FCC and ISED Test Report

Apple Inc
Model: A3239

In accordance with FCC 47 CFR Part 15B and ICES-003 and ISED RSS-GEN

Prepared for: Apple Inc
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SIGNATURE			
AJ Lawson.			
NAME	**JOB TITLE**	**RESPONSIBLE FOR**	**ISSUE DATE**
Andrew Lawson	Chief Engineer, EMC	Authorised Signatory	17 September 2024

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD document control rules.

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC 47 CFR Part 15B and ICES-003 and ISED RSS-GEN. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Connor Lee	17 September 2024	

FCC Accreditation
492497/UK2010 Octagon House, Fareham Test Laboratory

ISED Accreditation
12669A/UK0003 Octagon House, Fareham Test Laboratory

EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with FCC 47 CFR Part 15B, ICES-003 and ISED RSS-GEN: 2023, Issue 7: 2020 and Issue 5 and A2 (2021-02) for the tests detailed in section 1.3.

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1 Report Summary

1.1 Report Modification Record

Alterations and additions to this report will be issued to the holders of each copy in the form of a complete document.

Issue	Description of Change	Date of Issue
1	First Issue	17-Sept-2024

Table 1

1.2 Introduction

Applicant	Apple Inc
Manufacturer	Apple Inc
EUT/Sample Identification	Refer to section 1.6
Test Specification/Issue/Date	FCC 47 CFR Part 15B, 2023 ICES-003, Issue 7: 2020 ISED RSS-GEN, Issue 5, A2 (2021-02)
Start of Test	07-August-2024
Finish of Test	11-August-2024
Name of Engineer(s)	Connor Lee
Related Document(s)	ANSI C63.4: 2014

1.3 Brief Summary of Results

A brief summary of the tests carried out in accordance with FCC 47 CFR Part 15B and ICES-003 and ISED RSS-GEN is shown below.

Section	Specification Clause	Test Description	Result	Comments/Base Standard
Configuration and Mode: AC Powered - Transmitter Idle				
2.1	15.107, 3.1 and 8.8	Conducted Disturbance at Mains Terminals	Pass	ANSI C63.4: 2014
2.2	15.109, 3.2 and 7.1	Radiated Disturbance	Pass	ANSI C63.4: 2014

Table 2

1.4 Product Information

1.4.1 Technical Description

The equipment under test (EUT) was a desktop computer.

1.4.2 EUT Port/Cable Identification

Port	Max Cable Length specified	Usage	Type	Screened
Configuration and Mode: AC Powered - Transmitter Idle				
AC Power Port	2 m	Power	2 Pin Power Cable	No
USB-C Port 1	1 m	Data	USB Type C	No
USB-C Port 2	1 m	Data	USB Type C	No
USB-C Port 3	Unterminated	Data	USB Type C	No
USB-C Port 4	Unterminated	Data	USB Type C	No
USB-C Port 5	Unterminated	Data	USB Type C	No
Ethernet Port	3 m	Data	Cat 6	No
HDMI Port	2 m	Data	HDMI	No
Audio Jack Port	Unterminated	Data	Audio Jack 3.5mm	No

Table 3

1.4.3 Test Configuration

Configuration	Description
AC Powered	The EUT was powered from a 120 V 60 Hz AC supply. A 3.5 mm audio jack port was terminated with a set of headphones. An ethernet port was terminated to an ethernet switch. A mouse was used to terminate a USB-C port. A keyboard was used to terminate a USB-C Port. Three USB-C ports were unterminated. A monitor was used to terminate a HDMI port.

Table 4

1.4.4 Modes of Operation

Mode	Description
Transmitter Idle	The EUT was powered with all internal transmitters disabled.

Table 5

1.5 Deviations from the Standard

No deviations from the applicable test standard were made during testing.

1.6 Identification of the EUT

The table below details identification of the EUT(s) that have been used to carry out the testing within this report.

Model: A3239			
Serial Number	Hardware Version	Software Version	Firmware
MM2KXLKQX4	REV1.0	24A42521k	WLAN: 23.30.16 Bluetooth: 22.1.80.569 Thread: 22.1.80.569
T900Y661JW	REV1.0	24B18a	WLAN: 23.10.876.0.41.51.158 Bluetooth: 22.1.129.1265 Thread: 22.1.129.1265

Table 6

1.7 EUT Modification Record

The table below details modifications made to the EUT during the test programme.

The modifications incorporated during each test are recorded on the appropriate test pages.

Modification State	Description of Modification still fitted to EUT	Modification Fitted By	Date Modification Fitted
Model: A3239, Serial Number: MM2KXLKQX4			
0	As supplied by the customer	Not Applicable	Not Applicable
Model: A3239, Serial Number: T900Y661JW			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 7

1.8 Test Location

TÜV SÜD conducted the following tests at our Octagon House Test Laboratory.

Test Name	Name of Engineer(s)	Accreditation
Configuration and Mode: AC Powered - Transmitter Idle		
Conducted Disturbance at Mains Terminals	Connor Lee	UKAS
Radiated Disturbance	Connor Lee	UKAS

Table 8

Office Address:

TÜV SÜD
Octagon House
Concorde Way
Fareham
Hampshire
PO15 5RL
United Kingdom

2 Test Details

2.1 Conducted Disturbance at Mains Terminals

2.1.1 Specification Reference

FCC 47 CFR Part 15B, ICES-003 and ISED RSS-GEN, Clause 15.107, 3.1 and 8.8

2.1.2 Equipment Under Test and Modification State

A3239, S/N: MM2KXLKQX4 - Modification State 0
A3239, S/N: T900Y661JW - Modification State 0

2.1.3 Date of Test

07-August-2024

2.1.4 Test Method

The EUT was setup according to ANSI C63.4, clause 5.2.

