

RADIO REPORT FCC 47 CFR Part 15C ISED Canada RSS-247 Digital transmission systems operating within the 2400.0 MHz - 2483.5 MHz band	
Report Reference No	G0M-2205-1483-TFC247WF-V02
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	    DAkkS - Registration number : D-PL-12092-01-03 (ISED) ISED Testing Laboratory site: 3470A DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Kistler Instrumente AG
Address	Eulachstrasse 22 8408 Winterthur SWITZERLAND
Test Specification	47 CFR Part 15C RSS-247, Issue 2, 2017-02 RSS-Gen, Issue 5, Amendment 2, 2021-02
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Handheld measurement device
Model(s)	5811A00
Additional Model(s)	None
Brand Name(s)	None
Hardware Version(s)	A
Software Version(s)	1.0
FCC ID	2AWIT-5811A
IC	28487-5811A
Test Result	PASSED

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 °C - 30 °C	
Test Lab Humidity	25 % - 55 %	
Date of receipt of test item	2022-06-23	
Report:		
Compiled by	Radwan Jaafar	
Tested by (+ signature) (Responsible for Test)	Radwan Jaafar	
Approved by (+ signature) (Test Lab Engineer)	Wilfried Treffke	
Date of Issue	2024-01-12	
Total number of pages	62	
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	Handheld measurement device
	Model name	5811A01
	Brand name	N/A
	Hardware Version	A
	Software Version	1.00
	FCC ID	2AWIT-5811A
	IC	28487-5811A
	PMN	Handheld I/O-Link
	HVIN	5811A01
	FVIN	1.0
	HMN	N/A
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	2023-11-16	Initial Release	
02	2024-01-12	Replaced document: G0M-2205-1483-TFC247WF-V01 Replaced by: G0M-2205-1483-TFC247WF-V02 Reason: - Add Additional Variants (not tested) -page 3- - Correction of the antenna gain on section 1. - Add EIRP test results for IC on section 3.1. - Editorial correction to AC powerline conducted emissions on section 3.2.	R. Jaafar

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
BPSK	Binary Phase Shift Keying
DSSS	Direct Sequence Spread Spectrum
EUT	Equipment Under Test
FCC	Federal Communications Commission
HT	High Throughput
IEEE 802.11	MAC and PHY Layer for WiFi
ISED	Innovation, Science and Economic Development Canada
OFDM	Orthogonal Frequency Division Multiplexing
QAM	Quadrature Amplitude Modulation
QPSK	Quadrature Phase Shift Keying
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V _{NOM}	Nominal supply voltage

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1 Equipment (Test Item) Under Test

Description	Handheld measurement device	
Model	5811A00	
Additional Model(s)	None	
Brand Name(s)	None	
Serial Number(s)	Prototype	Radiated Test Sample ID 40272
Hardware Version(s)	A	
Software Version(s)	1.0	
PMN	Handheld Charge	
HVIN	5811A00	
FVIN	1.0	
HMN	n/a	
FCC ID	2AWIT-5811A	
IC	28487-5811A	
Equipment type	End Product	
Radio type	Transceiver	
Assigned frequency bands	2400.0 MHz - 2483.5 MHz	
Radio technology	IEEE 802.11 b/g/n (HT20)	
Modulation	BPSK, QPSK, 16-QAM, 64-QAM	
Number of antenna ports	1	
Radio Module	Type	Bluetooth + Wifi module
	Model	Jody-W263
	Manufacturer	U-Blox
	HW Version	1
	SW Version	1
	FCC-ID	XPYJODYW263
	IC	8595A-JODYW263
Antenna	Type	Integrated
	Model	W3008C
	Manufacturer	Puls
	Gain	1.3 dBi
Supply Voltage	V _{NOM}	5 VDC / 7.2 VDC (Battery)
Operating Temperature	T _{NOM}	25 °C
AC/DC-Adaptor	Model	BI18L-050300-I
	Vendor	EGSTION
	Input	100-240 VAC
	Output	5 VDC
Manufacturer	Kistler Instrumente AG Eulachstrasse 22 8408 Winterthur SWITZERLAND	

1.1 Photos – Equipment External

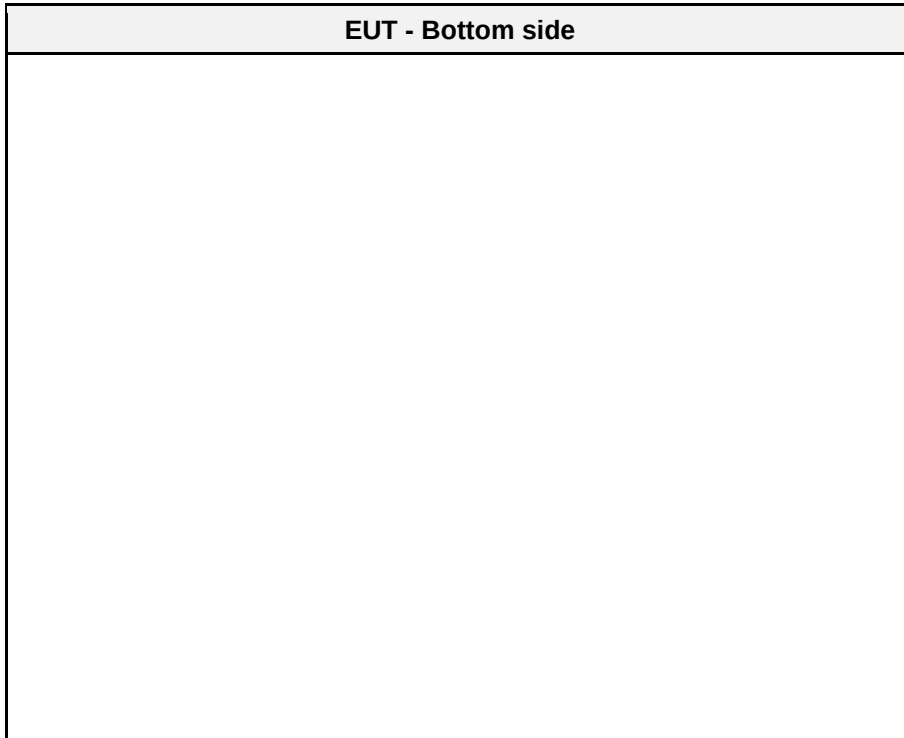
EUT - Front side
STC for all int/ext/ test set up photos

EUT - Rear side

EUT - Left side**EUT - Right side**

EUT - Top side**EUT - Top side - BNC covers removed**

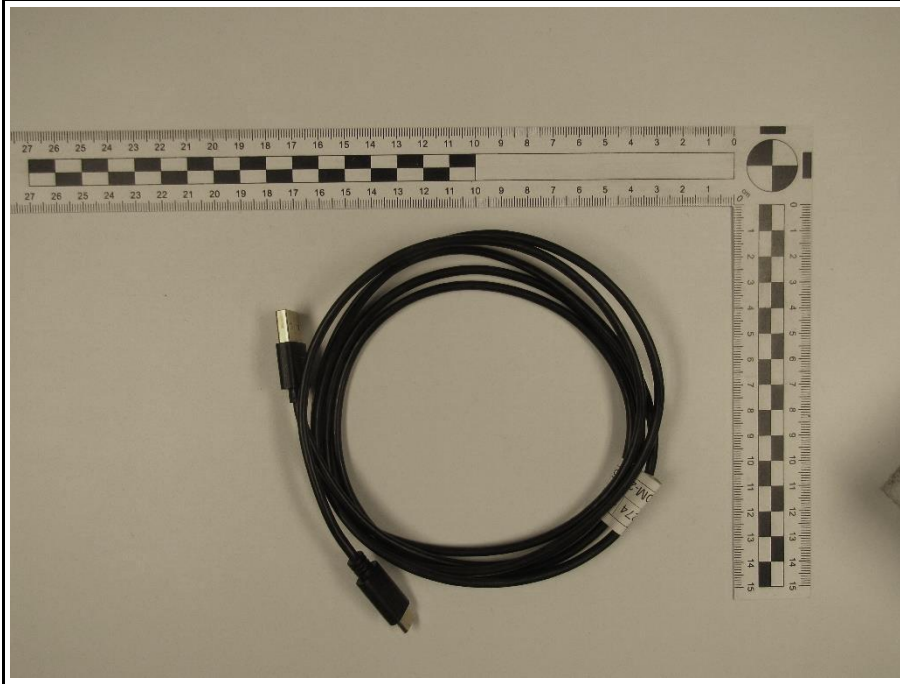
EUT - Bottom side

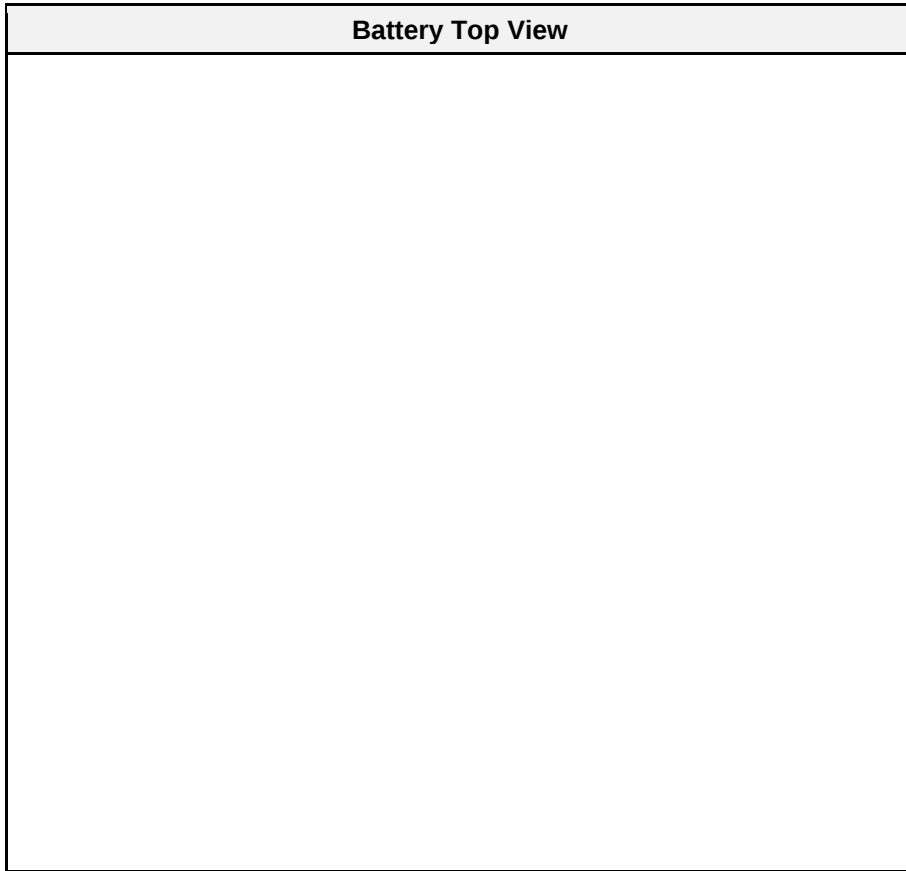
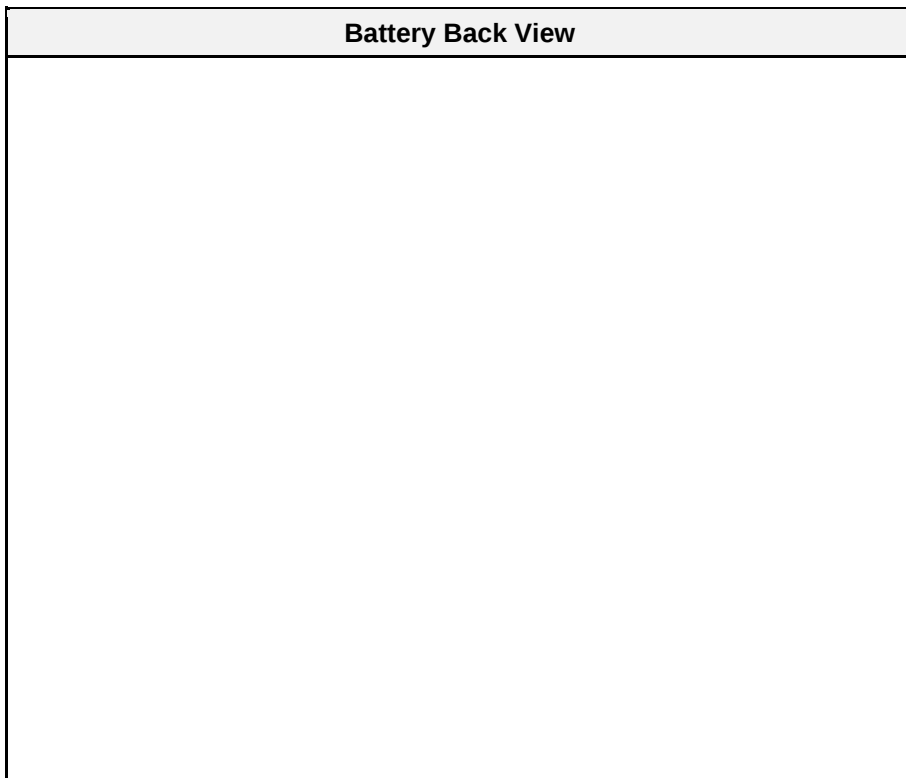


ACDC adapter



Micro USB to USB



Battery Top View**Battery Back View**

Battery Side View (left)



Battery Side View (right)



EUT with auxiliary equipment (AC/DC-Adapter)

EUT with auxiliary equipment

1.2 Photos – Equipment Internal

Internal 1

Internal 2

Internal 3**Internal 4**

Internal 5

Internal 6

Internal 7

Internal 8

Internal 9**Internal 10**

1.3 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Notebook	-	-	For configuring test modes
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.4 Test Modes

Mode	Description
HT20 (IEEE 802.11n)	Mode = Transmit Modulation = OFDM/BPSK Bandwidth = 20 MHz Duty cycle = 100% Power setting = 16 dBm Data rate = 6.5 Mbps MCS = 0
Receive	Mode = Receive
Comment: Worst case was found in module test report number MDE_UBLOX_2008_FCC_02 issued by 7layers GmbH on 2020-12-21.	

