

EMC TEST REPORT

Test Report No.....: EMC250318026-01-001

Product(s) Name.....: LCD MONITOR

Model(s).....: 27E4U, **27E4***** (*=0-9, A-Z, a-z, +,-,/,\ or blank.)

Trade Mark.....: AOC

Applicant.....: TPV Display Technology(Wuhan)Co., Ltd

Address.....: Unique No.11 Zhuankou Development District of Economic Technological
Development Zone Wuhan City, P.R.China

Receipt Date.....: 2025.02.20

Test Date.....: 2025.02.20~2025.03.03

Issued Date.....: 2025.03.25

Standards.....: EN 55032:2015; BS EN 55032:2015;
EN 55032:2015+A11:2020; BS EN 55032:2015+A1:2020;
EN 55032:2015+A1:2020; BS EN 55032:2015+A11:2020;
CISPR 32:2015+AMD1:2019; AS/NZS CISPR 32:2015+AMD1:2020;
EN 61000-3-2:2014; BS EN 61000-3-2:2014;
EN IEC 61000-3-2:2019+A1:2021; BS EN IEC 61000-3-2:2019+A1:2021;
EN 61000-3-3:2013; BS EN 61000-3-3:2013;
EN 61000-3-3:2013+A1:2019; BS EN 61000-3-3:2013+A1:2019;
EN 61000-3-3:2013+A2:2021; BS EN 61000-3-3:2013+A2:2021;
EN 55035:2017(CISPR 35:2016); BS EN 55035:2017;
EN 55035:2017+A11:2020; BS EN 55035:2017+A11:2020;

Testing Laboratory...: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
Jason Huang	Black Ding	Tim Zhang	
<i>Jason Huang</i>	<i>Black Ding</i>	<i>Tim Zhang</i>	

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History of the test report

Original Report Issue Date: 2025.03.25

- No additional attachment
- Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. General information

1.1. Basic information of EUT

Test sample no.	POC250318026-S001
Product Name	LCD MONITOR
Product Model	27E4U, **27E4***** (*=0-9, A-Z, a-z, +,-,/,\ or blank.)
Test Model	27E40
Model difference	Only the model name is different.
Trade Mark	AOC
Power supply	AC 100-240V, 50/60Hz
Applicant	TPV Display Technology(Wuhan)Co., Ltd Unique No.11 Zhuankou Development District of Economic Technological Development Zone Wuhan City, P.R.China

2. Measured equipment list

2.1. Test facility

Shenzhen Haiyun Standard Technical CO., Ltd.

Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue,
Labor Community, Xixiang Street, Baoan District, Shenzhen, China

CNAS Registration Number: CNAS L18252

Subcontract Laboratory:

Shenzhen Haiyun Testing CO., Ltd

Room 201, #3 factory, Gongjin Electronics, Shatian, Kengzi street, Pingshan District, Shenzhen,
Guangdong, China

CNAS Registration Number: CNAS L7006

Waltek Testing Group Co., Ltd.

Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China

CNAS Registration Number: CNAS L3110

2.2. Test instruments list

No.	Name of Equipment	Manufacturer	Model Number	Serial Number	Inventory No.	Last Calibration	Due Calibration
Radiated Emission							
1	Test receiver	Rohde&Schwarz	ESU	100184	JLE011	2024/4/24	2025/4/23
2	Log periodic antenna	Schwarzbeck	VULB 9168	1151	JLE012	2024/4/20	2025/4/19
3	Low frequency amplifier	/	LNA 0920N	2014	JLE023	2024/4/24	2025/4/23
4	High frequency amplifier	Schwarzbeck	BBV 9718	284	JLE024	2024/4/24	2025/4/23
5	Horn Antenna	SCHWARZBECK	BBHA 9120 D	02670	JLE028	2024/4/20	2025/4/19
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE021	2024/4/24	2025/4/23
7	Horn Antenna	SCHWARZBECK	BBHA 9170	9170#685	JLE029	2024/7/15	2025/7/14
8	Loop Antenna	SCHWARZBECK	FMZB1519B	00029	JLE030	2024/7/15	2025/7/14
9	Broadband preamplifier	Schwarzbeck	BBV9721	9721-019	JLE025	2024/4/24	2025/4/23
10	SAC	SAEMC	9*6*6	/	JLE014	2022/5/4	2025/5/3
11	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				
Conducted Emission							
1	LISN	Rohde&Schwarz	ENV216	100075	JLE002	2024/4/24	2025/4/23
2	ISN	Schwarzbeck	CATE 5 8158	#171	JLE003	2024/4/24	2025/4/23
3	ISN	Schwarzbeck	CAT 3 8158	00187	JLE032	2024/3/31	2025/3/30
4	Test receiver	Rohde&Schwarz	ESCI	100718	JLE010	2024/4/24	2025/4/23
5	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	JLE047	2024/4/24	2025/4/23
6	Temp&Humidity Recorder	Meideshi	JR900	/	JLE020	2024/4/24	2025/4/23
7	Test software	Farad Technology Co., Ltd	EZ-EMC Ver.TW-03A2				

ESD							
1	Electrostatic discharge generator	Prima	ESD61002TA	/	JLE009	2024/4/19	2025/4/18
2	Temp&Humidity Recorder	Meideshi	JR900	/	JLE019	2024/4/24	2025/4/23
RS							
1	Signal generator	DARE	CTR1009B/RG N6000B	16100025 SNO20	JLE043	2024/10/11	2025/10/10
2	Power meter	DARE	RPR2006C	18100006 SNO03	JLE044	2024/10/11	2025/10/10
3	Power meter	DARE	RPR2006C	18100006 SNO04	JLE045	2024/10/11	2025/10/10
4	Power amplifier	Bonn	BLWA0820-200 /100	1811690	JLE046	2024/10/11	2025/10/10
5	Power amplifier	Rflight	Power amplifier	23043081	JLE155	2024/09/06	2025/09/05
6	Probe	DARE	RadiSense 6	10I00037 SNO101	JLE052	2024/10/09	2025/10/08
7	Horn antenna	Rohde&Schwarz	STLP 9149	00811	JLE166	2023/9/14	2026/9/13
8	Integral Antenna	Rohde&Schwarz	STLP 9128D	STLP 9128 DN#119	JLE061	2023/10/14	2026/10/13
9	Test software	DARE!! instruments	RadiMation Ver.2017.2.10				
EFT							
1	Combined immunity tester	3ctest	CCS 600	/	JLE070	2024/10/20	2025/10/19
2	Combined immunity tester	3ctest	WT 2216S	/	JLE074	2024/10/20	2025/10/19
3	Coupling clamp	/	/	/	JLE013	2024/4/24	2025/4/23
4	Temp&Humidity Recorder	Meideshi	JR900	/	JLE018	2024/4/24	2025/4/23
5	Test software	3ctest	EMS Lab Ver.1.8.2.0				

Surge							
1	Combined immunity tester	3ctest	CCS 600	/	JLE070	2024/10/20	2025/10/19
2	Combined immunity tester	3ctest	WT 2216S	/	JLE074	2024/10/20	2025/10/19
3	Combined surge simulator	3ctest	CWS 600T	/	JLE071	2024/10/20	2025/10/19
4	Single phase transformer	Prima	JMB-3KVA	/	JLE008	2024/10/20	2025/10/19
5	Temp&Humidity Recorder	Meideshi	JR900	/	JLE017	2024/4/24	2025/4/23
6	Test software	3ctest	EMS Lab Ver.1.8.2.0				
CS							
1	Coupling decoupling network	3ctest	CDN M2/M3	ES06400 2622007	JLE073	2024/10/20	2025/10/19
2	6dB attenuator	Weinschel Associates	A622	59-6-33	JLE038	2024/4/24	2025/4/23
3	Conducted Immunity Tester System	Frankonia	CIT-10	E670107 8605	JLE001	2024/4/24	2025/4/23
4	absorbing clamp(CS)	Luthi	EM101	35978	JLE015	2024/4/22	2025/4/21
5	Temp&Humidity Recorder	Meideshi	JR900	/	JLE016	2024/4/24	2025/4/23
6	Test software	Frankonia	CIT-10 Ver.1.1.2.0				
DIPS							
1	Combined immunity tester	3ctest	WT 2216S	/	JLE074	2024/10/20	2025/10/19
2	Combined immunity tester	3ctest	CCS 600	/	JLE070	2024/10/20	2025/10/19
3	Temp&Humidity Recorder	Meideshi	JR900	/	JLE022	2024/4/24	2025/4/23
4	Test software	3ctest	EMS Lab Ver.1.8.2.0				
Harmonics & Flickers							
1	Harmonic & flicker analyzer	California	5001IX-CTS-4 00	2215A03 865	JLE034	2024/4/24	2025/4/23
2	Test software	California	CTS4 Ver.4.29.0.0				

Waltek Lab Instruments List:

Radiated emissions (30MHz-1GHz)						
No.	Description	Manufacturer	Model	Serial No.	Cal. Date	Due. Date
1	Coaxial Cable (below 1GHz)	Lair Microwave	LE400-NMNM-8M	#02	2025-01-10	2026-01-09
2	Broadband Preamplifier (9KHz-6GHz)	SCHWARZBEC K	BBV9744	00140	2025-01-10	2026-01-09
3	Trilog Broadband Antenna	SCHWARZBEC K	VULB9163	01376	2025-01-11	2026-01-10
4	Test Receiver (9KHz-7GHz)	R&S	ESR 7	102320	2025-01-10	2026-01-09
5	Test Software	Frad Technology	EZ-EMC(Ver.EMEC -3A1)	/	/	/
3m Fully Anechoic Room for Radiation (Above 1GHz)						
1	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due. Date
2	Spectrum Analyzer	R&S	FSP30	100091	2024-04-22	2025-04-21
3	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	2025-01-17	2026-01-16
4	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	2024-07-18	2025-07-17
5	Coaxial Cable (above 1GHz)	ZT26-NJ-NJ-8M/F A	1GHz-18GHz	NA	2024-04-22	2025-04-21

2.3. Measurement uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Uncertainty	
Parameter	Uncertainty
Conducted emission(9kHz~30MHz) AC main	$\pm 2.68\text{dB}$
Conducted emission(9kHz~30MHz) wired network ports	$\pm 2.94\text{dB}$
Radiated emission (1GHz~18GHz)	$\pm 5.06\text{dB}$
Radiated emission (18GHz~40GHz)	$\pm 4.98\text{dB}$

Measurement uncertainty levels of Waltek Testing Group Co., Ltd.		
Measurement	Measurement Frequency Range	Uncertainty
Radiated Emission	30MHz ~ 1GHz	$\pm 5.03\text{dB}$
Radiated Emission	1GHz ~ 18GHz	$\pm 5.24\text{dB}$

3. Test system information

3.1. Test result summary

Test procedures according to the technical standard(s):

Emission				
Standard	Item	Result	Remarks	Tested in Lab
EN 55032	Conducted (Main Port)	Pass	Class B	Haiyun
	Conducted (Telecom Port)	N/A	Class B	Haiyun
	Radiated (below 1 GHz)	Pass	Class B	Waltek Testing Group Co., Ltd.
	Radiated (above 1 GHz)	Pass	Class B	Haiyun
EN IEC 61000-3-2	Harmonic current emissions	Note2	Class D	Haiyun
EN 61000-3-3	Voltage fluctuations & flicker	Pass	/	Haiyun

Immunity				
Standard	Item	Result	Remarks	Tested in Lab
EN 61000-4-2	ESD	Pass	Criterion B	Haiyun
EN 61000-4-3	RS	Pass	Criterion A	Shenzhen Haiyun Testing CO., Ltd
EN 61000-4-4	EFT	Pass	Criterion B	Haiyun
EN 61000-4-5	Surge	Pass	Criterion B	Haiyun
EN 61000-4-6	CS	Pass	Criterion A	Haiyun
EN 61000-4-8	PFMF*	Note5	Criterion A	Haiyun
EN 61000-4-11	Voltage dips & voltage variations	Pass	Criterion B/C/C	Haiyun

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The power consumption of EUT is less than 75W and no limits apply.
- (3) Voltage dip: 0% residual voltage for 0.5 cycle – Performance Criteria B
Voltage dip: 70% residual voltage for 25 cycle (at 50Hz) – Performance Criteria C
Voltage Interruption: 0% residual voltage for 250 cycle (at 50Hz) – Performance Criteria C
- (4) Haiyun: Shenzhen Haiyun Standard Technical CO., Ltd.
- (5) * denotes test only to equipment containing devices intrinsically susceptible to magnetic fields, such as CRT monitors, Hall effect elements, electro-dynamic microphones, magnetic field sensors or audio frequency transformers. Refer to standard D.3.2 for determining the test level when the EUT contains a CRT display.

3.2. Description of test mode

Operating mode					
No.	Input ports	Input source	Resolution	Audio	USB
1*	HDMI Playing	PC	1920* 1080@120HZ	With Earphone	Connect USB port
2		PC	1280* 1024@120HZ	With Earphone	Connect USB port
3		PC	800* 600@60HZ	With Earphone	Connect USB port
4		PC	1920* 1080@120HZ	Without Earphone	Connect USB port
5		PC	1280* 1024@120HZ	Without Earphone	Connect USB port
6		PC	800* 600@60HZ	Without Earphone	Connect USB port
7		PC	1920* 1080@120HZ	With Earphone	No USB port
8		PC	1280* 1024@120HZ	With Earphone	No USB port
9		PC	800* 600@60HZ	With Earphone	No USB port
10		PC	1920* 1080@120HZ	Without Earphone	No USB port
11		PC	1280* 1024@120HZ	Without Earphone	No USB port
12		PC	800* 600@60HZ	Without Earphone	No USB port
13*	DP Playing	PC	1920* 1080@120HZ	With Earphone	Connect USB port
14		PC	1280* 1024@120HZ	With Earphone	Connect USB port
15		PC	800* 600@60HZ	With Earphone	Connect USB port
16		PC	1920* 1080@120HZ	Without Earphone	Connect USB port
17		PC	1280* 1024@120HZ	Without Earphone	Connect USB port
18		PC	800* 600@60HZ	Without Earphone	Connect USB port
19		PC	1920* 1080@120HZ	With Earphone	No USB port
20		PC	1280* 1024@120HZ	With Earphone	No USB port
21		PC	800* 600@60HZ	With Earphone	No USB port
22		PC	1920* 1080@120HZ	Without Earphone	No USB port
23		PC	1280* 1024@120HZ	Without Earphone	No USB port
24		PC	800* 600@60HZ	Without Earphone	No USB port
25*	VGA Playing	PC	1920* 1080@60HZ	With Earphone	Connect USB port
26		PC	1280* 1024@60HZ	With Earphone	Connect USB port
27		PC	800* 600@60HZ	With Earphone	Connect USB port
28		PC	1920* 1080@60HZ	Without Earphone	Connect USB port
29		PC	1280* 1024@60HZ	Without Earphone	Connect USB port
30		PC	800* 600@60HZ	Without Earphone	Connect USB port
31		PC	1920* 1080@60HZ	With Earphone	No USB port
32		PC	1280* 1024@60HZ	With Earphone	No USB port
33		PC	800* 600@60HZ	With Earphone	No USB port
34		PC	1920* 1080@60HZ	Without Earphone	No USB port
35		PC	1280* 1024@60HZ	Without Earphone	No USB port
36		PC	800* 600@60HZ	Without Earphone	No USB port

Note:

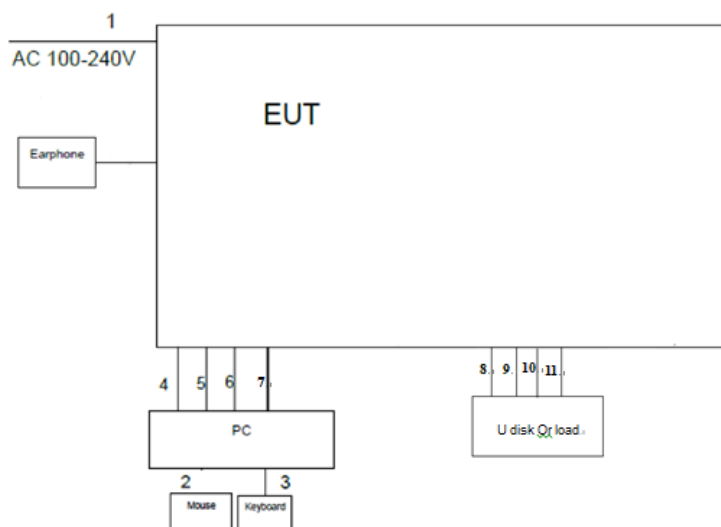
1. The lengths of AC power cord, HDMI cable, DP cable and USB Type-B cable are respectively: 1.2M / 1.5M / 1.8M, The 1.2M is the worst performance.
2. Resolution refresh rate from low to high: 800* 600@60HZ~1920* 1080@120HZ
3. "*"Means the worst test mode.

3.3. EUT Operating Conditions

The EUT exercise program used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use. The standard test signals and output signal as following.

