

Prüfbericht-Nr.: <i>Test report no.:</i>	CN256G07 001	Auftrags-Nr.: <i>Order no.:</i>	326128448	Seite 1 von 29 <i>Page 1 of 29</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	1288983	Auftragsdatum: <i>Order date:</i>	2025-09-03	
Auftraggeber: <i>Client:</i>	IKEA of Sweden AB Box 702, SE-343 81 Älmhult, Sweden			
Prüfgegenstand: <i>Test item:</i>	LED Fixed Lamp			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	V2501			
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 ICES-003:2020			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-12-05	Refer to the EUT photos file		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A004124298-003			
Prüfzeitraum: <i>Testing period:</i>	2026-01-06~2026-01-19			
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>	Ausstellungsdatum: <i>Issue date:</i>			
Stellung / Position:	Stellung / Position:			
Sonstiges / <i>Other:</i>				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>				
* Legende:				
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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. 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> |

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Revision history of test report:

Report number	Issue date	Contents and reason for change if appropriate
CN256G07 001	2026-04-04	Initial release.

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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 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 Manufacturer Information

Manufacturer: IKEA of Sweden AB
Address: Box 702, SE-343 81 Älmhult, Sweden
Country of origin: China

2.2 Product Function and Intended Use

The EUT (equipment under test) is an ordinary LED fixed lamp with wireless dimming function for lighting and similar use. For further information, refer to the user's manual.

2.3 Ratings and System Details

Rated input : AC 120 V, 60 Hz,
Rated power : 11 W

2.4 Independent Operation Modes

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

The test modes are as follows:

- Mode 1: EUT was illuminated and shifted color with max. lighting output.
- Mode 2: EUT was illuminated and shifted color with min. lighting output.

2.5 Description of interconnecting cables

None.

2.6 Noise Generating and Noise Suppressing Parts

Refer to the circuit diagram for further information.

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

The highest frequency used in the EUT is 2480 MHz for wireless module.

2.8 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.

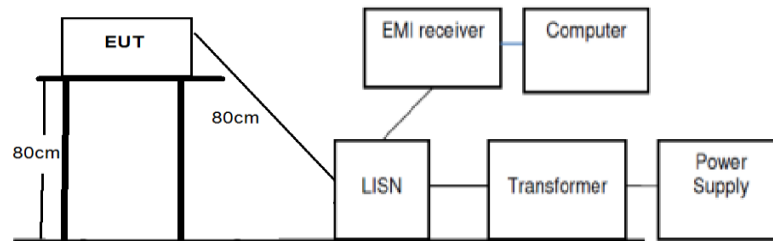
Refer to the related paragraph of this report.

The sequence of testing:

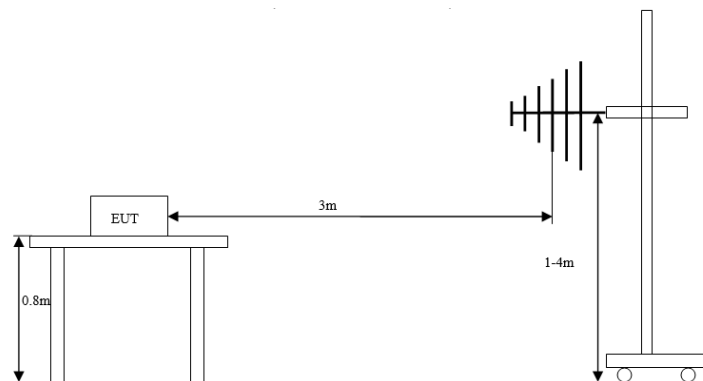
1. Conducted emission tests were performed on 2026-01-19.
2. Radiated emission tests were performed on 2026-01-06~2026-01-16.

3.2 Equipment and cable arrangement

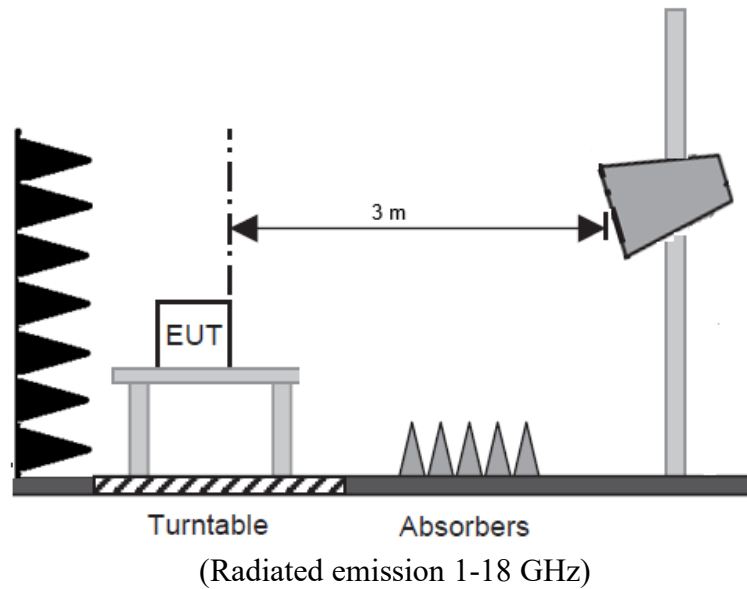
Block diagram for both conducted emission and radiated emission tests is as follows:



(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 Test Software

The “Home” APP for iPhone was used during the tests for color shifting and dimming.

3.4 Special Accessories and Auxiliary Equipment

During the tests, the following auxiliary equipment were used.

No.	Product	Model	Brand
1	Mobile phone	iPhone 15	Apple
2	Loudspeaker	HomePod mini	Apple
3	Remote control	E2489	IKEA

3.5 Countermeasures to achieve EMC Compliance

During tests, no special countermeasures were 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	: 2026-01-19	
Test procedure	: FCC 47 CFR Part 15, Subpart B:2024, ICES-005:2018, 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 1~ Mode 2, defined in clause 2.3 (The worst case was found by prescanning cold, warm, red, green and blue color with max and min lighting output, only the test data of worst case was recorded in the report)	
Ambient condition	: Temperature: 19.3 °C; Relative humidity: 52.2 %	
Expanded measurement uncertainty ($k=2$)	: 2.33 dB The minimum margin to the limit is 4.85 dB at 0.161250 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.

