

Prüfbericht-Nr.: <i>Test report no.:</i>	CN25BMW 001	Auftrags-Nr.: <i>Order no.:</i>	326116431	Seite 1 von 36 <i>Page 1 of 36</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	1288983	Auftragsdatum: <i>Order date:</i>	2025-06-24	
Auftraggeber: <i>Client:</i>	IKEA of Sweden AB Box 702, SE-343 81 Älmhult, Sweden			
Prüfgegenstand: <i>Test item:</i>	Table lamp			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	A2404			
Auftrags-Inhalt: <i>Order content:</i>	TÜV Rheinland EMC service			
Prüfgrundlage: <i>Test specification:</i>	FCC 47 CFR Part 15, Subpart B:2023 Class B ICES-005:2018			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-07-14	Refer to the EUT photos file		
Prüfmuster-Nr.: <i>Test sample no:</i>	A004042753-001			
Prüfzeitraum: <i>Testing period:</i>	2025-07-01~2025-08-01			
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>			
Datum: <i>Date:</i>	2025-11-04			
Stellung / Position:	Project engineer			
Sonstiges / Other:	FCC ID: FHO-A2404 Test Firm Name: TÜV 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 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 specification(s)	F(ail) = failed a.m. test specification(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. 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.				

Prüfbericht-Nr.: CN25BMVW 001
Test report no.:

Seite 2 von 36
Page 2 of 36

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. 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>
<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.: CN25BMVW 001

Test Report No.:

Seite 3 von 36

Page 3 of 36

Revision history of test report:

Report number	Issue date	Contents and reason for change if appropriate
CN25BMVW 001	2025-11-04	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	TEST SOFTWARE	8
3.4	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	8
3.5	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.....	20
5.2.1	Radiated emission (30-1000 MHz).....	20
6	PHOTOGRAPHS OF THE TEST SET-UP.....	34
7	LIST OF TEST AND MEASUREMENT INSTRUMENTS	35
8	LIST OF FIGURES.....	36

1 Test Sites

1.1 Test Facilities

Laboratory: TÜV Rheinland (Shanghai) Co., Ltd.

Address: Workshop14, 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 an ordinary table lamp for lighting and similar use. For further information, refer to the user's manual.

2.2 Ratings and System Details

Rated input : 5 V DC, 5 W

Protection class : Class III

The model B2404 has two kinds of Li-ion Batteries, models ICBL7.2-18-B1 and ICBL7.2-18-USBC-B1. Therefore, the EMC tests were performed on model B2404 with Li-ion Batteries ICBL7.2-18-B1 and ICBL7.2-18-USBC-B1 respectively.

2.3 Independent Operation Modes

The basic operation modes are: "ON" and "OFF".

- Mode 1: EUT was charged by power supply and lighting on.
- Mode 2: EUT was charged by laptop and lighting on.
- Mode 3: EUT was powered by internal battery and lighting on.

2.4 Description of interconnecting cables

N/A

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 16 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.

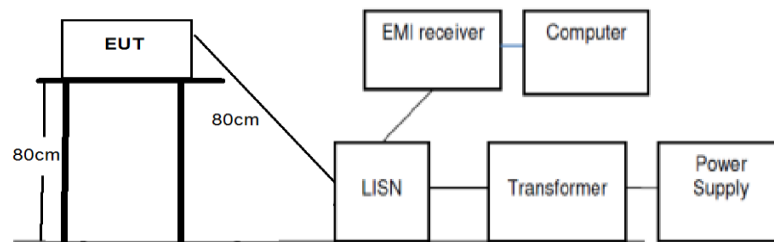
Refer to the related paragraph of this report.

The sequence of testing:

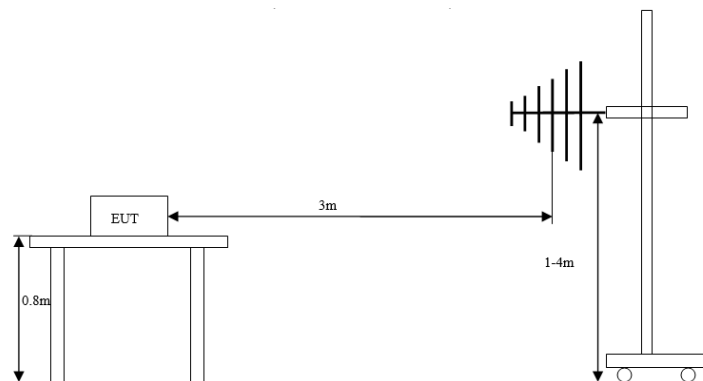
1. Conducted emission tests were performed on 2025-07-01~2025-08-01.
2. Radiated emission tests were performed on 2025-07-02~2025-07-30.

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 test.

3.3 Test Software

No special test software was used during the tests.

3.4 Special Accessories and Auxiliary Equipment

During the test, the following auxiliary equipment were used.

No.	Product	Model	Brand
1	Power supply	ICPSW5-5NA-1	IKEA
2	Laptop	T45	ThinkPad

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 Conducted emission

Result:		Passed
Date of testing	: 2025-07-01~2025-08-01	
Test procedure	: FCC 47 CFR Part 15, Subpart B:2023, 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 for power supply and power supply of laptop	
Operational mode	: Mode 1: EUT was charged by power supply and lighting on. Mode 2: EUT was charged by laptop and lighting on.	
Ambient condition	: Temperature: 22.3~23.5 °C; Relative humidity: 41.4~45.2 %	
Expanded measurement uncertainty ($k=2$)	: 2.33 dB The minimum margin to the limit is 8.39 dB at 0.165750 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, “◆” means Quasi-Peak Value and “◆” means Average Value results.

Prüfbericht - Nr.: CN25BMVW 001

Test Report No.:

Seite 11 von 36

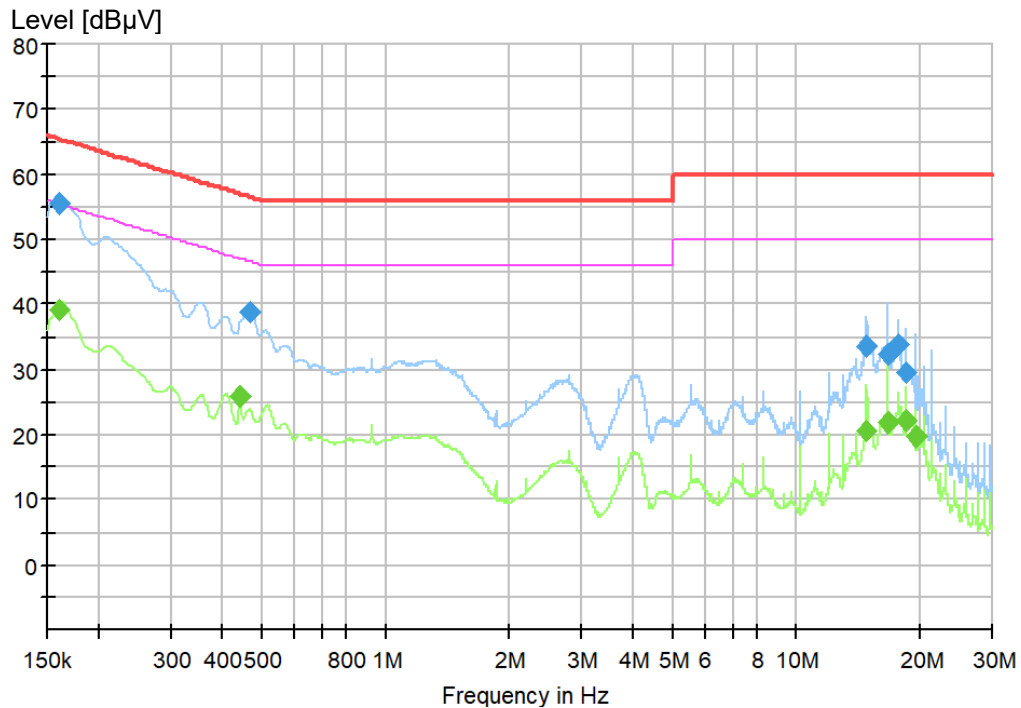
Page 11 of 36

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)