1. EUT connected to Earphone via Earphone cable
2. The Mouse and Keyboard connected to PC via USB cable.
3. The Printer connected to PC via USB cable.
4. EUT connected to PC via HDMI cable.
5. EUT connected to PC via DP cable.
6. EUT connected to PC via VGA cable.
7. EUT connected to PC via USB Type-B cable cable.
8. EUT connect U disk Or load
9. EUT connect U disk Or load
10. EUT connect U disk Or load
11. EUT connect U disk Or load

3.4. Block Diagram Showing the Configuration Of System Tested



3.5. Description of support units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Equipment	Model	Manufacturer	Series No
1	Microcomputer	Lenovo	ThinkCentre M750t-N000	/
2	Printer	Xiaomi	MJPMYTJHT01	/
3	Mouse	LENOVO	DOK-680U	/
4	Keyboard	LENOVO	SK-8827	/
5	Earphone	Huawei	P1	1.0 meter
6	USB Disk	/	Kingston	/

4. Emission test

4.1. Conduction emission test

4.1.1. Limit

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

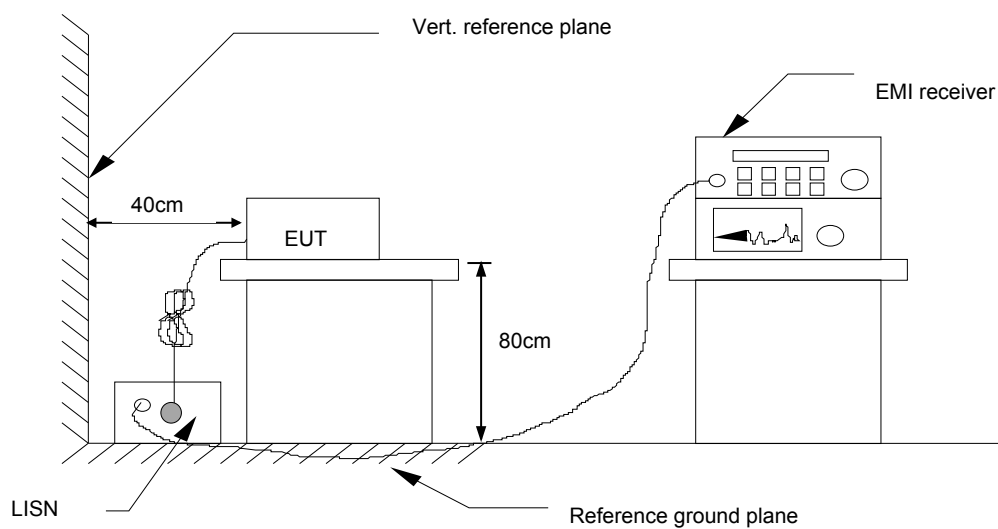
Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2. Test procedures

1. Test limits and test methods reference EN 55032 Appendix A and Appendix D.
2. The EUT was placed 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (AMN). All other support equipment powered from additional AMN. The AMN provide 50 Ohm/ 50 uH of coupling impedance for the measuring instrument.
3. Interconnecting cables that hang closer than 0.4 m to the ground plane shall be folded back and forth in the center forming a bundle 0.3 m to 0.4 m long.
4. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance.
5. The frequency range from 150 kHz to 30 MHz was searched.
6. Actual test configuration, please refer to the related Item – EUT Test Photos.
7. AAN, CP or CVP at least 0.8 m from nearest part of EUT chassis.
8. The thickness of the insulation shall not be more than 150 mm.

4.1.3. Test set-up



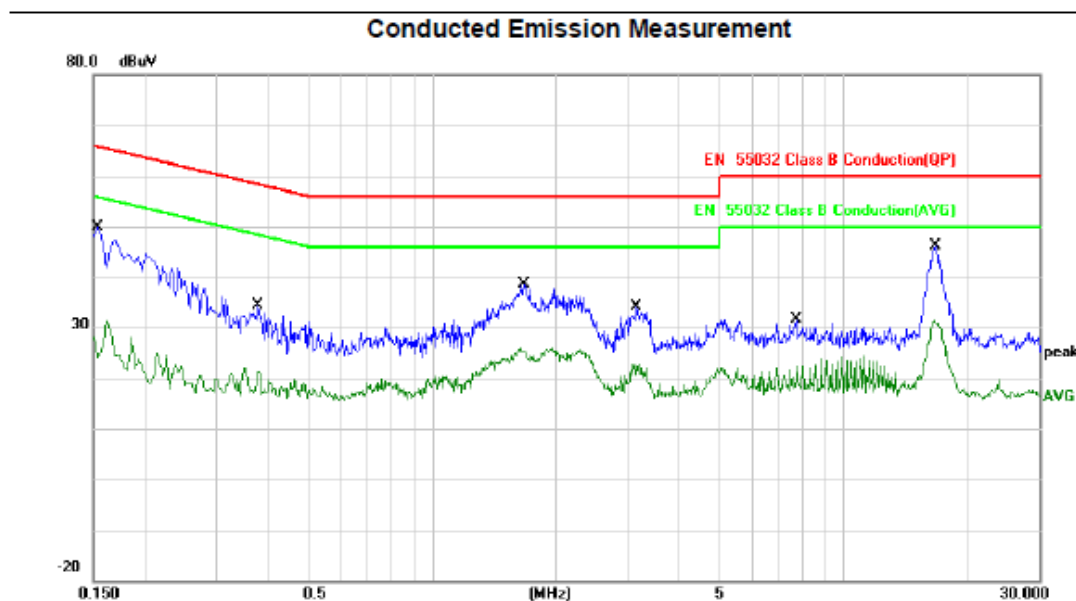
For the actual test configuration, please refer to the related item – Photographs of the test configuration

4.1.4. Test results(worst case)

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 1
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	20.14	20.10	40.24	65.78	-25.54	QP	
2		0.1540	3.61	20.10	23.71	55.78	-32.07	AVG	
3		0.3780	5.07	20.23	25.30	58.32	-33.02	QP	
4		0.3780	0.20	20.23	20.43	48.32	-27.89	AVG	
5		1.6740	14.17	20.08	34.25	56.00	-21.75	QP	
6		1.6740	5.11	20.08	25.19	46.00	-20.81	AVG	
7		3.1500	7.97	20.22	28.19	56.00	-27.81	QP	
8		3.1500	-0.54	20.22	19.68	46.00	-26.32	AVG	
9		7.6980	5.24	20.04	25.28	60.00	-34.72	QP	
10		7.6980	-0.55	20.04	19.49	50.00	-30.51	AVG	
11		16.7940	18.53	20.16	38.69	60.00	-21.31	QP	
12 *		16.7940	9.80	20.16	29.96	50.00	-20.04	AVG	

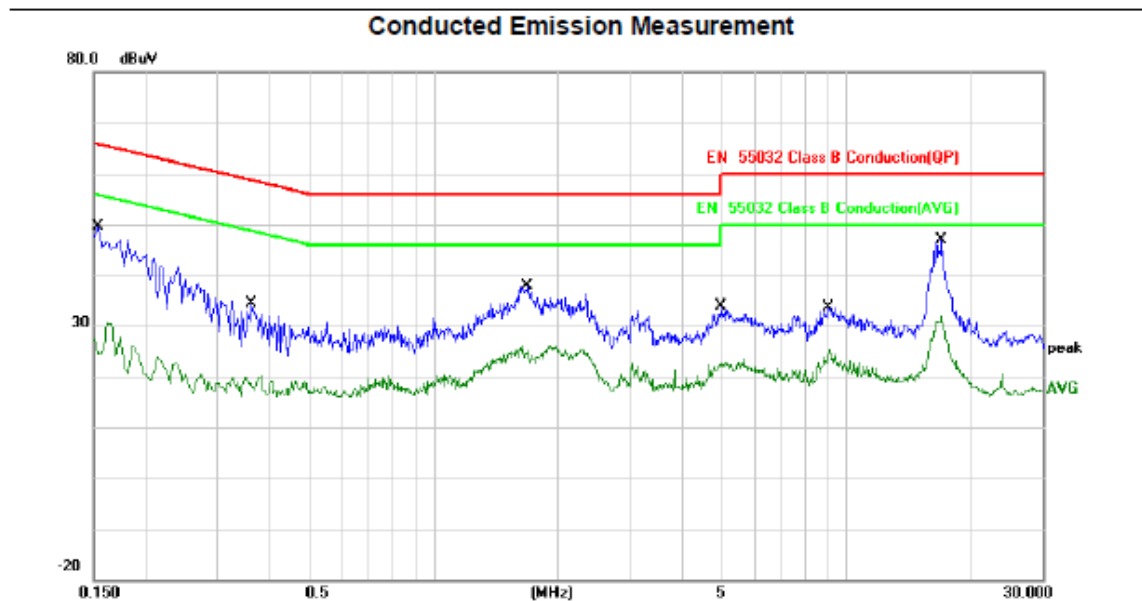
Note: 1. The other emission levels were very low against the limit.

2. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5°C, 50% RH	Test Mode	Mode 1
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	20.54	20.33	40.87	65.78	-24.91	QP	
2		0.1540	3.70	20.33	24.03	55.78	-31.75	AVG	
3		0.3620	3.72	20.11	23.83	58.68	-34.85	QP	
4		0.3620	-2.76	20.11	17.35	48.68	-31.33	AVG	
5		1.6900	12.11	20.35	32.46	56.00	-23.54	QP	
6		1.6900	4.08	20.35	24.43	46.00	-21.57	AVG	
7		4.9900	7.18	20.26	27.44	56.00	-28.56	QP	
8		4.9900	1.91	20.26	22.17	46.00	-23.83	AVG	
9		9.0740	8.62	20.18	28.80	60.00	-31.20	QP	
10		9.0740	3.05	20.18	23.23	50.00	-26.77	AVG	
11		17.0820	19.37	20.27	39.64	60.00	-20.36	QP	
12	*	17.0820	10.12	20.27	30.39	50.00	-19.61	AVG	

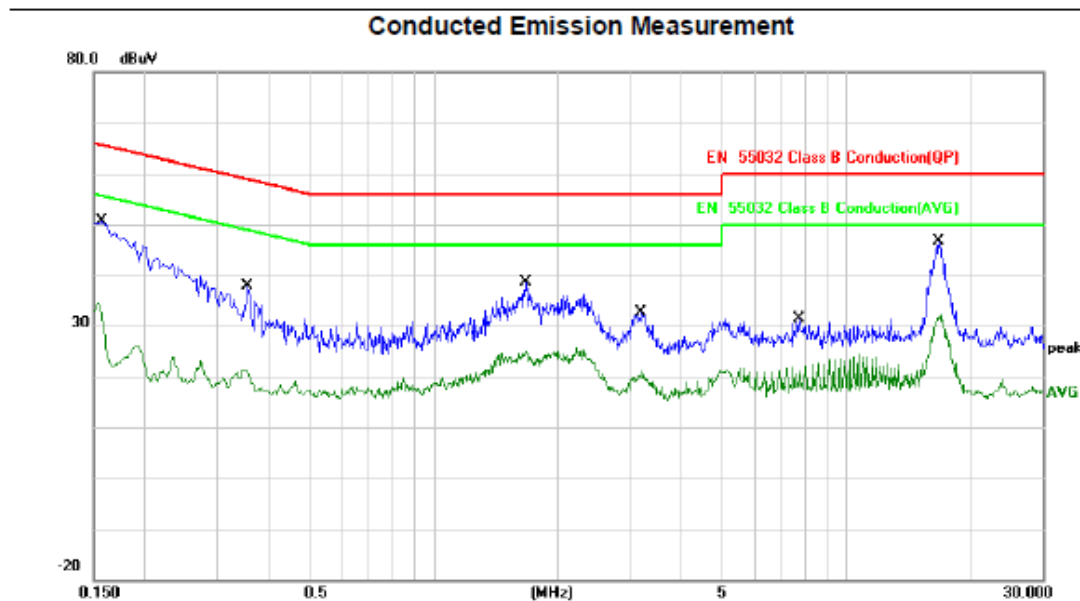
Note: 1.The other emission levels were very low against the limit.

2.Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5°C, 50% RH	Test Mode	Mode 1
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 110V/60Hz

Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	22.53	20.11	42.64	65.57	-22.93	QP	
2		0.1580	7.65	20.11	27.76	55.57	-27.81	AVG	
3		0.3540	7.03	20.06	27.09	58.87	-31.78	QP	
4		0.3540	0.33	20.06	20.39	48.87	-28.48	AVG	
5		1.6780	12.56	20.09	32.65	56.00	-23.35	QP	
6		1.6780	4.24	20.09	24.33	46.00	-21.67	AVG	
7		3.2020	6.64	20.21	26.85	56.00	-29.15	QP	
8		3.2020	-1.50	20.21	18.71	46.00	-27.29	AVG	
9		7.7020	7.18	20.04	27.22	60.00	-32.78	QP	
10		7.7020	-0.13	20.04	19.91	50.00	-30.09	AVG	
11	*	16.7940	21.85	20.16	42.01	60.00	-17.99	QP	
12		16.7940	11.00	20.16	31.16	50.00	-18.84	AVG	

Note: 1. The other emission levels were very low against the limit.

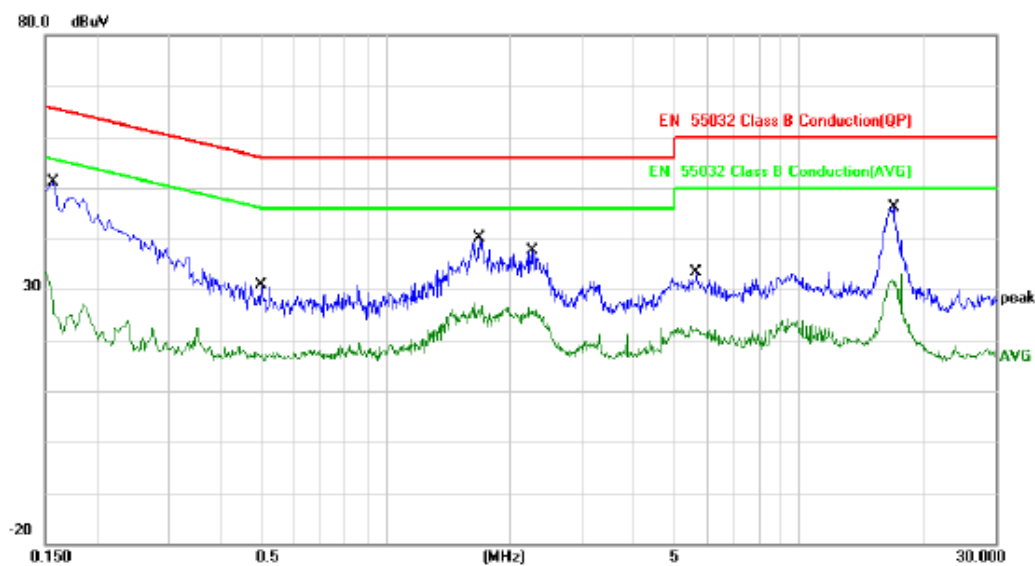
2. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 1
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 110V/60Hz

Neutral

Conducted Emission Measurement



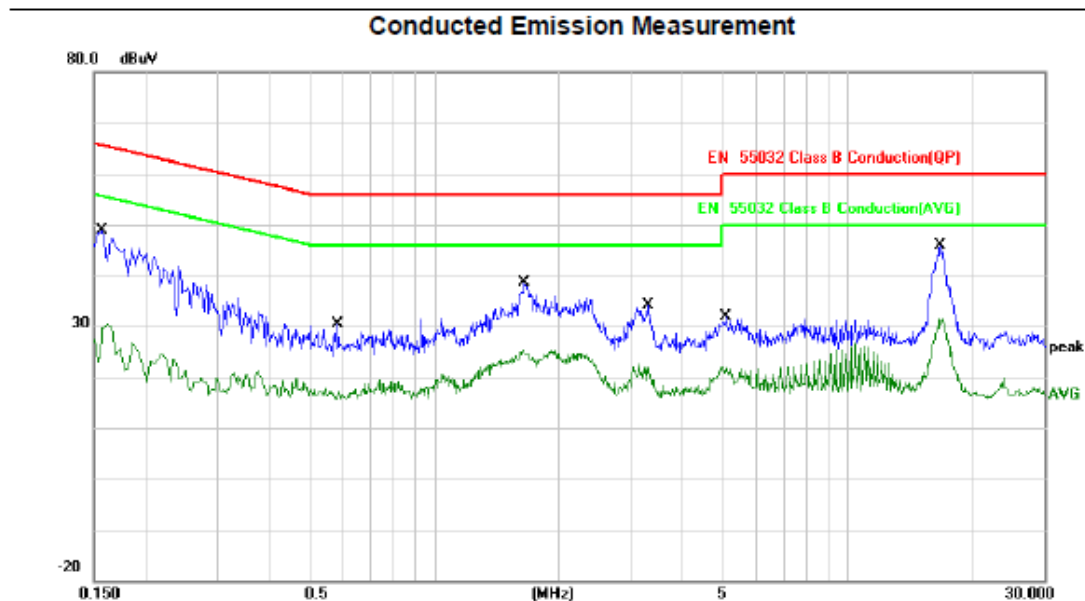
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	23.28	20.32	43.60	65.57	-21.97	QP	
2		0.1580	7.85	20.32	28.17	55.57	-27.40	AVG	
3		0.5020	1.00	20.01	21.01	56.00	-34.99	QP	
4		0.5020	-3.35	20.01	16.66	46.00	-29.34	AVG	
5		1.6820	12.29	20.35	32.64	56.00	-23.36	QP	
6		1.6820	3.65	20.35	24.00	46.00	-22.00	AVG	
7		2.2620	10.24	20.30	30.54	56.00	-25.46	QP	
8		2.2620	3.92	20.30	24.22	46.00	-21.78	AVG	
9		5.6660	6.67	20.29	26.96	60.00	-33.04	QP	
10		5.6660	1.90	20.29	22.19	50.00	-27.81	AVG	
11 *		16.9540	19.67	20.27	39.94	60.00	-20.06	QP	
12		16.9540	9.57	20.27	29.84	50.00	-20.16	AVG	

