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检测
TESTING
CNAS L3110

TEST REPORT

Reference No.	:	WTF26D01025458E
Applicant	:	Mid Ocean Brands B.V.
Address	:	Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer	:	114538
Address	:	---
Product	:	EU 2-pole wall adapter/charger
Model(s)	:	MO2979
Standards	:	EN 55032:2015+A1:2020 EN IEC 61000-3-2:2019+A2:2024 EN 61000-3-3:2013+A2: 2021 EN 55035:2017+A11:2020
Date of Receipt sample	:	2026-01-28
Date of Test	:	2026-01-28 to 2026-03-25
Date of Issue	:	2026-03-26
Test Result	:	Pass

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Approved by:

WALTEK TESTING GROUP CO.,LTD. WALTEK TEST REPORT

Deval Qin / Designated Reviewer

2 Contents

3 Revision History

Test Report No.	Date of Receipt Sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTF26D01025458E	2026-01-28	2026-01-28 to 2026-03-25	2026-03-26	Original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product: EU 2-pole wall adapter/charger
Model(s): MO2979

4.2 Details of E.U.T.

Power Supply: Input: AC 110-240V, 50/60Hz, 1.5A Max.
Output: Type-C: 5V⎓3A, 9V⎓3A, 12V⎓3A, 15V⎓3A, 20V⎓3.25A, 65W Max.
USB-A: 5V⎓3A, 9V⎓2A, 12V⎓1.5A
Type-C1+UCB-A: PD 45W+QC 18W
Highest Internal Frequency: f ≤ 108MHz
Classification of Equipment: Class B

4.3 Test Location

Laboratory: Waltek Testing Group Co., Ltd.
Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China

4.4 Abnormalities from Standard Conditions

None

4.5 EUT Setup and Operation Mode

No	Title	Description
TM1	Full load	AC 120V/60Hz & AC 230V/50Hz
TM2	Half load	AC 120V/60Hz & AC 230V/50Hz
TM3	No load	AC 120V/60Hz & AC 230V/50Hz
Pre-test in voltage input range & all operation modes, and find out the worst case for compliance test. And record it in the report.		

5 Summary of Test Results

Item	Standard	Method	Requirement	Result
Conducted emissions from AC mains power ports (150kHz-30MHz)	EN 55032:2015+A1:2020	Clause 7 of CISPR 16-2-1:2014/AMD1: 2017	Class B	Pass
Radiated emissions (30MHz-1GHz)	EN 55032:2015+A1:2020	Clause 7.3 of CISPR 16-2-3:2016	Class B	Pass
Harmonic current emission	EN IEC 61000-3-2:2019+ A2:2024	EN IEC 61000-3-2: 2019+A2:2024	Class A	Pass
Voltage fluctuations and flicker	EN 61000-3-3:2013+A2: 2021	EN 61000-3-3:2013 +A2:2021	Clause 4	Pass
Electrostatic discharges	EN 55035:2017+A11:2020	EN 61000-4-2: 2009	Contact Discharge: +/- 4kV Air Discharge: +/- 8kV	Pass
RF electromagnetic field disturbances	EN 55035:2017+A11:2020	EN IEC 61000-4-3: 2020	3V/m, 80%, 1kHz Amp. Mod.	Pass
Electrical fast transients / burst for AC mains power ports	EN 55035:2017+A11:2020	EN 61000-4-4: 2012	1kV; 5/50ns Tr/Th; 5kHz Repetition Frequency	Pass
Surges for AC mains power ports	EN 55035:2017+A11:2020	EN 61000-4-5: 2014 +A1: 2017	1.2/50μs Tr/Td; 1kV Line to Line	Pass
Continuous induced RF disturbances for AC mains power ports (150kHz-80MHz)	EN 55035:2017+A11:2020	EN 61000-4-6: 2014	0,15 to 10MHz 3Vrms (emf), 10 to 30MHz 3V to 1Vrms(emf), 30 to 80MHz 1Vrms(emf), 80%,1kHz Amp. Mod.	Pass
Voltage dips and interruptions	EN 55035:2017+A11:2020	EN IEC 61000-4-11: 2020	<5% residual voltage for 0.5 periods: B, 70% residual voltage: 25 periods for 50Hz, 30 periods for 60Hz: C, <5% residual voltage: 250 periods for 50Hz, 300 periods for 60Hz: C	Pass

6 Equipment Used during Test

6.1 Equipment List

Conducted emissions from AC mains power ports (150kHz-30MHz)					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
Cable	Top	TYPE16(3.5M)	/	2025-06-03	2026-06-02
LISN	R&S	ENV216	100115	2025-06-03	2026-06-02
EMI Test Receiver	R&S	ESCI	100947	2025-07-04	2026-07-03
Test Software	Frad Technology	EZ-EMC(RA-03A1-1)	/	/	/

Radiated emissions (30MHz-1GHz)					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
Cable	HUBER+SUHNER	CBL2	525178	2025-04-19	2026-04-18
Amplifier	ANRITSU	MH648A	M43381	2025-04-19	2026-04-18
Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2025-07-05	2026-07-04
Test Receiver	R&S	ESCI	101296	2025-04-19	2026-04-18
Test Software	Frad Technology	EZ-EMC(RA-03A1-1)	/	/	/

Voltage fluctuations and flicker					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
Power Source	SCHAFFNER	NSG 1007	58477	2025-04-19	2026-04-18
Digital Power Analyzer	SCHAFFNER	CCN 1000-1	72625	2025-04-19	2026-04-18
Test Software	California Instruments	CTS_4_33	/	/	/

Electrostatic discharges					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
Electrostatic Discharge Simulator	SCHLODER	SESD 216	606144	2025-04-21	2026-04-20

RF electromagnetic field disturbances					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
Amplifier	NJNT	NTWPAS-2560025	2560025	2025-07-04	2026-07-03
Power Meter	R&S	NRP2	102031	2025-07-04	2026-07-03
Gestockte Breitband (S tacked) Log.-per.Antenna	SCHWARZBECK	STLP9128D	043	2025-07-04	2026-07-03
RF Power Amplifier	BONN Elektronik	BLWA0830-160/100/40D	128740	2025-07-04	2026-07-03
Signal Generater	R&S	SMB100A	105942	2025-07-04	2026-07-03
Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1314	2025-08-09	2026-08-08
Test Software	BL	BL410-E V19.614	/	/	/

Voltage dips and interruptions Electrical fast transients / burst for AC mains power ports Surges for AC mains power ports					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
AC Power Supply	HENGYUAN	DTDGC-4	-	2025-07-04	2026-07-03
Signal and Data Line Coupling Network	SCHAFFNER	CDN 117	25627	2025-07-04	2026-07-03
All Modules Generator	SCHAFFNER	6150	34579	2025-07-04	2026-07-03
Test Software	Schaffner System	Modula 2.7	/	/	/

Continuous induced RF disturbances for AC mains power ports (150kHz-80MHz)					
Description	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Due. Date**
CDN M-Type	TESEQ	CDN M016	25112	2026-01-08	2027-01-07
RF Generator	TESEQ	NSG4070	25781	2025-07-04	2026-07-03
6dB Attenuator	TOP QUALITY	DTS100-6-1-N	240814096	2025-07-04	2026-07-03

6.2 Measurement Uncertainty

Parameter	**Measurement Uncertainty**
Conducted Emissions (AC Mains 150k - 30MHz)	±3.64dB
Radiated Emissions (30M - 1000MHz)	±4.53dB
Confidence interval: 95%. Confidence factor: k=2	

7 Evaluation Results (Evaluation)

7.1 Harmonic current emission

Test Requirement:	Class A
Test Limit:	Not specified
Test Method:	EN IEC 61000-3-2:2019+A2:2024

7.1.1 E.U.T. Operation

Environmental Conditions					
Temperature:	/	Humidity:	/	Atmospheric Pressure:	/
Test mode:	TM1				

7.1.2 Summary of Test Results

Refer to EN IEC 61000-3-2 clause 7.1:
"For the following categories of equipment, limits are not specified in this document:
– lighting equipment with a rated power less than but not equal to 5 W;
– equipment with a rated power of 75 W or less, other than lighting equipment;"
Since the rated power of the EUT is less than above described, it is deemed to comply with the requirement.

