



427 West 12800 South  
Draper, UT 84020

## Test Report Certification

<b>FCC ID</b>	SWX-U6MESHR
<b>IC ID</b>	6545A-U6MESHR
<b>Equipment Under Test</b>	U6-Mesh
<b>Test Report Serial Number</b>	TR6002_04
<b>Date of Test(s)</b>	28 and 29 January, 8 and 9 February, 16 and 31 March 2021
<b>Report Issue Date</b>	27 April 2021

<b>Test Specification</b>	<b>Applicant</b>
47 CFR FCC Part 15, Subpart C	Ubiquiti Inc. 685 Third Avenue New York, NY 10019 U.S.A.



NVLAP LAB CODE 600241-0

---

## Certification of Engineering Report

This report has been prepared by Unified Compliance Laboratory (UCL) to document compliance of the device described below with the requirement of Federal Communication Commissions (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.

<b>Applicant</b>	Ubiquiti Inc.
<b>Manufacturer</b>	Ubiquiti Inc.
<b>Brand Name</b>	UniFi
<b>Model Number</b>	U6-Mesh
<b>FCC ID</b>	SWX-U6MESHR
<b>IC ID</b>	6545A-U6MESHR

On this 27<sup>th</sup> day of April 2021, I individually and for Unified Compliance Laboratory 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 Unified Compliance Laboratory testing facilities, this report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the U.S. federal government.

Unified Compliance Laboratory



Written By: Joseph W. Jackson



Reviewed By: Richard L. Winter

---

<b>Revision History</b>		
<b>Revision</b>	<b>Description</b>	<b>Date</b>
01	Original Report Release	27 April 2021
02	Amend FCC ID, ISED ID and Table in Section 5.4	5 May 2021
03	Amend Sections 2.2 and 2.3	18 May 2021
04	Amended Sections 2.6 and 3.3.1	16 June 2021

## Table of Contents

1	Client Information.....	5
1.1	Applicant.....	5
1.2	Manufacturer.....	5
2	Equipment Under Test (EUT).....	6
2.1	Identification of EUT.....	6
2.2	Description of EUT.....	6
2.3	EUT and Support Equipment.....	6
2.4	Interface Ports on EUT.....	6
2.5	Operating Environment.....	7
2.6	Operating Modes.....	7
2.7	EUT Exercise Software.....	7
2.8	Block Diagram of Test Configuration.....	8
2.9	Modification Incorporated/Special Accessories on EUT.....	8
2.10	Deviation, Opinions Additional Information or Interpretations from Test Standard.....	8
3	Test Specification, Method and Procedures.....	9
3.1	Test Specification.....	9
3.2	Methods & Procedures.....	9
3.3	FCC Part 15, Subpart C.....	9
3.4	Results.....	10
3.5	Test Location.....	10
4	Test Equipment.....	11
4.1	Conducted Emissions at Mains Ports.....	11
4.2	Direct Connect at the Antenna Port Tests.....	11
4.3	Radiated Emissions.....	12
4.4	Equipment Calibration.....	12
4.5	Measurement Uncertainty.....	13
5	Test Results.....	14
5.1	§15.203 Antenna Requirements.....	14
5.2	Conducted Emissions at Mains Ports Data.....	14
5.3	§15.247(a)(2) Emissions Bandwidth.....	16
5.4	§15.247(b)(3) Maximum Average Output Power.....	17
5.5	§15.247(d) Spurious Emissions.....	19
5.6	§15.247(e) Maximum Average Power Spectral Density.....	29

# 1 Client Information

## 1.1 Applicant

<b>Company</b>	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
<b>Contact Name</b>	Mark Feil
<b>Title</b>	Compliance Manager

## 1.2 Manufacturer

<b>Company</b>	Ubiquiti Inc. 685 Third Avenue New York, NY 10017 U.S.A.
<b>Contact Name</b>	Mark Feil
<b>Title</b>	Compliance Manager

## 2 Equipment Under Test (EUT)

### 2.1 Identification of EUT

<b>Brand Name</b>	UniFi
<b>Model Number</b>	U6-Mesh
<b>Serial Number</b>	FCECDAFFAAF2
<b>Dimensions (cm)</b>	4.85 x 4.85 x 15.95

### 2.2 Description of EUT

The U6-Mesh is a four-stream WiFi 6 access point that provides up to 2.7 Gbps aggregate radio rate with 5 GHz (MU-MIMO and OFDMA) and 2.4 GHz (MIMO) radios. The U6-Mesh has a sleek design and is intended for indoor or outdoor use. The U6-Mesh has an Ethernet port for data transfer and is powered by a UPOE-at PoE power adapter.

This report covers the circuitry of the device subject to FCC Part 15, Subpart C. The circuitry of the device subject to FCC Part 15 Subpart B was found to be compliant and is covered under a separate Unified Compliance Laboratory test report.

### 2.3 EUT and Support Equipment

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

<b>Brand Name Model Number Serial Number</b>	<b>Description</b>	<b>Name of Interface Ports / Interface Cables</b>
BN: UniFi MN: U6-Mesh (Note 1) SN: FCECDAFFAAF2	WiFi Access Point	See Section 2.4
BN: Ubiquiti MN: UPOE-at (Note 1) SN: N/A	PoE Power Adapter	Shielded or Un-Shielded Cat 5e cable (Note 2)
BN: Dell MN: XPS 13 SN: N/A	Laptop PC	Shielded or Un-Shielded Cat 5e cable (Note 2)

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

<b>Name of Ports</b>	<b>No. of Ports Fitted to EUT</b>	<b>Cable Description/Length</b>
POE	1	Ethernet/<3m

Data	1	Shielded or Unshielded Cat 5e cable/8meters
------	---	---

## 2.5 Operating Environment

<b>Power Supply</b>	120 Vac to 48 Volts PoE Power
<b>AC Mains Frequency</b>	60 Hz
<b>Temperature</b>	21.5 – 22.6 °C
<b>Humidity</b>	16.5 – 26.1 %
<b>Barometric Pressure</b>	1023 mBar

## 2.6 Operating Modes

The U6-Mesh was connected to a personal computer laptop through the PoE Adapter. Test software was used in order to enable to constant duty cycle. The measurements within this report are corrected to reference a 100% duty cycle. All emissions modes of 802.11 b/g/n/ax were investigated. All measurements are reported with the worst-case mode (802.11ax) unless otherwise stated.

## 2.7 EUT Exercise Software

EUT firmware version 1.0 was used to operate the transmitter using a constant transmit mode. (ART)

## 2.8 Block Diagram of Test Configuration

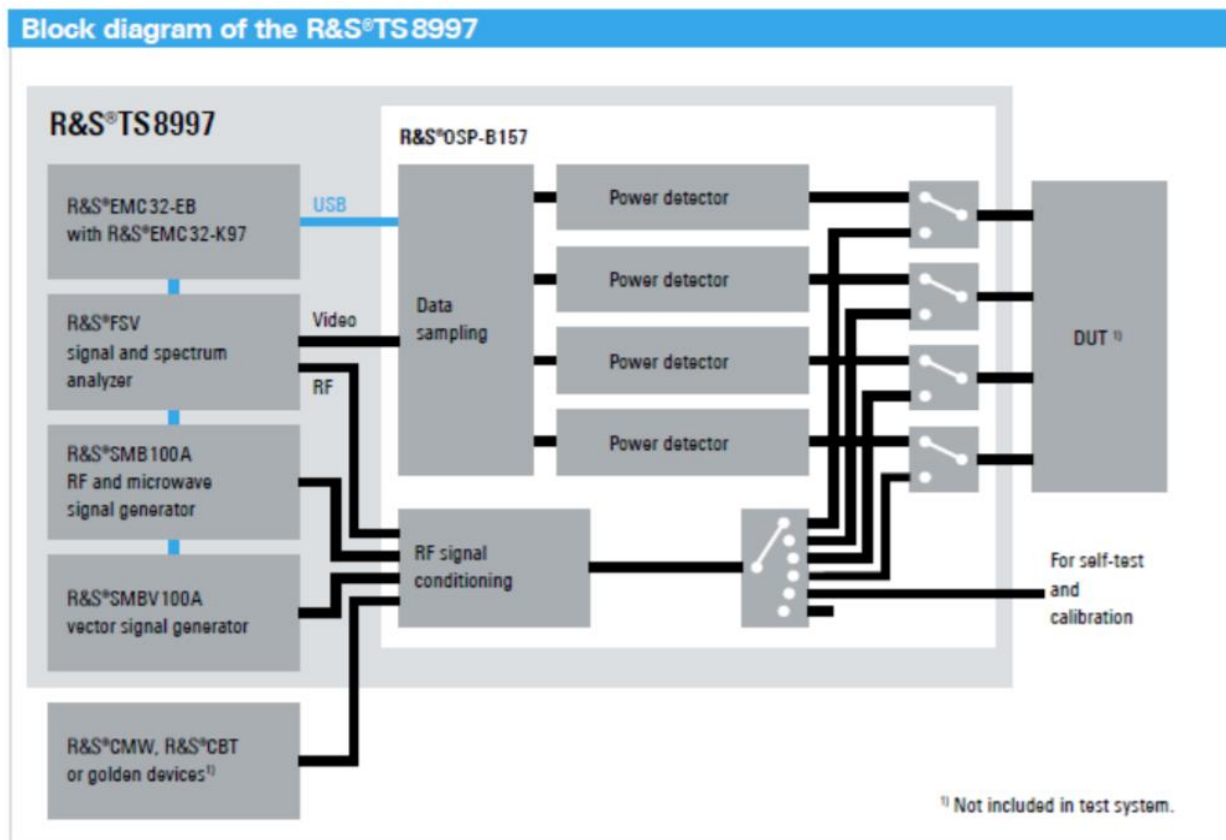


Diagram 1: Test Configuration Block Diagram

## 2.9 Modification Incorporated/Special Accessories on EUT

There were no modifications made to the EUT during testing to comply with the specification.

