

Prüfbericht-Nr.: Test Report No.:	CN241QVO 003	Auftrags-Nr.: Order No.:	326117112	Seite 1 von 28 Page 1 of 28
Kunden-Referenz-Nr.: Client Reference No.:	1288983	Auftragsdatum: Order date.:	2025-06-25	
Auftraggeber: Client:	IKEA of Sweden AB Box 702, SE-343 81, Älmhult Sweden			
Prüfgegenstand: Test item:	SJÖSS USB Charger			
Bezeichnung / Typ-Nr.: Identification / Type No.:	E2501-NA			
Auftrags-Inhalt: Order content:	TÜV Rheinland EMC service			
Prüfgrundlage: Test specification:	FCC 47 CFR Part 15, Subpart B:2023 Class B ICES-003:2020			
Wareneingangsdatum: Date of receipt:	2025-06-25	Refer to the EUT photos file		
Prüfmuster-Nr.: Test sample No.:	A004036898-004~006			
Prüfzeitraum: Testing period:	Refer to test report			
Ort der Prüfung: Place of testing:	Refer to clause 1.1			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: / tested by: <i>Xuelan Zhang</i> XueLan Zhang	genehmigt von: / authorized by: <i>JiaYi Zhou</i> JiaYi Zhou			
Datum: / Date: 2025-07-21	Datum: / Date: 2025-07-21			
Stellung: / Position: Project engineer	Stellung: / Position: Authorizer			
Sonstiges / Other:	FCC ID: FHO-E2501 Test Firm Name: TUV Rheinland (Shanghai) Co., Ltd. Designation Number: CN1396 Test Firm Registration Number: 930979			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested				
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Anmerkungen
Remarks

- | | |
|---|--|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.
Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.</i></p> <p><i>Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p> |
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| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.
Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p> |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p> |

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Revision history of test report:

Report number	Issue date	Contents and reason for change if appropriate
CN241QVO 001	2025-01-02	Initial release.
CN241QVO 002	2025-06-03	Adding CM inductor and updating U1
CN241QVO 003	2025-07-21	Updating U1

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1 Test Sites

1.1 Test Facilities

Laboratory: TÜV Rheinland (Shanghai) Co., Ltd.
Address: Workshop 14, North Half of Workshop 10 and Workshop 16, Pingqian (Taicang) Modern Industrial Park, No.525, Yuewang Lingang South Road, Shaxi, Taicang, Jiangsu, China

The used test equipment is in accordance with CISPR 16-1 series standards for measurement of radio interference.

Refer to Clause 7 for test and measurement instruments.

2 General Product Information

2.1 Product Function and Intended Use

The EUT (equipment under test) is a SJÖSS USB Charger. For the further information, refer to the user's manual.

2.2 Ratings and System Details

Rated input : AC 100-240 V, 50/60 Hz; Max. 0.5 A
Output : 5.0 V===3.0 A 15.0 W
9.0 V===2.22 A 20.0 W
12.0 V===1.67 A 20.0 W
15.0 V===1.33 A 20.0 W

Protection class : II

The above model was already EMC tested in reports CN241QVO 001-002. This report is only for updating U1. Therefore, all the EMC tests were performed.

Sample No.	Component	Model	Manufacturer
Sample 1#	U1	DK8025AP	Infineon
Sample 2#	U1	DK8020AP	Infineon
Sample 3#	U1	DK8025AP	InnoScience

2.3 Independent Operation Modess

The basic operation mode is continuously operating with matching load.

2.4 Description of interconnecting cables

None.

2.5 Noise Generating and Noise Suppressing Parts

Refer to the circuit diagram for further information.

2.6 Highest frequency generated or used in the device or on which the device operates or tunes

The highest frequency used in the EUT is less than 108 MHz.

2.7 Submitted Documents

Circuit diagram, user's manual and rating label.

3 Test Set-up and Operation Modes

3.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible emission level. The test conditions were adapted accordingly in reference to the instructions for use.

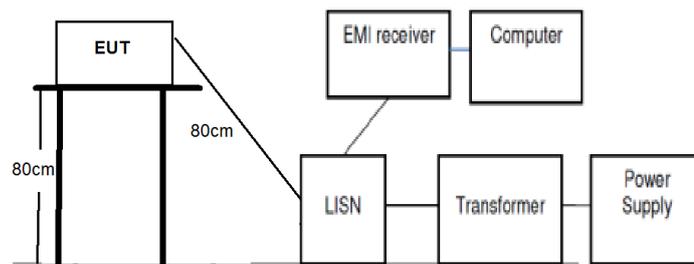
Refer to the related paragraph of this report.

The sequence of testing:

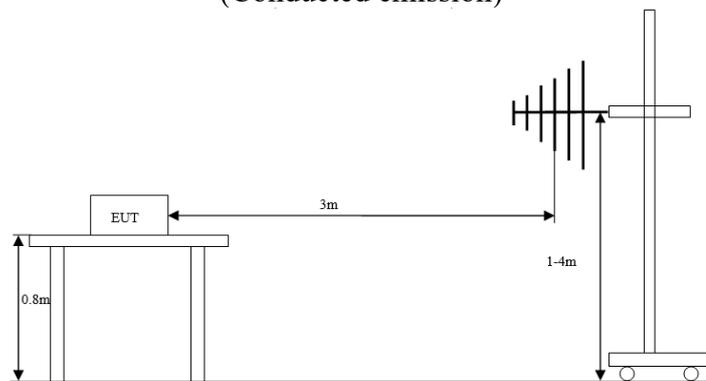
1. Radiated emission tests were performed on 2025-07-11.
2. Conducted emission tests were performed on 2025-07-11.

3.2 Equipment and cable arrangement

Block diagram for both conducted emission and radiated emission tests is as follows:



(Conducted emission)



(Radiated emission)

3.3 Test Software

No special test software was used during the tests.

3.4 Special Accessories and Auxiliary Equipment

During all testing, matching load was used for USB port load.

3.5 Countermeasures to achieve EMC Compliance

No other special measure is employed to achieve the requirement.

4 Conformity Decision Rule

For all EMI tests included in this report, as measurement uncertainties are less than the values U_{CISPR} given in CISPR 16-4-2, compliance with the limits is determined by comparing measurement results directly with corresponding limits without taking into consideration of measurement uncertainties.

