FCC EMC Test Report

Report No.	:	BTL-FCCE-1-2505T096
Equipment	:	D200P U.2
Model Name	:	PX1AE-25X
Brand Name	:	Apacer Technology Inc.
Applicant	:	Apacer Technology Inc.
Address	:	1F., No.32, Zhongcheng Rd., Tucheng Dist., New Taipei City 236, Taiwan (R.O.C)
FCC Rule Part(s)	:	FCC CFR Title 47, Part 15, Subpart B Class B
Measurement Procedure(s)	:	ANSI C63.4-2014 ANSI C63.4a-2017
Date of Receipt	:	2024/3/11
Date of Test	:	2024/3/15 ~ 2024/3/21
Issued Date	:	2025/6/10

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by : Steve Yang
Steve Yang, Engineer

Approved by : Jack Kao
Jack Kao, Manager

BTL Inc.
No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan
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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

CONTENTS

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCE-1-2505T096	R00	Original Report.	2025/6/10	Valid

1 SUMMARY OF TEST RESULTS

Emission			
Standard	Test Item	Limit	Judgment
FCC CFR Title 47, Part 15, Subpart B	AC power line conducted emissions	Class B	PASS
	Radiated emissions below 1 GHz	Class B	PASS
	Radiated emissions above 1 GHz	Class B	PASS

Statement of Conformity
The statement of conformity is based on the binary decision rule according to IEC Guide 115 and ILAC G8 "simple acceptance" principle. Without considering measurement uncertainty, its specific risk is less than 50% PFA. (PFA: Probability of False Accept)

NOTE:
(1) ”N/A” denotes test is not applicable in this Test Report.
(2) The report format version is TP.1.1.2.

1.1 TEST FACILITY

Test Firm Location: No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan.
TAF Accreditation Number is 0659; FCC Designation Number is TW1115.
The satellite facilities under the test firm used to collect the test data in this report are:
No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
☒ C05 ☒ CB08 ☒ CB11

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y ± U**, where expanded uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k = 2**, providing a level of confidence of approximately **95 %**. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C05	CISPR	150 kHz ~ 30 MHz	3.44

B. Radiated emissions below 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
CB08 (10m)	CISPR	30 MHz ~ 200 MHz	V	3.12
		30 MHz ~ 200 MHz	H	3.26
		200 MHz ~ 1,000 MHz	V	3.22
		200 MHz ~ 1,000 MHz	H	3.12

C. Radiated emissions above 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U (dB)
CB11	CISPR	1 GHz ~ 6 GHz	V	4.44
		1 GHz ~ 6 GHz	H	4.40
		6 GHz ~ 18 GHz	V	4.02
		6 GHz ~ 18 GHz	H	4.00

Test Site	Method	Measurement Frequency Range	U (dB)
CB11	CISPR	18 GHz ~ 26.5 GHz	4.76
		26.5 GHz ~ 40 GHz	5.24

NOTE:
Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Tested by
Conducted emissions	15°C, 56%	Bruce Lu
Radiated emissions below 1 GHz	25°C, 58%	Steve Yang
Radiated emissions above 1 GHz	22°C, 66%	Eric Tai

2 GENERAL INFORMATION

2.1 EUT INFORMATION

Equipment	D200P U.2
Model Name	PX1AE-25X
Brand Name	Apacer Technology Inc.
Model Difference	N/A
Power Source	DC voltage supplied from host system.
Power Rating	DC 12V, 2.5A
Products Covered	N/A
PCBA PN	Q2190X23X00G403H, Q2190X23X00G40XXXXXXX (X=0~9; A~Z)
Test Model	PX1AE-25X
Sample Status	Engineering Sample
Highest Internal Frequency	16 GHz
EUT Modification(s)	N/A

NOTE:
(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
(2) In this report, all the test results refer to BTL-EMC-1- 2403T060 report due to the device is identical to the referencing report and, after evaluated, no need to re-test.

2.2 TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation modes according to test plan.

Pretest Mode	Description
Mode 1	SSD R/W

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode	Description
Mode 1	SSD R/W

Radiated emissions below 1 GHz test	
Final Test Mode	Description
Mode 1	SSD R/W

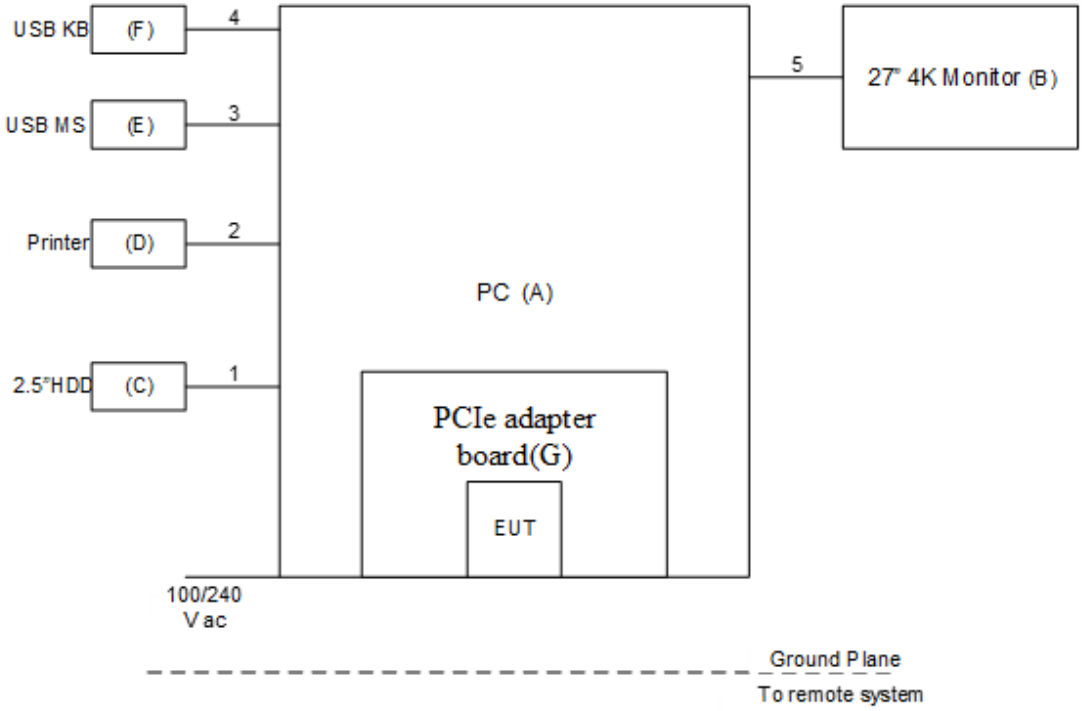
Radiated emissions above 1 GHz test	
Final Test Mode	Description
Mode 1	SSD R/W

2.3 EUT OPERATING CONDITION

The PC exercise program used during radiated and/or conducted emissions measurement was designed to exercise the various system components in a manner similar to a typical use.

2.4 TESTED CONFIGURATION DIAGRAM

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.5.



2.5 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	PC	DELL	Precision 3660	CT16K A00	Furnished by test lab.
B	27” 4K Monitor	DELL	U2723Q	CN-0822F2-WSL00-35I-526L-A03	Furnished by test lab.
C	USB 3.0 HDD (My Passport Ultra)	WD	WDBC3C0010BSL-0B	WX81A88ALJUC	Furnished by test lab.
D	Printer	HP	SNPRH-1504	N/A	Furnished by test lab.
E	USB Mouse	DELL	MOCZUL	CN-049TWY-PRC00-79E-01HA	Furnished by test lab.
F	USB K/B	DELL	KB216t	CN-0W33XP-L0300-797-05TY-A03	Furnished by test lab.
G	PCIe adapter board	N/A	N/A	N/A	Supplied by test requester.

Item	Cable Type	Shielded	Ferrite Core	Length	Remarks
1	USB Cable	YES	NO	1.5m	Type: USB 3.2 Gen1 Furnished by test lab.
2	USB Cable	YES	NO	1.7m	Type: USB 2.0 Furnished by test lab.
3	USB Cable	YES	NO	1.7m	Type: USB 2.0 Furnished by test lab.
4	USB Cable	YES	NO	1.7m	Type: USB 2.0 Furnished by test lab.
5	DP Cable	YES	NO	1.8m	Furnished by test lab.

