Testing Tomorrow's Technology

Application

For

Part 2, Subpart J, Paragraph 2.907 Equipment Authorization of Certification for an Intentional Radiator per Part 15, Subpart B, paragraph 15.109, Subpart C, paragraphs 15.207, 15.209 and 15.249

And

Innovation, Science, and Economic Development Canada Certification per RSS-210 Issue 10: License-Exempt Radio Apparatus: Category I Equipment and RSS-Gen Issue 5: General Requirements for Compliance of Radio Apparatus

For the

Scientific Games International
ASSY, PCB, ANALOG MODULE SRD
Model: PA25-0077

FCC ID: WRH-MOD02
IC: 2788A-MOD02

UST Project: 21-0322
Issue Date: February 4, 2022

Total Pages in This Report: 33

3505 Francis Circle Alpharetta, GA 30004
PH: 770-740-0717 Fax: 770-740-1508
www.ustech-lab.com

I certify that I am authorized to sign for the Test Agency and that all of the statements in this report and in the Exhibits attached hereto are true and correct to the best of my knowledge and belief:

US TECH (Agent Responsible For Test):

By: George Yang

Name: 

Title: Laboratory Manager

Date: February 4, 2022

NVLAP LAB CODE 200162-0

3505 Francis Circle Alpharetta, GA 30004
PH: 770-740-0717 Fax: 770-740-1508
www.ustech-lab.com

MEASUREMENT TECHNICAL REPORT

Company Name:	Scientific Games International
Address:	1500 Bluegrass Lakes Parkway, Alpharetta, GA 30004 USA
Model:	PA25-0077
FCC ID:	WRH-MOD02
IC ID:	2788A-MOD02
Date:	February 4, 2022

This report concerns (check one): ☒ Original ☐ Class II Permissive Change

Equipment type: 2.4 GHz ISM Radio Transceiver

Technical Information:

Radio Technology:	Proprietary
Frequency of Operation (MHz):	2400 - 2480 MHz
Output Power:	94.62 dBuV/m @ 3m
Type of Modulation:	N/A
Data/Bit Rate (M)bps:	N/A
Antenna Gain (dBi):	1.5 dBi
Software used to program EUT:	Docklight
EUT firmware:	Docklight V2.2
Power setting:	+3 dBm

Report prepared by:

US Tech

3505 Francis Circle Alpharetta, GA 30004

PH : 770-740-0717 Fax : 770-740-1508

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1 General Information

1.1 Purpose of this Report

This report is prepared as a means of conveying test results and information concerning the suitability of this exact product for public distribution according to the FCC Rules and Regulations Part 15, Section 249 and IC Radio Standards Specification RSS-210 Issue, 10.

1.2 Characterization of Test Sample

The sample used for testing was received by US Tech on November 9, 2021 in good operating condition.

1.3 Product Description

The Equipment under Test (EUT) is the Scientific Games wireless radio ASSY, PCB, ANALOG MODULE SRD, Model PA25-0077. The EUT is an ISM band transceiver operating in the 2400-2483.5 MHz frequency band. The module is designed to be installed within a number of different host devices.

1.4 Configuration of Tested System

The Test Sample was tested per *ANSI C63.4:2014 and ANSI C63.4:2013, Methods of Measurement of Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz* for FCC subpart A Digital equipment Verification requirements and per *ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices* for FCC subpart C Intentional Radiators.

A list of EUT and Peripherals is found in Table 1 following. A block diagram of the tested system is shown in Figure 1. Test configuration photographs are provided in separate Appendices

1.5 Test Facility

Testing was performed at US Tech's measurement facility at 3505 Francis Circle, Alpharetta, GA 30004. This site has been fully described and registered with the FCC under designation number US5301. Additionally, this site has been fully described and submitted to Industry Canada (IC), and has been approved under file number 9900A-1.

1.6 Related Submittals

The EUT is subject to the following FCC authorizations:

a) Certification under section 15.249 as a transmitter.

There are no other related submittals.

Table 1. EUT and Peripherals

EUT	MODEL NUMBER	SERIAL NUMBER	FCC/IC ID	CABLES P/D
Radio Module (EUT) Scientific Games International	PA25-0077	Engineering Sample	Pending FCC ID: WRH-MOD02 IC: 2788A-MOD02	None
PERIPHERAL MANUFACTURER	**MODEL NUMBER**	**SERIAL NUMBER**	**FCC/IC ID**	**CABLES P/D**
BCR Board (Evaluation board)	Barcode Reader	Engineering Sample	None	None

