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Test Report

Certification

FCC ID	2AJACT4TS
Equipment Under Test	040-00460a
Test Report Serial No	V055387_01
Date of Test	Radiated: July 13 – 14, July 20 – 23, August 10 – 13, August 17 – 19, 2020 Conducted at Antenna Port: November 6 – 10, 2020
Report Issue Date	December 7, 2020

Test Specifications:	**Applicant:**
FCC Part 15, Subpart C	Wirepath Home Systems, LLC (dba SnapAV, dba Control4) 1800 Continental Blvd , Suite 200 Charlotte, NC 28273 U.S.A.

NVLAP Testing
NVLAP Lab Code 100272-0

Certification of Engineering Report

This report has been prepared by VPI Laboratories, Inc. to document compliance of the device described below with the requirements of Federal Communications Commission (FCC) Part 15, Subpart C. This report may be reproduced in full. Partial reproduction of this report may only be made with the written consent of the laboratory. The results in this report apply only to the sample tested.

Applicant	Wirepath Home Systems, LLC (dba SnapAV, dba Control4)
Manufacturer	Wirepath Home Systems, LLC (dba SnapAV, dba Control4)
Brand Name	Control4
Model Number	Wirepath Home Systems, LLC (dba SnapAV, dba Control4)
FCC ID	2AJACT4TS

On this 7th day of December 2020, I, individually and for VPI Laboratories, Inc., certify that the statements made in this engineering report are true, complete, and correct to the best of my knowledge, and are made in good faith.

Although NVLAP has accredited the VPI Laboratories, Inc. EMC testing facilities, this report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

VPI Laboratories, Inc.

Radiated Emissions Tested by: Norman P. Hansen

Conducted Emissions Tested by: Benjamin N. Antczak

Reviewed by: Jason Stewart

Revision History		
Revision	**Description**	**Date**
01	Original Report Release	December 7, 2020

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1 Client Information

1.1 Applicant

Company Name	Wirepath Home Systems, LLC (dba SnapAV, dba Control4) 1800 Continental Blvd , Suite 200 Charlotte, NC 28273 U.S.A.
Contact Name	Roger Midgley
Title	Principle Compliance Engineer

1.2 Manufacturer

Company Name	Wirepath Home Systems, LLC (dba SnapAV, dba Control4) 1800 Continental Blvd , Suite 200 Charlotte, NC 28273 U.S.A.
Contact Name	Roger Midgley
Title	Principle Compliance Engineer

2 Equipment Under Test (EUT)

2.1 Identification of EUT

Brand Name	Control4
Model Number	040-00460a
Serial Number	None
Dimensions (cm)	2.8 x 1.6 x 0.2

2.2 Description of EUT

The 040-00460a is a WiFi module that uses the 2.4 GHz ISM band and the UNII bands. The 2.4 GHz ISM band transceiver operates on 11 channels and at the power setting as shown in the table below. The 040-00460a has 2 antennas installed, controlled by an RF switch, and only one antenna at a time is used for transmitting data. The 040-00460a receives power from the host device the module is installed in.

Channel	Frequency	802.11b	802.11g	802.11n
1	2412	19	12	13
2	2417	20	14	15
3	2422	20	15	16
4	2427	20	17	17
5	2432	20	17	18
6	2437	20	17	18
7	2442	20	17	18
8	2447	20	17	18
9	2452	20	16	18
10	2457	20	15	16
11	2462	19	13	12

This report covers the circuitry of the devices subject to FCC Part 15, Subpart C. The circuitry of the device subject to FCC Subpart B was found to be compliant and is covered in other reports.

2.3 EUT and Support Equipment

The EUT and support equipment used during the test are listed below.

Brand Name Model Number Serial Number	Description	Name of Interface Ports / Interface Cables
BN: Control4 MN: 040-00460a (Note 1) SN: None	WiFi Module	See Section 2.4
BN: Control4 MN: C4-T4IW10-XX SN: None	10” In-wall Touchscreen Display (Host System)	AC power/2 unshielded conductors Network/Cat 5e cable

Brand Name Model Number Serial Number	Description	Name of Interface Ports / Interface Cables
BN: Control4 MN: C4-T4IW8-XX SN: None	8” In-wall Touchscreen Display (Host System)	AC power/2 unshielded conductors Network/Cat 5e cable
BN: Control4 MN: C4-T4T10-XX SN: None	10” Tabletop Touchscreen Display (Host System)	AC power/Direct connection to AC outlet
BN: Control4 MN: C4-T4IW8-XX SN: None	10” Tabletop Touchscreen Display (Host System)	AC power/Direct connection to AC outlet
BN: ASUS MN: WL-520G SN: A1IAAC051369	Network Router	Network/Cat 5e cable

Notes: (1) EUT

(2) Interface port connected to EUT (See Section 2.4)

The support equipment listed above was not modified in order to achieve compliance with this standard.

2.4 Interface Ports on EUT

Name of Ports	No. of Ports Fitted to EUT	Cable Description/Length
Host system interface	1	Direct connection to the host system

2.5 Modification Incorporated/Special Accessories on EUT

There were no modifications or special accessories required to comply with the specification.

2.6 Deviation from Test Standard

There were no deviations from the test specification.

3 Test Specification, Methods and Procedures

3.1 Test Specification

Title	FCC PART 15, Subpart C (47 CFR 15) 15.203, 15.207, and 15.247 Limits and methods of measurement of radio interference characteristics of radio frequency devices.
Purpose of Test	The tests were performed to demonstrate initial compliance

3.2 Methods & Procedures

3.2.1 §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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 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. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

3.2.2 §15.207 Conducted Limits

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency range (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 to 0.50*	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

*Decreases with the logarithm of the frequency.

Table 1: Limits for conducted emissions at mains ports of Class B ITE.

3.2.3 §15.247 Operation within the bands 902 – 928 MHz, 2400 – 2483.5 MHz, and 5725 – 5850 MHz

a) Operation under the provisions of this Section is limited to frequency hopping and digitally modulated intentional radiators that comply with the following provisions.

1) Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400 – 2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudorandomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

   i. For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

   ii. Frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies. The maximum 20 dB bandwidth of the hopping channel is 1 MHz. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

   iii. Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 non-overlapping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels are used.

2) Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

b) The maximum peak output power of the intentional radiator shall not exceed the following:

1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

2) For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and, 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels, as permitted under paragraph (a)(1)(i) of this section.

3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725 – 5850 MHz bands: 1 watt. As an alternative to a peak power measurement, compliance with the Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

c) Operation with directional antenna gains greater than 6 dBi.

1) Fixed point-to-point operation:

i. Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

ii. Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter peak output power.

iii. Fixed, point-to-point operation, as used in paragraphs (b)(4)(i) and (b)(4)(ii) of this section, excludes the use of point-to-multipoint systems, omnidirectional applications, and multiple co-located intentional radiators transmitting the same information. The operator of the spread spectrum or digitally modulated intentional radiator or, if the equipment is professionally installed, the installer is responsible for ensuring that the system is used exclusively for fixed, point-to-point operations. The instruction manual furnished with the intentional radiator shall contain language in the installation instructions informing the operator and the installer of this responsibility.

2) In addition to the provisions in paragraphs (b)(1), (b)(3), (b)(4) and (c)(1)(i) of this section, transmitters operating in the 2400-2483.5 MHz band that emit multiple directional beams, simultaneously or sequentially, for the purpose of directing signals to individual receivers or to groups of receivers provided the emissions comply with the following:

i. Different information must be transmitted to each receiver.

ii. If the transmitter employs an antenna system that emits multiple directional beams but does not emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device, i.e., the sum of the power supplied to all antennas, antenna elements, staves, etc. and summed across all carriers or frequency channels, shall not exceed the limit specified in paragraph (b)(1) or (b)(3) of this section, as applicable. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna /antenna array exceeds 6 dBi. The directional antenna gain shall be computed as follows:

A. The directional gain shall be calculated as the sum of 10 log (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

B. A lower value for the directional gain than that calculated in paragraph (c)(2)(ii)(A) of this section will be accepted if sufficient evidence is presented, e.g., due to shading of the array or coherence loss in the beamforming.

iii. If a transmitter employs an antenna that operates simultaneously on multiple directional beams using the same or different frequency channels, the power supplied to each emission beam is subject to the power limit specified in paragraph (c)(2)(ii) of this section. If transmitted beams overlap, the power shall be reduced to ensure that their aggregate power does not exceed the limit specified in paragraph (c)(2)(ii) of this section. In addition, the aggregate power transmitted simultaneously on all beams shall not exceed the limit specified in paragraph (c)(2)(ii) of this section by more than 8 dB.

iv. Transmitters that emit a single directional beam shall operate under the provisions of paragraph (c)(1) of this section.

d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

f) For the purposes of this section, hybrid systems are those that employ a combination of both frequency hopping and digital modulation techniques. The frequency hopping operation of the hybrid system, with the direct sequence or digital modulation operation turned off, shall have an

average time of occupancy on any frequency not to exceed 0.4 seconds within a time period in seconds equal to the number of hopping frequencies employed multiplied by 0.4. The digital modulation operation of the hybrid system, with the frequency hopping turned off, shall comply with the power density requirements of paragraph (d) of this section.

g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

i) Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this Chapter.

Note: Spread spectrum systems are sharing these bands on a noninterference basis with systems supporting critical Government requirements that have been allocated the usage of these bands, secondary only to ISM equipment operated under the provisions of Part 18 of this Chapter. Many of these Government systems are airborne radiolocation systems that emit a high EIRP which can cause interference to other users. Also, investigations of the effect of spread spectrum interference to U. S. Government operations in the 902-928 MHz band may require a future decrease in the power limits allowed for spread spectrum operation.

3.3 Test Procedure

VPI Laboratories, Inc. is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Lab Code: 100272-0, which is effective until September 30, 2021. VPI Laboratories, Inc. carries FCC Accreditation Designation Number US5263. VPI Laboratories main office is located at 313 W 12800 S, Suite 311, Draper, UT 84020. The testing was performed according to the procedures in ANSI C63.10-2013, KDB 558074, and 47 CFR Part 15.

4 Operation of EUT During Testing

4.1 Operating Environment

Power Supply	3.3 Vdc from host device

4.2 Operating Modes

The transmitter was tested in 4 host units as listed in section 2.2. The in-wall host systems were tested as if mounted in a wall. The tabletop host systems were test while on the charging base and on 3 orthogonal axes when off the charging base. The transmitter was in a constant transmit mode at the upper, middle, and lower channels. The AC mains voltage was varied as required by §15.31(e) with no change seen in the voltage supplied to the transmitter or in transmitter characteristics. The tabletop host systems when tested off the charging base had fully charged batteries. For radiated spurious emissions, in 802.11b mode a data rate of 1 Mbps was found worst-case, 802.11g a data rate of 6 Mbps was found to be worst-case, and 802.11n worst-case was found to be using data rate MCS4.

4.3 EUT Exercise Software

Control4 firmware was used to exercise and control the transmitter for testing.

5 Summary of Test Results

5.1 FCC Part 15, Subpart C

5.1.1 Summary of Tests

Section	Environmental Phenomena	Frequency Range (MHz)	Result
15.203	Antenna Requirements	Structural requirement	Complied
15.207	Conducted Disturbance at Mains Ports	0.15 to 30	Complied
15.247(a)	Bandwidth Requirement	2400 to 2483.5	Complied
15.247(b)	Peak Output Power	2400 to 2483.5	Complied
15.247(d)	Antenna Conducted Spurious Emissions	0.009 - 25000	Complied
15.247(d)	Radiated Spurious Emissions	0.009 - 25000	Complied
15.247(e)	Peak Power Spectral Density	2400 to 2483.5	Complied

5.2 Result

In the configuration tested, the EUT complied with the requirements of the specification.

6 Measurements, Examinations and Derived Results

6.1 General Comments

This section contains the test results only. Details of the test methods used and a list of the test equipment used during the measurements can be found in Section 7 of this report.

6.2 802.11b Test Results

6.2.1 §15.203 Antenna Requirements

A total of 7 antenna are used in the 4 devices covered in this testing. The antennas are located interna to the housings and are not user accessible. The table below shows the device, antenna port, antenna model, and maximum gain of the antenna in the 2400 – 2483.5 MHz frequency band.

Device	Antenna Port	Model	Maximum Gain
C4-T4T10-XX	0	1005180	3.8
	1	1005179	2.8
C4-T4T8-XX	0	1005178	3.6
	1	1005179	2.8
C4-T4IW10-XX	0	1005097	5.3
	1	1005098	5.2
C4-T4IW8-XX	0	1005095	3.8
	1	1005096	4.0

Result

The EUT complied with the specification.

6.2.2 Conducted Emissions at Mains Ports Data

040-00460a installed in C4-T4IW10-XX

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.18	Hot Lead	Peak (Note 1)	51.1	54.5	-3.4
0.20	Hot Lead	Peak (Note 1)	47.7	53.5	-5.8
0.33	Hot Lead	Peak (Note 1)	43.9	49.3	-5.4
0.41	Hot Lead	Peak (Note 1)	44.0	47.6	-3.6
0.90	Hot Lead	Peak (Note 1)	39.8	46.0	-6.2
21.78	Hot Lead	Peak (Note 1)	44.0	50.0	-6.0
0.20	Neutral Lead	Quasi-Peak (Note 2)	52.9	63.5	-10.6
0.20	Neutral Lead	Average (Note 2)	41.4	53.5	-12.1
0.27	Neutral Lead	Peak (Note 1)	45.1	51.1	-6.0
0.33	Neutral Lead	Peak (Note 1)	45.5	49.3	-3.8
0.41	Neutral Lead	Peak (Note 1)	42.8	47.7	-4.9

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.91	Neutral Lead	Peak (Note 1)	37.4	46.0	-8.6
1.32	Neutral Lead	Peak (Note 1)	37.7	46.0	-8.3

Note 1: The reference detector used for the measurements was Quasi-Peak or Peak and the data was compared to the average limit; therefore, the EUT was deemed to meet both the average and quasi-peak limits.
Note 2: The reference detector used for the measurements was quasi-peak and average and the data was compared to the respective limits.

Result

The EUT complied with the specification limit by a margin of 3.4 dB.

040-00460a installed in C4-T4IW8-XX

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.15	Hot Lead	Peak (Note 1)	52.7	56.0	-3.3
0.20	Hot Lead	Quasi-Peak (Note 2)	51.6	63.6	-12.0
0.20	Hot Lead	Average (Note 2)	42.3	53.6	-11.3
0.33	Hot Lead	Peak (Note 1)	41.5	49.3	-7.8
0.39	Hot Lead	Peak (Note 1)	41.0	48.1	-7.1
2.80	Hot Lead	Peak (Note 1)	36.1	46.0	-9.9
3.07	Hot Lead	Peak (Note 1)	35.8	46.0	-10.2
0.20	Neutral Lead	Peak (Note 1)	46.6	53.6	-7.0
0.33	Neutral Lead	Peak (Note 1)	43.0	49.3	-6.3
0.41	Neutral Lead	Peak (Note 1)	40.7	47.7	-7.0
2.79	Neutral Lead	Peak (Note 1)	40.2	46.0	-5.8
2.96	Neutral Lead	Peak (Note 1)	40.9	46.0	-5.1
3.07	Neutral Lead	Peak (Note 1)	40.1	46.0	-5.9

Note 1: The reference detector used for the measurements was Quasi-Peak or Peak and the data was compared to the average limit; therefore, the EUT was deemed to meet both the average and quasi-peak limits.
Note 2: The reference detector used for the measurements was quasi-peak and average and the data was compared to the respective limits.

Result

The EUT complied with the specification limit by a margin of 3.3 dB.

040-00460a installed in C4-T4T10-XX

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.20	Hot Lead	Quasi-Peak (Note 2)	53.0	63.5	-10.5
0.20	Hot Lead	Average (Note 2)	45.3	53.5	-8.2

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.39	Hot Lead	Quasi-Peak (Note 1)	43.5	48.1	-4.6
0.69	Hot Lead	Quasi-Peak (Note 2)	45.8	56.0	-10.2
0.69	Hot Lead	Average (Note 2)	38.8	46.0	-7.2
0.77	Hot Lead	Quasi-Peak (Note 2)	45.3	56.0	-10.7
0.77	Hot Lead	Average (Note 2)	40.4	46.0	-5.6
0.91	Hot Lead	Quasi-Peak (Note 2)	43.8	56.0	-12.2
0.91	Hot Lead	Average (Note 2)	39.1	46.0	-6.9
1.22	Hot Lead	Quasi-Peak (Note 2)	42.5	56.0	-13.5
1.22	Hot Lead	Average (Note 2)	37.9	46.0	-8.1
1.49	Hot Lead	Quasi-Peak (Note 1)	41.3	46.0	-4.7
1.79	Hot Lead	Quasi-Peak (Note 1)	40.3	46.0	-5.7
0.16	Neutral Lead	Quasi-Peak (Note 2)	53.7	65.5	-11.8
0.16	Neutral Lead	Average (Note 2)	34.2	55.5	-21.3
0.22	Neutral Lead	Quasi-Peak (Note 2)	51.9	62.9	-11.0
0.22	Neutral Lead	Average (Note 2)	38.8	52.9	-14.1
0.28	Neutral Lead	Quasi-Peak (Note 1)	45.2	50.9	-5.7
0.41	Neutral Lead	Quasi-Peak (Note 1)	41.7	47.7	-6.0
0.46	Neutral Lead	Quasi-Peak (Note 1)	39.7	46.8	-7.1
0.64	Neutral Lead	Peak (Note 1)	42.9	46.0	-3.1
0.77	Neutral Lead	Quasi-Peak (Note 1)	41.9	46.0	-4.1
0.84	Neutral Lead	Quasi-Peak (Note 1)	40.7	46.0	-5.3
4.06	Neutral Lead	Quasi-Peak (Note 1)	39.0	46.0	-7.0
9.08	Neutral Lead	Peak (Note 1)	44.3	50.0	-5.7

Note 1: The reference detector used for the measurements was Quasi-Peak or Peak and the data was compared to the average limit; therefore, the EUT was deemed to meet both the average and quasi-peak limits.
Note 2: The reference detector used for the measurements was quasi-peak and average and the data was compared to the respective limits.

Result

The EUT complied with the specification limit by a margin of 3.1 dB.

040-00460a installed in C4-T4T8-XX

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBµV)	Limit (dBµV)	Margin (dB)
0.76	Hot Lead	Quasi-Peak (Note 2)	44.3	56.0	-11.7
0.76	Hot Lead	Average (Note 2)	42.6	46.0	-3.4
0.85	Hot Lead	Peak (Note 1)	38.8	46.0	-7.2

Frequency (MHz)	AC Mains Lead	Detector	Measured Level (dBμV)	Limit (dBμV)	Margin (dB)
1.61	Hot Lead	Peak (Note 1)	37.6	46.0	-8.4
2.37	Hot Lead	Peak (Note 1)	38.4	46.0	-7.6
3.22	Hot Lead	Peak (Note 1)	38.7	46.0	-7.3
4.04	Hot Lead	Peak (Note 1)	37.6	46.0	-8.4
0.16	Neutral Lead	Peak (Note 1)	50.7	55.5	-4.8
0.65	Neutral Lead	Quasi-Peak (Note 1)	41.4	46.0	-4.6
0.81	Neutral Lead	Quasi-Peak (Note 2)	44.3	56.0	-11.7
0.81	Neutral Lead	Average (Note 2)	42.1	46.0	-3.9
0.98	Neutral Lead	Peak (Note 1)	41.1	46.0	-4.9
1.42	Neutral Lead	Peak (Note 1)	40.9	46.0	-5.1
2.30	Neutral Lead	Peak (Note 1)	39.7	46.0	-6.3
2.68	Neutral Lead	Peak (Note 1)	38.1	46.0	-7.9

Note 1: The reference detector used for the measurements was Quasi-Peak or Peak and the data was compared to the average limit; therefore, the EUT was deemed to meet both the average and quasi-peak limits.
Note 2: The reference detector used for the measurements was quasi-peak and average and the data was compared to the respective limits.

Result

The EUT complied with the specification limit by a margin of 3.4 dB.

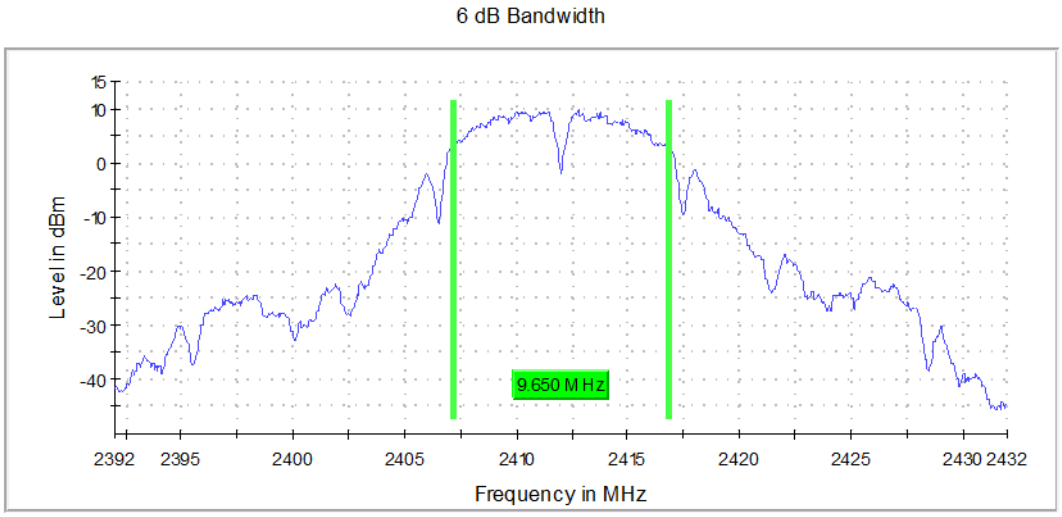
6.2.3 §15.247(a)(2) Emissions Bandwidth

040-00460a Antenna Port 0 and 1

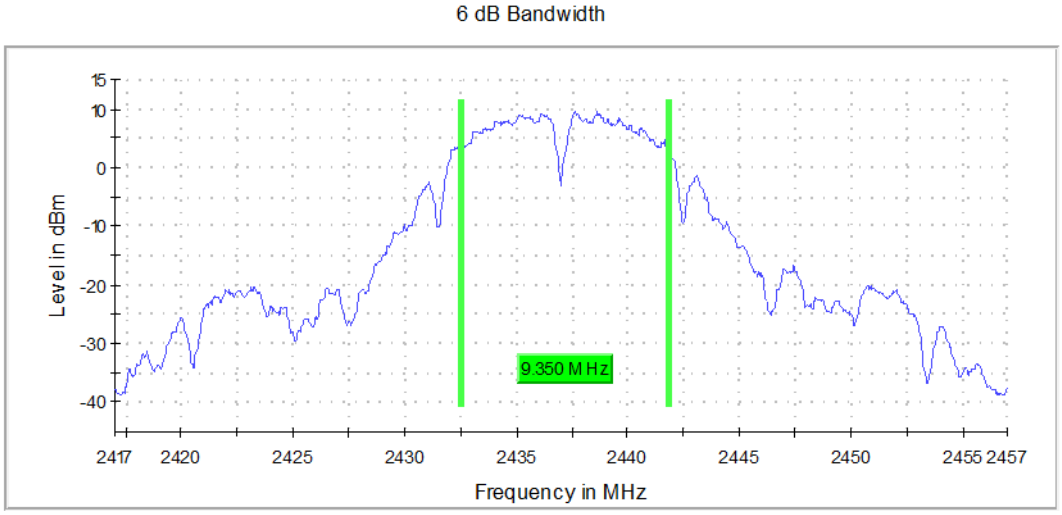
Frequency (MHz)	Antenna 0 Emissions 6 dB bandwidth (MHz)	Antenna 1 Emissions 6 dB bandwidth (MHz)
2412	9.7	8.8
2437	9.4	9.7
2462	9.6	9.8

Result

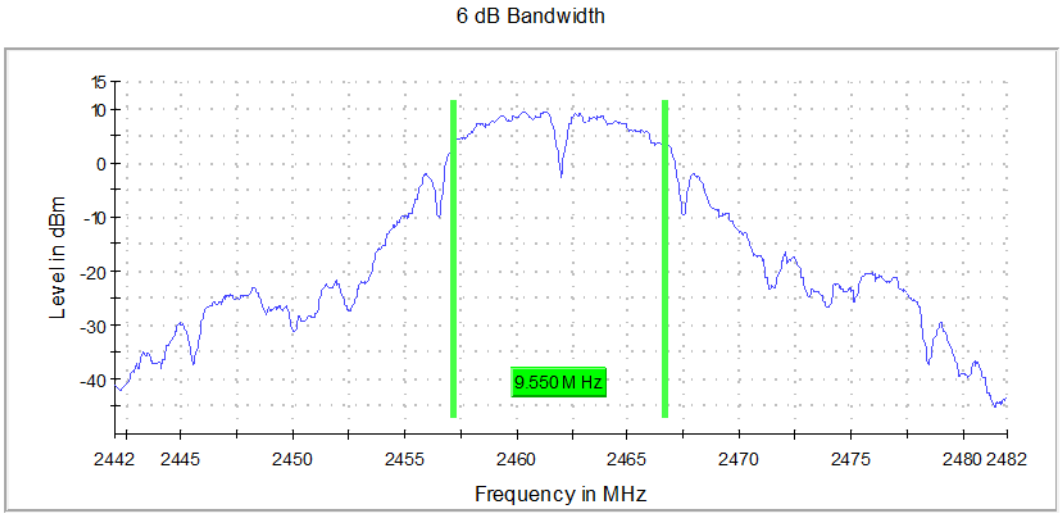
In the configuration tested, the 6 dB bandwidth was greater than 500 kHz; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plots below).



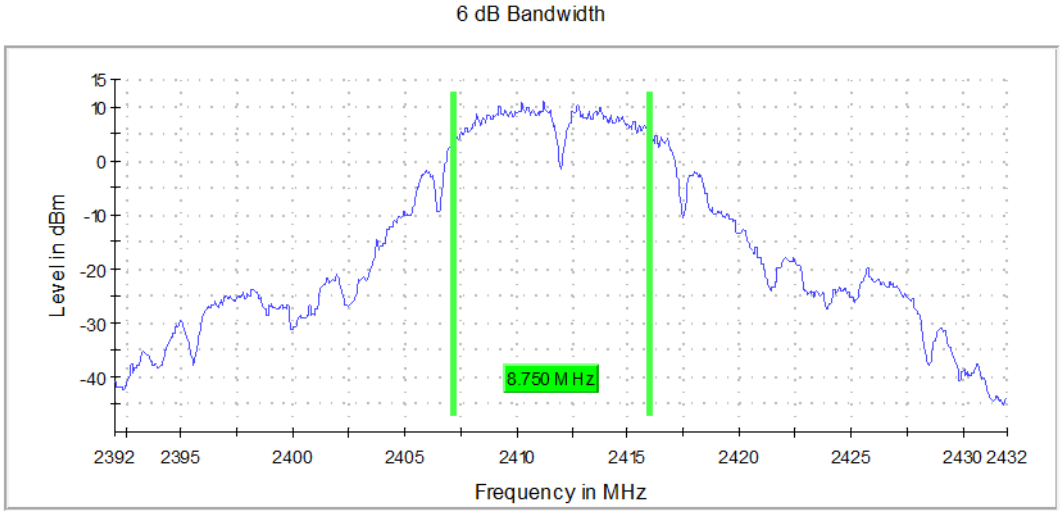
Graph 1: Lowest Channel Bandwidth – Antenna 0



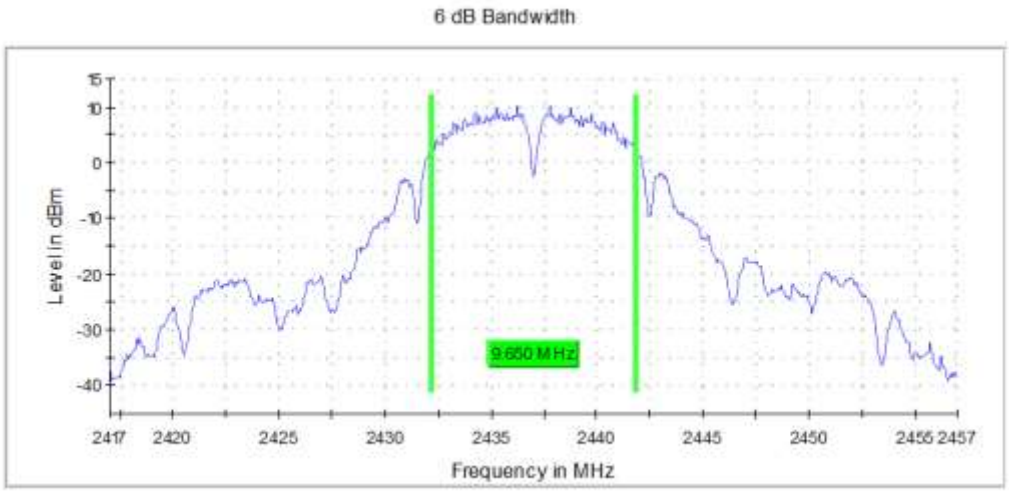
Graph 2: Middle Channel Bandwidth – Antenna 0



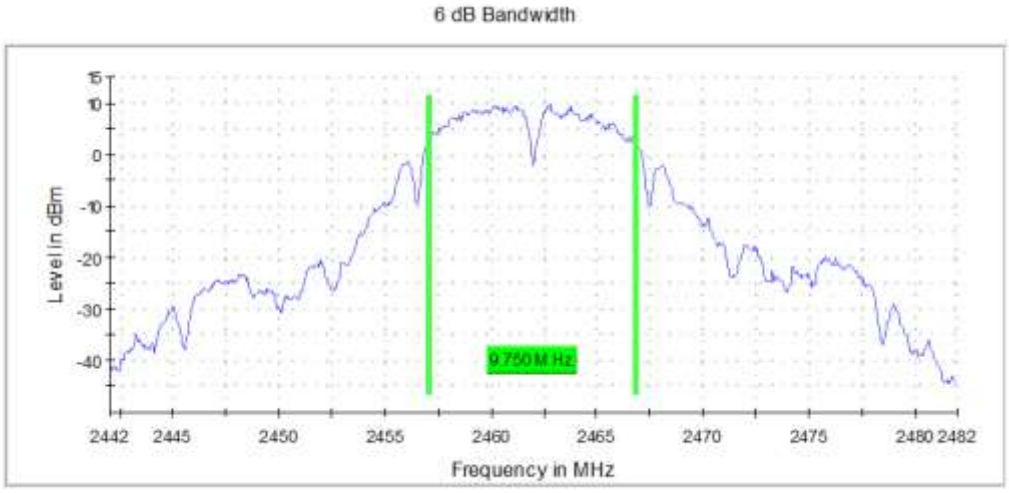
Graph 3: Highest Channel Bandwidth – Antenna 0



Graph 4: Lowest Channel Bandwidth – Antenna 1



Graph 5: Middle Channel Bandwidth – Antenna 1



Graph 6: Highest Channel Bandwidth – Antenna 1

6.2.4 §15.247(b)(3) Output Power

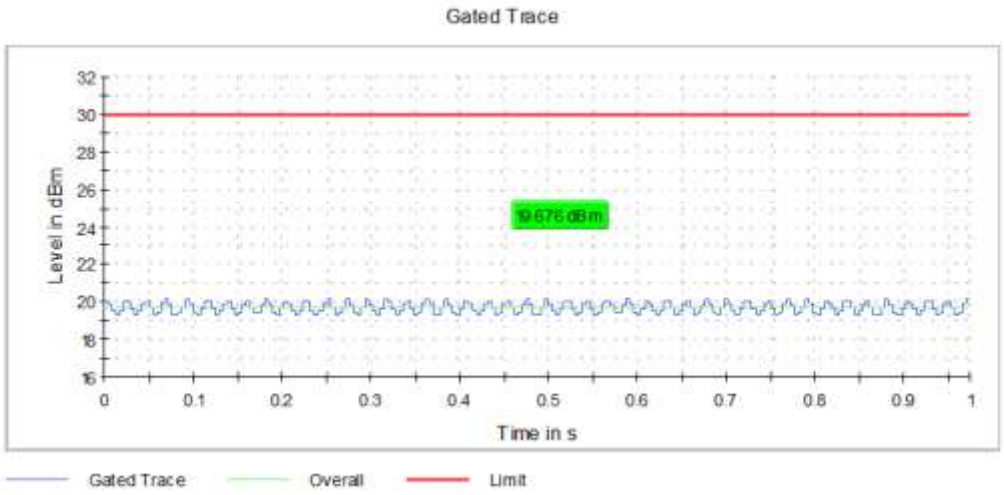
The maximum conducted (average) output power was measured according to Method AVGPM-G (ANSI C63.10, Section 11.9.2.3.2). Measurements were taken at the maximum possible power setting (20) to demonstrate compliance with this requirement at all possible power settings. The limit is 30 dBm when using antennas with 6 dBi or less gain.

040-00460a Antenna Port 0 and 1

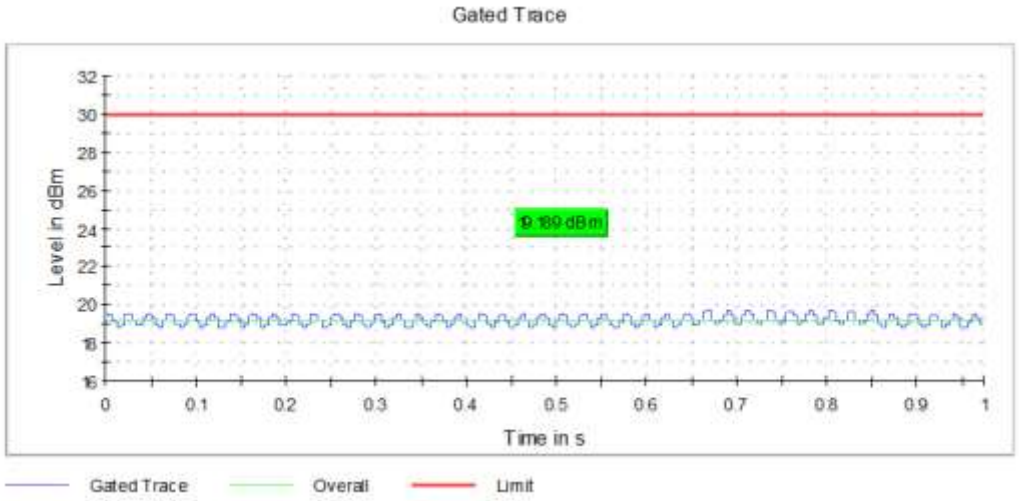
Frequency (MHz)	Antenna 0 Measured Output Power (dBm)	Antenna 1 Measured Output Power (dBm)
2412	19.7	19.5
2437	19.2	19.2
2462	19.5	19.2

Result

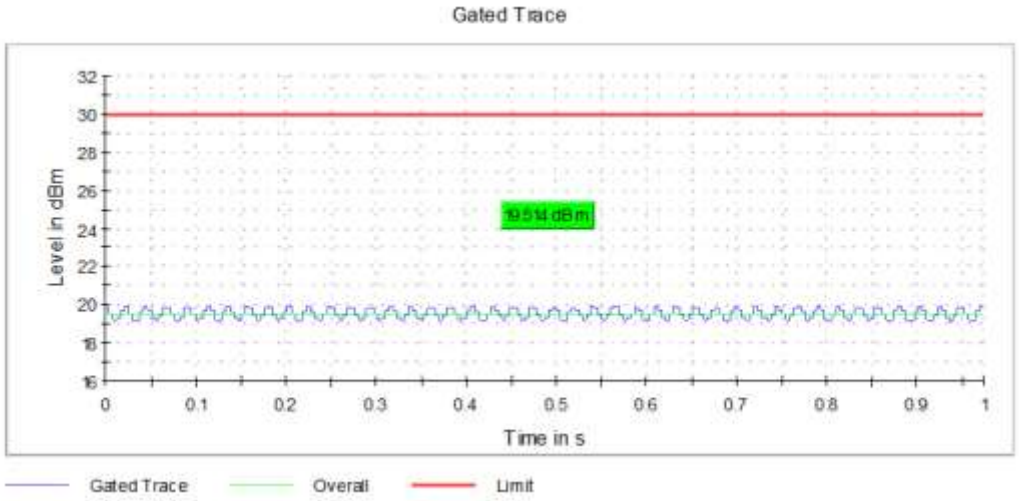
In the configuration tested, the RF peak output power was less than 1 Watt; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plots below).



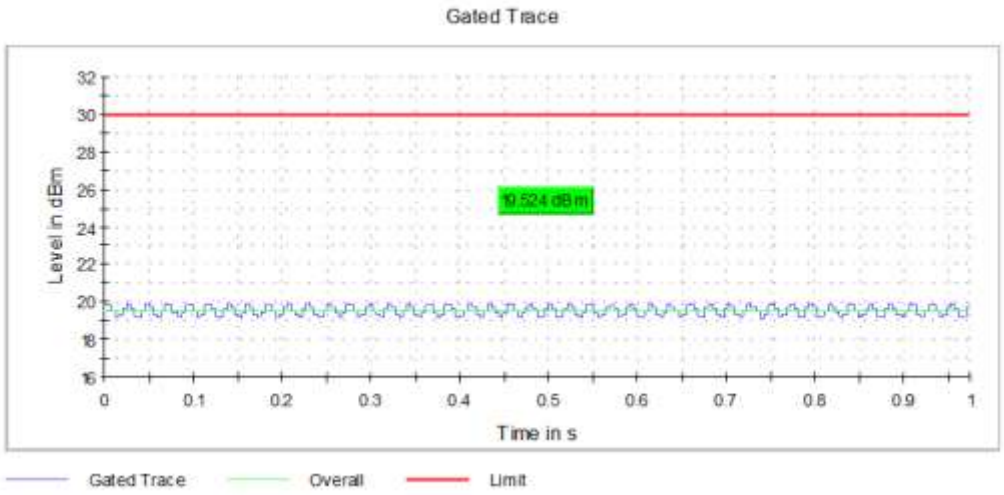
Graph 7: Lowest Channel Output Power Plot – Antenna 0



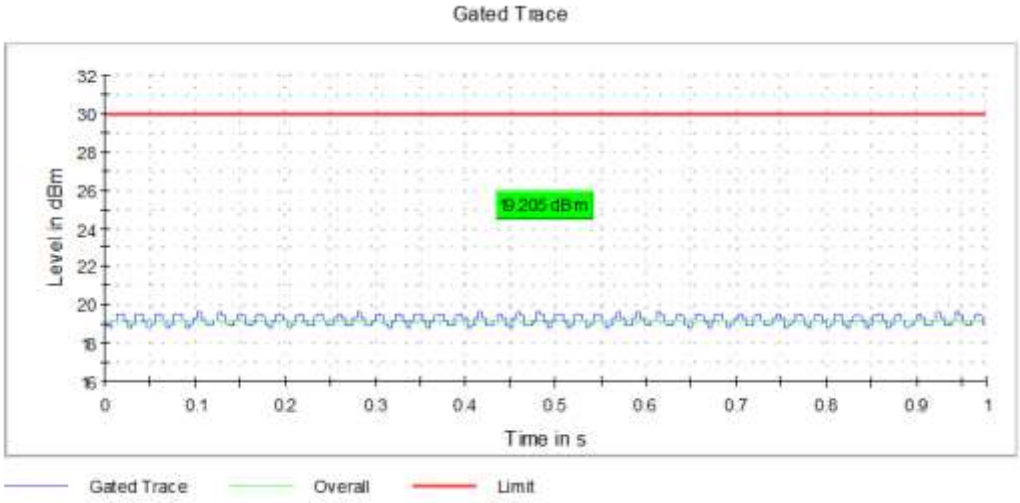
Graph 8: Middle Channel Output Power Plot– Antenna 0



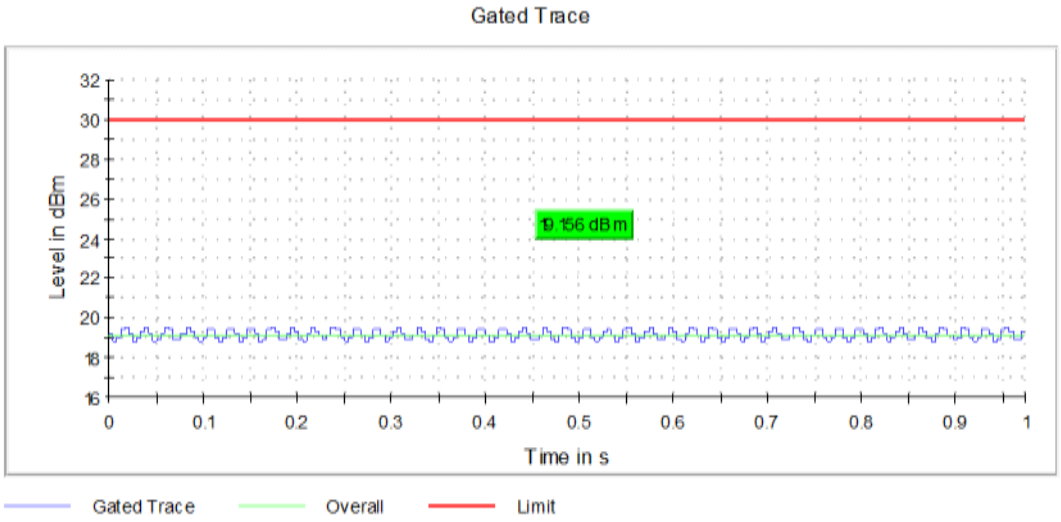
Graph 9: Highest Channel Output Power Plot – Antenna 0



Graph 10: Lowest Channel Output Power Plot – Antenna 1



Graph 11: Middle Channel Output Power Plot– Antenna 1



Graph 12: Highest Channel Output Power Plot – Antenna 1

6.2.5 §15.247(e) Power Spectral Density

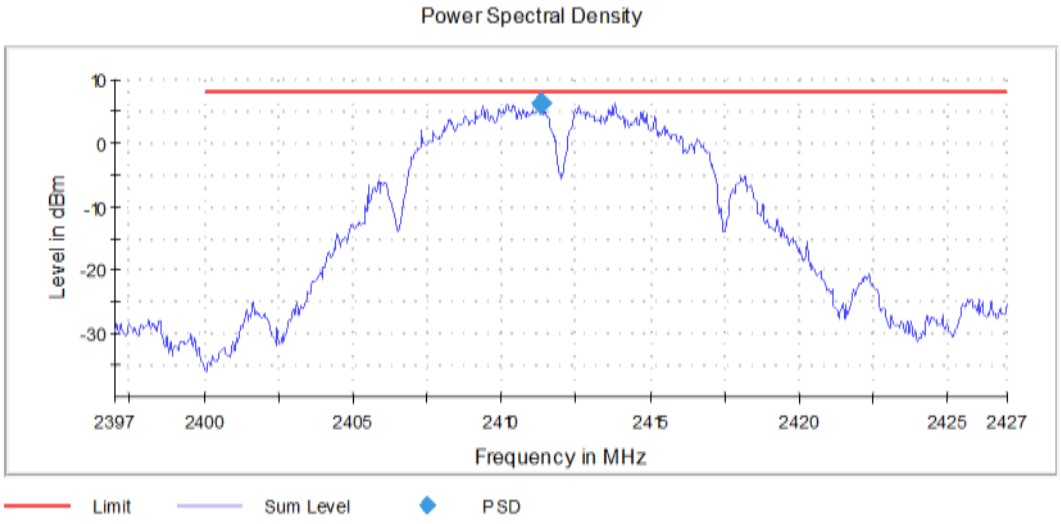
The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. Results of this testing are summarized below.

040-00460a Antenna Port 0 and 1

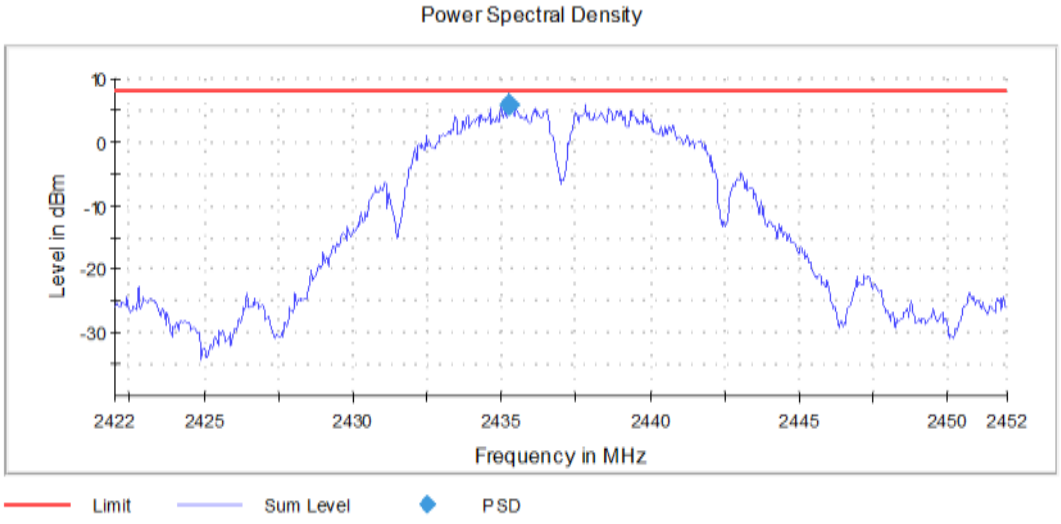
Frequency (MHz)	Antenna 0 Measurement (dBm)	Antenna 1 Measurement (dBm)
2412	6.2	6.0
2437	5.9	6.0
2462	6.7	6.5

Result

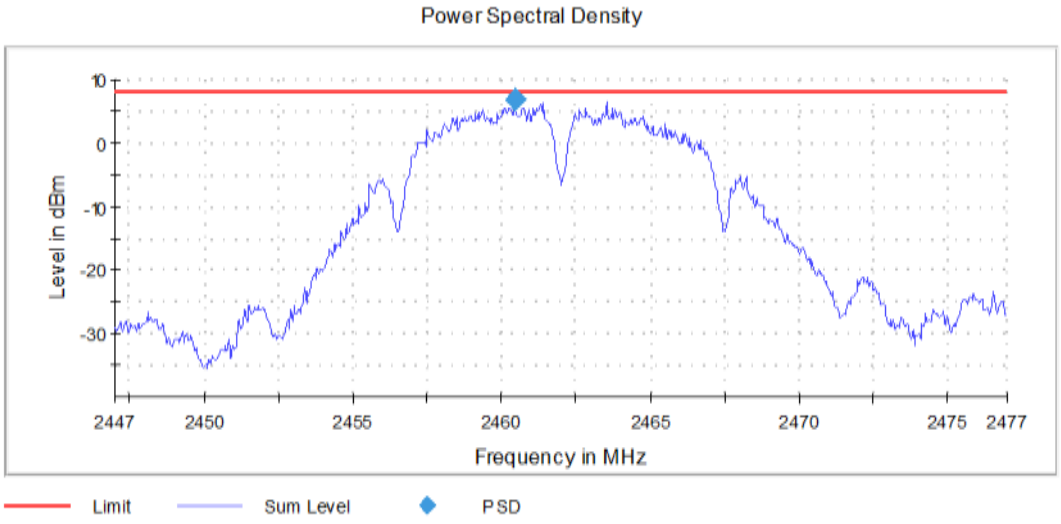
The maximum peak power spectral density was less than the limit of 8 dBm; therefore, the EUT complies with the specification.



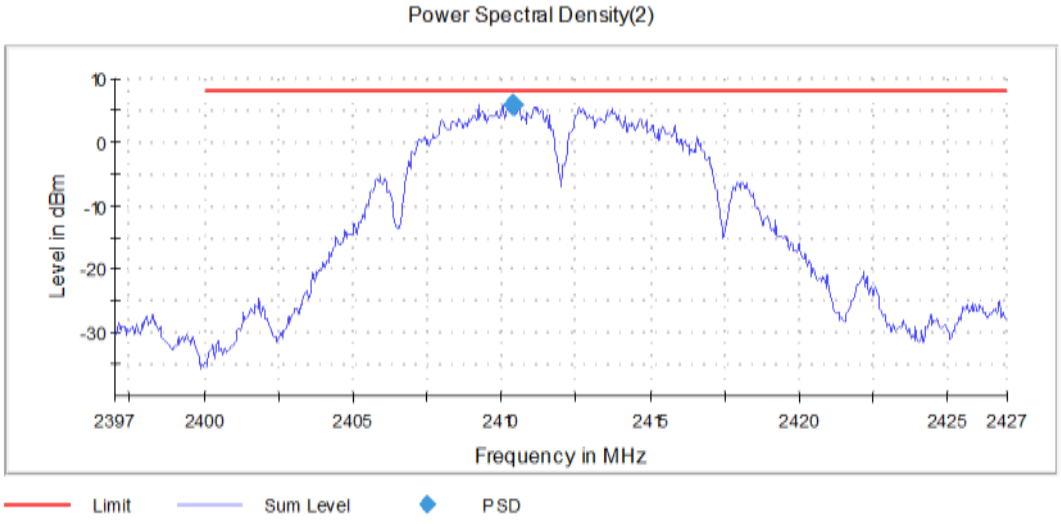
Graph 13: Lowest Channel PSD Plot – Antenna 0



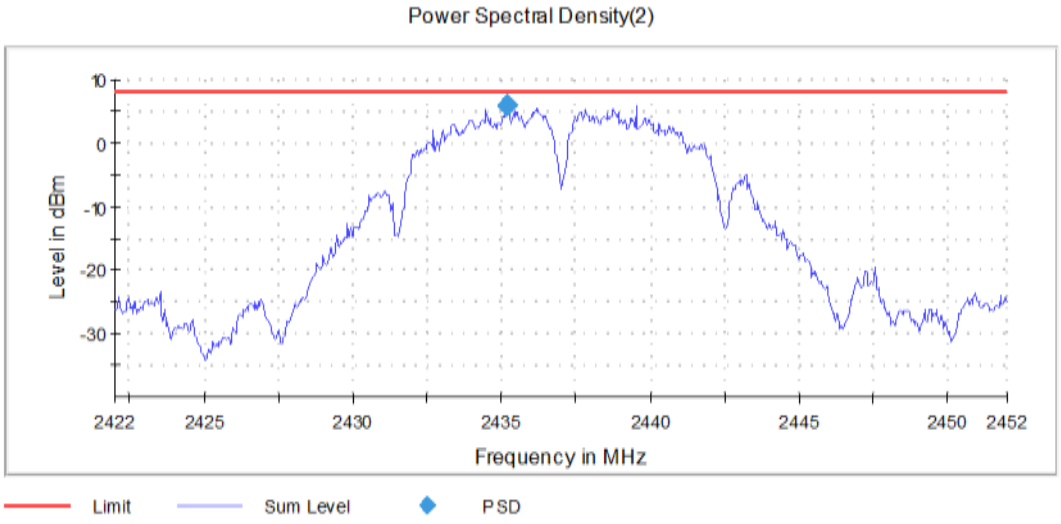
Graph 14: Middle Channel PSD Plot – Antenna 0



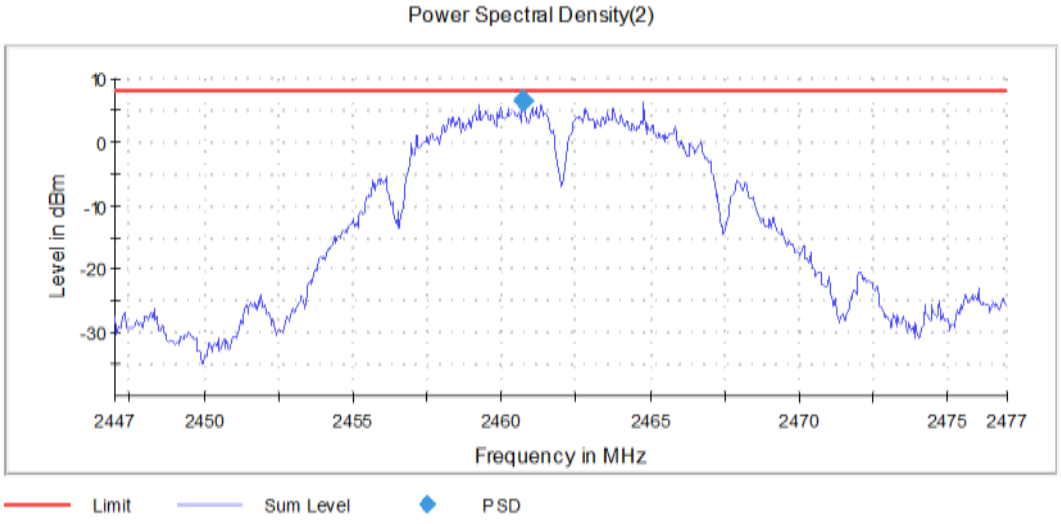
Graph 15: Highest Channel PSD Plot – Antenna 0



Graph 16: Lowest Channel PSD Plot – Antenna 1



Graph 17: Middle Channel PSD Plot – Antenna 1



Graph 18: Highest Channel PSD Plot – Antenna 1

6.2.6 §15.247(d) Conducted Spurious Emissions

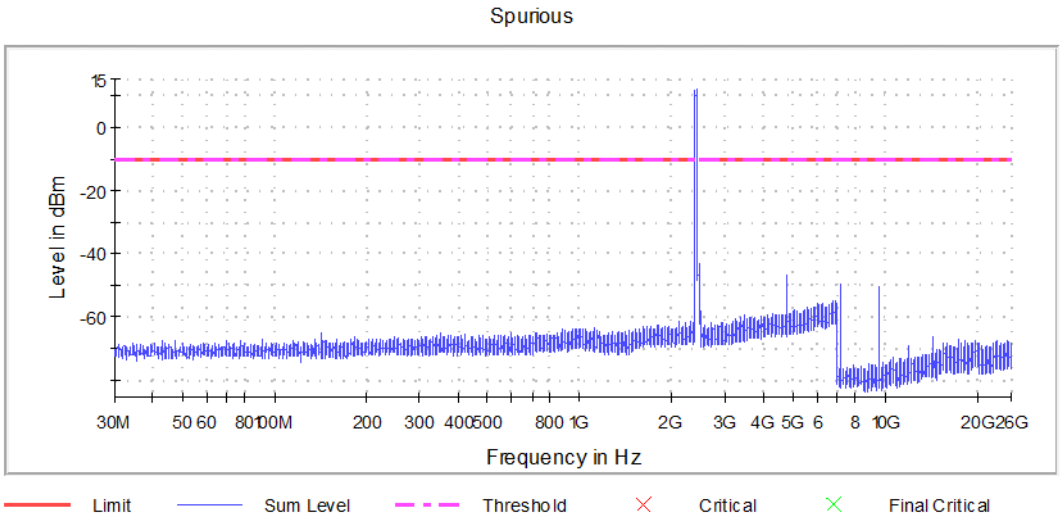
The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental frequency was investigated to measure any antenna-conducted emissions. The tables show the measurement data from spurious emissions noted across the frequency range when transmitting at the lowest frequency, middle frequency, and upper frequency. Shown below are plots with the EUT tuned to the upper and lower channels. These demonstrate compliance with the provisions of this section.