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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.

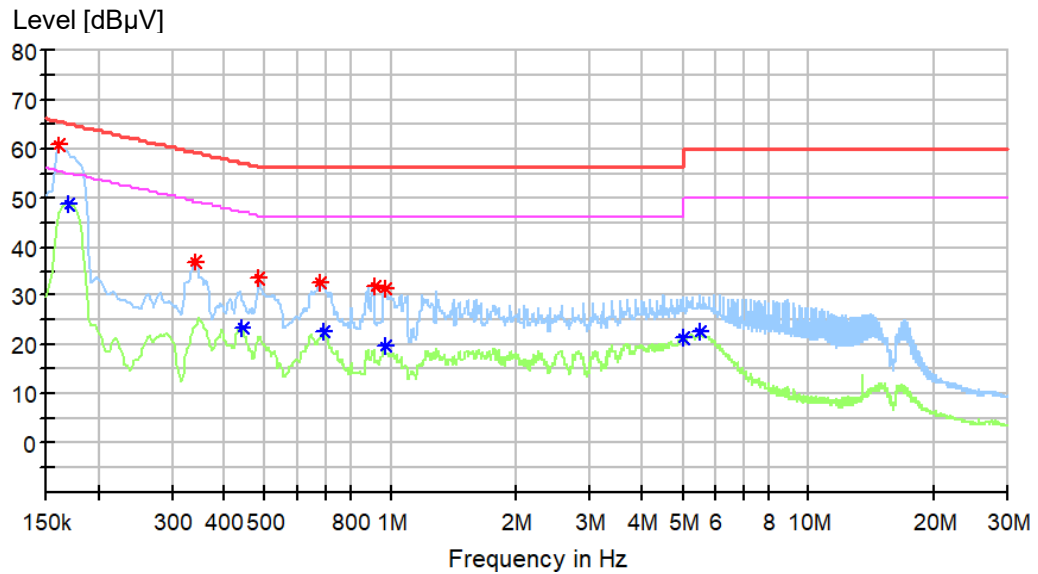
Notes on following tables of conducted emission results and conversions:

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, L on mode 1



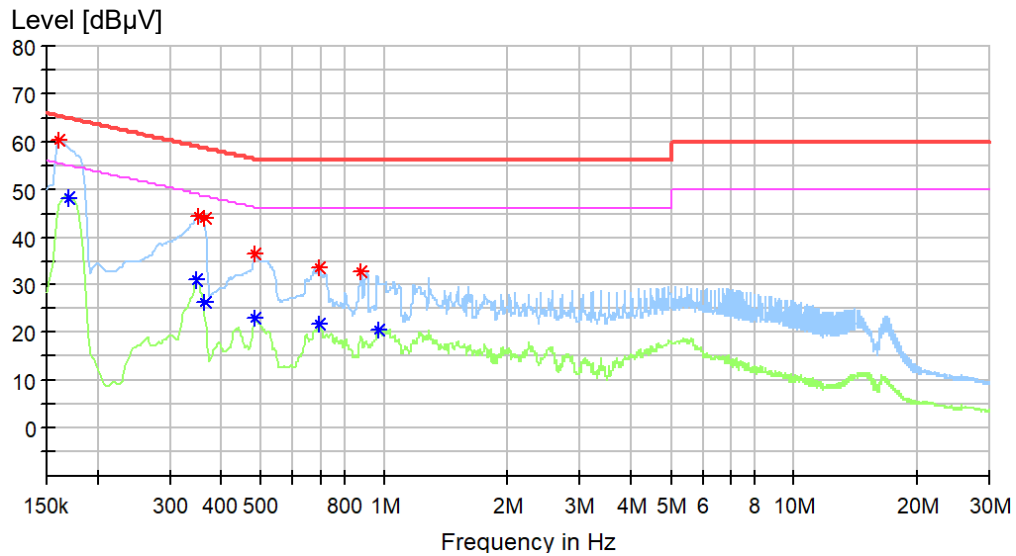
Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.161250	60.55	65.40	4.85	L1
0.341250	36.94	59.17	22.24	L1
0.483000	33.50	56.29	22.79	L1
0.681000	32.64	56.00	23.36	L1
0.912750	32.03	56.00	23.97	L1
0.966750	31.31	56.00	24.69	L1

Final average measurement result:

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.170250	48.42	54.95	6.53	L1
0.440250	23.52	47.06	23.54	L1
0.694500	22.55	46.00	23.45	L1
0.966750	19.58	46.00	26.42	L1
4.992000	21.51	46.00	24.49	L1
5.473500	22.51	50.00	27.49	L1

