FCC Test Report

Raspberry Pi Ltd
7” Display Screen, Model: Raspberry Pi Touch Display

In accordance with FCC 47 CFR Part 15B

Prepared for: Raspberry Pi Ltd
Maurice Wilkes Building
St John’s Innovation Park
Cowley Road
Cambridge
CB4 0DS
UNITED KINGDOM

Add value.
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FCC ID: Not Applicable

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Document 75956732-02 Issue 01

SIGNATURE			
A.J. Lawson			
NAME	**JOB TITLE**	**RESPONSIBLE FOR**	**ISSUE DATE**
Andrew Lawson	Chief Engineer, EMC	Authorised Signatory	15 May 2023

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. The sample tested was found to comply with the requirements defined in the applied rules.

RESPONSIBLE FOR	NAME	DATE	SIGNATURE
Testing	Matthew Dawkins	15 May 2023	

FCC Accreditation
90987 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: 2021 for the tests detailed in section 1.3.

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Contents

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	15-May-2023

Table 1

1.2 Introduction

Applicant	Raspberry Pi Ltd
Manufacturer	Raspberry Pi Ltd
Model Number(s)	Raspberry Pi Touch Display
Serial Number(s)	Not Serialised (FAR-702760-004)
Hardware Version(s)	2.0
Software Version(s)	1.0
Number of Samples Tested	1
Test Specification/Issue/Date	FCC 47 CFR Part 15B: 2021
Order Number Date	PO-6424 06-October-2022
Date of Receipt of EUT	05-January-2023
Start of Test	11-January-2023
Finish of Test	11-January-2023
Name of Engineer(s)	Matthew Dawkins
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 is shown below.

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

Table 2

1.4 Declaration of Build Status

MAIN EUT	
MANUFACTURING DESCRIPTION	7" Display Screen
MANUFACTURER	Raspberry Pi Ltd
MODEL	Raspberry Pi Touch Display
PART NUMBER	Not Applicable
HARDWARE VERSION	2.0
SOFTWARE VERSION	1.0
PSU VOLTAGE/FREQUENCY/CURRENT	13 A mains in 5.1 V DC out @ 3 A (supplied as accessory)
HIGHEST INTERNALLY GENERATED FREQUENCY	450 MHz
FCC ID (if applicable)	Not Applicable
INDUSTRY CANADA ID (if applicable)	Not Applicable
TECHNICAL DESCRIPTION (a brief technical description of the intended use and operation)	7″ touchscreen display for use with a Raspberry Pi and lets you create interactive projects such as tablets, entertainment systems, and information dashboards
COUNTRY OF ORIGIN	UK
SEPARATE BATTERY/POWER SUPPLY (if applicable)	
MODULES (if applicable)	
ANCILLARIES (if applicable)	

I hereby declare that the information supplied is correct and complete.

DocuSigned by:
6412FB9CB8B3427...

25 April 2023 | 19:21 BST

James Adams

Chief Operating Officer

Raspberry Pi Ltd

1.5 Product Information

1.5.1 Technical Description

The Equipment under test (EUT) was a Raspberry Pi Ltd 7" Touch Display Screen, Model Raspberry Pi Touch Display.

The primary function of the EUT is as a 7″ touchscreen display for use with a Raspberry Pi and lets you create interactive projects such as tablets, entertainment systems, and information dashboards.

Figure 1 - General View

Figure 2 - Rear View

1.5.2 EUT Port/Cable Identification

Port	Max Cable Length specified	Usage	Type	Screened
AC Power Port	1.5 m	Power	DC supply from Raspberry Pi DC output. Raspberry Pi powered from AC to DC adapter with USB-C output.	Yes

Table 3

1.5.3 Test Configuration

Configuration	Description
AC Powered	The EUT was tested with a Raspberry Pi and a display drive board fitted to the rear side of the EUT. The EUT was powered from a 5 V DC output from a Raspberry Pi which was powered from an AC to DC adapter with a USB-C output. The EUT had a ribbon cable connection to a display drive board which was then connected to the Raspberry Pi.

Table 4

1.5.4 Modes of Operation

Mode	Description
Operating	The EUT was powered and running a command prompt script.

Table 5

1.6 Deviations from the Standard

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

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: Raspberry Pi Touch Display, Serial Number: Not Serialised (FAR-702760-004)			
0	As supplied by the customer	Not Applicable	Not Applicable

Table 6

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 - Operating		
Conducted Disturbance at Mains Terminals	Matthew Dawkins	UKAS
Radiated Disturbance	Matthew Dawkins	UKAS

Table 7

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, Clause 15.107

2.1.2 Equipment Under Test and Modification State

Model: Raspberry Pi Touch Display, Serial Number: Not Serialised (FAR-702760-004)