U= Unshielded S= Shielded P= Power D= Data

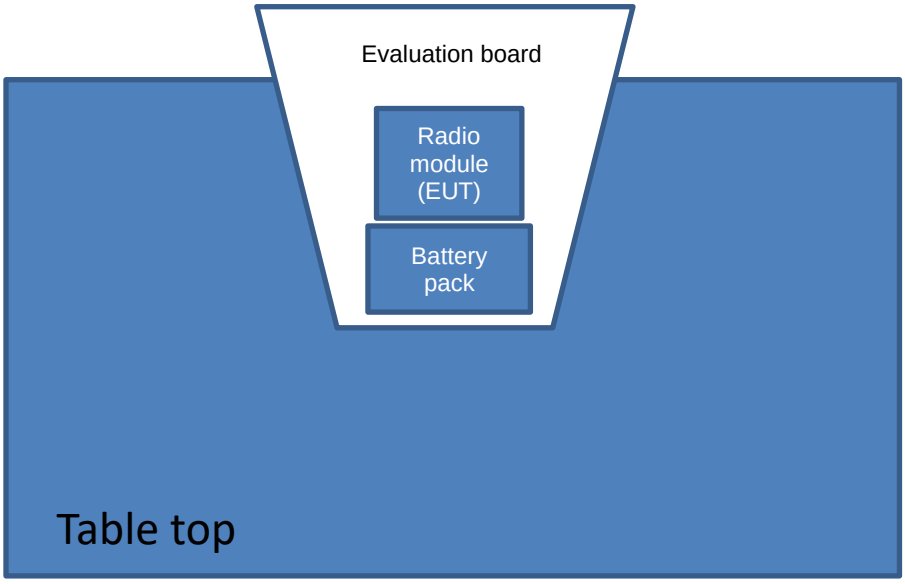


Figure 1. Block Diagram of Test Configuration

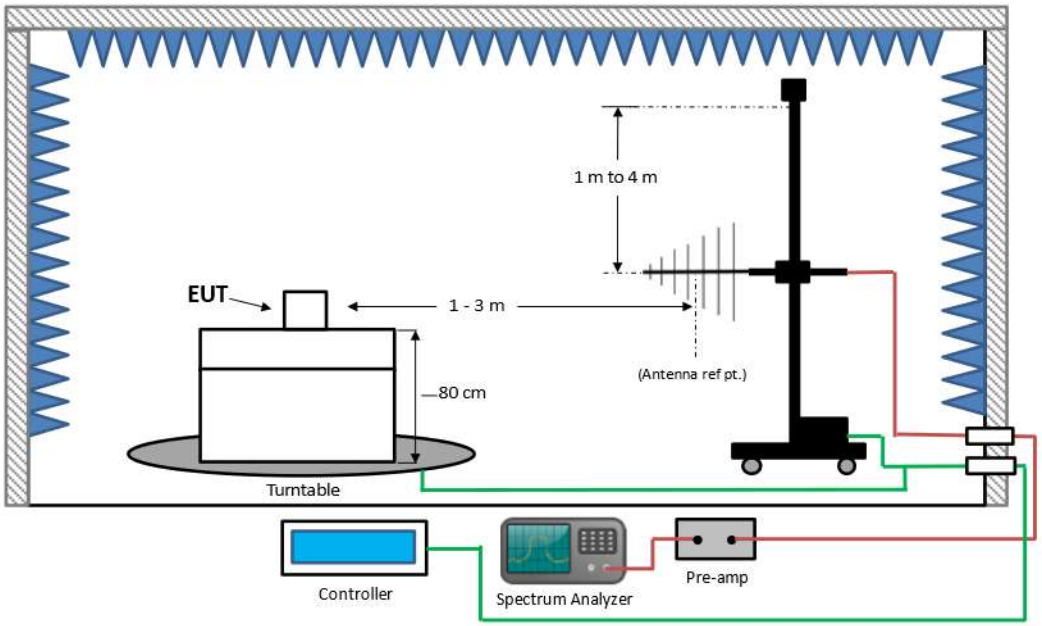


Figure 2. Spurious Emissions Test Configuration

2 Tests and Measurements

2.1 Test Equipment

The table below lists test equipment used to evaluate this product. Model numbers, serial numbers and their calibration status are indicated.

Table 2. Test Instruments

TEST INSTRUMENT	MODEL NUMBER	MANUFACTURER	SERIAL NUMBER	CALIBRATION DUE DATE
SPECTRUM ANALYZER	E4407B	AGILENT	US41442935	9/02/2022 2 yr.
SPECTRUM ANALYZER	DSA815	RIGOL	DSA8A18030 0138	1/06/2024 2 yr.
LOOP ANTENNA	6502	ETS Lindgren	9810-3246	4/06/2022 2 yr.
BICONICAL ANTENNA	3110B	EMCO	9306-1708	8/17/2023 2 yr.
LOG PERIODIC ANTENNA	3146	EMCO	9110-3236	12/13/2023 2 yr.
HORN ANTENNA	SAS-571	AH System	605	2/28/2022 2 yr.
RF PREAMP 100 kHz to 1.3 GHz	8447D	HEWLETT-PACKARD	1937A02980	6/9/2022
PREAMP 1.0 GHz to 26.0 GHz	8449B	HEWLETT-PACKARD	3008A00914	8/27/2022
LISN x 2	9247-50-TS-50-N	SOLAR ELECTRONICS	955824 and 955825	6/9/2022
HIGH PASS FILTER	H3R020G2	MICROWAVE CIRCUITS	001DC9528	7/16/2022

Note: The calibration interval of the above test instruments are 12 months unless stated otherwise and all calibrations are traceable to NIST/USA.

2.2 Modifications to EUT Hardware

No physical modifications were made by US Tech in order to bring the EUT into compliance with FCC Part 15, Subpart C Intentional Radiator Limits for the transmitter portion of the EUT or the Subpart B Unintentional Radiator Limits (Receiver and Digital Device) Requirements.

2.3 Number of Measurements for Intentional Radiators (CFR 15.31(m), RSS-Gen 6.8)

Measurements of intentional radiators or receivers shall be performed and reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in Table 3 below.

Table 3. Number of Test Frequencies for Intentional Radiators

Frequency Range over which the device operates	Number of Frequencies	Location in the Range of Operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near the top 1 near the bottom
Greater than 10 MHz	3	1 near top 1 near middle 1 near bottom

2.4 Frequency Range of Radiated Measurements (CFR 15.33, RSS-210, Annex B10)

2.4.1 Intentional Radiator

The spectrum was investigated for the intentional radiator from the lowest RF signal generated in the EUT, without going below 9 kHz to the 10th harmonic of the highest fundamental frequency generated or 40 GHz, whichever is the lowest.

2.4.2 Unintentional Radiator

For the digital device, an unintentional radiator, the frequency range tested was 30 MHz to 1000 MHz, or to 5 times the highest internal clock frequency.

2.5 Measurement Detector Function and Bandwidth (CFR 15.35, RSS-Gen 6.9, 6.13)

The radiated and conducted emissions limits shown herein are based on the parameters listed below.

2.5.1 Detector Function and Associated Bandwidth

On frequencies below 1000 MHz, the limits herein are based upon measurement equipment employing a CISPR Quasi-peak detector function and related measurement bandwidths (i.e. 9 kHz from 150 kHz to 30 MHz and 120 kHz from 30 MHz to 1000 MHz). Alternatively, measurements may be made with equipment employing a peak detector function as long as the same bandwidths specified for the Quasi-peak device are used.

2.5.2 Corresponding Peak and Average Requirements

Above 1000 MHz, radiated limits are based on measuring instrumentation employing an average detector function. When average radiated emissions are specified there is also a corresponding Peak requirement, as measured using a peak detector, of 20 dB greater than the average limit. For all measurements above 1000 MHz the Resolution Bandwidth shall be at least 1 MHz.

2.5.3 Pulsed Transmitter Averaging

When the radiated emissions limit is expressed as an average value, and the transmitter is pulsed, the measured field strength shall be determined by applying a Duty Cycle Correction Factor based upon dividing the total ON time during the first 100 ms period by 100 ms (or by the period if less than 100 ms). The duty cycle may be expressed logarithmically in dB.

NOTE: If the transmitter was programmed to transmit at >98% duty cycle, then, wherever applicable (where the detection mode was AVG), the duty cycle factor calculated will be applied.

2.6 EUT Antenna Requirements (CFR 15.203, RSS-Gen 6.7)

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. Only the antenna(s) listed in Table 4 will be used with this device.

Table 4. Allowed Antenna(s)

REPORT REFERENCE	MANUFACTURER	TYPE OF ANTENNA	TECHNICAL SPEC	TYPE OF CONNECTOR
Antenna	Johanson Technology	Chip Antenna	1.5 dBi	Soldered

2.7 Restricted Bands of Operation (CFR 15.205, RSS-Gen 8.10)

Only spurious emissions can fall in the frequency bands of CFR 15.205. The field strength of these spurious emissions cannot exceed the limits of 15.209. Radiated harmonics and other spurious emissions are examined for this requirement see paragraph 2.1

2.8 Pulsed Operation, Average Value (CFR 15.35(c), RSS-Gen 6.10)

The pulse train of the EUT did not exceed 0.1 seconds. Duty cycle plots are collected below to calculate the Duty Cycle factor to be employed in cases where the EUT was programmed to transmit at >98% Duty Cycle rate for testing purpose.

