

RADIO REPORT FCC 47 CFR Part 15C ISED Canada RSS-247 Digital transmission systems operating within the 2400 – 2483.5 MHz band	
Report Reference No	G0M-1901-7989-TFC247ZB-L1-V01
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-2 DAkks - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Amphenol Thermometrics, Inc.
Address	967 Windfall Road PA 15857 St. Marys USA
Test Specification	According to FCC/ISED rules
Standard	47 CFR Part 15C RSS-247, Issue 2, 2017-02 RSS-Gen, Issue 5, Amendment 1, 2019-03
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Kaye ValProbe RT dual flexible Temperature Logger collects Temperature data and transmits data to Kaye ValProbe RT Base Station via 2.4 GHz RF channel
Model(s)	RF3050 (XCDFVP-L-RT)
Additional Model(s)	None
Brand Name(s)	Kaye
Hardware Version(s)	1.1
Software Version(s)	1.2.9
FCC-ID	2AJQZ-VPRT-L1
IC	25680-VPRTL1
Test Result	PASSED

Test Report No.: G0M-1901-7989-TFC247ZB-L1-V01

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

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	2019-09-30	Test sample ID 25853 Test sample ID 25749
Report:		
Compiled by	Abdullah Al Jamal	
Tested by (+ signature) (Responsible for Test)	Abdullah Al Jamal	
Approved by (+ signature) (Head of Lab)	Christian Weber	
Date of Issue	2020-04-24	
Total number of pages	112	
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:		
None.		

ADDITIONAL VARIANTS

Additional Variants (not tested and not evaluated variants)		
Not-tested Variant	Description	
1	Product Type Description	Kaye ValProbe RT rigid Temperature Logger
	Model name	RF3050 (XCVP-L-R-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
2	Product Type Description	Kaye ValProbe RT single bendable Temperature Logger
	Model name	RF3050 (XCBVP-L-G-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
3	Product Type Description	Kaye ValProbe RT dual bendable Temperature Logger
	Model name	RF3050 (XCDBVP-La-Lb-G-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
4	Product Type Description	Kaye ValProbe RT single flexible Temperature Logger
	Model name	RF3050 (XCFVP-L-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
5	Product Type Description	Kaye ValProbe RT surface Temperature Logger
	Model name	RF3050 (X2534-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
6	Product Type Description	Kaye ValProbe RT Humidity Temperature Logger
	Model name	RF3050 (X2520-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
7	Product Type Description	Kaye ValProbe RT five channel flexible Temperature Logger
	Model name	RF3050 (XC5FVP-L-RT)
	Brand name	Kaye
	Hardware Version	1.1
	Software Version	1.2.9
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	2020-04-24	Initial Release	

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
DSSS	Direct Sequence Spread Spectrum
EUT	Equipment Under Test
FCC	Federal Communications Commission
IEEE 802.15.4	MAC and PHY Layer for Wireless Personal Area Networks
ISED	Innovation, Science and Economic Development Canada
O-QPSK	Offset-Quadrature Phase Shift Keying
QPSK	Quadrature Phase Shift Keying
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V _{NOM}	Nominal supply voltage

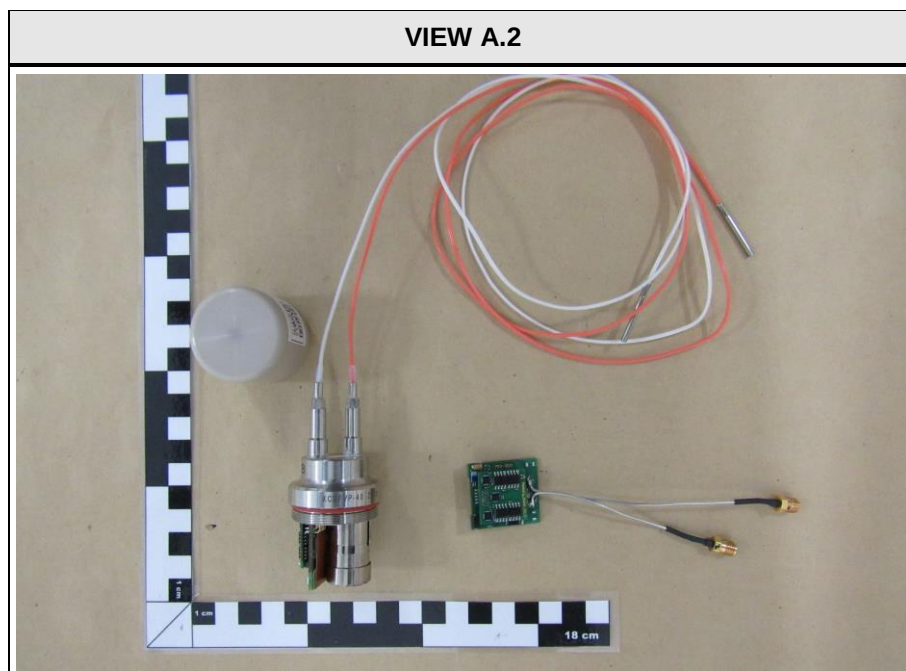
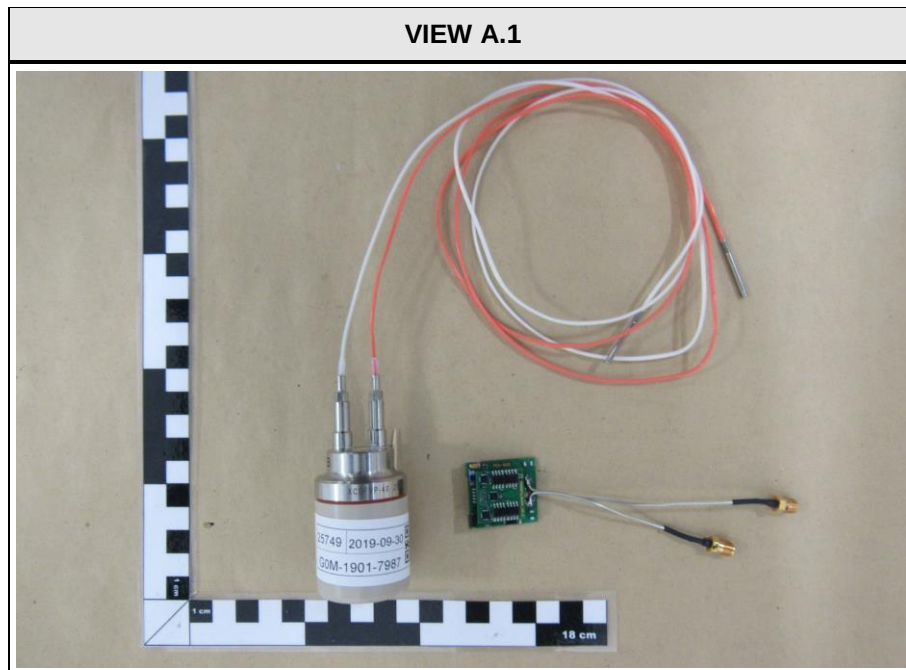
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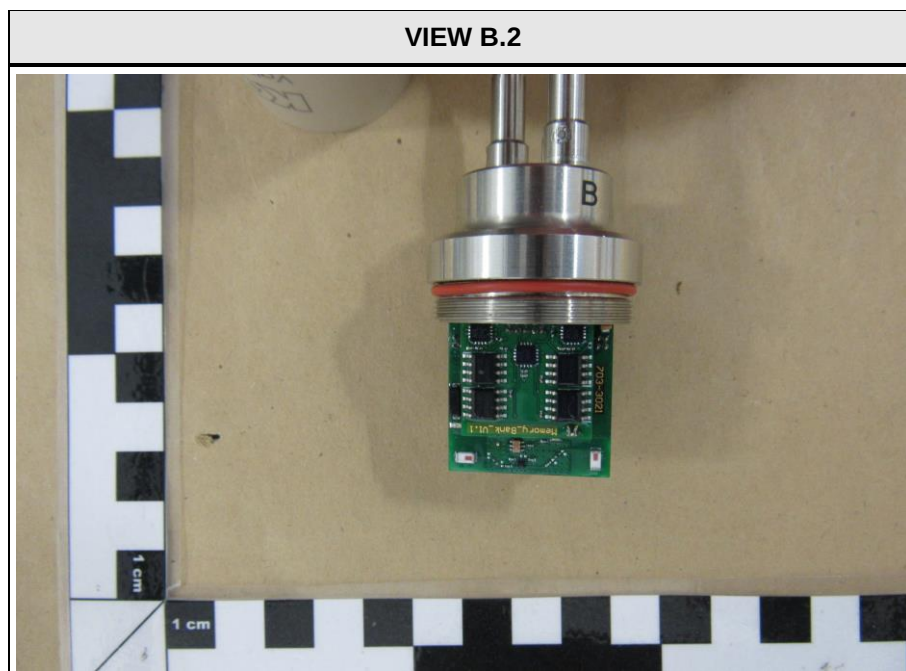
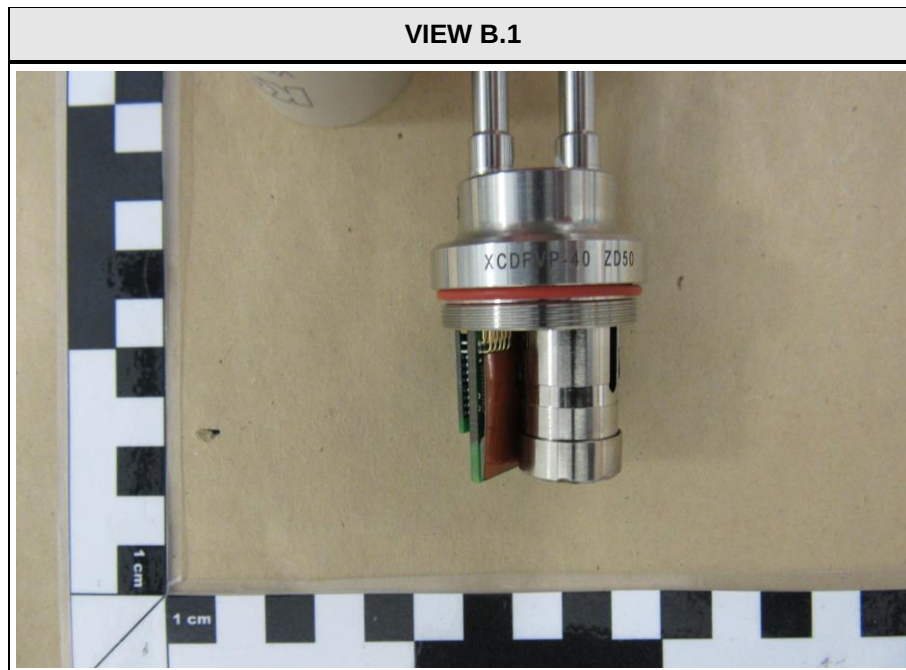
1 Equipment (Test Item) Under Test

Description	Kaye ValProbe RT dual flexible Temperature Logger collects Temperature data and transmits data to Kaye ValProbe RT Base Station via 2.4 GHz RF channel Comment: Hereinafter named as Kaye ValProbe RT dual flexible Temperature Logger.	
Model	RF3050 (XCDFVP-L-RT)	
Additional Model(s)	None	
Brand Name(s)	Kaye	
Serial Number(s)	Test sample ID 25853 (conducted measurements) S/N Not specified S/N Not specified Test sample ID 25749 (radiated measurements) S/N Not specified S/N XCDFVP-40 ZD50	
Hardware Version(s)	1.1	
Software Version(s)	1.2.9	
PMN	Kaye ValProbe RT dual flexible Temperature Logger	
HVIN	RF3050	
FVIN	1.2.9	
HMN	Not applicable	
FCC-ID	2AJQZ-VPRT-L1	
IC	25680-VPRTL1	
Equipment type	End Product	
Radio type	Transceiver	
Assigned frequency bands	2400 - 2483.5 MHz Channel 11 (2405 MHz) up to channel 25 (2475 MHz)	
Radio technology	IEEE 802.15.4	
Modulation	O-QPSK	
Number of antenna ports	2	
Antenna 1	Type	Integrated antenna
	Model	2450AT18A100
	Manufacturer	Johanson Technology, Inc. CA
	Gain	0.5 dBi (declared by applicant)
Antenna 2	Type	Integrated antenna
	Model	2450AT18A100
	Manufacturer	Johanson Technology, Inc. CA
	Gain	0.5 dBi (declared by applicant)
Supply Voltage	V _{NOM}	3.6 VDC (internal lithium battery)
Operating Temperature	T _{NOM}	25 °C
AC/DC-Adaptor	Model	N/A
	Vendor	N/A
	Input	N/A
	Output	N/A
Manufacturer	Amphenol Thermometrics, Inc. 967 Windfall Road PA 15857 St. Marys USA	

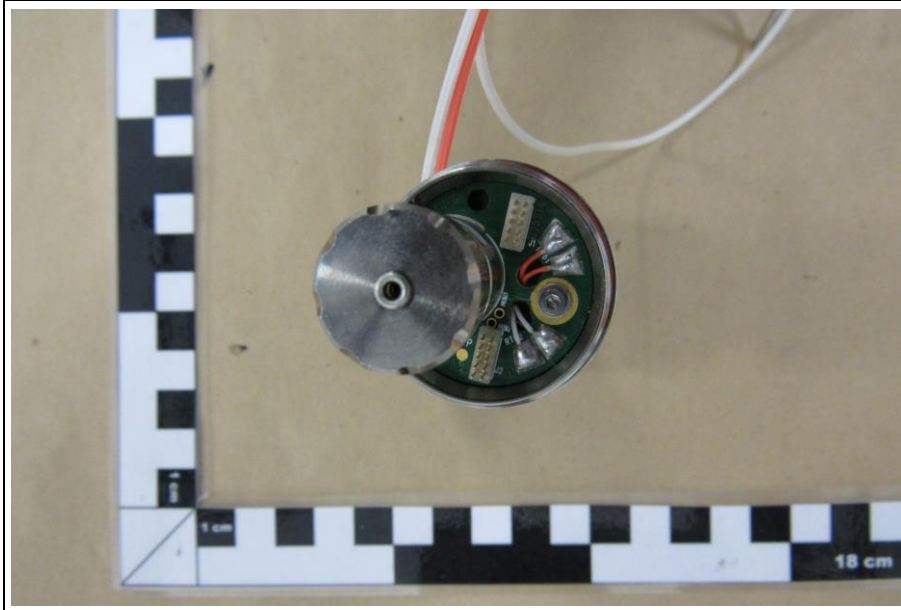
1.1 Photos – Equipment External



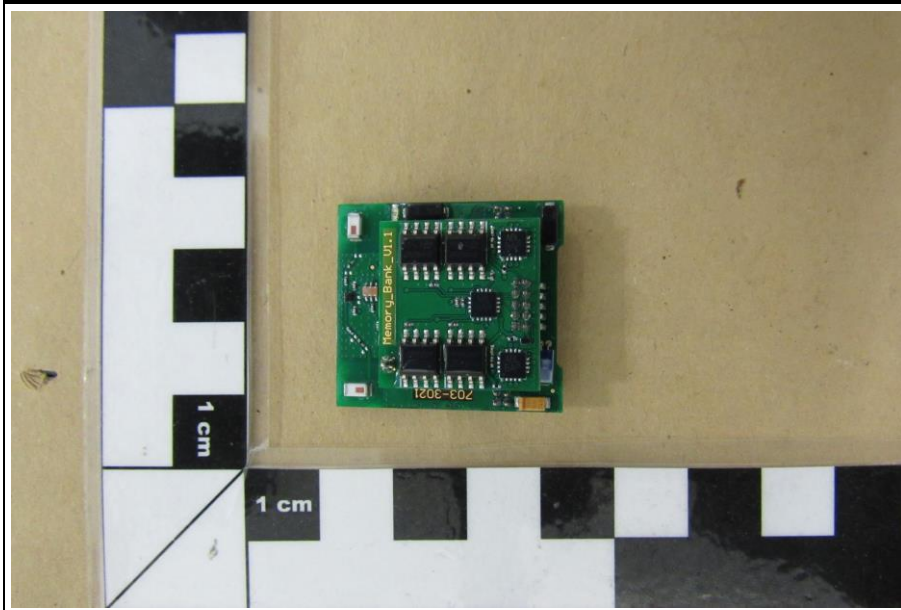
1.2 Photos – Equipment Internal



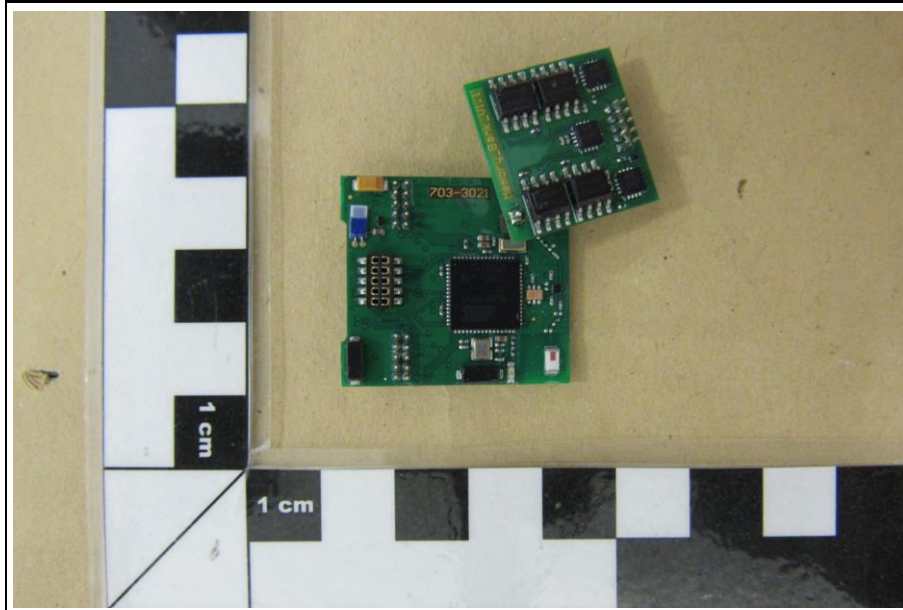
VIEW B.3



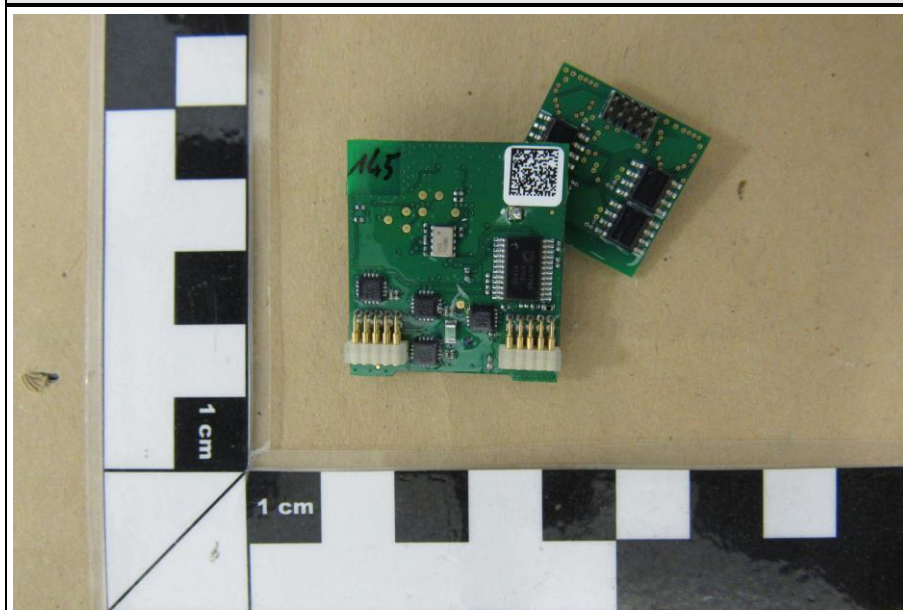
VIEW B.4



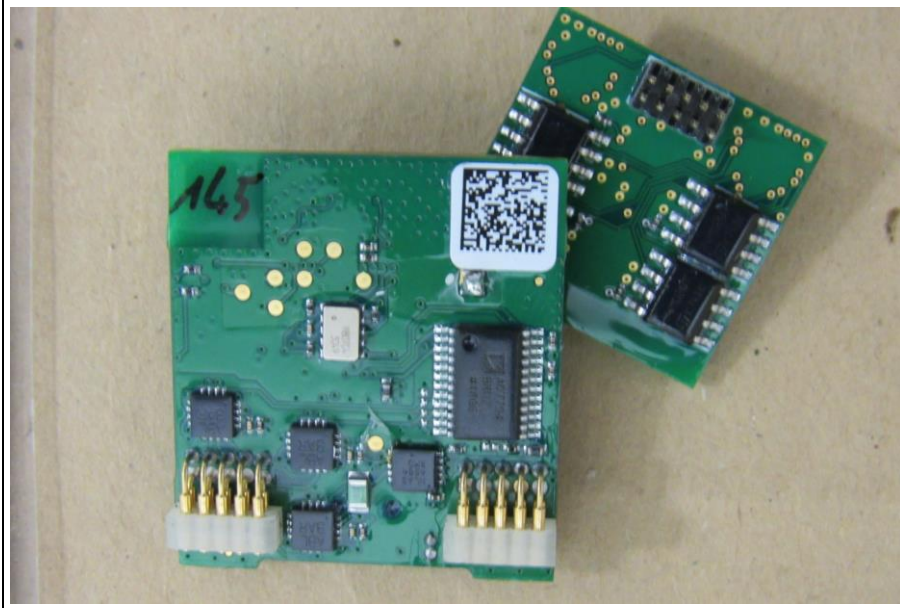
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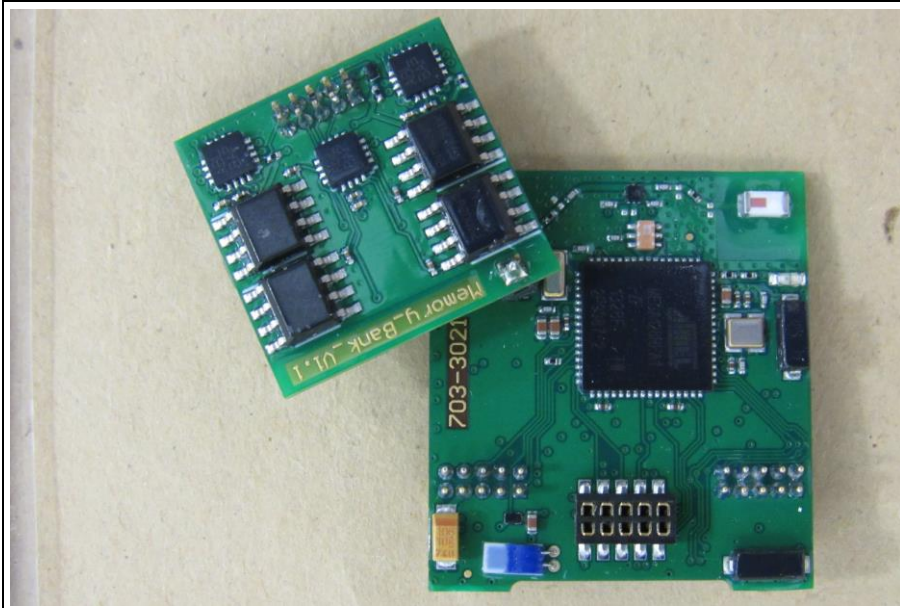
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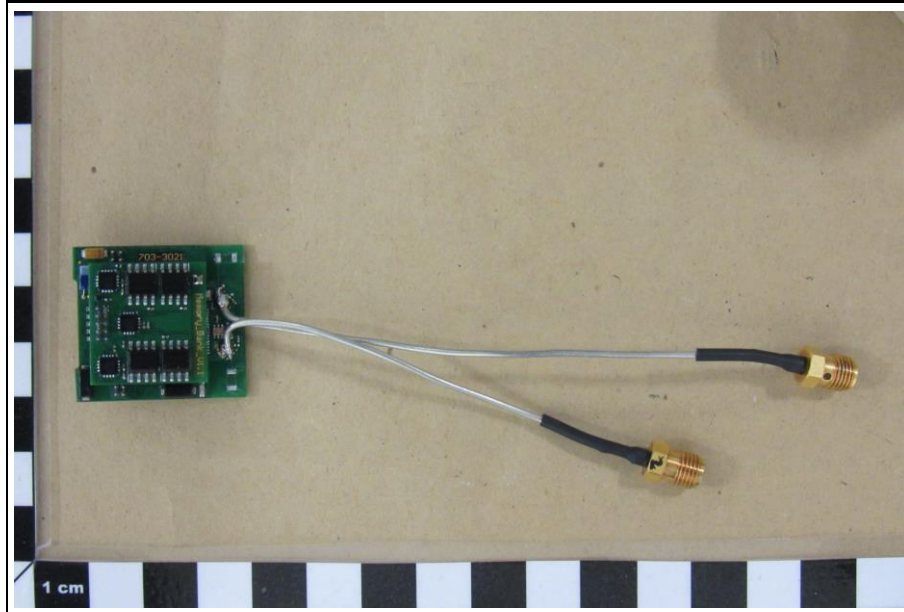
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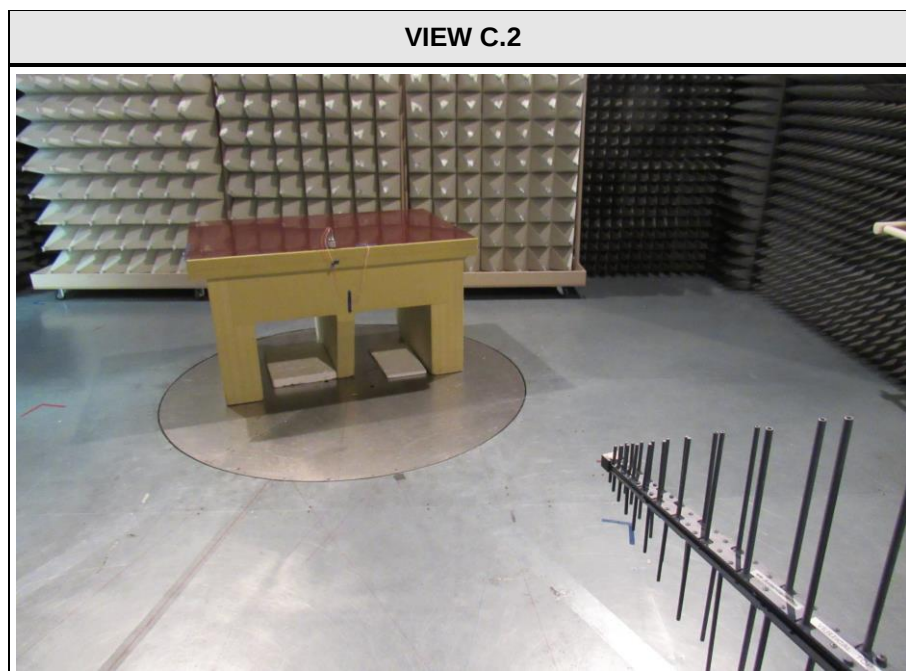
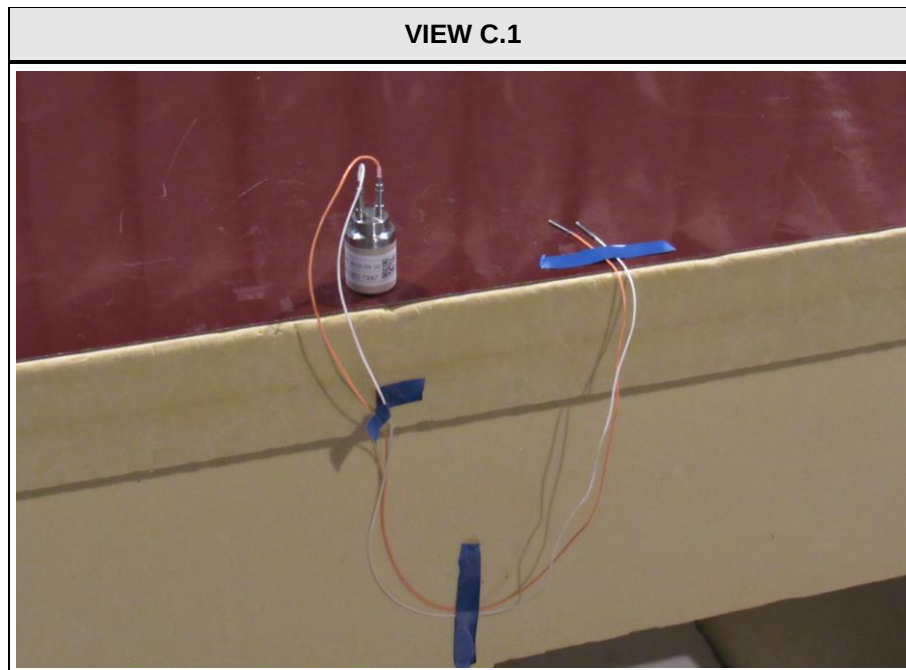
VIEW B.8



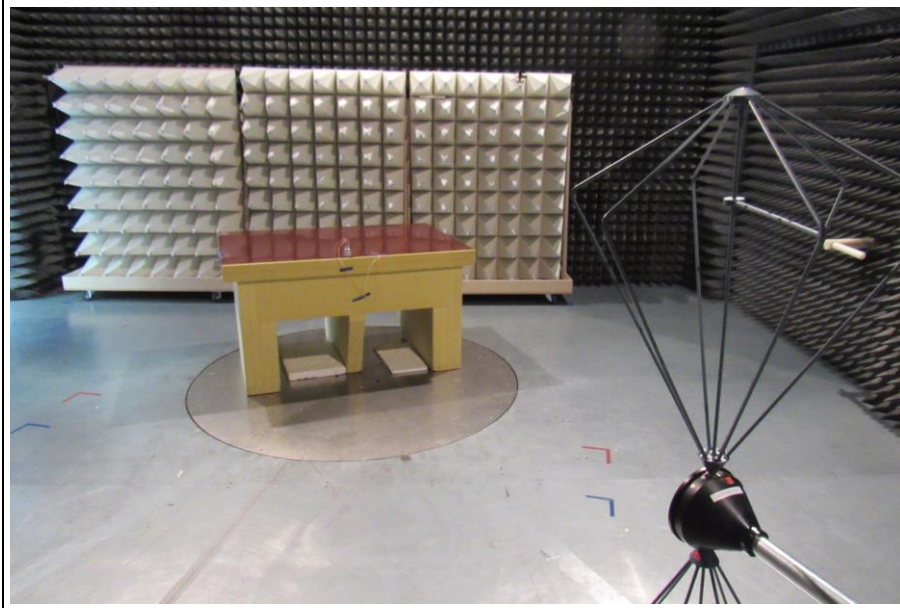
VIEW B.9



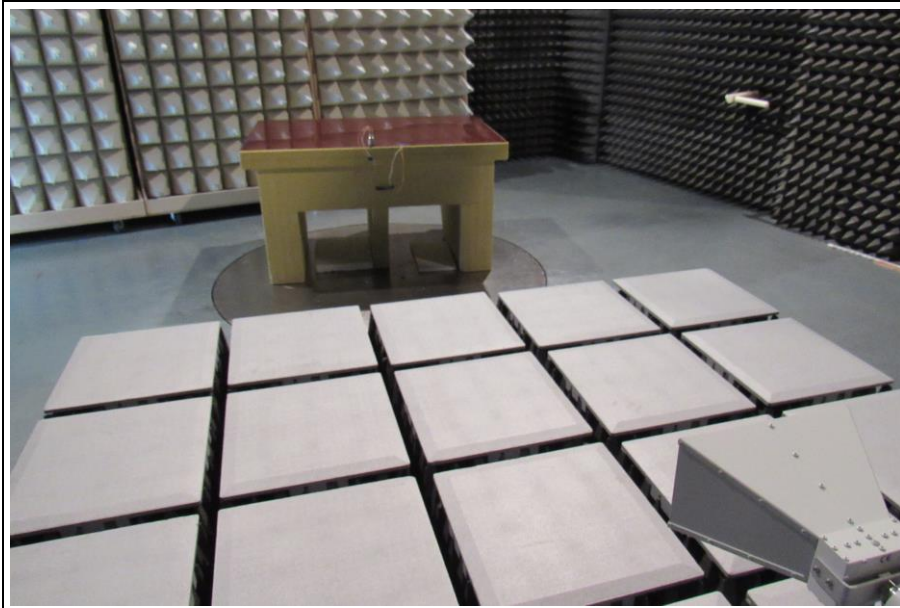
1.3 Photos – Test Setup



VIEW C.3



VIEW C.4



1.4 Support Equipment.

Product Type	Device	Manufacturer	Model	Comment
AE1	Tablet PC	Xplore Technologies	CFT-004	–
AE2	Docking station	Xplore Technologies	TCD-001	–
AE3	Base station	Amphenol Thermometrics, Inc.	RF3060	–
SFT	Atmel Studio 7.0 with Advanced Software Framework 3.47 and Toolchains	Microchip Technology Inc.	–	Build 2389
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment: None.				