3 EMC EMISSION TEST

3.1 CONDUCTED EMISSIONS TEST

3.1.1 LIMITS

Frequency (MHz)	Class A (dBμV)		Class B (dBμV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56 *	56 - 46 *
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTE:
(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
Margin Level = Measurement Value – Limit Value
Calculation example:

Reading Level (dBμV)		Correct Factor (dB)		Measurement Value (dBμV)
38.22	+	3.45	=	41.67

Measurement Value (dBμV)		Limit Value (dBμV)		Margin Level (dB)
41.67	-	60	=	-18.33

3.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	TWO-LINE V-NETWORK	R&S	ENV216	101521	2023/9/11	2024/9/10
2	Test Cable	EMCI	EMCCFD300-BM-BMR-5000	220331	2023/3/30	2024/3/29
3	EMI Test Receiver	R&S	ESR7	101433	2023/11/10	2024/11/9
4	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

REMARK:
(1) “N/A” denotes no model name, no serial no. or no calibration specified.
(2) All calibration period of equipment list is one year.

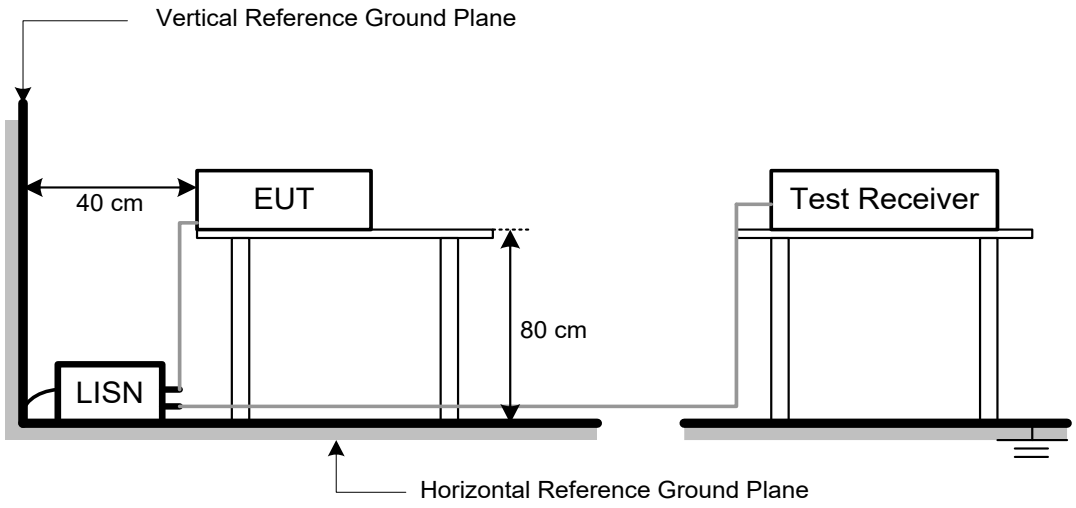
3.1.3 TEST PROCEDURE

a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
All other support equipment were powered from an additional LISN(s).
The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
The end of the cable will be terminated, using the correct terminating impedance.
The overall length shall not exceed 1 m.
d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
e. The receiver was set to quasi-peak and average detect function and specified bandwidth with maximum hold mode.
f. For the actual test configuration, please refer to the related Item - TEST PHOTOS.

3.1.4 DEVIATION FROM TEST STANDARD

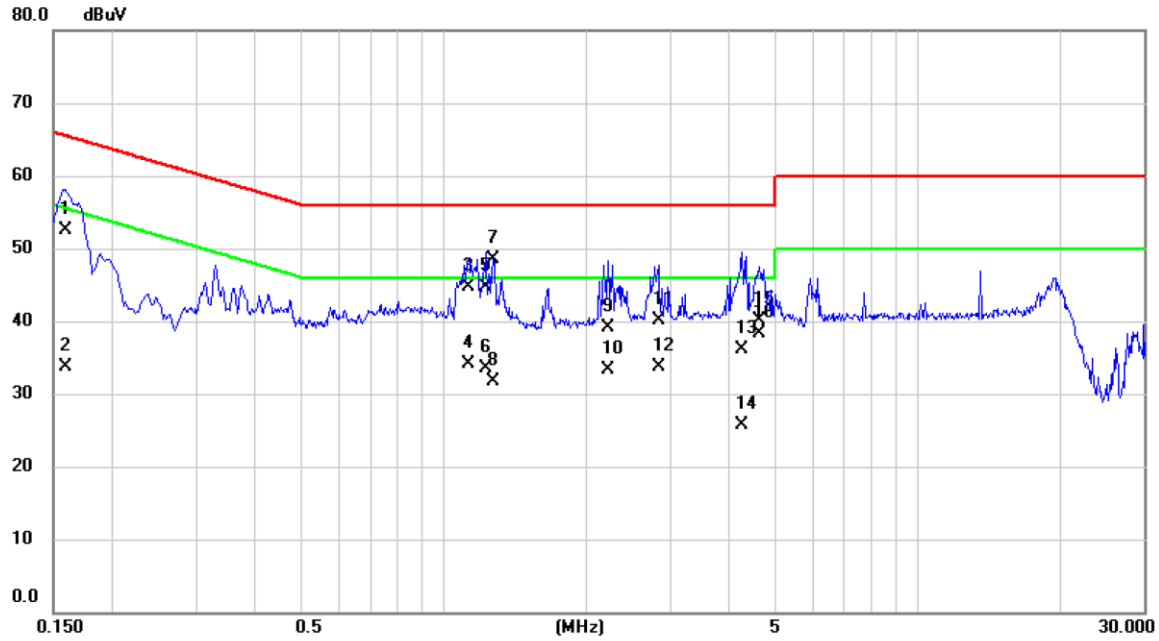
No deviation.