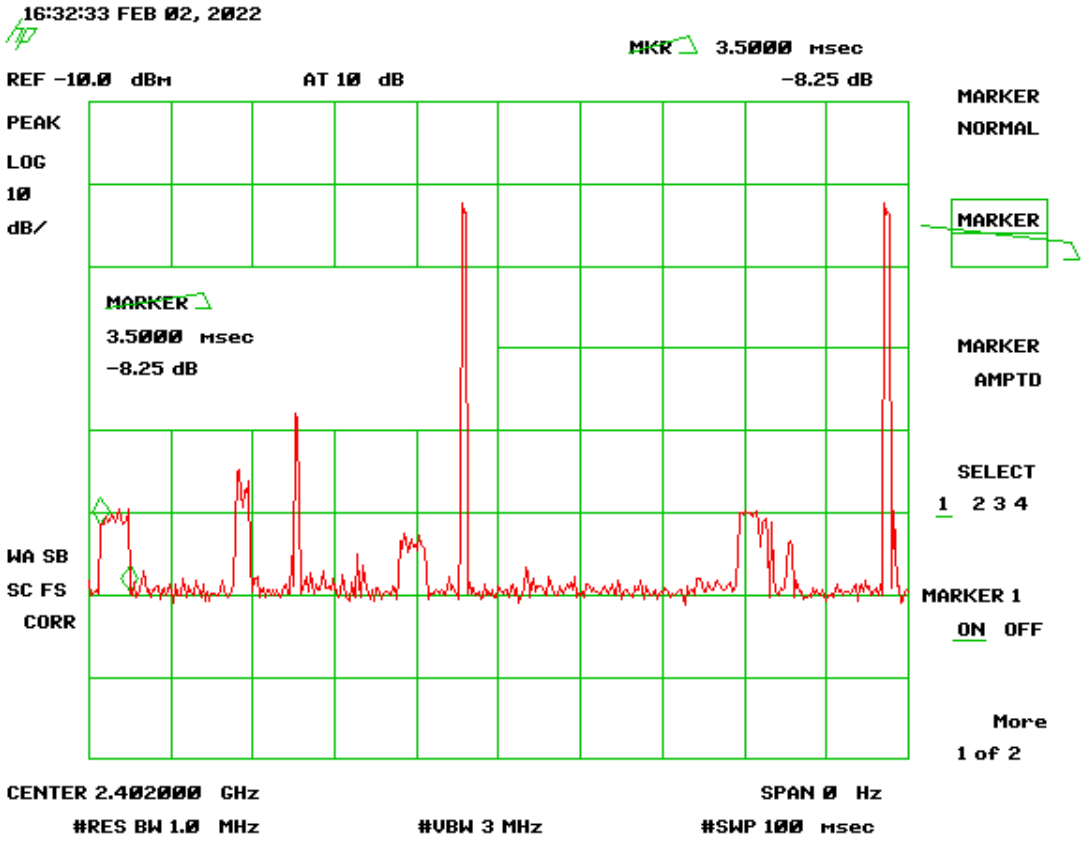


Figure 3. Pulse Width

Duty Cycle calculation:
TX On total= 17 mSec
Observation time (T_{obs})= 100 mSec
Duty Cycle (DC) factor = 20 log (TX On/T_{obs}) = -15.4 dB

2.9 Intentional Radiator, Radiated Emissions (CFR 15.209, 15.249(a)(c), RSS 210, A2.9 (a))

Radiated Spurious measurements: the EUT was placed into a continuous transmit mode of operation transmitting at >98% duty cycle and tested per ANSI C63.10:2013. A preliminary scan was performed on the EUT to find signal frequencies that were caused by the transmitter part of the device. To obtain worse case results the EUT was tested in X, Y and Z axes or in the orientation of normal operation if the device is designed to operation in a fixed position.

Radiated measurements were then conducted between the frequency range of 9KHz (or lowest frequency used/generated by the device) up to the tenth harmonic of the device (no greater than 40 GHz). In the band below 30 MHz a resolution bandwidth (RBW) of 9 kHz was used; emissions below 1 GHz were tested with a RBW of 100/120 KHz and emissions above 1 GHz were tested with a RBW of 1 MHz. All video bandwidth settings were at least three times the RBW value.

The EUT was investigated to CFR 15.209, General requirements for unwanted spurious emissions as well as CFR 15.249 for operation in the 902-928 MHz band.

Table 5. Spurious Radiated Emissions Below 30 MHz

150 kHz to 30 MHz, 15.209 limits							
Test: Radiated Emissions							
Frequency (MHz)	**Test Data (dBuv)**	**AF+CA-AMP (dB/m)**	**Results (dBuV/m)**	**QP Limits (dBuV/m)**	**Antenna Distance/ Polarization**	**Margin (dB)**	**Detector PK, or AVG**
All emissions detected were more than 20 dB below the applicable limit.							

Sample Calculation at: N/A

Test Date: December 27, 2021

Tested By
Signature: S. Mafakher Name: Shahram Mafakher

Table 6. Spurious Radiated Emissions 30 MHz to 25 GHz

Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP+DC (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Distance / Polarization	Margin (dB)	Detector PK/QP /AVG
300.02	48.69	-13.21	35.48	46.0	3m./HORZ	10.5	**QP**
800.00	38.44	-5.89	32.55	46.0	3m./HORZ	13.4	**PK**
800.08	37.84	-5.90	31.94	46.0	3m./HORZ	14.1	**PK**
164.69	42.83	-13.60	29.23	43.5	3m./VERT	14.3	**PK**
293.60	39.73	-13.89	25.84	46.0	3m./VERT	20.2	**PK**
763.52	36.85	-6.73	30.12	46.0	3m./VERT	15.9	**PK**
971.20	36.91	-6.73	30.18	54.0	3m./VERT	23.8	**PK**
3701.00	49.60	-6.80	42.80	54.0	3m./HORZ	11.2	**PK**
8459.50	39.21	-3.29	35.92	54.0	1m./HORZ	18.1	**PK**
3522.00	49.99	-7.95	42.04	54.0	3m./VERT	12.0	**PK**
8523.00	39.62	-3.25	36.37	54.0	1m./VERT	17.6	**PK**
All emissions detected were more than 20 dB below the applicable limit.							

Notes:
1. The EUT was placed in three orthogonal positions and the transmitter was in constant broadcast mode, with the duty cycle programmed for >98% ON time in continuous transmit mode.
2. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.
3. For measurements performed at 1 meter a distance extrapolation factor of -9.5 dB was applied to the value to correct the value to 3 meters.

