December 10, 2021

Syncwise
Todd Nowak
2308 Kettner Blvd., Suite B
San Diego, CA 92101

Dear Todd Nowak,

Enclosed is the EMC Wireless test report for compliance testing of the Syncwise, T10-R Tablet as tested to the requirements of the FCC Part 15.247 & RSS-247 standard.

Thank you for using the services of Eurofins Electrical and Electronic Testing NA, Inc. Please contact me if you have any questions regarding these results or if Eurofins E&E can be of further service to you.

Sincerely yours,

Rheine Nguyen

Documentation Department
Eurofins Electrical and Electronic Testing NA, Inc.

Reference: (\Syncwise\WIRS115236-FCC RSS WIFI 2.4GHz)

A2LA ACCREDITED
TESTING CERT #0591.02

FCC/ ISED Test Report

for the

Syncwise
T10-R Tablet

Tested under
47 CFR FCC Part 15, Subpart C (Section 15.247)
RSS 247 Issue2, February 2017
ANSI C63.10:2013
RSS Gen Issue5, March 2019

Report: WIRS115236-FCC RSS WIFI 2.4GHz

Prepared For:

SyncWise
2308 Kettner Blvd., Suite B
San Diego, CA 92101

Prepared By:
Eurofins Electrical and Electronic Testing NA, Inc.
3162 Belick St.
Santa Clara CA, 95054

FCC/ ISED Test Report

for the

Syncwise
T10-R Tablet

Standard
47 CFR FCC Part 15, Subpart C (Section 15.247)
RSS 247 Issue2, February 2017
ANSI C63.10:2013
RSS Gen Issue5, March 2019

Gary Chou
Wireless Engineering Manager, Wireless Laboratory

Engineering Statement: The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 22 Subpart H and Part 24 Subpart E and Part 27 Subpart L of the FCC Rules under normal use and maintenance.

Eleazar Zuniga,
Director, Wireless Laboratory

Report Status Sheet

Revision	Report Date	Reason for Revision
∅	December 10, 2021	Initial Issue.

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I. Executive Summary

A. Purpose of Test

An EMC evaluation was performed to determine compliance of the Syncwise, T10-R Tablet, with the requirements of FCC Part 15.247 & RSS-247 BLE. All references are to the most current version of Title 47 of the Code of Federal Regulations in effect. In accordance with PVG-04 technical requirements, the following data is presented in support of the Certification of the T10-R Tablet. Syncwise should retain a copy of this document which should be kept on file for at least two years after the manufacturing of the T10-R Tablet, has been **permanently** discontinued.

B. Executive Summary

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15.247 & RSS-247 standard, in accordance with Syncwise, purchase order number 1084. All tests were conducted using measurement procedure.

FCC Reference	Description	Compliance
§ 15.247 (d), § 15.205, § 15.209	Spurious Radiated Emissions & Band Edges	Compliant
RSS Reference	**Description**	**Compliance**
RSS 247 5.5C	Radiated Spurious Emissions	Compliant

Note: For other test information please refer to FCC ID : XMR201706SC20A report/ ISED ID: 10224A-201707SC20A

Rationale:
Per KDB 996369 D04 "Modular Transmitter Integration Guide – Guidance for Host Product Manufacturers" only spot checks are reported in this filing

II. Equipment Information

A. Overview

Eurofins Electrical and Electronic Testing NA, Inc. was contracted by Syncwise to perform testing on the T10-R Tablet, under purchase order number 1084.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of Syncwise, T10-R Tablet.
The results obtained relate only to the item(s) tested.

EUT Summary Table

Model(s) Tested:	T10-R Tablet	
Model(s) Covered:	T10-R Tablet	
Filing Status:	Original	
EUT Specifications:	Primary Power: Voltage: 12 V external power supply. AC or DC:DC Voltage Frequency:NA Number of Phases:1 Current: 0.5 Amp	
	Type of Modulations:	CCK, DQPSK, DBQPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	Technology:	DSSS, OFDM
	TX Frequency Range:	802.11b, 802.11g, 802.11n (20MHz), 802.11n (40MHz)
	Product:	Tablet
	Brand:	SyncWise
	FCC ID:	2A3HW T10-R
	ISED ID:	10842AT10R
	Hardware Rev:	Syncwise 10R
	Firmwave Rev:	0
	Antenna Name:	2.4/5.0/6.0 GHz ISM Flexible Polymer
	Antenna Manufacturer/Module:	J2J/ 2JF0202P
	Antenna Type:	Embedded Antenna

	Antenna Port	U.FL
	Antenna Gain:	4.4 dBi
Analysis:	The results obtained relate only to the item(s) tested.	
Environmental Test Conditions:	Temperature: 15-35° C	
	Relative Humidity: 30-60%	
	Barometric Pressure: 860-1060 mbar	
Evaluated by:	Rafael Aguilar	
Date(s):	December 10, 2021	

General Description of Applied Standards

B. References

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

- **47 CFR FCC Part 15, Subpart C (Section 15.247)**
- **558074 D01 15.247 Meas Guidance v05r02**
- **RSS 247 Issue2, February 2017**
- **ANSI C63.10:2013**
- **RSS Gen Issue 5, March 2019**

C. Test Site

All testing was performed at Eurofins Electrical and Electronic Testing NA, Inc., 3162 Belick St. Santa Clara, CA 95054. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology.

Eurofins Electrical and Electronic Testing NA, Inc. has been accredited by the American Association for Laboratory Accreditation (A2LA) (Certificate #: 0591.02) in accordance with ISO/IEC 17025:2017.

Eurofins Electrical and Electronic Testing NA, Inc. is part of the Eurofins Electrical & Electronics (E&E) global compliance network.

D. Measurement Uncertainty

Test Method	Typical Expanded Uncertainty	K	Confidence Level
RF Frequencies	±4.52 Hz	2	95%
RF Power Conducted Emissions	±2.32 dB	2	95%
RF Power Conducted Spurious Emissions	±2.25 dB	2	95%
RF Power Radiated Emissions	±3.01 dB	2	95%

Uncertainty Calculations Summary

E. Modifications

a) Modifications to EUT

No modifications were made to the EUT.

b) Modifications to Test Standard

No modifications were made to the test standard.