3.1.5 TEST SETUP



3.1.6 TEST RESULT

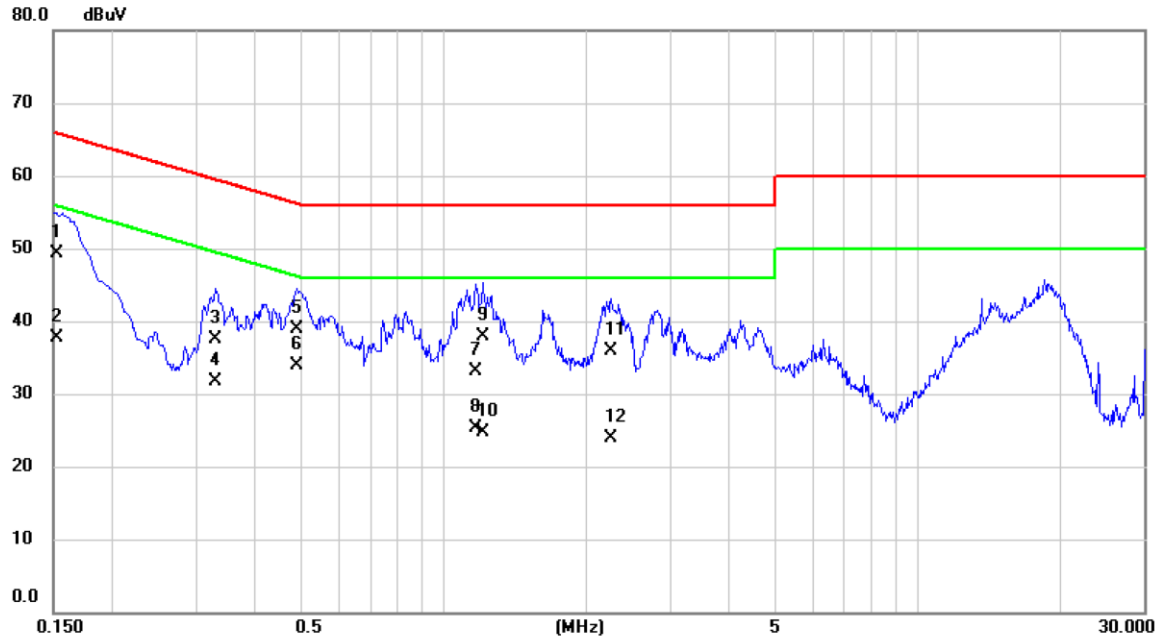
Test Mode	Mode 1	Tested Date	2024/3/21
Test Voltage	AC 120V/60Hz	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1590	42.90	9.60	52.50	65.52	-13.02	QP	
2		0.1590	24.10	9.60	33.70	55.52	-21.82	AVG	
3		1.1242	35.10	9.59	44.69	56.00	-11.31	QP	
4		1.1242	24.60	9.59	34.19	46.00	-11.81	AVG	
5		1.2255	35.10	9.59	44.69	56.00	-11.31	QP	
6		1.2255	23.90	9.59	33.49	46.00	-12.51	AVG	
7	*	1.2750	38.90	9.60	48.50	56.00	-7.50	QP	
8		1.2750	22.20	9.60	31.80	46.00	-14.20	AVG	
9		2.2200	29.50	9.65	39.15	56.00	-16.85	QP	
10		2.2200	23.60	9.65	33.25	46.00	-12.75	AVG	
11		2.8365	30.50	9.63	40.13	56.00	-15.87	QP	
12		2.8365	24.00	9.63	33.63	46.00	-12.37	AVG	
13		4.2608	26.40	9.64	36.04	56.00	-19.96	QP	
14		4.2608	16.00	9.64	25.64	46.00	-20.36	AVG	
15		4.6455	30.40	9.64	40.04	56.00	-15.96	QP	
16		4.6455	28.70	9.64	38.34	46.00	-7.66	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	Mode 1	Tested Date	2024/3/21
Test Voltage	AC 120V/60Hz	Phase	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1522	39.80	9.59	49.39	65.88	-16.49	QP	
2		0.1522	28.20	9.59	37.79	55.88	-18.09	AVG	
3		0.3300	28.00	9.57	37.57	59.45	-21.88	QP	
4		0.3300	22.20	9.57	31.77	49.45	-17.68	AVG	
5		0.4897	29.30	9.57	38.87	56.17	-17.30	QP	
6	*	0.4897	24.30	9.57	33.87	46.17	-12.30	AVG	
7		1.1715	23.60	9.58	33.18	56.00	-22.82	QP	
8		1.1715	15.80	9.58	25.38	46.00	-20.62	AVG	
9		1.2075	28.30	9.58	37.88	56.00	-18.12	QP	
10		1.2075	15.20	9.58	24.78	46.00	-21.22	AVG	
11		2.2515	26.30	9.63	35.93	56.00	-20.07	QP	
12		2.2515	14.30	9.63	23.93	46.00	-22.07	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

3.2 RADIATED EMISSIONS BELOW 1 GHZ TEST

3.2.1 LIMITS

FCC CFR Title 47, Part 15, Subpart B:

Frequency (MHz)	Class A (at 10 m)		Class A (at 3 m)*	Class B (at 3 m)	
	(uV/m) Field strength	(dBuV/m) Field strength	(dBuV/m) Field strength	(uV/m) Field strength	(dBuV/m) Field strength
30 - 88	90	39	49.46	100	40
88 - 216	150	43.5	53.96	150	43.5
216 - 960	210	46.4	56.86	200	46
Above 960	300	49.5	59.96	500	54
* FCC CFR Title 47, Part 15, Subpart A, section 15.31(f)(1), the distance could be extrapolated by using 20 dB/decade factor.					

Alternative Limits:

Frequency (MHz)	Class A (at 10 m)	Class B (at 10 m)
	dBµV/m	dBµV/m
30 - 230	40	30
230 - 1000	47	37
FCC CFR Title 47, Part 15, Subpart B, section 15.109(g) provides, as an alternative, compliance to the CISPR 22 (Third Edition) radiated emission limits in the 30 MHz to 1000 MHz range.		

Frequency range of radiated measurements (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:
(1) The tighter limit applies at the band edges.
(2) Emission level (dBuV/m) = 20log Emission level (uV/m).
3 m Emission level = 10 m Emission level + 20log(10 m/3 m).
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain (if use)
Margin Level = Measurement Value - Limit Value
Calculation example:

Reading Level (dBµV)		Correct Factor (dB/m)		Measurement Value (dBµV/m)
19.11	+	2.11	=	21.22

Measurement Value (dBµV/m)		Limit Value (dBµV/m)		Margin Level (dB)
21.22	-	40	=	-18.78

3.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Log-Bicon Antenna	Schwarzbeck	VULB 9168	9168-641	2024/2/23	2025/2/22
2	Attenuator	Inmet	EMCI-N-6-05	AT-N0507	2024/2/23	2025/2/22
3	Pre-Amplifier	EMCI	EMC 9135	980282	2023/9/19	2024/9/18
4	Test Cable	EMCI	EMC104-SM-SM-800	230906	2023/9/19	2024/9/18
5	Test Cable	EMCI	EMCCFD400-NM-NM-8000	230903	2023/9/19	2024/9/18
6	Test Cable	EMCI	EMCCFD400-NM-NM-3500	230904	2023/9/19	2024/9/18
7	Test Cable	EMCI	EMC104-NM-SM-2500	230908	2023/9/19	2024/9/18
8	EMI Test Receiver	Keysight	N9038A	MY56400090	2023/6/1	2024/5/31
9	Log-Bicon Antenna	Schwarzbeck	VULB 9168	9168-673	2024/2/23	2025/2/22
10	Attenuator	Inmet	EMCI-N-6-06	AT-N0615	2024/2/23	2025/2/22
11	Pre-Amplifier	EMCI	EMC 9135	980281	2023/9/19	2024/9/18
12	Test Cable	EMCI	EMC104-SM-SM-1000	230905	2023/9/19	2024/9/18
13	Test Cable	EMCI	EMC104-SM-SM-2500	230907	2023/9/19	2024/9/18
14	Test Cable	EMCI	EMCCFD400-NM-NM-8000	230902	2023/9/19	2024/9/18
15	Test Cable	EMCI	EMCCFD400-NM-NM-11000	230901	2023/9/19	2024/9/18
16	EXA Signal Analyzer	Keysight	N9010A	MY54200483	2023/11/15	2024/11/14
17	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

REMARK:
(1) “N/A” denotes no model name, no serial no. or no calibration specified.
(2) All calibration period of equipment list is one year.

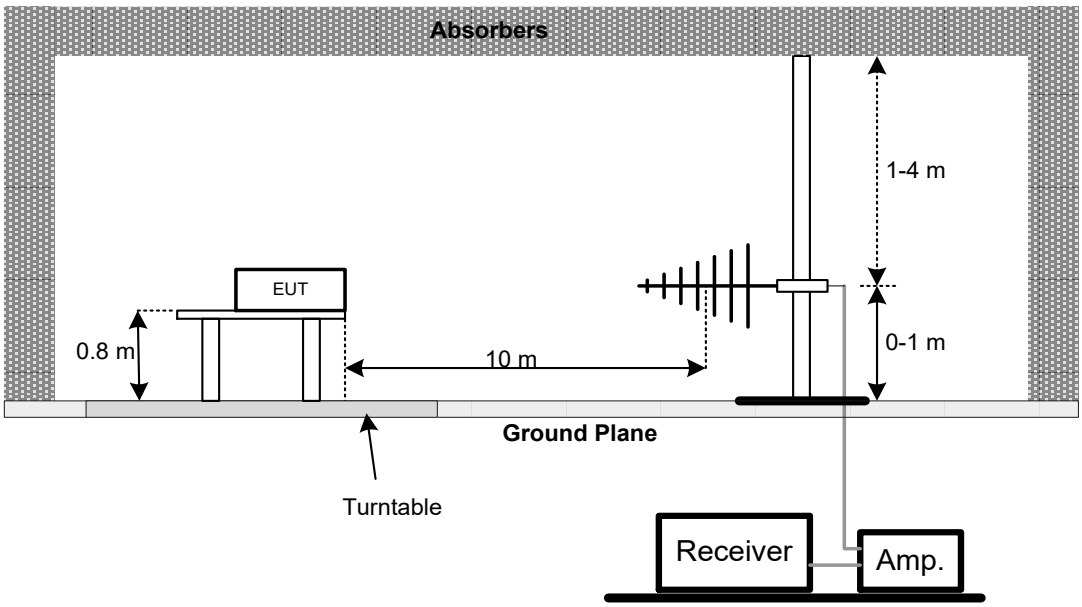
3.2.3 TEST PROCEDURE

a. The separation distance of 10 m was used for measurements below 1 GHz.
The EUT was placed on the top of a rotating table 0.8 m above the ground in a 10 m semi-anechoic chamber.
b. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the receive antenna was varied between 1 m and 4 m. Both horizontal and vertical polarizations of the antenna were checked.
d. For each suspected emission, the EUT was arranged at its worst case and then the antenna was scanned in height to find the maximum. The tower Bore sight function was used.
e. The receiver was set to quasi-peak detect function and specified bandwidth with maximum hold mode.
f. For the actual test configuration, please refer to the related Item - TEST PHOTOS.