Note: 1.The other emission levels were very low against the limit.
2.Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 13
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Line



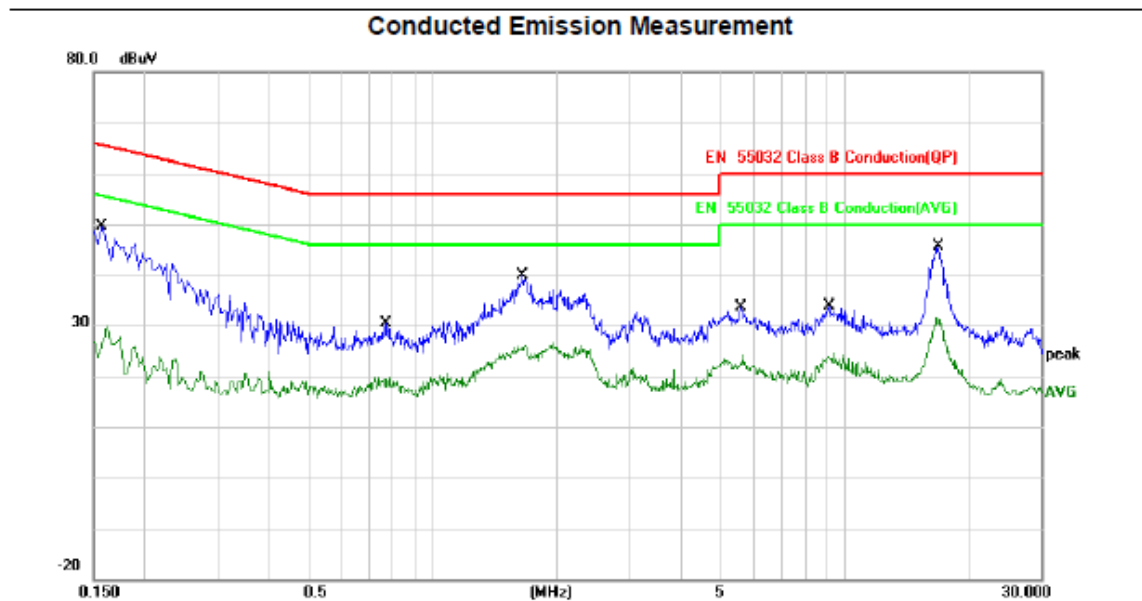
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	21.28	20.11	41.39	65.57	-24.18	QP	
2		0.1580	7.27	20.11	27.38	55.57	-28.19	AVG	
3		0.5860	-0.29	20.06	19.77	56.00	-36.23	QP	
4		0.5860	-3.87	20.06	16.19	46.00	-29.81	AVG	
5		1.6540	12.87	20.07	32.94	56.00	-23.06	QP	
6		1.6540	4.57	20.07	24.64	46.00	-21.36	AVG	
7		3.2940	7.47	20.19	27.66	56.00	-28.34	QP	
8		3.2940	-0.93	20.19	19.26	46.00	-26.74	AVG	
9		5.1100	5.00	20.02	25.02	60.00	-34.98	QP	
10		5.1100	0.08	20.02	20.10	50.00	-29.90	AVG	
11	*	16.8300	19.24	20.16	39.40	60.00	-20.60	QP	
12		16.8300	9.12	20.16	29.28	50.00	-20.72	AVG	

Note: 1. The other emission levels were very low against the limit.
2. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 13
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Neutral



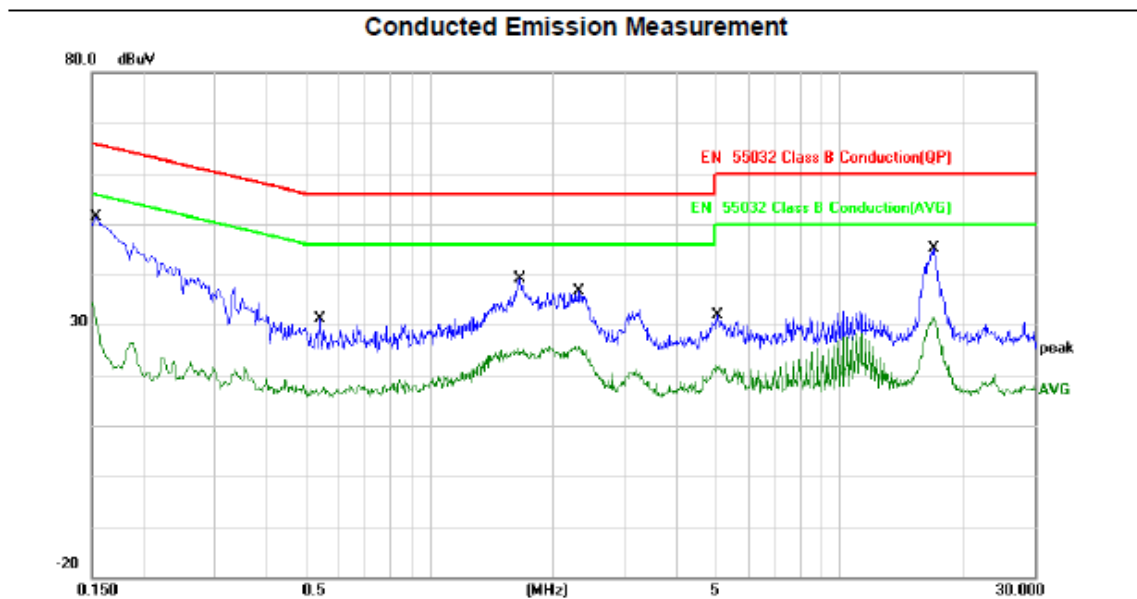
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	21.22	20.32	41.54	65.57	-24.03	QP	
2		0.1580	6.50	20.32	26.82	55.57	-28.75	AVG	
3		0.7740	2.79	20.07	22.86	56.00	-33.14	QP	
4		0.7740	-1.88	20.07	18.19	46.00	-27.81	AVG	
5		1.6580	13.50	20.35	33.85	56.00	-22.15	QP	
6		1.6580	5.16	20.35	25.51	46.00	-20.49	AVG	
7		5.6140	6.49	20.28	26.77	60.00	-33.23	QP	
8		5.6140	1.39	20.28	21.67	50.00	-28.33	AVG	
9		9.1820	8.22	20.17	28.39	60.00	-31.61	QP	
10		9.1820	2.38	20.17	22.55	50.00	-27.45	AVG	
11	*	16.9180	19.93	20.27	40.20	60.00	-19.80	QP	
12		16.9180	9.70	20.27	29.97	50.00	-20.03	AVG	

Note: 1.The other emission levels were very low against the limit.
2.Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5°C, 50% RH	Test Mode	Mode 13
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 110V/60Hz

Line



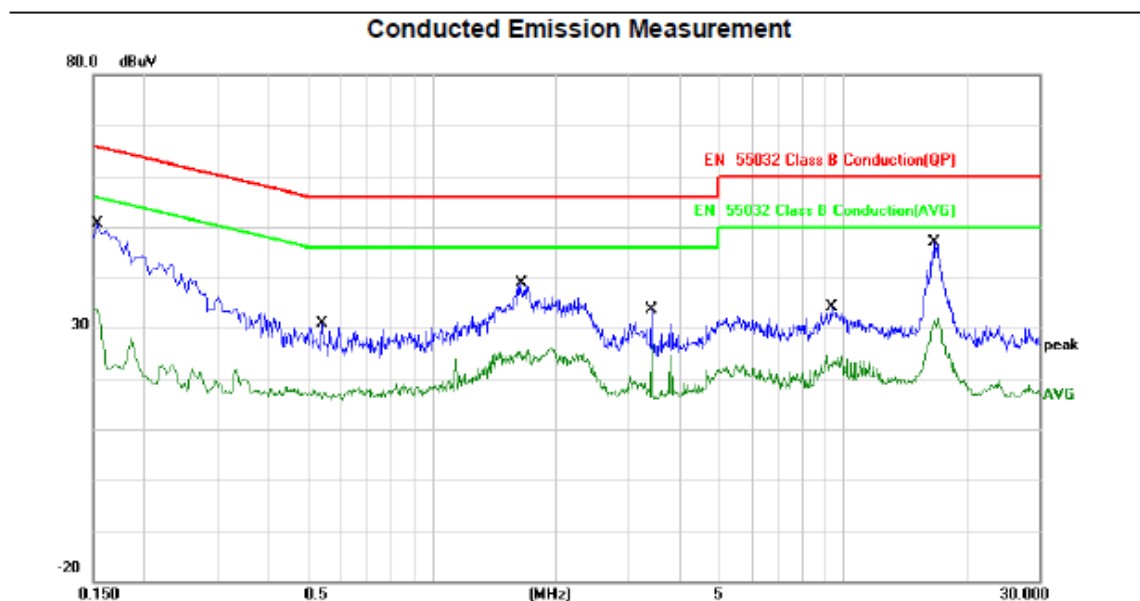
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	22.80	20.33	43.13	65.78	-22.65	QP	
2		0.1540	9.82	20.33	30.15	55.78	-25.63	AVG	
3		0.5420	0.11	20.11	20.22	56.00	-35.78	QP	
4		0.5420	-3.71	20.11	16.40	46.00	-29.60	AVG	
5		1.6660	11.88	20.35	32.23	56.00	-23.77	QP	
6		1.6660	3.74	20.35	24.09	46.00	-21.91	AVG	
7		2.3100	11.11	20.29	31.40	56.00	-24.60	QP	
8 *		2.3100	4.46	20.29	24.75	46.00	-21.25	AVG	
9		5.0380	4.94	20.26	25.20	60.00	-34.80	QP	
10		5.0380	-0.04	20.26	20.22	50.00	-29.78	AVG	
11		16.9340	16.33	20.27	36.60	60.00	-23.40	QP	
12		16.9340	8.23	20.27	28.50	50.00	-21.50	AVG	

Note: 1. The other emission levels were very low against the limit.
2. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 13
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Neutral



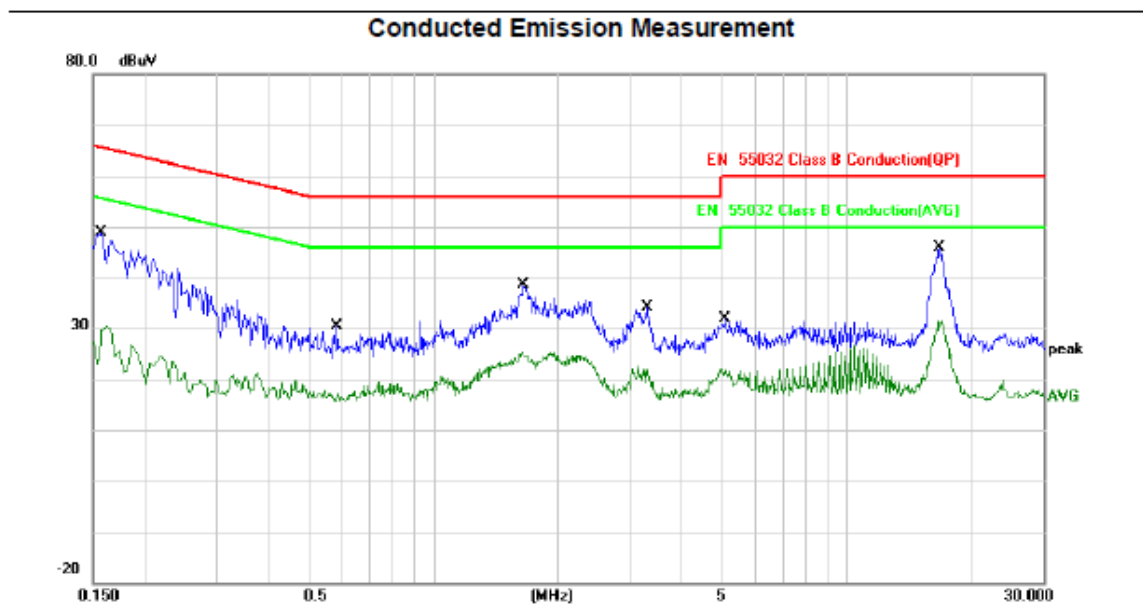
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1540	23.65	20.33	43.98	65.78	-21.80	QP	
2		0.1540	10.26	20.33	30.59	55.78	-25.19	AVG	
3		0.5420	0.21	20.11	20.32	56.00	-35.68	QP	
4		0.5420	-3.61	20.11	16.50	46.00	-29.50	AVG	
5		1.6460	12.97	20.35	33.32	56.00	-22.68	QP	
6		1.6460	4.07	20.35	24.42	46.00	-21.58	AVG	
7		3.4260	1.06	20.22	21.28	56.00	-34.72	QP	
8		3.4260	-4.03	20.22	16.19	46.00	-29.81	AVG	
9		9.3900	8.66	20.16	28.82	60.00	-31.18	QP	
10		9.3900	3.24	20.16	23.40	50.00	-26.60	AVG	
11		16.6820	18.51	20.29	38.80	60.00	-21.20	QP	
12	*	16.6820	9.46	20.29	29.75	50.00	-20.25	AVG	

Note: 1.The other emission levels were very low against the limit.
2.Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5°C, 50% RH	Test Mode	Mode 25
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	21.28	20.11	41.39	65.57	-24.18	QP	
2		0.1580	7.27	20.11	27.38	55.57	-28.19	AVG	
3		0.5860	-0.29	20.06	19.77	56.00	-36.23	QP	
4		0.5860	-3.87	20.06	16.19	46.00	-29.81	AVG	
5		1.6540	12.87	20.07	32.94	56.00	-23.06	QP	
6		1.6540	4.57	20.07	24.64	46.00	-21.36	AVG	
7		3.2940	7.47	20.19	27.66	56.00	-28.34	QP	
8		3.2940	-0.93	20.19	19.26	46.00	-26.74	AVG	
9		5.1100	5.00	20.02	25.02	60.00	-34.98	QP	
10		5.1100	0.08	20.02	20.10	50.00	-29.90	AVG	
11	*	16.8300	19.24	20.16	39.40	60.00	-20.60	QP	
12		16.8300	9.12	20.16	29.28	50.00	-20.72	AVG	

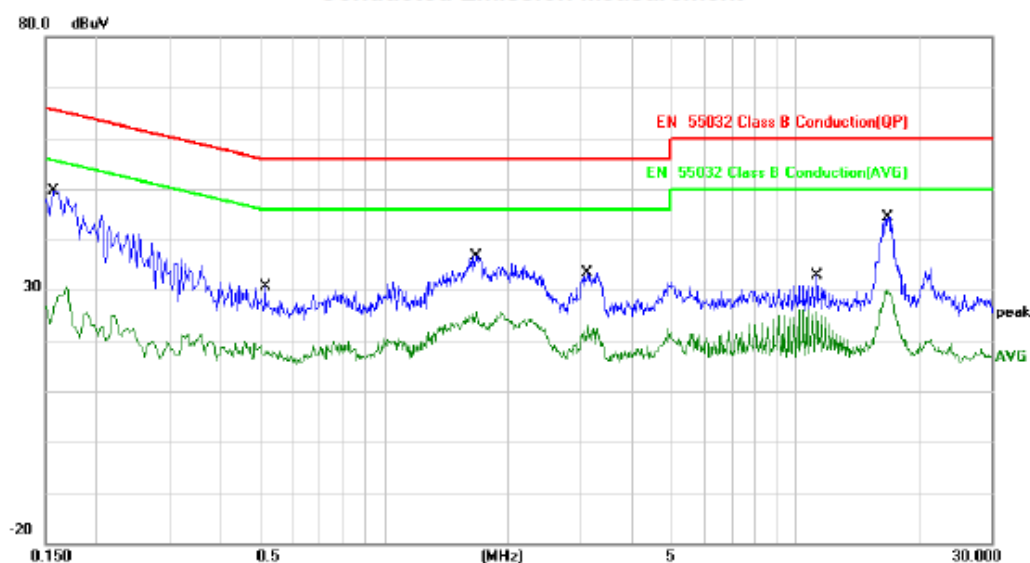
Note: 1. The other emission levels were very low against the limit.
2. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 25
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 230V/50Hz

