166 South Carter, Genoa City, WI 53128

Company:	NingBo Kaitai Electronic Co. Ltd
Model Tested:	E-94B
Report Number:	23308
DLS Project:	9227

Code of Federal Regulations 47 Part 15 – Radio Frequency Devices

Subpart C – Intentional Radiators
Section 15.247
Operation within the bands 902 - 928 MHz,
2400 - 2483.5 MHz, 5725 - 5875 MHz,
and 24.0 - 24.25 GHz.

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

FCC ID: 2AO2KGC741970

Formal Name:	B/T cooking thermometer
Kind of Equipment:	Bluetooth Transceiver BLE4.2
Frequency Range:	2402 to 2480 MHz
Test Configuration:	Tabletop
Model Number(s):	E-94B
Model(s) Tested:	E-94B
Serial Number(s):	6971384104100, 6971384104117, 6971384104124
Date of Tests:	December 20 – 22, 2017
Test Conducted For:	NingBo Kaitai Electronic Co. Ltd GUANHAIWEI INDUSTRIAL ZONE EAST SECTION GUANHAIWEI TOWN CIXI, ZHEJIANG 315314, CHINA

NOTICE: "This test report relates only to the items tested and must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government". Please see the "Description of Test Sample" page listed inside of this report.

© Copyright 1983 - 2018 D.L.S. Electronic Systems, Inc.

COPYRIGHT NOTICE
This report must not be reproduced (except in full), without the approval of D.L.S. Electronic Systems, Inc.

166 South Carter, Genoa City, WI 53128

Company:	NingBo Kaitai Electronic Co. Ltd
Model Tested:	E-94B
Report Number:	23308
DLS Project:	9227

SIGNATURE PAGE

Tested By:

Craig Brandt
Senior Test Engineer

Reviewed By:

William Stumpf
OATS Manager

Approved By:

Brian Mattson
General Manager

Table of Contents

i. Cover Page 1
ii. Signature Page 2
iii. Table of Contents 3
iv. NVLAP Certificate of Accreditation 3
1.0 Summary of Test Report 5
2.0 Introduction 6
3.0 Test Facilities 6
4.0 Description of Test Sample 6
5.0 Test Equipment 8
6.0 Test Arrangements 9
7.0 Test Conditions 9
8.0 Modifications Made To EUT For Compliance 9
9.0 Additional Descriptions 10
10.0 FCC 15.31 (e) Supply Voltage Requirement statement 10
11.0 FCC 15.203 Antenna Requirement statement 11
12.0 Results 11
13.0 Conclusion 11
Appendix A – Test Setup Photos 12
Appendix B – Measurement Data 17
B1.0 Duty Cycle during continuous Low, Mid, & High channel testing 17
B2.0 DTS Bandwidth (6 dB bandwidth) 20
B3.0 Output Power – Radiated 24
B4.0 Maximum Power Spectral Density – Radiated 31
B5.0 Emissions in Non-Restricted Frequency Bands – Radiated 38
B6.0 Emissions in Restricted Frequency Bands – Radiated 64
B7.0 Operating Band-Edge – Radiated 73
B8.0 Restricted Band-Edge – Radiated 76
Appendix C – Measurement Uncertainty 81

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 100276-0

D.L.S. Electronic Systems, Inc.
Wheeling, IL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-09-29 through 2018-09-30
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 100276-0

Emissions

Designation	***Description***
Off-site test location	D.L.S. Electronics performs radiated emissions testing at an additional location, 166 South Carter Street, Genoa City, WI 53128.

166 South Carter, Genoa City, WI 53128

1.0 Summary of Test Report

It was determined that the NingBo Kaitai Electronic Co., B/T cooking thermometer, model E-94B, complies with the requirements of CFR 47 Part 15 Subpart C Section 15.247.

Subpart C Section 15.247 Applicable Technical Requirements Tested:

Section	Description	Procedure	Note	Compliant?
15.31(e)	Supply Voltage Statement	N/A		Yes
15.203	Antenna Requirement Statement	N/A		Yes
Informative	Duty Cycle	ANSI C63.10-2013 Section 11.6(b)	1	NA
15.247(a)(2)	DTS Bandwidth (6 dB Bandwidth)	ANSI C63.10-2013 Sections 11.8 & 11.8.2	1	Yes
15.247(b)(3)	Output Power	ANSI C63.10-2013 Sections 11.9.1, 11.9.1.1, & Annex G	1	Yes
15.247(e)	Maximum Power Spectral Density	ANSI C63.10-2013 Sections 11.10, 11.10.2, & Annex G	1	Yes
15.247(d)	Emissions in Non-Restricted Frequency Bands	ANSI C63.10-2013 Sections 11.11, 11.11.2, & 11.11.3	1	Yes
15.247(d) 15.205(a) 15.209(a)	Emissions in Restricted Frequency Bands	ANSI C63.10-2013 Sections 11.12 & 11.12.1	1	Yes
15.247(d)	Operating Band-Edge	ANSI C63.10-2013 Sections 11.11, 11.11.2, & 11.11.3	1	Yes
15.247(d) 15.205(a) 15.209(a)	Restricted Band-Edge	ANSI C63.10-2013 Section 6.10.5.2	1	Yes

Note 1: Radiated emission measurement.

166 South Carter, Genoa City, WI 53128

2.0 Introduction

From December 20th to December 22nd 2017, the B/T cooking thermometer, model E-94B, as provided from NingBo Kaitai Electronic Co. was tested to the requirements of CFR 47 Part 15 Subpart C Section 15.247. To meet these requirements, the procedures contained within this report were performed by personnel of D.L.S Electronic Systems, Inc.

3.0 Test Facilities

D.L.S. Electronic Systems, Inc. is a full service EMC/Safety Testing Laboratory accredited to ISO 17025. NVLAP Certificate and Scope can be viewed at http://www.dlsemc.com/certificate. Our facilities are registered with the FCC, Innovation Science and Economic Development Canada, and VCCI.

Wisconsin Test Facility:
D.L.S. Electronic Systems, Inc.
166 S. Carter Street
Genoa City, Wisconsin 53128

Wheeling Test Facility:
D.L.S. Electronic Systems, Inc.
1250 Peterson Drive
Wheeling, IL 60090

FCC Registration #90531

4.0 Description of Test Sample

Description:

The Bluetooth thermometer, which has an LCD display, makes viewing cooking temperature and cooking times easy and quick.

Type of Equipment / Frequency Range:

Bluetooth Transceiver BLE4.2 (portable) / 2402-2480 MHz

Physical Dimensions of Equipment Under Test:

Length: 2.44 in., Width: 2.44 in., Height: 0.94 in.

4.0 Description of Test Sample - continued

Power Source:

3 Volts DC
Two AAA batteries

Internal Frequencies:

24 MHz

Transmit / Receive Frequencies Used For Test Purpose:

Low channel: 2402 MHz, Middle channel: 2442 MHz, High channel: 2480 MHz

Type of Modulation(s) / Antenna Type:

FSK / PCB Antenna (-2.82 dBi gain)

Description of Circuit Board(s) / Part Number:

APP Thermometer SP-E-94B	E15K160-A2

5.0 Test Equipment

A list of the equipment used can be found in the table below. All primary equipment was calibrated against known reference standards with a verified traceable path to NIST.

Radiated 30 – 1000 MHz (Site 2)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/006	20 Hz – 40 GHz	4-6-17	4-6-18
Preamplifier	Rohde & Schwarz	TS-PR10	032001/004	9 kHz – 1 GHz	11-22-17	11-22-18
Antenna	EMCO	3104C	00054892	20 MHz – 200 MHz	3-11-16	3-11-18
Antenna	Electro-Metrics	LPA-25	1205	200 MHz – 1 GHz	3-23-16	3-23-18
Cable	Beldin	9914	CBL-005	9 kHz – 1 GHz	11-27-17	11-27-18
Cable	Beldin	9273	CBL-028	9 kHz – 1 GHz	11-27-17	11-27-18
Cable	Manhattan/CDT	RB223/U	CBL-051	9 kHz – 1 GHz	11-27-17	11-27-18
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A

Radiated 1-26 GHz (Site G1)

Description	Manufacturer	Model Number	Serial Number	Frequency Range	Cal Date	Cal Due Dates
Receiver	Rohde & Schwarz	ESI 40	837808/005	20 Hz – 40 GHz	4-6-17	4-6-18
Preamp	Ciao	CA118-4010	101	1GHz-18GHz	1-9-17	1-9-18
Horn Antenna	EMCO	3115	9502-4451	1-18GHz	7-27-17	7-27-19
Filter- High-Pass	Q-Microwave	100462	1	4.2GHz-18GHz	7-7-17	7-7-18
Preamp	Miteq	AMF-8B-180265-40-10P-H/S	438727	18GHz-26GHz	5-11-17	5-11-18
Horn Antenna	EMCO	3116	2549	18 – 40GHz	9-2-16	9-2-18
High Pass Filter	K & L	50140 11SH10-18000/T40000-K-K	8	18-40 GHz	1-9-17	1-9-18
Cable	Micro-Coax	UFB311A	CBL-100	1-18GHz	5-5-17	5-5-18
Cable	Micro-Coax	UFC142A	CBL-093	18-40GHz	5-10-17	5-10-18
Cable	Teledyne	096-0004-036	CBL-091	18-40GHz	5-10-17	5-10-18
Test Software	Rohde & Schwarz	ESK-1	V1.7.1	N/A	N/A	N/A

6.0 Test Arrangements

Radiated Emissions Measurement Arrangement:

All radiated emission measurements were performed at D.L.S. Electronic Systems, Inc. and set up according to ANSI C63.10-2013, unless otherwise noted. Description of procedures and measurements can be found in Appendix B – Measurement Data. See Appendix A for additional photos of the test set up. See Appendix C for measurement uncertainty.

Unless otherwise noted, the bandwidth of the measuring receiver / analyzer used during testing is shown below.

Frequency Range	Bandwidth (-6 dB)
10 to 150 kHz	200 Hz
150 kHz to 30 MHz	9 kHz
30 MHz to 1 GHz	120 kHz
Above 1 GHz	1 MHz

7.0 Test Conditions

Temperature and Humidity:

70°F at 26% RH unless otherwise noted on test data

Supply Voltage:

3 Volt DC

Two AAA batteries

8.0 Modifications Made To EUT For Compliance

No modifications were made to the EUT.

9.0 Additional Descriptions

The EUT was programmed for continuous transmit, modulated, with a 100% duty cycle.

Three EUT's were tested. One was programmed for continuous transmission on the lowest channel of operation (2402 MHz). One was programmed for continuous transmission on the middle channel of operation (2442 MHz). One was programmed for continuous transmission on the highest channel of operation (2480 MHz).

The EUT with was rotated through 3 orthogonal axis to find worst-case.

10.0 FCC 15.31 (e) Supply Voltage Requirement statement

FCC 15.31 (e) - For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage.

Compliance Statement: This device complies with the requirements of Part 15.31(e):

☒ This device is battery operated. All tests were performed using a new (or fully charged) battery.

☐ This device provides a constant regulated voltage to the RF circuitry regardless of supply voltage (see schematic diagrams).

☐ This device does not provide a constant regulated voltage to the RF circuitry regardless of supply voltage. Data has been supplied in this test report that supports compliance. Details:

11.0 FCC 15.203 Antenna Requirement statement

SECTION 15.203 ANTENNA REQUIREMENT

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device…. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221.

Statement: This wireless device (Intentional Radiator) meets the requirements of FCC Part 15.203:

☒ The antenna is permanently attached

☐ The antenna has a unique coupling to the intentional radiator.
Description of coupling:

☐ This intentional radiator is professionally installed

☐ This intentional radiator, in accordance with Section 15.31(d), must be measured at the installation site.

12.0 Results

Measurements were performed in accordance with CFR 47 Part 15 Subpart C Section 15.247 and ANSI C63.10-2013. Graphical and tabular data can be found in Appendix B at the end of this report.

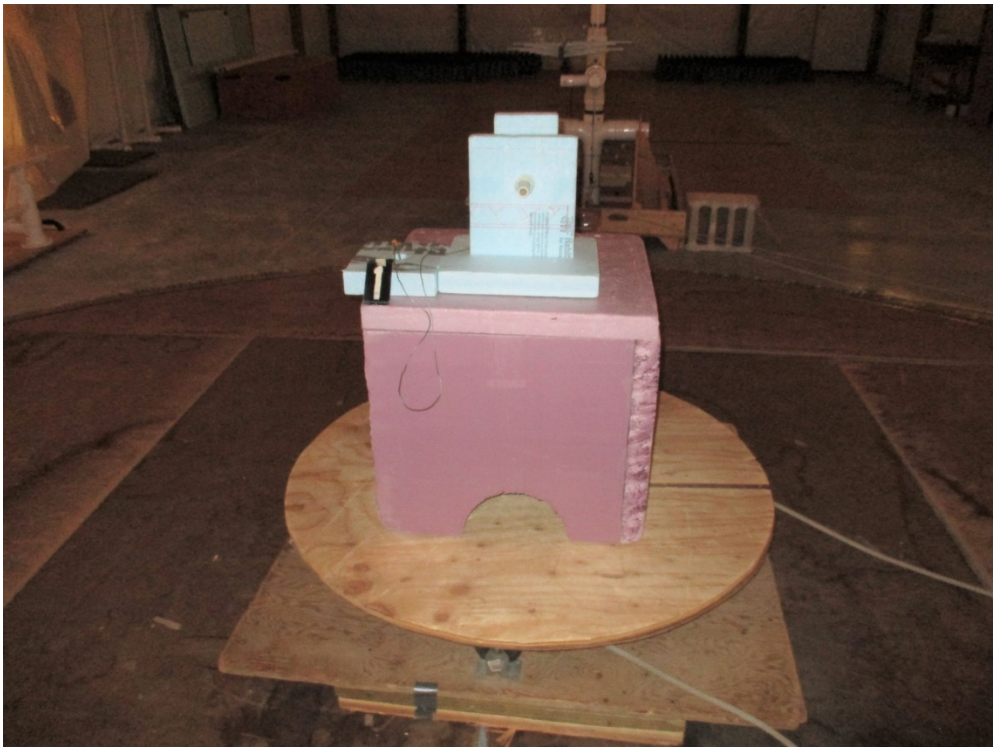
13.0 Conclusion

The B/T cooking thermometer, model E-94B, as provided from NingBo Kaitai Electronic Co., tested from December 20th to December 22nd 2017 **meets** the requirements of CFR 47 Part 15 Subpart C Section 15.247.

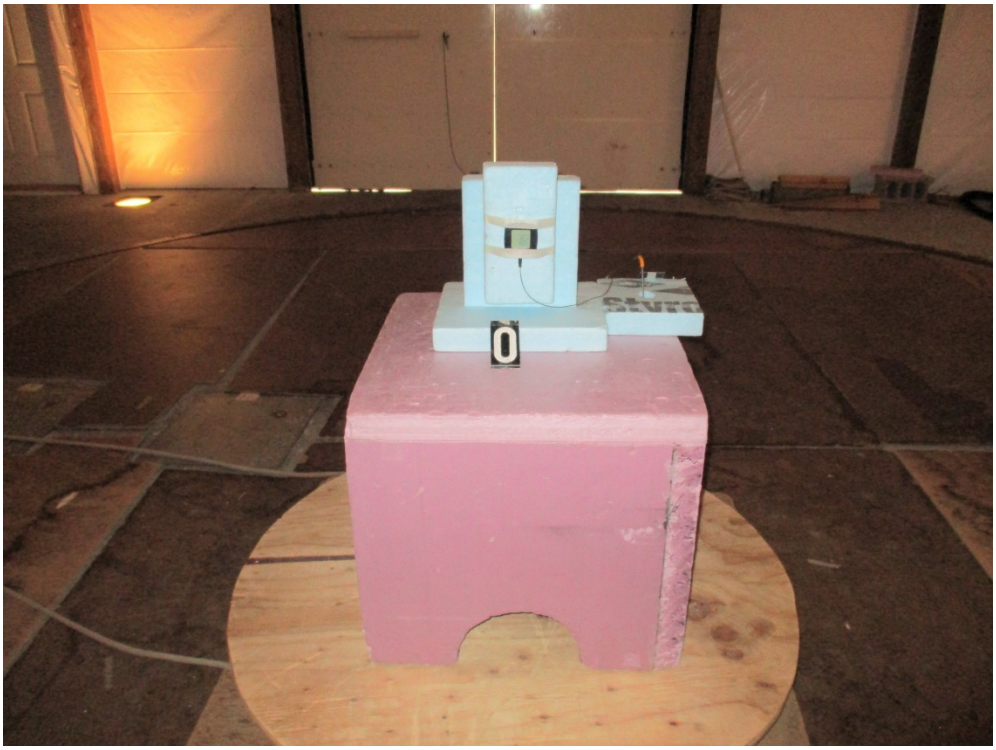
166 South Carter, Genoa City, WI 53128

Appendix A – Test Setup Photos

Radiated Emissions below 1 GHz – back



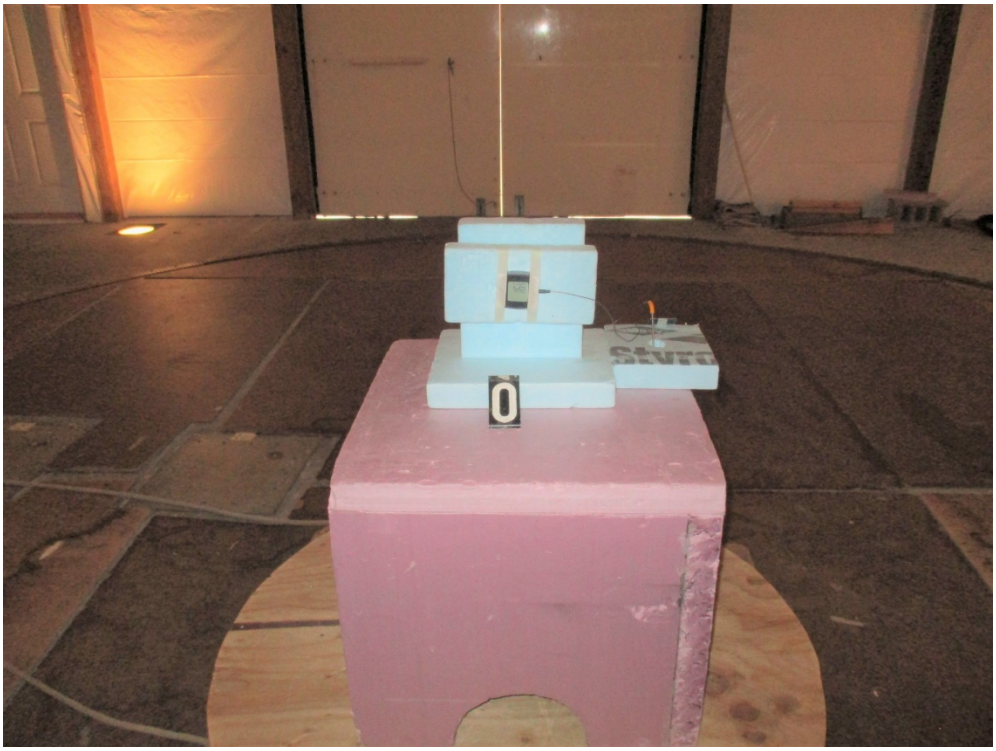
Radiated Emissions below 1 GHz – Position 1



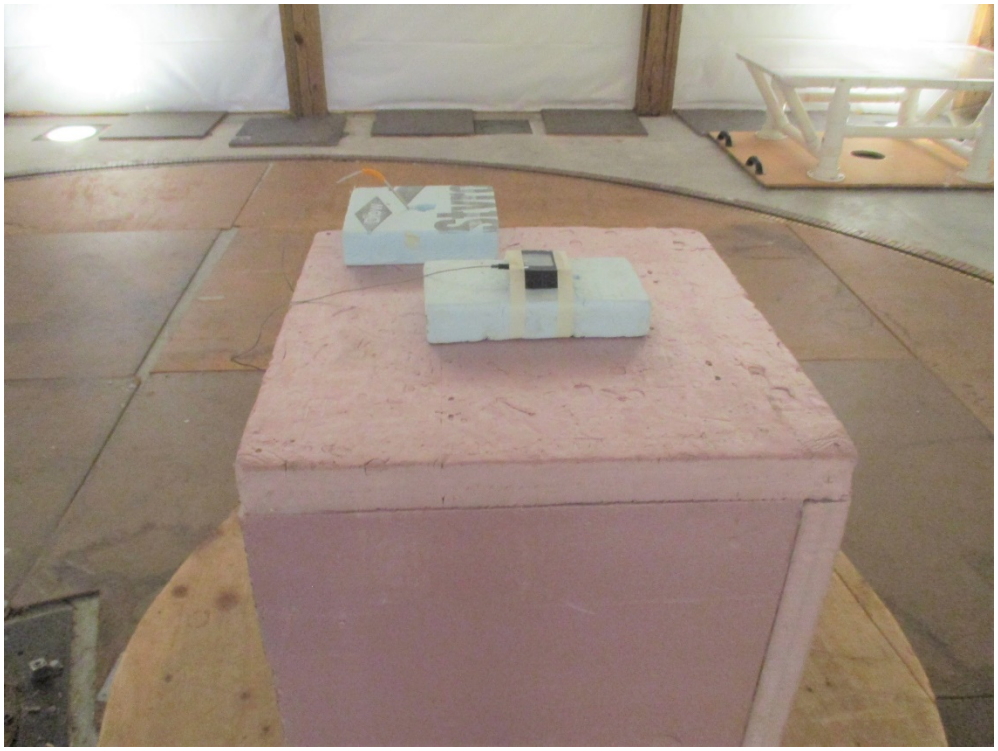
166 South Carter, Genoa City, WI 53128

Appendix A – Test Setup Photos - continued

Radiated Emissions below 1 GHz – Position 2



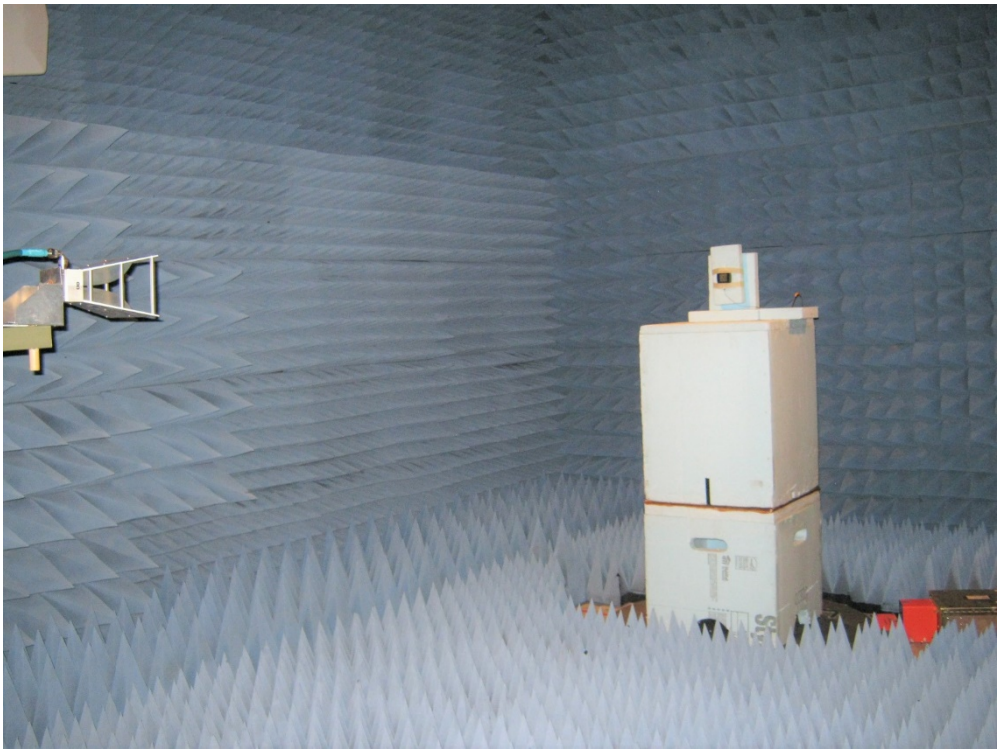
Radiated Emissions below 1 GHz – Position 3