3.2.4 DEVIATION FROM TEST STANDARD

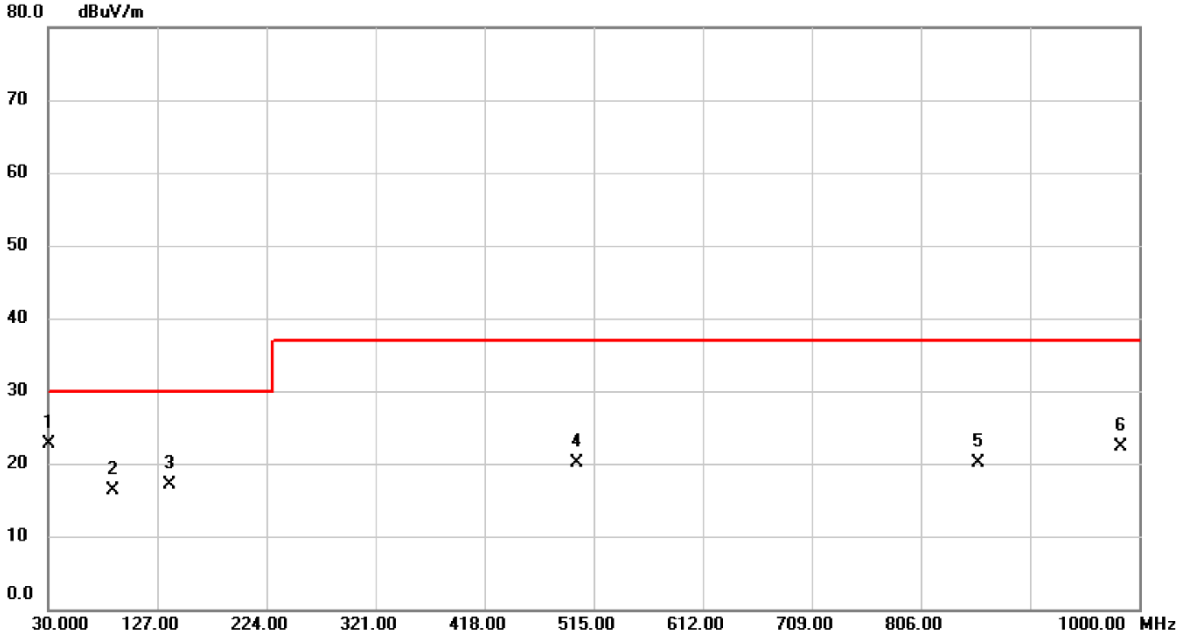
No deviation.

3.2.5 TEST SETUP



3.2.6 TEST RESULT

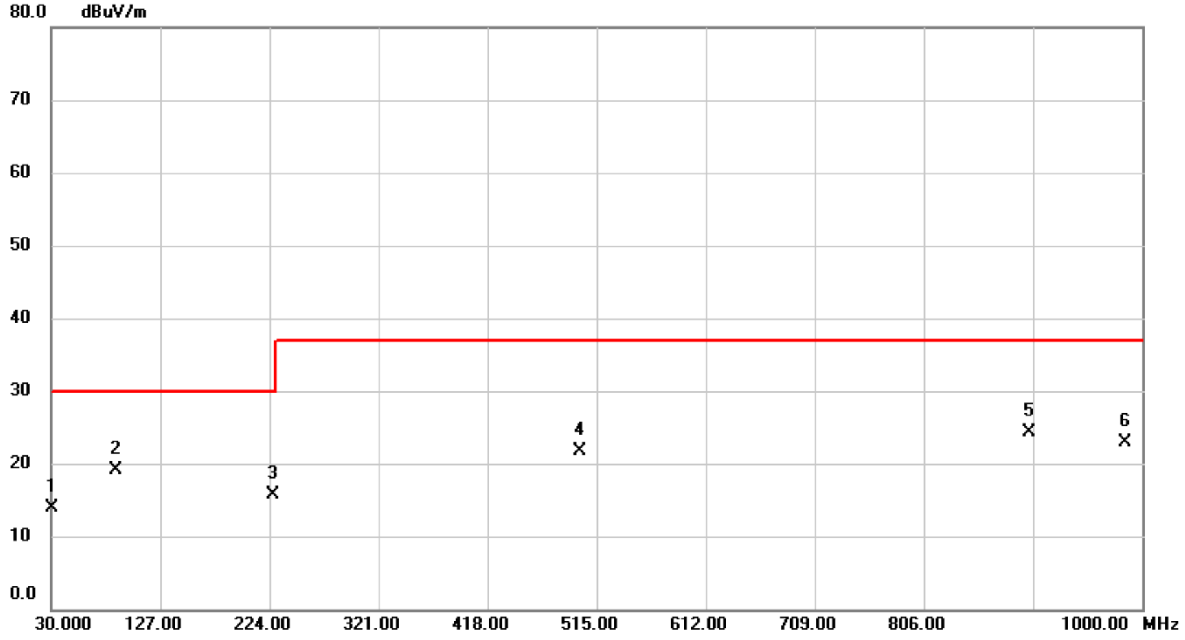
Test Mode	Mode 1	Tested Date	2024/3/16
Test Voltage	AC 120V/60Hz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	30.9700	41.69	-19.07	22.62	30.00	-7.38	QP	100	133	
2		87.2300	39.01	-22.66	16.35	30.00	-13.65	QP	199	83	
3		138.6400	34.72	-17.68	17.04	30.00	-12.96	QP	100	162	
4		500.4500	31.65	-11.63	20.02	37.00	-16.98	QP	299	213	
5		857.4100	26.55	-6.41	20.14	37.00	-16.86	QP	274	0	
6		983.5100	27.16	-4.94	22.22	37.00	-14.78	QP	399	360	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	Mode 1	Tested Date	2024/3/16
Test Voltage	AC 120V/60Hz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		30.9700	33.18	-19.24	13.94	30.00	-16.06	QP	100	114	
2	*	87.2300	42.01	-22.89	19.12	30.00	-10.88	QP	400	191	
3		226.9100	35.44	-19.82	15.62	30.00	-14.38	QP	400	334	
4		499.4800	33.77	-12.13	21.64	37.00	-15.36	QP	300	0	
5		900.0900	30.59	-6.34	24.25	37.00	-12.75	QP	300	148	
6		984.4800	27.81	-4.98	22.83	37.00	-14.17	QP	300	305	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

3.3 RADIATED EMISSIONS ABOVE 1 GHZ TEST

3.3.1 LIMITS

Frequency (GHz)	Class A				Class B	
	(dBuV/m) (at 3 m)		(dBuV/m) (at 10 m)		(dBuV/m) (at 3 m)	
	Peak	Average	Peak	Average	Peak	Average
Above 1	80	60	69.5	49.5	74	54

Frequency range of radiated measurements (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

NOTE:
(1) The tighter limit applies at the band edges.
(2) Emission level (dBuV/m) = 20log Emission level (uV/m).
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain (if use)
Margin Level = Measurement Value - Limit Value
Calculation example:

Reading Level (dBµV)		Correct Factor (dB/m)		Measurement Value (dBµV/m)
36.89	+	4.23	=	41.12

Measurement Value (dBµV/m)		Limit Value (dBµV/m)		Margin Level (dB)
41.12	-	54	=	-12.88