Neutral

Conducted Emission Measurement



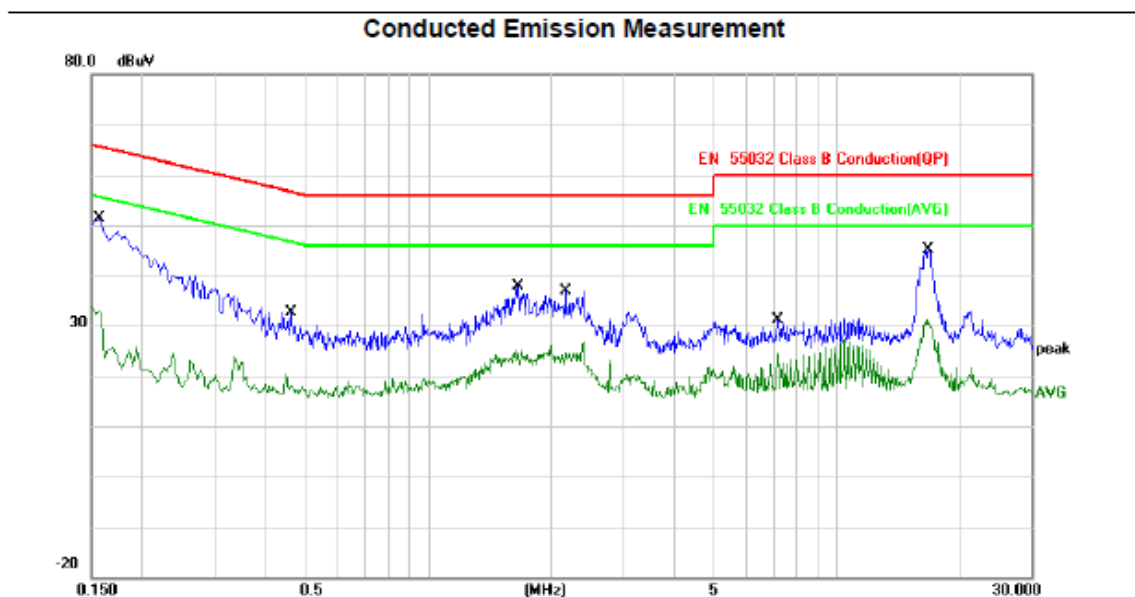
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	20.03	20.11	40.14	65.57	-25.43	QP	
2		0.1580	5.22	20.11	25.33	55.57	-30.24	AVG	
3		0.5140	1.03	20.16	21.19	56.00	-34.81	QP	
4		0.5140	-3.03	20.16	17.13	46.00	-28.87	AVG	
5		1.6740	11.07	20.08	31.15	56.00	-24.85	QP	
6		1.6740	3.75	20.08	23.83	46.00	-22.17	AVG	
7		3.1340	8.23	20.22	28.45	56.00	-27.55	QP	
8		3.1340	-0.44	20.22	19.78	46.00	-26.22	AVG	
9		11.3140	8.94	20.24	29.18	60.00	-30.82	QP	
10		11.3140	6.98	20.24	27.22	50.00	-22.78	AVG	
11	*	16.7940	21.21	20.16	41.37	60.00	-18.63	QP	
12		16.7940	9.72	20.16	29.88	50.00	-20.12	AVG	

Note: 1.The other emission levels were very low against the limit.
2.Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5°C, 50% RH	Test Mode	Mode 25
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 110V/60Hz

Line



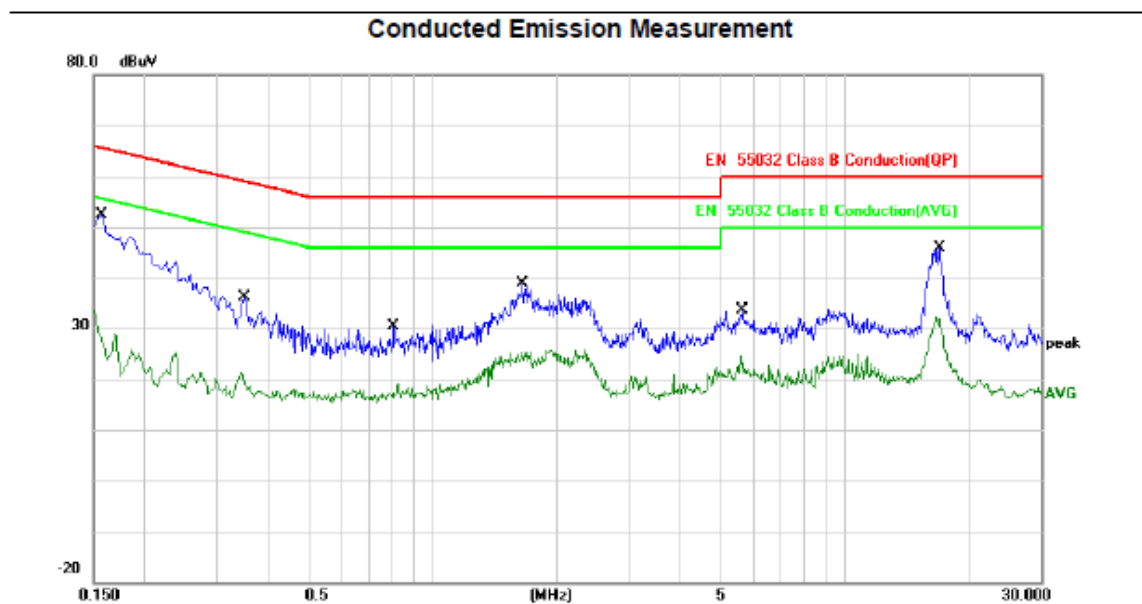
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	23.17	20.32	43.49	65.57	-22.08	QP	
2		0.1580	7.99	20.32	28.31	55.57	-27.26	AVG	
3		0.4620	2.42	20.10	22.52	56.66	-34.14	QP	
4		0.4620	-2.78	20.10	17.32	46.66	-29.34	AVG	
5		1.6660	11.47	20.35	31.82	56.00	-24.18	QP	
6		1.6660	3.12	20.35	23.47	46.00	-22.53	AVG	
7		2.1740	9.47	20.32	29.79	56.00	-26.21	QP	
8		2.1740	2.93	20.32	23.25	46.00	-22.75	AVG	
9		7.1900	4.05	20.31	24.36	60.00	-35.64	QP	
10		7.1900	0.22	20.31	20.53	50.00	-29.47	AVG	
11		16.7980	20.29	20.28	40.57	60.00	-19.43	QP	
12 *		16.7980	10.91	20.28	31.19	50.00	-18.81	AVG	

Note: 1. The other emission levels were very low against the limit.
2. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	RBW	9 kHz
Environmental Conditions	22.5℃, 50% RH	Test Mode	Mode 25
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-20		

Note: AC 110V/60Hz

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	23.42	20.32	43.74	65.57	-21.83	QP	
2		0.1580	7.83	20.32	28.15	55.57	-27.42	AVG	
3		0.3500	6.58	20.07	26.65	58.96	-32.31	QP	
4		0.3500	-1.34	20.07	18.73	48.96	-30.23	AVG	
5		0.8060	1.18	20.06	21.24	56.00	-34.76	QP	
6		0.8060	-3.03	20.06	17.03	46.00	-28.97	AVG	
7		1.6580	12.67	20.35	33.02	56.00	-22.98	QP	
8		1.6580	3.67	20.35	24.02	46.00	-21.98	AVG	
9		5.6660	5.90	20.29	26.19	60.00	-33.81	QP	
10		5.6660	0.69	20.29	20.98	50.00	-29.02	AVG	
11		16.9620	19.64	20.27	39.91	60.00	-20.09	QP	
12	*	16.9620	10.63	20.27	30.90	50.00	-19.10	AVG	

Note: 1.The other emission levels were very low against the limit.
2.Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

4.2. Telecommunication port conduction emission test

4.2.1. Limit

For Class A Equipment

FREQUENCY (MHz)	Voltage Limit (dBuV)		Current Limit (dBuA)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 ~ 0.5	97 ~ 87	84 ~ 74	53 ~ 43	40 ~ 30
0.5 ~ 30.0	87	74	43	30

Note: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

For Class B Equipment

FREQUENCY (MHz)	Voltage Limit (dBuV)		Current Limit (dBuA)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	84 ~ 74	74 ~ 64	40 ~ 30	30 ~ 20
0.5 - 30.0	74	64	30	20

Note: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

4.2.2. Test procedure

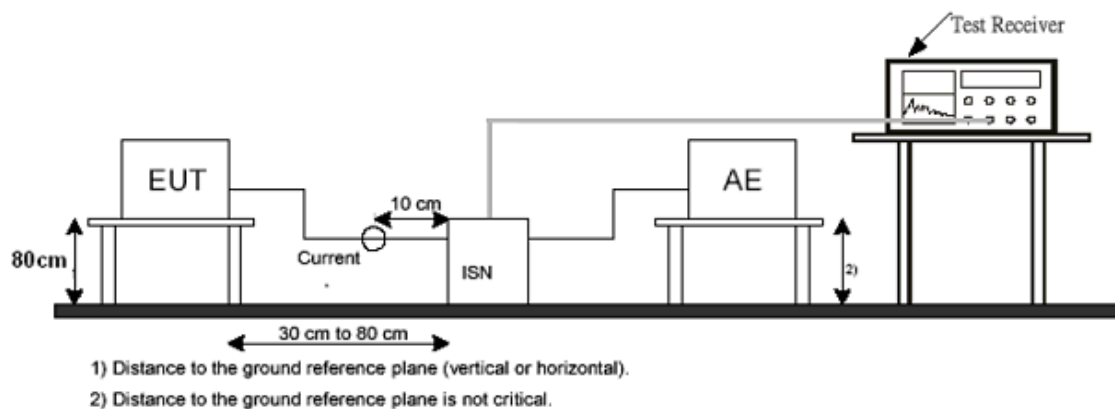
For ISN:

1. The EUT was placed 0.4 meters from the conducting wall of the shielded room and connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN.
2. Voltage at the measurement port of the ISN was detected, the reading was corrected by adding the voltage division factor of the ISN, and was compared to the voltage limits.
3. The disturbance levels and the frequencies of at least six highest disturbances were recorded from each telecommunication port, which comprises the EUT.

For Current Probe:

1. Current probe shall be placed at 0.1 m from the ISN.
2. Current at the measurement port of the ISN was detected, the reading was corrected by add the current division factor of the current probe, and was compared to the current limits.
3. The disturbance levels and the frequencies of at least six highest disturbances were recorded from each telecommunication port, which comprises the EUT.
4. Break the insulation and connect a 150 Ω resistor from the outside surface of the shield to ground and apply a clamp between 150 Ω connection and associated equipment (For STP LAN only).

4.2.3. Test set-up



For the actual test configuration, please refer to the related item – photographs of the test configuration.

4.2.4. Test results

N/A

4.3. Radiated emission test

4.3.1. Limit

Requirements for radiated emissions at frequencies up to 1 GHz for class B equipment

EN55032

Frequency Range MHz	Measurement			Class B limits dB μ V/m
	Facility	Distance m	Detector type / bandwidth	
30 to 230	OATS/SAC	10	Quasi Peak /	30
230 to 1 000			120 kHz	37

Requirements for radiated emissions at frequencies above 1 GHz for class B equipment

EN55032

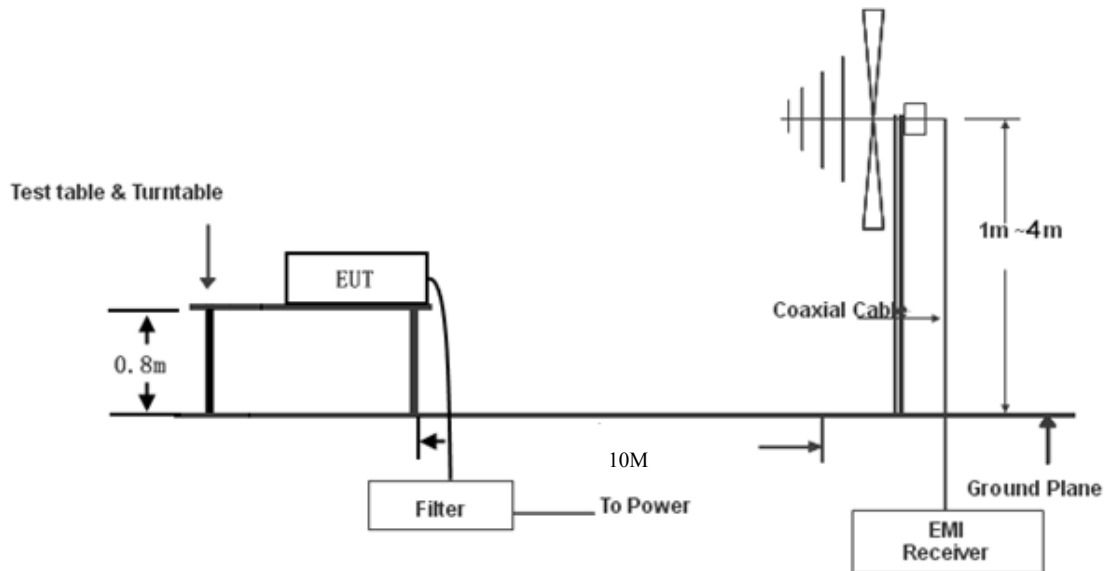
Frequency Range MHz	Measurement			Class B limits dB μ V/m
	Facility	Distance m	Detector type / bandwidth	
1 000 to 6000	FSOATS	3	Average/1 MHz	54
1 000 to 6000			Peak/1 MHz	74

4.3.2. Test procedures

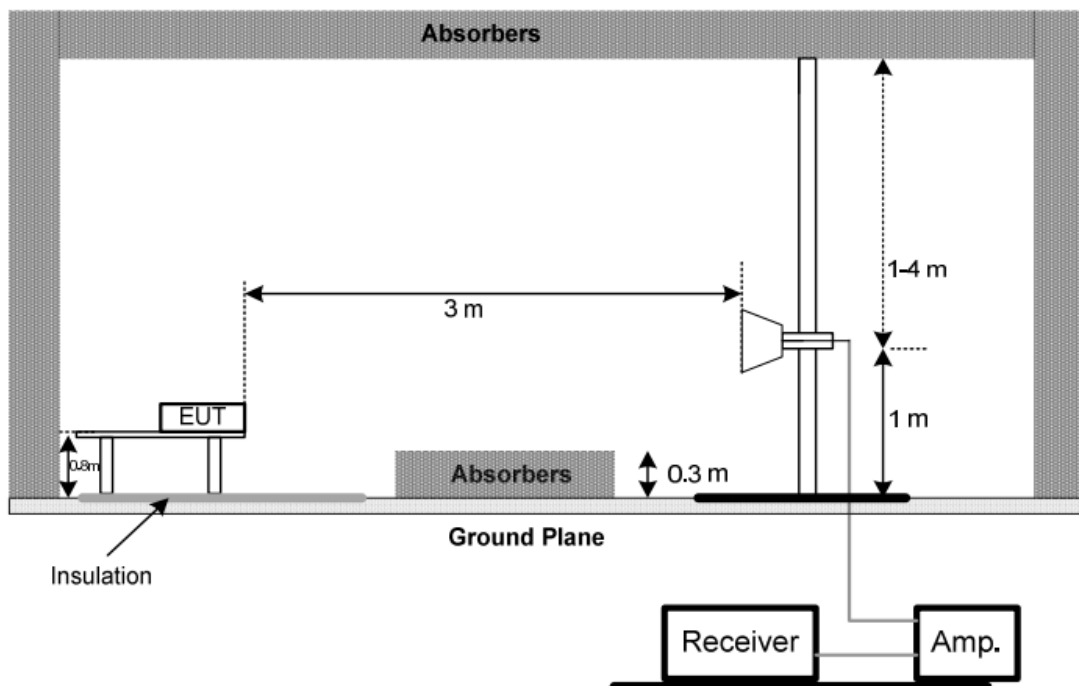
1. Test limits and test methods reference EN 55032 Appendix A and Appendix B.
2. Below 1GHz, the measuring distance of 10 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 m above the ground at a 10 m semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
3. Above 1GHz, the measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 m above the ground at a 3 m semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
5. The initial step in collecting radiated emission data is a receiver peak detector mode.
6. Pre - scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
7. For above 1GHz, If the emission level of the EUT In “Peak Detection” mode is 20 dB lower than the “Average” limit (means that the emission level in “Peak Detection” mode also complies with the limit in “Average Mode”), testing will be stopped and “Peak” values of the EUT will be reported, otherwise, the emissions of the EUT will be measured in “Average Mode” again and then reported.
8. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz).
9. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform.(above 1GHz)

