EN 55032:2015+A11:2020
EN 55035:2017+A11:2020
EN IEC 61000-3-2:2019+A2:2024
EN 61000-3-3:2013+A2:2021

MEASUREMENT AND TEST REPORT

For

Chengdu Zongheng Intelligence Control Technology Co., Ltd.
No. 1915, Building 888, Yizhou Avenue Middle Section, High-tech Zone, Chengdu

Tested Model: EM300

Report Type: Original Report	**Equipment Name:** Edge Computing gateway
Report Number:	RSC260625002-1
Date of Report Issue:	2026-07-20
Reviewed by:	Sula Huang
Prepared By:	Bay Area Compliance Laboratories Corp. (Chengdu) No.5040, Huilongwan Plaza, No. 1, Shawan Road, Jinniu District, Chengdu, Sichuan, China Tel: +86-28-65525123 www.baclcorp.com.cn

Note: BACL is not responsible for the authenticity of any test data or information provided by the applicant. Test data or information included from the applicant that may affect test results are marked with an asterisk '*'. Do not include Customer model name, addresses, names, trademarks. This report cannot be reproduced except in full, without prior written approval of the company.

TABLE OF CONTENTS

GENERAL INFORMATION **4**
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) 4
OBJECTIVE 4
TEST METHODOLOGY 5
MEASUREMENT UNCERTAINTY 5
SYSTEM TEST CONFIGURATION **7**
JUSTIFICATION 7
EUT EXERCISE SOFTWARE 7
EQUIPMENT MODIFICATIONS 7
SUPPORT TEST DEVICES DESCRIPTION 7
SUPPORT TEST CABLE DESCRIPTION 7
BLOCK DIAGRAM OF TEST SETUP 8
SUMMARY OF TEST RESULTS **10**
PERFORMANCE CRITERIA 10
TEST EQUIPMENT LIST **12**
EN 55032:2015+A11:2020 §A.3 - CONDUCTED EMISSIONS **15**
EUT SETUP 15
EMI TEST RECEIVER SETUP 15
TEST PROCEDURE 16
CORRECTED FACTOR & MARGIN CALCULATION 16
TEST RESULTS SUMMARY 16
TEST DATA 16
TEST SETUP PHOTOGRAPH(S) 22
EN 55032:2015+A11:2020 §A.2 – RADIATED EMISSIONS **24**
EUT SETUP 24
EMI TEST RECEIVER AND SPECTRUM ANALYZER SETUP 25
TEST PROCEDURE 25
CORRECTED AMPLITUDE & MARGIN CALCULATION 25
TEST RESULTS SUMMARY 26
TEST DATA 26
TEST SETUP PHOTOGRAPH(S) 29
EN IEC 61000-3-2:2019+A2:2024- HARMONIC CURRENT EMISSIONS **31**
EN 61000-3-3:2013+A2:2021 - VOLTAGE FLUCTUATION AND FLICKER **32**
TEST SYSTEM SETUP 32
TEST STANDARD 32
TEST DATA 33
TEST SETUP PHOTOGRAPH(S) 34
EN 55035:2017+A11:2020 §5 – ELECTROSTATIC DISCHARGES IMMUNITY TEST **35**
TEST SYSTEM SETUP 35
TEST STANDARD 35
TEST PROCEDURE 36
TEST DATA 37
TEST SETUP PHOTOGRAPH(S) 38
EN 55035:2017+A11:2020 §5 – CONTINUOUS RF ELECTROMAGNETIC FIELD DISTURBANCES IMMUNITY TEST **39**
TEST SYSTEM SETUP 39
TEST STANDARD 39
TEST PROCEDURE 40

TEST DATA 40
TEST SETUP PHOTOGRAPH(S) 41

EN 55035:2017+A11:2020 §5 – ELECTRICAL FAST TRANSIENTS/BURST IMMUNITY TEST 42

TEST SYSTEM SETUP 42
TEST PROCEDURE 42
TEST DATA 43
TEST SETUP PHOTOGRAPH(S) 44

EN 55035:2017+A11:2020 §5 – SURGES IMMUNITY TEST 45

TEST SYSTEM SETUP 45
TEST PROCEDURE 45
TEST DATA 46
TEST SETUP PHOTOGRAPH(S) 47

EN 55035:2017+A11:2020 §5 – CONTINUOUS INDUCED RF DISTURBANCES IMMUNITY TEST 48

TEST SETUP 48
TEST STANDARD 48
TEST PROCEDURE 48
TEST DATA 49
TEST SETUP PHOTOGRAPH(S) 50

EN 55035:2017+A11:2020 §5 – VOLTAGE DIPS AND INTERRUPTIONS IMMUNITY TEST 51

TEST SYSTEM SETUP 51
TEST PROCEDURE 51
TEST DATA 52
TEST SETUP PHOTOGRAPH(S) 52

EXHIBIT A – PRODUCT LABEL 53

LABEL LOCATION ON EUT 53

EXHIBIT B – EUT PHOTOGRAPHS 54

EXHIBIT C – PRODUCT DIFFERENCE DECLARATION* 59

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant	Chengdu Zongheng Intelligence Control Technology Co., Ltd. No. 1915, Building 888, Yizhou Avenue Middle Section, High-tech Zone, Chengdu Email:1414656453@qq.com
Manufacturer	Chengdu Zongheng Intelligence Control Technology Co., Ltd. No. 1915, Building 888, Yizhou Avenue Middle Section, High-tech Zone, Chengdu
Product	Edge Computing gateway
Tested Model(s)	EM300
Multiple Model(s)	EM100, EM500
Highest operating frequency*	1.2GHz
Voltage Range	DC 9-36V (Typical:12V) from AC/DC ADAPTER
Measure approximately	100mm (L)×80mm (W)×53mm (H)
Sample serial number	260625002/01 (assigned by the BACL, Chengdu)
Sample/EUT Status	The test sample was in good condition and received: 2026-06-25

Note: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Objective

The following test report was prepared on behalf of **Chengdu Zongheng Intelligence Control Technology Co., Ltd.** in accordance with EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN IEC 61000-3-2:2019+A2:2024 and EN 61000-3-3:2013+A2:2021.

EN 55032:2015+A11:2020: Electromagnetic compatibility of multimedia equipment - Emission Requirements.

EN 55035:2017+A11:2020: Electromagnetic compatibility of multimedia equipment - Immunity requirements.

EN IEC 61000-3-2:2019+A2:2024: Electromagnetic compatibility (EMC) Part 3-2: Limits for harmonic current emissions (equipment input current up to and including 16A phase).

EN 61000-3-3:2013+A2:2021: Electromagnetic compatibility (EMC) Part 3-3: Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16A per phase and subject to conditional connection.

The objective of the manufacture is to determine compliance with EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN IEC 61000-3-2:2019+A2:2024 and EN 61000-3-3:2013+A2:2021.

Test Methodology

All measurements contained in this report were conducted with CISPR 16-2-3:2016+AMD1:2019, Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements.

CISPR 16-2-1:2014+AMD1:2017, Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements.

Measurement Uncertainty

Item			Uncertainty	U_{cispr}
Power line conducted emission			2.95 dB	3.4 dB
Signal line conducted emission			3.07 dB	5.0 dB
Radiated Emission	30MHz-1GHz	H	5.32 dB	6.3 dB
		V	6.36 dB	6.3 dB
	1GHz-6GHz		5.75 dB	5.2 dB

ESD

Parameters	U_{lab}	U_{EN}
Rise time t_r	15 %	≤ 15 %
Peak current I_p	6.3%	≤ 7 %
Current at 30 ns	6.3%	≤ 7 %
Current at 60 ns	6.3%	≤ 7 %
U_{lab} (measurement uncertainty of lab) U_{EN} (measurement uncertainty of EN 61000-4-2)		

EFT

Parameters	U_{lab}	U_{EN}
Rise time (t_r)	6.2 %	6.2 %
Peak voltage value (V_P)	8.6 %	8.6 %
Voltage pulse width (t_w)	5.9%	5.9%
U_{lab} (measurement uncertainty of lab) U_{EN} (measurement uncertainty of EN 61000-4-4)		

Surge

Parameters	U_{lab}	U_{EN}
Open-circuit voltage front time (T_{fV})	13.3 % or 0.16μs	13.3 % or 0.16μs
Open-circuit voltage peak value (V_P)	8.6 %	8.6 %
Open-circuit voltage duration (T_d)	0.6% or 0.3μs	0.6% or 0.3μs
U_{lab} (measurement uncertainty of lab) U_{EN} (measurement uncertainty of EN 61000-4-5)		

Radiated Immunity (RS)

Parameters	U_{lab}	U_{EN}
Calibration process	1.88 dB	1.88 dB
Level setting	2.19 dB	2.19 dB
U_{lab} (measurement uncertainty of lab) U_{EN} (measurement uncertainty of EN 61000-4-3)		

Conducted Immunity (CS)-CDN

Parameters	U_{lab}	U_{EN}
CDN level setting process	1.27 dB	1.27 dB
CDN test process	1.36 dB	1.36 dB
U_{lab} (measurement uncertainty of lab) U_{EN} (measurement uncertainty of EN 61000-4-6)		

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the corresponding inclusion factor K when the inclusion probability is about 95%.

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

Test Mode: Running (WAN+ LAN link to access point)

Note: The device is power supplied by AC/DC Adapter. And it is intend for EU market.
So only 230VAC/50Hz was done and recorded in report.

EUT Exercise Software

No.

Equipment Modifications

No any modification was made by BACL.

Support Test Devices Description

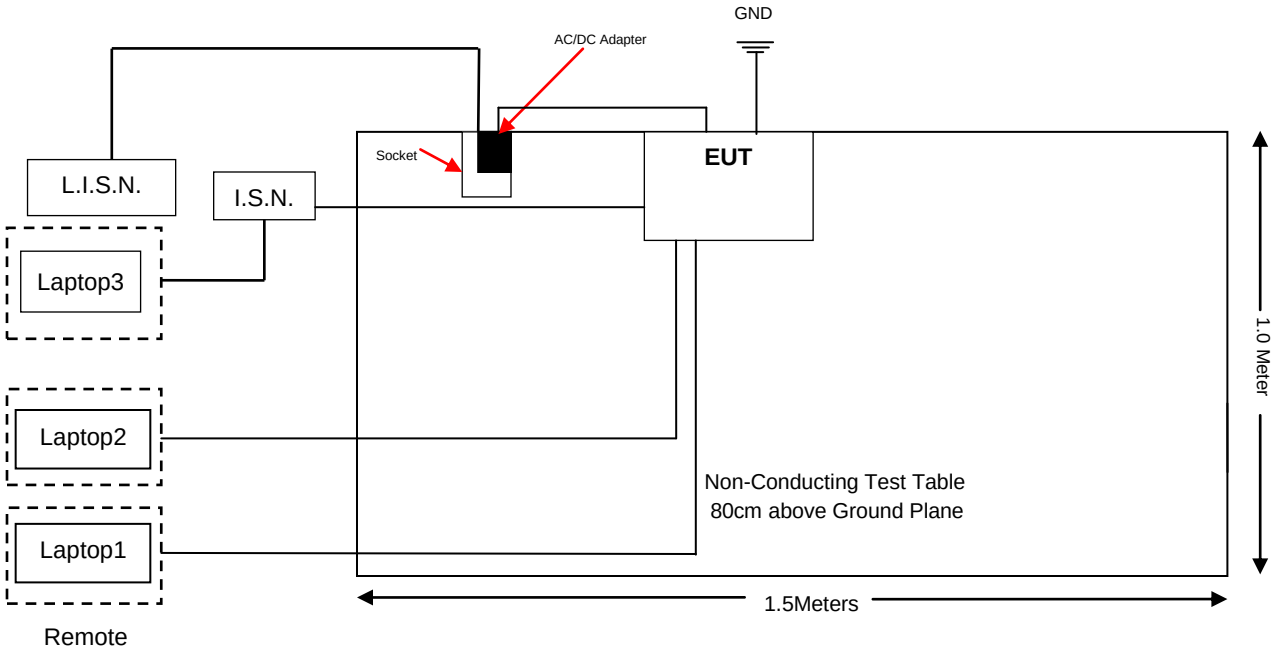
Manufacturer	Device Name	Model	Serial Number
Local			
HIENT POWER Technology Co,Ltd	AC/DC Adapter	HA10122A-120	0126
Remote			
Lenovo	Laptop 1	TP00081B	LR-08F93S
Lenovo	Laptop 2	L540	00330-50000-00000-AAOEM
Lenovo	Laptop 3	T460S	TP00072A