3.3.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Horn Antenna	RFSPIN	DRH18-E	210108A18E	2023/5/5	2024/5/4
2	Pre-Amplifier	EMCI	EMC012645SE	980411	2024/1/20	2025/1/19
3	Test Cable	EMCI	EMC104-SM-SM-2500	150306	2023/11/17	2024/11/16
4	Test Cable	EMCI	EMC104-SM-SM-7000	230909	2023/11/17	2024/11/16
5	Test Cable	EMCI	EMC104-SM-SM-800	150332	2023/11/17	2024/11/16
6	EMI Test Receiver	Keysight	N9038A	MY51210215	2023/11/23	2024/11/22
7	Horn Antenna	COM-POWER	AH-1840	10090003	2023/7/21	2024/7/20
8	Pre-Amplifier	EMCI	EMC184045SE	980511	2023/11/11	2024/11/10
9	Test Cable	EMCI	EMC101G-KM-KM-1000	210508	2023/11/17	2024/11/16
10	Test Cable	EMCI	EMC102-KM-KM-4700	151119	2023/11/17	2024/11/16
11	EXA Signal Analyzer	Keysight	N9010A	MY54200483	2023/11/15	2024/11/14
12	Measurement Software	Farad	EZ_EMC (Ver. NB-03A1-01)	N/A	N/A	N/A

REMARK:
(1) “N/A” denotes no model name, no serial no. or no calibration specified.
(2) All calibration period of equipment list is one year.

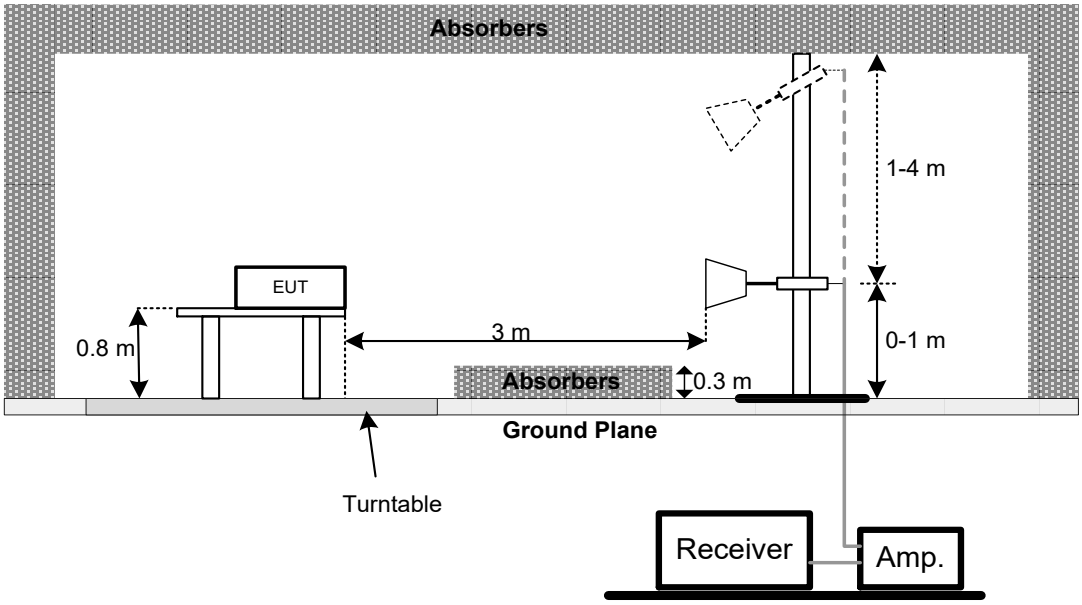
3.3.3 TEST PROCEDURE

a. The separation distance of 3 m was used for measurements above 1 GHz.
The test limits were altered using the 20 dB/decade extrapolation factor.
The EUT was placed on the top of a rotating table 0.8 m above the ground in a 3 m semi-anechoic chamber.
b. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the receive antenna was varied between 1 m and 4 m. Both horizontal and vertical polarizations of the antenna were checked.
d. For each suspected emission, the EUT was arranged at its worst case and then the antenna was scanned in height to find the maximum. The tower Bore sight function was used.
e. The receiver/spectrum analyzer was set to peak and average detect function and specified bandwidth with maximum hold mode.
f. For the actual test configuration, please refer to the related Item - TEST PHOTOS.

3.3.4 DEVIATION FROM TEST STANDARD

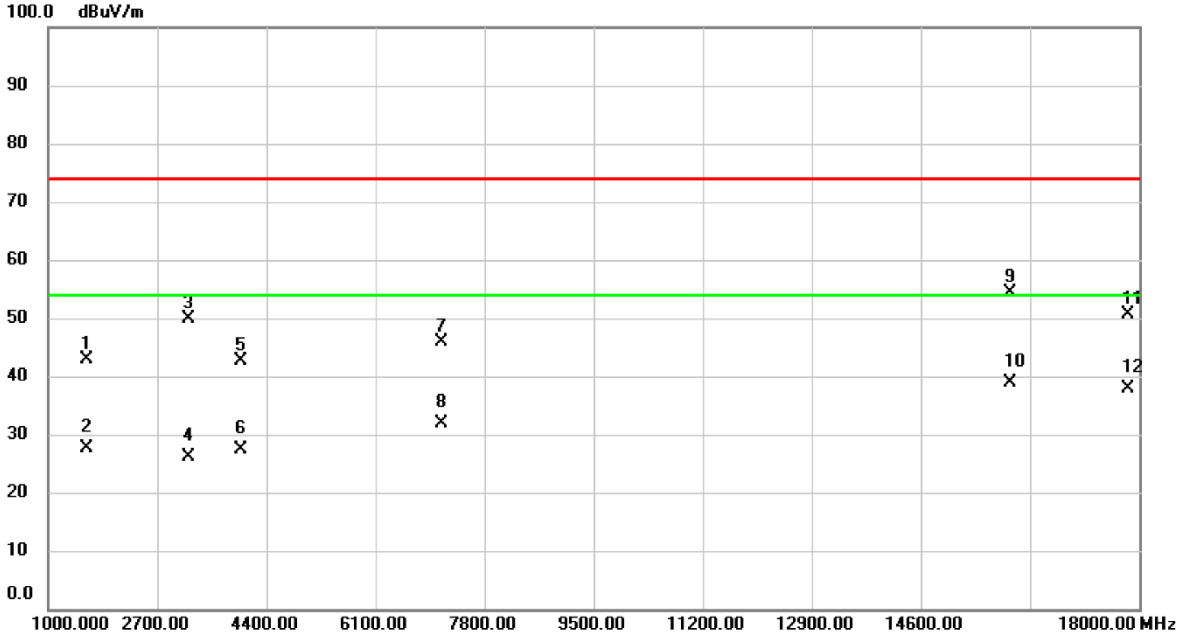
No deviation.