F. Disposition of EUT

The test sample including all support equipment (if any), submitted to the Electromagnetic Compatibility Lab for testing was returned to Syncwise upon completion of testing.

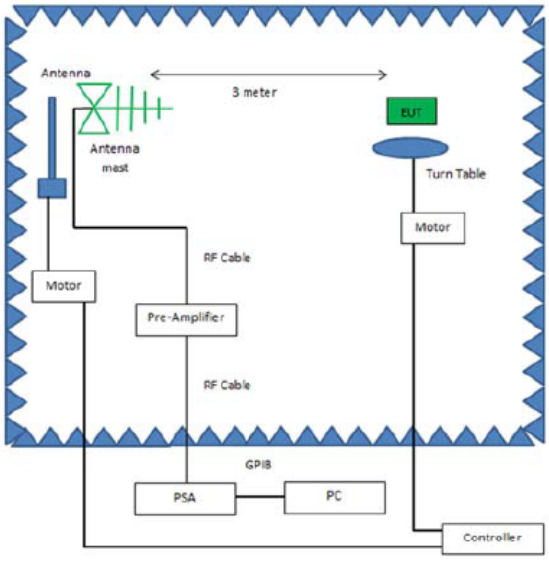
III. Electromagnetic Compatibility Criteria for Intentional Radiators

Radiated Emission and Bandage Measurement

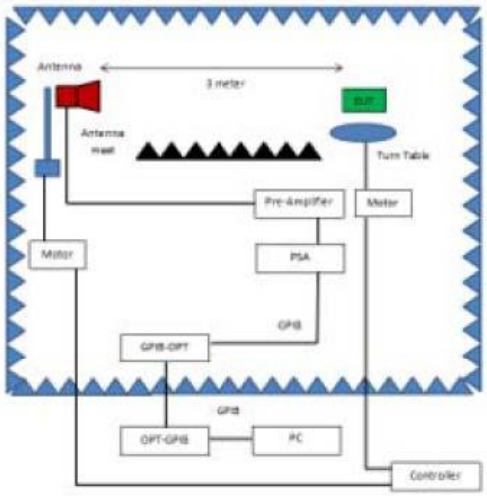
Limits of Radiated Emission and Bandage Measurement:
Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Test Procedures: The transmitter was turned on. Measurements were performed of the low, mid and high Channels. The EUT was rotated orthogonally through all three axes. Plots shown are corrected for both antenna correction factor and distance and compared to a 3 m limit line. Only noise floor was measured above 18 GHz.



Radiated Emissions, Below 1GHz, Test Setup



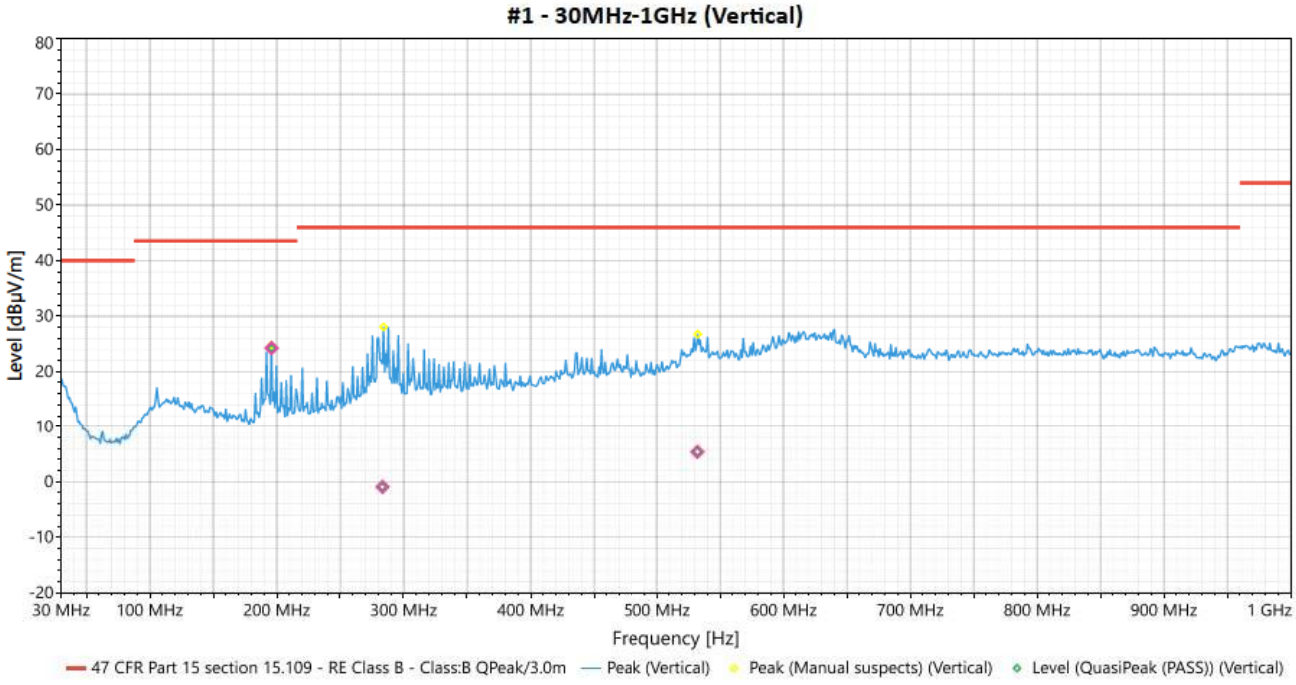
Radiated Emissions, Above 1GHz, Test Setup

Test Results: The EUT was tested is **compliant** with § 15.209 Radiated Spurious Emissions Requirements.

