RADIO REPORT

FCC 47 CFR Part 15E

Unlicensed National Information Infrastructure Devices in the 5 GHz Bands

Report Reference No	G0M-1810-7783-TFC407WF-V01
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Panasonic Industrial Devices Europe GmbH
Address	Zeppelinstr. 19 21337 Lüneburg GERMANY
Test Specification	According to FCC rules
Standard	47 CFR Part 15E
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model(s)	ENWF9201A1EF
Additional Model(s)	None
Brand Name(s)	PAN9026
Hardware Version(s)	05
Software Version(s)	01
FCC-ID	T7V-9026
Test Result	**PASSED**

Possible test case verdicts:	
required by standard but not tested	N/T
not required by standard	N/R
not applicable to EUT	N/A
test object does meet the requirement	P(PASS)
test object does not meet the requirement	F(FAIL)

Testing:	
Test Lab Temperature	20 - 23 °C
Test Lab Humidity	32 – 38 %
Date of receipt of test item	2018-09-27

Report:		
Compiled by	Toralf Jahn	
Tested by (+ signature) (Responsible for Test)	Toralf Jahn	T. J .....
Approved by (+ signature) (Head of Lab)	Christian Weber	C. Weber .....
Date of Issue	2019-05-24	
Total number of pages	258	

General Remarks:

The test results presented in this report relate only to the object tested.

The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

Additional Comments:

ADDITIONAL VARIANTS

Additional Variants (not tested and not evaluated variants)		
Not-tested Variant	**Description**	
1	Product Type Description	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
	Model name	ENWF9208A1EF (multi region)
	Brand name	PAN9026
	Hardware Version	05
	Software Version	01
Comment: Those named additional variants above have not been tested. Those additional variants of the series have been declared by the manufacturer. The test report explicitly states that those variants were neither tested nor assessed nor evaluated.		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2019-05-24	Initial Release	

ABBREVIATIONS AND ACRONYMS

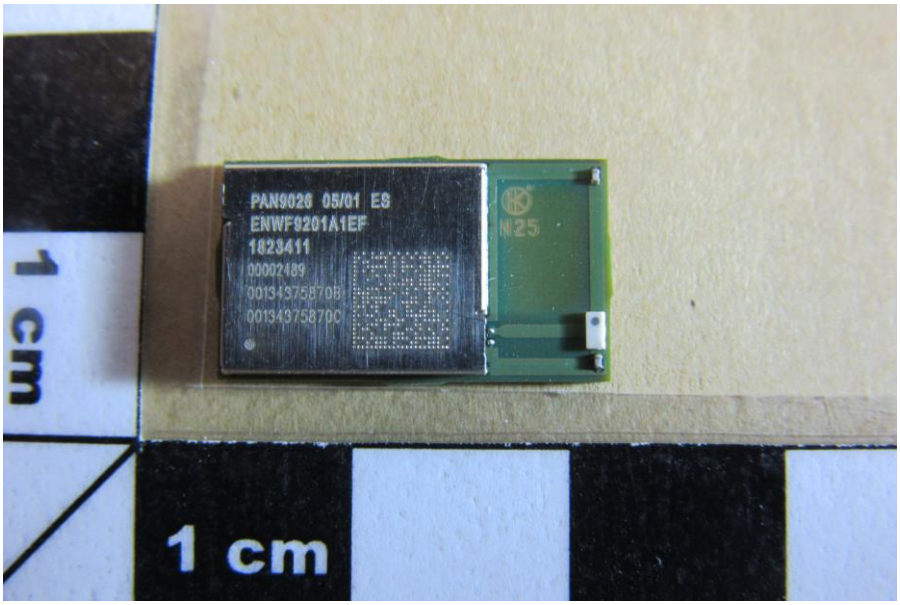
Acronyms	
Acronym	Description
BPSK	Binary Phase Shift Keying
EIRP	Equivalent Isotropic Radiated Power
EUT	Equipment Under Test
FCC	Federal Communications Commission
HT	High Throughput
IEEE 802.11	MAC and PHY Layer for WiFi
OFDM	Orthogonal Frequency Division Multiplexing
QAM	Quadrature Amplitude Modulation
QPSK	Quadrature Phase Shift Keying
RBW	Resolution bandwidth
RMS	Root mean square
TPC	Transmit Power Control
VBW	Video bandwidth
VHT	Very High Throughput

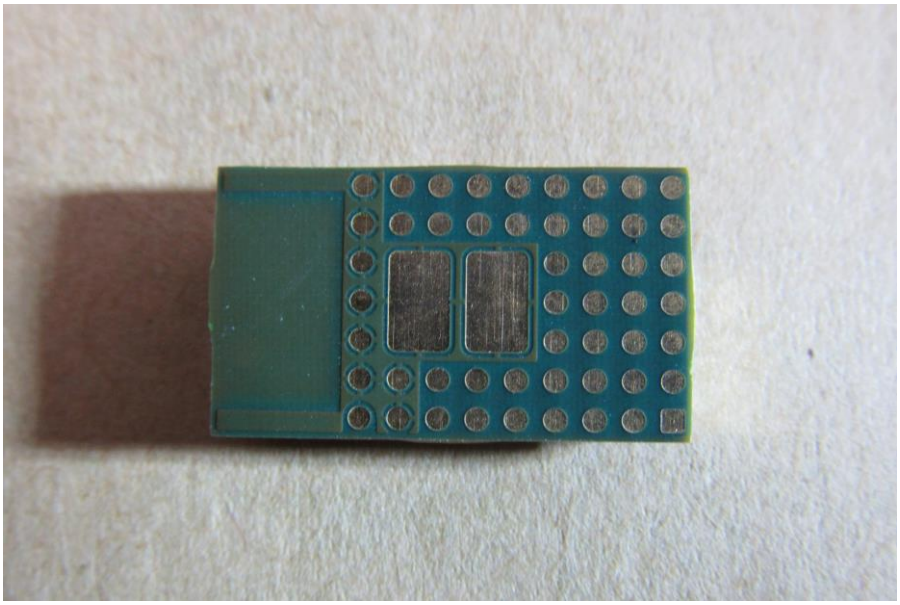
REPORT INDEX

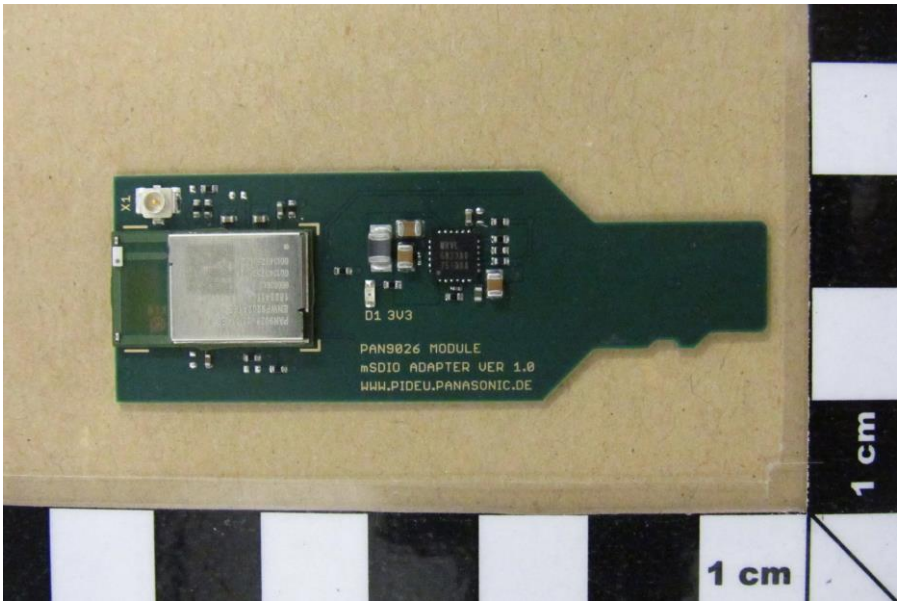
1 Equipment (Test Item) Under Test

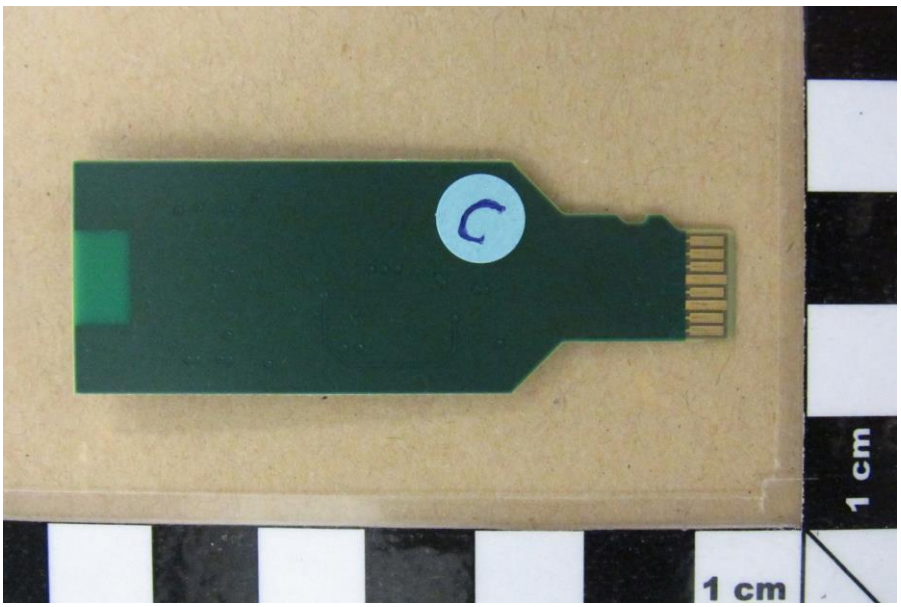
Description	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module	
Model	ENWF9201A1EF	
Additional Model(s)	None	
Brand Name(s)	PAN9026	
Serial Number(s)	1823411;00002129;00134375843B;F9201A1E;0501 (radiated) 1807211;00001040;0013436B110D;F9201A1E;0501 (conducted)	
Hardware Version(s)	05	
Software Version(s)	01	
FCC-ID	T7V-9026	
Equipment type	Radio Module	
Device type	Access point / Client without radar detection	
Radio type	Transceiver	
Assigned frequency bands	5150 - 5250 MHz 5250 - 5350 MHz 5470 - 5725 MHz 5725 - 5850 MHz	
Radio technology	IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11n (HT40)	
Modulation	BPSK, QPSK, 16-QAM, 64-QAM	
Number of antenna ports	1	
Transmit power control	No	
Antenna	Type	Integrated
	Model	ANT162442DT-2001A2
	Manufacturer	TDK
	Gain	+1.5 dBi
Supply Voltage	V_{NOM}	3.3 VDC
	V_{MIN}	3.0 VDC
	V_{MAX}	3.47 VDC
Operating Temperature	T_{NOM}	25 °C
	T_{MIN}	-30 °C
	T_{MAX}	85 °C
Battery supply	No	
AC/DC-Adaptor	Model	N/A
	Vendor	N/A
	Input	N/A
	Output	N/A
Manufacturer	Panasonic Industrial Devices Europe GmbH Zeppelinstr. 19 21337 Lüneburg GERMANY	

1.1 Photos – Equipment External

Module Top


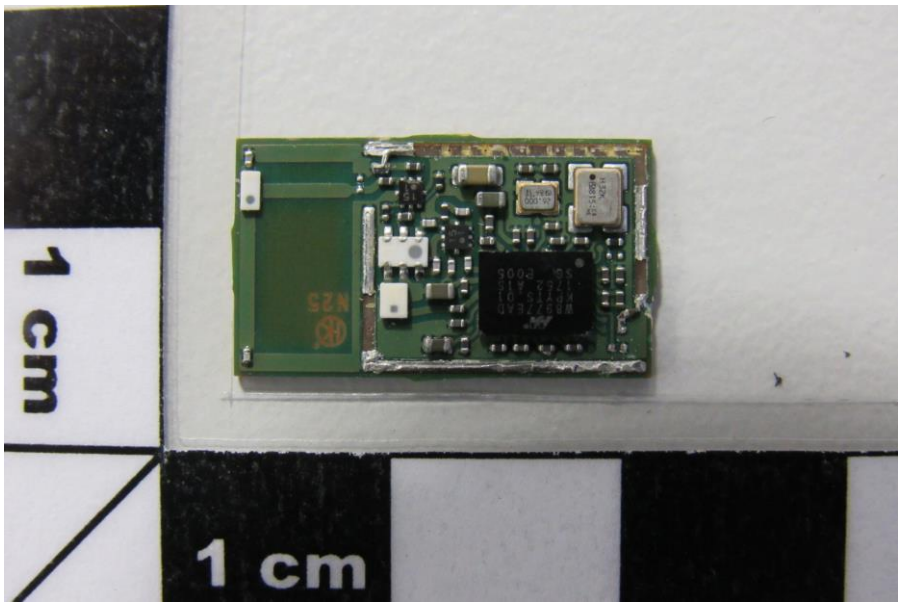
Module Bottom


Module with USB SDIO Converter Top


Module with USB SDIO Converter Bottom


Module with USB SDIO Converter and Wandboard

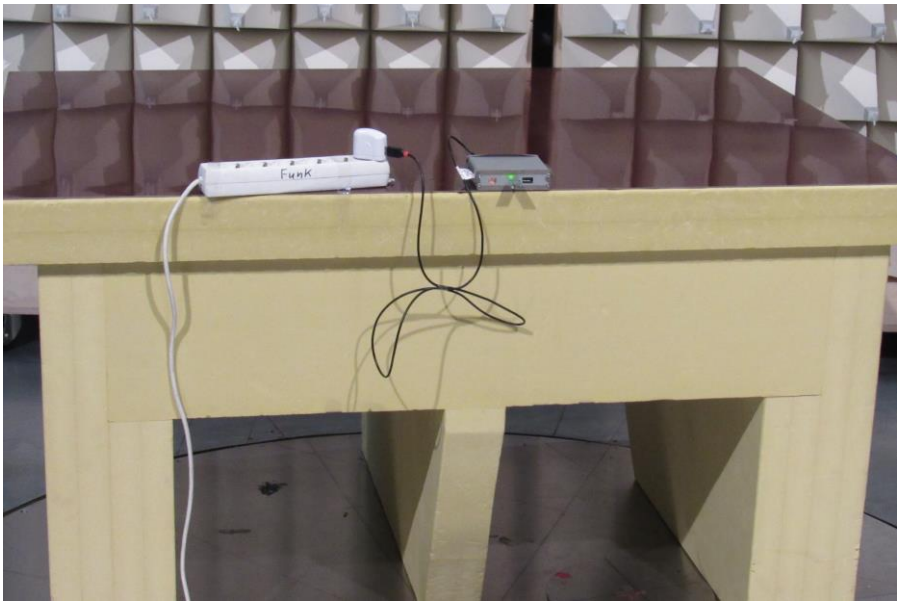

1.2 Photos – Equipment Internal

Module without Shielding


1.3 Photos – Test Setup

AC Power Line conducted

Radiated



1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Wandboard with i.MX6 Dual Core	Wandboard	WBIMX6U	
AE	USB SDIO Converter	Panasonic Industrial Devices Europe	USB_SDIO_V1.0	
CABL	USB cable		USB 2.0	
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
Comment:				

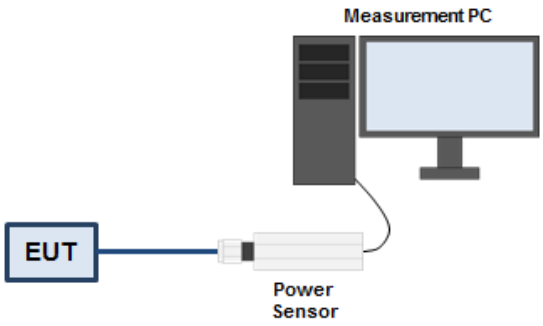
1.5 Test mode data rate evaluation

1.5.1 Information

Test Information	
Measurement Method	KDB 789033 E

1.5.2 Setup

Test Setup



1.5.3 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power sensor	ETS-Lindgren	7002-006	EF00935	2018-02	2019-02

1.5.4 Procedure

Test Procedure

1. EUT set to test mode on the first supported channel for each modulation and data rate
2. The conducted power is measured with a wide band power sensor
3. The power is measured for all data rates/modulations supported by the EUT
4. The data rate with the highest output power for each technology is selected for test mode

1.5.5 Results

OFDM - 5180 MHz							
Output power [dBm]							
6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
15.2	15.2	15.2	15.1	15.2	15.2	14.2	14.2

HT20 - 5180 MHz							
Output power [dBm]							
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
14.4	14.4	14.3	14.3	14.3	13.4	13.4	13.5

HT40 - 5190 MHz							
Output power [dBm]							
MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
13.4	13.3	13.3	13.4	13.4	12.5	12.5	12.5

1.6 Test mode duty cycle evaluation

1.6.1 Information

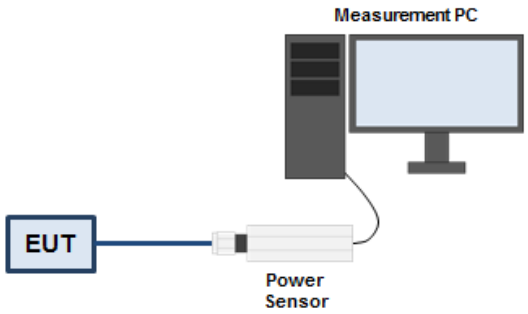
Test Information	
Measurement Method	ANSI C63.10 12.2

1.6.2 Requirements

Requirements	
Duty cycle	Duty cycle correction
≥ 98 %	No correction required
< 98 %	Correction required (10 x Log_{10}(1/DC)

1.6.3 Setup

Test Setup



1.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power sensor	ETS-Lindgren	7002-006	EF00935	2018-02	2019-02

1.6.5 Procedure

Test Procedure

1. EUT set to test mode
2. Sweep time is set long enough to capture at least 5 bursts
3. The maximum burst duration T_{ON} is measured
4. The minimum idle duration T_{OFF} is measured
5. The duty cycle is calculated by DC = T_{ON} / (T_{ON} + T_{OFF})
6. The duty cycle correction is calculated by DC = 10 x Log_{10}(T_{ON} / (T_{ON} + T_{OFF}))

1.6.6 Results

Duty Cycle Results				
Mode	Channel [MHz]	Data rate	Duty Cycle	Correction Factor [dB]
OFDM	5180	6 Mbps	98.8	N/R
HT20	5180	MCS 0	98.8	N/R
HT40	5190	MCS 0	98	N/R

1.7 Test Modes

Mode	Description
OFDM (IEEE 802.1a)	Mode = Transmit Modulation = BPSK Spreading = OFDM Bandwidth = 20 MHz Power setting = 16 Data rate = 6 Mbps
HT20 (IEEE 802.11n)	Mode = Transmit Modulation = BPSK Spreading = OFDM Bandwidth = 20 MHz Power setting (1 Simultaneous Tx) = 15 Data rate (1 Simultaneous Tx) = 6.5 Mbps MCS (1 Simultaneous Tx) = 0
HT40 (IEEE 802.11n)	Mode = Transmit Modulation = BPSK Spreading = OFDM Bandwidth = 40 MHz Power setting (1 Simultaneous Tx) = 14 Data rate (1 Simultaneous Tx) = 13 Mbps MCS (1 Simultaneous Tx) = 0
Comment: The above settings were found as worst case during pre-tests.	

1.8 Parameter settings of test software

The following power settings were used.

5 GHz – IEEE 802.11a/n																
802.11 Operation Mode					11a			11n 20M			11n 40M					
Data Rates					6M - 18M	24M - 36M	48M - 54M	MCS0 – MCS2	MCS3 – MCS4	MCS5 – MCS7	MCS0 – MCS2	MCS3 – MCS4	MCS5 – MCS7		0 = disable 1 = enable	
Country	Channel 20M	Channel 40M	Frequenz	Unit	TX Power									Unit	DFS	Passive Scan
US, EU, CA	36	38	5180	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	40		5200	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	44	46	5220	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	48		5240	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	52	54	5260	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	56		5280	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	60	62	5300	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	64		5320	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	100	102	5500	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	104		5520	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	108	110	5540	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	112		5560	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
US, EU	116	118	5580	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	120		5600	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	124	126	5620	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	128		5640	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
CA	116	118	5580	MHz	16	16	15	15	15	14	-	-	-	dBm	1	1
	120		5600	MHz	-	-	-	-	-	-	-	-	-	dBm	-	-
	124	126	5620	MHz	-	-	-	-	-	-	-	-	-	dBm	-	-
	128		5640	MHz	-	-	-	-	-	-	-	-	-	dBm	-	-
US, CA, EU	132	134	5660	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	136		5680	MHz	16	16	15	15	15	14	14	14	13	dBm	1	1
	140	-	5700	MHz	16	16	15	15	15	14	-	-	-	dBm	1	1
US, CA	149	151	5745	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	153		5765	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	157	159	5785	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	161		5805	MHz	16	16	15	15	15	14	14	14	13	dBm	0	0
	165	-	5825	MHz	16	16	15	15	15	14	-	-	-	dBm	0	0

1.9 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	36	5180
F2	Tx / Rx	40	5200
F3	Tx / Rx	48	5240
F4	Tx / Rx	36+40	5190
F5	Tx / Rx	44+48	5230
F6	Tx / Rx	52	5260
F7	Tx / Rx	56	5280
F8	Tx / Rx	64	5320
F9	Tx / Rx	52+56	5270
F10	Tx / Rx	60+64	5310
F11	Tx / Rx	100	5500
F13	Tx / Rx	120	5600
F15	Tx / Rx	140	5700
F16	Tx / Rx	100+104	5510
F17	Tx / Rx	124+128	5630
F18	Tx / Rx	132+136	5670
F19	Tx / Rx	149	5745
F20	Tx / Rx	157	5785
F21	Tx / Rx	165	5825
F22	Tx / Rx	149+153	5755
F23	Tx / Rx	157+161	5795

1.10 Sample emission level calculation

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

Reading:

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

A.F.:

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

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

Net:

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

Limit:

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

Limit (dBµV/m) = 20*log (µV/m)

Margin:

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

Example only:

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

1.11 Normative References

References	
Designator	Reference
KDB 789033	KDB 789033 D02 v02r01
ANSI C63.10	ANSI C63.10:2013

2 Result Summary

FCC 47 CFR Part 15E				
Product Standard Reference	**Requirement**	**Reference Method**	**Result**	**Remarks**
FCC 15.407(e)	6 dB bandwidth	KDB 789033 C.2	PASS	Only required in 5725 – 5850 MHz band.
FCC 15.407(a)(2),(a)(5),(h)(2)	26 dB bandwidth	KDB 789033 C.1	PASS	No limit. Basis for other measurements.
FCC 15.407(a)	Maximum output power	KDB 789033 E	PASS	
FCC 15.407(a)	Transmit power control	KDB 789033 E	N/R	TPC is required in 5250 – 5350 MHz and 5470 – 5725 MHz bands. TPC is not required for EIRP < 500 mW.
FCC 15.407(a)	Power spectral density	KDB 789033 F	PASS	
FCC 15.407(g)	Frequency stability	ANSI C63.10 6.8	PASS	
FCC 15.207	AC power line conducted emissions	ANSI C63.10 6.2	PASS	
FCC 15.407(b)	Transmitter radiated emissions	KDB 789033 G	PASS	
FCC 15.407(b)	Radiation pattern	KDB 789033 G	N/R	
Comment:				

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

3 Test Conditions and Results

3.1 Test Conditions and Results - 6 dB bandwidth

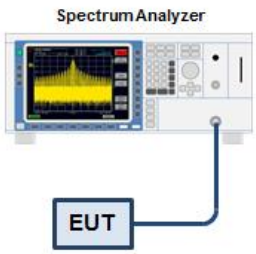
3.1.1 Information

Test Information	
Reference	FCC 15.407(e)
Measurement Method	KDB 789033 C.2
Operator	Toralf Jahn
Date	2018-12-20

3.1.2 Limits

Limits
≥ 500 kHz

3.1.3 Setup

Test Setup


3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2018-07	2019-07

3.1.5 Procedure

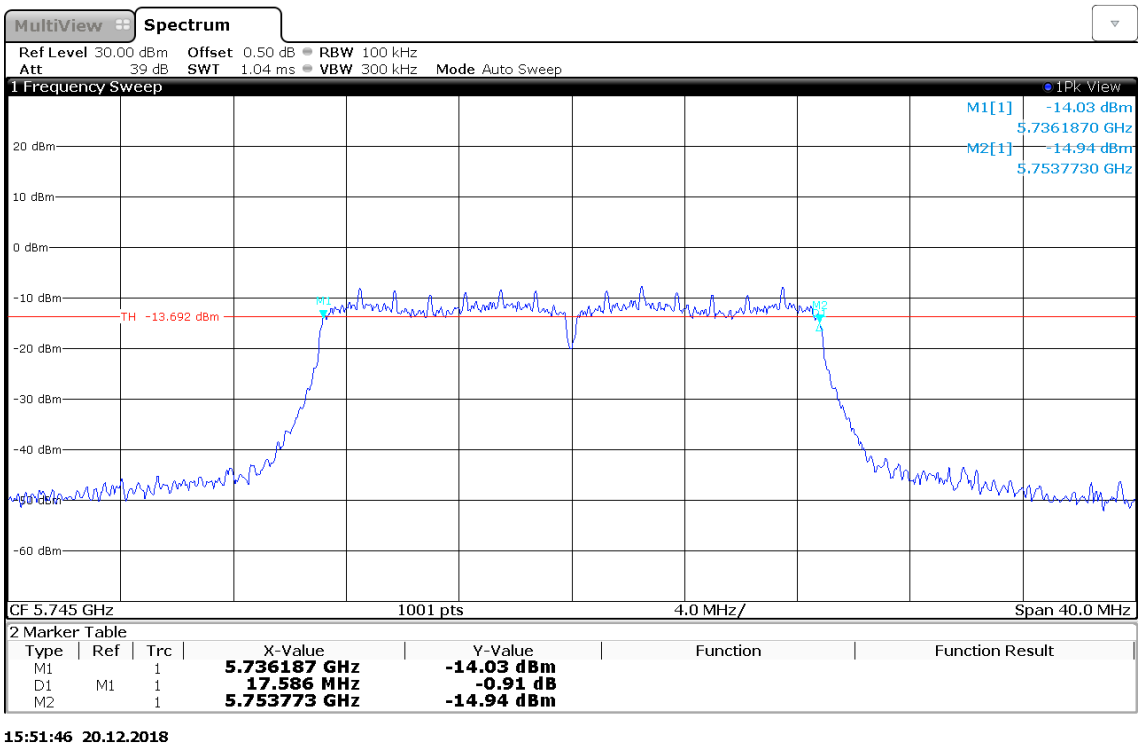
Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the nominal bandwidth 3. The resolution bandwidth is set to 100 kHz and video bandwidth ≥ 3 x RBW 4. The peak of the emission spectrum is determined 5. The left most frequency that corresponds to an emission level 6 dB below the maximum is determined 6. The right most frequency that corresponds to an emission level 6 dB below the maximum is determined 7. The 6 dB bandwidth is calculated from the two edge frequencies

3.1.6 Results

Test Results - 5725 - 5850 MHz					
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW [MHz]	Verdict
OFDM	149	5745	20	16.4	PASS
OFDM	157	5785	20	16.4	PASS
OFDM	165	5825	20	16.4	PASS
HT20	149	5745	20	17.6	PASS
HT20	157	5785	20	17.6	PASS
HT20	165	5825	20	17.6	PASS
HT40	149+153	5755	40	35.8	PASS
HT40	157+161	5795	40	35.8	PASS

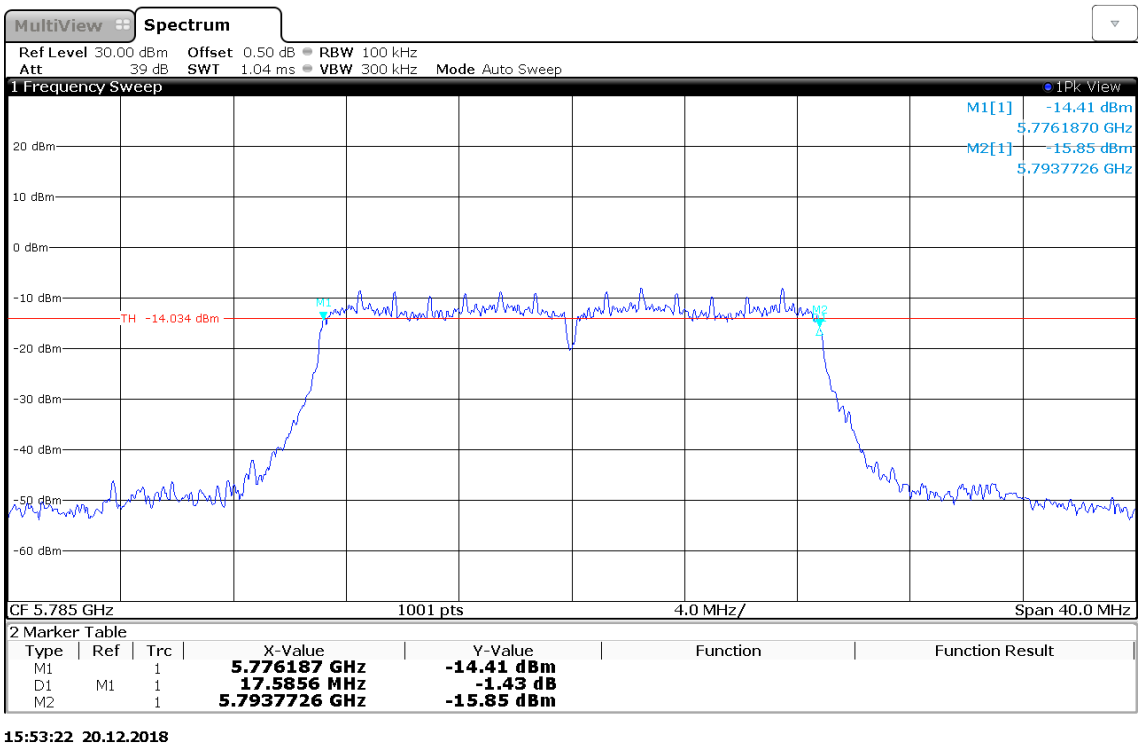
6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	HT20 - 5745 MHz



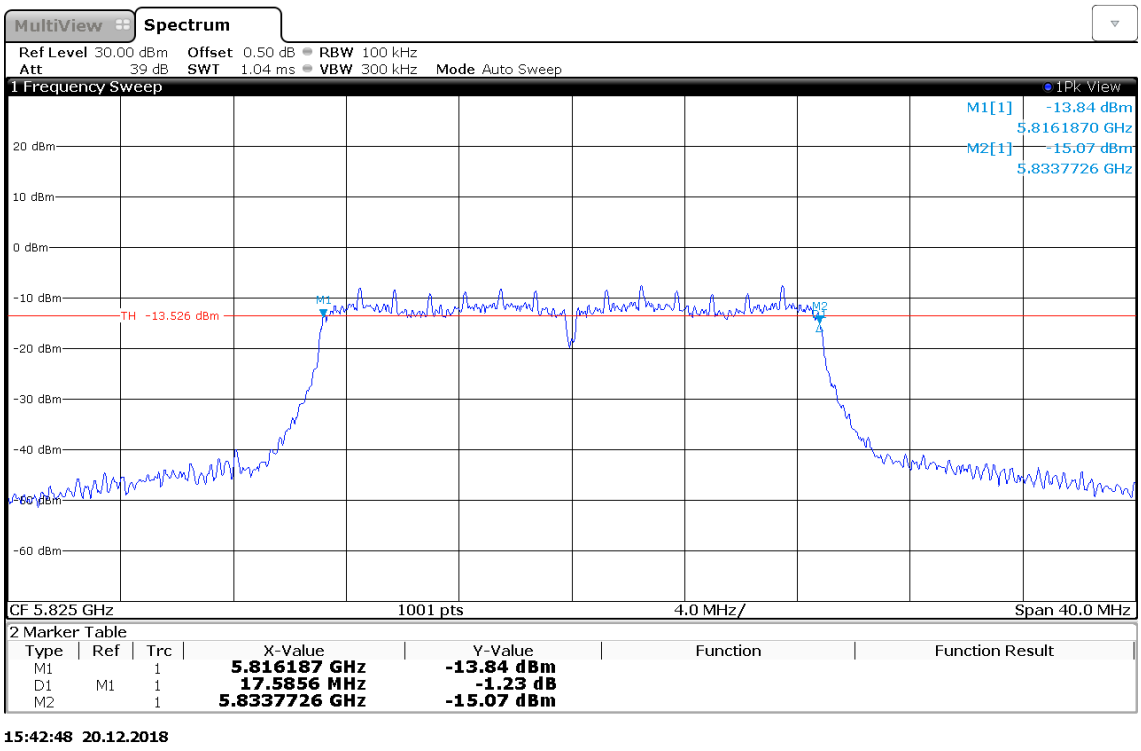
6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	HT20 - 5785 MHz



6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	HT20 - 5825 MHz



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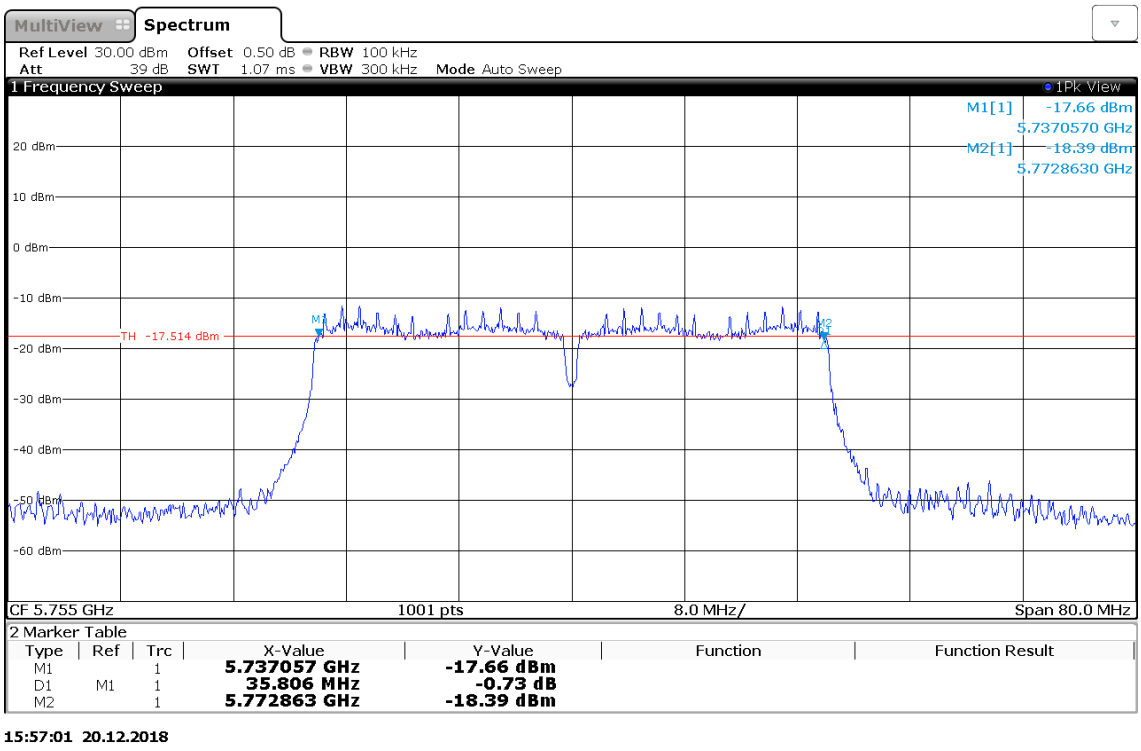
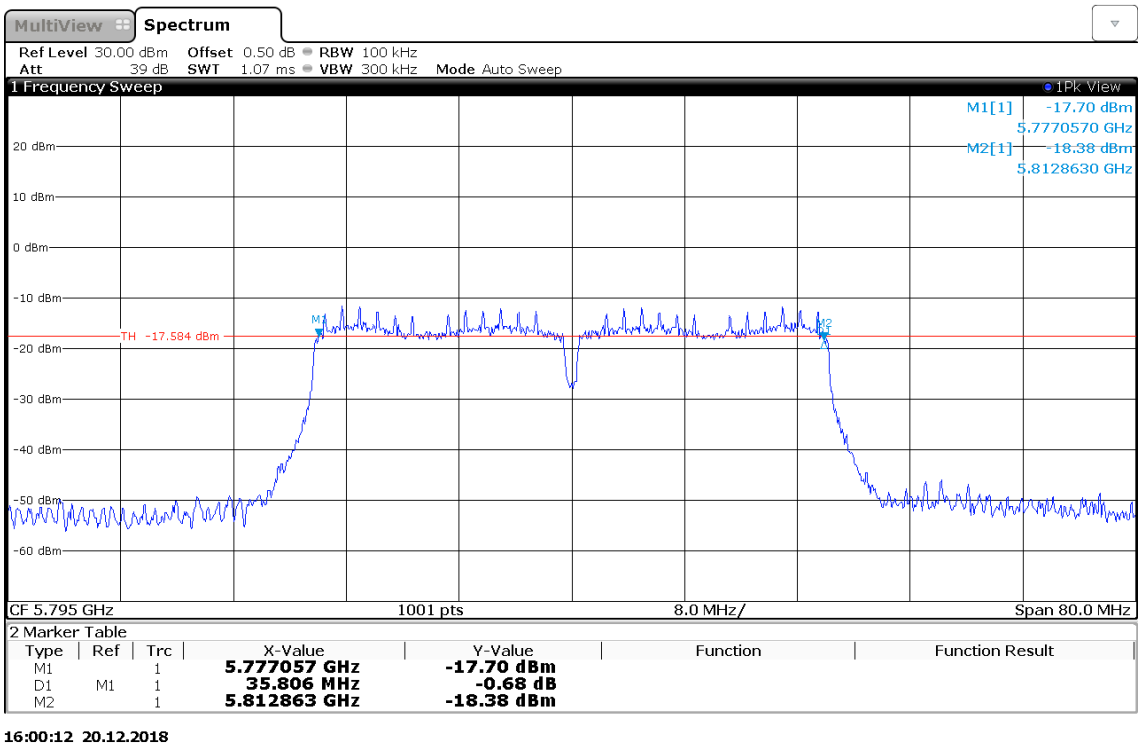
6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	HT40 - 5755 MHz



6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	HT40 - 5795 MHz



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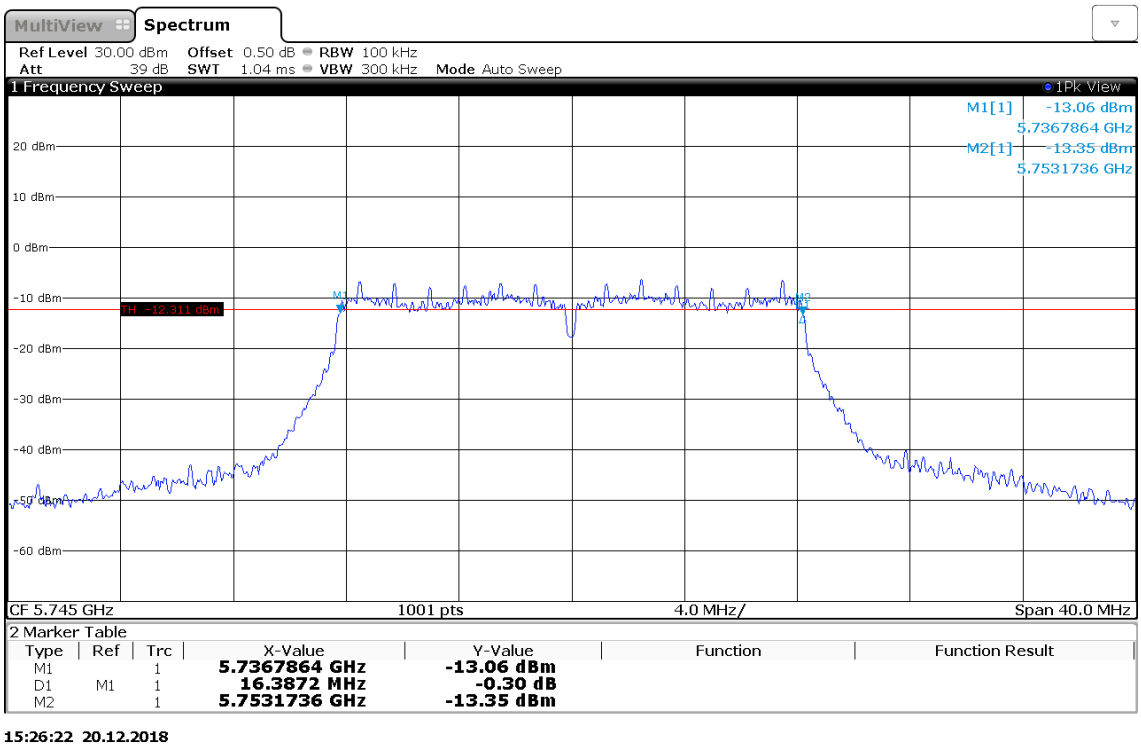
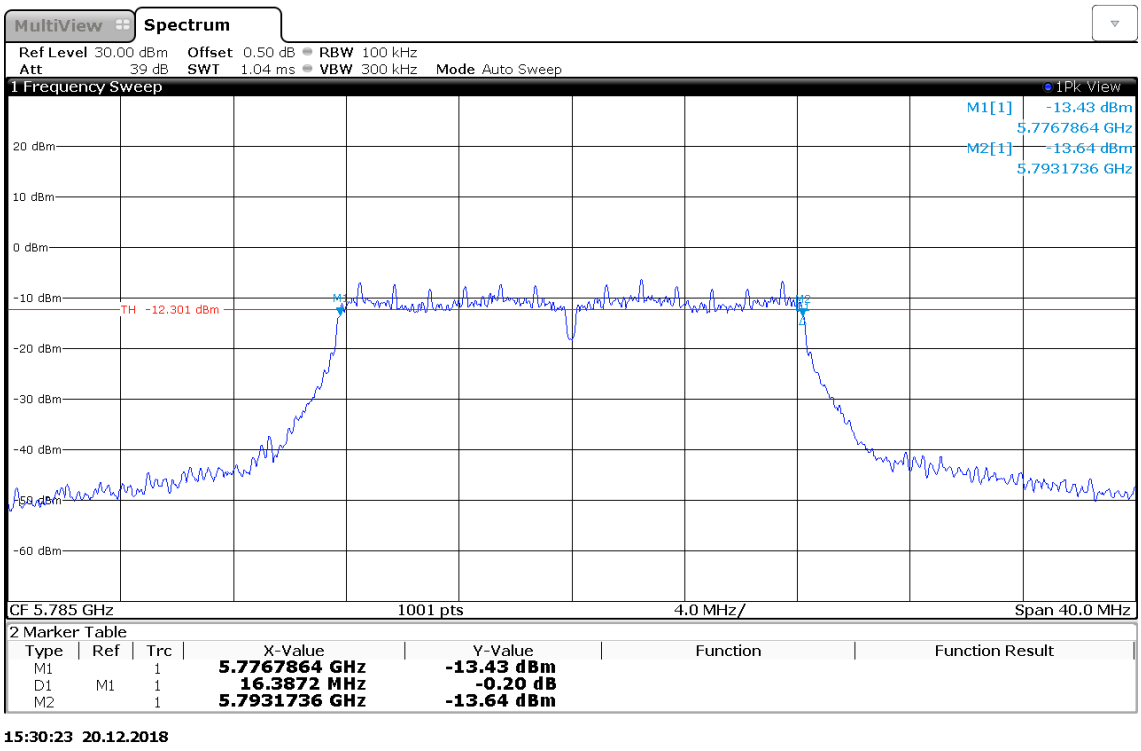
6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	OFDM - 5745 MHz



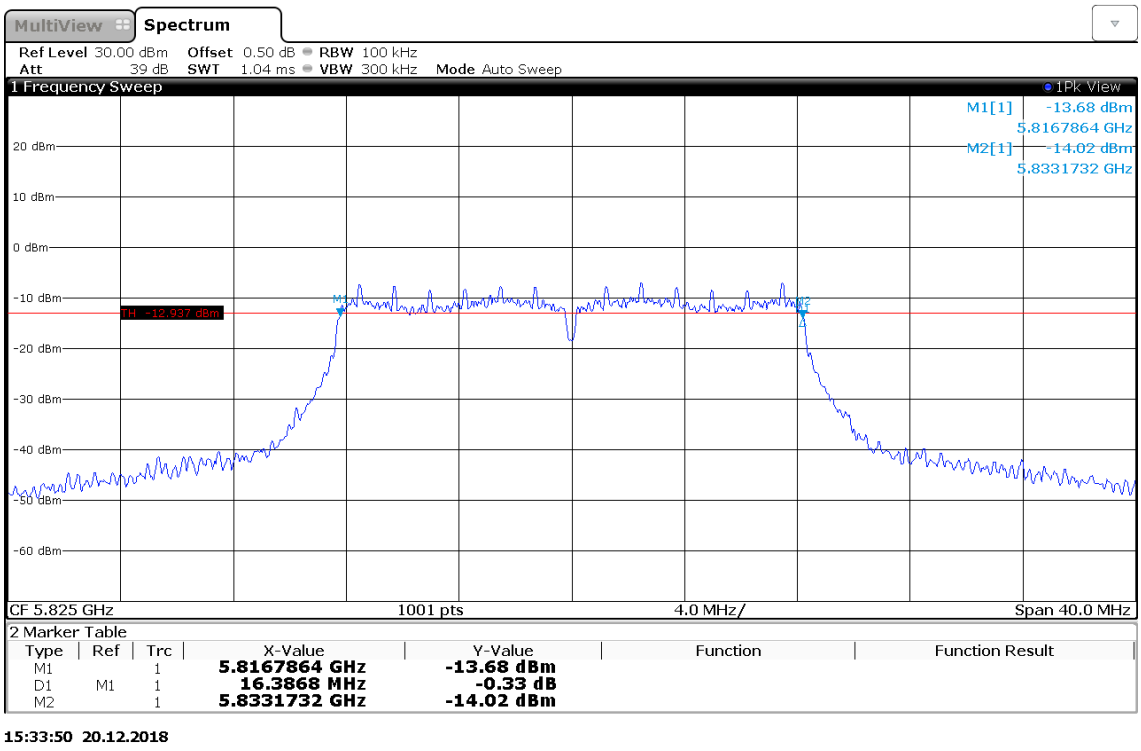
6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	OFDM - 5785 MHz



6 dB Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-20
Operating Conditions:	Tnom/Vnom
Mode:	OFDM - 5825 MHz



3.2 Test Conditions and Results - 26 dB bandwidth

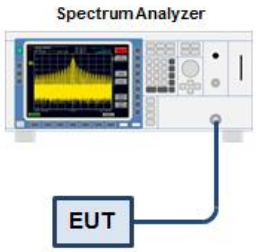
3.2.1 Information

Test Information	
Reference	FCC 15.407(a)(2),(a)(5),(h)(2)
Measurement Method	KDB 789033 C.1
Operator	Toralf Jahn
Date	2018-12-21

3.2.2 Limits

Limits
None, used to determine power limit and necessary DFS functionality

3.2.3 Setup

Test Setup


3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2018-07	2019-07

3.2.5 Procedure

Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission bandwidth 3. The resolution bandwidth is set to 1% of the emission bandwidth and video bandwidth ≥ RBW 4. The peak of the emission spectrum is determined 5. The left most frequency that corresponds to an emission level 26 dB below the maximum is determined 6. The right most frequency that corresponds to an emission level 26 dB below the maximum is determined 7. The 26 dB bandwidth is calculated from the two edge frequencies

3.2.6 Results

Test Results - 5150 - 5250 MHz – 26 dB BW					
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW Upper Edge [MHz]	BW [MHz]
OFDM	36	5180	20	N/A	19.5
OFDM	40	5200	20	N/A	19.6
OFDM	48	5240	20	5250.1	20.1
HT20	36	5180	20	N/A	20.3
HT20	40	5200	20	N/A	20.5
HT20	48	5240	20	5250.2	20.5
HT40	36+40	5190	40	N/A	41.5
HT40	44+48	5230	40	5252.2	42.9

Test Results - 5150 - 5250 MHz – 99% BW					
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW Upper Edge [MHz]	BW [MHz]
OFDM	48	5240	20	5248.3	16.7
HT20	48	5240	20	5248.8	17.7
HT40	44+48	5230	40	5248.1	36.4
Comment: If the Emission Bandwidth (26 dB) does not fall entierly in the band, Occupied Bandwidth (99 %) can be used instead to determine if DFS testing is required for this band.					

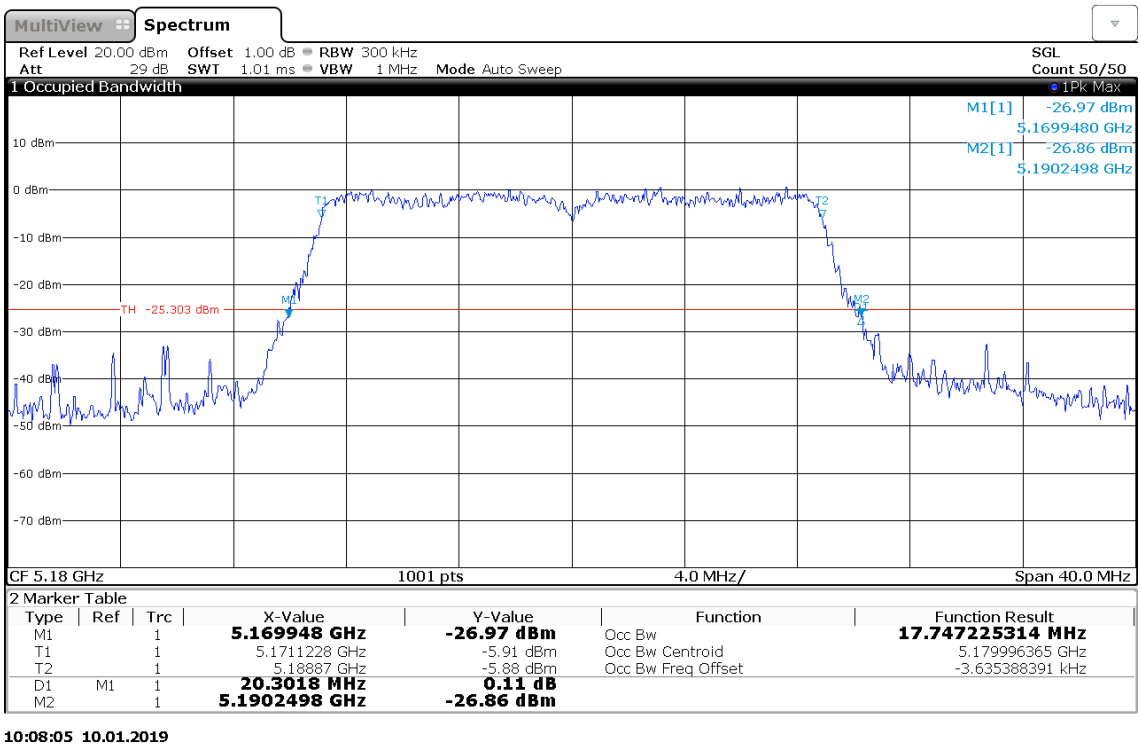
Test Results - 5250 - 5350 MHz - 26 dB BW				
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	BW [MHz]
OFDM	52	5260	20	19.7
OFDM	56	5280	20	19.9
OFDM	64	5320	20	19.9
HT20	52	5260	20	20.6
HT20	56	5280	20	20.1
HT20	64	5320	20	20.0
HT40	52+56	5270	40	41.6
HT40	60+64	5310	40	41.2

Test Results - 5470 - 5725 MHz – 26 dB BW				
Mode	Channel	Frequenzy [MHz]	Nominal BW [MHz]	BW [MHz]
OFDM	100	5500	20	19.5
OFDM	120	5600	20	19.9
OFDM	140	5700	20	19.5
HT20	100	5500	20	20.0
HT20	120	5600	20	20.2
HT20	140	5700	20	20.0
HT40	100+104	5510	40	41.6
HT40	124+128	5630	40	41.1
HT40	132+136	5670	40	41.2

Test Results - 5725 - 5850 MHz – 26 dB BW					
Mode	Channel	Frequenzy [MHz]	Nominal BW [MHz]	BW Lower Edge [MHz]	BW [MHz]
OFDM	149	5745	20	5735.1	19.7
OFDM	157	5785	20	N/A	19.7
OFDM	165	5825	20	N/A	19.7
HT20	149	5745	20	5734.9	20.3
HT20	157	5785	20	N/A	20.5
HT20	165	5825	20	N/A	20.1
HT40	149+153	5755	40	5734.0	41.8
HT40	157+161	5795	40	N/A	41.6

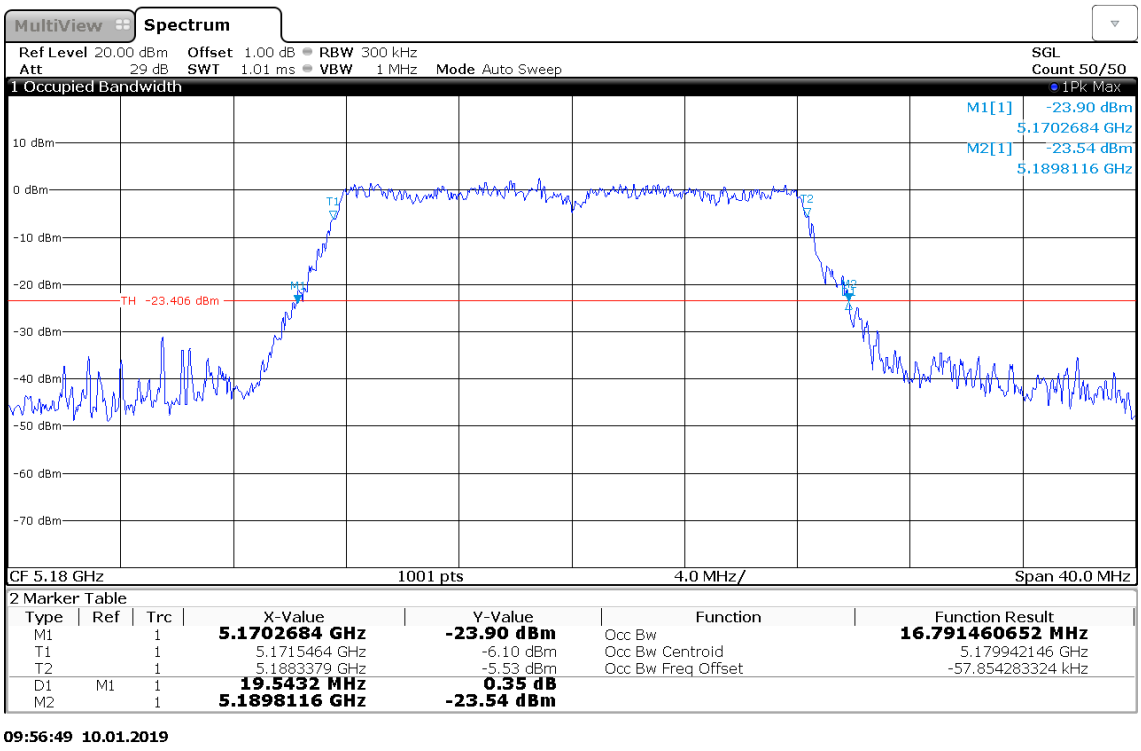
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5180 MHz - HT20



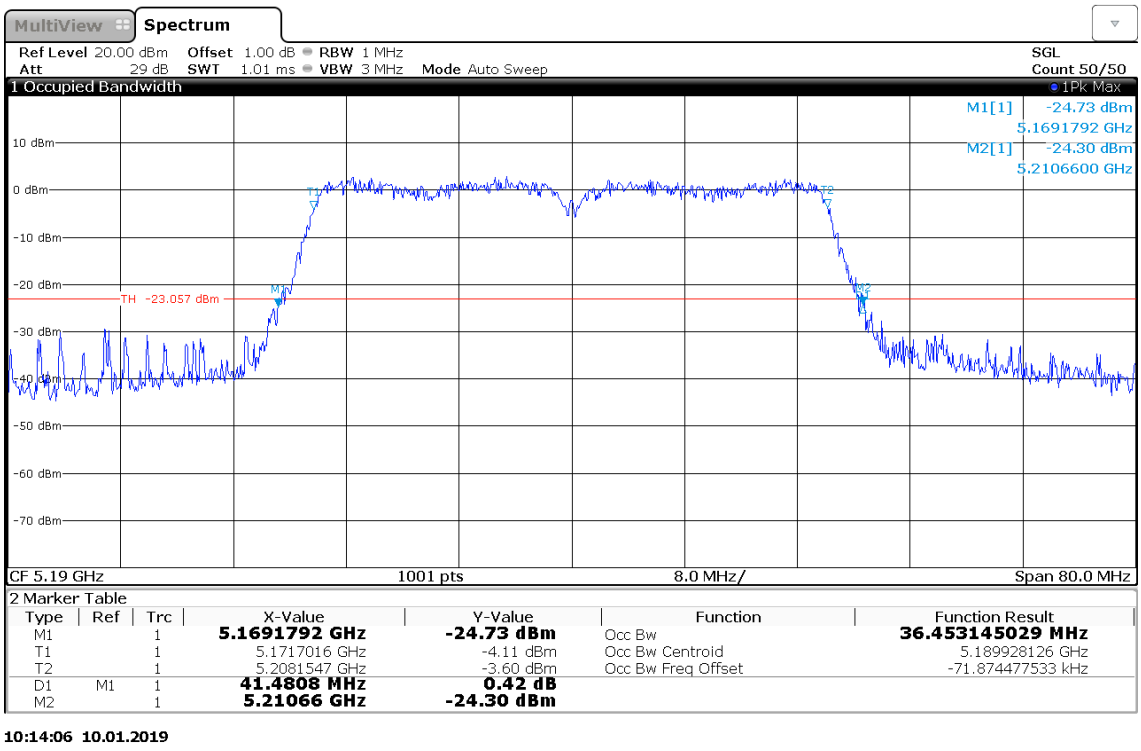
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5180 MHz - OFDM



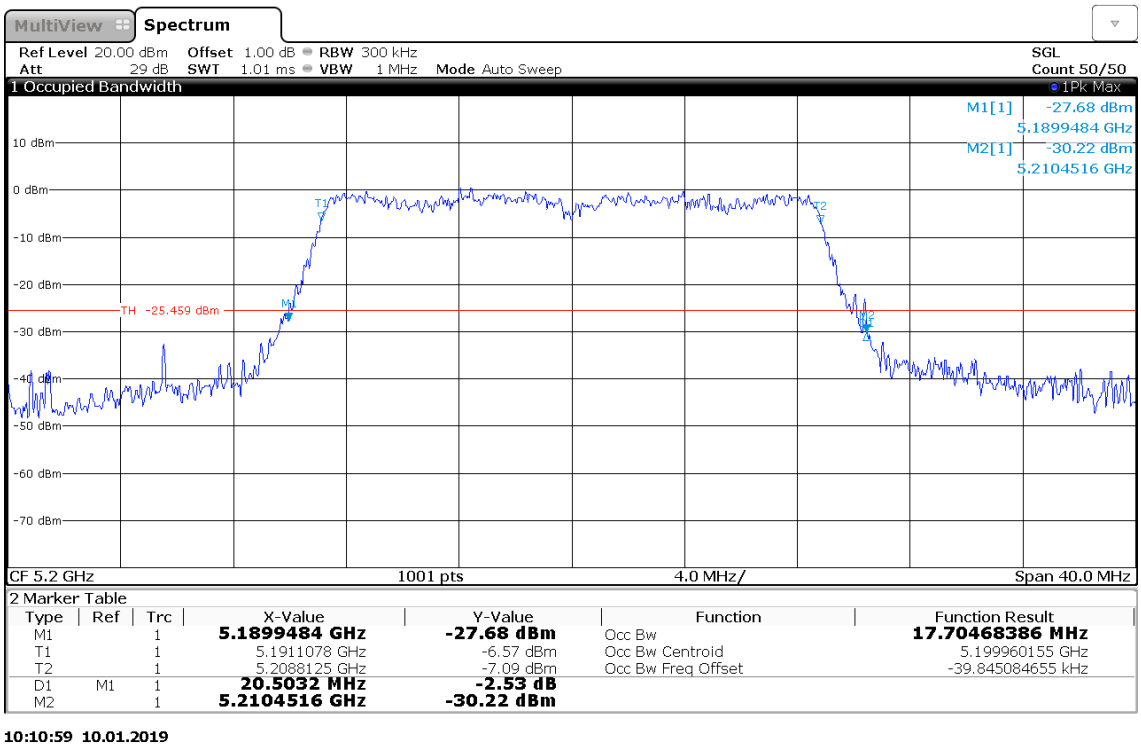
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5190 MHz - HT40



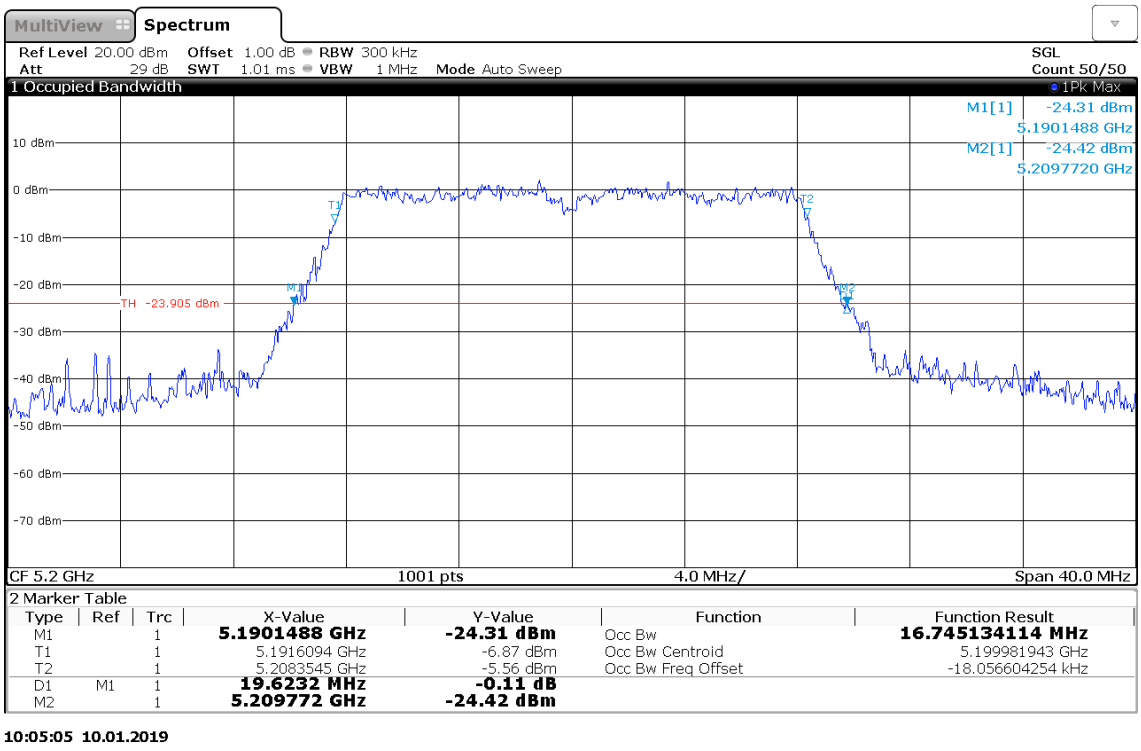
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5200 MHz - HT20



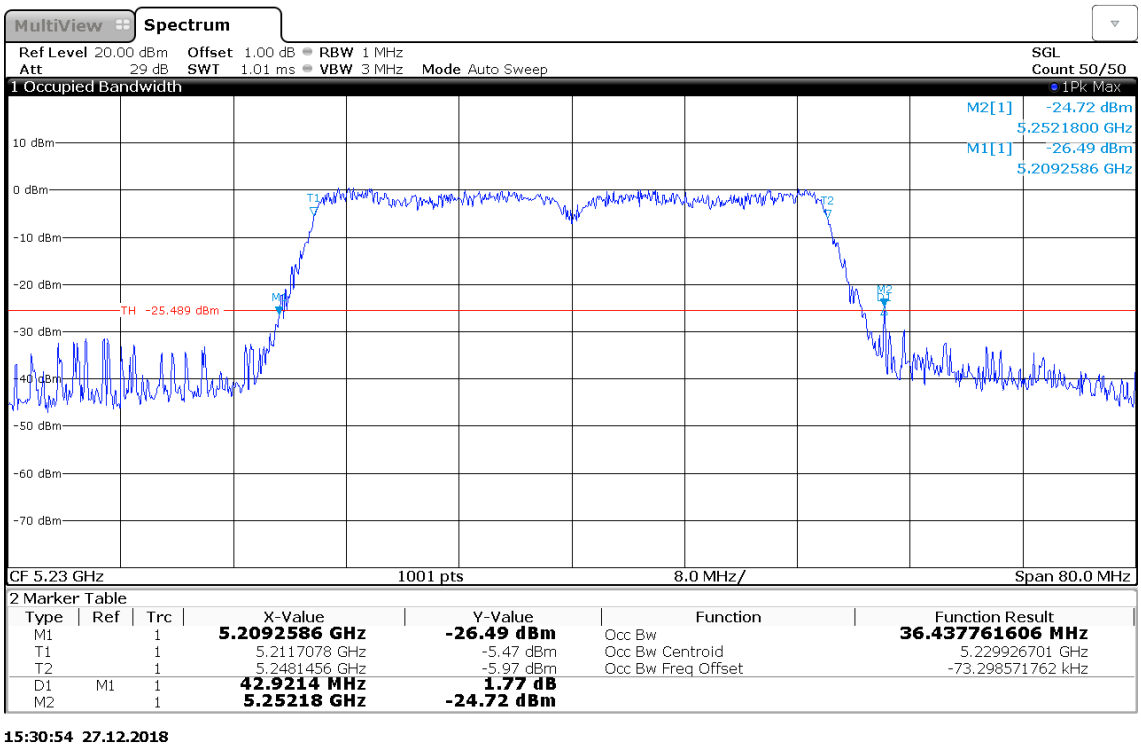
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5200 MHz - OFDM



Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5230 MHz - HT40



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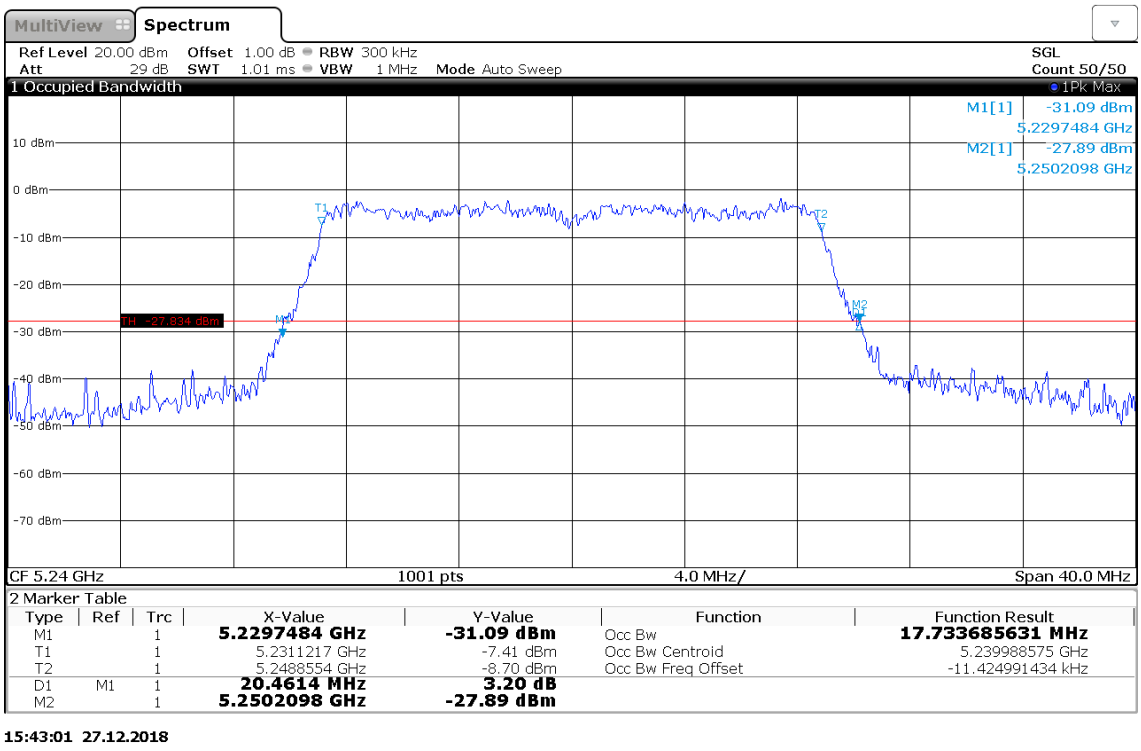
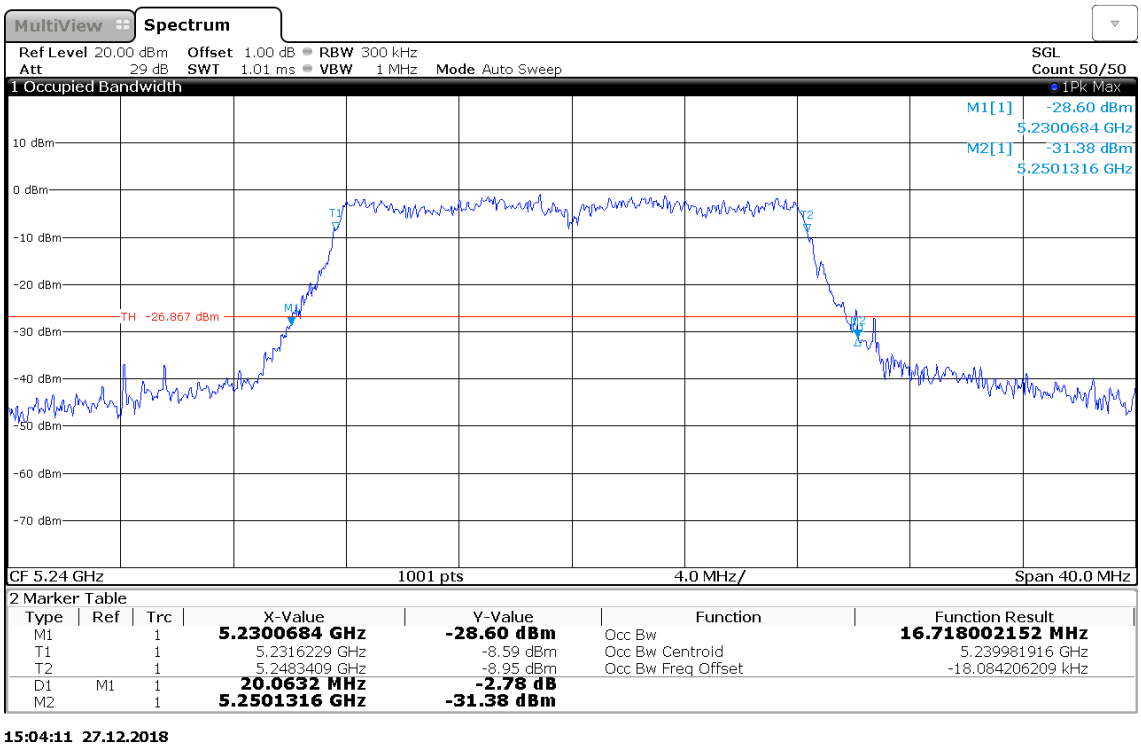
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5240 MHz - HT20



Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5240 MHz - OFDM



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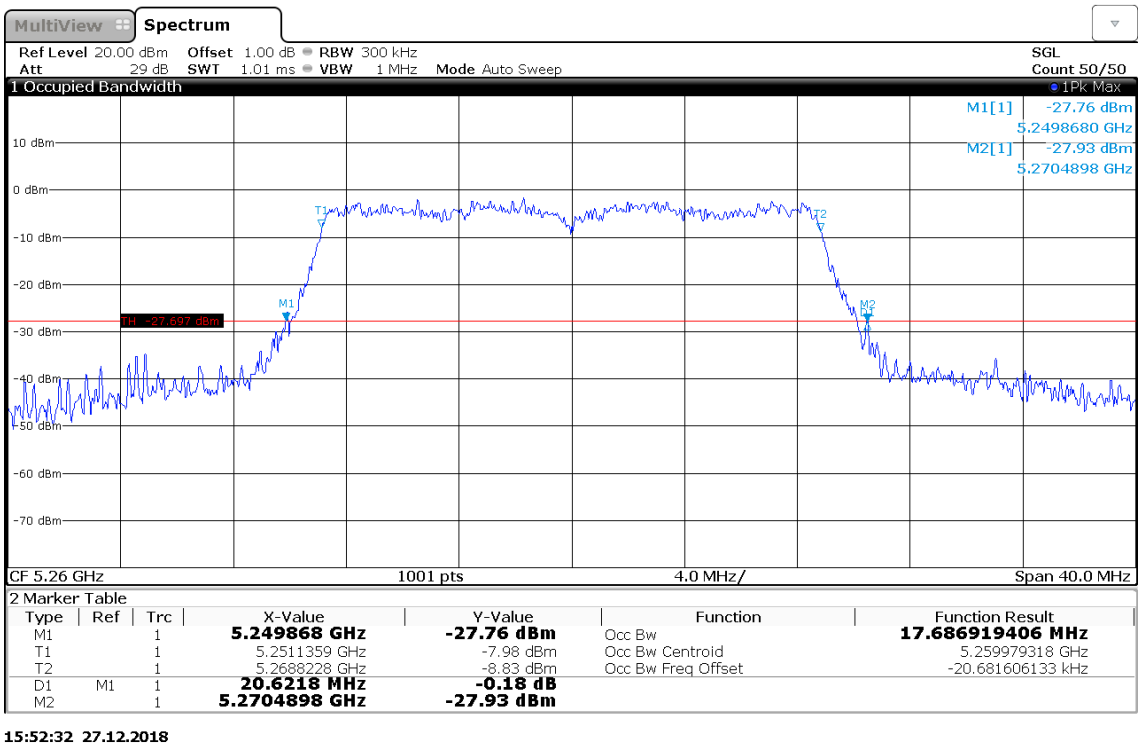
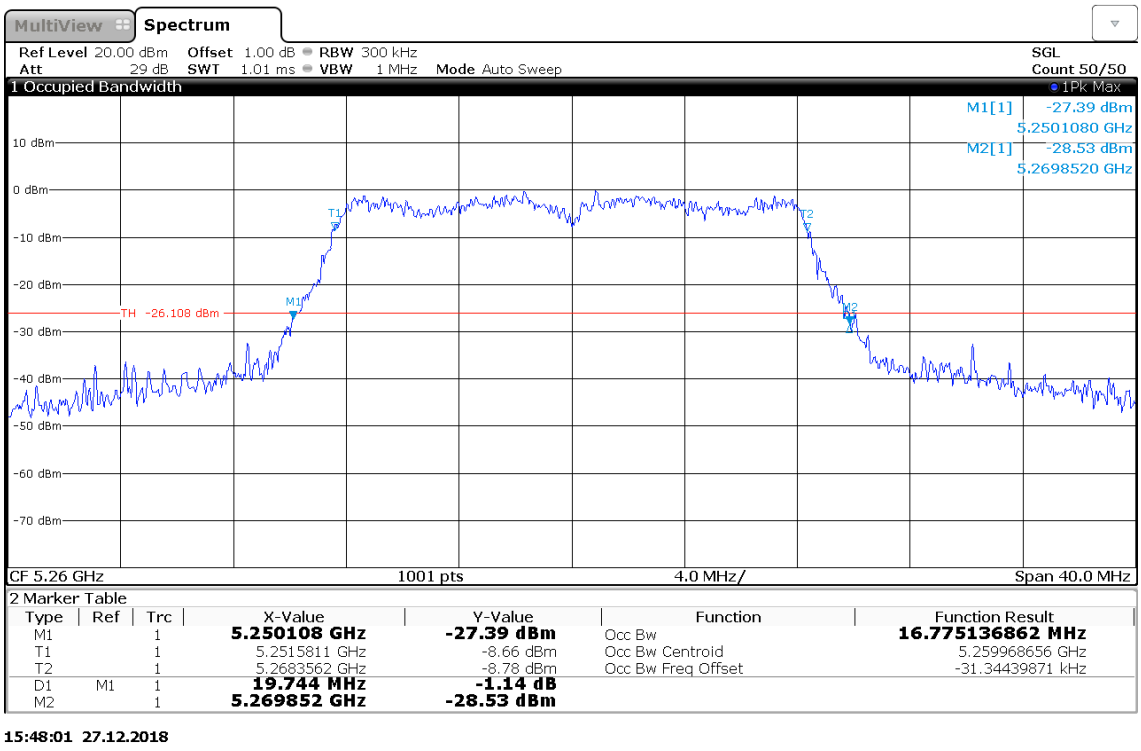
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5260 MHz - HT20



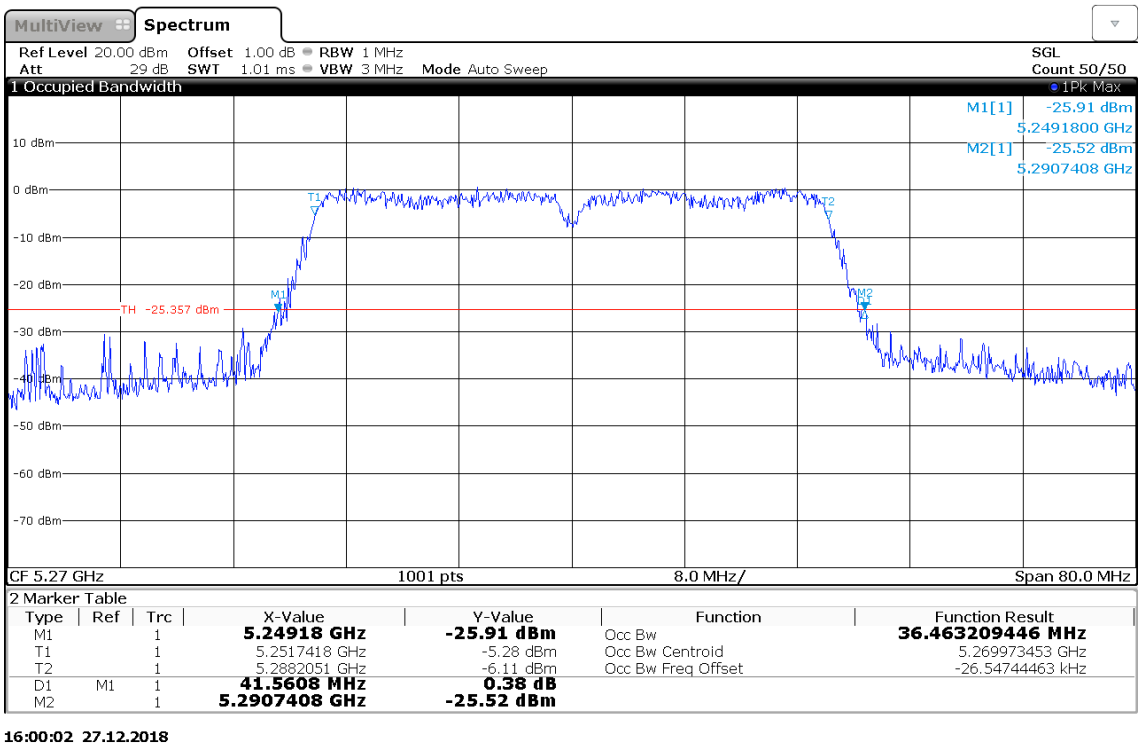
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5260 MHz - OFDM



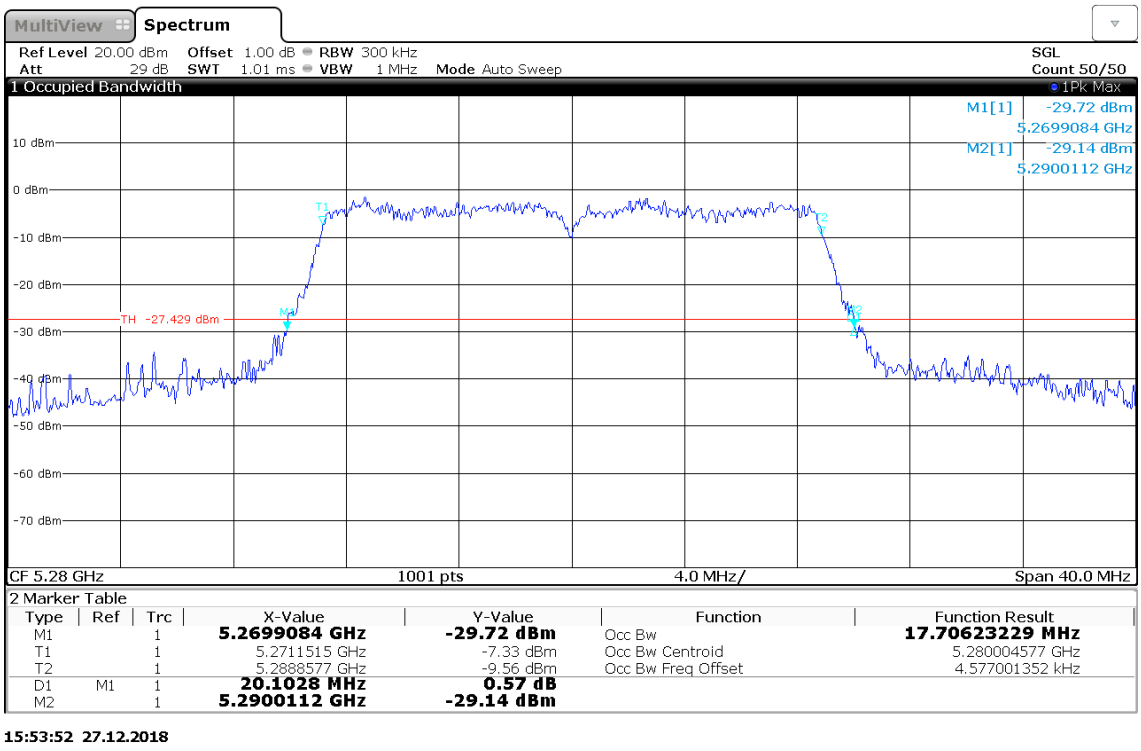
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5270 MHz - HT40



Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5280 MHz - HT20



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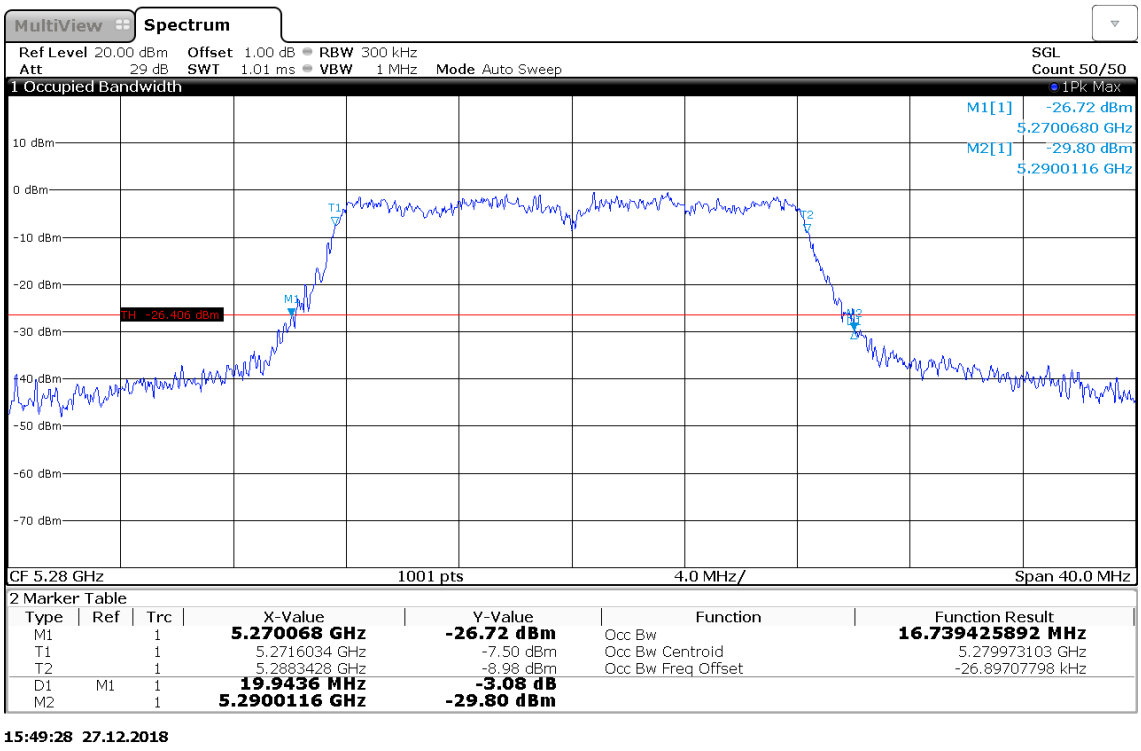
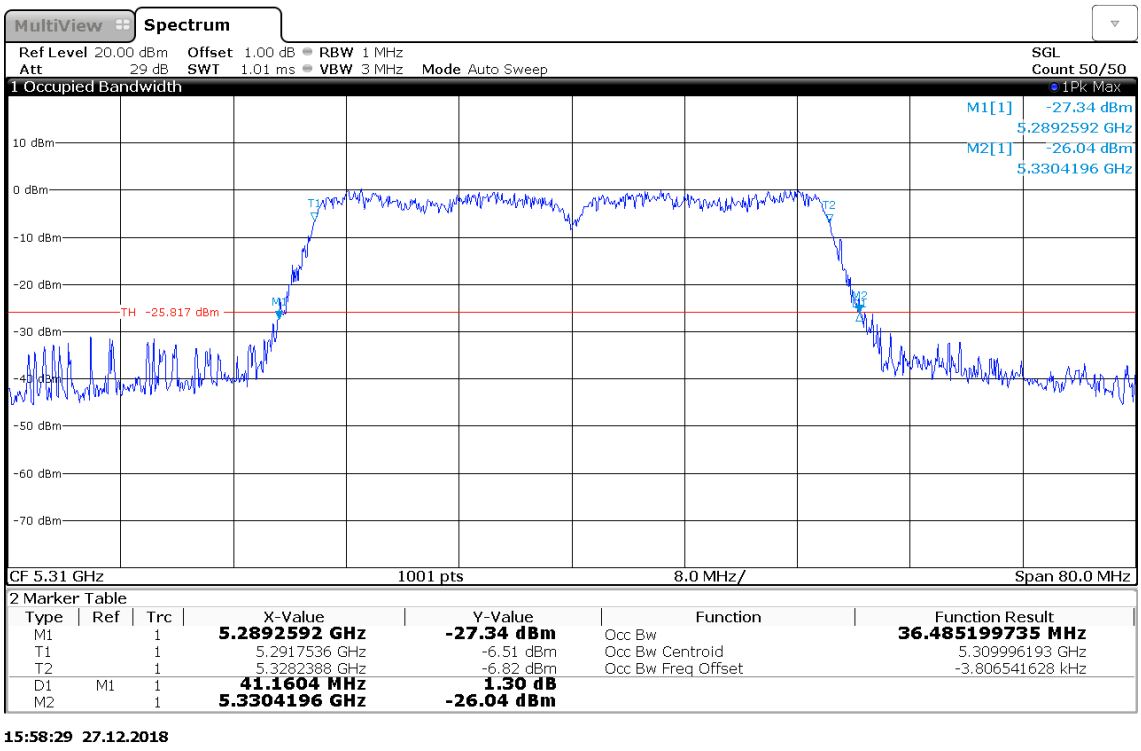
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5280 MHz - OFDM



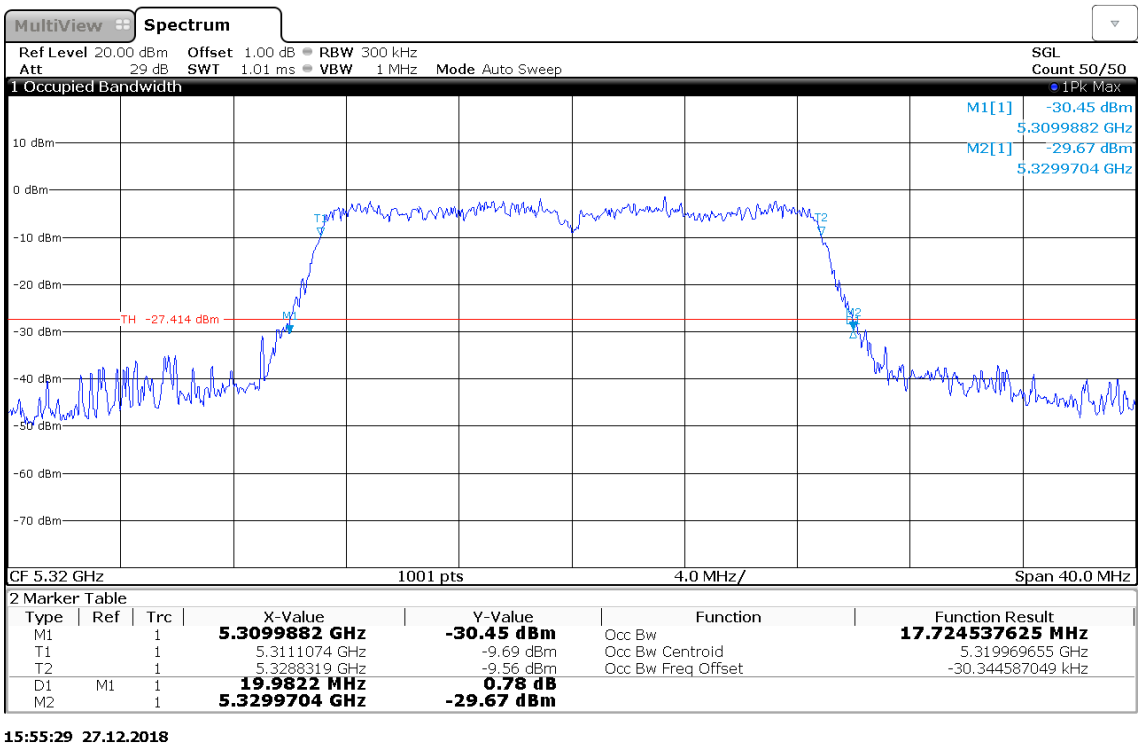
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5310 MHz - HT40



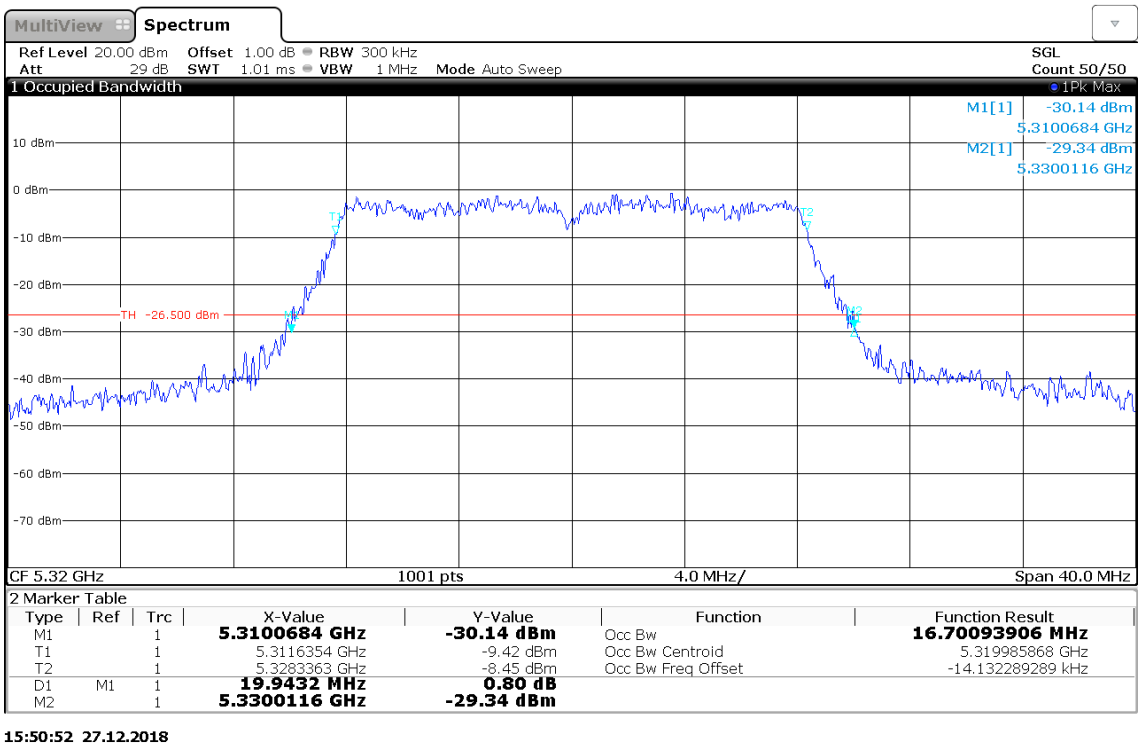
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5320 MHz - HT20



Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-27
Operating Conditions:	Tnom/Vnom
Mode:	5320 MHz - OFDM



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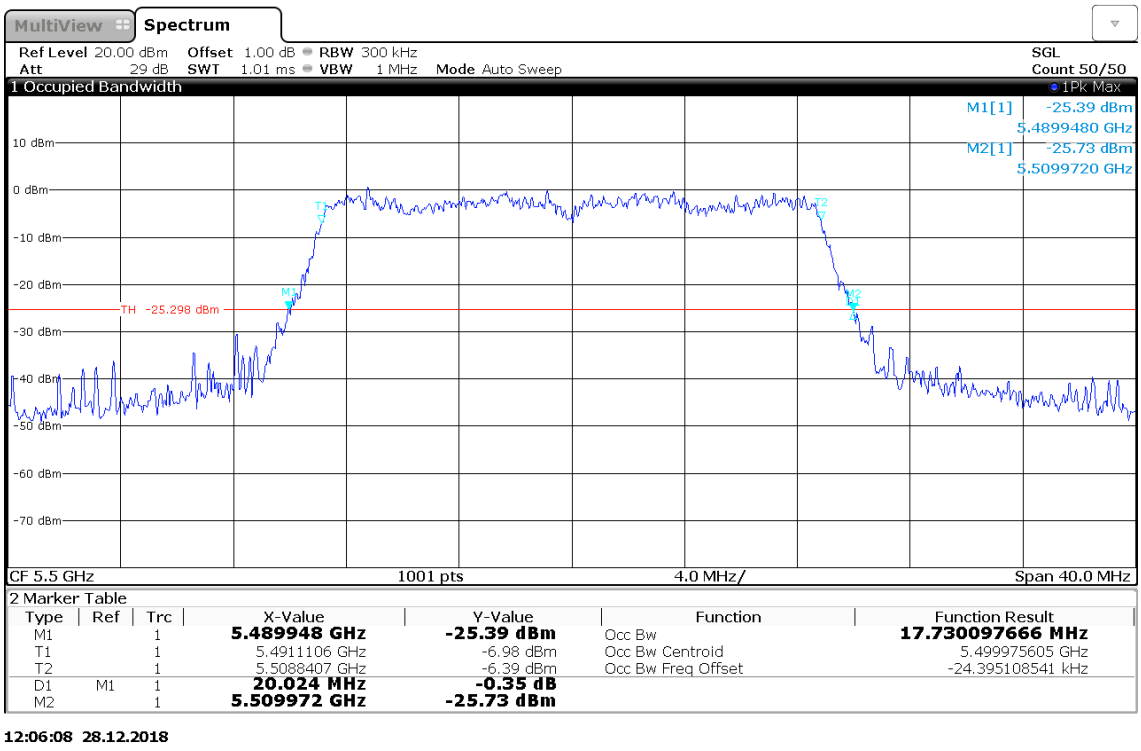
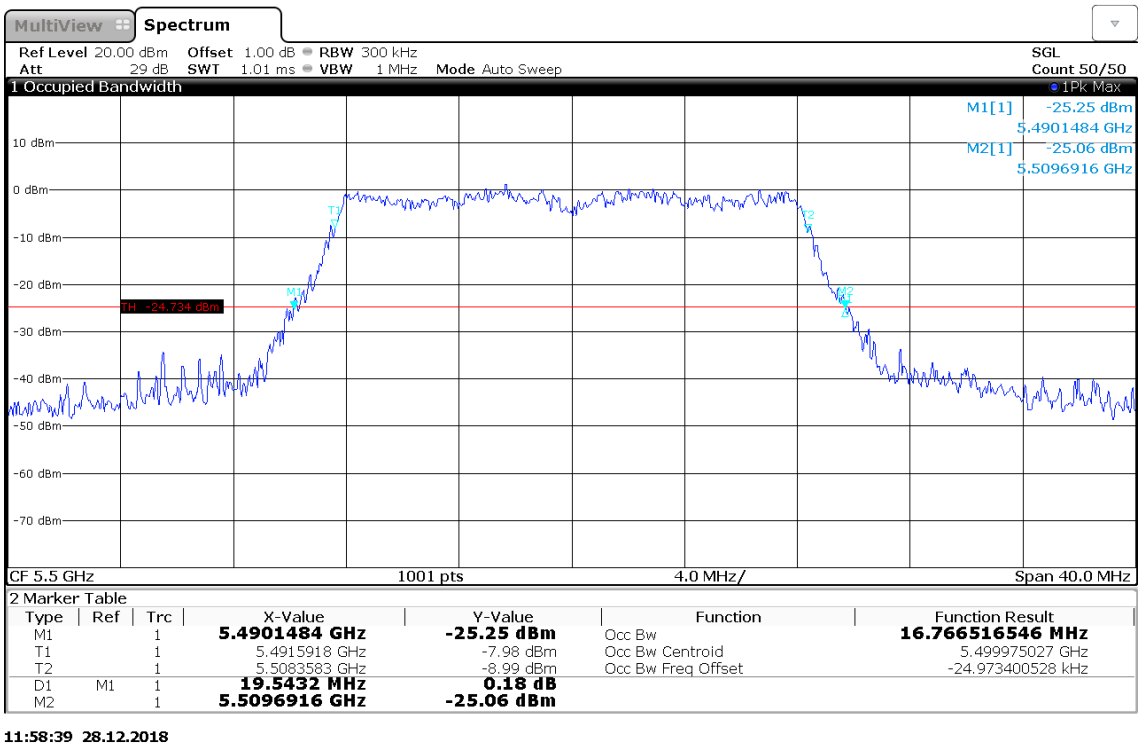
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5500 MHz - HT20



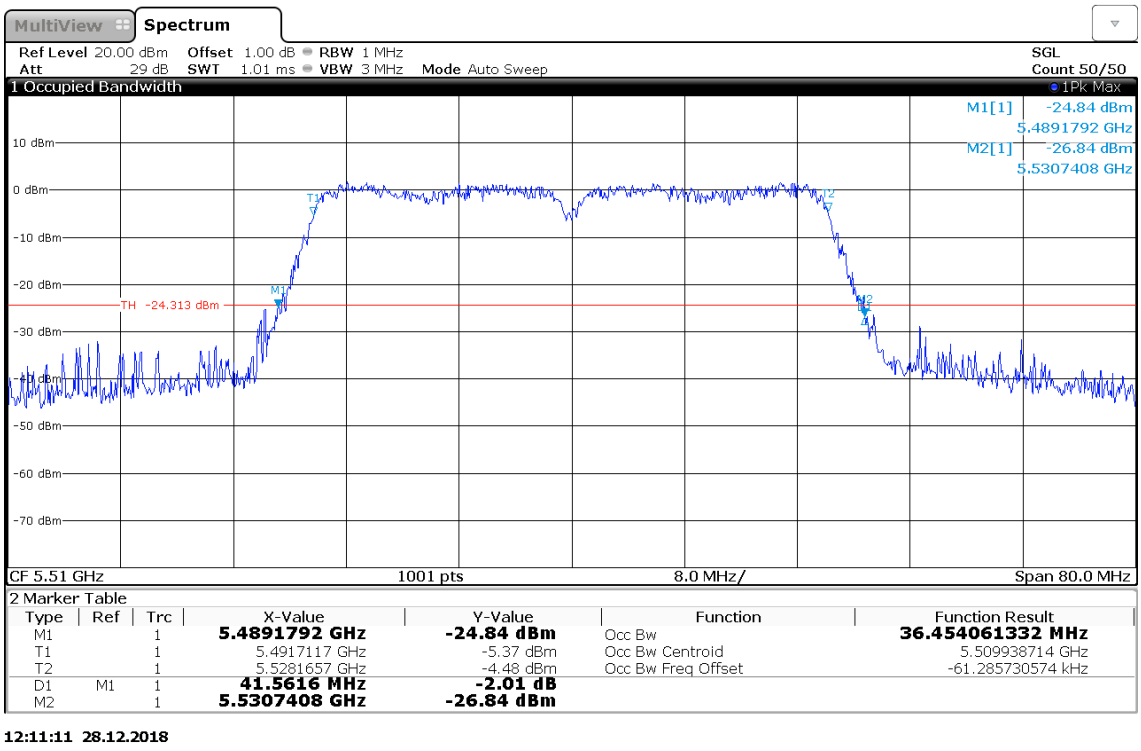
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5500 MHz - OFDM



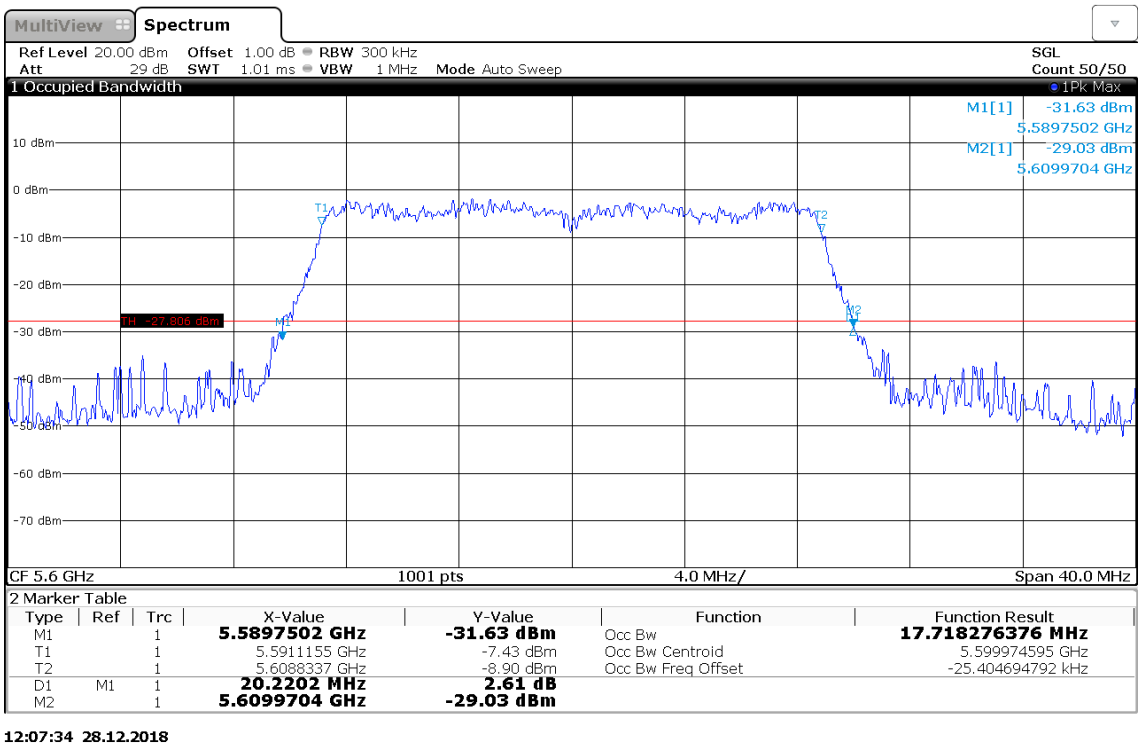
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5510 MHz - HT40



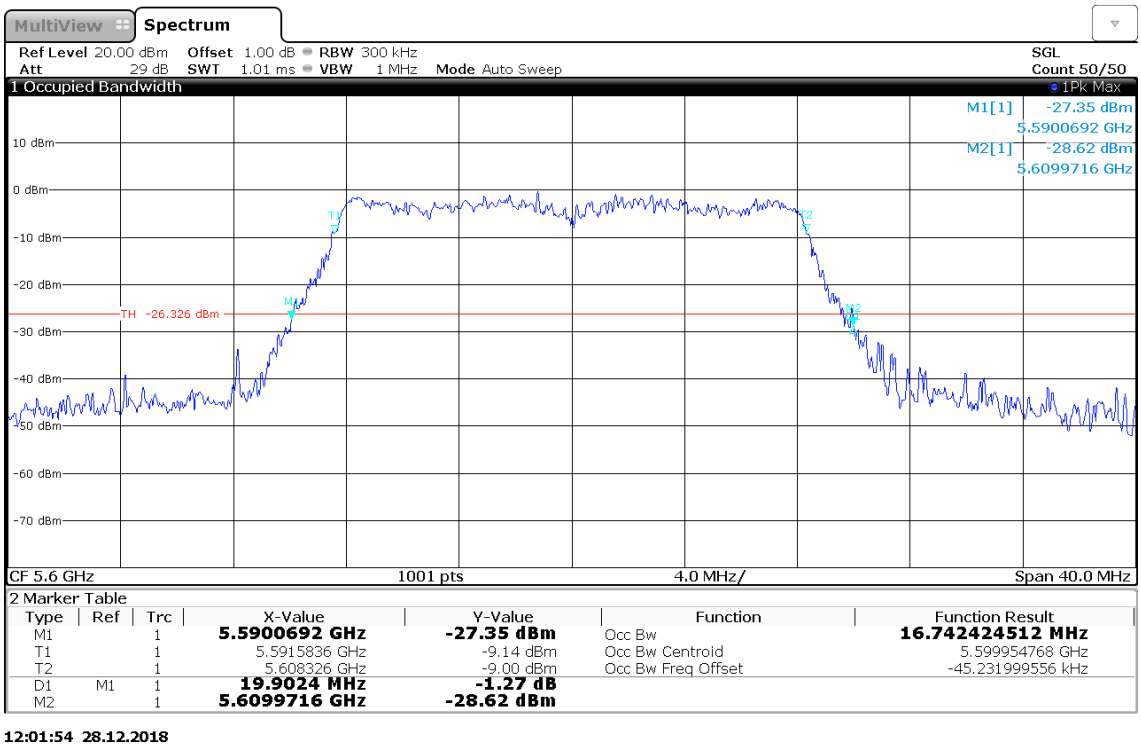
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5600 MHz - HT20



Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5600 MHz - OFDM



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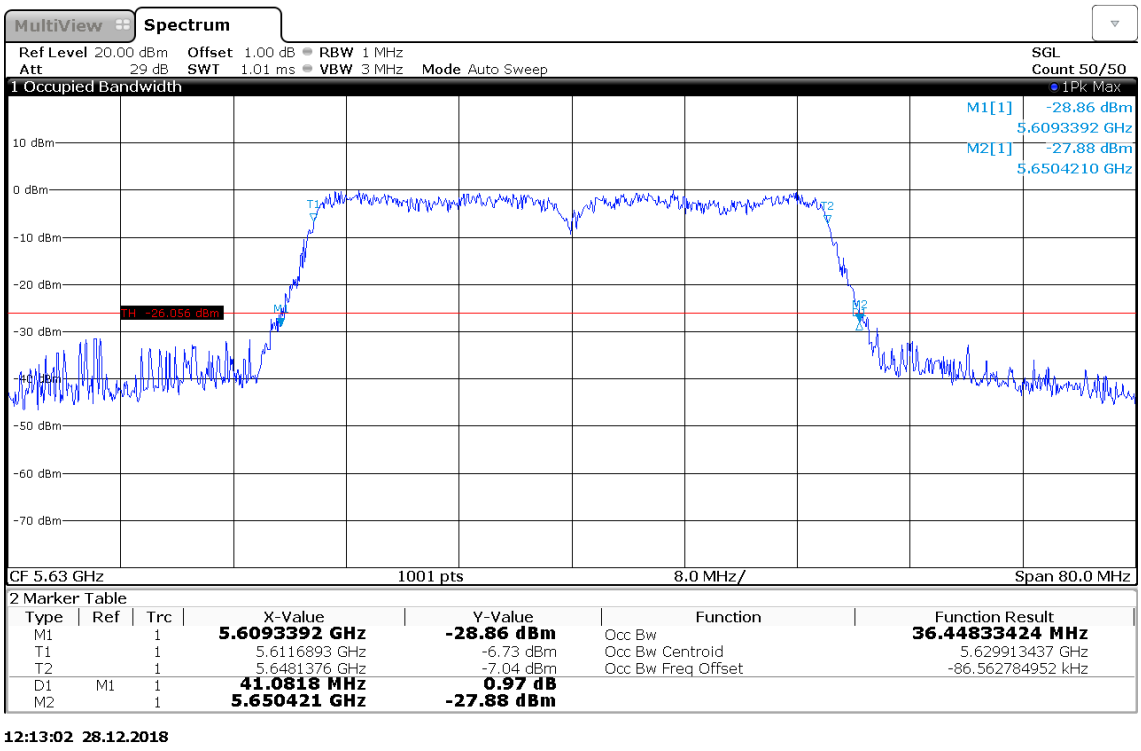
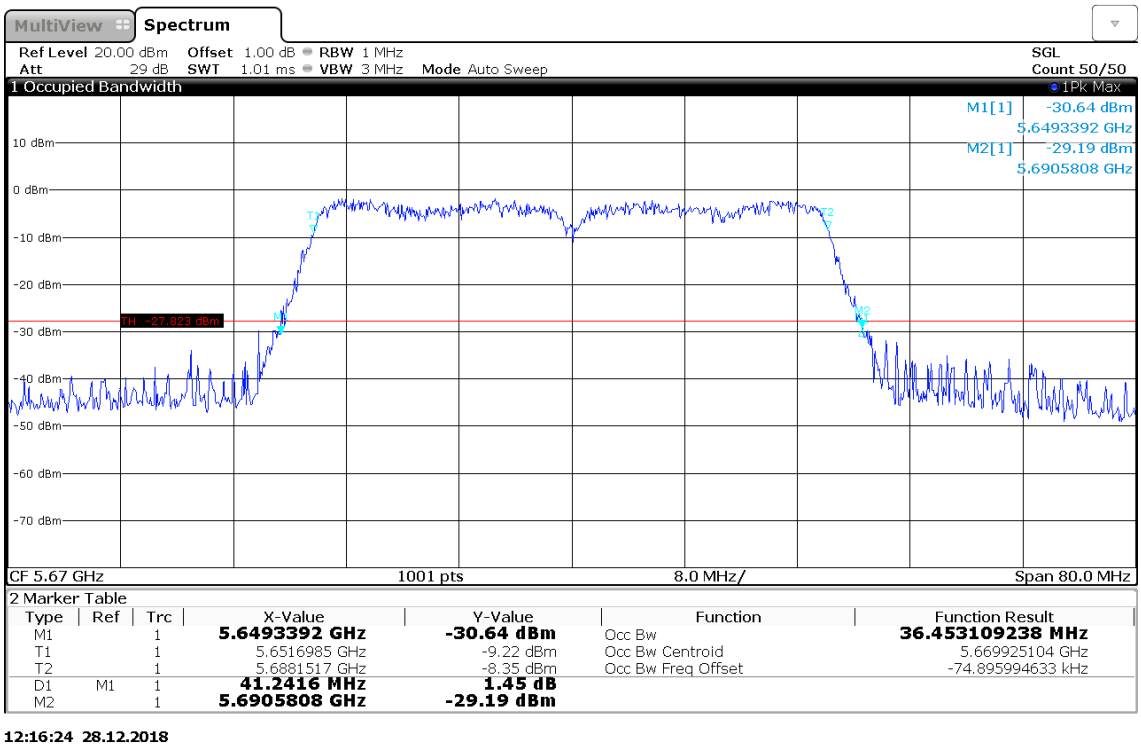
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5630 MHz - HT40



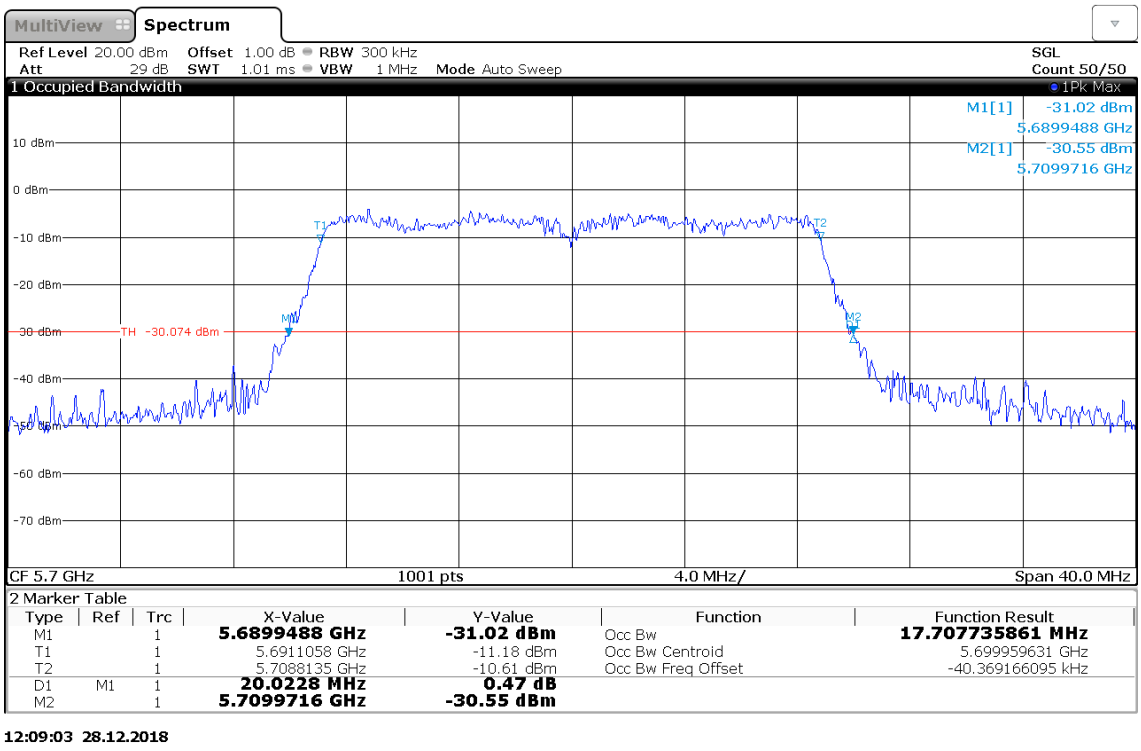
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5670 MHz - HT40



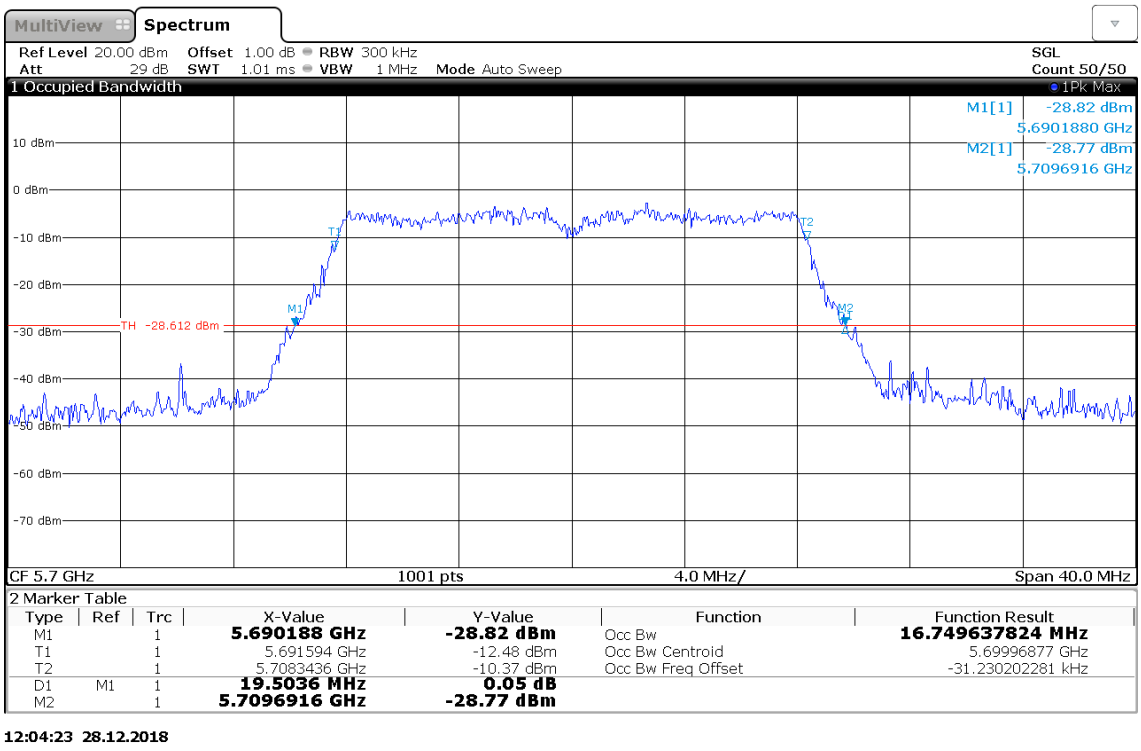
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5700 MHz - HT20



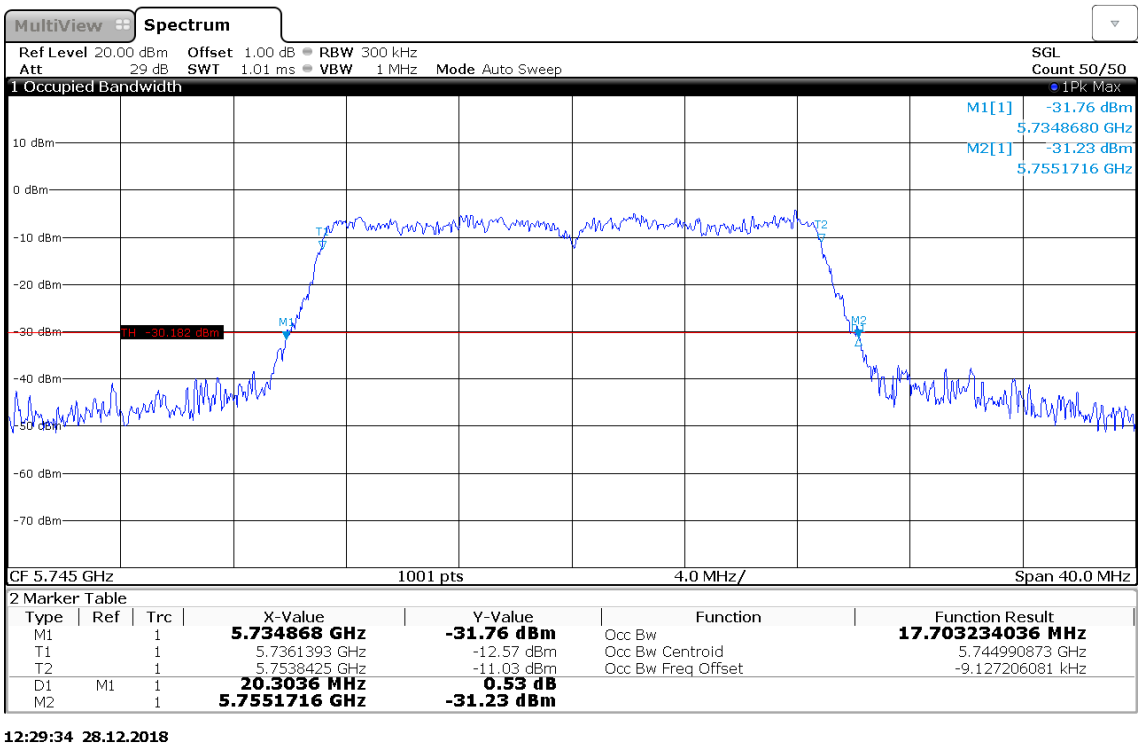
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5700 MHz - OFDM



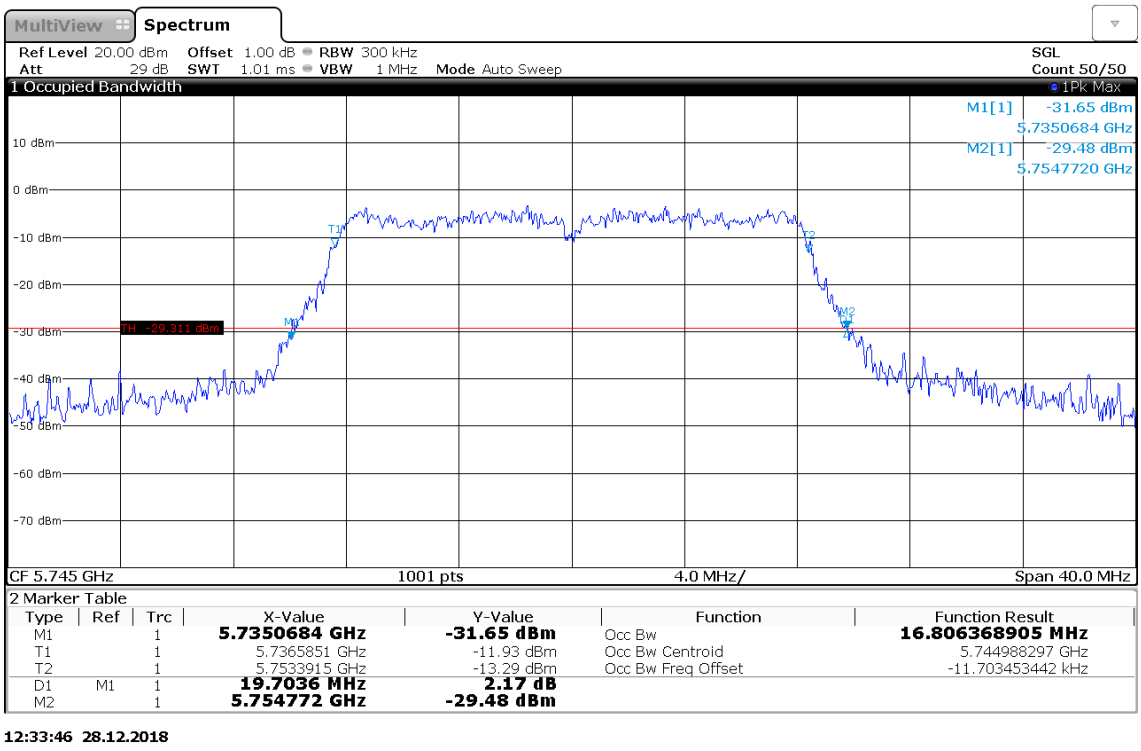
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5745 MHz – HT20



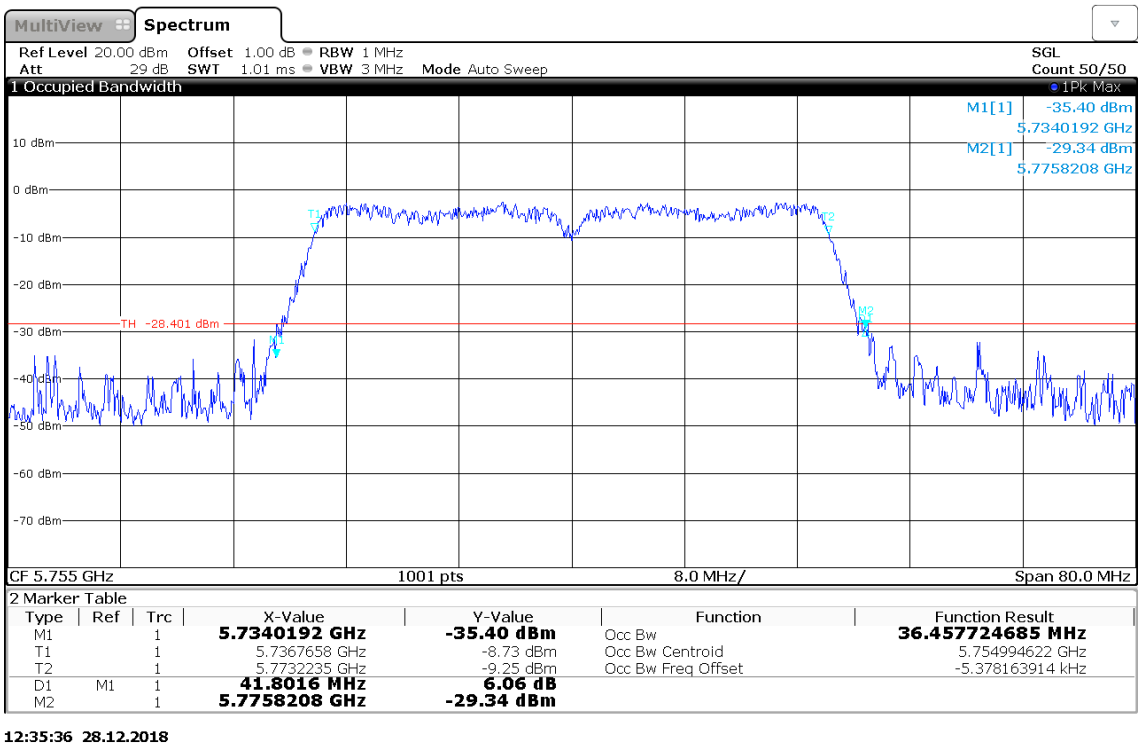
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5745 MHz - OFDM



Emission (26dB) and Occupied (99%) Bandwidth

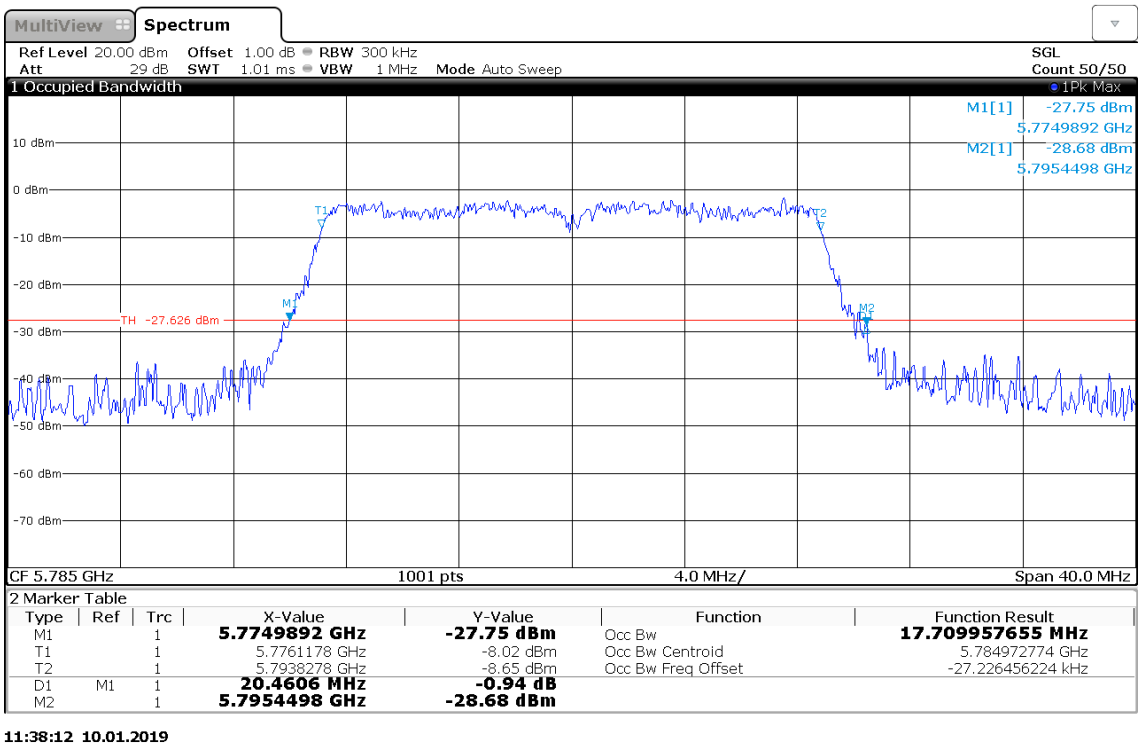
Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2018-12-28
Operating Conditions:	Tnom/Vnom
Mode:	5755 MHz - HT40



12:35:36 28.12.2018

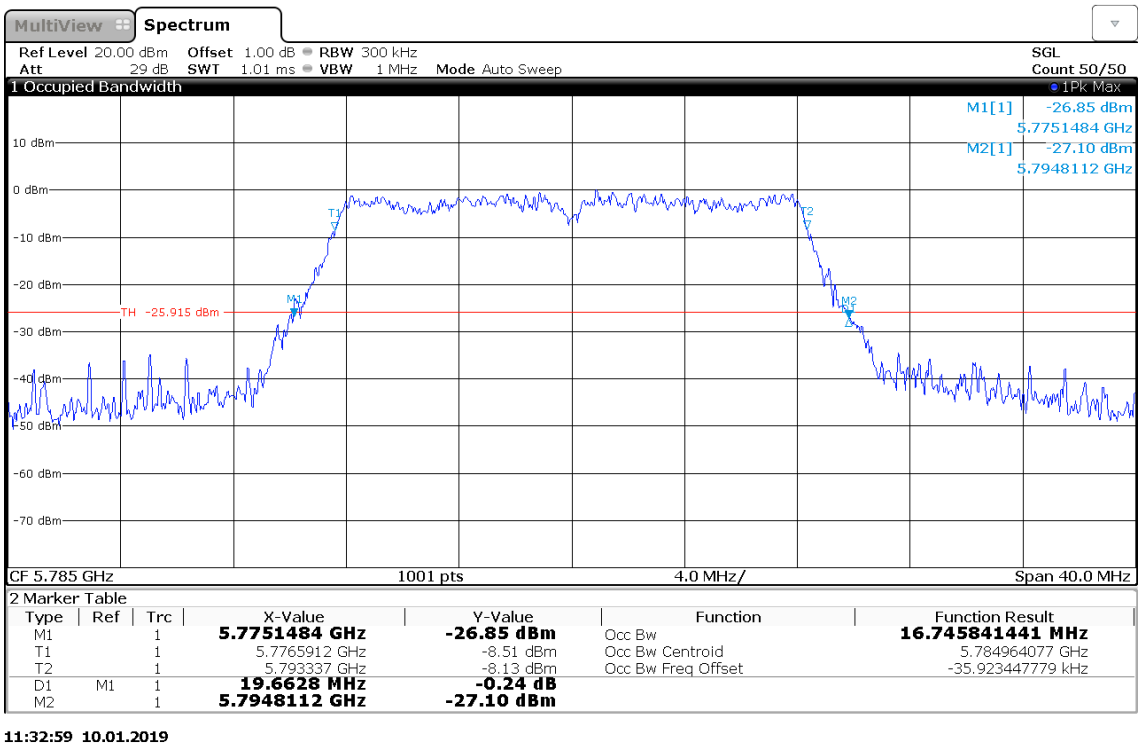
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5785 MHz - HT20



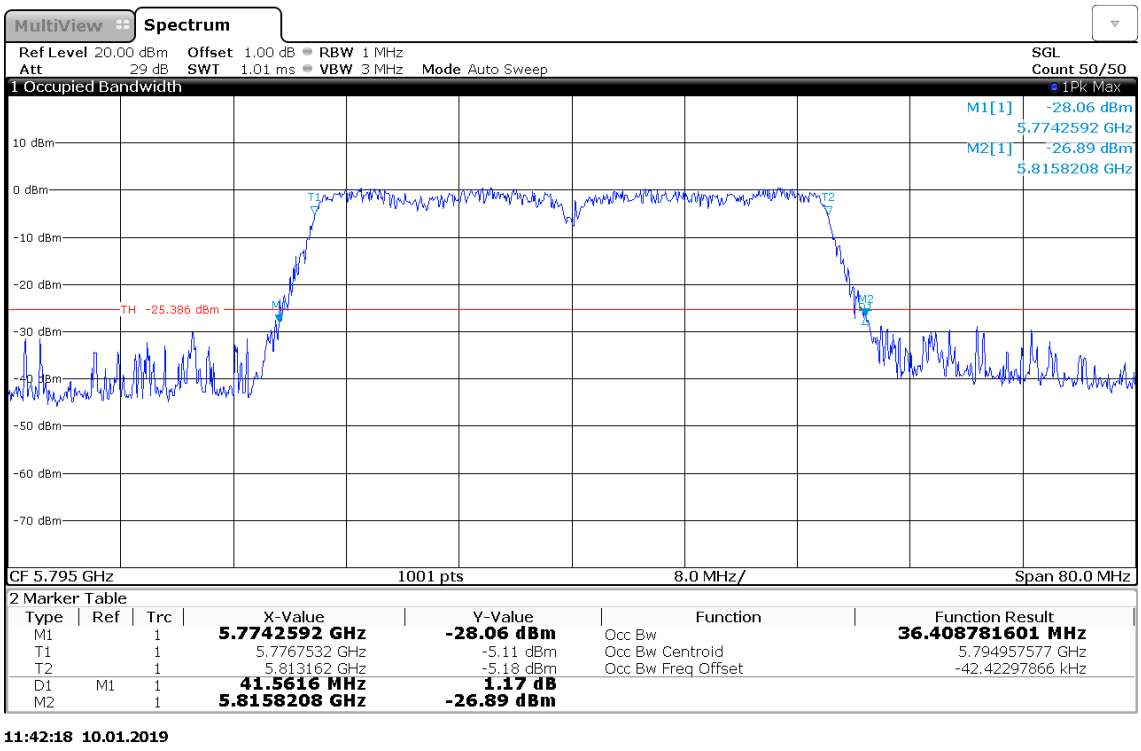
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5785 MHz - OFDM



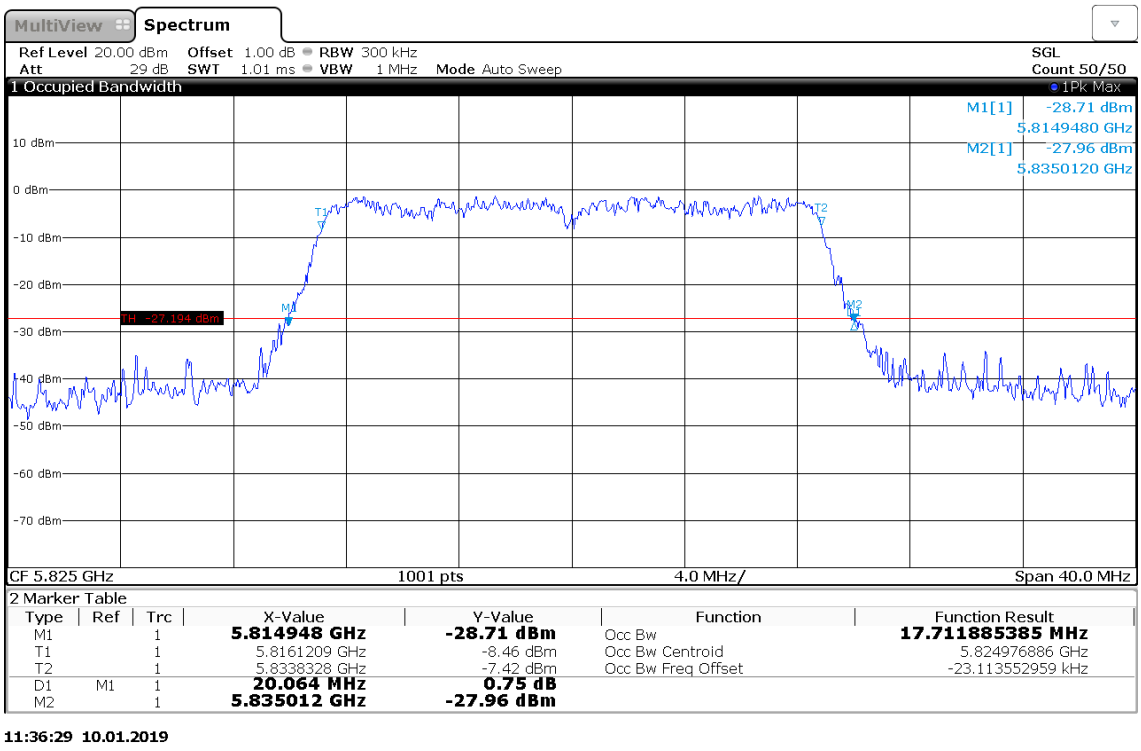
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5795 MHz - HT40



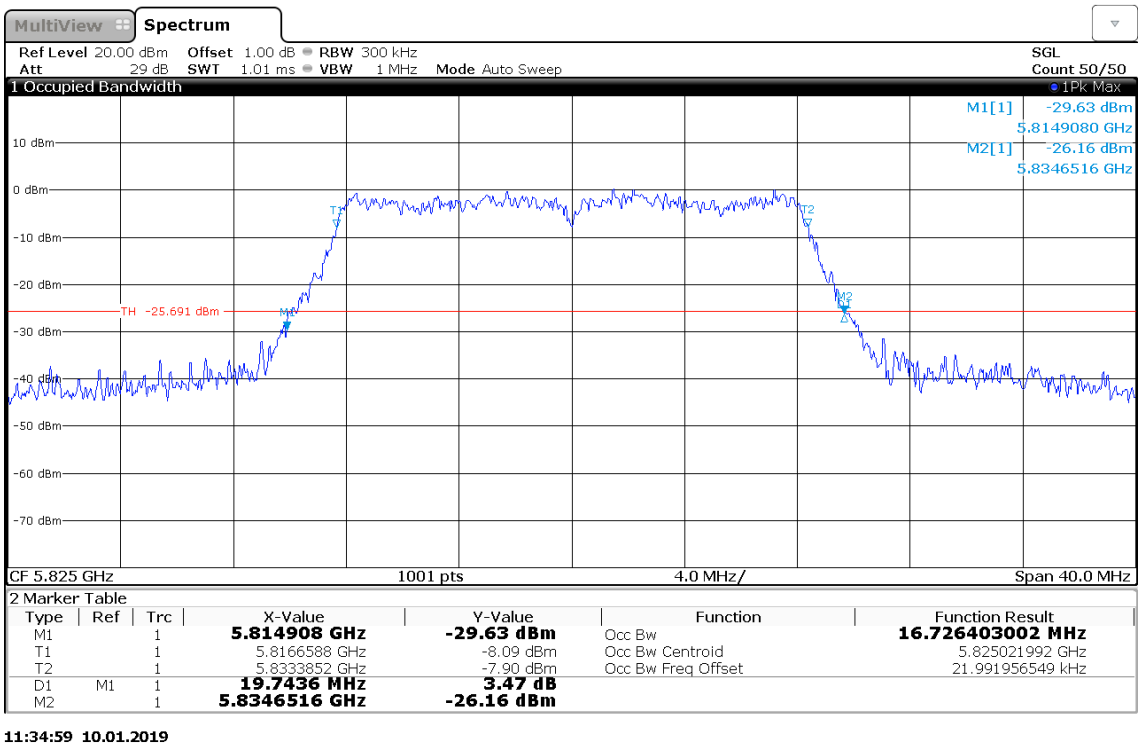
Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5825 MHz - HT20



Emission (26dB) and Occupied (99%) Bandwidth

Project Number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
Model Description:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Sample ID:	20576
Operator:	Toralf Jahn
Test Site:	Eurofins Product Service GmbH
Test Date:	2019-01-10
Operating Conditions:	Tnom/Vnom
Mode:	5825 MHz - OFDM



3.3 Test Conditions and Results - Maximum output power

3.3.1 Information

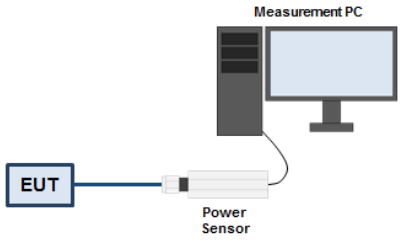
Test Information	
Reference	FCC 15.407(a)
Measurement Method	KDB 789033 E
Operator	Toralf Jahn
Date	2018-12-28

3.3.2 Limits

Limits			
Frequency band	Condition	Power limit	Maximum antenna gain[1]
5150 - 5250 MHz	Access point, indoor	1 W/30 dBm	6 dBi
5150 - 5250 MHz	Access point, outdoor	1 W/30 dBm	6 dBi
5150 - 5250 MHz	Access point, fixed point to point	1 W/30 dBm	23 dBi
5150 - 5250 MHz	Client	250 mW/24 dBm	6 dBi
5250 - 5350 MHz	-	Minimum of 250 mW/24 dBm or 11 dBm + 10*Log_{10}(BW[3])	6 dBi
5470 - 5725 MHz	-	Minimum of 250 mW/24 dBm or 11 dBm + 10*Log_{10}(BW[3])	6 dBi
5725 - 5850 MHz	-	1 W/30 dBm[2]	6 dBi
Note 1: The maximum output power must be reduced by the amount in dB that the gain exceeds the maximum allowed gain Note 2: Fixed point to point applications are excluded from power reduction according to Note 1 Note 3: BW is the 26 dB bandwidth in MHz			

3.3.3 Setup

Test Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power sensor	ETS-Lindgren	7002-006	EF00934	2018-07	2019-07

3.3.5 Procedure

Test Procedure
1. One wide band power sensor is connected to each antenna port of the EUT
1. EUT transmitter is activated in test mode under normal conditions
2. The output power is measured simultaneously at all antenna ports
3. The maximum power level is determined

3.3.6 Results

Test Results - 5150 - 5250 MHz						
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	Power [dBm]	Limit [dBm]	Verdict
OFDM	36	5180	20	14.9	24	PASS
OFDM	40	5200	20	14.7	24	PASS
OFDM	46	5240	20	14.3	24	PASS
HT20	36	5180	20	14.0	24	PASS
HT20	40	5200	20	13.8	24	PASS
HT20	46	5240	20	13.5	24	PASS
HT40	36+40	5190	40	12.6	24	PASS
HT40	44+48	5230	40	12.2	24	PASS

Test Results - 5250 - 5350 MHz						
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	Power [dBm]	Limit [dBm]	Verdict
OFDM	52	5260	20	14.1	24	PASS
OFDM	56	5280	20	14.2	24	PASS
OFDM	64	5320	20	13.9	24	PASS
HT20	52	5260	20	13.4	24	PASS
HT20	56	5280	20	13.3	24	PASS
HT20	64	5320	20	13.0	24	PASS
HT40	52+56	5270	40	12.3	24	PASS
HT40	60+64	5310	40	11.9	24	PASS

Test Results - 5470 - 5725 MHz						
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	Power [dBm]	Limit [dBm]	Verdict
OFDM	100	5500	20	15.0	24	PASS
OFDM	120	5600	20	14.6	24	PASS
OFDM	140	5700	20	12.5	24	PASS
HT20	100	5500	20	14.1	24	PASS
HT20	120	5600	20	13.8	24	PASS
HT20	140	5700	20	11.7	24	PASS
HT40	100+104	5510	40	13.0	24	PASS
HT40	124+128	5630	40	12.3	24	PASS
HT40	132+136	5670	40	10.8	24	PASS

Test Results - 5725 - 5850 MHz						
Mode	Channel	Frequency [MHz]	Nominal BW [MHz]	Power [dBm]	Limit [dBm]	Verdict
OFDM	149	5745	20	12.4	30	PASS
OFDM	157	5785	20	12.1	30	PASS
OFDM	165	5825	20	11.9	30	PASS
HT20	149	5745	20	11.5	30	PASS
HT20	157	5785	20	11.3	30	PASS
HT20	165	5825	20	11.2	30	PASS
HT40	149+153	5755	40	10.2	30	PASS
HT40	161+165	5795	40	10.1	30	PASS

3.4 Test Conditions and Results - Power spectral density

3.4.1 Information

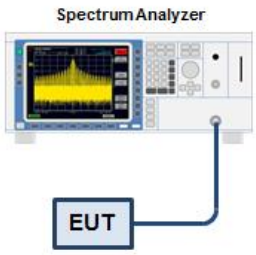
Test Information	
Reference	FCC 15.407(a)
Measurement Method	KDB 789033 F
Operator	Toralf Jahn
Date	2018-12-28

3.4.2 Limits

Limits			
Frequency band	Condition	PSD limit	Maximum antenna gain[1]
5150 - 5250 MHz	Access point, indoor	17 dBm/MHz	6 dBi
5150 - 5250 MHz	Access point, outdoor	17 dBm/MHz	6 dBi
5150 - 5250 MHz	Access point, fixed point to point	17 dBm/MHz	23 dBi
5150 - 5250 MHz	Client	11 dBm/MHz	6 dBi
5250 - 5350 MHz	All devices	11 dBm/MHz	6 dBi
5470 - 5725 MHz	All devices	11 dBm/MHz	6 dBi
5725 - 5850 MHz	All devices	30 dBm/500 kHz	6 dBi
Note 1: The power density limit must be reduced by the amount in dB that the gain exceeds the maximum allowed gain			

3.4.3 Setup

Test Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2018-07	2019-07

3.4.5 Procedure

Test Procedure
1. EUT transmitter is activated in test mode under normal conditions
2. The spectrum analyzer is set to rms detection with a span over the emission bandwidth
3. The resolution bandwidth is set to 1 MHz / 500 kHz and video bandwidth to ≥ 3 MHz
4. The number of sweep points is set ≥ 2 x span / RBW and the sweep time is set to auto
5. Trace averaging is set to 100
6. The maximum of the emission envelope is determined
7. The duty cycle (10 x Log_{10}(1/duty cycle)) correction is added to the measurement result

3.4.6 Results

Test Results - 5150 - 5250 MHz					
Mode	Channel	Frequncy [MHz]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
OFDM	36	5180	2.2	11	PASS
OFDM	40	5200	1.8	11	PASS
OFDM	48	5240	1.3	11	PASS
HT20	36	5180	0.9	11	PASS
HT20	40	5200	0.8	11	PASS
HT20	48	5240	0.1	11	PASS
HT40	36+40	5190	-3.1	11	PASS
HT40	44+48	5230	-4.1	11	PASS

Test Results - 5250 - 5350 MHz					
Mode	Channel	Frequncy [MHz]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
OFDM	52	5260	1.4	11	PASS
OFDM	56	5280	1.5	11	PASS
OFDM	64	5320	1.2	11	PASS
HT20	52	5260	0.3	11	PASS
HT20	56	5280	0.4	11	PASS
HT20	64	5320	0.1	11	PASS
HT40	52+56	5270	-3.7	11	PASS
HT40	60+64	5310	-3.8	11	PASS

Test Results - 5470 - 5725 MHz					
Mode	Channel	Frequency [MHz]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
OFDM	100	5500	1.6	11	PASS
OFDM	120	5600	1.0	11	PASS
OFDM	140	5700	-1.2	11	PASS
HT20	100	5500	0.8	11	PASS
HT20	120	5600	0.0	11	PASS
HT20	140	5700	-2.3	11	PASS
HT40	100+104	5510	-3.3	11	PASS
HT40	124+128	5630	-4.3	11	PASS
HT40	132+136	5670	-5.4	11	PASS

Test Results - 5725 - 5850 MHz					
Mode	Channel	Frequency [MHz]	PSD [dBm/500 kHz]	Limit [dBm/500 kHz]	Verdict
OFDM	149	5745	-4.8	30	PASS
OFDM	157	5785	-5.5	30	PASS
OFDM	165	5825	-5.6	30	PASS
HT20	149	5745	-6.1	30	PASS
HT20	157	5785	-6.4	30	PASS
HT20	165	5825	-6.6	30	PASS
HT40	149+153	5755	-10.0	30	PASS
HT40	161+165	5795	-10.6	30	PASS

3.5 Test Conditions and Results - Frequency stability

3.5.1 Information

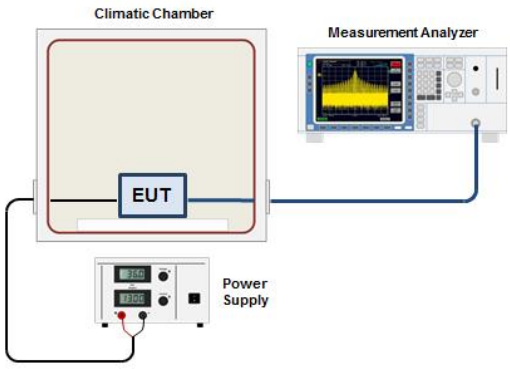
Test Information	
Reference	FCC 15.407(g)
Measurement Method	KDB 789033 A.3; ANSI C63.10 6.8
Operator	Toralf Jahn
Date	2019-01-09

3.5.2 Limits

Limits
Emission is maintained within the band of operation under all conditions of normal operation

3.5.3 Setup

Test Setup



3.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2018-07	2019-07
Climatic chamber	Vötsch	VT 4010	EF00134	2018-08	2019-08

3.5.5 Procedure

Test Procedure with respect to ambient temperature
1. The EUT is turned off and placed inside the temperature chamber
2. The temperature chamber is set to the highest operating temperature
3. The EUT is turned on at nominal supply voltage and the carrier frequency is measured at startup, at 2 minutes, 5 minutes and 10 minutes after EUT is energized
4. The EUT is turned off again
5. The temperature of the chamber is lowered by 10 °C
6. The carrier frequency measurement is repeated after temperature has stabilized
7. The procedure is repeated until the lowest operating frequency is reached

Test Procedure when varying supply voltage
1. The EUT is supplied with nominal supply voltage or a fully charged battery at room temperature (15 to 25 °C)
2. The carrier frequency is measured
3. The procedure is repeated at 85 % and 115 % of the nominal supply voltage or at the battery endpoint for battery operated equipment

Test Procedure of carrier frequency measurement
1. The emission spectrum is measured using a resolution band width of 100 kHz with peak detection and maximum hold
2. The peak of the emission spectrum is determined
3. The left most frequency f_1 10 dB below the peak emission is searched
4. The right most frequency f_2 10 dB below the peak emission is searched
5. The center frequency is calculated from $f_c = (f_1+f_2)/2$
6. The center frequency and the deviation from the nominal center frequency are recorded

3.5.6 Results

Test Results - 5180 MHz - Variation of ambient temperature					
Nominal Frequency [MHz]	Voltage [V]	Temperature [°C]	Time after activation	Frequency [MHz]	Deviation [kHz]
5180	3.3	85	0	5180.122	122
5180	3.3	85	2	5180.136	136
5180	3.3	85	5	5180.136	136
5180	3.3	85	10	5180.134	134
5180	3.3	80	0	5180.106	106
5180	3.3	80	2	5180.120	120
5180	3.3	80	5	5180.122	122
5180	3.3	80	10	5180.122	122
5180	3.3	70	0	5180.018	18
5180	3.3	70	2	5180.048	48
5180	3.3	70	5	5180.046	46
5180	3.3	70	10	5180.047	47
5180	3.3	60	0	5179.986	-14
5180	3.3	60	2	5180.008	8
5180	3.3	60	5	5180.008	8
5180	3.3	60	10	5180.008	8
5180	3.3	50	0	5179.980	-20
5180	3.3	50	2	5179.988	-12
5180	3.3	50	5	5179.988	-12
5180	3.3	50	10	5179.988	-12
5180	3.3	40	0	5179.980	-20
5180	3.3	40	2	5179.980	-20
5180	3.3	40	5	5179.980	-20
5180	3.3	40	10	5179.980	-20
5180	3.3	30	0	5179.989	-11
5180	3.3	30	2	5179.981	-19
5180	3.3	30	5	5179.980	-20
5180	3.3	30	10	5179.980	-20
5180	3.3	20	0	5179.993	-7
5180	3.3	20	2	5179.985	-15
5180	3.3	20	5	5179.986	-14
5180	3.3	20	10	5179.985	-15
5180	3.3	10	0	5180.004	4
5180	3.3	10	2	5179.994	-6
5180	3.3	10	5	5179.993	-7
5180	3.3	10	10	5179.994	-6
5180	3.3	0	0	5180.012	12
5180	3.3	0	2	5180.003	3
5180	3.3	0	5	5180.003	3
5180	3.3	0	10	5180.003	3
5180	3.3	-10	0	5180.013	13
5180	3.3	-10	2	5180.010	10
5180	3.3	-10	5	5180.010	10
5180	3.3	-10	10	5180.010	10
5180	3.3	-20	0	5180.010	10

5180	3.3	-20	2	5180.014	14
5180	3.3	-20	5	5180.014	14
5180	3.3	-20	10	5180.014	14
5180	3.3	-30	0	5180.004	4
5180	3.3	-30	2	5180.010	10
5180	3.3	-30	5	5180.010	10
5180	3.3	-30	10	5180.010	10

Test Results - 5180 MHz - Variation of supply voltage				
Nominal Frequency [MHz]	Voltage [V]	Temperature [°C]	Frequency [MHz]	Deviation [kHz]
5180	3.3	20	5179.983	-17
5180	3.47	20	5180.002	2
5180	3.0	20	5179.997	-3
Comment: Minimum and maximum voltagages defined by manufacturer do not cover the ±15% variations of nominal voltage as required by ANSI 63.10.				

3.6 Test Conditions and Results - AC power line conducted emissions

3.6.1 Information

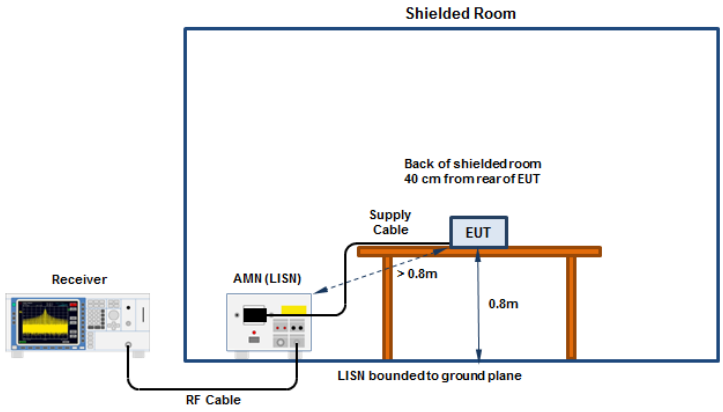
Test Information	
Reference	FCC 15.207
Measurement Method	ANSI C63.10 6.2
Operator	Wilfried Treffke
Date	2018-11-29

3.6.2 Limits

Limits		
Frequency [MHz]	Quasi-Peak [dBµV]	Average [dBµV]
0.15 - 0.5	66 - 56*	56 - 46*
0.5 - 5	56	46
5 - 30	60	50
* Limit decreases linearly with the logarithm of the frequency		

3.6.3 Setup

Test Setup



3.6.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2016.1.10

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESR7	EF00943	2018-07	2019-07
LISN	R&S	ESH3-Z5	EF00036	2017-01	2019-01

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

Project number: G0M-1810-7783

Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 22.3°C, Unom: 120 VAC / 60 Hz
LISN:	ESH3-Z5 (N)
Mode:	IEEE 802.11
Test Date:	2018-11-29
Note:	

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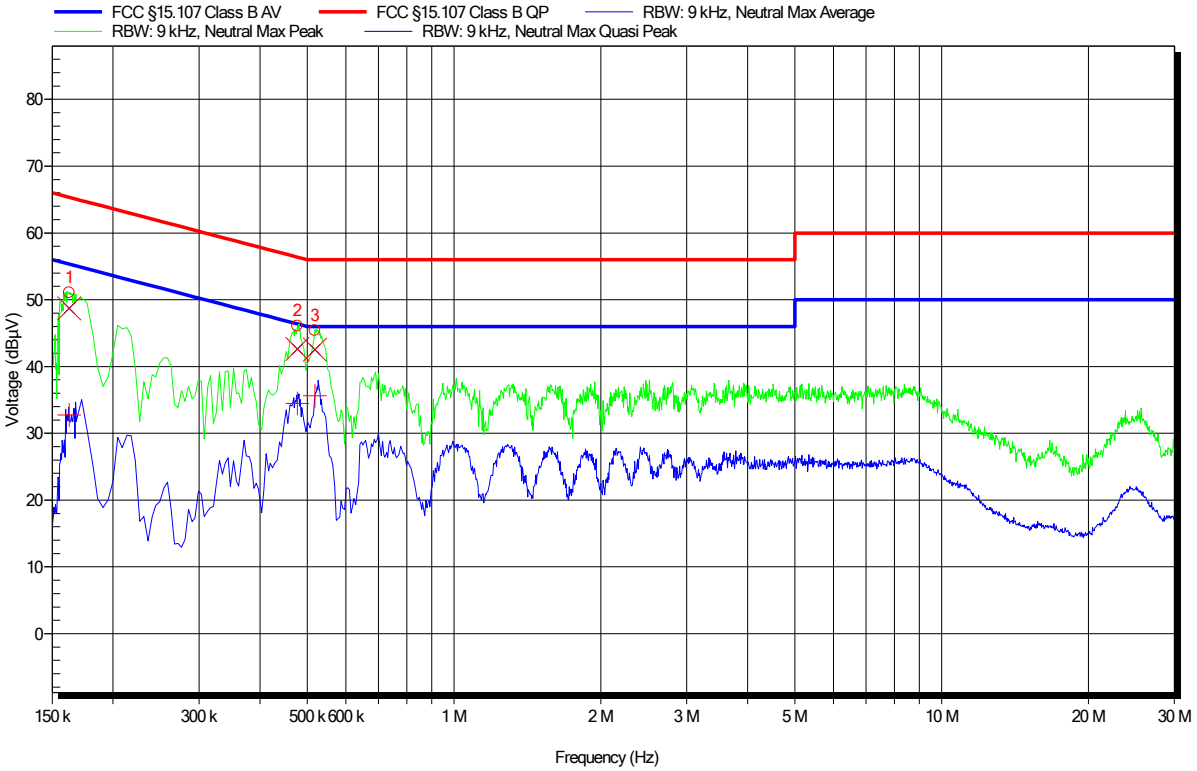

Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
1	162.6 kHz	48.69 dBµV	65.33 dBµV	-16.64 dB	Pass
2	477.15 kHz	42.64 dBµV	56.39 dBµV	-13.75 dB	Pass
3	519 kHz	42.53 dBµV	56 dBµV	-13.47 dB	Pass

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status
1	162.6 kHz	32.74 dBµV	55.33 dBµV	-22.59 dB	Pass
2	477.15 kHz	34.48 dBµV	46.39 dBµV	-11.91 dB	Pass
3	519 kHz	35.6 dBµV	46 dBµV	-10.4 dB	Pass

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

Project number: G0M-1810-7783

Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Treffke
Test Conditions:	Tnom: 22.3°C, Unom: 120 VAC / 60 Hz
LISN:	ESH3-Z5 (L)
Mode:	IEEE 802.11
Test Date:	2018-11-29
Note:	

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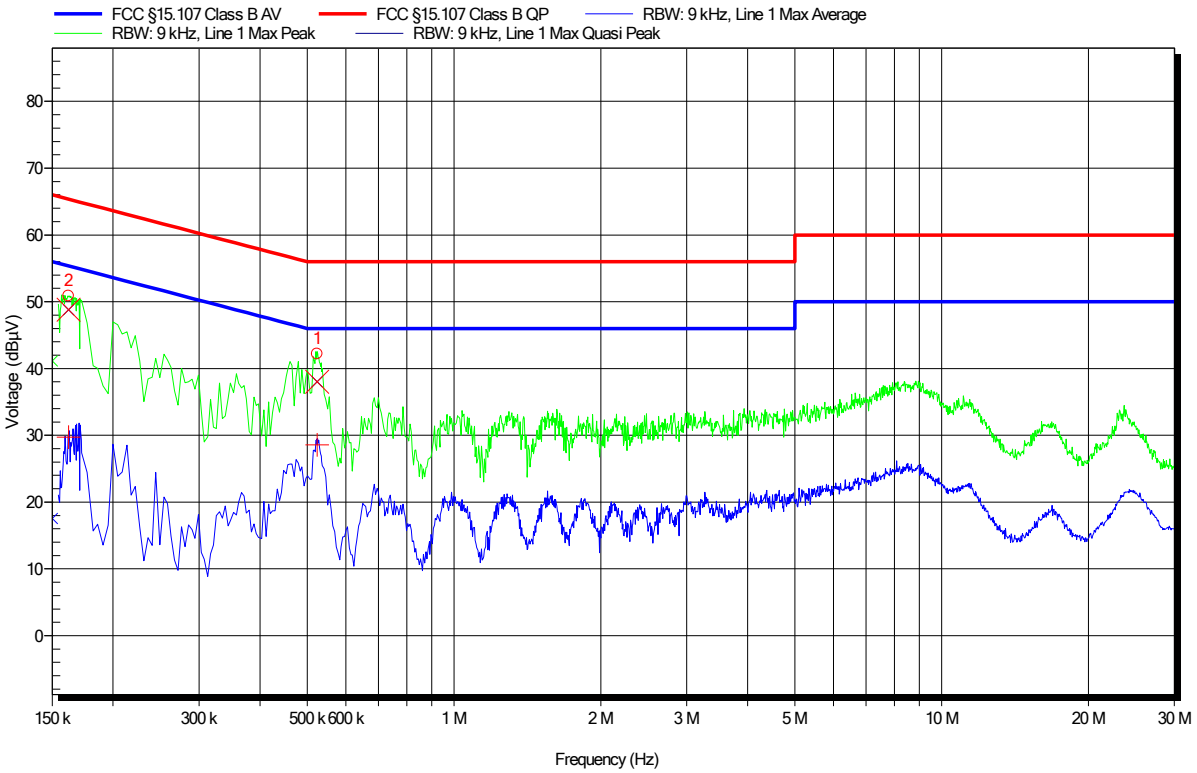


Peak Number	Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
1	523.95 kHz	38.04 dBµV	56 dBµV	-17.96 dB	Pass
2	162.15 kHz	48.79 dBµV	65.35 dBµV	-16.56 dB	Pass

Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status
1	523.95 kHz	28.58 dBµV	46 dBµV	-17.42 dB	Pass
2	162.15 kHz	29.72 dBµV	55.35 dBµV	-25.63 dB	Pass

3.7 Test Conditions and Results - Transmitter radiated emissions

3.7.1 Information

Test Information	
Reference	FCC 15.407(b)
Measurement Method	KDB 789033 G
Operator	Toralf Jahn
Date	2018-10-01

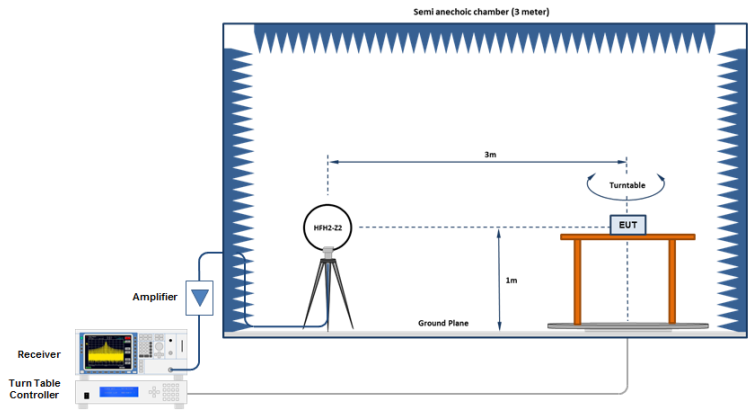
3.7.2 Limits

Limits - Restricted frequency bands and below 1 GHz			
Frequency [MHz]	Detector	Field strength [µV/m]	Measurement distance [m]
0.009 - 0.09	Average	2400/F[kHz]	300
0.09 - 0.110	Quasi-Peak	2400/F[kHz]	300
0.110 - 0.490	Average	2400/F[kHz]	300
0.490 - 1.705	Quasi-Peak	24000/F[kHz]	30
1.705 - 30.0	Quasi-Peak	30	30
30 - 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
>1000	Average	500	3

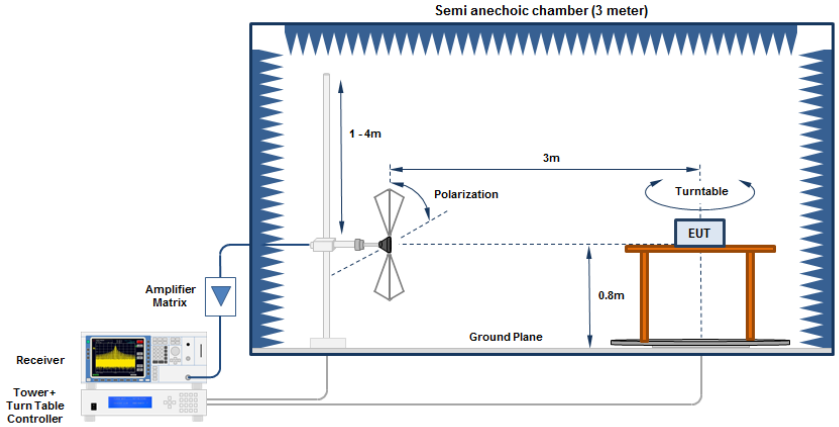
Limits - Outside restricted frequency bands above 1 GHz			
Frequency band [MHz]	Power limit [dBm EIRP]	Field strength limit [dBµV/m]	Measurement distance [m]
5150 - 5250	-27 dBm/MHz	68.2	3
5250 - 5350	-27 dBm/MHz	68.2	3
5470 - 5725	-27 dBm/MHz	68.2	3
5725 - 5850	-27 dBm/MHz @ ±75 MHz from band edge	68.3	3
5725 - 5850	10 to -27 dBm/MHz @ ±25 to ±75 MHz from band edge	105.3 to 68.3	3
5725 - 5850	15.6 to 10 dBm/MHz @ ±5 to ±25 MHz from band edge	110.8 to 105.3	3
5725 - 5850	27 to 15.6 dBm/MHz @ ±0 to ±5 MHz from band edge	122.2 to 110.8	3

3.7.3 Setup

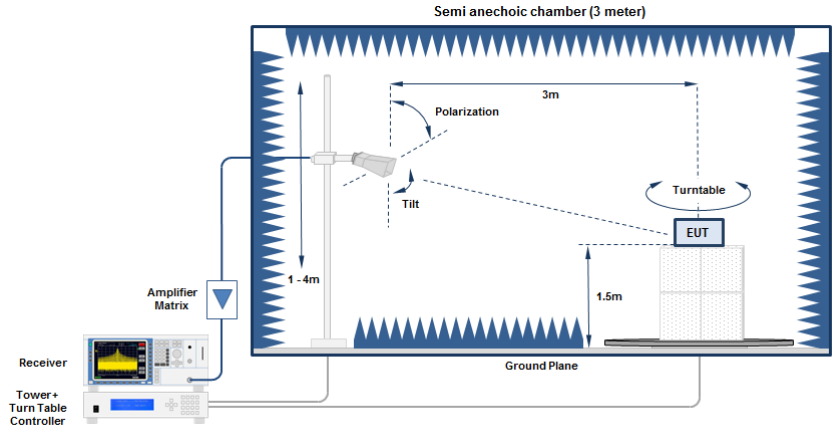
Test Setup < 30 MHz



Test Setup 30 - 1000 MHz



Test Setup > 1 GHz



3.7.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2015.2.4

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2018-08	2019-08
Antenna	R&S	HK 116	EF00030	2016-04	2019-04
Antenna	R&S	HL 223	EF00187	2016-05	2019-05

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2018-08	2019-08
Spectrum analyzer	R&S	FSW43	EF00896	2018-07	2019-07
Antenna	Schwarzbeck	BBHA 9120D	EF01153	2018-09	2019-09
Antenna	Amplifier Research	AT4560	EF01152	2018-10	2019-10
40GHz Standard Gain Horn with Amplifier	Flann Microwave Ltd	22240-25 Amp. CBL26402075	EF00301	2016-11	2019-11