1.5 Test mode duty cycle

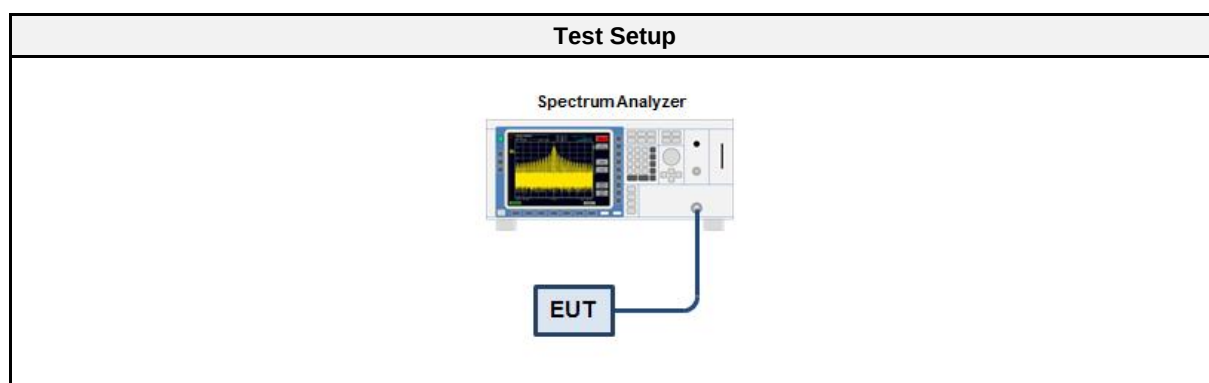
1.5.1 Information

Test Information	
Measurement Method	ANSI C63.10 11.6

1.5.2 Requirements

Requirements	
Duty cycle	Duty cycle correction
≥ 98 %	No correction required
< 98 %	Correction required ($10 \times \log_{10}(1/DC)$)

1.5.3 Setup



1.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSU 26	EF01003	2019-07	2020-07

1.5.5 Procedure

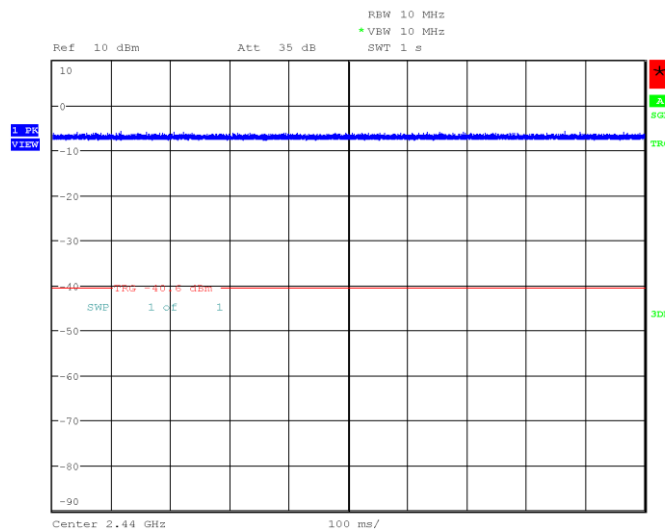
Test Procedure
1. EUT set to test mode 2. Span is set to zero span 3. Detector set to peak 4. Sweep time is set long enough to capture at least 5 bursts 5. Envelope peak value of emission spectrum is selected 6. The maximum burst duration T_{ON} is measured using two markers set to the start and the end of the longest burst 7. The minimum idle duration T_{OFF} is measured using two markers set to the start and the end of the shortest idle period 8. The duty cycle is calculated by $DC = T_{ON} / (T_{ON} + T_{OFF})$ 9. The duty cycle correction is calculated by $DC = 10 \times \log_{10}(T_{ON} / (T_{ON} + T_{OFF}))$

1.5.6 Results

Duty Cycle Results		
Mode	Duty Cycle	Correction Factor [dB]
IEEE 802.15.4	100 %	0

Duty Cycle

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25749
 Reference Standards: ANSI C63.10:2013
 Reference Method: ANSI C63.10:2013, Section 7.5
 Operating Frequency: 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-10
 Duty Cycle Period: 100
 Maximum Duty Cycle: 1.00
 Maximum Duty Cycle [%]: 100
 Duty Cycle Correction [dB]: 0.00



Date: 10.OCT.2019 16:04:12

1.6 Test Modes

Mode	Description
DSSS O-QPSK	Mode = Transmit Modulation = O-QPSK Spreading = None Data rate = 250 kbps Duty cycle = 100% Antenna port software setting = 6 for Antenna port 1 Antenna port software setting = 5 for Antenna port 2
O-QPSK	Mode = Transmit Modulation = O-QPSK Spreading = None Data rate = 250 kbps Duty cycle = 100% Antenna port software setting = 6 for Antenna port 1 Antenna port software setting = 5 for Antenna port 2
Receive	Mode = Receive (Scan)
Comment: None.	

1.7 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	11	2405
F2	Tx / Rx	18	2440
F3	Tx / Rx	25	2475

1.8 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 (section 6.6)	Occupied Bandwidth	ANSI C63.10-2013	N/R	Information only
FCC § 15.247(a)(2) ISED RSS-247, Issue 2 (section 5.2)	6 dB Bandwidth	ANSI C63.10-2013	PASS	
FCC § 15.247(b)(1) ISED RSS-247, Issue 2 (section 5.4)	Maximum peak conducted power	ANSI C63.10-2013	PASS	
FCC § 15.247(e) ISED RSS-247, Issue 2 (section 5.2)	Power spectral density	ANSI C63.10-2013	PASS	
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	
FCC § 15.247(d) ISED RSS-247, Issue 2 (section 5.5)	Conducted spurious emissions	ANSI C63.10-2013	PASS	
FCC § 15.247(d) FCC § 15.209 ISED RSS-Gen, Issue 5 (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 C63.10-2013	PASS	
Comment: None.				

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 - Occupied bandwidth

3.1.1 Information

Test Information	
Reference	ISED RSS-Gen, Issue 5 (section 6.6)
Measurement Method	ANSI C63.10 6.9.3
Operator	Abdullah Al Jamal
Date	2019-10-18

3.1.2 Limits

Limits
None (Informational only)

3.1.3 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2019-07	2020-07

3.1.4 Procedure

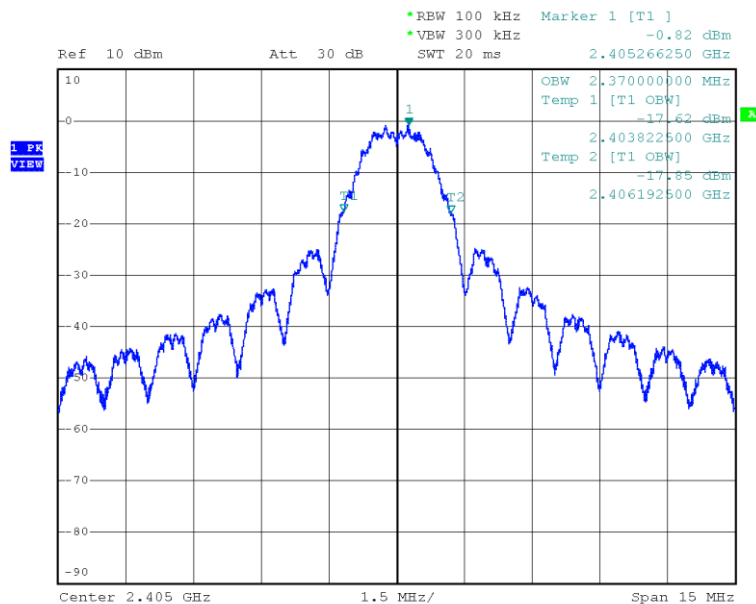
Test Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to the range of 1 % to 5 % of the occupied bandwidth 4. The occupied bandwidth is measured with the build-in analyzer function

3.1.5 Results

Test Results – Antenna port 1		
Mode	Frequency [MHz]	Bandwidth [MHz]
O-QPSK	2405	2.370
O-QPSK	2440	2.411
O-QPSK	2475	2.453

Occupied Bandwidth

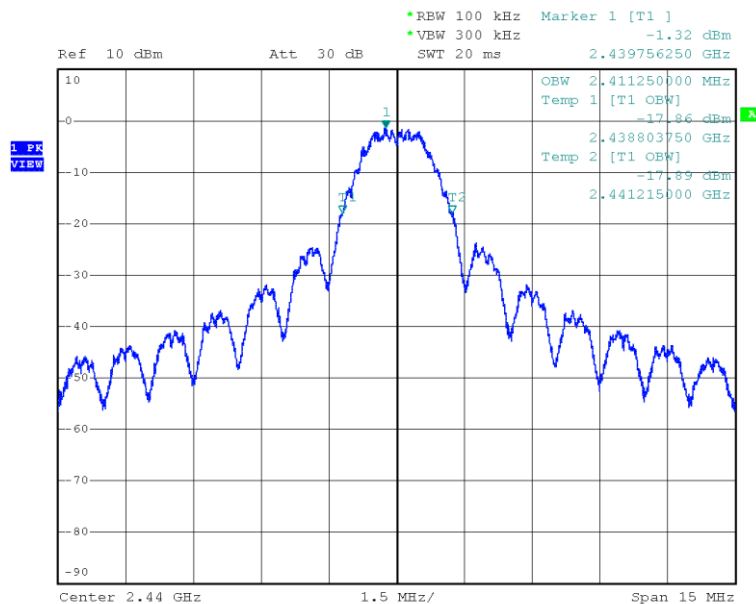
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Occupied Bandwidth [MHz]: 2.370



Date: 18.OCT.2019 11:26:29

Occupied Bandwidth

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: 250 kbps, Channel: 18, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Occupied Bandwidth [MHz]: 2.411



Date: 18.OCT.2019 11:27:49

Occupied Bandwidth

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Occupied Bandwidth [MHz]: 2.453



Date: 18.OCT.2019 11:28:31

3.2 Test Conditions and Results - 6 dB bandwidth

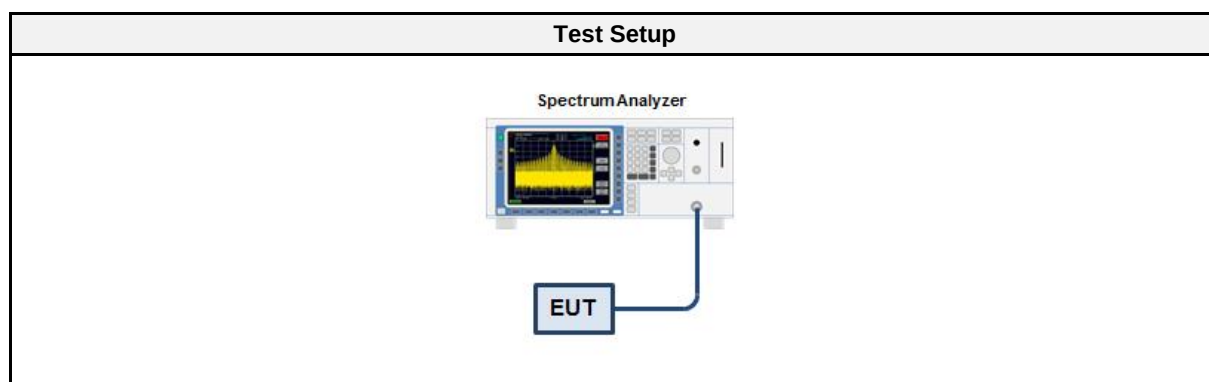
3.2.1 Information

Test Information	
Reference	FCC § 15.247(a)(2); ISED RSS-247, Issue 2 (section 5.2)
Measurement Method	ANSI C63.10 11.8
Operator	Abdullah Al Jamal
Date	2019-10-18

3.2.2 Limits

Limits
≥ 500kHz

3.2.3 Setup



3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2019-07	2020-07

3.2.5 Procedure

Test Procedure
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and RBW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak 7. 6 dB Bandwidth is determined by marker frequency separation

3.2.6 Results

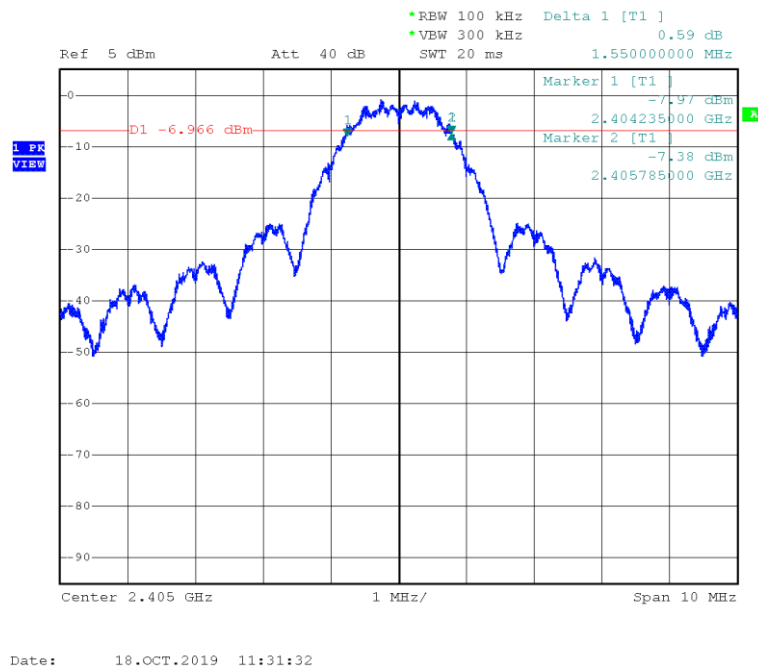
Test Results				
Mode	Frequency [MHz]	Bandwidth [kHz]	Limit [kHz]	Verdict
O-QPSK	2405	1550.0	500	PASS
O-QPSK	2440	1520.0	500	PASS
O-QPSK	2475	1580.0	500	PASS

Test Report No.: G0M-1901-7989-TFC247ZB-L1-V01

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

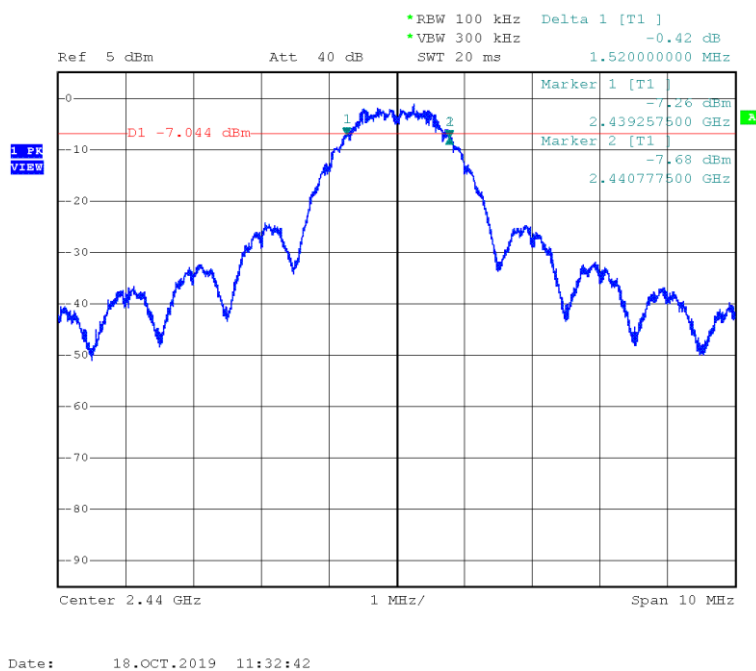
DTS (6 dB) Bandwidth

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Lower Frequency [MHz]: 2404.235
 Upper Frequency [MHz]: 2405.785
 6 dB Bandwidth [kHz]: 1550.0



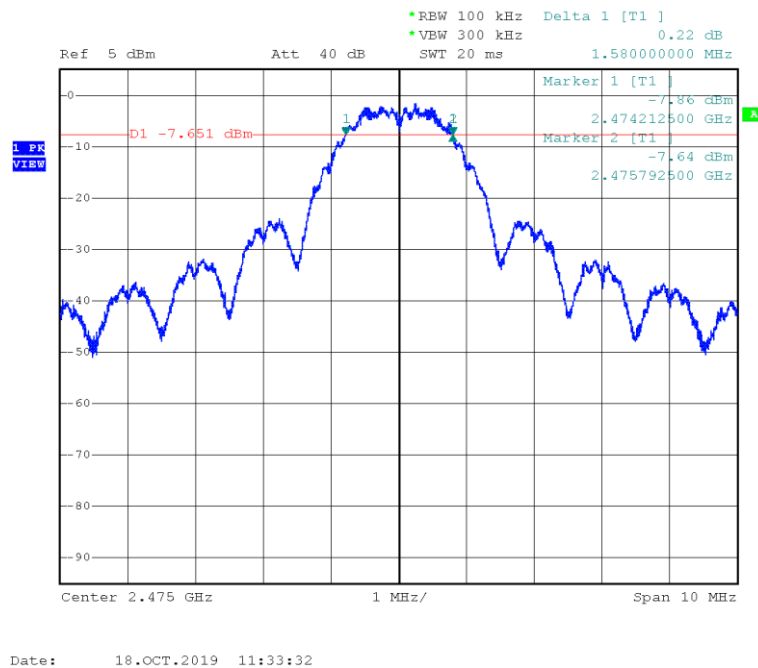
DTS (6 dB) Bandwidth

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: 250 kbps, Channel: 18, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Lower Frequency [MHz]: 2439.258
 Upper Frequency [MHz]: 2440.778
 6 dB Bandwidth [kHz]: 1520.0



DTS (6 dB) Bandwidth

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.8.1 Option 1
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Lower Frequency [MHz]: 2474.213
 Upper Frequency [MHz]: 2475.793
 6 dB Bandwidth [kHz]: 1580.0



3.3 Test Conditions and Results - Maximum peak conducted output power

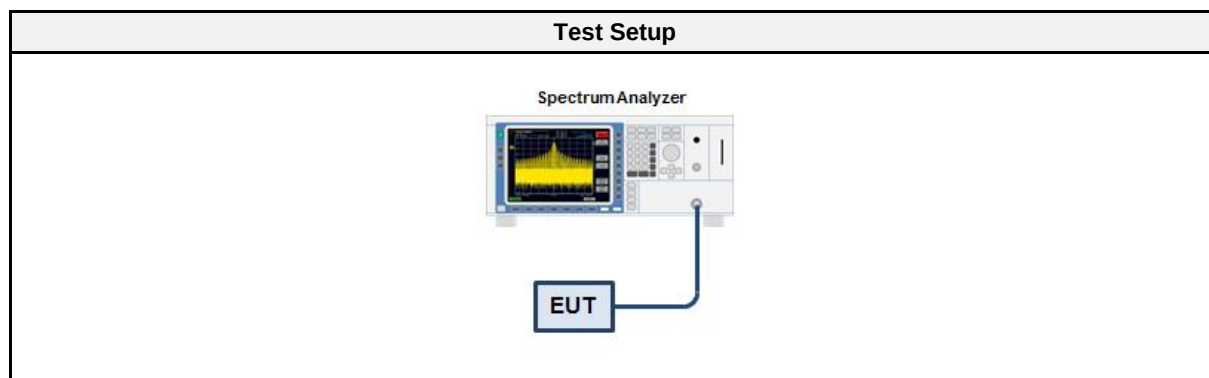
3.3.1 Information

Test Information	
Reference	FCC § 15.247(b)(1); ISED RSS-247, Issue 2 (section 5.4)
Measurement Method	ANSI C63.10 11.9.1
Operator	Abdullah Al Jamal
Date	2019-10-18

3.3.2 Limits

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

3.3.3 Setup



3.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2019-07	2020-07

3.3.5 Procedure

Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Analyzer resolution bandwidth is set $\geq$ DTS bandwidth 3. Detector set to peak and max hold 4. Sweep time is set to auto 5. After the trace has stabilized a marker is set to peak of envelope

3.3.6 Results

Test Results – Antenna port 1				
Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	Verdict
2405	2.683	0.001855	1.0	PASS
2440	2.557	0.001802	1.0	PASS
2475	2.339	0.001714	1.0	PASS

Test Results – Antenna port 2				
Channel [MHz]	Power [dBm]	Power [W]	Limit [W]	Verdict
2405	2.616	0.001826	1.0	PASS
2440	2.247	0.001678	1.0	PASS
2475	1.987	0.001580	1.0	PASS

3.4 Test Conditions and Results - Power spectral density

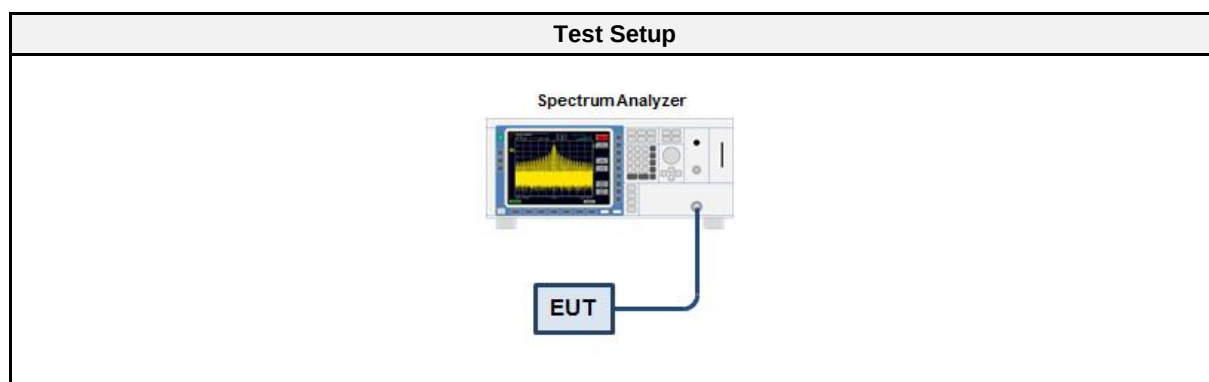
3.4.1 Information

Test Information	
Reference	FCC § 15.247(e); ISSED RSS-247, Issue 2 (section 5.2)
Measurement Method	ANSI C63.10 11.10.2, 14.3.2
Operator	Abdullah Al Jamal
Date	2019-10-18

3.4.2 Limits

Limits
8 dBm / 3 kHz

3.4.3 Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2019-07	2020-07

3.4.5 Procedure

Test Procedure
1. EUT set to test mode 2. The analyzer is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth 3. The RBW is set to 100 kHz with VBW $\geq$ RBW and the detector is set to peak with max hold 4. After the trace has stabilized a marker is set to the envelope maximum 5. If the power spectral density is above the limit the RBW is reduced (not lower than 3 kHz) and the measurement is repeated 6. If the EUT has more than one transmit chain the procedure is repeated for each transmit chain

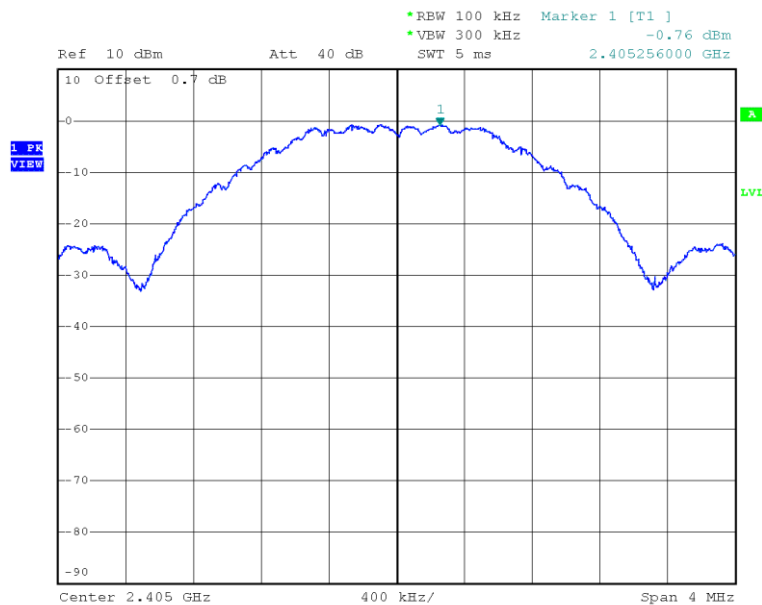
3.4.6 Results

Test Results – Antenna port 1			
Channel [MHz]	PSD [dBm/RBW]	Limit [dBm/3kHz]	Verdict
2405	-0.762	8.0	PASS
2440	-0.306	8.0	PASS
2475	-0.800	8.0	PASS
RBW = 100 kHz			

Test Results – Antenna port 2			
Channel [MHz]	PSD [dBm/RBW]	Limit [dBm/3kHz]	Verdict
2405	-0.342	8.0	PASS
2440	-0.491	8.0	PASS
2475	-1.271	8.0	PASS
RBW = 100 kHz			

Peak Power Spectral Density

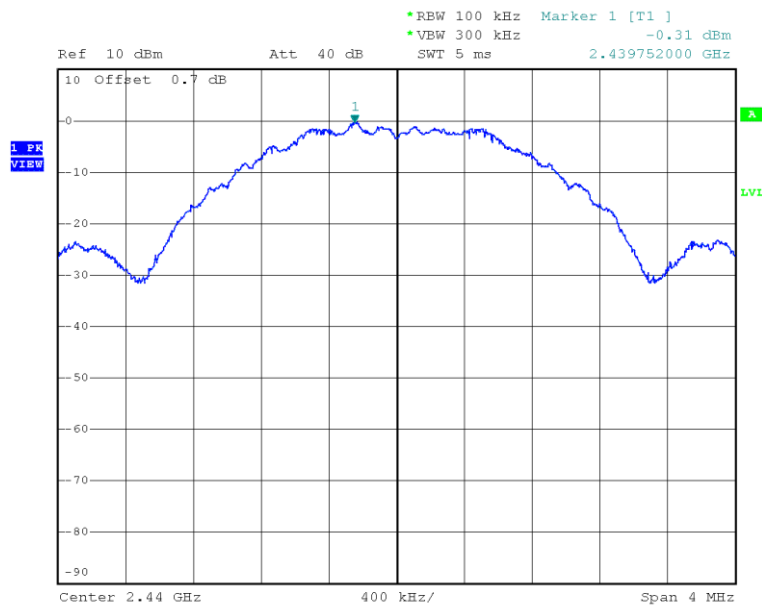
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Peak Frequency [MHz]: 2405.256
 Spectral Density [dBm/RBW]: -0.762
 Resolution Bandwidth [kHz]: 100 kHz



Date: 18.OCT.2019 11:56:41

Peak Power Spectral Density

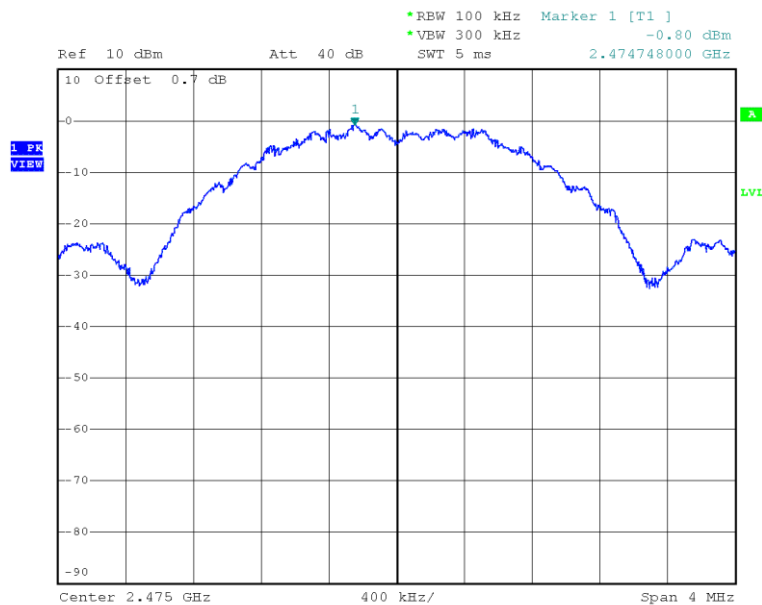
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: 250 kbps, Channel: 18, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Peak Frequency [MHz]: 2439.752
 Spectral Density [dBm/RBW]: -0.306
 Resolution Bandwidth [kHz]: 100 kHz