2.1.3 Date of Test

11-January-2023

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

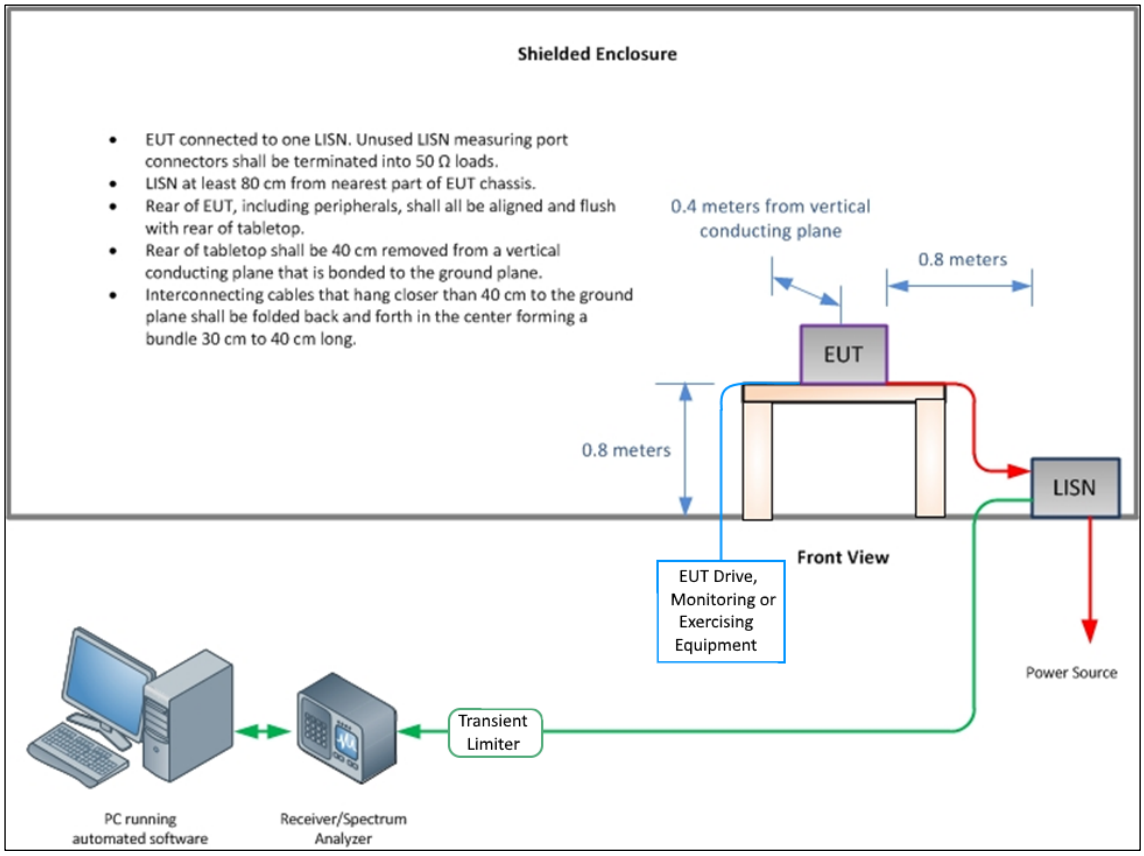

Figure 3 - Conducted Disturbance

2.1.7 Environmental Conditions

Ambient Temperature	23.8 °C
Relative Humidity	36.1 %
Atmospheric Pressure	995.0 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 8

2.1.9 Test Results

Results for Configuration and Mode: AC Powered - 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.

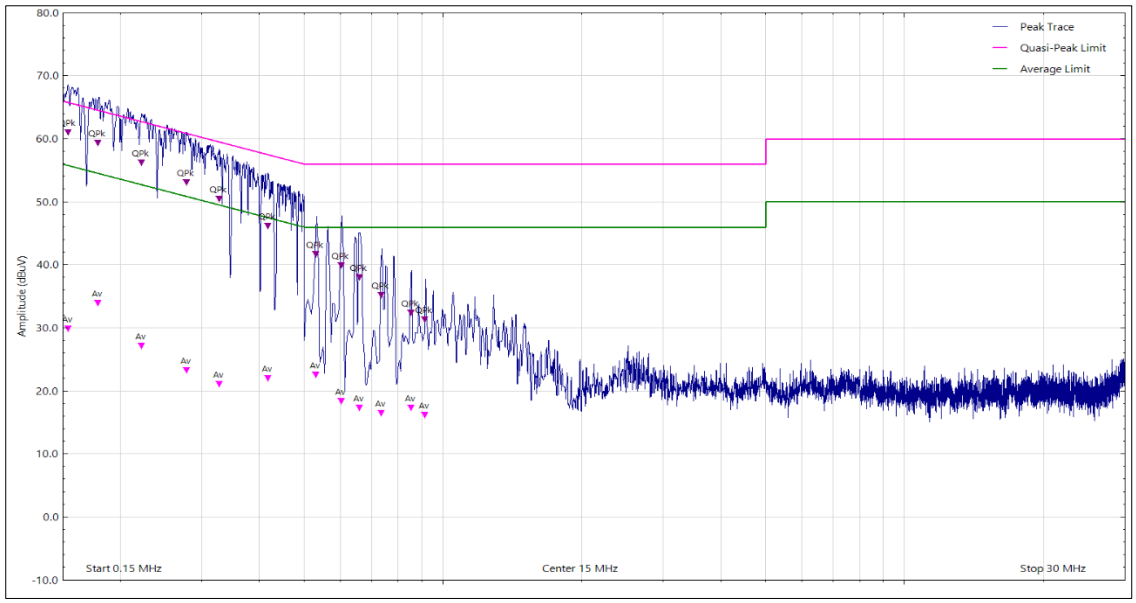

Figure 4 - Graphical Results - Live Line

Frequency (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
0.154	60.32	65.80	-5.48	Q-Peak
0.154	29.17	55.80	-26.63	CISPR Avg
0.179	58.65	64.50	-5.85	Q-Peak
0.179	33.24	54.50	-21.26	CISPR Avg
0.222	55.52	62.80	-7.28	Q-Peak
0.222	26.38	52.80	-26.42	CISPR Avg
0.278	52.34	60.90	-8.56	Q-Peak
0.278	22.56	50.90	-28.34	CISPR Avg
0.327	49.74	59.50	-9.76	Q-Peak
0.327	20.36	49.50	-29.14	CISPR Avg
0.417	45.49	57.50	-12.01	Q-Peak
0.417	21.34	47.50	-26.16	CISPR Avg
0.531	21.86	46.00	-24.14	CISPR Avg
0.531	41.00	56.00	-15.00	Q-Peak
0.603	17.67	46.00	-28.33	CISPR Avg
0.603	39.13	56.00	-16.87	Q-Peak
0.660	16.64	46.00	-29.36	CISPR Avg
0.660	37.29	56.00	-18.71	Q-Peak
0.736	15.80	46.00	-30.20	CISPR Avg
0.736	34.50	56.00	-21.50	Q-Peak
0.853	31.66	56.00	-24.34	Q-Peak
0.853	16.58	46.00	-29.42	CISPR Avg
0.915	15.46	46.00	-30.54	CISPR Avg
0.915	30.60	56.00	-25.40	Q-Peak

