4	
Operating frequency range	2405 - 2480 MHz	
Assigned frequency band	2400 - 2483.5 MHz	
Main test frequencies	F _{LOW}	2405 MHz
	F _{MID}	2450 MHz
	F _{HIGH}	2480 MHz
Spreading	DSSS	
Modulations	O-QPSK	
Number of channels	16 (11-26)	
Channel spacing	5 MHz	
Number of antennas	2 (diversity operation)	
Antenna "Stub"	Type	external dedicated
	Model	ANT-24G-S21P
	Manufacturer	RF-Solution
	Gain	0.0 dBi (manufacturer declaration)
Antenna "Quarter-Wave"	Type	external dedicated
	Model	M07-FL
	Manufacturer	TekFun
	Gain	5.0 dBi (manufacturer declaration)
Manufacturer	Atmel Automotive GmbH Koenigsbruecker Str. 61 01099 Dresden GERMANY	

Power supply	V _{NOM}	5 VDC
	V _{MIN}	4.5 VDC
	V _{MAX}	5.5 VDC
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
AE	Laptop	DELL	Latitude D620	
AE : Auxiliary/Associated Equipment				

1.5 Test Modes

Mode #	Description	
OQPSK250	General conditions:	EUT powered via USB and controlled by test-software
	Radio conditions:	Mode = standalone TX Spreading = DSSS Modulation = O-QPSK Power setting for channel "low", "mid" = 4 Power setting for channel "high" = -9 Antenna "Stub" / -13 Antenna "Quarter-Wave"
OQPSK2000	General conditions:	EUT powered via USB and controlled by test-software
	Radio conditions:	Mode = standalone TX Spreading = None Modulation = O-QPSK Power setting for channel "low", "mid" = 4 Power setting for channel "high" = -9 Antenna "Stub" / -13 Antenna "Quarter-Wave"
AC-Powerline	General conditions:	EUT powered via USB (laptop)
	Radio conditions:	Mode = standalone transmit Spreading = DSSS Power level = Maximum

1.6 Test Equipment Used During Testing

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

6dB Bandwidth					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2015-03	2016-03

Maximum peak conducted power					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2015-03	2016-03

Power spectral density					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2015-03	2016-03

Band edge compliance					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2015-03	2016-03

Conducted spurious emissions					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2015-03	2016-03

Radiated spurious 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	2013-02	2016-02

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

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

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:

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

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:

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

2 Result Summary

FCC 47 CFR Part 15C				
Product Specific Standard Section	Requirement – Test	Reference Method	Result	Remarks
FCC § 15.247(a)(2)	6dB Bandwidth	KDB Publication No. 558074	PASS	
FCC § 15.247(b)(3)	Maximum peak conducted power	KDB Publication No. 558074	PASS	
FCC § 15.247(e)	Power spectral density	KDB Publication No. 558074	PASS	
47 CFR 15.207	AC power line conducted emissions	KDB Publication No. 558074 / ANSI C63.4	PASS	
FCC § 15.247(d)	Band edge compliance	KDB Publication No. 558074	PASS	
FCC § 15.247(d)	Conducted spurious emissions	KDB Publication No. 558074	PASS	
FCC § 15.247(d) FCC § 15.209	Transmitter radiated spurious emissions	KDB Publication No. 558074 / ANSI C 63.4	PASS	
Remarks:				

3 Test Conditions and Results

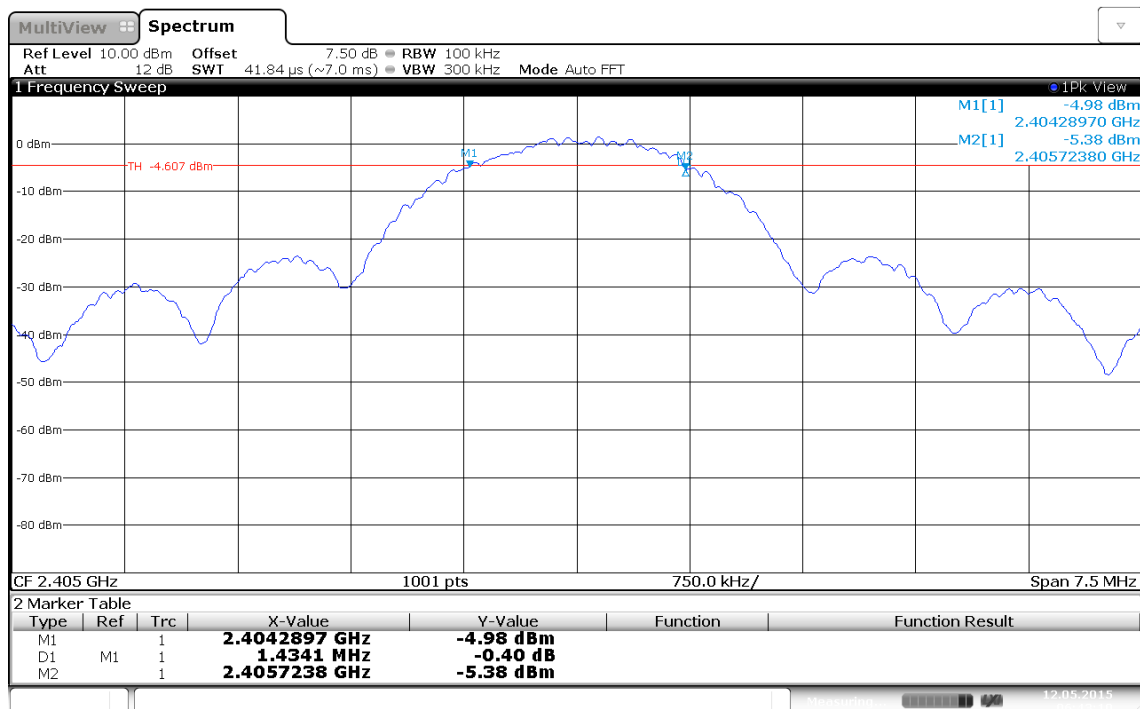
3.1 Test Conditions and Results – 6 dB Bandwidth

6dB Bandwidth acc. to FCC 15.247 / IC RSS-210				Verdict: PASS	
EUT requirement rule parts and clause		Reference			
		FCC 15.247(a)(2)			
Test according to measurement reference		Reference Method			
		FCC KDB Publication No. 558074			
Test frequency range		Tested frequencies			
		F _{LOW} / F _{MID} / F _{HIGH}			
Limits					
≥ 500kHz					
Test setup					
Spectrum Analyzer EUT					
Test procedure					
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and RBW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak 7. 6 dB Bandwidth is determined by marker frequency separation					
Test results 250kbps					
Channel	Frequency [MHz]	Mode	6 dB Bandwidth [kHz]	Limit [kHz]	Result
F _{LOW}	2405	OQPSK250	1434.1	500	PASS
F _{MID}	2450	OQPSK250	1491.1	500	PASS
F _{HIGH}	2480	OQPSK250	1554.0	500	PASS
Test results 2000kbps					
Channel	Frequency [MHz]	Mode	6 dB Bandwidth [kHz]	Limit [kHz]	Result
F _{LOW}	2405	OQPSK2000	1465.7	500	PASS
F _{MID}	2450	OQPSK2000	1443.1	500	PASS
F _{HIGH}	2480	OQPSK2000	1583.9	500	PASS

6 dB Bandwidth – ZIGBEE F_{LOW}
Minimum 6 dB Bandwidth acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: T_{nom} / V_{nom}
 Mode: Tx, 2405 MHz, PRBS, 250kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Procedure 8.1 DTS (558074 D01 Meas Guidance)
 Note 2: Minimum 6 dB Bandwidth conducted



6 dB bandwidth: 1434.1 KHz > 500 KHz

Date: 12.MAY.2015 06:43:11

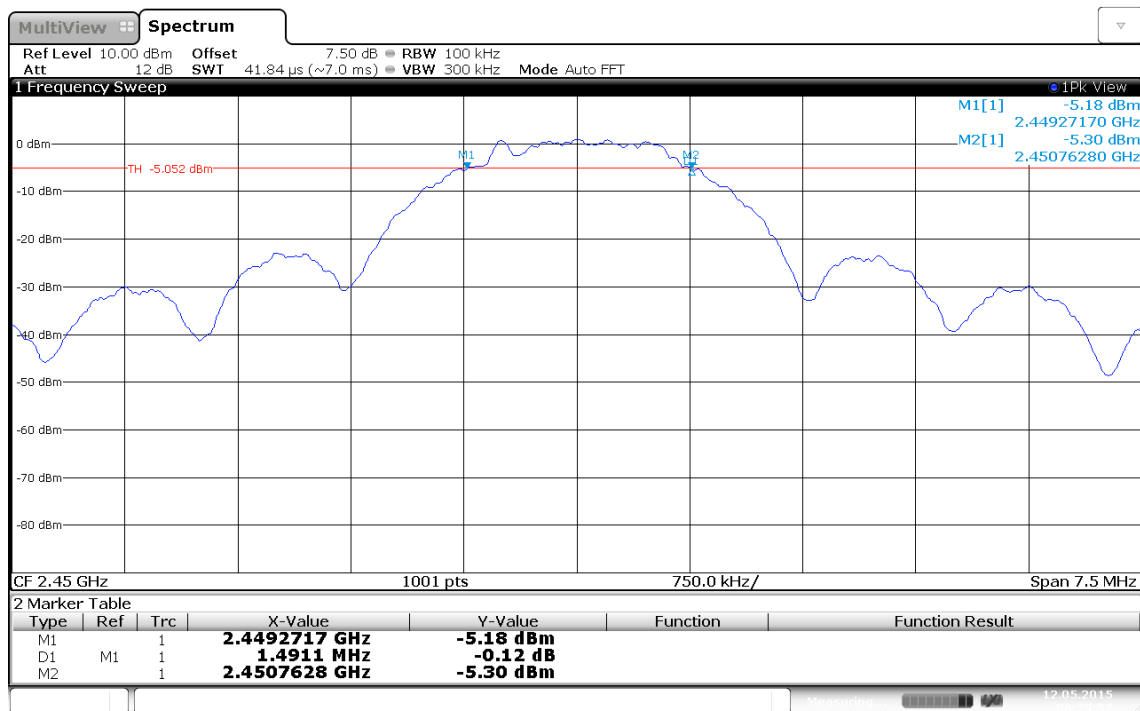
Test Report No.: G0M-1505-4730-TFC247ZB-V01

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 Storkower Str. 38c, D-15526 Reichenwalde, Germany

6 dB Bandwidth – ZIGBEE F_{MID}
Minimum 6 dB Bandwidth acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: T_{nom} / V_{nom}
 Mode: Tx, 2450 MHz, PRBS, 250kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Procedure 8.1 DTS (558074 D01 Meas Guidance)
 Note 2: Minimum 6 dB Bandwidth conducted



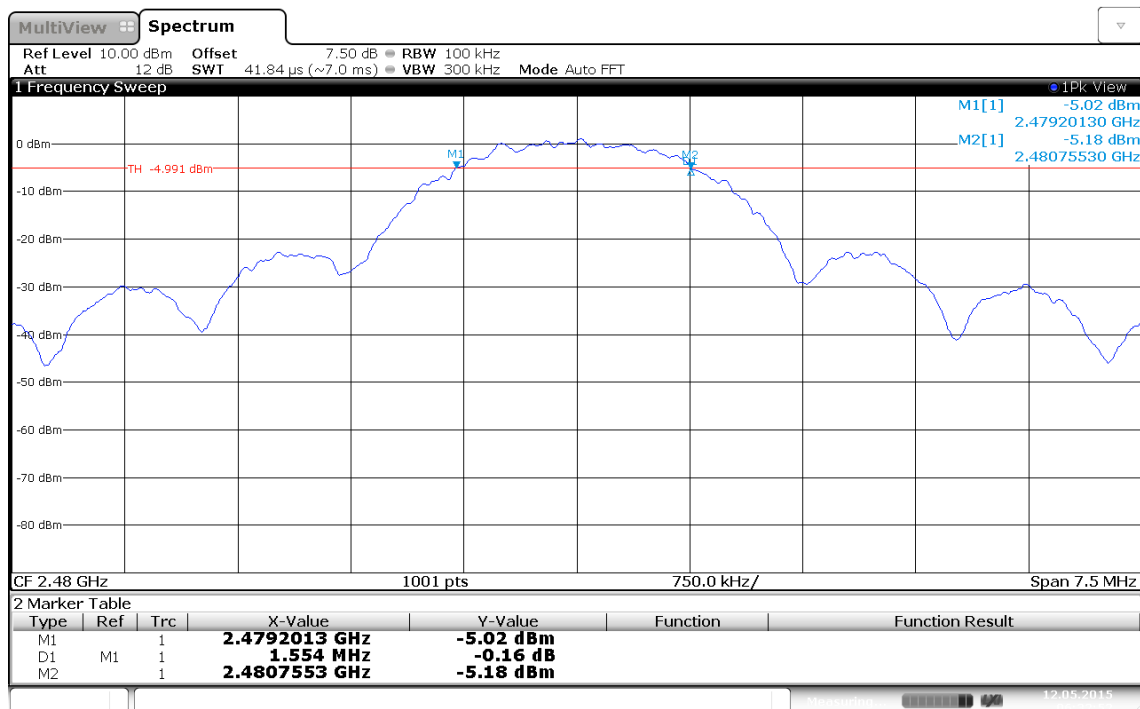
6 dB bandwidth: 1491.1 KHz > 500 KHz

Date: 12.MAY.2015 06:29:52

6 dB Bandwidth – ZIGBEE F_{HIGH}
Minimum 6 dB Bandwidth acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: T_{nom} / V_{nom}
 Mode: Tx, 2480 MHz, PRBS, 250kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Procedure 8.1 DTS (558074 D01 Meas Guidance)
 Note 2: Minimum 6 dB Bandwidth conducted



6 dB bandwidth: 1554 KHz > 500 KHz

Date: 12.MAY.2015 06:32:52

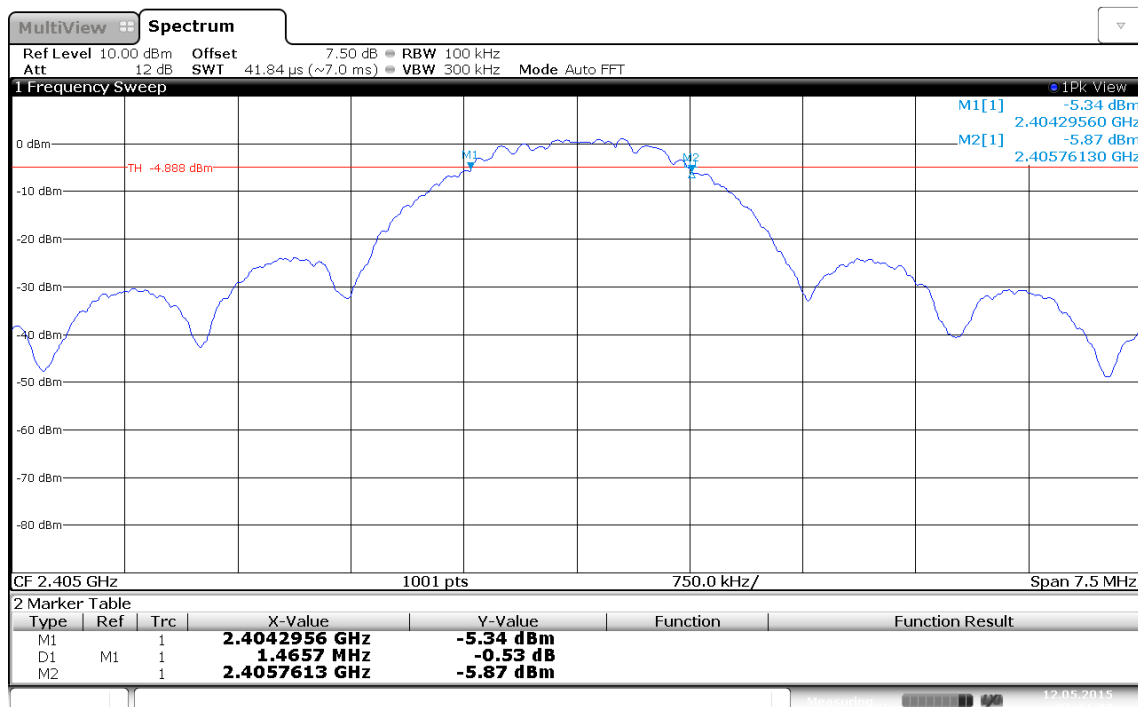
Test Report No.: G0M-1505-4730-TFC247ZB-V01

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6 dB Bandwidth – ZIGBEE F_{LOW}
Minimum 6 dB Bandwidth acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: T_{nom} / V_{nom}
 Mode: Tx, 2405 MHz, PRBS, 2000kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Procedure 8.1 DTS (558074 D01 Meas Guidance)
 Note 2: Minimum 6 dB Bandwidth conducted



6 dB bandwidth: 1465.7 KHz > 500 KHz

Date: 12.MAY.2015 06:41:07

Test Report No.: G0M-1505-4730-TFC247ZB-V01

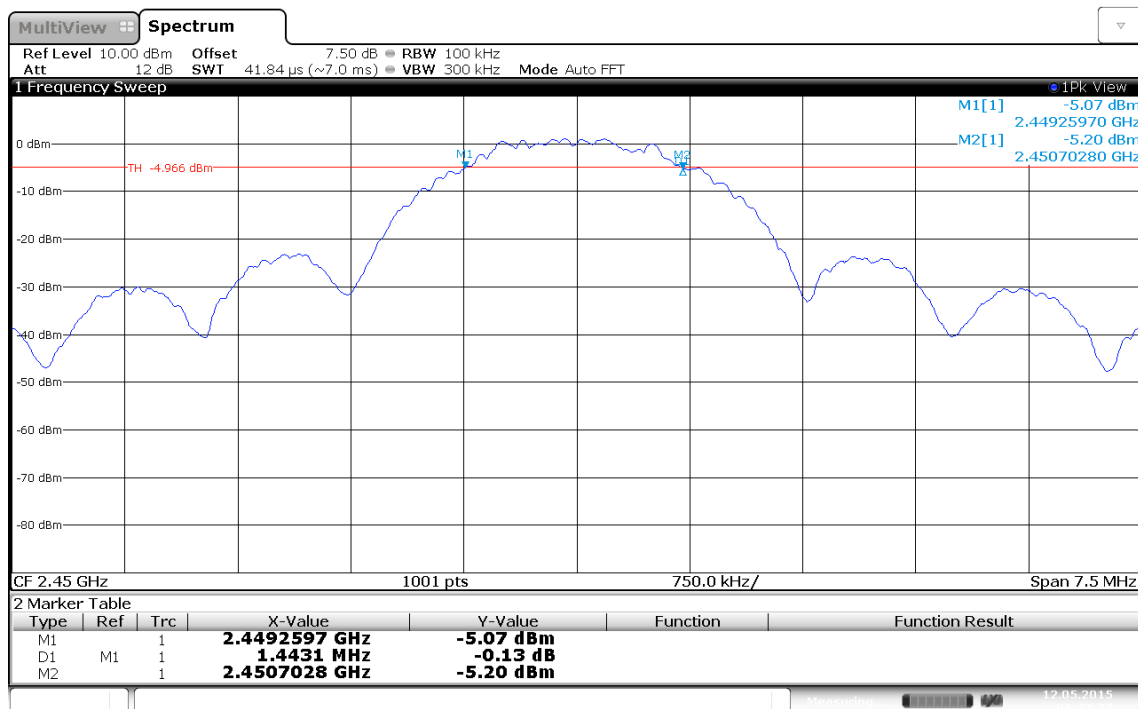
Eurofins Product Service GmbH
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6 dB Bandwidth – ZIGBEE F_{MID}

Minimum 6 dB Bandwidth acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2450 MHz, PRBS, 20000kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Procedure 8.1 DTS (558074 D01 Meas Guidance)
 Note 2: Minimum 6 dB Bandwidth conducted



6 dB bandwidth: 1443.1 KHz > 500 KHz

Date: 12.MAY.2015 06:37:37

Test Report No.: G0M-1505-4730-TFC247ZB-V01

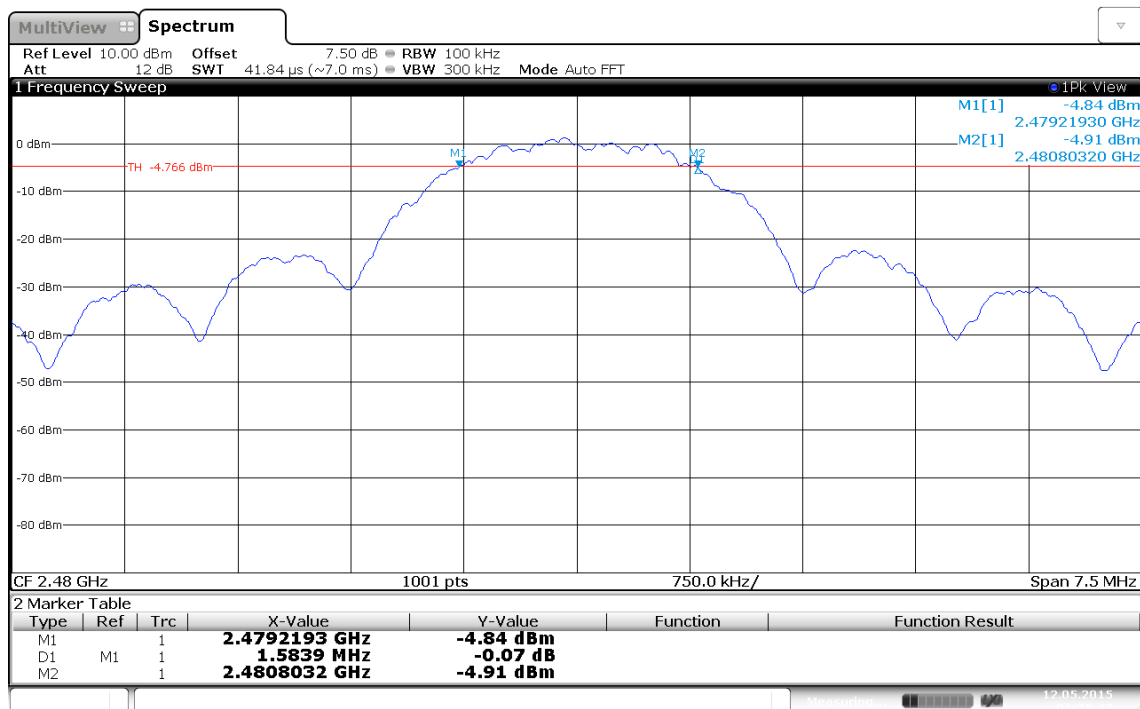
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 Storkower Str. 38c, D-15526 Reichenwalde, Germany

6 dB Bandwidth – ZIGBEE F_{HIGH}

Minimum 6 dB Bandwidth acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2480 MHz, PRBS, 2000kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Procedure 8.1 DTS (558074 D01 Meas Guidance)
 Note 2: Minimum 6 dB Bandwidth conducted



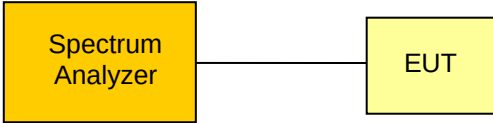
6 dB bandwidth: 1583.9 KHz > 500 KHz

Date: 12.MAY.2015 06:35:48

Test Report No.: G0M-1505-4730-TFC247ZB-V01

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 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3.2 Test Conditions and Results – Maximum peak conducted power

Maximum peak conducted power acc. to FCC 15.247		Verdict: PASS
EUT requirement rule parts and clause	Reference	
	FCC 15.247(b)(3)	
Test according to measurement reference	Reference Method	
	FCC KDB Publication No. 558074	
Test frequency range	Tested frequencies	
	$F_{\text{LOW}} / F_{\text{MID}} / F_{\text{HIGH}}$	
Measurement mode	Peak	
Maximum antenna gain	5 dBi $\Rightarrow$ Limit correction = 0 dB	
Limits		
1 W (30 dBm)		
The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.		
Test setup		
		
Test procedure		
1. EUT set to test mode (Communication tester is used if needed) 2. Center frequency set to test channel center frequency 3. Span set to twice the 20 dB bandwidth and detector to peak and max hold 4. Resolution bandwidth is set to 3 MHz 5. Peak conducted power is determined from peak of spectrum envelope		

Test results 250kbps							
Channel	Frequency [MHz]	Voltage [VDC]	Mode	Peak power [dbm]	Peak power [W]	Limit [dBm]	Margin [dB]
F _{LOW}	2405	V _{NOM} = 5	OQPSK250	3.75	0.0024	30	-26.25
F _{MID}	2450	V _{NOM} = 5	OQPSK250	3.75	0.0024	30	-26.25
F _{HIGH}	2480	V _{NOM} = 5	OQPSK250	-8.40	0.0001	30	-38.40
Test results 2000kbps							
Channel	Frequency [MHz]	Voltage [VDC]	Mode	Peak power [dbm]	Peak power [W]	Limit [dBm]	Margin [dB]
F _{LOW}	2405	V _{NOM} = 5	OQPSK2000	3.75	0.0024	30	-26.25
F _{MID}	2450	V _{NOM} = 5	OQPSK2000	3.72	0.0024	30	-26.28
F _{HIGH}	2480	V _{NOM} = 5	OQPSK2000	-8.43	0.0001	30	-38.43
Comments:							

3.3 Test Conditions and Results – Power spectral density

Power spectral density acc. to FCC 15.247					Verdict: PASS	
EUT requirement rule parts and clause		Reference				
		FCC 15.247(e)				
Test according to measurement reference		Reference Method				
		FCC KDB Publication No. 558074				
Test frequency range		Tested frequencies				
		F _{LOW} / F _{MID} / F _{HIGH}				
Measurement mode		Peak				
Limits						
8 dBm / 3 kHz						
Test setup						
Spectrum Analyzer EUT						
Test procedure						
1. EUT set to test mode (Communication tester is used if needed) 2. Center frequency set to test channel center frequency 3. Span is set large enough to capture maximum emissions in passband, RBW is set to 3kHz 4. Peak power density is determined from peak emission of envelope						
Test results 250kbps						
Channel	Frequency [MHz]	Test mode	Peak frequency [MHz]	Peak power density [dBm]	Limit [dBm/3kHz]	Margin [dB]
F _{LOW}	2405	OQPSK250	2404.985	1.01	8.0	-06.99
F _{MID}	2450	OQPSK250	2450.000	0.92	8.0	-07.08
F _{HIGH}	2480	OQPSK250	2480.292	-11.81	8.0	-19.81
Test results 2000kbps						
Channel	Frequency [MHz]	Test mode	Peak frequency [MHz]	Peak power density [dBm]	Limit [dBm/3kHz]	Margin [dB]
F _{LOW}	2405	OQPSK2000	2405.067	0.93	8.0	-07.07
F _{MID}	2450	OQPSK2000	2450.075	0.69	8.0	-07.31
F _{HIGH}	2480	OQPSK2000	2479.843	-11.66	8.0	-19.66

3.4 Test Conditions and Results – AC power line conducted emissions

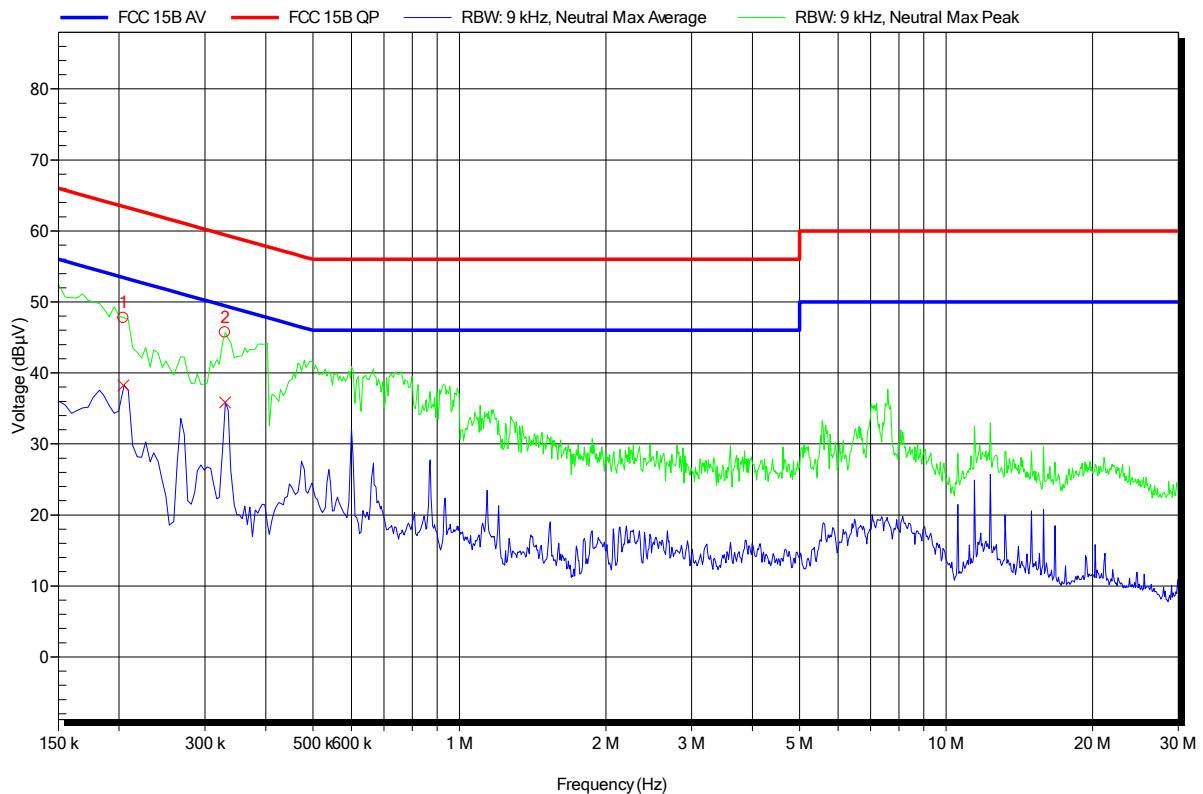
Power line conducted emissions acc. to FCC 47 CFR 15.207				Verdict: PASS
Test according referenced standards		Reference Method		
		ANSI C63.4		
Fully configured sample scanned over the following frequency range		Frequency range		
		0.15 MHz to 30 MHz		
Points of Application		Application Interface		
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 15B

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 120 V AC
 LISN: ESH2-Z5 N
 Mode: 2450 MHz, "Stub" ant.: diversity
 Test Date: 2015-05-27
 Note:

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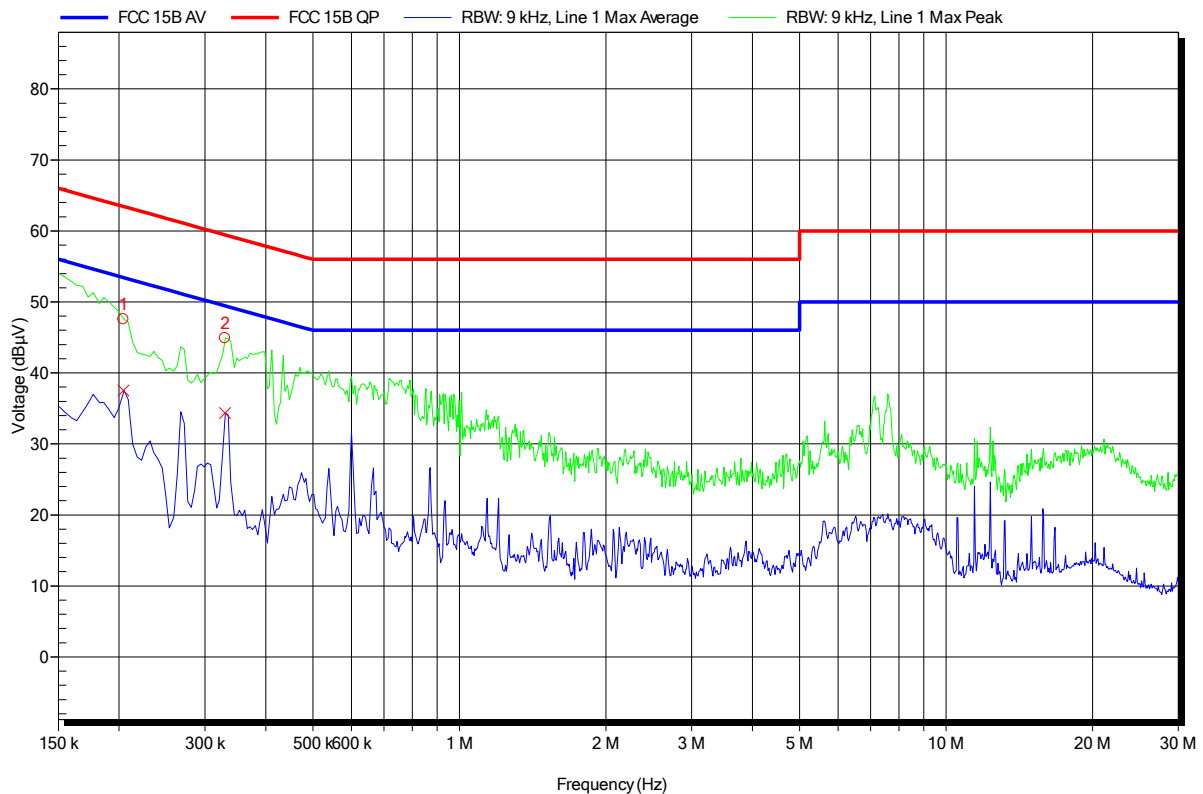


Conducted Emissions
EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 120 V AC
 LISN: ESH2-Z5 L
 Mode: 2450 MHz, "Stub" ant.: diversity
 Test Date: 2015-05-27
 Note:

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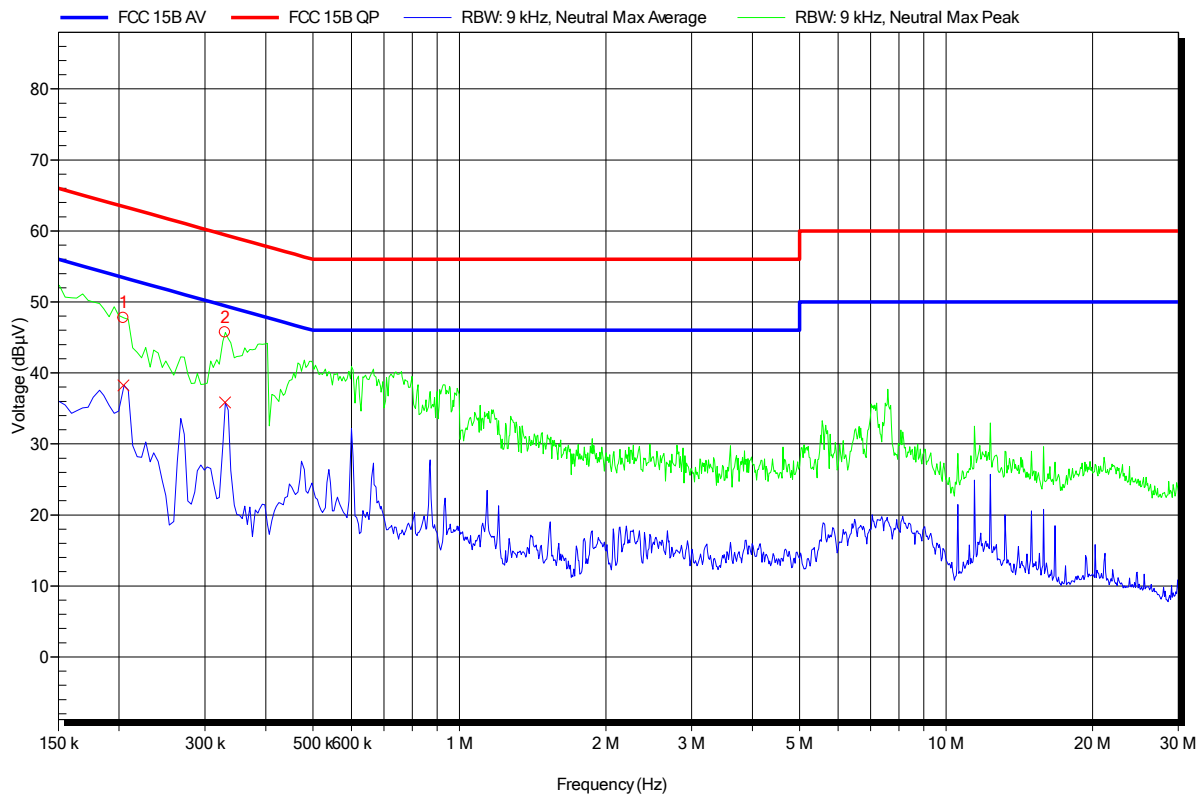
Conducted Emissions

EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Unom: 120 V AC
LISN: ESH2-Z5 N
Mode: 2450 MHz, "Quarter-Wave" ant.: diversity
Test Date: 2015-05-27
Note:

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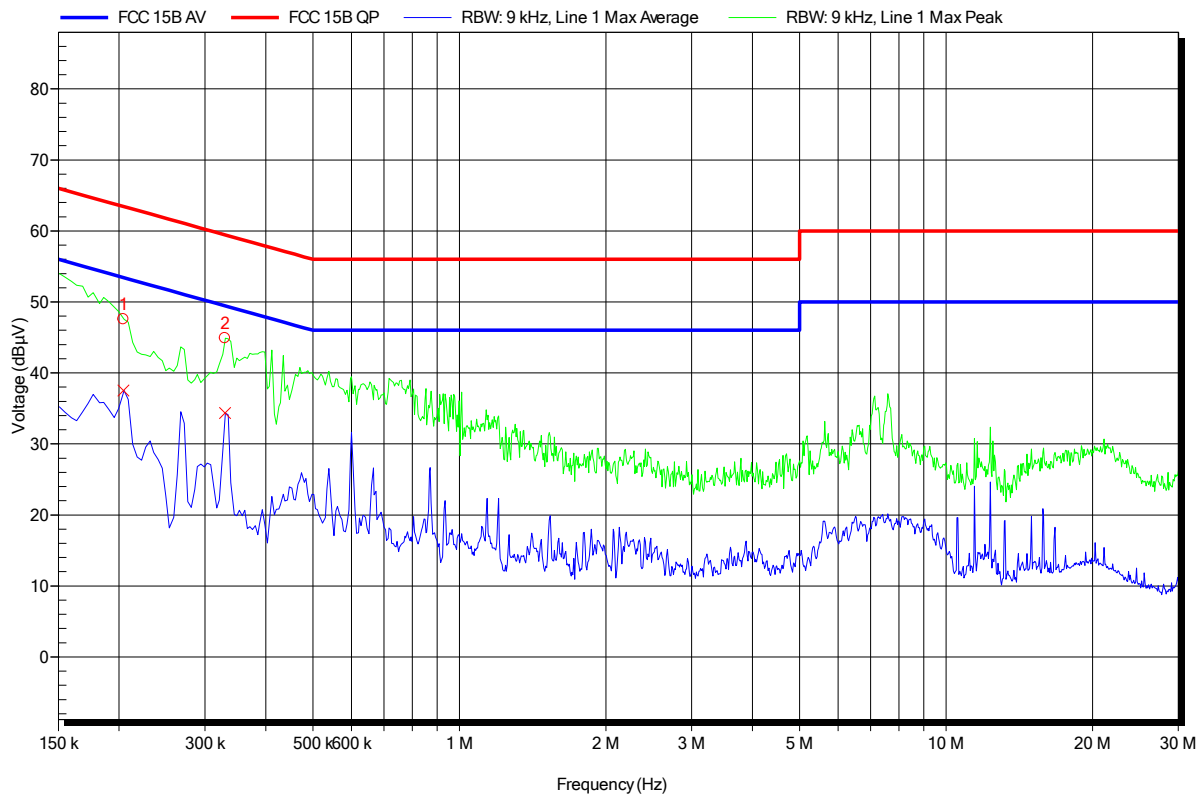
Conducted Emissions

EMI voltage test in the ac-mains according to FCC 15B

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Unom: 120 V AC
 LISN: ESH2-Z5 L
 Mode: 2450 MHz, "Quarter-Wave" ant.: diversity
 Test Date: 2015-05-27
 Note:

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Test Report No.: G0M-1505-4730-TFC247ZB-V01

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

3.5 Test Conditions and Results – Band edge compliance

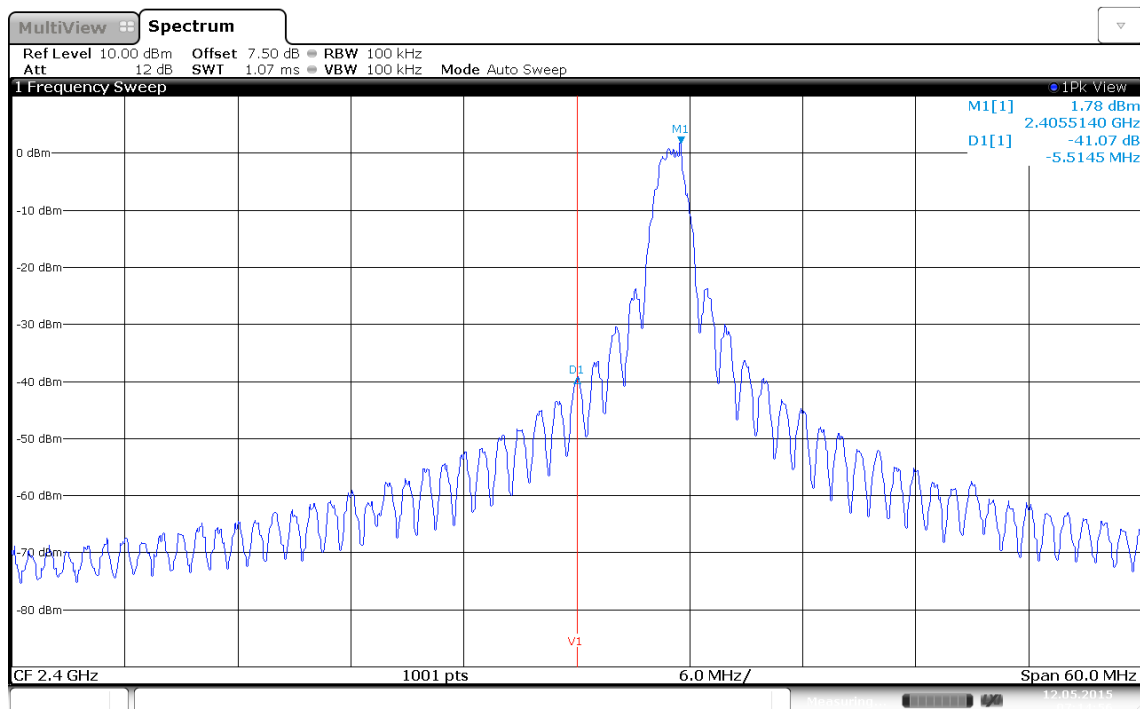
Band-edge compliance acc. to FCC 15.247 / IC RSS-210				Verdict: PASS	
EUT requirement rule parts and clause		Reference			
		FCC 15.247(d)			
Test according to measurement reference		Reference Method			
		FCC KDB Publication No. 558074			
Test frequency range		Tested frequencies			
		F _{LOW} / F _{HIGH}			
Measurement mode		Peak			
Limits					
Limit			Condition		
≤ -20 dB / 100 kHz			Peak power measurement detector = Peak		
≤ -30 dB / 100 kHz			Peak power measurement detector = RMS		
Test setup					
Spectrum Analyzer EUT					
Test procedure					
1. EUT set to test mode (Communication tester is used if needed) 2. Span set around lower band edge and detector is set to peak and max hold 3. Resolution bandwidth is set to 100 kHz 4. Markers are set to peak emission levels within frequency band and outside frequency band 5. Band edge attenuation is determined from level difference					
Test results 250kbps					
Channel	Frequency [MHz]	Mode	Level [dBc]	Limit [dBc]	Margin [dB]
F _{LOW}	2405	OQPSK250	-41.07	-20	-21.07
F _{HIGH}	2480	OQPSK250	-35.87	-20	-15.87
Test results 2000kbps					
Channel	Frequency [MHz]	Mode	Level [dBc]	Limit [dBc]	Margin [dB]
F _{LOW}	2405	OQPSK2000	-40.50	-20	-20.50
F _{HIGH}	2480	OQPSK2000	-35.54	-20	-15.54

Band-edge compliance – ZIGBEE F_{Low}

Band-edge compliance acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Handrik
Test Conditions: Tnom / Vnom
Mode: Tx, 2405 MHz, PRBS, 250kbps
Test Date: 2015-05-12
Verdict: PASS
Note 1: 20 dB down method (558074 D01 Meas Guidance)
Note 2: lower Band-edge, conducted measurement



Date: 12.MAY.2015 07:14:56

Test Report No.: G0M-1505-4730-TFC247ZB-V01

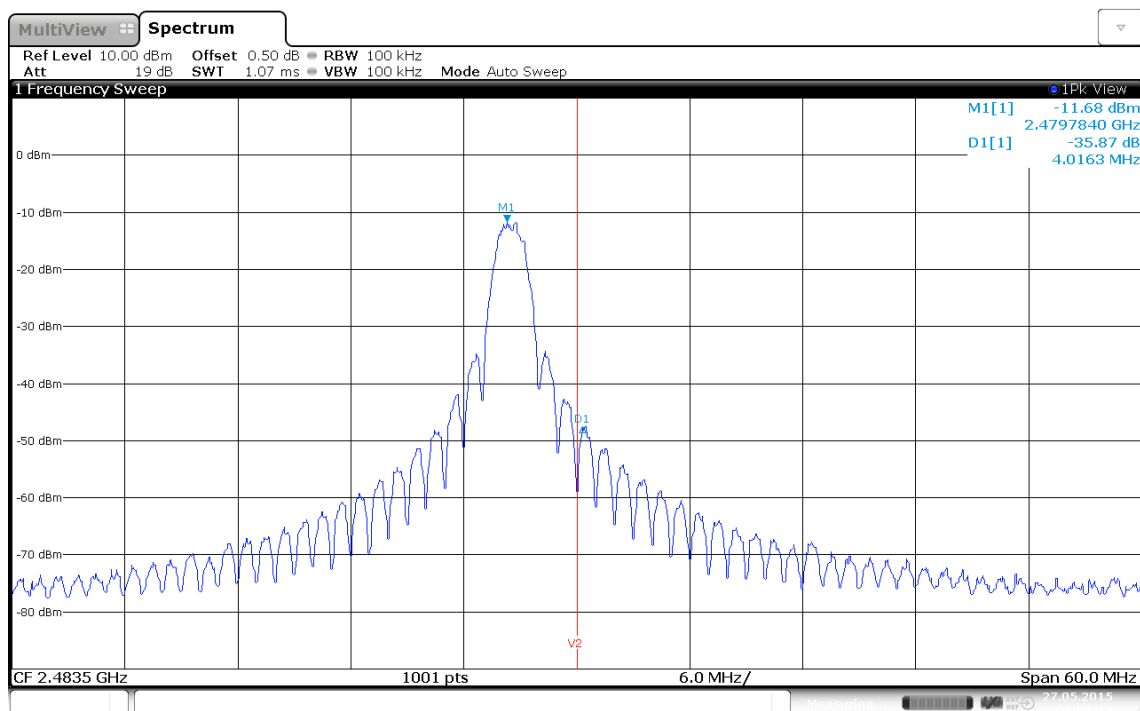
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Band-edge compliance – ZIGBEE F_{HIGH}

Band-edge compliance acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Handrik
Test Conditions: Tnom / Vnom
Mode: Tx, 2480 MHz, PRBS, 250kbps
Test Date: 2015-05-27
Verdict: PASS
Note 1: 20 dB down method (558074 D01 Meas Guidance)
Note 2: lower Band-edge, conducted measurement



Limit: Marker Delta value >20 dB; Result: PASS
Date: 27.MAY.2015 08:01:19

Test Report No.: G0M-1505-4730-TFC247ZB-V01

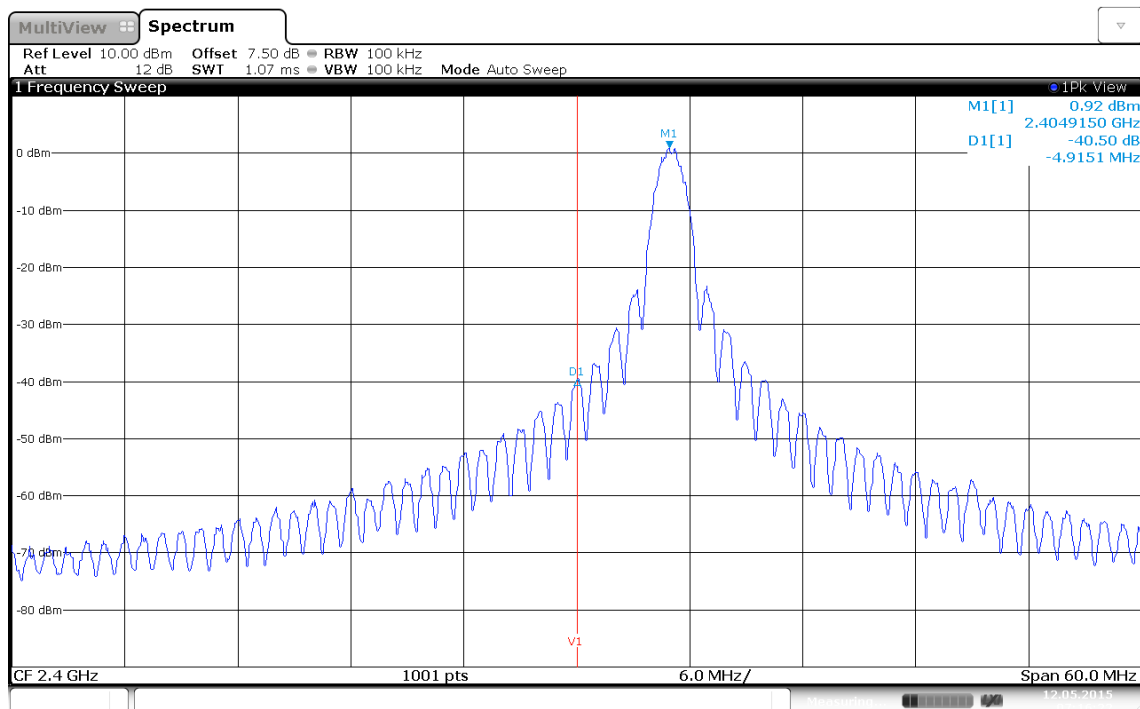
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Band-edge compliance – ZIGBEE F_{Low}

Band-edge compliance acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Handrik
Test Conditions: Tnom / Vnom
Mode: Tx, 2405 MHz, PRBS, 2000kbps
Test Date: 2015-05-12
Verdict: PASS
Note 1: 20 dB down method (558074 D01 Meas Guidance)
Note 2: lower Band-edge, conducted measurement



Limit: Marker Delta value >20 dB; Result: PASS

Date: 12.MAY.2015 07:16:22

Test Report No.: G0M-1505-4730-TFC247ZB-V01

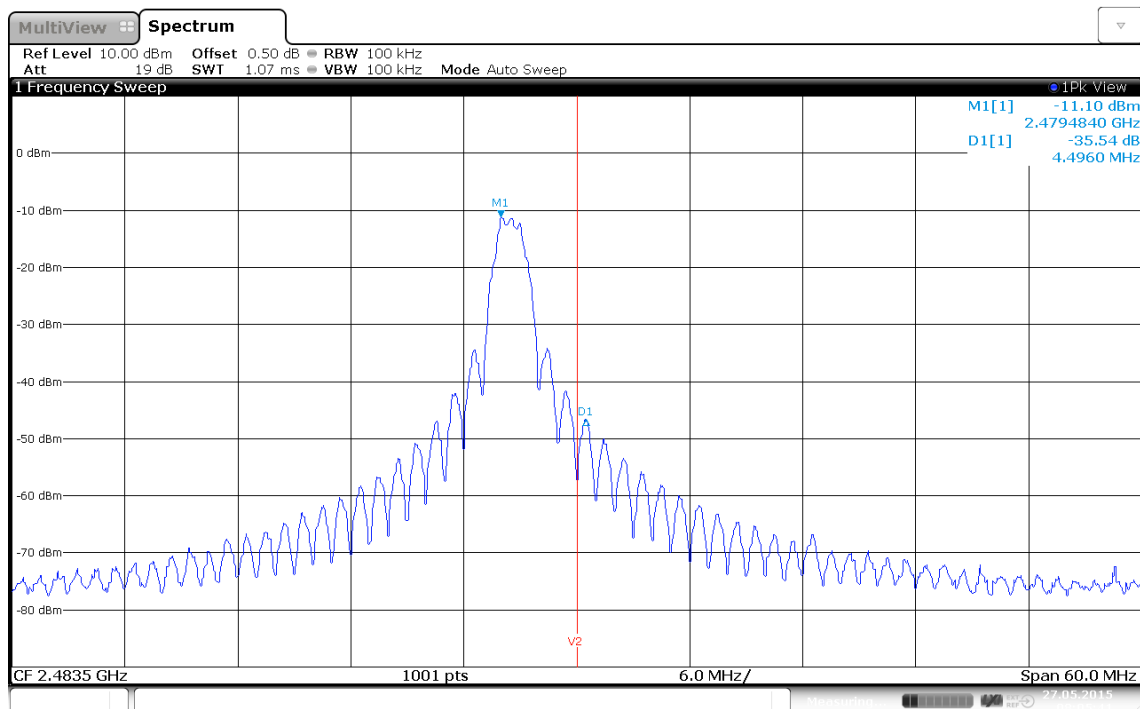
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Band-edge compliance – ZIGBEE F_{HIGH}

Band-edge compliance acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Handrik
Test Conditions: Tnom / Vnom
Mode: Tx, 2480 MHz, PRBS, 2000kbps
Test Date: 2015-05-27
Verdict: PASS
Note 1: 20 dB down method (558074 D01 Meas Guidance)
Note 2: lower Band-edge, conducted measurement



Limit: Marker Delta value >20 dB; Result: PASS
Date: 27.MAY.2015 08:05:41

Test Report No.: G0M-1505-4730-TFC247ZB-V01

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

3.6 Test Conditions and Results – Conducted spurious emissions

Conducted spurious emissions acc. to FCC 15.247						Verdict: PASS	
EUT requirement rule parts and clause			Reference				
			FCC 15.247(d)				
Test according to measurement reference			Reference Method				
			FCC KDB Publication No. 558074				
Test frequency range			Tested frequencies				
			10 MHz – 10 th Harmonic				
Measurement mode			Peak				
Limits							
Limit				Condition			
≤ -20 dB / 100 kHz				Peak power measurement detector = Peak			
≤ -30 dB /100 kHz				Peak power measurement detector = RMS			
Test setup							
Spectrum Analyzer EUT							
Test procedure							
1. EUT set to test mode (Communication tester is used if needed) 2. Span it set according to measurement range 3. Resolution bandwidth is set to 100 kHz and detector to peak and max hold 4. Markers are set to peak emission levels within frequency band 5. Emission level is determined by second marker on emission peak 6. Attenuation is determined from level difference							
Test results							
Channel	Frequency [MHz]	Mode	Emission [MHz]	Emission Level [dbm]	Peak power [dBm]	Limit [dBm]	Margin [dB]
Test results 250kbps							
F _{LOW}	2405	OQPSK250	4809.03	-55.89	1.00	-19.00	-36.89
F _{LOW}	2405	OQPSK250	9618.059	-65.66	1.00	-19.00	-46.66
Test results 2000kbps							
F _{LOW}	2405	OQPSK2000	4811.000	-56.10	1.2	-18.8	-37.30
Test results 250kbps							
F _{MID}	2450	OQPSK250	4899.020	-57.84	0.6	-19.4	-38.44
F _{MID}	2450	OQPSK250	9797.959	-63.50	0.6	-19.4	-44.10

Test Report No.: G0M-1505-4730-TFC247ZB-V01

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

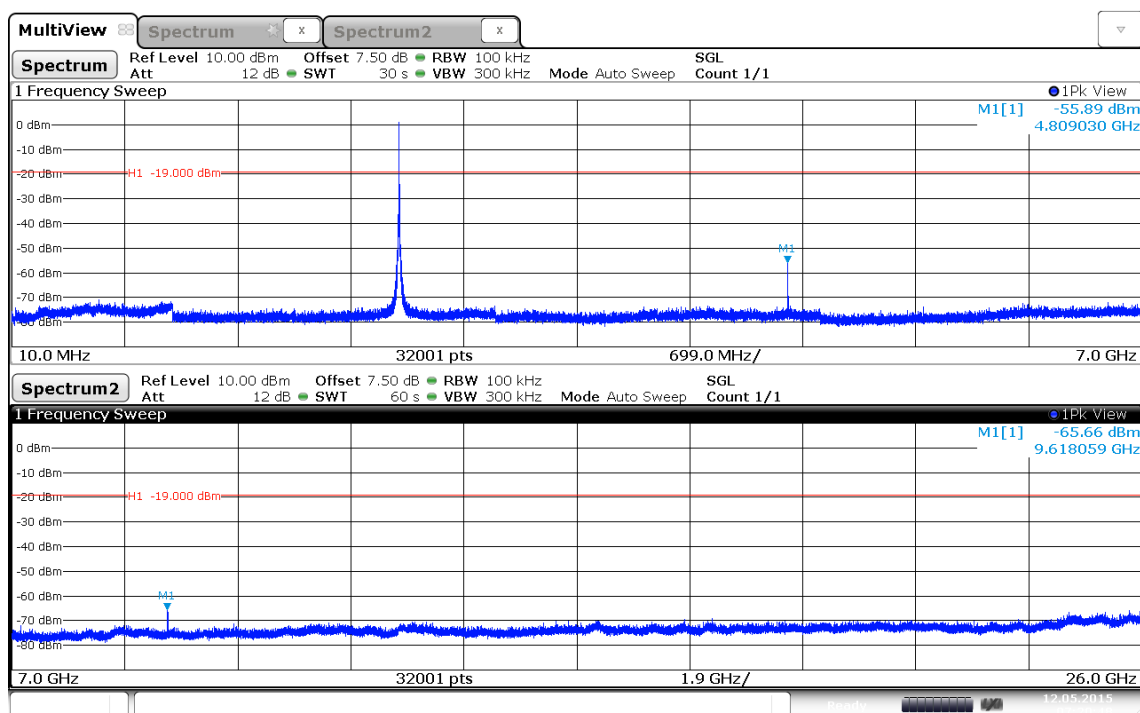
Test results 2000kbps							
F _{MID}	2450	OQPSK2000	4899.020	-58.89	0.9	-19.1	-39.79
F _{MID}	2450	OQPSK2000	9802.116	-64.33	0.9	-19.1	-45.23
Test results 250kbps							
F _{HIGH}	2480	OQPSK250	4961.060	-69.99	-11	-31.0	-38.99
F _{HIGH}	2480	OQPSK250	25772.30	-67.60	-11	-31.0	-36.60
Test results 2000kbps							
F _{HIGH}	2480	OQPSK2000	4961.060	-71.98	-10.4	-30.4	-41.58
F _{HIGH}	2480	OQPSK2000	25803.77	-68.19	-10.4	-30.4	-37.79
Comments:							

Conducted spurious emissions – ZIGBEE F_{LOW}

Spurious Emissions acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2405 MHz, PRBS, 250kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Spurious in non-restricted frequency bands (558074 D01 Meas Guidance)
 Note 2: conducted measurement



Date: 12.MAY.2015 07:20:48

Test Report No.: G0M-1505-4730-TFC247ZB-V01

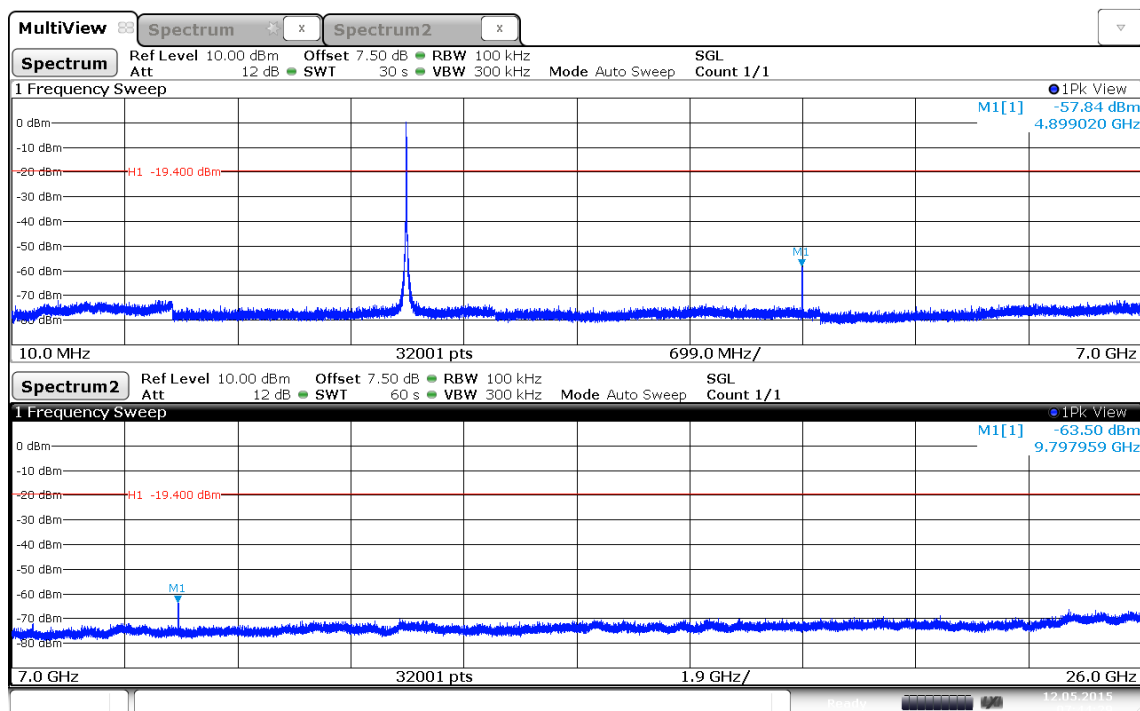
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Conducted spurious emissions – ZIGBEE F_{MID}

Spurious Emissions acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2450 MHz, PRBS, 250kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Spurious in non-restricted frequency bands (558074 D01 Meas Guidance)
 Note 2: conducted measurement



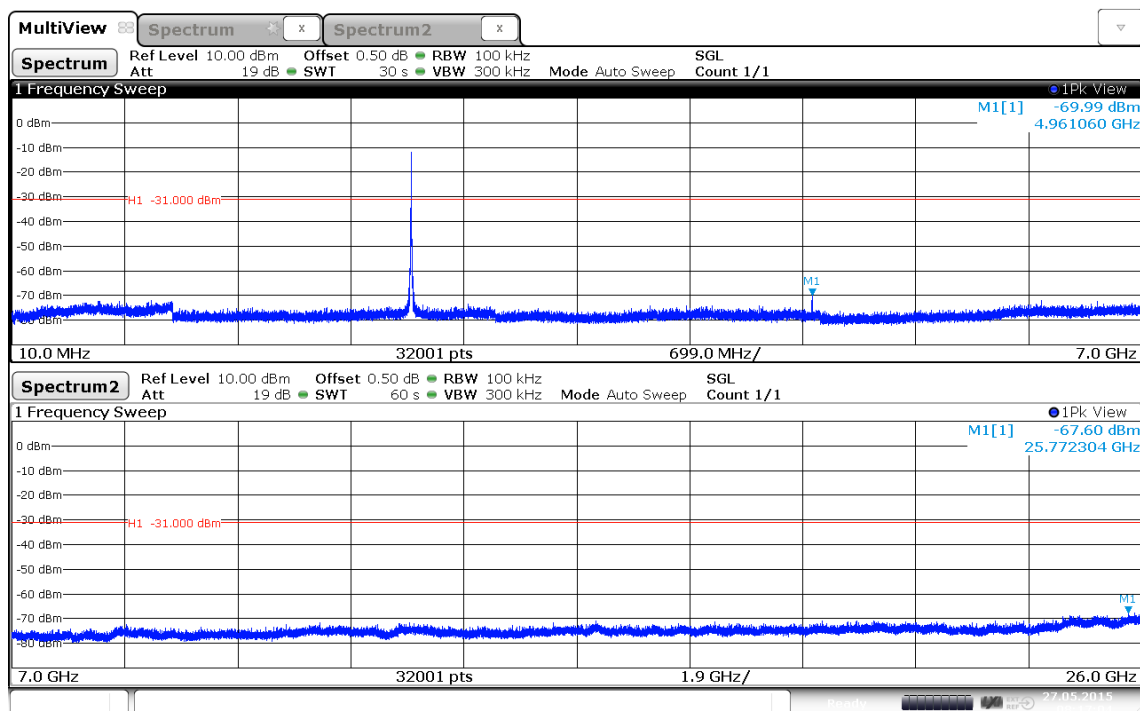
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Conducted spurious emissions – ZIGBEE F_{HIGH}

Spurious Emissions acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2480 MHz, PRBS, 2450kbps
 Test Date: 2015-05-27
 Verdict: PASS
 Note 1: Spurious in non-restricted frequency bands (558074 D01 Meas Guidance)
 Note 2: conducted measurement



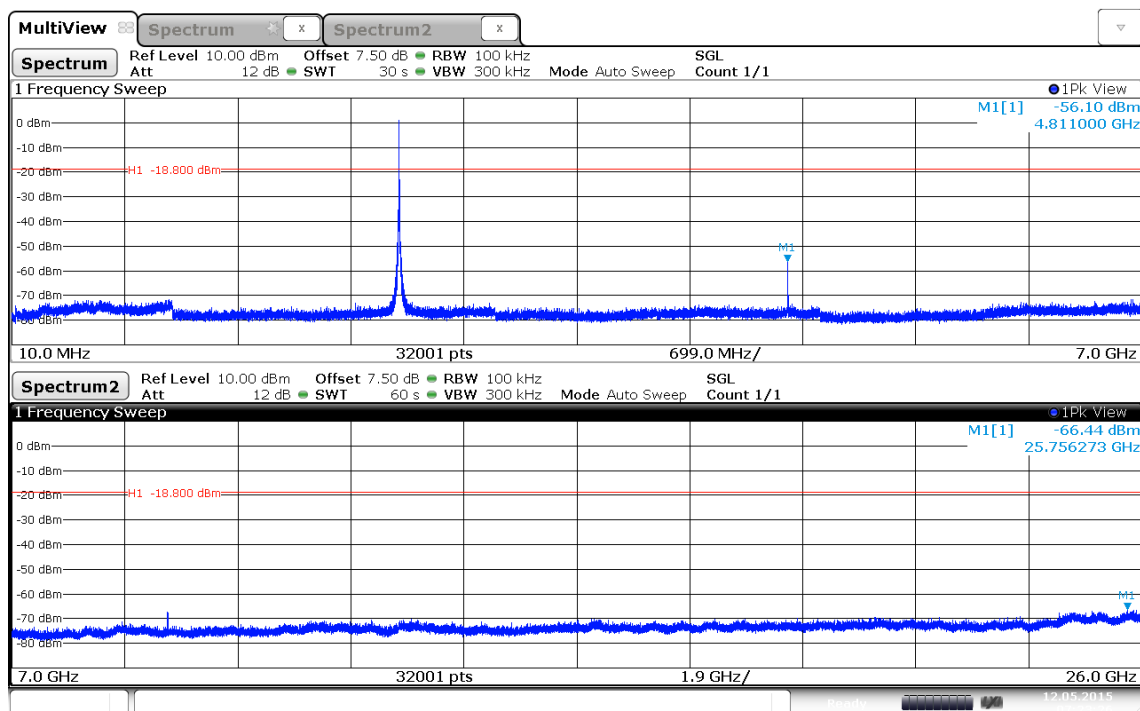
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Conducted spurious emissions – ZIGBEE F_{LOW}

Spurious Emissions acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2405 MHz, PRBS, 2000kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Spurious in non-restricted frequency bands (558074 D01 Meas Guidance)
 Note 2: conducted measurement

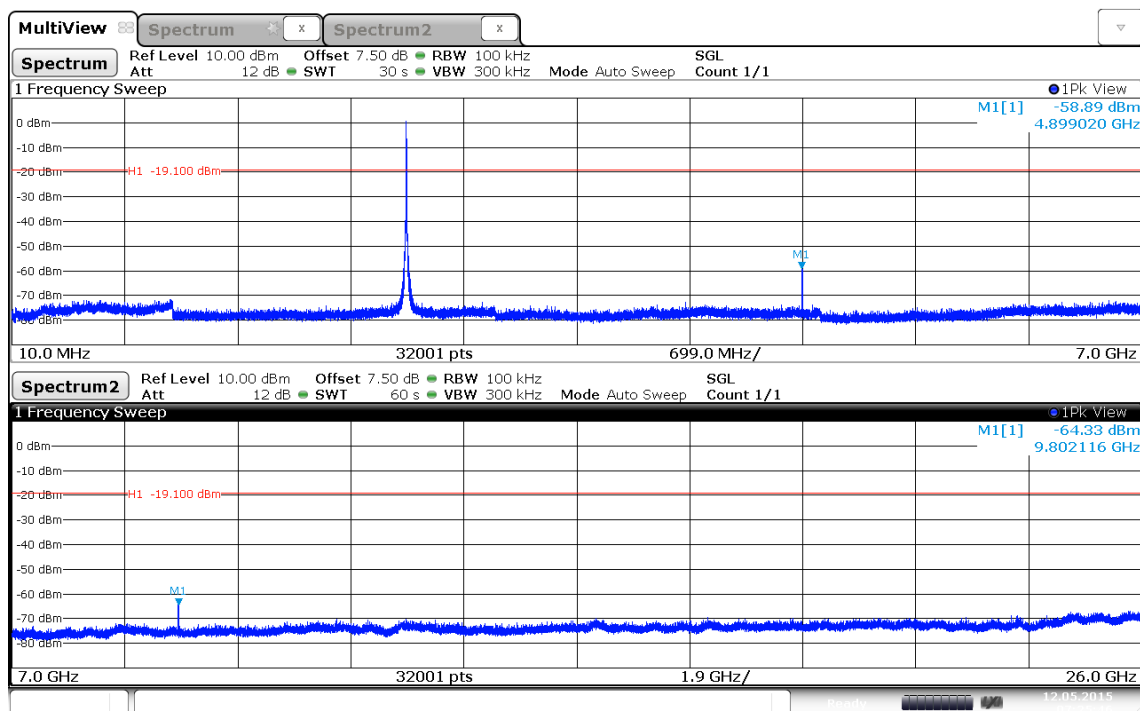


Conducted spurious emissions – ZIGBEE F_{MID}

Spurious Emissions acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2450 MHz, PRBS, 2000kbps
 Test Date: 2015-05-12
 Verdict: PASS
 Note 1: Spurious in non-restricted frequency bands (558074 D01 Meas Guidance)
 Note 2: conducted measurement



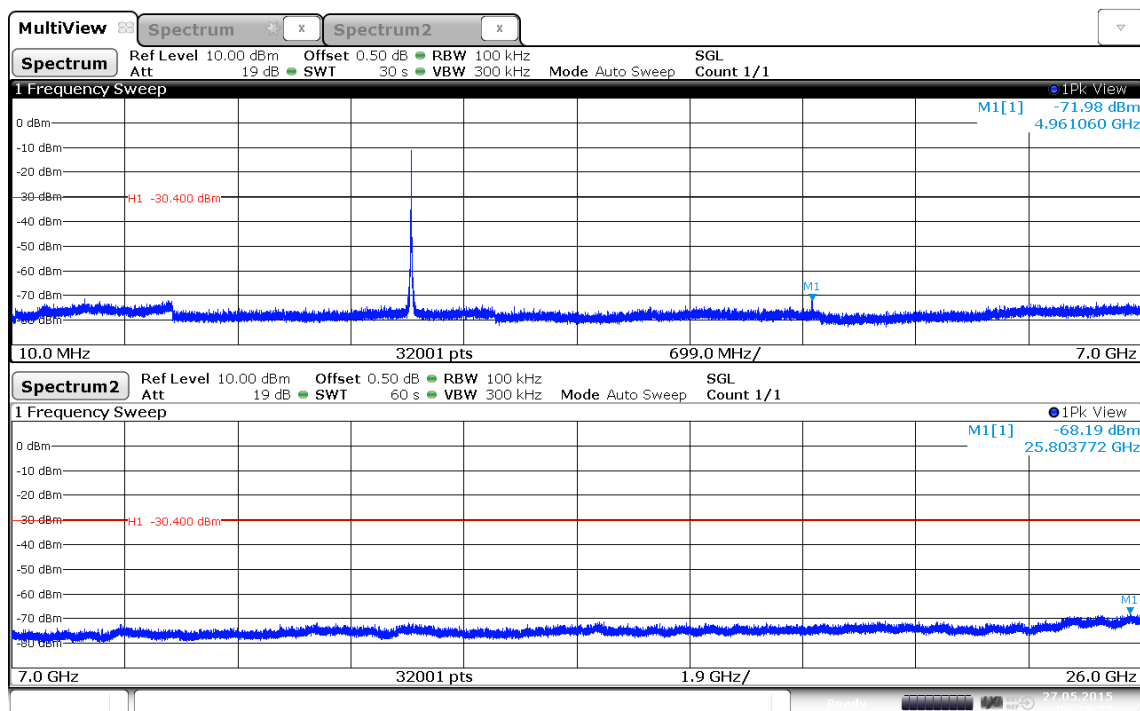
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Conducted spurious emissions – ZIGBEE F_{HIGH}

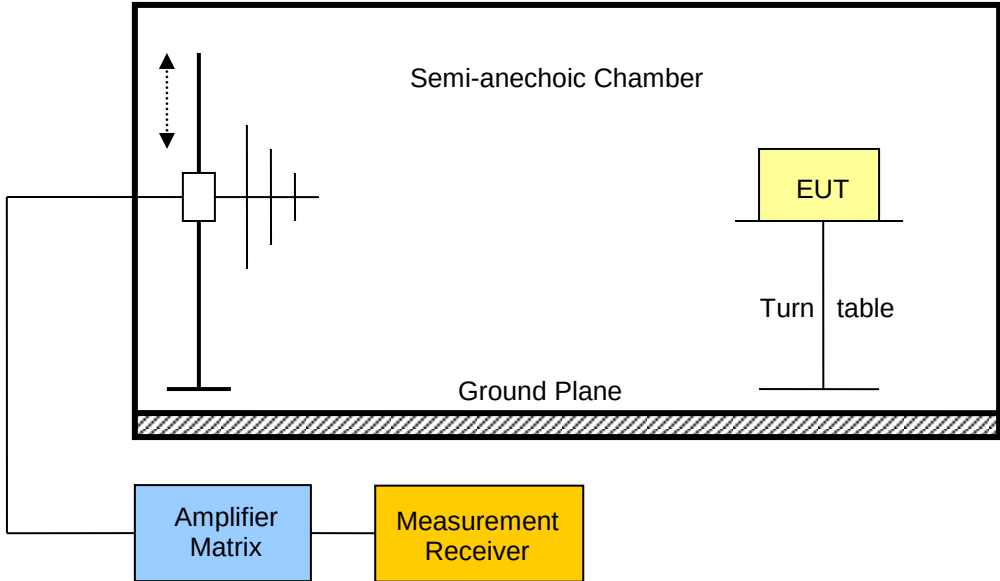
Spurious Emissions acc. to FCC 15.247

Project Number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Handrik
 Test Conditions: Tnom / Vnom
 Mode: Tx, 2480 MHz, PRBS, 2000kbps
 Test Date: 2015-05-27
 Verdict: PASS
 Note 1: Spurious in non-restricted frequency bands (558074 D01 Meas Guidance)
 Note 2: conducted measurement



3.7 Test Conditions and Results – Transmitter radiated emissions

Transmitter radiated emissions acc. to FCC 47 CFR 15.247				Verdict: PASS	
Test according referenced standards		Reference Method			
		FCC 15.247(d)			
Test according to measurement reference		Reference Method			
		FCC KDB Publication No. 558074 / ANSI C63.4			
Test frequency range		Tested frequencies			
		30 MHz – 10 th Harmonic			
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	
Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). When average radiated emission measurements are specified, including average emission measurements below 1000 MHz, there also is a limit on the peak level of the radio frequency emissions. The limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test.					
Test setup					
					

Test procedure									
1. EUT set to test 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 within restricted bands									
Test results – Antenna “Stub” A1									
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Limit dist. [m]*	Margin [dB]
F _{LOW}	2405	IEEE 802.15.4	240	26.66	pk	ver	46.00	3	-19.34
F _{LOW}	2405	IEEE 802.15.4	240	29.30	pk	hor	46.00	3	-16.70
F _{LOW}	2405	IEEE 802.15.4	241.6	26.33	pk	ver	46.00	3	-19.67
F _{LOW}	2405	IEEE 802.15.4	403.2	30.80	pk	ver	46.00	3	-15.20
F _{LOW}	2405	IEEE 802.15.4	404.8	32.85	pk	ver	46.00	3	-13.15
F _{LOW}	2405	IEEE 802.15.4	2339	41.61	pk	ver	74.00	3	-32.39
F _{LOW}	2405	IEEE 802.15.4	2339	29.27	RMS	ver	54.00	3	-24.73
F _{LOW}	2405	IEEE 802.15.4	2493	44.72	pk	ver	74.00	3	-29.28
F _{LOW}	2405	IEEE 802.15.4	3924	45.27	pk	ver	74.00	3	-28.73
F _{LOW}	2405	IEEE 802.15.4	4808	43.15	pk	ver	74.00	3	-30.85
F _{LOW}	2405	IEEE 802.15.4	4808	46.06	pk	hor	74.00	3	-27.94
F _{MID}	2450	IEEE 802.15.4	240	26.51	pk	ver	46.00	3	-19.49
F _{MID}	2450	IEEE 802.15.4	240	29.83	pk	hor	46.00	3	-16.17
F _{MID}	2450	IEEE 802.15.4	400	28.34	pk	hor	46.00	3	-17.66
F _{MID}	2450	IEEE 802.15.4	403.2	32.56	pk	ver	46.00	3	-13.44
F _{MID}	2450	IEEE 802.15.4	404.8	31.37	pk	ver	46.00	3	-14.63
F _{MID}	2450	IEEE 802.15.4	2496	44.40	pk	ver	74.00	3	-29.60
F _{MID}	2450	IEEE 802.15.4	3982	44.80	pk	ver	74.00	3	-29.20
F _{MID}	2450	IEEE 802.15.4	4896	44.88	pk	ver	74.00	3	-29.12
F _{MID}	2450	IEEE 802.15.4	4896	46.51	pk	hor	74.00	3	-27.49
F _{HIGH}	2480	IEEE 802.15.4	2484	52.98	pk	ver	74.00	3	-21.02
F _{HIGH}	2480	IEEE 802.15.4	2484	46.08	RMS	ver	54.00	3	-07.92
F _{HIGH}	2480	IEEE 802.15.4	2492	42.39	pk	ver	74.00	3	-31.61
F _{HIGH}	2480	IEEE 802.15.4	2492	29.47	RMS	ver	54.00	3	-24.53
F _{HIGH}	2480	IEEE 802.15.4	2495	44.28	pk	ver	74.00	3	-29.72
F _{HIGH}	2480	IEEE 802.15.4	2495	32.66	RMS	ver	54.00	3	-21.34
F _{HIGH}	2480	IEEE 802.15.4	2497	44.04	pk	ver	74.00	3	-29.96
F _{HIGH}	2480	IEEE 802.15.4	2497	34.11	RMS	ver	54.00	3	-19.89

F _{HIGH}	2480	IEEE 802.15.4	3979	44.94	pk	ver	74.00	3	-29.06
F _{HIGH}	2480	IEEE 802.15.4	7680	41.78	pk	ver	74.00	3	-32.22
F _{HIGH}	2480	IEEE 802.15.4	240	29.87	pk	hor	46.00	3	-16.13
F _{HIGH}	2480	IEEE 802.15.4	241.6	26.79	pk	hor	46.00	3	-19.21
F _{HIGH}	2480	IEEE 802.15.4	404.8	32.52	pk	ver	46.00	3	-13.48
F _{HIGH}	2480	IEEE 802.15.4	404.8	26.93	pk	hor	46.00	3	-19.07

Comments: * Physical distance between EUT and measurement antenna.
After radiated spurious check between 250 / 2000 kbps no differences in the results, measurement were performed with 250kbps.