Sample Calculation at: 300.02 MHz

Magnitude of Measured Frequency	48.69	dBuV
+Antenna Factor + Cable Loss+ Amplifier Gain	-13.21	dB/m
Duty Cycle Correction Factor	0.00	dB
Corrected Result	35.48	dBuV/m

Test Date: December 13, 14, 27, 2021

Tested By
Signature: S. Mafakher Name: Shahram Mafakher

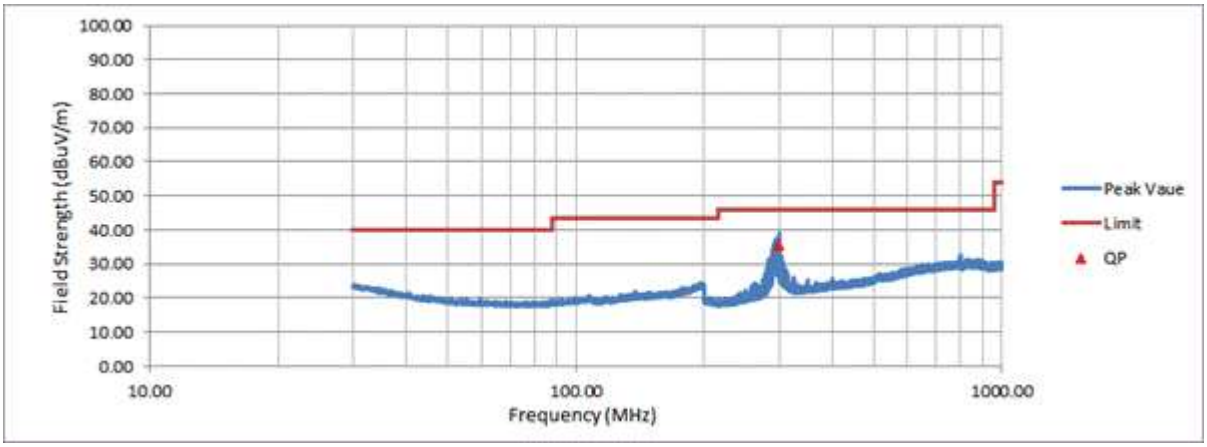


Figure 4. Radiated Emissions, 30 -1000 MHz, Horizontal

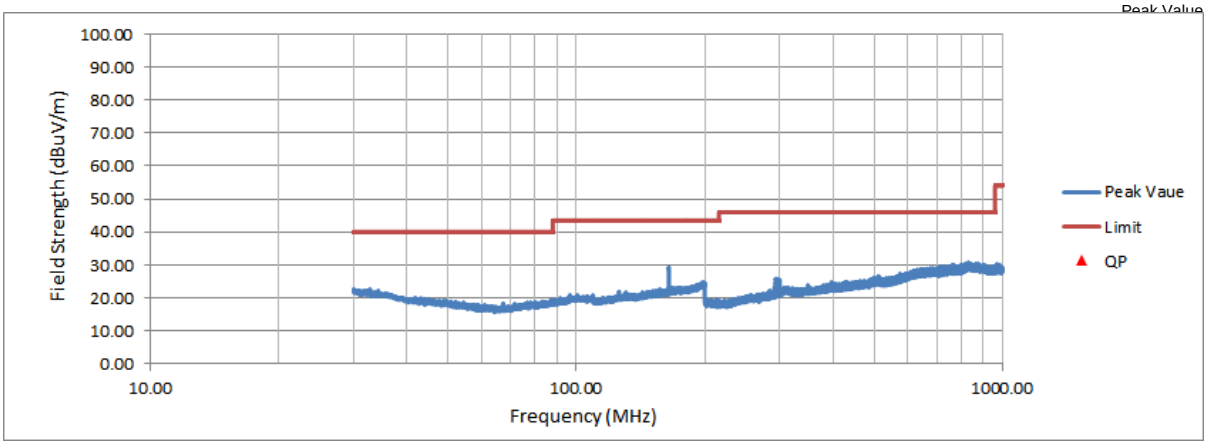


Figure 5. Radiated Emissions, 30-1000 MHz, Vertical

Peak Value

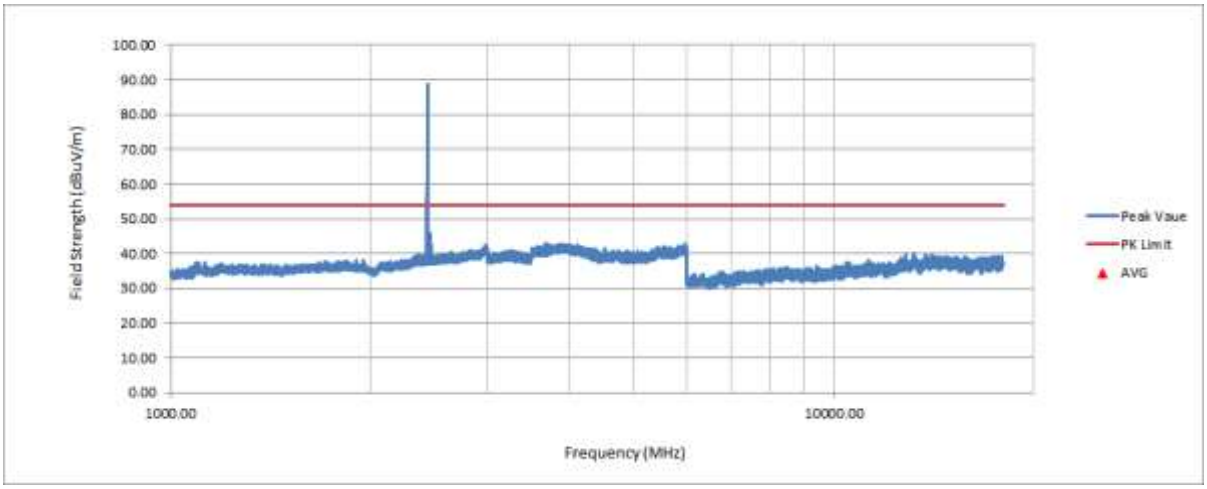


Figure 6. Radiated Emissions, above 1 GHz, Horizontal

Note: Fundamental signal identified above.

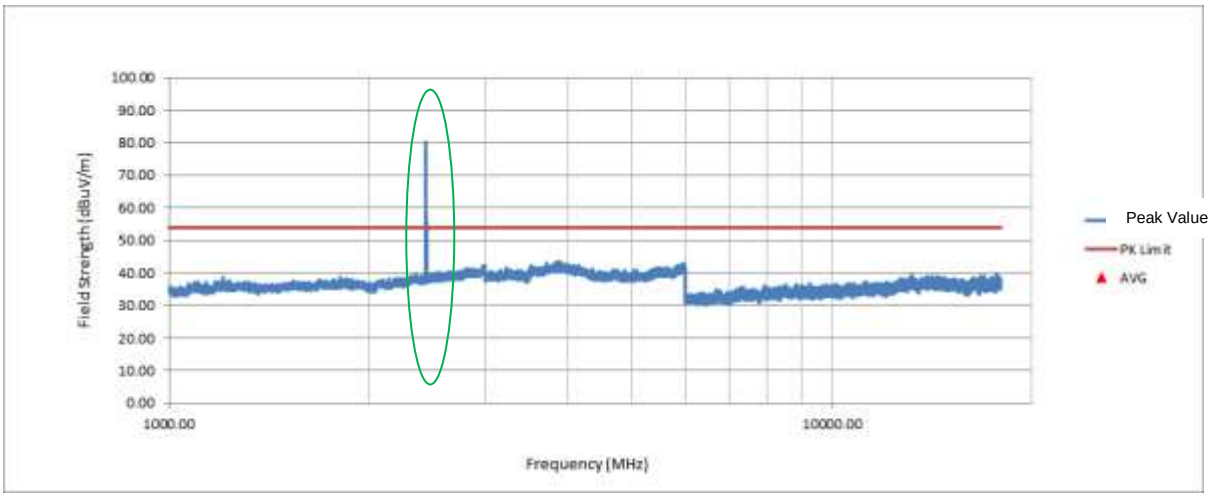


Figure 7. Radiated Emissions, above 1 GHz, Vertical

Note: Fundamental signal identified above.