Table 9

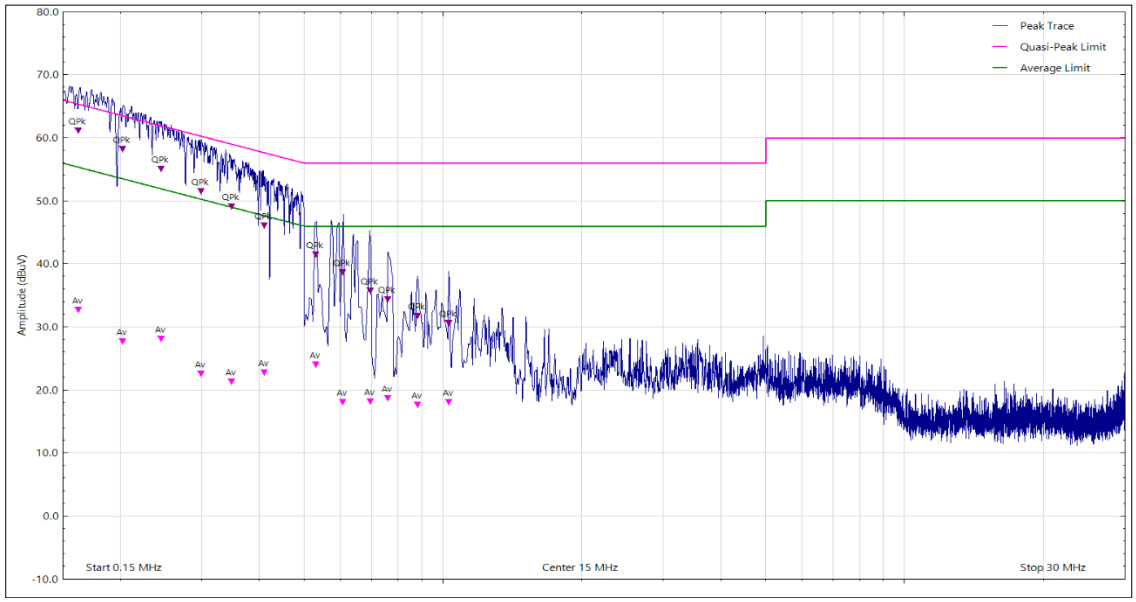

Figure 5 - Graphical Results - Neutral Line

Frequency (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
0.162	31.95	55.40	-23.45	CISPR Avg
0.162	60.36	65.40	-5.04	Q-Peak
0.202	57.47	63.50	-6.03	Q-Peak
0.202	26.99	53.50	-26.51	CISPR Avg
0.245	27.40	51.90	-24.50	CISPR Avg
0.245	54.33	61.90	-7.57	Q-Peak
0.299	21.78	50.30	-28.52	CISPR Avg
0.299	50.80	60.30	-9.50	Q-Peak
0.348	20.56	49.00	-28.44	CISPR Avg
0.348	48.36	59.00	-10.64	Q-Peak
0.410	45.39	57.70	-12.31	Q-Peak
0.410	22.01	47.70	-25.69	CISPR Avg
0.531	23.27	46.00	-22.73	CISPR Avg
0.531	40.70	56.00	-15.30	Q-Peak
0.606	17.38	46.00	-28.62	CISPR Avg
0.606	37.97	56.00	-18.03	Q-Peak
0.696	35.05	56.00	-20.95	Q-Peak
0.696	17.47	46.00	-28.53	CISPR Avg
0.760	17.97	46.00	-28.03	CISPR Avg
0.760	33.67	56.00	-22.33	Q-Peak
0.880	16.89	46.00	-29.11	CISPR Avg
0.880	31.07	56.00	-24.93	Q-Peak
1.028	29.87	56.00	-26.13	Q-Peak
1.028	17.34	46.00	-28.66	CISPR Avg

Table 10

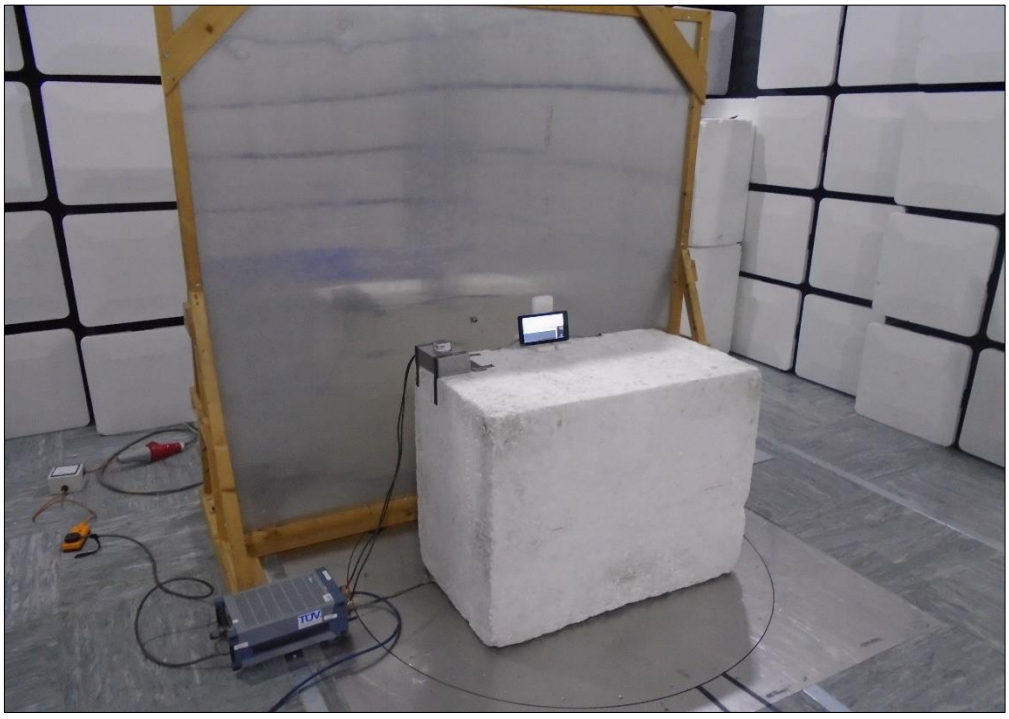

Figure 6 - Test Setup

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
Screened Room (12)	MVG	EMC-3	5621	36	11-Aug-2023
Emissions Software	TUV SUD	EmX V3.1.6	5125	-	Software
Test Receiver	Rohde & Schwarz	ESU40	3506	12	25-Mar-2023
Transient Limiter	Hewlett Packard	11947A	2378	12	25-Oct-2023
Cable (SMA to SMA, 2 m)	Rhophase	3PS-1801A-2000-3PS	4113	12	27-Jan-2023
Cable (N-Type to N-Type, 8 m)	Teledyne	PR90-088-8MTR	5450	6	23-Apr-2023
LISN (CISPR 16, Single Phase)	Rohde & Schwarz	ESH3-Z5	1390	12	31-Jan-2023

Table 11

2.2 Radiated Disturbance

2.2.1 Specification Reference

FCC 47 CFR Part 15B, Clause 15.109

2.2.2 Equipment Under Test and Modification State

Model: Raspberry Pi Touch Display, Serial Number: Not Serialised (FAR-702760-004)

2.2.3 Date of Test

11-January-2023

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 and Y 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

