

RADIO PERFORMANCE TEST REPORT

Test Report No. : OT-255-RWD-020
Reception No. : 2411004008
Applicant : SAM JIN CO., LTD
Address : 81, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do, South Korea
Manufacturer : SAM JIN CO., LTD
Address : 81, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do, South Korea
Type of Equipment : Audio Transceiver
FCC ID. : 2AF4SMV60001
Model Name : MV60001
Multiple Model Name : N/A
Serial number : N/A
Total page of Report : 39 pages (including this page)
Date of Incoming : November 11, 2024
Date of issue : May 30, 2025

SUMMARY

The equipment complies with the regulation; **FCC PART 15 SUBPART E Section 15.407**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

This report is not correlated with the "KS Q ISO/IEC 17025 and KOLAS accreditation" of Korean Laboratory Accreditation Scheme.





Tested by
 Yun-Bok, Wi / Project Engineer
 ONETECH Corp.

Reviewed by
 Tae-Ho, Kim / Chief Engineer
 ONETECH Corp.

Approved by
 Jae-Ho, Lee / Director
 ONETECH Corp.

CONTENTS

	Page
1. VERIFICATION OF COMPLIANCE	6
2. TEST SUMMARY	7
2.1 TEST ITEMS AND RESULTS	7
2.2 ADDITIONS, DEVIATIONS, EXCLUSIONS FROM STANDARDS.....	7
2.3 RELATED SUBMITTAL(S) / GRANT(S)	7
2.4 PURPOSE OF THE TEST	7
2.5 TEST METHODOLOGY.....	7
2.6 TEST FACILITY.....	7
3. GENERAL INFORMATION.....	8
3.1 PRODUCT DESCRIPTION.....	8
3.2 ALTERNATIVE TYPE(S)/MODEL(S); ALSO COVERED BY THIS TEST REPORT.....	8
4. EUT MODIFICATIONS.....	8
5. SYSTEM TEST CONFIGURATION	9
5.1 JUSTIFICATION.....	9
5.2 PERIPHERAL EQUIPMENT	9
5.3 MODE OF OPERATION DURING THE TEST	10
5.4 CONFIGURATION OF TEST SYSTEM.....	12
5.5 ANTENNA REQUIREMENT	12
6. MEASUREMENT UNCERTAINTY	12
7. PRELIMINARY TEST	13
7.1 AC POWER LINE CONDUCTED EMISSIONS TESTS.....	13
7.2 GENERAL RADIATED EMISSIONS TESTS	13
8. MINIMUM 26 dB BANDWIDTH.....	14
8.1 OPERATING ENVIRONMENT	14
8.2 TEST SET-UP	14
8.3 TEST DATE.....	14
8.4 TEST DATA.....	14
9. 6 dB BANDWIDTH.....	15
9.1 OPERATING ENVIRONMENT	15
9.2 TEST SET-UP	15
9.3 TEST DATE.....	15
9.4 TEST DATA.....	15
10. MAXIMUM CONDUCTED OUTPUT POWER.....	16

10.1 OPERATING ENVIRONMENT	16
10.2 TEST SET-UP	16
10.3 TEST DATE	16
10.4 TEST DATA	16
11. POWER SPECTRUL DENSITY	17
11.1 OPERATING ENVIRONMENT	17
11.2 TEST SET-UP	17
11.3 TEST DATE	17
11.4 TEST DATA	17
12. FREQUENCY STABILITY WITH TEMPERATURE VARIATION.....	18
12.1 OPERATING ENVIRONMENT	18
12.2 TEST SET-UP	18
12.3 TEST DATE	18
12.4 TEST DATA FOR U-NII-1	19
12.5 TEST DATA FOR U-NII-3	20
12.6 TEST DATA FOR U-NII-4	21
13. FREQUENCY STABILITY WITH VOLTAGE VARIATION.....	22
13.1 OPERATING ENVIRONMENT	22
13.2 TEST SET-UP	22
13.3 TEST DATE	22
13.4 TEST DATA FOR U-NII-1	22
13.5 TEST DATA FOR U-NII-3	23
13.6 TEST DATA FOR U-NII-4	23
14. RADIATED SPURIOUS EMISSIONS	24
14.1 OPERATING ENVIRONMENT	24
14.2 TEST SET-UP	24
14.3 TEST DATE	24
14.4 TEST DATA FOR BELOW 30 MHz	24
14.5 TEST DATA FOR 30 MHz ~ 1 000 MHz	25
14.6 TEST DATA FOR ABOVE 1 GHz.....	26
14.6.1 Test data for Frequency U-NII-1	26
14.6.2 Test data for Frequency U-NII-3	27
14.6.3 Test data for Frequency U-NII-4	28
15. RADIATED RESTRICTED BAND EDGE MEASUREMENTS	29
15.1 OPERATING ENVIRONMENT	29
15.2 TEST SET-UP	29
15.3 TEST DATE	29

15.4 TEST DATA FOR FREQUENCY U-NII-1.....	30
15.5 TEST DATA FOR FREQUENCY U-NII-3.....	31
15.6 TEST DATA FOR FREQUENCY U-NII-4.....	33
15.7 U-NII-3 EMISSION LIMITS	34
15.7.1 Emission Mask Plots.....	34
15.8 U-NII-4 EMISSION LIMITS	35
16. CONDUCTED EMISSION TEST.....	36
16.1 OPERATING ENVIRONMENT	36
16.2 TEST SET-UP	36
16.3 TEST DATE	36
16.4 TEST DATA.....	37
17. LIST OF TEST EQUIPMENT	39

※ Please refer to the Annex section for All test plots

Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-255-RWD-020	May 30, 2025	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : SAM JIN CO., LTD
 Address : 81, Anyangcheonseo-ro, Manan-gu, Anyang-si, Gyeonggi-do, South Korea
 Contact Person : MyoungGyu Kim / Senior Research Engineer
 Telephone No. : +82-31-467-5912
 FCC ID : 2AF4SMV60001
 Model Name : MV60001
 Brand Name : -
 Serial Number : N/A
 Date : May 30, 2025

EQUIPMENT CLASS	Unlicensed National Information infrastructure(UNII)
E.U.T. DESCRIPTION	Audio Transceiver
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2020
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART E Section 15.407 789033 D02 General UNII Test Procedures New Rules v02r01
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. TEST SUMMARY

2.1 Test items and results

SECTION	TEST ITEMS	RESULTS
15.407(a)	26 dB Bandwidth	PASS
15.407(a)	Maximum Conducted Output Power	Met the Limit / PASS
15.407(a)	Power Spectral Density	Met the Limit / PASS
15.407(e)	6 dB Bandwidth	Met the Limit / PASS
15.407(g)	Frequency Stability	Met the Limit / PASS
15.407(b)	Undesirable Emissions	Met the Limit / PASS
15.205, 15.407(b)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Met the Limit / PASS
15.207	AC Conducted Emissions 150 kHz-30 MHz	Met the Limit / PASS

2.2 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

2.3 Related Submittal(s) / Grant(s)

Original submittal only

2.4 Purpose of the test

To determine whether the equipment under test fulfills the requirements of the regulation stated in FCC PART 15 SUBPART E Section 15.407

2.5 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10: 2020. Radiated testing was performed at a distance of 3 m from EUT to the antenna.