8 Emission Test Results (EMI)

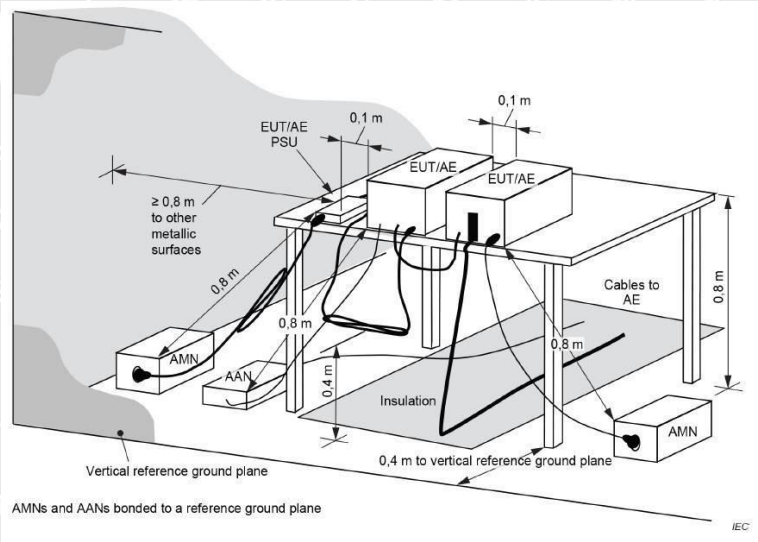
8.1 Conducted emissions from AC mains power ports (150kHz-30MHz)

Test Requirement:	Class B		
Test Limit:	**Frequency Range**	**Limit (Quasi-Peak)**	**Limit (Average)**
	0.15MHz to 0.5MHz	66dB(μV) to 56dB(μV)	56dB(μV) to 46dB(μV)
	0.5MHz to 5MHz	56dB(μV)	46dB(μV)
	5MHz to 30MHz	60dB(μV)	50dB(μV)
	Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz	
Test Method:	Clause 7 of CISPR 16-2-1:2014/AMD1:2017		
Procedure:	An initial pre-scan was performed with peak detector.Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected. Remark: Level= Read Level+ Cable Loss+ LISN Factor		

8.1.1 E.U.T. Operation

Environmental Conditions					
Temperature:	26.0 °C	Humidity:	48.6 %	Atmospheric Pressure:	101 kPa
Test mode:	TM1				

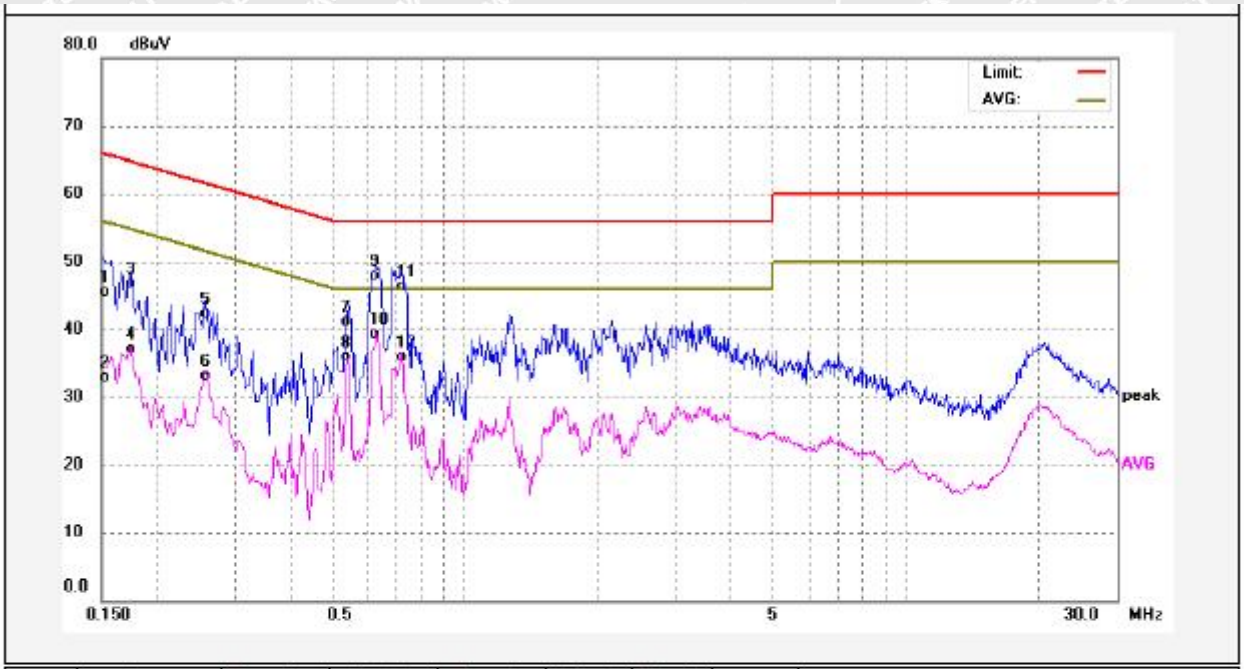
8.1.2 Basic Test Setup Block Diagram



8.1.3 Summary of Test Results

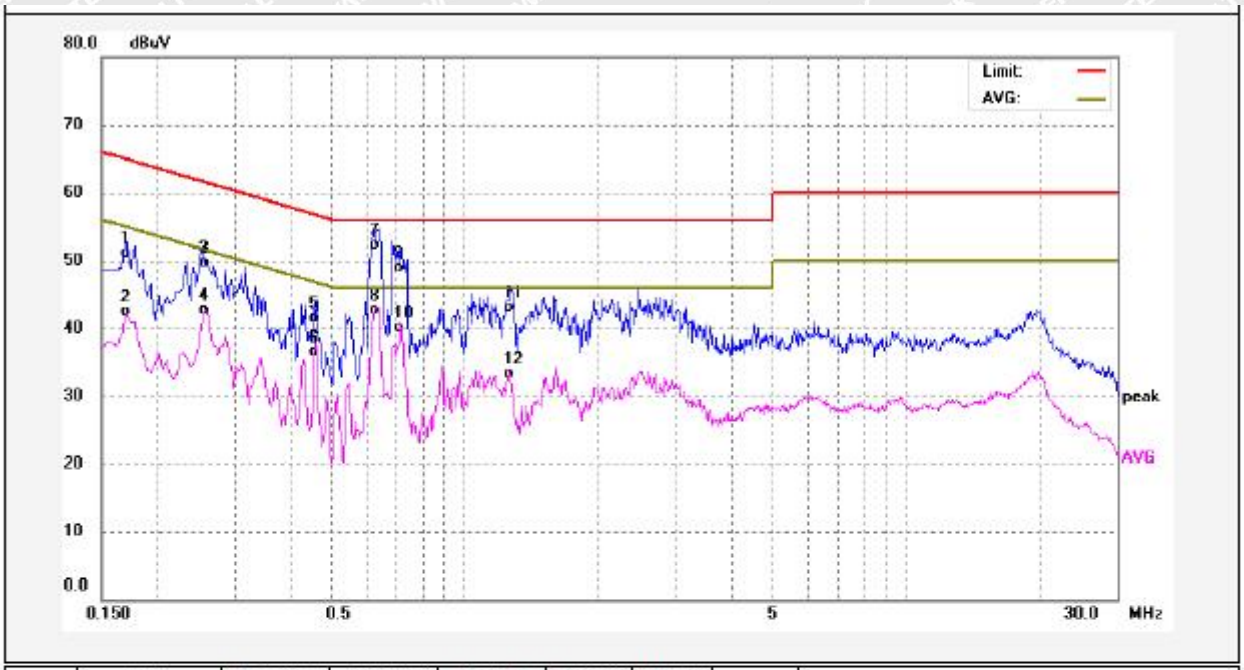
AC 230V/50Hz (Type-C: 20V/3.25A)

TM1 / Line: Line



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1500	35.56	9.94	45.50	65.99	-20.49	QP	
2	0.1500	22.95	9.94	32.89	55.99	-23.10	AVG	
3	0.1740	36.91	9.89	46.80	64.76	-17.96	QP	
4	0.1740	27.14	9.89	37.03	54.76	-17.73	AVG	
5	0.2580	32.52	9.87	42.39	61.49	-19.10	QP	
6	0.2580	23.17	9.87	33.04	51.49	-18.45	AVG	
7	0.5420	31.18	10.01	41.19	56.00	-14.81	QP	
8	0.5420	25.89	10.01	35.90	46.00	-10.10	AVG	
9	0.6260	37.77	10.09	47.86	56.00	-8.14	QP	
10	0.6260	29.17	10.09	39.26	46.00	-6.74	AVG	
11	0.7180	36.13	10.15	46.28	56.00	-9.72	QP	
12	0.7180	25.67	10.15	35.82	46.00	-10.18	AVG	

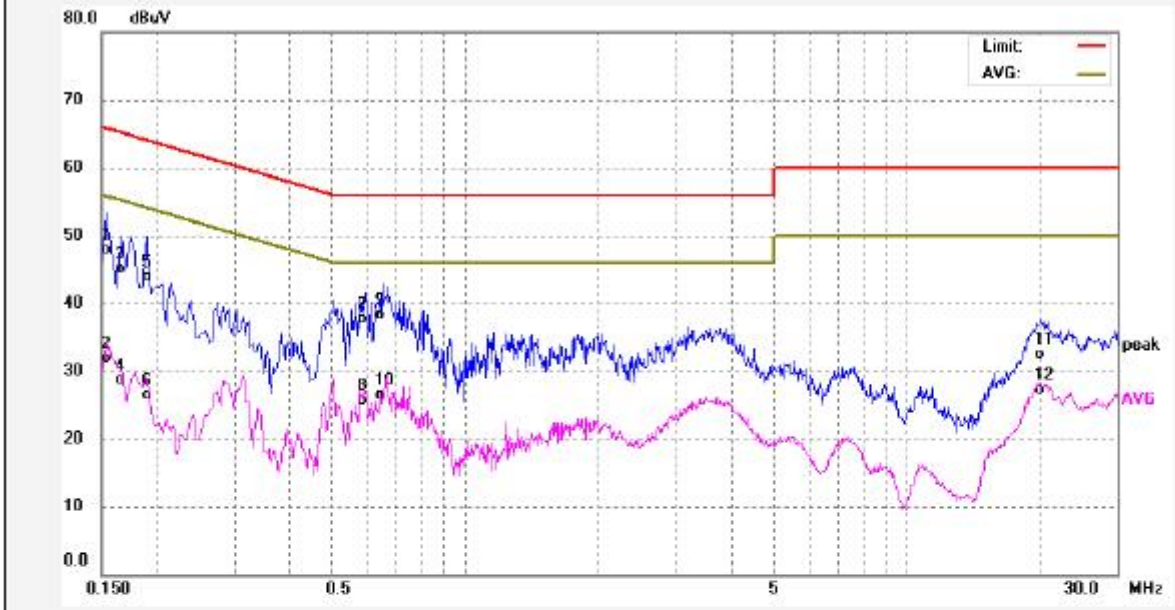
TM1 / Line: Neutral



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1700	41.22	9.90	51.12	64.96	-13.84	QP	
2	0.1700	32.61	9.90	42.51	54.96	-12.45	AVG	
3	0.2580	39.81	9.87	49.68	61.49	-11.81	QP	
4	0.2580	32.84	9.87	42.71	51.49	-8.78	AVG	
5	0.4580	31.59	9.95	41.54	56.73	-15.19	QP	
6	0.4580	26.57	9.95	36.52	46.73	-10.21	AVG	
7	0.6260	42.29	10.09	52.38	56.00	-3.62	QP	
8	0.6260	32.56	10.09	42.65	46.00	-3.35	AVG	
9	0.7140	38.83	10.15	48.98	56.00	-7.02	QP	
10	0.7140	29.89	10.15	40.04	46.00	-5.96	AVG	
11	1.2579	33.12	9.97	43.09	56.00	-12.91	QP	
12	1.2579	23.39	9.97	33.36	46.00	-12.64	AVG	