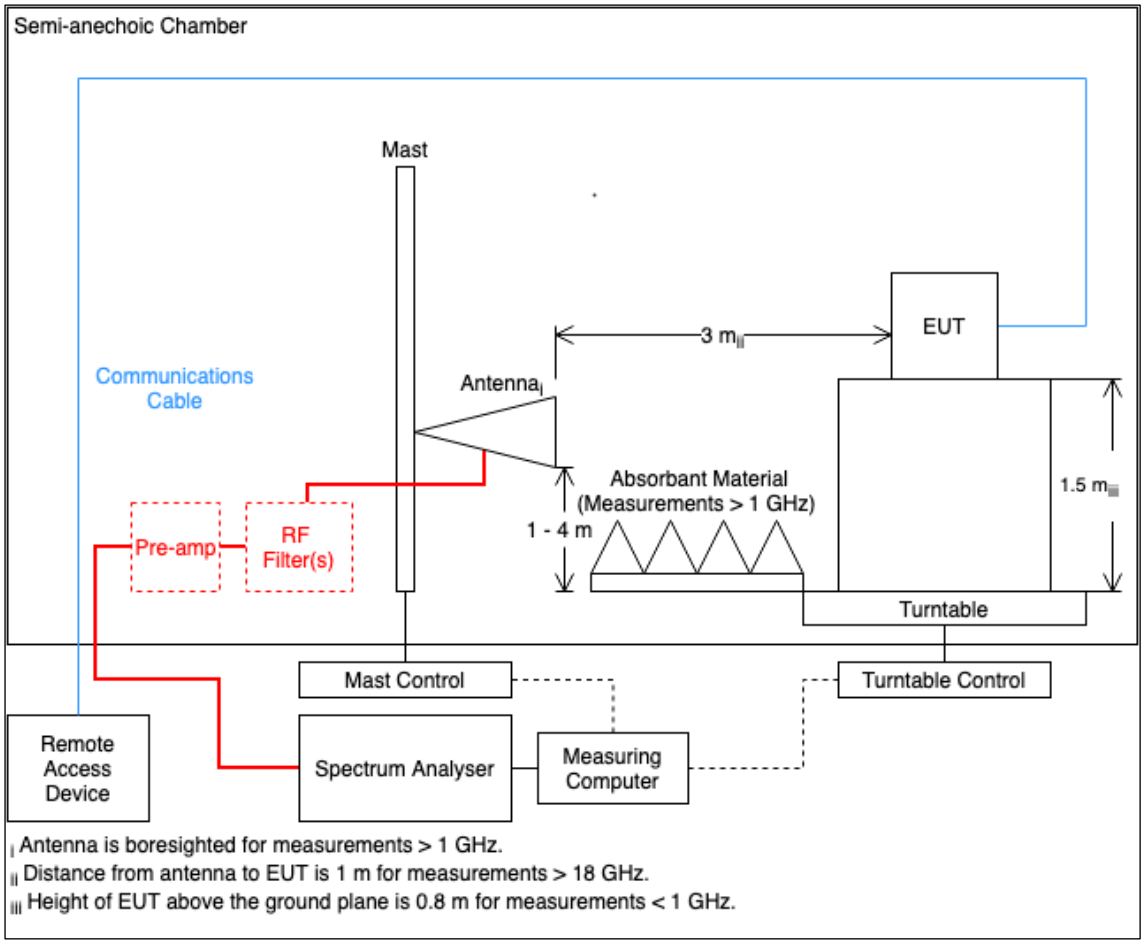

Figure 7

2.2.7 Environmental Conditions

Ambient Temperature	23.8 °C
Relative Humidity	36.1 %
Atmospheric Pressure	996.0 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 12

2.2.9 Test Results

Results for Configuration and Mode: AC Powered - 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: 450 MHz
Which necessitates an upper frequency test limit of: 2 GHz (Tested to 8 GHz).

The EUT can be used in multiple orientations and has therefore been tested in two different orientations in accordance with ANSI C63.4, Clause 6.3.2.1.

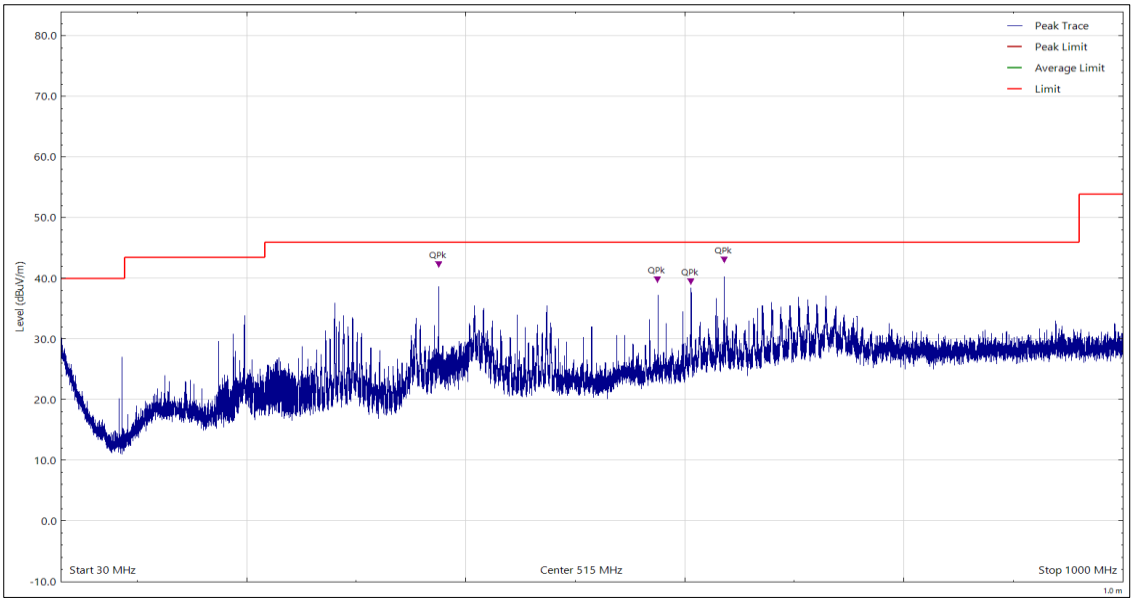

Figure 8 – 30 MHz to 1 GHz, Quasi-Peak, Horizontal - X Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
375.008	41.61	46.00	-4.39	Q-Peak	192	110	Horizontal
575.201	39.11	46.00	-6.89	Q-Peak	203	110	Horizontal
605.493	38.72	46.00	-7.28	Q-Peak	195	110	Horizontal
635.755	42.34	46.00	-3.66	Q-Peak	202	110	Horizontal

Table 13

No other final measurements were made as all other peak emissions seen were greater than 6 dB below the Quasi-Peak test limit.