3.7.5 Procedure

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

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

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

3.7.6 Results

Test Results - 5180 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
149.9958	39.10	pk	hor	68.20	-29.13
149.9958	37.30	qpk	hor	43.50	-06.24
149.9958	42.80	pk	ver	68.20	-25.39
149.9958	41.50	qpk	ver	43.50	-01.99
247.4932	40.30	pk	hor	68.20	-27.95
247.4932	39.80	qpk	hor	46.00	-06.18
247.4932	35.20	pk	ver	68.20	-32.98
247.4932	34.10	qpk	ver	46.00	-11.95
4731	50.93	pk	hor	68.20	-17.27
4731	38.58	RMS	hor	54.00	-15.42
4936	56.59	pk	hor	68.20	-11.61
4936	41.51	RMS	hor	54.00	-12.49
4956	52.58	pk	hor	68.20	-15.62
4956	40.12	RMS	hor	54.00	-13.88
5115	47.27	pk	hor	68.20	-20.93
5115	35.57	RMS	hor	54.00	-18.43
5149	59.26	pk	hor	68.20	-08.94
5149	46.05	RMS	hor	54.00	-07.95
5439	56.50	pk	hor	68.20	-11.70
5439	42.76	RMS	hor	54.00	-11.24
10355	51.73	pk	hor	68.20	-16.47
10355	51.21	pk	ver	68.20	-16.99
15544	45.14	pk	hor	68.20	-23.06
20709	39.76	pk	ver	68.20	-28.44

Test Results - 5240 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1039	49.16	pk	hor	68.20	-19.04
1039	48.02	RMS	hor	54.00	-05.98
1134	42.51	pk	ver	68.20	-25.69
1500	47.11	pk	hor	68.20	-21.09
1500	43.76	RMS	hor	54.00	-10.24
4992	55.75	pk	hor	68.20	-12.45
4992	42.89	RMS	hor	54.00	-11.11
5499	59.22	pk	hor	68.20	-08.98
5499	44.33	RMS	hor	68.20	-23.87
8736	45.86	pk	hor	68.20	-22.34
10477	46.79	pk	hor	68.20	-21.41
10477	48.72	pk	ver	68.20	-19.48
14472	47.01	pk	ver	68.20	-21.19
15712	44.75	pk	ver	68.20	-23.45
15720	44.73	pk	hor	68.20	-23.47
20952	40.08	pk	ver	68.20	-28.12

Test Results - 5190 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1040	48.85	pk	hor	68.20	-19.35
1040	47.47	RMS	hor	54.00	-06.53
1488	43.64	pk	hor	68.20	-24.56
1488	41.11	RMS	hor	54.00	-12.89
4911	53.37	pk	hor	68.20	-14.83
4911	41.95	RMS	hor	54.00	-12.05
5149	63.17	pk	hor	68.20	-05.03
5149	48.40	RMS	hor	54.00	-05.60
5149	50.14	pk	ver	68.20	-18.06
5149	36.78	RMS	ver	54.00	-17.22
5493	50.03	pk	hor	68.20	-18.17
5493	40.08	RMS	hor	68.20	-28.12
5560	52.72	pk	hor	68.20	-15.48
5560	41.48	RMS	hor	68.20	-26.72
7522	48.33	pk	ver	68.20	-19.87

Test Results - 5230 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
4933	53.19	pk	hor	68.20	-15.01
4933	42.44	RMS	hor	54.00	-11.56

Test Results - 5310 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1040	48.83	pk	hor	68.20	-19.37
1040	47.48	RMS	hor	54.00	-06.52
1488	43.66	pk	hor	68.20	-24.54
1488	41.09	RMS	hor	54.00	-12.91
4933	53.57	pk	hor	68.20	-14.63
4933	42.50	RMS	hor	54.00	-11.50
5363	62.69	pk	hor	68.20	-05.51
5363	50.22	RMS	hor	54.00	-03.78
5407	53.69	pk	hor	68.20	-14.51
5407	41.02	RMS	hor	54.00	-12.98
5555	55.74	pk	hor	68.20	-12.46
5555	45.26	RMS	hor	68.20	-22.94
8845	46.20	pk	hor	68.20	-22.00
14552	47.27	pk	hor	68.20	-20.93

Test Results - 5500 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1038	48.57	pk	hor	68.20	-19.63
1499	43.03	pk	ver	68.20	-25.17
4989	53.40	pk	hor	68.20	-14.80
4989	42.32	RMS	hor	54.00	-11.68
5449	55.77	pk	hor	68.20	-12.43
9170	51.55	pk	hor	68.20	-16.65
9170	41.41	RMS	hor	54.00	-12.59
11000	49.76	pk	hor	68.20	-18.44
11000	38.36	RMS	hor	54.00	-15.64
18642	36.75	pk	ver	68.20	-31.45
22000	44.72	pk	ver	68.20	-23.48
22000	29.83	RMS	ver	68.20	-38.37

Test Results - 5600 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1039	49.80	pk	hor	68.20	-18.40
1039	48.96	RMS	hor	54.00	-05.04
1499	43.16	pk	ver	68.20	-25.04
5329	55.56	pk	hor	68.20	-12.64
5329	42.81	RMS	hor	68.20	-25.39
7467	60.10	pk	hor	68.20	-08.10
7467	53.29	RMS	hor	54.00	-00.71
9337	50.91	pk	hor	68.20	-17.29
9337	40.30	RMS	hor	54.00	-13.70
22396	41.04	pk	ver	68.20	-27.16

Test Results - 5510 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1038	48.57	pk	hor	68.20	-19.63
4933	51.55	pk	hor	68.20	-16.65
4933	39.92	RMS	hor	54.00	-14.08
5470	62.33	pk	hor	68.20	-05.87
5470	49.30	RMS	hor	68.20	-18.90
7347	51.41	pk	hor	68.20	-16.79
7347	44.09	RMS	hor	54.00	-09.91
9171	43.91	pk	hor	68.20	-24.29
14600	48.51	pk	hor	68.20	-19.69

Test Results - 5590 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1038	48.49	pk	hor	68.20	-19.71
5333	53.67	pk	hor	68.20	-14.53
5333	42.46	RMS	hor	68.20	-25.74
7453	54.67	pk	hor	68.20	-13.53
7453	48.28	RMS	hor	54.00	-05.72
9312	44.60	pk	hor	68.20	-23.60
14584	47.36	pk	hor	68.20	-20.84

Test Results - 5670 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1000	42.92	pk	hor	68.20	-25.28
1000	38.17	RMS	hor	54.00	-15.83
1039	49.09	pk	hor	68.20	-19.11
1039	47.95	RMS	hor	54.00	-06.05
1499	42.78	pk	ver	68.20	-25.42
5016	43.97	pk	ver	68.20	-24.23
5414	54.24	pk	hor	68.20	-13.96
5414	42.66	RMS	hor	54.00	-11.34
5460	55.41	pk	hor	68.20	-12.79
5460	43.39	RMS	hor	68.20	-24.81
5726	62.36	pk	hor	68.20	-05.84
5726	50.34	RMS	hor	68.20	-17.86
7560	53.46	pk	hor	68.20	-14.74
7560	46.63	RMS	hor	54.00	-07.37

Test Results - 5700 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1000	48.12	pk	hor	68.20	-20.08
1000	44.78	RMS	hor	54.00	-09.22
1040	49.60	pk	hor	68.20	-18.60
1040	48.46	RMS	hor	54.00	-05.54
1250	43.15	pk	ver	68.20	-25.05
1250	38.18	RMS	ver	68.20	-30.02
1500	45.41	pk	hor	68.20	-22.79
1500	41.69	RMS	hor	54.00	-12.31
1500	43.96	pk	ver	68.20	-24.24
1500	41.09	RMS	ver	54.00	-12.91
5462	54.38	pk	hor	68.20	-13.82
5462	42.95	RMS	hor	68.20	-25.25
7600	57.97	pk	hor	68.20	-10.23
7600	50.65	RMS	hor	54.00	-03.35
7600	50.96	pk	ver	68.20	-17.24
7600	41.53	RMS	ver	54.00	-12.47
9503	47.68	pk	hor	68.20	-20.52
9503	37.11	RMS	hor	68.20	-31.09
11399	52.33	pk	hor	68.20	-15.87

11399	40.99	RMS	hor	54.00	-13.01
11399	49.33	pk	ver	68.20	-18.87
11399	38.52	RMS	ver	54.00	-15.48
22806	39.49	pk	ver	68.20	-28.71

Test Results - 5745 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1039	49.07	pk	hor	68.20	-19.13
1039	47.75	RMS	hor	54.00	-06.25
1187	40.67	pk	ver	68.20	-27.53
3830	51.61	pk	hor	68.20	-16.59
3830	40.42	RMS	hor	54.00	-13.58
5379	48.99	pk	hor	68.20	-19.21
5379	37.02	RMS	hor	54.00	-16.98
7660	57.04	pk	hor	68.20	-11.16
7660	49.90	RMS	hor	54.00	-04.10
11488	47.99	pk	hor	68.20	-20.21
11488	47.77	pk	ver	68.20	-20.43

Test Results - 5755 MHz – HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1499	38.99	pk	ver	68.20	-29.21
1581	40.71	pk	ver	68.20	-27.49
5445	46.88	pk	hor	68.20	-21.32
5445	36.40	RMS	hor	54.00	-17.60
7673	54.38	pk	hor	68.20	-13.82
7673	47.65	RMS	hor	54.00	-06.35

Test Results - 5785 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1039	48.47	pk	hor	68.20	-19.73 dB
1039	47.16	RMS	hor	54.00	-6.84 dB
3857	51.67	pk	hor	68.20	-16.53 dB
3857	41.26	RMS	hor	54.00	-12.74 dB
5390	49.20	pk	hor	68.20	-19 dB
5390	35.43	RMS	hor	54.00	-18.57 dB
7713	57.70	pk	hor	68.20	-10.5 dB
7713	51.43	RMS	hor	54.00	-2.57 dB
11570	53.69	pk	hor	68.20	-14.51 dB
11570	42.08	RMS	hor	54.00	-11.92 dB
11571	51.96	pk	ver	68.20	-16.24 dB
11571	40.72	RMS	ver	54.00	-13.28 dB

Test Results - 5795 MHz - HT40					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1038	46.47	pk	hor	68.20	-21.73
1581	40.31	pk	ver	68.20	-27.89
3760	39.43	pk	ver	68.20	-28.77
3866	43.52	pk	hor	68.20	-24.68
5351	46.59	pk	hor	68.20	-21.61
5351	36.29	RMS	hor	54.00	-17.71
7727	56.10	pk	hor	68.20	-12.10
7727	50.26	RMS	hor	54.00	-03.74

Test Results - 5825 MHz - OFDM					
Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
1038	48.12	pk	hor	68.20	-20.08
1187	40.88	pk	ver	68.20	-27.32
1499	41.92	pk	ver	68.20	-26.28
2500	36.30	pk	ver	68.20	-31.90
2500	26.37	RMS	ver	54.00	-27.63
3885	45.65	pk	hor	68.20	-22.55
5007	43.89	pk	ver	68.20	-24.31
5447	52.27	pk	hor	68.20	-15.93
5447	39.55	RMS	hor	54.00	-14.45
6087	62.48	pk	hor	68.20	-05.72
6087	48.05	RMS	hor	68.20	-20.15
10950	43.30	pk	hor	68.20	-24.90
11040	43.69	pk	ver	68.20	-24.51
11648	48.47	pk	hor	68.20	-19.73
11649	50.69	pk	ver	68.20	-17.51

ANNEX A Transmitter spurious emissions

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Rohde & Schwarz HK 116, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5180 MHz
Test Date:	2019-01-18
Note:	

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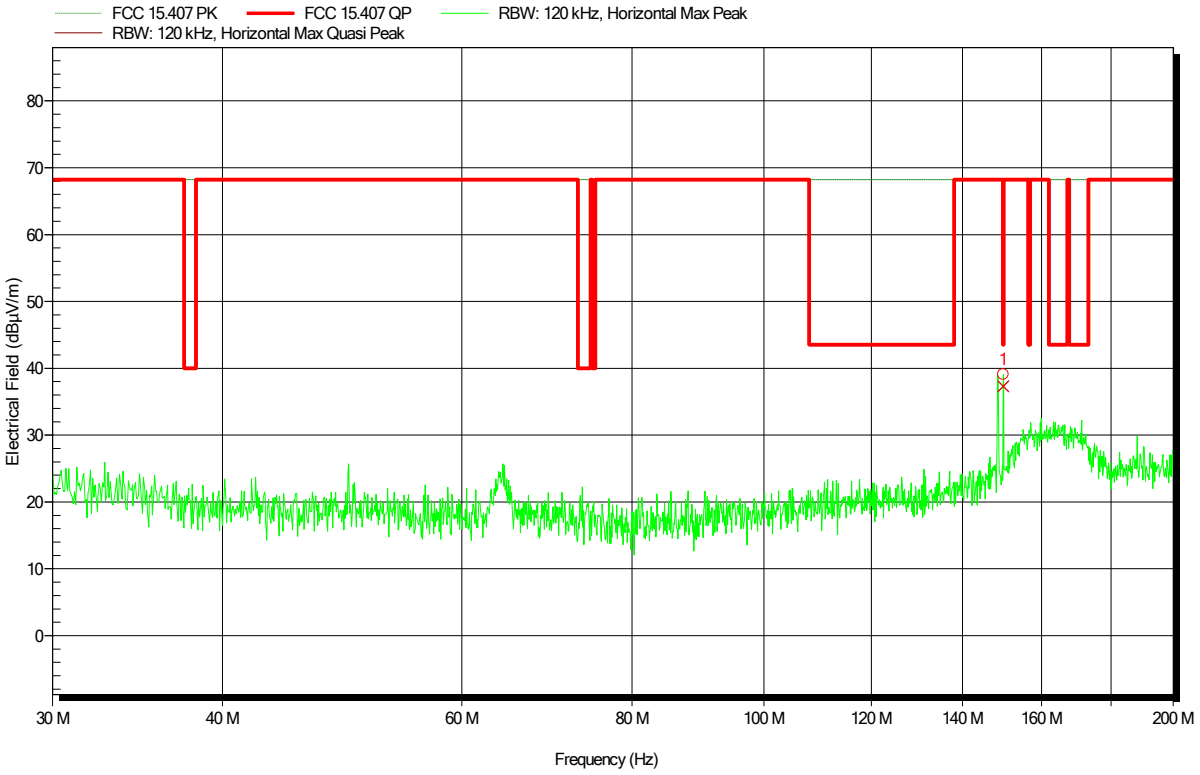

Frequency	Peak	Peak Limit	Peak Difference	Status
149.9958 MHz	39.1 dBµV/m	68.2 dBµV/m	-29.13 dB	Pass

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
149.9958 MHz	37.3 dBµV/m	43.5 dBµV/m	-6.24 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Rohde & Schwarz HK 116, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5180 MHz
Test Date:	2019-01-18
Note:	

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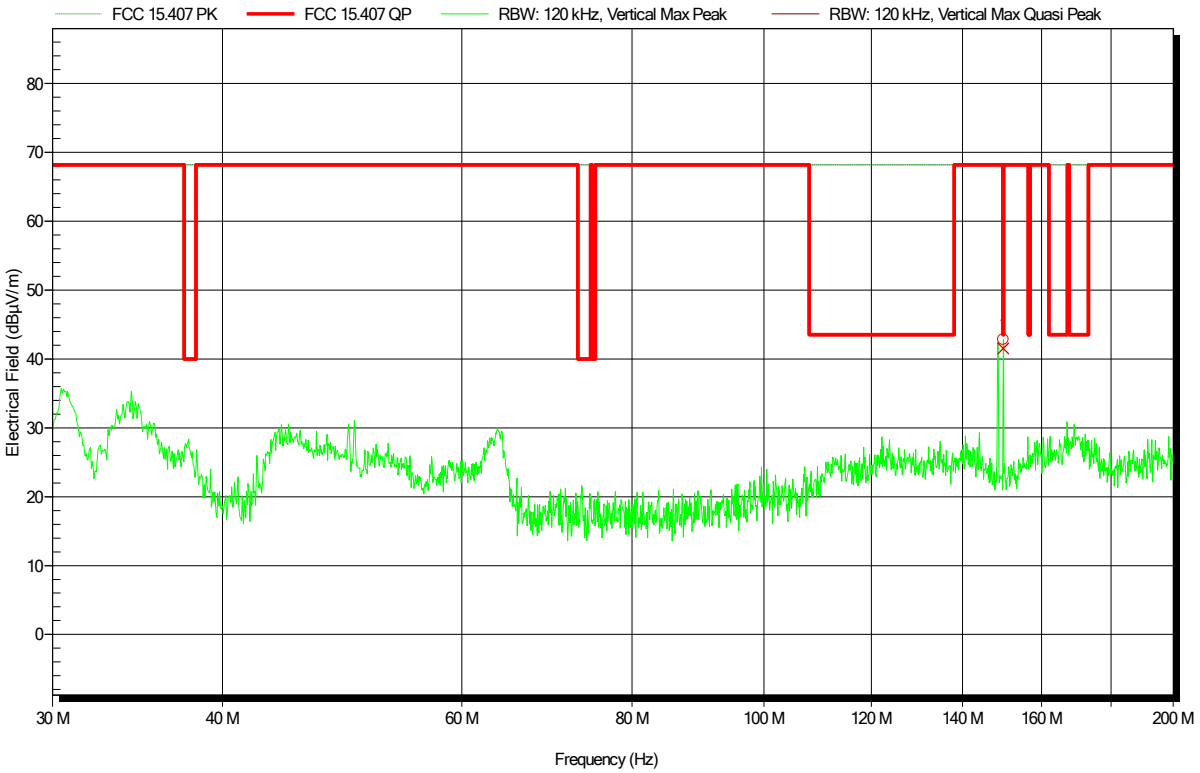

Frequency	Peak	Peak Limit	Peak Difference	Status
149.9958 MHz	42.8 dBµV/m	68.2 dBµV/m	-25.39 dB	Pass

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
149.9958 MHz	41.5 dBµV/m	43.5 dBµV/m	-1.99 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Rohde & Schwarz HL 223, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5180 MHz
Test Date:	2019-01-18
Note:	

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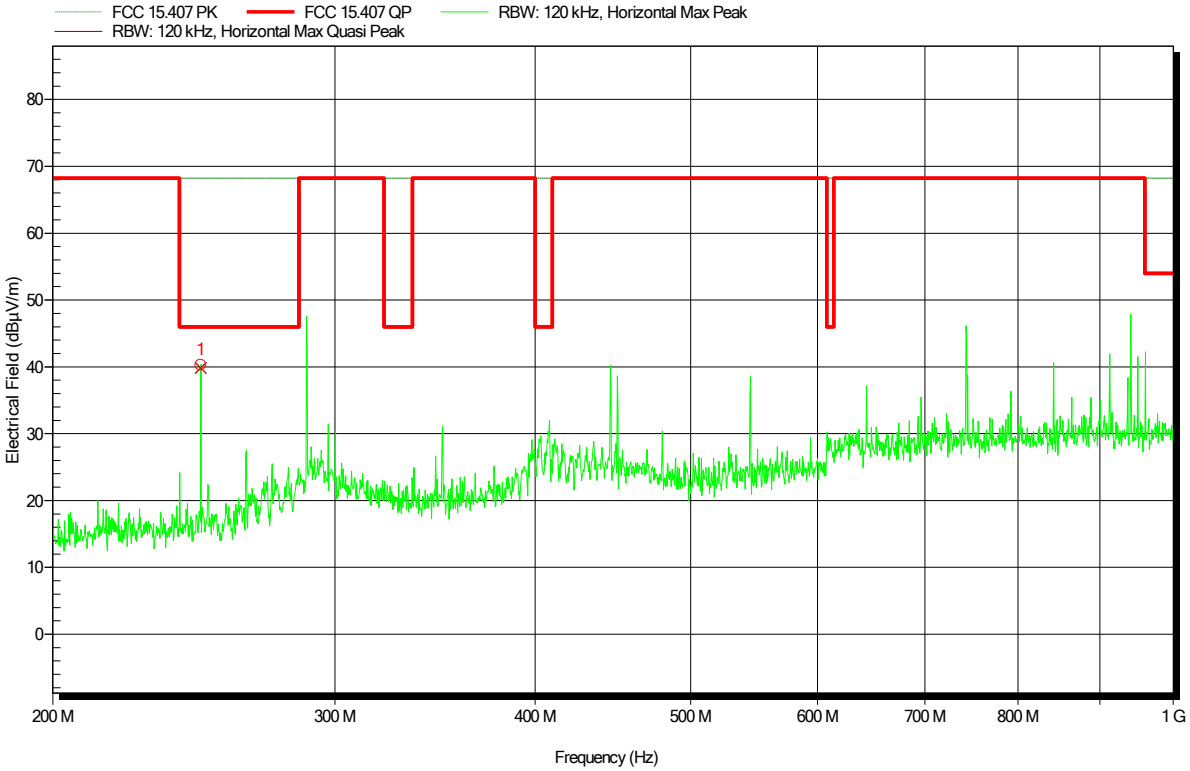

Frequency	Peak	Peak Limit	Peak Difference	Status
247.4932 MHz	40.3 dBµV/m	68.2 dBµV/m	-27.95 dB	Pass

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
247.4932 MHz	39.8 dBµV/m	46 dBµV/m	-6.18 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Jahn
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Rohde & Schwarz HL 223, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5180 MHz
Test Date:	2019-01-18
Note:	

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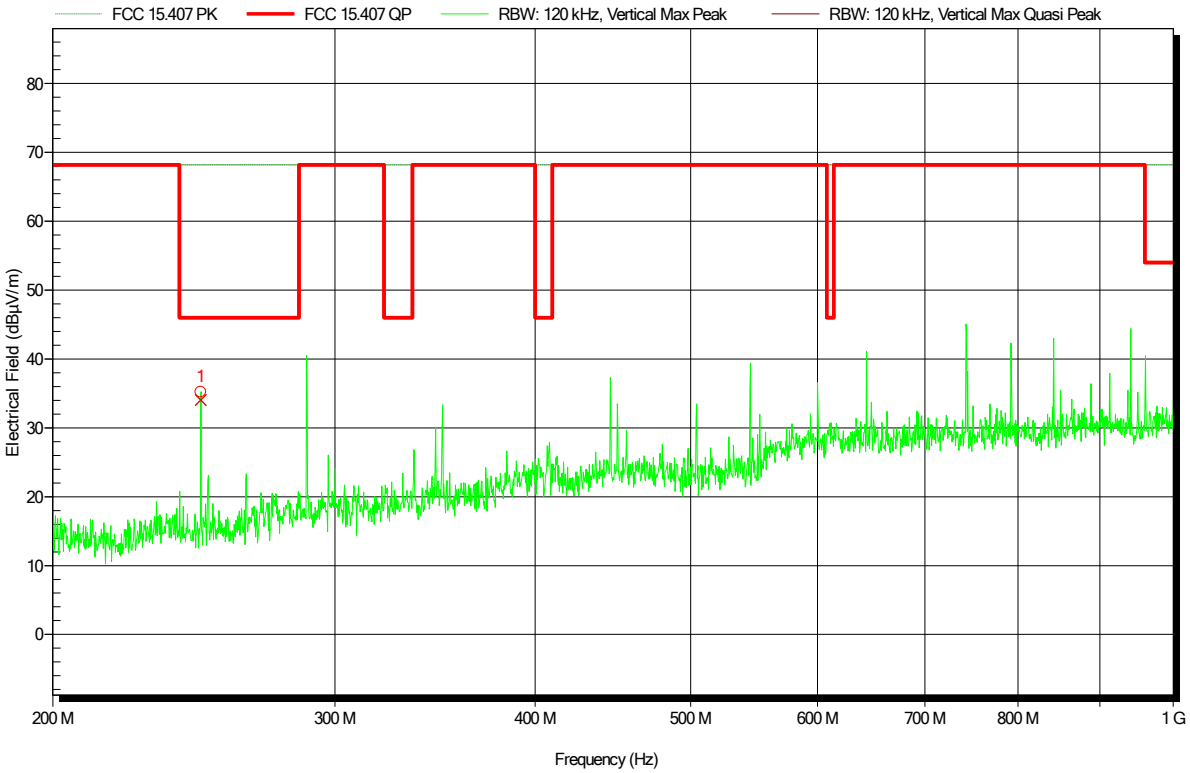

Frequency	Peak	Peak Limit	Peak Difference	Status
247.4932 MHz	35.2 dBµV/m	68.2 dBµV/m	-32.98 dB	Pass

Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status
247.4932 MHz	34.1 dBµV/m	46 dBµV/m	-11.95 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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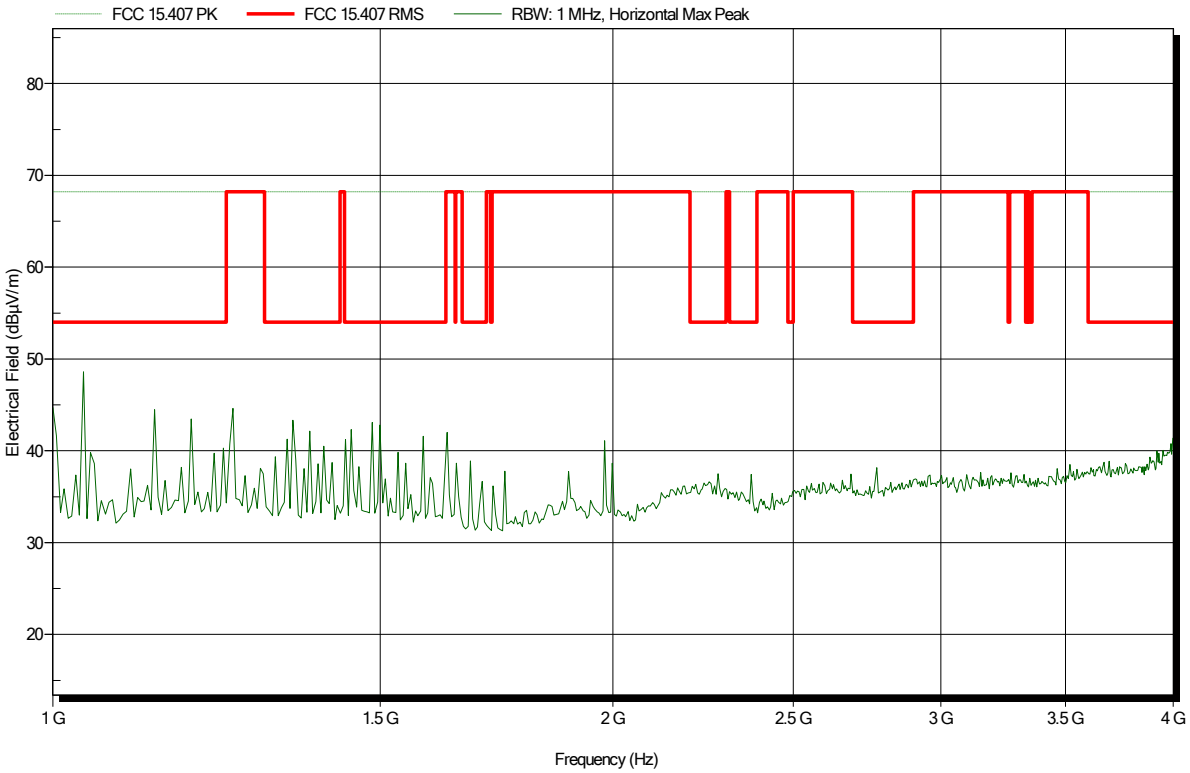

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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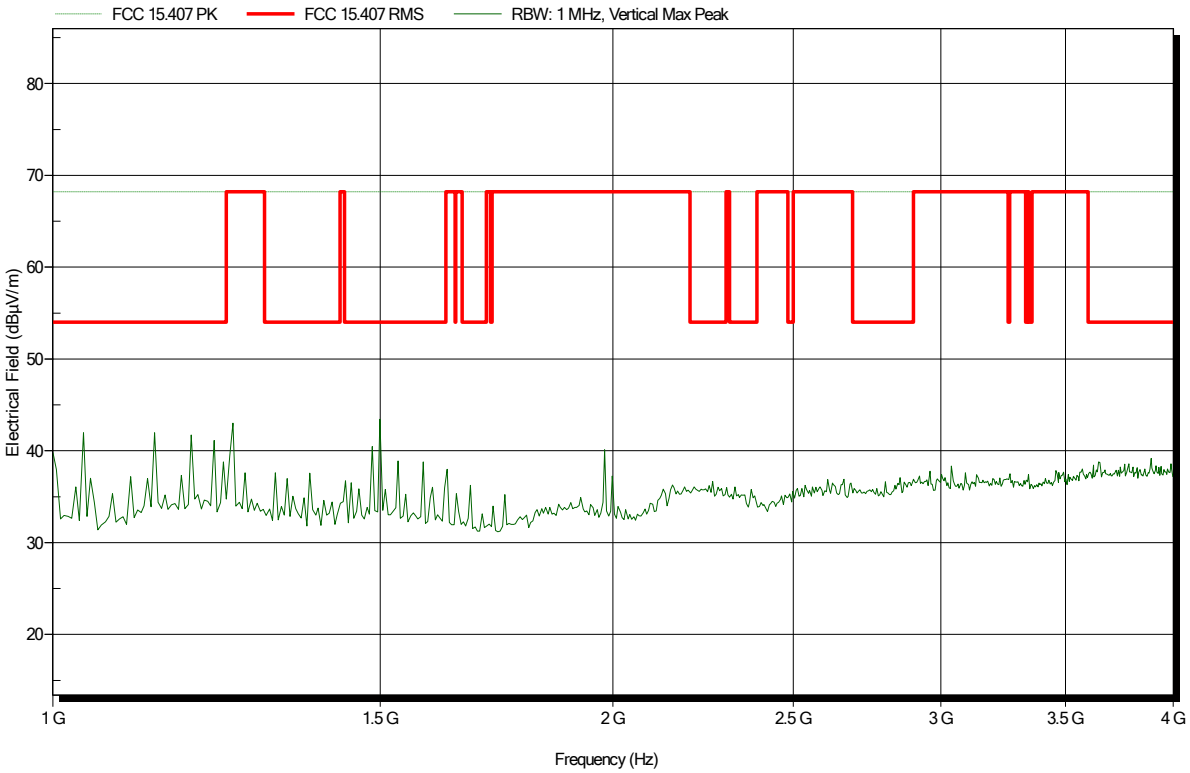

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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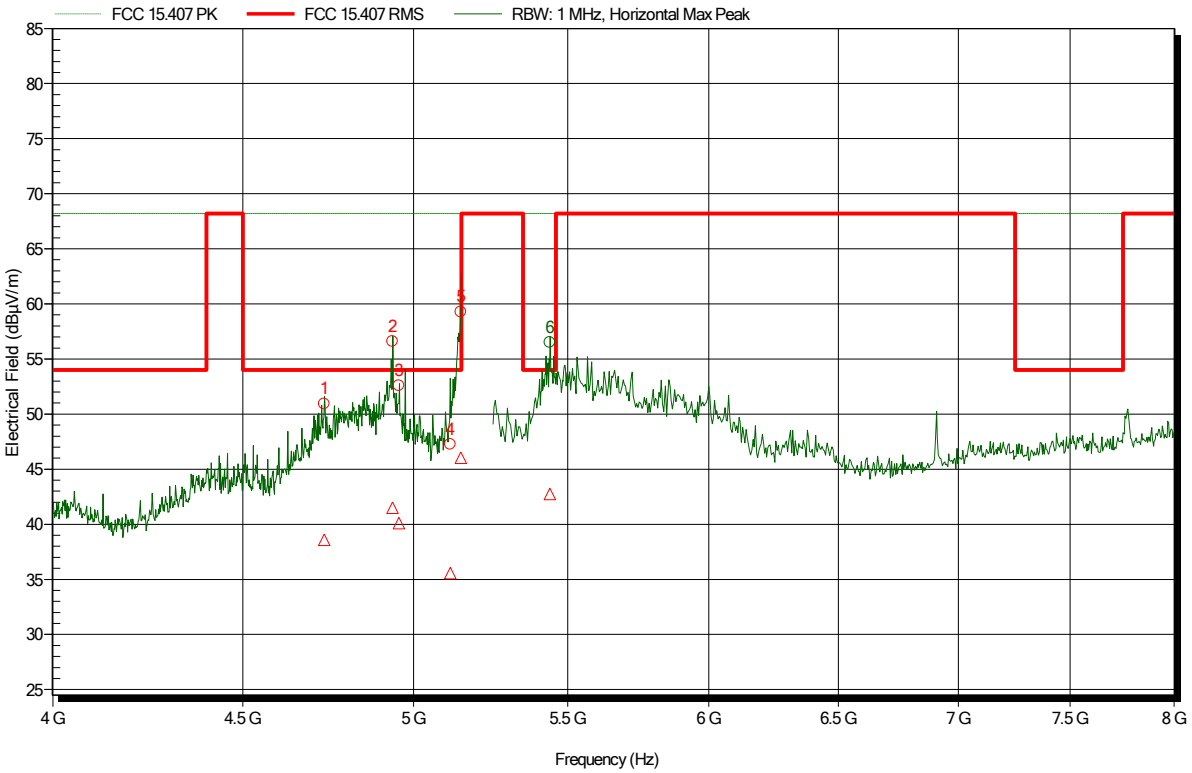

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.731 GHz	50.93 dBµV/m	68.2 dBµV/m	-17.27 dB	Pass
4.936 GHz	56.59 dBµV/m	68.2 dBµV/m	-11.61 dB	Pass
4.956 GHz	52.58 dBµV/m	68.2 dBµV/m	-15.62 dB	Pass
5.115 GHz	47.27 dBµV/m	68.2 dBµV/m	-20.93 dB	Pass
5.149 GHz	59.26 dBµV/m	68.2 dBµV/m	-8.94 dB	Pass
5.439 GHz	56.5 dBµV/m	68.2 dBµV/m	-11.7 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.731 GHz	38.58 dBµV/m	54 dBµV/m	-15.42 dB	Pass
4.936 GHz	41.51 dBµV/m	54 dBµV/m	-12.49 dB	Pass
4.956 GHz	40.12 dBµV/m	54 dBµV/m	-13.88 dB	Pass
5.115 GHz	35.57 dBµV/m	54 dBµV/m	-18.43 dB	Pass
5.149 GHz	46.05 dBµV/m	54 dBµV/m	-7.95 dB	Pass
5.439 GHz	42.76 dBµV/m	54 dBµV/m	-11.24 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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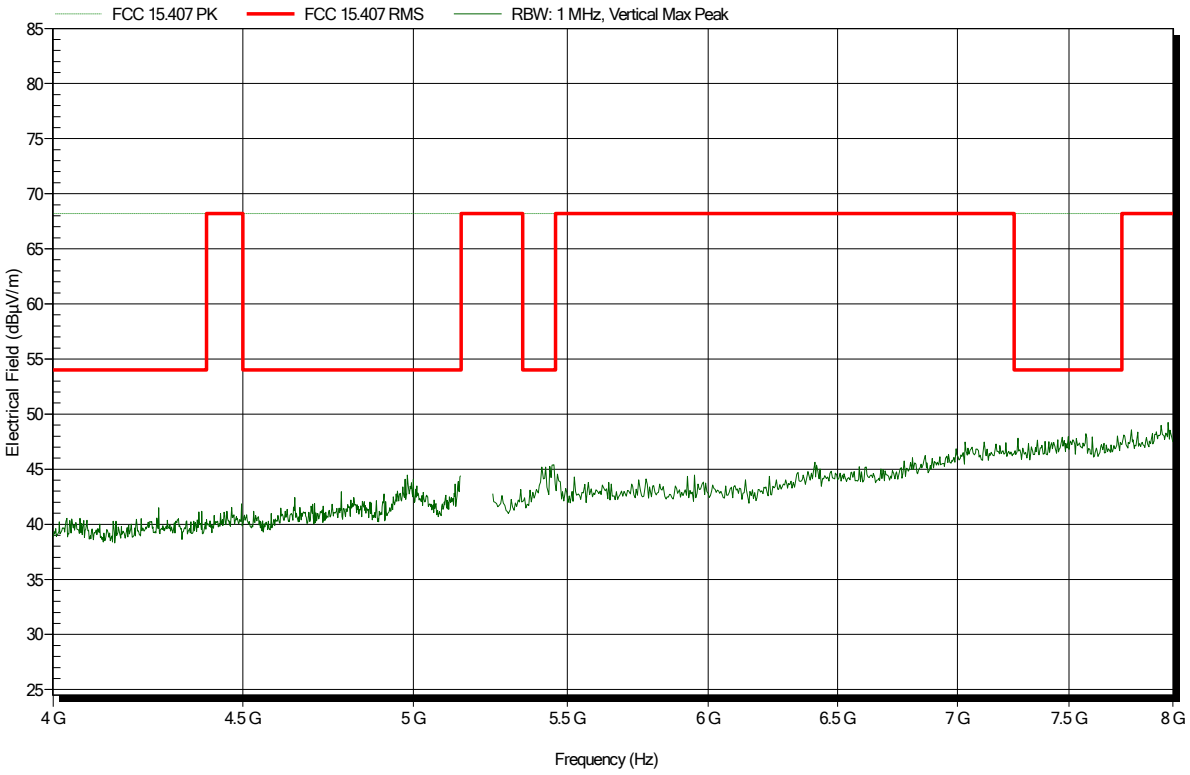

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	lower bandedge

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Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-27
Note:	lower bandedge

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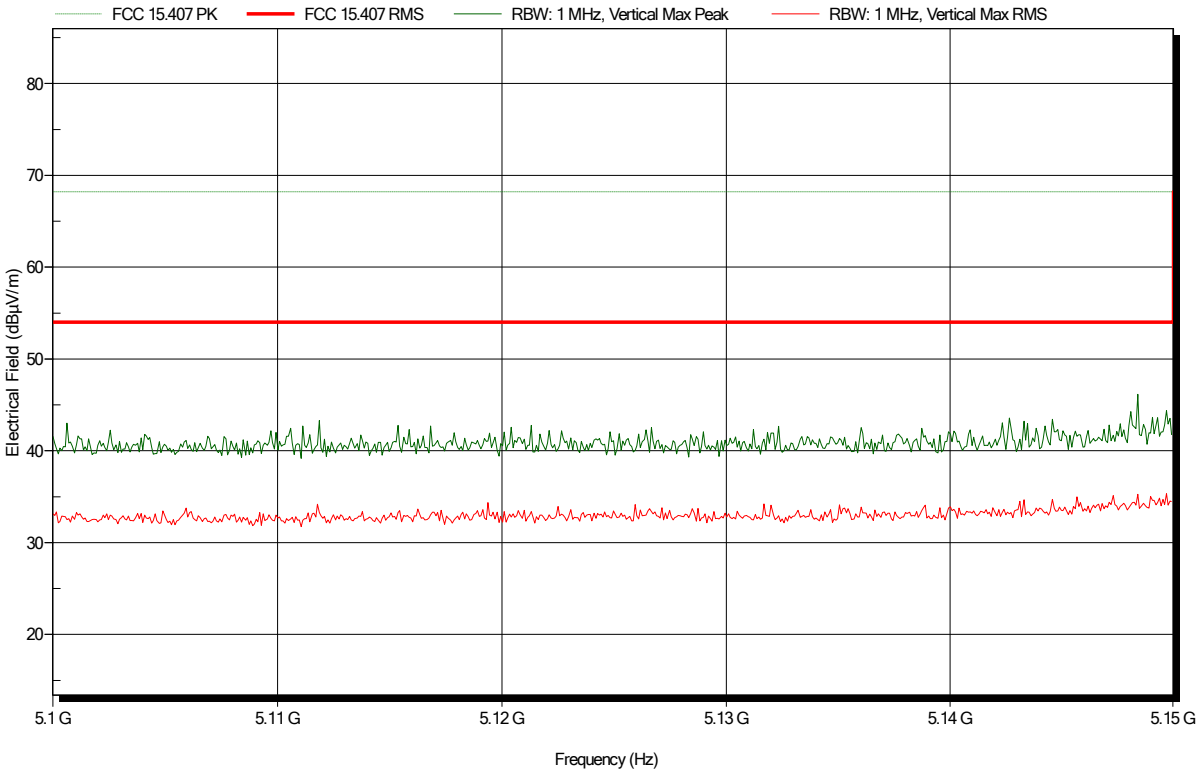

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	upper bandedge

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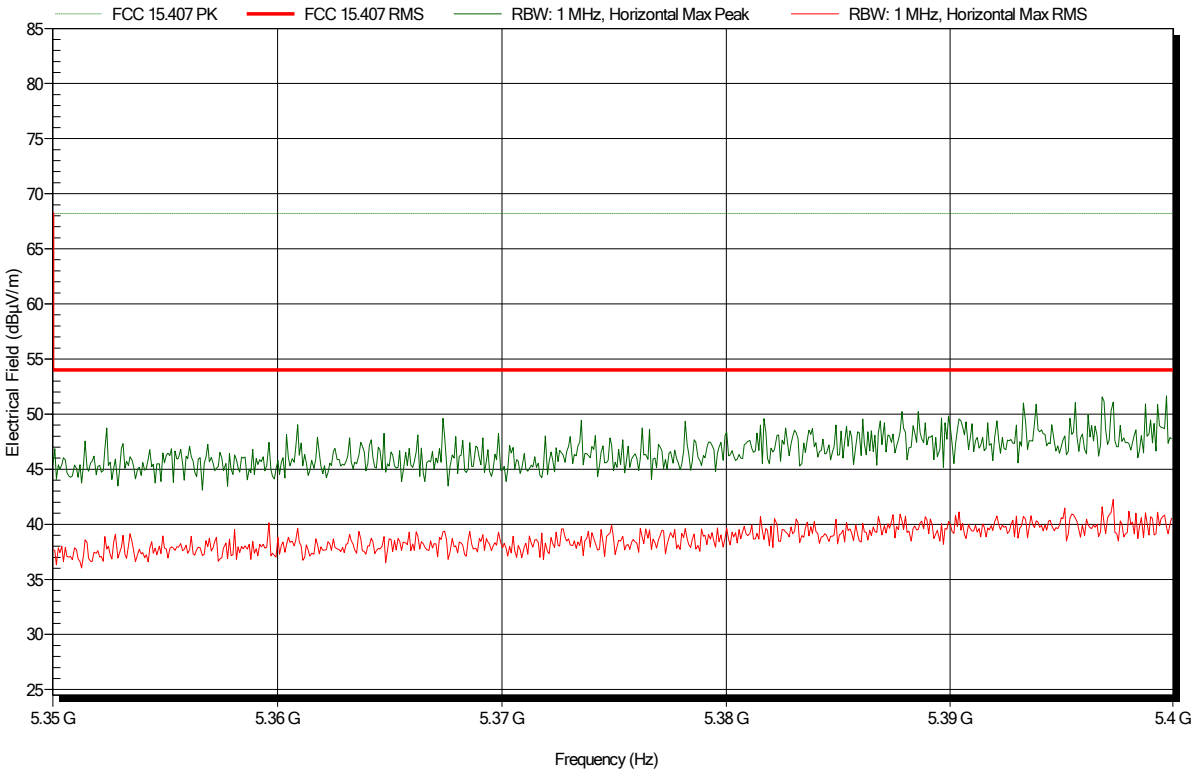

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-27
Note:	upper bandedge

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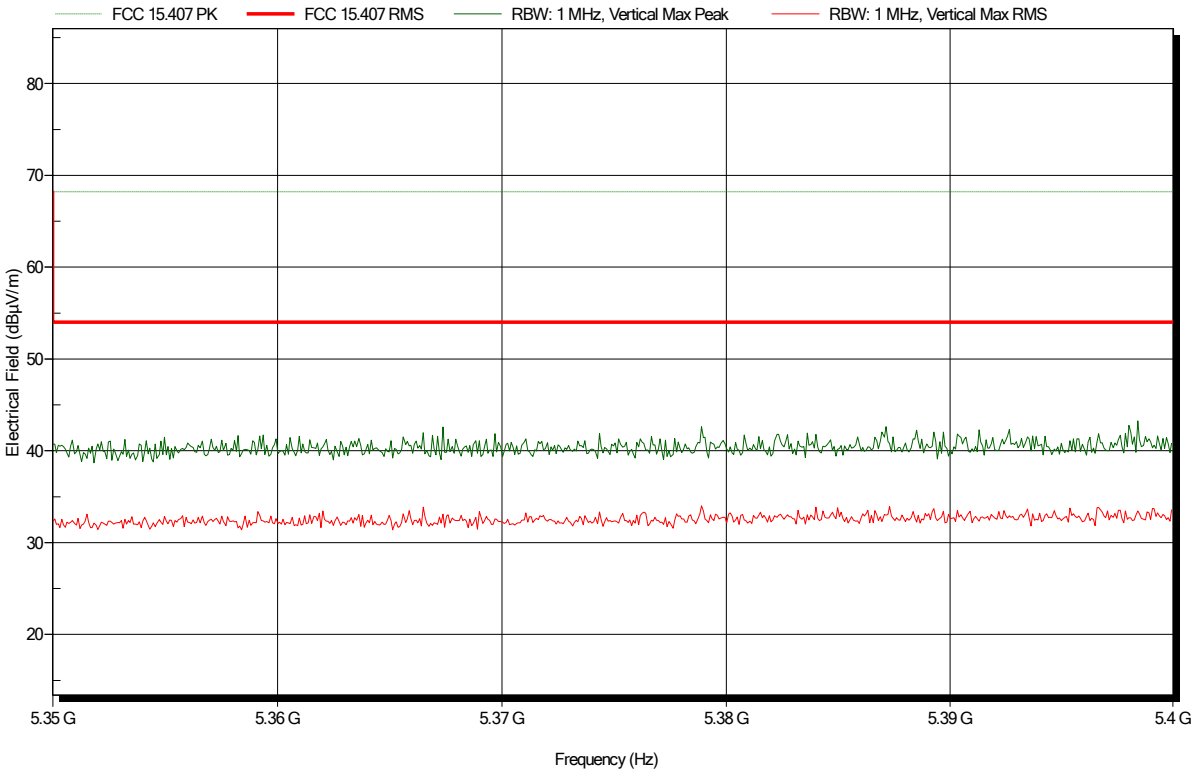

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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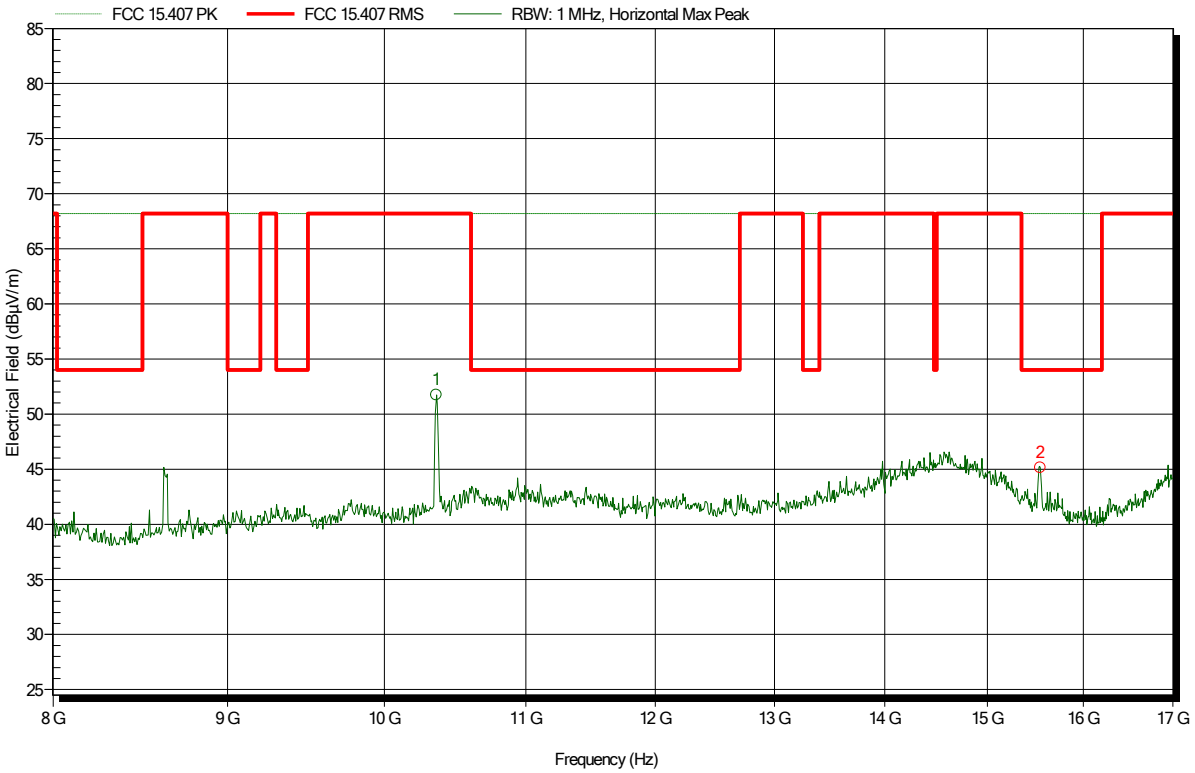

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.355 GHz	51.73 dBµV/m	68.2 dBµV/m	-16.47 dB	Pass
15.544 GHz	45.14 dBµV/m	68.2 dBµV/m	-23.06 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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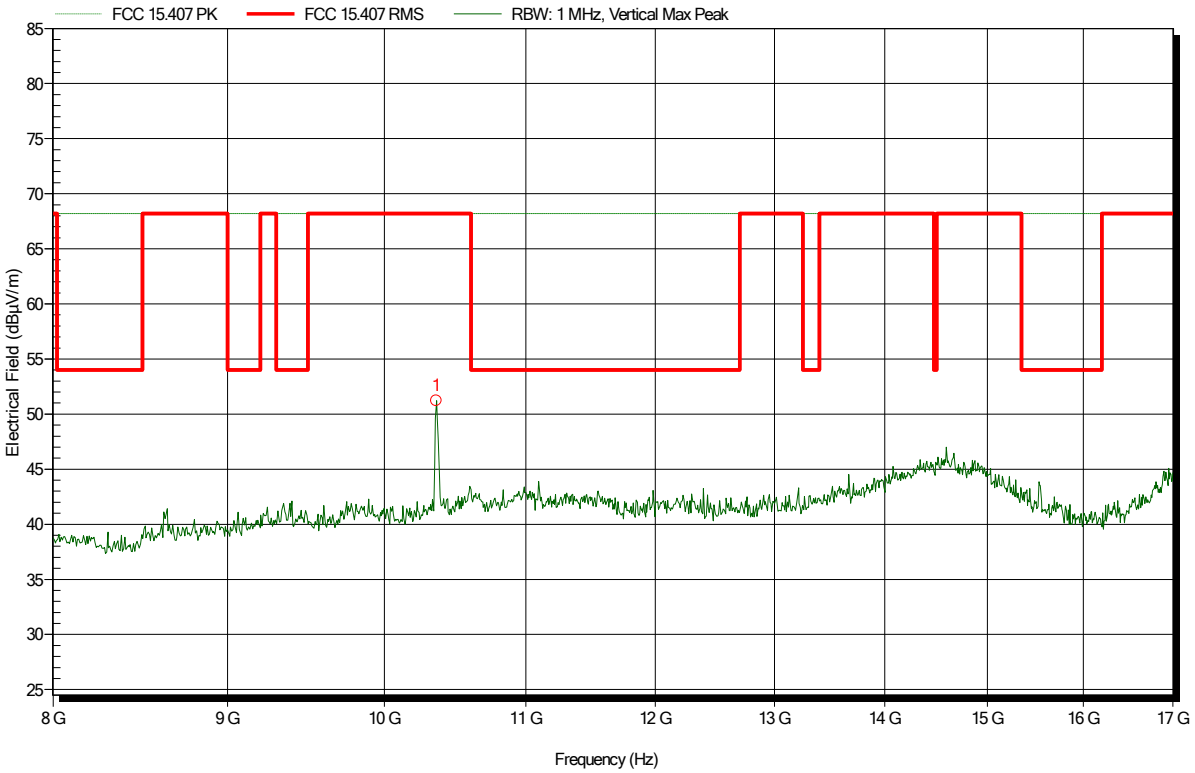

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.355 GHz	51.21 dBµV/m	68.2 dBµV/m	-16.99 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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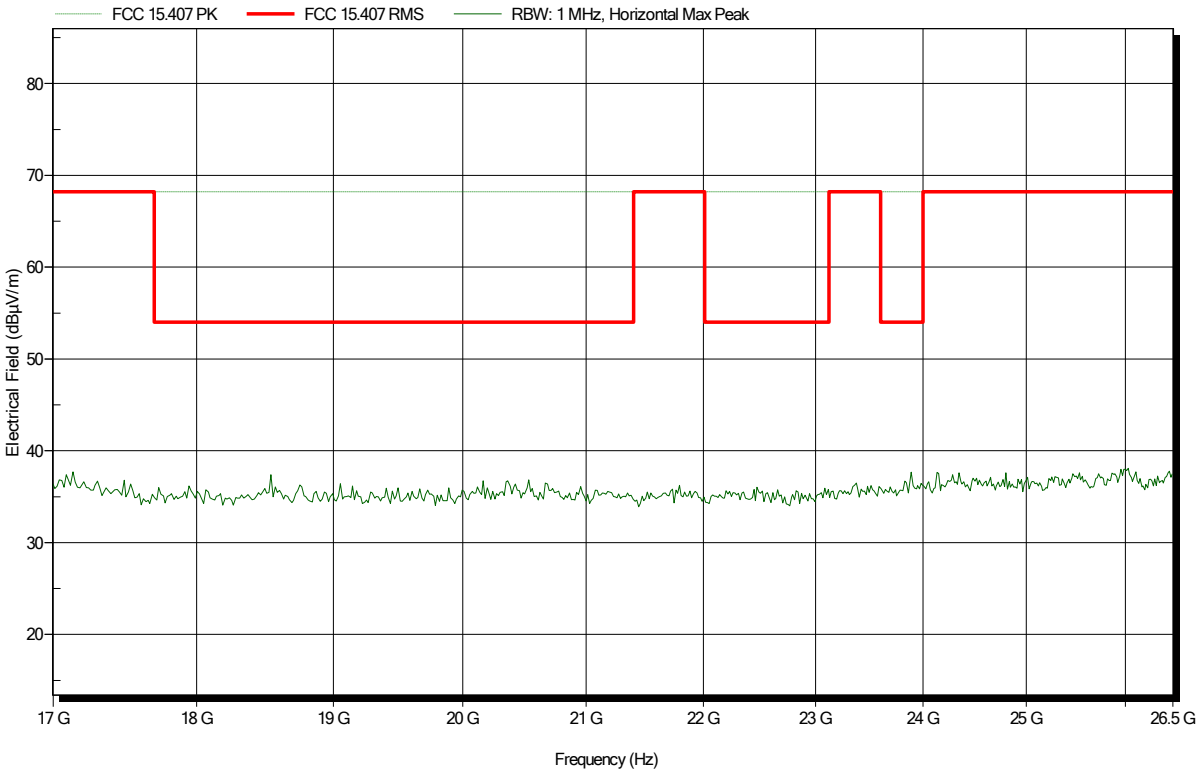

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-20
Note:	

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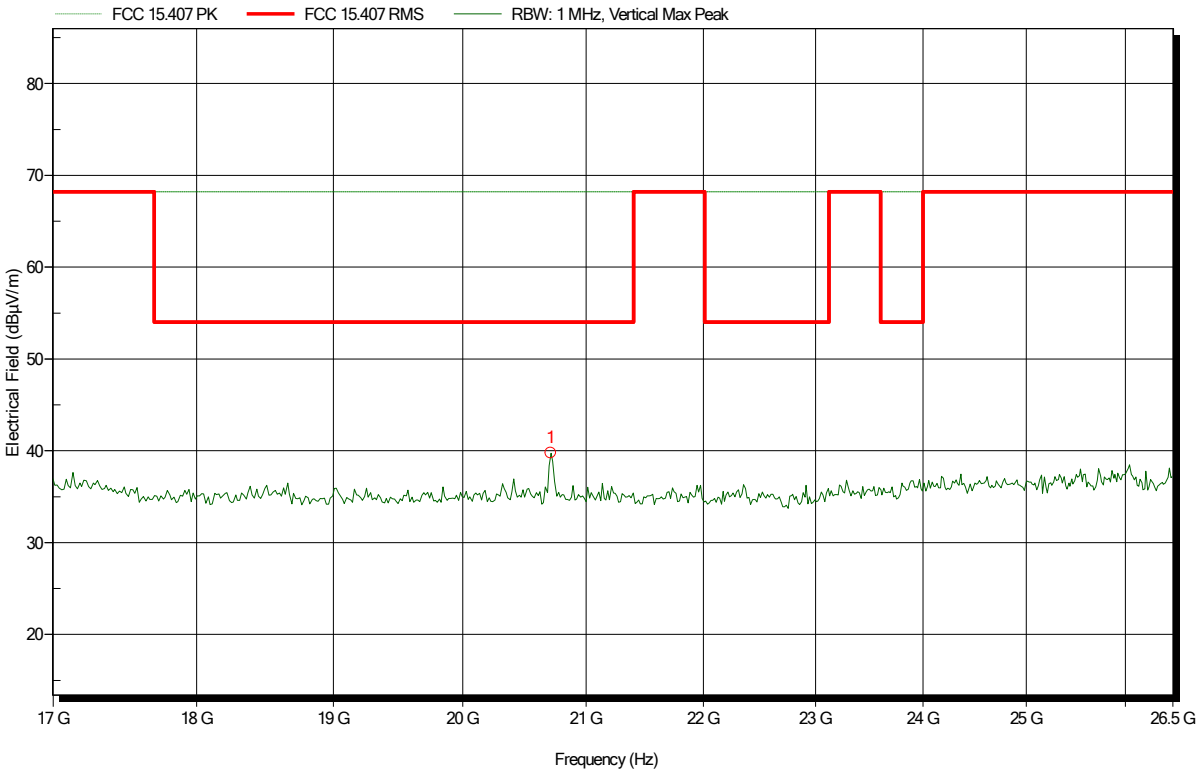

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.709 GHz	39.76 dBµV/m	68.2 dBµV/m	-28.44 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-27
Note:	

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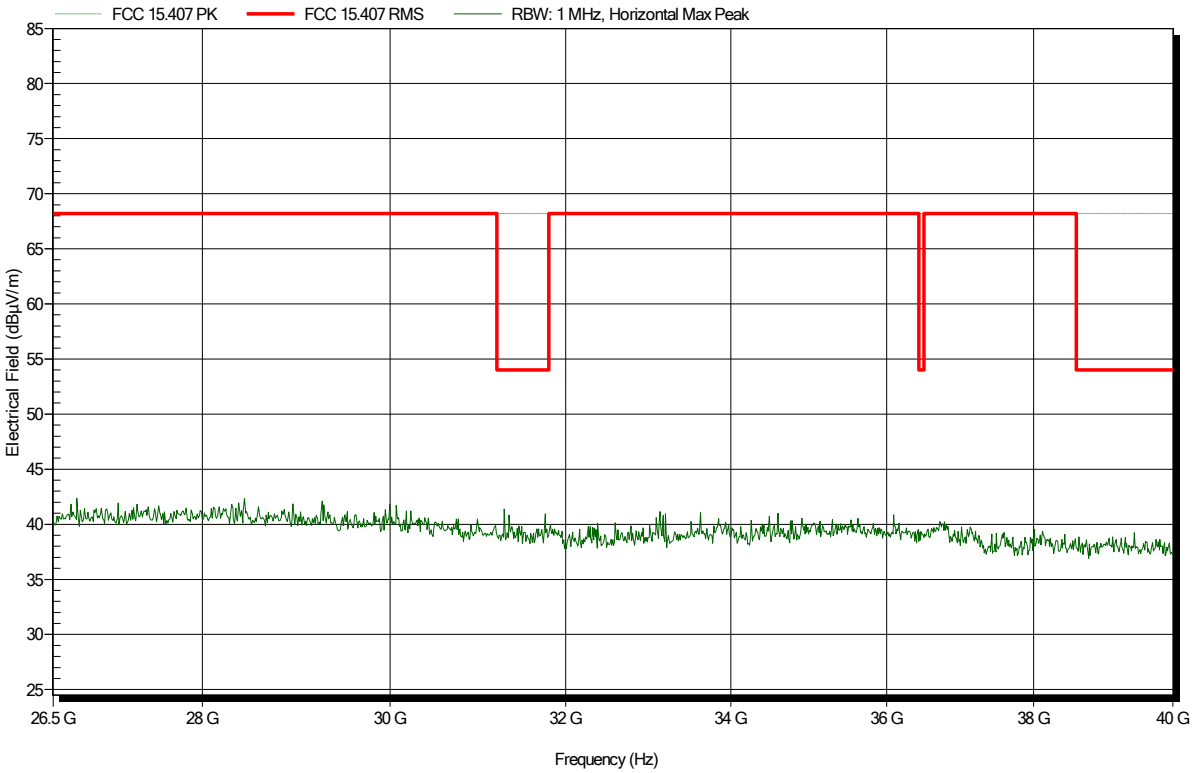

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Flann Microwave Ltd 22240-25+CBL26402075, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5180 MHz
Test Date:	2018-12-27
Note:	

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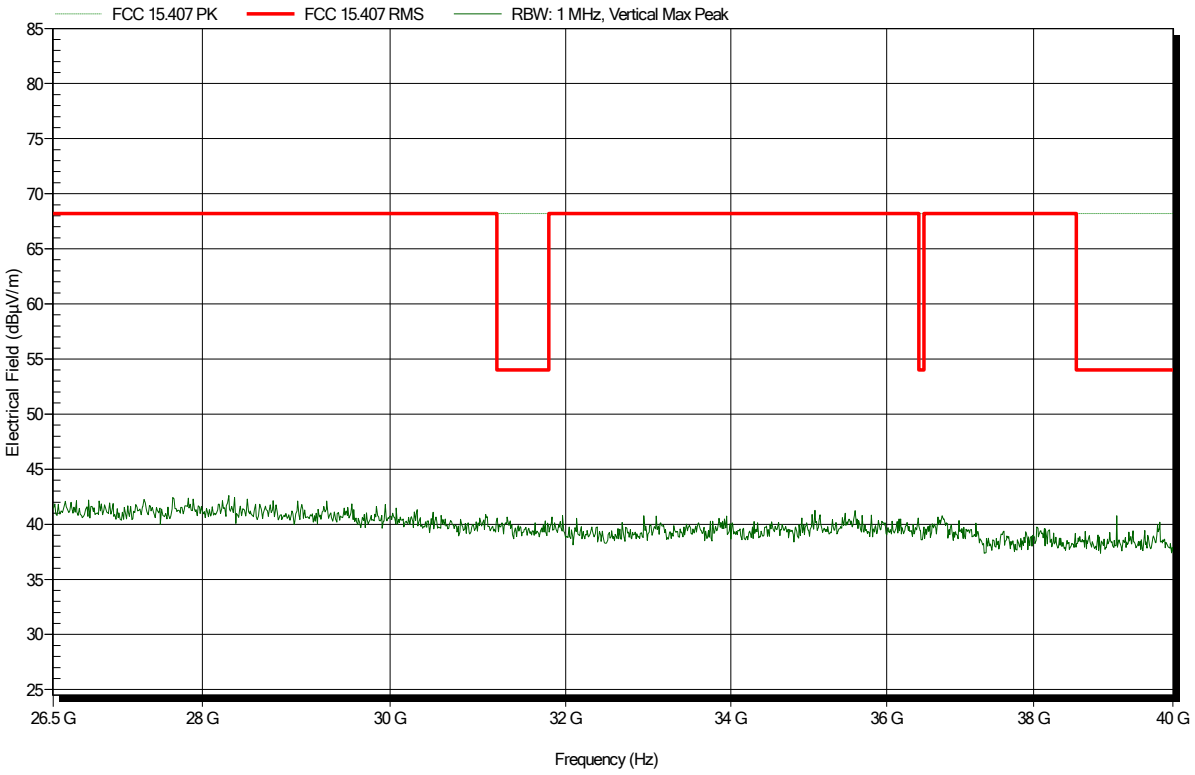

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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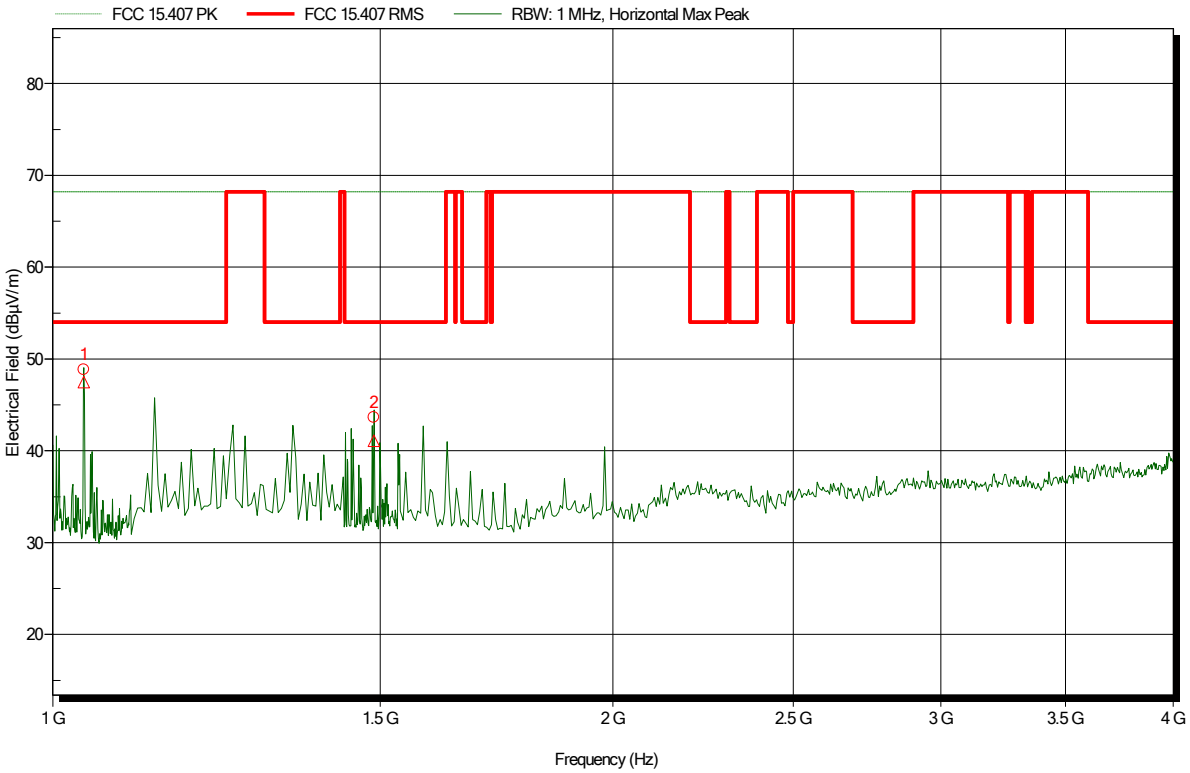

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.04 GHz	48.85 dBµV/m	68.2 dBµV/m	-19.35 dB	Pass
1.488 GHz	43.64 dBµV/m	68.2 dBµV/m	-24.56 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.04 GHz	47.47 dBµV/m	54 dBµV/m	-6.53 dB	Pass
1.488 GHz	41.11 dBµV/m	54 dBµV/m	-12.89 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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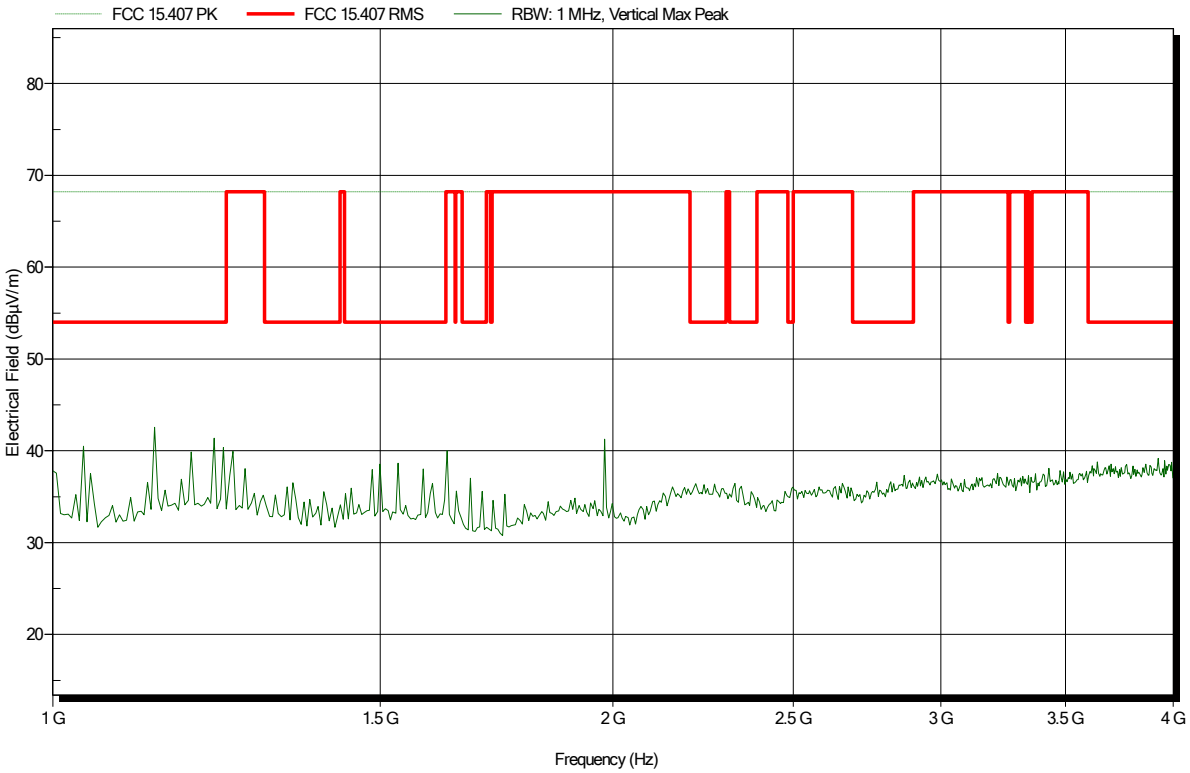

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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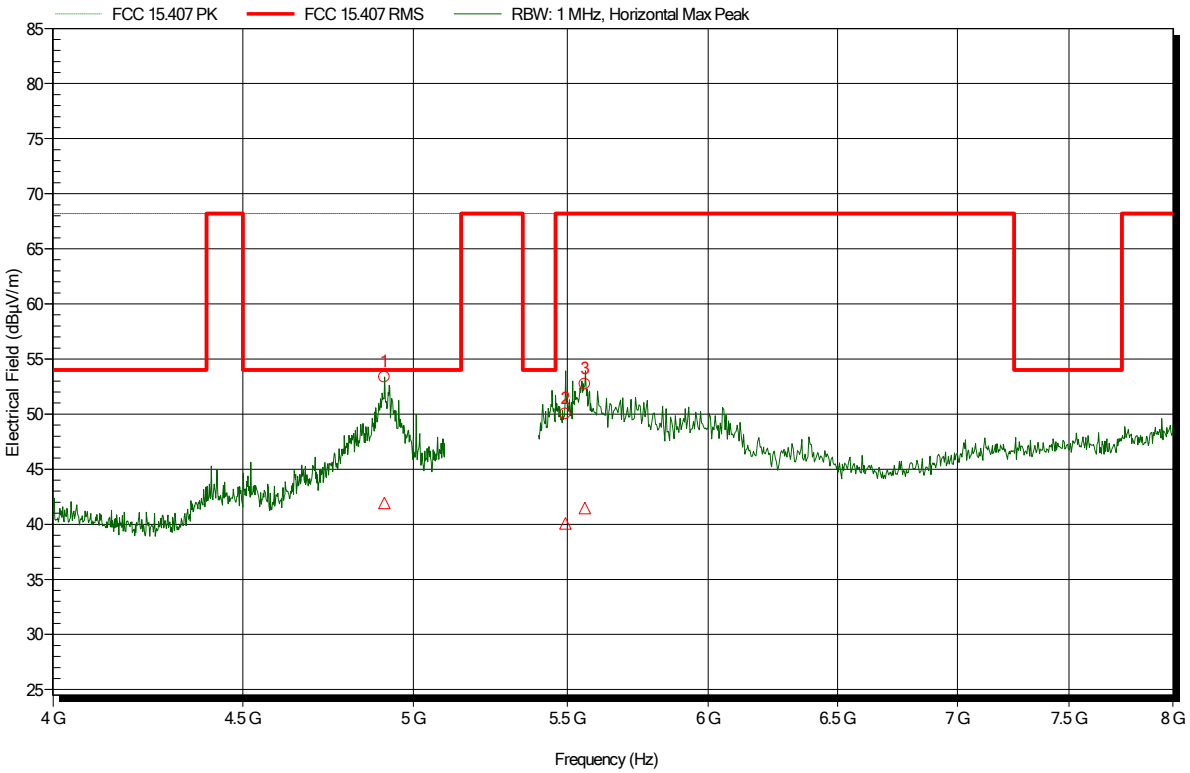

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.911 GHz	53.37 dBµV/m	68.2 dBµV/m	-14.83 dB	Pass
5.493 GHz	50.03 dBµV/m	68.2 dBµV/m	-18.17 dB	Pass
5.56 GHz	52.72 dBµV/m	68.2 dBµV/m	-15.48 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.911 GHz	41.95 dBµV/m	54 dBµV/m	-12.05 dB	Pass
5.493 GHz	40.08 dBµV/m	68.2 dBµV/m	-28.12 dB	Pass
5.56 GHz	41.48 dBµV/m	68.2 dBµV/m	-26.72 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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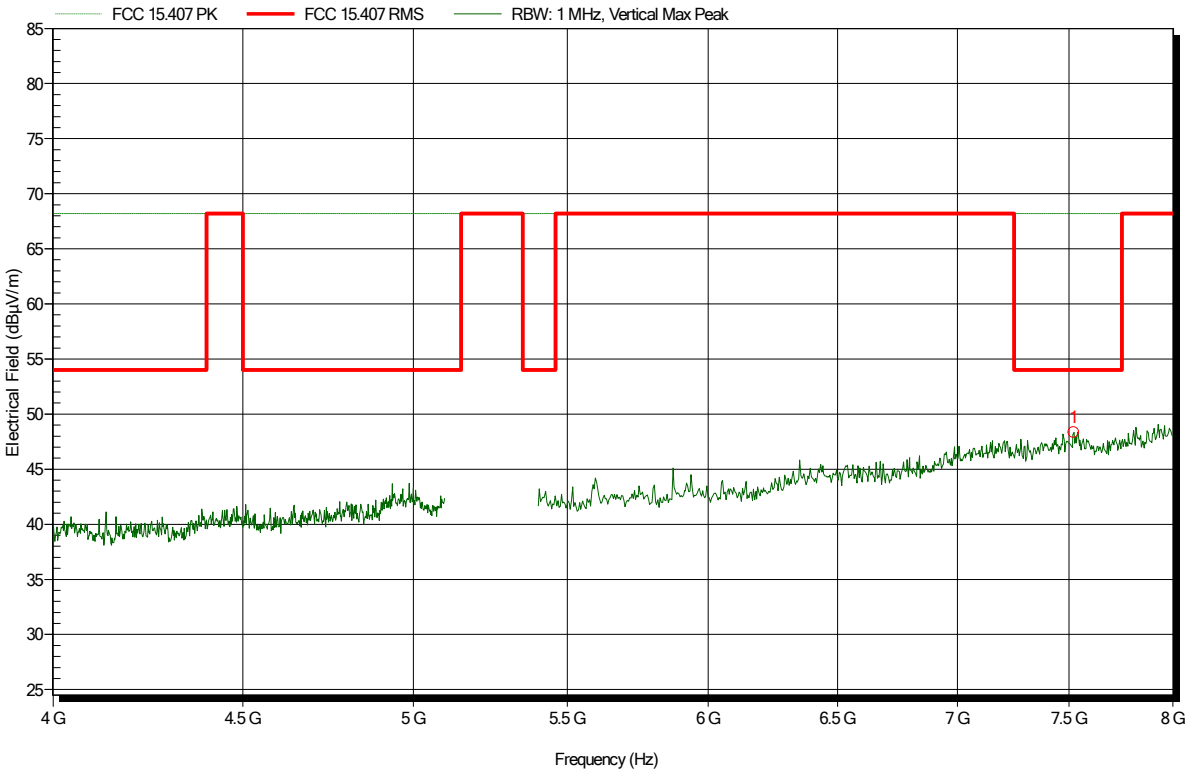

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.522 GHz	48.33 dBµV/m	68.2 dBµV/m	-19.87 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	lower bandedge

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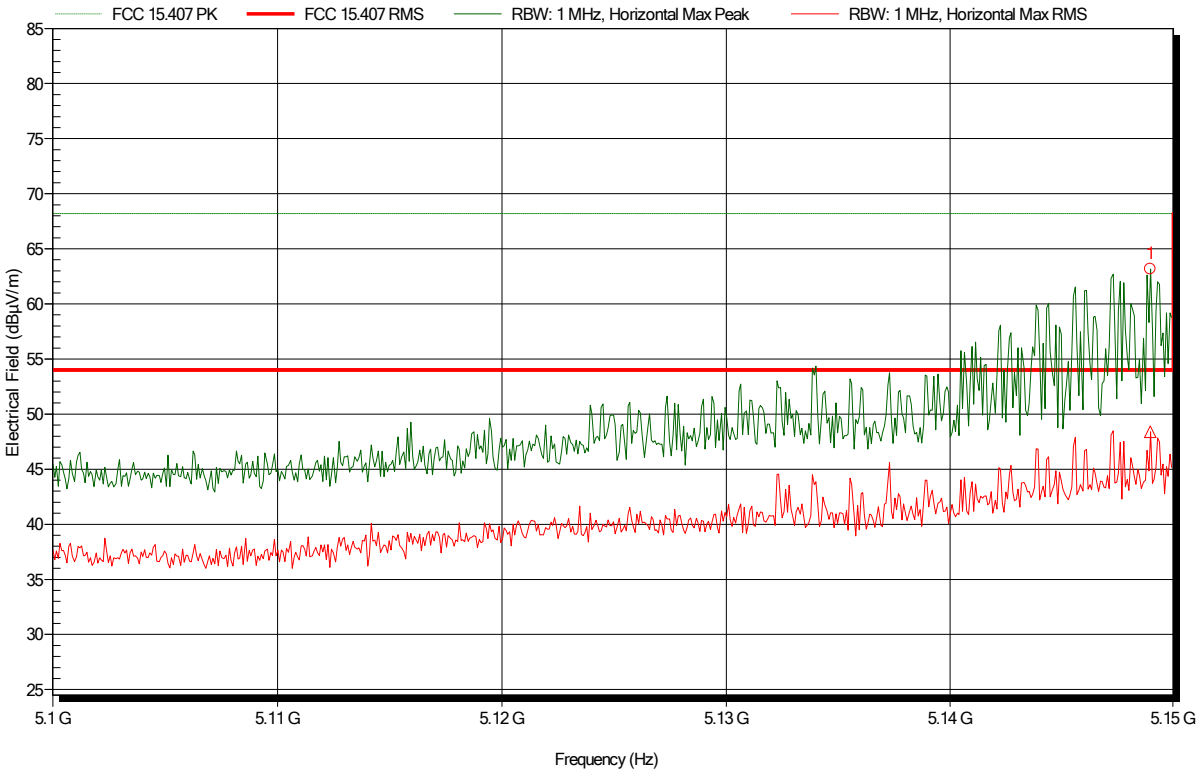

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.149 GHz	63.17 dBµV/m	68.2 dBµV/m	-5.03 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.149 GHz	48.4 dBµV/m	54 dBµV/m	-5.6 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	lower bandedge

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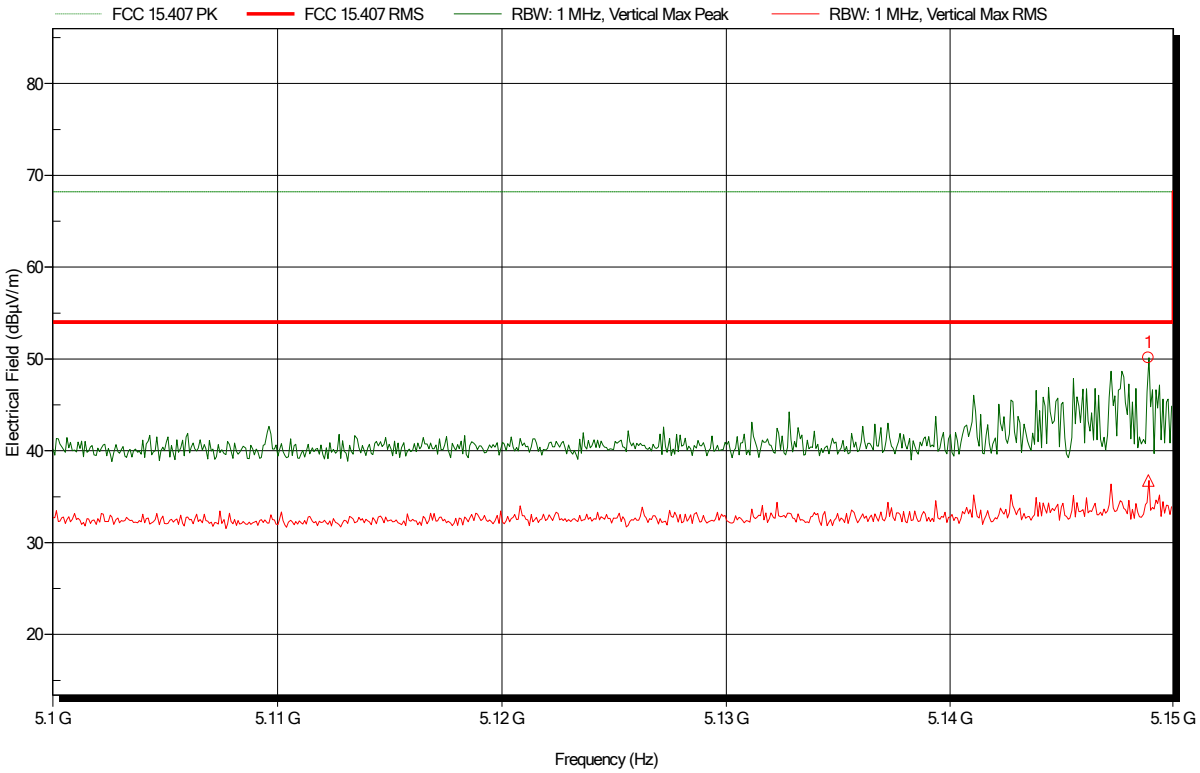

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.149 GHz	50.14 dBµV/m	68.2 dBµV/m	-18.06 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.149 GHz	36.78 dBµV/m	54 dBµV/m	-17.22 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	upper bandedge