Support Test Cable Description

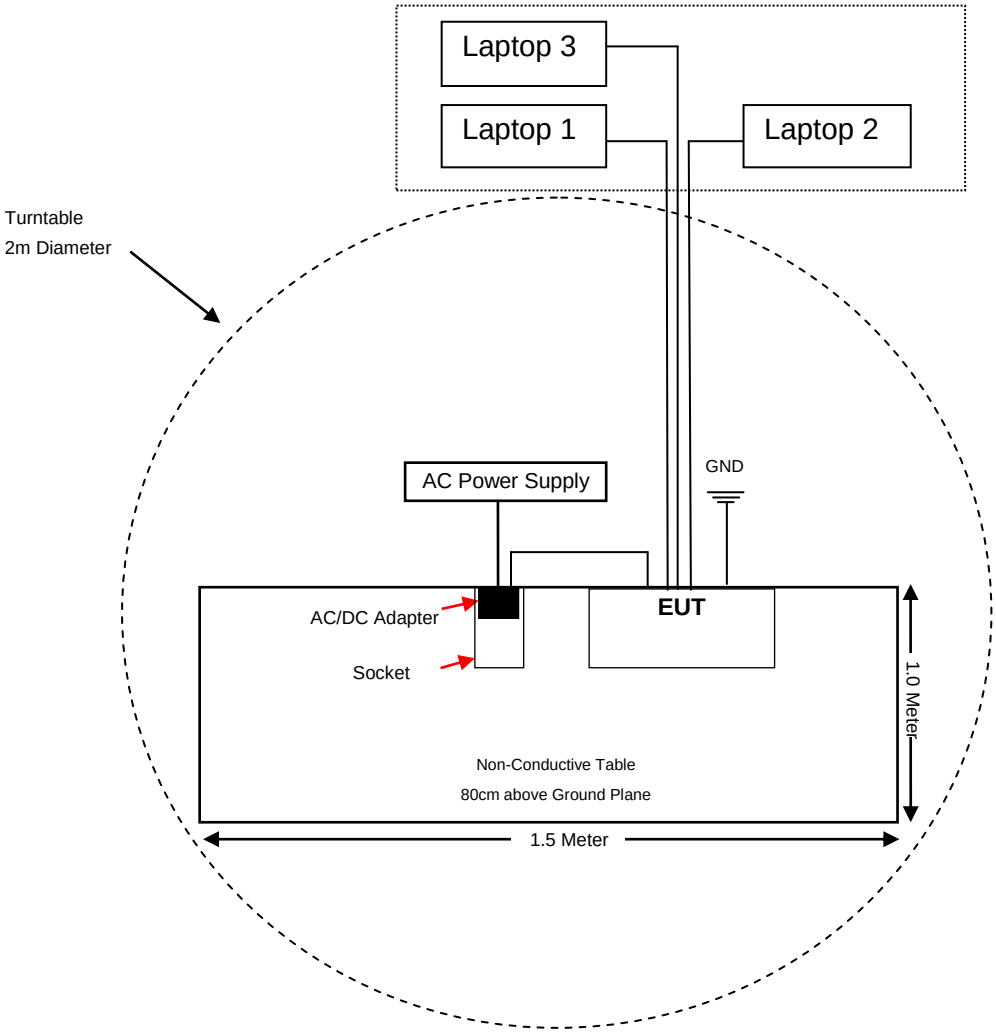
Cable Description	Length (m)	From / Port	To
Unshielded DC Power Cable	1.5	EUT	AC/DC Adapter
Unshielded RJ45 Cable	1.5/10	EUT	ISN/Laptop 3
Unshielded RJ45 Cable	10	EUT	Laptop 2
Unshielded RJ45 Cable	10	EUT	Laptop 1

Block Diagram of Test Setup

Conducted Emission:



Radiated Emission：



SUMMARY OF TEST RESULTS

EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN IEC 61000-3-2:2019+A2:2024 and EN 61000-3-3:2013+A2:2021

Rule	Description	Result
EN 55032:2015+A11:2020 §A.3	Conducted Emissions Test	Compliant
EN 55032:2015+A11:2020 §A.2	Radiated Emissions Test	Compliant
EN IEC 61000-3-2:2019+A2:2024	Harmonic current Emissions	Compliant
EN 61000-3-3:2013+A2:2021	Voltage Fluctuation and Flicker	Compliant
EN 55035:2017+A11:2020 §5	Electrostatic Discharge Immunity Test	Compliant
EN 55035:2017+A11:2020 §5	Continuous RF Electromagnetic Field Disturbances Immunity Test	Compliant
EN 55035:2017+A11:2020 §5	Electrical Fast Transients/Burst Immunity Test	Compliant
EN 55035:2017+A11:2020 §5	Surges Immunity Test	Compliant
EN 55035:2017+A11:2020 §5	Continuous Induced RF Disturbances Immunity Test	Compliant
EN 55035:2017+A11:2020 §5	Power Frequency Magnetic Field Immunity Test	N/A
EN 55035:2017+A11:2020 §5	Voltage Dips and Interruptions Immunity Test	Compliant

N/A: The equipment without containing devices intrinsically susceptible to magnetic fields.

Note: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Performance Criteria

Immunity requires the following as specific performance criteria:
Performance criterion A:
The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment is used as intended.
The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Performance criterion B:
During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test.

After the test, the equipment shall continue to operate as intended without operator intervention; no degradation of performance or loss of function is allowed, below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance.

If the minimum performance level (or the permissible performance loss), or recovery time, is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.

Performance criterion C:

Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed.

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

TEST EQUIPMENT LIST

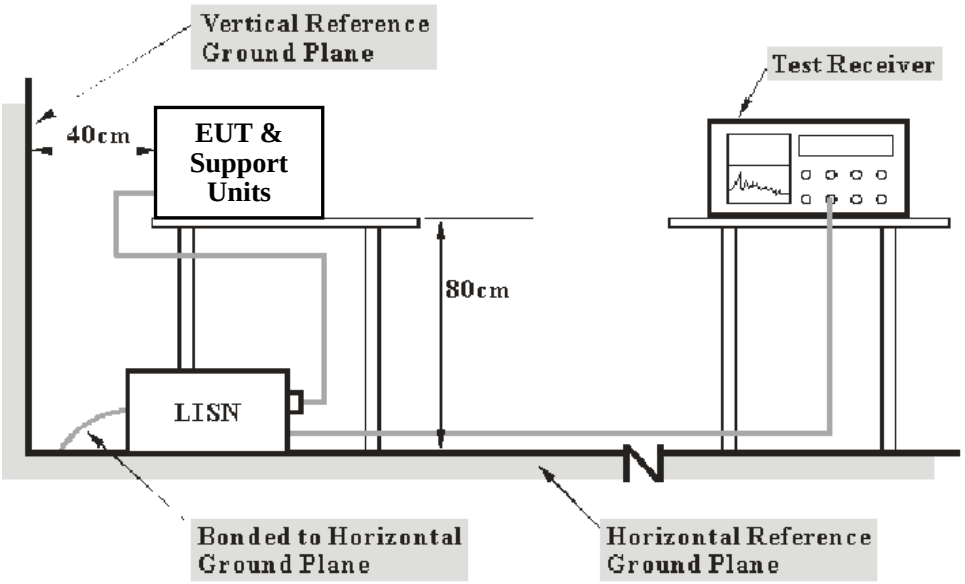
Manufacturer	Description	Model Number	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2026-03-17	2027-03-16
Rohde & Schwarz	L.I.S.N.	ENV216	101112	2026-03-17	2027-03-16
HP	RF Limiter	11947A	3107A01270	2025-08-03	2026-08-02
UTIFLEX	Conducted Cable	L-E-003	000003	2025-10-27	2026-10-26
Rohde & Schwarz	8-WIRE ISN	ENY81	100453	2025-07-31	2026-07-30
Rohde & Schwarz	EMC32	EMC32	V 8.52.0	NCR	NCR
Radiated Emissions Test（below 1GHz）					
EMCT	Semi-Anechoic Chamber	966	001	2025-07-30	2028-07-29
Sonoma Instrument	Pre-Amplifier	310N	185444	2025-10-27	2026-10-26
Sunol Sciences	Broadband Antenna	JB3	A121808	2026-01-23	2027-01-22
INMET	Attenuator	18N-6dB	64671	2026-01-23	2027-01-22
Rohde & Schwarz	EMI Test Receiver	ESR3	102456	2026-03-17	2027-03-16
Huber+Suhener	RF Cable (Below 1GHz)	L-E-015	MY4345/EA	2025-07-31	2026-07-30
Xin Hang Xun Wei Bo	RF Cable (Below 1GHz)	XH500A-N/J-N/J -2M-A	T-E271	2025-07-31	2026-07-30
Xin Hang Xun Wei Bo	RF Cable (Below 1GHz)	XH500A-N/J-N/J -7M-A	T-E268	2025-07-31	2026-07-30
Rohde & Schwarz	EMC32	EMC32	V9.10.00	NCR	NCR
Radiated Emissions Test（above 1GHz）					
EMCT	Semi-Anechoic Chamber	966	001	2025-07-30	2028-07-29
Rohde & Schwarz	Signal Analyzer	FSV40	101943	2026-03-17	2027-03-16
EMCO	Horn Antenna	3115	2192	2025-08-26	2026-08-25
A.H. Systems, inc.	Pre-Amplifier	PAM-0118P	509	2025-10-27	2026-10-26
Xin Hang Xun Wei Bo	RF Cable (Above 1GHz)	XH500A-SMA/J -N/J-2M-A	L-E-016	2025-07-31	2026-07-30
Xin Hang Xun Wei Bo	RF Cable (Above 1GHz)	XH500A-SMA/J -N/J-5M-A	L-E-017	2025-07-31	2026-07-30
Rohde & Schwarz	EMC32	EMC32	V9.10.00	NCR	NCR
Harmonic & Flicker Test					
BACL	643 Shielded Room	6.0mx4.0mx3.0m	004	2025-07-30	2028-07-29
EM Test	Harmonic/Flicker Analyzer	DPA500	0604-01	2026-03-17	2027-03-16
EM Test	AC Source	ACS500S1	0601-02	2025-07-31	2026-07-30
EM Test	Test Software	dpa.control	V5.4.5.0	NCR	NCR

Manufacturer	Description	Model Number	Serial Number	Calibration Date	Calibration Due Date
ESD Test					
Schaffner	ESD Generator	NSG435	005911	2025-07-31	2026-07-30
EFT Test					
BACL	643 Shielded Room	6.0mx4.0mx3.0m	004	2025-07-30	2028-07-29
EM Test	Ultra-Compact Generator	UCS 500N5	V1102108299	2025-07-31	2026-07-30
EM Test	Auto-transformer	V4780 S2	0711-100	2026-03-17	2027-03-16
EM Test	Capacitive coupling pliers	EFTC	309620	2025-07-31	2026-07-30
EM Test	Test Software	iec.control	5.1.3.0	NCR	NCR
Continuous RF Electromagnetic Field Disturbances Immunity Test					
BACL	Semi-Anechoic Chamber	8.0mx4.0mx3.0m	001	2025-07-30	2028-07-29
OPHIR RF	RF Power Amplifier (Below 1GHz)	5225FE	1013	2025-07-31	2026-07-30
A&R	Log-Periodic Antenna (Below 1GHz)	ATL80M1G	0350121	NCR	NCR
A&R	RF Power Amplifier (Above 1GHz)	60S1G6	0349443	NCR	NCR
AR	Wideband Trapezoidal Log-Periodic Antenna	ATT700M12G	0349409	NCR	NCR
HP	Signal Generator	8665B	3315A00457	2026-03-17	2027-03-16
Werlatone	Directional Coupler (Below 1ghz)	C5982-14	116141	NCR	NCR
Werlatone	Directional Coupler (Above 1ghz)	C10117-14	116228	NCR	NCR
Agilent	EPM series power meter	E4418B	US39402020	2025-07-31	2026-07-30
Agilent	Power Sensor	8481A	MY41094391	2025-07-31	2026-07-30
ETS	Field intensity probe	HI-6005	00205859	2023-11-09	2026-11-08
Xin Hang Wei Bo	Flexible microwave cable	XH800B-N/J-N/J -1.5M (Below 1GHz)	L-E-018	NCR	NCR
Xin Hang Wei Bo	Flexible microwave cable	XH800B-N/J-N/J-4M (Below 1GHz)	L-E-020	NCR	NCR
Xin Hang Wei Bo	Flexible microwave cable	XH800B-N/J-N/J -1.5M (Above 1GHz)	L-E-019	NCR	NCR
Xin Hang Wei Bo	Flexible microwave cable	XH800B-N/J-N/J-6M (Above 1GHz)	L-E-021	NCR	NCR
BACL	Test Software	IEC 61000-4-3&6	V2.7.6	NCR	NCR

Manufacturer	Description	Model Number	Serial Number	Calibration Date	Calibration Due Date
Surge Test					
BACL	643 Shielded Room	6.0mx4.0mx3.0m	004	2025-07-30	2028-07-29
EM Test	Ultra-Compact Generator	UCS 500N5	V1102108299	2025-07-31	2026-07-30
EM Test	Auto-transformer	V4780 S2	0711-100	2026-03-17	2027-03-16
EM Test	Coupling network	CNV 508A	V0651102107	2026-03-17	2027-03-16
EM Test	Test Software	iec.control	5.1.3.0	NCR	NCR
BACL	643 Shielded Room	6.0mx4.0mx3.0m	004	2025-07-30	2028-07-29
Continuous Induced RF Disturbances Immunity Test					
BACL	643 Shielded Room	6.0mx4.0mx3.0m	004	2025-07-30	2028-07-29
HP	Signal Generator	8648C	3623A04150	2026-03-17	2027-03-16
Amplifier Research	Power Amplifier	25A250AM6	309682	2025-07-31	2026-07-30
AR	Attenuator	6dB	303283	2025-07-31	2026-07-30
FCC	Coupling/Decoupling Network	CDN FCC-801 -M3-16A	05028	2025-07-31	2026-07-30
COM-POWER	CDN	CDN-T8E	34250007	2026-03-17	2027-03-16
Agilent	EPM series power meter	E4419B	GB41293778	2025-07-31	2026-07-30
Agilent	Power Sensor	8482A	US37295303	2025-07-31	2026-07-30
Osr Broadcast Research	High power Directional Coupler	C21AB	0463	NCR	NCR
BACL	Test Software	IEC 61000-4-3&6	V2.7.6	NCR	NCR
Dips/Interruption Test					
BACL	643 Shielded Room	6.0mx4.0mx3.0m	004	2025-07-30	2028-07-29
EM Test	Ultra-Compact Generator	UCS 500N5	V1102108299	2025-07-31	2026-07-30
EM Test	Auto-transformer	V4780 S2	0711-100	2026-03-17	2027-03-16
EM Test	Test Software	iec.control	5.1.3.0	NCR	NCR

EN 55032:2015+A11:2020 §A.3 - CONDUCTED EMISSIONS

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with CISPR 16-2-1:2014 +AMD1:2017 measurement procedure. The specification used was the EN 55032:2015+A11:2020 Class A limits.