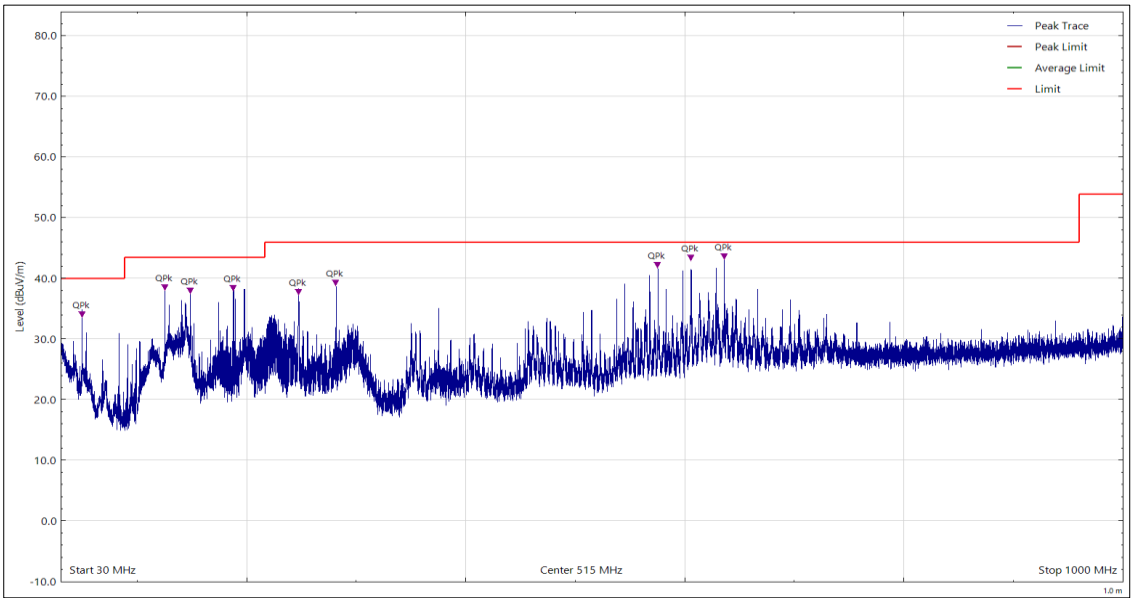

Figure 9 – 30 MHz to 1 GHz, Quasi-Peak, Vertical - X Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
49.400	33.34	40.00	-6.66	Q-Peak	268	106	Vertical
125.002	37.81	43.50	-5.69	Q-Peak	0	100	Vertical
148.162	37.27	43.50	-6.23	Q-Peak	234	109	Vertical
187.503	37.64	43.50	-5.86	Q-Peak	250	100	Vertical
246.973	37.04	46.00	-8.96	Q-Peak	323	110	Vertical
281.261	38.55	46.00	-7.45	Q-Peak	300	100	Vertical
575.202	41.41	46.00	-4.59	Q-Peak	0	100	Vertical
605.476	42.62	46.00	-3.38	Q-Peak	18	100	Vertical
635.755	42.92	46.00	-3.08	Q-Peak	310	101	Vertical

Table 14

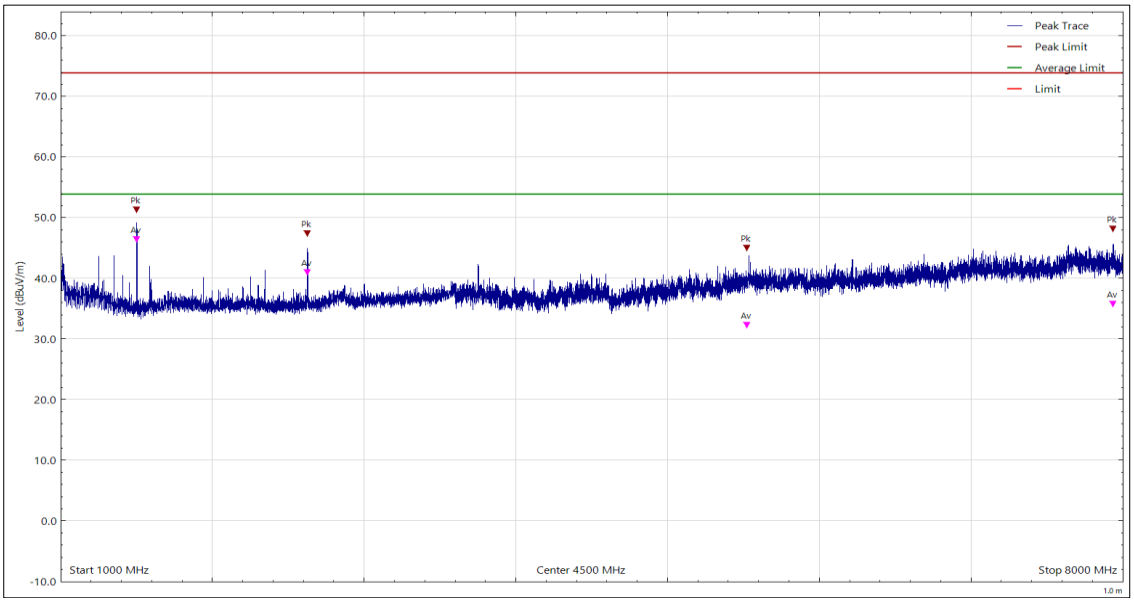

Figure 10 - 1 GHz to 8 GHz, Peak and CISPR Average, Horizontal - X Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1499.849	45.64	54.00	-8.36	CISPR Avg	189	100	Horizontal
1499.849	50.61	74.00	-23.39	Peak	189	100	Horizontal
2625.129	46.72	74.00	-27.28	Peak	155	128	Horizontal
2625.129	40.24	54.00	-13.76	CISPR Avg	155	128	Horizontal
5524.409	44.28	74.00	-29.72	Peak	179	100	Horizontal
5524.409	31.52	54.00	-22.48	CISPR Avg	179	100	Horizontal
7935.500	35.09	54.00	-18.91	CISPR Avg	0	110	Horizontal
7935.500	47.46	74.00	-26.54	Peak	0	110	Horizontal

Table 15

No other final measurements were made as all other peak emissions seen were greater than 6 dB below the CISPR Average test limit.