Test Date(s): 10/27/2021

Test Data
Radiated Emissions (30 MHz~1000 MHz)

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	30MHz-1GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE 11B 2437 MHz		



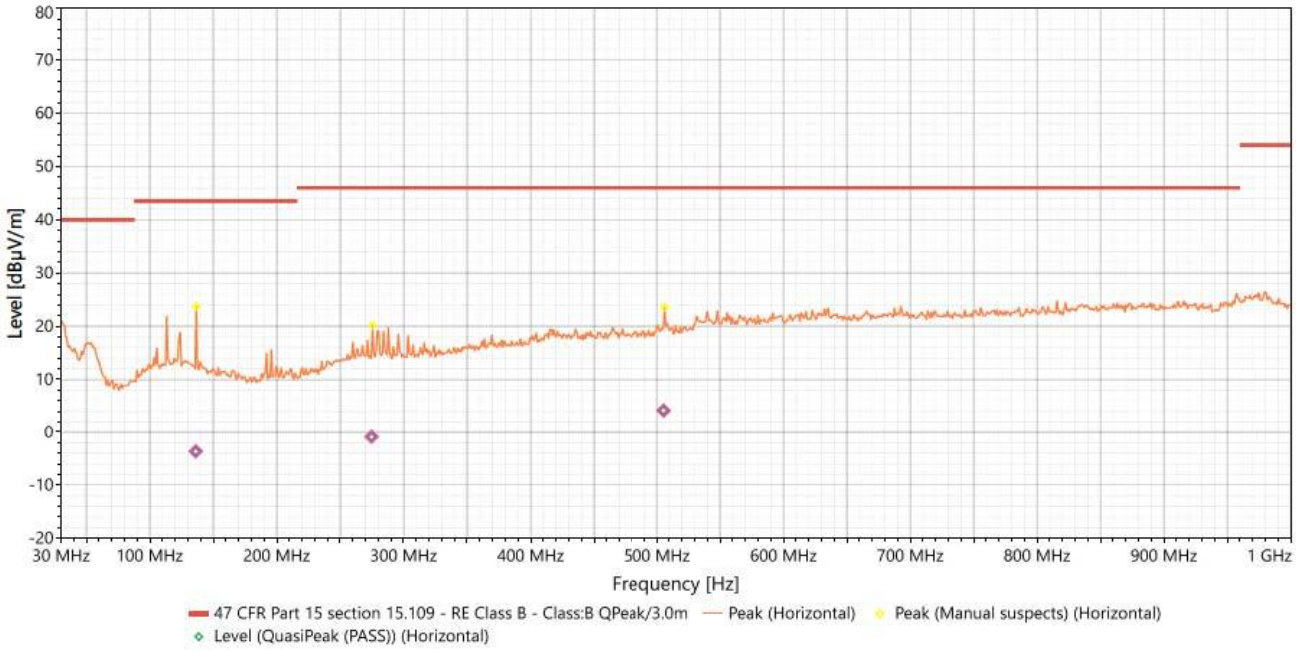
Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (cm)	Angle (Deg)	Factor [dB(1/m)]	Pass/ Fail
1	196.002	Vertical	24.231	43.5	-19.269	1.44	57	-15.6	Pass
2	283.276	Vertical	-0.925	46	-46.925	2.23	195	-12.26	Pass
3	532.148	Vertical	5.382	46	-40.618	2.84	135	-6.34	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	30MHz-1GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE 11B 2437 MHz		

#2 - 30MHz-1GHz (Horizontal)



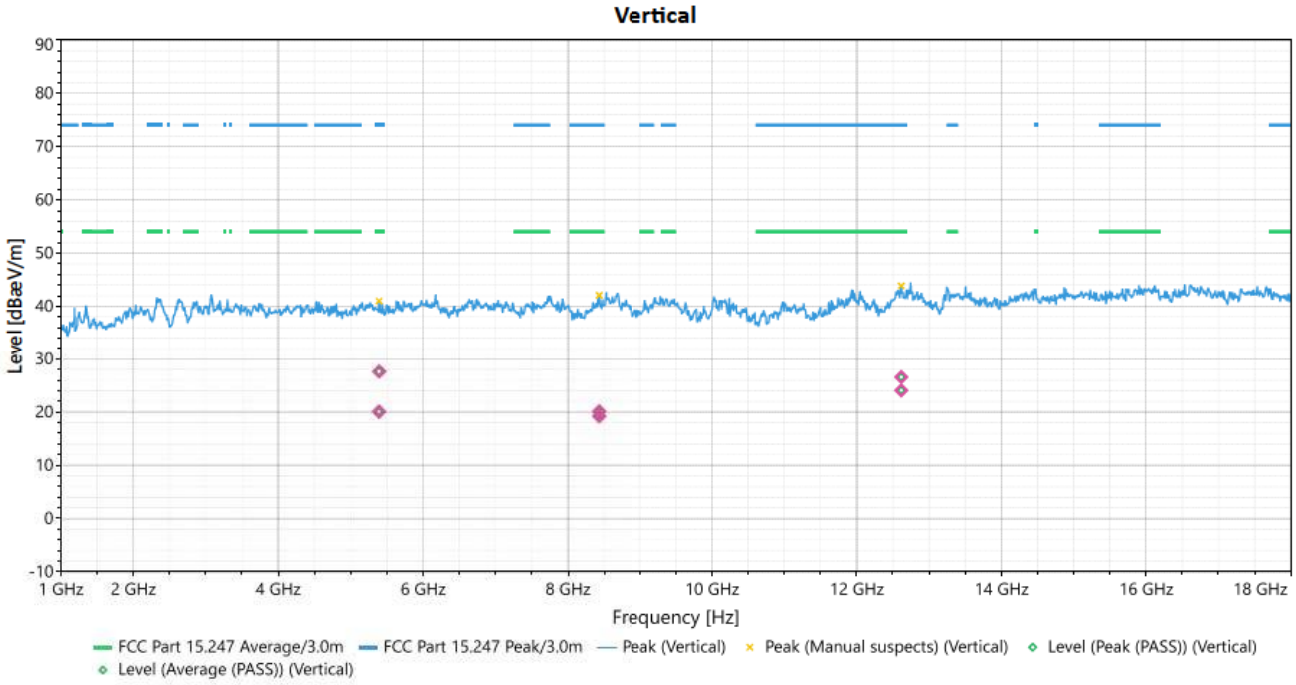
Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (cm)	Angle (Deg)	Factor [dB(1/m)]	Pass/ Fail
1	136.22	Horizontal	-3.664	43.5	-47.164	3.85	58	-13.71	Pass
2	274.678	Horizontal	-0.922	46	-46.922	1.81	33	-11.99	Pass
3	505.502	Horizontal	4.172	46	-41.828	1.64	226	-7.13	Pass