All units of equipment forming the system under test (including the EUT, connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation was achieved between the neighbouring units.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance using all installation combination.

All data was recorded in the Quasi-peak and average detection mode.

Corrected Factor & Margin Calculation

The basic equation is as follows:

$V_C = V_R + A_C + VDF$

Herein,
V_C: corrected voltage amplitude
V_R: reading voltage amplitude
A_c: attenuation caused by cable loss
VDF: voltage division factor of AMN or ISN

The "**Margin**" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the recorded data in following table, the EUT complied with the EN 55032:2015+A11:2020 Class A Limits.

Test Data

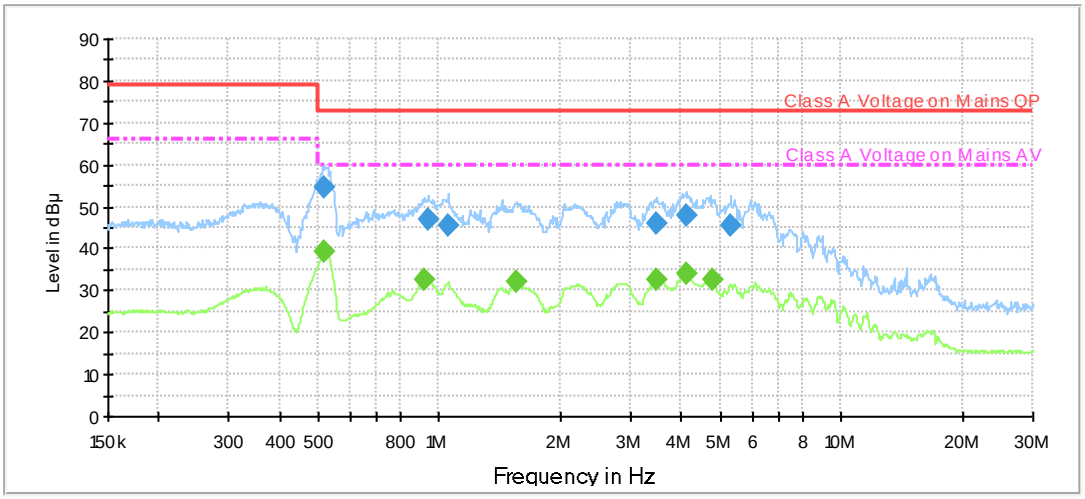
Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	95.0 kPa

The testing was performed by Sam Yuan on 2026-07-15.

Test Mode: Running (WAN+ LAN link to access point)

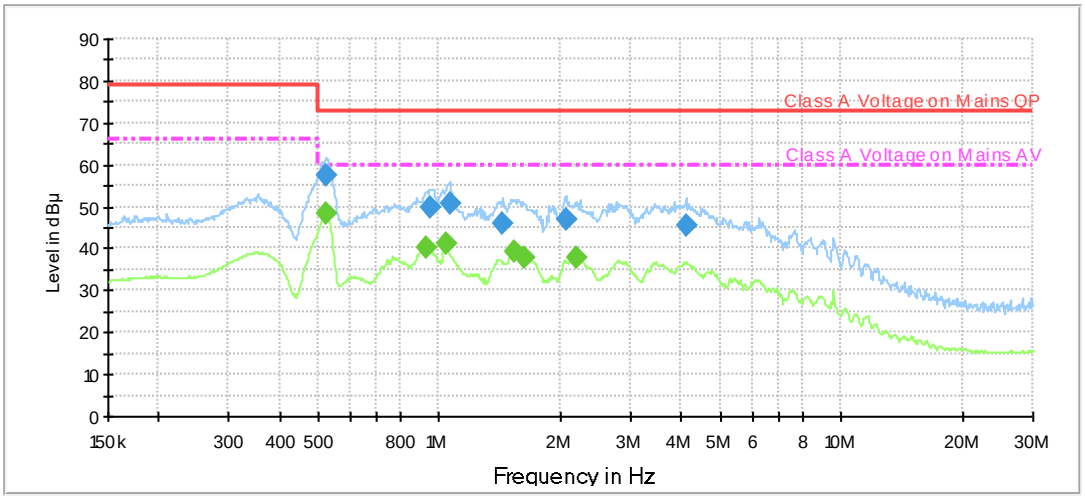
AC 230V/50Hz, Line:



Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.516743	54.7	5000.0	9.000	On	L1	20.6	18.3	73.0
0.940161	47.0	5000.0	9.000	On	L1	20.8	26.0	73.0
1.054440	45.6	5000.0	9.000	On	L1	20.9	27.4	73.0
3.473045	45.9	5000.0	9.000	On	L1	20.9	27.1	73.0
4.114874	47.7	5000.0	9.000	On	L1	20.9	25.3	73.0
5.306714	45.3	5000.0	9.000	On	L1	20.9	27.7	73.0

Frequency (MHz)	CAverage (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.516743	39.4	5000.0	9.000	On	L1	20.6	20.6	60.0
0.921591	32.7	5000.0	9.000	On	L1	20.8	27.3	60.0
1.563654	32.3	5000.0	9.000	On	L1	20.9	27.7	60.0
3.455767	32.7	5000.0	9.000	On	L1	20.9	27.3	60.0
4.114874	34.0	5000.0	9.000	On	L1	20.9	26.0	60.0
4.779015	32.6	5000.0	9.000	On	L1	20.9	27.4	60.0

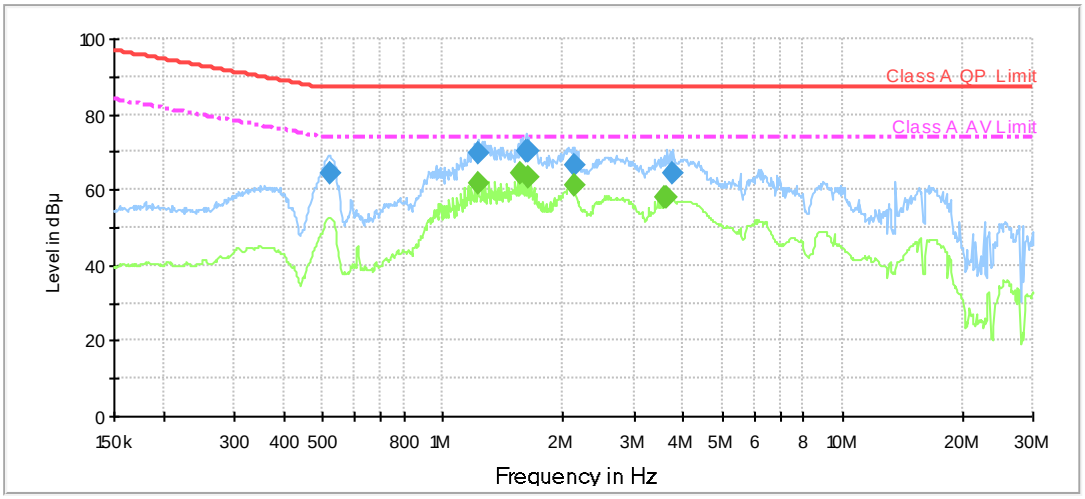
AC 230V/50Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.521924	57.6	5000.0	9.000	On	N	20.7	15.4	73.0
0.954334	49.7	5000.0	9.000	On	N	20.8	23.3	73.0
1.065010	50.6	5000.0	9.000	On	N	20.8	22.4	73.0
1.443722	46.0	5000.0	9.000	On	N	20.9	27.0	73.0
2.067474	46.7	5000.0	9.000	On	N	20.9	26.3	73.0
4.114874	45.5	5000.0	9.000	On	N	20.9	27.5	73.0

Frequency (MHz)	CAverage (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.521924	48.2	5000.0	9.000	On	N	20.7	11.8	60.0
0.926199	40.4	5000.0	9.000	On	N	20.8	19.6	60.0
1.043974	41.2	5000.0	9.000	On	N	20.8	18.8	60.0
1.540431	39.2	5000.0	9.000	On	N	20.9	20.8	60.0
1.635442	37.7	5000.0	9.000	On	N	20.9	22.3	60.0
2.184071	37.8	5000.0	9.000	On	N	20.9	22.2	60.0

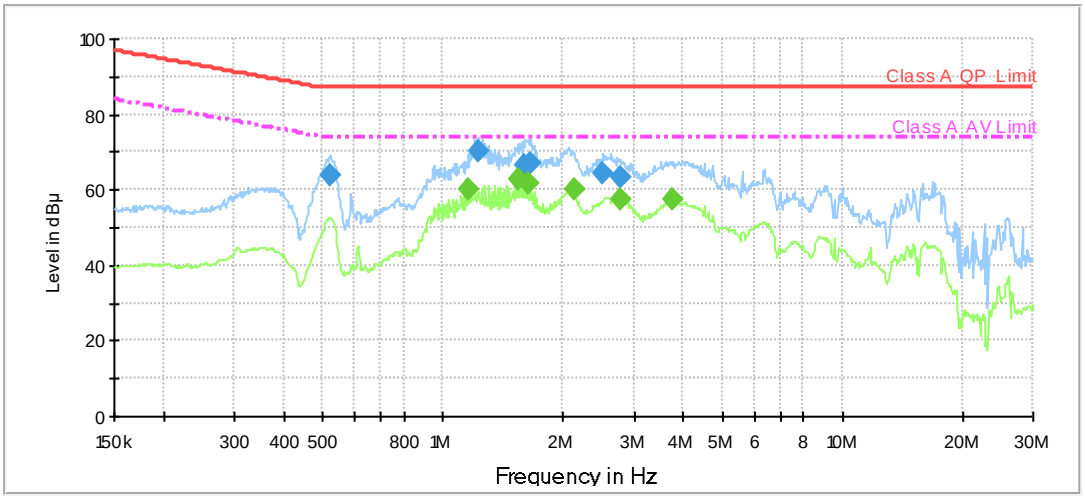
LAN1 port_100Mbps:



Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.521924	64.4	5000.0	9.000	On	19.7	22.6	87.0
1.224626	69.4	5000.0	9.000	On	19.7	17.6	87.0
1.611154	70.2	5000.0	9.000	On	19.7	16.8	87.0
1.635442	70.3	5000.0	9.000	On	19.7	16.7	87.0
2.130279	66.3	5000.0	9.000	On	19.7	20.7	87.0
3.761555	64.3	5000.0	9.000	On	19.7	22.7	87.0

Frequency (MHz)	CAverage (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Corr. (dB)	Margin (dB)	Limit (dBµ V)
1.224626	61.5	5000.0	9.000	On	19.7	12.5	74.0
1.563654	64.3	5000.0	9.000	On	19.7	9.7	74.0
1.635442	63.3	5000.0	9.000	On	19.7	10.7	74.0
2.130279	61.4	5000.0	9.000	On	19.7	12.6	74.0
3.578548	57.9	5000.0	9.000	On	19.7	16.1	74.0
3.632495	58.2	5000.0	9.000	On	19.7	15.8	74.0

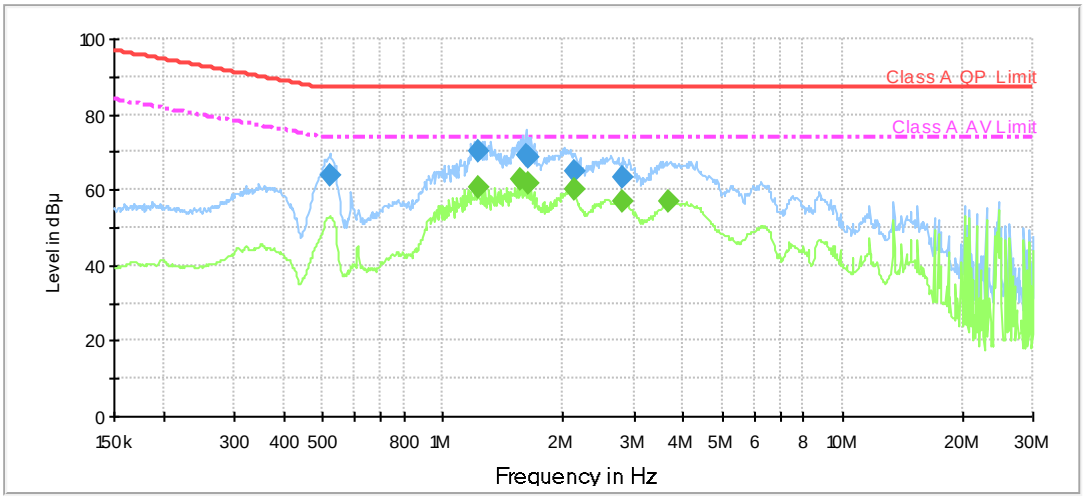
LAN 2 port_100Mbps:



Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.521924	63.9	5000.0	9.000	On	19.7	23.1	87.0
1.224626	70.4	5000.0	9.000	On	19.7	16.6	87.0
1.603138	66.5	5000.0	9.000	On	19.7	20.5	87.0
1.660096	67.2	5000.0	9.000	On	19.7	19.8	87.0
2.511403	64.2	5000.0	9.000	On	19.7	22.8	87.0
2.774838	63.4	5000.0	9.000	On	19.7	23.6	87.0

