

October 11, 2023

Trackonomy Systems

214 Devcon Drive
San Jose, CA 95112

Dear Saurabh Sanghai,

Enclosed is the Wireless test report for compliance testing of the Trackonomy Systems, Multifunctional IoT Platform Sensor as tested to the requirements of Title 47 of the CFR, Part 15 Subpart C, RSS 247 for Intentional Radiators.

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



Documentation Department
Eurofins Electrical and Electronic Testing NA, Inc.

Reference: WIR128384-Track_FCC_ISED-BLE



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FCC/ ISED Test Report

Applicant name: Trackonomy Systems

Product: Multifunctional IoT Platform Sensor

Report: WIR128384-Track_FCC_ISED-BLE

Applicant Address:

**214 Devcon Drive
San Jose, CA 95112**

Manufacturer Address:

**214 Devcon Drive
San Jose, CA 95112**

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

FCC/ ISED Test Report

Applicant name: Trackonomy Systems

Product: Multifunctional IoT Platform Sensor

Standard

47 CFR FCC Part 15, Subpart C (Section 15.247)

558074 D01 15.247 Meas Guidance v05r02

RSS 247 Issue2, February 2017

RSS Gen Issue5, March 2019

ANSI C63.10: 2013

Christopher Martin

Christopher Martin Test Engineer, 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 FCC Rules under normal use and maintenance.

Gary Chou

Gary Chou

Wireless Engineering Manager, Wireless Laboratory

Report Status Sheet

Revision	Report Date	Reason for Revision
Ø	October 11 , 2023	Initial Issue.

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I. Executive Summary

A. Executive Summary

47 CFR FCC Part 15, Subpart C (SECTION 15.247) RSS 247 Issue2, RSS Gen Issue5				
FCC/ IC Cluse	ISED	Test Item	Result	Remarks
15.207	RSS Gen 8.8	AC Power Conducted Emission	PASS	Meet the requirement of limit.
15.205 & 15.209 & 15.247(d)	RSS Gen 8.8	Radiated Emissions and Band Edge Measurement	PASS	Meet the requirement of limit.
15.247(a)(2)	RSS 247 5.5C	6dB bandwidth & 99% bandwidth	PASS	Note 1
15.247(b)	RSS 247 5.2.1 RSS Gen 6.7	Conducted power	PASS	Note 1
15.247(e)	RSS 247 5.4.4	Power Spectral Density	PASS	Note 1
15.203	RSS 247 5.2.2	Antenna Requirement	PASS	Meet the requirement.

Note:

1. Refer to RF module Report FCC ID : HSW2832, RF module report ISED ID : 4492A-2832
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

II. Equipment Information

A. Overview

EUT Summary Table

Product:	Multifunctional IoT Platform Sensor		
Brand:	Trackonomy Systems		
Model(s) Tested:	PGW-2005		
Series Model:	N/A		
Sample Status:	Original		
EUT Specifications:	Primary Power:		120Vac, 60Hz
	Voltage Frequency:		N/A
	Technology / Type of Modulations:		BLUETOOTH LE: GFSK
	Operating Frequency :		2.402 ~ 2.480GHz
	FCC ID:		2AXA8-PGW-2005
	ISED ID:		27299-PGW2005
	Antenna Type:	Dipole Antenna	
	Antenna Manufacturer/ Modle:		TAOGLAS/ GW.22.5151
	Antenna connector:		RP-SMA
	Antenna Gain		4.64 dBi
Analysis:	The results obtained relate only to the item(s) tested.		
Environmental Test Conditions:	Temperature: 20.3° C		
	Relative Humidity: 47.5%		
	Barometric Pressure: 860-1060 mbar		
Evaluated by:	Christopher Martin		
Issue Date(s):	September 12, 2023		

NOTE: The following modules can be chosen to be configured in the EUT.

	Model No.	FCC ID	Note
-	-	-	-

-	-	-	-
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FCC/IC RF Testing Units Setting

Model	Hardware (FW) Rev.	Firmware (FW) Rev.	FW operation verification and Instruction
PGW-2005	Nominal HW V2	Nominal FW V2	Verify by Spectrum Analyzer & Laptop

DESCRIPTION OF TEST MODES

Power Setting :

Channel	Frequency(MHz)	Power Setting
0	2402	default
19	2440	default
39	2480	default

40 channels are provided for Bluetooth LE:

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
0	2402	14	2430	28	2458
1	2404	15	2432	29	2460
2	2406	16	2434	30	2462
3	2408	17	2436	31	2464
4	2410	18	2438	32	2466
5	2412	19	2440	33	2468
6	2414	20	2442	34	2470
7	2416	21	2444	35	2472
8	2418	22	2446	36	2474
9	2420	23	2448	37	2476
10	2422	24	2450	38	2478
11	2424	25	2452	39	2480
12	2426	26	2454		
13	2428	27	2456		

B. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
B	wideband radio communication tester	ROHDE& SCHARZ	CMW500	1201.0002K50	-	Bluetooth Tester

Note: (Describe the outline of a simulator, if used for the tests, as a note under the table.)

Insert Cable Connections to/from EUT provided by test team.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
	-	-	-	-	0	-

Note: The core(s) is(are) originally attached to the cable(s).

General Description of Applied Standards

C. 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
- ANSI C63.10:2013
- RSS 247 Issue2
- RSS Gen Issue5

D. 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.

E. 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

F. 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.

G. Disposition of EUT

The test sample including all support equipment (if any), submitted to the Electromagnetic Compatibility Lab for testing was returned to Trackonomy Systems 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:

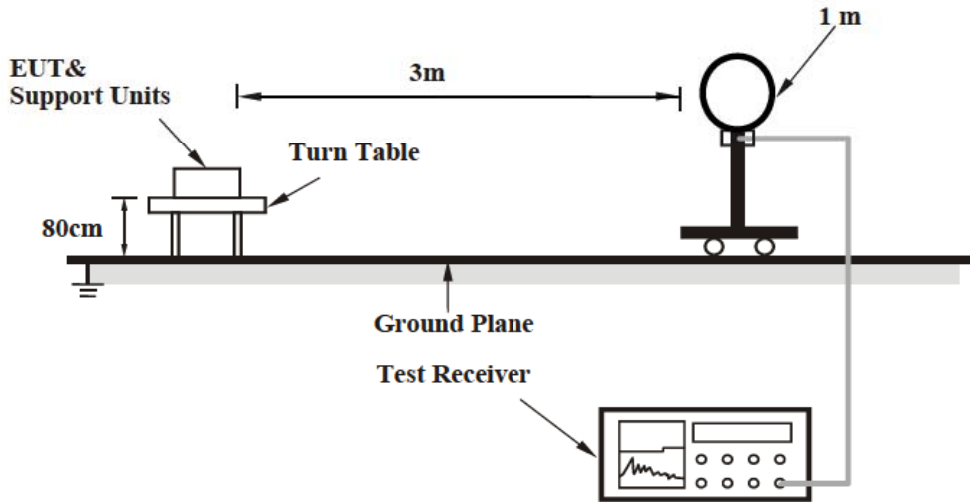
Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

Test Procedures:

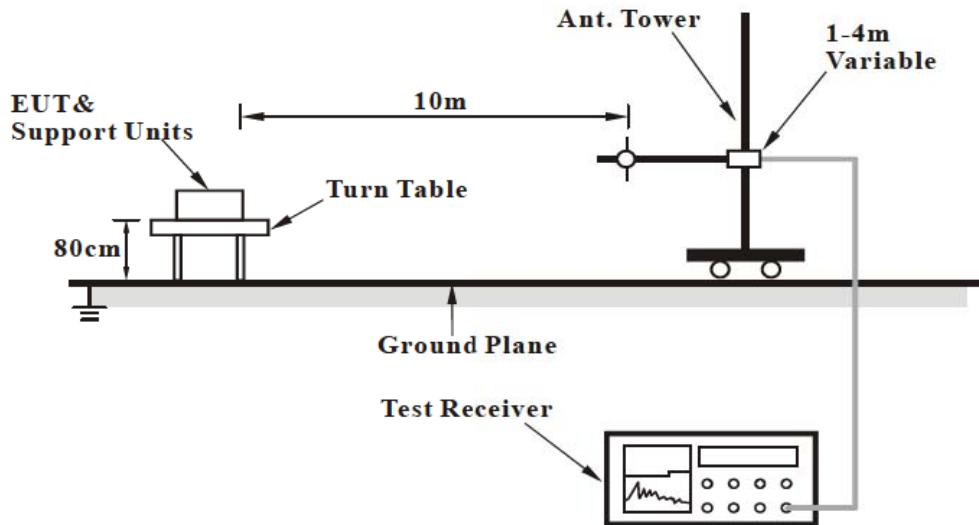
The transmitter was turned on. Measurements were performed of the low, mid and high Channels. The EUT was rotated orthogonally through all three axes. Plots shown are corrected for both antenna correction factor and distance and compared to a 3 m limit line. Only noise floor was measured above 18 GHz.

Test Setup

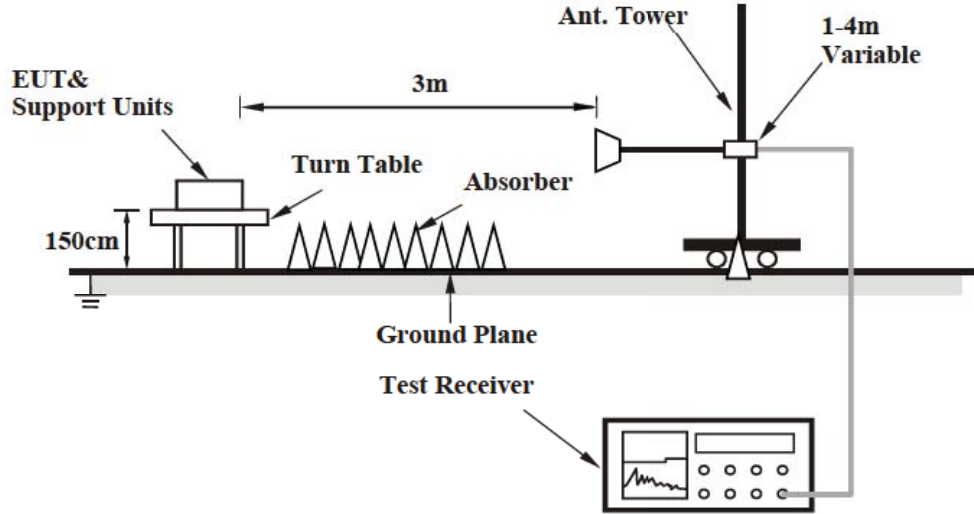
For Radiated Emission Below 30MHz



For Radiated emission 30 MHz to 1GHz



For Radiated emission 1GHz to 40GHz



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

Test Equipment List

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2017.

Asset #	Equipment	Manufacturer	Model	Last Cal Date	Cal Due Date
1S2003	EMI Test Receiver	Keysight	N9030B	11/01/2022	11/01/2023
1S2399	Turntable Controller	SUNOL SCIENCE	SC99V	Not Required	Not Required
1S2486	5 Meter Chamber Control Room	Panashield	5 Meter Control Room	Not Required	Not Required
1S3826	Horn Antenna	ETS-LINDGREN	3117	04/06/2023	04/06/2025
1S4802	Preamplifier	EMC Instrument	EMC118A45SE	Note 1	Note 1
1S2668	Preamplifier	Sonoma Instrument	310N	Note 1	Note 1
1S2600	Antenna	Sunol Sciences Corp	JB3	04/ 11/ 2023	04/ 11/ 2025
1S3983	Loop Antenna	ETS-LINDGREN	6512	10/ 14 /2021	10/ 14 /2023

Note 1: Verified by calibrated instrumentation at the time of testing

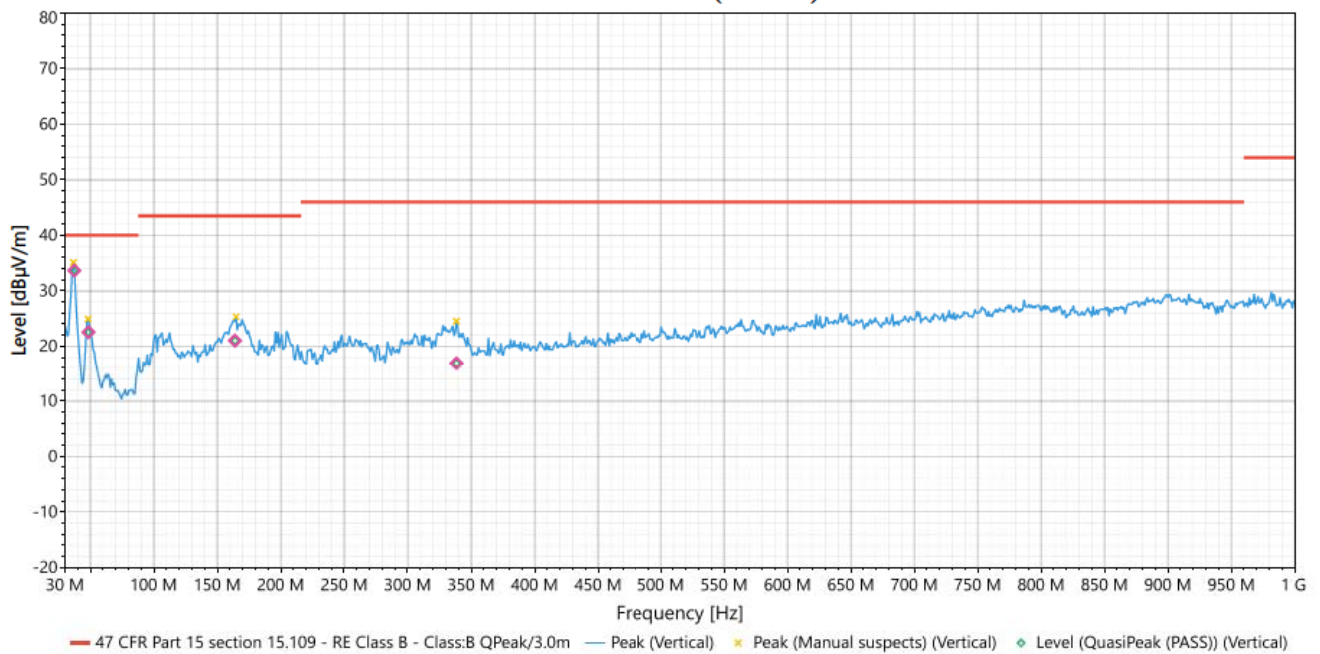
Test Engineer: Christopher Martin

Test Date(s): 09/02/20223

Test Data Radiated Emissions (30 MHz~1000 MHz)

EUT Test Condition		Measurement Detail	
Input Power	120 Vac	Frequency Range	30MHz-1GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2440 MHz		

#1 - 30MHz-1GHz (Vertical)



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	37.44	Vertical	17.807	40	-22.193	1.63	62	-6.75	Pass
2	105.65	Vertical	21.405	43.5	-22.095	2.5	227	-9.4	Pass
3	163.67	Vertical	22.426	43.5	-21.074	2.21	281	-9.22	Pass
4	875.24	Vertical	23.274	46	-22.726	2.67	286	4.32	Pass