2.6 Test Facility

The Onetech Corp. has been designated to perform equipment testing in compliance with ISO/IEC 17025.

The Electromagnetic compatibility measurement facilities are located at 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea.

-. Site Filing:

VCCI (Voluntary Control Council for Interference) – Registration No. R-20122/ C-14617/ G-10666/ T-11842

ISED (Innovation, Science and Economic Development Canada) – Registration No. Site# 3736A-3

KOLAS (Korea Laboratory Accreditation Scheme) - Accreditation NO. KT085

FCC (Federal Communications Commission) - Accreditation No. KR0013

RRA (Radio Research Agency) – Designation No. KR0013

3. GENERAL INFORMATION

3.1 Product Description

The SAM JIN CO., LTD, Model MV60001 (referred to as the EUT in this report) is a Audio Transceiver. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Audio Transceiver		
Temperature Range	-5 °C ~ +40 °C		
OPERATING FREQUENCY	5 160 MHz ~ 5 245 MHz (U-NII-1)		
	5 730 MHz ~ 5 850 MHz (U-NII-3)		
	5 850 MHz ~ 5 870 MHz (U-NII-4)		
MODULATION TYPE	GFSK		
RF OUTPUT POWER	5 160 MHz ~ 5 245 MHz (U-NII-1)	9.30 dBm	
	5 730 MHz ~ 5 850 MHz (U-NII-3)	11.41 dBm	
	5 850 MHz ~ 5 870 MHz (U-NII-4)	13.25 dBm	
ANTENNA TYPE	PCB Antenna		
ANTENNA GAIN	5 160 MHz ~ 5 245 MHz (U-NII-1)	Antenna A	2.27 dBi
		Antenna B	2.08 dBi
	5 730 MHz ~ 5 850 MHz (U-NII-3)	Antenna A	2.13 dBi
		Antenna B	2.13 dBi
	5 850 MHz ~ 5 870 MHz (U-NII-4)	Antenna A	1.98 dBi
		Antenna B	1.99 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	16 MHz		

Note: This Device works a Diversity Antenna. So, We Tested only Antenna B.

3.2 Alternative type(s)/model(s); also covered by this test report.

-. None

4. EUT MODIFICATIONS

-. None

5. SYSTEM TEST CONFIGURATION

5.1 Justification

This device was configured for testing in a typical way as a normal customer is supposed to be used. During the test, the following components were installed inside of the EUT.

DEVICE TYPE	MANUFACTURER	MODEL/PART NUMBER	FCC ID
Main Board	SAM JIN CO., LTD	AUDIO Transceiver MODULE_REV1.0	N/A

5.2 Peripheral equipment

Defined as equipment needed for correct operation of the EUT, but not considered as tested:

Model	Manufacturer	Description	Connected to
MV60001	SAM JIN CO., LTD	Audio Transceiver (EUT)	-
PROBOOK 450 G7	HP	Notebook PC	EUT

5.3 Mode of operation during the test

For the testing, software used to control the EUT for staying in continuous transmitting mode is programmed.

-. Channel List (UNII-1)

Channel	Frequency[MHz]	Channel	Frequency[MHz]	Channel	Frequency[MHz]
1	5 160.00	8	5 195.00	15	5 230.00
2	5 165.00	9	5 200.00	16	5 235.00
3	5 170.00	10	5 205.00	17	5 240.00
4	5 175.00	11	5 210.00	18	5 245.00
5	5 180.00	12	5 215.00		
6	5 185.00	13	5 220.00	-	-
7	5 190.00	14	5 225.00	-	-

-. Channel List (UNII-3)

Channel	Frequency[MHz]	Channel	Frequency[MHz]	Channel	Frequency[MHz]
1	5 730.00	10	5 775.00	19	5 820.00
2	5 735.00	11	5 780.00	20	5 825.00
3	5 740.00	12	5 785.00	21	5 830.00
4	5 745.00	13	5 790.00	22	5 835.00
5	5 750.00	14	5 795.00	23	5 840.00
6	5 755.00	15	5 800.00	24	5 845.00
7	5 760.00	16	5 805.00	-	-
8	5 765.00	17	5 810.00	-	-
9	5 770.00	18	5 815.00	-	-

-. Channel List (UNII-4)

Channel	Frequency[MHz]	Channel	Frequency[MHz]	Channel	Frequency[MHz]
1	5 850.00	3	5 860.00	5	5 870.00
2	5 855.00	4	5 865.00	-	-

-. Frequency / Channel Operations

	Channel	Frequency
U-NII-1	1	5 160
	10	5 205
	18	5 245
U-NII-3	1	5 730
	12	5 785
	24	5 845
U-NII-4	1	5 850
	3	5 860
	5	5 870

-. Duty Cycle

Band	Tx On Time [ms]	Tx Off Time [ms]	Duty Cycle [%]	Correction Factor [dB]
U-NII-1	-	-	100.00	-
U-NII-3	-	-	100.00	-
U-NII-4	-	-	100.00	-

Note – Duty Cycle : $(\text{Tx On Time} / (\text{Tx On Time} + \text{Tx Off Time})) * 100$

Correction Factor : $10 * \text{Log}(1 / (\text{Duty Cycle} / 100))$

5.4 Configuration of Test System

- Line Conducted Test:** The EUT was tested in the Transmitting mode. All supporting equipment were connected to another LISN. Preliminary Power line Conducted Emission test was performed by using the procedure in ANSI C63.10: 2020 to determine the worse operating conditions.
- Radiated Emission Test:** Preliminary radiated emissions test were conducted using the procedure in ANSI C63.10: 2020 to determine the worse operating conditions. Final radiated emission tests were conducted at 3 meter Semi Anechoic Chamber.
- The turntable was rotated through 360 degrees and the EUT was tested by positioned three orthogonal planes to obtain the highest reading on the field strength meter. Once maximum reading was determined, the search antenna was raised and lowered in both vertical and horizontal polarization.

5.5 Antenna Requirement

For intentional device, according to section 15.203, 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.

Antenna Construction:

The antenna of the EUT is a PCB Antenna on the main board in the EUT, so no consideration of replacement by the user.

6. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2020.

All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence.

The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (dB)
Conducted Output Power	1.20
Conducted Spurious Emission < 26.5 GHz	1.26
Power Spectral Density	1.20
Line Conducted Disturbance (150 kHz ~ 30 MHz)	2.00
Radiated Disturbance (9 kHz ~ 30 MHz)	3.30
Radiated Disturbance (30 MHz ~ 1 GHz)	4.42
Radiated Disturbance (1 GHz ~ 18 GHz)	5.10
Radiated Disturbance (18 GHz ~ 40 GHz)	5.65

7. PRELIMINARY TEST

7.1 AC Power line Conducted Emissions Tests

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worse operating condition (Please check one only)
Transmitting Mode	X

7.2 General Radiated Emissions Tests

During Preliminary Test, the following operating mode was investigated.

