

Prüfbericht-Nr.: <i>Test Report No.:</i>	CN26EIGL 001	Auftrags-Nr.: <i>Order No.:</i>	326146837	Seite 1 von 31 <i>Page 1 of 31</i>
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	1288983	Auftragsdatum: <i>Order date.:</i>	2025-12-23	
Auftraggeber: <i>Client:</i>	IKEA of Sweden AB Box 702, SE-343 81 Älmhult, Sweden			
Prüfgegenstand: <i>Test item:</i>	Portable Luminaire			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	J2613			
Auftrags-Inhalt: <i>Order content:</i>	TÜV Rheinland EMC service			
Prüfgrundlage: <i>Test specification:</i>	FCC 47 CFR Part 15, Subpart B:2024 Class B ICES-005:2018			
Wareneingangsdatum: <i>Date of receipt:</i>	2025-01-12	Refer to the EUT photos file		
Prüfmuster-Nr.: <i>Test sample No.:</i>	A004182773-012			
Prüfzeitraum: <i>Testing period:</i>	2026-02-02			
Ort der Prüfung: <i>Place of testing:</i>	Refer to clause 1.1			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	genehmigt von: <i>authorized by:</i>		HeXiong Liu	
Datum: <i>Date:</i> 2026-03-17	Rambo Liu		HeXiong Liu	
Stellung: / Position	Project engineer		Authorizer	
Sonstiges / Other:	FCC ID: FHO-J2613 Test Firm Name: TUV Rheinland (Shanghai) Co., Ltd. Designation Number: CN1396 Test Firm Registration Number: 930979			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* 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				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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.</p> <p>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> |
| 2 | <p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature</i></p> |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>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 115:2023, 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 115:2023, 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> |

Prüfbericht - Nr.: CN26EIGL 001
Test Report No.:

Seite 3 von 31
Page 3 of 31

Revision history of test report:

Report number	Issue date	Contents and reason for change if appropriate
CN26EIGL 001	2026-03-17	Initial release.

Contents

1	TEST SITES	5
1.1	TEST FACILITIES	5
2	GENERAL PRODUCT INFORMATION	6
2.1	PRODUCT FUNCTION AND INTENDED USE	6
2.2	RATINGS AND SYSTEM DETAILS	6
2.3	INDEPENDENT OPERATION MODES	6
2.4	DESCRIPTION OF INTERCONNECTING CABLES.....	6
2.5	NOISE GENERATING AND NOISE SUPPRESSING PARTS	6
2.6	HIGHEST FREQUENCY GENERATED OR USED IN THE DEVICE OR ON WHICH THE DEVICE OPERATES OR TUNES	6
2.7	SUBMITTED DOCUMENTS.....	6
3	TEST SET-UP AND OPERATION MODES	7
3.1	PRINCIPLE OF CONFIGURATION SELECTION	7
3.2	EQUIPMENT AND CABLE ARRANGEMENT.....	7
3.3	PHYSICAL CONFIGURATION FOR TESTING.....	8
3.4	TEST OPERATION AND TEST SOFTWARE	8
3.5	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	8
3.6	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE	8
4	CONFORMITY DECISION RULE	9
5	TEST RESULTS EMISSION	10
5.1	EMISSION IN THE FREQUENCY RANGE UP TO 30 MHz.....	10
5.1.1	Conducted Emission.....	10
5.2	EMISSION IN THE FREQUENCY RANGE ABOVE 30 MHz.....	18
5.2.1	Radiated Emission (30-1000 MHz).....	18
6	PHOTOGRAPHS OF THE TEST SET-UP.....	30
7	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	31
8	LIST OF FIGURES.....	31

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 test equipment used 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 an ordinary portable luminaire for lighting and similar use. For further information, refer to the user's manual.

2.2 Ratings and System Details

Battery input : DC 7.2 V, 0.23 W
USB input : DC 5 V, Max 5 W
Battery pack : Rechargeable Li-Ion Battery
ICBL7.2-18-B1
DC 7.2 V, 2600 mAh

2.3 Independent Operation Modes

The basic operation modes are: "On" or "Off".

The test modes as follows:

"On"

Mode 1: the EUT was illuminated by battery powered with max. lighting output.

Mode 2: the EUT was illuminated by battery powered with min. lighting output.

Mode 3: the EUT was charged by USB adapter.

Mode 4: the EUT was charged by USB adapter and illuminated with max. lighting output.

Mode 5: the EUT was charged by USB adapter and illuminated with min. lighting output.

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 600 kHz.

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.

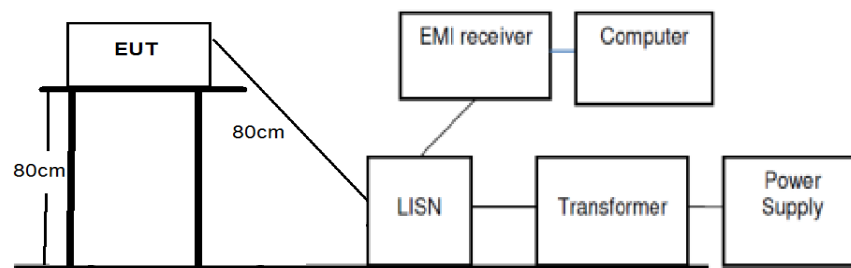
Refer to the related paragraph of this report.

The sequence of testing:

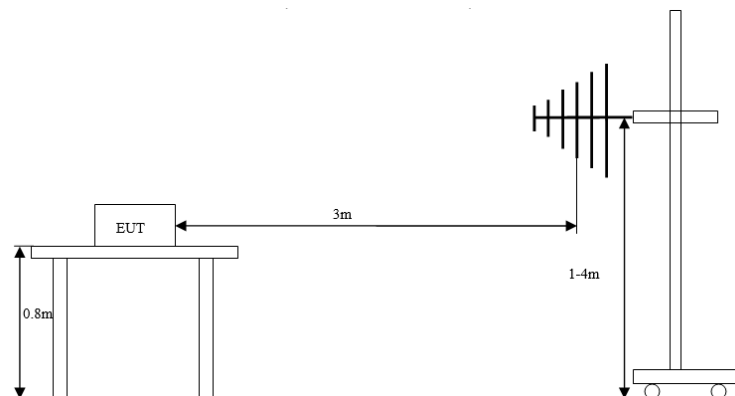
1. Conducted emission tests were performed on 2026-02-02.
2. Radiated emission tests were performed on 2026-02-02.

3.2 Equipment and cable arrangement

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



(Conducted emission)



(Radiated emission 30-1000 MHz)

Also refer to photographs on clause 6 for test setups for both conducted emission test and radiated emission tests.

3.3 Physical Configuration for Testing

Refer to the related paragraph of this report.

3.4 Test Operation and Test Software

Refer to the related paragraph of this report. No software was used.

3.5 Special Accessories and Auxiliary Equipment

During the tests, the following auxiliary equipment was used.

No.	Product	Model	Brand
1	LED driver	ICPSW5-5NA-1 Input: AC 100-240 V, 50/60 Hz, Max.0.2 A, 7 W Output: DC 5.0 V, Max.1.0 A, 5 W	IKEA

3.6 Countermeasures to achieve EMC Compliance

During tests, no special countermeasure was 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 Conducted Emission

Result:	Passed
----------------	---------------

Date of testing	: 2026-02-02
Test procedure	: FCC 47 CFR Part 15, Subpart B:2024, ICES-005:2018, 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 (powered by LED driver)
Operational mode	: Mode 3, 4, 5 defined in clause 2.3
Ambient condition	: Temperature: 22.5 °C; Relative humidity: 46.5 %
Expanded measurement uncertainty ($k=2$)	: 2.33 dB The minimum margin to the limit is 7.25 dB at 0.195000 MHz. The margin is higher than expanded measurement uncertainty.
Test setup photo	: Photograph 1 of Attachment 3

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.