The EUT was placed on a non-conductive table 0.8 m above a reference ground plane. A vertical coupling plane was placed 0.4 m from the EUT boundary.

A Line Impedance Stabilisation Network (LISN) was directly bonded to the ground-plane. The EUT was located so that the distance between the boundary of the EUT and the closest surface of the LISN was 0.8 m.

Interconnecting cables that hanged closer than 0.4 m to the ground plane were folded back and forth in the centre forming a bundle 0.3 m to 0.4 m long.

Input and output cables were terminated with equipment or loads representative of real usage conditions.

The EUT was configured to give the highest level of emissions within reason of a typical installation as described by the manufacturer.

2.1.5 Example Calculation

Quasi-Peak level (dBµV) = Receiver level (dBµV) + Correction Factor (dB)
Margin (dB) = Quasi-Peak level (dBµV) - Limit (dBµV)

CISPR Average level (dBµV) = Receiver level (dBµV) + Correction Factor (dB)
Margin (dB) = CISPR Average level (dBµV) - Limit (dBµV)

2.1.6 Example Test Setup Diagram

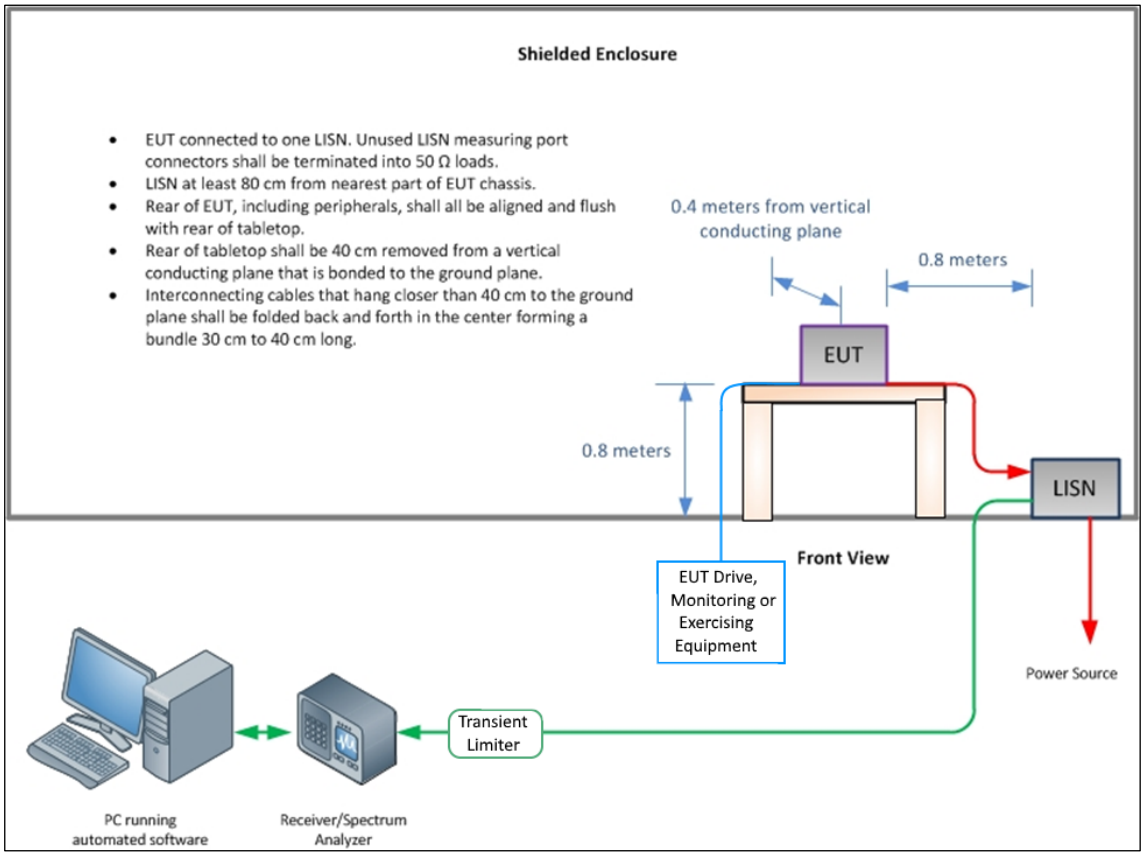

Figure 1 - Conducted Disturbance

2.1.7 Environmental Conditions

Ambient Temperature	21.3 °C
Relative Humidity	58.4 %
Atmospheric Pressure	1007.0 mbar

2.1.8 Specification Limits

Required Specification Limits - Class B			
Line Under Test	Frequency Range (MHz)	Quasi-Peak Test Limit (dBµV)	CISPR Average Test Limit (dBµV)
AC Power Port	0.15 to 0.5	66 to 56[(1)]	56 to 46[(1)]
	0.5 to 5	56	46
	5 to 30	60	50
Supplementary information: Note 1. Decreases with the logarithm of the frequency.			

Table 9

2.1.9 Test Results

Results for Configuration and Mode: AC Powered - Transmitter Idle.