Operation Mode	The Worse operating condition (Please check one only)
Transmitting Mode	X

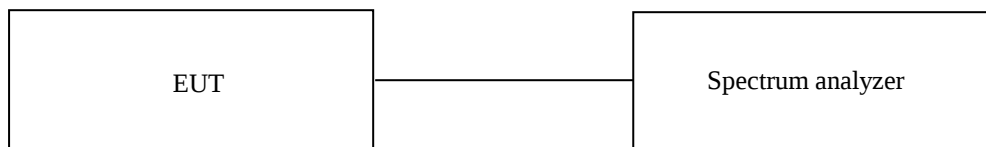
8. MIMIMUM 26 dB BANDWIDTH

8.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

8.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz, and peak detection was used. The 26 dB bandwidth is defined as the total spectrum over which the power is higher than the peak power minus 26 dB.



8.3 Test date

March 17, 2025 ~ April 02, 2025

8.4 Test data

-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	26 dB Bandwidth (MHz)
5 160 ~ 5 245	Low	5 160.00	4.55
	Middle	5 205.00	4.53
	High	5 245.00	4.54
5 730 ~ 5 845	Low	5 730.00	4.47
	Middle	5 785.00	4.51
	High	5 845.00	4.50
5 850 ~ 5 870	Low	5 850.00	4.50
	Middle	5 860.00	4.55
	High	5 870.00	4.56

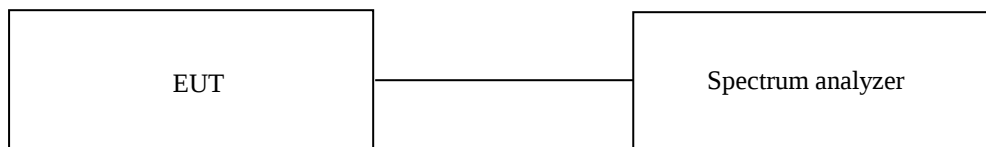
9. 6 dB BANDWIDTH

9.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

9.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz, and peak detection was used. The 6 dB bandwidth is defined as the total spectrum over which the power is higher than the peak power minus 6 dB.



9.3 Test date

March 17, 2025 ~ April 02, 2025

9.4 Test data

-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	6 dB Bandwidth (MHz)	LIMIT (MHz)	MARGIN (MHz)
5 730 ~ 5 845	Low	5 730.00	1.89	0.50	1.39
	Middle	5 785.00	1.92	0.50	1.42
	High	5 845.00	1.91	0.50	1.41
5 850 ~ 5 870	Low	5 850.00	1.92	0.50	1.42
	Middle	5 860.00	1.93	0.50	1.43
	High	5 870.00	1.95	0.50	1.45

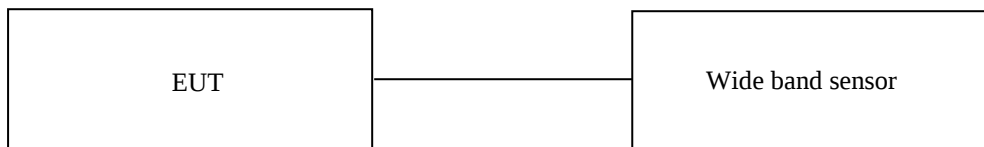
10. MAXIMUM CONDUCTED OUTPUT POWER

10.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

10.2 Test set-up

The maximum peak output power was measured with the wide band sensor connected to the antenna output of the EUT.
The Wide Band Sensor is measured when the EUT is transmitting at the appropriate center frequency its maximum power control level as described in Section E. 3.(KDB 789033 D02 General UNII Test Procedures New Rules v02r01).
Since this measurement is made only during the ON time of the transmitter, no duty cycle correction is required.



10.3 Test date

March 17, 2025 ~ April 02, 2025

10.4 Test data

-. Test Result : Pass
-. Duty Cycle : 100 %

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	ANTENNA GAIN (dBi)	EIRP (dBm)	LIMIT (dBm)	MARGIN (dB)
5 160 ~ 5 245	Low	5 160.00	9.30	2.27	-	24.00	14.70
	Middle	5 205.00	8.47	2.27	-	24.00	15.53
	High	5 245.00	8.61	2.27	-	24.00	15.39
5 730 ~ 5 845	Low	5 730.00	11.41	2.13	-	30.00	18.59
	Middle	5 785.00	10.71	2.13	-	30.00	19.29
	High	5 845.00	11.38	2.13	-	30.00	18.62
5 850 ~ 5 870	Low	5 850.00	11.26	1.99	13.25	30.00	16.75
	Middle	5 860.00	11.22	1.99	13.21	30.00	16.79
	High	5 870.00	11.09	1.99	13.08	30.00	16.92

Remark: UNII 4 Margin = Limit – EIRP (=Measured value + Antenna gain)

UNII 1,3 Margin = Limit – Measured value

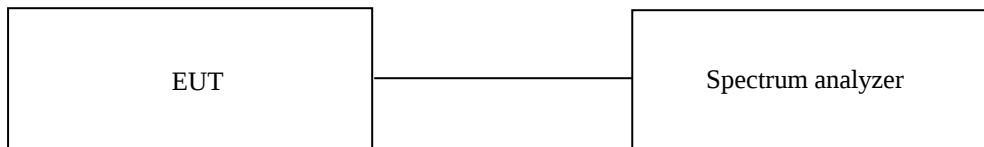
11. POWER SPECTRUL DENSITY

11.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

11.2 Test set-up

The antenna output of the EUT was connected to the spectrum analyzer. The resolution bandwidth is set to 1 MHz(500 kHz for UNII-3), the video bandwidth is set to 3 times the resolution bandwidth. The maximum level form the EUT in 1 MHz(500 kHz for UNII-3) bandwidth was measured with above condition.



11.3 Test Date

March 17, 2025 ~ April 02, 2025

11.4 Test data

-. Operating condition : Highest Output Power Transmitting Mode

-. Test Result : Pass

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VALUE (dBm)	ANTENNA GAIN (dBi)	TOTAL VALUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 160 ~ 5 245	Low	5 160.00	6.65	-	6.65	11.00	4.35
	Middle	5 205.00	5.81	-	5.81	11.00	5.19
	High	5 245.00	5.90	-	5.90	11.00	5.10
5 730 ~ 5 845	Low	5 730.00	6.06	-	6.06	30.00	23.94
	Middle	5 785.00	5.15	-	5.15	30.00	24.85
	High	5 845.00	5.97	-	5.97	30.00	24.03
5 850 ~ 5 870	Low	5 850.00	8.63	1.99	10.62	14.00	3.38
	Middle	5 860.00	8.49	1.99	10.48	14.00	3.52
	High	5 870.00	8.40	1.99	10.39	14.00	3.61

Remark: Margin = Limit – Total Value

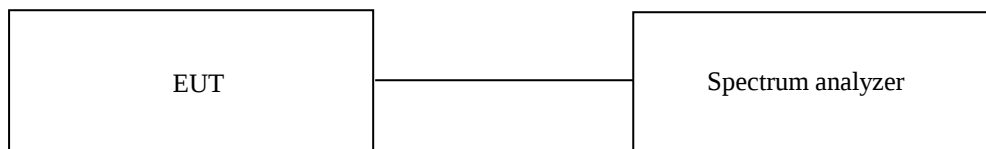
12. FREQUENCY STABILITY WITH TEMPERATURE VARIATION

12.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

12.2 Test set-up

Turn EUT off and set chamber temperature to -20 °C and then allow sufficient time (approximately 20 min to 30 min after chamber reach the assigned temperature) for EUT to stabilize. Turn on the EUT and measure the EUT operating frequency and then turn off the EUT after the measurement. The temperature in the chamber was raised 10 °C step from -20 °C to +60 °C. Repeat above method for frequency measurements every 10 °C step and then record all measured frequencies on each temperature step.



