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CNAS L6451



ETSI EN 301 489 TEST REPORT

Applicant	:	XGIMI Technology Co., Ltd
Address of Applicant	:	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, China
Manufacturer	:	XGIMI Technology Co., Ltd
Address of Manufacturer	:	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, China
Equipment under Test	:	Projector
Model No.	:	XR03B
Test Standard(s)	:	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) ETSI EN 301 489-3 V2.3.2 (2023-01)
Report No.	:	DDT-RE25090923-1E04
Issue Date	:	2025/12/12
Issued By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

Applicant	:	XGIMI Technology Co., Ltd
Address	:	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, China
Manufacturer	:	XGIMI Technology Co., Ltd
Address	:	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, China
Equipment under Test	:	Projector
Model No.	:	XR03B

Test Standard Used:

ETSI EN 301 489-1 V2.2.3 (2019-11)
ETSI EN 301 489-17 V3.3.1 (2024-09)
ETSI EN 301 489-3 V2.3.2 (2023-01)

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25090923-1E04		
Date of Receipt:	2025/10/16	Date of Test:	2025/10/16-2025/11/04

Created: Eddie Liu	Reviewed: Caesar Peng	Approved: Damon Hu
		
2025/11/12	2025/12/11	2025/12/12

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Version	Revision Content	Issue Date	Approved
V0	Initial issue	2025/12/12	Damon Hu

1. Summary of Test Results

EMISSION (EMI)			
Description of Test Item	Standard	Result	Memo
Asymmetric mode conducted emissions	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	N/A	Asymmetric mode
Conducted disturbance at mains terminals	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Radiated Emissions	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Harmonic Current Emissions Test	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Voltage Fluctuations& Flicker Test	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
IMMUNITY (EMS)			
Description of Test Item	Standard	Result	Memo
Electrostatic Discharge Test	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Continuous Radio Frequency Disturbances	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Electrical fast transients(EFT) test	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Surge	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3	PASS	/

	V2.3.2 (2023-01)		
Continuous Conducted Disturbances	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Voltage Dips and Interruptions	ETSI EN 301 489-1 V2.2.3 (2019-11),ETSI EN 301 489-17 V3.3.1 (2024-09),ETSI EN 301 489-3 V2.3.2 (2023-01)	PASS	/
Note: All tests were conducted according to the customer's requirements.			

Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.

Note: 1. The EMI measurements had been made in the operating mode producing the largest emission in the frequency band being investigated consistent with normal applications. An attempt had been made to maximize the emission by varying the configuration of the EUT.

2. The EMS measurements had been made in the frequency bands being investigated, with the EUT in the most susceptible operating mode consistent with normal applications. The configuration of the test sample had been varied to achieve maximum susceptibility.

Remark: Performance criteria:

Criteria	During test	After test (i.e. as a result of the application of the test)
A	Shall operate as intended. (see note). Shall be no loss of function. Shall be no unintentional transmissions.	Shall operate as intended. Shall be no degradation of performance. Shall be no loss of function. Shall be no loss of critical stored data.
B	May be loss of function.	Functions shall be self-recoverable. Shall operate as intended after recovering. Shall be no loss of critical stored data.
C	May be loss of function.	Functions shall be recoverable by the operator. Shall operate as intended after recovering. Shall be no loss of critical stored data.
NOTE: Operate as intended during the test allows a level of degradation in accordance with Minimum performance level. For equipment that supports a PER or FER, the minimum performance level shall be a PER or FER less than or equal to 10 %. For equipment that does not support a PER or a FER, the minimum performance level shall be no loss of the wireless transmission function needed for the intended use of the equipment.		

Performance criteria for continuous phenomena:

The performance criteria A shall apply.

During the test, the equipment shall:

- continue to operate as intended;
- not unintentionally transmit;
- not unintentionally change its operating state;
- not unintentionally change critical stored data.

Performance criteria for Transient phenomena:

The performance criteria B shall apply.

For all ports and transient phenomena with the exception described below, the following applies:

- The application of the transient phenomena shall not result in a change of the mode of operation (e.g. unintended transmission) or the loss of critical stored data.
- After application of the transient phenomena, the equipment shall operate as intended.

For surges applied to symmetrically operated wired network ports intended to be connected directly to outdoor lines the following criteria applies:

- For products with only one symmetrical port intended for connection to outdoor lines, loss of function is allowed, provided the function is self-recoverable, or can be otherwise restored.

Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

- For products with more than one symmetrical port intended for connection to outdoor lines, loss of function on the port under test is allowed, provided the function is self-recoverable. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

2. General Test Information

2.1. Description of EUT

EUT* Name	: Projector
Model Number	: XR03B
Difference of model number	: /
EUT Function Description	: Please reference user manual of this device
Power Supply	: AC 100-240V/50/60Hz
Hardware Version	: /
Software Version	: /
Sample Number	: S25090923-003,S25090923-006

Note 1: EUT is the abbreviation of equipment under test.

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz WLAN, 5 GHz WLAN, this report only for Bluetooth BR/EDR.

Radio Specification	: Bluetooth BR/EDR
Operation Frequency	: 2402 MHz-2480 MHz
Modulation	: GFSK, $\pi/4$ -DQPSK, 8DPSK

Antenna information	
Antenna Type	: FPC
Max Antenna Gain(dBi)	: 5.1

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz WLAN, 5 GHz WLAN, this report only for 2.4 GHz WLAN.

Radio Specification	: IEEE 802.11b/g/n/ax
Operation Frequency	: IEEE 802.11b: 2412MHz-2472MHz IEEE 802.11g: 2412MHz-2472MHz IEEE 802.11n HT20: 2412MHz-2472MHz IEEE 802.11n HT40: 2422MHz-2462MHz IEEE 802.11ax HE20: 2412MHz-2472MHz IEEE 802.11ax HE40: 2422MHz-2462MHz
Modulation	: IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDM, OFDMA (1024QAM, 64QAM, 16QAM, QPSK, BPSK)

WLAN (2.4 GHz) Antenna information			
Antenna Type	FPC		
Antenna Gain(dBi)	Mode	ANT 1	ANT 2
	IEEE 802.11b	5.1	5.0
	IEEE 802.11g	5.1	5.0
	IEEE 802.11n HT20	5.1	5.0
	IEEE 802.11n HT40	5.1	5.0
	IEEE 802.11ax HE20	5.1	5.0
	IEEE 802.11ax HE40	5.1	5.0
Note: This product does not support beamforming.			

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz WLAN, 5 GHz WLAN, this report only for 5 GHz WLAN.

Radio Technology	:	IEEE 802.11a/n/ac/ax
Operation frequency	:	5180 MHz to 5240 MHz, 5260 MHz to 5320 MHz, 5500 MHz to 5700 MHz
Modulation	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna information:			
Antenna Type	FPC		
Max Antenna Gain (dBi)	/	Ant1 Gain	Ant2 Gain
	IEEE 802.11a	5.1	4.8
	IEEE 802.11n HT20	5.1	4.8
	IEEE 802.11n HT40	5.1	4.8
	IEEE 802.11ac VHT20	5.1	4.8
	IEEE 802.11ac VHT40	5.1	4.8
	IEEE 802.11ac VHT80	5.1	4.8
	IEEE 802.11ax HE20	5.1	4.8
	IEEE 802.11ax HE40	5.1	4.8
	IEEE 802.11ax HE80	5.1	4.8
Note: This product does not support beamforming.			

Note: This EUT support Bluetooth BR/EDR/LE, 2.4 GHz WLAN, 5 GHz WLAN, this report only for 5.8 GHz WLAN.

Radio Technology	:	IEEE 802.11a/n/ac/ax
Operation frequency	:	5745 MHz to 5825 MHz
Modulation	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ax: OFDMA (1024QAM, 64QAM, 16QAM, QPSK, BPSK)

Antenna information:

Antenna Type	FPC		
	/	Ant1 Gain	Ant2 Gain
Max Antenna Gain (dBi)	IEEE 802.11a	5.1	4.8
	IEEE 802.11n HT20	5.1	4.8
	IEEE 802.11n HT40	5.1	4.8
	IEEE 802.11ac VHT20	5.1	4.8
	IEEE 802.11ac VHT40	5.1	4.8
	IEEE 802.11ac VHT80	5.1	4.8
	IEEE 802.11ax HE20	5.1	4.8
	IEEE 802.11ax HE40	5.1	4.8
	IEEE 802.11ax HE80	5.1	4.8

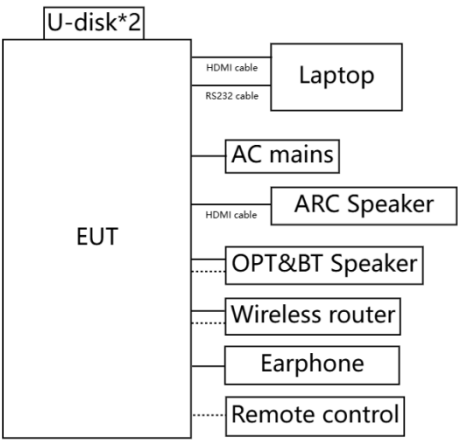
Note: This product does not support beamforming.

2.2. Accessories of EUT

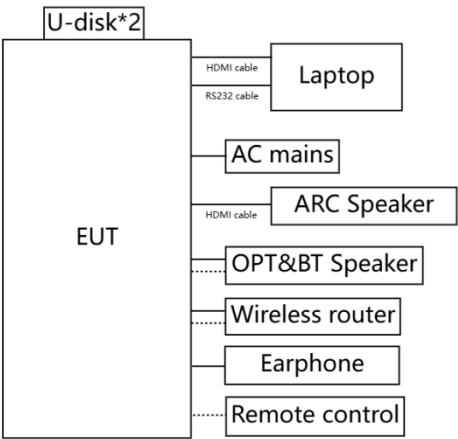
Accessories	Manufacturer	Model number	Description
Remote control	/	/	/

2.3. Block diagram EUT configuration for test

Mode 1:Bluetooth + 2.4GHz Wi-Fi mode



Mode 2:Bluetooth + 5GHz Wi-Fi mode



2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below.

Emission	Conducted disturbance at mains terminals	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode
	Radiated Emissions	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode
	Harmonic Current Emissions Test	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode
	Voltage Fluctuations& Flicker Test	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode
Immunity	Electrostatic Discharge Test	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode Mode 2: Bluetooth + 5GHz Wi-Fi mode

	Continuous Radio Frequency Disturbances	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode Mode 2: Bluetooth + 5GHz Wi-Fi mode
	Electrical fast transients(EFT) test	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode Mode 2: Bluetooth + 5GHz Wi-Fi mode
	Surge	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode Mode 2: Bluetooth + 5GHz Wi-Fi mode
	Continuous Conducted Disturbances	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode Mode 2: Bluetooth + 5GHz Wi-Fi mode
	Voltage Dips and Interruptions	Mode 1: Bluetooth + 2.4GHz Wi-Fi mode Mode 2: Bluetooth + 5GHz Wi-Fi mode

2.5. Deviations of test standard

No deviation

2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	15-30°C
Humidity range:	25-75%
Pressure range:	86-106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2.8. Measurement uncertainty

Test Item	Uncertainty
Conducted disturbance at mains terminals	1#: 3.72dB (9 kHz to 150 kHz), 3.34dB (150 kHz to 30 MHz)
	2#: 3.75dB (9 kHz to 150 kHz), 3.39dB (150 kHz to 30 MHz)
	3#: 3.78dB (9 kHz to 150 kHz), 3.37dB (150 kHz to 30 MHz)
Uncertainty for telecommunication port conduction emission test	1#: AAN with aLCL = 55 ... 40 dBc: 3.64 dB AAN with aLCL = 65 ... 50 dBc: 4.08 dB AAN with aLCL = 75 ... 60 dBc: 4.56 dB
	2#: AAN with aLCL = 55 ... 40 dBc: 3.82 dB AAN with aLCL = 65 ... 50 dBc: 3.96 dB AAN with aLCL = 75 ... 60 dBc: 4.12 dB
Uncertainty for radiation emission test (30 MHz-1 GHz)	1#: 4.94 dB (Antenna Polarize: V) 4.68 dB (Antenna Polarize: H)
	2#: 4.94 dB (Antenna Polarize: V) 4.68 dB (Antenna Polarize: H)
	3#: 4.96 dB (Antenna Polarize: V) 4.98 dB (Antenna Polarize: H)
	10m: 4.48 dB (Antenna Polarize: V) 4.64 dB (Antenna Polarize: H)
Uncertainty for radiation disturbance test (1 GHz to 6 GHz)	1#: 4.10 dB (1-6 GHz)
	3#: 4.54 dB (1-6 GHz)
Uncertainty for Flicker test	0.2%
Uncertainty for Harmonic test	5%
Uncertainty for Electrostatic discharge	Rise time: 4% Peak current: 3.1% Current at 30 ns: 3.1% Current at 60 ns: 3.1%
Uncertainty for Surge	Peak of the open-circuit voltage impulse: 3% Front time of the open-circuit voltage impulse: 5% Width of the open-circuit voltage impulse: 5% Peak of the short-circuit current impulse: 2.7% Front time of the short-circuit current impulse: 5% Duration of the short-circuit current impulse: 3%
Uncertainty for Electrical fast transients	Voltage rise time: 3.7% Peak voltage value: 3.4% Voltage pulse width: 3.7%
Uncertainty for Continuous conducted disturbances	0.25dB
Uncertainty for Continuous radio frequency disturbances	1.12dB
Uncertainty for Power-frequency magnetic fields	10%
Uncertainty for Voltage dips and interruptions	3.7%
Temperature	0.4 °C
Humidity	2%
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

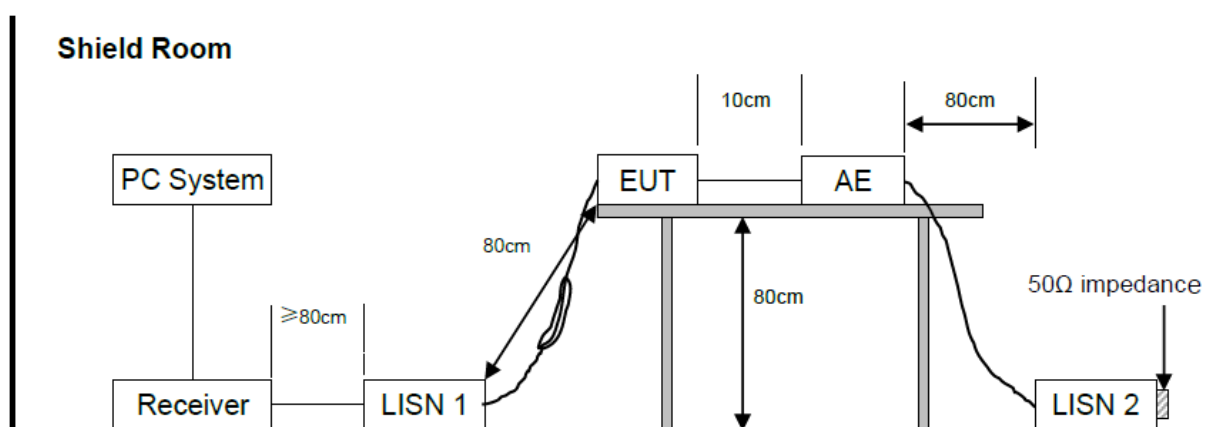
3. Conducted disturbance at mains terminals

3.1. Test equipment

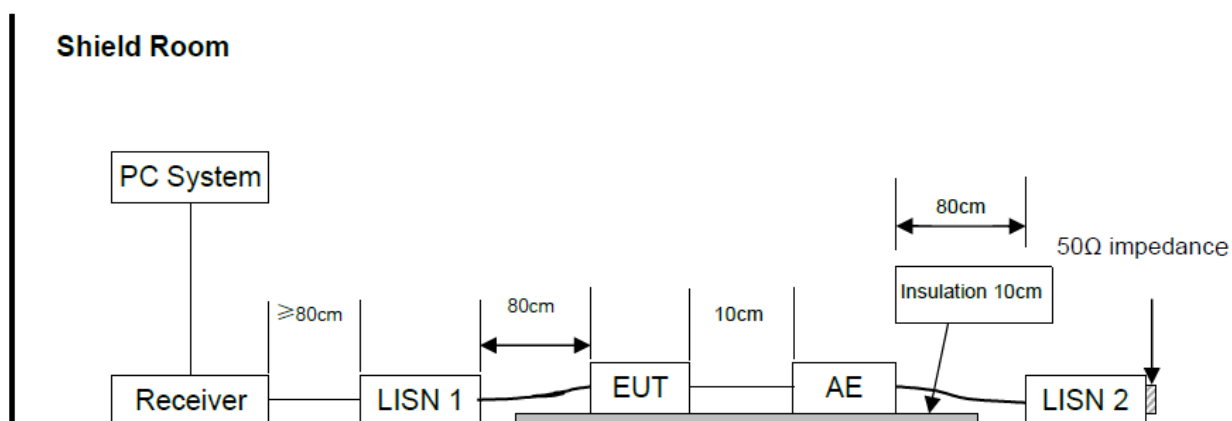
Equipment	Manufacturer	Model No.	Equipment No.	Cal Due To
EMI Test Receiver	R&S	ESCI [®]	DDT-ZC00235	2026/07/06
Two Line V-Network	R&S	ENV216	DDT-ZC00535	2026/07/06
Artificial mains	R&S	ESH2-Z5	DDT-ZC00538	2026/07/06
Pulse Limiter	SCHWARZBECK	ESH3-Z2	DDT-ZC00539	2026/07/06
CE Cable 1	R&S	ESU8/RF2	DDT-ZC00566	2026/07/06
Conducted Radiated Software	Audix	E3	DDT-ZC00562	/

3.2. Block diagram of test setup

For table-top equipment



For floor standing equipment



Shield Room

PC System

Receiver

LISN 1

EUT

AE

LISN 2

80cm

80cm

80cm

Typical spacing

50Ω impedance

Insulation 10cm

$\geq 80\text{cm}$

Class A:		
Frequency	Quasi-Peak Level dB(mV)	Average Level dB(mV)
150 kHz~500 kHz	79	66
500 kHz~30 MHz	73	60
Class B:		
Frequency	Quasi-Peak Level dB(mV)	Average Level dB(mV)
150 kHz~500 kHz	66 ~ 56*	56 ~ 46*
500 kHz~5 MHz	56	46
5 MHz~30 MHz	60	50

Notes:

- * Decreasing linearly with logarithm of frequency.
- The lower limit shall apply at the transition frequencies.

