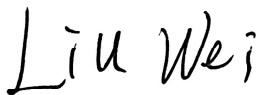


RF TEST REPORT

Applicant SAMSUNG Electronics Co., Ltd.
FCC ID ZCAEBU2500
Product Magnet Wireless Battery Pack
Brand SAMSUNG
Model EB-U2500
Report No. EFTA25090223-IE-02-R1V3
Issue Date November 17, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15C (2024)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	October 29, 2025
Rev.1	Updated information.	October 30, 2025
Rev.2	Updated information.	November 14, 2025
Rev.3	Updated information.	November 17, 2025
Note: This revised report (Report No.: EFTA25090223-IE-02-R1V3) supersedes and replaces the previously issued report (Report No.: EFTA25090223-IE-02-R1V2). Please discard or destroy the previously issued report and dispose of it accordingly.		

Summary of Measurement Results

Number	Test Case	Clause in FCC rules	Verdict
1	Occupied Bandwidth	§2.1049 §15.215	PASS
2	Radiated Emissions Measurement	§15.201(a), §15.205(a), §15.209(a), §15.215(a)	PASS
3	AC Conducted Emissions	§15.207(a)	PASS
Date of Testing: September 27, 2025 ~ October 13, 2025 Date of Sample Received: September 18, 2025			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

1. Test Laboratory

1.1. Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <https://www.eurofins.com/electrical-and-electronics>
E-mail: Kain.Xu@cpt.eurofinscn.com

2. General Description of Equipment Under Test

2.1. Applicant and Manufacturer Information

Applicant	SAMSUNG Electronics Co., Ltd.
Applicant address	19 Chapin Rd., Building D Pine Brook, NJ 07058
Manufacturer	SAMSUNG Electronics Co., Ltd.
Manufacturer address	Samsung R5, Maetan dong 129, Samsung ro Youngtong gu, Suwon city 443 742, Korea

2.2. General Information

EUT Description	
Model	EB-U2500
SN	N451325910000023
Hardware Version	B1-1
Software Version	T934AOCT04
Power Supply	AC adapter
Test Mode	Wireless charge
Operating Frequency Range(s)	111 - 150 kHz 360 kHz
Modulation type	FSK
Antenna Type	Coil Antenna
State voltage	DC 3.88V
EUT Accessory	
USB Cable 1	Manufacturer: Saibao(Jiangxi) Communication Industrial Co.,Ltd Model: SLQ-A293A 20cm Cable, Shielded
USB Cable 2	Manufacturer: JIANGXI JIEYE ELECTRONICS CO.,LTD Model: JY-C03-432 20cm Cable, Shielded
Auxiliary Test Equipment	
Phone 1	Manufacturer: Apple Inc. Model: iphone13 Pro (IMEI 1: 352291518494975; IMEI 2: 352291518405849)
Phone 2	Manufacturer: XIAOMI Model: Xiaomi 15 Ultra (IMEI 1: 862930075511357; IMEI 2: 862930075511365)
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.	

3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards:

FCC CFR47 Part 15C (2024) Radio Frequency Devices

ANSI C63.10-2020

4. Test Configuration

Test Mode

Test Mode for Positive Charging	
Mode 1:	Communication before charging, adjustment charging mode / position
Mode 2:	Communication
Mode 3:	energy transmission
During the test, the preliminary test was performed in all modes, mode 3 is selected as the worst condition. The test data of the worst-case condition was recorded in this report.	

5. Test Case Results

5.1. Occupied Bandwidth

Ambient Condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through space. RBW is set to 1 kHz; VBW is set to 3 kHz on spectrum analyzer.

Dector=Peak, Trace mode=max hold.