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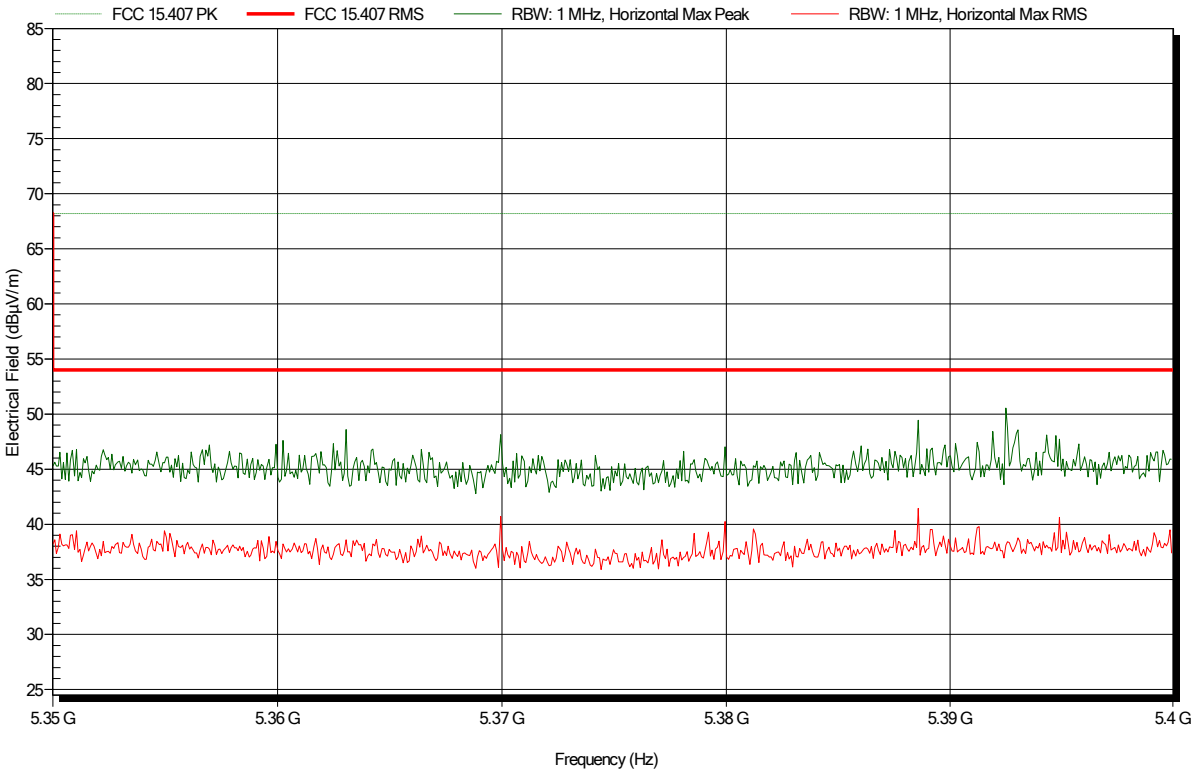

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	upper bandedge

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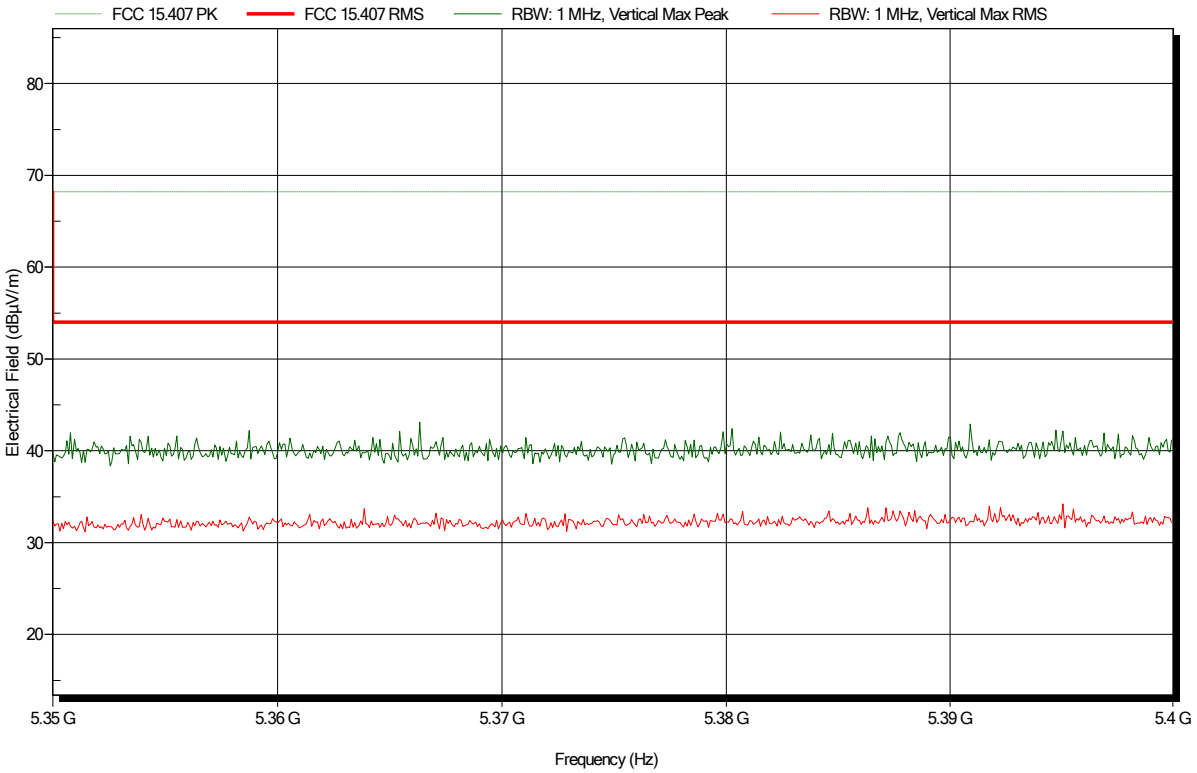

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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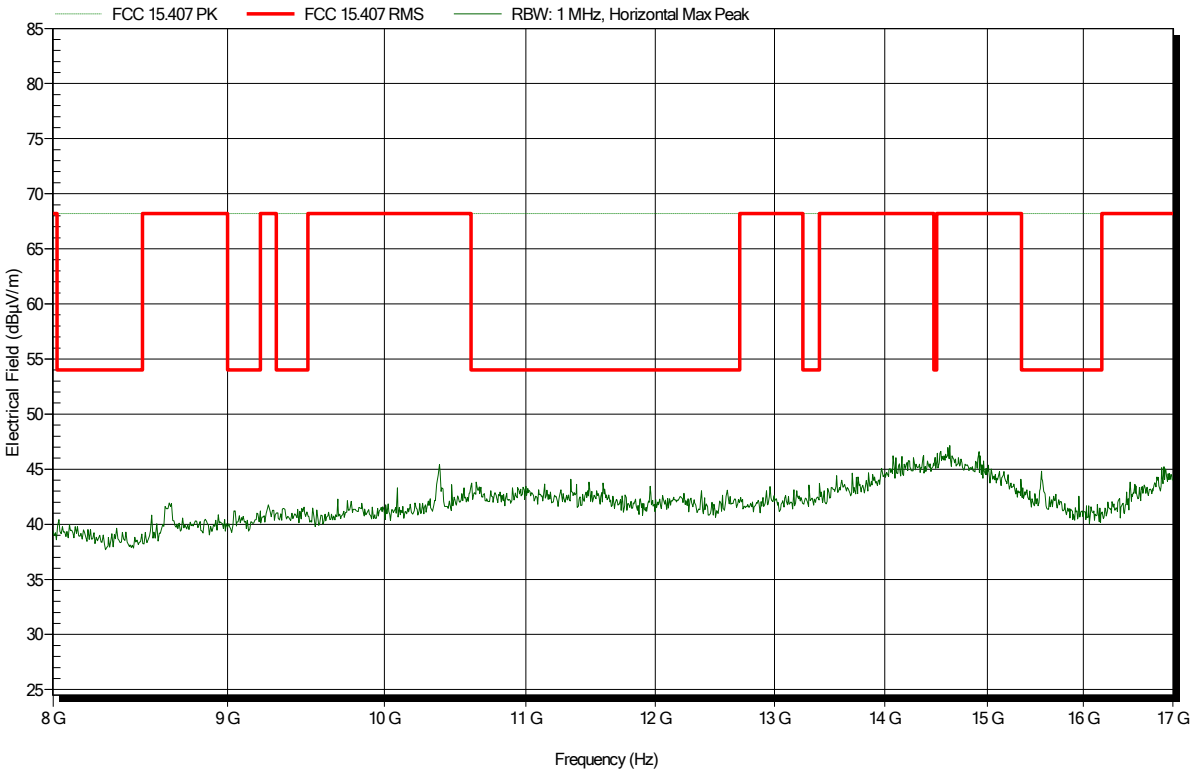

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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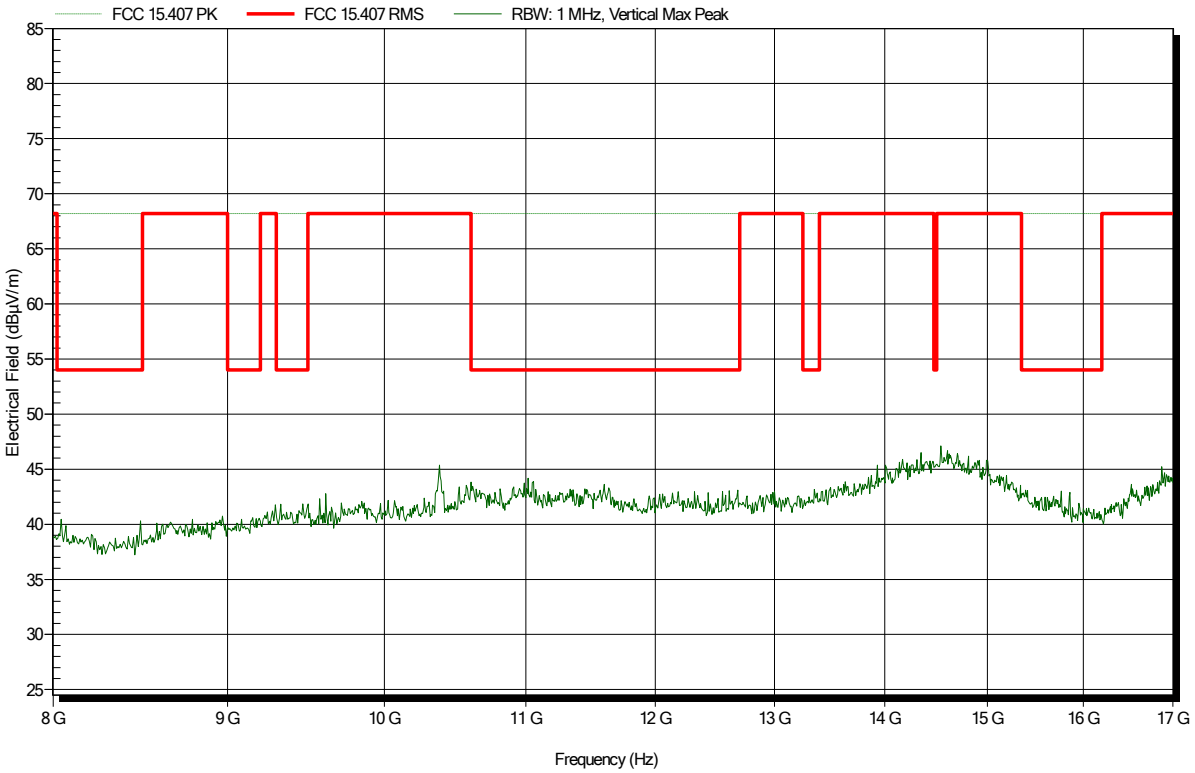

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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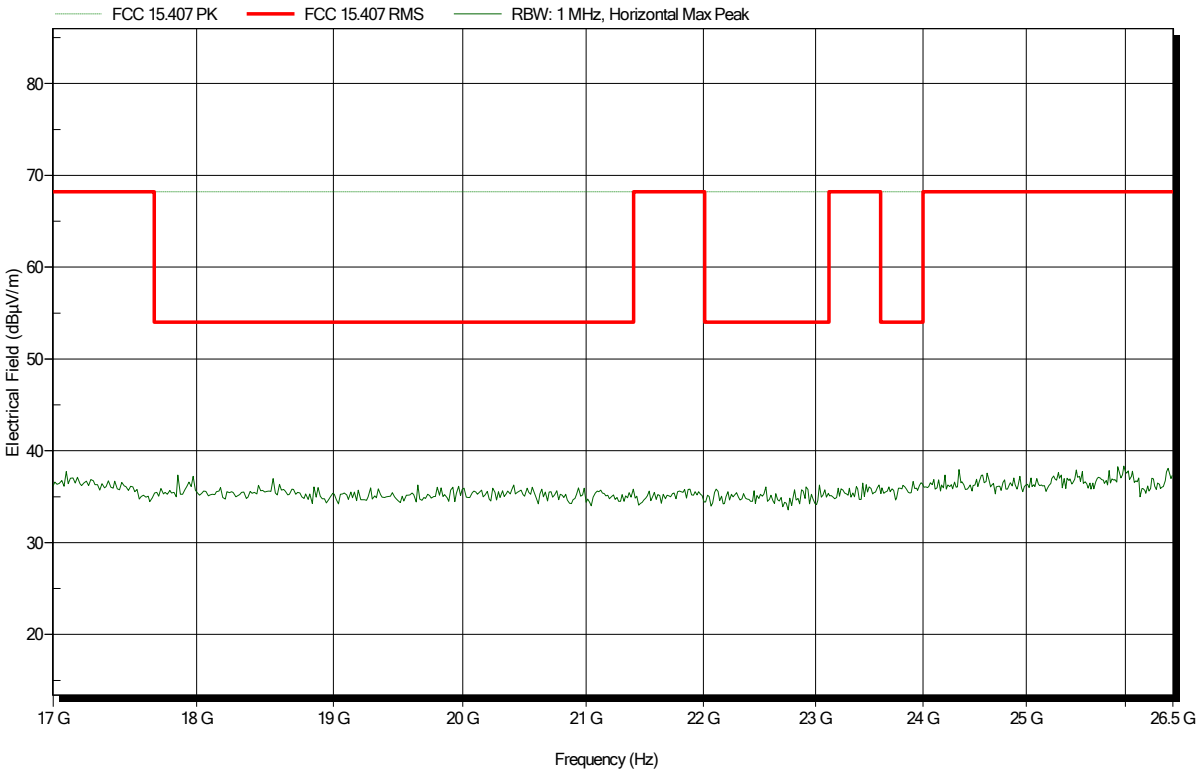

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5190 MHz
Test Date:	2018-12-28
Note:	

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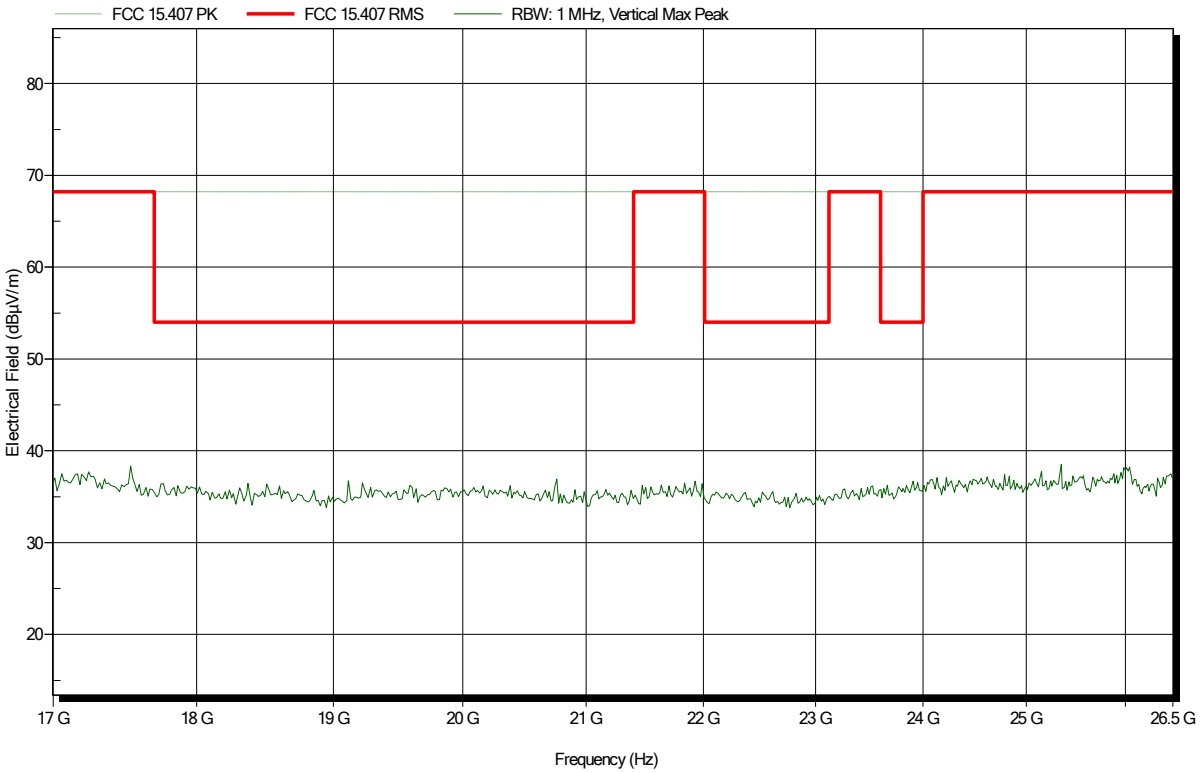

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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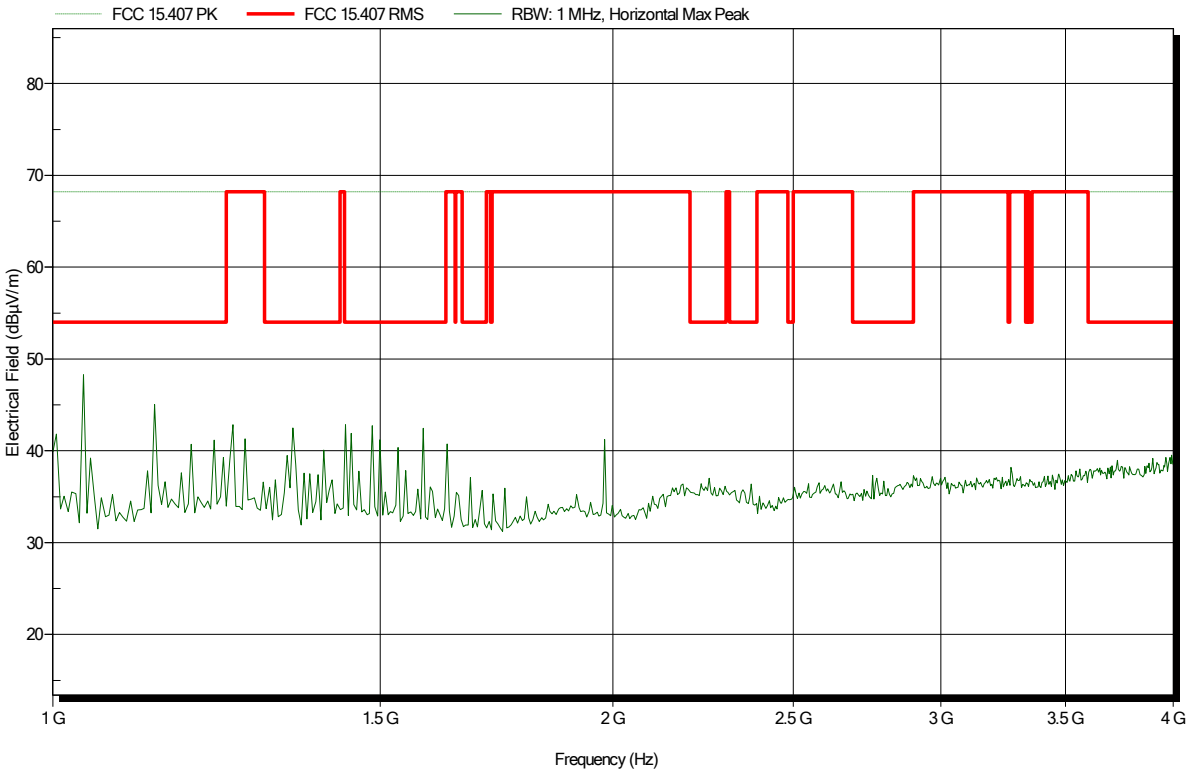

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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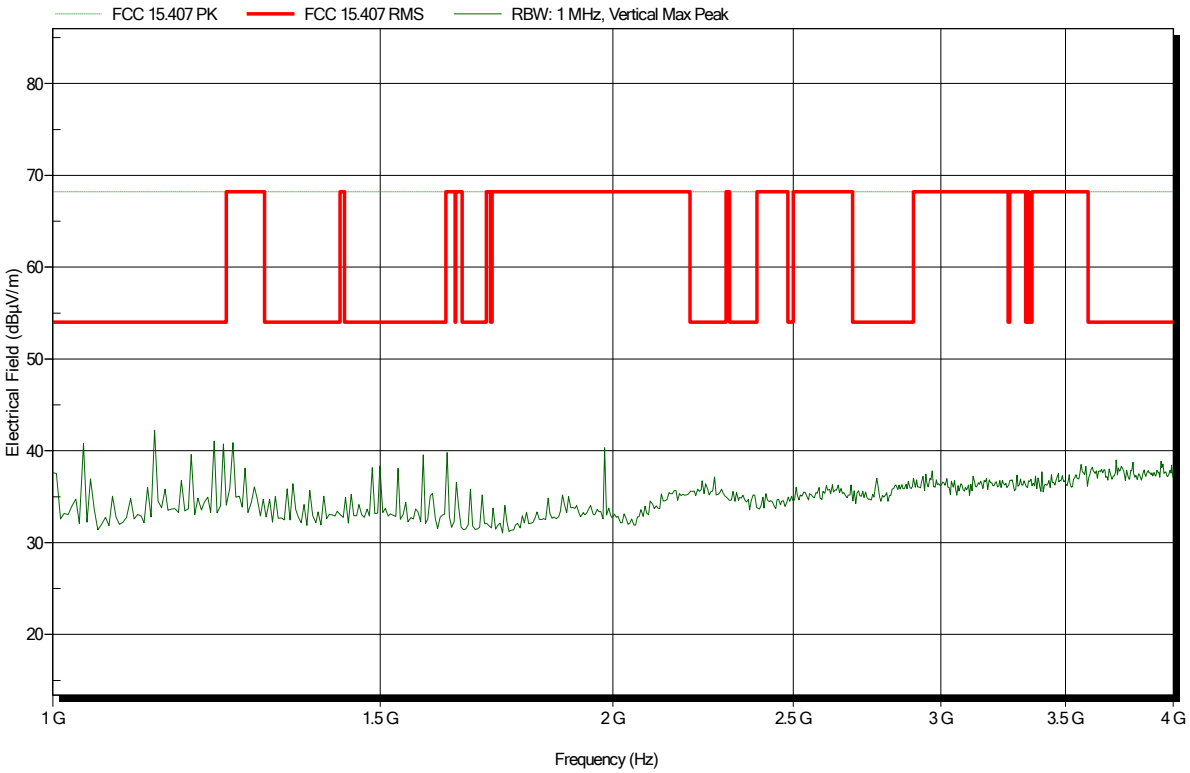

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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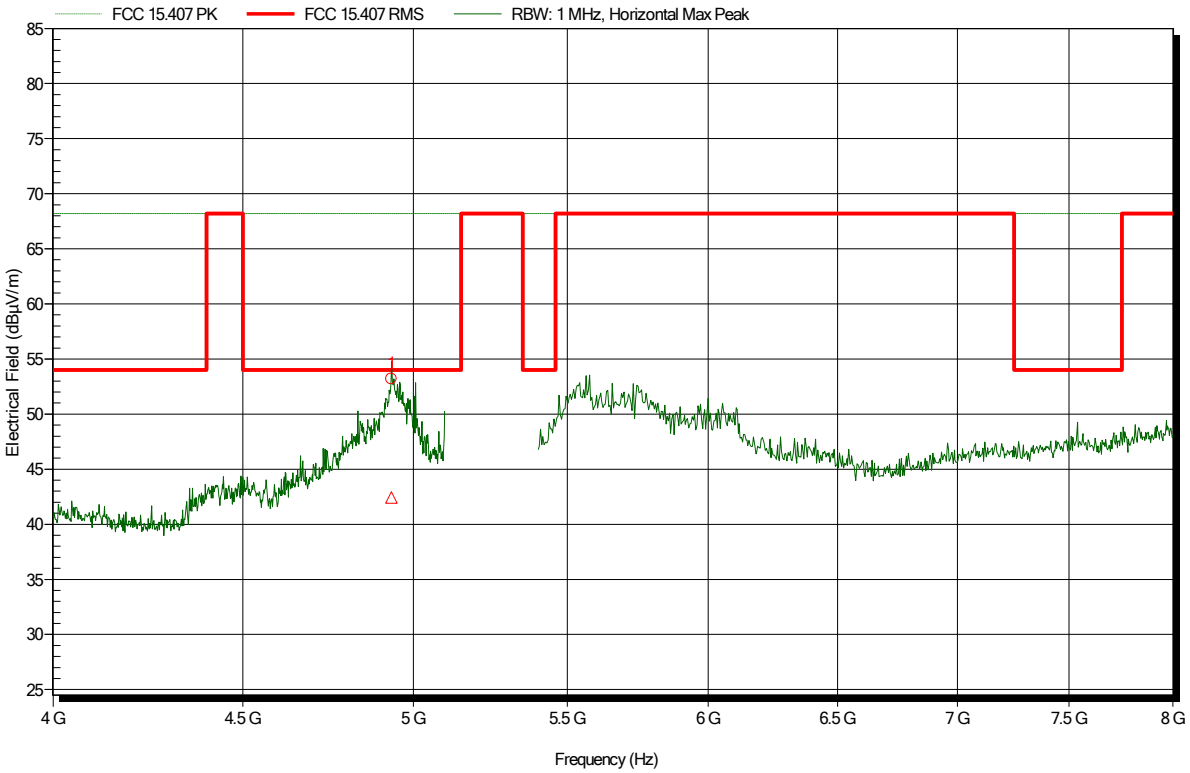

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.933 GHz	53.19 dBµV/m	68.2 dBµV/m	-15.01 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.933 GHz	42.44 dBµV/m	54 dBµV/m	-11.56 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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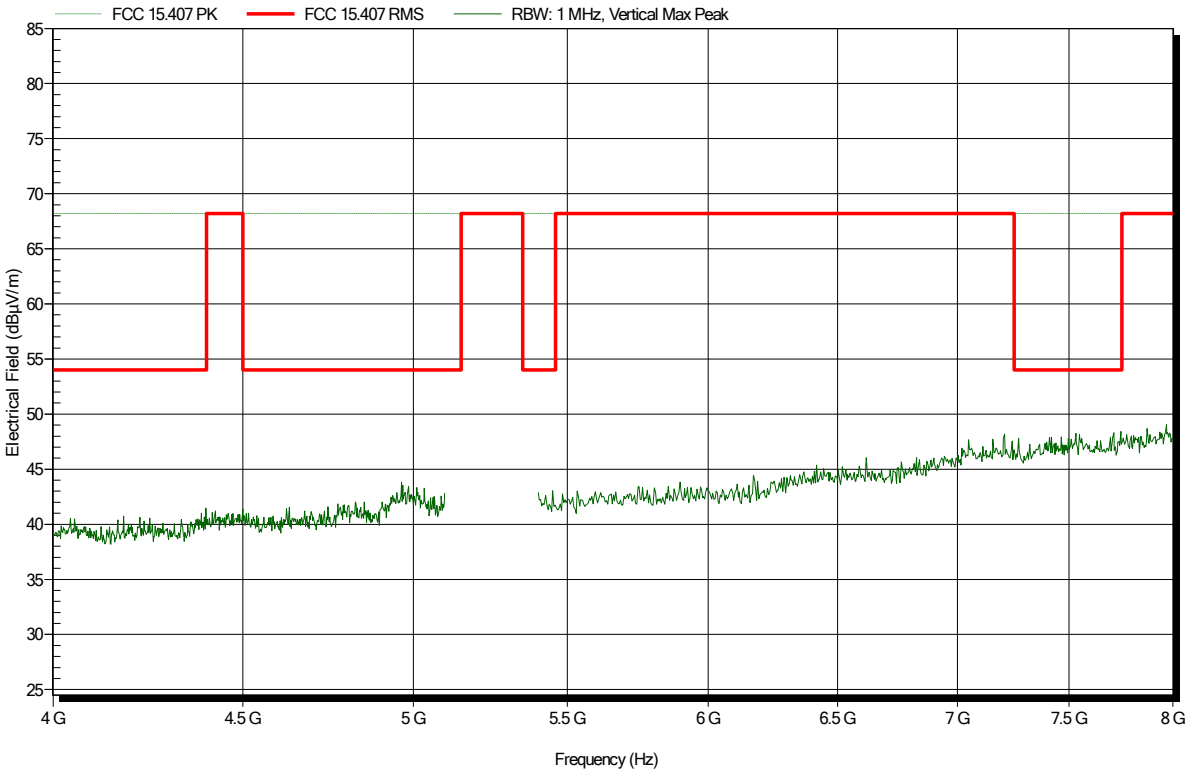

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	lower bandedge

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Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	lower bandedge

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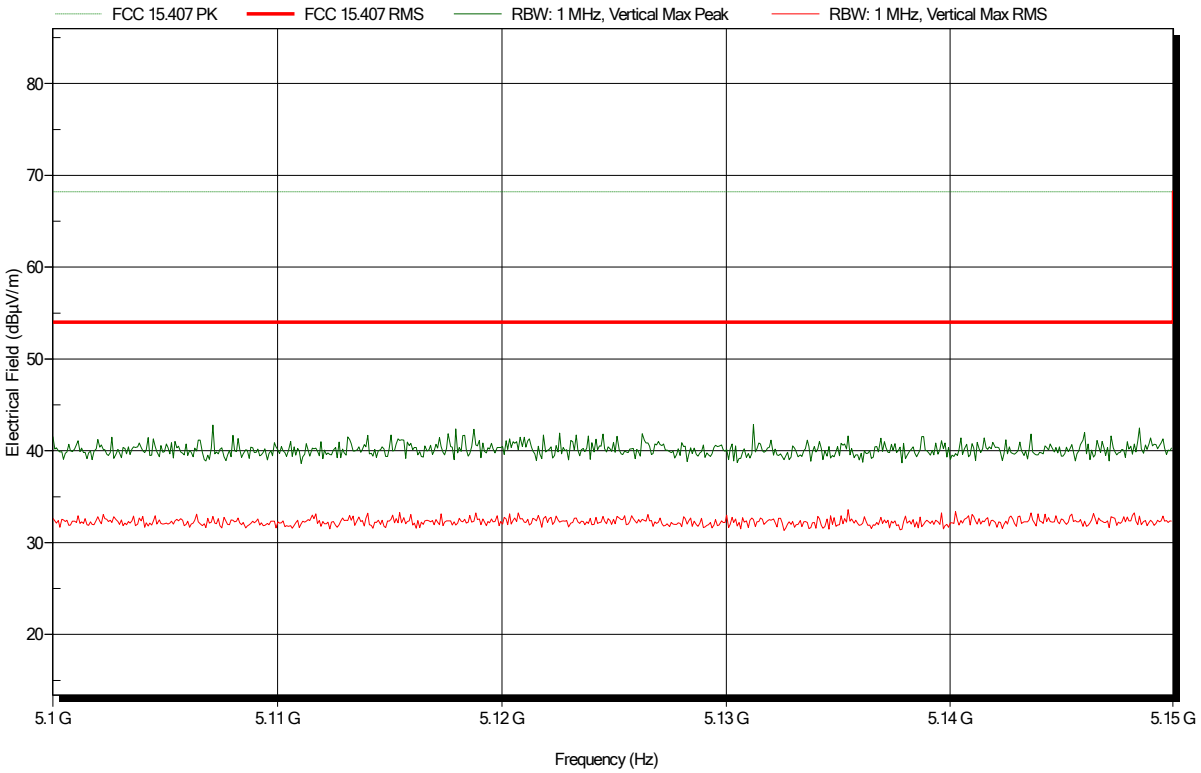

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	upper bandedge

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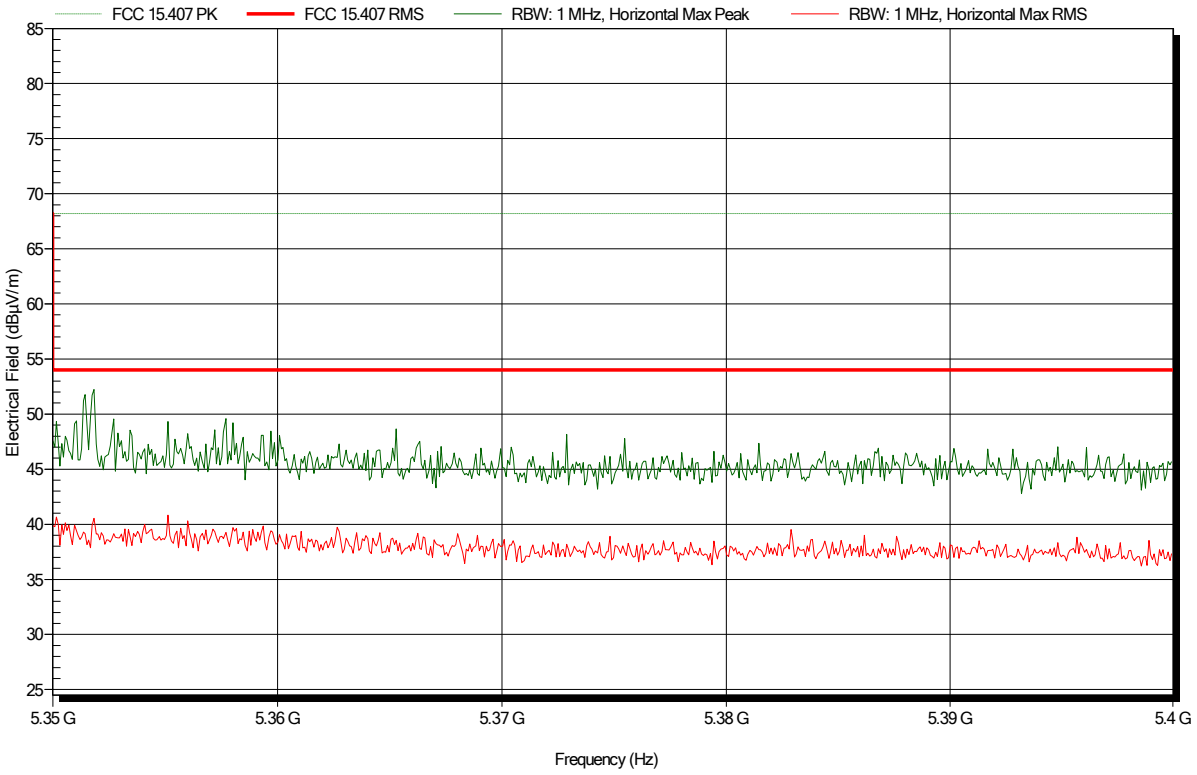

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	upper bandedge

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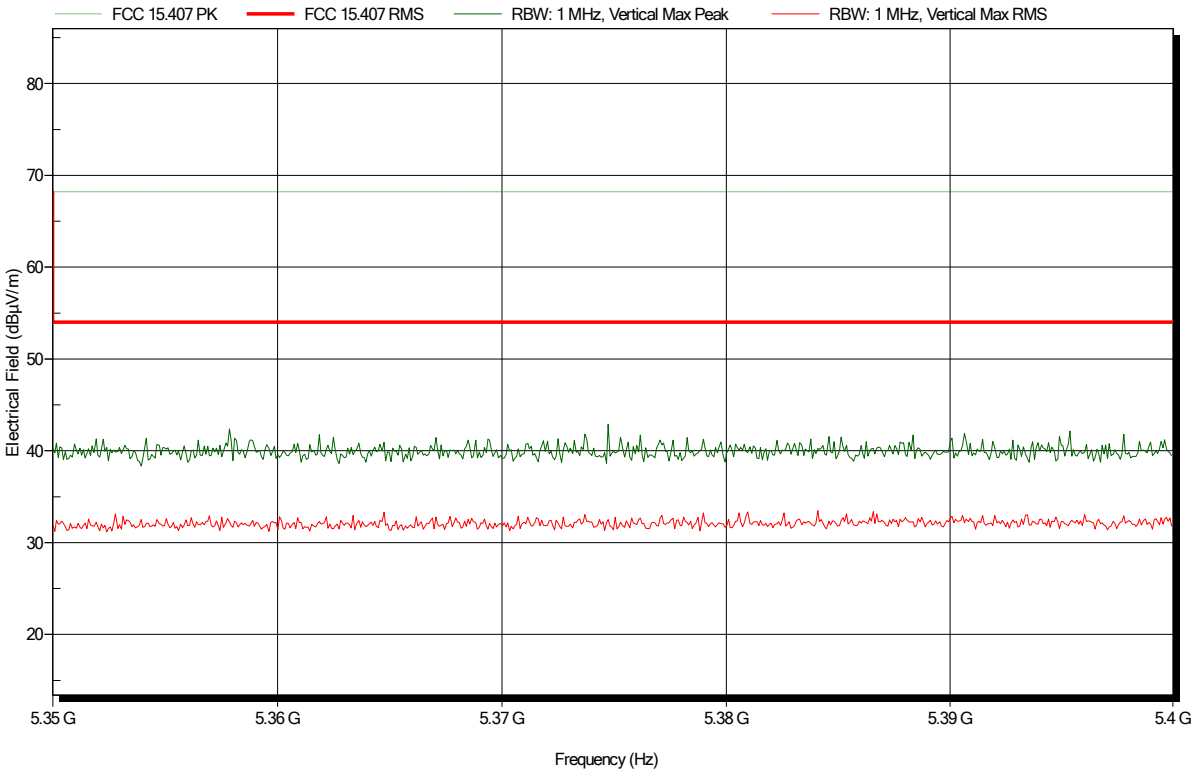

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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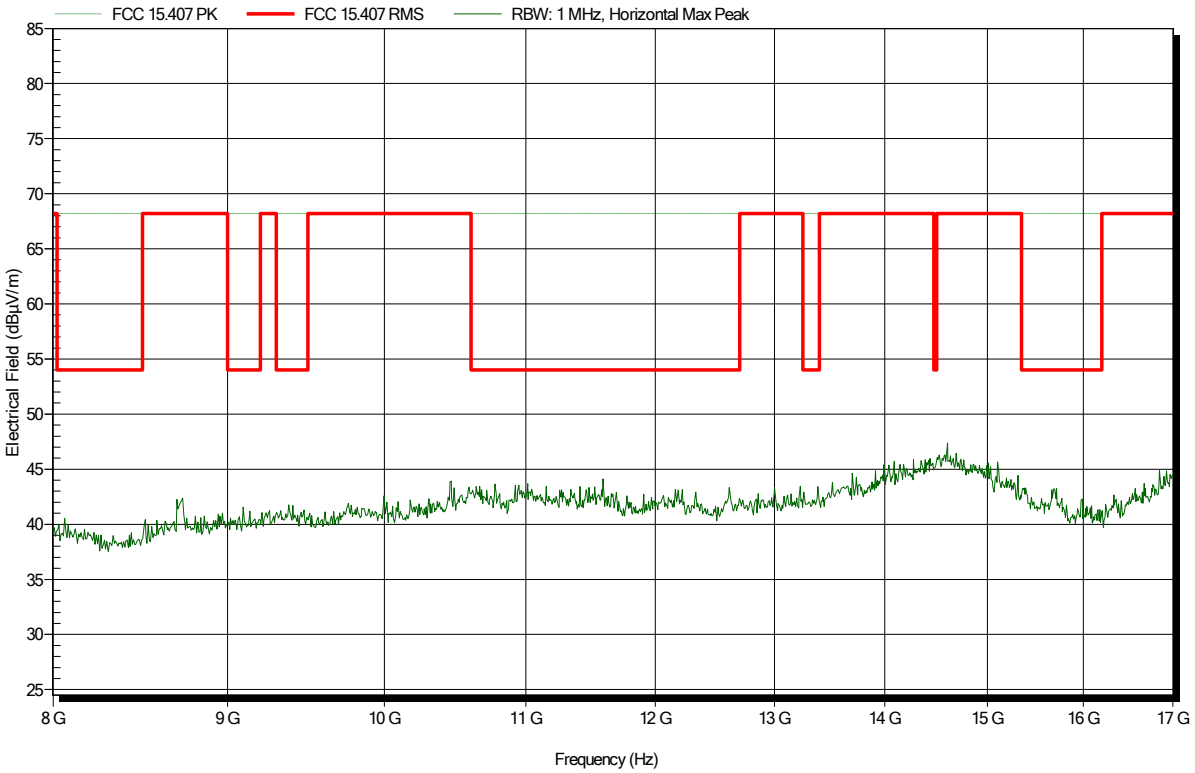

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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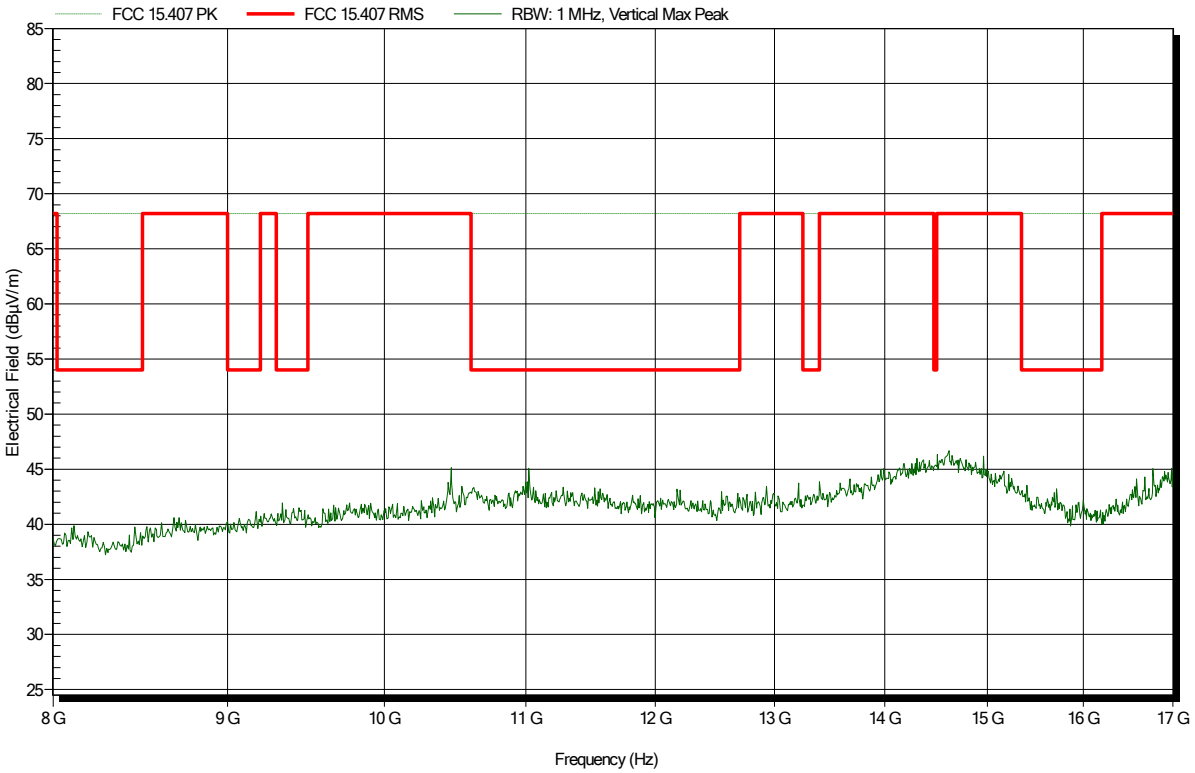

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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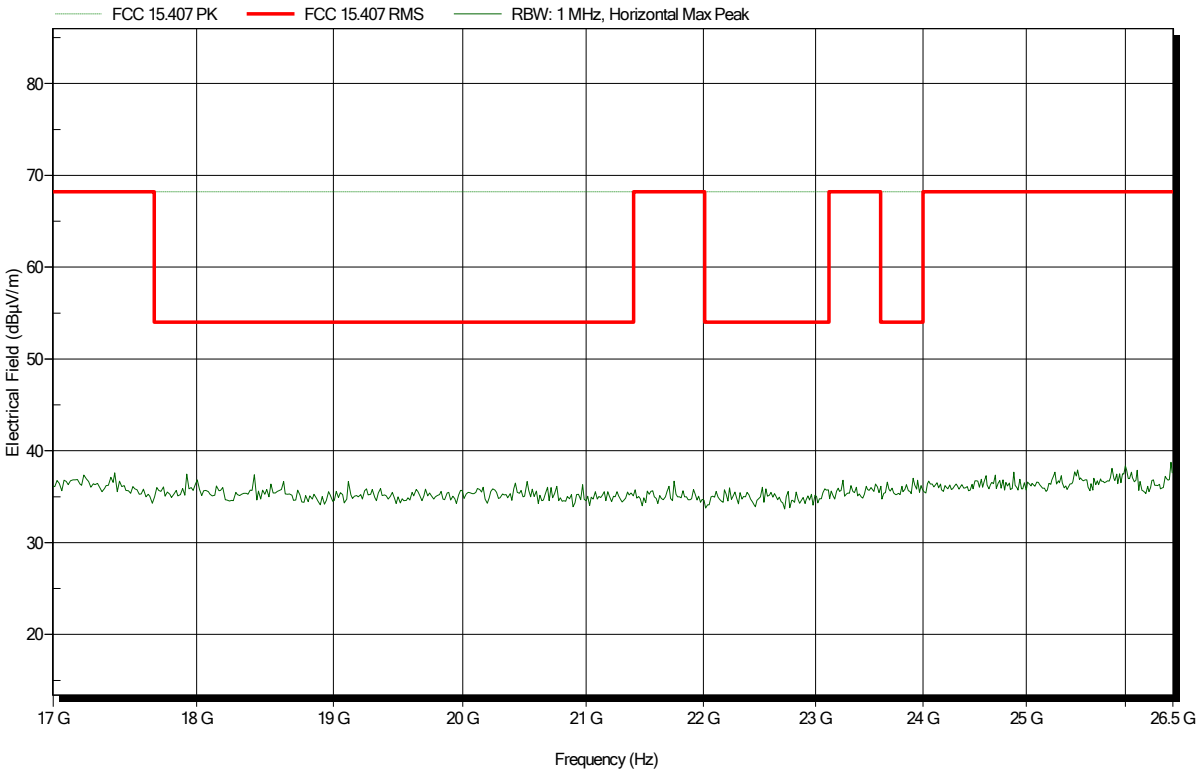

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5230 MHz
Test Date:	2018-12-28
Note:	

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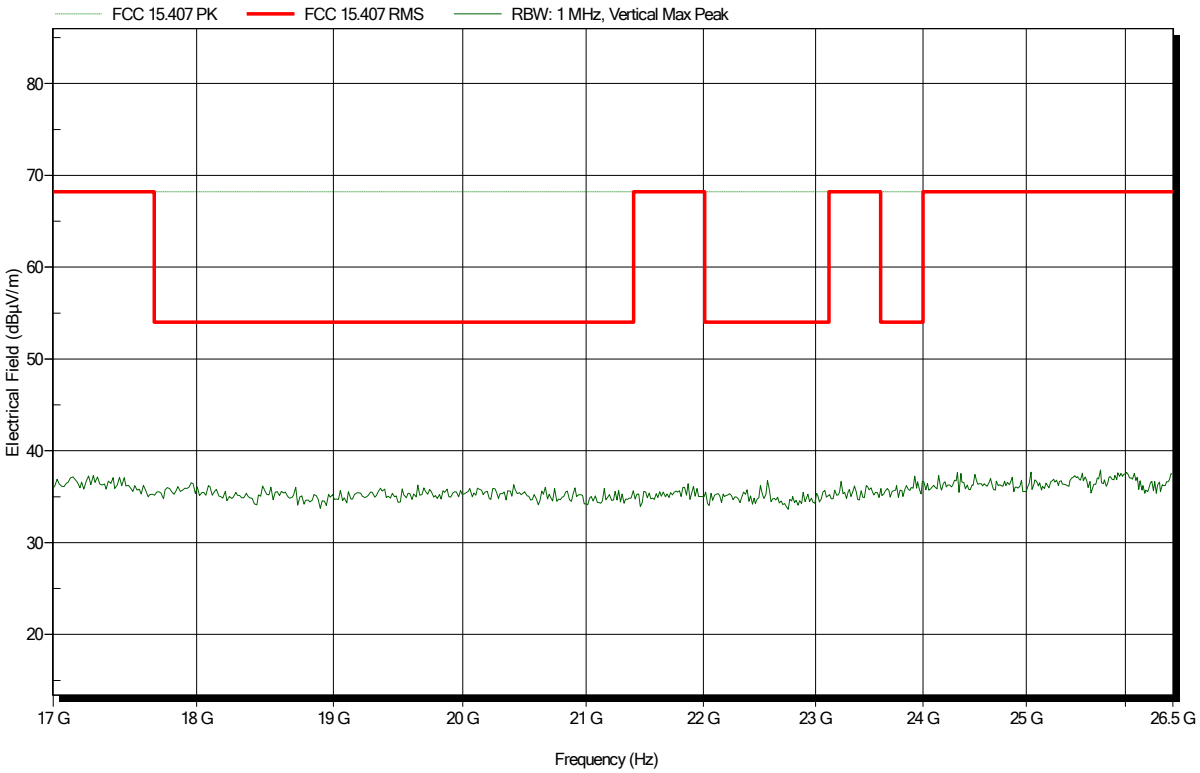

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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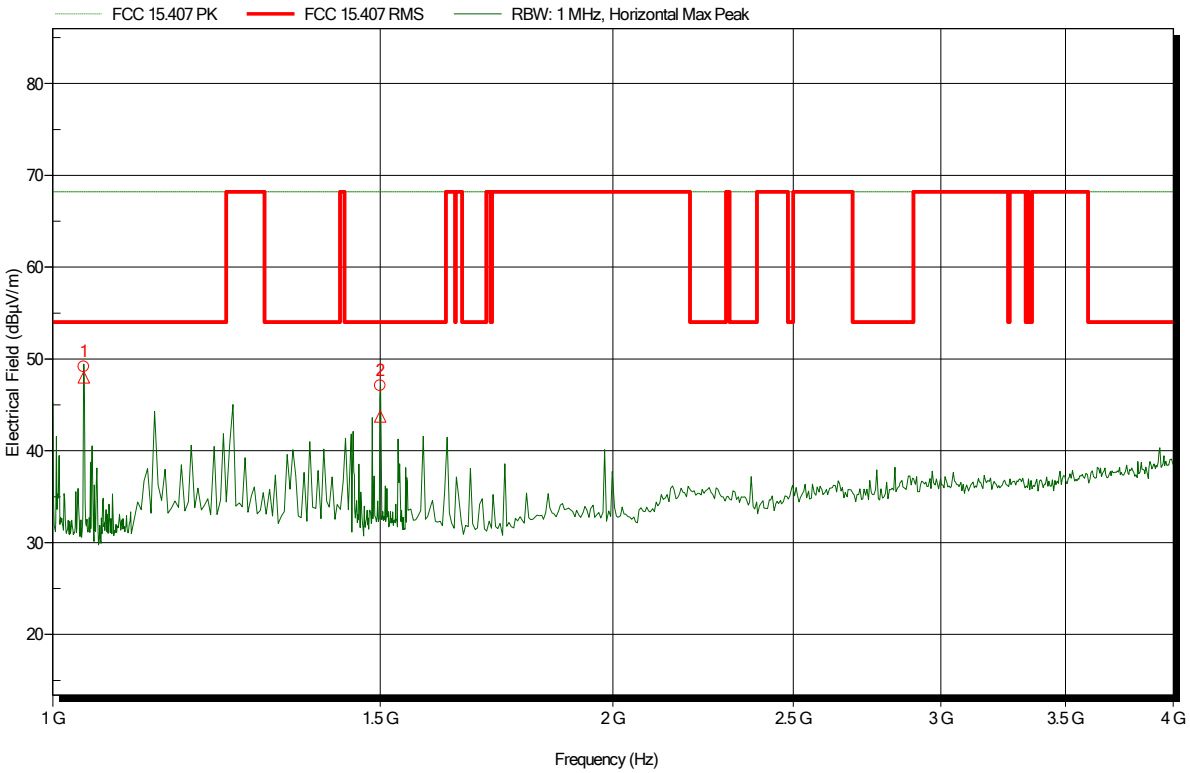

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.039 GHz	49.16 dBµV/m	68.2 dBµV/m	-19.04 dB	Pass
1.5 GHz	47.11 dBµV/m	68.2 dBµV/m	-21.09 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.039 GHz	48.02 dBµV/m	54 dBµV/m	-5.98 dB	Pass
1.5 GHz	43.76 dBµV/m	54 dBµV/m	-10.24 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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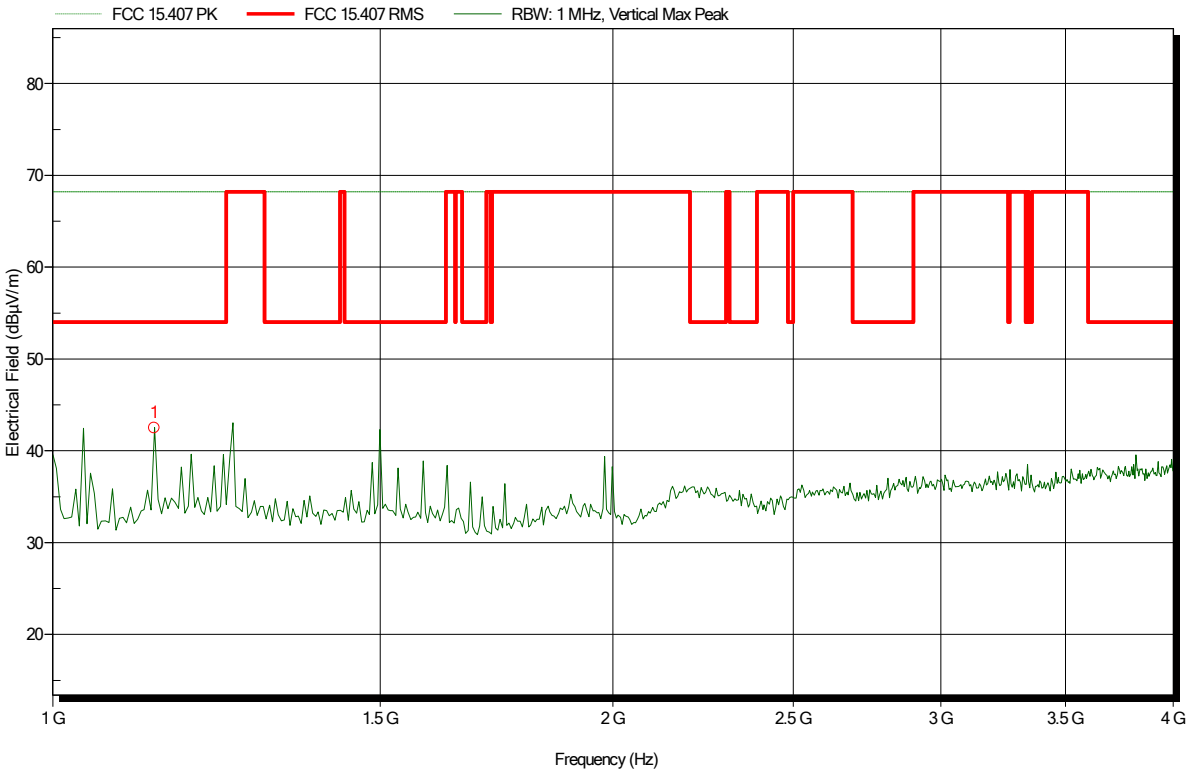

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.134 GHz	42.51 dBµV/m	68.2 dBµV/m	-25.69 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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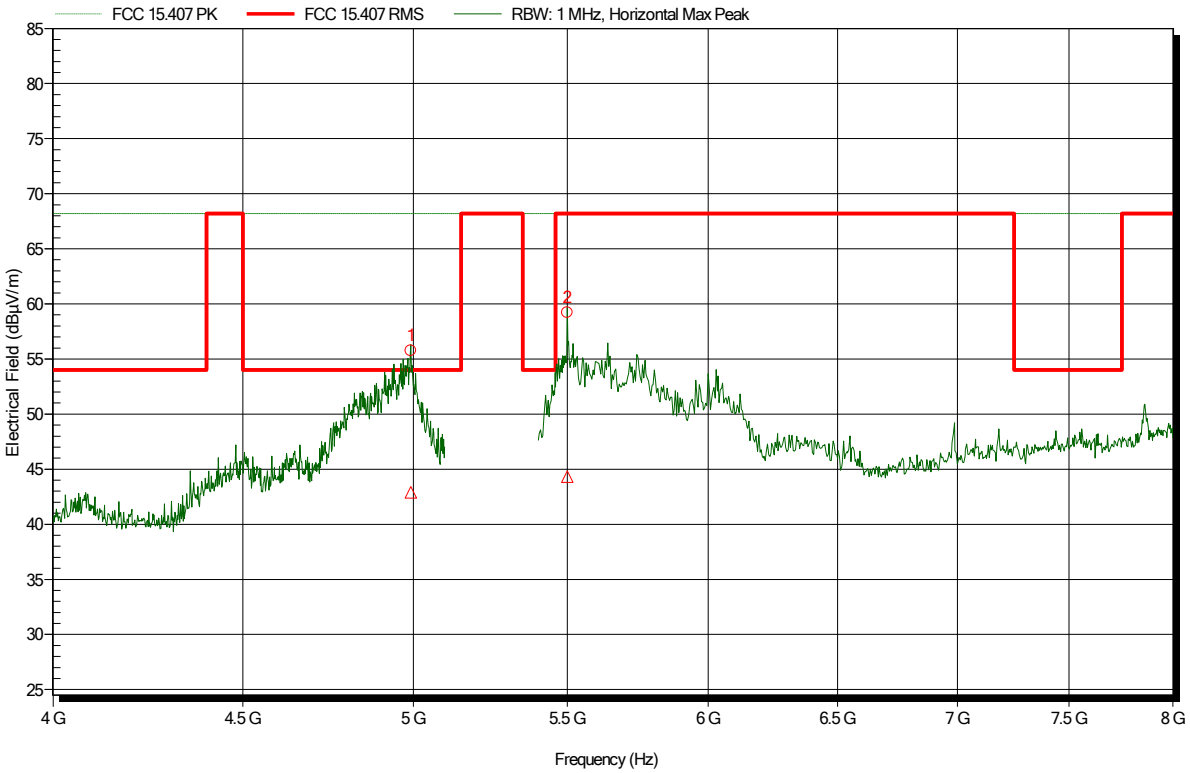

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.992 GHz	55.75 dBµV/m	68.2 dBµV/m	-12.45 dB	Pass
5.499 GHz	59.22 dBµV/m	68.2 dBµV/m	-8.98 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.992 GHz	42.89 dBµV/m	54 dBµV/m	-11.11 dB	Pass
5.499 GHz	44.33 dBµV/m	68.2 dBµV/m	-23.87 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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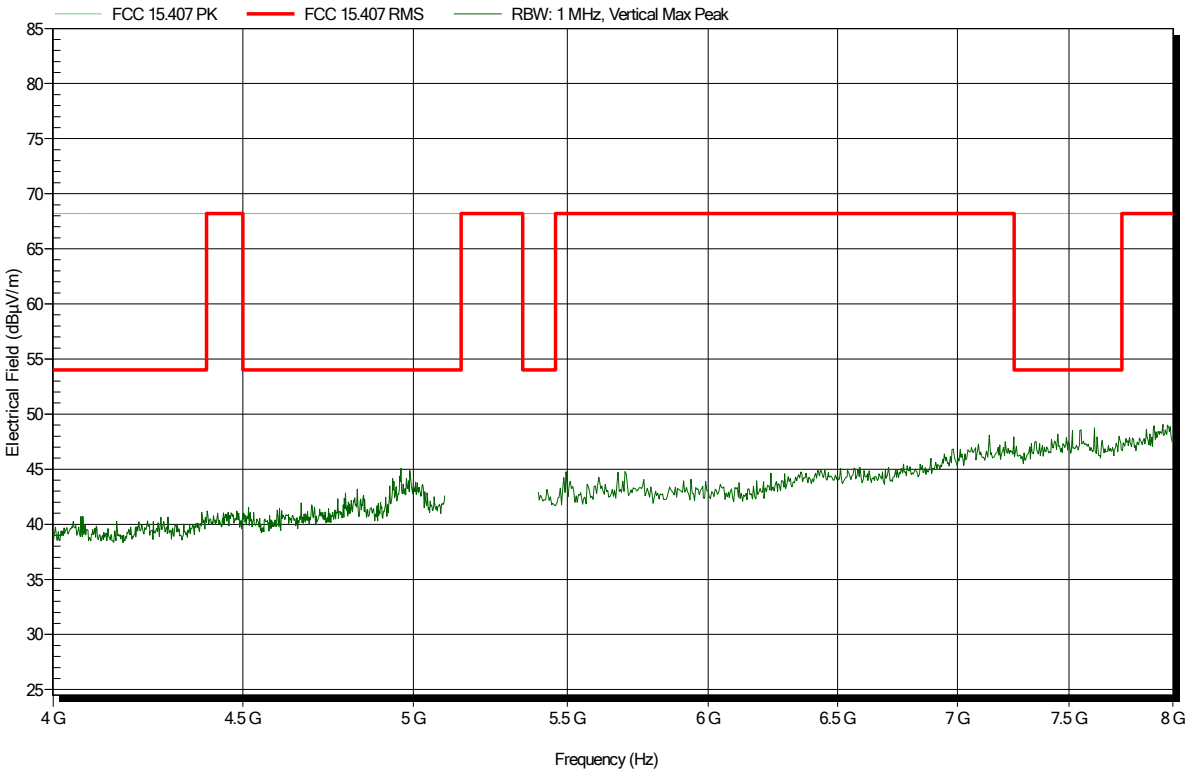

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	lower bandedge

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Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	lower bandedge

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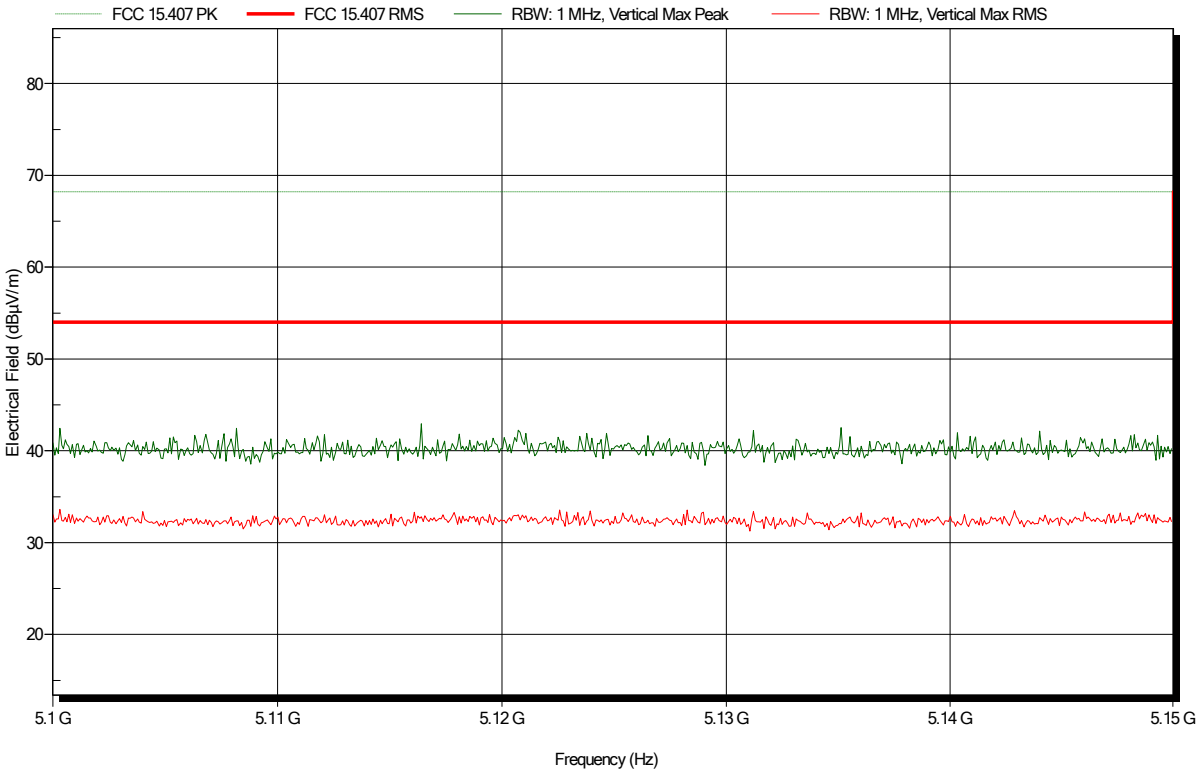

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	upper bandedge

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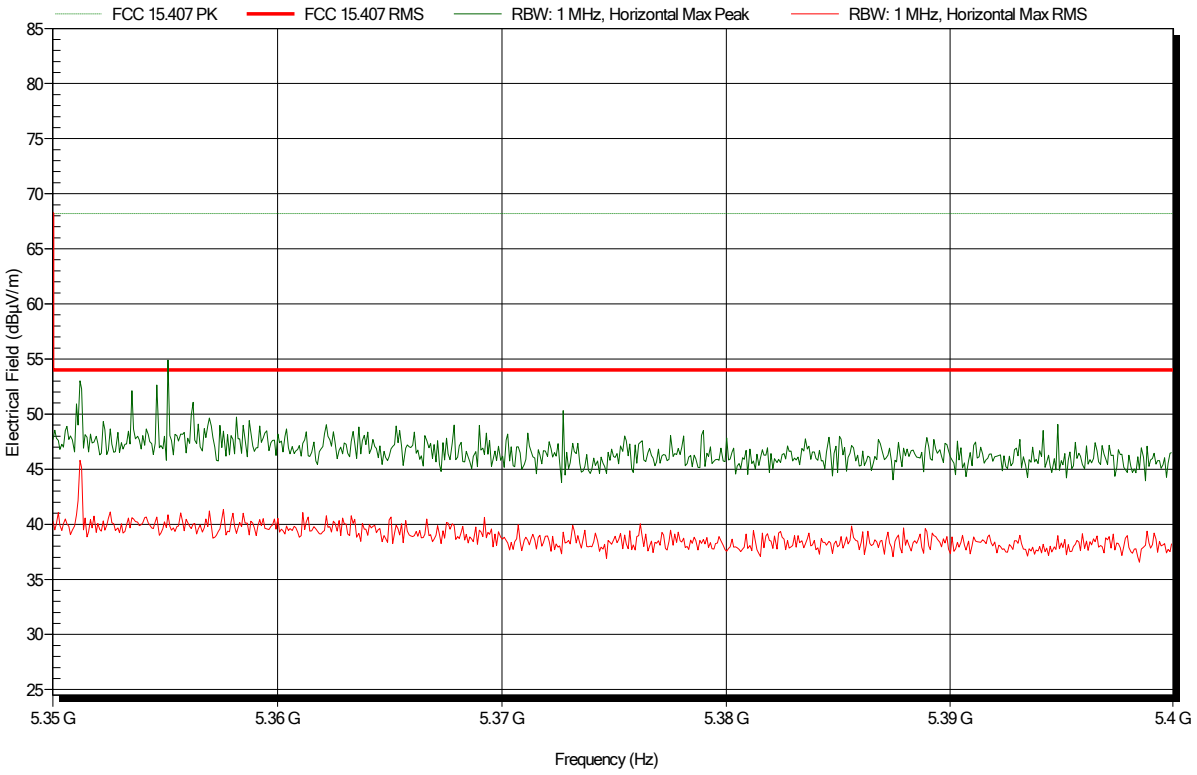

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	upper bandedge

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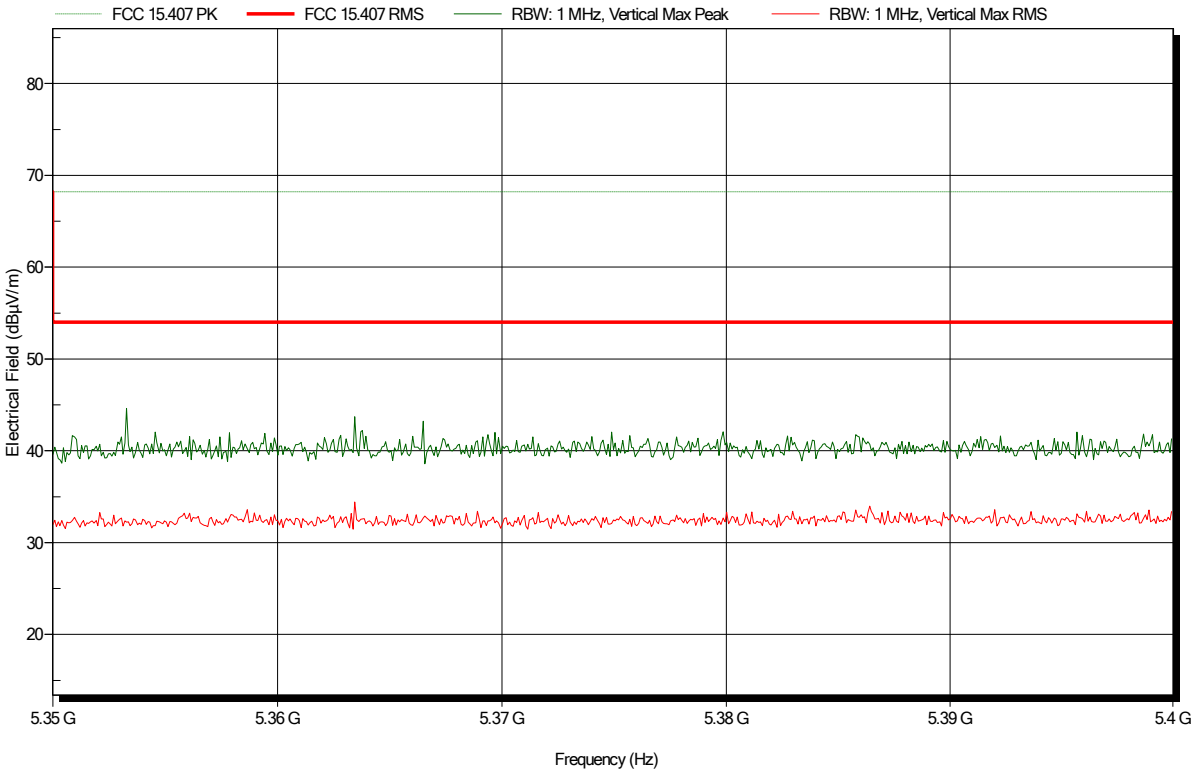

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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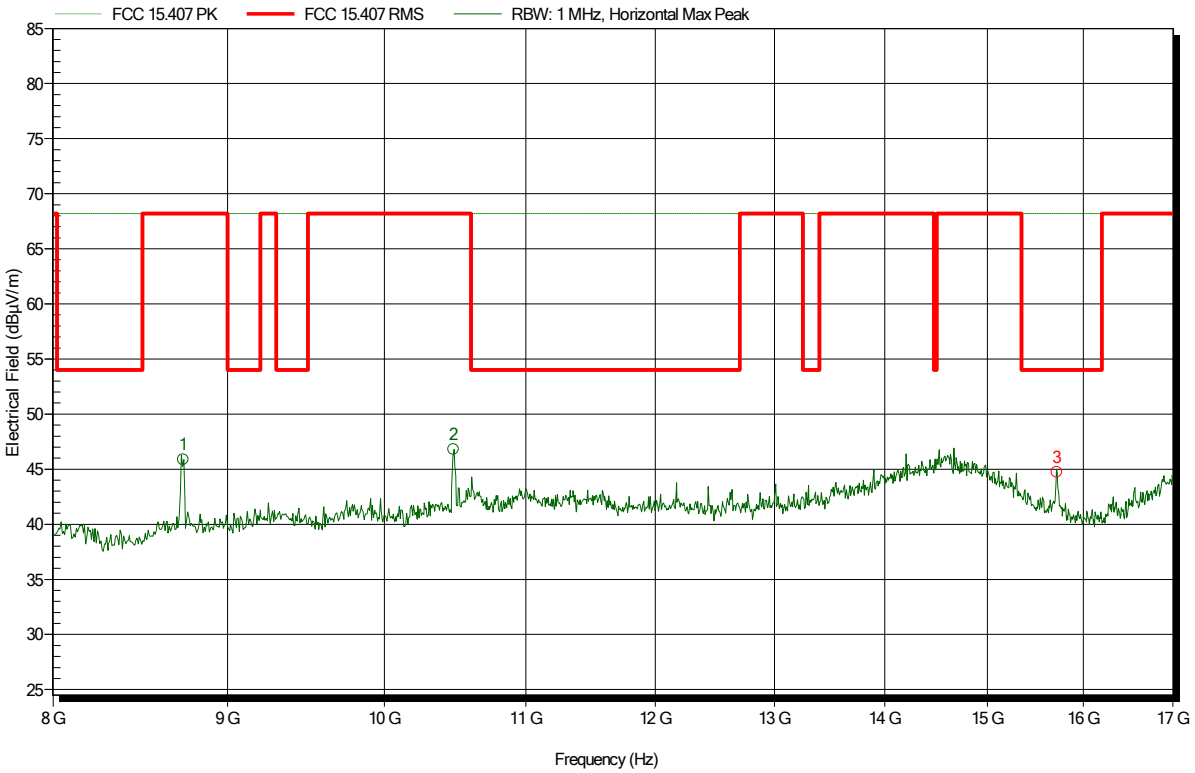

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.477 GHz	46.79 dBµV/m	68.2 dBµV/m	-21.41 dB	Pass
15.72 GHz	44.73 dBµV/m	68.2 dBµV/m	-23.47 dB	Pass
8.736 GHz	45.86 dBµV/m	68.2 dBµV/m	-22.34 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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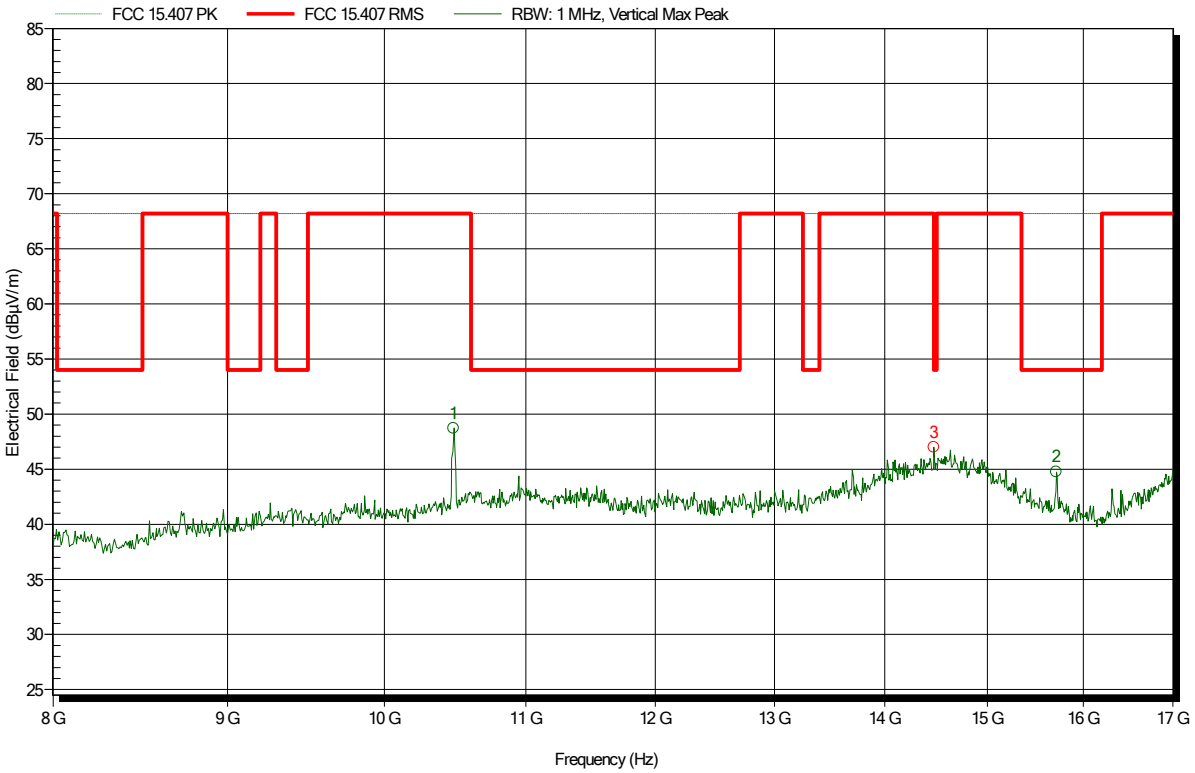

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.477 GHz	48.72 dBµV/m	68.2 dBµV/m	-19.48 dB	Pass
14.472 GHz	47.01 dBµV/m	68.2 dBµV/m	-21.19 dB	Pass
15.712 GHz	44.75 dBµV/m	68.2 dBµV/m	-23.45 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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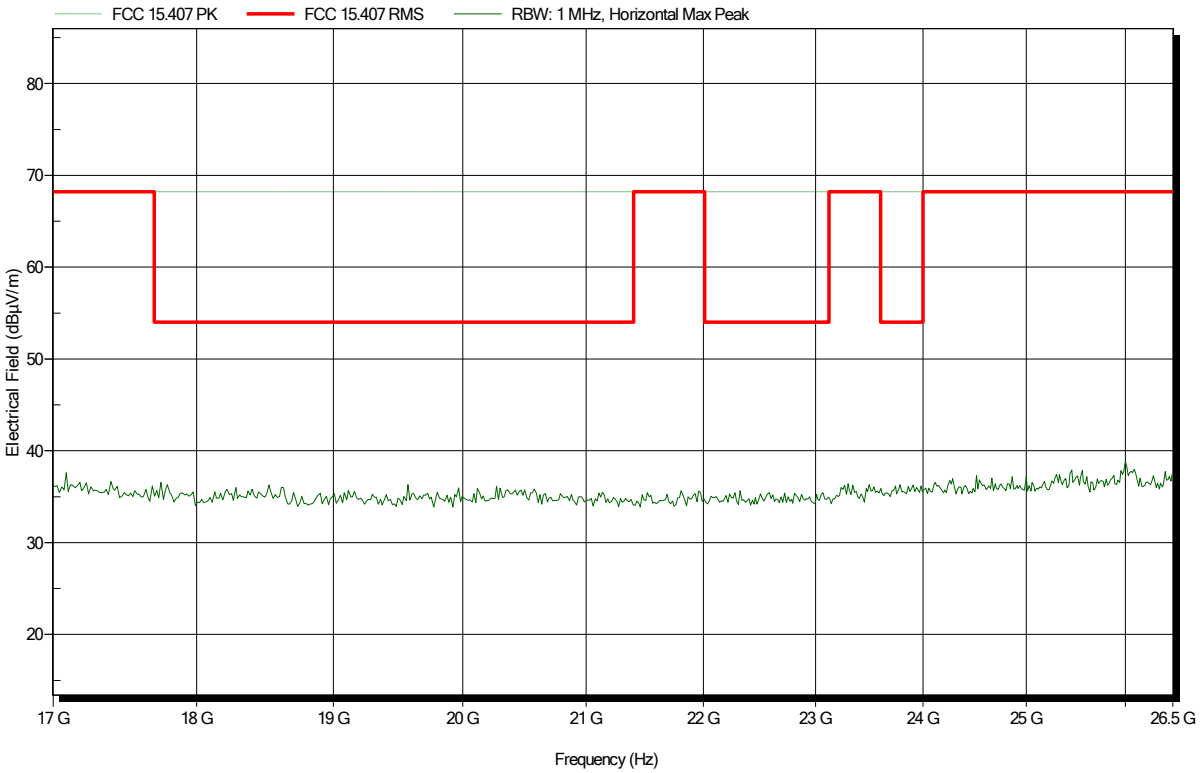

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5240 MHz
Test Date:	2018-12-27
Note:	

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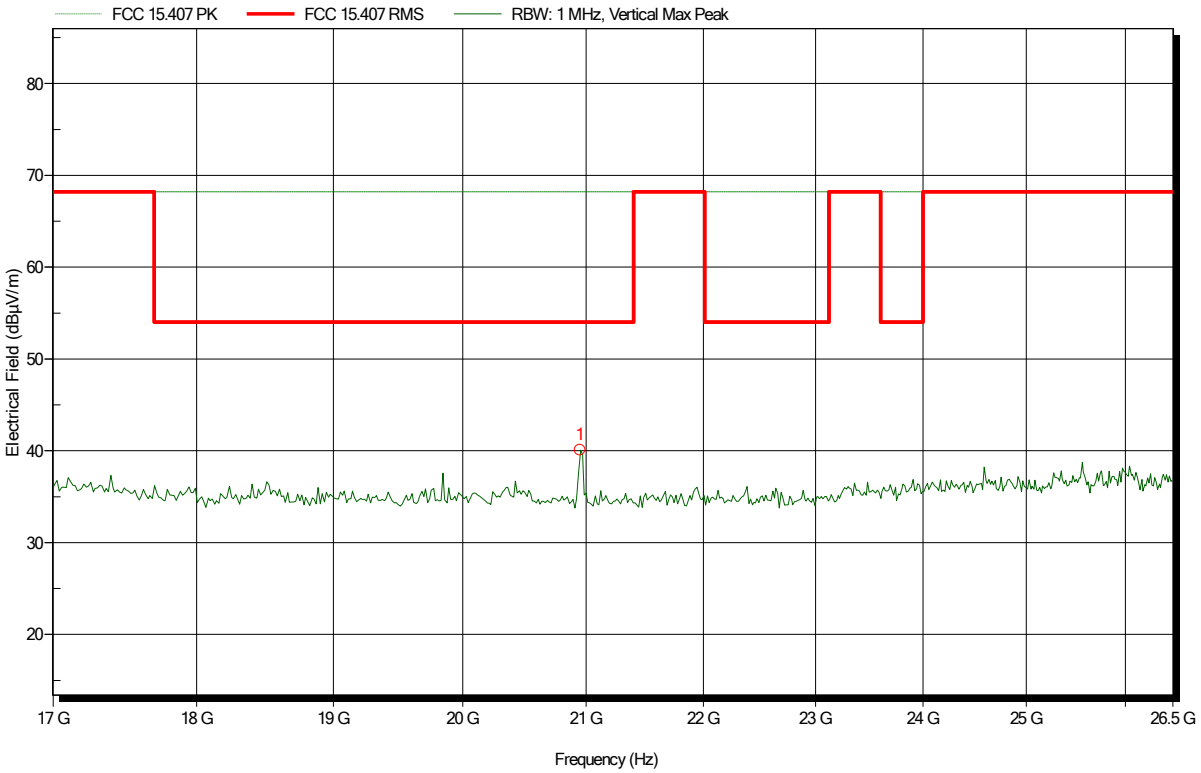

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
20.952 GHz	40.08 dBµV/m	68.2 dBµV/m	-28.12 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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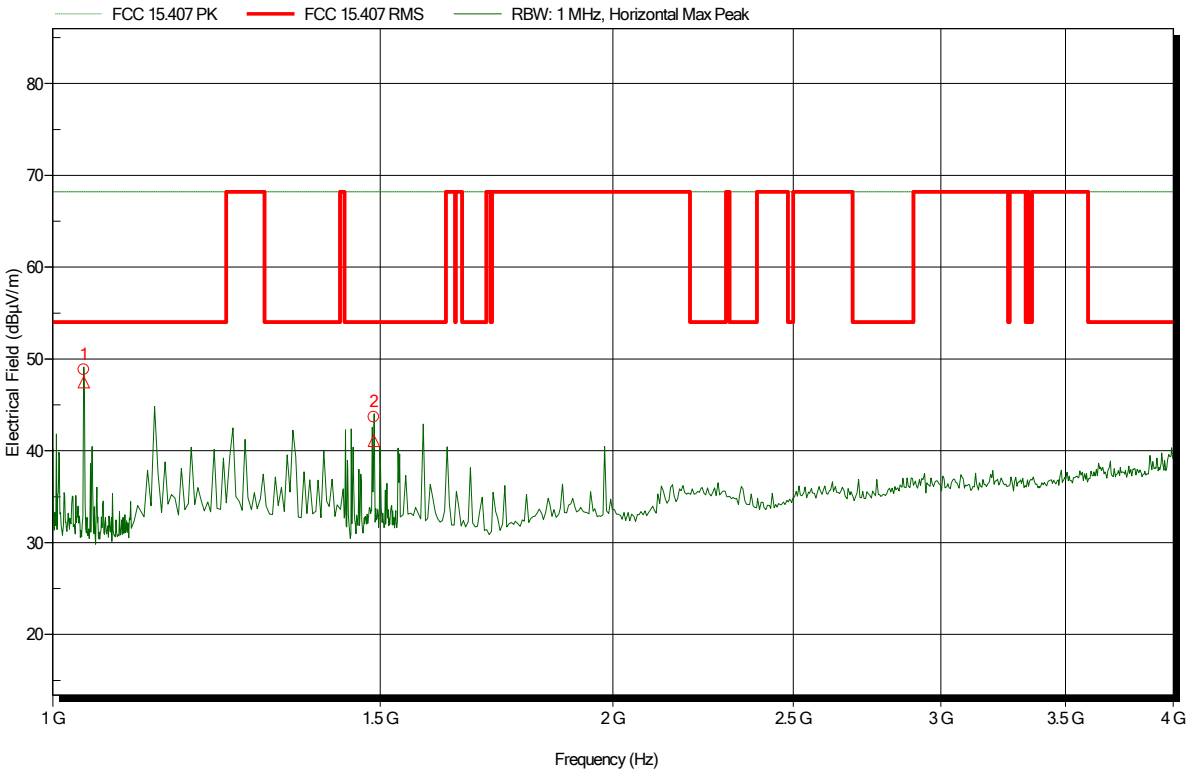