Assistant equipment	Manufacturer	Model number	Description	other
USB Flash	Kingston	DT101 G2	/	/
Speaker	N/A	Bar 2.0	/	/
Speaker	JBL	JBL GO	/	/
Router	Mi	R4A	/	/
Earphone	N/A	N/A	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/

3.5. Test procedure

- (1) The EUT was placed on a non-metallic table, 0.8m (table-top device)/0.1m (floor-stand device) above the ground plane.
- (2) Setup the EUT and assistant equipment as shown above block diagram and equipment list.
- (3) The EUT's power was connected to the power mains through a line impedance stabilization network (L.I.S.N). which this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted disturbance. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ETSI EN 301 489 on conducted disturbance emission test.
- (4) The bandwidth of test receiver is set at 9 kHz.
- (5) The frequency range from 150 kHz to 30 MHz is checked.

3.6. Test result

Pass. (See below detailed test result)

Note 1: All emissions not reported below are too low against the prescribed limits.

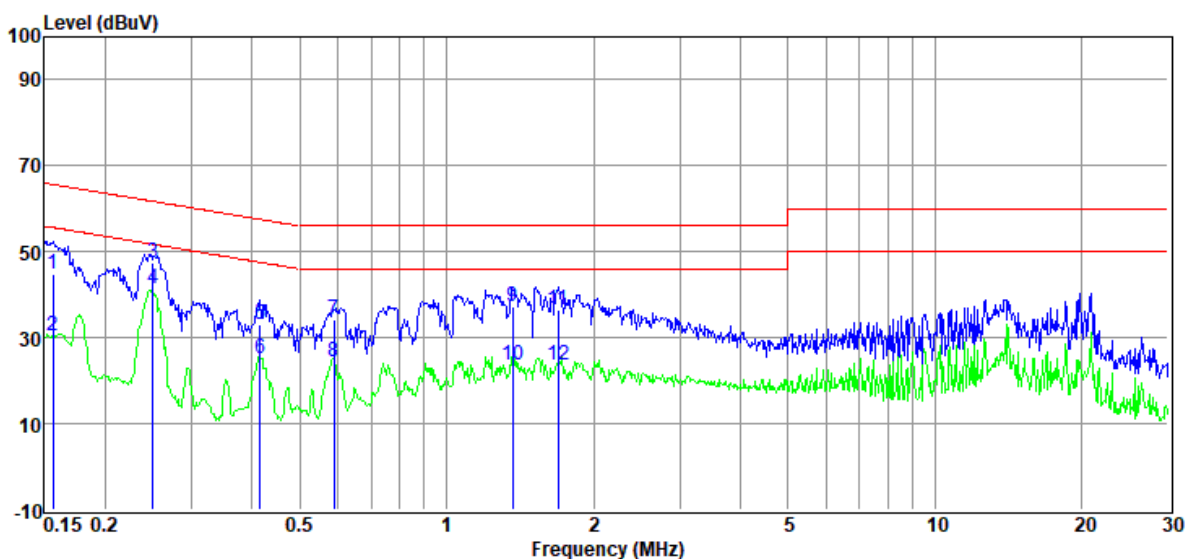
Note 2: "----" means Peak detection; "----" means Average detection.

3.7. Test data

TR-4-E-010 Conducted Emission Test Result

Test Site : DDT 1# Shield Room D:\2025 CE report data\Q25090923-1E\1018 CE.EM6
Test Date : 2025-10-18 Tested By : Aaron Liu
Power Supply : AC 240V/50Hz Test Mode : Bluetooth + 2.4GHz Wi-Fi mode
Condition : TEMP:23.4°C, RH:61.2% LISN : 2025 1# 216/LINE
Sample No. : S25090923-003

Data: 98



Item	Freq.	Read Level	LISN Factor	Cable Loss	Pulse Limiter Factor	Result Level	Limit Line	Margin	Detector	Phase
(Mark)	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV)	(dBuV)	(dB)		
1	0.16	25.00	9.85	0.05	9.89	44.79	65.65	20.86	QP	LINE
2	0.16	10.68	9.85	0.05	9.89	30.47	55.65	25.18	Average	LINE
3	0.25	27.64	9.82	0.06	9.89	47.41	61.73	14.32	QP	LINE
4	0.25	21.69	9.82	0.06	9.89	41.46	51.73	10.27	Average	LINE
5	0.41	13.38	9.70	0.08	9.89	33.05	57.55	24.50	QP	LINE
6	0.41	5.63	9.70	0.08	9.89	25.30	47.55	22.25	Average	LINE
7	0.59	14.26	9.92	0.10	9.89	34.17	56.00	21.83	QP	LINE
8	0.59	4.50	9.92	0.10	9.89	24.41	46.00	21.59	Average	LINE
9	1.37	17.20	9.89	0.16	9.90	37.15	56.00	18.85	QP	LINE
10	1.37	3.55	9.89	0.16	9.90	23.50	46.00	22.50	Average	LINE
11	1.69	16.53	9.83	0.16	9.89	36.41	56.00	19.59	QP	LINE
12	1.69	3.59	9.83	0.16	9.89	23.47	46.00	22.53	Average	LINE

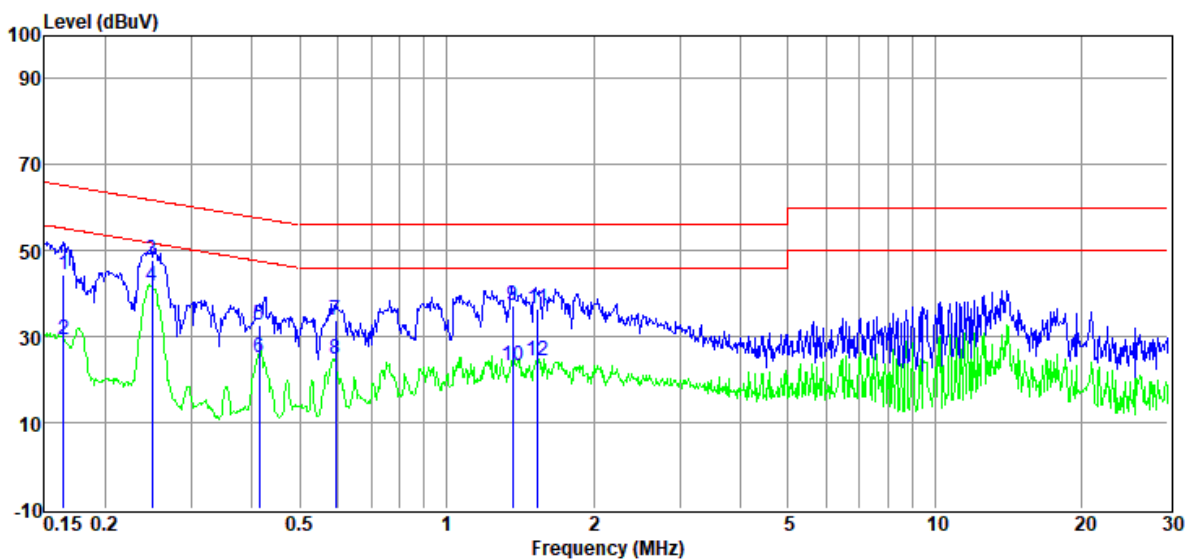
Note:

1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

TR-4-E-010 Conducted Emission Test Result

Test Site : DDT 1# Shield Room D:\2025 CE report data\Q25090923-1E\1018 CE.EM6
Test Date : 2025-10-18 Tested By : Aaron Liu
Power Supply : AC 240V/50Hz Test Mode : Bluetooth + 2.4GHz Wi-Fi mode
Condition : TEMP:23.4°C, RH:61.2% LISN : 2025 1# 216/NEUTRAL
Sample No. : S25090923-003

Data: 100



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBμV)	Limit Line (dBμV)	Margin (dB)	Detector	Phase
1	0.16	24.94	9.71	0.05	9.89	44.59	65.25	20.66	QP	NEUTRAL
2	0.16	9.73	9.71	0.05	9.89	29.38	55.25	25.87	Average	NEUTRAL
3	0.25	27.89	9.84	0.06	9.89	47.68	61.78	14.10	QP	NEUTRAL
4	0.25	22.00	9.84	0.06	9.89	41.79	51.78	9.99	Average	NEUTRAL
5	0.41	13.03	9.82	0.08	9.89	32.82	57.59	24.77	QP	NEUTRAL
6	0.41	5.27	9.82	0.08	9.89	25.06	47.59	22.53	Average	NEUTRAL
7	0.59	14.08	9.88	0.10	9.89	33.95	56.00	22.05	QP	NEUTRAL
8	0.59	4.74	9.88	0.10	9.89	24.61	46.00	21.39	Average	NEUTRAL
9	1.37	17.21	9.86	0.16	9.90	37.13	56.00	18.87	QP	NEUTRAL
10	1.37	3.41	9.86	0.16	9.90	23.33	46.00	22.67	Average	NEUTRAL
11	1.54	16.61	9.83	0.16	9.89	36.49	56.00	19.51	QP	NEUTRAL
12	1.54	4.50	9.83	0.16	9.89	24.38	46.00	21.62	Average	NEUTRAL

Note:

1. Result Level = Read Level + LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

3.8. Test photo



4. Radiated Emissions

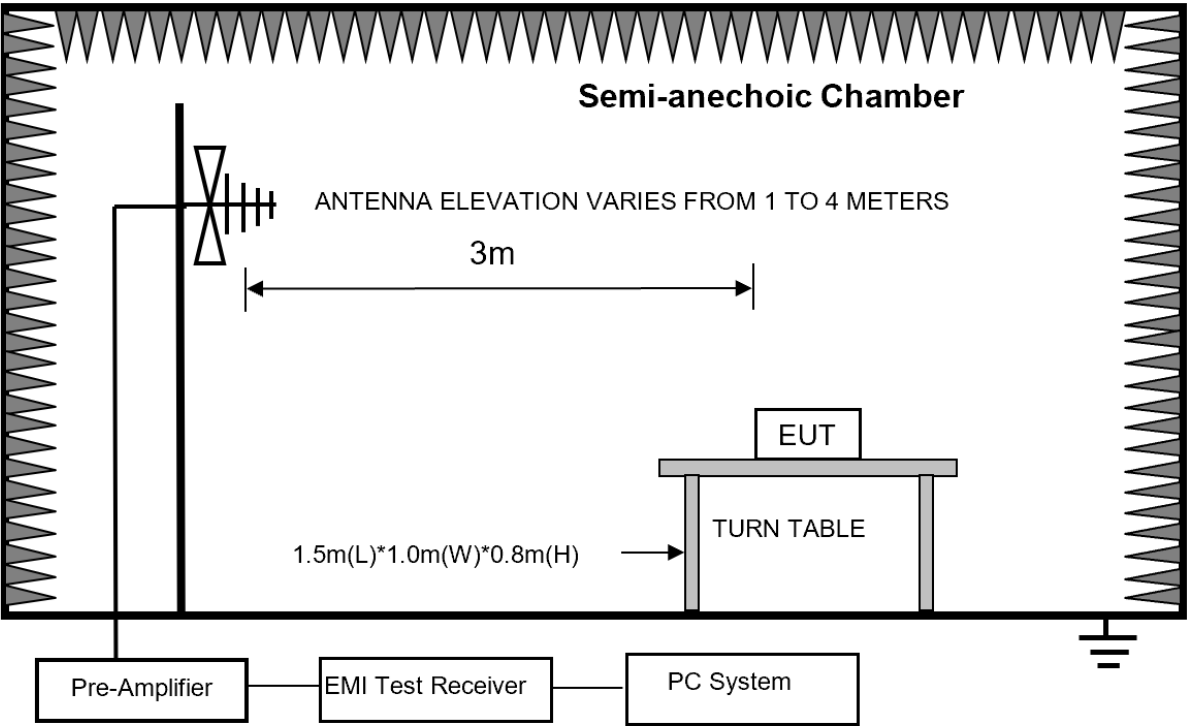
4.1. Test equipment

Equipment	Manufacturer	Model No.	Equipment No.	Cal Due To
Spectrum Analyzer	Agilent	E4440A	DDT-ZC01445	2026/03/28
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	DDT-ZC00506	2026/04/01
Horn Antenna	SCHWARZBECK	BBHA9120 D	DDT-ZC01218	2026/08/13
Preamplifier	COM-POWER	PAM-118A	DDT-ZC01489	2026/08/10
Pre-amplifier	COM-POWER	PAM-840A	DDT-ZC01693	2026/03/28
EMI Test Software	Audix/TW	e3	DDT-ZC01252	/
RF cable	Zhongke Junchuang	JCTB810-NJ-NJ-7M	DDT-ZC02759	2026/07/22
EMI Test Receiver	R&S	ESCI 3	DDT-ZC01972	2026/03/28
Active Loop Antenna	Schwarzbeck	FMZB1519	DDT-ZC00524	2026/08/18
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	DDT-ZC00246	2026/07/18
RF Cable	H&S	RG214-11	DDT-ZC01497	2026/03/28
EMI Test Software	Audix/TW	e3	DDT-ZC01252	/
Horn Antenna	SCHWARZBECK	BBHA9120 D	DDT-ZC01218	2026/08/13
Preamplifier	COM-POWER	PAM-118A	DDT-ZC01489	2026/08/10
Spectrum Analyzer	Agilent	E4440A	DDT-ZC01445	2026/03/28
RF cable	Zhongke Junchuang	JCTB810-NJ-NJ-7M	DDT-ZC02759	2026/07/22