12.3 Test Date

March 17, 2025 ~ April 02, 2025

12.4 Test Data for U-NII-1

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-5	5 160 000 000	5 160 048 930	48 930
0		5 160 051 161	51 161
10		5 160 050 139	50 139
20		5 160 043 585	43 585
30		5 160 034 719	34 719
40		5 160 026 585	26 585
-5	5 205 000 000	5 205 049 356	49 356
0		5 205 051 598	51 598
10		5 205 050 592	50 592
20		5 205 043 959	43 959
30		5 205 035 019	35 019
40		5 205 026 781	26 781
-5	5 245 000 000	5 245 049 665	49 665
0		5 245 051 620	51 620
10		5 245 050 896	50 896
20		5 245 044 110	44 110
30		5 245 035 258	35 258
40		5 245 026 758	26 758

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

12.5 Test Data for U-NII-3

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-5	5 730 000 000	5 730 054 112	54 112
0		5 730 056 525	56 525
10		5 730 055 116	55 116
20		5 730 048 185	48 185
30		5 730 038 368	38 368
40		5 730 029 158	29 158
-5	5 785 000 000	5 785 054 873	54 873
0		5 785 057 340	57 340
10		5 785 056 072	56 072
20		5 785 048 999	48 999
30		5 785 038 999	38 999
40		5 785 029 692	29 692
-5	5 845 000 000	5 845 055 464	55 464
0		5 845 057 954	57 954
10		5 845 056 650	56 650
20		5 845 049 425	49 425
30		5 845 039 431	39 431
40		5 845 030 025	30 025

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

12.6 Test Data for U-NII-4

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
-5	5 850 000 000	5 850 055 558	55 558
0		5 850 057 988	57 988
10		5 850 056 641	56 641
20		5 850 049 493	49 493
30		5 850 039 429	39 429
40		5 850 030 062	30 062
-5	5 860 000 000	5 860 055 698	55 698
0		5 860 058 114	58 114
10		5 860 056 717	56 717
20		5 860 049 583	49 583
30		5 860 039 445	39 445
40		5 860 030 116	30 116
-5	5 870 000 000	5 870 055 817	55 817
0		5 870 058 188	58 188
10		5 870 056 811	56 811
20		5 870 049 637	49 637
30		5 870 039 546	39 546
40		5 870 030 127	30 127

Note : While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized.

Four measurements in total are made.(ANSI C63.10: 2020)

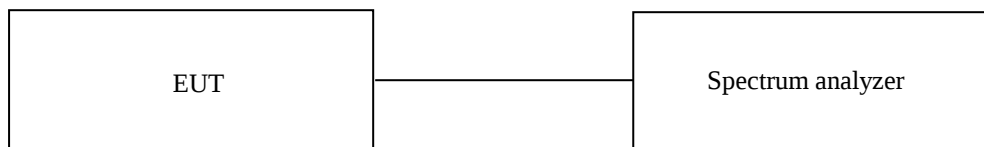
13. FREQUENCY STABILITY WITH VOLTAGE VARIATION

13.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

13.2 Test set-up

An external DC power supply was connected to the input of the EUT. The voltage of EUT set to 110.0 % of the nominal value and then was reduced to 90.0 % of nominal voltage. The output frequency was recorded at each step.



13.3 Test Date

March 17, 2025 ~ April 02, 2025

13.4 Test Data for U-NII-1

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5.00	5 160 000 000	5 160 039 278	39 278
4.25		5 160 039 121	39 121
5.75		5 160 039 408	39 408
5.00	5 205 000 000	5 205 039 529	39 529
4.25		5 205 039 537	39 537
5.75		5 205 039 720	39 720
5.00	5 245 000 000	5 245 039 656	39 656
4.25		5 245 039 615	39 615
5.75		5 245 039 996	39 996

13.5 Test Data for U-NII-3

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5.00	5 730 000 000	5 730 043 359	43 359
4.25		5 730 043 415	43 415
5.75		5 730 043 615	43 615
5.00	5 785 000 000	5 785 044 038	44 038
4.25		5 785 044 024	44 024
5.75		5 785 044 025	44 025
5.00	5 845 000 000	5 845 044 420	44 420
4.25		5 845 044 464	44 464
5.75		5 845 044 534	44 534

13.6 Test Data for U-NII-4

-. Result : Pass

Voltage (VDC)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (Hz)
5.00	5 850 000 000	5 850 044 411	44 411
4.25		5 850 044 449	44 449
5.75		5 850 044 523	44 523
5.00	5 860 000 000	5 860 044 422	44 422
4.25		5 860 044 618	44 618
5.75		5 860 044 591	44 591
5.00	5 870 000 000	5 870 044 567	44 567
4.25		5 870 044 613	44 613
5.75		5 870 044 603	44 603

14. RADIATED SPURIOUS EMISSIONS

14.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

14.2 Test set-up

The radiated emissions measurements were on the 3 m semi anechoic chamber. The EUT and other support equipment were placed on a non-conductive turntable above the ground plane. The interconnecting cables from outside test site were inserted into ferrite clamps at the point where the cables reach the turntable.

The frequency spectrum from 30 MHz to 40 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



14.3 Test Date

March 17, 2025 ~ April 02, 2025

14.4 Test data for Below 30 MHz

- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Emission from the EUT more than 20 dB below the limit in each frequency range.									