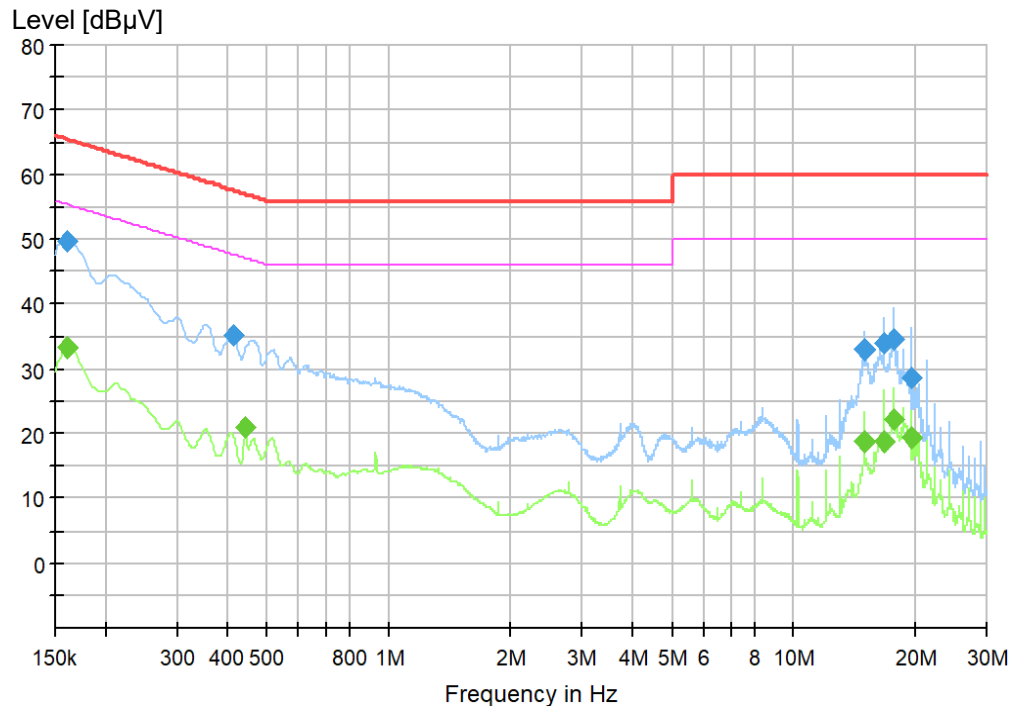
Figure 1: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-B1, mode 1


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	55.66	65.40	9.74	1000.0	9.000	L1
0.465000	38.84	56.60	17.77	1000.0	9.000	L1
14.849250	33.52	60.00	26.48	1000.0	9.000	L1
16.705500	32.41	60.00	27.59	1000.0	9.000	L1
17.634750	34.04	60.00	25.96	1000.0	9.000	L1
18.561750	29.57	60.00	30.43	1000.0	9.000	L1

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	39.15	55.40	16.25	1000.0	9.000	L1
0.442500	25.83	47.02	21.18	1000.0	9.000	L1
14.849250	20.52	50.00	29.48	1000.0	9.000	L1
16.705500	21.94	50.00	28.06	1000.0	9.000	L1
18.561750	22.15	50.00	27.85	1000.0	9.000	L1
19.491000	19.83	50.00	30.17	1000.0	9.000	L1

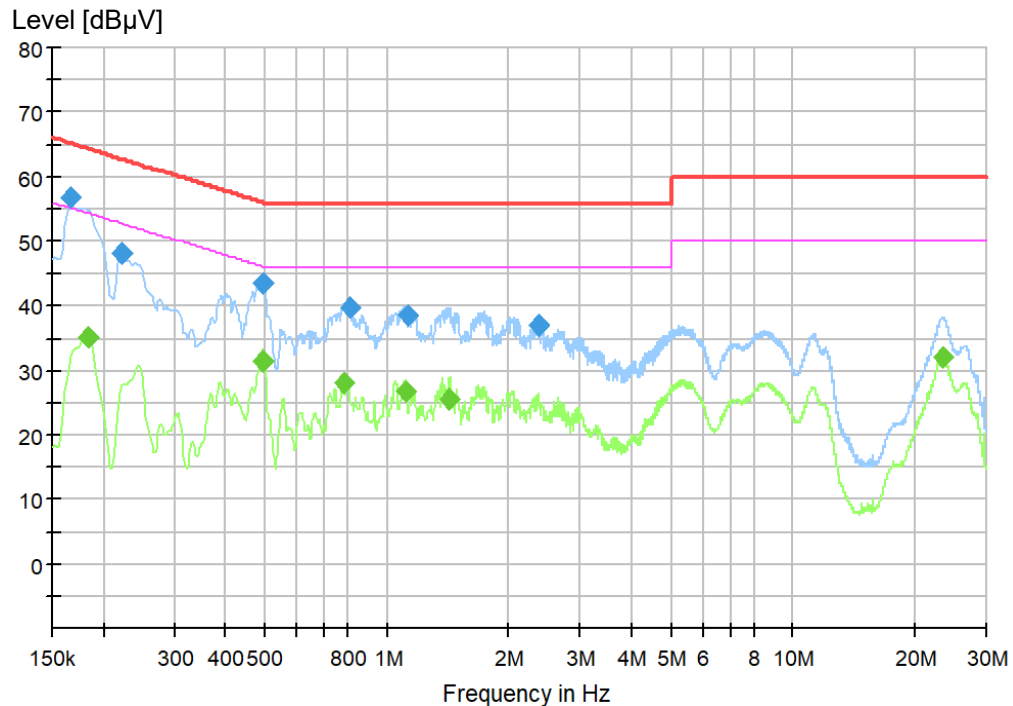
Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-B1, mode 1


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	49.68	65.40	15.72	1000.0	9.000	N
0.411000	35.15	57.63	22.48	1000.0	9.000	N
14.901000	32.87	60.00	27.13	1000.0	9.000	N
16.764000	33.94	60.00	26.06	1000.0	9.000	N
17.695500	34.66	60.00	25.34	1000.0	9.000	N
19.558500	28.58	60.00	31.42	1000.0	9.000	N

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	33.25	55.40	22.15	1000.0	9.000	N
0.442500	20.85	47.02	26.16	1000.0	9.000	N
14.903250	18.82	50.00	31.18	1000.0	9.000	N
16.764000	18.78	50.00	31.22	1000.0	9.000	N
17.695500	22.06	50.00	27.94	1000.0	9.000	N
19.558500	19.26	50.00	30.74	1000.0	9.000	N

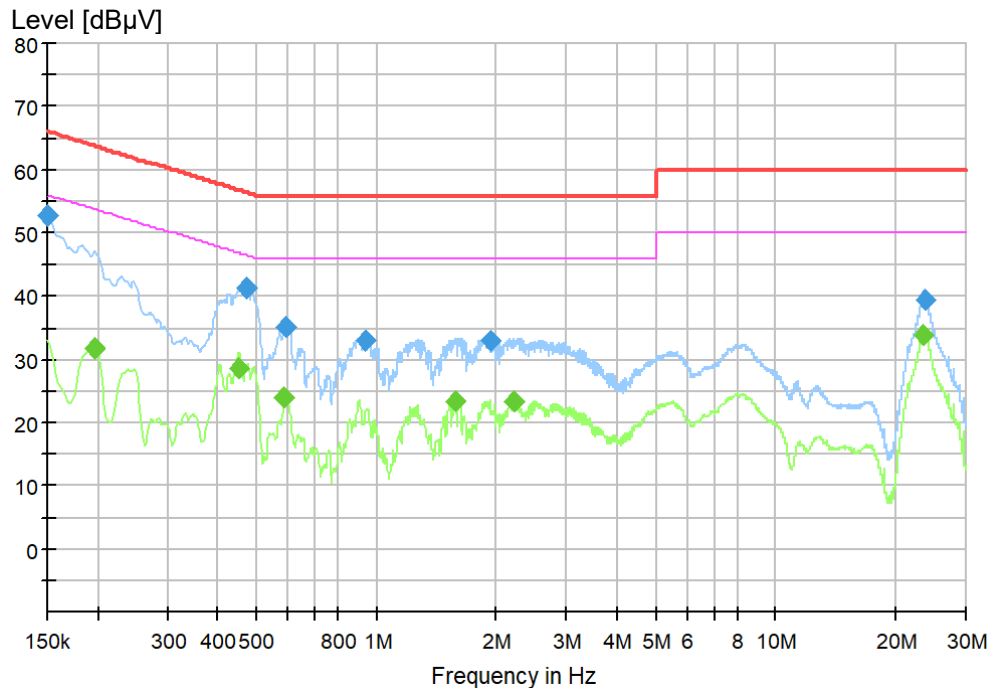
Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-B1, mode 2