Test Setup



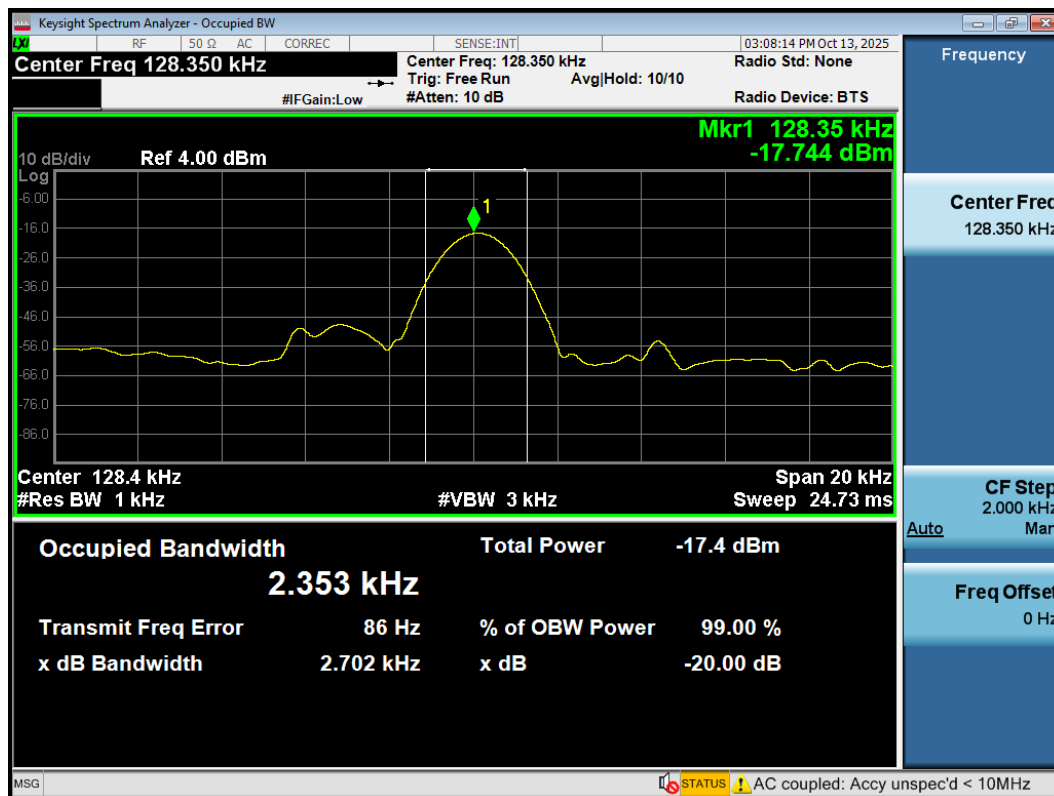
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:

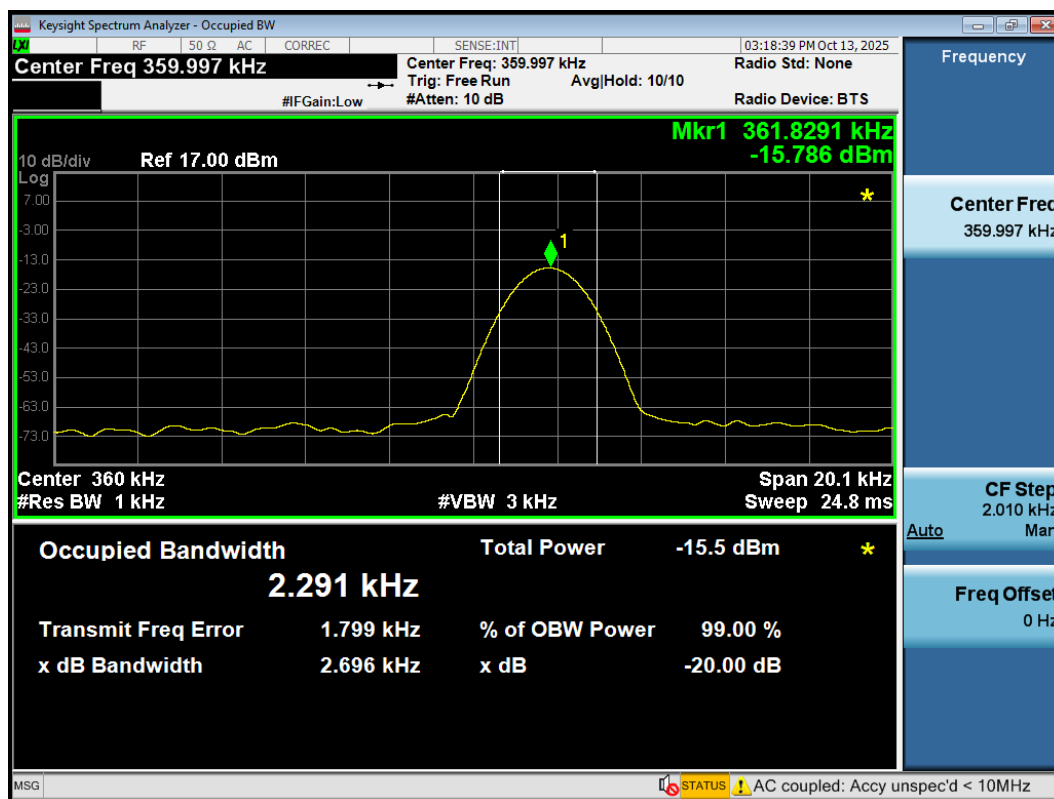
111-150 kHz

Test frequency (kHz)	99% bandwidth (kHz)	Conclusion
128.35	2.353	PASS



360 kHz

Test frequency (kHz)	99% bandwidth (kHz)	Conclusion
361.829	2.291	PASS



5.2. Radiates Emission

Ambient Condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.

Sweep the whole frequency band through the range from 9 kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

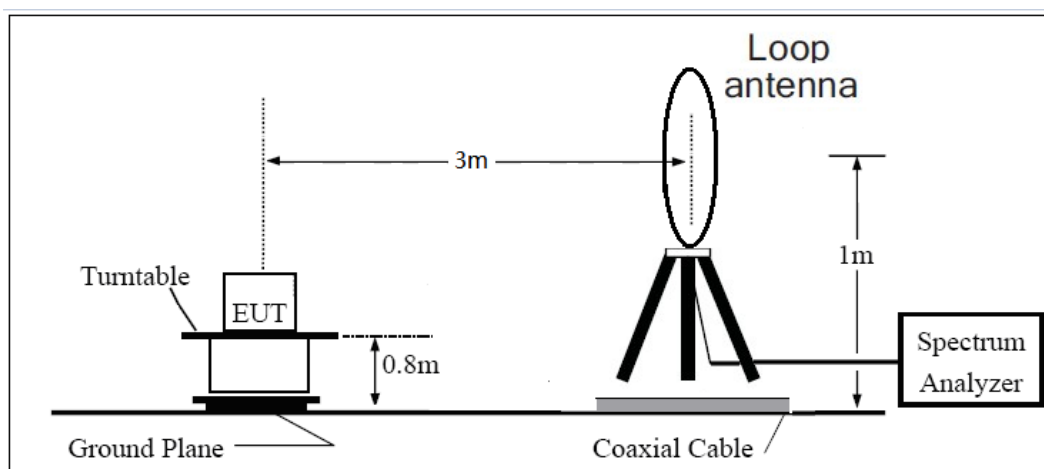
Below 30MHz

RBW=9 KHz, VBW=30 KHz,

detector; The measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Test setup

9kHz ~ 30MHz



Limits

Rule Part 15.247(d) specifies that “In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).”

Limit in restricted band

Frequency of emission (MHz)	Field strength(μ V/m)	Field strength(dB μ V/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30–88	100	40
88–216	150	43.5
216–960	200	46
Above 960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Peak Limit=74 dB μ V/m

Average Limit=54 dB μ V/m

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Measurement Uncertainty

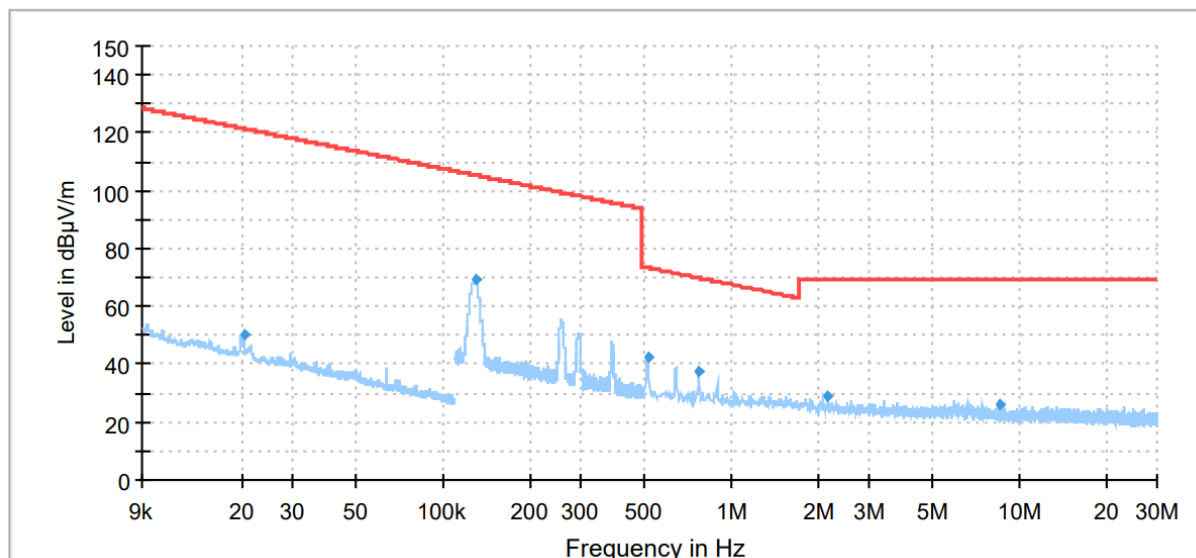
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB

Test Results:

The following graphs display the maximum values of horizontal and vertical by software.

111-150 kHz



Radiates Emission from 9kHz to 30MHz

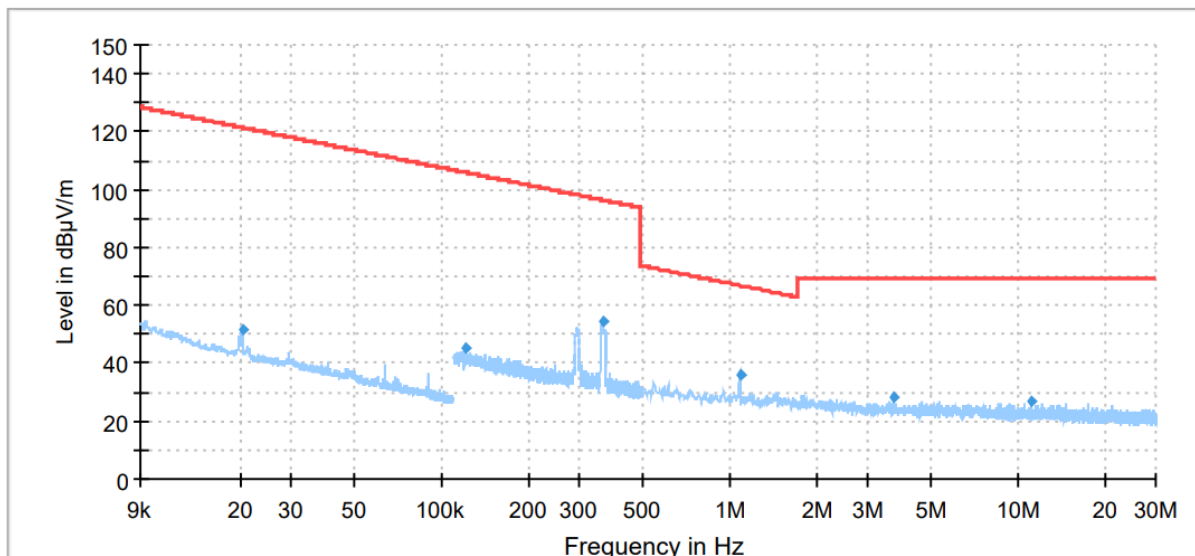
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Azimuth (deg)	Corr. (dB/m)
0.02	50.39	121.45	71.06	500.00	324.00	17
0.13	69.48	105.40	35.92	150.00	207.00	17
0.51	42.46	73.42	30.95	150.00	171.00	17
0.77	37.72	69.87	32.15	150.00	0.00	17
2.17	29.17	69.50	40.33	150.00	227.00	17
8.59	25.99	69.50	43.51	150.00	358.00	17

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –Average

360 kHz



Radiates Emission from 9kHz to 30MHz

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Azimuth (deg)	Corr. (dB/m)
0.02	51.46	121.46	69.99	500.00	241.00	17
0.12	44.94	105.94	61.00	150.00	74.00	17
0.36	54.54	96.40	41.85	150.00	259.00	17
1.08	35.80	66.90	31.10	150.00	207.00	17
3.71	28.01	69.50	41.49	150.00	88.00	17
11.08	27.08	69.50	42.42	150.00	357.00	17