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.04 GHz	48.83 dBµV/m	68.2 dBµV/m	-19.37 dB	Pass
1.488 GHz	43.66 dBµV/m	68.2 dBµV/m	-24.54 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.04 GHz	47.48 dBµV/m	54 dBµV/m	-6.52 dB	Pass
1.488 GHz	41.09 dBµV/m	54 dBµV/m	-12.91 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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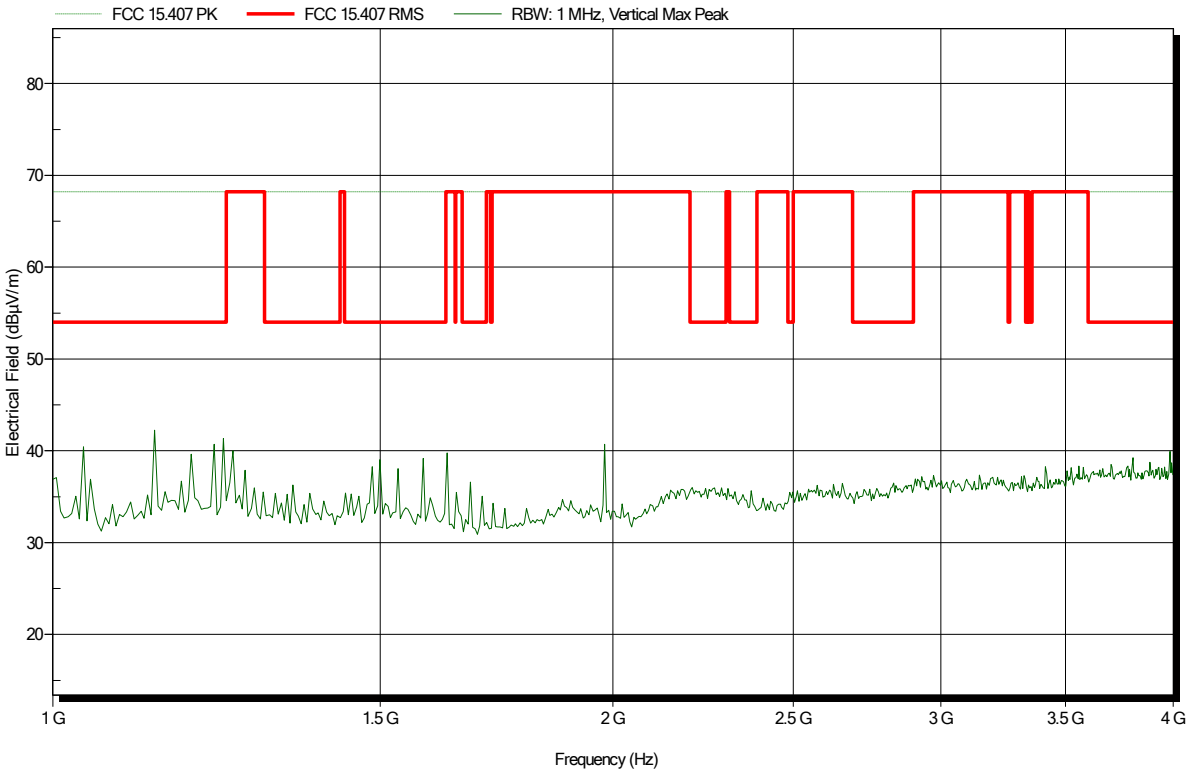

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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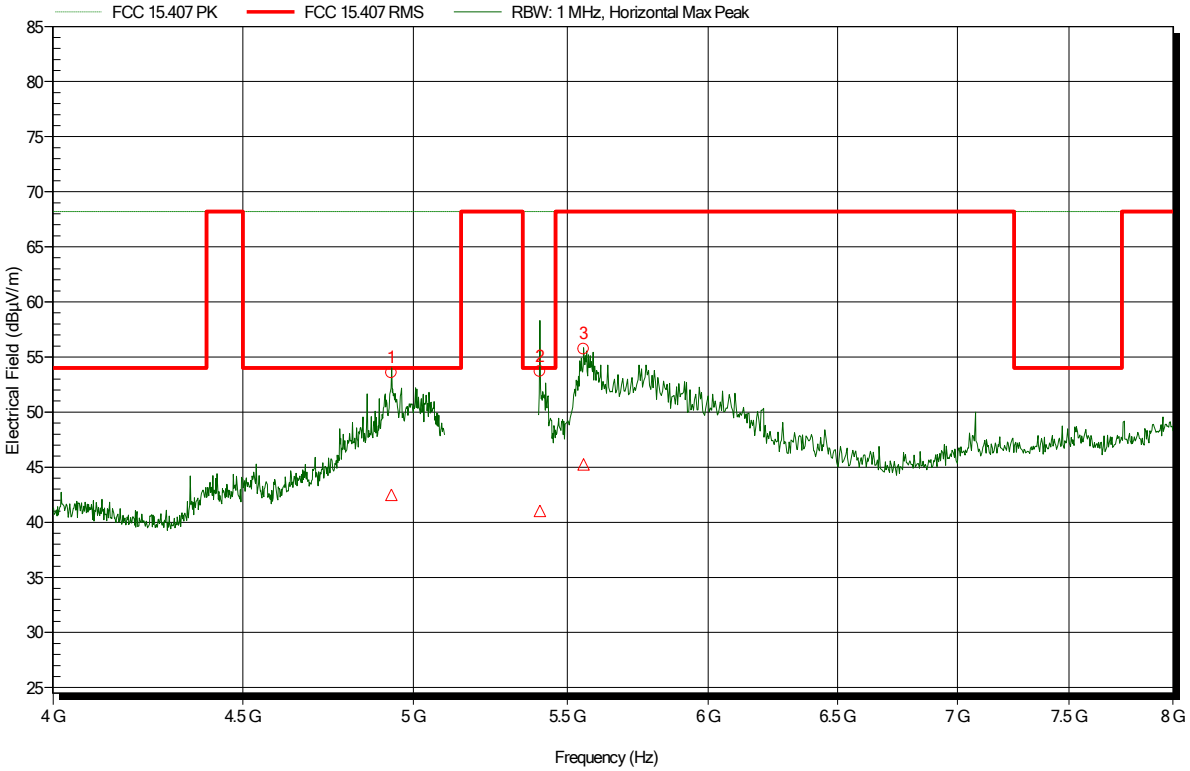

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.933 GHz	53.57 dBµV/m	68.2 dBµV/m	-14.63 dB	Pass
5.407 GHz	53.69 dBµV/m	68.2 dBµV/m	-14.51 dB	Pass
5.555 GHz	55.74 dBµV/m	68.2 dBµV/m	-12.46 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.933 GHz	42.5 dBµV/m	54 dBµV/m	-11.5 dB	Pass
5.407 GHz	41.02 dBµV/m	54 dBµV/m	-12.98 dB	Pass
5.555 GHz	45.26 dBµV/m	68.2 dBµV/m	-22.94 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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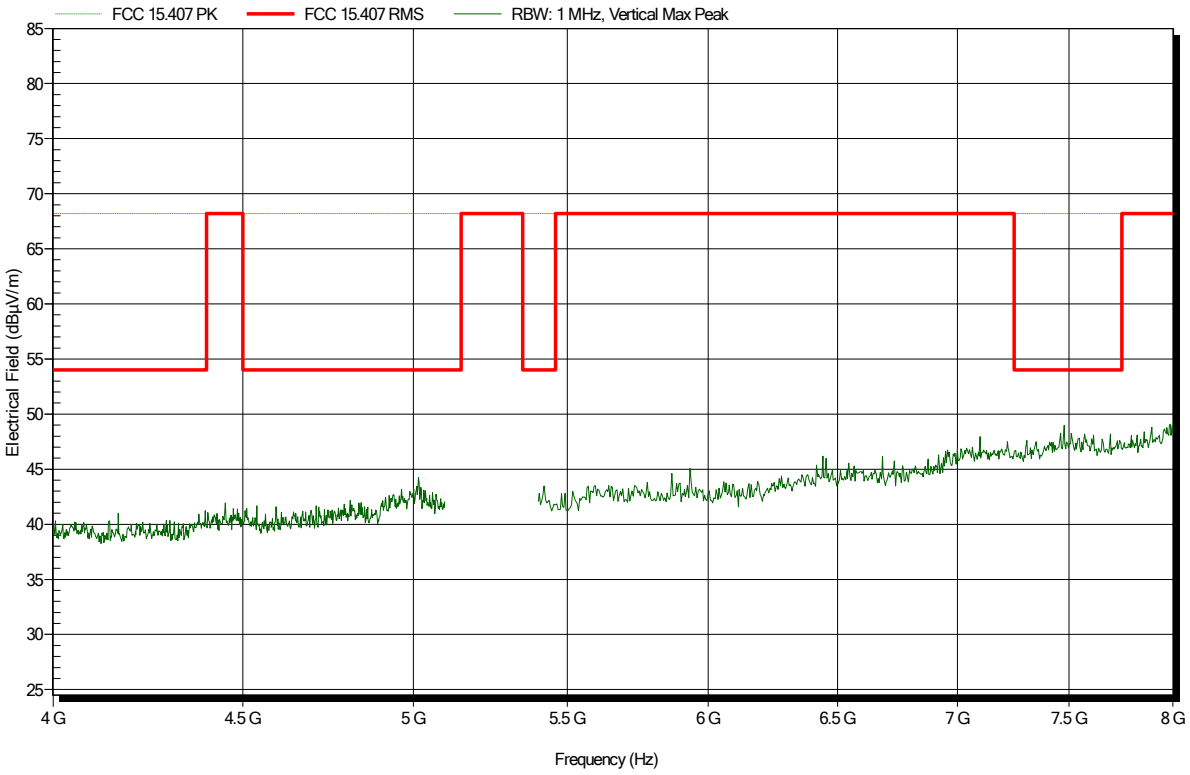

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	lower bandedge

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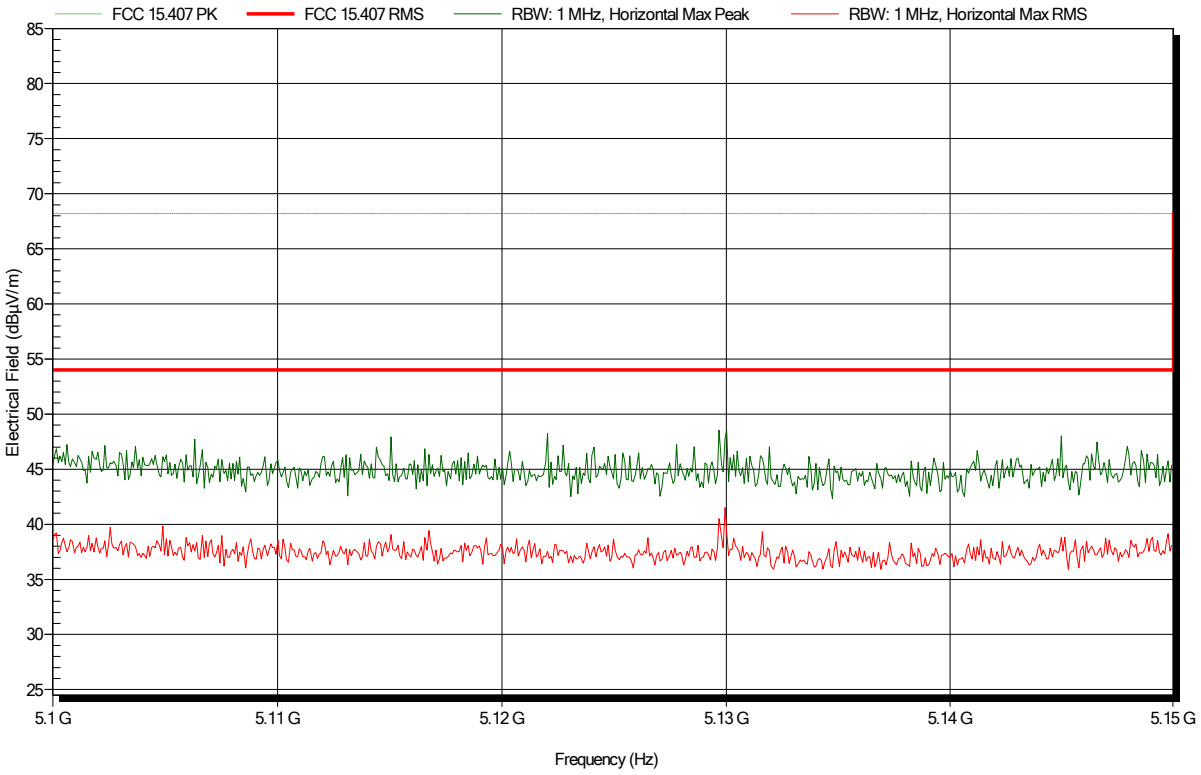

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	lower bandedge

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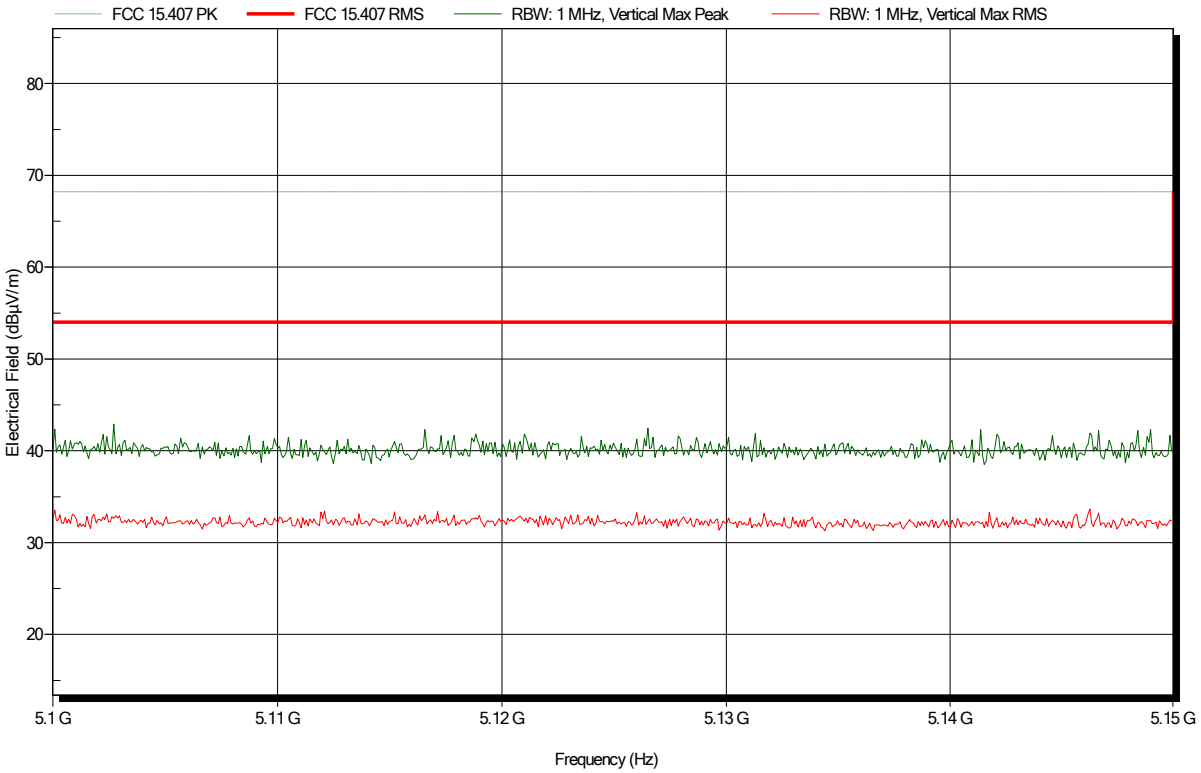

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	upper bandedge

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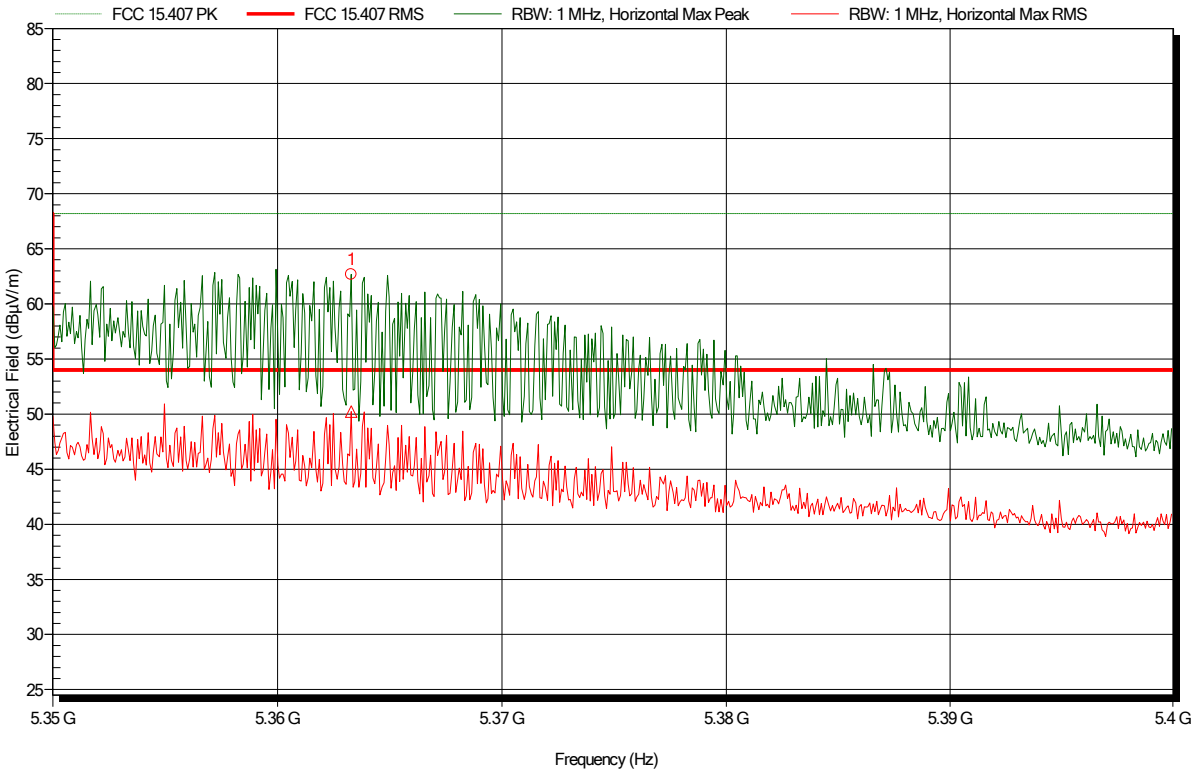

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.363 GHz	62.69 dBµV/m	68.2 dBµV/m	-5.51 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.363 GHz	50.22 dBµV/m	54 dBµV/m	-3.78 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	upper bandedge

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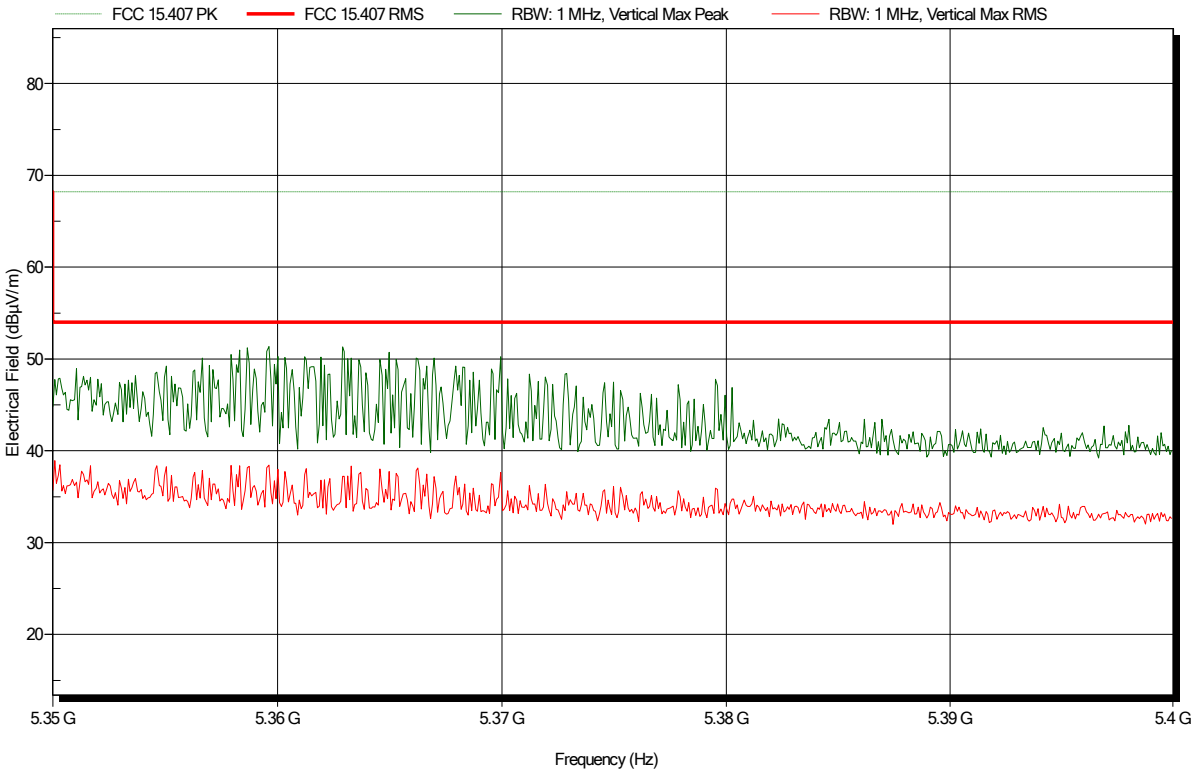

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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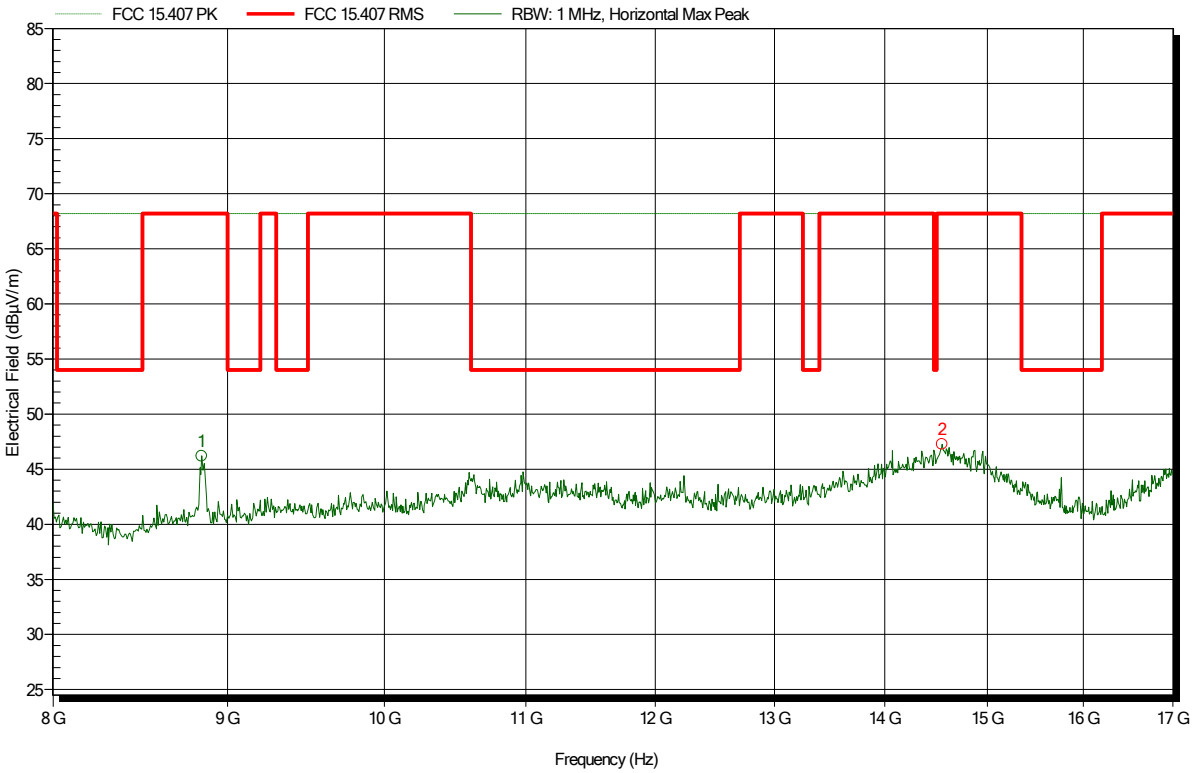

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
14.552 GHz	47.27 dBµV/m	68.2 dBµV/m	-20.93 dB	Pass
8.845 GHz	46.2 dBµV/m	68.2 dBµV/m	-22 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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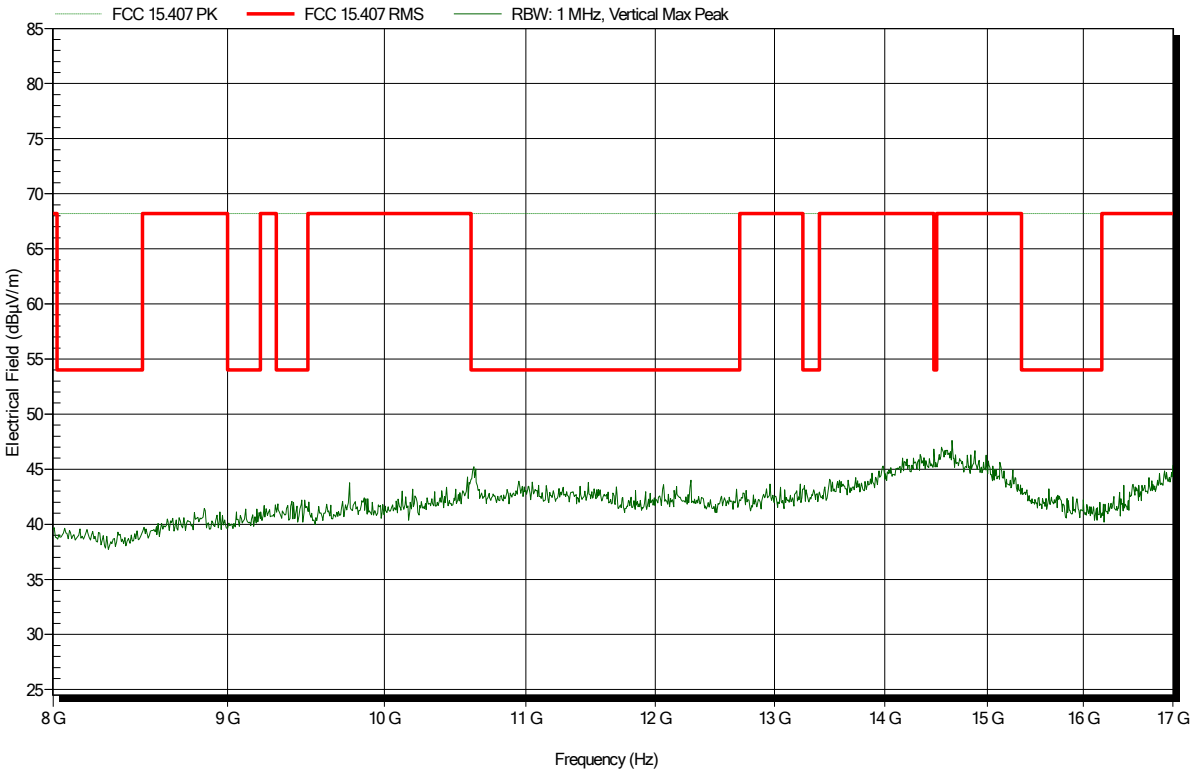

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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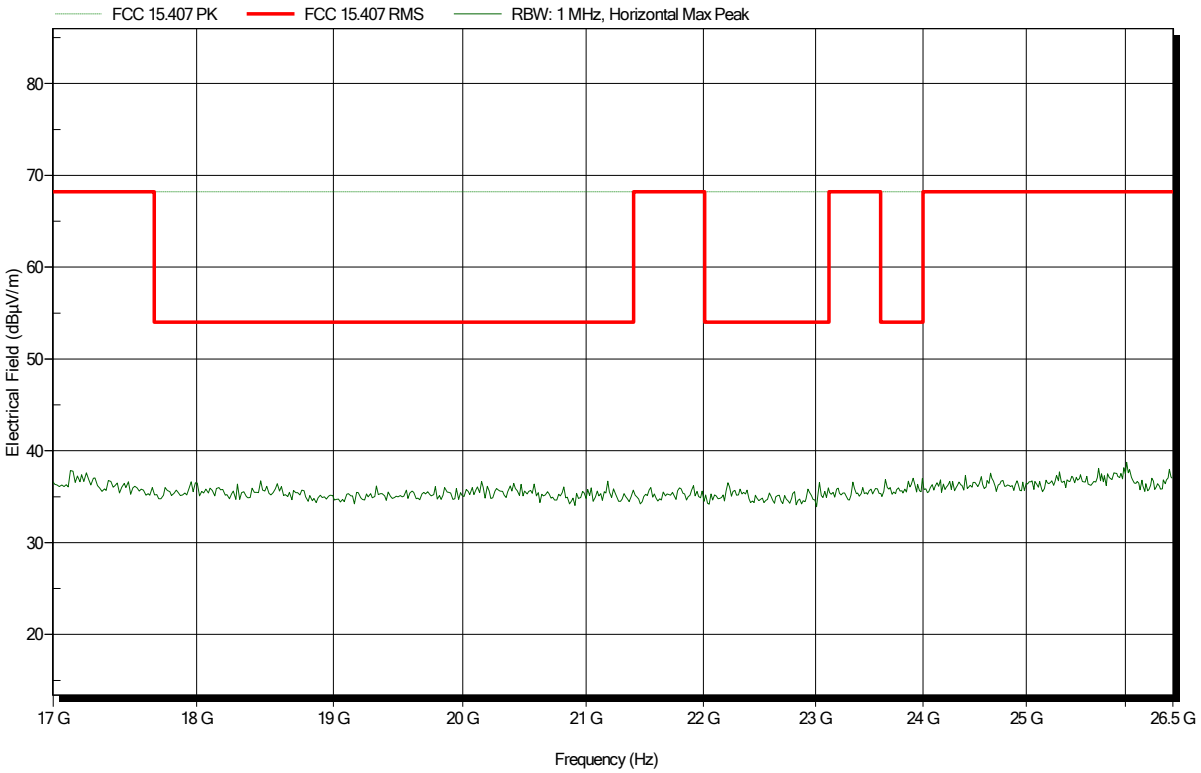

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5310 MHz
Test Date:	2018-12-28
Note:	

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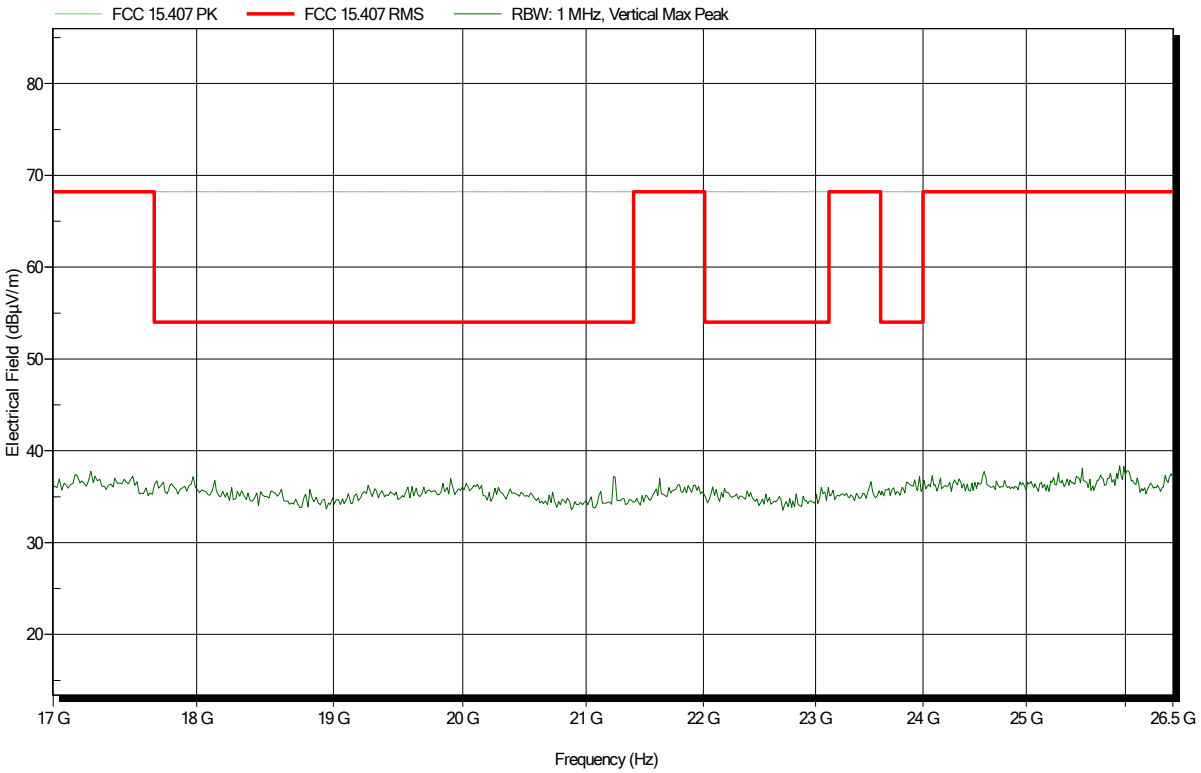

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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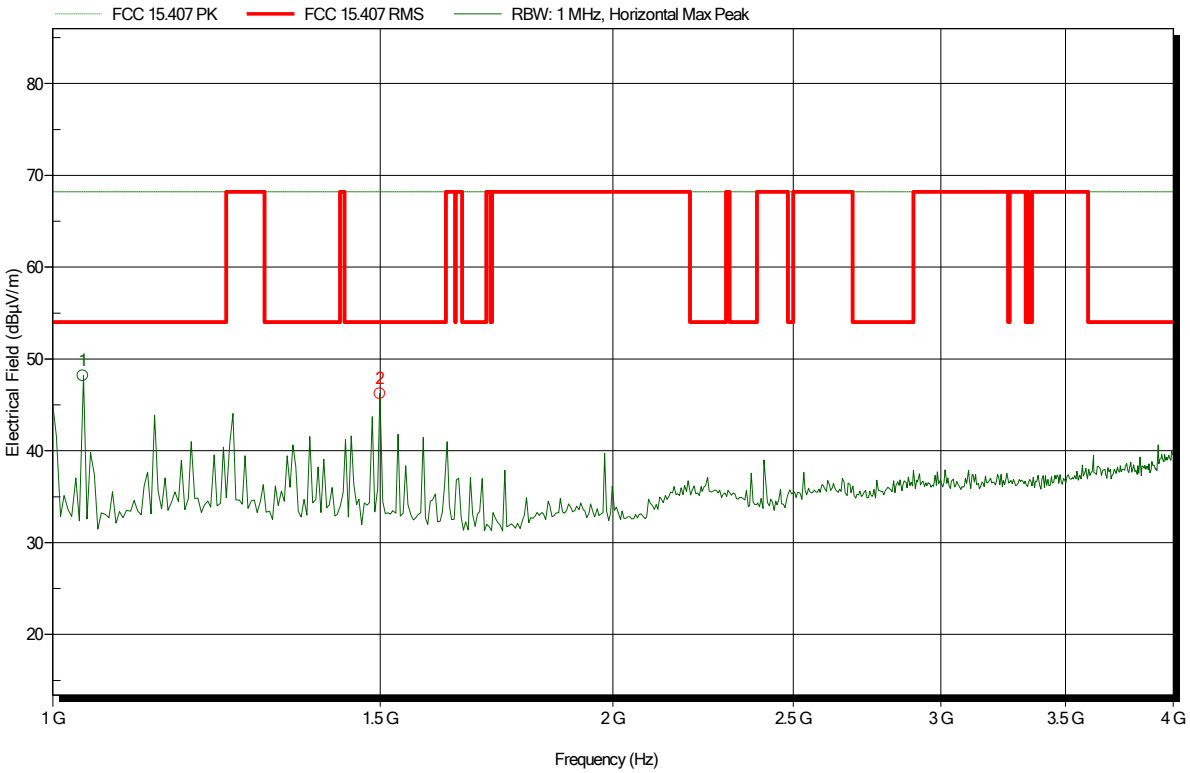

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	48.2 dBµV/m	68.2 dBµV/m	-20 dB	Pass
1.499 GHz	46.21 dBµV/m	68.2 dBµV/m	-21.99 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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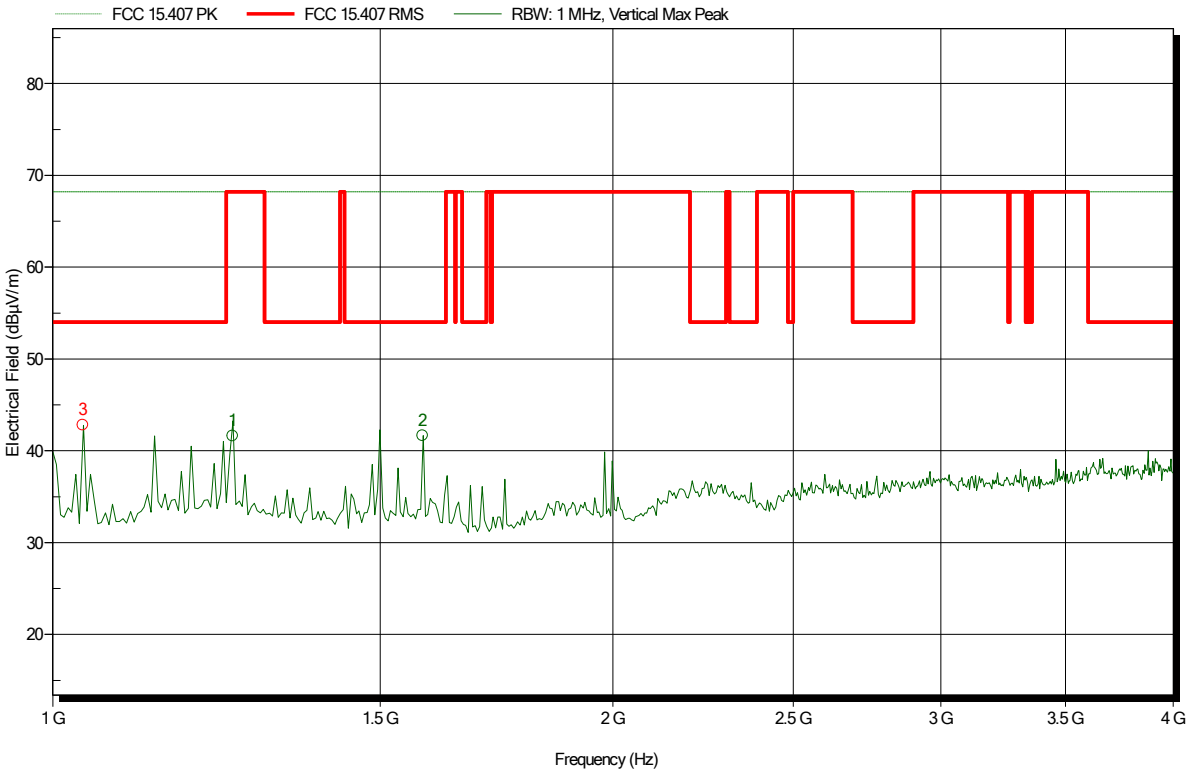

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	42.8 dBµV/m	68.2 dBµV/m	-25.4 dB	Pass
1.25 GHz	41.64 dBµV/m	68.2 dBµV/m	-26.56 dB	Pass
1.581 GHz	41.67 dBµV/m	68.2 dBµV/m	-26.53 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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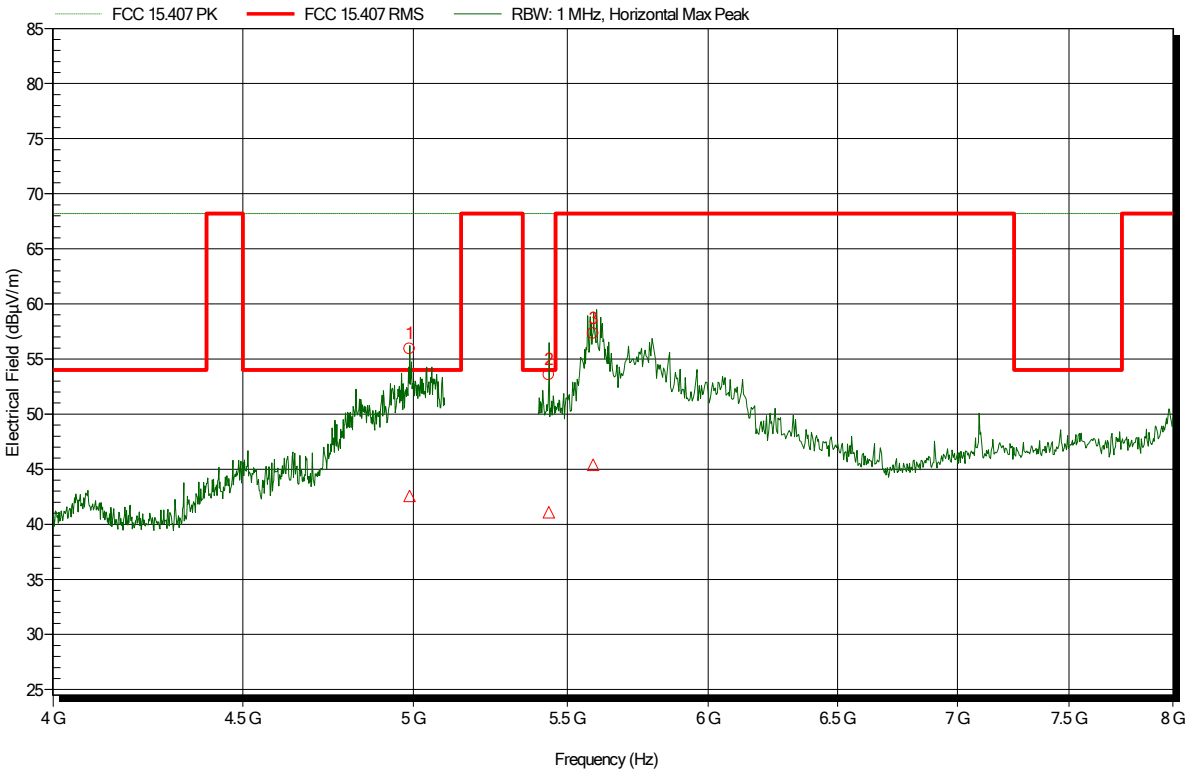

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.988 GHz	55.92 dBµV/m	68.2 dBµV/m	-12.28 dB	Pass
5.437 GHz	53.56 dBµV/m	68.2 dBµV/m	-14.64 dB	Pass
5.588 GHz	57.34 dBµV/m	68.2 dBµV/m	-10.86 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.988 GHz	42.58 dBµV/m	54 dBµV/m	-11.42 dB	Pass
5.437 GHz	41.08 dBµV/m	54 dBµV/m	-12.92 dB	Pass
5.588 GHz	45.4 dBµV/m	68.2 dBµV/m	-22.8 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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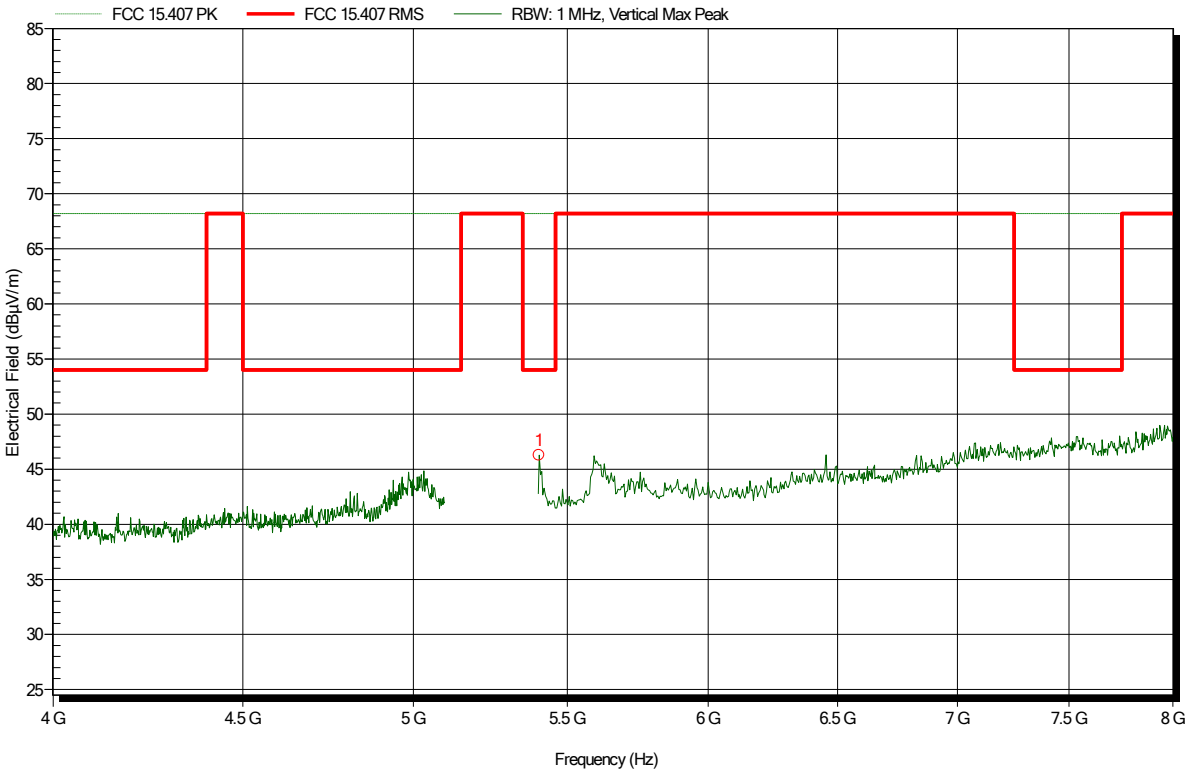

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.404 GHz	46.28 dBµV/m	68.2 dBµV/m	-21.92 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	lower bandedge

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Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	lower bandedge

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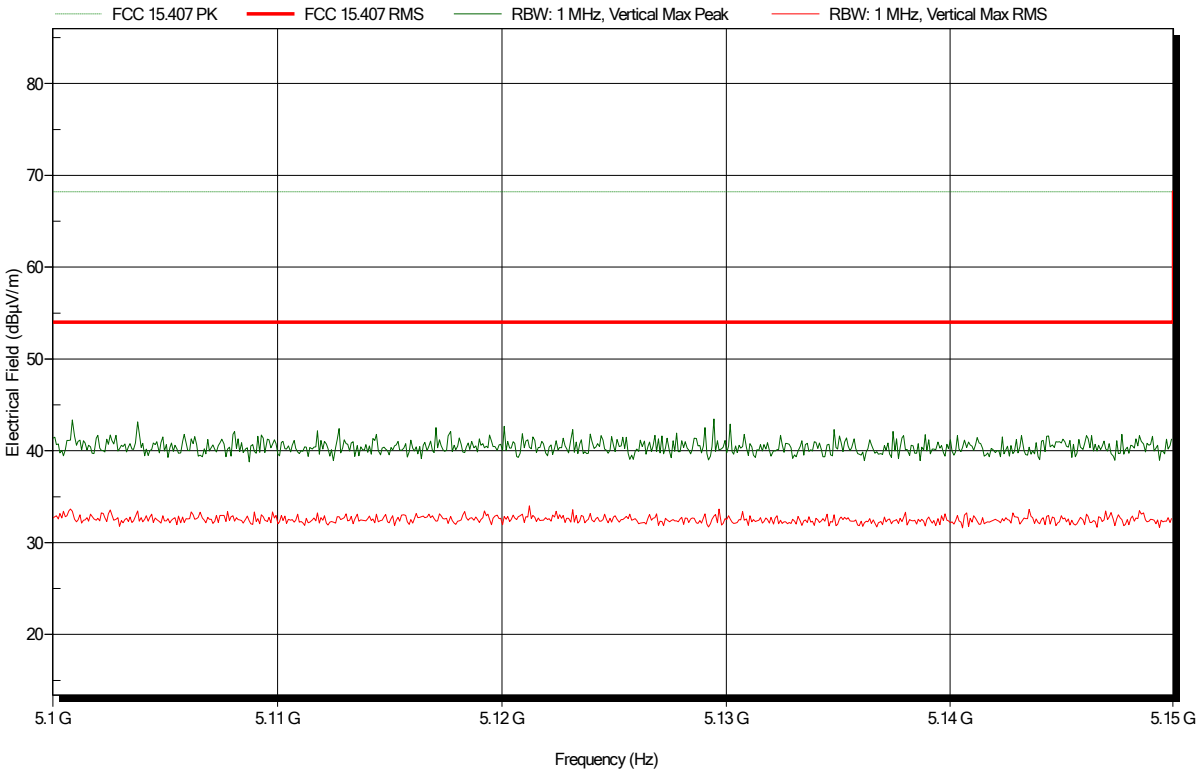

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	upper bandedge

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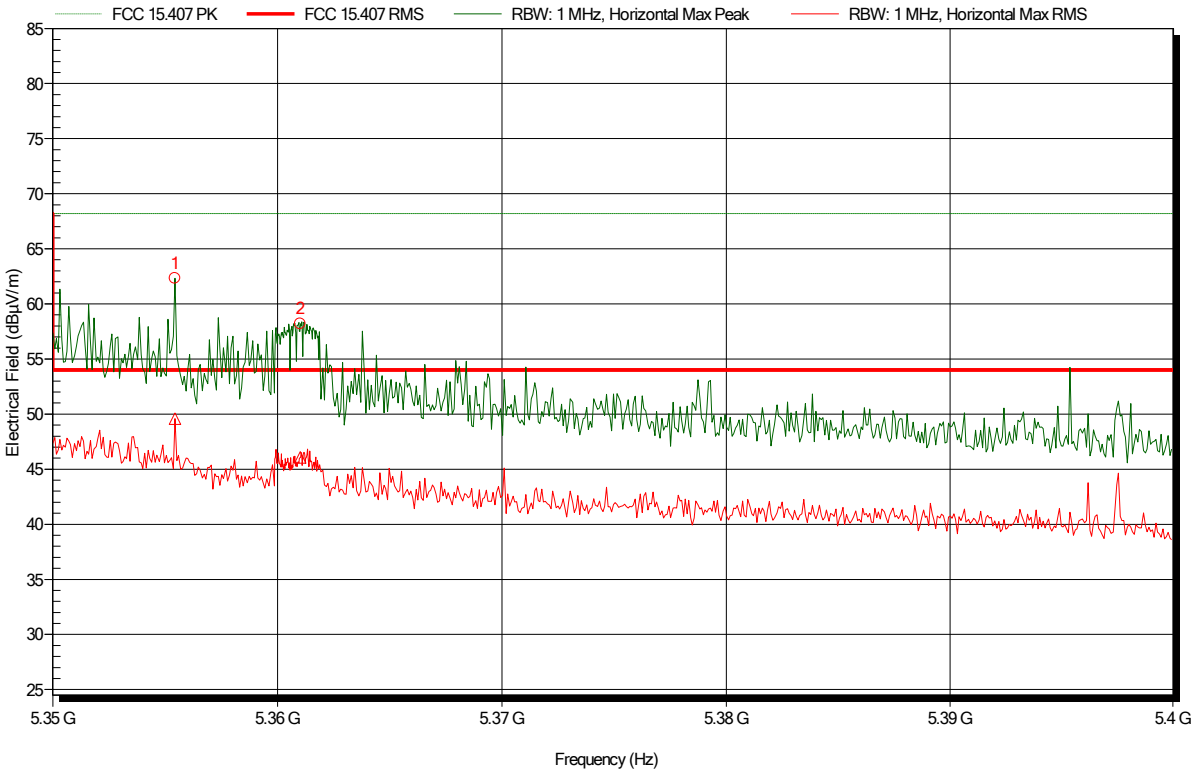

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.355 GHz	62.33 dBµV/m	68.2 dBµV/m	-5.87 dB	Pass
5.361 GHz	58.18 dBµV/m	68.2 dBµV/m	-10.02 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.355 GHz	49.58 dBµV/m	54 dBµV/m	-4.42 dB	Pass
5.361 GHz	46.07 dBµV/m	54 dBµV/m	-7.93 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	upper bandedge

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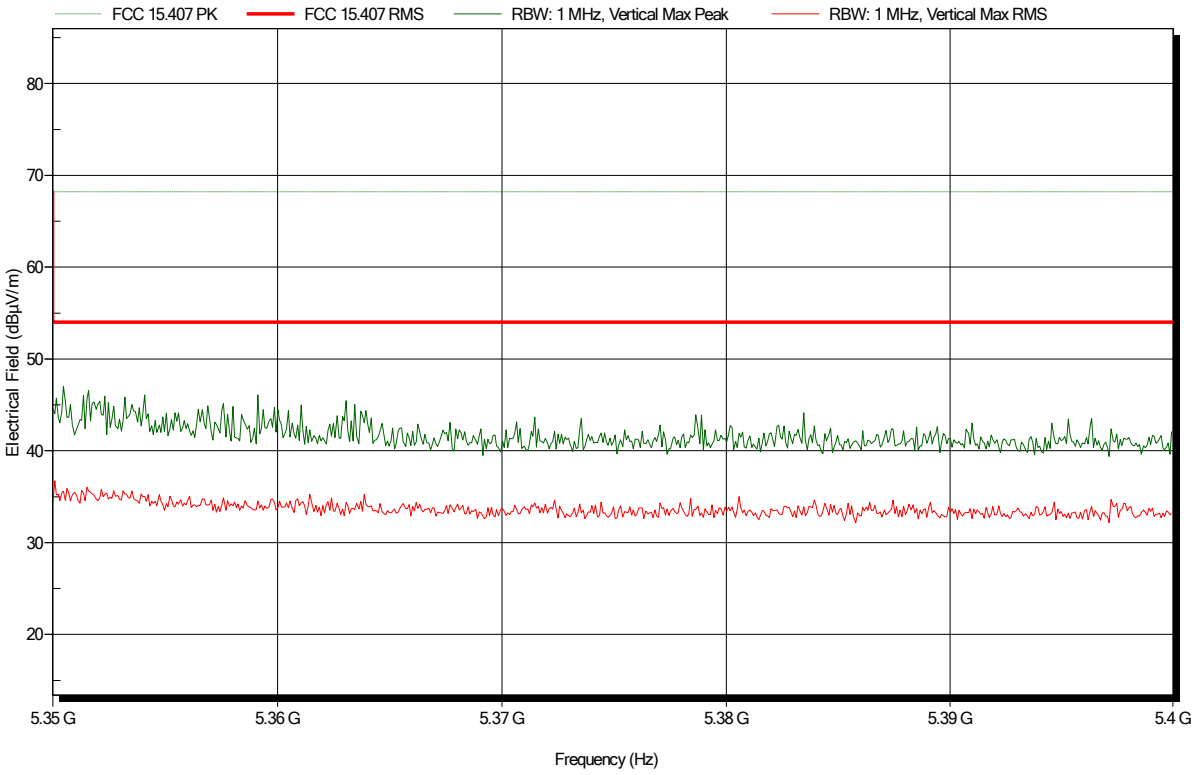

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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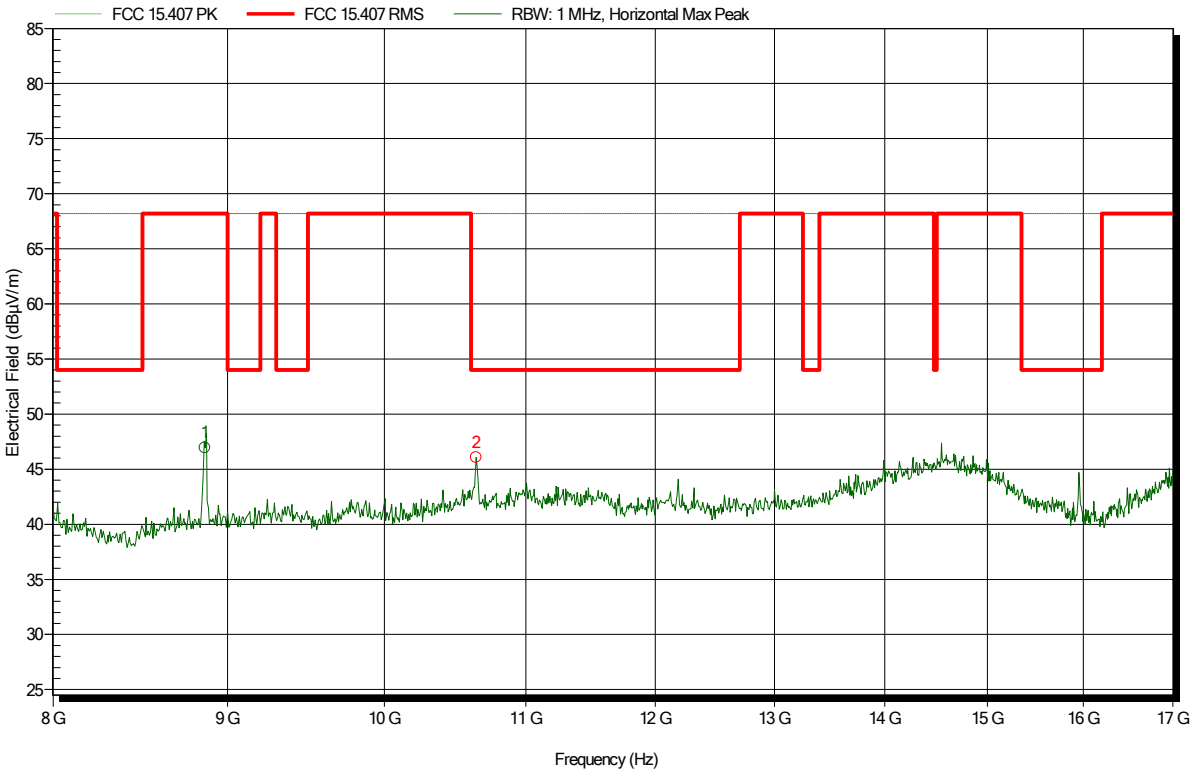

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.637 GHz	46.08 dBµV/m	68.2 dBµV/m	-22.12 dB	Pass
8.864 GHz	46.94 dBµV/m	68.2 dBµV/m	-21.26 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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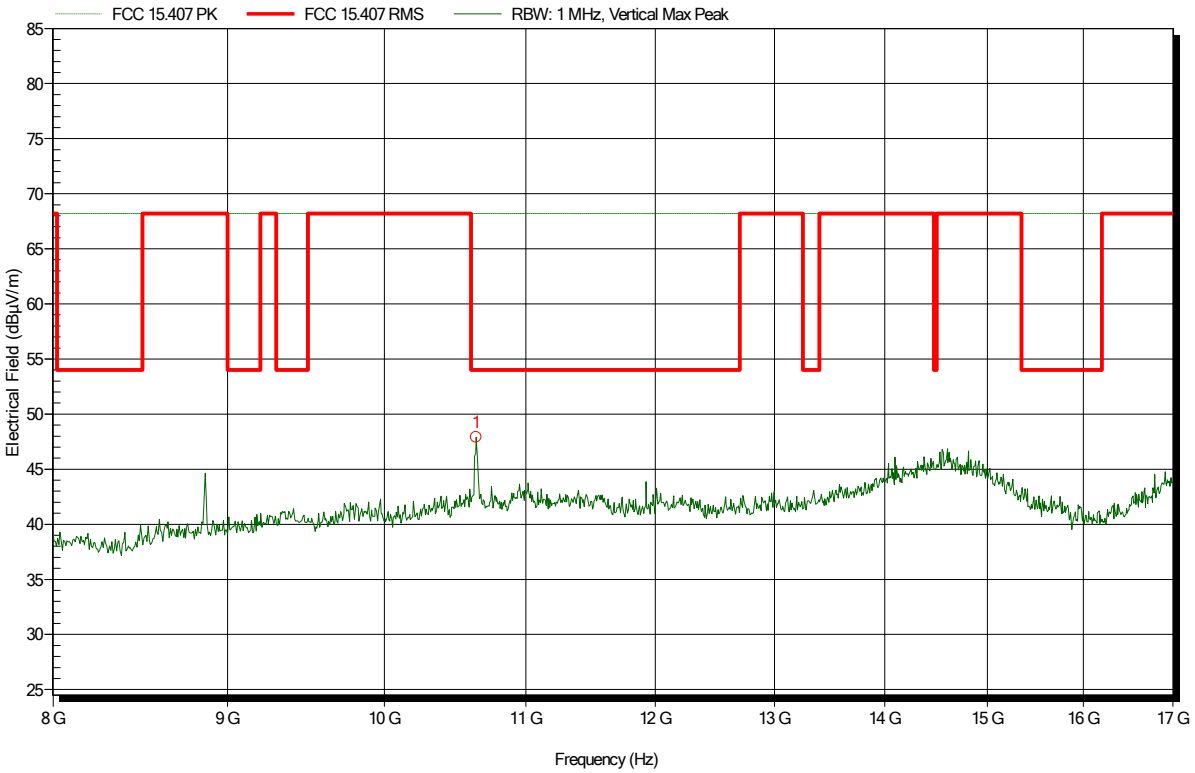

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.637 GHz	47.91 dBµV/m	68.2 dBµV/m	-20.29 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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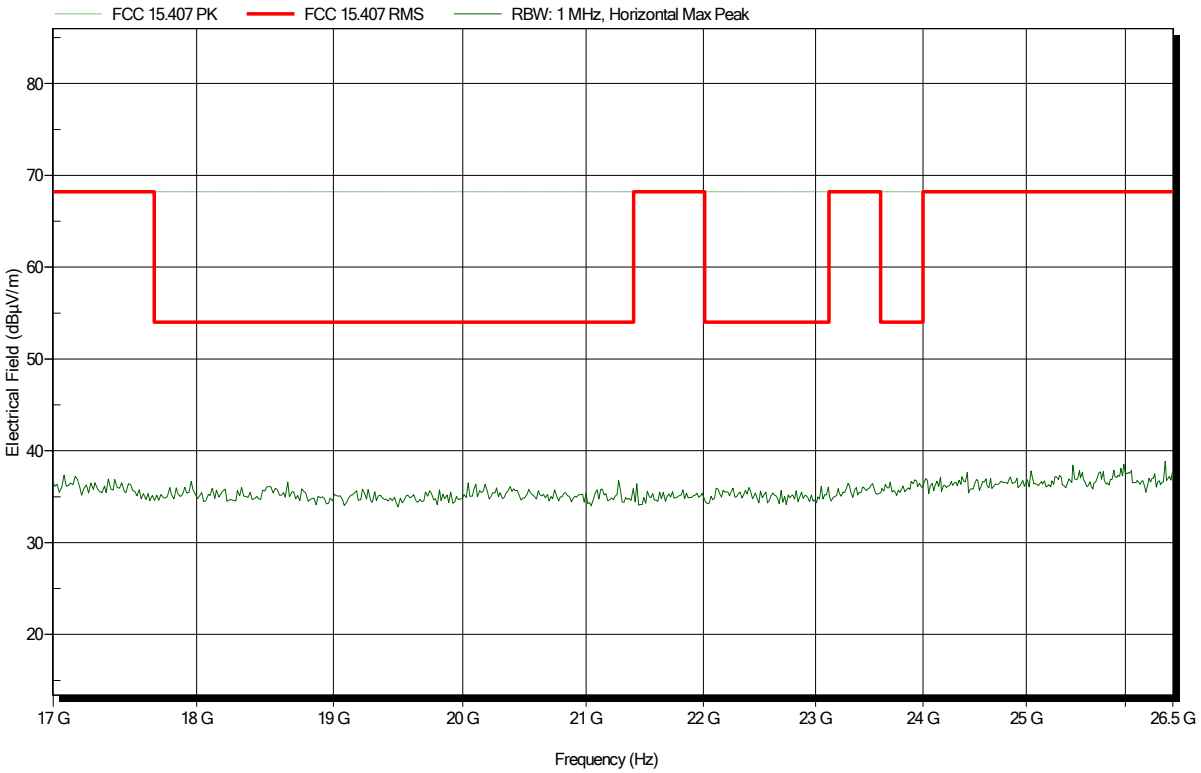

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6Mbps; 5320 MHz
Test Date:	2018-12-27
Note:	

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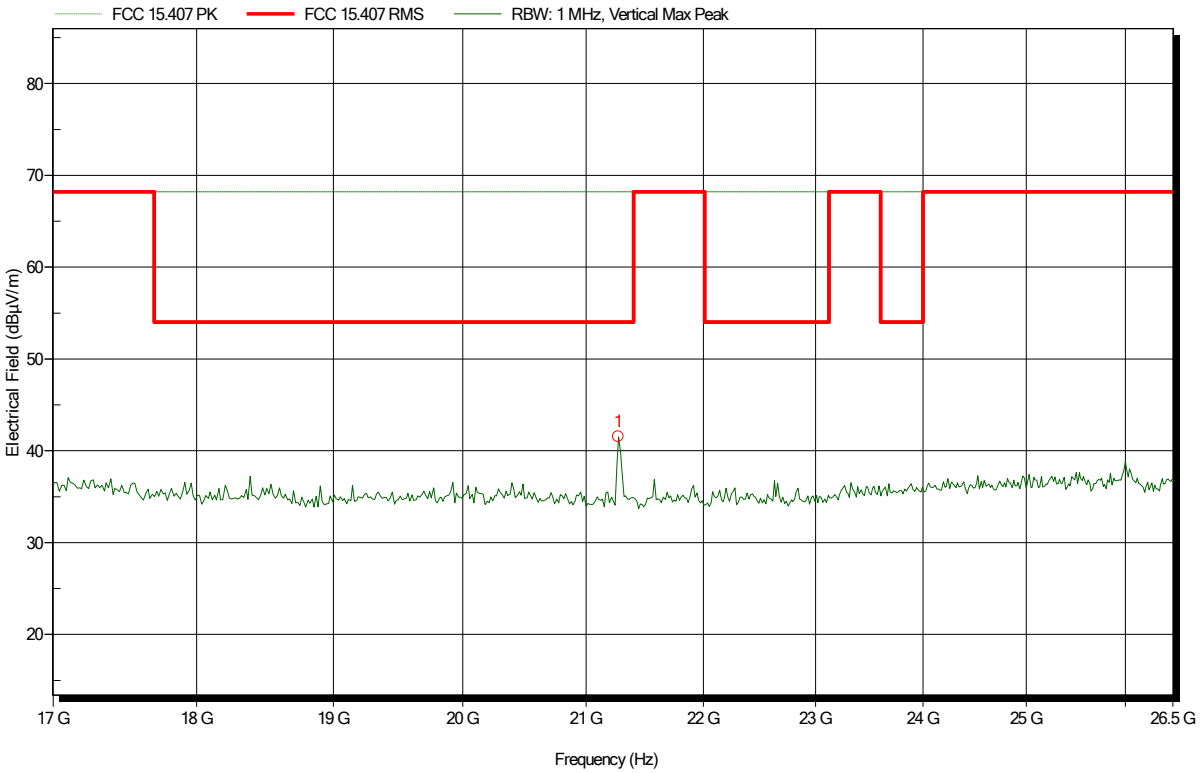

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
21.271 GHz	41.55 dBµV/m	68.2 dBµV/m	-26.65 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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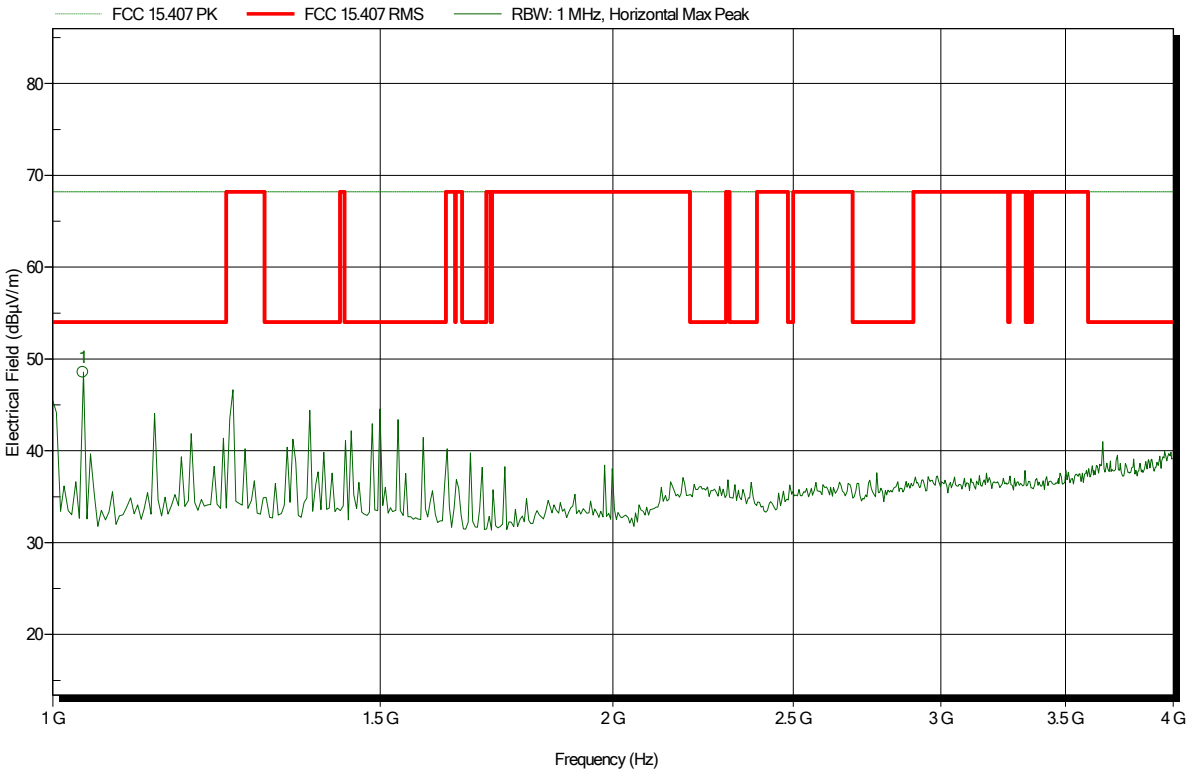

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	48.57 dBµV/m	68.2 dBµV/m	-19.63 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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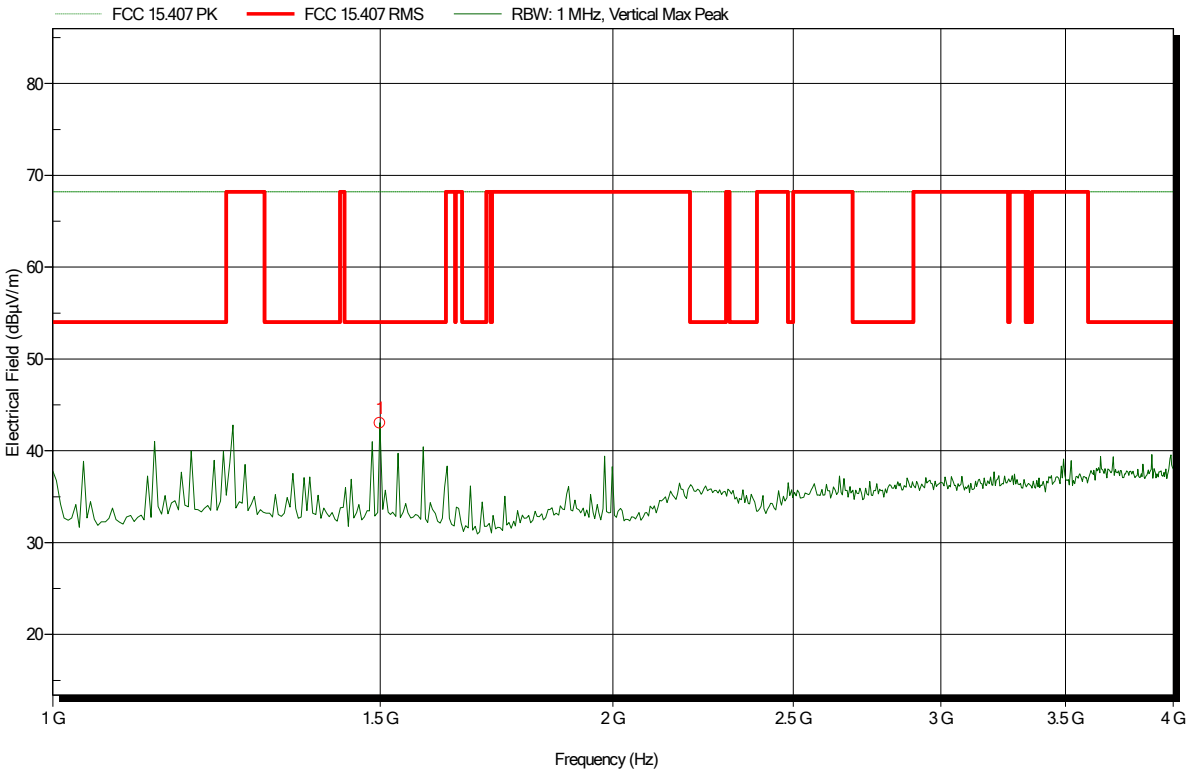

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.499 GHz	43.03 dBµV/m	68.2 dBµV/m	-25.17 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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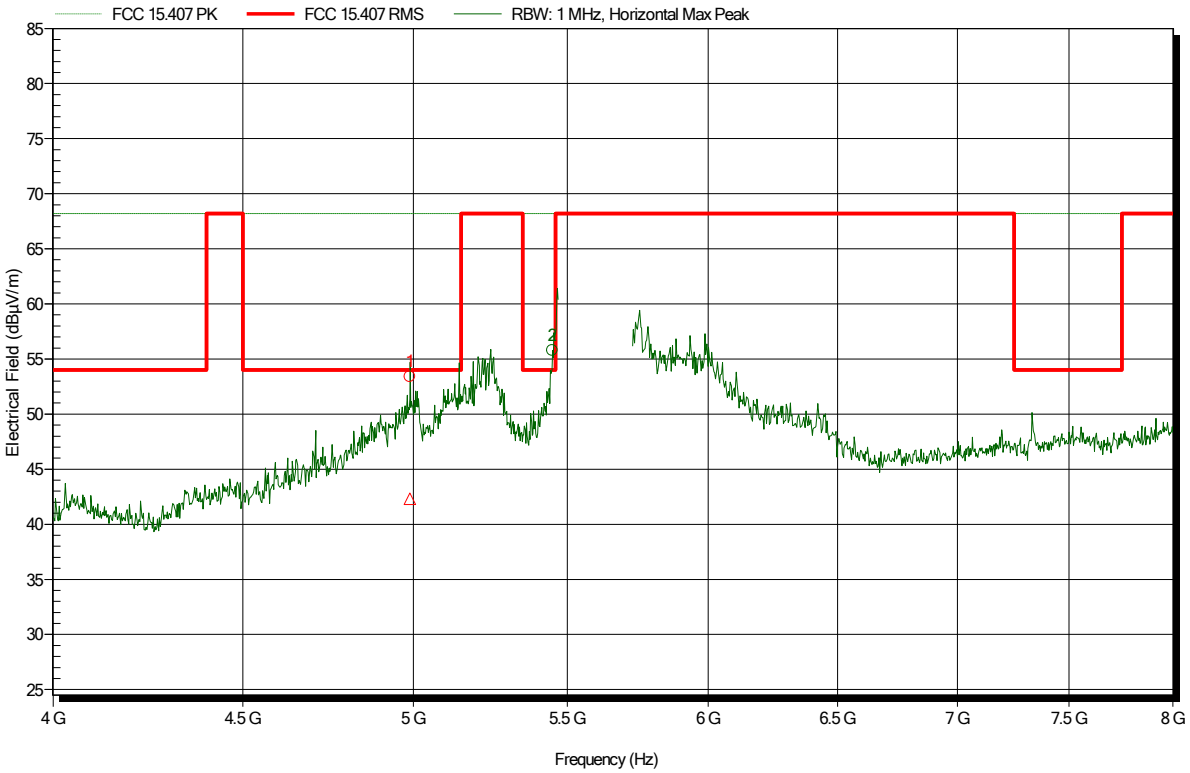

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.989 GHz	53.4 dBµV/m	68.2 dBµV/m	-14.8 dB	Pass
5.449 GHz	55.77 dBµV/m	68.2 dBµV/m	-12.43 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.989 GHz	42.32 dBµV/m	54 dBµV/m	-11.68 dB	Pass
5.449 GHz				

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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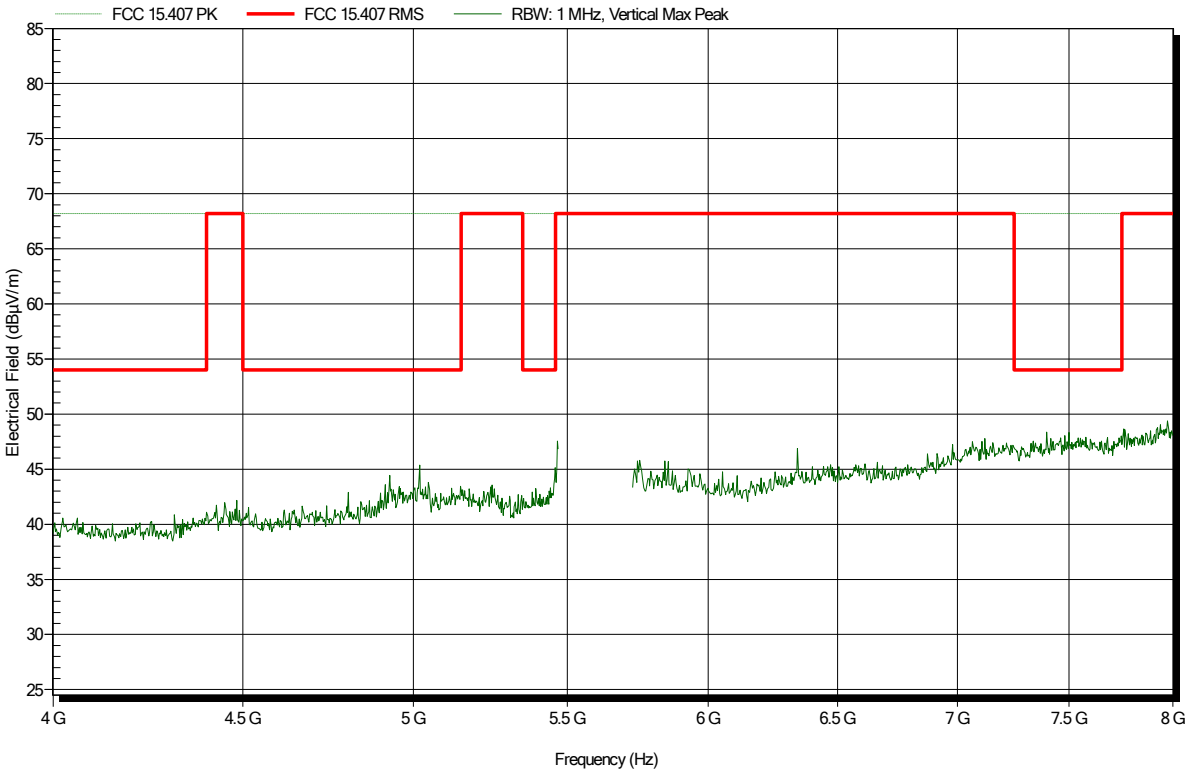

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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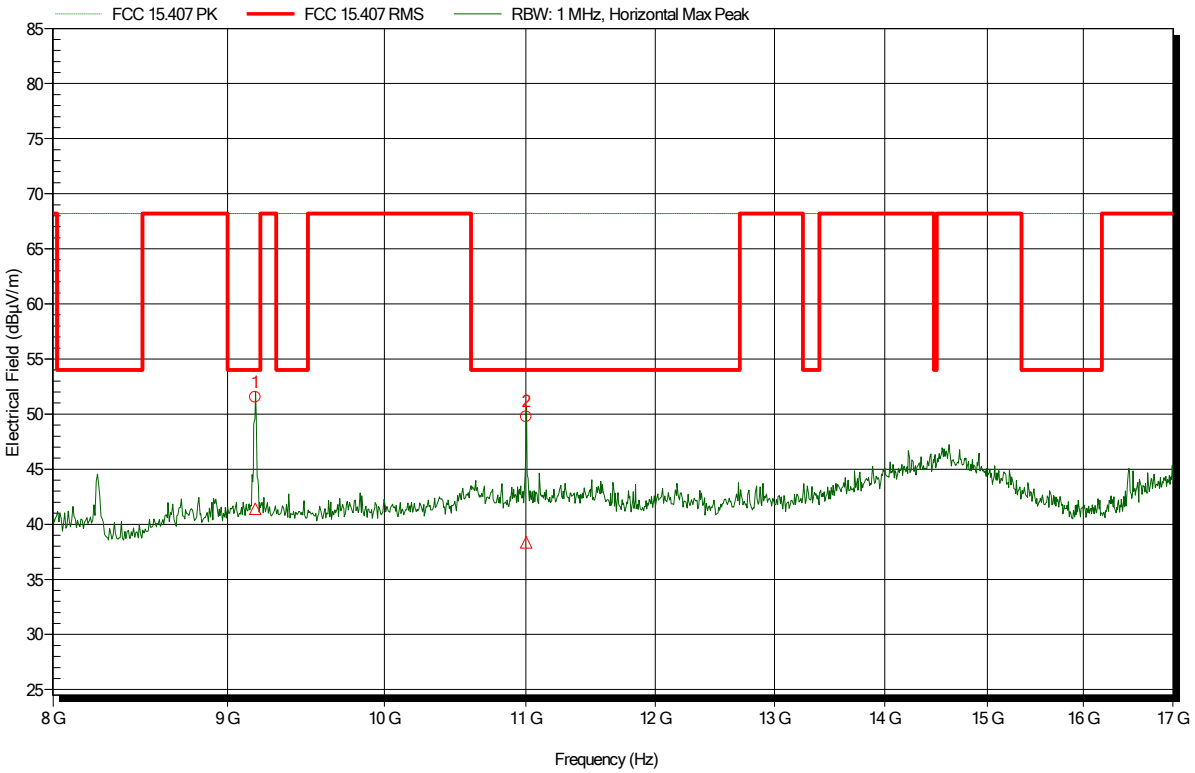