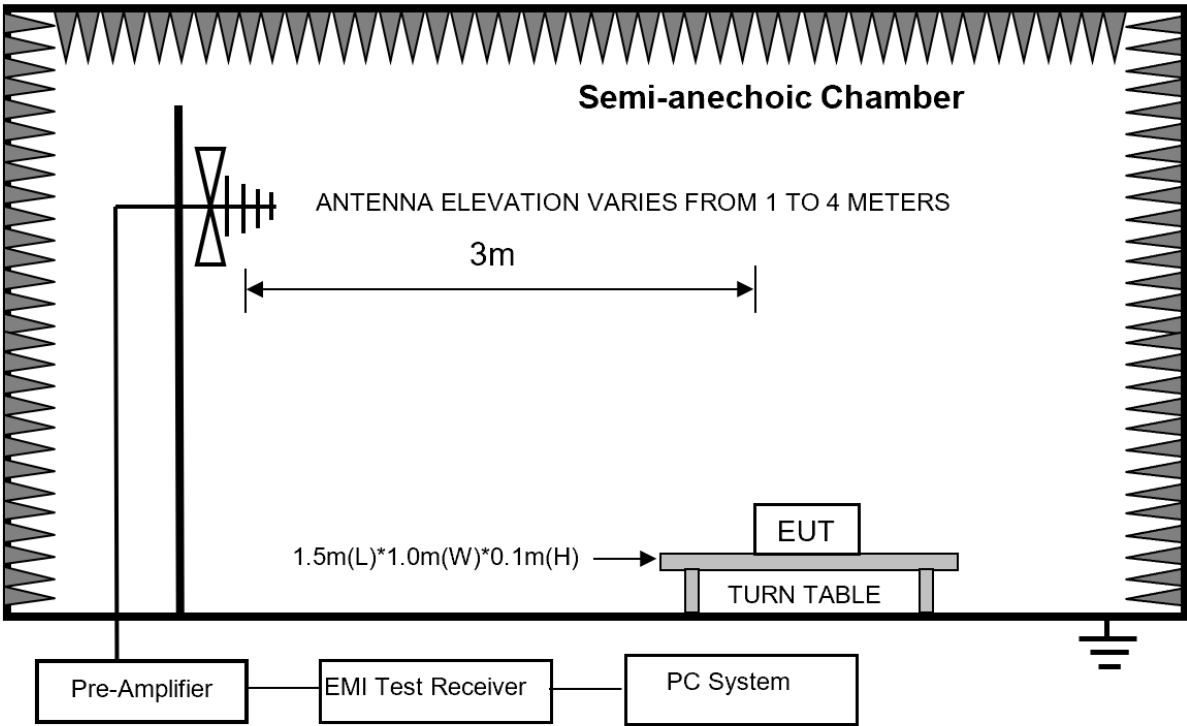
4.2. Block diagram of test setup

Below 1 GHz

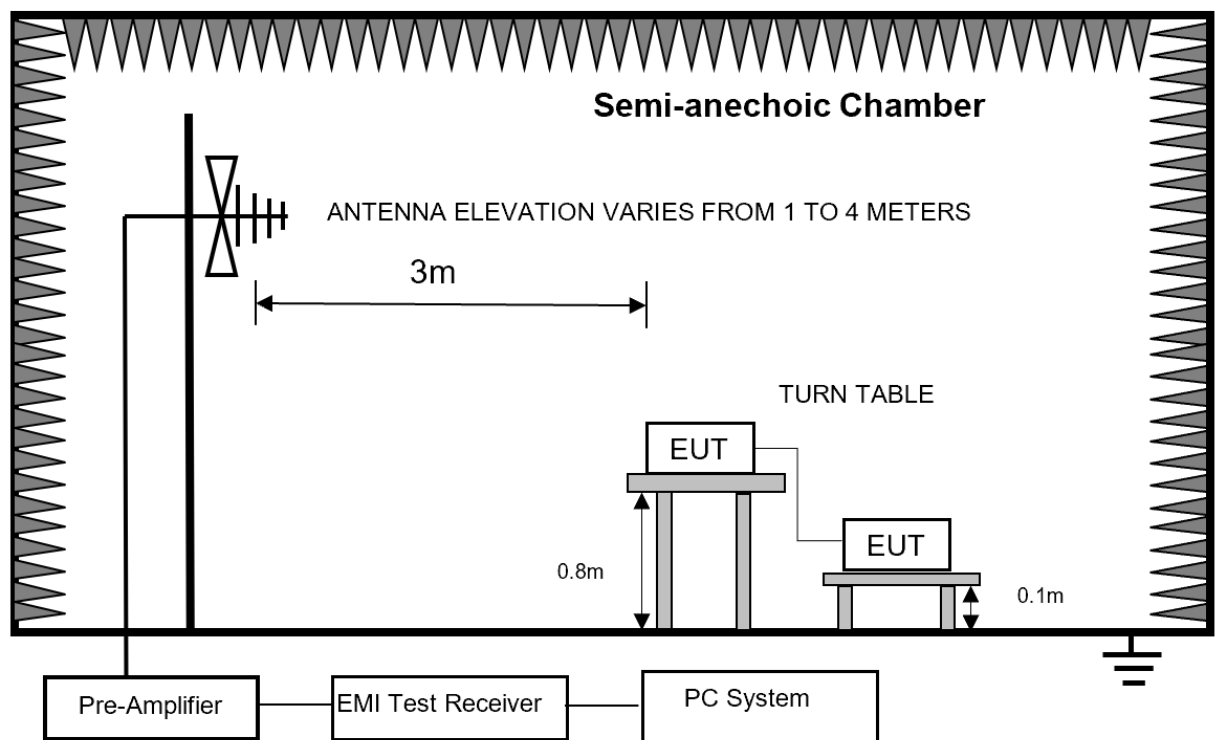
For table-top equipment



For floor standing equipment

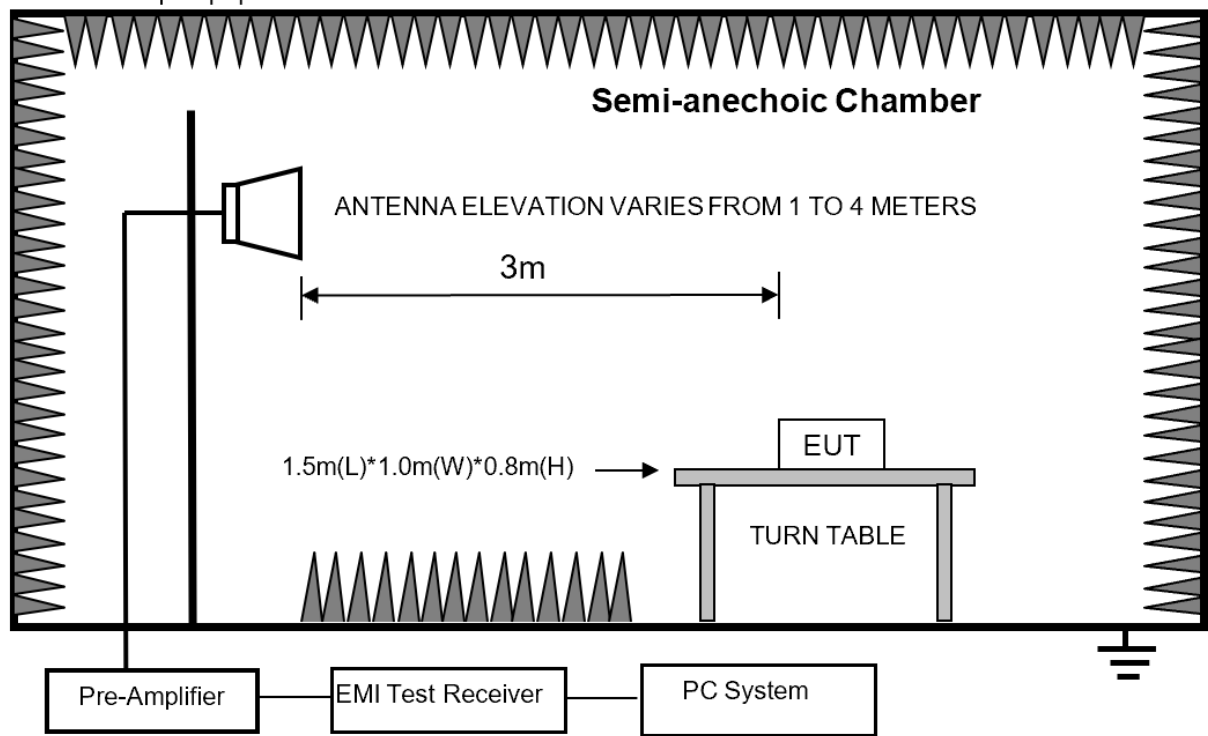


For combinations equipment

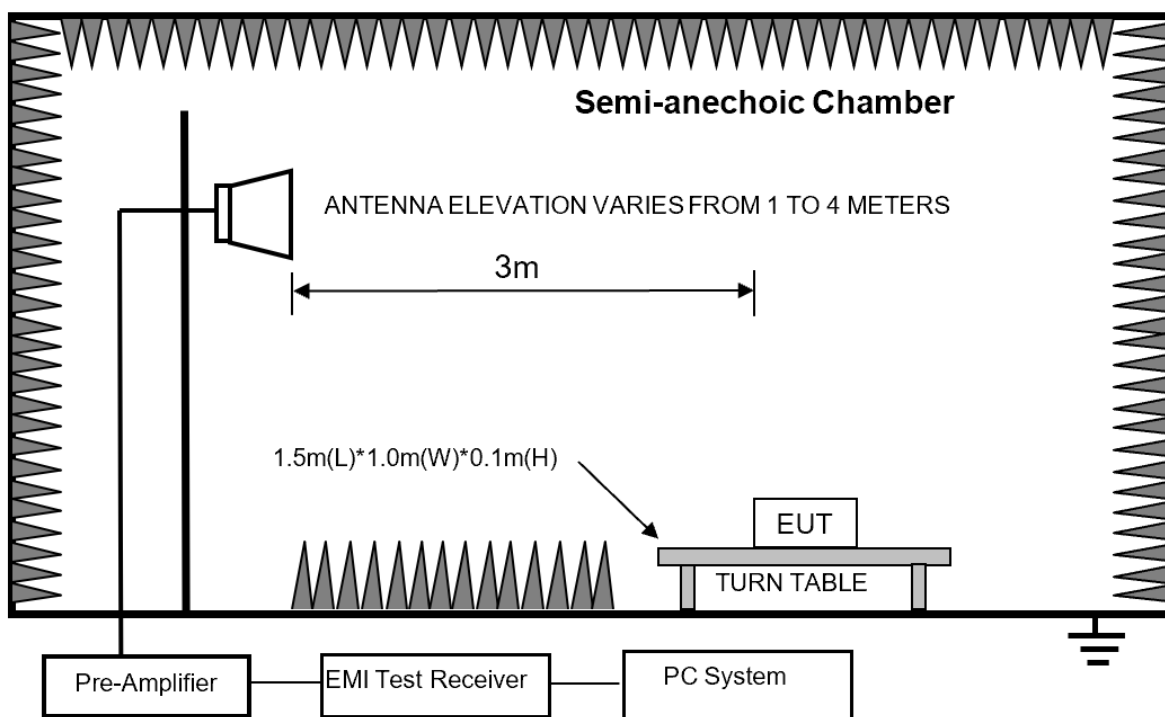


Above 1 GHz

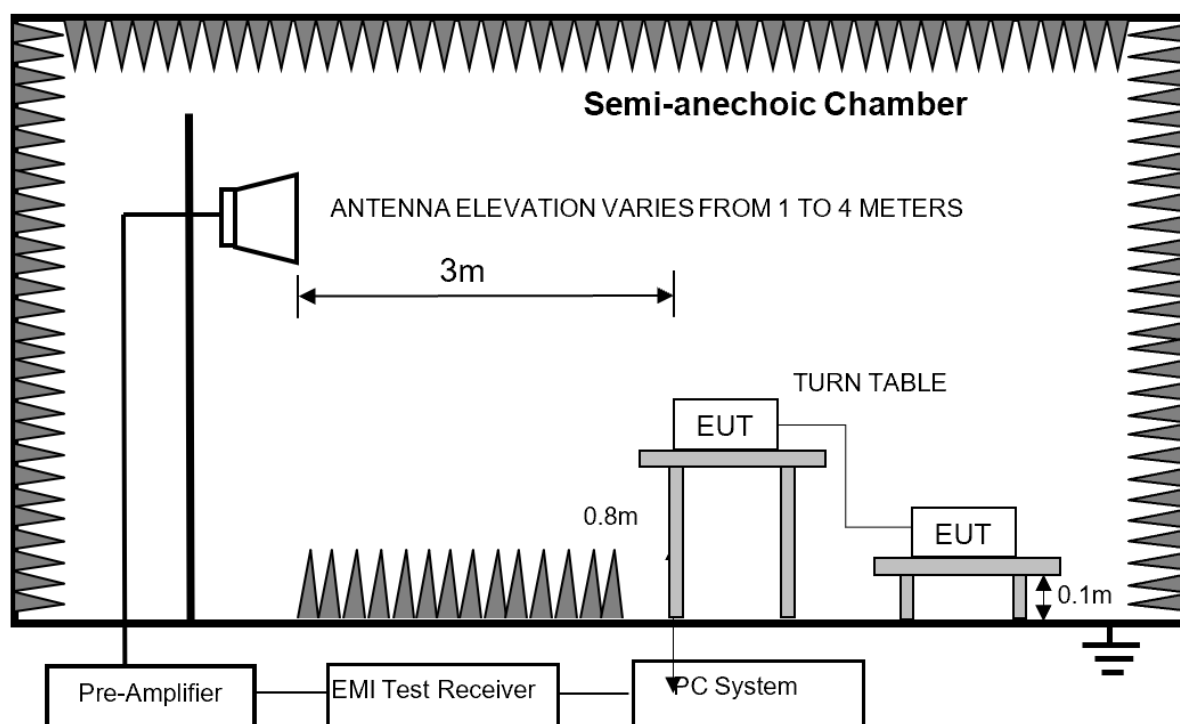
For table-top equipment



For floor standing equipment



For combinations equipment



4.3. Limits

Class A			
Equipment	Frequency	Field Strengths Limits at 10m measuring distance dB(μV)/m	Field Strengths Limits at 3m measuring distance dB(μV)/m
Class A Equipment	30 MHz to 230 MHz	40	50
	230 MHz to 1000 MHz	47	57
	1 GHz to 3 GHz	/	Average:56; Peak:76
	3 GHz to 6 GHz	/	Average:60; Peak:80
Class B			
Equipment	Frequency	Field Strengths Limits at 10m measuring distance dB(μV)/m	Field Strengths Limits at 3m measuring distance dB(μV)/m
Class B Equipment	30 MHz to 230 MHz	30	40
	230 MHz to 1000 MHz	37	47
	1 GHz to 3 GHz	/	Average:50; Peak:70
	3 GHz to 6 GHz	/	Average:54; Peak:74
Note:			
(1) The smaller limit shall apply at the cross point between two frequency bands.			
(2) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.			

4.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Speaker	JBL	JBL GO	/	/
USB Flash	Kingston	DT101 G2	/	/
Speaker	Edifier	R1280DBs	/	/
Speaker	N/A	Bar 2.0	/	/
Router	Mi	R4A	/	/
Earphone	N/A	N/A	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/

4.5. Test procedure

- (1) The EUT was placed on a non-metallic table, 0.8m (table-top device)/0.1m (floor-stand device) above the ground plane inside a semi-anechoic chamber.
- (2) Test antenna was located 3m (see note) from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ETSI EN 301 489 on radiated emission test.
- (3) Spectrum frequency from 30 MHz to 6 GHz was investigated.
- (4) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ETSI EN 301 489 on Radiated Emission test.
- (5) For emissions from 30 MHz to 1GHz, Quasi-Peak values were measured with EMI Receiver and the bandwidth of Receiver is 120 kHz.
For emissions above 1 GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz VBW is set at 3 MHz.

4.6. Test result

Pass. (See below detailed test result)

Note 1: All emissions not reported below are too low against the prescribed limits.

Note 2: "----" means Peak detection.

4.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2#

D:\2025 RE2# Report Data\Q25090923-1E\1104 RE.EM6

Test Date : 2025-11-04

Tested By : Andy Li

Power Supply : AC 240V/50Hz

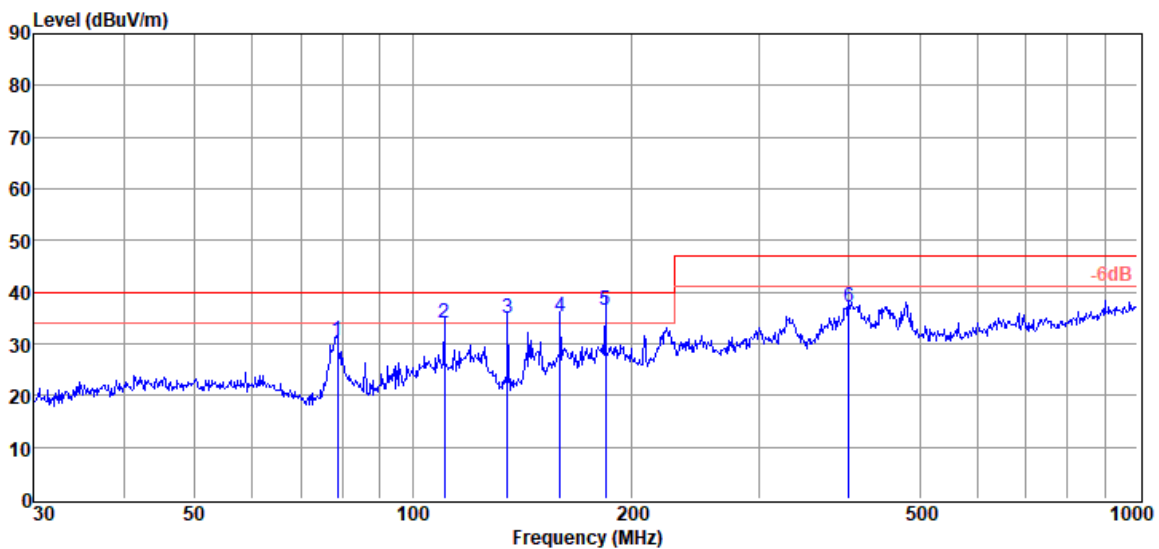
Test Mode : Bluetooth + 2.4GHz Wi-Fi mode

Condition : Temp:22.4°C,Humi:54.2%

Antenna/Distance : 2025 2# ANT 9163/3m/HORIZONTAL

Sample No. : S25090923-006

Data: 17



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Margin (dB)	Detector	Polarization
1	78.69	18.25	8.21	4.30	30.76	40.00	9.24	QP	HORIZONTAL
2	110.57	17.71	11.74	4.57	34.02	40.00	5.98	QP	HORIZONTAL
3	135.03	21.89	8.19	4.78	34.86	40.00	5.14	QP	HORIZONTAL
4	159.78	21.53	8.76	4.96	35.25	40.00	4.75	QP	HORIZONTAL
5	184.49	21.50	9.90	5.12	36.52	40.00	3.48	QP	HORIZONTAL
6	399.03	15.03	15.62	6.36	37.01	47.00	9.99	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 2#

D:\2025 RE2# Report Data\Q25090923-1E\1104 RE.EM6

Test Date : 2025-11-04

Tested By : Andy Li

Power Supply : AC 240V/50Hz

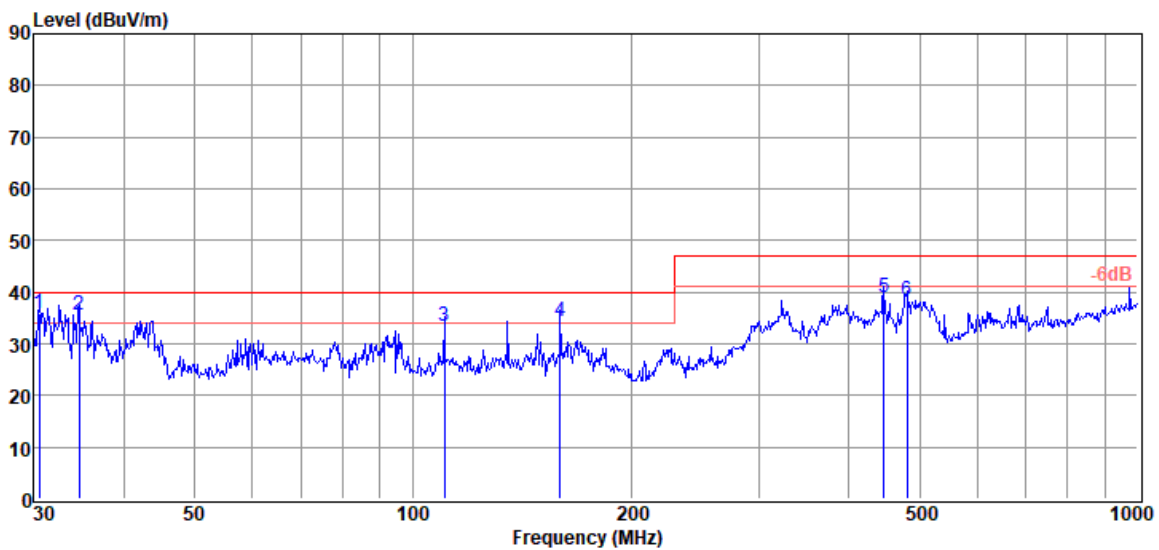
Test Mode : Bluetooth + 2.4GHz Wi-Fi mode

Condition : Temp:22.4°C,Humi:54.2%

Antenna/Distance : 2025 2# ANT 9163/3m/VERTICAL

Sample No. : S25090923-006

Data: 18



Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1# D\2025 RE 1# Report data\Q25090923-1E\1020 RE-H.EM6

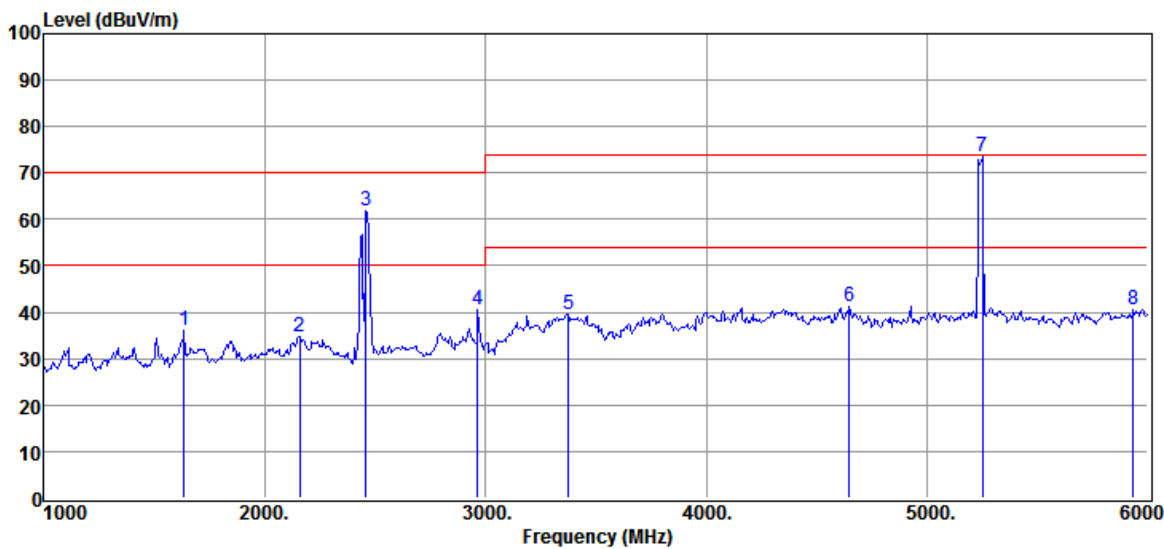
Test Date : 2025-10-21 Tested By : Li guilin

Power Supply : AC 240V/50Hz Test Mode : Bluetooth + 2.4GHz Wi-Fi mode

Condition : Temp:19.4°C,Humi:60.9% Antenna/Distance : 2025 9120D 1#/3m/HORIZONTAL