This test was performed to the requirements of the Class B limits.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

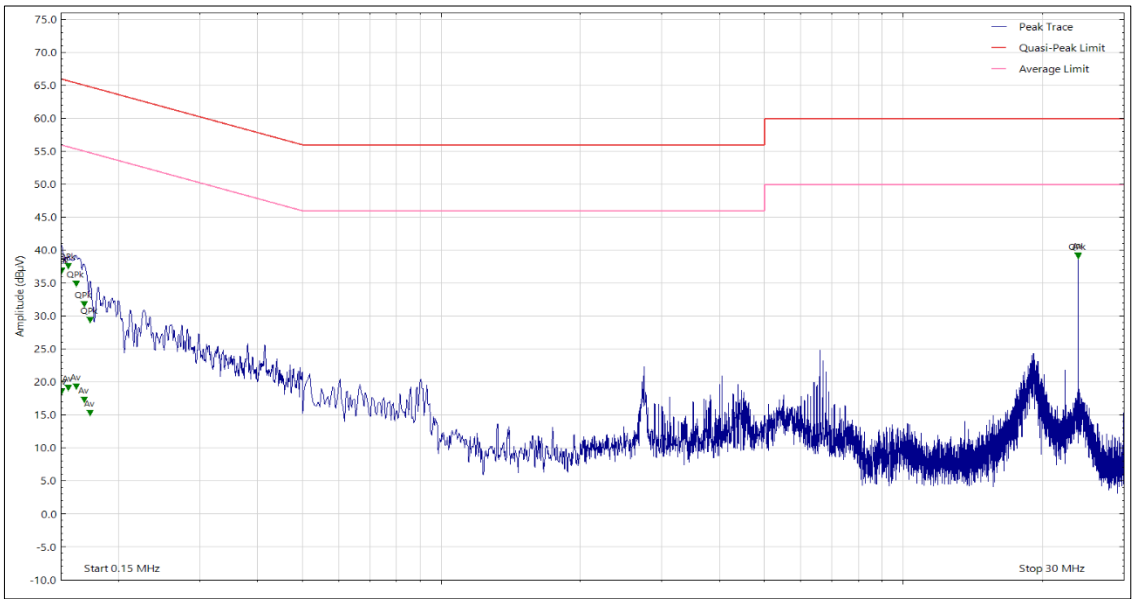

Figure 2 - Graphical Results - Live Line

Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Detector
0.151	36.21	65.90	-29.69	Q-Peak
0.151	17.89	55.90	-38.01	CISPR Avg
0.156	36.88	65.70	-28.82	Q-Peak
0.156	18.40	55.70	-37.30	CISPR Avg
0.162	34.17	65.40	-31.23	Q-Peak
0.162	18.65	55.40	-36.75	CISPR Avg
0.169	16.59	55.00	-38.41	CISPR Avg
0.169	31.07	65.00	-33.93	Q-Peak
0.174	28.68	64.80	-36.12	Q-Peak
0.174	14.62	54.80	-40.18	CISPR Avg
23.878	38.46	50.00	-11.54	CISPR Avg
23.878	38.35	60.00	-21.65	Q-Peak

Table 10

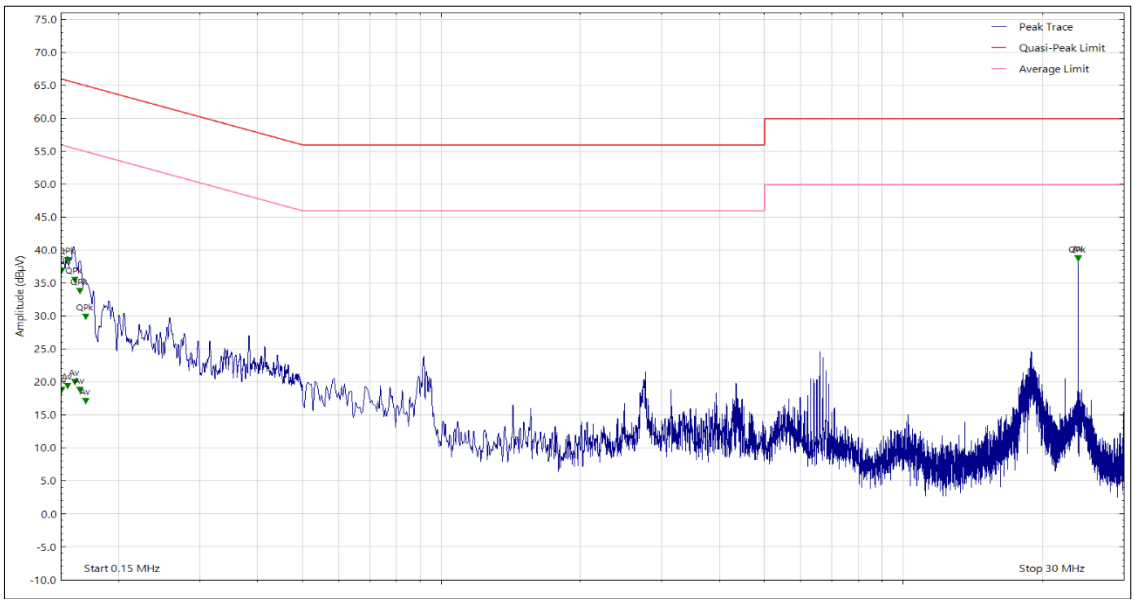

Figure 3 - Graphical Results - Neutral Line

Frequency (MHz)	Level (dBµV)	Limit (dBµV)	Margin (dB)	Detector
0.151	18.08	56.00	-37.92	CISPR Avg
0.151	36.18	66.00	-29.82	Q-Peak
0.155	18.70	55.70	-37.00	CISPR Avg
0.155	37.81	65.70	-27.89	Q-Peak
0.161	19.33	55.40	-36.07	CISPR Avg
0.161	34.76	65.40	-30.64	Q-Peak
0.165	18.07	55.20	-37.13	CISPR Avg
0.165	33.06	65.20	-32.14	Q-Peak
0.170	16.37	55.00	-38.63	CISPR Avg
0.170	29.22	65.00	-35.78	Q-Peak
23.879	37.97	60.00	-22.03	Q-Peak
23.879	38.08	50.00	-11.92	CISPR Avg