Table 7. Intentional Emissions (Fundamental and Harmonics)

Frequency (MHz)	Test Data (dBuV)	Additional Factor (dB)	AF+CA -AMP+DC (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Distance / Polarization	Margin (dB)	Detector PK/QP/AVG
2400.56	67.14	--	27.48	94.62	114.0	3m./VERT	19.4	**PK**
2400.56	67.14	-15.4	27.48	79.22	94.0	3m./VERT	14.8	**PK**
2440.50	66.44	--	27.42	93.86	114.0	3m./VERT	20.1	**PK**
2440.50	66.44	-15.4	27.42	78.46	94.0	3m./VERT	15.5	**PK**
2479.53	65.76	--	27.48	93.24	114.0	3m./VERT	20.8	**PK**
2479.53	65.76	-15.4	27.48	77.84	94.0	3m./VERT	16.2	**PK**
4799.93	55.29	--	-7.03	48.26	54.0	3m./VERT	5.7	**PK**
7201.82	54.16	-9.5	-3.20	41.46	54.0	1m./HORZ	12.5	**PK**
4880.02	53.16	--	-7.47	45.69	54.0	3m./VERT	8.3	**PK**
7320.07	52.73	-9.5	-3.06	40.17	54.0	1m./HORZ	13.8	**PK**
4960.20	54.45	--	-7.51	46.94	54.0	3m./VERT	7.1	**PK**

Notes:
1. No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10th harmonic
2. The EUT was placed in three orthogonal positions and the transmitter was in constant broadcast mode, with the duty cycle programmed for >98% ON time in continuous transmit mode.
3. The emissions were measured with the receive antenna in vertical and horizontal polarizations. The data listed in the above table was worst case.
4. Peak value plus DC factor of (-15.4 dB) used to calculate the AVG value for Fundamentals
5. For measurements performed at 1 meter a distance extrapolation factor of -9.5 dB was applied to the value to correct the value to 3 meters.

Sample Calculation at: 2400.56:

Magnitude of Measured Frequency	67.14	dBuV
+Antenna Factor + Cable Loss - Amplifier Gain	27.48	dB/m
Corrected Result	94.62	dBuV/m

Test Date: December 13, 14, 27, 2021

Tested By
Signature: S. Mafakher Name: Shahram Mafakher

2.10 Band Edge Measurements – (CFR 15.249(d), RSS-Gen 8.10)

Band Edge measurements are made following the guidelines in FCC KDB Publication No. 558074 with the EUT initially operating on the Lowest Channel and then operating on the Highest Channel within its band of operation. Radiated measurements are performed to demonstrate compliance with the requirement of 15.249(d) that all emissions outside of the band edges be attenuated by at least 50 dB or 15.209 limits, when compared to its highest in-band value (contained in a 100 kHz band).

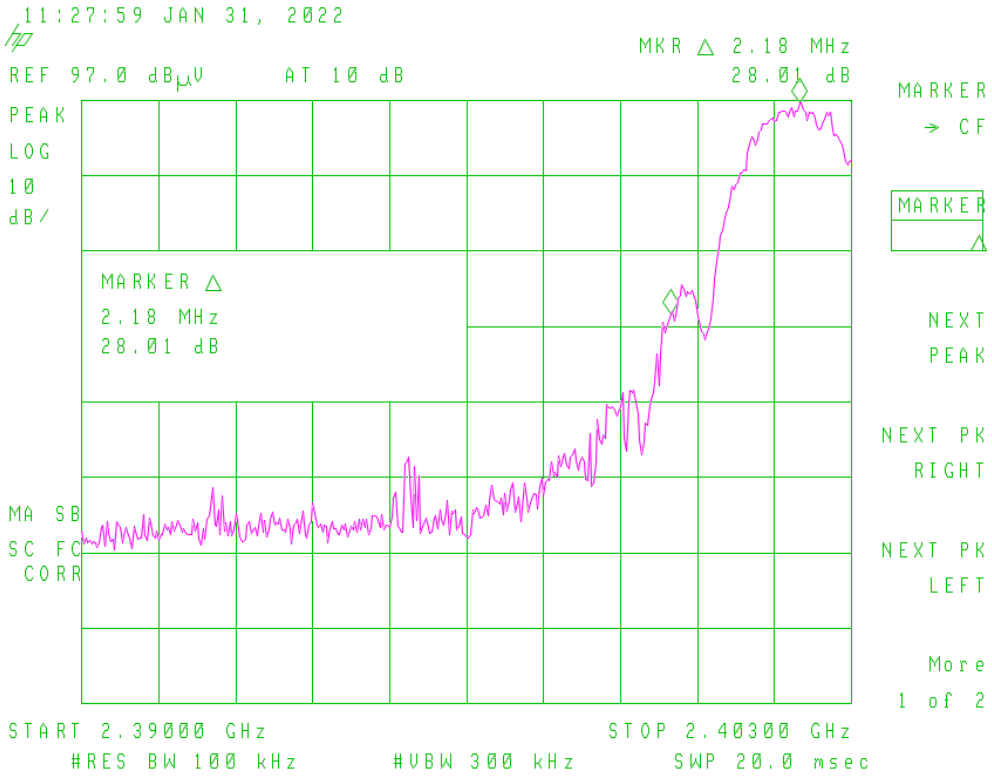


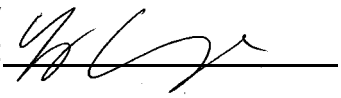
Figure 8. Band Edge Compliance, Low Channel Delta - Peak

In order to comply with band edge requirements, the lowest operating channel is restricted to 2402 MHz. See the compliance calculations below.

Calculations for compliance with Part 15.209 limits:

Low Channel Corrected Measured Value	94.62	dBuV
+Low Channel Band Edge Delta	-28.01	dB
Calculated Result	66.61	dBuV/m
Band Edge Limit	74.00	dBuV/m
-Calculated Result	66.61	dBuV/m
Band Edge Margin	7.39	dBuV/m
Band Edge Limit	54.00	dBuV/m
-Calculated Result	66.61	dBuV/m
+Duty Cycle correction factor	15.40	dB
Band Edge Margin	2.79	dBuV/m