Test results – Antenna “Stub” A2									
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbμV/m]	Det.	Pol.	Limit [dbμV/m]	Limit dist. [m]*	Margin [dB]
F _{LOW}	2405	IEEE 802.15.4	240	27.71	pk	hor	46.00	3	-18.29
F _{LOW}	2405	IEEE 802.15.4	403.2	32.01	pk	ver	46.00	3	-13.99
F _{LOW}	2405	IEEE 802.15.4	403.2	26.31	pk	hor	46.00	3	-19.69
F _{LOW}	2405	IEEE 802.15.4	404.8	32.16	pk	ver	46.00	3	-13.84
F _{LOW}	2405	IEEE 802.15.4	2339	40.92	pk	ver	74.00	3	-33.08
F _{LOW}	2405	IEEE 802.15.4	2339	29.38	RMS	ver	54.00	3	-24.62
F _{LOW}	2405	IEEE 802.15.4	3961	44.27	pk	ver	74.00	3	-29.73
F _{LOW}	2405	IEEE 802.15.4	4808	42.43	pk	ver	74.00	3	-31.57
F _{LOW}	2405	IEEE 802.15.4	4808	45.48	pk	hor	74.00	3	-28.52
F _{LOW}	2405	IEEE 802.15.4	7488	42.32	pk	ver	74.00	3	-31.68
F _{LOW}	2405	IEEE 802.15.4	7488	42.62	pk	hor	74.00	3	-31.38
F _{MID}	2450	IEEE 802.15.4	240	29.69	pk	hor	46.00	3	-16.31
F _{MID}	2450	IEEE 802.15.4	400	30.05	pk	ver	46.00	3	-15.95
F _{MID}	2450	IEEE 802.15.4	400	26.35	pk	hor	46.00	3	-19.65
F _{MID}	2450	IEEE 802.15.4	403.2	32.69	pk	ver	46.00	3	-13.31
F _{MID}	2450	IEEE 802.15.4	404.8	31.89	pk	ver	46.00	3	-14.11
F _{MID}	2450	IEEE 802.15.4	1417	45.14	pk	ver	74.00	3	-28.86
F _{MID}	2450	IEEE 802.15.4	3864	44.04	pk	hor	74.00	3	-29.96
F _{MID}	2450	IEEE 802.15.4	3970	44.52	pk	ver	74.00	3	-29.48
F _{MID}	2450	IEEE 802.15.4	3973	44.01	pk	hor	74.00	3	-29.99
F _{MID}	2450	IEEE 802.15.4	4896	41.38	pk	ver	74.00	3	-32.62
F _{MID}	2450	IEEE 802.15.4	4896	44.17	pk	hor	74.00	3	-29.83
F _{MID}	2450	IEEE 802.15.4	7344	44.07	pk	ver	74.00	3	-29.93
F _{MID}	2450	IEEE 802.15.4	7344	44.96	pk	hor	74.00	3	-29.04
F _{HIGH}	2480	IEEE 802.15.4	2484	58.72	pk	ver	74.00	3	-15.28
F _{HIGH}	2480	IEEE 802.15.4	2484	52.64	RMS	ver	54.00	3	-01.36
F _{HIGH}	2480	IEEE 802.15.4	2484	57.15	pk	hor	74.00	3	-16.85
F _{HIGH}	2480	IEEE 802.15.4	2484	50.58	RMS	hor	54.00	3	-03.42
F _{HIGH}	2480	IEEE 802.15.4	2492	45.93	pk	ver	74.00	3	-28.07
F _{HIGH}	2480	IEEE 802.15.4	2492	32.57	RMS	ver	54.00	3	-21.43
F _{HIGH}	2480	IEEE 802.15.4	2494	45.12	pk	ver	74.00	3	-28.88
F _{HIGH}	2480	IEEE 802.15.4	2494	33.62	RMS	ver	54.00	3	-20.38
F _{HIGH}	2480	IEEE 802.15.4	2497	43.78	pk	ver	74.00	3	-30.22

F _{HIGH}	2480	IEEE 802.15.4	2497	34.56	RMS	ver	54.00	3	-19.44
F _{HIGH}	2480	IEEE 802.15.4	2500	44.28	pk	ver	74.00	3	-29.72
F _{HIGH}	2480	IEEE 802.15.4	3754	44.75	pk	ver	74.00	3	-29.25
F _{HIGH}	2480	IEEE 802.15.4	3838	44.57	pk	ver	74.00	3	-29.43
F _{HIGH}	2480	IEEE 802.15.4	3901	47.15	pk	hor	74.00	3	-26.85
F _{HIGH}	2480	IEEE 802.15.4	240	29.11	pk	hor	46.00	3	-16.89
F _{HIGH}	2480	IEEE 802.15.4	401.6	31.56	pk	ver	46.00	3	-14.44
F _{HIGH}	2480	IEEE 802.15.4	404.8	26.03	pk	hor	46.00	3	-19.97
F _{HIGH}	2480	IEEE 802.15.4	406.4	32.82	pk	ver	46.00	3	-13.18

Comments: * Physical distance between EUT and measurement antenna.
After radiated spurious check between 250 / 2000 kbps no differences in the results, measurement were performed with 250kbps.

Test results – Antenna “Quarter-Wave” A1									
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dbμV/m]	Det.	Pol.	Limit [dbμV/m]	Limit dist. [m]*	Margin [dB]
F _{LOW}	2405	IEEE 802.15.4	240	30.62	pk	hor	46.00	3	-15.38
F _{LOW}	2405	IEEE 802.15.4	241.6	29.06	pk	hor	46.00	3	-16.94
F _{LOW}	2405	IEEE 802.15.4	331.2	27.56	pk	hor	46.00	3	-18.44
F _{LOW}	2405	IEEE 802.15.4	2339	42.71	pk	ver	74.00	3	-31.29
F _{LOW}	2405	IEEE 802.15.4	2339	30.20	RMS	ver	54.00	3	-23.80
F _{LOW}	2405	IEEE 802.15.4	4808	43.59	pk	ver	74.00	3	-30.41
F _{LOW}	2405	IEEE 802.15.4	4808	52.29	pk	hor	74.00	3	-21.71
F _{MID}	2450	IEEE 802.15.4	240	30.78	pk	hor	46.00	3	-15.22
F _{MID}	2450	IEEE 802.15.4	243.2	27.91	pk	hor	46.00	3	-18.09
F _{MID}	2450	IEEE 802.15.4	4896	42.04	pk	ver	74.00	3	-31.96
F _{MID}	2450	IEEE 802.15.4	4896	49.71	pk	hor	74.00	3	-24.29
F _{HIGH}	2480	IEEE 802.15.4	2484	51.63	pk	ver	74.00	3	-22.37
F _{HIGH}	2480	IEEE 802.15.4	2484	44.60	RMS	ver	54.00	3	-09.40
F _{HIGH}	2480	IEEE 802.15.4	2484	58.16	pk	hor	74.00	3	-15.84
F _{HIGH}	2480	IEEE 802.15.4	2484	51.69	RMS	hor	54.00	3	-02.31
F _{HIGH}	2480	IEEE 802.15.4	2495	44.74	pk	ver	74.00	3	-29.26
F _{HIGH}	2480	IEEE 802.15.4	2495	33.33	RMS	ver	54.00	3	-20.67
F _{HIGH}	2480	IEEE 802.15.4	2499	44.84	pk	ver	74.00	3	-29.16
F _{HIGH}	2480	IEEE 802.15.4	2499	32.67	RMS	ver	54.00	3	-21.33
F _{HIGH}	2480	IEEE 802.15.4	3877	45.17	pk	ver	74.00	3	-28.83
F _{HIGH}	2480	IEEE 802.15.4	3898	47.04	pk	hor	74.00	3	-26.96
F _{HIGH}	2480	IEEE 802.15.4	240	29.56	pk	ver	46.00	3	-16.44

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

F _{HIGH}	2480	IEEE 802.15.4	403.2	27.15	pk	ver	46.00	3	-18.85
F _{HIGH}	2480	IEEE 802.15.4	404.8	29.41	pk	ver	46.00	3	-16.59

Comments: * Physical distance between EUT and measurement antenna.
After radiated spurious check between 250 / 2000 kbps no differences in the results, measurement were performed with 250kbps.

Test results – Antenna “Quarter-Wave” A2									
Channel	Frequency [MHz]	Mode	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Limit dist. [m]*	Margin [dB]
F _{LOW}	2405	IEEE 802.15.4	2339	41.09	pk	ver	74.00	3	-32.91
F _{LOW}	2405	IEEE 802.15.4	2339	28.94	RMS	ver	54.00	3	-25.06
F _{LOW}	2405	IEEE 802.15.4	4808	43.48	pk	ver	74.00	3	-30.52
F _{LOW}	2405	IEEE 802.15.4	4808	52.56	pk	hor	74.00	3	-21.44
F _{MID}	2450	IEEE 802.15.4	4896	42.39	pk	ver	74.00	3	-31.61
F _{MID}	2450	IEEE 802.15.4	4896	49.62	pk	hor	74.00	3	-24.38
F _{HIGH}	2480	IEEE 802.15.4	2484	47.26	pk	ver	74.00	3	-26.74
F _{HIGH}	2480	IEEE 802.15.4	2484	39.53	RMS	ver	54.00	3	-14.47
F _{HIGH}	2480	IEEE 802.15.4	2484	58.57	pk	hor	74.00	3	-15.43
F _{HIGH}	2480	IEEE 802.15.4	2484	51.80	RMS	hor	54.00	3	-02.20
F _{HIGH}	2480	IEEE 802.15.4	2494	44.36	pk	ver	74.00	3	-29.64
F _{HIGH}	2480	IEEE 802.15.4	2494	32.73	RMS	ver	54.00	3	-21.27
F _{HIGH}	2480	IEEE 802.15.4	2496	43.89	pk	ver	74.00	3	-30.11
F _{HIGH}	2480	IEEE 802.15.4	2496	34.11	RMS	ver	54.00	3	-19.89
F _{HIGH}	2480	IEEE 802.15.4	2499	45.41	pk	ver	74.00	3	-28.59
F _{HIGH}	2480	IEEE 802.15.4	2499	32.52	RMS	ver	54.00	3	-21.48
F _{HIGH}	2480	IEEE 802.15.4	3856	44.32	pk	ver	74.00	3	-29.68
F _{HIGH}	2480	IEEE 802.15.4	3982	47.34	pk	hor	74.00	3	-26.66
F _{HIGH}	2480	IEEE 802.15.4	3985	44.45	pk	ver	74.00	3	-29.55
F _{HIGH}	2480	IEEE 802.15.4	5000	42.86	pk	ver	74.00	3	-31.14

Comments: * Physical distance between EUT and measurement antenna.
After radiated spurious check between 250 / 2000 kbps no differences in the results, measurement were performed with 250kbps.

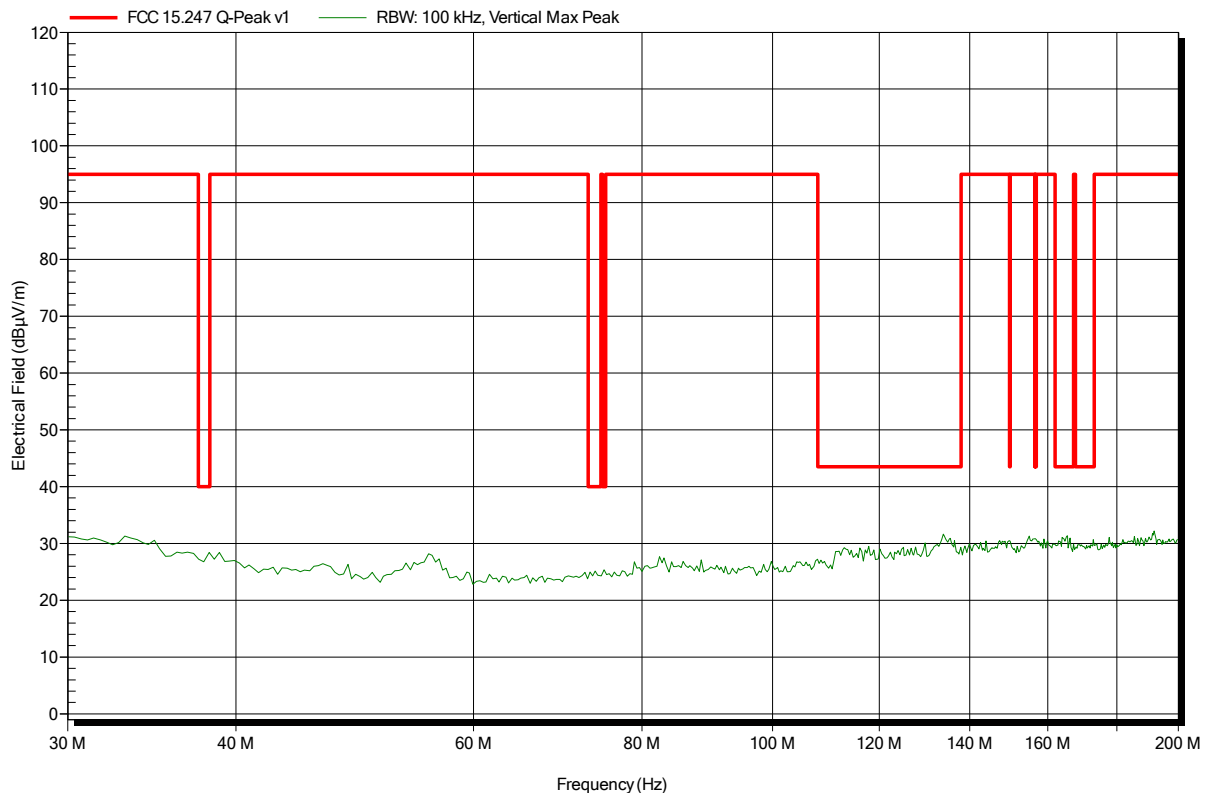
ANNEX A Transmitter radiated spurious emissions

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A1

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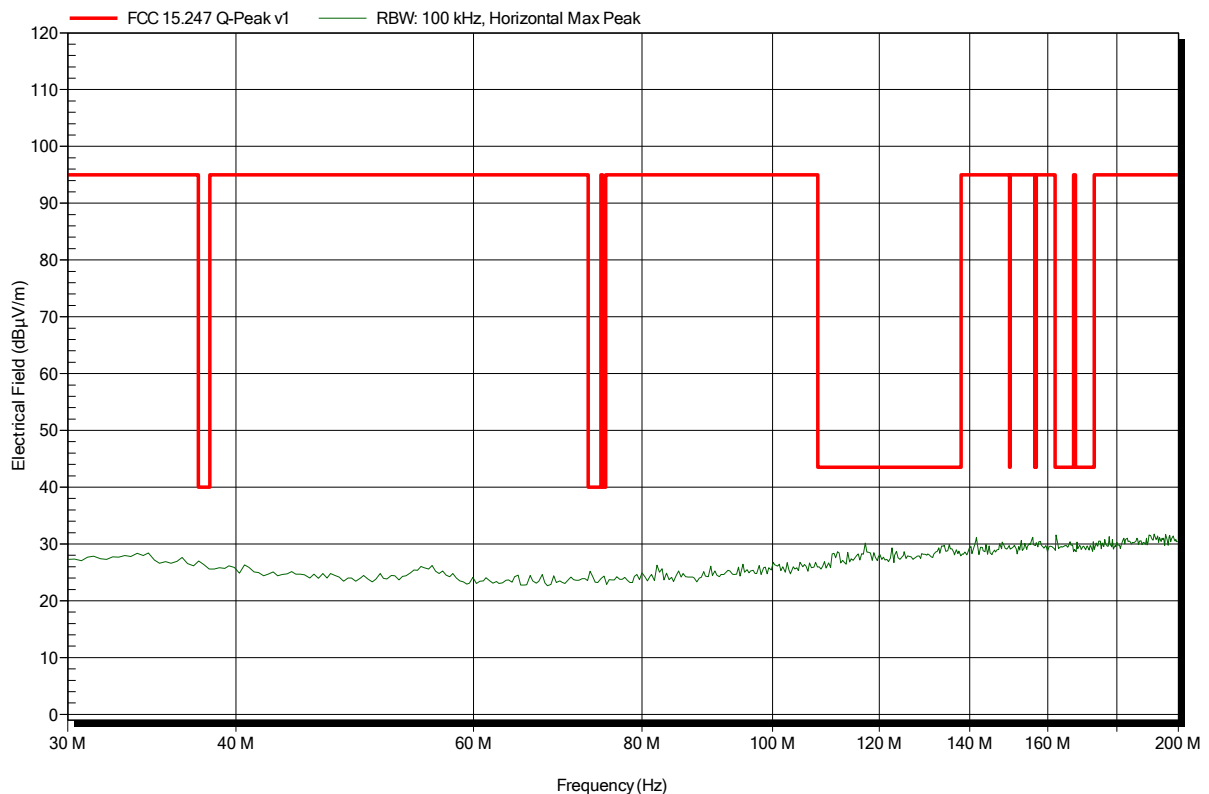


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HK 116, Horizontal
Measurement distance: 3 m
Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date: 2015-05-19
Note: EUT vertical, ant.: A1

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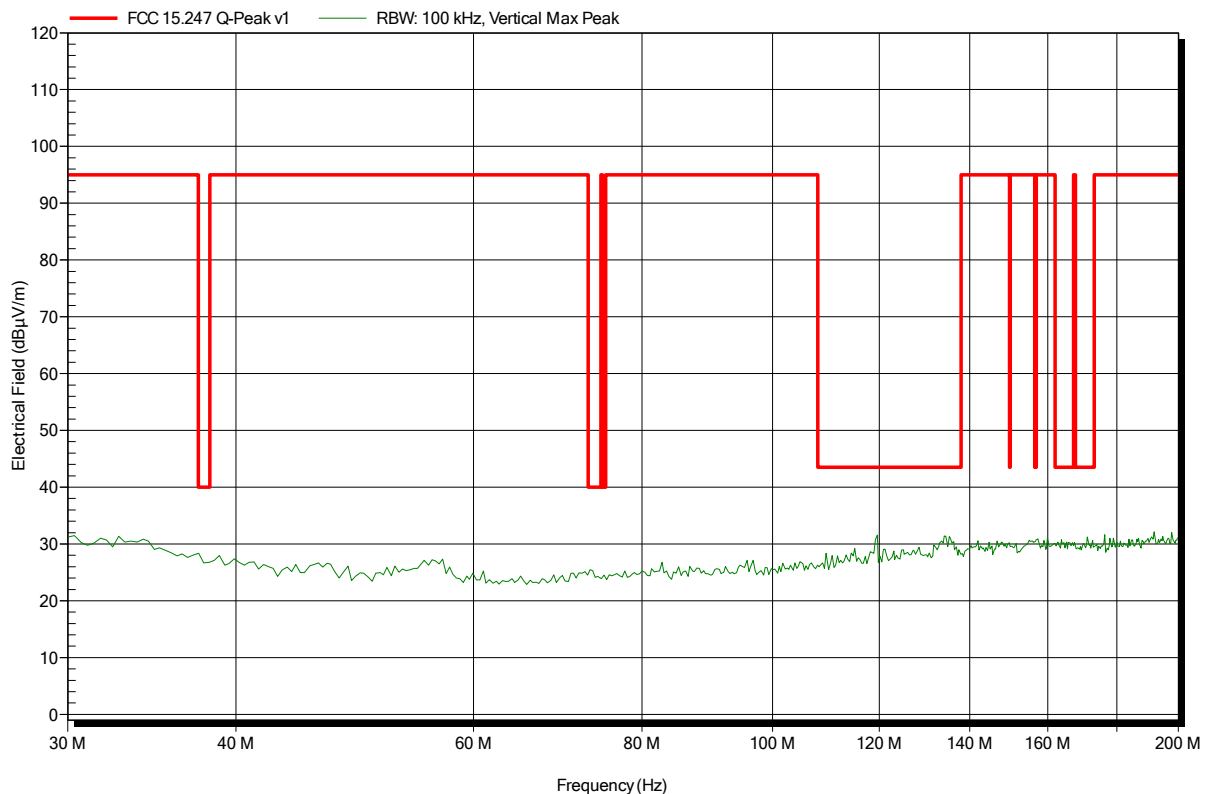


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3 m
Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date: 2015-05-19
Note: EUT vertical, ant.: A1

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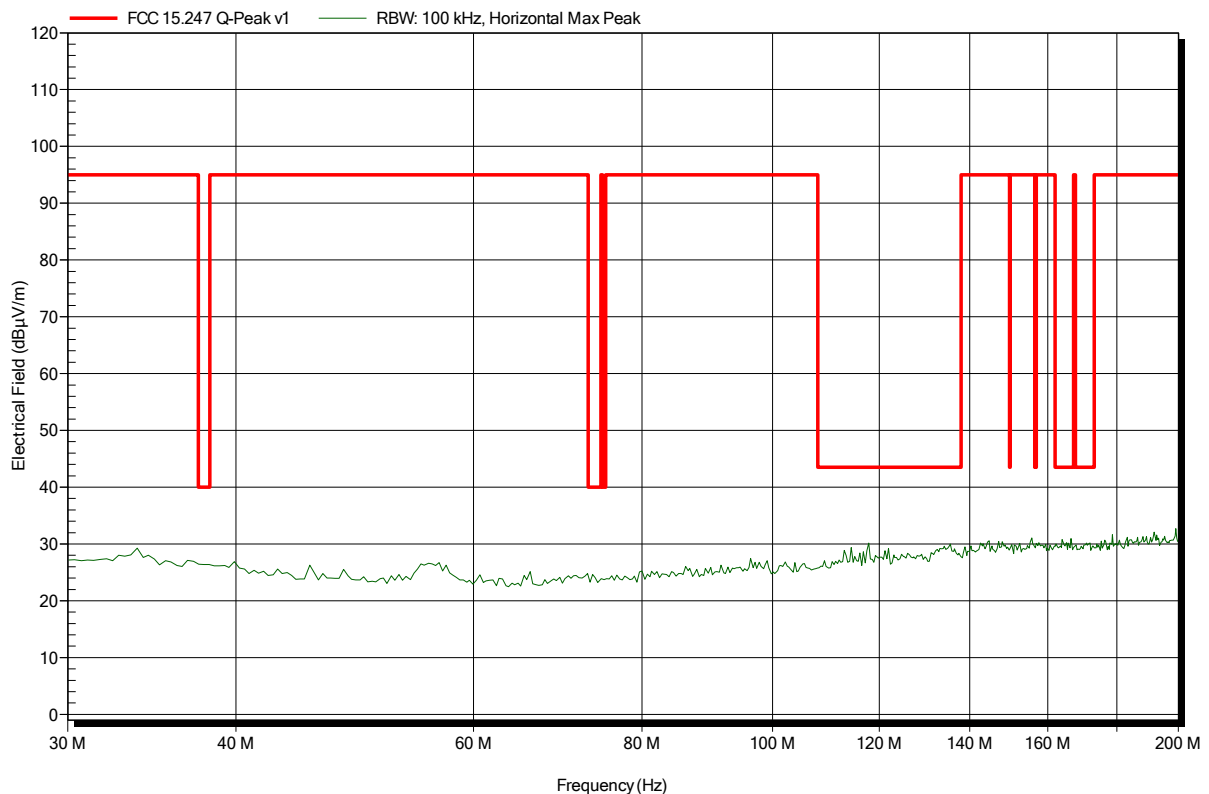


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A1

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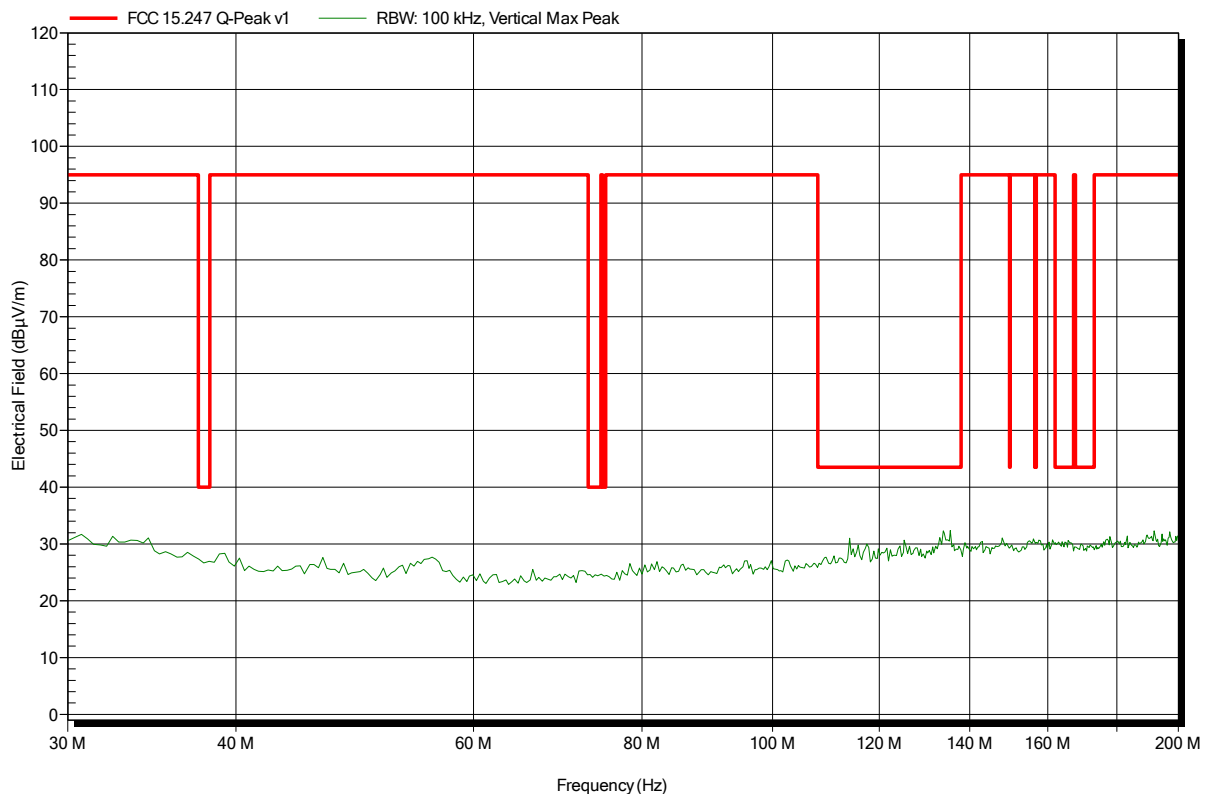


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A1

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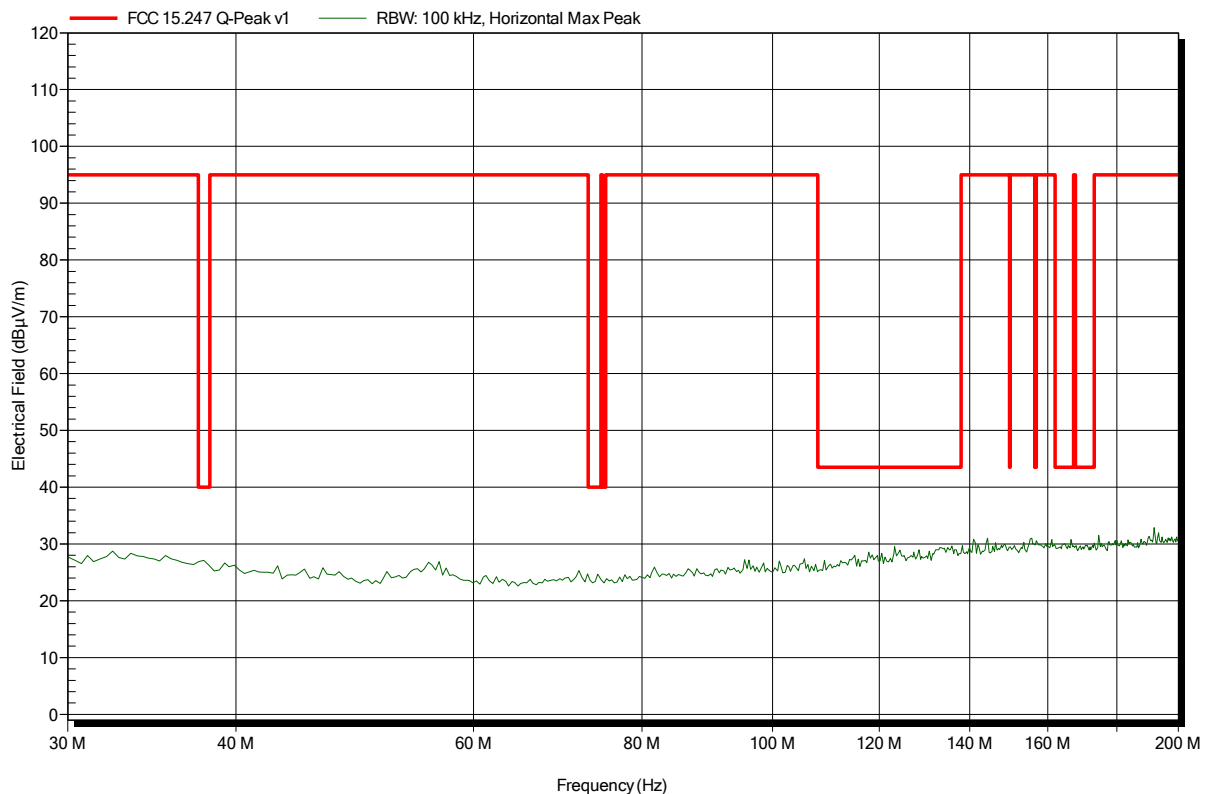


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A1

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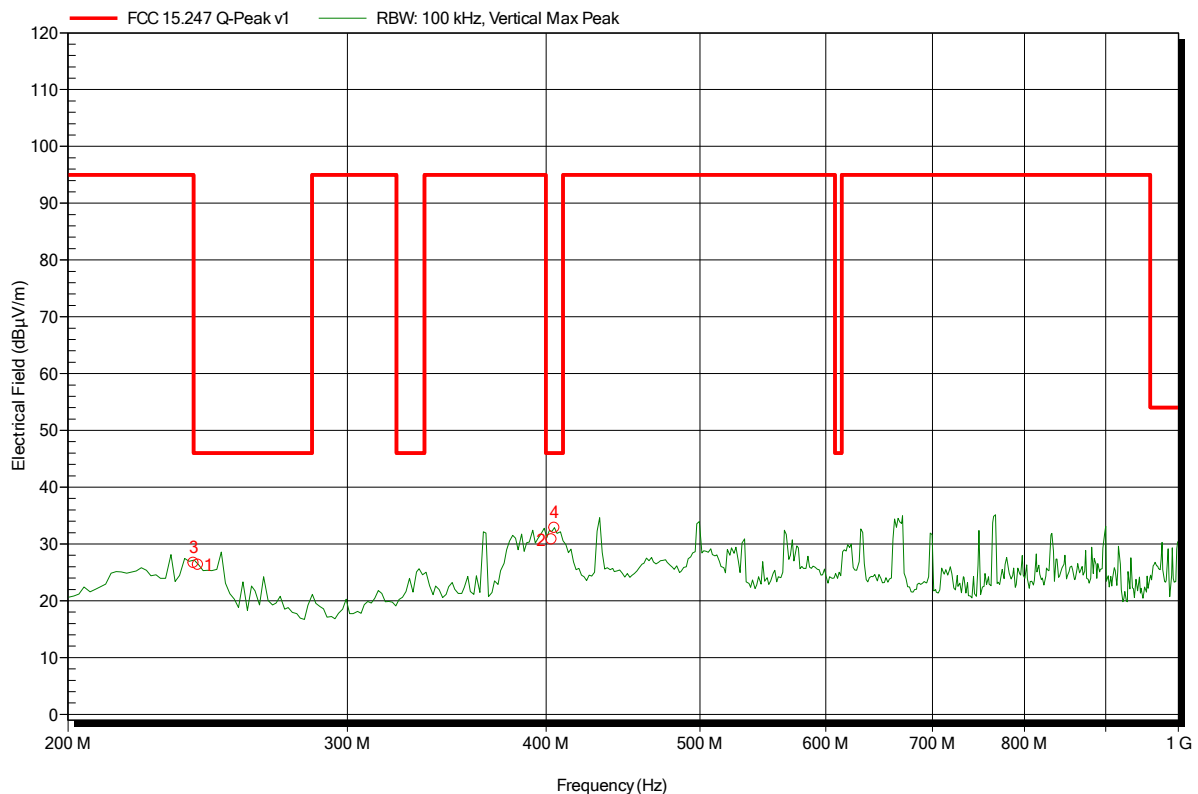


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	26.66 dBµV/m	46 dBµV/m	-19.34 dB	Pass
241.6 MHz	26.33 dBµV/m	46 dBµV/m	-19.67 dB	Pass
403.2 MHz	30.8 dBµV/m	46 dBµV/m	-15.2 dB	Pass
404.8 MHz	32.85 dBµV/m	46 dBµV/m	-13.15 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

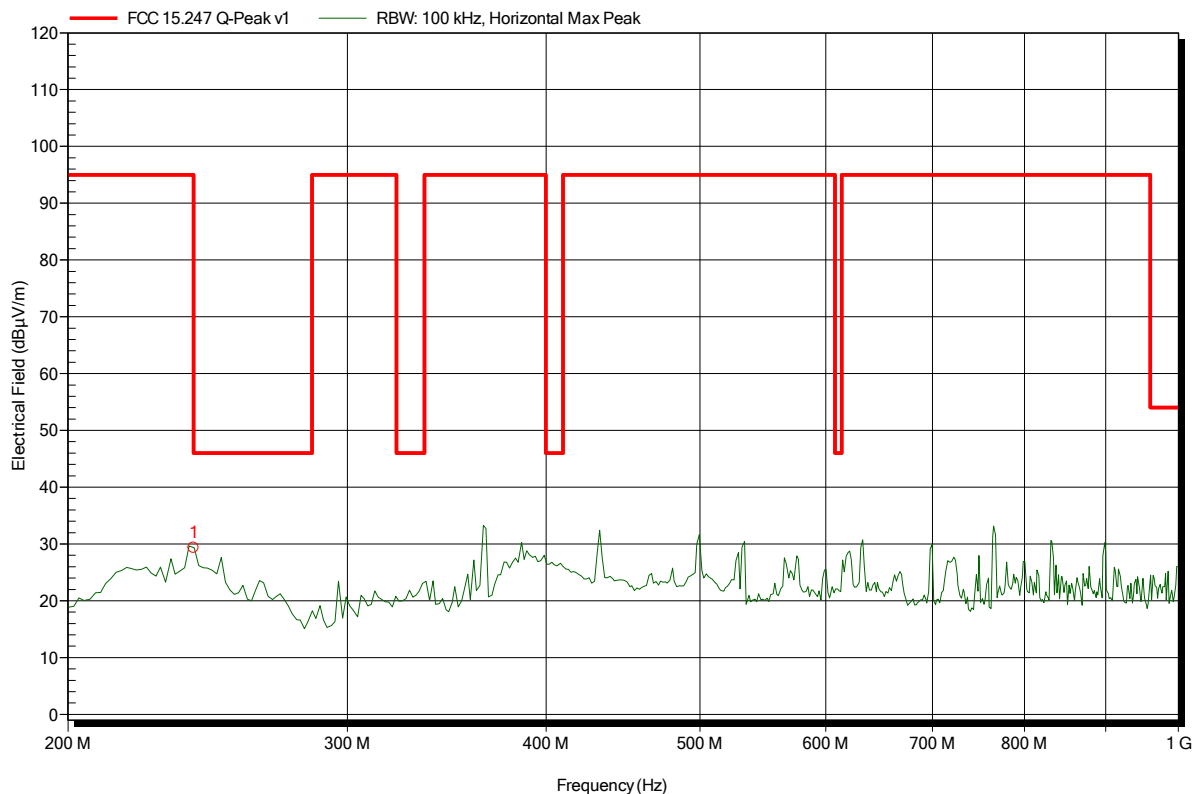
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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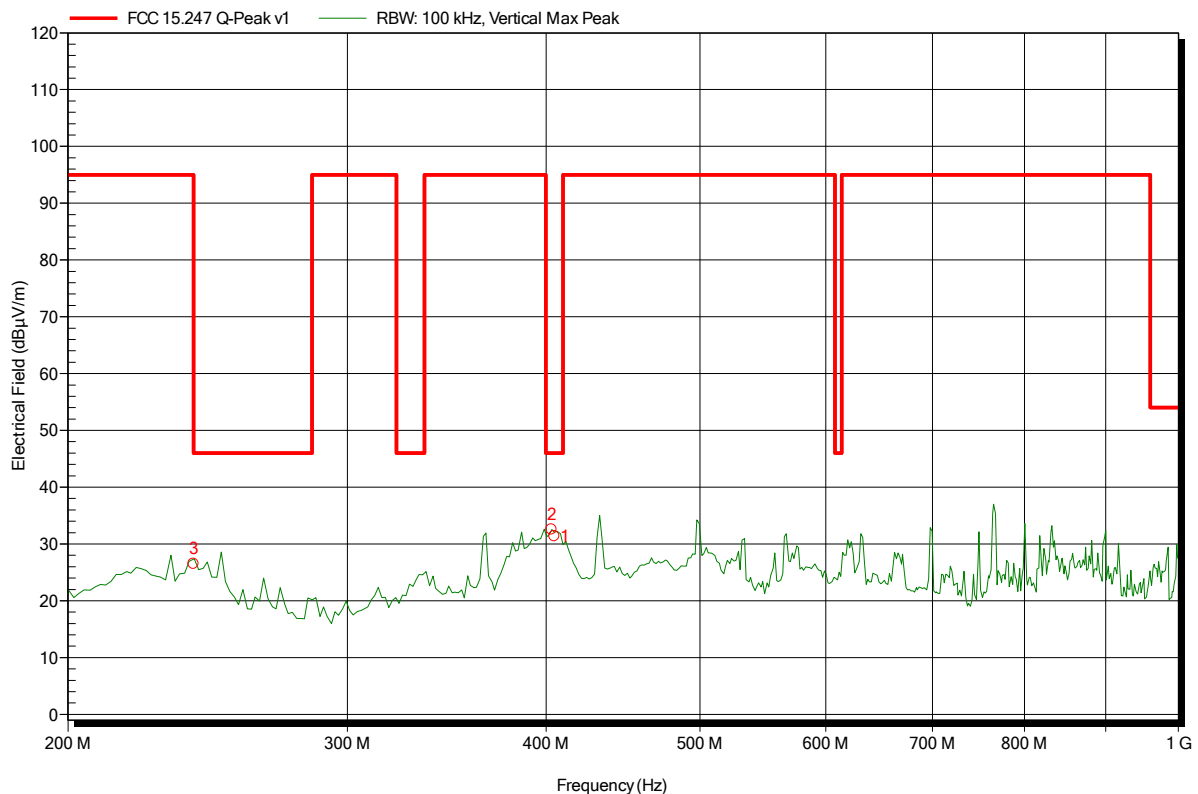
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	29.3 dBµV/m	46 dBµV/m	-16.7 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HL 223, Vertical
Measurement distance: 3 m
Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date: 2015-05-19
Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	26.51 dBµV/m	46 dBµV/m	-19.49 dB	Pass
403.2 MHz	32.56 dBµV/m	46 dBµV/m	-13.44 dB	Pass
404.8 MHz	31.37 dBµV/m	46 dBµV/m	-14.63 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

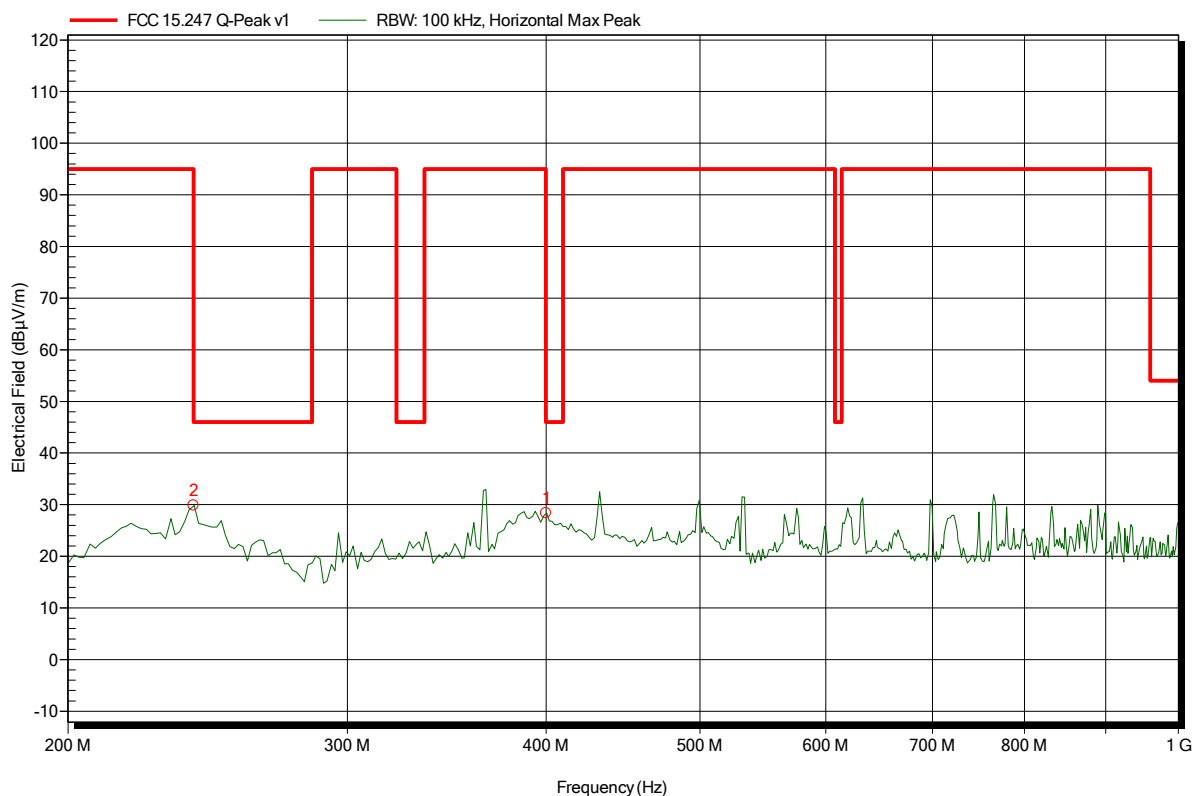
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	29.83 dBµV/m	46 dBµV/m	-16.17 dB	Pass
400 MHz	28.34 dBµV/m	46 dBµV/m	-17.66 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

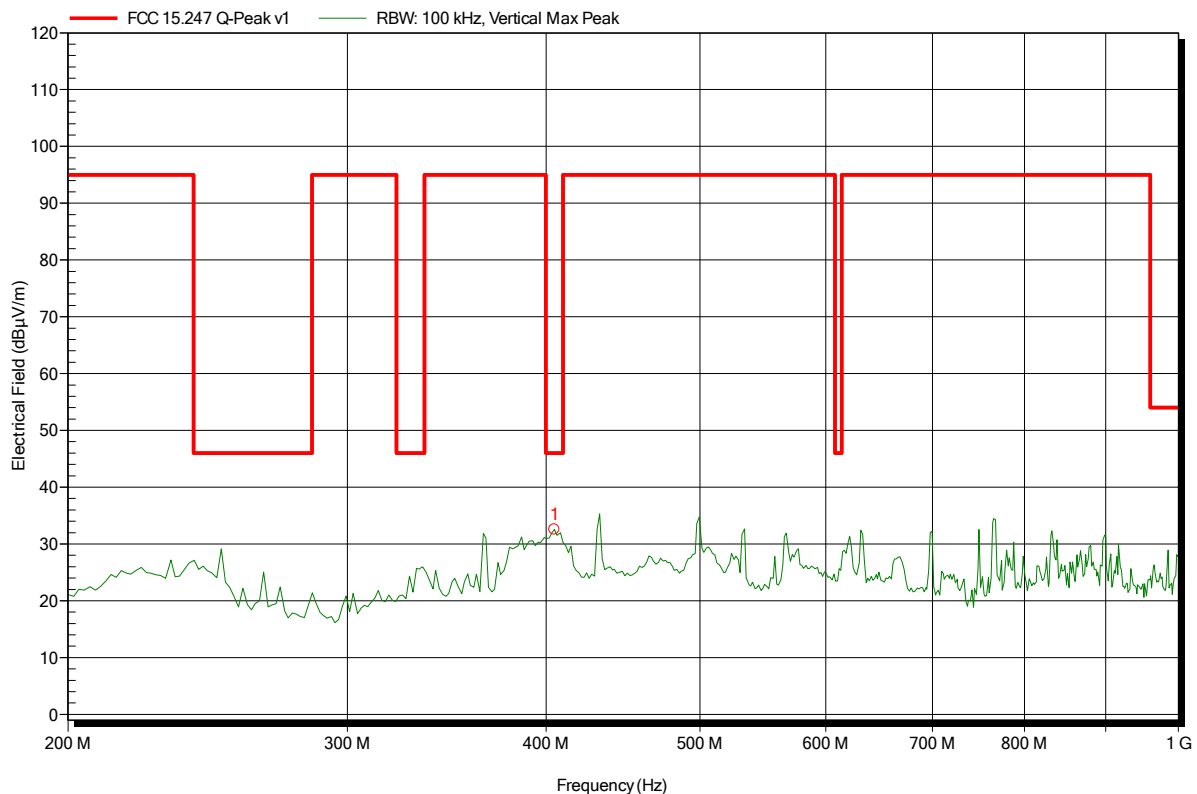
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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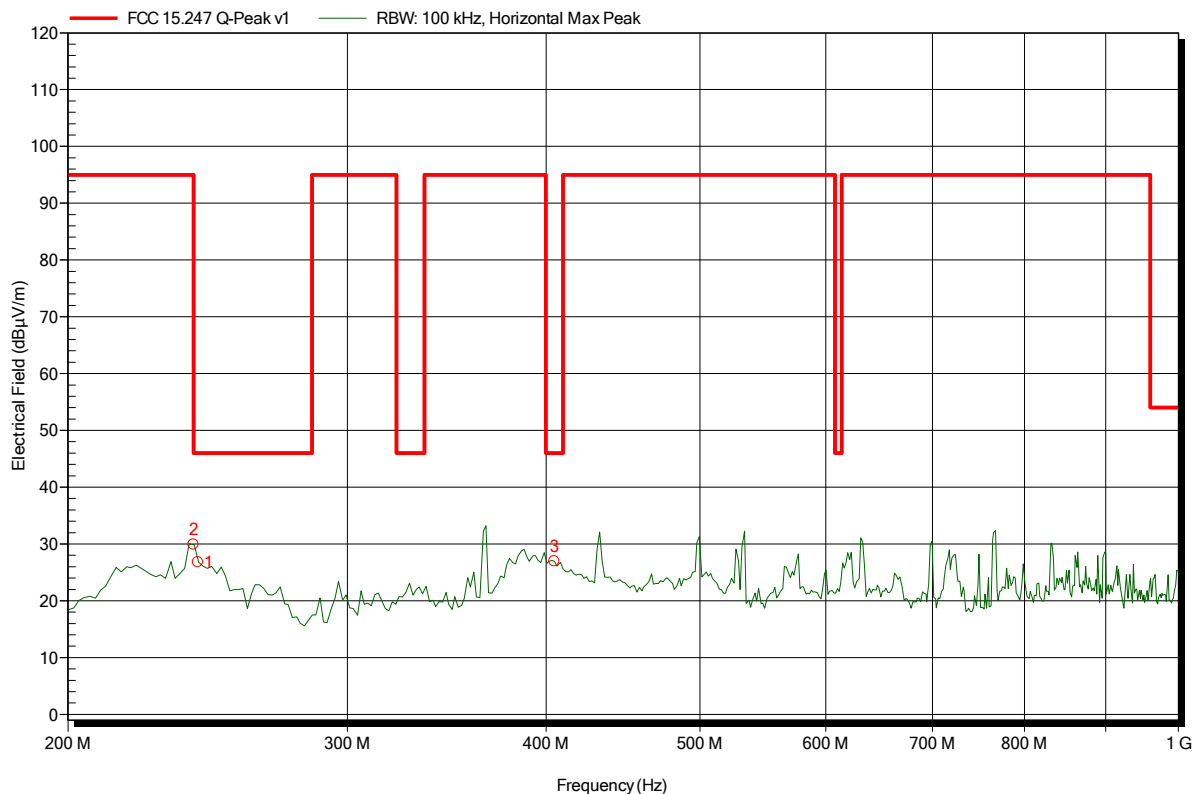
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
404.8 MHz	32.52 dBµV/m	46 dBµV/m	-13.48 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	29.87 dBµV/m	46 dBµV/m	-16.13 dB	Pass
241.6 MHz	26.79 dBµV/m	46 dBµV/m	-19.21 dB	Pass
404.8 MHz	26.93 dBµV/m	46 dBµV/m	-19.07 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

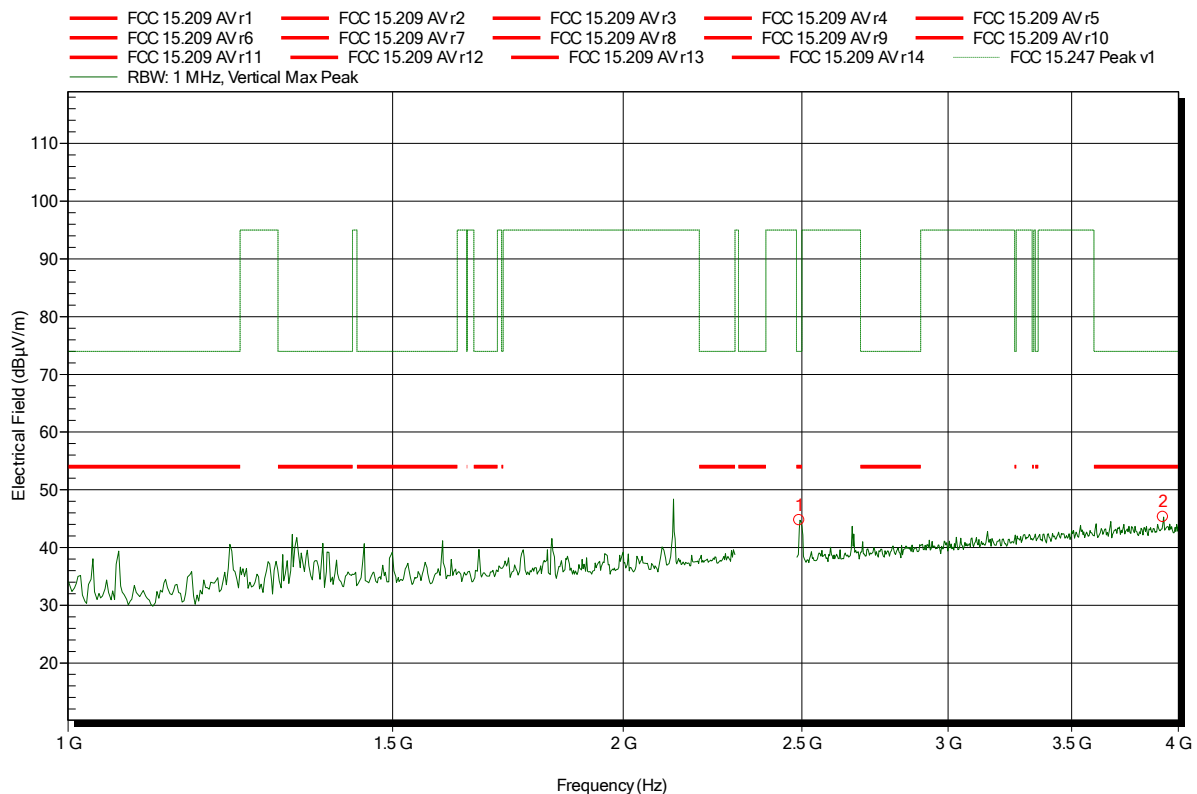
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.493 GHz	44.72 dBµV/m	74 dBµV/m	-29.28 dB	Pass
3.924 GHz	45.27 dBµV/m	74 dBµV/m	-28.73 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

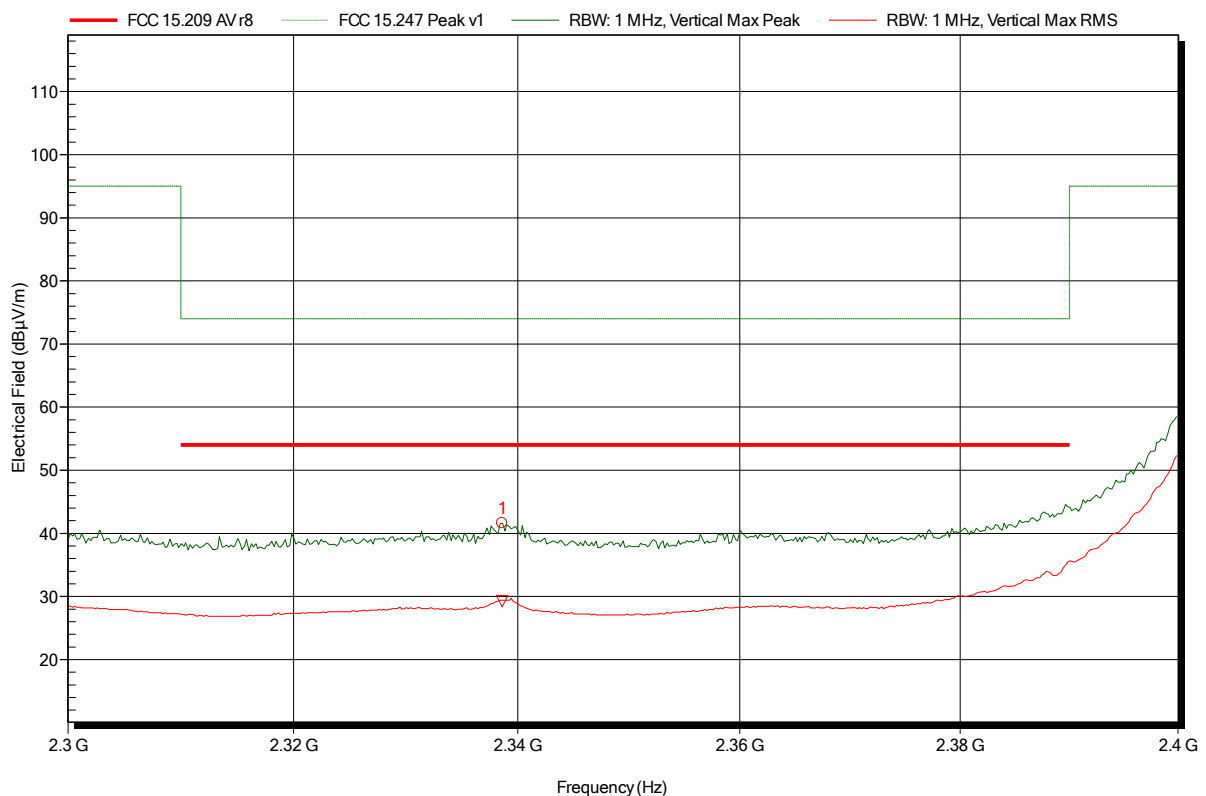
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1; lower bandedge

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Frequency 2.339 GHz	Peak 41.61 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -32.39 dB	Peak Status Pass
Frequency 2.339 GHz	RMS 29.27 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -24.73 dB	RMS Status Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

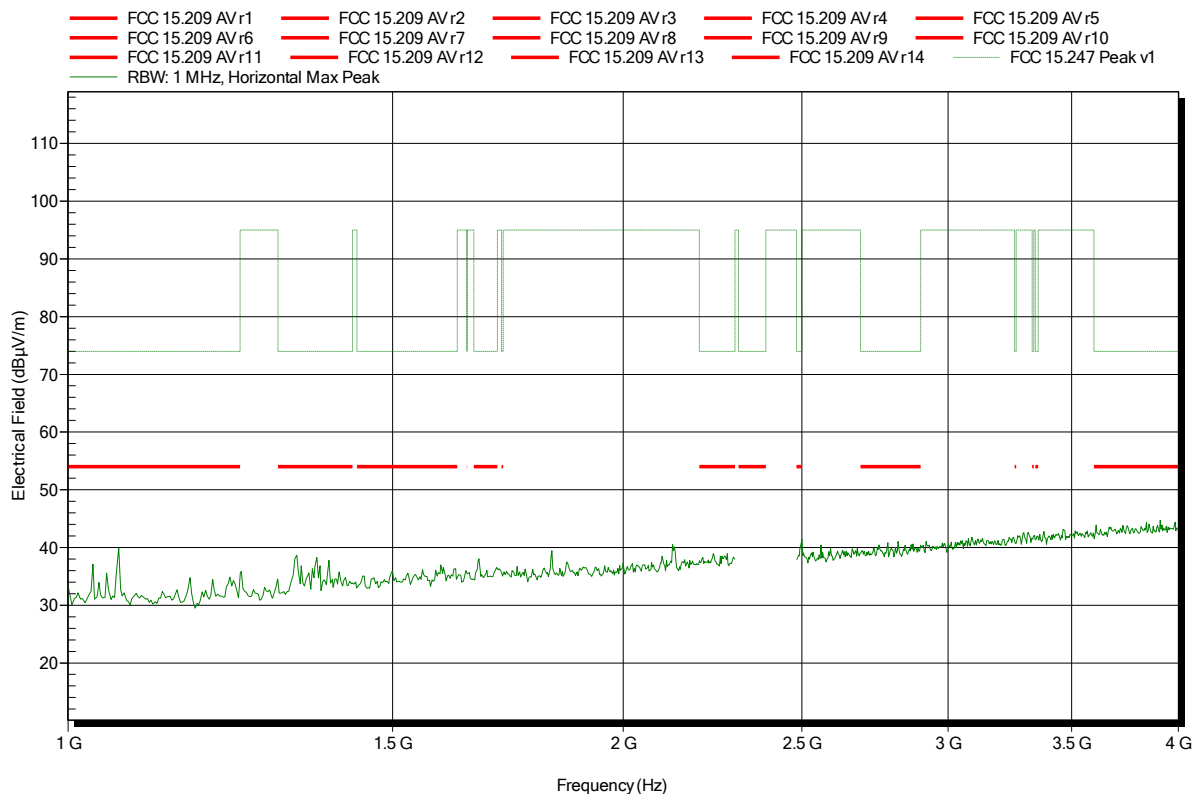
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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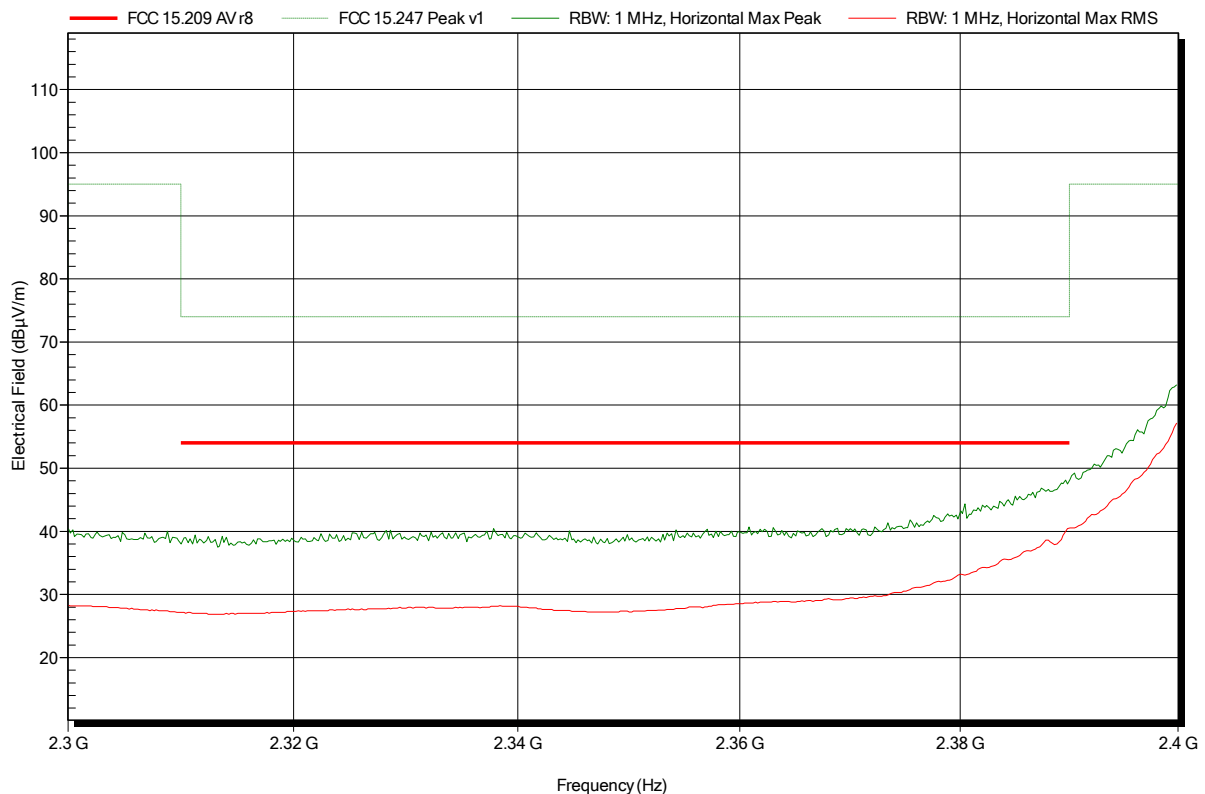


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1; lower bandedge

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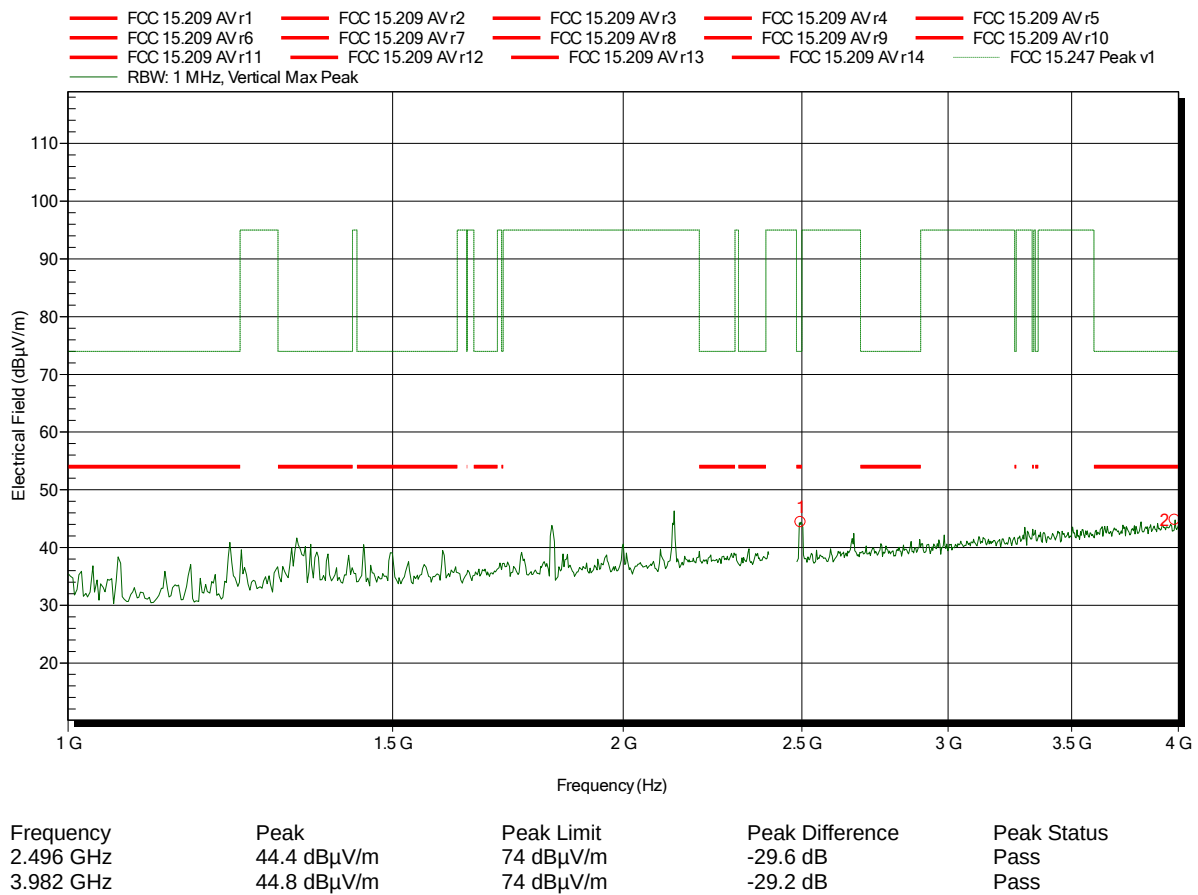


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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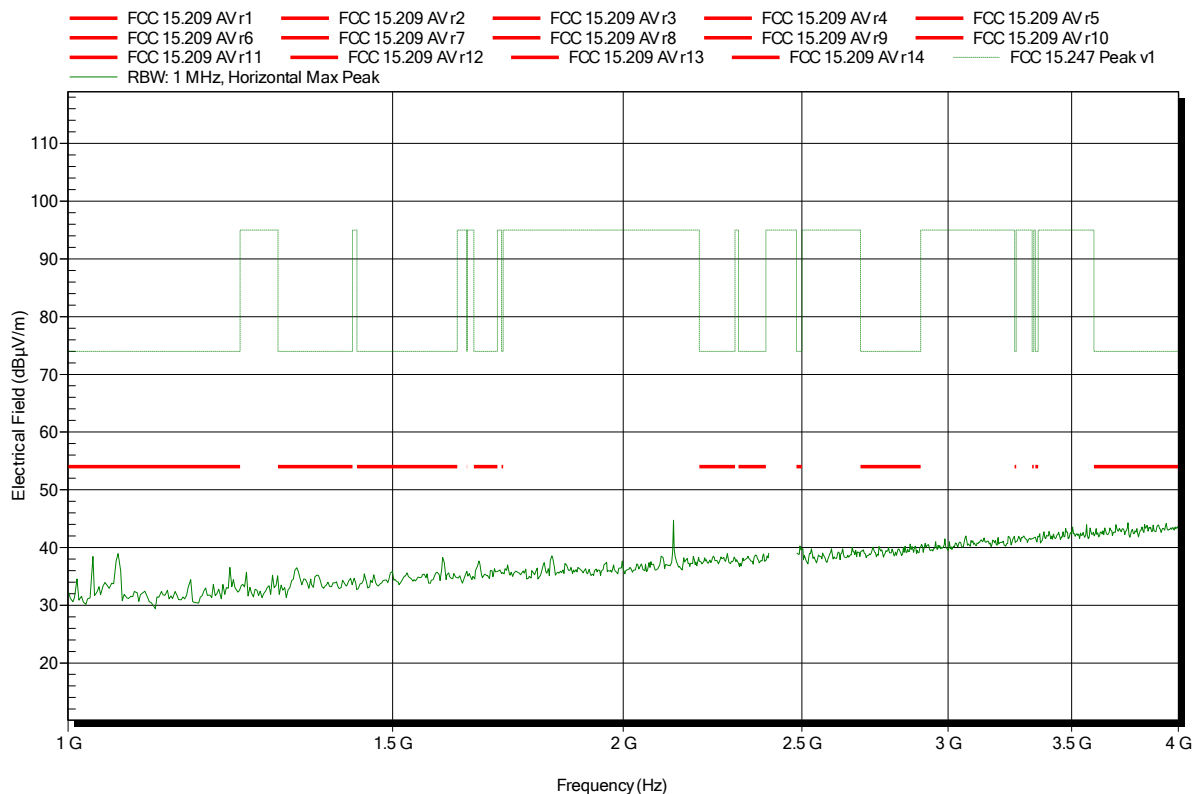