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.165750	56.78	65.17	8.39	1000.0	9.000	L1
0.222000	48.13	62.74	14.62	1000.0	9.000	L1
0.496500	43.54	56.06	12.51	1000.0	9.000	L1
0.807000	39.69	56.00	16.31	1000.0	9.000	L1
1.122000	38.46	56.00	17.54	1000.0	9.000	L1
2.359500	36.91	56.00	19.09	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	35.10	54.31	19.21	1000.0	9.000	L1
0.494250	31.42	46.10	14.67	1000.0	9.000	L1
0.780000	28.04	46.00	17.96	1000.0	9.000	L1
1.106250	26.70	46.00	19.30	1000.0	9.000	L1
1.430250	25.51	46.00	20.49	1000.0	9.000	L1
23.381250	32.07	50.00	17.93	1000.0	9.000	L1

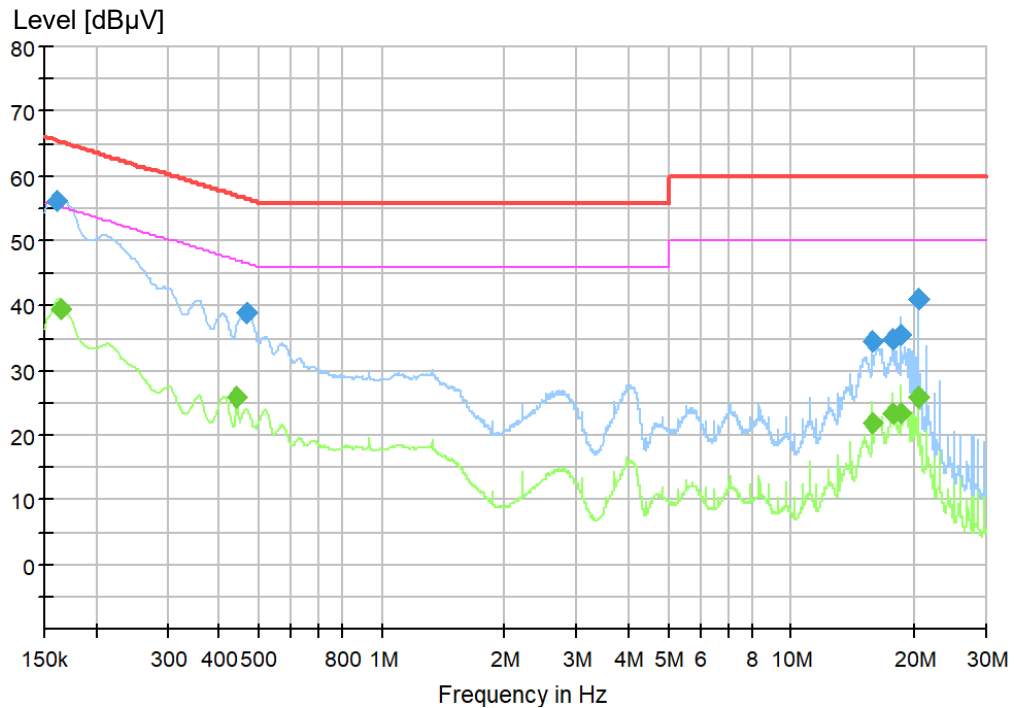
Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-B1, mode 2


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.150000	52.71	66.00	13.29	1000.0	9.000	N
0.471750	41.43	56.48	15.05	1000.0	9.000	N
0.593250	35.01	56.00	20.99	1000.0	9.000	N
0.939750	33.09	56.00	22.91	1000.0	9.000	N
1.929750	32.93	56.00	23.07	1000.0	9.000	N
23.572500	39.44	60.00	20.56	1000.0	9.000	N

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.197250	31.91	53.73	21.82	1000.0	9.000	N
0.451500	28.55	46.85	18.30	1000.0	9.000	N
0.586500	24.00	46.00	22.00	1000.0	9.000	N
1.574250	23.40	46.00	22.60	1000.0	9.000	N
2.199750	23.43	46.00	22.57	1000.0	9.000	N
23.527500	33.92	50.00	16.08	1000.0	9.000	N

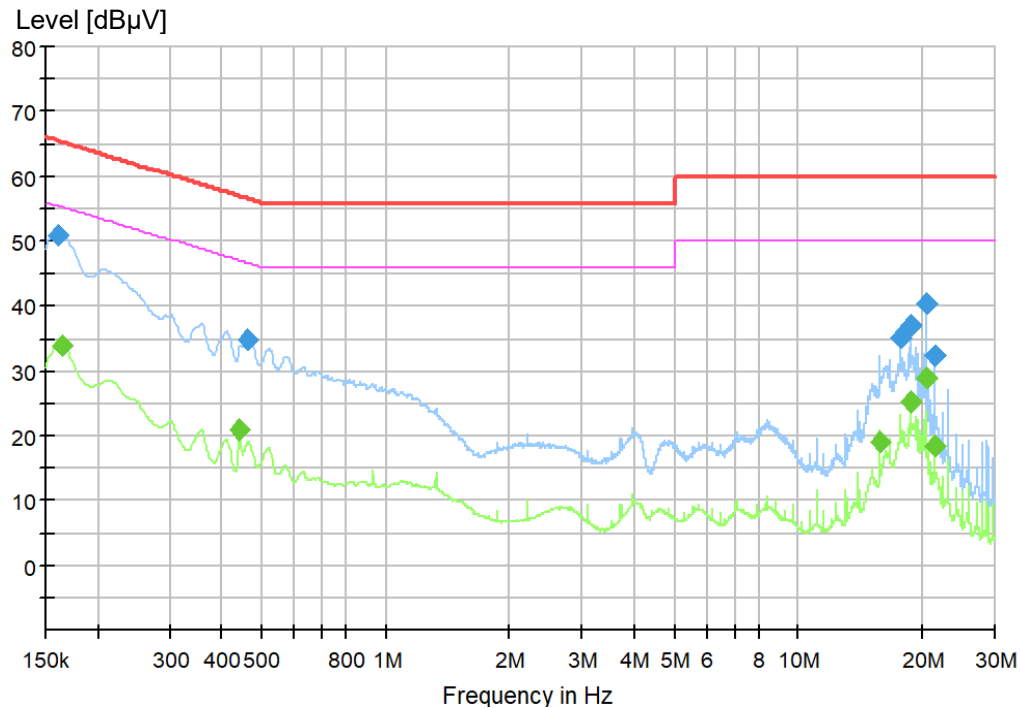
Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-USBC-B1, mode 1


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	56.09	65.40	9.30	1000.0	9.000	L1
0.467250	38.92	56.56	17.65	1000.0	9.000	L1
15.801000	34.59	60.00	25.41	1000.0	9.000	L1
17.659500	34.81	60.00	25.19	1000.0	9.000	L1
18.588750	35.47	60.00	24.53	1000.0	9.000	L1
20.449500	41.12	60.00	18.88	1000.0	9.000	L1

Final average measurement result:

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.163500	39.37	55.28	15.91	1000.0	9.000	L1
0.442500	25.76	47.02	21.26	1000.0	9.000	L1
15.801000	21.71	50.00	28.29	1000.0	9.000	L1
17.659500	23.41	50.00	26.59	1000.0	9.000	L1
18.588750	23.46	50.00	26.54	1000.0	9.000	L1
20.449500	25.98	50.00	24.02	1000.0	9.000	L1

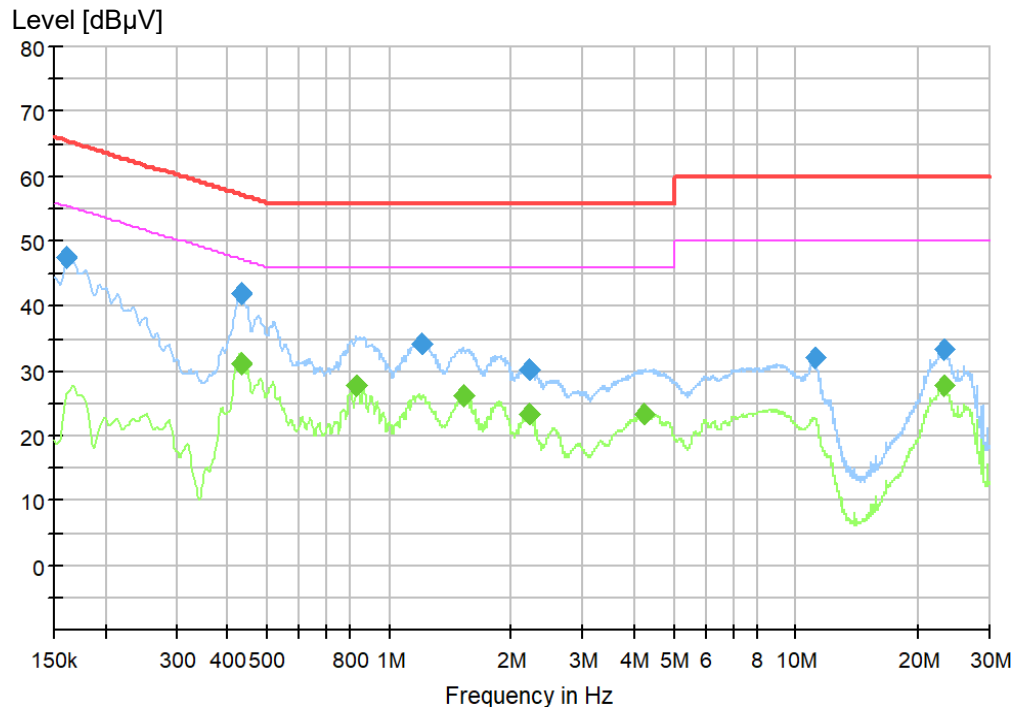
Figure 6: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-USBC-B1, mode 1