040-00460a Antenna Port 0 and 1

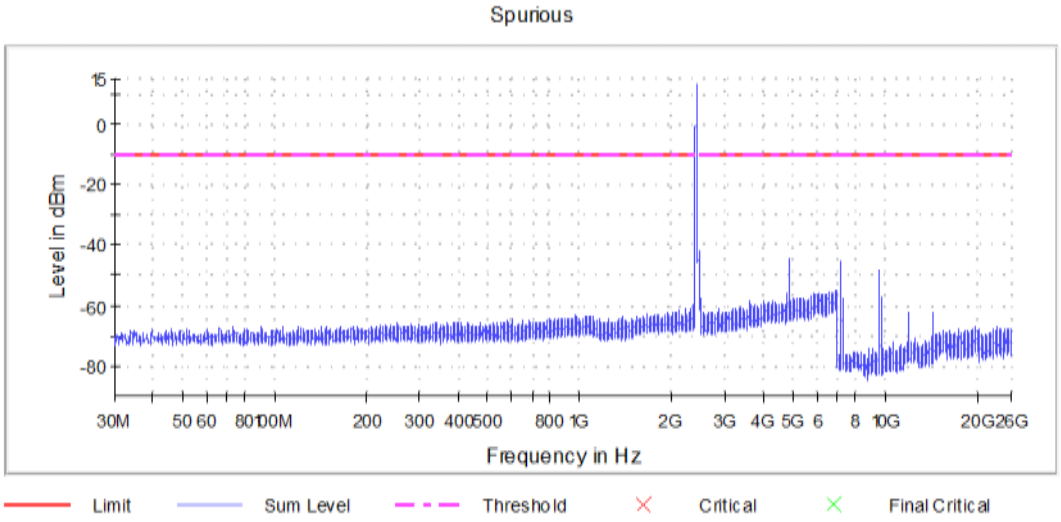
The emissions must be attenuated 30 dB below the highest power level measured within the authorized band as measured with a 100 kHz RBW. The highest power measured in was 19.7 dBm; therefore, the criteria is 19.7 – 30 = -10.3 dBm.

Result

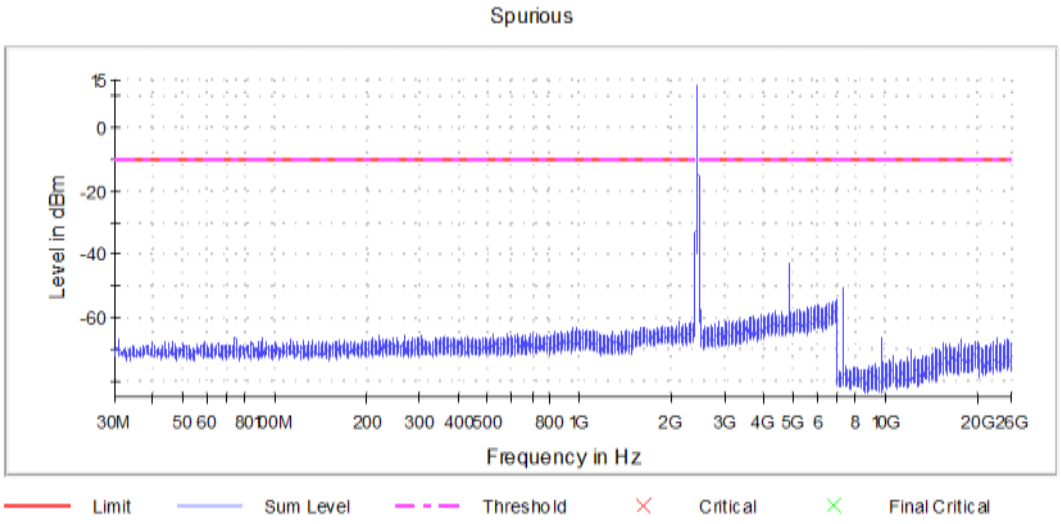
Conducted spurious emissions were attenuated 30 dB or more below the fundamental; therefore, the EUT complies with the specification.



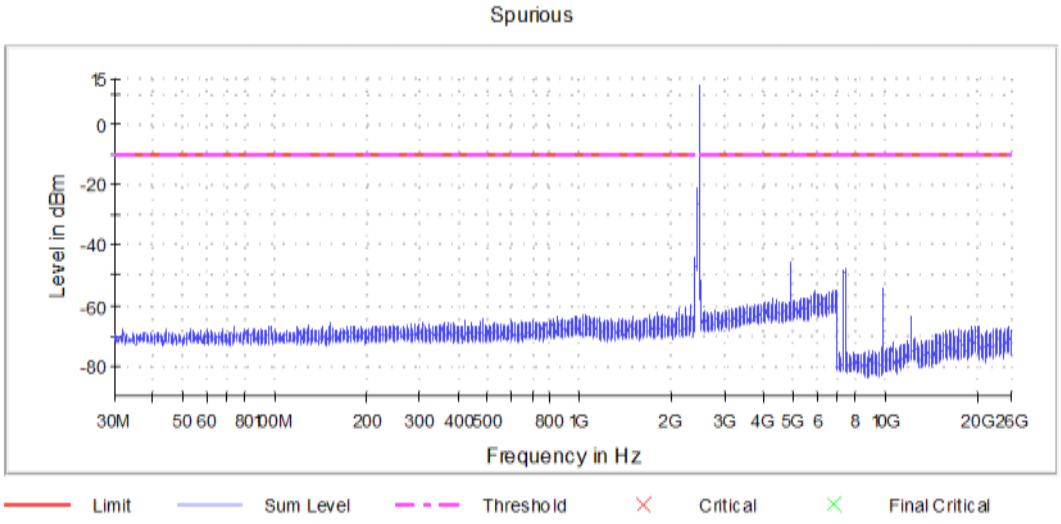
Graph 19: Transmitting on Channel 1, Power Setting 19– Antenna 0



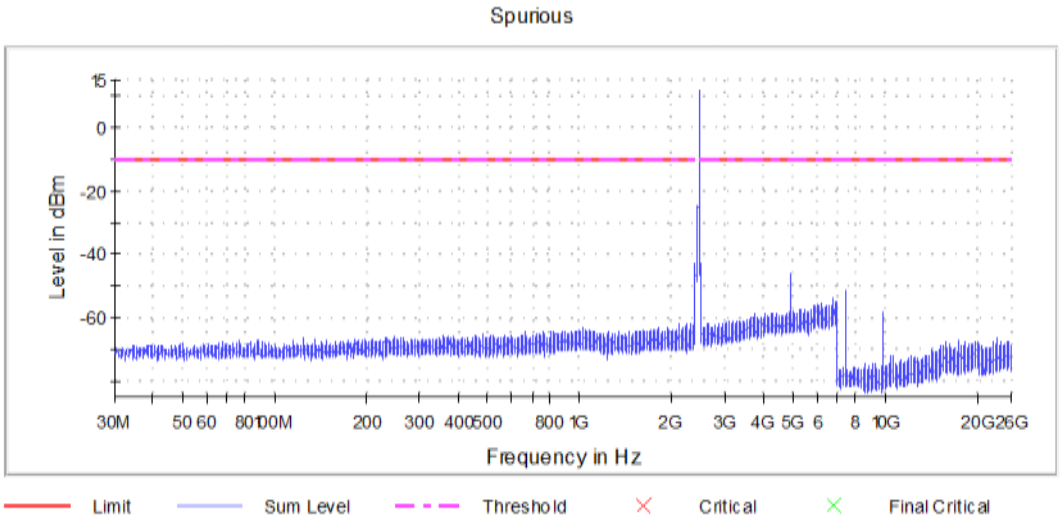
Graph 20: Transmitting on Channel 2, Power Setting 20– Antenna 0



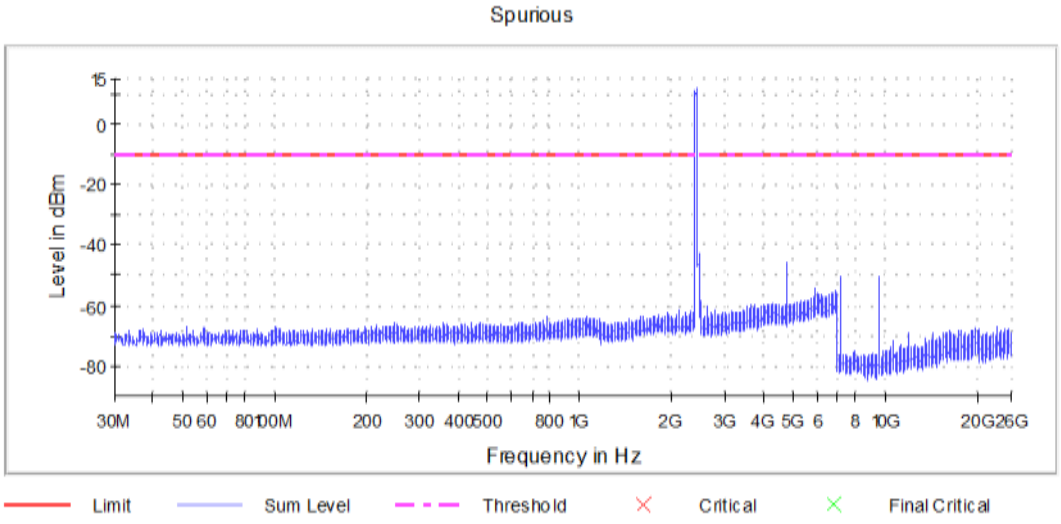
Graph 21: Transmitting on Channel 6, Power Setting 20– Antenna 0



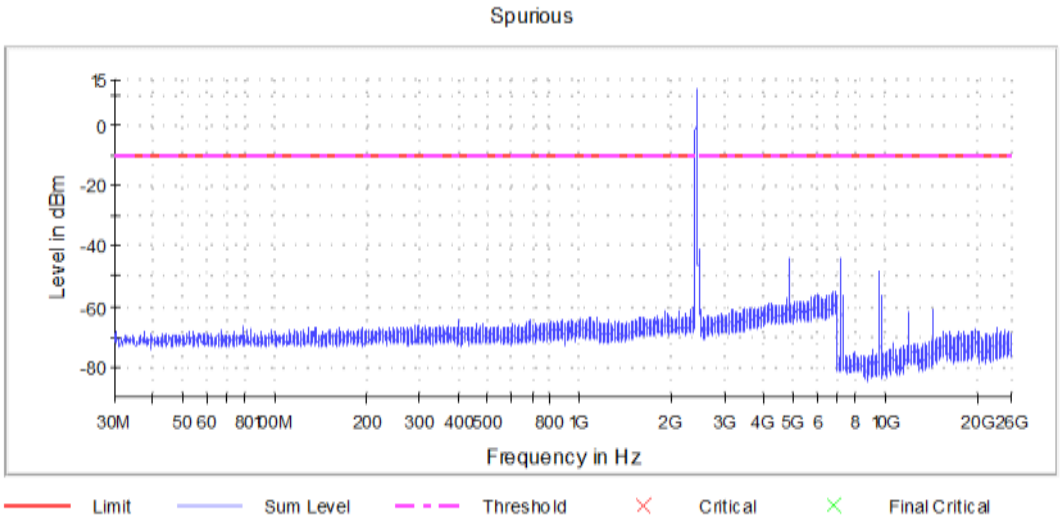
Graph 22: Transmitting on Channel 10, Power Setting 20– Antenna 0



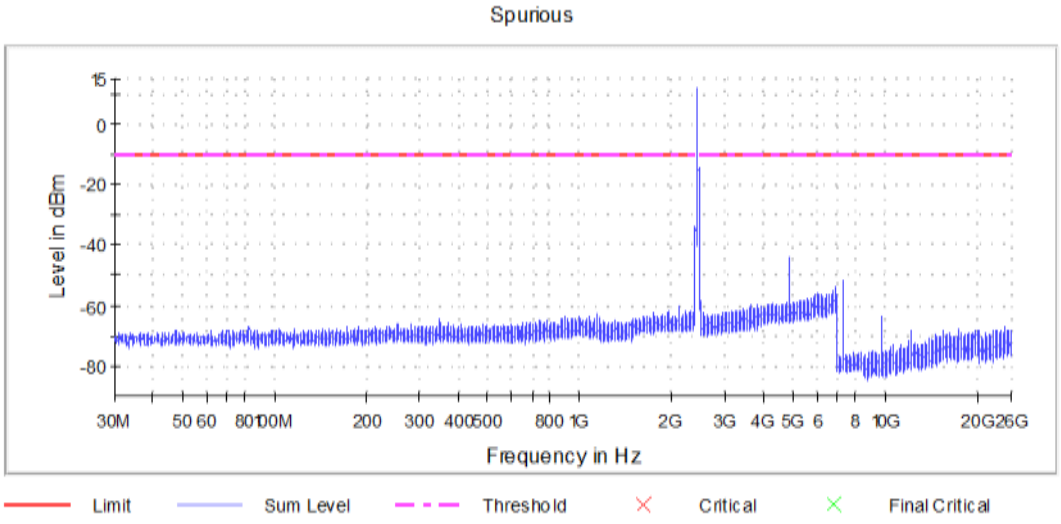
Graph 23: Transmitting on Channel 11, Power Setting 19– Antenna 0



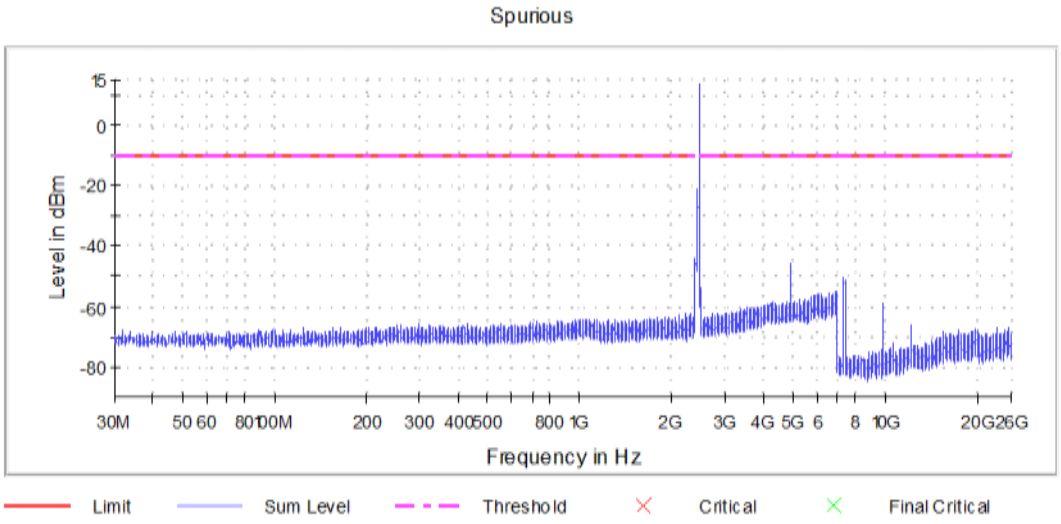
Graph 24: Transmitting on Channel 1, Power Setting 19– Antenna 1



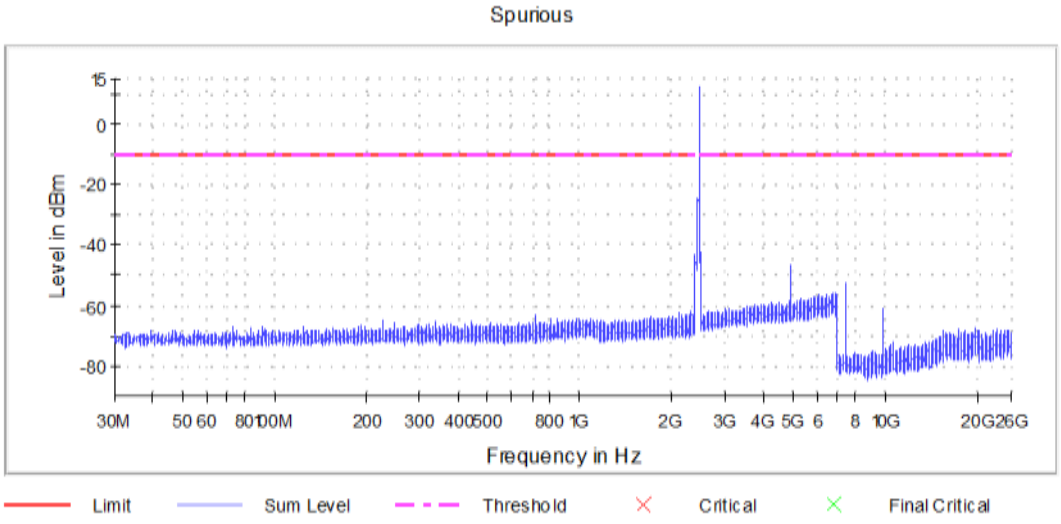
Graph 25: Transmitting on Channel 2, Power Setting 20– Antenna 1



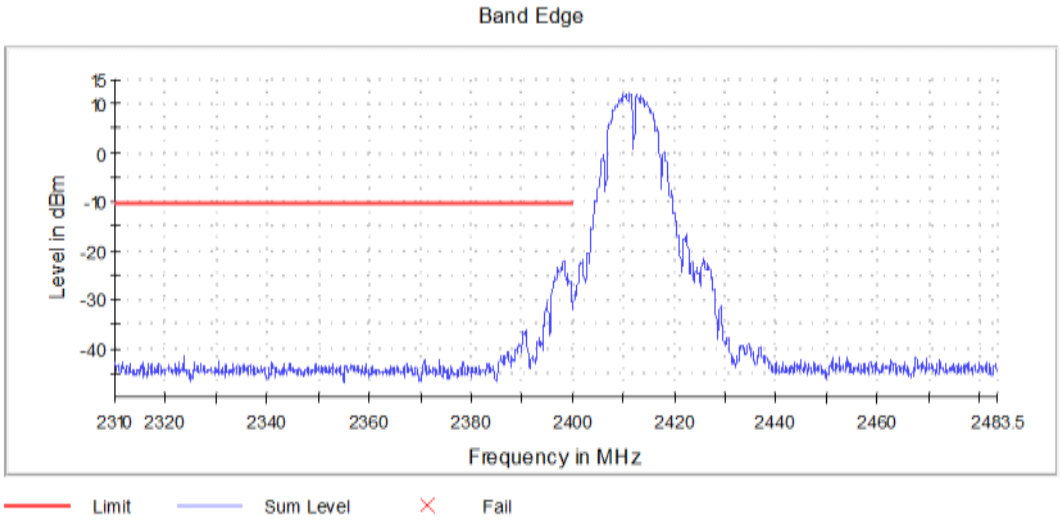
Graph 26: Transmitting on Channel 6, Power Setting 20– Antenna 1



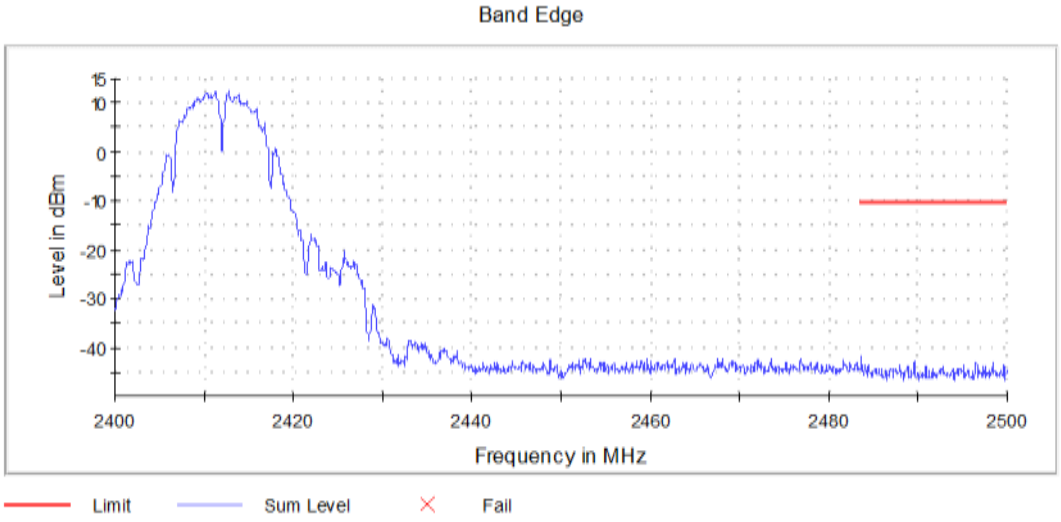
Graph 27: Transmitting on Channel 10, Power Setting 20– Antenna 1



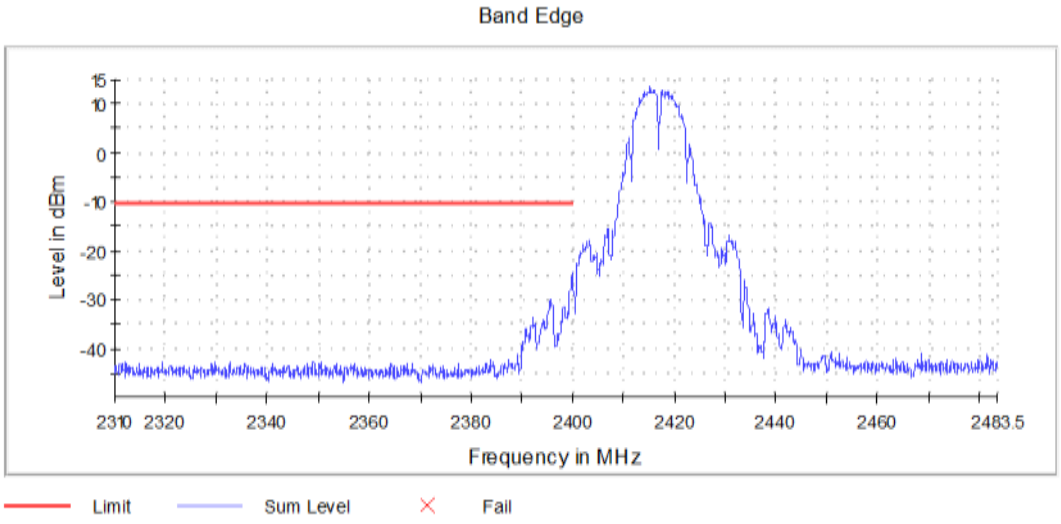
Graph 28: Transmitting on Channel 11, Power Setting 19– Antenna 1



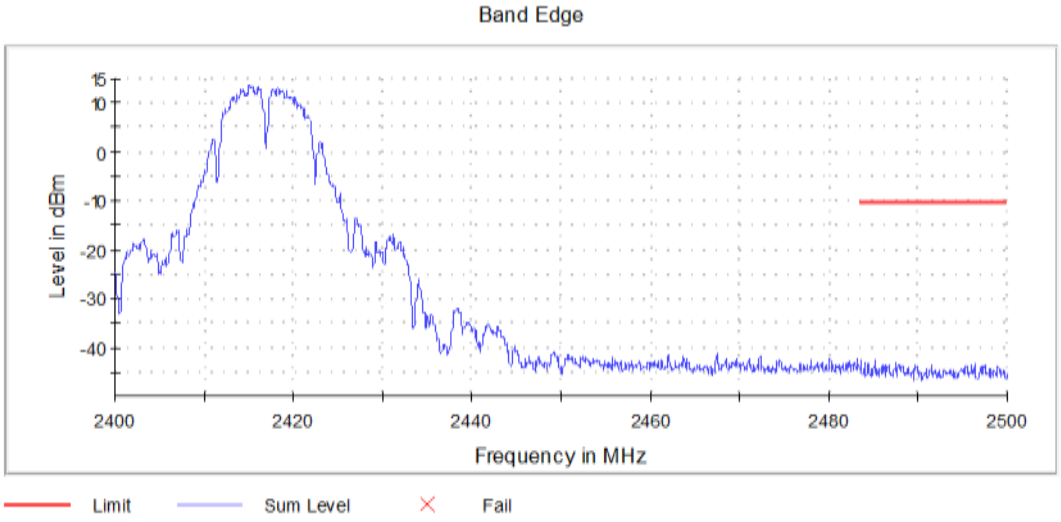
Graph 29: Lower Band Edge Plot Transmitting on Channel 1, Power Setting 19 – Antenna 0



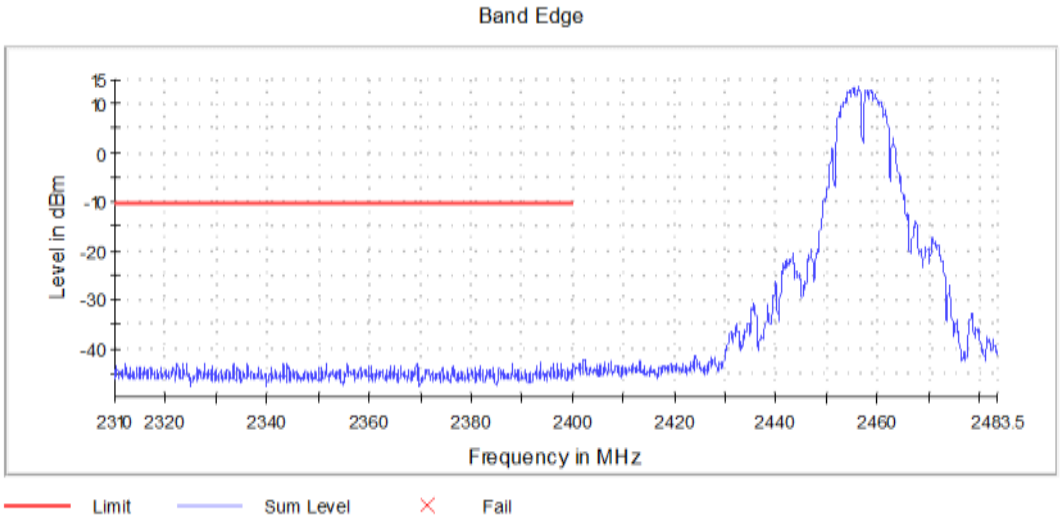
Graph 30: Upper Band Edge Plot Transmitting on Channel 1, Power Setting 19 – Antenna 0



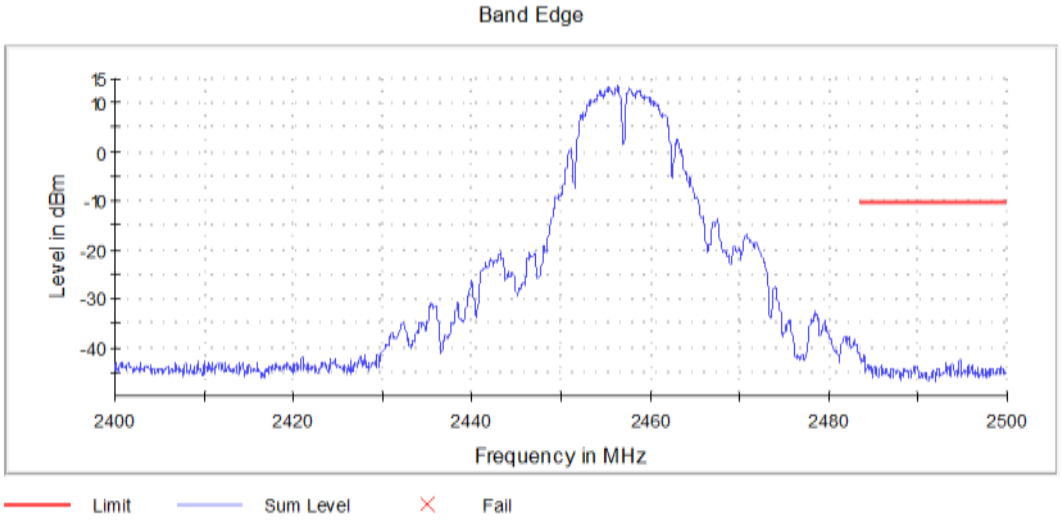
Graph 31: Lower Band Edge Plot Transmitting on Channel 2, Power Setting 20 – Antenna 0



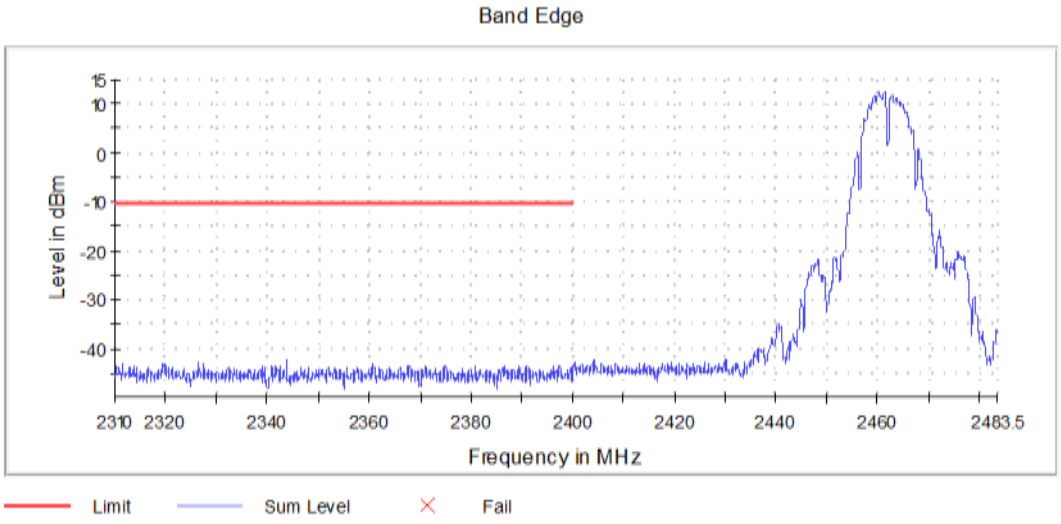
Graph 32: Upper Band Edge Plot Transmitting on Channel 2, Power Setting 20 – Antenna 0



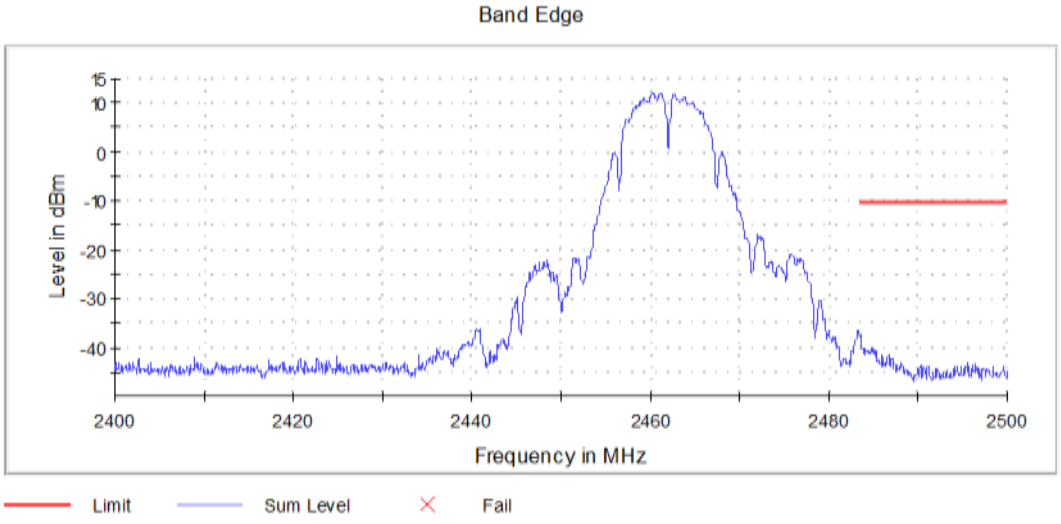
Graph 33: Lower Band Edge Plot Transmitting on Channel 10, Power Setting 20 – Antenna 0



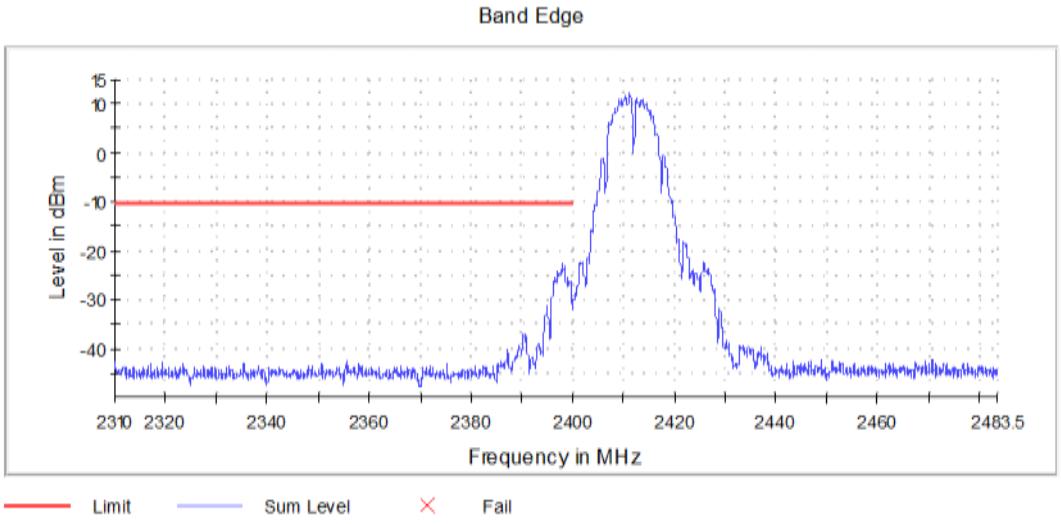
Graph 34: Upper Band Edge Plot Transmitting on Channel 10, Power Setting 20 – Antenna 0



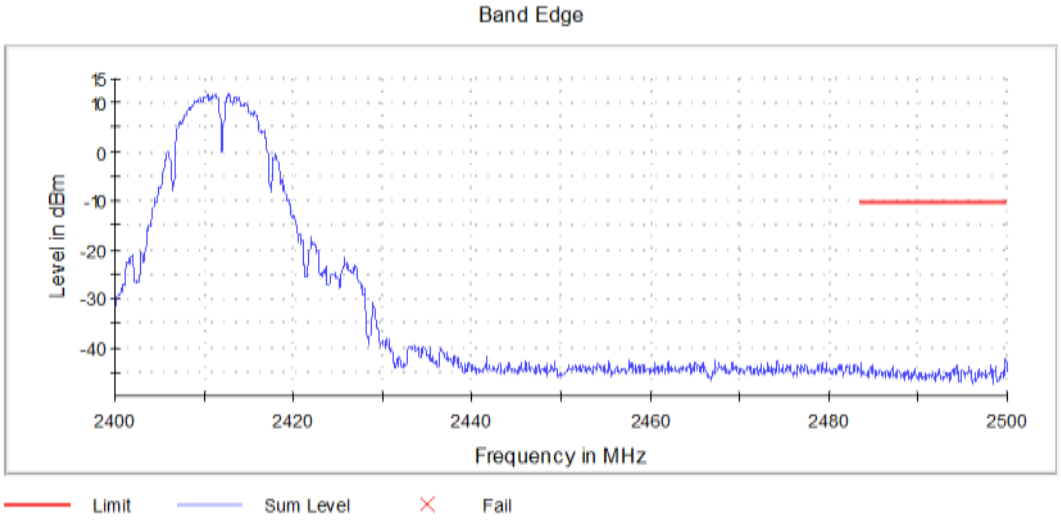
Graph 35: Lower Band Edge Plot Transmitting on Channel 11, Power Setting 19 – Antenna 0



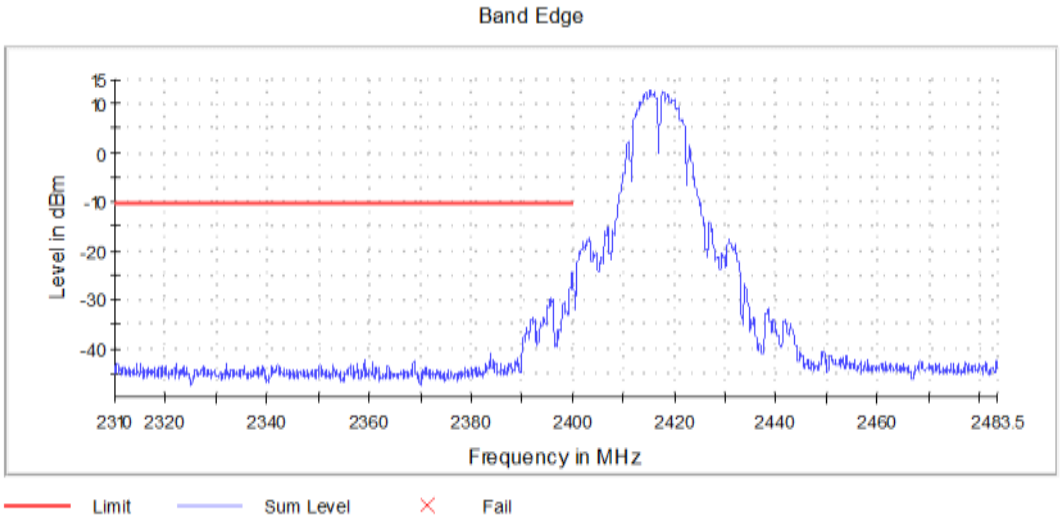
Graph 36: Upper Band Edge Plot Transmitting on Channel 11, Power Setting 19 – Antenna 0



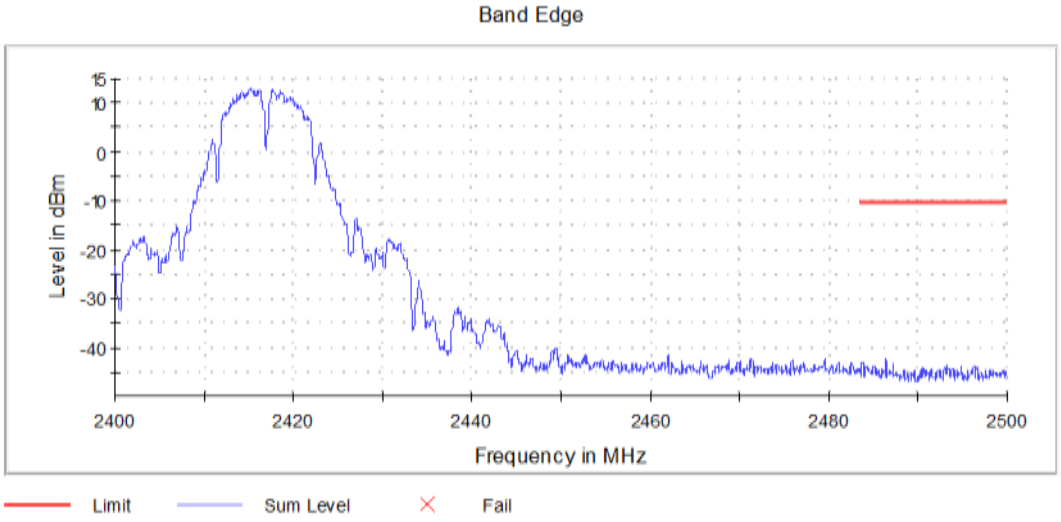
Graph 37: Lower Band Edge Plot Transmitting on Channel 1, Power Setting 19 – Antenna 1



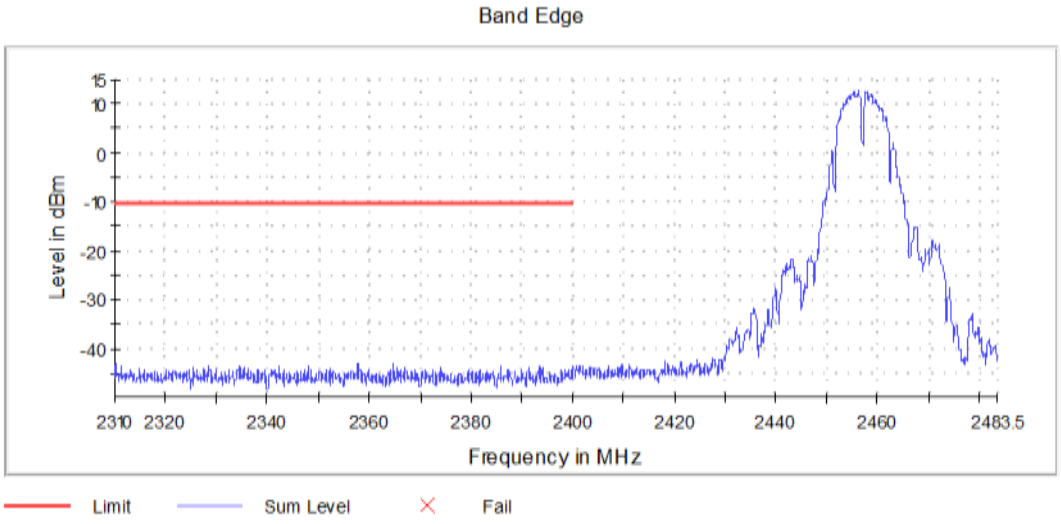
Graph 38: Upper Band Edge Plot Transmitting on Channel 1, Power Setting 19 – Antenna 1



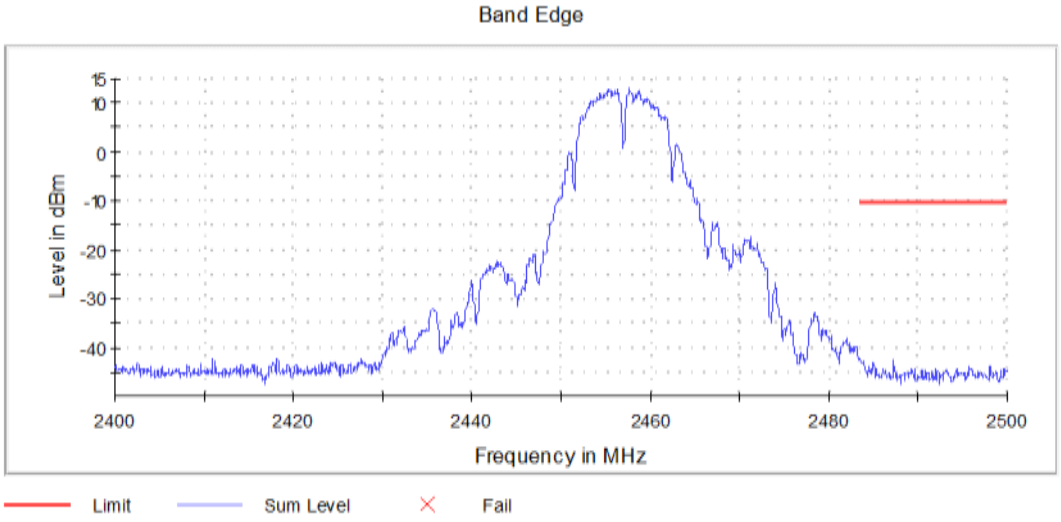
Graph 39: Lower Band Edge Plot Transmitting on Channel 2, Power Setting 20 – Antenna 1



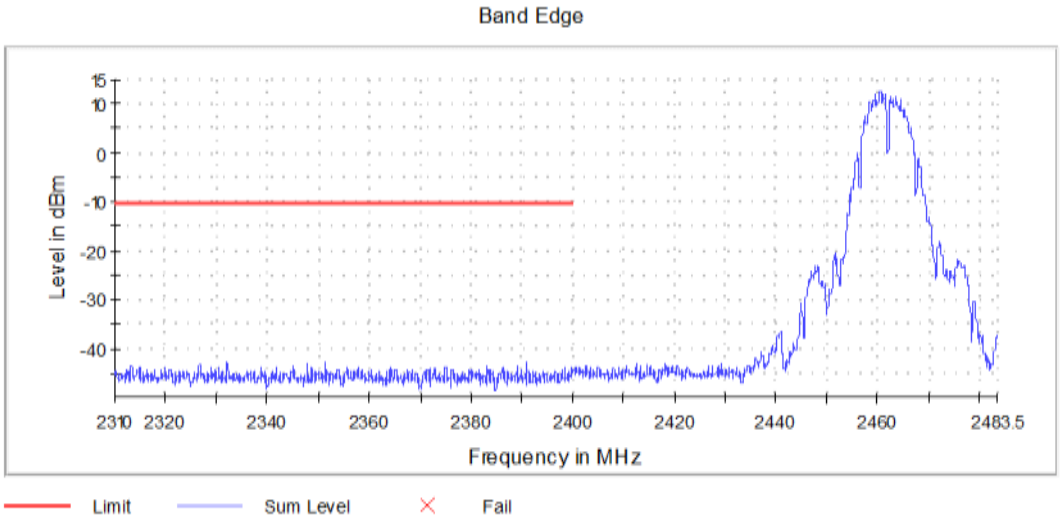
Graph 40: Upper Band Edge Plot Transmitting on Channel 2, Power Setting 20 – Antenna 1



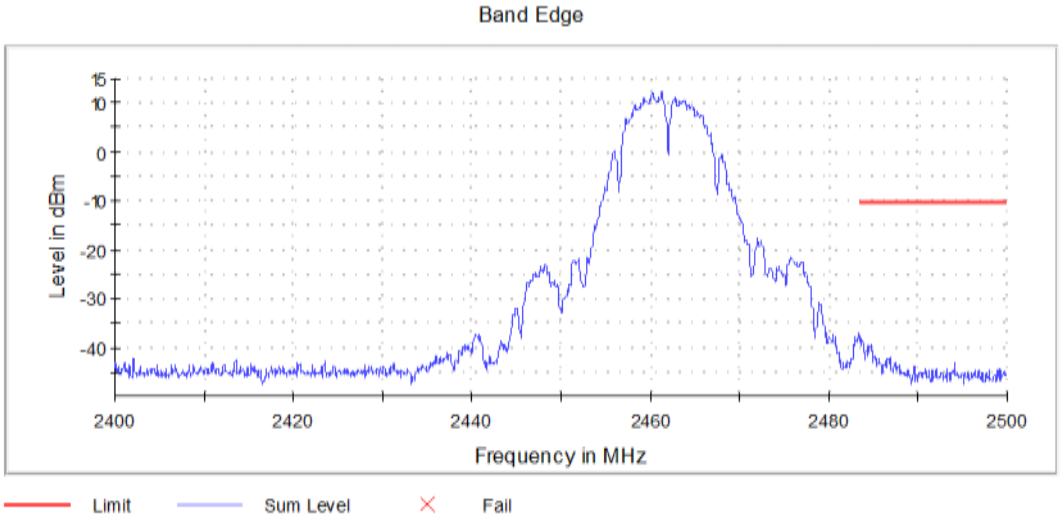
Graph 41: Lower Band Edge Plot Transmitting on Channel 10, Power Setting 20 – Antenna 1



Graph 42: Upper Band Edge Plot Transmitting on Channel 10, Power Setting 20 – Antenna 1



Graph 43: Lower Band Edge Plot Transmitting on Channel 11, Power Setting 19 – Antenna 1



Graph 44: Upper Band Edge Plot Transmitting on Channel 11, Power Setting 19 – Antenna 1

6.2.7 §15.247(d) Radiated Spurious Emissions in the Restricted Bands of §15.205

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental emission was investigated to measure any radiated emissions in the restricted bands. The following tables show measurements of any emission that fell into the restricted bands of §15.205. The tables show the worst-case emission measured from the EUT. For frequencies above 18.0 GHz, a measurement distance of 1 meter was used. The noise floor was a minimum of 6 dB below the limit. The emissions in the restricted bands must meet the limits specified in §15.209. Tabular data for each of the spurious emissions is shown below for each of the units with power set at the maximum power of any channel in the band. A 1Mbps data rate was found to be worst-case and the data is from testing in the worst-case data rate. The tabular data is from testing with the power set to the maximum for any channel in the band, setting 20. Plots of the band edges with the power set for the specific channels are also shown.

Result

All emissions in the restricted bands of §15.205 met the limits specified in §15.209; therefore, the EUT complies with the specification.