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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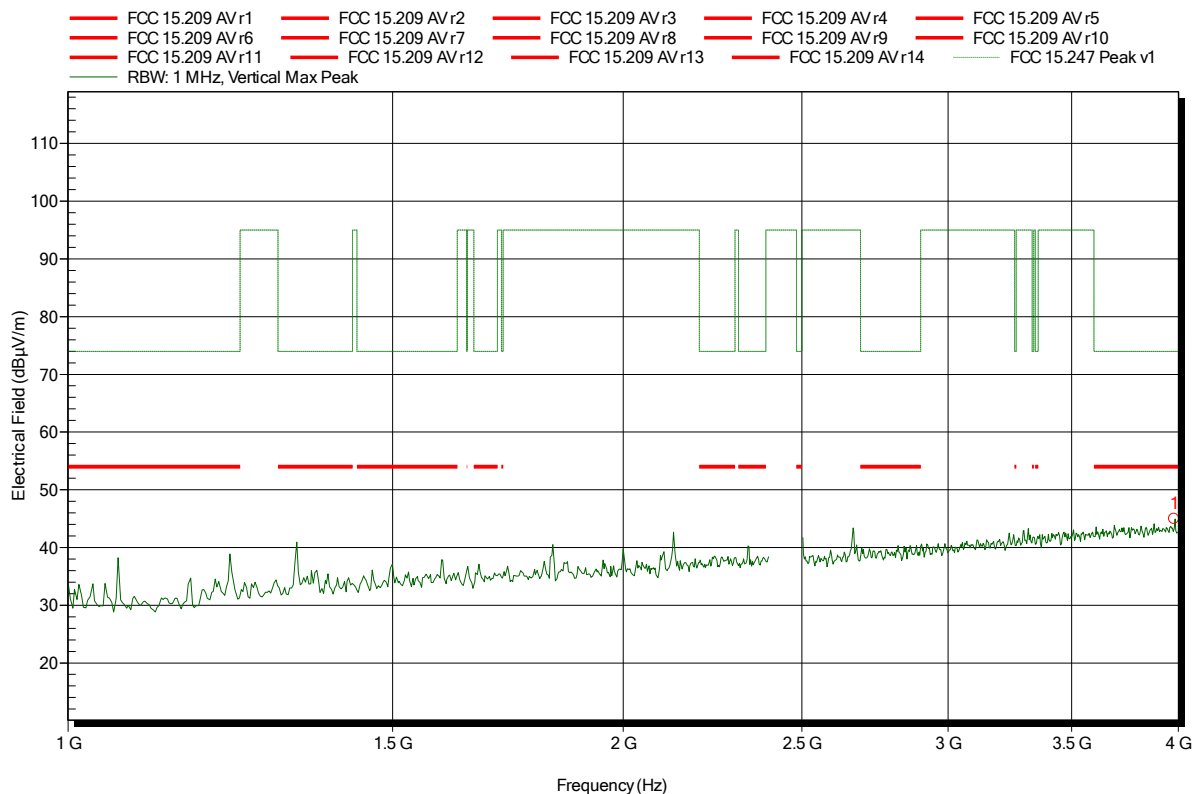


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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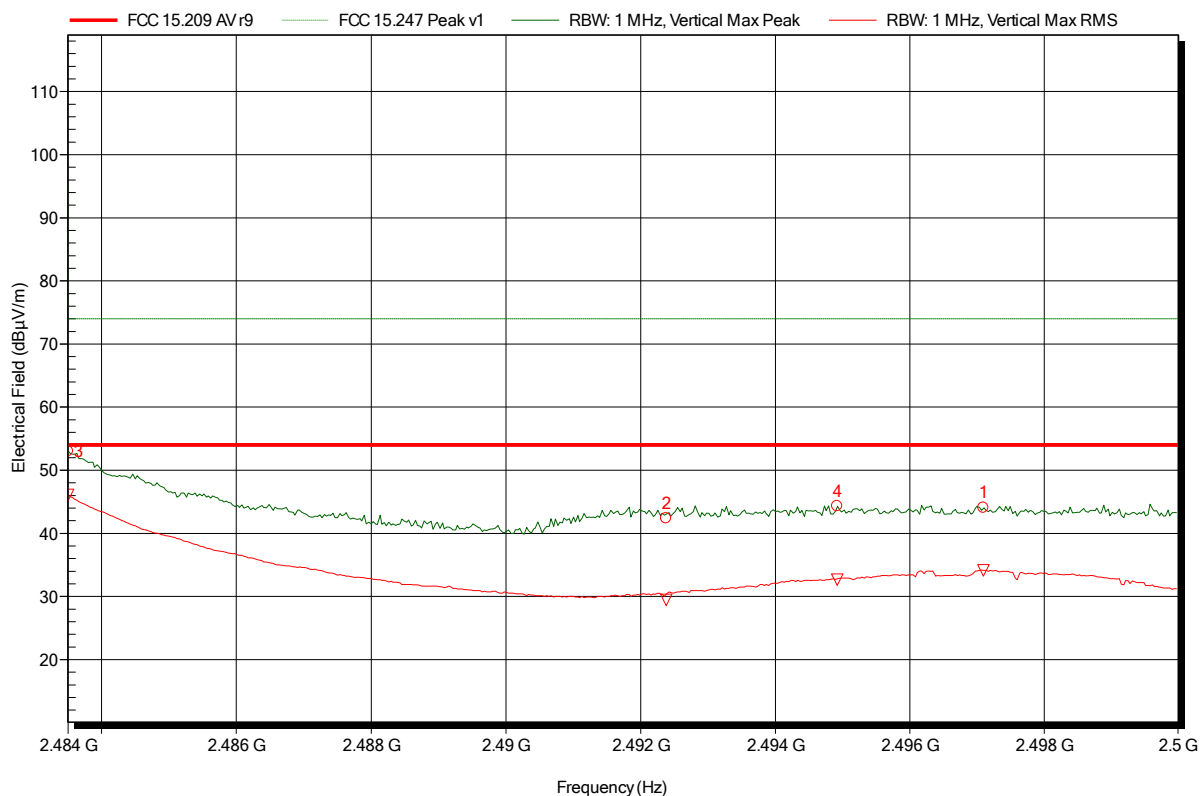
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.979 GHz	44.94 dBµV/m	74 dBµV/m	-29.06 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HL 025, Vertical
Measurement distance: 3 m
Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
Test Date: 2015-05-19
Note: EUT vertical, ant.: A1; higher bandedge

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	52.98 dBμV/m	74 dBμV/m	-21.02 dB	Pass
2.492 GHz	42.39 dBμV/m	74 dBμV/m	-31.61 dB	Pass
2.495 GHz	44.28 dBμV/m	74 dBμV/m	-29.72 dB	Pass
2.497 GHz	44.04 dBμV/m	74 dBμV/m	-29.96 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	46.08 dBμV/m	54 dBμV/m	-7.92 dB	Pass
2.492 GHz	29.47 dBμV/m	54 dBμV/m	-24.53 dB	Pass
2.495 GHz	32.66 dBμV/m	54 dBμV/m	-21.34 dB	Pass
2.497 GHz	34.11 dBμV/m	54 dBμV/m	-19.89 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

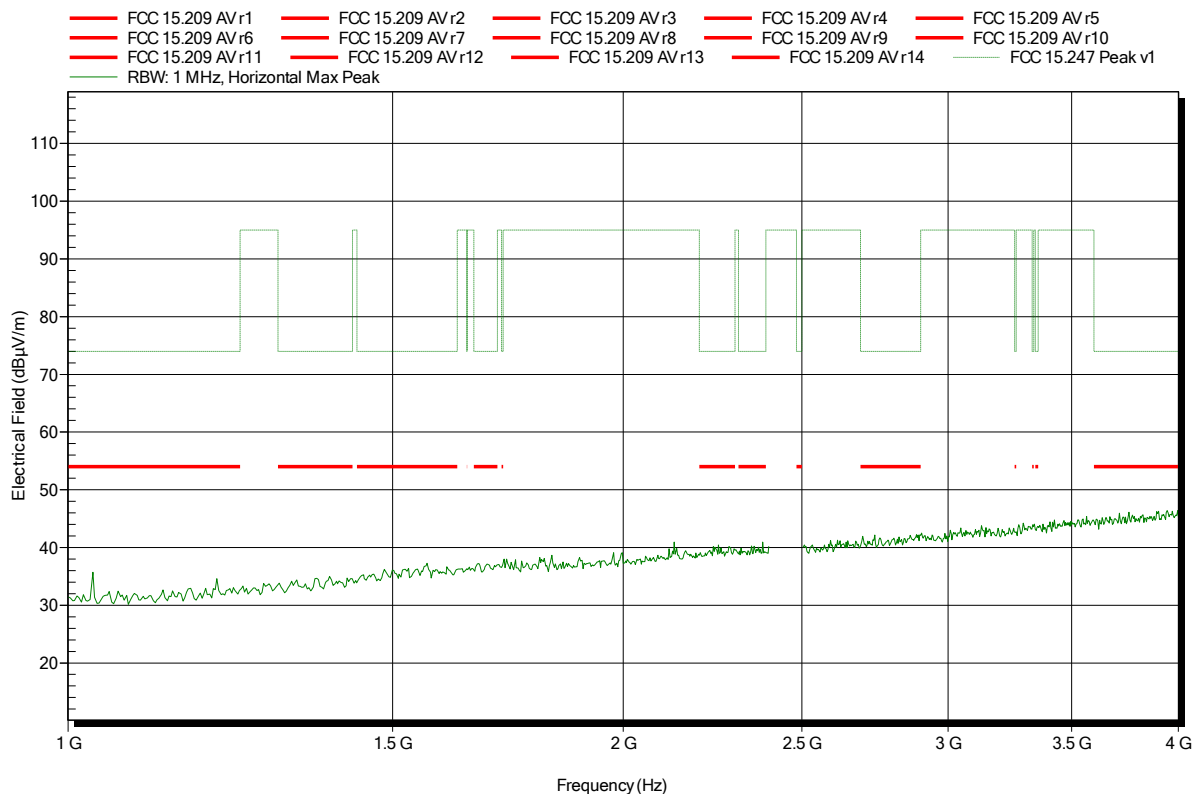
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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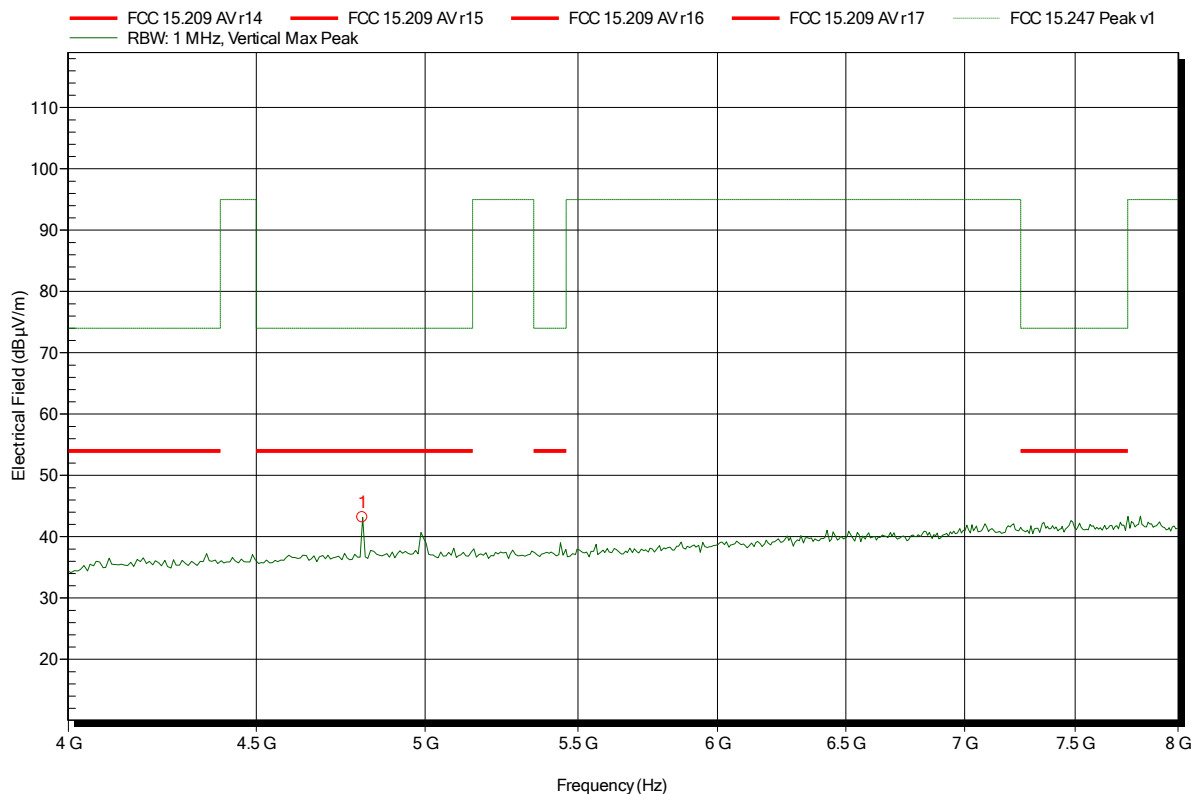


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.808 GHz	43.15 dBµV/m	74 dBµV/m	-30.85 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

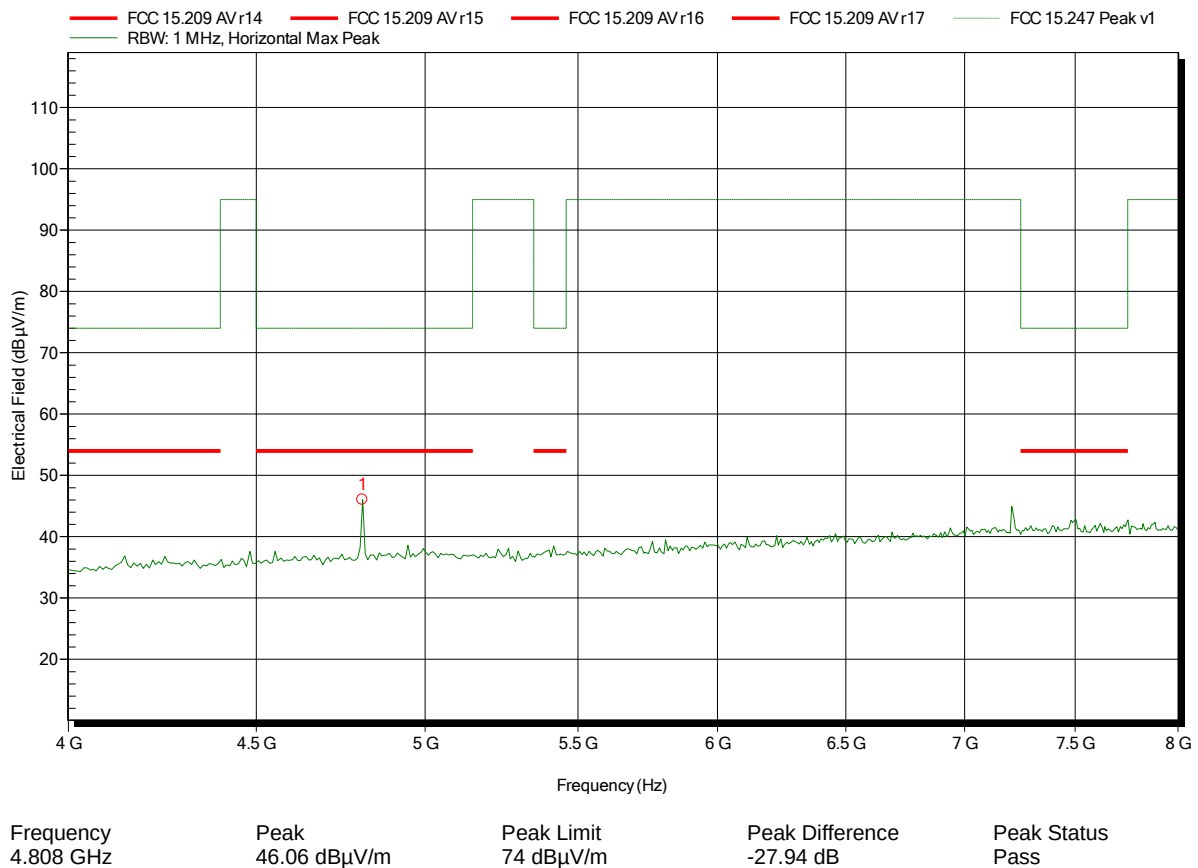
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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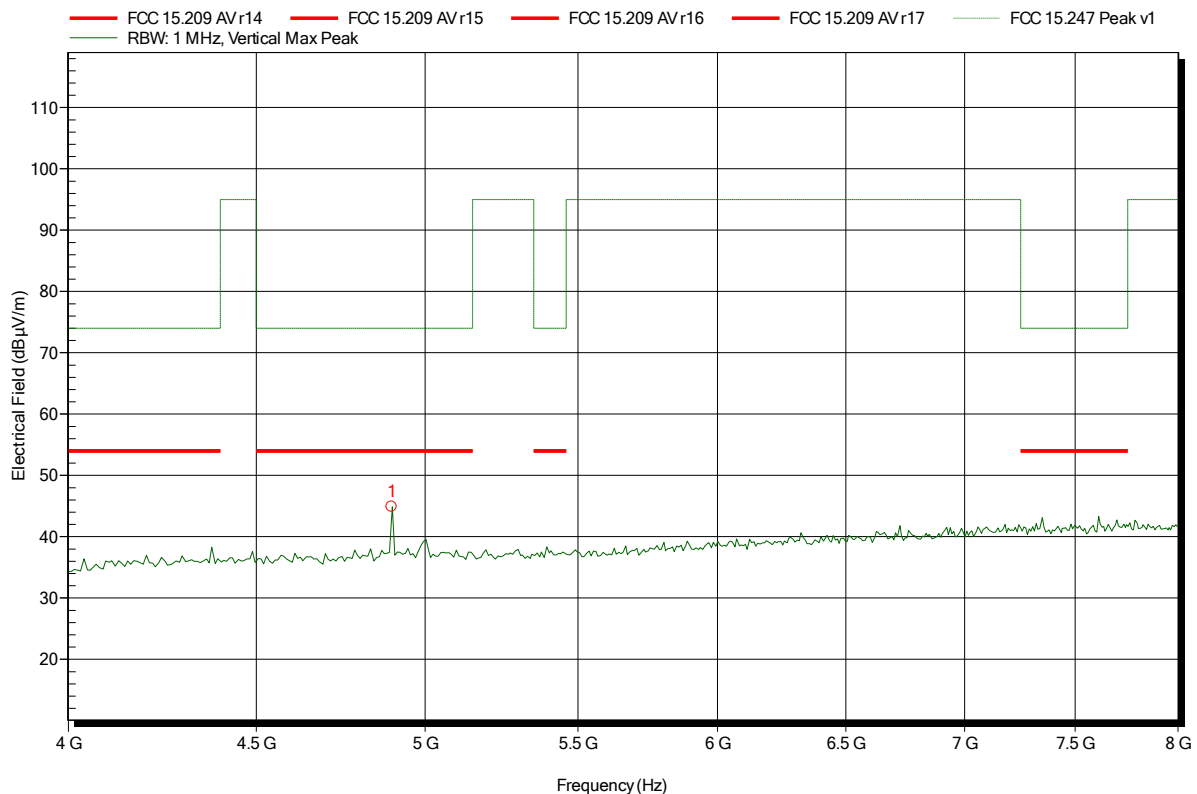


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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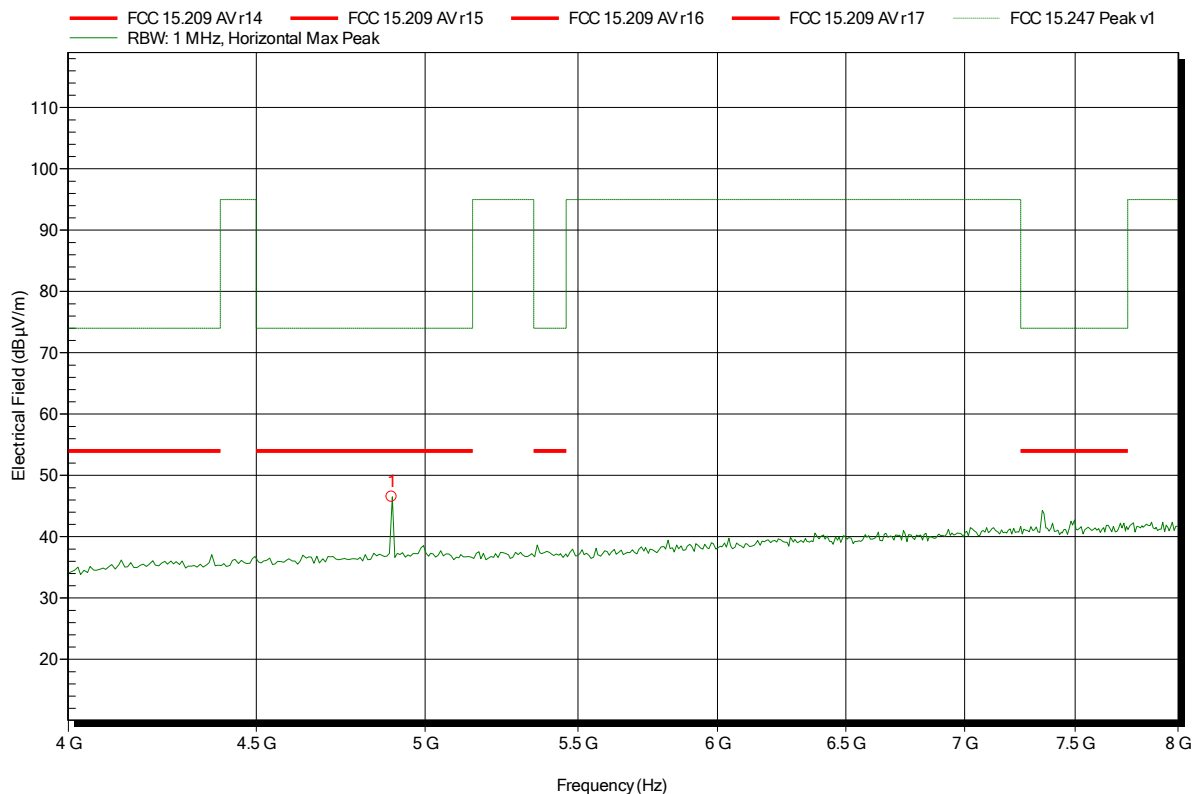
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	44.88 dBµV/m	74 dBµV/m	-29.12 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	46.51 dBµV/m	74 dBµV/m	-27.49 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

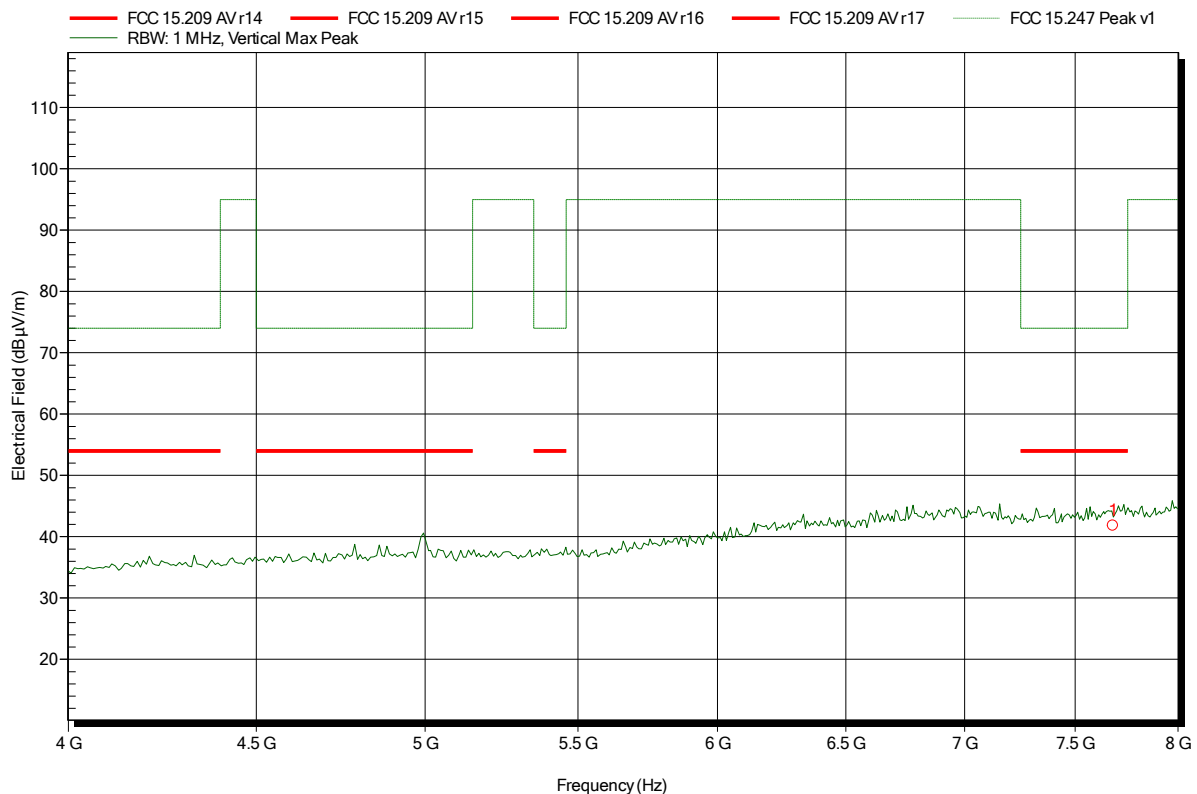
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A1

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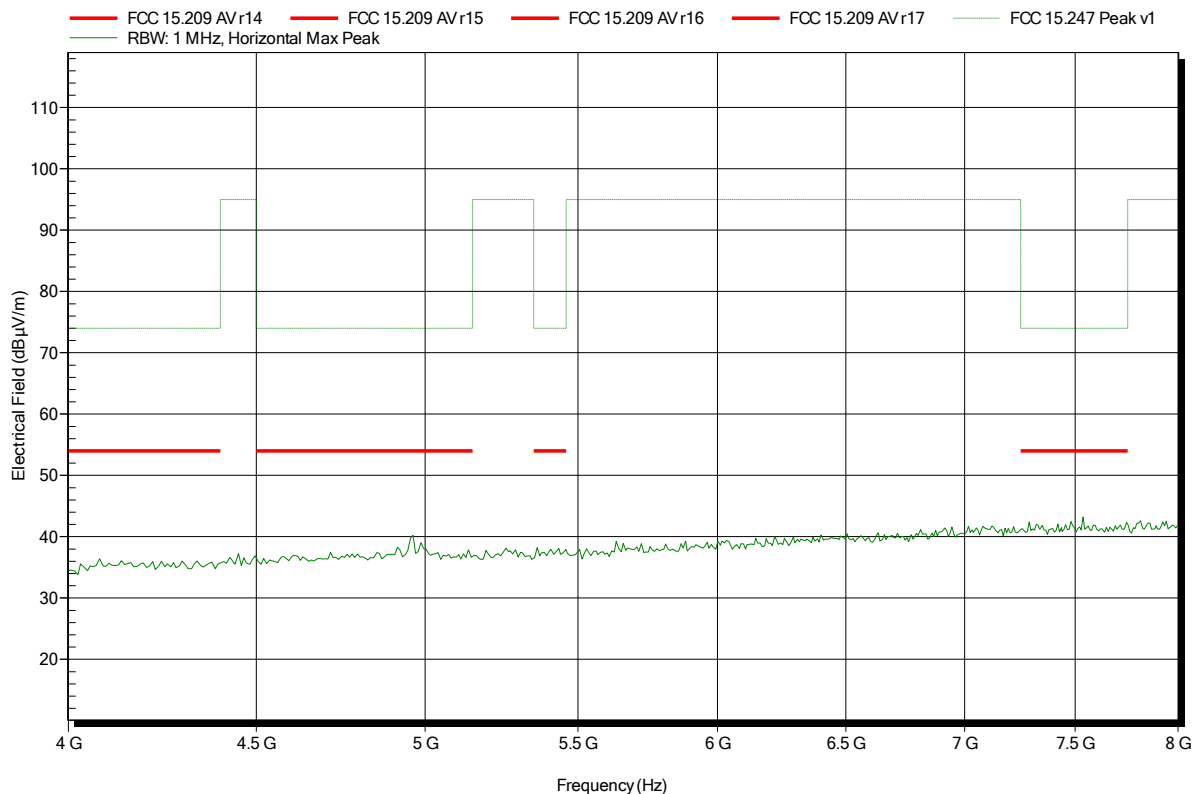
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.68 GHz	41.78 dBµV/m	74 dBµV/m	-32.22 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A1

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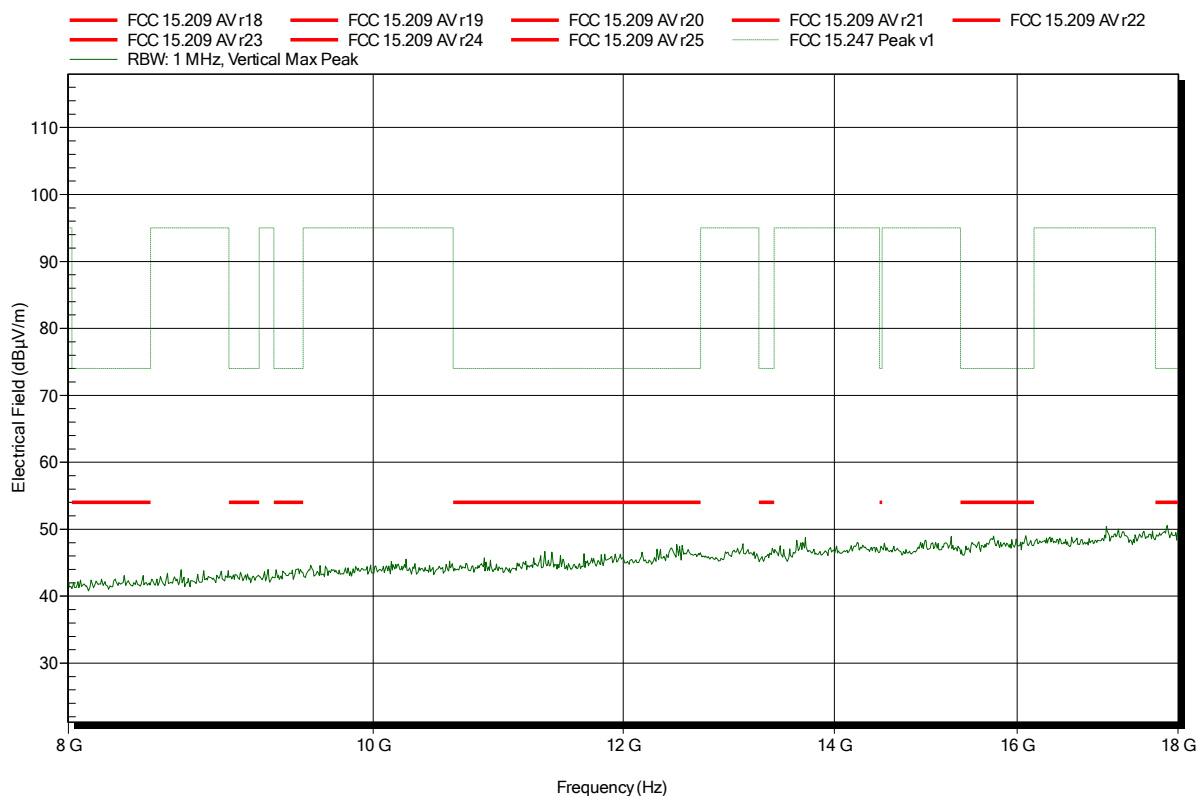


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Test Report No.: G0M-1505-4730-TFC247ZB-V01

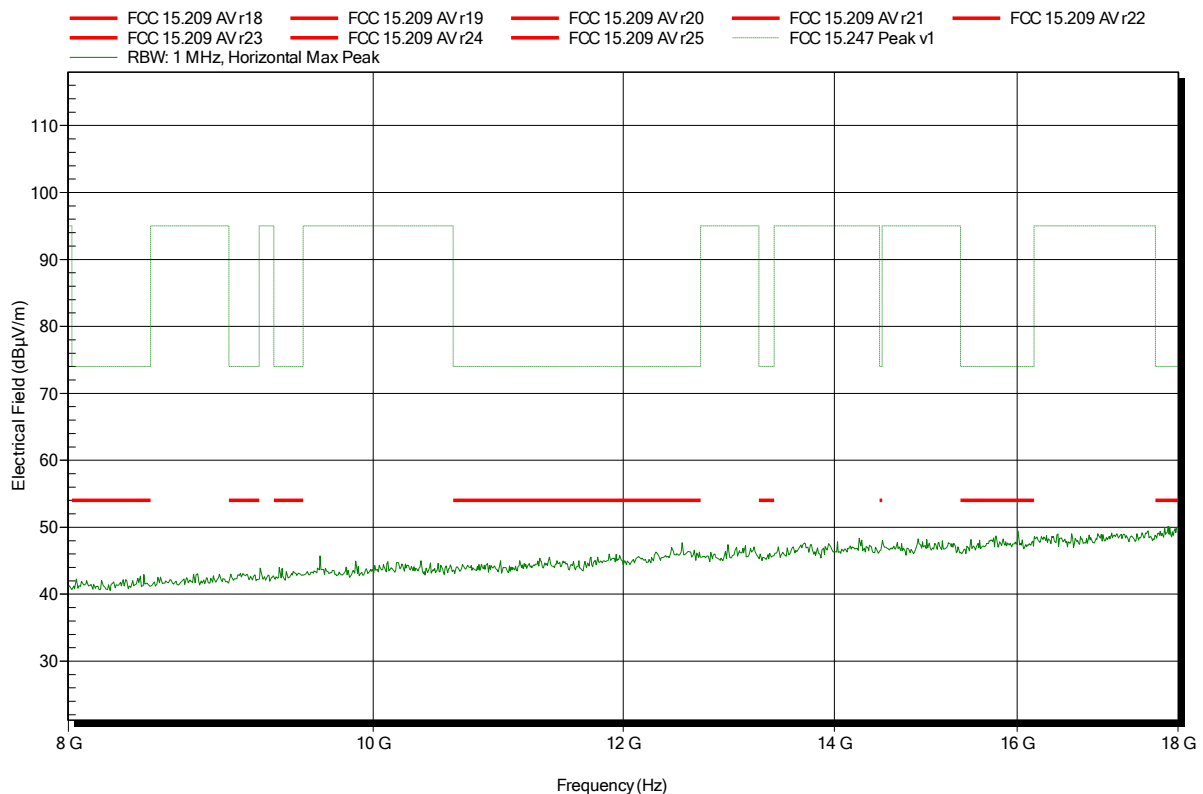
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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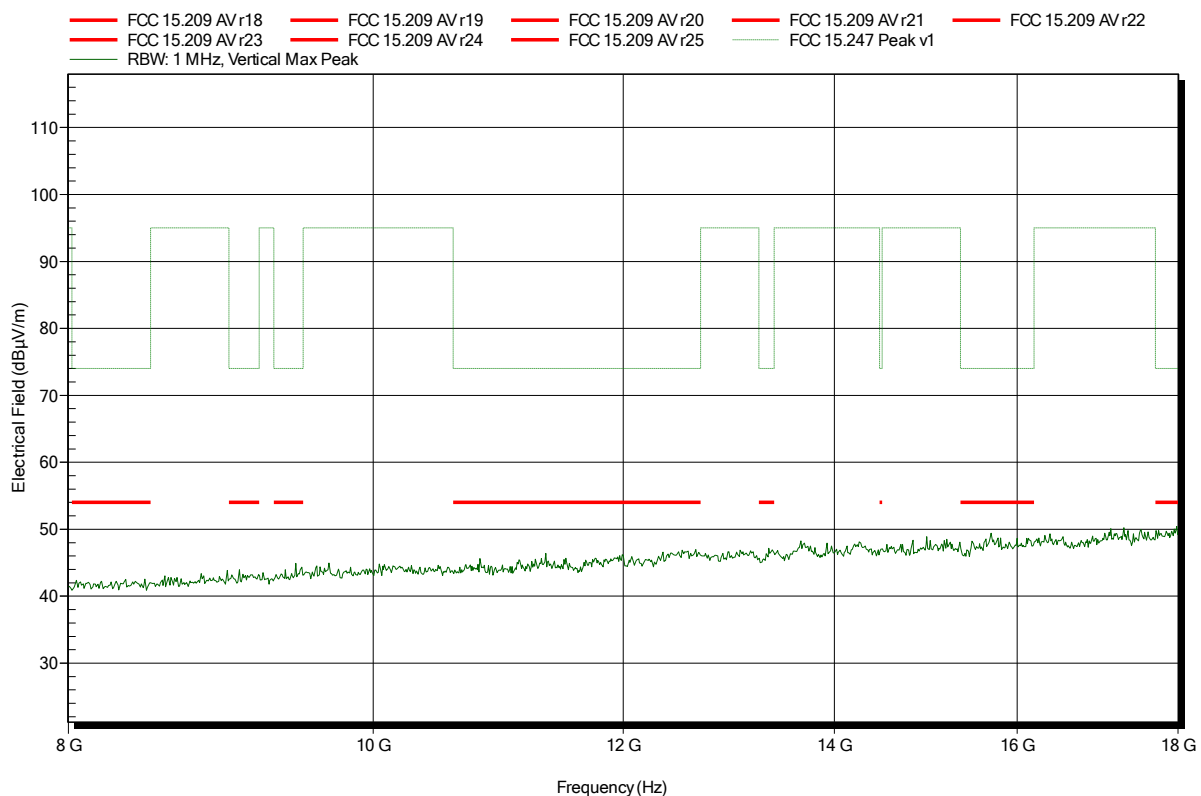


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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Test Report No.: G0M-1505-4730-TFC247ZB-V01

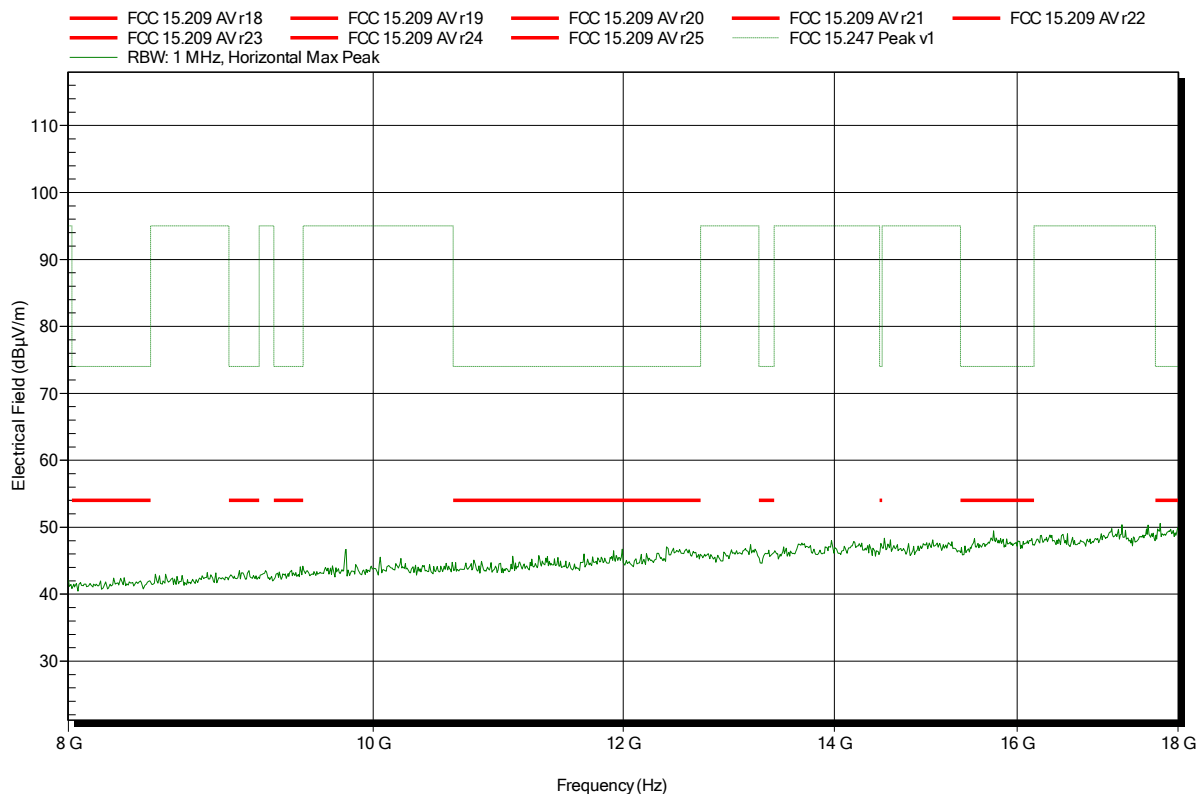
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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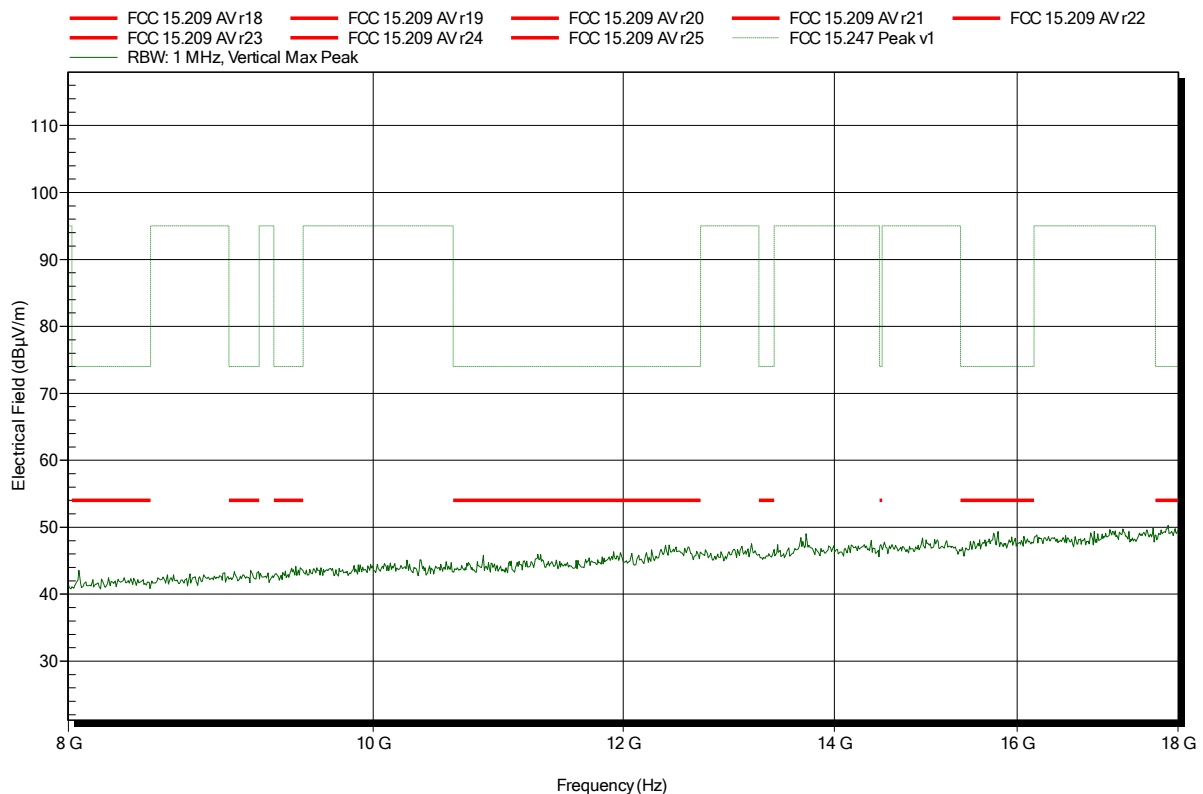


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A1

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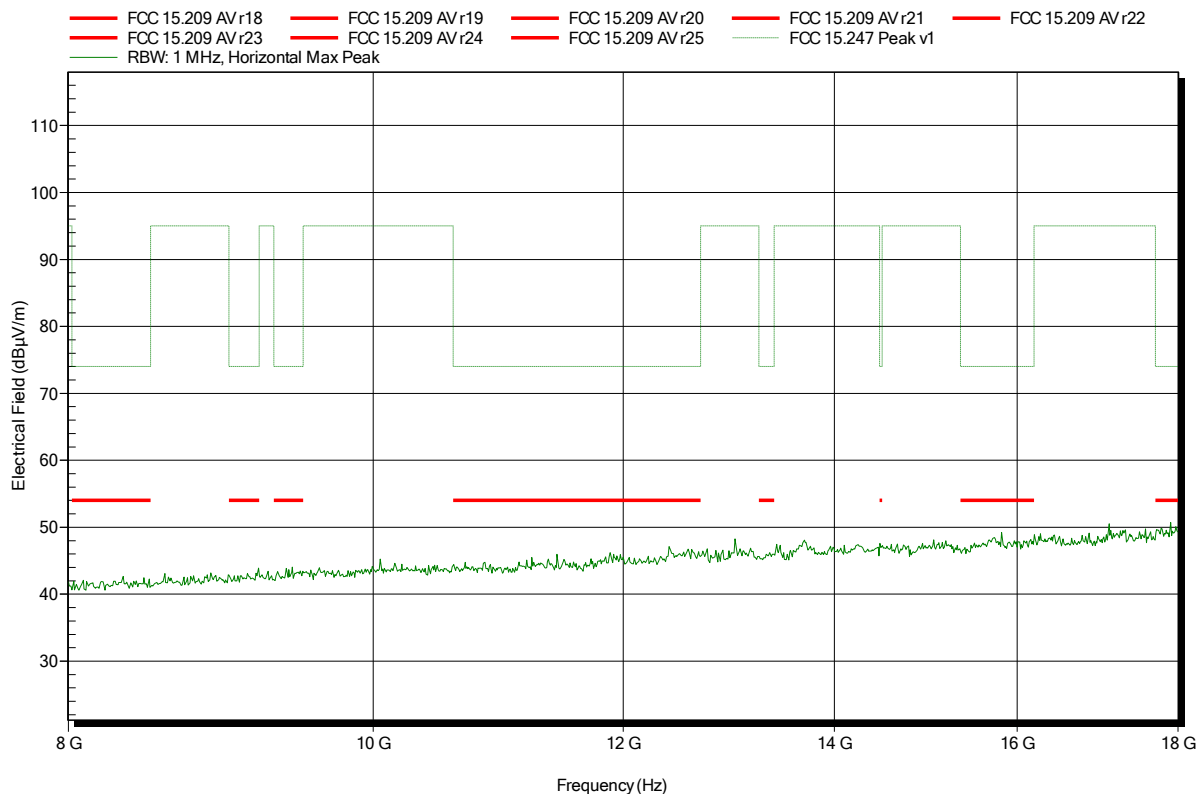


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A1

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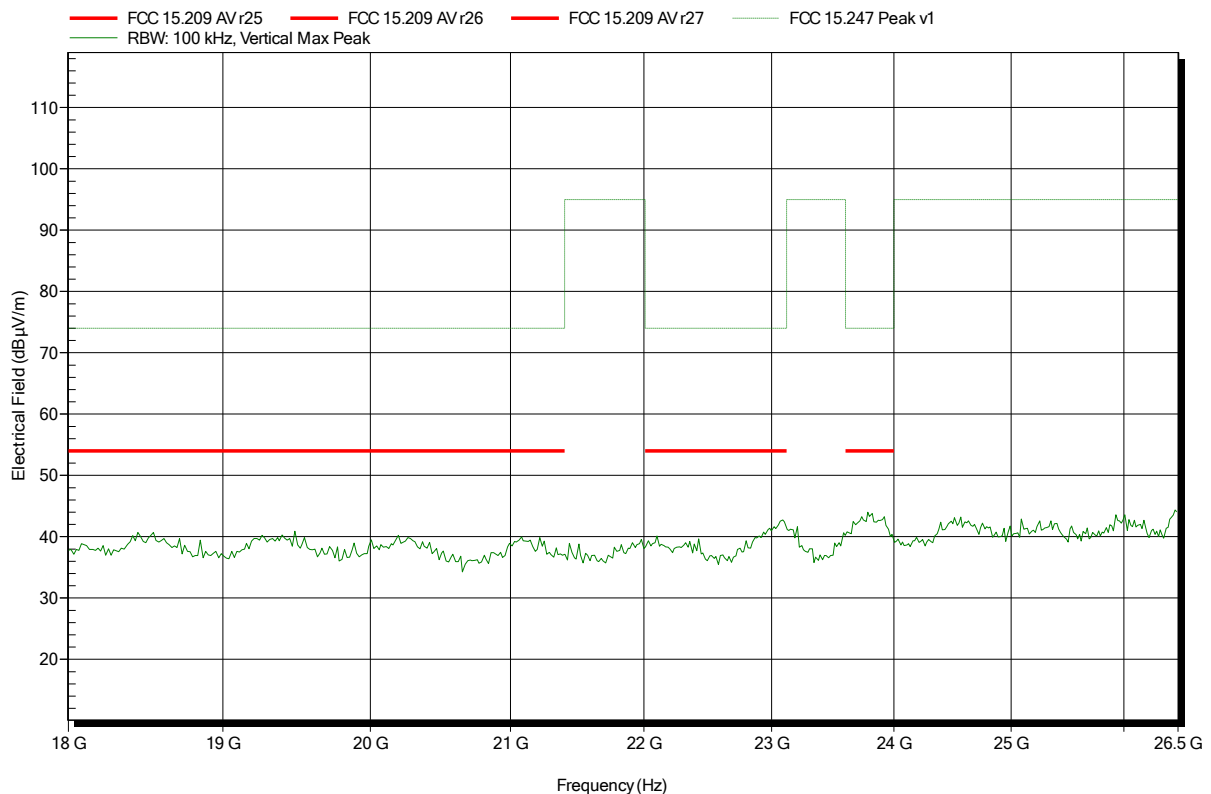


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A1

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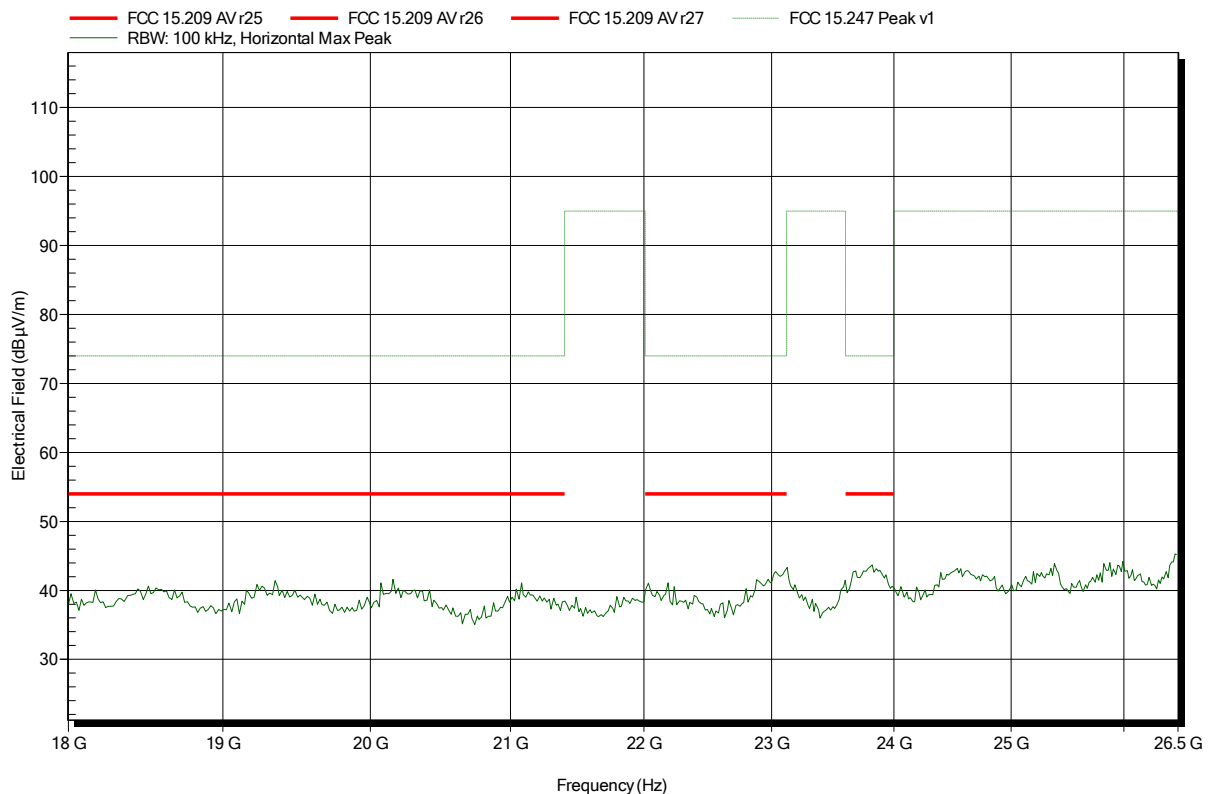


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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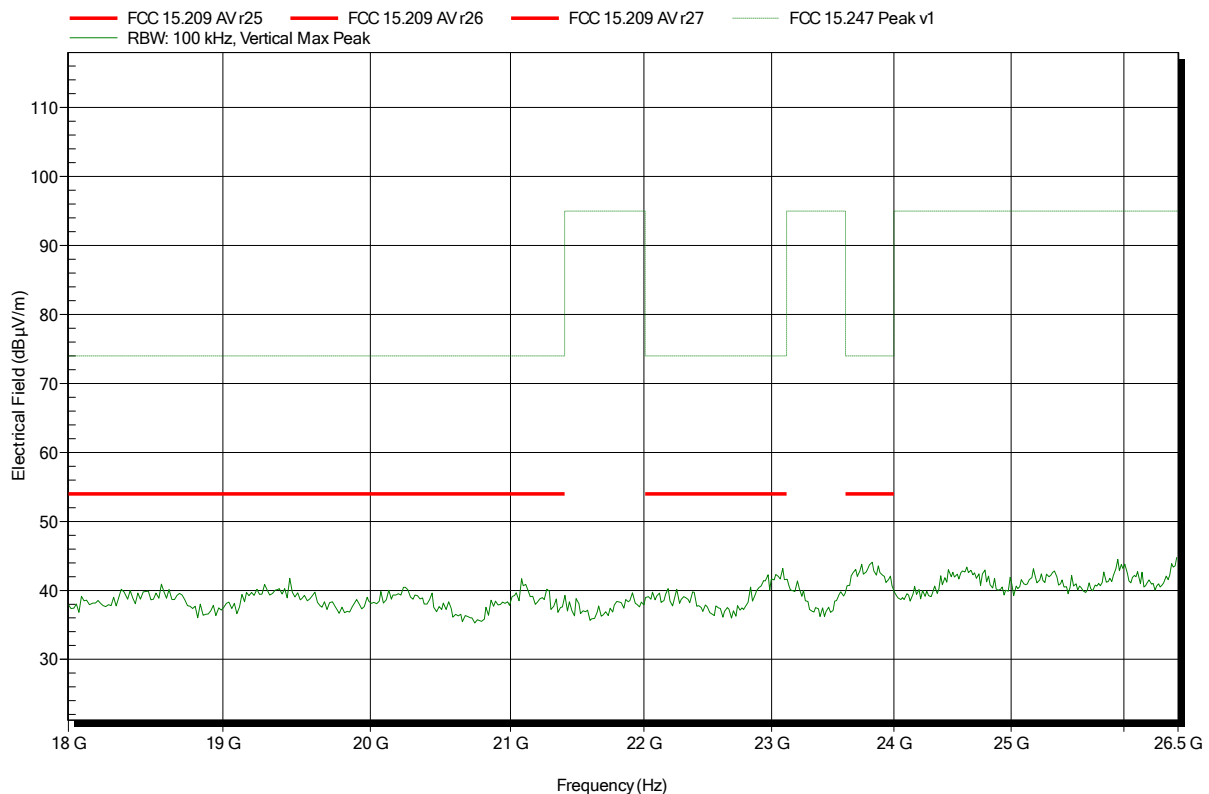


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A1

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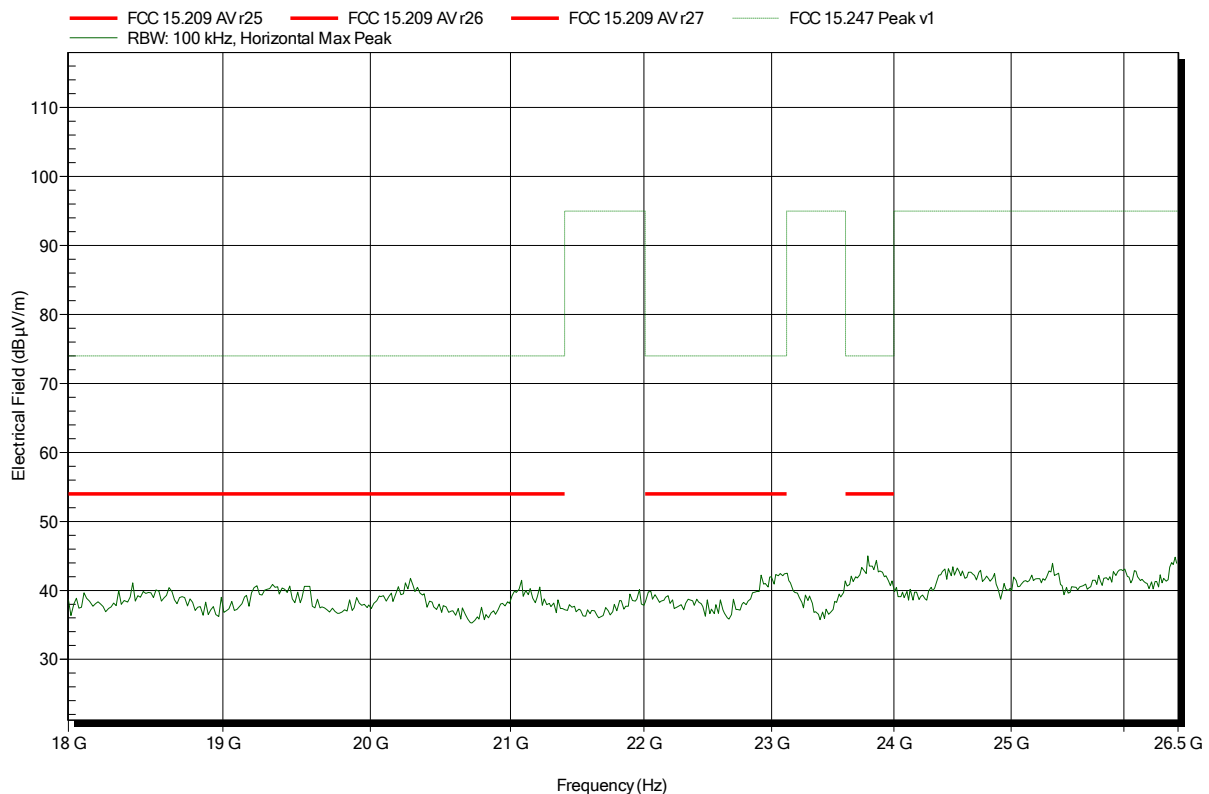


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A1
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A1

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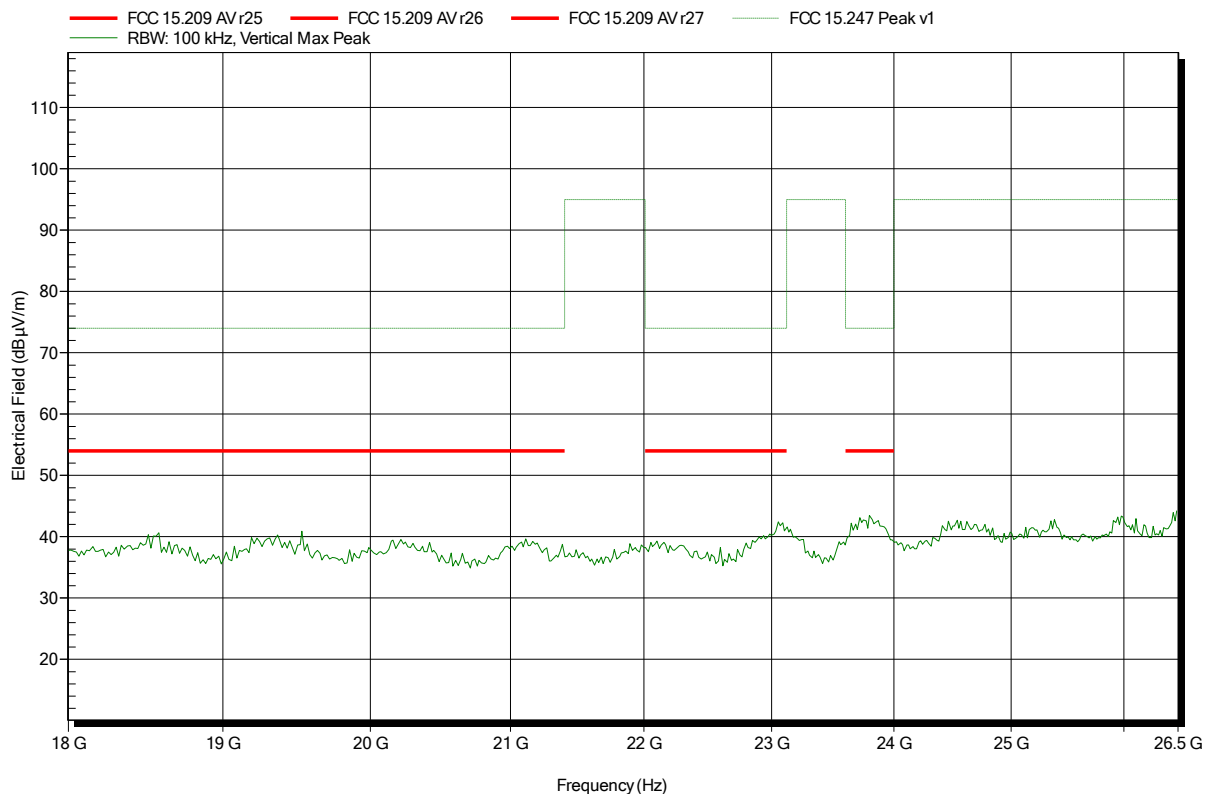


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2480 MHz, "Stub" ant.: A1 (-9)
Test Date:	2015-05-20
Note:	EUT vertical an.: A1

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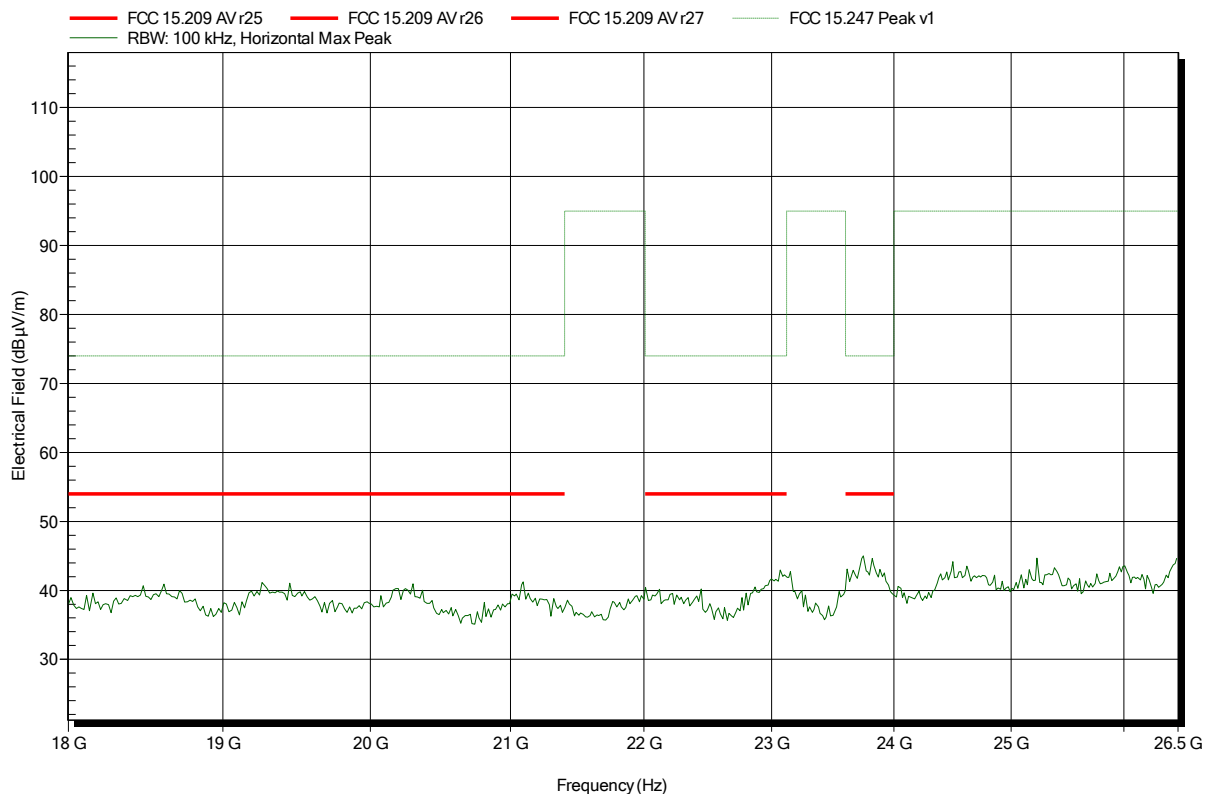


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A1 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A1

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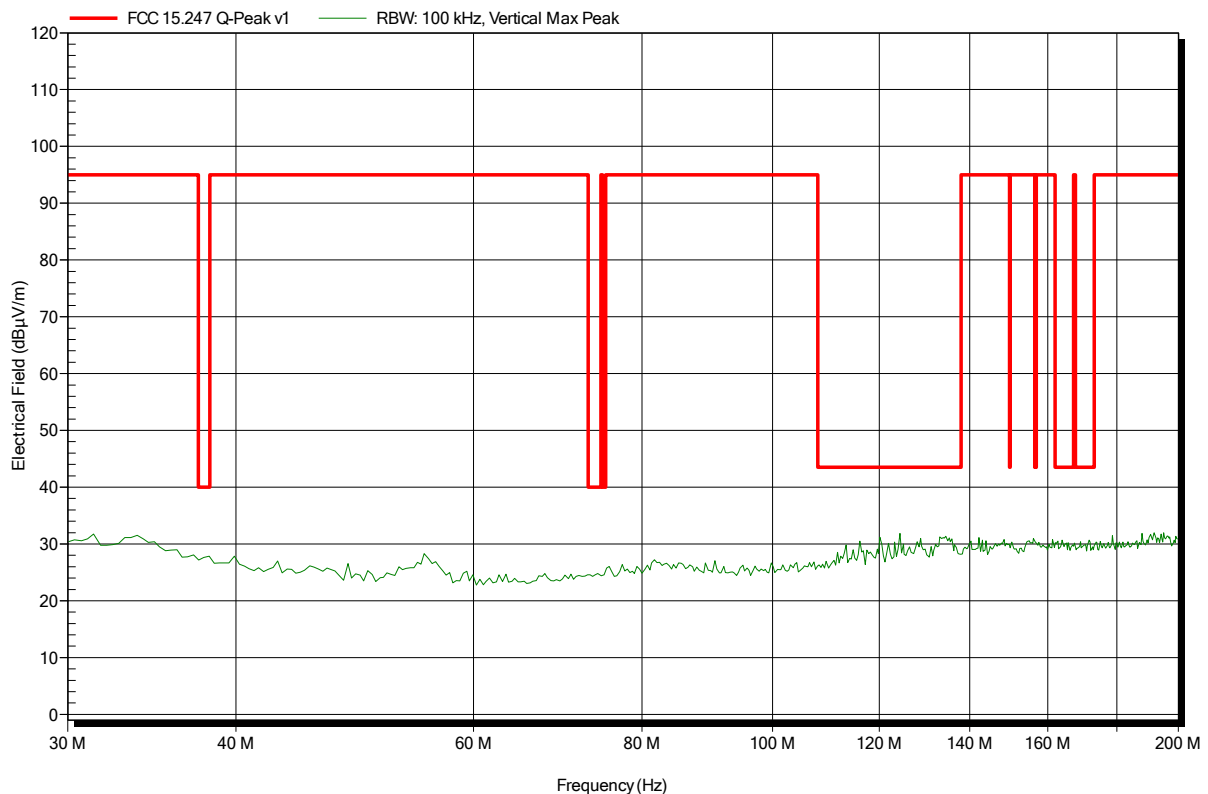


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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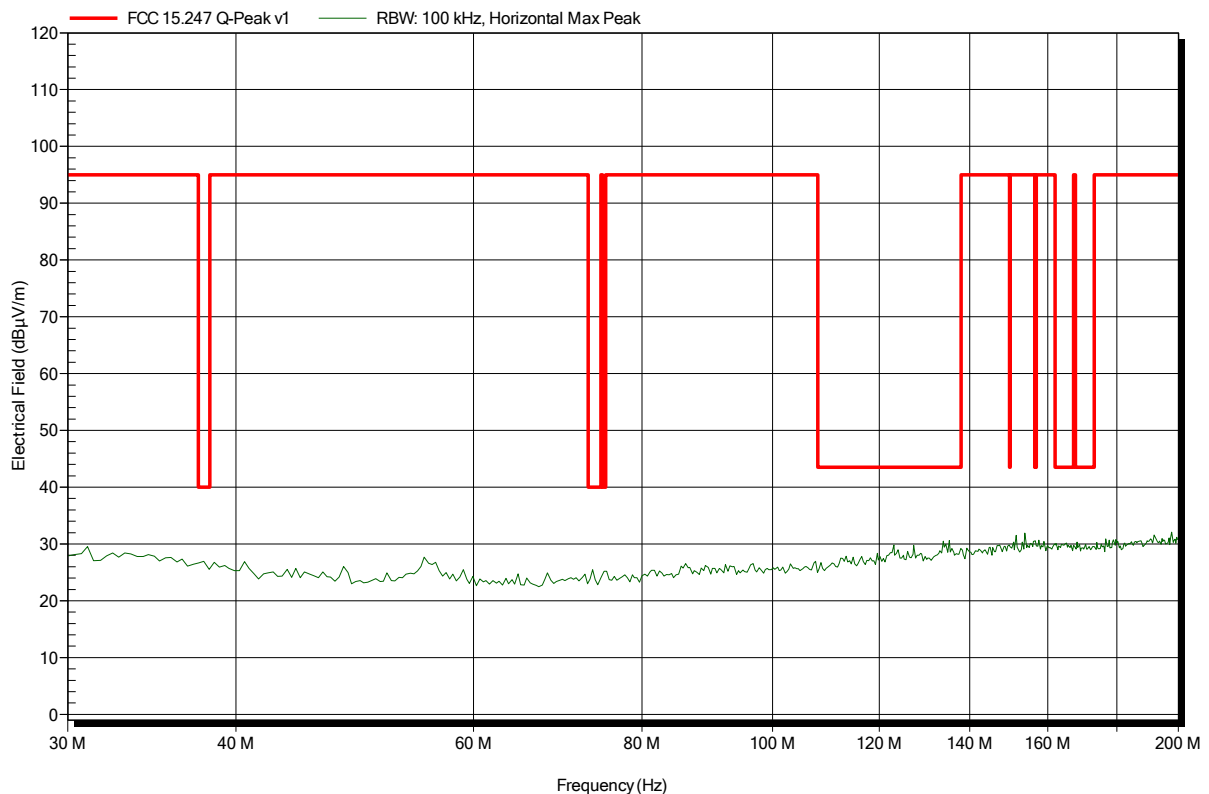