Sample No. : S25090923-003

Data: 63



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	1635.00	59.69	25.03	52.95	4.25	36.02	70.00	-33.98	Peak	HORIZONTAL
2	2160.00	55.59	27.20	53.08	4.94	34.65	70.00	-35.35	Peak	HORIZONTAL
3	2460.00	81.95	27.68	53.05	5.19	61.77	Carrier Frequency			HORIZONTAL
4	2965.00	59.52	28.44	53.00	5.60	40.56	70.00	-29.44	Peak	HORIZONTAL
5	3375.00	58.18	28.75	53.22	5.96	39.67	74.00	-34.33	Peak	HORIZONTAL
6	4650.00	56.20	31.50	53.34	6.83	41.19	74.00	-32.81	Peak	HORIZONTAL
7	5250.00	86.86	33.00	53.53	7.18	73.51	Carrier Frequency			HORIZONTAL
8	5935.00	54.45	32.95	54.42	7.65	40.63	74.00	-33.37	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site

: DDT 3m Chamber 1#

D\2025 RE 1# Report data\Q25090923-1E\1020 RE-H.EM6

Test Date

: 2025-10-21

Tested By

: Li guilin

Power Supply

: AC 240V/50Hz

Test Mode

: Bluetooth + 2.4GHz Wi-Fi mode

Condition

: Temp:19.4°C,Humi:60.9%

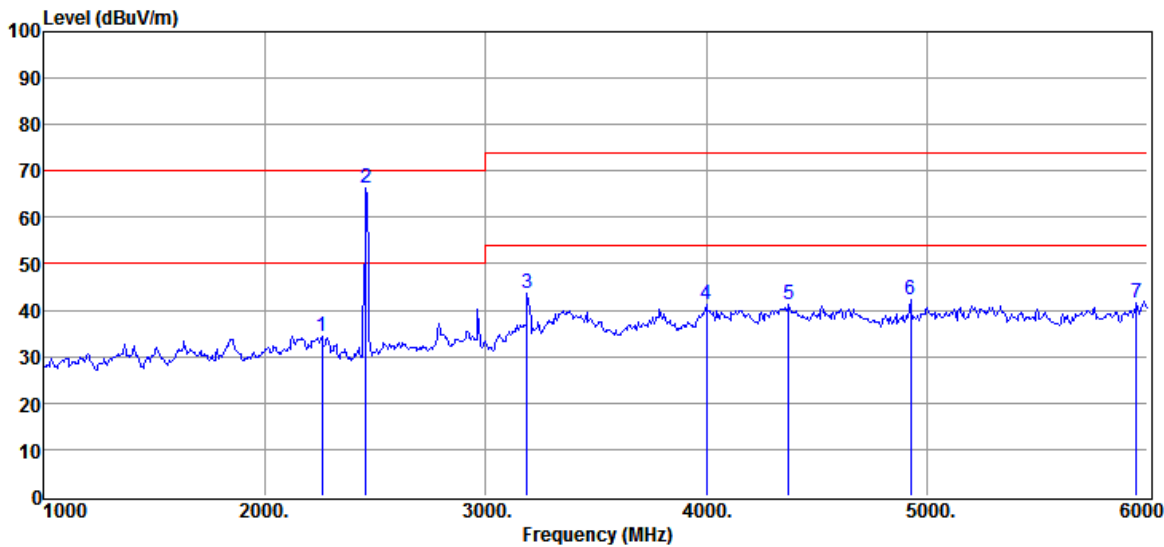
Antenna/Distance

: 2025 9120D 1#/3m/VERTICAL

Sample No.

: S25090923-003

Data: 64



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	2260.00	55.50	26.90	53.07	5.02	34.35	70.00	-35.65	Peak	VERTICAL
2	2460.00	86.62	27.68	53.05	5.19	66.44	Carrier Frequency			VERTICAL
3	3190.00	62.25	28.66	53.11	5.80	43.60	74.00	-30.40	Peak	VERTICAL
4	4000.00	58.36	29.90	53.60	6.52	41.18	74.00	-32.82	Peak	VERTICAL
5	4375.00	57.48	30.60	53.45	6.70	41.33	74.00	-32.67	Peak	VERTICAL
6	4925.00	57.30	31.20	53.23	6.96	42.23	74.00	-31.77	Peak	VERTICAL
7	5950.00	55.48	32.80	54.44	7.66	41.50	74.00	-32.50	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

4.8. Test photo



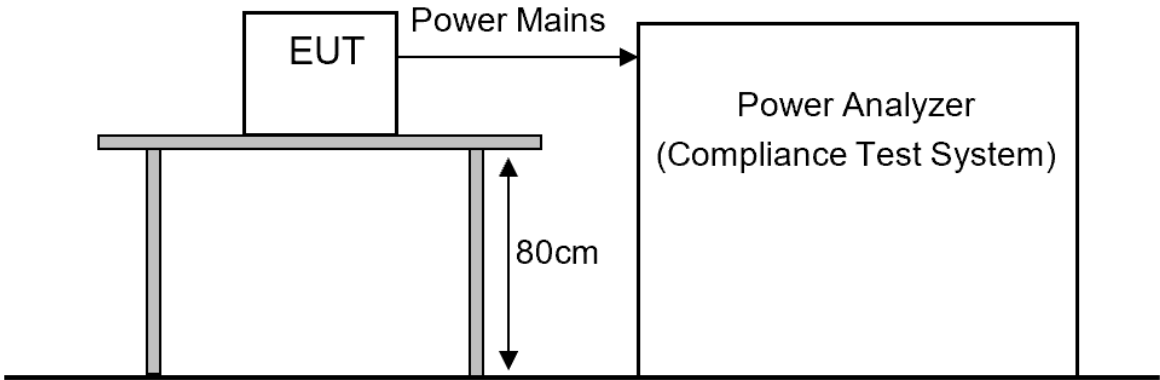
5. Harmonic Current Emissions Test

5.1. Test equipment

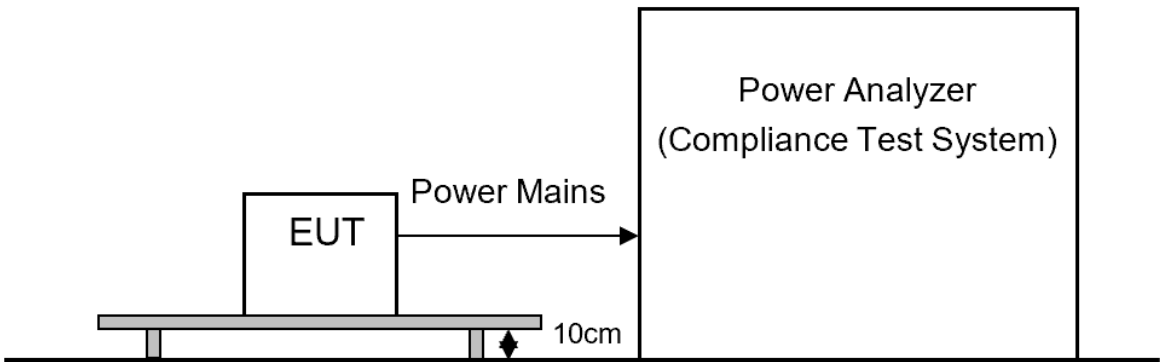
Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
Harmonics&Flicker Analyzer	emtest	DPA503N	DDT-ZC04145	2026/10/19
Flicker impedance	AMETEK CTS	AIF 503N32.4	DDT-ZC04558	2026/10/19
NET.CONTROL	EM TEST	N/A	DDT-ZC00795	/
Electronic Power Source	emtest	NetWave 20-400	DDT-ZC04144	2026/03/28

5.2. Block diagram of test setup

Table-top device



Floor-standing device



5.3. Test levels and performance criterion

Limit for Class A equipment		
Harmonic order(h)	Maximum permissible harmonic current (A)	
Odd harmonics		
3	2.30	
5	1.14	
7	0.77	
9	0.40	
11	0.33	
13	0.21	
15≤h≤39	0.15*15/h	
Even harmonics		
2	1.08	
4	0.43	
6	0.30	
8≤h≤40	0.23*8/h	
Limit for Class B equipment		
The harmonics of the input current shall not exceed the values given in Class A limits multiplied by a factor of 1,5.		
Limit for Class C equipment		
Harmonic order(h)	Maximum permissible harmonic current expressed as a percentage of the input current at the fundamental frequency %	
2	2	
3	27	
5	10	
7	7	
9	5	
11≤h≤39 (odd harmonic only)	3	
Limit for Class D equipment		
Harmonic order(h)	Maximum permissible harmonic current per watt (mA/W)	Maximum permissible harmonic current (A)
3	3.4	2.30
5	1.9	1.14
7	1.0	0.77
9	0.5	0.40
11	0.35	0.33
13≤h≤39 (odd harmonic only)	3.85/n	0.15*15/h

5.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Router	Mi	R4A	/	/
Speaker	N/A	Bar 2.0	/	/
Earphone	N/A	N/A	/	/
Mobile Drive	WD	Elements SE	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Mobile HDD	WD	WDBUZG0010B BK-EB	/	/
Speaker	JBL	JBL GO	/	/

5.5. Test procedure

The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the maximum harmonic components under normal operating conditions for each successive harmonic component in turn. The correspondent test program of test instrument to measure the current harmonics emanated from EUT is chosen. The measure time shall be not less than the necessary for the EUT to be exercised.

5.6. Test result

Pass. (See below detailed test result)

5.7. Test data

Test Report			
Test Object :	Projector		
Test Standard :	IEC 61000-3-2 (Ed5-1) - Class A (230V - 50Hz)		
Tester :	Bote Huang		
Company :	Guangdong Dongdian Testing Service Co., Ltd.		
Test Date :	10/21/2025 8:25:13 PM		
Result			
E.U.T. :	PASS	Source :	PASS
Test Object / Product			
Name :	Projector	Operation Mode :	Bluetooth + 2.4GHz Wi-Fi mode
Serial Number :	S25090923-003	Connection :	/
Description :	XR03B		
Climatic Conditions			
Temperature :	22 °C	Pressure :	101 kPa
		Humidity :	45 %
Measures & Analysis			
Measure Window :	10 periods	Voltage Range :	500 V
Refresh Interval :	2 s	Current Range :	200 A
Sampling Rate :	10.24 kS/s		
Scaled Window :	Rectangular		
According :	IEC 61000-3-2 (Edition 5.1) Limits for harmonic current emissions (equipment input current < 16 A per phase)		

Standard Specific Results for IEC 61000-3-2 (Edition 5.1)

Standard Group:	Industry
Standard Name:	IEC 61000-3-2 (Edition 5.1)
	Limits for harmonic current emissions (equipment input current < 16 A per phase)
Device Under Test:	PASS
Power Source:	PASS
Connection Type:	L - N
Main Line:	230 V, 50 Hz
Classification:	Class A
Appli. of Limits:	less than or equal to 150 % (Without POHC Enhancement)
Test Duration:	3 min

Evaluation of Partial Odd Harmonics Enhancement*Partial Odd Harmonic Currents*

	<i>measured value</i>	<i>limit</i>	<i>result</i>
Line 1:	0.021 A (1.54 %)	0.251 A	PASS

Evaluation for current limits

	<i>without enhancement</i>	<i>with enhancement</i>	<i>need enhancement</i>
Line 1:	PASS	PASS	No

Enhancement is not applied

Check Harmonics 2..40*First detected harmonic order > 150 %*

Line 1: None

Harmonics orders > 150 %

Line 1: None

Harmonics orders with average > 100 %

Line 1: None

Measured values*Fundamental Current*

Line 1: 1.35 A

Active input Power

Line 1: 311.794 W *

Circuit power factor

Line 1: 0.997 *

* Absolute value.

Prerequisite for simplified method fulfilled*First time window with THD(I) > 15 %*

Line 1: None

Time window with max THD(I) > 15 %

Line 1: None

Current emission below 60 % of the applicable limits

Line 1: No

Active Input Power

Line 1: 312 W *

* Absolute value.

Current Test Result

Average and Maximum harmonic current results									
Hn	Average				Maximum				Harmonic Result
	I _{eff} [A]	of Limit [%]	Limit [A]	Result	I _{eff} [A]	of Limit [%]	Limit [A]	Result	
1	1.349				1.350				
2	0.010	0.897	1.080	PASS	0.010	0.629	1.620	PASS	PASS
3	0.035	1.542	2.300	PASS	0.036	1.037	3.450	PASS	PASS
4	0.017	3.841	0.430	PASS	0.017	2.618	0.645	PASS	PASS
5	0.036	3.127	1.140	PASS	0.036	2.121	1.710	PASS	PASS
6	0.017	5.757	0.300	PASS	0.018	3.945	0.450	PASS	PASS
7	0.033	4.229	0.770	PASS	0.033	2.867	1.155	PASS	PASS
8	0.003	1.437	0.230	n/a	0.004	1.052	0.345	n/a	PASS
9	0.024	6.102	0.400	PASS	0.025	4.156	0.600	PASS	PASS
10	0.003	1.664	0.184	n/a	0.003	1.195	0.276	n/a	PASS
11	0.023	7.066	0.330	PASS	0.024	4.880	0.495	PASS	PASS
12	0.002	1.590	0.153	n/a	0.003	1.167	0.230	n/a	PASS
13	0.014	6.748	0.210	PASS	0.014	4.565	0.315	PASS	PASS
14	0.002	1.186	0.131	n/a	0.002	0.949	0.197	n/a	PASS
15	0.009	5.897	0.150	PASS	0.009	4.136	0.225	PASS	PASS
16	0.002	1.713	0.115	n/a	0.002	1.256	0.173	n/a	PASS
17	0.006	4.535	0.132	n/a	0.006	3.174	0.199	n/a	PASS
18	0.002	2.057	0.102	n/a	0.002	1.505	0.153	n/a	PASS
19	0.002	2.014	0.118	n/a	0.003	1.542	0.178	n/a	PASS
20	0.002	2.151	0.092	n/a	0.002	1.562	0.138	n/a	PASS
21	0.009	8.738	0.107	PASS	0.010	5.920	0.161	PASS	PASS
22	0.001	1.640	0.084	n/a	0.002	1.210	0.125	n/a	PASS
23	0.009	8.996	0.098	PASS	0.009	6.141	0.147	PASS	PASS
24	0.001	1.700	0.077	n/a	0.001	1.294	0.115	n/a	PASS
25	0.004	4.905	0.090	n/a	0.005	3.402	0.135	n/a	PASS
26	0.001	1.718	0.071	n/a	0.001	1.281	0.106	n/a	PASS
27	0.006	7.616	0.083	n/a	0.007	5.286	0.125	n/a	PASS
28	0.001	2.049	0.066	n/a	0.002	1.528	0.099	n/a	PASS
29	0.008	10.318	0.078	n/a	0.008	7.034	0.116	PASS	PASS
30	0.002	2.547	0.061	n/a	0.002	1.843	0.092	n/a	PASS
31	0.004	5.836	0.073	n/a	0.004	4.076	0.109	n/a	PASS
32	0.002	2.776	0.058	n/a	0.002	2.101	0.086	n/a	PASS
33	0.003	4.806	0.068	n/a	0.003	3.360	0.102	n/a	PASS
34	0.001	2.572	0.054	n/a	0.002	1.926	0.081	n/a	PASS
35	0.008	12.255	0.064	n/a	0.008	8.464	0.096	PASS	PASS
36	0.001	2.824	0.051	n/a	0.002	2.058	0.077	n/a	PASS
37	0.007	11.363	0.061	n/a	0.007	8.072	0.091	n/a	PASS
38	0.001	2.917	0.048	n/a	0.002	2.172	0.073	n/a	PASS
39	0.002	3.443	0.058	n/a	0.002	2.667	0.087	n/a	PASS
40	0.001	2.747	0.046	n/a	0.002	2.192	0.069	n/a	PASS

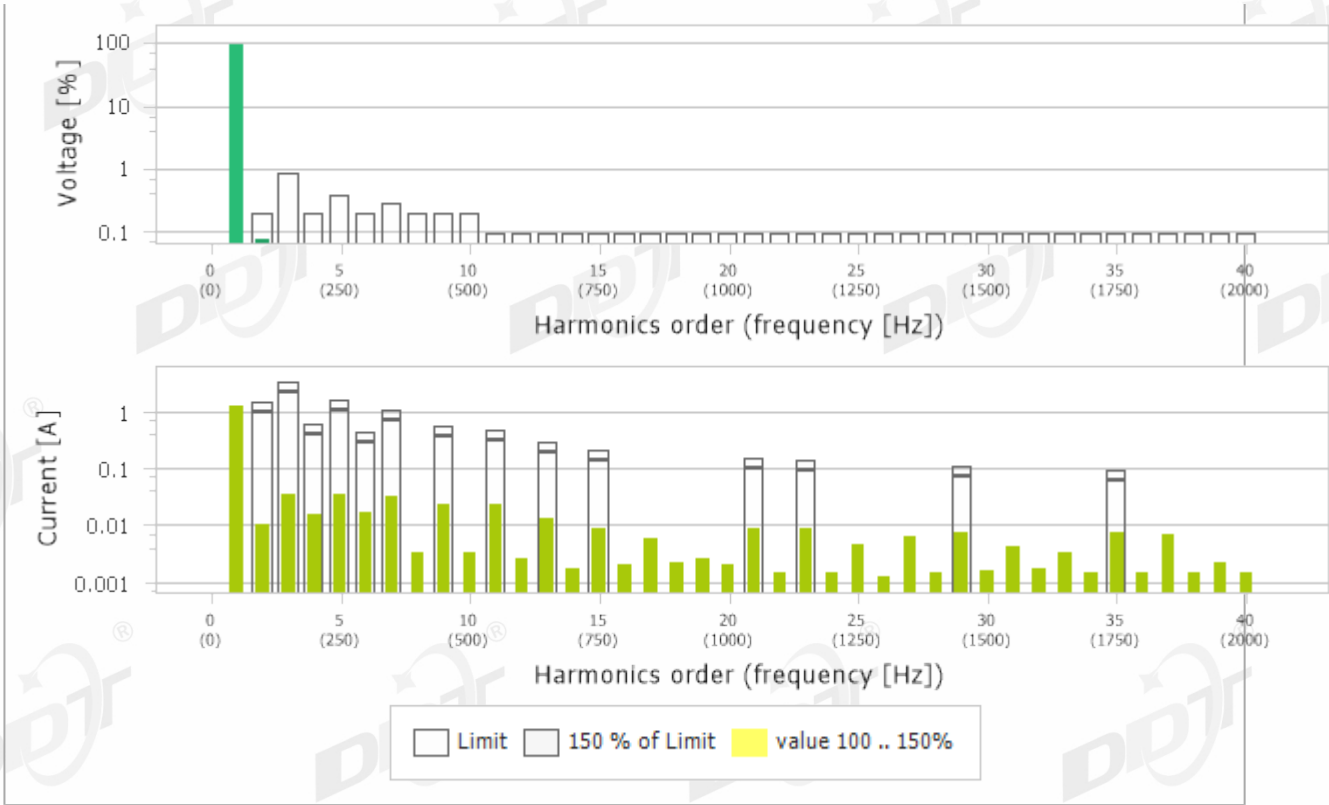
Note: Harmonic currents less than 0.6 % of the input current measured under the test conditions, or less than 5 mA, whichever is greater, are disregarded.