Frequency (MHz)	CAverage (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Corr. (dB)	Margin (dB)	Limit (dBµ V)
1.153482	60.1	5000.0	9.000	On	19.7	13.9	74.0
1.540431	62.6	5000.0	9.000	On	19.7	11.4	74.0
1.635442	61.7	5000.0	9.000	On	19.7	12.3	74.0
2.130279	60.2	5000.0	9.000	On	19.7	13.8	74.0
2.774838	57.3	5000.0	9.000	On	19.7	16.7	74.0
3.761555	57.5	5000.0	9.000	On	19.7	16.5	74.0

WAN port_100Mbps:



Frequency (MHz)	QuasiPeak (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Corr. (dB)	Margin (dB)	Limit (dBµ V)
0.521924	64.0	5000.0	9.000	On	19.7	23.0	87.0
1.224626	70.1	5000.0	9.000	On	19.7	16.9	87.0
1.611154	69.0	5000.0	9.000	On	19.7	18.0	87.0
1.635442	68.5	5000.0	9.000	On	19.7	18.5	87.0
2.140930	65.1	5000.0	9.000	On	19.7	21.9	87.0
2.830753	63.3	5000.0	9.000	On	19.7	23.7	87.0

Frequency (MHz)	CAverage (dBµ V)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Corr. (dB)	Margin (dB)	Limit (dBµ V)
1.224626	60.6	5000.0	9.000	On	19.7	13.4	74.0
1.563654	62.6	5000.0	9.000	On	19.7	11.4	74.0
1.635442	61.7	5000.0	9.000	On	19.7	12.3	74.0
2.130279	60.0	5000.0	9.000	On	19.7	14.0	74.0
2.816669	57.0	5000.0	9.000	On	19.7	17.0	74.0
3.668911	56.8	5000.0	9.000	On	19.7	17.2	74.0

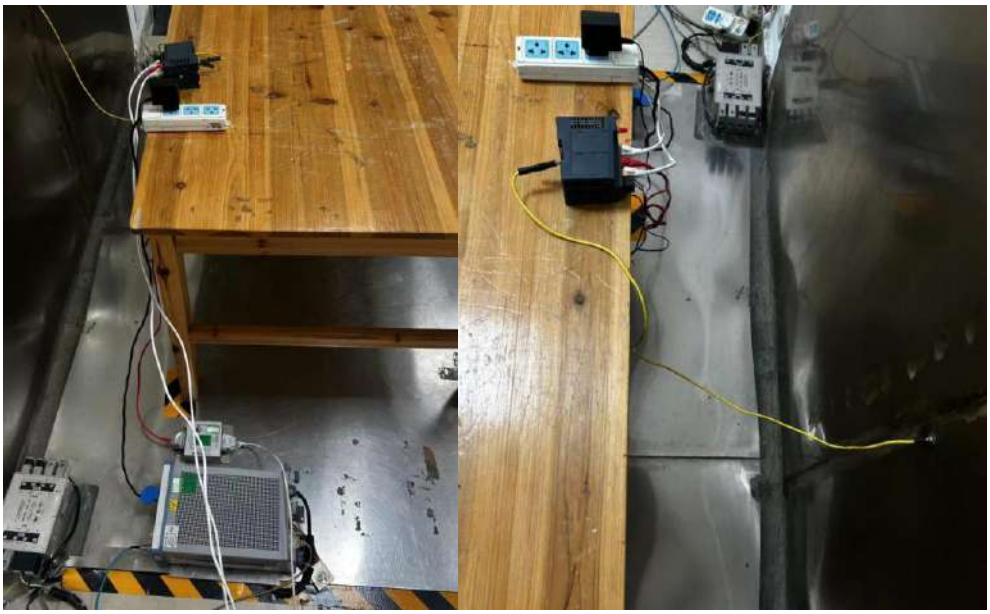
Note:
1) Correction Factor =LISN VDF (Voltage Division Factor) + Cable Loss + Transient Limiter Attenuation
The corrected factor has been input into the transducer of the test software.
2) Corrected Amplitude = Reading + Correction Factor (The reading was calculated auto by test software and no reading indicated in data table)
3) Margin = Limit – Corrected Amplitude(QuasiPeak or CAverage)

Test Setup Photograph(s)

AC 230V/50Hz

Conducted Emissions Test Setup Front View

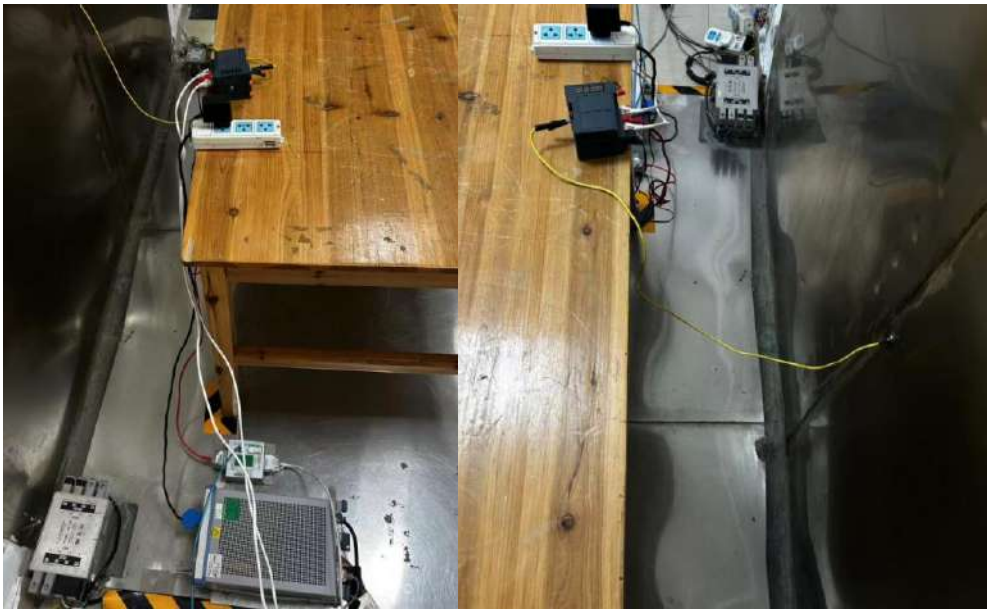
Conducted Emissions Test Setup Side View



LAN/WAN Port(s):

Conducted Emissions Test Setup Front View

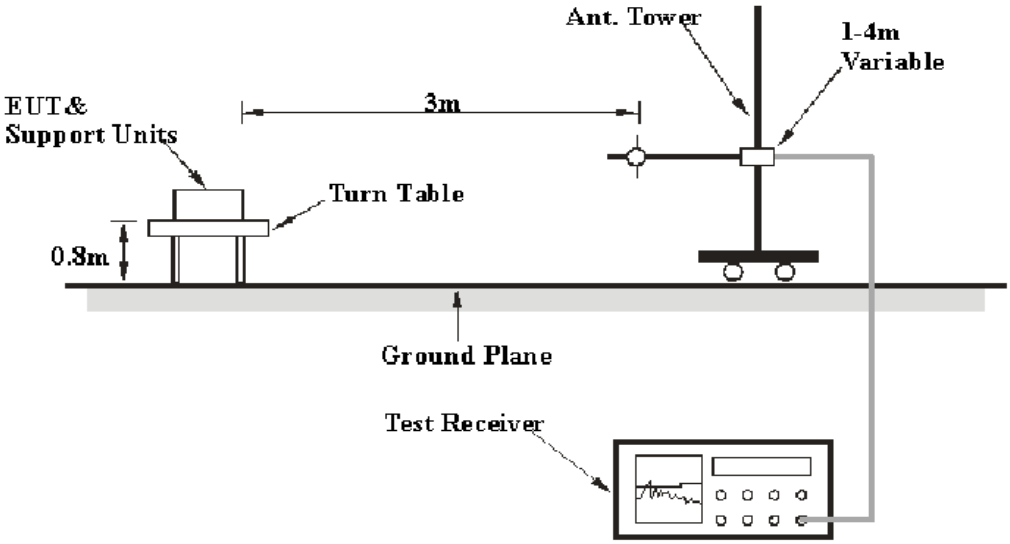
Conducted Emissions Test Setup Side View



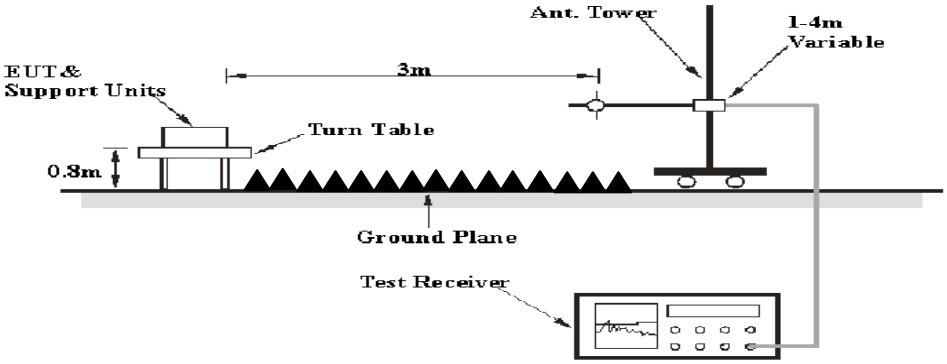
EN 55032:2015+A11:2020 §A.2 – RADIATED EMISSIONS

EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emissions tests were performed in the 3 meter semi anechoic chamber, using the setup accordance with the CISPR 16-2-3:2016+AMD1:2019 .The specification used was EN 55032:2015+A11:2020 Class A limits.

All units of equipment forming the system under test (including the EUT, connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation was achieved between the neighbouring units.

EMI Test Receiver and Spectrum Analyzer Setup

The system was investigated from 30 MHz to 6 GHz.

During the radiated emissions test, the EMI test receiver or Spectrum Analyzer was set with the following configurations:

Frequency Range	RBW	Video B/W	Detector
30 MHz – 1000 MHz	120 kHz	500 kHz	PK
	120 kHz	/	QP

Frequency Range	RBW	Video B/W	Measurement	Detector
Above 1GHz	Pre-scan			
	1 MHz	3 MHz	PK	PK
	1 MHz	3 MHz	AV	AV
	Final measurement			
	1 MHz	/	PK	PK
	1 MHz	/	AV	CAV

If the maximized peak measured value complies with under the QP/Average limit more than 10dB, then it is unnecessary to perform an QP/Average measurement.

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the Quasi-peak detection mode from 30 MHz to 1GHz.
Peak and average detection mode above 1 GHz.

The EUT was in the normal (native) mode during the final qualification test to represent the worst case results.

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the receiver reading value. The basic equation is as follows:

Corrected Amplitude = Reading Value + Antenna Factor + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit.
The equation for margin calculation is as follows:

Margin = Limit - Corrected Amplitude

Test Results Summary

According to the data in the following table, the EUT complied with the EN 55032:2015+A11:2020 Class A Limits.

Test Data

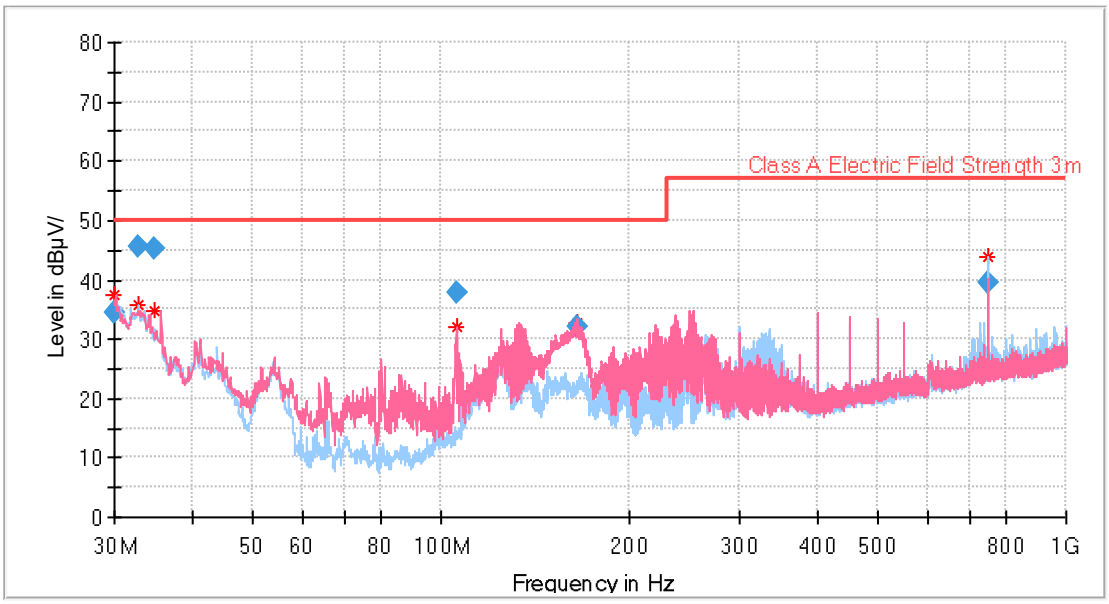
Test Environment Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	95 kPa

The testing was performed by Sam Yuan on 2026-07-15.