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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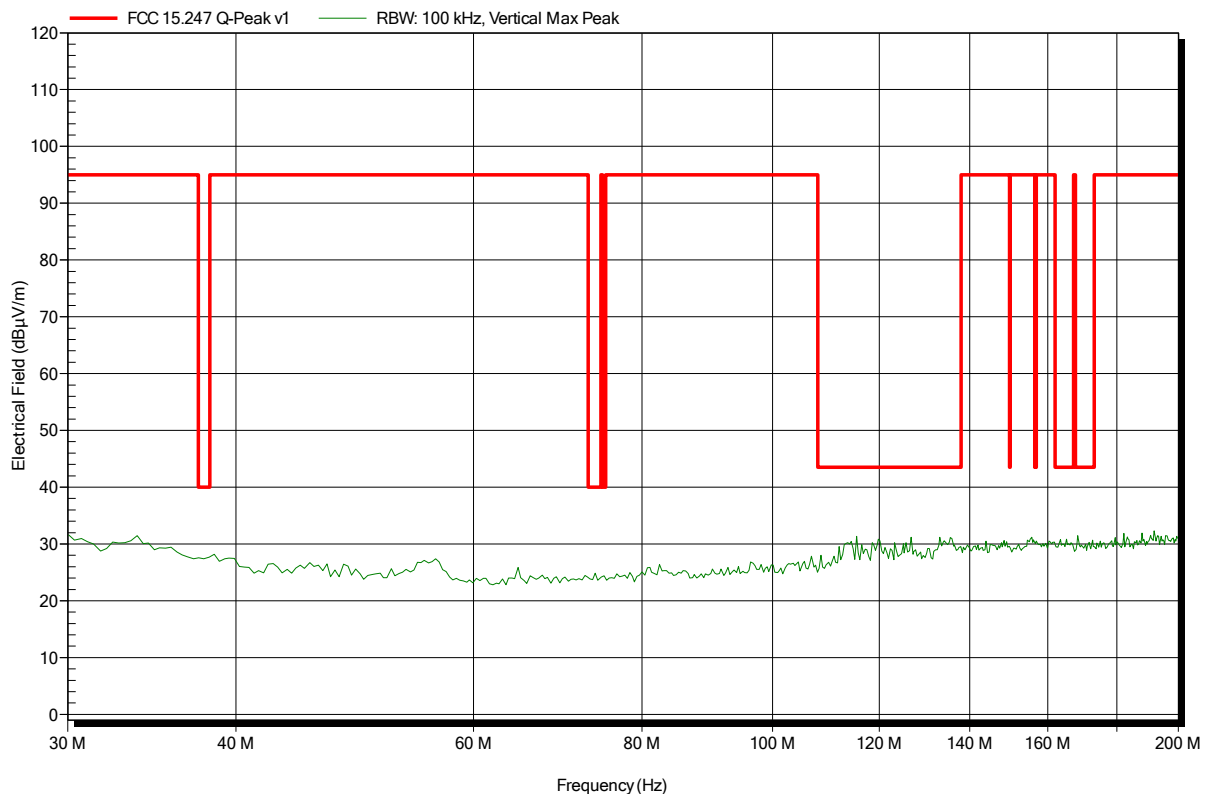


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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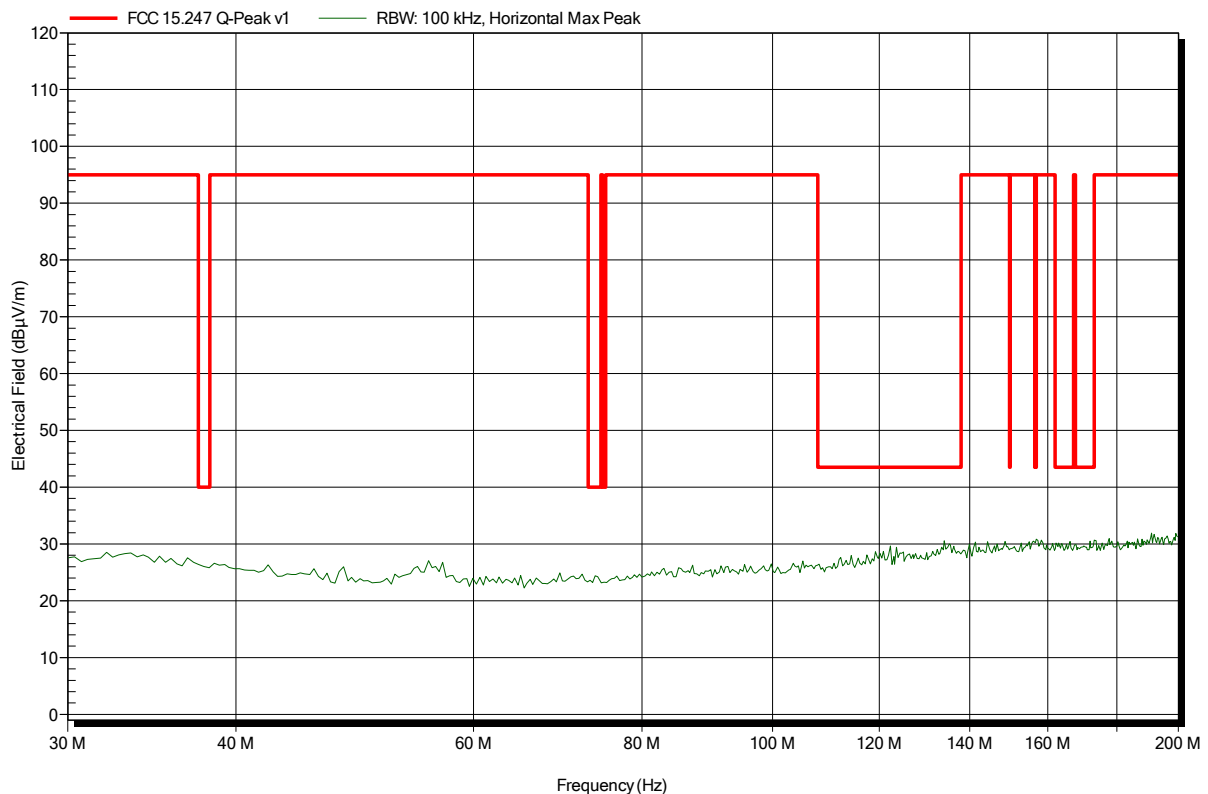


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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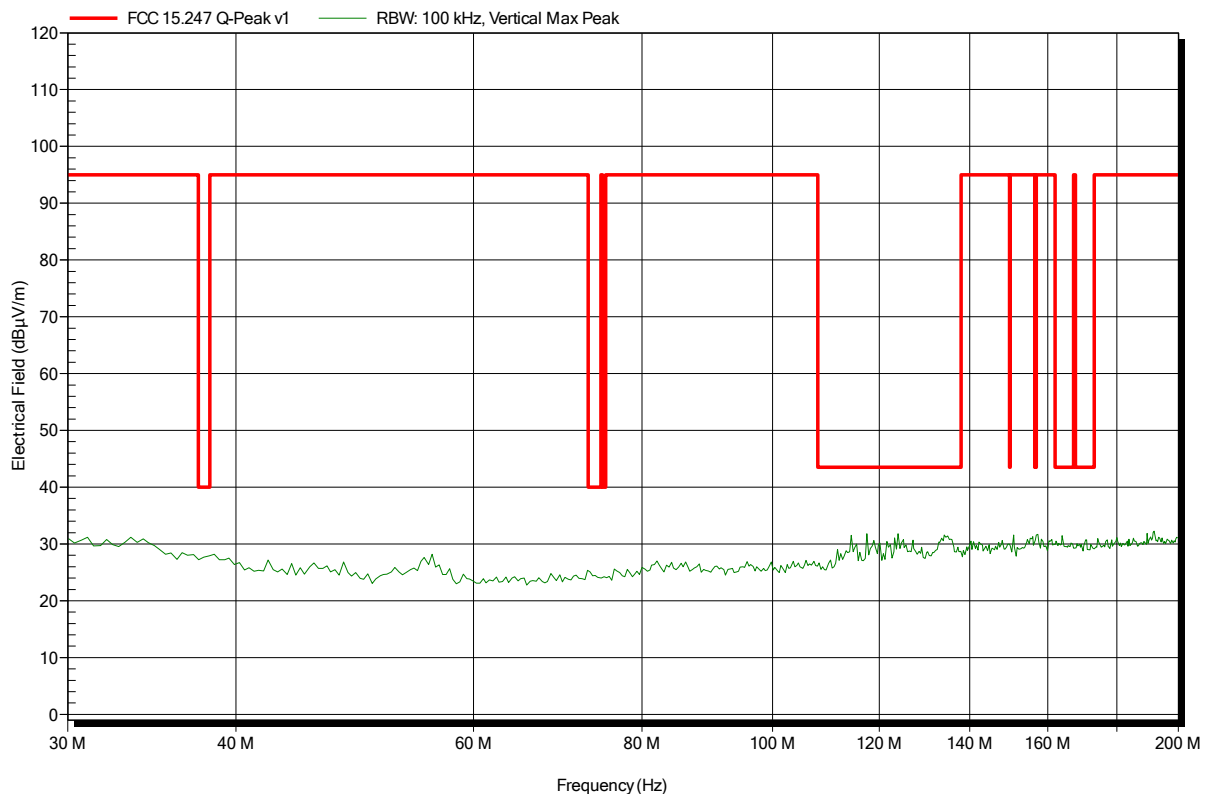


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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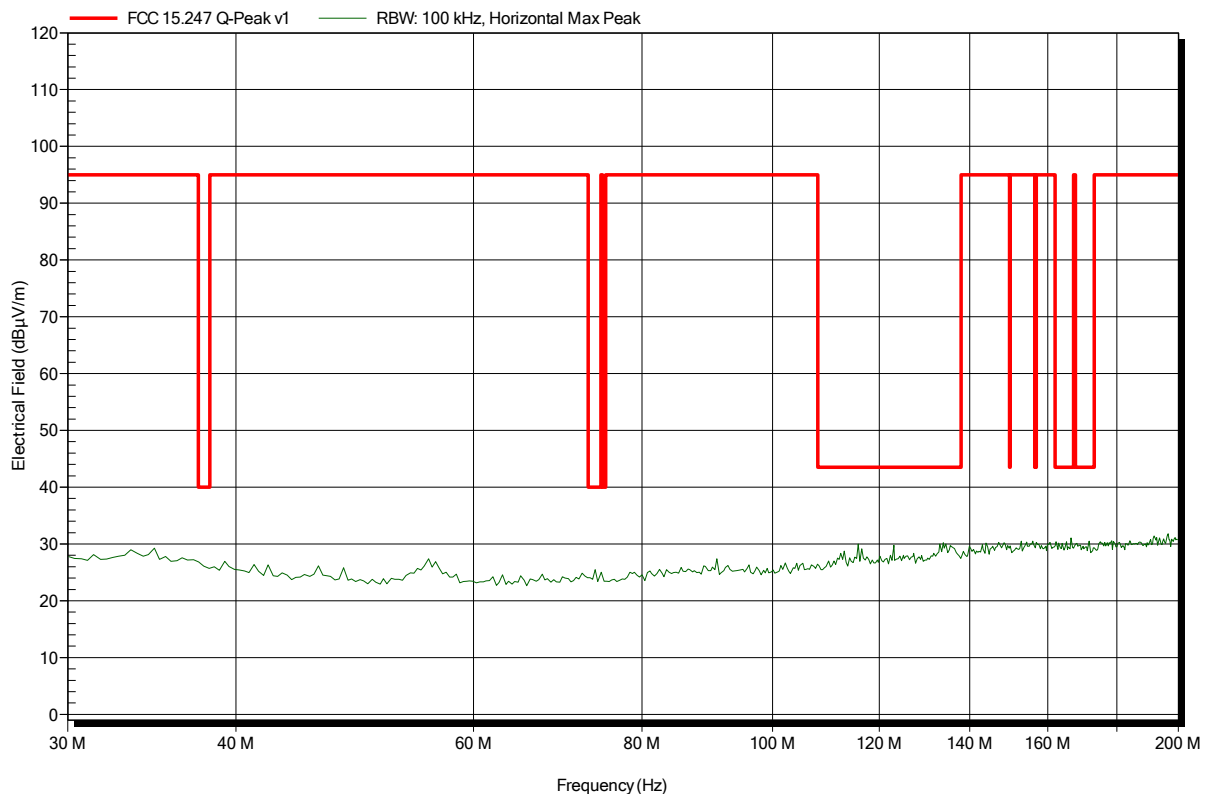


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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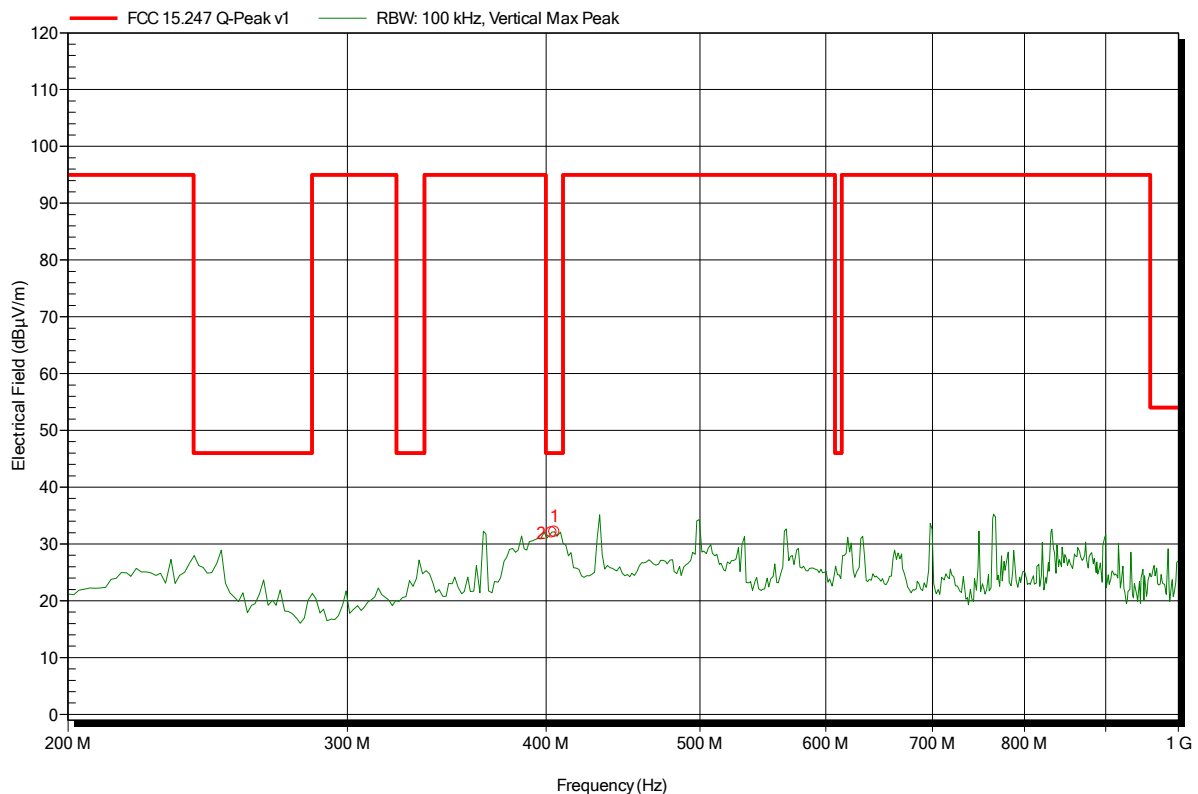


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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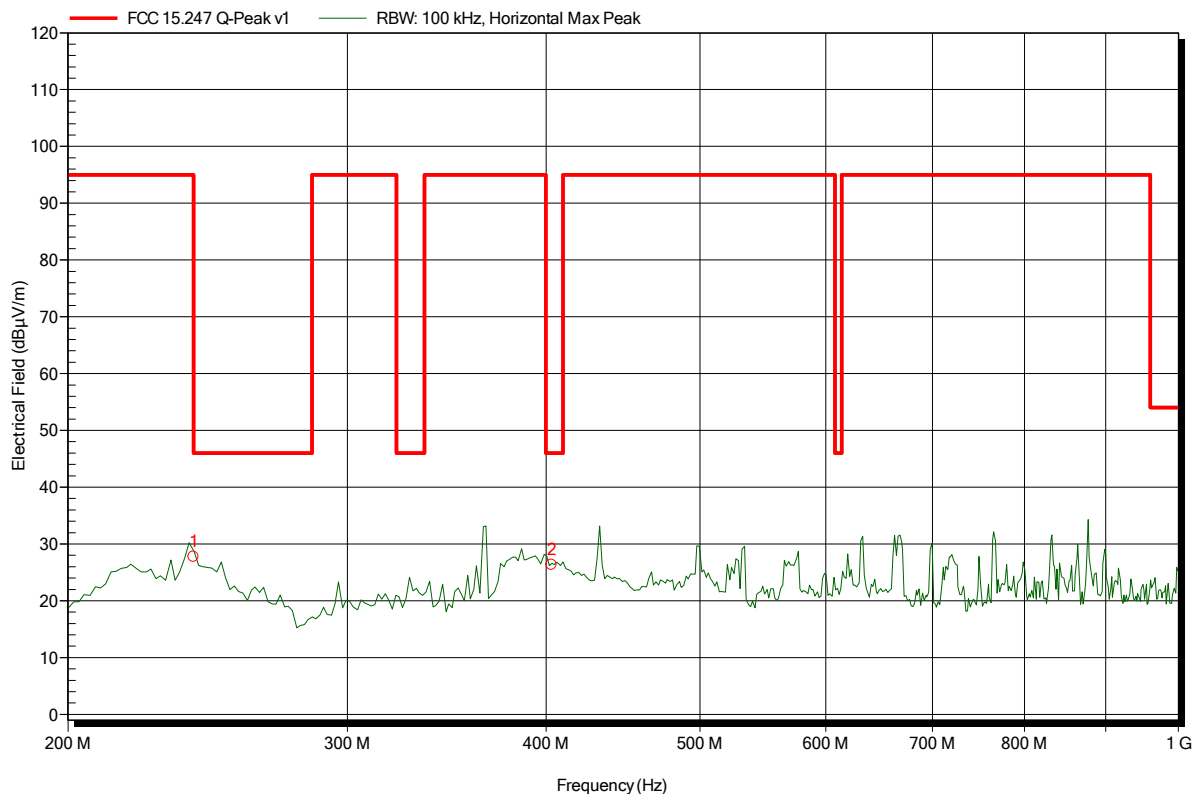
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
403.2 MHz	32.01 dBµV/m	46 dBµV/m	-13.99 dB	Pass
404.8 MHz	32.16 dBµV/m	46 dBµV/m	-13.84 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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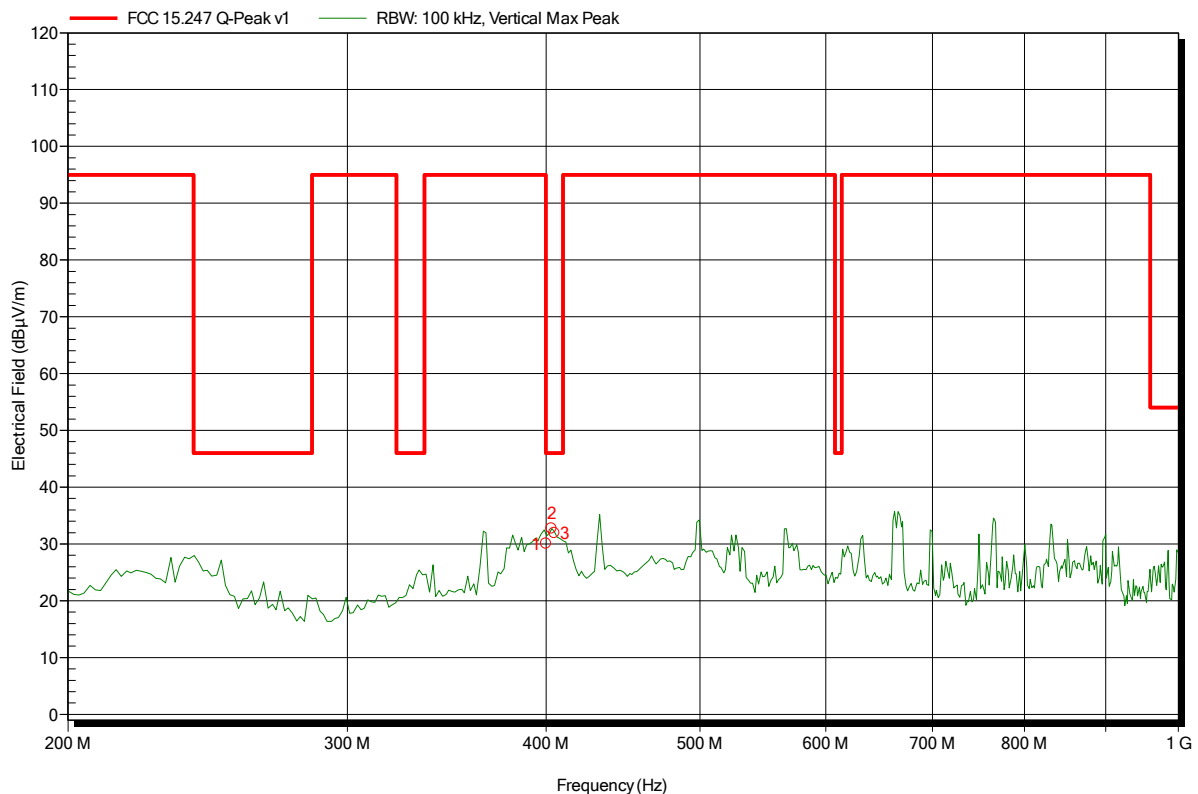
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	27.71 dBµV/m	46 dBµV/m	-18.29 dB	Pass
403.2 MHz	26.31 dBµV/m	46 dBµV/m	-19.69 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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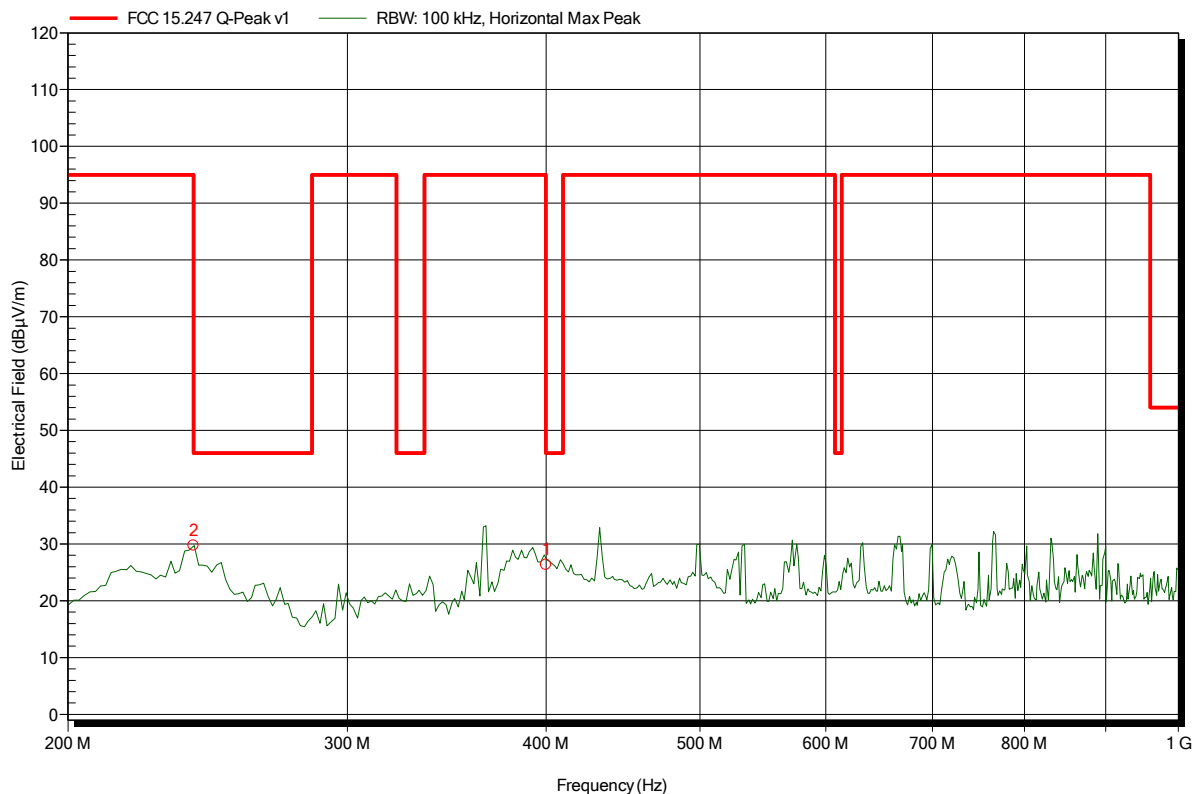
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
400 MHz	30.05 dBµV/m	46 dBµV/m	-15.95 dB	Pass
403.2 MHz	32.69 dBµV/m	46 dBµV/m	-13.31 dB	Pass
404.8 MHz	31.89 dBµV/m	46 dBµV/m	-14.11 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	29.69 dBµV/m	46 dBµV/m	-16.31 dB	Pass
400 MHz	26.35 dBµV/m	46 dBµV/m	-19.65 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

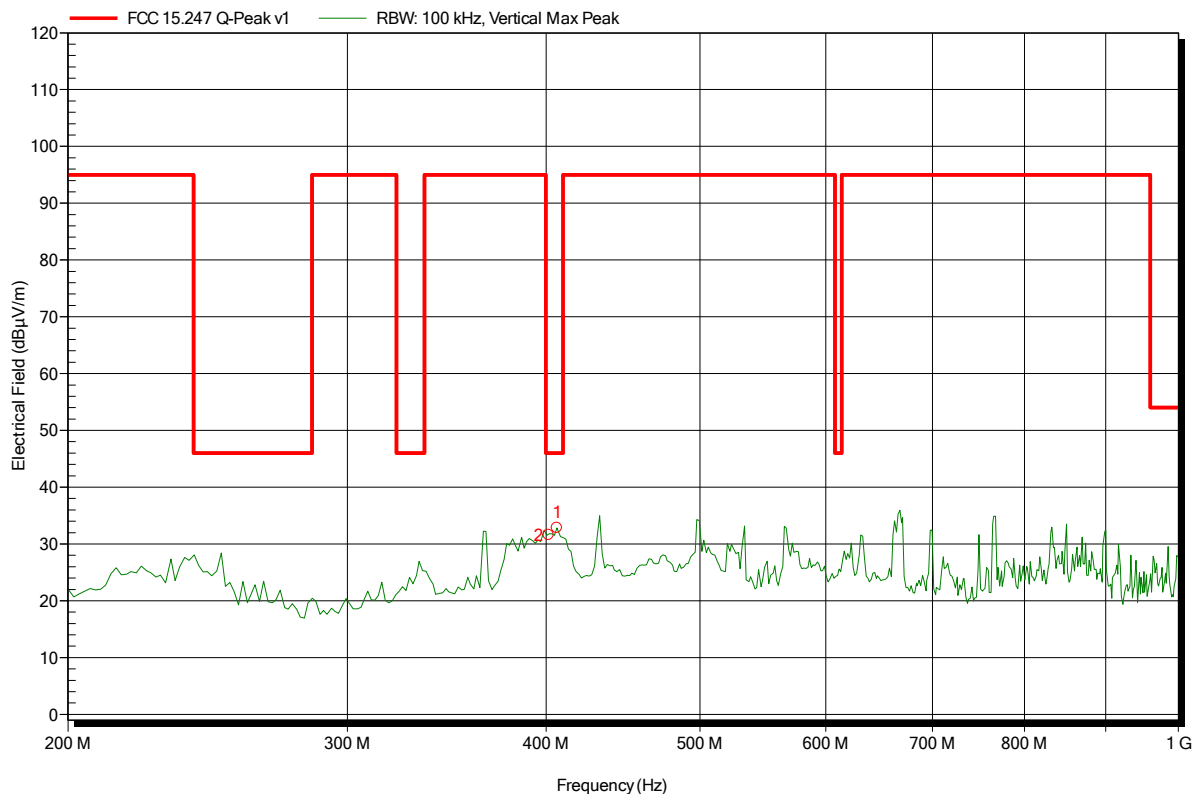
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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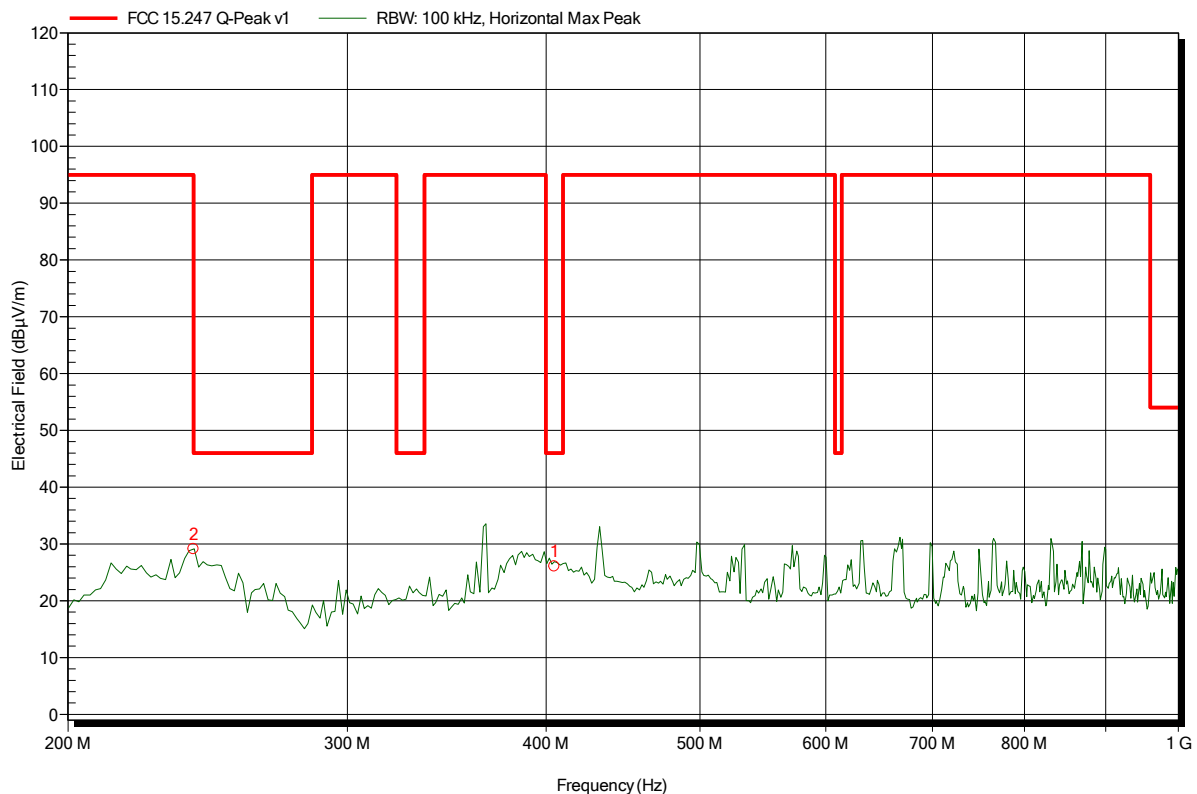
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
401.6 MHz	31.56 dBµV/m	46 dBµV/m	-14.44 dB	Pass
406.4 MHz	32.82 dBµV/m	46 dBµV/m	-13.18 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	29.11 dBµV/m	46 dBµV/m	-16.89 dB	Pass
404.8 MHz	26.03 dBµV/m	46 dBµV/m	-19.97 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

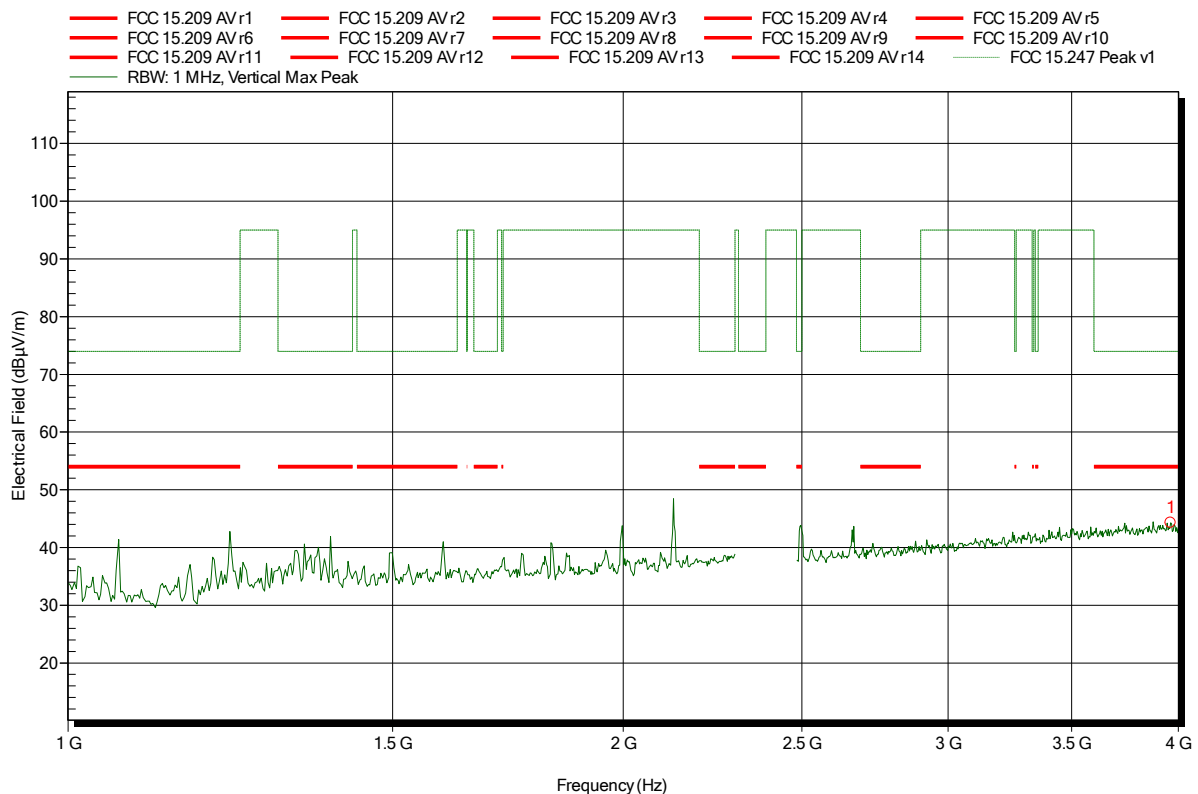
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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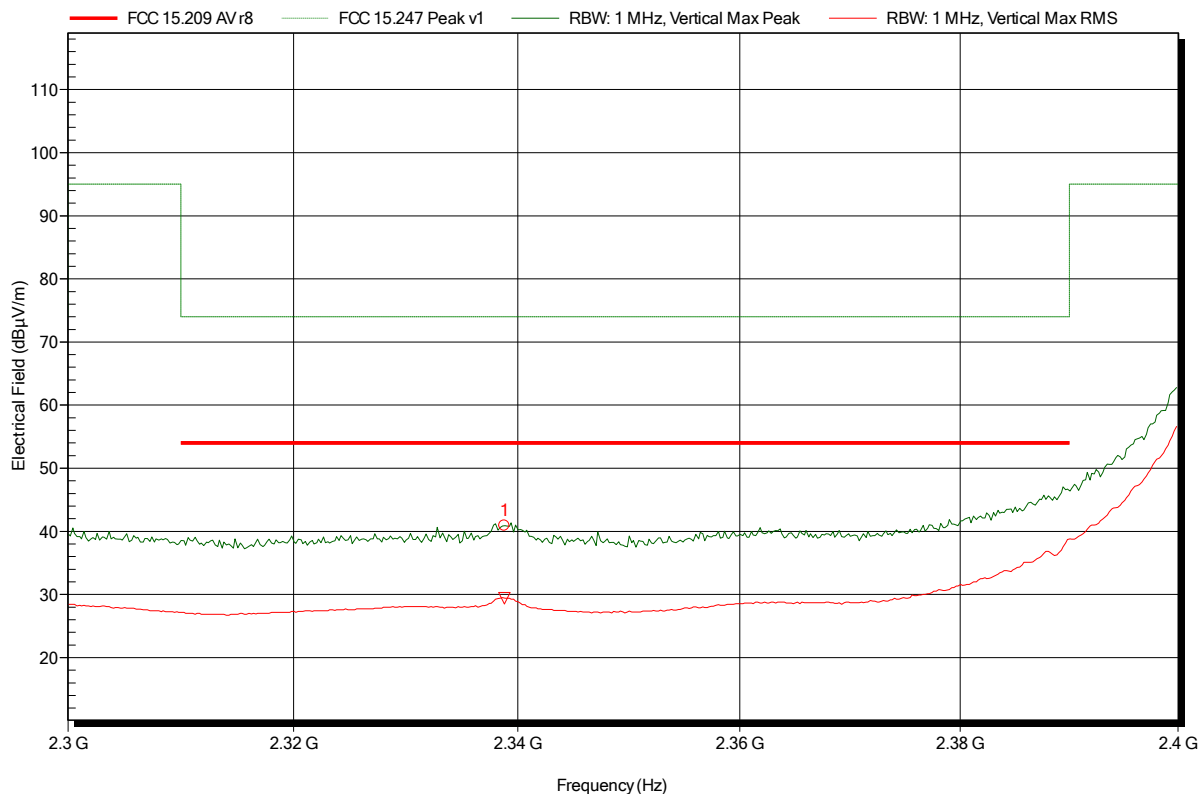
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.961 GHz	44.27 dBµV/m	74 dBµV/m	-29.73 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2; lower bandedge

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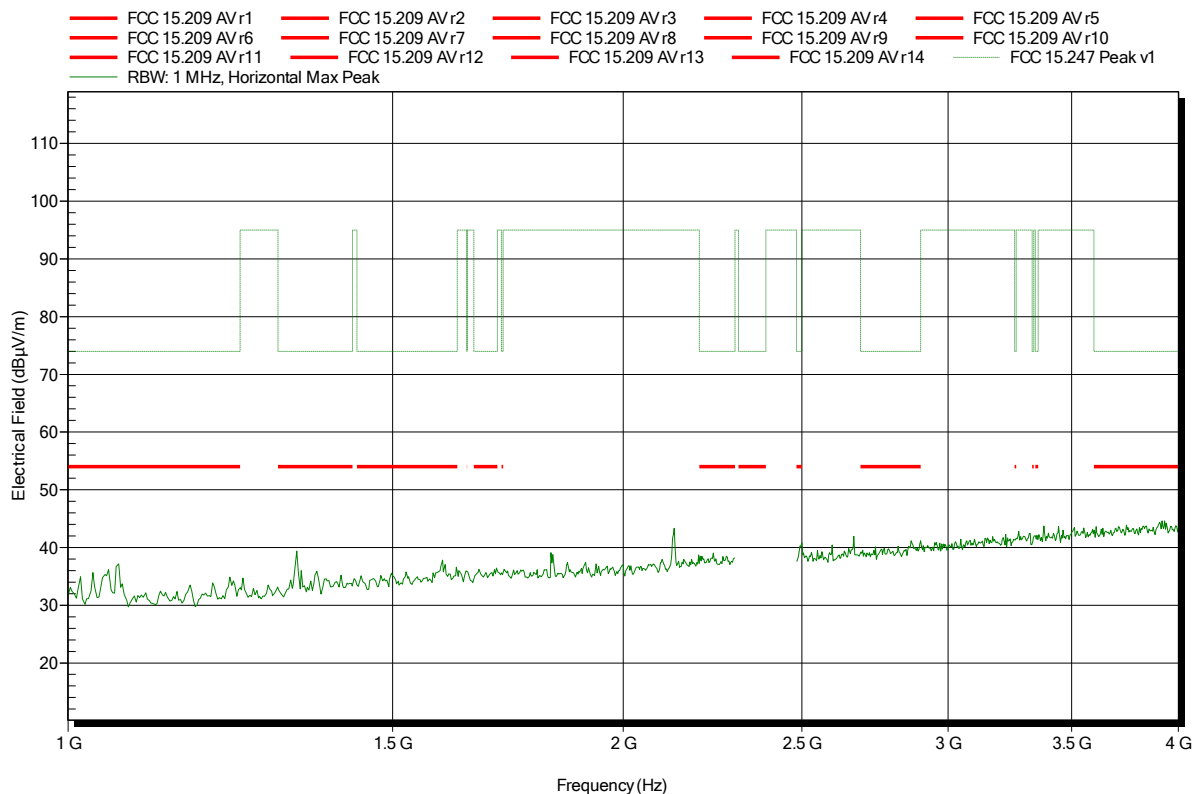
Frequency 2.339 GHz	Peak 40.92 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -33.08 dB	Peak Status Pass
Frequency 2.339 GHz	RMS 29.38 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -24.62 dB	RMS Status Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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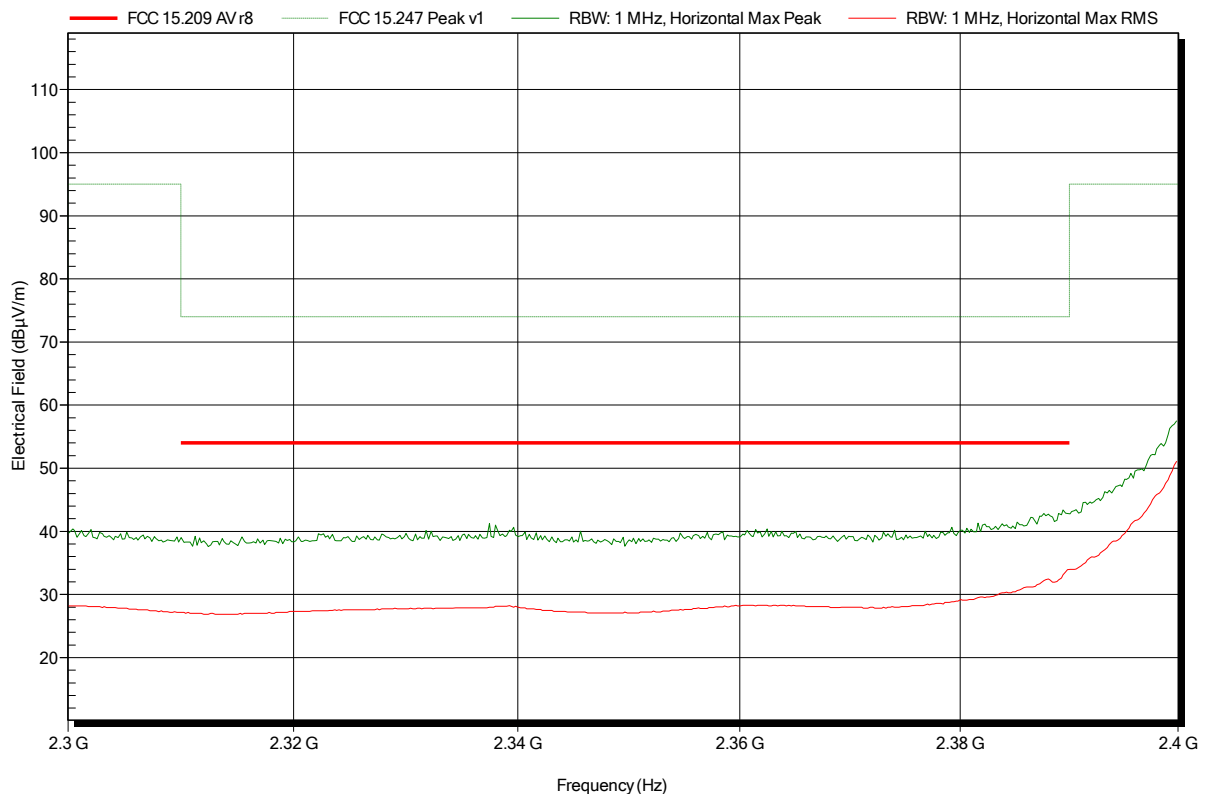


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2; lower bandedge

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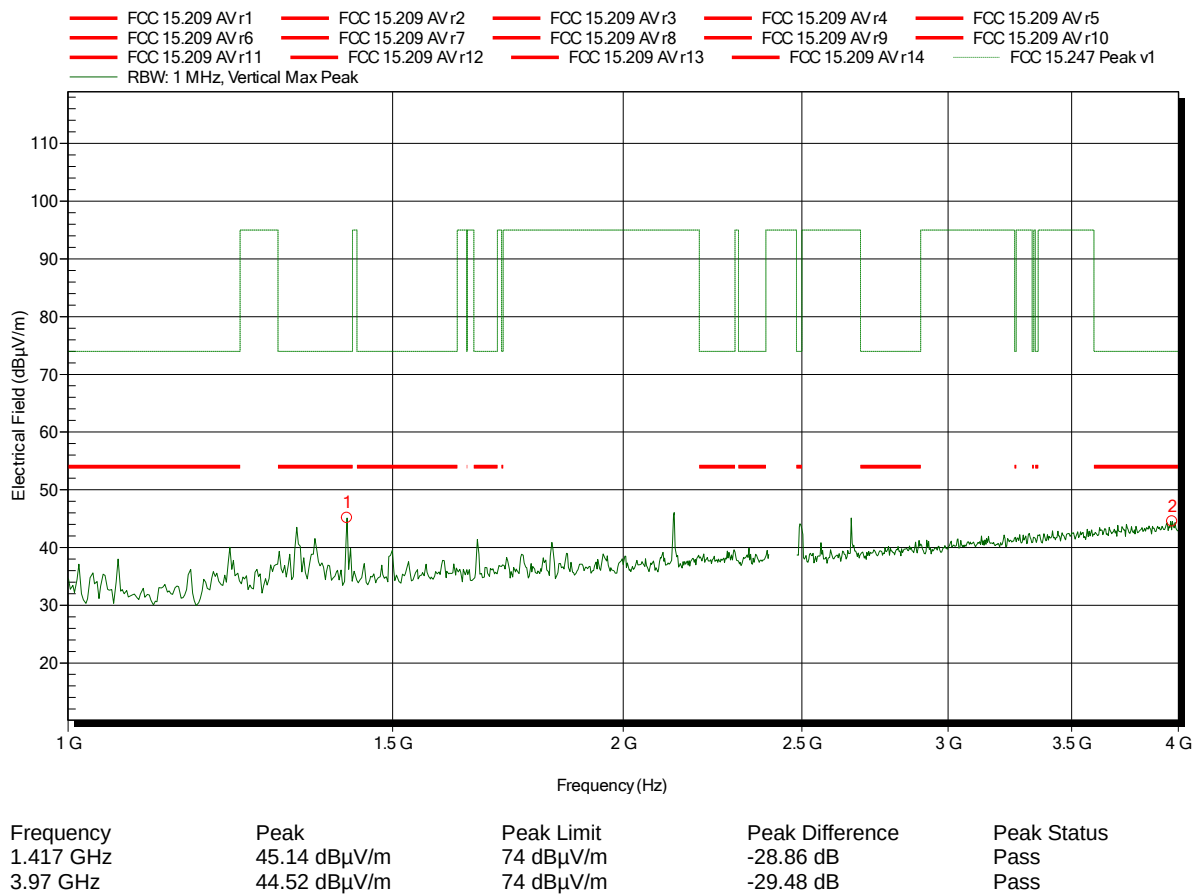


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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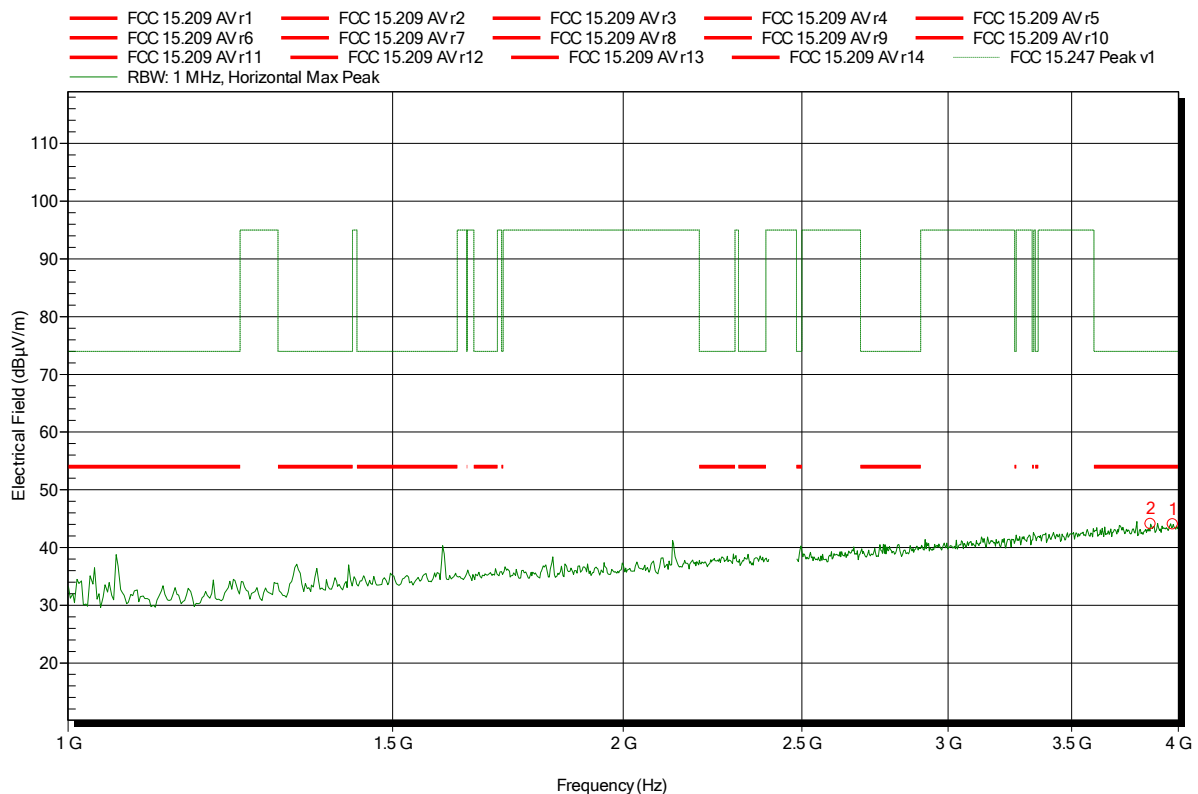


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.864 GHz	44.04 dBµV/m	74 dBµV/m	-29.96 dB	Pass
3.973 GHz	44.01 dBµV/m	74 dBµV/m	-29.99 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

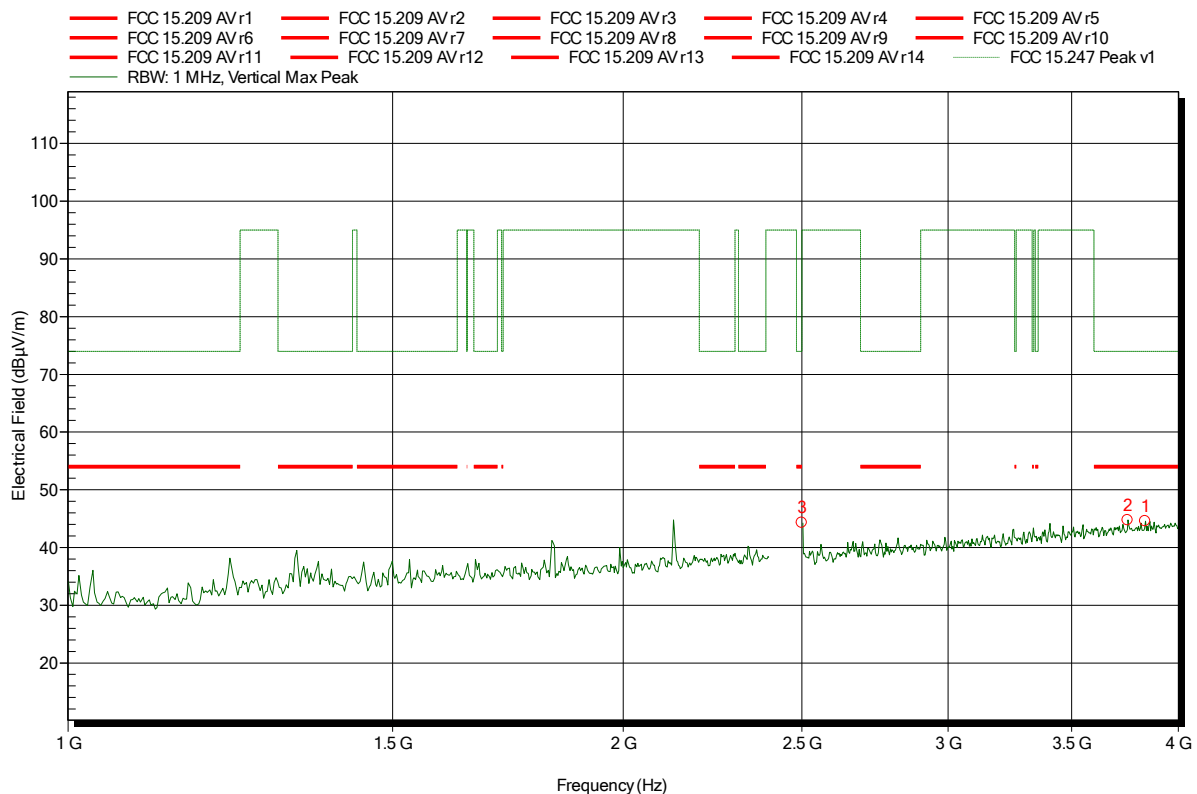
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.5 GHz	44.28 dBµV/m	74 dBµV/m	-29.72 dB	Pass
3.754 GHz	44.75 dBµV/m	74 dBµV/m	-29.25 dB	Pass
3.838 GHz	44.57 dBµV/m	74 dBµV/m	-29.43 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

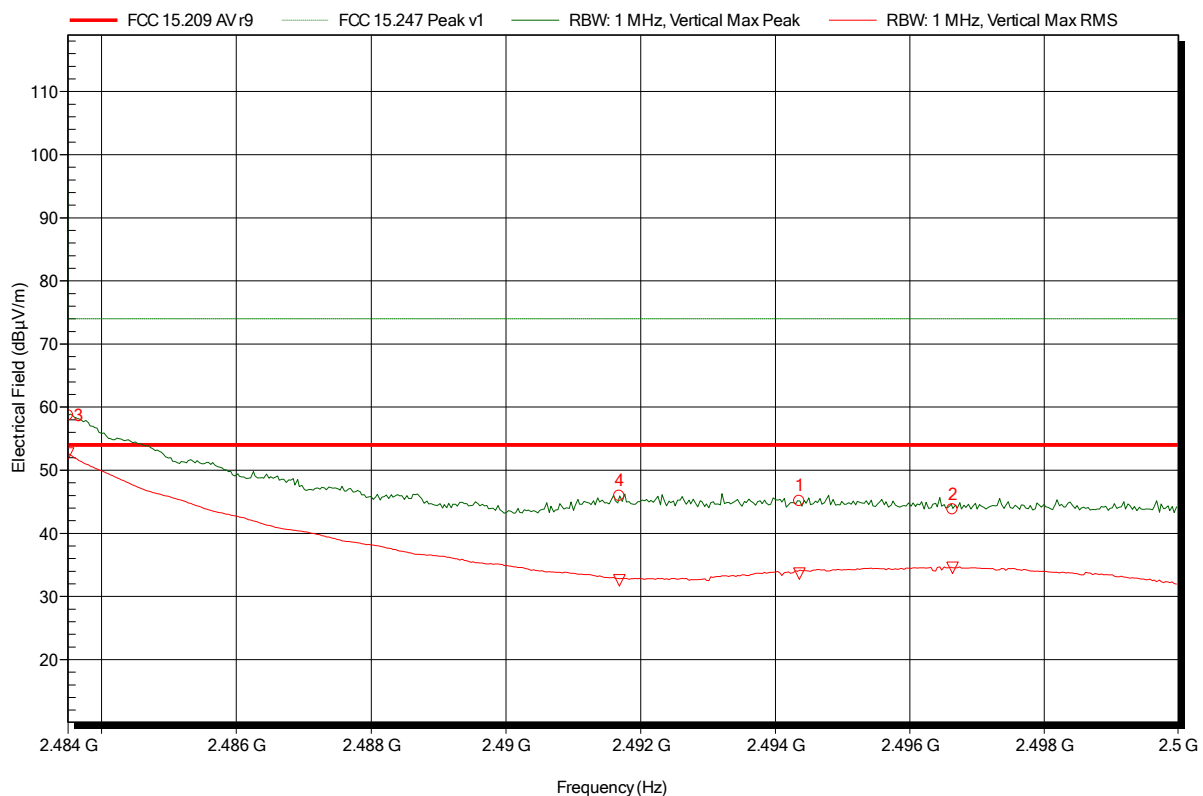
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical, ant.: A2; higher bandedge

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	58.72 dBµV/m	74 dBµV/m	-15.28 dB	Pass
2.492 GHz	45.93 dBµV/m	74 dBµV/m	-28.07 dB	Pass
2.494 GHz	45.12 dBµV/m	74 dBµV/m	-28.88 dB	Pass
2.497 GHz	43.78 dBµV/m	74 dBµV/m	-30.22 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	52.64 dBµV/m	54 dBµV/m	-1.36 dB	Pass
2.492 GHz	32.57 dBµV/m	54 dBµV/m	-21.43 dB	Pass
2.494 GHz	33.62 dBµV/m	54 dBµV/m	-20.38 dB	Pass
2.497 GHz	34.56 dBµV/m	54 dBµV/m	-19.44 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

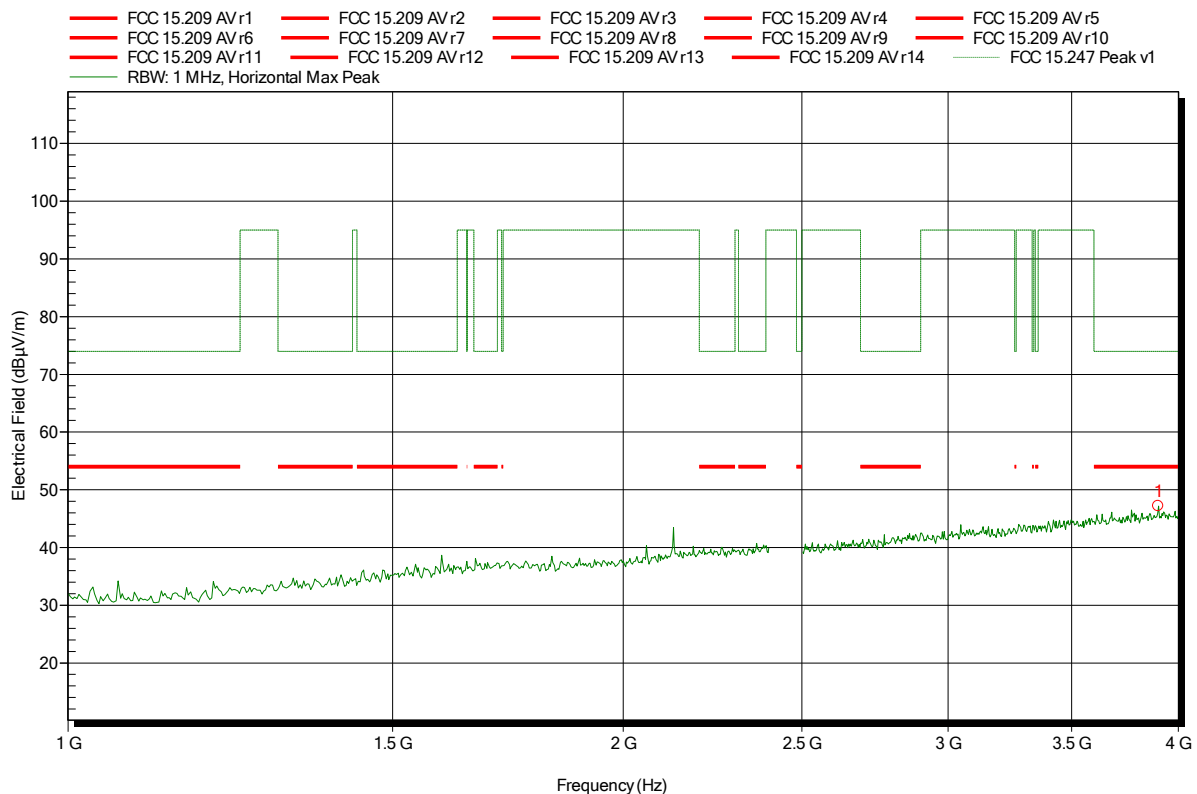
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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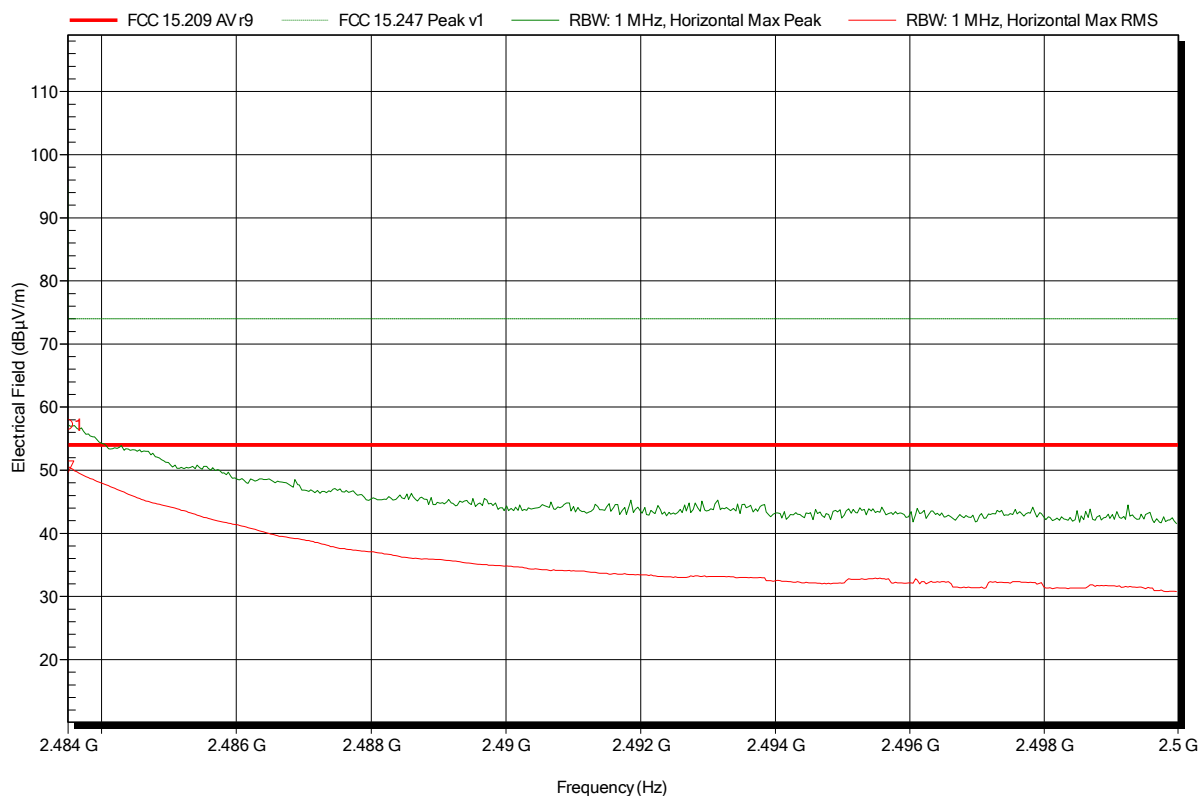
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.901 GHz	47.15 dBµV/m	74 dBµV/m	-26.85 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical ant.: A2; higher bandedge

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Frequency 2.484 GHz	Peak 57.15 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -16.85 dB	Peak Status Pass
Frequency 2.484 GHz	RMS 50.58 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -3.42 dB	RMS Status Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

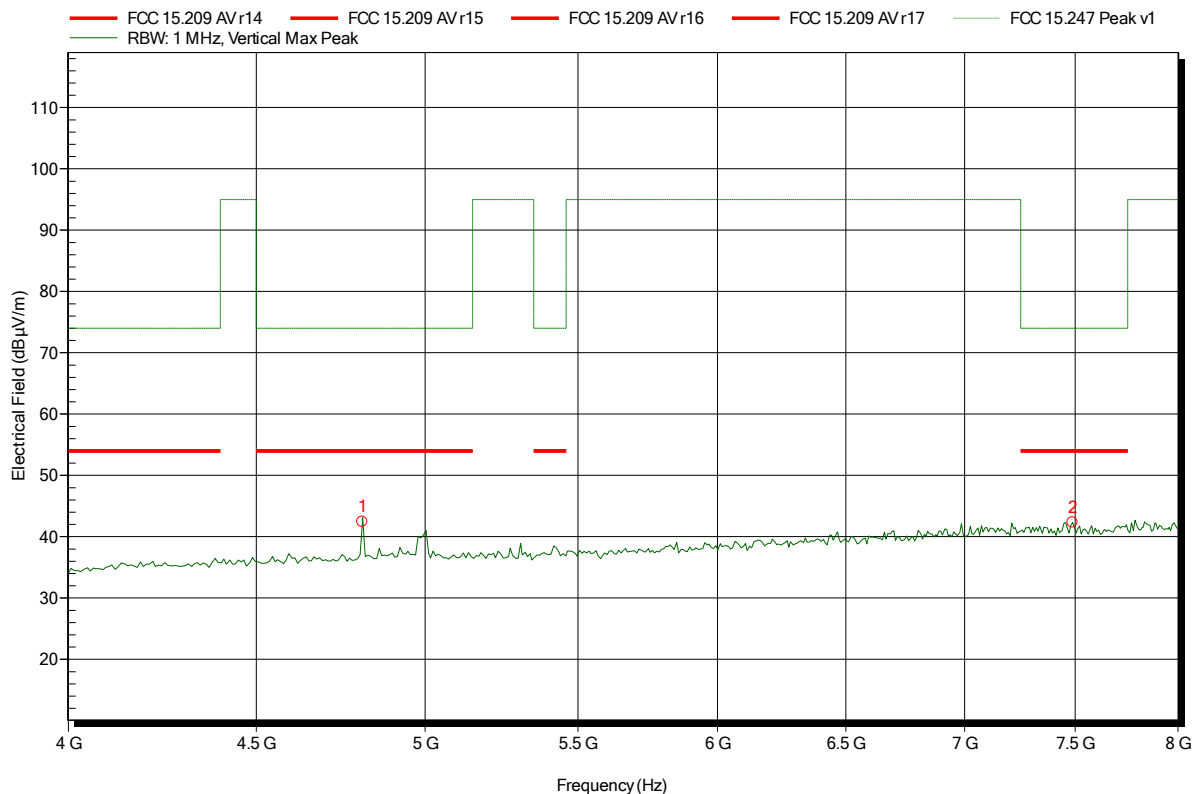
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.808 GHz	42.43 dBµV/m	74 dBµV/m	-31.57 dB	Pass
7.488 GHz	42.32 dBµV/m	74 dBµV/m	-31.68 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

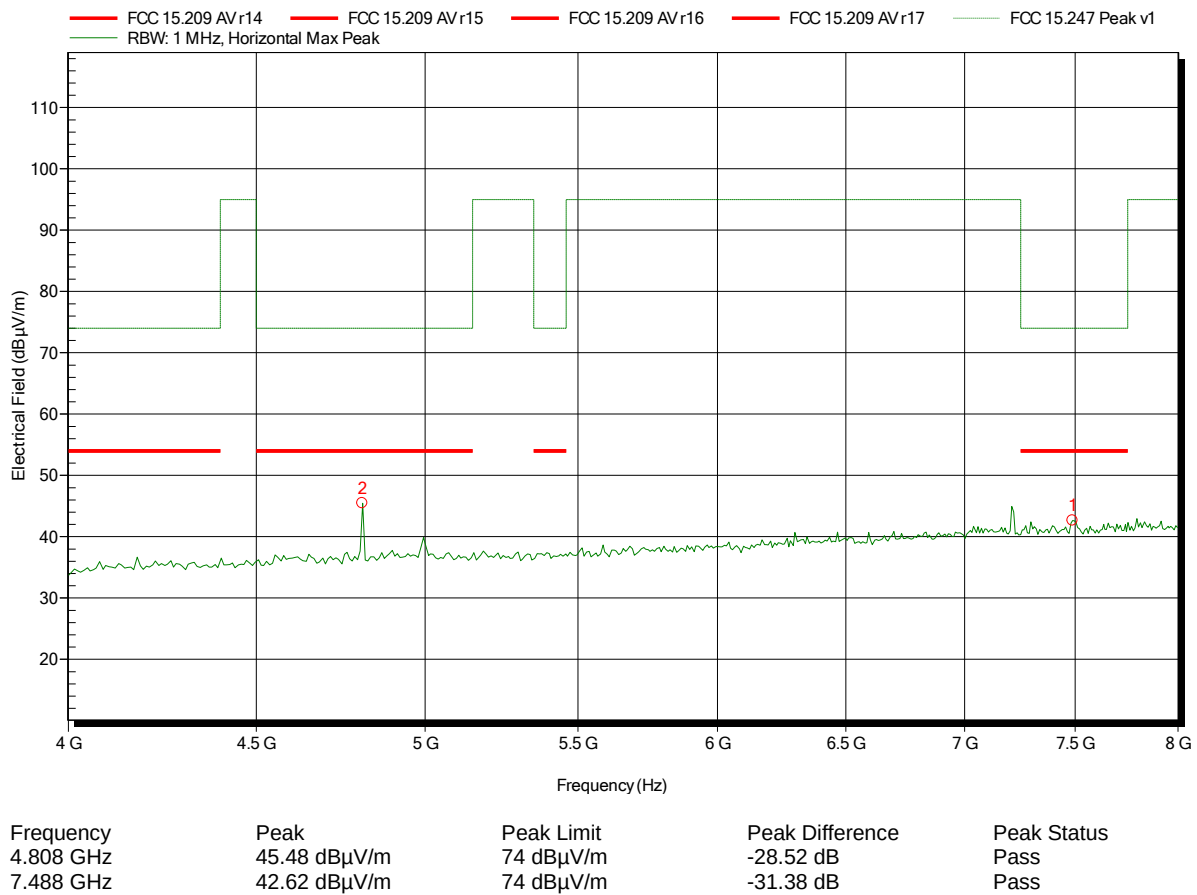
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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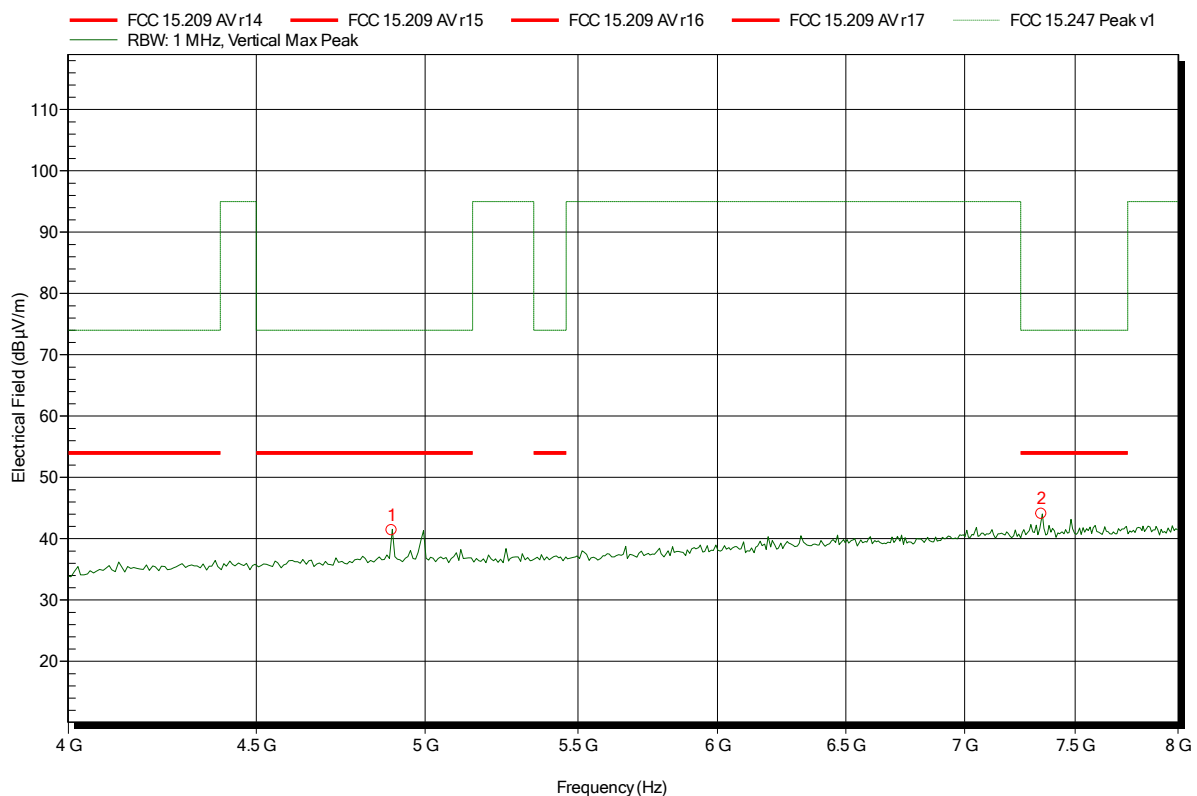


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	41.38 dBµV/m	74 dBµV/m	-32.62 dB	Pass
7.344 GHz	44.07 dBµV/m	74 dBµV/m	-29.93 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