Figure 2: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N on mode 1



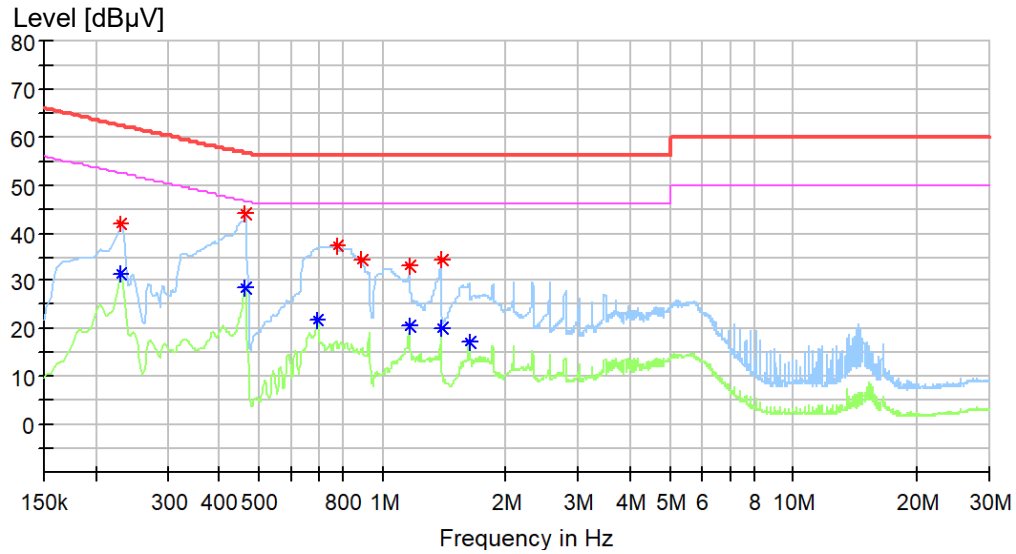
Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Line
0.161250	60.23	65.40	5.17	N
0.352500	44.43	58.90	14.47	N
0.363750	44.04	58.64	14.60	N
0.483000	36.61	56.29	19.68	N
0.694500	33.73	56.00	22.27	N
0.881250	32.86	56.00	23.14	N

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line
0.170250	48.36	54.95	6.59	N
0.350250	31.13	48.96	17.83	N
0.363750	26.35	48.64	22.30	N
0.485250	22.98	46.25	23.27	N
0.692250	21.96	46.00	24.04	N
0.966750	20.76	46.00	25.24	N

Figure 3: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, L on mode 2

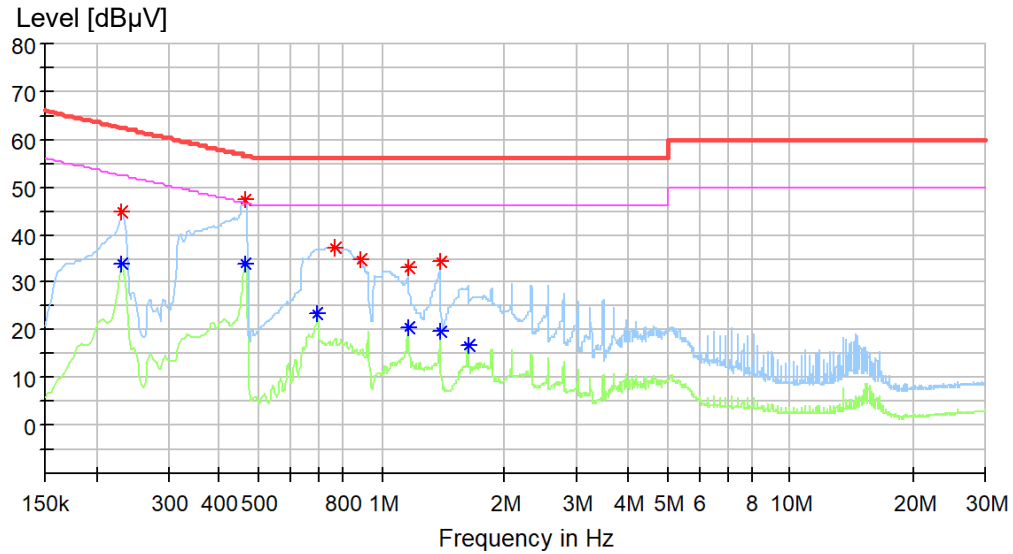


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBuV)	Limit (dBuV)	Margin (dB)	Line
0.231000	42.04	62.41	20.37	L1
0.462750	44.04	56.64	12.60	L1
0.773250	37.12	56.00	18.88	L1
0.883500	34.51	56.00	21.49	L1
1.158000	33.21	56.00	22.79	L1
1.389750	34.29	56.00	21.71	L1

Final average measurement result:

Frequency (MHz)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line
0.231000	31.30	52.41	21.11	L1
0.462750	28.58	46.64	18.06	L1
0.694500	21.97	46.00	24.03	L1
1.158000	20.57	46.00	25.43	L1
1.389750	20.00	46.00	26.00	L1
1.621500	17.42	46.00	28.58	L1

Figure 4: Spectral Diagrams, Conducted Emission, 150 kHz – 30 MHz, N on mode 2


Final quasi-peak measurement result:

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.231000	44.72	62.41	17.69	N
0.462750	47.15	56.64	9.49	N
0.768750	37.30	56.00	18.70	N
0.883500	34.63	56.00	21.37	N
1.160250	33.19	56.00	22.81	N
1.392000	34.33	56.00	21.67	N

Final average measurement result:

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Line
0.231000	34.10	52.41	18.31	N
0.462750	33.96	46.64	12.68	N
0.694500	23.39	46.00	22.61	N
1.158000	20.68	46.00	25.32	N
1.389750	19.91	46.00	26.09	N
1.621500	16.92	46.00	29.08	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	: 2025-01-16
Test procedure	: FCC 47 CFR Part 15, Subpart B:2024, ICES-005:2018, ICES-003:2020, ANSI C63.4-2014 and CISPR 16-2-3
Product classification	: Class B
Frequency range	: 30 – 1000 MHz
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)
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
Operational mode	: Mode 1 ~ Mode 2, defined in clause 2.3 (The worst case was found by prescanning cold, warm, red, green and blue color with max and min lighting output, only the test data of worst case was recorded in the report)
Ambient condition	: Temperature: 21.3 °C; Relative humidity: 54.4 %
Expanded measurement uncertainty ($k=2$)	: 5.40 dB The minimum margin to the limit is 13.1 dB at 254.676250 MHz and 45.762500 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 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.