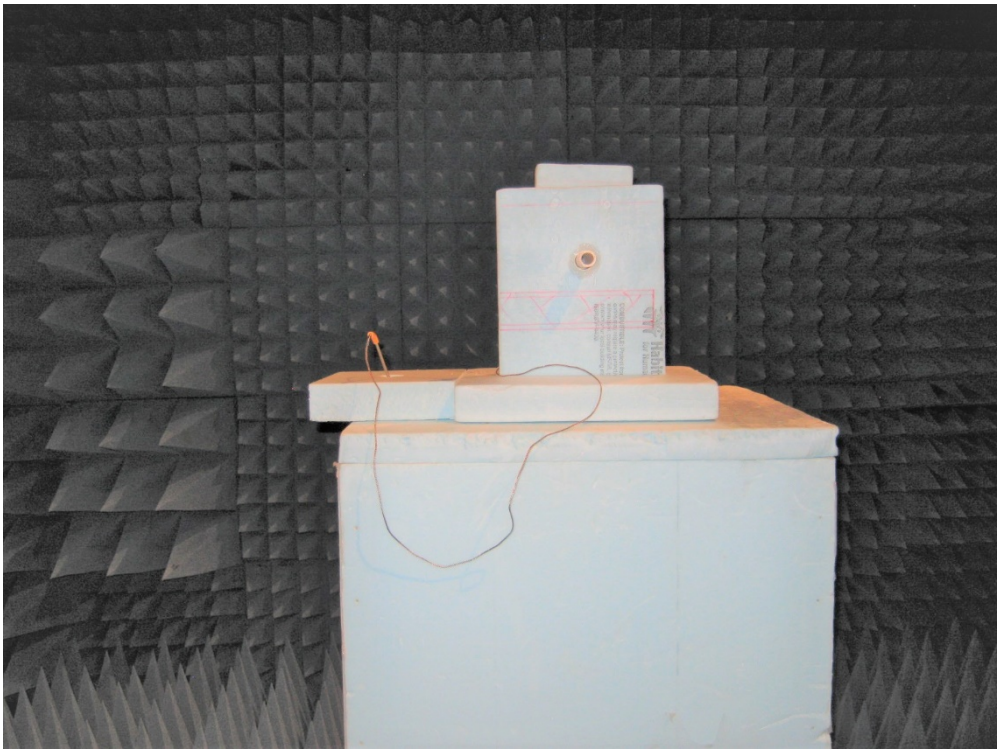
166 South Carter, Genoa City, WI 53128

Appendix A – Test Setup Photos - continued

Radiated Emissions above 1 GHz - front



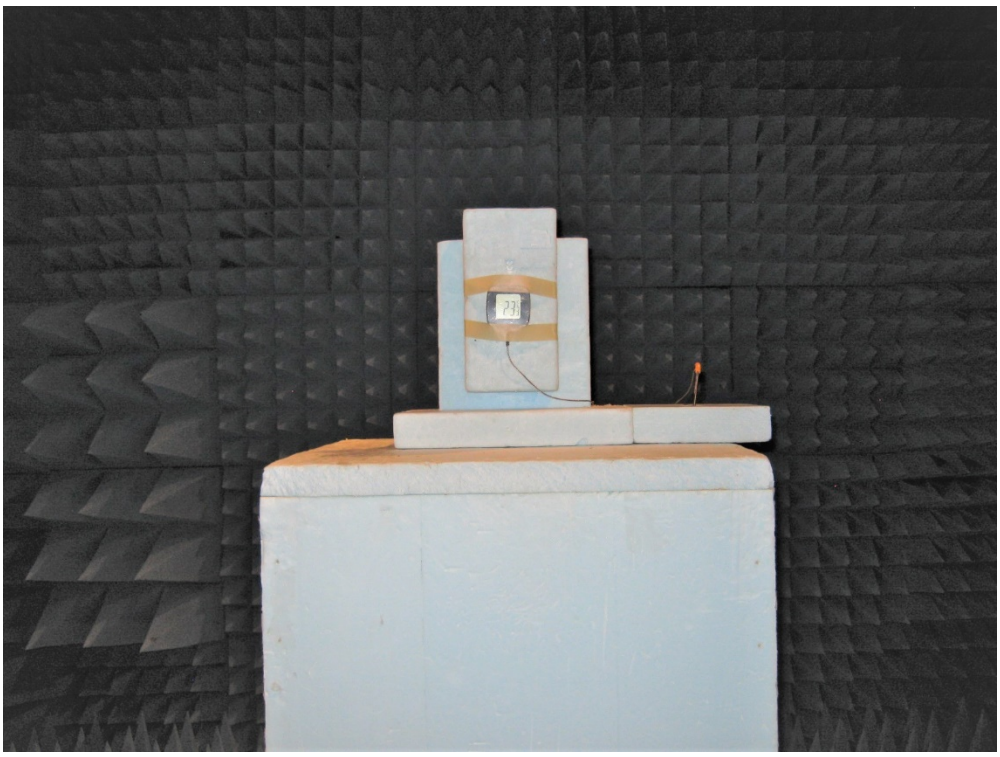
Radiated Emissions above 1 GHz – back



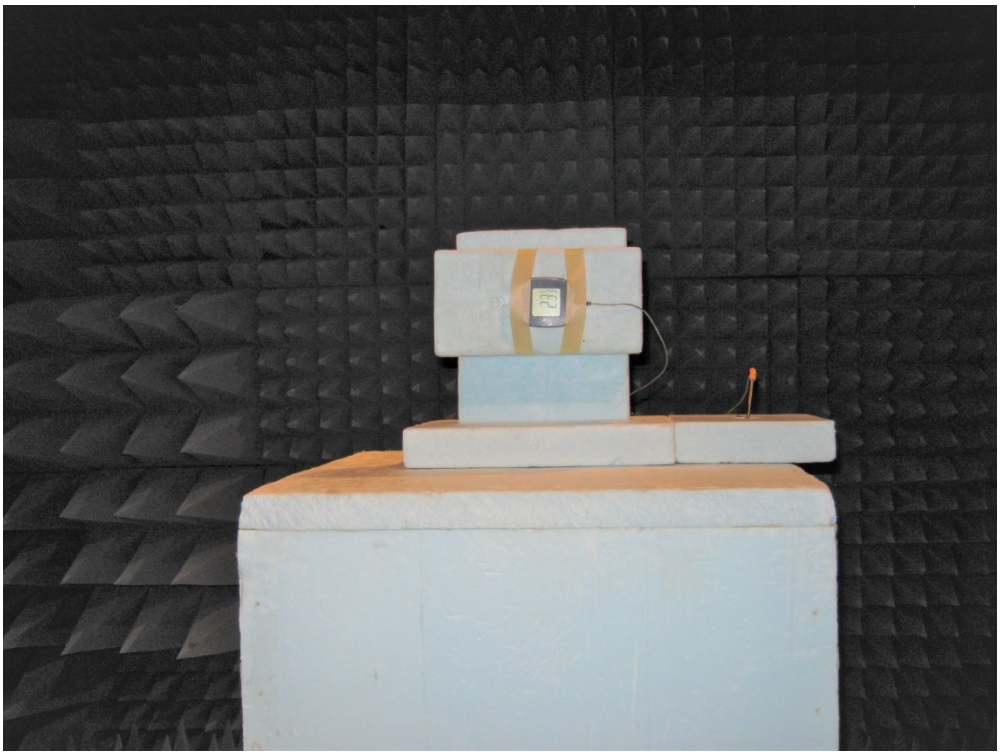
166 South Carter, Genoa City, WI 53128

Appendix A – Test Setup Photos - continued

Radiated Emissions above 1 GHz – Position 1



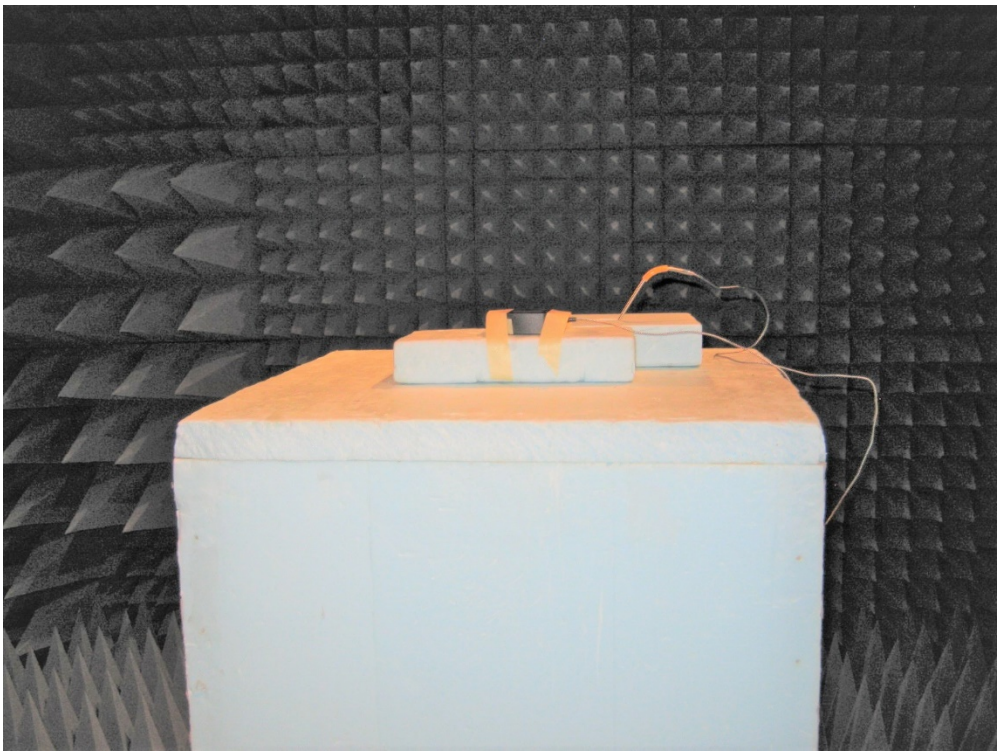
Radiated Emissions above 1 GHz – Position 2



166 South Carter, Genoa City, WI 53128

Appendix A – Test Setup Photos – continued

Radiated Emissions above 1 GHz – Position 3



Appendix B – Measurement Data

B1.0 Duty Cycle during continuous Low, Mid, & High channel testing

Rule Part: Informative

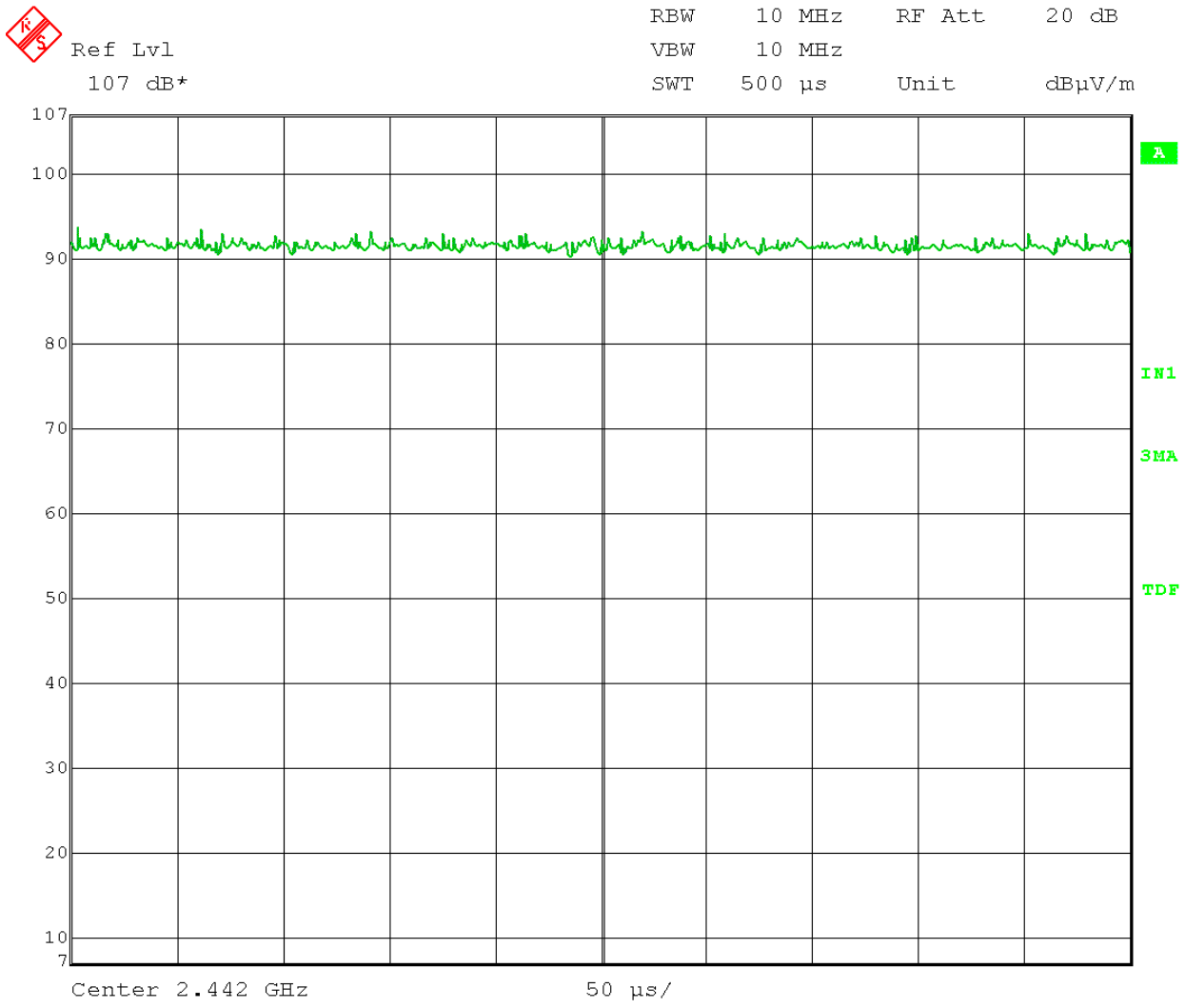
Test Procedure: ANSI 63.10-2013, section 11.6(b)

Limit: Not Applicable

Results: Duty Cycle = 100%
Duty correction factor: None

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Duty Cycle – special mode for testing purposes
Operator: Craig B

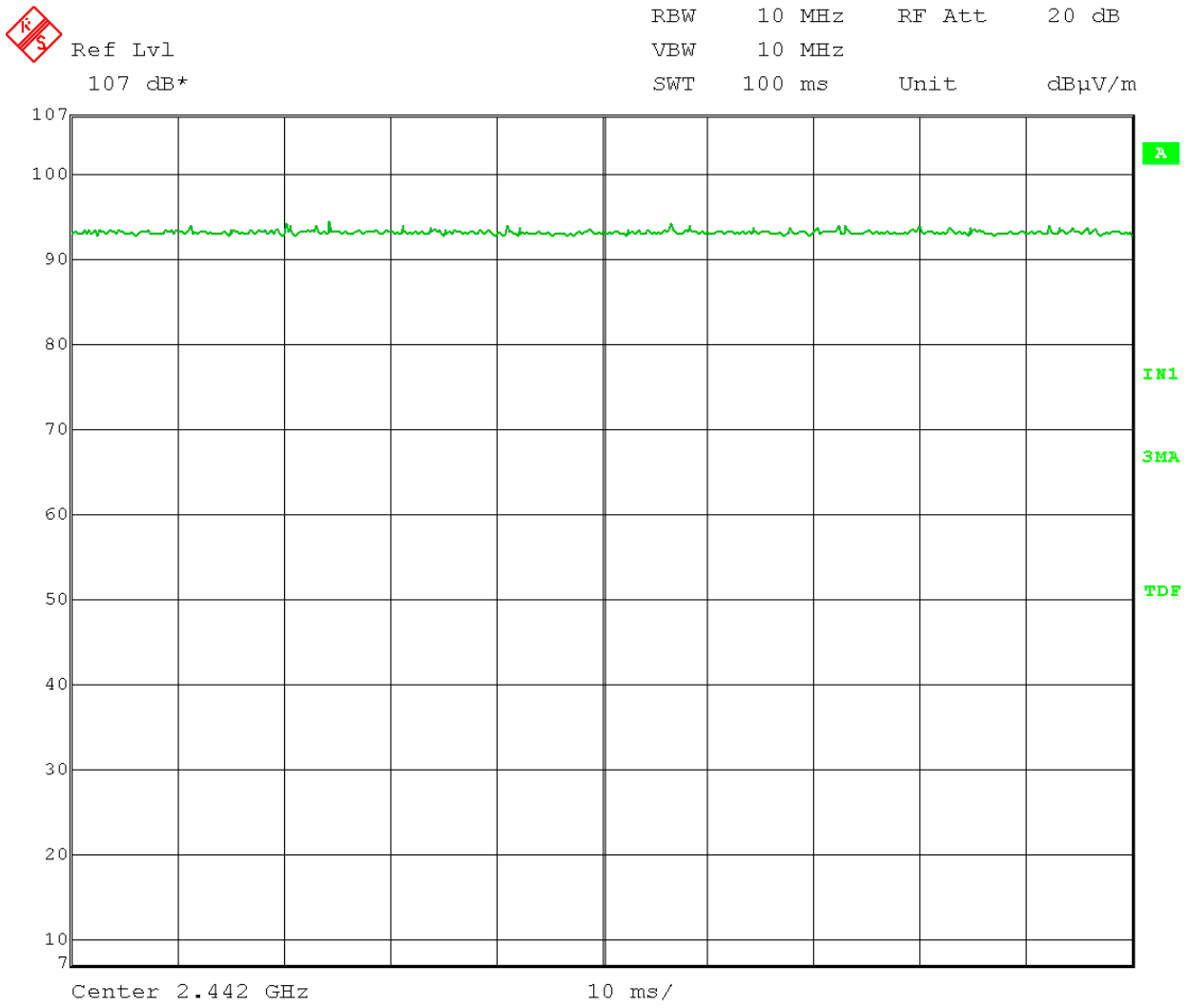
Comment: Duty Cycle = 100%



Date: 20.DEC.2017 10:11:31

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Duty Cycle – special mode for testing purposes
Operator: Craig B

Comment: Duty Cycle = 100%



Date: 20.DEC.2017 10:12:35

Appendix B

B2.0 DTS Bandwidth (6 dB bandwidth)

Rule Part: FCC 15.247(a)(2)

Test Procedure: ANSI C63.10-2013, section 6.9.2

Limit: Minimum 6 dB bandwidth must be at least 500 kHz

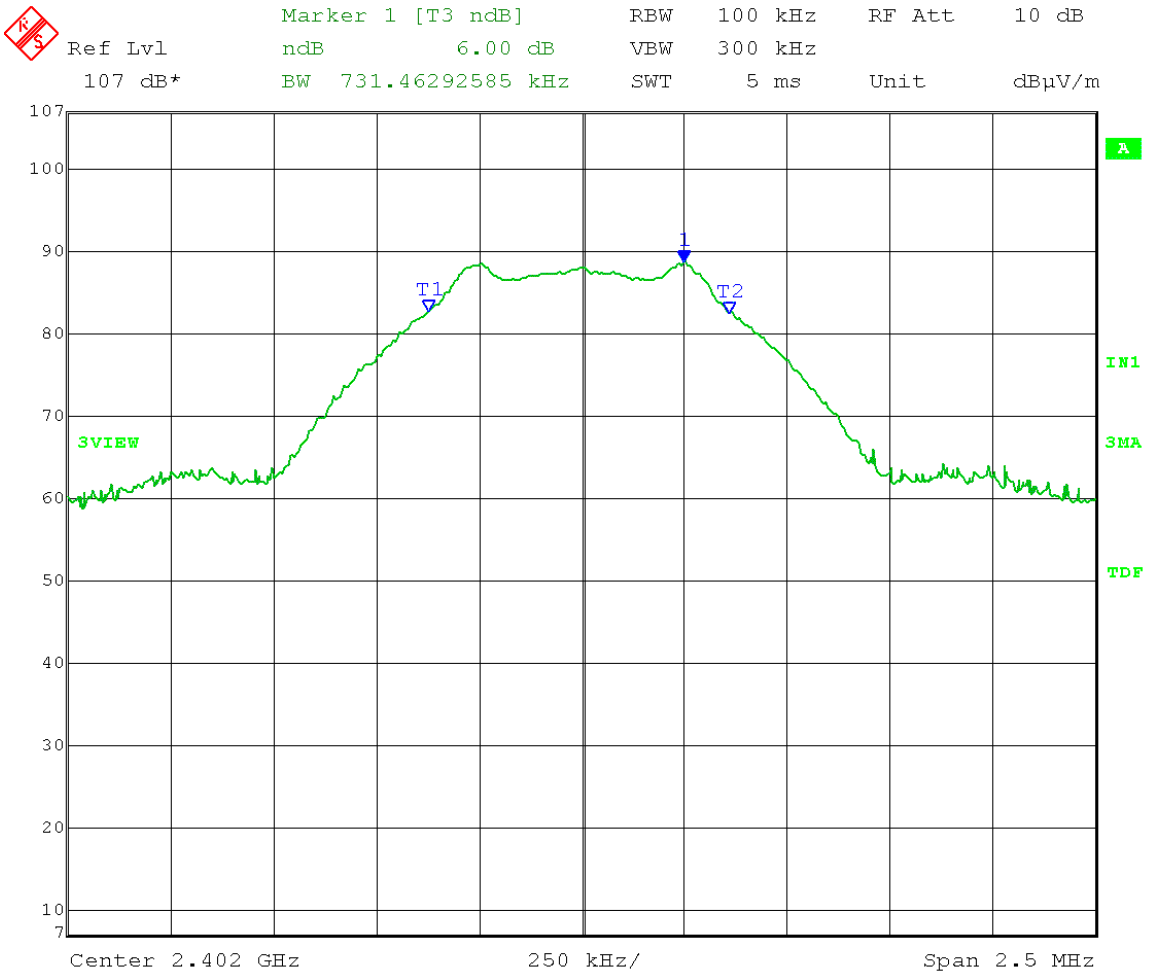
Results: Compliant
Minimum 6 dB bandwidth = 731 kHz

Notes: The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The EUT was tested at the low, middle, and high channels of operation.

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: DTS Bandwidth (6 dB)
Operator: Craig B

Comment: Low Channel: Frequency – 2.402 GHz

6 dB Bandwidth = 731 kHz

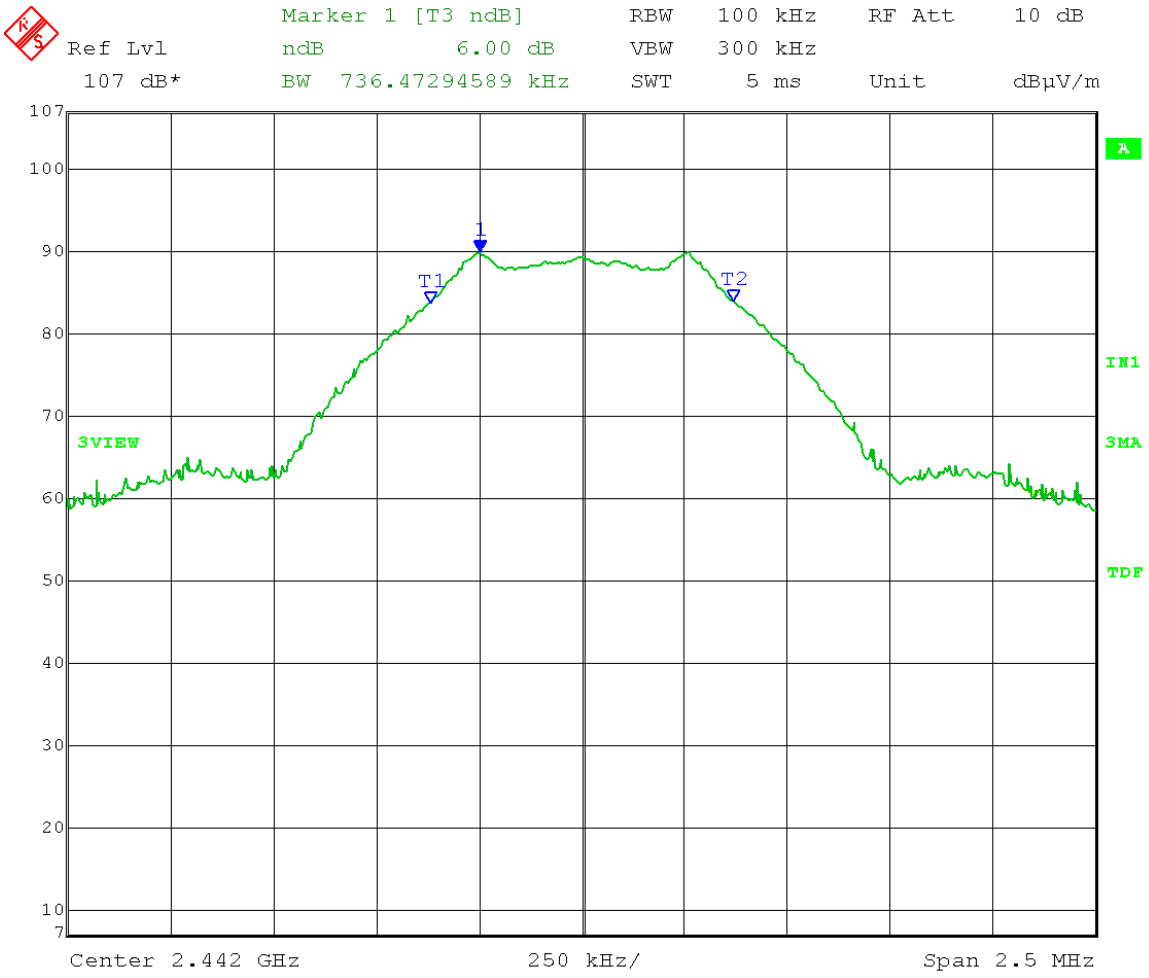


Date: 20.DEC.2017 12:15:36

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: DTS Bandwidth (6 dB)
Operator: Craig B

Comment: Middle Channel: Frequency – 2.442 GHz

6 dB Bandwidth = 736 kHz

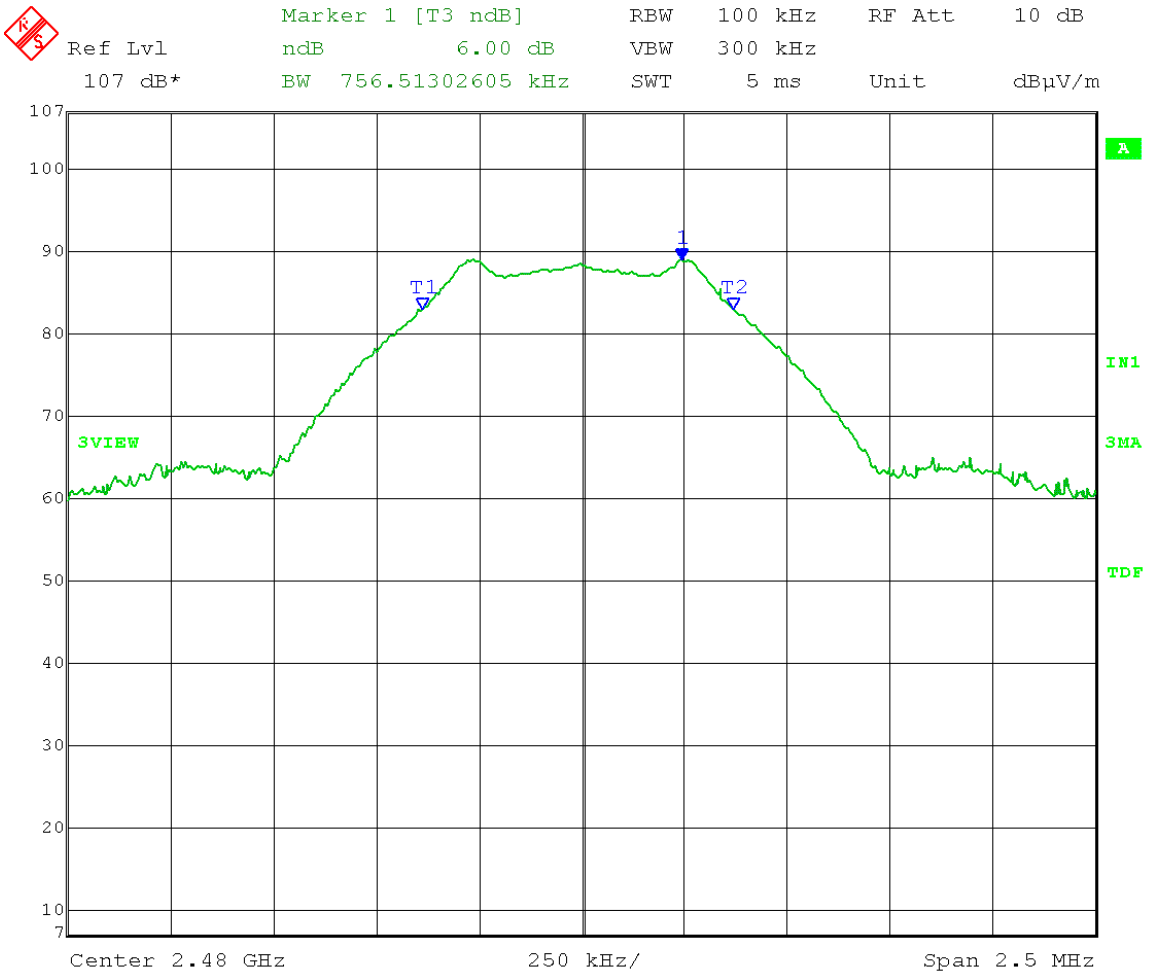


Date: 20.DEC.2017 10:16:29

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: DTS Bandwidth (6 dB)
Operator: Craig B

Comment: High Channel: Frequency – 2.480 GHz

6 dB Bandwidth = 756 kHz



Date: 20.DEC.2017 14:20:41

Appendix B

B3.0 Output Power – Radiated

Rule Part: FCC 15.247(b)(3)

Test Procedure: ANSI C63.10-2013, sections 11.9.1 & 11.9.1.1 (Peak power; RBW ≥ DTS bandwidth)
ANSI C63.10-2013, Annex G (relationship between field strength and RF conducted power)

Limit: 1 Watt (30 dBm) RF Conducted

Results: Compliant

Maximum radiated peak field strength = 91.3 dBµV/m at 3 meters
EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -3.957 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -1.137 dBm = 0.77 mW

Notes: The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The EUT with was rotated through 3 orthogonal axis to find worst-case. The maximum field strength level was measured and mathematically converted into and Effective Isotropic Radiated Power Level (EIRP). The EIRP level was then mathematically converted to RF conducted output power by subtracting the antenna gain (-2.82 dBi) from the EIRP level. The EUT was tested at the low, middle, and high channels of operation.