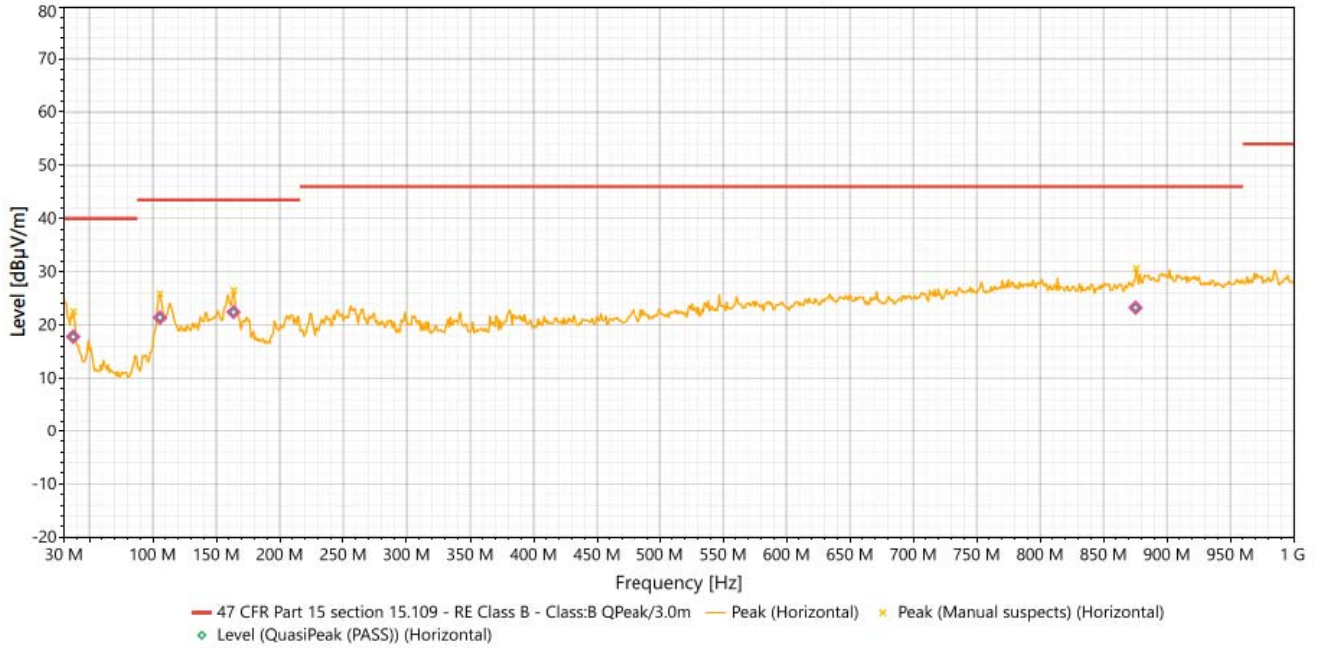
REMARKS:

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	120 Vac	Frequency Range	30MHz-1GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2440 MHz		

#2 - 30MHz-1GHz (Horizontal)



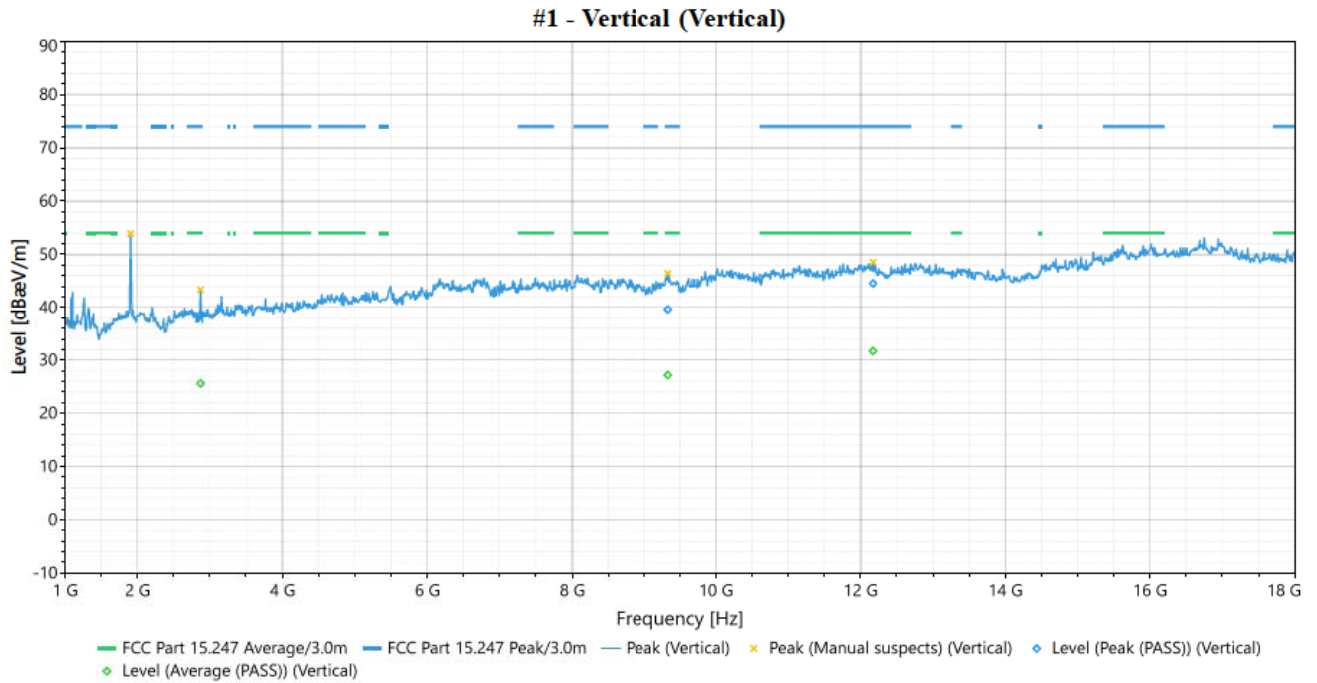
Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (cm)	Angle (Deg)	Factor [dB(1/m)]	Pass/Fail
1	37.44	Horizontal	17.807	40	-22.193	1.63	62	-6.75	Pass
2	105.65	Horizontal	21.405	43.5	-22.095	2.5	227	-9.4	Pass
3	163.67	Horizontal	22.426	43.5	-21.074	2.21	281	-9.22	Pass
4	875.24	Horizontal	23.274	46	-22.726	2.67	286	4.32	Pass

REMARKS:

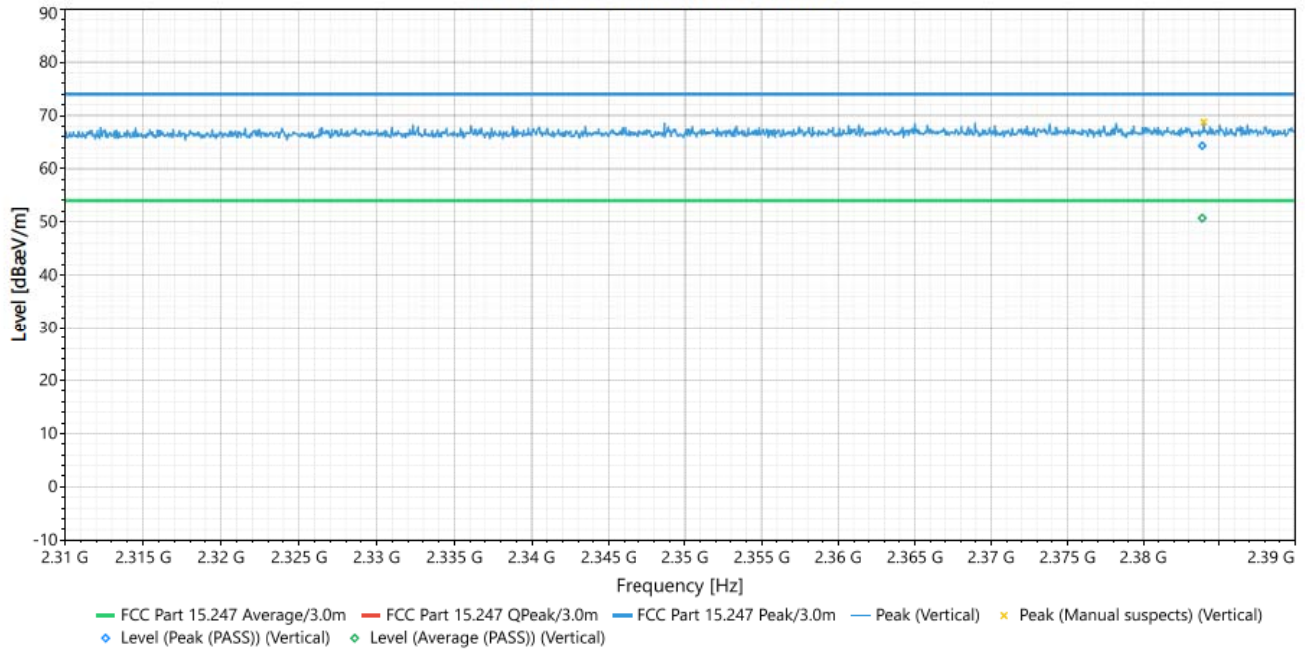
1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

Radiated Emissions (Above 1GHz)

EUT Test Condition		Measurement Detail	
Input Power	120 Vac	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2402 MHz		



#1 - 2.31GHz-2.39GHz (Vertical)



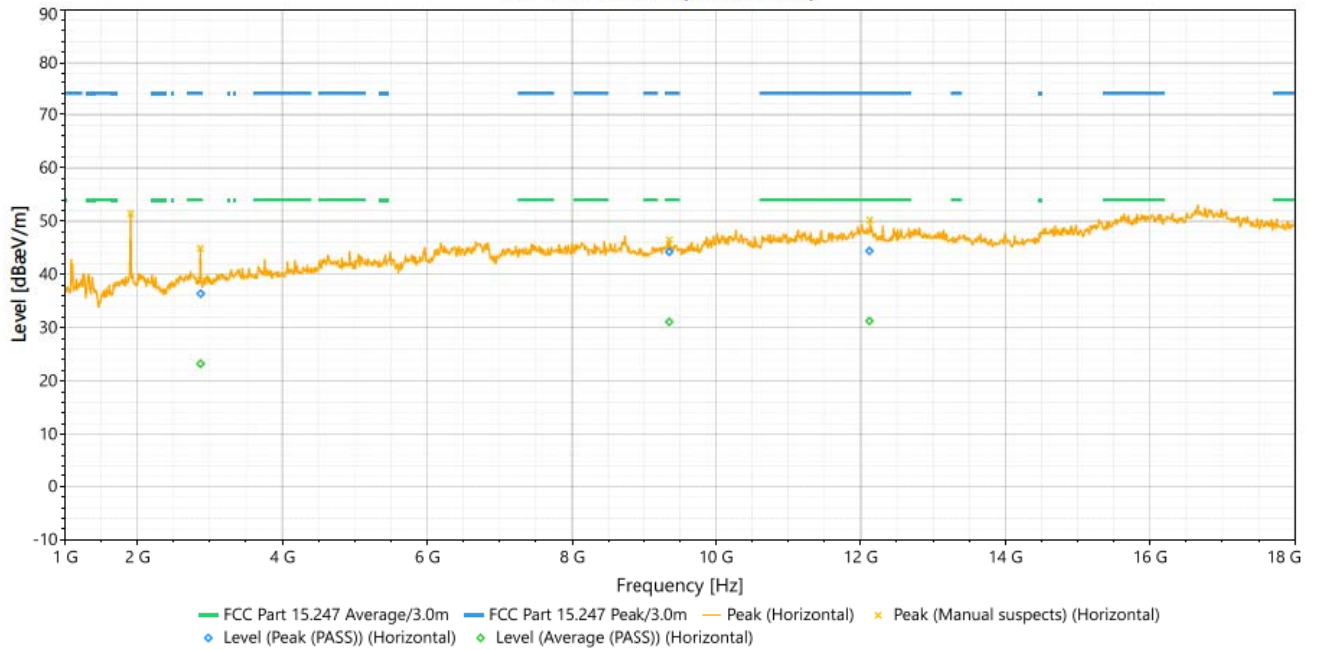
Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak [dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	2873.47	Vertical	38.619	74	-35.381	2.13	38.619	2.19	Peak (PASS)
2	2873.47	Vertical	25.603	54	-28.397	2.13	25.603	2.19	Average (PASS)
3	9336.08	Vertical	39.605	74	-34.395	1.01	39.605	5.56	Peak (PASS)
4	9336.08	Vertical	27.171	54	-26.829	1.01	27.171	5.56	Average (PASS)
5	12172.1	Vertical	44.526	74	-29.474	1.01	44.526	7.55	Peak (PASS)
6	12172.1	Vertical	31.704	54	-22.296	1.01	31.704	7.55	Average (PASS)
7	2383.884	Vertical	64.297	74	-9.703	1.95	346	38.73	Peak (PASS)
8	2383.884	Vertical	50.71	54	-3.29	1.95	346	38.73	Average (PASS)

REMARKS:

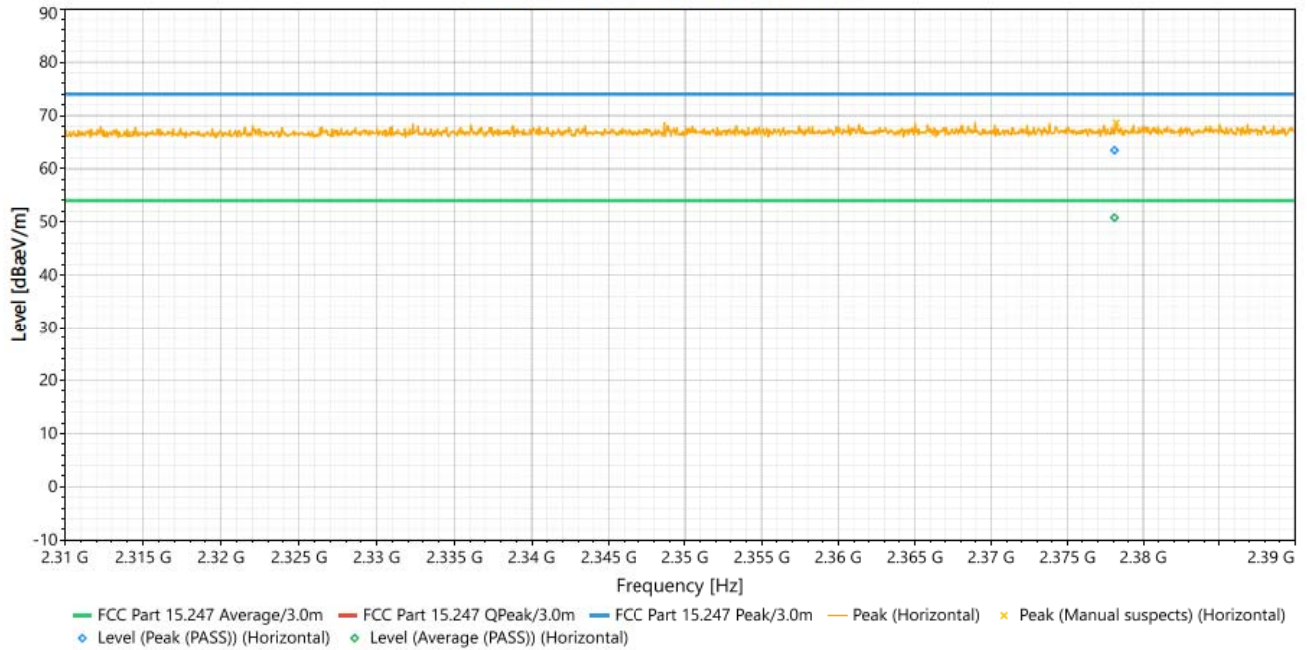
1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	120 Vac	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2402 MHz		