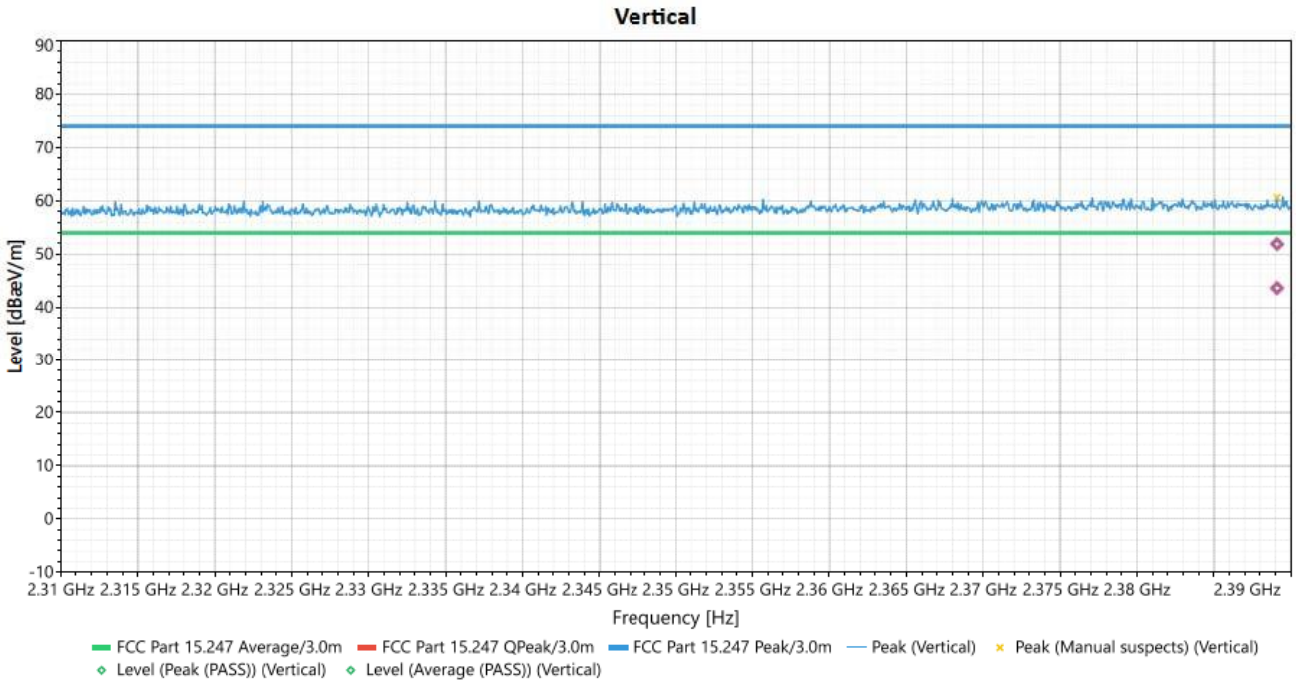
REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

Radiated Emissions (Above 1GHz)