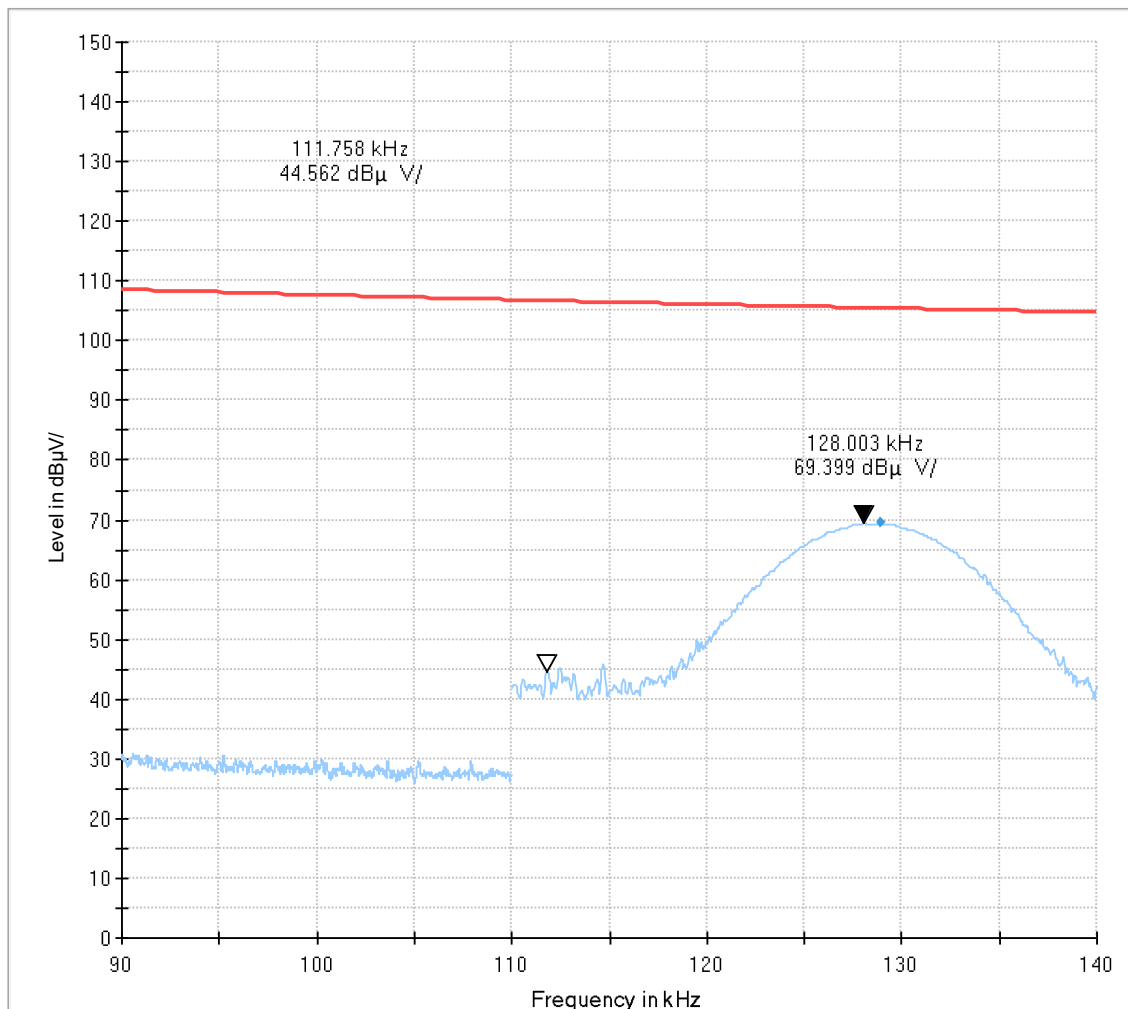
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –Average