#2 - Horizontal (Horizontal)



#2 - 2.31GHz-2.39GHz (Horizontal)



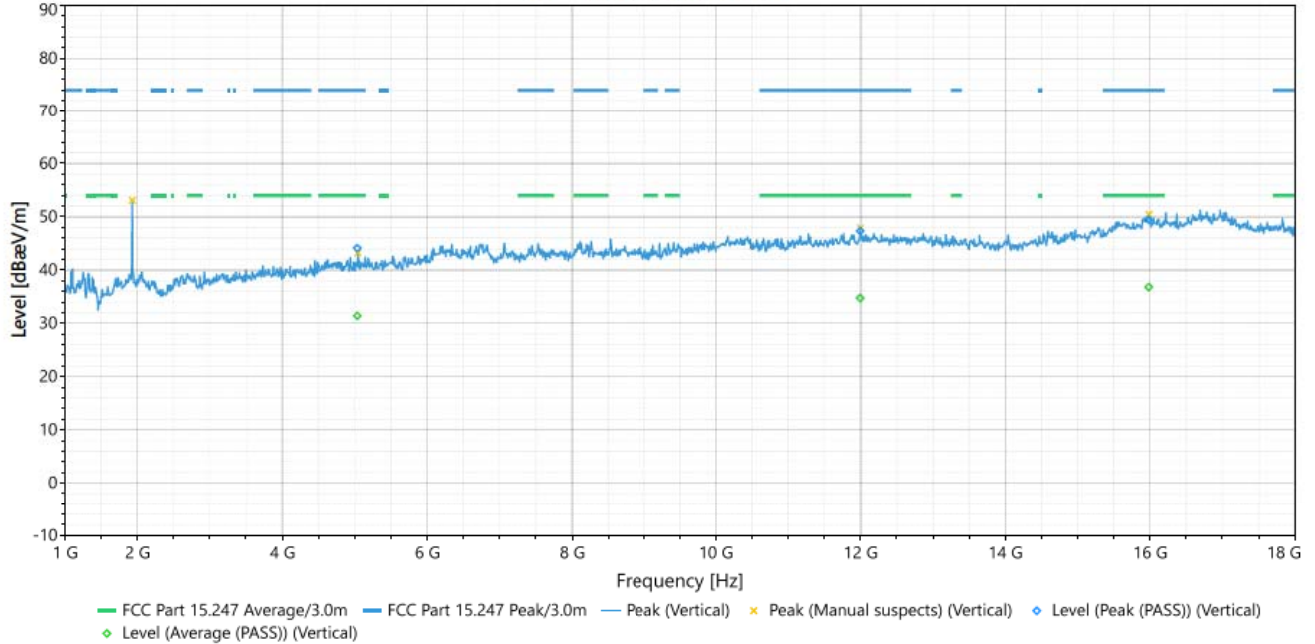
Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level Peak [dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	2876.02	Horizontal	36.382	74	-37.618	1.6	134	2.23	Peak (PASS)
2	2876.02	Horizontal	23.24	54	-30.76	1.6	134	2.23	Average (PASS)
3	9357.89	Horizontal	44.237	74	-29.763	3.5	48	5.61	Peak (PASS)
4	9357.89	Horizontal	31.08	54	-22.92	3.5	48	5.61	Average (PASS)
5	12121.87	Horizontal	44.397	74	-29.603	1.12	115	7.55	Peak (PASS)
6	12121.87	Horizontal	31.27	54	-22.73	1.12	115	7.55	Average (PASS)
7	2378.108	Horizontal	63.458	74	-10.542	2.07	290	38.85	Peak (PASS)
8	2378.108	Horizontal	50.795	54	-3.205	2.07	290	38.85	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	120 Vac	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2440 MHz		

#1 - Vertical (Vertical)

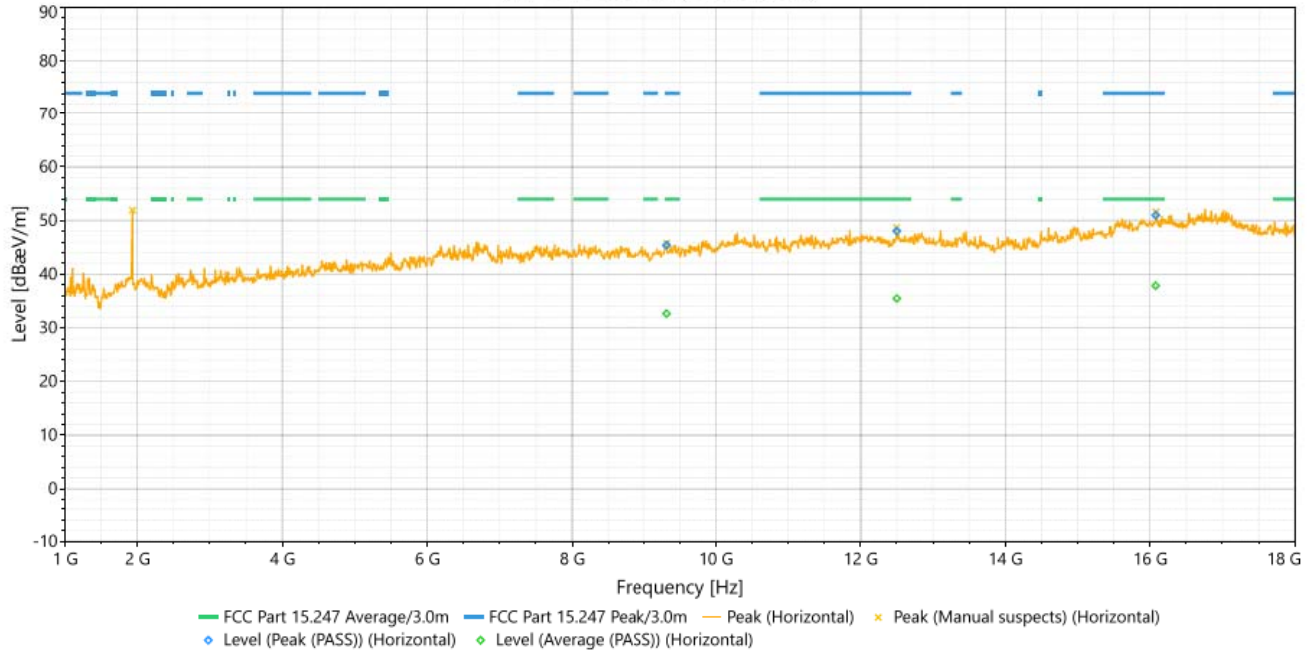


Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	5036.75	Vertical	44.099	74	-29.901	3.22	332	4.16	Peak (PASS)
2	5036.75	Vertical	31.419	54	-22.581	3.22	332	4.16	Average (PASS)
3	11993.94	Vertical	47.309	74	-26.691	3.11	96	7.5	Peak (PASS)
4	11993.94	Vertical	34.73	54	-19.27	3.11	96	7.5	Average (PASS)
5	15980.8	Vertical	49.45	74	-24.55	3.1	162	8.55	Peak (PASS)
6	15980.8	Vertical	36.804	54	-17.196	3.1	162	8.55	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	120 Vac	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2440 MHz		