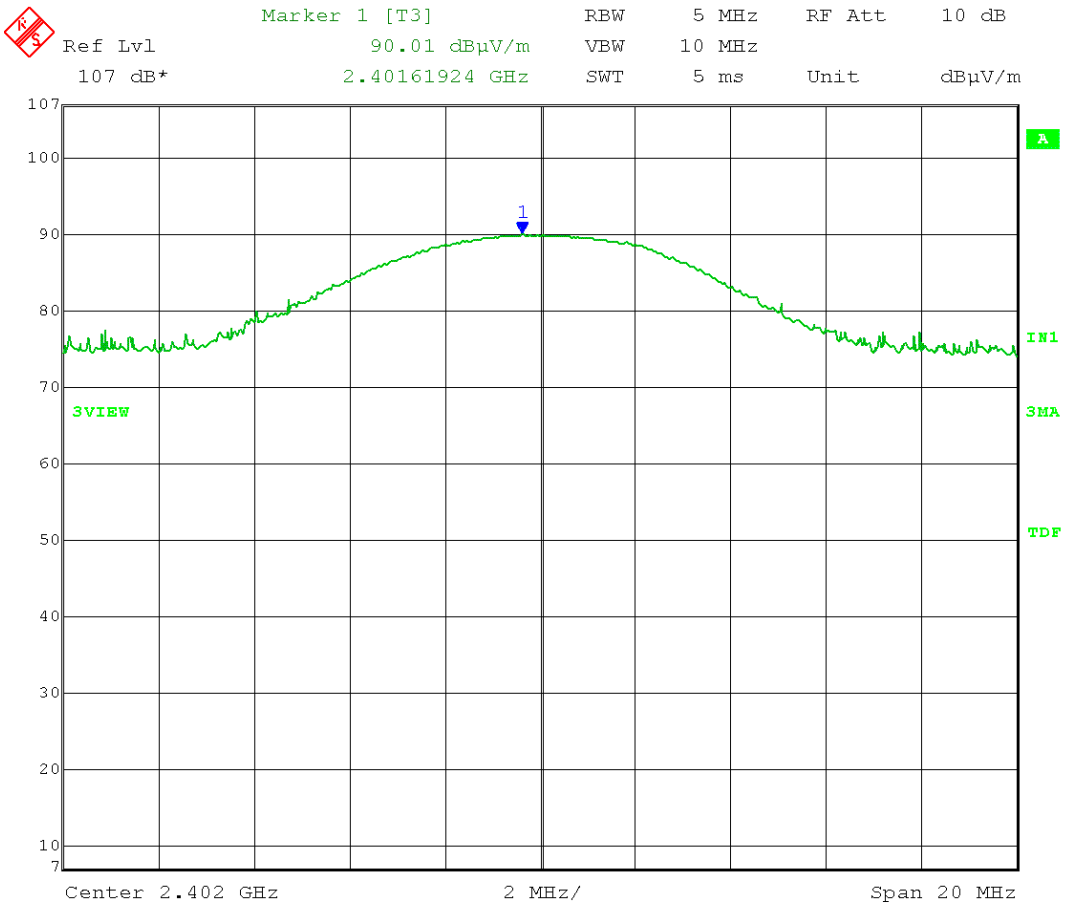
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Fundamental Emission Output Power - Radiated
Operator: Craig B

Comment: RBW ≥ DTS BW
VBW ≥ 3 x RBW
Span ≥ 3 x RBW
Sweep = auto couple
Detector = Peak
Trace = max hold

Comment: Low Channel: Frequency – 2.402 GHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -5.24 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -2.42 dBm = **0.57 mW**

Vertical:



Date: 20.DEC.2017 12:17:46

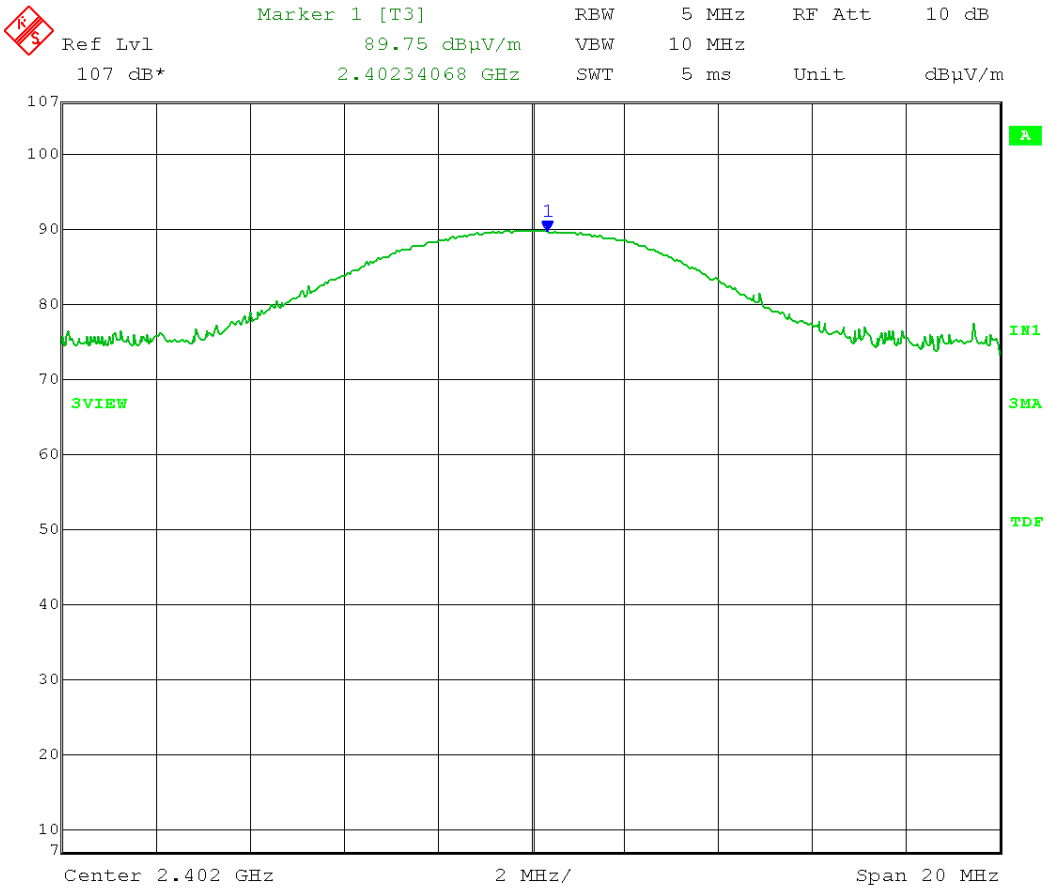
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Fundamental Emission Output Power - Radiated
Operator: Craig B

Comment: RBW ≥ DTS BW
VBW ≥ 3 x RBW
Span ≥ 3 x RBW
Sweep = auto couple
Detector = Peak
Trace = max hold

Comment: Low Channel: Frequency – 2.402 GHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -5.507 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -2.687 dBm = **0.54 mW**

Horizontal:



Date: 20.DEC.2017 12:40:06

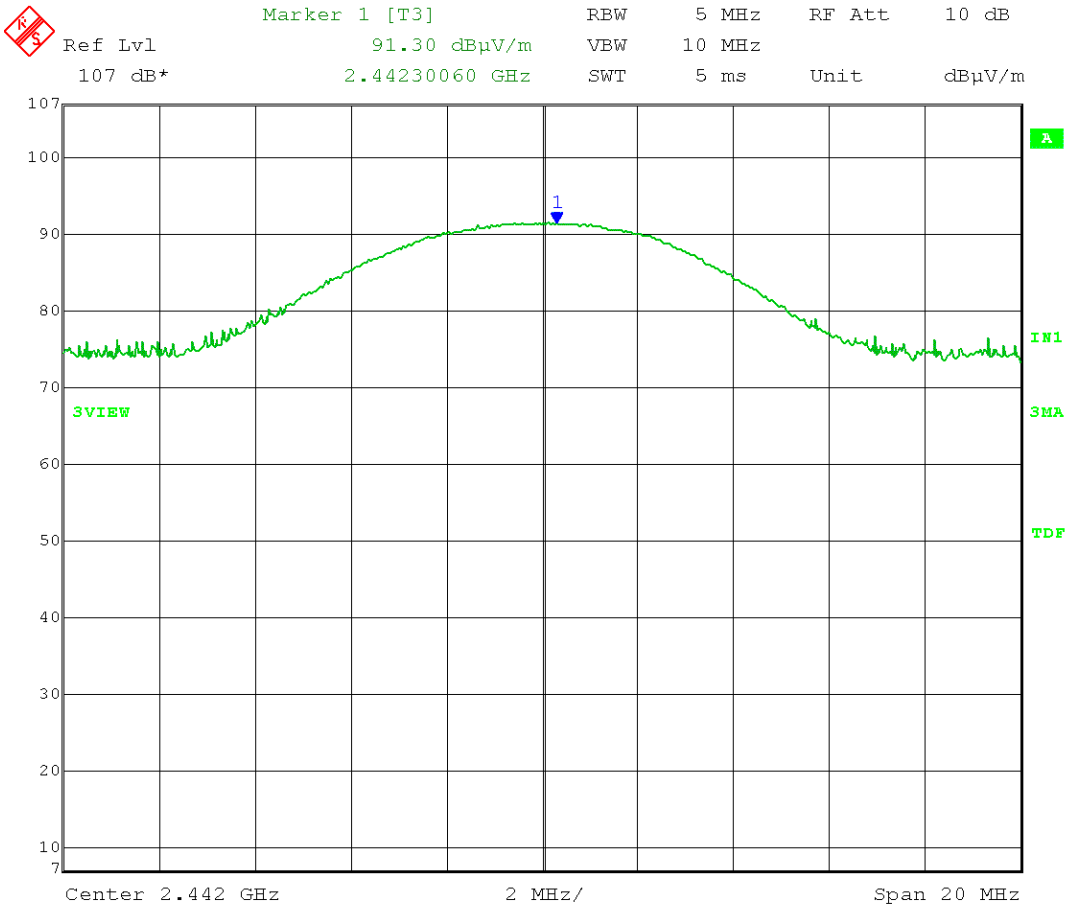
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Fundamental Emission Output Power - Radiated
Operator: Craig B

Comment: RBW ≥ DTS BW
VBW ≥ 3 x RBW
Span ≥ 3 x RBW
Sweep = auto couple
Detector = Peak
Trace = max hold

Comment: Middle Channel: Frequency – 2.442 GHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -3.957 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -1.137 dBm = **0.77 mW**

Vertical:



Date: 20.DEC.2017 11:49:09

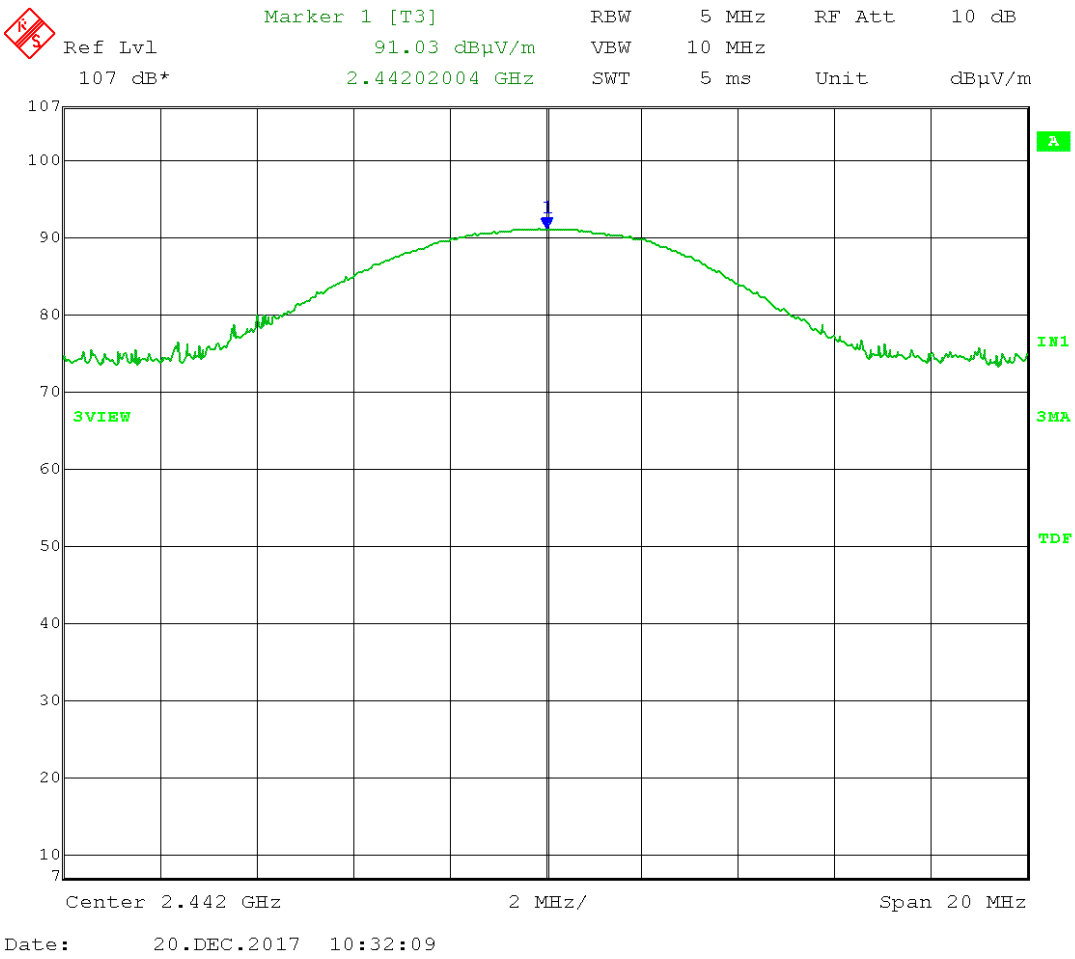
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Fundamental Emission Output Power - Radiated
Operator: Craig B

Comment: RBW ≥ DTS BW
VBW ≥ 3 x RBW
Span ≥ 3 x RBW
Sweep = auto couple
Detector = Peak
Trace = max hold

Comment: Middle Channel: Frequency – 2.442 GHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -4.227 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -1.407 dBm = **72 mW**

Horizontal:



Date: 20.DEC.2017 10:32:09

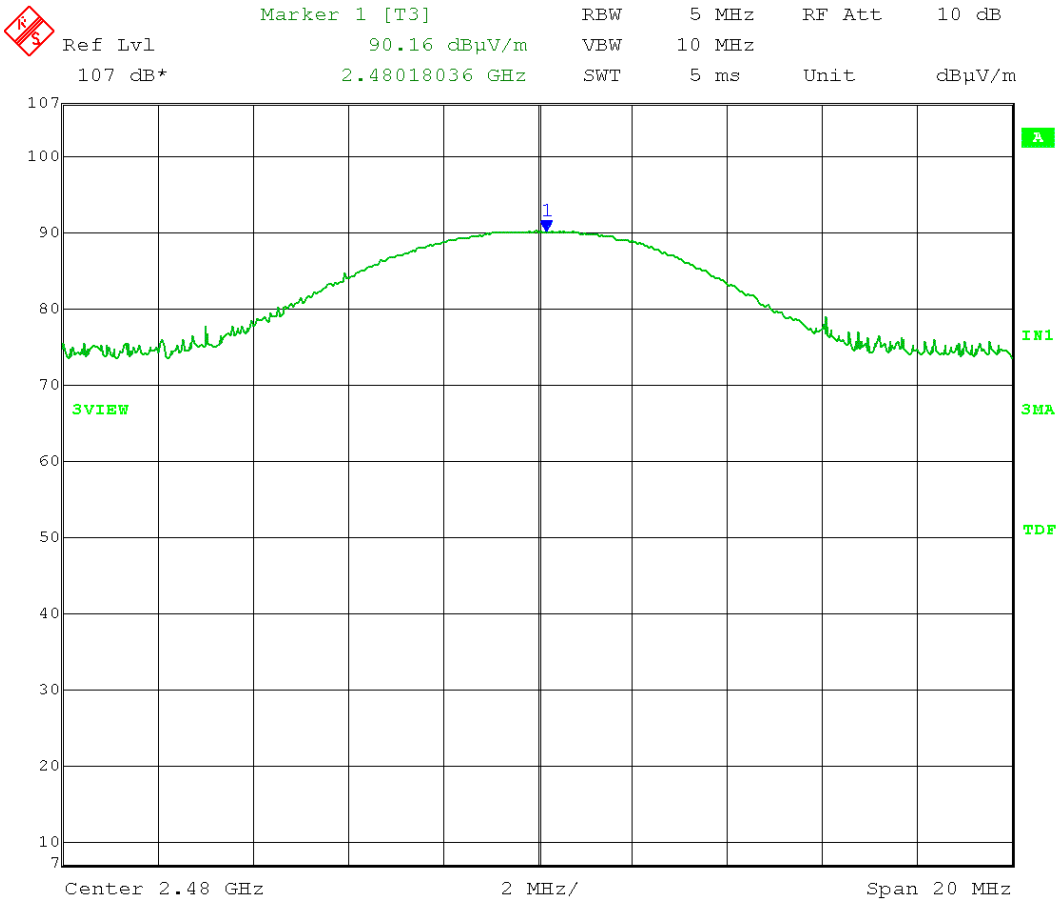
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Fundamental Emission Output Power - Radiated
Operator: Craig B

Comment: RBW ≥ DTS BW
VBW ≥ 3 x RBW
Span ≥ 3 x RBW
Sweep = auto couple
Detector = Peak
Trace = max hold

Comment: High Channel: Frequency – 2.480 GHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -5.097 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -2.277 dBm = **0.59 mW**

Vertical:



Date: 20.DEC.2017 14:16:09

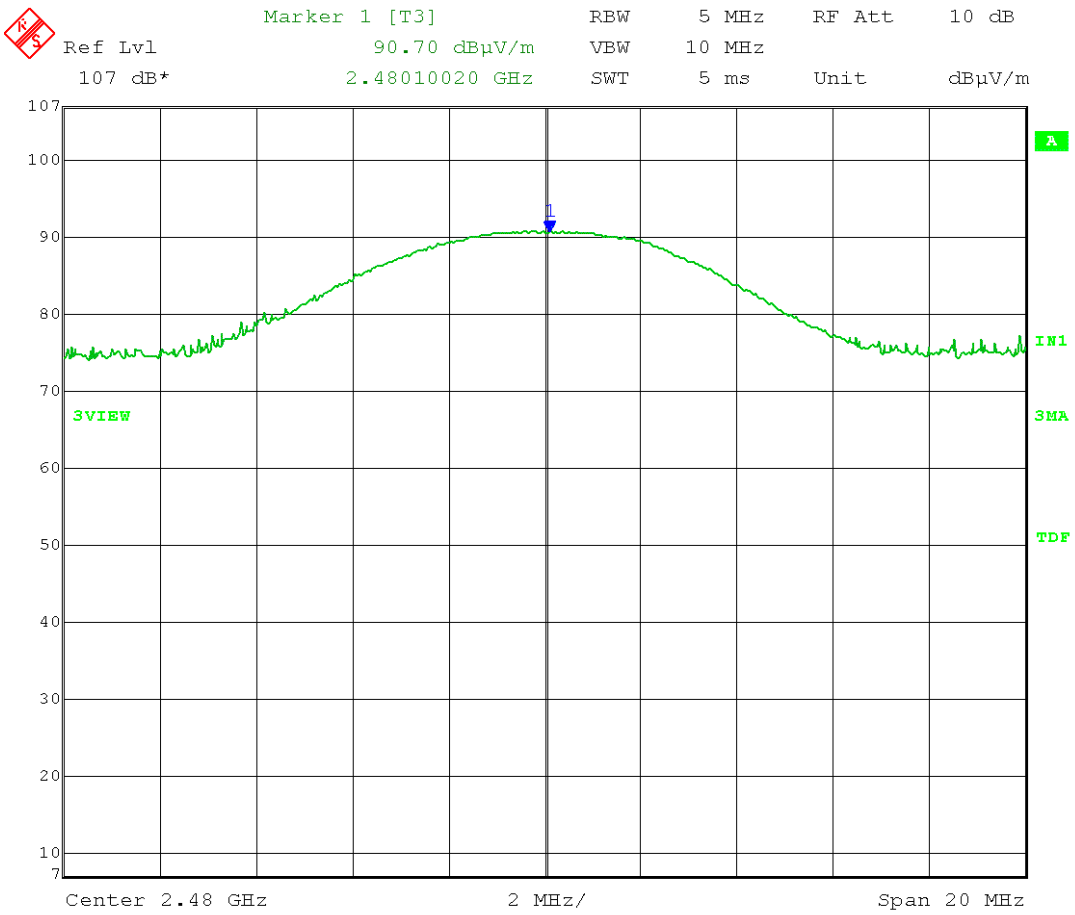
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Fundamental Emission Output Power - Radiated
Operator: Craig B

Comment: RBW ≥ DTS BW
VBW ≥ 3 x RBW
Span ≥ 3 x RBW
Sweep = auto couple
Detector = Peak
Trace = max hold

Comment: High Channel: Frequency – 2.480 GHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -4.557 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -1.737 dBm = **0.67 mW**

Horizontal:



Date: 20.DEC.2017 14:50:31

Appendix B

B4.0 Maximum Power Spectral Density – Radiated

Rule Part: FCC 15.247(e)

Test Procedure: ANSI C63.10-2013, sections 11.10 & 11.10.2 (Peak Power Spectral Density)
ANSI C63.10-2013, Annex G (relationship between field strength and RF conducted power)

Limit: 8 dBm in any 3 kHz band during continuous transmission

Results: Compliant
Maximum radiated peak field strength = 81.24 dBµV/m at 3 meters, in a 3 kHz bandwidth
EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -14.017 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -11.19 dBm
Peak RF Conducted PSD = -11.19 dBm/3kHz

Notes: This was a radiated measurement. The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The EUT with was rotated through 3 orthogonal axis to find worst-case. The maximum field strength spectral density level was measured and mathematically converted into and Effective Isotropic Radiated PSD Level (EIRP). The EIRP level was then mathematically converted to RF conducted output PSD by subtracting the antenna gain (-2.82 dBi) from the EIRP level. The EUT was tested at the low, middle, and high channels of operation.

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Maximum Power Spectral Density - Radiated
Operator: Craig B

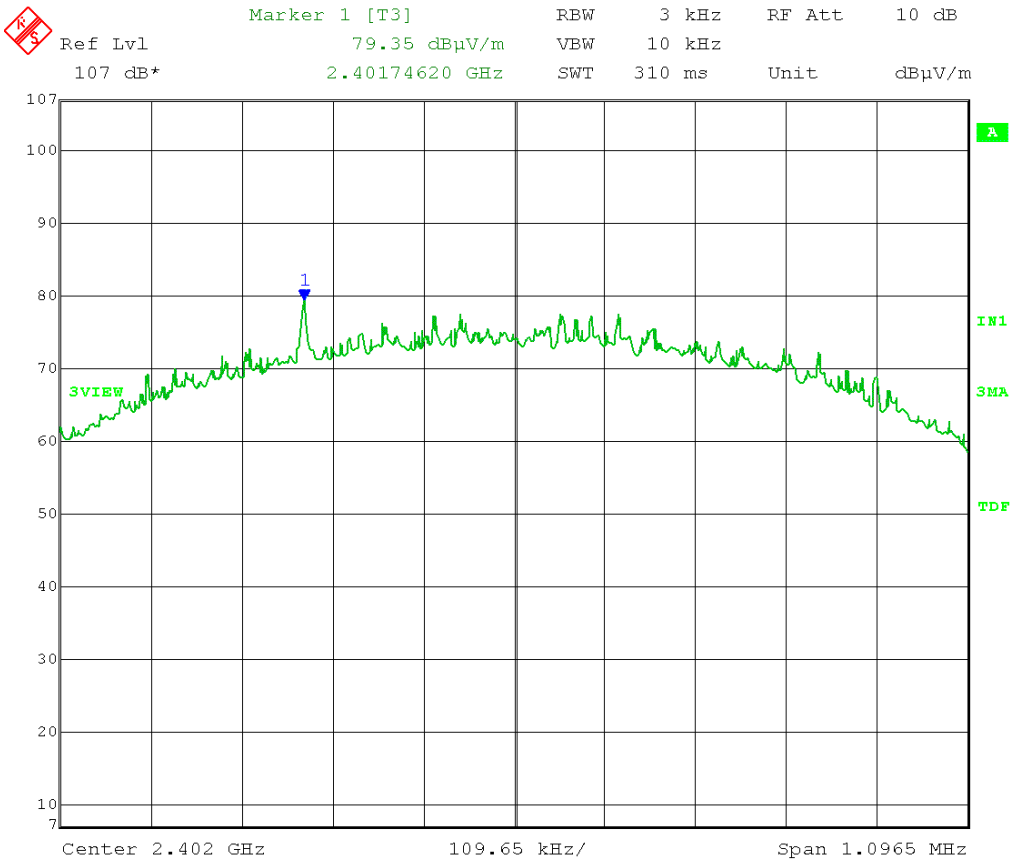
Comment: RBW = 3 kHz
VBW ≥ 3 x RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Limit: 8 dBm/3kHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -15.907 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -13.08 dBm
Peak PSD = **-13.08 dBm/3kHz**

Vertical:



Date: 20.DEC.2017 12:21:33

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Maximum Power Spectral Density - Radiated
Operator: Craig B

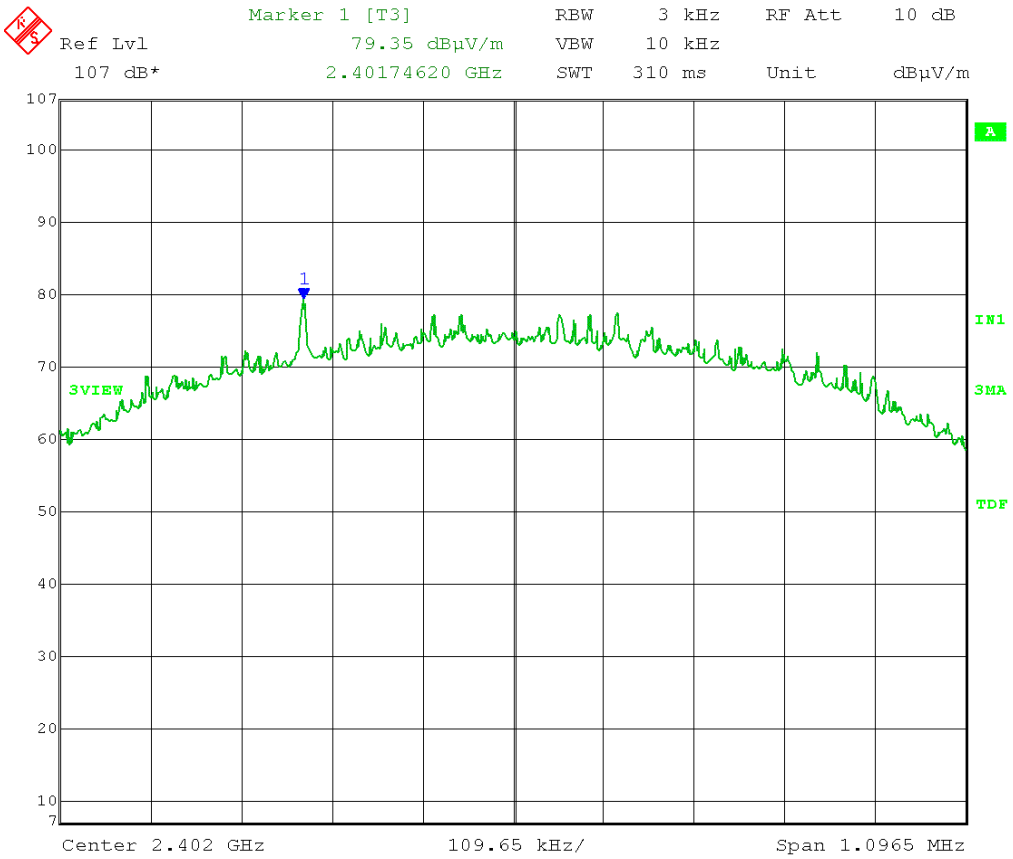
Comment: RBW = 3 kHz
VBW ≥ 3 x RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Limit: 8 dBm/3kHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -15.907 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -13.08 dBm
Peak PSD = **-13.08 dBm/3kHz**

Horizontal:



Date: 20.DEC.2017 12:36:57

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Maximum Power Spectral Density - Radiated
Operator: Craig B