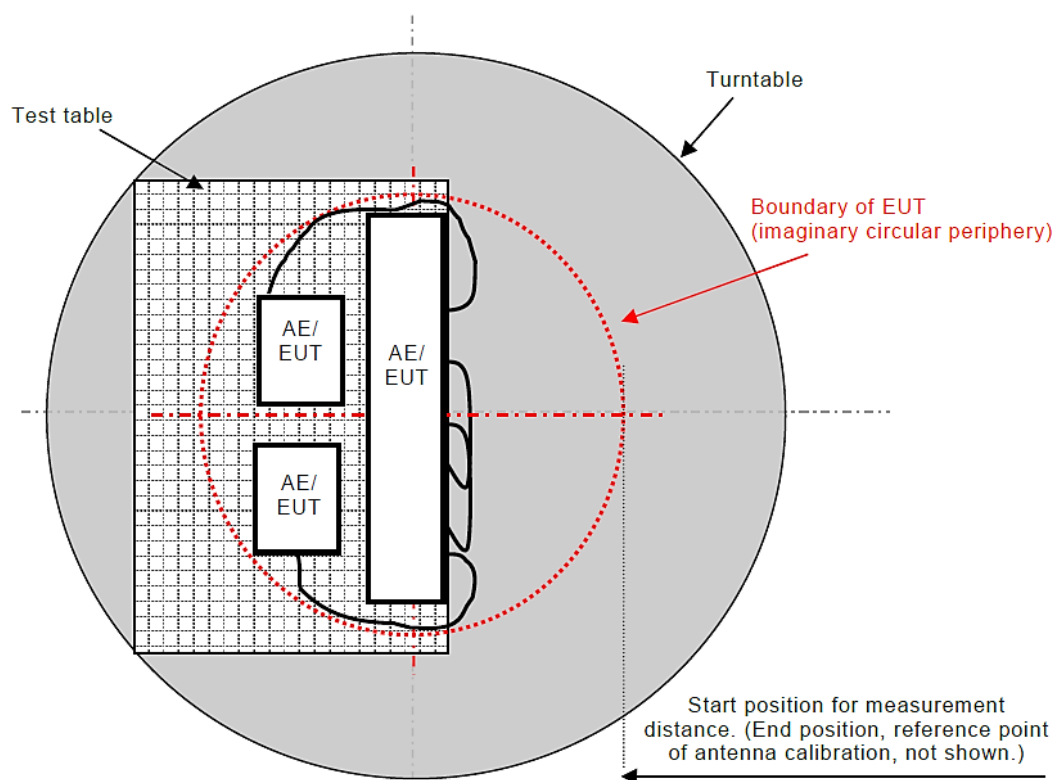
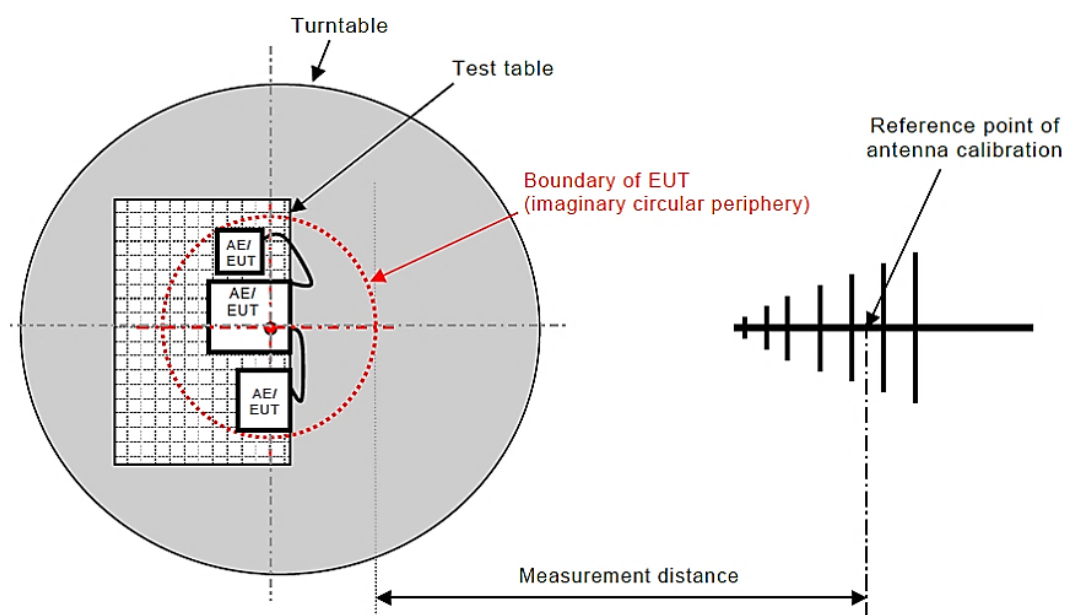
4.3.3. Test set-up

Radiated measurement test set-up frequency below 1 GHz



Radiated measurement test set-up frequency above 1 GHz





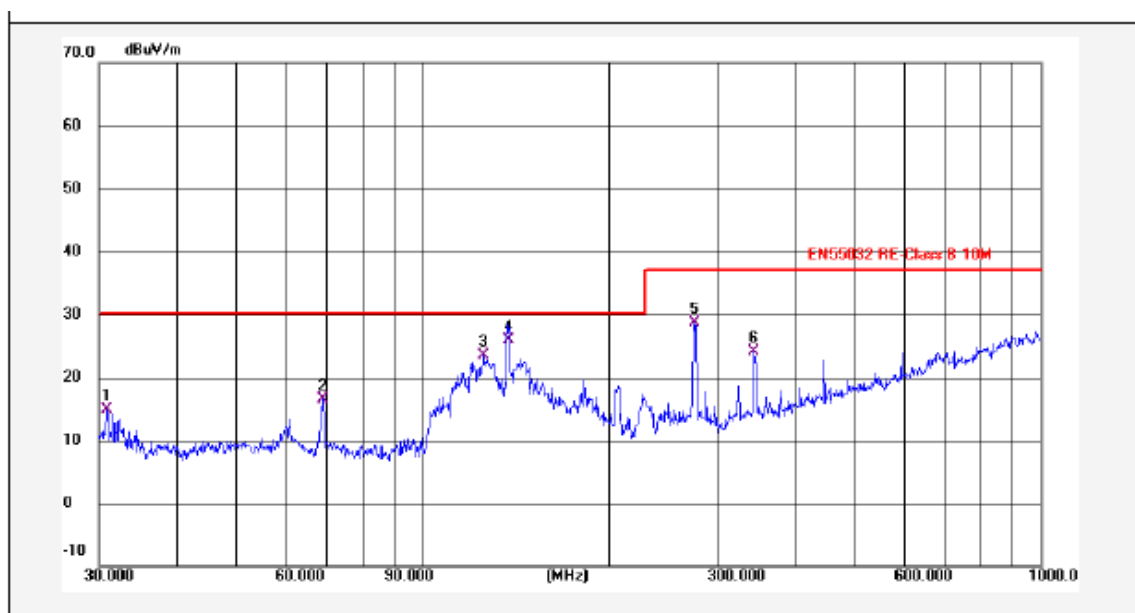
For the actual test configuration, please refer to the related item – Photographs of the Test Configuration

4.3.4. Test results(worst case)

Below 1G

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5℃, 56.7% RH	Test Mode	Mode 1
Antenna Pole	Vertical	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 230V/50Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/	Margin (dB)	Detector	Remark
1	30.8534	30.47	-15.48	14.99	30.00	-15.01	QP	
2	69.1140	33.05	-16.60	16.45	30.00	-13.55	QP	
3	125.8863	36.38	-12.87	23.51	30.00	-6.49	QP	
4	137.4202	39.87	-13.97	25.90	30.00	-4.10	QP	
5	275.1570	41.61	-12.88	28.73	37.00	-8.27	QP	
6	343.1800	34.67	-10.60	24.07	37.00	-12.93	QP	

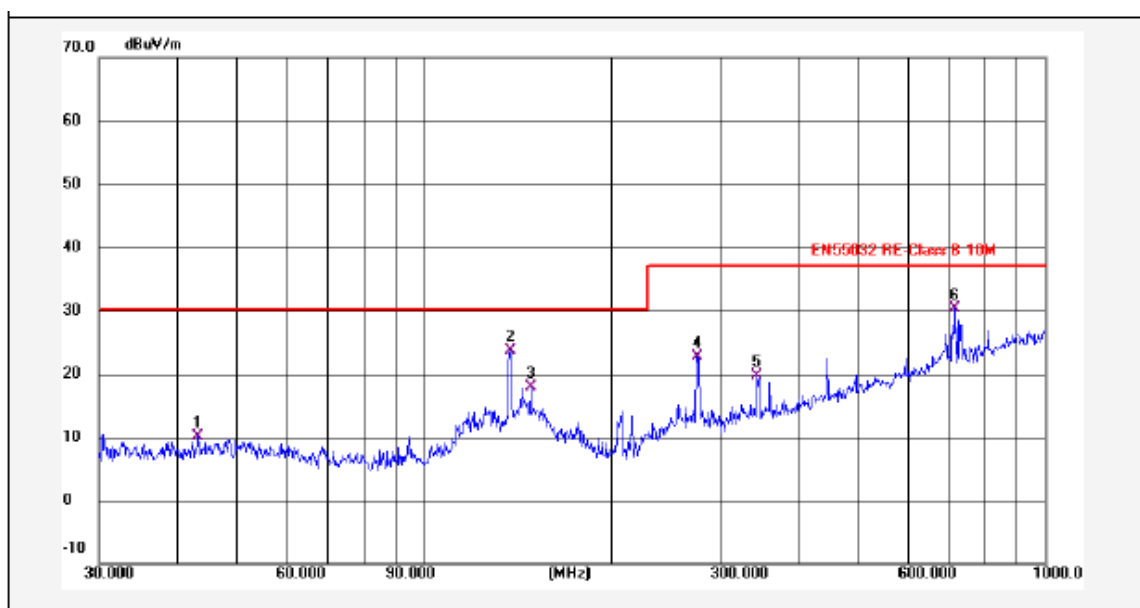
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 1
Antenna Pole	Horizontal	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 230V/50Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	43.3534	24.75	-14.63	10.12	30.00	-19.88	QP	
2	137.9028	37.70	-14.02	23.68	30.00	-6.32	QP	
3	148.4410	31.83	-14.00	17.83	30.00	-12.17	QP	
4	274.1939	35.69	-12.91	22.78	37.00	-14.22	QP	
5	343.1800	30.38	-10.60	19.78	37.00	-17.22	QP	
6	716.6820	31.59	-1.34	30.25	37.00	-6.75	QP	

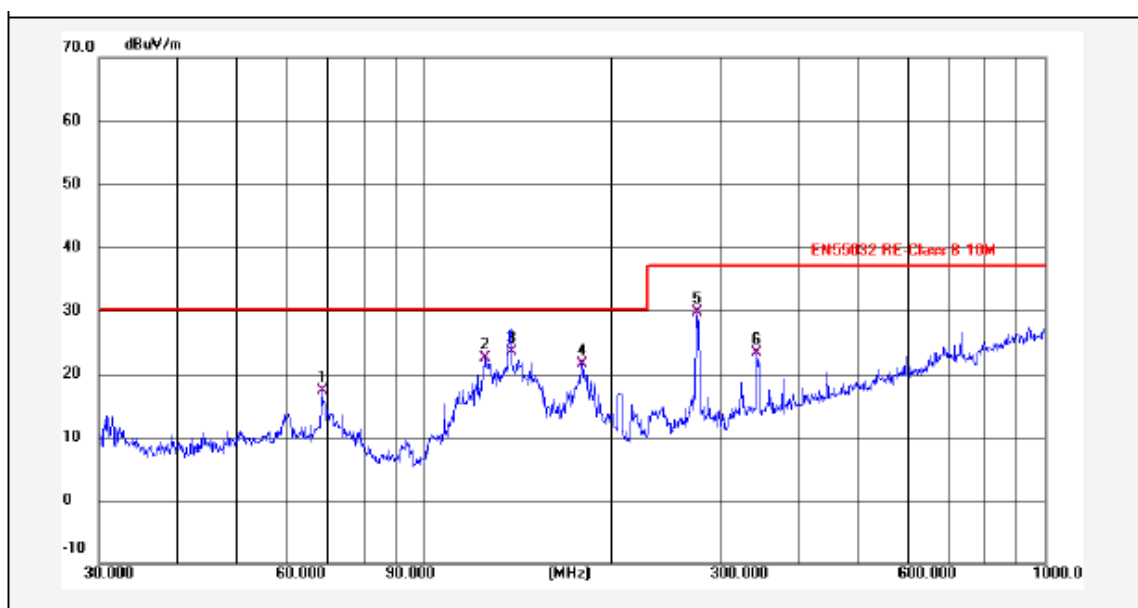
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5℃, 56.7% RH	Test Mode	Mode 1
Antenna Pole	Vertical	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 110V/60Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	68.6310	33.89	-16.55	17.34	30.00	-12.66	QP	
2	125.4457	35.27	-12.83	22.44	30.00	-7.56	QP	
3	138.3873	37.57	-14.07	23.50	30.00	-6.50	QP	
4	180.0164	37.52	-16.09	21.43	30.00	-8.57	QP	
5	275.1570	42.66	-12.88	29.78	37.00	-7.22	QP	
6	343.1800	33.87	-10.60	23.27	37.00	-13.73	QP	

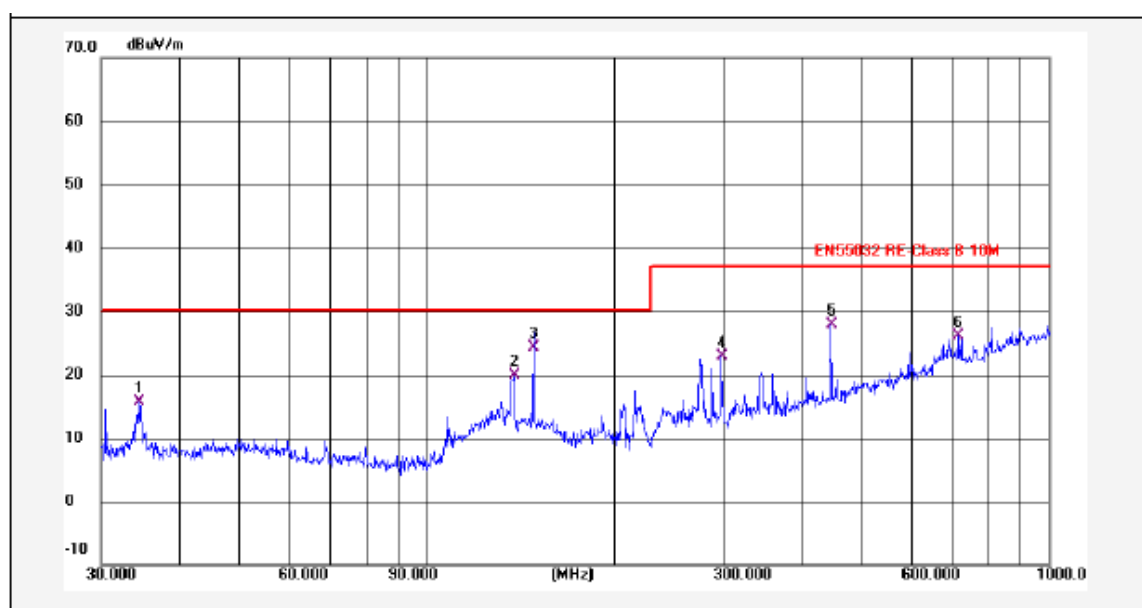
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 1
Antenna Pole	Horizontal	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 110V/60Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	34.6385	30.86	-15.21	15.65	30.00	-14.35	QP	
2	138.3873	33.88	-14.07	19.81	30.00	-10.19	QP	
3	148.4410	38.30	-14.00	24.30	30.00	-5.70	QP	
4	297.2240	36.05	-13.22	22.83	37.00	-14.17	QP	
5	446.4141	35.48	-7.56	27.92	37.00	-9.08	QP	
6	716.6820	27.52	-1.34	26.18	37.00	-10.82	QP	

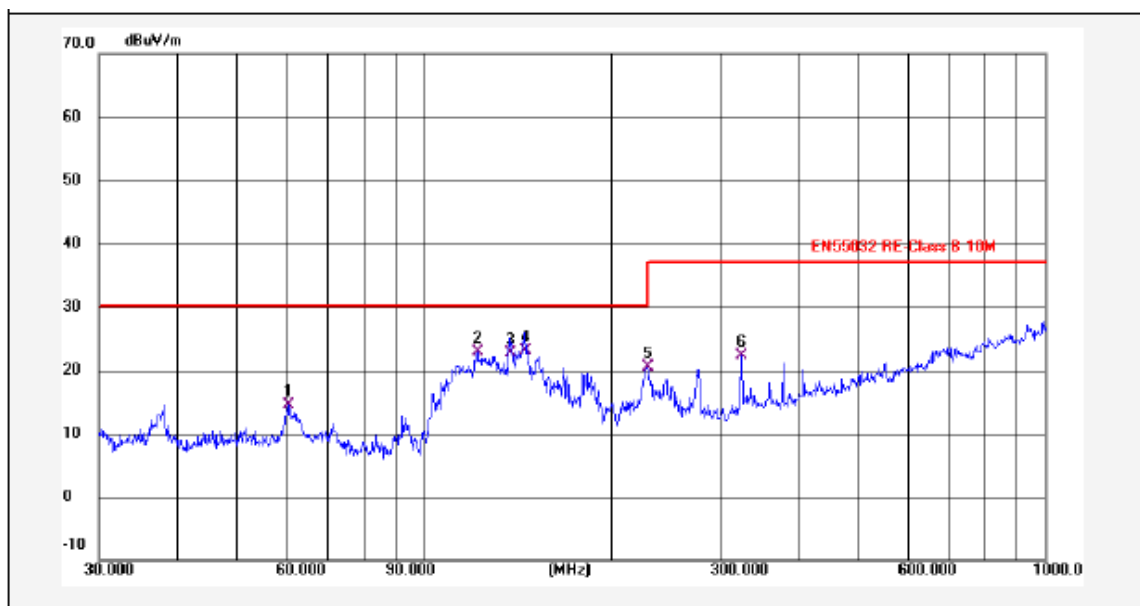
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 13
Antenna Pole	Vertical	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 230V/50Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	60.7043	30.21	-15.65	14.56	30.00	-15.44	QP	
2	121.9755	35.31	-12.50	22.81	30.00	-7.19	QP	
3	137.4202	36.77	-13.97	22.80	30.00	-7.20	QP	
4	145.3506	37.18	-14.08	23.10	30.00	-6.90	QP	
5	228.4903	37.55	-17.01	20.54	30.00	-9.46	QP	
6	324.4560	33.52	-11.12	22.40	37.00	-14.60	QP	