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE B 2412 MHz		



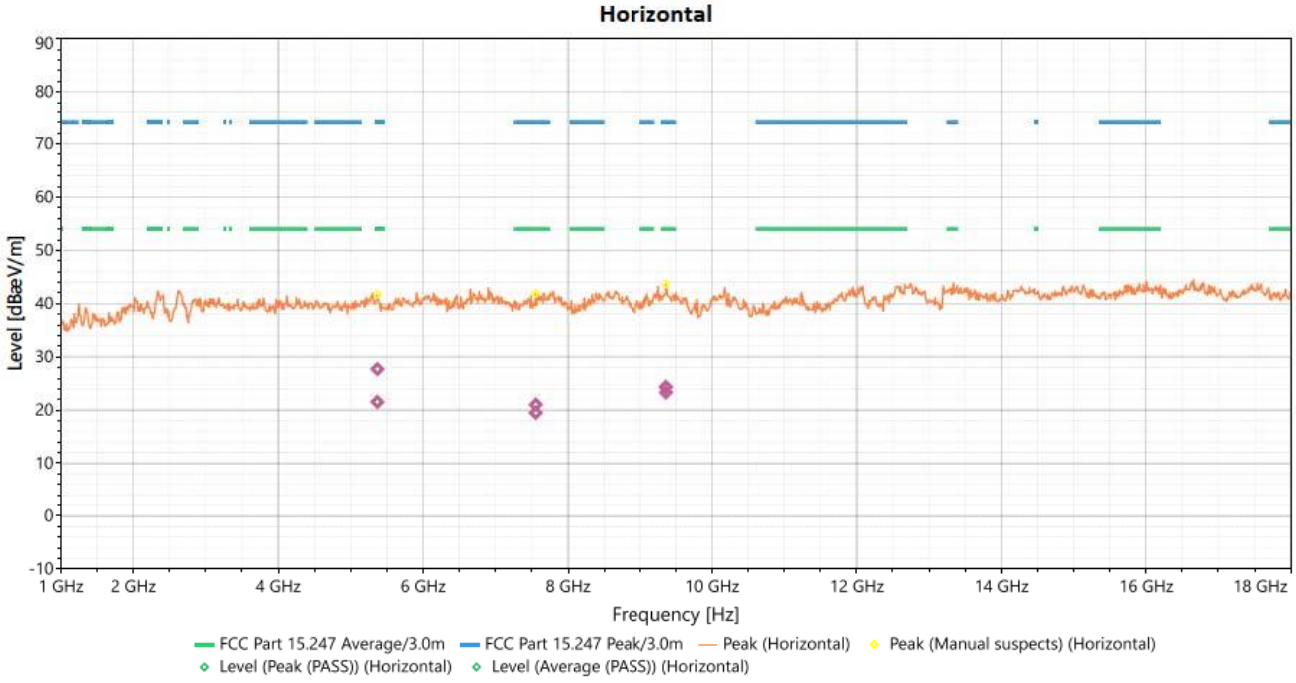


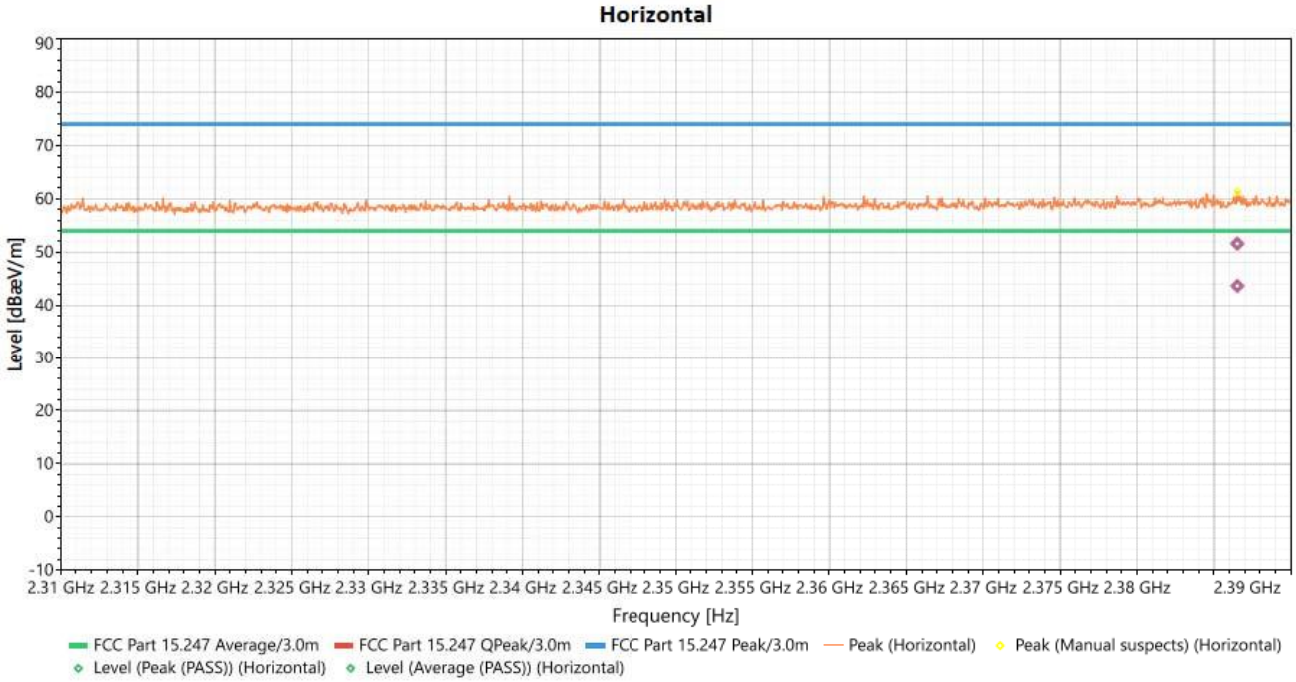
Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	5393.717	Vertical	27.633	74	-46.367	1.47	222	0.87	Peak (PASS)
2	5393.717	Vertical	20.067	54	-33.933	1.47	222	0.87	Average (PASS)
3	8432.19	Vertical	19.213	74	-54.787	1.58	333	1.82	Peak (PASS)
4	8432.19	Vertical	20.08	54	-33.92	1.58	333	1.82	Average (PASS)
5	12618.36	Vertical	24.08	74	-49.92	2	0	3.83	Peak (PASS)
6	12618.36	Vertical	26.574	54	-27.426	2	0	3.83	Average (PASS)
7	2389.106	Vertical	51.888	74	-22.112	1.36	110	35.82	Peak (PASS)
8	2389.106	Vertical	43.603	54	-10.397	1.36	110	35.82	Average (PASS)

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE B 2412 MHz		



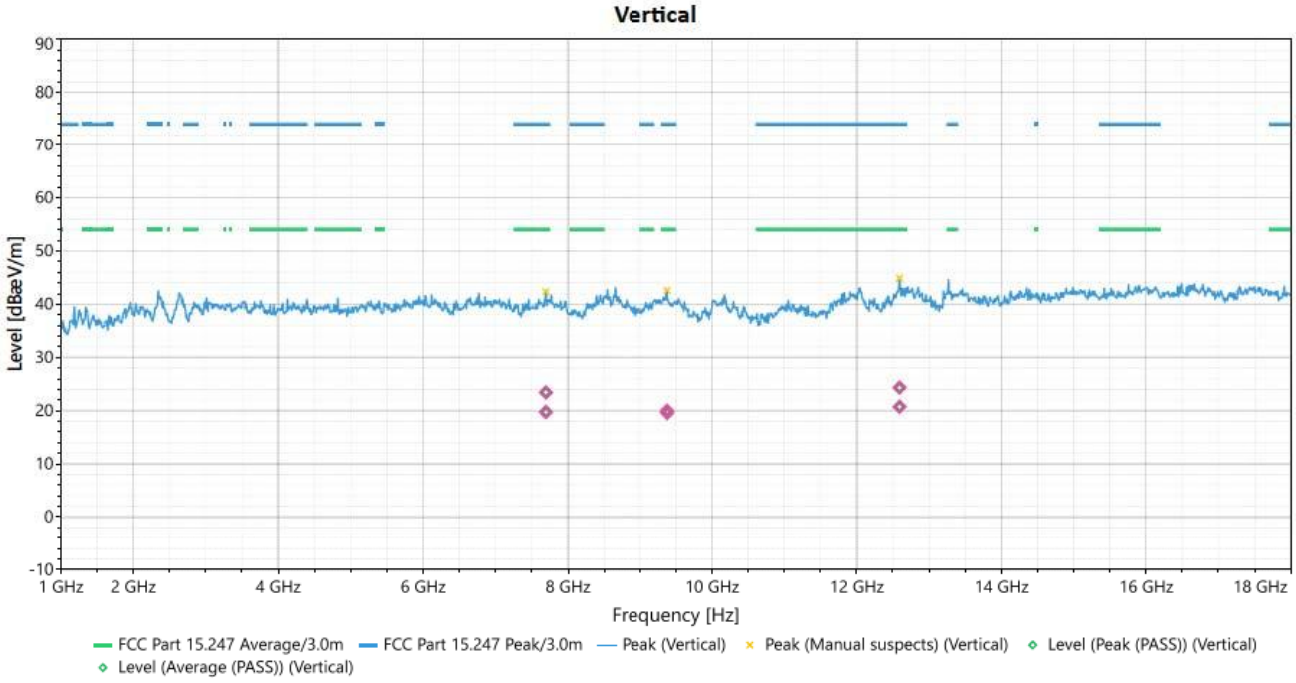


Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	5368.818	Horizontal	27.696	74	-46.304	1	277	0.97	Peak (PASS)
2	5368.818	Horizontal	21.518	54	-32.482	1	277	0.97	Average (PASS)
3	7554.272	Horizontal	19.478	74	-54.522	1	241	2.21	Peak (PASS)
4	7554.272	Horizontal	21.008	54	-32.992	1	241	2.21	Average (PASS)
5	9366.127	Horizontal	23.33	74	-50.67	2	258	2.16	Peak (PASS)
6	9366.127	Horizontal	24.357	54	-29.643	2	258	2.16	Average (PASS)
7	2386.525	Horizontal	51.566	74	-22.434	1.69	36	51.566	Peak (PASS)
8	2386.525	Horizontal	43.636	54	-10.364	1.69	36	43.636	Average (PASS)