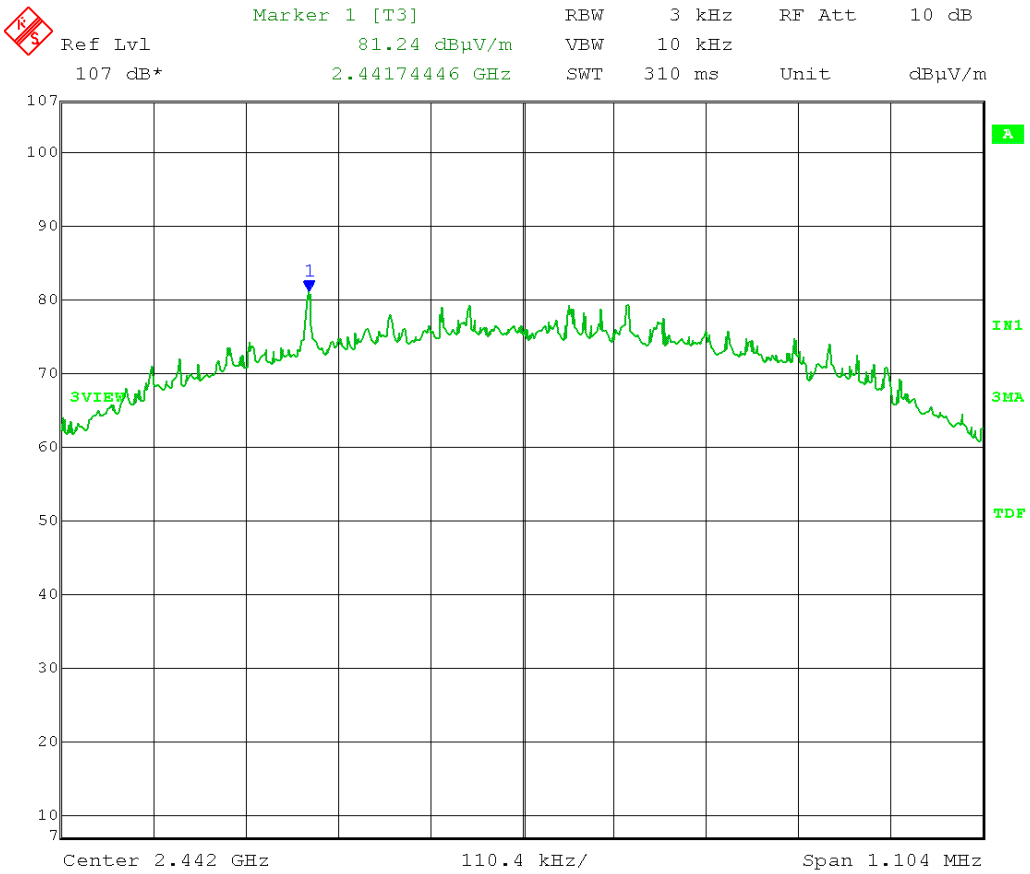
Comment: RBW = 3 kHz
VBW ≥ 3 x RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Limit: 8 dBm/3kHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -14.017 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -11.19 dBm
Peak PSD = **-11.19 dBm/3kHz**

Vertical:



Date: 20.DEC.2017 11:54:45

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Maximum Power Spectral Density - Radiated
Operator: Craig B

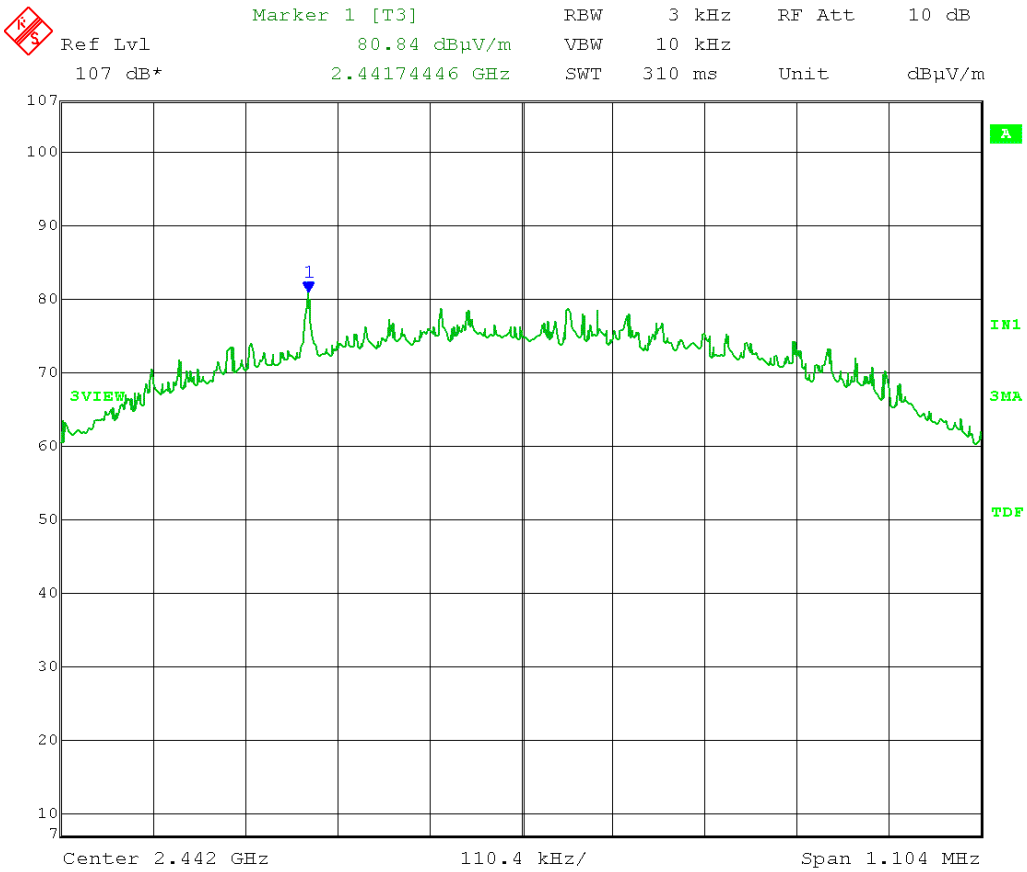
Comment: RBW = 3 kHz
VBW ≥ 3 x RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Limit: 8 dBm/3kHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -14.417 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -11.59 dBm
Peak PSD = **-11.59 dBm/3kHz**

Horizontal:



Date: 20.DEC.2017 11:00:26

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Maximum Power Spectral Density - Radiated
Operator: Craig B

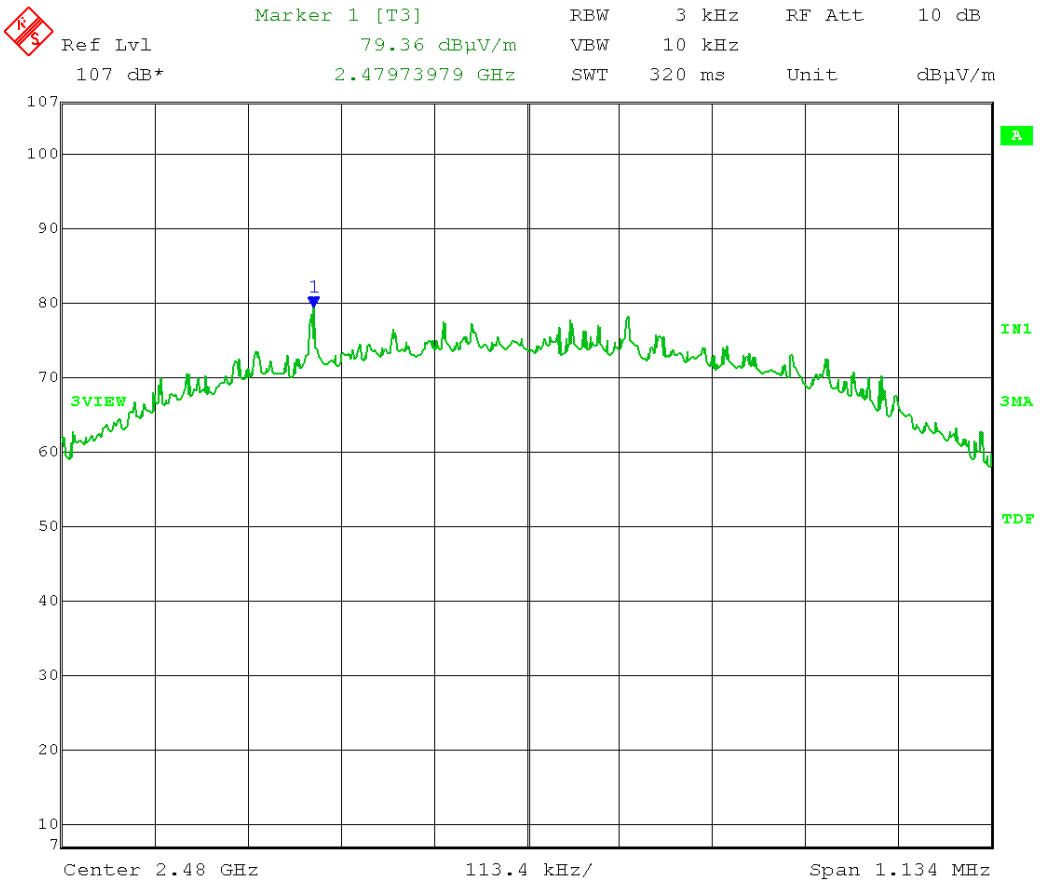
Comment: RBW = 3 kHz
VBW ≥ 3 x RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Limit: 8 dBm/3kHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -15.897 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -13.07 dBm
Peak PSD = **-13.07 dBm/3kHz**

Vertical:



Date: 20.DEC.2017 14:23:14

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Maximum Power Spectral Density - Radiated
Operator: Craig B

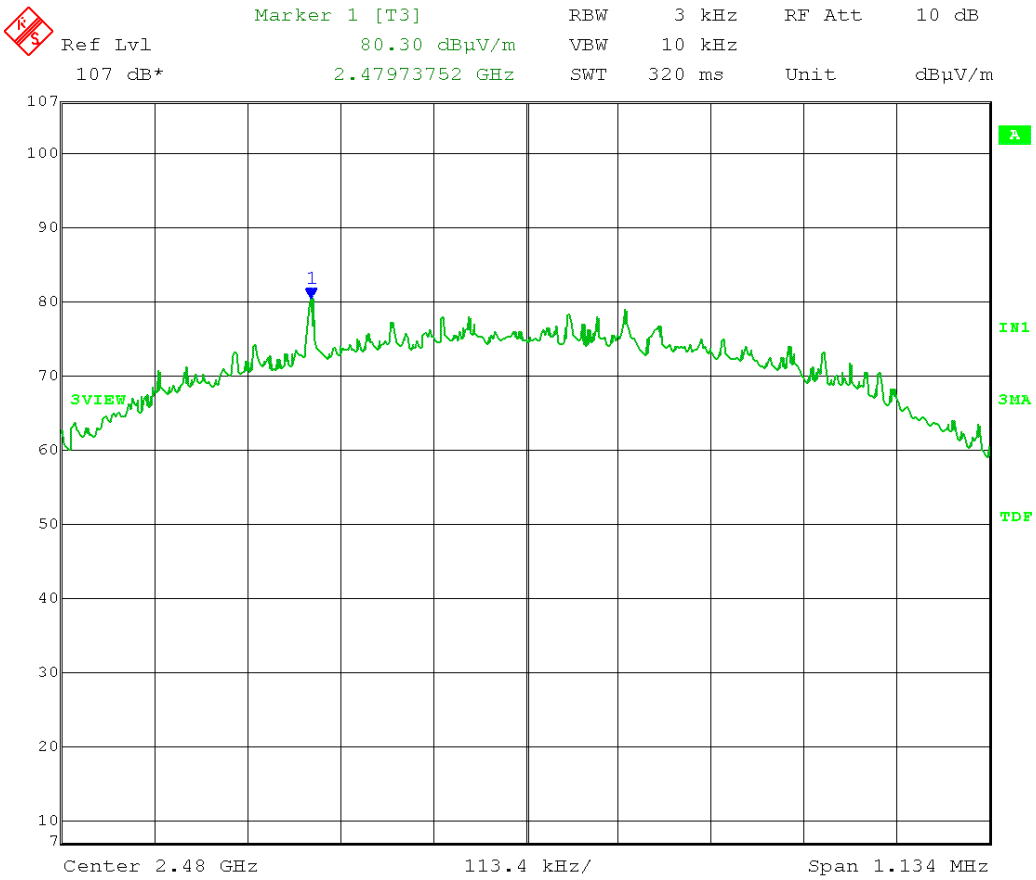
Comment: RBW = 3 kHz
VBW ≥ 3 x RBW
Span = 1.5 x DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Limit: 8 dBm/3kHz

EIRP (dBm) = Field Strength (dBµV/m) + 20 log (3 meters) – 104.8
= -14.957 dBm
Conducted Power (dBm) = EIRP (dBm) – antenna gain (dBi)
= -12.13 dBm
Peak PSD = **-12.13 dBm/3kHz**

Horizontal:



Date: 20.DEC.2017 14:58:17

Appendix B

B5.0 Emissions in Non-Restricted Frequency Bands – Radiated

Rule Part: FCC 15.247(d)

Test Procedure: ANSI C63.10-2013, sections 11.11, 11.11.2 & 11.11.3

Limit: 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

Results: Compliant

Notes: This was a radiated measurement. The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The EUT with was rotated through 3 orthogonal axis to find the highest level. The maximum field strength level of the fundamental was measured. The limit was then set to a value 20 dB lower than the level of the fundamental. The field strength of unwanted emissions were measured from 30 MHz to 25 GHz. The EUT with was rotated through 3 orthogonal axis to find worst-case for each unwanted emission. The EUT was tested at the low, middle, and high channels of operation. A peak detector was used for this test.

No Transmitter
Radiated Emissions
were detected from the

E-94B Bluetooth Thermometer

from 30 to 1000 MHz

with the transceiver in continuous transmit mode, at Low, Mid, and High channels of operation.

Tested at 3 meter distance.

12-21-2017

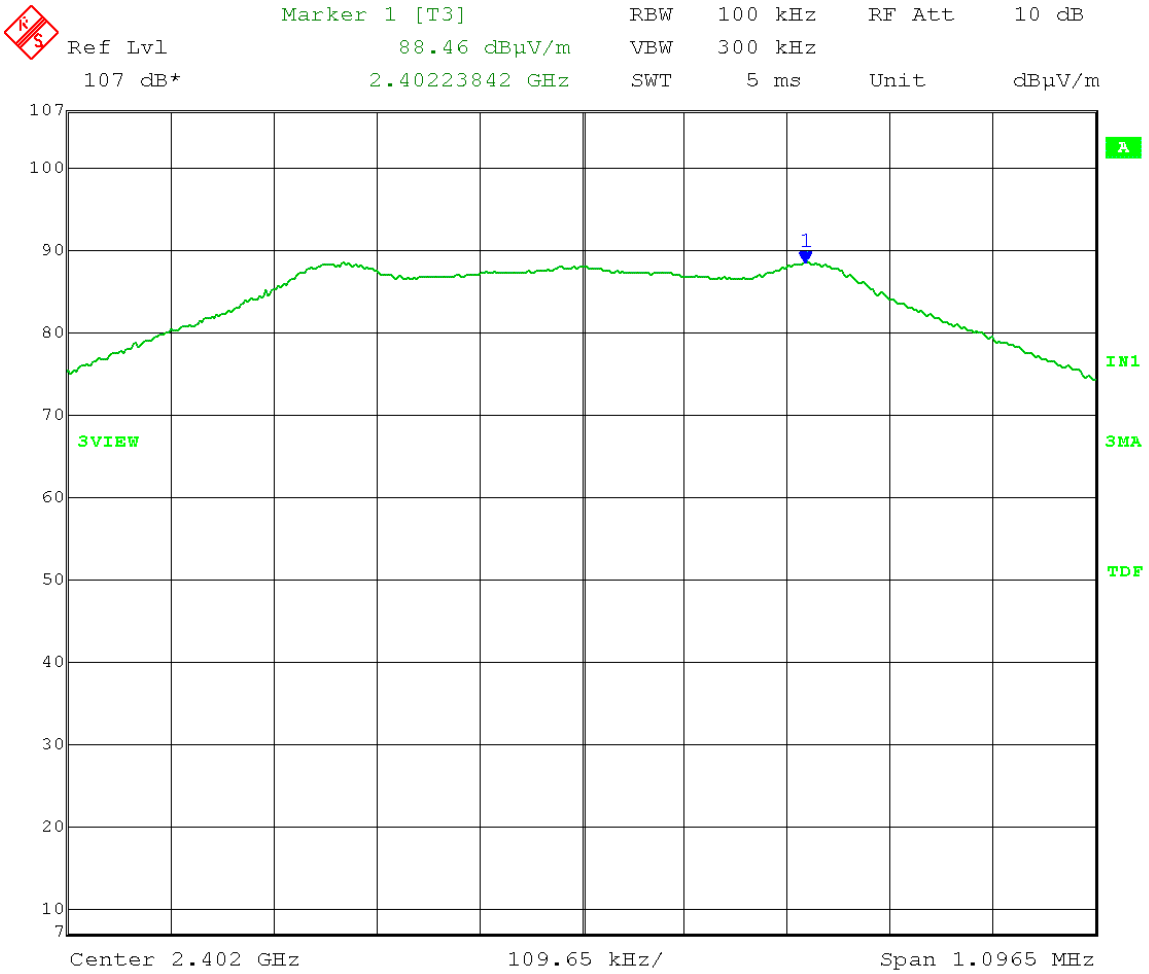
Test Date: 12-20-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Span = ≥ DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Reference Level measurement
Limit = 88.46 dBµV/m– 20 dB = 68.46 dBµV/m

Vertical:



Date: 20.DEC.2017 12:25:48

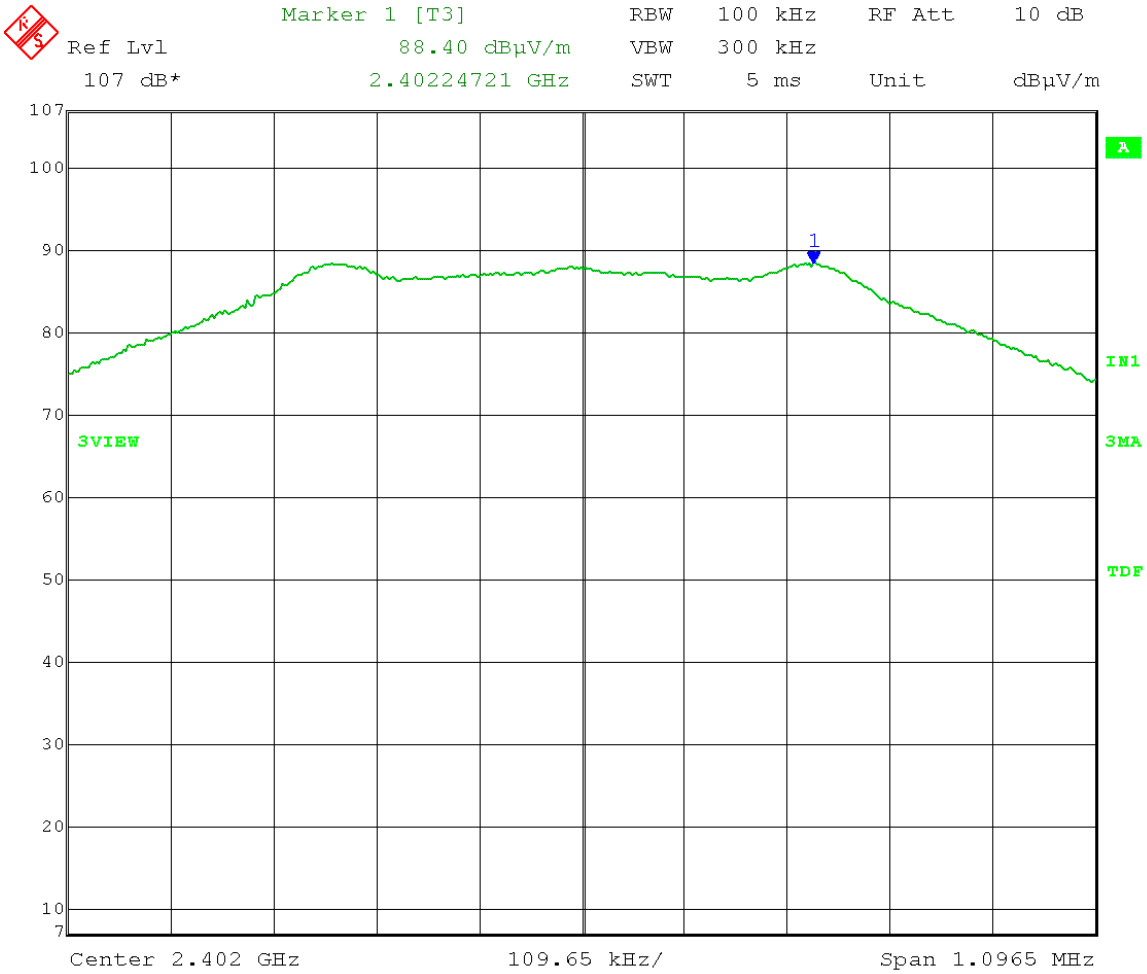
Test Date: 12-20-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Span = ≥ DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Reference Level measurement
Limit = 88.40 dBµV/m– 20 dB = 68.40 dBµV/m

Horizontal:



Date: 20.DEC.2017 12:33:25

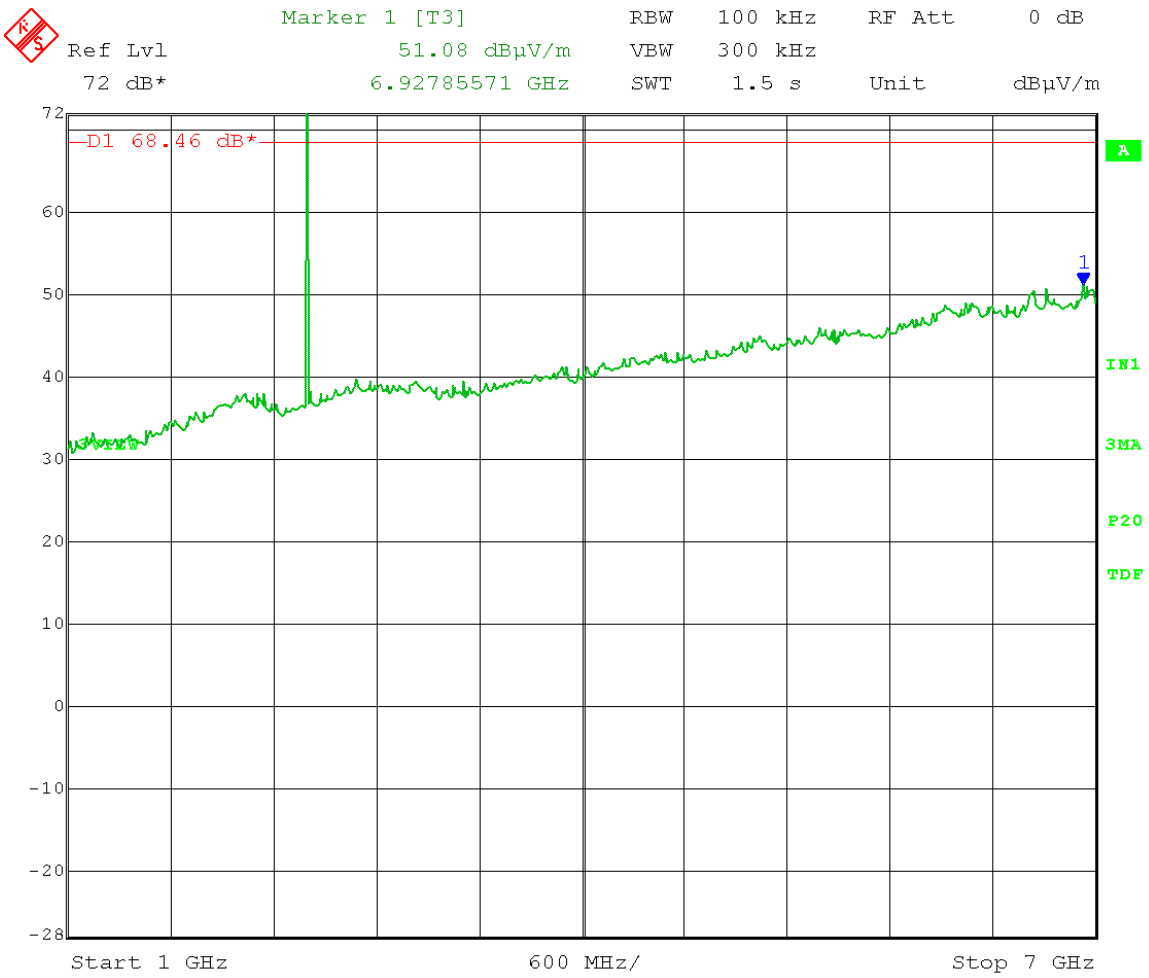
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Emission Level measurement
Limit = 88.46 dBµV/m– 20 dB = 68.46 dBµV/m

Vertical:



Date: 21.DEC.2017 11:15:29

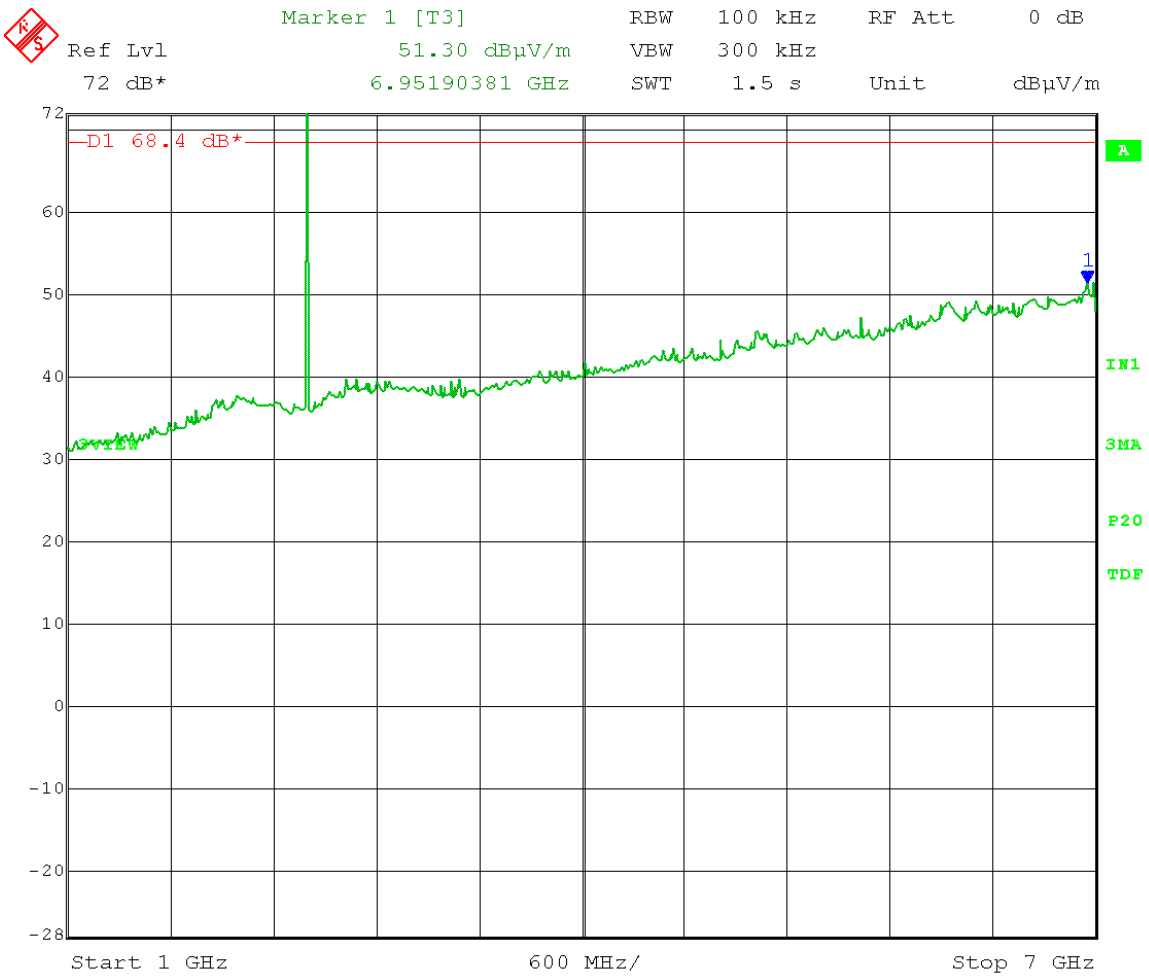
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Emission Level measurement
Limit = 88.40 dBµV/m– 20 dB = 68.40 dBµV/m

Horizontal:



Date: 21.DEC.2017 11:21:56

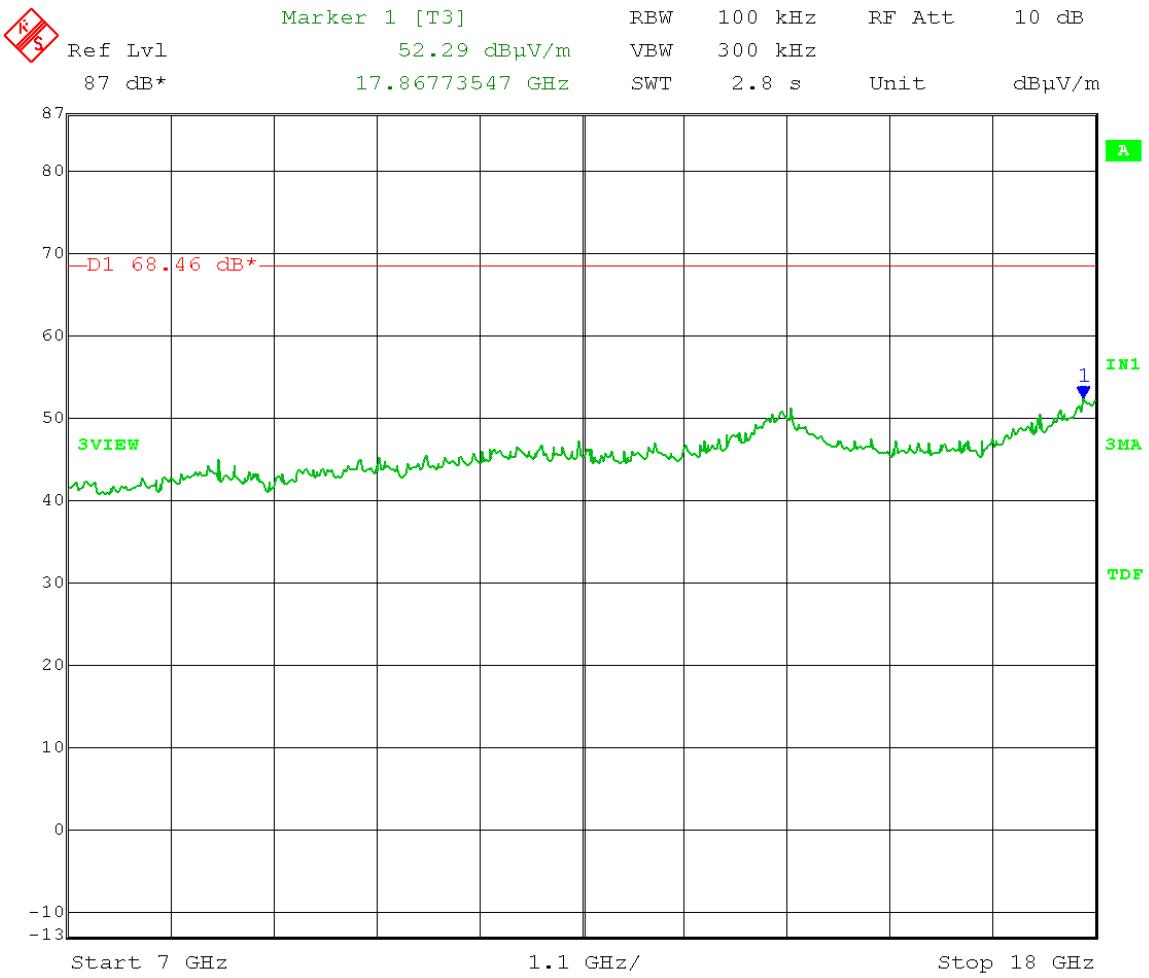
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Emission Level measurement
Limit = 88.46 dBµV/m– 20 dB = 68.46 dBµV/m

Vertical:



Date: 21.DEC.2017 12:39:41

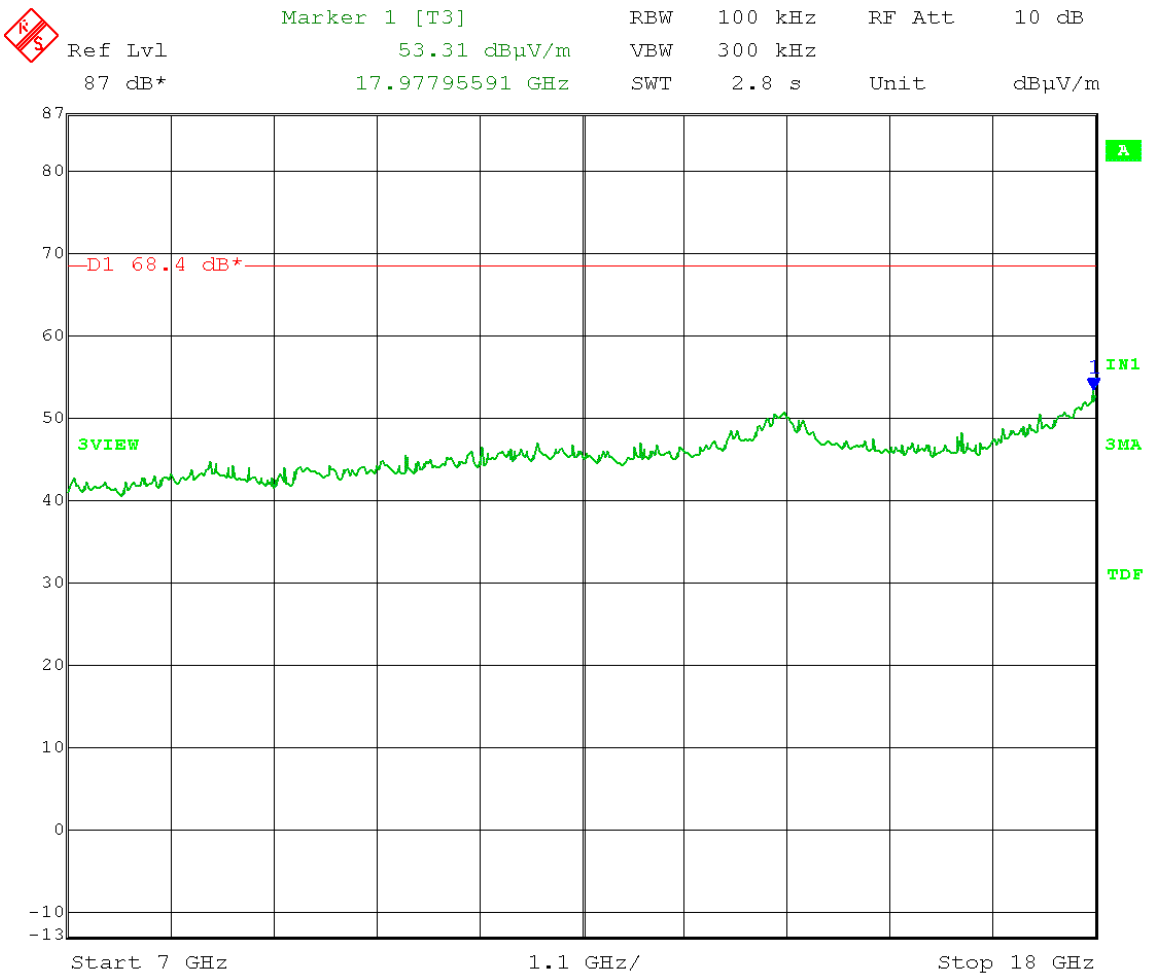
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Emission Level measurement
Limit = 88.40 dBµV/m– 20 dB = 68.40 dBµV/m

Horizontal:



Date: 21.DEC.2017 12:35:34

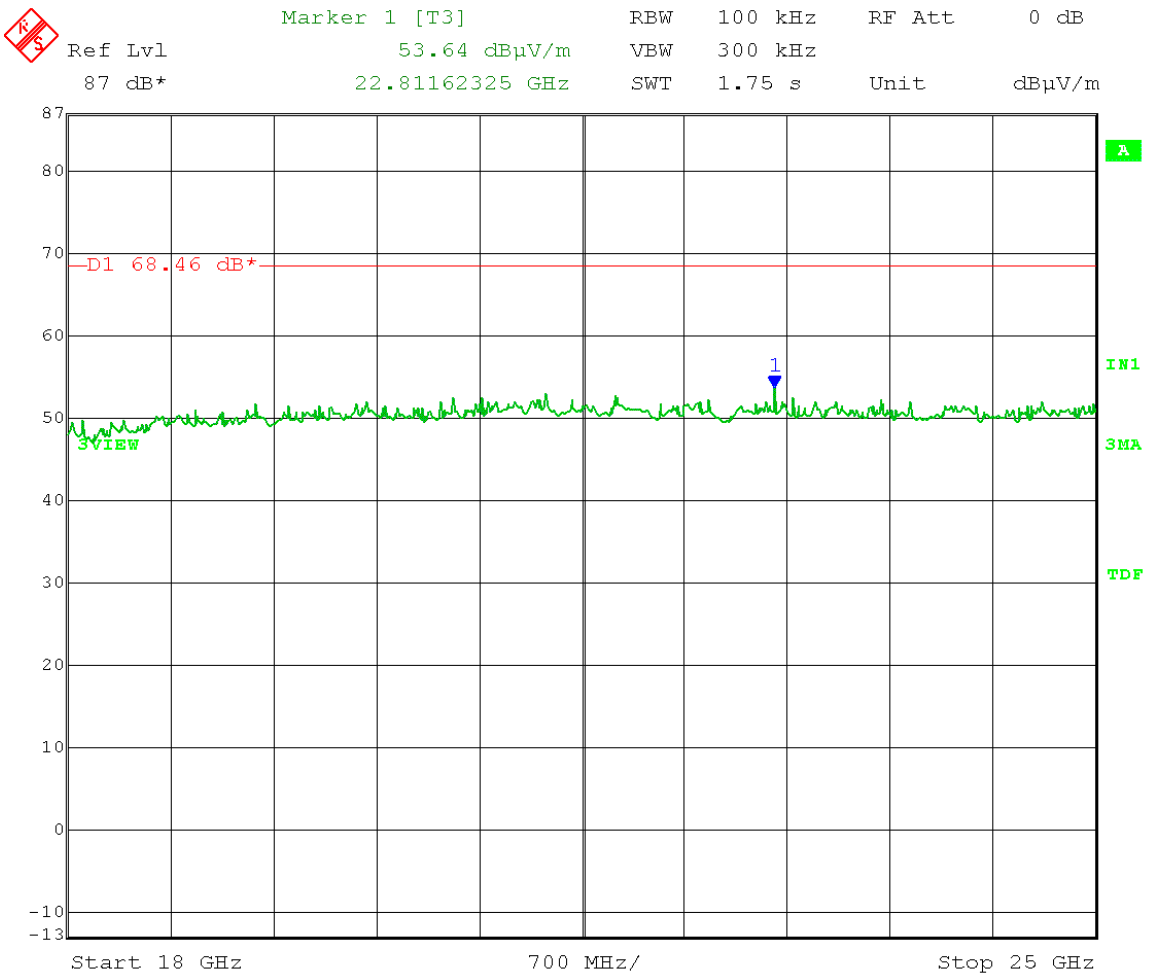
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Emission Level measurement
Limit = 88.46 dBµV/m– 20 dB = 68.46 dBµV/m

Vertical:



Date: 21.DEC.2017 13:42:54

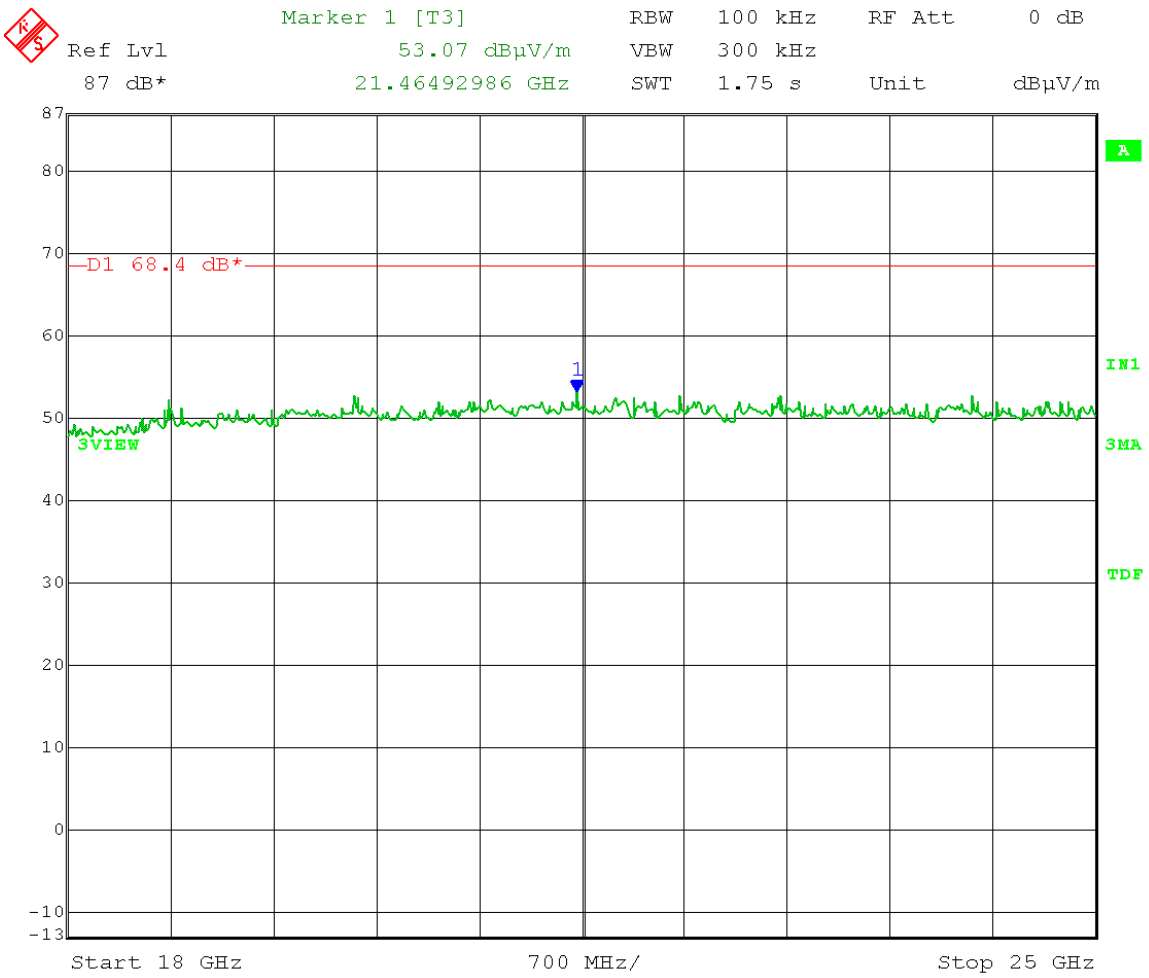
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Frequency – 2.402 GHz

Emission Level measurement
Limit = 88.40 dBµV/m– 20 dB = 68.40 dBµV/m

Horizontal:



Date: 21.DEC.2017 13:44:35

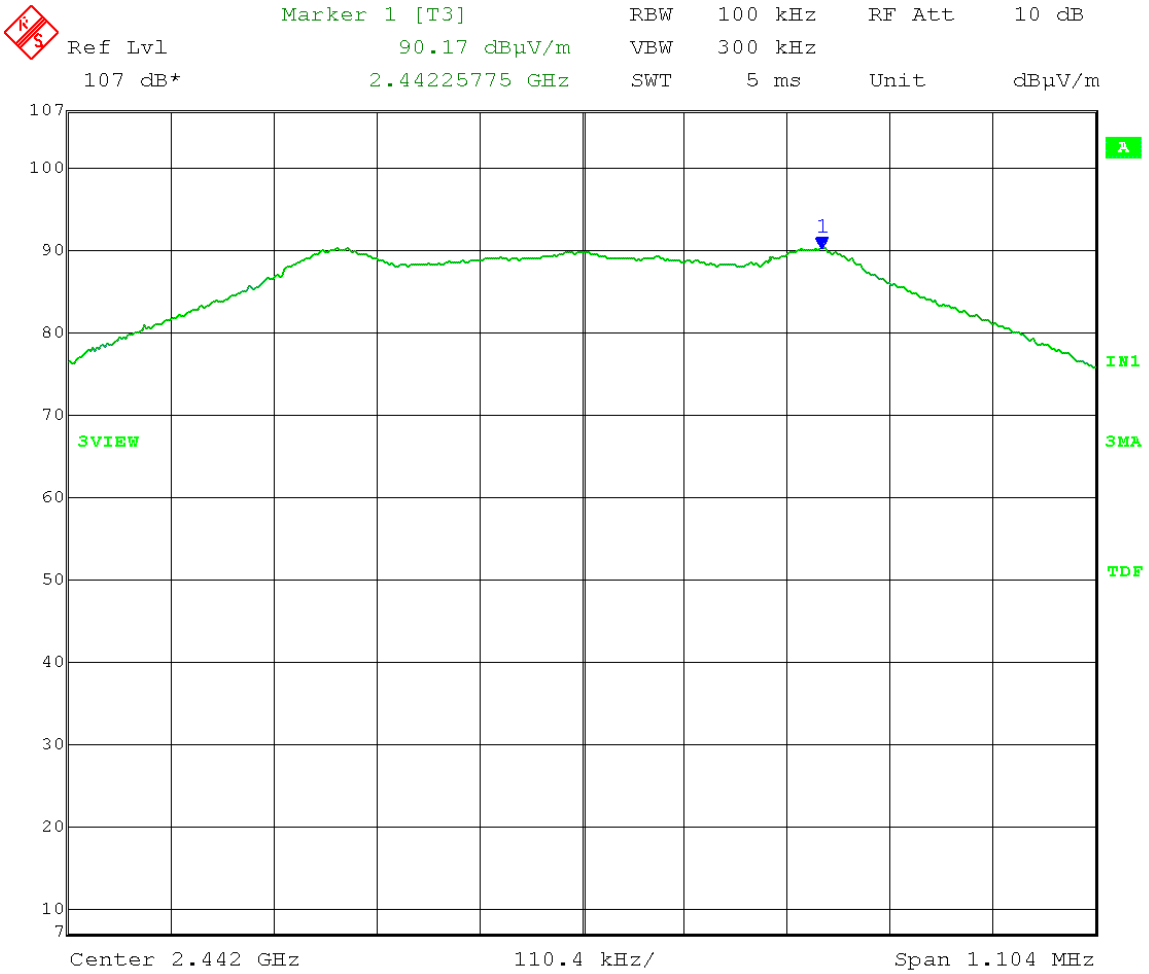
Test Date: 12-20-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Span = ≥ DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Reference Level measurement
Limit = 90.17 dBµV/m– 20 dB = 70.17 dBµV/m

Vertical:



Date: 20.DEC.2017 11:57:54

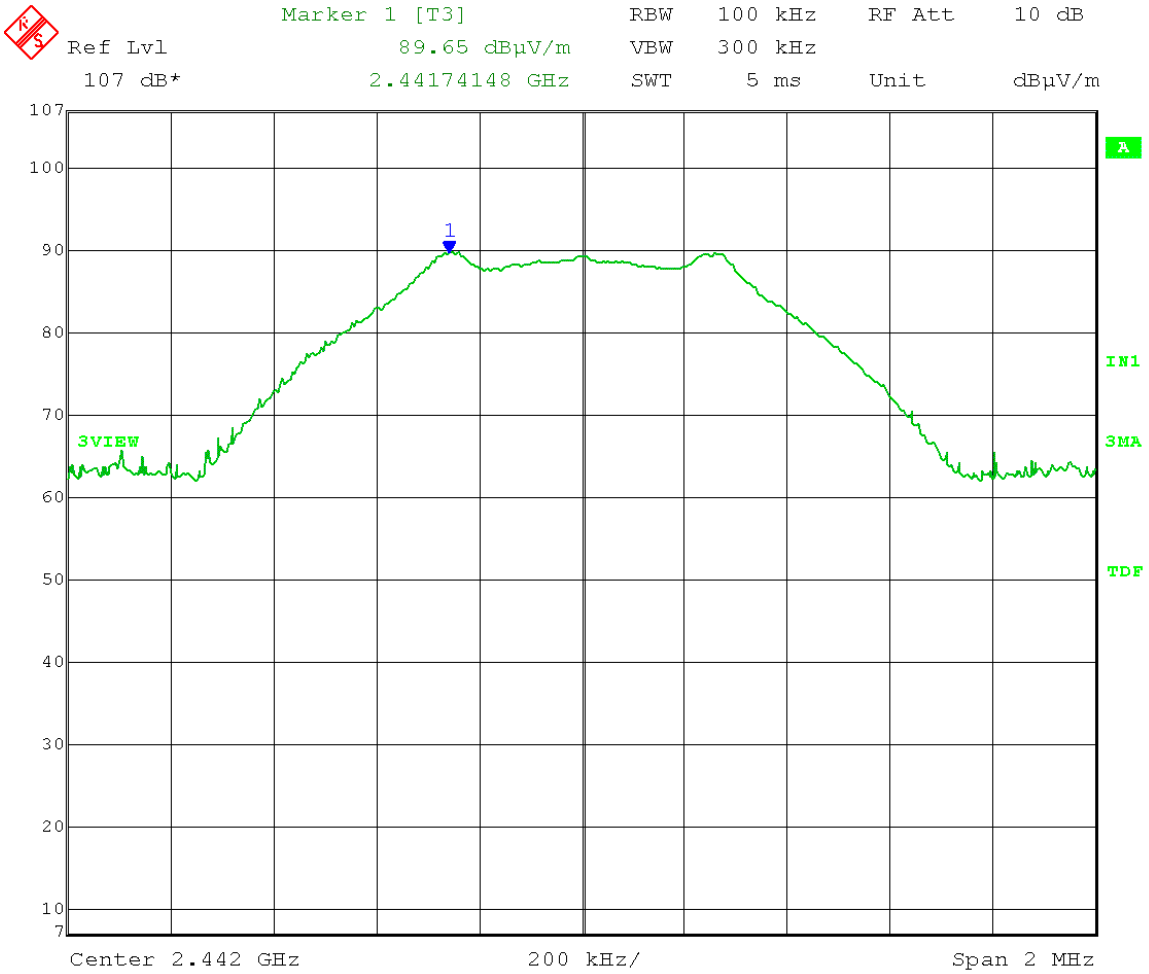
Test Date: 12-20-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Span = ≥ DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Reference Level measurement
Limit = 89.65 dBµV/m– 20 dB = 69.65 dBµV/m

Horizontal:



Date: 20.DEC.2017 10:51:43

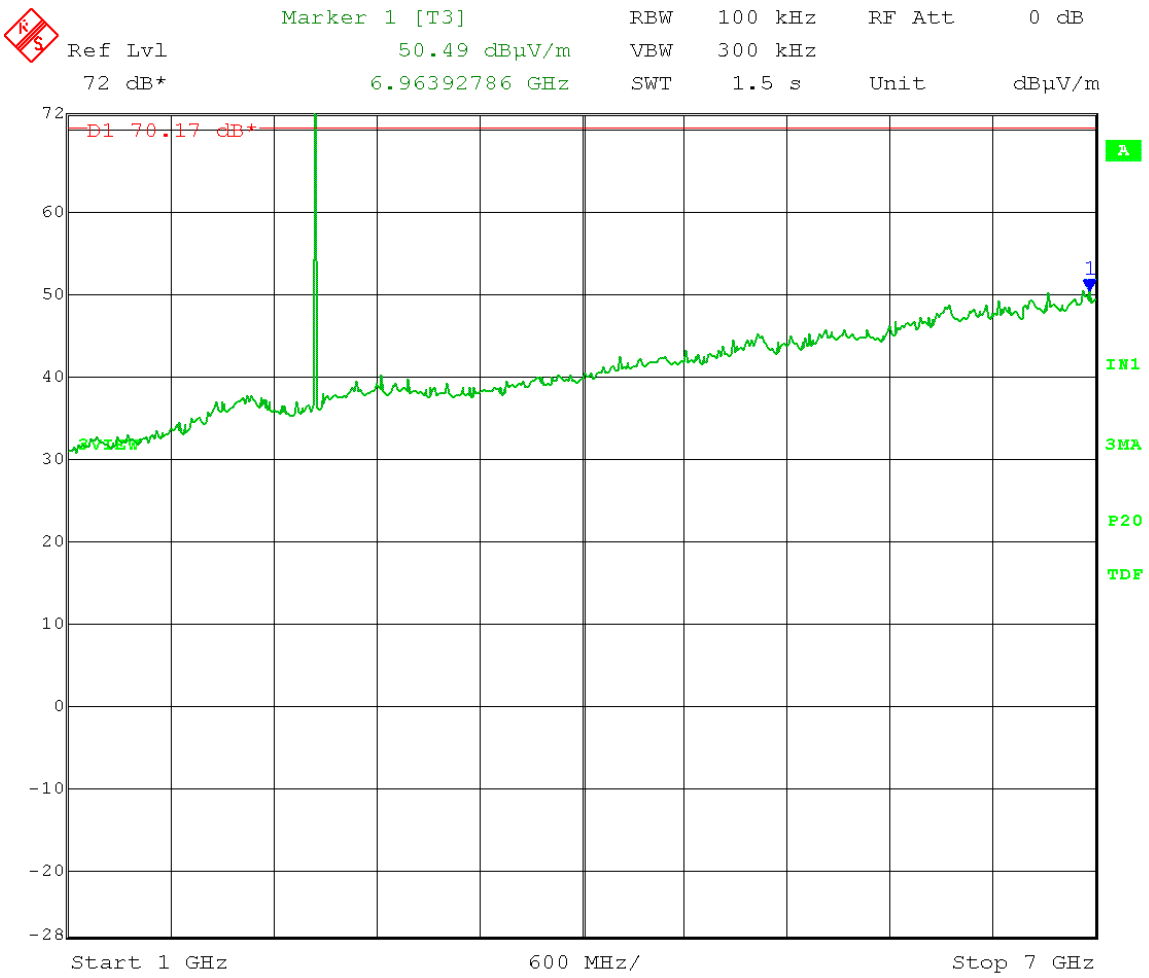
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Emission Level measurement
Limit = 90.17 dBµV/m– 20 dB = 70.17 dBµV/m

Vertical:



Date: 21.DEC.2017 11:47:22

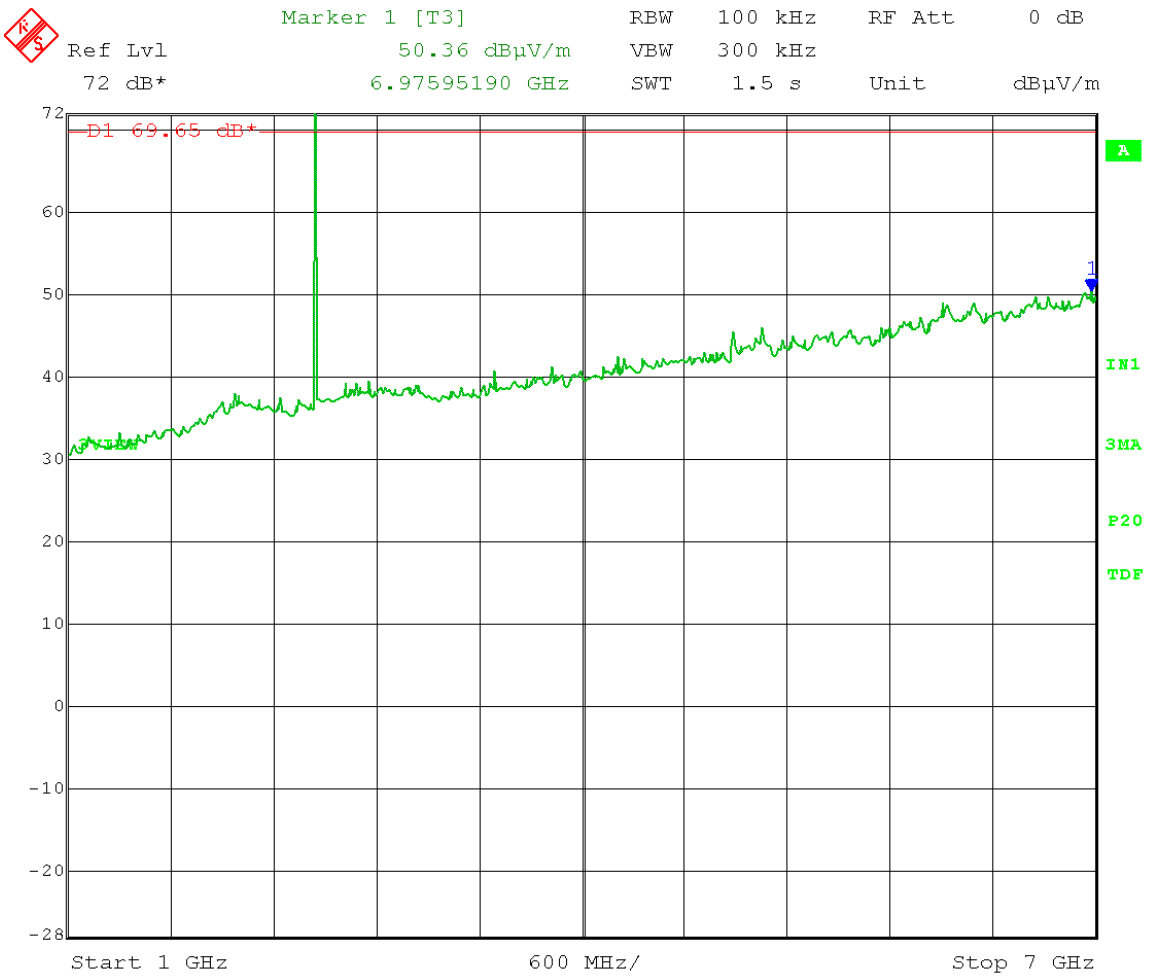
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Emission Level measurement
Limit = 89.65 dBµV/m– 20 dB = 69.65 dBµV/m