5 Test Results EMISSION

5.1 Emission in the Frequency Range up to 30 MHz

5.1.1 Mains Terminal Continuous Disturbance Voltage

Result:	Passed
Date of testing	: 2025-07-11
Test procedure	: FCC 47 CFR Part 15, Subpart B:2023, ICES-003:2020, ANSI C63.4-2014 and CISPR 16-2-1
Frequency range	: 0.15 – 30 MHz
Limits	: Quasi-peak limit: 0.15 - 0.5 MHz, 66 to 56 dB μ V (decrease with the logarithm of frequency); 0.5 - 5 MHz, 56 dB μ V; 5 - 30 MHz, 60 dB μ V Average limit: 0.15 - 0.5 MHz, 56 to 46 dB μ V (decrease with the logarithm of frequency); 0.5 – 5 MHz, 46 dB μ V; 5 – 30 MHz, 50 dB μ V
Bandwidth of EMI receiver for final measurement	: 9 kHz
Measurement time for final measurement	: 1 s
Kind of test site	: Shielded room
Input voltage	: AC 120 V, 60 Hz
Operational mode	: Mode as defined in clause 2.3
Ambient condition	: Temperature: 23.5 °C; Relative humidity: 56.8 %
Expanded measurement uncertainty ($k=2$)	: 2.33 dB The minimum margin to the limit is 7.58 dB at 0.685500 MHz. The margin is higher than expanded measurement uncertainty.

The measurement setup was made according to ANSI C63.4-2014 in a shielded room.

The measurement equipment like test receivers, quasi-peak detector and artificial mains network (AMN) are in compliance with CISPR 16-1 series standards.

The tested object was set-up on a wooden support. The EUT was set 0.8 m away from the AMN. The cord longer than necessary to be connected to the AMN was folded forth and back parallel so as to form a bundle with a length between 0.3 m and 0.4 m.

The disturbance voltage test was performed on the neutral line and phase line of the power supply of the EUT respectively.

The following figures and tables were those measured by an automatic measuring system. Both quasi-peak and average measurements were performed. In the following spectral diagram, “◆” mean Quasi-Peak Value and “◆” mean Average Value results.

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Notes on following tables of conducted emission results and conversions:

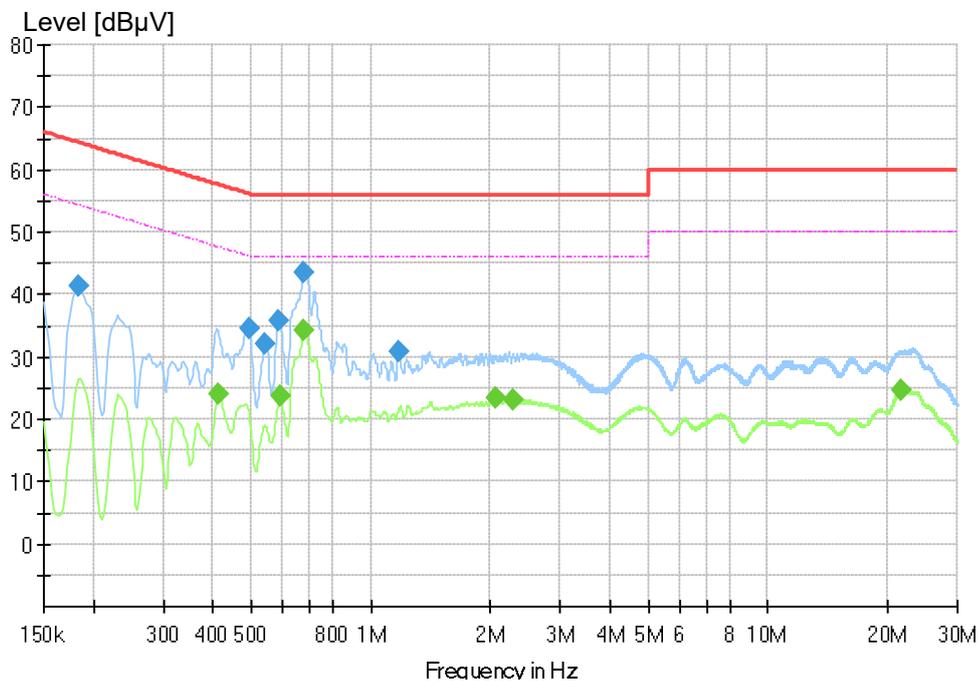
Level (dB μ V): final measurement results by using quasi-peak detector and average detector

Transd (dB): transducer factor including cable loss, insertion loss of artificial mains network and gain of pre-amplifier (if used)

Margin: Limit (dB μ V) - Level (dB μ V)

Note 1: The EUT generated the highest emission level under DC 15 V by measurement. Therefore, only the data of DC 15 V was retained.

Figure 1: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, Sample 1#



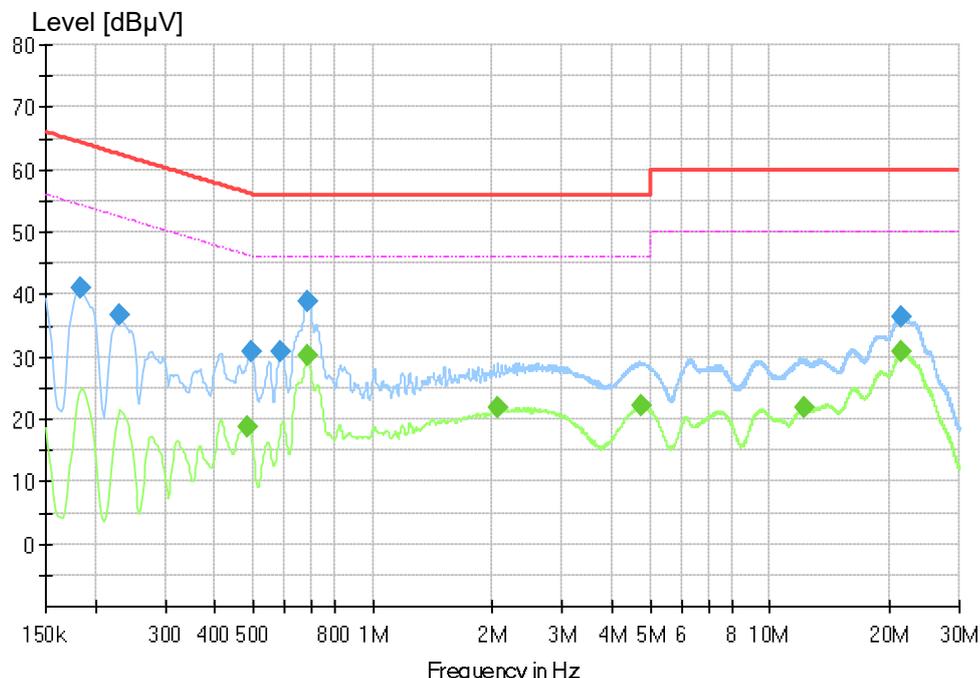
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.183750	41.25	64.31	23.07	1000.0	9.000	L1
0.492000	34.58	56.13	21.55	1000.0	9.000	L1
0.543750	32.18	56.00	23.82	1000.0	9.000	L1
0.586500	35.69	56.00	20.31	1000.0	9.000	L1
0.676500	43.38	56.00	12.62	1000.0	9.000	L1
1.178250	30.80	56.00	25.20	1000.0	9.000	L1