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Notes on following tables of radiated emission results and conversions:

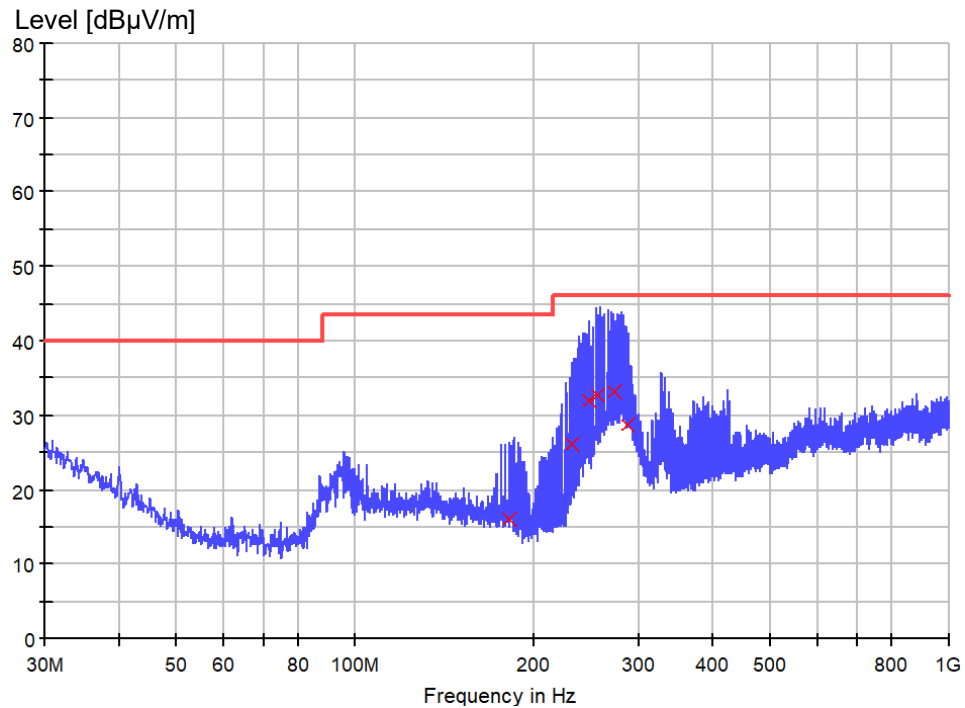
QuasiPeak (dB μ V/m): final measurement results by using quasi-peak detector

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)

Note: The class B limits of ICES-005:2018 is stricter than those FCC 47 CFR Part 15, Subpart B:2024 and ICES-003:2020 for 3 m test distance. Therefore, the former limits are used in following figures and tables.

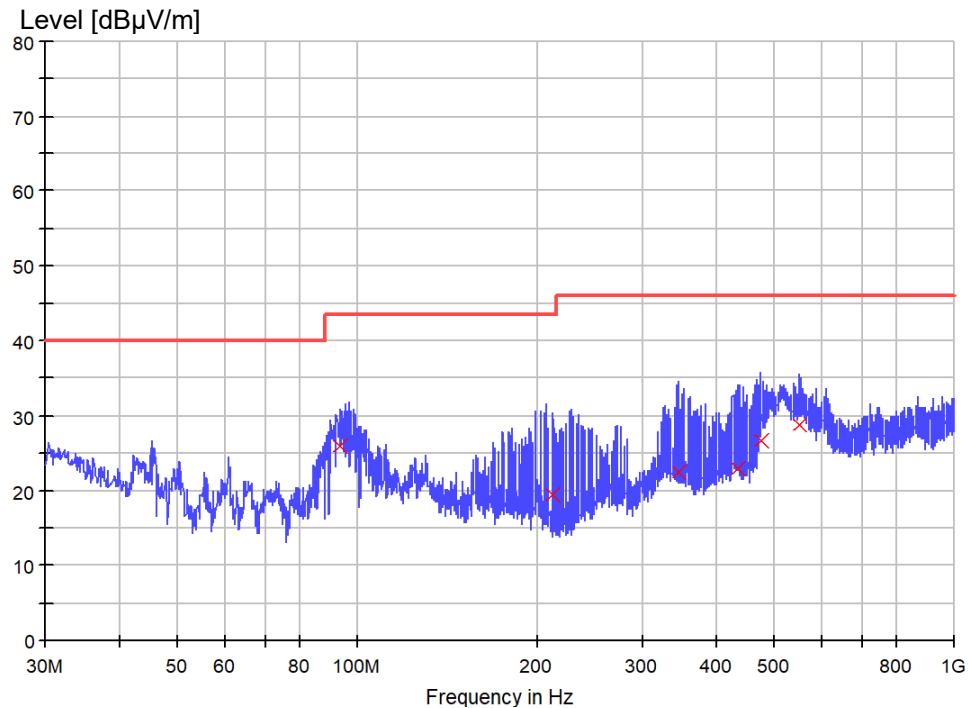
Figure 5: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization on mode 1



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)
182.290000	16.1	120.000	146.0	H	-38.0	16.0	27.4	43.5
232.123750	26.2	120.000	197.0	H	-96.0	17.6	19.8	46.0
247.280000	32.1	120.000	200.0	H	-151.0	19.2	13.9	46.0
254.797500	32.9	120.000	157.0	H	125.0	20.2	13.2	46.0
272.378750	33.2	120.000	168.0	H	-72.0	20.0	12.8	46.0
287.292500	28.8	120.000	170.0	H	154.0	19.9	17.2	46.0