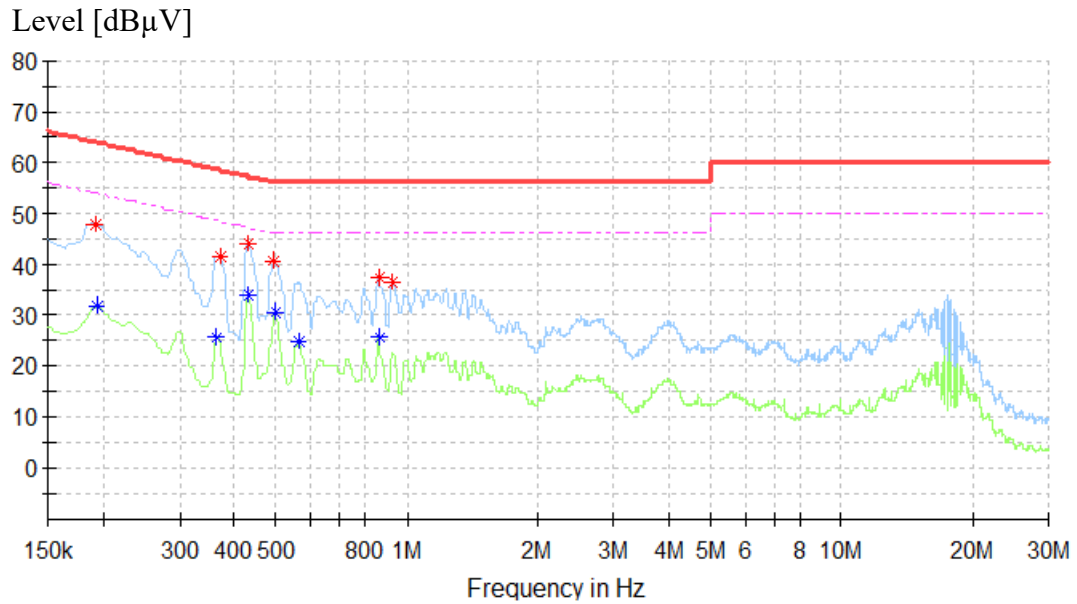
The following figures and tables were measured by an automatic measuring system. Both quasi-peak and average measurements were performed. In the following spectral diagram, “*” means Quasi-Peak Value and “*” means Average Value results.

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)

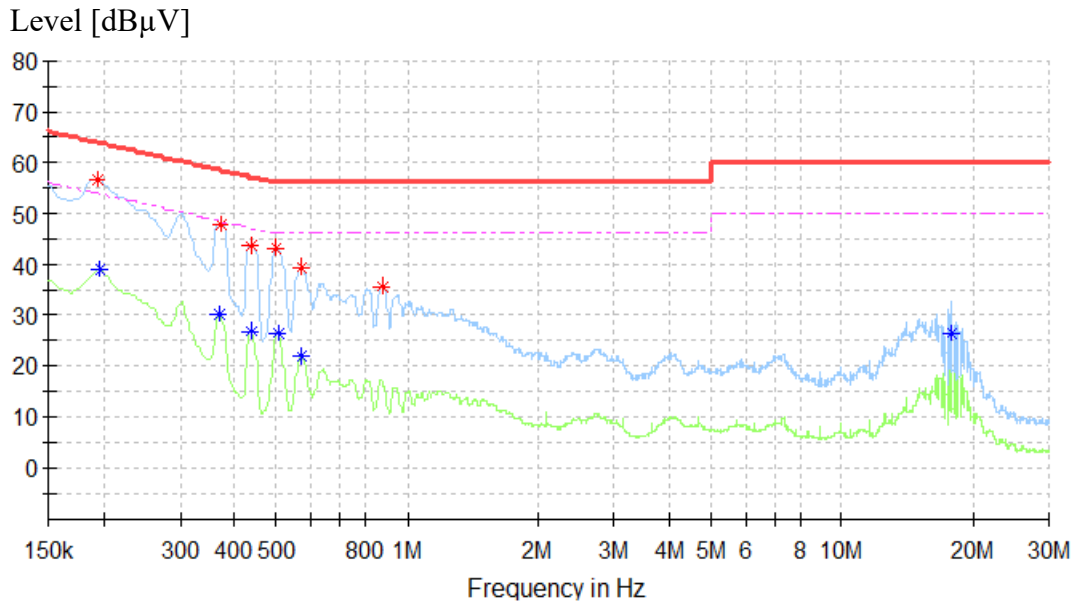
Figure 1: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 3, Line L



Final measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.192750	47.91	---	63.92	16.01	L1
0.195000	---	31.68	53.82	22.15	L1
0.366000	---	25.74	48.59	22.85	L1
0.372750	41.69	---	58.44	16.75	L1
0.431250	43.89	---	57.23	13.34	L1
0.431250	---	34.02	47.23	13.21	L1
0.494250	40.52	---	56.10	15.58	L1
0.498750	---	30.59	46.02	15.43	L1
0.564000	---	24.90	46.00	21.10	L1
0.863250	---	25.41	46.00	20.59	L1
0.863250	37.47	---	56.00	18.53	L1
0.928500	36.39	---	56.00	19.61	L1

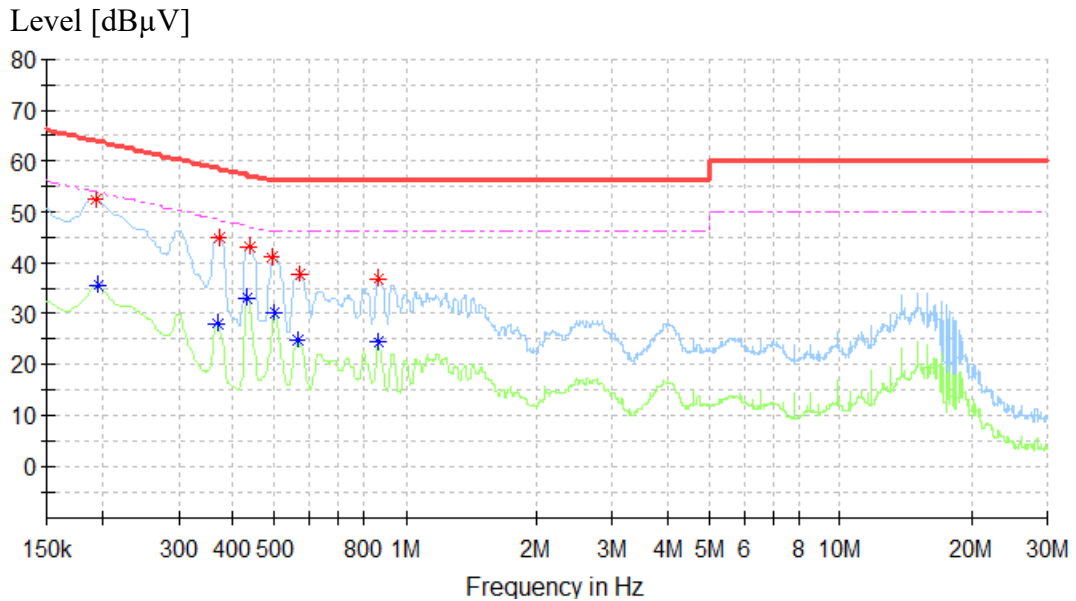
Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 3, Line N



Final measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.195000	56.57	---	63.82	7.25	N
0.197250	---	38.81	53.73	14.91	N
0.370500	---	30.19	48.49	18.30	N
0.375000	47.87	---	58.39	10.51	N
0.435750	---	26.68	47.14	20.46	N
0.438000	43.70	---	57.10	13.40	N
0.501000	43.11	---	56.00	12.89	N
0.503250	---	26.25	46.00	19.75	N
0.573000	39.25	---	56.00	16.75	N
0.573000	---	21.86	46.00	24.14	N
0.876750	35.54	---	56.00	20.46	N
17.891250	---	26.28	50.00	23.72	N