Final Average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.413250	24.06	47.58	23.53	1000.0	9.000	L1
0.591000	23.76	46.00	22.24	1000.0	9.000	L1
0.681000	34.28	46.00	11.72	1000.0	9.000	L1
2.060250	23.30	46.00	22.70	1000.0	9.000	L1
2.287500	23.24	46.00	22.76	1000.0	9.000	L1
21.738750	24.59	50.00	25.41	1000.0	9.000	L1

Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, Sample 1#



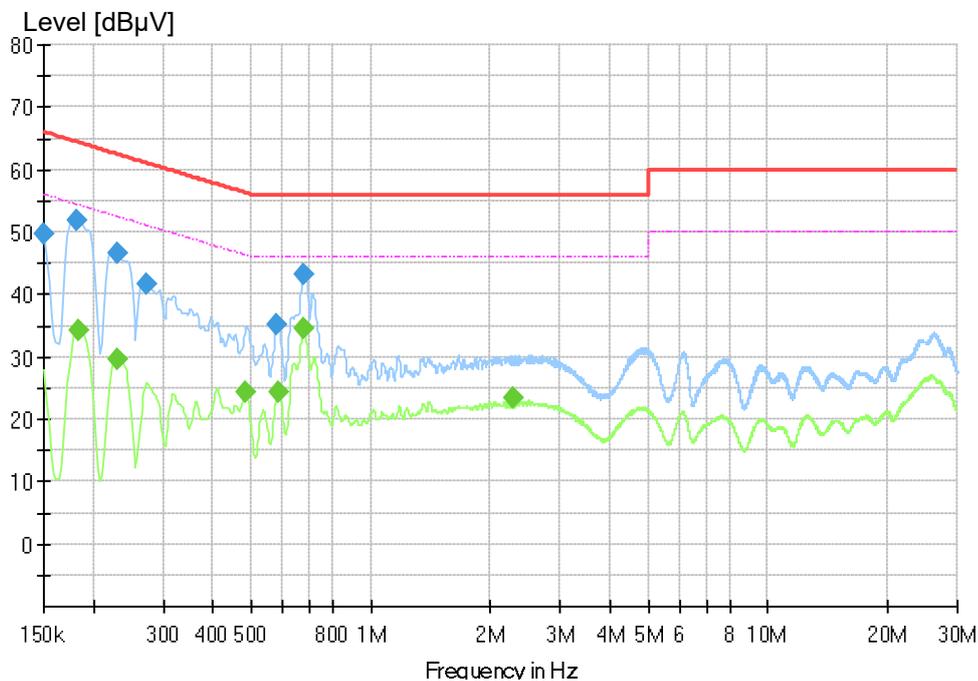
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.183750	41.04	64.31	23.27	1000.0	9.000	N
0.231000	36.85	62.41	25.57	1000.0	9.000	N
0.496500	30.77	56.06	25.29	1000.0	9.000	N
0.586500	30.67	56.00	25.33	1000.0	9.000	N
0.687750	39.01	56.00	16.99	1000.0	9.000	N
21.491250	36.29	60.00	23.71	1000.0	9.000	N

Final Average measurement result:

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.485250	18.73	46.25	27.52	1000.0	9.000	N
0.683250	30.25	46.00	15.75	1000.0	9.000	N
2.062500	21.88	46.00	24.12	1000.0	9.000	N
4.764750	22.19	46.00	23.82	1000.0	9.000	N
12.214500	21.71	50.00	28.29	1000.0	9.000	N
21.444000	30.72	50.00	19.28	1000.0	9.000	N

Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, Sample 2#



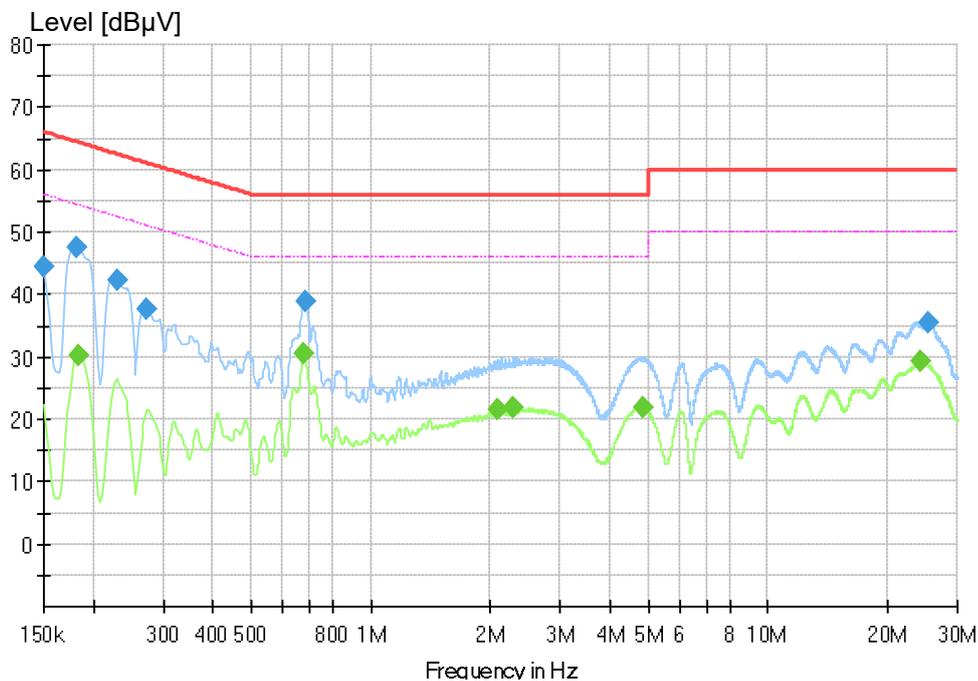
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.150000	49.63	66.00	16.37	1000.0	9.000	L1
0.181500	51.85	64.42	12.57	1000.0	9.000	L1
0.228750	46.59	62.50	15.91	1000.0	9.000	L1
0.273750	41.77	61.00	19.24	1000.0	9.000	L1
0.579750	35.26	56.00	20.74	1000.0	9.000	L1
0.678750	43.22	56.00	12.78	1000.0	9.000	L1