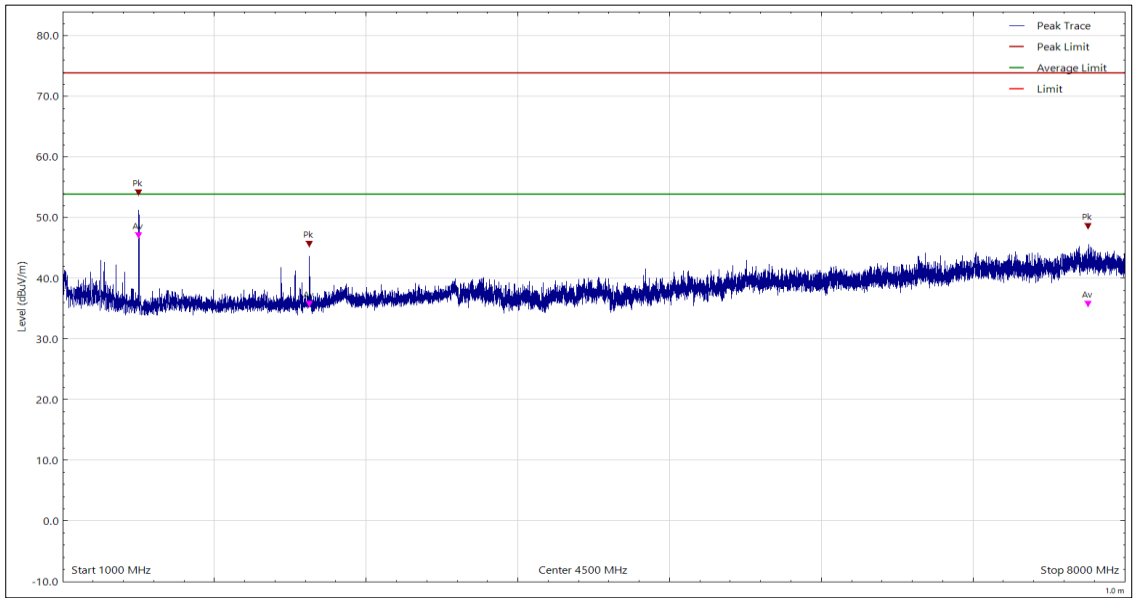

Figure 11 - 1 GHz to 8 GHz, Peak and CISPR Average, Vertical - X Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1500.385	53.40	74.00	-20.60	Peak	146	147	Vertical
1500.385	46.38	54.00	-7.62	CISPR Avg	146	147	Vertical
2624.891	44.91	74.00	-29.09	Peak	158	100	Vertical
2624.891	35.08	54.00	-18.92	CISPR Avg	158	100	Vertical
7759.294	35.04	54.00	-18.96	CISPR Avg	1	100	Vertical
7759.294	47.85	74.00	-26.15	Peak	1	100	Vertical

Table 16

No other final measurements were made as all other peak emissions seen were greater than 6 dB below the CISPR Average test limit.

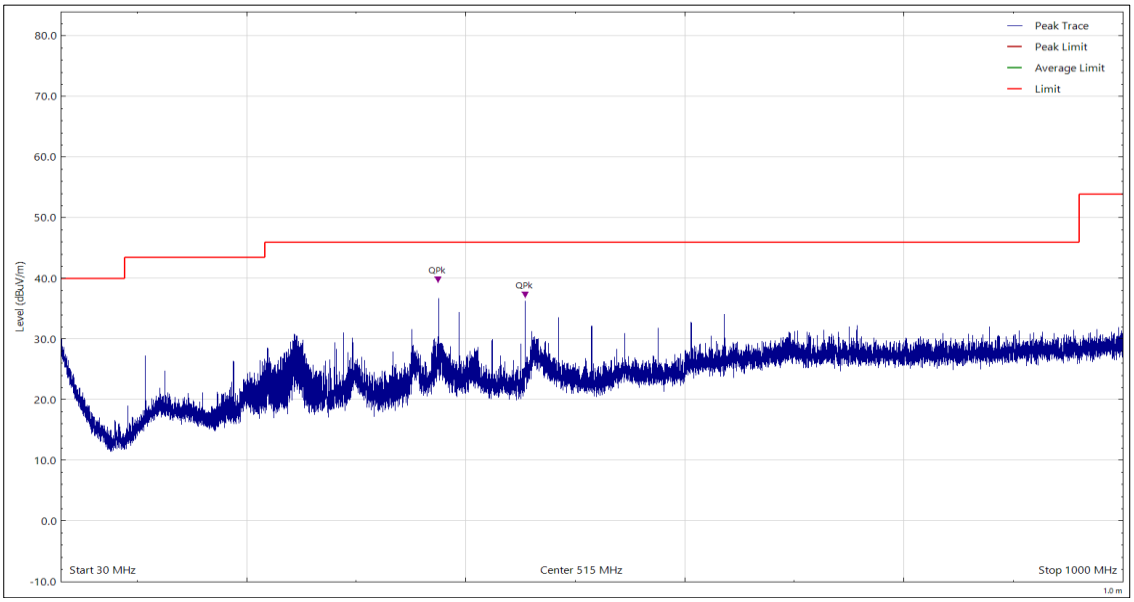

Figure 12 - 30 MHz to 1 GHz, Quasi-Peak, Horizontal - Y Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
375.005	39.11	46.00	-6.89	Q-Peak	214	100	Horizontal
454.114	36.52	46.00	-9.48	Q-Peak	360	100	Horizontal

Table 17

No other final measurements were made as all other peak emissions seen were greater than 6 dB below the Quasi-Peak test limit.

30 MHz to 1 GHz

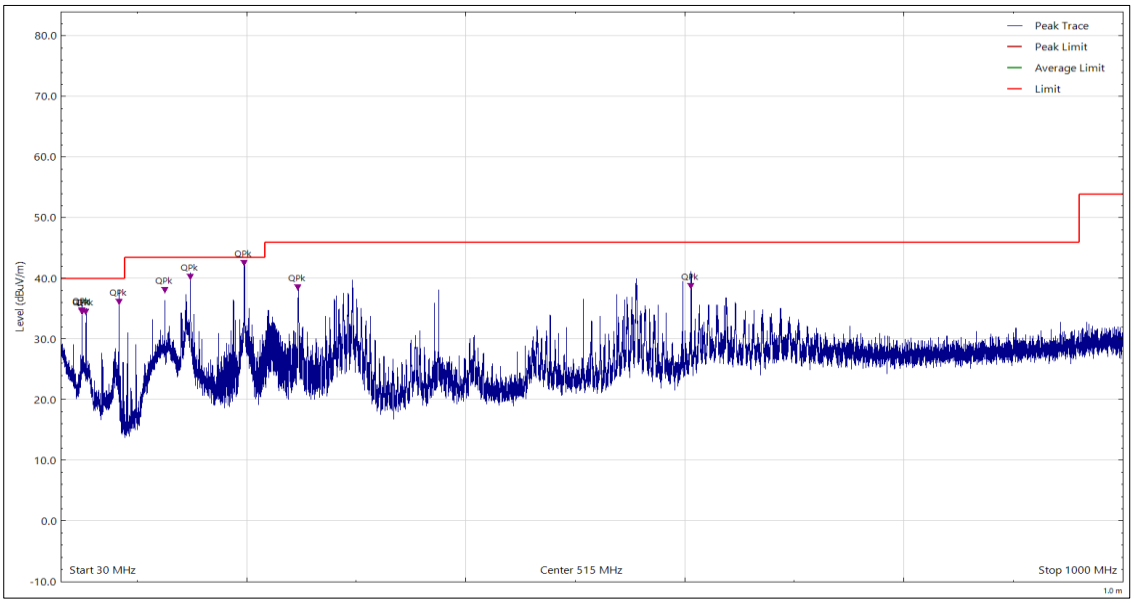

Figure 13 - 30 MHz to 1 GHz, Quasi-Peak, Vertical - Y Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
49.324	33.74	40.00	-6.26	Q-Peak	250	100	Vertical
49.344	33.91	40.00	-6.09	Q-Peak	354	100	Vertical
52.975	33.75	40.00	-6.25	Q-Peak	300	100	Vertical
83.258	35.35	40.00	-4.65	Q-Peak	206	100	Vertical
124.998	37.31	43.50	-6.19	Q-Peak	354	100	Vertical
148.139	39.52	43.50	-3.98	Q-Peak	338	104	Vertical
197.471	41.80	43.50	-1.70	Q-Peak	271	100	Vertical
246.742	37.74	46.00	-8.26	Q-Peak	332	100	Vertical
605.477	37.95	46.00	-8.05	Q-Peak	208	100	Vertical