1.5 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx	1	2412
F2	Tx / Rx	10	2457
F3	Tx	11	2462

1.6 Sample emission level calculation

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

Reading:

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

A.F.:

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

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

Net:

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

Limit:

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

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

Margin:

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

Example only:

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

2 Result Summary

FCC 47 CFR Part 15C, ISED RSS-247				
Product Standard Reference	Requirement	Reference Method	Result	Remarks
ISED RSS-Gen, Issue 5 A2 (section 6.7)	Occupied Bandwidth	ANSI C63.10-2013	N/R	Informational only
FCC § 15.247(a)(2) ISED RSS-247, Issue 2 (section 5.2)	6 dB Bandwidth	ANSI C63.10-2013	N/T	
FCC § 15.247(b) ISED RSS-247, Issue 2 (section 5.4)	Maximum peak conducted power	ANSI C63.10-2013	PASS	Note 1
FCC § 15.247(e) ISED RSS-247, Issue 2 (section 5.2)	Power spectral density	ANSI C63.10-2013	N/T	
FCC § 15.207 ISED RSS-247, Issue 2 (section 3.1)	AC power line conducted emissions	ANSI C63.10-2013	PASS	
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Band edge compliance	ANSI C63.10-2013	PASS	Note 1
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Conducted spurious emissions	ANSI C63.10-2013	N/T	
FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 A2 (section 6.13)	Transmitter radiated spurious emissions	ANSI C63.10-2013	PASS	
ISED RSS-247, Issue 2 (section 3.1)	Receiver radiated spurious emissions	ANSI C63.4-2014	PASS	
Note 1: Due to the integration of a pre-certified module, only partial and spot check tests were performed with reference to the original test report MDE_UBLOX_2008_FCC_02 issued by 7layers GmbH on 2020-12-21.				
Comment: The Decision Rule is applied on the basis of ETSI TR 102 273 and ETSI TR 100 028. These standards provide guidance on how to calculate and apply measurement uncertainty whilst providing maximum uncertainties allowance. In all cases due consideration will be given to ILAC-G8:09/2019. Where a result is considered conditional in respect of its proximity to the limit line, the customer would be made aware of situation so that they can make an informed decision on how to proceed.				

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 - Maximum peak conducted output power

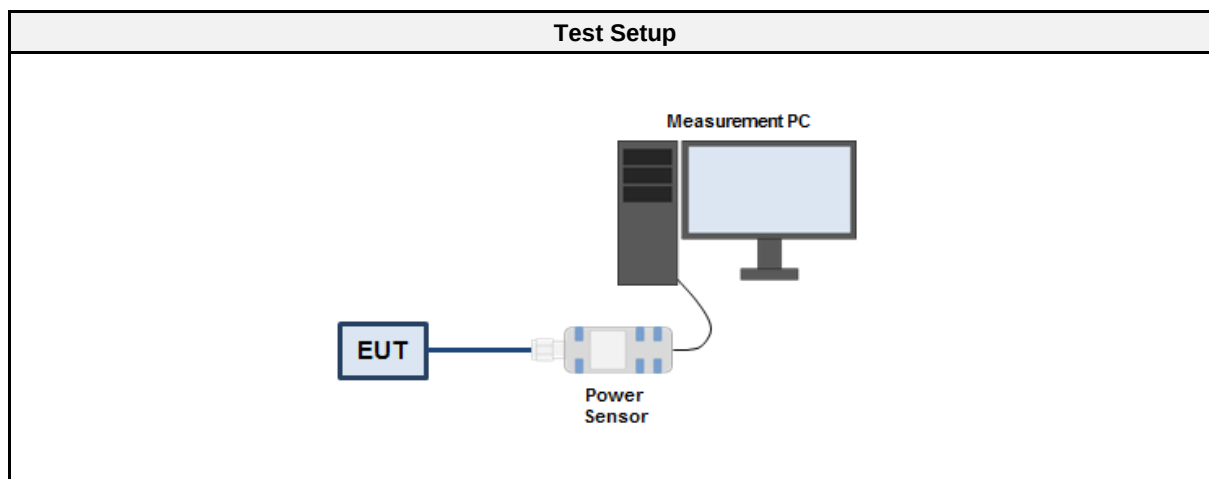
3.1.1 Information

Test Information	
Reference	FCC § 15.247(b); ISED RSS-247, Issue 5 (section 5.4)
Measurement Method	ANSI C63.10 11.9.1
Measurement Uncertainty	± 2.86 dB
Operator	Odai Qawasmeh
Date	2023-02-02

3.1.2 Limits

Limits
1 W (30 dBm)
FCC: The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
ISED: The maximum peak conducted output power shall not exceed 1W. The e.i.r.p. shall not exceed 4 W.

3.1.3 Setup



3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Power sensor	R&S	NRP-Z81	EF00830	2022-09	2023-09

3.1.5 Procedure

Test Procedure	
1. EUT set to test mode (Communication tester is used if needed) 2. The EUT antenna port is connected to a wideband power sensor 3. The peak power is measured with the power sensor 4. If the EUT has more than one transmit chain the procedure is repeated for each transmit chain and the power is summed up	

3.1.6 Results

Test Results							
Channel [MHz]	Conducted Power [dBm]	Conducted Power [W]	Conducted Limit [W]	EIRP Power [dBm]	EIRP Power [W]	EIRP Limit [W]	Verdict
2457	22.98	0.068	1.0	24.28	0.2679	4.0	PASS

3.2 Test Conditions and Results - AC powerline conducted emissions

3.2.1 Information

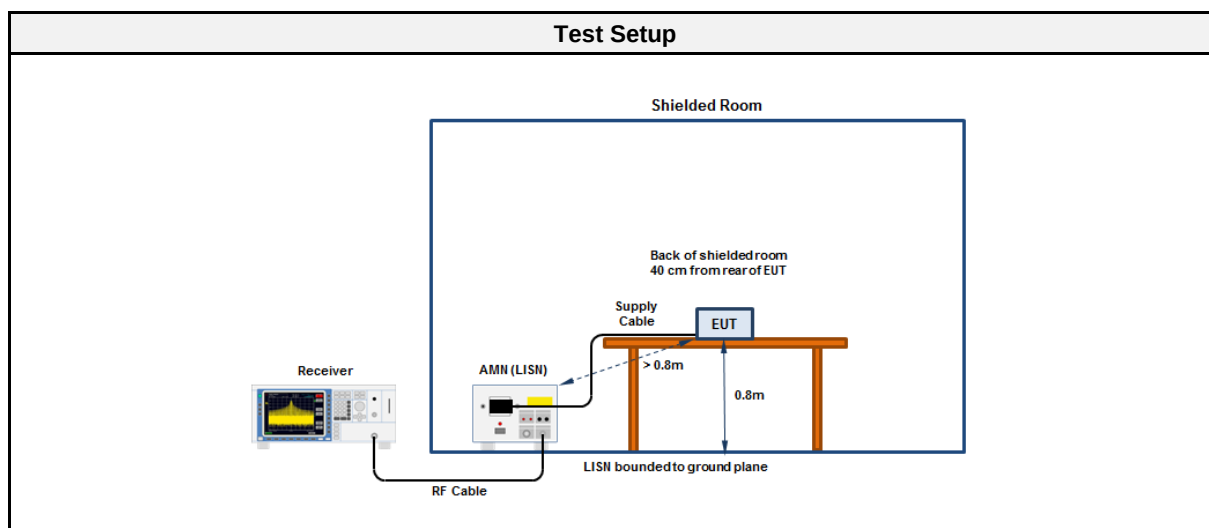
Test Information	
Reference	FCC § 15.207; ISED RSS-247, Issue 5 (section 3.1)
Measurement Method	ANSI C63.10 6.2
Measurement Uncertainty	± 3.82 dB
Operator	Odai Qawasmeh
Date	2022-06-29

3.2.2 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

3.2.3 Setup



3.2.4 Equipment

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

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
EMI Test Receiver	R&S	ESR7	EF00943	2021-08	2022-08
Pulse Limiter	R&S	ESH3-Z2	EF01222	2021-07	2022-07
LISN	Schwarzbeck	NSLK 8127 RC	EF01592	2021-07	2022-07

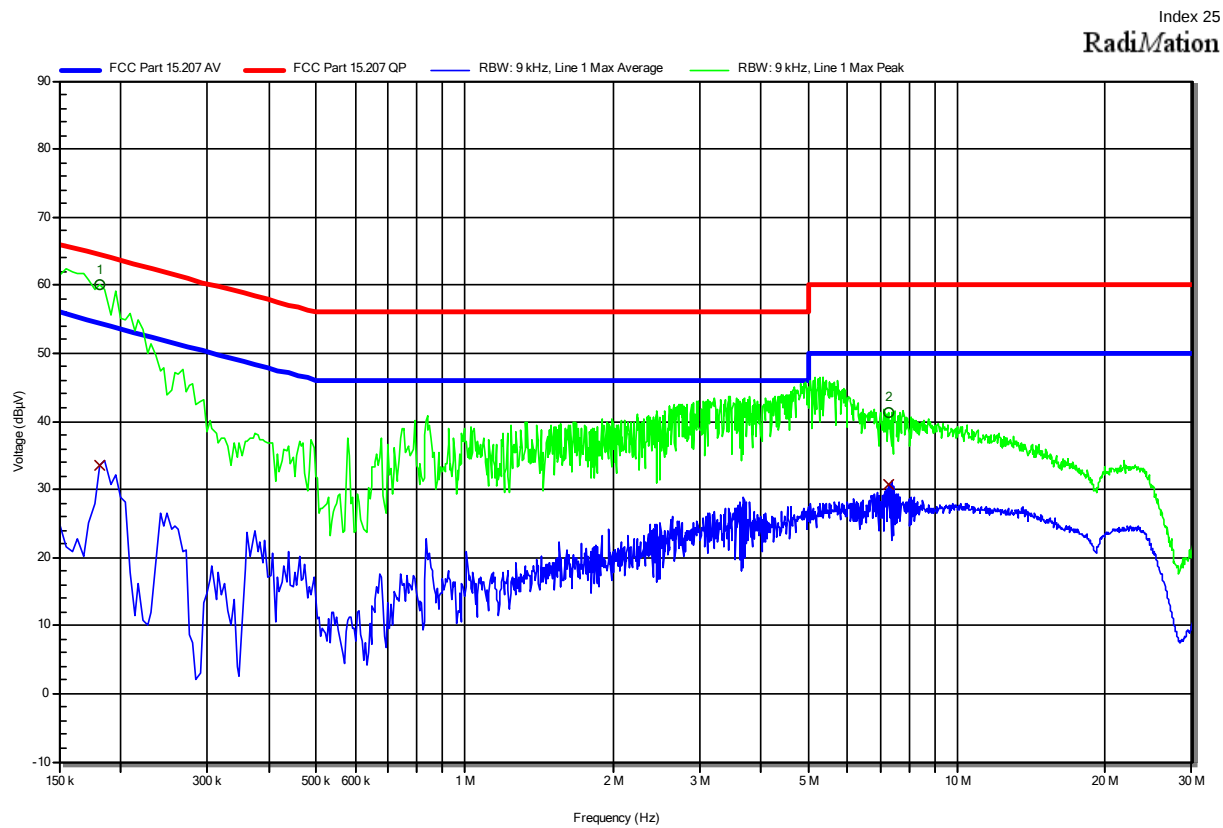
3.2.5 Setup Photos

Setup for measurements 150 kHz – 30 MHz

Setup for measurements 150 kHz – 30 MHz

Conducted emissions at the mains power port according to FCC 15.207; RSS-247 – Issue 2

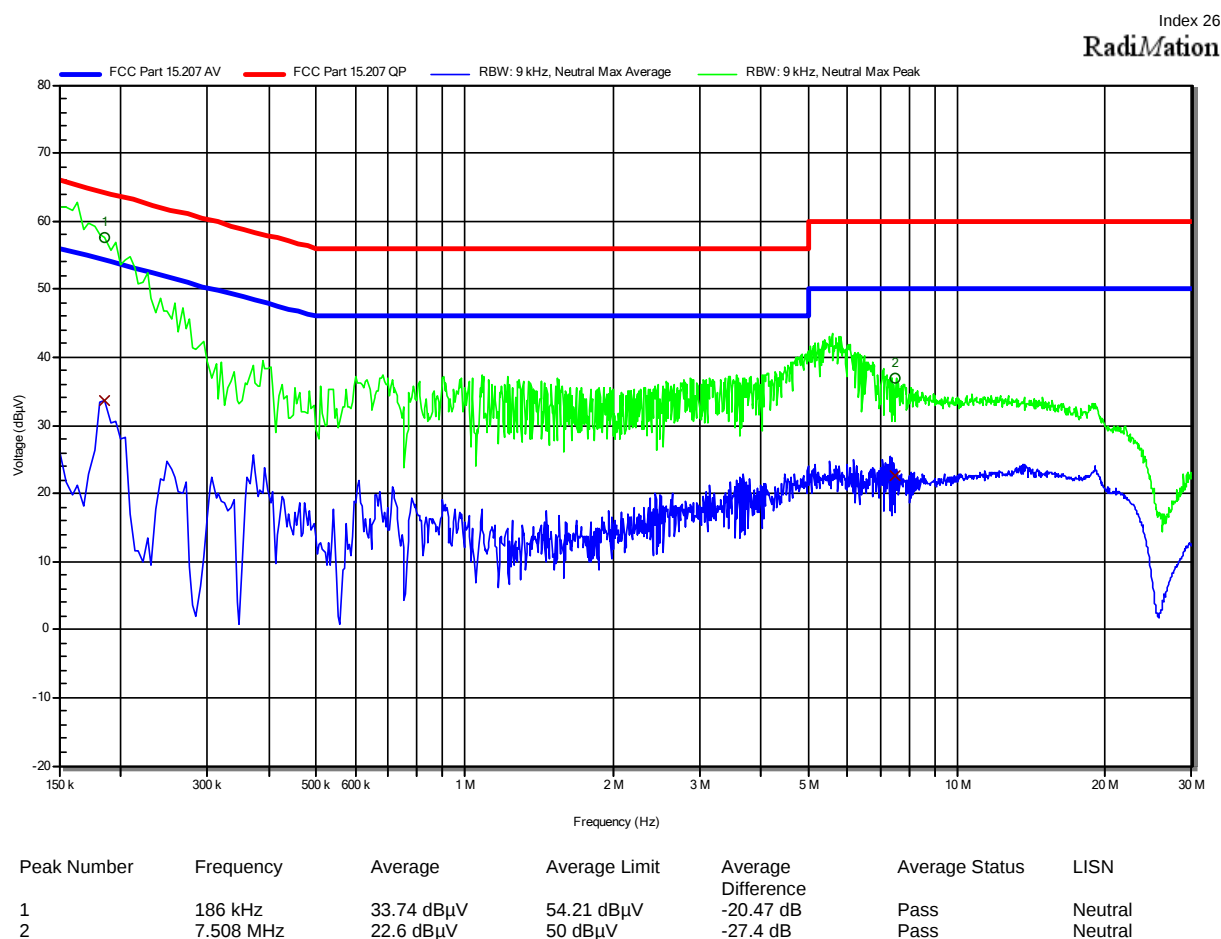
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40273
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Degenhardt
 Test Date: 2022-06-29
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 7.2 VDC
 LISN: Schwarzbeck NSLK 8127 RC L1
 Operational Mode: Tx, IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 EUT Configuration:
 Applied to Port: 120 VAC / 60 Hz
 Note 1:



Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	181.5 kHz	33.44 dBµV	54.42 dBµV	-20.98 dB	Pass	Line 1
2	7.251 MHz	30.81 dBµV	50 dBµV	-19.19 dB	Pass	Line 1