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11 GHz	49.76 dBµV/m	68.2 dBµV/m	-18.44 dB	Pass
9.17 GHz	51.55 dBµV/m	68.2 dBµV/m	-16.65 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
11 GHz	38.36 dBµV/m	54 dBµV/m	-15.64 dB	Pass
9.17 GHz	41.41 dBµV/m	54 dBµV/m	-12.59 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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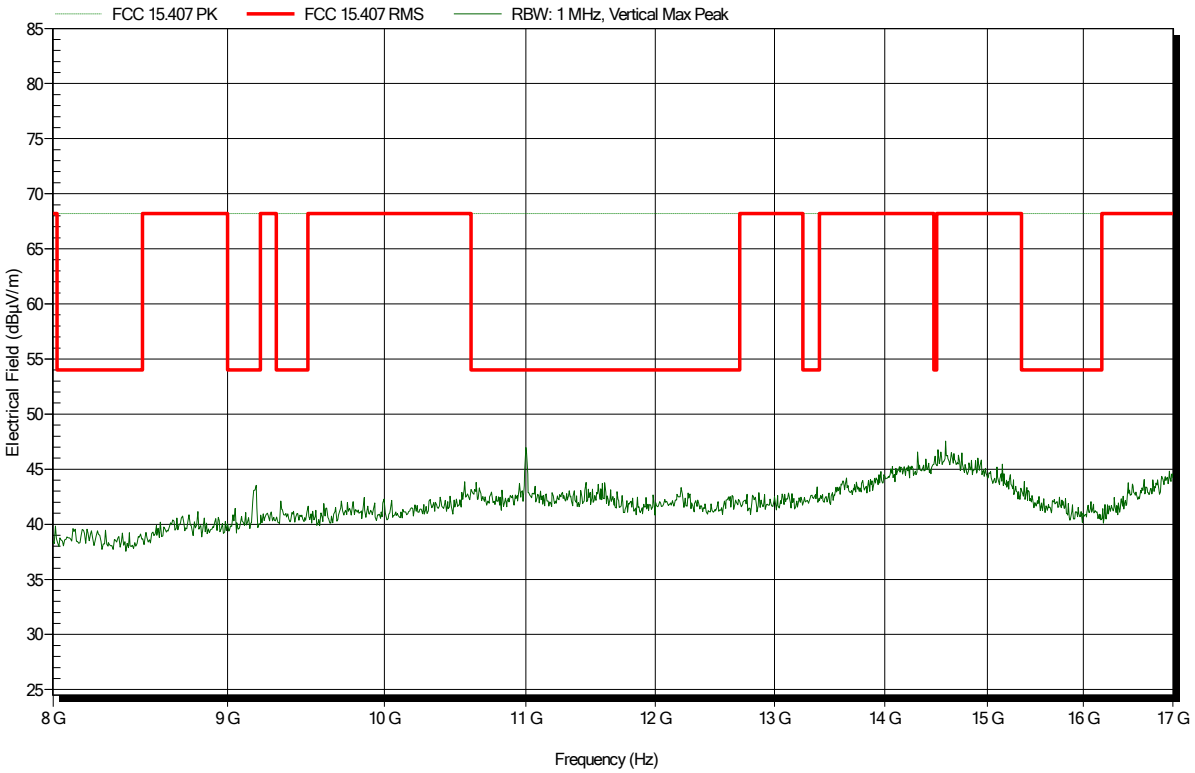

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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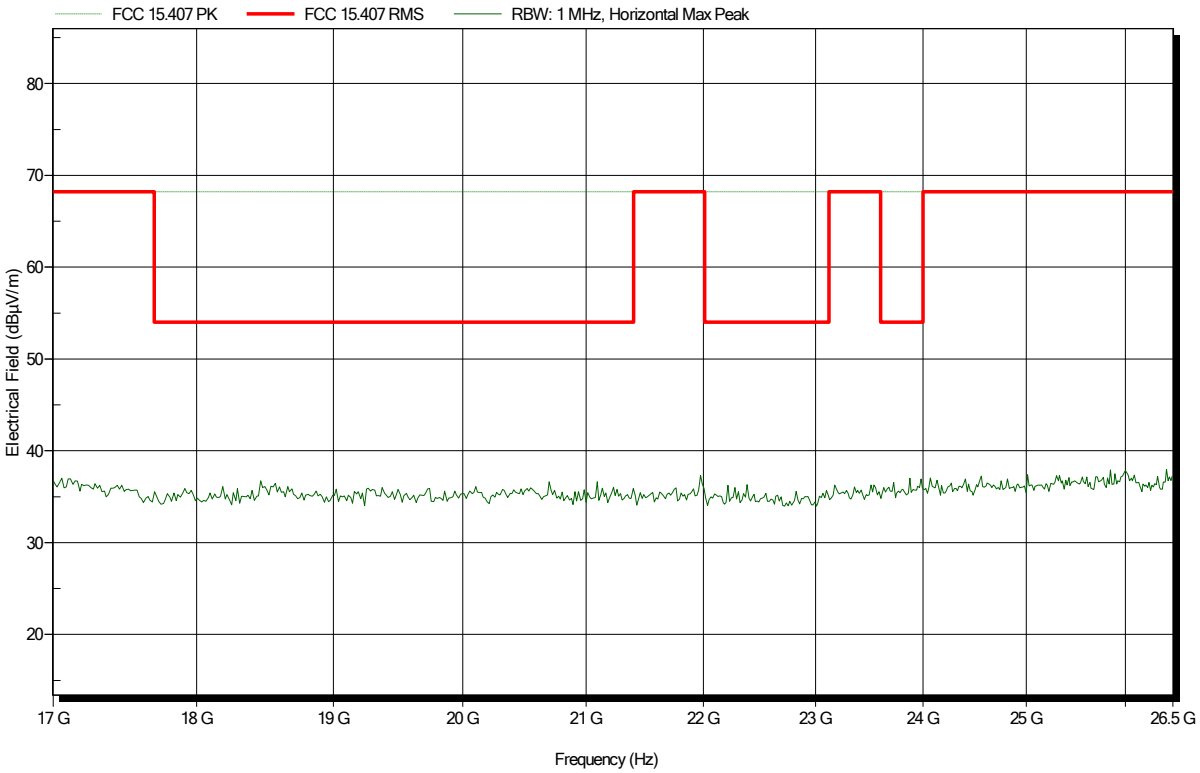

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
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Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5500 MHz
Test Date:	2019-01-10
Note:	

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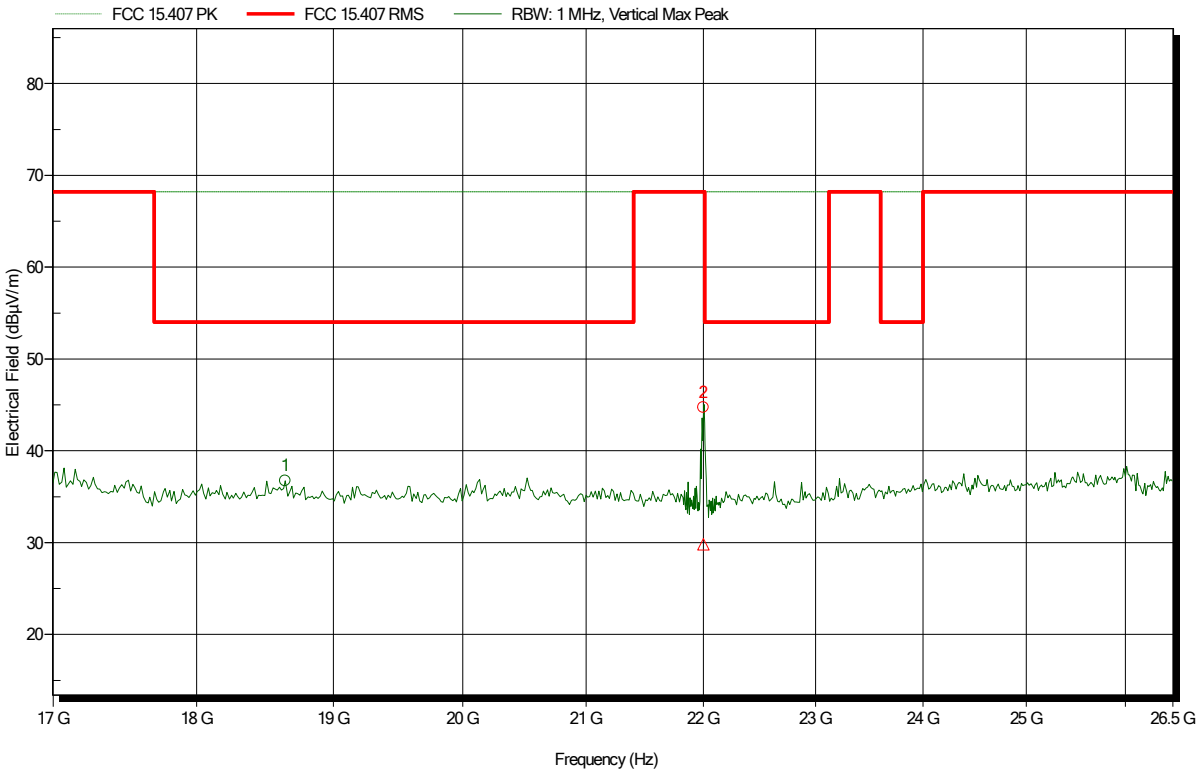

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
18.642 GHz	36.75 dBµV/m	68.2 dBµV/m	-31.45 dB	Pass
22 GHz	44.72 dBµV/m	68.2 dBµV/m	-23.48 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
18.642 GHz				
22 GHz	29.83 dBµV/m	68.2 dBµV/m	-38.37 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2018-12-28
Note:	

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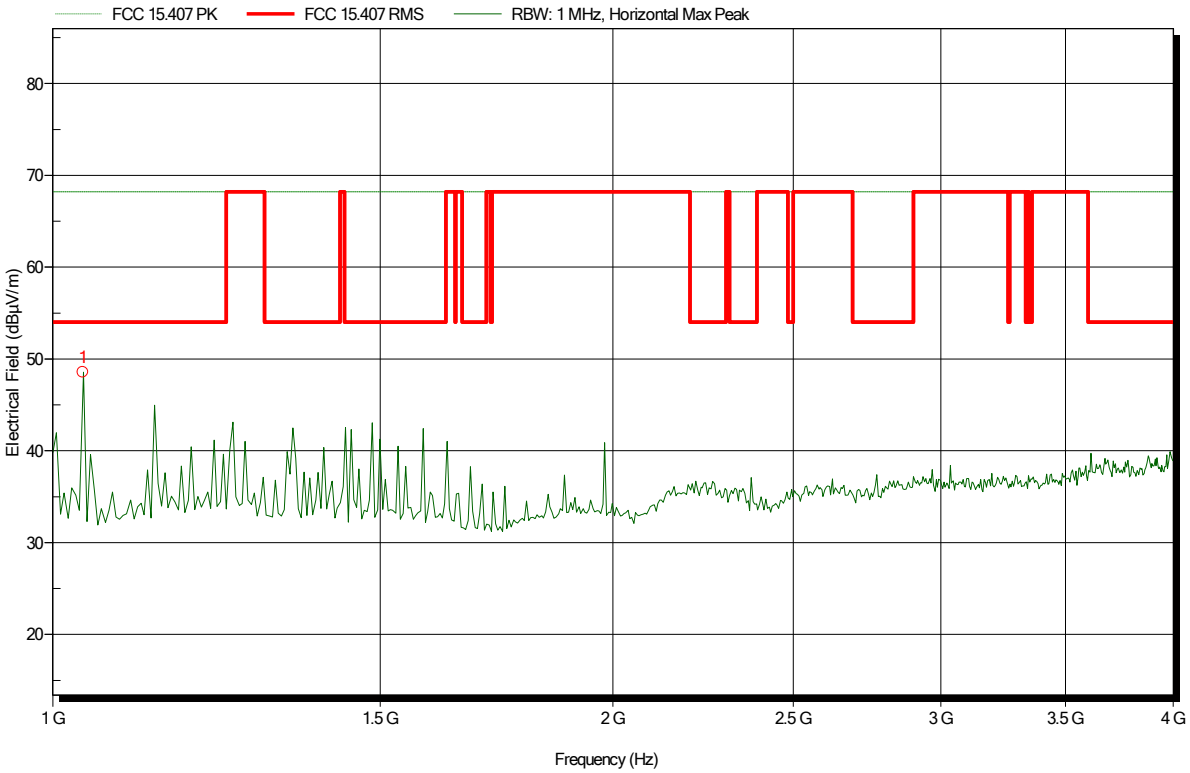

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	48.57 dBµV/m	68.2 dBµV/m	-19.63 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2018-12-28
Note:	

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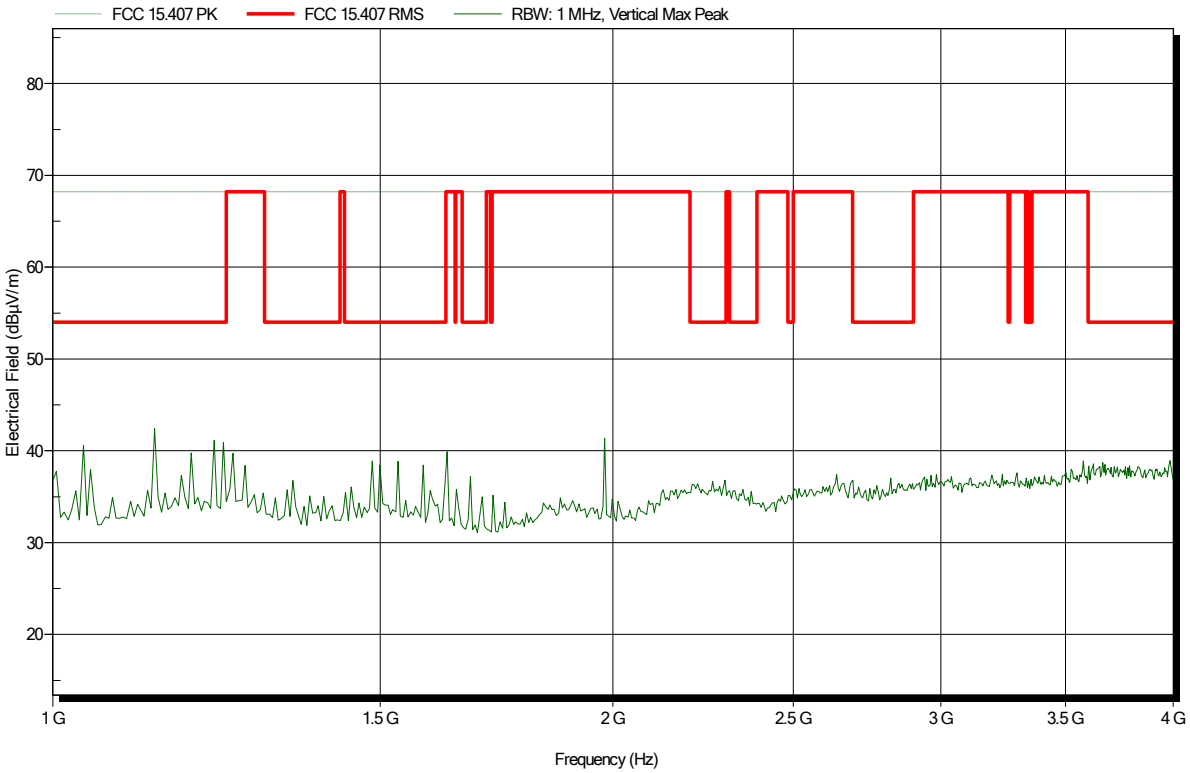

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2018-12-28
Note:	

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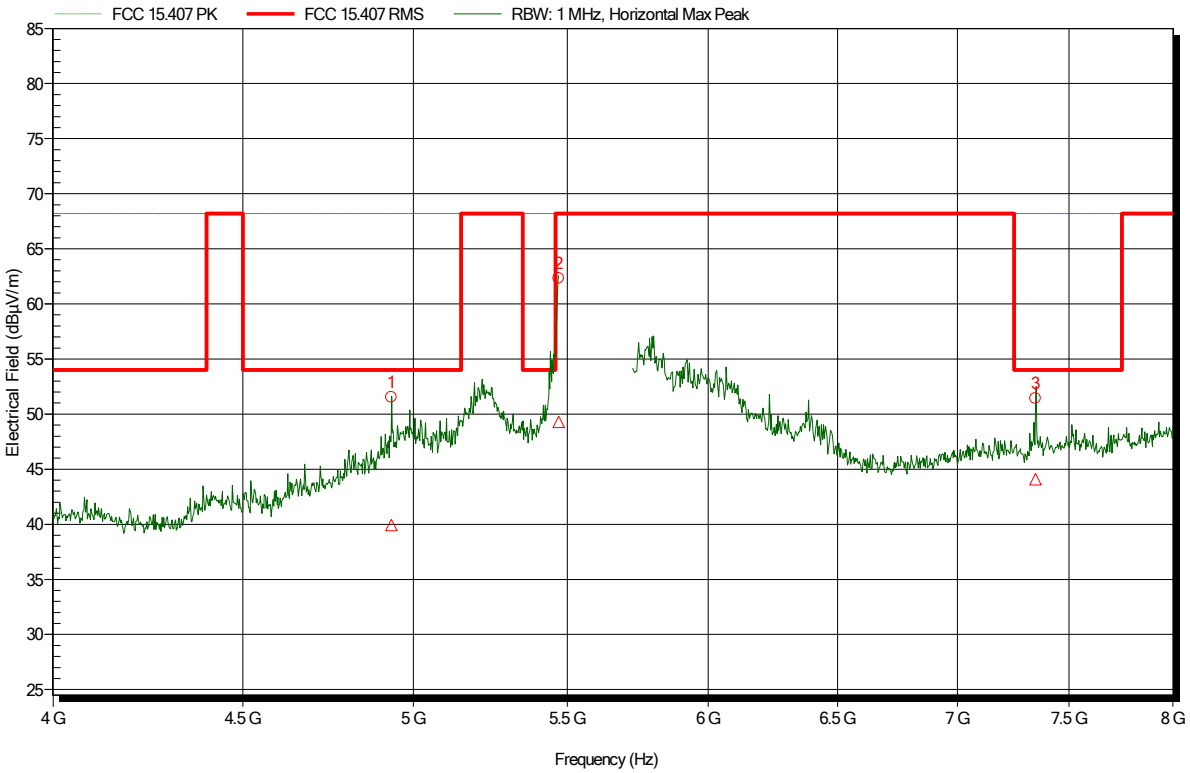

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.933 GHz	51.55 dBµV/m	68.2 dBµV/m	-16.65 dB	Pass
5.47 GHz	62.33 dBµV/m	68.2 dBµV/m	-5.87 dB	Pass
7.347 GHz	51.41 dBµV/m	68.2 dBµV/m	-16.79 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
4.933 GHz	39.92 dBµV/m	54 dBµV/m	-14.08 dB	Pass
5.47 GHz	49.3 dBµV/m	68.2 dBµV/m	-18.9 dB	Pass
7.347 GHz	44.09 dBµV/m	54 dBµV/m	-9.91 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2018-12-28
Note:	

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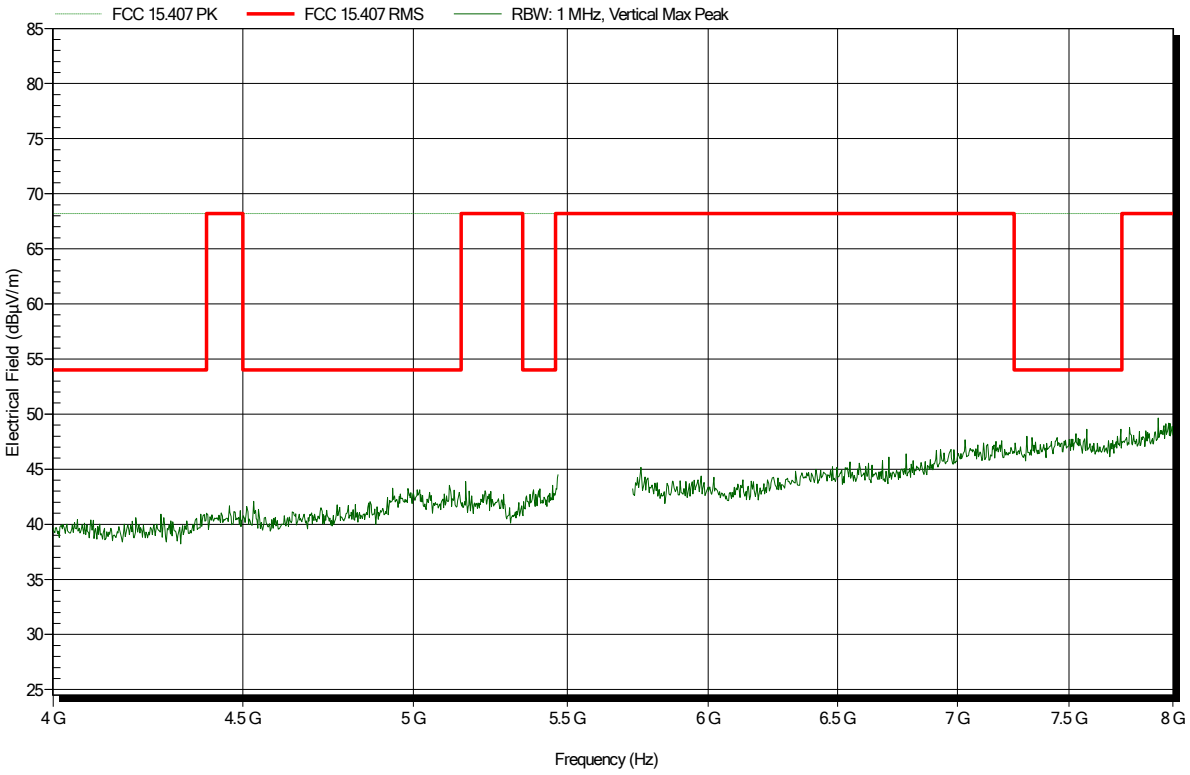

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2018-12-28
Note:	

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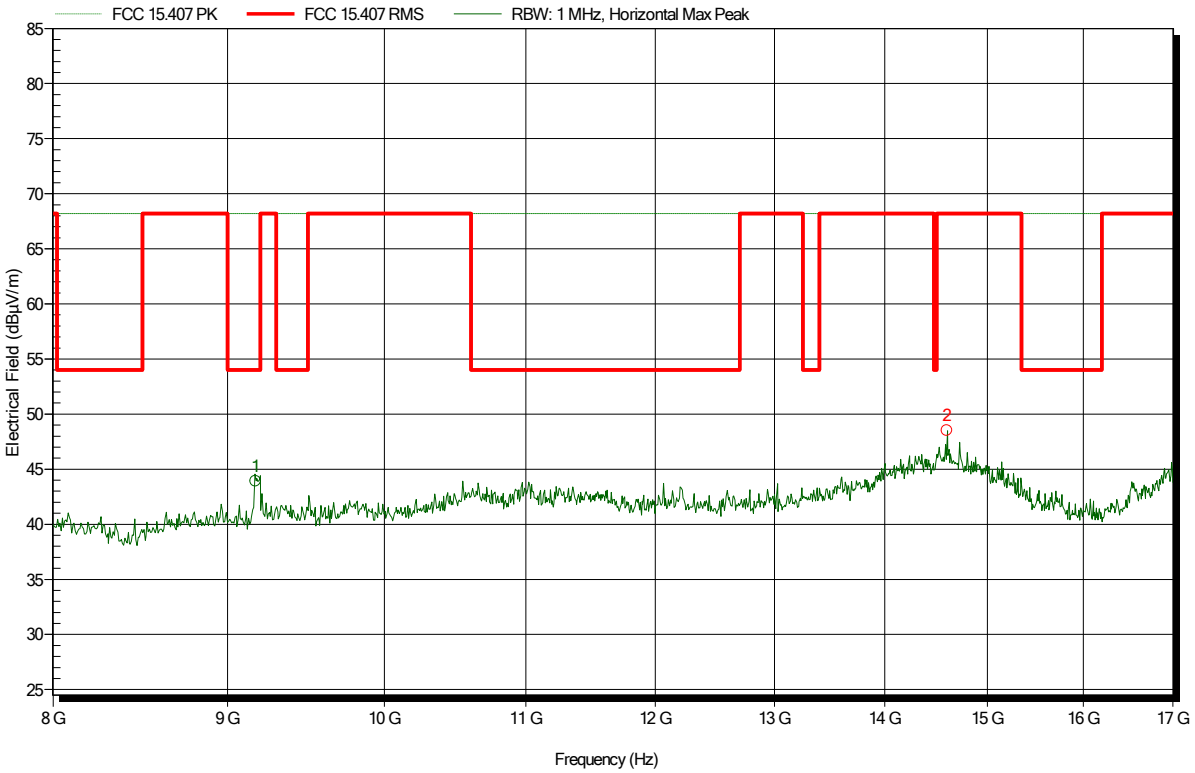

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
14.6 GHz	48.51 dBµV/m	68.2 dBµV/m	-19.69 dB	Pass
9.171 GHz	43.91 dBµV/m	68.2 dBµV/m	-24.29 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2018-12-28
Note:	

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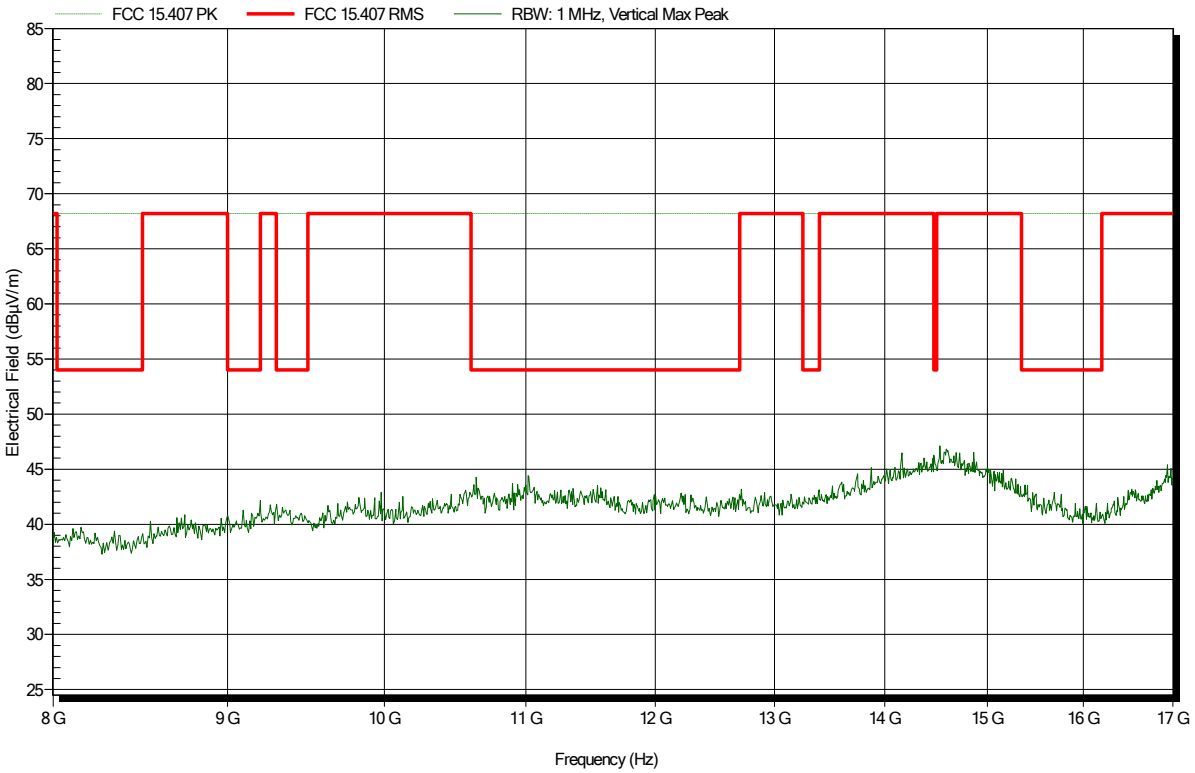

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2019-01-10
Note:	

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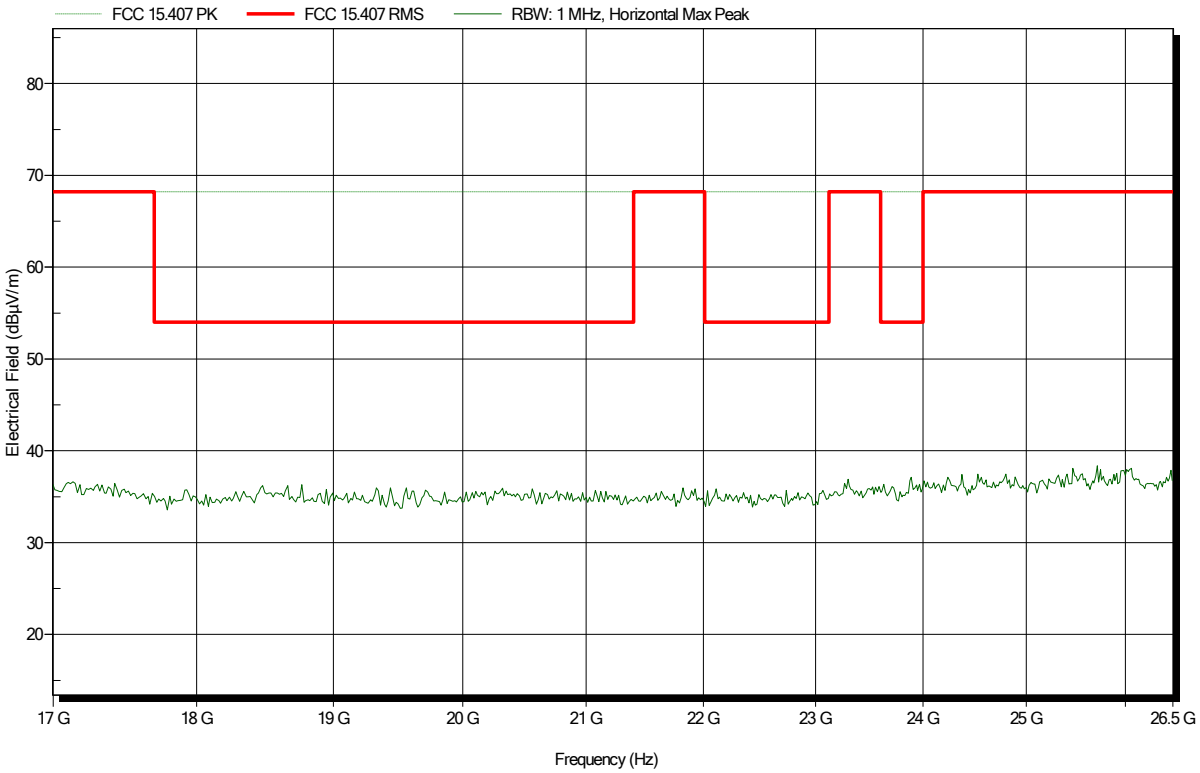

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5510 MHz
Test Date:	2019-01-10
Note:	

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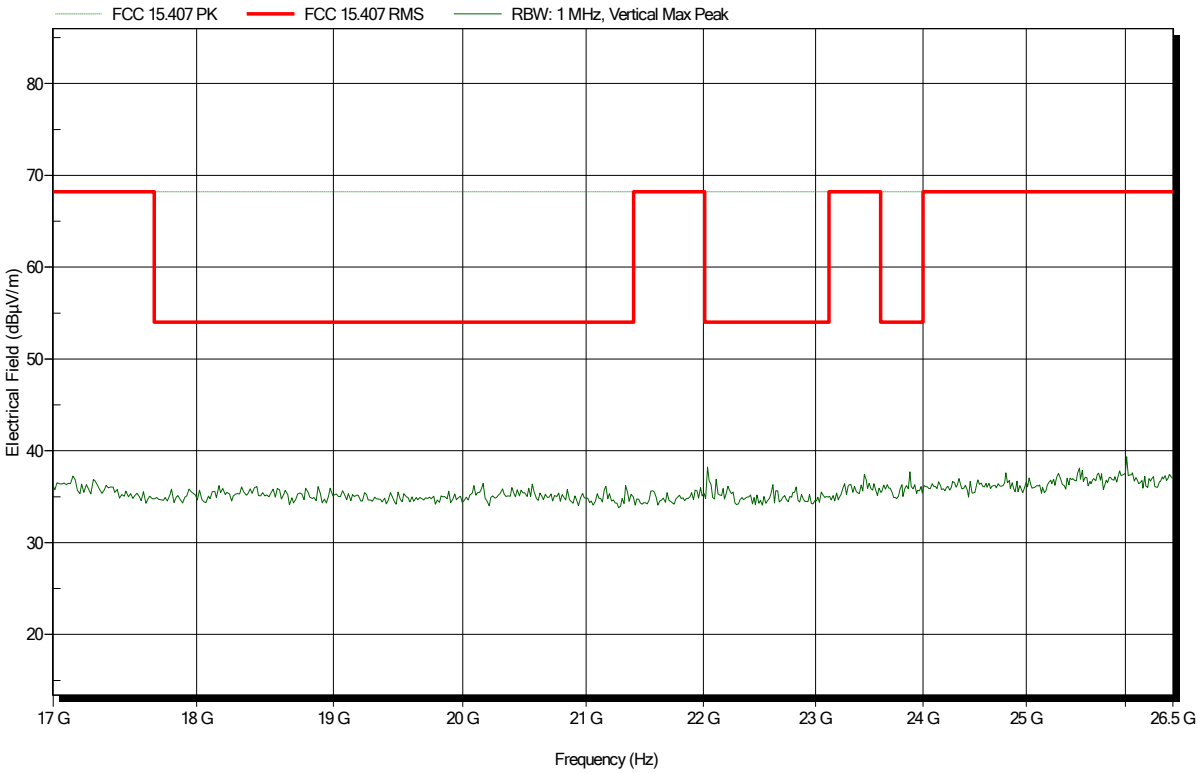

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2018-12-28
Note:	

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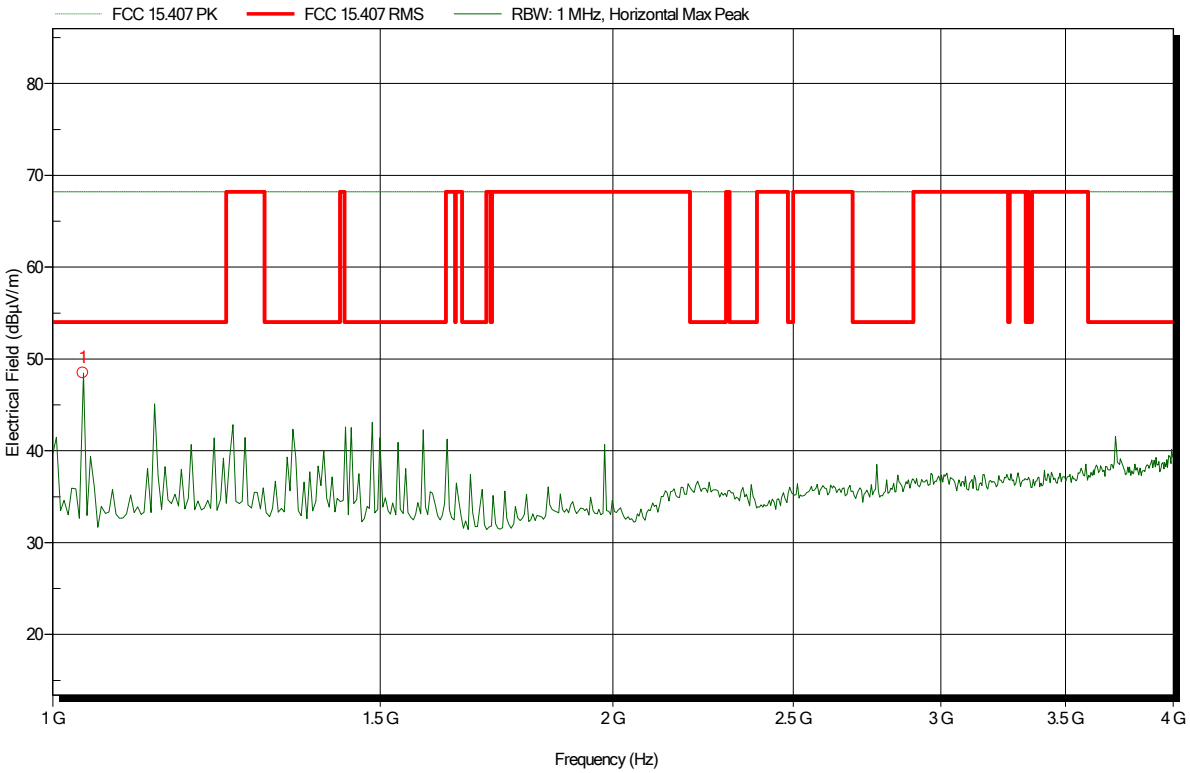

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	48.49 dBµV/m	68.2 dBµV/m	-19.71 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2018-12-28
Note:	

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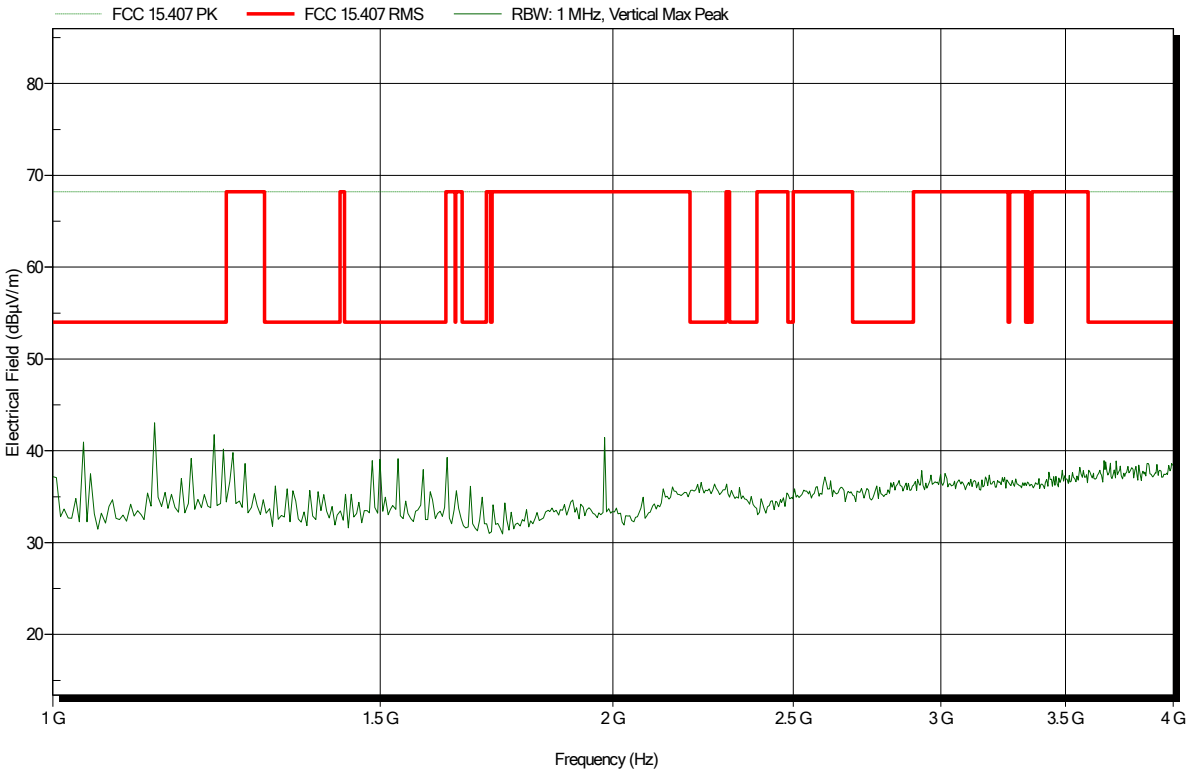

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2018-12-28
Note:	

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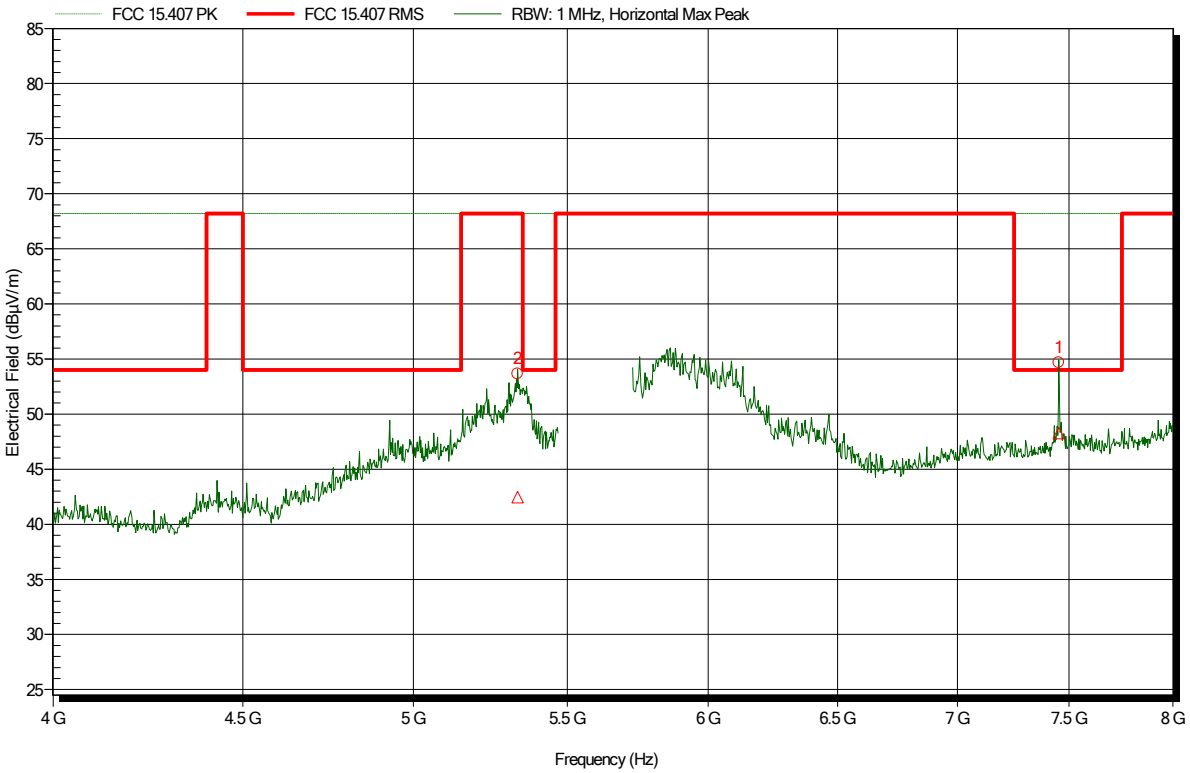

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.333 GHz	53.67 dBµV/m	68.2 dBµV/m	-14.53 dB	Pass
7.453 GHz	54.67 dBµV/m	68.2 dBµV/m	-13.53 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.333 GHz	42.46 dBµV/m	68.2 dBµV/m	-25.74 dB	Pass
7.453 GHz	48.28 dBµV/m	54 dBµV/m	-5.72 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2018-12-28
Note:	

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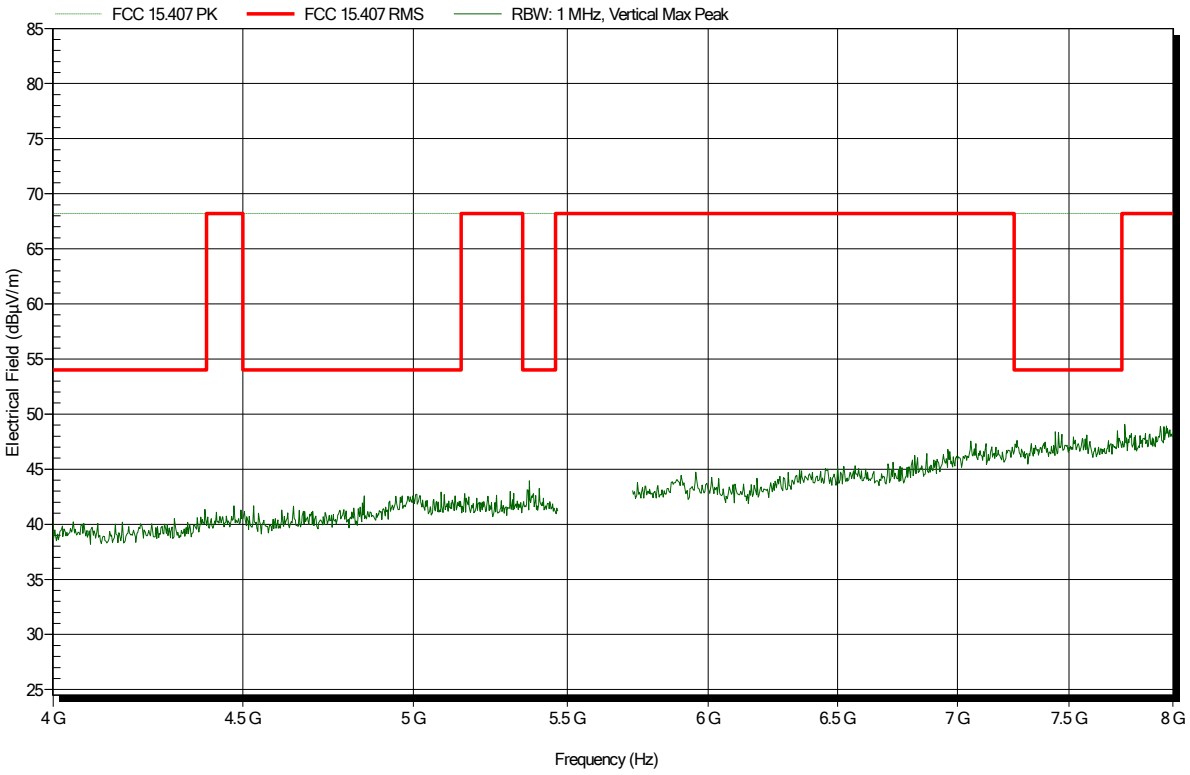

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2018-12-28
Note:	

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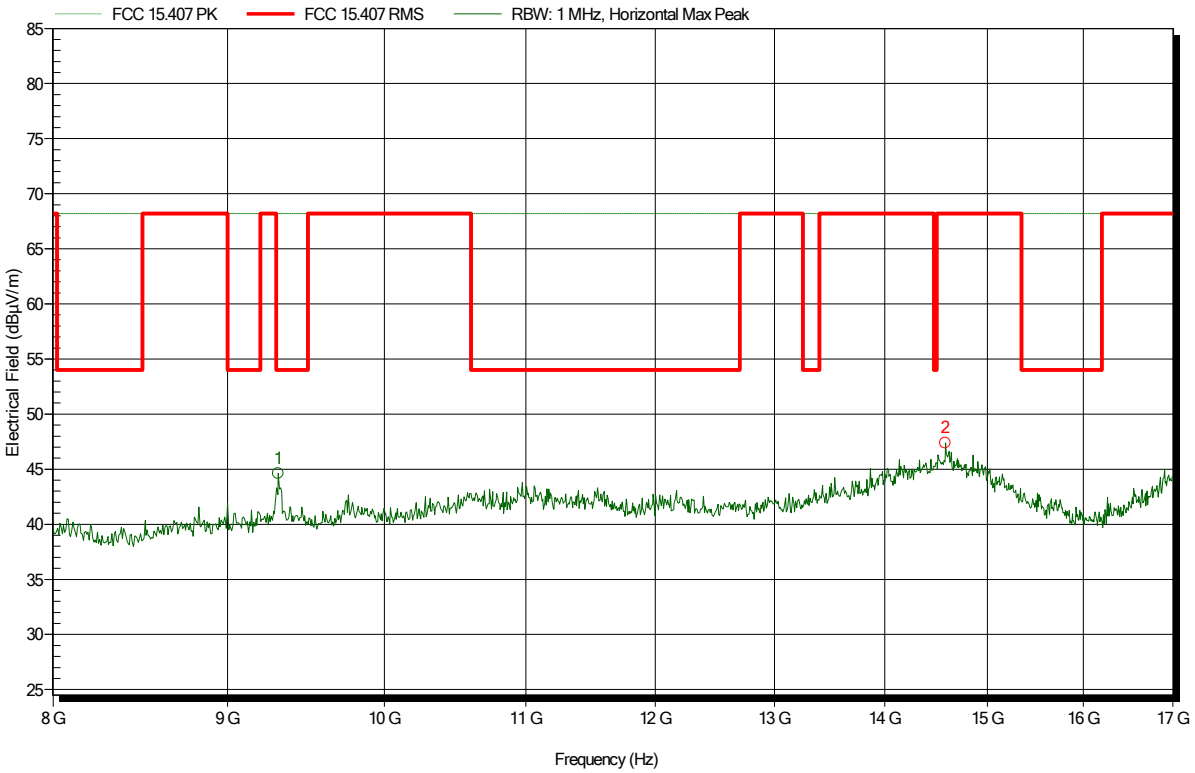

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
14.584 GHz	47.36 dBµV/m	68.2 dBµV/m	-20.84 dB	Pass
9.312 GHz	44.6 dBµV/m	68.2 dBµV/m	-23.6 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2018-12-28
Note:	

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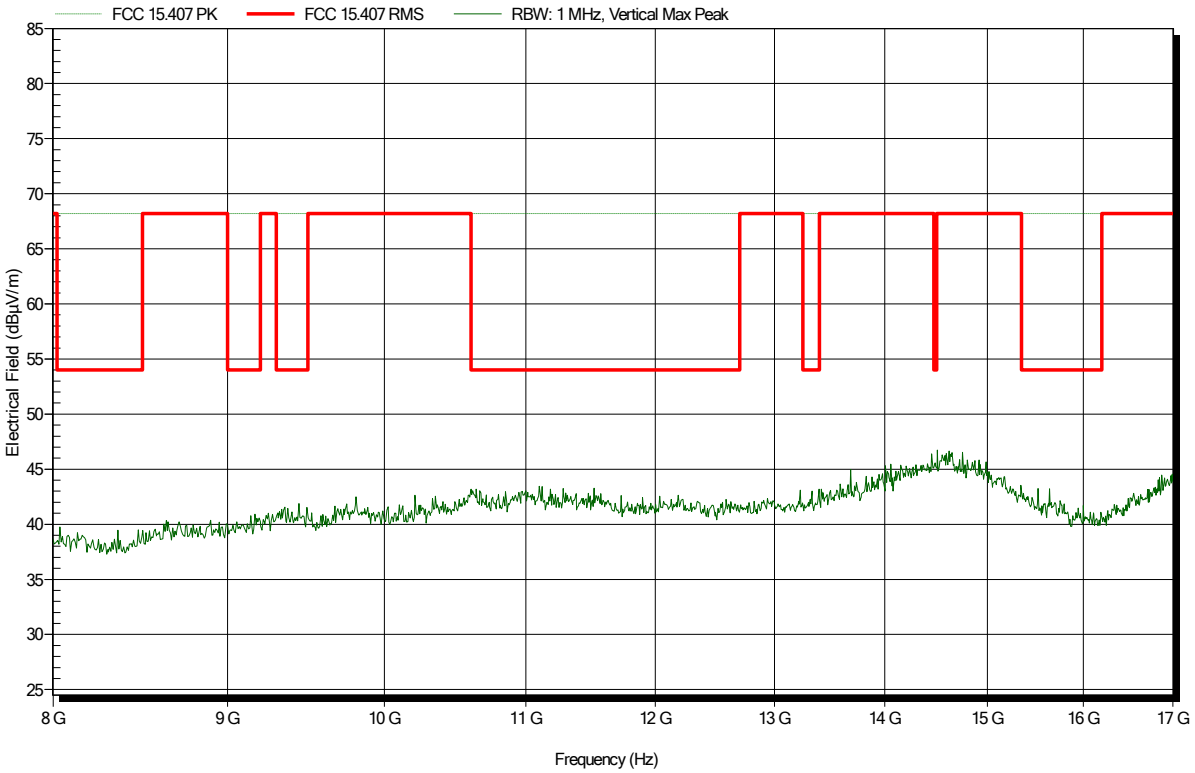

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2019-01-10
Note:	

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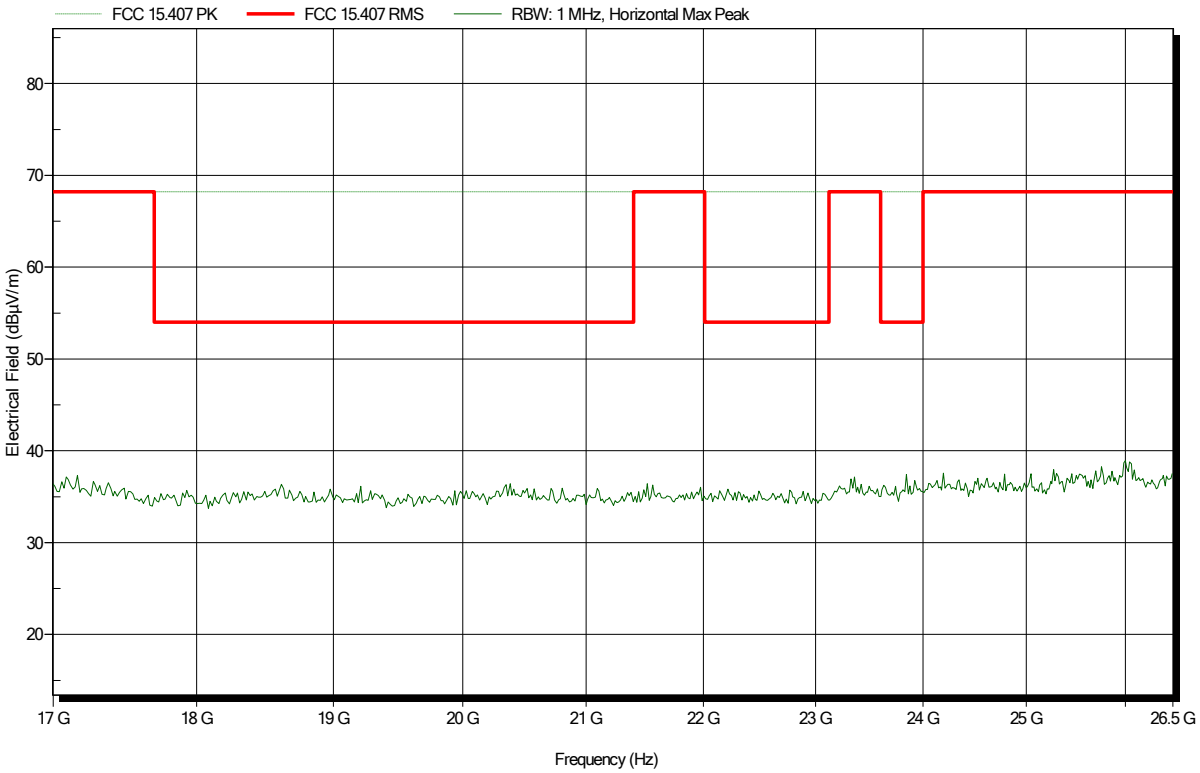

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5590 MHz
Test Date:	2019-01-10
Note:	

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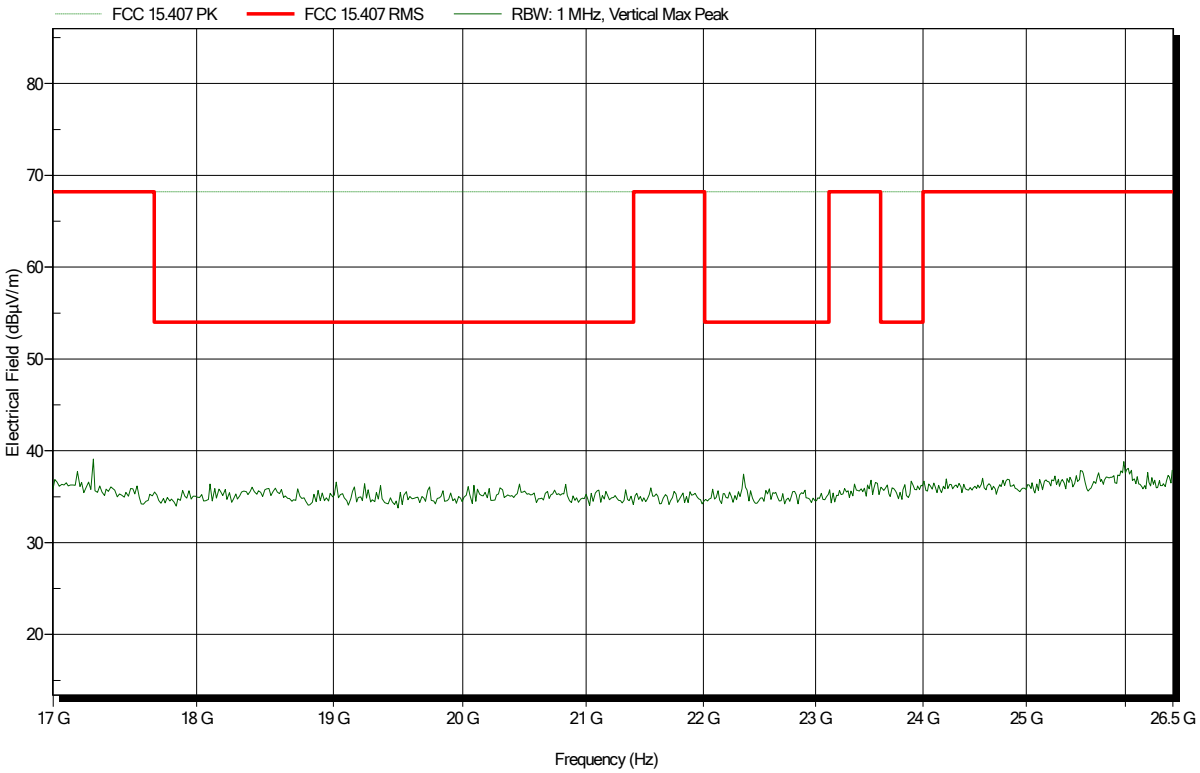

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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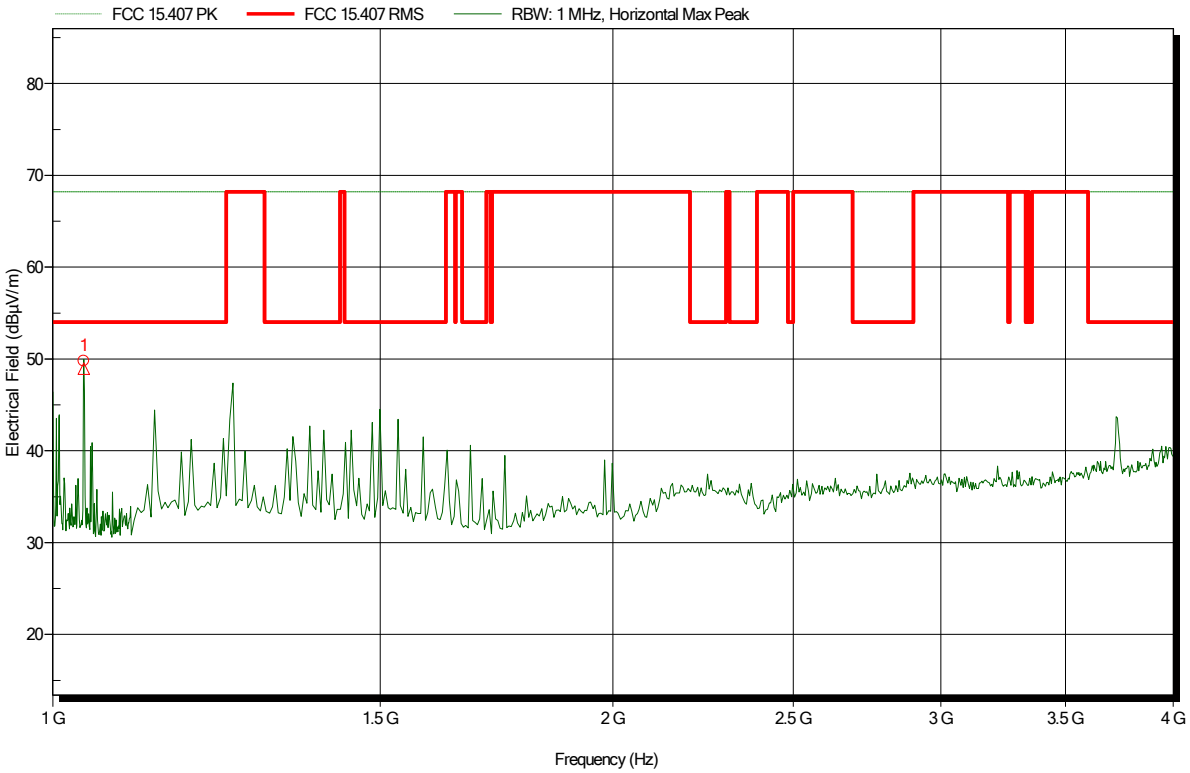

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.039 GHz	49.8 dBµV/m	68.2 dBµV/m	-18.4 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.039 GHz	48.96 dBµV/m	54 dBµV/m	-5.04 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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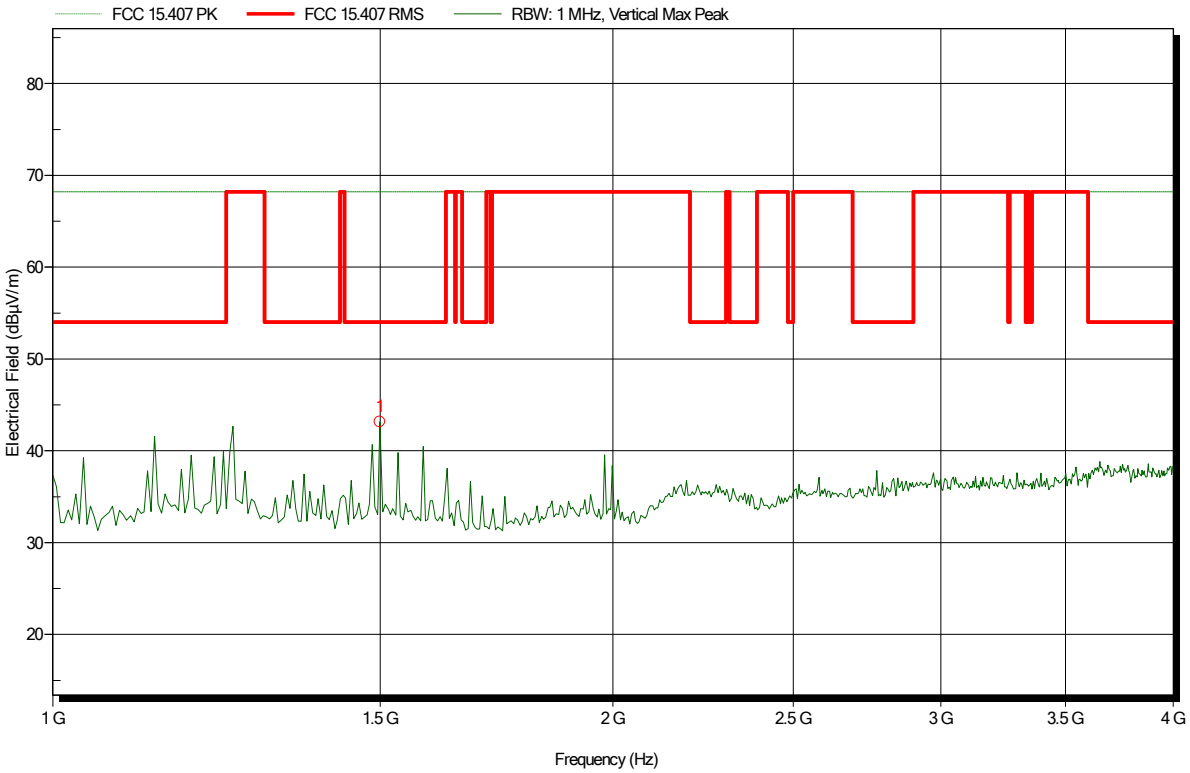

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.499 GHz	43.16 dBµV/m	68.2 dBµV/m	-25.04 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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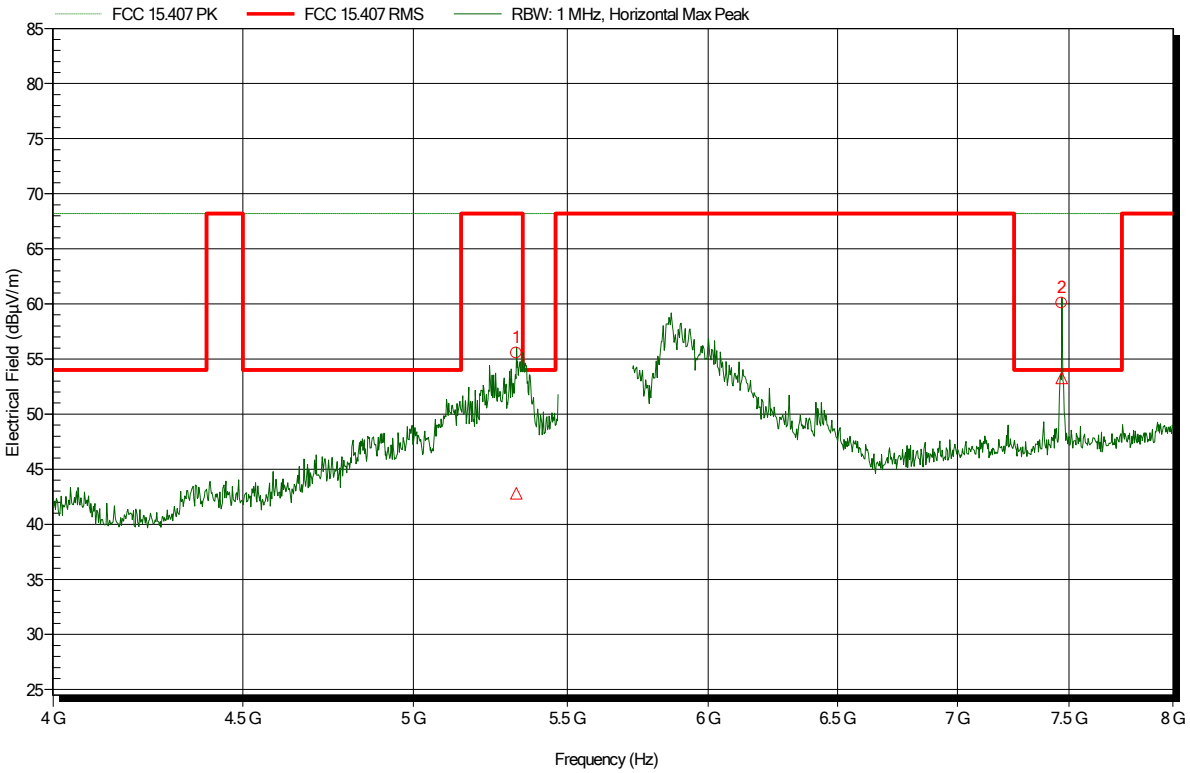

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.329 GHz	55.56 dBµV/m	68.2 dBµV/m	-12.64 dB	Pass
7.467 GHz	60.1 dBµV/m	68.2 dBµV/m	-8.1 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.329 GHz	42.81 dBµV/m	68.2 dBµV/m	-25.39 dB	Pass
7.467 GHz	53.29 dBµV/m	54 dBµV/m	-0.71 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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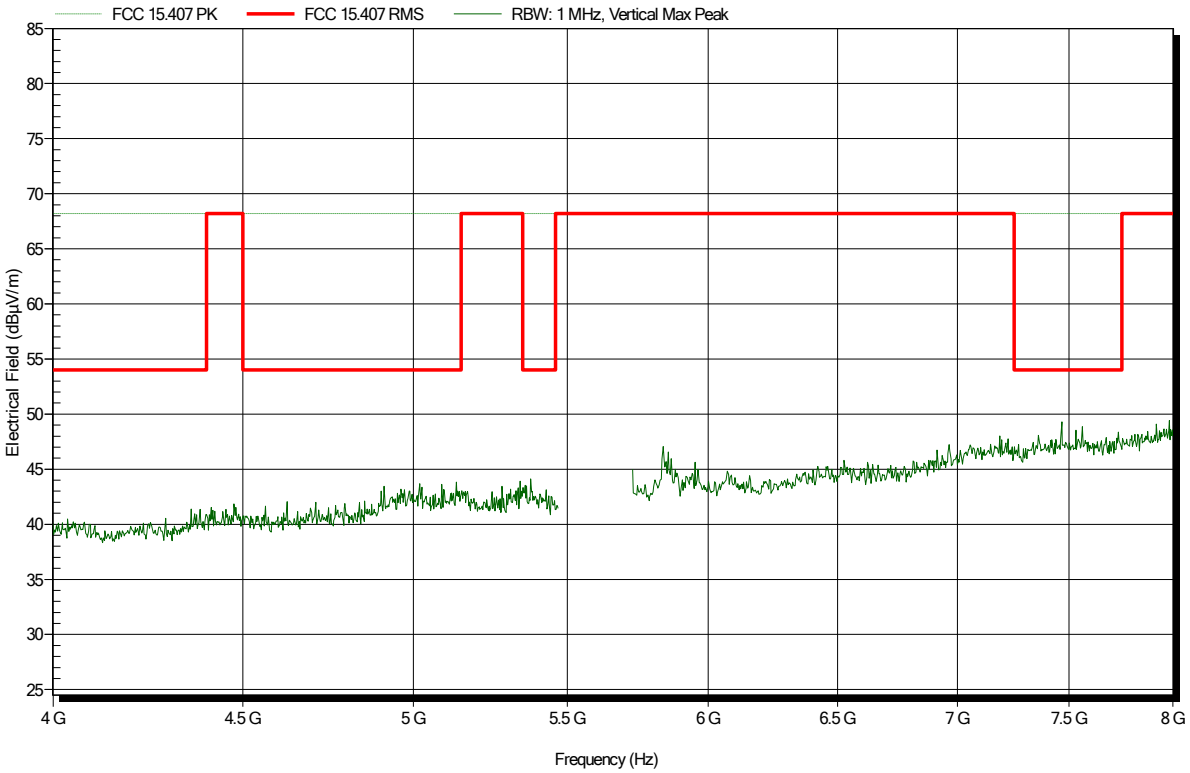

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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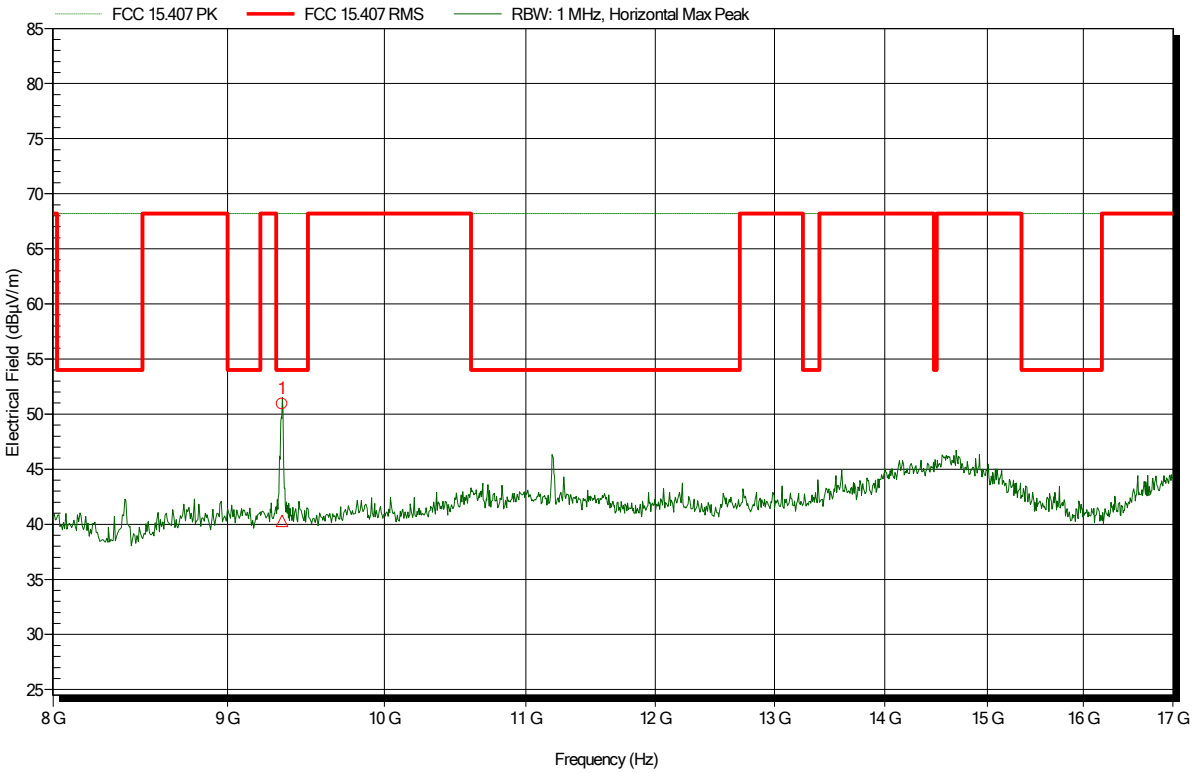

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
9.337 GHz	50.91 dBµV/m	68.2 dBµV/m	-17.29 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
9.337 GHz	40.3 dBµV/m	54 dBµV/m	-13.7 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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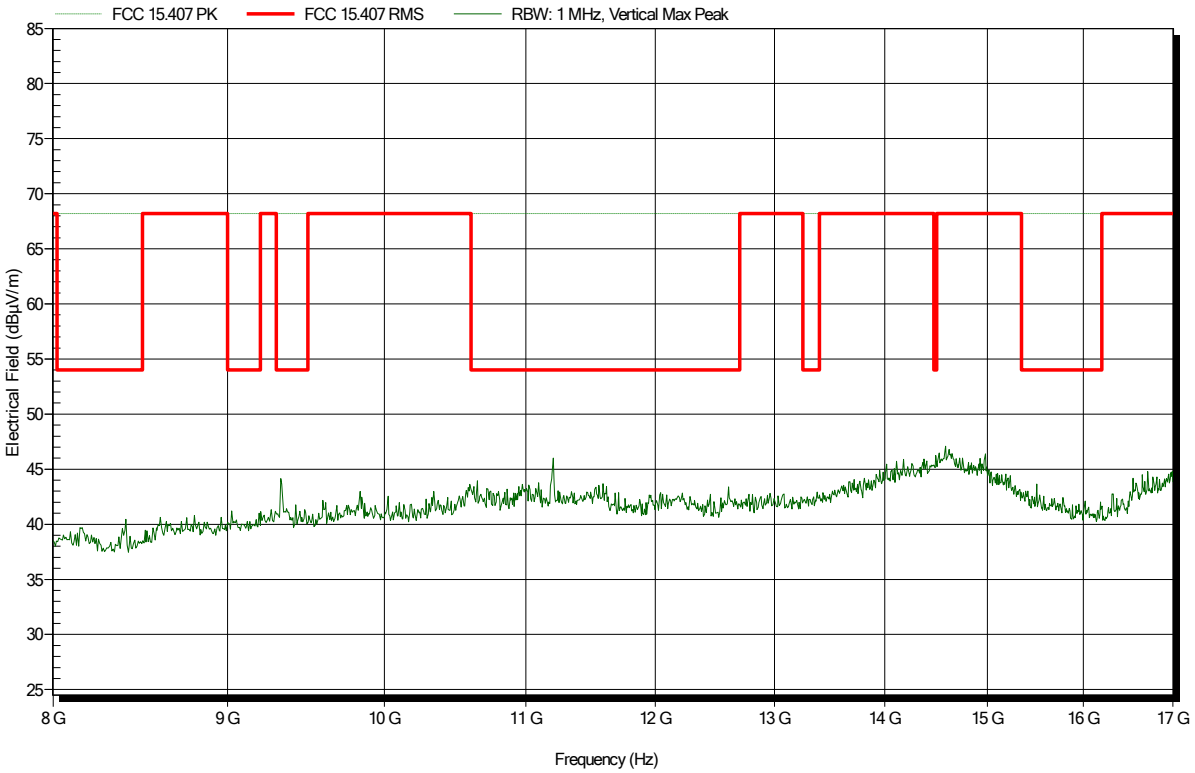

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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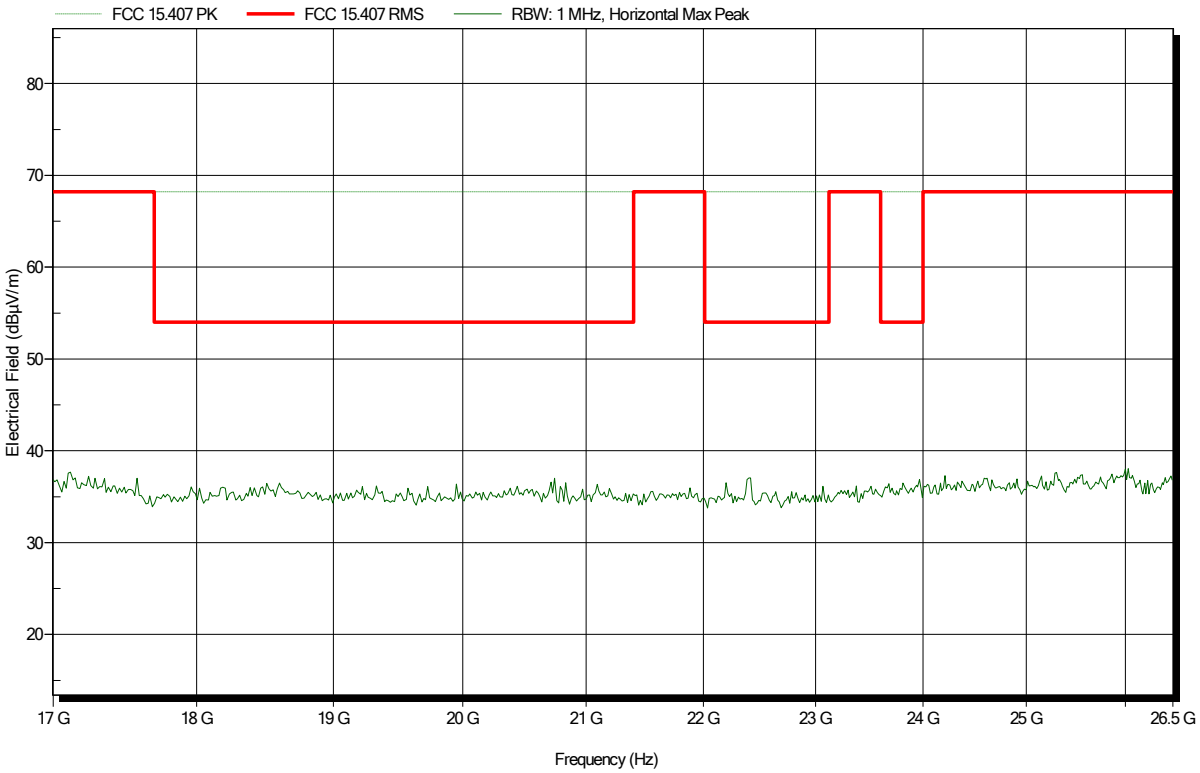

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5600 MHz
Test Date:	2019-01-10
Note:	

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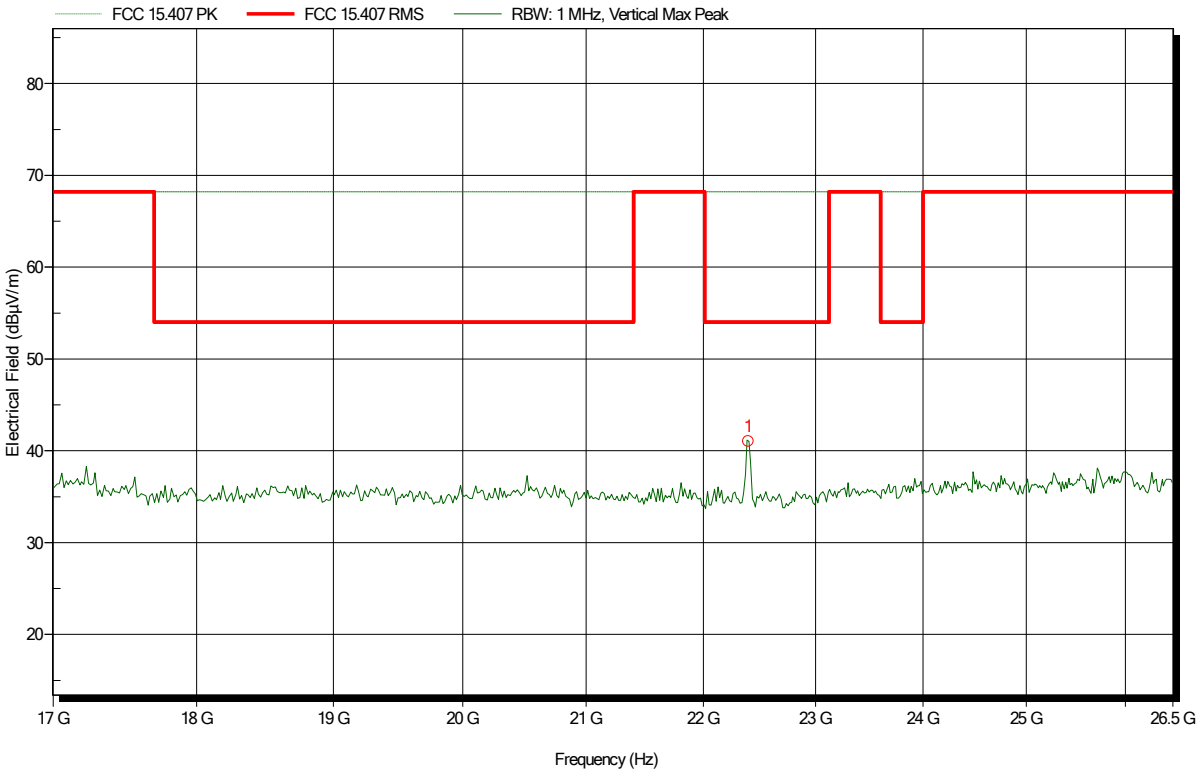

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.396 GHz	41.04 dBµV/m	68.2 dBµV/m	-27.16 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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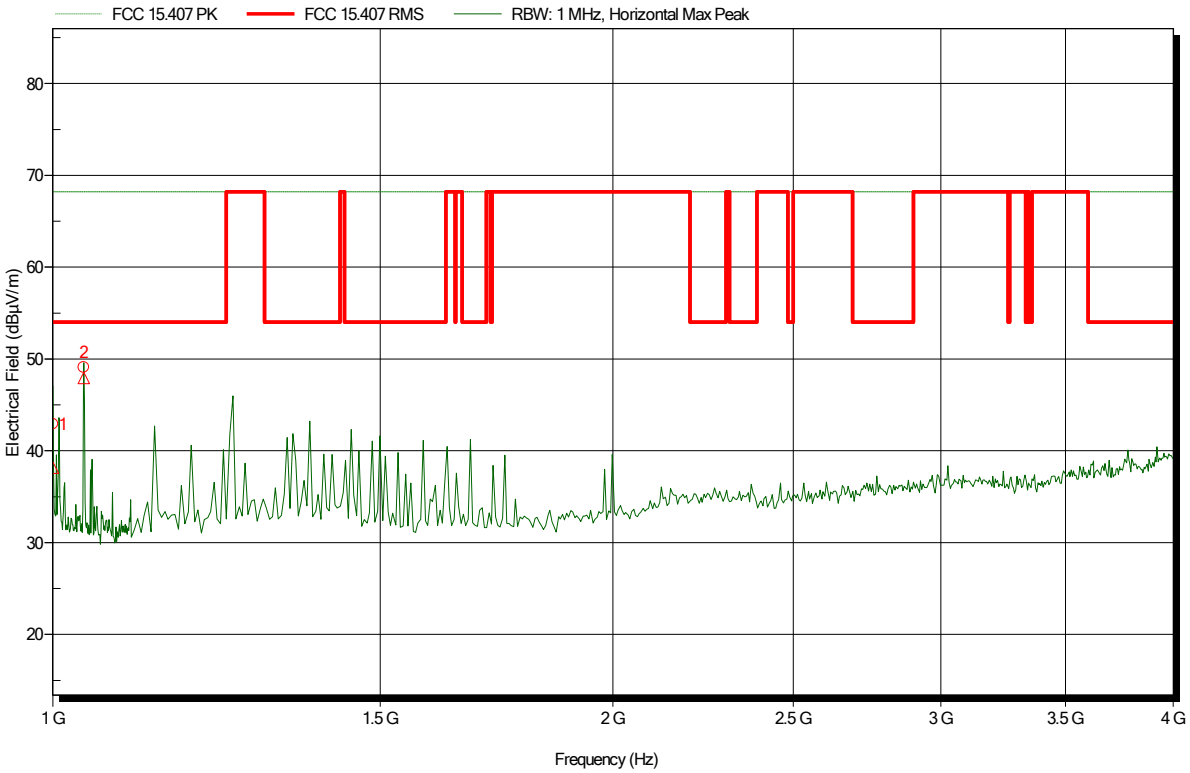