Test Date: January 31, 2022

Tested By
Signature:  Name: George Yang

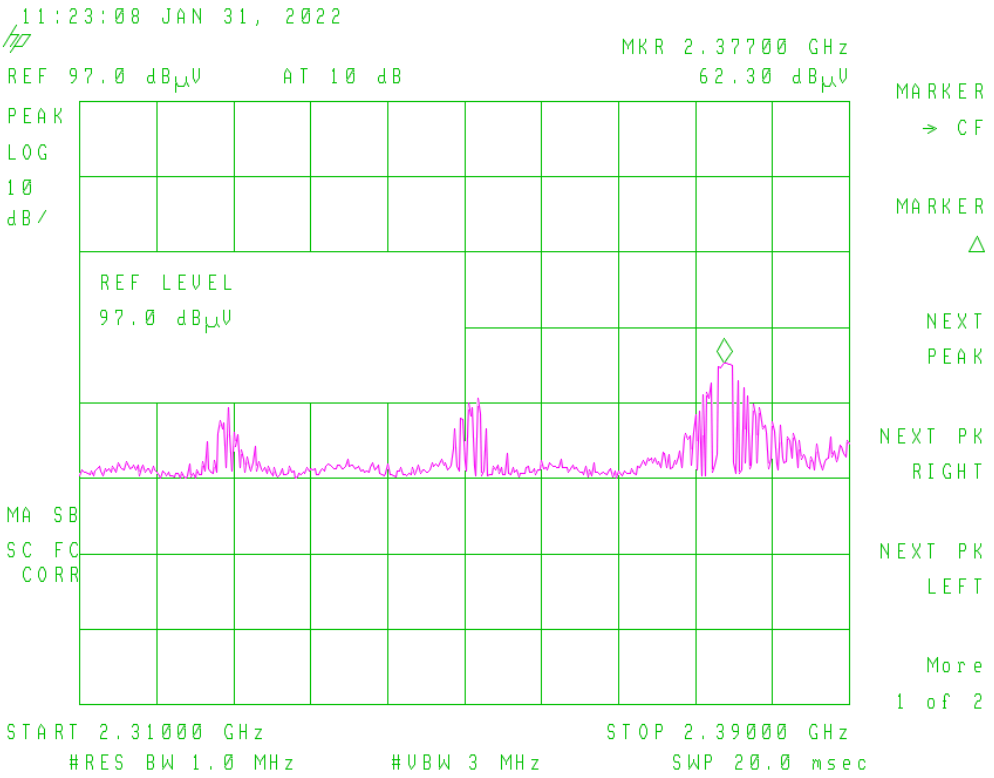


Figure 9. Restricted Band, 2310-2390 MHz

Table 8. Restricted Band, 2310 - 2390 MHz

Frequency (MHz)	Test Data (dBuV)	Additional Factor (dB)	AF+CA -AMP+DC (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Distance / Polarization	Margin (dB)	Detector PK/QP /AVG
2377.00	62.30	--	-10.67	51.63	74.0	3.0m./VERT	22.4	**PK**
2377.00	62.30	-15.4	-10.67	36.23	54.0	3.0m./VERT	17.8	**PK**

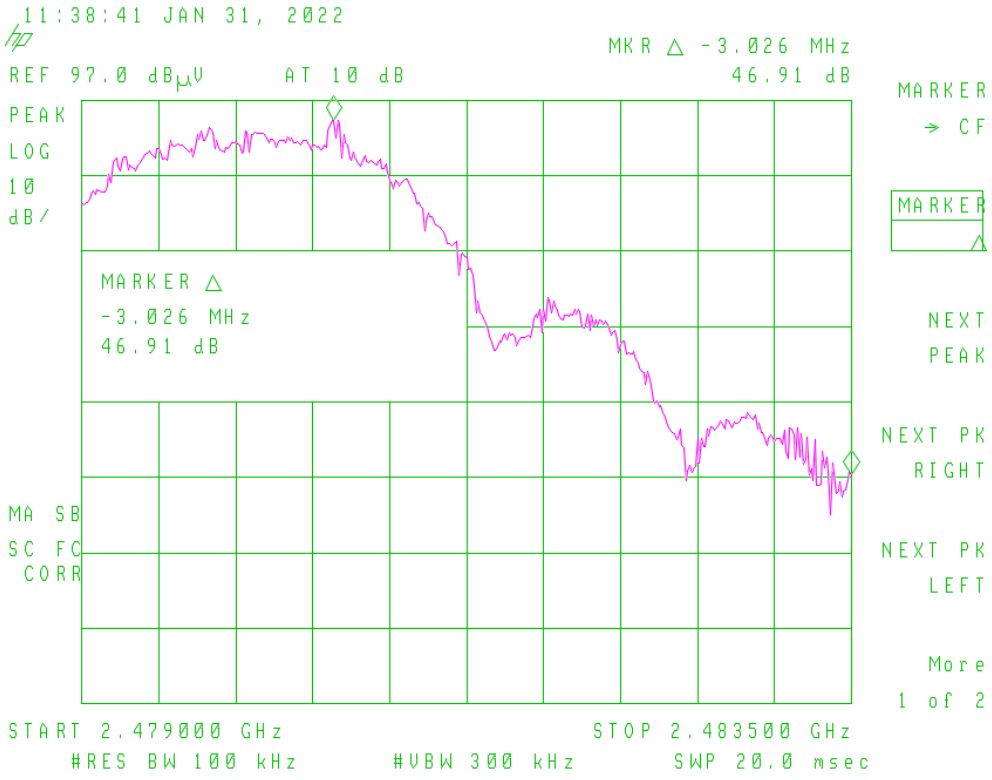


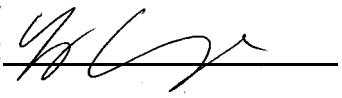
Figure 10. Band Edge Compliance, High Channel Delta – Peak

The highest operating channel is restricted to 2480 MHz. See the compliance calculations below.

Calculations for compliance with Part 15.209 limits:

High Channel Corrected Measured Value	93.24	dBuV
+High Channel Band Edge Delta	-46.91	dB
Calculated Result	46.33	dBuV/m
Band Edge Limit	74.00	dBuV/m
-Calculated Result	46.33	dBuV/m
Band Edge Margin	27.67	dBuV/m
Band Edge Limit	54.00	dBuV/m
-Calculated Result	46.33	dBuV/m
+Duty Cycle correction factor	15.40	dB
Band Edge Margin	23.07	dBuV/m