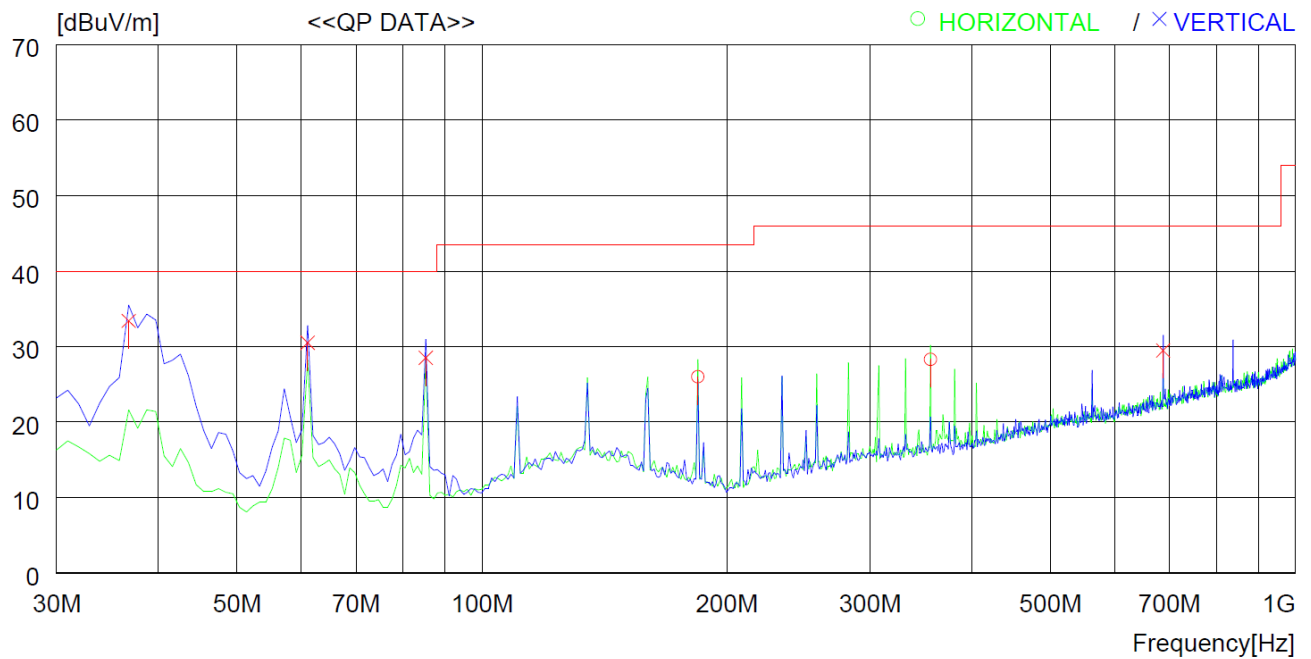
14.5 Test data for 30 MHz ~ 1 000 MHz

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

Result : PASSED

EUT : Audio Transceiver

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	184.230	39.8	16.5	1.8	32.1	26.0	43.5	17.5	200	272
2	355.920	37.9	20.2	2.4	32.2	28.3	46.0	17.7	100	359
----- Vertical -----										
3	36.790	46.2	18.5	0.8	32.1	33.4	40.0	6.6	100	67
4	61.040	49.2	12.4	1.0	32.1	30.5	40.0	9.5	100	0
5	85.290	45.8	13.6	1.2	32.1	28.5	40.0	11.5	100	0
6	687.655	33.2	25.4	3.4	32.5	29.5	46.0	16.5	100	76

14.6 Test data for Above 1 GHz

14.6.1 Test data for Frequency U-NII-1

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : 100 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel										
10 320.00	50.35	Peak	H	39.34	10.07	42.19	-	57.57	68.20	10.63
10 320.00	50.17	Peak	V	39.34	10.07	42.19	-	57.39	68.20	10.81
Test Data for Middle Channel										
10 410.00	51.47	Peak	H	39.53	10.71	42.19	-	59.52	68.20	8.68
10 410.00	50.84	Peak	V	39.52	10.71	42.19	-	58.88	68.20	9.32
Test Data for High Channel										
10 490.00	52.74	Peak	H	39.50	9.94	43.30	-	58.88	68.20	9.32
10 490.00	55.46	Peak	V	39.50	9.94	43.30	-	61.60	68.20	6.60

Remark: "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.6.2 Test data for Frequency U-NII-3

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : 100 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel										
11 460.00	51.83	Peak	H	39.90	10.36	43.16	-	58.93	74.00	15.07
11 460.00	39.62	Average	H	39.90	10.36	43.16	-	46.72	54.00	7.28
11 460.00	53.55	Peak	V	39.90	10.36	43.16	-	60.65	74.00	13.35
11 460.00	44.85	Average	V	39.90	10.36	43.16	-	51.95	54.00	2.05
Test Data for Middle Channel										
11 570.00	50.93	Peak	H	39.89	10.58	42.31	-	59.09	74.00	14.91
11 570.00	38.37	Average	H	39.89	10.58	42.31	-	46.53	54.00	7.47
11 570.00	49.94	Peak	V	39.94	10.58	42.31	-	58.15	74.00	15.85
11 570.00	37.86	Average	V	39.92	10.58	42.31	-	46.05	54.00	7.95
Test Data for High Channel										
11 690.00	49.91	Peak	H	39.43	10.38	42.24	-	57.48	74.00	16.52
11 690.00	37.86	Average	H	39.48	10.38	42.25	-	45.47	54.00	8.53
11 690.00	50.12	Peak	V	39.45	10.38	42.25	-	57.70	74.00	16.30
11 690.00	37.94	Average	V	39.44	10.38	42.24	-	45.52	54.00	8.48

Remark: "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

14.6.3 Test data for Frequency U-NII-4

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode for the emissions fall in restricted band,
1 MHz and RMS Detector for Average Mode for the emissions fall in restricted band
100 kHz for Peak Mode for the emissions outside restricted band
- Video bandwidth : 3 MHz for Peak and Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Duty Cycle : 100 %
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Test Data for Low Channel										
11 700.000	50.06	Peak	H	39.41	10.38	42.24	-	57.61	74.00	16.39
11 700.000	38.18	Average	H	39.40	10.38	42.24	-	45.72	54.00	8.28
11 700.000	50.06	Peak	V	39.38	10.38	42.23	-	57.59	74.00	16.41
11 700.000	37.96	Average	V	39.39	10.38	42.24	-	45.49	54.00	8.51
Test Data for Middle Channel										
11 720.000	50.48	Peak	H	39.32	10.38	42.23	-	57.95	74.00	16.05
11 720.000	38.02	Average	H	39.32	10.38	42.23	-	45.49	54.00	8.51
11 720.000	50.30	Peak	V	39.33	10.38	42.23	-	57.78	74.00	16.22
11 720.000	37.83	Average	V	39.30	10.38	42.22	-	45.29	54.00	8.71
Test Data for High Channel										
11 740.000	50.20	Peak	H	39.27	10.38	42.22	-	57.63	74.00	16.37
11 740.000	37.92	Average	H	39.24	10.38	42.22	-	45.32	54.00	8.68
11 740.000	50.28	Peak	V	39.26	10.38	42.22	-	57.70	74.00	16.30
11 740.000	38.44	Average	V	39.24	10.38	42.22	-	45.84	54.00	8.16

Remark: "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

15. RADIATED RESTRICTED BAND EDGE MEASUREMENTS

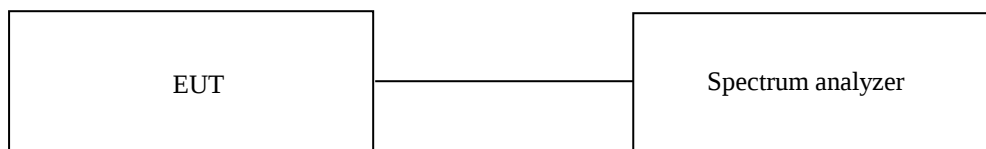
15.1 Operating environment

Temperature : 25 °C
Relative humidity : 49 % R.H.