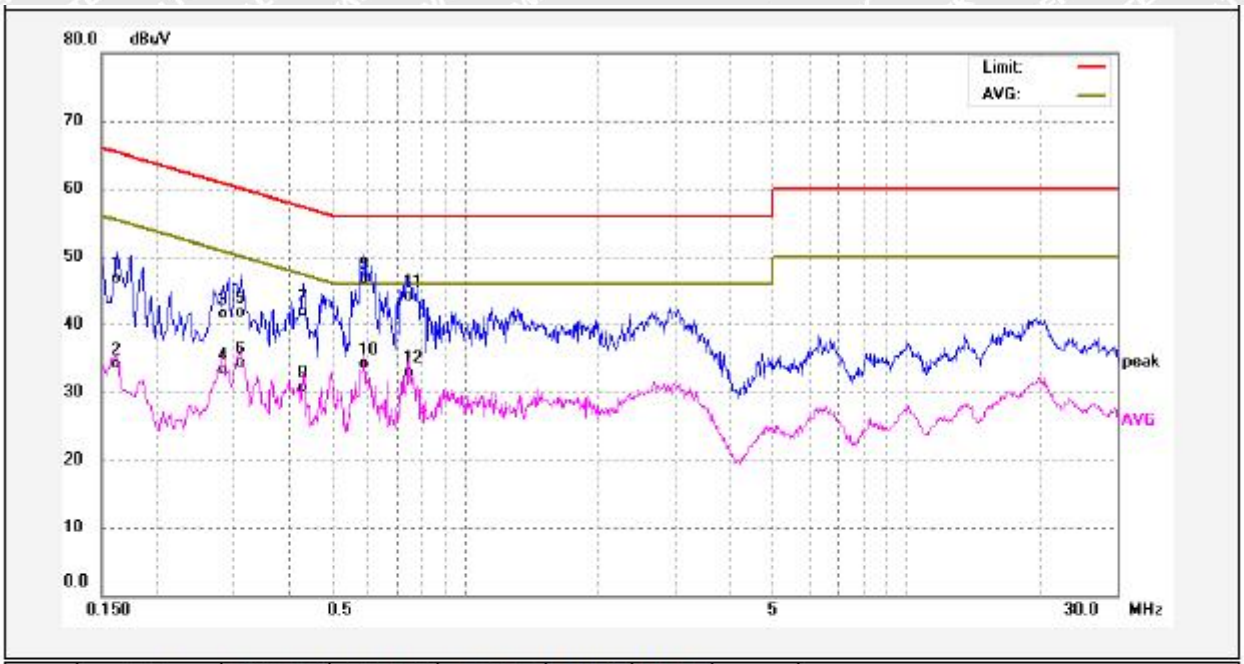
AC 120V/60Hz (Type-C: 20V/3.25A)

TM1 / Line: Line



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1539	37.97	9.93	47.90	65.78	-17.88	QP	
2	0.1539	22.00	9.93	31.93	55.78	-23.85	AVG	
3	0.1660	35.27	9.90	45.17	65.15	-19.98	QP	
4	0.1660	18.74	9.90	28.64	55.15	-26.51	AVG	
5	0.1900	34.03	9.85	43.88	64.03	-20.15	QP	
6	0.1900	16.63	9.85	26.48	54.03	-27.55	AVG	
7	0.5940	27.61	10.06	37.67	56.00	-18.33	QP	
8	0.5940	15.65	10.06	25.71	46.00	-20.29	AVG	
9	0.6500	28.20	10.12	38.32	56.00	-17.68	QP	
10	0.6500	16.38	10.12	26.50	46.00	-19.50	AVG	
11	20.1140	22.12	10.37	32.49	60.00	-27.51	QP	
12	20.1140	16.86	10.37	27.23	50.00	-22.77	AVG	

TM1 / Line: Neutral



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1620	36.73	9.91	46.64	65.36	-18.72	QP	
2	0.1620	24.19	9.91	34.10	55.36	-21.26	AVG	
3	0.2819	31.69	9.89	41.58	60.76	-19.18	QP	
4	0.2819	23.41	9.89	33.30	50.76	-17.46	AVG	
5	0.3100	31.88	9.90	41.78	59.97	-18.19	QP	
6	0.3100	24.40	9.90	34.30	49.97	-15.67	AVG	
7	0.4300	31.95	9.94	41.89	57.25	-15.36	QP	
8	0.4300	20.73	9.94	30.67	47.25	-16.58	AVG	
9	0.5899	36.66	10.06	46.72	56.00	-9.28	QP	
10	0.5899	24.02	10.06	34.08	46.00	-11.92	AVG	
11	0.7460	33.89	10.14	44.03	56.00	-11.97	QP	
12	0.7460	22.70	10.14	32.84	46.00	-13.16	AVG	

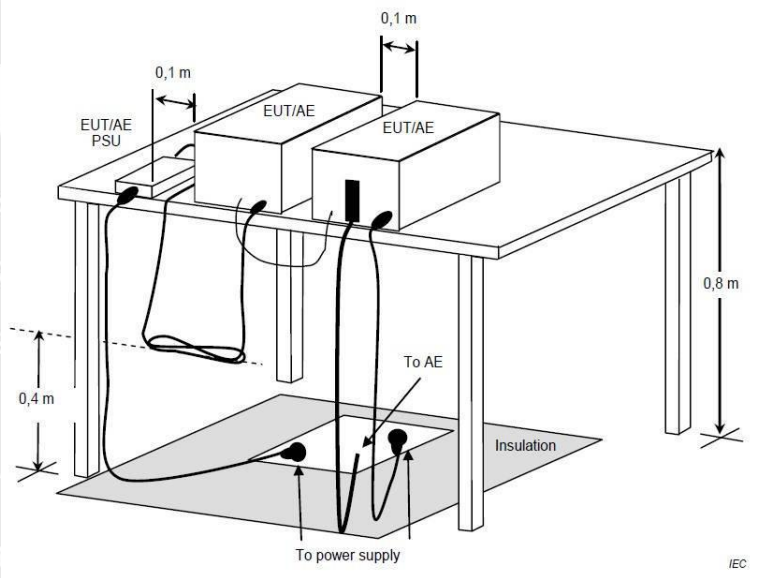
8.2 Radiated emissions (30MHz-1GHz)

Test Requirement:	Class B		
Test Limit:	**Frequency (MHz)**	**Limit [dB(uV/m) at 10m]**	**Limit [dB(uV/m) at 3m]**
	30 to 230	30	40
	230 to 1000	37	47
	Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to 1000MHz	
Test Method:	Clause 7.3 of CISPR 16-2-3:2016		
Procedure:	An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor		

8.2.1 E.U.T. Operation

Environmental Conditions					
Temperature:	25.8 °C	Humidity:	44.6 %	Atmospheric Pressure:	101 kPa
Test mode:	TM1				