Test Mode: Running (WAN+ LAN link to access point)

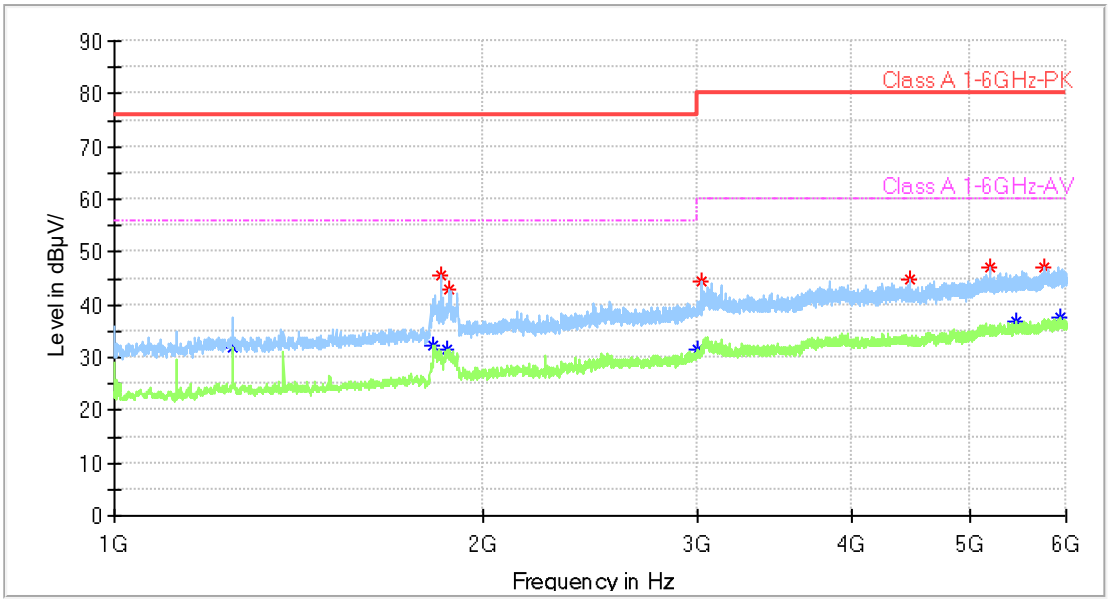
Below 1GHz:



Frequency (MHz)	QuasiPeak (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.021134	34.40	50.00	15.60	10000.0	120.000	103.0	V	169.0	-4.8
32.814400	45.47	50.00	4.53	10000.0	120.000	151.0	H	344.0	-6.9
34.648600	45.34	50.00	4.66	10000.0	120.000	167.0	V	351.0	-8.0
106.162600	37.92	50.00	12.08	10000.0	120.000	127.0	V	169.0	-14.3
164.542000	31.95	50.00	18.05	10000.0	120.000	103.0	V	41.0	-13.5
749.979600	39.64	57.00	17.36	10000.0	120.000	132.0	H	236.0	-3.1

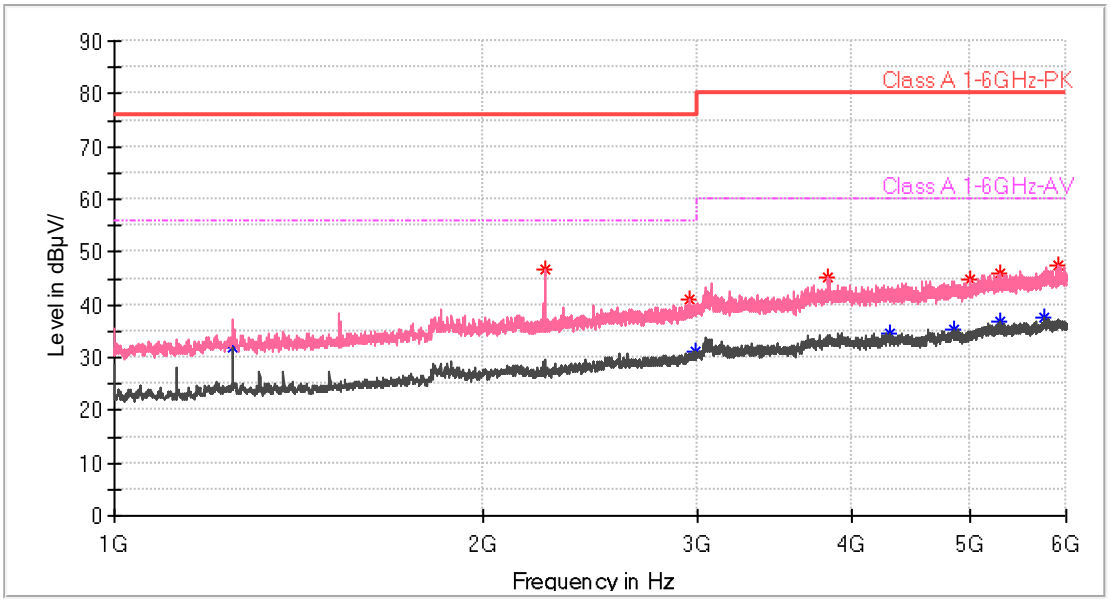
Above 1GHz:

Horizontal



Frequency (MHz)	MaxPeak (dBµ V/m)	Average (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1250.000000	---	31.99	56.00	24.01	150.0	H	16.0	-15.1
1824.500000	---	32.36	56.00	23.64	100.0	H	224.0	-12.7
1851.500000	45.55	---	76.00	30.45	100.0	H	150.0	-12.1
1873.500000	---	31.52	56.00	24.48	100.0	H	215.0	-11.9
1880.000000	42.74	---	76.00	33.26	100.0	H	170.0	-11.8
2996.500000	---	31.46	56.00	24.54	100.0	H	333.0	-7.8
3023.000000	44.59	---	80.00	35.41	100.0	H	185.0	-7.6
4465.500000	44.68	---	80.00	35.32	150.0	H	200.0	-5.0
5202.000000	47.03	---	80.00	32.97	150.0	H	270.0	-2.9
5468.500000	---	36.85	60.00	23.15	100.0	H	314.0	-2.5
5757.500000	47.15	---	80.00	32.85	150.0	H	1.0	-1.8
5924.000000	---	37.48	60.00	22.52	150.0	H	219.0	-1.7

Vertical



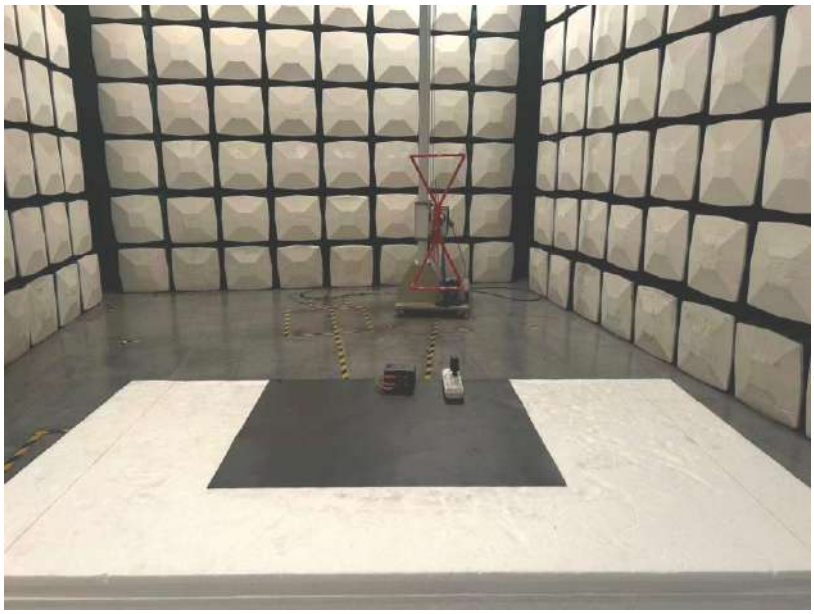
Frequency (MHz)	MaxPeak (dBµ V/m)	Average (dBµ V/m)	Limit (dBµ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1250.000000	---	31.98	56.00	24.02	150.0	V	218.0	-15.1
2249.000000	46.78	---	76.00	29.22	150.0	V	328.0	-11.4
2948.000000	41.00	---	76.00	35.00	100.0	V	92.0	-8.3
2981.000000	---	31.17	56.00	24.83	100.0	V	359.0	-8.0
3835.500000	45.22	---	80.00	34.78	100.0	V	113.0	-5.3
4308.000000	---	34.71	60.00	25.29	100.0	V	356.0	-5.1
4850.500000	---	35.19	60.00	24.81	100.0	V	196.0	-3.5
5009.000000	44.69	---	80.00	35.31	100.0	V	323.0	-3.6
5288.000000	45.82	---	80.00	34.18	100.0	V	191.0	-2.8
5303.000000	---	36.70	60.00	23.30	100.0	V	196.0	-2.7
5758.000000	---	37.58	60.00	22.42	100.0	V	251.0	-1.8
5917.500000	47.28	---	80.00	32.72	150.0	V	95.0	-1.7

Note:
Corrected Amplitude = Corrected Factor + Reading
(Note: The reading was calculated auto by test software and no reading indicated in data table)
Corrected Factor=Antenna factor (RX) + Cable Loss – Amplifier Factor
Margin = Limit- Corr. Amplitude (MaxPeak, QuasiPeak or Average)

Test Setup Photograph(s)

Below 1GHz:

Radiated Emissions Test Setup Front View



Radiated Emissions Test Setup Rear View

Above 1GHz:

Radiated Emissions Test Setup Front View

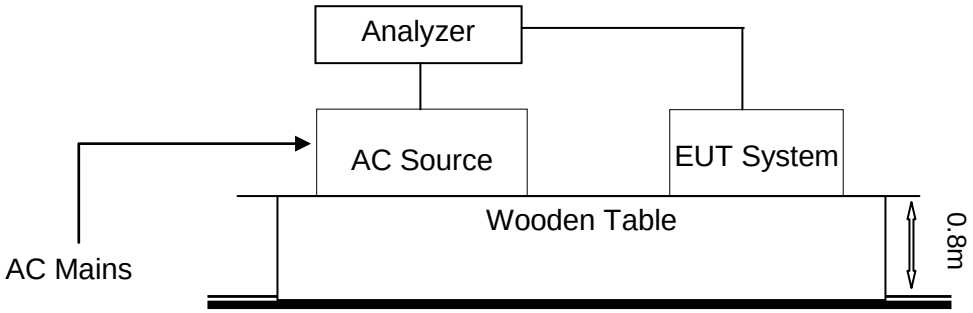
Radiated Emissions Test Setup Rear View

EN IEC 61000-3-2:2019+A2:2024- HARMONIC CURRENT EMISSIONS

Remarks: According to EN IEC 61000-3-2:2019+A2:2024 - Equipment with a rated power of 75 W or less, other than lighting equipment, limits are not specified in this standard.

EN 61000-3-3:2013+A2:2021 - VOLTAGE FLUCTUATION AND FLICKER

Test System Setup



Test Standard

EN 61000-3-3:2013+A2:2021

Flicker Test Limits

The limits shall be applicable to voltage fluctuations and flicker at the supply terminals of the equipment under test, measured or calculated according to clause 4 under test conditions described in clause 6 and annex A. Tests made to prove compliance with the limits are considered to be type tests.
The following limits apply:
– the value of Pst shall not be greater than 1,0;
– the value of Plt shall not be greater than 0,65;
– the value of d(t) during a voltage change shall not exceed 3,3 % for more than 500 ms;
– the relative steady-state voltage change, dc, shall not exceed 3,3 %;

– the maximum relative voltage change dmax, shall not exceed
a) 4 % without additional conditions;
b) 6 % for equipment which is:
– switched manually, or
– switched automatically more frequently than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds), or manual restart, after a power supply interruption.

NOTE: The cycling frequency will be further limited by the Pst and Plt limit. For example: a dmax of 6 % producing a rectangular voltage change characteristic twice per hour will give a Plt of about 0,65.
c) 7 % for equipment which is
– attended whilst in use (for example: hair dryers, vacuum cleaners, kitchen equipment such as mixers, garden equipment such as lawn mowers, portable tools such as electric drills), or

– switched on automatically, or is intended to be switched on manually, no more than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds) or manual restart, after a power supply interruption.

In the case of equipment having several separately controlled circuits in accordance with 6.6, limits b) and d) shall apply only if there is delayed or manual restart after a power supply interruption; for all equipment with automatic switching which is energized immediately on restoration of supply after a power supply interruption, limits a) shall apply; for all equipment with manual switching, limits b) or c) shall apply depending on the rate of switching. Pst and Plt requirements shall not be applied to voltage changes caused by manual switching. The limits shall not be applied to voltage changes associated with emergency switching or emergency interruptions.

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	46 %
ATM Pressure:	93.5 kPa

The testing was performed by Sam Yuan on 2026-07-16.

Measurement file name:	Flicker
Standard used:	EN 61000-3-3 Flicker
Observation time:	120 min (12 Flicker measurement)
Test Mode:	Running (WAN+ LAN link to access point)

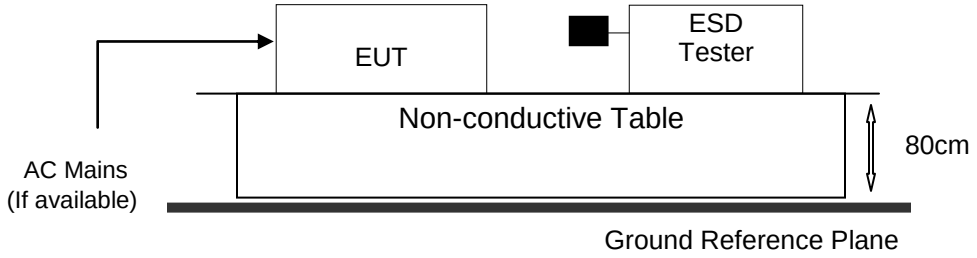
Maximum Flicker results

	EUT values	Limit	Result
Pst	0.028	1.00	PASS
Plt	0.028	0.65	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.045	4.00	PASS
dt [s]	0.028	1.00	PASS

Test Setup Photograph(s)

EN 55035:2017+A11:2020 §5 – ELECTROSTATIC DISCHARGES IMMUNITY TEST

Test System Setup



Remark: ■ is the tip of the electrode

IEC 61000-4-2 specifies that a tabletop EUT shall be placed on a non-conducting table which is 80 centimeters above a ground reference plane and that floor mounted equipment shall be placed on an insulating support approximately 10 centimeters above a ground plane. During the tests, the EUT is positioned over a ground reference plane in conformance with this requirement.