Table 11

2.1.10 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 12.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Transient Limiter	Hewlett Packard	11947A	15	12	24-Oct-2024
LISN (CISPR 16, Three Phase)	Rohde & Schwarz	ESH2-Z5	16	12	05-Sep-2024
LISN (CISPR 16, Single Phase)	Rohde & Schwarz	ESH3-Z5	1390	12	01-Feb-2025
Test Receiver	Rohde & Schwarz	ESU40	3506	12	17-Apr-2025
Termination (50ohm)	JFW	50T-054	3952	12	20-Mar-2025
Emissions Software	TUV SUD	EmX V3.2.0	5125	-	Software
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5604	12	22-Nov-2024
Cable (N-Type to N-Type, 2 m)	Junkosha	MWX221-02000AMSAMS/B	5726	6	17-Aug-2024
Cable (N-Type to N-Type, 8 m)	Junkosha	MWX221-08000NMSNMS/B	6321	12	04-Feb-2025

Table 12

2.2 Radiated Disturbance

2.2.1 Specification Reference

FCC 47 CFR Part 15B, ICES-003 and ISED RSS-GEN, Clause 15.109, 3.2 and 7.1

2.2.2 Equipment Under Test and Modification State

A3239, S/N: T900Y661JW - Modification State 0

2.2.3 Date of Test

11-August-2024

2.2.4 Test Method

The EUT was set up on a non-conductive table 0.8 m above a reference ground plane within a semi-anechoic chamber on a remotely controlled turntable.

A pre-scan of the EUT emissions profile using a peak detector was made at a 3 m antenna distance whilst varying the antenna-to-EUT azimuth and polarisation.

For an EUT which could reasonable be used in multiple planes, pre-scans were performed with the EUT orientated in X, Y and Z planes with reference to the ground plane.

Using a list of the highest emissions detected during the pre-scan along with their bearing and associated antenna polarisation, the EUT was then formally measured using a Quasi-Peak, Peak or CISPR Average detector as appropriate.

The readings were maximised by adjusting the antenna height, polarisation and turntable azimuth, in accordance with the specification.

2.2.5 Example Calculation

Below 1 GHz:

Quasi-Peak level (dBµV/m) = Receiver level (dBµV) + Correction Factor (dB/m)
Margin (dB) = Quasi-Peak level (dBµV/m) - Limit (dBµV/m)

Above 1 GHz:

CISPR Average level (dBµV/m) = Receiver level (dBµV) + Correction Factor (dB/m)
Margin (dB) = CISPR Average level (dBµV/m) - Limit (dBµV/m)

Peak level (dBµV/m) = Receiver level (dBµV) + Correction Factor (dB/m)
Margin (dB) = Peak level (dBµV/m) - Limit (dBµV/m)