C4-T4T10-xx Antenna 0 (Model 1005180)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.7	38.5	45.2	74.0	-28.8
4824.0	Average	Vertical	-0.6	38.5	37.9	54.0	-16.1
4824.0	Peak	Horizontal	6.9	38.5	45.4	74.0	-28.6
4824.0	Average	Horizontal	-0.8	38.5	37.7	54.0	-16.3
7236.0	Peak	Vertical	5.8	42.7	48.5	74.0	-25.5
7236.0	Average	Vertical	-3.5	42.7	39.2	54.0	-14.8
7236.0	Peak	Horizontal	5.6	42.7	48.3	74.0	-25.7
7236.0	Average	Horizontal	-5.5	42.7	37.2	54.0	-16.8
12060.0	Peak	Vertical	4.5	47.9	52.4	74.0	-21.6
12060.0	Average	Vertical	-7.1	47.9	40.8	54.0	-13.2
12060.0	Peak	Horizontal	4.3	47.9	52.2	74.0	-21.8
12060.0	Average	Vertical	-7.1	47.9	40.8	54.0	-13.2

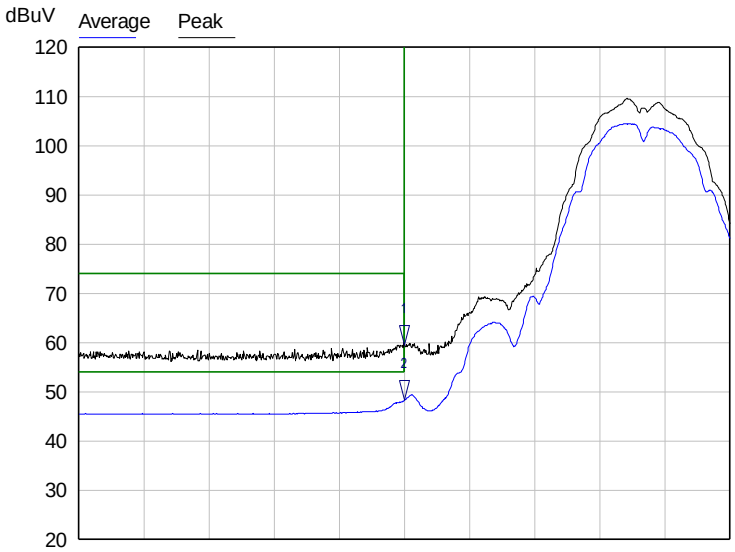
Table 2: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4874.0	Peak	Vertical	7.4	38.6	46.0	74.0	-28.0
4874.0	Average	Vertical	0.0	38.6	38.6	54.0	-15.4
4874.0	Peak	Horizontal	6.9	38.6	45.5	74.0	-28.5
4874.0	Average	Horizontal	-0.7	38.6	37.9	54.0	-16.1
7311.0	Peak	Vertical	4.0	42.9	46.9	74.0	-27.1
7311.0	Average	Vertical	-8.4	42.9	34.5	54.0	-19.5
7311.0	Peak	Horizontal	3.3	42.9	46.2	74.0	-27.8
7311.0	Average	Horizontal	-8.3	42.9	34.6	54.0	-19.4
12185.0	Peak	Vertical	4.4	47.8	52.2	74.0	-21.8
12185.0	Average	Vertical	-7.3	47.8	40.5	54.0	-13.5
12185.0	Peak	Horizontal	4.3	47.8	52.1	74.0	-21.9
12185.0	Average	Vertical	-7.0	47.8	40.8	54.0	-13.2

Table 3: Transmitting at the Middle Frequency

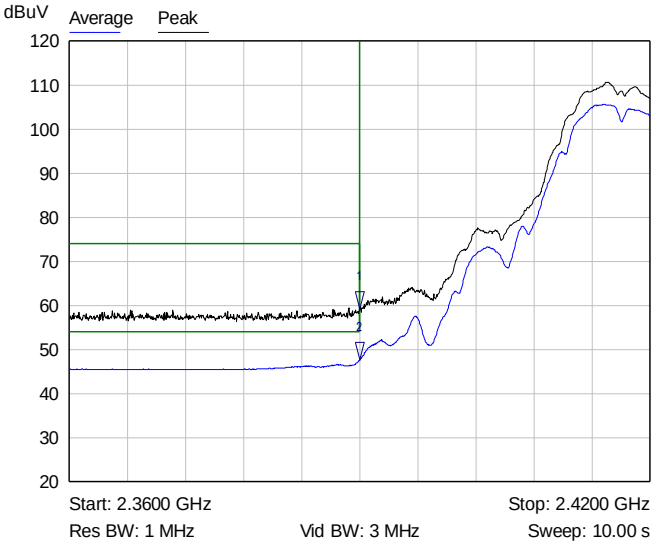
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	10.4	38.7	49.1	74.0	-24.9
4924.0	Average	Vertical	6.2	38.7	44.9	54.0	-9.1
4924.0	Peak	Horizontal	8.7	38.7	47.4	74.0	-26.6
4924.0	Average	Horizontal	3.6	38.7	42.3	54.0	-11.7
7386.0	Peak	Vertical	5.5	43.1	48.6	74.0	-25.4
7386.0	Average	Vertical	-4.9	43.1	38.2	54.0	-15.8
7386.0	Peak	Horizontal	4.8	43.1	47.9	74.0	-26.1
7386.0	Average	Horizontal	-6.4	43.1	36.7	54.0	-17.3
12310.0	Peak	Vertical	4.5	47.7	52.2	74.0	-21.8
12310.0	Average	Vertical	-7.6	47.7	40.1	54.0	-13.9
12310.0	Peak	Horizontal	3.9	47.7	51.6	74.0	-22.4
12310.0	Average	Vertical	-7.9	47.7	39.8	54.0	-14.2

Table 4: Transmitting at the Highest Frequency



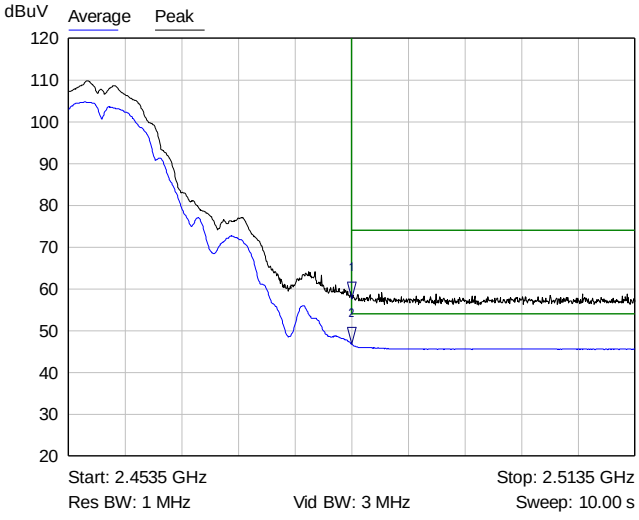
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	59.43 dBuV	
2	Average	2.3900 GHz	48.32 dBuV	

Graph 45: Radiated Band Edge Plot – Channel 1 at Power Setting 19



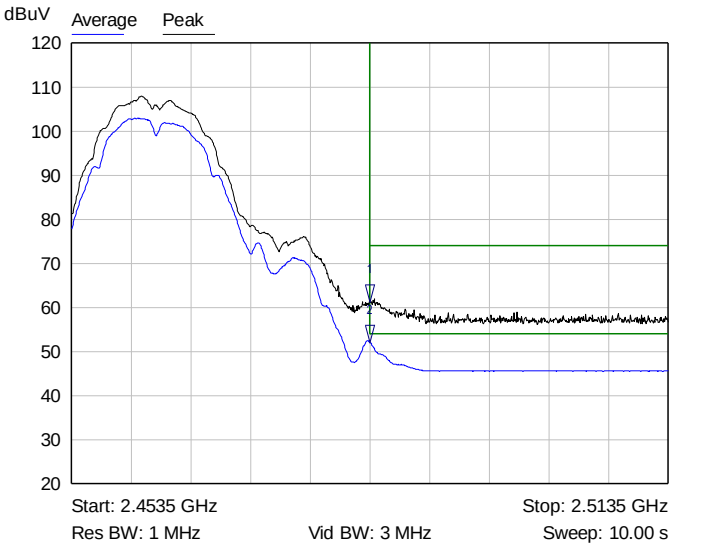
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	59.20 dBuV	
2	Average	2.3900 GHz	47.72 dBuV	

Graph 46: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	57.67 dBuV	
2	Average	2.4835 GHz	46.80 dBuV	

Graph 47: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4835 GHz	61.16 dBuV	
2 ▽	Average	2.4835 GHz	52.08 dBuV	

Graph 48: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4T10-xx Antenna 1 (Model 1005179)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.2	38.5	44.7	74.0	-29.3
4824.0	Average	Vertical	-4.4	38.5	34.1	54.0	-19.9
4824.0	Peak	Horizontal	6.5	38.5	45.0	74.0	-29.0
4824.0	Average	Horizontal	-2.2	38.5	36.3	54.0	-17.7
7236.0	Peak	Vertical	4.1	42.7	46.8	74.0	-27.2
7236.0	Average	Vertical	-6.9	42.7	35.8	54.0	-18.2
7236.0	Peak	Horizontal	5.2	42.7	47.9	74.0	-26.1
7236.0	Average	Horizontal	-5.2	42.7	37.5	54.0	-16.5
12060.0	Peak	Vertical	4.7	47.9	52.6	74.0	-21.4
12060.0	Average	Vertical	-7.3	47.9	40.6	54.0	-13.4
12060.0	Peak	Horizontal	3.7	47.9	51.6	74.0	-22.4
12060.0	Average	Vertical	-7.4	47.9	40.5	54.0	-13.5

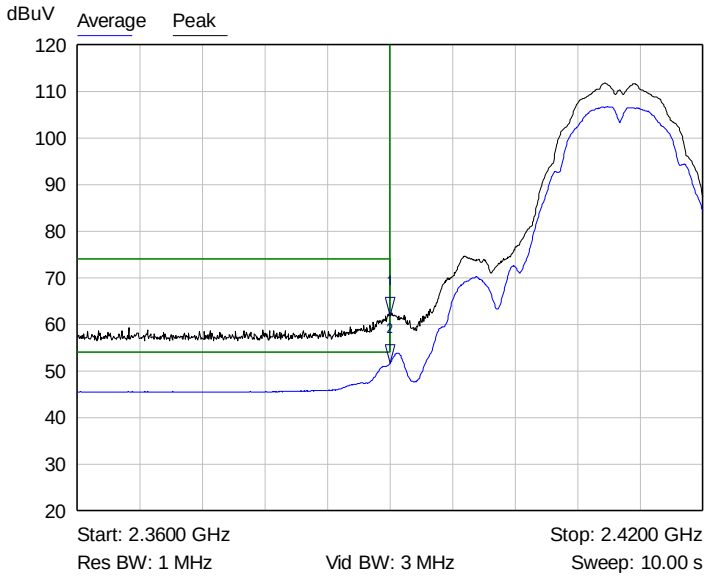
Table 5: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	5.8	38.6	44.4	74.0	-29.6
4874.0	Average	Vertical	-3.5	38.6	35.1	54.0	-18.9
4874.0	Peak	Horizontal	6.3	38.6	44.9	74.0	-29.1
4874.0	Average	Horizontal	-3.0	38.6	35.6	54.0	-18.4
7311.0	Peak	Vertical	4.7	42.9	47.6	74.0	-26.4
7311.0	Average	Vertical	-5.8	42.9	37.1	54.0	-16.9
7311.0	Peak	Horizontal	5.3	42.9	48.2	74.0	-25.8
7311.0	Average	Horizontal	-5.5	42.9	37.4	54.0	-16.6
12185.0	Peak	Vertical	3.5	47.8	51.3	74.0	-22.7
12185.0	Average	Vertical	-7.4	47.8	40.4	54.0	-13.6
12185.0	Peak	Horizontal	4.0	47.8	51.8	74.0	-22.2
12185.0	Average	Vertical	-7.7	47.8	40.1	54.0	-13.9

Table 6: Transmitting at the Middle Frequency

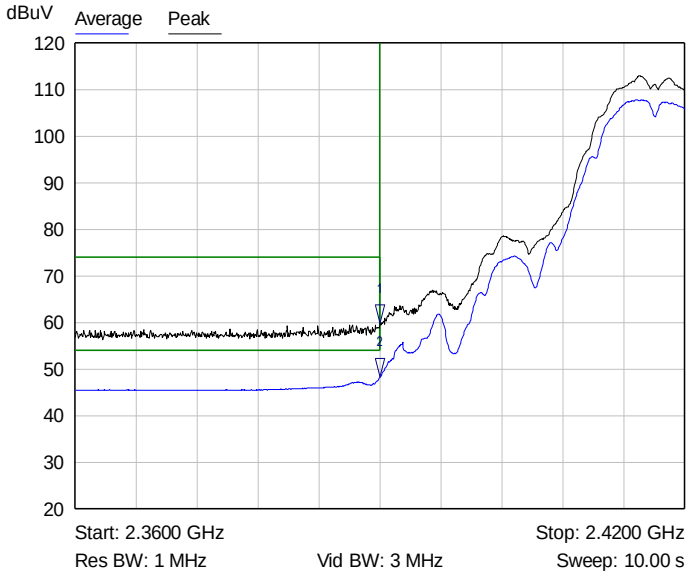
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	6.1	38.7	44.8	74.0	-29.2
4924.0	Average	Vertical	-3.3	38.7	35.4	54.0	-18.6
4924.0	Peak	Horizontal	6.7	38.7	45.4	74.0	-28.6
4924.0	Average	Horizontal	-1.5	38.7	37.2	54.0	-16.8
7386.0	Peak	Vertical	5.1	43.1	48.2	74.0	-25.8
7386.0	Average	Vertical	-5.8	43.1	37.3	54.0	-16.7
7386.0	Peak	Horizontal	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Horizontal	-5.8	43.1	37.3	54.0	-16.7
12310.0	Peak	Vertical	3.7	47.7	51.4	74.0	-22.6
12310.0	Average	Vertical	-7.6	47.7	40.1	54.0	-13.9
12310.0	Peak	Horizontal	4.1	47.7	51.8	74.0	-22.2
12310.0	Average	Vertical	-7.8	47.7	39.9	54.0	-14.1

Table 7: Transmitting at the Highest Frequency



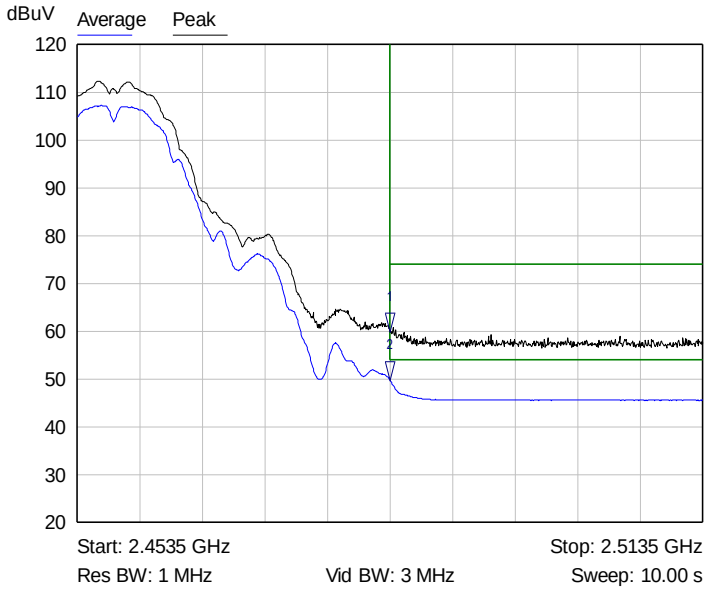
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	61.85 dBuV	
2	Average	2.3900 GHz	51.70 dBuV	

Graph 49: Radiated Band Edge Plot – Channel 1 at Power Setting 19



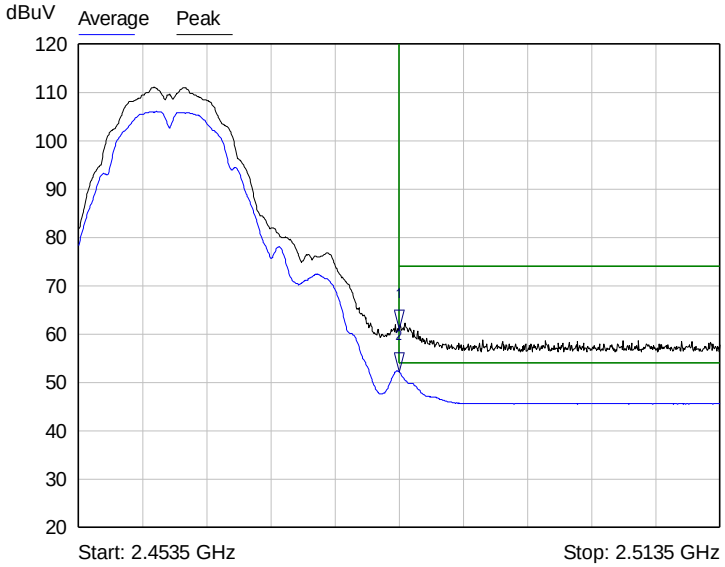
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	59.86 dBuV	
2	Average	2.3900 GHz	48.31 dBuV	

Graph 50: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	59.75 dBuV	
2	Average	2.4835 GHz	49.74 dBuV	

Graph 51: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	60.94 dBuV	
2	Average	2.4835 GHz	52.19 dBuV	

Graph 52: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4T8-XX Antenna 0 (Model 1005178)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824.0	Peak	Vertical	5.6	38.5	44.1	74.0	-29.9
4824.0	Average	Vertical	-4.7	38.5	33.8	54.0	-20.2
4824.0	Peak	Horizontal	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Horizontal	-4.8	38.5	33.7	54.0	-20.3
7236.0	Peak	Vertical	7.0	42.7	49.7	74.0	-24.3
7236.0	Average	Vertical	-0.8	42.7	41.9	54.0	-12.1
7236.0	Peak	Horizontal	5.8	42.7	48.5	74.0	-25.5
7236.0	Average	Horizontal	-4.4	42.7	38.3	54.0	-15.7
12060.0	Peak	Vertical	4.0	47.9	51.9	74.0	-22.1
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1
12060.0	Peak	Horizontal	3.5	47.9	51.4	74.0	-22.6
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1

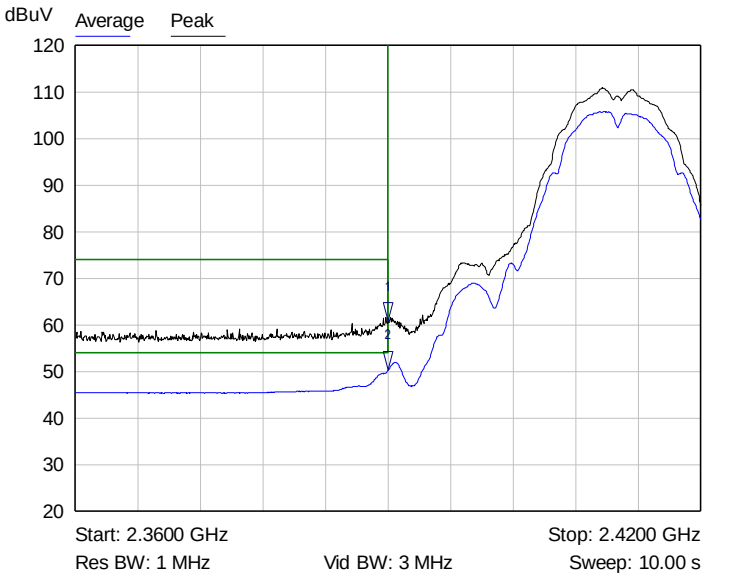
Table 8: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	5.4	38.6	44.0	74.0	-30.0
4874.0	Average	Vertical	-4.9	38.6	33.7	54.0	-20.3
4874.0	Peak	Horizontal	5.7	38.6	44.3	74.0	-29.7
4874.0	Average	Horizontal	-5.4	38.6	33.2	54.0	-20.8
7311.0	Peak	Vertical	5.8	42.9	48.7	74.0	-25.3
7311.0	Average	Vertical	-2.2	42.9	40.7	54.0	-13.3
7311.0	Peak	Horizontal	4.7	42.9	47.6	74.0	-26.4
7311.0	Average	Horizontal	-4.5	42.9	38.4	54.0	-15.6
12185.0	Peak	Vertical	2.5	47.8	50.3	74.0	-23.7
12185.0	Average	Vertical	-8.4	47.8	39.4	54.0	-14.6
12185.0	Peak	Horizontal	2.7	47.8	50.5	74.0	-23.5
12185.0	Average	Vertical	-8.1	47.8	39.7	54.0	-14.3

Table 9: Transmitting at the Middle Frequency

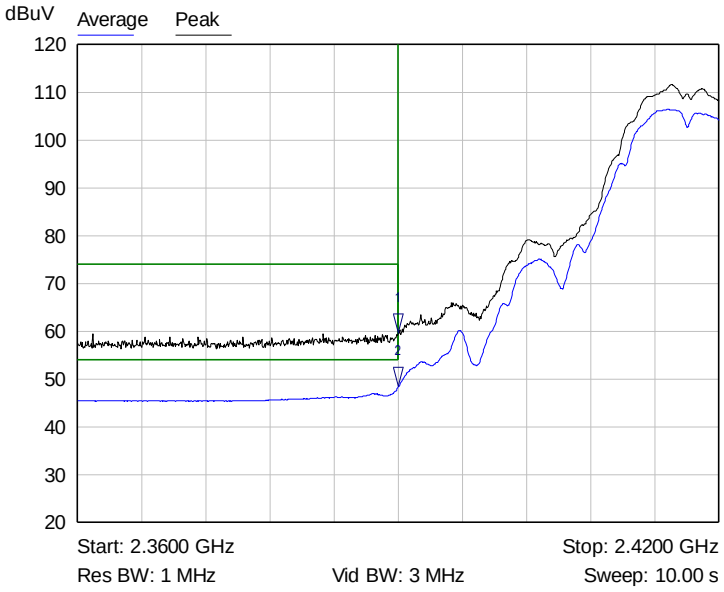
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	7.0	38.7	45.7	74.0	-28.3
4924.0	Average	Vertical	-2.2	38.7	36.5	54.0	-17.5
4924.0	Peak	Horizontal	6.1	38.7	44.8	74.0	-29.2
4924.0	Average	Horizontal	-2.6	38.7	36.1	54.0	-17.9
7386.0	Peak	Vertical	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Vertical	-4.3	43.1	38.8	54.0	-15.2
7386.0	Peak	Horizontal	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Horizontal	-6.1	43.1	37.0	54.0	-17.0
12310.0	Peak	Vertical	2.7	47.7	50.4	74.0	-23.6
12310.0	Average	Vertical	-8.5	47.7	39.2	54.0	-14.8
12310.0	Peak	Horizontal	3.1	47.7	50.8	74.0	-23.2
12310.0	Average	Vertical	-8.5	47.7	39.2	54.0	-14.8

Table 10: Transmitting at the Highest Frequency



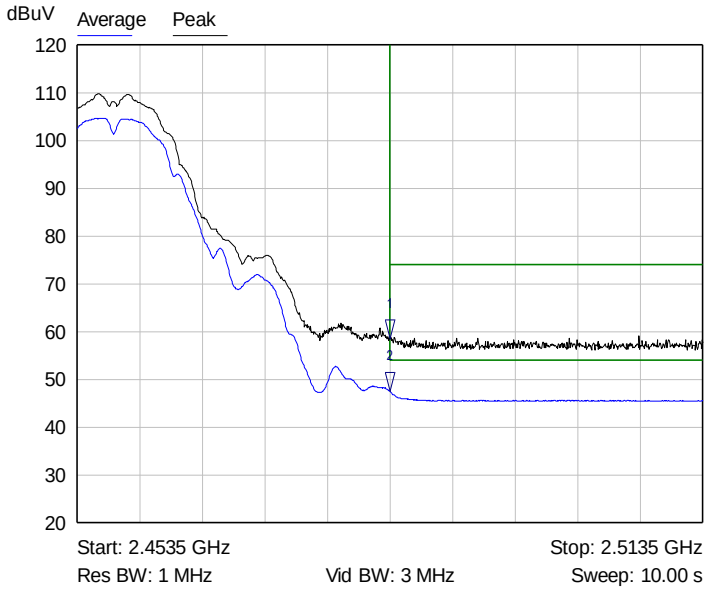
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	60.87 dBuV	
2	Average	2.3900 GHz	50.28 dBuV	

Graph 53: Radiated Band Edge Plot – Channel 1 at Power Setting 19



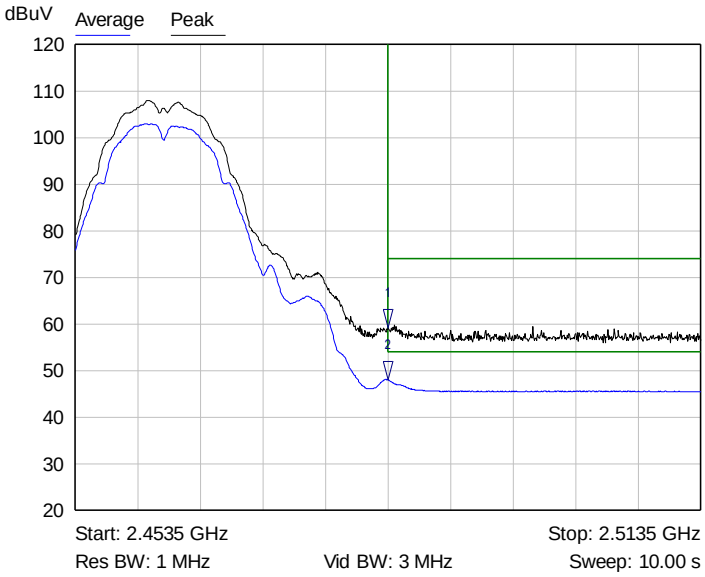
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	59.60 dBuV	
2	Average	2.3900 GHz	48.48 dBuV	

Graph 54: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	58.56 dBuV	
2	Average	2.4835 GHz	47.49 dBuV	

Graph 55: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	59.17 dBuV	
2	Average	2.4835 GHz	47.99 dBuV	

Graph 56: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4T8-XX Antenna 1 (Model 1005179)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	5.4	38.5	43.9	74.0	-30.1
4824.0	Average	Vertical	-3.4	38.5	35.1	54.0	-18.9
4824.0	Peak	Horizontal	6.4	38.5	44.9	74.0	-29.1
4824.0	Average	Horizontal	-3.4	38.5	35.1	54.0	-18.9
7236.0	Peak	Vertical	6.3	42.7	49.0	74.0	-25.0
7236.0	Average	Vertical	-2.7	42.7	40.0	54.0	-14.0
7236.0	Peak	Horizontal	6.7	42.7	49.4	74.0	-24.6
7236.0	Average	Horizontal	-1.9	42.7	40.8	54.0	-13.2
12060.0	Peak	Vertical	3.0	47.9	50.9	74.0	-23.1
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1
12060.0	Peak	Horizontal	3.3	47.9	51.2	74.0	-22.8
12060.0	Average	Vertical	-8.1	47.9	39.8	54.0	-14.2

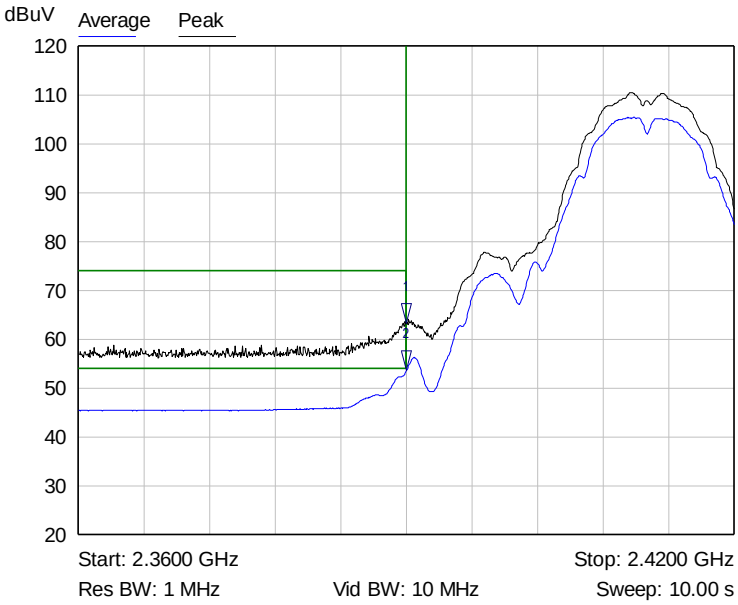
Table 11: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.6	38.6	45.2	74.0	-28.8
4874.0	Average	Vertical	-1.8	38.6	36.8	54.0	-17.2
4874.0	Peak	Horizontal	5.5	38.6	44.1	74.0	-29.9
4874.0	Average	Horizontal	-3.6	38.6	35.0	54.0	-19.0
7311.0	Peak	Vertical	4.4	42.9	47.3	74.0	-26.7
7311.0	Average	Vertical	-6.7	42.9	36.2	54.0	-17.8
7311.0	Peak	Horizontal	5.1	42.9	48.0	74.0	-26.0
7311.0	Average	Horizontal	-4.5	42.9	38.4	54.0	-15.6
12185.0	Peak	Vertical	2.2	47.8	50.0	74.0	-24.0
12185.0	Average	Vertical	-8.3	47.8	39.5	54.0	-14.5
12185.0	Peak	Horizontal	2.8	47.8	50.6	74.0	-23.4
12185.0	Average	Vertical	-8.4	47.8	39.4	54.0	-14.6

Table 12: Transmitting at the Middle Frequency

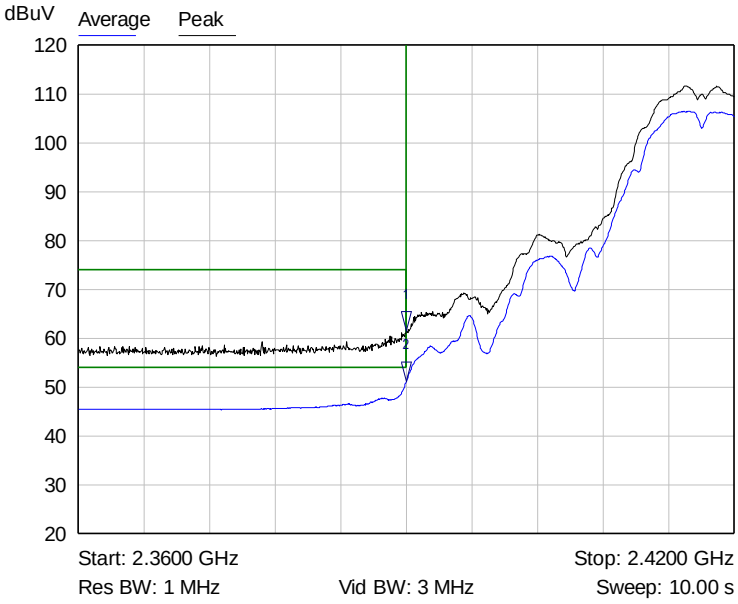
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	6.3	38.7	45.0	74.0	-29.0
4924.0	Average	Vertical	-3.1	38.7	35.6	54.0	-18.4
4924.0	Peak	Horizontal	6.5	38.7	45.2	74.0	-28.8
4924.0	Average	Horizontal	-1.8	38.7	36.9	54.0	-17.1
7386.0	Peak	Vertical	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Vertical	-4.9	43.1	38.2	54.0	-15.8
7386.0	Peak	Horizontal	5.0	43.1	48.1	74.0	-25.9
7386.0	Average	Horizontal	-4.8	43.1	38.3	54.0	-15.7
12310.0	Peak	Vertical	2.0	47.7	49.7	74.0	-24.3
12310.0	Average	Vertical	-9.3	47.7	38.4	54.0	-15.6
12310.0	Peak	Horizontal	2.2	47.7	49.9	74.0	-24.1
12310.0	Average	Vertical	-9.1	47.7	38.6	54.0	-15.4

Table 13: Transmitting at the Highest Frequency



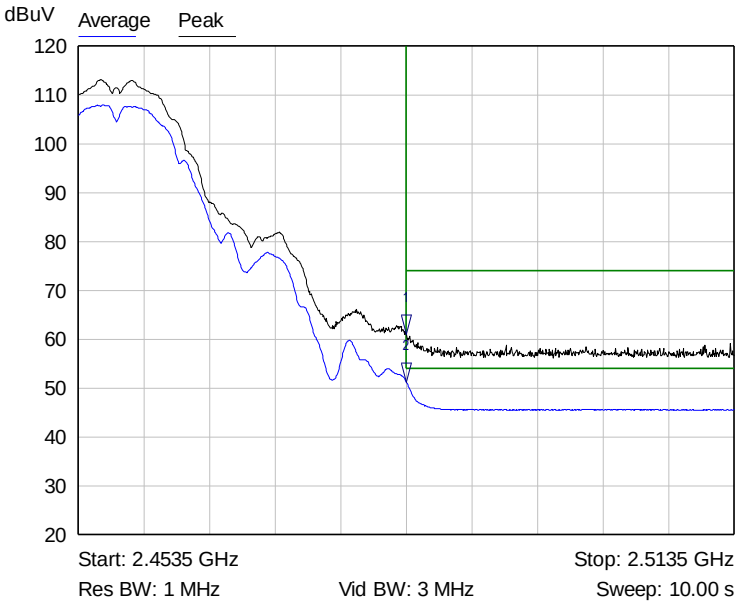
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	63.26 dBuV	
2	Average	2.3900 GHz	53.60 dBuV	

Graph 57: Radiated Band Edge Plot – Channel 1 at Power Setting 19



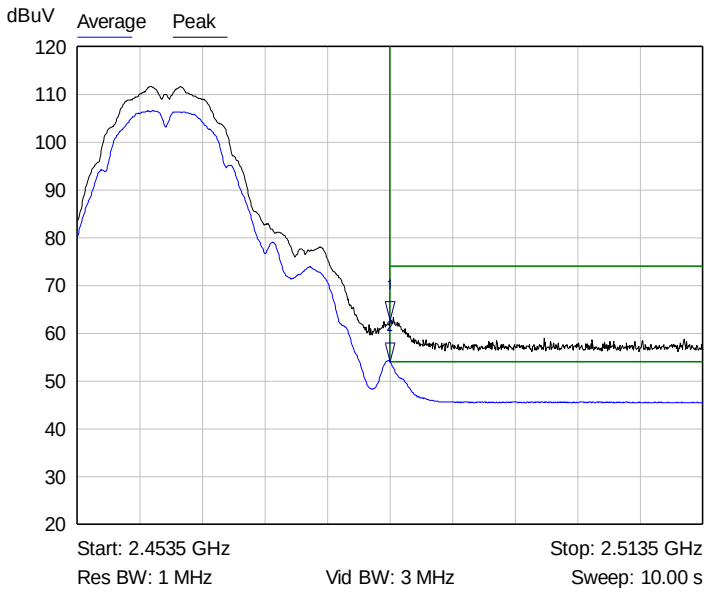
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	61.50 dBuV	
2	Average	2.3900 GHz	51.14 dBuV	

Graph 58: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	60.93 dBuV	
2	Average	2.4835 GHz	51.24 dBuV	

Graph 59: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	62.59 dBuV	
2	Average	2.4835 GHz	53.92 dBuV	

Graph 60: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4IW10-XX Antenna 0 (Model 1005097)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824.0	Peak	Vertical	6.9	38.5	45.4	74.0	-28.6
4824.0	Average	Vertical	-5.2	38.5	33.3	54.0	-20.7
4824.0	Peak	Horizontal	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Horizontal	-5.1	38.5	33.4	54.0	-20.6
7236.0	Peak	Vertical	4.9	42.7	47.6	74.0	-26.4
7236.0	Average	Vertical	-5.9	42.7	36.8	54.0	-17.2
7236.0	Peak	Horizontal	6.0	42.7	48.7	74.0	-25.3
7236.0	Average	Horizontal	-5.1	42.7	37.6	54.0	-16.4
12060.0	Peak	Vertical	3.6	47.9	51.5	74.0	-22.5
12060.0	Average	Vertical	-7.4	47.9	40.5	54.0	-13.5
12060.0	Peak	Horizontal	4.1	47.9	52.0	74.0	-22.0
12060.0	Average	Vertical	-7.2	47.9	40.7	54.0	-13.3

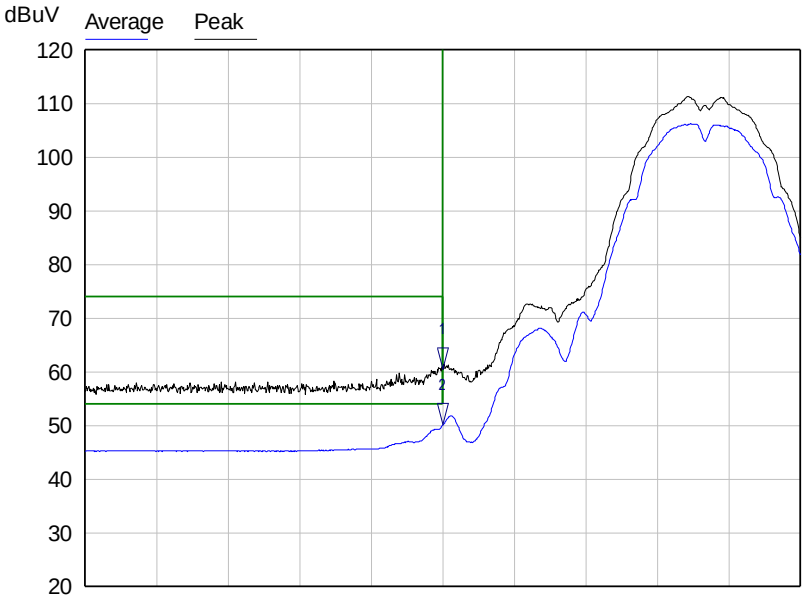
Table 14: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.0	38.6	44.6	74.0	-29.4
4874.0	Average	Vertical	-4.5	38.6	34.1	54.0	-19.9
4874.0	Peak	Horizontal	6.4	38.6	45.0	74.0	-29.0
4874.0	Average	Horizontal	-5.9	38.6	32.7	54.0	-21.3
7311.0	Peak	Vertical	5.9	42.9	48.8	74.0	-25.2
7311.0	Average	Vertical	-6.0	42.9	36.9	54.0	-17.1
7311.0	Peak	Horizontal	4.7	42.9	47.6	74.0	-26.4
7311.0	Average	Horizontal	-6.4	42.9	36.5	54.0	-17.5
12185.0	Peak	Vertical	3.5	47.8	51.3	74.0	-22.7
12185.0	Average	Vertical	-6.9	47.8	40.9	54.0	-13.1
12185.0	Peak	Horizontal	4.5	47.8	52.3	74.0	-21.7
12185.0	Average	Vertical	-7.3	47.8	40.5	54.0	-13.5

Table 15: Transmitting at the Middle Frequency

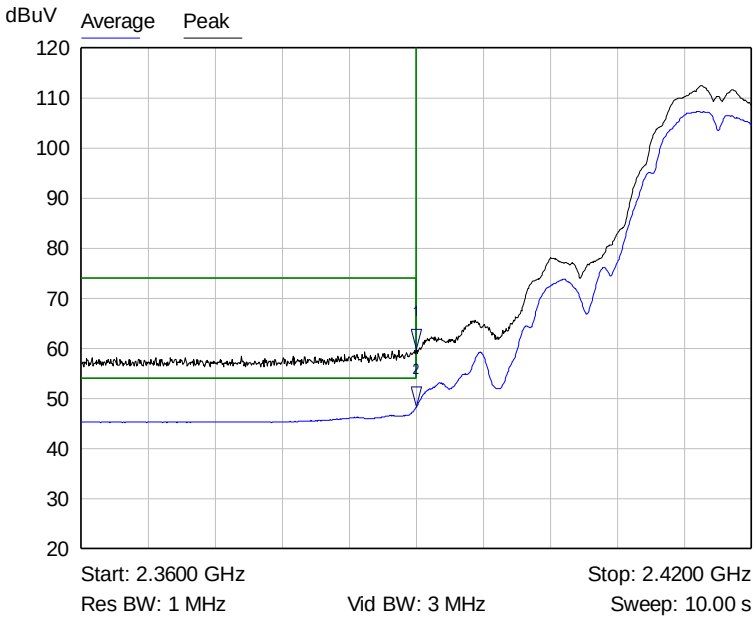
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	5.3	38.7	44.0	74.0	-30.0
4924.0	Average	Vertical	-6.0	38.7	32.7	54.0	-21.3
4924.0	Peak	Horizontal	5.5	38.7	44.2	74.0	-29.8
4924.0	Average	Horizontal	-5.8	38.7	32.9	54.0	-21.1
7386.0	Peak	Vertical	5.3	43.1	48.4	74.0	-25.6
7386.0	Average	Vertical	-5.4	43.1	37.7	54.0	-16.3
7386.0	Peak	Horizontal	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Horizontal	-6.0	43.1	37.1	54.0	-16.9
12310.0	Peak	Vertical	3.5	47.7	51.2	74.0	-22.8
12310.0	Average	Vertical	-7.5	47.7	40.2	54.0	-13.8
12310.0	Peak	Horizontal	3.7	47.7	51.4	74.0	-22.6
12310.0	Average	Vertical	-7.6	47.7	40.1	54.0	-13.9

Table 16: Transmitting at the Highest Frequency



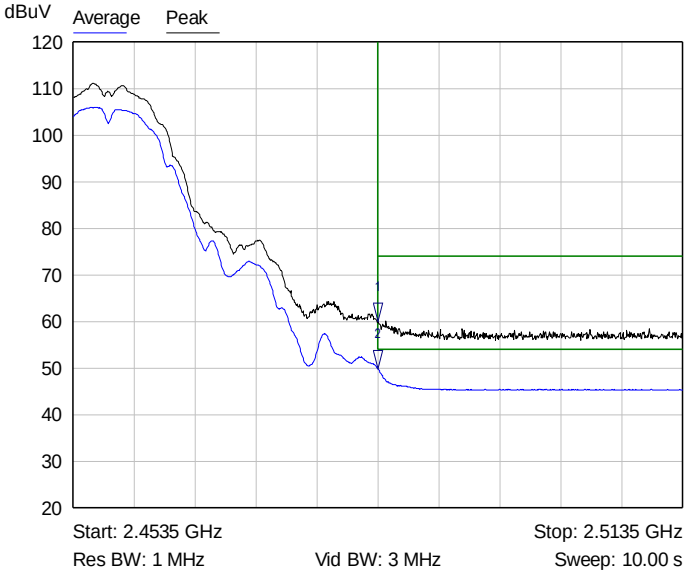
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	60.53 dBuV	
2 ▽	Average	2.3900 GHz	50.14 dBuV	

Graph 61: Radiated Band Edge Plot – Channel 1 at Power Setting 19



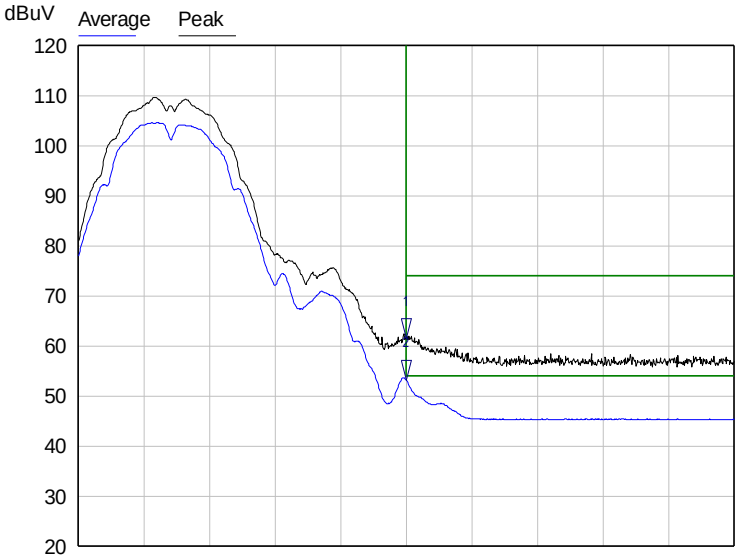
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	59.81 dBuV	
2	Average	2.3900 GHz	48.32 dBuV	

Graph 62: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	59.98 dBuV	
2	Average	2.4835 GHz	49.84 dBuV	

Graph 63: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4835 GHz	61.42 dBuV	
2 ▽	Average	2.4835 GHz	53.16 dBuV	

Graph 64: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4IW10-XX Antenna 1 (Model 1005098)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Vertical	-5.9	38.5	32.6	54.0	-21.4
4824.0	Peak	Horizontal	5.7	38.5	44.2	74.0	-29.8
4824.0	Average	Horizontal	-5.7	38.5	32.8	54.0	-21.2
7236.0	Peak	Vertical	5.6	42.7	48.3	74.0	-25.7
7236.0	Average	Vertical	-4.2	42.7	38.5	54.0	-15.5
7236.0	Peak	Horizontal	6.0	42.7	48.7	74.0	-25.3
7236.0	Average	Horizontal	-4.5	42.7	38.2	54.0	-15.8
12060.0	Peak	Vertical	4.5	47.9	52.4	74.0	-21.6
12060.0	Average	Vertical	-7.3	47.9	40.6	54.0	-13.4
12060.0	Peak	Horizontal	3.9	47.9	51.8	74.0	-22.2
12060.0	Average	Vertical	-7.2	47.9	40.7	54.0	-13.3

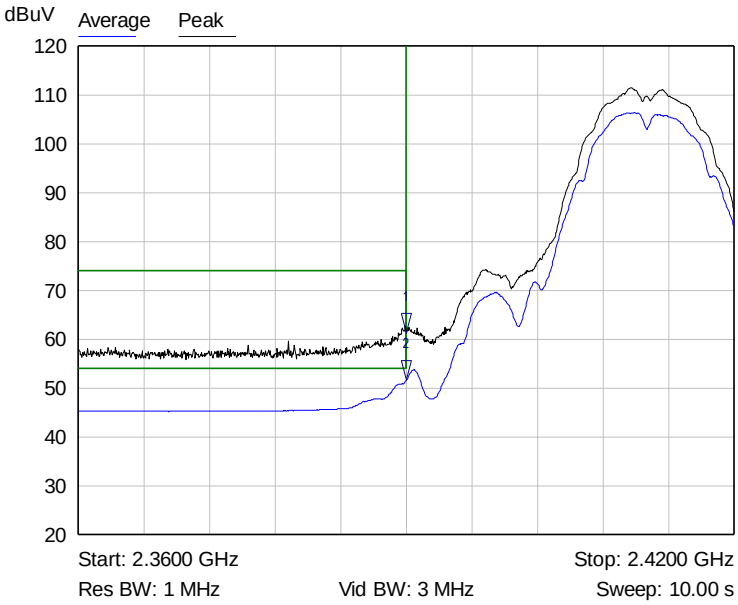
Table 17: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.4	38.6	45.0	74.0	-29.0
4874.0	Average	Vertical	-5.6	38.6	33.0	54.0	-21.0
4874.0	Peak	Horizontal	1.9	38.6	40.5	74.0	-33.5
4874.0	Average	Horizontal	-3.8	38.6	34.8	54.0	-19.2
7311.0	Peak	Vertical	5.5	42.9	48.4	74.0	-25.6
7311.0	Average	Vertical	-5.6	42.9	37.3	54.0	-16.7
7311.0	Peak	Horizontal	4.9	42.9	47.8	74.0	-26.2
7311.0	Average	Horizontal	-6.0	42.9	36.9	54.0	-17.1
12185.0	Peak	Vertical	3.8	47.8	51.6	74.0	-22.4
12185.0	Average	Vertical	-7.2	47.8	40.6	54.0	-13.4
12185.0	Peak	Horizontal	5.1	47.8	52.9	74.0	-21.1
12185.0	Average	Vertical	-7.1	47.8	40.7	54.0	-13.3

Table 18: Transmitting at the Middle Frequency

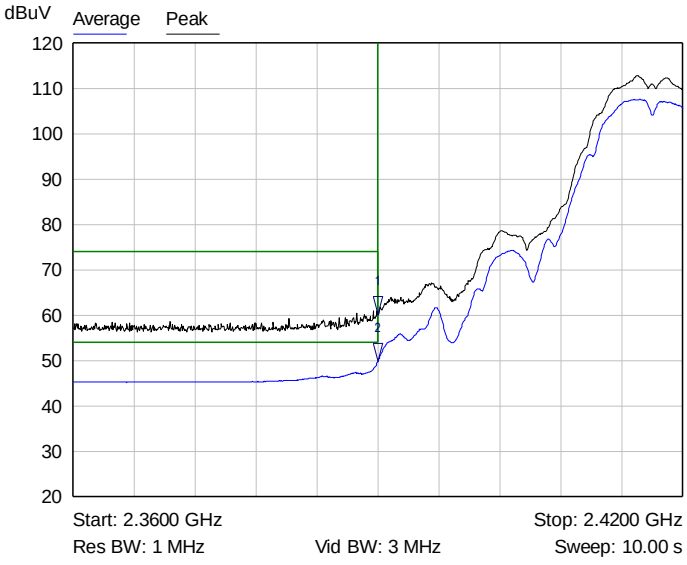
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	5.2	38.7	43.9	74.0	-30.1
4924.0	Average	Vertical	-4.7	38.7	34.0	54.0	-20.0
4924.0	Peak	Horizontal	6.2	38.7	44.9	74.0	-29.1
4924.0	Average	Horizontal	-5.0	38.7	33.7	54.0	-20.3
7386.0	Peak	Vertical	5.8	43.1	48.9	74.0	-25.1
7386.0	Average	Vertical	-5.4	43.1	37.7	54.0	-16.3
7386.0	Peak	Horizontal	5.5	43.1	48.6	74.0	-25.4
7386.0	Average	Horizontal	-5.2	43.1	37.9	54.0	-16.1
12310.0	Peak	Vertical	3.6	47.7	51.3	74.0	-22.7
12310.0	Average	Vertical	-7.7	47.7	40.0	54.0	-14.0
12310.0	Peak	Horizontal	4.1	47.7	51.8	74.0	-22.2
12310.0	Average	Vertical	-7.4	47.7	40.3	54.0	-13.7

Table 19: Transmitting at the Highest Frequency



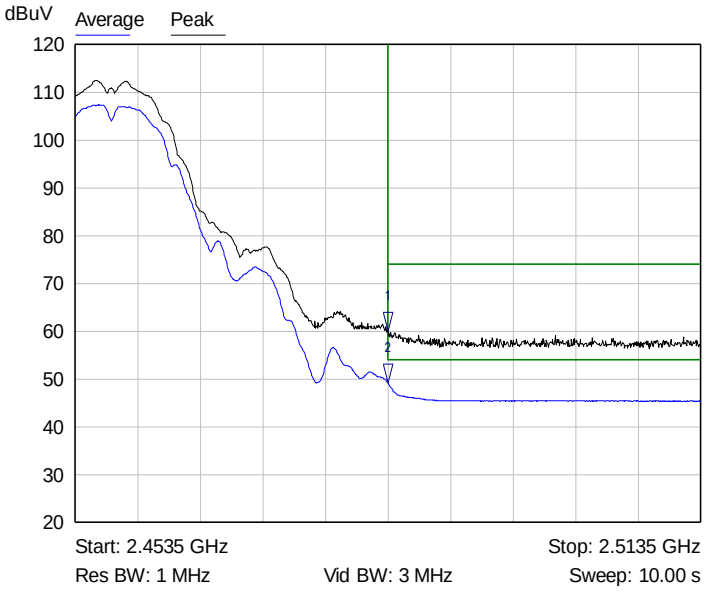
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	61.35 dBuV	
2	Average	2.3900 GHz	51.68 dBuV	

Graph 65: Radiated Band Edge Plot – Channel 1 at Power Setting 19



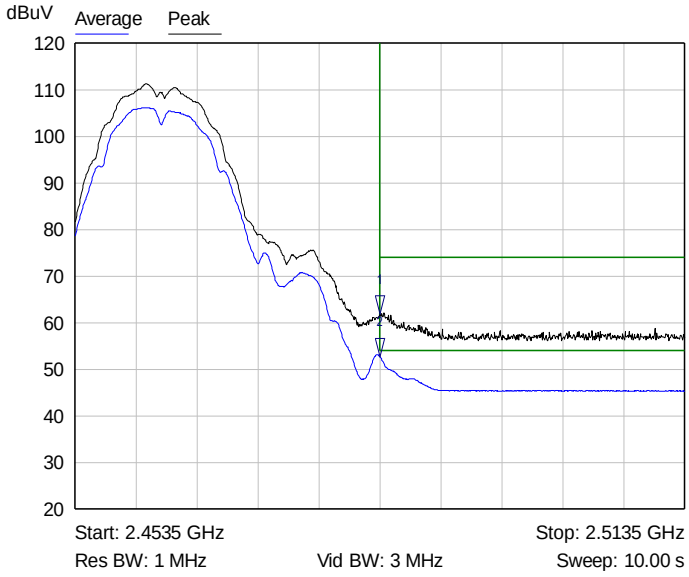
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	60.15 dBuV	
2	Average	2.3900 GHz	49.89 dBuV	

Graph 66: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	59.93 dBuV	
2	Average	2.4835 GHz	49.08 dBuV	

Graph 67: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	61.85 dBuV	
2	Average	2.4835 GHz	52.71 dBuV	

Graph 68: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4IW8-XX Antenna 0 (Model 1005095)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	3.9	38.5	42.4	74.0	-31.6
4824.0	Average	Vertical	-4.3	38.5	34.2	54.0	-19.8
4824.0	Peak	Horizontal	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Horizontal	-4.9	38.5	33.6	54.0	-20.4
7236.0	Peak	Vertical	5.3	42.7	48.0	74.0	-26.0
7236.0	Average	Vertical	-5.1	42.7	37.6	54.0	-16.4
7236.0	Peak	Horizontal	5.4	42.7	48.1	74.0	-25.9
7236.0	Average	Horizontal	-5.2	42.7	37.5	54.0	-16.5
12060.0	Peak	Vertical	3.0	47.9	50.9	74.0	-23.1
12060.0	Average	Vertical	-8.1	47.9	39.8	54.0	-14.2
12060.0	Peak	Horizontal	3.1	47.9	51.0	74.0	-23.0
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1

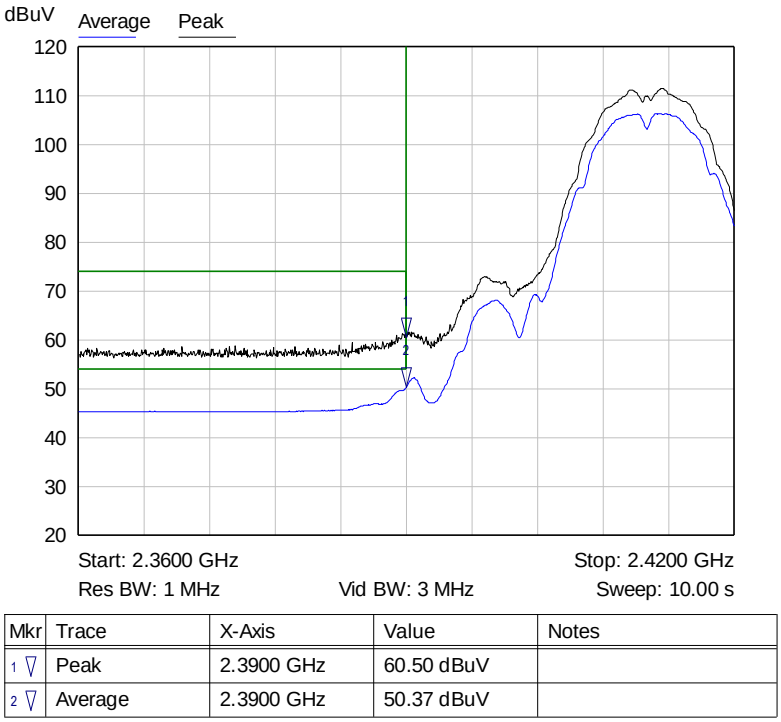
Table 20: Transmitting at the Lowest Frequency

Error! Bookmark not defined.Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4874.0	Peak	Vertical	6.0	38.6	44.6	74.0	-29.4
4874.0	Average	Vertical	-4.5	38.6	34.1	54.0	-19.9
4874.0	Peak	Horizontal	5.7	38.6	44.3	74.0	-29.7
4874.0	Average	Horizontal	-3.7	38.6	34.9	54.0	-19.1
7311.0	Peak	Vertical	5.3	42.9	48.2	74.0	-25.8
7311.0	Average	Vertical	-5.4	42.9	37.5	54.0	-16.5
7311.0	Peak	Horizontal	5.3	42.9	48.2	74.0	-25.8
7311.0	Average	Horizontal	-5.6	42.9	37.3	54.0	-16.7
12185.0	Peak	Vertical	3.9	47.8	51.7	74.0	-22.3
12185.0	Average	Vertical	-7.9	47.8	39.9	54.0	-14.1
12185.0	Peak	Horizontal	3.4	47.8	51.2	74.0	-22.8
12185.0	Average	Vertical	-7.8	47.8	40.0	54.0	-14.0

Table 21: Transmitting at the Middle Frequency

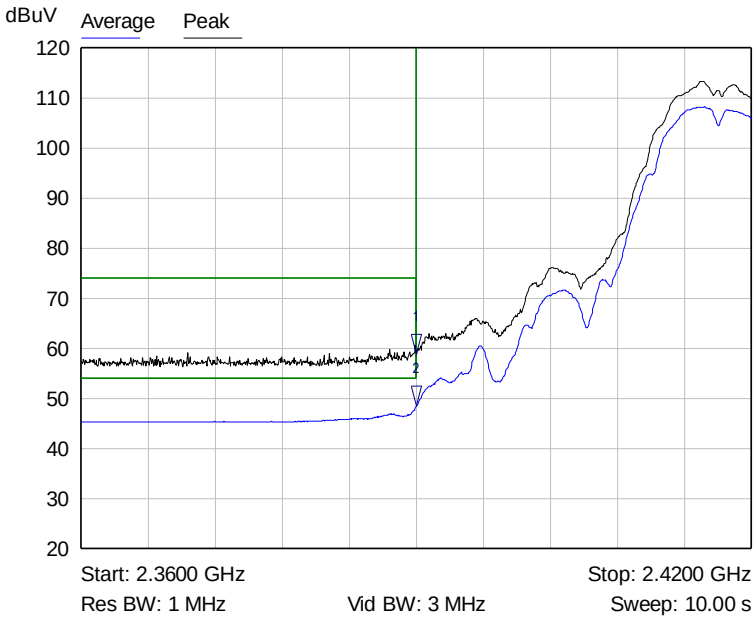
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	6.2	38.7	44.9	74.0	-29.1
4924.0	Average	Vertical	-4.4	38.7	34.3	54.0	-19.7
4924.0	Peak	Horizontal	5.5	38.7	44.2	74.0	-29.8
4924.0	Average	Horizontal	-4.9	38.7	33.8	54.0	-20.2
7386.0	Peak	Vertical	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Vertical	-5.5	43.1	37.6	54.0	-16.4
7386.0	Peak	Horizontal	5.0	43.1	48.1	74.0	-25.9
7386.0	Average	Horizontal	-5.8	43.1	37.3	54.0	-16.7
12310.0	Peak	Vertical	2.8	47.7	50.5	74.0	-23.5
12310.0	Average	Vertical	-8.4	47.7	39.3	54.0	-14.7
12310.0	Peak	Horizontal	2.9	47.7	50.6	74.0	-23.4
12310.0	Average	Vertical	-8.5	47.7	39.2	54.0	-14.8