## 2.10 Deviation, Opinions Additional Information or Interpretations from Test Standard

There were no deviations, opinions, additional information or interpretations from the test specification.



## 3 Test Specification, Method and Procedures

### 3.1 Test Specification

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

### 3.2 Methods & Procedures

#### 3.2.1 47 CFR FCC Part 15 Section 15.203

See test standard for details.

#### 3.2.2 47 CFR FCC Part 15 Section 15.207

See test standard for details.

#### 3.2.3 47 CFR FCC Part 15 Section 15.247

See test standard for details.

### 3.3 FCC Part 15, Subpart C

#### 3.3.1 Summary of Tests

FCC Section	ISED Section	Environmental Phenomena	Frequency Range (MHZ)	Result
15.203	N/A	Antenna requirements	Structural Requirement	Compliant
15.207	RSS-Gen	Conducted Disturbance at Mains Port	0.15 to 30	Compliant
15.247(a)	RSS-247 § 5.2	Bandwidth Requirement	2400 to 2483.5	Compliant
15.247(b)	RSS-247 § 5.4	Peak Output Power	2400 to 2483.5	Compliant
15.247(d)	RSS-247 § 5.4	Antenna Conducted Spurious Emissions	0.009 to 26000	Compliant
15.247(d)	RSS-247 § 5.4	Radiated Spurious Emissions	0.009 to 26000	Compliant
15.247(e)	RSS-247 § 5.2	Peak Power Spectral Density	2400 to 2483.5	Compliant

The testing was performed according to the procedures in ANSI C63.10-2013, KDB 558074 and 47 CFR Part 15. Where applicable, KDB 662911 was followed to sum required measurements.

### **3.4 Results**

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

### **3.5 Test Location**

Testing was performed at the Unified Compliance Laboratory 10-Meter chamber located at 427 West 12800 South, Draper, UT 84020. Unified Compliance Laboratory is accredited by National Voluntary Laboratory Accreditation Program (NVLAP); NVLAP Code 600241-0 which is effective until 30 June 2021. This site has also been registered with Innovations, Science and Economic Development (ISED) department and was accepted under Appendix B, Phase 1 procedures of the APEC Tel MRA for Canadian recognition. ISED No.: 25346, effective until June 30, 2021. Unified Compliance Laboratory has been assigned Conformity Assessment Number US0223 by ISED.

## 4 Test Equipment

### 4.1 Conducted Emissions at Mains Ports

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	AFJ	FFT3010	UCL-2500	9/18/2020	9/18/2021
LISN	AFJ	LS16C/10	UCL-2512	5/26/2020	5/26/2021
Cat6 ISN	Teseq	ISN T8-Cat6	UCL-2971	5/18/2020	5/18/2021
ISN	Teseq	ISN T800	UCL-2974	6/1/2020	6/1/2021
LISN	Com-Power	LIN-120C	UCL-2612	5/19/2020	5/19/2021
AC Power Source	Laplace Instruments	AC1000A	UCL-2857	N/A	N/A
Test Software	UCL	Revision 1	UCL-3107	N/A	N/A

Table 1: List of equipment used for Conducted Emissions Testing at Mains Port

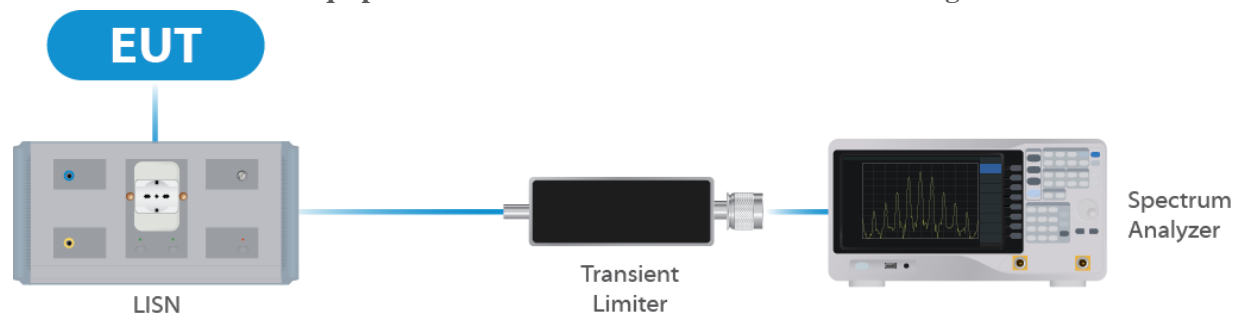


Figure 1: Conducted Emissions Test

### 4.2 Direct Connect at the Antenna Port Tests

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
Spectrum Analyzer	R&S	FSV40	UCL-2861	8/24/2020	8/24/2021
Signal Generator	R&S	SMB100A	UCL-2864	N/A	N/A
Vector Signal Generator	R&S	SMBV100A	UCL-2873	N/A	N/A
Switch Extension	R&S	OSP-B157WX	UCL-2867	8/25/2020	8/25/2021
Switch Extension	R&S	OSP-150W	UCL-2870	8/21/2020	8/21/2021

Table 2: List of equipment used for Direct Connect at the Antenna Port

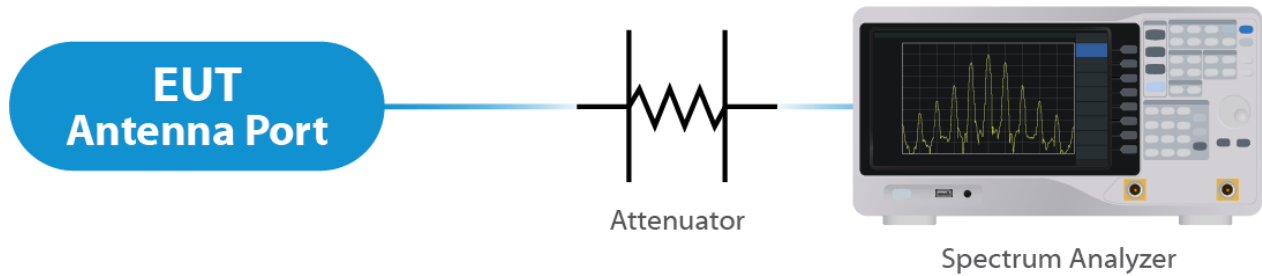


Figure 2: Direct Connect at the Antenna Port Test

### 4.3 Radiated Emissions

Type of Equipment	Manufacturer	Model Number	Asset Number	Date of Last Calibration	Due Date of Calibration
EMI Receiver	Keysight	N9038A	UCL-2778	6/1/2020	6/1/2021
Pre-Amplifier 9 kHz – 1 GHz	Sonoma Instruments	310N	UCL-2889	9/10/2020	9/10/2021
Double Ridge Horn Antenna	Scwarzbeck	BBHA 9120D	UCL-3065	7/8/2020	7/8/2021
Log Periodic	Scwarzbeck	STLP 9129	UCL-3068	5/20/2020	5/20/2021
15 - 40 GHz Horn Antenna	Scwarzbeck	BBHA 9170	UCL-2487	5/21/2020	5/21/2021
1 – 18 GHz Amplifier	Com-Power	PAM 118A	UCL-3833	9/29/2020	9/29/2021
Test Software	UCL	Revision 1	UCL-3108	N/A	N/A