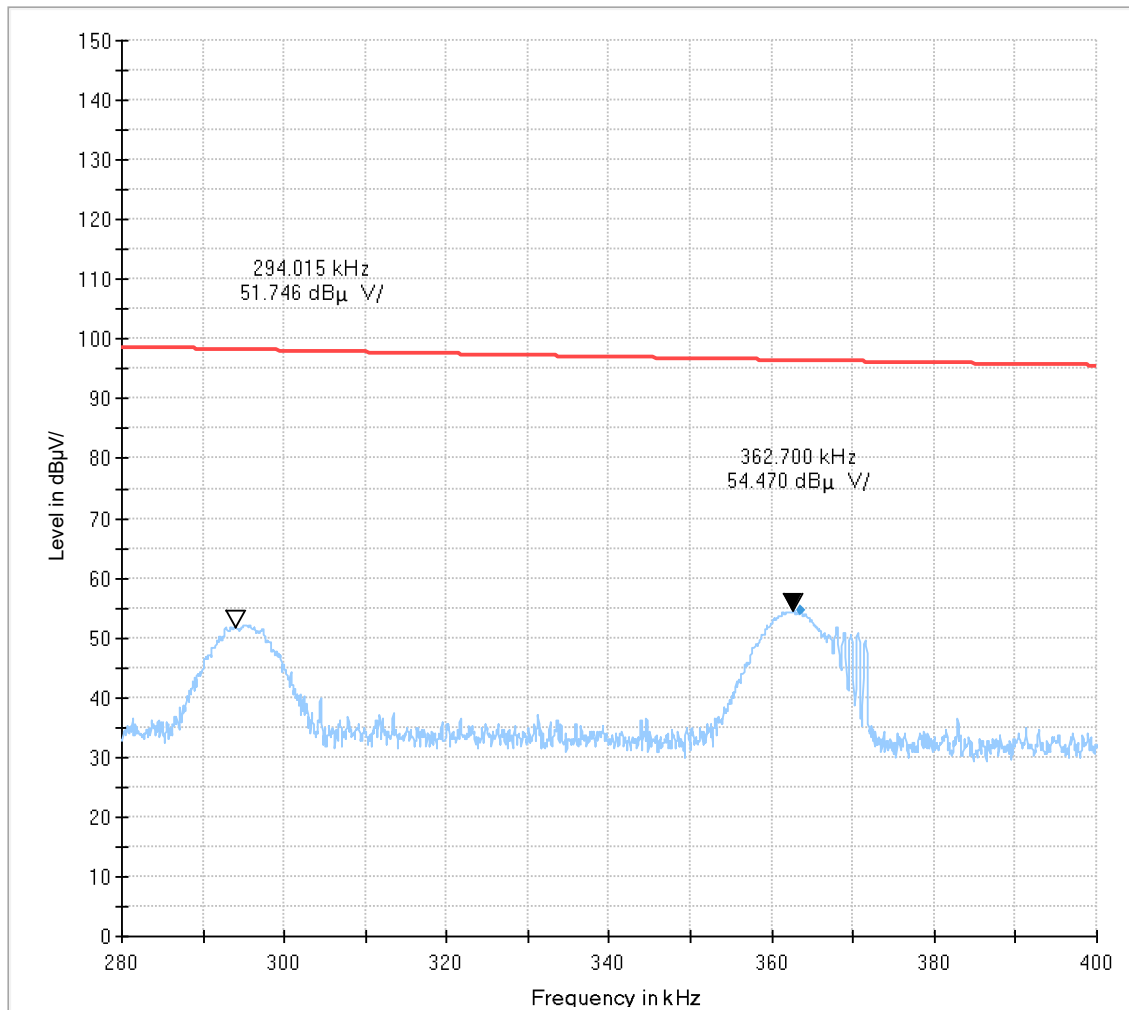
Band Edge

A symbol ($\text{dB}\mu\text{V}/\text{m}$) in the test plot below means (dB $\mu\text{V}/\text{m}$)