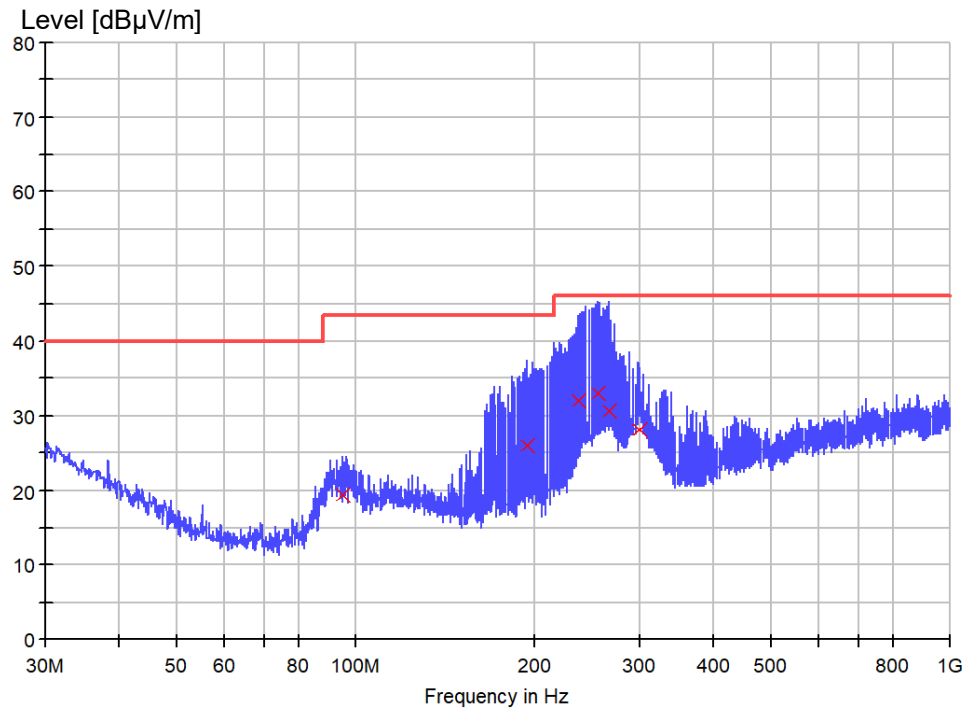
Figure 6: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization on mode 1



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)
93.292500	26.0	120.000	130.0	V	92.0	16.0	17.6	43.5
211.996250	19.5	120.000	101.0	V	-16.0	16.1	24.0	43.5
345.007500	22.5	120.000	171.0	V	180.0	21.1	23.5	46.0
435.217500	22.9	120.000	142.0	V	-151.0	23.7	23.1	46.0
476.078750	26.6	120.000	114.0	V	-100.0	24.7	19.4	46.0
550.162500	28.7	120.000	104.0	V	-150.0	26.4	17.3	46.0

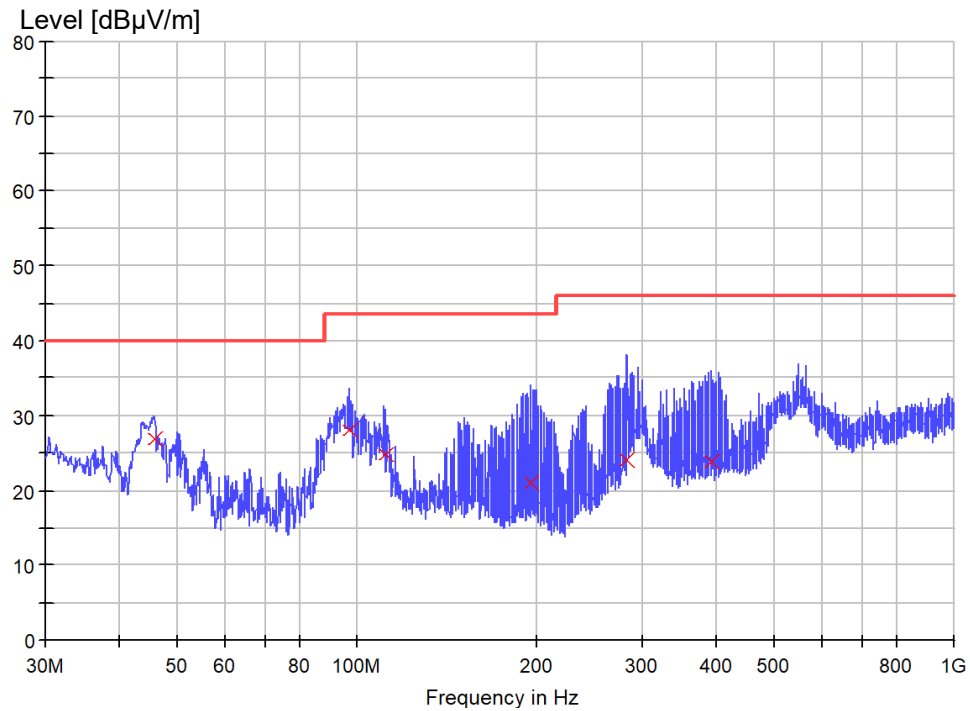
Figure 7: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Horizontal polarization on mode 2



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)
94.747500	19.4	120.000	127.0	H	176.0	16.3	24.2	43.5
194.293750	25.9	120.000	139.0	H	49.0	15.8	17.7	43.5
236.610000	32.0	120.000	160.0	H	-139.0	18.3	14.0	46.0
254.676250	32.9	120.000	139.0	H	156.0	20.1	13.1	46.0
266.801250	30.6	120.000	193.0	H	-57.0	21.0	15.4	46.0
301.115000	28.1	120.000	174.0	H	59.0	20.9	17.9	46.0

Figure 8: Spectral Diagrams, Radiated Emission, 30 MHz – 1000 MHz, Vertical polarization on mode 2



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)
45.762500	26.9	120.000	118.0	V	-25.0	16.7	13.1	40.0
96.687500	28.2	120.000	123.0	V	-14.0	16.7	15.3	43.5
111.480000	24.9	120.000	132.0	V	15.0	18.7	18.6	43.5
195.991250	21.0	120.000	135.0	V	159.0	15.9	22.6	43.5
284.018750	24.0	120.000	108.0	V	121.0	19.7	22.0	46.0
392.537500	23.9	120.000	138.0	V	-6.0	22.9	22.1	46.0