Table 3: List of equipment used for Radiated Emissions

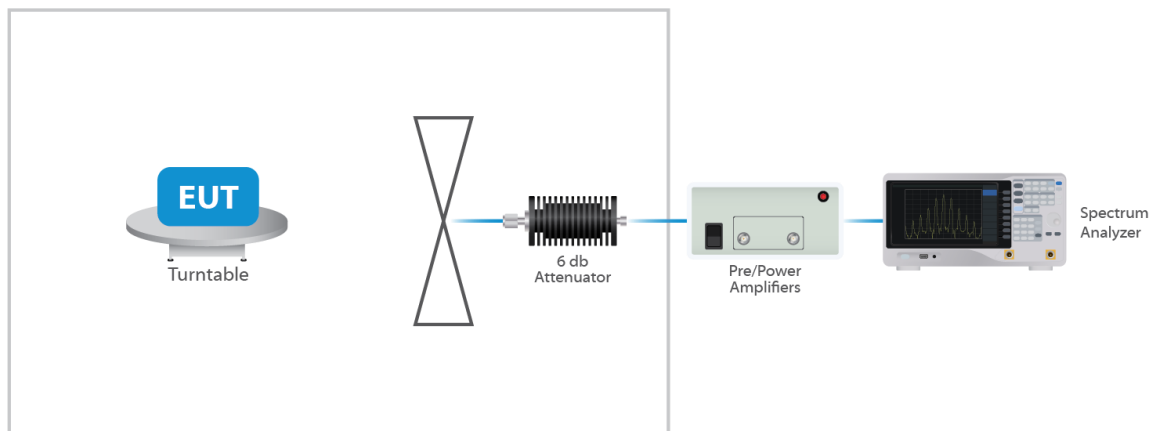


Figure 3: Radiated Emissions Test

### 4.4 Equipment Calibration

All applicable equipment is calibrated using either an independent calibration laboratory or Unified Compliance Laboratory personnel at intervals defined in ANSI C63.4:2014 following outlined calibration

procedures. All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST). Supporting documentation relative to traceability is on file and is available for examination upon request.

## 4.5 Measurement Uncertainty

Test	Uncertainty ( $\pm$ dB)	Confidence (%)
Conducted Emissions	1.44	95
Radiated Emissions (9 kHz to 30 MHz)	2.50	95
Radiated Emissions (30 MHz to 1 GHz)	4.38	95
Radiated Emissions (1 GHz to 18 GHz)	4.37	95
Radiated Emissions (18 GHz to 40 GHz)	3.93	95
<b>Direct Connect Tests</b>	<b>K Factor</b>	<b>Value</b>
Emissions Bandwidth	2	2.0%
Output Power	2	1.0 dB
Peak Power Spectral Density	2	1.3 dB
Band Edge	2	0.8 dB
Transmitter Spurious Emissions	2	1.8 dB

## 5 Test Results

### 5.1 §15.203 Antenna Requirements

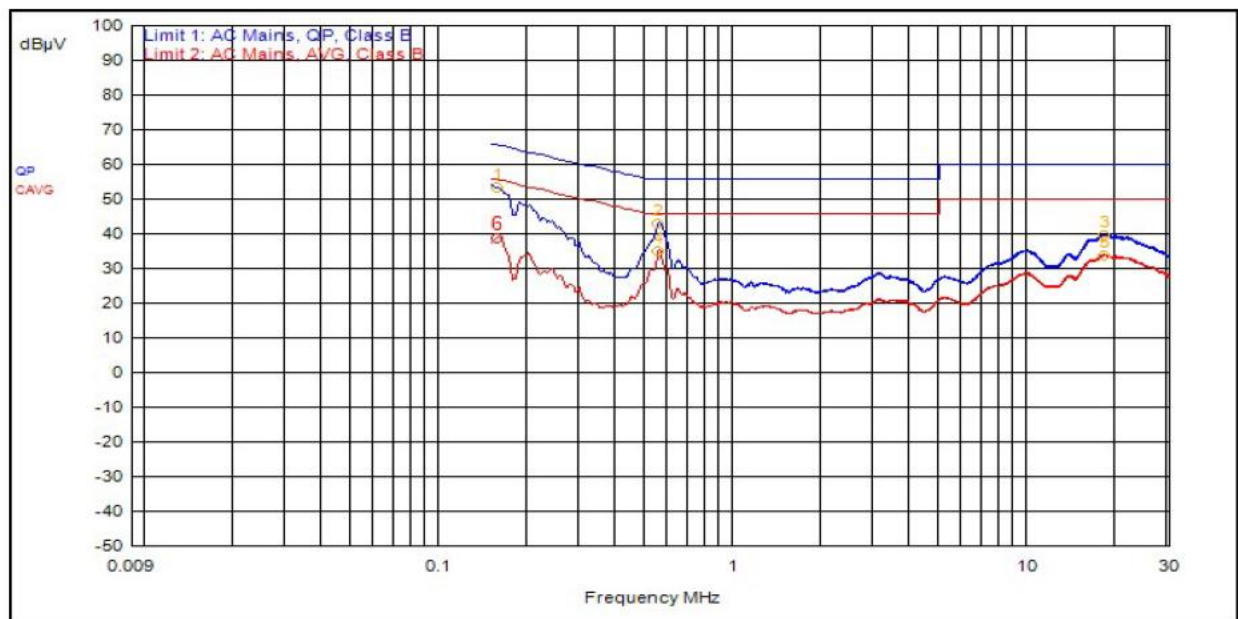
The EUT uses an integral antenna. The Maximum gain of the antenna is 3 dBi. The antenna is not user replaceable.

#### Results

The EUT complied with the specification.

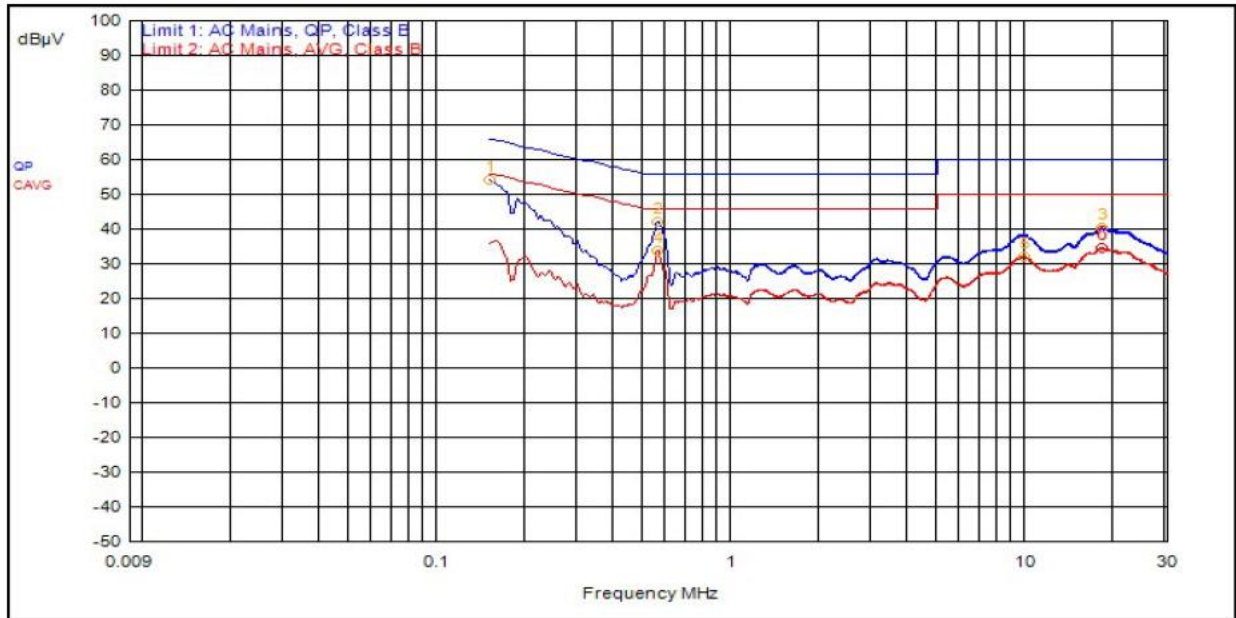
### 5.2 Conducted Emissions at Mains Ports Data

#### 5.2.1 Line 1 (Hot)



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit	Limit Dist.
4	552.000kHz	12.4	0.0		C_AVG	22.7	35.1	46.0	-10.9
1	156.000kHz	12.4	0.0		QPeak	40.8	53.2	65.7	-12.4
2	552.000kHz	12.4	0.0		QPeak	30.7	43.1	56.0	-12.9
5	17.889MHz	12.3	0.2		C_AVG	21.4	33.9	50.0	-16.1
6	156.000kHz	12.4	0.0		C_AVG	26.4	38.8	55.7	-16.9
3	17.958MHz	12.3	0.2		QPeak	27.1	39.6	60.0	-20.4

## 5.2.2 Neutral



ID	Frequency	Probe	Cable	Atten.	Detector	Meter Read	Meas Level	Limit	Limit Dist.
1	150.000kHz	12.4	0.0		QPeak	41.7	54.1	66.0	-11.9
4	558.000kHz	12.4	0.0		C_AVG	21.5	33.9	46.0	-12.1
2	555.000kHz	12.4	0.0		QPeak	29.6	42.1	56.0	-13.9
6	17.835MHz	12.3	0.2		C_AVG	21.9	34.5	50.0	-15.5
5	9.723MHz	12.3	0.2		C_AVG	19.5	32.0	50.0	-18.0
3	18.036MHz	12.3	0.2		QPeak	27.7	40.3	60.0	-19.7

### Result

The EUT complied with the specification limit.