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1 GHz	42.92 dBµV/m	68.2 dBµV/m	-25.28 dB	Pass
1.039 GHz	49.09 dBµV/m	68.2 dBµV/m	-19.11 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1 GHz	38.17 dBµV/m	54 dBµV/m	-15.83 dB	Pass
1.039 GHz	47.95 dBµV/m	54 dBµV/m	-6.05 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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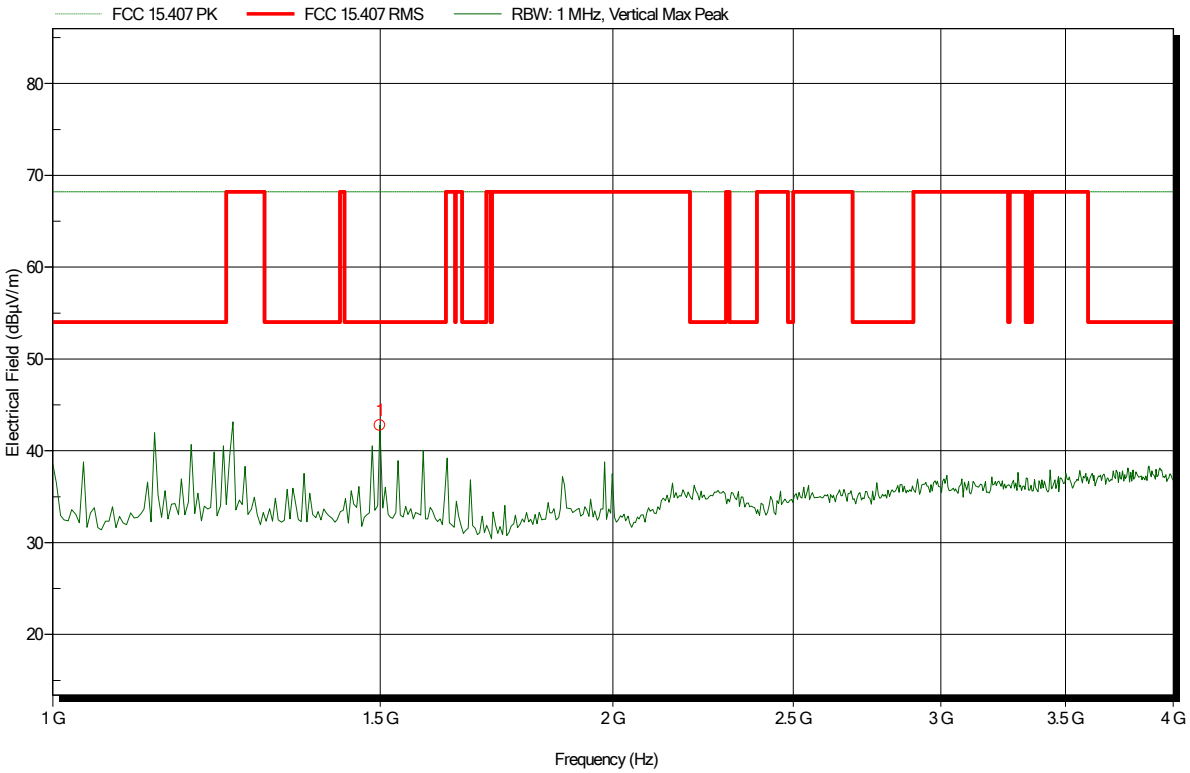

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.499 GHz	42.78 dBµV/m	68.2 dBµV/m	-25.42 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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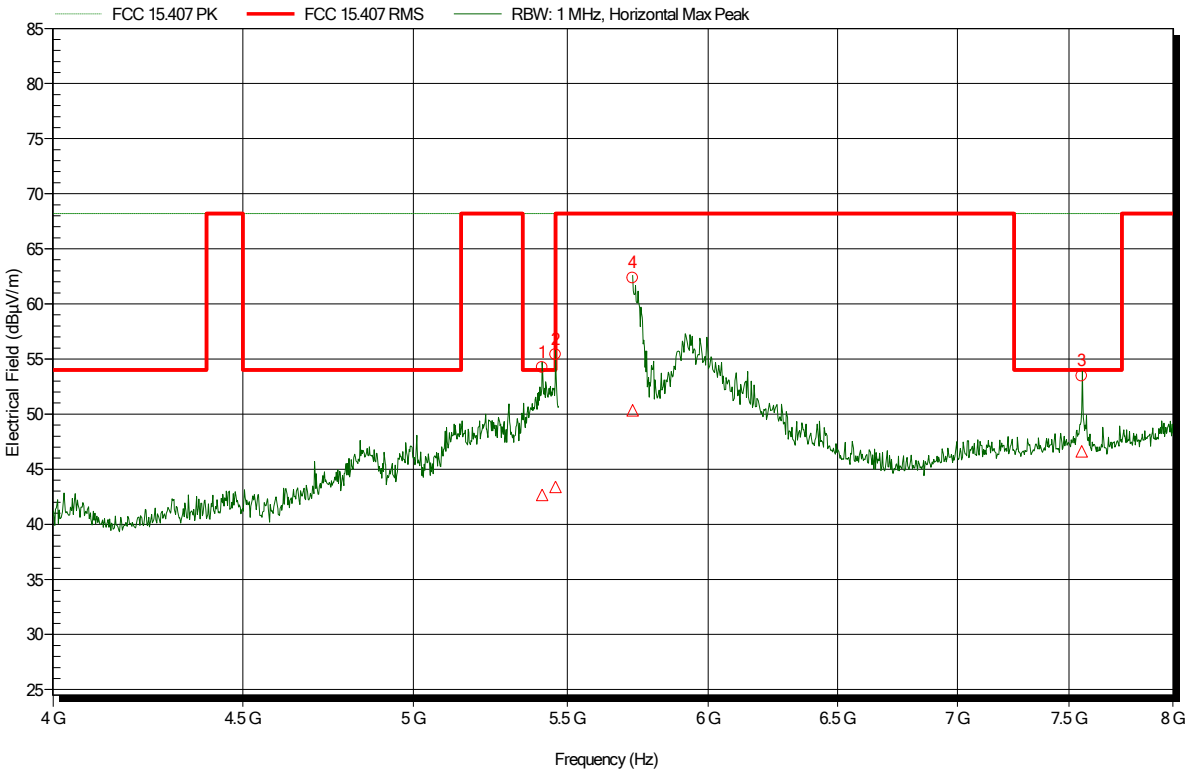

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.414 GHz	54.24 dBµV/m	68.2 dBµV/m	-13.96 dB	Pass
5.46 GHz	55.41 dBµV/m	68.2 dBµV/m	-12.79 dB	Pass
5.726 GHz	62.36 dBµV/m	68.2 dBµV/m	-5.84 dB	Pass
7.56 GHz	53.46 dBµV/m	68.2 dBµV/m	-14.74 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.414 GHz	42.66 dBµV/m	54 dBµV/m	-11.34 dB	Pass
5.46 GHz	43.39 dBµV/m	68.2 dBµV/m	-24.81 dB	Pass
5.726 GHz	50.34 dBµV/m	68.2 dBµV/m	-17.86 dB	Pass
7.56 GHz	46.63 dBµV/m	54 dBµV/m	-7.37 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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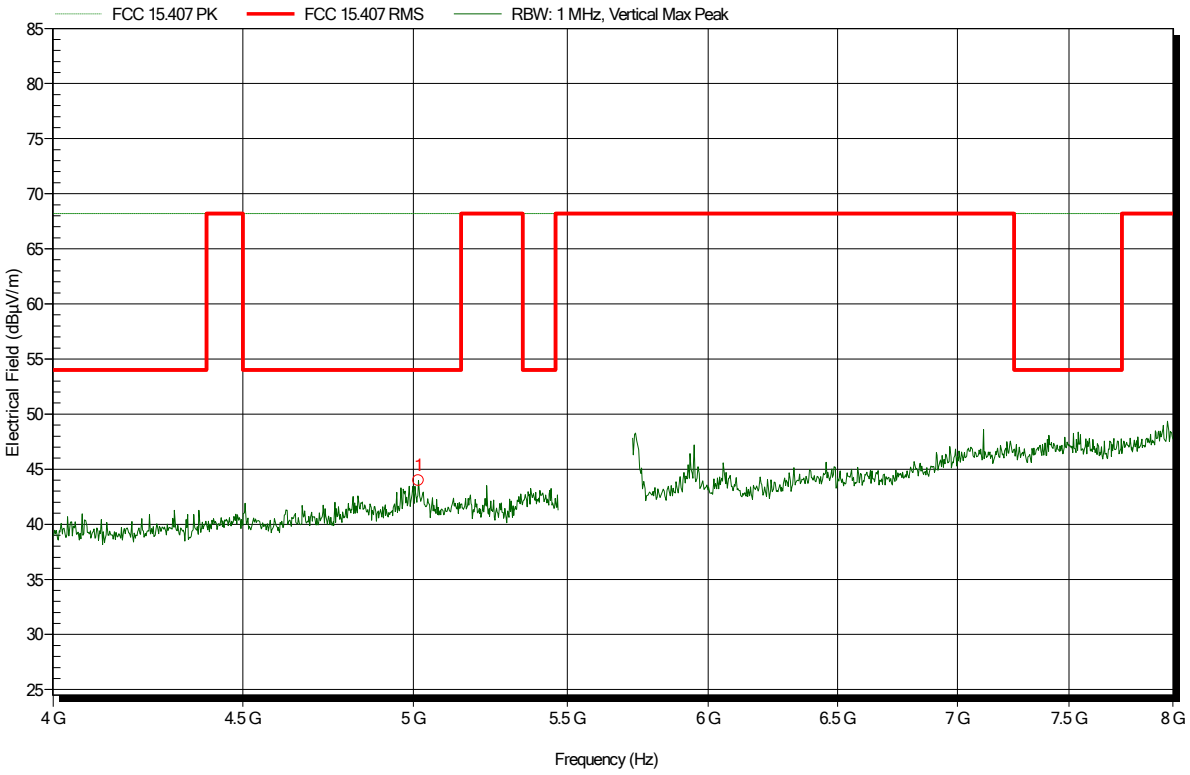

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.016 GHz	43.97 dBµV/m	68.2 dBµV/m	-24.23 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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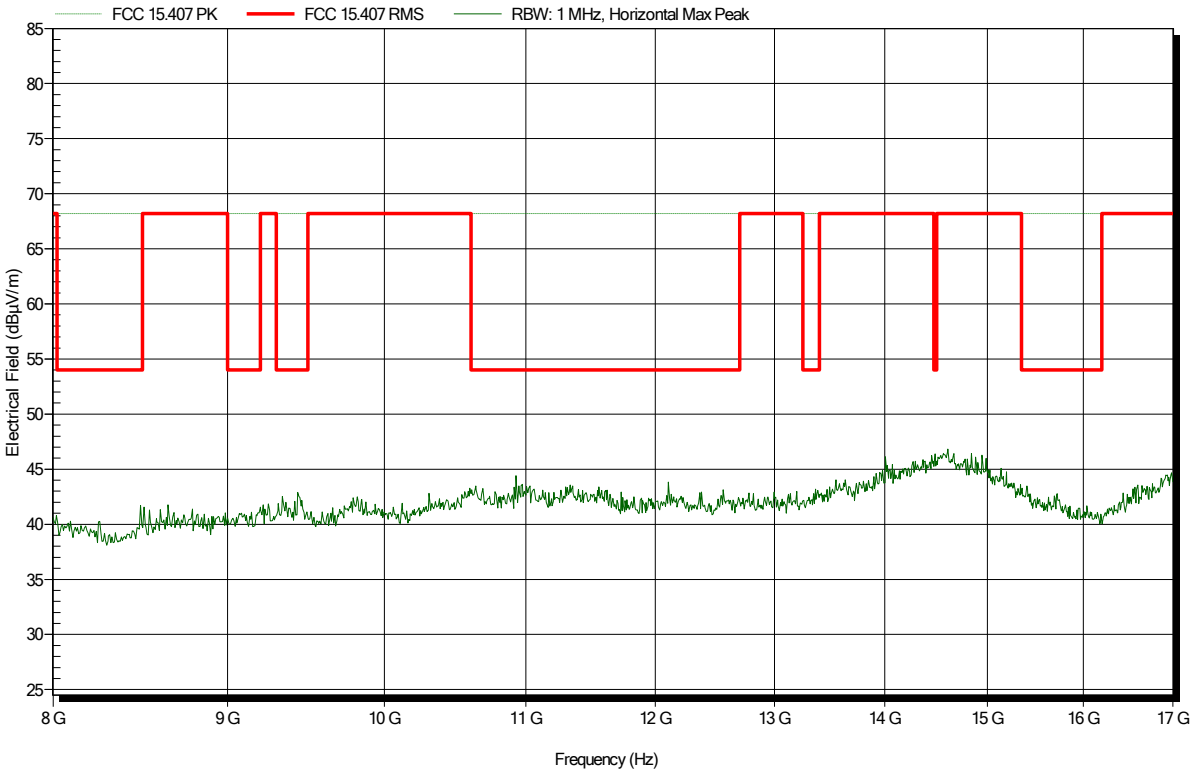

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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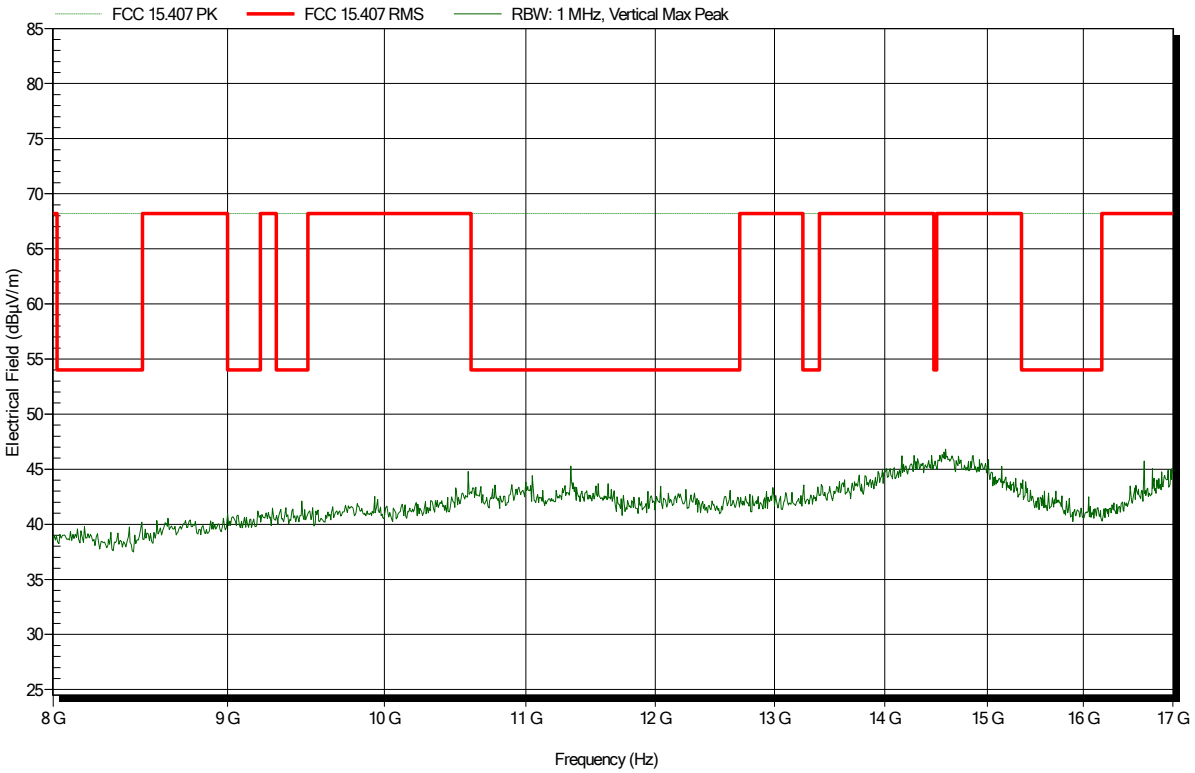

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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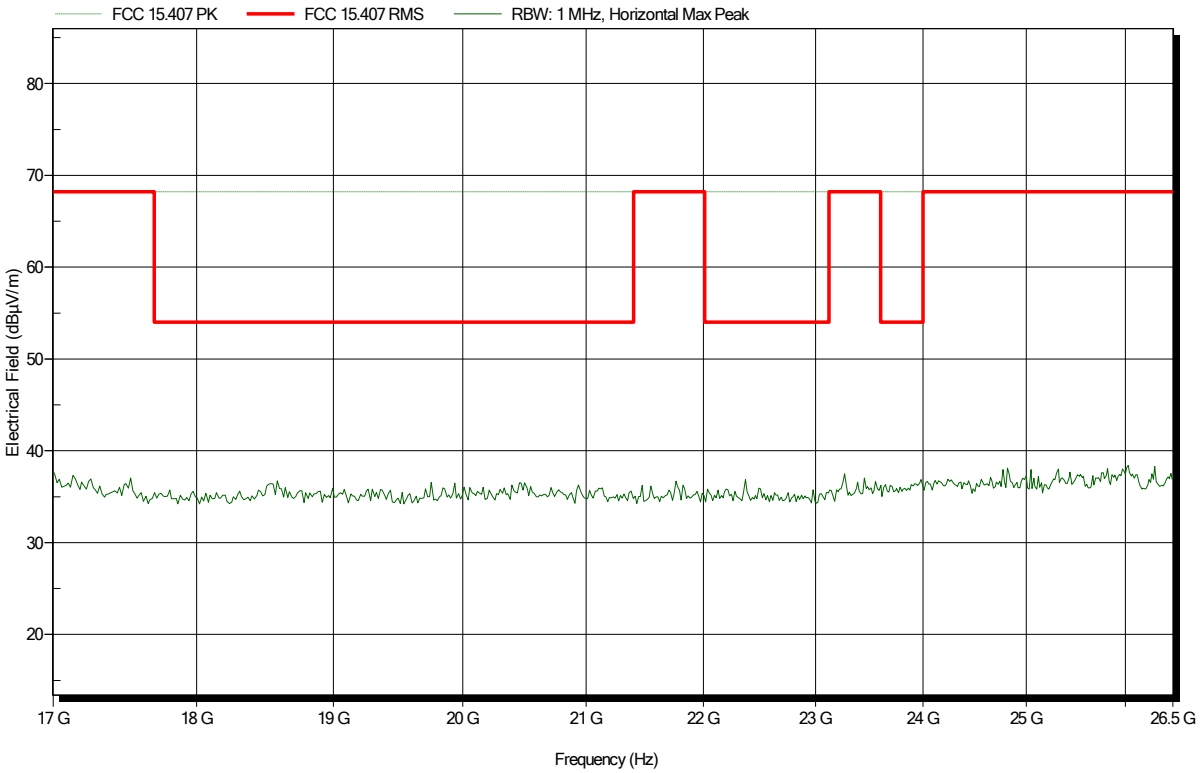

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 MHz; MCS0; 5670 MHz
Test Date:	2019-01-10
Note:	

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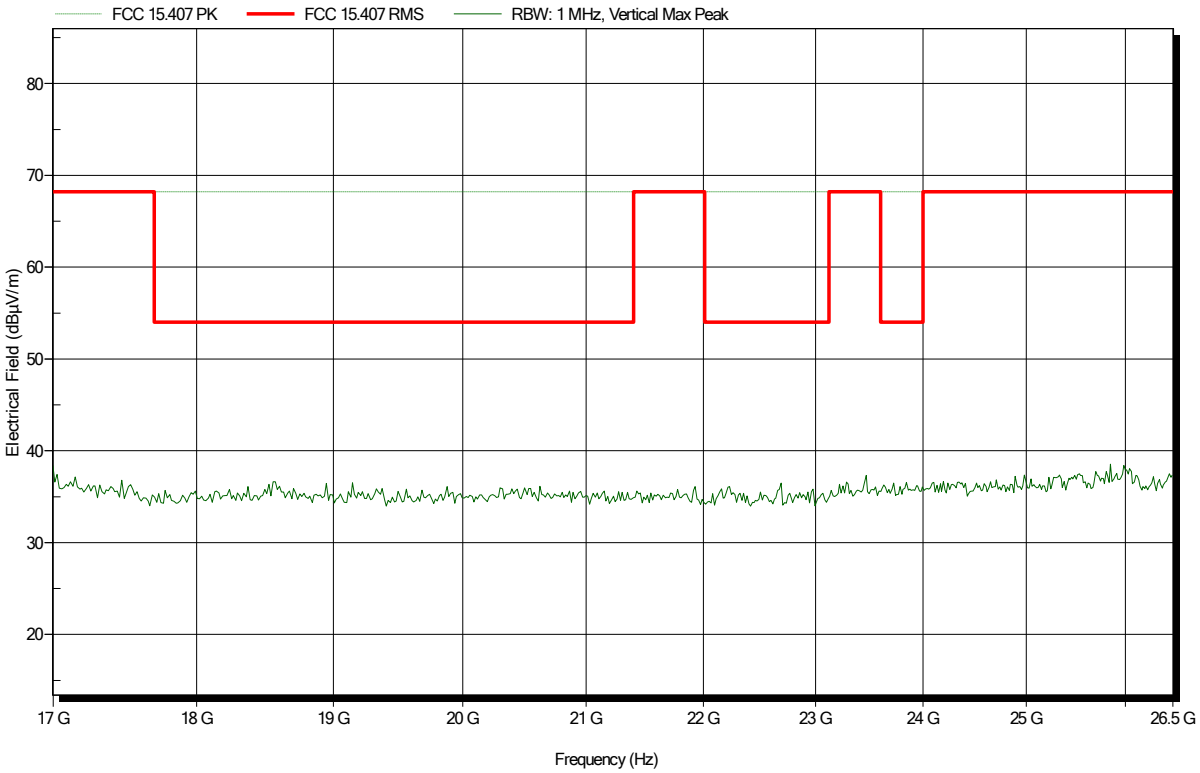

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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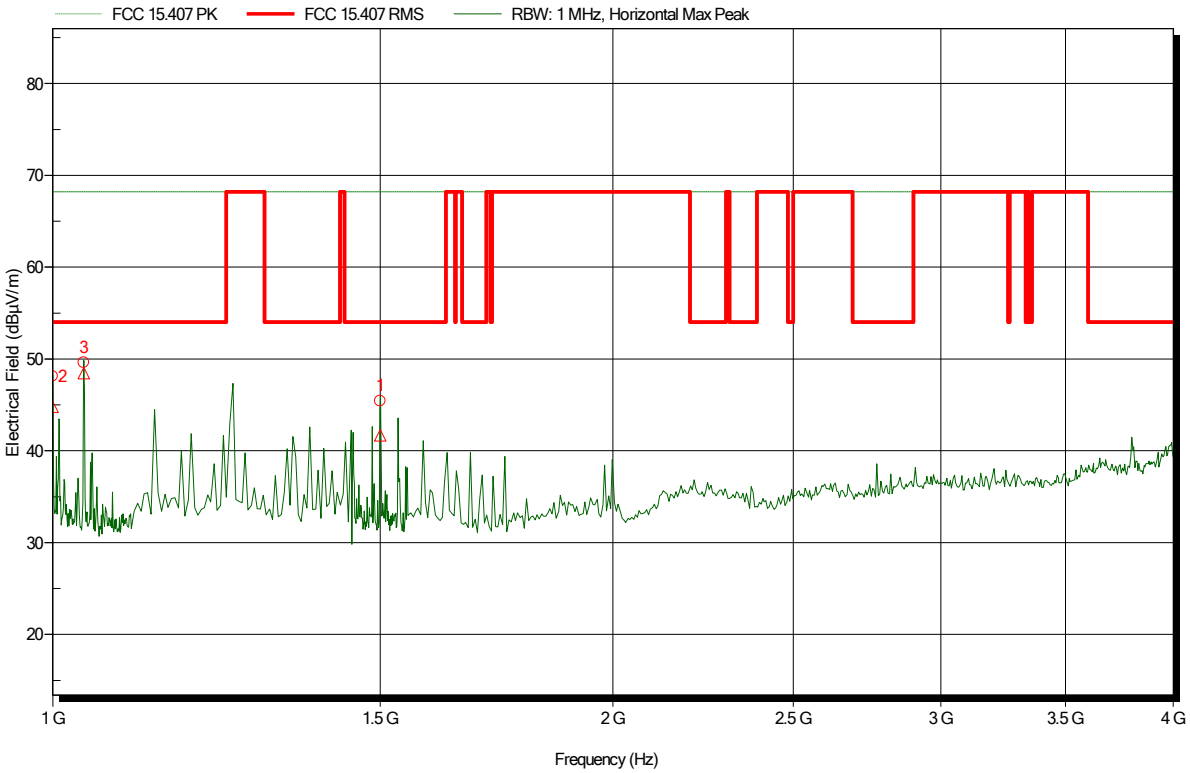

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1 GHz	48.12 dBµV/m	68.2 dBµV/m	-20.08 dB	Pass
1.04 GHz	49.6 dBµV/m	68.2 dBµV/m	-18.6 dB	Pass
1.5 GHz	45.41 dBµV/m	68.2 dBµV/m	-22.79 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1 GHz	44.78 dBµV/m	54 dBµV/m	-9.22 dB	Pass
1.04 GHz	48.46 dBµV/m	54 dBµV/m	-5.54 dB	Pass
1.5 GHz	41.69 dBµV/m	54 dBµV/m	-12.31 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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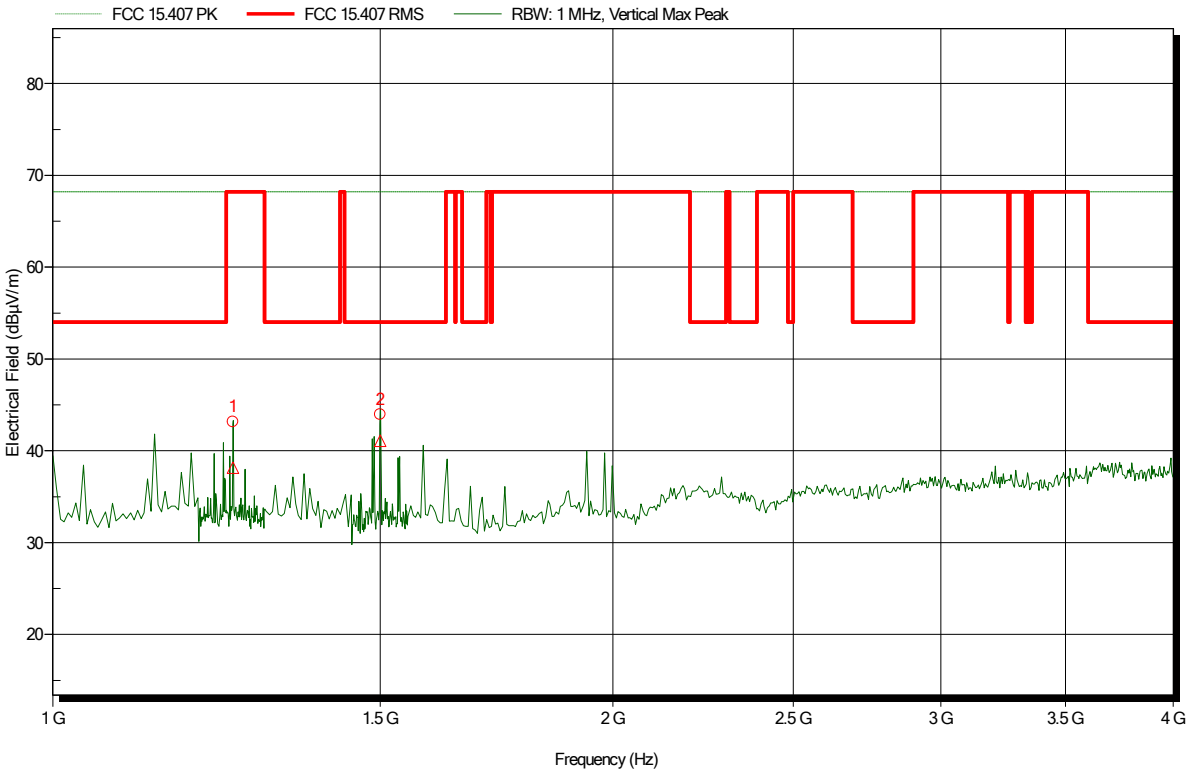

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.25 GHz	43.15 dBµV/m	68.2 dBµV/m	-25.05 dB	Pass
1.5 GHz	43.96 dBµV/m	68.2 dBµV/m	-24.24 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.25 GHz	38.18 dBµV/m	68.2 dBµV/m	-30.02 dB	Pass
1.5 GHz	41.09 dBµV/m	54 dBµV/m	-12.91 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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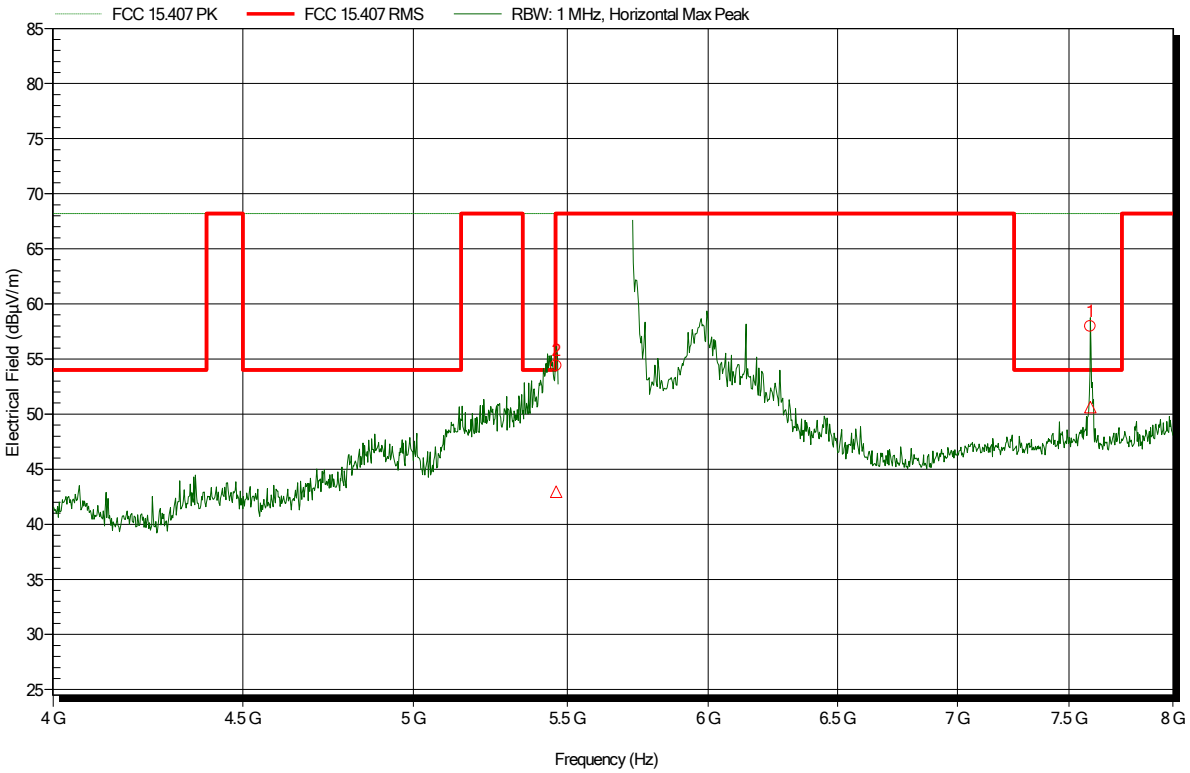

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.462 GHz	54.38 dBµV/m	68.2 dBµV/m	-13.82 dB	Pass
7.6 GHz	57.97 dBµV/m	68.2 dBµV/m	-10.23 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.462 GHz	42.95 dBµV/m	68.2 dBµV/m	-25.25 dB	Pass
7.6 GHz	50.65 dBµV/m	54 dBµV/m	-3.35 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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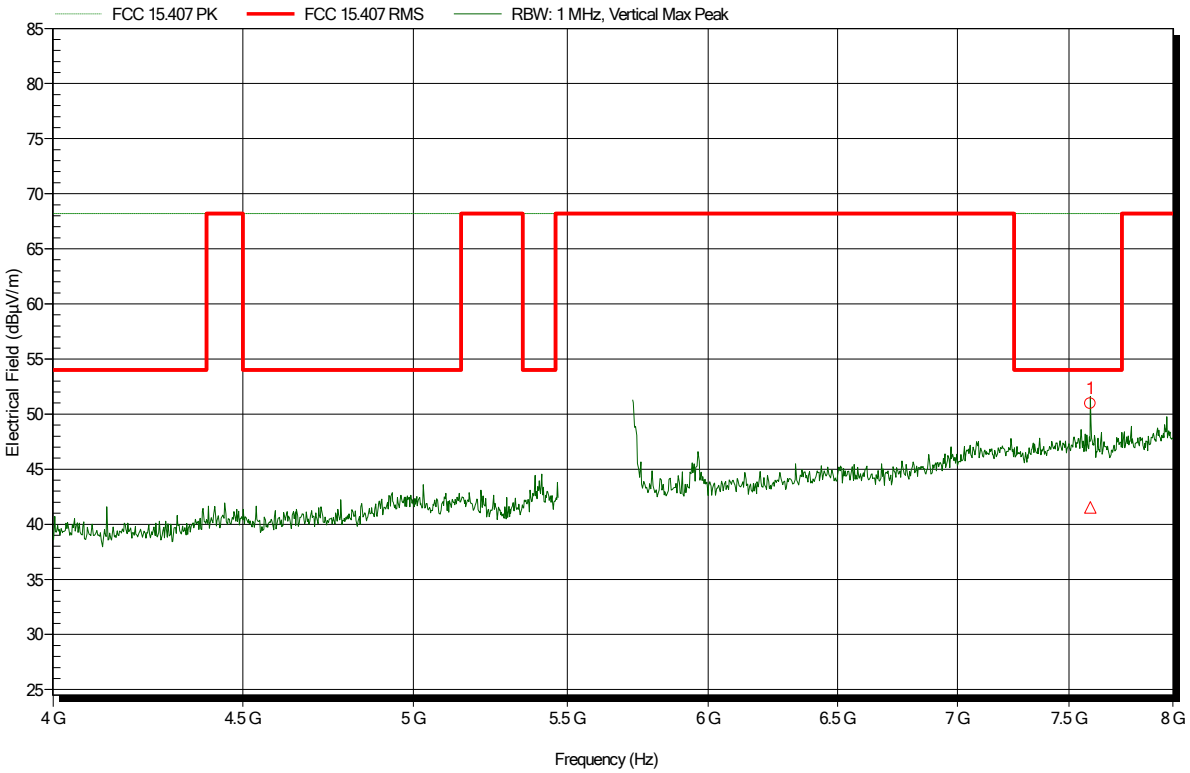

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.6 GHz	50.96 dBµV/m	68.2 dBµV/m	-17.24 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
7.6 GHz	41.53 dBµV/m	54 dBµV/m	-12.47 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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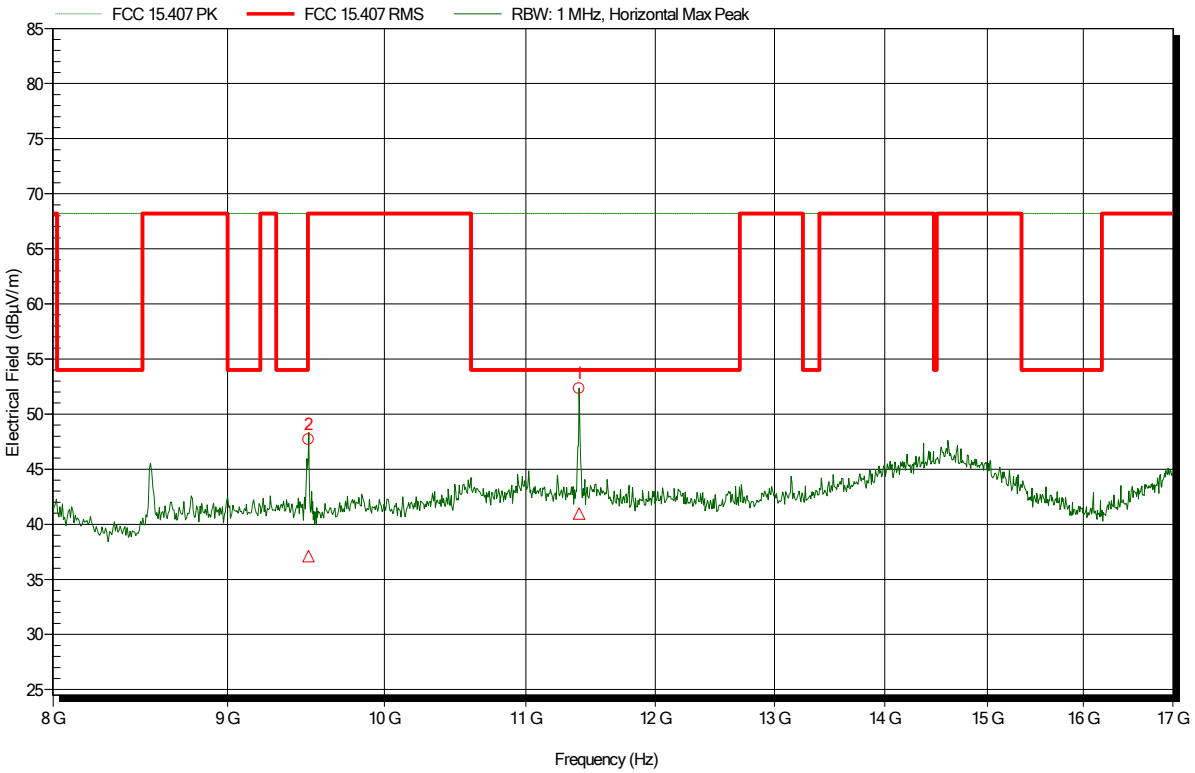

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.399 GHz	52.33 dBµV/m	68.2 dBµV/m	-15.87 dB	Pass
9.503 GHz	47.68 dBµV/m	68.2 dBµV/m	-20.52 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
11.399 GHz	40.99 dBµV/m	54 dBµV/m	-13.01 dB	Pass
9.503 GHz	37.11 dBµV/m	68.2 dBµV/m	-31.09 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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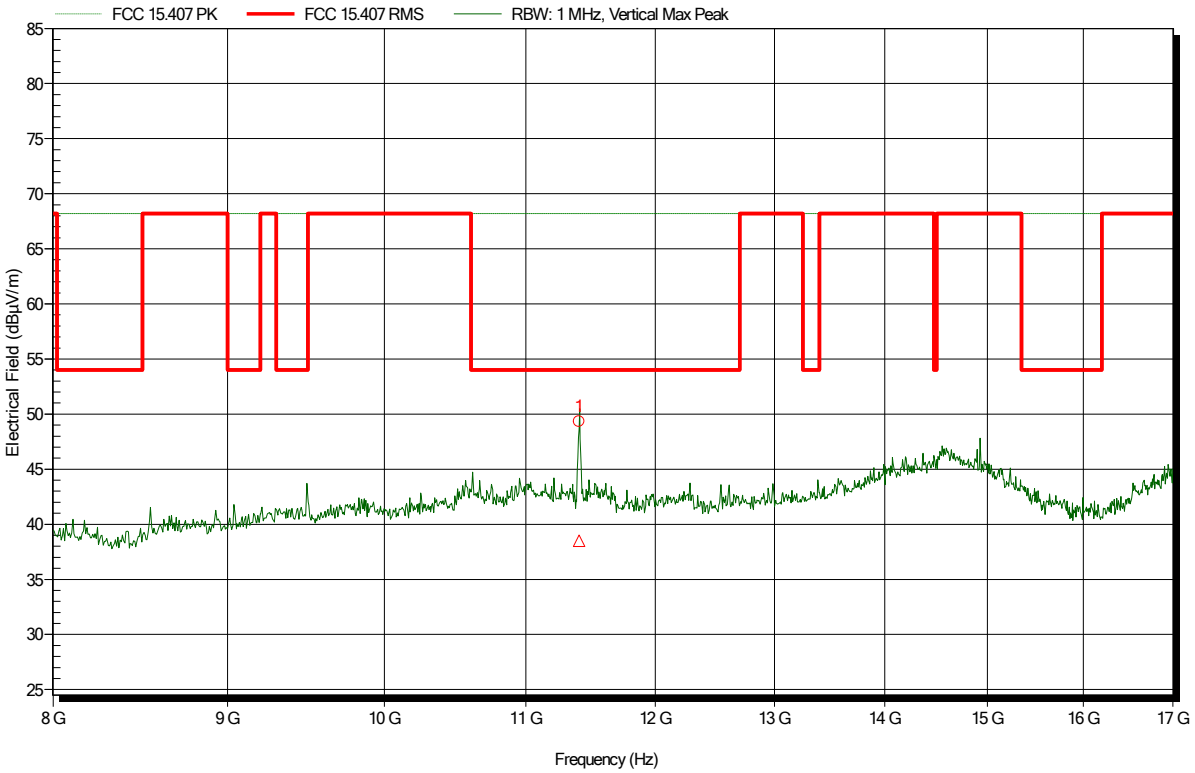

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.399 GHz	49.33 dBµV/m	68.2 dBµV/m	-18.87 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
11.399 GHz	38.52 dBµV/m	54 dBµV/m	-15.48 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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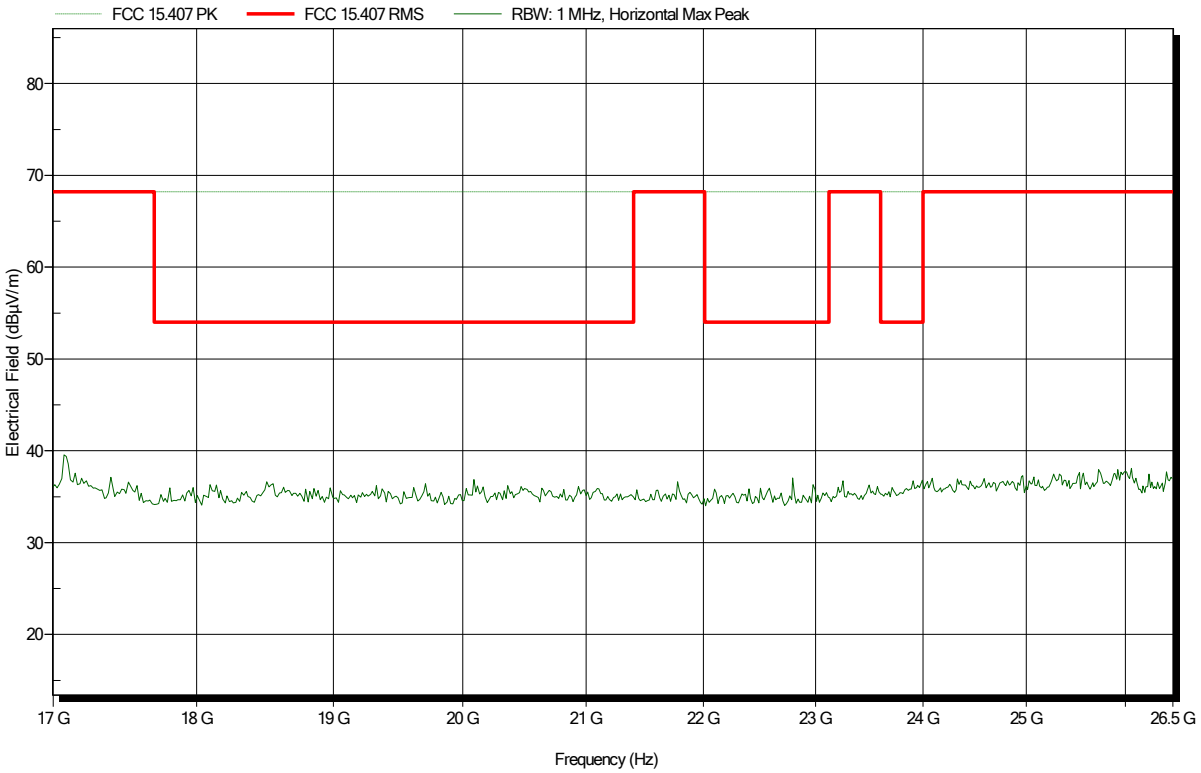

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5700 MHz
Test Date:	2019-01-10
Note:	

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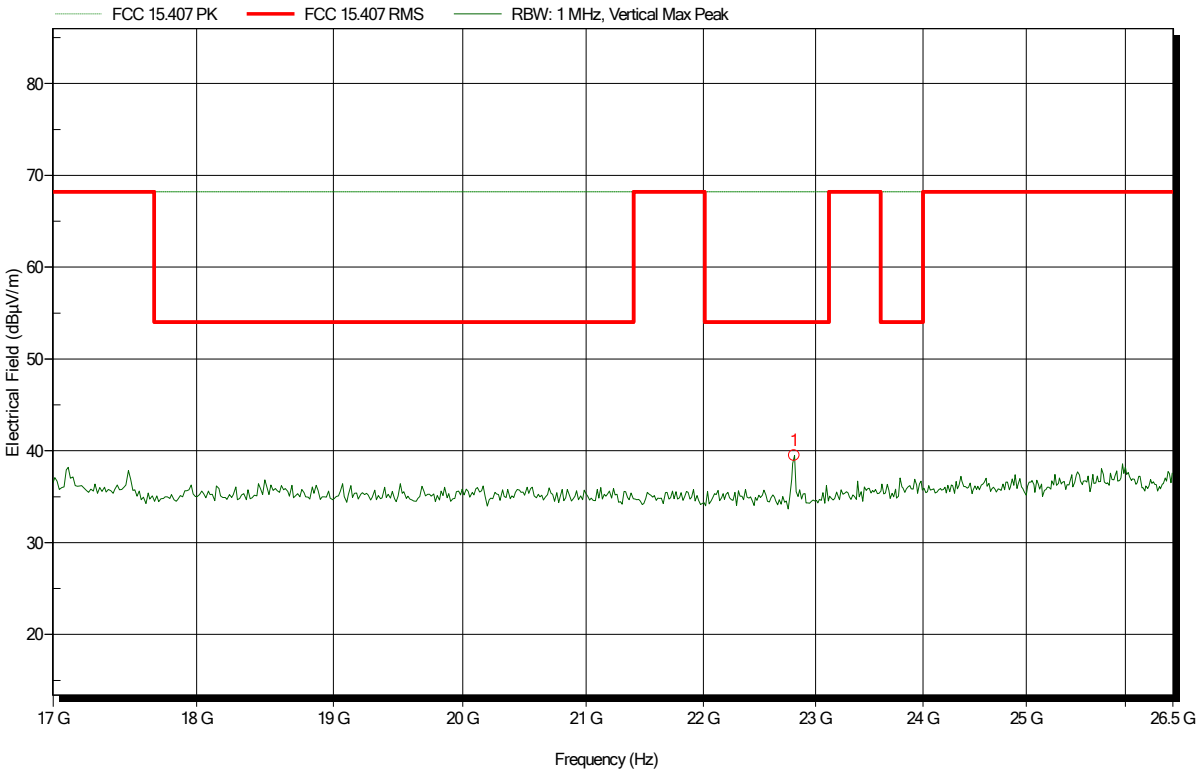

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
22.806 GHz	39.49 dBµV/m	68.2 dBµV/m	-28.71 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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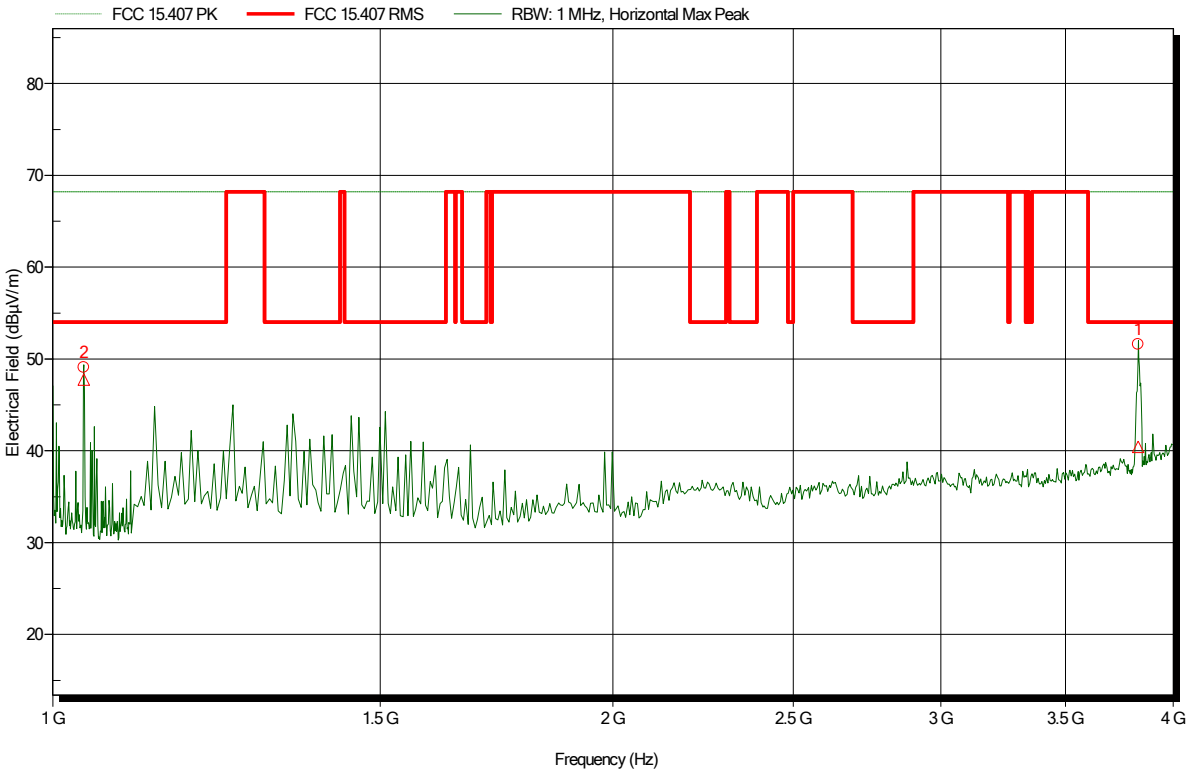

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.039 GHz	49.07 dBµV/m	68.2 dBµV/m	-19.13 dB	Pass
3.83 GHz	51.61 dBµV/m	68.2 dBµV/m	-16.59 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.039 GHz	47.75 dBµV/m	54 dBµV/m	-6.25 dB	Pass
3.83 GHz	40.42 dBµV/m	54 dBµV/m	-13.58 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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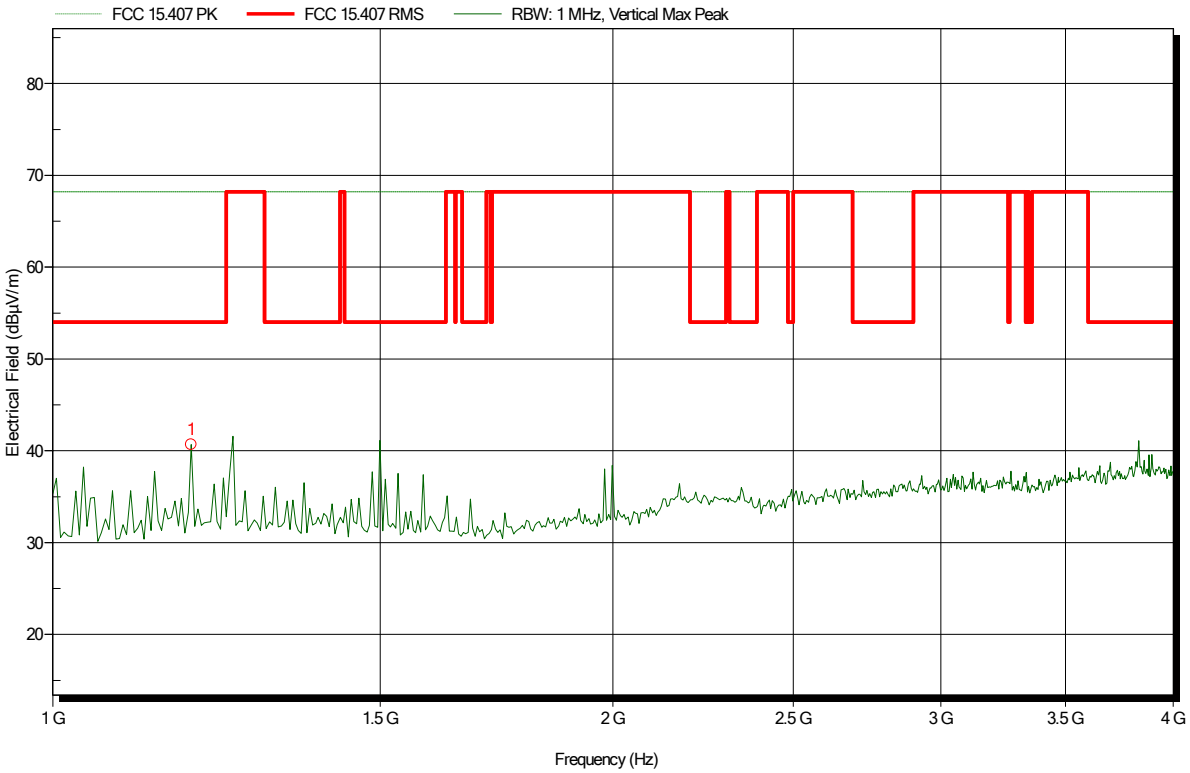

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.187 GHz	40.67 dBµV/m	68.2 dBµV/m	-27.53 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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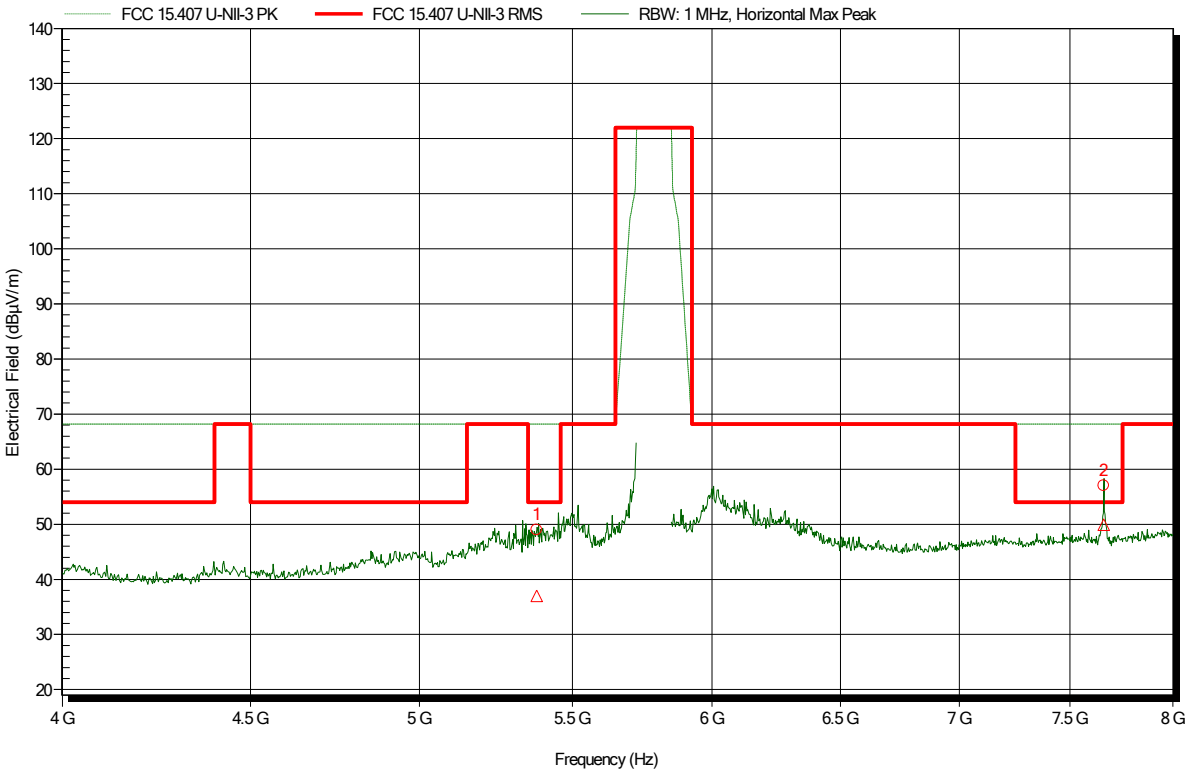

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.379 GHz	48.99 dBµV/m	68.2 dBµV/m	-19.21 dB	Pass
7.66 GHz	57.04 dBµV/m	68.2 dBµV/m	-11.16 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.379 GHz	37.02 dBµV/m	54 dBµV/m	-16.98 dB	Pass
7.66 GHz	49.9 dBµV/m	54 dBµV/m	-4.1 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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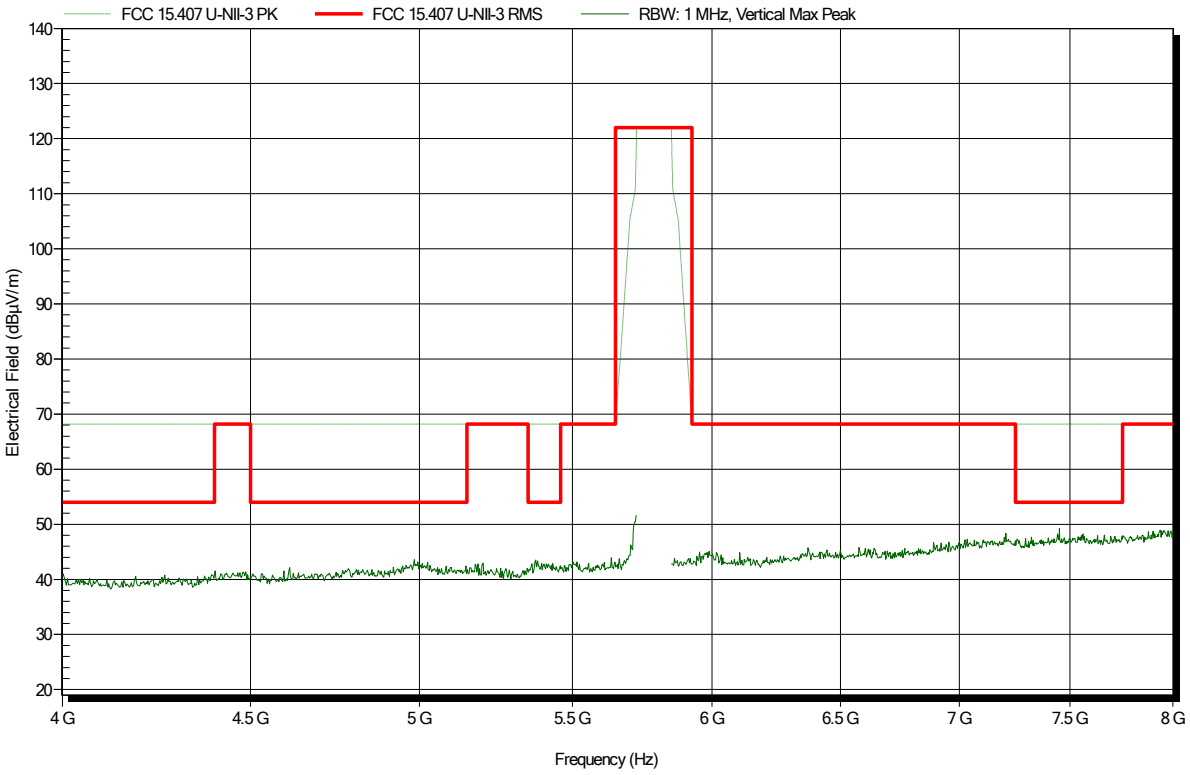

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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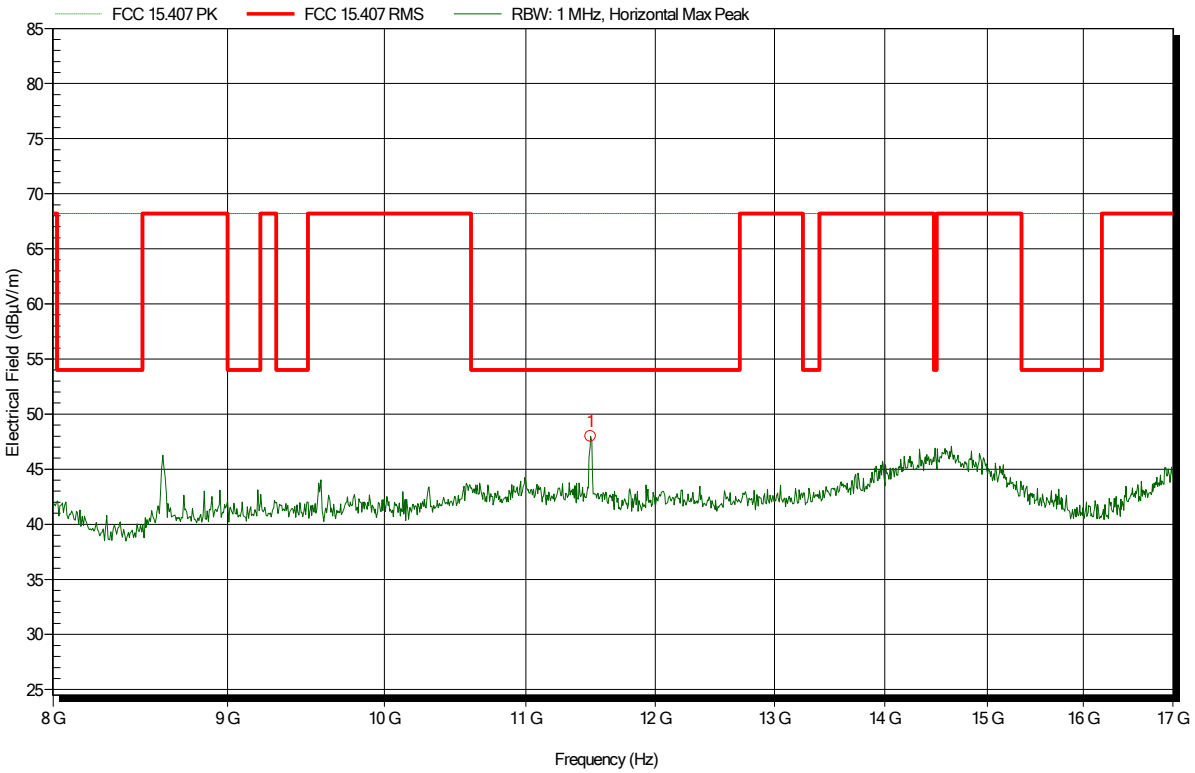

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.488 GHz	47.99 dBµV/m	68.2 dBµV/m	-20.21 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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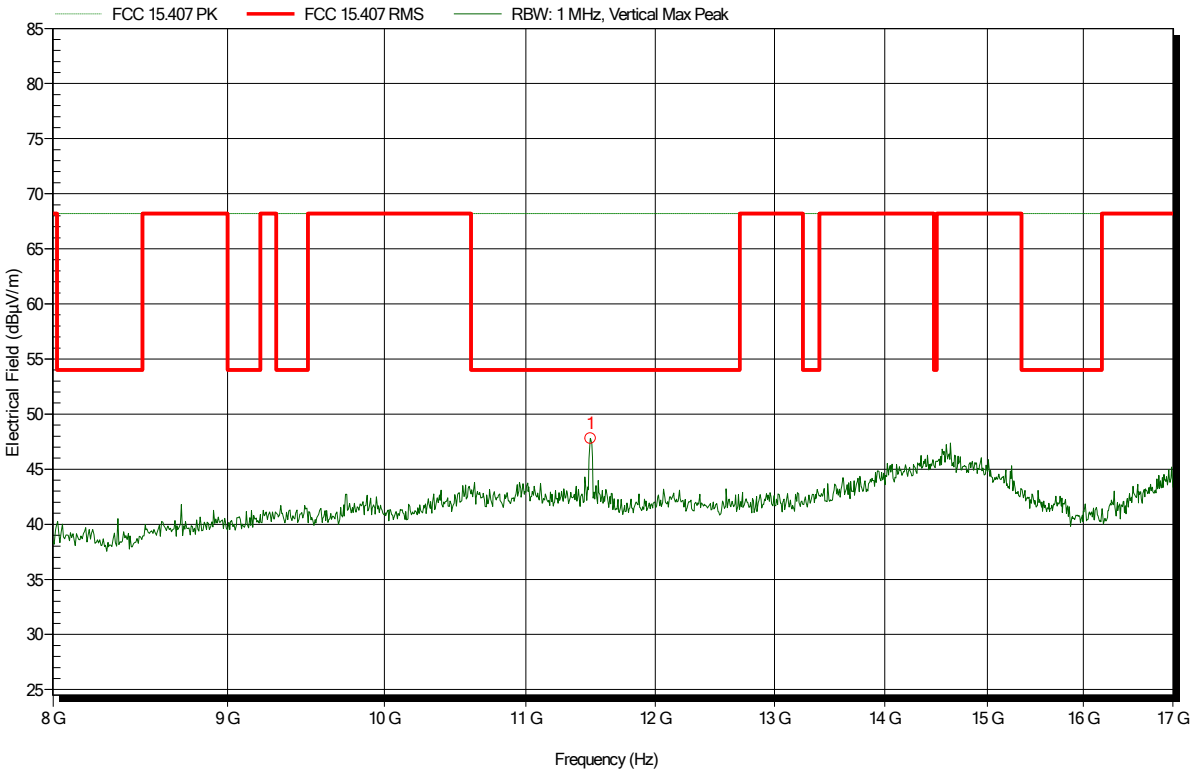

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.488 GHz	47.77 dBµV/m	68.2 dBµV/m	-20.43 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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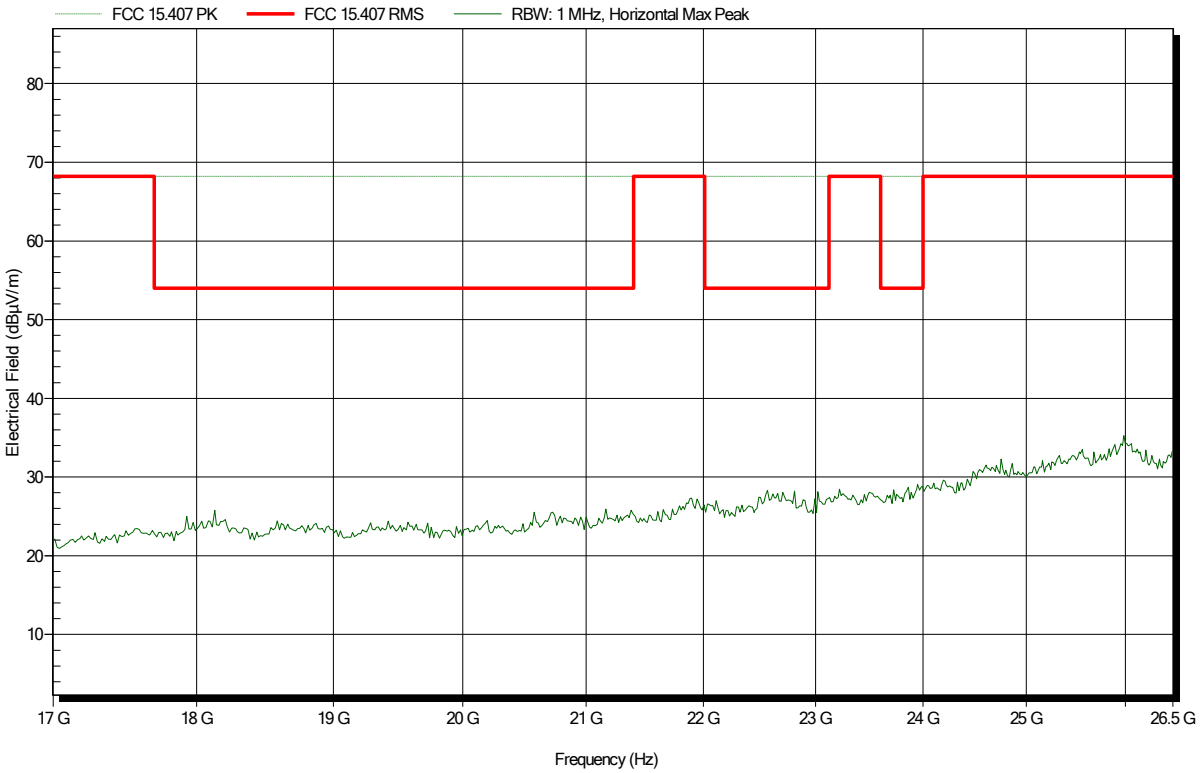

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5745 MHz
Test Date:	2019-01-24
Note:	

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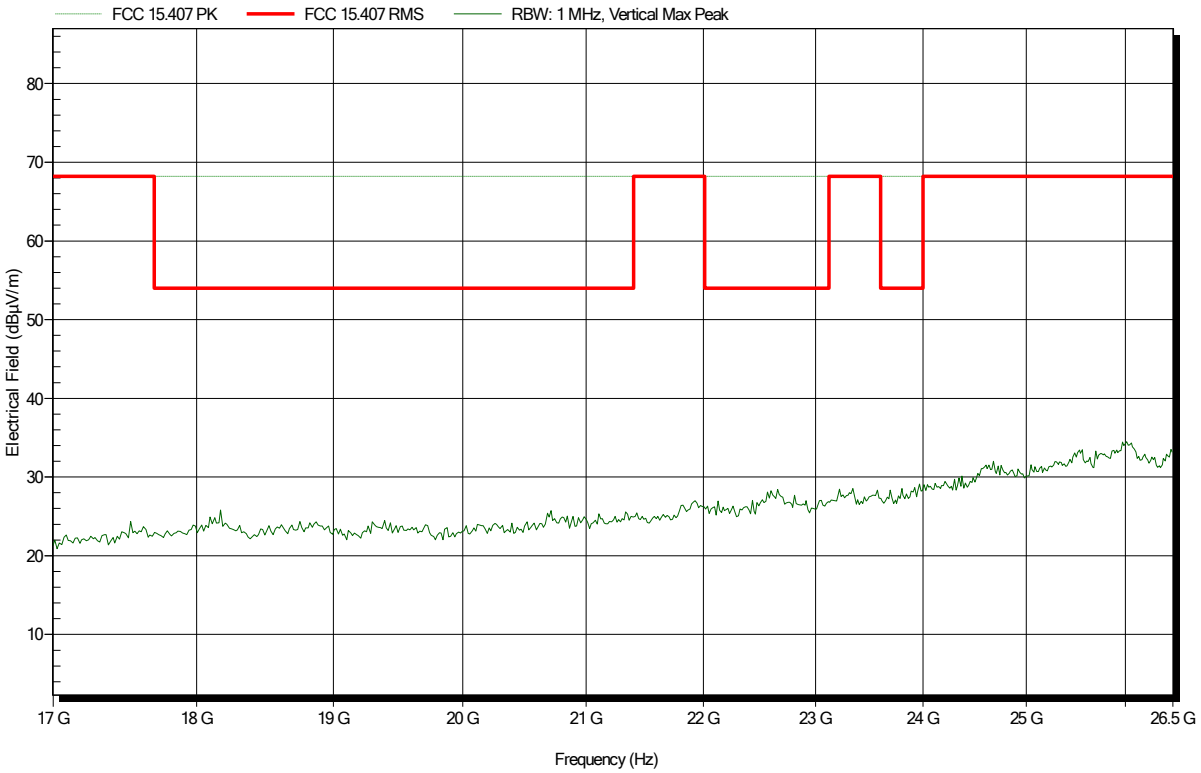

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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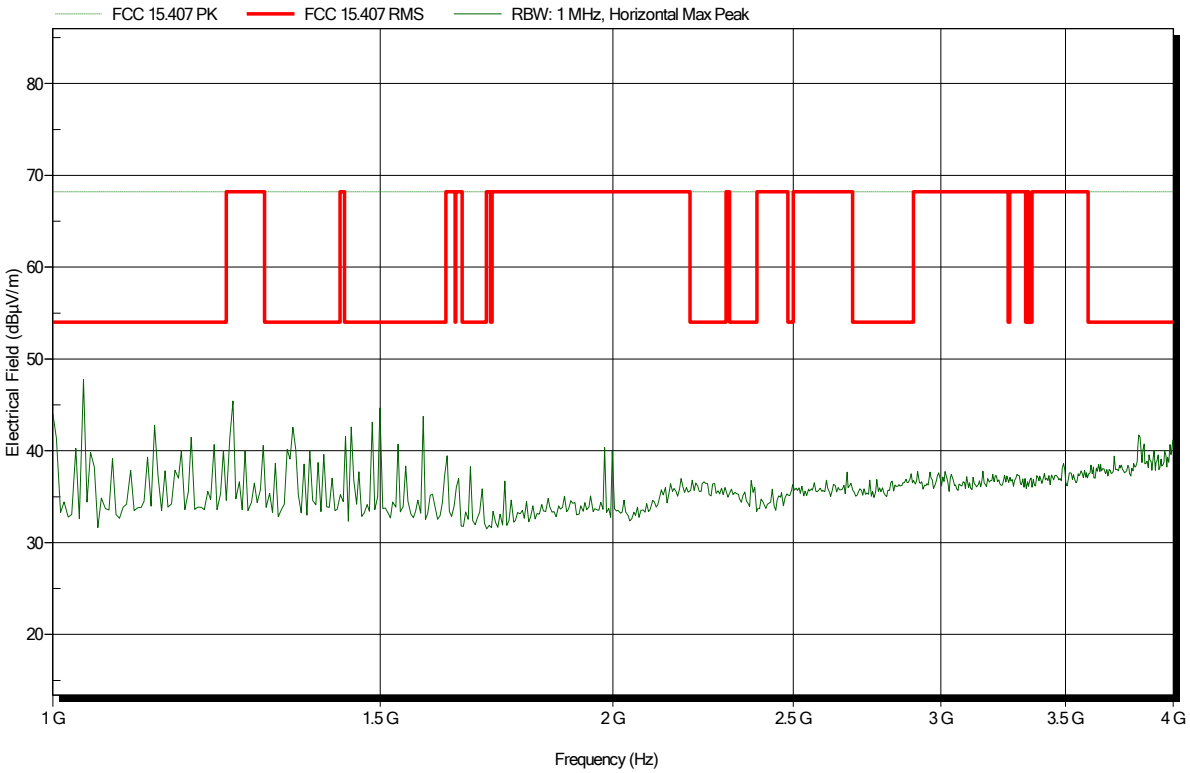

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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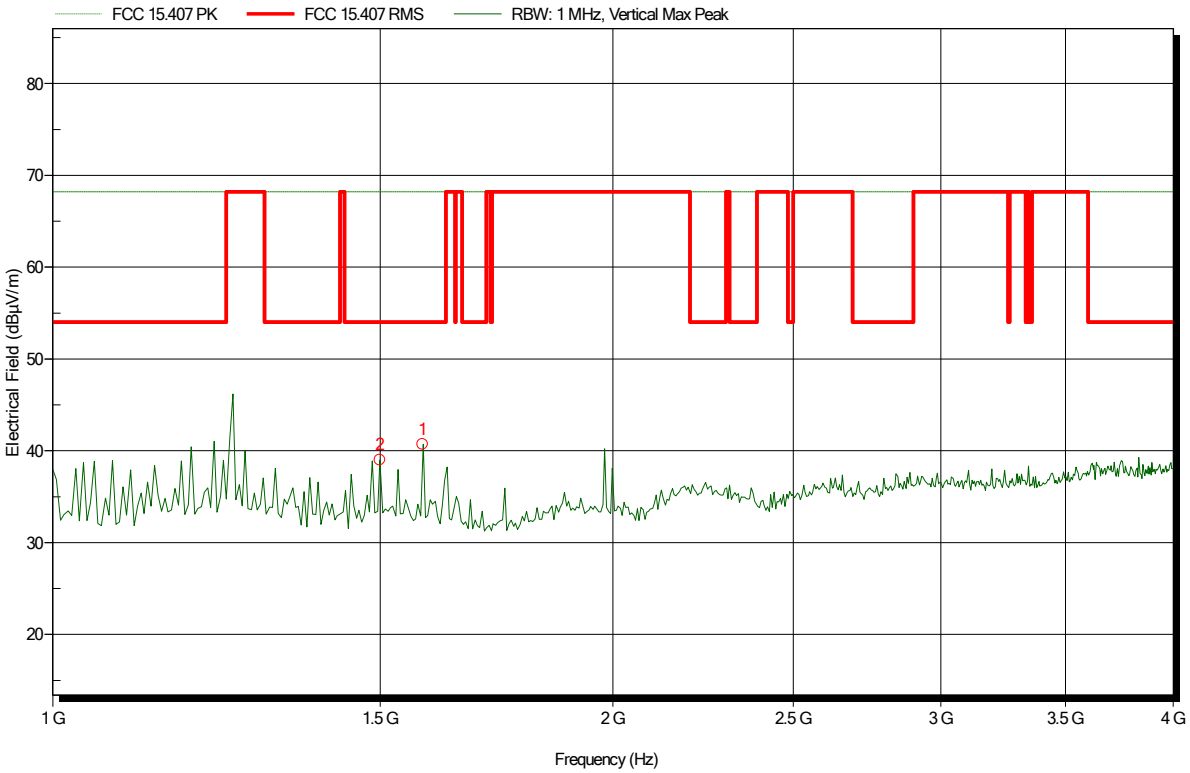

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.499 GHz	38.99 dBµV/m	68.2 dBµV/m	-29.21 dB	Pass
1.581 GHz	40.71 dBµV/m	68.2 dBµV/m	-27.49 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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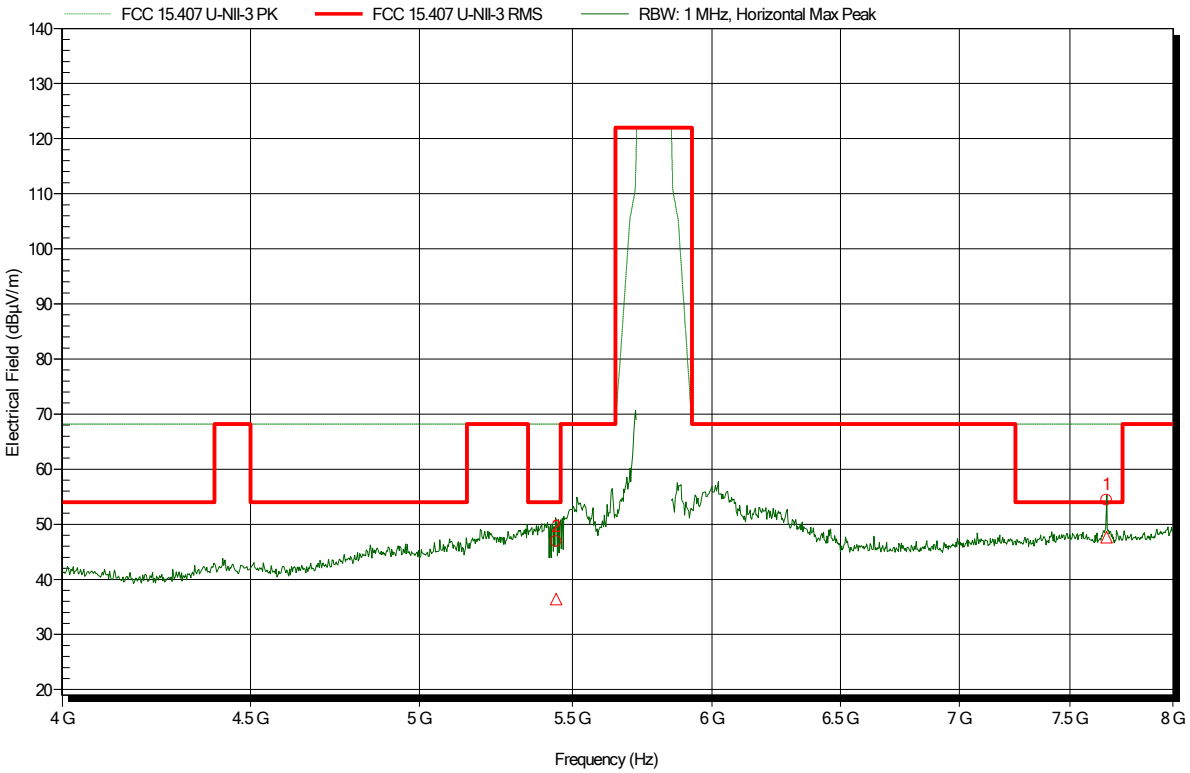

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.445 GHz	46.88 dBµV/m	68.2 dBµV/m	-21.32 dB	Pass
7.673 GHz	54.38 dBµV/m	68.2 dBµV/m	-13.82 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.445 GHz	36.4 dBµV/m	54 dBµV/m	-17.6 dB	Pass
7.673 GHz	47.65 dBµV/m	54 dBµV/m	-6.35 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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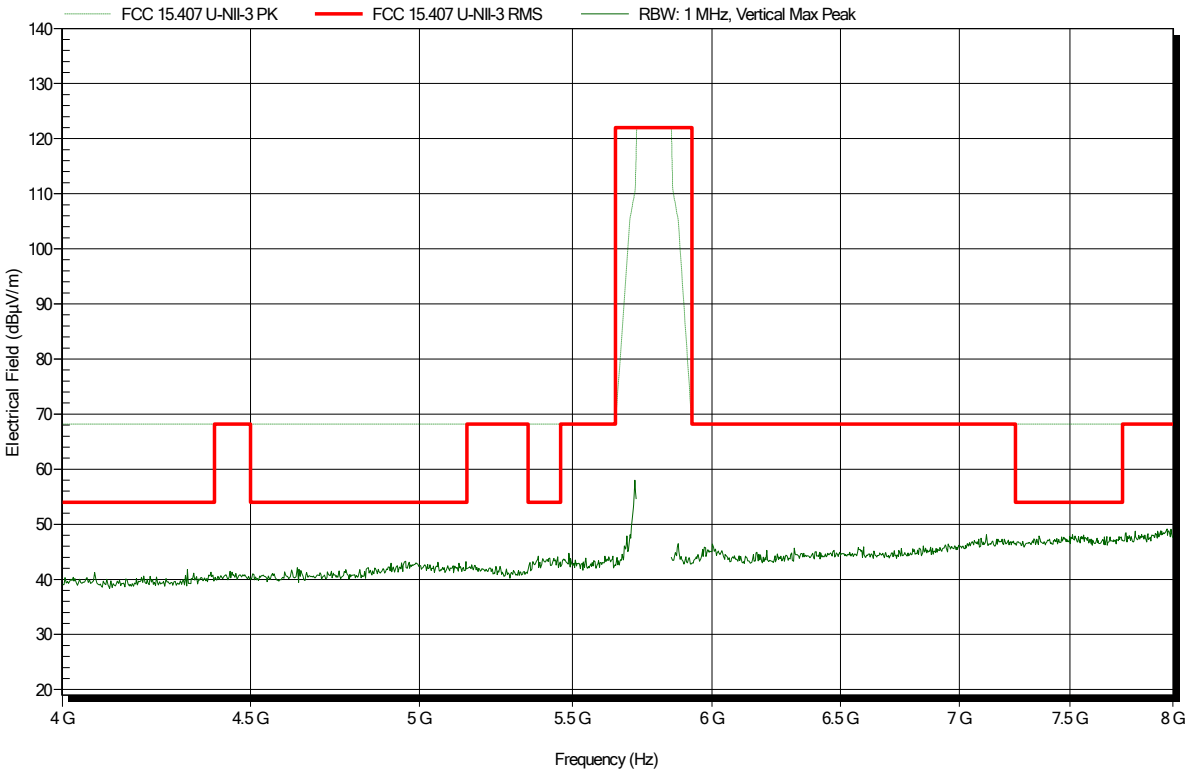