5.2.2 Radiated Emission (1-18 GHz)

Result:
Passed

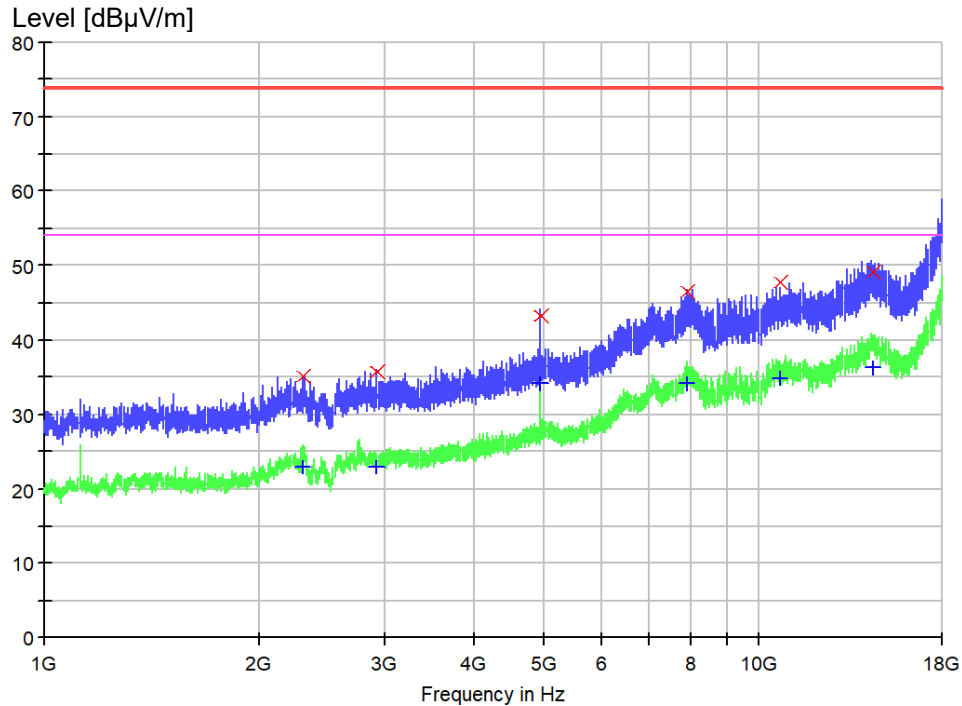
Date of testing	: 2026-01-06
Port	: Enclosure
Test procedure	: FCC 47 CFR Part 15, Subpart B:2024, ICES-005:2018, ICES-003:2020, ANSI C63.4-2014 and CISPR 16-2-3
Product classification	: Class B
Limit	: Peak limits (3 m distance): 1-18 GHz, 74 dB μ V/m Average limits (3 m distance): 1-18 GHz, 54 dB μ V/m
Frequency range	: 1 – 18 GHz (see Note)
Kind of test site	: Absorber-lined semi-anechoic chamber
Test distance	: 3 m
Test voltage	: AC 120 V, 60 Hz
Operational mode	: Mode 1 ~ Mode 2, defined in clause 2.3 (The worst case was found by prescanning cold, warm, red, green and blue color with max and min lighting output, only the test data of worst case was recorded in the report)
Earthing	: No earth
Ambient condition	: Temperature: 21.3 °C; Relative humidity: 54.4 %
Expanded measurement uncertainty ($k=2$)	: 5.17 dB (1 GHz~6 GHz) 5.12 dB (6 GHz~18 GHz) The minimum margin to the limit is 11.9 dB at 4952.750000 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 an absorber-lined semi-anechoic chamber. The test distance from the receiving antenna to the EUT is 3 m. The site voltage standing wave ratio (S_{VSWR}) of the absorber-lined 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 supporting table. And the supporting table was rotated 360° around, the receiving antenna was kept aiming at the EUT and its height 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. The final test was performed with peak detector and average detector at those critical frequencies during the preview test. In the following figure, “×” and “+” means measurement results with peak detector and average detector.

Note: The highest frequency in the EUT is 2480 MHz. According to FCC Part 15 subpart B §15.33 (b) (1) and ICES-003:2020 table 3, the upper frequency for radiated emission measurement is 18 GHz.

Figure 9: Spectral Diagrams and measurement results, 1 GHz – 18 GHz, Horizontal polarization on mode 1

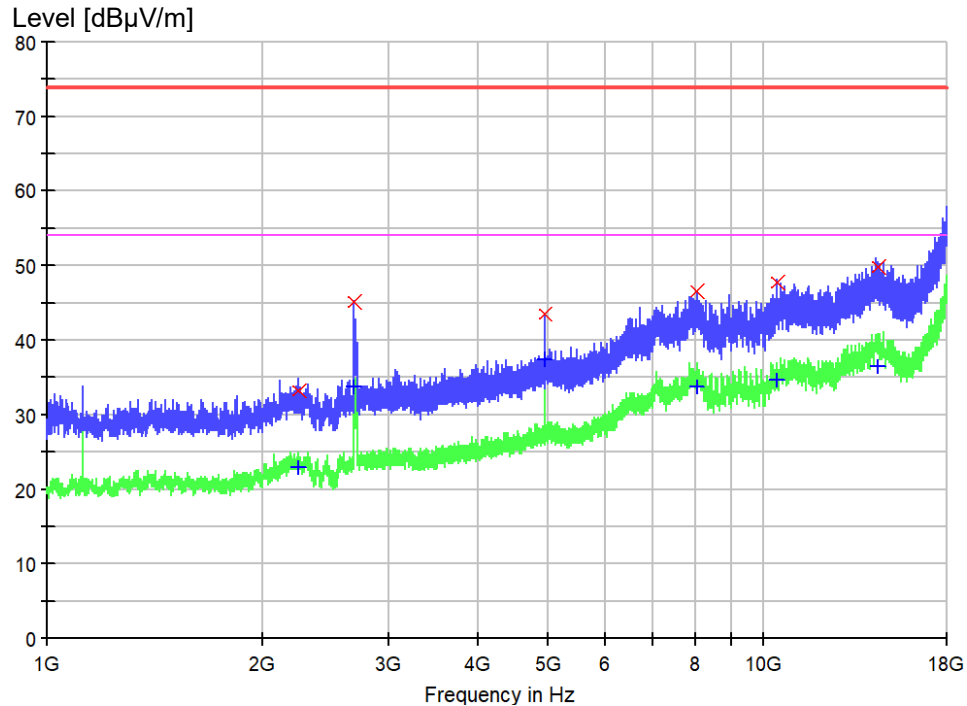


Final peak measurement result:

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
2298.375000	35.1	1000.0	1000.000	193.0	H	25.0	-15.7	38.9	74.0
2928.437500	35.7	1000.0	1000.000	111.0	H	-103.0	-15.1	38.3	74.0
4952.500000	43.2	1000.0	1000.000	137.0	H	-12.0	-11.0	30.8	74.0
7913.687500	46.6	1000.0	1000.000	125.0	H	70.0	-3.6	27.4	74.0
10702.218750	47.6	1000.0	1000.000	173.0	H	99.0	-1.9	26.4	74.0
14466.125000	49.0	1000.0	1000.000	151.0	H	-90.0	2.7	25.0	74.0

Final average measurement result:

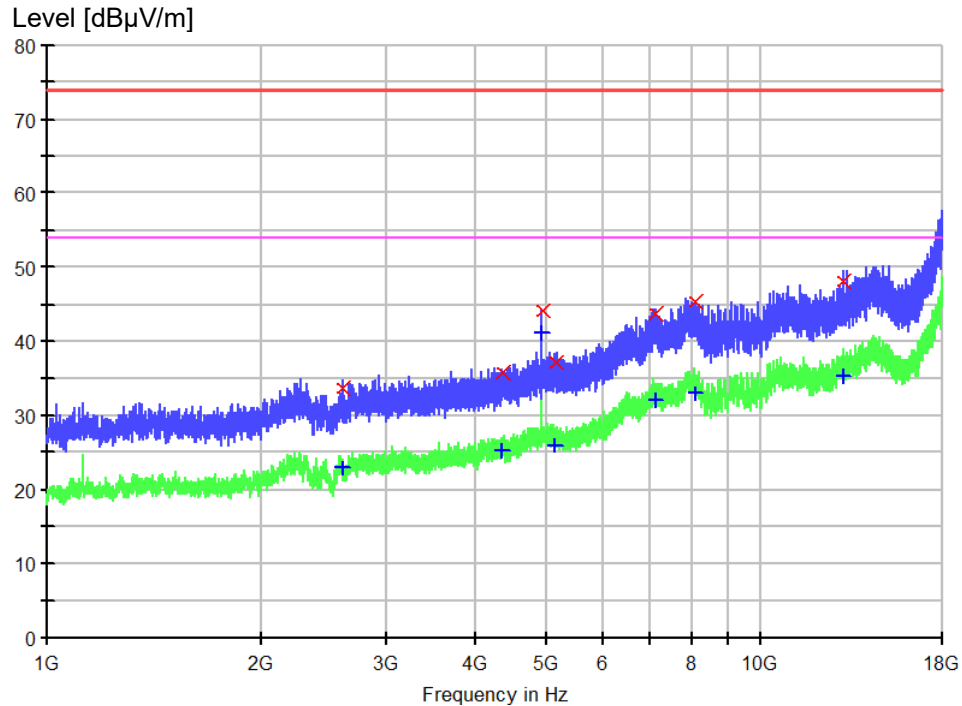
Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
2298.375000	22.9	1000.0	1000.000	111.0	H	25.0	-15.7	31.1	54.0
2928.437500	22.8	1000.0	1000.000	186.0	H	-76.0	-15.1	31.2	54.0
4952.500000	34.1	1000.0	1000.000	174.0	H	55.0	-11.0	19.9	54.0
7913.687500	34.2	1000.0	1000.000	131.0	H	-19.0	-3.6	19.8	54.0
10702.218750	34.8	1000.0	1000.000	115.0	H	53.0	-1.9	19.3	54.0
14466.125000	36.3	1000.0	1000.000	138.0	H	84.0	2.7	17.7	54.0

Figure 10: Spectral Diagrams and measurement results, 1 GHz – 18 GHz, Vertical polarization on mode 1

Final peak measurement result:

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
2241.000000	33.2	1000.0	1000.000	152.0	V	-6.0	-15.6	40.8	74.0
2686.718750	45.2	1000.0	1000.000	112.0	V	-166.0	-15.4	28.8	74.0
4952.500000	43.6	1000.0	1000.000	133.0	V	-55.0	-11.0	30.4	74.0
8089.000000	46.6	1000.0	1000.000	179.0	V	145.0	-3.8	27.4	74.0
10430.218750	47.7	1000.0	1000.000	134.0	V	-15.0	-2.0	26.3	74.0
14433.718750	49.8	1000.0	1000.000	124.0	V	-167.0	2.7	24.3	74.0

Final average measurement result:

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
2241.000000	22.8	1000.0	1000.000	199.0	V	-152.0	-15.6	31.2	54.0
2686.718750	33.7	1000.0	1000.000	119.0	V	33.0	-15.4	20.3	54.0
4952.500000	37.4	1000.0	1000.000	173.0	V	168.0	-11.0	16.6	54.0
8089.000000	33.7	1000.0	1000.000	150.0	V	48.0	-3.8	20.3	54.0
10430.218750	34.5	1000.0	1000.000	105.0	V	-37.0	-2.0	19.5	54.0
14433.718750	36.6	1000.0	1000.000	170.0	V	-73.0	2.7	17.5	54.0