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	50.84	65.40	14.56	1000.0	9.000	N
0.462750	34.72	56.64	21.93	1000.0	9.000	N
17.675250	35.00	60.00	25.00	1000.0	9.000	N
18.604500	37.06	60.00	22.94	1000.0	9.000	N
20.465250	40.41	60.00	19.59	1000.0	9.000	N
21.394500	32.47	60.00	27.53	1000.0	9.000	N

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.163500	33.99	55.28	21.30	1000.0	9.000	N
0.442500	20.79	47.02	26.22	1000.0	9.000	N
15.814500	19.01	50.00	30.99	1000.0	9.000	N
18.604500	25.15	50.00	24.85	1000.0	9.000	N
20.465250	29.00	50.00	21.00	1000.0	9.000	N
21.394500	18.60	50.00	31.40	1000.0	9.000	N

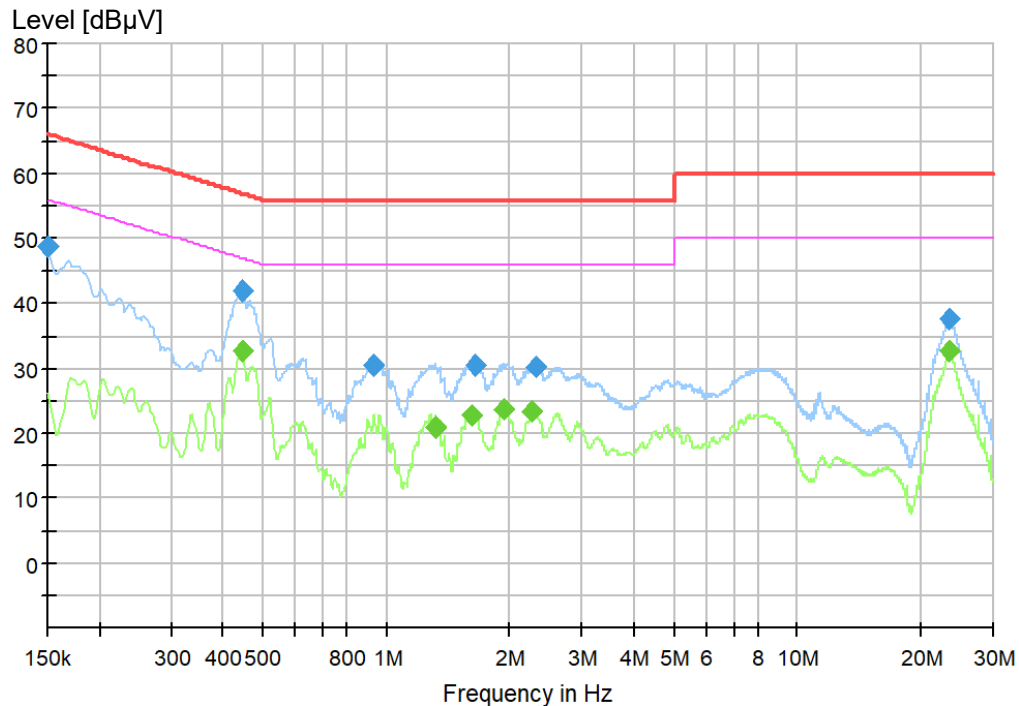
Figure 7: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-USBC-B1, mode 2


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.161250	47.53	65.40	17.87	1000.0	9.000	L1
0.433500	41.97	57.19	15.21	1000.0	9.000	L1
1.207500	34.09	56.00	21.91	1000.0	9.000	L1
2.195250	30.32	56.00	25.68	1000.0	9.000	L1
11.170500	32.03	60.00	27.97	1000.0	9.000	L1
23.257500	33.32	60.00	26.68	1000.0	9.000	L1

Final average measurement result:

Frequency (MHz)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.431250	31.29	47.23	15.94	1000.0	9.000	L1
0.829500	27.74	46.00	18.26	1000.0	9.000	L1
1.522500	26.16	46.00	19.84	1000.0	9.000	L1
2.199750	23.42	46.00	22.58	1000.0	9.000	L1
4.213500	23.36	46.00	22.64	1000.0	9.000	L1
23.259750	27.84	50.00	22.16	1000.0	9.000	L1

Figure 8: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-USBC-B1, mode 2


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.150000	48.90	66.00	17.10	1000.0	9.000	N
0.444750	41.99	56.97	14.99	1000.0	9.000	N
0.928500	30.50	56.00	25.50	1000.0	9.000	N
1.639500	30.51	56.00	25.49	1000.0	9.000	N
2.298750	30.24	56.00	25.76	1000.0	9.000	N
23.554500	37.59	60.00	22.41	1000.0	9.000	N

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.447000	32.76	46.93	14.17	1000.0	9.000	N
1.317750	20.89	46.00	25.11	1000.0	9.000	N
1.603500	22.94	46.00	23.06	1000.0	9.000	N
1.929750	23.64	46.00	22.36	1000.0	9.000	N
2.265000	23.39	46.00	22.61	1000.0	9.000	N
23.552250	32.53	50.00	17.47	1000.0	9.000	N

5.2 Emission in the Frequency Range above 30 MHz

5.2.1 Radiated emission (30-1000 MHz)

Result:	Passed
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Date of testing	: 2025-07-02~2025-07-30
Test procedure	: FCC 47 CFR Part 15, Subpart B:2023, ICES-005:2018, ANSI C63.4-2014 and CISPR 16-2-3
Product classification	: Class B
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 – 1000 MHz, 46 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
Input voltage	: AC 120 V, 60 Hz for power supply and power supply of laptop
Operational mode	: Mode 1: EUT was charged by power supply and lighting on. Mode 2: EUT was charged by laptop and lighting on. Mode 3: EUT was powered by internal battery and lighting on.
Ambient condition	: Temperature: 18.3~22.1 °C; Relative humidity: 51.3~52.1 %
Expanded measurement uncertainty ($k=2$)	: 5.40 dB The minimum margin to the limit is 7.40 dB at 150.643750 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 an 80 cm wooden support above the reference ground plane. The wooden support 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, “◆” means quasi-peak test results.

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)

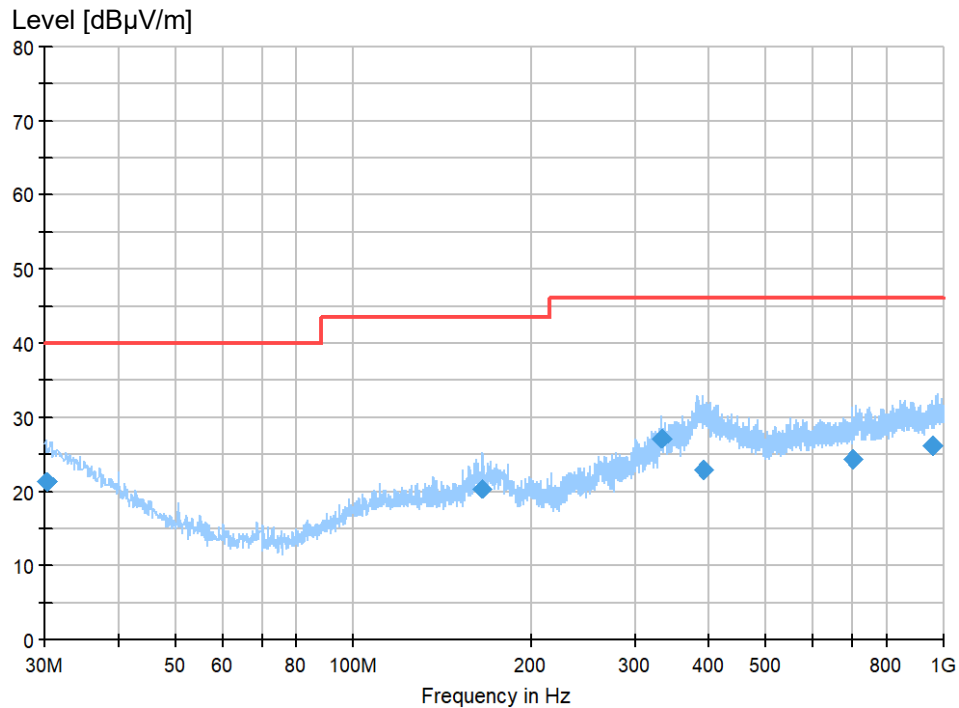
Margin: Limit (dB μ V/m) - QuasiPeak (dB μ V/m)

Prüfbericht - Nr.: CN25BMVW 001
Test Report No.:

Seite 21 von 36
Page 21 of 36

Note 1: The highest frequency in the EUT is less than 108 MHz. According to FCC Part 15 subpart B §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:2023 for 3 m test distance. Therefore, the former limits are used in following figures and tables.