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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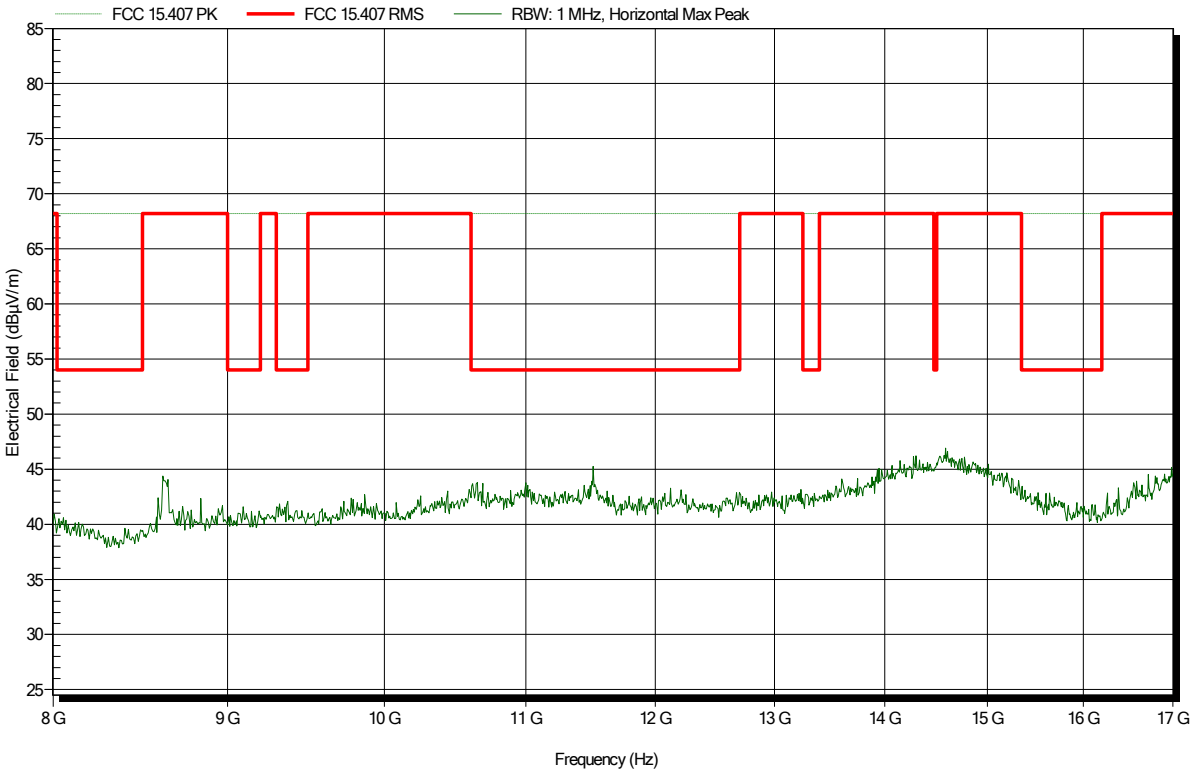

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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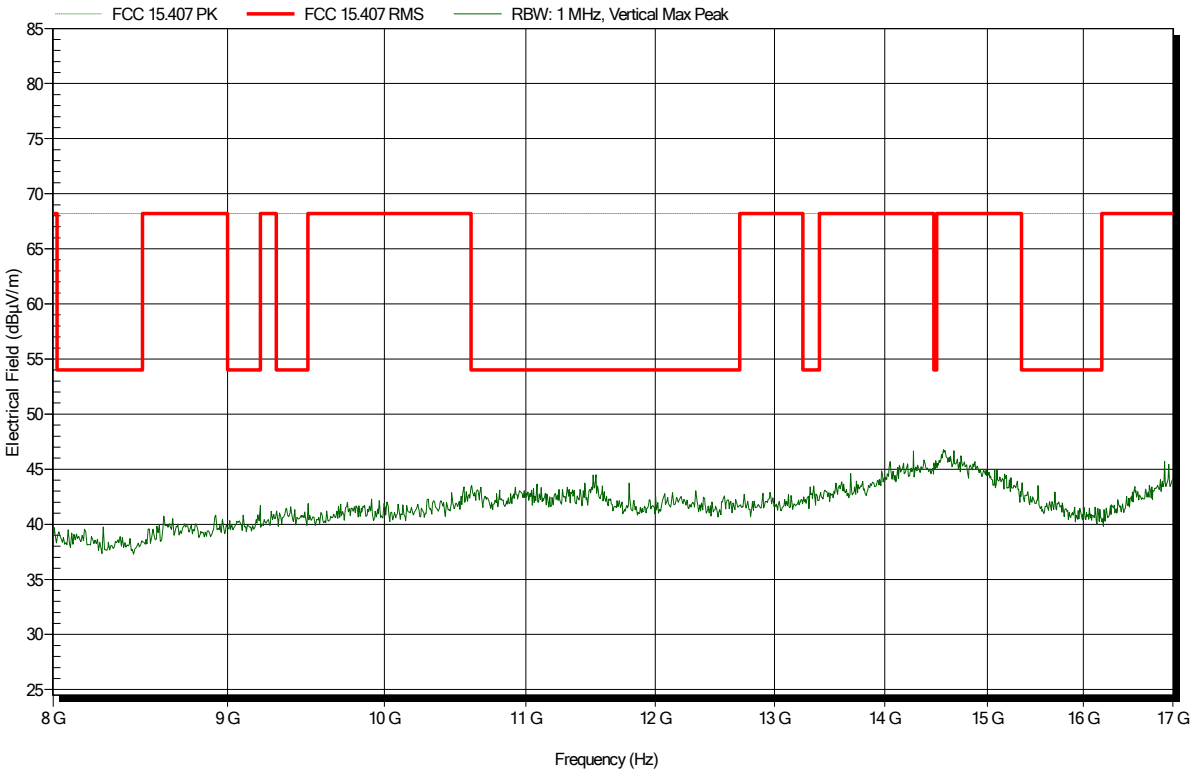

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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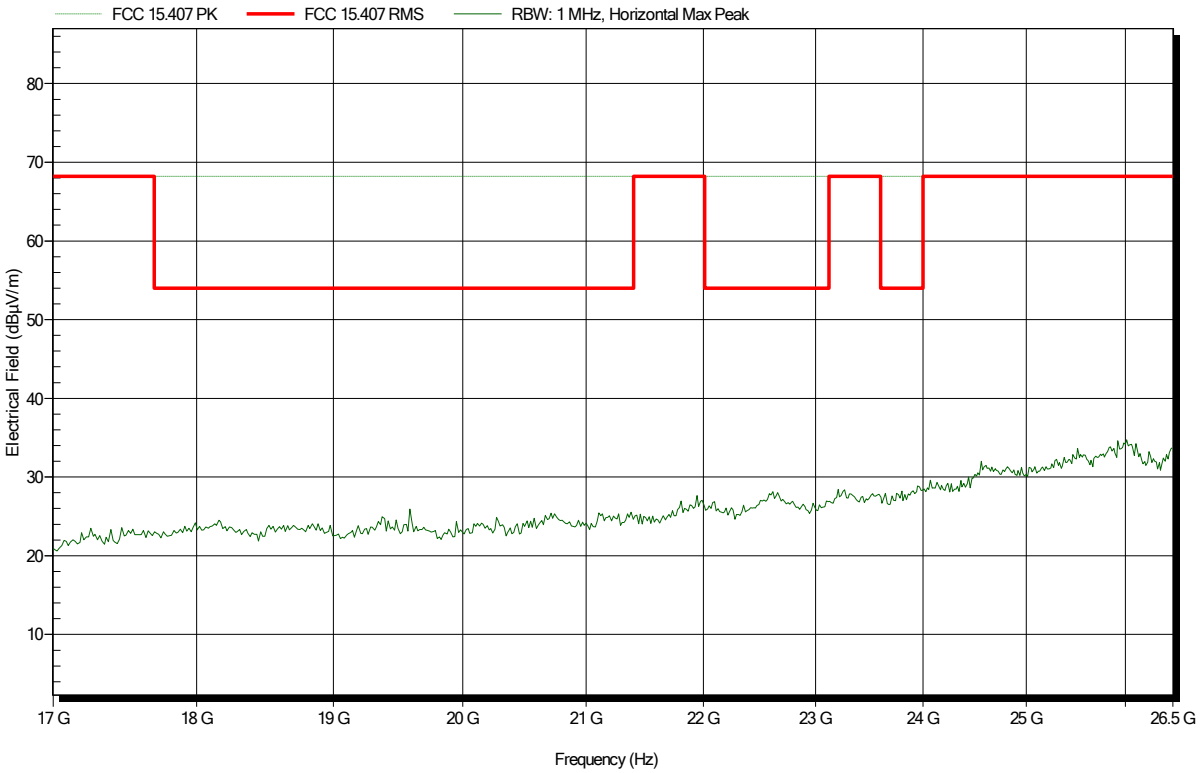

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5755 MHz
Test Date:	2019-01-24
Note:	

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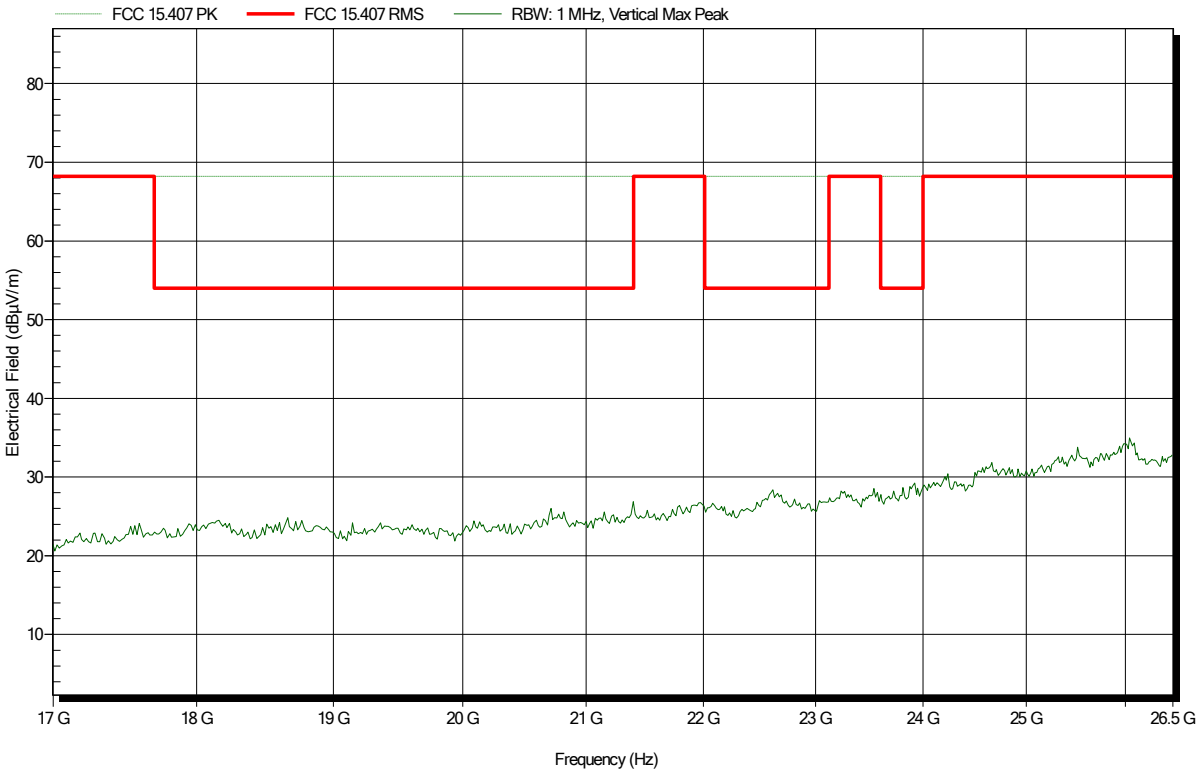

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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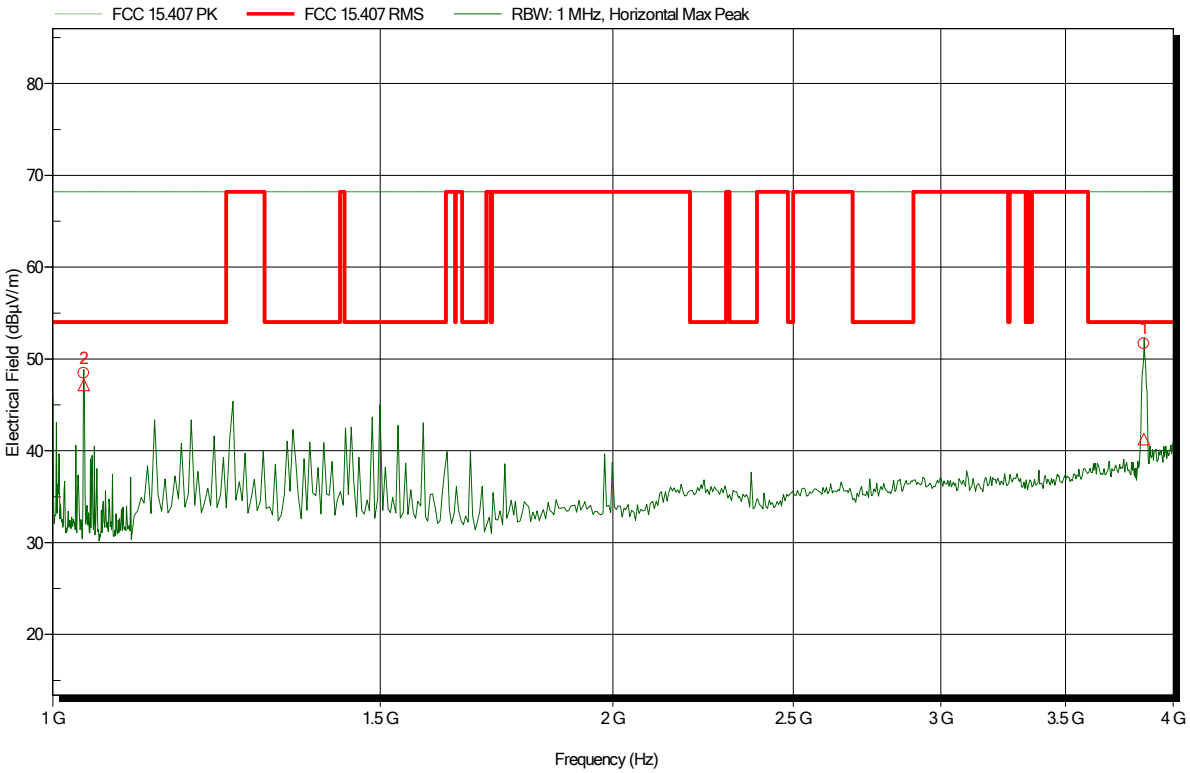

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.039 GHz	48.47 dBµV/m	68.2 dBµV/m	-19.73 dB	Pass
3.857 GHz	51.67 dBµV/m	68.2 dBµV/m	-16.53 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.039 GHz	47.16 dBµV/m	54 dBµV/m	-6.84 dB	Pass
3.857 GHz	41.26 dBµV/m	54 dBµV/m	-12.74 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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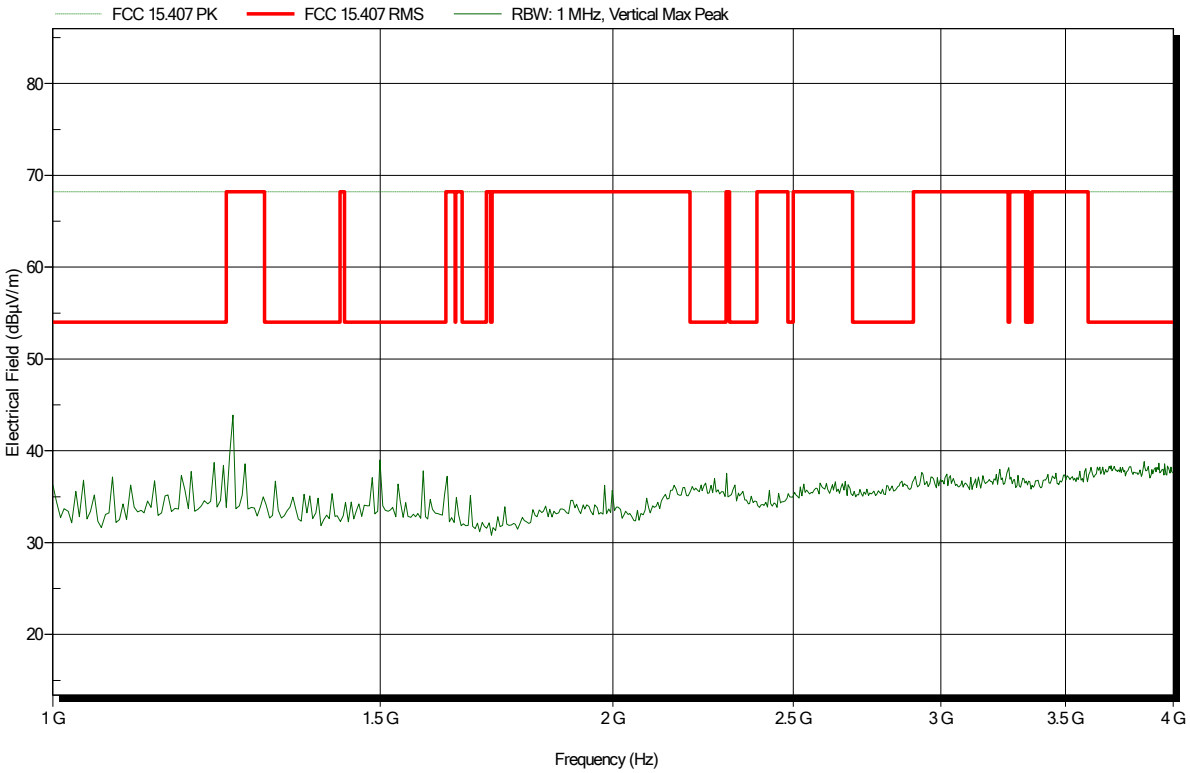

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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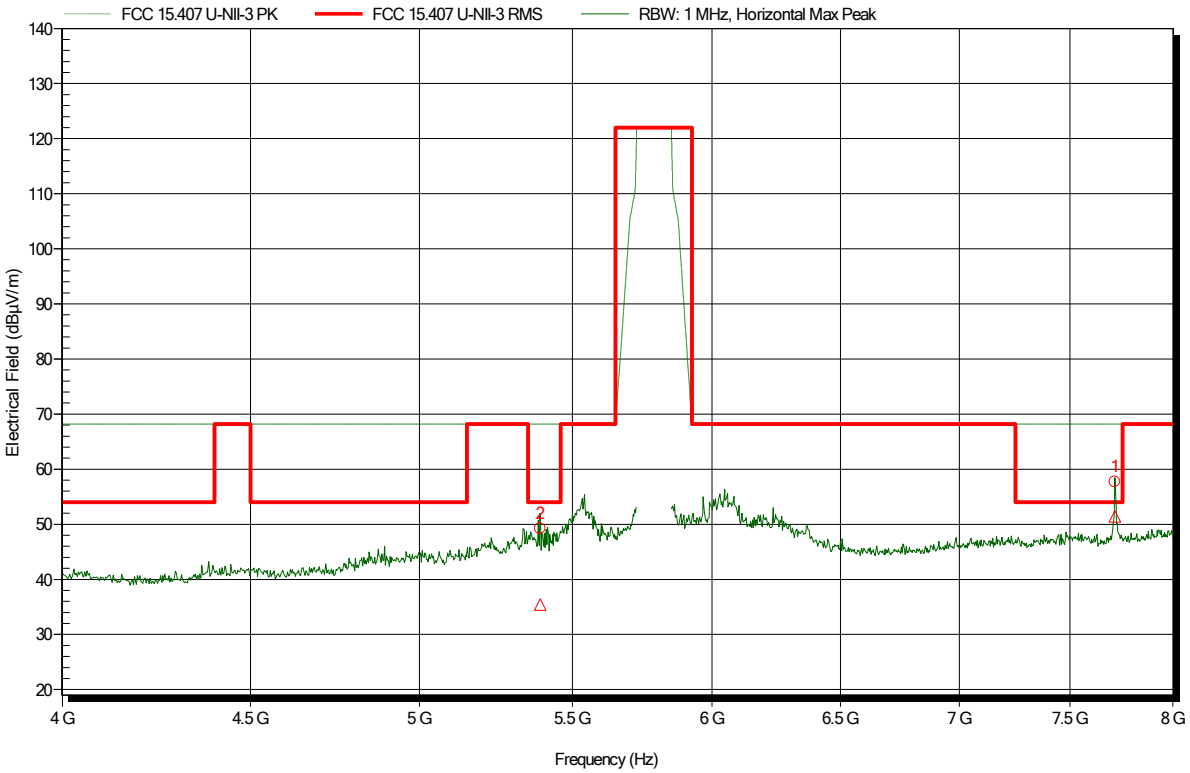

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.39 GHz	49.2 dBµV/m	68.2 dBµV/m	-19 dB	Pass
7.713 GHz	57.7 dBµV/m	68.2 dBµV/m	-10.5 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.39 GHz	35.43 dBµV/m	54 dBµV/m	-18.57 dB	Pass
7.713 GHz	51.43 dBµV/m	54 dBµV/m	-2.57 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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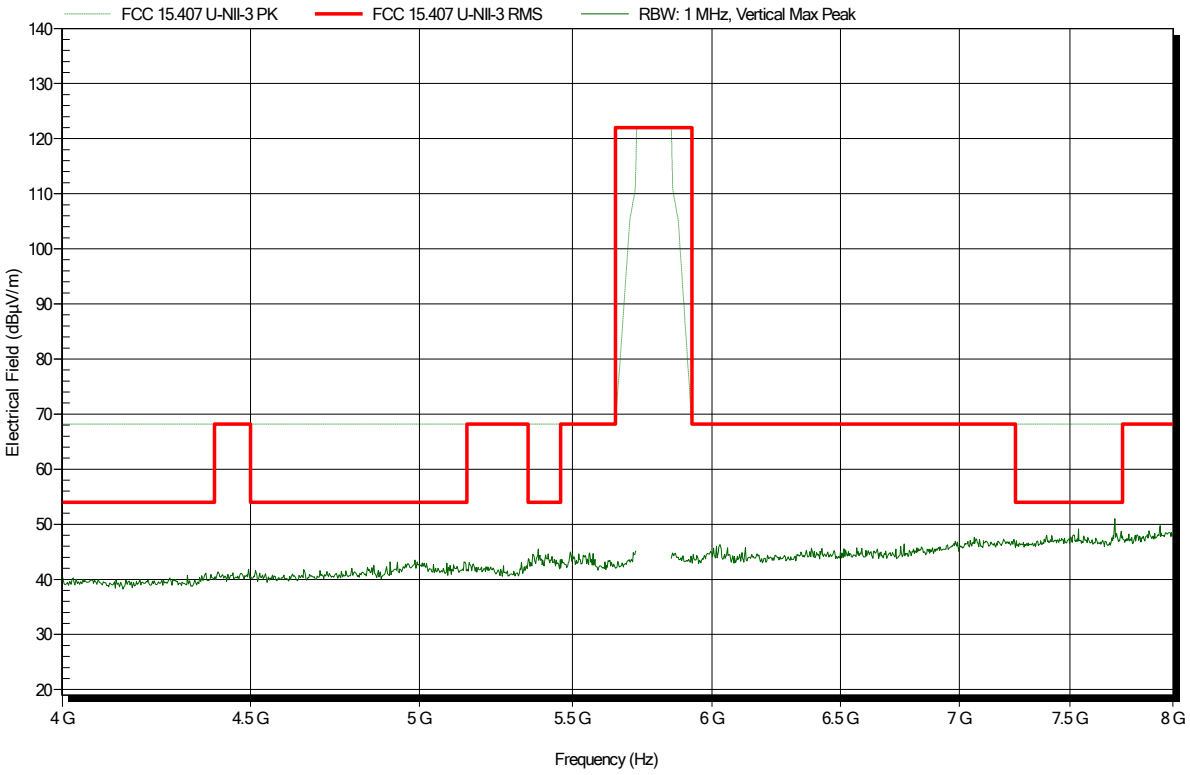

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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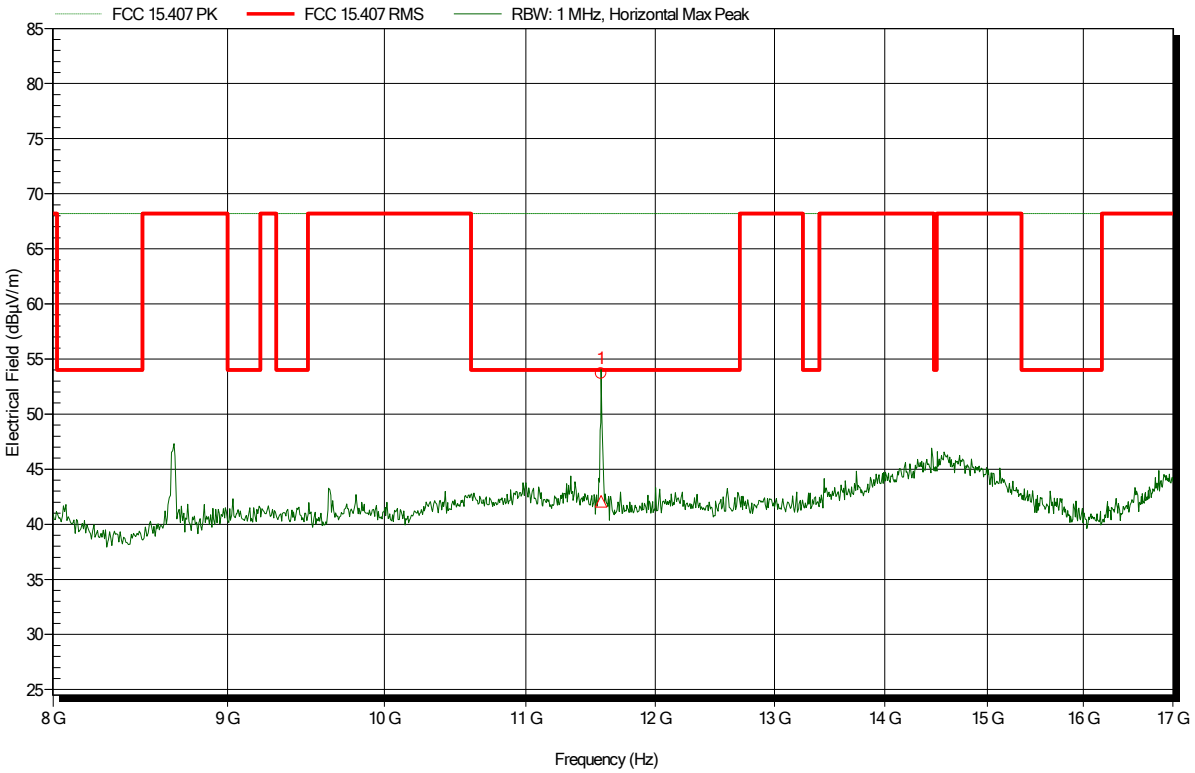

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.57 GHz	53.69 dBµV/m	68.2 dBµV/m	-14.51 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
11.57 GHz	42.08 dBµV/m	54 dBµV/m	-11.92 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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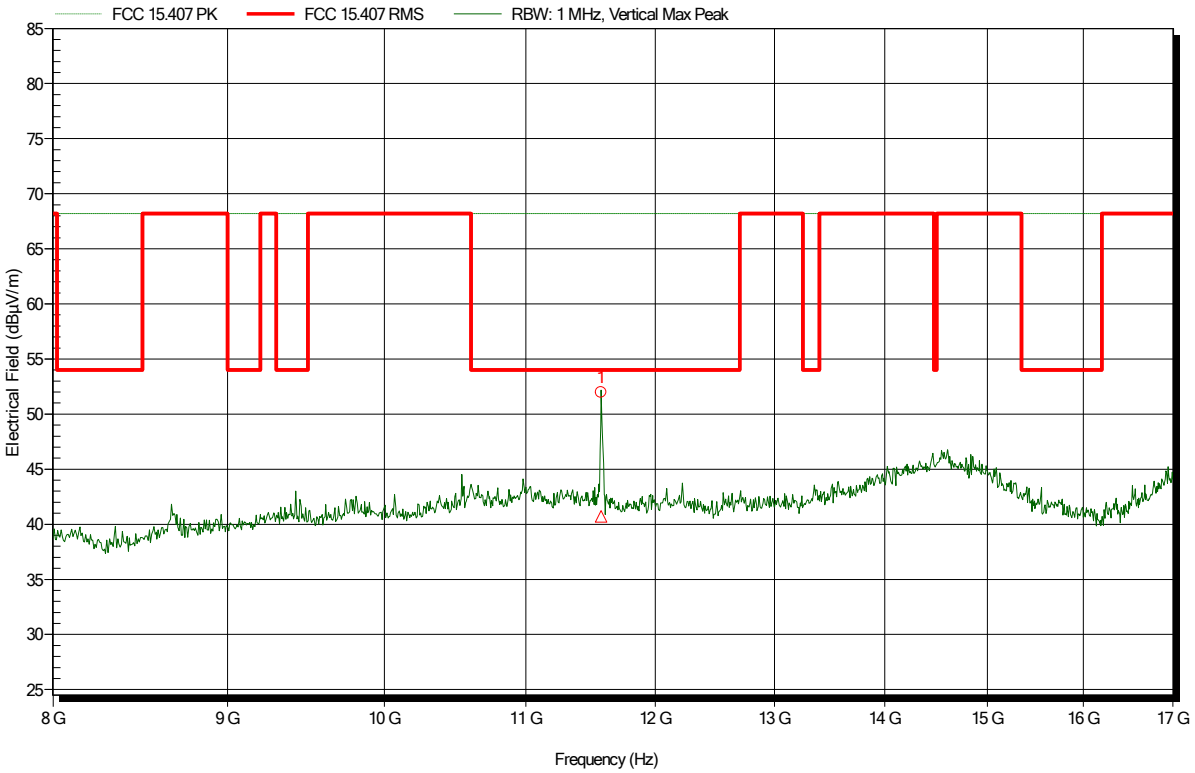

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.571 GHz	51.96 dBµV/m	68.2 dBµV/m	-16.24 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
11.571 GHz	40.72 dBµV/m	54 dBµV/m	-13.28 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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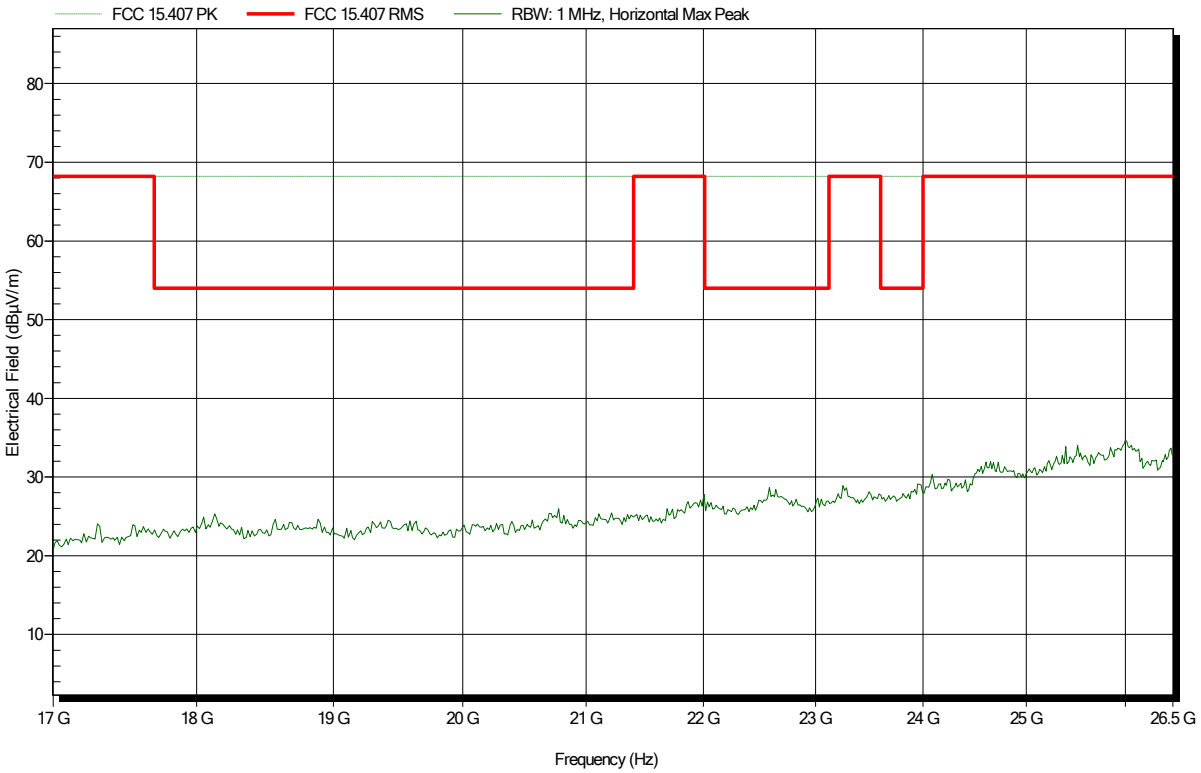

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5785 MHz
Test Date:	2019-01-24
Note:	

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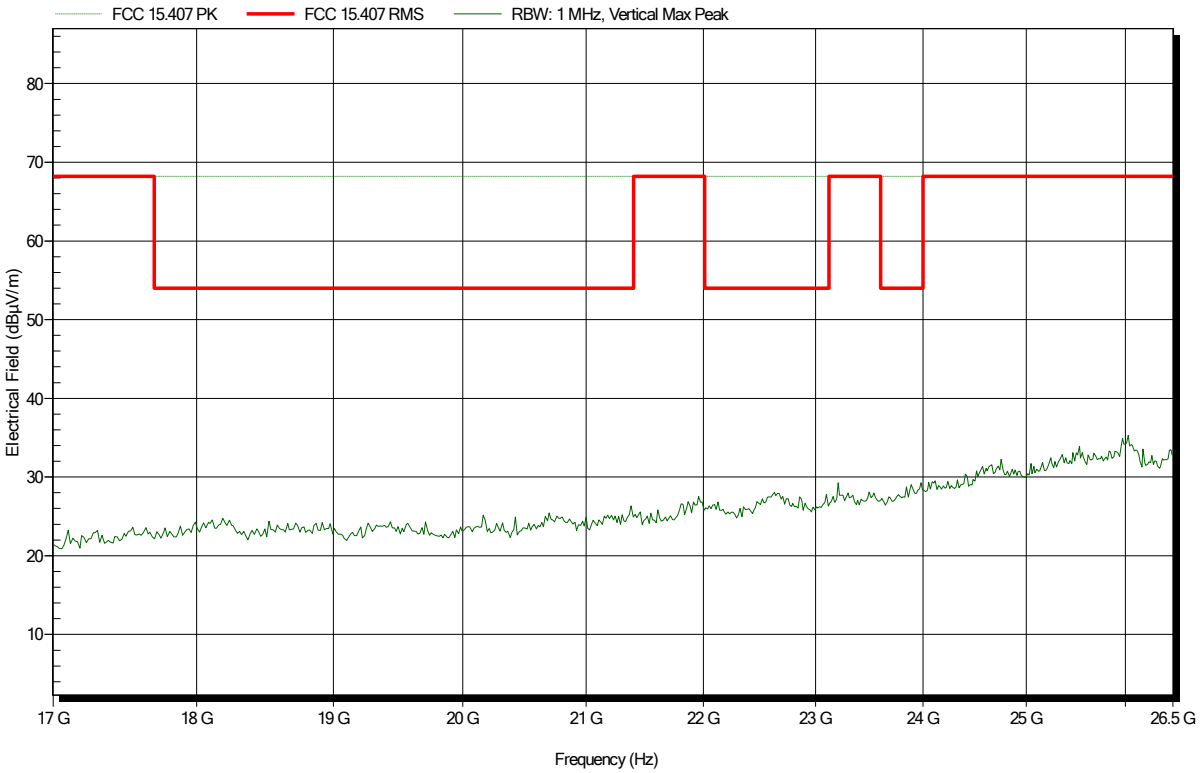

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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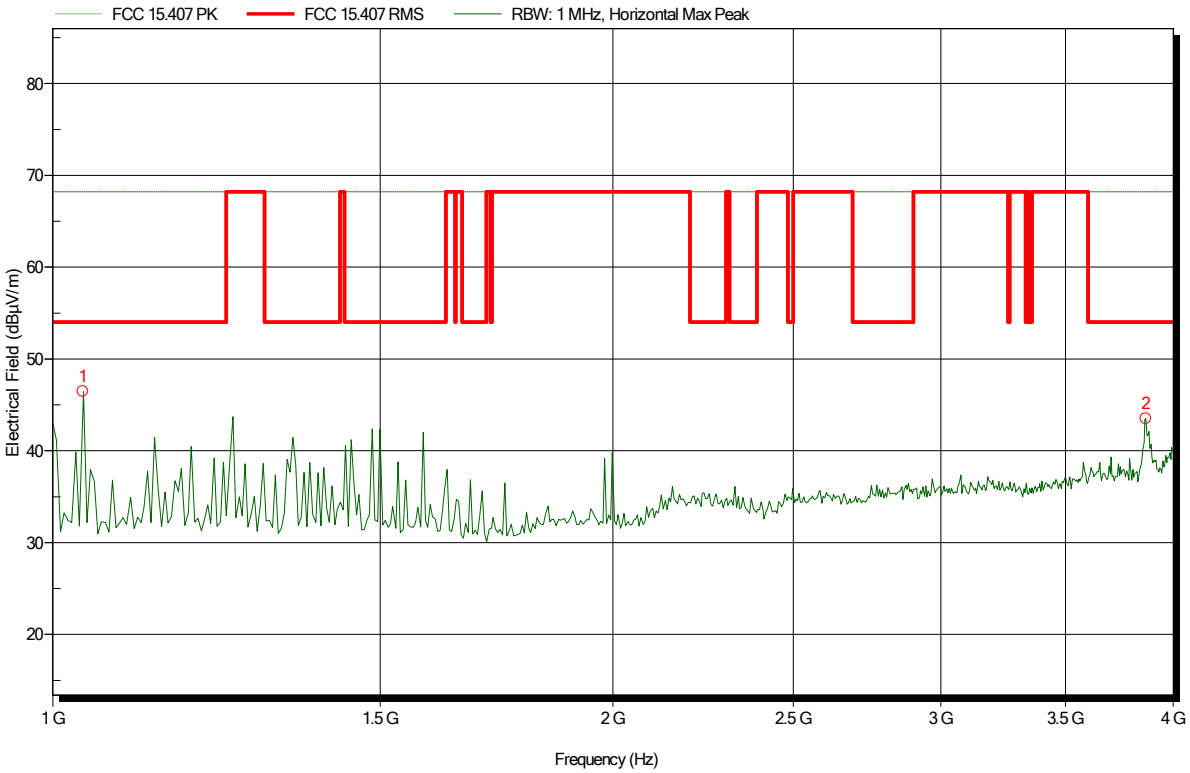

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	46.47 dBµV/m	68.2 dBµV/m	-21.73 dB	Pass
3.866 GHz	43.52 dBµV/m	68.2 dBµV/m	-24.68 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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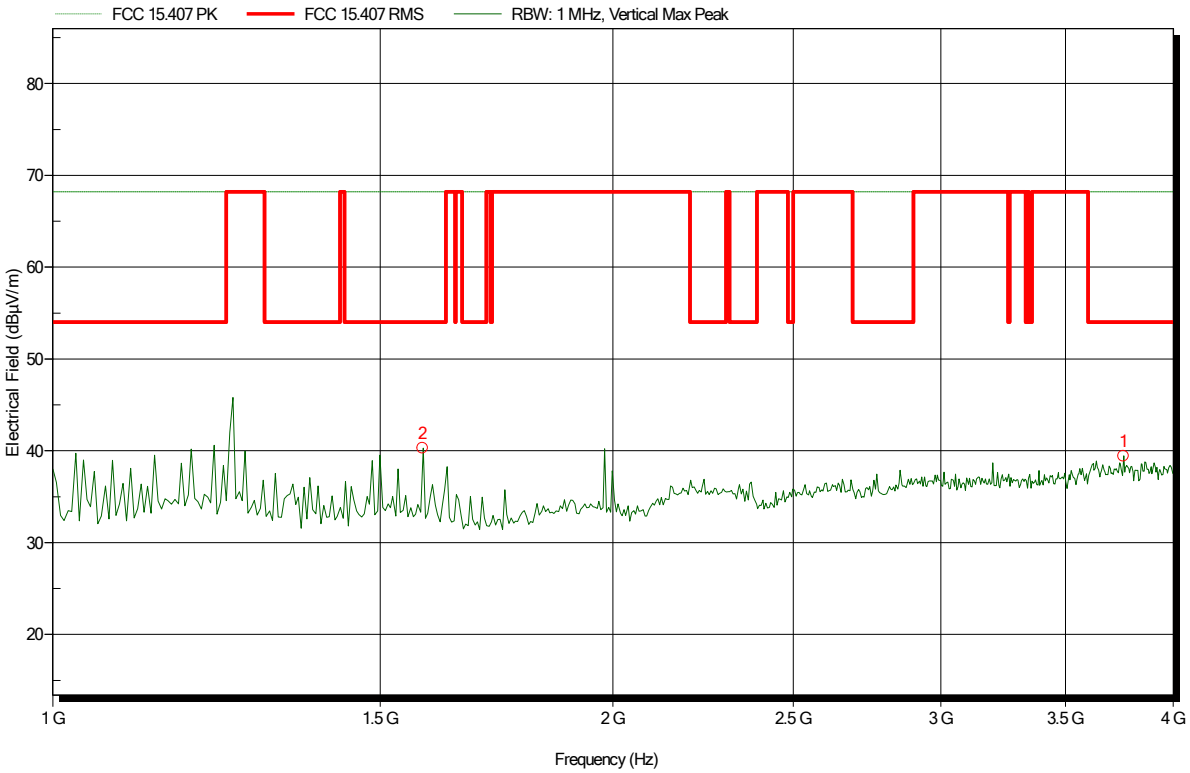

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.581 GHz	40.31 dBµV/m	68.2 dBµV/m	-27.89 dB	Pass
3.76 GHz	39.43 dBµV/m	68.2 dBµV/m	-28.77 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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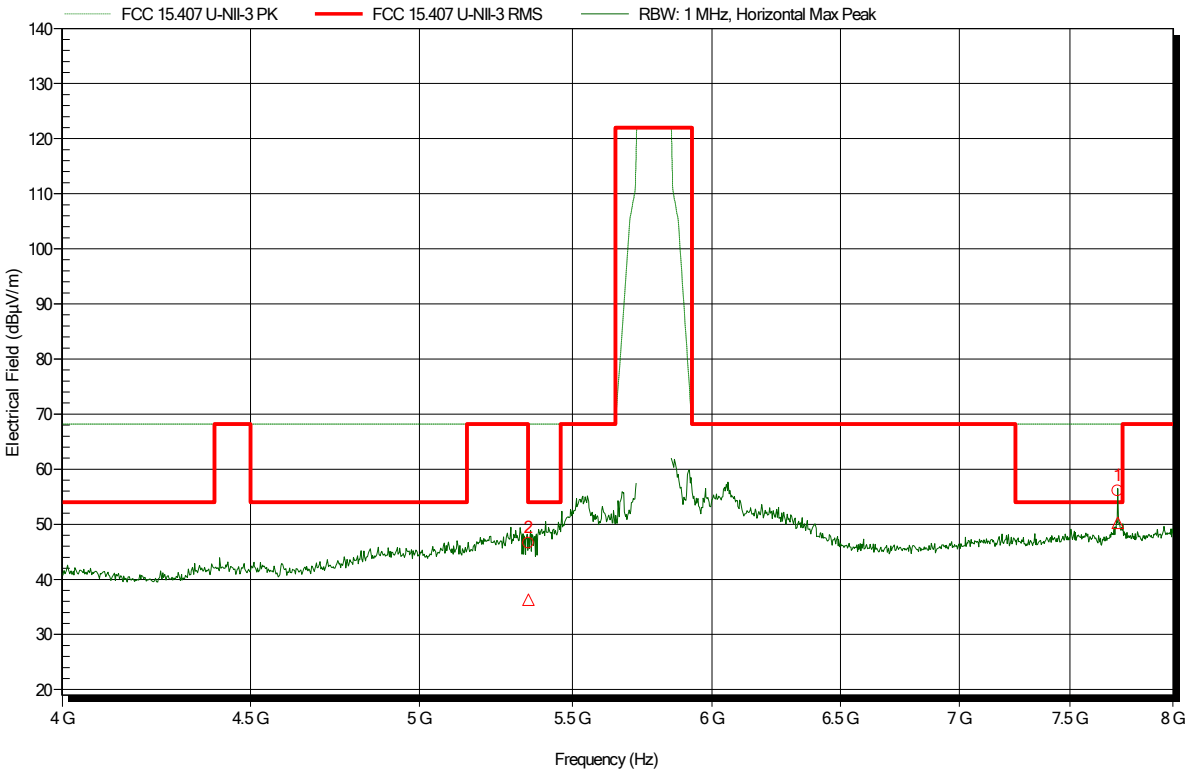

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.351 GHz	46.59 dBµV/m	68.2 dBµV/m	-21.61 dB	Pass
7.727 GHz	56.1 dBµV/m	68.2 dBµV/m	-12.1 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.351 GHz	36.29 dBµV/m	54 dBµV/m	-17.71 dB	Pass
7.727 GHz	50.26 dBµV/m	54 dBµV/m	-3.74 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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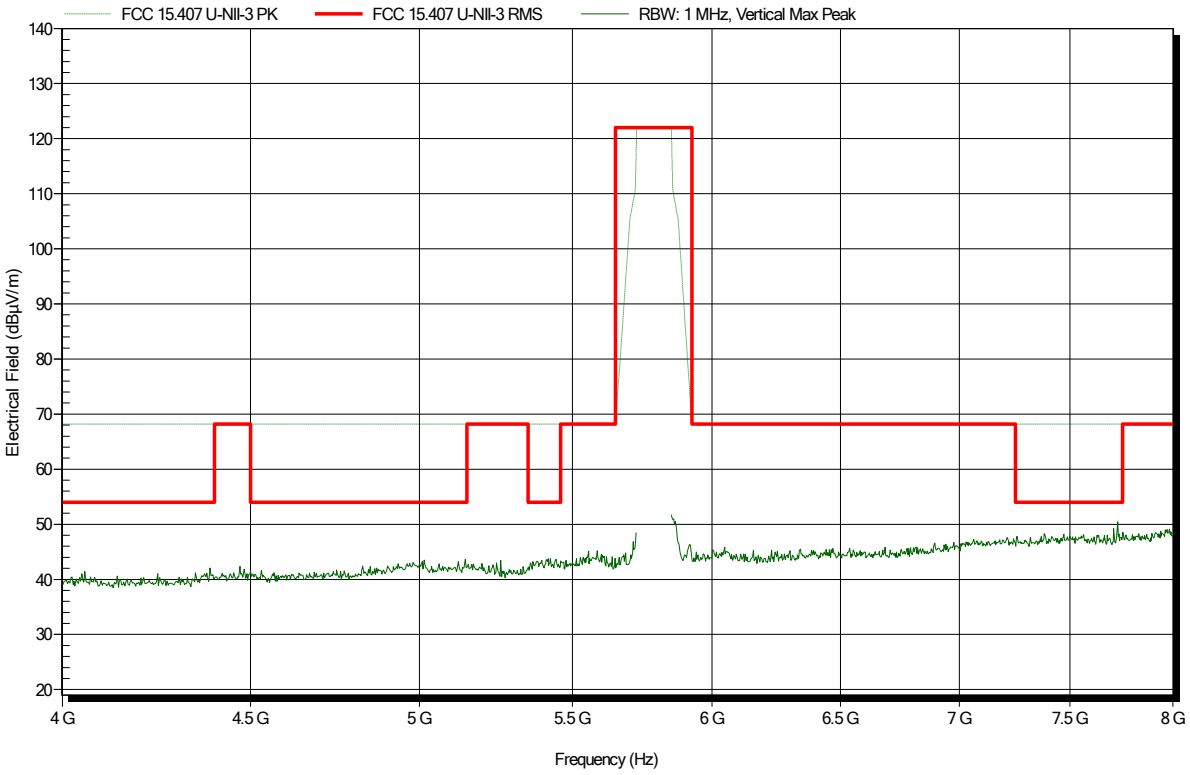

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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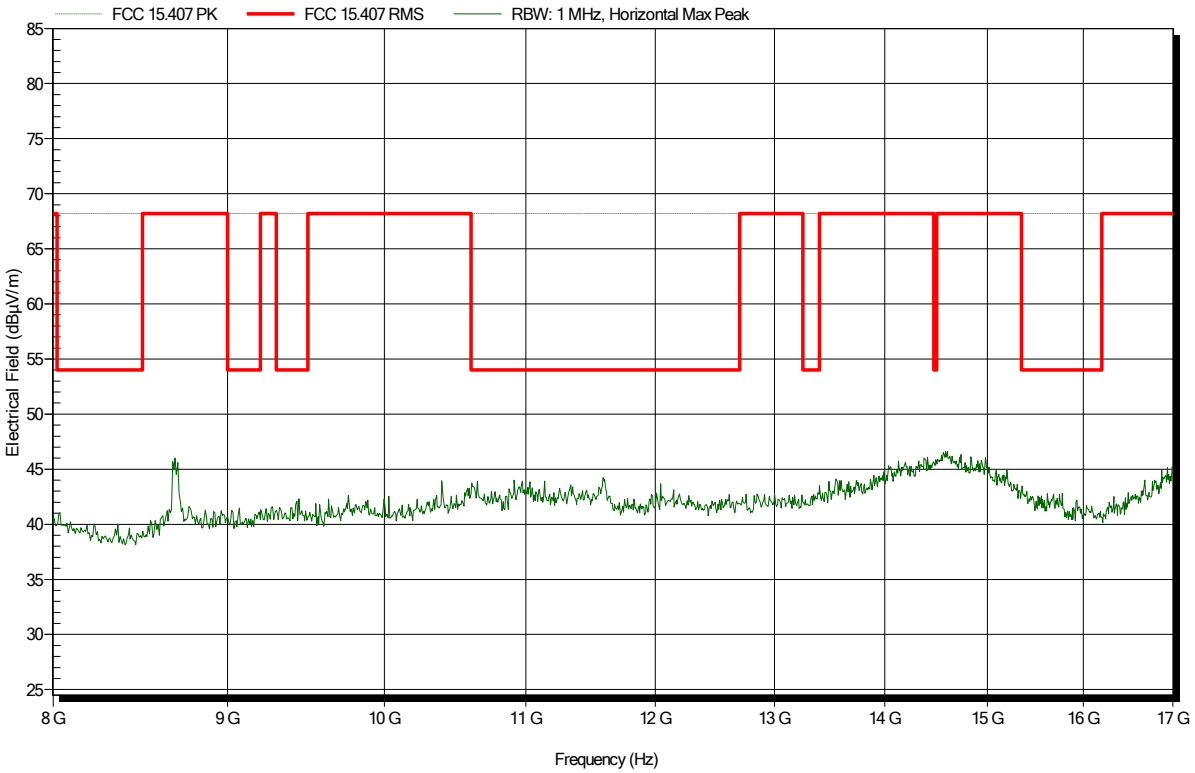

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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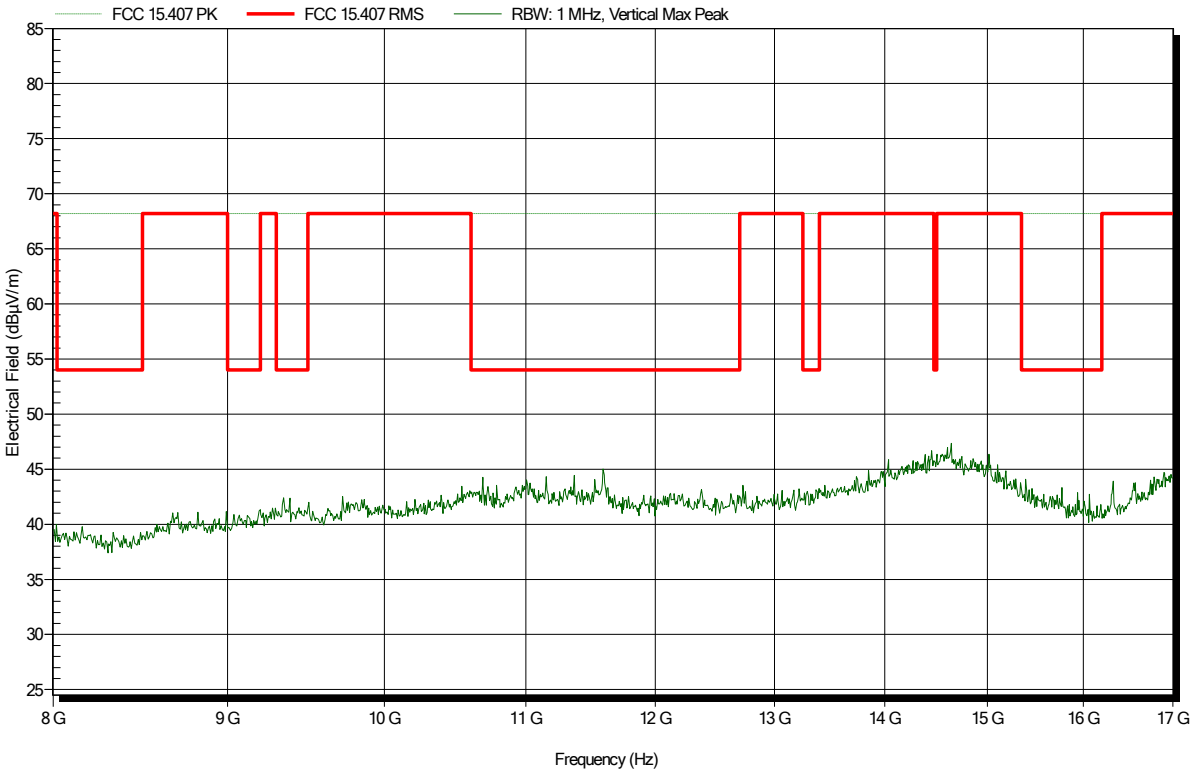

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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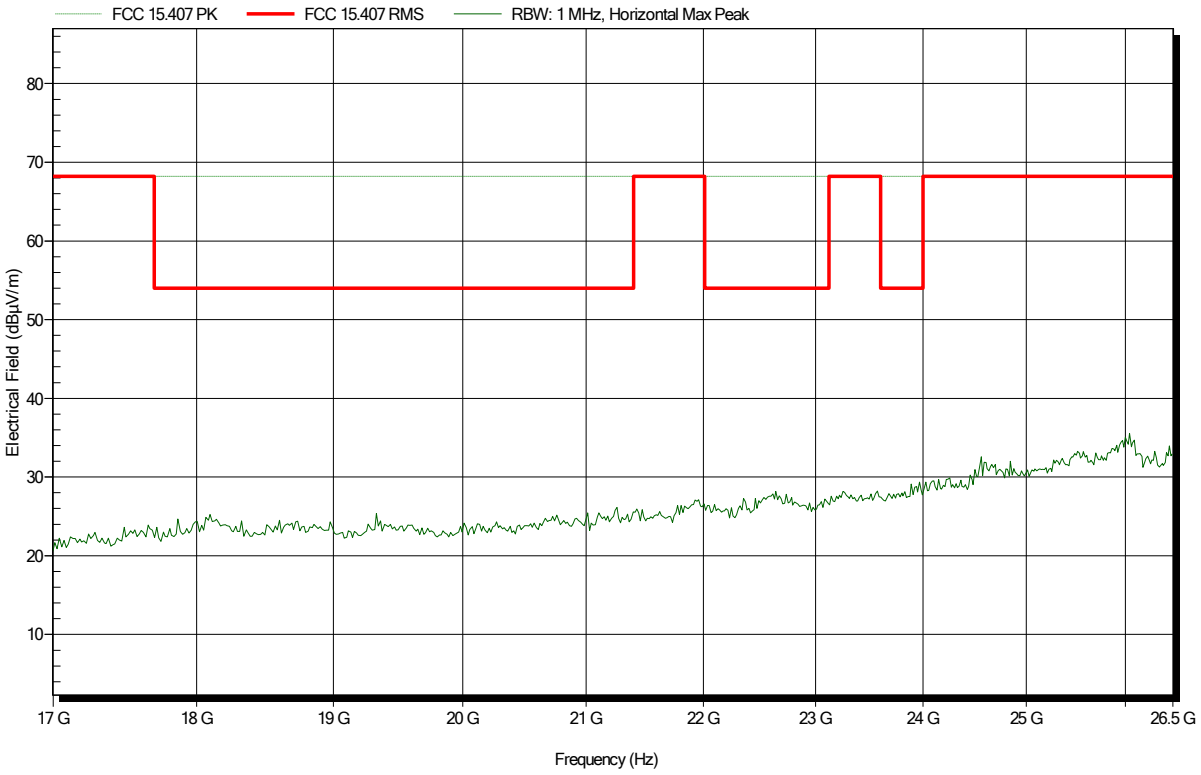

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11n; 40 Mhz; MCS0; 5795 MHz
Test Date:	2019-01-24
Note:	

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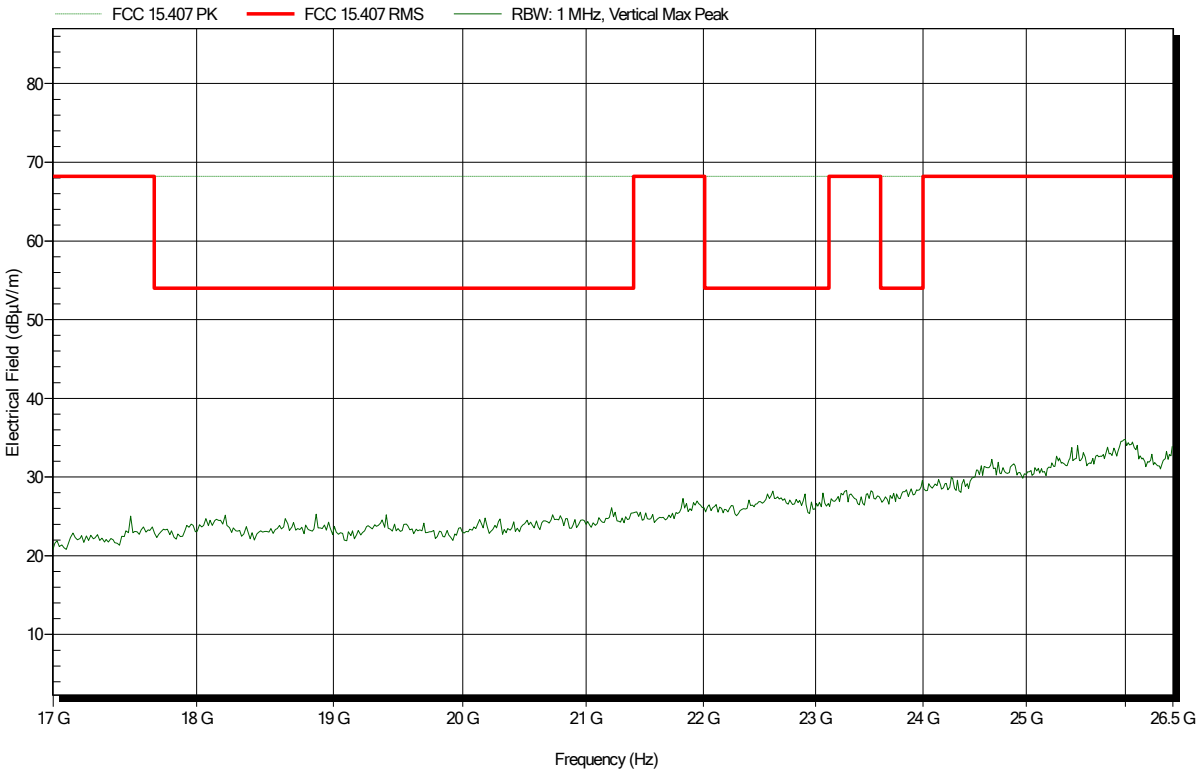

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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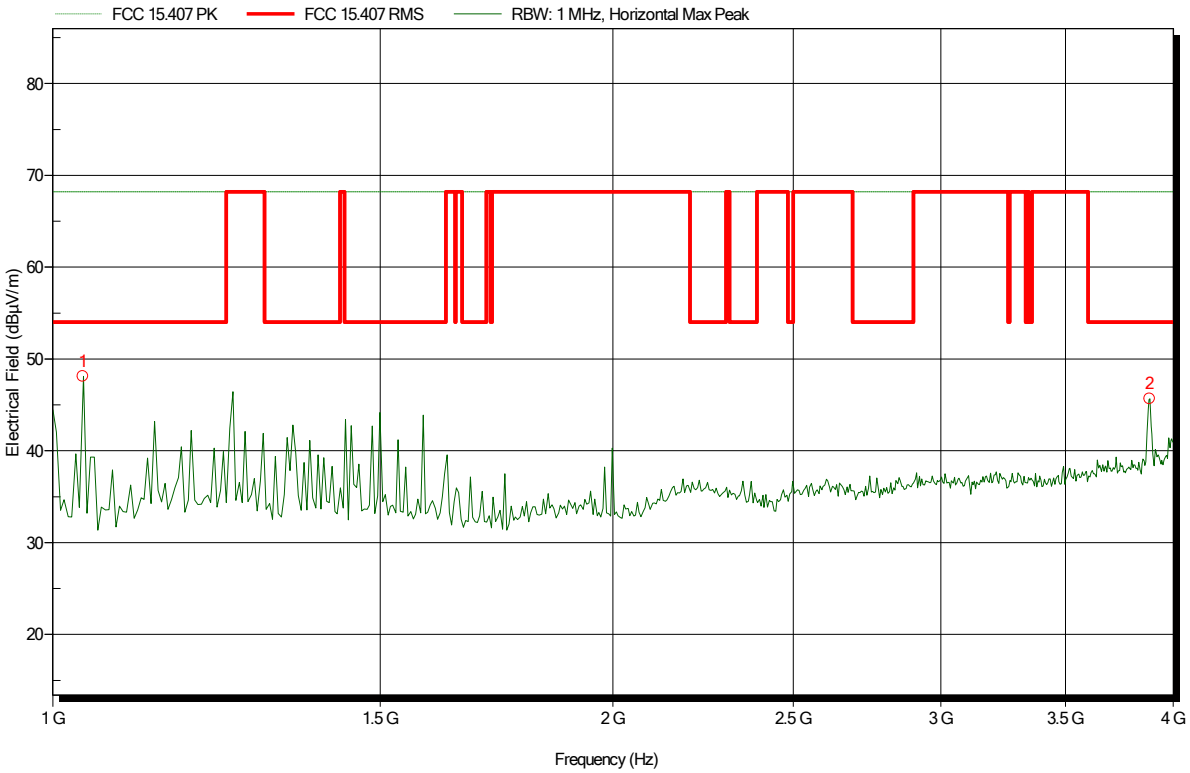

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.038 GHz	48.12 dBµV/m	68.2 dBµV/m	-20.08 dB	Pass
3.885 GHz	45.65 dBµV/m	68.2 dBµV/m	-22.55 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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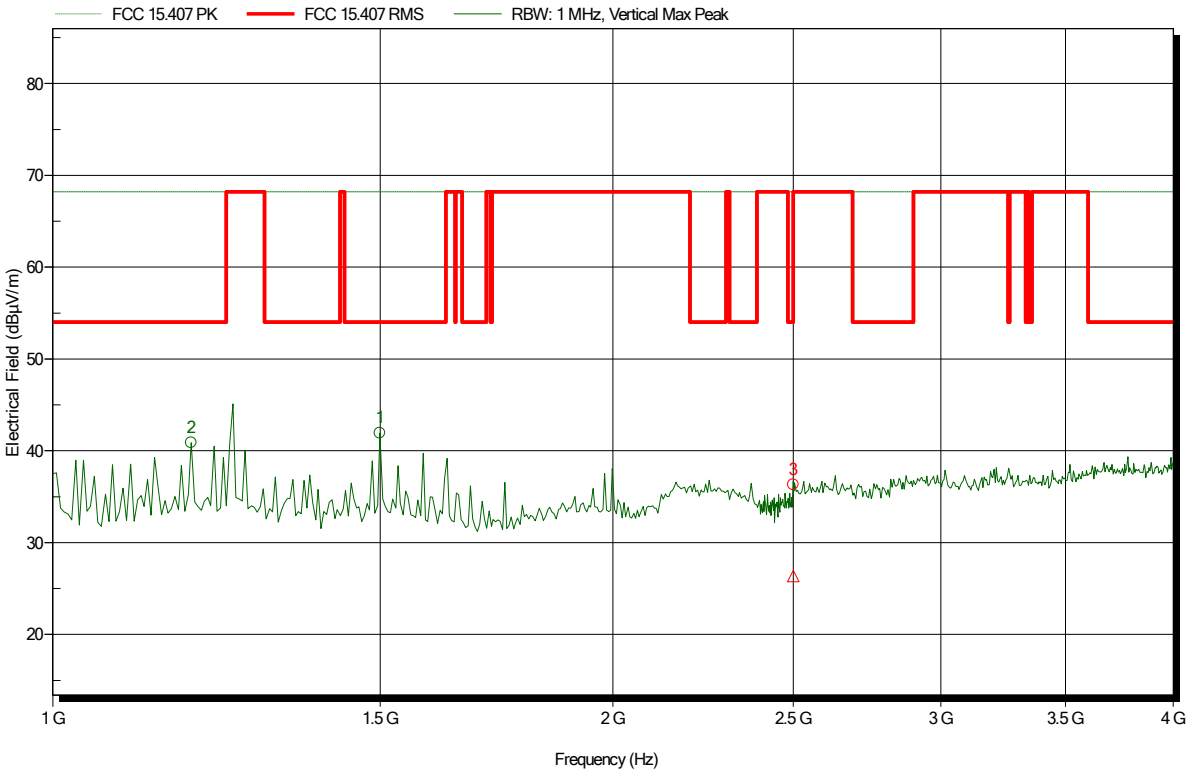

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
1.187 GHz	40.88 dBµV/m	68.2 dBµV/m	-27.32 dB	Pass
1.499 GHz	41.92 dBµV/m	68.2 dBµV/m	-26.28 dB	Pass
2.5 GHz	36.3 dBµV/m	68.2 dBµV/m	-31.9 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
1.187 GHz				
1.499 GHz				
2.5 GHz	26.37 dBµV/m	54 dBµV/m	-27.63 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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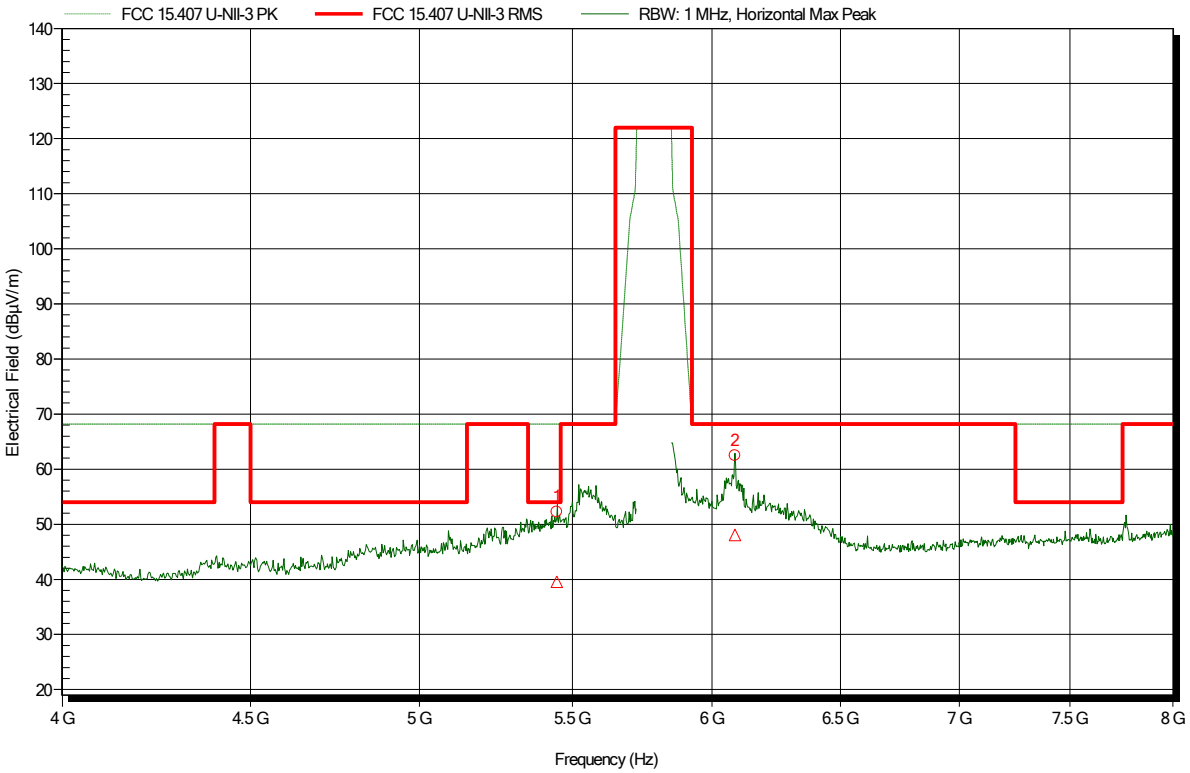

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.447 GHz	52.27 dBµV/m	68.2 dBµV/m	-15.93 dB	Pass
6.087 GHz	62.48 dBµV/m	68.2 dBµV/m	-5.72 dB	Pass

Frequency	RMS	RMS Limit	RMS Difference	RMS Status
5.447 GHz	39.55 dBµV/m	54 dBµV/m	-14.45 dB	Pass
6.087 GHz	48.05 dBµV/m	68.2 dBµV/m	-20.15 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	3 m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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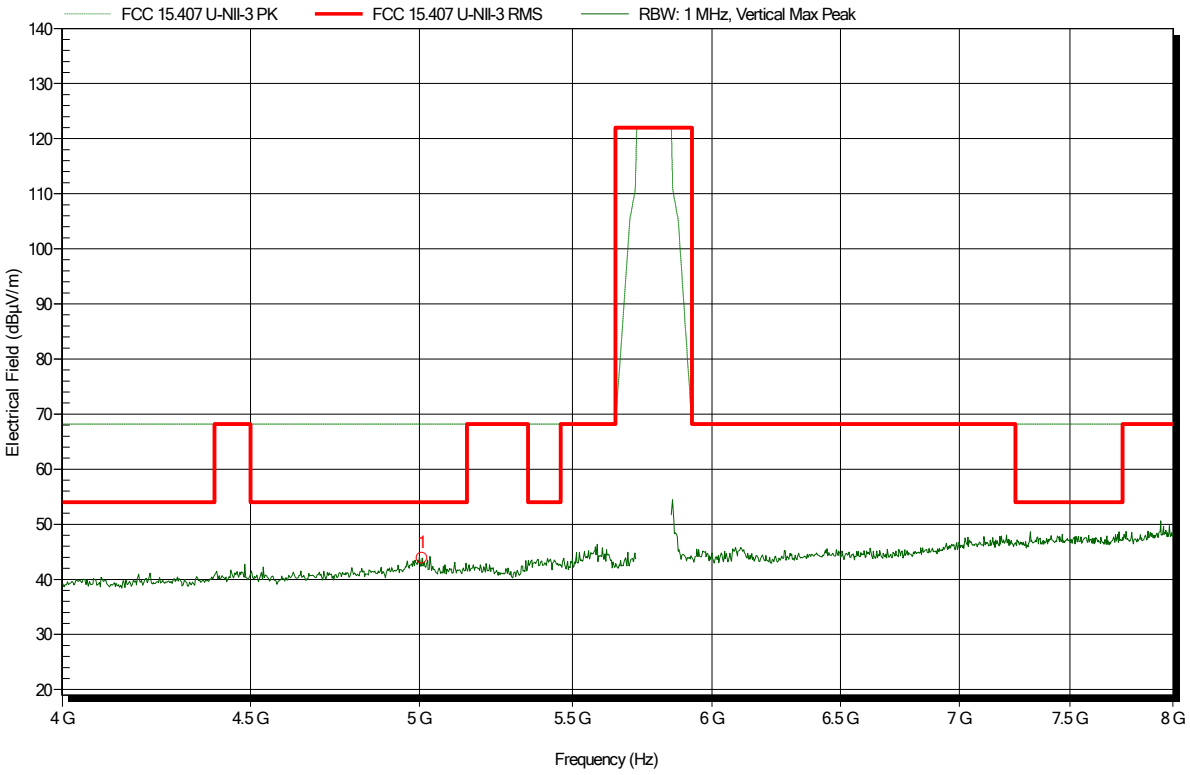

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
5.007 GHz	43.89 dBµV/m	68.2 dBµV/m	-24.31 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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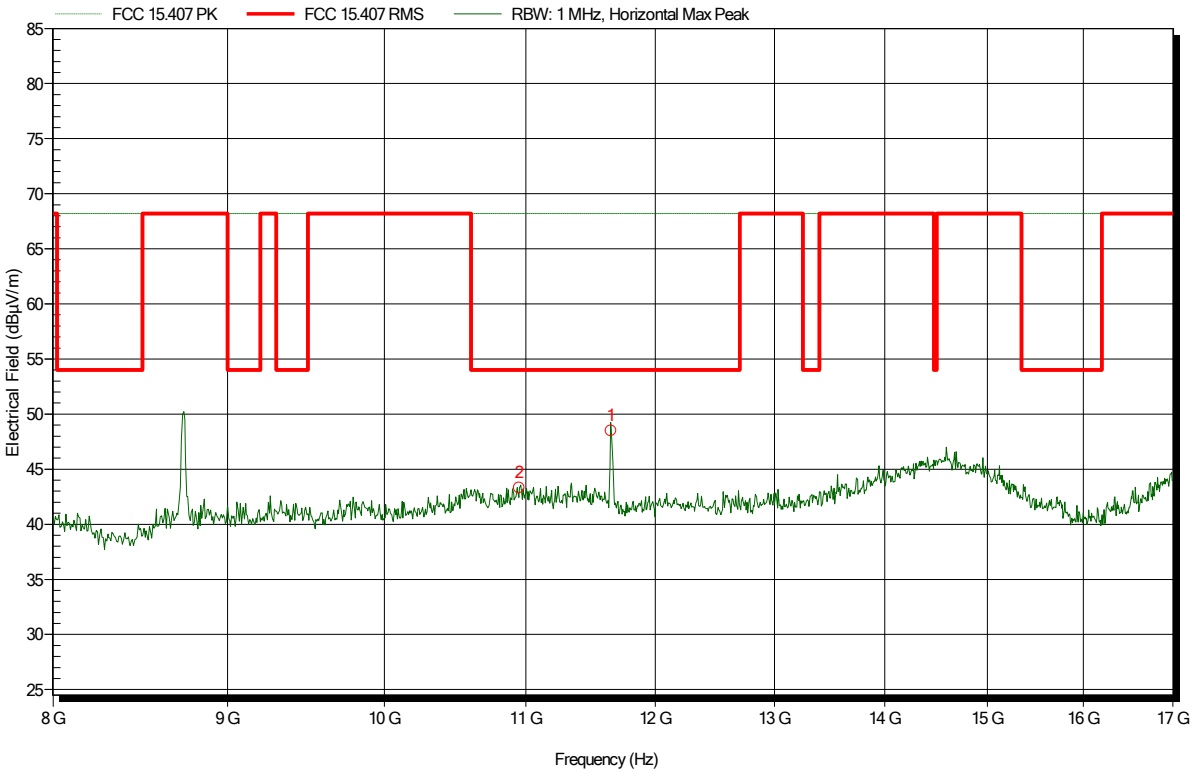

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
10.95 GHz	43.3 dBµV/m	68.2 dBµV/m	-24.9 dB	Pass
11.648 GHz	48.47 dBµV/m	68.2 dBµV/m	-19.73 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Schwarzbeck BBHA 9120D, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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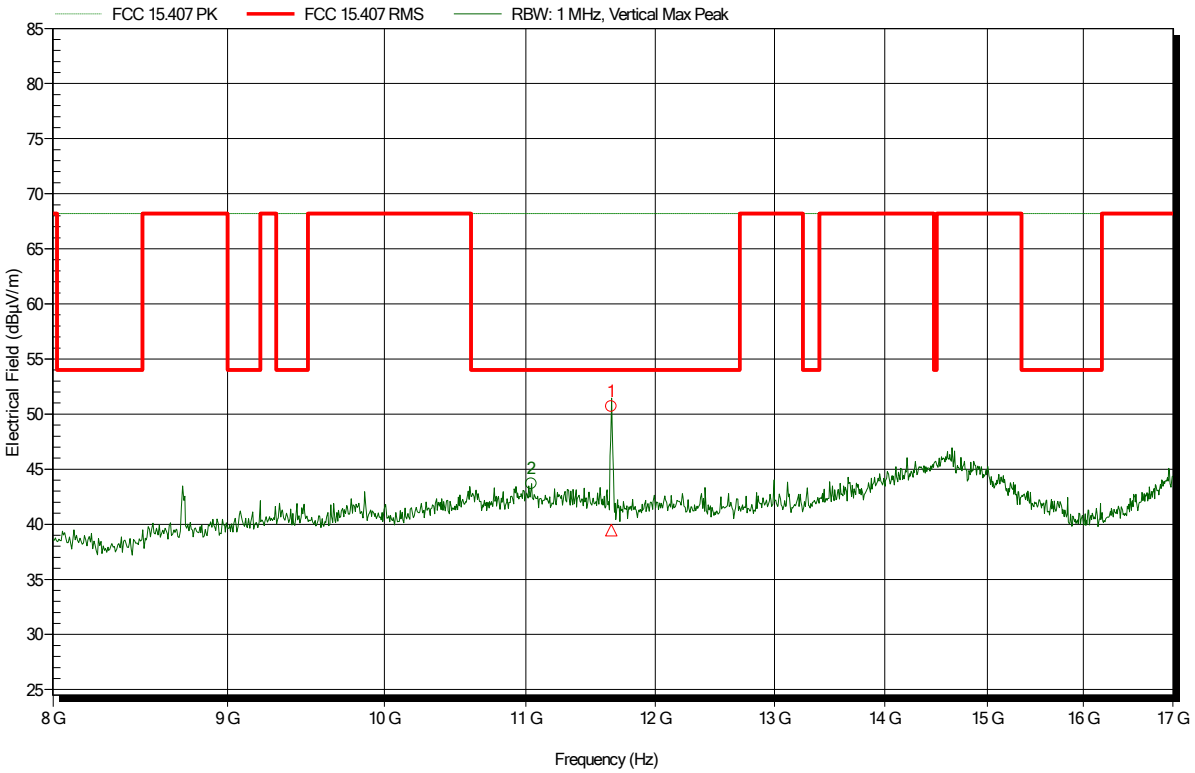

Frequency	Peak	Peak Limit	Peak Difference	Peak Status
11.04 GHz	43.69 dBµV/m	68.2 dBµV/m	-24.51 dB	Pass
11.649 GHz	50.69 dBµV/m	68.2 dBµV/m	-17.51 dB	Pass

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Horizontal
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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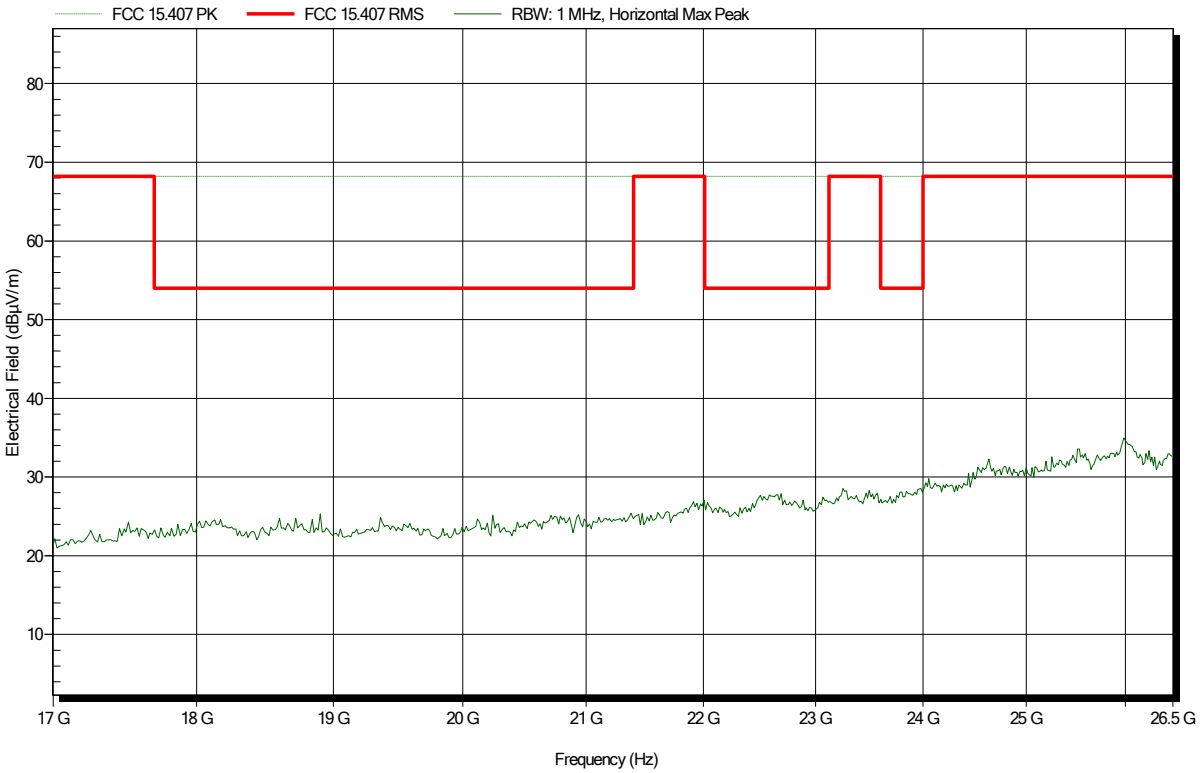

Spurious emissions according to FCC 15.407

Project number:	G0M-1810-7783
Applicant:	Panasonic Industrial Devices Europe GmbH
EUT Name:	Wi-Fi Dual Band 2.4/5 GHz and Bluetooth Module
Model:	ENWF9201A1EF
Test Site:	Eurofins Product Service GmbH
Operator:	Charline Graf
Test Conditions:	Tnom: 23°C, Vnom: 3.3 VDC
Antenna:	Amplifier Research AT4560, Vertical
Measurement distance:	1 m converted to 3m
Mode:	TX; IEEE 802.11a; 6 Mbps; 5825 MHz
Test Date:	2019-01-24
Note:	

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