Conducted emissions at the mains power port according to FCC 15.207; RSS-247 – Issue 2

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40273
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Degenhardt
 Test Date: 2022-06-29
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 7.2 VDC
 LISN: Schwarzbeck NSLK 8127
 Operational Mode: Tx, IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 EUT Configuration:
 Applied to Port: 120 VAC / 60 Hz
 Note 1:

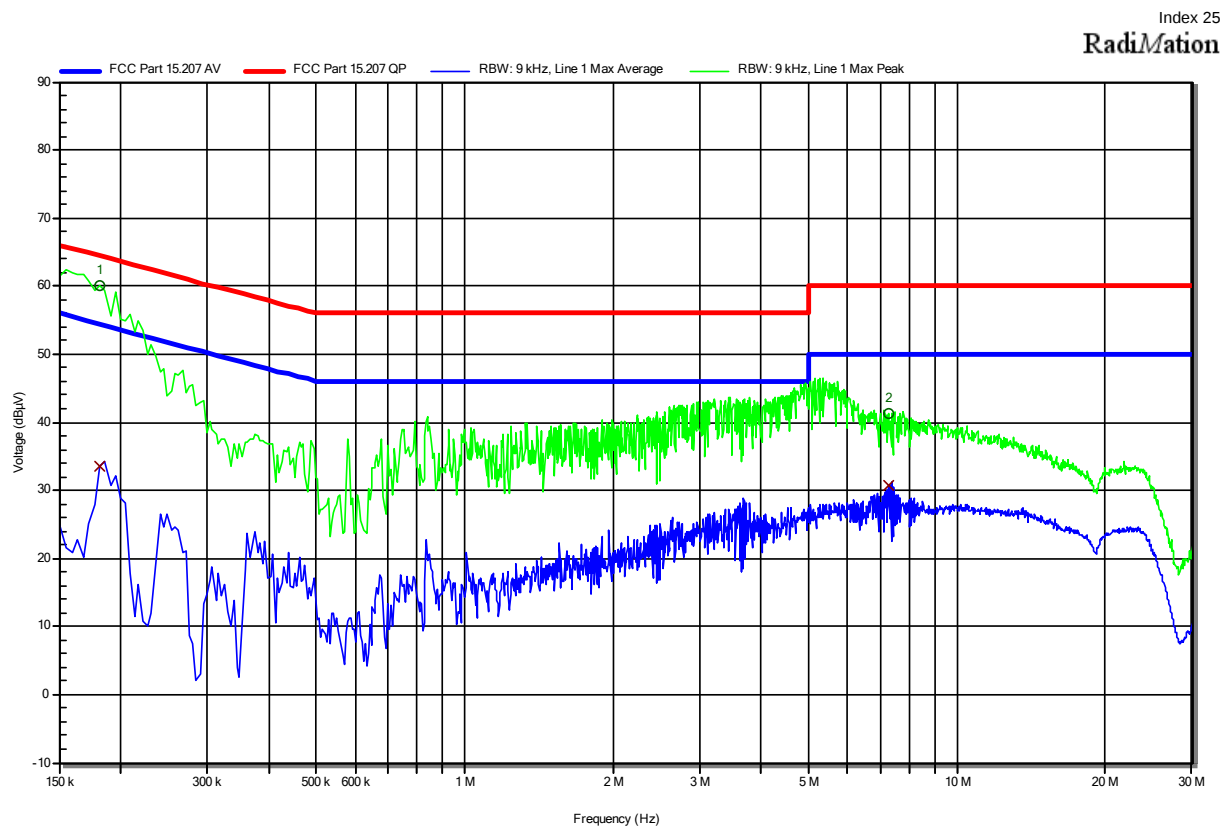


Conducted emissions at the mains power port according to RSS-247; RSS-Gen

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40273
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Degenhardt
 Test Date: 2022-06-29
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 7.2 VDC
 LISN: Schwarzbeck NSLK 8127 RC L1
 Operational Mode: Rx, IEEE802.11n, 2457 MHz, 20 MHz Bandwidth
 EUT Configuration:

Applied to Port: 120 VAC / 60 Hz

Note 1:



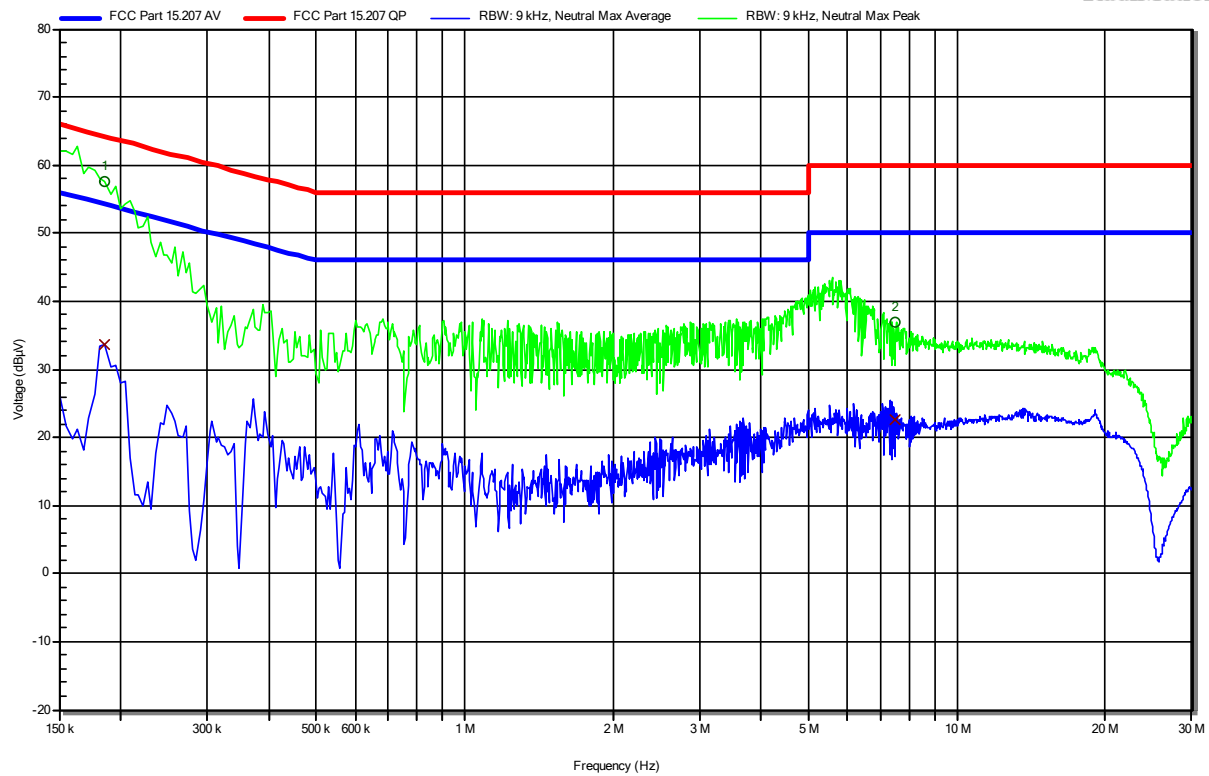
Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	181.5 kHz	33.44 dBµV	54.42 dBµV	-20.98 dB	Pass	Line 1
2	7.251 MHz	30.81 dBµV	50 dBµV	-19.19 dB	Pass	Line 1

Conducted emissions at the mains power port according to RSS-247; RSS-Gen

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40273
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Degenhardt
 Test Date: 2022-06-29
 Operating Conditions: ambient temperature: 23 °Celsius
 power input: 7.2 VDC
 LISN: Schwarzbeck NSLK 8127
 Operational Mode: Rx, IEEE802.11n, 2457 MHz, 20 MHz Bandwidth
 EUT Configuration:
 Applied to Port: 120 VAC / 60 Hz
 Note 1:

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RadiMation



Peak Number	Frequency	Average	Average Limit	Average Difference	Average Status	LISN
1	186 kHz	33.74 dBµV	54.21 dBµV	-20.47 dB	Pass	Neutral
2	7.508 MHz	22.6 dBµV	50 dBµV	-27.4 dB	Pass	Neutral

3.3 Test Conditions and Results - Band-edge compliance

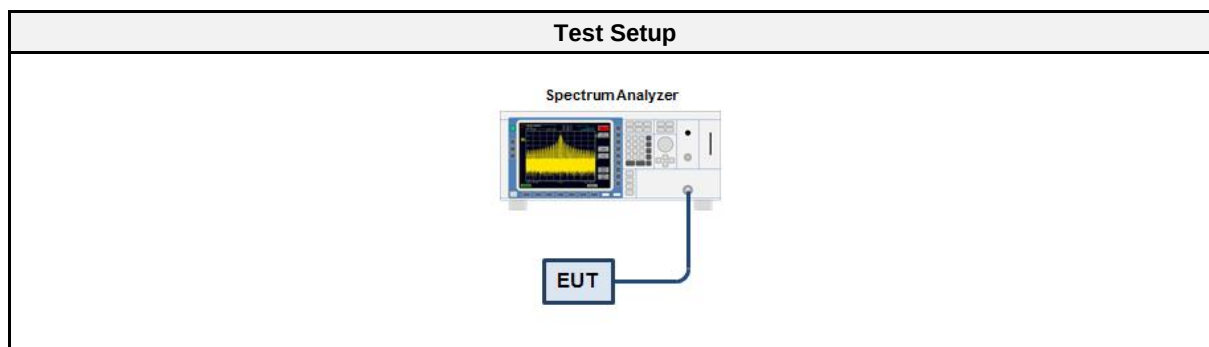
3.3.1 Information

Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 5 (section 5.5)
Measurement Uncertainty	± 3.64 dB
Measurement Method	ANSI C63.10 11.13
Operator	Odai Qawasmeh
Date	2023-02-02

3.3.2 Limits

Limits	
Power Measurement	Out-of-band attenuation [dB]
Peak	20
RMS	30

3.3.3 Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSU26	EF01003	2022-07	2023-07
Cable	Gigalane	CAAAZ	EF00779	2022-02	2023-02

3.3.5 Procedure

Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Span set around lower band edge and detector is set to peak and max hold 3. Resolution bandwidth is set to 100 kHz 4. Markers are set to peak emission levels within frequency band and outside frequency band 5. Band edge attenuation is determined from level difference

3.3.6 Results

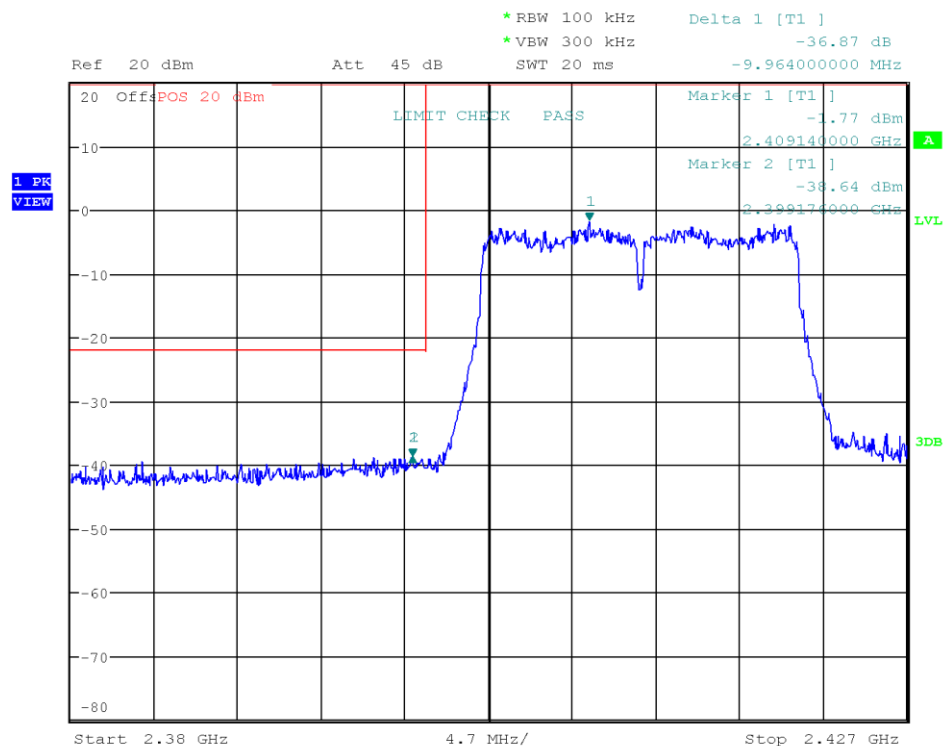
Test Results				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
OFDM (IEEE 802.11n)	2412	-36.87	-20	PASS
OFDM (IEEE 802.11n)	2462	-36.47	-20	PASS

Test Report No.: G0M-2205-1483-TFC247WF-V02

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

Emissions in nonrestricted frequency bands at the Band-edge

Project Number:	G0M-2205-1483
Applicant:	Kistler Instrumente AG
Model Description:	Handheld
Model:	5811A
Test Sample ID:	41714
Reference Standards:	FCC 15.247, RSS-247
Reference Method:	ANSI C63.10:2013, Section 11.11
Operational Mode:	IEEE 802.11 n HT20, Channel: 1, 2412 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Odai Qawasmeh
Test Site:	Eurofins Product Service GmbH
Test Date:	2023-02-02
Note:	Spot Check ISED
Band-edge	Lower
In-band Frequency [MHz]:	2409.14
Max. in-band Level [dBm/100 kHz]:	-1.775
Out-of-band Frequency [MHz]:	2399.176
Max. out-of-band Level [dBm/100 kHz]:	-38.641
Attenuation [dB]:	-36.87