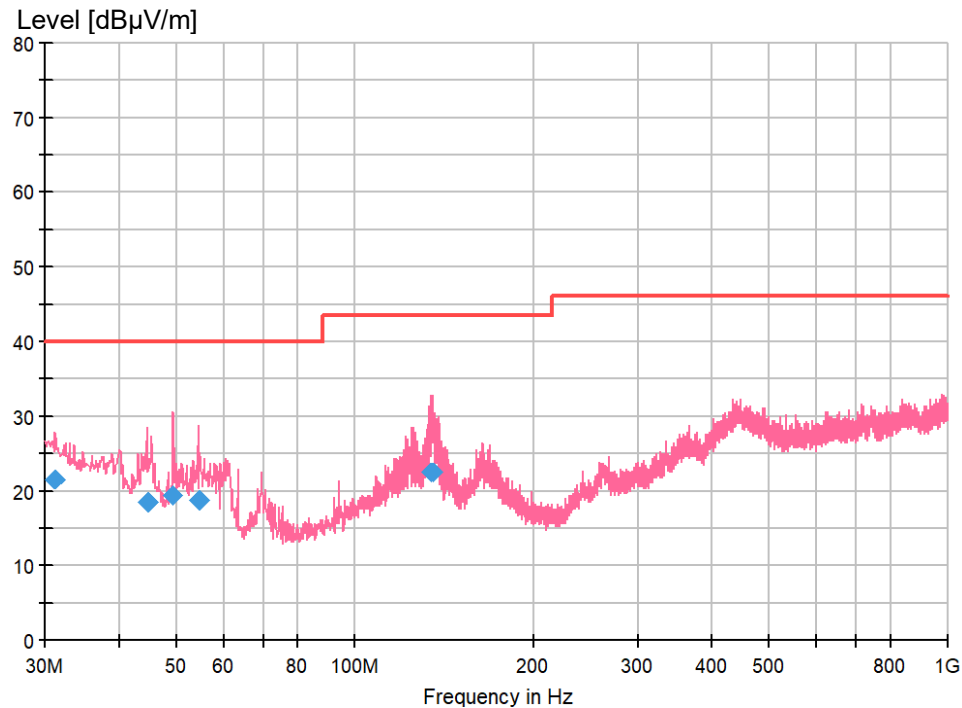
Figure 9: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-B1, mode 1



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.121250	21.35	40.00	18.65	1000.0	120.000	170.0	H	-90.0
165.678750	20.39	43.50	23.11	1000.0	120.000	170.0	H	19.0
332.882500	27.03	46.00	18.97	1000.0	120.000	100.0	H	-59.0
392.658750	22.89	46.00	23.11	1000.0	120.000	100.0	H	-81.0
703.907500	24.26	46.00	21.74	1000.0	120.000	130.0	H	91.0
953.318750	26.27	46.00	19.73	1000.0	120.000	100.0	H	91.0

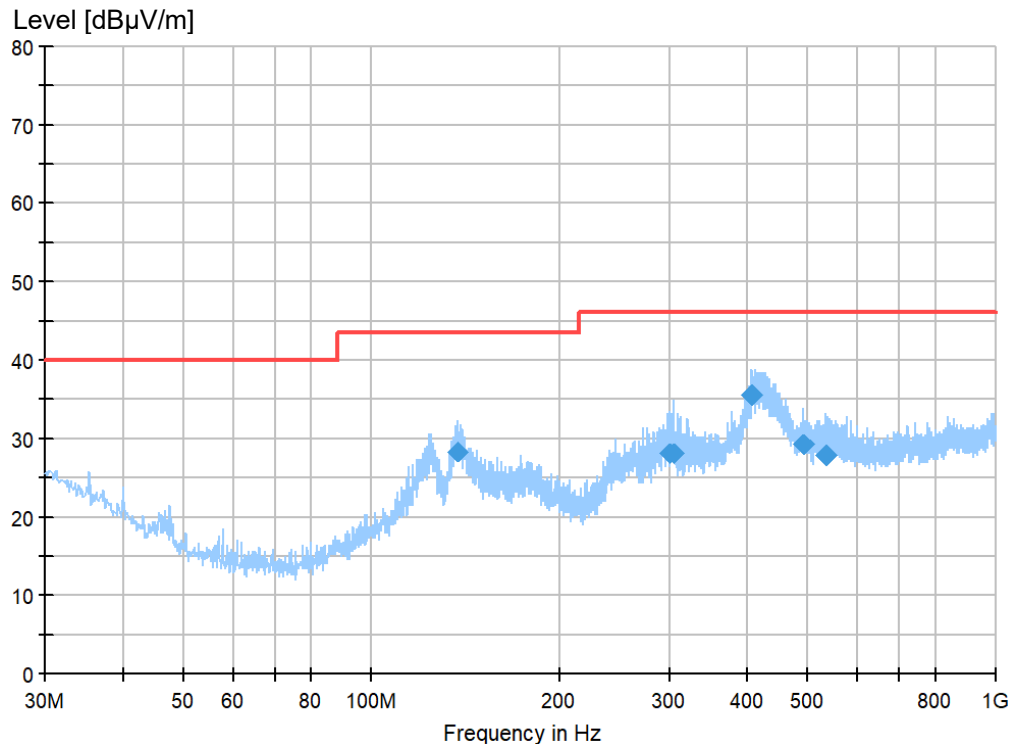
Figure 10: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-B1, mode 1



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
31.212500	21.51	40.00	18.49	1000.0	120.000	170.0	V	180.0
44.550000	18.55	40.00	21.45	1000.0	120.000	100.0	V	92.0
49.278750	19.50	40.00	20.50	1000.0	120.000	170.0	V	-35.0
54.371250	18.73	40.00	21.27	1000.0	120.000	100.0	V	-82.0
134.638750	22.46	43.50	21.04	1000.0	120.000	100.0	V	69.0
135.487500	22.47	43.50	21.03	1000.0	120.000	100.0	V	-136.0

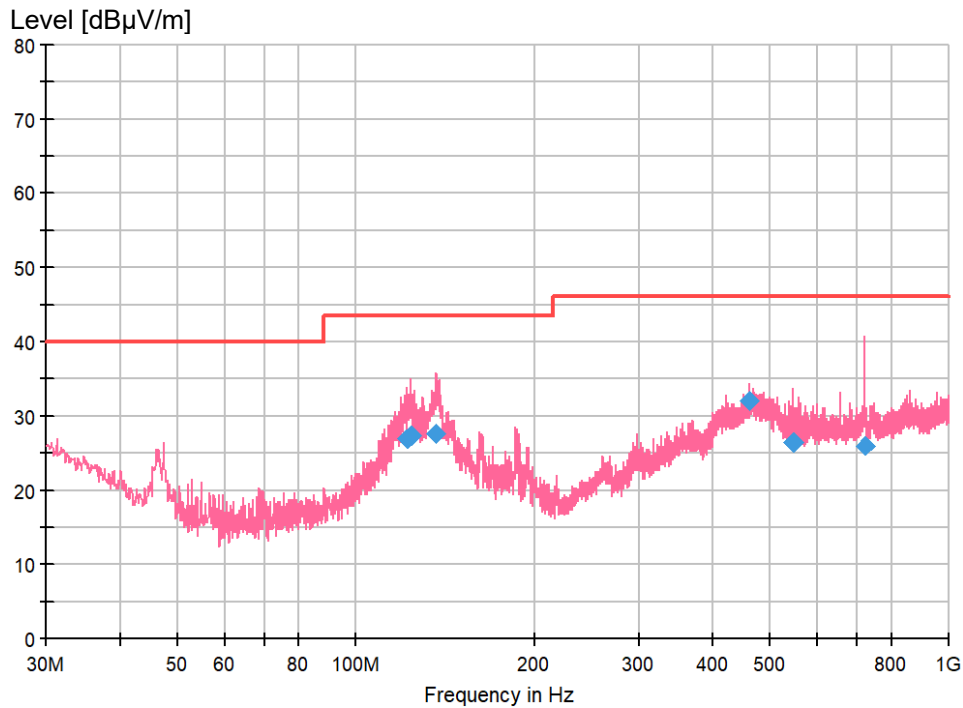
Figure 11: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-B1, mode 2