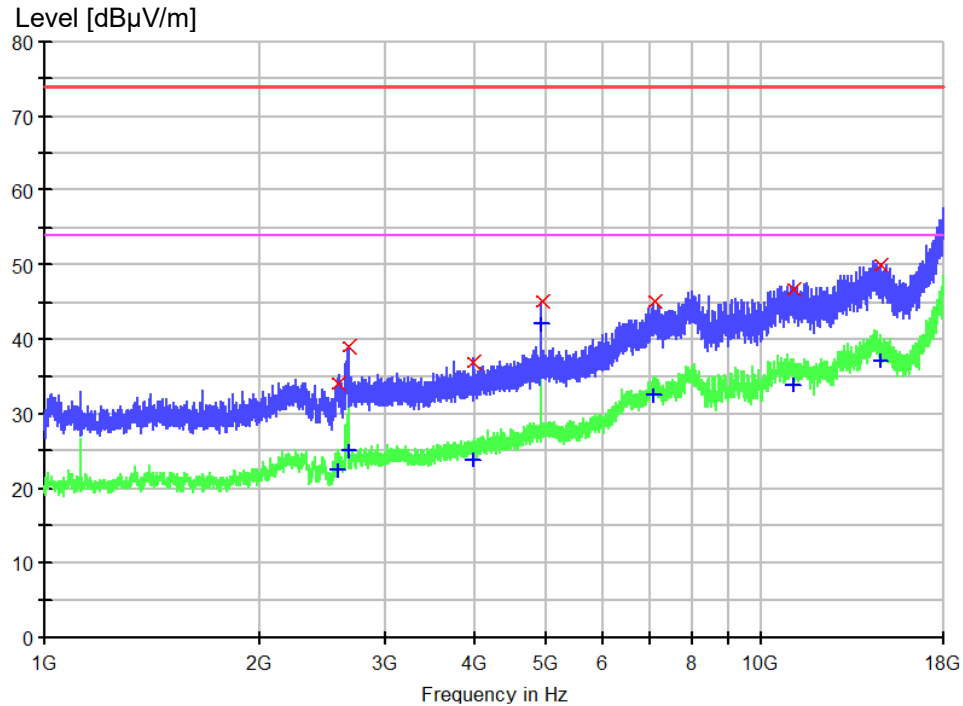
Figure 11: Spectral Diagrams and measurement results, 1 GHz – 18 GHz, Horizontal polarization on mode 2

Final peak measurement result:

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
2591.625000	33.6	1000.0	1000.000	103.0	H	-40.0	-15.8	40.4	74.0
4352.187500	35.7	1000.0	1000.000	133.0	H	41.0	-12.6	38.3	74.0
4952.500000	44.3	1000.0	1000.000	180.0	H	-10.0	-11.0	29.7	74.0
5167.656250	37.1	1000.0	1000.000	153.0	H	132.0	-11.0	36.9	74.0
7147.093750	43.8	1000.0	1000.000	163.0	H	-124.0	-5.3	30.2	74.0
8103.343750	45.3	1000.0	1000.000	136.0	H	-5.0	-3.9	28.7	74.0
13119.937500	48.1	1000.0	1000.000	169.0	H	105.0	-0.5	25.9	74.0

Final average measurement result:

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
2591.625000	22.9	1000.0	1000.000	200.0	H	127.0	-15.8	31.1	54.0
4352.187500	25.2	1000.0	1000.000	120.0	H	-43.0	-12.6	28.8	54.0
4952.500000	41.3	1000.0	1000.000	140.0	H	98.0	-11.0	12.7	54.0
5167.656250	26.0	1000.0	1000.000	181.0	H	-91.0	-11.0	28.0	54.0
7147.093750	32.1	1000.0	1000.000	188.0	H	-11.0	-5.3	21.9	54.0
8103.343750	33.1	1000.0	1000.000	136.0	H	5.0	-3.9	20.9	54.0
13119.937500	35.4	1000.0	1000.000	198.0	H	-40.0	-0.5	18.6	54.0

Figure 12: Spectral Diagrams and measurement results, 1 GHz – 18 GHz, Vertical polarization on mode 2



Final peak measurement result:

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
2560.281250	34.1	1000.0	1000.000	103.0	V	-75.0	-15.9	39.9	74.0
2657.500000	39.1	1000.0	1000.000	111.0	V	138.0	-15.5	34.9	74.0
3970.750000	36.9	1000.0	1000.000	180.0	V	160.0	-13.5	37.2	74.0
4952.750000	45.2	1000.0	1000.000	126.0	V	-67.0	-11.0	28.8	74.0
7094.500000	45.1	1000.0	1000.000	131.0	V	95.0	-5.1	28.9	74.0
11094.281250	46.9	1000.0	1000.000	108.0	V	155.0	-2.3	27.2	74.0
14695.093750	50.1	1000.0	1000.000	145.0	V	64.0	2.4	23.9	74.0

Final average measurement result:

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
2560.281250	22.5	1000.0	1000.000	128.0	V	-71.0	-15.9	31.6	54.0
2657.500000	25.0	1000.0	1000.000	102.0	V	32.0	-15.5	29.0	54.0
3970.750000	24.0	1000.0	1000.000	175.0	V	-58.0	-13.5	30.0	54.0
4952.750000	42.1	1000.0	1000.000	110.0	V	-80.0	-11.0	11.9	54.0
7094.500000	32.6	1000.0	1000.000	137.0	V	10.0	-5.1	21.4	54.0
11094.281250	33.9	1000.0	1000.000	197.0	V	-113.0	-2.3	20.1	54.0
14695.093750	37.2	1000.0	1000.000	130.0	V	75.0	2.4	16.8	54.0

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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	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
EMC-C-175	Preamplifier	EMC051845SE	980612	EMCI Taiwan	2025-07-11	2026-07-11
EMC-C-161	Spectrum analyser	FSV40	101258	Rohde & Schwarz	2025-07-11	2026-07-11
EMC-C-019	Double ridged horn antenna	BBHA 9120 D	9120D-433	Schwarzbeck	2025-02-28	2026-08-28

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End of test report