Test Date: January 31, 2022

Tested By
Signature:  Name: George Yang

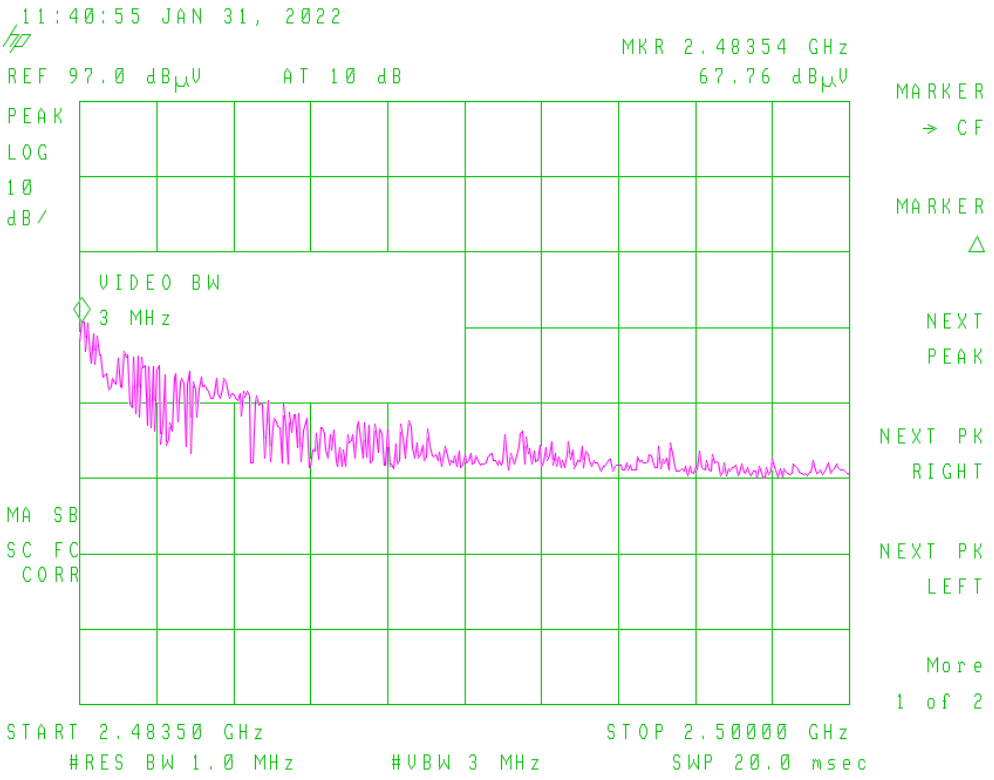


Figure 11. Restricted Band, 2483.5 - 2500 MHz

Table 9. Restricted Band, 2483.5 - 2500 MHz

Frequency (MHz)	Test Data (dBuV)	Additional Factor (dB)	AF+CA-AMP+DC (dB/m)	Results (dBuV/m)	Limits (dBuV/m)	Distance / Polarization	Margin (dB)	Detector PK/QP/AVG
2483.54	67.76	--	-10.74	57.02	74.0	3m./VERT	17.0	**PK**
2483.54	67.76	-15.4	-10.74	41.62	54.0	3m./VERT	12.4	**PK**

2.11 Occupied Bandwidth (CFR 2.1049, CFR 15.215(c), RSS-Gen 6.6)

These measurements were performed while the EUT was in a constant transmit mode. The 99% Occupied bandwidth measurement function of the spectrum analyzer/receiver was used to perform these measurements.

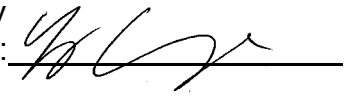
The 99% Occupied bandwidth and the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The results are presented below.

Table 10. 20 dB Bandwidth and 99% Occupied Bandwidth

Frequency (MHz)	20 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
2400.00	2.325	2.325
2440.00	2.375	2.375
2480.00	2.375	2.375

Note: 99% Occupied Bandwidth used to represent 20 dB Bandwidth respectively.