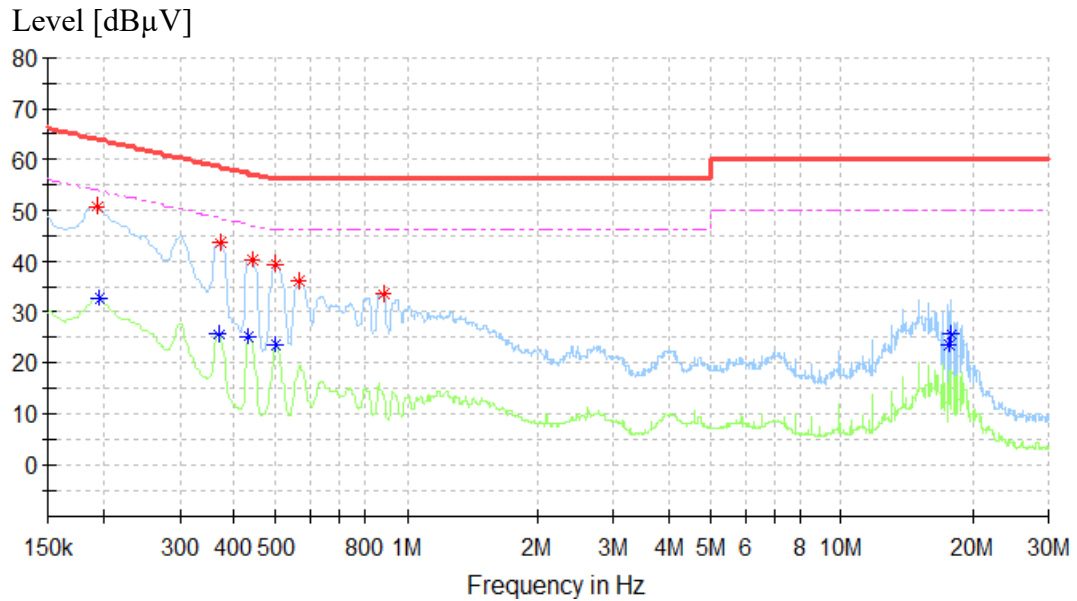
Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 4, Line L



Final measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.195000	52.39	---	63.82	11.43	L1
0.197250	---	35.43	53.73	18.30	L1
0.368250	---	28.05	48.54	20.49	L1
0.375000	44.84	---	58.39	13.55	L1
0.433500	---	33.08	47.19	14.11	L1
0.435750	43.36	---	57.14	13.78	L1
0.496500	41.24	---	56.06	14.81	L1
0.501000	---	30.25	46.00	15.75	L1
0.568500	---	24.84	46.00	21.16	L1
0.570750	37.64	---	56.00	18.36	L1
0.867750	---	24.35	46.00	21.65	L1
0.870000	36.76	---	56.00	19.24	L1

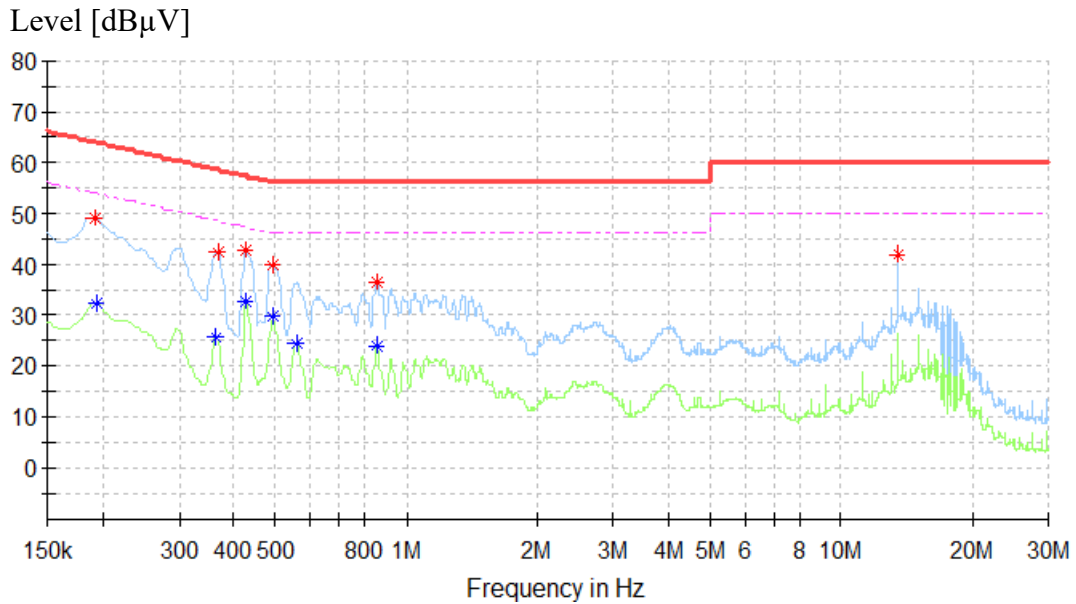
Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 4, Line N



Final measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.195000	50.49	---	63.82	13.33	N
0.197250	---	32.71	53.73	21.02	N
0.368250	---	25.75	48.54	22.79	N
0.375000	43.41	---	58.39	14.98	N
0.433500	---	25.12	47.19	22.06	N
0.442500	40.27	---	57.02	16.74	N
0.498750	39.22	---	56.02	16.81	N
0.501000	---	23.44	46.00	22.56	N
0.568500	35.87	---	56.00	20.13	N
0.883500	33.73	---	56.00	22.27	N
17.778750	---	23.42	50.00	26.58	N
17.846250	---	25.78	50.00	24.22	N

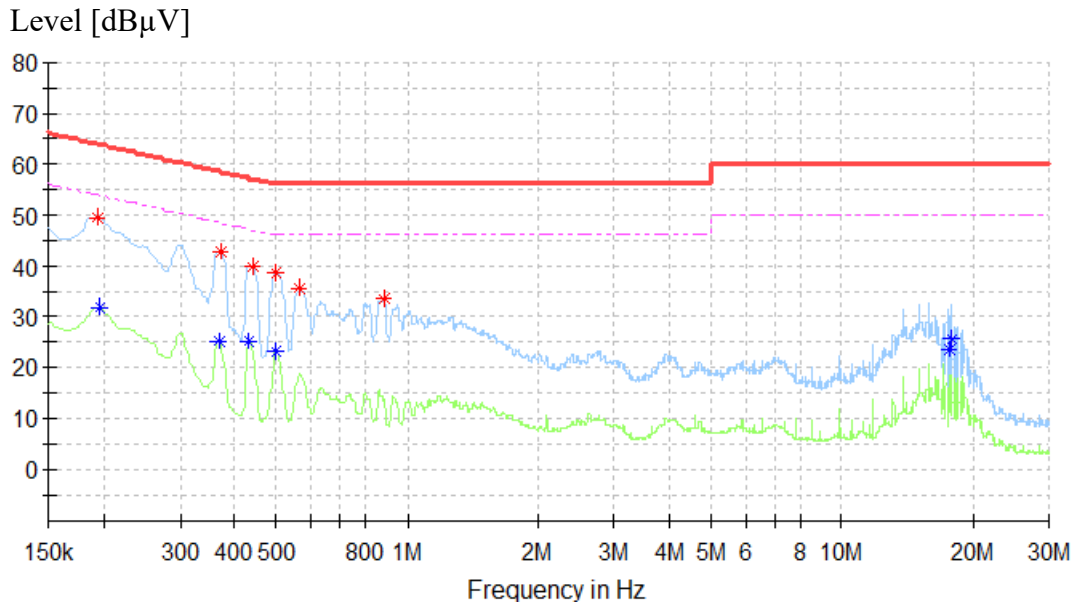
Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 5, Line L