3.3.5 TEST SETUP



3.3.6 TEST RESULT

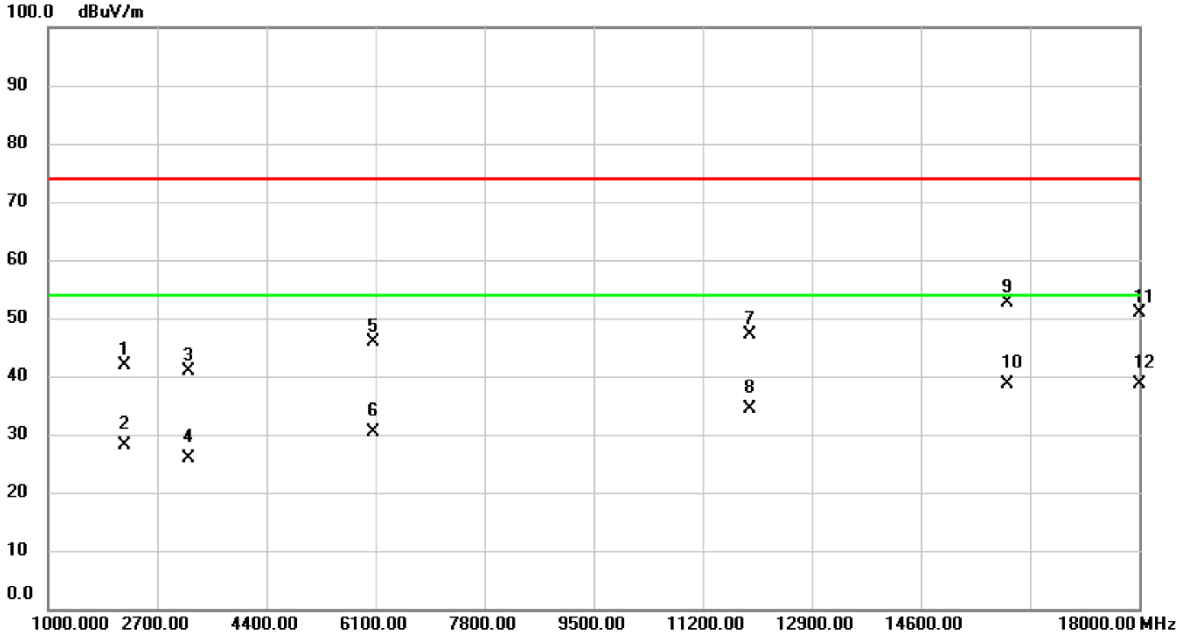
Test Mode	Mode 1	Tested Date	2024/3/15
Test Voltage	AC 120V/60Hz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		1595.000	64.03	-21.11	42.92	74.00	-31.08	peak	100	145	
2		1595.000	48.66	-21.11	27.55	54.00	-26.45	AVG	100	145	
3		3176.000	64.76	-14.98	49.78	74.00	-24.22	peak	100	194	
4		3176.000	41.20	-14.98	26.22	54.00	-27.78	AVG	100	194	
5		3992.000	54.93	-12.21	42.72	74.00	-31.28	peak	100	226	
6		3992.000	39.62	-12.21	27.41	54.00	-26.59	AVG	100	226	
7		7120.000	51.03	-5.05	45.98	74.00	-28.02	peak	178	360	
8		7120.000	36.98	-5.05	31.93	54.00	-22.07	AVG	178	360	
9		15994.00	49.33	5.00	54.33	74.00	-19.67	peak	100	201	
10	*	15994.00	33.82	5.00	38.82	54.00	-15.18	AVG	100	201	
11		17830.00	45.93	4.73	50.66	74.00	-23.34	peak	100	194	
12		17830.00	33.25	4.73	37.98	54.00	-16.02	AVG	100	194	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

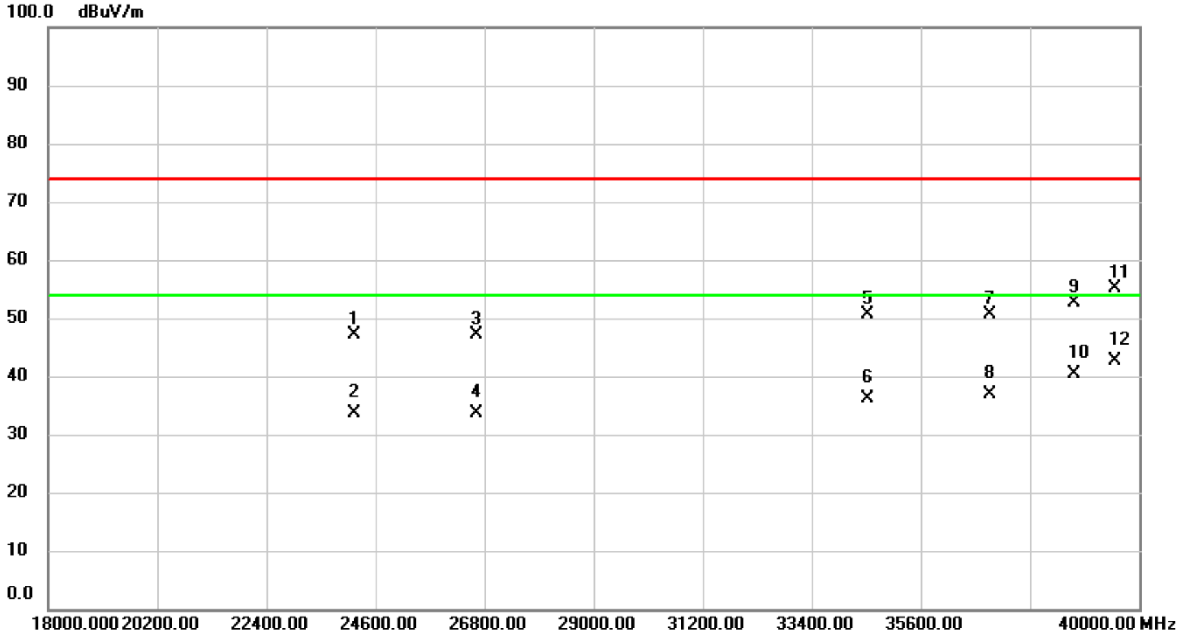
Test Mode	Mode 1	Tested Date	2024/3/15
Test Voltage	AC 120V/60Hz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		2190.000	60.14	-18.22	41.92	74.00	-32.08	peak	200	321	
2		2190.000	46.23	-18.22	28.01	54.00	-25.99	AVG	200	321	
3		3193.000	55.74	-14.93	40.81	74.00	-33.19	peak	100	235	
4		3193.000	40.81	-14.93	25.88	54.00	-28.12	AVG	100	235	
5		6066.000	54.10	-8.11	45.99	74.00	-28.01	peak	100	360	
6		6066.000	38.51	-8.11	30.40	54.00	-23.60	AVG	100	360	
7		11931.00	47.05	0.19	47.24	74.00	-26.76	peak	200	0	
8		11931.00	34.28	0.19	34.47	54.00	-19.53	AVG	200	0	
9		15943.00	47.53	5.03	52.56	74.00	-21.44	peak	100	192	
10		15943.00	33.66	5.03	38.69	54.00	-15.31	AVG	100	192	
11		18000.00	45.52	5.24	50.76	74.00	-23.24	peak	100	283	
12	*	18000.00	33.48	5.24	38.72	54.00	-15.28	AVG	100	283	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

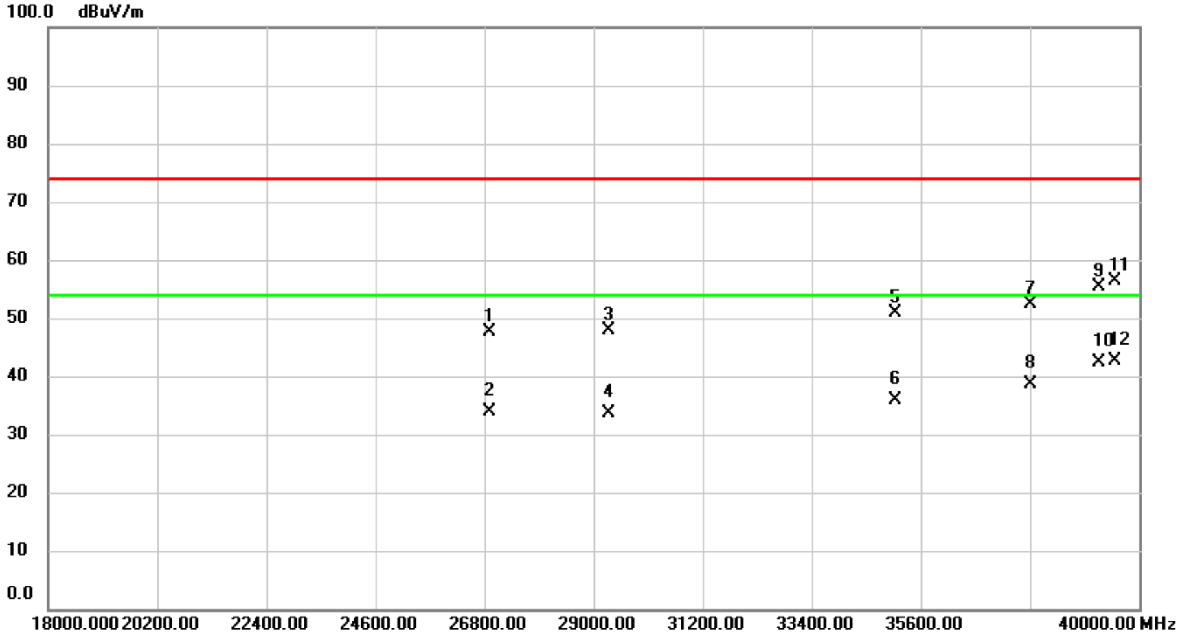
Test Mode	Mode 1	Tested Date	2024/3/15
Test Voltage	AC 120V/60Hz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		24188.18	51.37	-4.13	47.24	74.00	-26.76	peak	100	192	
2		24188.18	37.83	-4.13	33.70	54.00	-20.30	AVG	100	192	
3		26632.63	50.67	-3.59	47.08	74.00	-26.92	peak	100	148	
4		26632.63	37.10	-3.59	33.51	54.00	-20.49	AVG	100	148	
5		34538.53	53.18	-2.50	50.68	74.00	-23.32	peak	100	226	
6		34538.53	38.65	-2.50	36.15	54.00	-17.85	AVG	100	226	
7		36982.98	51.94	-1.34	50.60	74.00	-23.40	peak	100	146	
8		36982.98	38.19	-1.34	36.85	54.00	-17.15	AVG	100	146	
9		38700.70	50.55	2.16	52.71	74.00	-21.29	peak	100	119	
10		38700.70	38.24	2.16	40.40	54.00	-13.60	AVG	100	119	
11		39515.51	49.66	5.35	55.01	74.00	-18.99	peak	100	96	
12	*	39515.51	37.26	5.35	42.61	54.00	-11.39	AVG	100	96	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	Mode 1	Tested Date	2024/3/15
Test Voltage	AC 120V/60Hz	Polarization	Horizontal