Table 18

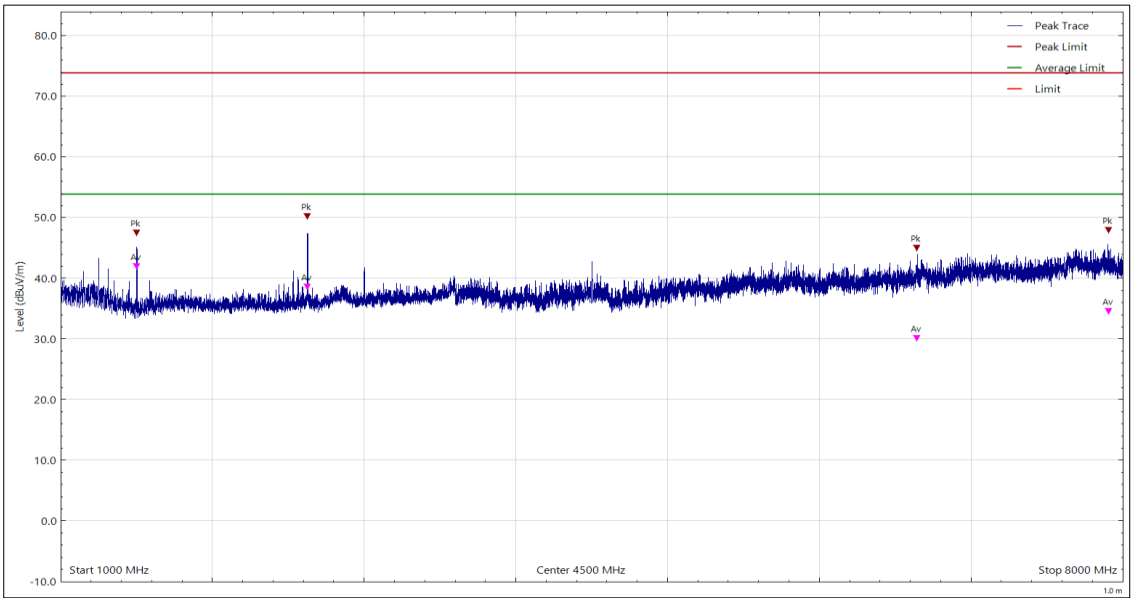

Figure 14 - 1 GHz to 8 GHz, Peak and CISPR Average, Horizontal - Y Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1499.816	46.79	74.00	-27.21	Peak	192	100	Horizontal
1499.816	41.26	54.00	-12.74	CISPR Avg	192	100	Horizontal
2625.715	37.91	54.00	-16.09	CISPR Avg	340	100	Horizontal
2625.715	49.52	74.00	-24.48	Peak	340	100	Horizontal
6642.951	29.40	54.00	-24.60	CISPR Avg	0	100	Horizontal
6642.951	44.29	74.00	-29.71	Peak	0	100	Horizontal
7906.910	47.22	74.00	-26.78	Peak	160	102	Horizontal
7906.910	33.81	54.00	-20.19	CISPR Avg	160	102	Horizontal

Table 19

No other final measurements were made as all other peak emissions seen were greater than 6 dB below the CISPR Average test limit.

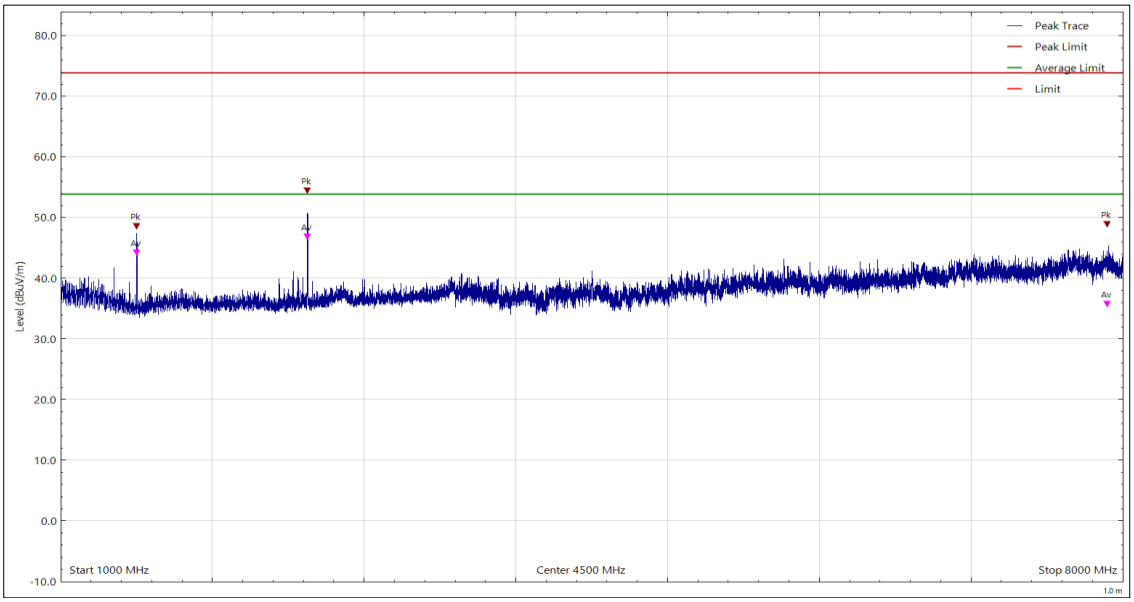

Figure 15 - 1 GHz to 8 GHz, Peak and CISPR Average, Vertical - Y Orientation

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
1499.959	47.87	74.00	-26.13	Peak	79	100	Vertical
1499.959	43.54	54.00	-10.46	CISPR Avg	79	100	Vertical
2625.206	46.08	54.00	-7.92	CISPR Avg	169	110	Vertical
2625.206	53.74	74.00	-20.26	Peak	169	110	Vertical
7897.377	35.02	54.00	-18.98	CISPR Avg	350	106	Vertical
7897.377	48.14	74.00	-25.86	Peak	350	106	Vertical

Table 20

No other final measurements were made as all other peak emissions seen were greater than 6 dB below the CISPR Average test limit.