Date: 18.OCT.2019 11:58:18

Peak Power Spectral Density

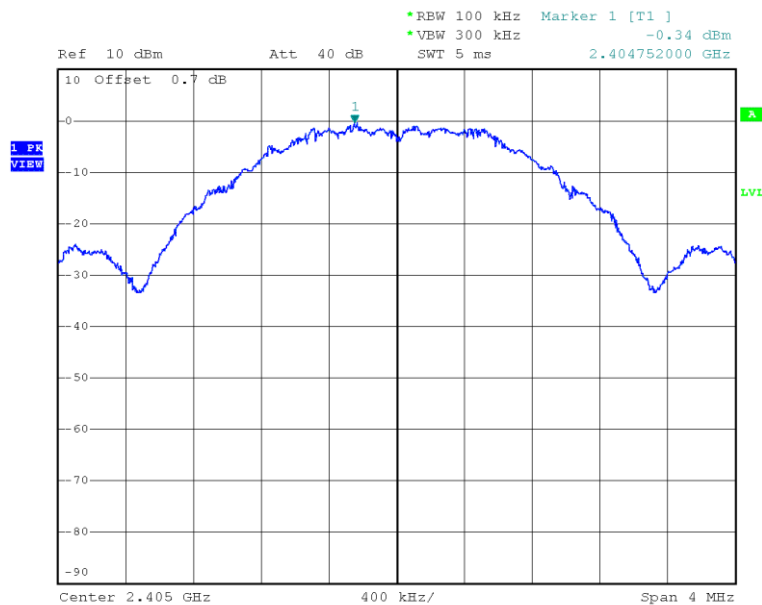
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Peak Frequency [MHz]: 2474.748
 Spectral Density [dBm/RBW]: -0.800
 Resolution Bandwidth [kHz]: 100 kHz



Date: 18.OCT.2019 11:59:04

Peak Power Spectral Density

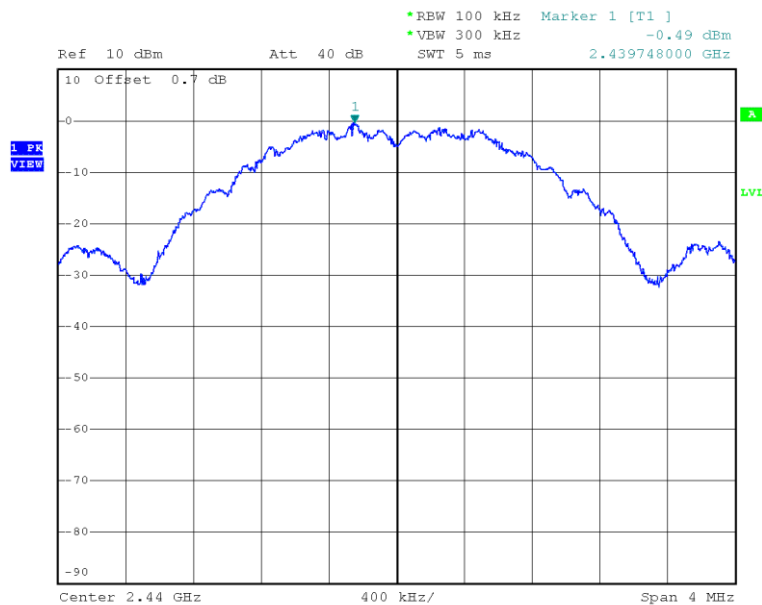
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Peak Frequency [MHz]: 2404.752
 Spectral Density [dBm/RBW]: -0.342
 Resolution Bandwidth [kHz]: 100 kHz



Date: 18.OCT.2019 12:00:52

Peak Power Spectral Density

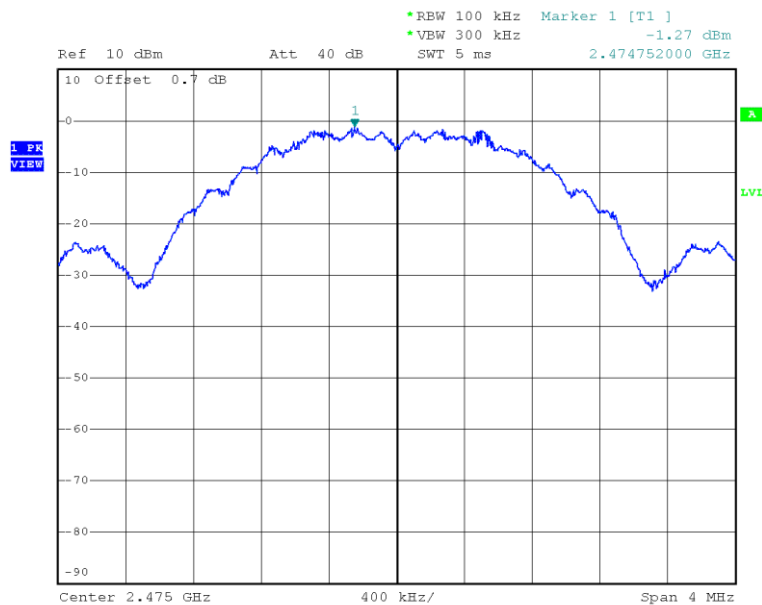
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: 250 kbps, Channel: 18, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Peak Frequency [MHz]: 2439.748
 Spectral Density [dBm/RBW]: -0.491
 Resolution Bandwidth [kHz]: 100 kHz



Date: 18.OCT.2019 12:01:31

Peak Power Spectral Density

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.10.2
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Peak Frequency [MHz]: 2474.752
 Spectral Density [dBm/RBW]: -1.271
 Resolution Bandwidth [kHz]: 100 kHz



Date: 18.OCT.2019 12:02:32

3.5 Test Conditions and Results - Band-edge compliance

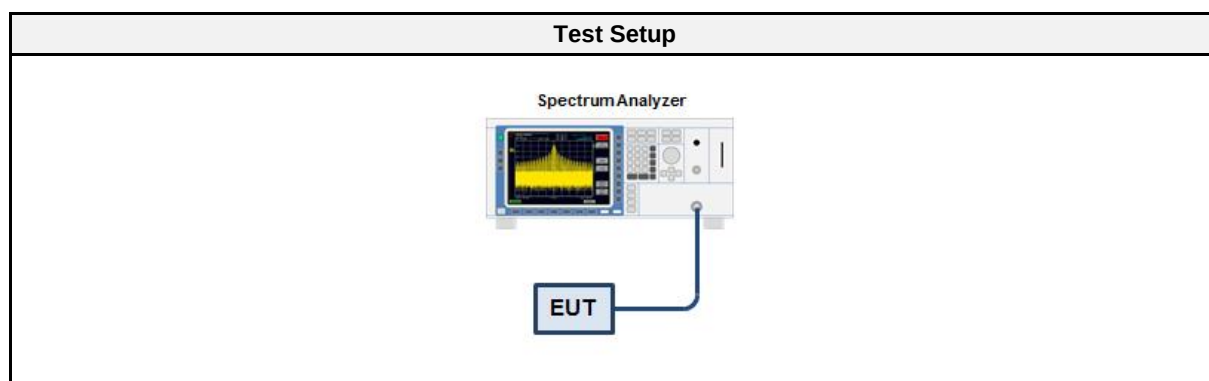
3.5.1 Information

Test Information	
Reference	FCC § 15.247(d); ISSED RSS-247, Issue 2 (section 5.5)
Measurement Method	ANSI C63.10 11.13
Operator	Abdullah Al Jamal
Date	2019-10-18

3.5.2 Limits

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

3.5.3 Setup



3.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSP 30	EF00312	2019-07	2020-07

3.5.5 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

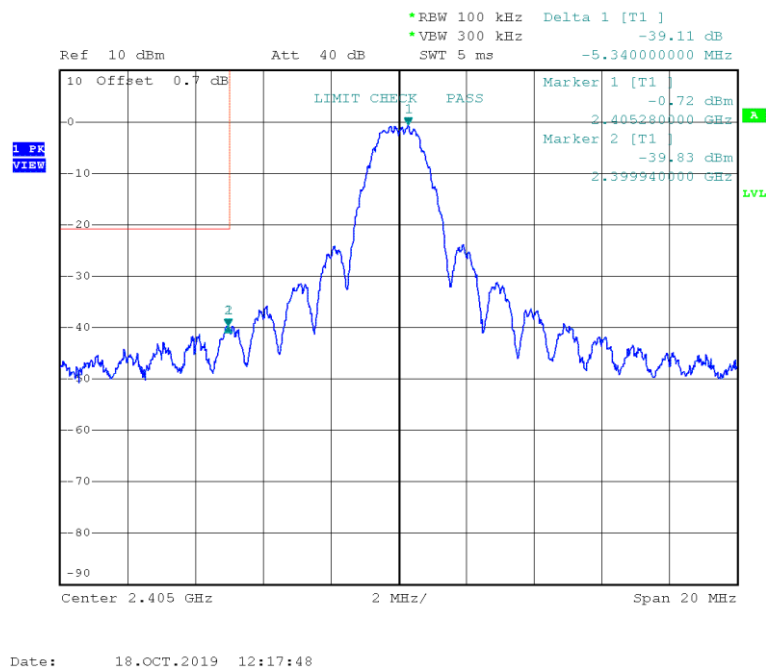
3.5.6 Results

Test Results – Antenna port 1				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
O-QPSK	2405	-39.11	-20	PASS
O-QPSK	2475	-45.98	-20	PASS

Test Results – Antenna port 2				
Mode	Channel [MHz]	Out-of-band Attenuation [dB]	Limit [dB]	Verdict
O-QPSK	2405	-39.19	-20	PASS
O-QPSK	2475	-44.81	-20	PASS

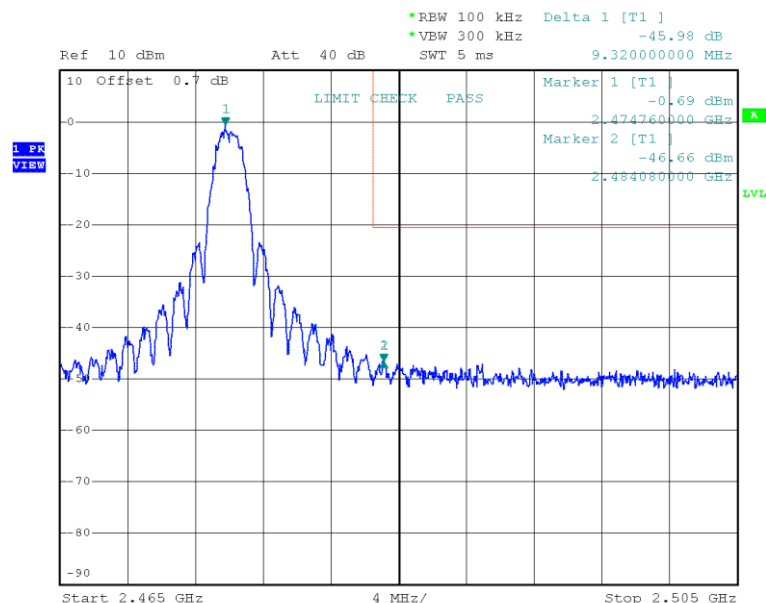
Emissions in nonrestricted frequency bands at the Band-edge

Project Number: GOM-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Band-edge: Lower
 In-band Frequency [MHz]: 2405.28
 Max. in-band Level [dBm/100 kHz]: -0.718
 Out-of-band Frequency [MHz]: 2399.94
 Max. out-of-band Level [dBm/100 kHz]: -39.827
 Attenuation [dB]: -39.11



Emissions in nonrestricted frequency bands at the Band-edge

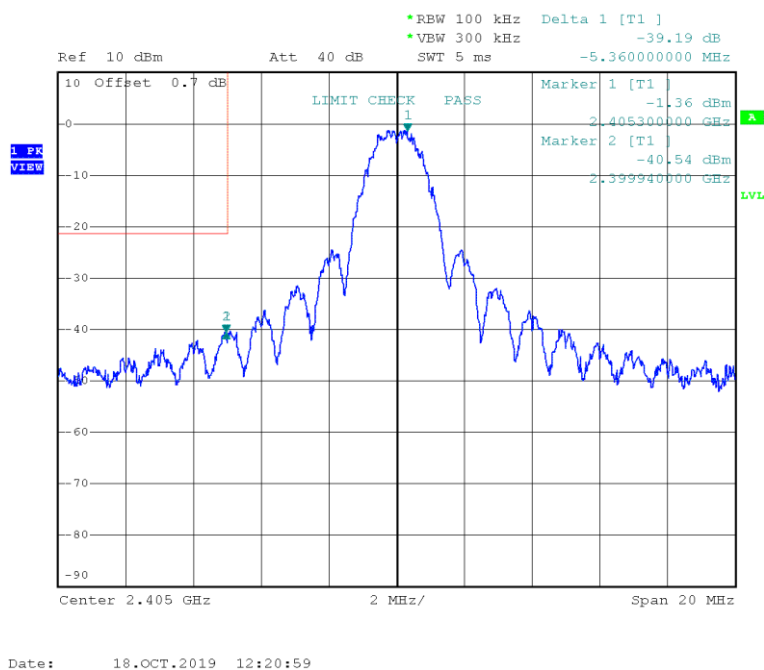
Project Number: GOM-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Band-edge: Upper
 In-band Frequency [MHz]: 2474.76
 Max. in-band Level [dBm/100 kHz]: -0.685
 Out-of-band Frequency [MHz]: 2484.08
 Max. out-of-band Level [dBm/100 kHz]: -46.662
 Attenuation [dB]: -45.98



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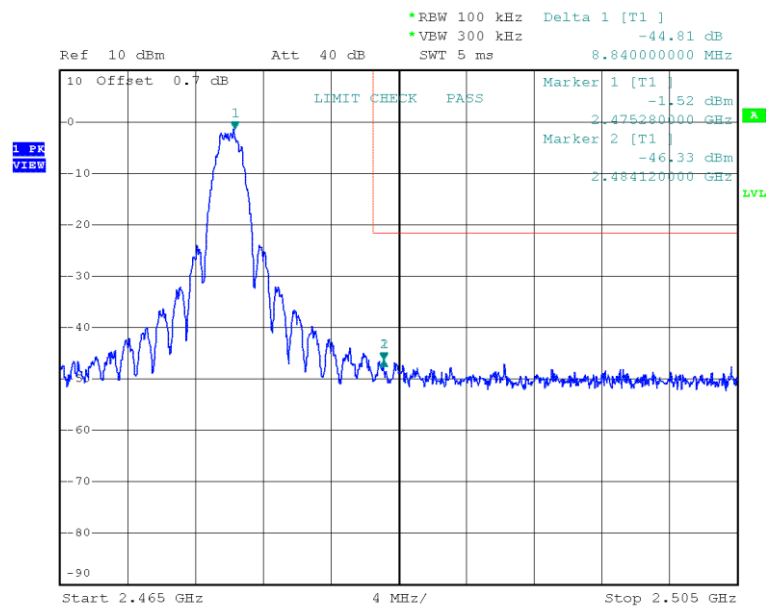
Emissions in nonrestricted frequency bands at the Band-edge

Project Number: GOM-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Band-edge: Lower
 In-band Frequency [MHz]: 2405.3
 Max. in-band Level [dBm/100 kHz]: -1.356
 Out-of-band Frequency [MHz]: 2399.94
 Max. out-of-band Level [dBm/100 kHz]: -40.542
 Attenuation [dB]: -39.19



Emissions in nonrestricted frequency bands at the Band-edge

Project Number: GOM-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Band-edge: Upper
 In-band Frequency [MHz]: 2475.28
 Max. in-band Level [dBm/100 kHz]: -1.524
 Out-of-band Frequency [MHz]: 2484.12
 Max. out-of-band Level [dBm/100 kHz]: -46.333
 Attenuation [dB]: -44.81



Date: 18.OCT.2019 12:22:09

3.6 Test Conditions and Results - Conducted spurious emissions

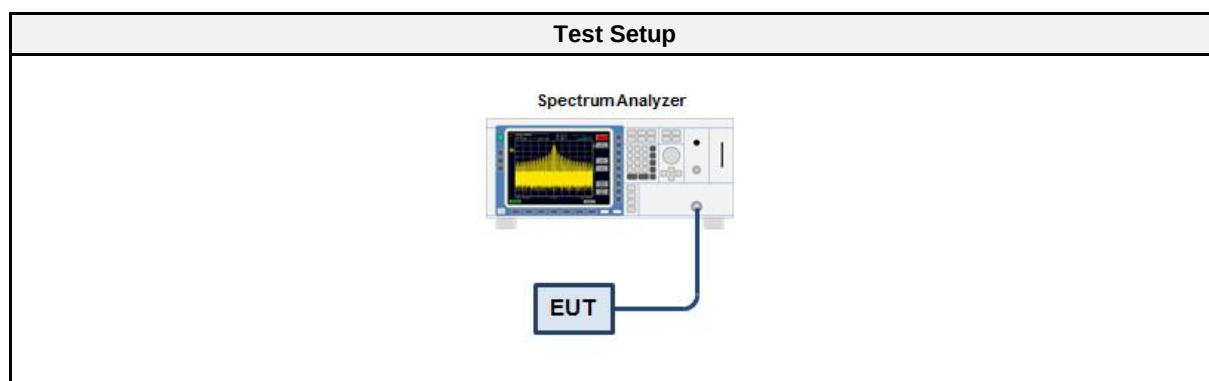
3.6.1 Information

Test Information	
Reference	FCC § 15.247(d); ISED RSS-247, Issue 2 (section 5.5)
Measurement Method	ANSI C63.10 11.11
Operator	Abdullah Al Jamal
Date	2019-10-18

3.6.2 Limits

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

3.6.3 Setup



3.6.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSW 43	EF00896	2019-07	2020-07

3.6.5 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

3.6.6 Results

Test Results – Antenna port 1		
Mode	Channel [MHz]	Verdict
O-QPSK	2405	PASS
O-QPSK	2440	PASS
O-QPSK	2475	PASS

Test Results – Antenna port 2		
Mode	Channel [MHz]	Verdict
O-QPSK	2405	PASS
O-QPSK	2440	PASS
O-QPSK	2475	PASS

Conducted Spurious Emissions

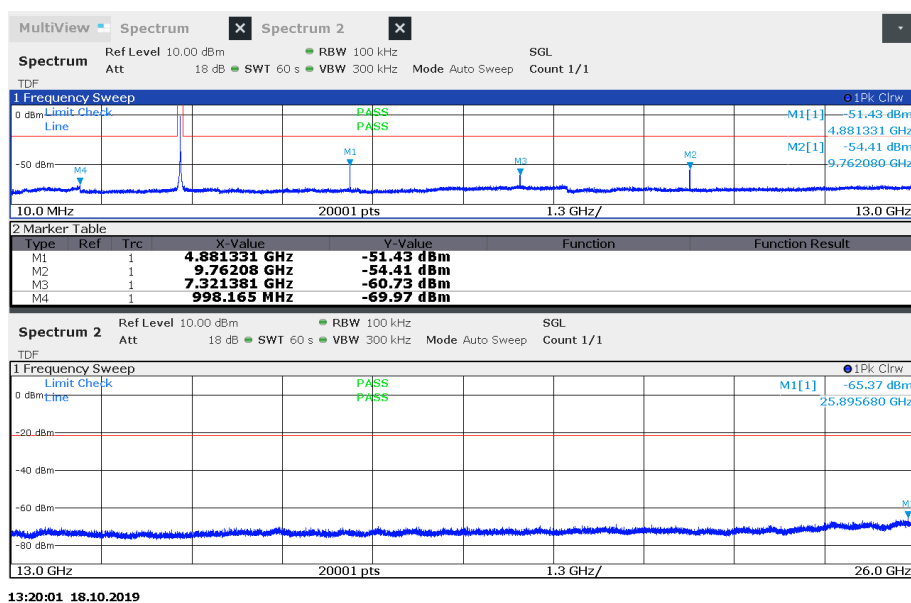
Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Max. in-band Frequency [MHz]: 2405.3
 Max. in-band Level [dBm/100 kHz]: 0.1
 Out-of-band Limit [dBm/100 kHz]: -19.9



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Conducted Spurious Emissions

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 18, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Max. in-band Frequency [MHz]: 2440.1
 Max. in-band Level [dBm/100 kHz]: -1.6
 Out-of-band Limit [dBm/100 kHz]: -21.6



13:20:01 18.10.2019

Conducted Spurious Emissions

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 1
 Max. in-band Frequency [MHz]: 2474.8
 Max. in-band Level [dBm/100 kHz]: -2.2
 Out-of-band Limit [dBm/100 kHz]: -22.2



Conducted Spurious Emissions

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 11, 2405 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Max. in-band Frequency [MHz]: 2404.7
 Max. in-band Level [dBm/100 kHz]: -0.7
 Out-of-band Limit [dBm/100 kHz]: -20.7



Conducted Spurious Emissions

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 18, 2440 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Max. in-band Frequency [MHz]: 2439.8
 Max. in-band Level [dBm/100 kHz]: -1.5
 Out-of-band Limit [dBm/100 kHz]: -21.5



Conducted Spurious Emissions

Project Number: G0M-1901-7989
 Applicant: Amphenol Thermometrics, Inc.
 Model Description: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Sample ID: 25853
 Reference Standards: FCC 15.247, RSS-247
 Reference Method: ANSI C63.10:2013, Section 11.11
 Operational Mode: 250 kbps, Channel: 25, 2475 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Abdullah Al Jamal
 Test Site: Eurofins Product Service GmbH
 Test Date: 2019-10-18
 Note: Antenna port 2
 Max. in-band Frequency [MHz]: 2475.2
 Max. in-band Level [dBm/100 kHz]: -2.2
 Out-of-band Limit [dBm/100 kHz]: -22.2



3.7 Test Conditions and Results - Transmitter radiated emissions

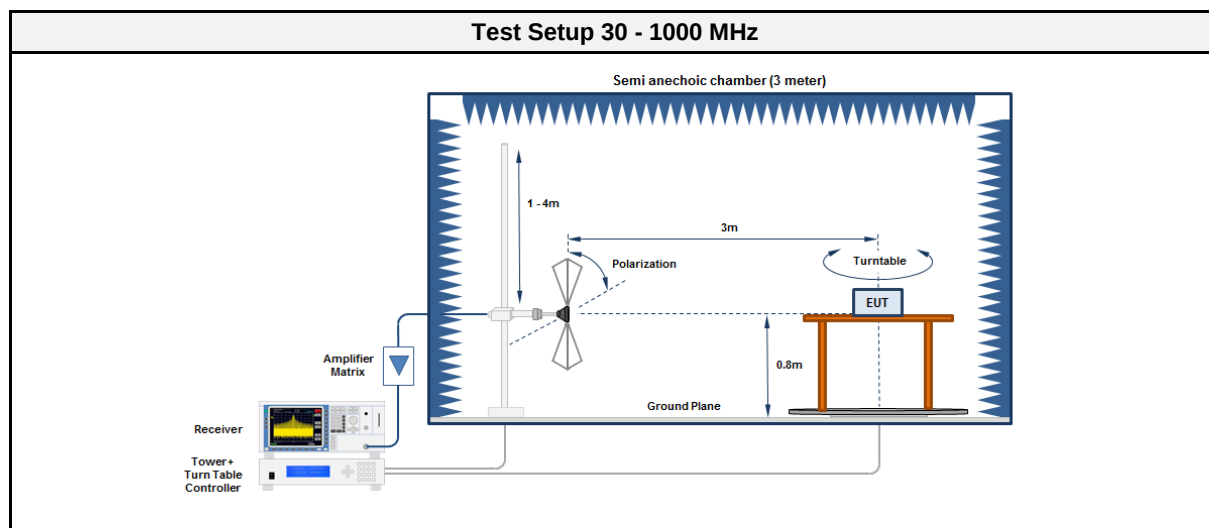
3.7.1 Information

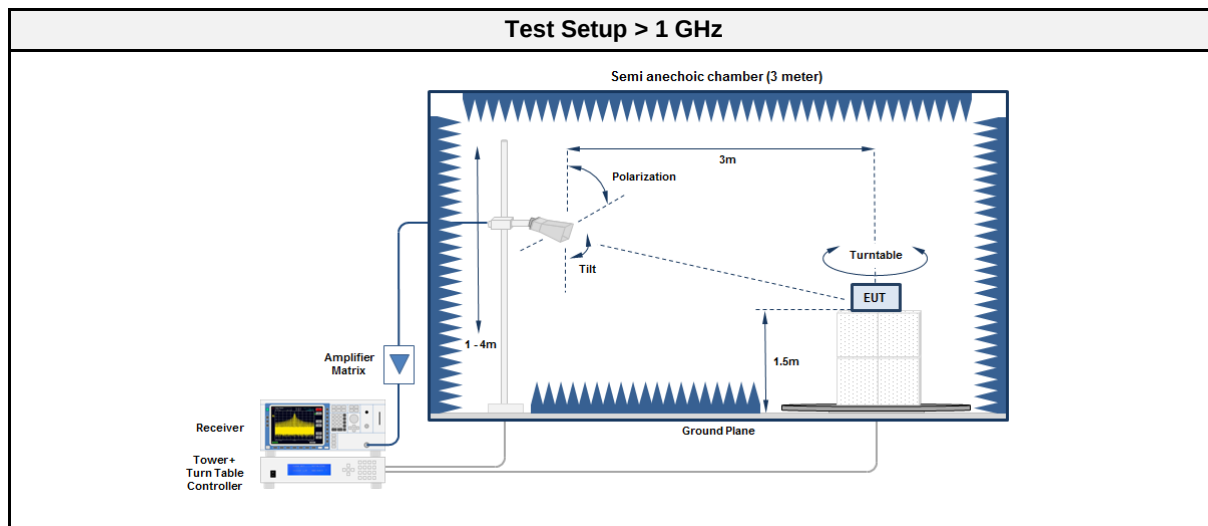
Test Information	
Reference	FCC § 15.247(d); FCC § 15.209; ISSED RSS-Gen, Issue 5 (section 6.13)
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Abdullah Al Jamal
Date	2019-10-10
Additional information	Measurement plots not listed in the test report contain plots with no significant emissions or a measured noise floor only.

3.7.2 Limits

Limits			
Frequency [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

3.7.3 Setup





3.7.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2015.2.4
EMC Software	DARE Instruments	RadiMation	2016.1.10

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Measurement Receiver	R&S	ESU 26	EF00887	2019-07	2020-07
Antenna	R&S	VULB 9162	EF00978	2016-11	2019-11

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Measurement Receiver	R&S	ESU 26	EF00887	2019-07	2020-07
Antenna	Schwarzbeck	BBHA 9120D	EF00019	2018-10	2020-10
Antenna	Amplifier Research	AT4560	EF01152	2018-10	2020-10

3.7.5 Procedure

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 – Antenna port 1						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
2405	No significant emission detected.					
2440	171.984	33.58	pk	ver	43.52	-09.94
2475	169.536	33.59	pk	hor	43.52	-09.93
2475	No significant emission detected.					

3.8 Test Conditions and Results - Receiver radiated emissions

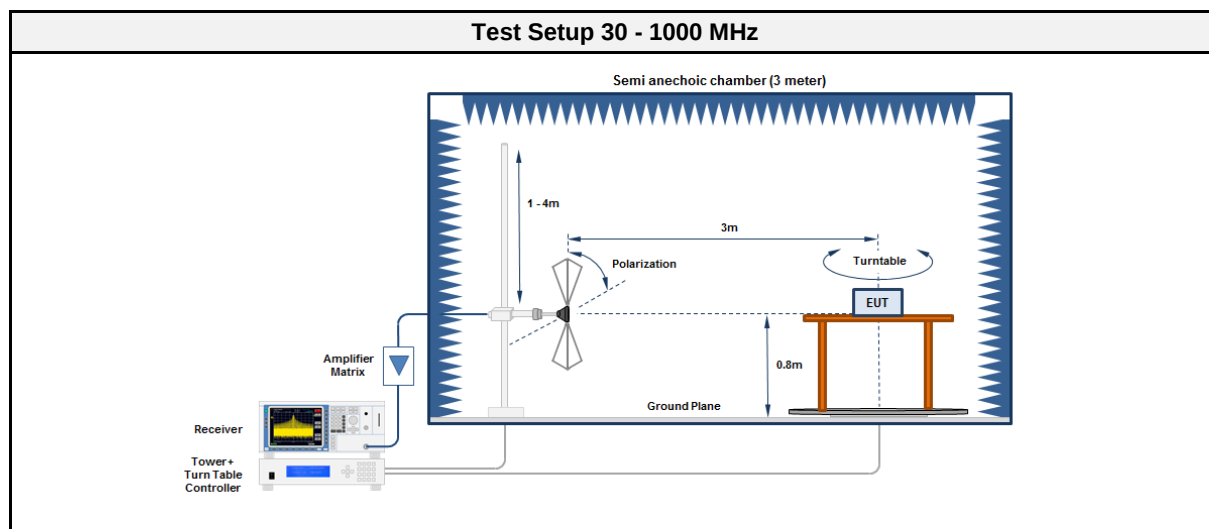
3.8.1 Information

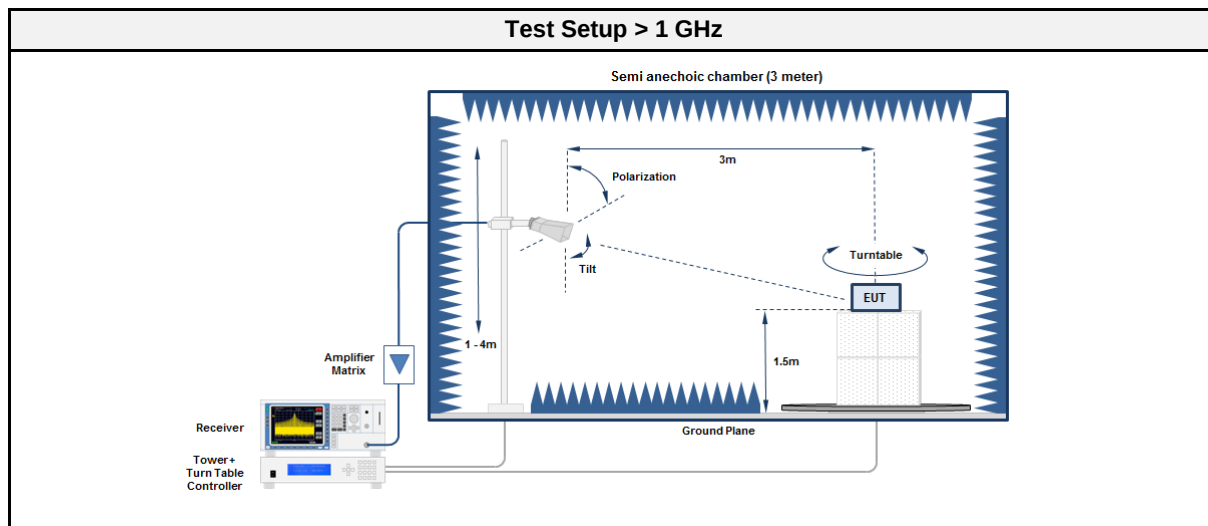
Test Information	
Reference	ISED RSS-247, Issue 2 (section 3.1)
Measurement Method	ANSI C63.10 6.5, 6.6, 11.12
Operator	Abdullah Al Jamal
Date	2019-10-10
Additional information	Measurement plots not listed in the test report contain plots with no significant emissions or a measured noise floor only.