Final measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.192750	49.01	---	63.92	14.91	L1
0.195000	---	32.36	53.82	21.46	L1
0.366000	---	25.48	48.59	23.11	L1
0.370500	42.24	---	58.49	16.25	L1
0.429000	42.82	---	57.27	14.45	L1
0.429000	---	32.67	47.27	14.60	L1
0.492000	40.01	---	56.13	16.12	L1
0.494250	---	29.86	46.10	16.24	L1
0.559500	---	24.26	46.00	21.74	L1
0.856500	---	24.07	46.00	21.93	L1
0.858750	36.42	---	56.00	19.58	L1
13.560000	41.83	---	60.00	18.17	L1

Figure 6: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 5, Line N



Final measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.195000	49.48	---	63.82	14.34	N
0.197250	---	31.71	53.73	22.01	N
0.368250	---	25.24	48.54	23.30	N
0.372750	42.74	---	58.44	15.70	N
0.433500	---	25.00	47.19	22.19	N
0.442500	39.74	---	57.02	17.27	N
0.501000	---	23.03	46.00	22.97	N
0.501000	38.60	---	56.00	17.40	N
0.568500	35.50	---	56.00	20.50	N
0.883500	33.53	---	56.00	22.47	N
17.769750	---	23.46	50.00	26.54	N
17.837250	---	25.57	50.00	24.43	N

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Radiated Emission (30-1000 MHz)

Result:	Passed
----------------	---------------

Date of testing	: 2026-02-02
Test procedure	: FCC 47 CFR Part 15, Subpart B:2024, ICES-005:2018, ANSI C63.4-2014 and CISPR 16-2-3
Product classification	: Class B
Frequency range	: 30 – 1000 MHz (<i>see note 1</i>)
Limits	: Quasi-peak limits (3 m distance): (<i>see note 2</i>) 30 – 88 MHz, 40 dB μ V/m; 88 – 216 MHz, 43.5 dB μ V/m; 216 – 1000 MHz, 46 dB μ V/m
Bandwidth of EMI receiver for final measurement	: 120 kHz
Measurement time for final measurement	: 1 s
Kind of test site	: Semi-anechoic chamber
Supply voltage	: AC 120 V, 60 Hz (powered by LED driver)
Operational mode	: Mode 1, 2, 3, 4, 5 defined in clause 2.3
Ambient condition	: Temperature: 23.1 °C; Relative humidity: 47.4 %
Expanded measurement uncertainty ($k=2$)	: 5.40 dB The minimum margin to the limit is 18.4 dB at 30.121250 & 30.363750 & 30.242500 MHz. The margin is higher than expanded measurement uncertainty.
Test setup photo	: Photograph 2 of Attachment 3

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 an 80 cm wooden support above the reference ground plane. The wooden support was rotated 360° around and the height of the antenna 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 measured by an automatic measurement system. A preview test was first 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, “×” means quasi-peak test results.

Note 1: The highest frequency in the EUT is less than 108 MHz. According to FCC 47 CFR Part 15, Subpart B:2024 §15.33 (b) (1), the upper frequency for radiated emission measurement is 1000 MHz.

Note 2: The class B limits of ICES-005:2018 is stricter than those FCC 47 CFR Part 15, Subpart B:2024 for 3 m test distance. Therefore, the former limits are used in following figures and tables.

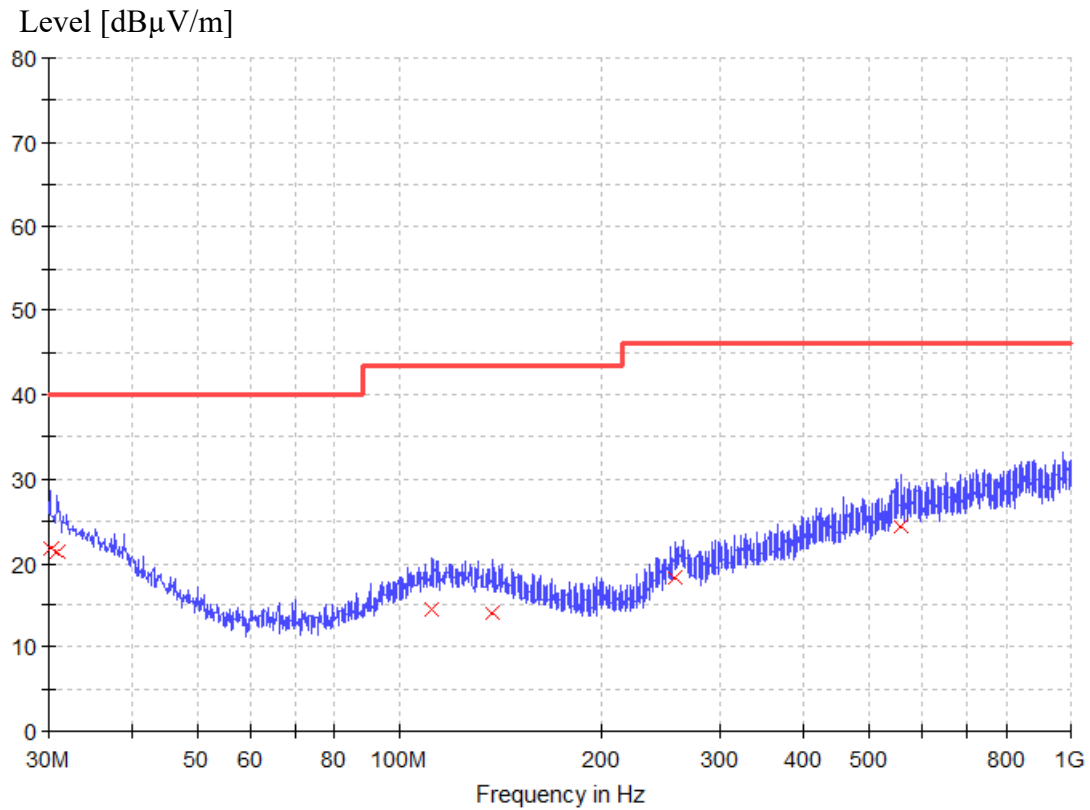
Notes on following tables of radiated emission results and conversions:

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)