15.2 Test set-up

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



15.3 Test Date

March 17, 2025 ~ April 02, 2025

15.4 Test data for Frequency U-NII-1

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- Video bandwidth : 3 MHz for Peak and Average Mode
- Measurement distance : 3 m
- Duty Cycle : 100 %
- Result : PASSED

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain	ATT (dB)	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
4 706.04	54.70	Peak	H	31.10	6.78	41.32	6.09	-	57.35	74.00	16.65
5 064.07	43.30	Average	H	31.83	7.21	41.25	6.09	-	47.18	54.00	6.82
4 543.85	53.91	Peak	V	30.89	6.72	41.36	6.09	-	56.25	74.00	17.75
5 064.73	44.66	Average	V	31.83	7.21	41.25	6.09	-	48.54	54.00	5.46

Tabulated test data for Restricted Band

Remark: “H”: Horizontal, “V”: Vertical

$$\text{Margin (dB)} = \text{Limits (dB}\mu\text{V/m)} - \text{Total Level (dB}\mu\text{V/m)}$$

$$\text{Total Level} = \text{Reading} + \text{Antenna Factor} + \text{Cable Loss} - \text{AMP Gain} + \text{ATT} + \text{Duty Factor}$$

15.5 Test data for Frequency U-NII-3

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- Video bandwidth : 3 MHz for Peak and Average Mode
- Measurement distance : 3 m
- Duty Cycle : 100 %
- Result : PASSED

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain	ATT (dB)	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel											
5 650.17	55.67	Peak	H	32.00	7.05	42.87	-	-	51.85	68.33	16.48
5 700.03	56.75	Peak	H	32.00	7.05	42.89	-	-	52.91	105.21	52.30
5 720.05	56.67	Peak	H	32.00	7.05	42.90	-	-	52.82	110.92	58.10
5 854.95	56.67	Peak	H	32.30	7.16	42.91	-	-	53.22	110.92	57.70
5 873.57	57.15	Peak	H	32.30	7.16	42.92	-	-	53.69	105.60	51.91
5 924.58	56.81	Peak	H	32.40	7.14	42.95	-	-	53.40	68.51	15.11
5 650.22	55.06	Peak	V	32.00	7.05	42.87	-	-	51.24	68.36	17.12
5 700.83	56.91	Peak	V	32.00	7.05	42.89	-	-	53.07	105.43	52.36
5 720.51	57.00	Peak	V	32.00	7.05	42.90	-	-	53.15	111.96	58.81
5 854.94	57.01	Peak	V	32.30	7.16	42.91	-	-	53.56	110.94	57.38
5 874.53	57.59	Peak	V	32.30	7.16	42.92	-	-	54.13	105.33	51.20
5 924.83	56.63	Peak	V	32.40	7.14	42.95	-	-	53.22	68.33	15.11

High Channel											
5 650.47	50.73	Peak	H	32.00	7.44	41.31	6.10	-	54.96	68.55	13.59
5 701.73	52.62	Peak	H	32.00	7.44	41.32	6.10	-	56.84	105.68	48.84
5 720.00	50.78	Peak	H	32.04	7.44	41.32	6.10	-	55.04	110.80	55.76
5 855.00	50.69	Peak	H	32.31	7.79	41.34	6.10	-	55.55	110.80	55.25
5 873.51	52.05	Peak	H	32.35	7.79	41.34	6.10	-	56.95	105.62	48.67
5 924.98	51.99	Peak	H	32.50	7.79	41.35	6.10	-	57.03	68.21	11.18
5 650.22	50.19	Peak	V	32.00	7.44	41.31	6.10	-	54.42	68.36	13.94
5 701.83	51.98	Peak	V	32.00	7.44	41.32	6.10	-	56.20	105.71	49.51
5 720.68	51.48	Peak	V	32.04	7.44	41.32	6.10	-	55.74	112.35	56.61
5 855.00	52.57	Peak	V	32.31	7.79	41.34	6.10	-	57.43	110.80	53.37
5 874.79	52.53	Peak	V	32.35	7.79	41.34	6.10	-	57.43	105.26	47.83
5 924.28	51.67	Peak	V	32.50	7.79	41.35	6.10	-	56.71	68.73	12.02

Tabulated test data for Restricted Band

Remark: "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Total Level (dBμV/m)

Total Level = Reading + Antenna Factor + Cable Loss – AMP Gain + ATT + Duty Factor

15.6 Test data for Frequency U-NII-4

- Resolution bandwidth : 1 MHz and Peak Detector for Peak Mode
1 MHz and RMS Detector for Average Mode
- Video bandwidth : 3 MHz for Peak and Average Mode
- Measurement distance : 3 m
- Duty Cycle : 100 %
- Result : PASSED

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	AMP Gain	ATT (dB)	Duty Factor (dB)	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel											
5 650.42	52.27	Peak	H	32.00	7.44	41.31	6.10	-	56.50	68.51	12.01
5 700.65	52.86	Peak	H	32.00	7.44	41.32	6.10	-	57.08	105.38	48.30
5 720.02	52.99	Peak	H	32.04	7.44	41.32	6.10	-	57.25	110.84	53.59
5 924.96	43.04	Average	H	32.50	7.79	41.35	6.10	-	48.08	68.23	20.15
5 650.02	52.24	Peak	V	32.00	7.44	41.31	6.10	-	56.47	68.22	11.75
5 701.21	54.03	Peak	V	32.00	7.44	41.32	6.10	-	58.25	105.53	47.28
5 720.24	54.01	Peak	V	32.04	7.44	41.32	6.10	-	58.27	111.35	53.08
5 924.99	42.84	Average	V	32.50	7.79	41.35	6.10	-	47.88	68.21	20.33
High Channel											
5 650.12	52.24	Peak	H	32.00	7.44	41.31	6.10	-	56.47	68.29	11.82
5 700.05	53.11	Peak	H	32.00	7.44	41.32	6.10	-	57.33	105.22	47.89
5 720.08	53.95	Peak	H	32.04	7.44	41.32	6.10	-	58.21	80.98	22.77
5 924.84	42.74	Average	H	32.50	7.79	41.35	6.10	-	47.78	68.32	20.54
5 651.27	53.39	Peak	V	32.00	7.44	41.31	6.10	-	57.62	69.14	11.52
5 700.09	53.25	Peak	V	32.00	7.44	41.32	6.10	-	57.47	105.22	47.75
5 720.06	52.69	Peak	V	32.04	7.44	41.32	6.10	-	56.95	110.93	53.98
5 924.96	42.71	Average	V	32.50	7.79	41.35	6.10	-	47.75	68.23	20.48