Voltage Source Verification

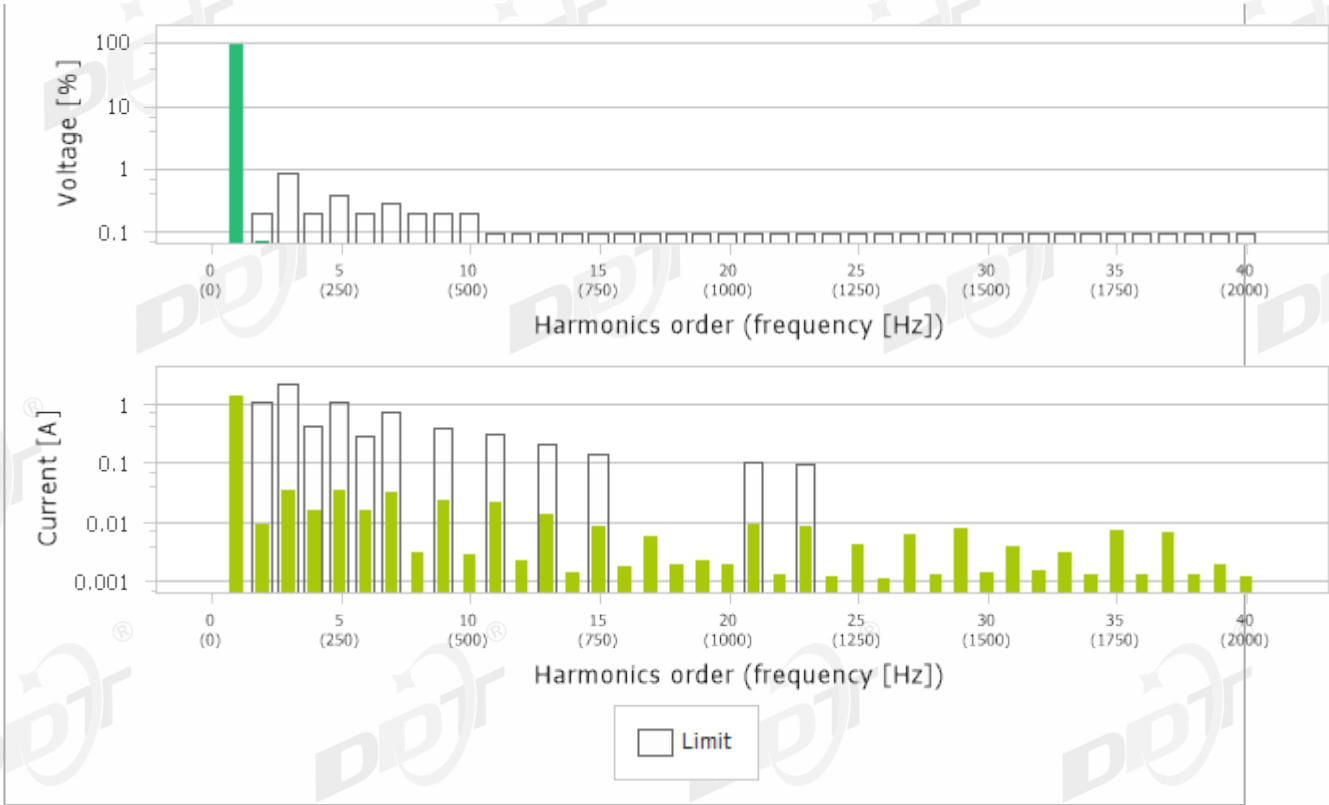
Harmonic voltage results				
Hn	Ueff [V]	Ueff [%]	Limit [%]	Result
1	231.141	100.496		
2	0.186	0.081	0.200	PASS
3	0.062	0.027	0.900	PASS
4	0.073	0.032	0.200	PASS
5	0.050	0.022	0.400	PASS
6	0.048	0.021	0.200	PASS
7	0.039	0.017	0.300	PASS
8	0.040	0.017	0.200	PASS
9	0.033	0.014	0.200	PASS
10	0.039	0.017	0.200	PASS
11	0.040	0.018	0.100	PASS
12	0.024	0.010	0.100	PASS
13	0.023	0.010	0.100	PASS
14	0.021	0.009	0.100	PASS
15	0.020	0.009	0.100	PASS
16	0.017	0.007	0.100	PASS
17	0.015	0.007	0.100	PASS
18	0.020	0.009	0.100	PASS
19	0.017	0.007	0.100	PASS
20	0.017	0.007	0.100	PASS
21	0.015	0.006	0.100	PASS
22	0.017	0.007	0.100	PASS
23	0.019	0.008	0.100	PASS
24	0.014	0.006	0.100	PASS
25	0.022	0.010	0.100	PASS
26	0.015	0.006	0.100	PASS
27	0.029	0.013	0.100	PASS
28	0.018	0.008	0.100	PASS
29	0.024	0.010	0.100	PASS
30	0.014	0.006	0.100	PASS
31	0.016	0.007	0.100	PASS
32	0.013	0.005	0.100	PASS
33	0.015	0.007	0.100	PASS
34	0.010	0.004	0.100	PASS
35	0.014	0.006	0.100	PASS
36	0.011	0.005	0.100	PASS
37	0.010	0.004	0.100	PASS
38	0.010	0.005	0.100	PASS
39	0.010	0.004	0.100	PASS
40	0.010	0.005	0.100	PASS

Maximum / Average Values	
Maximum Values	Line 1
	Frequency 50 Hz
	Voltage RMS 231.1 V
	Current RMS 1.353 A
	Peak Current 1.983 A
	Fundamental Current 1.352 A
	Current Crest Factor 1.467
	Active Power P 312.2 W
	Power Factor 0.9975
	Total Harmonic Current (THC) 0.07940 A
	Instantaneous Partial Odd Harmonic Current (Inst. POHC) 0.02148 A
	Total Harmonic Distortion Current (THDC) 0.05880
	Average Values
	Total Harmonic Current (THC) 0.07878 A
	Instantaneous Partial Odd Harmonic Current (Inst. POHC) 0.02078 A
	Total Harmonic Distortion Current (THDC) 0.05835

Maximum Harmonics											
Maximum Harmonics (Line 1)											
Hn	Frequency [Hz]	Voltage					Current				
		eff [V]	eff [%]	of Limit [%]	Limit [%]	Time Window	eff [A]	eff[%]	of Limit [%]	Limit [A]	Time Window
1	50.0	231.141	100.50	-	-	505	1.350	100.00	-	-	370
2	100.0	0.186	0.08	40.44	0.20	359	0.011	0.80	0.66	1.62	1
3	150.0	0.062	0.03	3.00	0.90	66	0.036	2.65	1.04	3.45	523
4	200.0	0.073	0.03	15.89	0.20	22	0.017	1.25	2.62	0.65	364
5	250.0	0.050	0.02	5.39	0.40	229	0.036	2.69	2.13	1.71	1
6	300.0	0.048	0.02	10.40	0.20	766	0.018	1.32	3.96	0.45	1
7	350.0	0.039	0.02	5.68	0.30	744	0.033	2.45	2.87	1.16	669
8	400.0	0.040	0.02	8.63	0.20	499	0.004	0.27	1.05	0.35	681
9	450.0	0.033	0.01	7.24	0.20	487	0.025	1.85	4.16	0.60	741
10	500.0	0.039	0.02	8.45	0.20	159	0.003	0.25	1.23	0.28	1
11	550.0	0.040	0.02	17.55	0.10	75	0.024	1.79	4.88	0.50	76
12	600.0	0.024	0.01	10.26	0.10	434	0.003	0.20	1.17	0.23	754
13	650.0	0.023	0.01	9.96	0.10	92	0.014	1.07	4.57	0.32	3
14	700.0	0.021	0.01	8.97	0.10	511	0.002	0.14	0.96	0.20	1
15	750.0	0.020	0.01	8.81	0.10	397	0.009	0.69	4.14	0.23	178
16	800.0	0.017	0.01	7.48	0.10	407	0.002	0.16	1.26	0.17	635
17	850.0	0.015	0.01	6.58	0.10	262	0.006	0.47	3.17	0.20	202
18	900.0	0.020	0.01	8.52	0.10	637	0.002	0.17	1.50	0.15	57
19	950.0	0.017	0.01	7.33	0.10	449	0.003	0.20	1.54	0.18	200
20	1000.0	0.017	0.01	7.46	0.10	818	0.002	0.16	1.56	0.14	755
21	1050.0	0.015	0.01	6.31	0.10	569	0.010	0.72	6.03	0.16	1
22	1100.0	0.017	0.01	7.23	0.10	407	0.002	0.11	1.21	0.13	753
23	1150.0	0.019	0.01	8.18	0.10	422	0.009	0.67	6.14	0.15	830
24	1200.0	0.014	0.01	6.12	0.10	600	0.002	0.12	1.37	0.12	1
25	1250.0	0.022	0.01	9.65	0.10	119	0.005	0.35	3.48	0.14	1
26	1300.0	0.015	0.01	6.33	0.10	866	0.001	0.10	1.28	0.11	49
27	1350.0	0.029	0.01	12.72	0.10	835	0.007	0.49	5.29	0.13	540
28	1400.0	0.018	0.01	8.03	0.10	634	0.002	0.11	1.53	0.10	877
29	1450.0	0.024	0.01	10.33	0.10	99	0.008	0.61	7.03	0.12	553
30	1500.0	0.014	0.01	6.23	0.10	898	0.002	0.13	1.84	0.09	772
31	1550.0	0.016	0.01	6.90	0.10	621	0.004	0.33	4.08	0.11	245
32	1600.0	0.013	0.01	5.49	0.10	420	0.002	0.14	2.18	0.09	1
33	1650.0	0.015	0.01	6.66	0.10	259	0.003	0.25	3.36	0.10	287
34	1700.0	0.010	0.00	4.31	0.10	624	0.002	0.12	1.93	0.08	47
35	1750.0	0.014	0.01	5.96	0.10	215	0.008	0.60	8.46	0.10	119
36	1800.0	0.011	0.00	4.59	0.10	77	0.002	0.12	2.06	0.08	609
37	1850.0	0.010	0.00	4.34	0.10	810	0.007	0.55	8.07	0.09	205
38	1900.0	0.010	0.00	4.51	0.10	165	0.002	0.12	2.17	0.07	372
39	1950.0	0.010	0.00	4.25	0.10	624	0.002	0.17	2.67	0.09	205
40	2000.0	0.010	0.00	4.50	0.10	295	0.002	0.11	2.19	0.07	46



Average Harmonics											
Average Harmonics (Line 1)											
Hn	Frequency [Hz]	Voltage					Current				
		eff [V]	eff [%]	of Limit [%]	Limit [%]	Pass / Fail	eff [A]	eff[%]	of Limit [%]	Limit [A]	Pass / Fail
1	50.0	231.120	100.49	-	-	n/a	1.349	99.93	-	-	n/a
2	100.0	0.174	0.08	37.83	0.20	Pass	0.010	0.72	0.90	1.08	Pass
3	150.0	0.052	0.02	2.52	0.90	Pass	0.035	2.63	1.54	2.30	Pass
4	200.0	0.066	0.03	14.33	0.20	Pass	0.017	1.22	3.84	0.43	Pass
5	250.0	0.040	0.02	4.31	0.40	Pass	0.036	2.64	3.13	1.14	Pass
6	300.0	0.042	0.02	9.04	0.20	Pass	0.017	1.28	5.76	0.30	Pass
7	350.0	0.031	0.01	4.43	0.30	Pass	0.033	2.41	4.23	0.77	Pass
8	400.0	0.034	0.01	7.35	0.20	Pass	0.003	0.24	1.44	0.23	n/a
9	450.0	0.024	0.01	5.30	0.20	Pass	0.024	1.81	6.10	0.40	Pass
10	500.0	0.024	0.01	5.16	0.20	Pass	0.003	0.23	1.66	0.18	n/a
11	550.0	0.023	0.01	9.83	0.10	Pass	0.023	1.73	7.07	0.33	Pass
12	600.0	0.018	0.01	7.69	0.10	Pass	0.002	0.18	1.59	0.15	n/a
13	650.0	0.017	0.01	7.33	0.10	Pass	0.014	1.05	6.75	0.21	Pass
14	700.0	0.015	0.01	6.55	0.10	Pass	0.002	0.12	1.19	0.13	n/a
15	750.0	0.014	0.01	6.08	0.10	Pass	0.009	0.66	5.90	0.15	Pass
16	800.0	0.012	0.01	5.35	0.10	Pass	0.002	0.15	1.71	0.12	n/a
17	850.0	0.009	0.00	3.96	0.10	Pass	0.006	0.44	4.54	0.13	n/a
18	900.0	0.011	0.00	4.92	0.10	Pass	0.002	0.16	2.06	0.10	n/a
19	950.0	0.010	0.00	4.34	0.10	Pass	0.002	0.18	2.01	0.12	n/a
20	1000.0	0.011	0.00	4.79	0.10	Pass	0.002	0.15	2.15	0.09	n/a
21	1050.0	0.010	0.00	4.21	0.10	Pass	0.009	0.69	8.74	0.11	Pass
22	1100.0	0.011	0.00	4.64	0.10	Pass	0.001	0.10	1.64	0.08	n/a
23	1150.0	0.014	0.01	6.16	0.10	Pass	0.009	0.65	9.00	0.10	Pass
24	1200.0	0.009	0.00	4.11	0.10	Pass	0.001	0.10	1.70	0.08	n/a
25	1250.0	0.018	0.01	7.83	0.10	Pass	0.004	0.33	4.91	0.09	n/a
26	1300.0	0.008	0.00	3.62	0.10	Pass	0.001	0.09	1.72	0.07	n/a
27	1350.0	0.021	0.01	9.17	0.10	Pass	0.006	0.47	7.62	0.08	n/a
28	1400.0	0.012	0.01	5.14	0.10	Pass	0.001	0.10	2.05	0.07	n/a
29	1450.0	0.017	0.01	7.52	0.10	Pass	0.008	0.59	10.32	0.08	n/a
30	1500.0	0.010	0.00	4.41	0.10	Pass	0.002	0.12	2.55	0.06	n/a
31	1550.0	0.011	0.00	4.72	0.10	Pass	0.004	0.31	5.84	0.07	n/a
32	1600.0	0.008	0.00	3.60	0.10	Pass	0.002	0.12	2.78	0.06	n/a
33	1650.0	0.010	0.00	4.51	0.10	Pass	0.003	0.24	4.81	0.07	n/a
34	1700.0	0.006	0.00	2.57	0.10	Pass	0.001	0.10	2.57	0.05	n/a
35	1750.0	0.009	0.00	4.05	0.10	Pass	0.008	0.58	12.26	0.06	n/a
36	1800.0	0.006	0.00	2.56	0.10	Pass	0.001	0.11	2.82	0.05	n/a
37	1850.0	0.006	0.00	2.59	0.10	Pass	0.007	0.51	11.36	0.06	n/a
38	1900.0	0.006	0.00	2.49	0.10	Pass	0.001	0.10	2.92	0.05	n/a
39	1950.0	0.005	0.00	2.09	0.10	Pass	0.002	0.15	3.44	0.06	n/a
40	2000.0	0.006	0.00	2.53	0.10	Pass	0.001	0.09	2.75	0.05	n/a



5.8. Test photo



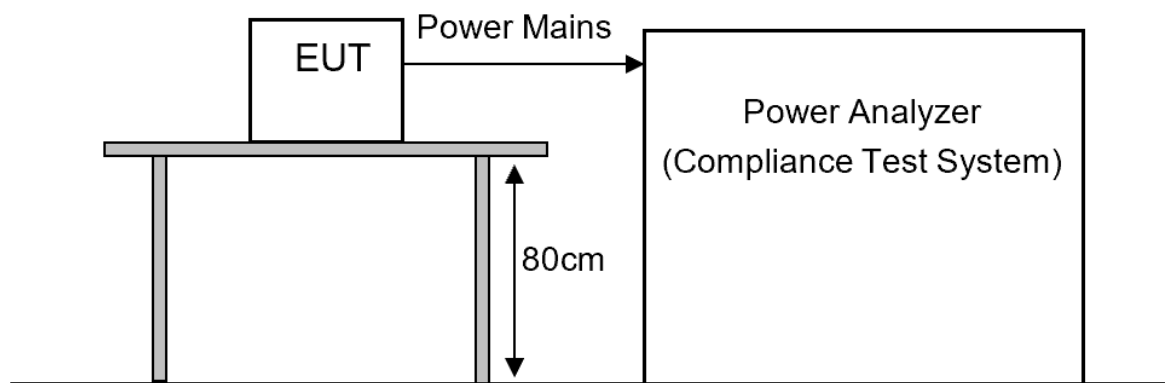
6. Voltage Fluctuations& Flicker Test

6.1. Test equipment

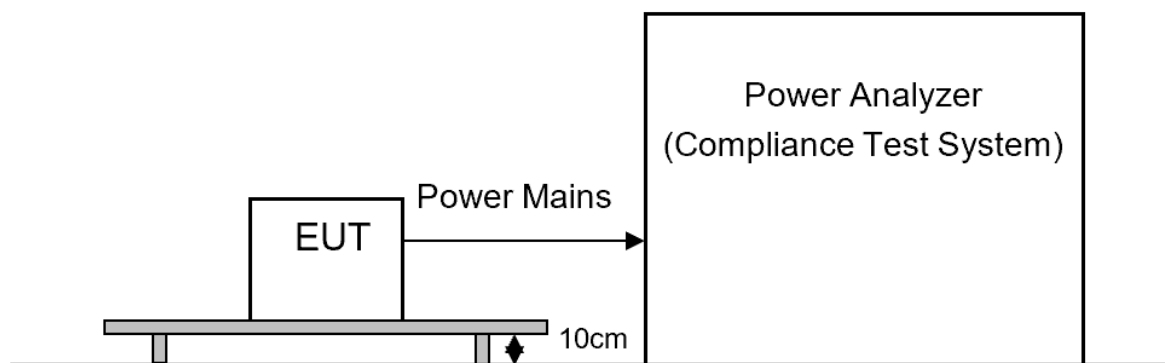
Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
Harmonics&Flicker Analyzer	emtest	DPA503N	DDT-ZC04145	2026/10/19
Flicker impedance	AMETEK CTS	AIF 503N32.4	DDT-ZC04558	2026/10/19
NET.CONTROL	EM TEST	N/A	DDT-ZC00795	/
Electronic Power Source	emtest	NetWave 20-400	DDT-ZC04144	2026/03/28

6.2. Block diagram of test setup

Table-top device



Floor-standing device



6.3. Test levels and performance criterion

Voltage fluctuations & flicker Limit		
Test Item	Limit	Note
Pst	1.0	Pst means Short-term flicker indicator
Plt	0.65	Plt means long-term flicker indicator
Tdt	0.5	Tdt means maximum time that dt exceeds 3.3%
dmax(%)	4%	dmax means maximum relative voltage change.
dc(%)	3.3%	dc means relative steady-state voltage change.