3.8.2 Limits

Limits			
Frequency [MHz]	Detector	Field strength [dB μ 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

3.8.3 Setup





3.8.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2015.2.4
EMC Software	DARE Instruments	RadiMation	2016.1.10

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Measurement Receiver	R&S	ESU 26	EF00887	2019-07	2020-07
Antenna	R&S	VULB 9162	EF00978	2016-11	2019-11

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2018-07	2021-07
Measurement Receiver	R&S	ESU 26	EF00887	2019-07	2020-07
Antenna	Schwarzbeck	BBHA 9120D	EF00019	2018-10	2020-10

3.8.5 Procedure

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

3.8.6 Results

Test Results – Antenna port 1						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
2440	7519	38.48	pk	hor	53.98	-15.50
2440	10957	44.72	pk	ver	53.98	-09.26

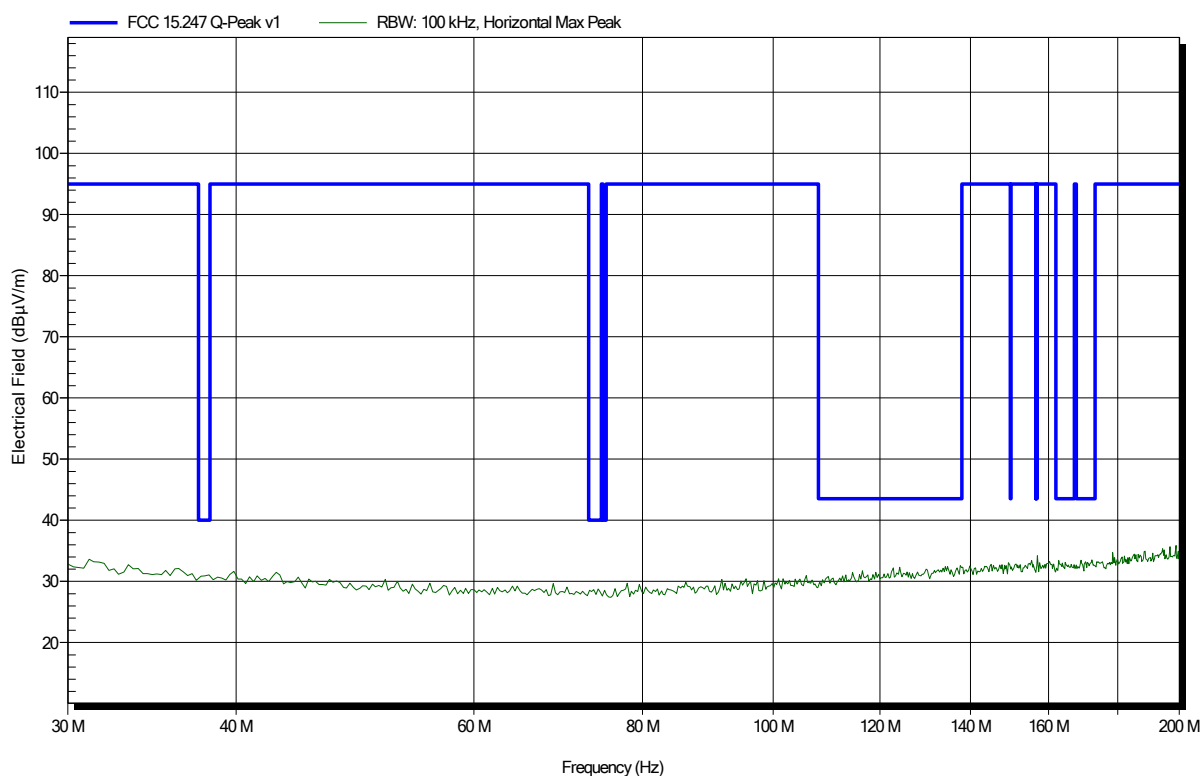
ANNEX A Transmitter spurious emissions

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: TX; Test sample ID #25749 – 2405 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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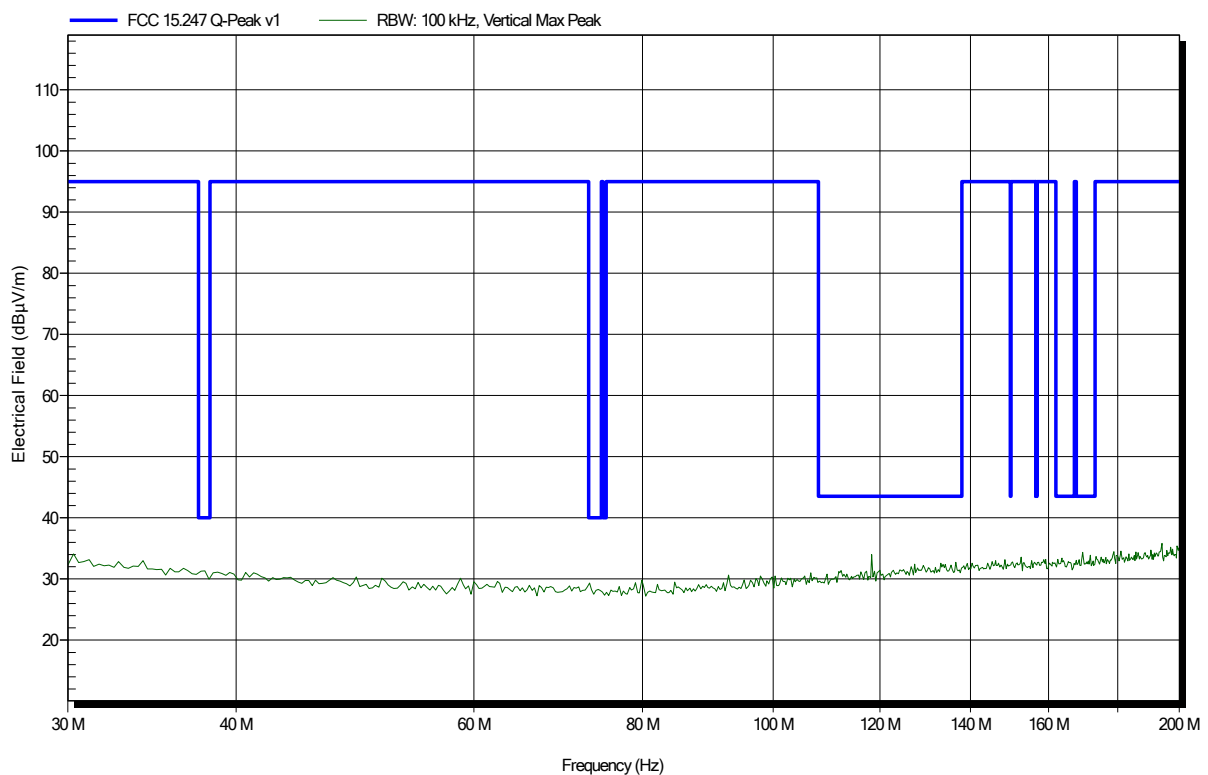


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3 m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note:

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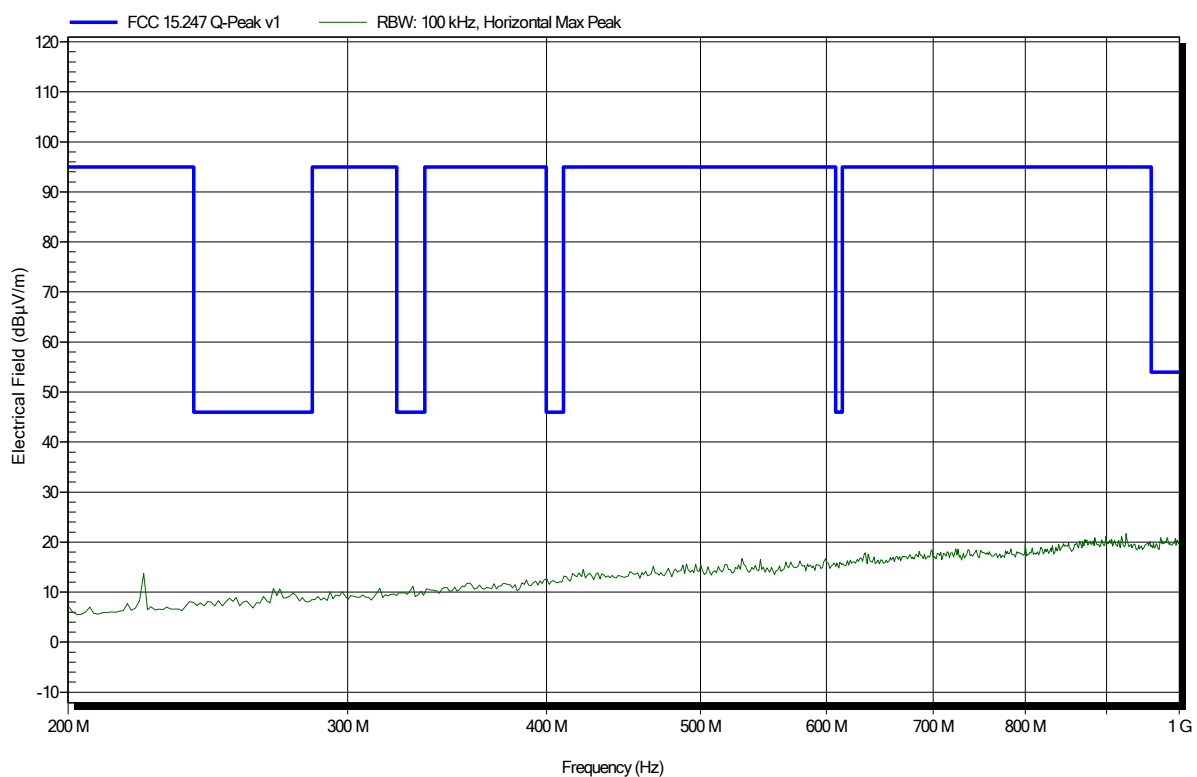


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; Test sample ID #25749 – 2405 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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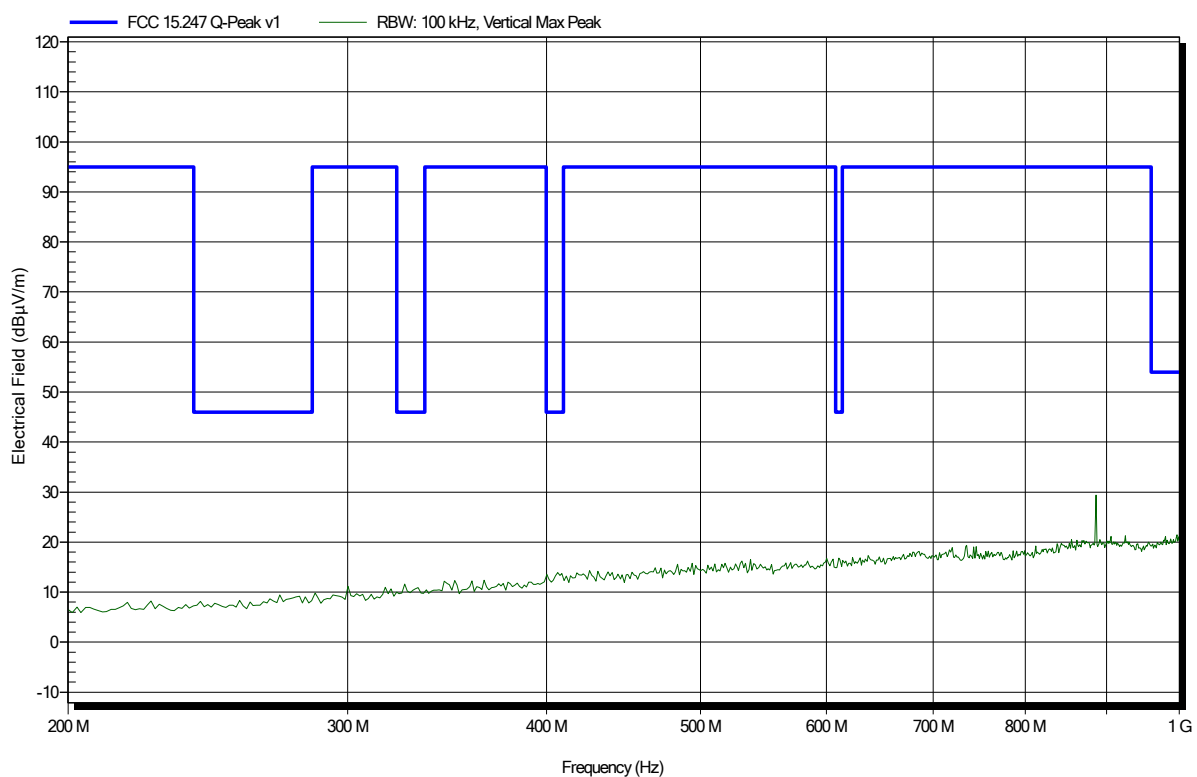


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; Test sample ID #25749 – 2405 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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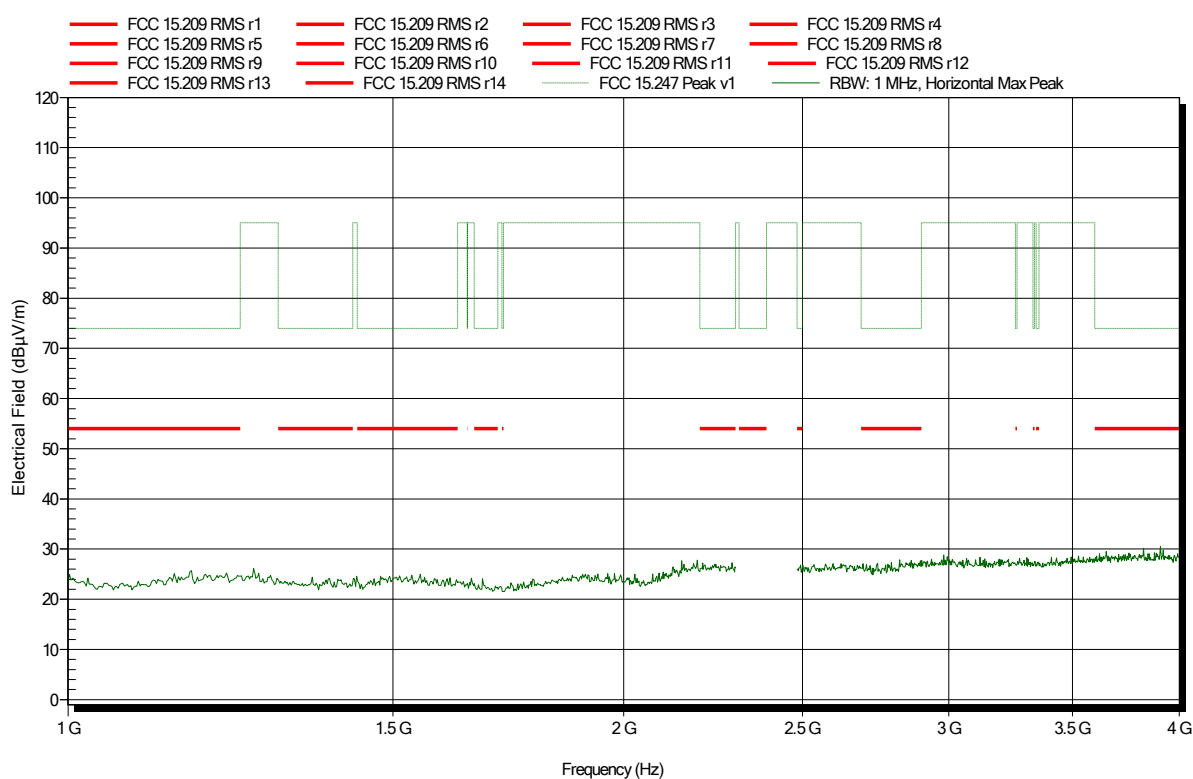


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note:

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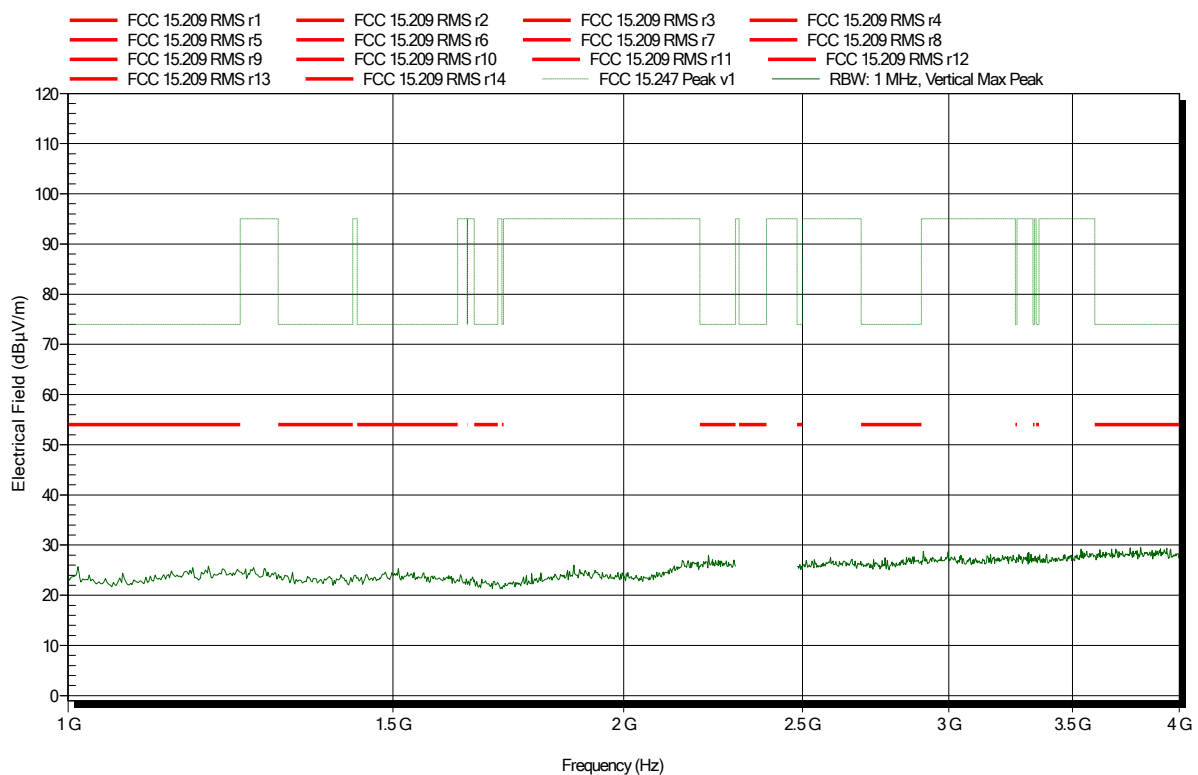


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note:

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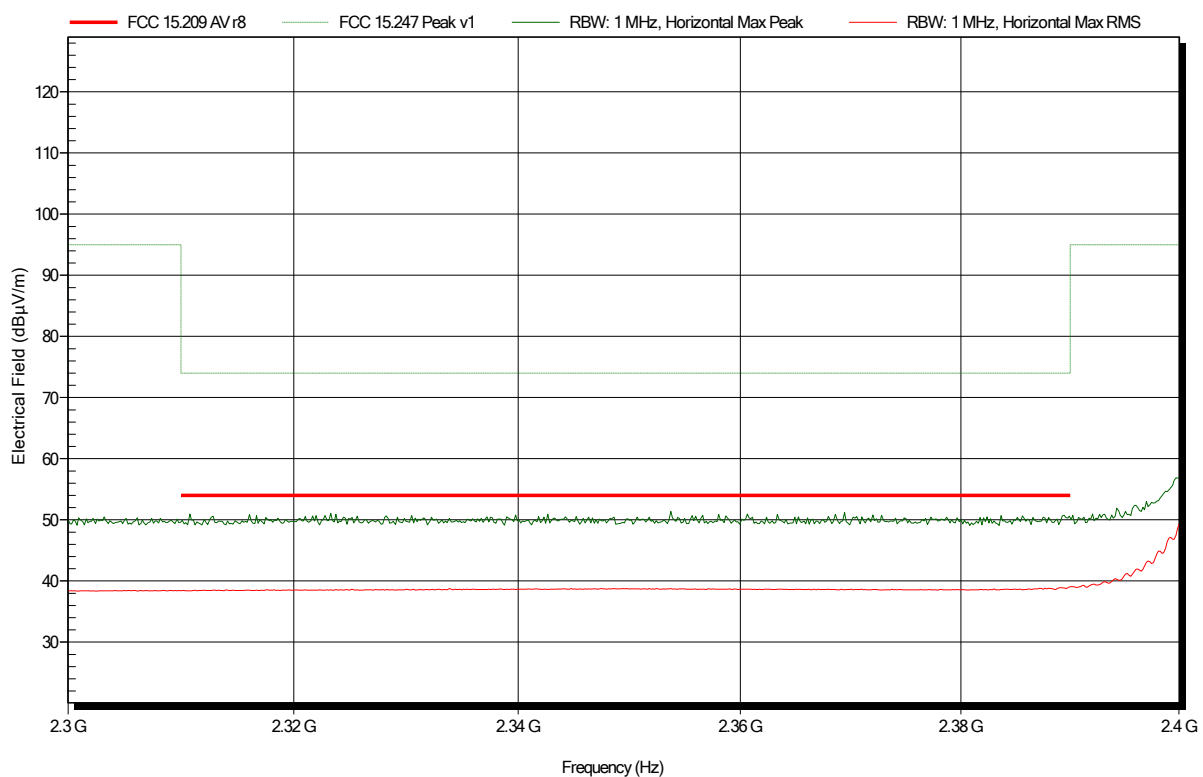


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note: lower bandedge

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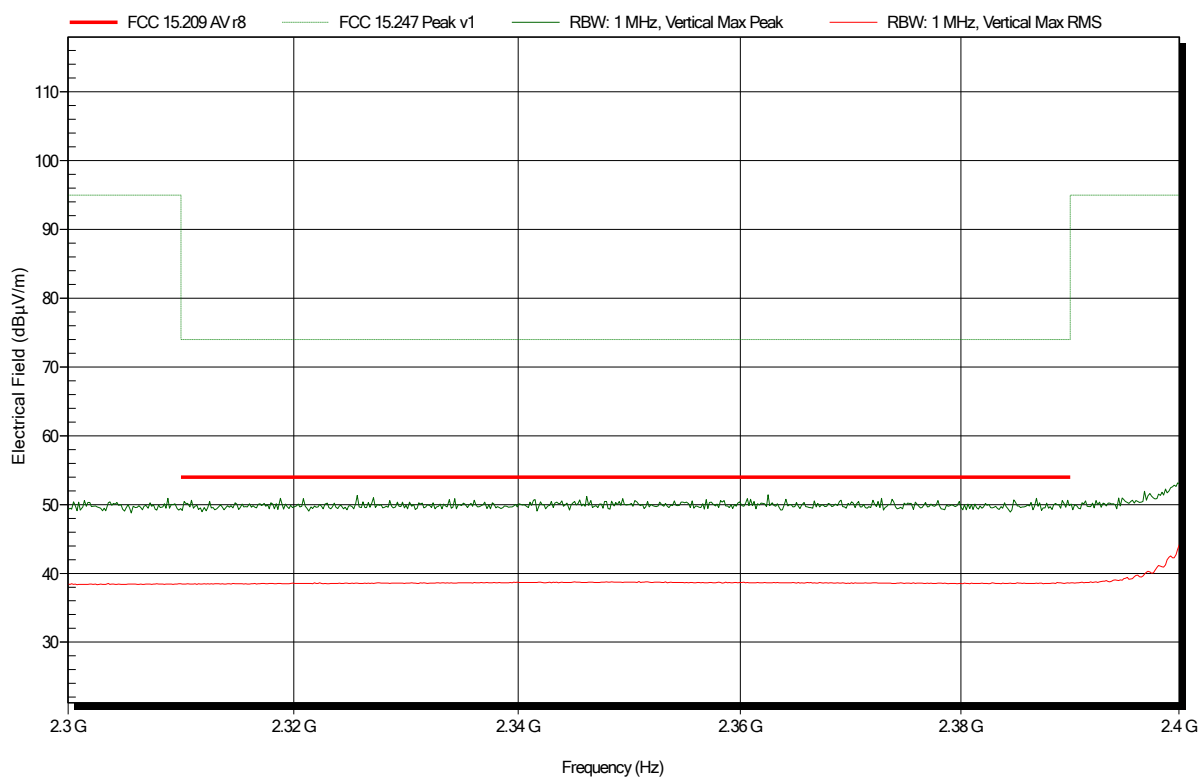


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note: lower bandedge

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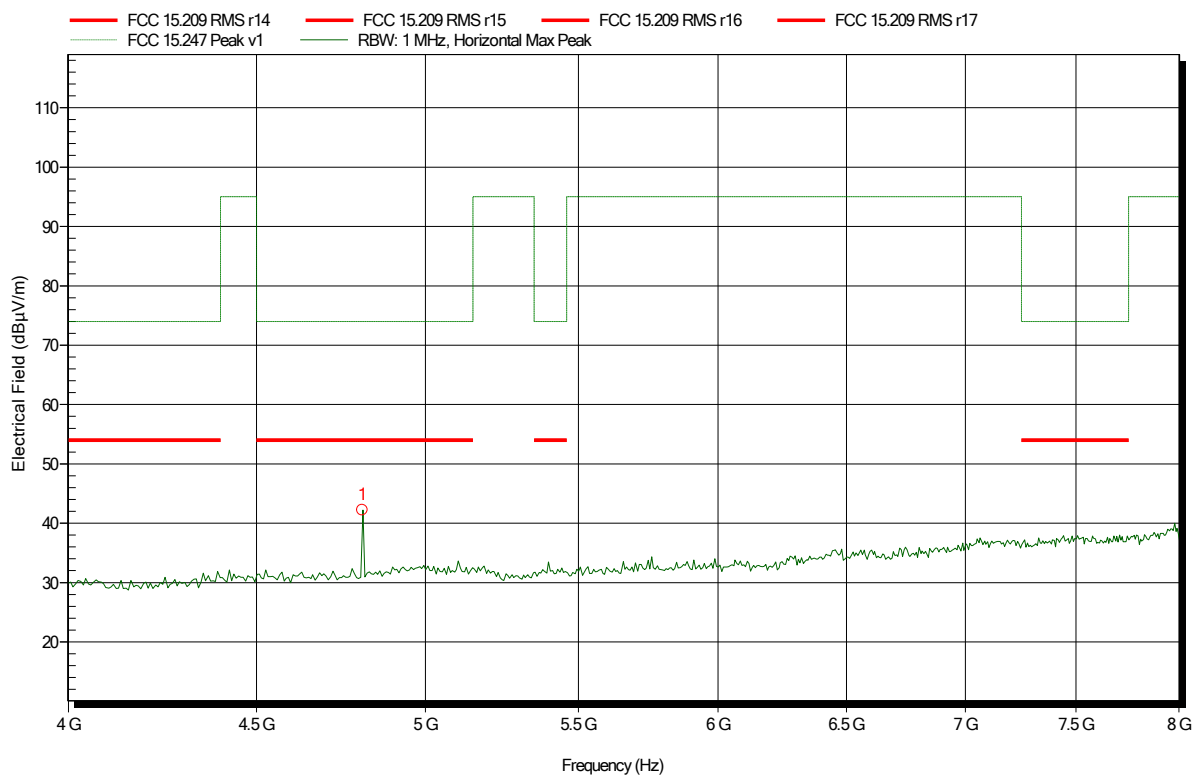


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2405 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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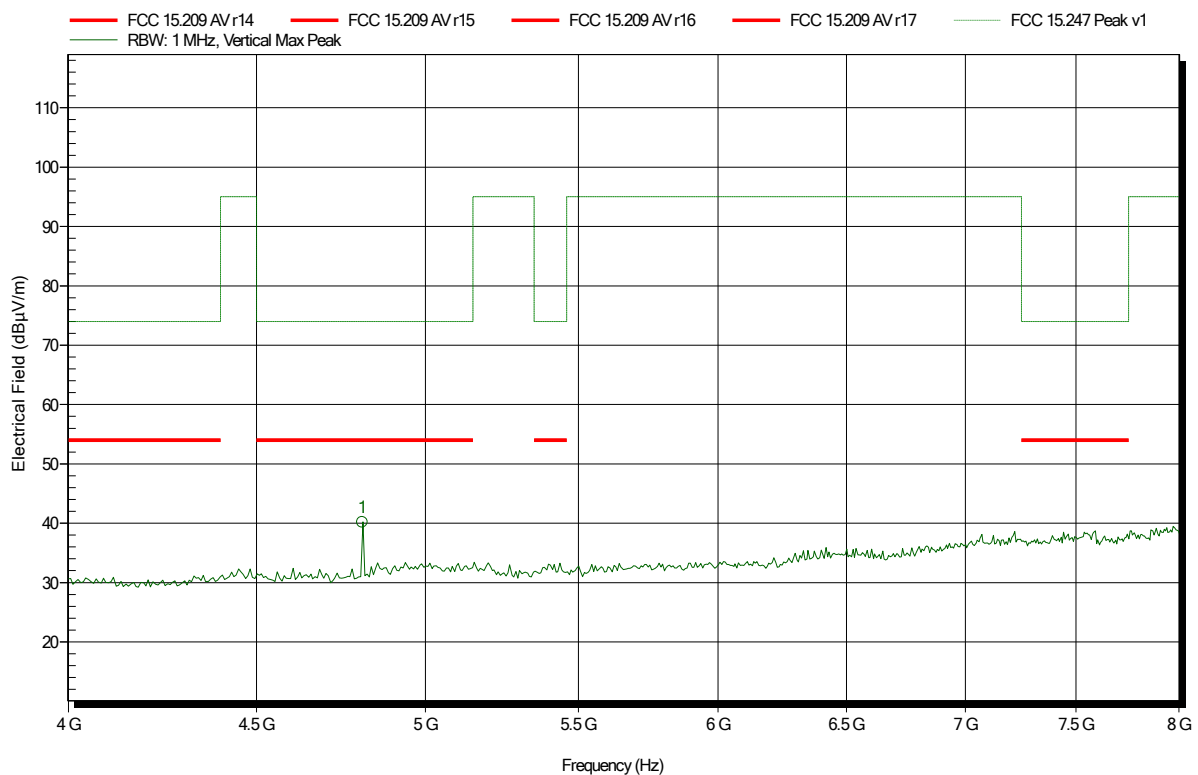
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.806 GHz	42.2 dBμV/m	74 dBμV/m	-31.8 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2405 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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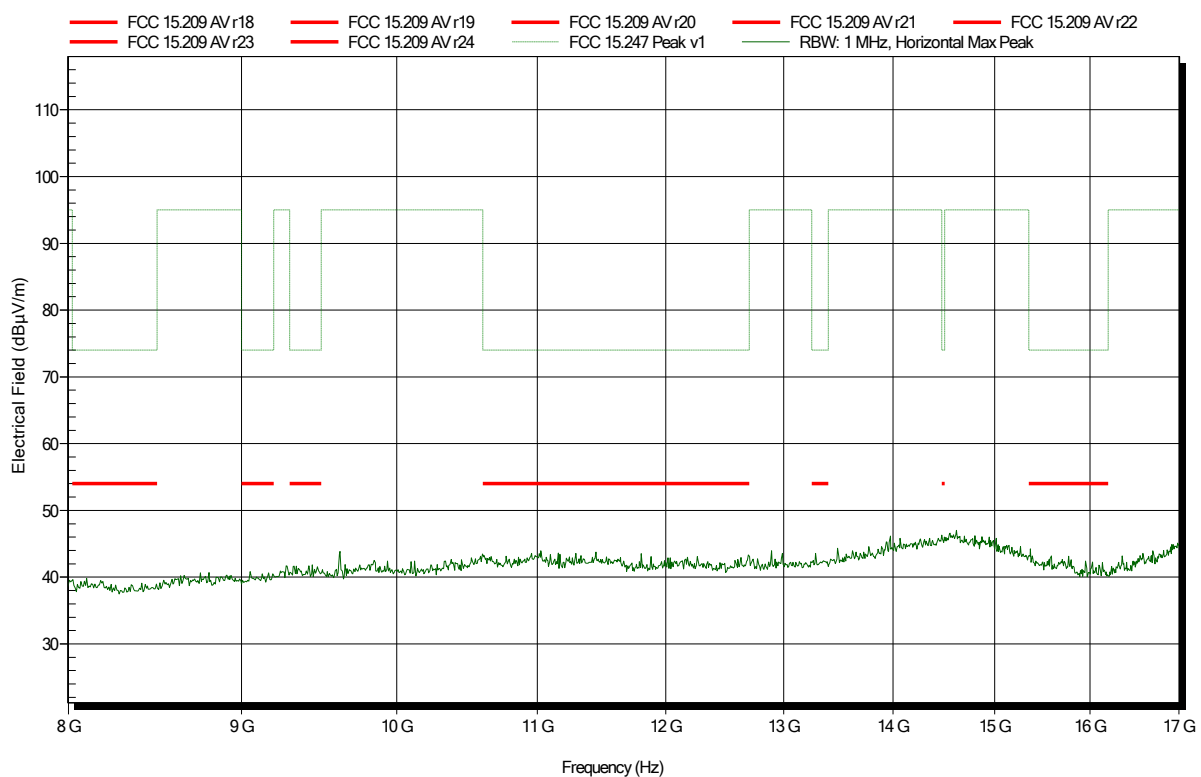
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.806 GHz	40.19 dBµV/m	74 dBµV/m	-33.81 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note:

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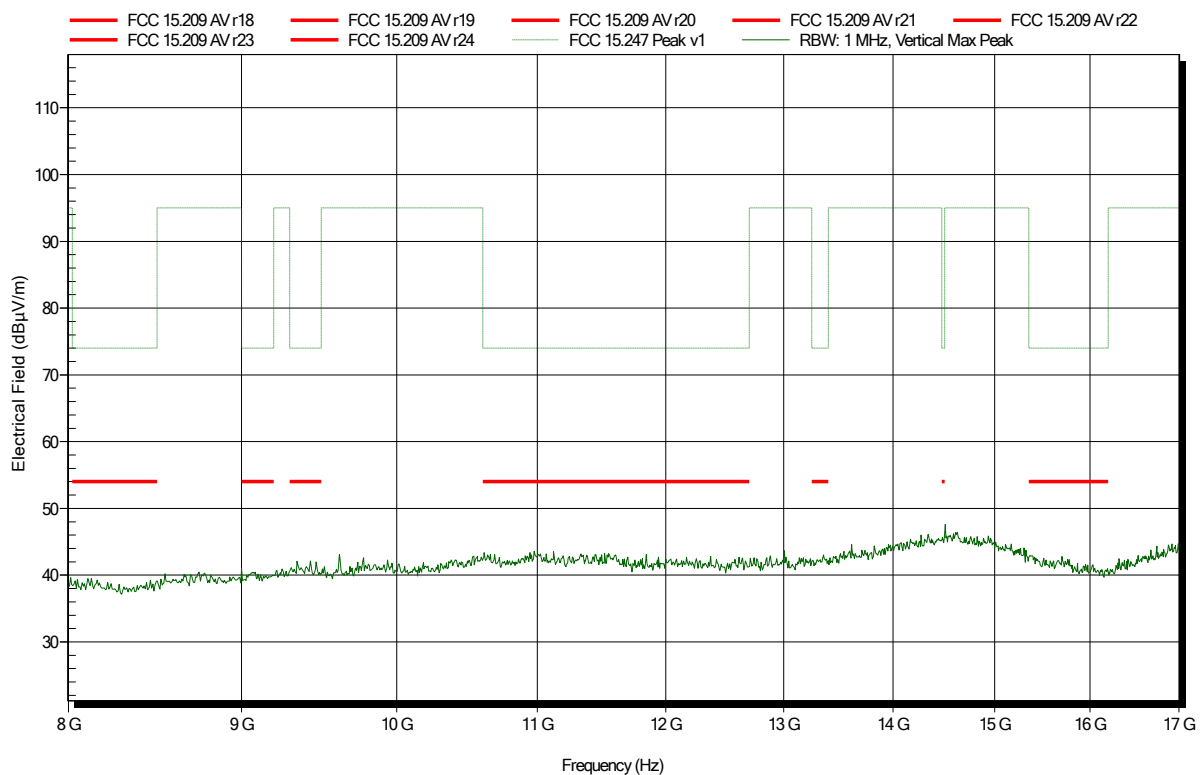


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2405 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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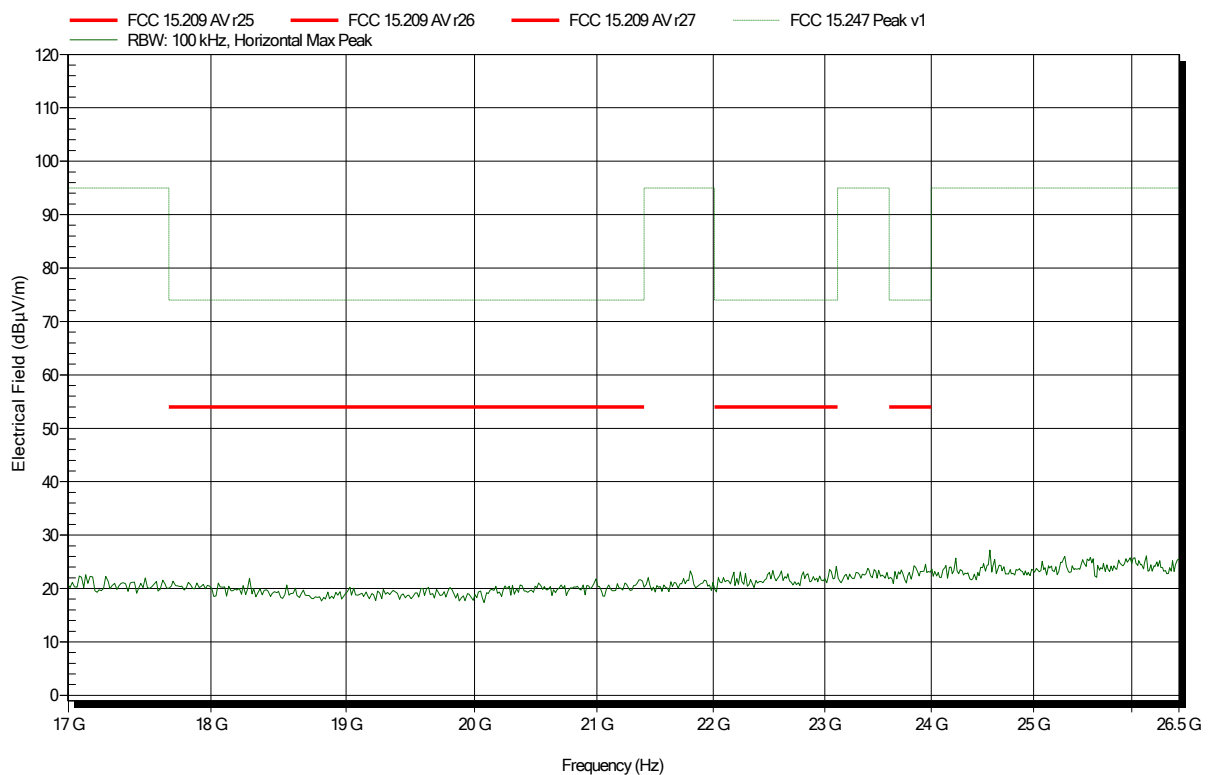


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Amplifier Research AT4560, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note:

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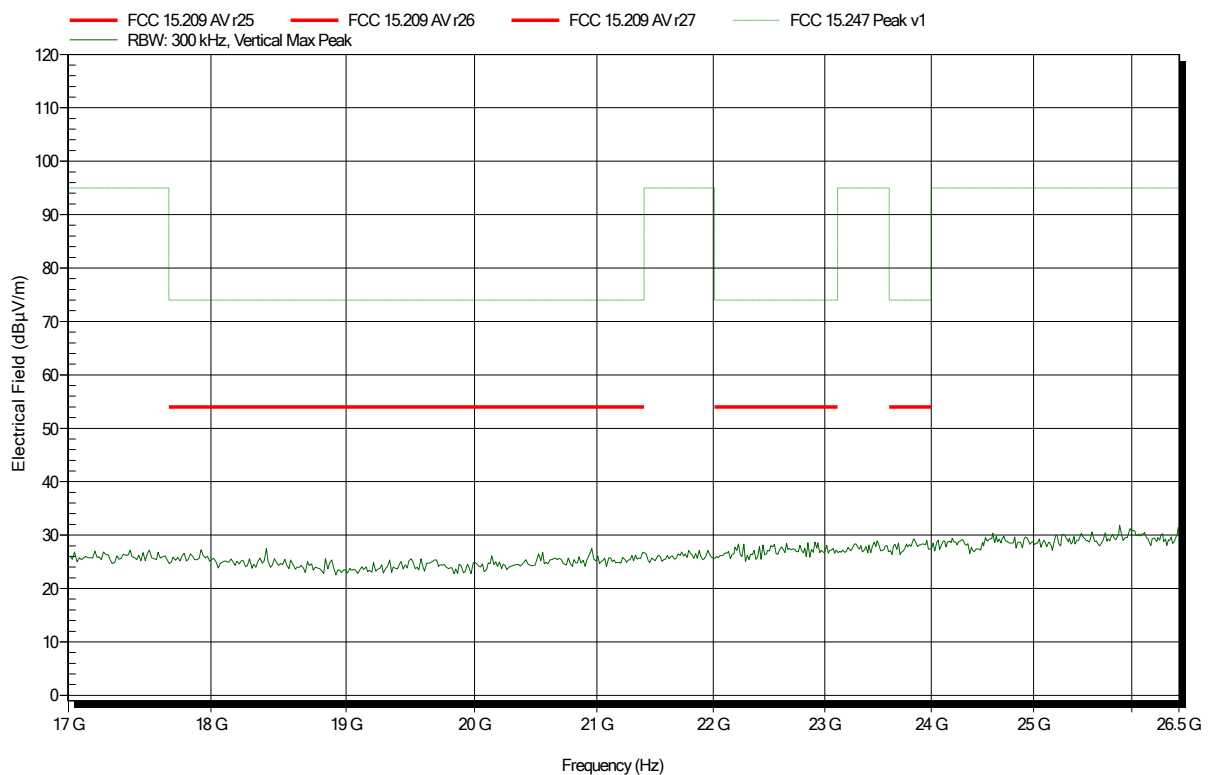


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Amplifier Research AT4560, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2405 MHz
Test Date: Thursday, October 10, 2019
Note:

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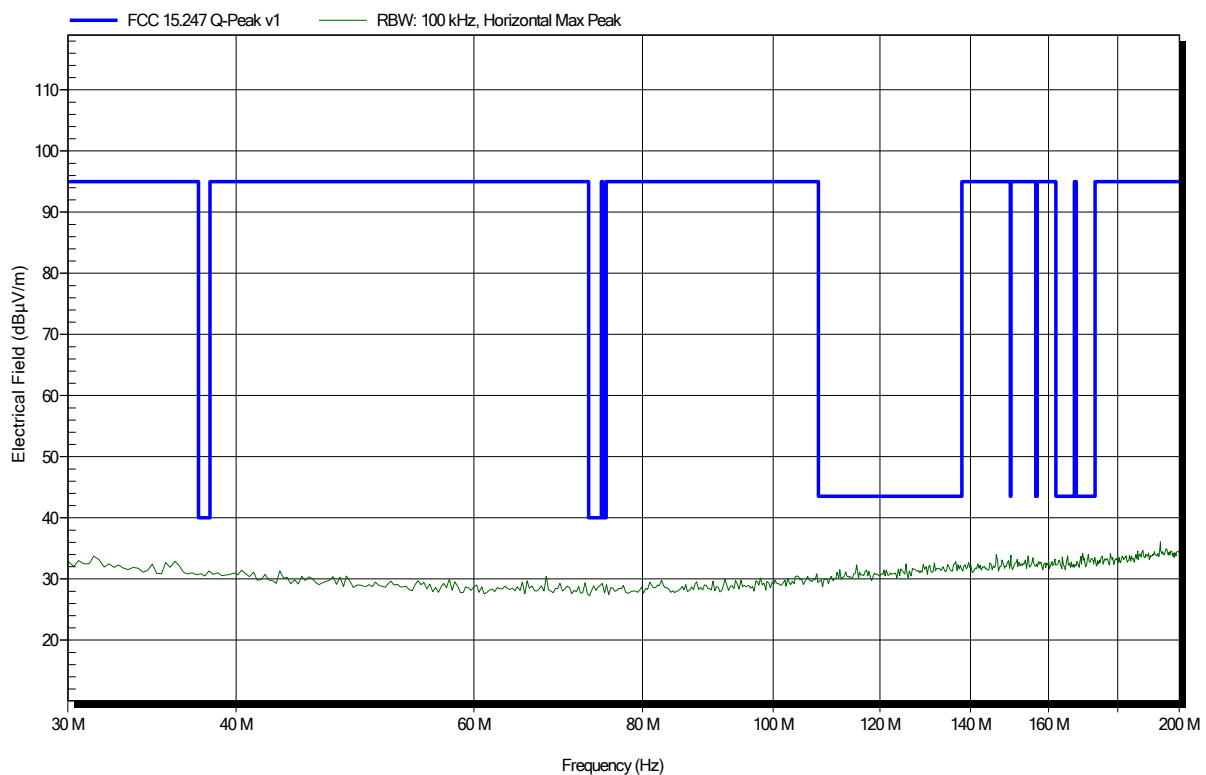


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HK 116, Horizontal
Measurement distance: 3 m
Mode: TX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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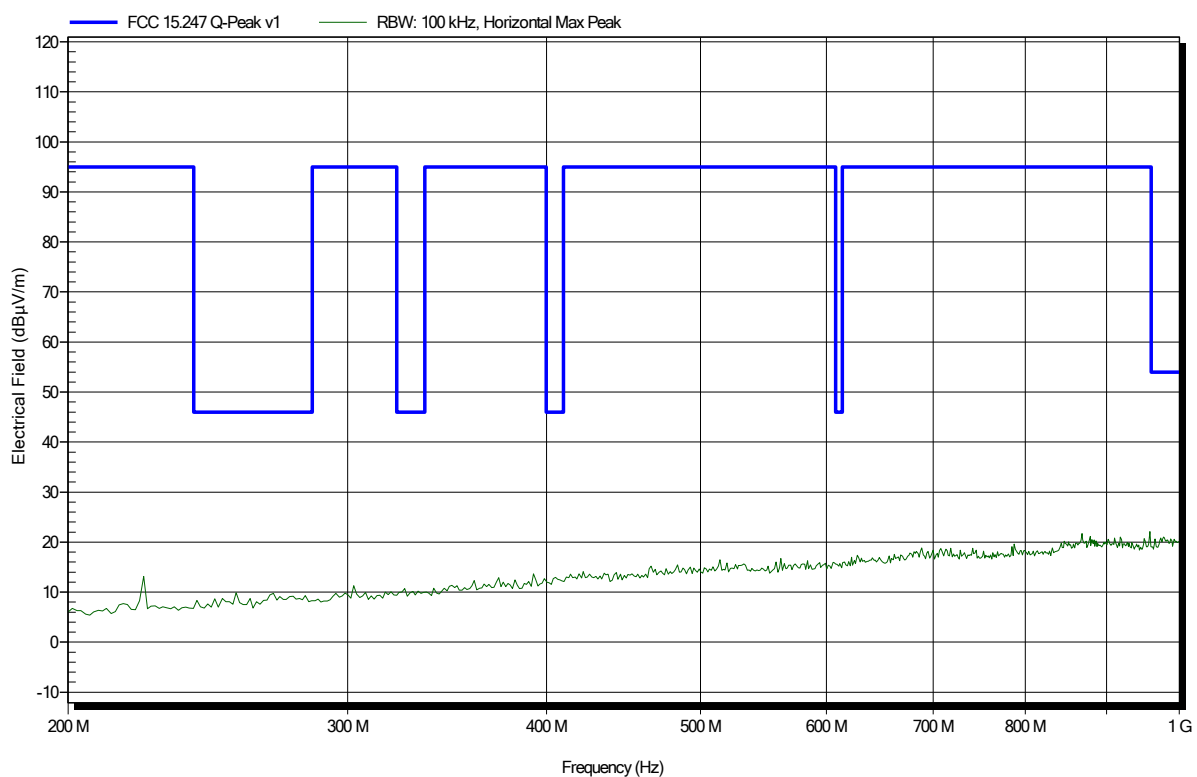


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: TX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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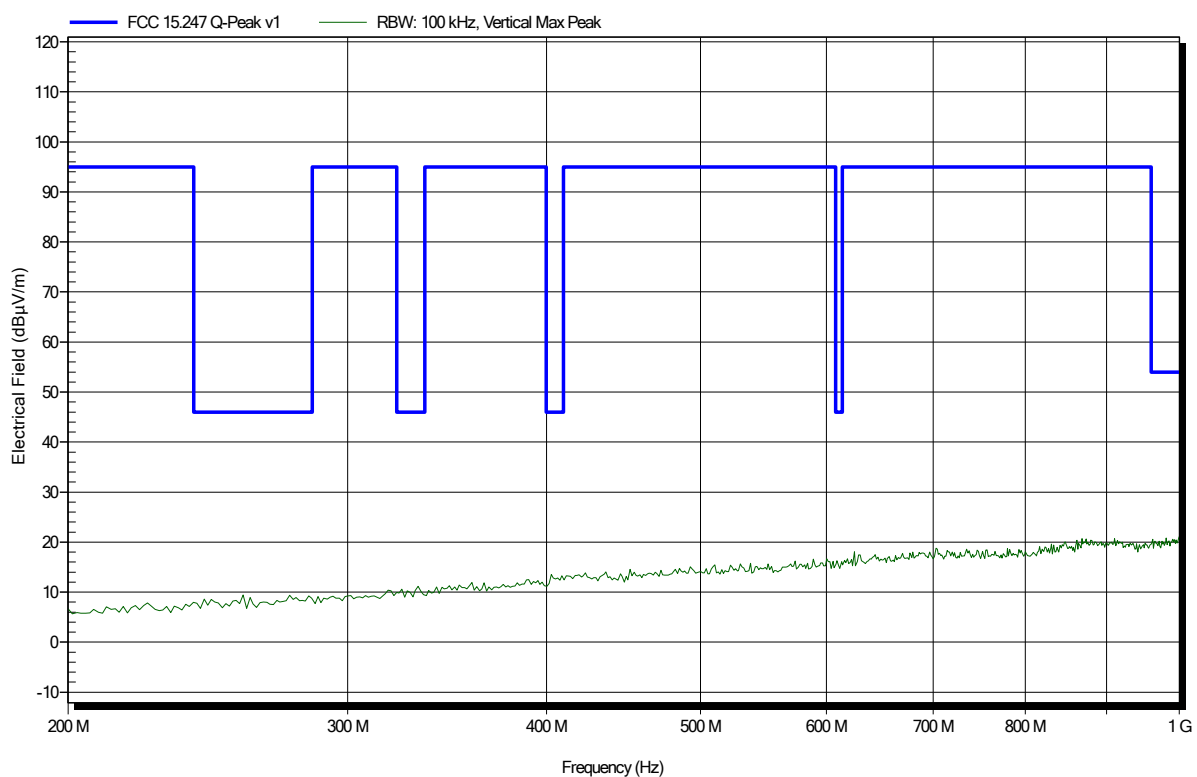


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: TX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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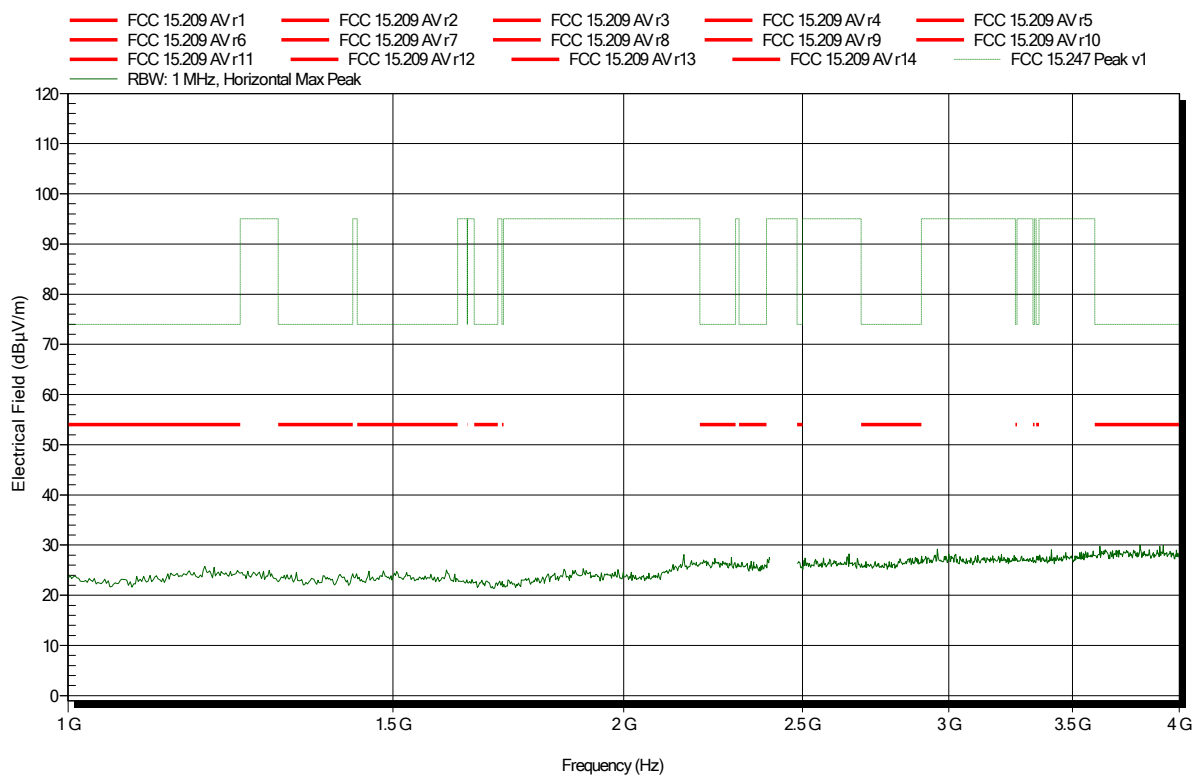


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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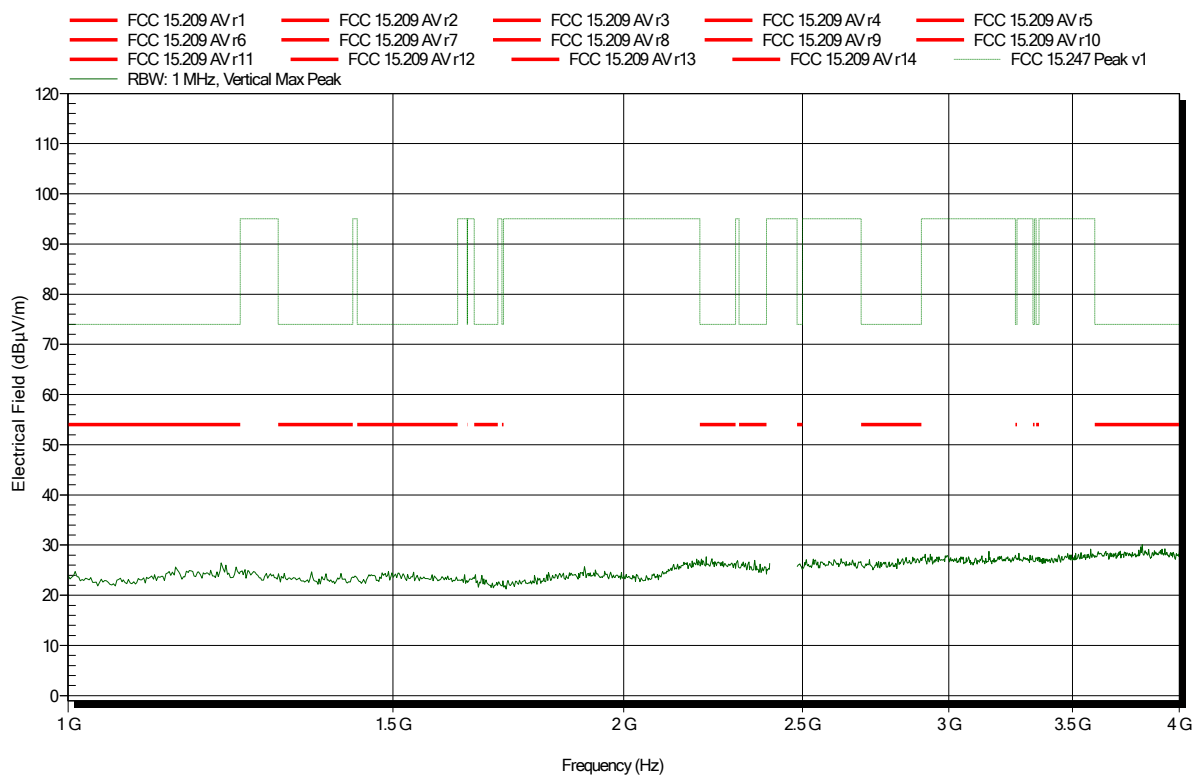


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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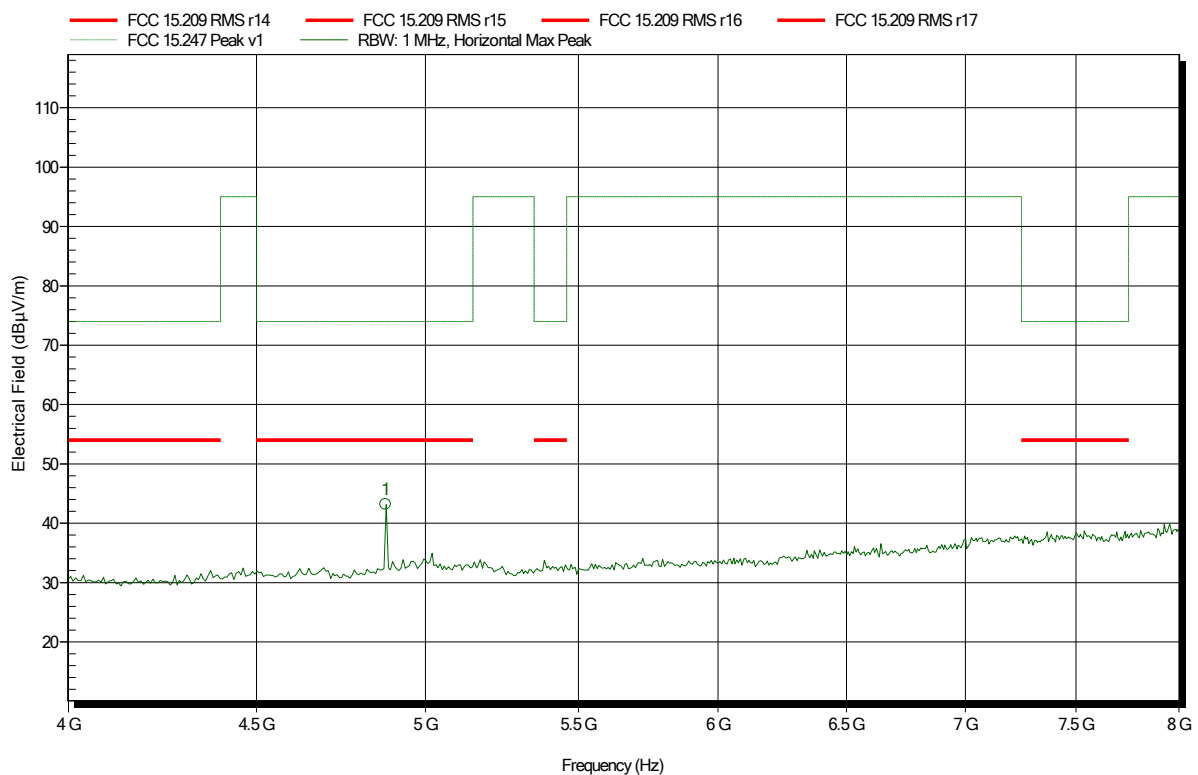