Tabulated test data for Restricted Band

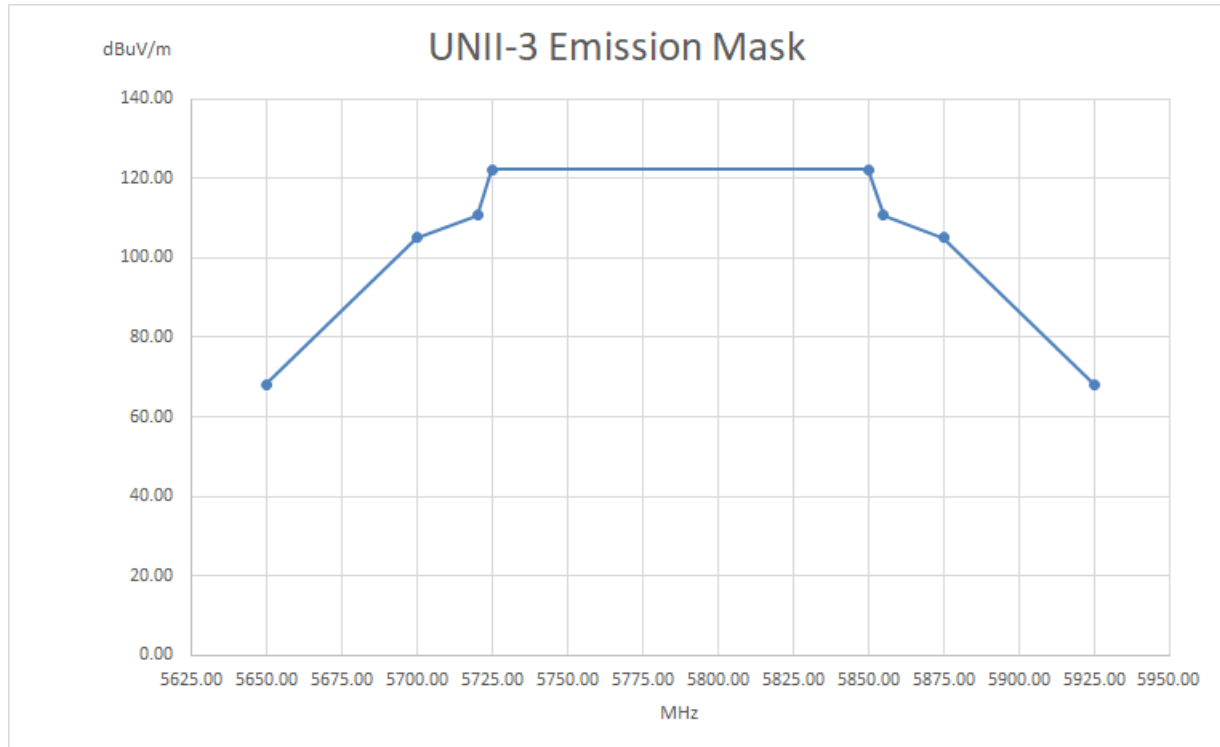
Remark: "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Total Level (dBμV/m)

Total Level = Reading + Antenna Factor + Cable Loss – AMP Gain + ATT + Duty Factor

15.7 U-NII-3 Emission Limits

15.7.1 Emission Mask Plots



Remark.

-. Title 47 → Part 15 → Subpart E—UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES

§ 15.407 General technical requirements.

(4) For transmitters operating in the 5.725-5.85 GHz band:

- (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

15.8 U-NII-4 Emission Limits

-. Title 47 → Part 15 → Subpart E—UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE DEVICES

§ 15.407 General technical requirements.

(5) For transmitters operating solely in the 5.850-5.895 GHz band

(ii) All emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz.

(iii) All emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

16. CONDUCTED EMISSION TEST

16.1 Operating environment

Temperature : 18.7 °C
Relative humidity : 45.8 % R.H.

16.2 Test set-up

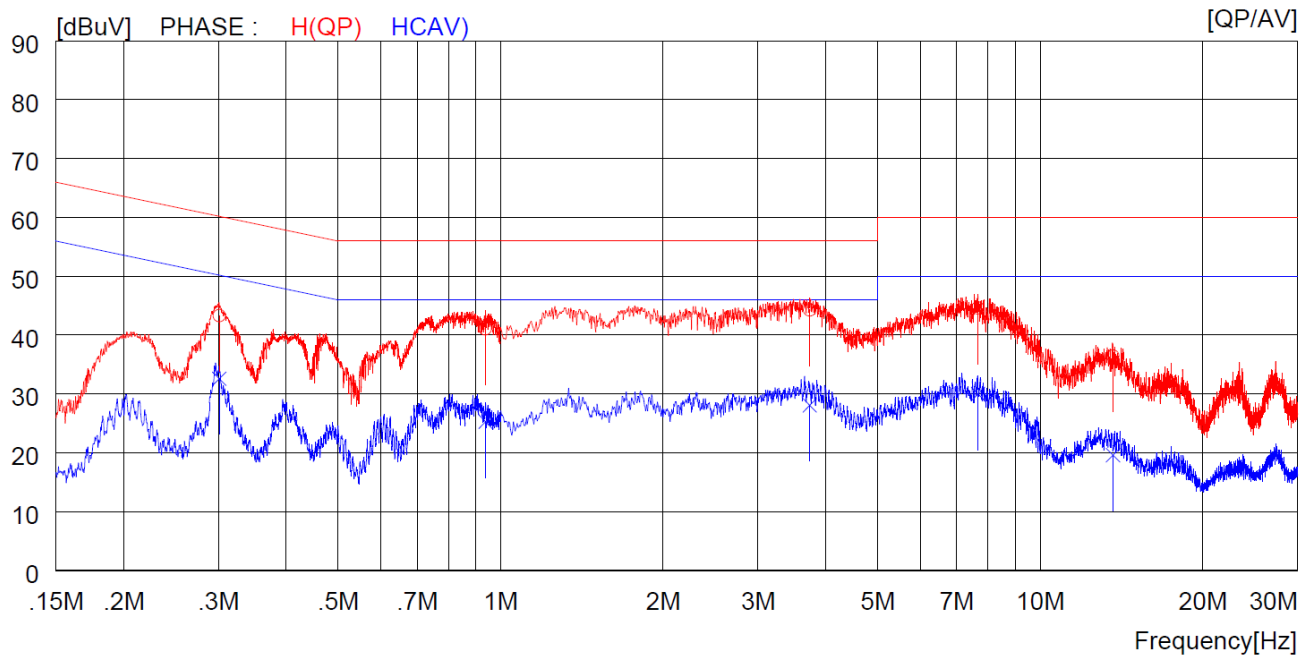
The EUT was placed on a wooden table, 0.8 m height above the floor. Power was fed to the EUT through a 50 Ω / 50 μ H + 5 Ω Artificial Mains Network (AMN). The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient.