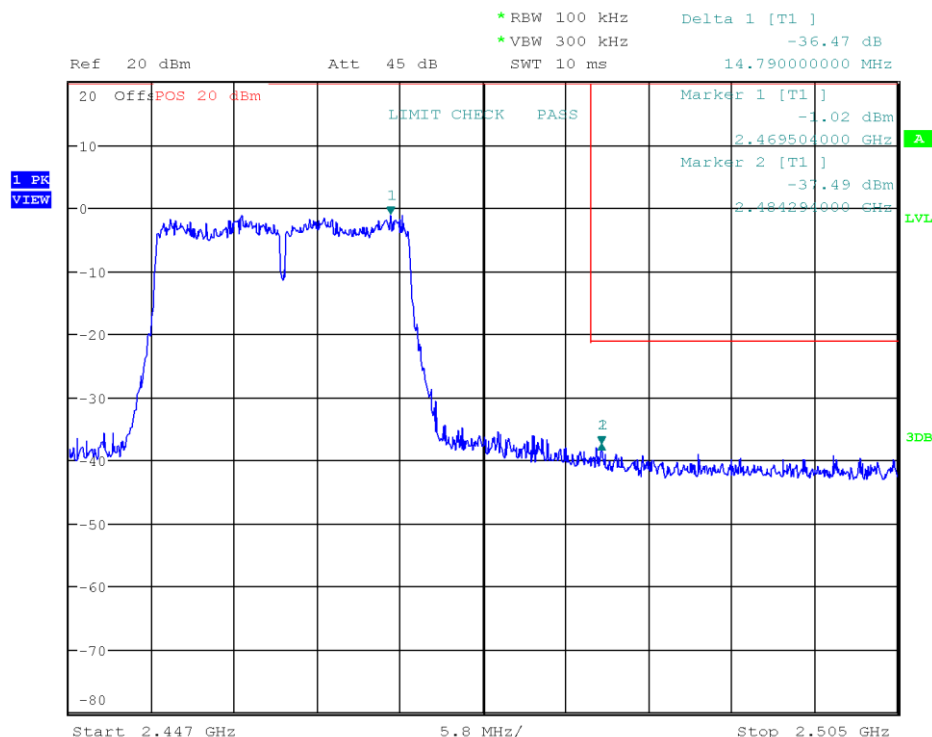
Date: 2.FEB.2023 14:54:22

Test Report No.: G0M-2205-1483-TFC247WF-V02

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

Emissions in nonrestricted frequency bands at the Band-edge

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 41714
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: IEEE 802.11 n HT20, Channel: 11, 2462 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Odai Qawasmeh
 Test Site: Eurofins Product Service GmbH
 Test Date: 2023-02-02
 Note: Spot Check ISSED
 Band-edge: Upper
 In-band Frequency [MHz]: 2469.504
 Max. in-band Level [dBm/100 kHz]: -1.021
 Out-of-band Frequency [MHz]: 2484.294
 Max. out-of-band Level [dBm/100 kHz]: -37.492
 Attenuation [dB]: -36.47



Date: 2.FEB.2023 14:57:51

Test Report No.: G0M-2205-1483-TFC247WF-V02

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

3.4 Test Conditions and Results - Transmitter radiated emissions

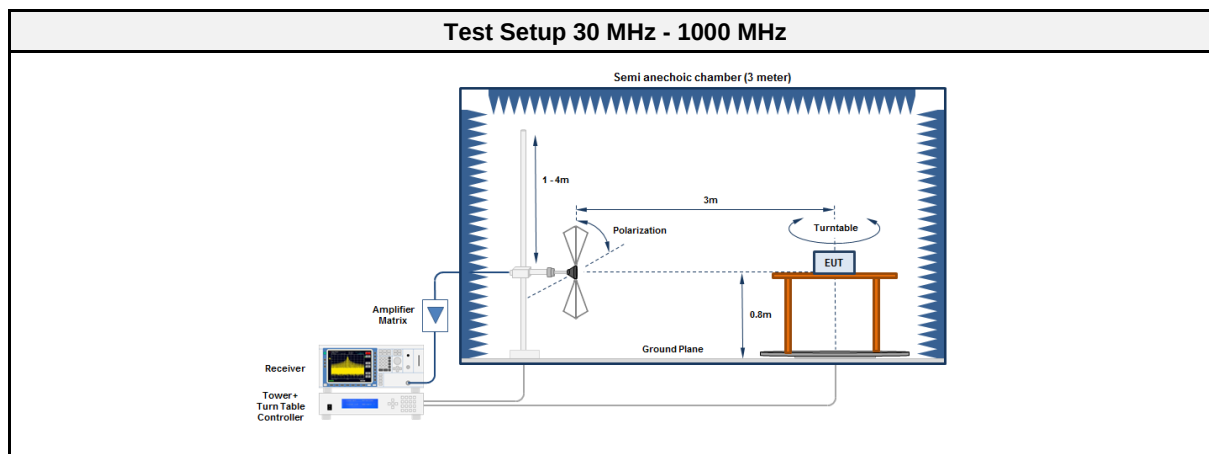
3.4.1 Information

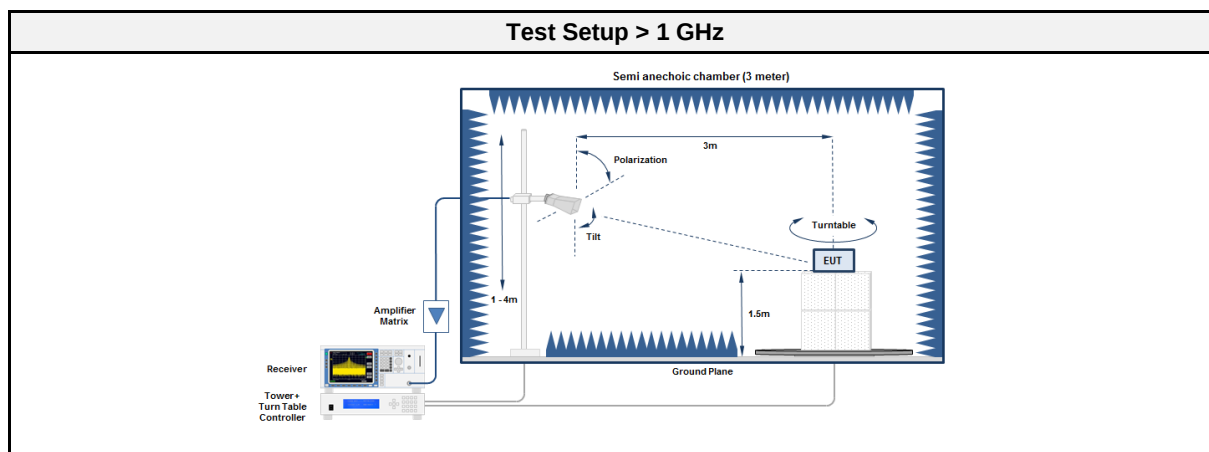
Test Information	
Reference	FCC § 15.247(d); FCC § 15.209; ISSED RSS-Gen, Issue 5 A2 (section 6.13)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Odai Qawasmeh
Date	2022-07-01

3.4.2 Limits

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

3.4.3 Setup





3.4.4 Equipment

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

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2022-06	2025-06

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic chamber	Frankonia	AC 2	EF01616	2021-09	2022-09
Spectrum analyzer	R&S	FSU43	EF01631	2021-07	2022-07
Horn antenna	Schwarzbeck	BBHA 9120B	EF01678	2021-03	2024-03
Horn Antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2024-03
Antenna	Amplifier Research	AT4560	EF00302	2021-06	2023-06

3.4.5 Procedure

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

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

3.4.6 Results

Test Results - HT20						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
2457	156.7882	33.90	qpk	ver	43.50	-09.57
2457	156.8158	32.30	pk	ver	43.50	-11.20
2457	165.979	36.00	qpk	ver	43.50	-07.50
2457	171.4627	33.60	qpk	ver	43.50	-09.89
2457	330.64	33.10	pk	ver	46.00	-12.86
2457	330.96	35.10	pk	ver	46.00	-10.91
2457	960.02	42.50	pk	ver	54.00	-11.55
2457	960.02	41.10	pk	ver	54.00	-12.86
2457	1100	45.10	pk	ver	74.00	-28.90
2457	1100	40.40	avg	ver	54.00	-13.60
2457	17768	43.27	pk	ver	74.00	-30.73
2457	17768	31.54	avg	ver	54.00	-22.46
2457	17850	43.80	pk	ver	74.00	-30.20
2457	17850	32.34	avg	ver	54.00	-21.66
2457	18472	48.80	pk	ver	74.00	-25.20
2457	18472	36.02	avg	ver	54.00	-17.98
2457	20662	49.09	pk	ver	74.00	-24.91
2457	20662	36.33	avg	ver	54.00	-17.67

3.4.7 Setup Photos

Setup for measurements below 1 GHz

EUT Test Setup

Setup for measurements above 1 GHz**EUT Test Setup**

3.5 Test Conditions and Results - Receiver radiated emissions

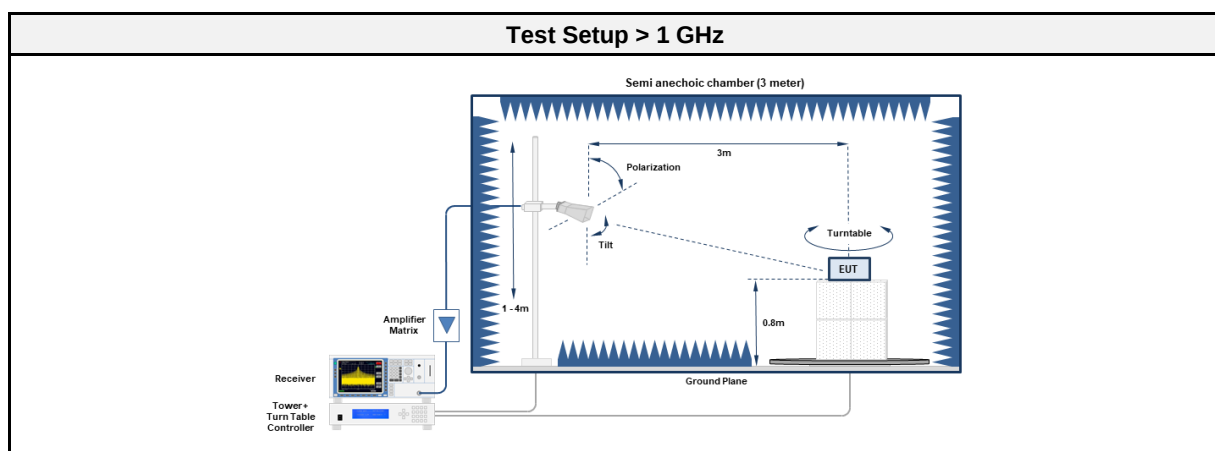
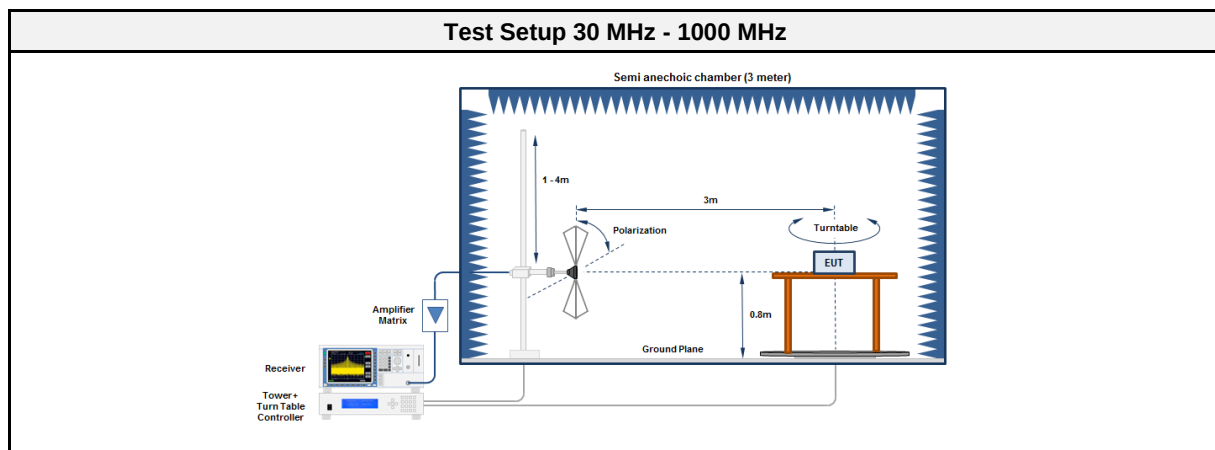
3.5.1 Information

Test Information	
Reference	ISED RSS-247, Issue 5 (section 3.1)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.4-2014 8.1-8.3
Operator	Odai Qawasmeh
Date	2022-07-01

3.5.2 Limits

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

3.5.3 Setup



3.5.4 Equipment

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

Test Equipment 30 MHz - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2022-06	2025-06

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2021-02	2024-02
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2021-07	2022-07
Horn antenna	Schwarzbeck	BBHA 9120B	EF01678	2021-03	2024-03
Horn Antenna	Schwarzbeck	HWRD 650	EF01679	2021-03	2024-03

3.5.5 Procedure

Test Procedure	
1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground 2. EUT is 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	

3.5.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
2457	148.6121	35.20	qpk	ver	43.50	-08.28
2457	154.8459	30.10	qpk	ver	43.50	-13.42
2457	154.8998	35.80	qpk	ver	43.50	-07.67
2457	160.0051	35.90	qpk	ver	43.50	-07.61
2457	160.0868	37.40	qpk	ver	43.50	-06.10
2457	166.0424	36.80	qpk	ver	43.50	-06.68
2457	169.5318	27.60	qpk	ver	43.50	-15.91
2457	199.095	32.00	qpk	ver	43.50	-11.48
2457	199.1465	35.80	qpk	ver	43.50	-07.73
2457	201.508	29.90	qpk	ver	43.50	-13.56
2457	202.9013	27.90	qpk	ver	43.50	-15.64
2457	287.544	34.60	qpk	ver	46.00	-11.43
2457	342.9682	31.80	qpk	ver	46.00	-14.24
2457	879.9774	39.80	qpk	ver	46.00	-06.22
2457	879.9954	40.00	qpk	ver	46.00	-06.00
2457	899.9906	41.10	qpk	ver	46.00	-04.95
2457	900.0312	37.90	qpk	ver	46.00	-08.13
2457	919.9913	38.70	qpk	ver	46.00	-07.26
2457	919.9959	40.60	qpk	ver	46.00	-05.44
2457	949.991	37.60	qpk	ver	46.00	-08.40
2457	950.0062	42.60	qpk	ver	46.00	-03.38
2457	959.9907	43.20	qpk	ver	46.00	-02.76
2457	959.9954	40.50	qpk	ver	46.00	-05.53
2457	1020	47.02	pk	ver	74.00	-26.98
2457	1020	36.77	avg	ver	53.98	-17.21
2457	6245	50.36	pk	ver	74.00	-23.64
2457	6245	38.22	avg	ver	53.98	-15.76
2457	17841	48.79	pk	ver	74.00	-25.21
2457	17841	39.19	avg	ver	53.98	-14.79