Horizontal:



Date: 21.DEC.2017 11:43:28

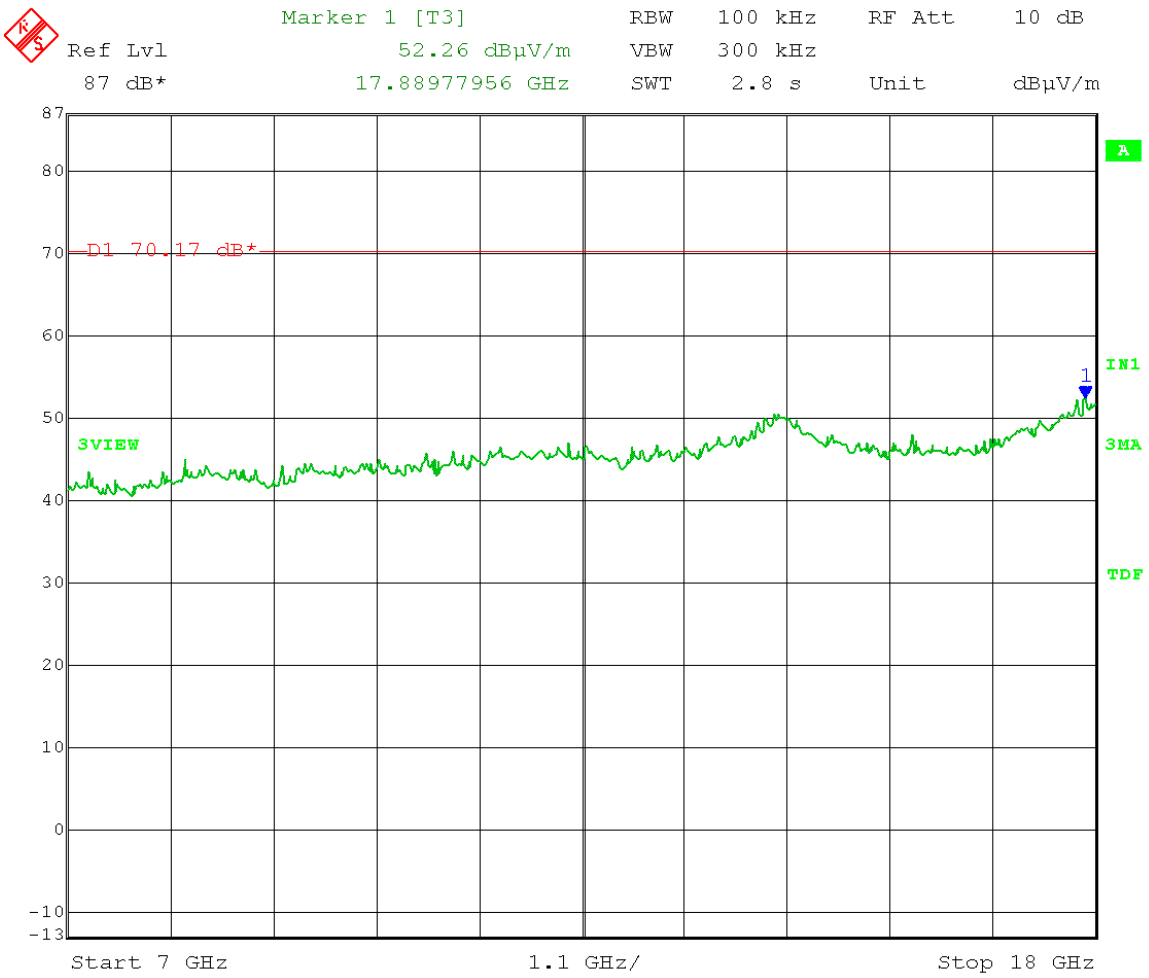
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Emission Level measurement
Limit = 90.17 dBµV/m– 20 dB = 70.17 dBµV/m

Vertical:



Date: 21.DEC.2017 12:18:23

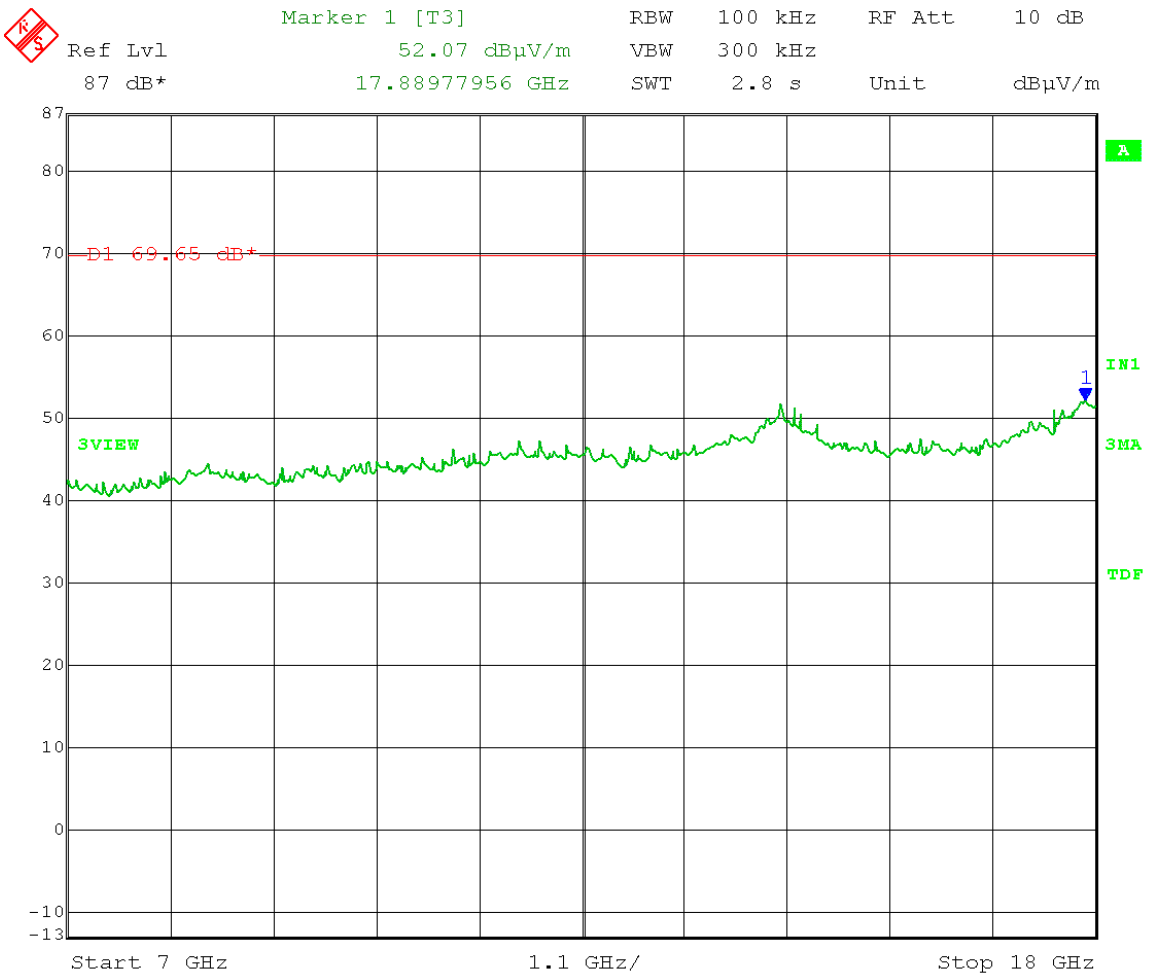
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Emission Level measurement
Limit = 89.65 dBµV/m– 20 dB = 69.65 dBµV/m

Horizontal:



Date: 21.DEC.2017 12:23:14

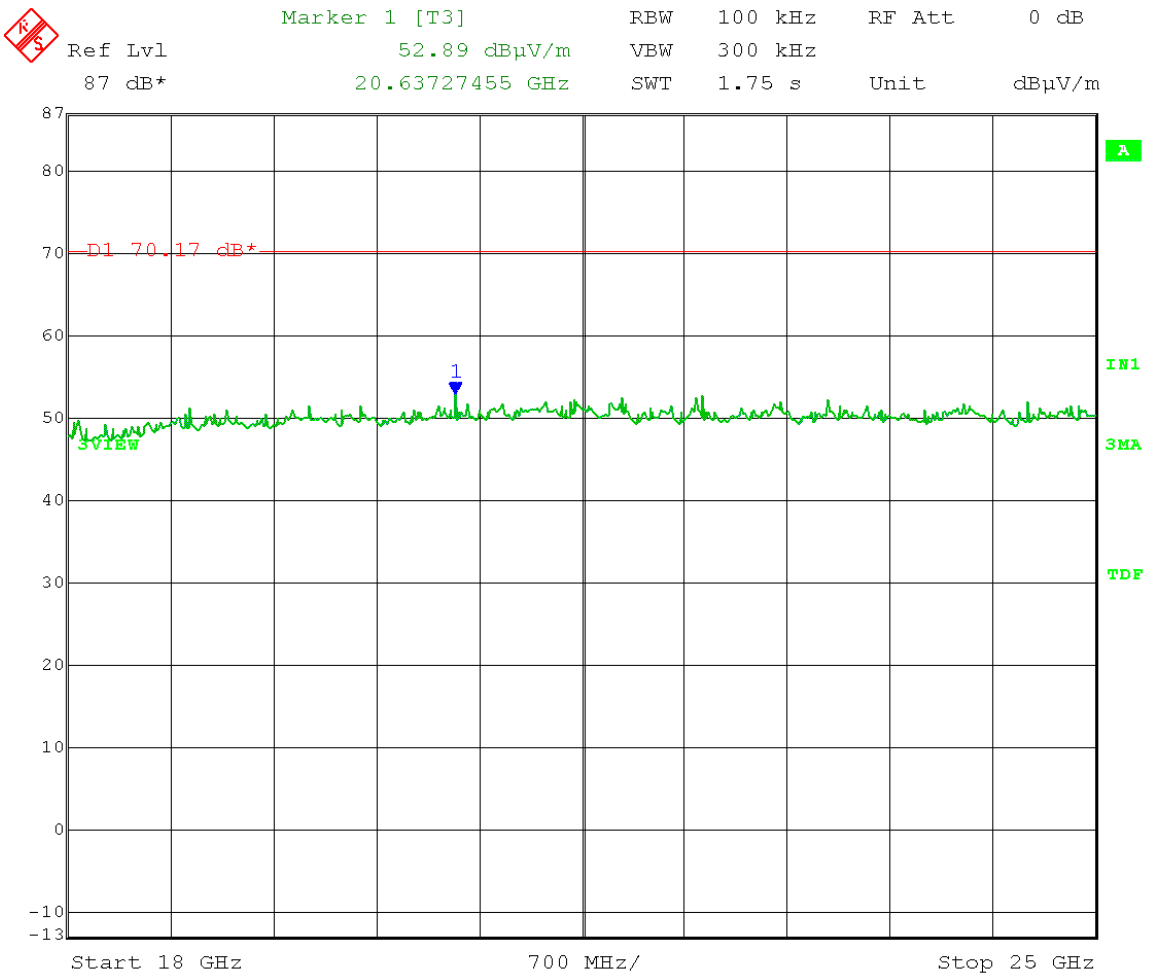
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Emission Level measurement
Limit = 90.17 dBµV/m– 20 dB = 70.17 dBµV/m

Vertical:



Date: 21.DEC.2017 13:48:02

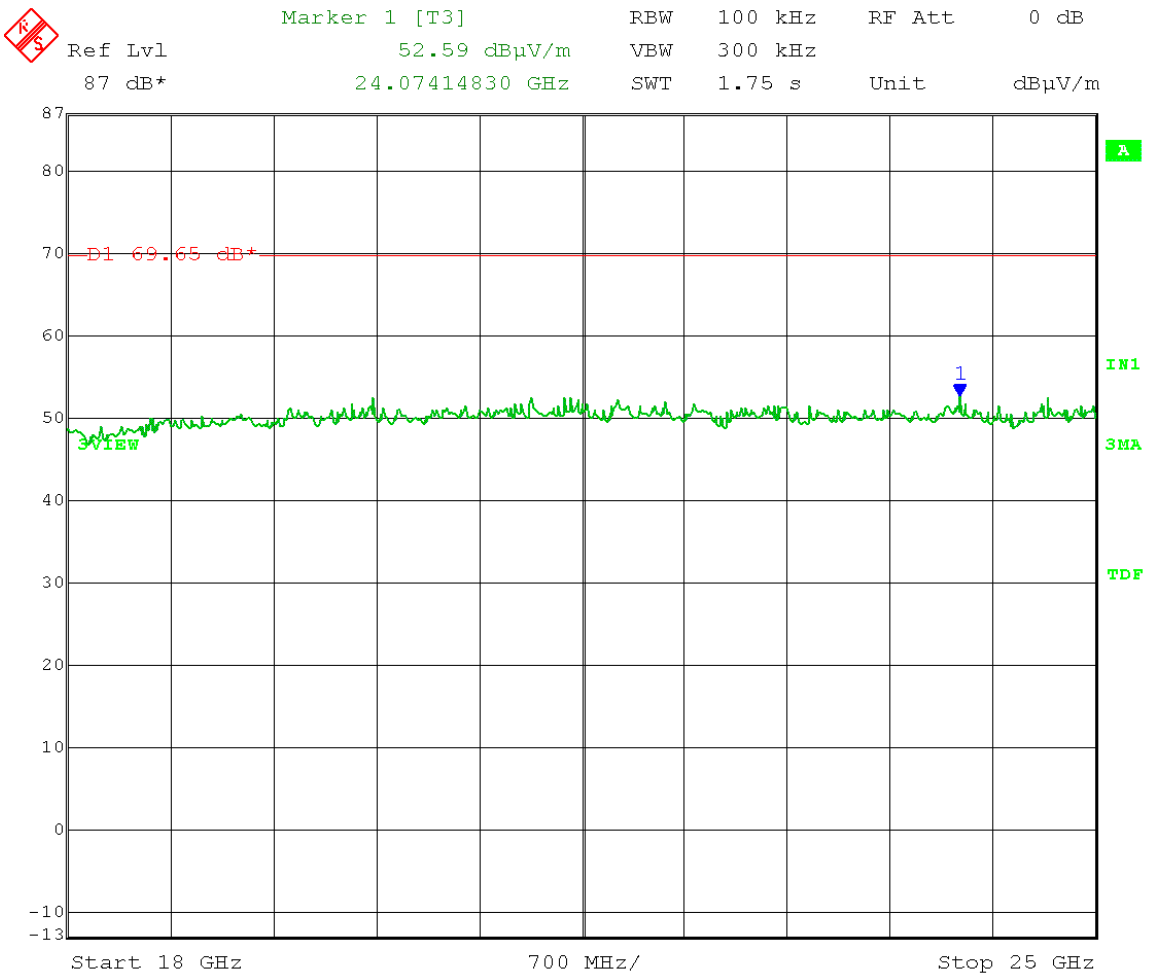
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Middle Channel: Frequency – 2.442 GHz

Emission Level measurement
Limit = 89.65 dBµV/m– 20 dB = 69.65 dBµV/m

Horizontal:



Date: 21.DEC.2017 13:50:52

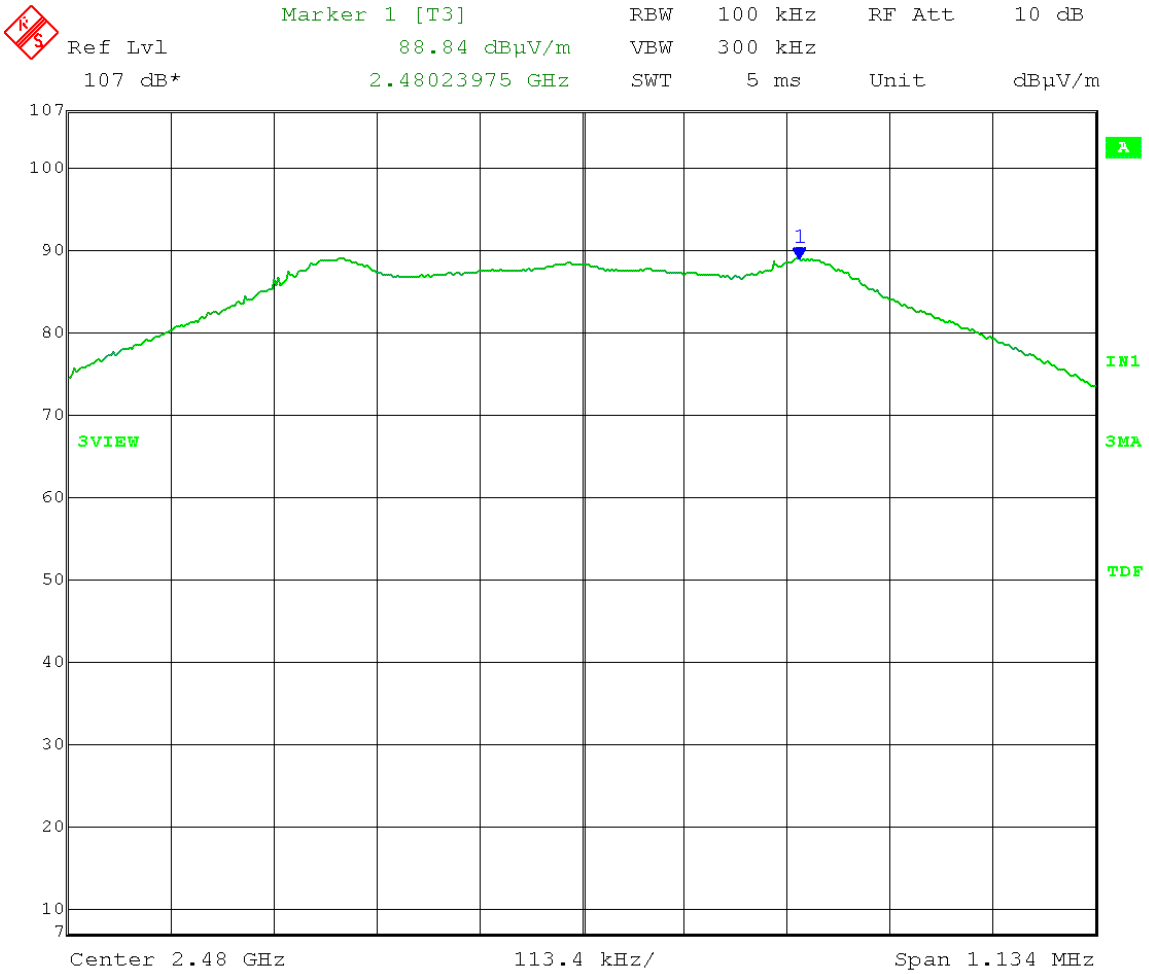
Test Date: 12-20-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Span = ≥ DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Reference Level measurement
Limit = 88.84 dBµV/m – 20 dB = 68.84 dBµV/m

Vertical:



Date: 20.DEC.2017 14:30:31

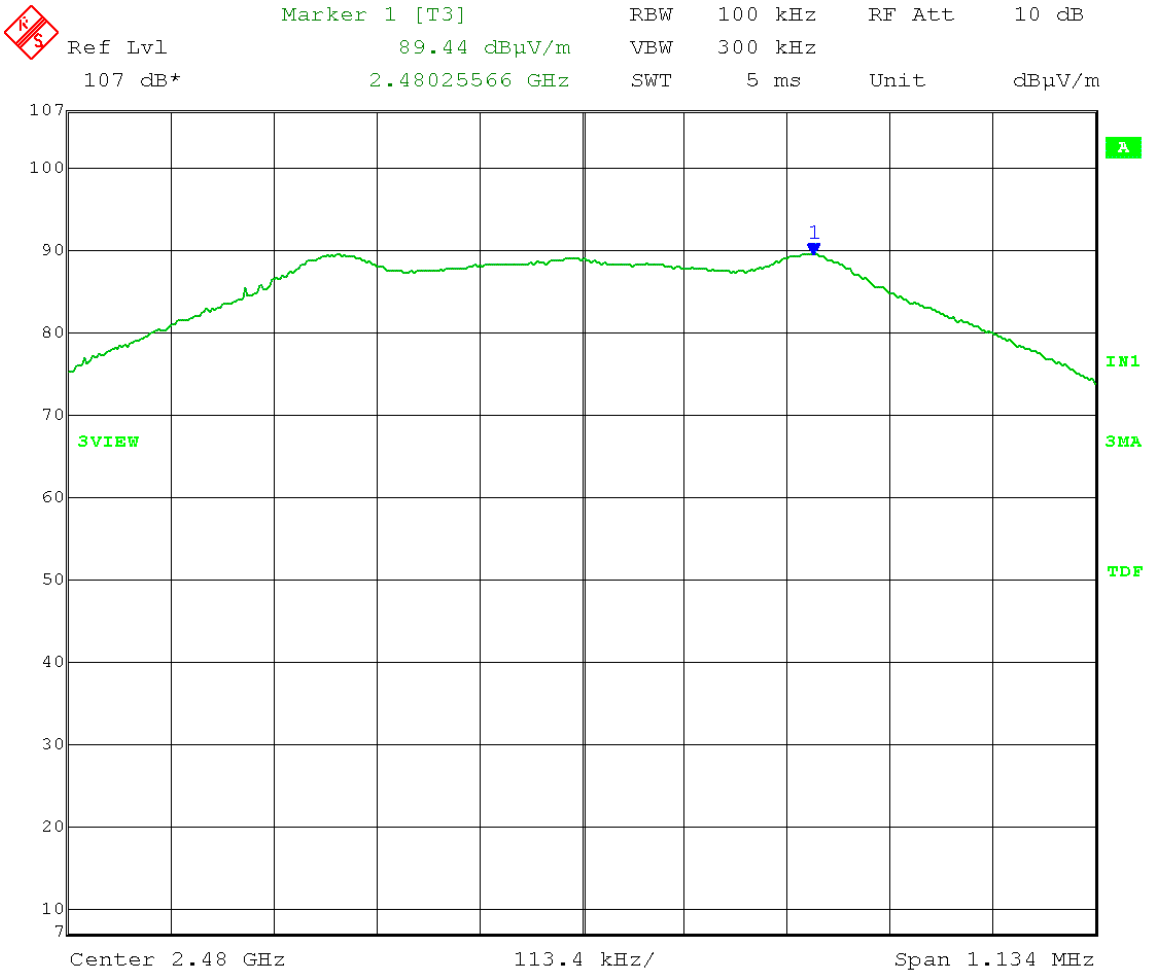
Test Date: 12-20-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Span = ≥ DTS BW
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Reference Level measurement
Limit = 89.44 dBµV/m – 20 dB = 69.44 dBµV/m

Horizontal:



Date: 20.DEC.2017 15:01:23

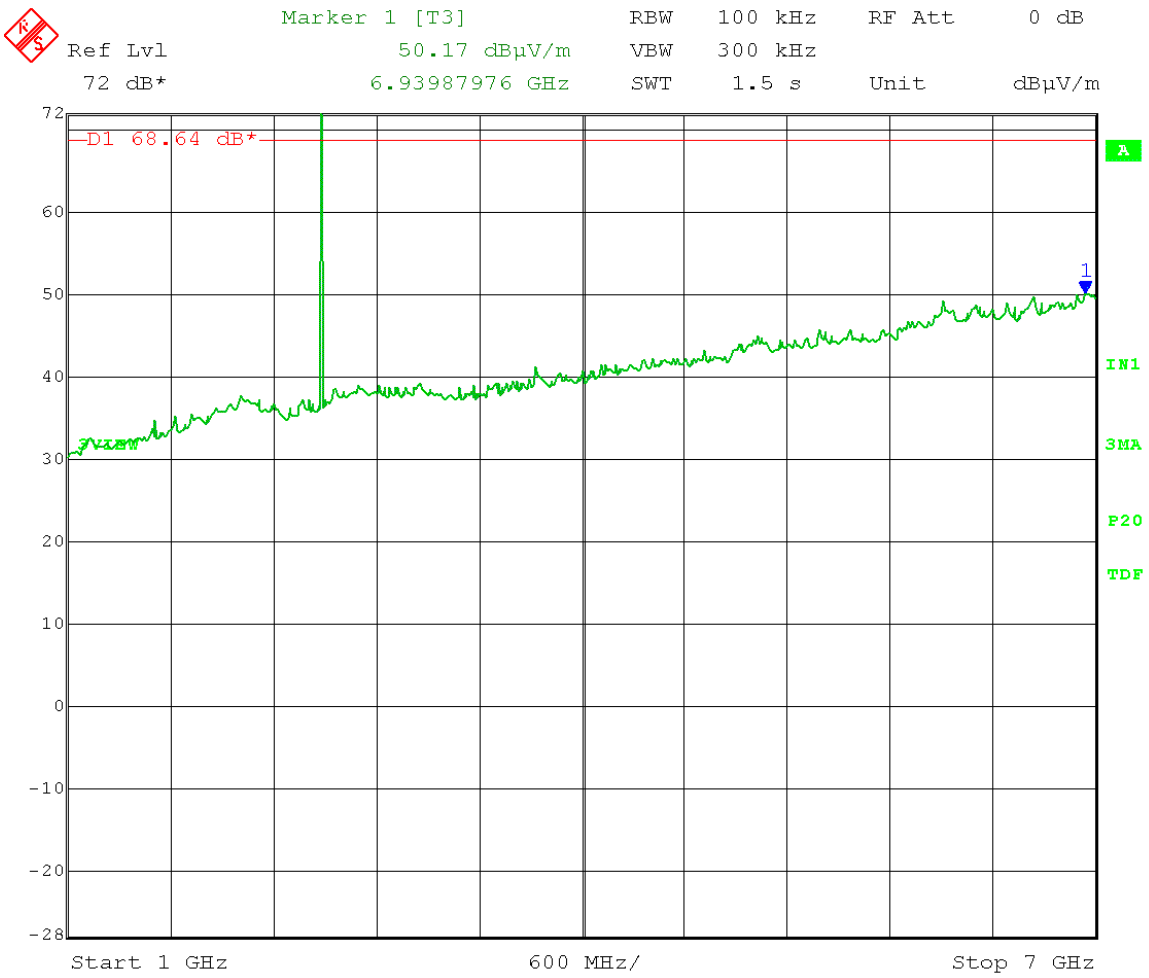
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Emission Level measurement
Limit = 88.84 dBµV/m – 20 dB = 68.84 dBµV/m

Vertical:



Date: 21.DEC.2017 11:53:46

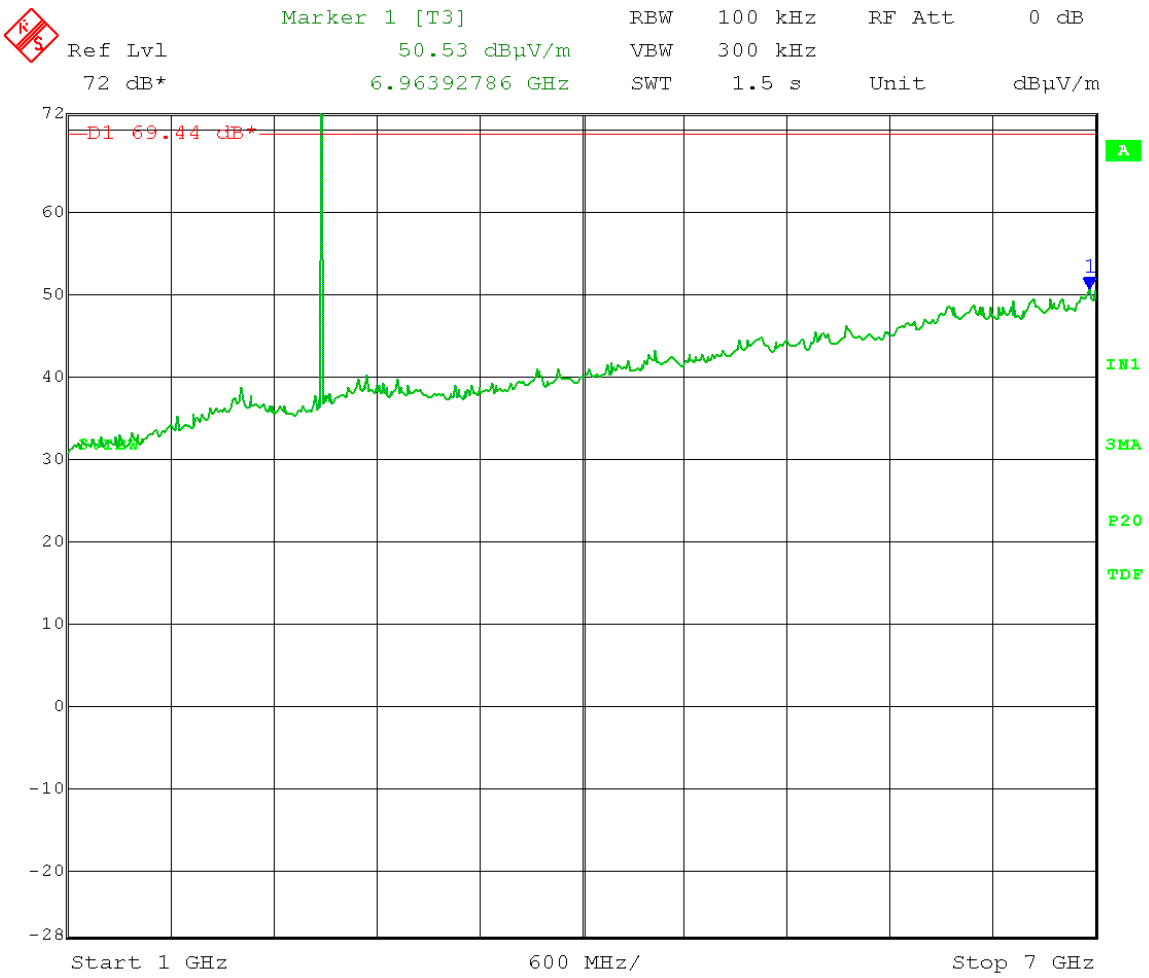
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Emission Level measurement
Limit = 89.44 dBµV/m – 20 dB = 69.44 dBµV/m

Horizontal:



Date: 21.DEC.2017 11:57:36

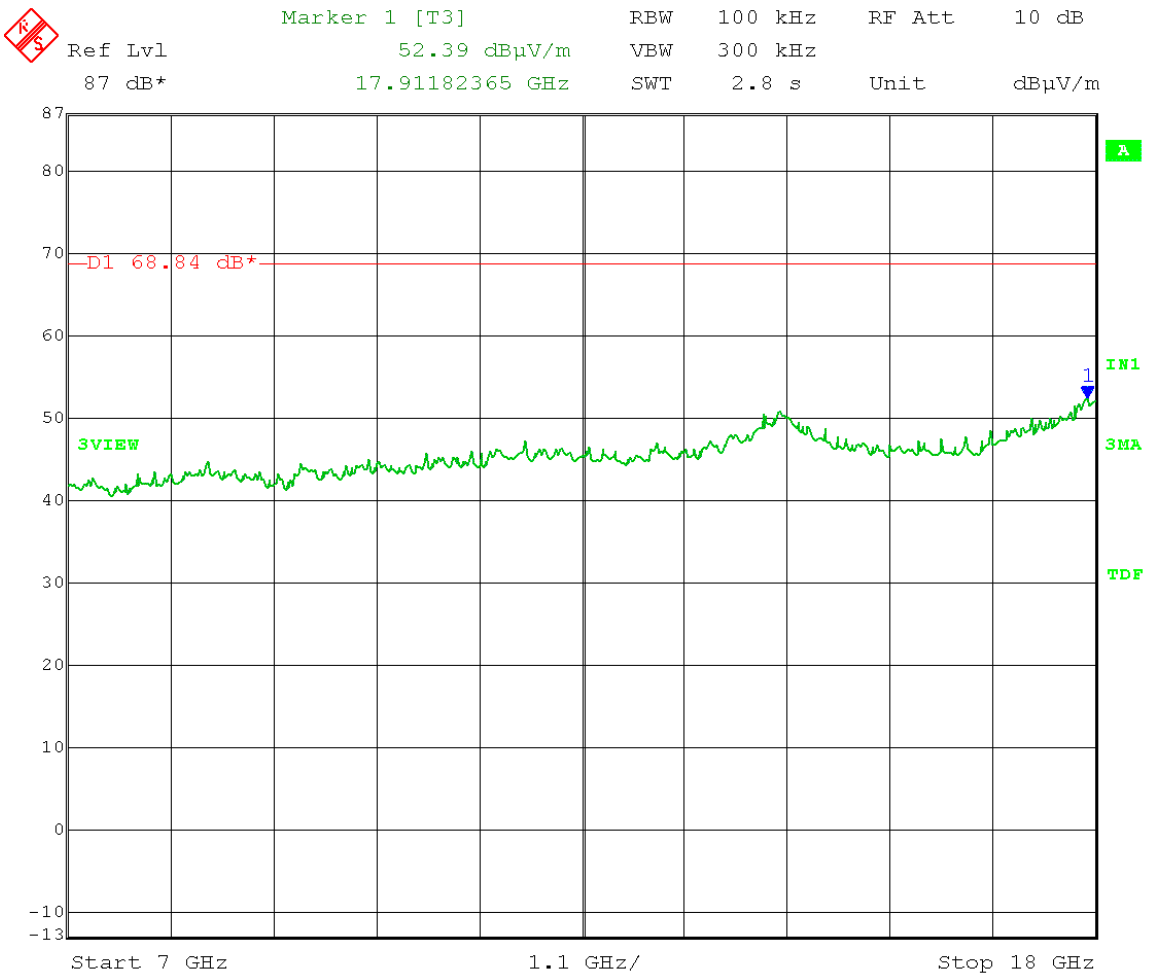
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Emission Level measurement
Limit = 88.84 dBµV/m – 20 dB = 68.84 dBµV/m

Vertical:



Date: 21.DEC.2017 12:11:58

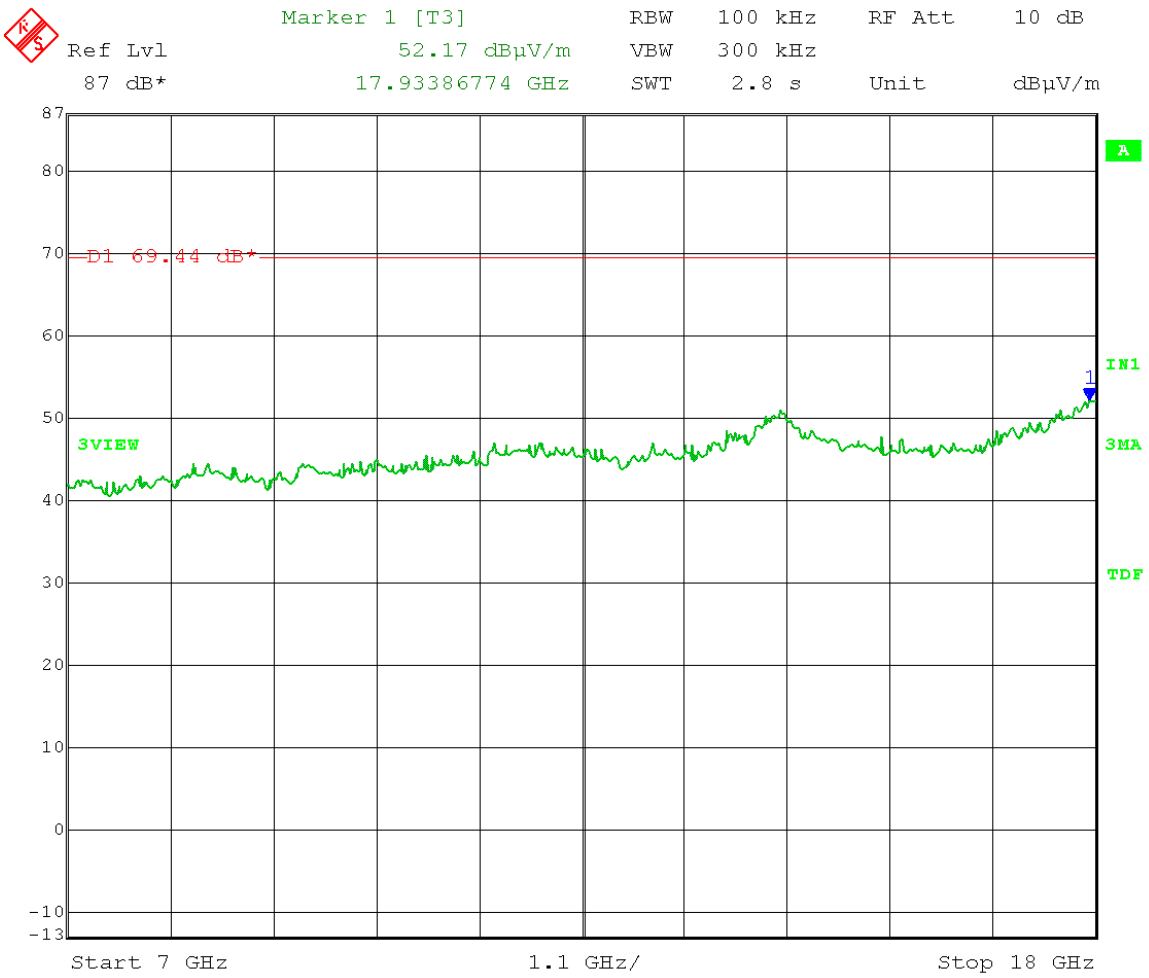
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Emission Level measurement
Limit = 89.44 dBµV/m – 20 dB = 69.44 dBµV/m

Horizontal:



Date: 21.DEC.2017 12:07:12

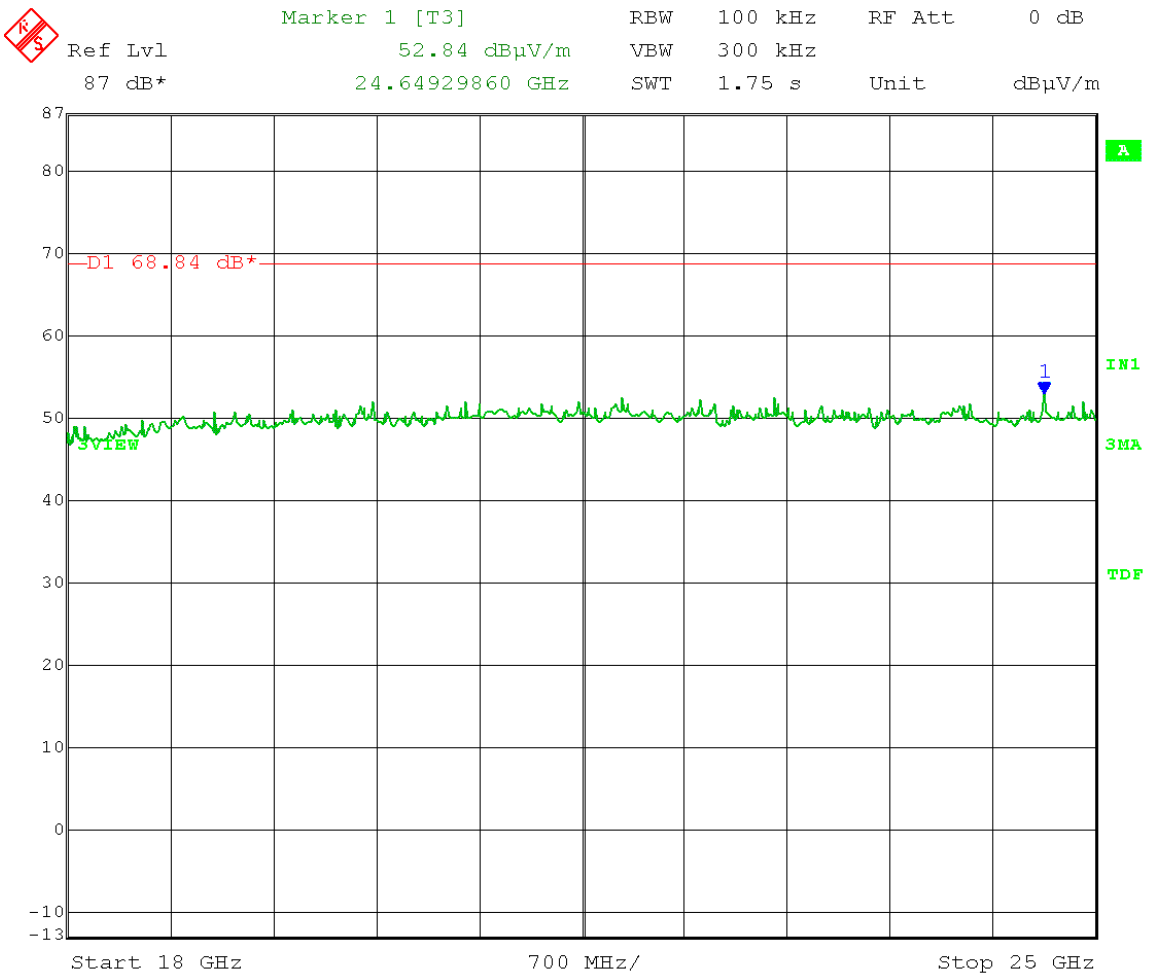
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Emission Level measurement
Limit = 88.84 dBµV/m – 20 dB = 68.84 dBµV/m

Vertical:



Date: 21.DEC.2017 13:54:46

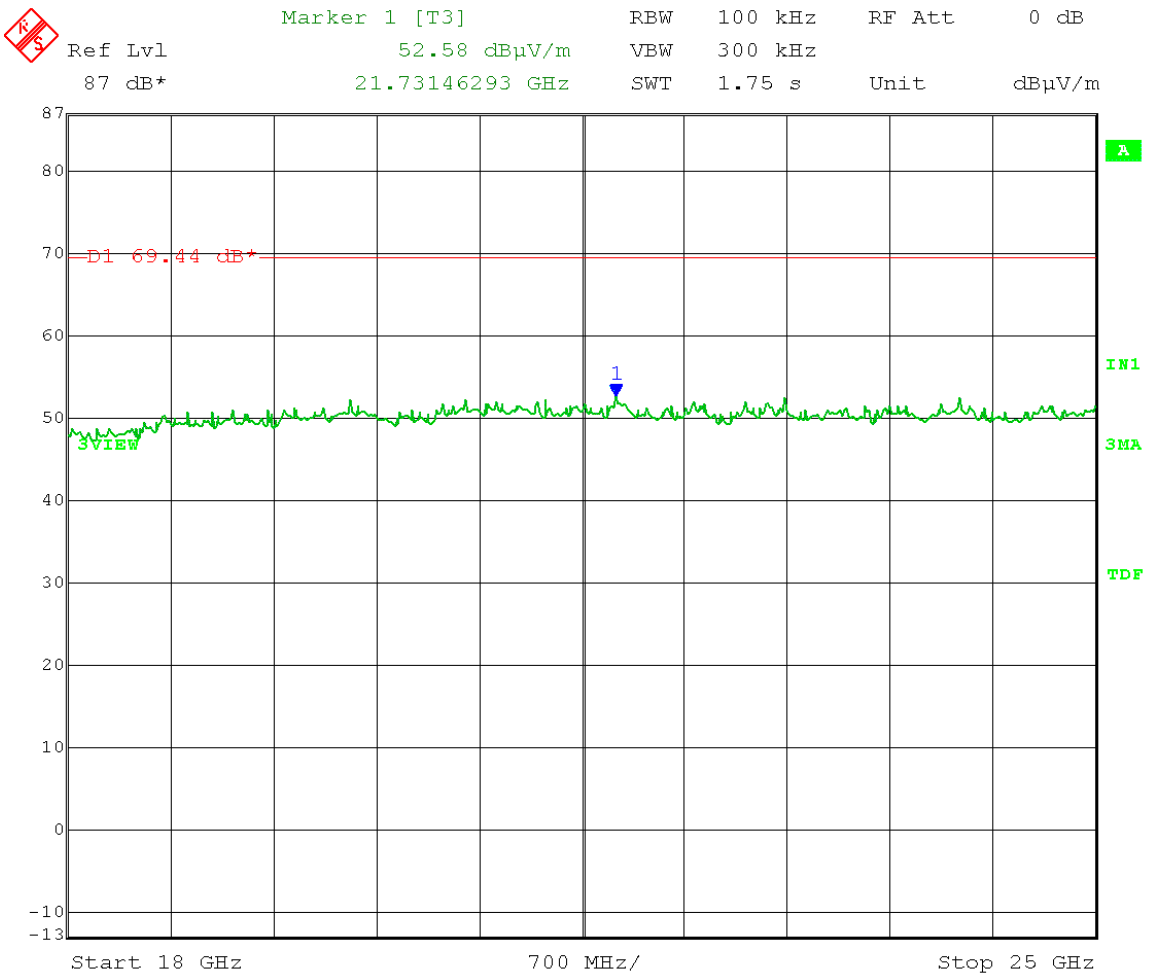
Test Date: 12-21-2017
Company: NingBo Kaitai
Test: Maximum Unwanted Emission Levels - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW = 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Frequency – 2.480 GHz

Emission Level measurement
Limit = 89.44 dBµV/m – 20 dB = 69.44 dBµV/m

Horizontal:



Date: 21.DEC.2017 13:57:20

166 South Carter, Genoa City, WI 53128

Appendix B

B6.0 Emissions in Restricted Frequency Bands – Radiated

Rule Part: FCC 15.247(d), 15.205(a), 15.209(a)

Test Procedure: ANSI C63.10-2013, sections 11.12 & 11.12.1

Limit: FCC 15.209

Results: Compliant

Notes: This was a radiated measurement. The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The field strength of unwanted emissions were measured from 30 MHz to 25 GHz. The EUT with was rotated through 3 orthogonal axis to find worst-case for each unwanted emission. The EUT was tested at the low, middle, and high channels of operation.

No Transmitter
Radiated Emissions
were detected from the

E-94B Bluetooth Thermometer

from 30 to 1000 MHz

with the transceiver in continuous transmit mode, at Low, Mid, and High channels of operation.

Tested at 3 meter distance.

12-21-2017

FCC Part 15.247

Electric Field Strength

EUT: E-94B Bluetooth Thermometer
Manufacturer: NingBo Kaitai
Operating Condition: 70 deg F 26% R.H.
Test Site: DLS O.F. G1
Operator: Craig B #9227
Test Specification: Radiated emissions
Comment: Continuous Transmit; L, M, H channels
Date: 12-21-2017

TEXT: "Vert 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with VERTICAL Antenna Polarization

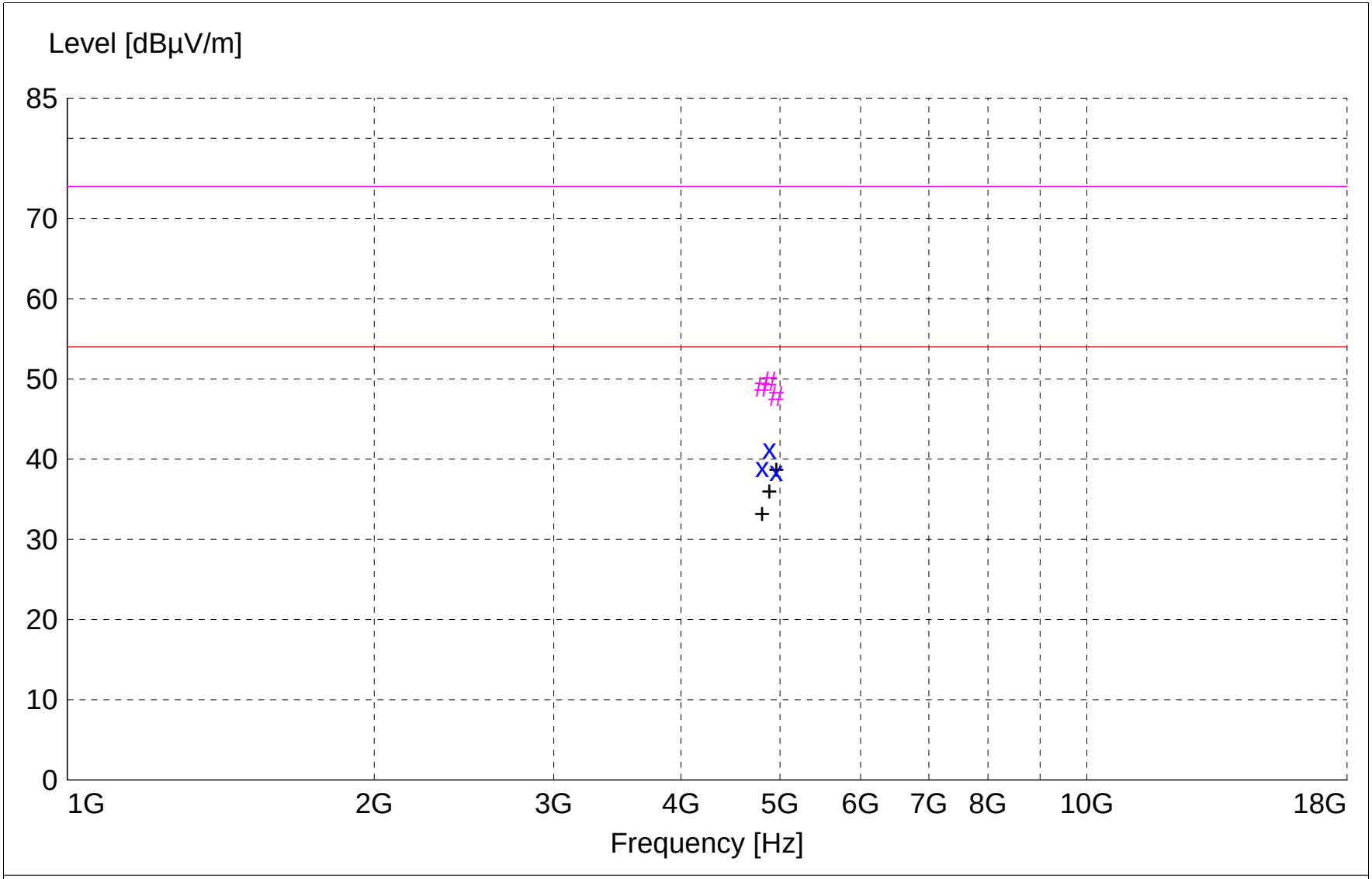
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A1220_sv_Average
: MES A1220_sv_Peak
+ + : MES A1220_sv_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A1220_sv_Final"

12/21/2017 9:46AM

Frequency MHz	Level dBµV	Antenna Factor dBµV/m	System Loss dB	Total Level dBµV/m	Limit dBµV/m	Margin dB	Height Ant. m	EuT Angle deg	Final Detector	Comment
4884.000000	44.75	33.02	-36.5	41.2	54.0	12.8	1.16	42	AVERAGE	Mid ch
4804.000000	42.46	33.04	-36.5	39.0	54.0	15.0	1.67	342	AVERAGE	Low ch
4960.000000	41.89	33.20	-36.6	38.5	54.0	15.5	1.71	350	AVERAGE	High ch
4884.000000	53.19	33.02	-36.5	49.7	74.0	24.3	1.16	42	MAX PEAK	Mid ch
4804.000000	52.52	33.04	-36.5	49.1	74.0	24.9	1.67	342	MAX PEAK	Low ch
4960.000000	51.30	33.20	-36.6	47.9	74.0	26.1	1.71	350	MAX PEAK	High ch

FCC Part 15.247

Electric Field Strength

EUT: E-94B Bluetooth Thermometer
Manufacturer: NingBo Kaitai
Operating Condition: 70 deg F 26% R.H.
Test Site: DLS O.F. G1
Operator: Craig B #9227
Test Specification: Radiated emissions
Comment: Continuous Transmit; L, M, H channels
Date: 12-21-2017

TEXT: "Horz 3 meters"

Short Description: Test Set-up

Test Set-up: EUT Measured at 3 Meters with HORIZONTAL Antenna Polarization

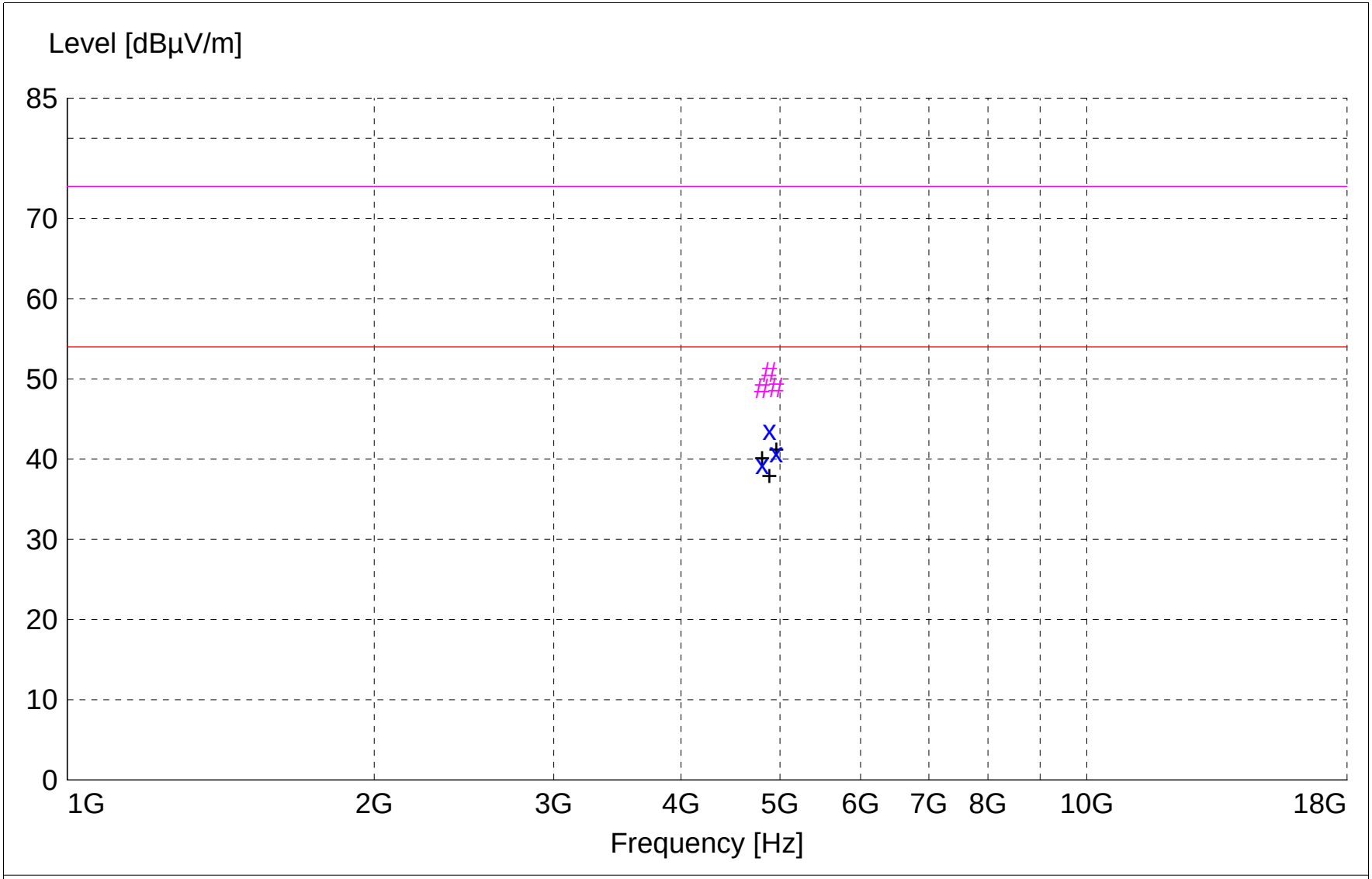
Sample Equations:

Total Level(dBµV/m)	= Level(dBµV)	+ System Loss(dB)	+ Antenna Factor(dBµV/m)
24.6	= 35.51	+ (-22.1)	+ 11.20

Margin(dB)	= Limit(dBµV/m)	- Total Level(dBµV/m)
15.4	= 40	- 24.6

Graph Markers:

+	Frequency marker (Level of marker not related to final level)
|	Final maximized level using Quasi-Peak detector
X	Final maximized level using Average dector
#	Final maximized level using Peak detector
-	Background Scan Peak Detector (Optional)
-	Background Scan Average Detector (Optional)



x x : MES A1220_sh_Average
: MES A1220_sh_Peak
+ + : MES A1220_sh_Peak_List
——— LIM FCC Class B F 3m AVG Field Strength AVG Limit 3m
——— LIM FCC Class B F 3m PK Field Strength PEAK Limit 3m

MEASUREMENT RESULT: "A1220_sh_Final"

12/21/2017 9:31AM

Frequency MHz	Level dBµV	Antenna Factor dBµV/m	System Loss dB	Total Level dBµV/m	Limit dBµV/m	Margin dB	Height Ant. m	EuT Angle deg	Final Detector	Comment
4884.000000	47.14	33.02	-36.5	43.6	54.0	10.4	1.81	216	AVERAGE	Mid ch
4960.000000	44.25	33.20	-36.6	40.8	54.0	13.2	1.78	135	AVERAGE	High ch
4804.000000	42.83	33.04	-36.5	39.4	54.0	14.6	1.49	221	AVERAGE	Low ch
4884.000000	54.39	33.02	-36.5	50.9	74.0	23.1	1.81	216	MAX PEAK	Mid ch
4960.000000	52.31	33.20	-36.6	48.9	74.0	25.1	1.78	135	MAX PEAK	High ch
4804.000000	52.26	33.04	-36.5	48.8	74.0	25.2	1.49	221	MAX PEAK	Low ch

No Measurable
Radiated Emissions
were detected Inside the Restricted Bands
from the

E-94B Bluetooth Thermometer

from 18 to 25 GHz

with the transceiver in continuous transmit mode, at Low, Mid, and High channels of operation.