For tabletop equipment, a 1.5 by 1.0-meter metal sheet (HCP) is placed on the table and connected to the ground plane via a metal strap with two 470 k Ohms resistors in series. The EUT and attached cables are isolated from this metal sheet by 0.5-millimeter thick insulating material. A Vertical Coupling Plane (VCP) grounded on the ground plane through the same configuration as in the HCP is used.

Test Standard

EN 55035:2017+A11:2020 (Refer to IEC 61000-4-2:2025)
Test level 3 for Air Discharge at ±8 kV
Test level 2 for Contact Discharge at ±4 kV

Test level

Level	Test Voltage Contact Discharge (±kV)	Test Voltage Air Discharge (±kV)
1.	2	2
2.	4	4
3.	6	8
4.	8	15
X.	Special	Special

Performance criterion: B

Test Procedure

Air Discharge:

This test is done on a non-conductive surface. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Contact Discharge:

All the procedure shall be same as Section 8.3.1 of IEC 61000-4-2, except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

Indirect Discharge for Horizontal Coupling Plane

At least 50 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT. The discharge electrode positions vertically at a distance of 0.1 m from the EUT and with the discharge electrode touching the coupling plane.

Indirect Discharge for Vertical Coupling Plane

At least 50 single discharges shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	47 %
ATM Pressure:	95 kPa

The testing was performed by Sam Yuan on 2026-07-16.

Test Mode: Running (WAN+ LAN link to access point)

Table 1: Electrostatic Discharge Immunity (Air Discharge)

Test Points	Test Levels (kV)									
	-2	+2	-4	+4	-8	+8	-15	+15	+X	-X
Insulating Surface	A	A	A	A	A	A	-	-	-	-
Aperture	A	A	A	A	A	A	-	-	-	-

Table 2: Electrostatic Discharge Immunity (Direct Contact)

Test Points	Test Levels (kV)									
	-2	+2	-4	+4	-6	+6	-8	+8	+X	-X
Conductive Surface	A	A	A	A	-	-	-	-	-	-

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP)

Test Points	Test Levels (kV)									
	-2	+2	-4	+4	-6	+6	-8	+8	+X	-X
Front Side	A	A	A	A	-	-	-	-	-	-
Back Side	A	A	A	A	-	-	-	-	-	-
Left Side	A	A	A	A	-	-	-	-	-	-
Right Side	A	A	A	A	-	-	-	-	-	-

Table 4: Electrostatic Discharge Immunity (Indirect Contact VCP)

Test Points	Test Levels (kV)									
	-2	+2	-4	+4	-6	+6	-8	+8	+X	-X
Front Side	A	A	A	A	-	-	-	-	-	-
Back Side	A	A	A	A	-	-	-	-	-	-
Left Side	A	A	A	A	-	-	-	-	-	-
Right Side	A	A	A	A	-	-	-	-	-	-

Test Setup Photograph(s)

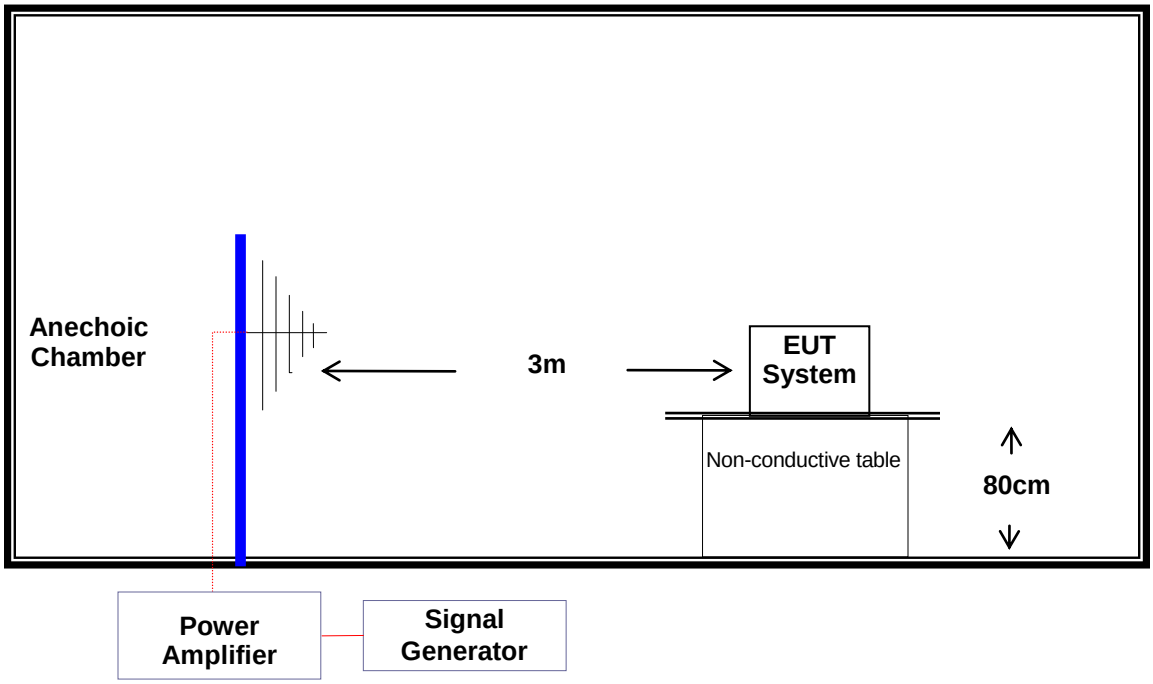
Test Points as follows:

Note: Air discharge locations shall be marked with a red arrow above.

Contact discharge locations shall be marked with a blue arrow above.

EN 55035:2017+A11:2020 §5 – CONTINUOUS RF ELECTROMAGNETIC FIELD DISTURBANCES IMMUNITY TEST

Test System Setup



Note: The test distance is 3 m.

Test Standard

EN 55035:2017+A11:2020 (Refer to IEC 61000-4-3:2020)
Test level 2 at 3V/m

Test level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X.	Special

Performance criterion: A

Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.
In order to judge the EUT performance, one CCD camera and laptop are used to monitor the EUT.

All the scanning conditions are as follows**:**

	Condition of Test	Remarks
1.	Field Strength	3 V/m (Test level 2)
2.	Radiated Signal	Modulated AM 1 kHz 80% Modulation
3.	Scanning Frequency	80 – 1000 MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz
4.	Sweeping time of radiated	0.0015decade/s
5.	Dwell Time	1Sec.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	46 %
ATM Pressure:	96 kPa

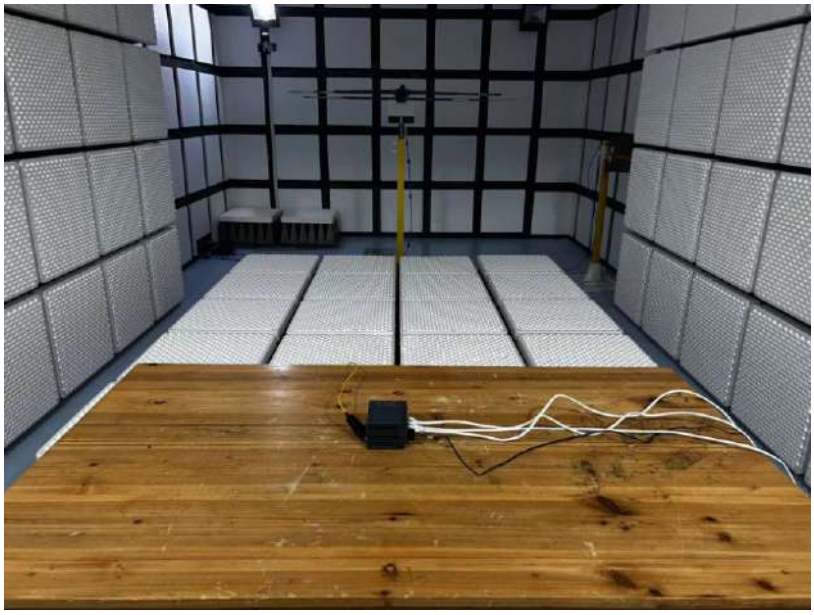
The testing was performed by Sam Yuan on 2026-07-15.

Test Mode: Running (WAN+ LAN link to access point)

Frequency Range (MHz)		Front (3 V/m)		Rear (3 V/m)		Left Side (3 V/m)		Right Side (3 V/m)	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000		A	A	A	A	A	A	A	A
Spot	1800	A	A	A	A	A	A	A	A
	2600	A	A	A	A	A	A	A	A
	3500	A	A	A	A	A	A	A	A
	5000	A	A	A	A	A	A	A	A

Test Setup Photograph(s)

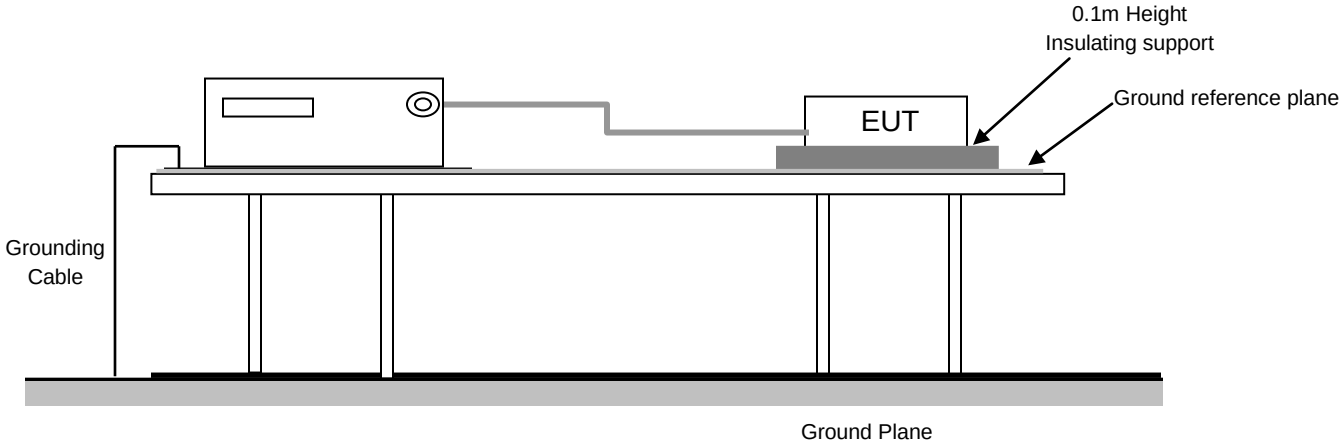
Below 1GHz



Above 1GHz

EN 55035:2017+A11:2020 §5 – ELECTRICAL FAST TRANSIENTS/BURST IMMUNITY TEST

Test System Setup



Test Standard

EN 55035:2017+A11:2020 (Refer to IEC 61000-4-4:2012)
Test level 2 at 1kV on AC mains power port(s)
Test level 2 at 0.5kV on Signal Port(s)

Test level

Open Circuit Output Test Voltage ±10%		
Level	**On Power Supply Lines**	**On I/O (Input/Output) Signal data and control lines**
1	0.5 kV	0.25 kV
2	1 kV	0.5 kV
3	2 kV	1 kV
4	4 kV	2 kV
X	Special	Special

Performance criterion: B

Test Procedure

The EUT was arranged for Power Line Coupling and for I/O Line Coupling through a capacitive clamp, where applicable. (Note: The I/O coupling test using a capacitive clamp is performed on the I/O interface cables that are longer in length than 3 meters.) A metal ground plane 2.4 meter by 2.0 meter was placed between the floor and the table and is connected to the earth by a 2.0 meter ground rod. The ground rod is connected to the test facility's electrical earth.

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	46 %
ATM Pressure:	93.5 kPa

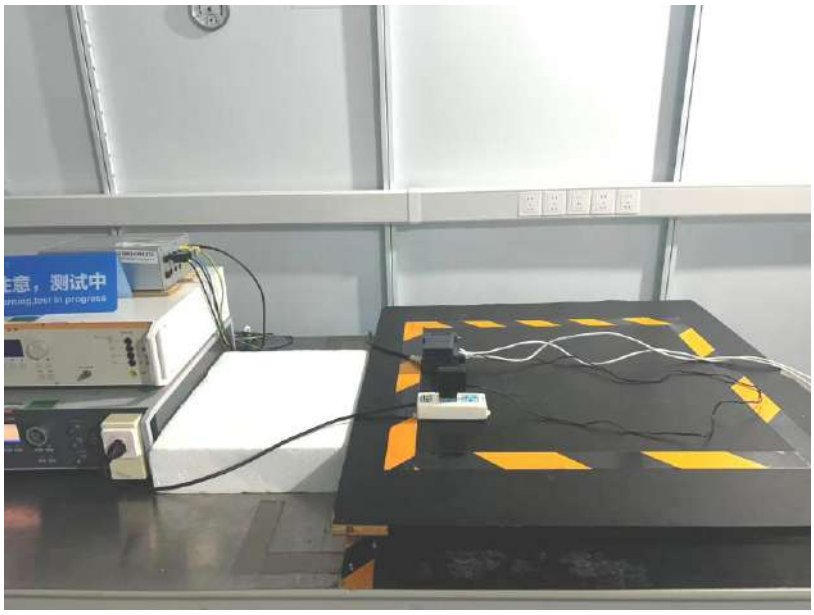
The testing was performed by Sam Yuan on 2026-07-16.