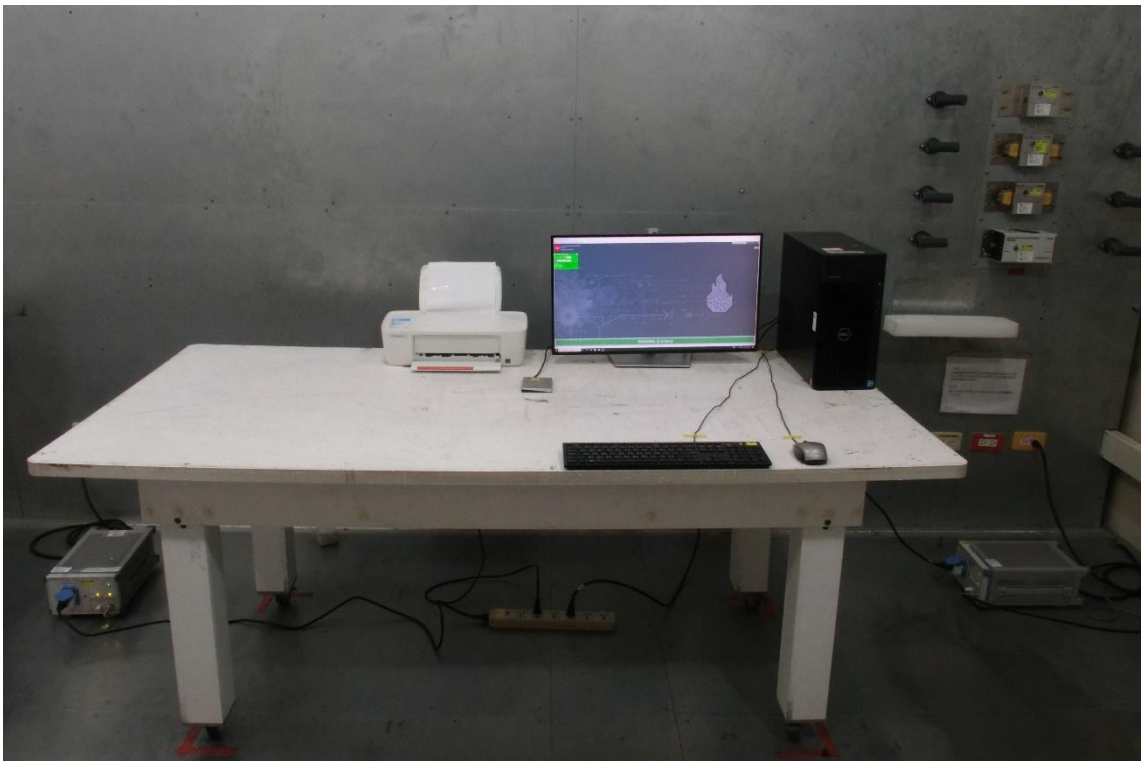


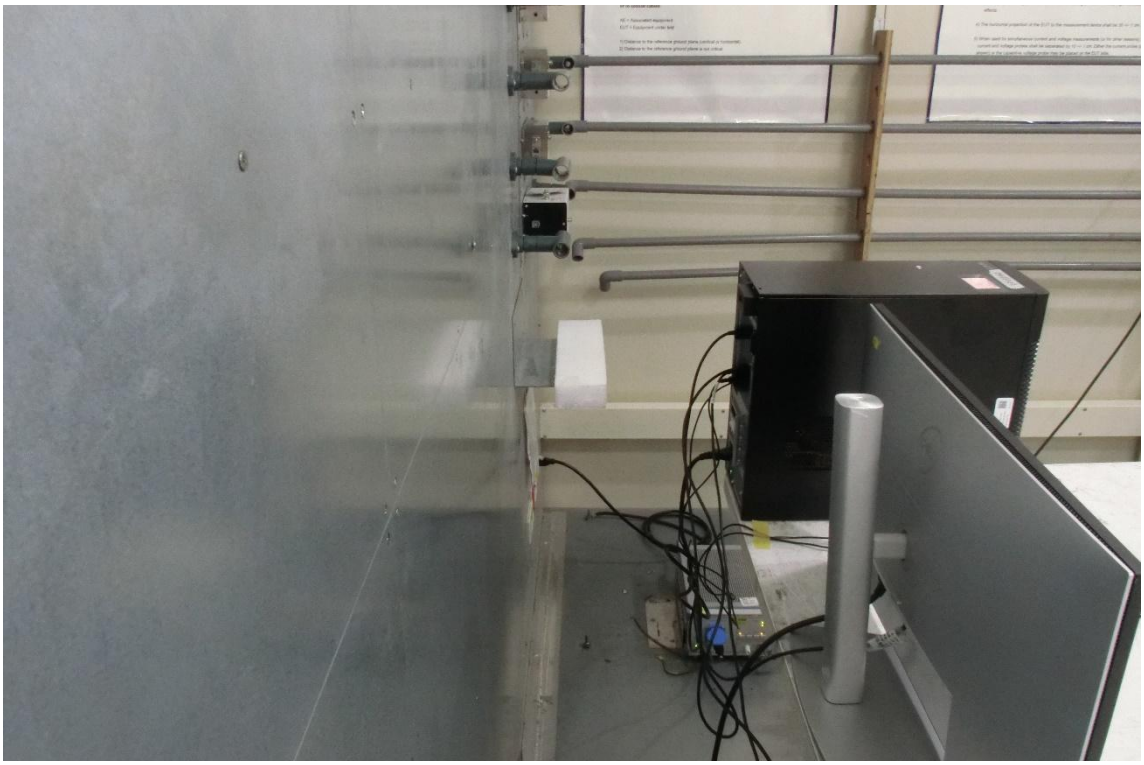
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		26896.89	51.17	-3.54	47.63	74.00	-26.37	peak	100	154	
2		26896.89	37.36	-3.54	33.82	54.00	-20.18	AVG	100	154	
3		29319.31	52.69	-4.86	47.83	74.00	-26.17	peak	100	172	
4		29319.31	38.46	-4.86	33.60	54.00	-20.40	AVG	100	172	
5		35089.08	54.06	-3.26	50.80	74.00	-23.20	peak	100	309	
6		35089.08	39.10	-3.26	35.84	54.00	-18.16	AVG	100	309	
7		37819.82	52.31	0.10	52.41	74.00	-21.59	peak	200	195	
8		37819.82	38.46	0.10	38.56	54.00	-15.44	AVG	200	195	
9		39207.20	51.28	4.09	55.37	74.00	-18.63	peak	100	230	
10		39207.20	38.17	4.09	42.26	54.00	-11.74	AVG	100	230	
11		39515.51	51.15	5.35	56.50	74.00	-17.50	peak	100	154	
12	*	39515.51	37.35	5.35	42.70	54.00	-11.30	AVG	100	154	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