Final Average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.183750	34.38	54.31	19.94	1000.0	9.000	L1
0.228750	29.63	52.50	22.87	1000.0	9.000	L1
0.483000	24.24	46.29	22.05	1000.0	9.000	L1
0.586500	24.19	46.00	21.81	1000.0	9.000	L1
0.678750	34.68	46.00	11.32	1000.0	9.000	L1
2.269500	23.44	46.00	22.56	1000.0	9.000	L1

Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, Sample 2#

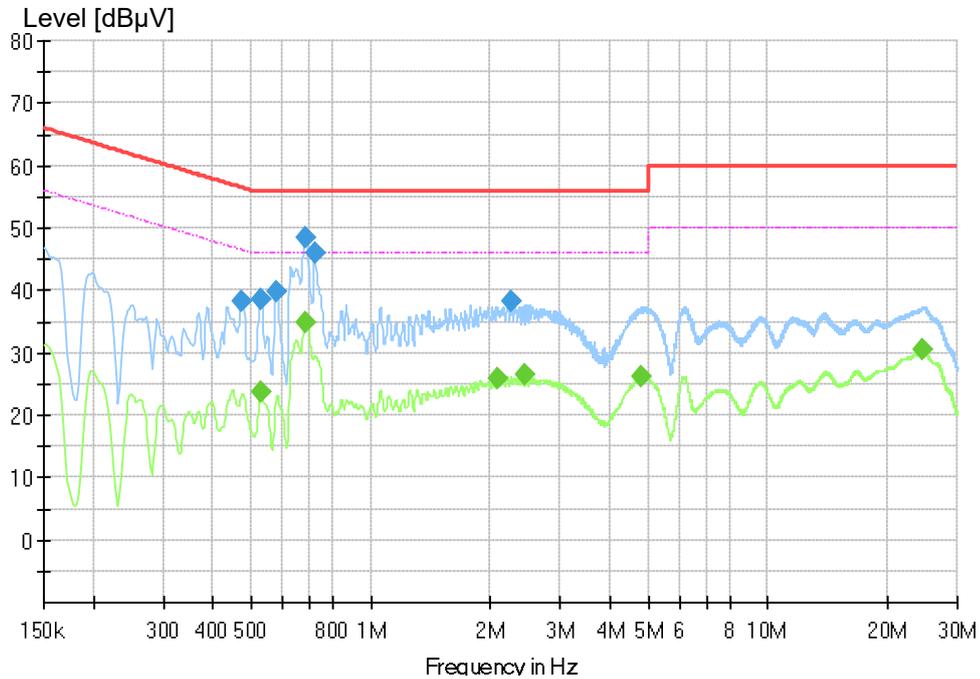


Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.150000	44.28	66.00	21.72	1000.0	9.000	N
0.181500	47.38	64.42	17.04	1000.0	9.000	N
0.228750	42.25	62.50	20.25	1000.0	9.000	N
0.273750	37.50	61.00	23.51	1000.0	9.000	N
0.683250	38.77	56.00	17.23	1000.0	9.000	N
25.476000	35.41	60.00	24.59	1000.0	9.000	N

Final Average measurement result:

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.183750	30.27	54.31	24.04	1000.0	9.000	N
0.678750	30.37	46.00	15.63	1000.0	9.000	N
2.094000	21.41	46.00	24.59	1000.0	9.000	N
2.274000	21.93	46.00	24.07	1000.0	9.000	N
4.841250	21.88	46.00	24.12	1000.0	9.000	N
24.117000	29.17	50.00	20.83	1000.0	9.000	N

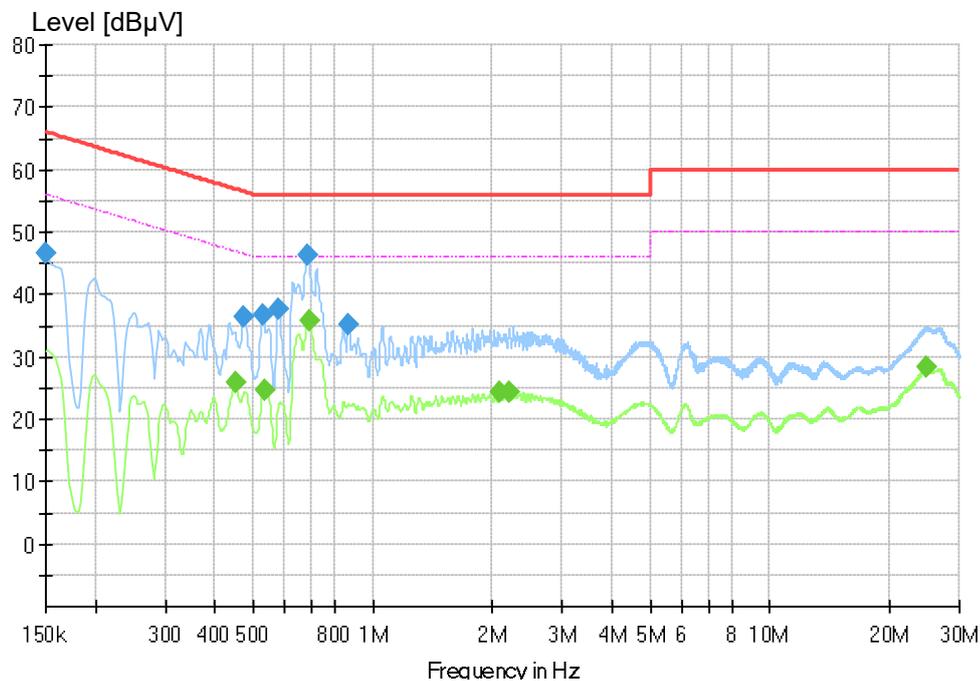
Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, Sample 3#

Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.474000	38.38	56.44	18.06	1000.0	9.000	L1
0.530250	38.49	56.00	17.51	1000.0	9.000	L1
0.577500	39.83	56.00	16.17	1000.0	9.000	L1
0.685500	48.42	56.00	7.58	1000.0	9.000	L1
0.721500	46.11	56.00	9.89	1000.0	9.000	L1
2.256000	38.11	56.00	17.89	1000.0	9.000	L1

Final Average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.530250	23.57	46.00	22.43	1000.0	9.000	L1
0.685500	34.79	46.00	11.21	1000.0	9.000	L1
2.089500	25.88	46.00	20.12	1000.0	9.000	L1
2.451750	26.51	46.00	19.49	1000.0	9.000	L1
4.796250	26.08	46.00	19.92	1000.0	9.000	L1
24.621000	30.36	50.00	19.64	1000.0	9.000	L1

Figure 6: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, Sample 3#



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.150000	46.59	66.00	19.41	1000.0	9.000	N
0.474000	36.32	56.44	20.12	1000.0	9.000	N
0.528000	36.59	56.00	19.41	1000.0	9.000	N
0.577500	37.67	56.00	18.33	1000.0	9.000	N
0.685500	46.38	56.00	9.62	1000.0	9.000	N
0.865500	35.07	56.00	20.93	1000.0	9.000	N

Final Average measurement result:

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.449250	25.74	46.89	21.14	1000.0	9.000	N
0.532500	24.75	46.00	21.25	1000.0	9.000	N
0.690000	35.90	46.00	10.10	1000.0	9.000	N
2.089500	24.41	46.00	21.59	1000.0	9.000	N
2.206500	24.46	46.00	21.54	1000.0	9.000	N
24.855000	28.26	50.00	21.74	1000.0	9.000	N

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Radiated emission (30 MHz - 1 GHz)

Result:	Passed
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Date of testing	: 2025-07-11
Test procedure	: FCC 47 CFR Part 15, Subpart B:2023, ICES-003:2020, ANSI C63.4-2014 and CISPR 16-2-3
Frequency range	: 30 – 1000 MHz (see Note 1)
Limits	: Quasi-peak limits (3 m distance): 30 – 88 MHz, 40 dB μ V/m; 88 – 216 MHz, 43.5 dB μ V/m; 216 – 960 MHz, 46 dB μ V/m; Above 960 MHz, 54 dB μ V/m. (see Note 2)
Bandwidth of EMI receiver for final measurement	: 120 kHz
Measurement time for final measurement	: 1 s
Kind of test site	: Semi-anechoic chamber
Operational mode	: Mode as defined in clause 2.3
Input voltage	: AC 120 V; 60 Hz
Ambient condition	: Temperature: 23.1 °C; Relative humidity: 57.2 %
Expanded measurement uncertainty ($k=2$)	: 5.40 dB The minimum margin to the limit is 16.5 dB at 30.000000 MHz. The margin is higher than expanded measurement uncertainty.

The radiated disturbance test was carried out in a semi-anechoic chamber. The test distance from the receiving antenna to the EUT is 3 m. The normalized site attenuation of the semi-anechoic chamber is regularly calibrated to ensure the radiated disturbance test results are valid. During the test, the EUT was placed on a 0.8 m high wooden table above the reference ground plane. The wooden table was rotated 360° around and the height of the antenna was varied from 1 m to 4 m to find the maximum disturbance. The test was performed with the antenna both in its horizontal and vertical polarizations.

The following figures and tables were those measured by an automatic measurement system. A preview test was firstly performed with peak detector. The final test was performed with quasi-peak at those critical frequencies during the preview test. In the following spectral diagram, “x” means quasi-peak test results.

Note 1: The highest frequency of the internal sources of the EUT is less than 108 MHz, so according to FCC 47 CFR Part 15, Subpart B:2023 this measurement was only made up to 1 GHz.

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Note 2: The class B limits of FCC 47 CFR Part 15, Subpart B:2023 is stricter than those ICES-003:2020 for 3 m test distance. Therefore, the former limits are used in following figures and tables.

Note 3: The EUT generated the highest emission level under DC 15 V by measurement. Therefore, only the data of DC 15 V was retained.

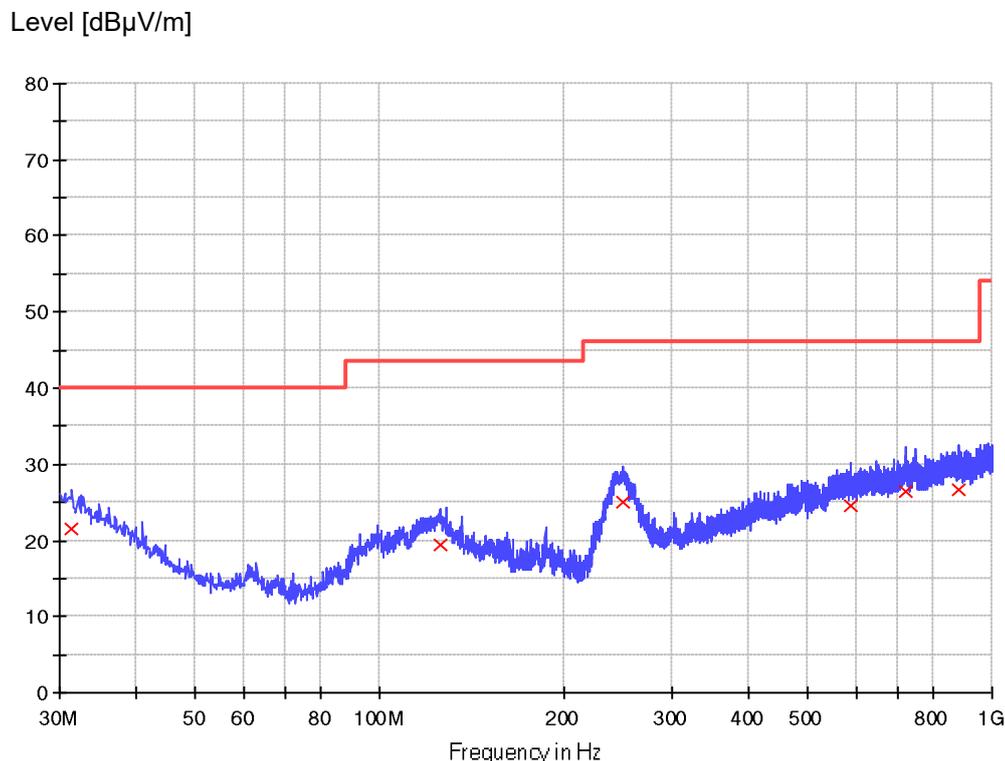
Notes on following tables of radiated emission results and conversions:

QuasiPeak (dB μ V/m): final measurement results by using quasi-peak detector

Corr. (dB): correction factor including: antenna factor, cable loss, and gain of pre-amplifier (if used)

Margin: Limit (dB μ V/m) - QuasiPeak (dB μ V/m)

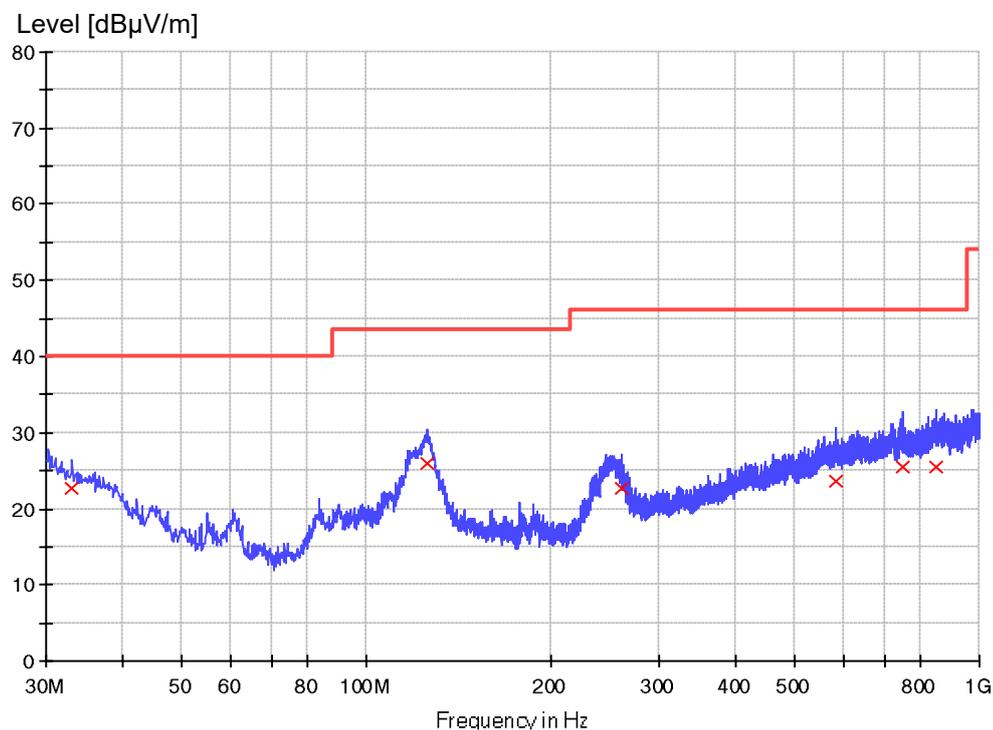
Figure 7: Spectral Diagrams and measurement results, horizontal polarization (30 MHz to 1 GHz), Sample 1#



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
31.455000	21.6	1000.0	120.000	138.0	H	-149.0	24.6	18.5	40.0
125.666250	19.5	1000.0	120.000	150.0	H	169.0	18.7	24.0	43.5
249.705000	25.1	1000.0	120.000	111.0	H	-125.0	19.3	20.9	46.0
587.022500	24.5	1000.0	120.000	107.0	H	35.0	26.7	21.5	46.0
722.337500	26.4	1000.0	120.000	200.0	H	-77.0	28.5	19.6	46.0
881.902500	26.8	1000.0	120.000	179.0	H	-103.0	29.1	19.2	46.0

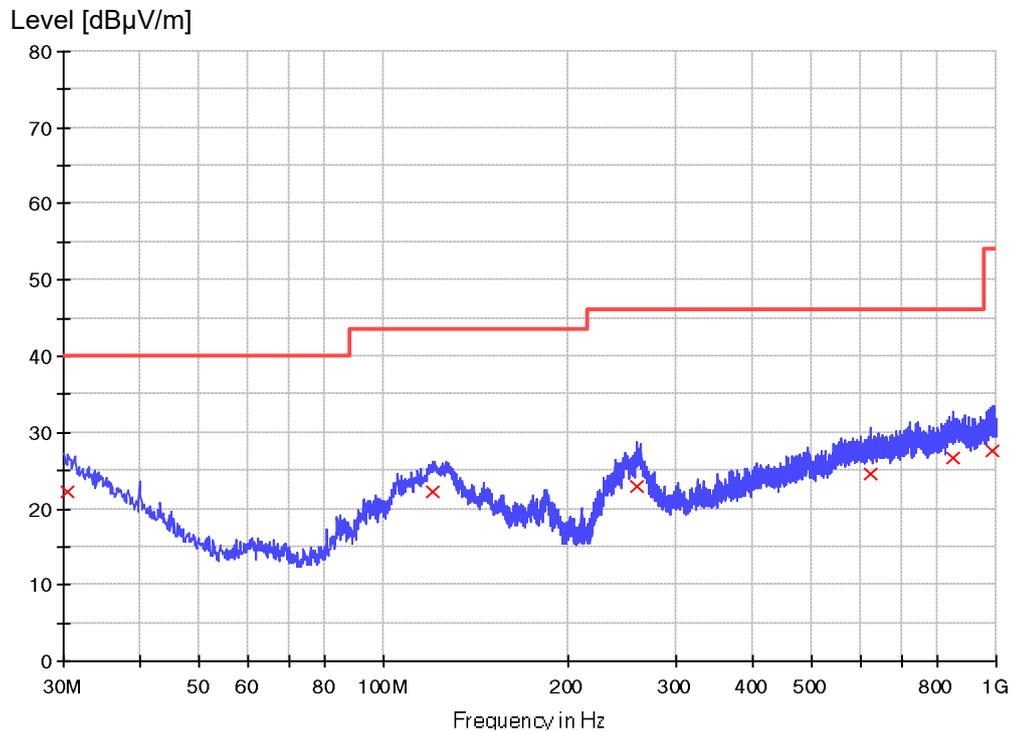
Figure 8: Spectral Diagrams and measurement results, vertical polarization (30 MHz to 1 GHz), Sample 1#