Table 22: Transmitting at the Highest Frequency



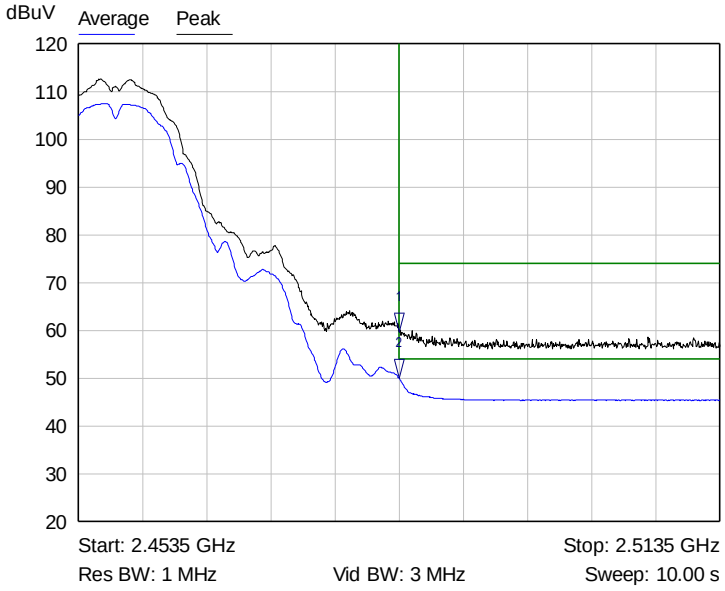
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	60.50 dBuV	
2 ▽	Average	2.3900 GHz	50.37 dBuV	

Graph 69: Radiated Band Edge Plot – Channel 1 at Power Setting 19



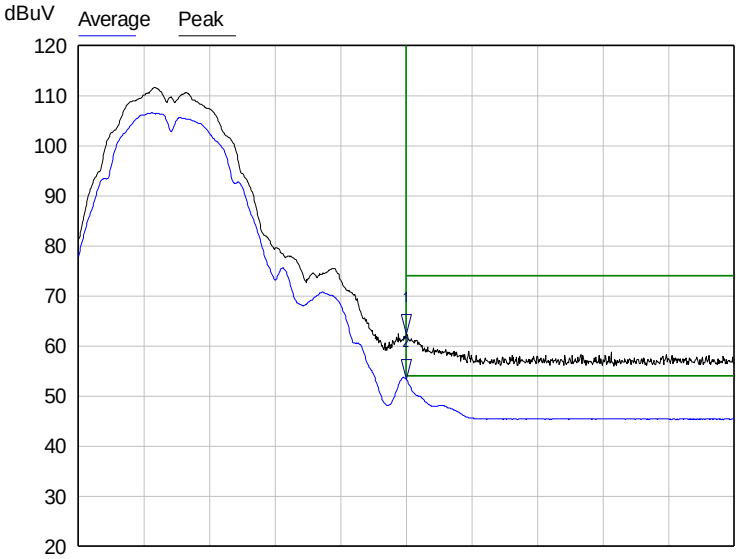
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	58.88 dBuV	
2	Average	2.3900 GHz	48.42 dBuV	

Graph 70: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	59.72 dBuV	
2	Average	2.4835 GHz	49.95 dBuV	

Graph 71: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	62.38 dBuV	
2	Average	2.4835 GHz	53.30 dBuV	

Graph 72: Radiated Band Edge Plot – Channel 11 at Power Setting 19

C4-T4IW8-XX Antenna 1 (Model 1005096)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.0	38.5	44.5	74.0	-29.5
4824.0	Average	Vertical	-4.2	38.5	34.3	54.0	-19.7
4824.0	Peak	Horizontal	6.3	38.5	44.8	74.0	-29.2
4824.0	Average	Horizontal	-1.7	38.5	36.8	54.0	-17.2
7236.0	Peak	Vertical	6.5	42.7	49.2	74.0	-24.8
7236.0	Average	Vertical	-3.3	42.7	39.4	54.0	-14.6
7236.0	Peak	Horizontal	6.2	42.7	48.9	74.0	-25.1
7236.0	Average	Horizontal	-3.2	42.7	39.5	54.0	-14.5
12060.0	Peak	Vertical	3.2	47.9	51.1	74.0	-22.9
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1
12060.0	Peak	Horizontal	3.4	47.9	51.3	74.0	-22.7
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1

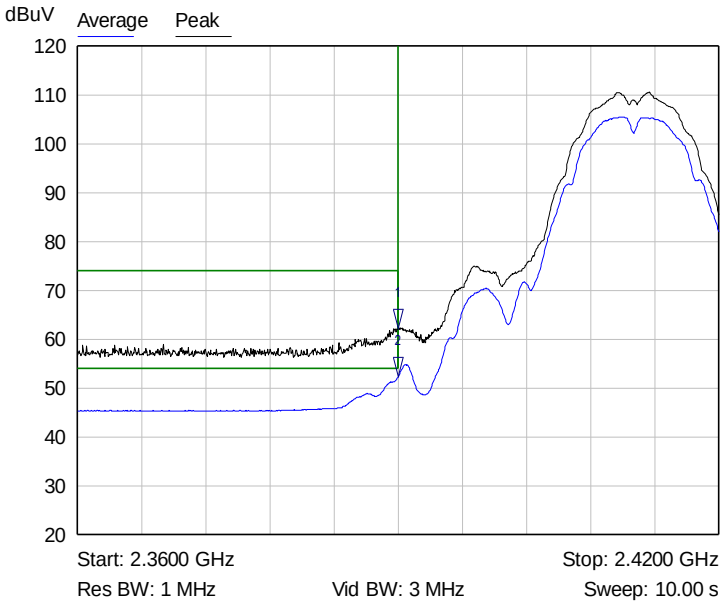
Table 23: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	5.6	38.6	44.2	74.0	-29.8
4874.0	Average	Vertical	-3.6	38.6	35.0	54.0	-19.0
4874.0	Peak	Horizontal	5.8	38.6	44.4	74.0	-29.6
4874.0	Average	Horizontal	-4.0	38.6	34.6	54.0	-19.4
7311.0	Peak	Vertical	4.3	42.9	47.2	74.0	-26.8
7311.0	Average	Vertical	-5.8	42.9	37.1	54.0	-16.9
7311.0	Peak	Horizontal	5.4	42.9	48.3	74.0	-25.7
7311.0	Average	Horizontal	-5.2	42.9	37.7	54.0	-16.3
12185.0	Peak	Vertical	3.2	47.8	51.0	74.0	-23.0
12185.0	Average	Vertical	-8.1	47.8	39.7	54.0	-14.3
12185.0	Peak	Horizontal	2.7	47.8	50.5	74.0	-23.5
12185.0	Average	Vertical	-7.7	47.8	40.1	54.0	-13.9

Table 24: Transmitting at the Middle Frequency

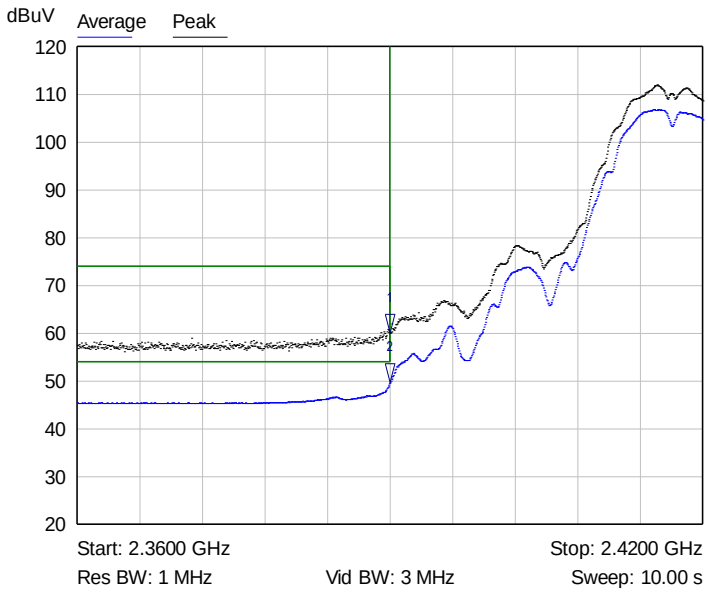
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	6.0	38.7	44.7	74.0	-29.3
4924.0	Average	Vertical	-5.2	38.7	33.5	54.0	-20.5
4924.0	Peak	Horizontal	6.7	38.7	45.4	74.0	-28.6
4924.0	Average	Horizontal	-1.7	38.7	37.0	54.0	-17.0
7386.0	Peak	Vertical	5.7	43.1	48.8	74.0	-25.2
7386.0	Average	Vertical	-4.8	43.1	38.3	54.0	-15.7
7386.0	Peak	Horizontal	5.1	43.1	48.2	74.0	-25.8
7386.0	Average	Horizontal	-5.5	43.1	37.6	54.0	-16.4
12310.0	Peak	Vertical	3.8	47.7	51.5	74.0	-22.5
12310.0	Average	Vertical	-8.4	47.7	39.3	54.0	-14.7
12310.0	Peak	Horizontal	2.4	47.7	50.1	74.0	-23.9
12310.0	Average	Vertical	-8.6	47.7	39.1	54.0	-14.9

Table 25: Transmitting at the Highest Frequency



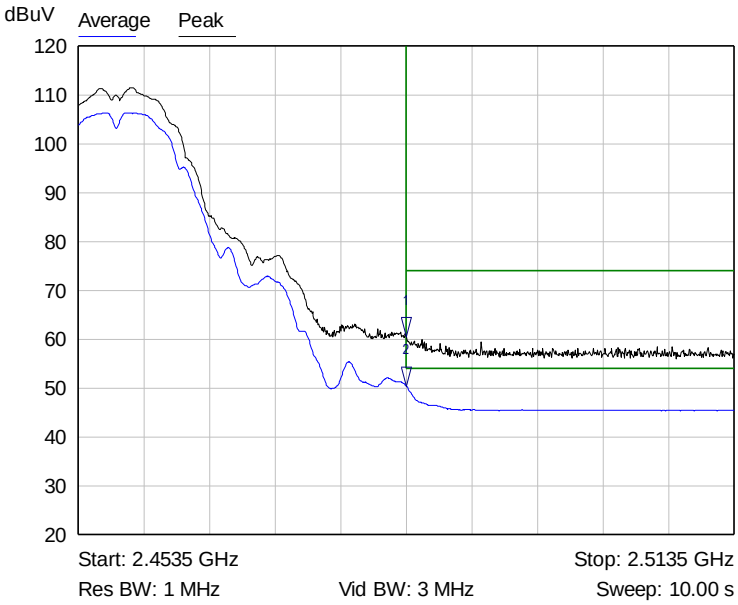
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	62.23 dBuV	
2	Average	2.3900 GHz	52.41 dBuV	

Graph 73: Radiated Band Edge Plot – Channel 1 at Power Setting 19



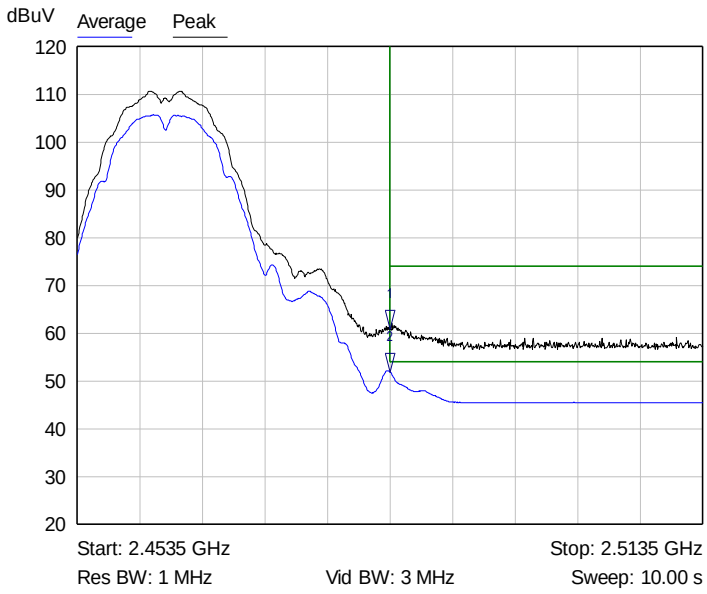
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	59.95 dBuV	
2	Average	2.3900 GHz	49.73 dBuV	

Graph 74: Radiated Band Edge Plot – Channel 2 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	60.45 dBuV	
2	Average	2.4835 GHz	50.41 dBuV	

Graph 75: Radiated Band Edge Plot – Channel 10 at Power Setting 20



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	60.76 dBuV	
2	Average	2.4835 GHz	51.89 dBuV	

Graph 76: Radiated Band Edge Plot – Channel 11 at Power Setting 19

6.3 802.11g Test Results

6.3.1 §15.203 Antenna Requirements

See Section 6.2.1.

Result

The EUT complied with the specification.

6.3.2 Conducted Emissions at Mains Ports Data

See Section 6.2.2.

Result

The EUT complied with the specification.

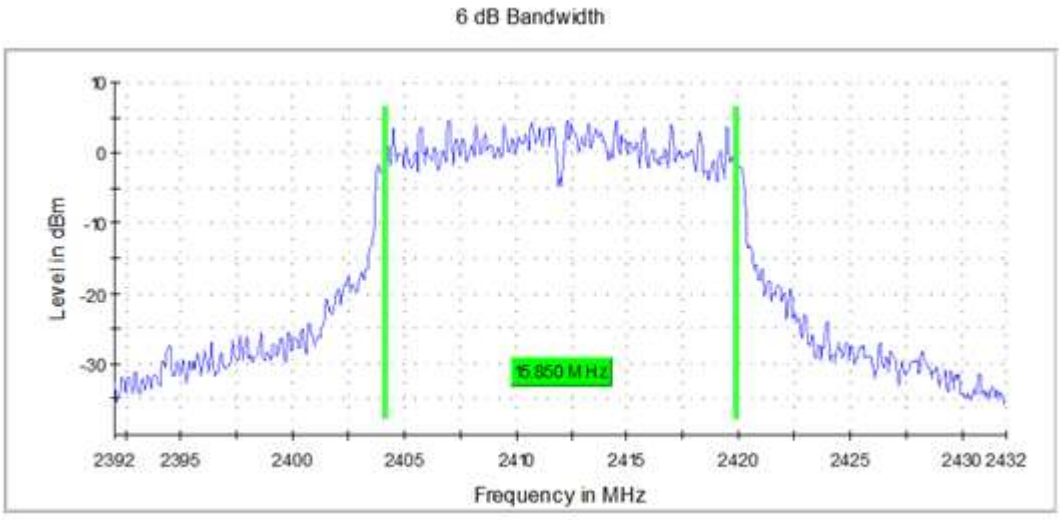
6.3.3 §15.247(a)(2) Emissions Bandwidth

040-00460a Antenna Port 0 and 1

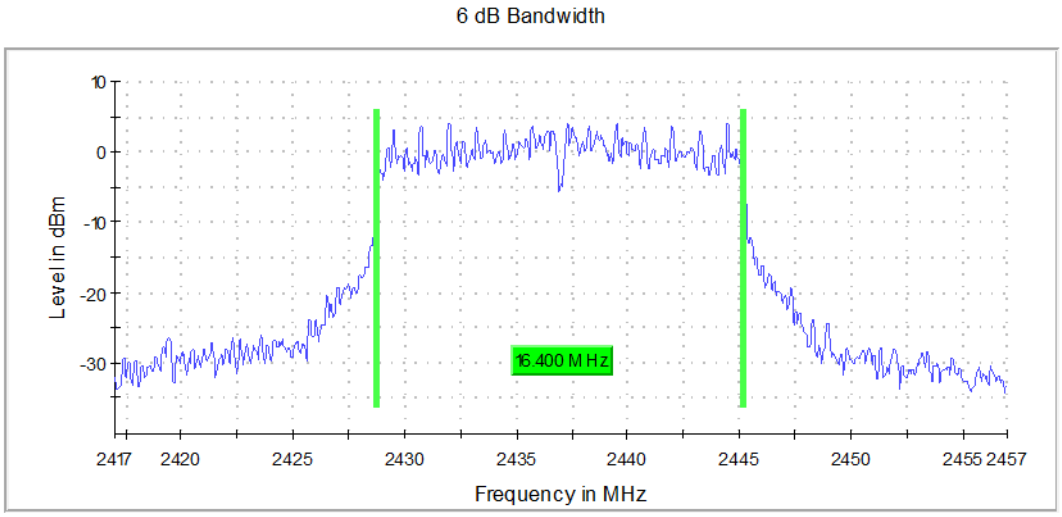
Frequency (MHz)	Antenna 0 Emissions 6 dB bandwidth (MHz)	Antenna 1 Emissions 6 dB bandwidth (MHz)
2412	15.9	15.9
2437	16.4	16.4
2462	15.5	15.6

Result

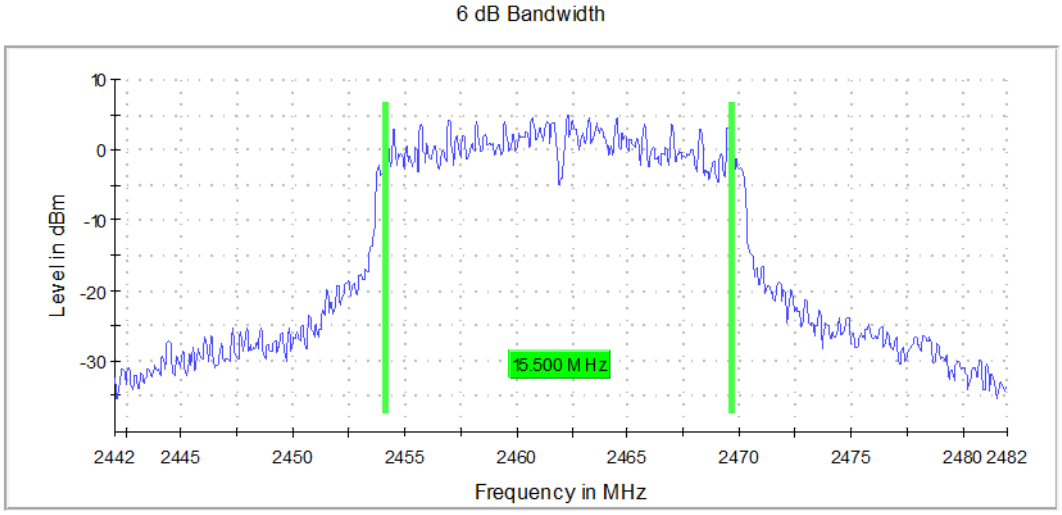
In the configuration tested, the 6 dB bandwidth was greater than 500 kHz; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plots below).



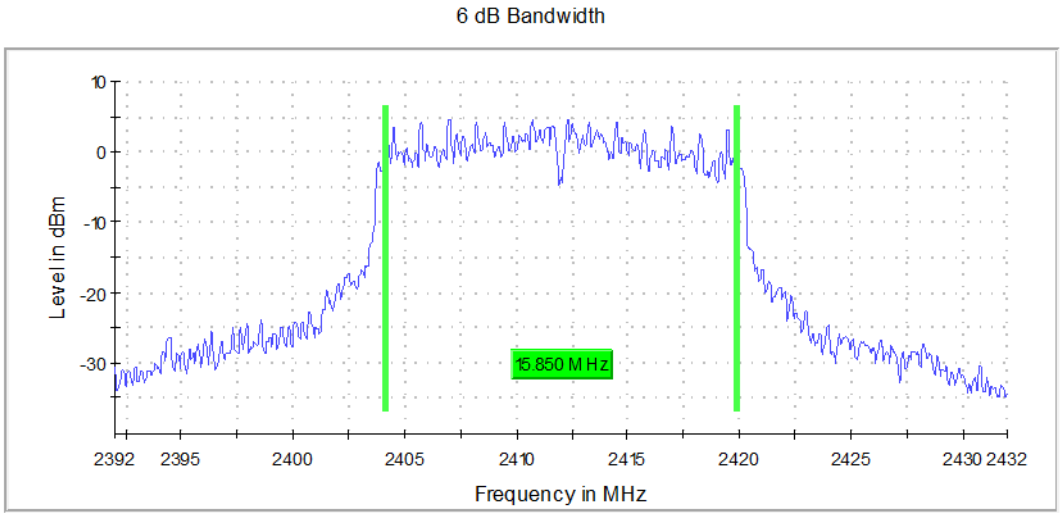
Graph 77: Lowest Channel Bandwidth – Antenna 0



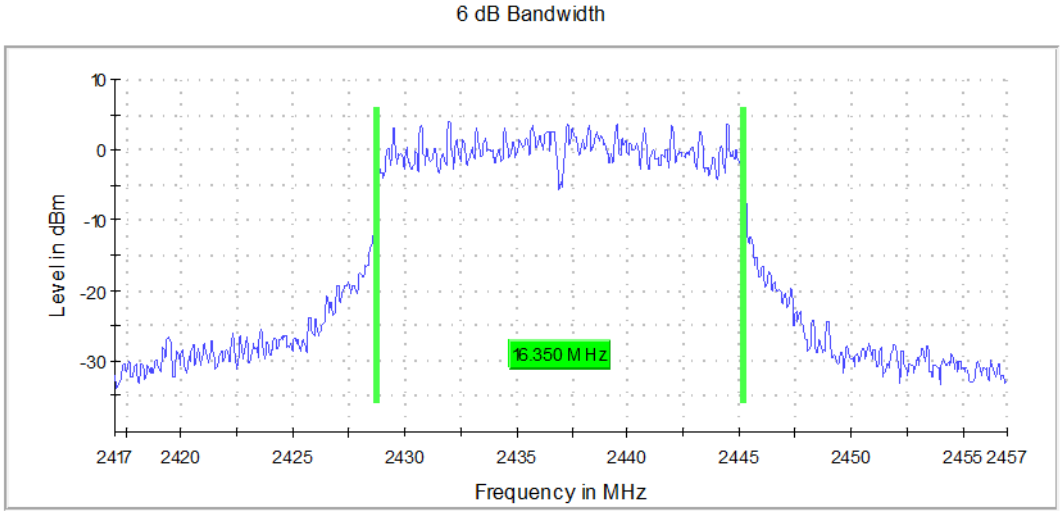
Graph 78: Middle Channel Bandwidth – Antenna 0



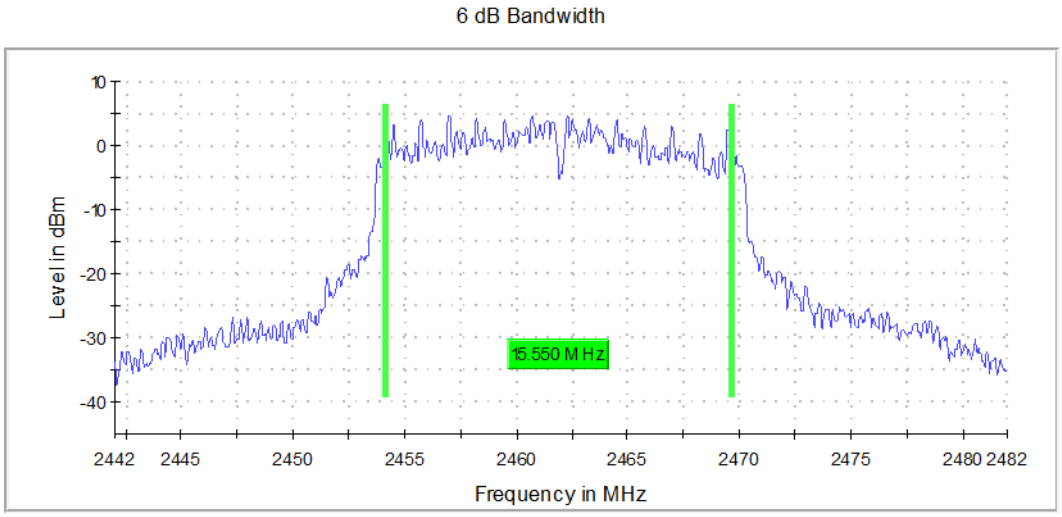
Graph 79: Highest Channel Bandwidth – Antenna 0



Graph 80: Lowest Channel Bandwidth – Antenna 1



Graph 81: Middle Channel Bandwidth – Antenna 1



Graph 82: Highest Channel Bandwidth – Antenna 1

6.3.4 §15.247(b)(3) Output Power

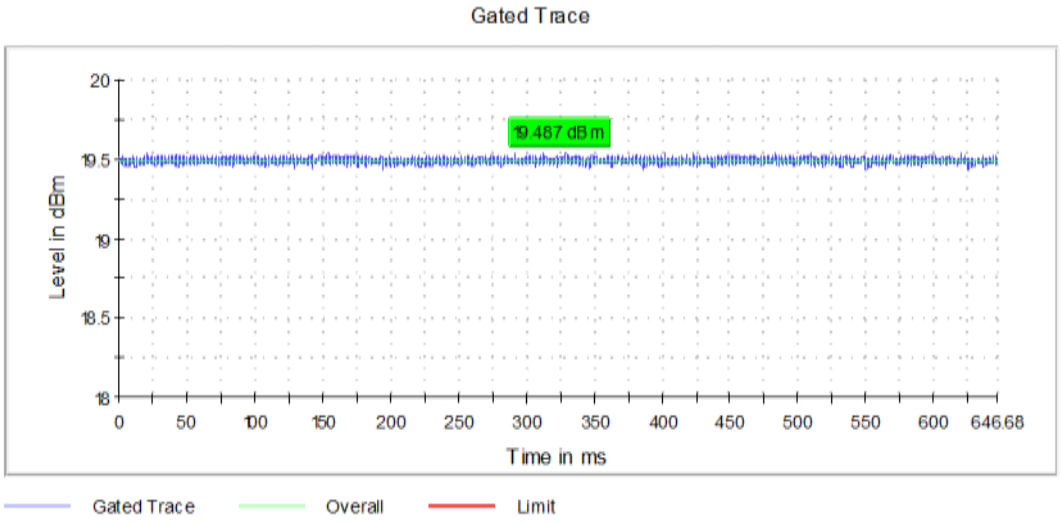
The maximum conducted (average) output power was measured according to Method AVGPM-G (ANSI C63.10, Section 11.9.2.3.2). Measurements were taken at the maximum possible power setting (20) to demonstrate compliance with this requirement at all possible power settings. The limit is 30 dBm when using antennas with 6 dBi or less gain.

040-00460a Antenna Port 0 and 1

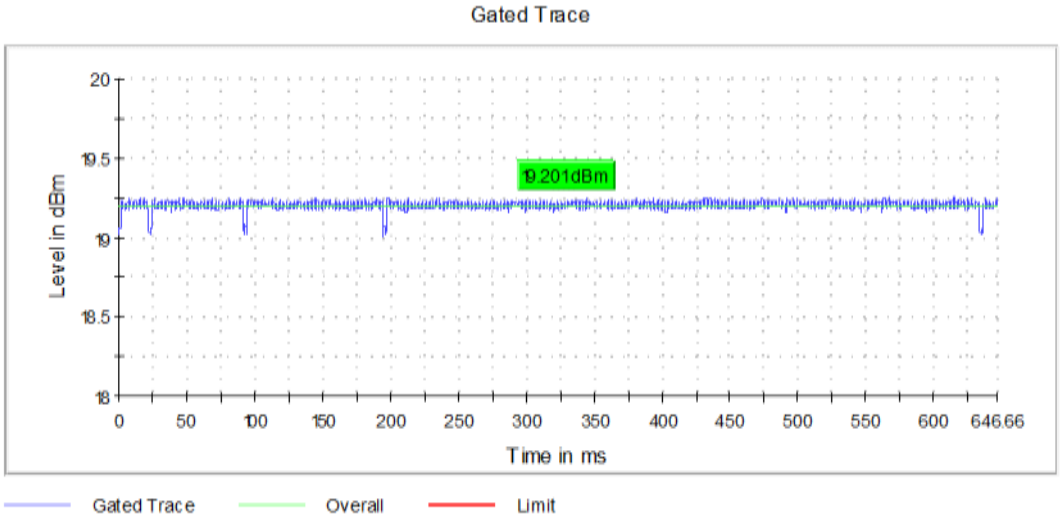
Frequency (MHz)	Antenna 0 Measured Output Power (dBm)	Antenna 1 Measured Output Power (dBm)
2412	19.5	19.3
2437	19.2	19.1
2462	19.4	19.3

Result

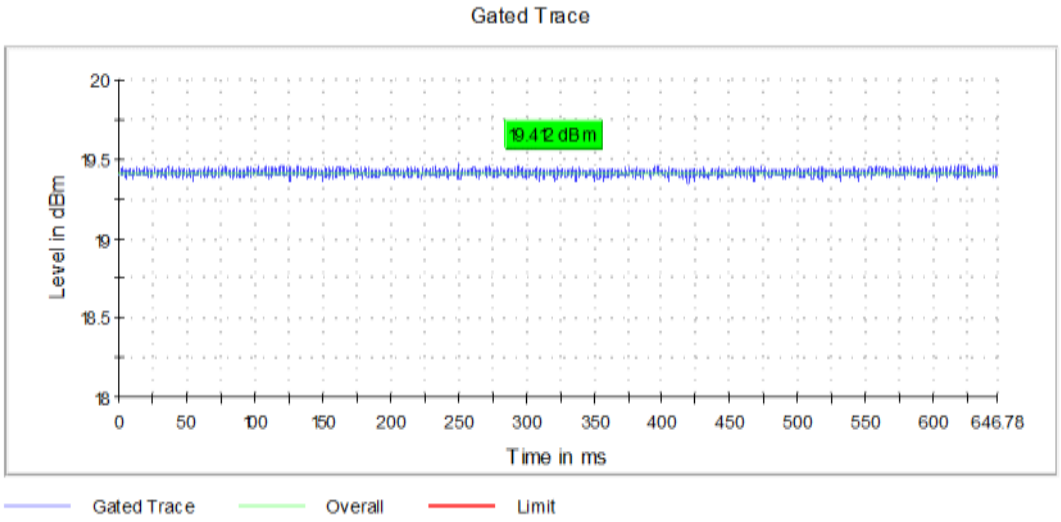
In the configuration tested, the RF peak output power was less than 1 Watt; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plots below).



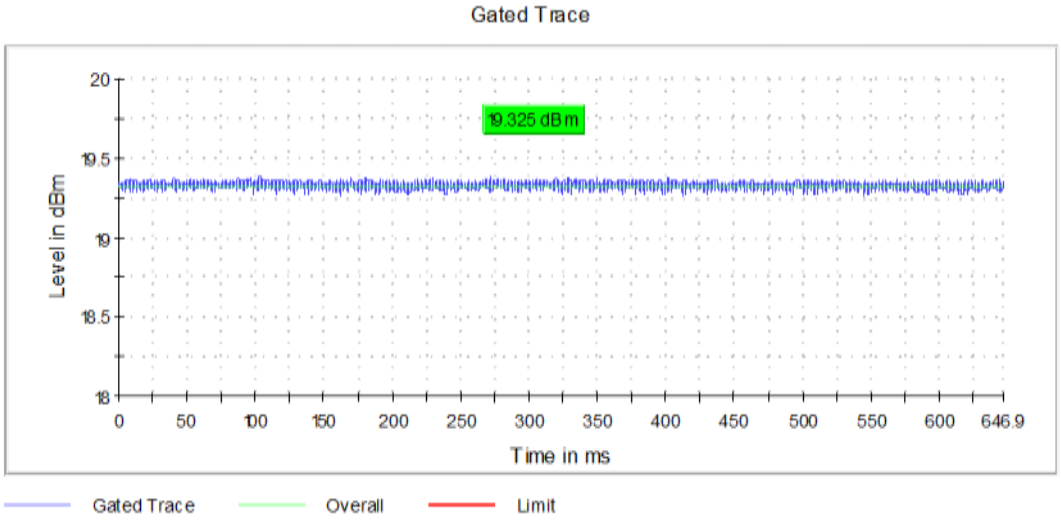
Graph 83: Lowest Channel Output Power Plot – Antenna 0



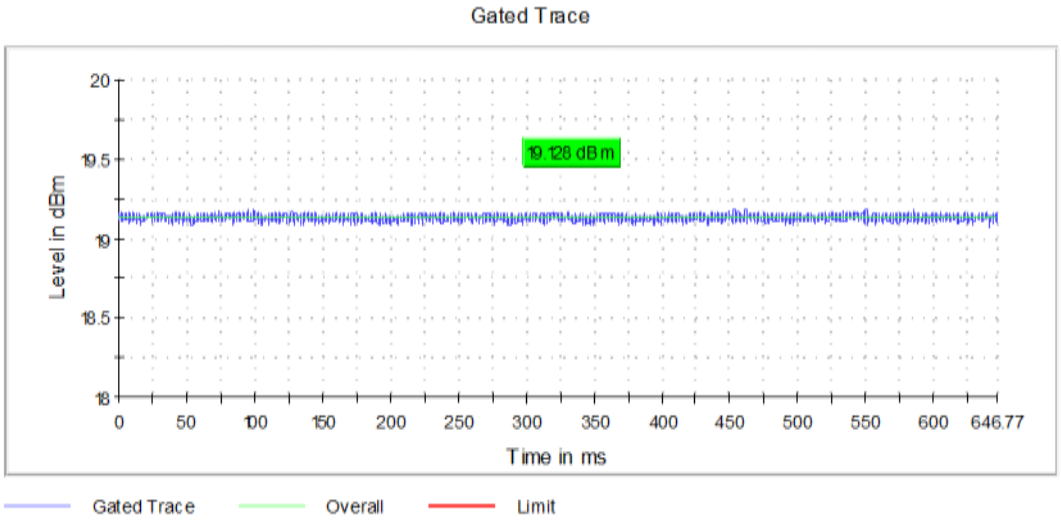
Graph 84: Middle Channel Output Power Plot– Antenna 0



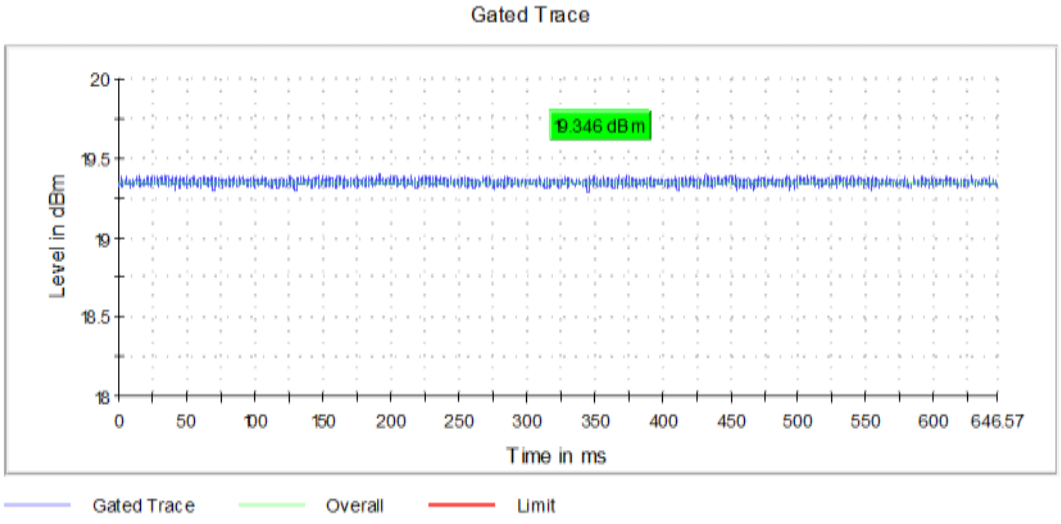
Graph 85: Highest Channel Output Power Plot – Antenna 0



Graph 86: Lowest Channel Output Power Plot – Antenna 1



Graph 87: Middle Channel Output Power Plot– Antenna 1



Graph 88: Highest Channel Output Power Plot – Antenna 1

6.3.5 §15.247(e) Power Spectral Density

The average power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. Results of this testing are summarized below.

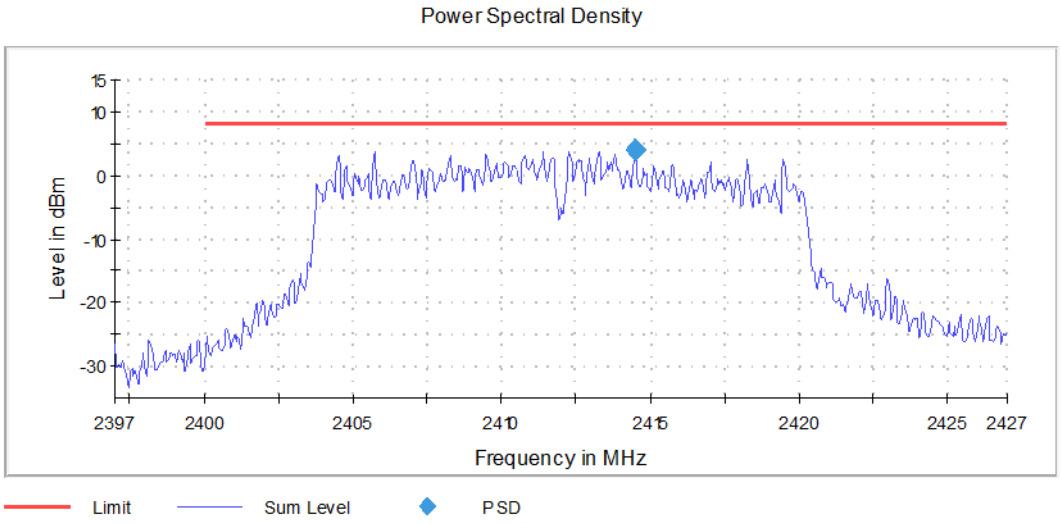
040-00460a Antenna Port 0 and 1

Frequency (MHz)	Antenna 0 Measurement (dBm)	Antenna 1 Measurement (dBm)
2412	4.0	4.0
2437	3.9	3.6

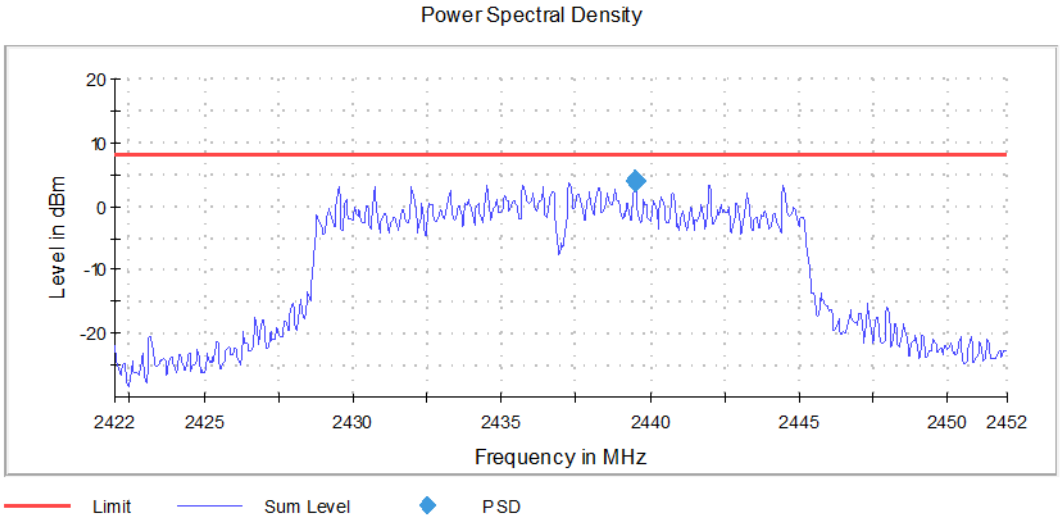
Frequency (MHz)	Antenna 0 Measurement (dBm)	Antenna 1 Measurement (dBm)
2462	4.9	4.3

Result

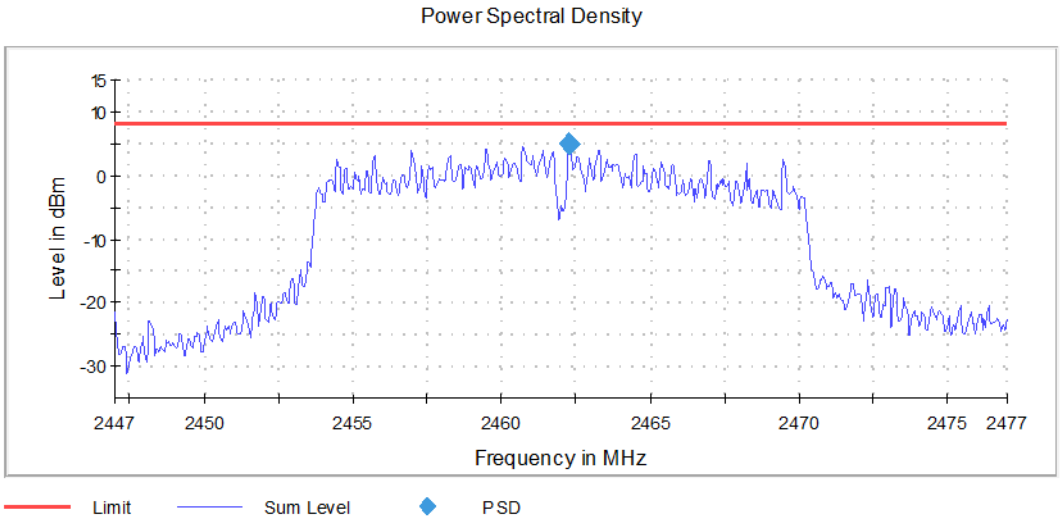
The maximum peak power spectral density was less than the limit of 8 dBm; therefore, the EUT complies with the specification.



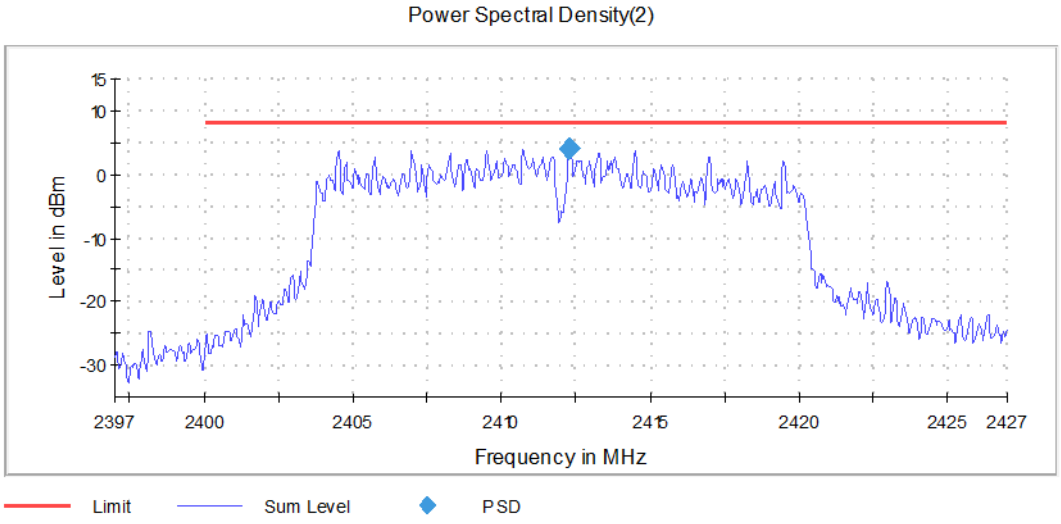
Graph 89: Lowest Channel PSD Plot – Antenna 0



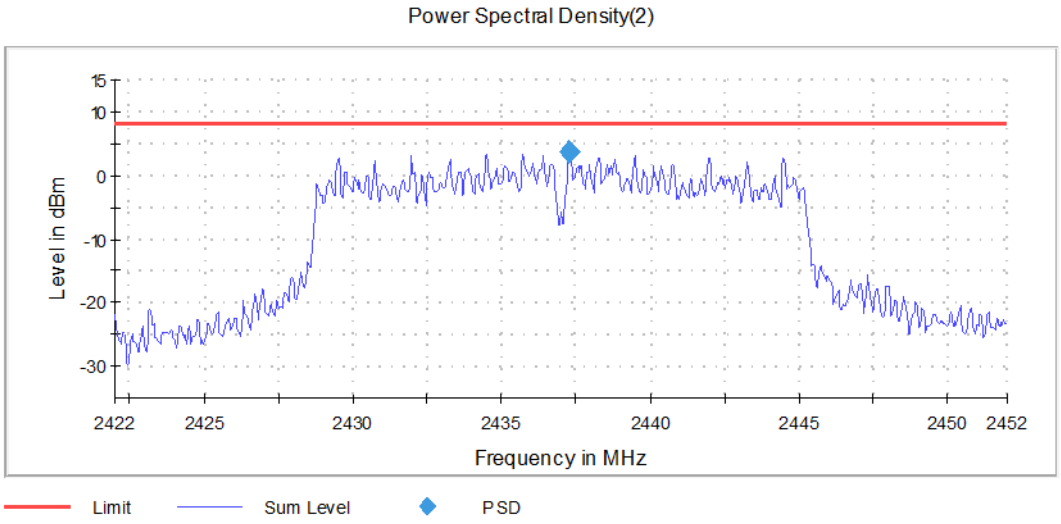
Graph 90: Middle Channel PSD Plot – Antenna 0



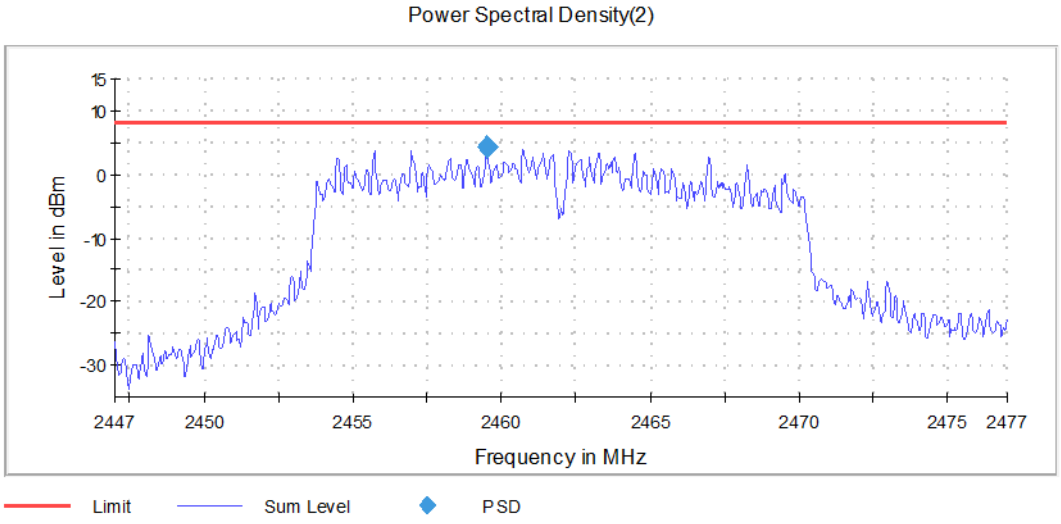
Graph 91: Highest Channel PSD Plot – Antenna 0



Graph 92: Lowest Channel PSD Plot – Antenna 1



Graph 93: Middle Channel PSD Plot – Antenna 1



Graph 94: Highest Channel PSD Plot – Antenna 1

6.3.6 §15.247(d) Conducted Spurious Emissions

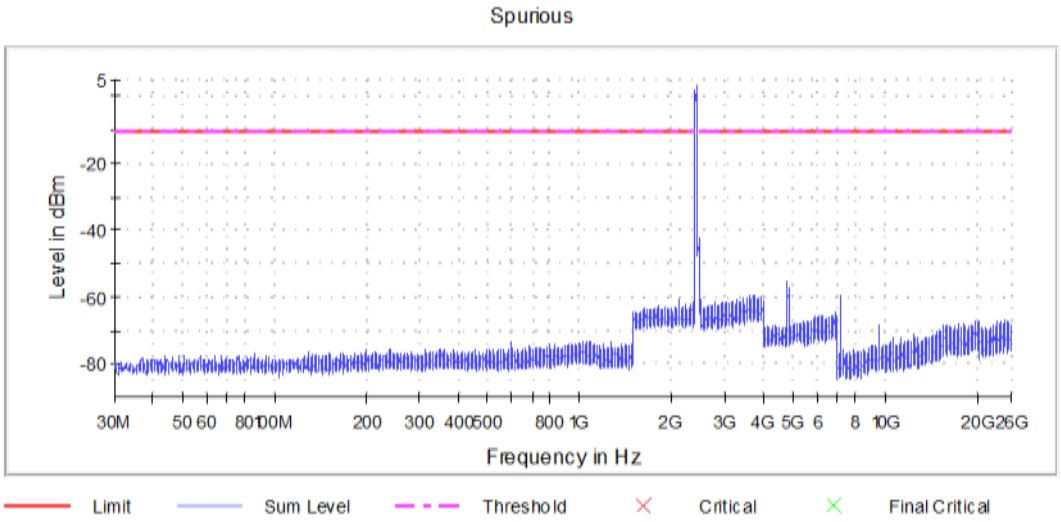
The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental frequency was investigated to measure any antenna-conducted emissions. The tables show the measurement data from spurious emissions noted across the frequency range when transmitting at the lowest frequency, middle frequency, and upper frequency. Shown below are plots with the EUT tuned to the upper and lower channels. These demonstrate compliance with the provisions of this section.

040-00460a Antenna Port 0 and 1

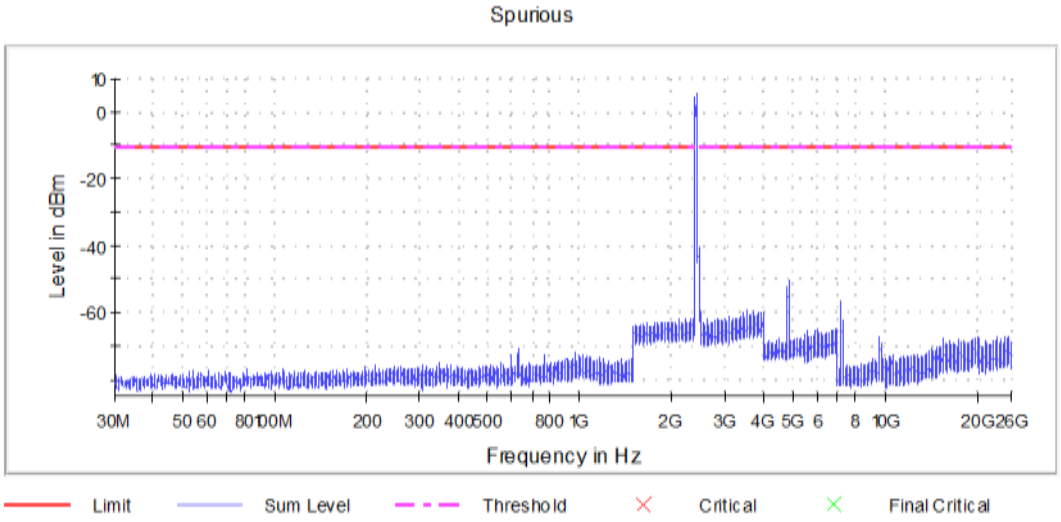
The emissions must be attenuated 30 dB below the highest power level measured within the authorized band as measured with a 100 kHz RBW. The highest power measured in was 19.5 dBm; therefore, the criteria is 19.5 – 30 = -10.5 dBm.

Result

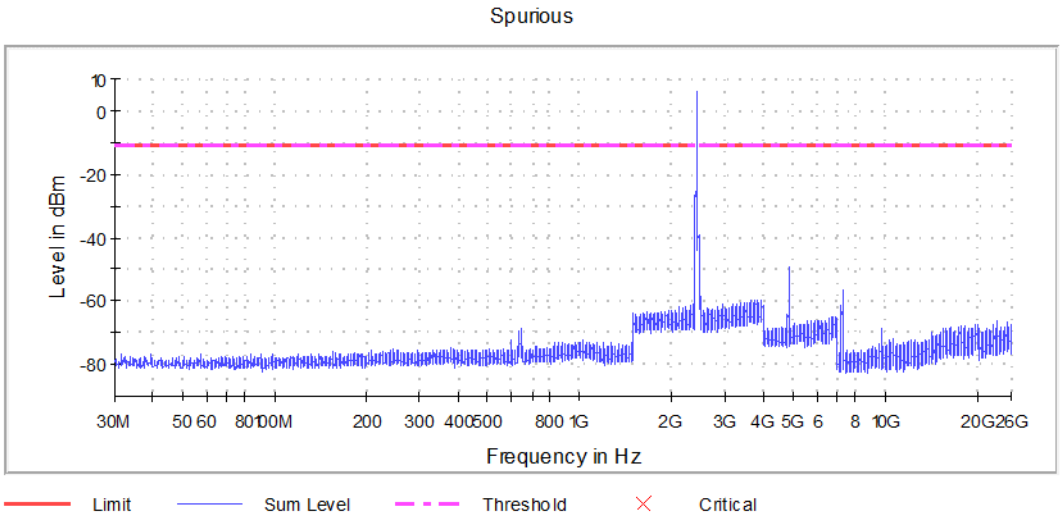
Conducted spurious emissions were attenuated 30 dB or more below the fundamental; therefore, the EUT complies with the specification.