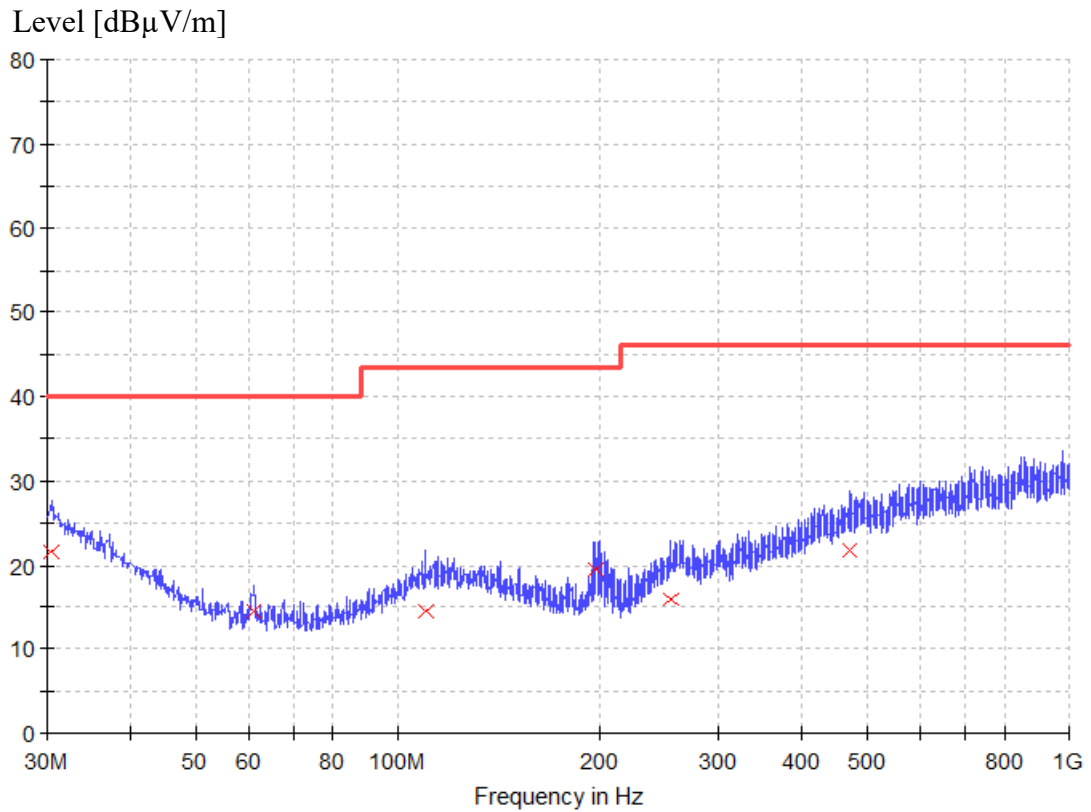
Figure 7: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 1, Horizontal polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.121250	21.6	120.000	170.0	H	-37.0	25.3	18.4	40.0
30.970000	21.2	120.000	160.0	H	108.0	24.9	18.8	40.0
111.843750	14.4	120.000	110.0	H	92.0	18.7	29.1	43.5
136.942500	14.0	120.000	200.0	H	74.0	18.2	29.5	43.5
257.343750	18.2	120.000	130.0	H	81.0	20.8	27.8	46.0
558.286250	24.4	120.000	100.0	H	112.0	26.5	21.6	46.0

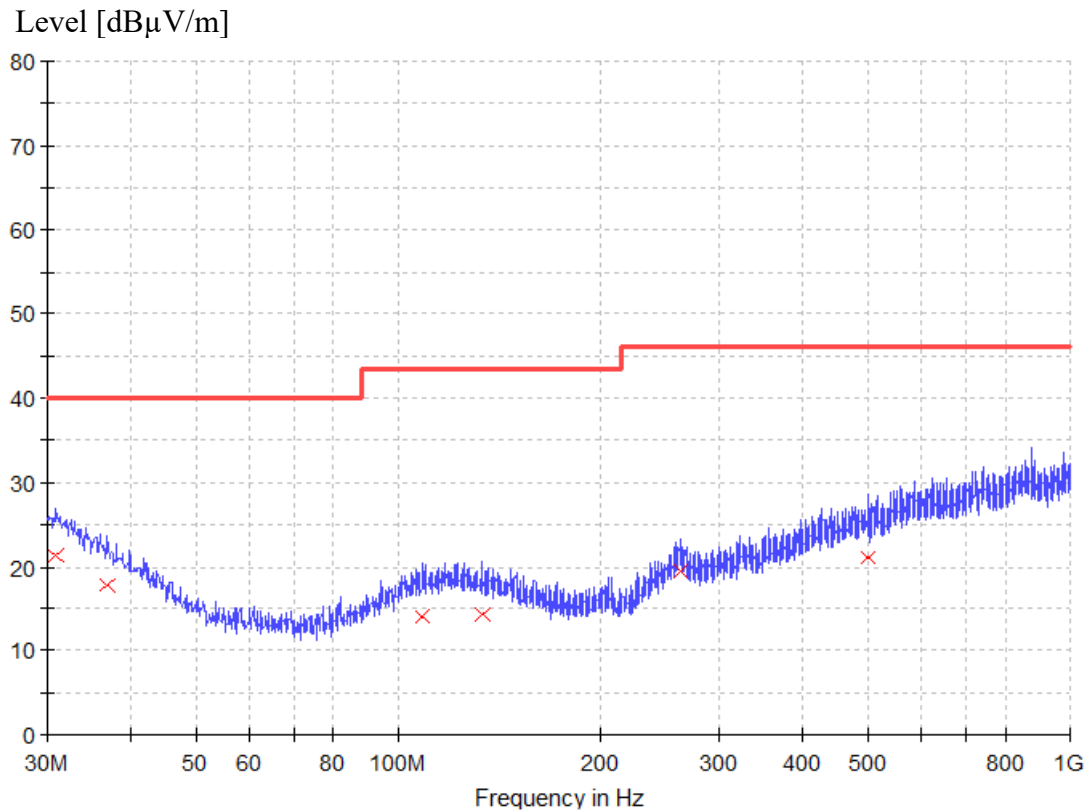
Figure 8: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 1, Vertical polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.363750	21.6	120.000	100.0	V	-12.0	25.2	18.4	40.0
60.918750	14.5	120.000	120.0	V	-74.0	12.6	25.5	40.0
109.782500	14.5	120.000	160.0	V	-101.0	18.6	29.1	43.5
197.446250	19.5	120.000	130.0	V	48.0	16.0	24.0	43.5
255.525000	15.9	120.000	110.0	V	93.0	20.3	30.1	46.0
471.107500	21.8	120.000	110.0	V	122.0	24.8	24.2	46.0

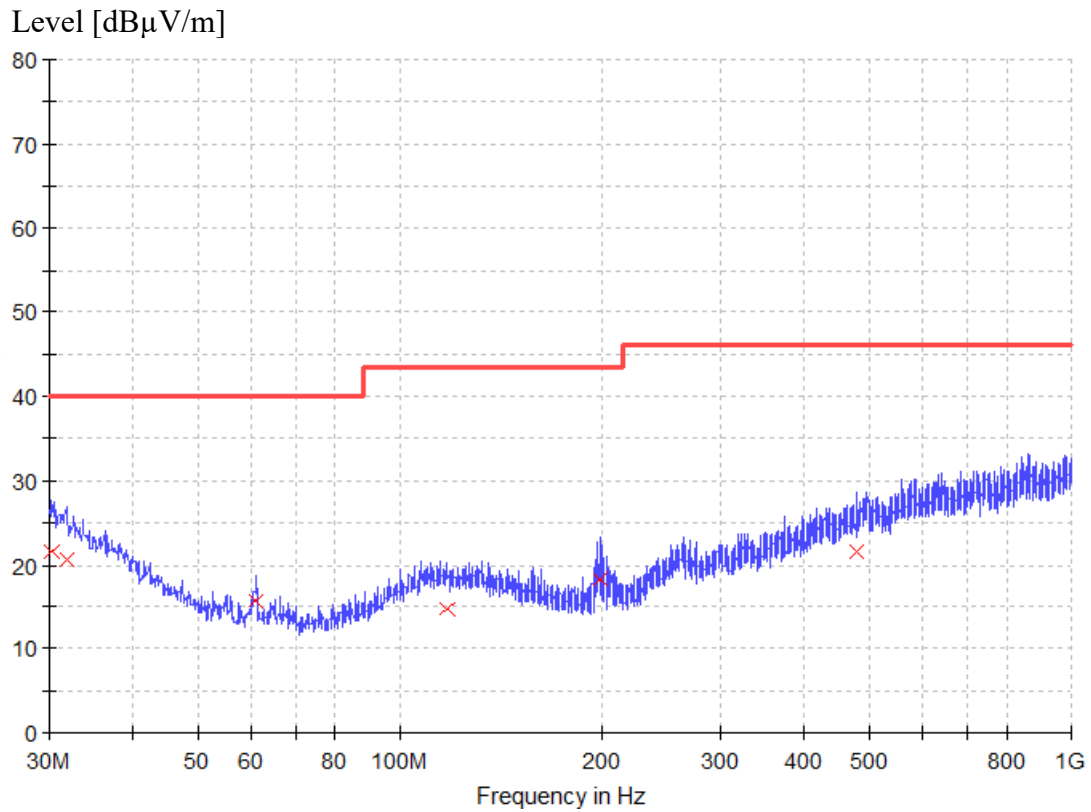
Figure 9: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 2, Horizontal polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.970000	21.2	120.000	120.0	H	167.0	24.9	18.8	40.0
36.911250	17.7	120.000	170.0	H	121.0	21.5	22.3	40.0
108.327500	14.0	120.000	200.0	H	101.0	18.5	29.5	43.5
133.183750	14.3	120.000	130.0	H	-91.0	18.4	29.2	43.5
263.042500	19.3	120.000	210.0	H	-108.0	21.6	26.7	46.0
501.298750	21.0	120.000	110.0	H	-129.0	24.6	25.0	46.0