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

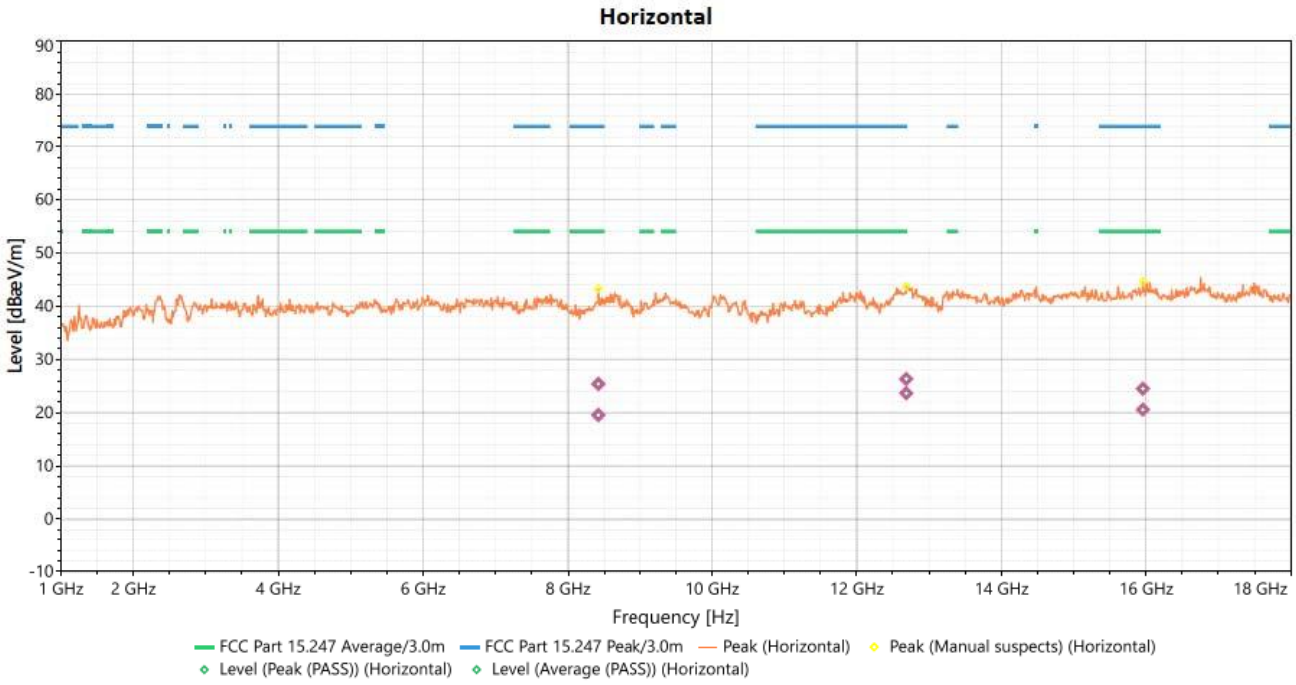
EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE 11 B 2437 MHz		



Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	7695.403	Vertical	23.431	74	-50.569	1.36	360	2.12	Peak (PASS)
2	7695.403	Vertical	19.753	54	-34.247	1.36	360	2.12	Average (PASS)
3	9380.66	Vertical	19.583	74	-54.417	1.58	4	2.22	Peak (PASS)
4	9380.66	Vertical	19.976	54	-34.024	1.58	4	2.22	Average (PASS)
5	12593.46	Vertical	20.726	74	-53.274	1.58	259	3.83	Peak (PASS)
6	12593.46	Vertical	24.319	54	-29.681	1.58	259	3.83	Average (PASS)