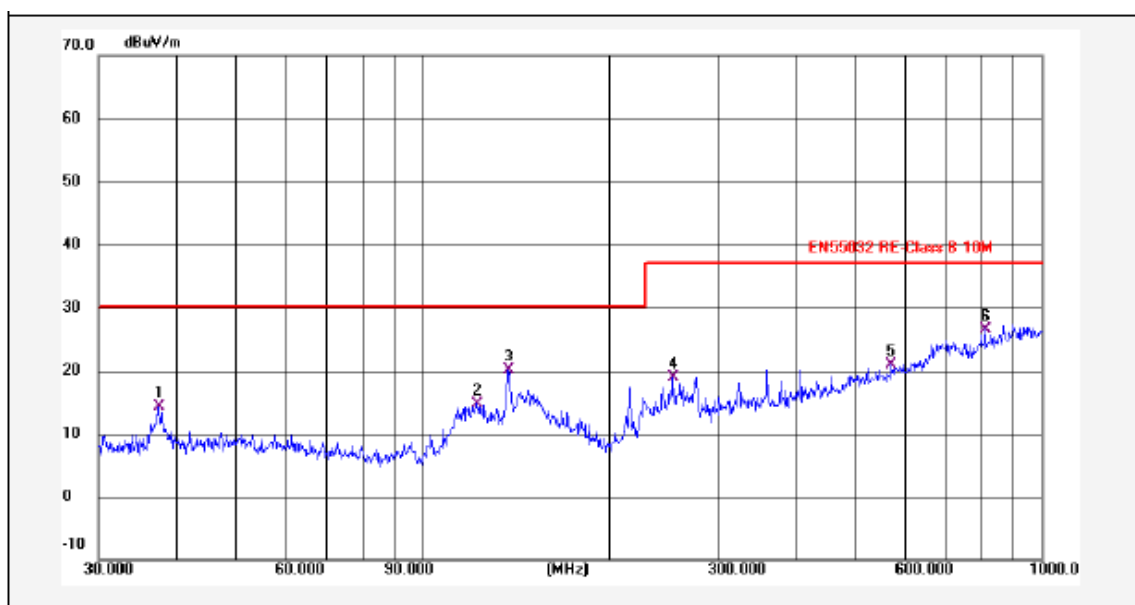
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 13
Antenna Pole	Horizontal	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 230V/50Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	37.4165	29.31	-15.02	14.29	30.00	-15.71	QP	
2	122.4039	27.34	-12.54	14.80	30.00	-15.20	QP	
3	137.4202	33.99	-13.97	20.02	30.00	-9.98	QP	
4	253.8367	33.28	-14.36	18.92	37.00	-18.08	QP	
5	572.6144	25.28	-4.39	20.89	37.00	-16.11	QP	
6	810.2653	26.45	0.15	26.60	37.00	-10.40	QP	

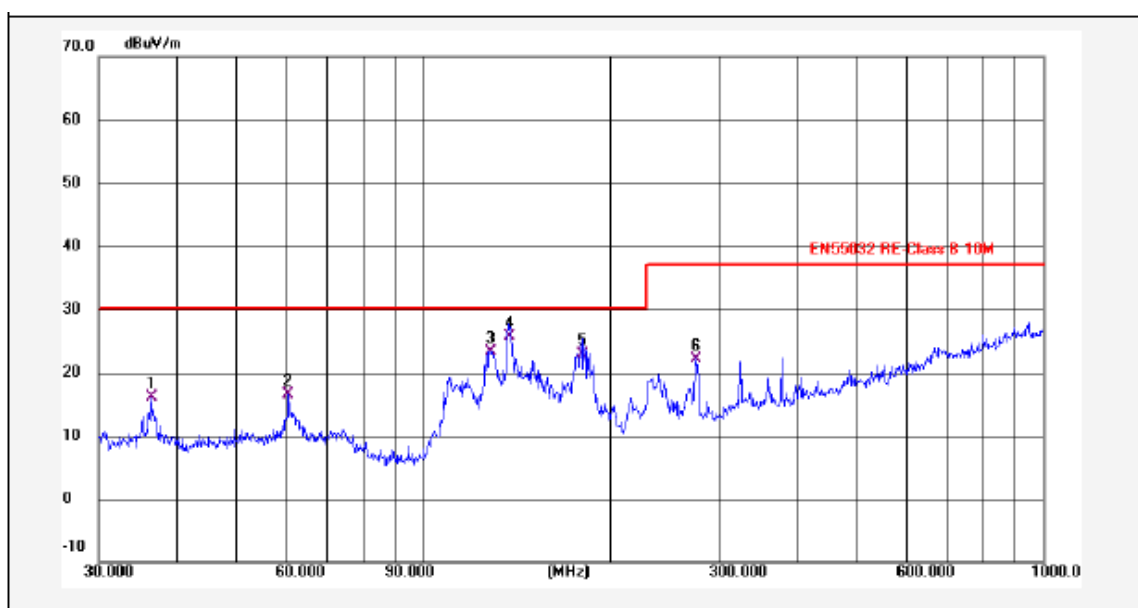
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 13
Antenna Pole	Vertical	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 110V/60Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	36.5090	31.16	-15.08	16.08	30.00	-13.92	QP	
2	60.7043	32.24	-15.65	16.59	30.00	-13.41	QP	
3	128.5629	36.44	-13.13	23.31	30.00	-6.69	QP	
4	137.4202	39.67	-13.97	25.70	30.00	-4.30	QP	
5	180.6487	39.03	-16.13	22.90	30.00	-7.10	QP	
6	275.1569	35.08	-12.88	22.20	37.00	-14.80	QP	

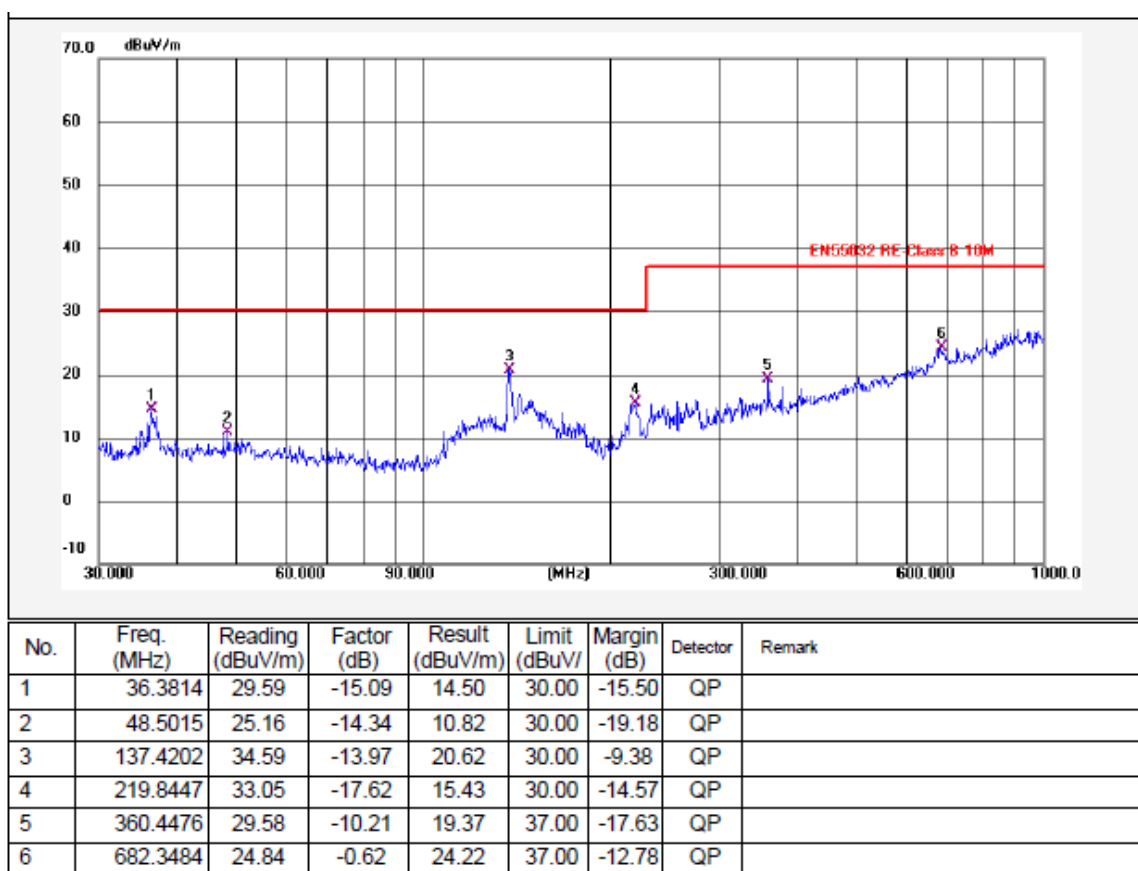
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 13
Antenna Pole	Horizontal	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 110V/60Hz



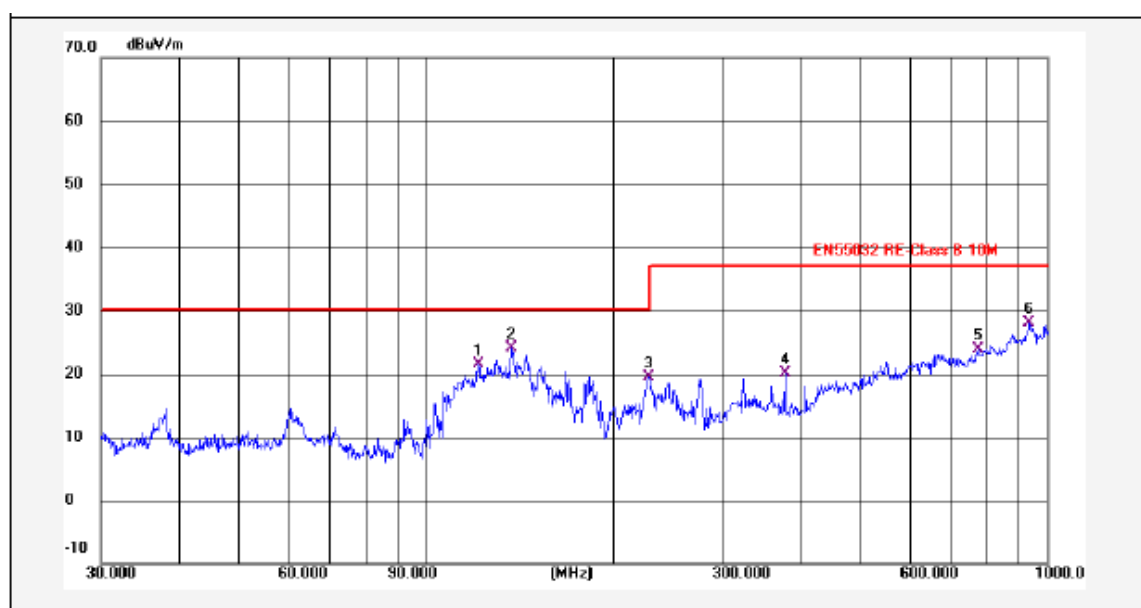
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 25
Antenna Pole	Vertical	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 230V/50Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	121.5485	34.05	-12.46	21.59	30.00	-8.41	QP	
2	137.4200	38.05	-13.97	24.08	30.00	-5.92	QP	
3	228.4901	36.55	-17.01	19.54	30.00	-10.46	QP	
4	378.5842	29.79	-9.67	20.12	37.00	-16.88	QP	
5	774.1584	24.81	-0.98	23.83	37.00	-13.17	QP	
6	935.5461	25.77	2.25	28.02	37.00	-8.98	QP	

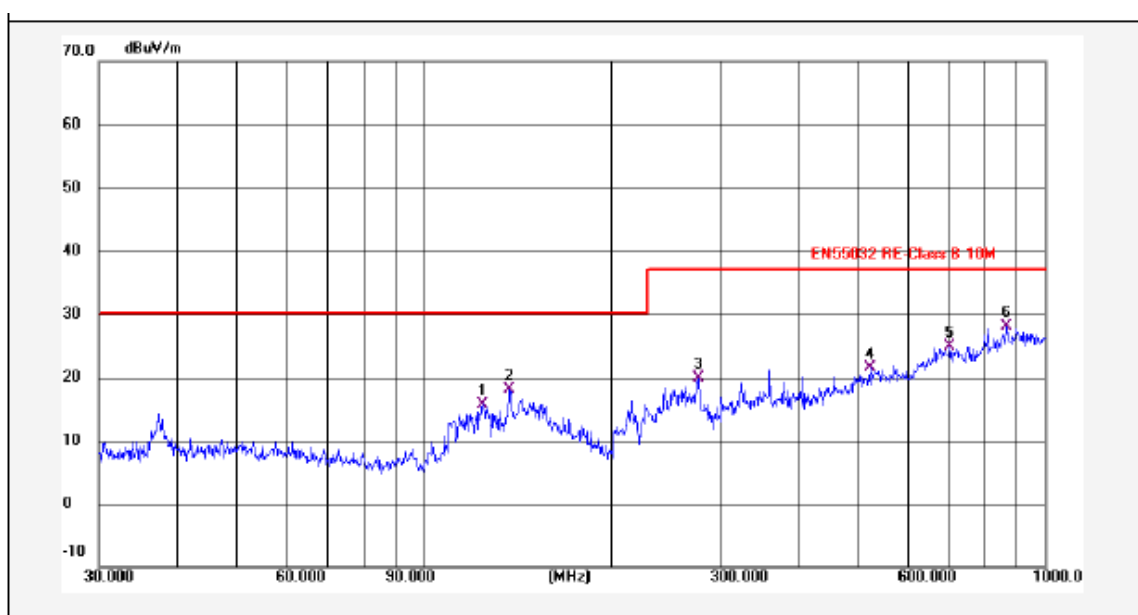
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 25
Antenna Pole	Horizontal	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 230V/50Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/	Margin (dB)	Detector	Remark
1	124.5690	28.54	-12.74	15.80	30.00	-14.20	QP	
2	137.4200	31.99	-13.97	18.02	30.00	-11.98	QP	
3	277.0935	32.67	-12.79	19.88	37.00	-17.12	QP	
4	522.7178	27.16	-5.69	21.47	37.00	-15.53	QP	
5	701.7607	25.99	-1.15	24.84	37.00	-12.16	QP	
6	866.0878	27.09	1.04	28.13	37.00	-8.87	QP	

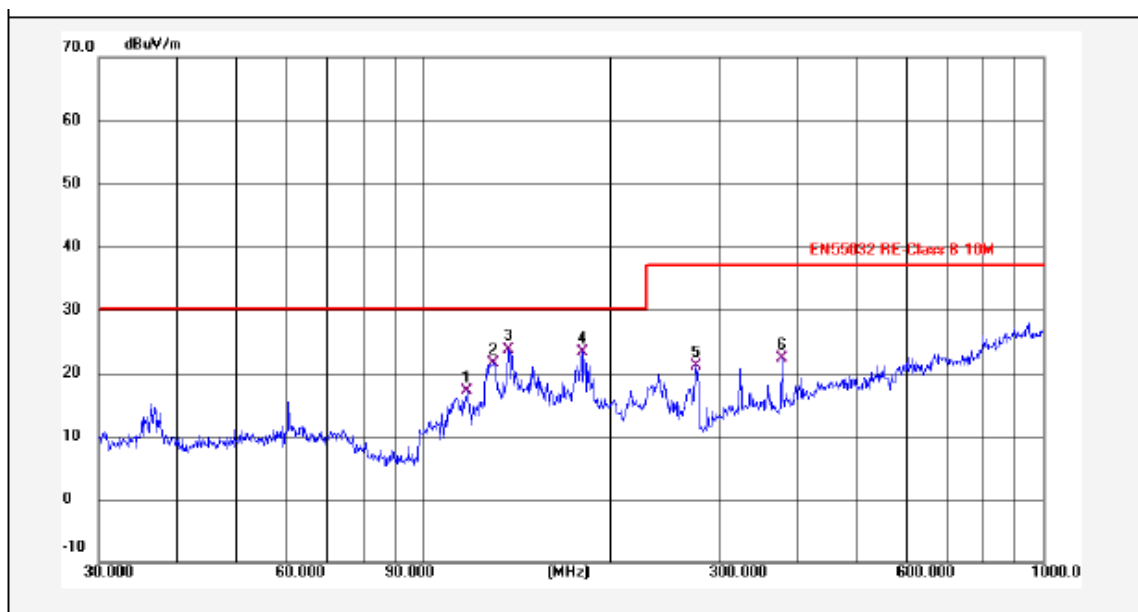
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 25
Antenna Pole	Vertical	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 110V/60Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	117.7724	30.11	-12.91	17.20	30.00	-12.80	QP	
2	129.9225	34.84	-13.26	21.58	30.00	-8.42	QP	
3	137.4200	37.65	-13.97	23.68	30.00	-6.32	QP	
4	180.6484	39.39	-16.13	23.26	30.00	-6.74	QP	
5	275.1569	34.08	-12.88	21.20	37.00	-15.80	QP	
6	378.5842	32.00	-9.67	22.33	37.00	-14.67	QP	

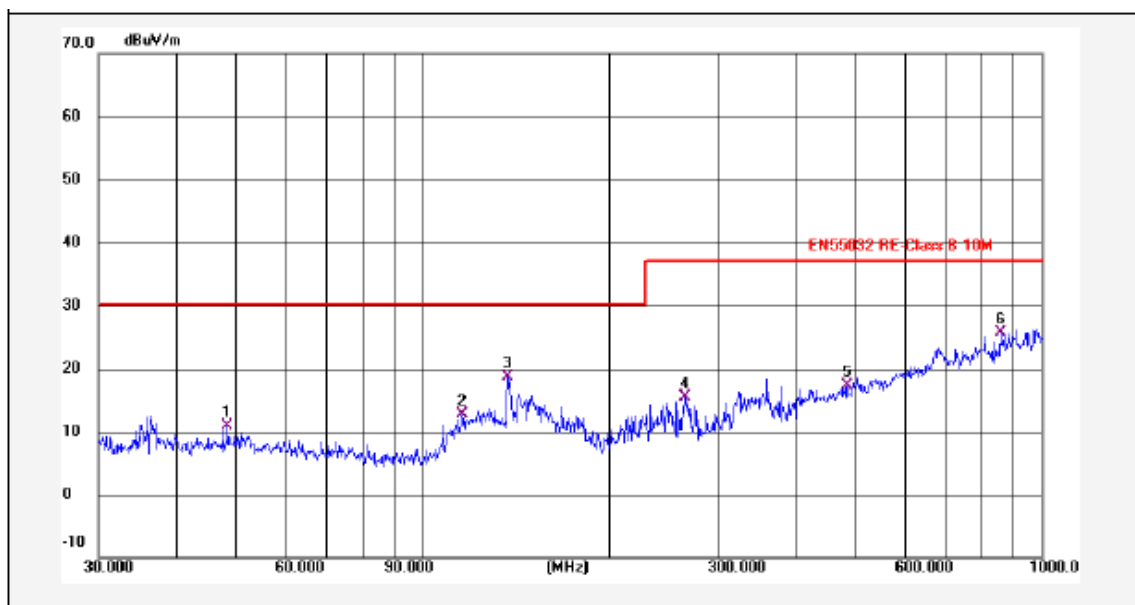
Note: 1.QP= Quasi-peak Reading.