Test Date: December 29, 2021

Tested By
Signature:  Name: George Yang

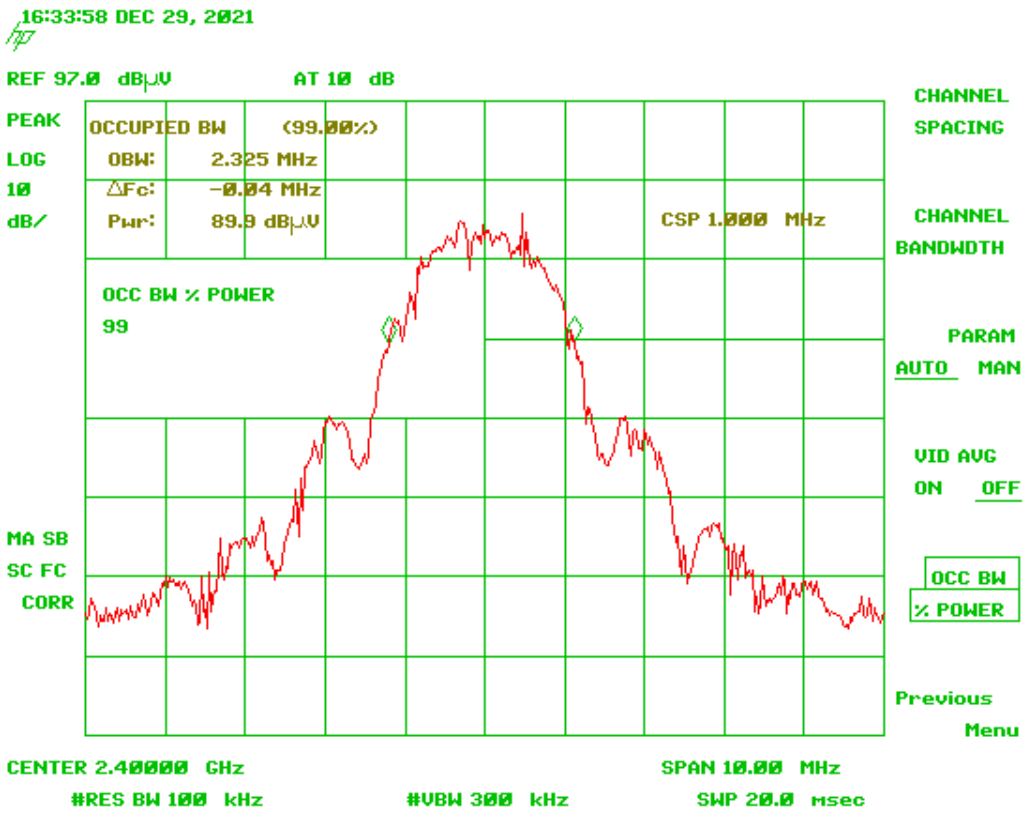


Figure 12. 99% Occupied Bandwidth – Low Channel

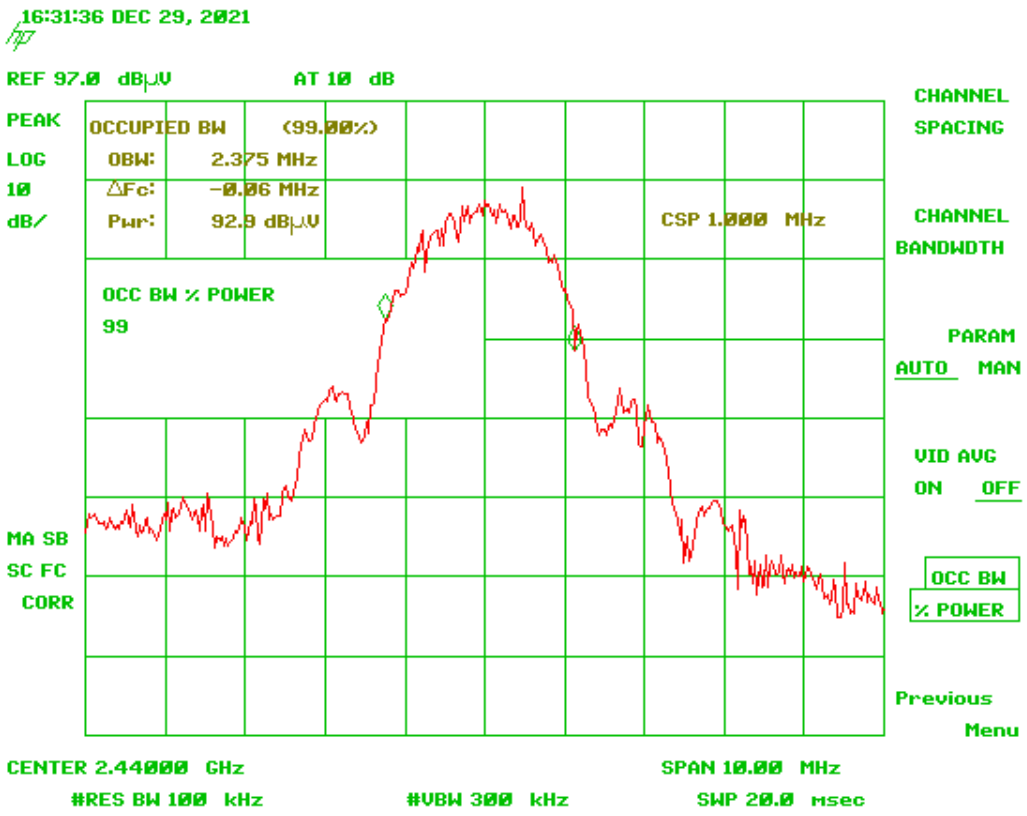


Figure 13. 99% Occupied Bandwidth – Mid Channel

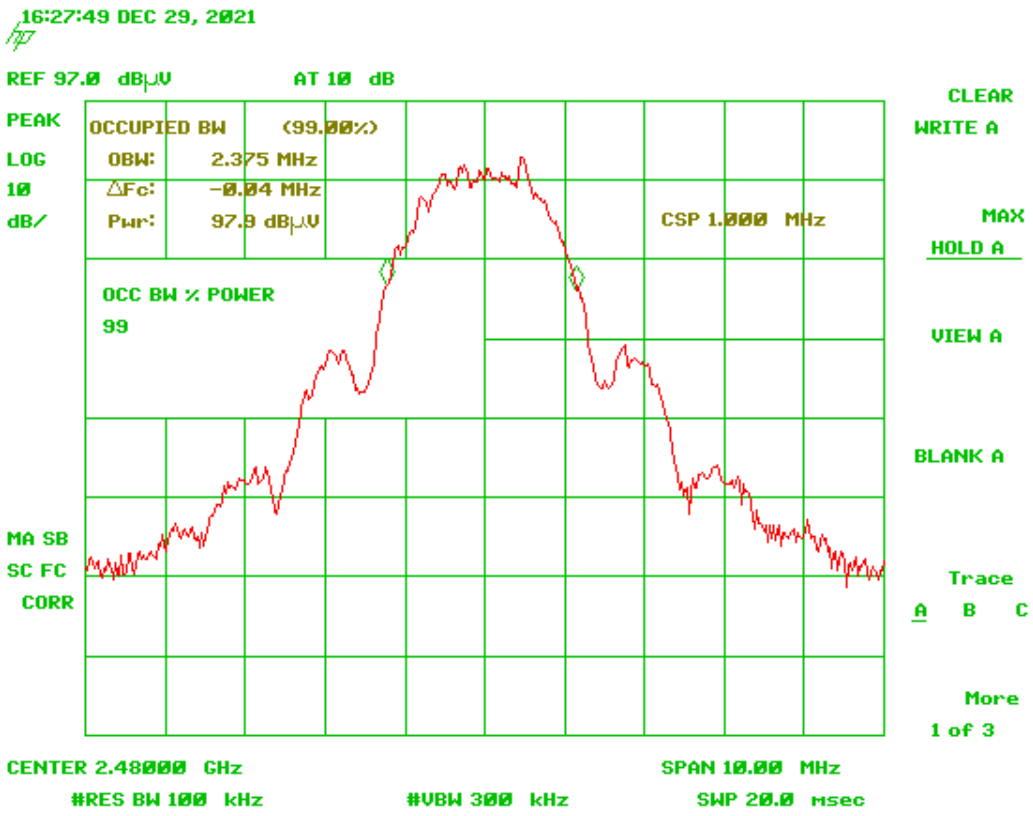


Figure 14. 99% Occupied Bandwidth – High Channel

2.12 Power Line Conducted Emissions (CFR 15.207, RSS-210)

Evaluations with the radio module installed in a host device as it would be in typical operation was used as the representative test configuration for this test.

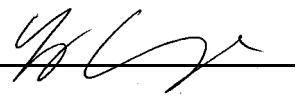
Table 11. Unintentional Powerline Conducted Emissions

Test: Conducted Emissions Class A limits							
Frequency (MHz)	**Test Data (dBuV)**	**LISN+CL-PA (dB)**	**Results (dBuV)**	**Limits AVG (dBuV)**	**Phase/ Neutral**	**Margin (dB)**	**DET PK/QP/AVG**
Phase							
0.2503	37.45	0.08	37.53	51.7	Phase	14.2	**PK**
0.5216	32.98	2.70	35.68	46.0	Phase	10.3	**PK**
4.1860	43.62	0.14	43.76	46.0	Phase	2.2	**PK**
9.9420	51.90	0.51	52.41	60.0	Phase	7.6	**PK**
9.9420	37.73	0.51	38.24	50.0	Phase	11.8	**AVG**
11.4600	56.84	0.57	57.41	60.0	Phase	2.6	**PK**
11.4600	42.23	0.57	42.80	50.0	Phase	7.2	**AVG**
21.0660	39.77	0.94	40.71	50.0	Phase	9.3	**PK**
Neutral							
0.2940	33.76	0.10	33.86	50.4	Neutral	16.6	**PK**
0.5383	30.88	0.51	31.39	46.0	Neutral	14.6	**PK**
2.8000	44.63	0.44	45.07	56.0	Neutral	10.9	**PK**
2.8000	42.63	0.44	43.07	46.0	Neutral	2.9	**AVG**
9.9160	50.93	0.69	51.62	60.0	Neutral	8.4	**PK**
9.9160	41.69	0.69	42.38	50.0	Neutral	7.6	**AVG**
11.8000	56.26	0.84	57.10	60.0	Neutral	2.9	**PK**
11.8000	46.56	0.84	47.40	50.0	Neutral	2.6	**AVG**
20.3000	39.14	1.33	40.47	50.0	Neutral	9.5	**PK**

Sample Calculation at: 0.2503 MHz

Magnitude of Measured Frequency	37.45	dBuV
+LISN Factor + Cable Loss+ Amplifier Gain	0.08	dB/m
Corrected Result	37.53	dBuV/m

Test Date: January 31, 2022

Tested By
Signature:  Name: George Yang

2.13 Measurement Uncertainty

The measurement uncertainties given were calculated using the method detailed in CISPR 16-4-2:2011. A coverage factor of k=2 was used to give a level of confidence of approximately 95%.

2.13.1 Conducted Emissions Measurement Uncertainty

Measurement Uncertainty (within a 95% confidence level) for this test is ±2.78 dB.

2.13.2 Radiated Emissions Measurement Uncertainty

For a measurement distance of 3 m the measurement uncertainty (with a 95% confidence level) for this test using a Biconical Antenna (30 MHz to 200 MHz) is ± 5.39 dB. This value includes all elements of measurement.

The measurement uncertainty (with a 95% confidence level) for this test using a Log Periodic Antenna (200 MHz to 1000 MHz) is ± 5.18 dB.

The measurement uncertainty (with a 95% confidence level) for this test using a Horn Antenna is ±5.21dB.

3 Conclusions

The EUT is deemed to meet the requirements of the test standards cited herein when tested in the configuration detailed in this test report.