6.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Mobile HDD	WD	WDBUZG0010B BK-EB	/	/
Mobile Drive	WD	Elements SE	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Speaker	N/A	Bar 2.0	/	/
Speaker	JBL	JBL GO	/	/
Earphone	N/A	N/A	/	/
Router	Mi	R4A	/	/

6.5. Test procedure

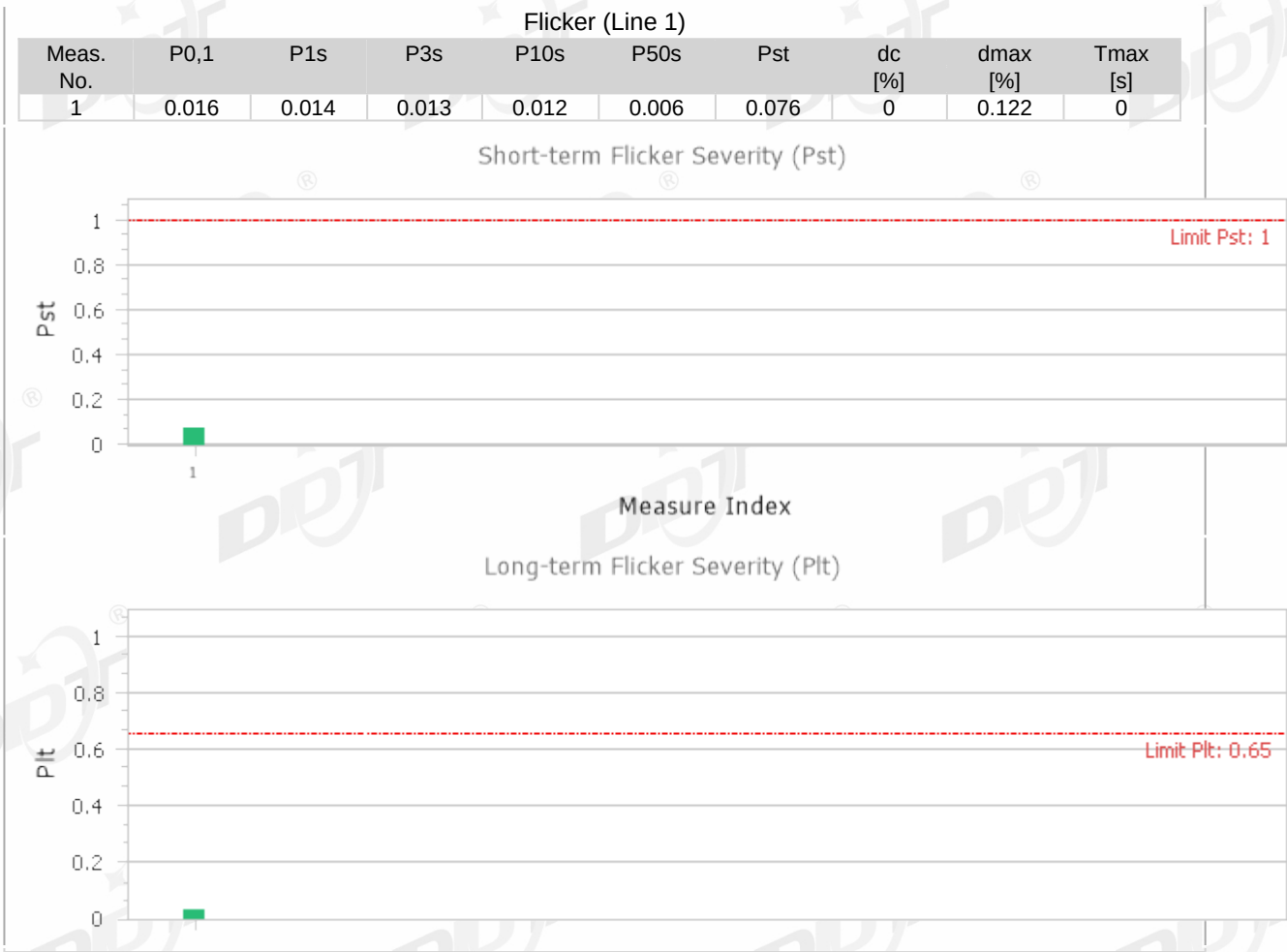
The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the most unfavorable sequence of voltage changes under normal conditions during the flick measurement; the measure time shall include that part of whole operation changes. The observation period for short-term flicker indicator is 10 minutes and the observation period for long-term flicker indicator is 2 hours.

6.6. Test result

Pass. (See below detailed test result)

6.7. Test data

Test Report												
Test Object :		Projector										
Test Standard :		IEC 61000-3-3 (Ed3-2) - General Test conditions (230V - 50Hz)										
Tester :		Bote Huang										
Company :		Guangdong Dongdian Testing Service Co., Ltd.										
Test Date :		10/21/2025 7:57:05 PM										
Result												
E.U.T. :		PASS										
Test Object / Product												
Name :		Projector				Operation Mode :		Bluetooth + 2.4GHz Wi-Fi mode				
Serial Number :		S25090923-003				Connection :		/				
Description :		XR03B										
Climatic Conditions												
Temperature :		22 °C		Pressure :		101 kPa		Humidity :		45 %		
Flicker Results												
Standard Specific Results for IEC 61000-3-3 (Edition 3.2)												
Standard Group:		Industry										
Standard Name:		IEC 61000-3-3 (Edition 3.2) Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection										
Test Condition:		General Test Conditions										
Analysis Status:		PASS										
Flicker Measurements Settings												
Main Line:		230V, 50Hz										
Flicker Meter:		230V / 50Hz										
Flicker Impedance:		Zref										
Observation Time:		1 × 10 min										
Measurements:		1										
Flicker Measurements												
	Last V _{rms} [V]	P _{lt}	Max P _{st}	Max d _c [%]	Max d _{max} [%]	Max T _{max} [s]						
Line 1:	230.266	0.033	0.076	0	< 0.2	0						
Limits:		0.65	1	3.3	4	0.5						
Results:		PASS	PASS	PASS	PASS	PASS						
Flicker Individual Measurements												
Measurement	P _{st} []		d _c [%]		d _{max} [%]		T _{max} [s]					
	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result
#1	0.08	1.00	PASS	0.00	3.30	PASS	< 0.2	4.00	PASS	0.00	0.50	PASS
Pst Data												



6.8. Test photo



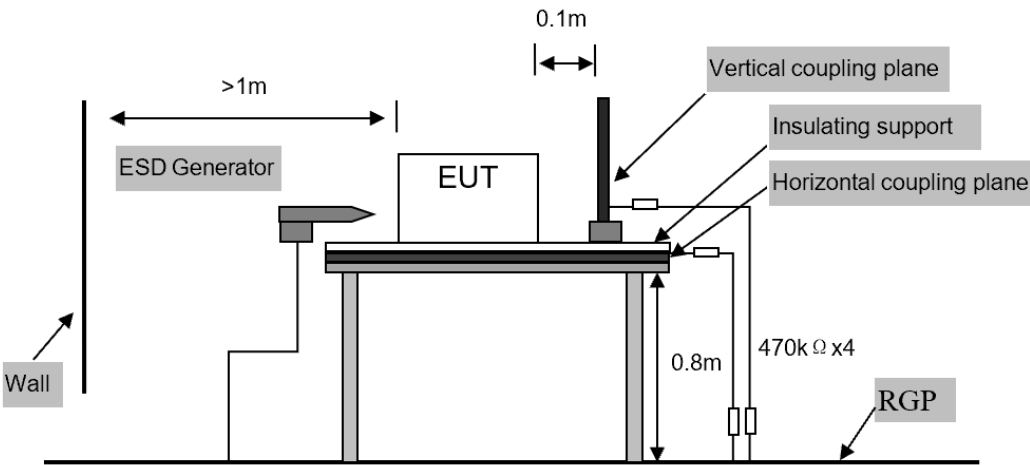
7. Electrostatic Discharge Test

7.1. Test equipment

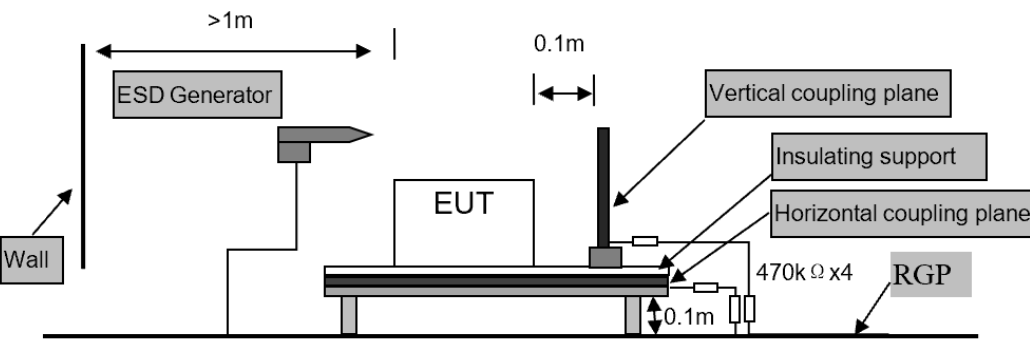
Equipment	Manufacturer	Model No.	Equipment No.	Cal Due To
ESD Generator	TESEQ	NSG 437	DDT-ZC01820	2026/04/01

7.2. Block diagram of test setup

Table-top equipment



Floor-standing equipment



7.3. Test levels and performance criterion

Test Level		Performance Criteria
Air Discharge	±2kV, ±4kV and ±8kV	B
Contact Discharge	±4kV	
Performance criteria B description: During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test. After the test, the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the EUT is used as intended.		

7.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Router	Mi	R4A	/	/
Mobile Drive	WD	Elements SE	/	/
Speaker	N/A	Bar 2.0	/	/
Mobile HDD	WD	WDBUZG0010B BK-EB	/	/
Speaker	JBL	JBL GO	/	/
Earphone	N/A	N/A	/	/

7.5. Test procedure

Air Discharge:

The test was applied on non-conductive surfaces of EUT. The round discharge tip of the discharge electrode was approached as fast as possible to touch the EUT. After each discharge, the discharge electrode was removed from the EUT. The generator was re-triggered for a new single discharge and repeated 20 times for each pre-selected test point. This procedure was repeated until all the air discharge completed.

Contact Discharge:

All the procedure was same as air discharge. Except that the generator was re-triggered for a new single discharge. The tip of the discharge electrode was touching the EUT before the discharge switch was operated.

Indirect discharge for horizontal coupling plane:

At least 20 single discharges were applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1m from the EUT and with the discharge electrode touching the coupling plane.

Indirect discharge for vertical coupling plane:

At least 20 single discharges were applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, was placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges were applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

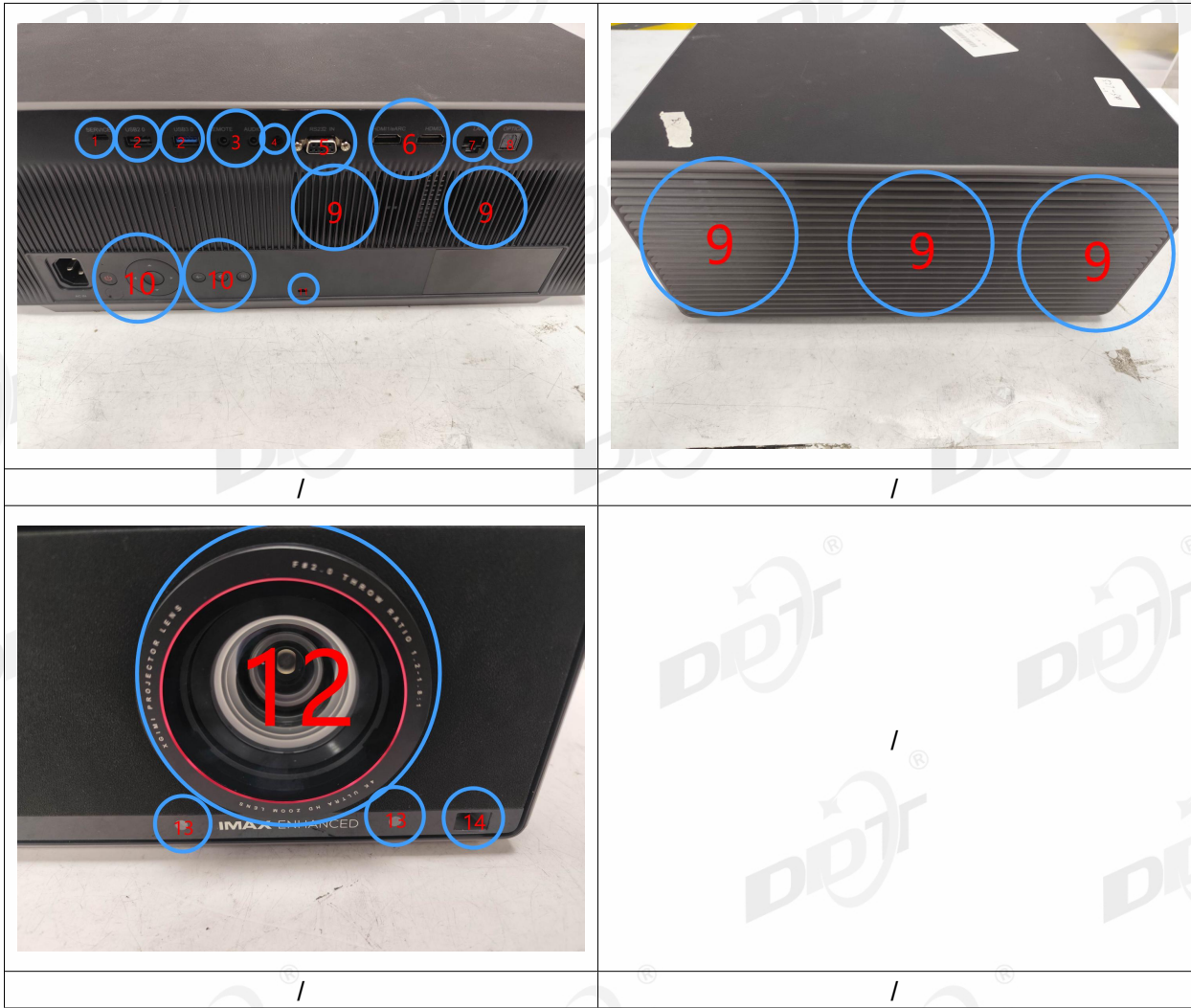
7.6. Test result

Test Site: 7#EMC Shield Room	Test Date: 2025/10/22--2025/10/22
Condition: 23°C,51%RH,101kPa	Test Engineer: Elosky Liu
Memo: /	

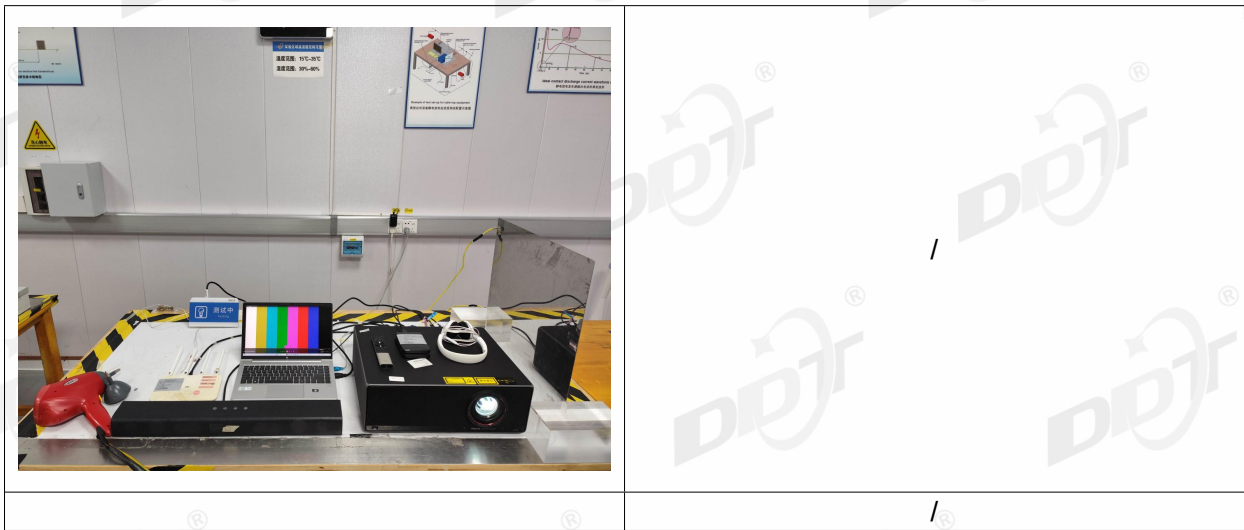
EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo:/		
Measure parameters: 20 times at each point for contact discharge; 20 times at each point for air discharge. 1 second interval for each discharge.					
Type of discharge	Test Level	Test Point	Required	Observation	Result
Contact to EUT	±4kV	/	B	/	/
Contact to Coupling Planes	±4kV	Coupling Planes	B	A	Pass
Air	±2 kV /±4 kV /±8kV	1,2,3,4,5,6,7,8,9,10,11,12,13,14	B	A	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 5GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo:/		
Measure parameters: 20 times at each point for contact discharge; 20 times at each point for air discharge. 1 second interval for each discharge.					
Type of discharge	Test Level	Test Point	Required	Observation	Result
Contact to EUT	±4kV	/	B	/	/
Contact to Coupling Planes	±4kV	Coupling Planes	B	A	Pass
Air	±2 kV /±4 kV /±8kV	1,2,3,4,5,6,7,8,9,10, 11,12,13,14	B	A	Pass
Observation Description:					
A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