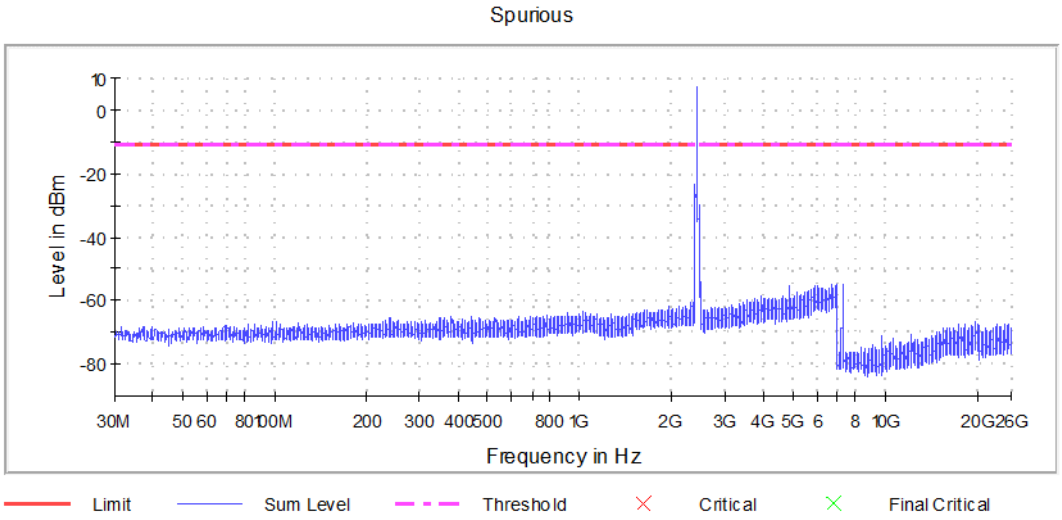
Graph 95: Transmitting on Channel 1, Power Setting 12– Antenna 0



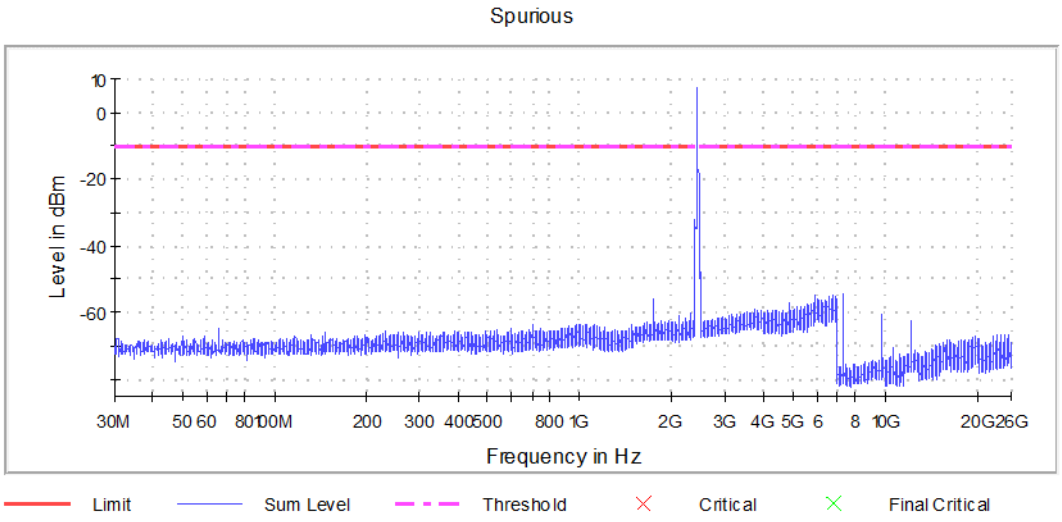
Graph 96: Transmitting on Channel 2, Power Setting 14– Antenna 0



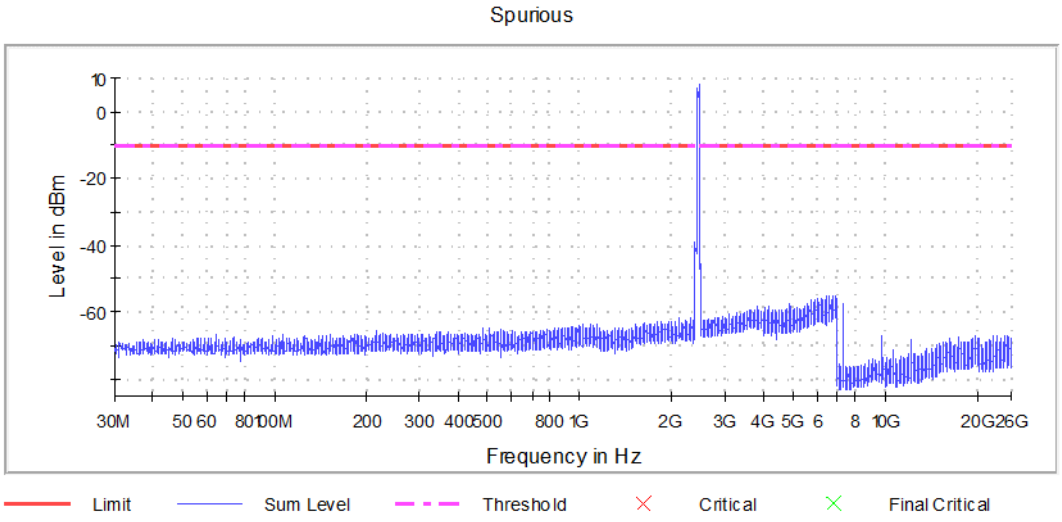
Graph 97: Transmitting on Channel 3, Power Setting 15– Antenna 0



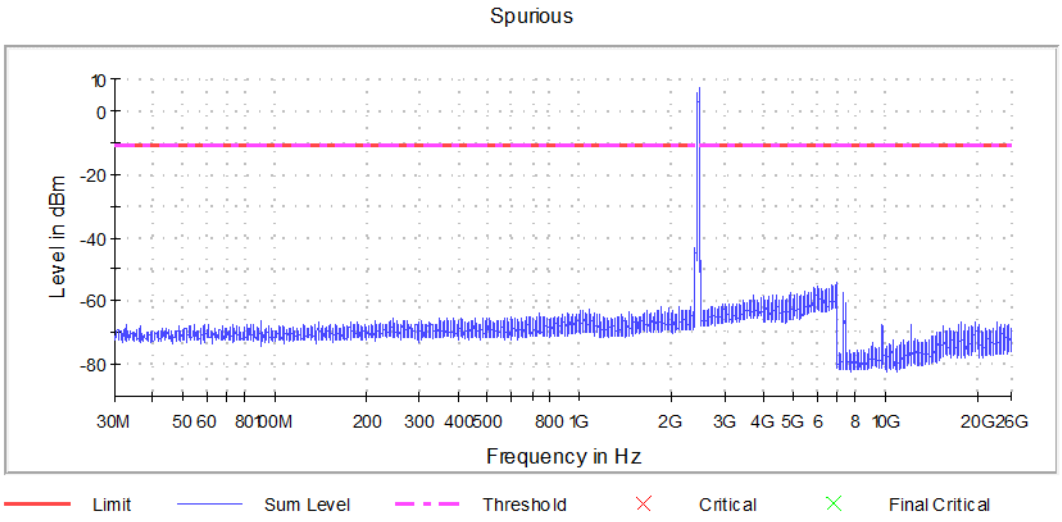
Graph 98: Transmitting on Channel 4, Power Setting 17– Antenna 0



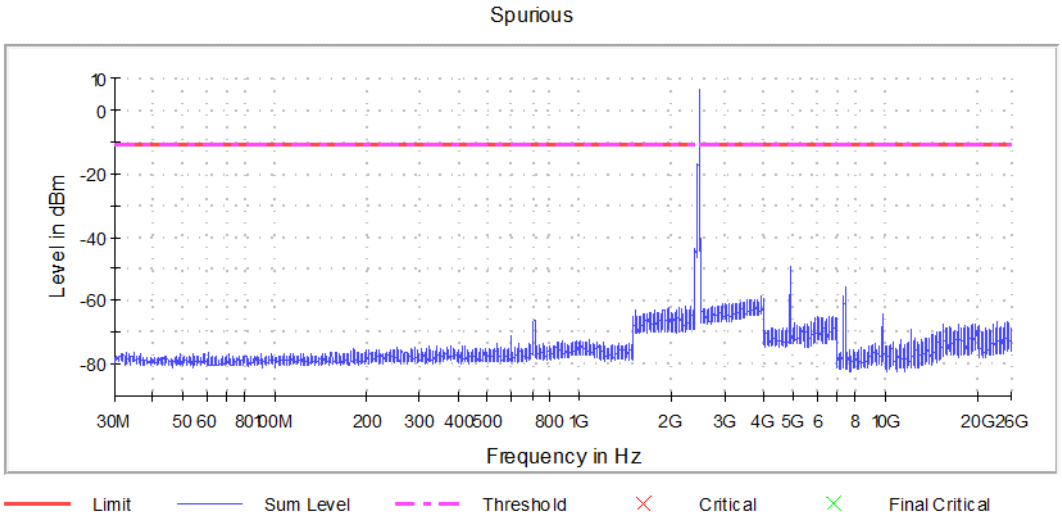
Graph 99: Transmitting on Channel 6, Power Setting 17– Antenna 0



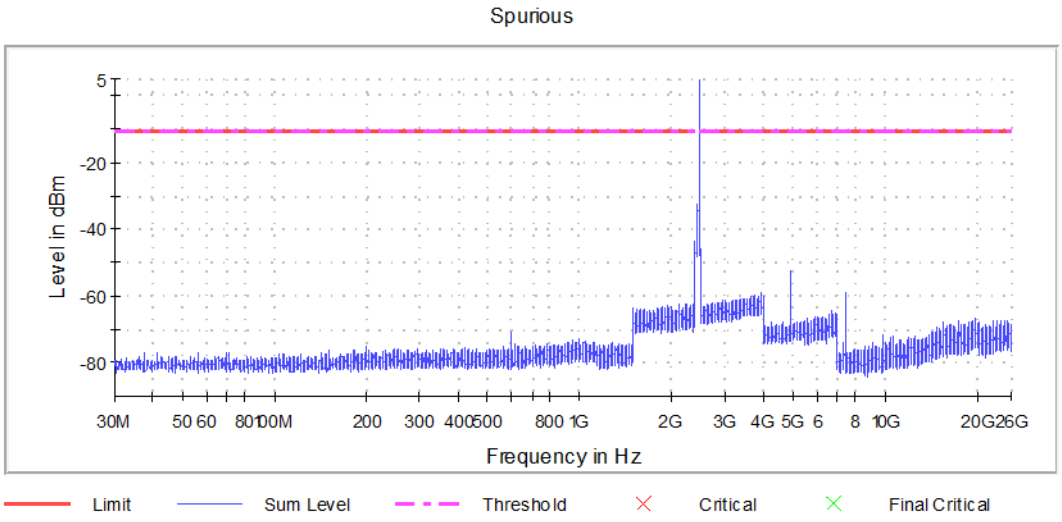
Graph 100: Transmitting on Channel 8, Power Setting 17– Antenna 0



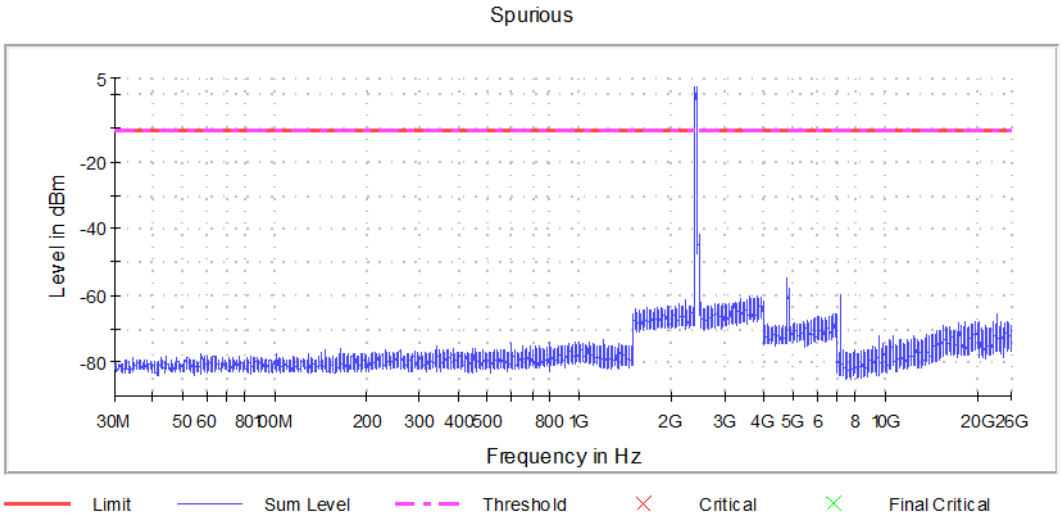
Graph 101: Transmitting on Channel 9, Power Setting 16– Antenna 0



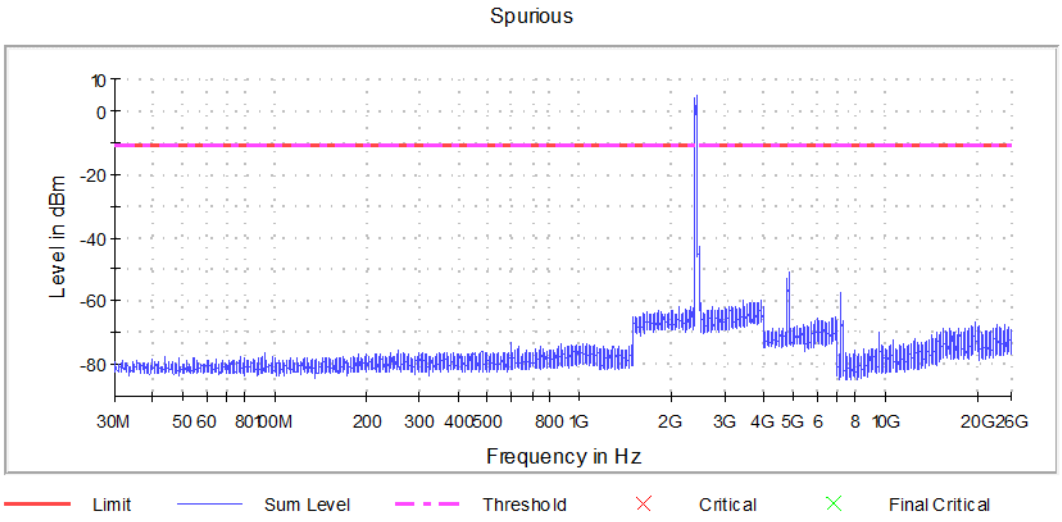
Graph 102: Transmitting on Channel 10, Power Setting 15– Antenna 0



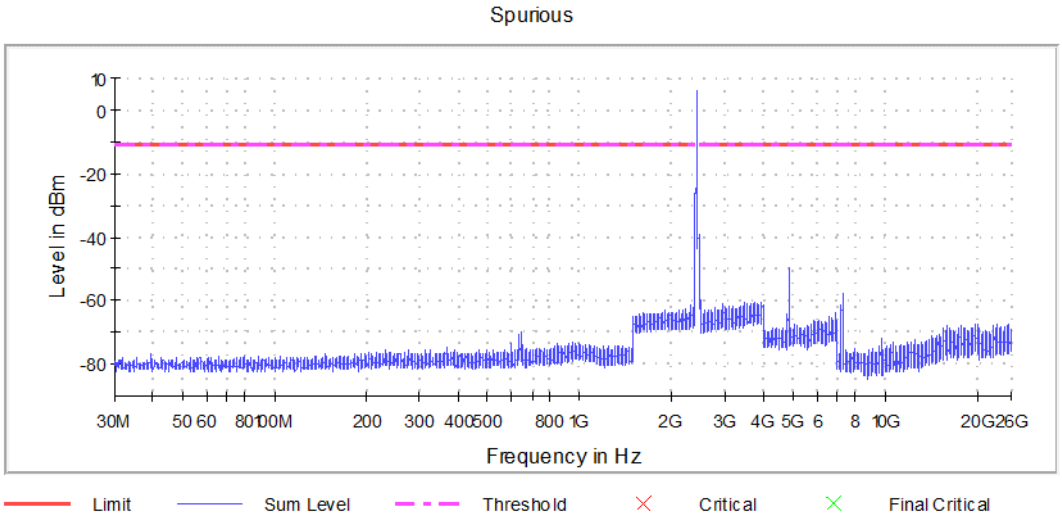
Graph 103: Transmitting on Channel 11, Power Setting 13– Antenna 0



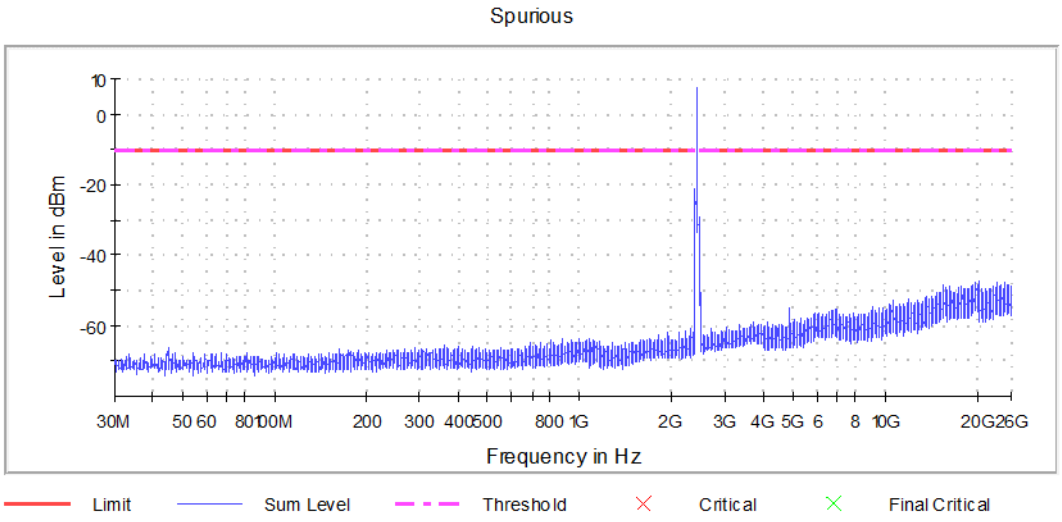
Graph 104: Transmitting on Channel 1, Power Setting 12– Antenna 1



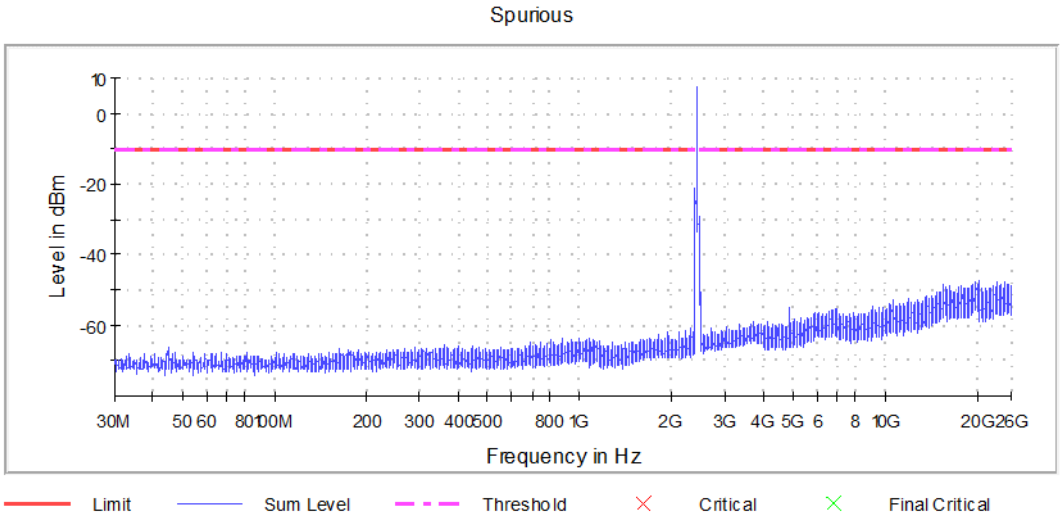
Graph 105: Transmitting on Channel 2, Power Setting 14– Antenna 1



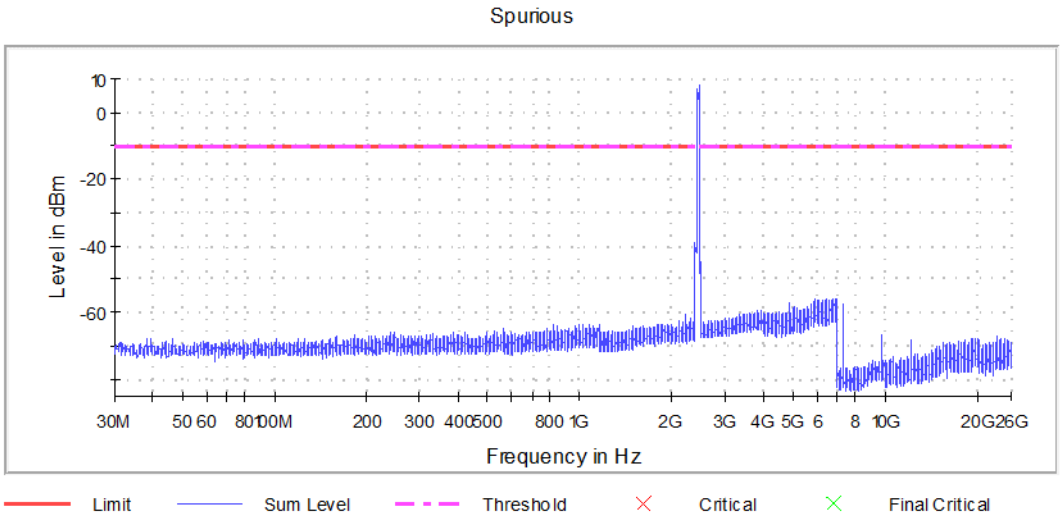
Graph 106: Transmitting on Channel 3, Power Setting 15– Antenna 1



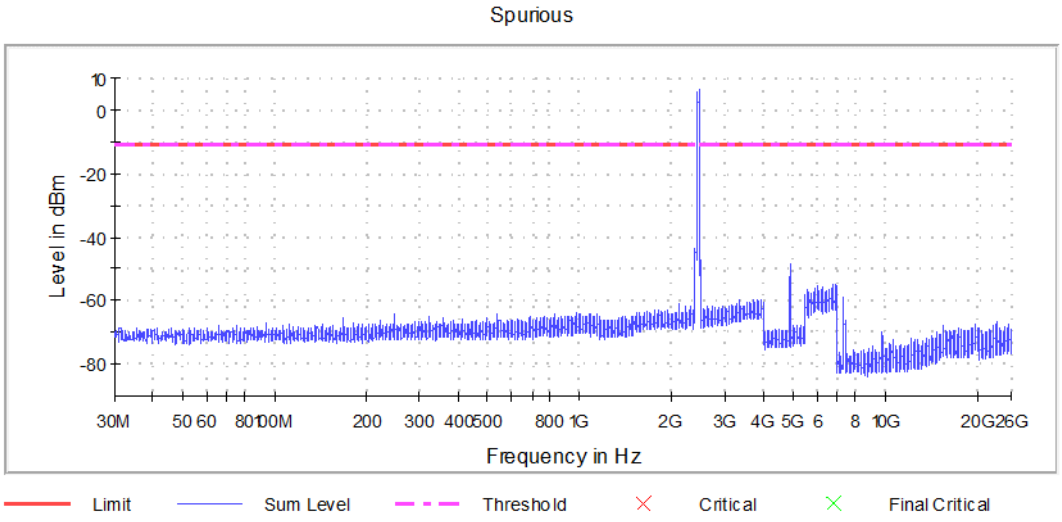
Graph 107: Transmitting on Channel 4, Power Setting 17– Antenna 1



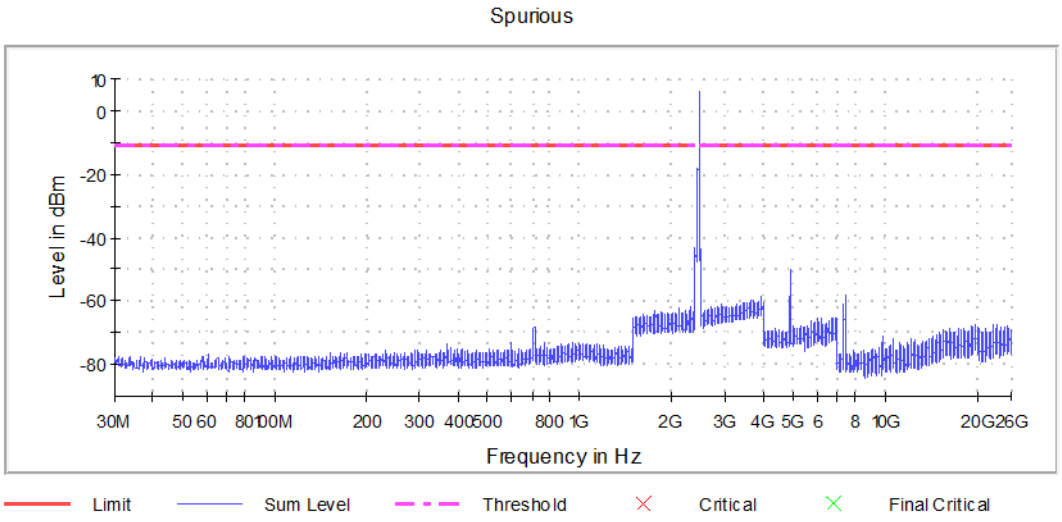
Graph 108: Transmitting on Channel 6, Power Setting 17– Antenna 1



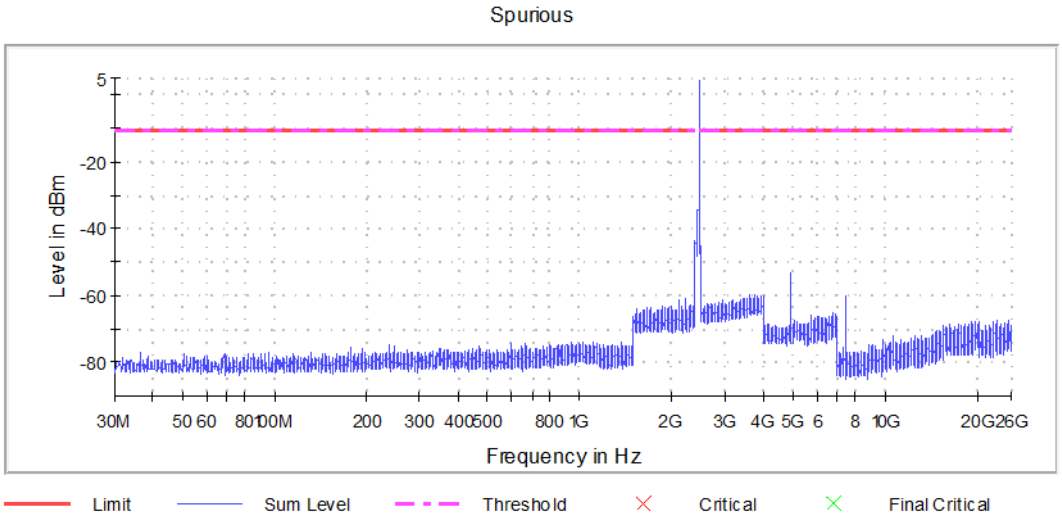
Graph 109: Transmitting on Channel 8, Power Setting 17– Antenna 1



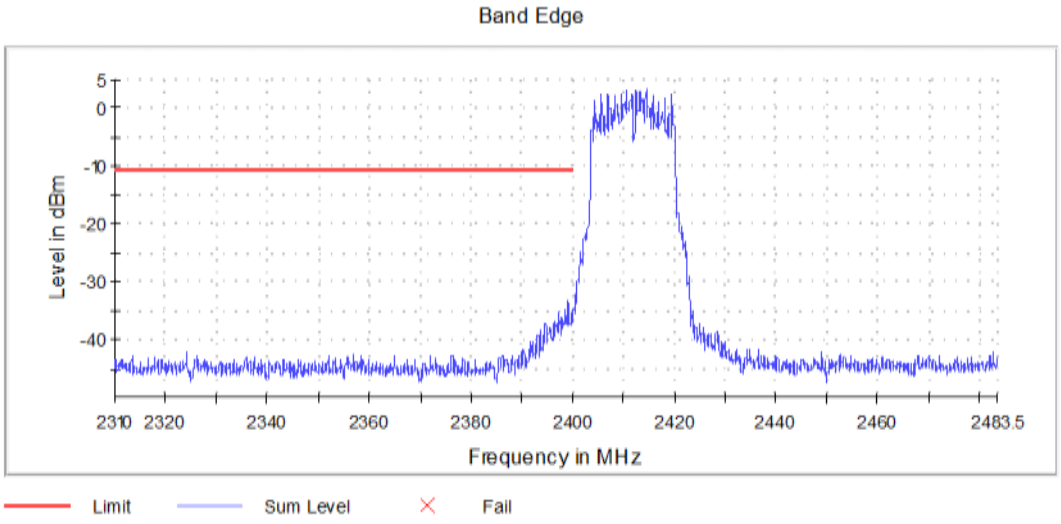
Graph 110: Transmitting on Channel 9, Power Setting 16– Antenna 1



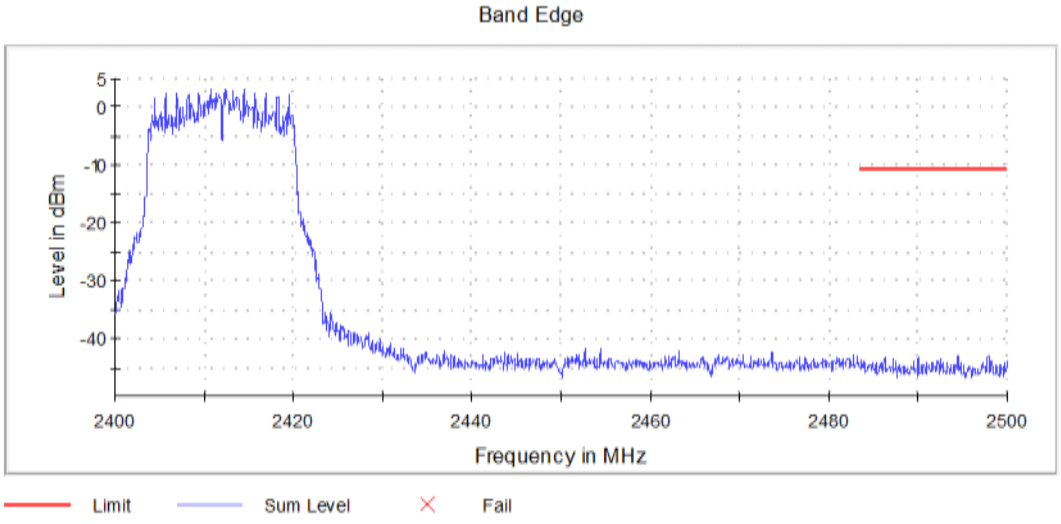
Graph 111: Transmitting on Channel 10, Power Setting 15– Antenna 1



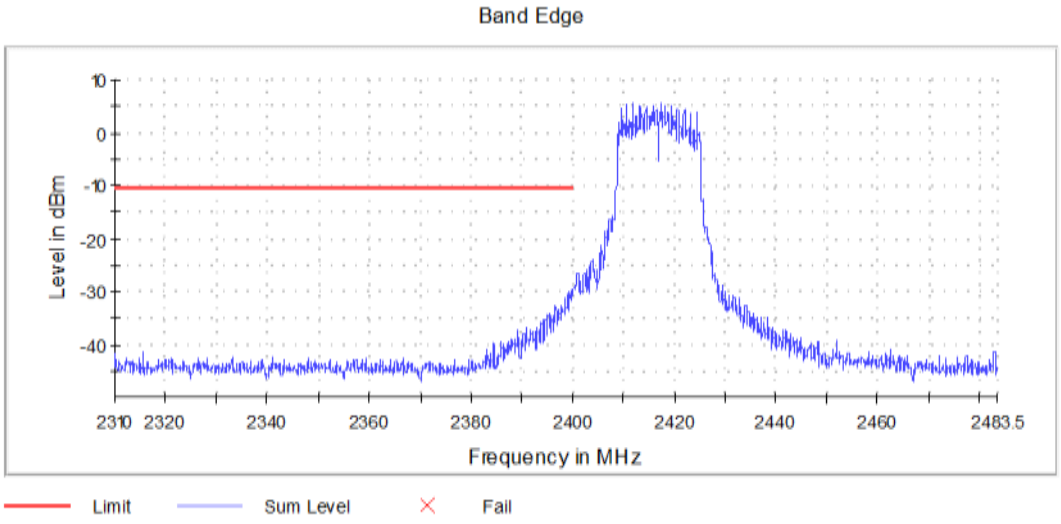
Graph 112: Transmitting on Channel 11, Power Setting 13– Antenna 1



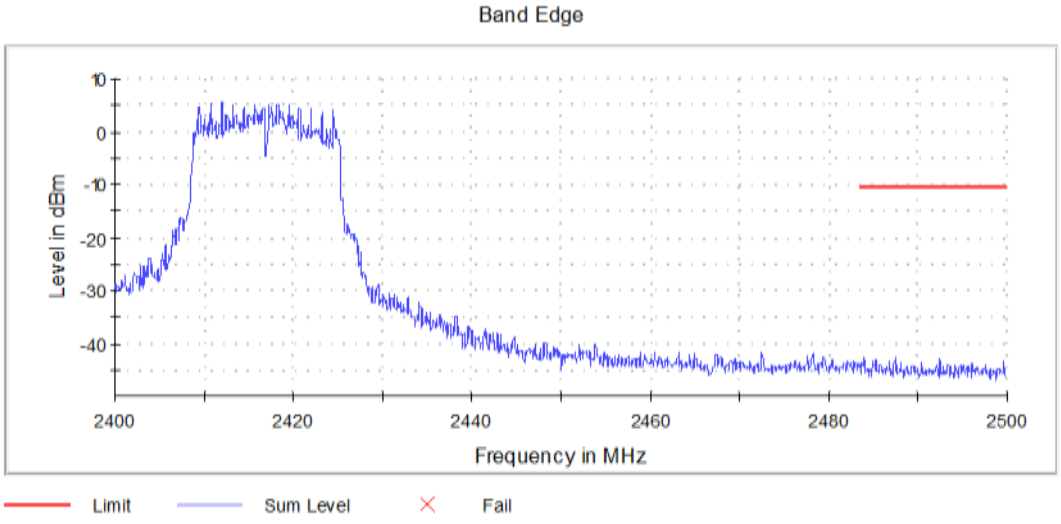
Graph 113: Lower Band Edge Plot Transmitting on Channel 1, Power Setting 12 – Antenna 0



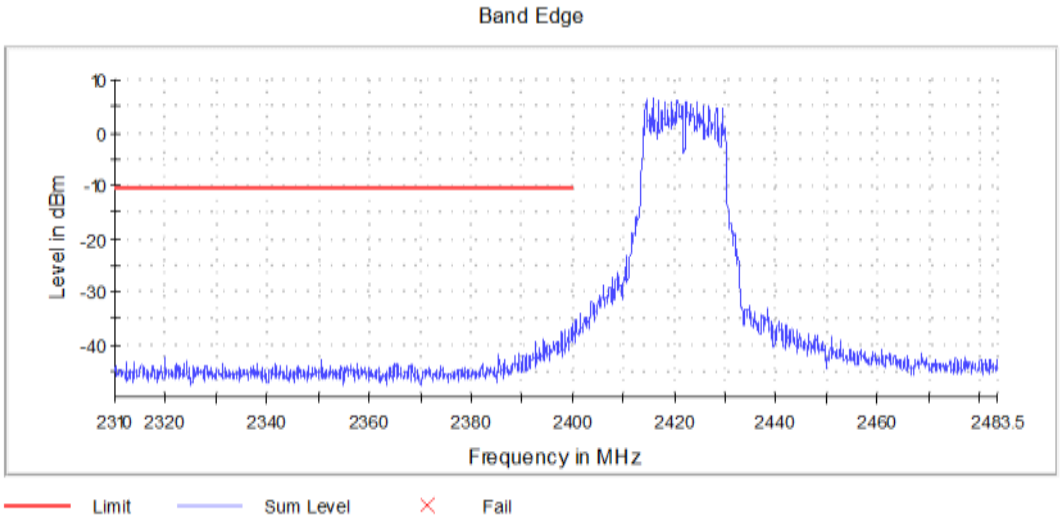
Graph 114: Upper Band Edge Plot Transmitting on Channel 1, Power Setting 12 – Antenna 0



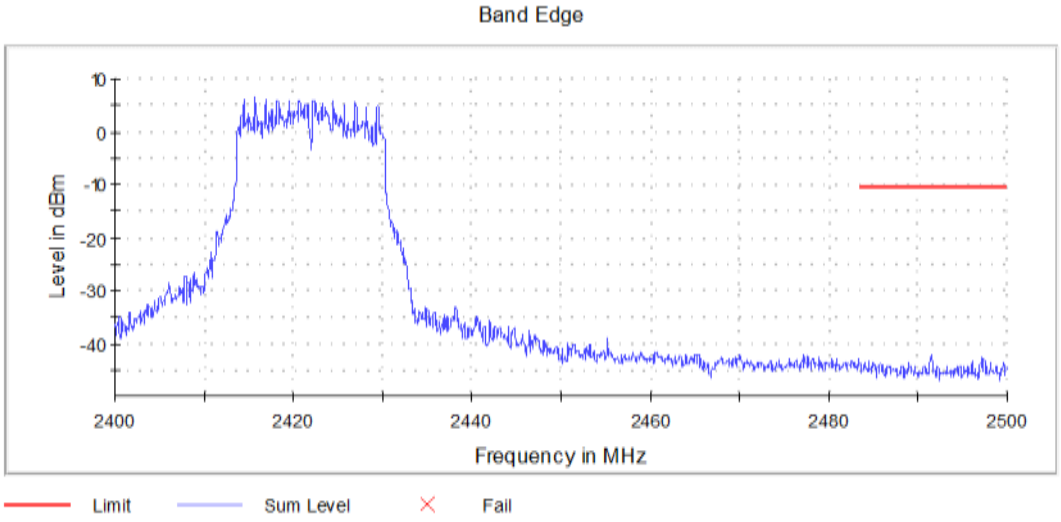
Graph 115: Lower Band Edge Plot Transmitting on Channel 2, Power Setting 14 – Antenna 0



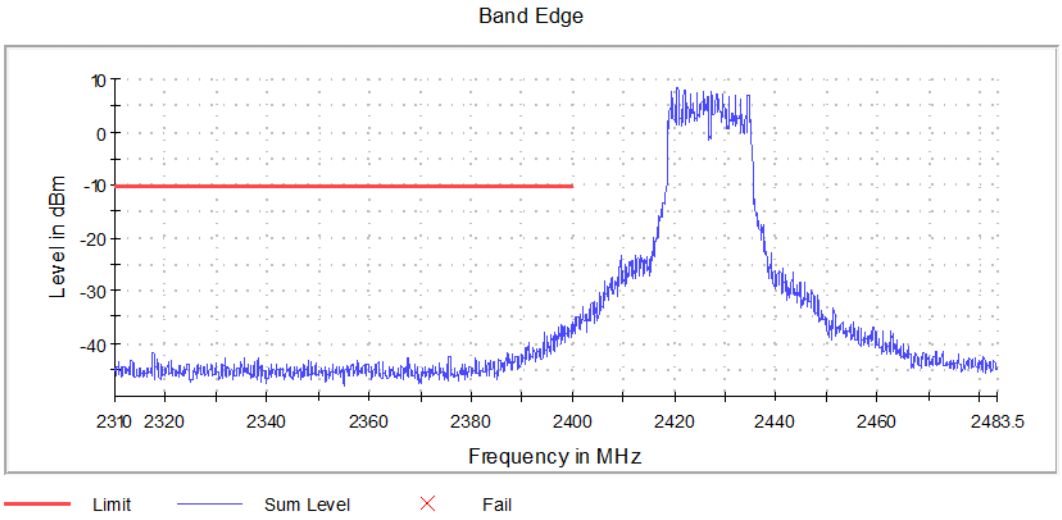
Graph 116: Upper Band Edge Plot Transmitting on Channel 2, Power Setting 14 – Antenna 0



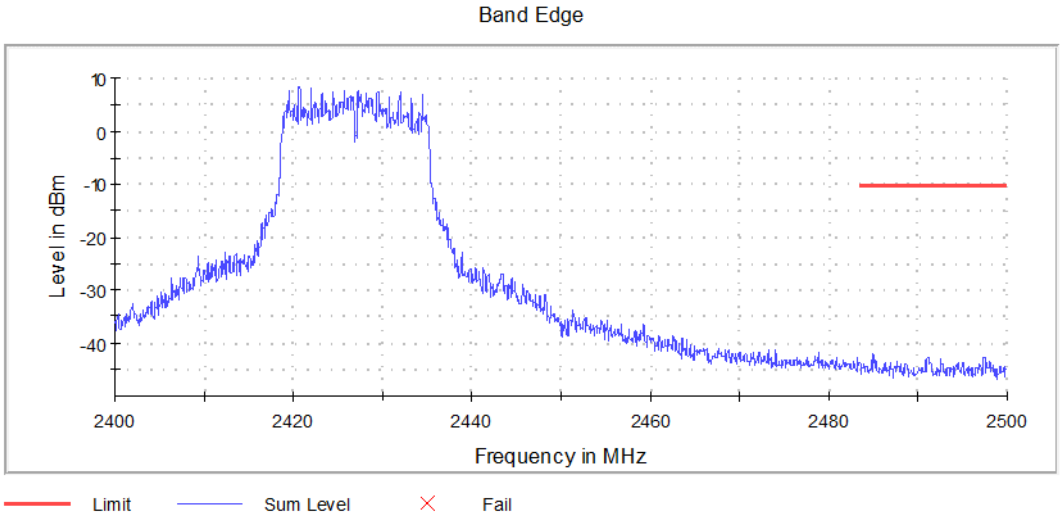
Graph 117: Lower Band Edge Plot Transmitting on Channel 3, Power Setting 15 – Antenna 0



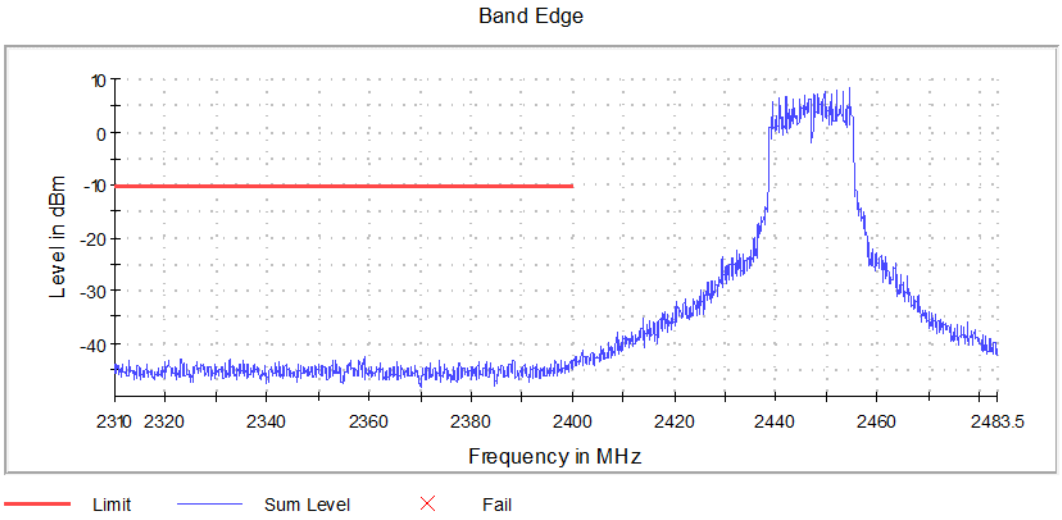
Graph 118: Upper Band Edge Plot Transmitting on Channel 3, Power Setting 15 – Antenna 0



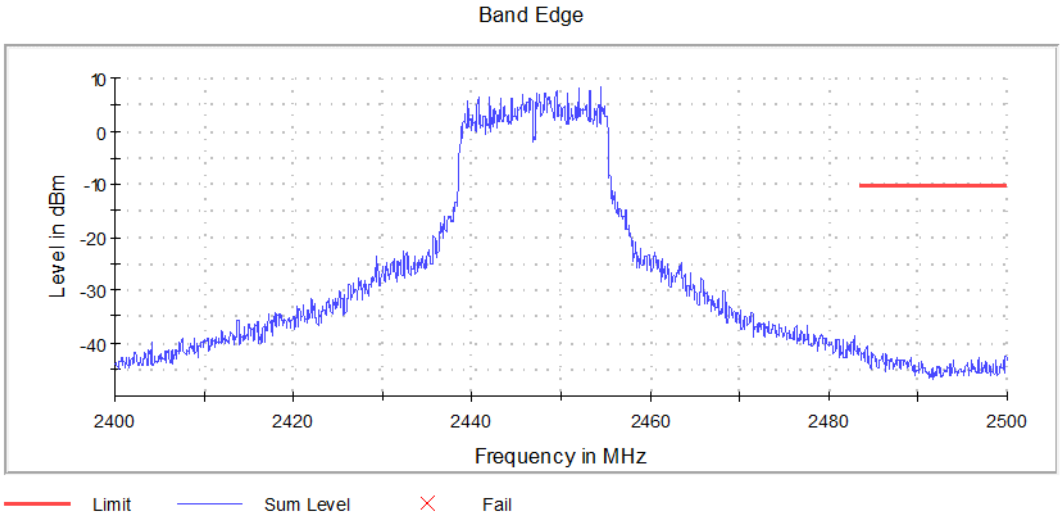
Graph 119: Lower Band Edge Plot Transmitting on Channel 4, Power Setting 17 – Antenna 0



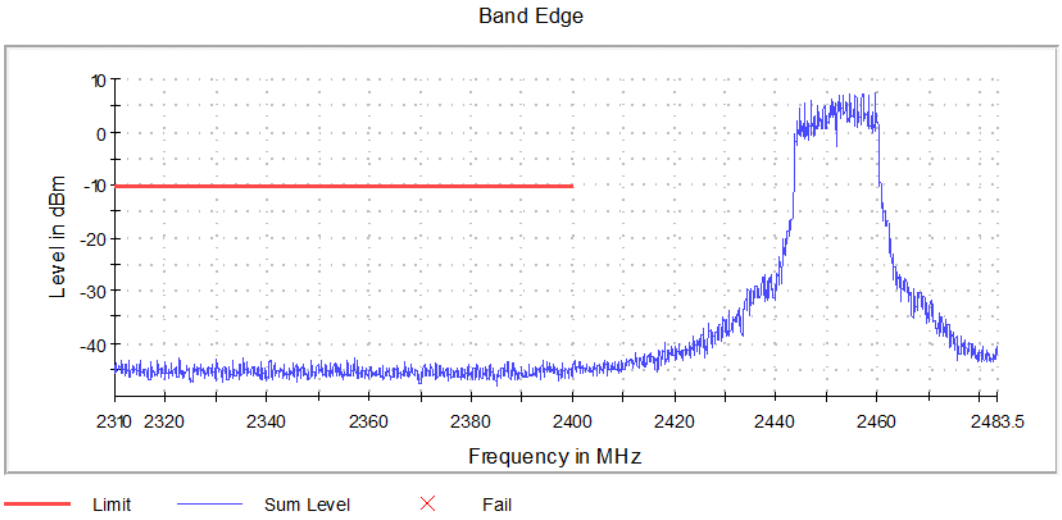
Graph 120: Upper Band Edge Plot Transmitting on Channel 4, Power Setting 17 – Antenna 0



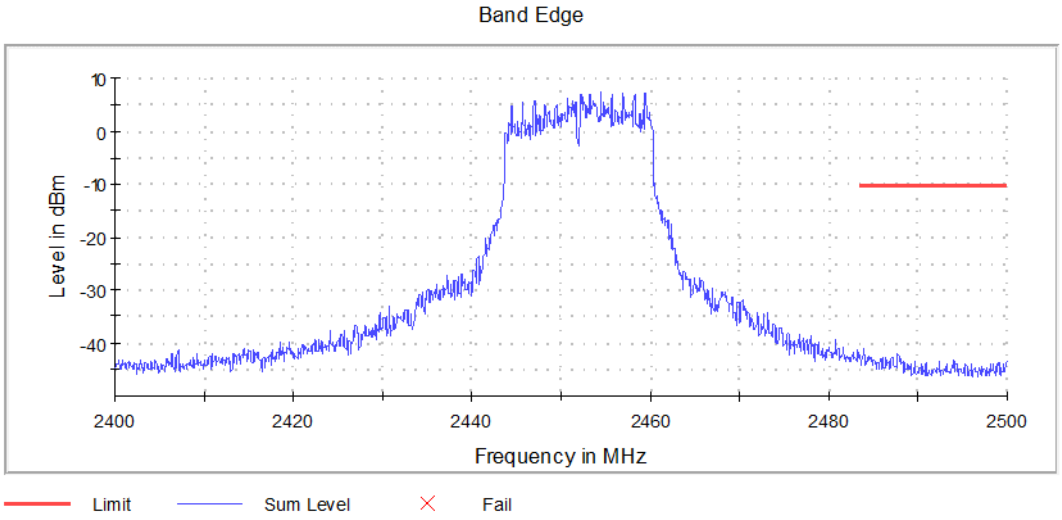
Graph 121: Lower Band Edge Plot Transmitting on Channel 8, Power Setting 17 – Antenna 0



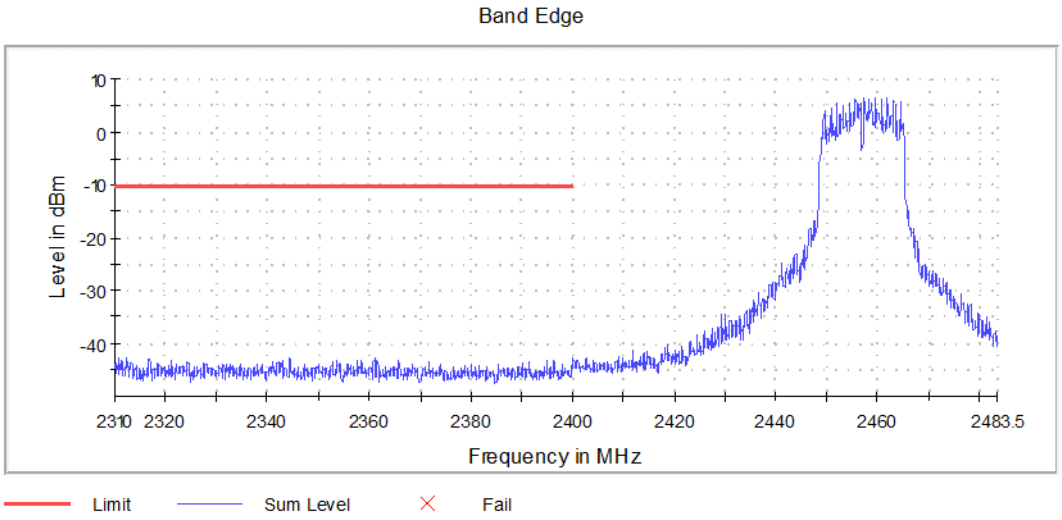
Graph 122: Upper Band Edge Plot Transmitting on Channel 8, Power Setting 17 – Antenna 0



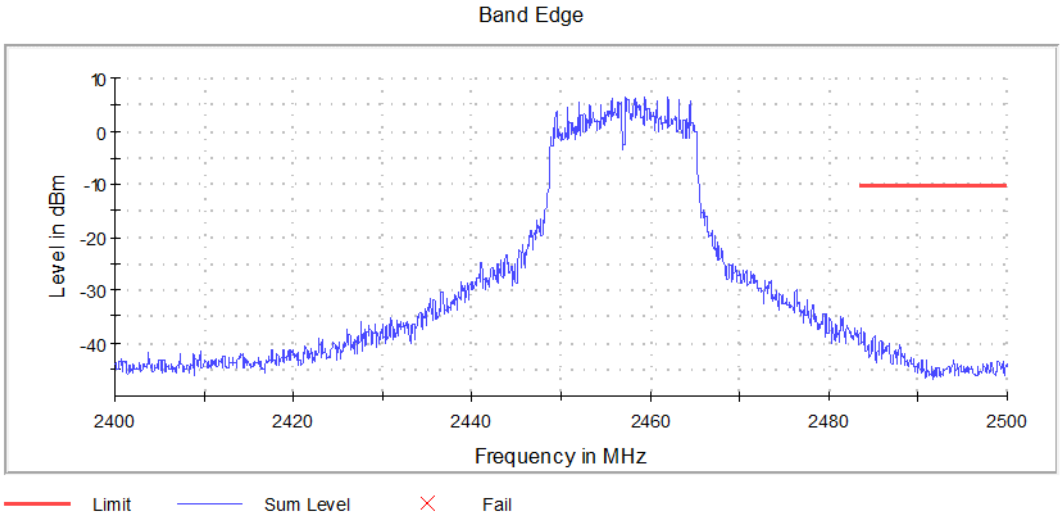
Graph 123: Lower Band Edge Plot Transmitting on Channel 9, Power Setting 16 – Antenna 0