Tested at 1 meter distance.

12-21-2017

Appendix B

B7.0 Operating Band-Edge – Radiated

Rule Part: FCC 15.247(d)

Test Procedure: ANSI C63.10-2013, sections 11.11, 11.11.2 & 11.11.3

Limit: 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

Results: Compliant

Notes: This was a radiated measurement. The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The EUT with was rotated through 3 orthogonal axis to find worst-case. The difference in the field strength level between the fundamental emission and the band edge emission was measured. The EUT was tested at the low and high channels of operation. A peak detector was used for this test.

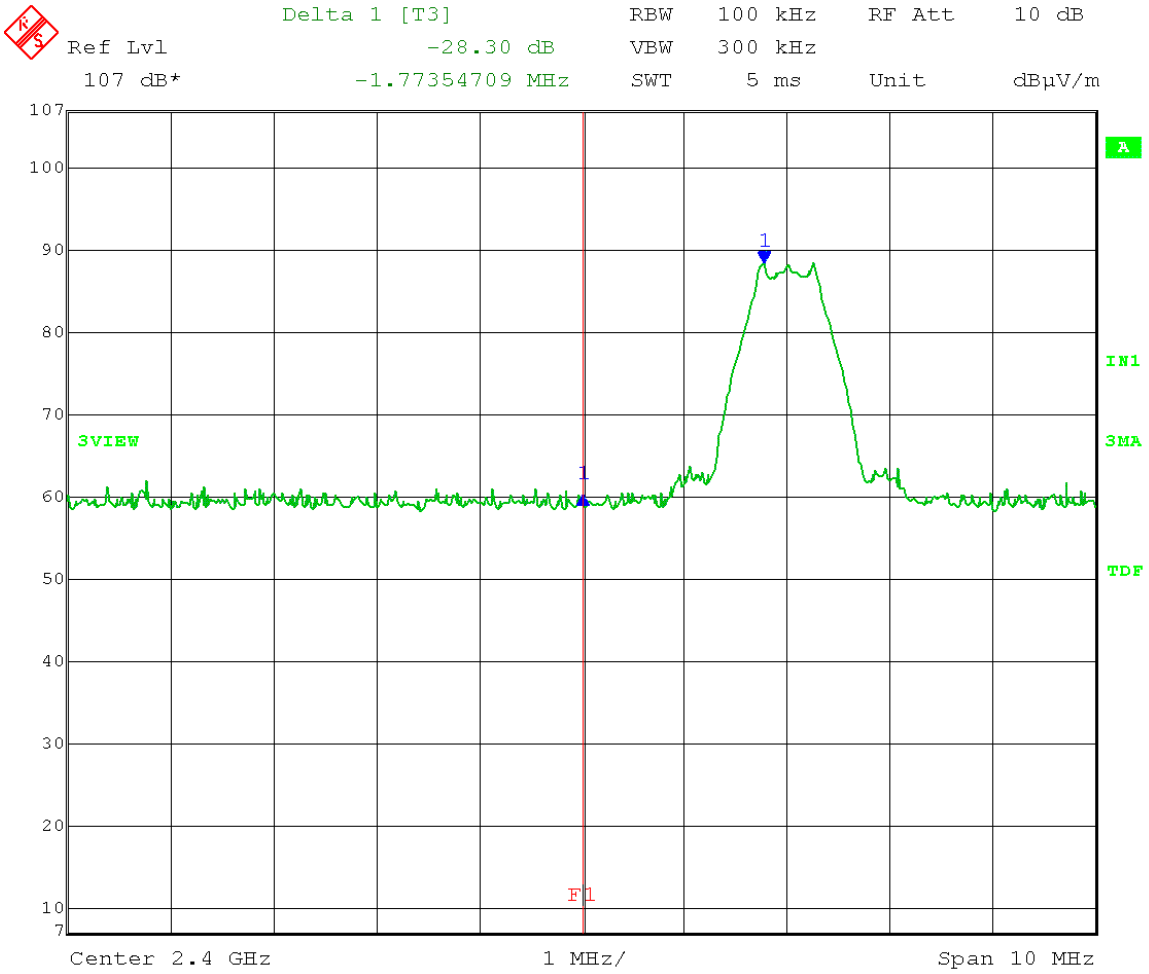
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Band-Edge Measurements - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

Low Channel: Transmit = 2.402 GHz

Limit: Band-Edge > 20 dB Below Peak In-Band Emission

Band-Edge Frequency = 2.4 GHz



Date: 20.DEC.2017 13:26:48

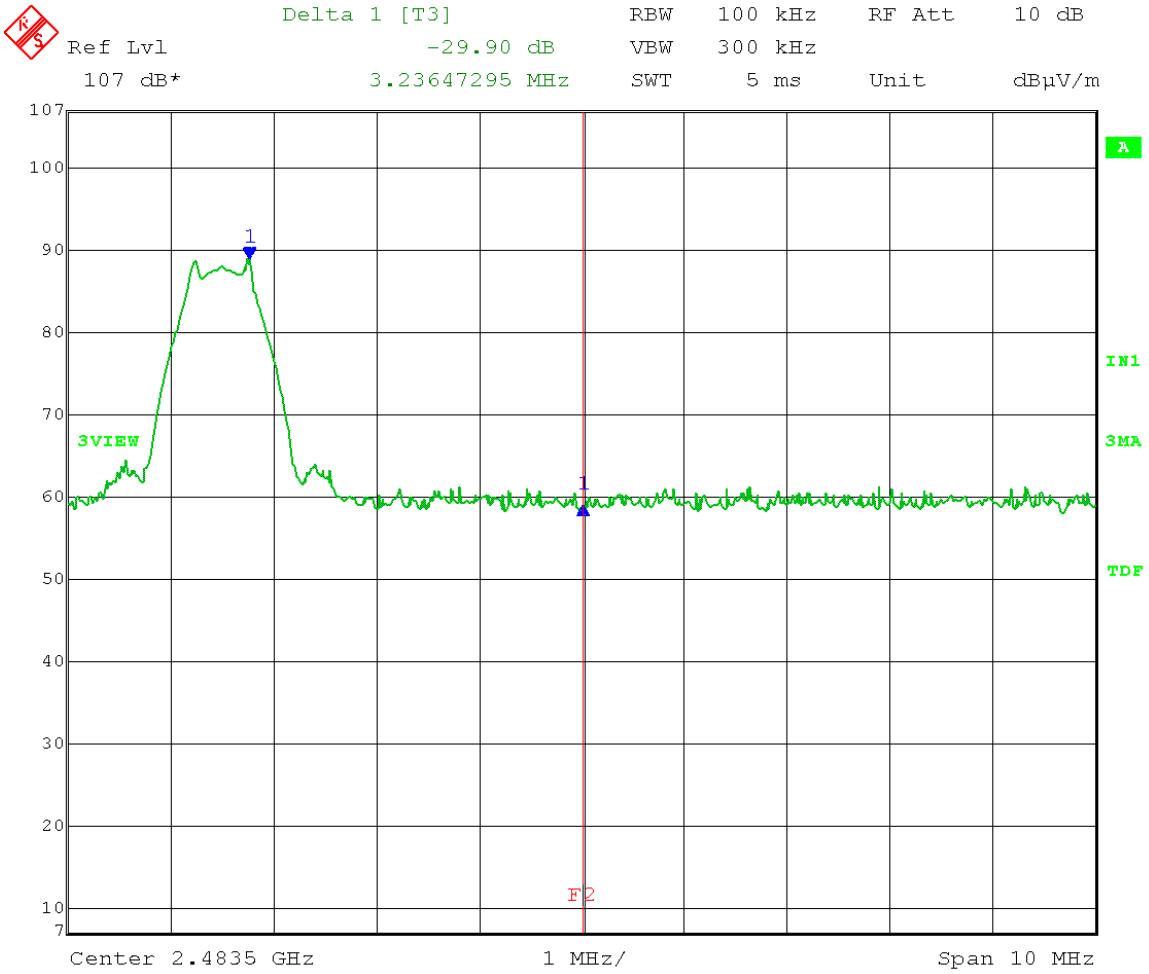
Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Band-Edge Measurements - Radiated
Operator: Craig B

Comment: RBW = 100 kHz
VBW ≥ 300 kHz
Detector = Peak
Sweep = auto couple
Trace = max hold

High Channel: Transmit = 2.480 GHz

Limit: Band-Edge > 20 dB Below Peak In-Band Emission

Band-Edge Frequency = 2.4835 GHz



Date: 20.DEC.2017 14:26:53

166 South Carter, Genoa City, WI 53128

Appendix B

B8.0 Restricted Band-Edge – Radiated

Rule Part: FCC 15.247(d), 15.205(a), 15.209(a)

Test Procedure: ANSI C63.10-2013, section 6.10.5.2

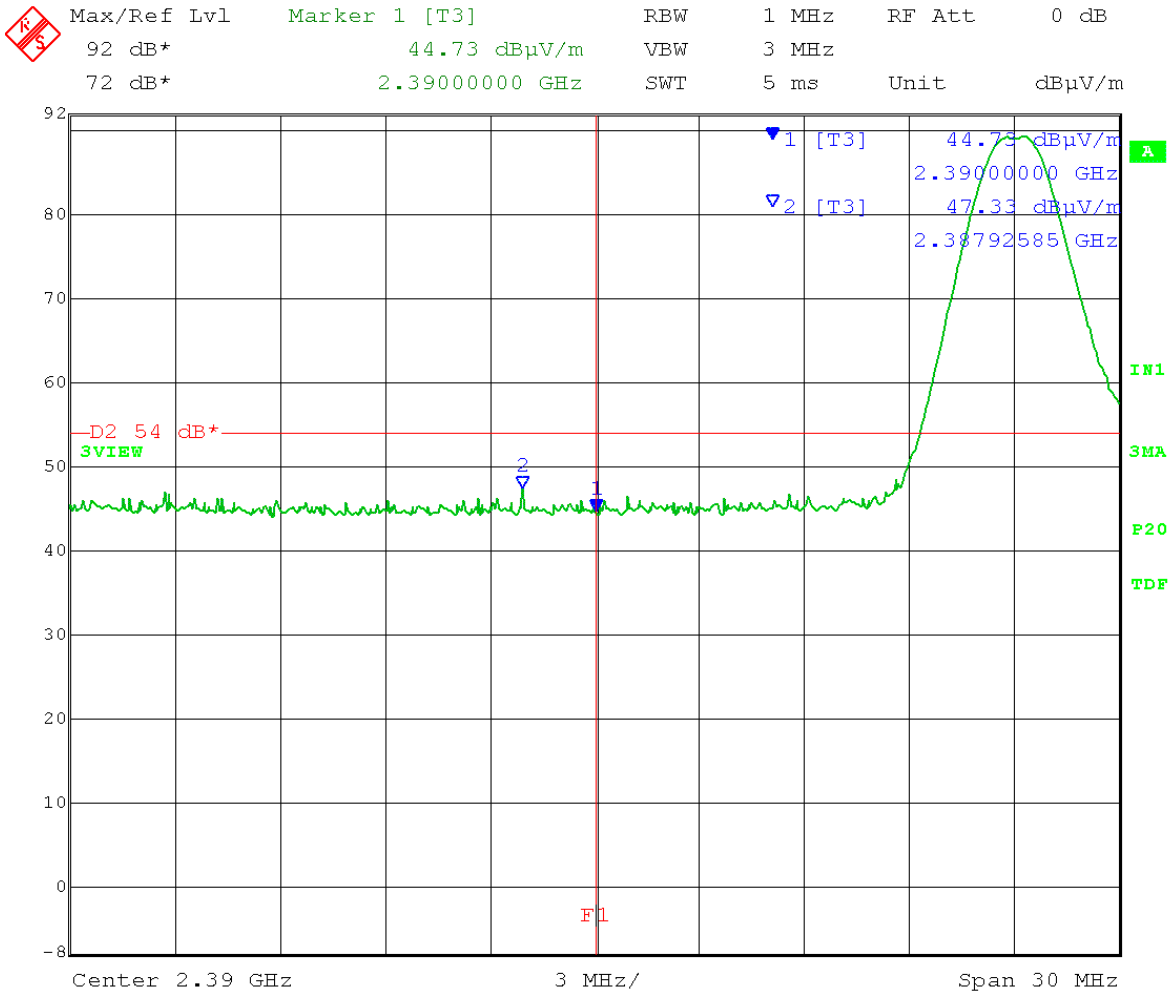
Limit: FCC 15.209

Results: Compliant

Notes: This was a radiated measurement. The EUT was set to transmit continuously (100% duty cycle) at its maximum power. The EUT with was rotated through 3 orthogonal axis to find worst-case. The emission at the band edge, or the highest emission within the restricted band was measured. The EUT was tested at the low and high channels of operation. A peak detector was used. The peak level measured is under the Average limit. Therefore, the EUT complies with both the Peak and Average limit requirements.

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Lower Restricted Band Edge – Radiated
Operator: Craig B
Comment: Low Channel: 2402 MHz

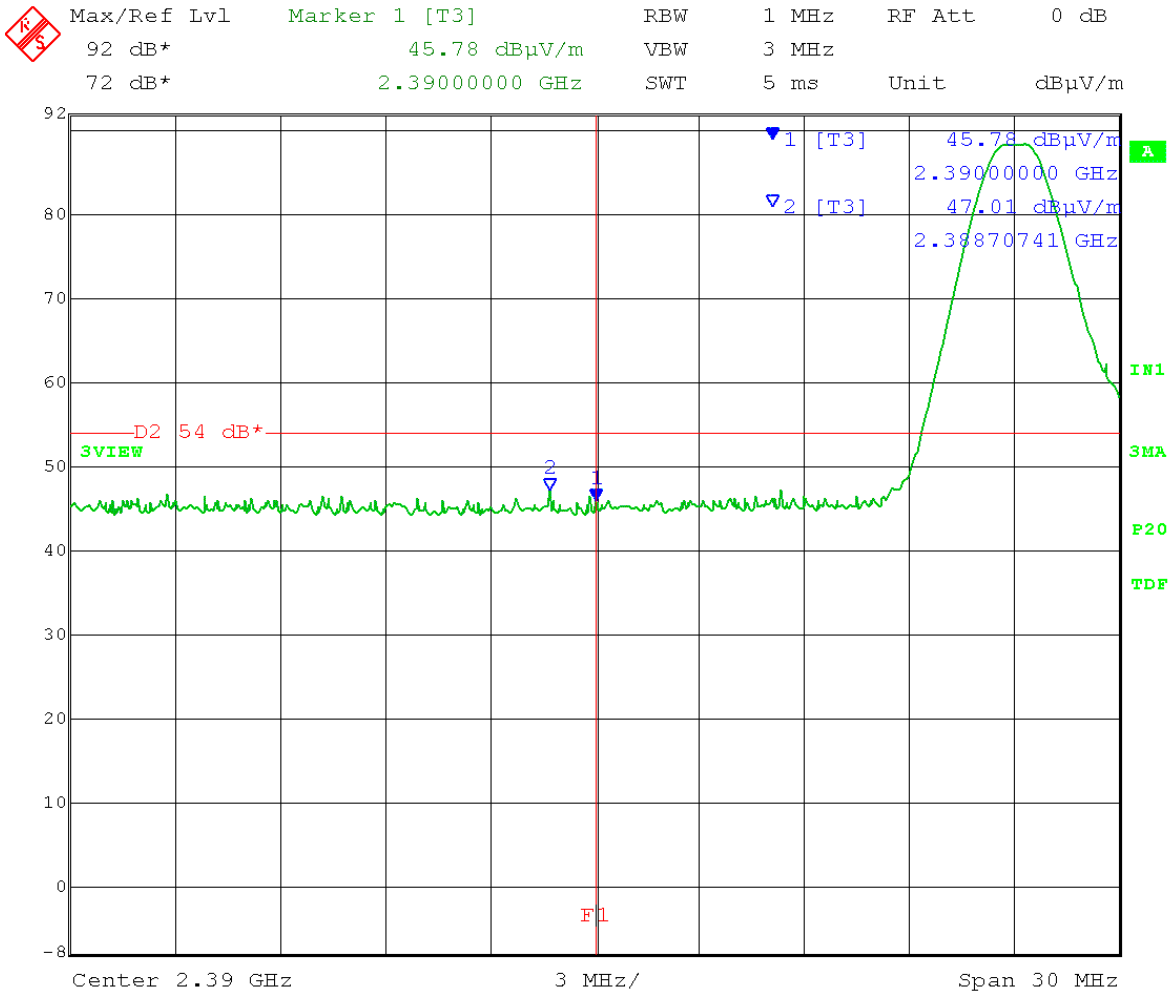
Polarization: Vertical
Detector: Peak
Limit: Average



Date: 20.DEC.2017 13:42:05

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Lower Restricted Band Edge – Radiated
Operator: Craig B
Comment: Low Channel: 2402 MHz

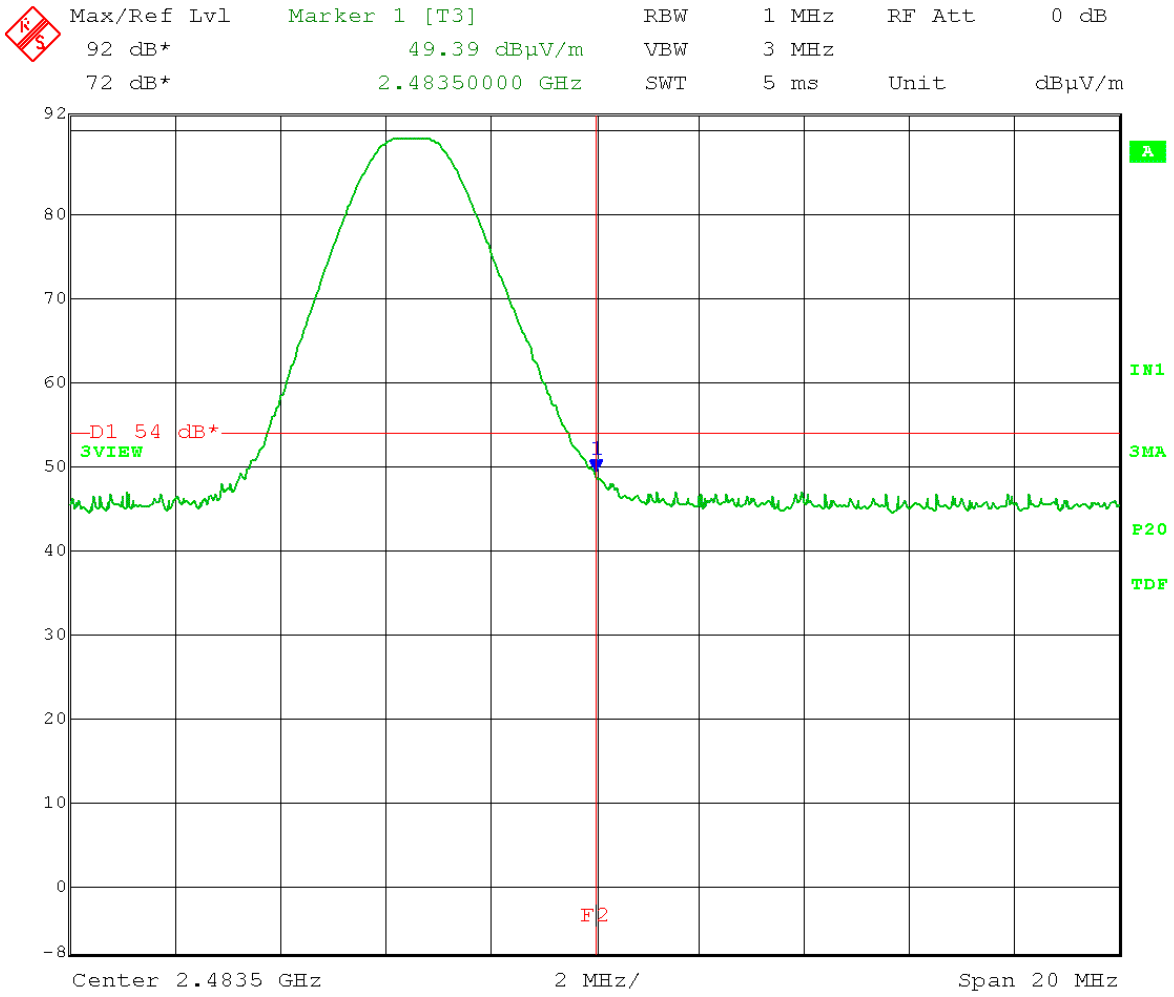
Polarization: Horizontal
Detector: Peak
Limit: Average



Date: 20.DEC.2017 13:37:20

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Upper Restricted Band Edge – Radiated
Operator: Craig B
Comment: High Channel: 2480 MHz

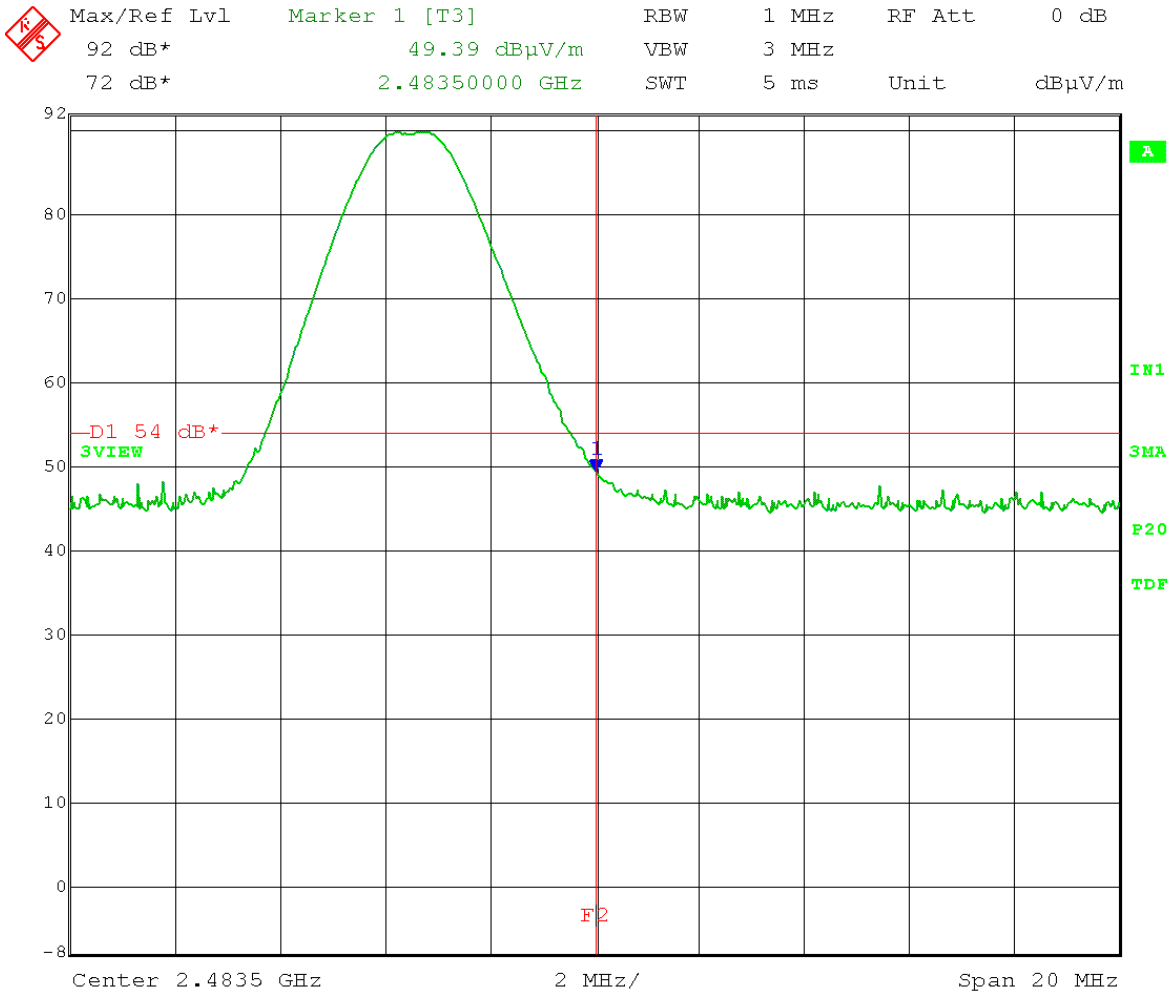
Polarization: Vertical
Detector: Peak
Limit: Average



Date: 20.DEC.2017 14:35:28

Test Date: 12-20-2017
Company: NingBo Kaitai
EUT: E-94B Bluetooth Thermometer
Test: Upper Restricted Band Edge – Radiated
Operator: Craig B
Comment: High Channel: 2480 MHz

Polarization: Horizontal
Detector: Peak
Limit: Average



Date: 20.DEC.2017 15:04:07

166 South Carter, Genoa City, WI 53128

Appendix C – Measurement Uncertainty

Compliance with the limits in this standard are based on the results of the compliance measurement. Our calculated measurement uncertainty including the measurement instrumentation, associated connections between the various instruments in the measurement chain, and other contributions, are provided in this section of the test report.

Parameter		Expanded Uncertainty (K=2)
Occupied Channel Bandwidth		+/-1.14%
RF Output Power, Conducted		+/-0.89dB
Unwanted Emissions, Conducted		+/-2.62dB
All Emissions, Radiated		+/-4.95dB
DC and Low Frequency Voltages		+/-2.42%
Time		+/-0.01%
Duty Cycle		+/-0.05%

END OF REPORT

Revision #	Date	Comments	By
1.0	January 5, 2018	Initial Release	CB
1.1	March 2, 2018	Added FCC ID number	CB