### 5.3 §15.247(a)(2) Emissions Bandwidth

Mode	Frequency (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth (MHz)
b	2412	13.3	8.15
	2437	13.4	9.15
	2462	13.1	8.15
g	2412	16.3	16.35
	2437	24.6	16.25
	2462	16.3	16.0
n 20	2412	17.5	16.7
	2437	18.0	16.6
	2462	17.5	16.6
n 40	2422	37.75	35.50
	2437	37.50	15.25
	2452	37.75	17.95
ax 20	2412	18.9	16.9
	2437	19.1	18.4
	2462	18.9	18.15
ax 40	2422	37.5	35.8
	2437	37.5	34.8
	2452	37.75	24.85

#### 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 plot within the Annex).



## 5.4 §15.247(b)(3) Maximum Average Output Power

The maximum average RF conducted output power measured for this device was 23.2 dBm or 208.93 mW. The limit is 30 dBm or 1 Watt when using antennas with 6 dBi or less gain. The antenna has a gain of 3 dBi.

Modulation (BW)	Frequency (MHz)	Data Rate	TP Setting	Conducted Output Power *	Measured EIRP
CCK 20	2412	Mcs0	39	18.8	21.80
	2417	Mcs0	39	21.8	24.80
	2422	Mcs0	41	22.0	25.00
	2427	Mcs0	44	22.2	25.20
	2432	Mcs0	46	23.2	26.20
	2437	Mcs0	46	23.2	26.20
	2452	Mcs0	43	21.9	24.90
	2457	Mcs0	40	21.3	24.30
	2462	Mcs0	40	20.8	23.80
OFDM 20	2412	Mcs0	30	18.1	21.10
	2417	Mcs0	33	18.5	21.50
	2422	Mcs0	37	20.1	23.10
	2427	Mcs0	39	21.3	24.30
	2432	Mcs0	42	22.0	25.00
	2437	Mcs0	42	21.9	24.90
	2442	Mcs0	42	22.3	25.30
	2447	Mcs0	39	21.7	24.70
	2452	Mcs0	38	20.2	23.20
	2457	Mcs0	34	19.6	22.60
	2462	Mcs0	31	18.5	21.50
HT 20	2412	Mcs0	33	17.7	20.70
	2417	Mcs0	35	18.7	21.70
	2422	Mcs0	40	19.8	22.80
	2427	Mcs0	40	21.6	24.60
	2432	Mcs0	42	22.2	25.20
	2437	Mcs0	43	22.2	25.20
	2442	Mcs0	43	20.0	23.00
	2447	Mcs0	40	21.4	24.40
	2452	Mcs0	38	20.8	23.80
	2457	Mcs0	35	19.2	22.20

	2462	Mcs0	31	18.1	21.10
HT 40	2422	Mcs0	25	16.5	19.50
	2437	Mcs0	30	17.8	20.80
	2452	Mcs0	26	16.1	19.10
ax 20	2412	Mcs0	32	17.2	20.20
	2417	Mcs0	36	18.7	21.70
	2422	Mcs0	37	19.3	22.30
	2427	Mcs0	39	20.5	23.50
	2432	Mcs0	43	20.7	23.70
	2437	Mcs0	43	21.8	24.80
	2442	Mcs0	42	21.6	24.60
	2447	Mcs0	39	20.5	23.50
	2452	Mcs0	39	19.9	22.90
	2457	Mcs0	33	18.8	21.80
	2462	Mcs0	31	17.7	20.70
ax 40	2422	Mcs0	24	16.4	19.40
	2437	Mcs0	30	18.2	21.20
	2452	Mcs0	26	16.6	19.60

### Result

In the configuration tested, the maximum average RF output power was less than 1 watt; therefore, the EUT complied with the requirements of the specification (see spectrum analyzer plot within the Annex).

\* Gated EIRP shown in the Annex is the conducted measurement

## **5.5 §15.247(d) Spurious Emissions**

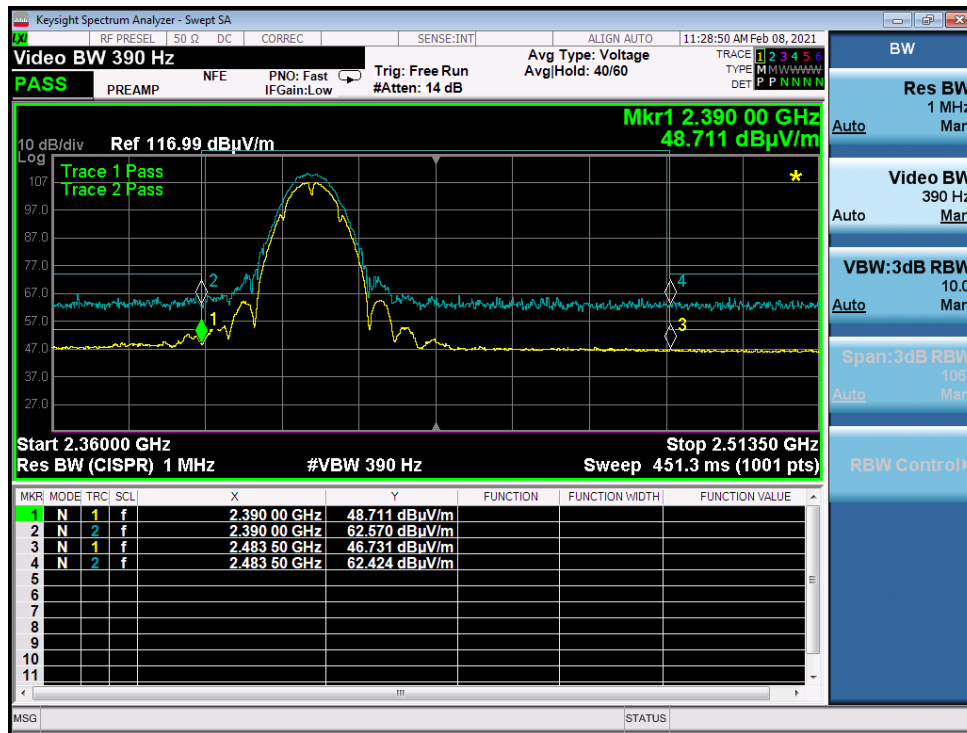
### **5.5.1 Conducted Spurious Emissions**

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 table 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 plot(s) with the EUT tuned to the upper and lower channels. These demonstrate compliance with the provisions of this section at the band edges.

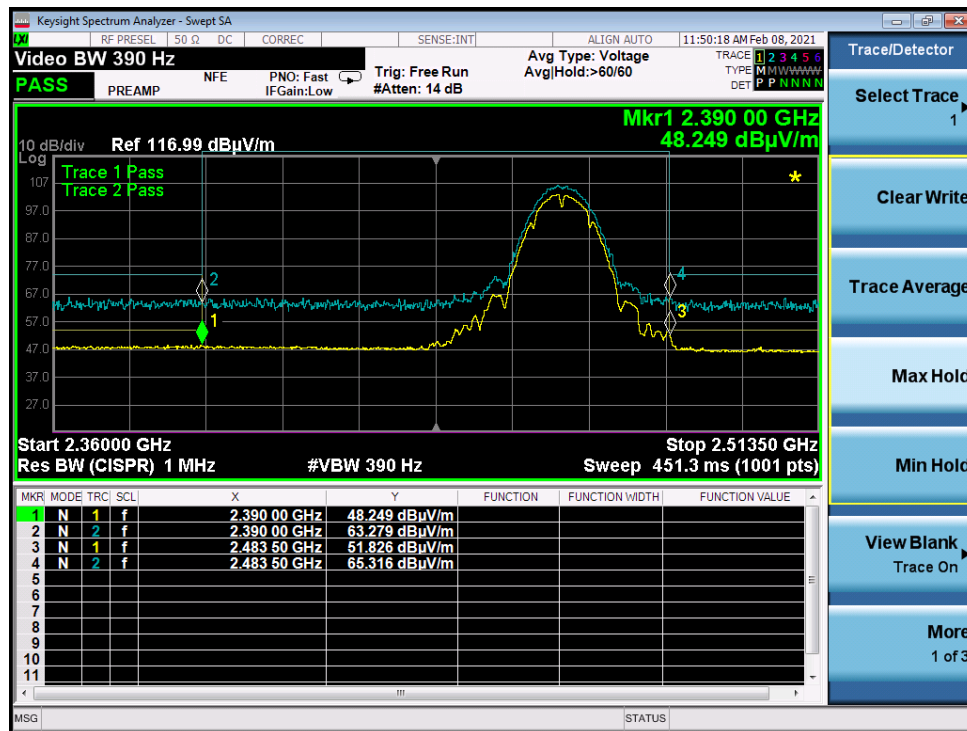
The emissions must be attenuated 30 dB below the highest power spectral density level measured within the authorized band as measured with a 100 kHz RBW.