Final Quasi-peak measurement result:

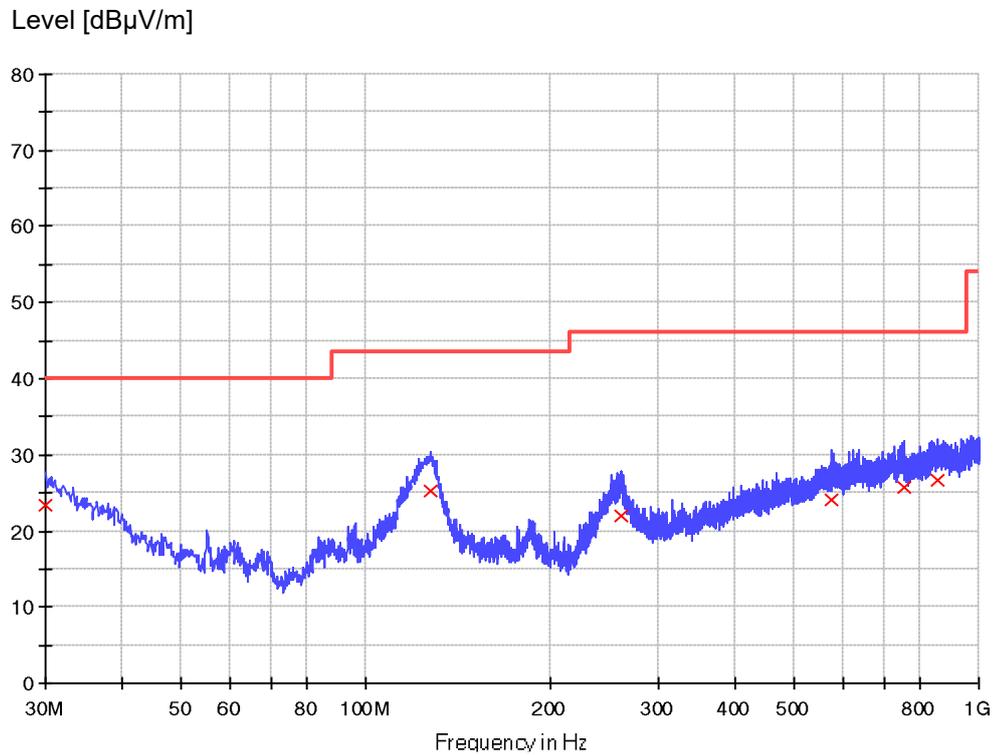
Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
33.031250	22.7	1000.0	120.000	171.0	V	-45.0	23.7	17.3	40.0
125.423750	25.9	1000.0	120.000	198.0	V	44.0	18.7	17.6	43.5
260.132500	22.6	1000.0	120.000	105.0	V	55.0	21.5	23.4	46.0
581.445000	23.5	1000.0	120.000	188.0	V	122.0	26.9	22.5	46.0
747.193750	25.4	1000.0	120.000	136.0	V	-165.0	28.8	20.6	46.0
852.802500	25.6	1000.0	120.000	171.0	V	95.0	28.9	20.4	46.0

Figure 9: Spectral Diagrams and measurement results, horizontal polarization (30 MHz to 1 GHz), Sample 2#



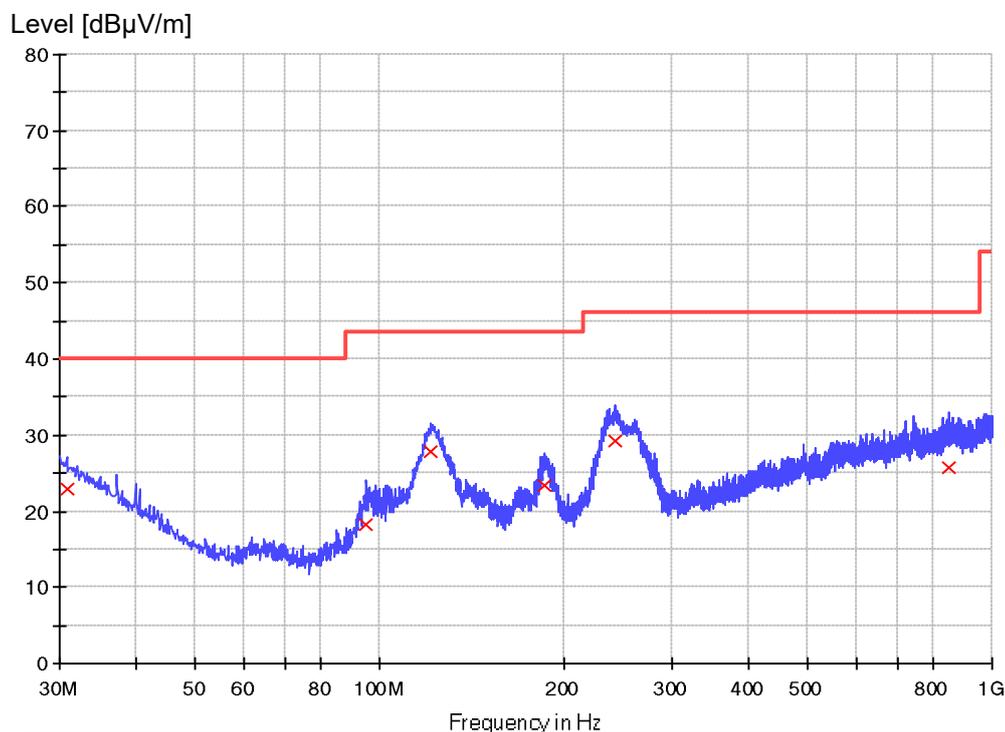
Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.485000	22.3	1000.0	120.000	109.0	H	-137.0	25.2	17.8	40.0
120.573750	22.2	1000.0	120.000	189.0	H	37.0	18.7	21.3	43.5
258.192500	22.9	1000.0	120.000	122.0	H	62.0	21.0	23.1	46.0
621.457500	24.5	1000.0	120.000	130.0	H	-151.0	26.8	21.5	46.0
851.105000	26.7	1000.0	120.000	139.0	H	-39.0	28.9	19.3	46.0
988.845000	27.5	1000.0	120.000	164.0	H	-167.0	29.6	26.5	54.0