111-150 kHz



360 kHz



5.3. Conducted Emission

Ambient Condition

Temperature	Relative humidity	Pressure
15°C ~ 35°C	20% ~ 80%	86 kPa ~ 106 kPa

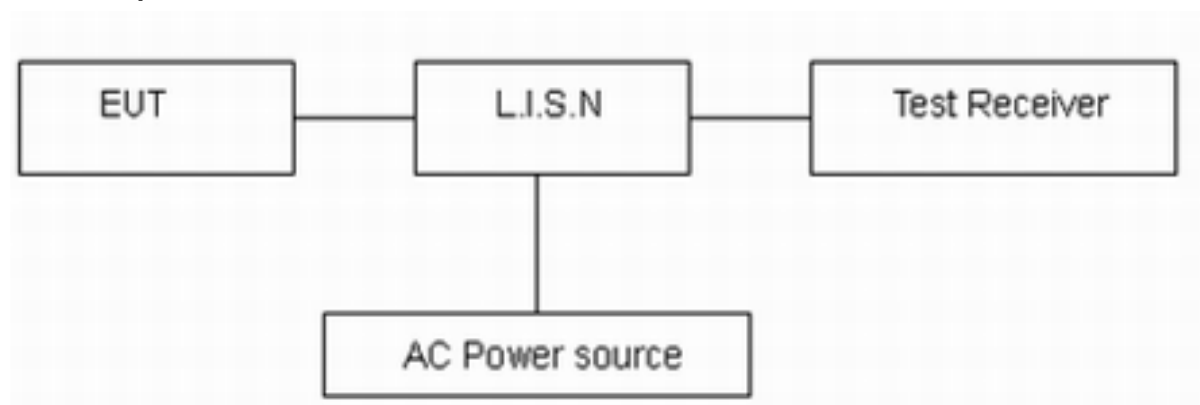
Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz.

The measurement result should include both L line and N line.

The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

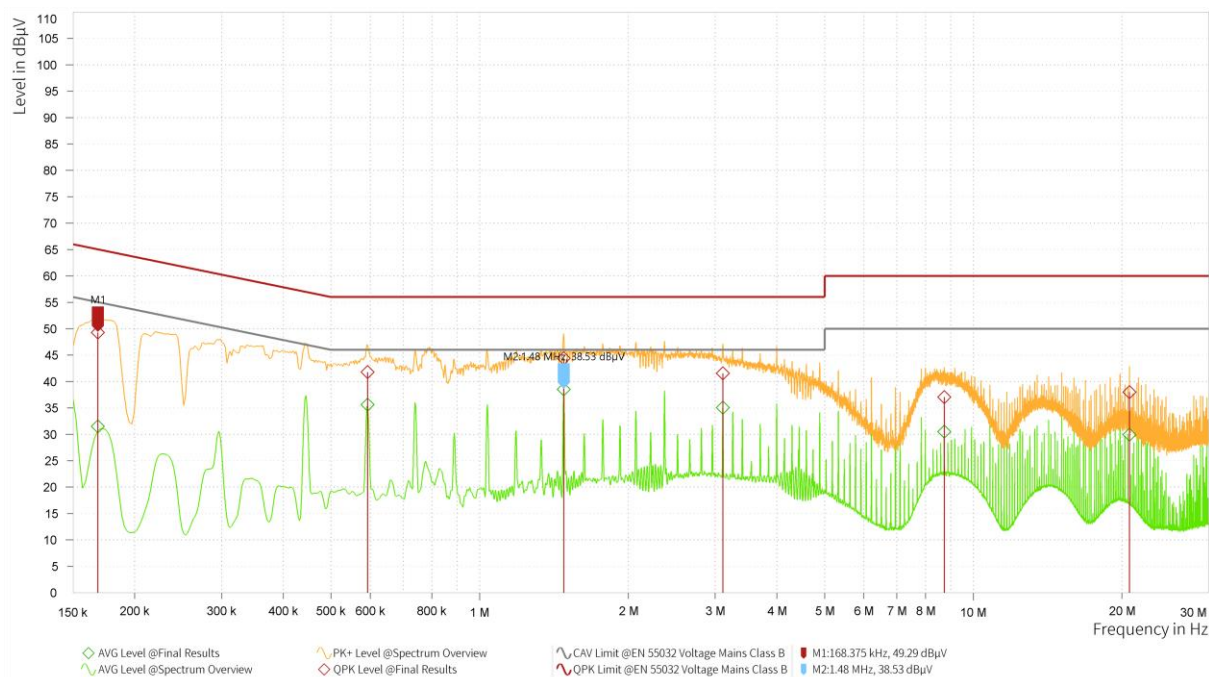
Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