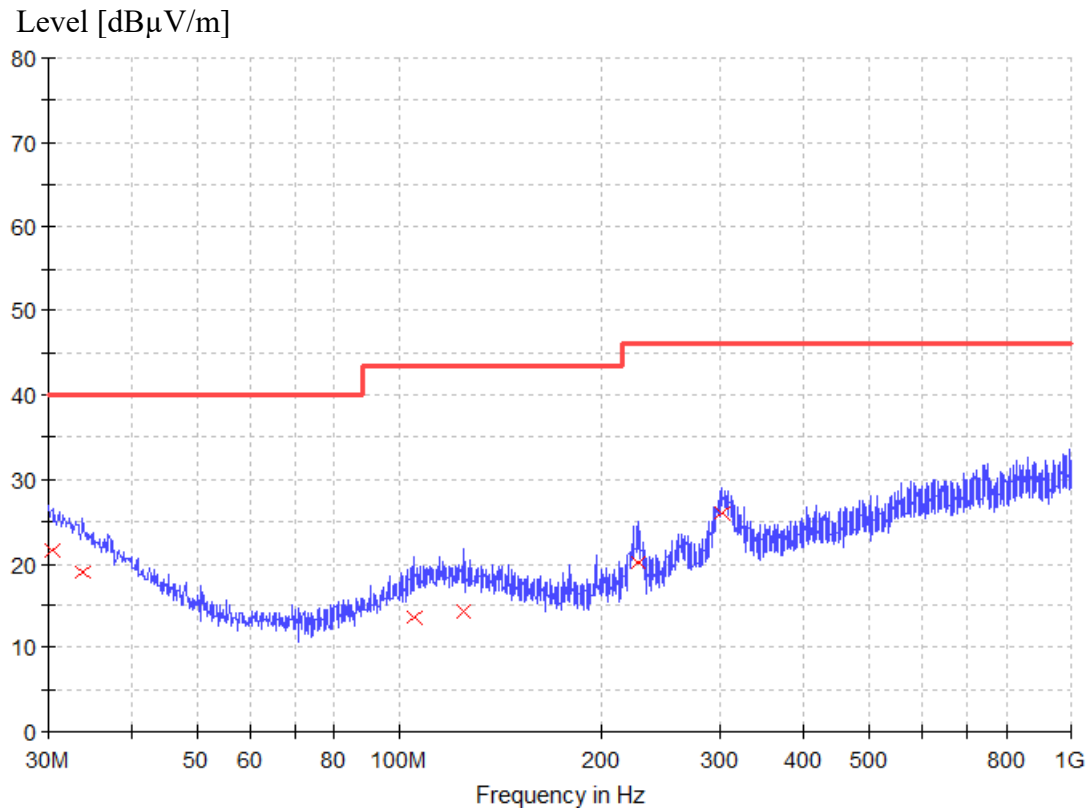
Figure 10: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 2, Vertical polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.242500	21.6	120.000	120.0	V	112.0	25.3	18.4	40.0
31.818750	20.6	120.000	110.0	V	71.0	24.4	19.4	40.0
60.918750	15.7	120.000	130.0	V	52.0	12.6	24.3	40.0
117.663750	14.6	120.000	170.0	V	109.0	18.8	28.9	43.5
198.052500	18.2	120.000	110.0	V	-63.0	16.0	25.3	43.5
479.110000	21.6	120.000	140.0	V	-51.0	24.7	24.4	46.0

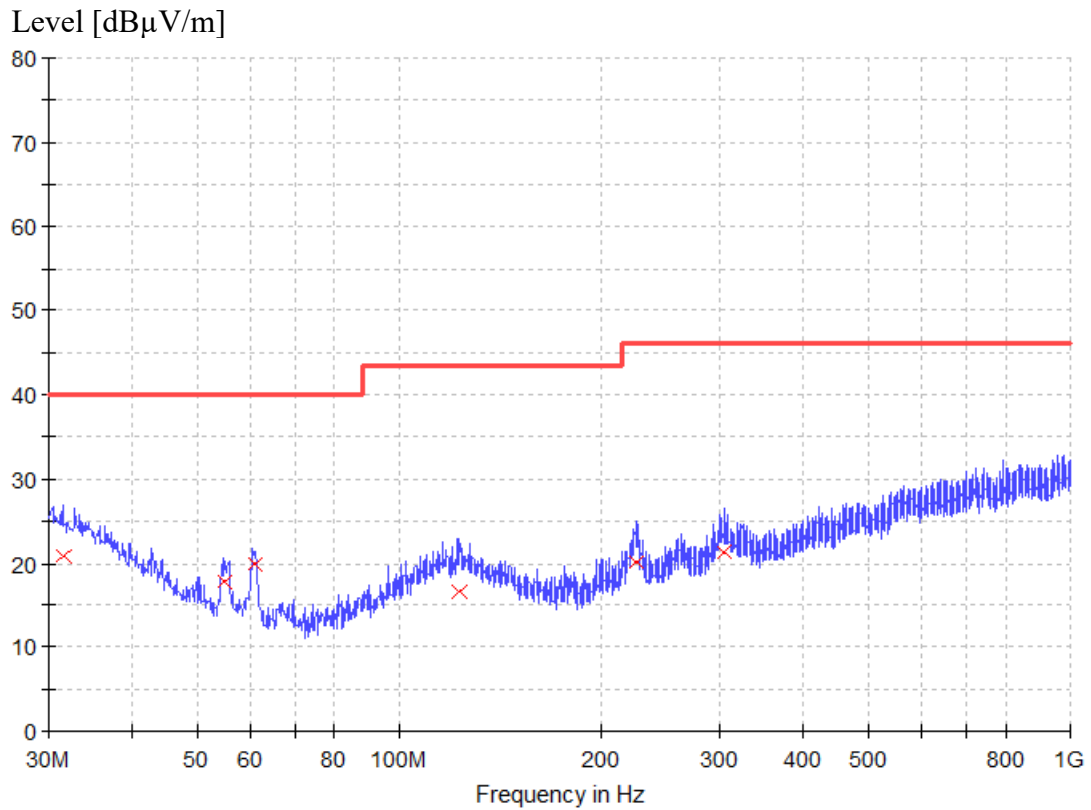
Figure 11: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 3, Horizontal polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.363750	21.5	120.000	120.0	H	-98.0	25.2	18.5	40.0
33.880000	19.0	120.000	130.0	H	-108.0	23.2	21.0	40.0
105.053750	13.6	120.000	200.0	H	-172.0	18.1	29.9	43.5
124.817500	14.4	120.000	170.0	H	106.0	18.7	29.1	43.5
226.425000	20.2	120.000	180.0	H	128.0	16.8	25.8	46.0
303.418750	25.9	120.000	160.0	H	114.0	20.7	20.1	46.0