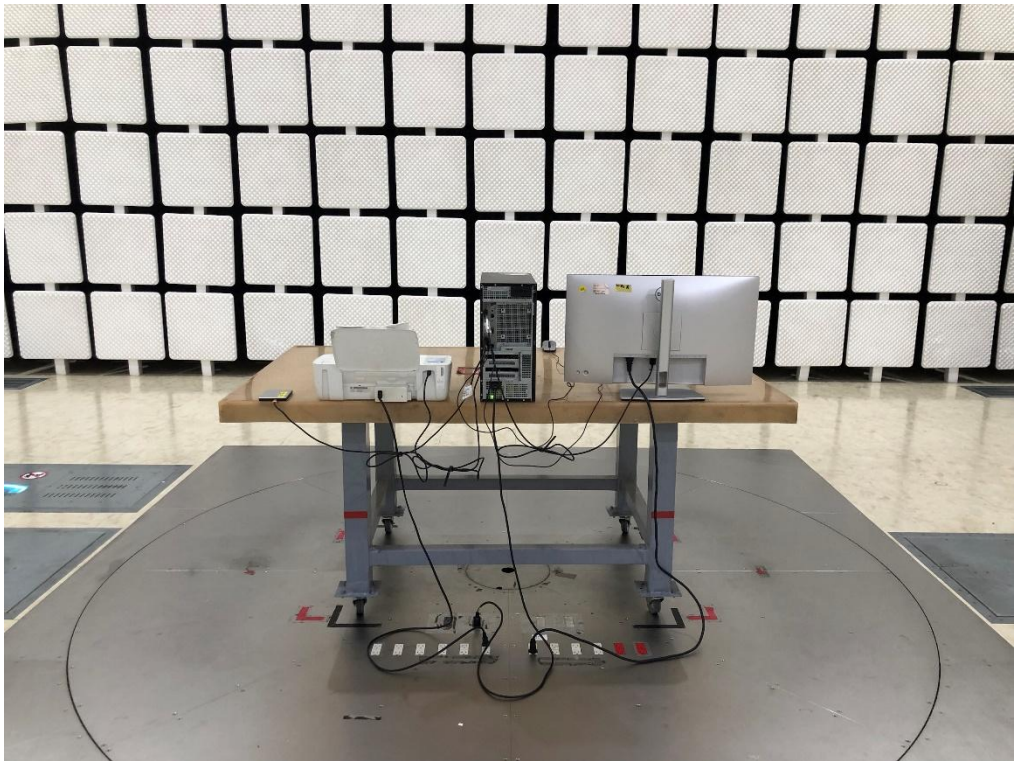
4 TEST PHOTOS

AC power line conducted emissions test photos

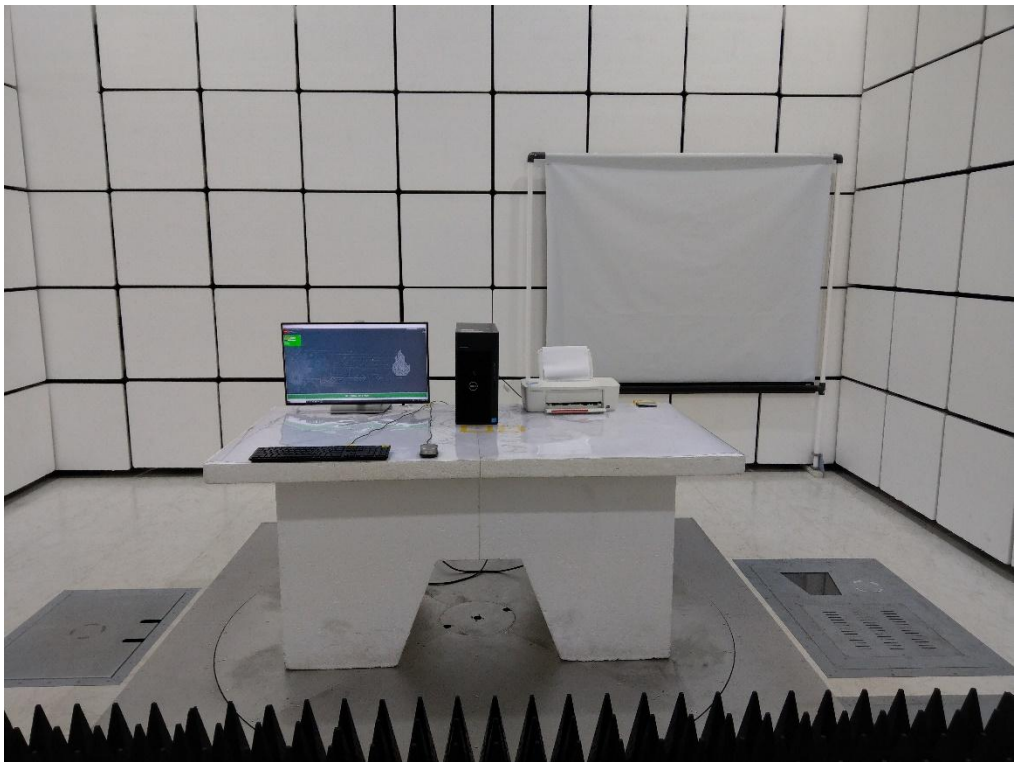


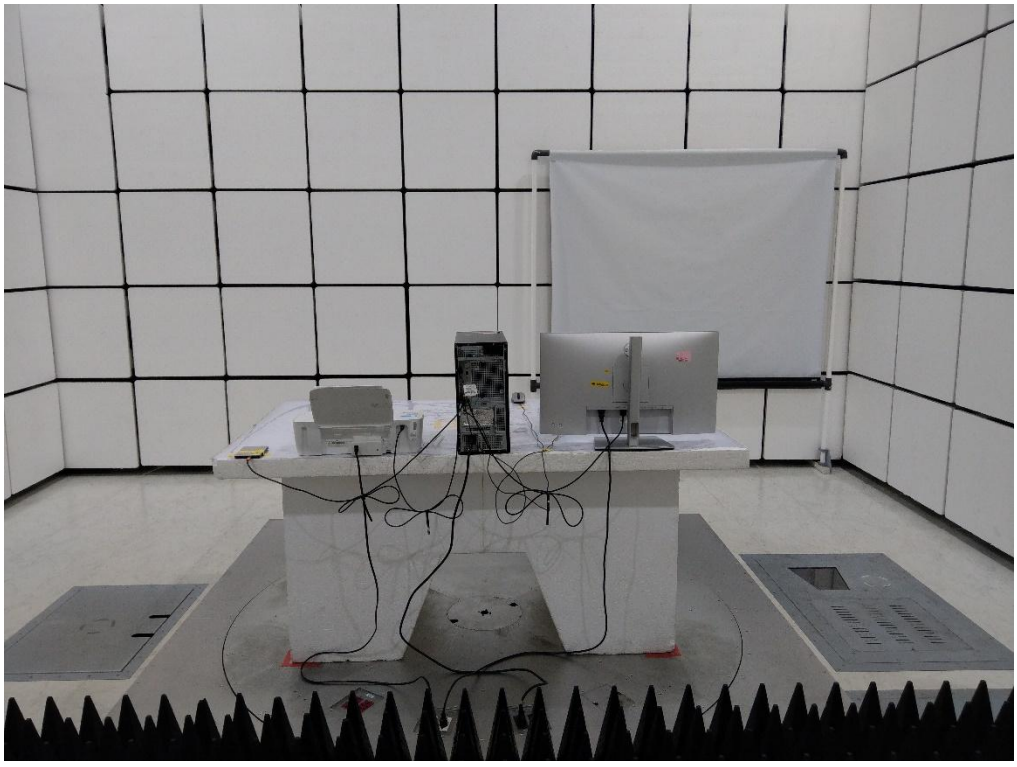


Radiated emissions below 1 GHz test photos



Radiated emissions above 1 GHz test photos





5 EUT PHOTOS

Please refer to document Appendix No.: EP-2505T096-1 (APPENDIX-EUT PHOTOS).

End of Test Report