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
137.427500	28.30	43.50	15.20	1000.0	120.000	230.0	H	-26.0
299.538750	28.15	46.00	17.86	1000.0	120.000	100.0	H	175.0
304.388750	27.96	46.00	18.04	1000.0	120.000	100.0	H	1.0
407.815000	35.56	46.00	10.44	1000.0	120.000	100.0	H	56.0
492.690000	29.31	46.00	16.69	1000.0	120.000	100.0	H	13.0
533.430000	27.91	46.00	18.09	1000.0	120.000	100.0	H	-31.0

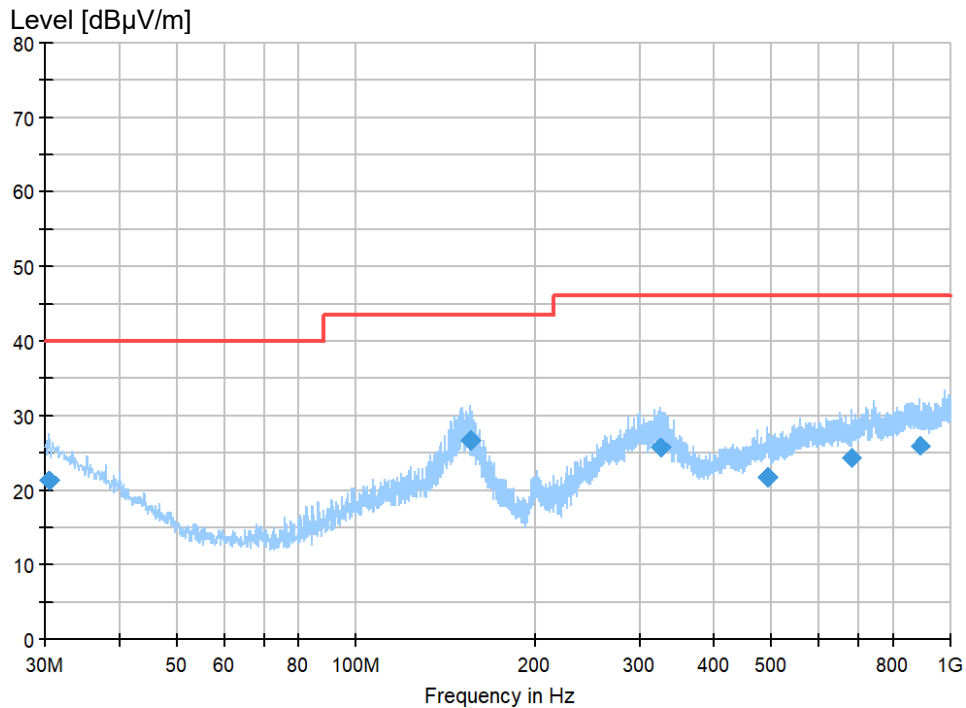
Figure 12: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-B1, mode 2



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
121.907500	26.97	43.50	16.53	1000.0	120.000	100.0	V	-98.0
123.726250	27.43	43.50	16.07	1000.0	120.000	100.0	V	175.0
136.700000	27.63	43.50	15.87	1000.0	120.000	100.0	V	25.0
461.407500	32.05	46.00	13.95	1000.0	120.000	130.0	V	-40.0
546.282500	26.45	46.00	19.55	1000.0	120.000	170.0	V	86.0
723.428750	25.89	46.00	20.11	1000.0	120.000	130.0	V	25.0

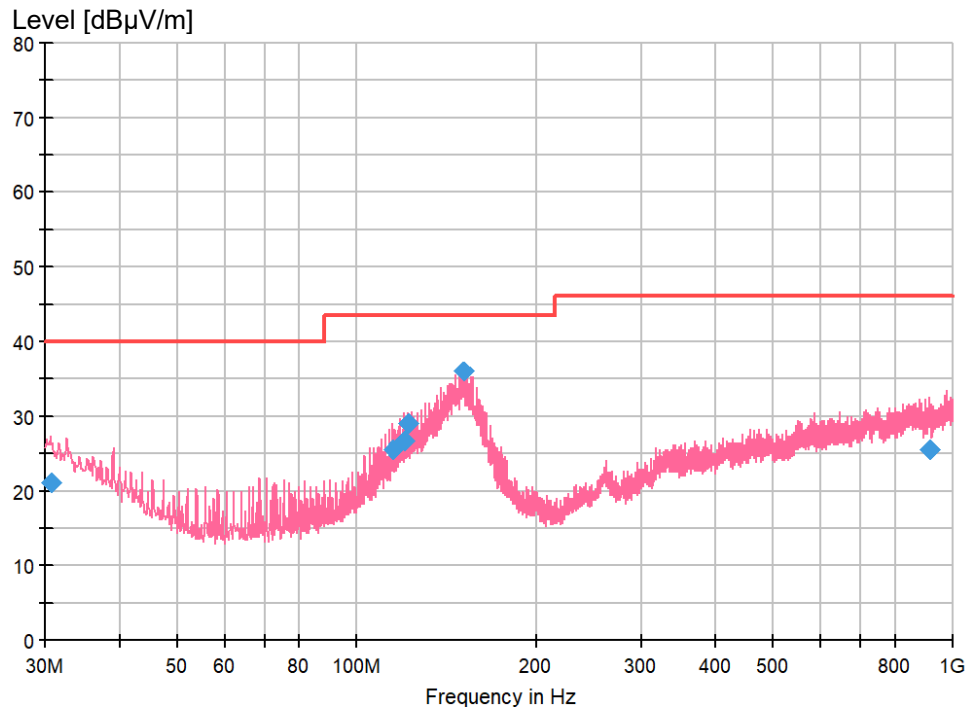
Figure 13: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-B1, mode 3



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.363750	21.26	40.00	18.74	1000.0	120.000	224.0	H	38.0
155.251250	26.74	43.50	16.76	1000.0	120.000	201.0	H	-6.0
325.243750	25.76	46.00	20.24	1000.0	120.000	100.0	H	-39.0
491.841250	21.81	46.00	24.19	1000.0	120.000	130.0	H	69.0
682.567500	24.38	46.00	21.62	1000.0	120.000	100.0	H	-168.0
886.631250	25.92	46.00	20.08	1000.0	120.000	230.0	H	26.0

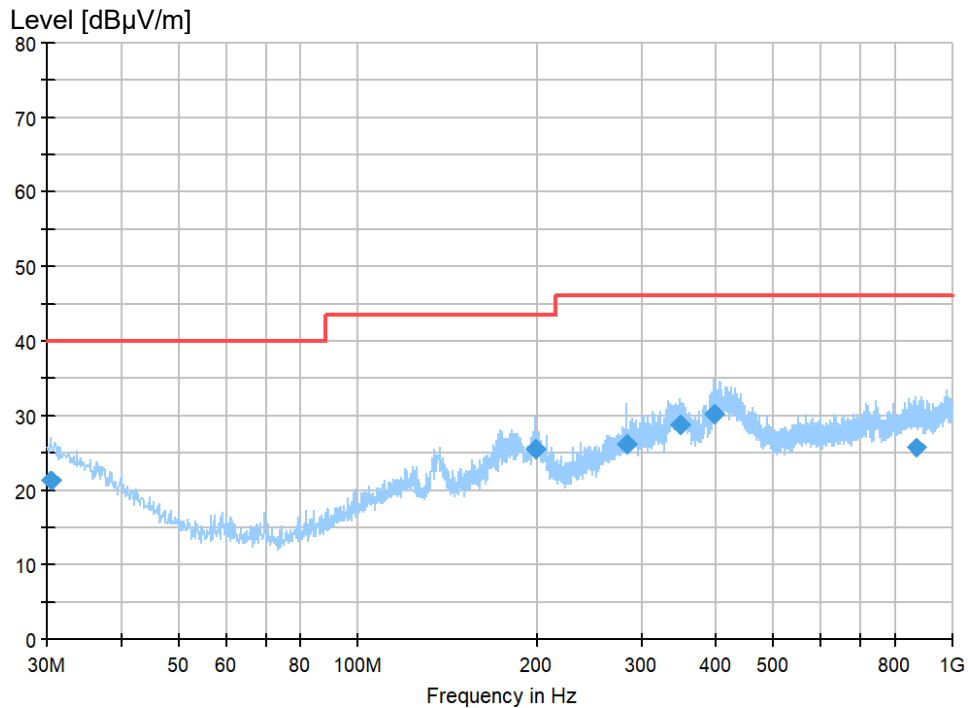
Figure 14: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-B1, mode 3