16.3 Test Date

March 17, 2025 ~ April 02, 2025

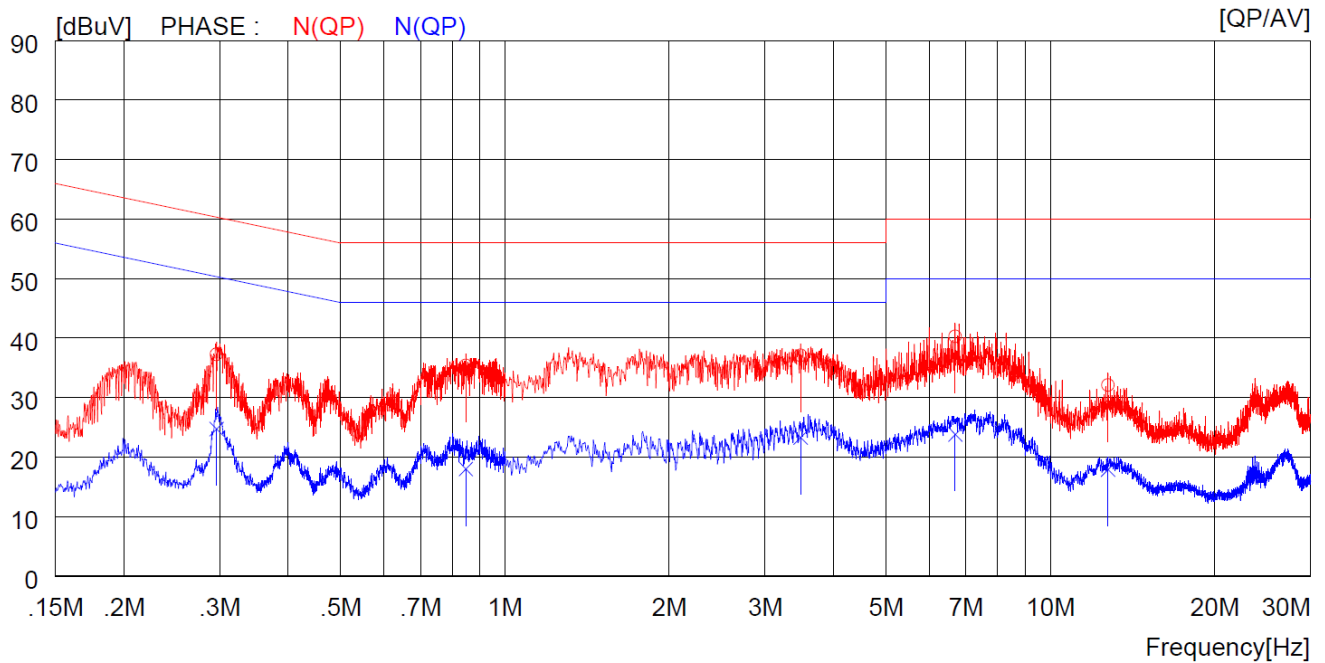
16.4 Test data

- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.30100	33.2	----	10.1	43.3	----	60.2	----	16.9	----	H (QP)
2	0.93700	31.0	----	10.1	41.1	----	56.0	----	14.9	----	H (QP)
3	3.74000	34.0	----	10.3	44.3	----	56.0	----	11.7	----	H (QP)
4	7.66500	34.2	----	10.4	44.6	----	60.0	----	15.4	----	H (QP)
5	13.64000	25.6	----	10.8	36.4	----	60.0	----	23.6	----	H (QP)
6	0.30100	----	22.5	10.1	----	32.6	----	50.2	----	17.6	HCAV)
7	0.93700	----	15.2	10.1	----	25.3	----	46.0	----	20.7	HCAV)
8	3.74000	----	17.8	10.3	----	28.1	----	46.0	----	17.9	HCAV)
9	7.66500	----	19.6	10.4	----	30.0	----	50.0	----	20.0	HCAV)
10	13.64000	----	8.8	10.8	----	19.6	----	50.0	----	30.4	HCAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.29600	27.2	----	10.1	37.3	----	60.4	----	23.1	----	N (QP)
2	0.84800	25.3	----	10.1	35.4	----	56.0	----	20.6	----	N (QP)
3	3.48400	26.8	----	10.3	37.1	----	56.0	----	18.9	----	N (QP)
4	6.69500	30.0	----	10.3	40.3	----	60.0	----	19.7	----	N (QP)
5	12.75000	21.3	----	10.8	32.1	----	60.0	----	27.9	----	N (QP)
6	0.29600	----	14.6	10.1	----	24.7	----	50.4	----	25.7	N (CAV)
7	0.84800	----	7.9	10.1	----	18.0	----	46.0	----	28.0	N (CAV)
8	3.48400	----	13.0	10.3	----	23.3	----	46.0	----	22.7	N (CAV)
9	6.69500	----	13.5	10.3	----	23.8	----	50.0	----	26.2	N (CAV)
10	12.75000	----	7.1	10.8	----	17.9	----	50.0	----	32.1	N (CAV)

Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

17. LIST OF TEST EQUIPMENT

Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
FSV30	Rohde & Schwarz	Signal Analyzer	101199	Jul. 04, 2024 (1Y)
FSV40-N	Rohde & Schwarz	Spectrum Analyzer	102176	Mar. 05, 2025 (1Y)
ESU	Rohde & Schwarz	TEST RECEIVER	100261	Mar. 05, 2025 (1Y)
310N	Sonoma Instrument	Pre-Amplifier	392756	Oct. 16, 2024 (1Y)
SCU18	Rohde & Schwarz	Pre-Amplifier	102266	Jul. 04, 2024 (1Y)
ELNA18	EXYNOD	RF Pre Amplifier	27594	Jan. 1, 2025 (1Y)
SCU40A	Rohde & Schwarz	Pre-Amplifier	100436	Jan. 15, 2025 (1Y)
DT2000-2t	Innco System	Turn Table	N/A	N/A
MA-4640-XPET	Innco System	Antenna Master	MA4640/652/43100318/P	N/A
CO3000	Innco System	Controller	1026/40960617/P	N/A
FMZB 1519-60D	Schwarzbeck	Active Magnetic Loop Antenna	00113	Jan. 07, 2025 (2Y)
HLP-2008	TDK	Hybrid Antenna	131316	Mar. 09, 2024 (2Y)
BBHA9120D	Schwarzbeck	Horn Antenna	9120D-1349	Jul. 02, 2024 (1Y)
BBHA9120D	Schwarzbeck	Horn Antenna	9120D-1366	Jun. 17, 2024 (1Y)
BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Jan. 04, 2025 (1Y)
F-40-10.0-RF	RLC Electronis	High Pass Filter	0427	Jan. 15, 2025 (1Y)
ESCI	Rohde & Schwarz	EMI TEST RECEIVER	101012	Sep. 26, 2024 (1Y)
NSLK8128	Schwarzbeck	AMN	8128216	Mar. 11 2025 (1Y)
ESH3-Z2	Rohde & Schwarz	PULSE LIMITER	100655	Mar. 11 2025 (1Y)