2.2.6 Example Test Setup Diagram

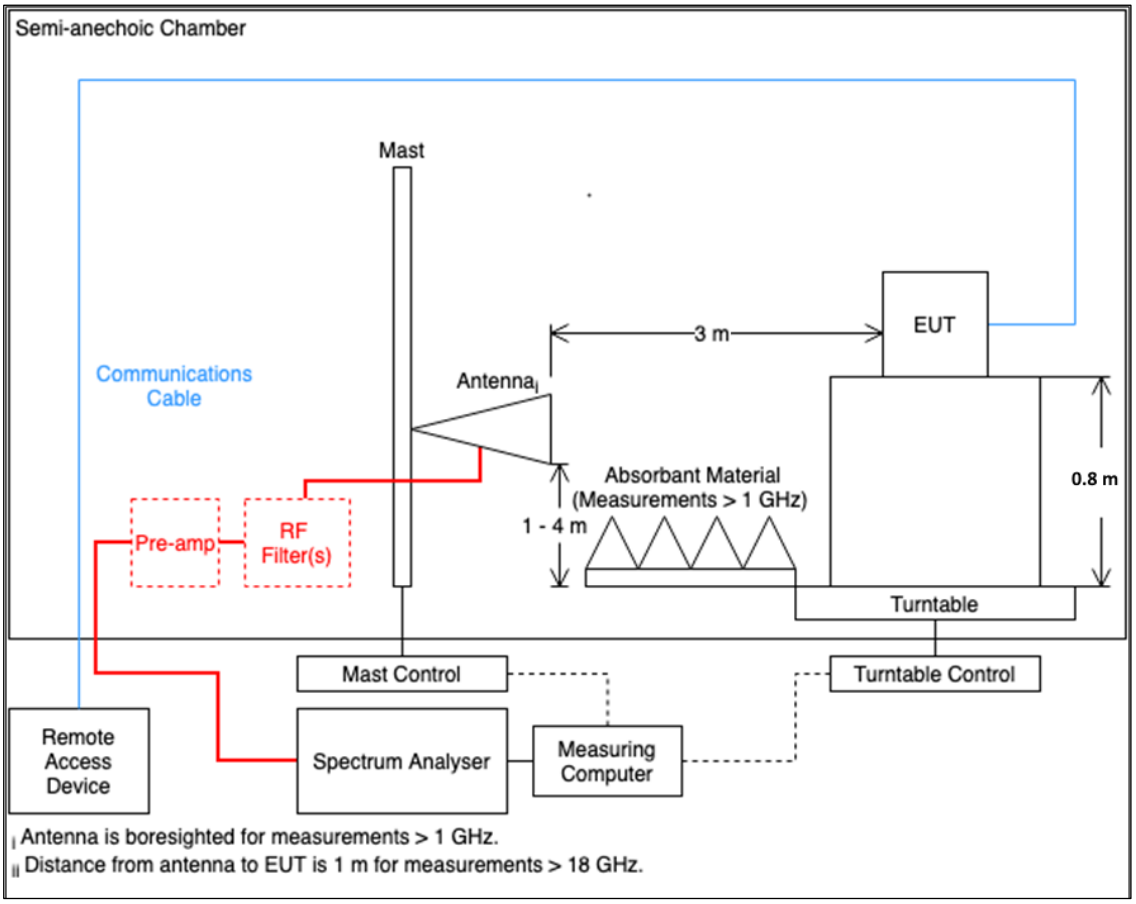

Figure 4 - Radiated Disturbance Example Test Setup

2.2.7 Environmental Conditions

Ambient Temperature	19.8 °C
Relative Humidity	57.3 %
Atmospheric Pressure	1008.0 mbar

2.2.8 Specification Limits

Required Specification Limits, Field Strength - Class B Test Limit at a 3 m Measurement Distance		
Frequency Range (MHz)	Test Limit (µV/m)	Test Limit (dBµV/m)
30 to 88	100	40.0
88 to 216	150	43.5
216 to 960	200	46.0
Above 960	500	54.0
Supplementary information: Note 1. A Quasi-peak detector is to be used for measurements below 1 GHz. Note 2. A CISPR Average detector is to be used for measurements above 1 GHz. Note 3. The Peak test limit above 1 GHz is 20 dB higher than the CISPR Average test limit.		

Table 13

2.2.9 Test Results

Results for Configuration and Mode: AC Powered - Transmitter Idle.

This test was performed to the requirements of the Class B limits.

Performance assessment of the EUT made during this test: Pass.

Detailed results are shown below.

Highest frequency generated or used within the EUT: 6 GHz
Which necessitates an upper frequency test limit of: 40 GHz

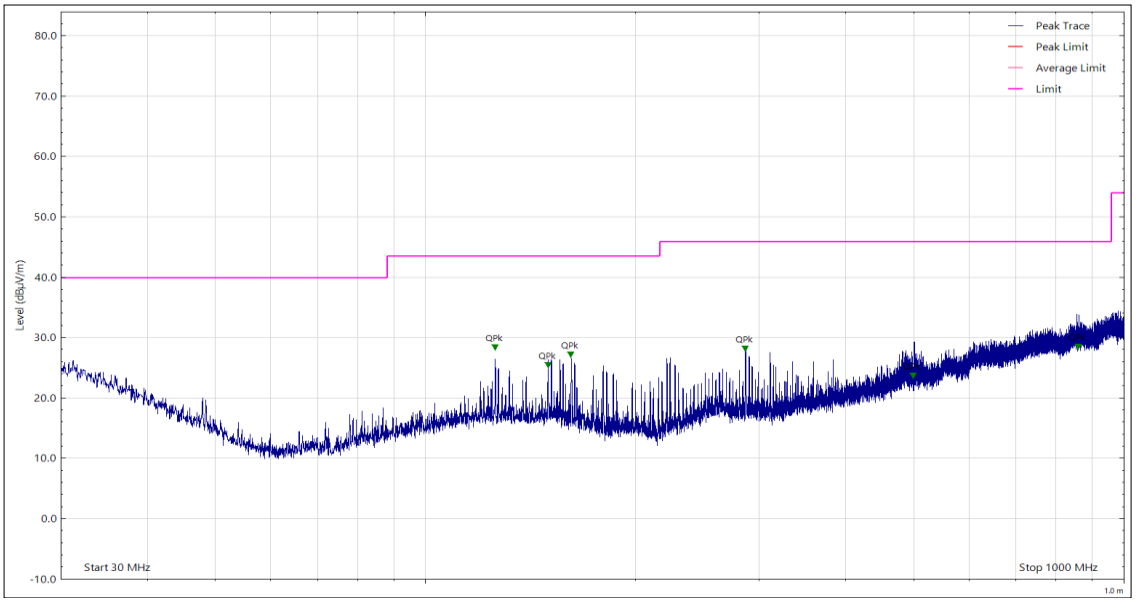

Figure 5 - 30 MHz to 1 GHz, Horizontal

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
125.683	27.65	43.50	-15.85	Q-Peak	231	167	Horizontal
149.633	24.66	43.50	-18.84	Q-Peak	236	218	Horizontal
161.489	26.39	43.50	-17.11	Q-Peak	255	112	Horizontal
287.230	27.34	46.00	-18.66	Q-Peak	289	100	Horizontal
499.851	22.93	46.00	-23.07	Q-Peak	328	100	Horizontal
861.506	27.74	46.00	-18.26	Q-Peak	252	100	Horizontal