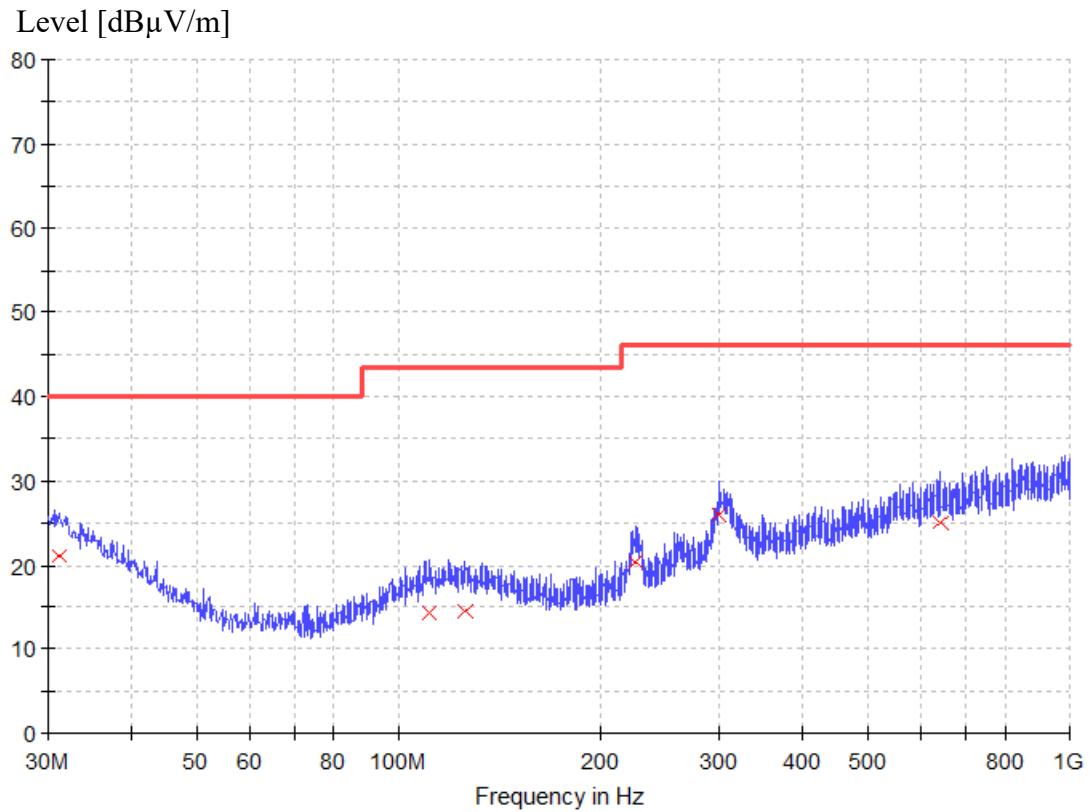
Figure 12: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 3, Vertical polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
31.576250	20.9	120.000	110.0	V	-66.0	24.5	19.1	40.0
54.856250	17.7	120.000	120.0	V	-24.0	13.3	22.3	40.0
61.040000	19.8	120.000	200.0	V	-96.0	12.6	20.2	40.0
123.241250	16.6	120.000	170.0	V	102.0	18.7	26.9	43.5
224.970000	20.2	120.000	100.0	V	124.0	16.6	25.9	46.0
304.995000	21.2	120.000	100.0	V	178.0	20.5	24.8	46.0

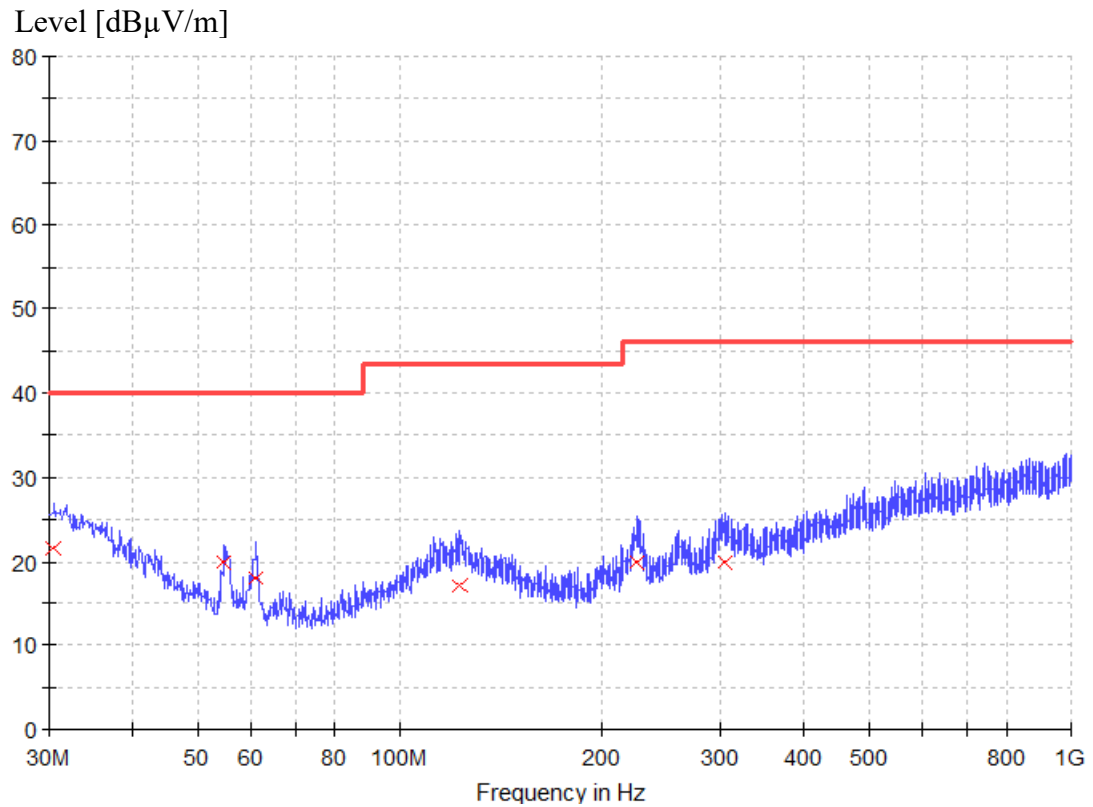
Figure 13: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 4, Horizontal polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
31.212500	20.9	120.000	180.0	H	160.0	24.8	19.1	40.0
111.116250	14.4	120.000	100.0	H	124.0	18.7	29.2	43.5
125.666250	14.4	120.000	110.0	H	-72.0	18.7	29.1	43.5
225.697500	20.3	120.000	130.0	H	-66.0	16.7	25.7	46.0
300.630000	26.1	120.000	220.0	H	-109.0	20.8	19.9	46.0
641.706250	25.0	120.000	170.0	H	112.0	26.9	21.0	46.0