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.606250	21.14	40.00	18.86	1000.0	120.000	130.0	V	36.0
115.238750	25.44	43.50	18.06	1000.0	120.000	100.0	V	-175.0
119.967500	26.70	43.50	16.80	1000.0	120.000	100.0	V	147.0
121.786250	28.94	43.50	14.56	1000.0	120.000	100.0	V	70.0
150.643750	36.10	43.50	7.40	1000.0	120.000	100.0	V	59.0
916.458750	25.51	46.00	20.49	1000.0	120.000	170.0	V	-147.0

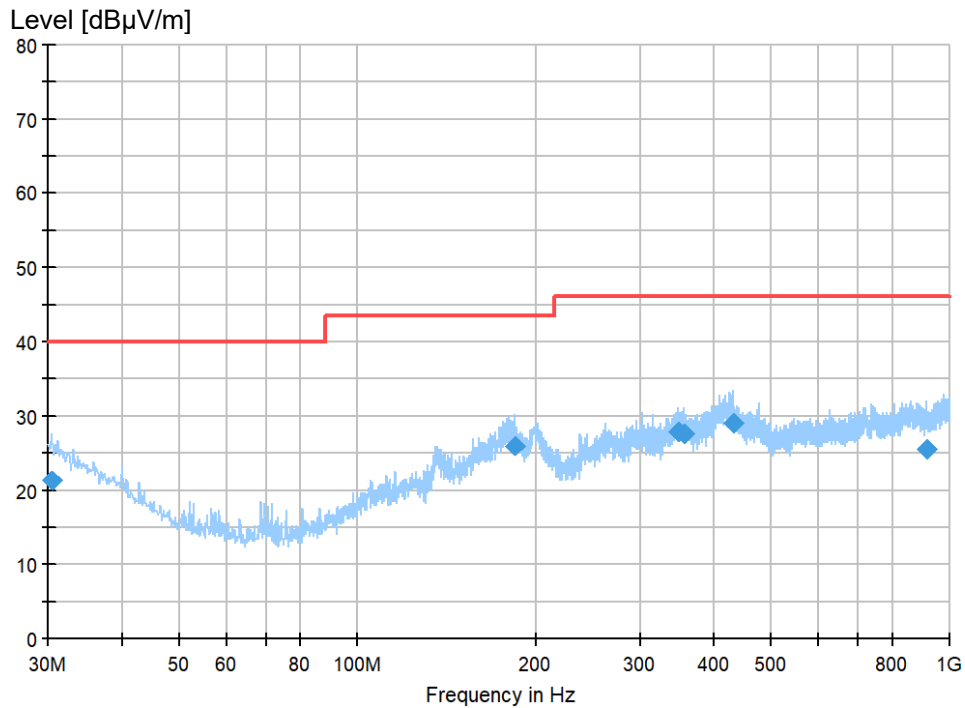
Figure 15: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-USBC-B1, mode 1



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.363750	21.20	40.00	18.80	1000.0	120.000	170.0	H	-180.0
198.658750	25.58	43.50	17.92	1000.0	120.000	130.0	H	3.0
283.412500	26.11	46.00	19.89	1000.0	120.000	100.0	H	133.0
348.645000	28.86	46.00	17.14	1000.0	120.000	100.0	H	-50.0
398.721250	30.08	46.00	15.92	1000.0	120.000	100.0	H	-50.0
866.746250	25.78	46.00	20.22	1000.0	120.000	170.0	H	36.0

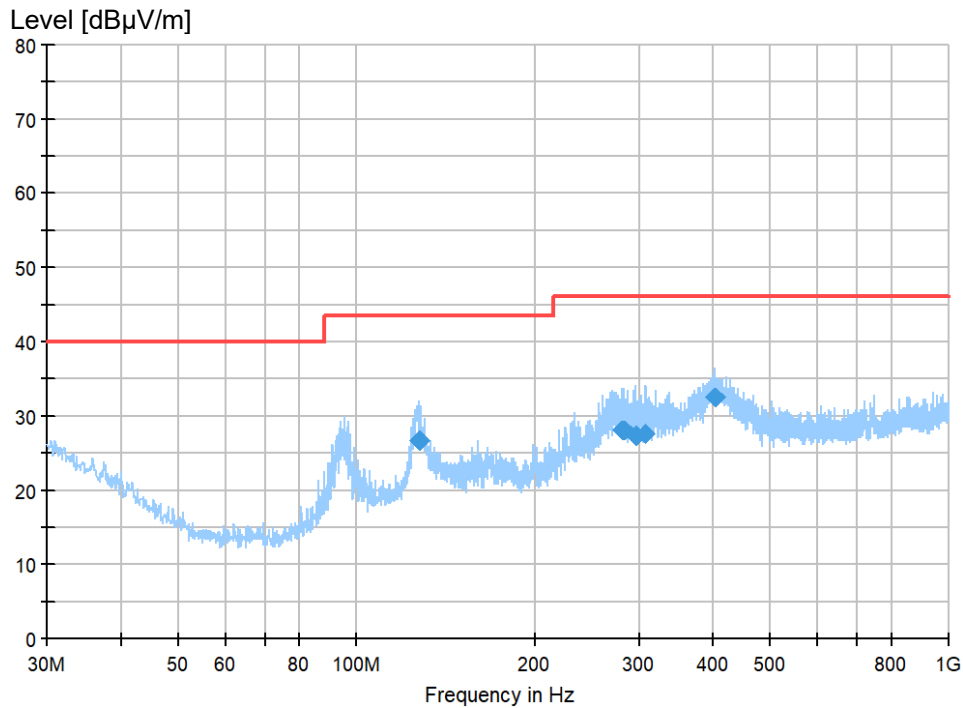
Figure 16: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-USBC-B1, mode 1



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.363750	21.29	40.00	18.71	1000.0	120.000	170.0	H	-180.0
184.715000	25.97	43.50	17.53	1000.0	120.000	170.0	H	6.0
346.826250	27.79	46.00	18.21	1000.0	120.000	100.0	H	36.0
356.768750	27.59	46.00	18.41	1000.0	120.000	100.0	H	46.0
430.003750	29.04	46.00	16.96	1000.0	120.000	100.0	H	147.0
912.336250	25.56	46.00	20.44	1000.0	120.000	202.0	H	-91.0

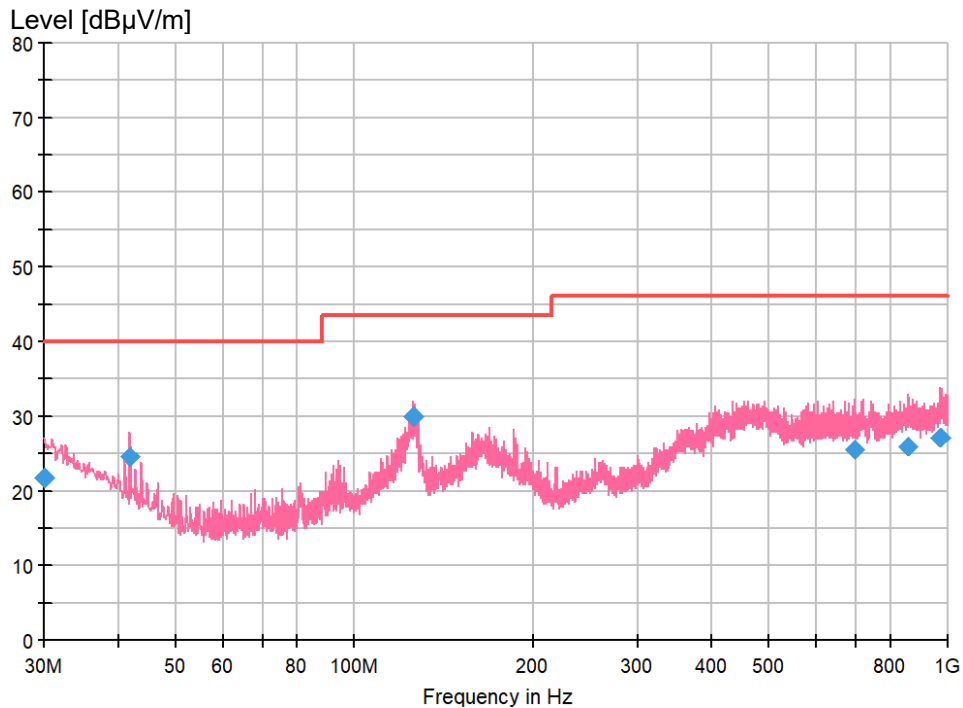
Figure 17: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-USBC-B1, mode 2