3.5.7 Setup Photos

Setup for measurements below 1 GHz

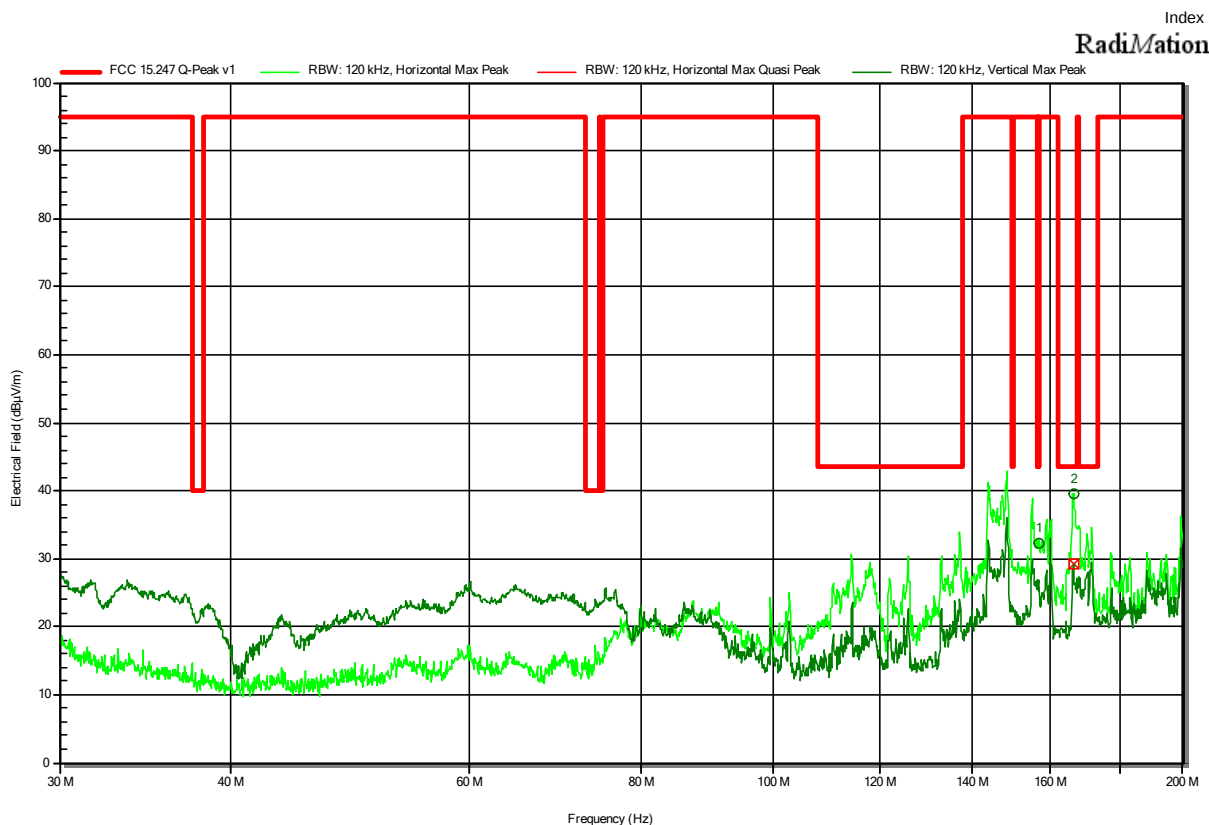
Setup for measurements above 1 GHz

EUT Test Setup

ANNEX A Transmitter spurious emissions

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

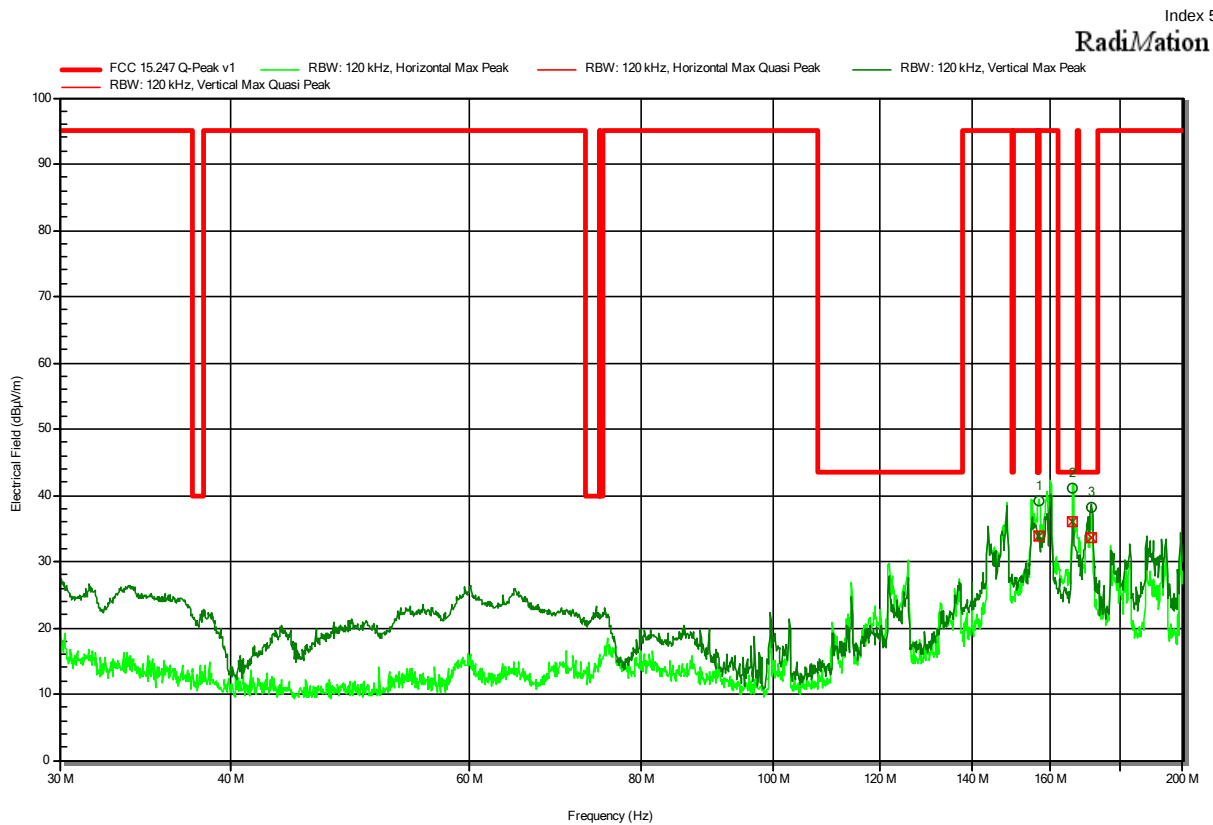
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HK 116
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-08
 Note: EUT horizontal



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
156.8158 MHz	32.3 dBµV/m	43.5 dBµV/m	-11.2 dB	Pass	Horizontal
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
166.3381 MHz	29.1 dBµV/m	43.5 dBµV/m	-14.38 dB	Pass	Horizontal

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

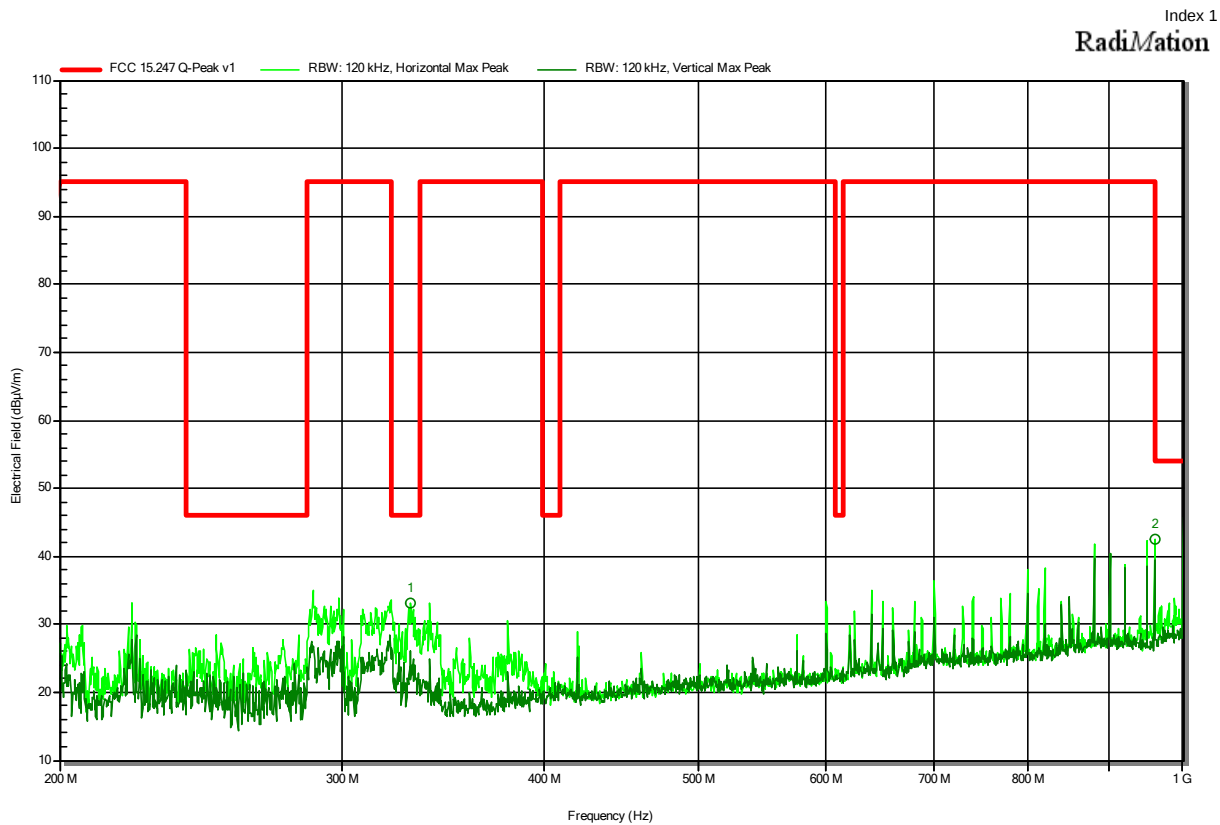
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HK 116
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-08
 Note: EUT vertical



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
156.7882 MHz	33.9 dBμV/m	43.5 dBμV/m	-9.57 dB	Pass	Horizontal
165.979 MHz	36 dBμV/m	43.5 dBμV/m	-7.5 dB	Pass	Horizontal
171.4627 MHz	33.6 dBμV/m	43.5 dBμV/m	-9.89 dB	Pass	Vertical

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

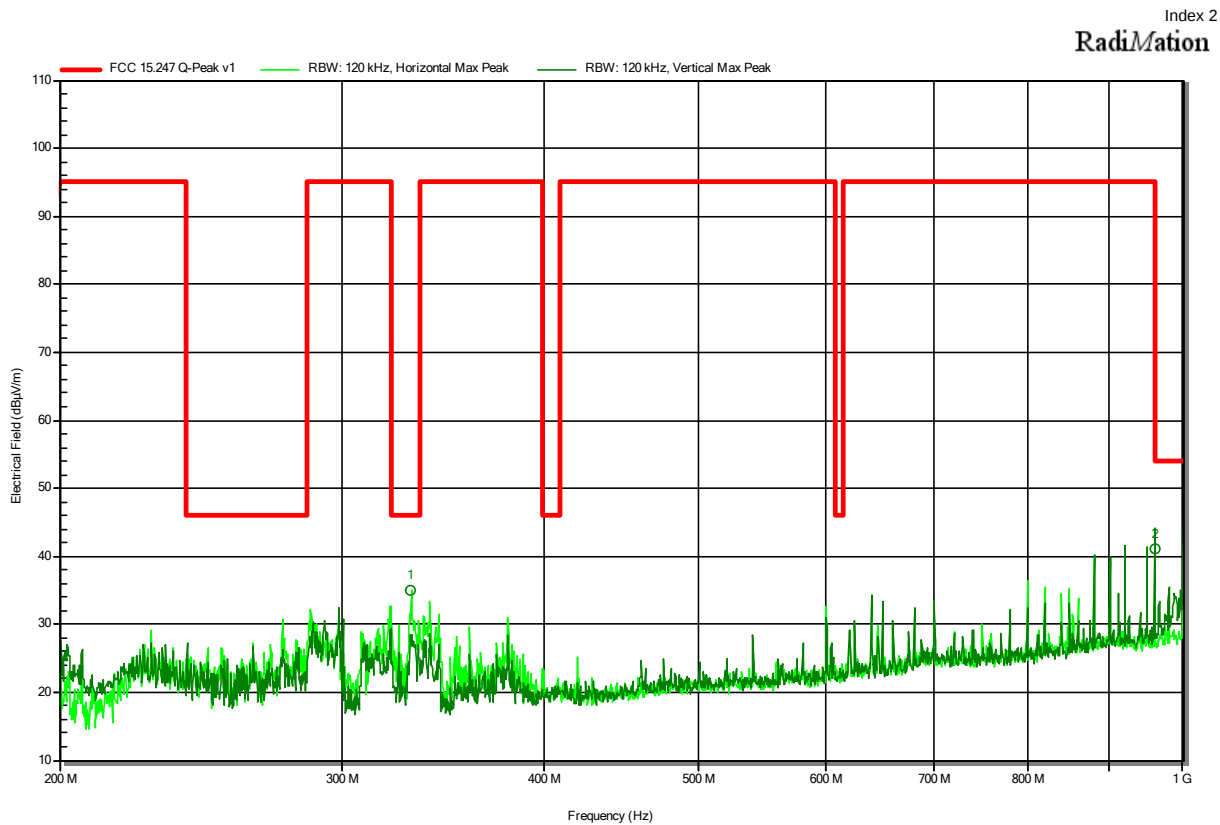
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HL 223
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-06
 Note: EUT horizontal



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
330.64 MHz	33.1 dBμV/m	46 dBμV/m	-12.86 dB	Pass	Horizontal
960.02 MHz	42.5 dBμV/m	54 dBμV/m	-11.55 dB	Pass	Horizontal

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HL 223
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-06
 Note: EUT vertical



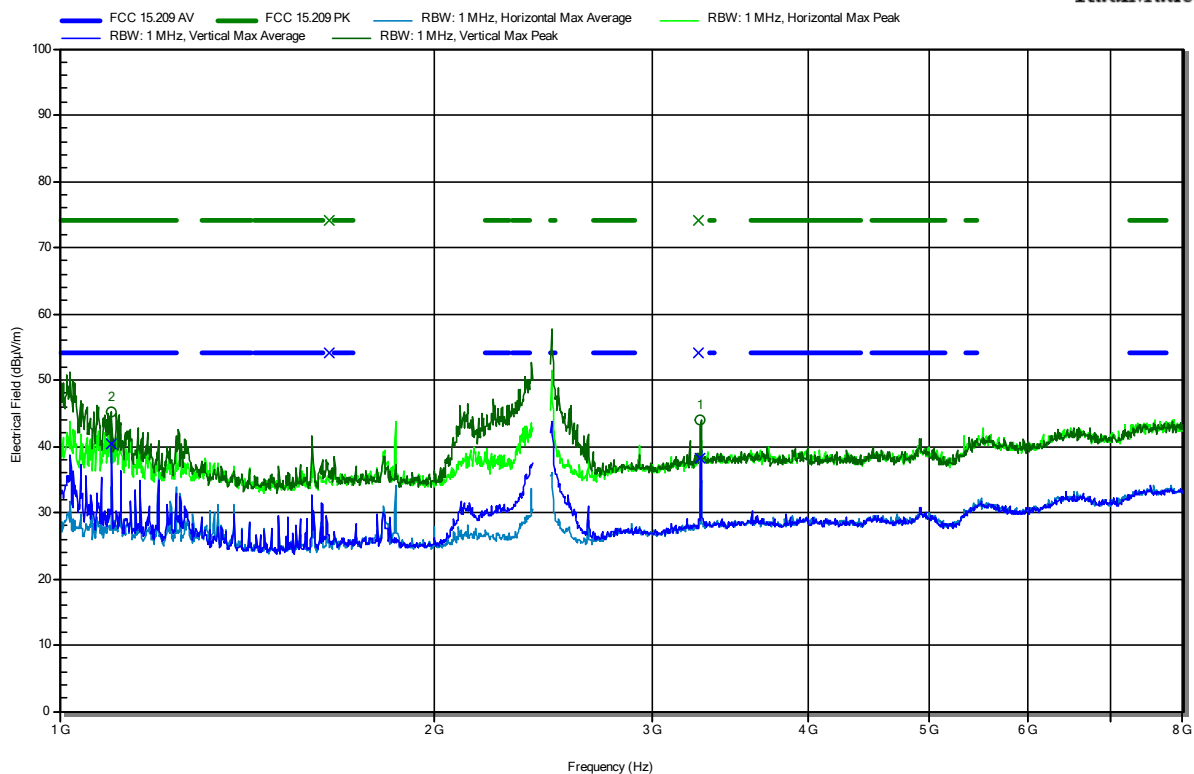
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
330.96 MHz	35.1 dBμV/m	46 dBμV/m	-10.91 dB	Pass	Horizontal
960.02 MHz	41.1 dBμV/m	54 dBμV/m	-12.86 dB	Pass	Vertical