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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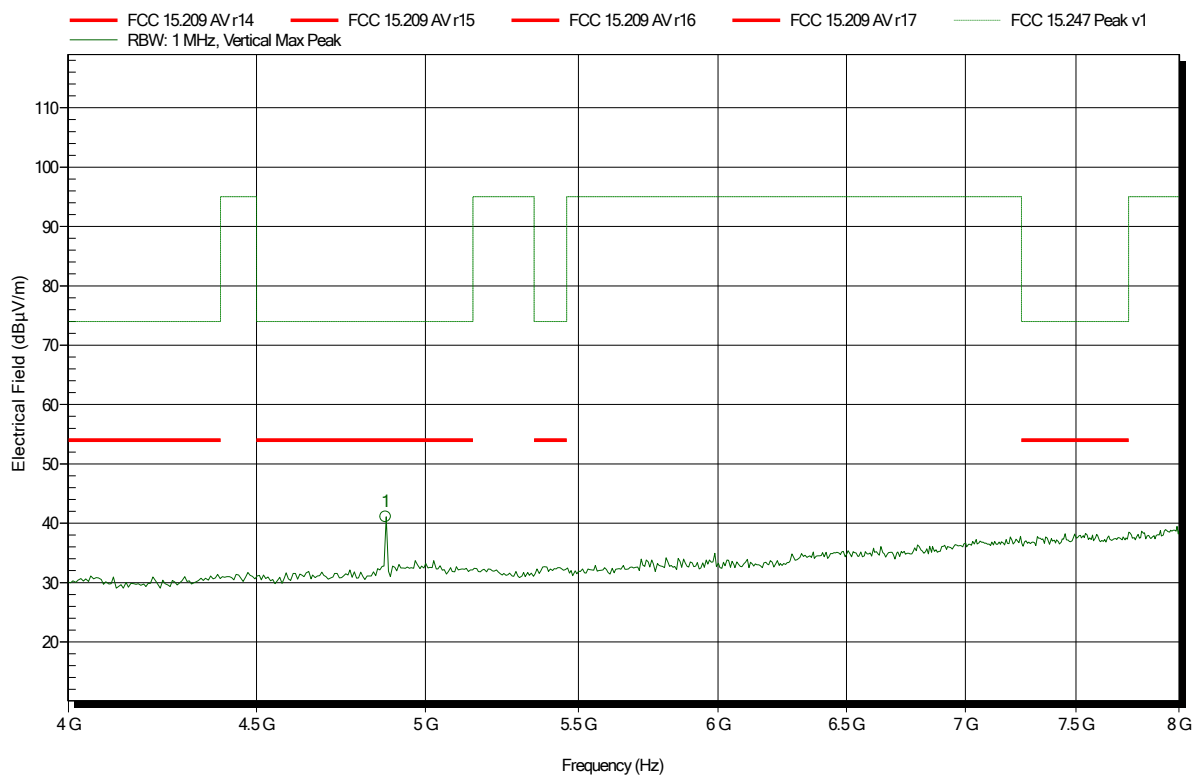
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.877 GHz	43.17 dBµV/m	74 dBµV/m	-30.83 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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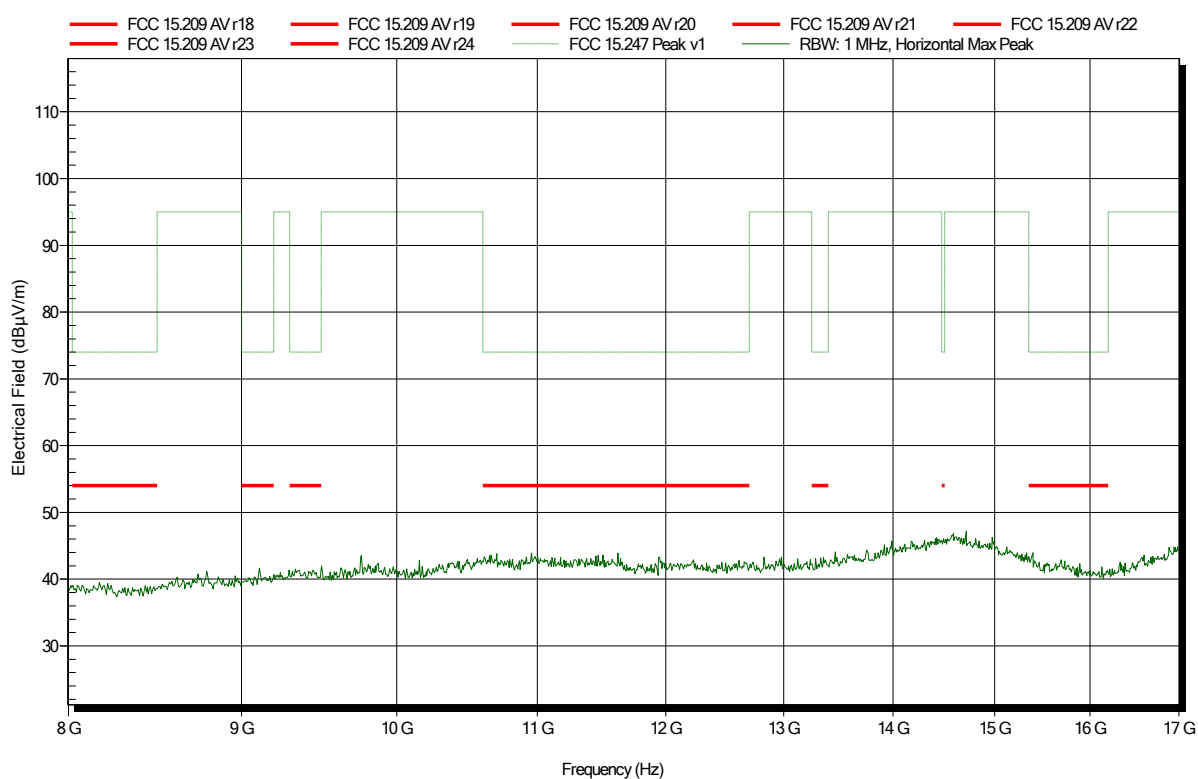
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.877 GHz	41.1 dBμV/m	74 dBμV/m	-32.9 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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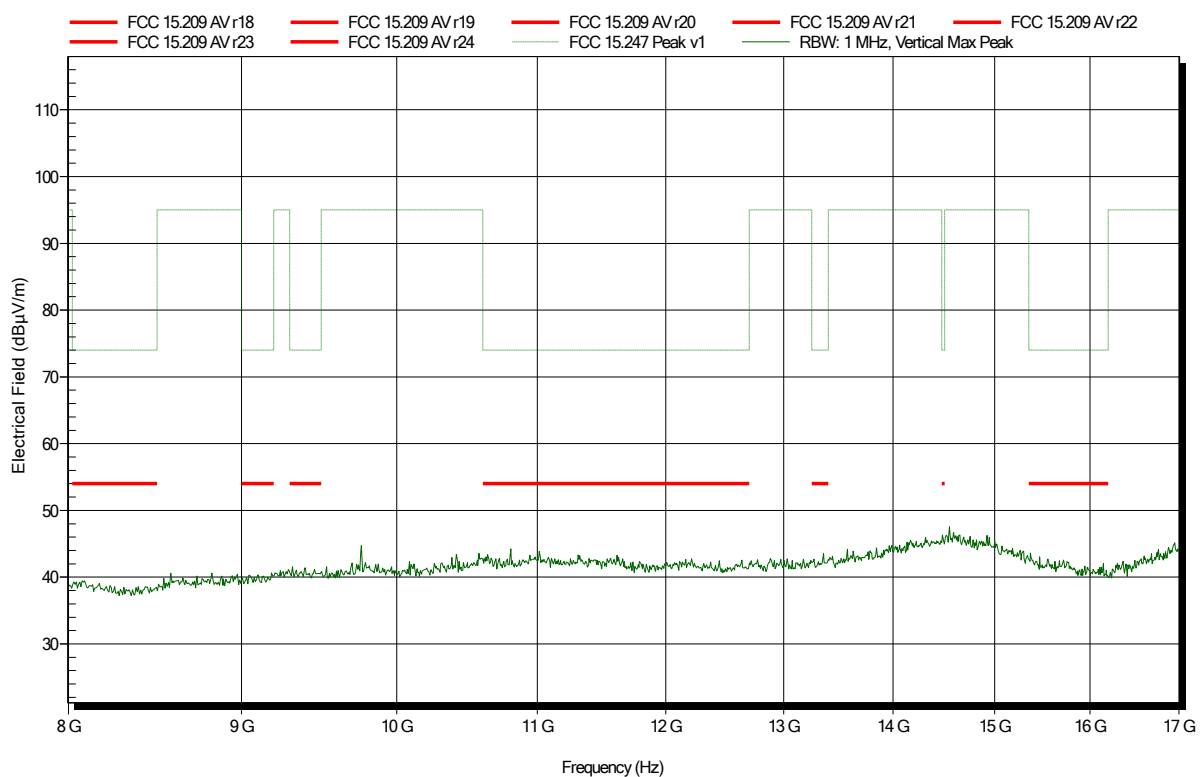


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
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 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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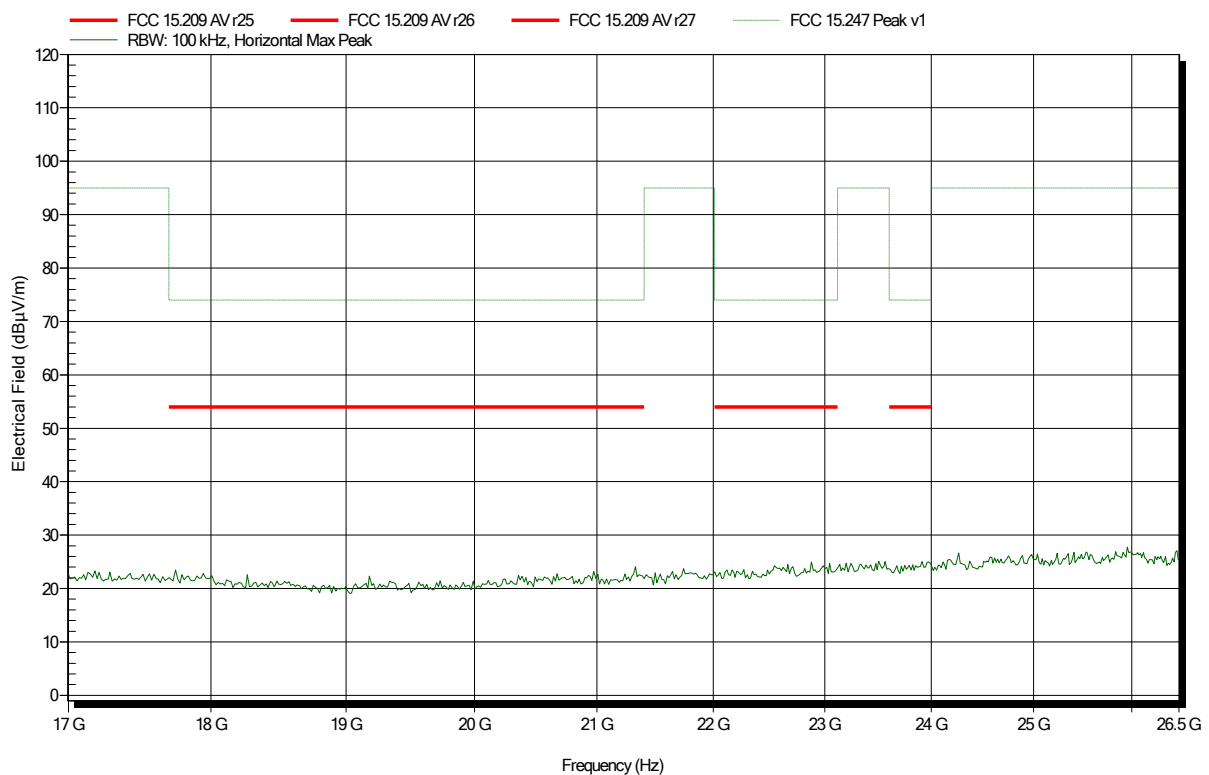


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Amplifier Research AT4560, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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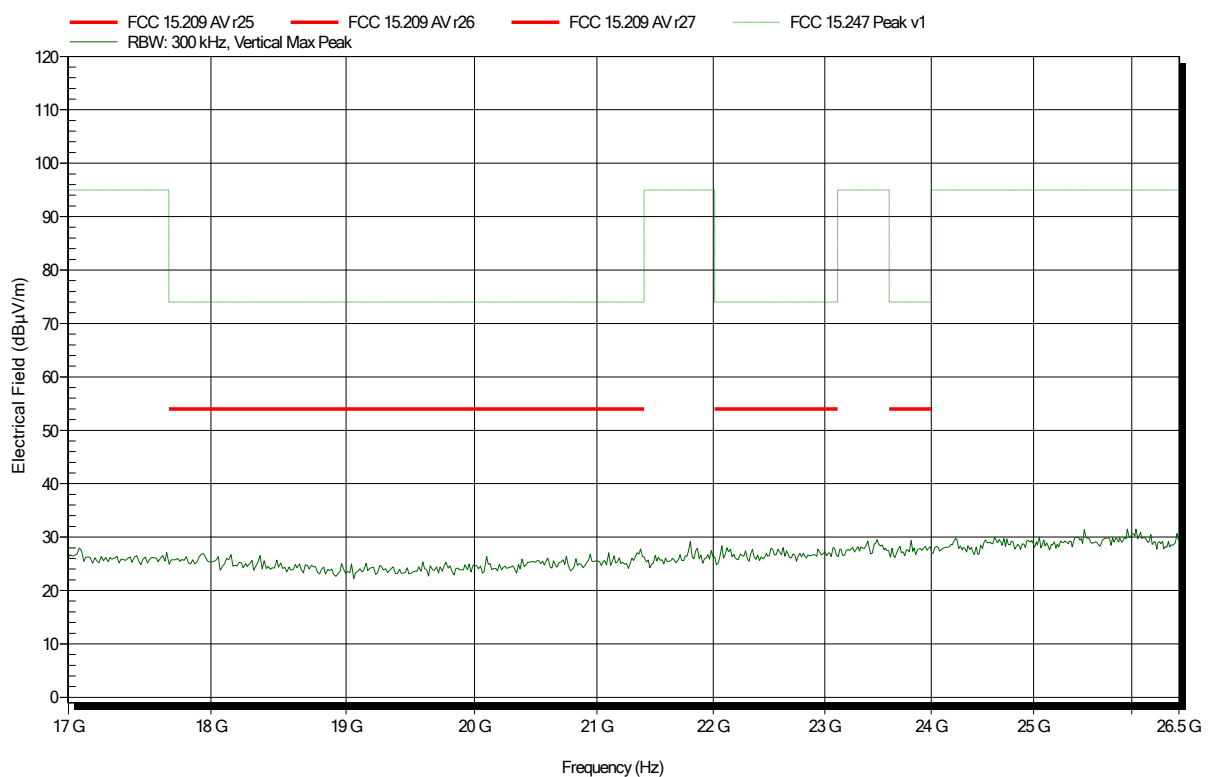


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Amplifier Research AT4560, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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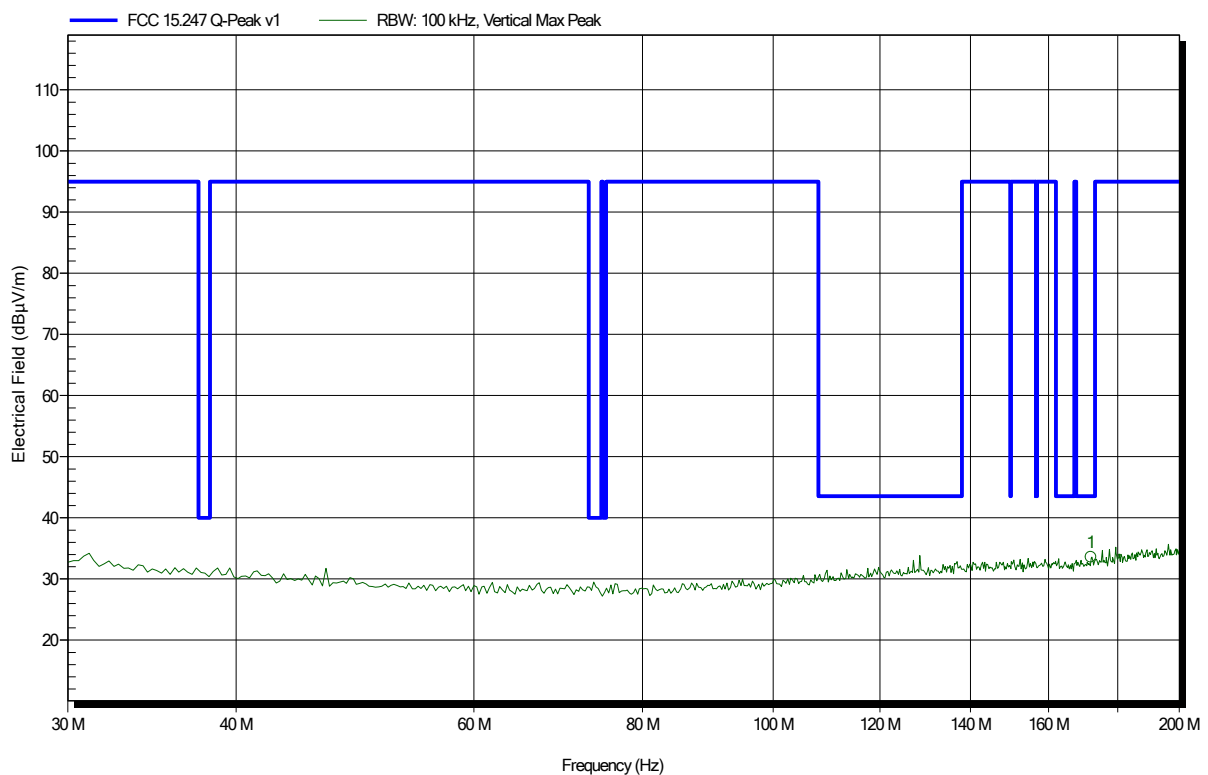


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3 m
Mode: TX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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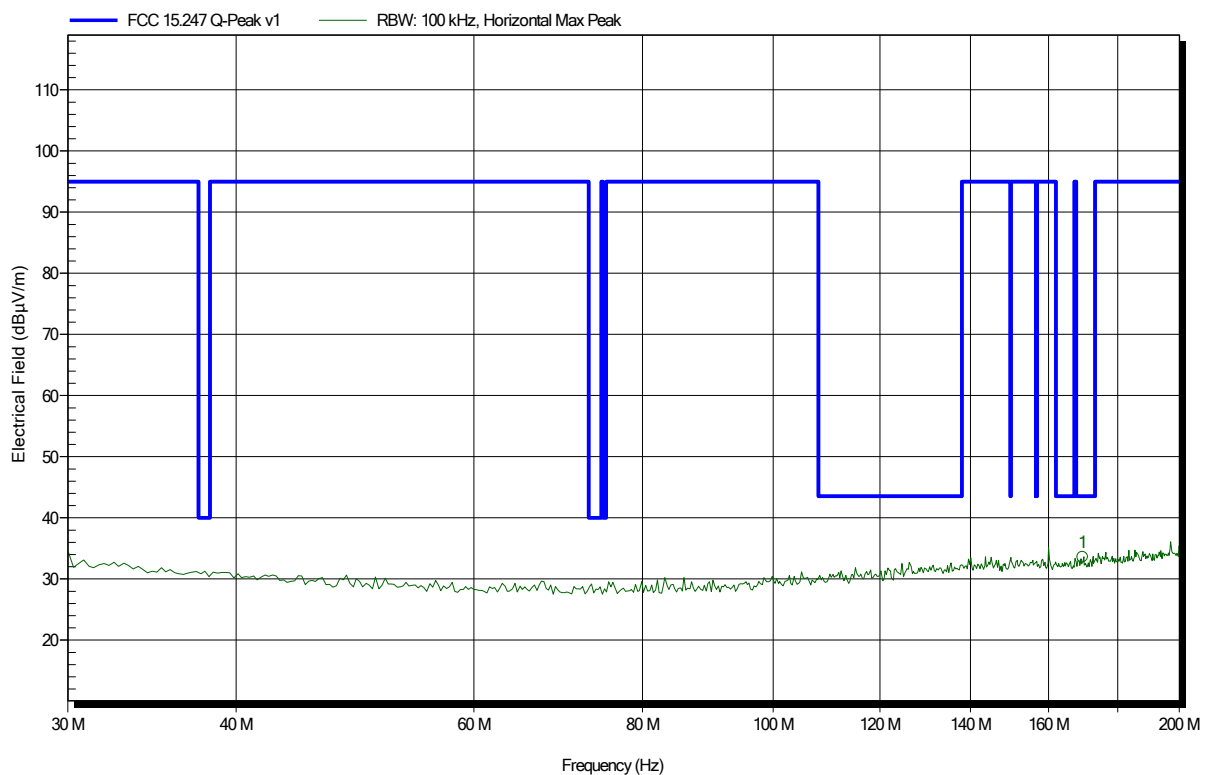
Frequency	Peak	Peak Limit	Peak Difference	Status
171.984 MHz	33.58 dBµV/m	43.52 dBµV/m	-9.94 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HK 116, Horizontal
 Measurement distance: 3 m
 Mode: TX; Test sample ID #25749 – 2475 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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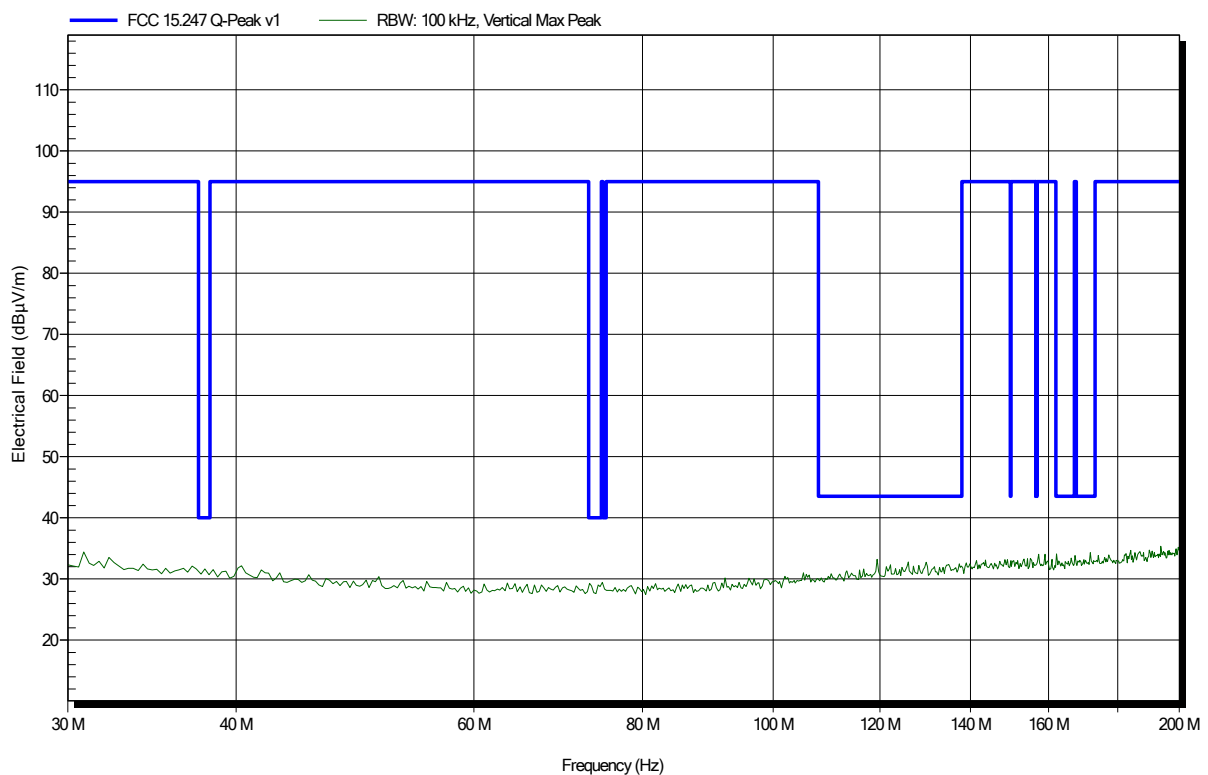
Frequency	Peak	Peak Limit	Peak Difference	Status
169.536 MHz	33.59 dBµV/m	43.52 dBµV/m	-9.93 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3 m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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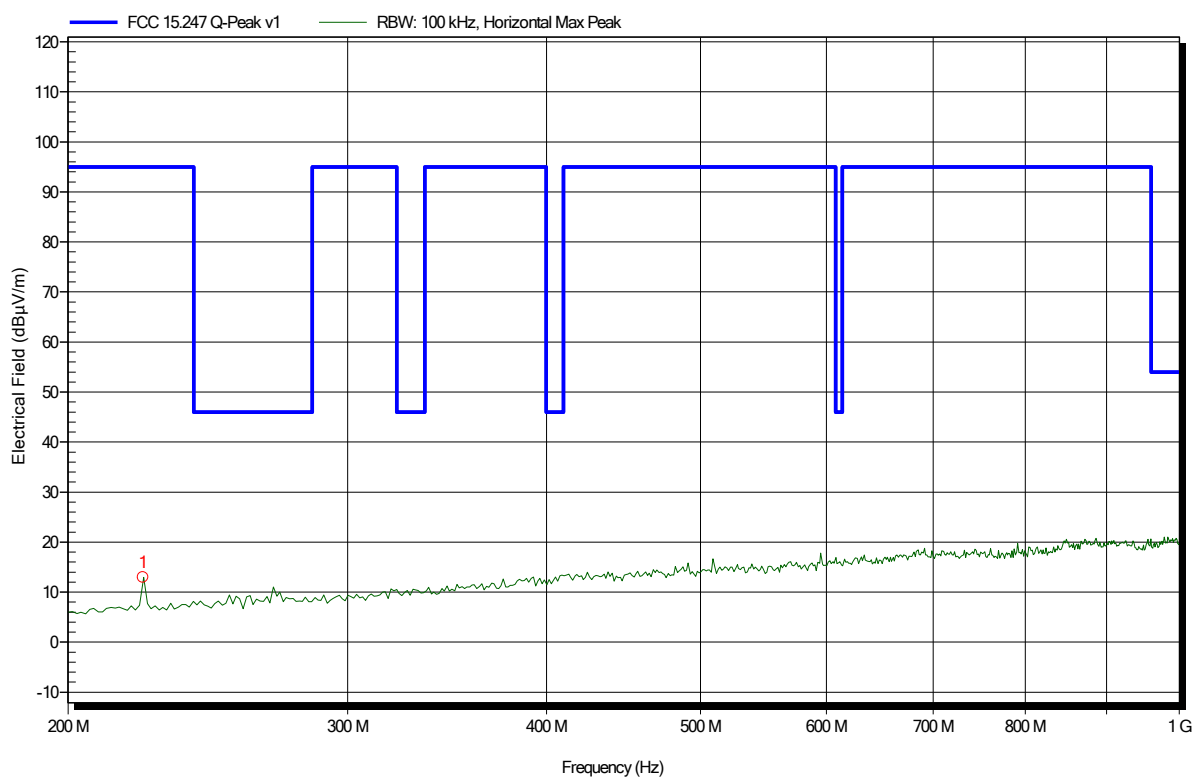


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HL 223, Horizontal
Measurement distance: 3 m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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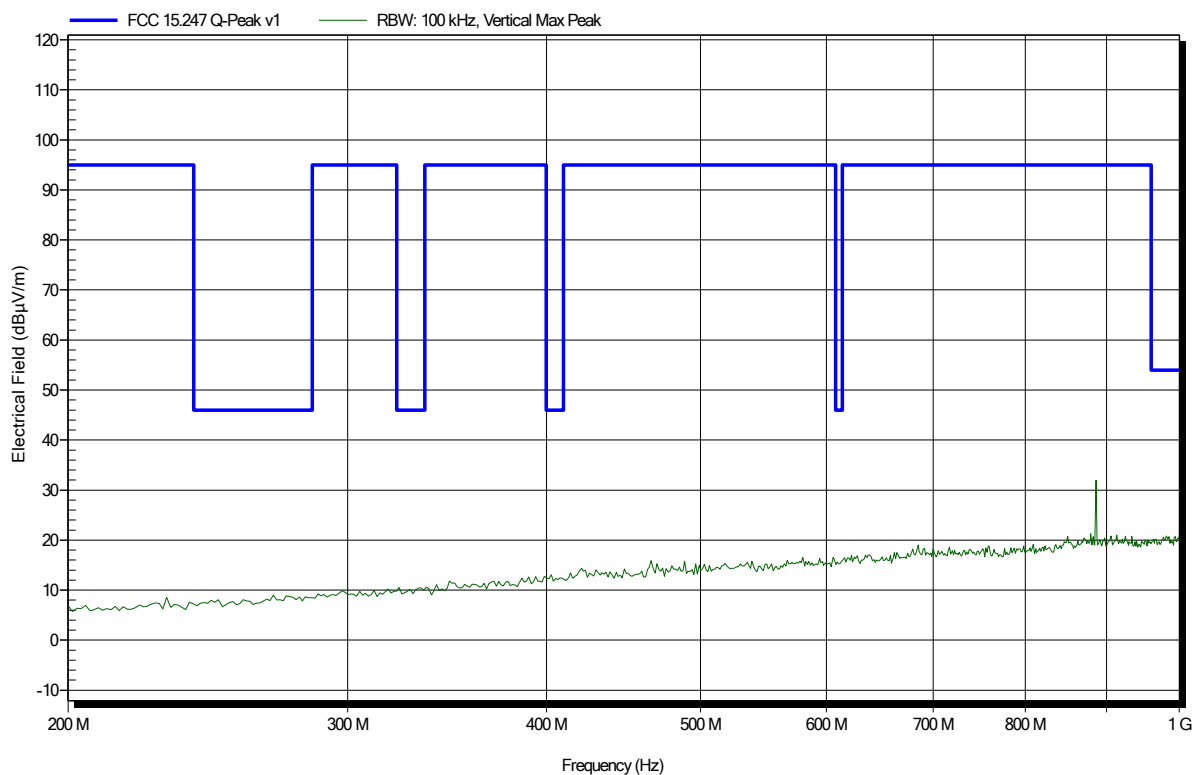
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
223.04 MHz	12.95 dBµV/m	95 dBµV/m	-82.05 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HL 223, Vertical
Measurement distance: 3 m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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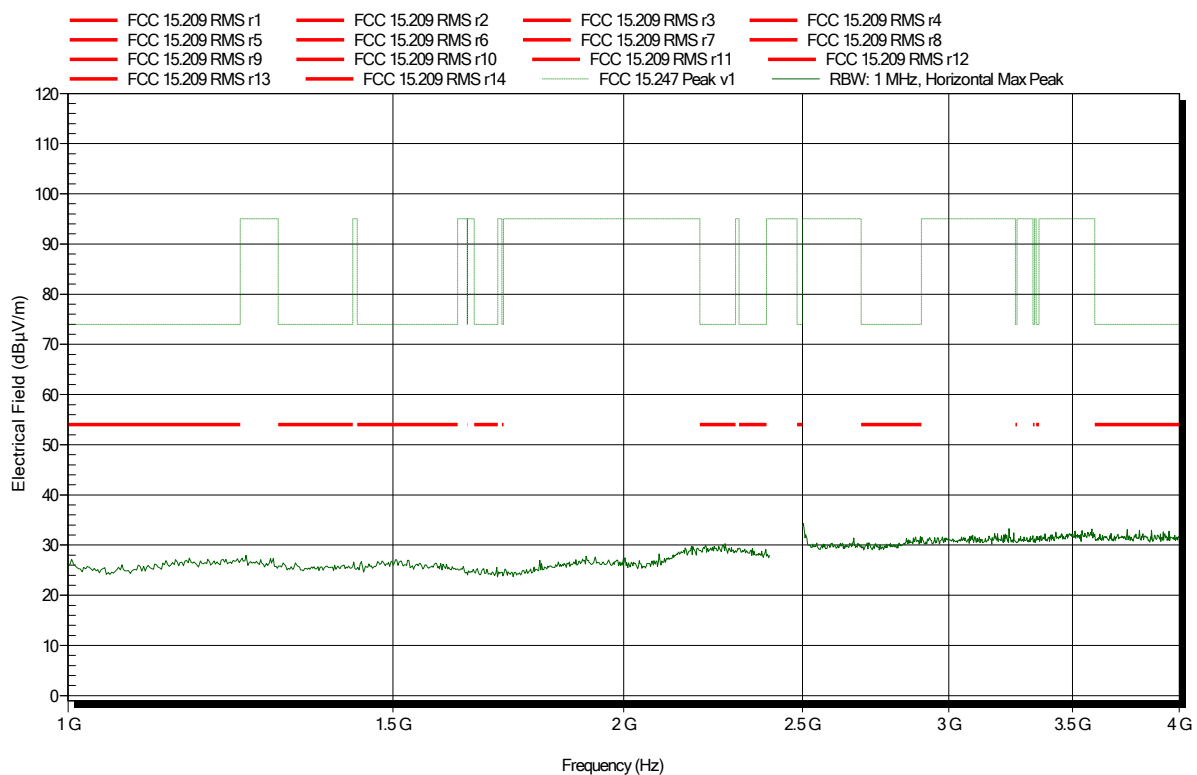