Test Mode: Running (WAN+ LAN link to access point)

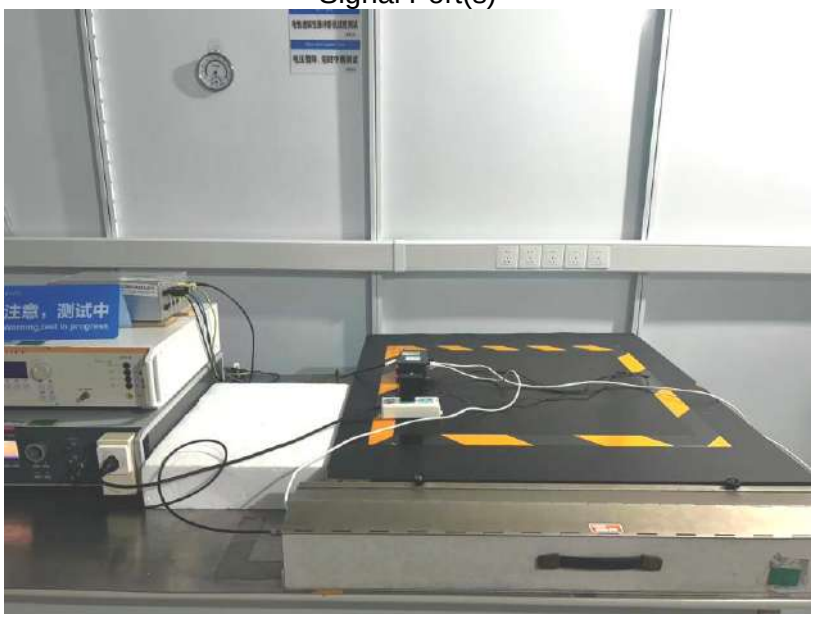
Coupled mode		Voltage peak (kV)							
		Repetition frequency: 5 kHz							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
AC power port	L	-	-	A	A	-	-	-	-
	N	-	-	A	A	-	-	-	-
	PE	-	-	-	-	-	-	-	-
	L+N	-	-	A	A	-	-	-	-
	L+PE	-	-	-	-	-	-	-	-
	N+PE	-	-	-	-	-	-	-	-
	L+ N+PE	-	-	-	-	-	-	-	-
Signal Port(s)		A	A	-	-	-	-	-	-

Test Setup Photograph(s)

AC Power Port

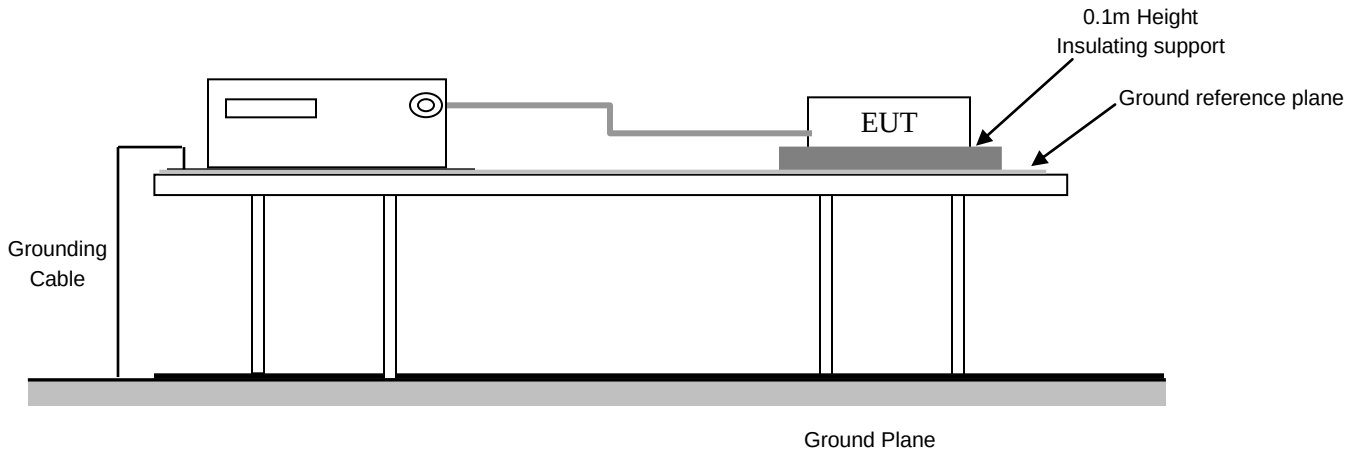


Signal Port(s)



EN 55035:2017+A11:2020 §5 – SURGES IMMUNITY TEST

Test System Setup



Test Standard

EN 55035:2017+A11:2020 (Refer to IEC 61000-4-5:2014+AMD1:2017)

AC Mains Power Port(s):
Line to Line: Test Level 1 at 0.5 kV, Test Level 2 at 1 kV

Signal Port(s):
Line to Earth: Test Level 1 at 0.5 kV, Test Level 2 at 1 kV

Test level

Level	Open Circuit Output Test Voltage ±10%
1	0.5 kV
2	1 kV
3	2 kV
4	4 kV
X	Special

Performance criterion: B

Test Procedure

1. For AC power port line to line coupling mode, provide a 0.5kV/1kV 1.2/50μs voltage surge (at open-circuit condition). For AC power port line to ground coupling mode, provide a 0.5kV/1 kV/2kV 1.2/50μs voltage surge (at open-circuit condition). For wired network ports. line to ground coupling mode, provide a 0.5kV/1 kV 1.2/50us voltage surge (at open-circuit).
2. At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.
3. Different phase angles are done individually.
4. Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	46 %
ATM Pressure:	93.5 kPa

The testing was performed by Sam Yuan on 2026-07-16.

Test Mode: Running (WAN+ LAN link to access point)

Table 1: AC Mains Power Input Port

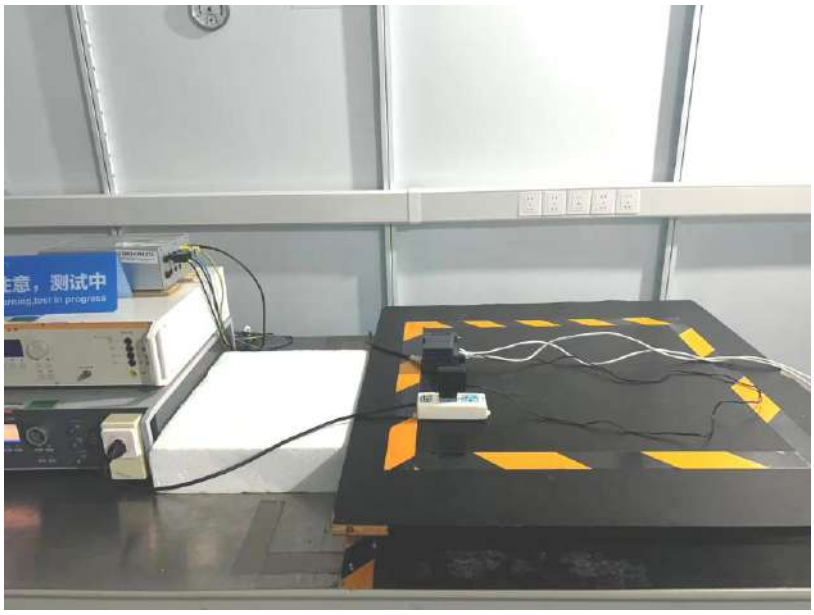
Level	Voltage	Poll	Path	Phase	Pass	Fail
1	0.5 kV	±	Line to Line	0°/90°/180°/270°	A	-
2	1 kV	±	Line to Line	0°/90°/180°/270°	A	-
3	2 kV	±	Line to Earth	-	-	-
4	4 kV	±	Line to Earth	-	-	-

Table 2: Signal Ports

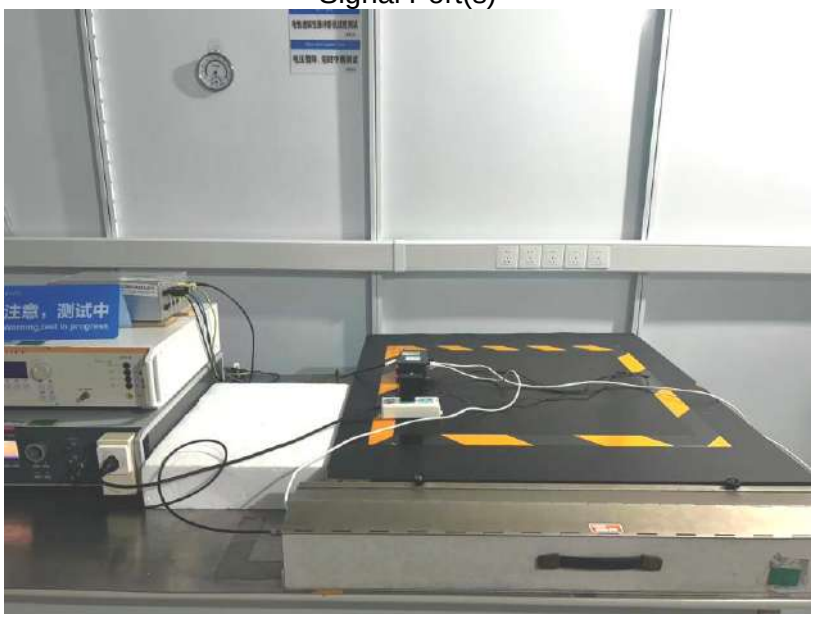
Level	Voltage	Poll	Path	Pass	Fail
1	0.5 kV	±	Line to Earth	A	-
2	1 kV	±	Line to Earth	A	-
3	2 kV	±	Line to Earth	-	-
4	4 kV	±	Line to Earth	-	-

Test Setup Photograph(s)

AC Power Port

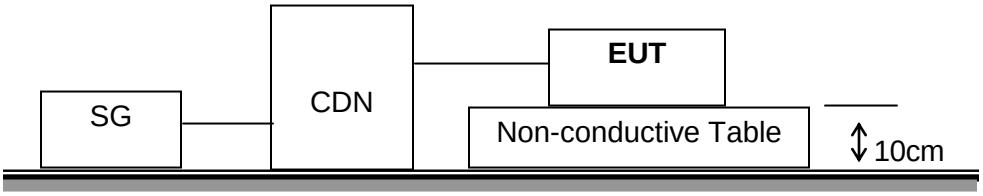


Signal Port(s)



EN 55035:2017+A11:2020 §5 – CONTINUOUS INDUCED RF DISTURBANCES IMMUNITY TEST

Test Setup



Test Standard

EN 55035:2017+A11:2020 (Refer to IEC 61000-4-6:2013)

AC Mains Power port(s):
Test level 2 at 3 V (r.m.s.), 0.15 MHz ~ 10 MHz
Test level 2-1 at 3-1 V (r.m.s.), 10 MHz ~ 30 MHz
Test level 1 at 1 V (r.m.s.), 30 MHz ~ 80 MHz

Signal Port(s):
Test level 2 at 3 V (r.m.s.), 0.15 MHz ~ 10 MHz
Test level 2-1 at 3-1 V (r.m.s.), 10 MHz ~ 30 MHz
Test level 1 at 1 V (r.m.s.), 30 MHz ~ 80 MHz

Test level

Level	Voltage Level (r.m.s.) (V)
1	1
2	3
3	10
X	Special

Performance criterion: A

Test Procedure

1. Let the EUT work in test mode and test it.
2. The EUT are placed on an insulating support 0.1 m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3 m 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).
3. The disturbance signal described below is injected to EUT's adapter through CDN.
4. The EUT operates within its operational mode(s) under intended climatic conditions after power on.
5. The frequency range is swept from 150 kHz to 80 MHz with the disturbance signal 80% amplitude modulated with a 1 kHz sine wave.

6. The rate of sweep shall not exceed $1.5*10^{-3}$decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.
7. Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	46 %
ATM Pressure:	93.5 kPa

The testing was performed by Sam Yuan on 2026-07-15.