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Godson Offorji
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Schwarzbeck BBHA 9120B
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-14
 Note: Power = 16 dBm
 EUT vertical

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RadiMation



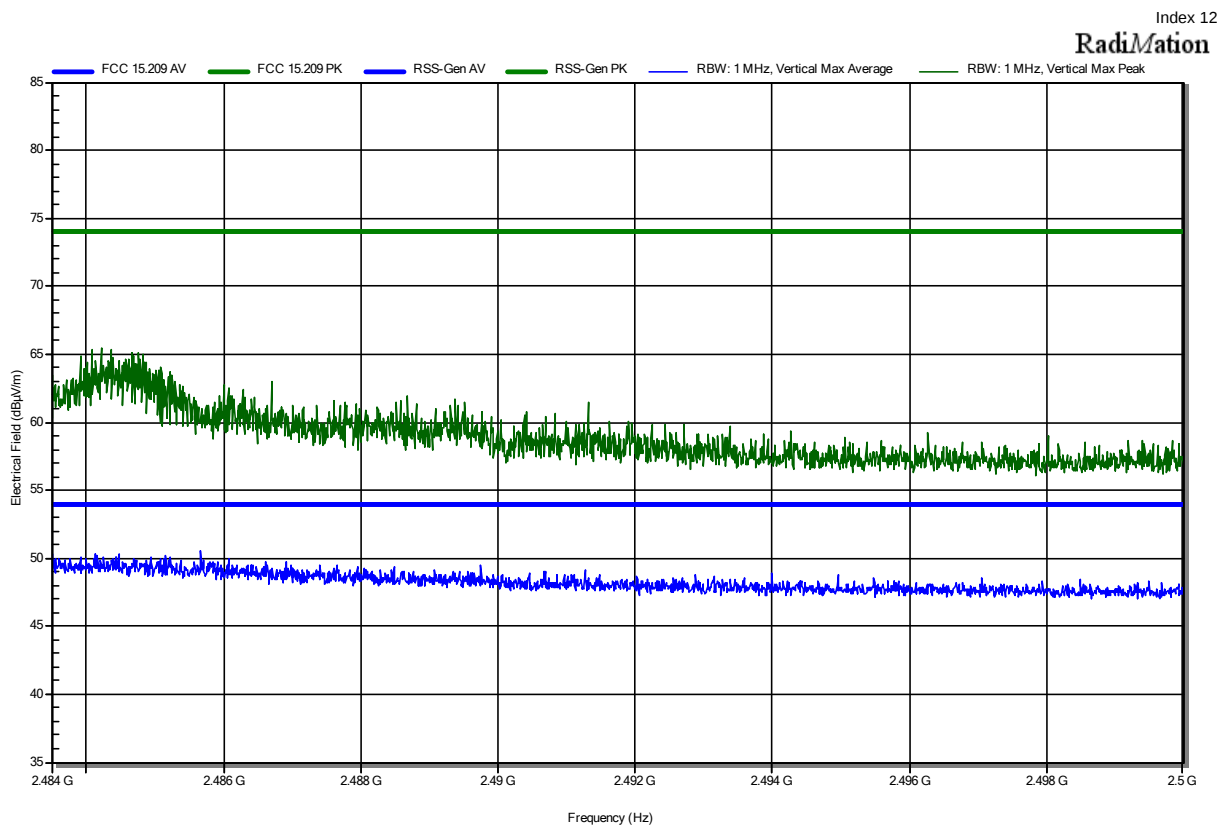
Frequency 1.1 GHz	Peak 45.1 dBμV/m	Peak Limit 74 dBμV/m	Peak Difference -28.9 dB	Peak Status Pass	Polarization Vertical
Frequency 1.1 GHz	Average 40.4 dBμV/m	Average Limit 54 dBμV/m	Average Difference -13.6 dB	Average Status Pass	Polarization Vertical

Test Report No.: G0M-2205-1483-TFC247WF-V02

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

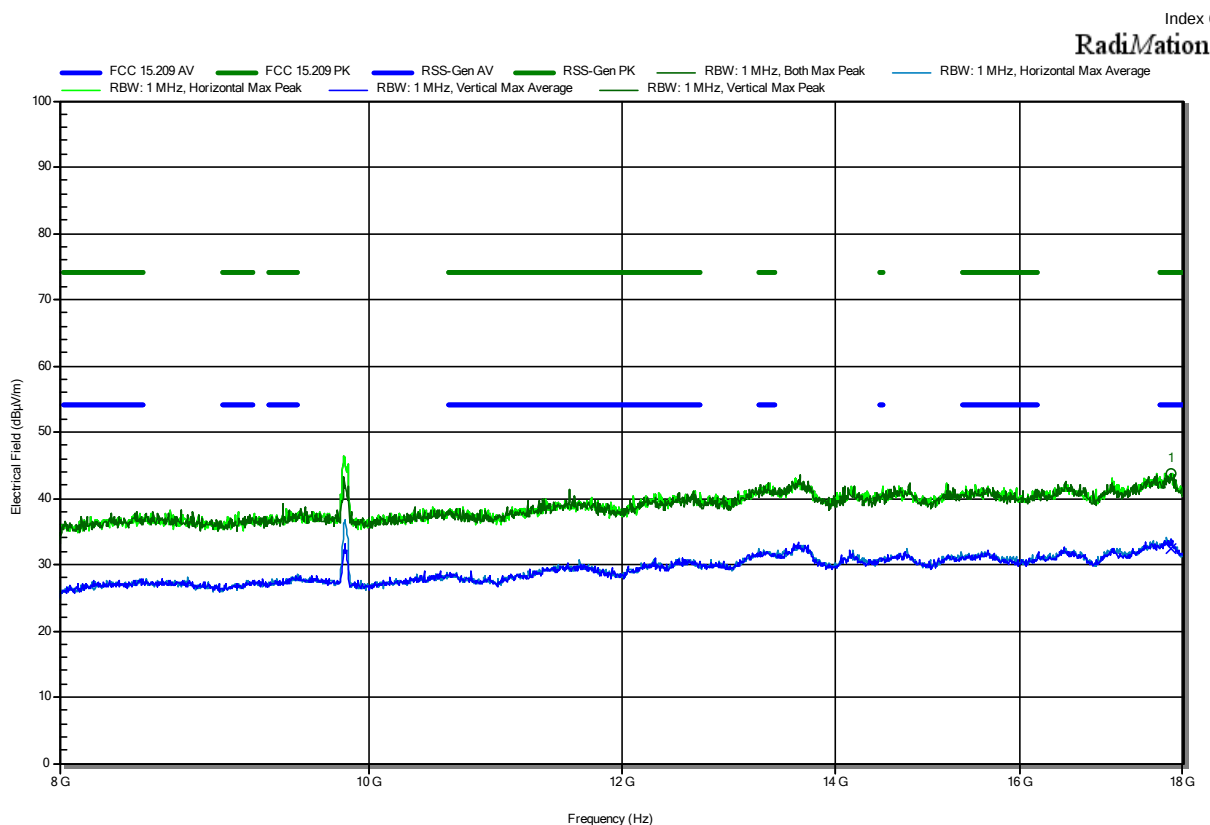
Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Godson Offorji
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Schwarzbeck BBHA 9120B
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-11
 Note: upper bandedge
 16 dBm



Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

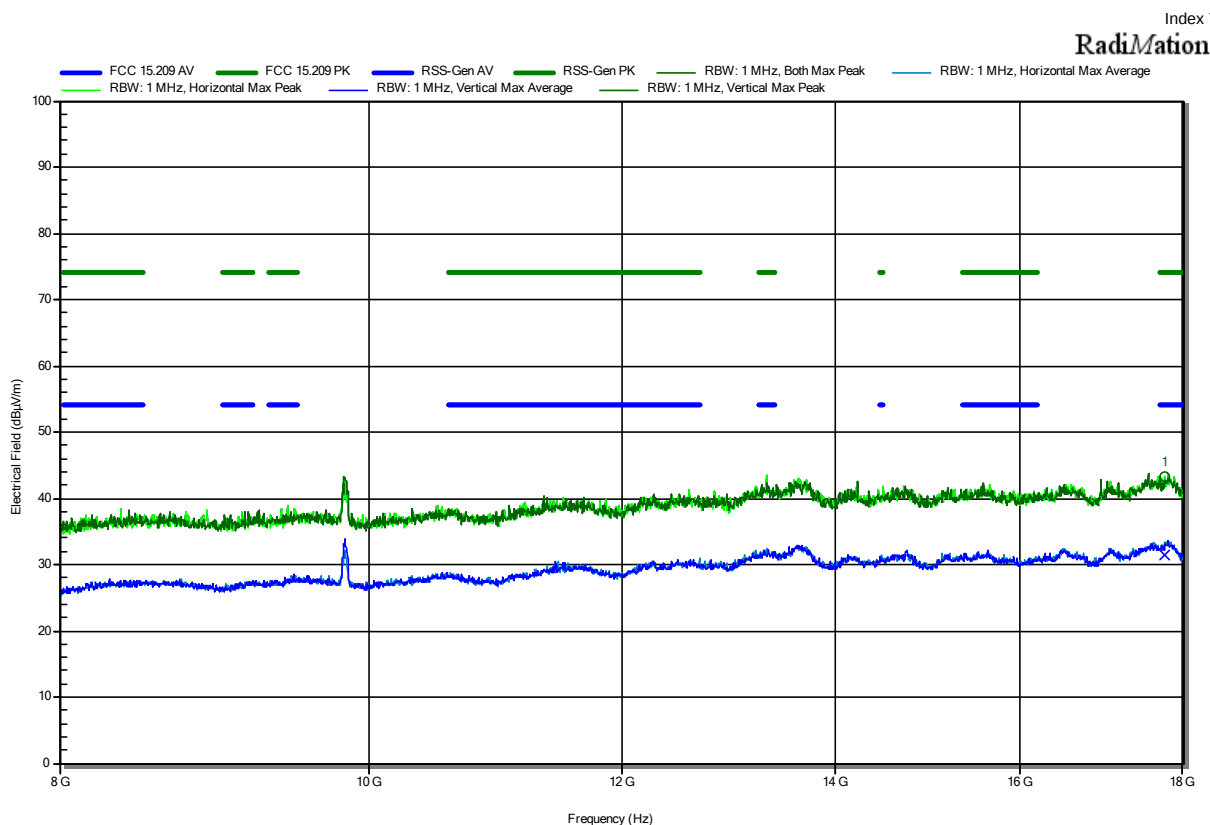
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Godson Offorji
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Schwarzbeck HWRD 650
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-11
 Note: EUT Vertical



Frequency 17.85 GHz	Peak 43.8 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -30.2 dB	Peak Status Pass	Polarization Horizontal
Frequency 17.85 GHz	Average 32.34 dBµV/m	Average Limit 54 dBµV/m	Average Difference -21.66 dB	Average Status Pass	Polarization Horizontal

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

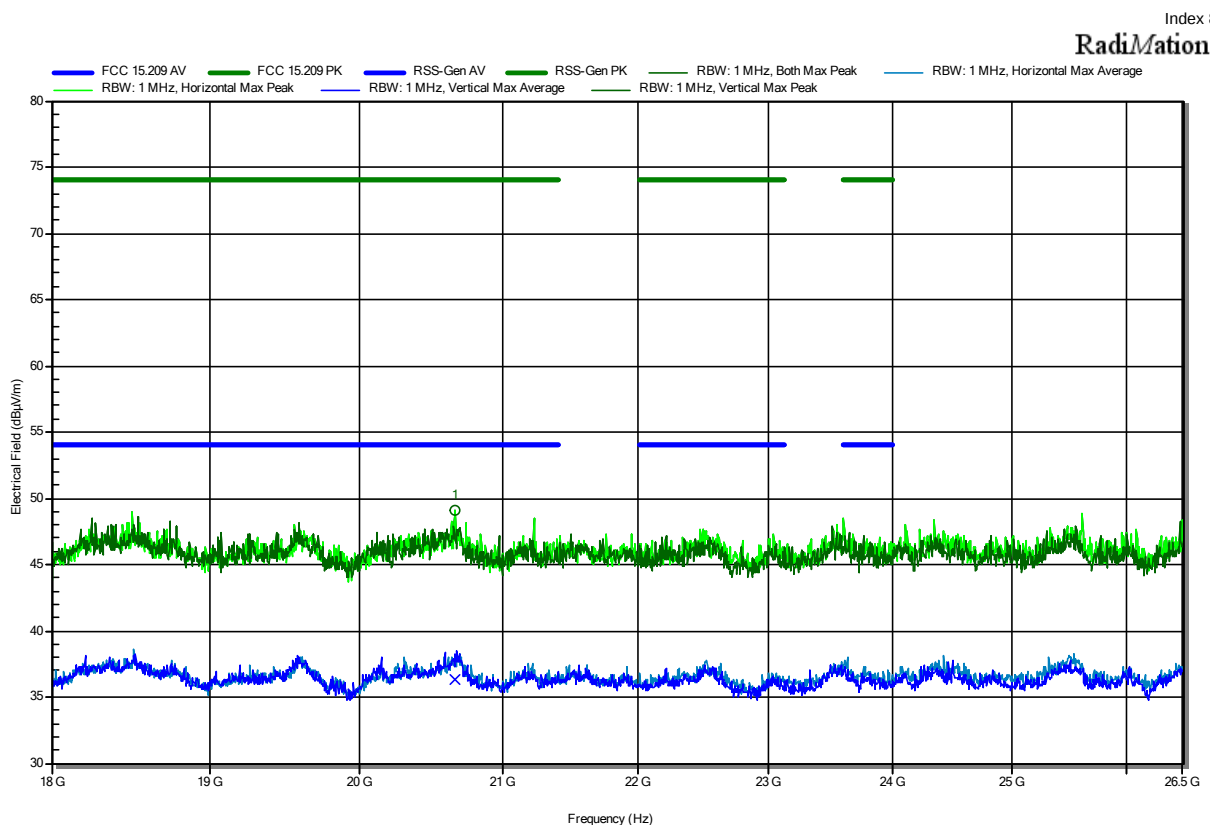
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Godson Offorji
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Schwarzbeck HWRD 650
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-11
 Note: EUT Horizontal