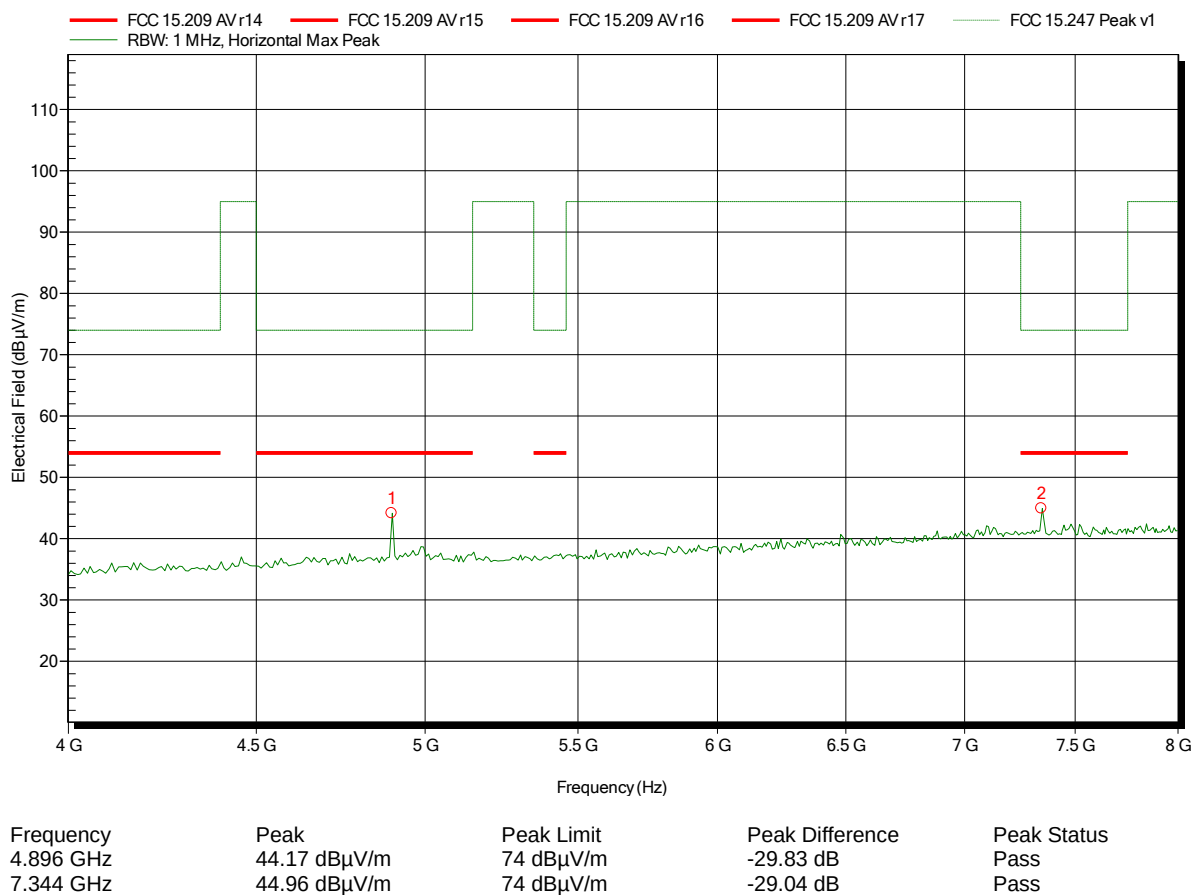
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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Test Report No.: G0M-1505-4730-TFC247ZB-V01

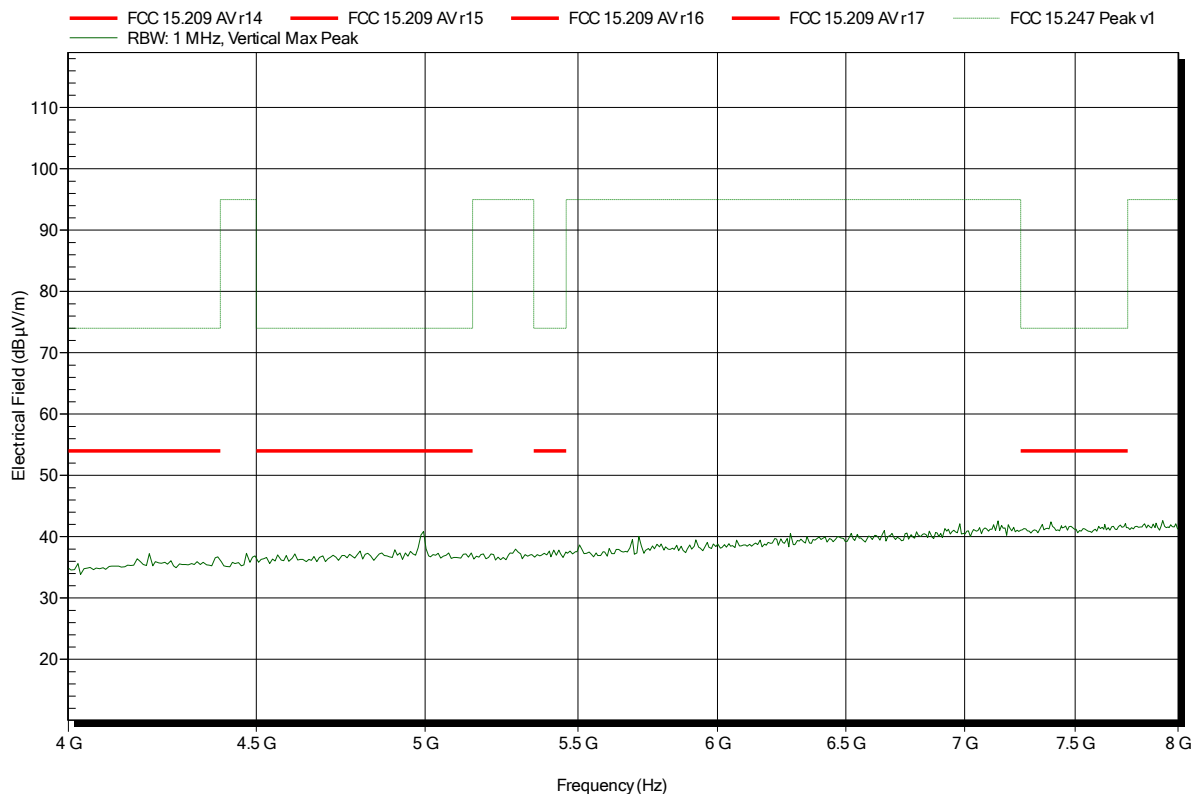
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A2

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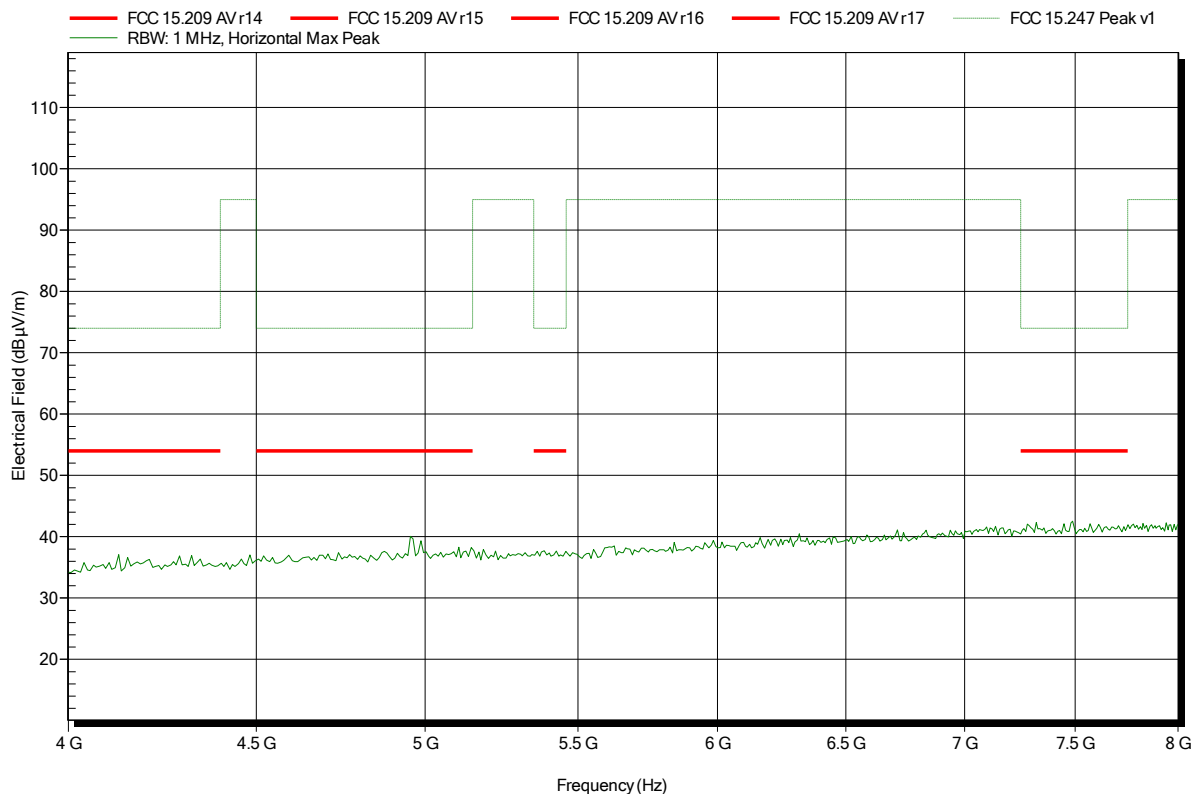


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A2

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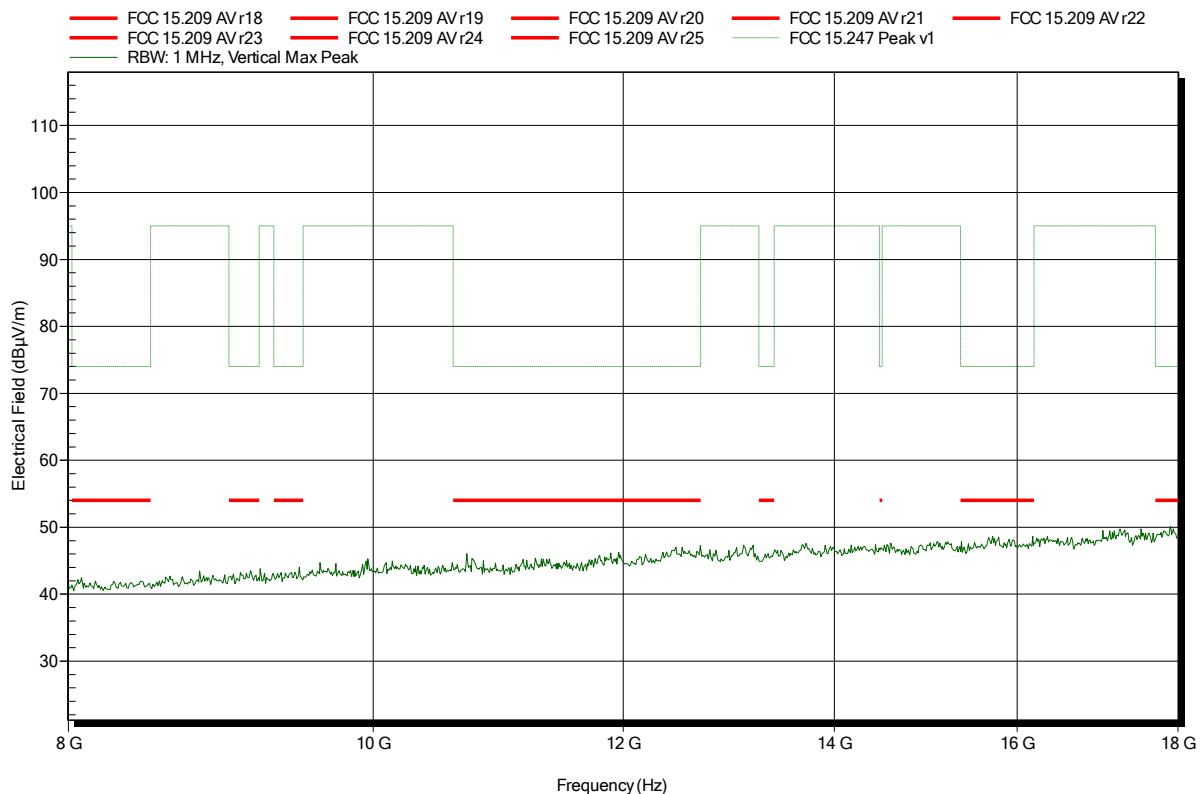


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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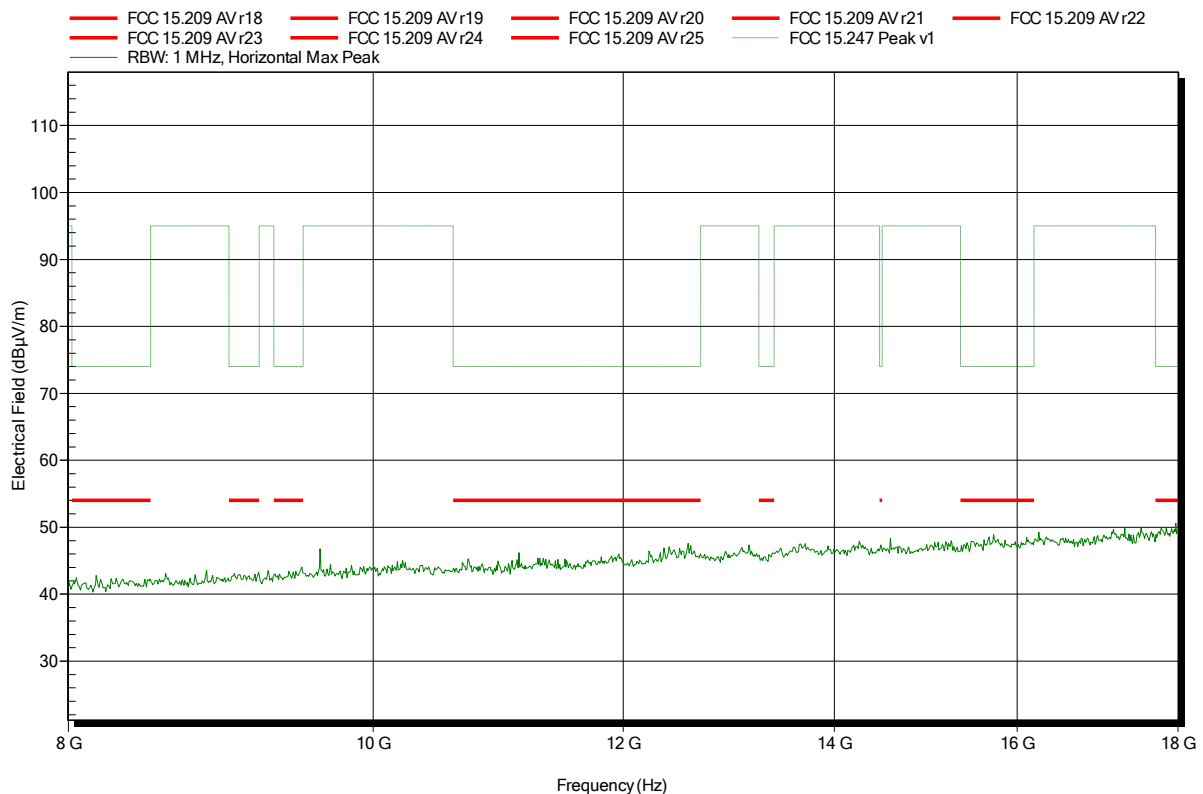


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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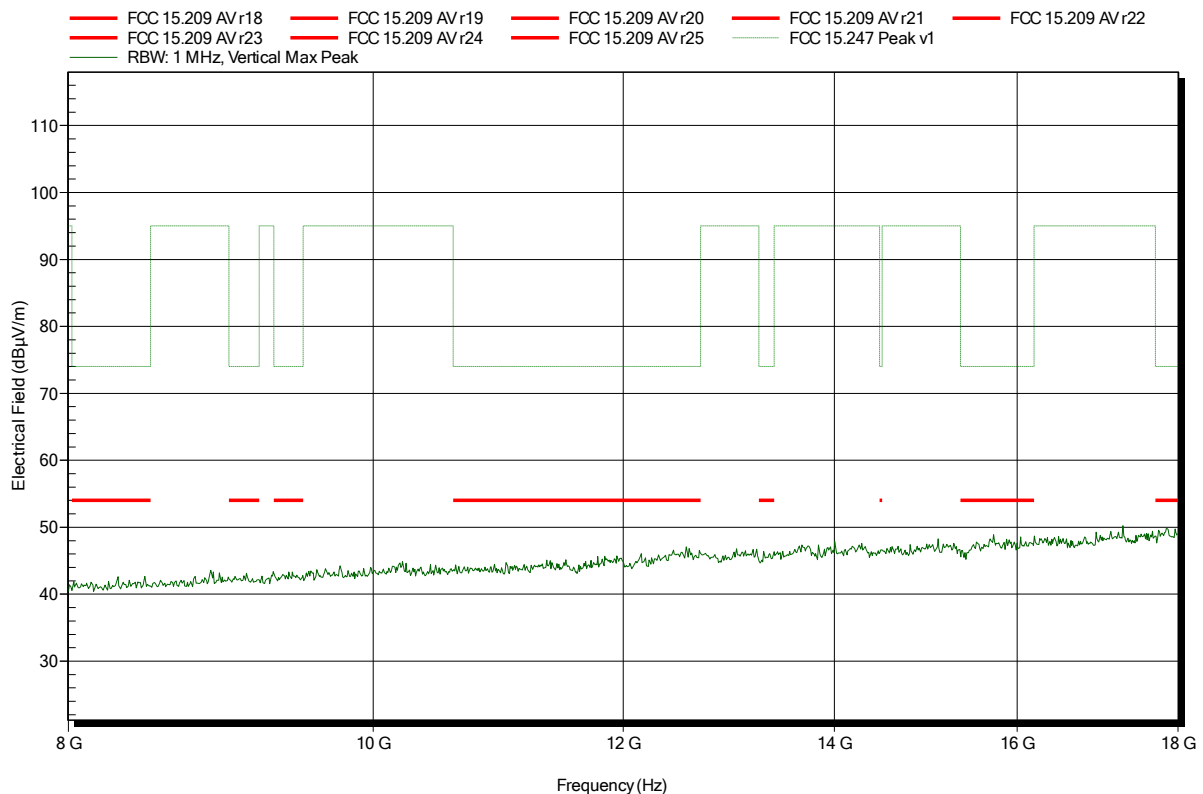


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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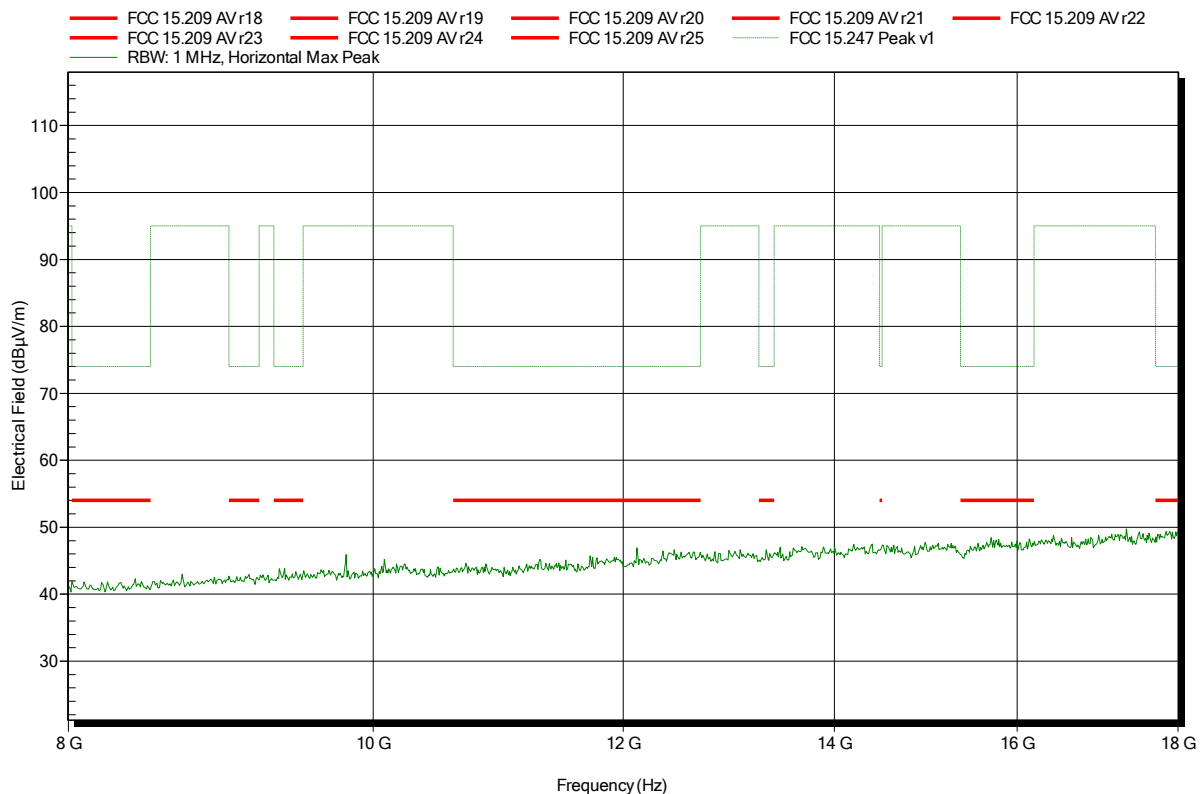


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
 Test Date: 2015-05-19
 Note: EUT vertical, ant.: A2

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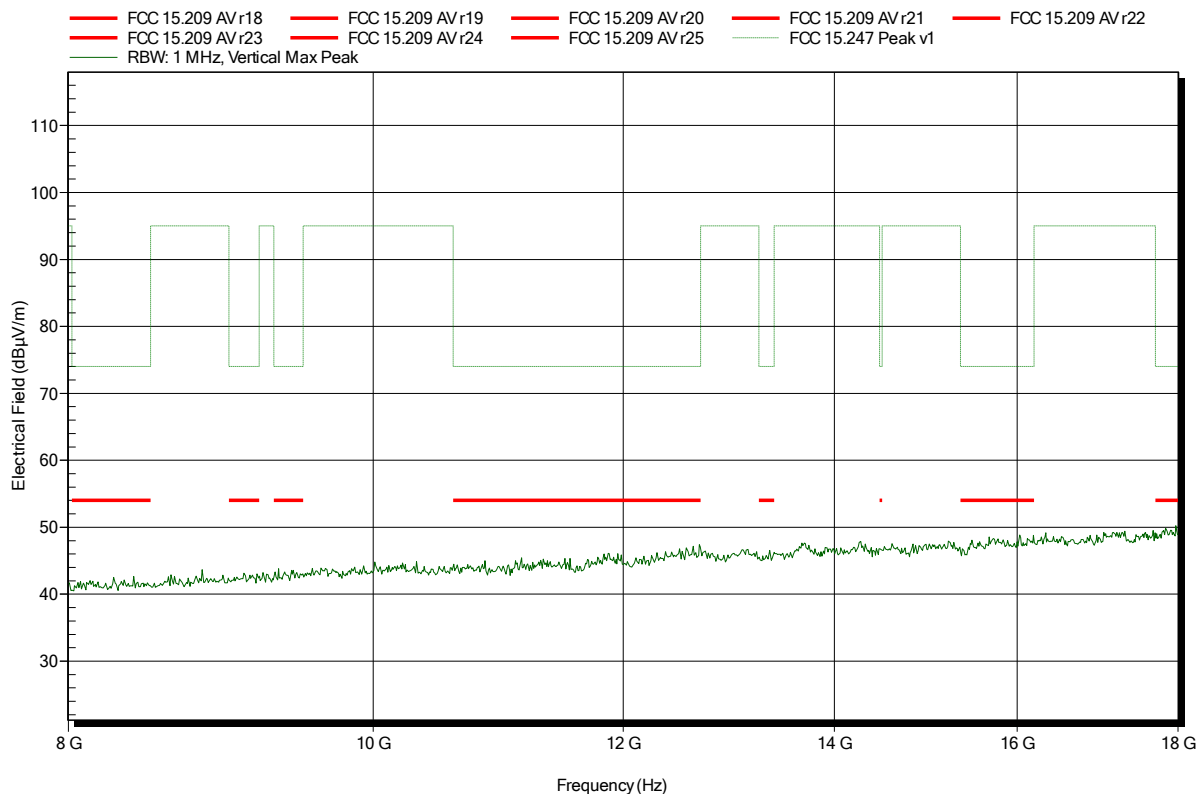


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A2

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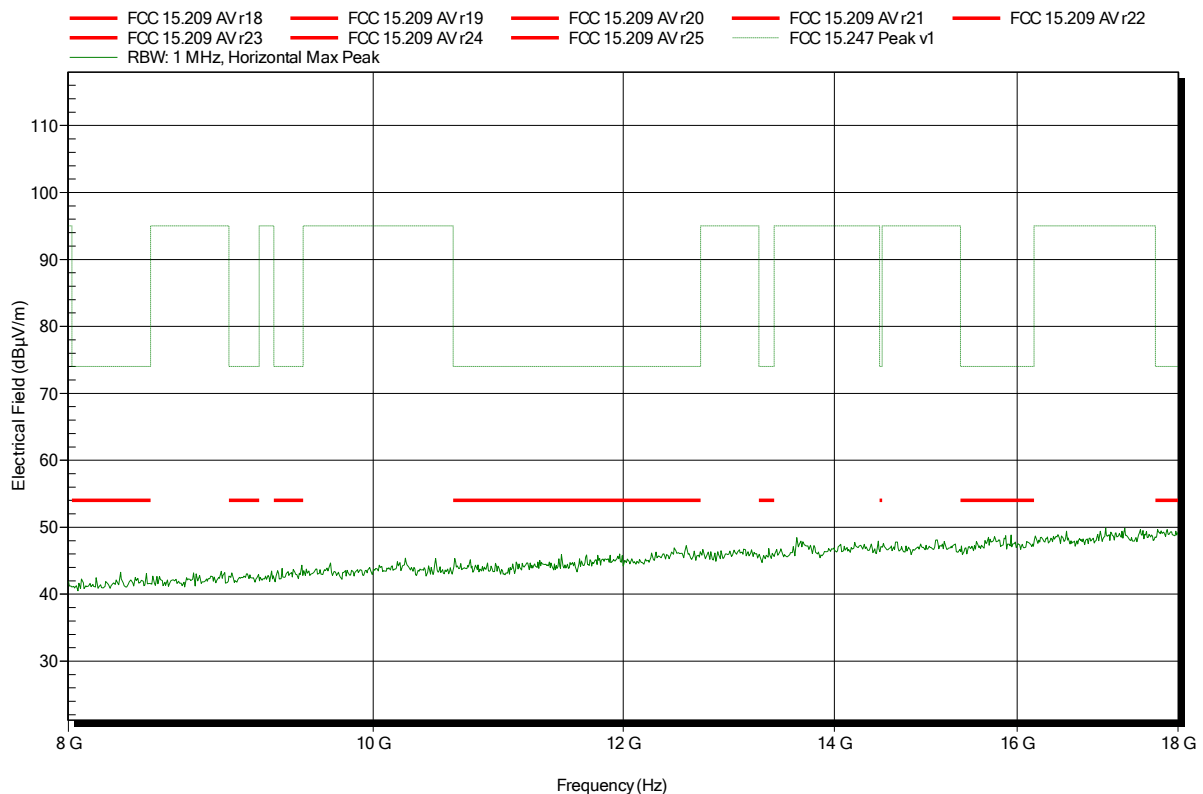


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A2

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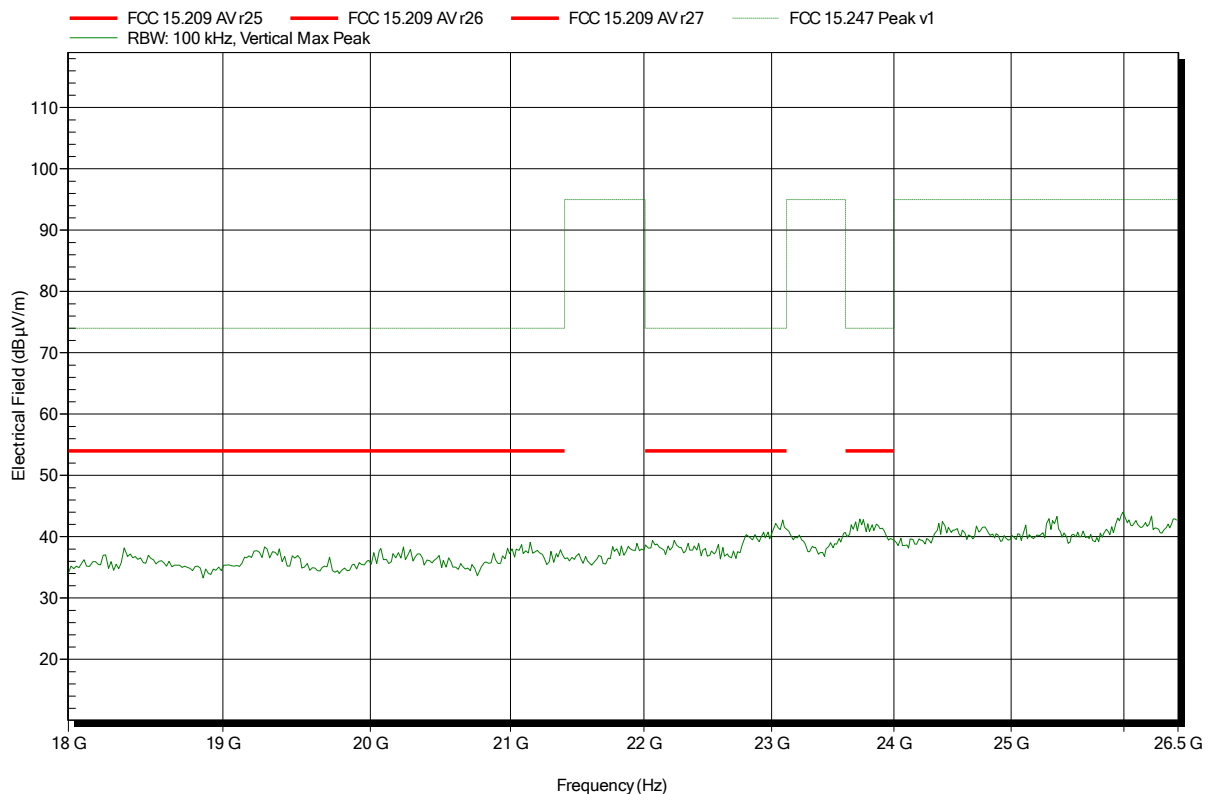


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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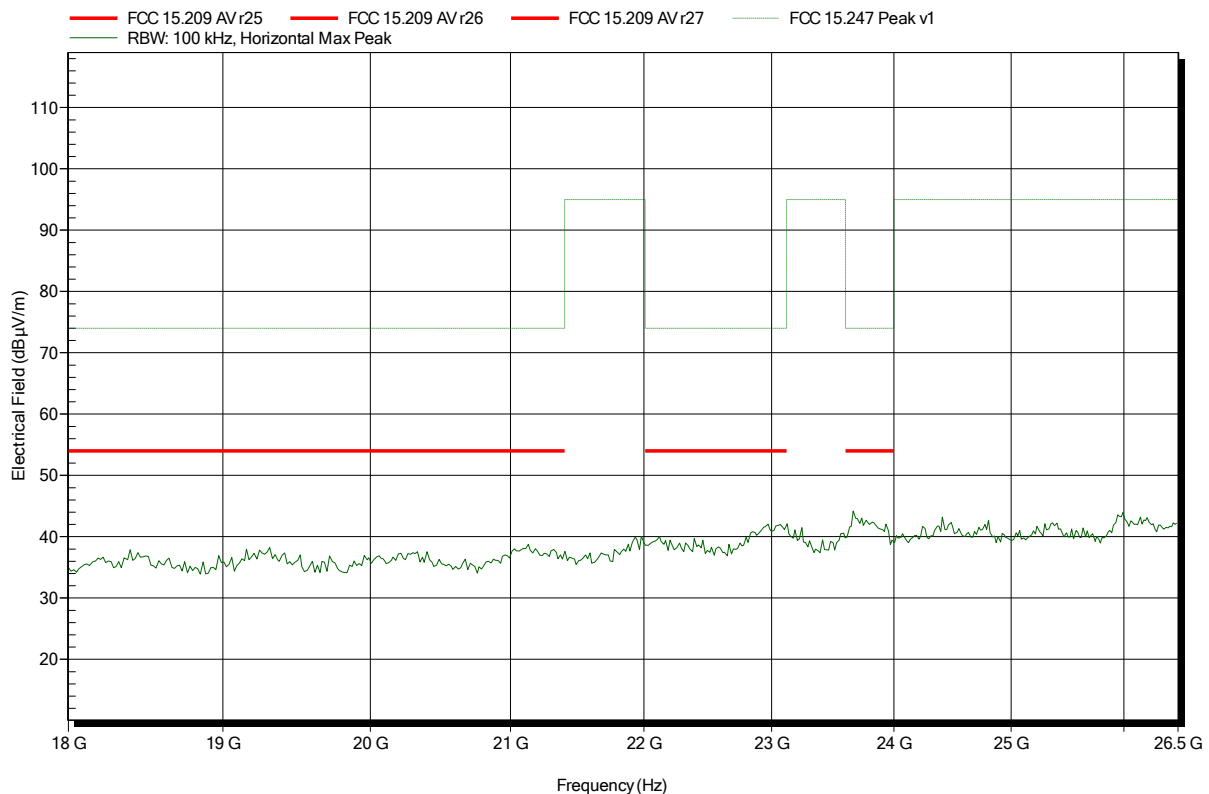


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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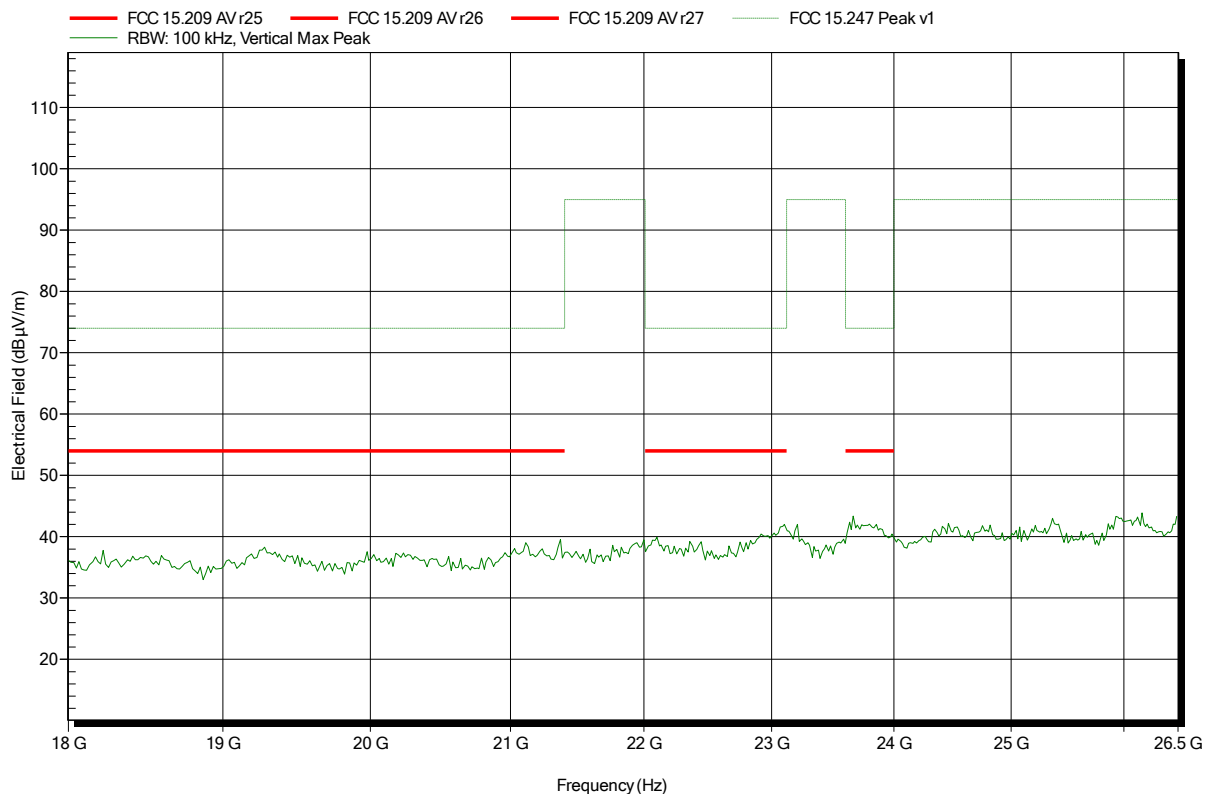


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

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EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
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Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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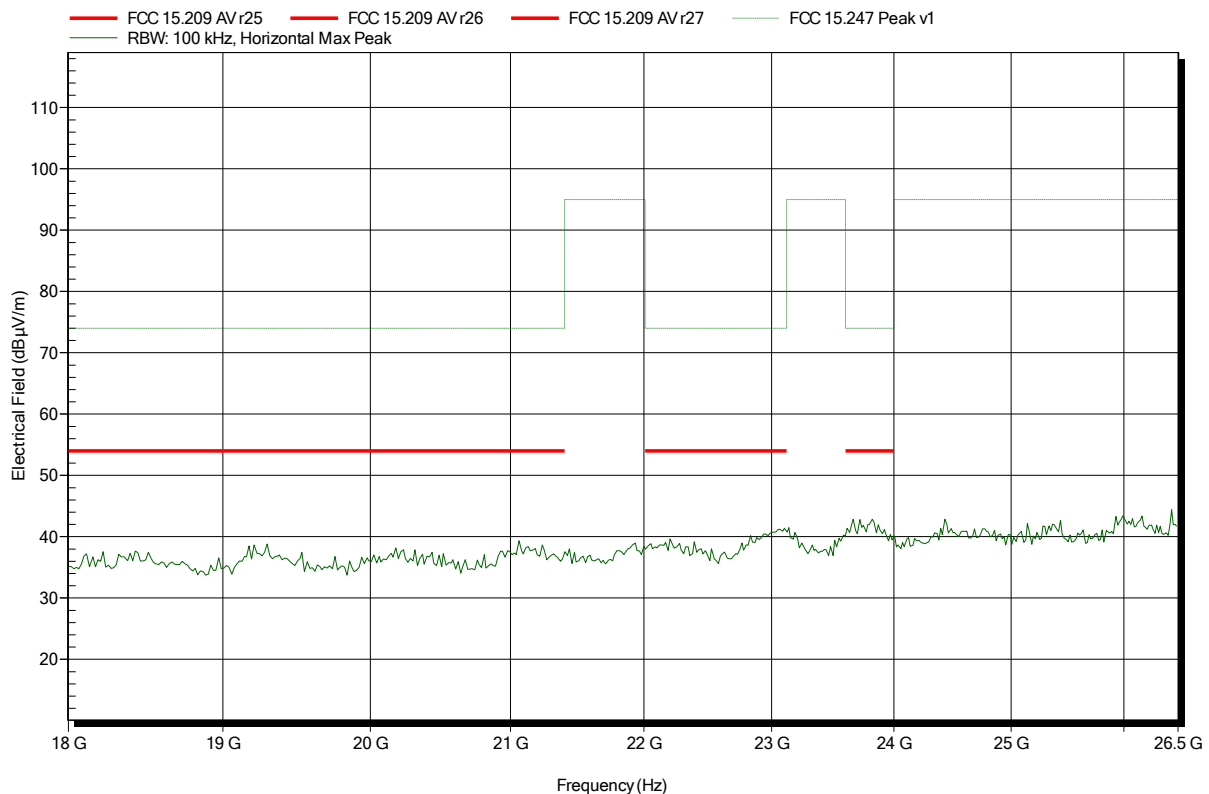


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
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Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Stub" ant.: A2
Test Date:	2015-05-19
Note:	EUT vertical, ant.: A2

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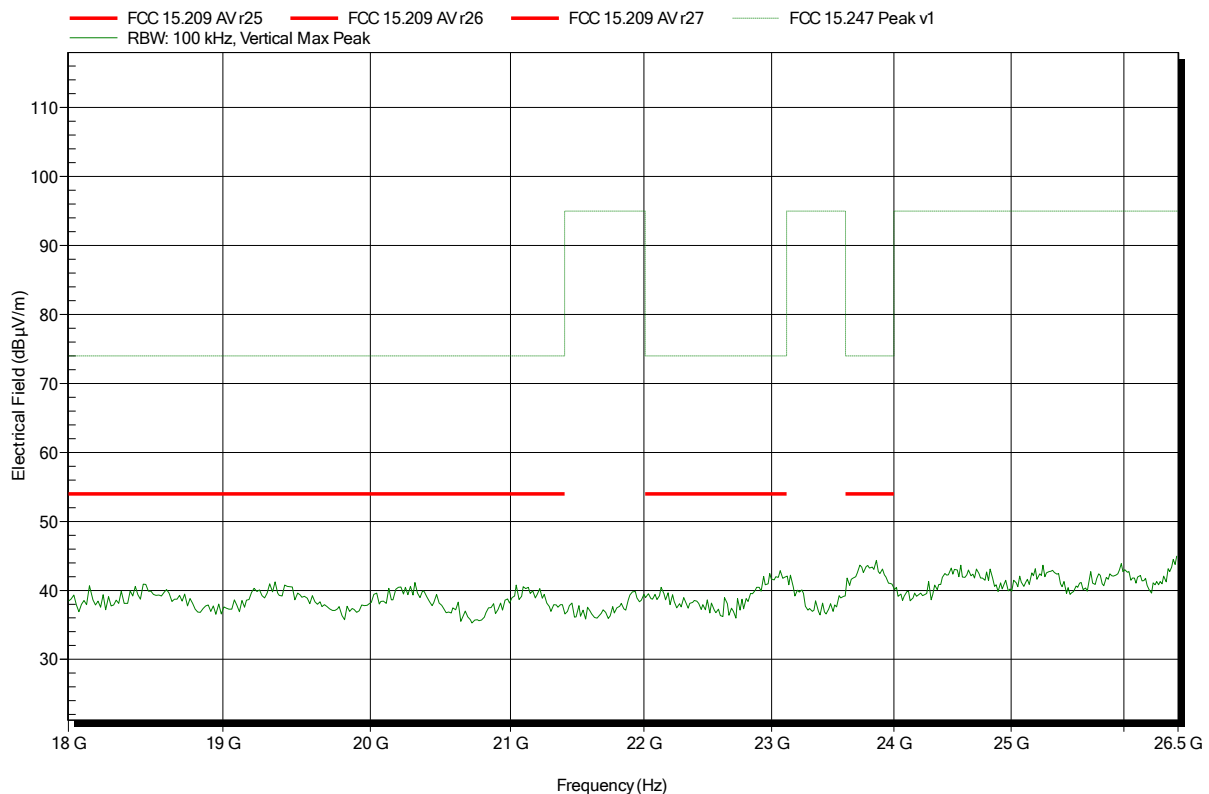


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A2

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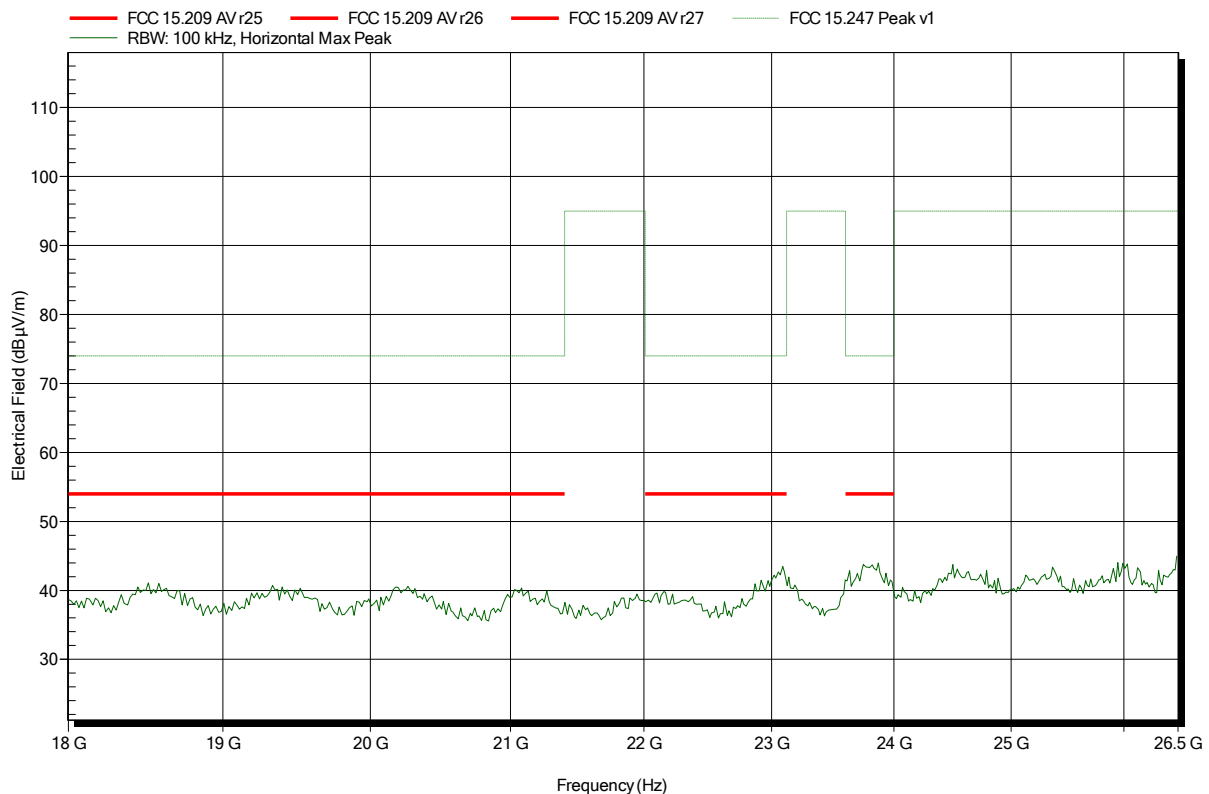


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Stub" ant.: A2 (-9)
 Test Date: 2015-05-20
 Note: EUT vertical an.: A2

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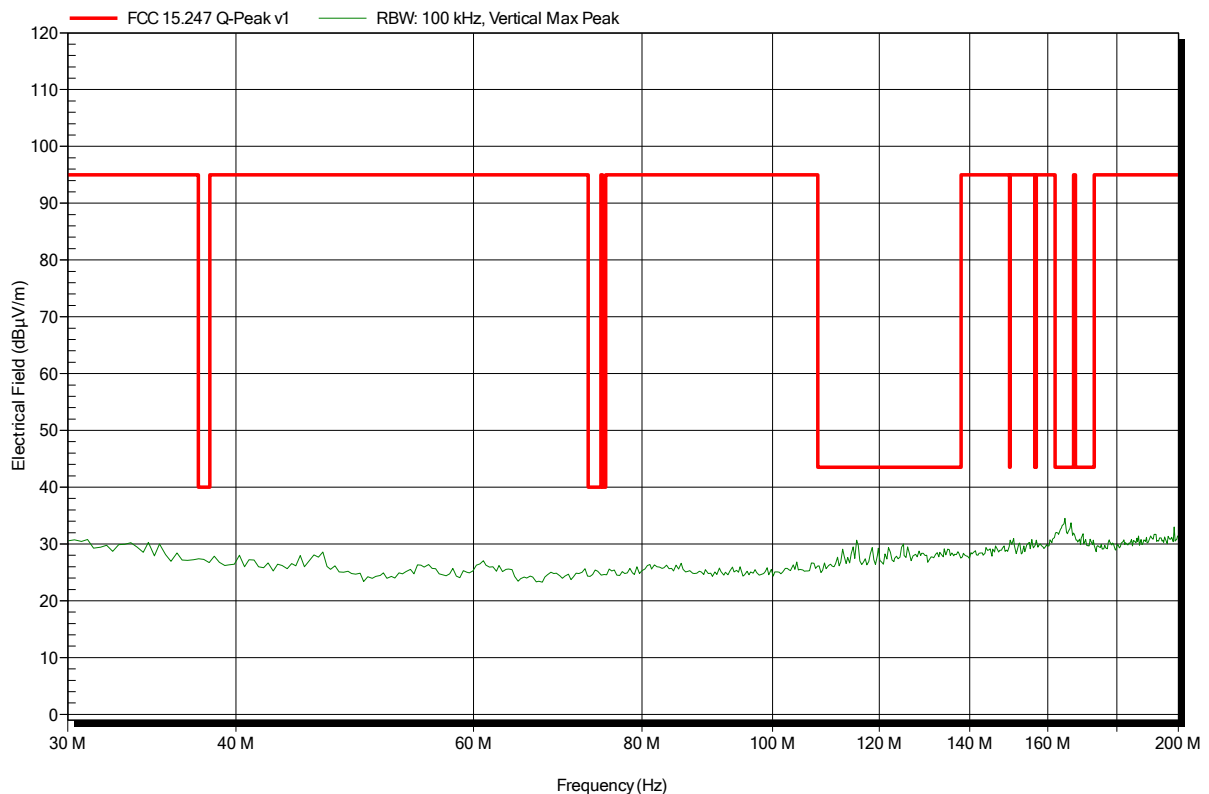


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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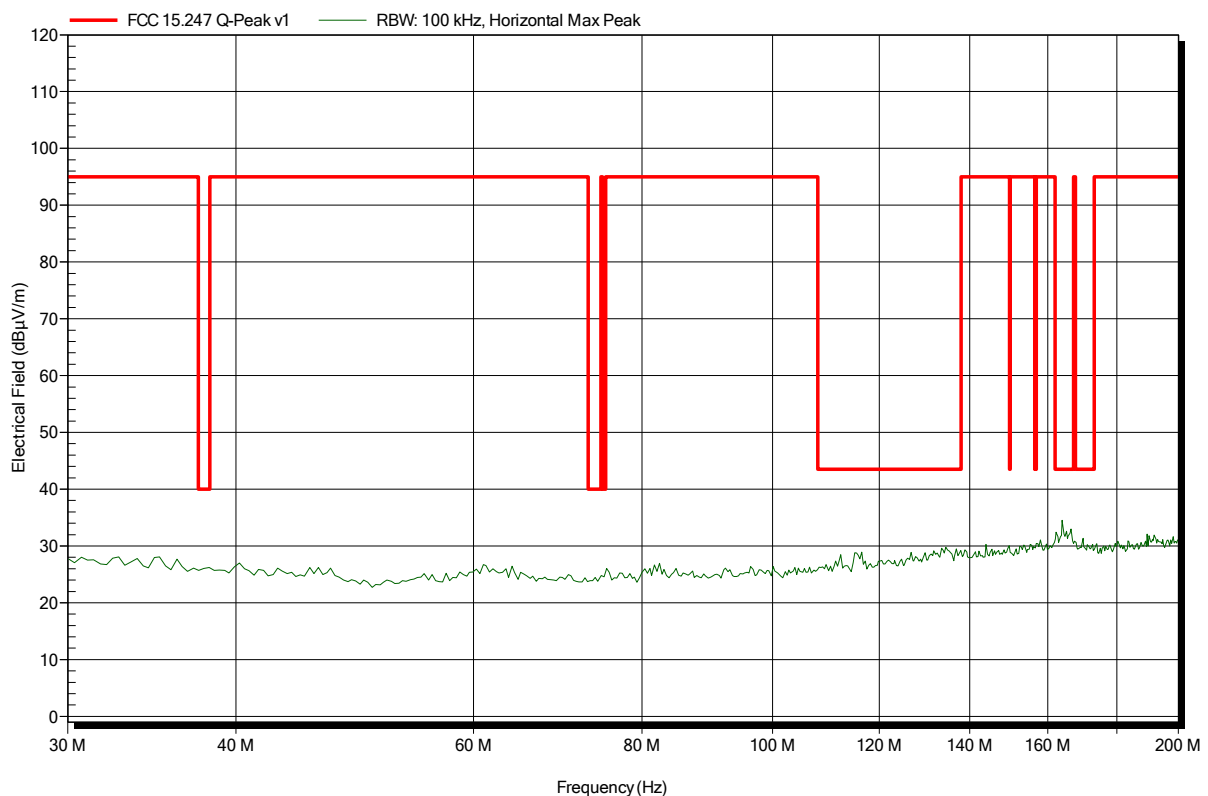


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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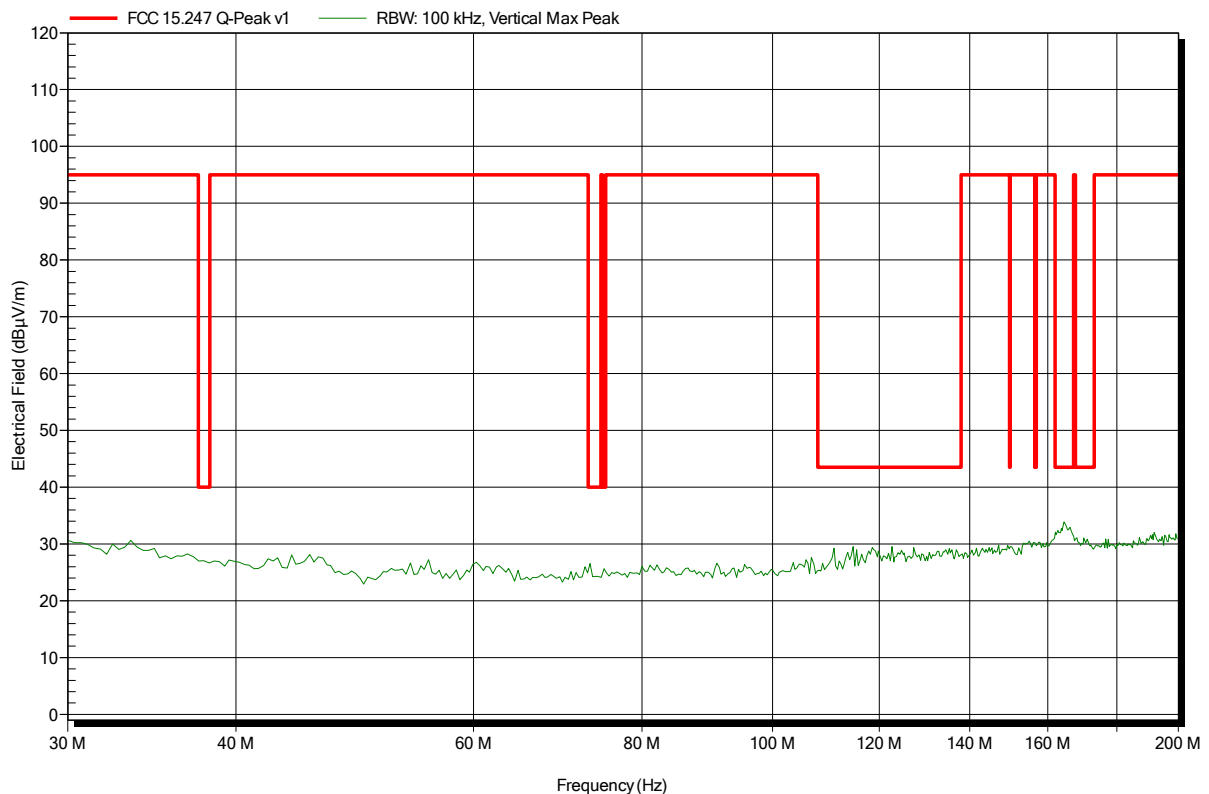


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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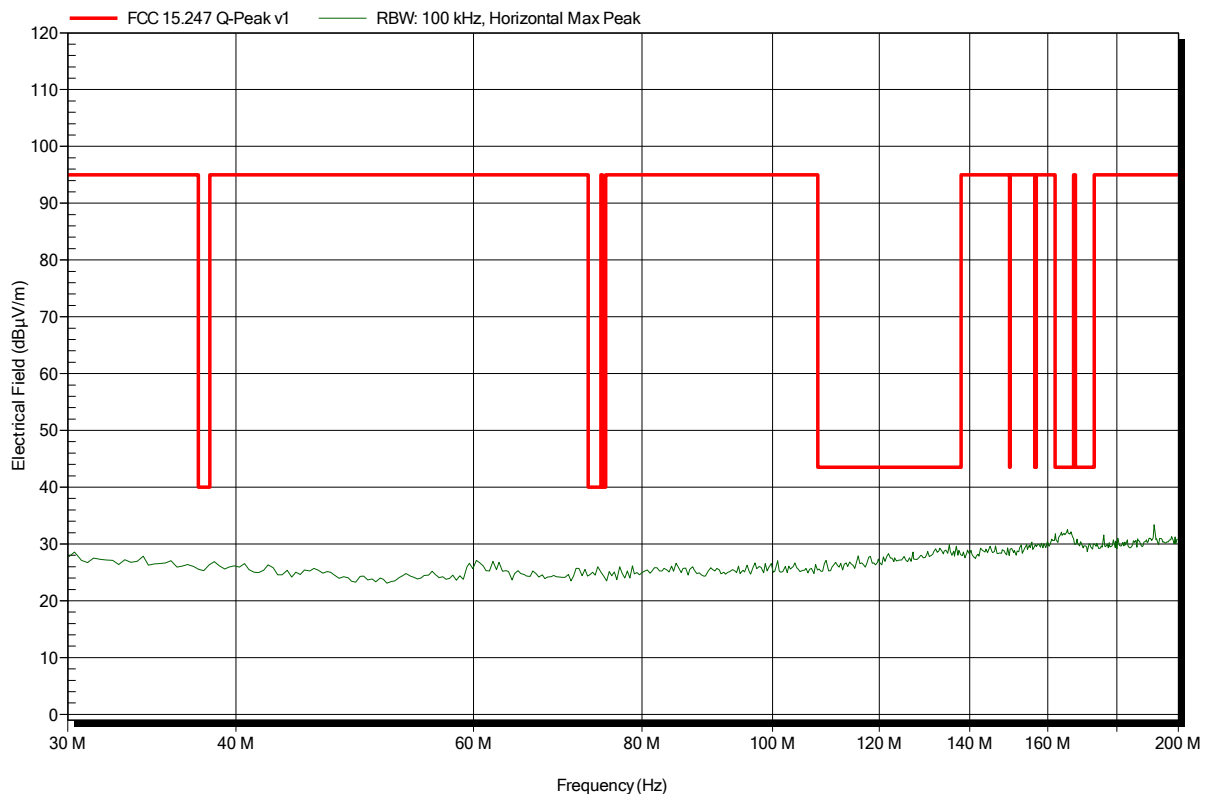


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
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Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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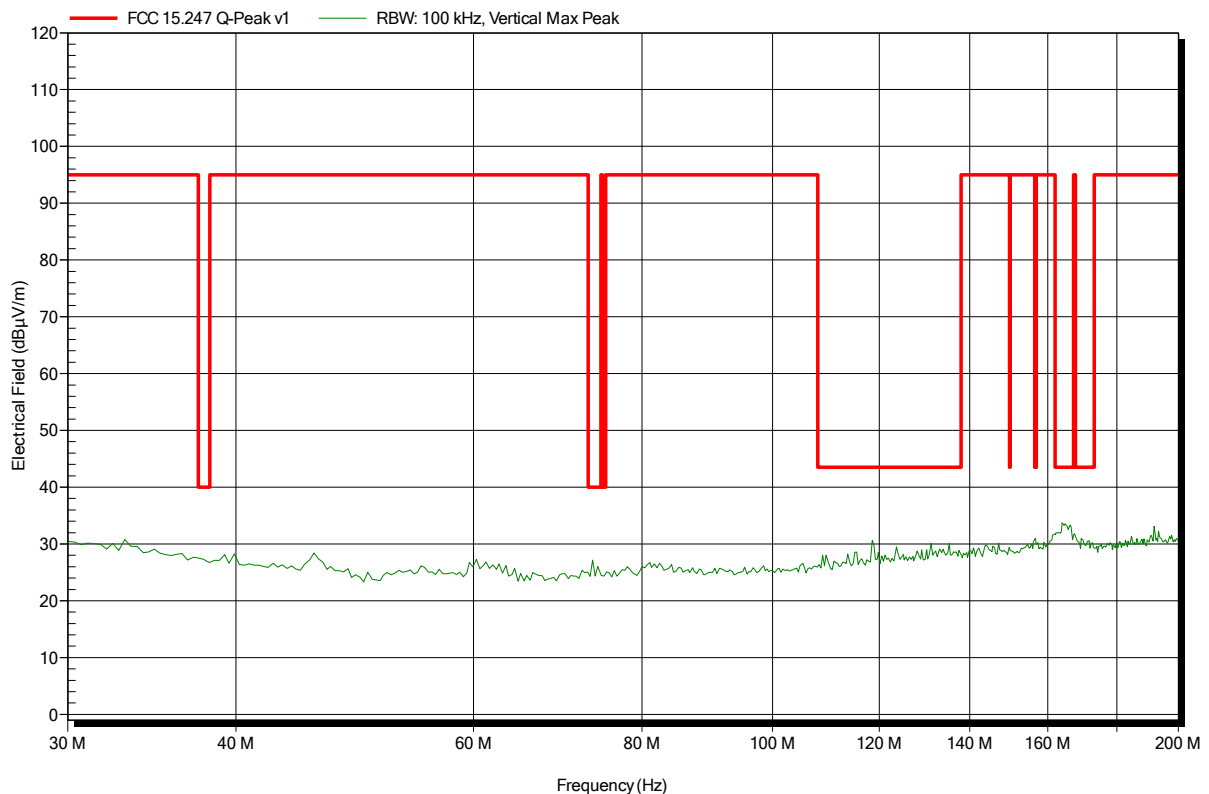


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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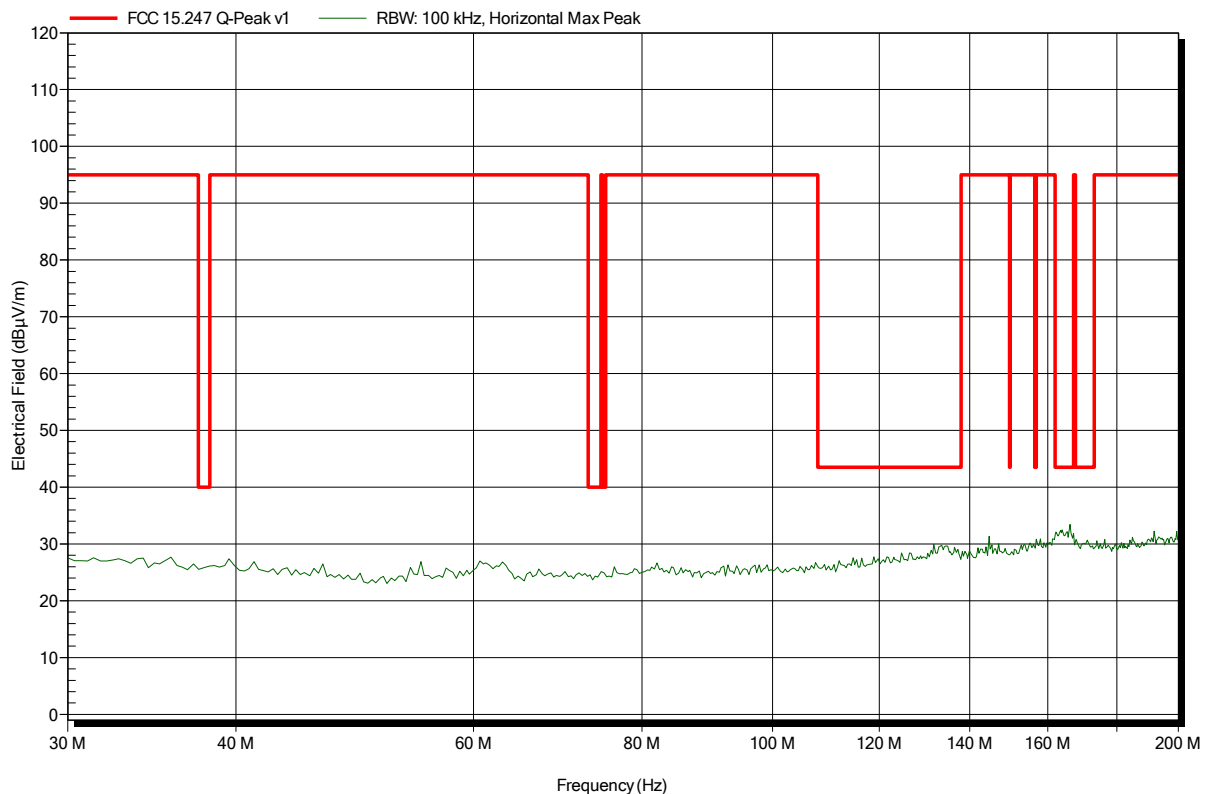


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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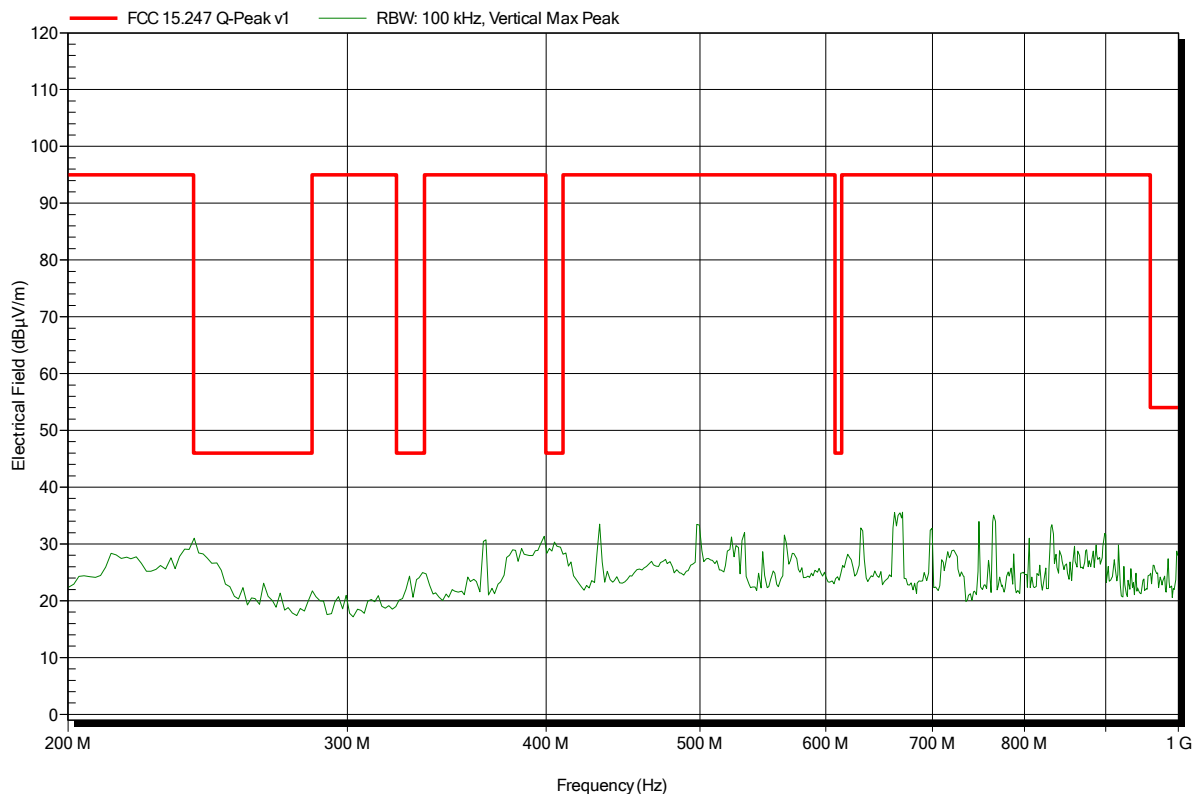


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HL 223, Vertical
Measurement distance: 3 m
Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date: 2015-05-18
Note: EUT horizontal, ant.: A1 -90° horizontal

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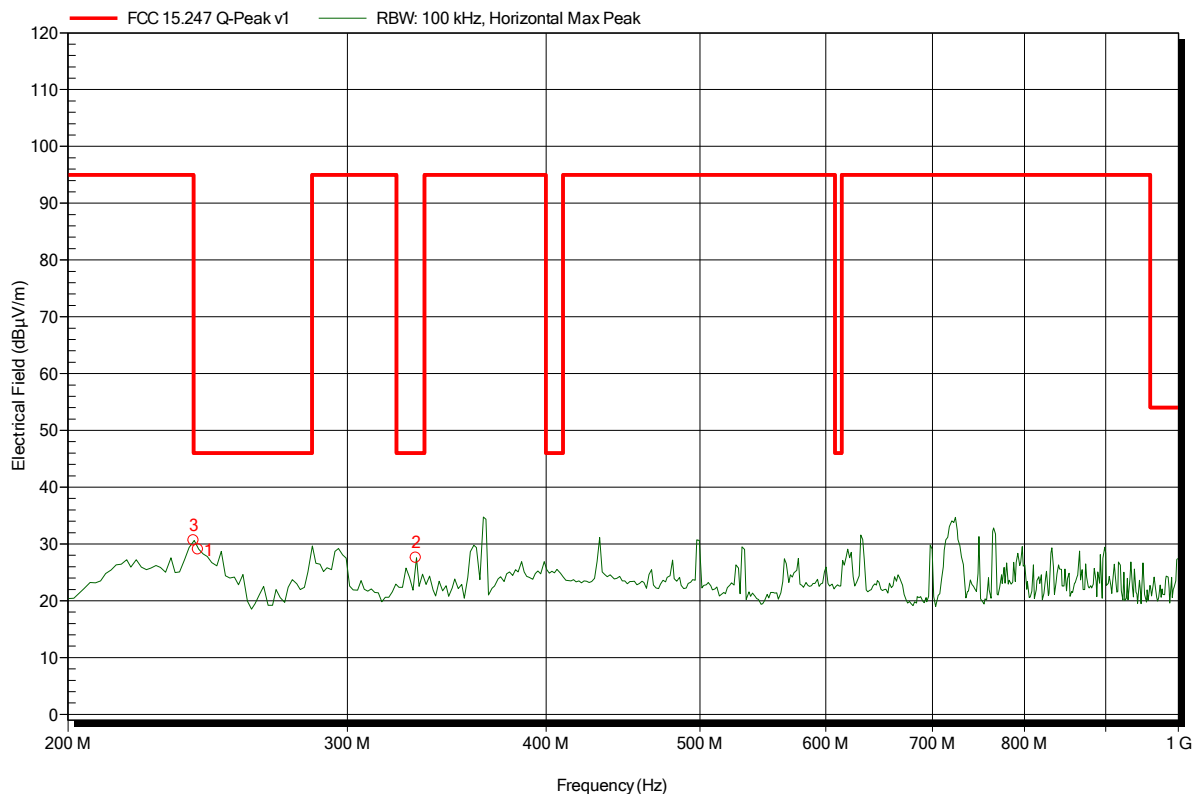


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	30.62 dBµV/m	46 dBµV/m	-15.38 dB	Pass
241.6 MHz	29.06 dBµV/m	46 dBµV/m	-16.94 dB	Pass
331.2 MHz	27.56 dBµV/m	46 dBµV/m	-18.44 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