#2 - Horizontal (Horizontal)



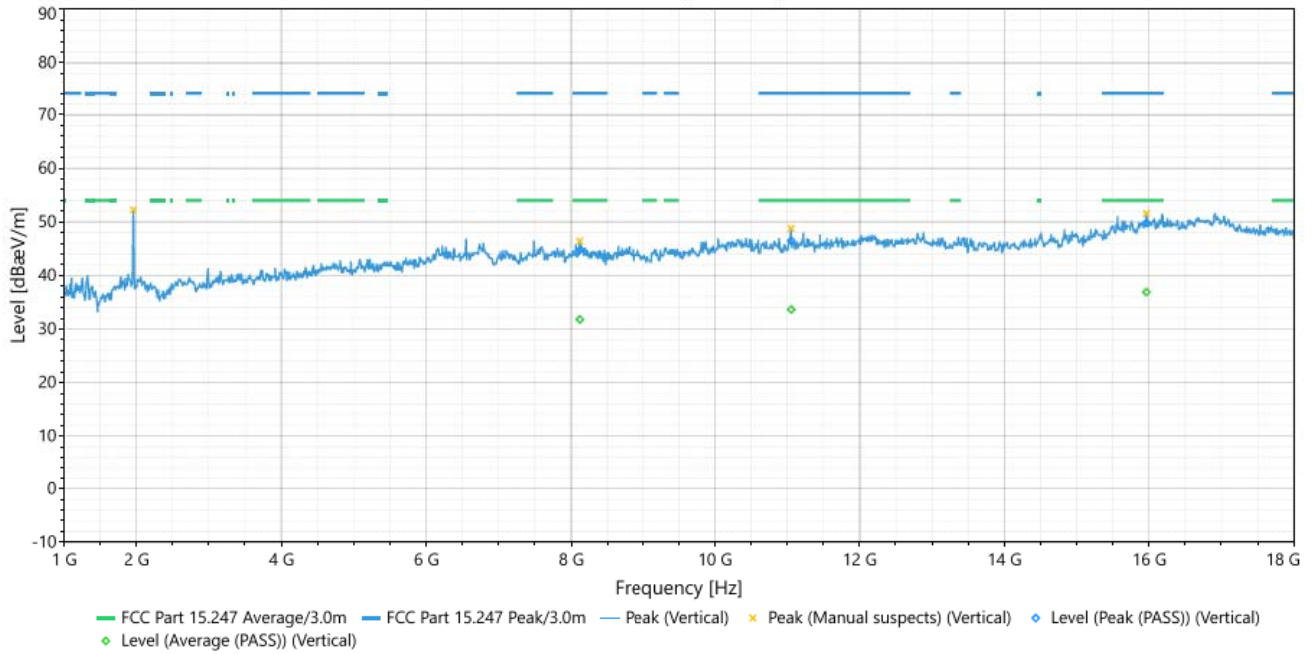
Antenna Polarity & Test Distance: Horizontal at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (cm)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	9318.4	Horizontal	45.376	74	-28.624	3.5	305	5.56	Peak (PASS)
2	9318.4	Horizontal	32.646	54	-21.354	3.5	305	5.56	Average (PASS)
3	12501.21	Horizontal	48.013	74	-25.987	3.5	14	7.55	Peak (PASS)
4	12501.21	Horizontal	35.463	54	-18.537	3.5	14	7.55	Average (PASS)
5	16076.71	Horizontal	50.982	74	-23.018	3.5	155	8.51	Peak (PASS)
6	16076.71	Horizontal	37.856	54	-16.144	3.5	155	8.51	Average (PASS)

REMARKS:

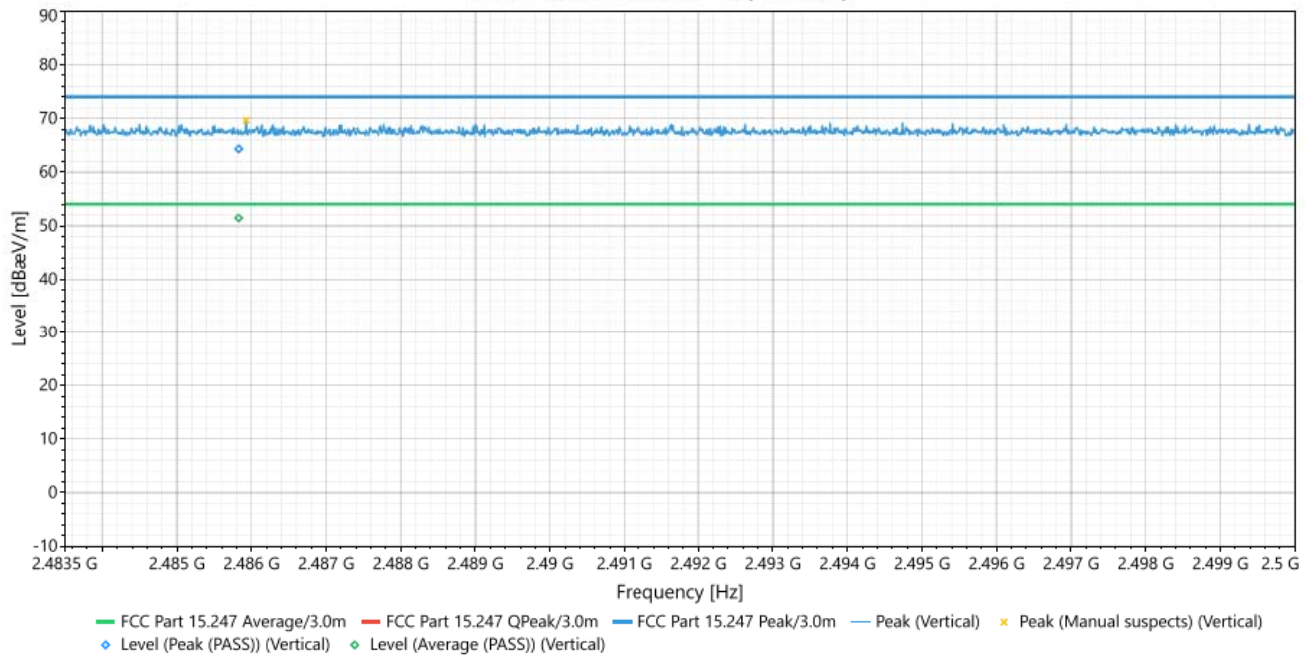
1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	120 Vac	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2480 MHz		

#1 - Vertical (Vertical)



#1 - 2.4835GHz-2.5GHz (Vertical)