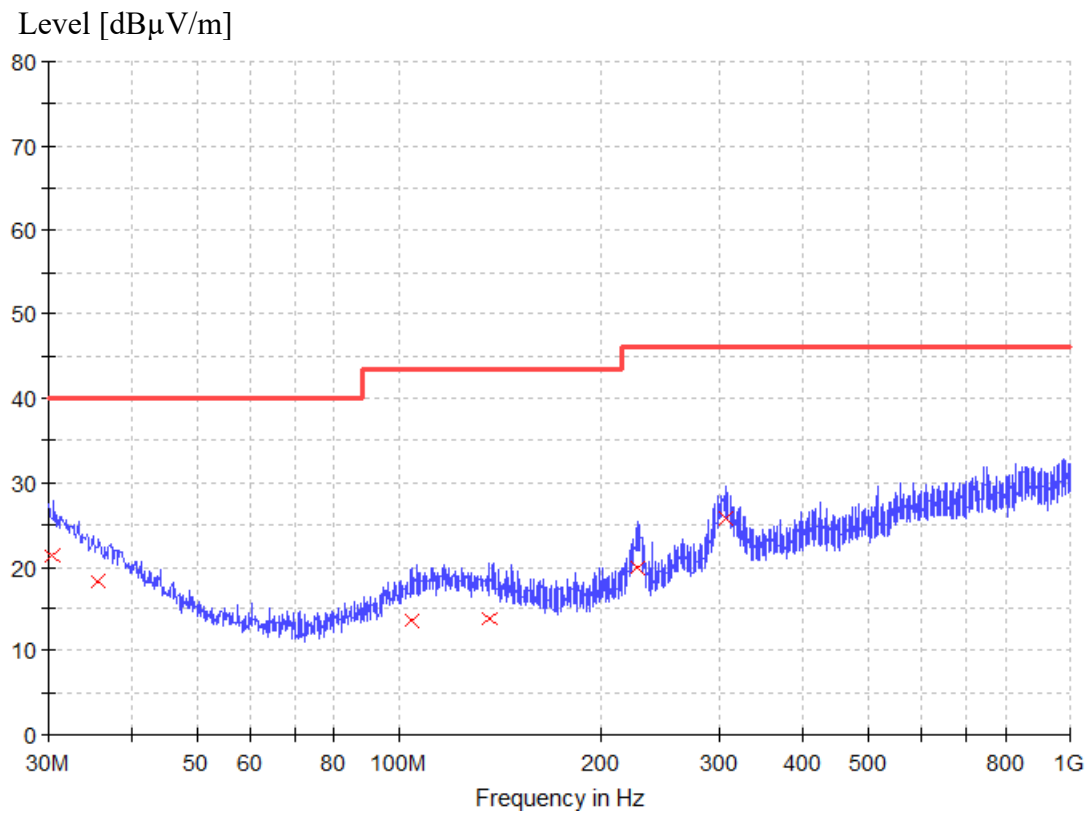
Figure 14: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 4, Vertical polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.485000	21.5	120.000	110.0	V	-63.0	25.2	18.5	40.0
54.735000	20.0	120.000	120.0	V	-124.0	13.4	20.0	40.0
61.040000	18.1	120.000	170.0	V	87.0	12.6	21.9	40.0
123.241250	17.0	120.000	190.0	V	46.0	18.7	26.5	43.5
224.848750	19.9	120.000	210.0	V	17.0	16.6	26.1	46.0
304.995000	19.8	120.000	100.0	V	42.0	20.5	26.2	46.0

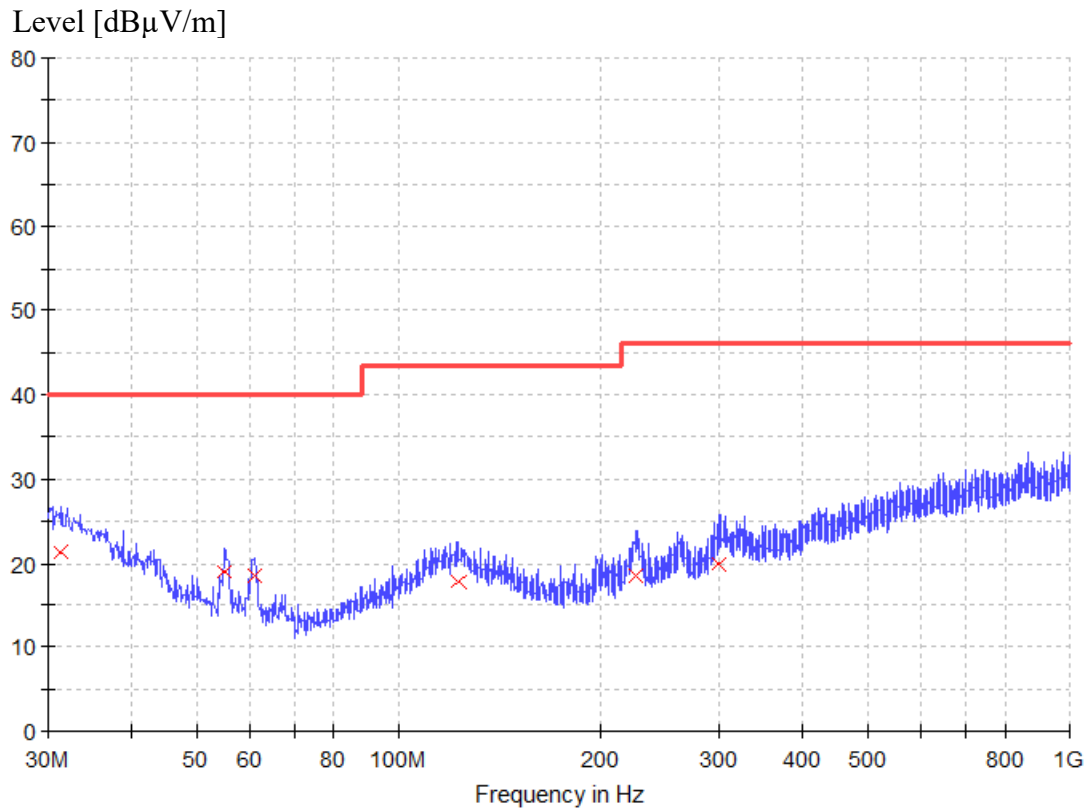
Figure 15: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 5, Horizontal polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
30.485000	21.4	120.000	180.0	H	-96.0	25.2	18.6	40.0
35.577500	18.2	120.000	210.0	H	-26.0	22.3	21.8	40.0
104.083750	13.7	120.000	220.0	H	108.0	18.0	29.9	43.5
136.215000	13.8	120.000	120.0	H	129.0	18.3	29.7	43.5
226.788750	19.8	120.000	170.0	H	68.0	16.8	26.2	46.0
307.298750	25.8	120.000	180.0	H	26.0	20.4	20.2	46.0

Figure 16: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 5, Vertical polarization



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - QPK (dB)	Limit - QPK (dBμV/m)
31.455000	21.4	120.000	100.0	V	180.0	24.6	18.6	40.0
55.098750	18.9	120.000	100.0	V	180.0	13.3	21.1	40.0
61.040000	18.5	120.000	100.0	V	180.0	12.6	21.5	40.0
122.635000	17.8	120.000	100.0	V	180.0	18.7	25.8	43.5
225.697500	18.6	120.000	100.0	V	180.0	16.7	27.5	46.0
300.023750	20.0	120.000	100.0	V	180.0	20.8	26.0	46.0

6 Photographs of the Test Set-Up

Refer to the test setup file.

7 List of Test and Measurement Instruments

Equipment no	Name	Model	Serial no	Manufacturer	Calibration 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	2025-07-11	2026-07-11
EMC-C-195	EMI test receiver	ESR3	102794	Rohde & Schwarz	2025-08-02	2026-08-02
EMC-C-190	Artificial mains network	ENV432	101514	Rohde & Schwarz	2025-09-02	2026-09-02
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	2025-09-28	2026-09-28
EMC-C-001	3 m semi-anechoic chamber	SAC3	FJ129002	Frankonia	2023-12-03	2026-12-03

8 List of Figures

Figure 1: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 3, Line L	12
Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 3, Line N	13
Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 4, Line L	14
Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 4, Line N	15
Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 5, Line L	16
Figure 6: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, mode 5, Line N	17
Figure 7: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 1, Horizontal polarization	20
Figure 8: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 1, Vertical polarization	21
Figure 9: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 2, Horizontal polarization	22
Figure 10: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 2, Vertical polarization	23
Figure 11: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 3, Horizontal polarization	24
Figure 12: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 3, Vertical polarization	25
Figure 13: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 4, Horizontal polarization	26
Figure 14: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 4, Vertical polarization	27
Figure 15: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 5, Horizontal polarization	28
Figure 16: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, mode 5, Vertical polarization	29

End of test report