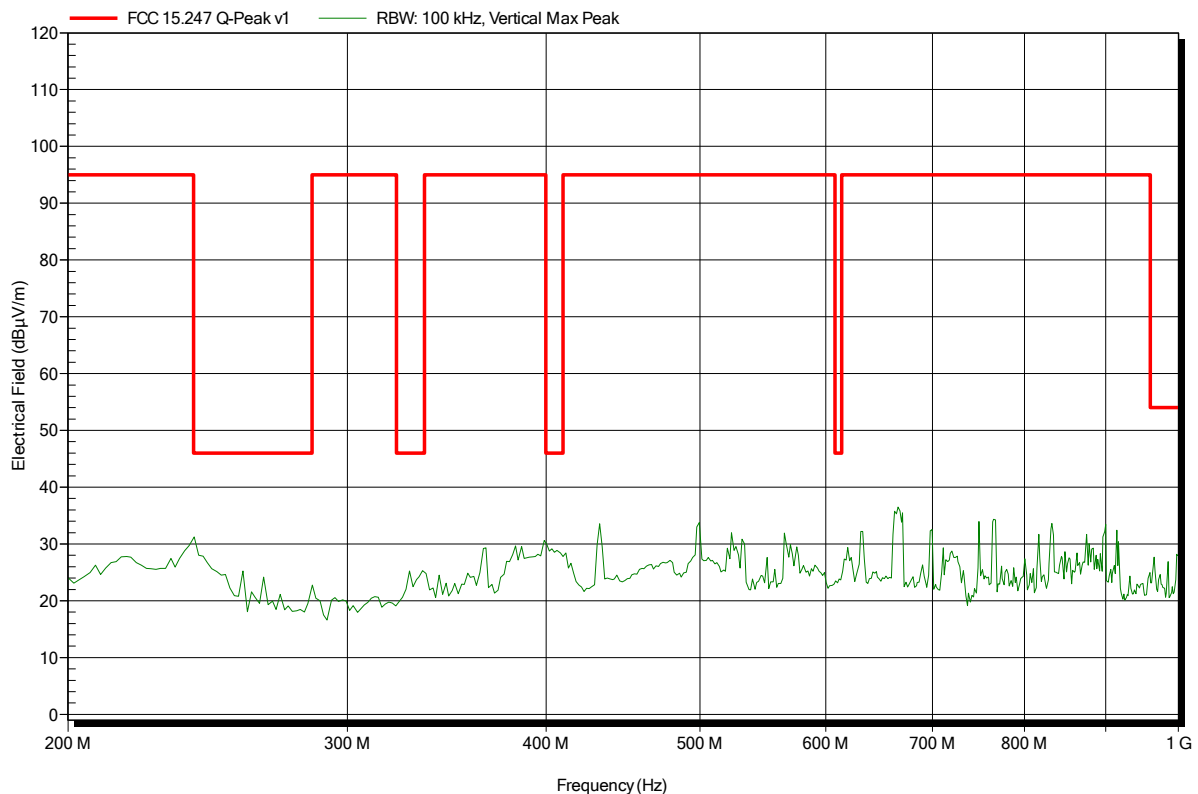
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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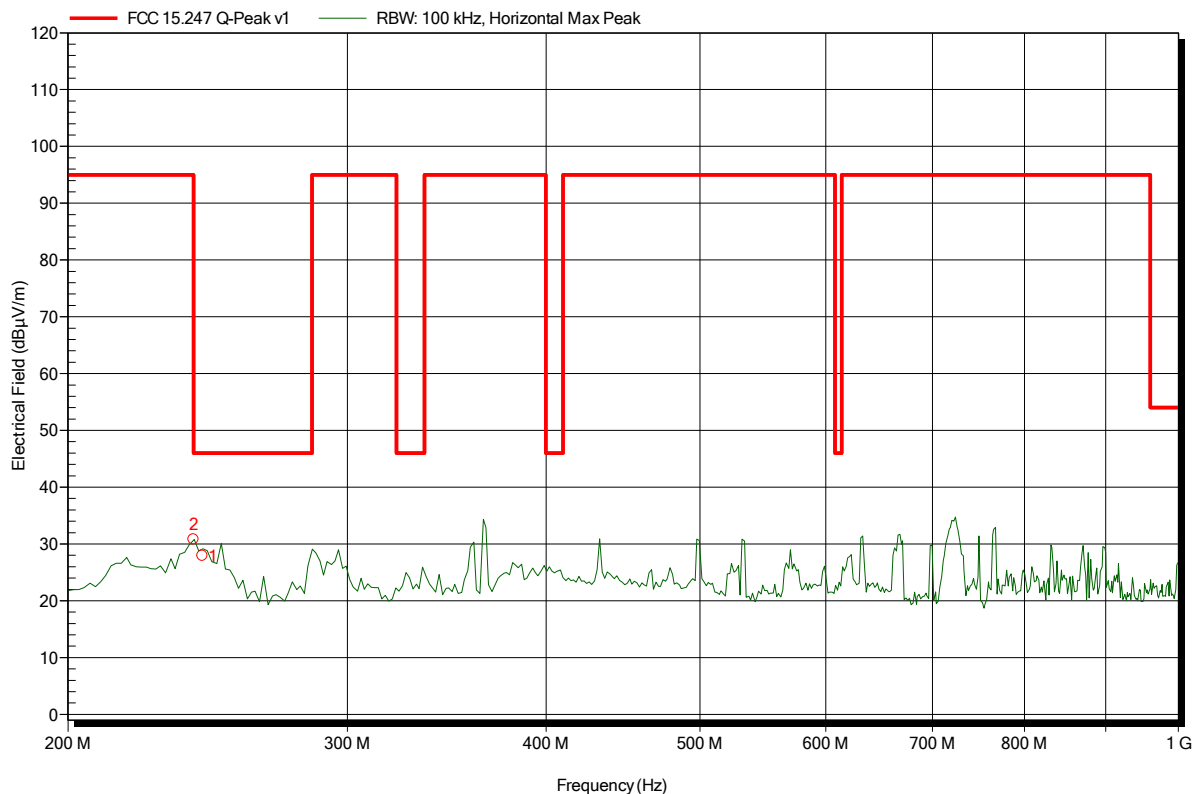


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	30.78 dBµV/m	46 dBµV/m	-15.22 dB	Pass
243.2 MHz	27.91 dBµV/m	46 dBµV/m	-18.09 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

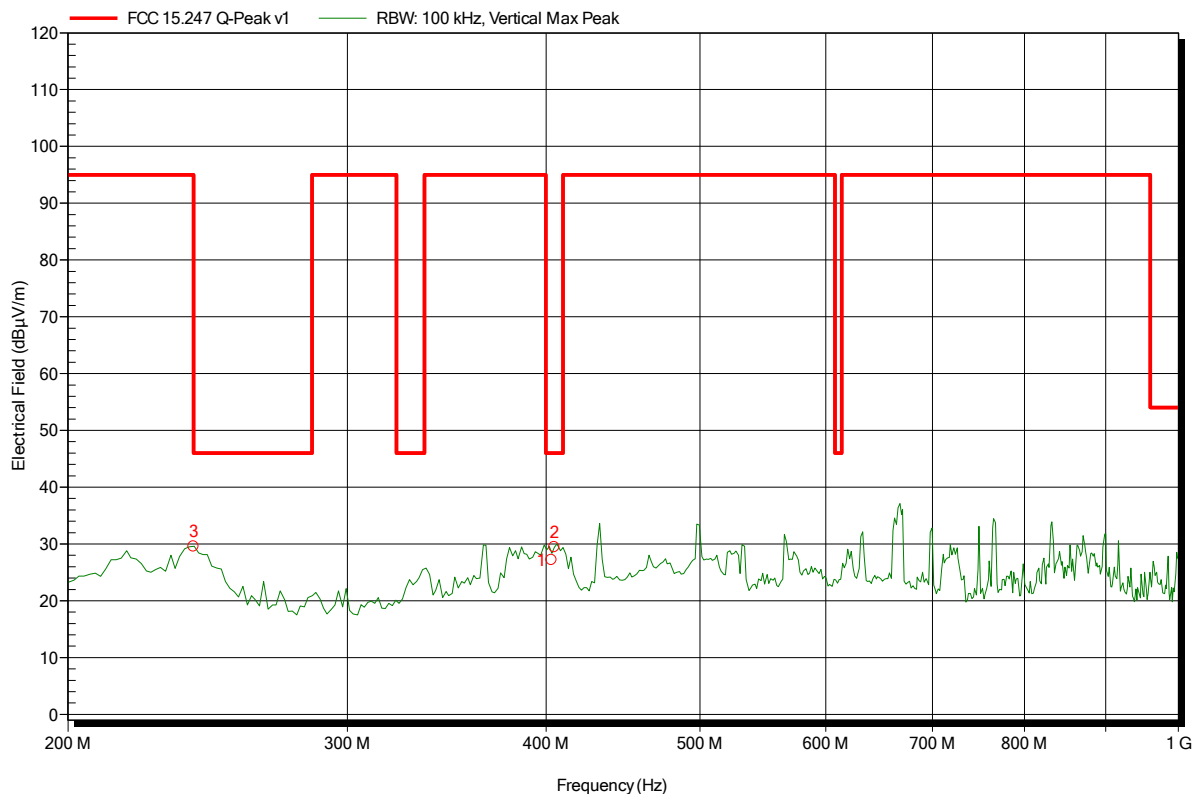
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HL 223, Vertical
Measurement distance: 3 m
Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date: 2015-05-18
Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
240 MHz	29.56 dBµV/m	46 dBµV/m	-16.44 dB	Pass
403.2 MHz	27.15 dBµV/m	46 dBµV/m	-18.85 dB	Pass
404.8 MHz	29.41 dBµV/m	46 dBµV/m	-16.59 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

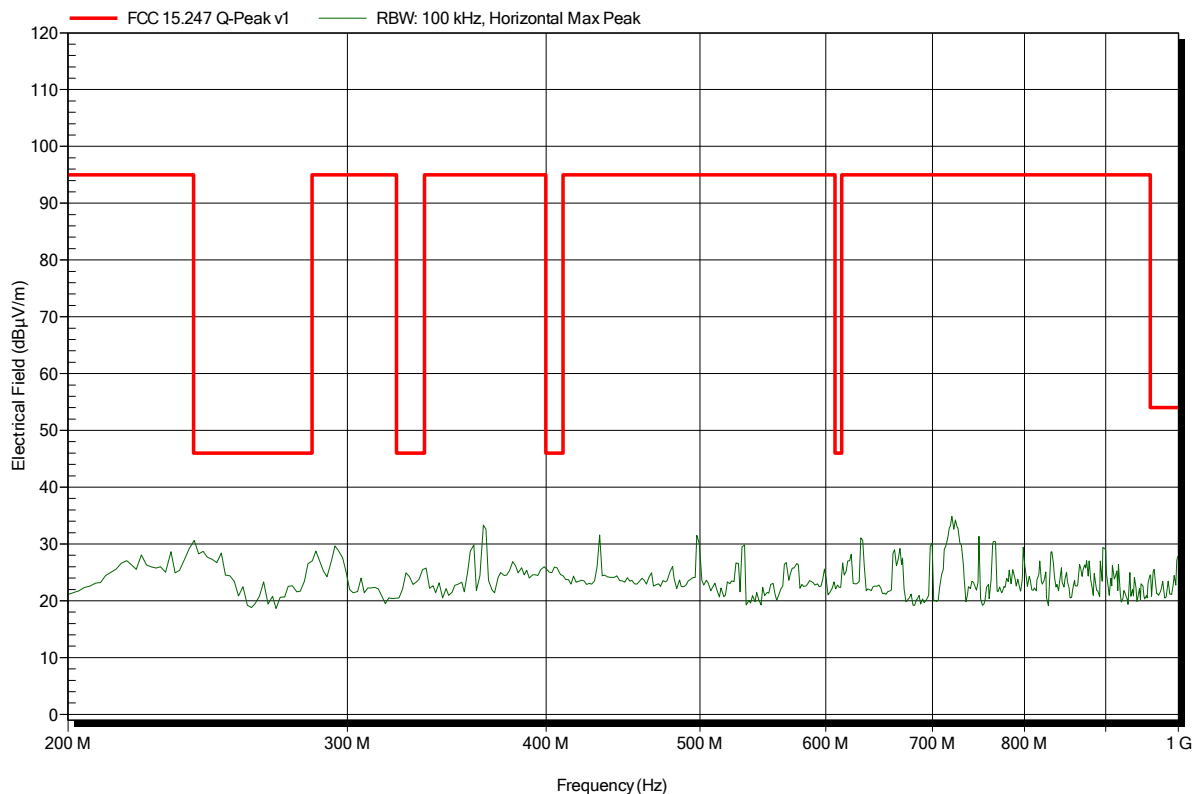
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
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Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A1 -90° horizontal

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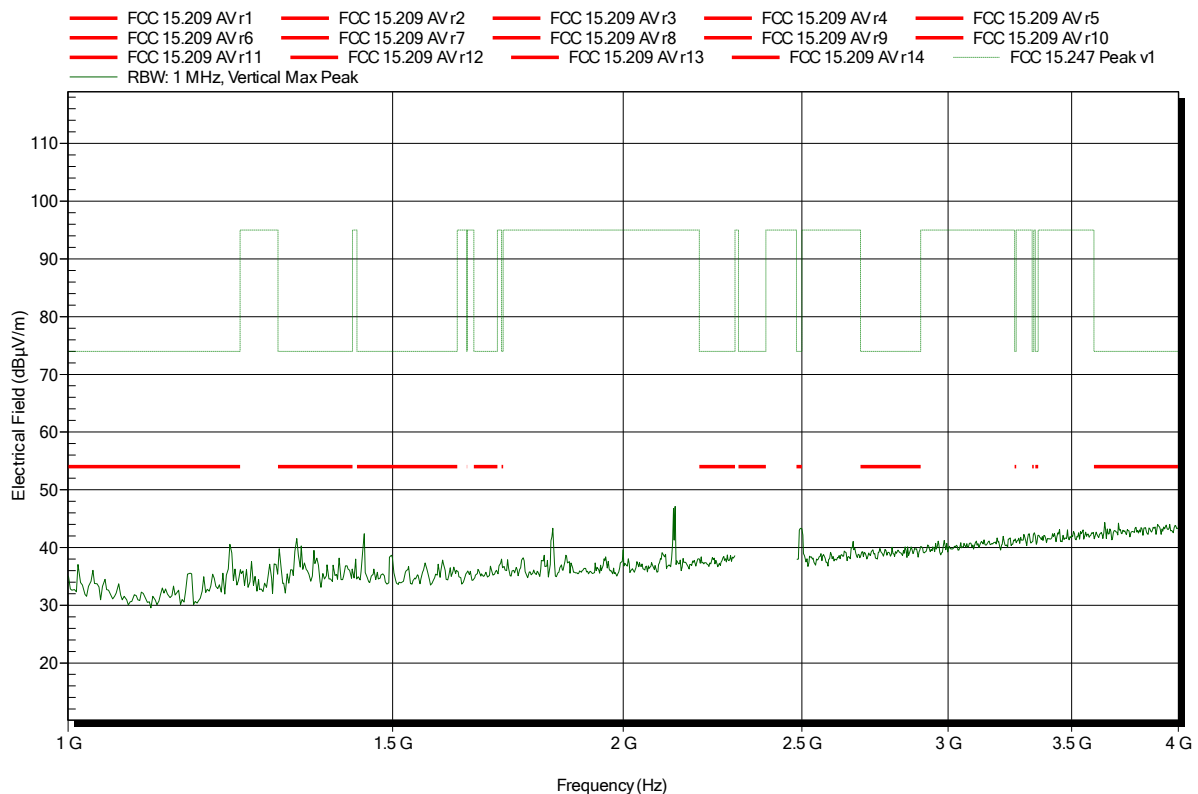


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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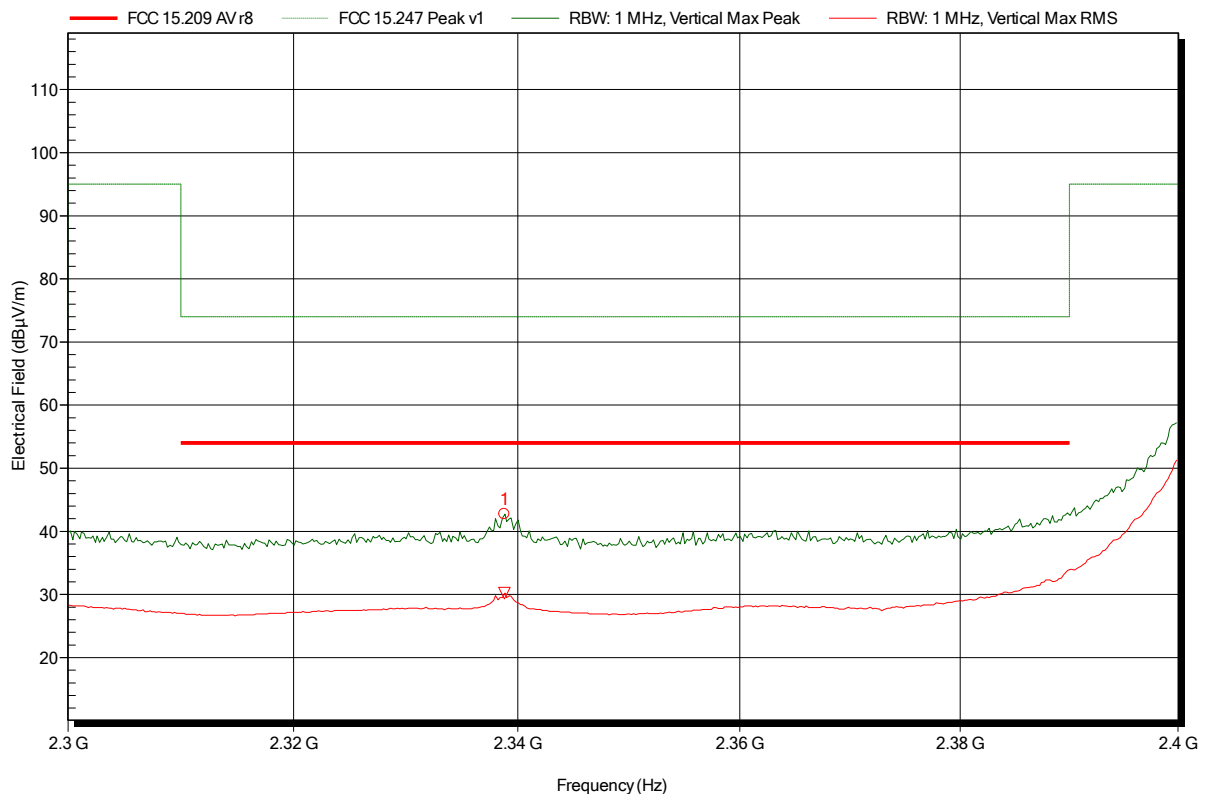


Spurious emissions according to FCC part 15 Subpart C § 15.247

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 Model: ATSAMR21G18-MR210UA
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency 2.339 GHz	Peak 42.71 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -31.29 dB	Peak Status Pass
Frequency 2.339 GHz	RMS 30.2 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -23.8 dB	RMS Status Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

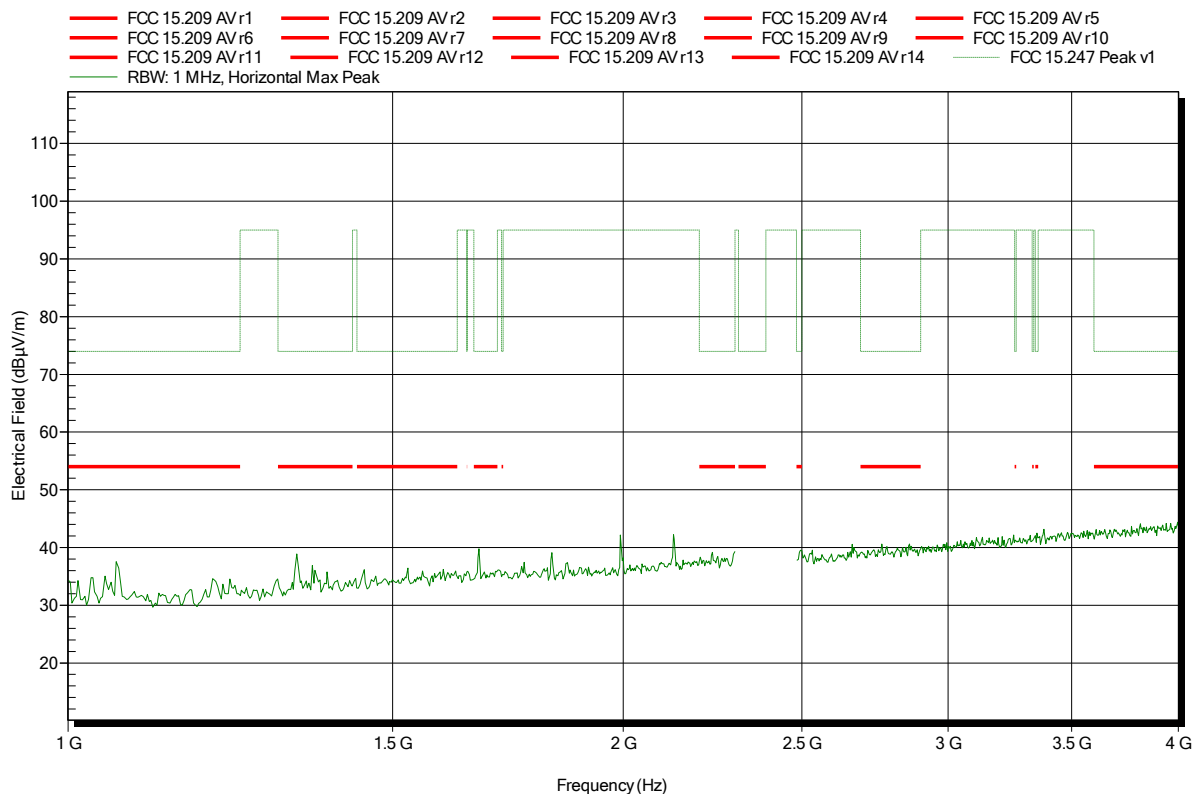
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Test Report No.: GOM-1505-4730-TFC247ZB-V01

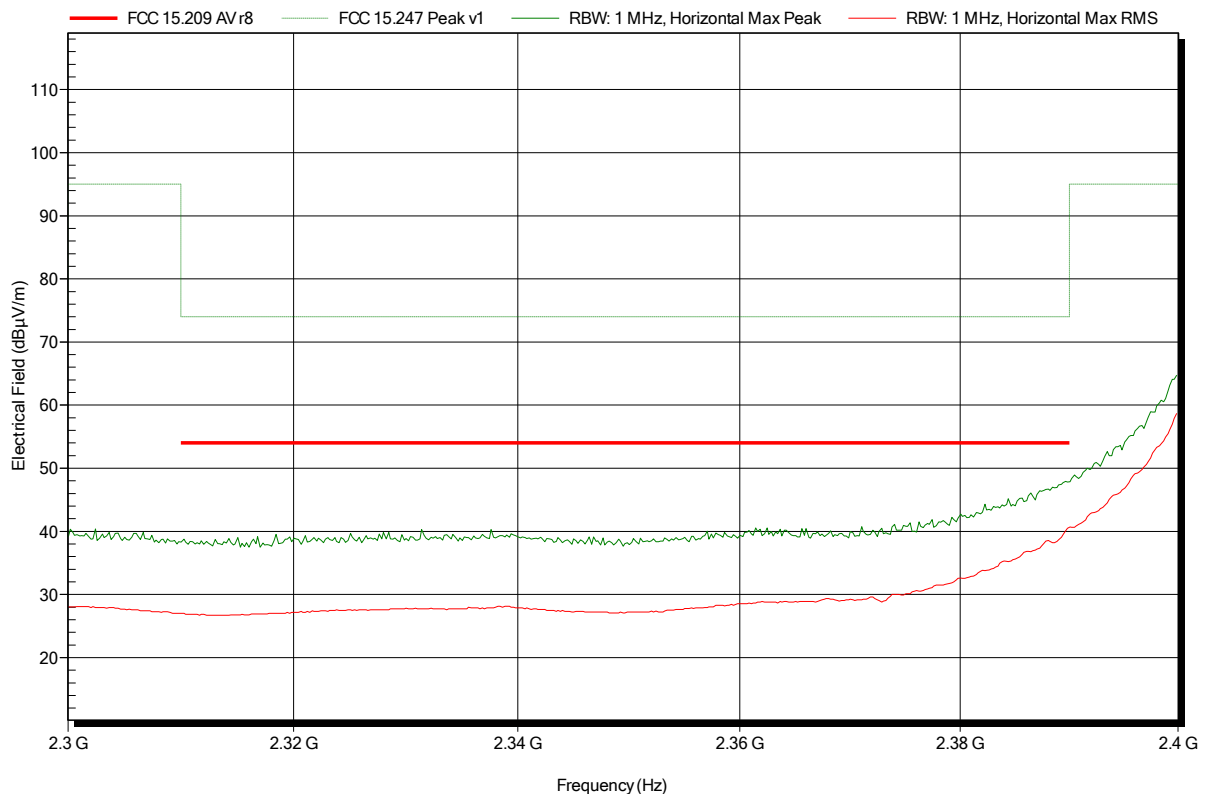
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal; lower bandedge

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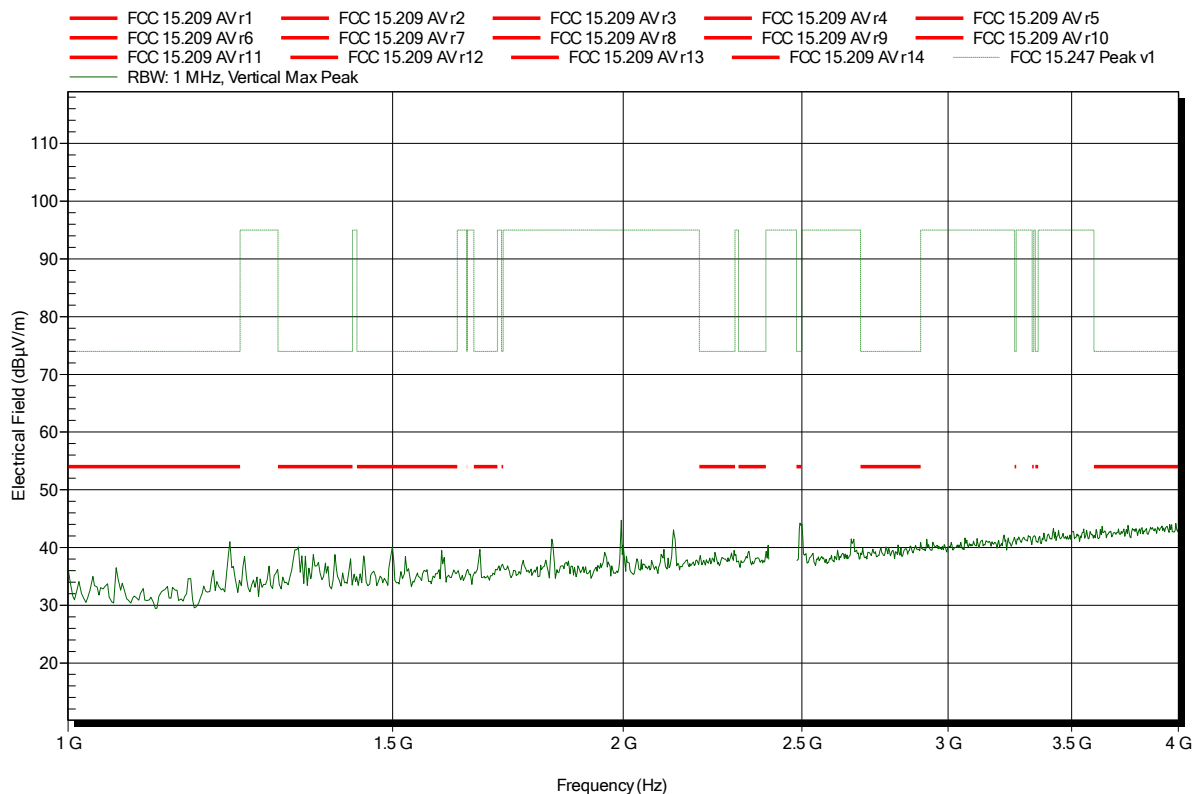


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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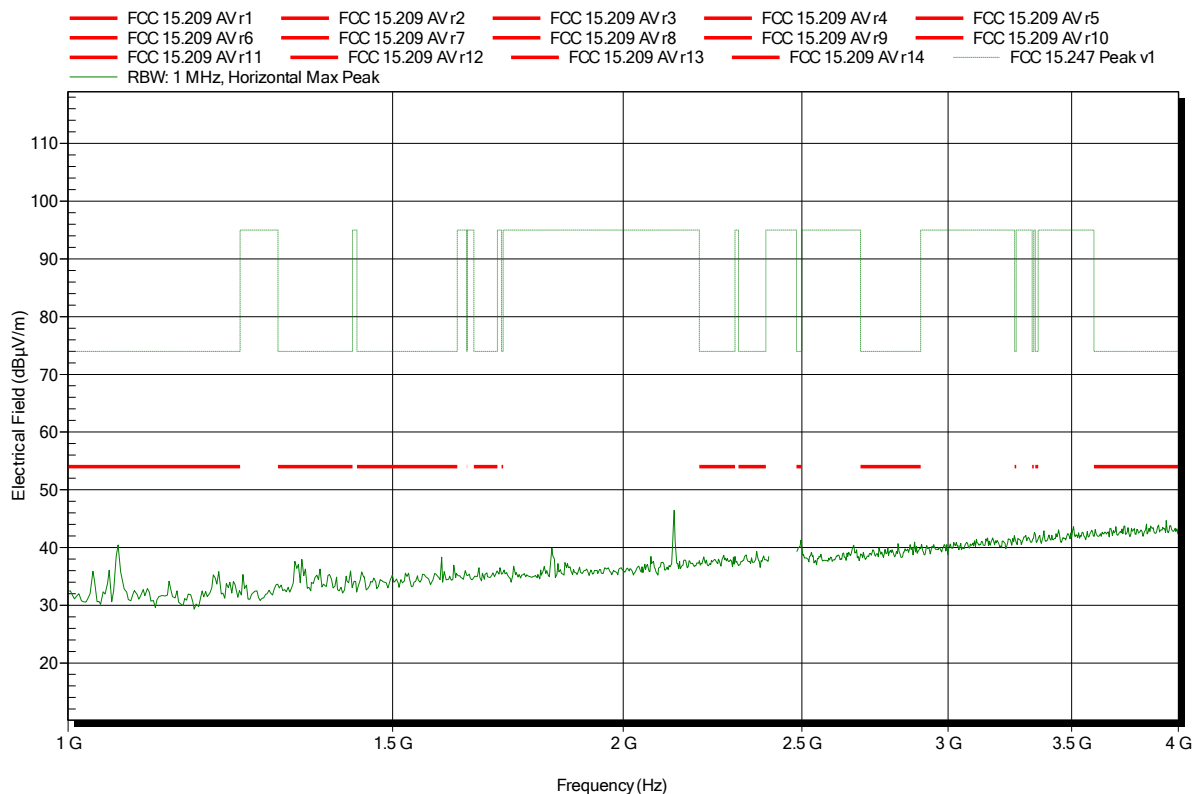


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A1 -90° horizontal

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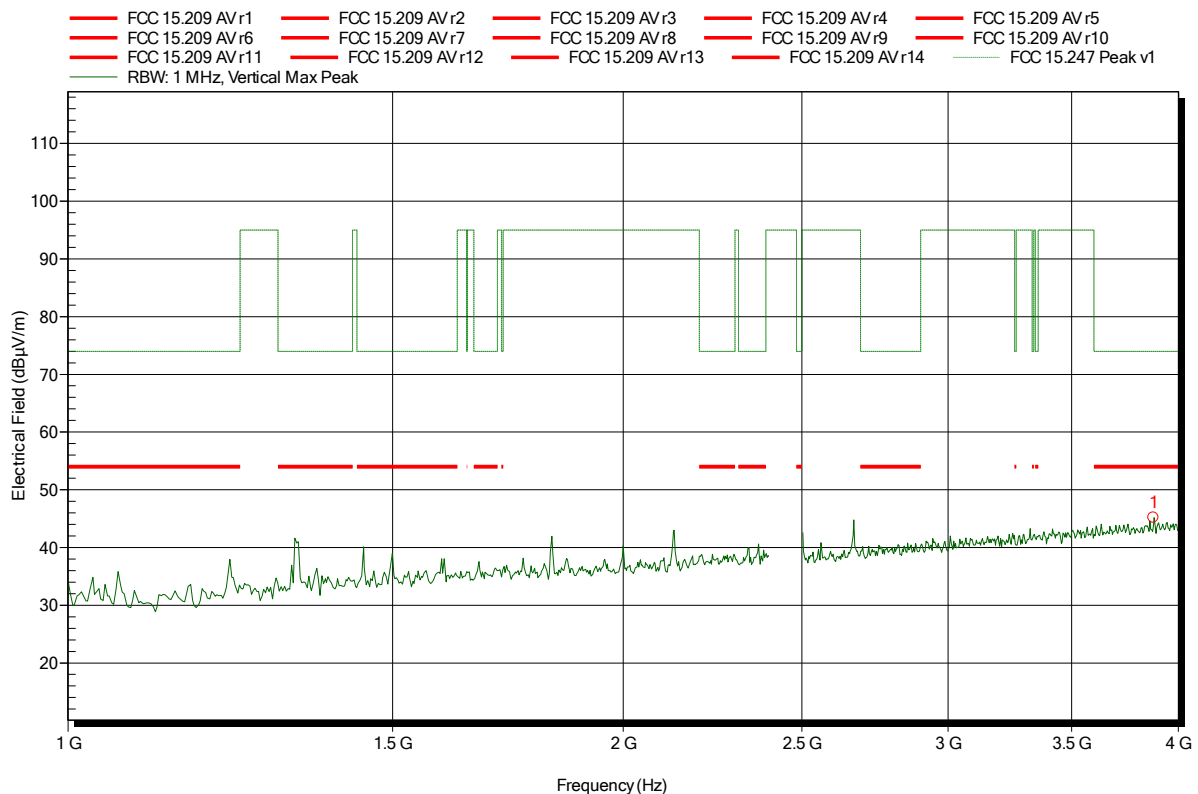


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A1 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.877 GHz	45.17 dBµV/m	74 dBµV/m	-28.83 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

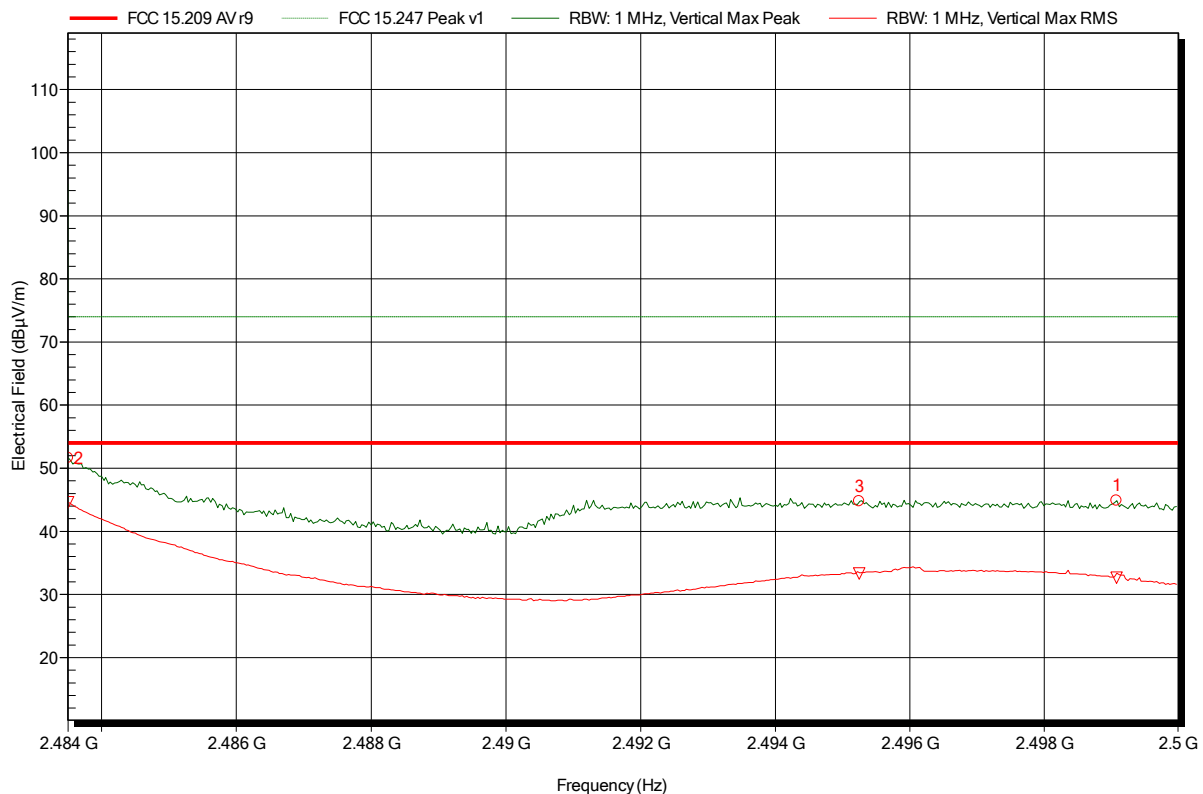
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
Model: ATSAMR21G18-MR210UA
Test Site: Eurofins Product Service GmbH
Operator: Mr. Handrik
Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna: Rohde & Schwarz HL 025, Vertical
Measurement distance: 3 m
Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A1 (-13)
Test Date: 2015-05-20
Note: EUT horizontal, ant.: A1 -90° horizontal; higher bandedge

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	51.63 dBµV/m	74 dBµV/m	-22.37 dB	Pass
2.495 GHz	44.74 dBµV/m	74 dBµV/m	-29.26 dB	Pass
2.499 GHz	44.84 dBµV/m	74 dBµV/m	-29.16 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	44.6 dBµV/m	54 dBµV/m	-9.4 dB	Pass
2.495 GHz	33.33 dBµV/m	54 dBµV/m	-20.67 dB	Pass
2.499 GHz	32.67 dBµV/m	54 dBµV/m	-21.33 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

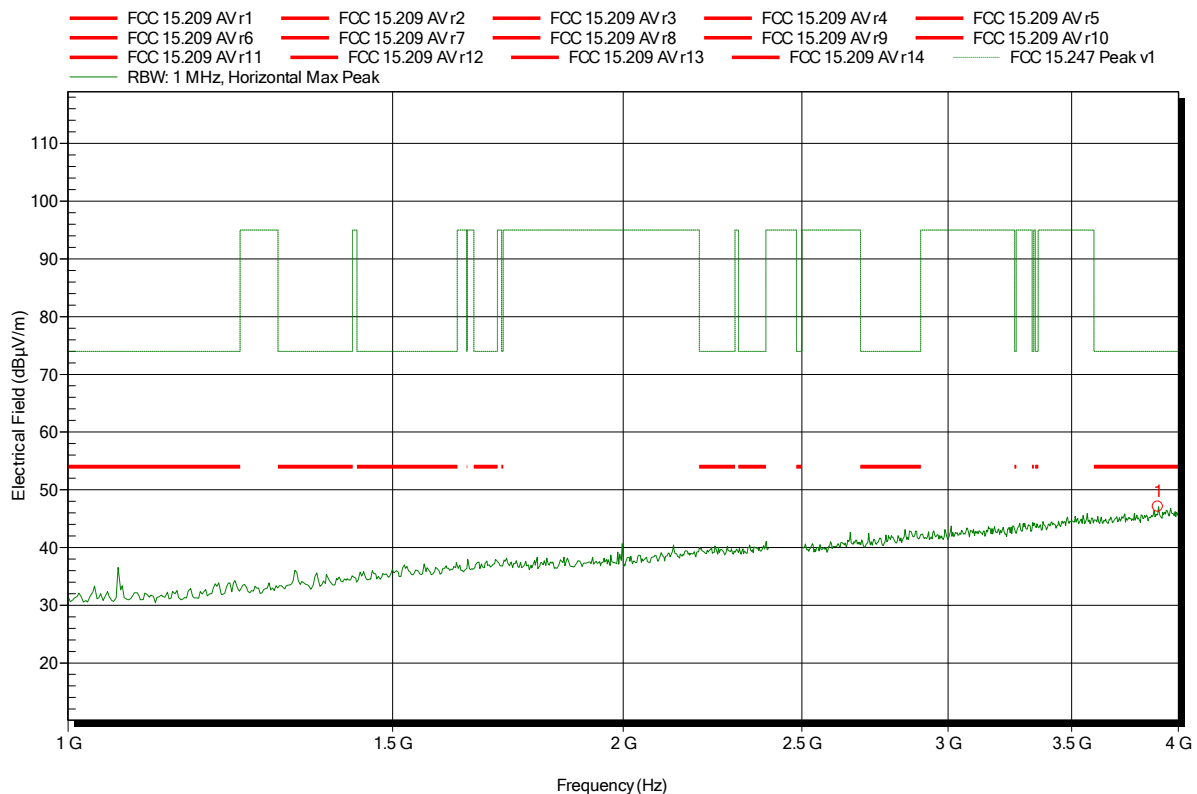
Eurofins Product Service GmbH
Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A1 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A1 -90° horizontal

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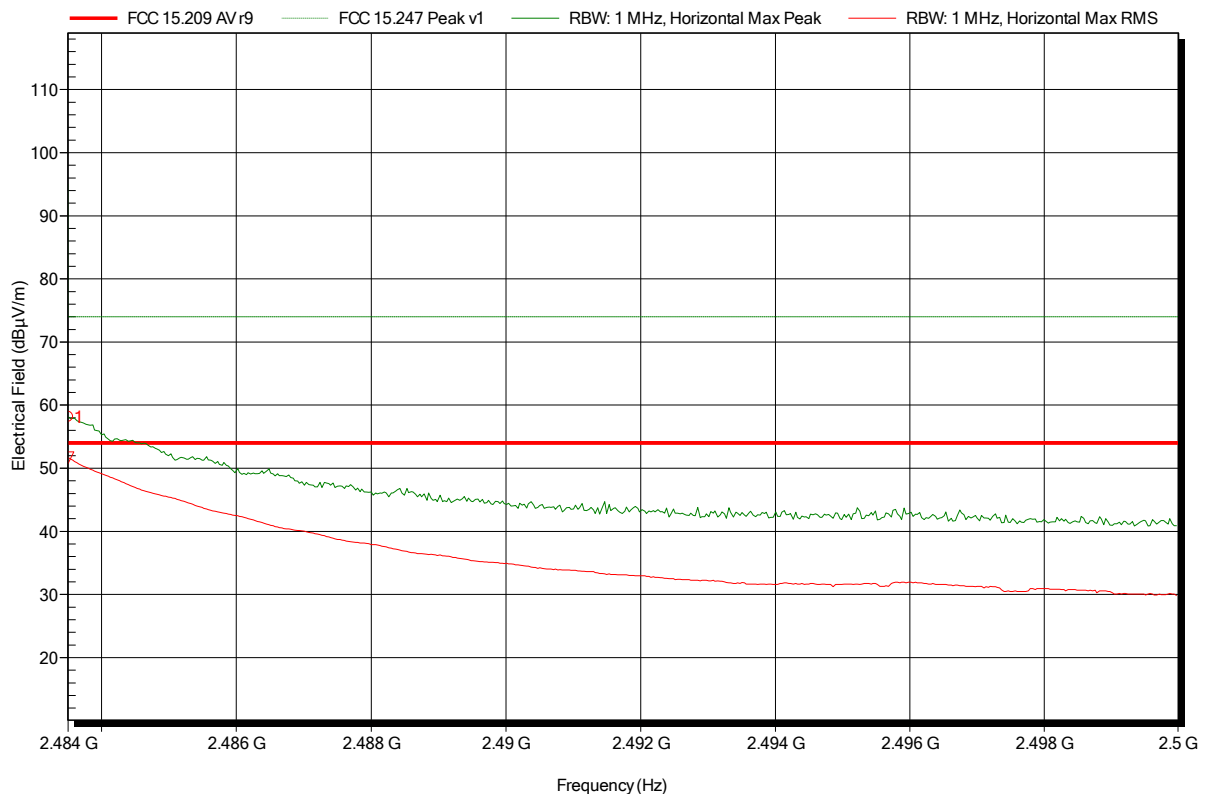
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.898 GHz	47.04 dBµV/m	74 dBµV/m	-26.96 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A1 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A1 -90° horizontal; higher bandedge

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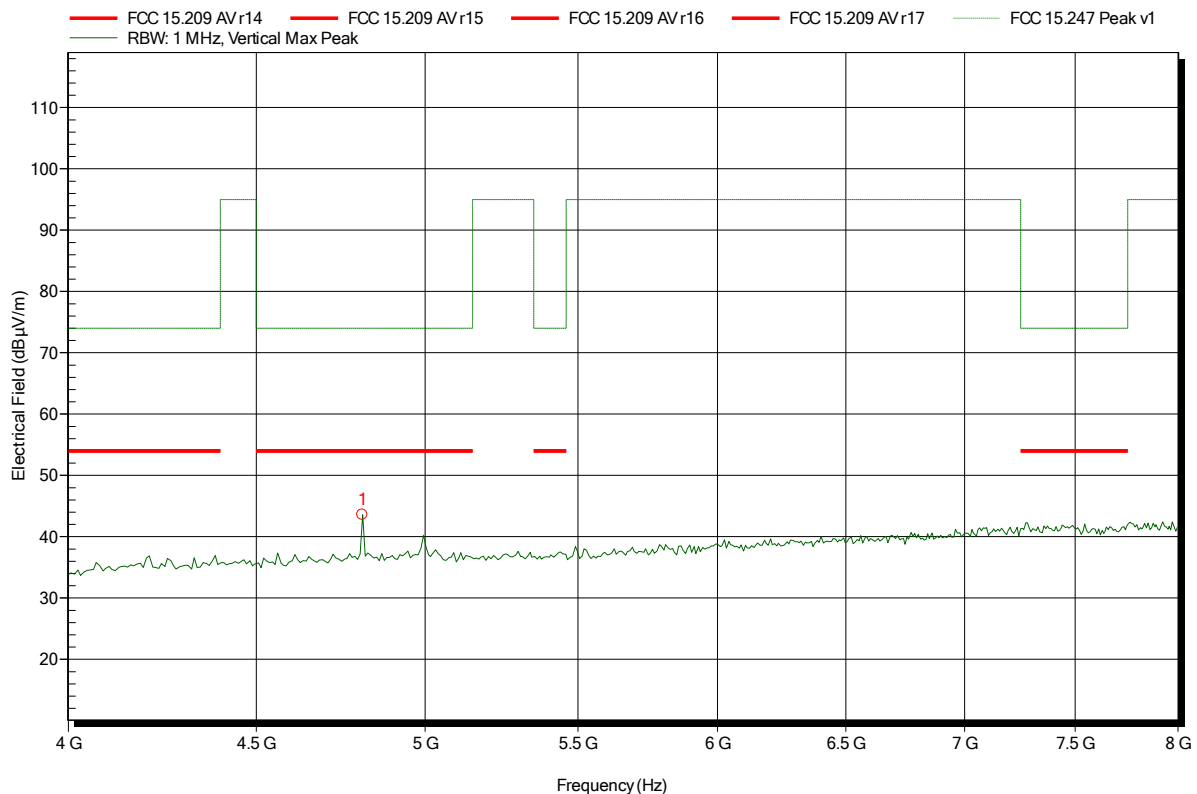
Frequency 2.484 GHz	Peak 58.16 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -15.84 dB	Peak Status Pass
Frequency 2.484 GHz	RMS 51.69 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -2.31 dB	RMS Status Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.808 GHz	43.59 dBµV/m	74 dBµV/m	-30.41 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

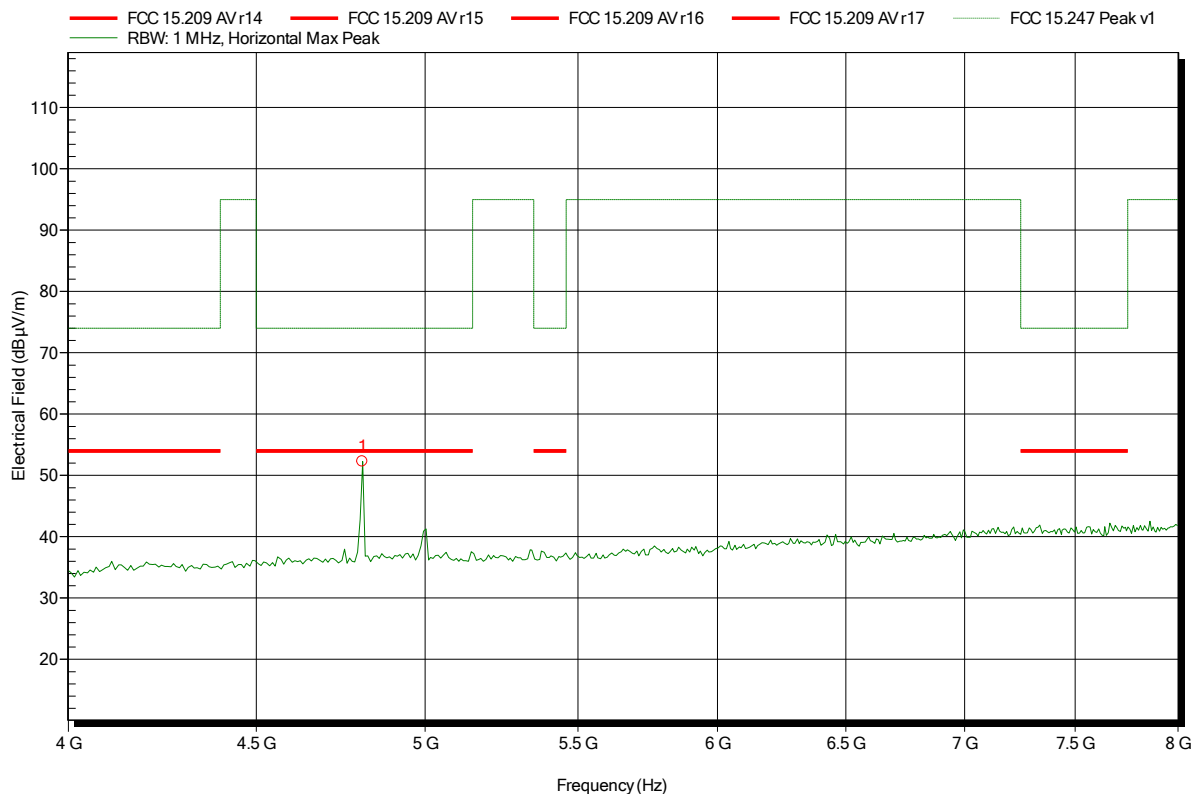
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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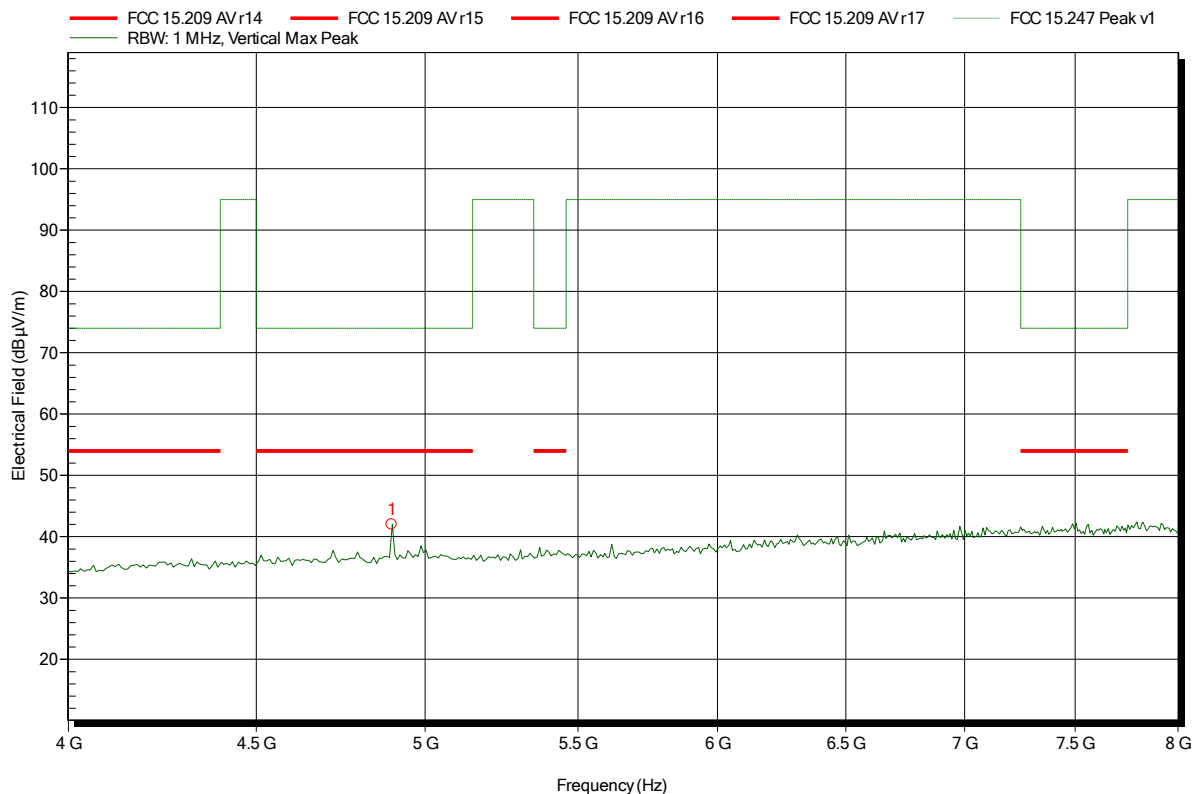
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.808 GHz	52.29 dBµV/m	74 dBµV/m	-21.71 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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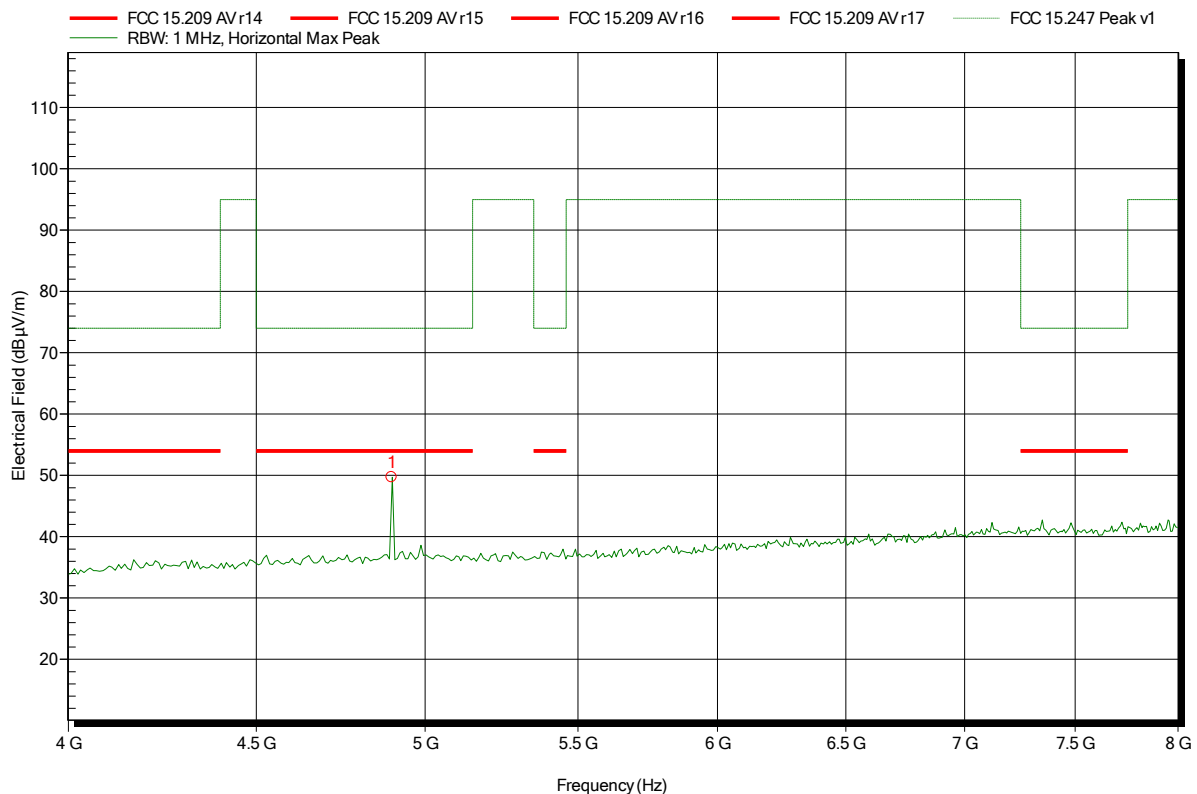
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	42.04 dBµV/m	74 dBµV/m	-31.96 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	49.71 dBµV/m	74 dBµV/m	-24.29 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

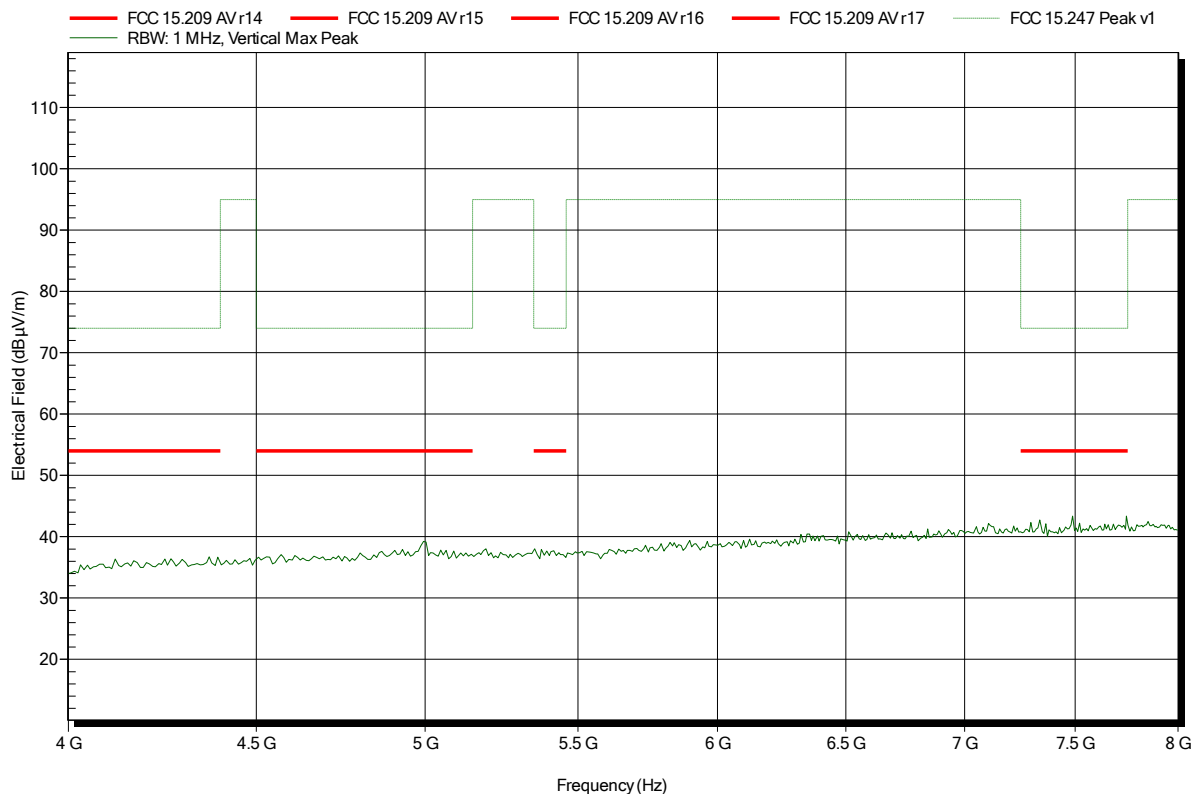
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A1 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A1 -90° horizontal

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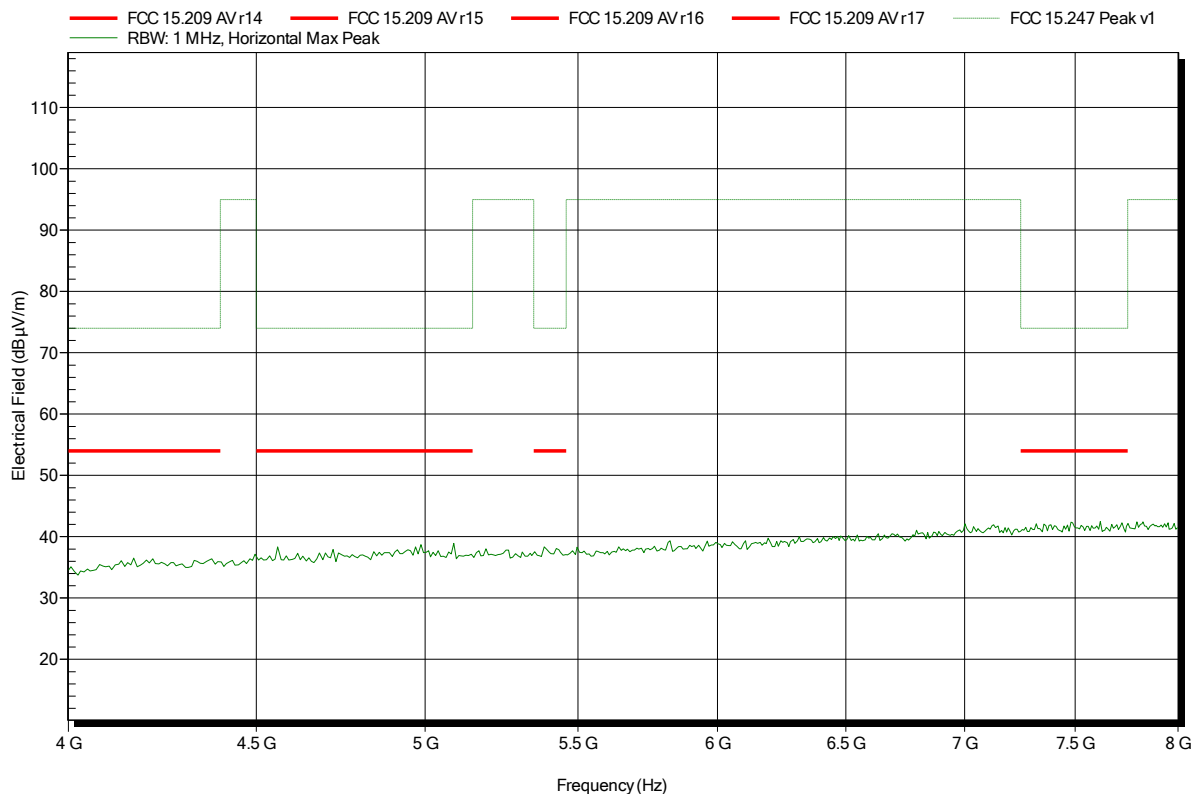


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A1 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A1 -90° horizontal

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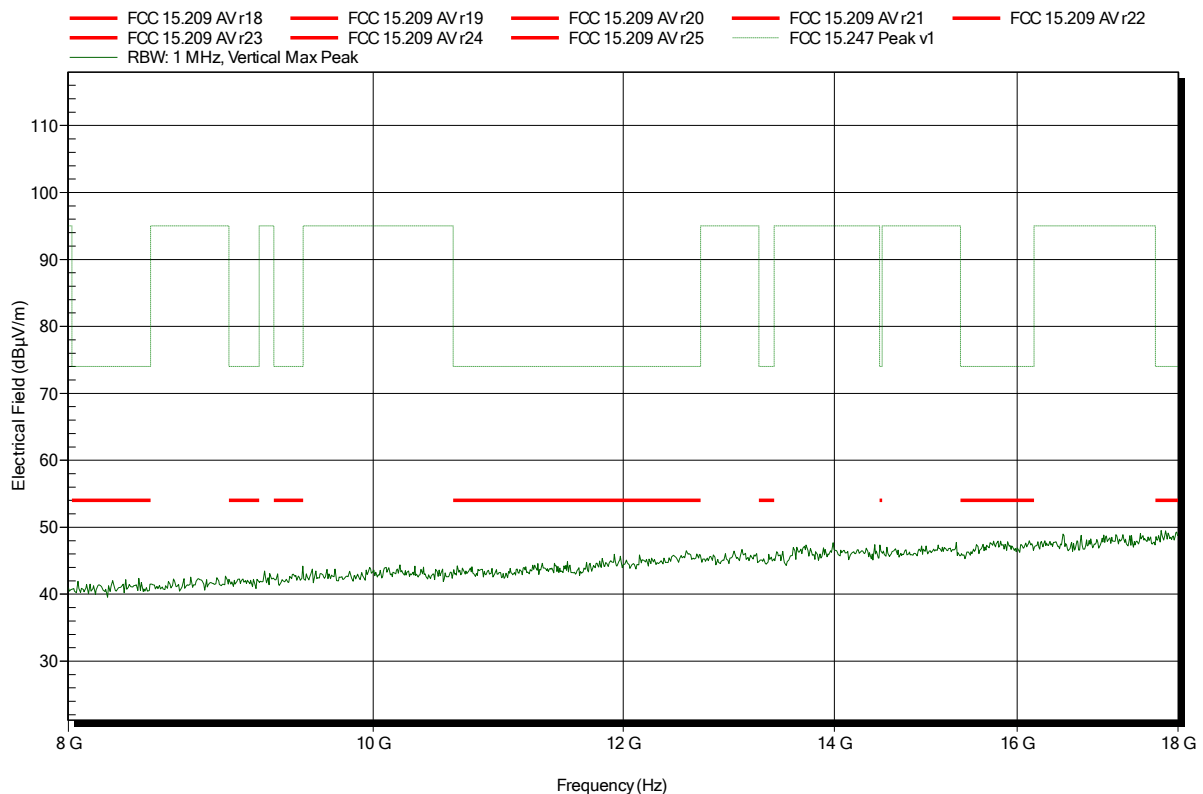


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Project number: G0M-1505-4730

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 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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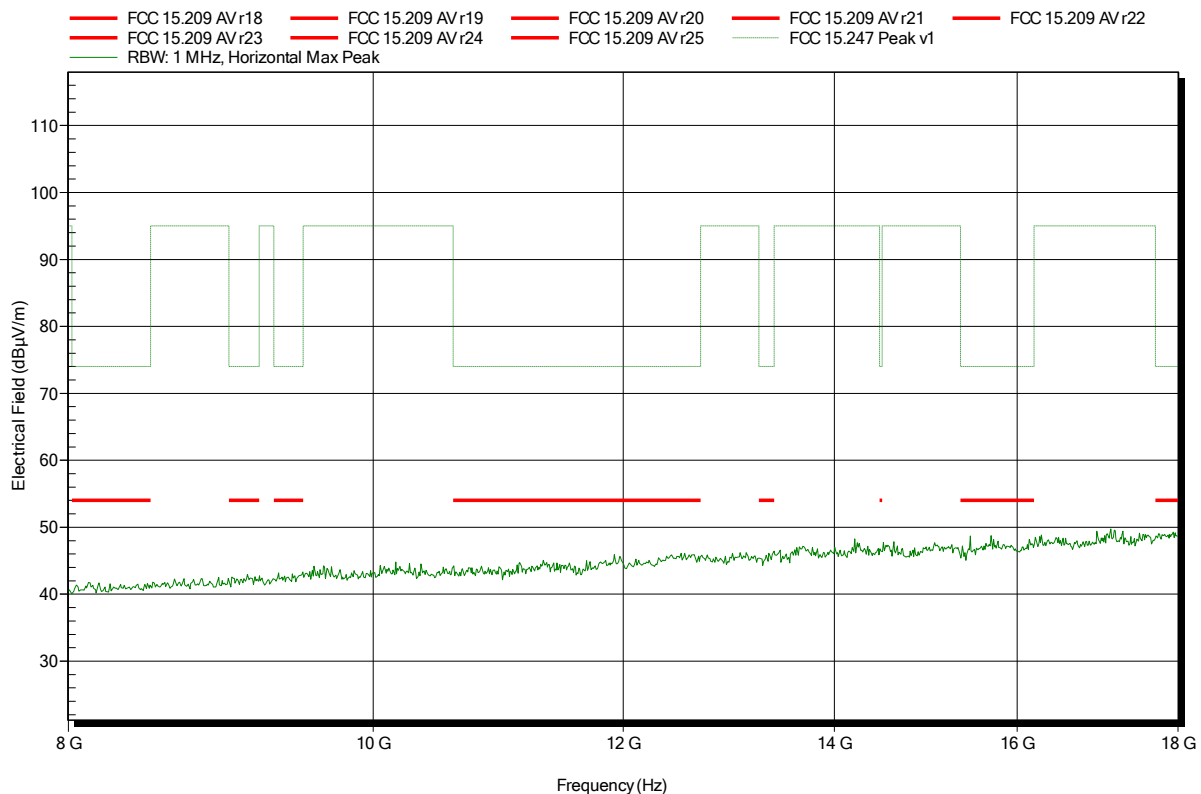


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Project number: GOM-1505-4730

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 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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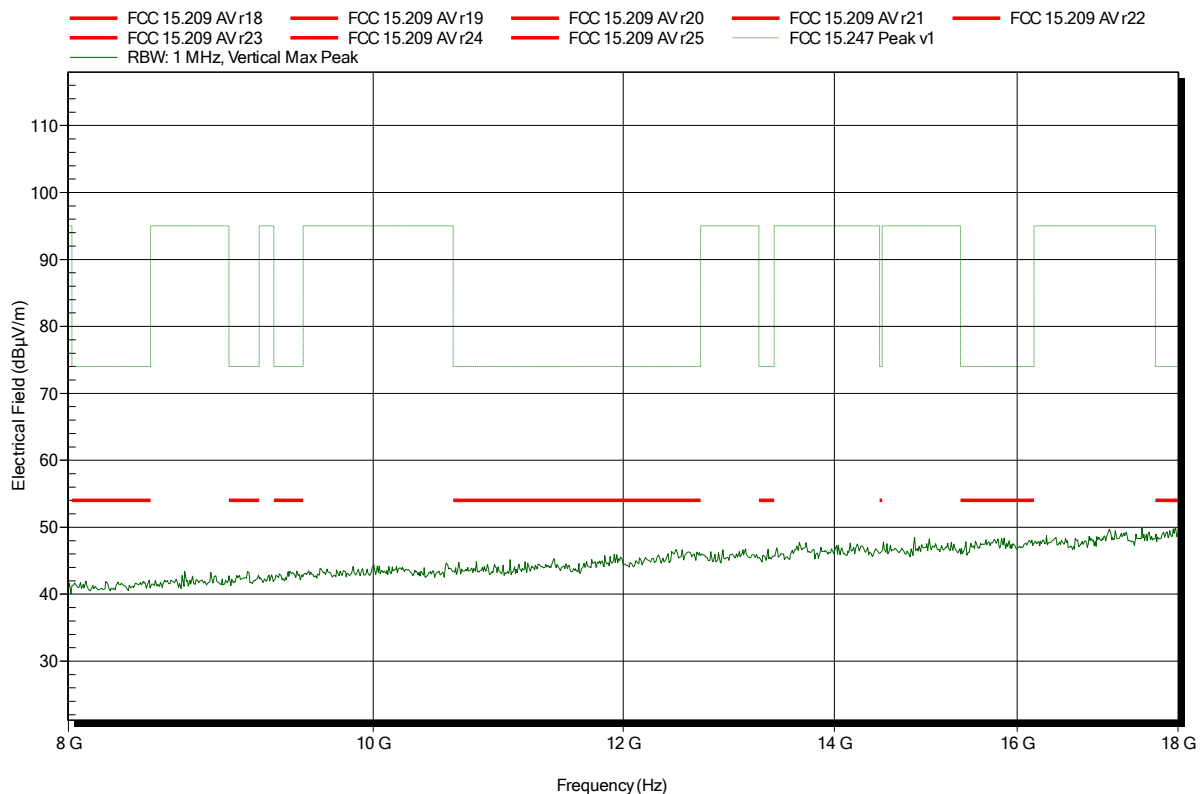


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

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 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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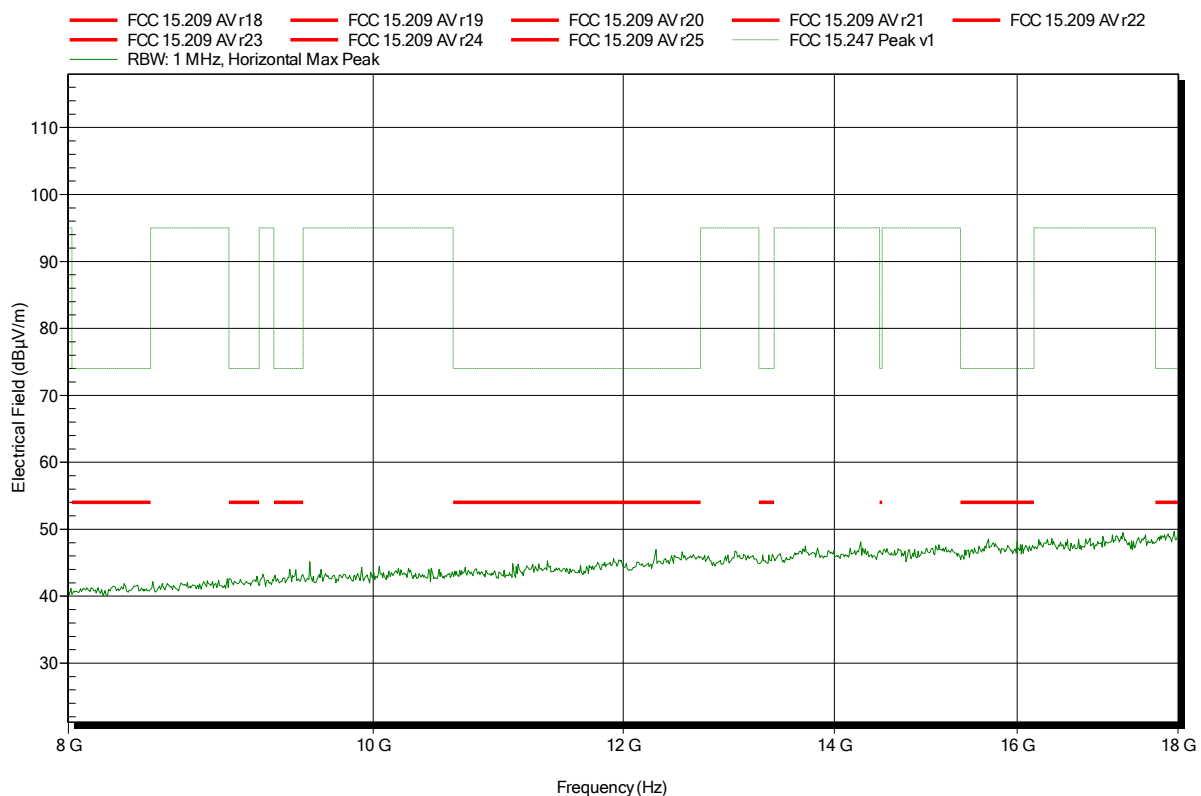