#### **Result**

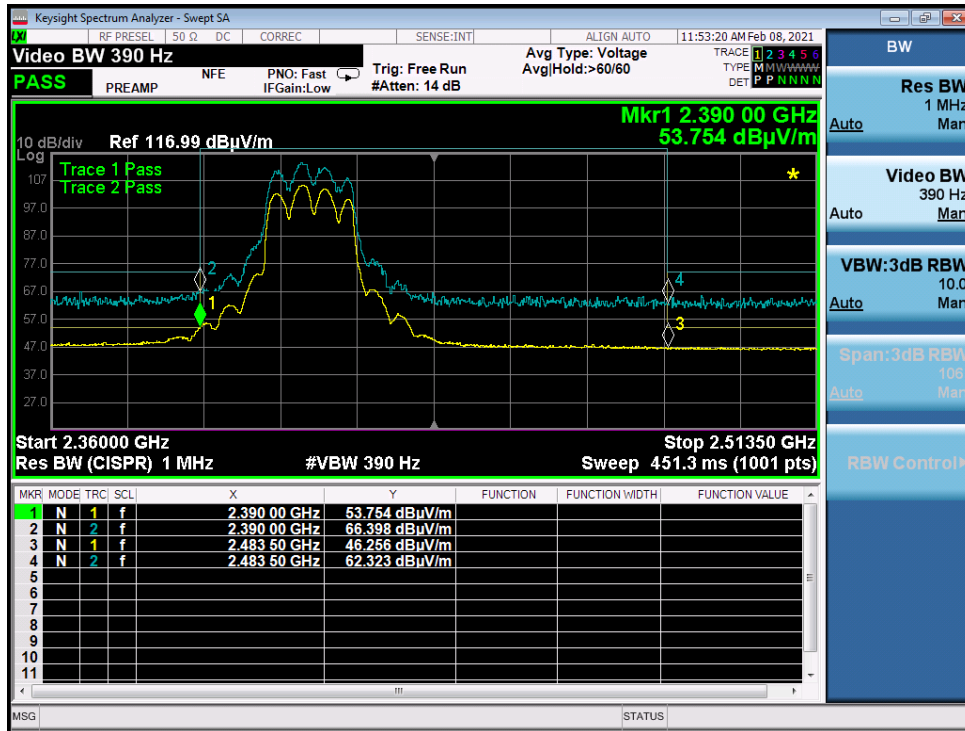
Conducted spurious emissions were attenuated 30 dB or more below the fundamental; therefore, the EUT complies with the specification.



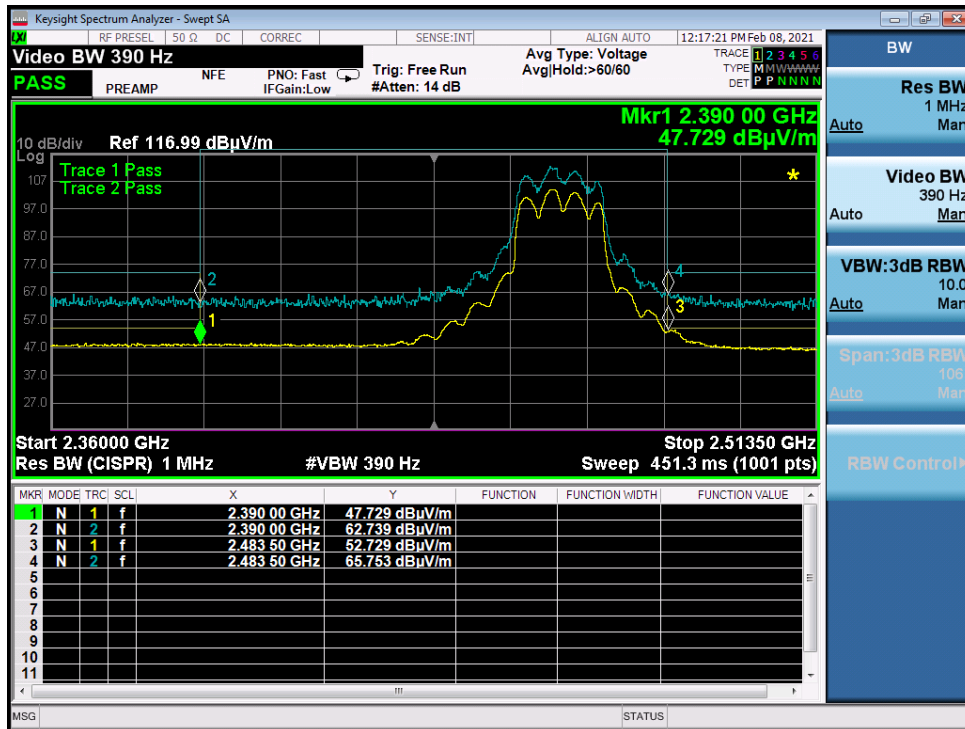
Graph 1: Lower Band Edge Plot – b Mode 20 MHz – 2412 MHz



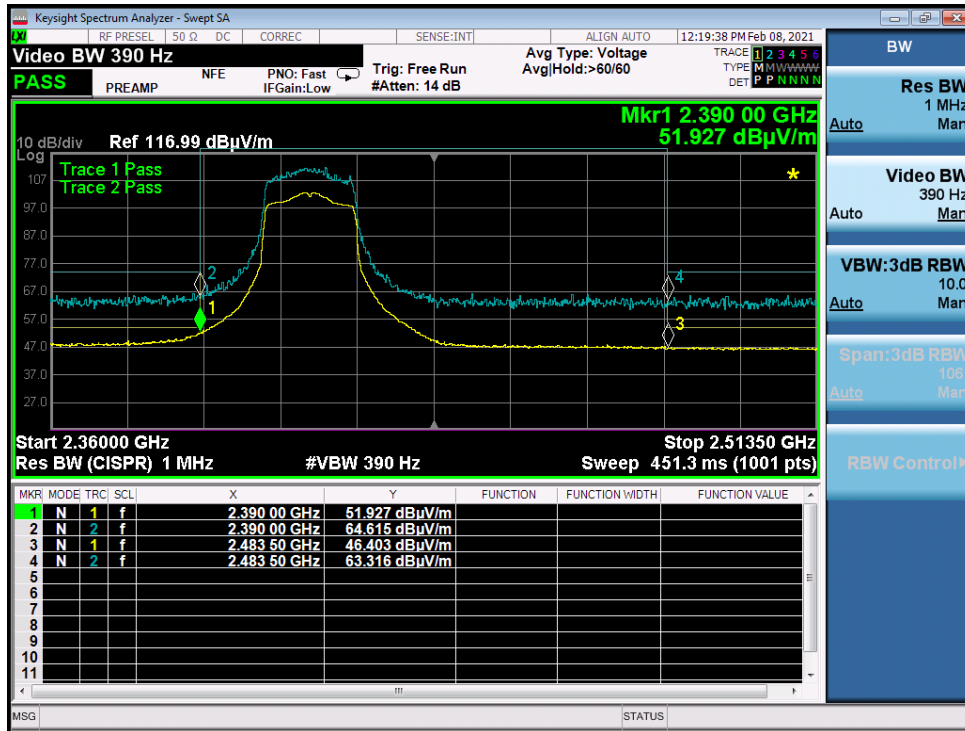
Graph 2: Upper Band Edge Plot – b Mode 20 MHz – 2462 MHz



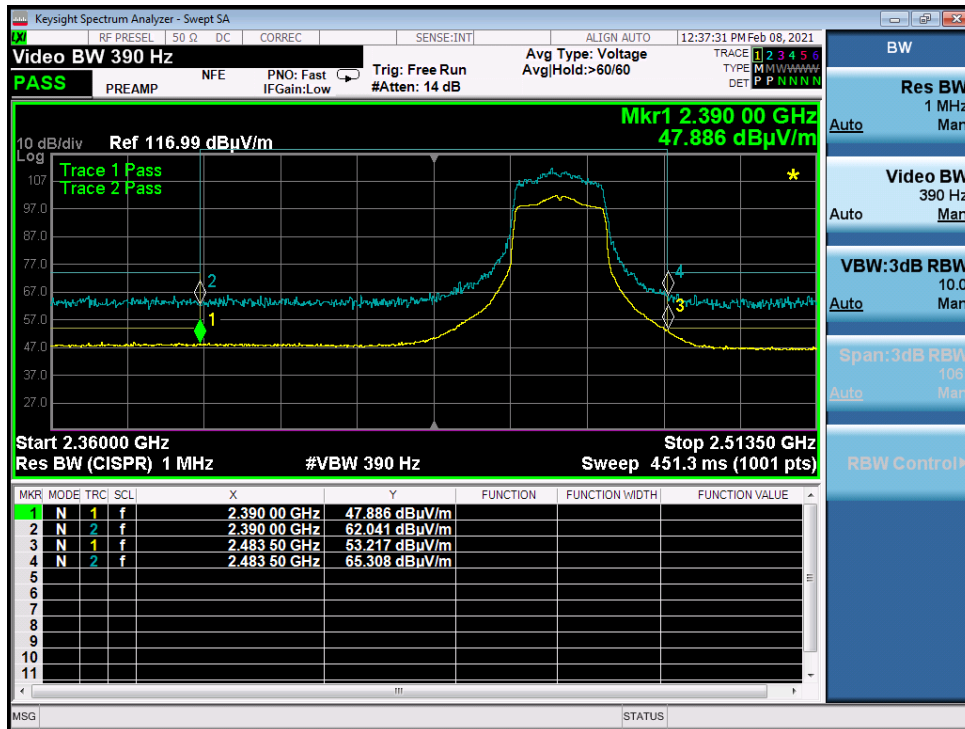
Graph 3: Lower Band Edge Plot – g Mode 20 MHz – 2412 MHz