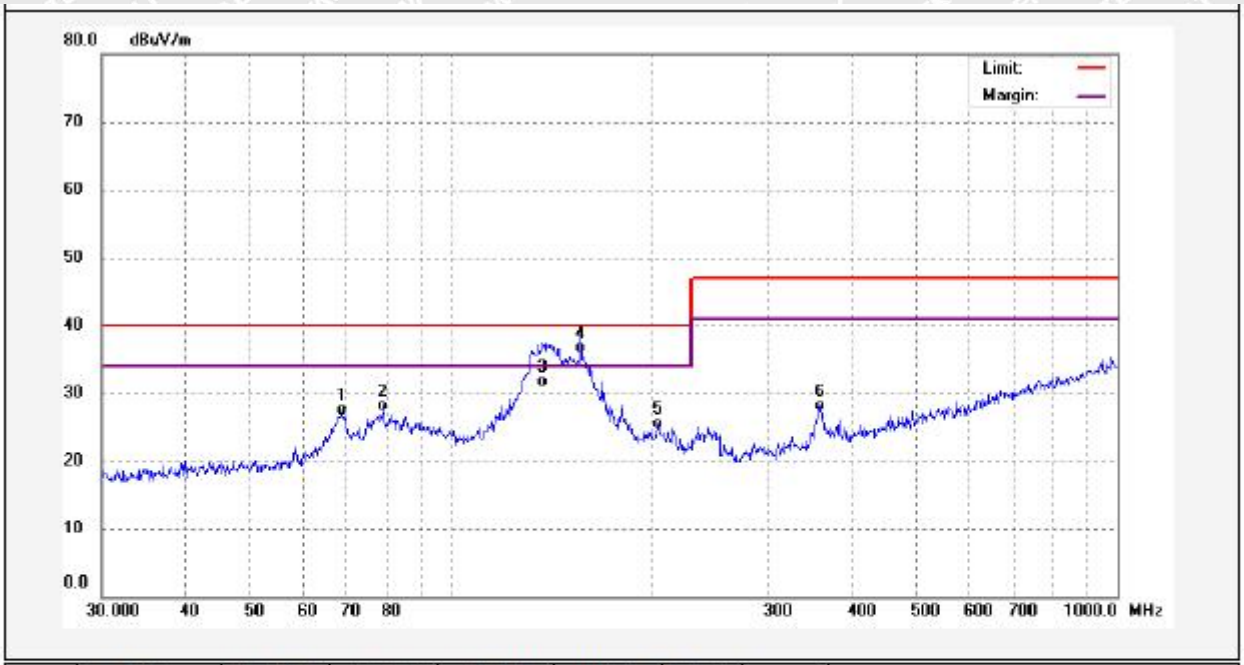
8.2.2 Basic Test Setup Block Diagram



8.2.3 Summary of Test Results

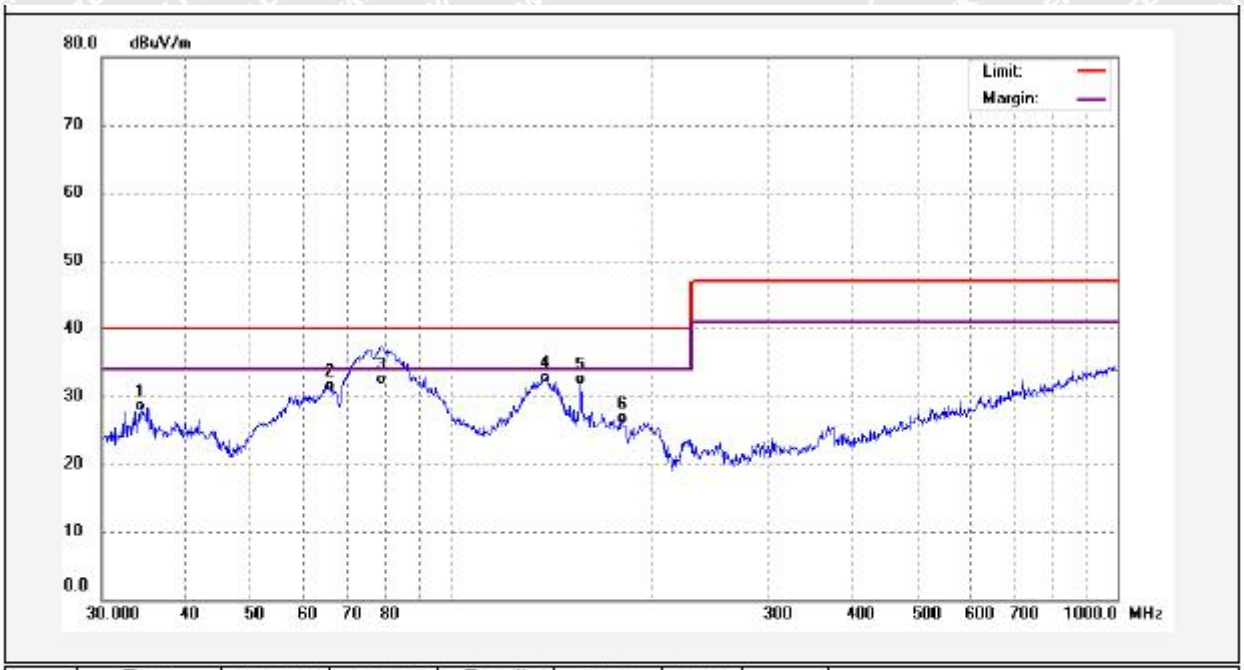
AC 230V/50Hz (Type-C1+UCB-A: 15V/3A+12V/1.5A)

TM1 / Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	68.6310	38.98	-11.42	27.56	40.00	-12.44	QP	
2	79.2425	40.46	-12.43	28.03	40.00	-11.97	QP	
3	137.4202	40.24	-8.44	31.80	40.00	-8.20	QP	
4	156.4578	44.82	-8.12	36.70	40.00	-3.30	QP	
5	204.2376	36.30	-10.82	25.48	40.00	-14.52	QP	
6	357.9286	34.98	-6.78	28.20	47.00	-18.80	QP	

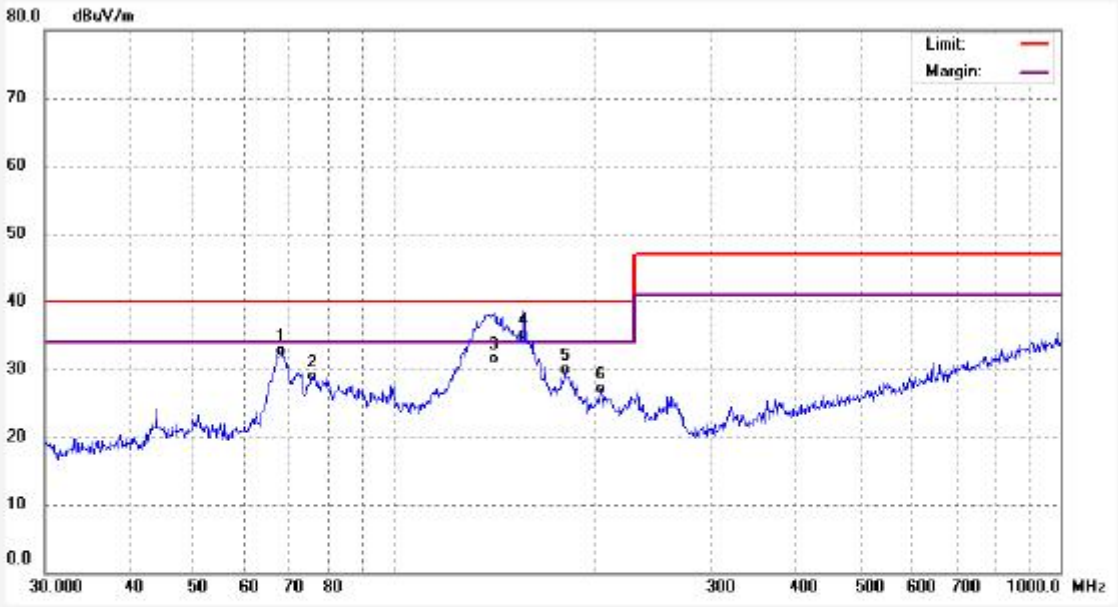
TM1 / Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	34.2760	38.86	-10.37	28.49	40.00	-11.51	QP	
2	66.0342	42.72	-11.17	31.55	40.00	-8.45	QP	
3	78.6888	44.89	-12.39	32.50	40.00	-7.50	QP	
4	138.3873	41.15	-8.37	32.78	40.00	-7.22	QP	
5	156.4577	40.57	-8.12	32.45	40.00	-7.55	QP	
6	180.6488	36.66	-9.99	26.67	40.00	-13.33	QP	

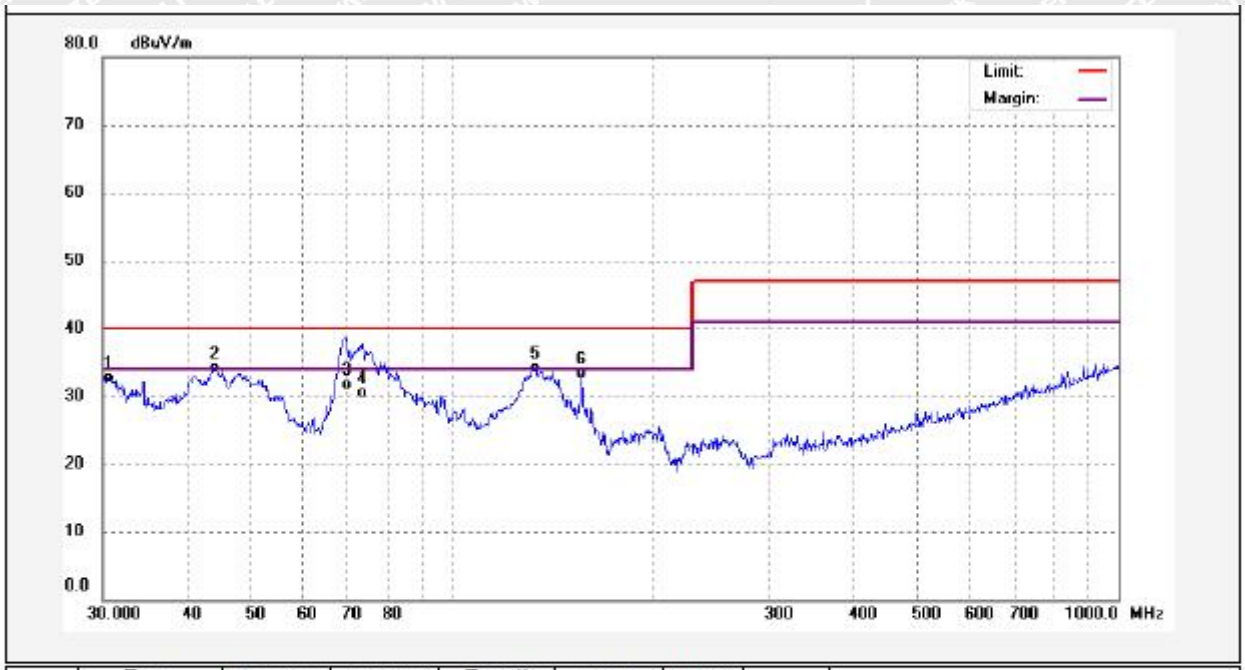
AC 120V/60Hz (Type-C1+UCB-A: 15V/3A+12V/1.5A)