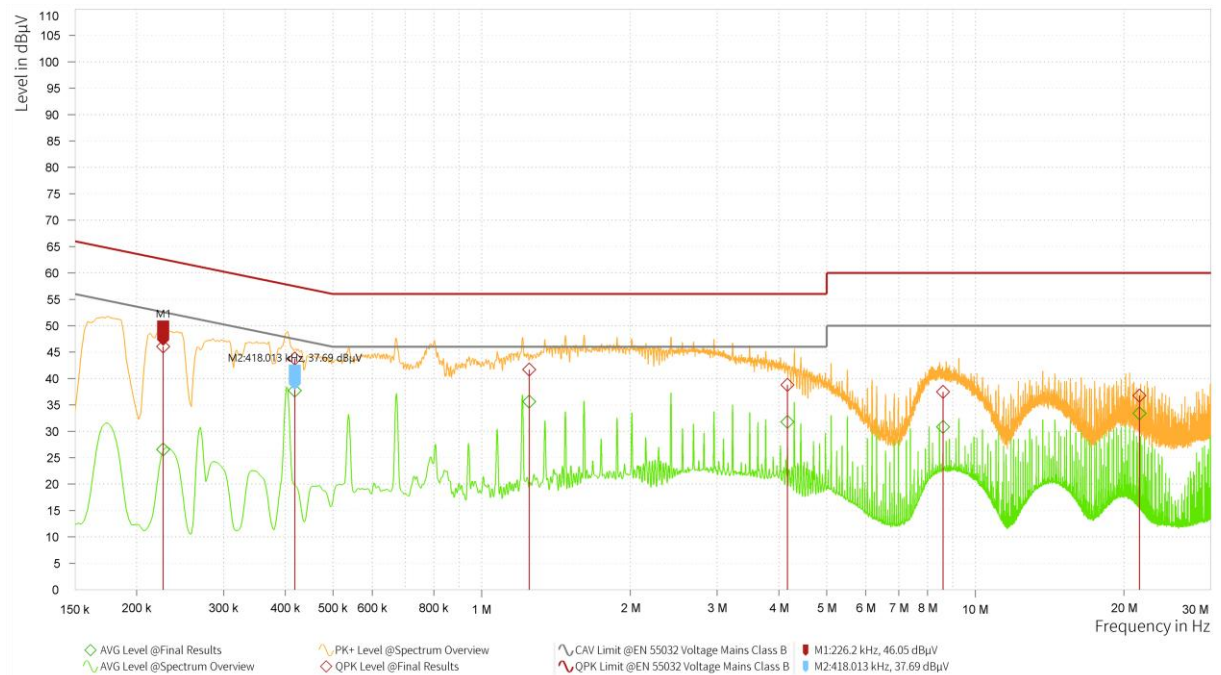
Test Results:



Frequency [MHz]	QPK Level [dBµV]	QPK Limit [dBµV]	QPK Margin [dB]	AVG Level [dBµV]	AVG: CAV Limit [dBµV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.168	49.29	65.04	15.75	31.48	55.04	23.57	20.89	L1	9.000	1.000
0.593	41.77	56.00	14.23	35.60	46.00	10.40	20.68	L1	9.000	1.000
1.480	44.41	56.00	11.59	38.53	46.00	7.47	19.85	L1	9.000	1.000
3.108	41.56	56.00	14.44	35.05	46.00	10.95	19.48	L1	9.000	1.000
8.737	37.06	60.00	22.94	30.52	50.00	19.48	19.41	L1	9.000	1.000
20.725	37.97	60.00	22.03	29.91	50.00	20.09	19.68	L1	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 KHz to 30 MHz



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG: CAV Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.226	46.05	62.59	16.54	26.57	52.59	26.02	21.01	N	9.000	1.000
0.418	43.78	57.49	13.71	37.69	47.49	9.80	20.87	N	9.000	1.000
1.248	41.68	56.00	14.32	35.61	46.00	10.39	19.99	N	9.000	1.000
4.163	38.80	56.00	17.20	31.80	46.00	14.20	19.43	N	9.000	1.000
8.608	37.48	60.00	22.52	30.83	50.00	19.17	19.42	N	9.000	1.000
21.515	36.78	60.00	23.22	33.40	50.00	16.60	19.74	N	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 KHz to 30 MHz

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
EMI Test Receiver	R&S	ESCI3	100948	2025-05-07	2026-05-06
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2023-07-14	2026-07-13
Software	R&S	EMC32	9.26.01	/	/
Artificial main network	R&S	ENV216	102191	2024-12-02	2026-12-01
EMI Test Receiver	R&S	ESR	101667	2025-05-06	2026-05-05
Software	R&S	EMC32	10.35.10	/	/

7. The EUT Appearance

Refer to *EUT Appearance*.

8. Test Setup Photos

Refer to *RF Test Setup*.

***** END OF REPORT *****