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

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 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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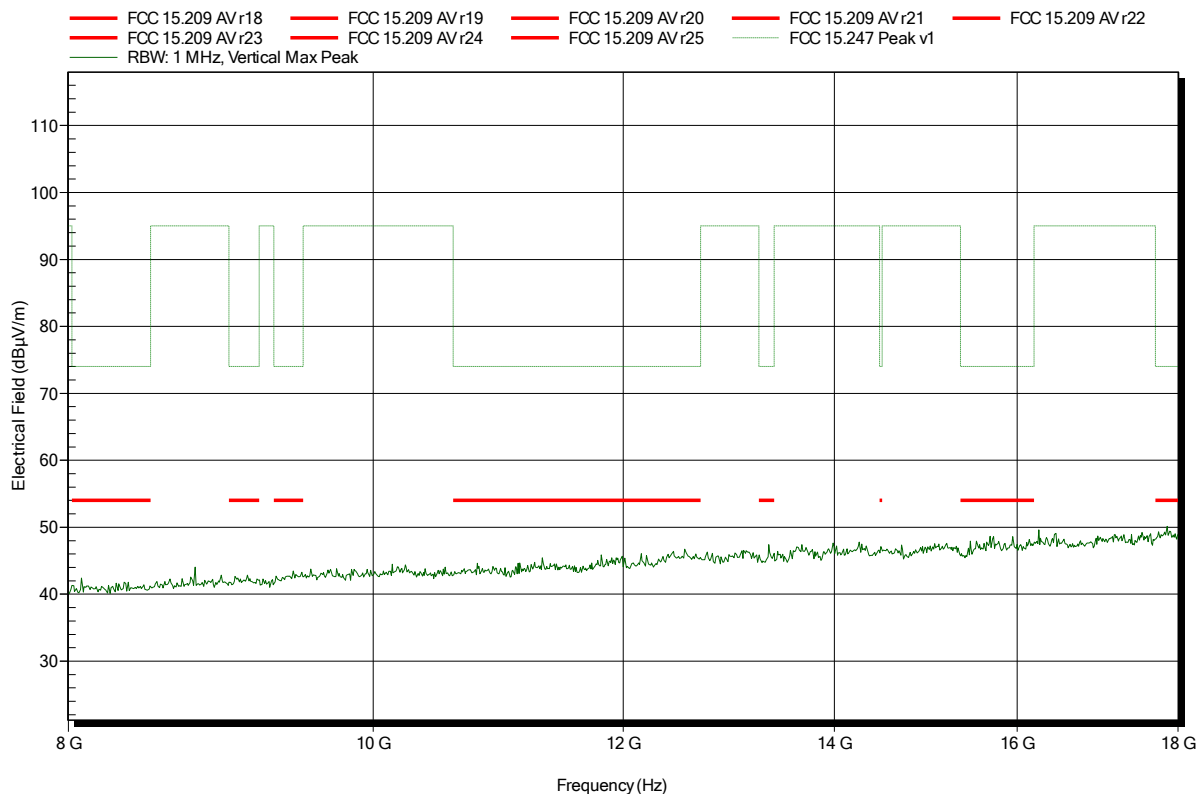


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 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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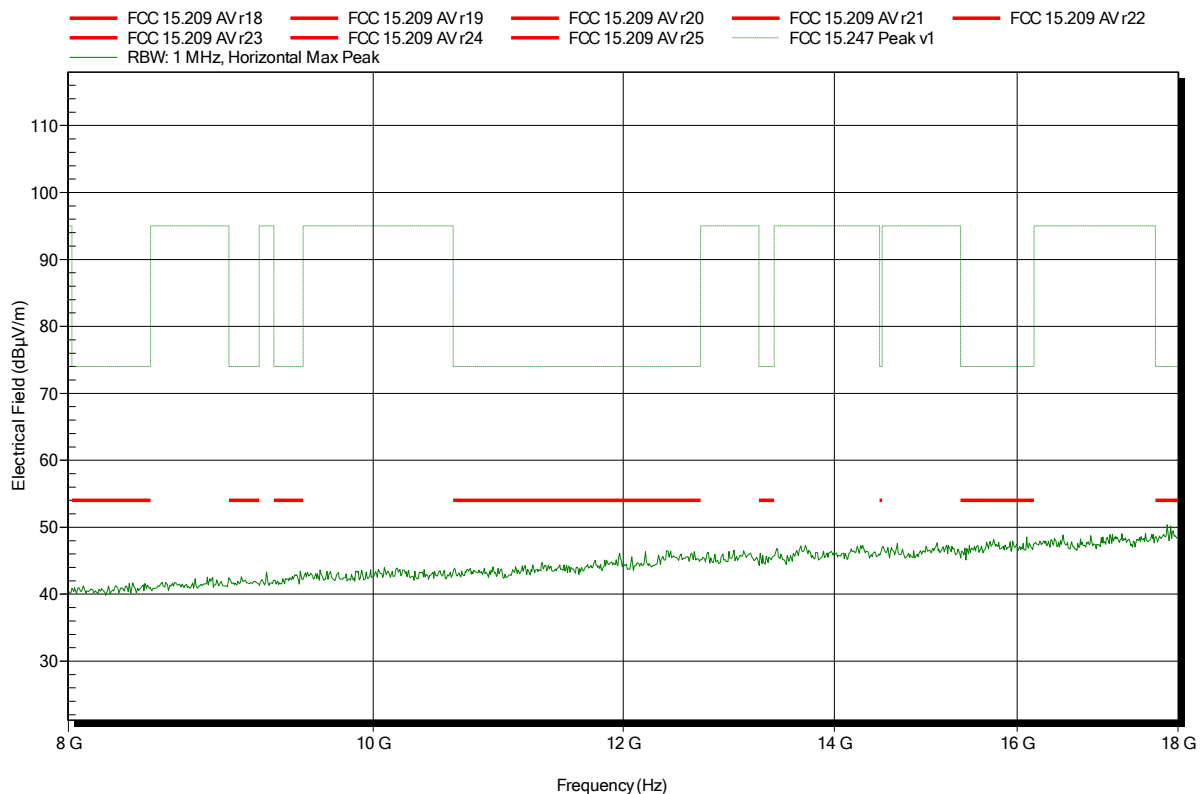


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 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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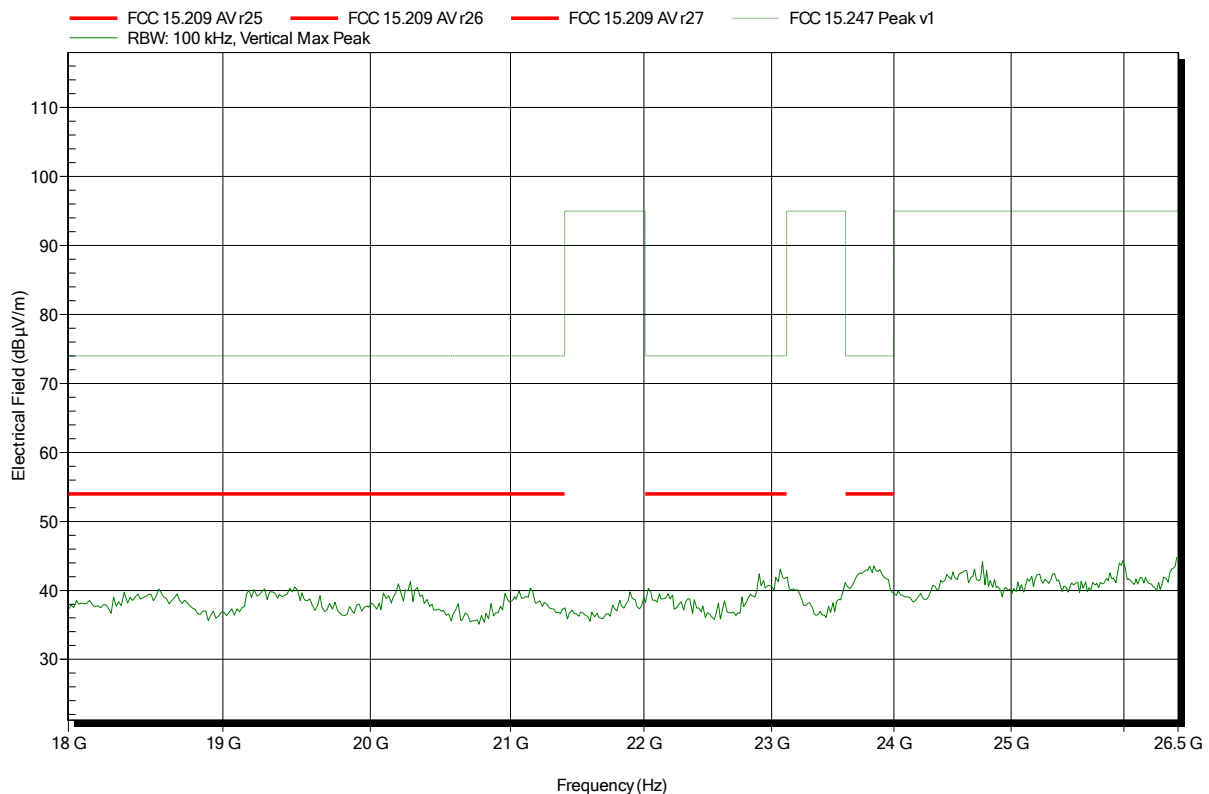


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-13
Note:	EUT horizontal, ant.: A1 -90° horizontal

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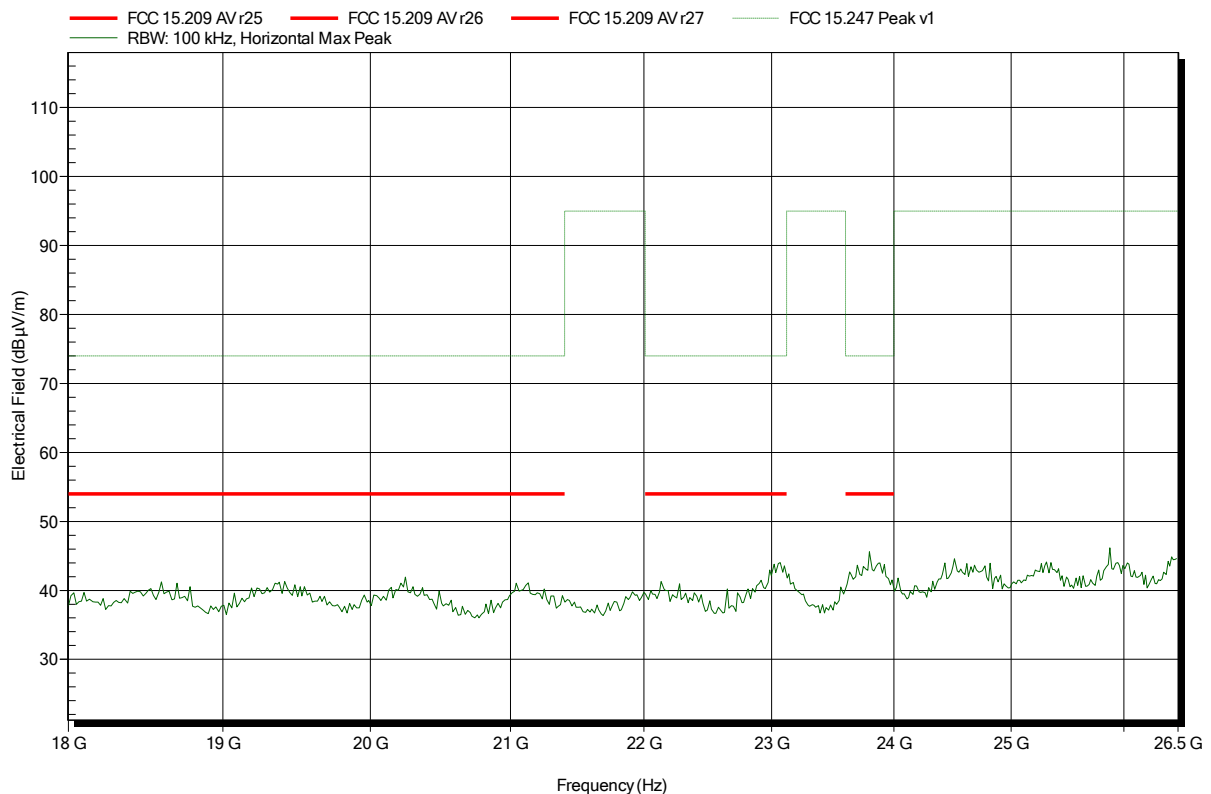


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Applicant: Atmel Automotive GmbH
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 Model: ATSAMR21G18-MR210UA
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 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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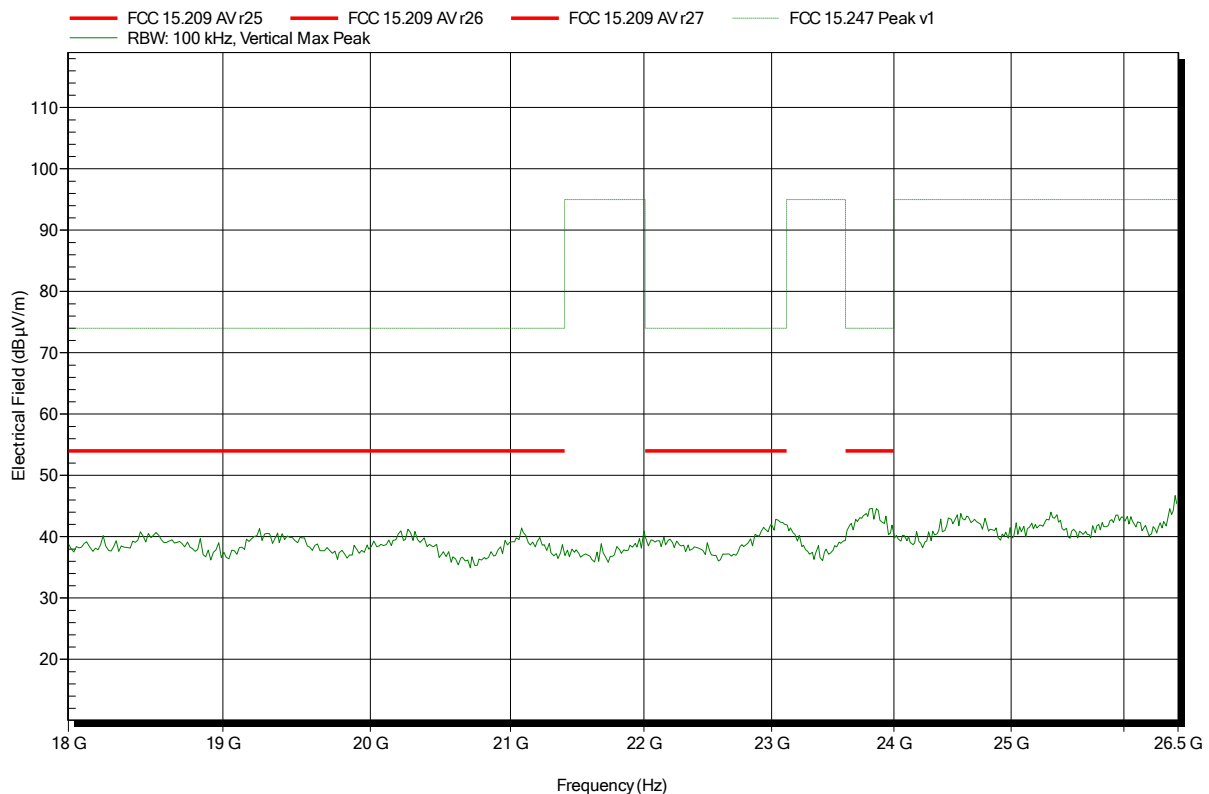


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Project number: G0M-1505-4730

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 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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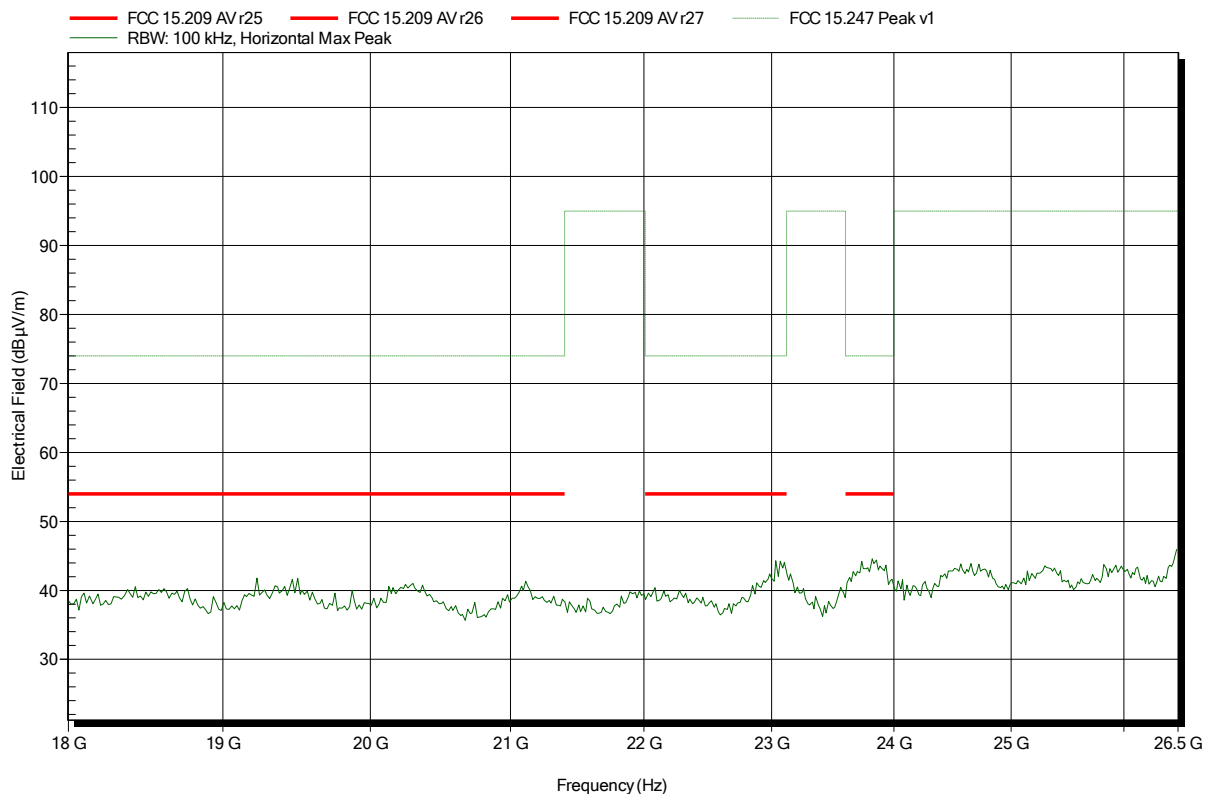


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 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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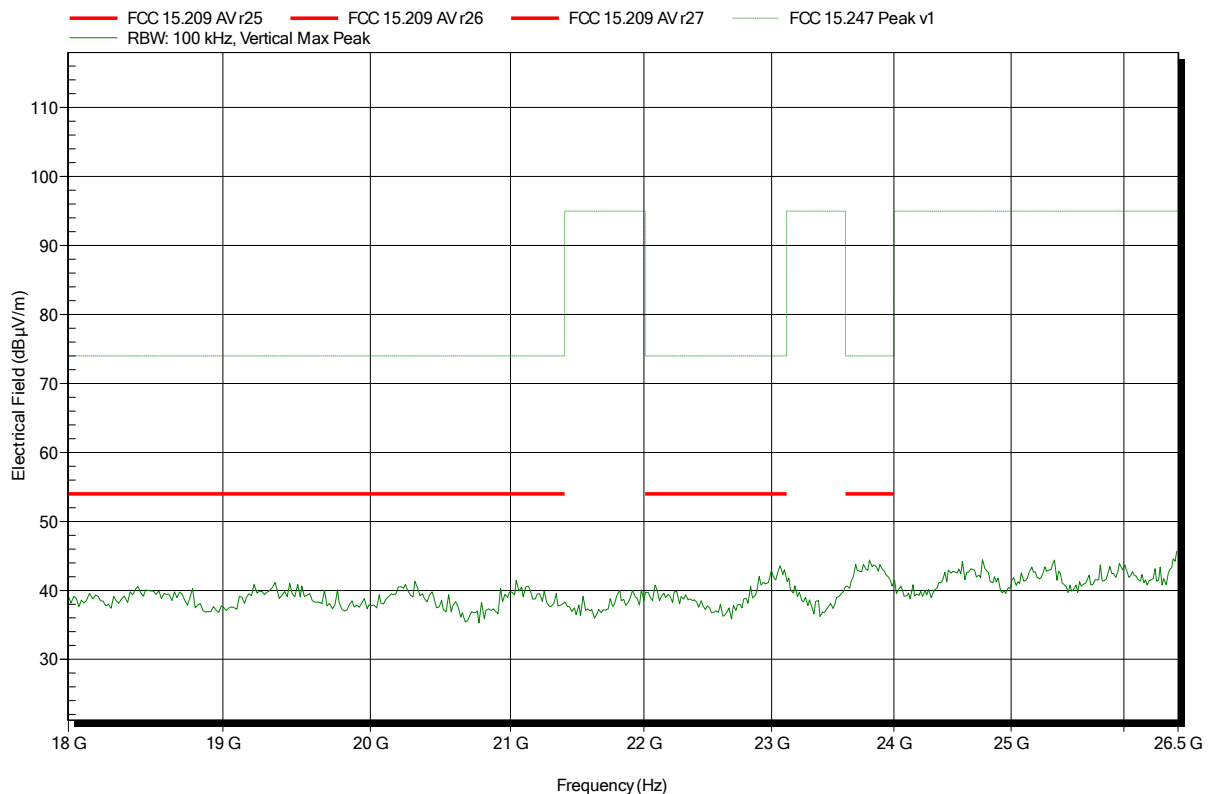


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
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Test Site:	Eurofins Product Service GmbH
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Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
Test Date:	2015-05-13
Note:	EUT horizontal, ant.: A1 -90° horizontal

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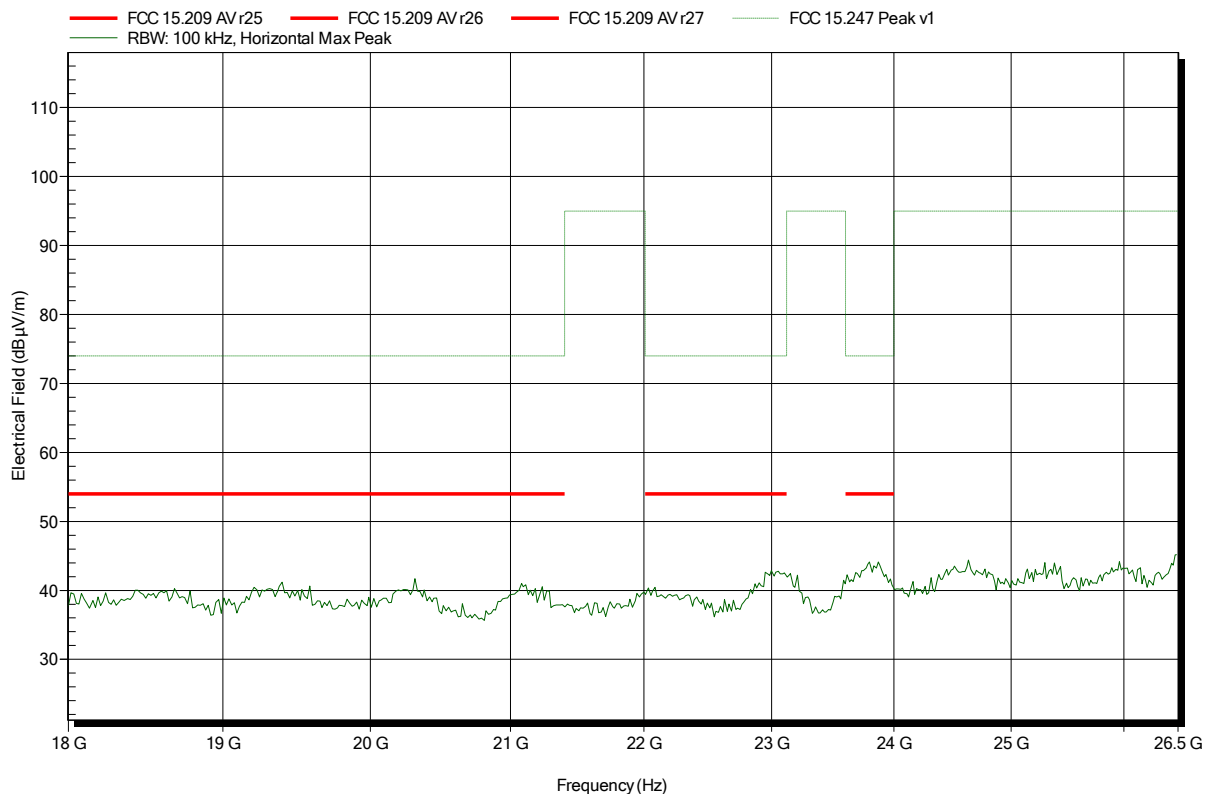


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
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 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A1
 Test Date: 2015-05-13
 Note: EUT horizontal, ant.: A1 -90° horizontal

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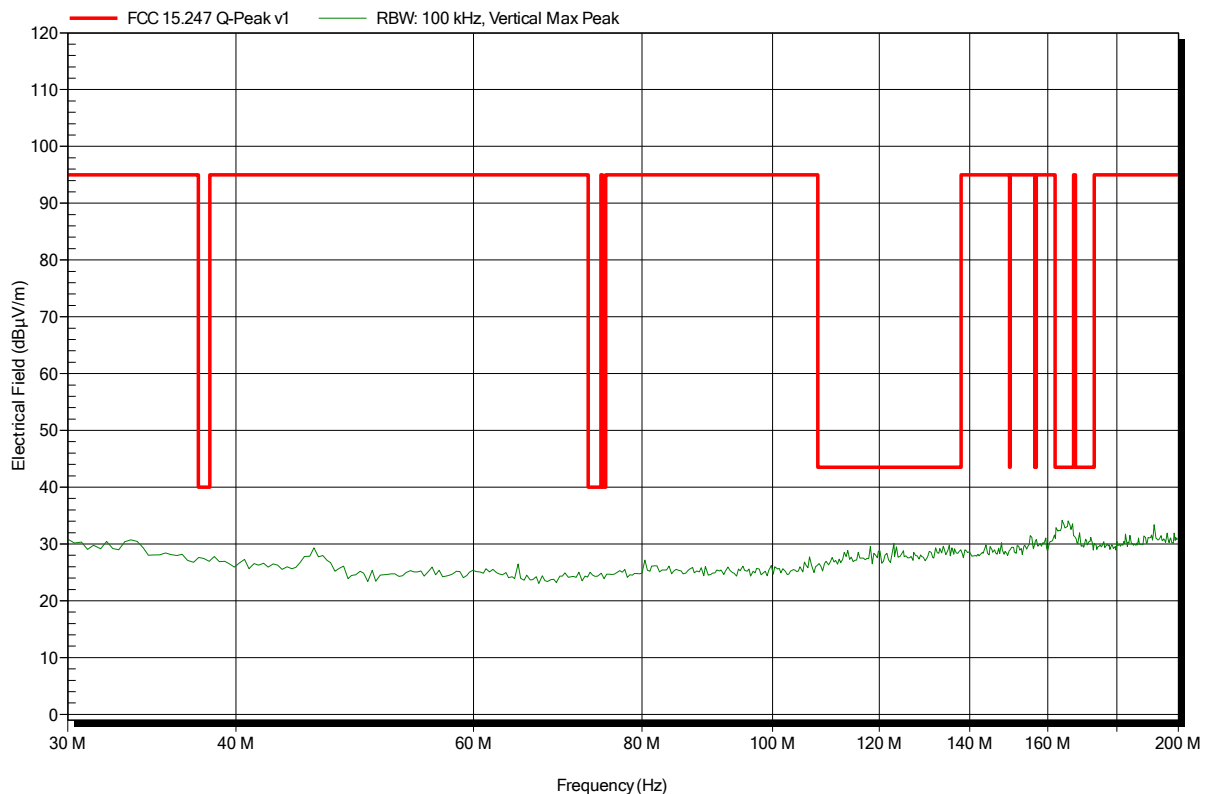


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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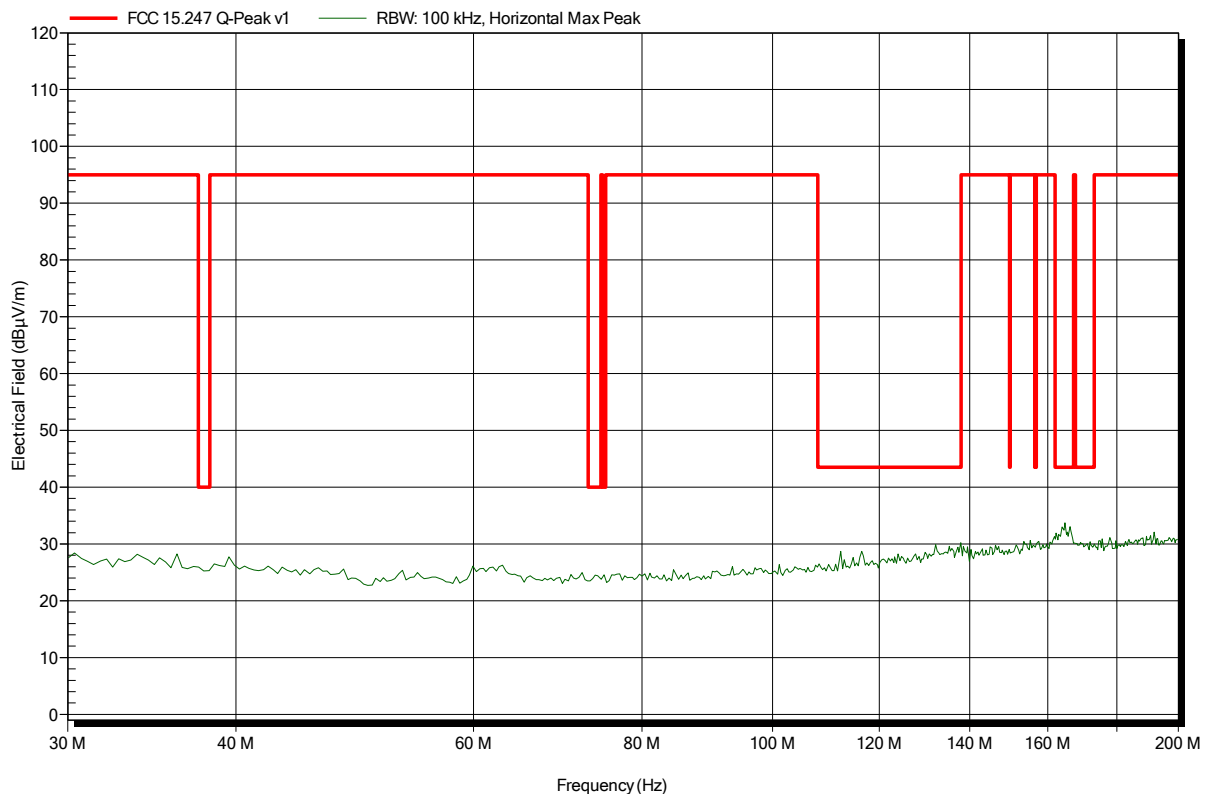


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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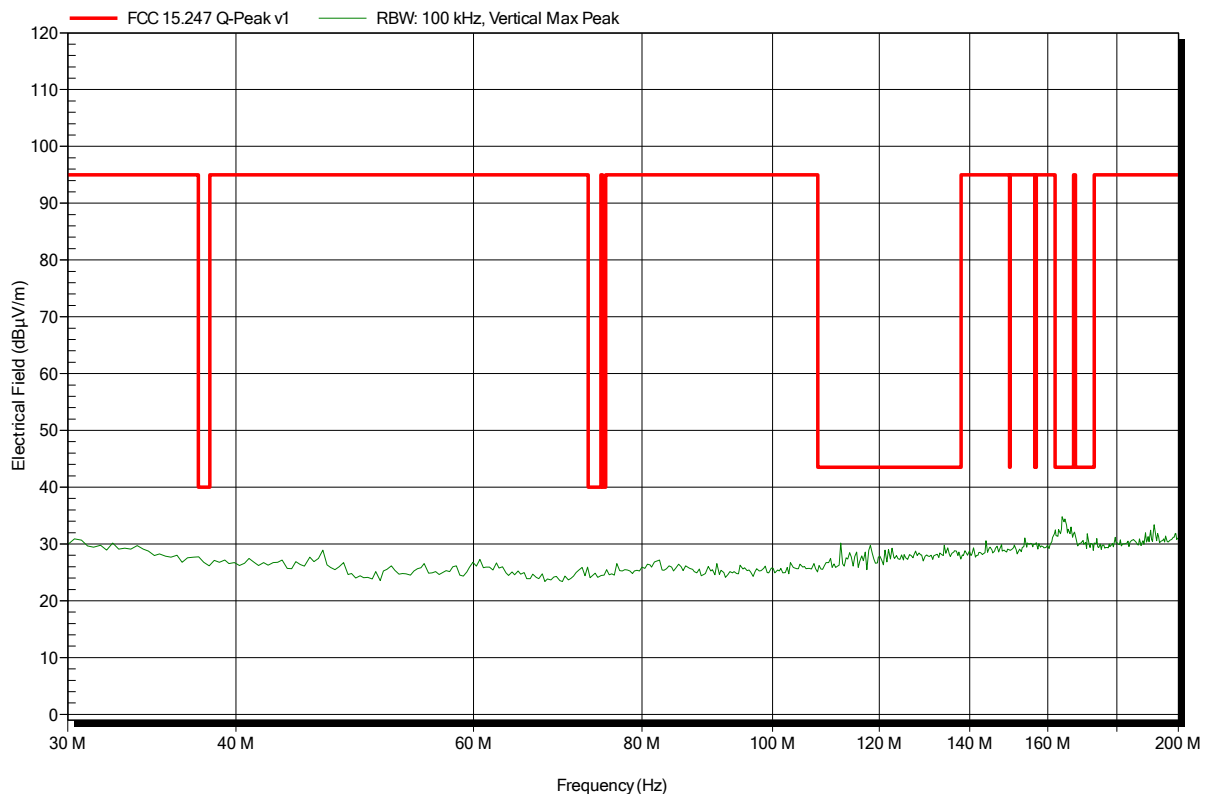


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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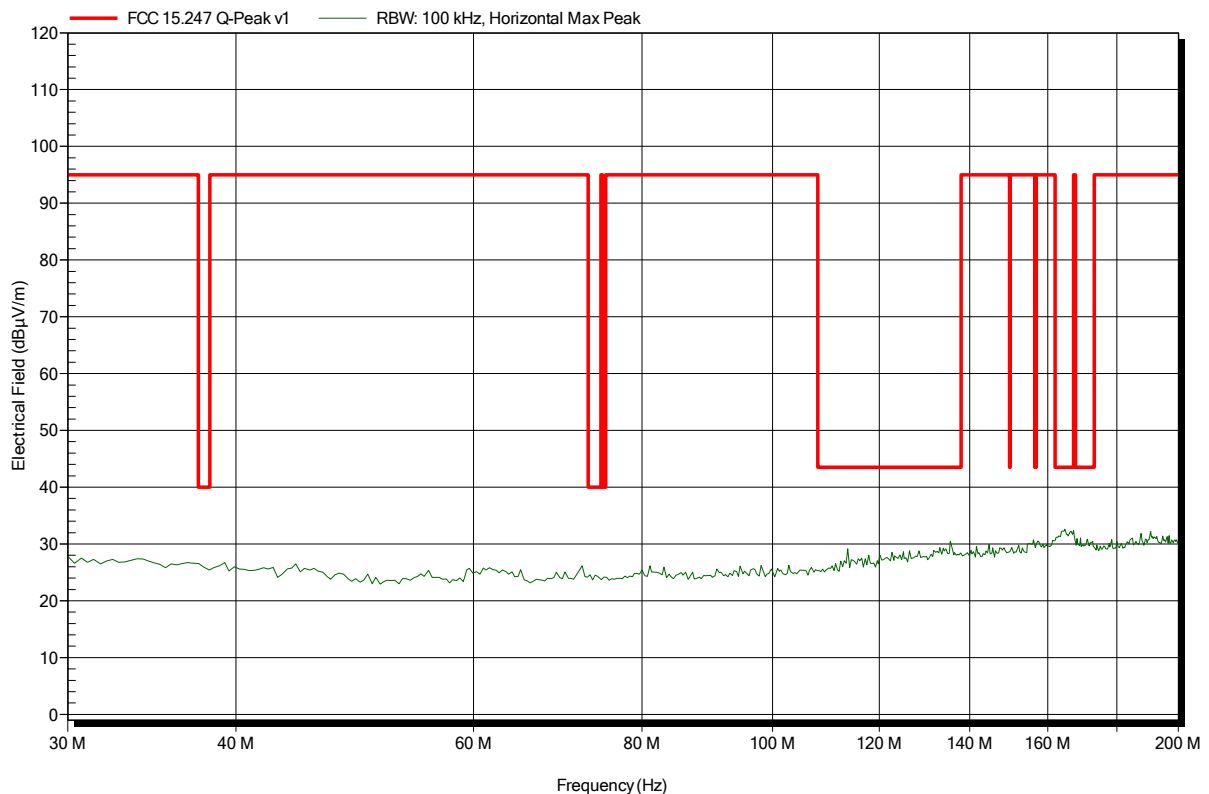


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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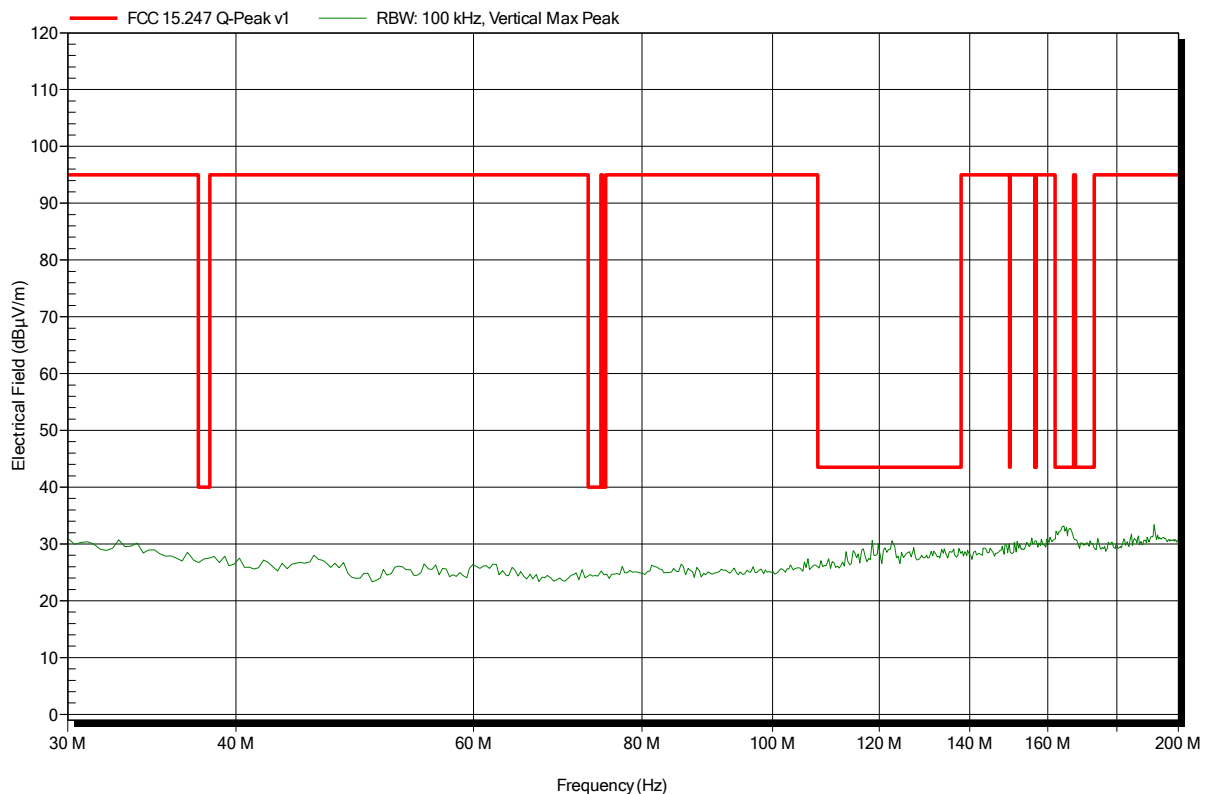


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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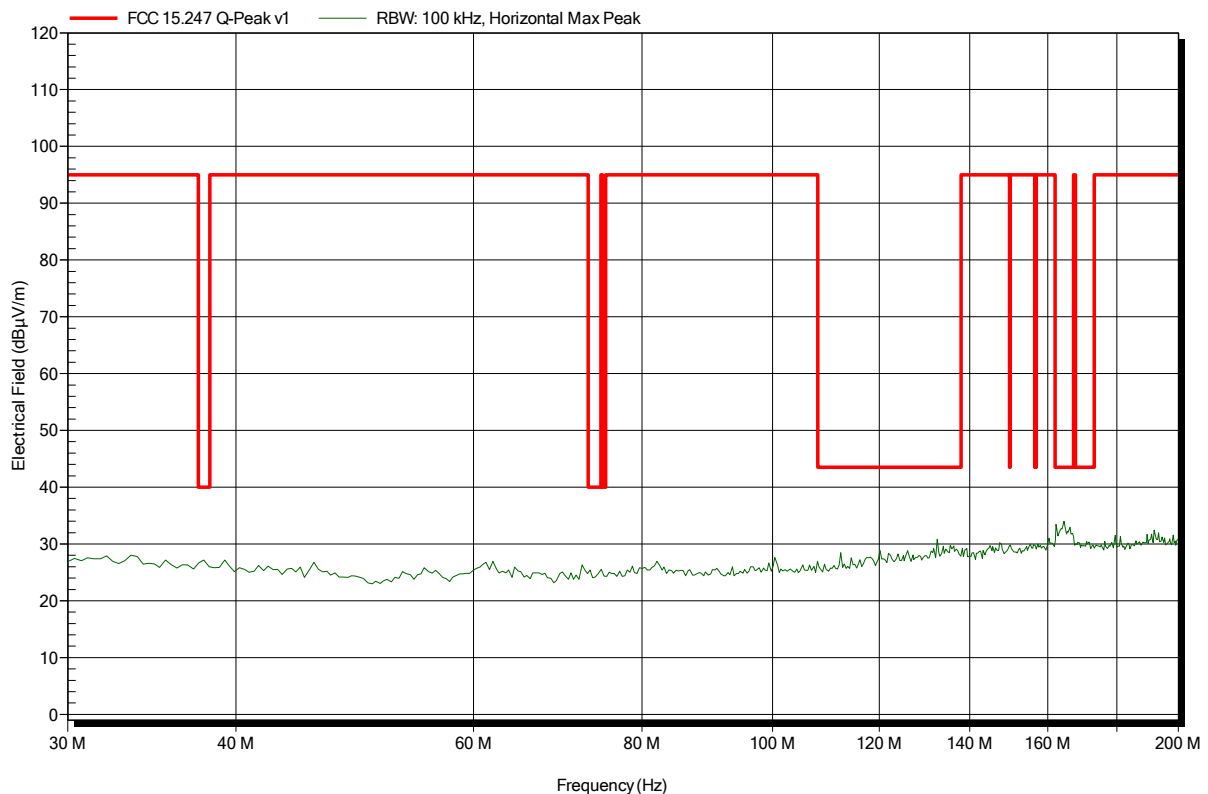


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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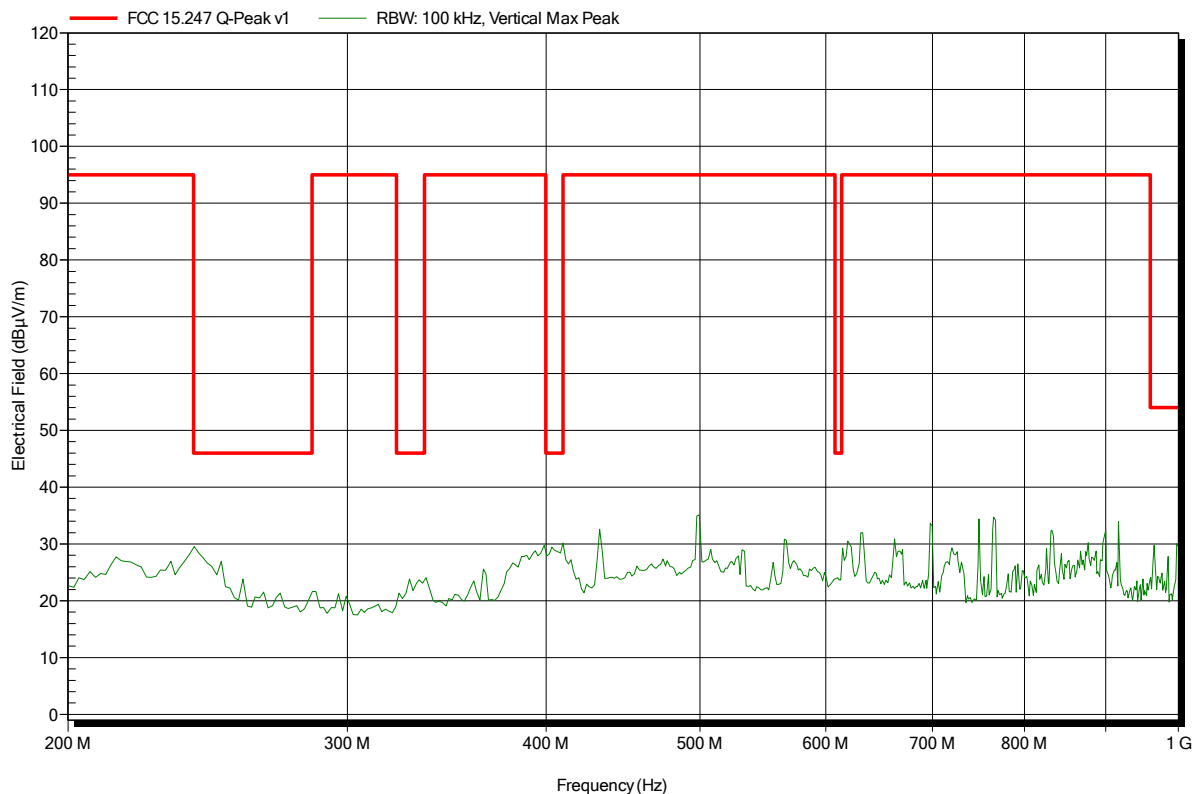


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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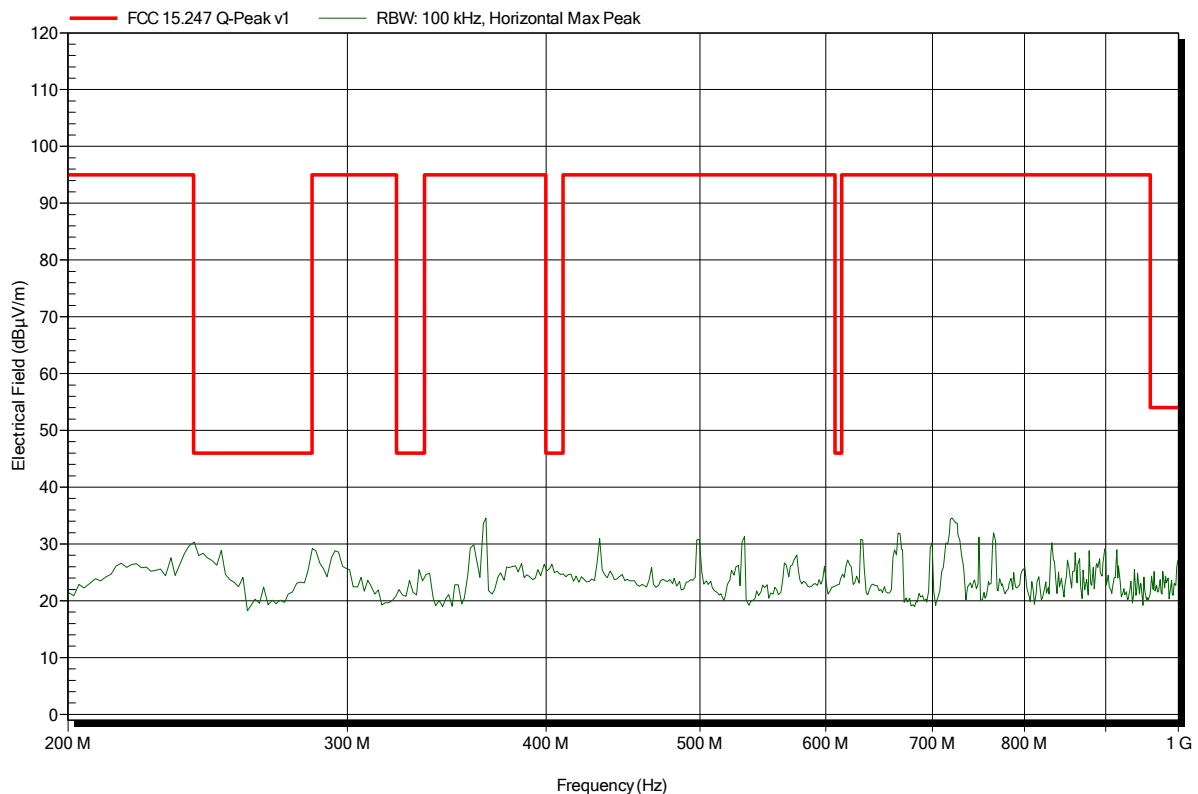


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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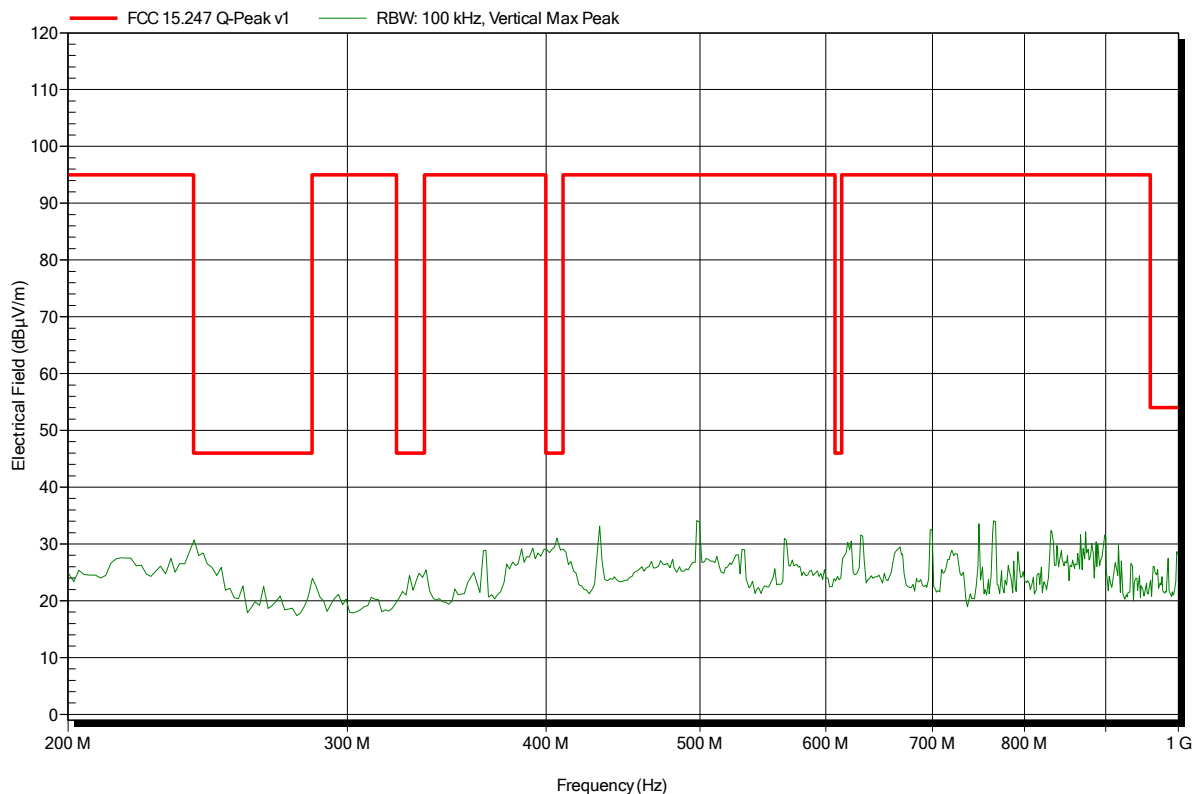


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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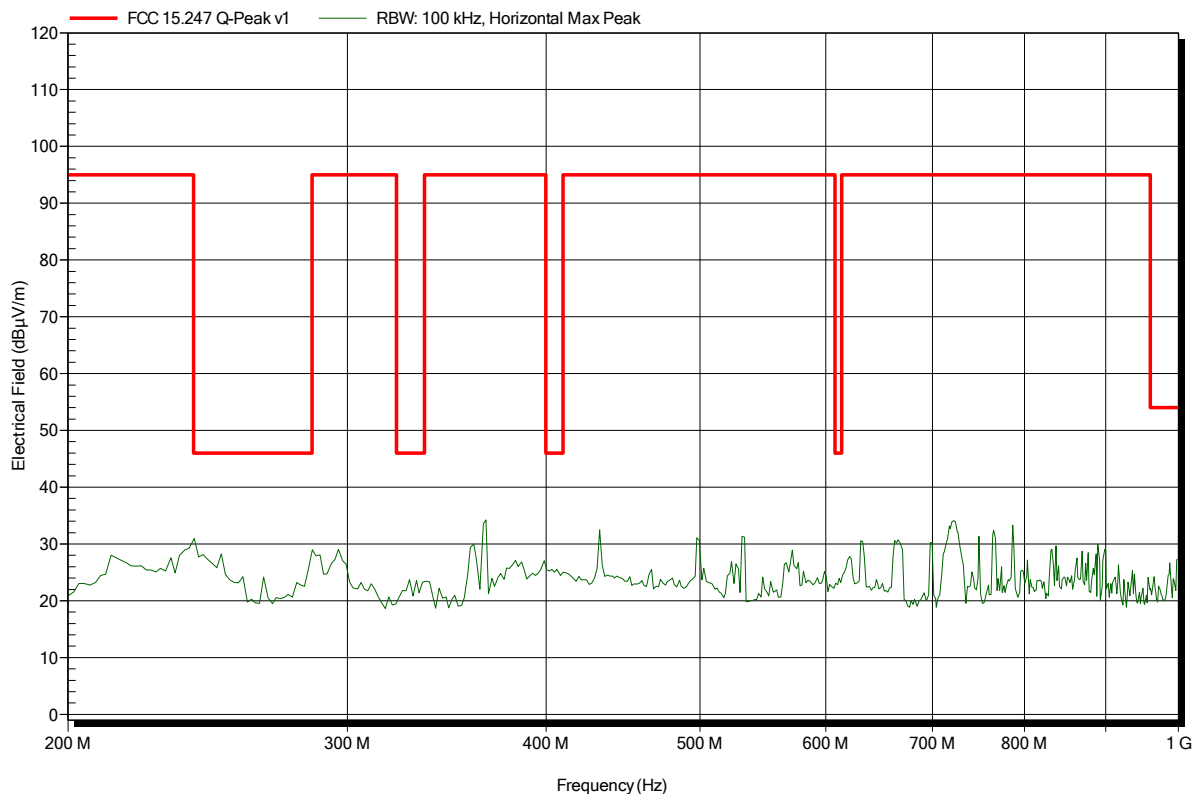


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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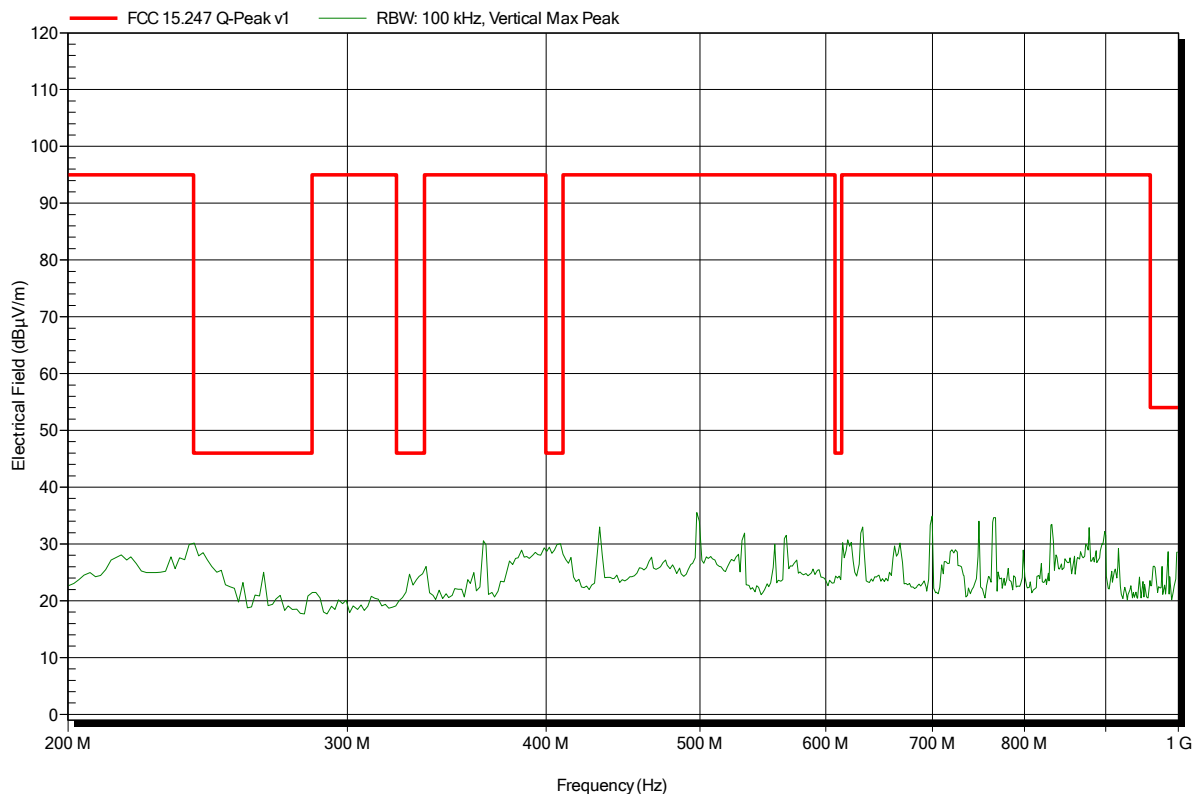


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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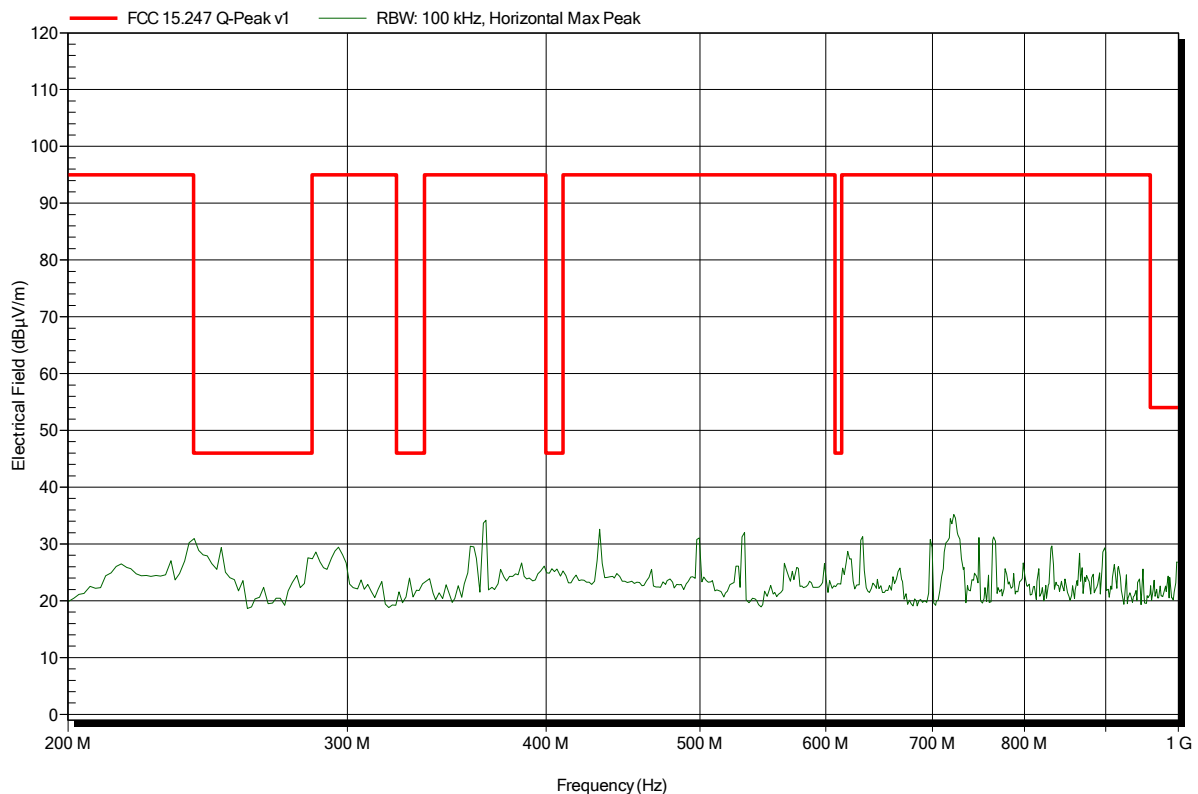


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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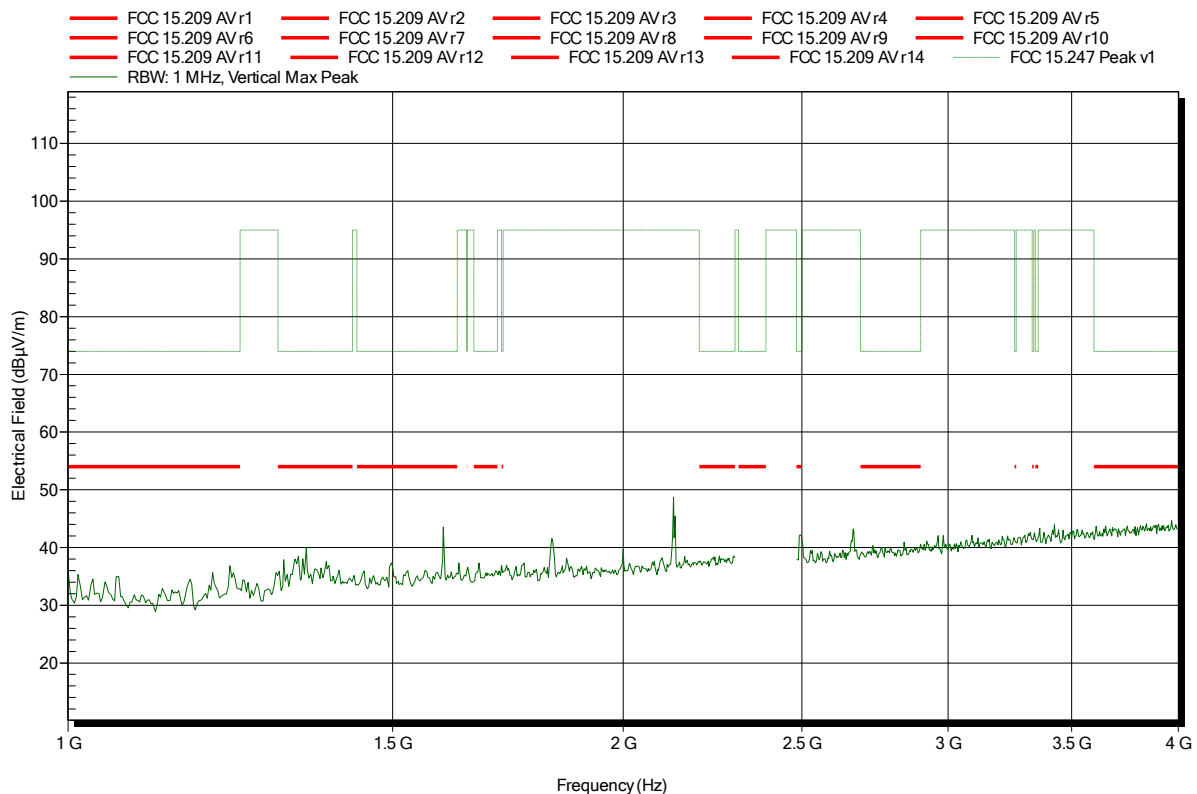


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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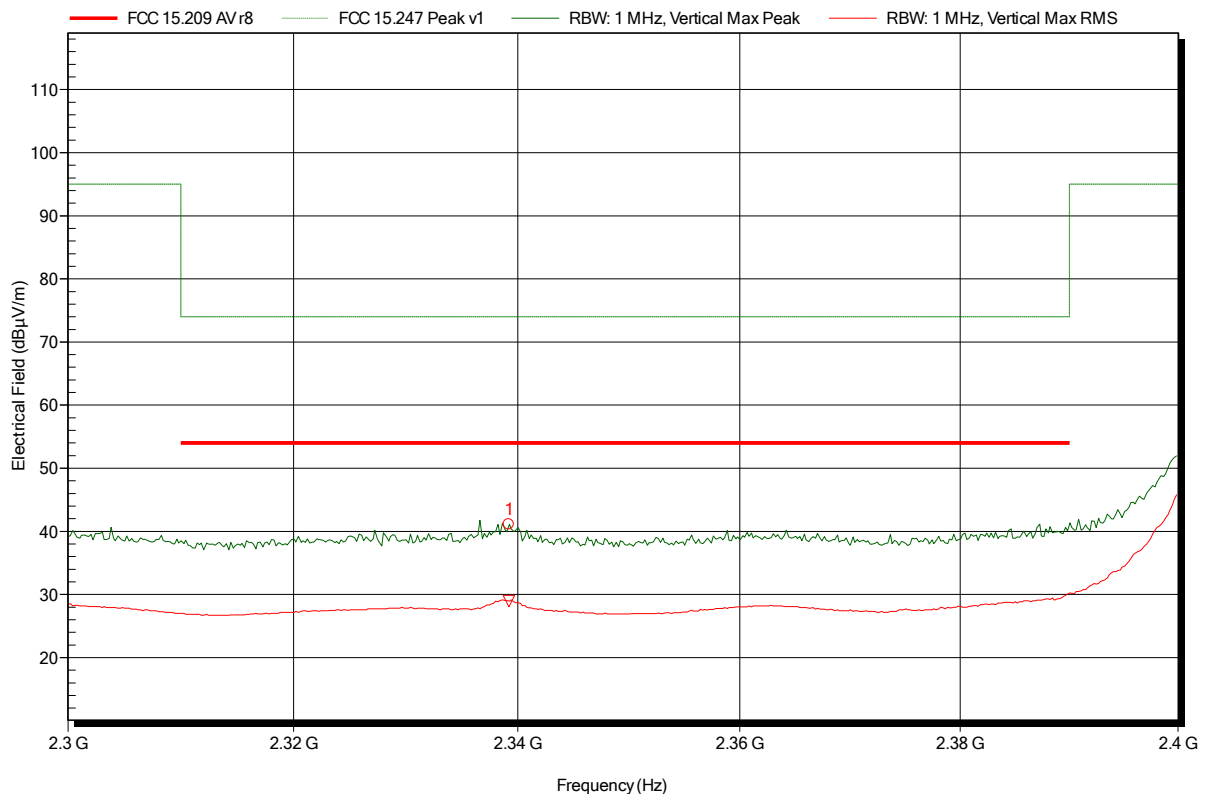


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal; lower bandedge

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Frequency 2.339 GHz	Peak 41.09 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -32.91 dB	Peak Status Pass
Frequency 2.339 GHz	RMS 28.94 dBµV/m	RMS Limit 54 dBµV/m	RMS Difference -25.06 dB	RMS Status Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

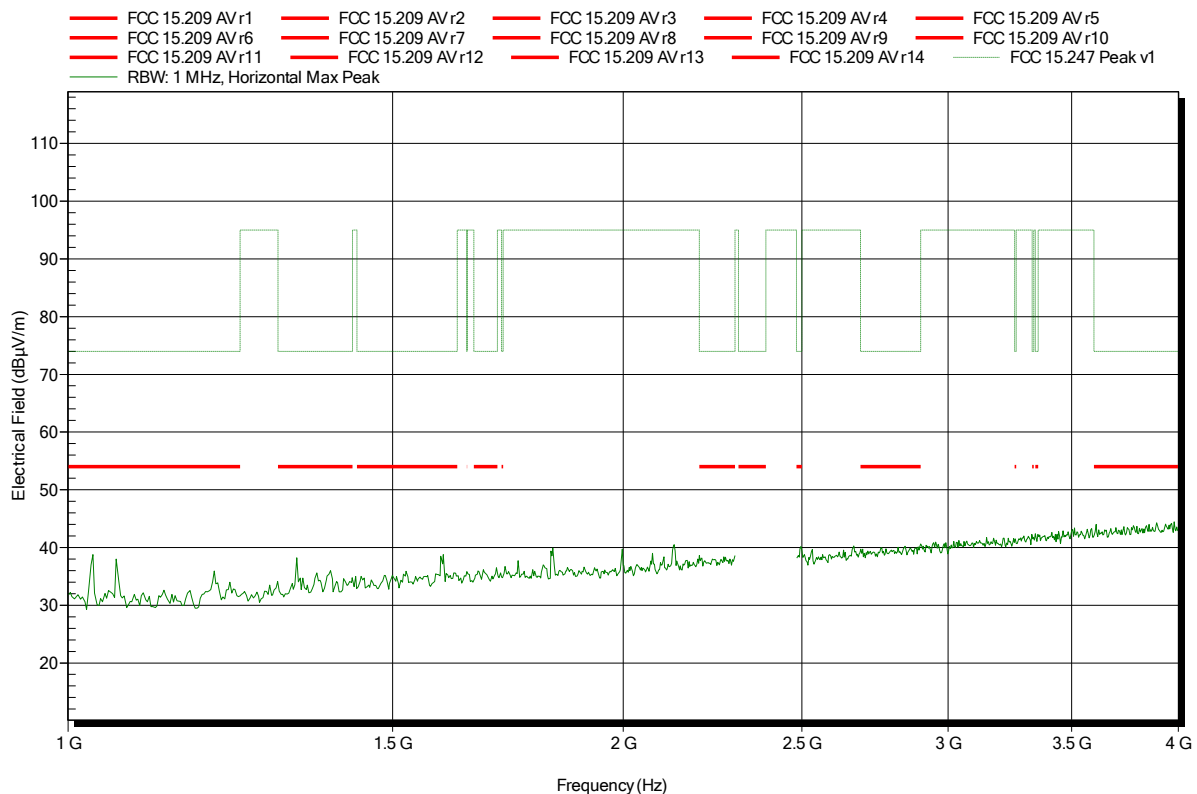
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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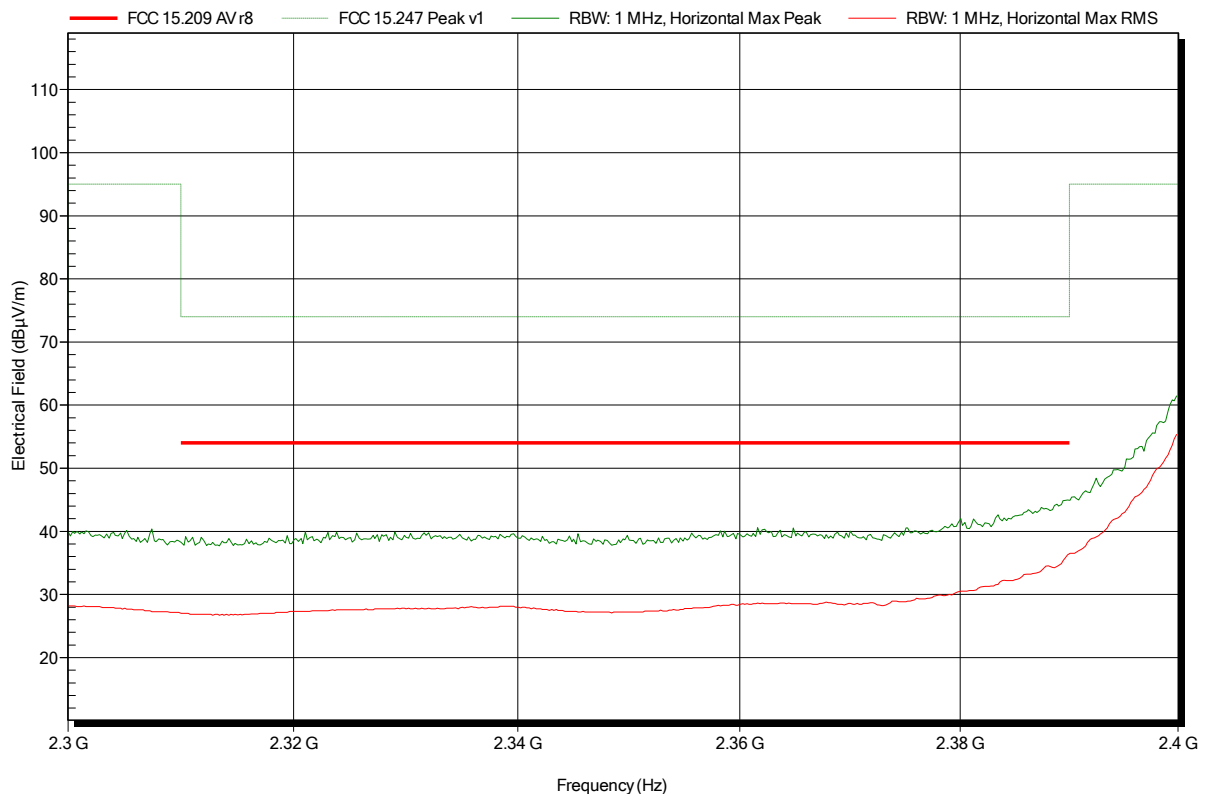