Table 14

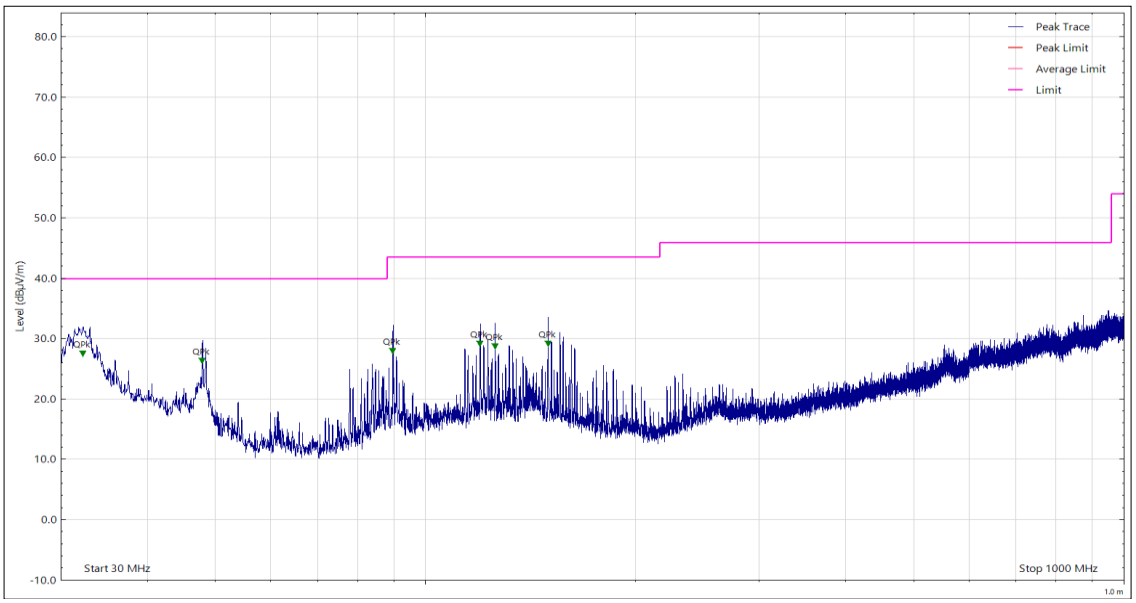

Figure 6 - 30 MHz to 1 GHz, Vertical

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
32.275	26.76	40.00	-13.24	Q-Peak	267	107	Vertical
47.843	25.50	40.00	-14.50	Q-Peak	30	100	Vertical
89.757	27.14	43.50	-16.36	Q-Peak	250	103	Vertical
119.635	28.38	43.50	-15.12	Q-Peak	147	100	Vertical
125.623	27.90	43.50	-15.60	Q-Peak	84	110	Vertical
149.693	28.41	43.50	-15.09	Q-Peak	273	100	Vertical