TM1 / Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	67.6751	43.97	-11.33	32.64	40.00	-7.36	QP	
2	75.4462	40.96	-12.07	28.89	40.00	-11.11	QP	
3	141.3298	39.83	-8.23	31.60	40.00	-8.40	QP	
4	156.4578	43.22	-8.12	35.10	40.00	-4.90	QP	
5	180.6487	39.86	-9.99	29.87	40.00	-10.13	QP	
6	204.2376	38.00	-10.82	27.18	40.00	-12.82	QP	

TM1 / Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	30.6379	43.56	-10.76	32.80	40.00	-7.20	QP	
2	44.1202	43.92	-9.75	34.17	40.00	-5.83	QP	
3	69.6005	43.31	-11.51	31.80	40.00	-8.20	QP	
4	73.3593	42.48	-11.88	30.60	40.00	-9.40	QP	
5	133.6188	42.88	-8.68	34.20	40.00	-5.80	QP	
6	156.4578	41.47	-8.12	33.35	40.00	-6.65	QP	

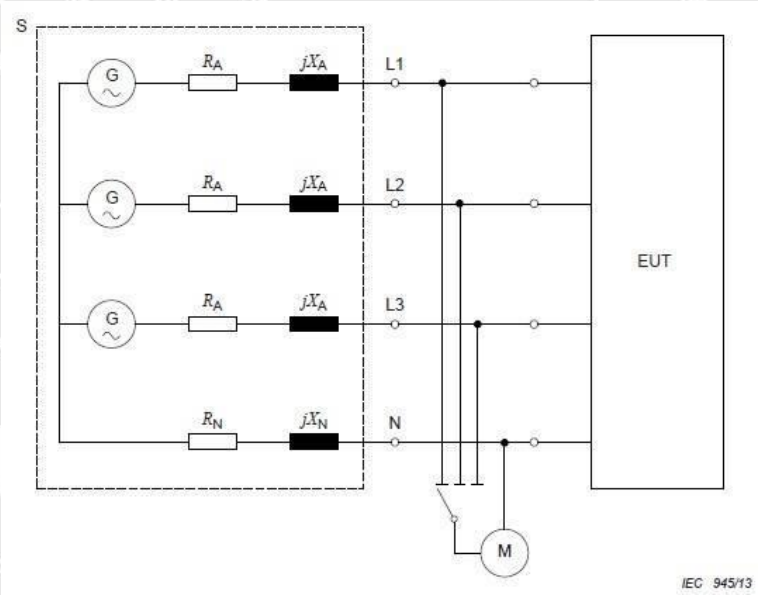
8.3 Voltage fluctuations and flicker

Test Requirement:	Clause 4
Test Limit:	EN 61000-3-3, Clause 5
Test Method:	EN 61000-3-3:2013+A2:2021

8.3.1 E.U.T. Operation

Environmental Conditions					
Temperature:	22.6 °C	Humidity:	39.4 %	Atmospheric Pressure:	102.5 kPa
Test mode:	TM1				

8.3.2 Basic Test Setup Block Diagram



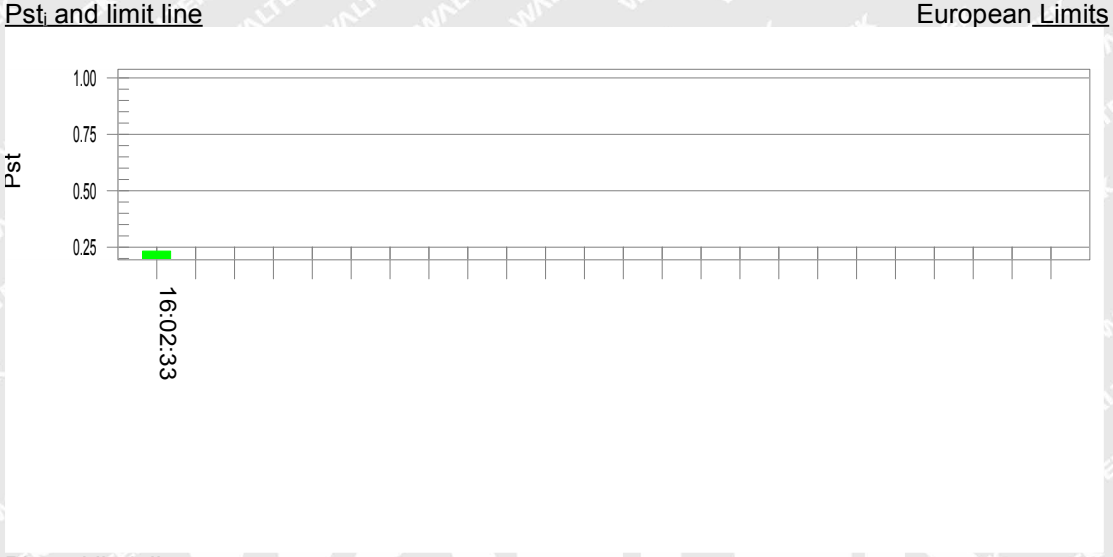
8.3.3 Summary of Test Results

Flicker Test Summary per IEC61000-3-3:2013/AMD1:2017 (Run time)

EUT: EU 2-pole wall adapter/charger
Tested by: Parker Liu
Test category: All parameters (European limits)
Test Margin: 100
Test date: 2026/1/29
Start time: 15:52:12
End time: 16:02:39
Test duration (min): 10
Data file name: F-000730.cts_data
Comment: Full load
Customer: MO2979

Test Result: Pass
Status: Test Completed

Pst_i and limit line
European Limits



Plt and limit line

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.84			
T-max (mS):	0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.233	Test limit:	1.000	Pass
Highest Plt (2 hr. period):	0.102	Test limit:	0.650	Pass

9 Immunity Test Results (EMS)

General Performance Criteria

Performance Criteria 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 Criteria 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 Criteria 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.

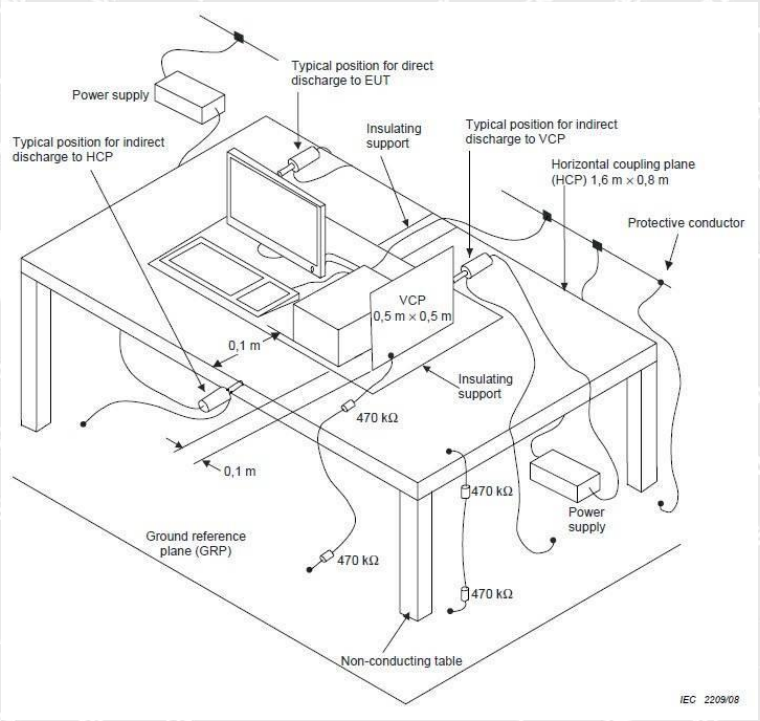
9.1 Electrostatic discharges

Test Requirement:	Contact Discharge: +/- 4kV Air Discharge: +/- 8kV
Test Method:	EN 61000-4-2: 2009
Procedure:	Discharge Impedance: 330Ω/150pF Number of Discharge: Minimum 10 times at each test point Discharge Mode: Single Discharge Discharge Period: 1 second minimum
Performance Criteria:	B

9.1.1 E.U.T. Operation

Environmental Conditions					
Temperature:	22.8 °C	Humidity:	40.2 %	Atmospheric Pressure:	102.6 kPa
Test mode:	TM1				

9.1.2 Basic Test Setup Block Diagram



9.1.3 Summary of Test Results

Discharge type	Volt (kV)	Polarity	Test Point	Result/ Observations
Air discharge	2,4,6,8	+	1	A
Air discharge	2,4,6,8	-	1	A
Contact discharge	2,4	+	2	A
Contact discharge	2,4	-	2	A
Horizontal Coupling	2,4	+	3	A
Horizontal Coupling	2,4	-	3	A
Vertical Coupling	2,4	+	3	A
Vertical Coupling	2,4	-	3	A

A: No degradation in the performance of the EUT was observed.