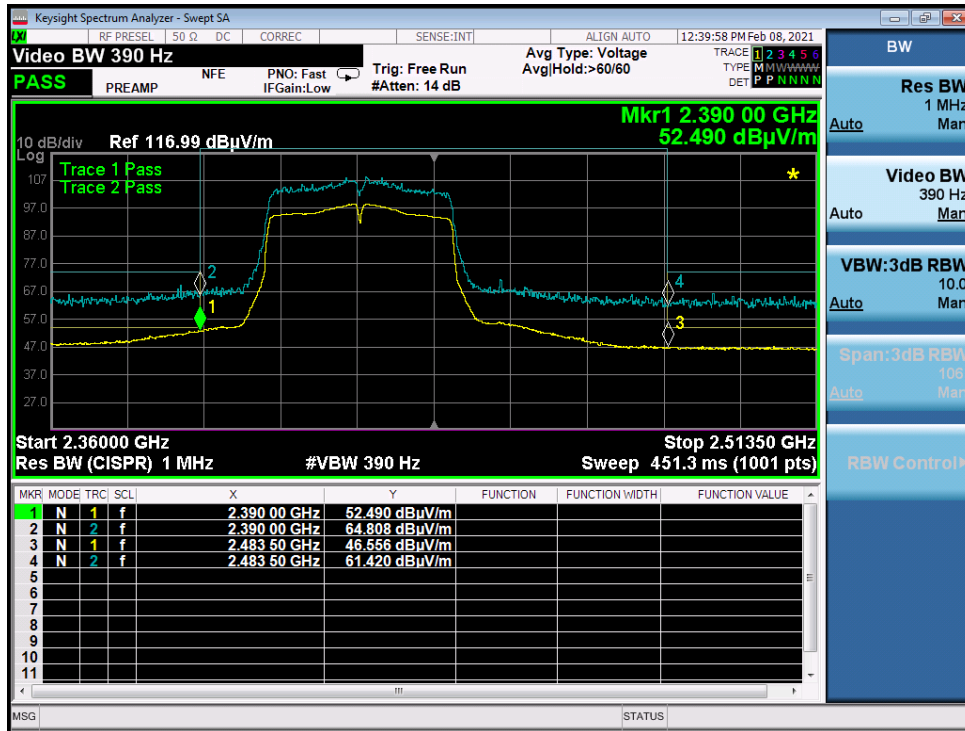
Graph 4: Upper Band Edge Plot – g Mode 20 MHz – 2462 MHz



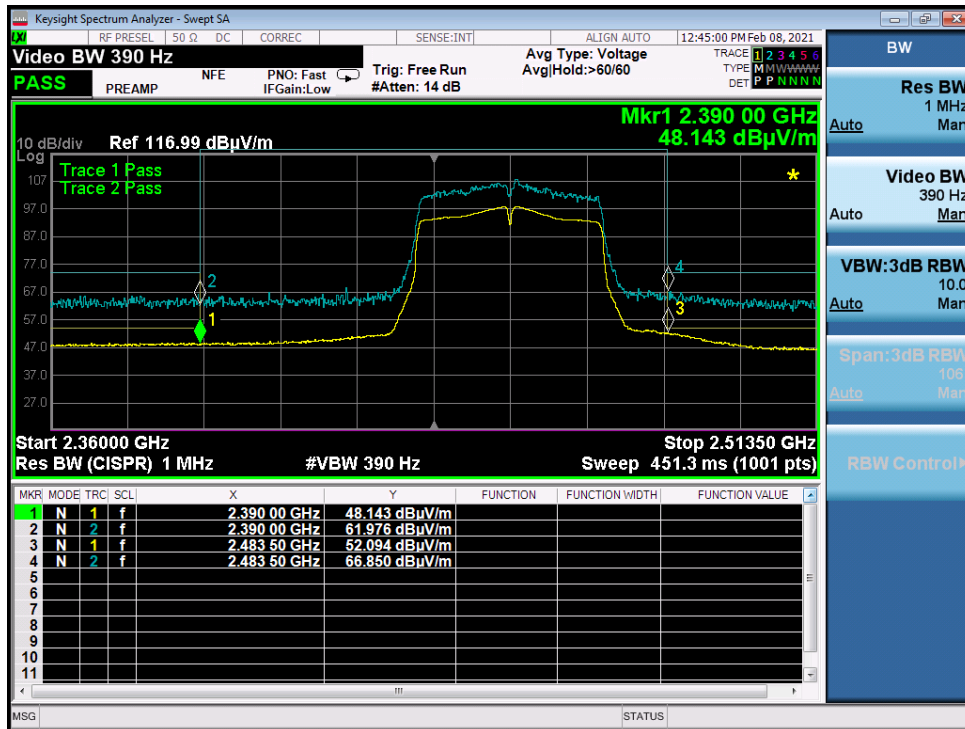
Graph 5: Lower Band Edge Plot – n Mode 20 MHz – 2412 MHz



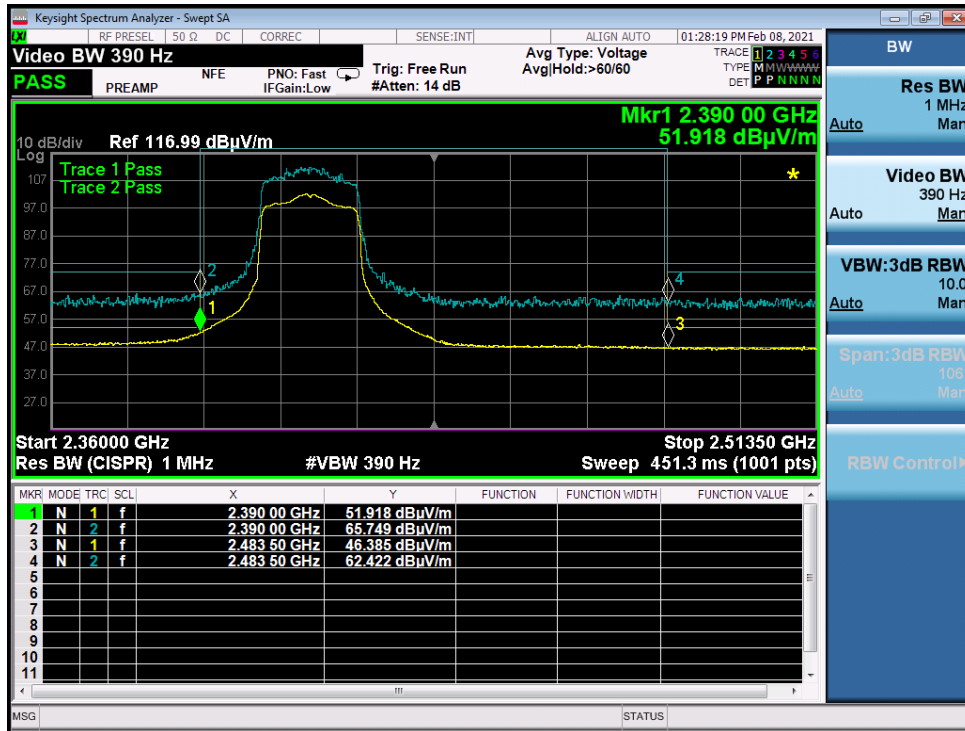
Graph 6: Upper Band Edge Plot – n Mode 20 MHz – 2462 MHz