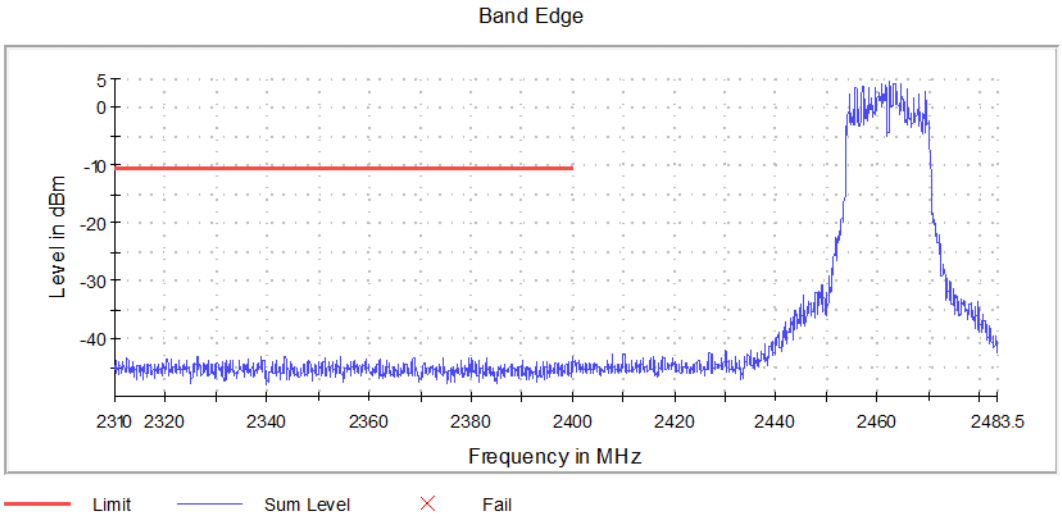
Graph 124: Upper Band Edge Plot Transmitting on Channel 9, Power Setting 16 – Antenna 0



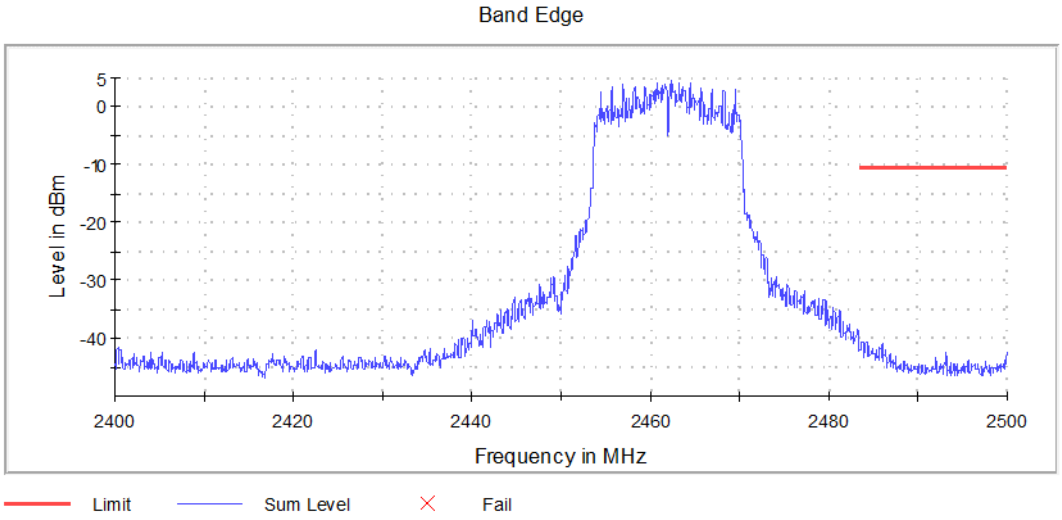
Graph 125: Lower Band Edge Plot Transmitting on Channel 10, Power Setting 15 – Antenna 0



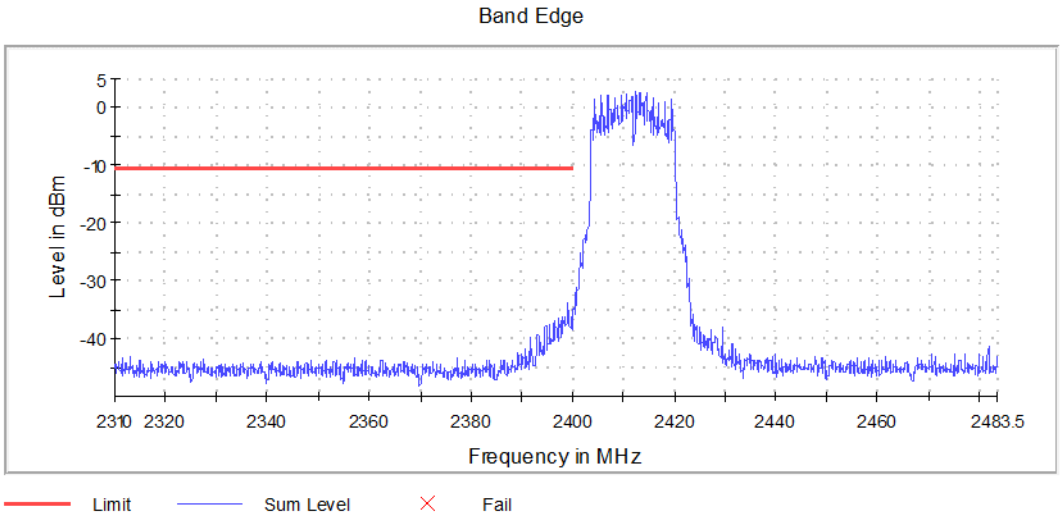
Graph 126: Upper Band Edge Plot Transmitting on Channel 10, Power Setting 15 – Antenna 0



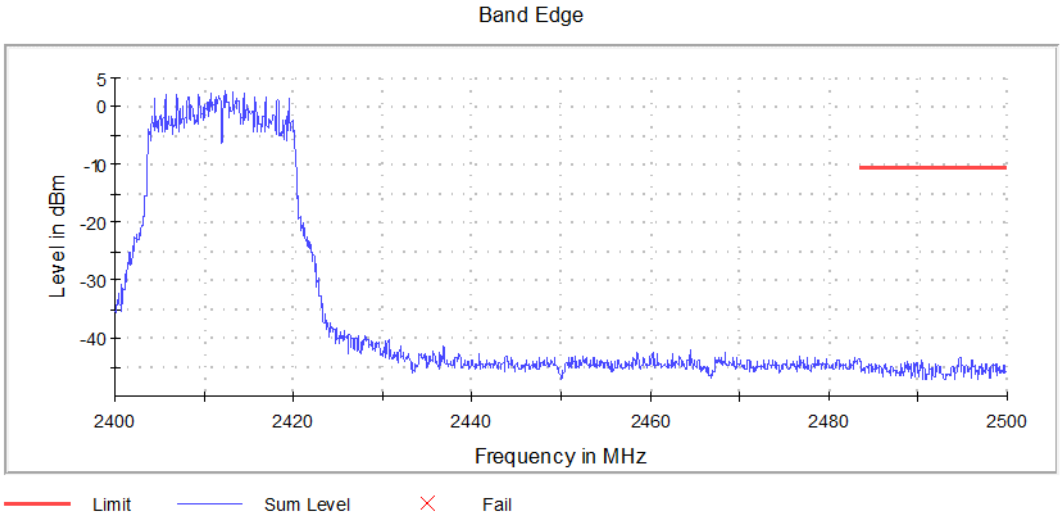
Graph 127: Lower Band Edge Plot Transmitting on Channel 11, Power Setting 13 – Antenna 0



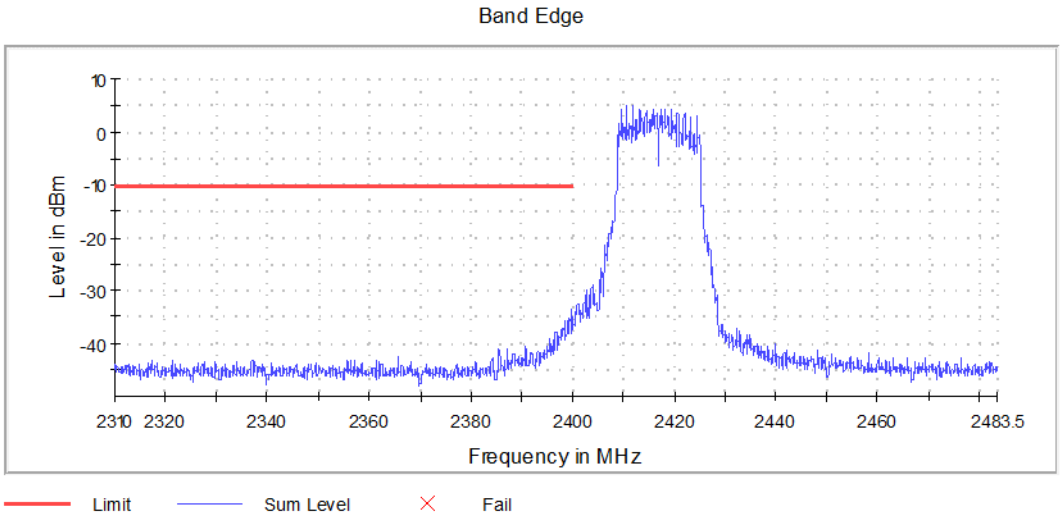
Graph 128: Upper Band Edge Plot Transmitting on Channel 11, Power Setting 13 – Antenna 0



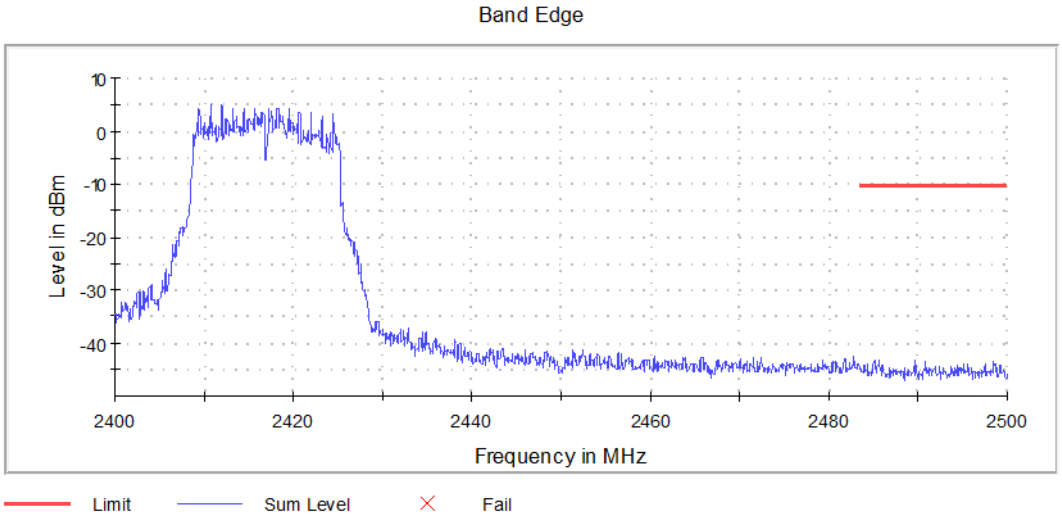
Graph 129: Lower Band Edge Plot Transmitting on Channel 1, Power Setting 12 – Antenna 1



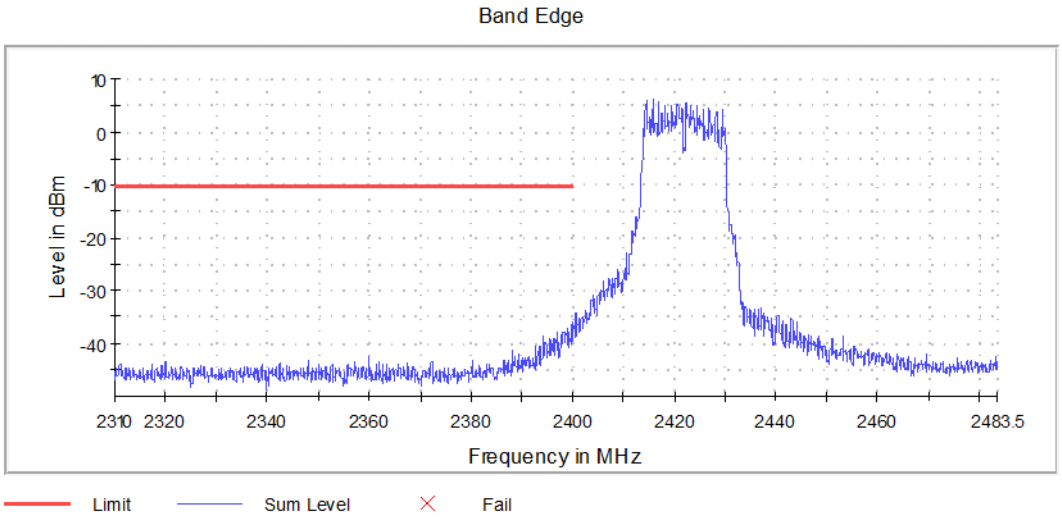
Graph 130: Upper Band Edge Plot Transmitting on Channel 1, Power Setting 12 – Antenna 1



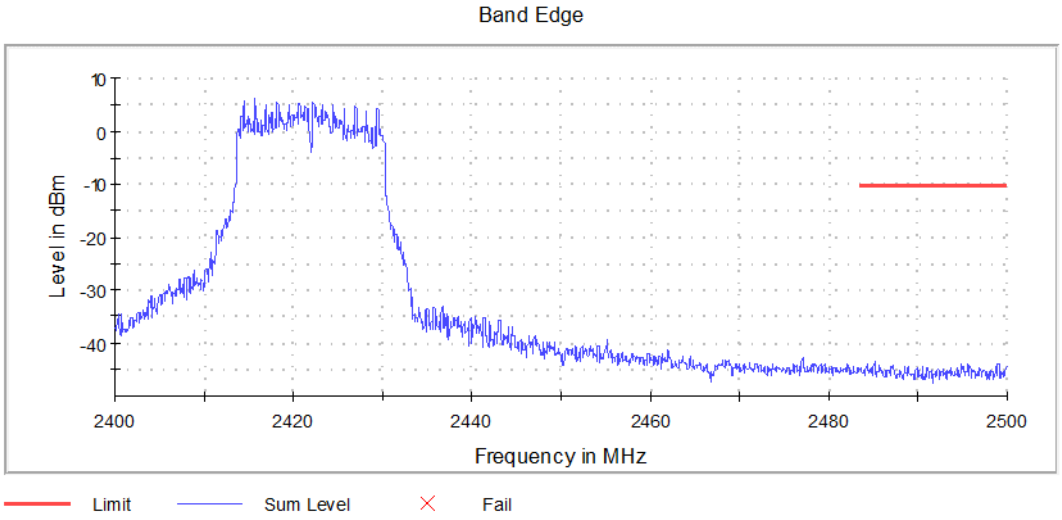
Graph 131: Lower Band Edge Plot Transmitting on Channel 2, Power Setting 14 – Antenna 1



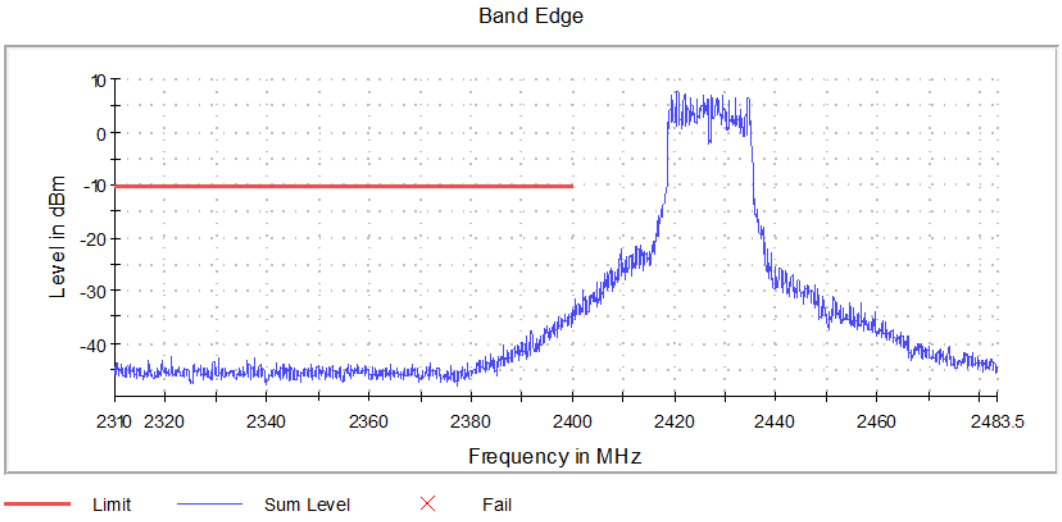
Graph 132: Upper Band Edge Plot Transmitting on Channel 2, Power Setting 14 – Antenna 1



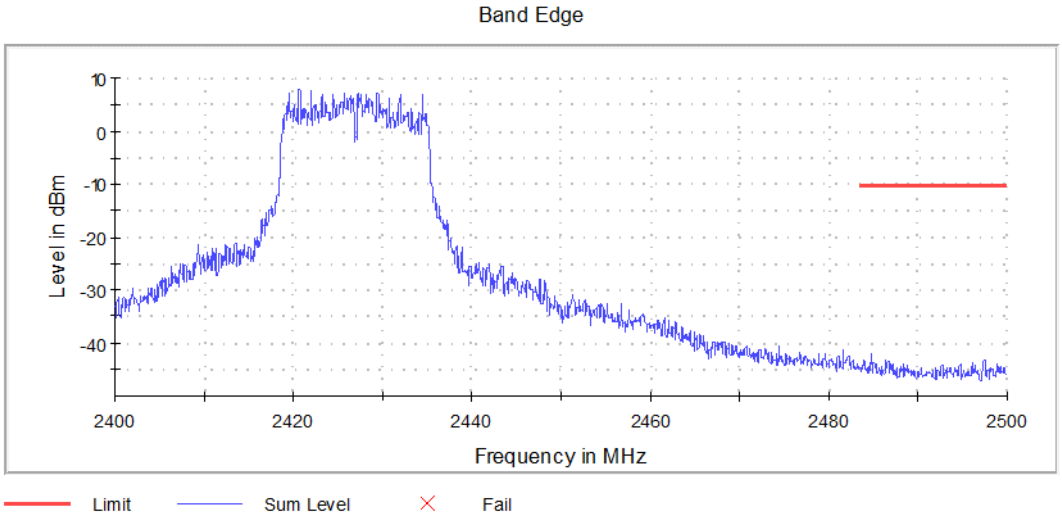
Graph 133: Lower Band Edge Plot Transmitting on Channel 3, Power Setting 15 – Antenna 1



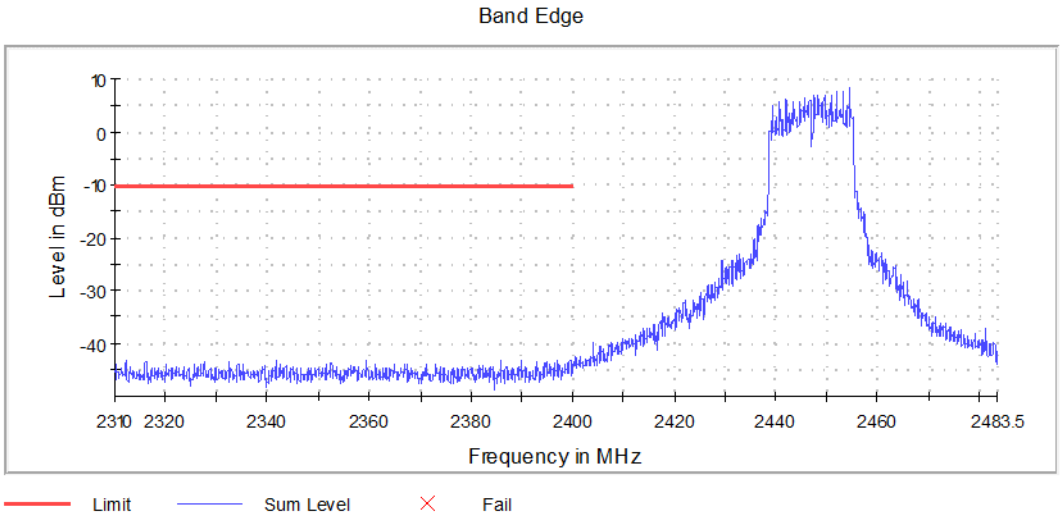
Graph 134: Upper Band Edge Plot Transmitting on Channel 3, Power Setting 15 – Antenna 1



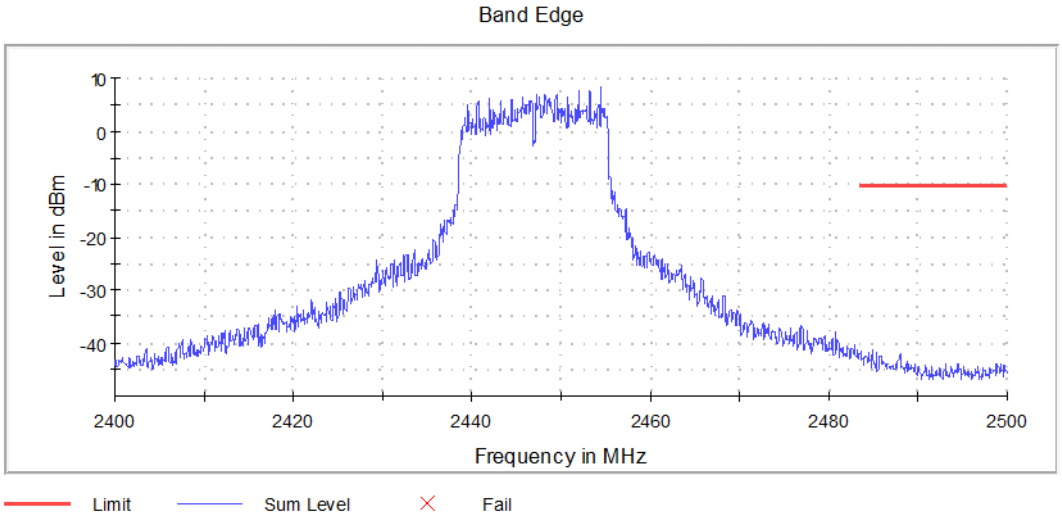
Graph 135: Lower Band Edge Plot Transmitting on Channel 4, Power Setting 17 – Antenna 1



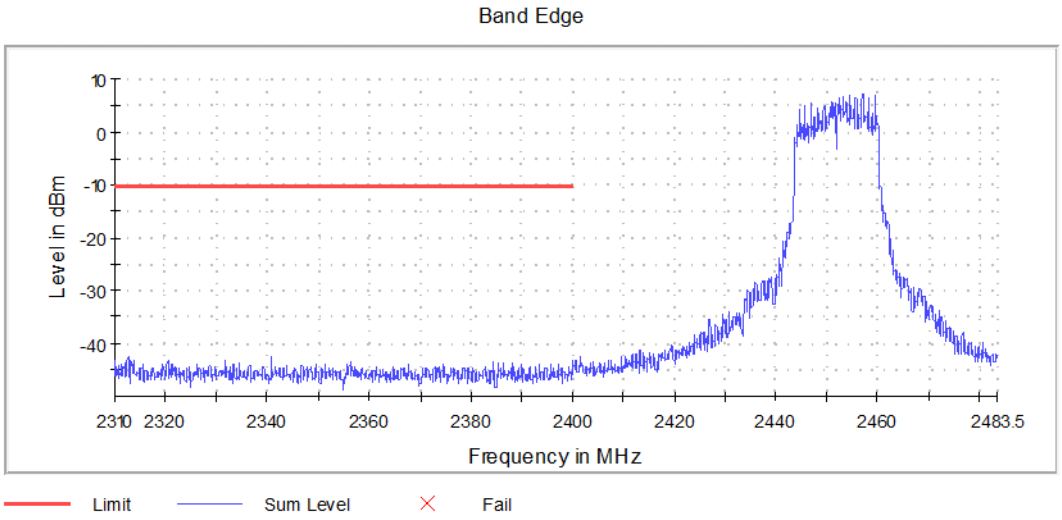
Graph 136: Upper Band Edge Plot Transmitting on Channel 4, Power Setting 17 – Antenna 1



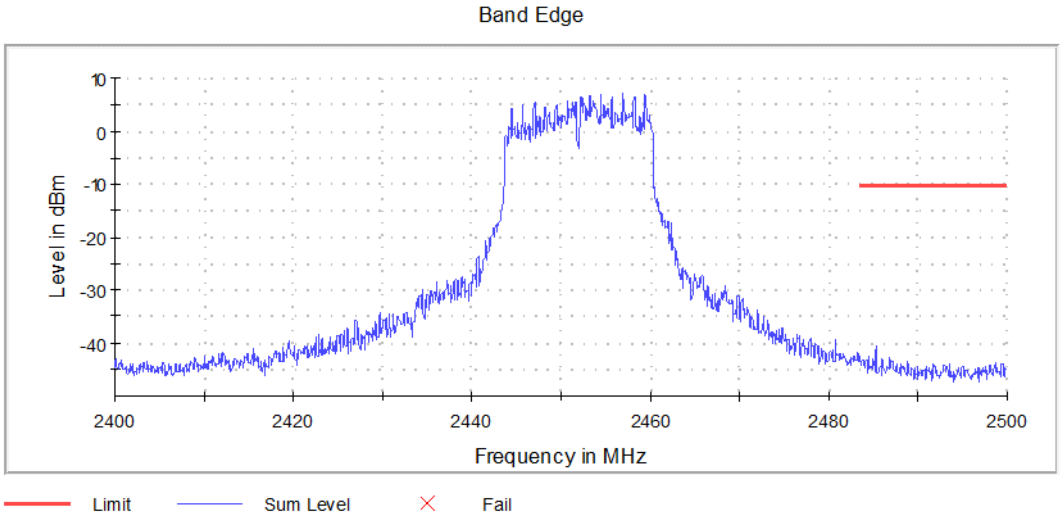
Graph 137: Lower Band Edge Plot Transmitting on Channel 8, Power Setting 17 – Antenna 1



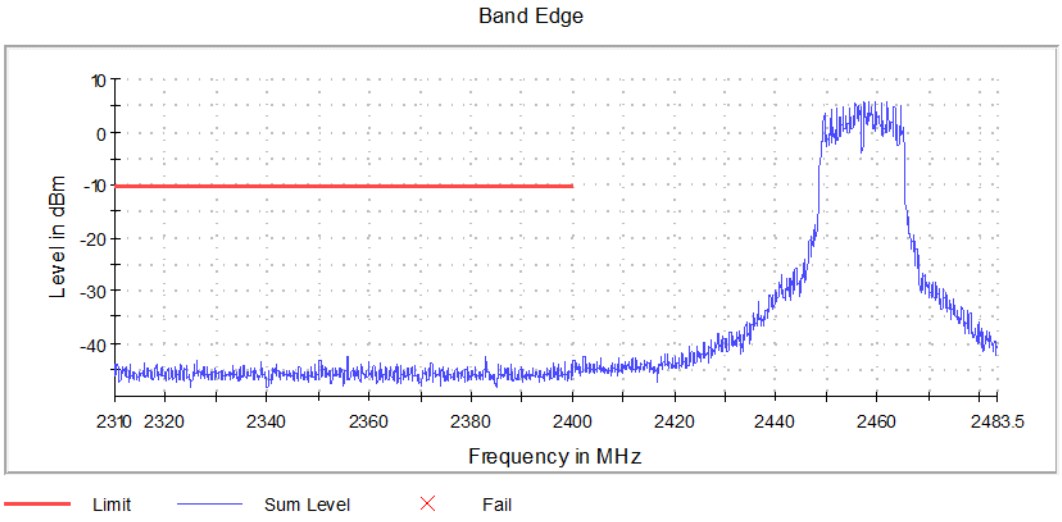
Graph 138: Upper Band Edge Plot Transmitting on Channel 8, Power Setting 17 – Antenna 1



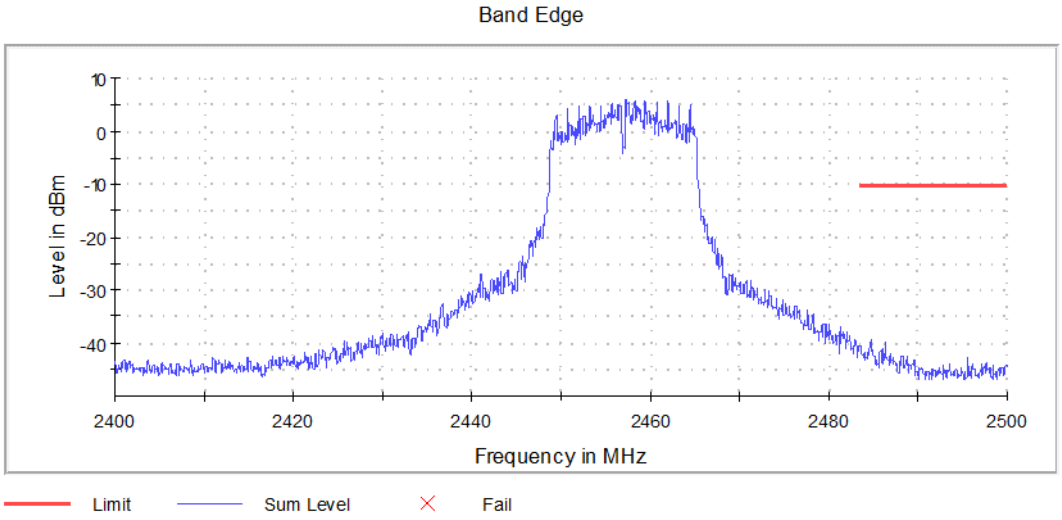
Graph 139: Lower Band Edge Plot Transmitting on Channel 9, Power Setting 16 – Antenna 1



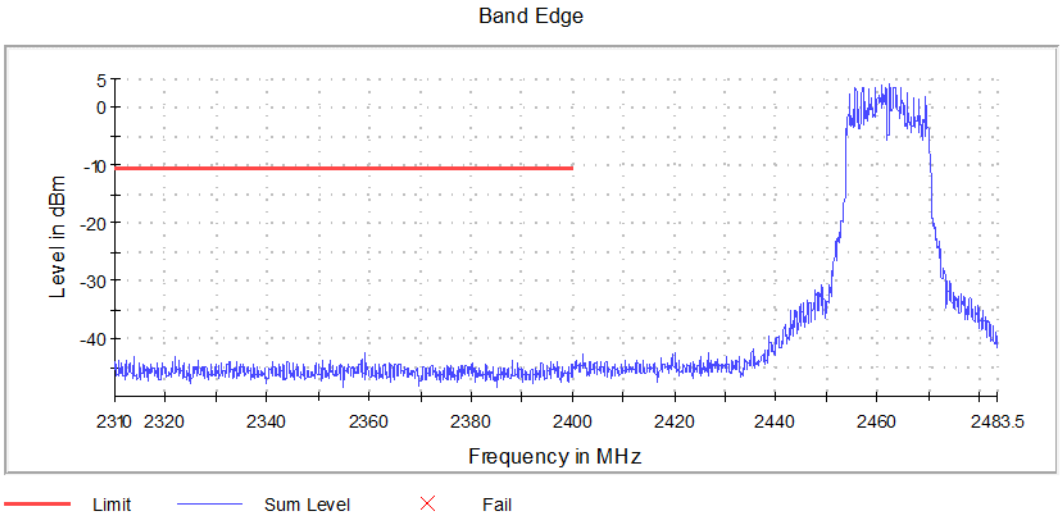
Graph 140: Upper Band Edge Plot Transmitting on Channel 9, Power Setting 16 – Antenna 1



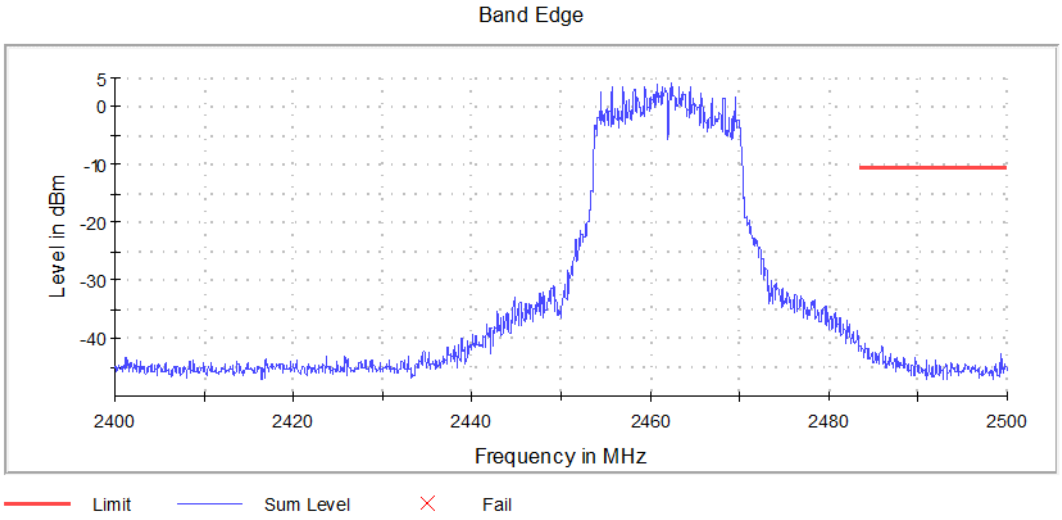
Graph 141: Lower Band Edge Plot Transmitting on Channel 10, Power Setting 15 – Antenna 1



Graph 142: Upper Band Edge Plot Transmitting on Channel 10, Power Setting 15 – Antenna 1



Graph 143: Lower Band Edge Plot Transmitting on Channel 11, Power Setting 13 – Antenna 1



Graph 144: Upper Band Edge Plot Transmitting on Channel 11, Power Setting 13 – Antenna 1

6.3.7 §15.247(d) Radiated Spurious Emissions in the Restricted Bands of §15.205

The frequency range from the lowest frequency generated or used in the device to the tenth harmonic of the highest fundamental emission was investigated to measure any radiated emissions in the restricted bands. The following tables show measurements of any emission that fell into the restricted bands of §15.205. The tables show the worst-case emission measured from the EUT. For frequencies above 18.0 GHz, a measurement distance of 1 meter was used. The noise floor was a minimum of 6 dB below the limit. The emissions in the restricted bands must meet the limits specified in §15.209. Tabular data for each of the spurious emissions is shown below for each of the units with power set at the maximum power of any channel in the band. A 6Mbps data rate was found to be worst-case and the data is from testing in the worst-case data rate. Plots of the band edges with the power set for the specific channels are also shown.

Result

All emissions in the restricted bands of §15.205 met the limits specified in §15.209; therefore, the EUT complies with the specification.

C4-T4T10-xx Antenna 0 (Model 1005180)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.7	38.5	45.2	74.0	-28.8
4824.0	Average	Vertical	-0.6	38.5	37.9	54.0	-16.1
4824.0	Peak	Horizontal	6.9	38.5	45.4	74.0	-28.6
4824.0	Average	Horizontal	-0.8	38.5	37.7	54.0	-16.3
7236.0	Peak	Vertical	5.8	42.7	48.5	74.0	-25.5
7236.0	Average	Vertical	-3.5	42.7	39.2	54.0	-14.8
7236.0	Peak	Horizontal	5.6	42.7	48.3	74.0	-25.7
7236.0	Average	Horizontal	-5.5	42.7	37.2	54.0	-16.8
12060.0	Peak	Vertical	4.5	47.9	52.4	74.0	-21.6
12060.0	Average	Vertical	-7.1	47.9	40.8	54.0	-13.2
12060.0	Peak	Horizontal	4.3	47.9	52.2	74.0	-21.8
12060.0	Average	Vertical	-7.1	47.9	40.8	54.0	-13.2

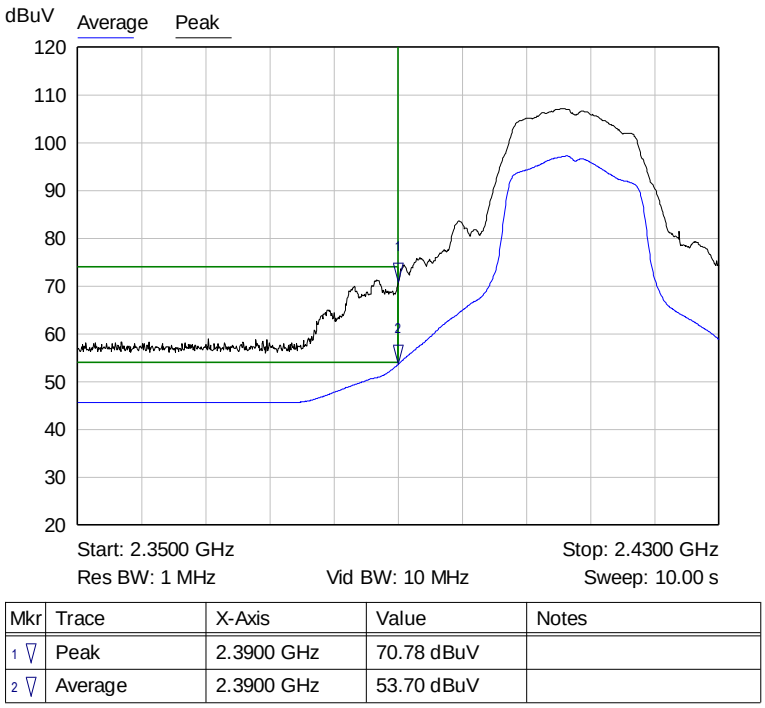
Table 26: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4874.0	Peak	Vertical	7.4	38.6	46.0	74.0	-28.0
4874.0	Average	Vertical	0.0	38.6	38.6	54.0	-15.4
4874.0	Peak	Horizontal	6.9	38.6	45.5	74.0	-28.5
4874.0	Average	Horizontal	-0.7	38.6	37.9	54.0	-16.1
7311.0	Peak	Vertical	4.0	42.9	46.9	74.0	-27.1
7311.0	Average	Vertical	-8.4	42.9	34.5	54.0	-19.5
7311.0	Peak	Horizontal	3.3	42.9	46.2	74.0	-27.8
7311.0	Average	Horizontal	-8.3	42.9	34.6	54.0	-19.4
12185.0	Peak	Vertical	4.4	47.8	52.2	74.0	-21.8
12185.0	Average	Vertical	-7.3	47.8	40.5	54.0	-13.5
12185.0	Peak	Horizontal	4.3	47.8	52.1	74.0	-21.9
12185.0	Average	Vertical	-7.0	47.8	40.8	54.0	-13.2

Table 27: Transmitting at the Middle Frequency

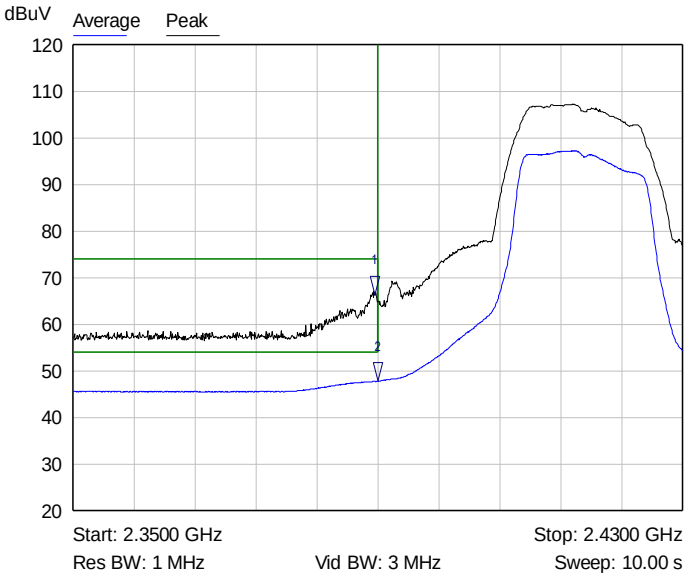
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	10.4	38.7	49.1	74.0	-24.9
4924.0	Average	Vertical	6.2	38.7	44.9	54.0	-9.1
4924.0	Peak	Horizontal	8.7	38.7	47.4	74.0	-26.6
4924.0	Average	Horizontal	3.6	38.7	42.3	54.0	-11.7
7386.0	Peak	Vertical	5.5	43.1	48.6	74.0	-25.4
7386.0	Average	Vertical	-4.9	43.1	38.2	54.0	-15.8
7386.0	Peak	Horizontal	4.8	43.1	47.9	74.0	-26.1
7386.0	Average	Horizontal	-6.4	43.1	36.7	54.0	-17.3
12310.0	Peak	Vertical	4.5	47.7	52.2	74.0	-21.8
12310.0	Average	Vertical	-7.6	47.7	40.1	54.0	-13.9
12310.0	Peak	Horizontal	3.9	47.7	51.6	74.0	-22.4
12310.0	Average	Vertical	-7.9	47.7	39.8	54.0	-14.2

Table 28: Transmitting at the Highest Frequency



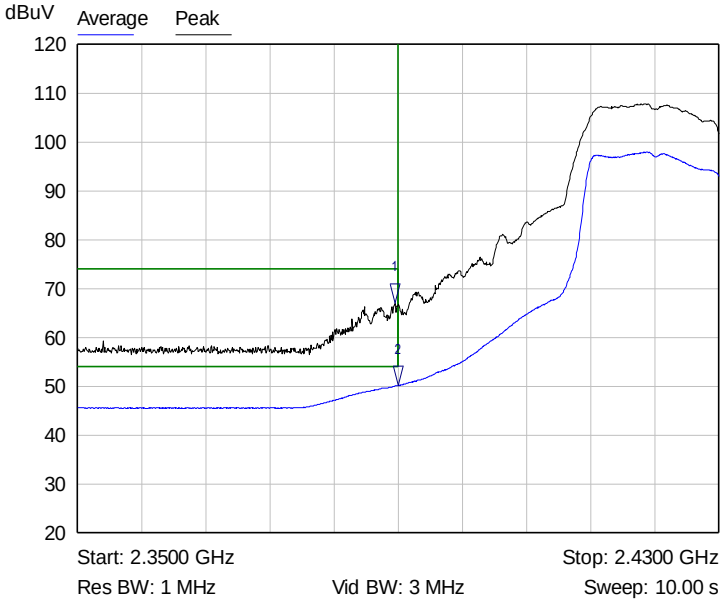
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	70.78 dBuV	
2 ▽	Average	2.3900 GHz	53.70 dBuV	

Graph 145: Radiated Band Edge Plot – Channel 1 at Power Setting 12



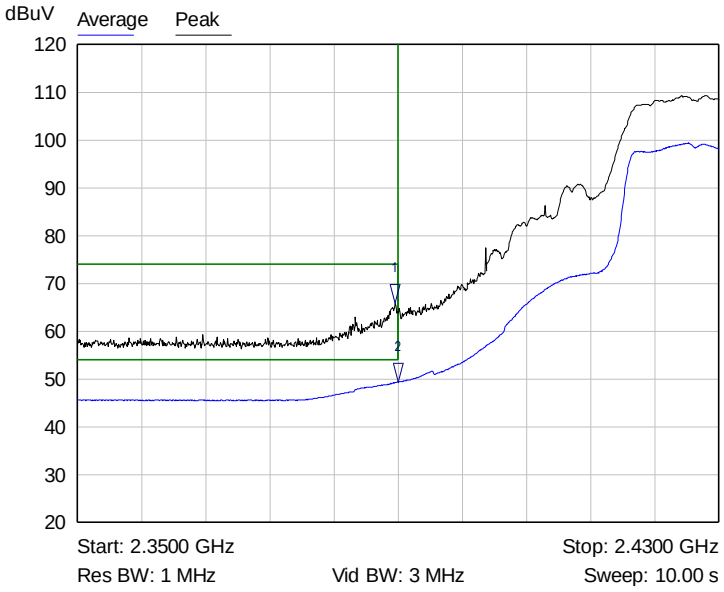
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3896 GHz	66.37 dBuV	
2	Average	2.3900 GHz	47.83 dBuV	

Graph 146: Radiated Band Edge Plot – Channel 2 at Power Setting 14



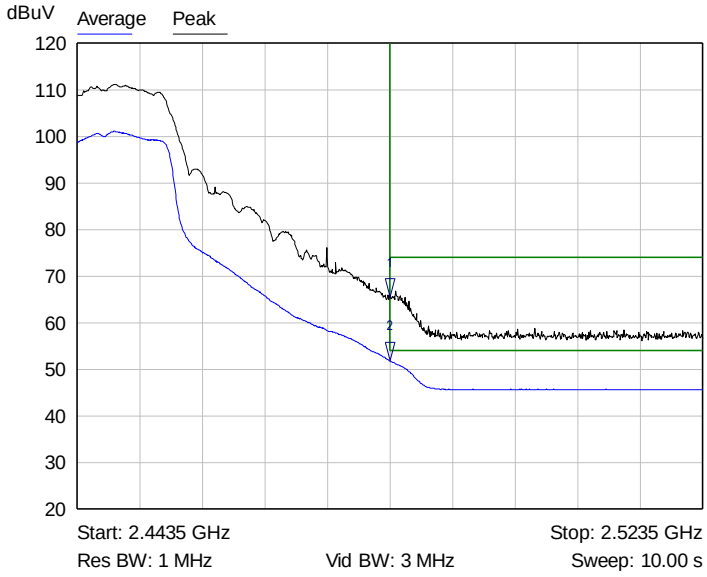
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3896 GHz	66.93 dBuV	
2	Average	2.3900 GHz	50.21 dBuV	

Graph 147: Radiated Band Edge Plot – Channel 3 at Power Setting 15



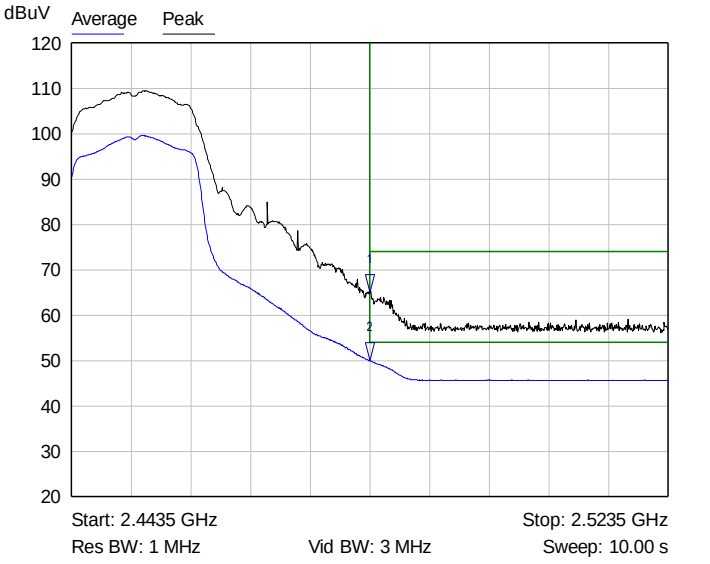
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3896 GHz	65.88 dBuV	
2	Average	2.3900 GHz	49.39 dBuV	

Graph 148: Radiated Band Edge Plot – Channel 4 at Power Setting 17



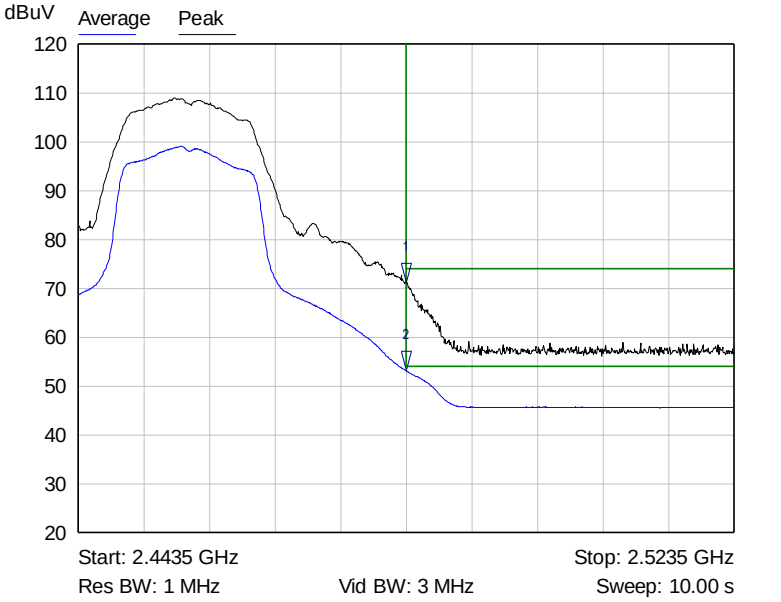
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	65.55 dBuV	
2	Average	2.4835 GHz	51.84 dBuV	

Graph 149: Radiated Band Edge Plot – Channel 8 at Power Setting 17



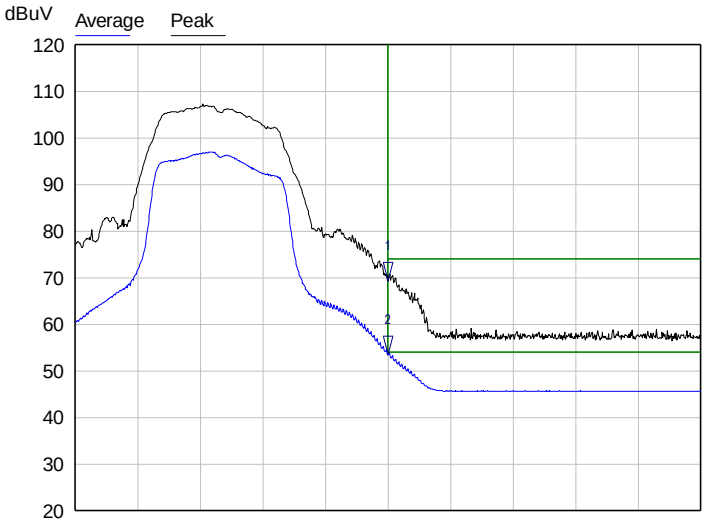
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	64.99 dBuV	
2	Average	2.4835 GHz	49.98 dBuV	

Graph 150: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	71.12 dBuV	
2	Average	2.4835 GHz	53.11 dBuV	

Graph 151: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	69.35 dBuV	
2	Average	2.4835 GHz	53.42 dBuV	

Graph 152: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4T10-xx Antenna 1 (Model 1005179)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.2	38.5	44.7	74.0	-29.3
4824.0	Average	Vertical	-4.4	38.5	34.1	54.0	-19.9
4824.0	Peak	Horizontal	6.5	38.5	45.0	74.0	-29.0
4824.0	Average	Horizontal	-2.2	38.5	36.3	54.0	-17.7
7236.0	Peak	Vertical	4.1	42.7	46.8	74.0	-27.2
7236.0	Average	Vertical	-6.9	42.7	35.8	54.0	-18.2
7236.0	Peak	Horizontal	5.2	42.7	47.9	74.0	-26.1
7236.0	Average	Horizontal	-5.2	42.7	37.5	54.0	-16.5
12060.0	Peak	Vertical	4.7	47.9	52.6	74.0	-21.4
12060.0	Average	Vertical	-7.3	47.9	40.6	54.0	-13.4
12060.0	Peak	Horizontal	3.7	47.9	51.6	74.0	-22.4
12060.0	Average	Vertical	-7.4	47.9	40.5	54.0	-13.5

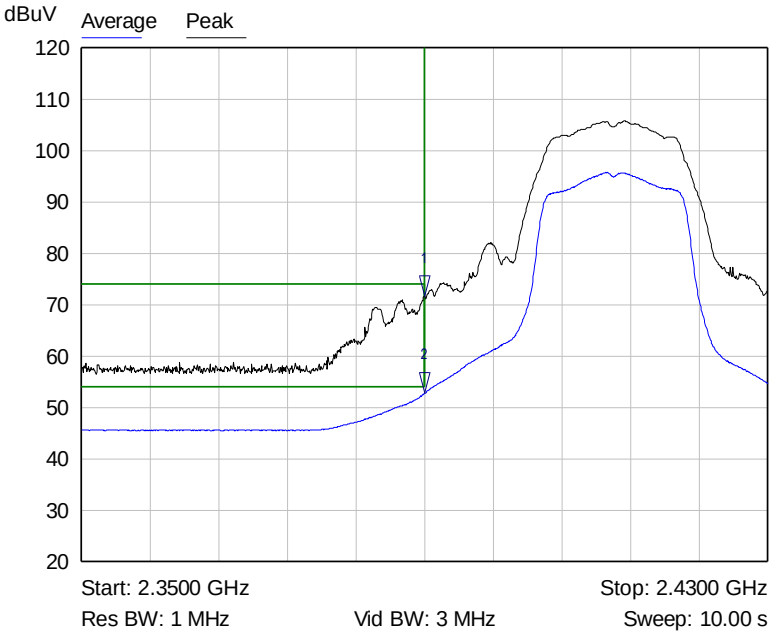
Table 29: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	5.8	38.6	44.4	74.0	-29.6
4874.0	Average	Vertical	-3.5	38.6	35.1	54.0	-18.9
4874.0	Peak	Horizontal	6.3	38.6	44.9	74.0	-29.1
4874.0	Average	Horizontal	-3.0	38.6	35.6	54.0	-18.4
7311.0	Peak	Vertical	4.7	42.9	47.6	74.0	-26.4
7311.0	Average	Vertical	-5.8	42.9	37.1	54.0	-16.9
7311.0	Peak	Horizontal	5.3	42.9	48.2	74.0	-25.8
7311.0	Average	Horizontal	-5.5	42.9	37.4	54.0	-16.6
12185.0	Peak	Vertical	3.5	47.8	51.3	74.0	-22.7
12185.0	Average	Vertical	-7.4	47.8	40.4	54.0	-13.6
12185.0	Peak	Horizontal	4.0	47.8	51.8	74.0	-22.2
12185.0	Average	Vertical	-7.7	47.8	40.1	54.0	-13.9