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	3 m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal; lower bandedge

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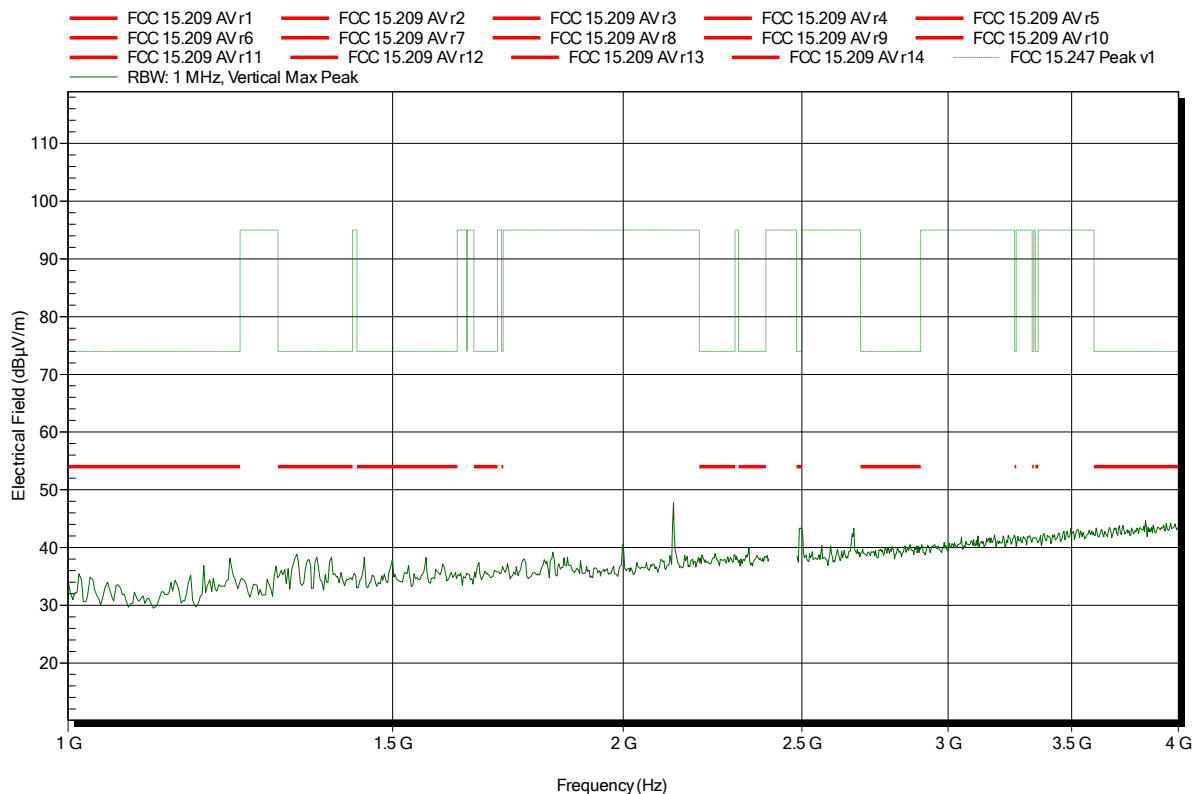


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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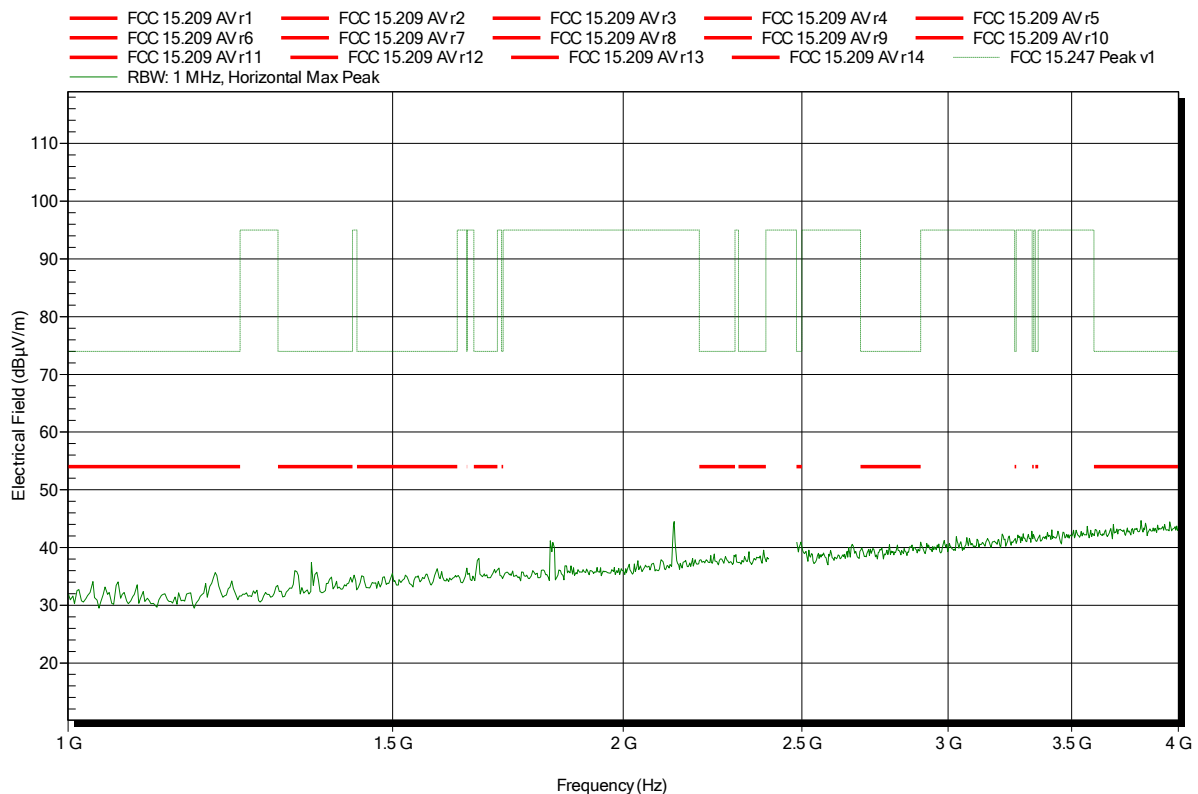


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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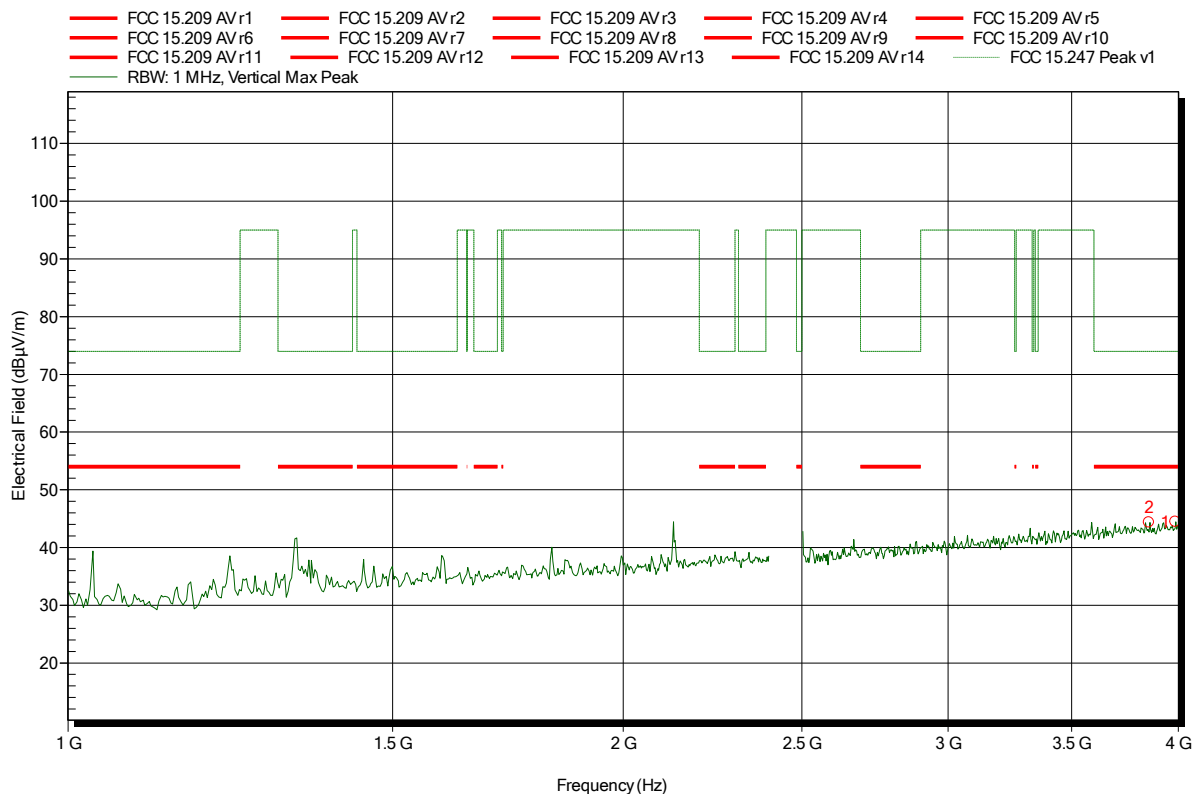


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A2 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A2 -90° horizontal

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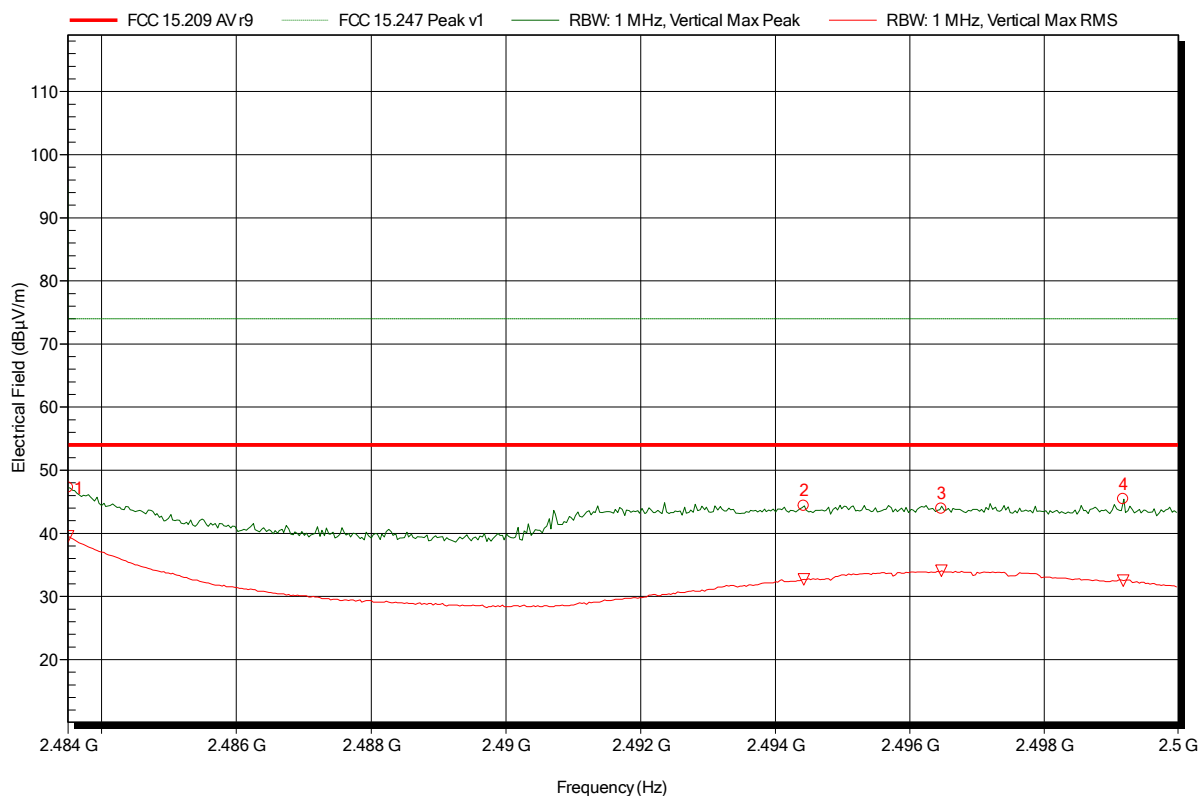
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.856 GHz	44.32 dBµV/m	74 dBµV/m	-29.68 dB	Pass
3.985 GHz	44.45 dBµV/m	74 dBµV/m	-29.55 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A2 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A2 -90° horizontal; higher bandedge

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	47.26 dBµV/m	74 dBµV/m	-26.74 dB	Pass
2.494 GHz	44.36 dBµV/m	74 dBµV/m	-29.64 dB	Pass
2.496 GHz	43.89 dBµV/m	74 dBµV/m	-30.11 dB	Pass
2.499 GHz	45.41 dBµV/m	74 dBµV/m	-28.59 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	39.53 dBµV/m	54 dBµV/m	-14.47 dB	Pass
2.494 GHz	32.73 dBµV/m	54 dBµV/m	-21.27 dB	Pass
2.496 GHz	34.11 dBµV/m	54 dBµV/m	-19.89 dB	Pass
2.499 GHz	32.52 dBµV/m	54 dBµV/m	-21.48 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

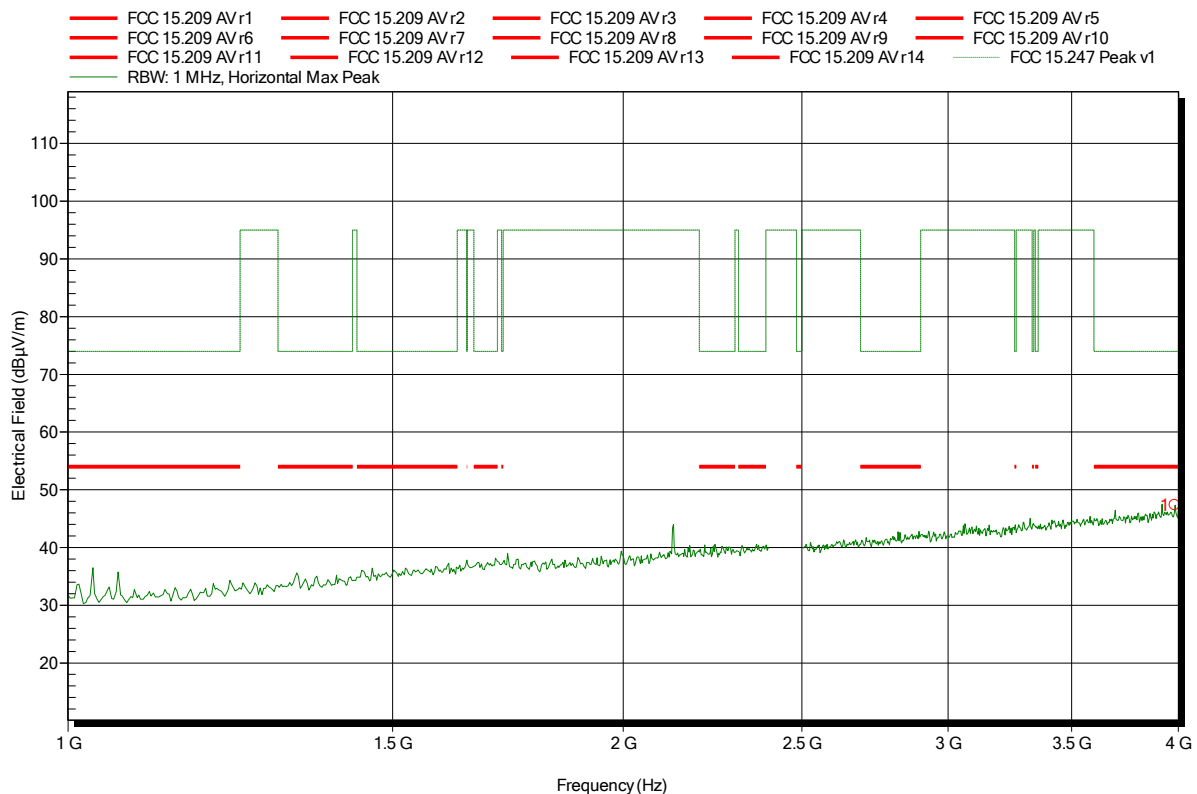
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A2 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A2 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
3.982 GHz	47.34 dBµV/m	74 dBµV/m	-26.66 dB	Pass

Test Report No.: GOM-1505-4730-TFC247ZB-V01

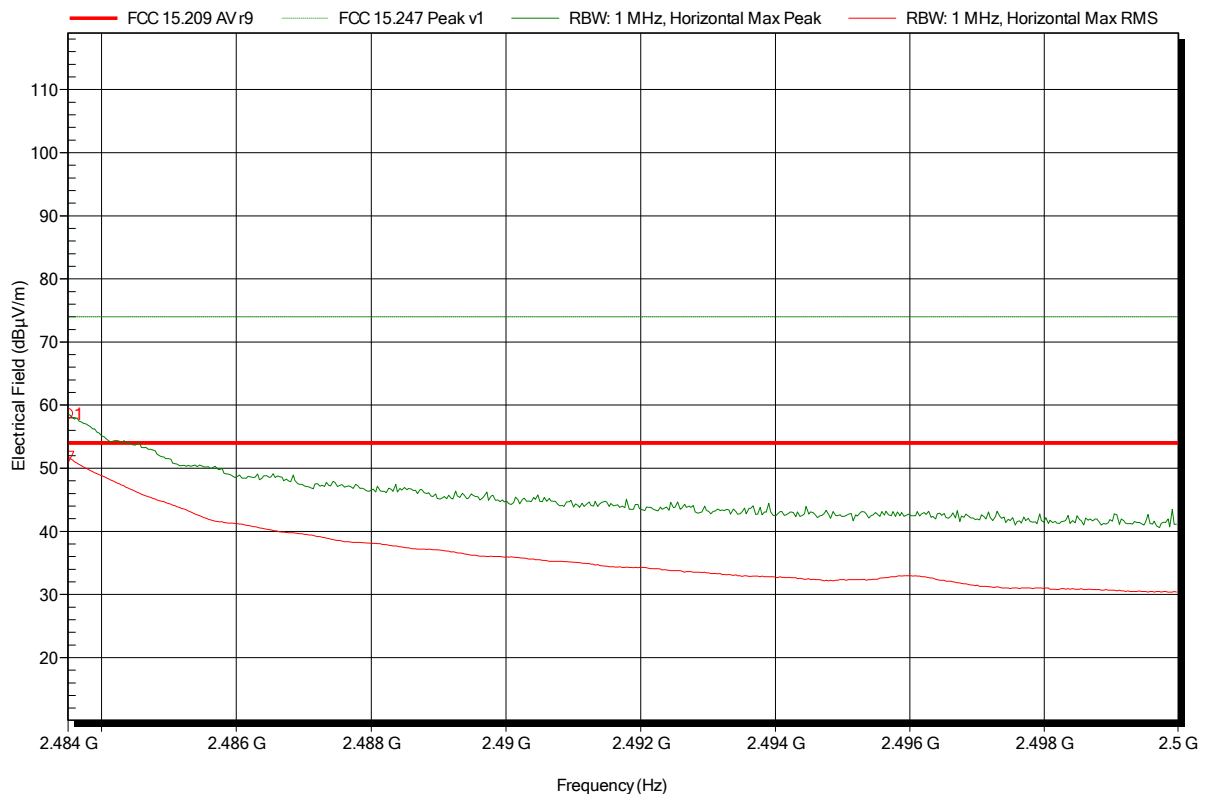
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: GOM-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 3 m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A2 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A2 -90° horizontal; higher bandedge

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.484 GHz	58.57 dBµV/m	74 dBµV/m	-15.43 dB	Pass

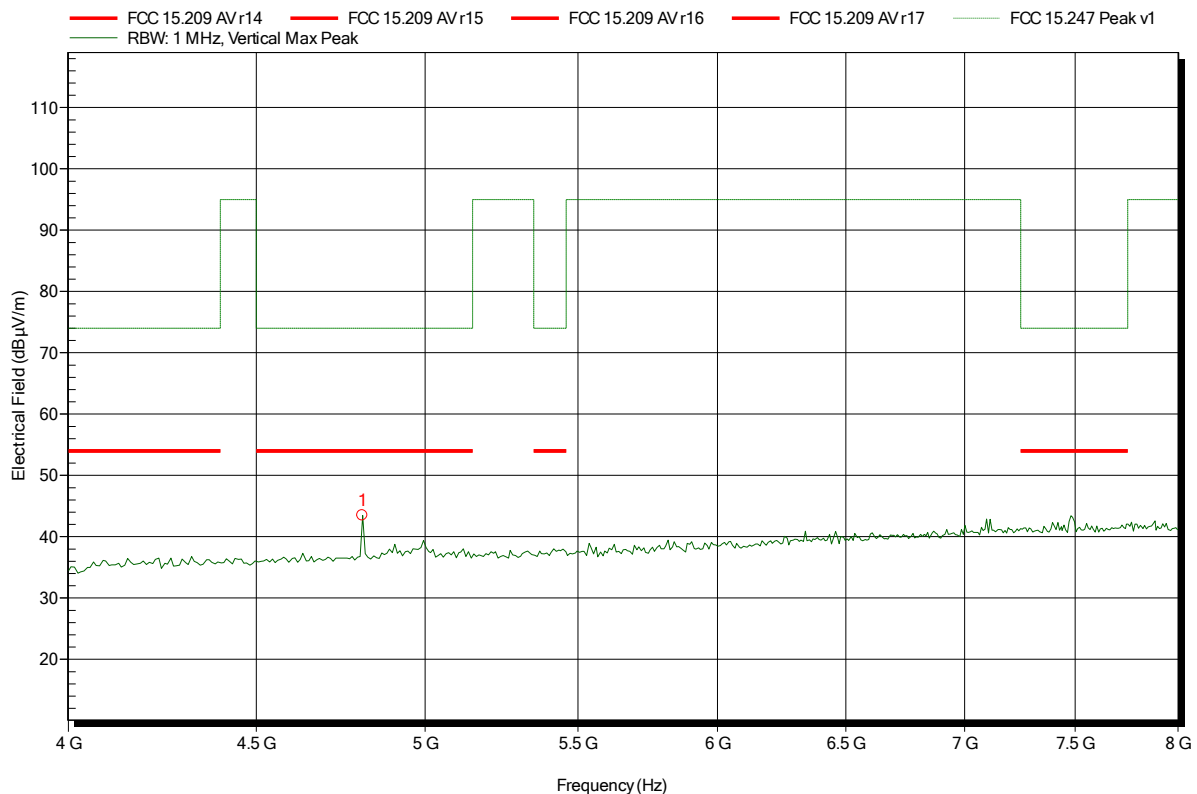
Frequency	RMS	RMS Limit	RMS Difference	RMS Status
2.484 GHz	51.8 dBµV/m	54 dBµV/m	-2.2 dB	Pass

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal (43.48)

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.808 GHz	43.48 dBµV/m	74 dBµV/m	-30.52 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

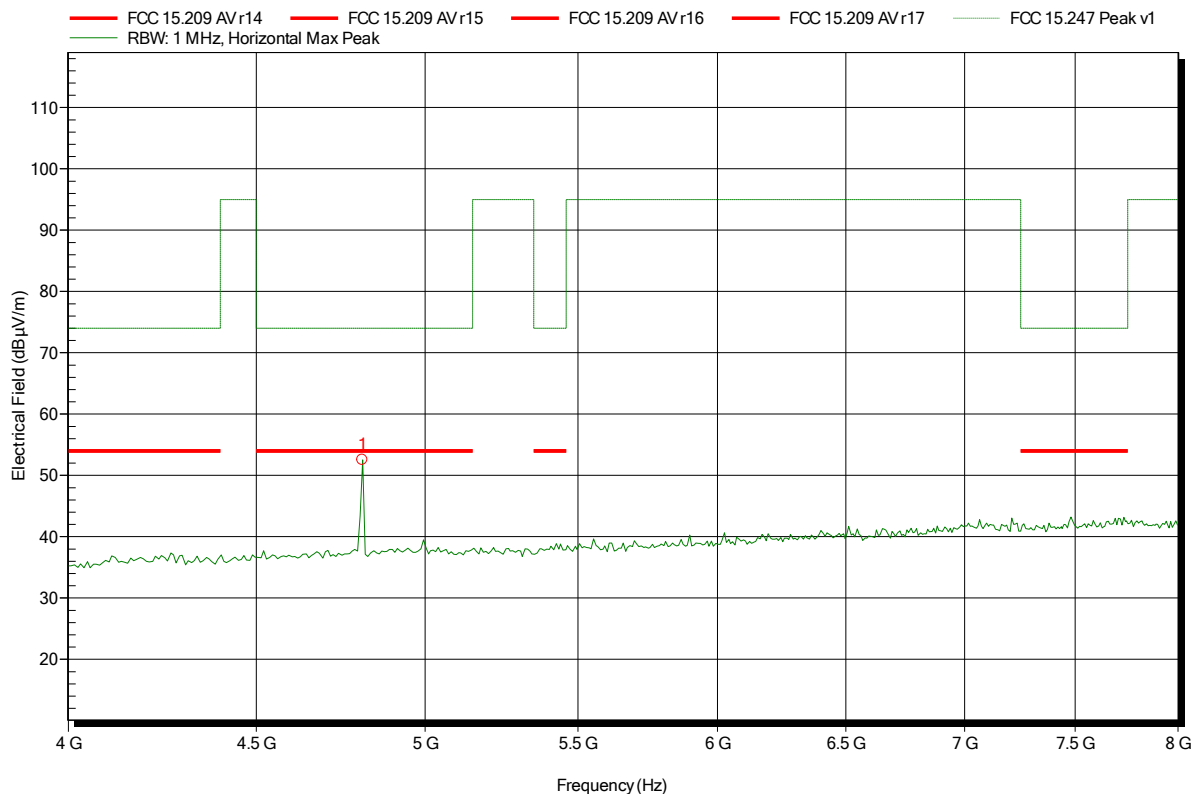
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal (52.56)

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.808 GHz	52.56 dBµV/m	74 dBµV/m	-21.44 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

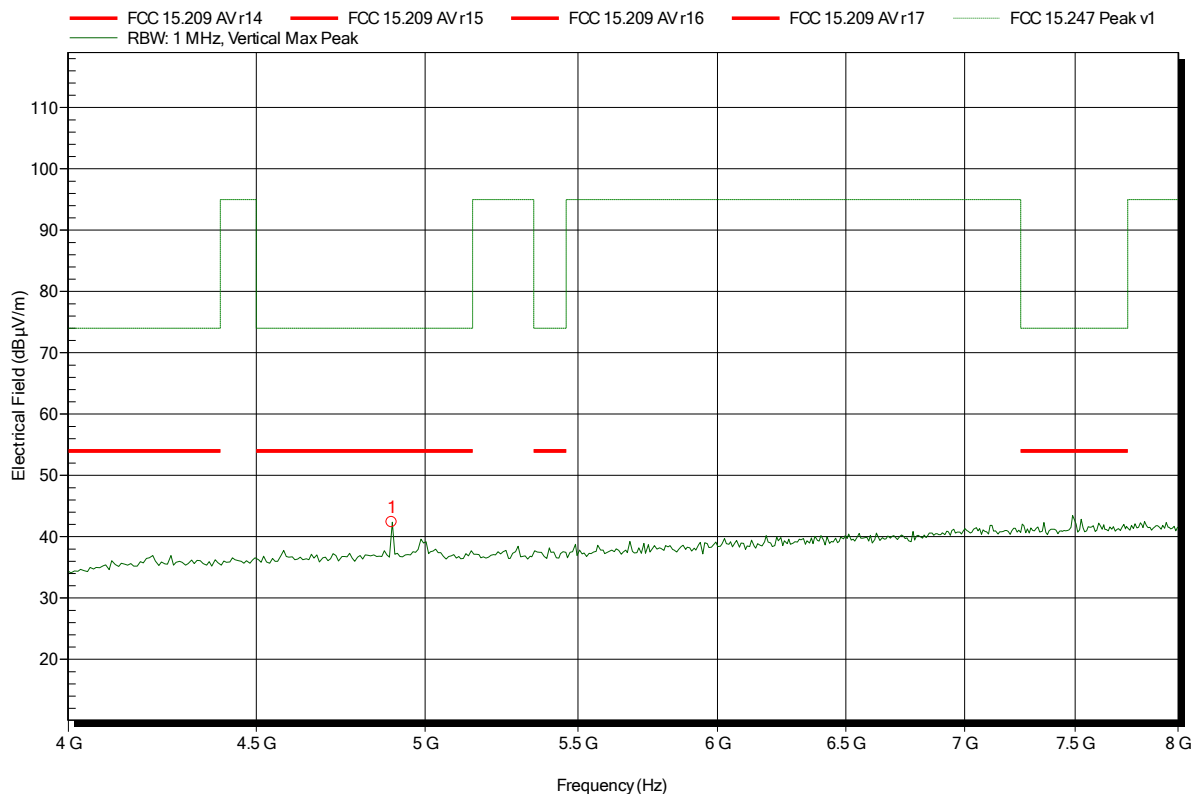
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal (42.39)

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	42.39 dBµV/m	74 dBµV/m	-31.61 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

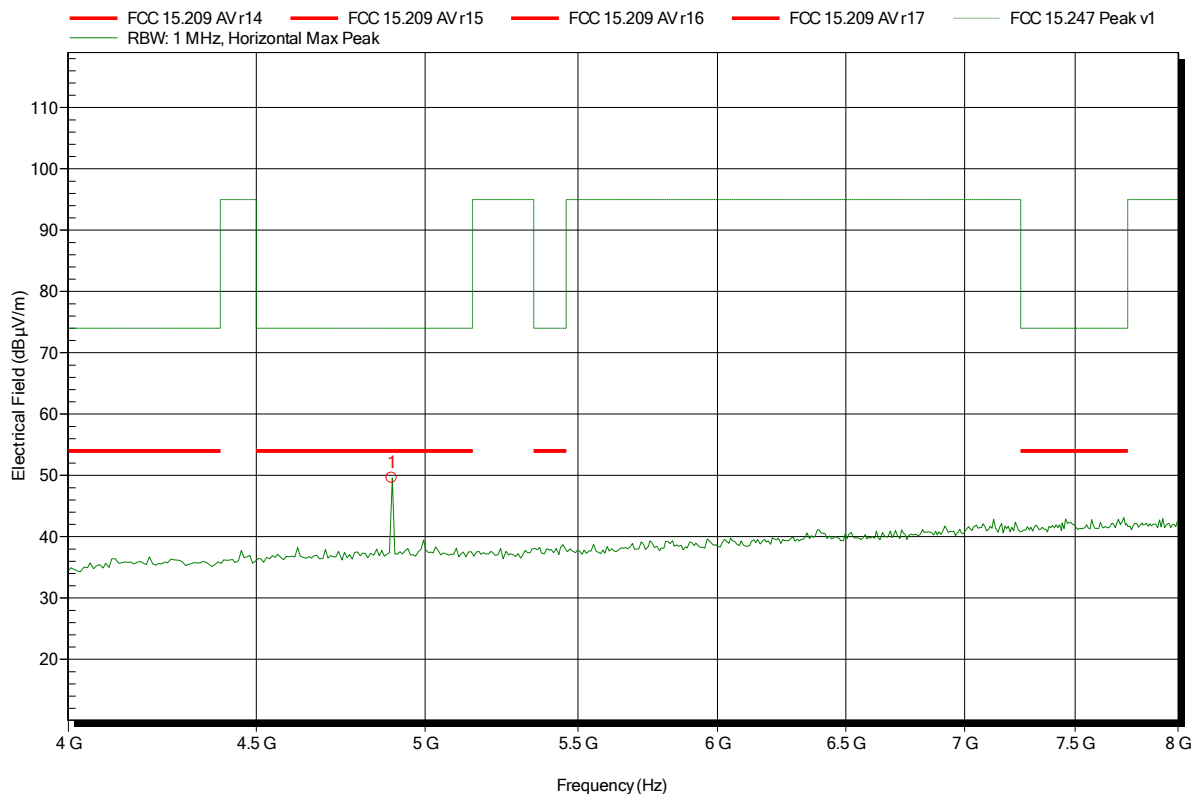
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal (49.62)

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.896 GHz	49.62 dBµV/m	74 dBµV/m	-24.38 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

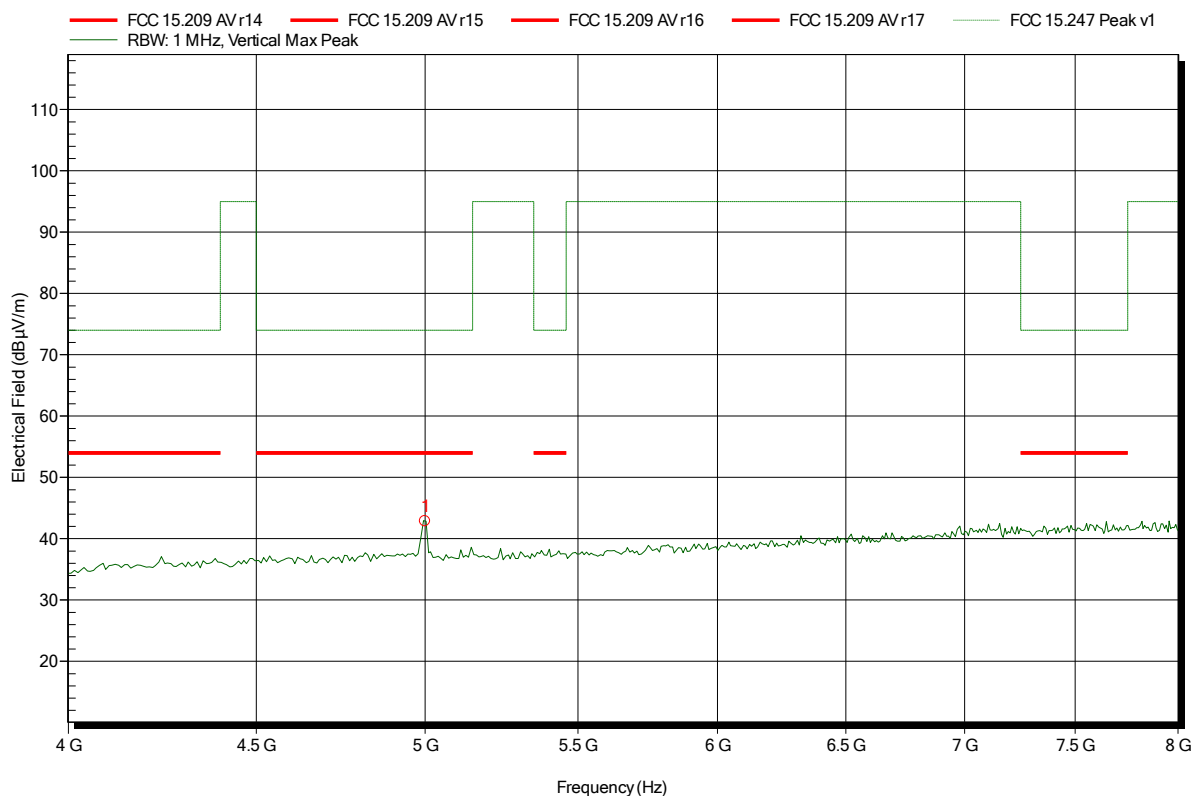
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A2 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A2 -90° horizontal

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Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5 GHz	42.86 dBµV/m	74 dBµV/m	-31.14 dB	Pass

Test Report No.: G0M-1505-4730-TFC247ZB-V01

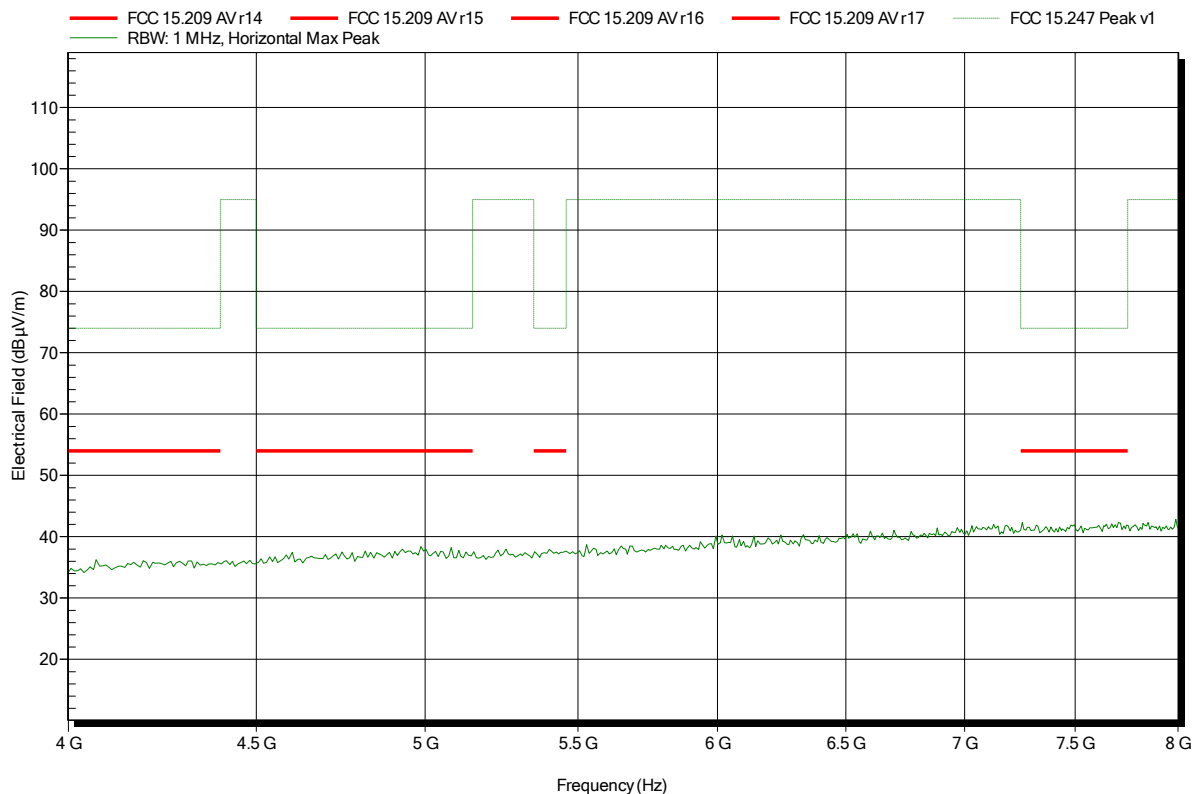
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, "Quarter-Wave" ant.: A2 (-13)
 Test Date: 2015-05-20
 Note: EUT horizontal, ant.: A2 -90° horizontal

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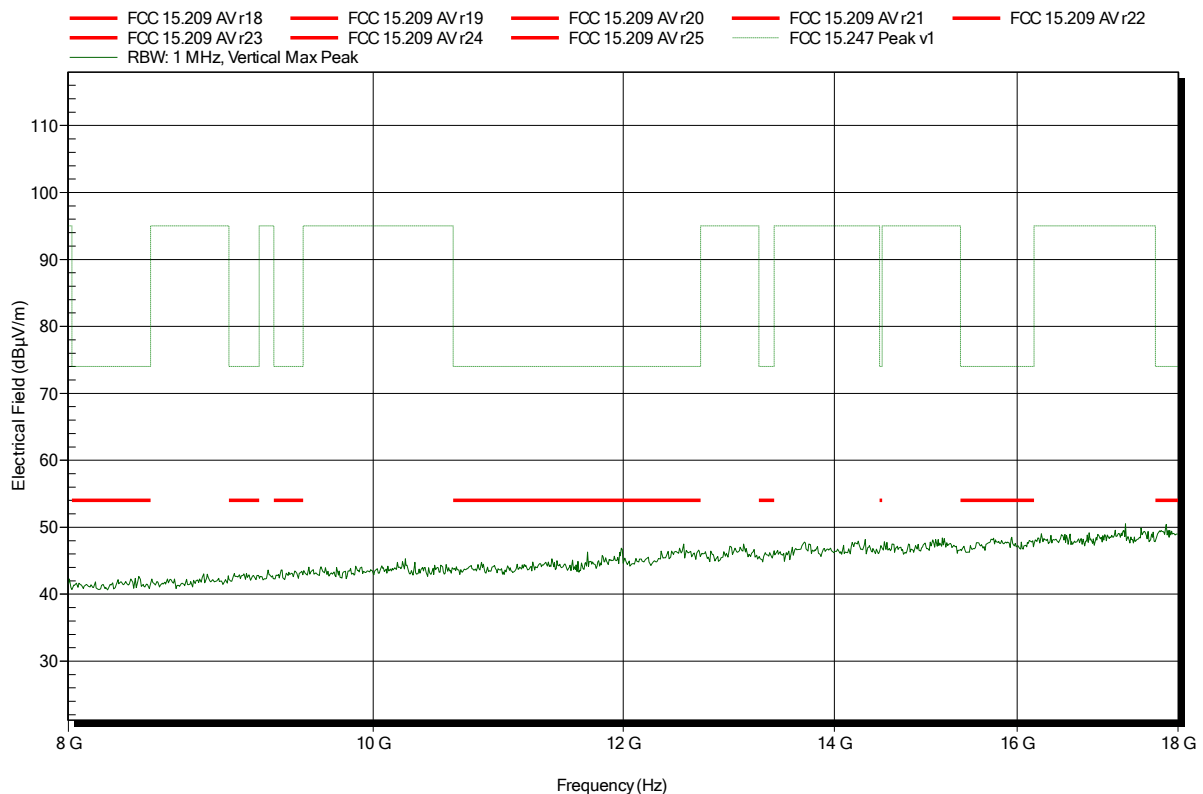


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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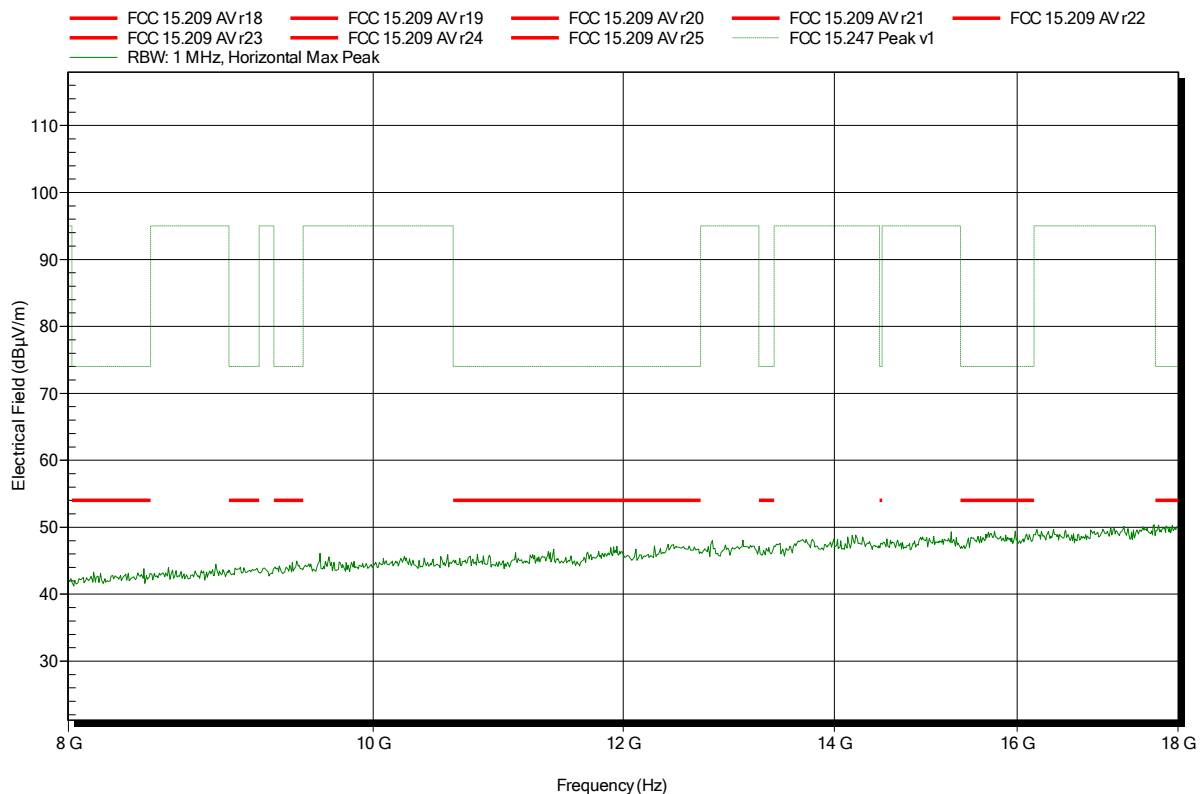


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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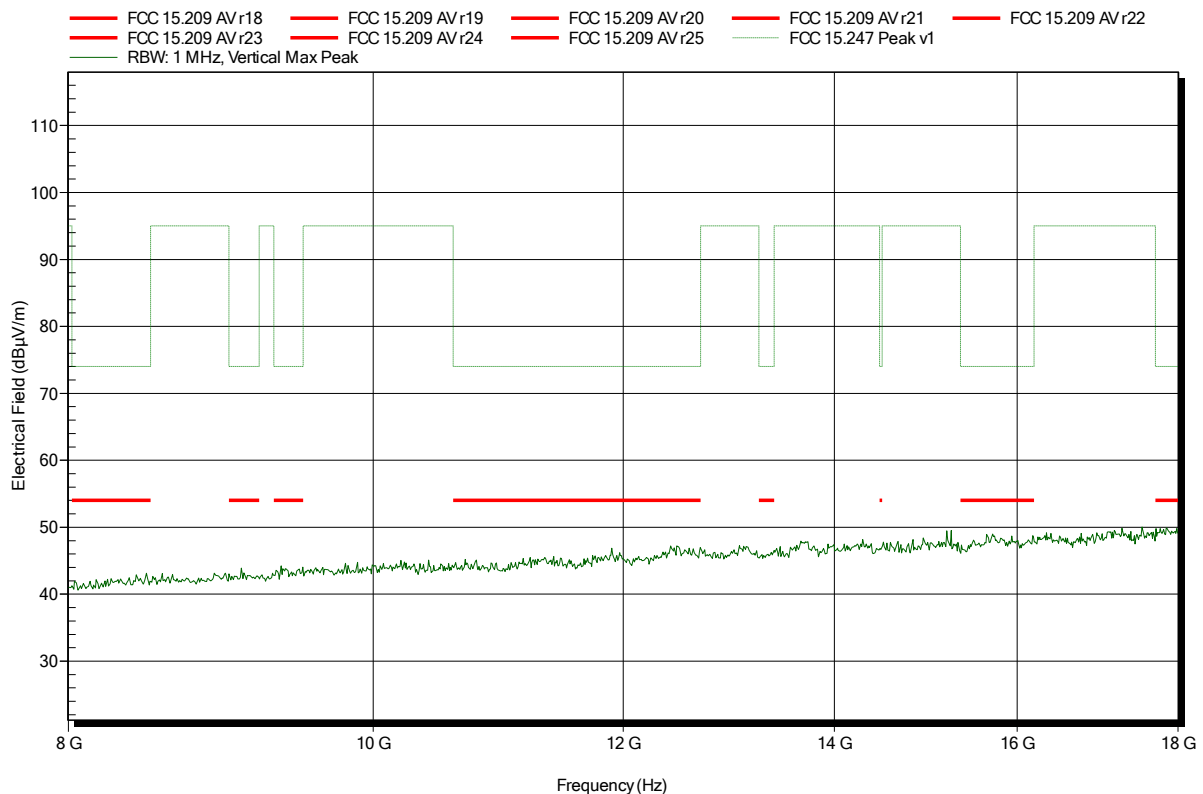


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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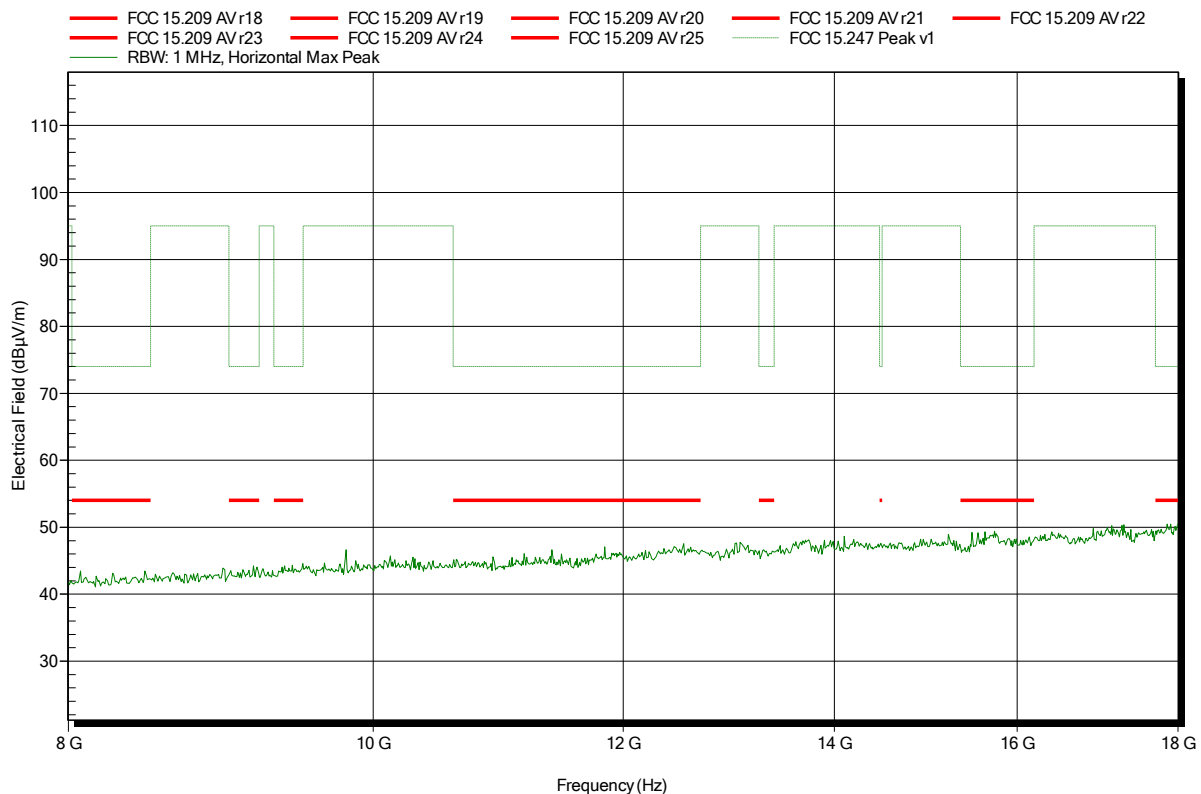


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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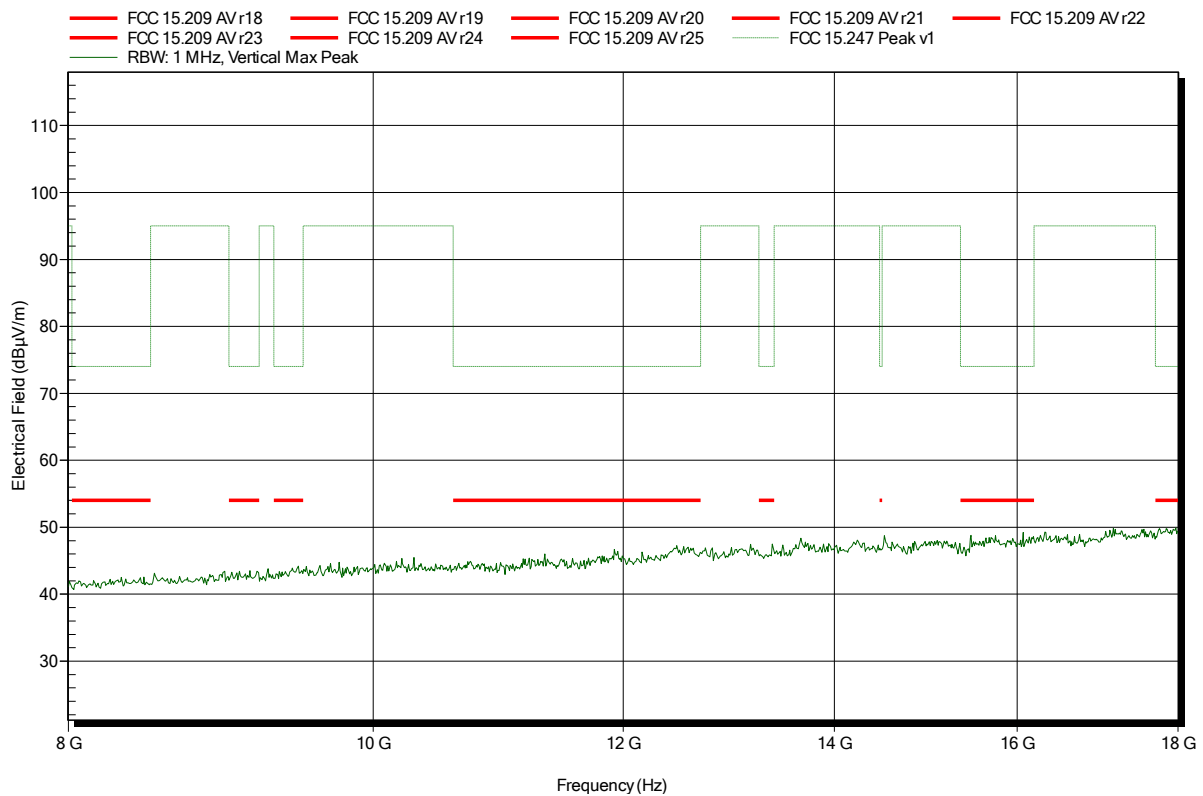


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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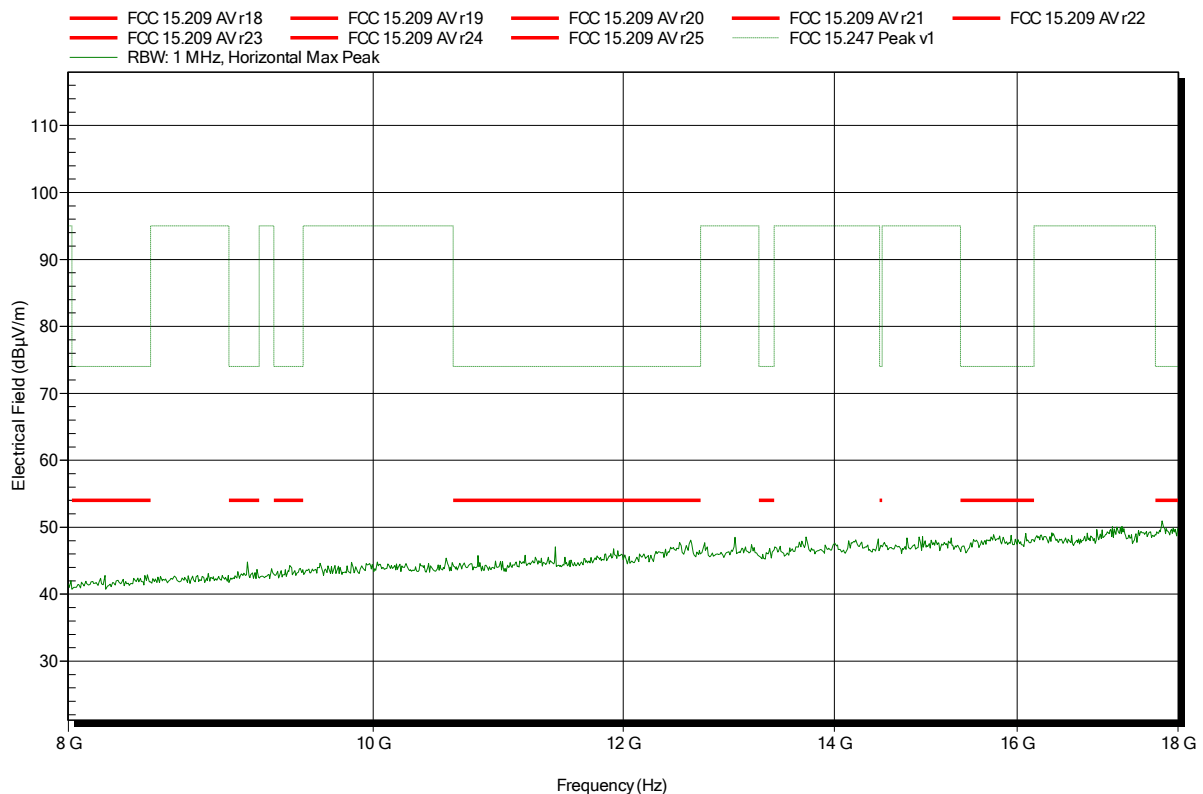


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
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 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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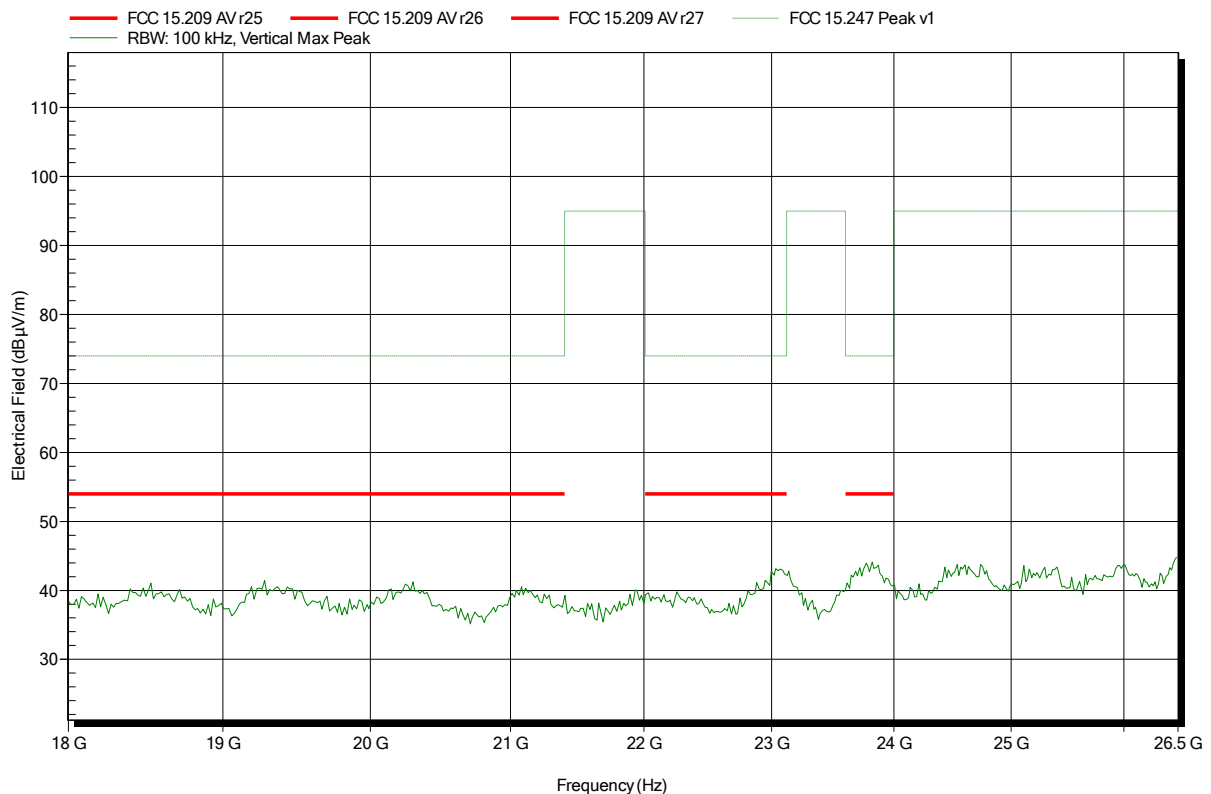


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 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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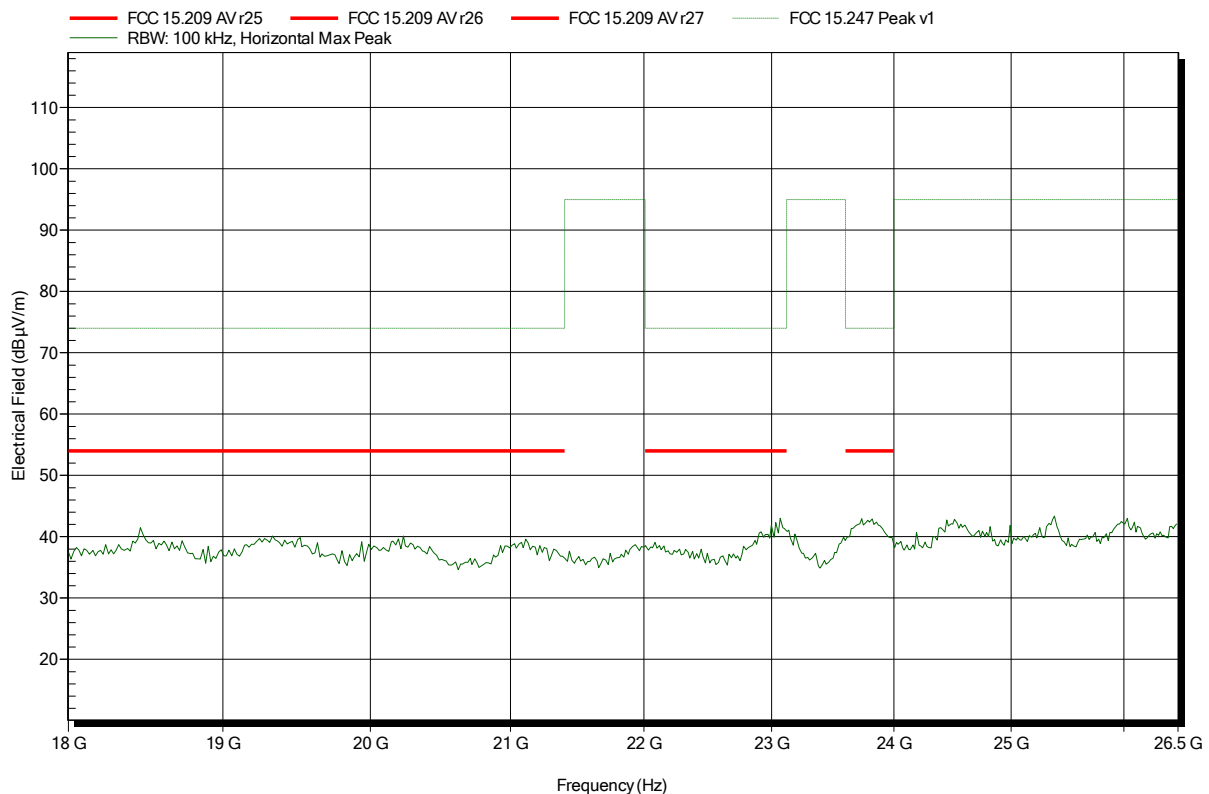


Spurious emissions according to FCC part 15 Subpart C § 15.247

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Applicant:	Atmel Automotive GmbH
EUT Name:	ATSAMR21 Smart Connect Module with solder mount footprint
Model:	ATSAMR21G18-MR210UA
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Handrik
Test Conditions:	Tnom: 22°C, Vnom: 5 V DC (USB)
Antenna:	Rohde & Schwarz HL 025, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; 2405 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
Test Date:	2015-05-18
Note:	EUT horizontal, ant.: A2 -90° horizontal

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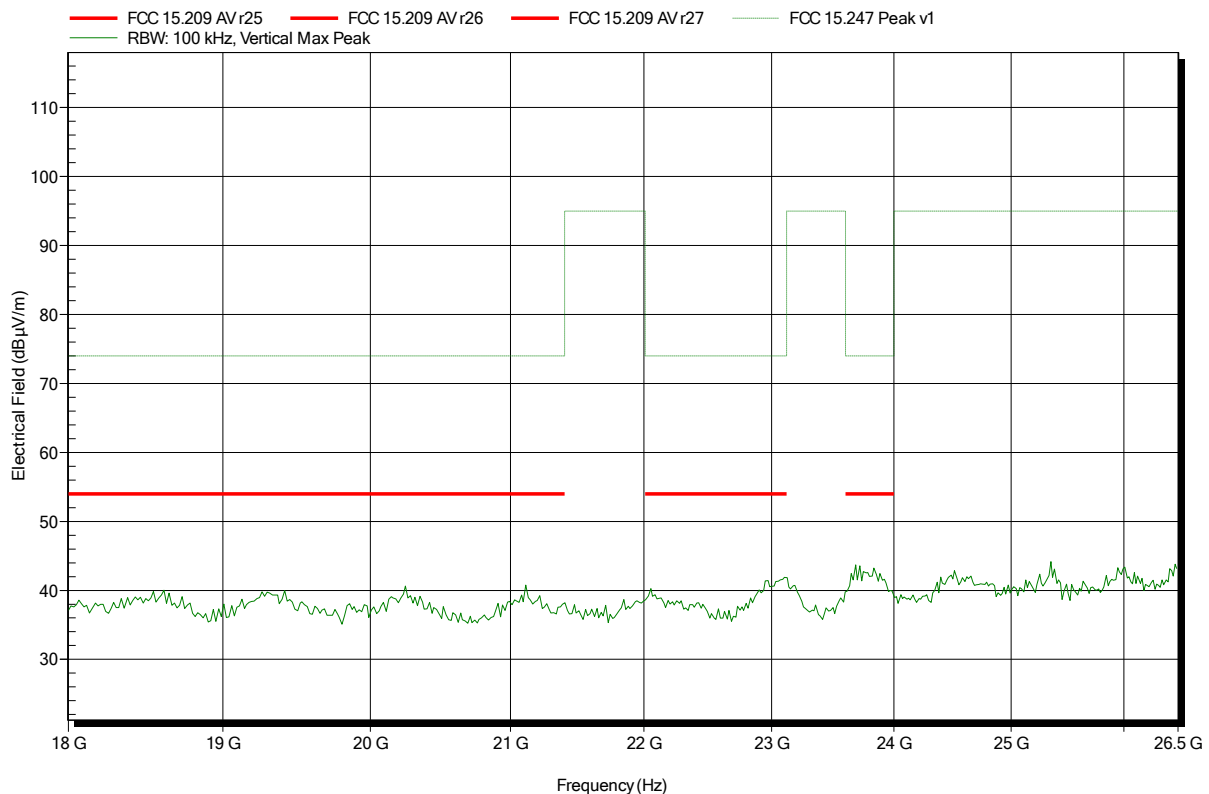


Spurious emissions according to FCC part 15 Subpart C § 15.247

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Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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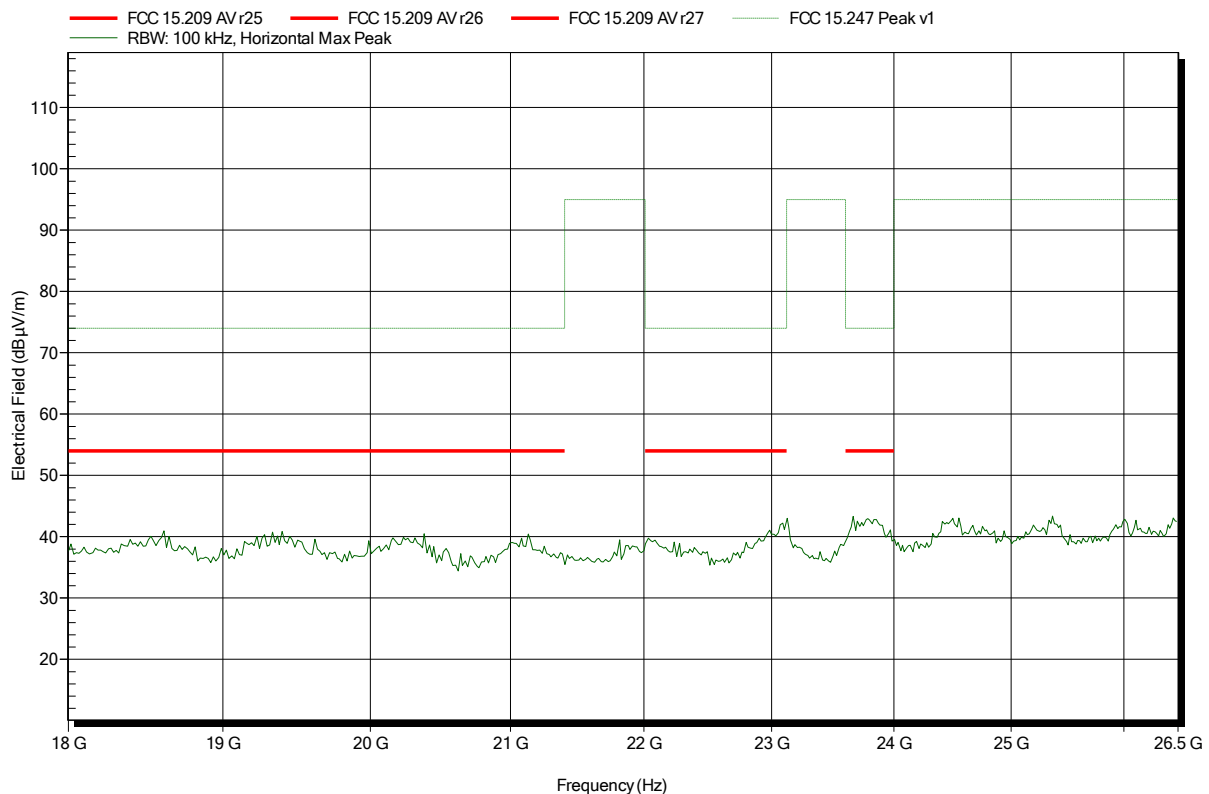


Spurious emissions according to FCC part 15 Subpart C § 15.247

Project number: G0M-1505-4730

Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
 Model: ATSAMR21G18-MR210UA
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Handrik
 Test Conditions: Tnom: 22°C, Vnom: 5 V DC (USB)
 Antenna: Rohde & Schwarz HL 025, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; 2450 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
 Note: EUT horizontal, ant.: A2 -90° horizontal

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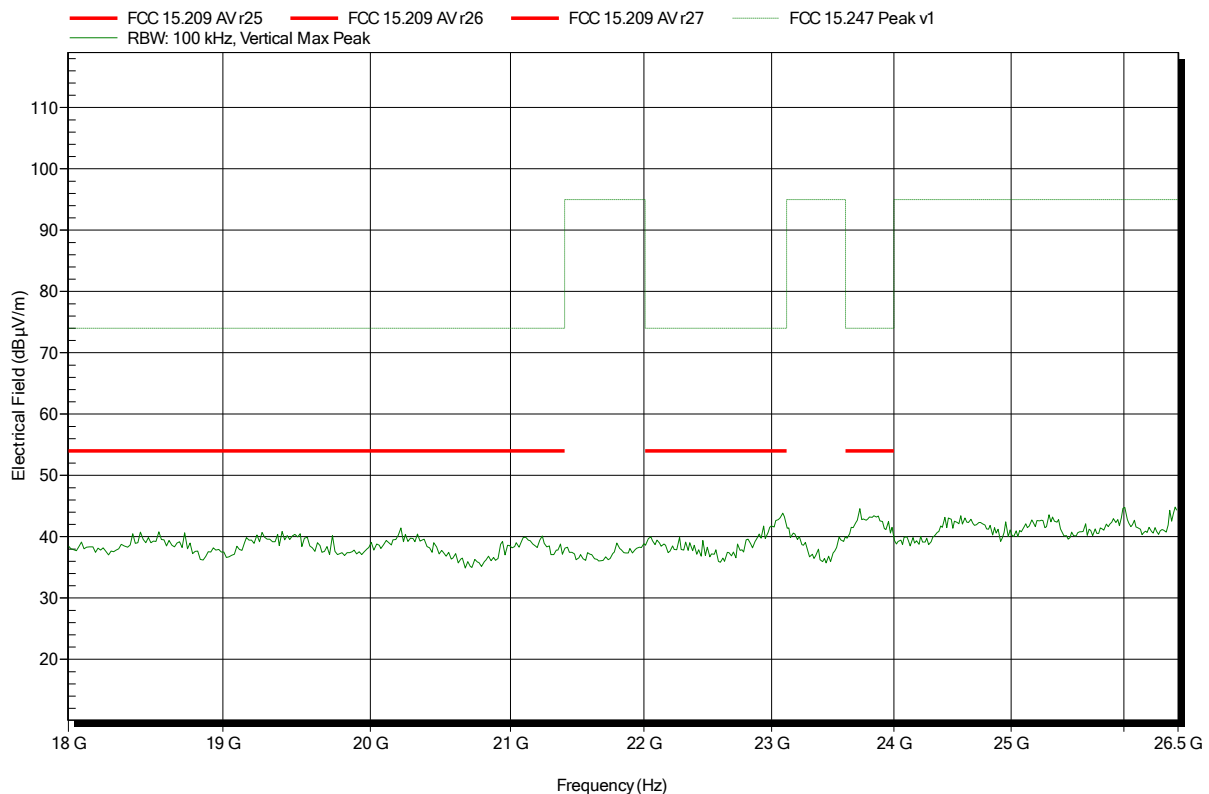


Spurious emissions according to FCC part 15 Subpart C § 15.247

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Applicant: Atmel Automotive GmbH
 EUT Name: ATSAMR21 Smart Connect Module with solder mount footprint
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 Mode: TX; 2480 MHz, PRSB, 250kbps, "Quarter-Wave" ant.: A2
 Test Date: 2015-05-18
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