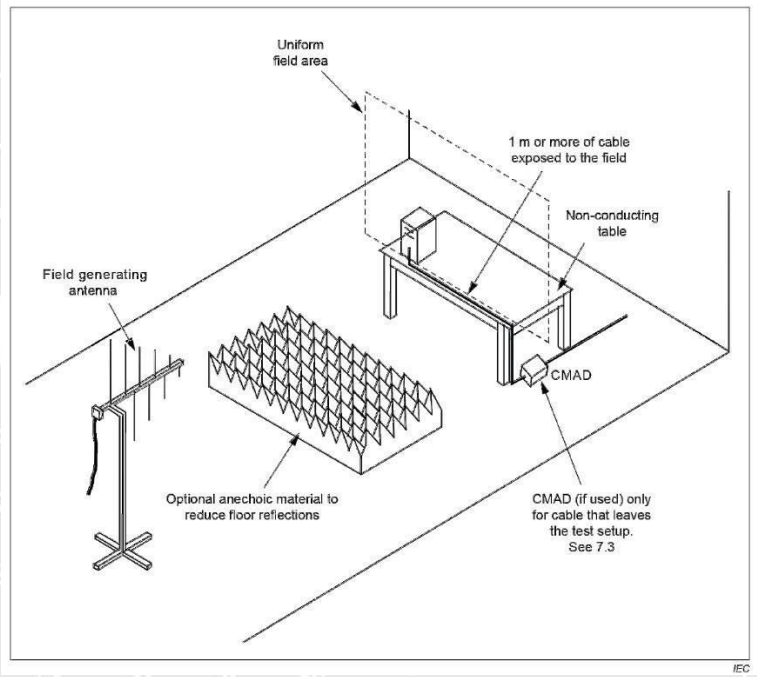
9.2 RF electromagnetic field disturbances

Test Requirement:	3V/m, 80%, 1kHz Amp. Mod.
Test Method:	EN IEC 61000-4-3: 2020
Procedure:	Frequency Range: 80MHz to 1GHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz Antenna Polarisation: Vertical and Horizontal Modulation: 1kHz,80% Amp. Mod,1% increment
Performance Criteria:	A

9.2.1 E.U.T. Operation

Environmental Conditions					
Temperature:	23.1 °C	Humidity:	43.1 %	Atmospheric Pressure:	102.2 kPa
Test mode:	TM1				

9.2.2 Basic Test Setup Block Diagram



9.2.3 Summary of Test Results

Frequency	Field Strength (V/m)	EUT face	Dwell time	Result/ Observations
80MHz-1GHz	3	Front	1s	A
80MHz-1GHz	3	Back	1s	A
80MHz-1GHz	3	Left	1s	A
80MHz-1GHz	3	Right	1s	A
80MHz-1GHz	3	Top	1s	A
80MHz-1GHz	3	Bottom	1s	A
1800MHz	3	Front	1s	A
1800MHz	3	Back	1s	A
1800MHz	3	Left	1s	A
1800MHz	3	Right	1s	A
1800MHz	3	Top	1s	A
1800MHz	3	Bottom	1s	A
2600MHz	3	Front	1s	A
2600MHz	3	Back	1s	A
2600MHz	3	Left	1s	A
2600MHz	3	Right	1s	A
2600MHz	3	Top	1s	A
2600MHz	3	Bottom	1s	A
3500MHz	3	Front	1s	A
3500MHz	3	Back	1s	A
3500MHz	3	Left	1s	A
3500MHz	3	Right	1s	A
3500MHz	3	Top	1s	A
3500MHz	3	Bottom	1s	A
5000MHz	3	Front	1s	A
5000MHz	3	Back	1s	A
5000MHz	3	Left	1s	A
5000MHz	3	Right	1s	A
5000MHz	3	Top	1s	A
5000MHz	3	Bottom	1s	A

A: No degradation in the performance of the EUT was observed.

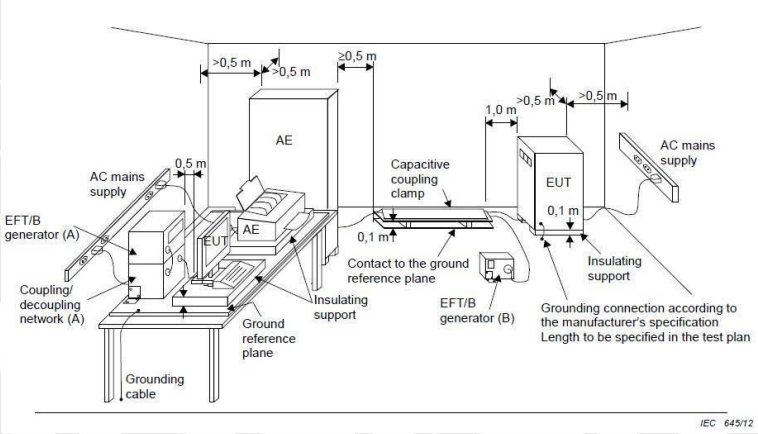
9.3 Electrical fast transients / burst for AC mains power ports

Test Requirement:	1kV; 5/50ns Tr/Th; 5kHz Repetition Frequency
Test Method:	EN 61000-4-4: 2012
Procedure:	Repetition Frequency: 5kHz Burst Period: 300ms Test Duration: 2 minute per level & polarity
Performance Criteria:	B

9.3.1 E.U.T. Operation

Environmental Conditions					
Temperature:	22.8 °C	Humidity:	40.2 %	Atmospheric Pressure:	102.6 kPa
Test mode:	TM1				

9.3.2 Basic Test Setup Block Diagram



9.3.3 Summary of Test Results

Port	Volt (kV)	Polarity	CDN/ Clamp	Result/ Observations
AC power port	1	+	CDN	A
AC power port	1	-	CDN	A

A: No degradation in the performance of the EUT was observed.

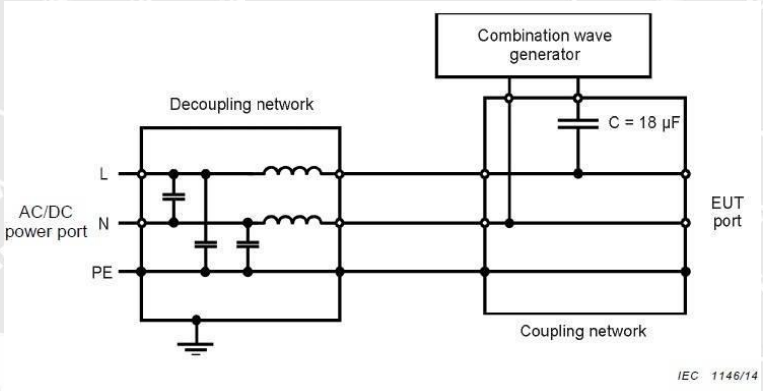
9.4 Surges for AC mains power ports

Test Requirement:	1.2/50μs Tr/Td; 1kV Line to Line
Test Method:	EN 61000-4-5: 2014 +A1: 2017
Procedure:	Interval: 60s between each surge No. of surges: 5 positive, 5 negative at 90°, 270°
Performance Criteria:	B

9.4.1 E.U.T. Operation

Environmental Conditions					
Temperature:	22.8 °C	Humidity:	40.2 %	Atmospheric Pressure:	102.6 kPa
Test mode:	TM1				

9.4.2 Basic Test Setup Block Diagram



9.4.3 Summary of Test Results

Port	Volt (kV)	Polarity	Phase(degree)	Result/ Observations
L-N	1	+	90°	A
L-N	1	-	270°	A

A: No degradation in the performance of the EUT was observed.

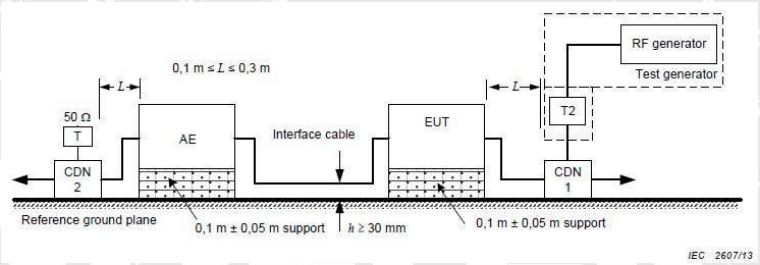
9.5 Continuous induced RF disturbances for AC mains power ports (150kHz-80MHz)

Test Requirement:	0,15 to 10MHz 3Vrms (emf), 10 to 30MHz 3V to 1Vrms(emf), 30 to 80MHz 1Vrms(emf), 80%,1kHz Amp. Mod.
Test Method:	EN 61000-4-6: 2014
Procedure:	Frequency Range: 0.15MHz to 80MHz Modulation: 80%, 1kHz Amplitude Modulation Step Size: 1%
Performance Criteria:	A

9.5.1 E.U.T. Operation

Environmental Conditions					
Temperature:	22.6 °C	Humidity:	39.4 %	Atmospheric Pressure:	102.5 kPa
Test mode:	TM1				

9.5.2 Basic Test Setup Block Diagram



9.5.3 Summary of Test Results

Port	Strength (Vrms)	CDN/Clamp	Dwell time	Result/ Observations
AC power port	3(0.15MHz-10MHz)	CDN	1s	A
AC power port	3 to 1(10MHz-30MHz, Lines)	CDN	1s	A
AC power port	1(30MHz-80MHz)	CDN	1s	A

A: No degradation in the performance of the EUT was observed.