Figure 10: Spectral Diagrams and measurement results, vertical polarization (30 MHz to 1 GHz), Sample 2#

Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.000000	23.5	1000.0	120.000	184.0	V	-118.0	25.4	16.5	40.0
127.970000	25.3	1000.0	120.000	182.0	V	14.0	18.6	18.2	43.5
260.011250	21.9	1000.0	120.000	115.0	V	78.0	21.4	24.1	46.0
576.231250	24.0	1000.0	120.000	155.0	V	-121.0	26.5	22.0	46.0
753.256250	25.7	1000.0	120.000	140.0	V	127.0	28.1	20.3	46.0
855.833750	26.7	1000.0	120.000	184.0	V	-97.0	28.9	19.3	46.0

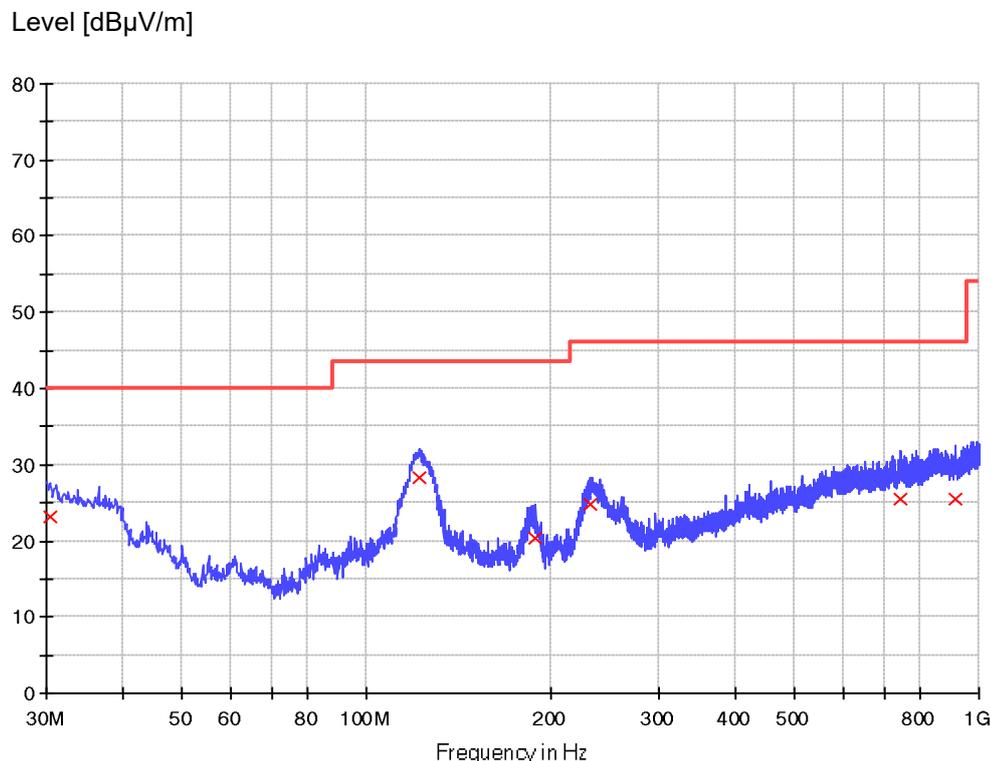
Figure 11: Spectral Diagrams and measurement results, horizontal polarization (30 MHz to 1 GHz), Sample 3#



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.848750	23.0	1000.0	120.000	105.0	H	16.0	25.0	17.0	40.0
95.232500	18.2	1000.0	120.000	109.0	H	-135.0	16.4	25.3	43.5
121.422500	27.8	1000.0	120.000	139.0	H	-12.0	18.7	15.7	43.5
185.321250	23.4	1000.0	120.000	172.0	H	104.0	15.9	20.1	43.5
242.551250	29.2	1000.0	120.000	173.0	H	158.0	19.1	16.8	46.0
852.560000	25.7	1000.0	120.000	100.0	H	-161.0	28.9	20.3	46.0

Figure 12: Spectral Diagrams and measurement results, vertical polarization (30 MHz to 1 GHz), Sample 3#



Final Quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBµV/m)
30.363750	23.1	1000.0	120.000	140.0	V	14.0	25.2	17.0	40.0
121.786250	28.3	1000.0	120.000	125.0	V	-20.0	18.7	15.3	43.5
189.201250	20.3	1000.0	120.000	125.0	V	92.0	15.8	23.2	43.5
232.487500	24.8	1000.0	120.000	190.0	V	159.0	17.6	21.2	46.0
745.496250	25.6	1000.0	120.000	152.0	V	22.0	28.9	20.4	46.0
912.700000	25.6	1000.0	120.000	184.0	V	-74.0	28.9	20.4	46.0

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6 Photographs of the Test Set-Up

Refer to the test setup file.

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7 List of Test and Measurement Instruments

Equip. no.	Equipment name	Model	Serial no.	Manufacturer	Cal. date	Due date
EMC-S-028	EMI measurement software	EMC32-E+ (10.60.20)	100150	Rohde & Schwarz	N/A	N/A
EMC-C-366	Thermohygrometer	608-H1	2485149174	testo	2024-07-26	2025-07-26
EMC-C-195	EMI test receiver	ESR3	102794	Rohde & Schwarz	2024-08-03	2025-08-03
EMC-C-190	Artificial mains network	ENV432	101514	Rohde & Schwarz	2024-10-11	2025-10-11
EMC-S-032	EMI measurement software	EMC32-MEB (10.60.20)	100697	Rohde & Schwarz	N/A	N/A
EMC-C-155	BiLog antenna	CBL 6112D	40530	Teseq	2025-03-24	2026-09-24
EMC-C-121	Thermohygrometer	608-H1	1241320265	testo	2025-06-05	2026-06-05
EMC-C-066	EMI test receiver	ESCI	100280	Rohde & Schwarz	2024-10-17	2025-10-17
EMC-C-001	3 m semi-anechoic chamber	SAC3	FJ129002	Frankonia	2023-12-03	2026-12-03

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End of test report