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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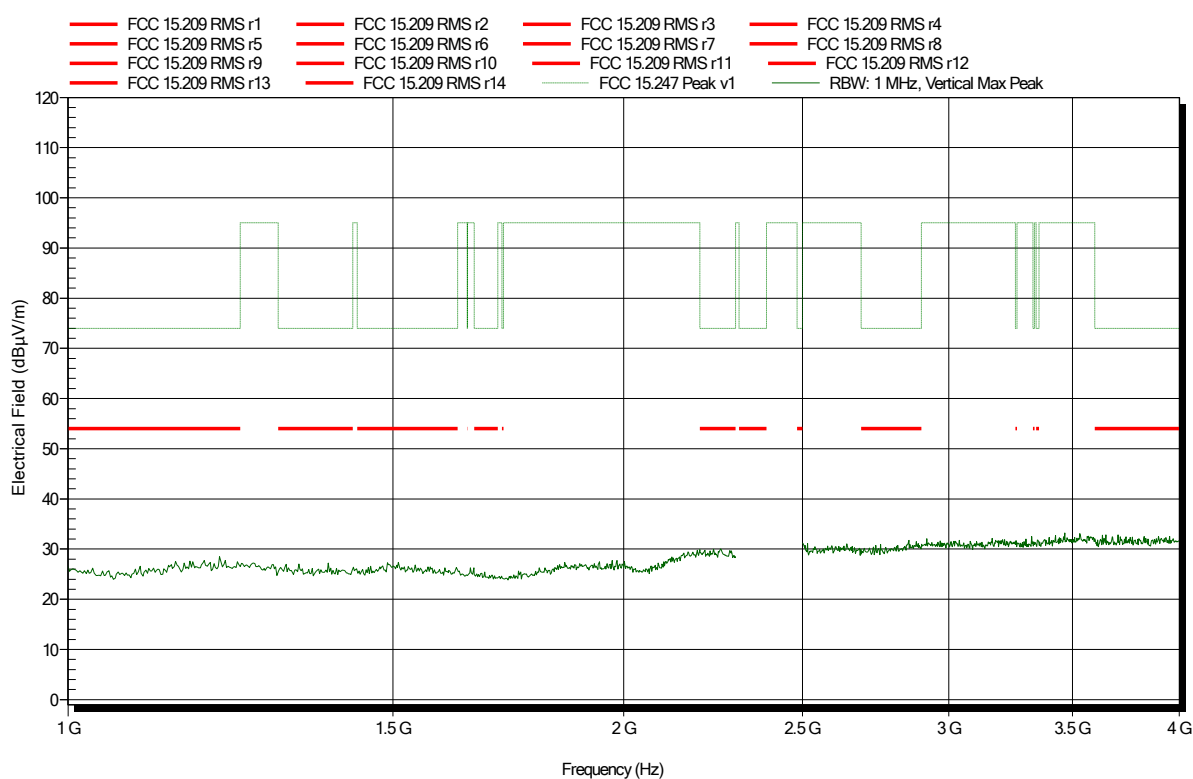


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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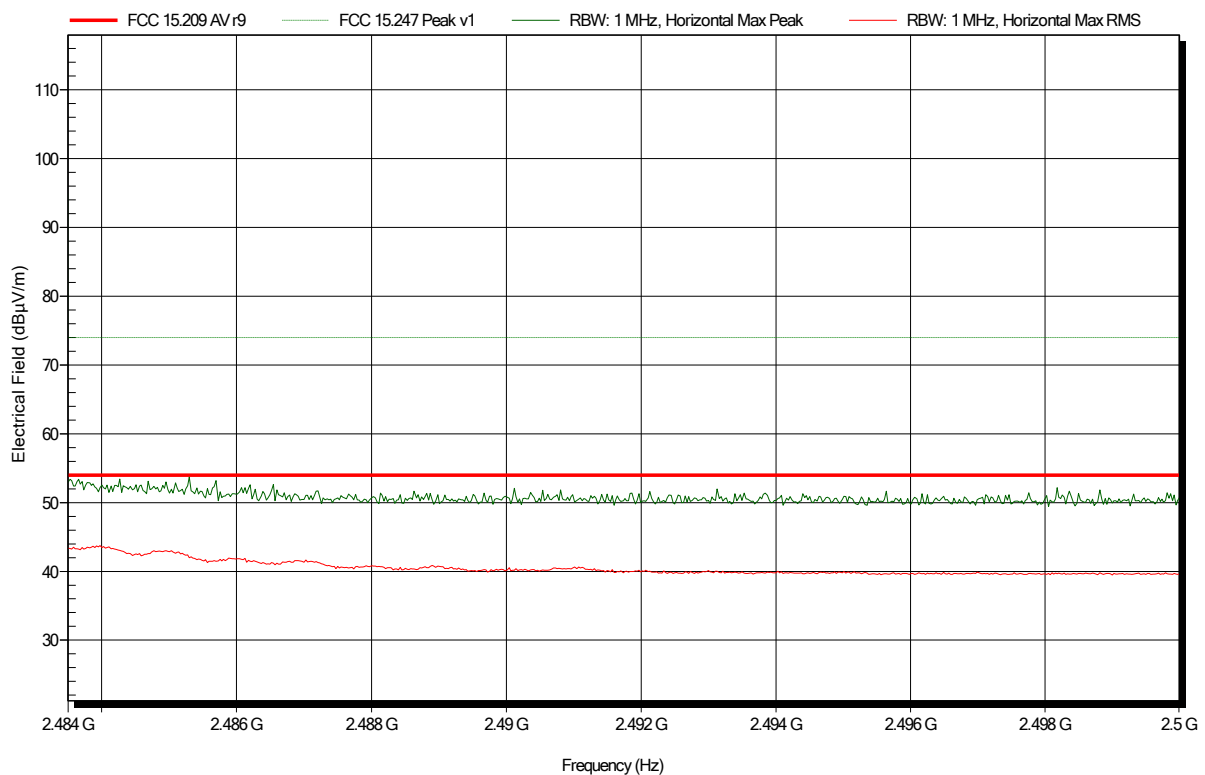


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2475 MHz
 Test Date: Thursday, October 10, 2019
 Note: upper bandedge

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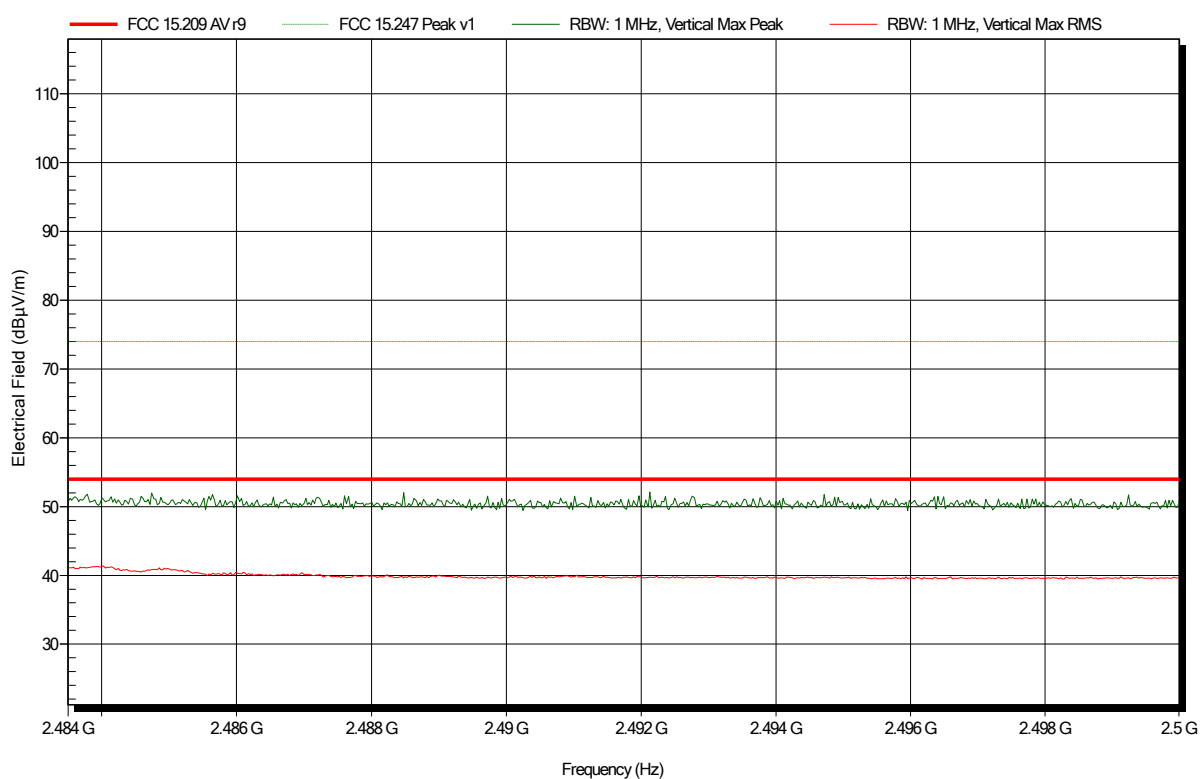


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note: upper bandedge

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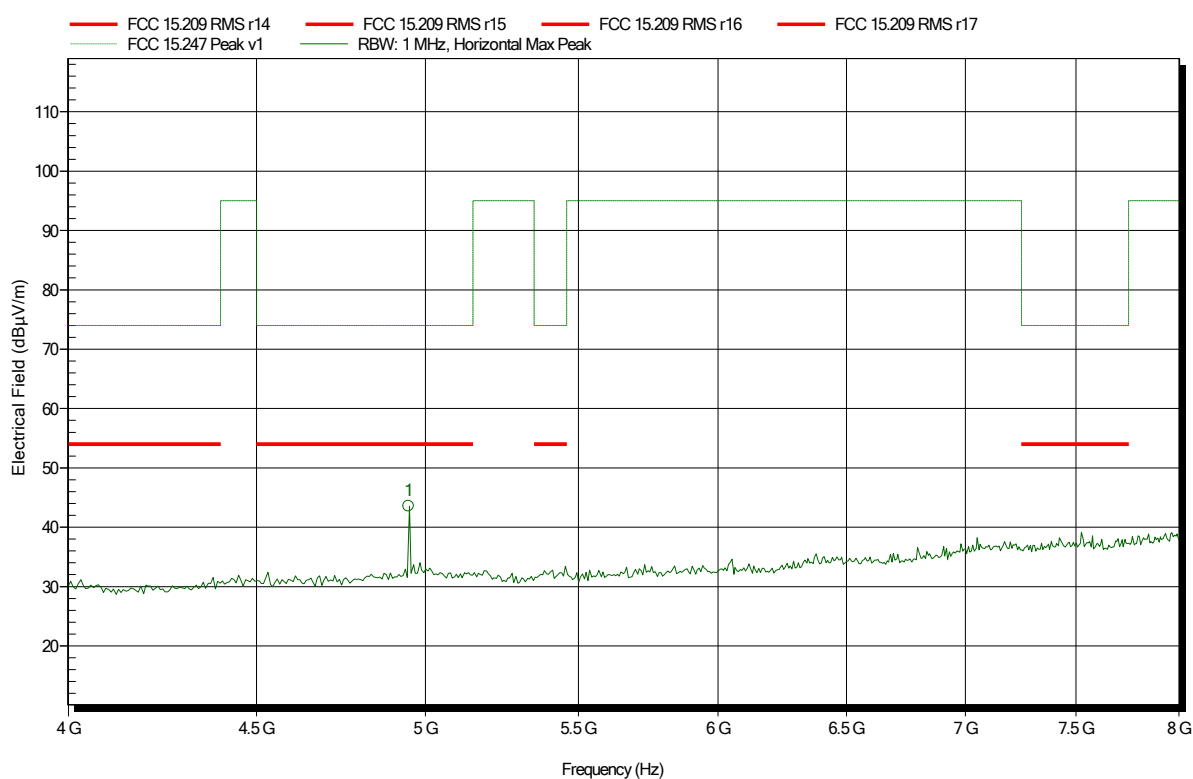


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Horizontal
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2475 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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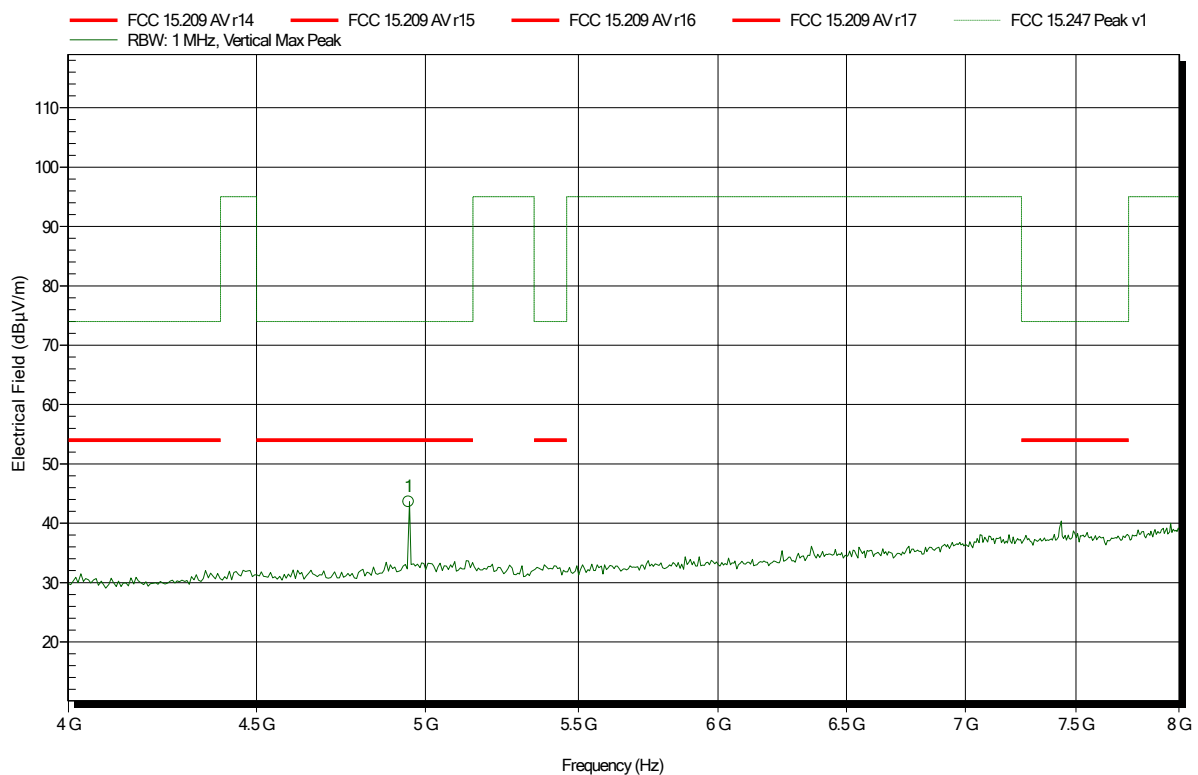
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.947 GHz	43.55 dBµV/m	74 dBµV/m	-30.45 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: TX; Test sample ID #25749 – 2475 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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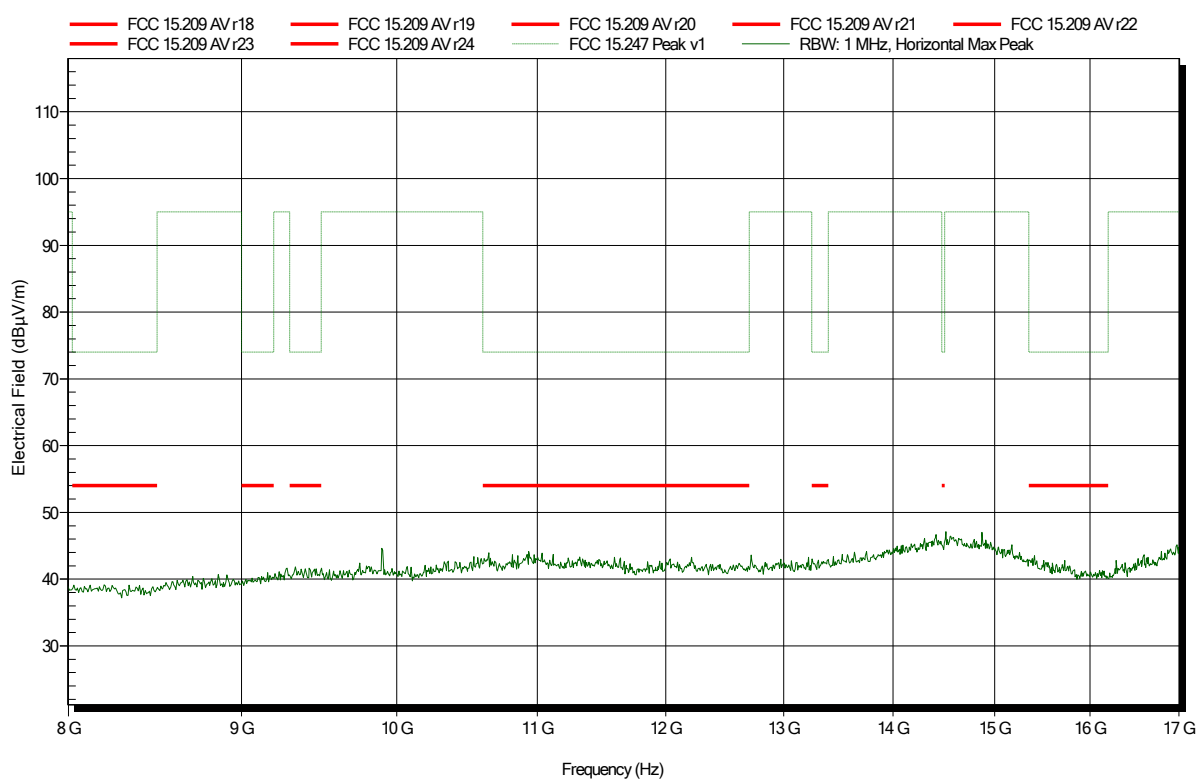
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
4.947 GHz	43.62 dBµV/m	74 dBµV/m	-30.38 dB	Pass

Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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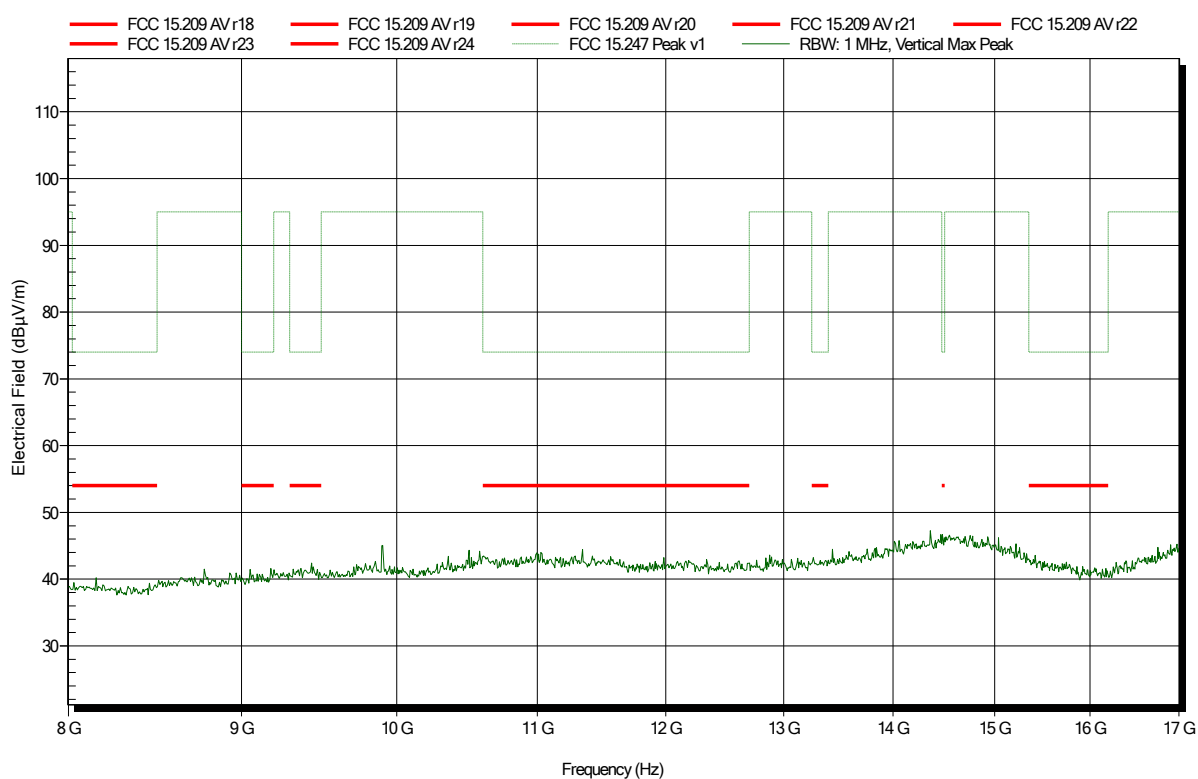


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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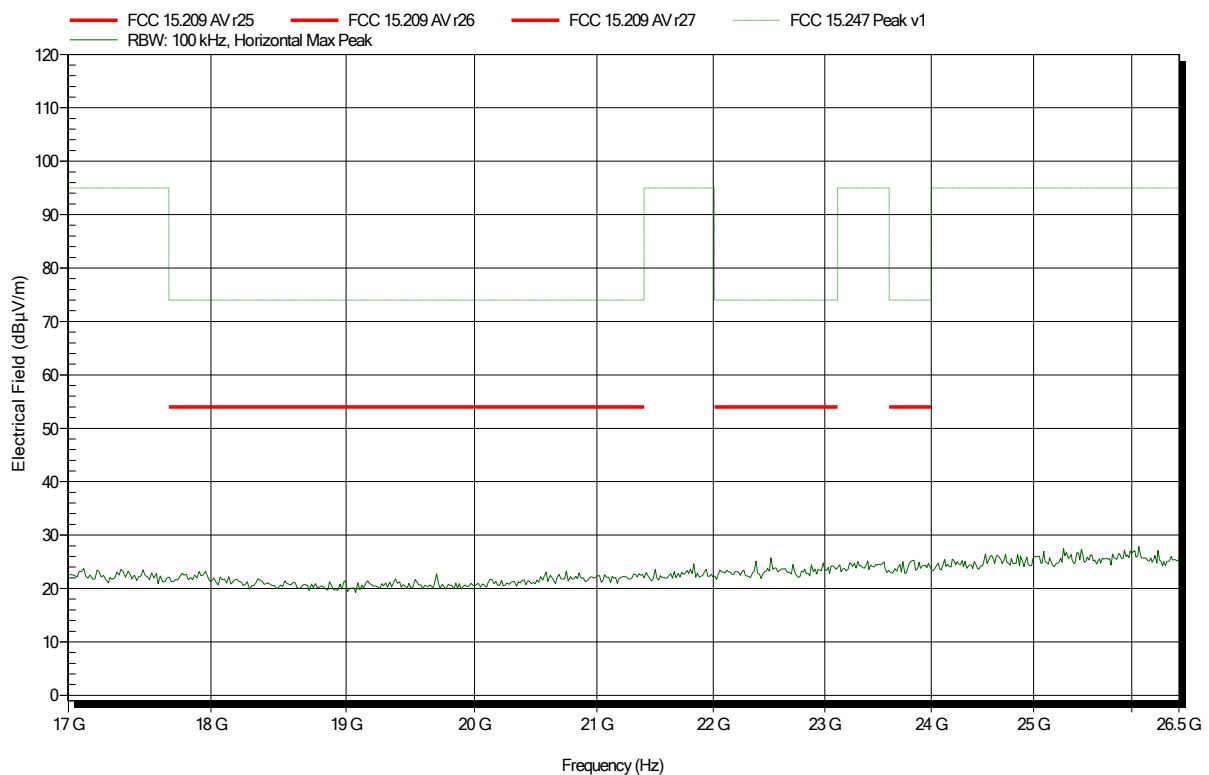


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Amplifier Research AT4560, Horizontal
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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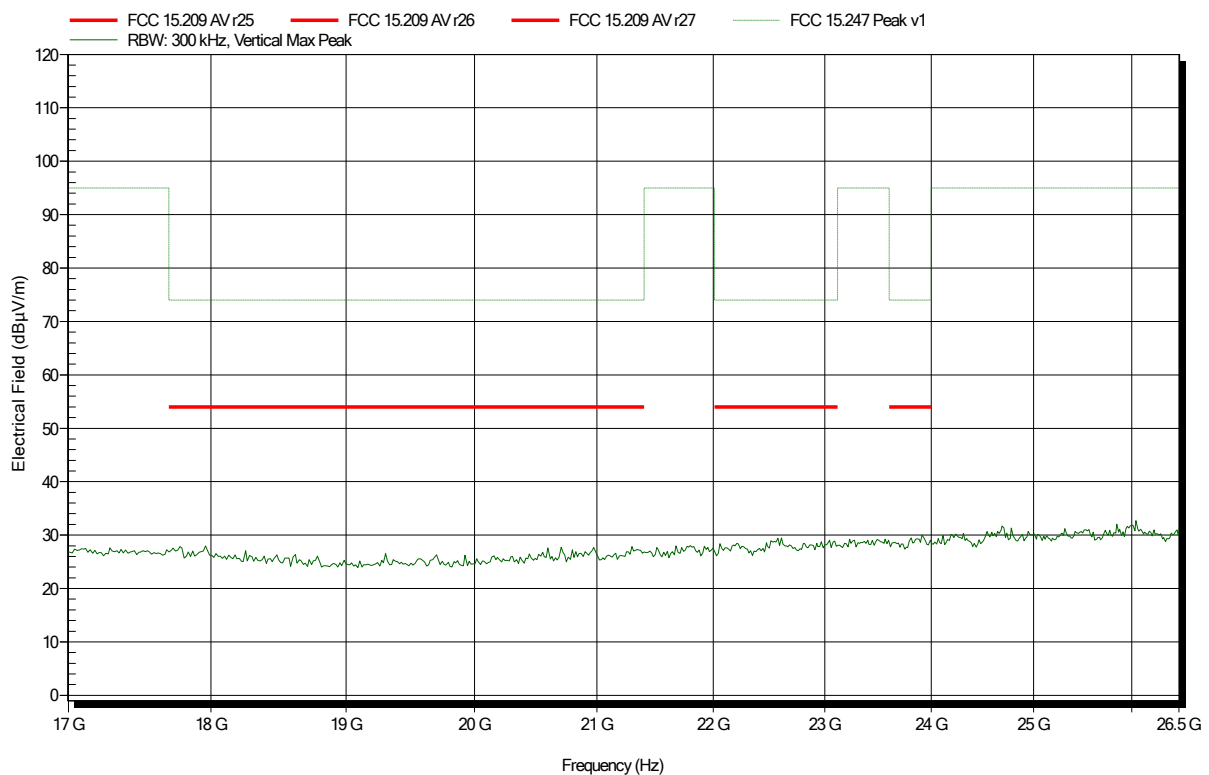


Spurious emissions according to FCC 47 e-CFR §15.247

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Amplifier Research AT4560, Vertical
Measurement distance: 1 m converted to 3m
Mode: TX; Test sample ID #25749 – 2475 MHz
Test Date: Thursday, October 10, 2019
Note:

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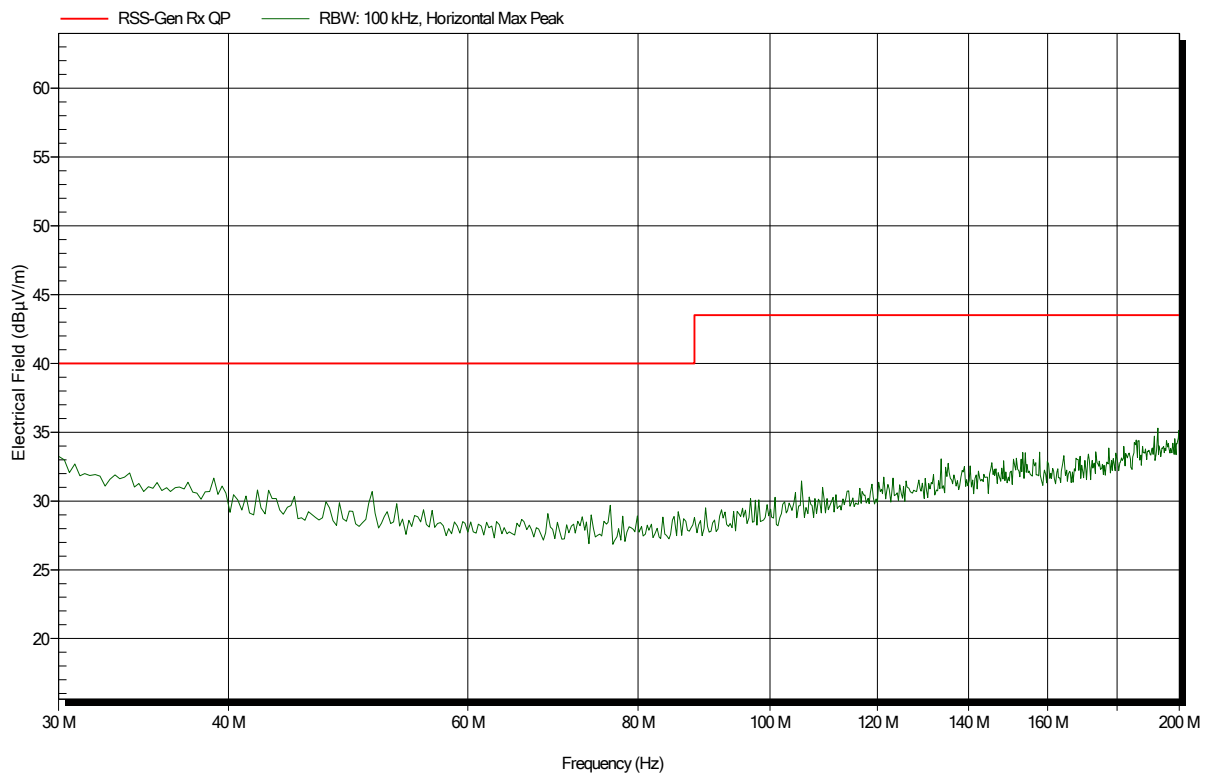
ANNEX B Receiver spurious emissions

Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HK 116, Horizontal
Measurement distance: 3 m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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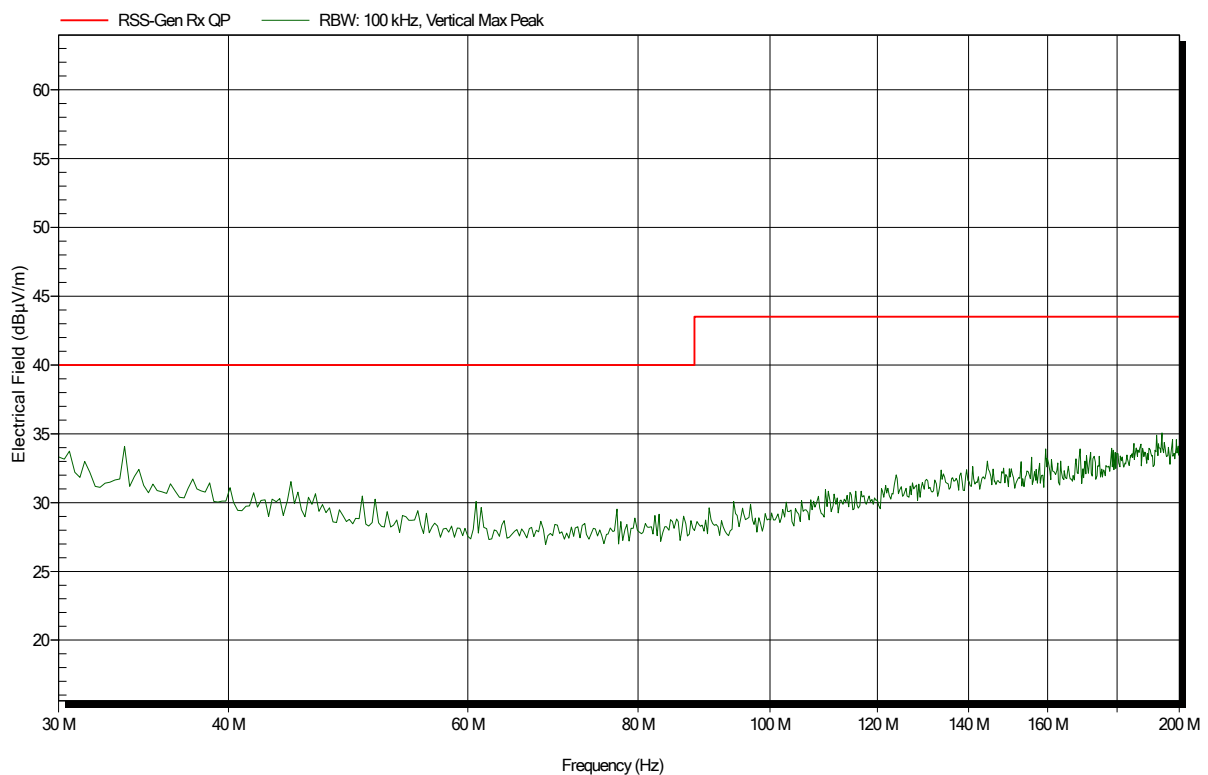


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Rohde & Schwarz HK 116, Vertical
Measurement distance: 3 m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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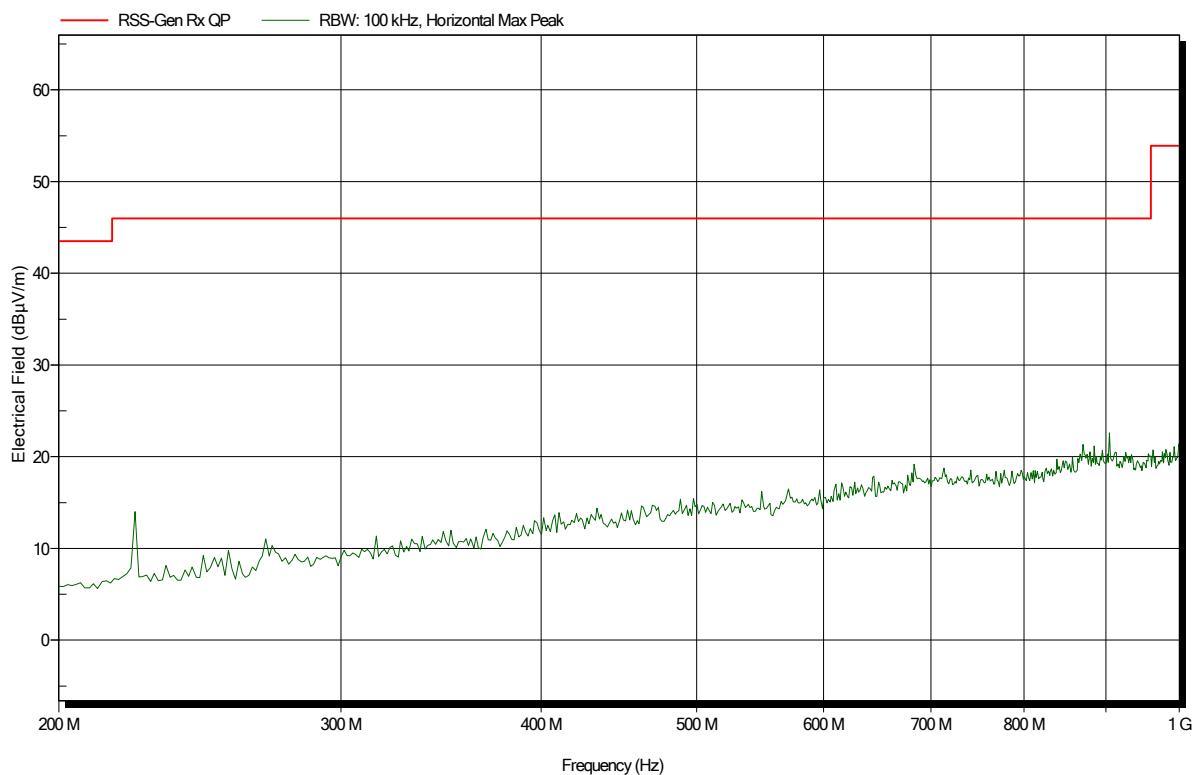


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HL 223, Horizontal
 Measurement distance: 3 m
 Mode: RX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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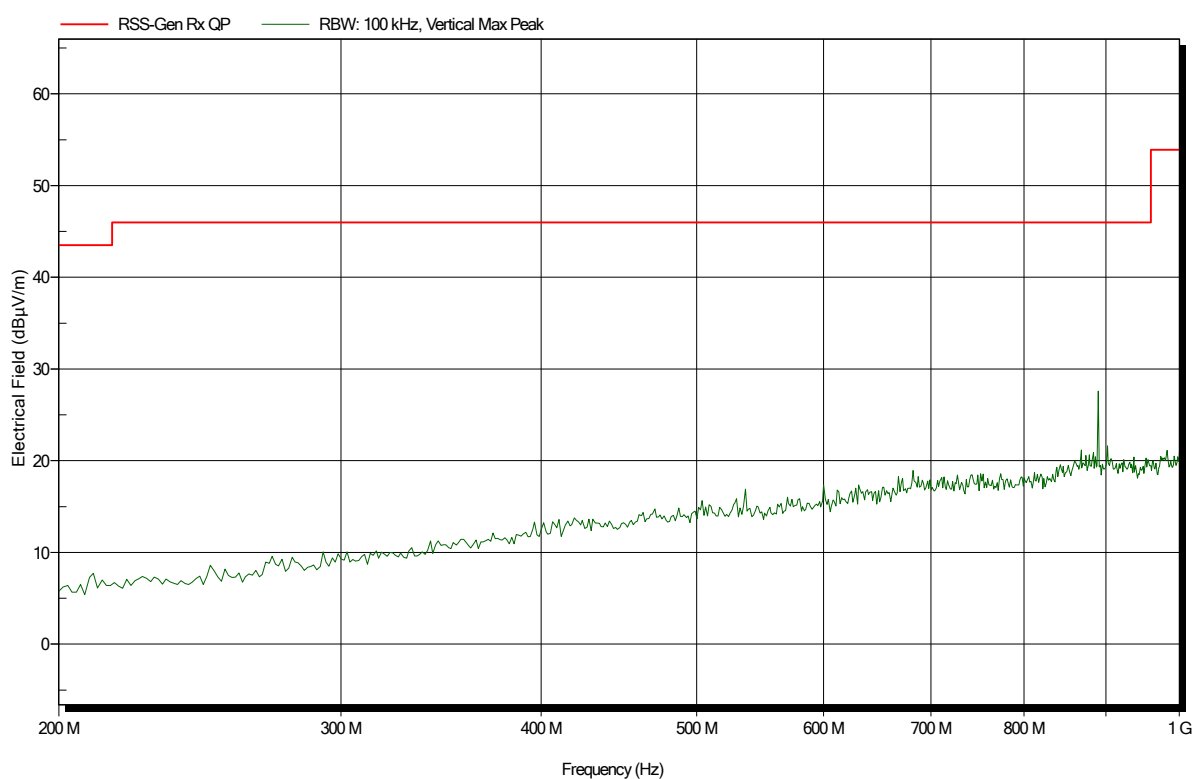


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Rohde & Schwarz HL 223, Vertical
 Measurement distance: 3 m
 Mode: RX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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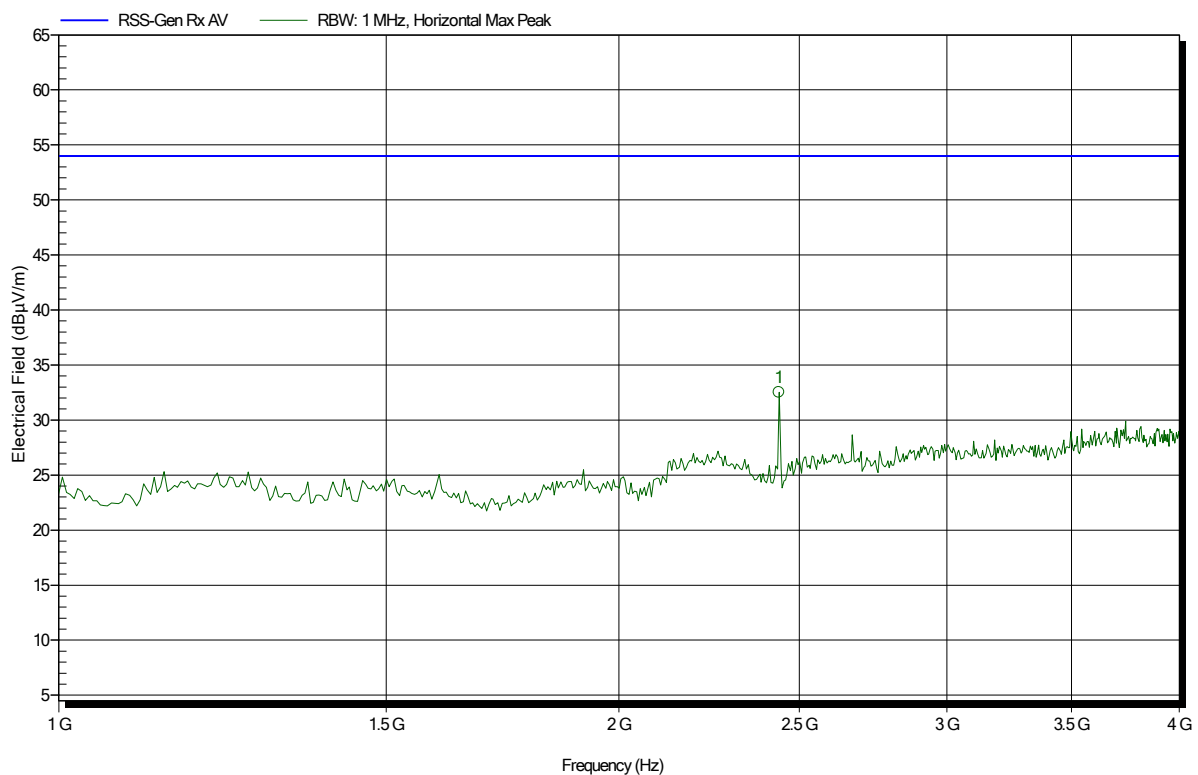


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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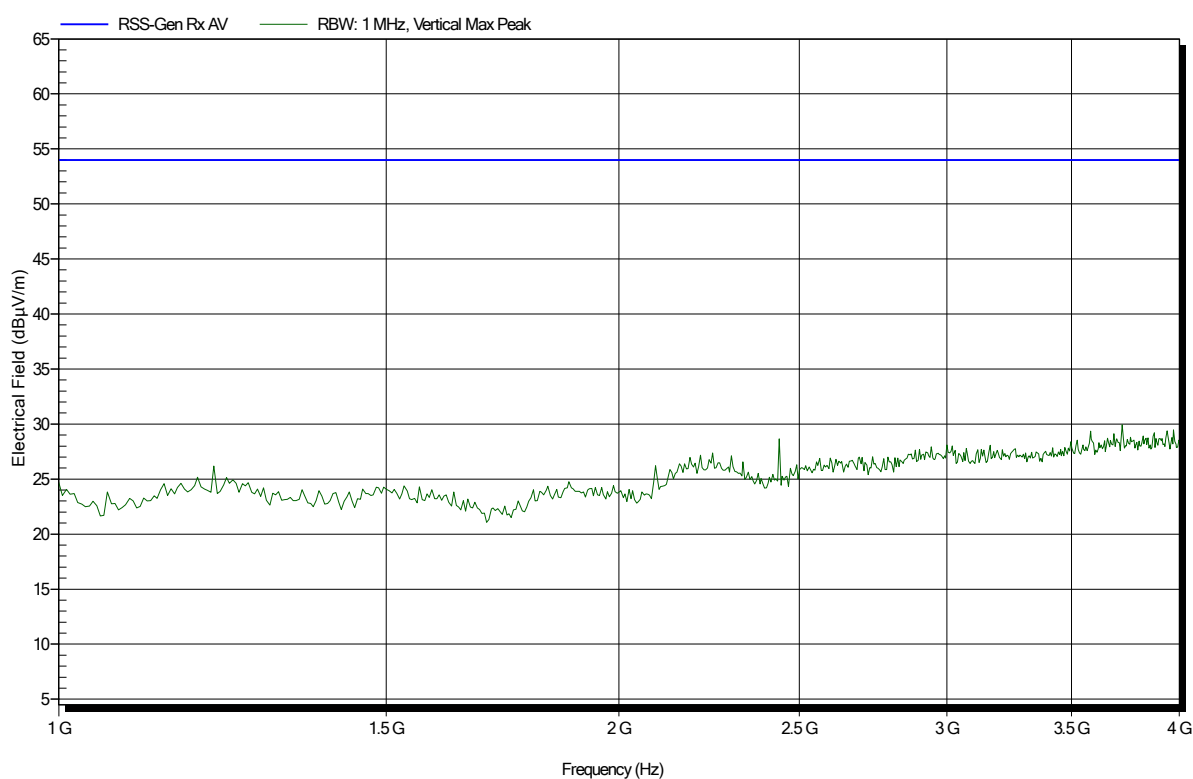
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
2.438 GHz	32.53 dBµV/m	53.98 dBµV/m	-21.45 dB	Pass

Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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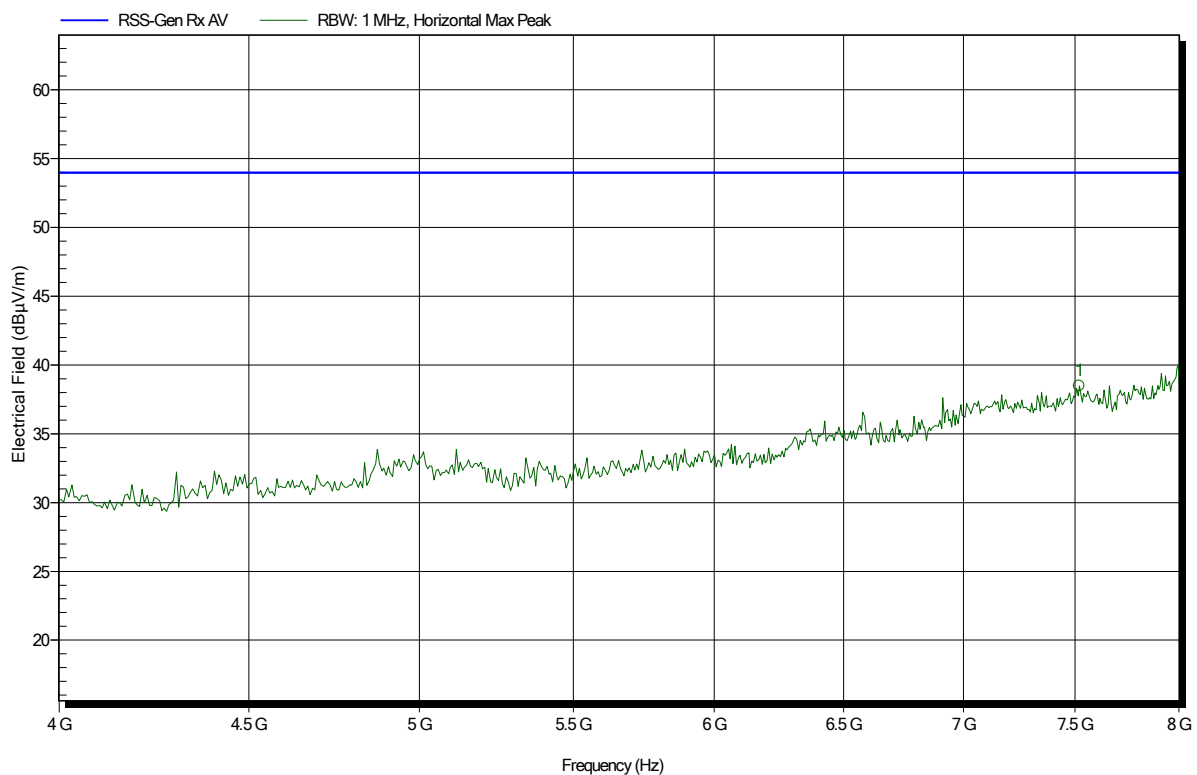


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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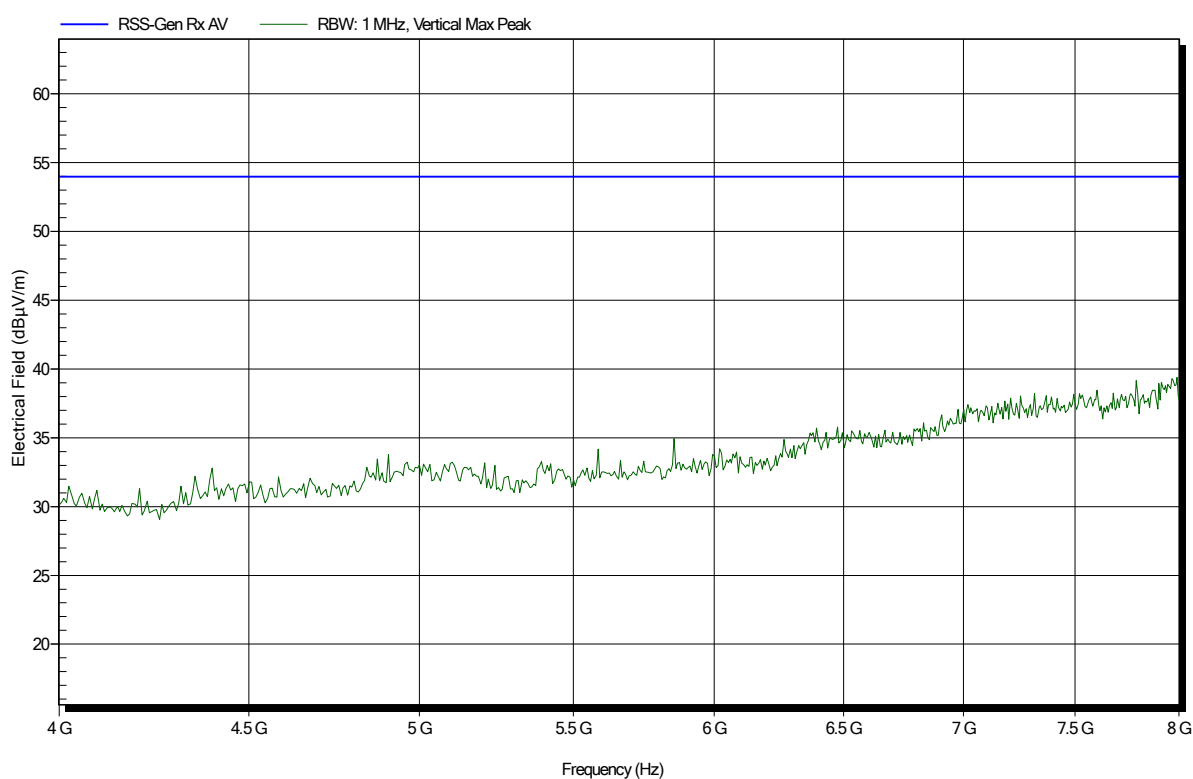
Frequency	Peak	Peak Limit	Peak Difference	Peak Status
7.519 GHz	38.48 dBµV/m	53.98 dBµV/m	-15.5 dB	Pass

Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Vertical
Measurement distance: 1 m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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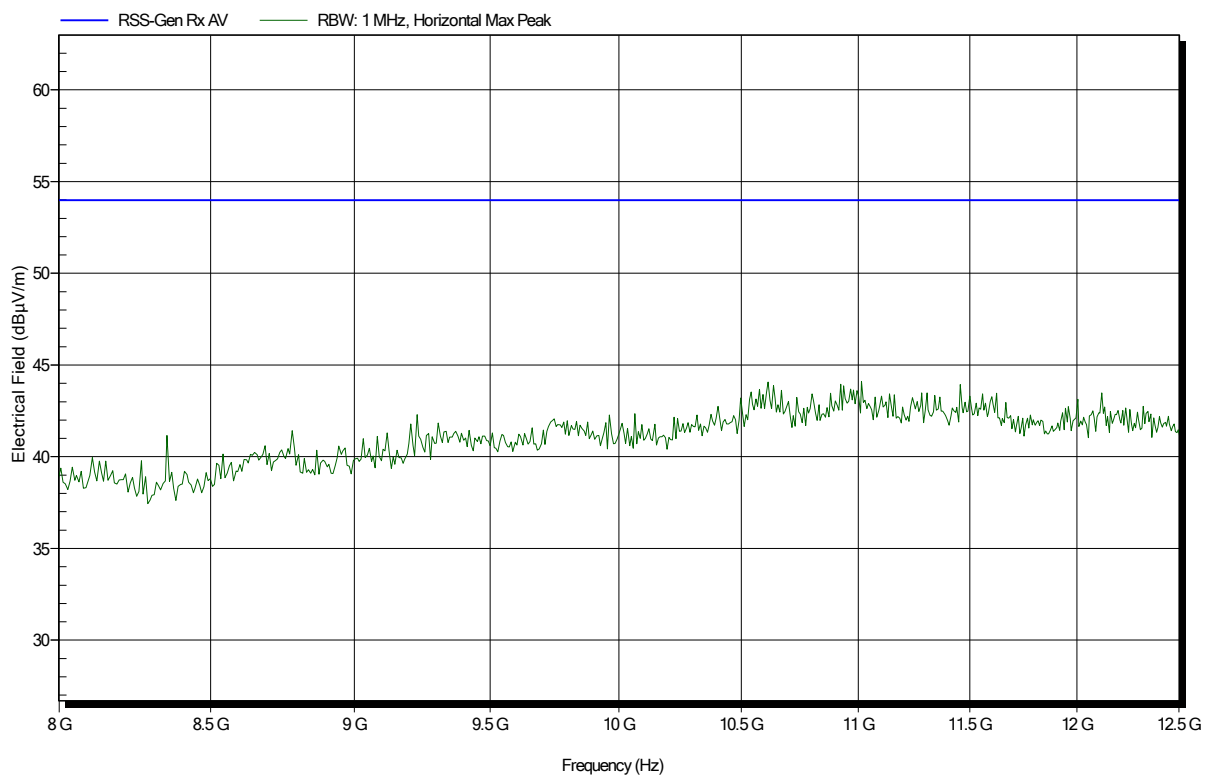


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: GOM-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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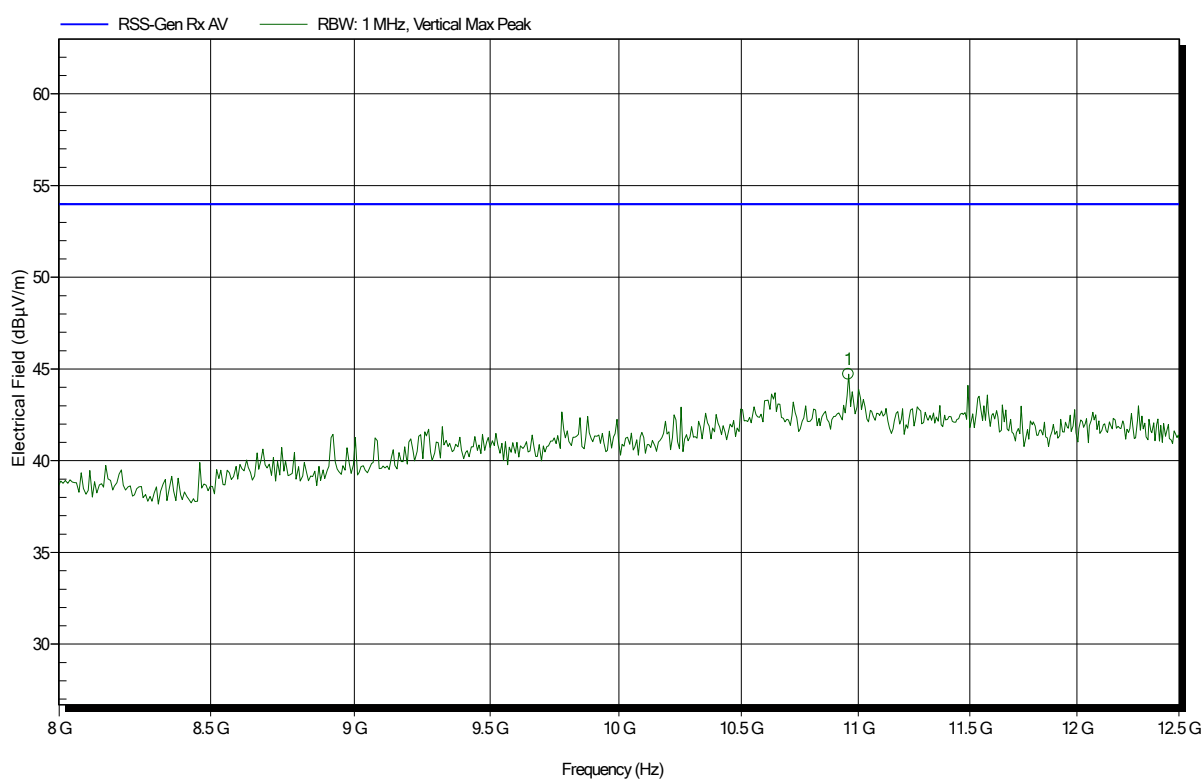


Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: RX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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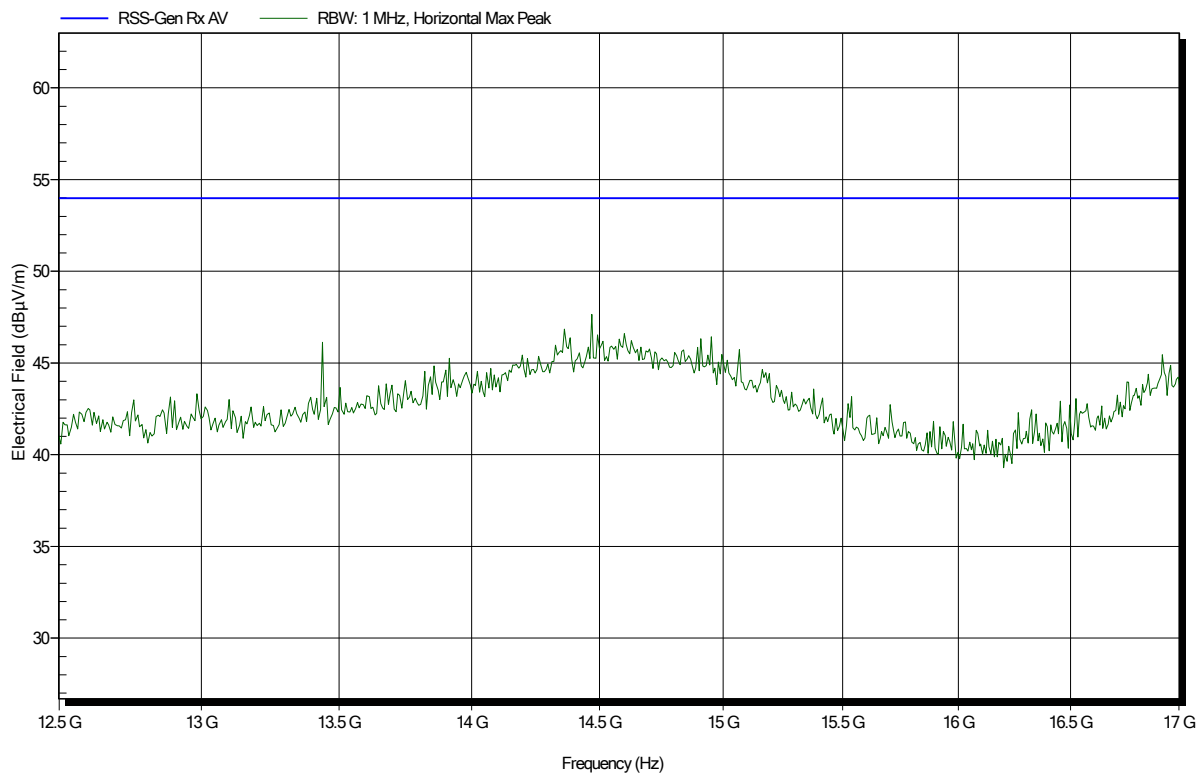
Frequency	Peak	Peak Limit	Peak Difference	Status
10.957 GHz	44.72 dBµV/m	53.98 dBµV/m	-9.26 dB	Pass

Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
Model: RF3050 (XCDFVP-L-RT)
Test Site: Eurofins Product Service GmbH
Operator: Abdullah Al Jamal
Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
Antenna: Schwarzbeck BBHA 9120D, Horizontal
Measurement distance: 1 m converted to 3m
Mode: RX; Test sample ID #25749 – 2440 MHz
Test Date: Thursday, October 10, 2019
Note:

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Spurious emissions according to ISED RSS-247 Issue 2 (February 2017)

Project number: G0M-1901-7989

Applicant: Amphenol Thermometrics, Inc.
 EUT Name: Kaye ValProbe RT dual flexible Temperature Logger
 Model: RF3050 (XCDFVP-L-RT)
 Test Site: Eurofins Product Service GmbH
 Operator: Abdullah Al Jamal
 Test Conditions: Tnom: 23.4°C, Vnom: 3.6 VDC (internal battery, lithium)
 Antenna: Schwarzbeck BBHA 9120D, Vertical
 Measurement distance: 1 m converted to 3m
 Mode: RX; Test sample ID #25749 – 2440 MHz
 Test Date: Thursday, October 10, 2019
 Note:

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