Table 30: Transmitting at the Middle Frequency

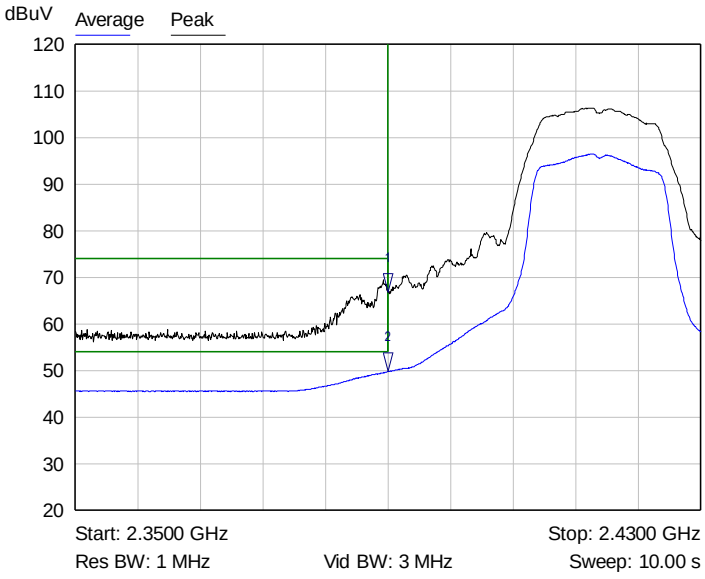
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	6.1	38.7	44.8	74.0	-29.2
4924.0	Average	Vertical	-3.3	38.7	35.4	54.0	-18.6
4924.0	Peak	Horizontal	6.7	38.7	45.4	74.0	-28.6
4924.0	Average	Horizontal	-1.5	38.7	37.2	54.0	-16.8
7386.0	Peak	Vertical	5.1	43.1	48.2	74.0	-25.8
7386.0	Average	Vertical	-5.8	43.1	37.3	54.0	-16.7
7386.0	Peak	Horizontal	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Horizontal	-5.8	43.1	37.3	54.0	-16.7
12310.0	Peak	Vertical	3.7	47.7	51.4	74.0	-22.6
12310.0	Average	Vertical	-7.6	47.7	40.1	54.0	-13.9
12310.0	Peak	Horizontal	4.1	47.7	51.8	74.0	-22.2
12310.0	Average	Vertical	-7.8	47.7	39.9	54.0	-14.1

Table 31: Transmitting at the Highest Frequency



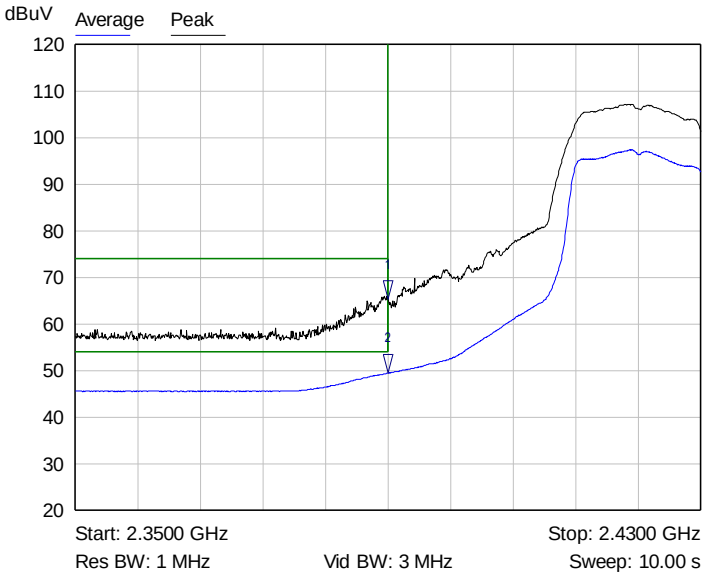
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	71.65 dBuV	
2 ▽	Average	2.3900 GHz	52.87 dBuV	

Graph 153: Radiated Band Edge Plot – Channel 1 at Power Setting 12



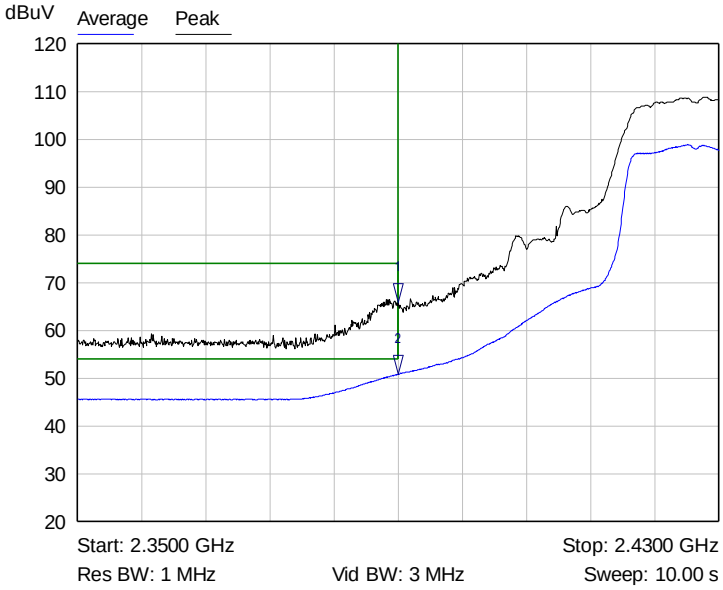
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	66.79 dBuV	
2 ▽	Average	2.3900 GHz	49.75 dBuV	

Graph 154: Radiated Band Edge Plot – Channel 2 at Power Setting 14



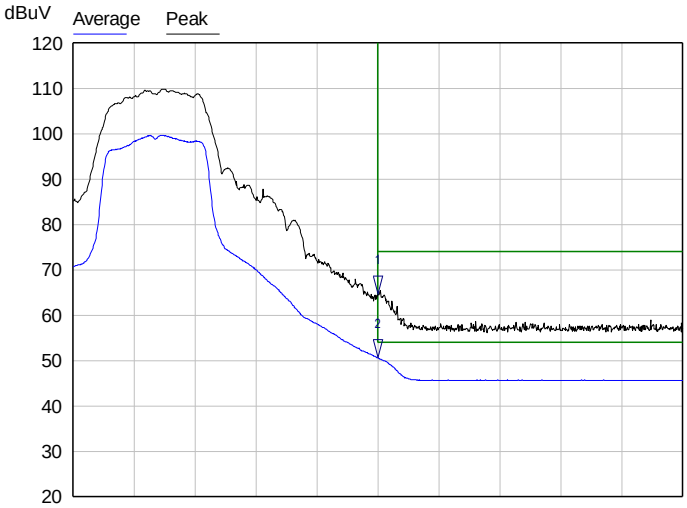
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	65.36 dBuV	
2	Average	2.3900 GHz	49.51 dBuV	

Graph 155: Radiated Band Edge Plot – Channel 3 at Power Setting 15



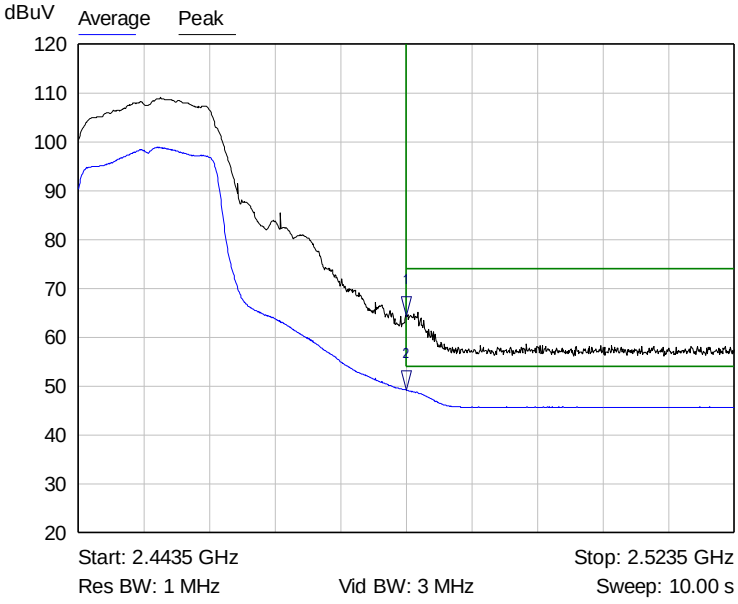
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	65.84 dBuV	
2	Average	2.3900 GHz	50.91 dBuV	

Graph 156: Radiated Band Edge Plot – Channel 4 at Power Setting 17



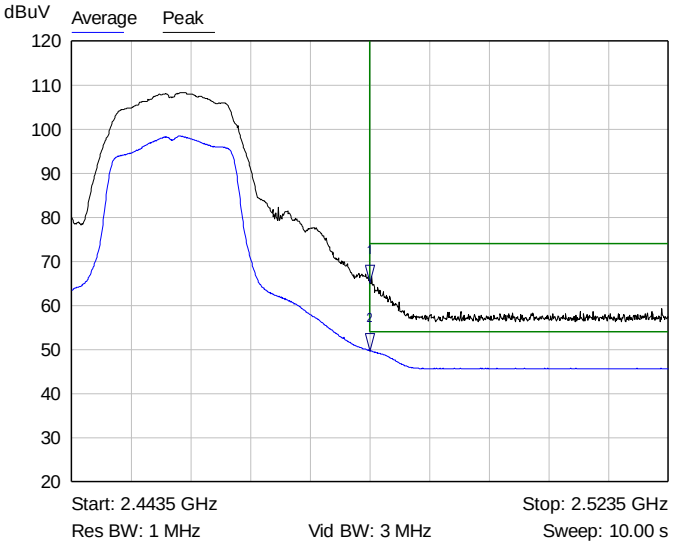
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	64.67 dBuV	
2	Average	2.4835 GHz	50.62 dBuV	

Graph 157: Radiated Band Edge Plot – Channel 8 at Power Setting 17



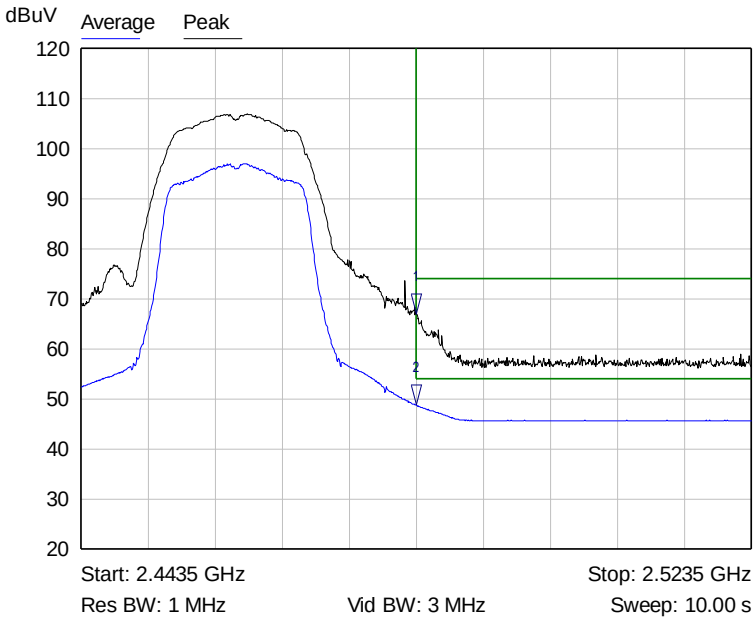
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	64.34 dBuV	
2	Average	2.4835 GHz	49.18 dBuV	

Graph 158: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4835 GHz	65.24 dBuV	
2 ▽	Average	2.4835 GHz	49.70 dBuV	

Graph 159: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4835 GHz	66.99 dBuV	
2 ▽	Average	2.4835 GHz	48.78 dBuV	

Graph 160: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4T8-XX Antenna 0 (Model 1005178)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824.0	Peak	Vertical	5.6	38.5	44.1	74.0	-29.9
4824.0	Average	Vertical	-4.7	38.5	33.8	54.0	-20.2
4824.0	Peak	Horizontal	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Horizontal	-4.8	38.5	33.7	54.0	-20.3
7236.0	Peak	Vertical	7.0	42.7	49.7	74.0	-24.3
7236.0	Average	Vertical	-0.8	42.7	41.9	54.0	-12.1
7236.0	Peak	Horizontal	5.8	42.7	48.5	74.0	-25.5
7236.0	Average	Horizontal	-4.4	42.7	38.3	54.0	-15.7
12060.0	Peak	Vertical	4.0	47.9	51.9	74.0	-22.1
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1
12060.0	Peak	Horizontal	3.5	47.9	51.4	74.0	-22.6
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1

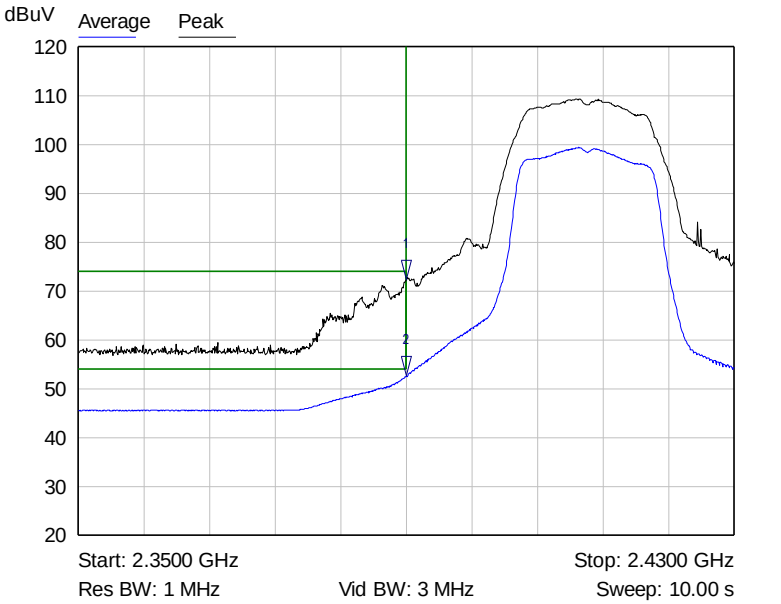
Table 32: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	5.4	38.6	44.0	74.0	-30.0
4874.0	Average	Vertical	-4.9	38.6	33.7	54.0	-20.3
4874.0	Peak	Horizontal	5.7	38.6	44.3	74.0	-29.7
4874.0	Average	Horizontal	-5.4	38.6	33.2	54.0	-20.8
7311.0	Peak	Vertical	5.8	42.9	48.7	74.0	-25.3
7311.0	Average	Vertical	-2.2	42.9	40.7	54.0	-13.3
7311.0	Peak	Horizontal	4.7	42.9	47.6	74.0	-26.4
7311.0	Average	Horizontal	-4.5	42.9	38.4	54.0	-15.6
12185.0	Peak	Vertical	2.5	47.8	50.3	74.0	-23.7
12185.0	Average	Vertical	-8.4	47.8	39.4	54.0	-14.6
12185.0	Peak	Horizontal	2.7	47.8	50.5	74.0	-23.5
12185.0	Average	Vertical	-8.1	47.8	39.7	54.0	-14.3

Table 33: Transmitting at the Middle Frequency

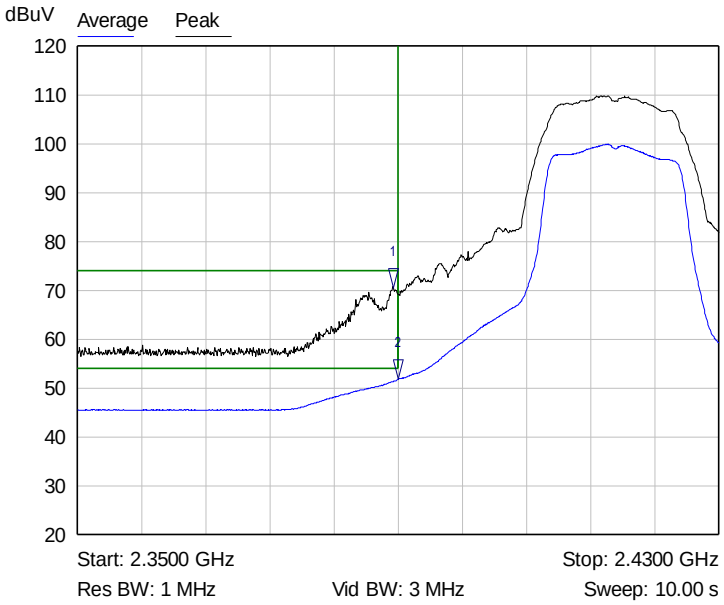
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	7.0	38.7	45.7	74.0	-28.3
4924.0	Average	Vertical	-2.2	38.7	36.5	54.0	-17.5
4924.0	Peak	Horizontal	6.1	38.7	44.8	74.0	-29.2
4924.0	Average	Horizontal	-2.6	38.7	36.1	54.0	-17.9
7386.0	Peak	Vertical	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Vertical	-4.3	43.1	38.8	54.0	-15.2
7386.0	Peak	Horizontal	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Horizontal	-6.1	43.1	37.0	54.0	-17.0
12310.0	Peak	Vertical	2.7	47.7	50.4	74.0	-23.6
12310.0	Average	Vertical	-8.5	47.7	39.2	54.0	-14.8
12310.0	Peak	Horizontal	3.1	47.7	50.8	74.0	-23.2
12310.0	Average	Vertical	-8.5	47.7	39.2	54.0	-14.8

Table 34: Transmitting at the Highest Frequency



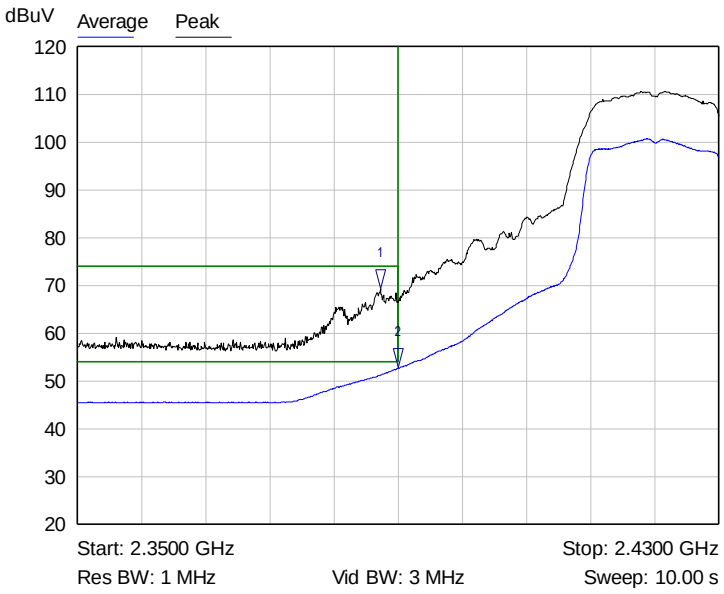
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	72.33 dBuV	
2	Average	2.3900 GHz	52.69 dBuV	

Graph 161: Radiated Band Edge Plot – Channel 1 at Power Setting 12



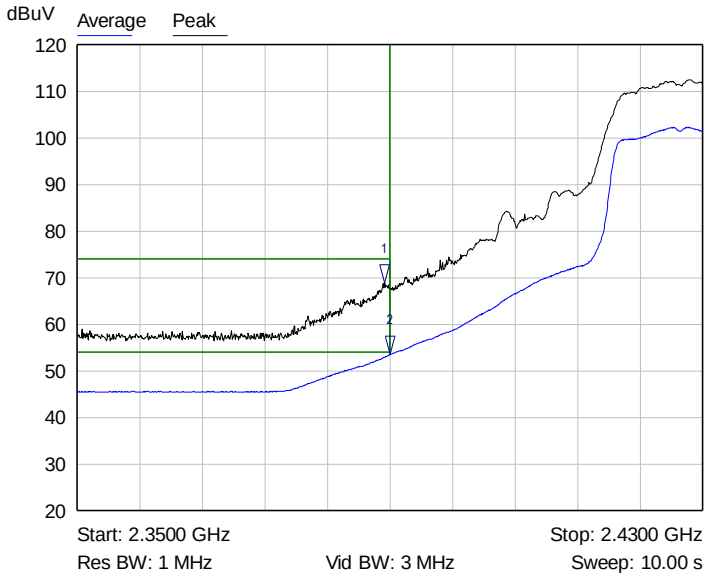
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3894 GHz	70.43 dBuV	
2	Average	2.3900 GHz	51.82 dBuV	

Graph 162: Radiated Band Edge Plot – Channel 2 at Power Setting 14



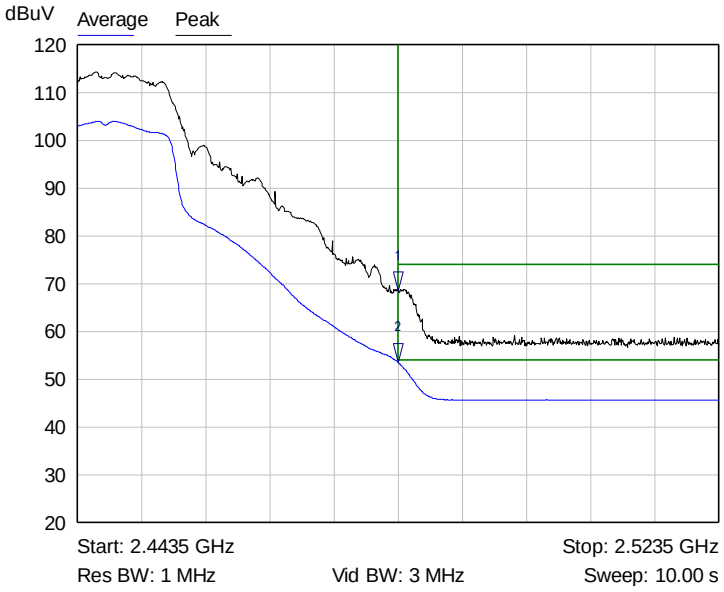
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3878 GHz	69.37 dBuV	
2	Average	2.3900 GHz	52.77 dBuV	

Graph 163: Radiated Band Edge Plot – Channel 3 at Power Setting 15



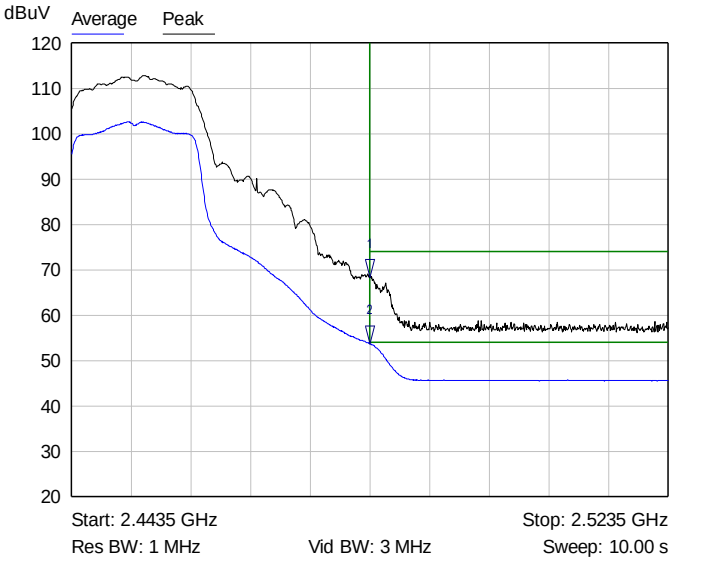
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3893 GHz	68.81 dBuV	
2	Average	2.3900 GHz	53.53 dBuV	

Graph 164: Radiated Band Edge Plot – Channel 4 at Power Setting 17



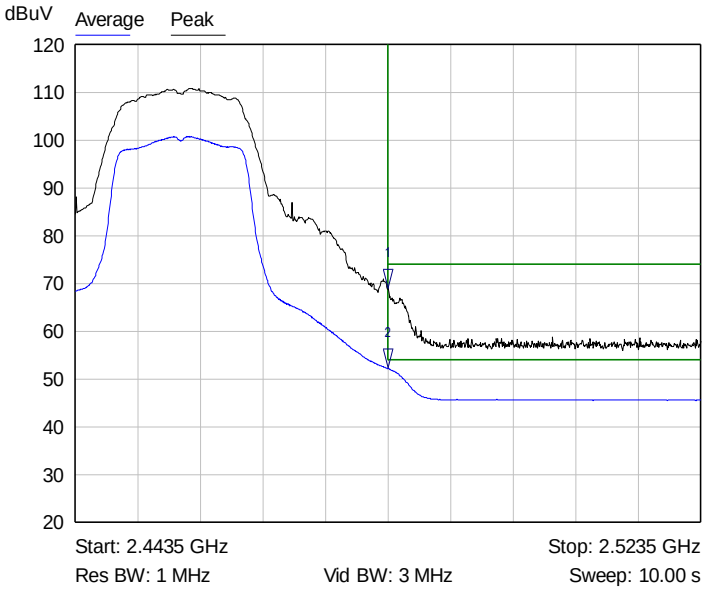
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	68.55 dBuV	
2	Average	2.4835 GHz	53.49 dBuV	

Graph 165: Radiated Band Edge Plot – Channel 8 at Power Setting 17



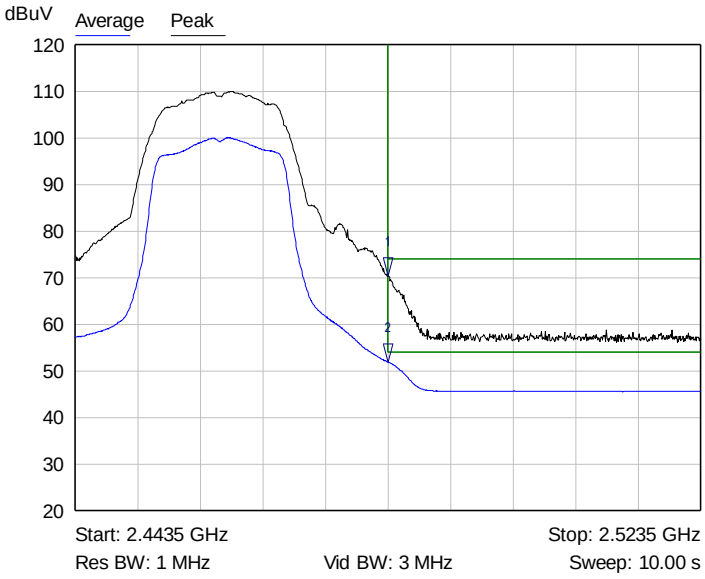
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	68.39 dBuV	
2	Average	2.4835 GHz	53.73 dBuV	

Graph 166: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	68.99 dBuV	
2	Average	2.4835 GHz	52.27 dBuV	

Graph 167: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	70.41 dBuV	
2	Average	2.4835 GHz	51.89 dBuV	

Graph 168: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4T8-XX Antenna 1 (Model 1005179)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	5.4	38.5	43.9	74.0	-30.1
4824.0	Average	Vertical	-3.4	38.5	35.1	54.0	-18.9
4824.0	Peak	Horizontal	6.4	38.5	44.9	74.0	-29.1
4824.0	Average	Horizontal	-3.4	38.5	35.1	54.0	-18.9
7236.0	Peak	Vertical	6.3	42.7	49.0	74.0	-25.0
7236.0	Average	Vertical	-2.7	42.7	40.0	54.0	-14.0
7236.0	Peak	Horizontal	6.7	42.7	49.4	74.0	-24.6
7236.0	Average	Horizontal	-1.9	42.7	40.8	54.0	-13.2
12060.0	Peak	Vertical	3.0	47.9	50.9	74.0	-23.1
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1
12060.0	Peak	Horizontal	3.3	47.9	51.2	74.0	-22.8
12060.0	Average	Vertical	-8.1	47.9	39.8	54.0	-14.2

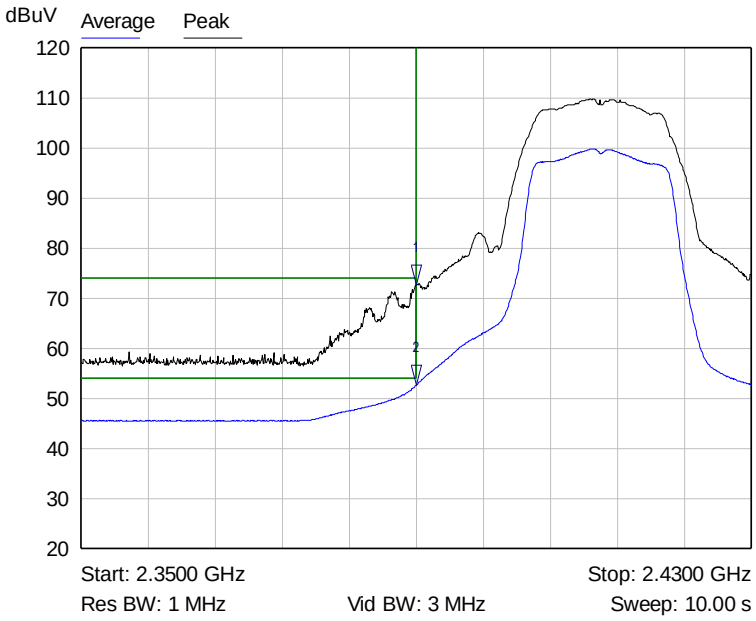
Table 35: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.6	38.6	45.2	74.0	-28.8
4874.0	Average	Vertical	-1.8	38.6	36.8	54.0	-17.2
4874.0	Peak	Horizontal	5.5	38.6	44.1	74.0	-29.9
4874.0	Average	Horizontal	-3.6	38.6	35.0	54.0	-19.0
7311.0	Peak	Vertical	4.4	42.9	47.3	74.0	-26.7
7311.0	Average	Vertical	-6.7	42.9	36.2	54.0	-17.8
7311.0	Peak	Horizontal	5.1	42.9	48.0	74.0	-26.0
7311.0	Average	Horizontal	-4.5	42.9	38.4	54.0	-15.6
12185.0	Peak	Vertical	2.2	47.8	50.0	74.0	-24.0
12185.0	Average	Vertical	-8.3	47.8	39.5	54.0	-14.5
12185.0	Peak	Horizontal	2.8	47.8	50.6	74.0	-23.4
12185.0	Average	Vertical	-8.4	47.8	39.4	54.0	-14.6

Table 36: Transmitting at the Middle Frequency

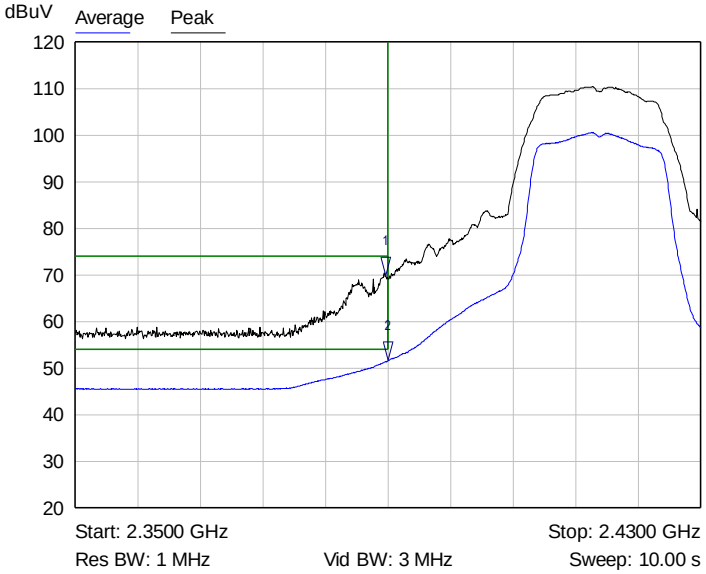
Error! Bookmark not defined.**Frequency (MHz)**	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	6.3	38.7	45.0	74.0	-29.0
4924.0	Average	Vertical	-3.1	38.7	35.6	54.0	-18.4
4924.0	Peak	Horizontal	6.5	38.7	45.2	74.0	-28.8
4924.0	Average	Horizontal	-1.8	38.7	36.9	54.0	-17.1
7386.0	Peak	Vertical	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Vertical	-4.9	43.1	38.2	54.0	-15.8
7386.0	Peak	Horizontal	5.0	43.1	48.1	74.0	-25.9
7386.0	Average	Horizontal	-4.8	43.1	38.3	54.0	-15.7
12310.0	Peak	Vertical	2.0	47.7	49.7	74.0	-24.3
12310.0	Average	Vertical	-9.3	47.7	38.4	54.0	-15.6
12310.0	Peak	Horizontal	2.2	47.7	49.9	74.0	-24.1
12310.0	Average	Vertical	-9.1	47.7	38.6	54.0	-15.4

Table 37: Transmitting at the Highest Frequency



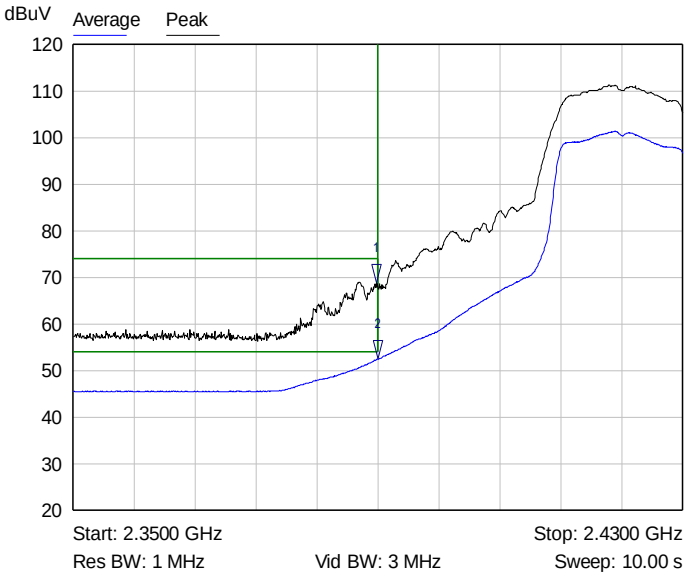
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	72.71 dBuV	
2 ▽	Average	2.3900 GHz	52.71 dBuV	

Graph 169: Radiated Band Edge Plot – Channel 1 at Power Setting 12



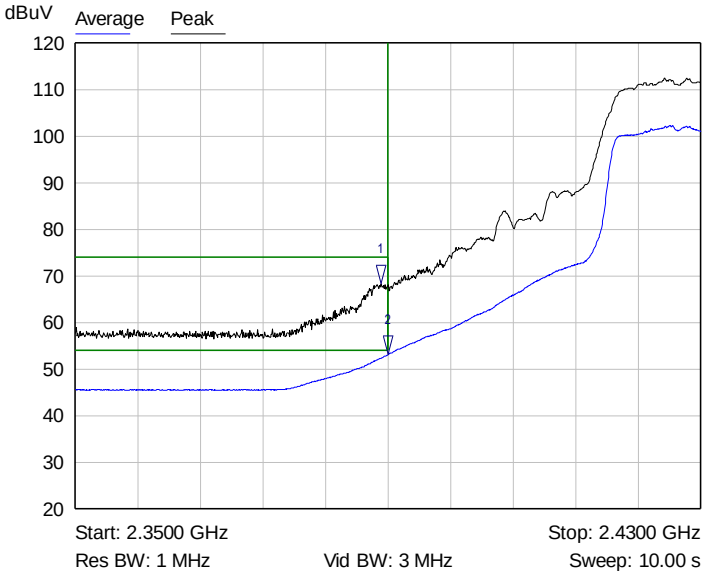
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3897 GHz	69.81 dBuV	
2 ▽	Average	2.3900 GHz	51.73 dBuV	

Graph 170: Radiated Band Edge Plot – Channel 2 at Power Setting 14



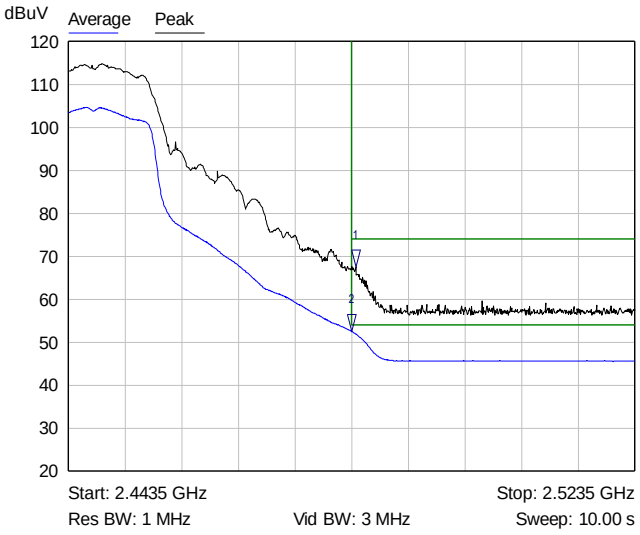
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3898 GHz	68.88 dBuV	
2	Average	2.3900 GHz	52.55 dBuV	

Graph 171: Radiated Band Edge Plot – Channel 3 at Power Setting 15



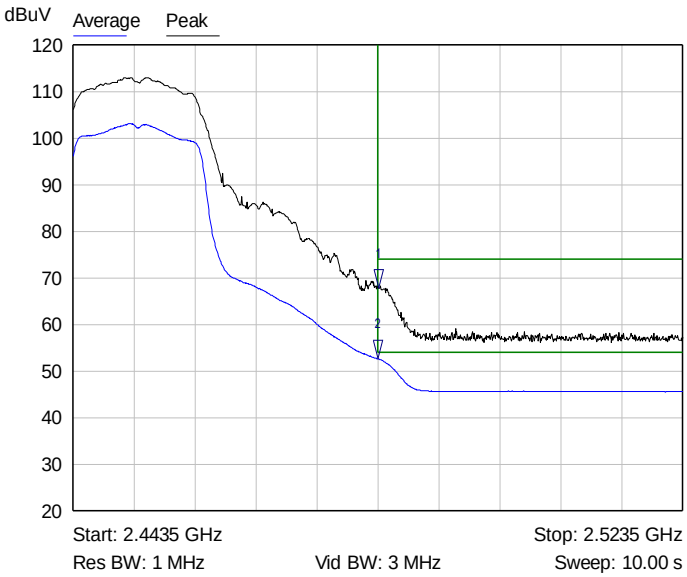
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3891 GHz	68.33 dBuV	
2	Average	2.3900 GHz	53.20 dBuV	

Graph 172: Radiated Band Edge Plot – Channel 4 at Power Setting 17



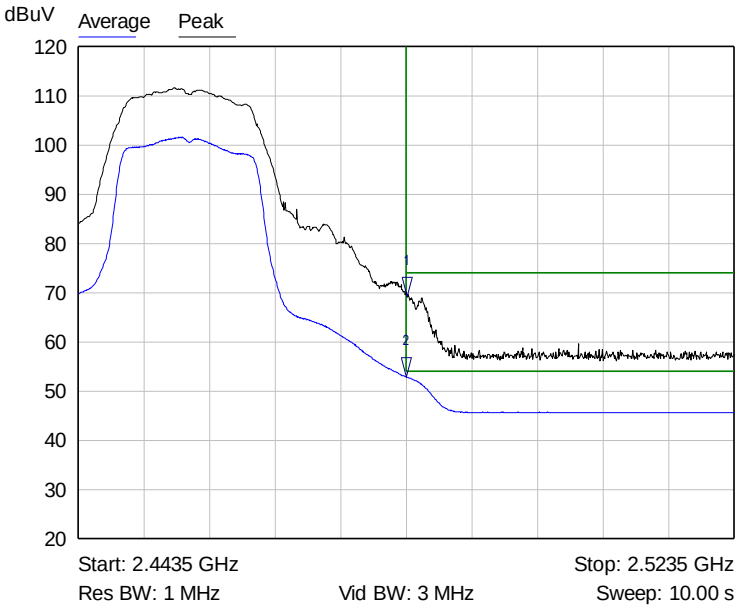
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4841 GHz	67.49 dBuV	
2	Average	2.4835 GHz	52.46 dBuV	

Graph 173: Radiated Band Edge Plot – Channel 8 at Power Setting 17



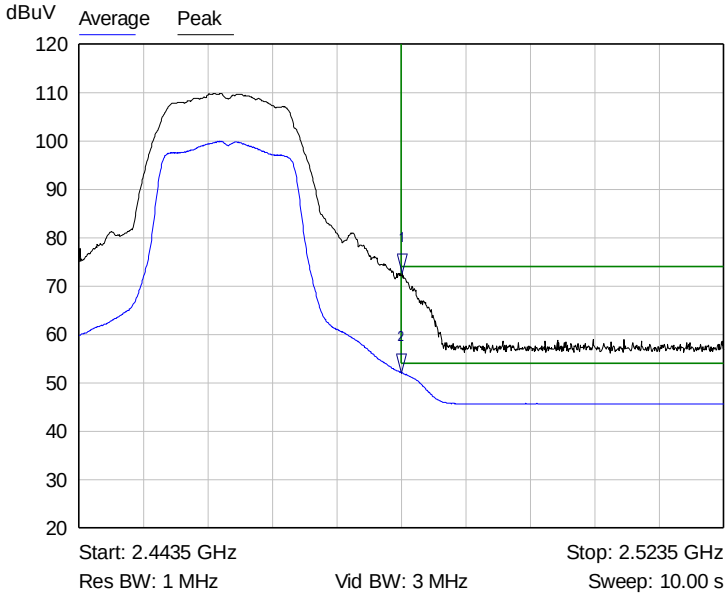
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4836 GHz	67.86 dBuV	
2	Average	2.4835 GHz	52.64 dBuV	

Graph 174: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4836 GHz	69.18 dBuV	
2 ▽	Average	2.4835 GHz	52.91 dBuV	

Graph 175: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4836 GHz	72.62 dBuV	
2 ▽	Average	2.4835 GHz	52.07 dBuV	

Graph 176: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4IW10-XX Antenna 0 (Model 1005097)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824.0	Peak	Vertical	6.9	38.5	45.4	74.0	-28.6
4824.0	Average	Vertical	-5.2	38.5	33.3	54.0	-20.7
4824.0	Peak	Horizontal	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Horizontal	-5.1	38.5	33.4	54.0	-20.6
7236.0	Peak	Vertical	4.9	42.7	47.6	74.0	-26.4
7236.0	Average	Vertical	-5.9	42.7	36.8	54.0	-17.2
7236.0	Peak	Horizontal	6.0	42.7	48.7	74.0	-25.3
7236.0	Average	Horizontal	-5.1	42.7	37.6	54.0	-16.4
12060.0	Peak	Vertical	3.6	47.9	51.5	74.0	-22.5
12060.0	Average	Vertical	-7.4	47.9	40.5	54.0	-13.5
12060.0	Peak	Horizontal	4.1	47.9	52.0	74.0	-22.0
12060.0	Average	Vertical	-7.2	47.9	40.7	54.0	-13.3

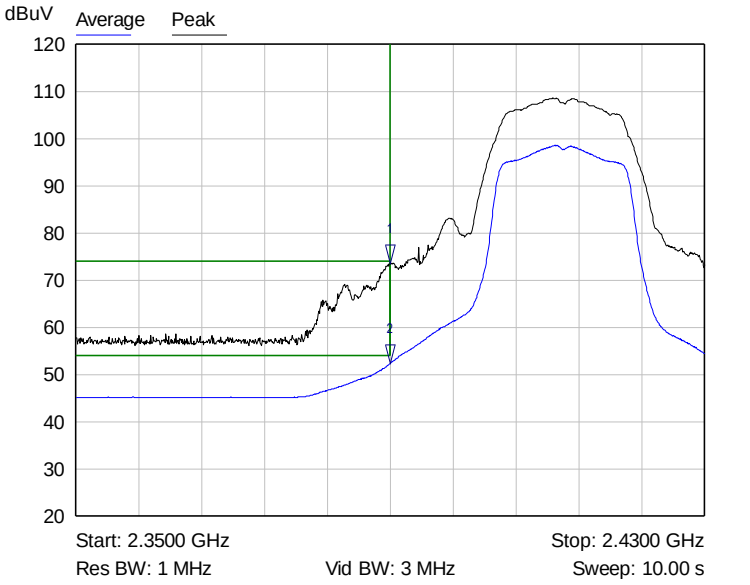
Table 38: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.0	38.6	44.6	74.0	-29.4
4874.0	Average	Vertical	-4.5	38.6	34.1	54.0	-19.9
4874.0	Peak	Horizontal	6.4	38.6	45.0	74.0	-29.0
4874.0	Average	Horizontal	-5.9	38.6	32.7	54.0	-21.3
7311.0	Peak	Vertical	5.9	42.9	48.8	74.0	-25.2
7311.0	Average	Vertical	-6.0	42.9	36.9	54.0	-17.1
7311.0	Peak	Horizontal	4.7	42.9	47.6	74.0	-26.4
7311.0	Average	Horizontal	-6.4	42.9	36.5	54.0	-17.5
12185.0	Peak	Vertical	3.5	47.8	51.3	74.0	-22.7
12185.0	Average	Vertical	-6.9	47.8	40.9	54.0	-13.1
12185.0	Peak	Horizontal	4.5	47.8	52.3	74.0	-21.7
12185.0	Average	Vertical	-7.3	47.8	40.5	54.0	-13.5

Table 39: Transmitting at the Middle Frequency

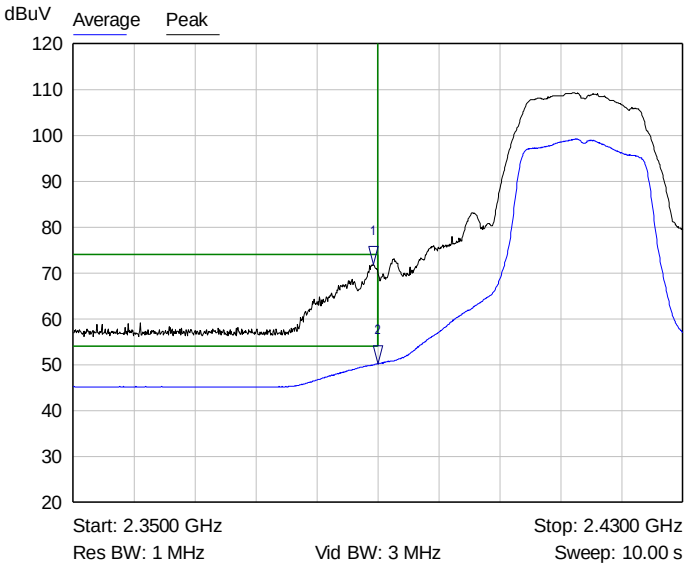
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	5.3	38.7	44.0	74.0	-30.0
4924.0	Average	Vertical	-6.0	38.7	32.7	54.0	-21.3
4924.0	Peak	Horizontal	5.5	38.7	44.2	74.0	-29.8
4924.0	Average	Horizontal	-5.8	38.7	32.9	54.0	-21.1
7386.0	Peak	Vertical	5.3	43.1	48.4	74.0	-25.6
7386.0	Average	Vertical	-5.4	43.1	37.7	54.0	-16.3
7386.0	Peak	Horizontal	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Horizontal	-6.0	43.1	37.1	54.0	-16.9
12310.0	Peak	Vertical	3.5	47.7	51.2	74.0	-22.8
12310.0	Average	Vertical	-7.5	47.7	40.2	54.0	-13.8
12310.0	Peak	Horizontal	3.7	47.7	51.4	74.0	-22.6
12310.0	Average	Vertical	-7.6	47.7	40.1	54.0	-13.9

Table 40: Transmitting at the Highest Frequency



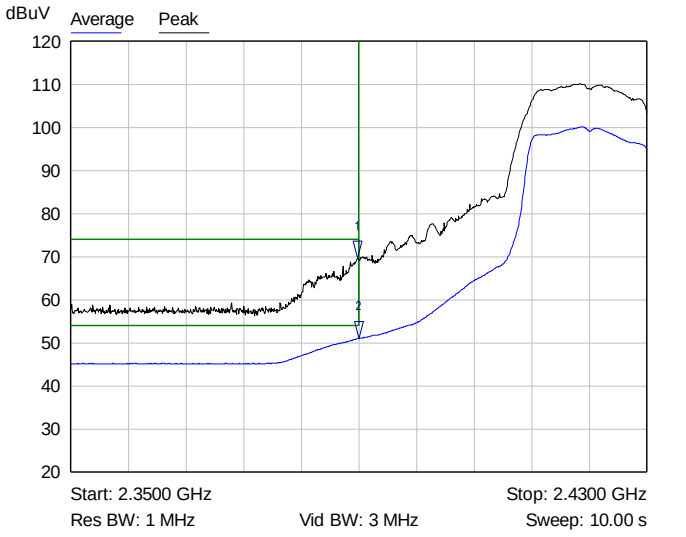
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.3900 GHz	73.54 dBuV	
2 ▽	Average	2.3900 GHz	52.38 dBuV	

Graph 177: Radiated Band Edge Plot – Channel 1 at Power Setting 12



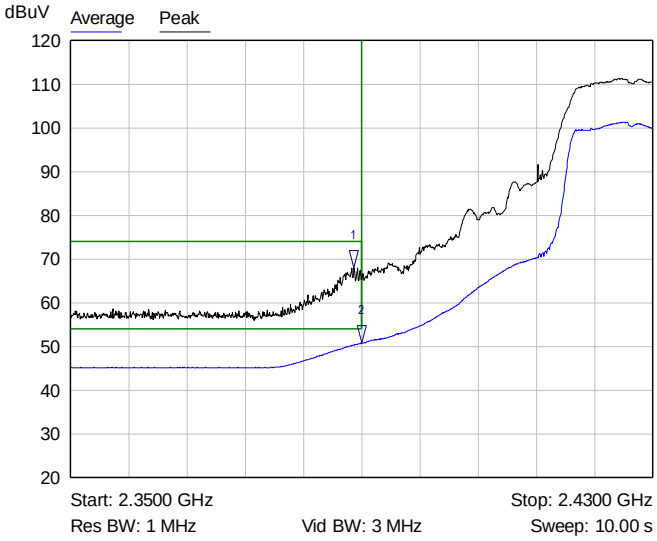
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3894 GHz	71.84 dBuV	
2	Average	2.3900 GHz	50.23 dBuV	

Graph 178: Radiated Band Edge Plot – Channel 2 at Power Setting 14



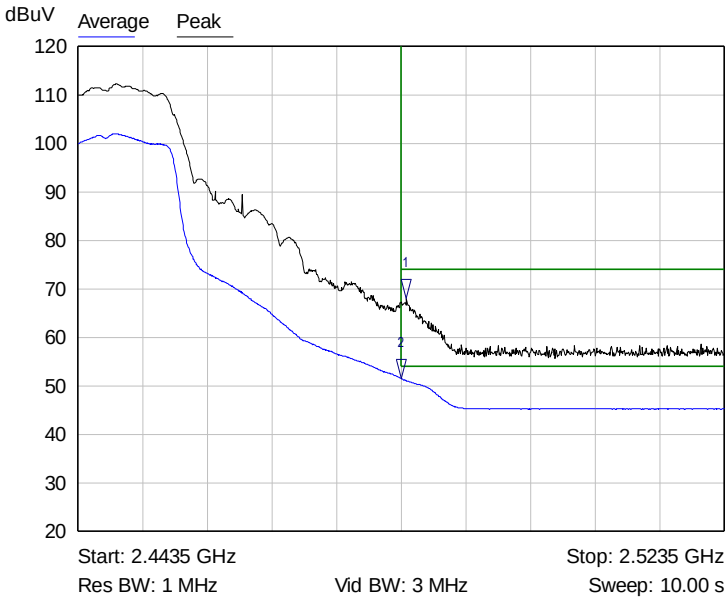
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3898 GHz	69.71 dBuV	
2	Average	2.3900 GHz	51.08 dBuV	

Graph 179: Radiated Band Edge Plot – Channel 3 at Power Setting 15



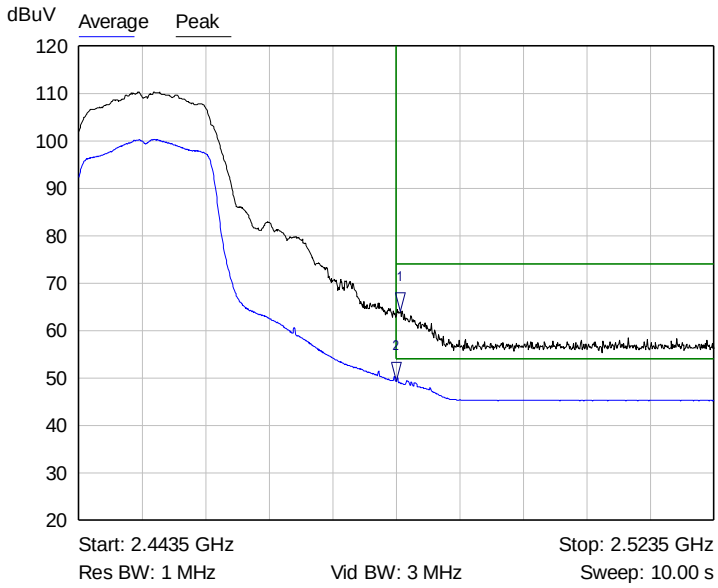
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3889 GHz	67.96 dBuV	
2	Average	2.3900 GHz	50.79 dBuV	

Graph 180: Radiated Band Edge Plot – Channel 4 at Power Setting 17



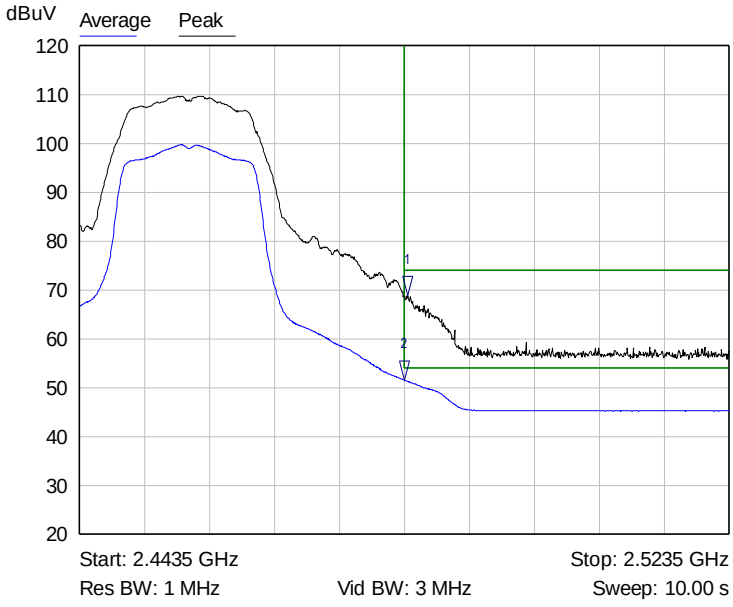
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4841 GHz	67.99 dBuV	
2	Average	2.4835 GHz	51.47 dBuV	