7.7. ESD test points



7.8. Test photo



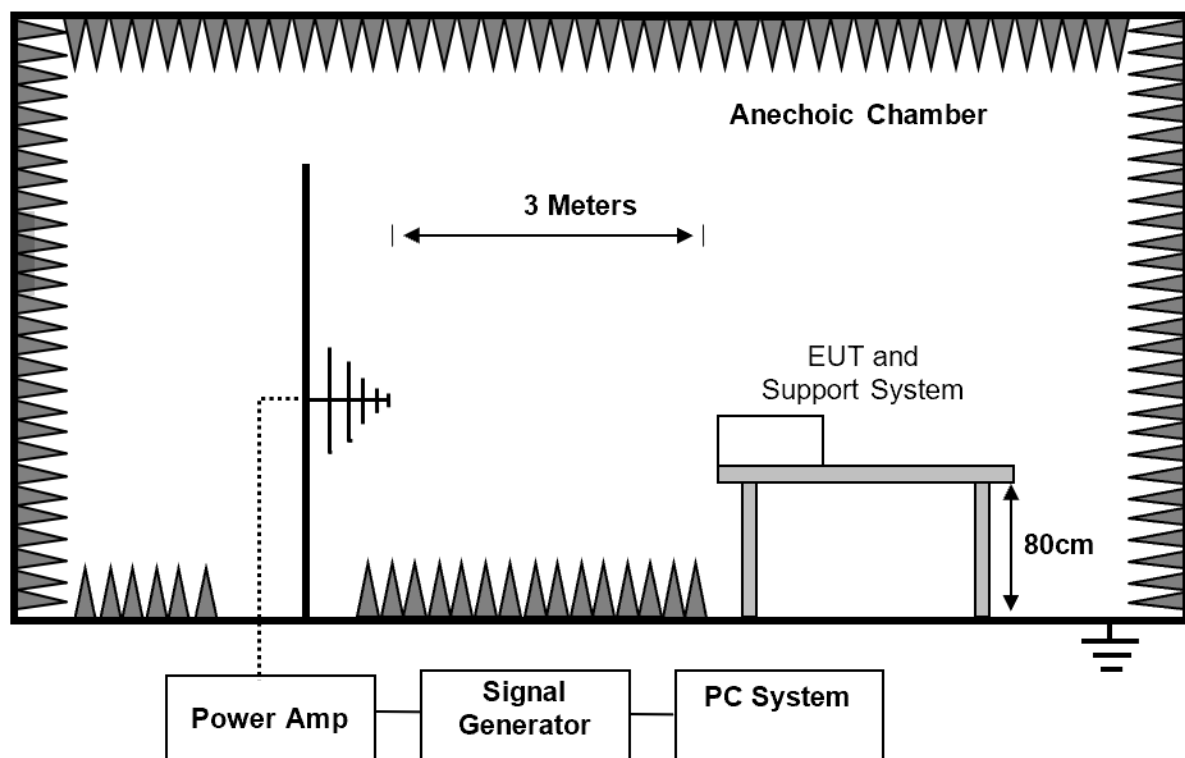
8. Continuous Radio Frequency Disturbances

8.1. Test equipment

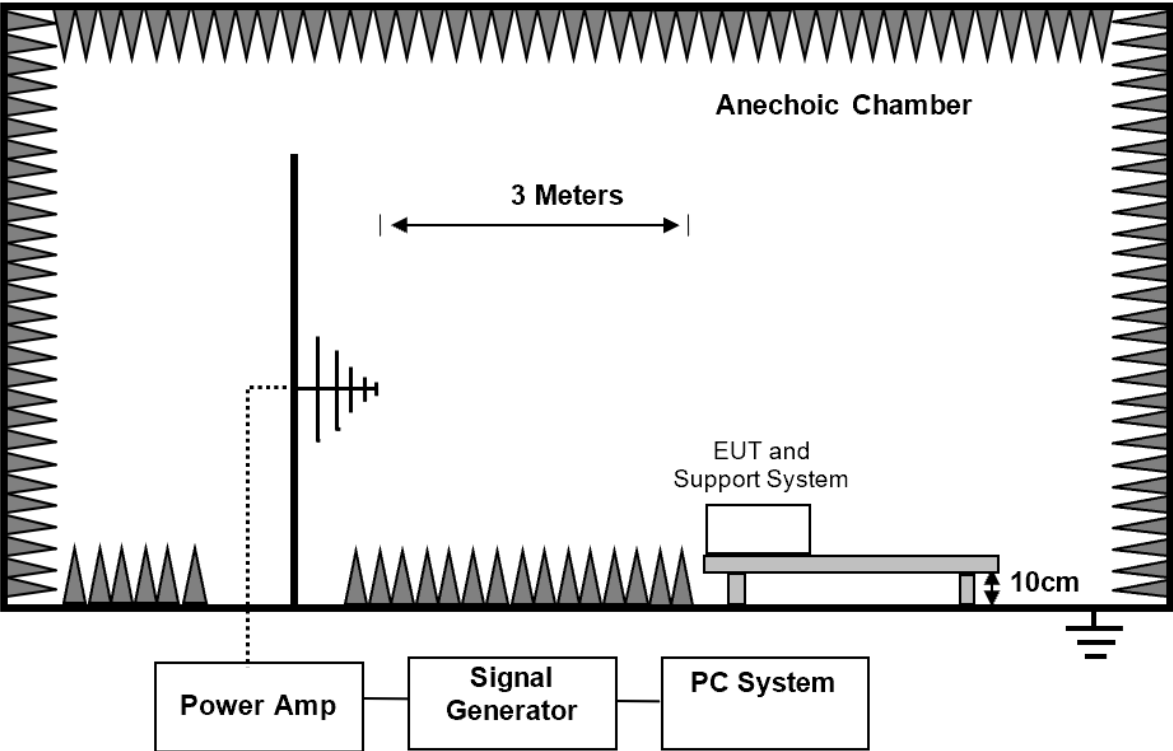
Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
MXG Vector Signal Generator	Agilent	N5182A	DDT-ZC00239	2026/07/06
Power meter	Agilent	E4417A	DDT-ZC00934	2026/07/06
Power sensor	Agilent	E9323A	DDT-ZC00938	2026/08/10
Power sensor	Agilent	E9323A	DDT-ZC00939	2026/08/10
Electric Field Sensors	DARE Instruments	CTR1001S	DDT-ZC02865	2025/11/03
Power Amplifier	Wonder	HPA80M1000M500	DDT-ZC00940	2026/07/06
Power Amplifier	Wonder	HPA1000M2500M300	DDT-ZC00941	2026/07/06
Power Amplifier	Wonder	HPA2500M6000M200	DDT-ZC00942	2026/07/06
RS Test Software	SKET	EMC-S	DDT-ZC01455	/
Audio Analyzer	R&S	UPV	DDT-ZC01246	/
Log-Periodic Antenna	schwarzbeck	STLP 9129	DDT-ZC04673	2026/10/19

8.2. Block diagram of test setup

Table-top device



Floor-standing device



8.3. Test levels and performance criterion

Test Level		Performance Criteria
Frequency	80 MHz to 6 GHz	A
Field Strength	3V/m measured unmodulated	
Modulation	AM modulated to a depth of 80% by a sinusoidal audio signal of 400 Hz (note 1)	
Step Size	1% increments	
Dwell time	>0.5 Sec.	

Note 1: The 1 kHz modulation may be replaced by a different audio modulation frequency more appropriate for a given EUT if, for example, 1 kHz is not within the operating audio range of the EUT.

Performance criteria A description for other devices: During and after the test the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a minimum performance level specified by the manufacturer when the EUT is used as intended.

8.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
USB Flash	Kingston	DT101 G2	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Speaker	N/A	Bar 2.0	/	/
Router	Mi	R4A	/	/
Earphone	N/A	N/A	/	/
Speaker	JBL	JBL GO	/	/

8.5. Test procedure

The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.

The frequency range is swept from 80 MHz to 6GHz, and with the disturbance signal 80% amplitude modulated with sine wave.. Where the frequency range is swept incrementally; the step size was 1% of preceding frequency value.

The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.

The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

The frequency on which the transmitter part of the EUT is intended to operate shall be excluded from conducted and radiated emission measurements when performed in transmit mode of operation.

8.6. Test result

Test Site: 4# 1m Chamber	Test Date: 2025/10/22--2025/10/22
Condition: 22°C,45%RH	Test Engineer: Hans Xu
Memo: /	

EUT Name: Projector			EUT Model: XR03B			
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode			
Power supply: AC 230V/50Hz			Memo:/			
Steps: 1%, Dwell time 1s, 400Hz 80% AM modulation						
Test frequency	Level	EUT Position	Antenna Polarization	Required	Observation	Result
80MHz to 6000MHz	3V/m	Front	H	A	A	Pass
			V	A	A	Pass
		Left	H	A	A	Pass
			V	A	A	Pass
		Rear	H	A	A	Pass
			V	A	A	Pass
		Right	H	A	A	Pass
			V	A	A	Pass
Observation Description:						
A: Normal performance within limits specified by the manufacturer requestor or purchaser.						

EUT Name: Projector				EUT Model: XR03B		
Sample No.: S25090923-003				Test Mode: Bluetooth + 5GHz Wi-Fi mode		
Power supply: AC 230V/50Hz				Memo:/		
Steps: 1%, Dwell time 1s, 400Hz 80% AM modulation						
Test frequency	Level	EUT Position	Antenna Polarization	Required	Observation	Result
80MHz to 6000MHz	3V/m	Front	H	A	A	Pass
			V	A	A	Pass
		Left	H	A	A	Pass
			V	A	A	Pass
		Rear	H	A	A	Pass
			V	A	A	Pass
		Right	H	A	A	Pass
			V	A	A	Pass
Observation Description:						
A: Normal performance within limits specified by the manufacturer requestor or purchaser.						

8.7. Test photo



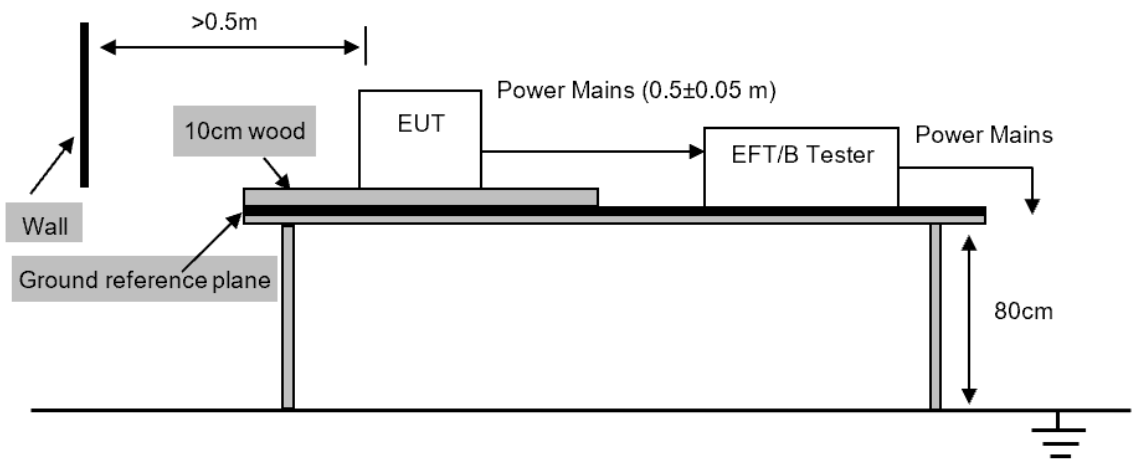
9. Electrical fast transients(EFT) test

9.1. Test equipment

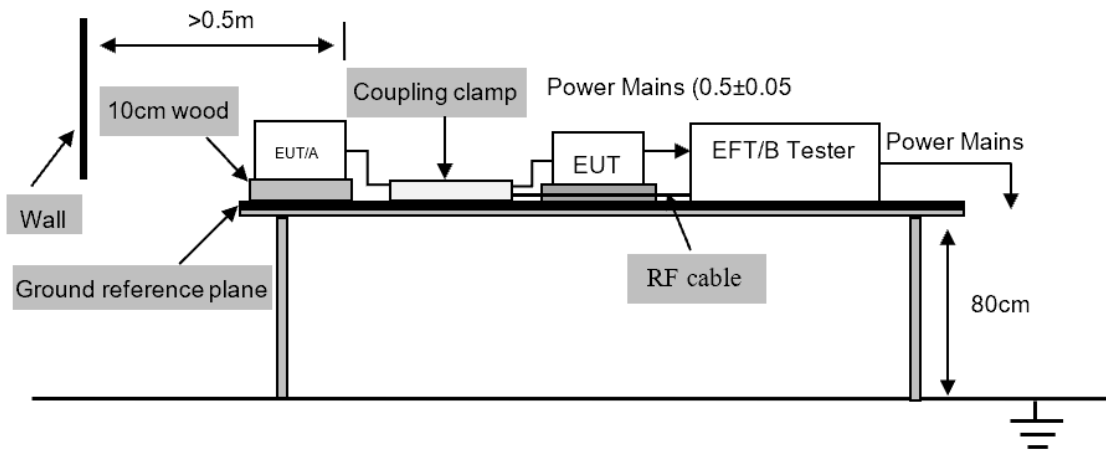
Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
EFT Generator	EMC Partner	TRA3000F	DDT-ZC00546	2026/03/28

9.2. Block diagram of test setup

For power port (Note: if the DC network power cable may be lengths greater than 3 m, the requirement is applicable).



For analogue/digital data ports, if the cables may be longer than 3 m.



9.3. Test levels and performance criterion

Test Level			Performance Criteria
Test voltage	±1kV For AC mains Port	±0.5kV for dc input or signal Port	B
Repetition Frequency	5kHz	5kHz	
Burst Duration	15ms	15ms	
Burst Period	300ms	300ms	
Inject Time(s)	120s	120s	
Inject Method	Direct for AC mains port	Capacitive coupling clamp or CDN	
Inject Line	AC mains	signal ports, wired network ports, control ports, and DC power ports	

Note: This test shall be additionally performed on signal ports, wired network ports, control ports, and DC power ports, of radio equipment and associated ancillary equipment, if the cables may be longer than 3 m.

Performance criteria B description: During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test. After the test, the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the EUT is used as intended.

9.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Speaker	N/A	Bar 2.0	/	/
USB Flash	Kingston	DT101 G2	/	/
Earphone	N/A	N/A	/	/
Router	Mi	R4A	/	/
Speaker	JBL	JBL GO	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/

9.5. Test procedure

The EUT and its simulators were placed on the ground reference plane and were insulated from it by a wood support 0.1m ± 0.01m thick. The ground reference plane was 1m*1m metallic sheet with 0.65mm minimum thickness. This reference ground plane was project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane was more than 0.5m. All cables to the EUT was placed on the wood support, cables not subject to EFT/B was routed as far as possible from the cable under test to minimize the coupling between the cables.

For DC powerport and AC main ports:

The EUT was connected to the power mains by using a coupling device that couples the EFT interference signal to AC or DC power lines. Both positive transients and negative transients of test voltage were applied during compliance test and the duration of the test can't less than 2mins.

For signal ports, wired network ports, control ports:

The capacitive coupling clamp was connected to the power by using a coupling device that couples the EFT interference signal to capacitive coupling clamp. Both positive transients and negative

transients of test voltage were applied during compliance test and the duration of the test can't less than 2mins.

9.6. Test result

Test Site: 7#EMC Shield Room	Test Date: 2025/10/16--2025/10/23
Condition: 24°C,41%RH	Test Engineer: Xu Jianhao
Memo: /	

EUT Name: Projector	EUT Model: XR03B
Sample No.: S25090923-003	Test Mode: Bluetooth + 2.4GHz Wi-Fi mode
Power supply: AC 230V/50Hz	Memo: /

Test Burst parameters: Burst Period 300ms, Durations 15ms, Repetition Frequency 5kHz						
Port/ Coupling	Line	Test Voltage	Test time(s)	Required	Observation	Result
AC Mains/ Direct	L	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	N	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	L-N	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	L-PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	N-PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	L-N-PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
Observation Description:						
A: Normal performance within limits specified by the manufacturer requestor or purchaser.						

EUT Name: Projector				EUT Model: XR03B		
Sample No.: S25090923-003				Test Mode: Bluetooth + 5GHz Wi-Fi mode		
Power supply: AC 230V/50Hz				Memo:/		
Test Burst parameters: Burst Period 300ms, Durations 15ms, Repetition Frequency 5kHz						
Port/ Coupling	Line	Test Voltage	Test time(s)	Required	Observation	Result
AC Mains/ Direct	L	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	N	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	L-N	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	L-PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	N-PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
	L-N-PE	+1kV	120	B	A	Pass
		-1kV	120	B	A	Pass
Observation Description:						
A: Normal performance within limits specified by the manufacturer requestor or purchaser.						

EUT Name: Projector			EUT Model: XR03B			
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode			
Power supply: AC 230V/50Hz			Memo:/			
Test Burst parameters: Burst Period 300ms, Durations 15ms, Repetition Frequency 5kHz.						
Port/Coupling	Line	Test Voltage	Test time(s)	Required	Observation	Result
Signal/ Capacitive Clamp	Signal	+0.5kV	120	B	A	Pass
		-0.5kV	120	B	A	Pass
Observation Description:						
A: Normal performance within limits specified by the manufacturer requestor or purchaser.						

9.7. Test photo

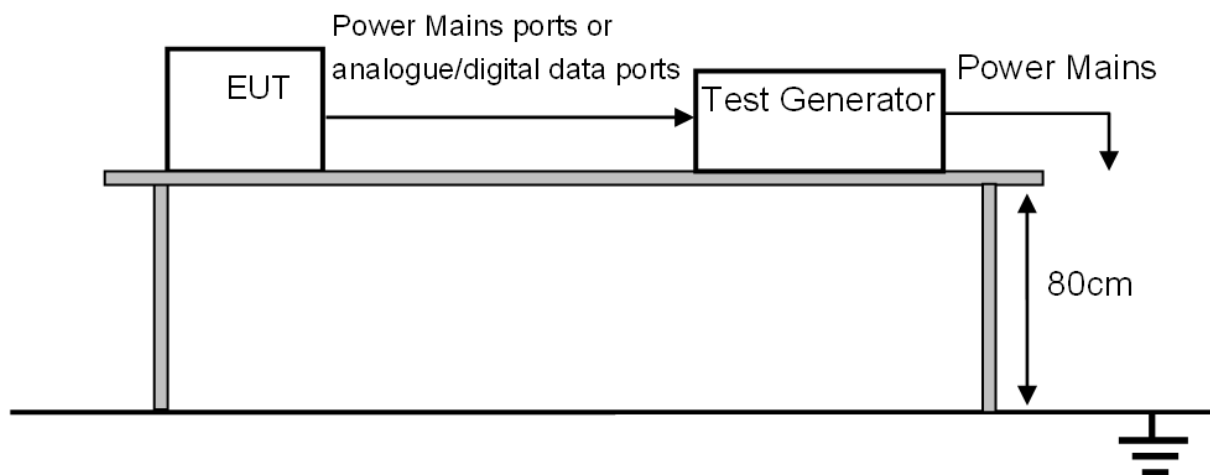


10. Surge

10.1. Test equipment

Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
SURGE Generator	EMC Partner	TRANSIENT2000	DDT-ZC00544	2026/03/28
Surge Coupling Network	EMC Partner	CDN-UTP8 ED3	DDT-ZC00892	2026/07/06
SIGNAL LINE COUPLING NETWORK	TESEQ	CDN 117	DDT-ZC03969	2026/03/28

10.2. Block diagram of test setup



10.3. Test levels and performance criterion

Test level for AC mains ports		Performance Criterion
Line to Line	1 kV 1.2/50(8/20) μ s	B
Line to Ground	2 kV 1.2/50(8/20) μ s	B
Note: In telecom centres 1 kV line to ground and 0,5 kV line to line shall be used.		
Wired network port (outdoor)		Performance Criterion
Line to Ground	1 kV 10/700(5/320) μ s (symmetrically)	B
Line to Ground or Shield to Ground	1 kV 1.2/50(8/20) μ s (non-symmetrically)	B
Line to Line	0.5 kV 1.2/50(8/20) μ s (non-symmetrically)	B
Wired network port (indoor)		Performance Criterion
Line to Ground or Shield to Ground	0.5 kV 1.2/50(8/20) μ s (longer than 30m)	B

Performance criteria B description: During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test. After the test, the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the EUT is used as intended.