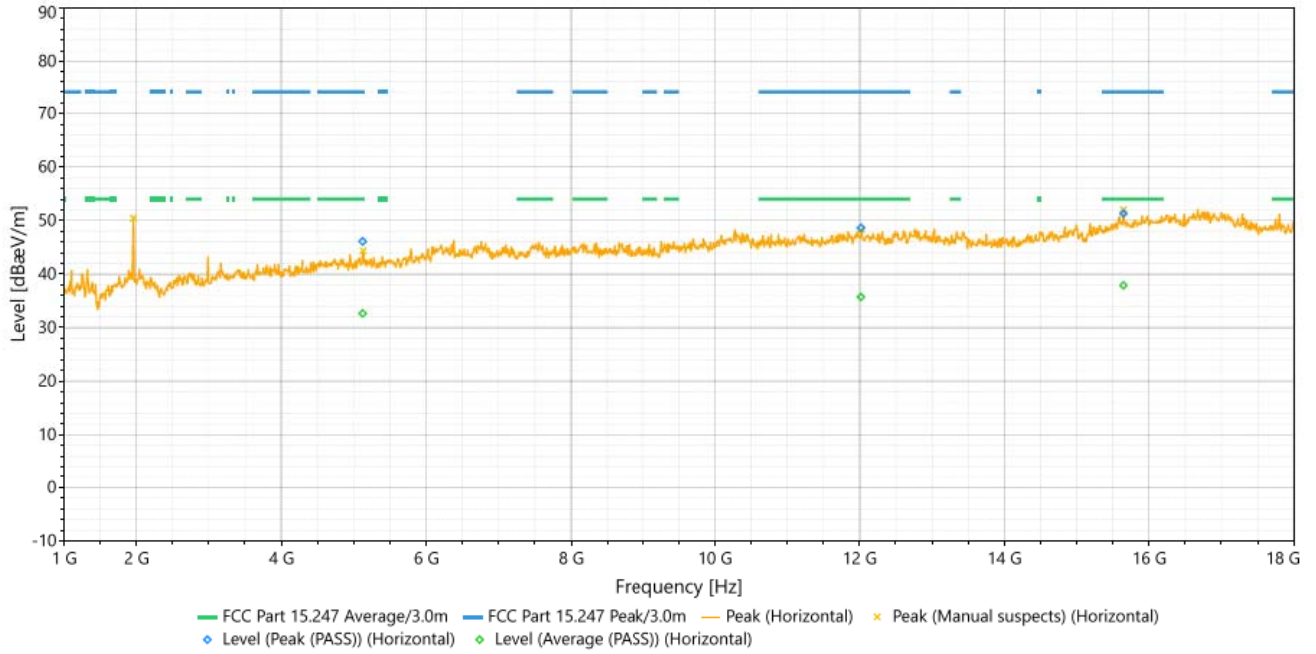


Antenna Polarity & Test Distance: Vertical at 3m									
No.	Frequency (MHz)	Polarization	Level Peak[dB(uV/m)]	Limit Peak dB(uV/m)	Margin Peak [dB]	Height (m)	Angle (Deg)	Factor [dB(1/m)]	Measure Type/ Result
1	8121.78	Vertical	44.788	74	-29.212	3.5	155	5.87	Peak (PASS)
2	8121.78	Vertical	31.795	54	-22.205	3.5	155	5.87	Average (PASS)
3	11055.63	Vertical	46.452	74	-27.548	3.12	206	6.52	Peak (PASS)
4	11055.63	Vertical	33.629	54	-20.371	3.12	206	6.52	Average (PASS)
5	15962.19	Vertical	49.81	74	-24.19	3.13	320	8.52	Peak (PASS)
6	15962.19	Vertical	36.876	54	-17.124	3.13	320	8.52	Average (PASS)
7	2485.829	Vertical	64.318	74	-9.682	1	90	39.15	Peak (PASS)
8	2485.829	Vertical	51.471	54	-2.529	1	90	39.15	Average (PASS)

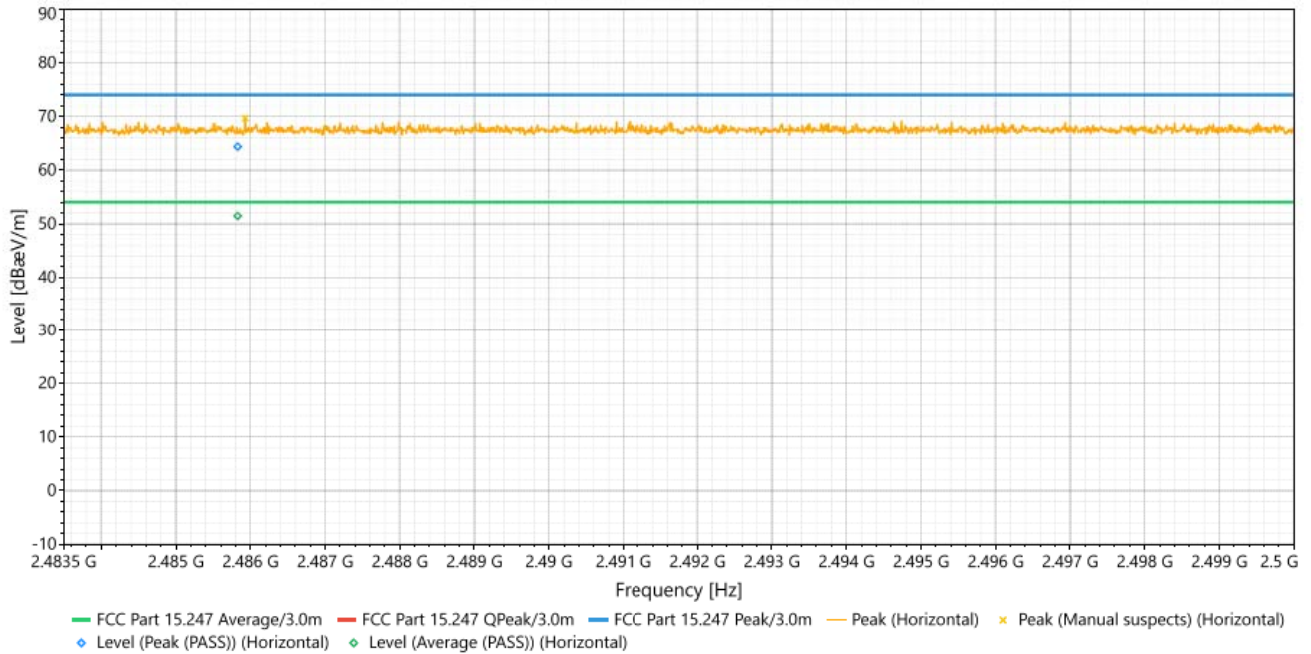
1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) +Preamplifier
3. Margin value = Emission level – Limit value.
4. The emission levels of other frequencies were less than 20dB margin against the limit.

EUT Test Condition		Measurement Detail	
Input Power	120 Vac	Frequency Range	1GHz-26GHz
Environmental Conditions	25 deg. C, 70% RH	Tested By	Christopher Martin
Test Mode	TX MODE BLE 2480 MHz		

#2 - Horizontal (Horizontal)



#2 - 2.4835GHz-2.5GHz (Horizontal)



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	5125.2	Horizontal	46.105	74	-27.895	3.5	13	4.23	Peak (PASS)
2	5125.2	Horizontal	32.653	54	-21.347	3.5	13	4.23	Average (PASS)
3	12018.55	Horizontal	48.647	74	-25.353	3.5	141	7.52	Peak (PASS)
4	12018.55	Horizontal	35.739	54	-18.261	3.5	141	7.52	Average (PASS)
5	15645.25	Horizontal	51.289	74	-22.711	3.5	77	8.19	Peak (PASS)
6	15645.25	Horizontal	37.91	54	-16.09	3.5	77	8.19	Average (PASS)
7	2485.829	Horizontal	64.38	74	-9.62	2.65	24	39.16	Peak (PASS)
8	2485.829	Horizontal	51.477	54	-2.523	2.65	24	39.16	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.