Graph 181: Radiated Band Edge Plot – Channel 8 at Power Setting 17



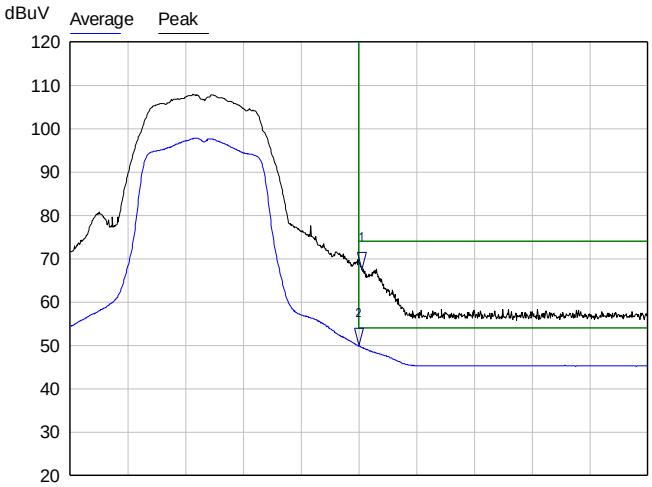
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4840 GHz	64.06 dBuV	
2 ▽	Average	2.4835 GHz	49.38 dBuV	

Graph 182: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Peak	2.4839 GHz	68.87 dBuV	
2 ▽	Average	2.4835 GHz	51.57 dBuV	

Graph 183: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4839 GHz	67.48 dBuV	
2	Average	2.4835 GHz	49.92 dBuV	

Graph 184: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4IW10-XX Antenna 1 (Model 1005098)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Vertical	-5.9	38.5	32.6	54.0	-21.4
4824.0	Peak	Horizontal	5.7	38.5	44.2	74.0	-29.8
4824.0	Average	Horizontal	-5.7	38.5	32.8	54.0	-21.2
7236.0	Peak	Vertical	5.6	42.7	48.3	74.0	-25.7
7236.0	Average	Vertical	-4.2	42.7	38.5	54.0	-15.5
7236.0	Peak	Horizontal	6.0	42.7	48.7	74.0	-25.3
7236.0	Average	Horizontal	-4.5	42.7	38.2	54.0	-15.8
12060.0	Peak	Vertical	4.5	47.9	52.4	74.0	-21.6
12060.0	Average	Vertical	-7.3	47.9	40.6	54.0	-13.4
12060.0	Peak	Horizontal	3.9	47.9	51.8	74.0	-22.2
12060.0	Average	Vertical	-7.2	47.9	40.7	54.0	-13.3

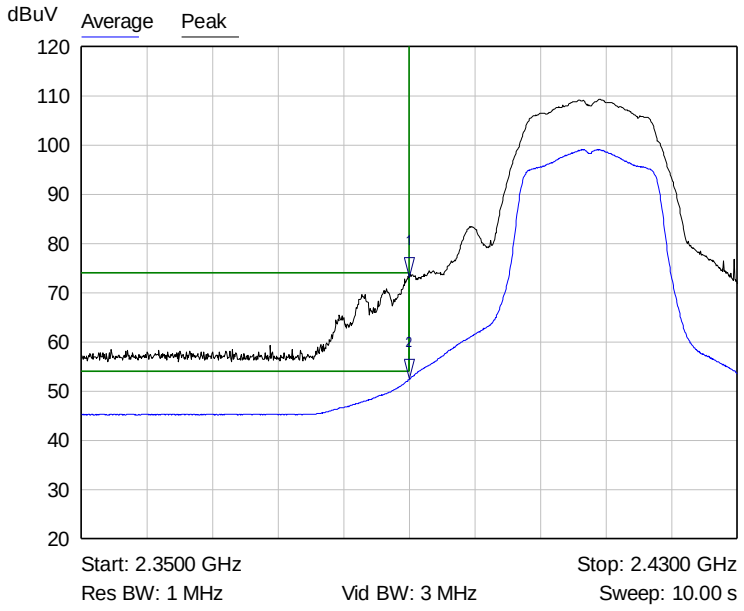
Table 41: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.4	38.6	45.0	74.0	-29.0
4874.0	Average	Vertical	-5.6	38.6	33.0	54.0	-21.0
4874.0	Peak	Horizontal	1.9	38.6	40.5	74.0	-33.5
4874.0	Average	Horizontal	-3.8	38.6	34.8	54.0	-19.2
7311.0	Peak	Vertical	5.5	42.9	48.4	74.0	-25.6
7311.0	Average	Vertical	-5.6	42.9	37.3	54.0	-16.7
7311.0	Peak	Horizontal	4.9	42.9	47.8	74.0	-26.2
7311.0	Average	Horizontal	-6.0	42.9	36.9	54.0	-17.1
12185.0	Peak	Vertical	3.8	47.8	51.6	74.0	-22.4
12185.0	Average	Vertical	-7.2	47.8	40.6	54.0	-13.4
12185.0	Peak	Horizontal	5.1	47.8	52.9	74.0	-21.1
12185.0	Average	Vertical	-7.1	47.8	40.7	54.0	-13.3

Table 42: Transmitting at the Middle Frequency

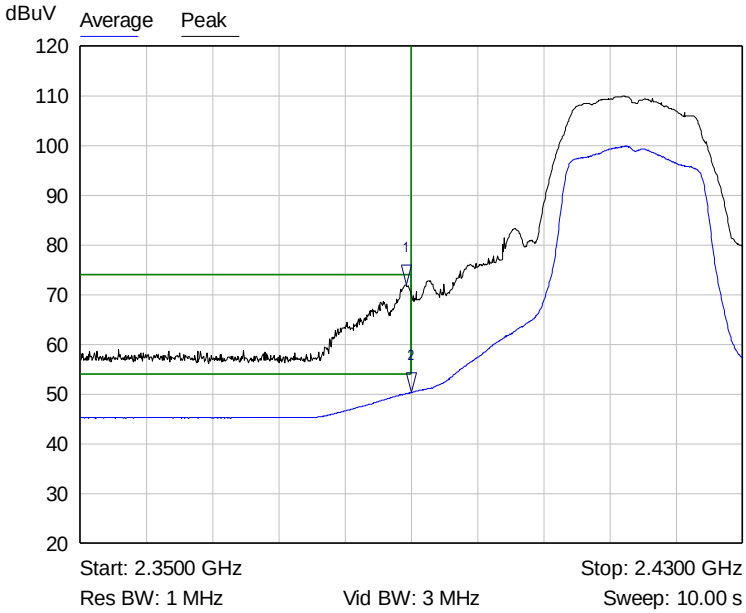
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4924.0	Peak	Vertical	5.2	38.7	43.9	74.0	-30.1
4924.0	Average	Vertical	-4.7	38.7	34.0	54.0	-20.0
4924.0	Peak	Horizontal	6.2	38.7	44.9	74.0	-29.1
4924.0	Average	Horizontal	-5.0	38.7	33.7	54.0	-20.3
7386.0	Peak	Vertical	5.8	43.1	48.9	74.0	-25.1
7386.0	Average	Vertical	-5.4	43.1	37.7	54.0	-16.3
7386.0	Peak	Horizontal	5.5	43.1	48.6	74.0	-25.4
7386.0	Average	Horizontal	-5.2	43.1	37.9	54.0	-16.1
12310.0	Peak	Vertical	3.6	47.7	51.3	74.0	-22.7
12310.0	Average	Vertical	-7.7	47.7	40.0	54.0	-14.0
12310.0	Peak	Horizontal	4.1	47.7	51.8	74.0	-22.2
12310.0	Average	Vertical	-7.4	47.7	40.3	54.0	-13.7

Table 43: Transmitting at the Highest Frequency



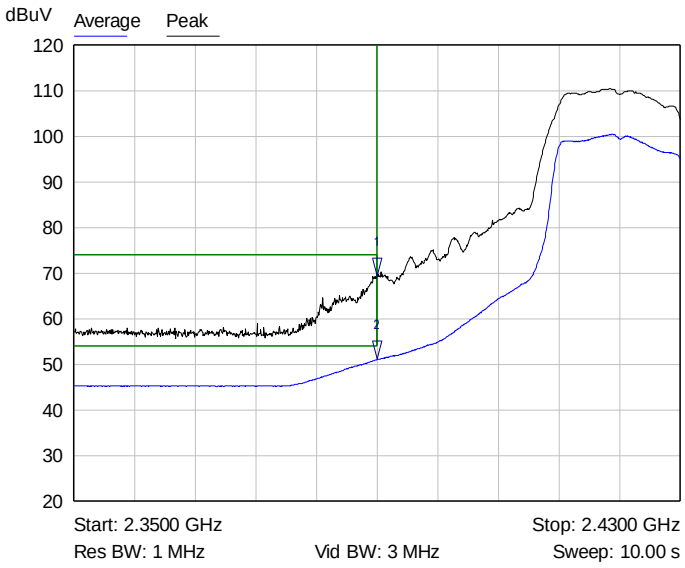
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	73.23 dBuV	
2	Average	2.3900 GHz	52.54 dBuV	

Graph 185: Radiated Band Edge Plot – Channel 1 at Power Setting 12



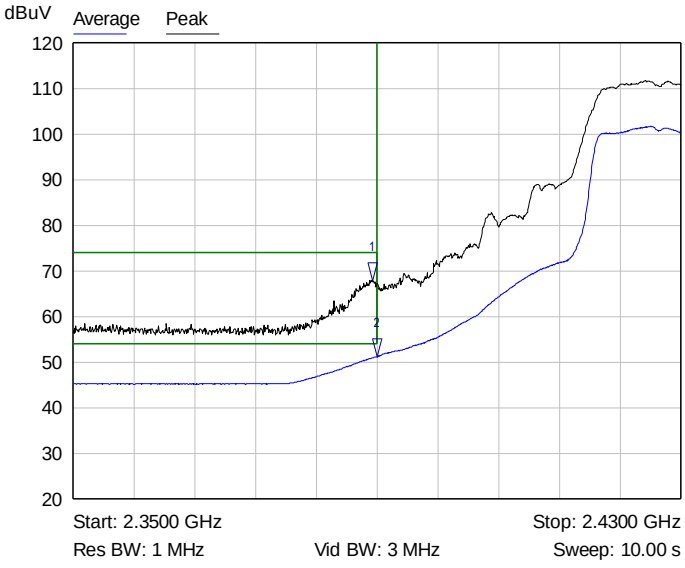
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3894 GHz	71.96 dBuV	
2	Average	2.3900 GHz	50.42 dBuV	

Graph 186: Radiated Band Edge Plot – Channel 2 at Power Setting 14



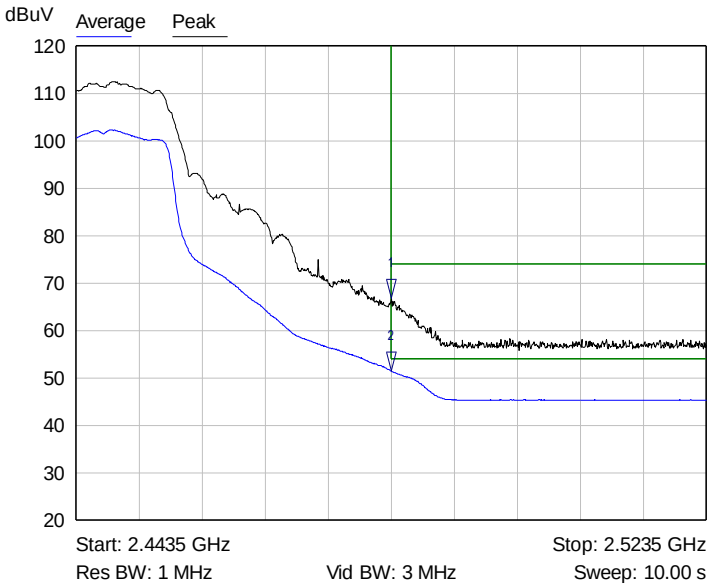
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	69.42 dBuV	
2	Average	2.3900 GHz	51.11 dBuV	

Graph 187: Radiated Band Edge Plot – Channel 3 at Power Setting 15



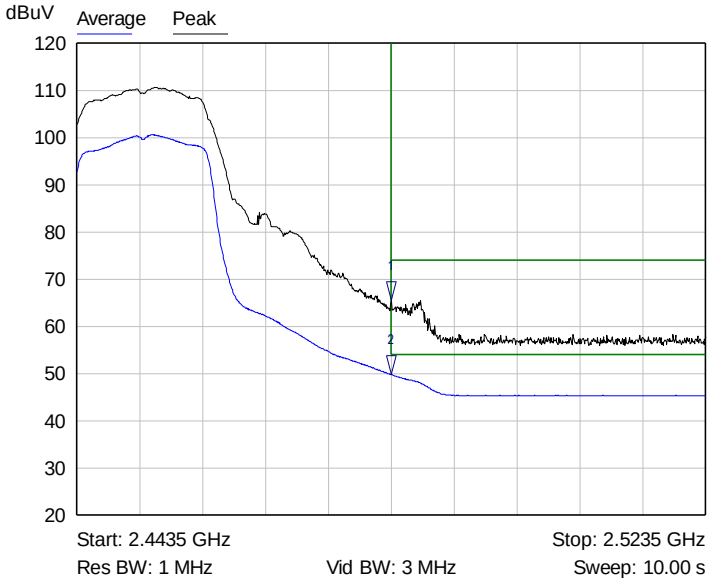
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3894 GHz	67.81 dBuV	
2	Average	2.3900 GHz	51.21 dBuV	

Graph 188: Radiated Band Edge Plot – Channel 4 at Power Setting 17



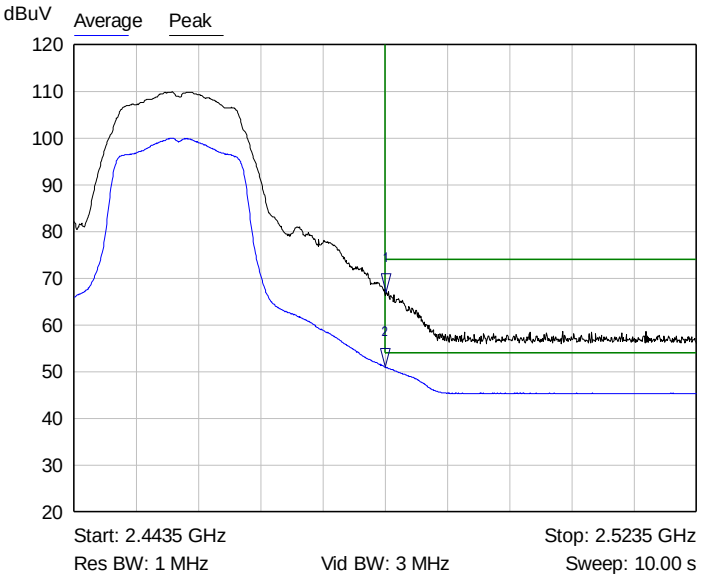
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	66.83 dBuV	
2	Average	2.4835 GHz	51.46 dBuV	

Graph 189: Radiated Band Edge Plot – Channel 8 at Power Setting 17



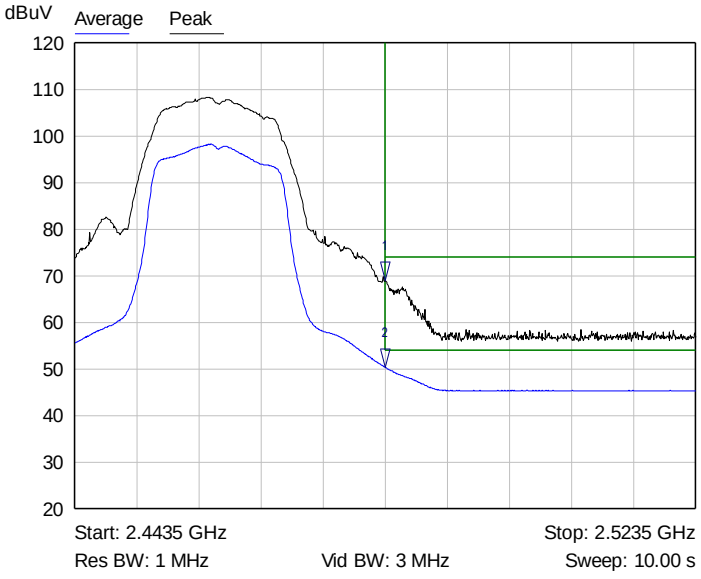
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	65.45 dBuV	
2	Average	2.4835 GHz	49.77 dBuV	

Graph 190: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4836 GHz	66.94 dBuV	
2	Average	2.4835 GHz	51.08 dBuV	

Graph 191: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	69.03 dBuV	
2	Average	2.4835 GHz	50.39 dBuV	

Graph 192: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4IW8-XX Antenna 0 (Model 1005095)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4824.0	Peak	Vertical	3.9	38.5	42.4	74.0	-31.6
4824.0	Average	Vertical	-4.3	38.5	34.2	54.0	-19.8
4824.0	Peak	Horizontal	6.1	38.5	44.6	74.0	-29.4
4824.0	Average	Horizontal	-4.9	38.5	33.6	54.0	-20.4
7236.0	Peak	Vertical	5.3	42.7	48.0	74.0	-26.0
7236.0	Average	Vertical	-5.1	42.7	37.6	54.0	-16.4
7236.0	Peak	Horizontal	5.4	42.7	48.1	74.0	-25.9
7236.0	Average	Horizontal	-5.2	42.7	37.5	54.0	-16.5
12060.0	Peak	Vertical	3.0	47.9	50.9	74.0	-23.1
12060.0	Average	Vertical	-8.1	47.9	39.8	54.0	-14.2
12060.0	Peak	Horizontal	3.1	47.9	51.0	74.0	-23.0
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1

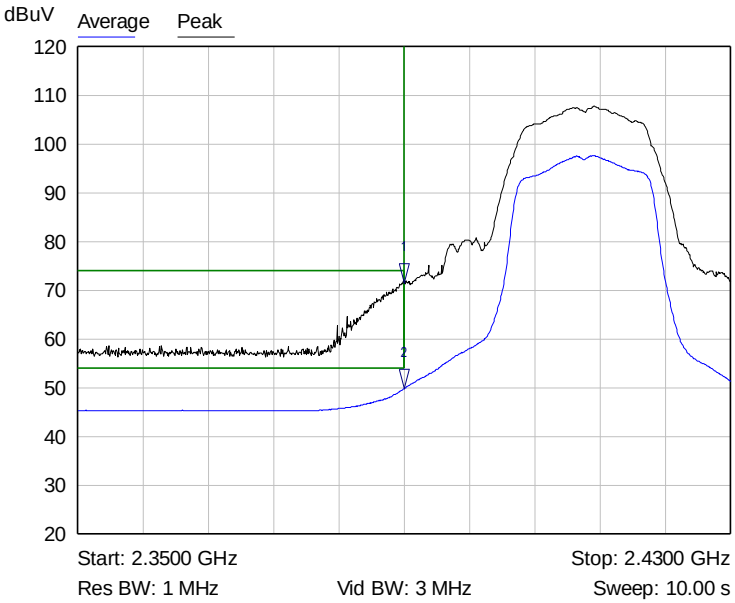
Table 44: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
4874.0	Peak	Vertical	6.0	38.6	44.6	74.0	-29.4
4874.0	Average	Vertical	-4.5	38.6	34.1	54.0	-19.9
4874.0	Peak	Horizontal	5.7	38.6	44.3	74.0	-29.7
4874.0	Average	Horizontal	-3.7	38.6	34.9	54.0	-19.1
7311.0	Peak	Vertical	5.3	42.9	48.2	74.0	-25.8
7311.0	Average	Vertical	-5.4	42.9	37.5	54.0	-16.5
7311.0	Peak	Horizontal	5.3	42.9	48.2	74.0	-25.8
7311.0	Average	Horizontal	-5.6	42.9	37.3	54.0	-16.7
12185.0	Peak	Vertical	3.9	47.8	51.7	74.0	-22.3
12185.0	Average	Vertical	-7.9	47.8	39.9	54.0	-14.1
12185.0	Peak	Horizontal	3.4	47.8	51.2	74.0	-22.8
12185.0	Average	Vertical	-7.8	47.8	40.0	54.0	-14.0

Table 45: Transmitting at the Middle Frequency

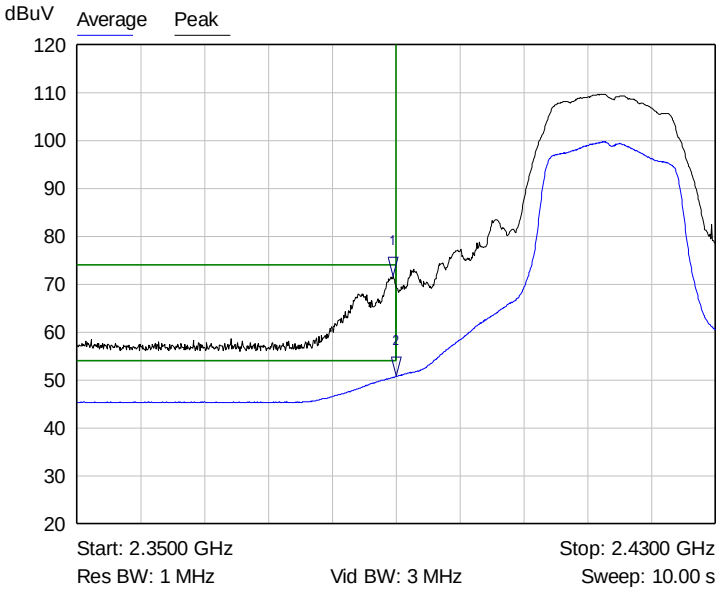
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	6.2	38.7	44.9	74.0	-29.1
4924.0	Average	Vertical	-4.4	38.7	34.3	54.0	-19.7
4924.0	Peak	Horizontal	5.5	38.7	44.2	74.0	-29.8
4924.0	Average	Horizontal	-4.9	38.7	33.8	54.0	-20.2
7386.0	Peak	Vertical	5.2	43.1	48.3	74.0	-25.7
7386.0	Average	Vertical	-5.5	43.1	37.6	54.0	-16.4
7386.0	Peak	Horizontal	5.0	43.1	48.1	74.0	-25.9
7386.0	Average	Horizontal	-5.8	43.1	37.3	54.0	-16.7
12310.0	Peak	Vertical	2.8	47.7	50.5	74.0	-23.5
12310.0	Average	Vertical	-8.4	47.7	39.3	54.0	-14.7
12310.0	Peak	Horizontal	2.9	47.7	50.6	74.0	-23.4
12310.0	Average	Vertical	-8.5	47.7	39.2	54.0	-14.8

Table 46: Transmitting at the Highest Frequency



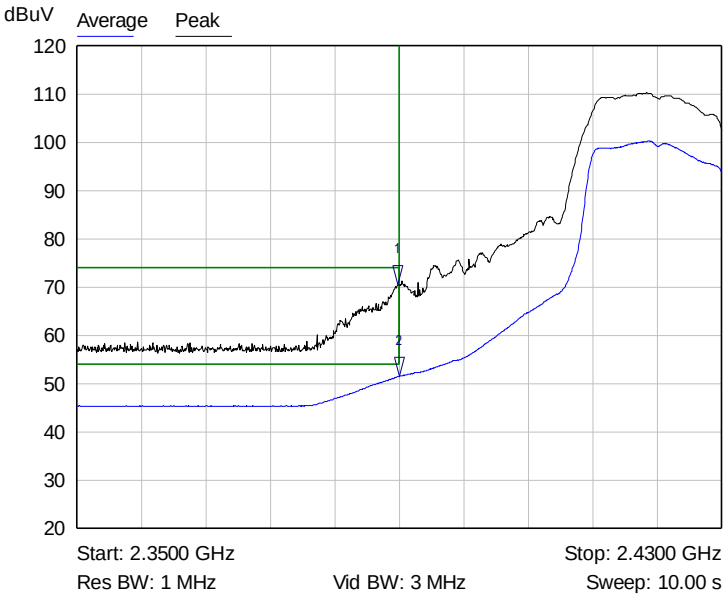
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	71.44 dBuV	
2	Average	2.3900 GHz	49.91 dBuV	

Graph 193: Radiated Band Edge Plot – Channel 1 at Power Setting 12



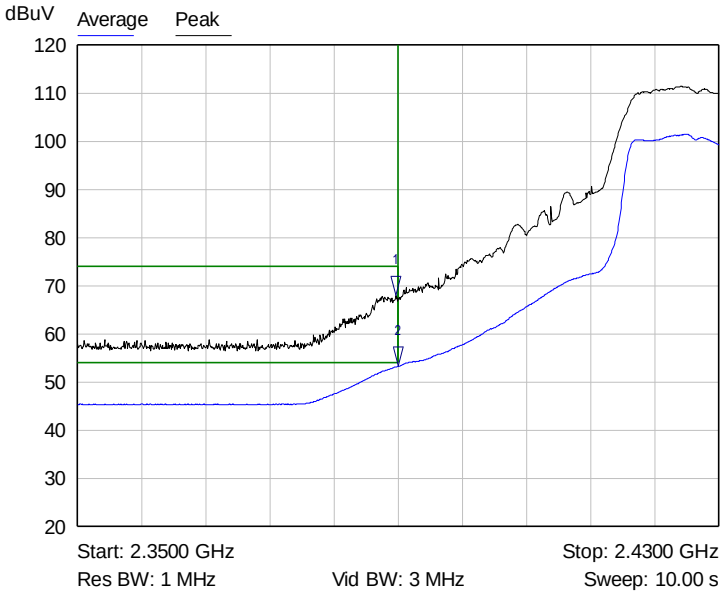
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3896 GHz	71.73 dBuV	
2	Average	2.3900 GHz	50.81 dBuV	

Graph 194: Radiated Band Edge Plot – Channel 2 at Power Setting 14



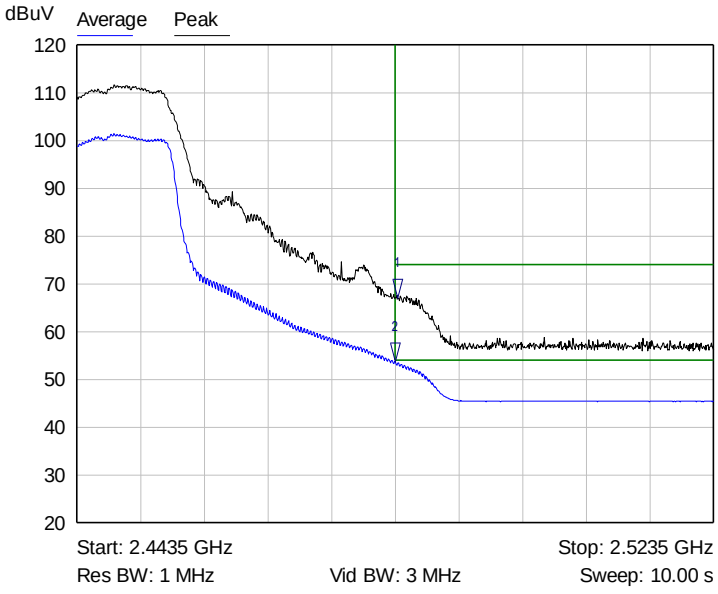
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3898 GHz	70.56 dBuV	
2	Average	2.3900 GHz	51.58 dBuV	

Graph 195: Radiated Band Edge Plot – Channel 3 at Power Setting 15



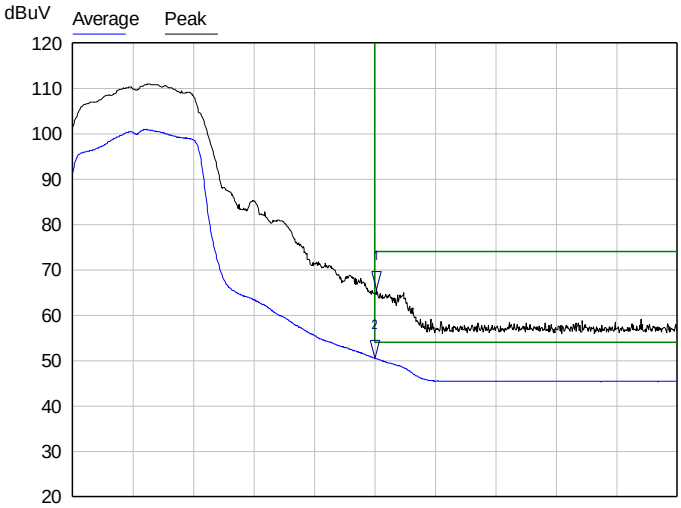
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3897 GHz	67.96 dBuV	
2	Average	2.3900 GHz	53.29 dBuV	

Graph 196: Radiated Band Edge Plot – Channel 4 at Power Setting 17



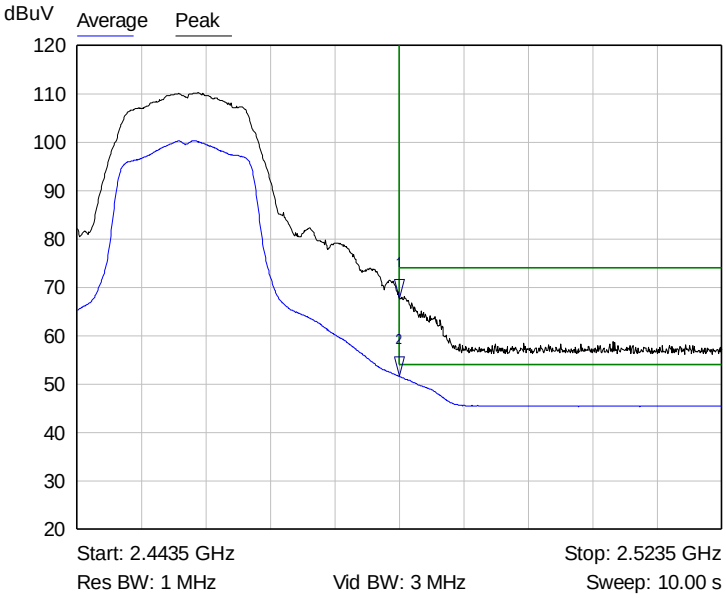
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4838 GHz	66.93 dBuV	
2	Average	2.4835 GHz	53.75 dBuV	

Graph 197: Radiated Band Edge Plot – Channel 8 at Power Setting 17



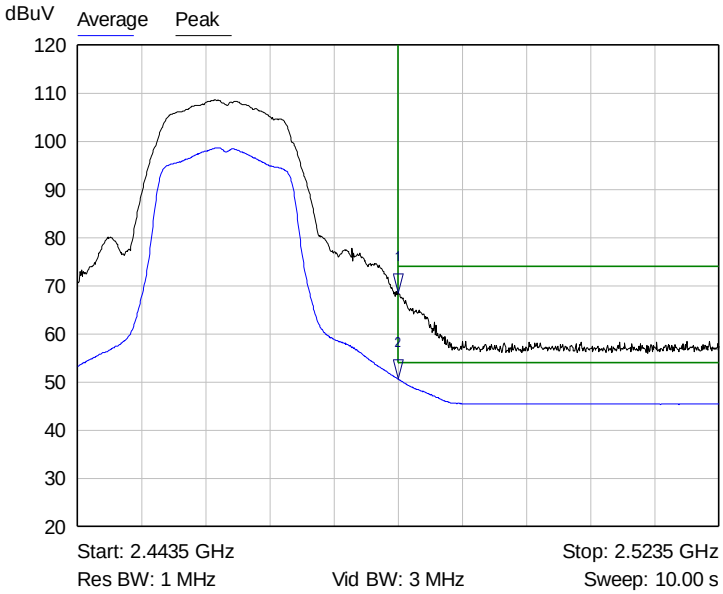
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4837 GHz	65.60 dBuV	
2	Average	2.4835 GHz	50.56 dBuV	

Graph 198: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	67.67 dBuV	
2	Average	2.4835 GHz	51.61 dBuV	

Graph 199: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	68.57 dBuV	
2	Average	2.4835 GHz	50.67 dBuV	

Graph 200: Radiated Band Edge Plot – Channel 11 at Power Setting 13

C4-T4IW8-XX Antenna 1 (Model 1005096)

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4824.0	Peak	Vertical	6.0	38.5	44.5	74.0	-29.5
4824.0	Average	Vertical	-4.2	38.5	34.3	54.0	-19.7
4824.0	Peak	Horizontal	6.3	38.5	44.8	74.0	-29.2
4824.0	Average	Horizontal	-1.7	38.5	36.8	54.0	-17.2
7236.0	Peak	Vertical	6.5	42.7	49.2	74.0	-24.8
7236.0	Average	Vertical	-3.3	42.7	39.4	54.0	-14.6
7236.0	Peak	Horizontal	6.2	42.7	48.9	74.0	-25.1
7236.0	Average	Horizontal	-3.2	42.7	39.5	54.0	-14.5
12060.0	Peak	Vertical	3.2	47.9	51.1	74.0	-22.9
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1
12060.0	Peak	Horizontal	3.4	47.9	51.3	74.0	-22.7
12060.0	Average	Vertical	-8.0	47.9	39.9	54.0	-14.1

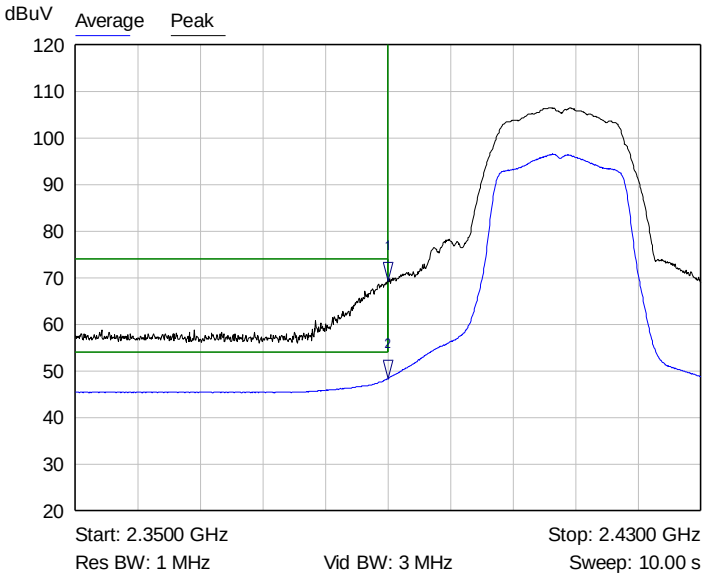
Table 47: Transmitting at the Lowest Frequency

Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4874.0	Peak	Vertical	5.6	38.6	44.2	74.0	-29.8
4874.0	Average	Vertical	-3.6	38.6	35.0	54.0	-19.0
4874.0	Peak	Horizontal	5.8	38.6	44.4	74.0	-29.6
4874.0	Average	Horizontal	-4.0	38.6	34.6	54.0	-19.4
7311.0	Peak	Vertical	4.3	42.9	47.2	74.0	-26.8
7311.0	Average	Vertical	-5.8	42.9	37.1	54.0	-16.9
7311.0	Peak	Horizontal	5.4	42.9	48.3	74.0	-25.7
7311.0	Average	Horizontal	-5.2	42.9	37.7	54.0	-16.3
12185.0	Peak	Vertical	3.2	47.8	51.0	74.0	-23.0
12185.0	Average	Vertical	-8.1	47.8	39.7	54.0	-14.3
12185.0	Peak	Horizontal	2.7	47.8	50.5	74.0	-23.5
12185.0	Average	Vertical	-7.7	47.8	40.1	54.0	-13.9

Table 48: Transmitting at the Middle Frequency

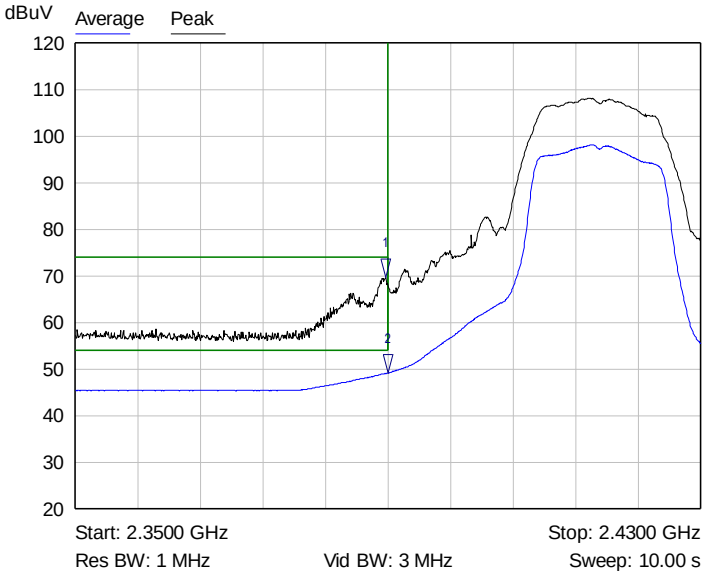
Frequency (MHz)	Detector	Antenna Polarity	Receiver Reading (dBµV)	Correction Factor (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4924.0	Peak	Vertical	6.0	38.7	44.7	74.0	-29.3
4924.0	Average	Vertical	-5.2	38.7	33.5	54.0	-20.5
4924.0	Peak	Horizontal	6.7	38.7	45.4	74.0	-28.6
4924.0	Average	Horizontal	-1.7	38.7	37.0	54.0	-17.0
7386.0	Peak	Vertical	5.7	43.1	48.8	74.0	-25.2
7386.0	Average	Vertical	-4.8	43.1	38.3	54.0	-15.7
7386.0	Peak	Horizontal	5.1	43.1	48.2	74.0	-25.8
7386.0	Average	Horizontal	-5.5	43.1	37.6	54.0	-16.4
12310.0	Peak	Vertical	3.8	47.7	51.5	74.0	-22.5
12310.0	Average	Vertical	-8.4	47.7	39.3	54.0	-14.7
12310.0	Peak	Horizontal	2.4	47.7	50.1	74.0	-23.9
12310.0	Average	Vertical	-8.6	47.7	39.1	54.0	-14.9

Table 49: Transmitting at the Highest Frequency



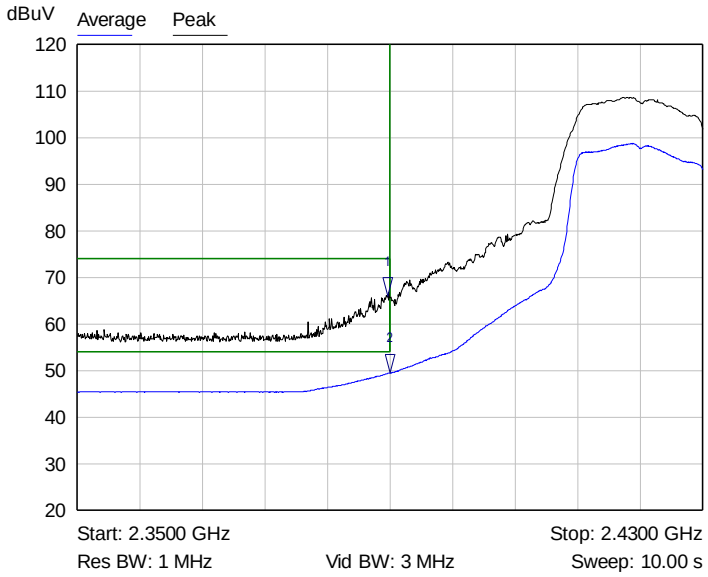
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	69.41 dBuV	
2	Average	2.3900 GHz	48.41 dBuV	

Graph 201: Radiated Band Edge Plot – Channel 1 at Power Setting 12



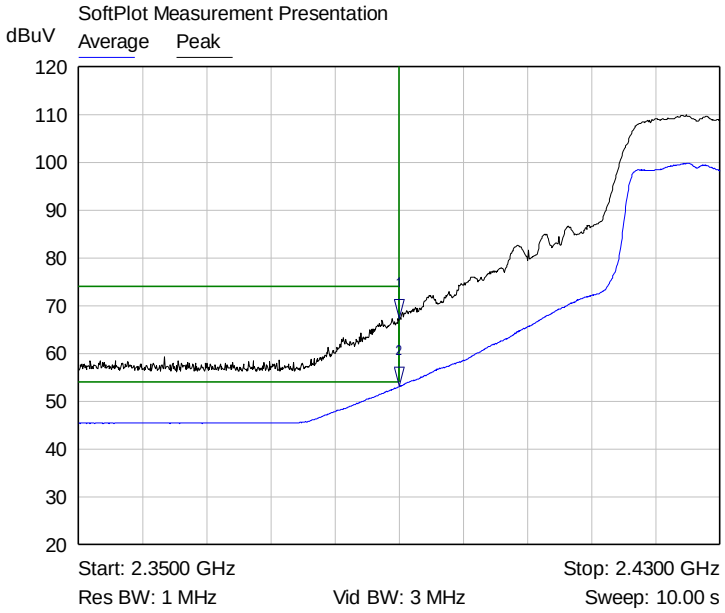
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3897 GHz	69.61 dBuV	
2	Average	2.3900 GHz	49.24 dBuV	

Graph 202: Radiated Band Edge Plot – Channel 2 at Power Setting 14



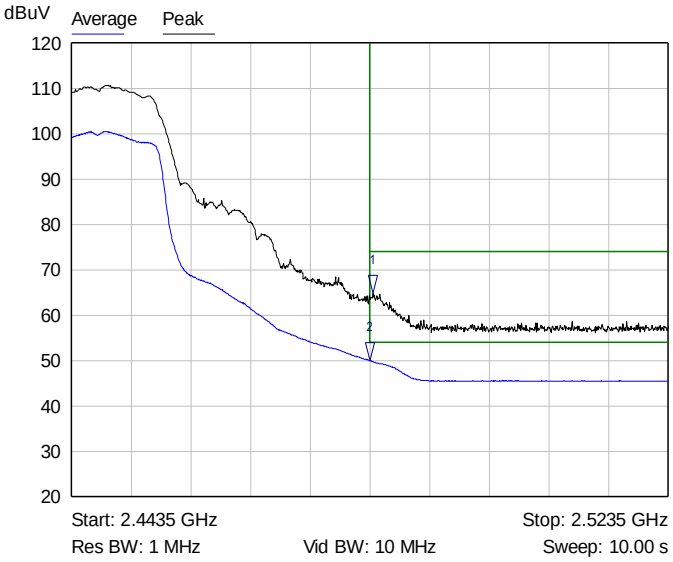
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3897 GHz	66.07 dBuV	
2	Average	2.3900 GHz	49.53 dBuV	

Graph 203: Radiated Band Edge Plot – Channel 3 at Power Setting 15



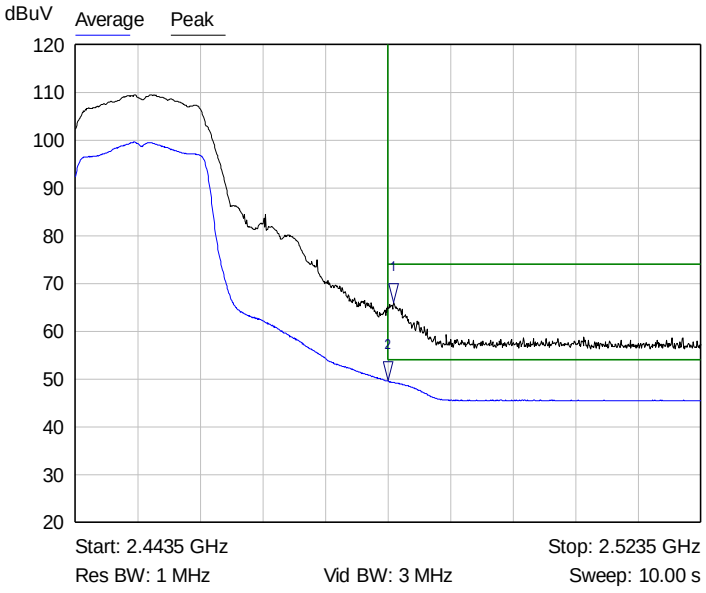
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.3900 GHz	67.40 dBuV	
2	Average	2.3900 GHz	53.15 dBuV	

Graph 204: Radiated Band Edge Plot – Channel 4 at Power Setting 17



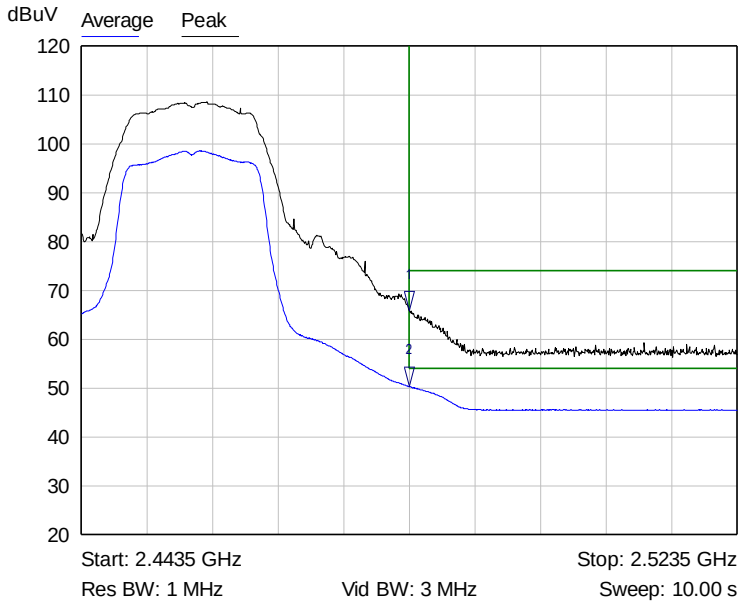
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4839 GHz	64.78 dBuV	
2	Average	2.4835 GHz	50.00 dBuV	

Graph 205: Radiated Band Edge Plot – Channel 8 at Power Setting 17



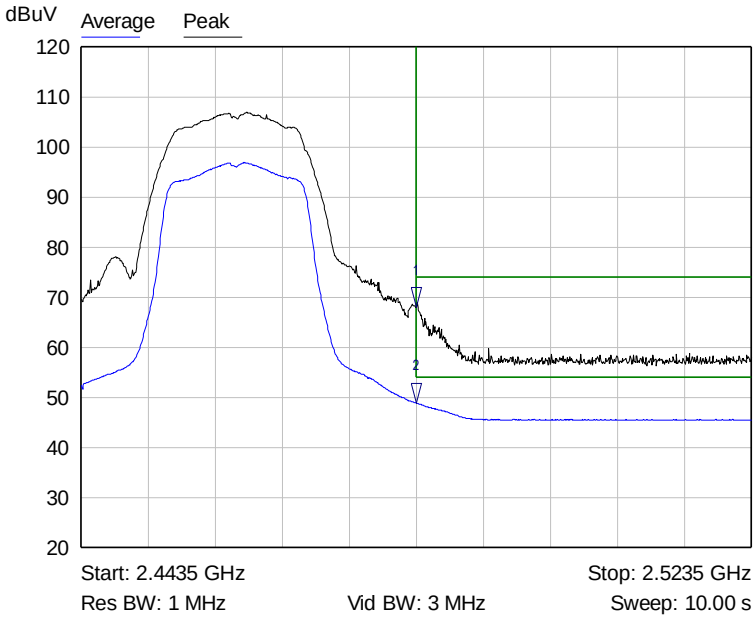
Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4842 GHz	65.94 dBuV	
2	Average	2.4835 GHz	49.63 dBuV	

Graph 206: Radiated Band Edge Plot – Channel 9 at Power Setting 16



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	65.86 dBuV	
2	Average	2.4835 GHz	50.41 dBuV	

Graph 207: Radiated Band Edge Plot – Channel 10 at Power Setting 15



Mkr	Trace	X-Axis	Value	Notes
1	Peak	2.4835 GHz	68.07 dBuV	
2	Average	2.4835 GHz	48.87 dBuV	

Graph 208: Radiated Band Edge Plot – Channel 11 at Power Setting 13

6.4 802.11n Test Results

6.4.1 §15.203 Antenna Requirements

See Section 6.2.1.

Result

The EUT complied with the specification.

6.4.2 Conducted Emissions at Mains Ports Data

See Section 6.2.2.

Result

The EUT complied with the specification.

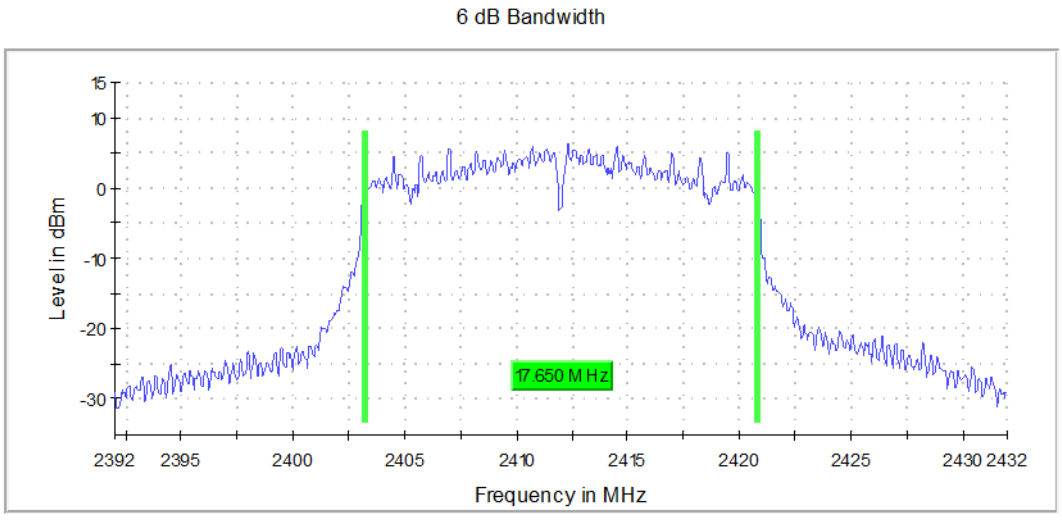
6.4.3 §15.247(a)(2) Emissions Bandwidth

040-00460a Antenna Port 0 and 1

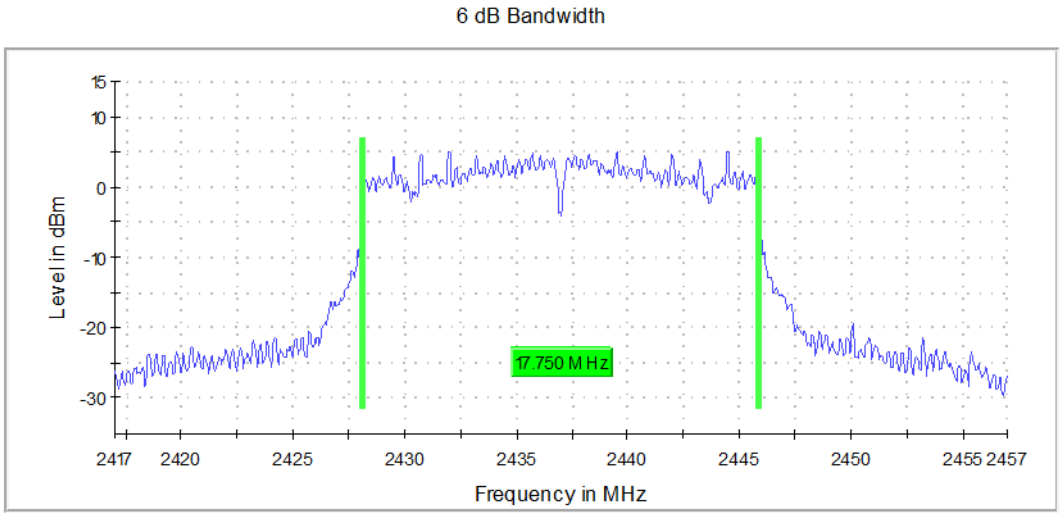
Frequency (MHz)	Antenna 0 Emissions 6 dB bandwidth (MHz)	Antenna 1 Emissions 6 dB bandwidth (MHz)
2412	17.7	17.7
2437	17.8	17.8
2462	17.4	17.4

Result

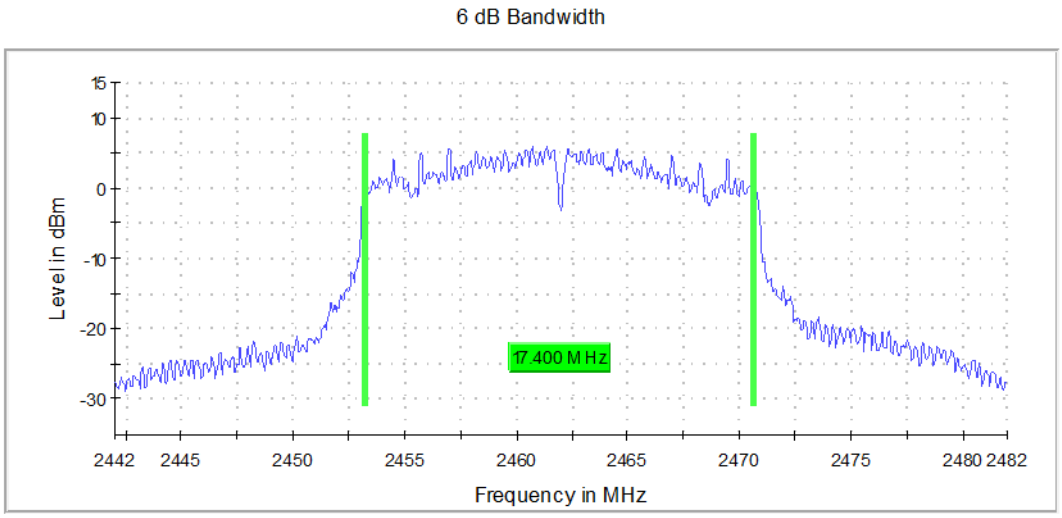
In the configuration tested, the 6 dB bandwidth was greater than 500 kHz; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plots below).



Graph 209: Lowest Channel Bandwidth – Antenna 0



Graph 210: Middle Channel Bandwidth – Antenna 0



Graph 211: Highest Channel Bandwidth – Antenna 0