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE 11B 2437 MHz		

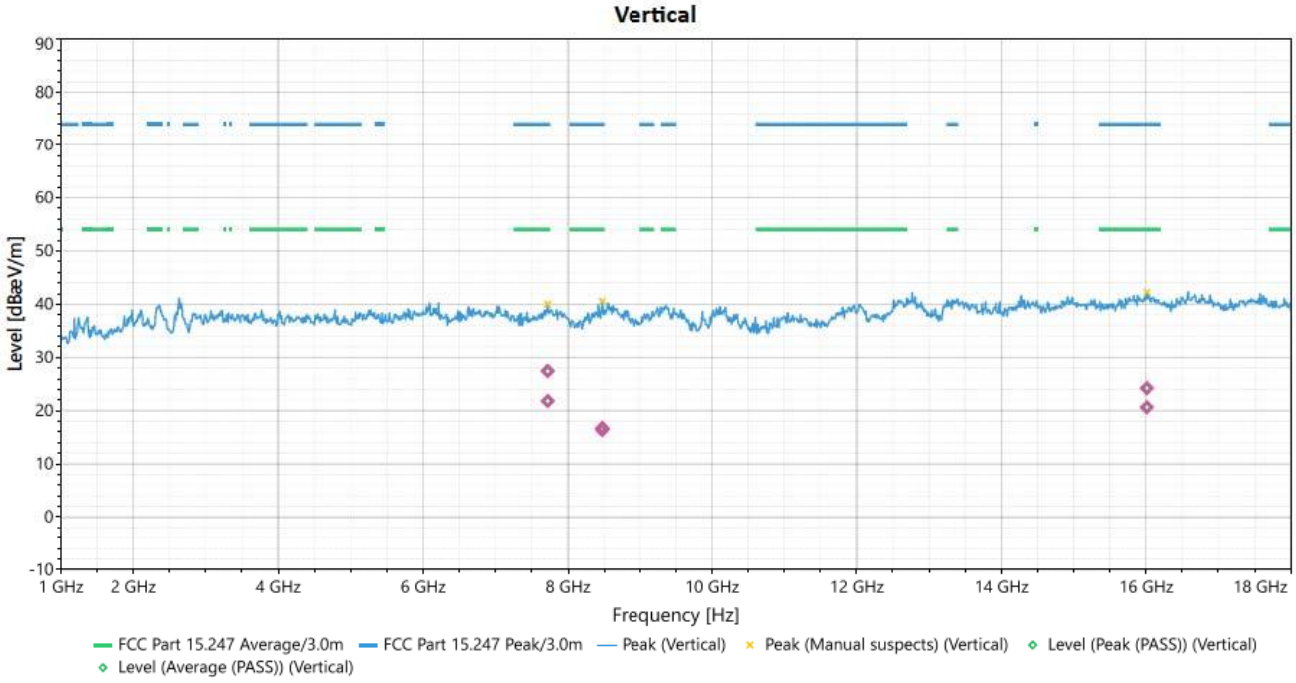


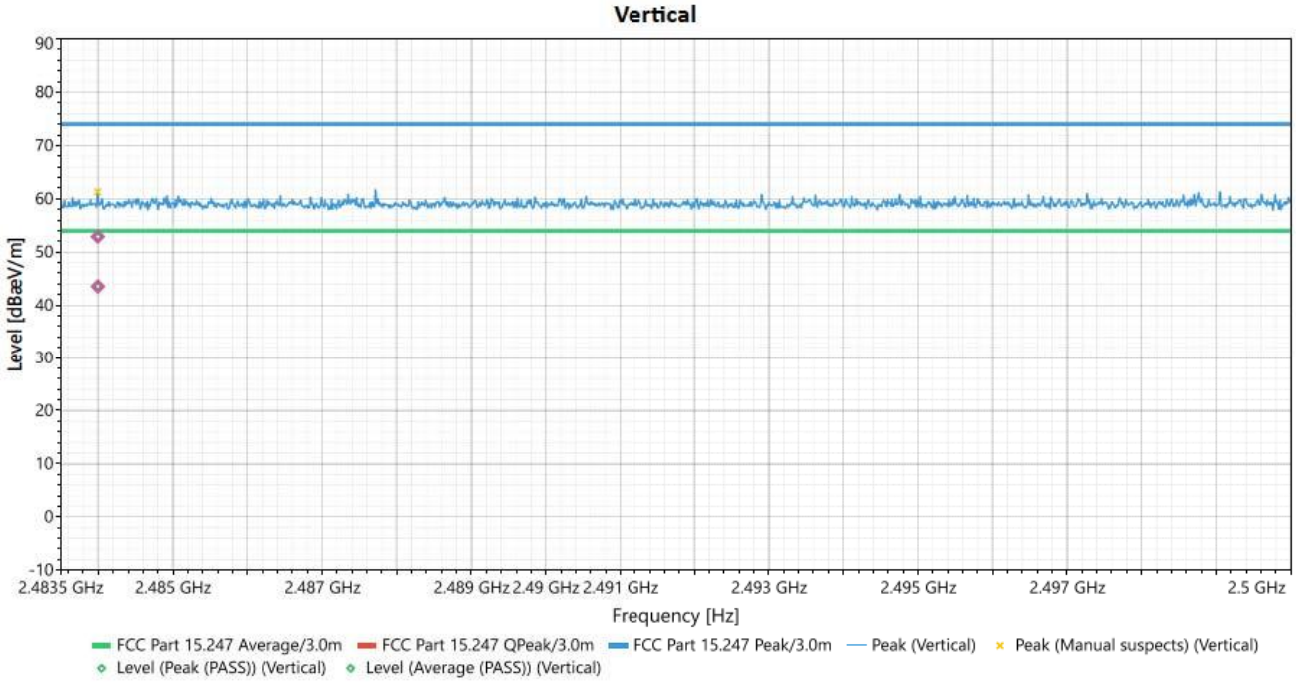
Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (cm)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	8419.728	Horizontal	25.386	74	-48.614	1.04	360	1.89	Peak (PASS)
2	8419.728	Horizontal	19.566	54	-34.434	1.04	360	1.89	Average (PASS)
3	12686.86	Horizontal	23.667	74	-50.333	2	0	3.87	Peak (PASS)
4	12686.86	Horizontal	26.333	54	-27.667	2	0	3.87	Average (PASS)
5	15955.68	Horizontal	20.566	74	-53.434	1.26	18	4.8	Peak (PASS)
6	15955.68	Horizontal	24.504	54	-29.496	1.26	18	4.8	Average (PASS)