2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	10m chamber
Environmental Conditions	22.5°C, 56.7% RH	Test Mode	Mode 25
Antenna Pole	Horizontal	RBW	120 kHz
Tested by	Waltek Billy	Test Results	PASS
Test Date	2025-02-27		

Note: AC 110V/60Hz



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	48.5015	25.16	-14.34	10.82	30.00	-19.18	QP	
2	116.1320	26.13	-13.35	12.78	30.00	-17.22	QP	
3	137.4200	32.59	-13.97	18.62	30.00	-11.38	QP	
4	265.6757	28.88	-13.30	15.58	37.00	-21.42	QP	
5	485.6091	23.57	-6.27	17.30	37.00	-19.70	QP	
6	857.0244	24.87	0.90	25.77	37.00	-11.23	QP	

Note: 1.QP= Quasi-peak Reading.

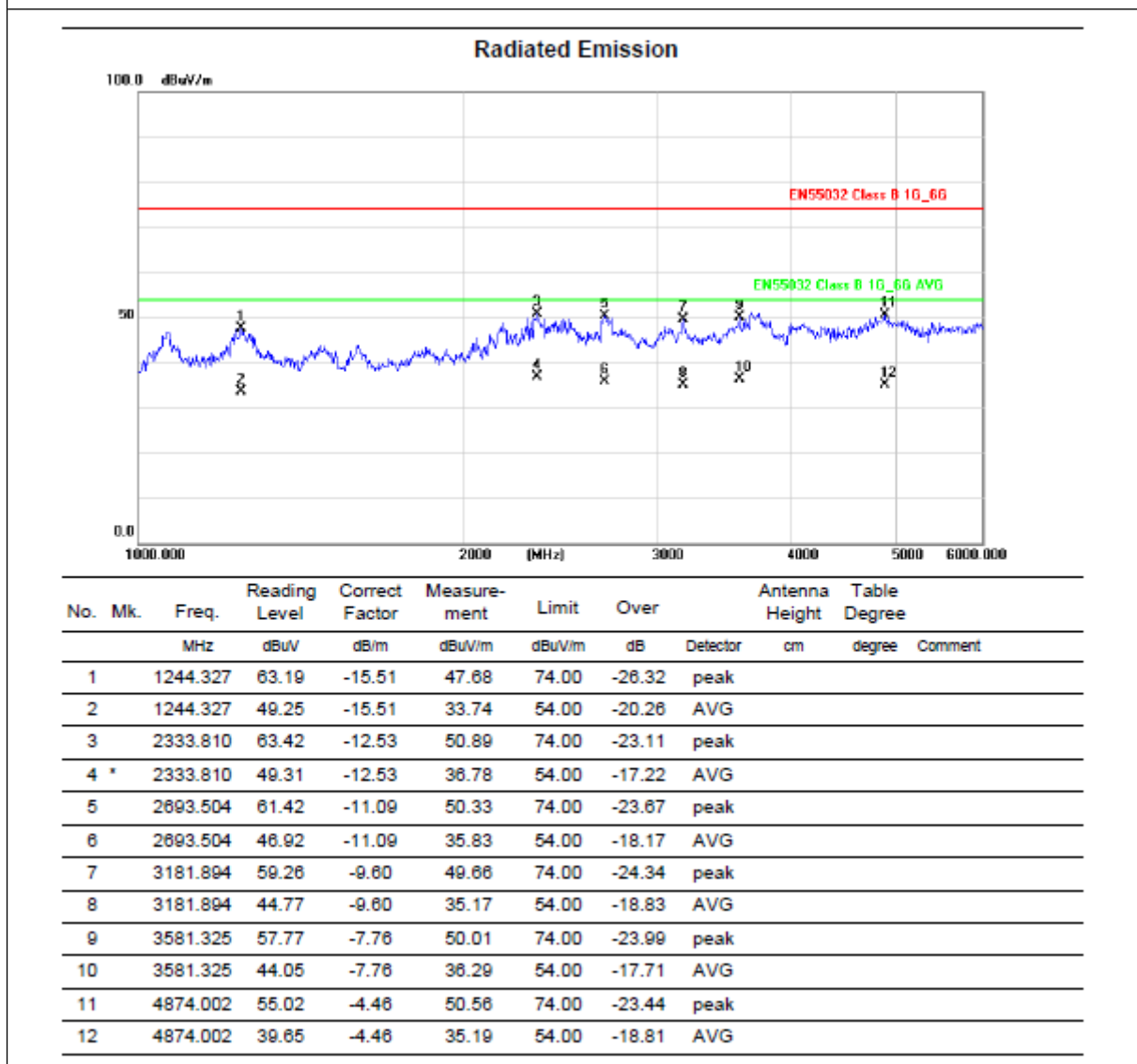
2.The other emission levels were very low against the limit.

3. Measurement = Reading Level+ Correct Factor, Over = Measurement- Limit

Above 1G(worst case)

Product Model	27E40	Location	3m chamber
Environmental Conditions	23.1℃, 50% RH	Test Mode	Mode 1
Antenna Pole	Vertical	RBW	1 MHz
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-28		

Note: AC 230V/50Hz

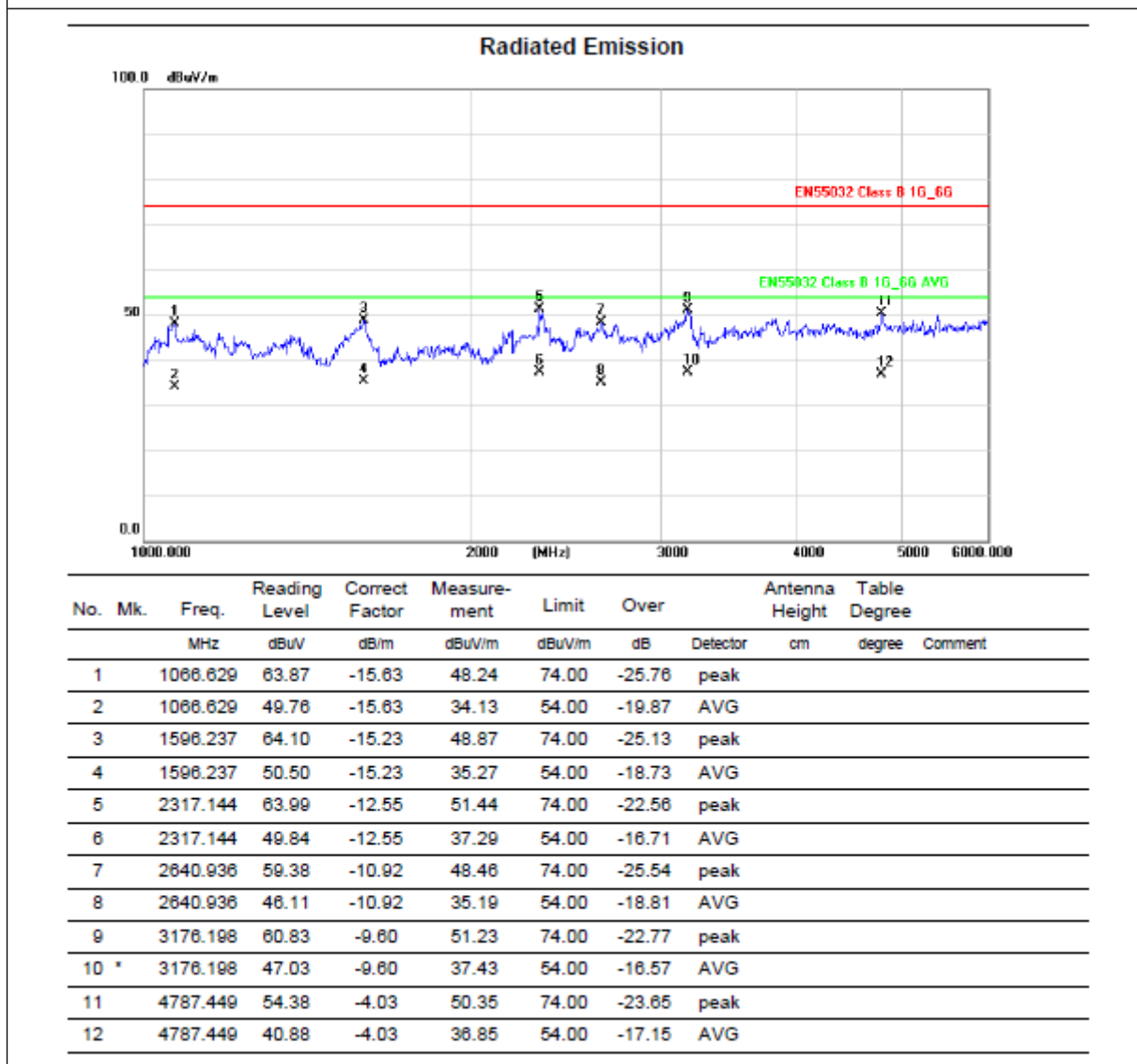


Note:1.While performing the testing, the notch filter is used for avoiding test instrument overload

2. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	3m chamber
Environmental Conditions	23.1℃, 50% RH	Test Mode	Mode 1
Antenna Pole	Horizontal	RBW	1 MHz
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-28		

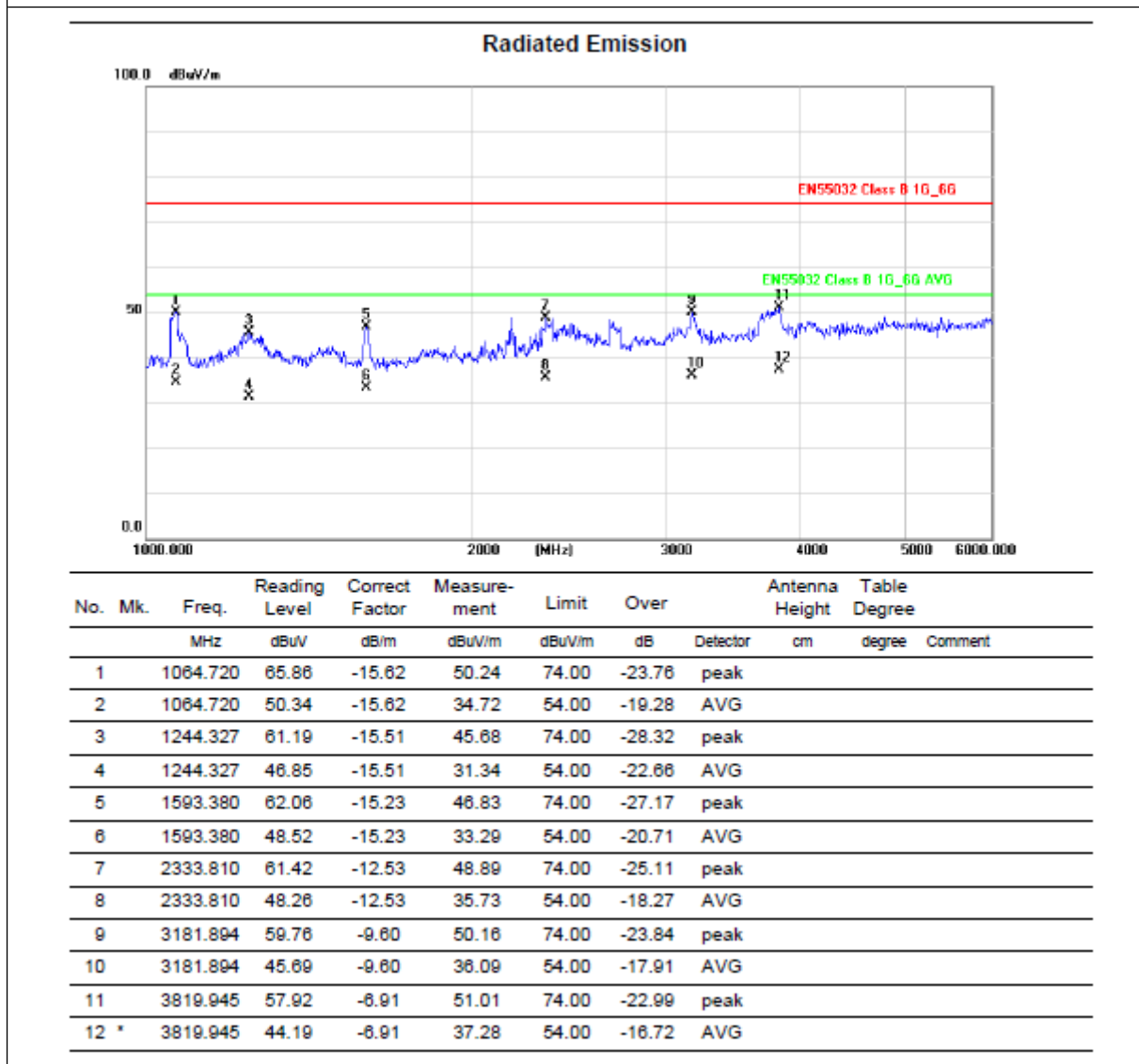
Note: AC 230V/50Hz



Note: 1. While performing the testing, the notch filter is used for avoiding test instrument overload
 2. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

Product Model	27E40	Location	3m chamber
Environmental Conditions	23.1°C, 50% RH	Test Mode	Mode 1
Antenna Pole	Vertical	RBW	1 MHz
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-28		

Note: AC 110V/60Hz

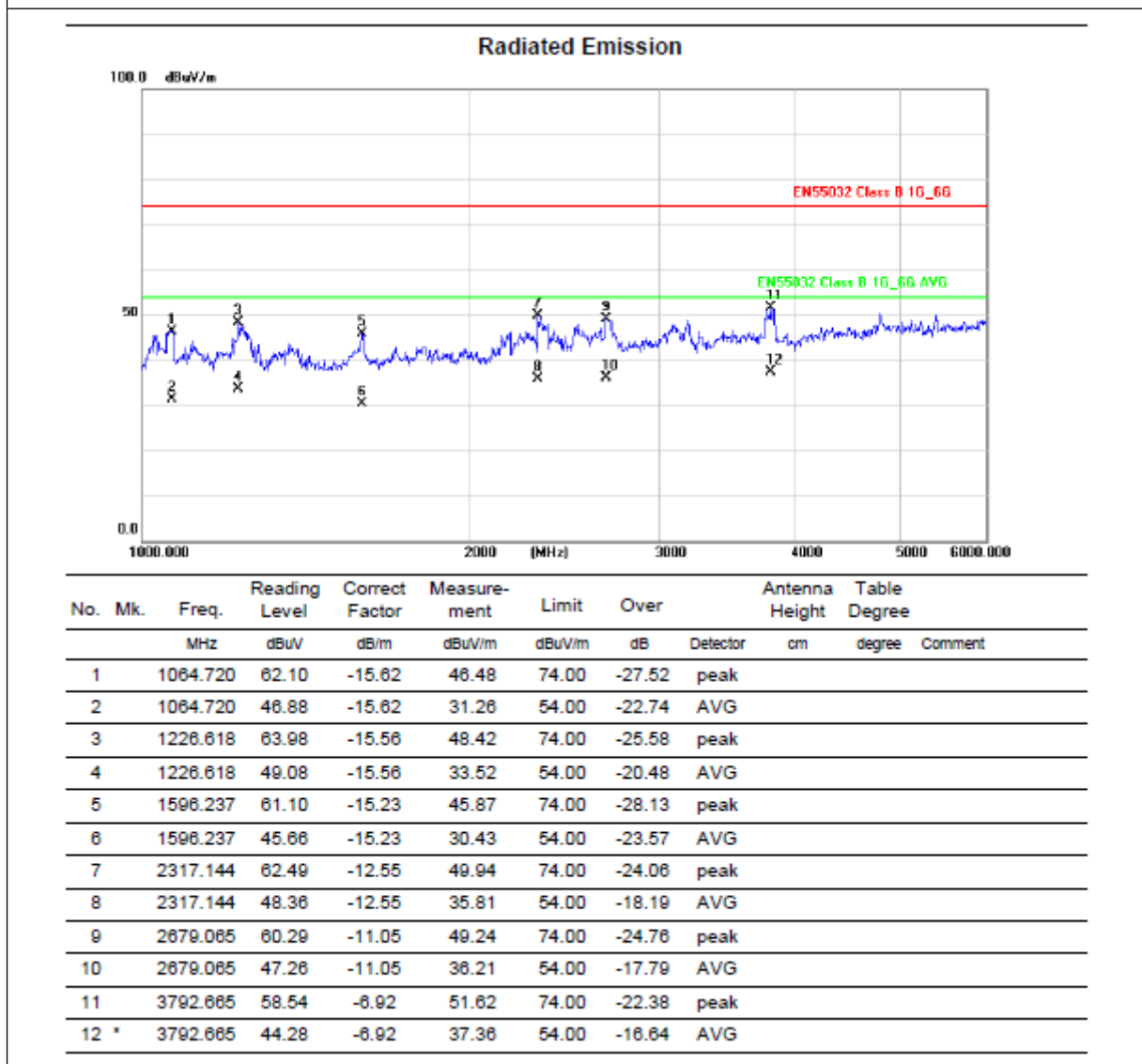


Note: 1. While performing the testing, the notch filter is used for avoiding test instrument overload

2. Measurement = Reading Level + Correct Factor, Over = Measurement - Limit

Product Model	27E40	Location	3m chamber
Environmental Conditions	23.1°C, 50% RH	Test Mode	Mode 1
Antenna Pole	Horizontal	RBW	1 MHz
Tested by	Freedom Zhuo	Test Results	PASS
Test Date	2025-02-28		

Note: AC 110V/60Hz



Note: 1. While performing the testing, the notch filter is used for avoiding test instrument overload
 2. Measurement = Reading Level+Correct Factor, Over = Measurement- Limit

4.4. Harmonics current measurement

4.4.1. Limit

Limits for Class A equipment		Limits for Class D equipment		
Harmonics Ordern	Max. permissible harmonics current A	Harmonics Ordern	Max. permissible harmonics current per watt mA/W	Max. permissible harmonics current A
Odd harmonics		Odd Harmonics only		
3	2.30	3	3.4	2.30
5	1.14	5	1.9	1.14
7	0.77	7	1.0	0.77
9	0.40	9	0.5	0.40
11	0.33	11	0.35	0.33
13	0.21	13	0.30	0.21
15<=n<=39	0.15x15/n	15<=n<=39	3.85/n	0.15x15/n
Even harmonics				
2	1.08			
4	0.43			
6	0.30			
8<=n<=40	0.23x8/n			

Note:

1. Class A and Class D are classified according to item 7.4.3.
2. According to section 7 of EN IEC 61000-3-2, the above limits for all equipment except for Lightning equipment having an active input power > 75 W and no limits apply for equipment with an active input power up to and including 75 W.