Conducted Emission Measurement**Limits of Conducted Emission Measurement :**

The following standards specified below are covered in the scope of this section of the test report:

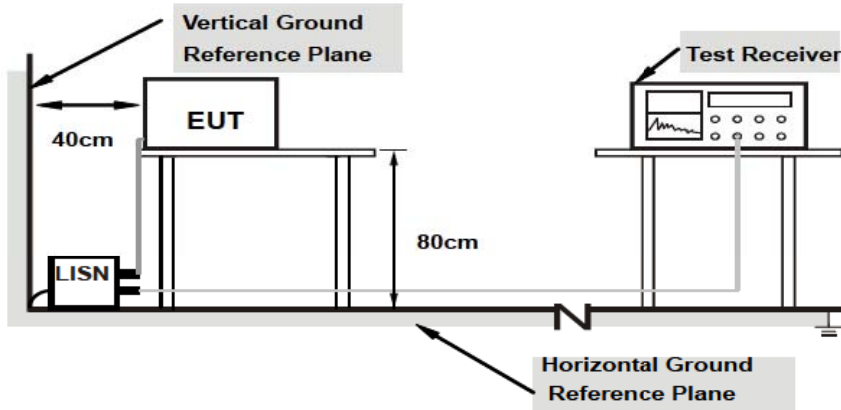
Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

- Note: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Conducted Emissions - Test Procedure

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency ranges from 150 kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Conducted Emissions - Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo)

Test Results:

Line	Frequency	QP Amplitude (dBµV)	QP Limit (dBµV)	QP Margin (dB)	Pass/Fail	Average Amplitude (dBµV)	Average Limit (dBµV)	Average Margin (dB)	Pass/Fail
Line	640 kHz	59.378	73	-13.622	Pass	52.748	60	-7.252	Pass
Line	2.66 MHz	38.822	73	-34.178	Pass	29.362	60	-30.638	Pass
Line	2.975 MHz	32.777	73	-40.223	Pass	23.597	60	-36.403	Pass
Line	4.62 MHz	40.434	73	-32.566	Pass	32.054	60	-27.946	Pass
Line	6.42 MHz	39.947	73	-33.053	Pass	31.867	60	-28.133	Pass
Line	11.405 MHz	34.738	73	-38.262	Pass	26.978	60	-33.022	Pass

Table 1. CEV - (150 kHz – 30 MHz, Phase 1), 120VAC 60Hz - PMM 9010F, Line 1 Test Results

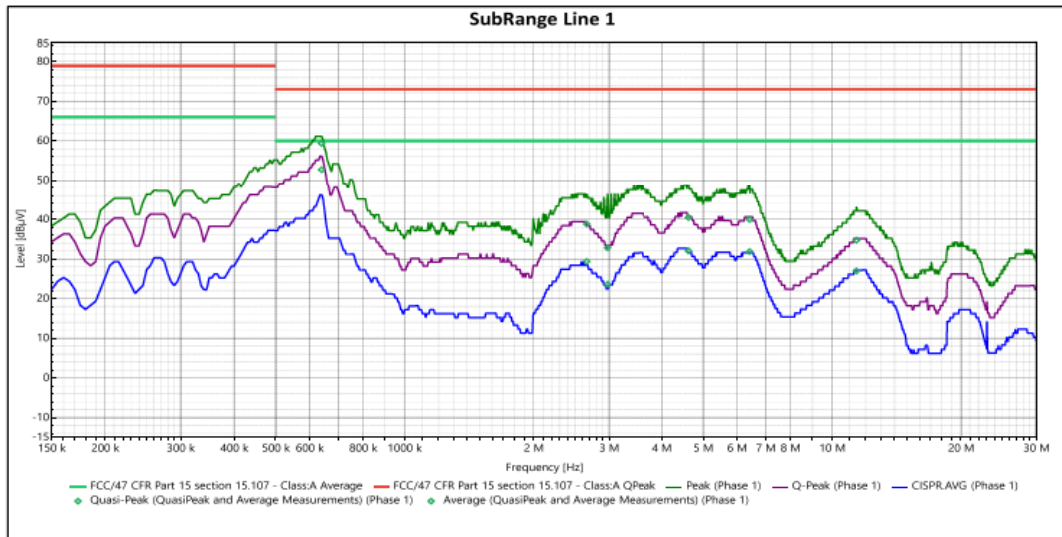


Figure 1. CEV - (150 kHz – 30 MHz, Phase 1), 120VAC 60Hz - PMM 9010F, Line 1 Plot

Line	Frequency	OP Amplitude (dBµV)	OP Limit (dBµV)	OP Margin (dB)	Pass/Fail	Average Amplitude (dBµV)	Average Limit (dBµV)	Average Margin (dB)	Pass/Fail
Neutral	635 kHz	59.248	73	-13.752	Pass	52.608	60	-7.392	Pass
Neutral	1.24 MHz	30.953	73	-42.047	Pass	24.243	60	-35.757	Pass
Neutral	3.54 MHz	40.158	73	-32.842	Pass	33.808	60	-26.192	Pass
Neutral	4.59 MHz	40.14	73	-32.86	Pass	32.83	60	-27.17	Pass
Neutral	6.18 MHz	39.104	73	-33.896	Pass	30.914	60	-29.086	Pass
Neutral	11.415 MHz	34.988	73	-38.012	Pass	25.698	60	-34.302	Pass

Table 2. CEV - (150 kHz – 30 MHz, Neutral), 120VAC 60Hz - PMM 9010F, Neutral Test Results

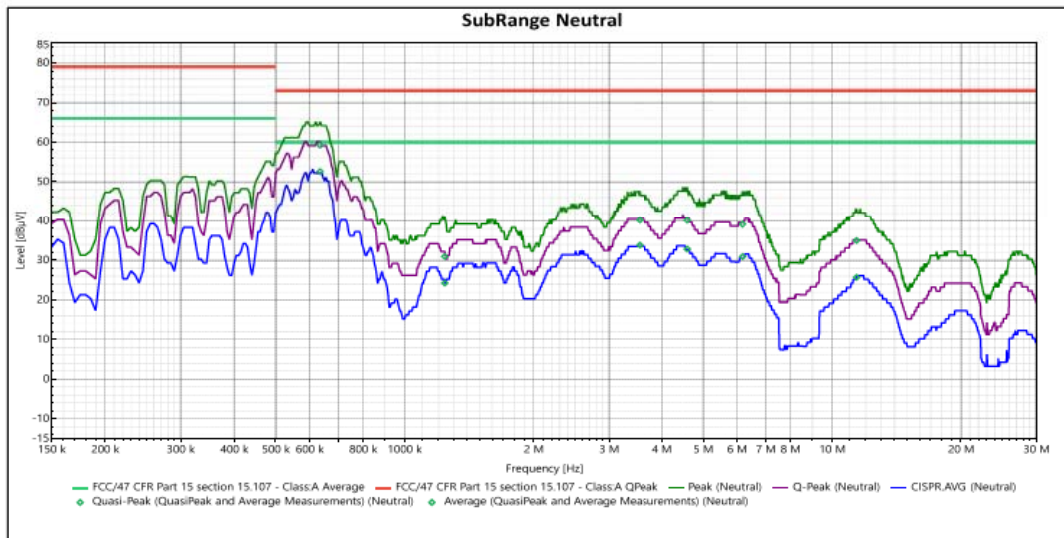


Figure 2. CEV - (150 kHz – 30 MHz, Neutral), 120VAC 60Hz - PMM 9010F, Neutral Plot

IV. Pictures of test Arrangements

Please see setup photo file

END OF REPORT