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
127.363750	26.62	43.50	16.88	1000.0	120.000	201.0	H	-4.0
281.351250	28.05	46.00	17.95	1000.0	120.000	100.0	H	159.0
282.200000	28.04	46.00	17.96	1000.0	120.000	100.0	H	169.0
295.295000	27.31	46.00	18.69	1000.0	120.000	100.0	H	147.0
308.026250	27.68	46.00	18.32	1000.0	120.000	100.0	H	169.0
403.935000	32.52	46.00	13.48	1000.0	120.000	100.0	H	-94.0

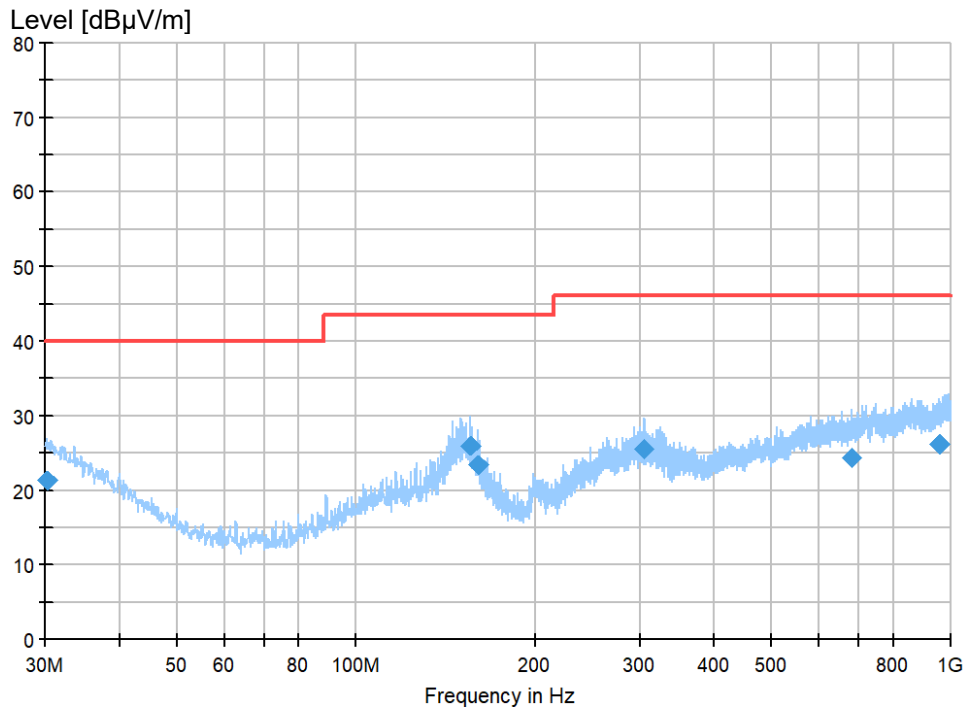
Figure 18: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-USBC-B1, mode 2



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.000000	21.70	40.00	18.30	1000.0	120.000	230.0	V	137.0
41.882500	24.62	40.00	15.38	1000.0	120.000	100.0	V	136.0
125.787500	29.90	43.50	13.60	1000.0	120.000	100.0	V	-139.0
695.056250	25.49	46.00	20.51	1000.0	120.000	100.0	V	12.0
858.743750	26.04	46.00	19.96	1000.0	120.000	170.0	V	94.0
973.931250	27.12	46.00	18.88	1000.0	120.000	170.0	V	-168.0

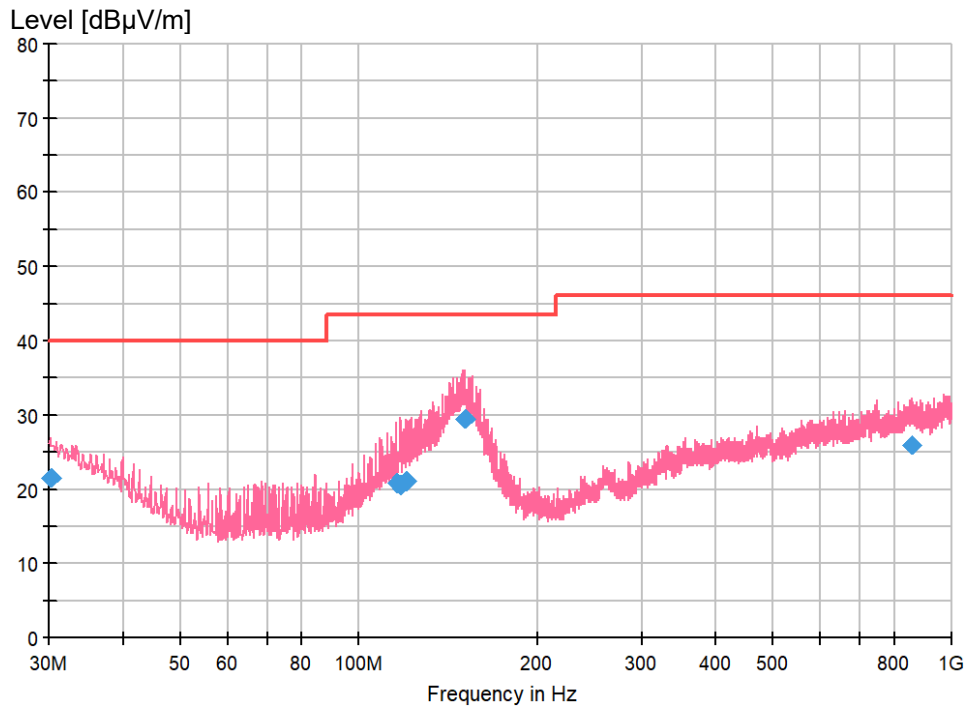
Figure 19: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-USBC-B1, mode 3



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.121250	21.38	40.00	18.62	1000.0	120.000	203.0	H	-156.0
155.251250	25.90	43.50	17.60	1000.0	120.000	170.0	H	8.0
159.858750	23.37	43.50	20.13	1000.0	120.000	170.0	H	8.0
305.722500	25.59	46.00	20.41	1000.0	120.000	100.0	H	158.0
680.263750	24.41	46.00	21.59	1000.0	120.000	100.0	H	-169.0
957.198750	26.11	46.00	19.89	1000.0	120.000	223.0	H	-156.0

Figure 20: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-USBC-B1, mode 3



Final quasi-peak measurement results:

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
30.121250	21.41	40.00	18.60	1000.0	120.000	202.0	V	-135.0
115.966250	20.80	43.50	22.70	1000.0	120.000	100.0	V	147.0
117.785000	20.64	43.50	22.86	1000.0	120.000	100.0	V	180.0
120.573750	21.04	43.50	22.46	1000.0	120.000	100.0	V	157.0
151.250000	29.49	43.50	14.01	1000.0	120.000	100.0	V	157.0
858.622500	25.92	46.00	20.08	1000.0	120.000	130.0	V	124.0

6 Photographs of the Test Set-Up

Refer to the test setup file.

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	2025-07-11	2026-07-11
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	2028-03-24
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

8 List of Figures

Figure 1: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-B1, mode 1	12
Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-B1, mode 1	13
Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-B1, mode 2	14
Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-B1, mode 2	15
Figure 5: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-USBC-B1, mode 1	16
Figure 6: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-USBC-B1, mode 1	17
Figure 7: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L, battery ICBL7.2-18-USBC-B1, mode 2	18
Figure 8: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N, battery ICBL7.2-18-USBC-B1, mode 2	19
Figure 9: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-B1, mode 1	22
Figure 10: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-B1, mode 1	23
Figure 11: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-B1, mode 2	24
Figure 12: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-B1, mode 2	25
Figure 13: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-B1, mode 3	26
Figure 14: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-B1, mode 3	27
Figure 15: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-USBC-B1, mode 1	28
Figure 16: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-USBC-B1, mode 1	29
Figure 17: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-USBC-B1, mode 2	30
Figure 18: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-USBC-B1, mode 2	31
Figure 19: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization, battery ICBL7.2-18-USBC-B1, mode 3	32
Figure 20: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization, battery ICBL7.2-18-USBC-B1, mode 3	33

End of test report