Frequency 17.768 GHz	Peak 43.27 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -30.73 dB	Peak Status Pass	Polarization Horizontal
Frequency 17.768 GHz	Average 31.54 dBµV/m	Average Limit 54 dBµV/m	Average Difference -22.46 dB	Average Status Pass	Polarization Horizontal

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

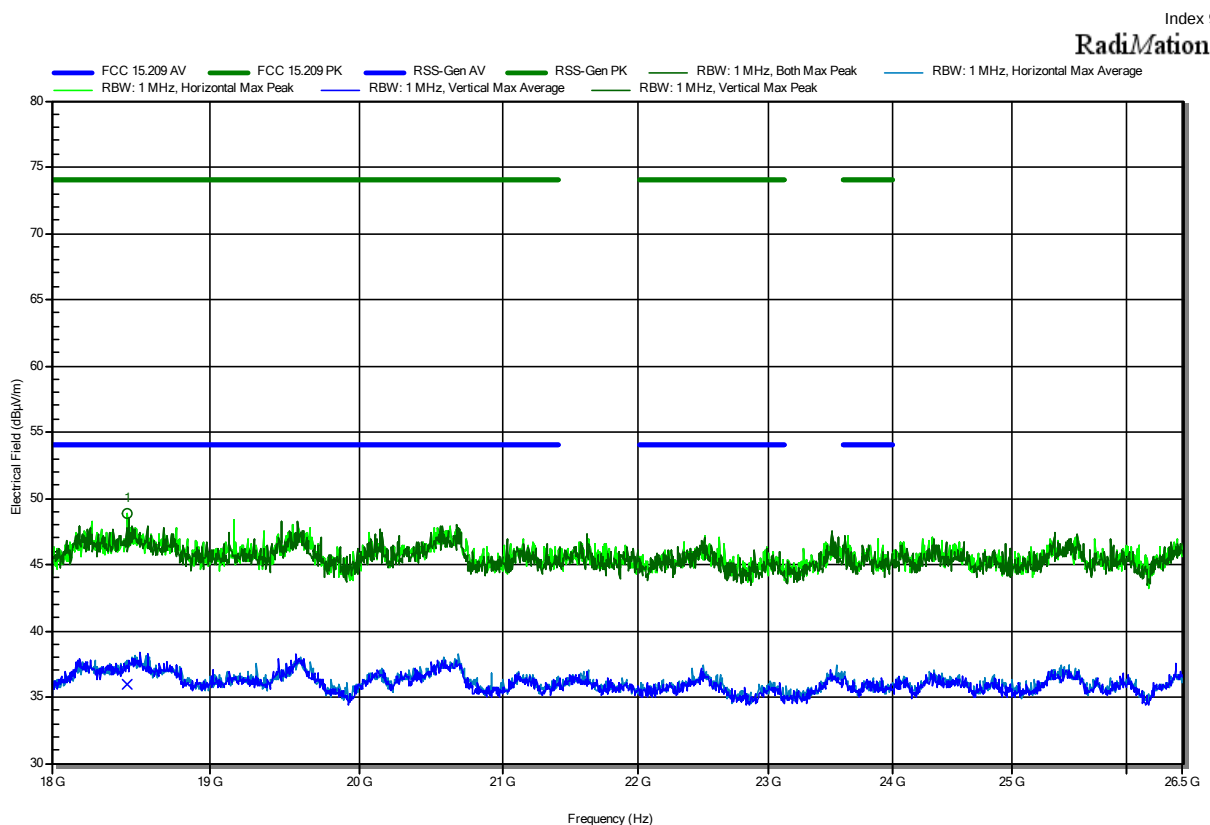
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Godson Offorji
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Amplifier Research AT4560
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-11
 Note: EUT Horizontal



Frequency 20.662 GHz	Peak 49.09 dBμV/m	Peak Limit 74 dBμV/m	Peak Difference -24.91 dB	Peak Status Pass	Polarization Horizontal
Frequency 20.662 GHz	Average 36.33 dBμV/m	Average Limit 54 dBμV/m	Average Difference -17.67 dB	Average Status Pass	Polarization Horizontal

Radiated Spurious Emissions according to FCC 15.247; RSS-247-Issue 2

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld Messgerät
 Model: TBC
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Godson Offorji
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Amplifier Research AT4560
 Measurement distance: 3 m
 Mode: Tx; IEEE802.11n, 2457 MHz, 20 MHz Bandwidth, MCS0
 Test Date: 2022-07-11
 Note: EUT Vertical

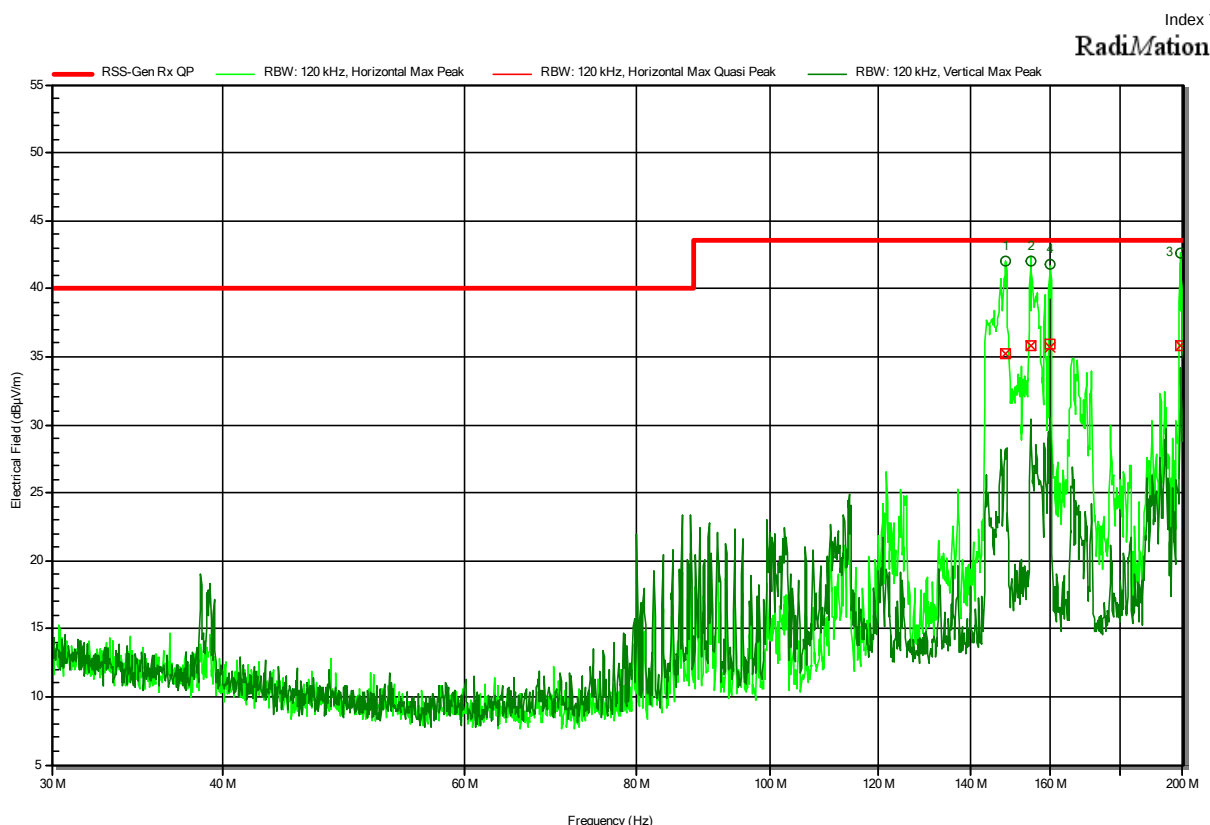


Frequency 18.472 GHz	Peak 48.8 dBμV/m	Peak Limit 74 dBμV/m	Peak Difference -25.2 dB	Peak Status Pass	Polarization Horizontal
Frequency 18.472 GHz	Average 36.02 dBμV/m	Average Limit 54 dBμV/m	Average Difference -17.98 dB	Average Status Pass	Polarization Horizontal

ANNEX B Receiver spurious emissions

Radiated Spurious Emissions according to RSS-247 Issue 2, RSS-Gen Issue 5

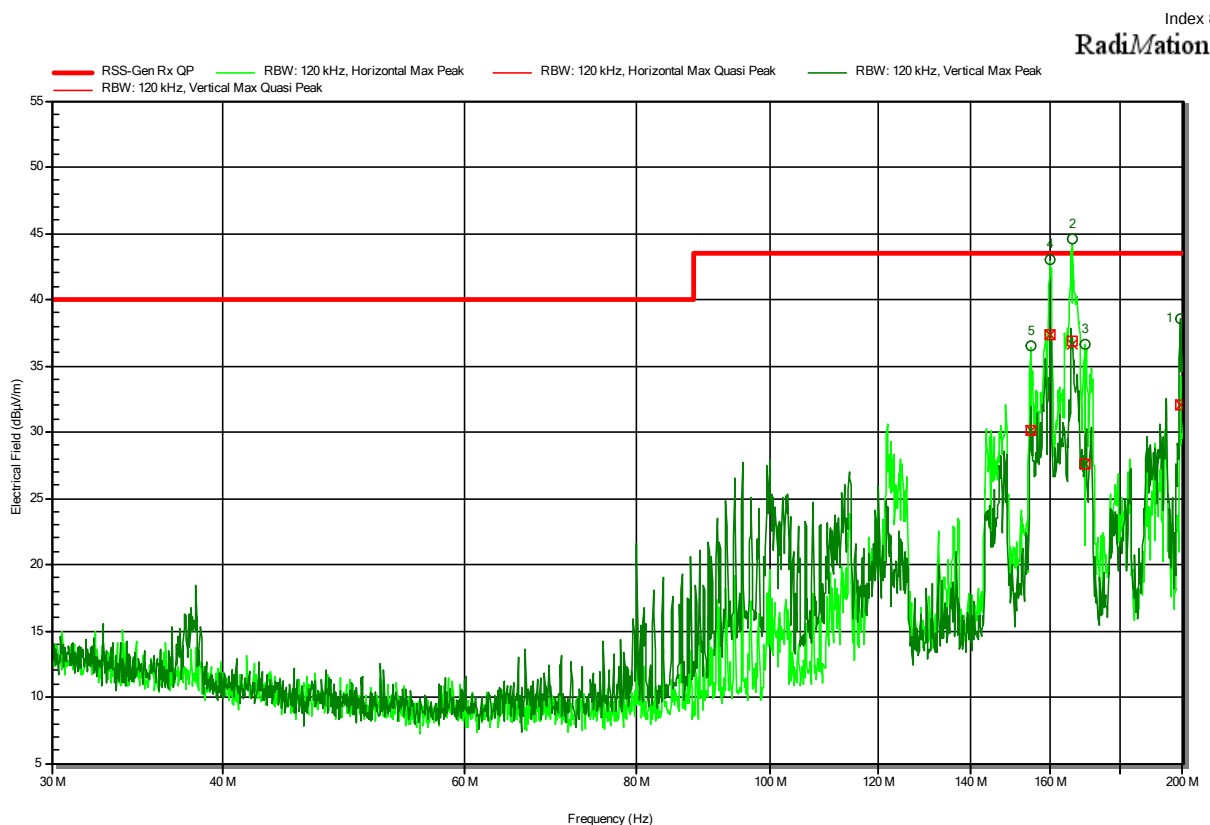
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HK 116
 Measurement distance: 3 m
 Mode: Rx; IEEE802.11n, 2457 MHz
 Test Date: 2022-07-08
 Note: EUT horizontal



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
148.6121 MHz	35.2 dBµV/m	43.5 dBµV/m	-8.28 dB	Pass	Horizontal
154.8998 MHz	35.8 dBµV/m	43.5 dBµV/m	-7.67 dB	Pass	Horizontal
160.0051 MHz	35.9 dBµV/m	43.5 dBµV/m	-7.61 dB	Pass	Horizontal
199.1465 MHz	35.8 dBµV/m	43.5 dBµV/m	-7.73 dB	Pass	Horizontal

Radiated Spurious Emissions according to RSS-247 Issue 2, RSS-Gen Issue 5

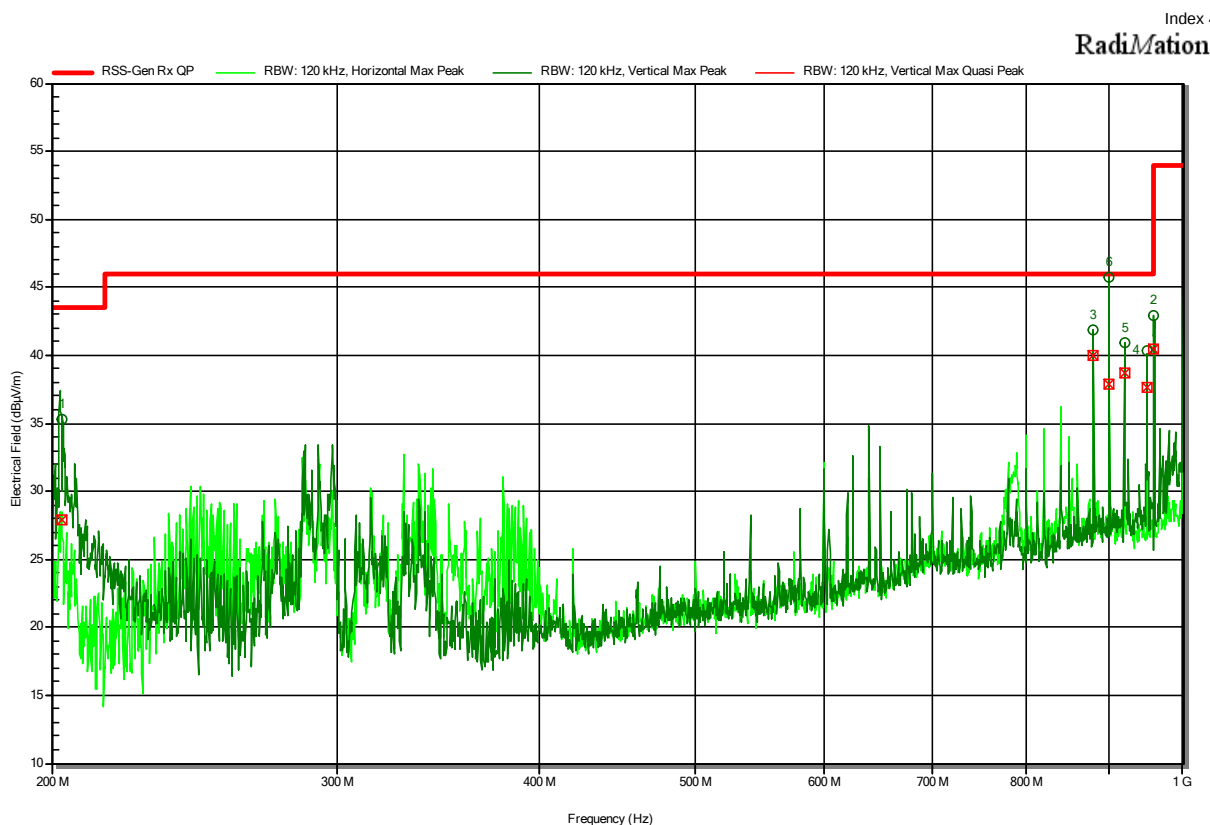
Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HK 116
 Measurement distance: 3 m
 Mode: Rx; IEEE802.11n, 2457 MHz
 Test Date: 2022-07-08
 Note: EUT vertical