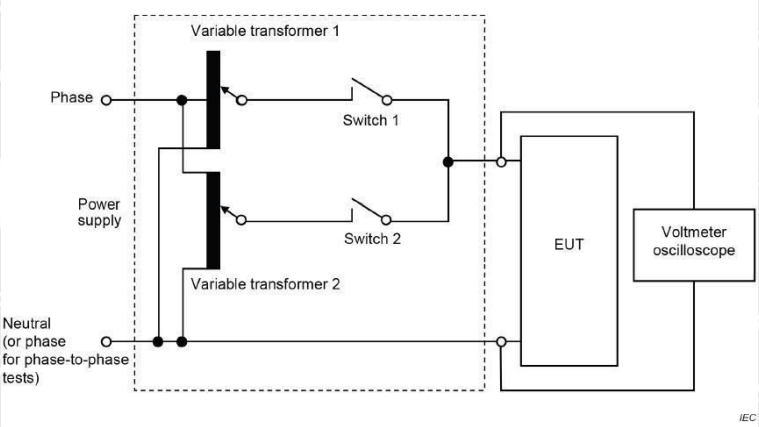
9.6 Voltage dips and interruptions

Test Requirement:	<5% residual voltage for 0.5 periods 70% residual voltage: 25 periods for 50Hz, 30 periods for 60Hz <5% residual voltage: 250 periods for 50Hz, 300 periods for 60Hz
Test Method:	EN IEC 61000-4-11:2020
Procedure:	<5% residual voltage for 0.5 period 70% residual voltage: 25 periods for 50Hz, 30 periods for 60Hz <5% residual voltage: 250 periods for 50Hz, 300 periods for 60Hz No. of Dips / Interruptions: 3 per Level Time between dropout: 10s
Performance Criteria:	B, C, C

9.6.1 E.U.T. Operation

Environmental Conditions					
Temperature:	22.8 °C	Humidity:	40.2 %	Atmospheric Pressure:	102.6 kPa
Test mode:	TM1				

9.6.2 Basic Test Setup Block Diagram



9.6.3 Summary of Test Results

Level %UT	Phase (degree)	Duration	No. of Dips/ Interruptions	Result/ Observations
0	0°	0.5 Cycles	3	A
0	0°	250 Cycles	3	B
70	0°	25 Cycles	3	A
0	0°	0.5 Cycles	3	A
0	0°	300 Cycles	3	B
70	0°	30 Cycles	3	A

A: No degradation in the performance of the EUT was observed.
B: The EUT shut down during the tests of 0%UT, 250 cycles and 300 cycles, and self-recovered after tests.

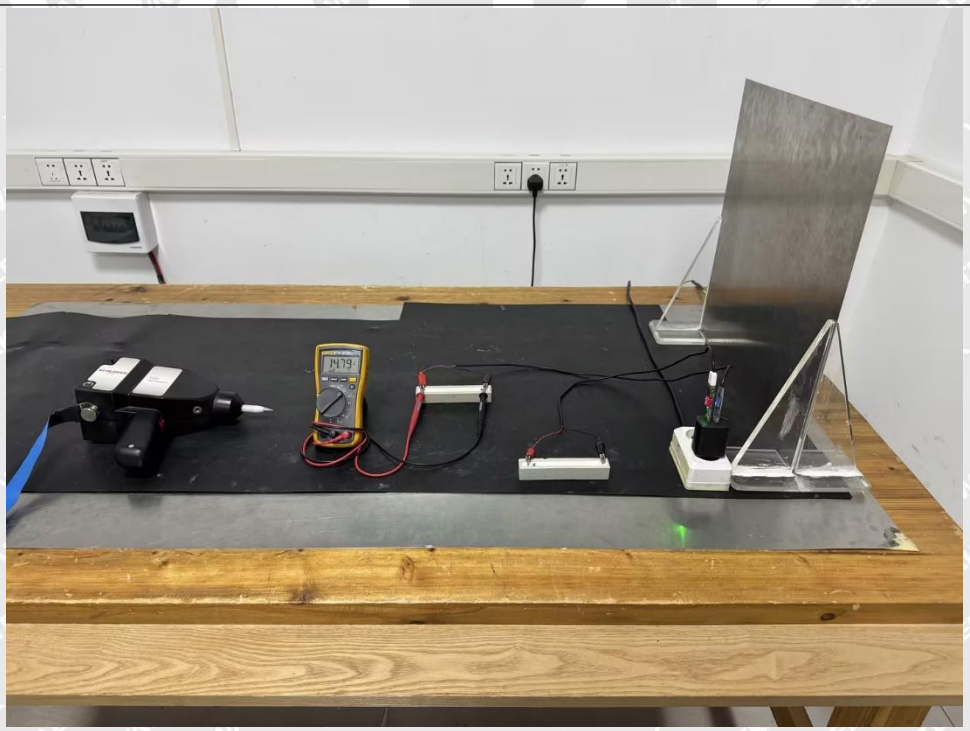
10 Photographs – Test Setup

10.1 Conducted emissions from AC mains power ports (150kHz-30MHz)

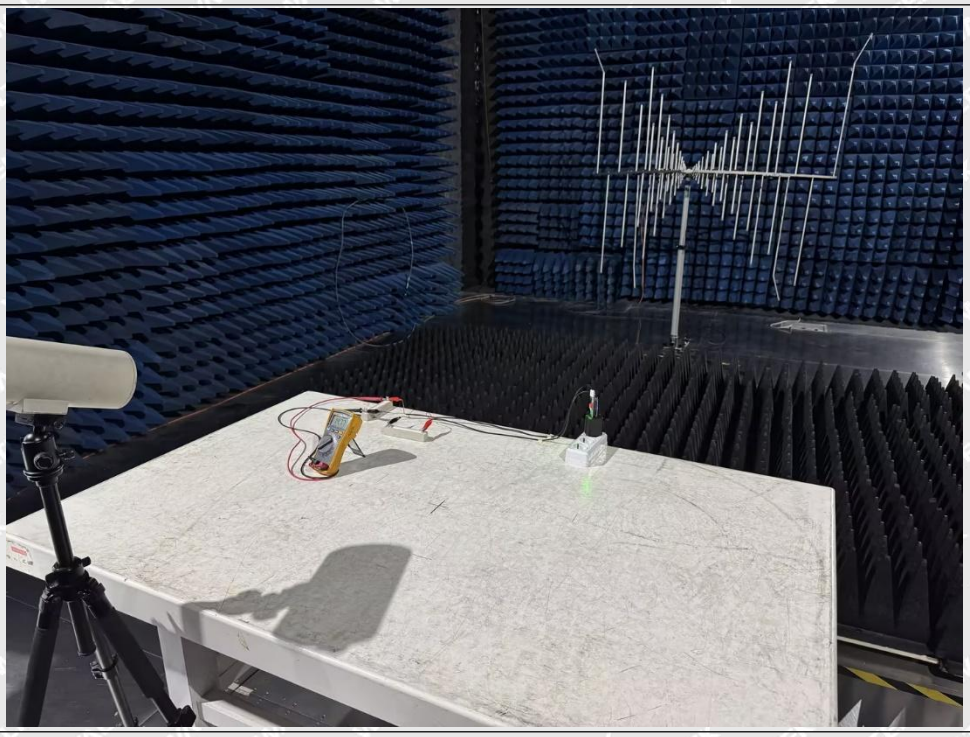
10.2 Radiated emissions (30MHz-1GHz)