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE 11B 2462 MHz		

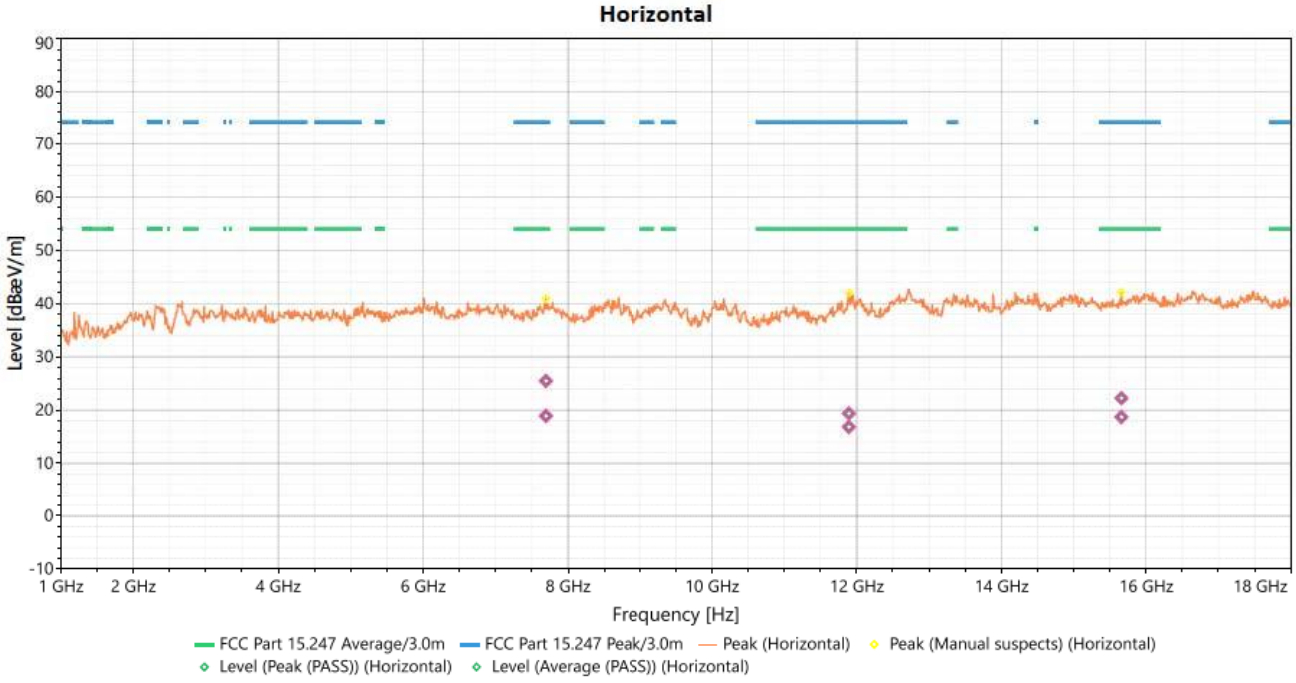


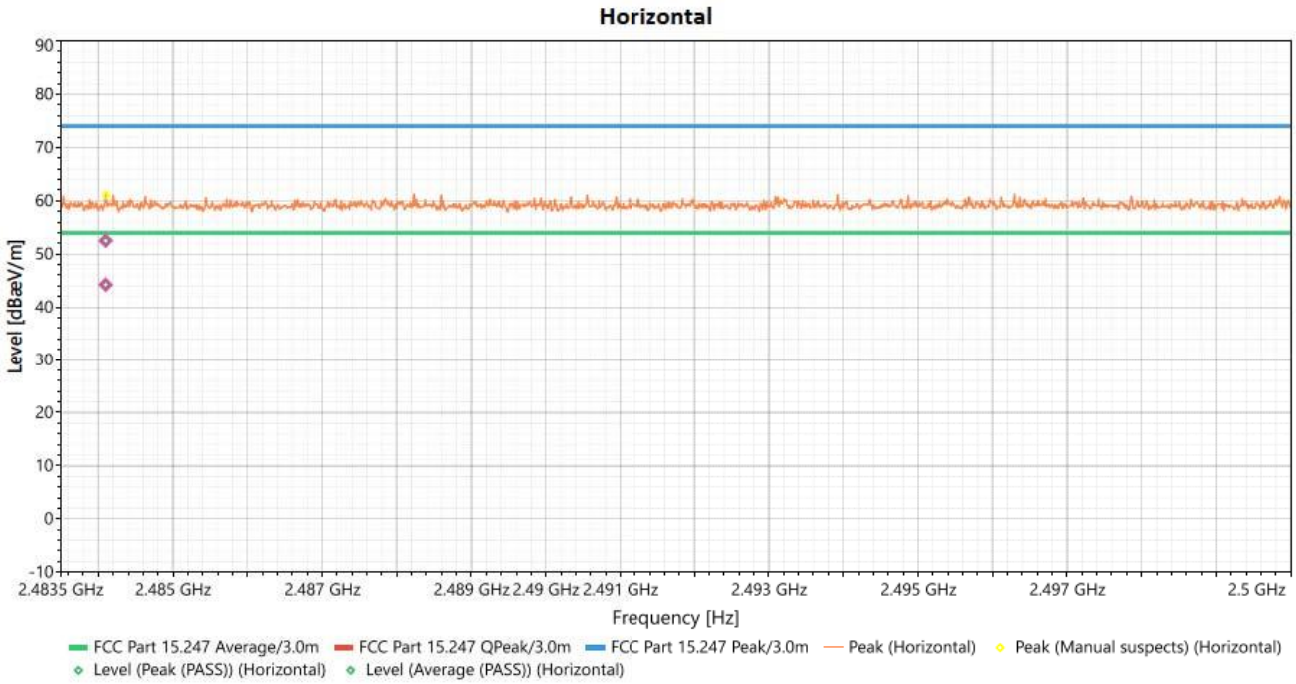


Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	7720.302	Vertical	27.437	74	-46.563	1.91	129	2.13	Peak (PASS)
2	7720.302	Vertical	21.832	54	-32.168	1.91	129	2.13	Average (PASS)
3	8473.69	Vertical	16.375	74	-57.625	1.36	166	1.85	Peak (PASS)
4	8473.69	Vertical	16.725	54	-37.275	1.36	166	1.85	Average (PASS)
5	16011.71	Vertical	20.646	74	-53.354	1.58	166	4.95	Peak (PASS)
6	16011.71	Vertical	24.235	54	-29.765	1.58	166	4.95	Average (PASS)
7	2483.996	Vertical	52.894	74	-21.106	1.47	360	36.21	Peak (PASS)
8	2483.996	Vertical	43.542	54	-10.458	1.47	360	36.21	Average (PASS)

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE 11B 2462 MHz		





Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level [dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (cm)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	7695.406	Horizontal	25.476	74	-48.524	1	18	2.2	Peak (PASS)
2	7695.406	Horizontal	18.897	54	-35.103	1	18	2.2	Average (PASS)
3	11894.03	Horizontal	16.851	74	-57.149	1.25	297	3.42	Peak (PASS)
4	11894.03	Horizontal	19.359	54	-34.641	1.25	297	3.42	Average (PASS)
5	15658.9	Horizontal	18.69	74	-55.31	1.15	360	4.43	Peak (PASS)
6	15658.9	Horizontal	22.239	54	-31.761	1.15	360	4.43	Average (PASS)
7	2484.101	Horizontal	52.53	74	-21.47	1.69	92	36.33	Peak (PASS)
8	2484.101	Horizontal	44.235	54	-9.765	1.69	92	36.33	Average (PASS)

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	12Vdc	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Alberto Saldivar
Test Mode	TX MODE G 2412 MHz