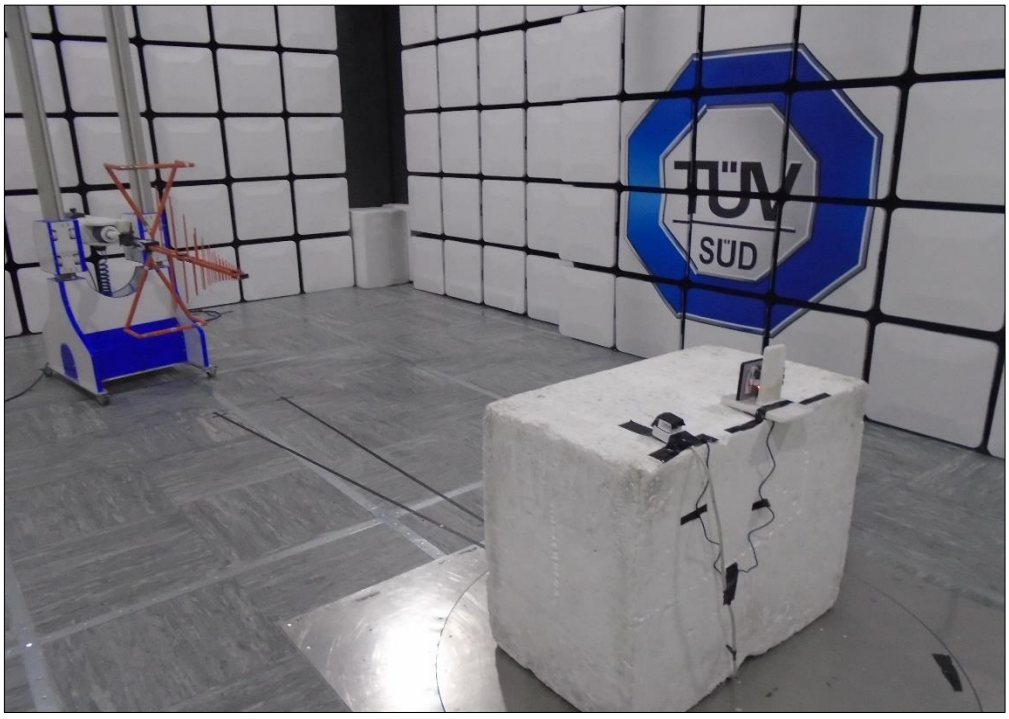

Figure 16 - Test Setup X Orientation - 30 MHz to 1 GHz

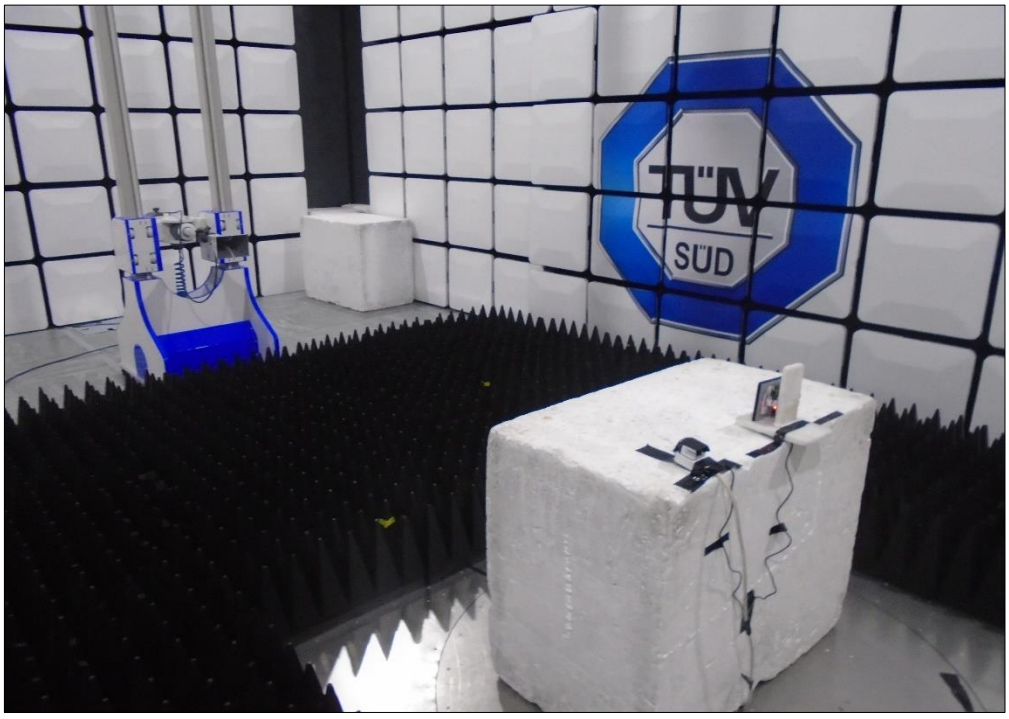

Figure 17 - Test Setup X Orientation - 1 GHz to 8 GHz

Figure 18 - Test Setup Y Orientation - 30 MHz to 1 GHz

Figure 19 - Test Setup Y Orientation - 1 GHz to 8 GHz

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
Screened Room (12)	MVG	EMC-3	5621	36	11-Aug-2023
Emissions Software	TUV SUD	EmX V3.1.6	5125	-	Software
Test Receiver	Rohde & Schwarz	ESU40	3506	12	25-Mar-2023
Turntable & Mast Controller	Maturo Gmbh	NCD/498/2799.01	5612	-	TU
Tilt Antenna Mast	Maturo Gmbh	TAM 4.0-P	5613	-	TU
Cable (SMA to SMA, 2 m)	Rhophase	3PS-1801A-2000-3PS	4113	12	27-Jan-2023
Cable (N-Type to N-Type, 8 m)	Teledyne	PR90-088-8MTR	5450	6	23-Apr-2023
Cable (K-Type to K-Type, 2 m)	Junkosha	MWX241/B	5909	12	14-Apr-2023
Antenna with attenuator (Bilog, 30 MHz to 3 GHz)	Schaffner	CBL6143	287	24	02-Dec-2024
Pre-Amplifier (1 GHz to 18 GHz)	Schwarzbeck	BBV 9718 C	5350	12	20-Oct-2023
Antenna (DRG, 1 GHz to 10.5 GHz)	Schwarzbeck	BBHA9120B	5611	12	16-Oct-2023

Table 21

TU - Traceability Unscheduled

3 Test Equipment Information

3.1 General Test Equipment Used

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Expires
Thermo-hygro-Barometer	PCE Instruments	PCE-THB-40	5472	12	25-Mar-2023

Table 22

4 Incident Reports

No incidents reports were raised.

5 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, ±5.2 dB 1 GHz to 40 GHz, Horn Antenna, ±6.3 dB

Table 23

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.