Table 15

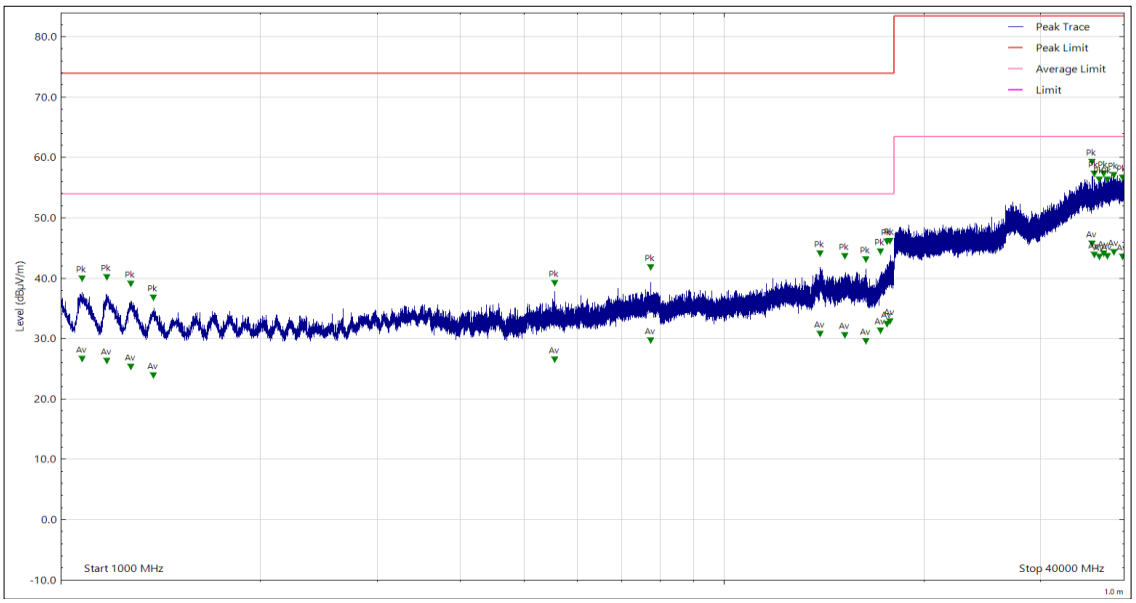

Figure 7 - 1 GHz to 40 GHz, Horizontal

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1076.000	25.82	54.00	-28.18	CISPR Avg	201	317	Horizontal
1076.000	39.15	74.00	-34.85	Peak	201	317	Horizontal
1172.500	39.38	74.00	-34.62	Peak	358	100	Horizontal
1172.500	25.59	54.00	-28.41	CISPR Avg	358	100	Horizontal
1274.500	38.35	74.00	-35.65	Peak	74	390	Horizontal
1274.500	24.55	54.00	-29.45	CISPR Avg	74	390	Horizontal
1381.000	23.14	54.00	-30.86	CISPR Avg	341	338	Horizontal
1381.000	36.04	74.00	-37.96	Peak	341	338	Horizontal
5553.500	25.80	54.00	-28.20	CISPR Avg	66	340	Horizontal
5553.500	38.38	74.00	-35.62	Peak	66	340	Horizontal
7754.000	41.04	74.00	-32.96	Peak	349	105	Horizontal
7754.000	28.89	54.00	-25.11	CISPR Avg	349	105	Horizontal
13941.000	43.37	74.00	-30.63	Peak	332	100	Horizontal
13941.000	29.99	54.00	-24.01	CISPR Avg	332	100	Horizontal
15206.500	29.79	54.00	-24.21	CISPR Avg	51	270	Horizontal
15206.500	42.94	74.00	-31.06	Peak	51	270	Horizontal
16340.500	28.82	54.00	-25.18	CISPR Avg	259	100	Horizontal
16340.500	42.36	74.00	-31.64	Peak	259	100	Horizontal
17219.500	30.61	54.00	-23.39	CISPR Avg	22	347	Horizontal
17219.500	43.67	74.00	-30.33	Peak	22	347	Horizontal
17572.500	45.34	74.00	-28.66	Peak	104	100	Horizontal
17572.500	31.68	54.00	-22.32	CISPR Avg	104	100	Horizontal
17788.500	45.42	74.00	-28.58	Peak	349	100	Horizontal

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
17788.500	32.06	54.00	-21.94	CISPR Avg	349	100	Horizontal
35856.501	58.51	83.50	-24.99	Peak	333	100	Horizontal
35856.501	44.94	63.50	-18.56	CISPR Avg	333	100	Horizontal
36157.965	43.15	63.50	-20.35	CISPR Avg	195	100	Horizontal
36157.965	56.52	83.50	-26.98	Peak	195	100	Horizontal
36711.998	55.61	83.50	-27.89	Peak	148	100	Horizontal
36711.998	42.84	63.50	-20.66	CISPR Avg	148	100	Horizontal
37349.989	56.53	83.50	-26.97	Peak	358	100	Horizontal
37349.989	43.33	63.50	-20.17	CISPR Avg	358	100	Horizontal
37773.502	55.54	83.50	-27.96	Peak	125	100	Horizontal
37773.502	42.92	63.50	-20.58	CISPR Avg	125	100	Horizontal
38627.504	56.36	83.50	-27.14	Peak	187	100	Horizontal
38627.504	43.51	63.50	-19.99	CISPR Avg	187	100	Horizontal
39799.500	55.84	83.50	-27.66	Peak	23	100	Horizontal
39799.500	42.74	63.50	-20.76	CISPR Avg	23	100	Horizontal