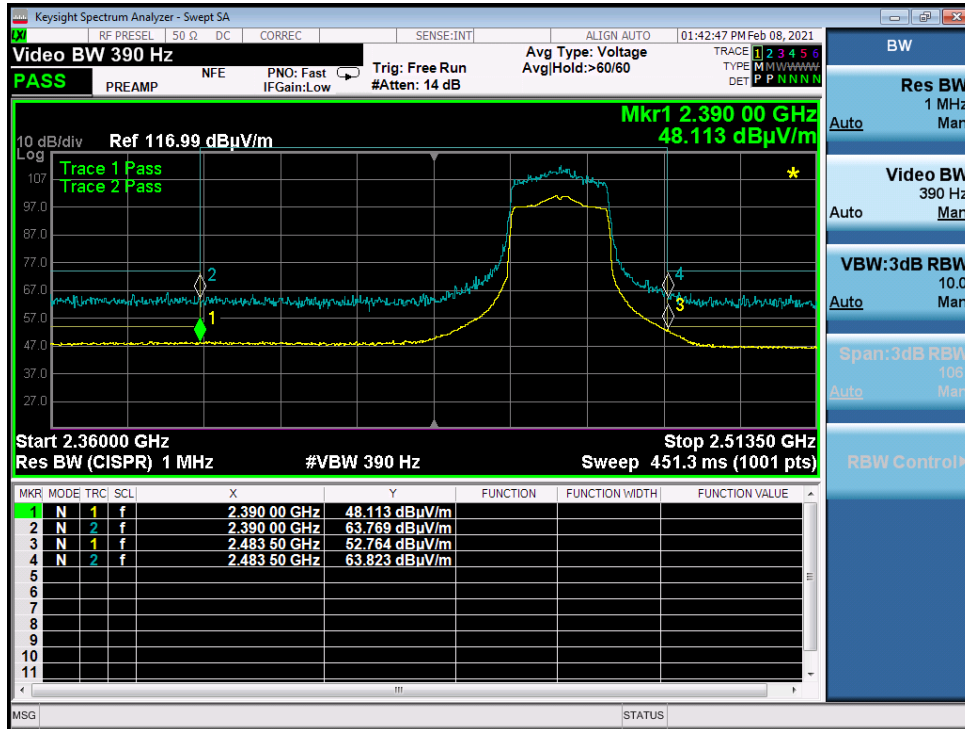
Graph 7: Lower Band Edge Plot – n Mode 40 MHz – 2422 MHz



Graph 8: Upper Band Edge Plot – n Mode 40 MHz – 2452 MHz

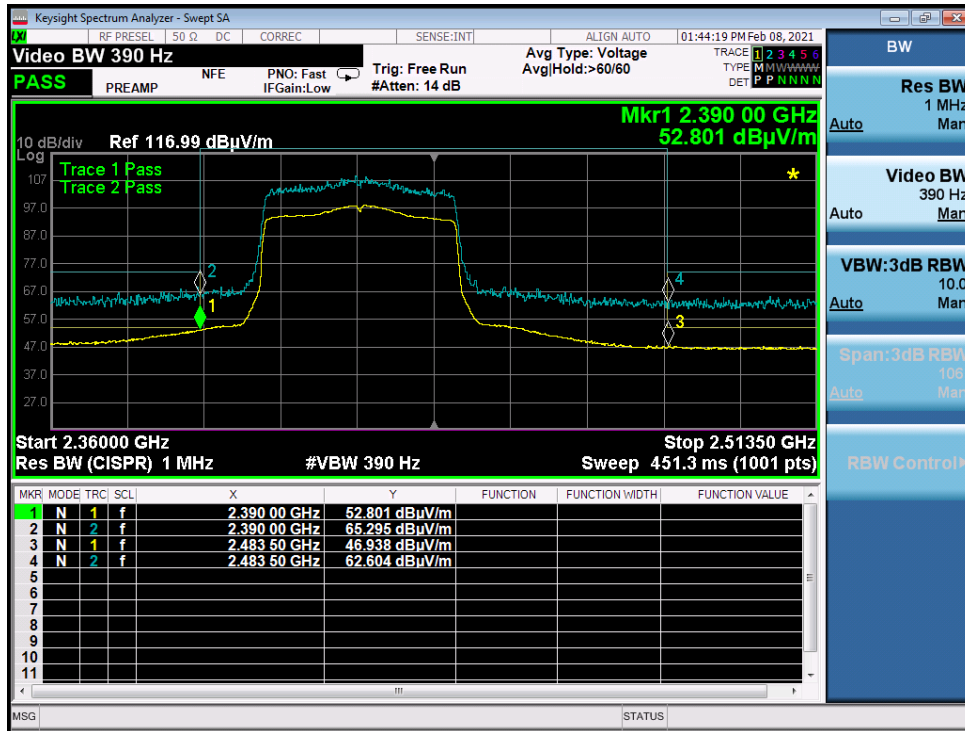


Graph 9: Lower Band Edge Plot – ax Mode 20 MHz – 2412 MHz

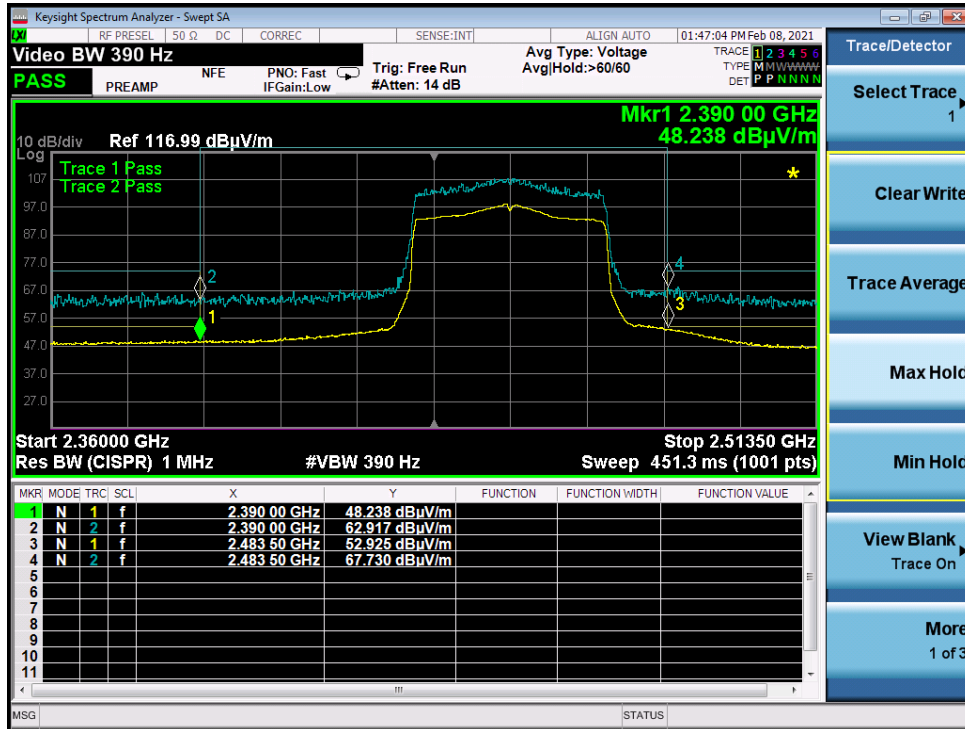


Graph 10: Upper Band Edge Plot – ax Mode 20 MHz – 2462 MHz





**Graph 11: Lower Band Edge Plot – ax Mode 40 MHz – 2422 MHz**



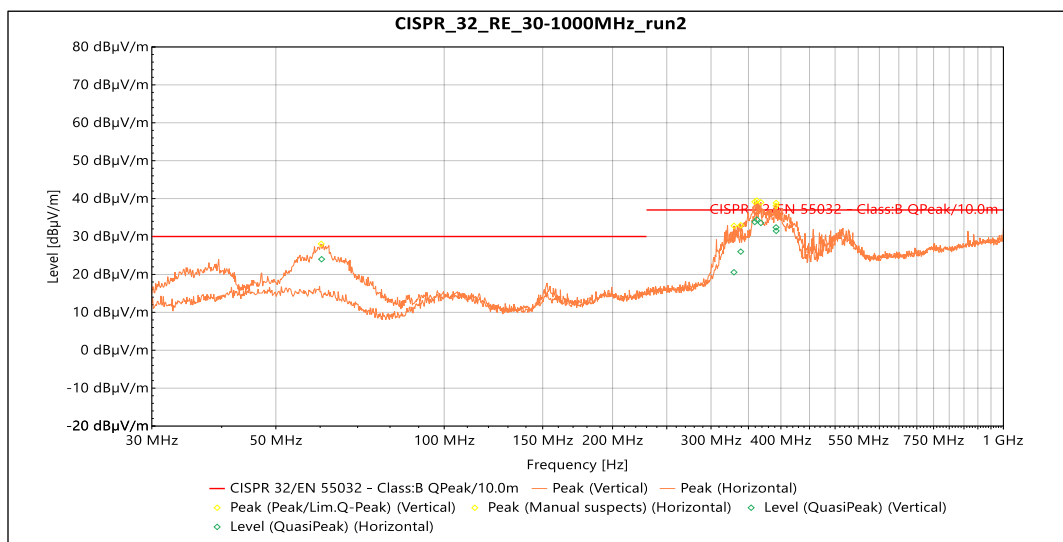
**Graph 12: Upper Band Edge Plot – ax Mode 40 MHz – 2452 MHz**

## 5.5.2 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 emissions was investigated to measure any radiated emissions in the restricted bands. The following tables show measurements of any emissions that fell into the restricted bands of §15.205. The tables show the worst-case emissions 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 limits. 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. Plots of the band edges 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.