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
154.8459 MHz	30.1 dBμV/m	43.5 dBμV/m	-13.42 dB	Pass	Horizontal
160.0868 MHz	37.4 dBμV/m	43.5 dBμV/m	-6.1 dB	Pass	Horizontal
166.0424 MHz	36.8 dBμV/m	43.5 dBμV/m	-6.68 dB	Pass	Horizontal
169.5318 MHz	27.6 dBμV/m	43.5 dBμV/m	-15.91 dB	Pass	Horizontal
199.095 MHz	32 dBμV/m	43.5 dBμV/m	-11.48 dB	Pass	Vertical

Radiated Spurious Emissions according to RSS-247 Issue 2, RSS-Gen Issue 5

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HL 223
 Measurement distance: 3 m
 Mode: Rx; IEEE802.11n, 2457 MHz
 Test Date: 2022-07-08
 Note: EUT vertical



Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
202.9013 MHz	27.9 dBµV/m	43.5 dBµV/m	-15.64 dB	Pass	Vertical
879.9954 MHz	40 dBµV/m	46 dBµV/m	-6 dB	Pass	Vertical
900.0312 MHz	37.9 dBµV/m	46 dBµV/m	-8.13 dB	Pass	Vertical
919.9913 MHz	38.7 dBµV/m	46 dBµV/m	-7.26 dB	Pass	Vertical
949.991 MHz	37.6 dBµV/m	46 dBµV/m	-8.4 dB	Pass	Vertical
959.9954 MHz	40.5 dBµV/m	46 dBµV/m	-5.53 dB	Pass	Vertical

Test Report No.: G0M-2205-1483-TFC247WF-V02

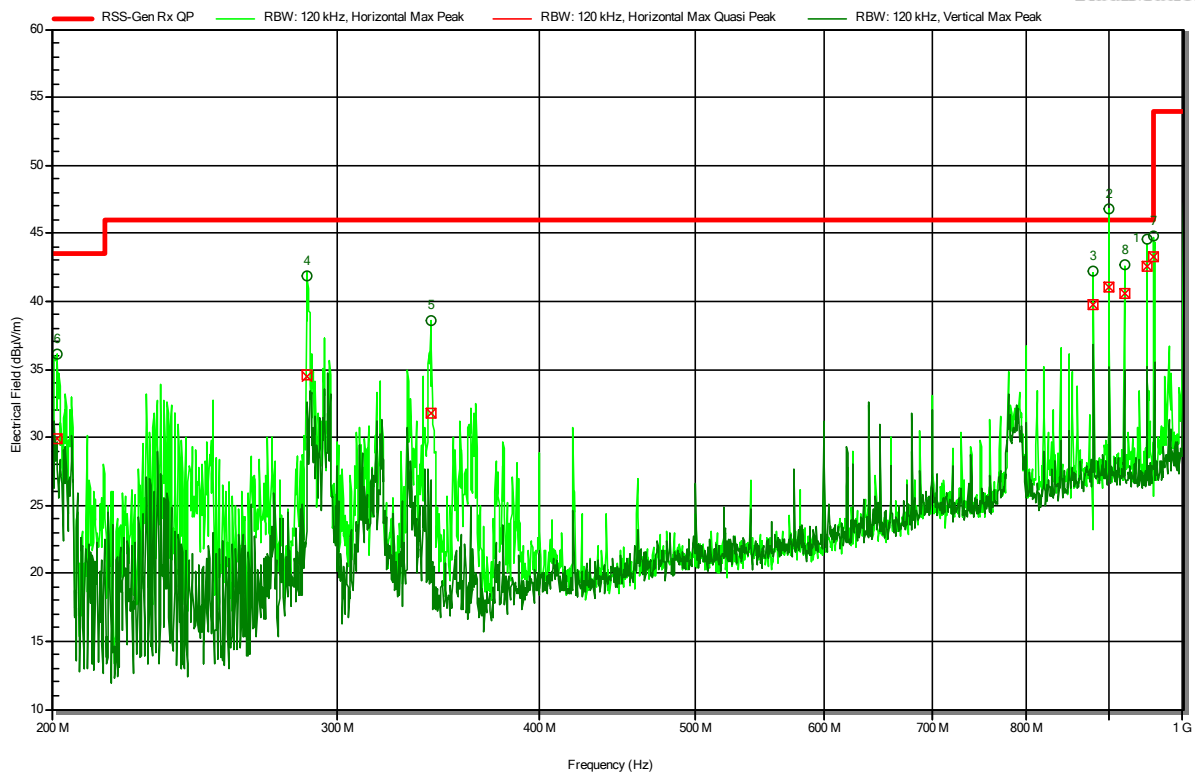
Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated Spurious Emissions according to RSS-247 Issue 2, RSS-Gen Issue 5

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Rohde & Schwarz HL 223
 Measurement distance: 3 m
 Mode: Rx; IEEE802.11n, 2457 MHz
 Test Date: 2022-07-08
 Note: EUT horizontal

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RadiMation



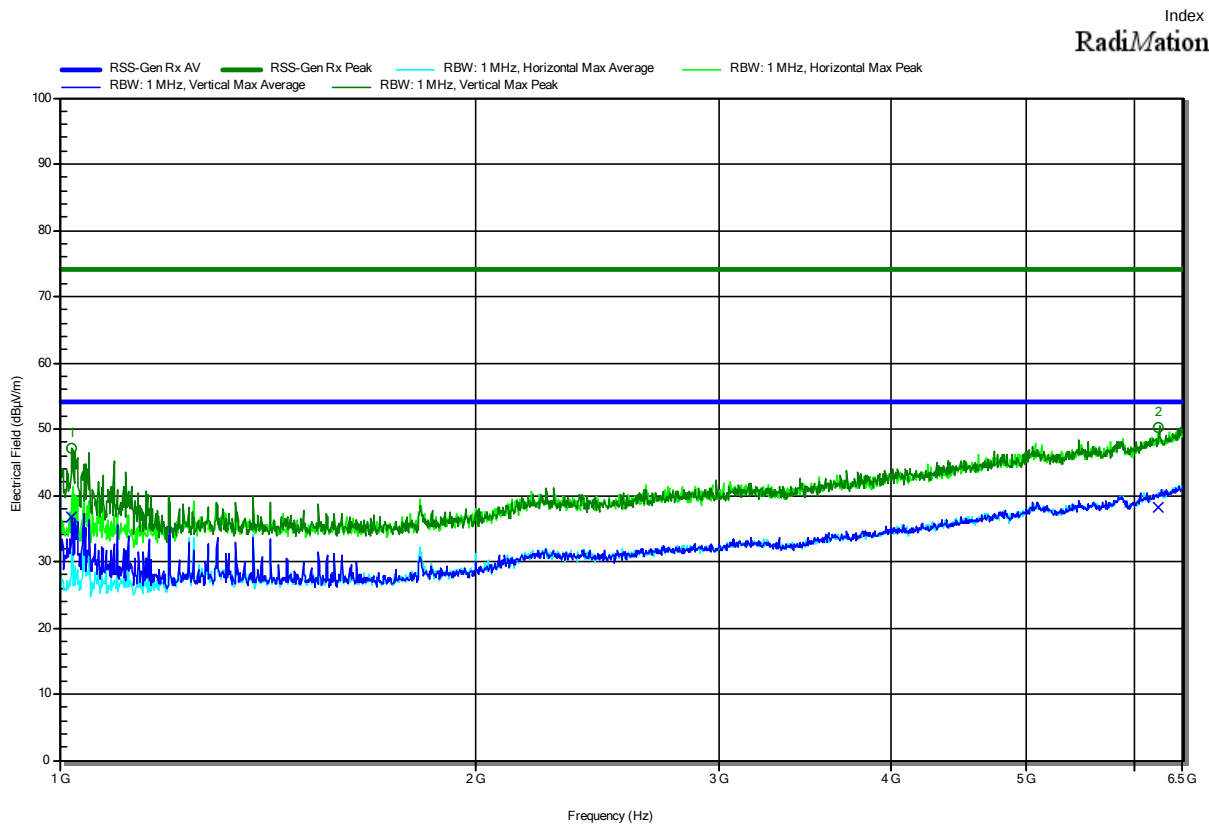
Frequency	Quasi-Peak	Quasi-Peak Limit	Quasi-Peak Difference	Quasi-Peak Status	Polarization
201.508 MHz	29.9 dBμV/m	43.5 dBμV/m	-13.56 dB	Pass	Horizontal
287.544 MHz	34.6 dBμV/m	46 dBμV/m	-11.43 dB	Pass	Horizontal
342.9682 MHz	31.8 dBμV/m	46 dBμV/m	-14.24 dB	Pass	Horizontal
879.9774 MHz	39.8 dBμV/m	46 dBμV/m	-6.22 dB	Pass	Horizontal
899.9906 MHz	41.1 dBμV/m	46 dBμV/m	-4.95 dB	Pass	Horizontal
919.9959 MHz	40.6 dBμV/m	46 dBμV/m	-5.44 dB	Pass	Horizontal
950.0062 MHz	42.6 dBμV/m	46 dBμV/m	-3.38 dB	Pass	Horizontal
959.9907 MHz	43.2 dBμV/m	46 dBμV/m	-2.76 dB	Pass	Horizontal

Test Report No.: G0M-2205-1483-TFC247WF-V02

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

Radiated Spurious Emissions according to RSS-247 Issue 2, RSS-Gen Issue 5

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Schwarzbeck BBHA 9120D
 Measurement distance: 3 m
 Mode: Rx; IEEE802.11n, 2457 MHz
 Test Date: 2022-07-01
 Note:



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1.02 GHz	47.02 dBµV/m	74 dBµV/m	-26.98 dB	Pass	Vertical
6.245 GHz	50.36 dBµV/m	74 dBµV/m	-23.64 dB	Pass	Vertical

Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
1.02 GHz	36.77 dBµV/m	53.98 dBµV/m	-17.21 dB	Pass	Vertical
6.245 GHz	38.22 dBµV/m	53.98 dBµV/m	-15.76 dB	Pass	Vertical

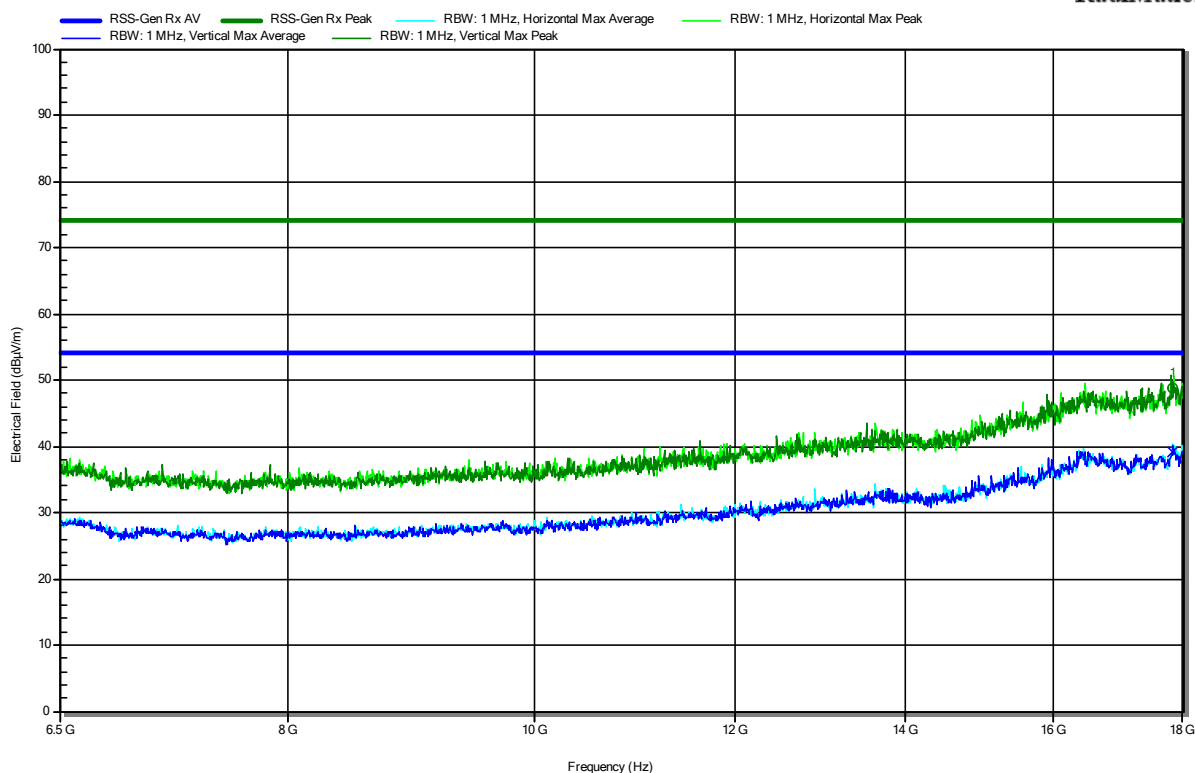
Test Report No.: G0M-2205-1483-TFC247WF-V02

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

Radiated Spurious Emissions according to RSS-247 Issue 2, RSS-Gen Issue 5

Project Number: G0M-2205-1483
 Applicant: Kistler Instrumente AG
 Model Description: Handheld
 Model: 5811A
 Test Sample ID: 40272
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Qawasmeh
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 21 °Celsius, Vnom:
 Antenna: Schwarzbeck HWRD 650
 Measurement distance: 3 m
 Mode: Rx; IEEE802.11n, 2457 MHz
 Test Date: 2022-07-01
 Note:

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RadiMation



Frequency 17.841 GHz	Peak 48.79 dBµV/m	Peak Limit 74 dBµV/m	Peak Difference -25.21 dB	Peak Status Pass	Polarization Vertical
Frequency 17.841 GHz	Average 39.19 dBµV/m	Average Limit 53.98 dBµV/m	Average Difference -14.79 dB	Average Status Pass	Polarization Vertical

== = END OF TEST REPORT == =

Test Report No.: G0M-2205-1483-TFC247WF-V02

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