10.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Router	Mi	R4A	/	/
Mobile Drive	WD	Elements SE	/	/
Speaker	N/A	Bar 2.0	/	/
Speaker	JBL	JBL GO	/	/
Mobile HDD	WD	WDBUZG0010B BK-EB	/	/
Earphone	N/A	N/A	/	/

10.5. Test procedure

For line-to- nature coupling mode, provide a 1 kV 1.2/50 us voltage surge (at pen-circuit condition) and 8/20 us current surge to EUT selected points.

For line-to- ground coupling mode, provide a 2 kV 1.2/50 us voltage surge (at pen-circuit condition) and 8/20 us current surge to EUT selected points.

At least 5 positive and 5 negative (polarity) tests with a maximum 1-minute repetition rate are applied during test.

Different phase angles are done individually.

For other surge test, each line of internet port to ground coupling mode, provide a combination wave specified above table.

At least 5 positive and 5 negative (polarity) tests with a maximum 1-minute repetition rate are applied during test.

Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

10.6. Test result

Test Site: 1# Surge Room	Test Date: 2025/10/22--2025/10/22
Condition: 22°C,48%RH	Test Engineer: Elosky Liu
Memo: /	

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo:/		
Test wave parameters: Wave Type: 1.2/50us-8/20us; Voltage Phase: 0°, 90°, 180°, 270°; Pulse times: 5 times at each polarity; Pulse Interval: 60s					
Line/Port	Internal impedance	Test Voltage	Required	Observation	Result
L-N	2Ω	+0.5kV	B	A	Pass
	2Ω	-0.5kV	B	A	Pass
L-N	2Ω	+1kV	B	A	Pass
	2Ω	-1kV	B	A	Pass
L-PE	12Ω	+0.5kV	B	A	Pass
	12Ω	-0.5kV	B	A	Pass
N-PE	12Ω	+0.5kV	B	A	Pass
	12Ω	-0.5kV	B	A	Pass
L-PE	12Ω	+1kV	B	A	Pass
	12Ω	-1kV	B	A	Pass
N-PE	12Ω	+1kV	B	A	Pass
	12Ω	-1kV	B	A	Pass
L-PE	12Ω	+2kV	B	A	Pass
	12Ω	-2kV	B	A	Pass
N-PE	12Ω	+2kV	B	A	Pass
	12Ω	-2kV	B	A	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 5GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo:/		
Test wave parameters: Wave Type: 1.2/50us-8/20us; Voltage Phase: 0°, 90°, 180°, 270°; Pulse times: 5 times at each polarity; Pulse Interval: 60s					
Line/Port	Internal impedance	Test Voltage	Required	Observation	Result
L-N	2Ω	+0.5kV	B	A	Pass
	2Ω	-0.5kV	B	A	Pass
L-N	2Ω	+1kV	B	A	Pass
	2Ω	-1kV	B	A	Pass
L-PE	12Ω	+0.5kV	B	A	Pass
	12Ω	-0.5kV	B	A	Pass
N-PE	12Ω	+0.5kV	B	A	Pass
	12Ω	-0.5kV	B	A	Pass
L-PE	12Ω	+1kV	B	A	Pass
	12Ω	-1kV	B	A	Pass
N-PE	12Ω	+1kV	B	A	Pass
	12Ω	-1kV	B	A	Pass
L-PE	12Ω	+2kV	B	A	Pass
	12Ω	-2kV	B	A	Pass
N-PE	12Ω	+2kV	B	A	Pass
	12Ω	-2kV	B	A	Pass
Observation Description:					
A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo:/		
Test wave parameters: Wave Type: 1.2/50us-8/20us; Voltage Phase: N/A; Pulse times: 5 times at each polarity; Pulse Interval: 60s					
Line/Port	Internal impedance	Test Voltage	Required	Observation	Result
Signal	42Ω	+0.5kV	B	A	Pass
	42Ω	-0.5kV	B	A	Pass
Observation Description:					
A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

10.7. Test photo



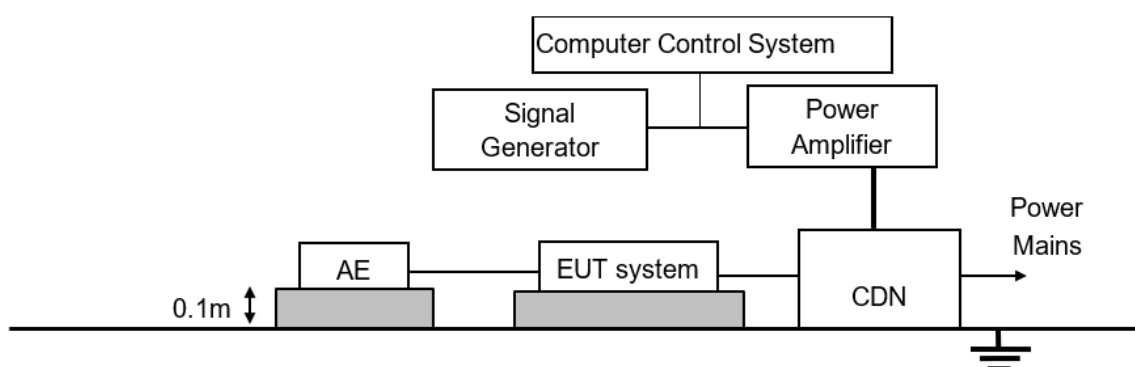
11. Continuous Conducted Disturbances

11.1. Test equipment

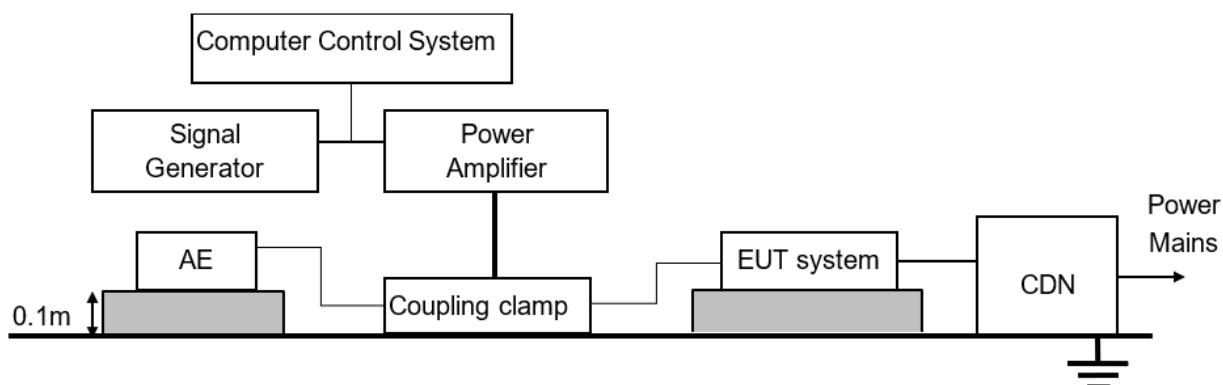
Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
Conducted Immunity Tester	FRANKONIA	CIT-10	DDT-ZC00551	2026/03/28
CDN	SCHWARZBECK	CDN M2/M3PE 16A	DDT-ZC01558	2026/07/06
Attenuation	BIRD	DAM75W (6dB)	DDT-ZC00555	2026/07/06
EM Clamp	FRANKONIA	EMCL	DDT-ZC00556	2026/08/10
CDN	SHANGHAI LIONCEL	CDN-M3-32	DDT-ZC01540	2026/07/06
Test Software	FRANKONIA	IEC/EN61000-4-6	DDT-ZC00564	/
CS Test Software	SKET	EMC-S	DDT-ZC01429	/
CDN	FRANKONIA	CDNT8	DDT-ZC00553	2026/07/06

11.2. Block diagram of test setup

For power port (Note: if the DC network power cable may be lengths greater than 3 m, the requirement is applicable).



For signal/wired network/control ports, if the cables may be longer than 3 m.



11.3. Test levels and performance criterion

Test Level		Performance Criteria
Frequency	0.15 MHz to 80 MHz	A
Field Strength	3V measured unmodulated	
Modulation	AM modulated to a depth of 80% by a sinusoidal audio signal of 400 Hz (see note1)	
Step Size	1% increments	
Dwell time	>0.5 Sec.	

Note 1: If the wanted signal is modulated at 1 kHz, then the test signal of 400 Hz shall be used.

Note 2: This test shall be additionally performed on signal ports, wired network ports, control ports, and DC power ports, of radio equipment and associated ancillary equipment, if the cables may be longer than 3 m.

11.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Router	Mi	R4A	/	/
USB Flash	Kingston	DT101 G2	/	/
Speaker	JBL	JBL GO	/	/
Earphone	N/A	N/A	/	/
Speaker	N/A	Bar 2.0	/	/
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Speaker	Edifier	R1280DBs	/	/

11.5. Test procedure

The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).

The disturbance signal described below is injected to EUT through CDN.

The EUT operates within its operational mode(s) under intended climatic conditions after power on.

The frequency range is swept from 0.15 MHz to 80 MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with sine wave.

Where the frequency is swept incrementally; the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.

Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

11.6. Test result

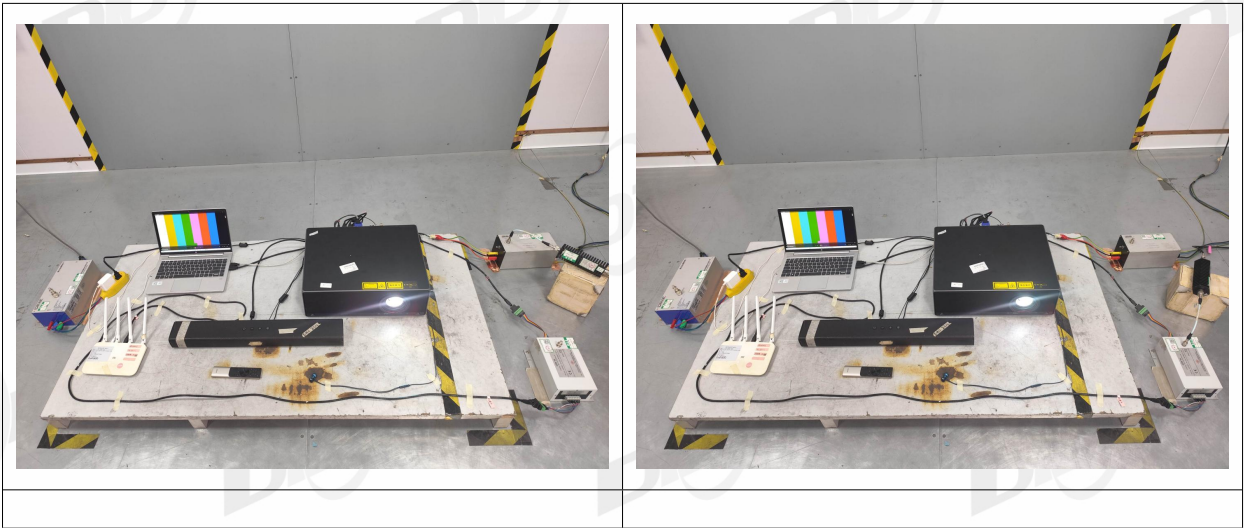
Test Site: 6#EMC Shield Room	Test Date: 2025/10/16--2025/10/23
Condition: 21°C,49%RH	Test Engineer: Bote Huang
Memo: /	

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo: /		
Test steps: 1%, Dwell time 1s, 0.4kHz 80% AM modulation					
④ Test frequency	Injected Position	Strength	Required	Observation	Result
0.15MHz to 80MHz	AC Port	3V	A	A	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

EUT Name: Projector		EUT Model: XR03B			
Sample No.: S25090923-003		Test Mode: Bluetooth + 5GHz Wi-Fi mode			
Power supply: AC 230V/50Hz		Memo:/			
Test steps: 1%, Dwell time 1s, 0.4kHz 80% AM modulation					
Test frequency	Injected Position	Strength	Required	Observation	Result
0.15MHz to 80MHz	AC Port	3V	A	A	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 230V/50Hz			Memo:/		
Test steps: 1%, Dwell time 1s, 0.4kHz 80% AM modulation					
Test frequency	Injected Position	Strength	Required	Observation	Result
0.15MHz to 80MHz	LAN Port	3V	A	A	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser.					

11.7. Test photo

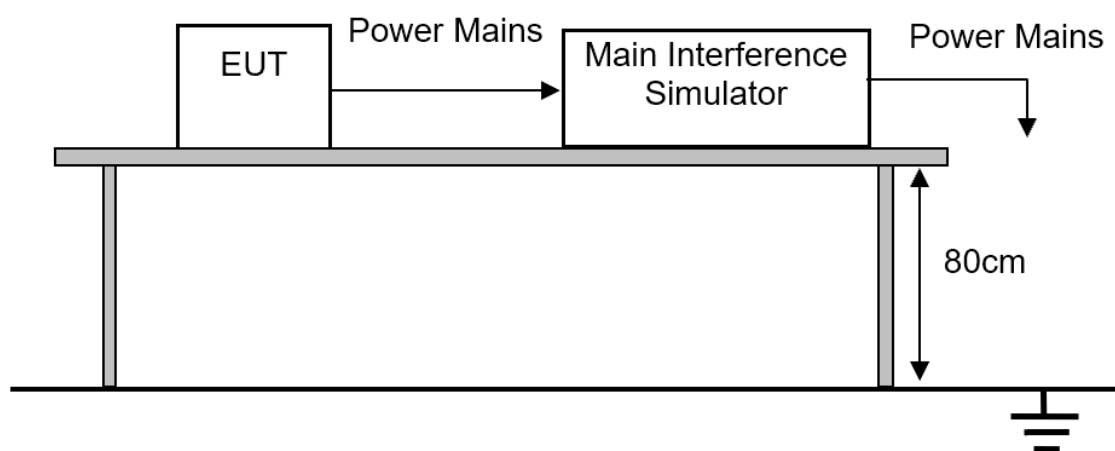


12. Voltage Dips and Interruptions

12.1. Test equipment

Equipment	Manufacturer	Model No.	Equipment No.	Cal. Due to
EFT Generator	EMC Partner	TRA3000F	DDT-ZC00546	2026/03/28
DIPS TESTER	EMC Partner	EXT-TRA3000D	DDT-ZC00548	2026/03/28

12.2. Block diagram of test setup



12.3. Test levels and performance criterion

Test Level %UT	Voltage dip and short interruptions %UT	Duration (in period)	Performance Criterion
0	100	0.5	B
0	100	1	B
70	30	25 for 50 Hz/30 for 60 Hz	C(note)
0	100	250 for 50 Hz/300 for 60 Hz	C

Note: in the case where the equipment is fitted with or connected to a battery back-up, the performance criteria for transient phenomena shall apply as specified in clause 6.2 of ETSI EN 301 489-1.

12.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
Laptop	HP	HP ZHAN 66 Pro A 14 G5	/	/
Speaker	JBL	JBL GO	/	/
USB Flash	Kingston	DT101 G2	/	/
Router	Mi	R4A	/	/
Earphone	N/A	N/A	/	/
Speaker	N/A	Bar 2.0	/	/

12.5. Test procedure

The EUT and test generator were setup as shown. The interruptions are introduced at selected phase angles with specified duration. Record any degradation of performance.

12.6. Test result

Test Site: 7#EMC Shield Room	Test Date: 2025/10/16--2025/10/23
Condition: 24°C,41%RH	Test Engineer: Xu Jianhao
Memo: /	

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 240V/50Hz			Memo: /		
Voltage Dips & Short Interruptions %U _T	Duration (in period)	Phase Angle	Required	Observation	Result
0	0.5P	0° to 360°	B	A	Pass
0	1P	0° to 360°	B	A	Pass
70	25P	0° to 360°	C	A	Pass
0	250P	0° to 360°	C	C	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser. C: During the test, the power supply of the prototype was interrupted and it was necessary for humans to restore it manually after the test was completed.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 2.4GHz Wi-Fi mode		
Power supply: AC 100V/60Hz			Memo: /		
Voltage Dips & Short Interruptions %U _T	Duration (in period)	Phase Angle	Required	Observation	Result
0	0.5P	0° to 360°	B	A	Pass
0	1P	0° to 360°	B	A	Pass
70	30P	0° to 360°	C	A	Pass
0	300P	0° to 360°	C	C	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser. C: During the test, the power supply of the prototype was interrupted and it was necessary for humans to restore it manually after the test was completed.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 5GHz Wi-Fi mode		
Power supply: AC 240V/50Hz			Memo: /		
Voltage Dips & Short Interruptions %U _T	Duration (in period)	Phase Angle	Required	Observation	Result
0	0.5P	0° to 360°	B	A	Pass
0	1P	0° to 360°	B	A	Pass
70	25P	0° to 360°	C	A	Pass
0	250P	0° to 360°	C	C	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser. C: During the test, the power supply of the prototype was interrupted and it was necessary for humans to restore it manually after the test was completed.					

EUT Name: Projector			EUT Model: XR03B		
Sample No.: S25090923-003			Test Mode: Bluetooth + 5GHz Wi-Fi mode		
Power supply: AC 100V/60Hz			Memo: /		
Voltage Dips & Short Interruptions %U _T	Duration (in period)	Phase Angle	Required	Observation	Result
0	0.5P	0° to 360°	B	A	Pass
0	1P	0° to 360°	B	A	Pass
70	30P	0° to 360°	C	A	Pass
0	300P	0° to 360°	C	C	Pass
Observation Description: A: Normal performance within limits specified by the manufacturer requestor or purchaser. C: During the test, the power supply of the prototype was interrupted and it was necessary for humans to restore it manually after the test was completed.					

12.7. Test photo



13. Photos of the EUT

Please refer to Appendix I : DDT-Q25090923-1E

-----End Report-----