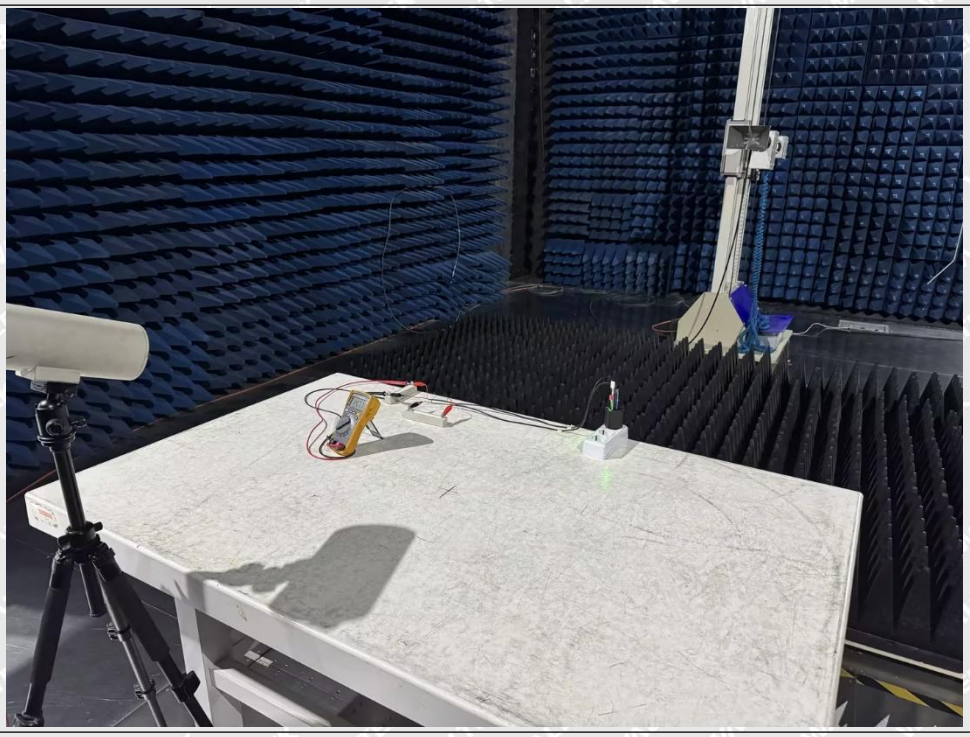
10.3 Voltage fluctuations and flicker

10.4 Electrostatic discharges

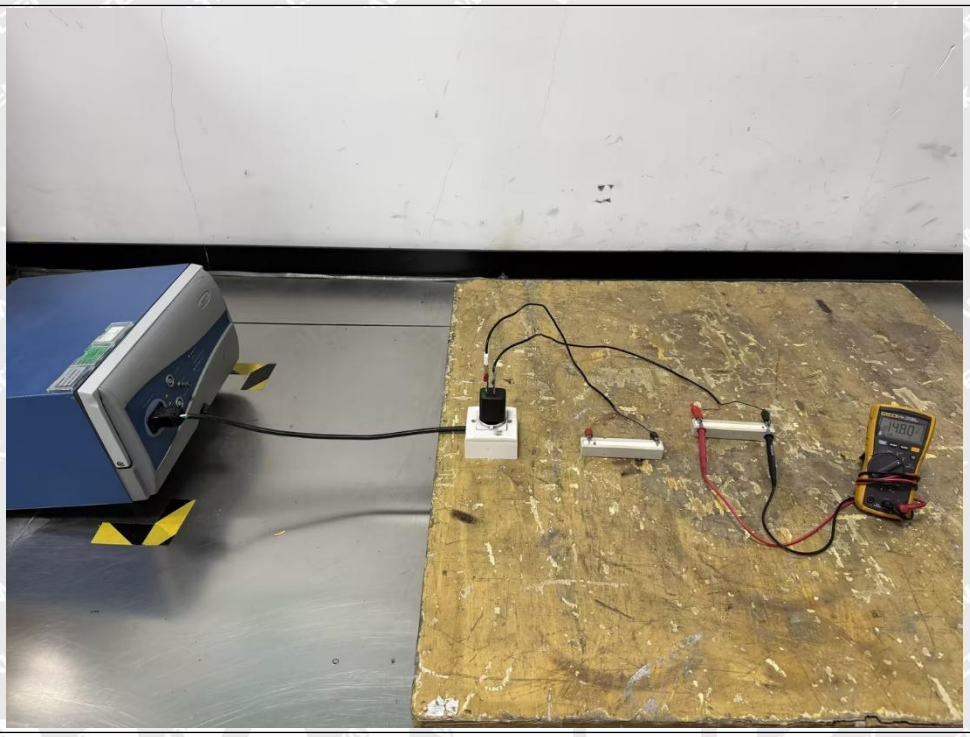


10.5 RF electromagnetic field disturbances

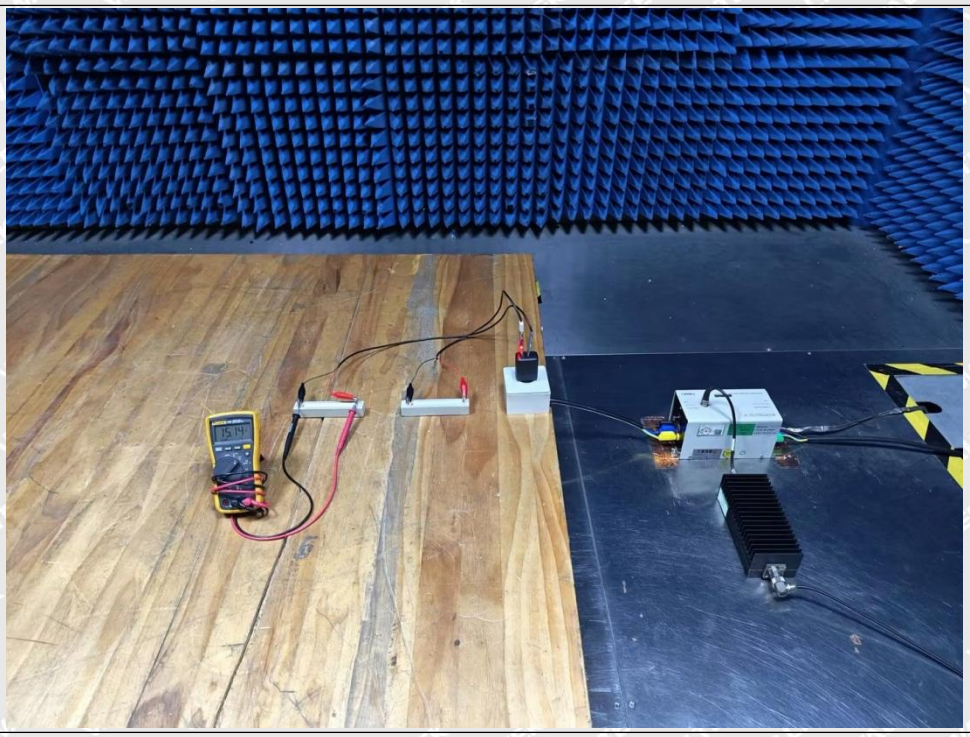




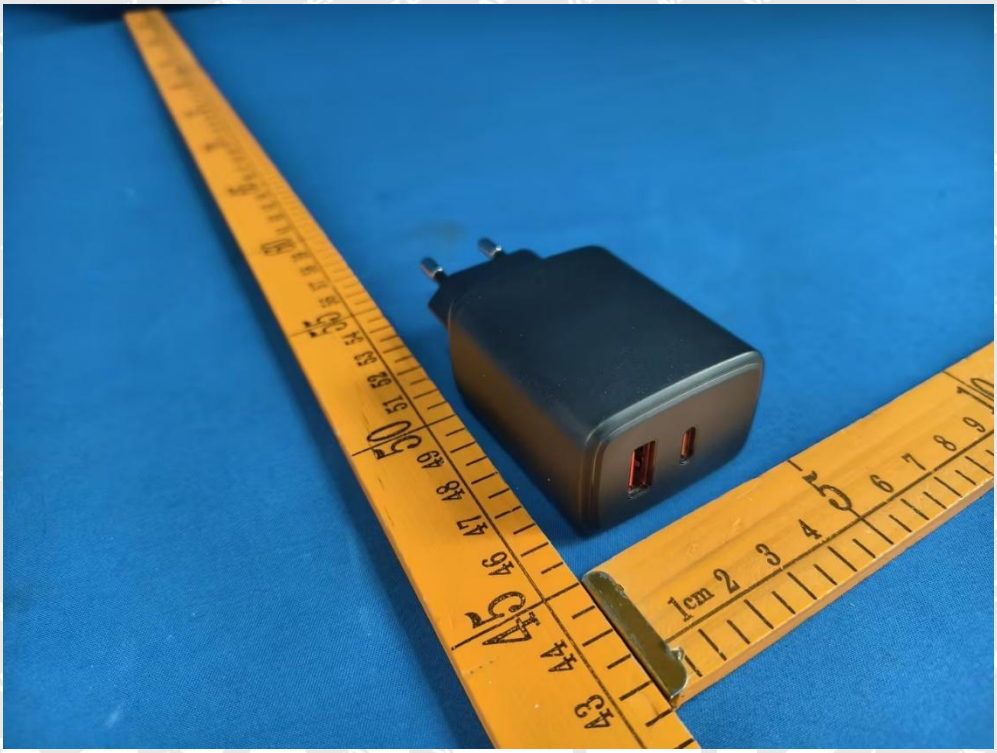
10.6 Electrical fast transients / burst for AC mains power ports
Surges for AC mains power ports
Voltage dips and interruptions

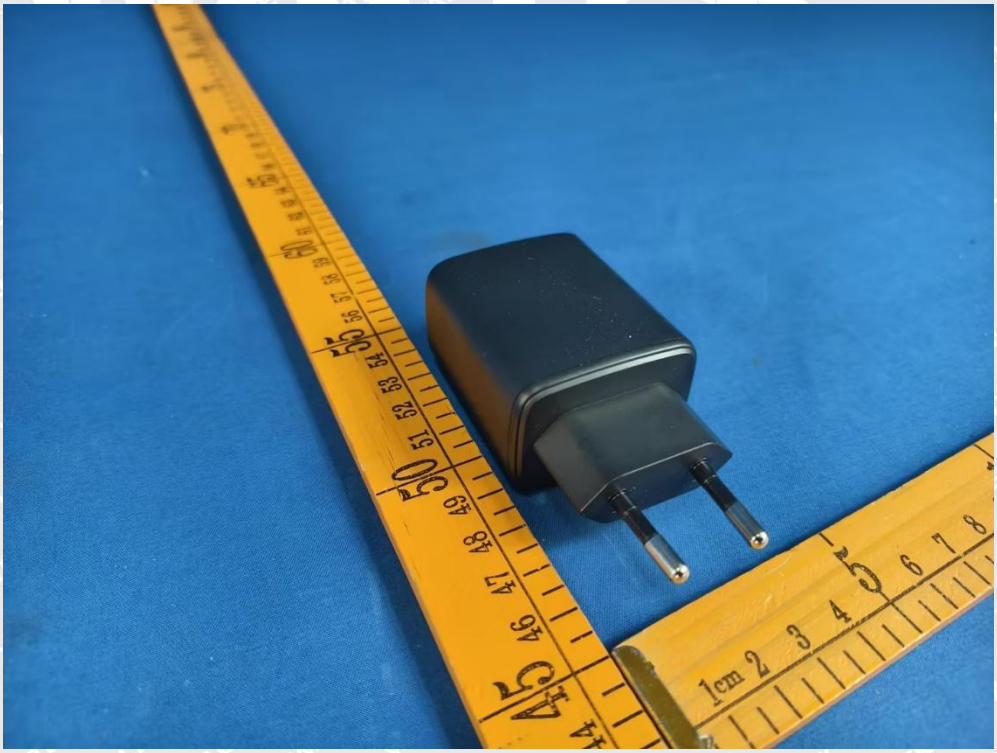


10.7 Continuous induced RF disturbances for AC mains power ports (150kHz-80MHz)



11 Photographs – Constructional Details





====== End of Report ======