Table 16

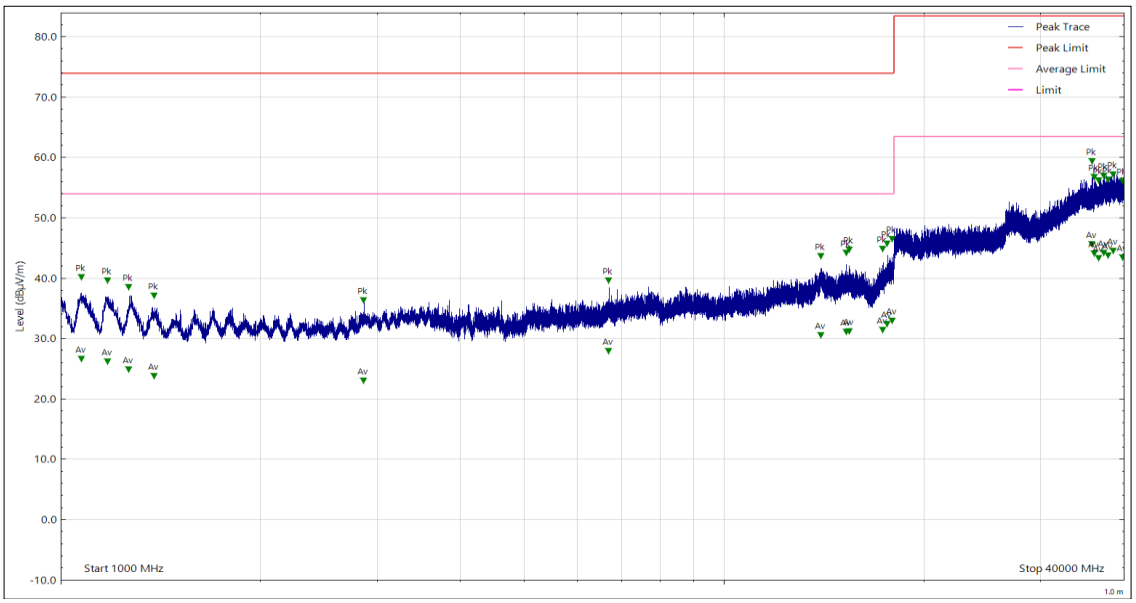

Figure 8 - 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1073.500	39.45	74.00	-34.55	Peak	260	108	Vertical
1073.500	25.85	54.00	-28.15	CISPR Avg	260	108	Vertical
1177.000	25.41	54.00	-28.59	CISPR Avg	345	310	Vertical
1177.000	38.81	74.00	-35.19	Peak	345	310	Vertical
1266.500	37.78	74.00	-36.22	Peak	207	100	Vertical
1266.500	24.16	54.00	-29.84	CISPR Avg	207	100	Vertical
1383.500	36.33	74.00	-37.67	Peak	350	390	Vertical
1383.500	23.03	54.00	-30.97	CISPR Avg	350	390	Vertical
2863.500	35.56	74.00	-38.44	Peak	203	165	Vertical
2863.500	22.27	54.00	-31.73	CISPR Avg	203	165	Vertical
6690.500	27.14	54.00	-26.86	CISPR Avg	179	100	Vertical
6690.500	38.81	74.00	-35.19	Peak	179	100	Vertical
13996.500	42.86	74.00	-31.14	Peak	258	390	Vertical
13996.500	29.83	54.00	-24.17	CISPR Avg	258	390	Vertical
15267.000	43.48	74.00	-30.52	Peak	106	100	Vertical
15267.000	30.29	54.00	-23.71	CISPR Avg	106	100	Vertical
15416.000	30.46	54.00	-23.54	CISPR Avg	107	100	Vertical
15416.000	43.95	74.00	-30.05	Peak	107	100	Vertical
17343.500	30.64	54.00	-23.36	CISPR Avg	41	390	Vertical
17343.500	44.08	74.00	-29.92	Peak	41	390	Vertical
17616.000	31.63	54.00	-22.37	CISPR Avg	350	100	Vertical
17616.000	45.00	74.00	-29.00	Peak	350	100	Vertical
17889.500	45.76	74.00	-28.24	Peak	144	175	Vertical

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
17889.500	32.18	54.00	-21.82	CISPR Avg	144	175	Vertical
35846.002	44.88	63.50	-18.62	CISPR Avg	317	100	Vertical
35846.002	58.59	83.50	-24.91	Peak	317	100	Vertical
36158.503	56.03	83.50	-27.47	Peak	54	100	Vertical
36158.503	43.32	63.50	-20.18	CISPR Avg	54	100	Vertical
36675.050	55.42	83.50	-28.08	Peak	142	100	Vertical
36675.050	42.54	63.50	-20.96	CISPR Avg	142	100	Vertical
37307.740	43.40	63.50	-20.10	CISPR Avg	81	100	Vertical
37307.740	56.20	83.50	-27.30	Peak	81	100	Vertical
37872.503	42.98	63.50	-20.52	CISPR Avg	104	100	Vertical
37872.503	55.58	83.50	-27.92	Peak	104	100	Vertical
38533.467	43.75	63.50	-19.75	CISPR Avg	315	100	Vertical
38533.467	56.44	83.50	-27.06	Peak	315	100	Vertical
39840.471	55.39	83.50	-28.11	Peak	350	100	Vertical
39840.471	42.73	63.50	-20.77	CISPR Avg	350	100	Vertical

Table 17

2.2.10 Test Location and Test Equipment Used

This test was carried out in EMC Chamber 12.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Antenna (DRG, 18 GHz to 40 GHz)	Link Microtek Ltd	AM180HA-K-TU2	230	24	23-Sep-2024
Pre-Amplifier (18 GHz to 40 GHz)	Narda	NARDA DB02-0447	237	12	04-Dec-2024
Pre-Amplifier (8 GHz to 18 GHz)	Phase One	PS04-0086	1533	12	26-Feb-2025
Test Receiver	Rohde & Schwarz	ESU40	3506	12	17-Apr-2025
Antenna (DRG 1-10.5GHz)	Schwarzbeck	BBHA9120B	4848	12	14-Jul-2025
Emissions Software	TUV SUD	EmX V3.2.0	5125	-	Software
Antenna (DRG, 7.5 GHz to 18 GHz)	Schwarzbeck	HWRD750	5348	12	15-Oct-2024
Pre-Amplifier (1 GHz to 18 GHz)	Schwarzbeck	BBV 9718 C	5350	12	01-Dec-2024
Cable (K-Type to K-Type, 2 m)	Junkosha	MWX241-02000KMSKMS/A	5524	12	29-Oct-2024
Thermo-Hygro-Barometer	PCE Instruments	PCE-THB 40	5604	12	22-Nov-2024
Turntable & Mast Controller	Maturo Gmbh	NCD/498/2799.01	5612	-	TU
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	5613	-	TU
Antenna with Attenuator (Bi-Log, 30 MHz to 1 GHz)	Teseq	CBL6111D	5615	24	15-Mar-2025
3m Semi-Anechoic Chamber	MVG	EMC Chamber 12	5621	36	07-Aug-2026
Cable (N-Type to N-Type, 2 m)	Junkosha	MWX221-02000AMSAMS/B	5726	6	17-Aug-2024
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	20-May-2025
Cable (N-Type to N-Type, 8 m)	Junkosha	MWX221-08000NMSNMS/B	6321	12	04-Feb-2025

Table 18

TU - Traceability Unscheduled

3 Incident Reports

No incidents reports were raised.

4 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Conducted Disturbance at Mains Terminals	150 kHz to 30 MHz, LISN, ±3.7 dB
Radiated Disturbance	30 MHz to 1 GHz, Bilog Antenna, SAC, ± 5.2 dB 1 GHz to 6 GHz, Horn Antenna, SAC, ± 5.1 dB 6 GHz to 18 GHz, Horn Antenna, SAC, ± 4.9 dB 18 GHz to 40 GHz, Horn Antenna, SAC, ± 6.3 dB

Table 19

Worst case error for both Time and Frequency measurement 12 parts in 10^6.

Measurement Uncertainty Decision Rule

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.