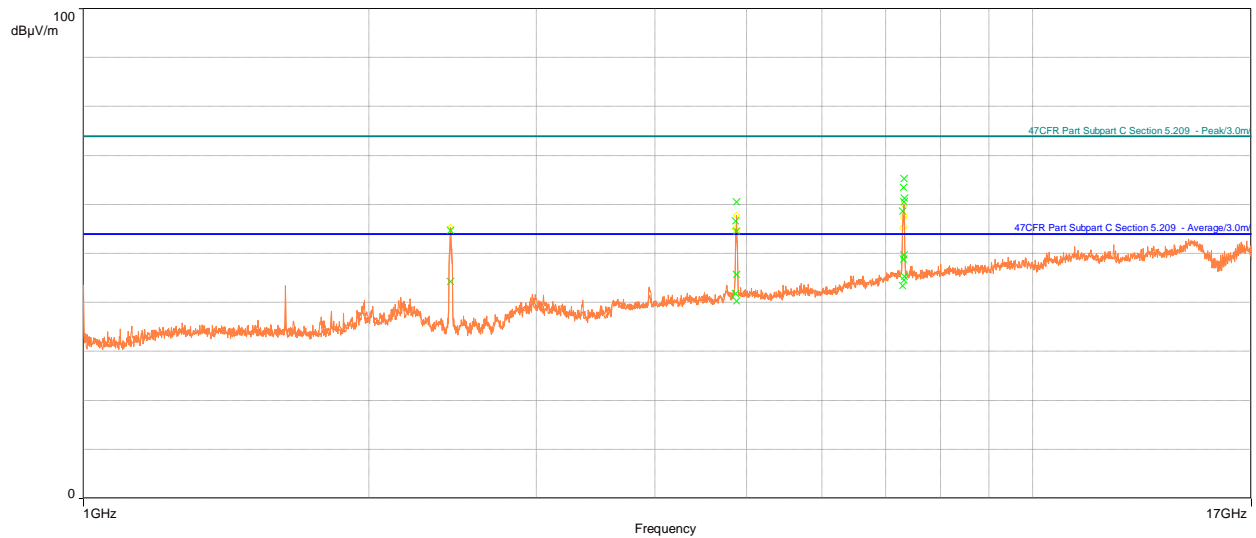
### QuasiPeak

Source	Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Meas. Time	RBW	Meas.Time	Correction (dB)
QuasiPeak	60.366 MHz	1	24.005	30	-5.995	197	3.364	Vertical	15	120000	0.001	-13.501
QuasiPeak	329.7 MHz	1	20.569	37	-16.431	85	1.304	Vertical	15	120000	0.001	-11.089
QuasiPeak	339.04 MHz	1	26.006	37	-10.994	333	0.994	Vertical	15	120000	0.001	-10.592
QuasiPeak	362.31 MHz	1	34.472	37	-2.528	168	3.9	Vertical	15	120000	0.001	-10.194
QuasiPeak	392.33 MHz	1	31.485	37	-5.515	134	3.756	Vertical	15	120000	0.001	-9.193

### QuasiPeak

Source	Frequency	SR #	Level (dBµV/m)	Limit (dBµV/m)	Margin	Azimuth (°)	Height	Pol.	Meas. Time	RBW	Meas.Time	Correction (dB)
QuasiPeak	359.24 MHz	2	33.842	37	-3.158	269	2.812	Horizontal	15	120000	0.001	-10.362
QuasiPeak	368.35 MHz	2	33.581	37	-3.419	269	2.697	Horizontal	15	120000	0.001	-9.994

Source	Frequency	SR #	Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin	Azimuth (°)	Height	Pol.	Meas. Time	RBW	Meas. Time	Correction (dB)
QuasiPeak	392.08 MHz	2	32.41	37	-4.59	245	2.073	Horizontal	15	120000	0.001	-9.2

**Table 4: Radiated Emissions 30 – 10000 MHz**


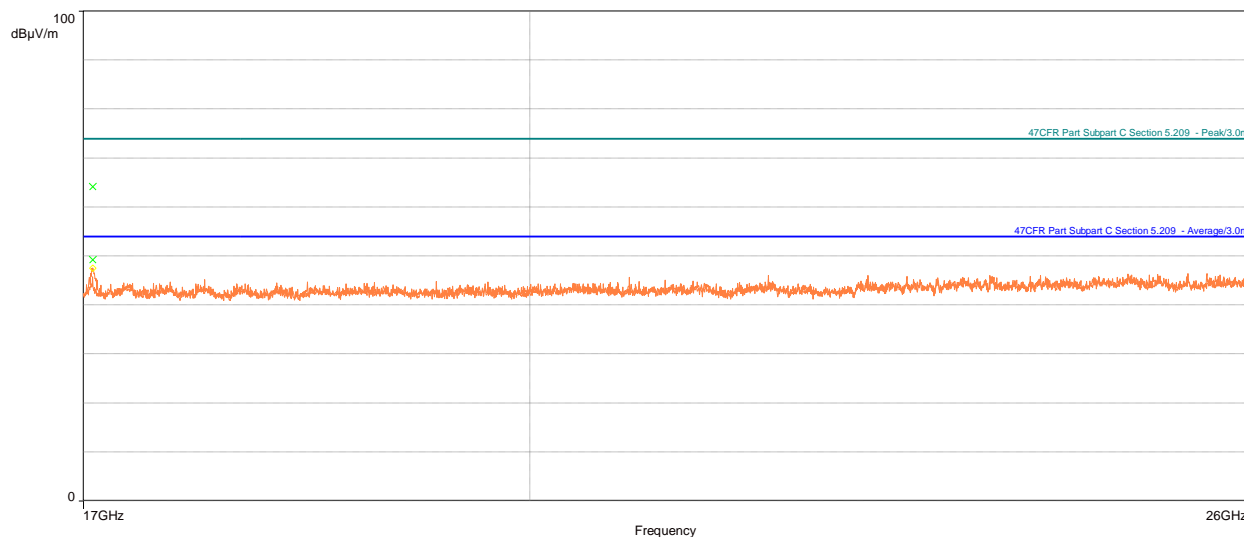
Avg

Frequency (MHz)	Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
4876.8	40.27	54.00	-13.73	310.00	1.50	Vertical	2.69
7297.1	43.43	54.00	-10.57	359.00	1.62	Vertical	9.62
7306.4	48.87	54.00	-5.13	280.00	2.36	Vertical	9.65
7314.8	49.68	54.00	-4.32	277.00	2.35	Vertical	9.66
7325.4	45.31	54.00	-8.69	278.00	2.04	Vertical	9.68
2435.7	44.33	54.00	-9.67	188.00	2.97	Horizontal	-4.22
4864.2	41.79	54.00	-12.21	39.00	1.58	Horizontal	2.53
4875.6	45.75	54.00	-8.25	43.00	2.01	Horizontal	2.68
7317.6	44.56	54.00	-9.44	1.00	1.52	Horizontal	9.66

Peak

Frequency (MHz)	Level (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	Correction (dB)
4876.8	54.54	74.00	-19.46	310.00	1.50	Vertical	2.69
7297.1	58.64	74.00	-15.36	359.00	1.62	Vertical	9.62
7306.4	63.52	74.00	-10.48	280.00	2.36	Vertical	9.65

7314.8	65.30	74.00	-8.70	277.00	2.35	Vertical	9.66
7325.4	61.36	74.00	-12.64	278.00	2.04	Vertical	9.68
2435.7	54.75	74.00	-19.25	188.00	2.97	Horizontal	-4.22
4864.2	56.70	74.00	-17.30	39.00	1.58	Horizontal	2.53
4875.6	60.59	74.00	-13.41	43.00	2.01	Horizontal	2.68
7317.6	60.55	74.00	-13.45	1.00	1.52	Horizontal	9.66

**Table 5: Radiated Emissions 1 – 17 GHz – Middle Frequency 2437 (Worse Case)**


Avg

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
17057	49.22	54.00	-4.78	303.00	Horizontal	-5.43

Peak

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Pol.	Correction (dB)
17057	64.16	74.00	-9.84	303.00	Horizontal	-5.43

**Table 6: Radiated Emissions 17 – 26 GHz – Middle Frequency 2437 (Worse Case)**

## 5.6 §15.247(e) Maximum Average Power Spectral Density

The maximum average power spectral density conducted from the intentional radiator of 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.

Mode	Frequency (MHz)	Measurement (dBm)	Criteria (dBm)
b	2412	-12.87	8.0
	2437	-9.54	8.0
	2462	-12.02	8.0
g	2412	-14.12	8.0
	2437	-10.12	8.0
	2462	-13.36	8.0
n 20	2412	-16.08	8.0
	2437	-11.96	8.0
	2462	-15.88	8.0
n 40	2422	-21.02	8.0
	2437	-20.02	8.0
	2452	-21.95	8.0
ax 20	2412	-17.93	8.0
	2437	-13.64	8.0
	2462	-17.34	8.0
ax 40	2422	-21.14	8.0
	2437	-19.27	8.0
	2452	-21.34	8.0

### Result

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

-- End of Test Report --