Test Mode: Running (WAN+LAN link to access point)

Table 1: AC mains power port:
Frequency range: __150__kHz to__80__MHz
■ Modulated: Amplitude 80%, 1kHz sine wave □ Unmodulated □ Other:

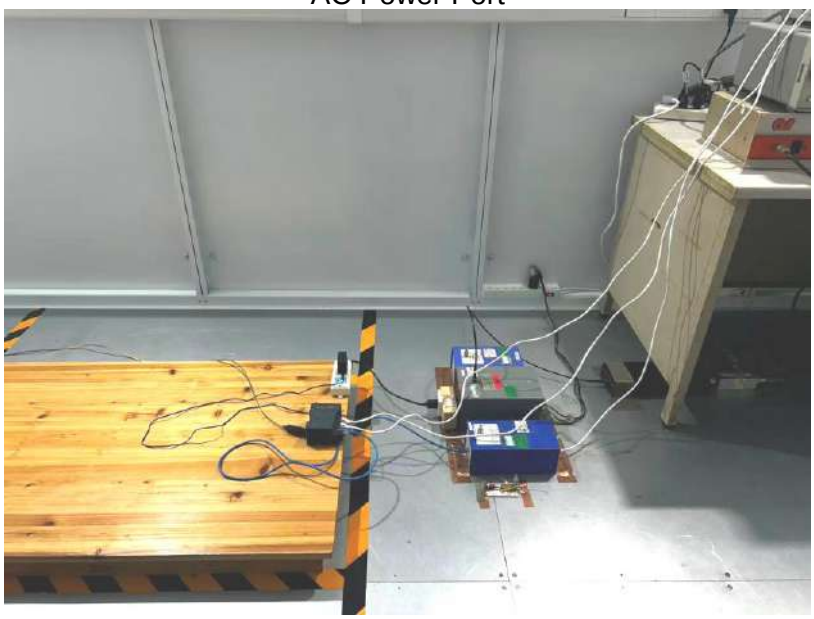
Frequency (MHz)	Voltage Level	Pass	Fail
0.15-10	3V	A	/
10-30	3V to1V		
30-80	1V		

Table 2: Signal Ports
Frequency range: __150__kHz to__80__MHz
■ Modulated: Amplitude 80%, 1kHz sine wave □ Unmodulated □ Other:

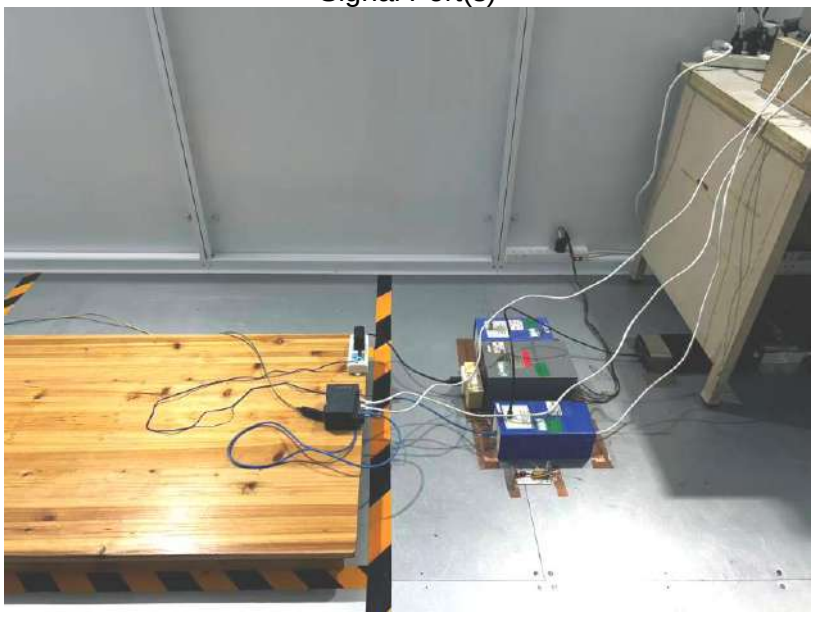
Frequency (MHz)	Voltage Level	Pass	Fail
0.15-10	3V	A	/
10-30	3V to1V		
30-80	1V		

Test Setup Photograph(s)

AC Power Port

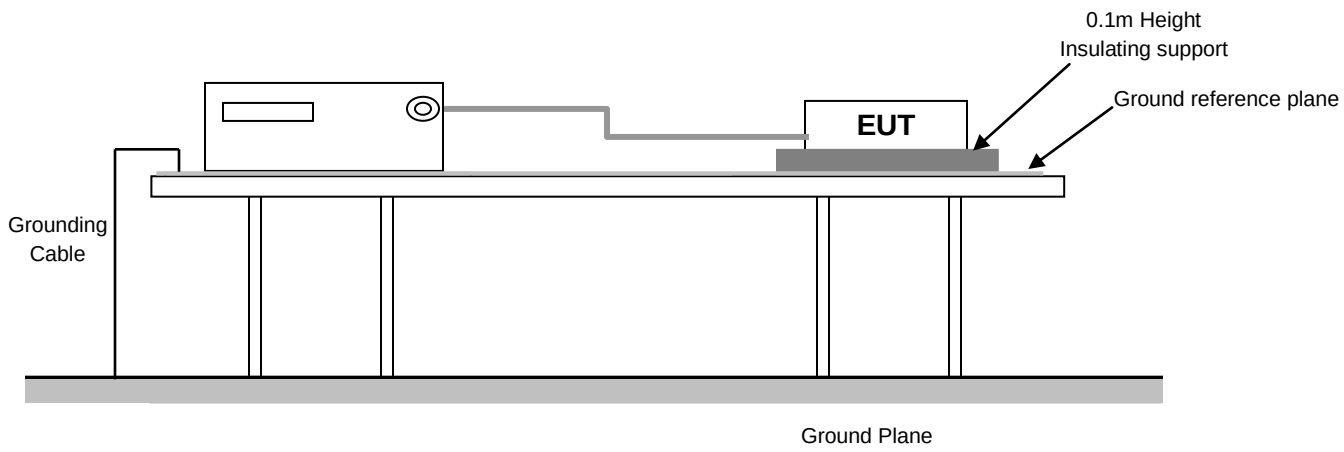


Signal Port(s)



EN 55035:2017+A11:2020 §5 – VOLTAGE DIPS AND INTERRUPTIONS IMMUNITY TEST

Test System Setup



Test Standard

EN 55035:2017+A11:2020 (Refer to IEC 61000-4-11:2020)
Test levels and Performance Criterion

Test levels

Test Level	Voltage dip and short interruptions (%) Residual	Duration (Periods)	Performance Criterion
1	<5	0.5	B
2	70	25	C
3	<5	250	C

Test Procedure

1. The interruption is introduced at selected phase angles with specified duration.
2. Record any degradation of performance.

Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	46 %
ATM Pressure:	93.5 kPa

The testing was performed by Sam Yuan on 2026-07-16.

Test Mode: Running

Voltage Dips/Interruptions Test

Test Level	Voltage dip and short interruptions % Residual	Td(periods)	Phase Angle	Pass	Fail
1	0	0.5	0°/90°/270°	A	-
2	70	25	0°/90°/270°	A	-
3	0	250	0°/90°/270°	C	-

Performance "B" represent it stop working during test and it is self-recoverable after test.

Test Setup Photograph(s)

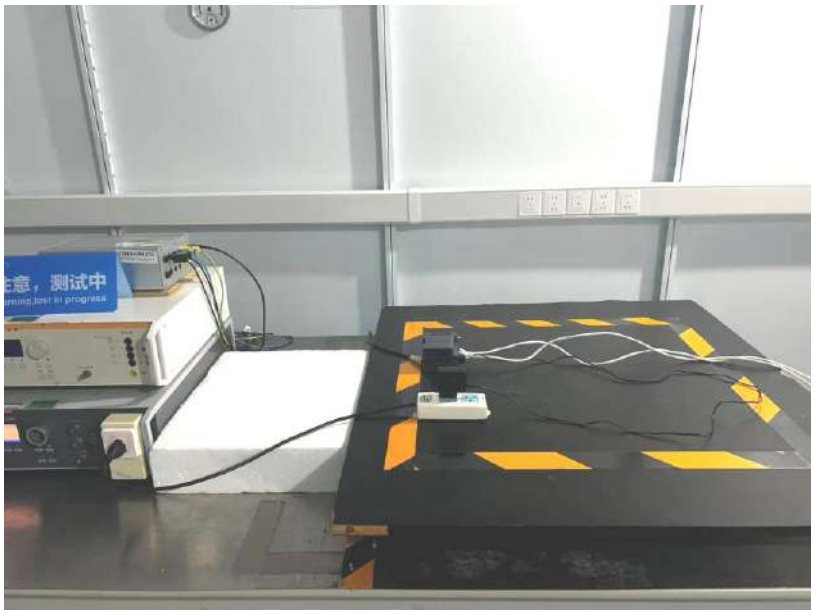


EXHIBIT A – PRODUCT LABEL

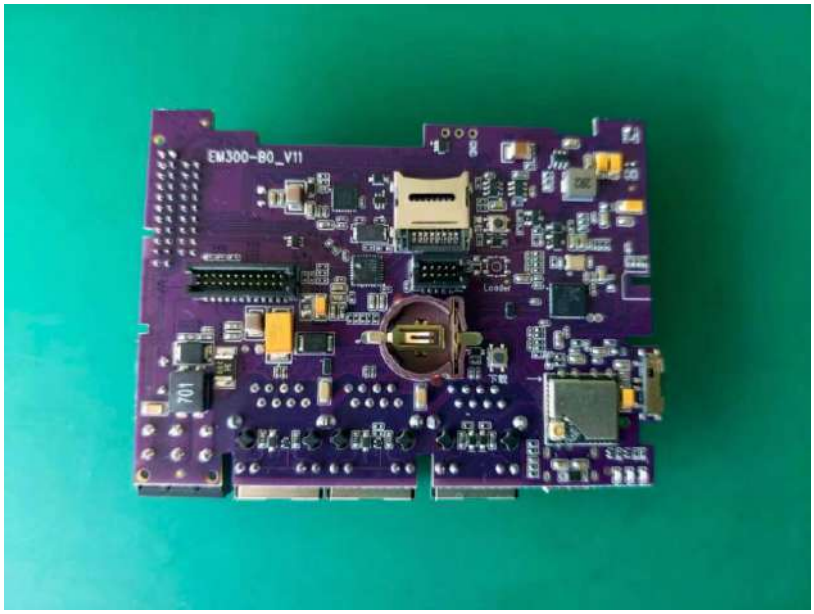
Label Location on EUT

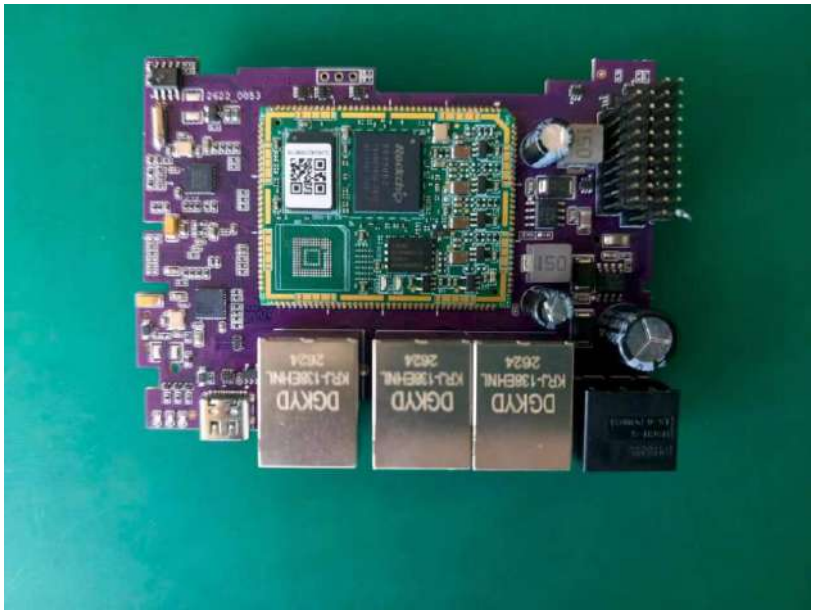
EXHIBIT B – EUT PHOTOGRAPHS

EUT EXTERNAL PHOTOS

LAN2
LAN1
WAN

EUT INTERNAL PHOTOS*





EMO-AD808_V10
2022_0071

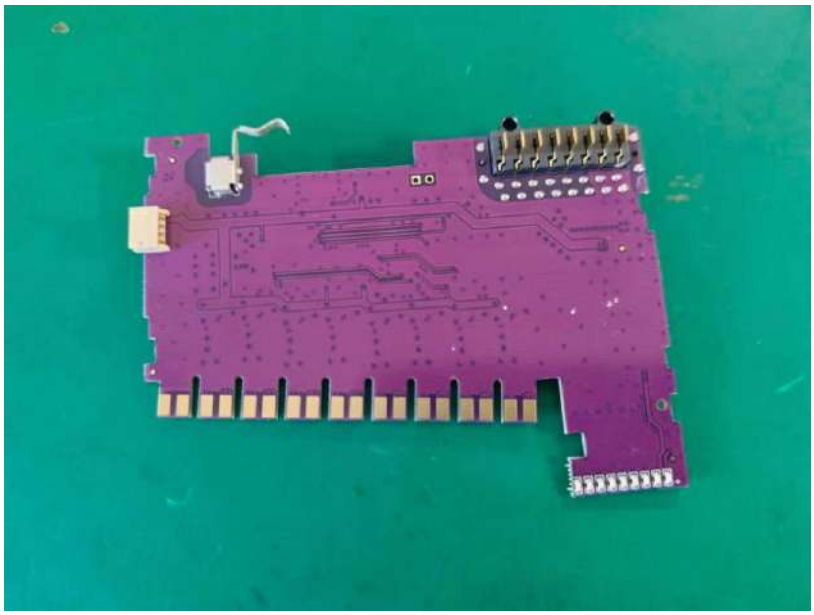


EXHIBIT C – PRODUCT DIFFERENCE DECLARATION*

Company Name: Chengdu Zongheng Intelligence Control Technology Co., Ltd.
Address: No. 1915, Building 888, Yizhou Avenue Middle Section, High-tech Zone, Chengdu.

Model Difference Statement

Current Date: 2026-06-25

We, Chengdu Zongheng Intelligence Control Technology Co., Ltd. hereby declare that product name: ARM Industrial Computer, multi-listing model number: EC300、EC301 are electrically identical to test model number: EC100 (such as layout of PCB, schem atics, board layout, and internal structures etc.).

We declare that the products above are electrically identical, only difference in model number. We guarantee all information above-mentioned is true, and notice that we'll bear all the consequences caused by any false information or concealing

Note: The definition of identical should be "electrically identical". A device will be considered to be electrically identical if no changes are made to the device's schematics, board layout, component layout, chip sets, resistors and all other electrical aspects of the device.

Sincerely,

Client's Signature: Yang Yuxiang

Client's Name/Title: Yang yuxiang/ Marketing Manager

END OF REPORT