4.4.2. Test procedures

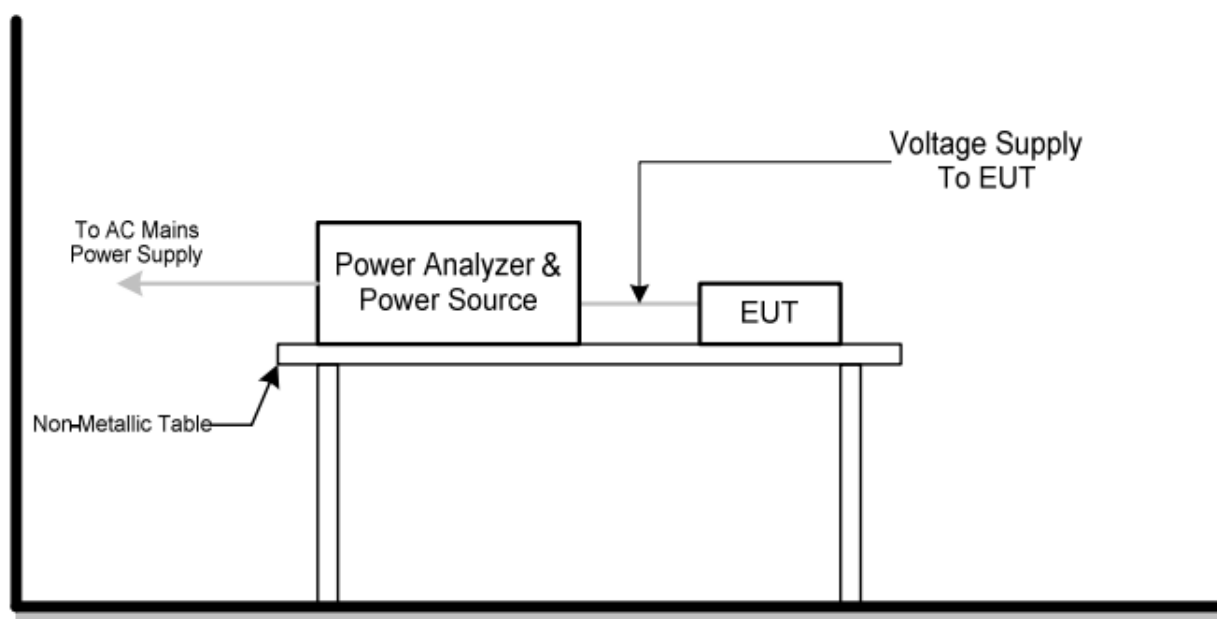
1. The EUT was placed on the top of a wooden table 0.8 m above the ground and operated to produce the maximum harmonic components under normal operating conditions.
2. The classification of EUT is according to of EN 61000-3-2. The EUT is classified as follows:
 Class A: Balanced three-phase equipment, Household appliances excluding equipment as Class D, Tools excluding portable tools, Dimmers for incandescent lamps, audio equipment, equipment not specified in one of the three other classes.
 Class B: Portable tools; Arc welding equipment which is not professional equipment.
 Class C: Lightning equipment.

Class D: Equipment having a specified power less than or equal to 600 W of the following types:

Personal computers and personal computer monitors and television receivers.

3. 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 time necessary for the EUT to be exercised.

4.4.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the test configuration.

4.4.4. Test results(worst case)

The EUT has power less than 75W. Hence according to EN IEC 61000-3-2, the EUT belong to class D equipment with a rated power of 75W or less other than lighting equipment', therefore 'limits are not specified in this edition of the standards.

4.5. Voltage fluctuation and flicker measurement

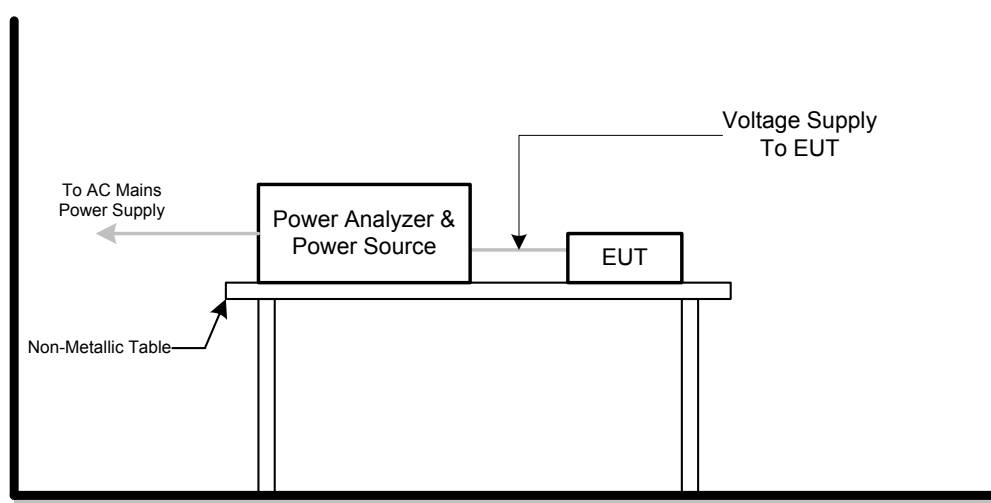
4.5.1. Limit

TEST ITEM	LIMIT	REMARK
P_{st}	1.0	P_{st} means short-term flicker indicator.
P_{lt}	0.65	P_{lt} means long-term flicker indicator.
T_{dt} (ms)	500	T_{dt} means maximum time that dt exceeds 3.3 %.
d_{max} (%)	4%	d_{max} means maximum relative voltage change.
dc (%)	3.3%	dc means relative steady-state voltage change

4.5.2. Test procedures

1. Tests was performed according to the Test Conditions/Assessment of Voltage Fluctuations specified in EN 61000-3-3 depend on which standard adopted for compliance measurement.
2. All types of harmonic current and/or voltage fluctuation in this report are assessed by direct measurement using flicker-meter.

4.5.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.5.4. Test results(worst case)

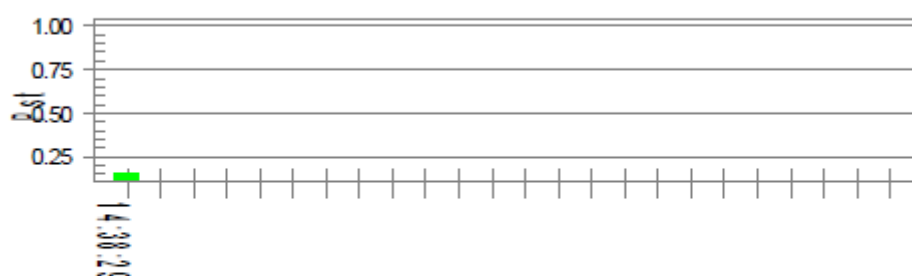
Product Model	27E40	Test Results	PASS
Observation Period (Tp)	10mins	Test Mode	Mode 1
Environmental Conditions	23.8℃, 51% RH	Tested by	Lemon He
Test Date	2025-02-24		

Test Result: Pass

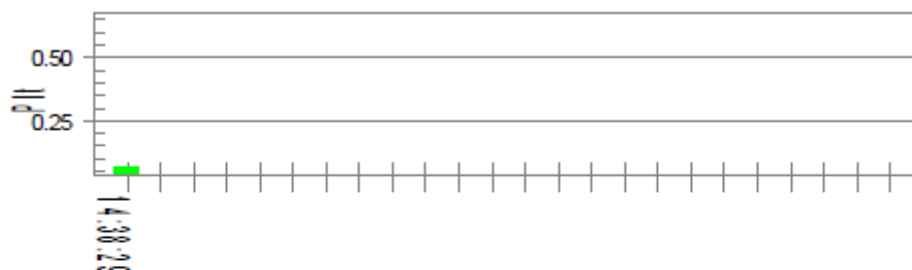
Status: Test Completed

Pst and limit line

European Limits



Plt and limit line



Parameter values recorded during the test:

Vrms at the end of test (Volt): 229.73

Highest dt (%):

T-max (mS): 0

Highest dc (%): 0.00

Highest dmax (%): 0.00

Highest Pst (10 min. period): 0.153

Highest Plt (2 hr. period): 0.067

Test limit (%):

Test limit (mS): 500.0 Pass

Test limit (%): 3.30 Pass

Test limit (%): 4.00 Pass

Test limit: 1.000 Pass

Test limit: 0.650 Pass

5. Immunity test

5.1. General description

Product Standard	Test Type	Minimum Requirement
Basic Standard, Specification, and Performance Criterion required	Electrostatic Discharge	EN 55035 ±2,4,8kV Air discharge, ±2,4kV Contact discharge, Performance Criterion B
	Radio frequency Electromagnetic Field	EN 55035 80MHz~1000MHz: 3V/m, 80% AM 1800,2600,3500,5000: 3V/m, 80% AM Performance Criterion A
	Electrical Fast Transient/Burst	EN 55035 Power Port: ±1 kV I/O Port: ±0.5 kV 5/50ns Tr/Th, 5kHz Repetition Freq Performance Criterion B
	Surge immunity	EN 55035 Power port: Line to Line: ±1kV for 1.2/50(8/20) Line to Ground: ±2kV for 1.2/50(8/20) LAN/WAN Port: Line to Ground: ±1kV for 10/700(5/320)
	Continuous induced RF disturbance	EN 55035 0.15~10MHz, 3V (r.m.s), 80% AM 10 ~30MHz, 3V to 1 V (r.m.s), 80% AM 30~80MHz 1V 80% AM Performance Criterion A
	Voltage dips and Voltage interruptions	EN 55035 Voltage Dips: i) <5% residual voltage for 0.5 cycle Performance Criterion B ii) 70% residual voltage for 25 cycles Performance Criterion C Voltage Interruptions: <5% reduction for 250 cycles Performance Criterion C

5.2. Performance of criteria

The performance of criteria about EN 55035

Criteria A:	The apparatus shell continues 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 apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the manufacturer does not specify the minimum performance level or the permissible performance loss, 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.
Criteria B:	After test, the apparatus shell continues to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomenon below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. However, no change of operating state if stored data is allowed to persist after the test. If the manufacturer does not specify the minimum performance level or the permissible performance loss, 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.
Criteria C:	Temporary loss of function is allowed, provided the functions is self-recoverable or can be restored by the operation of controls by the user in accordance with the manufacturer instructions. Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

5.3. Electrostatic discharge immunity test(ESD)

5.3.1. Test specification

Basic Standard:	EN 61000-4-2
Discharge Impedance:	330 ohm / 150 pF
Discharge Voltage:	Air Discharge: 2,4,8kV Contact Discharge: 2,4kV
Polarity:	Positive & Negative
Number of Discharge:	Minimum 10 times at each test point
Discharge Mode:	Single Discharge 1 second minimum

5.3.2. Test procedures

The test generator necessary to perform direct and indirect application of discharges to the EUT in the following manner:

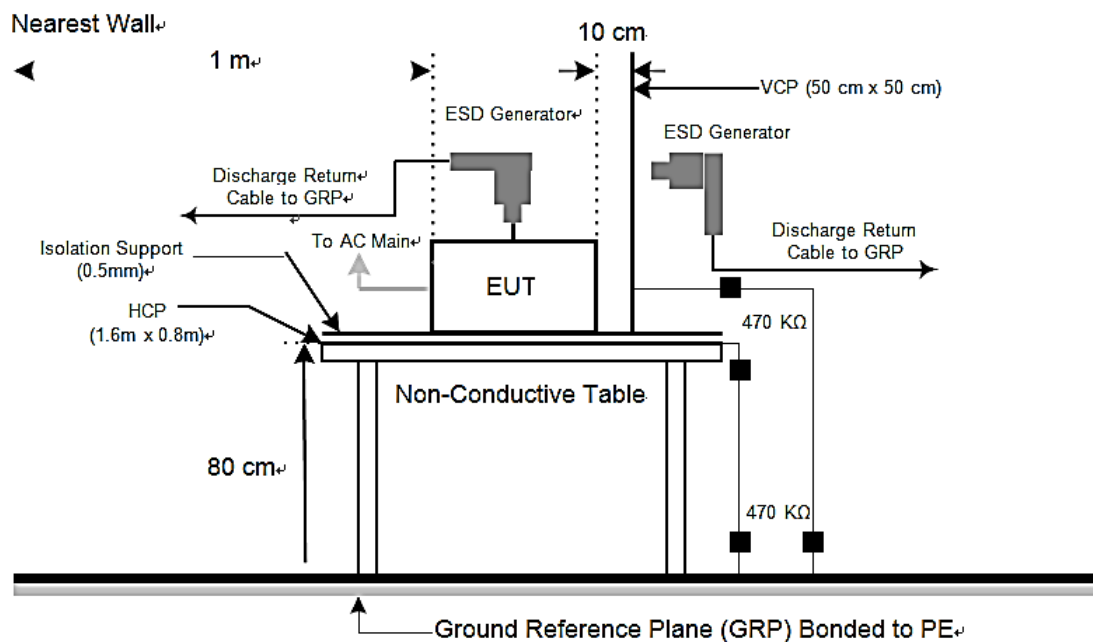
1. Test Level Refer to EN 55035 test method reference EN 61000-4-2.
2. Contact discharge was applied to conductive surfaces and coupling planes of the EUT.

During the test, it was performed with single discharges. For the single discharge time between successive single discharges was at least 1 second. The EUT shall be exposed to at least 80 discharges, 40 each at negative and positive polarity, at a minimum of four test points. One of the test points shall be subjected to at least 20 indirect discharges to the center of the front edge of the horizontal coupling plane. The remaining three test points shall each receive at least 20 direct contact discharges. If no direct contact test points are available, then at least 80 indirect discharges shall be applied in the indirect mode. Test shall be performed at a maximum repetition rate of one discharge per second.

3. Vertical Coupling Plane (VCP):
4. The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a
5. Distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.

6. The four faces of the EUT will be performed with electrostatic discharge.
7. Horizontal Coupling Plane (HCP):
8. The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane. The four faces of the EUT will be performed with electrostatic discharge.
9. Air discharges at insulation surfaces of the EUT.
10. It was at least ten single discharges with positive and negative at the same selected point.
11. For the actual test configuration, please refer to the related Item –EUT Test Photos

5.3.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration

5.3.4. Test results

Temperature	23.2°C	Humidity	54% RH
Pressure	101.1kPa	Tested By	Lemon He
Test Mode	Mode 1, 13, 25	Required Passing Performance	Criterion B
Test Date	2025-03-01		

Air Discharge					
Test Points	Test Levels				Results
	± 2 kV	± 4 kV	± 8 kV	± 15 kV	PASS/ FAIL
Gap	A	A	B	/	PASS
Screen	A	A	B	/	PASS
HDMI Port	A	A	B	/	PASS
LED	A	A	A	/	PASS
Switch	A	A	A	/	PASS
Earphone	A	A	A	/	PASS
USB Port	A	A	B	/	PASS

Contact Discharge					
Test Points	Test Levels				Results
	± 2 kV	± 4 kV	± 6 kV	± 8 kV	PASS/ FAIL
HDMI Port	A	B	/	/	PASS
USB Port	A	B	/	/	PASS
Screw	A	B	/	/	PASS
Metal	A	B	/	/	PASS

Discharge To Horizontal/Vertical Coupling Plane				
Side of EUT	Test Levels			Results
	± 2 kV	± 4 kV	± 6 kV	PASS/ FAIL
Front	/	A	/	PASS
Back	/	A	/	PASS
Left	/	A	/	PASS
Right	/	A	/	PASS

Note:

Performance criterion B: Test degradation of performance, returned to normal after the test.

5.4. Radio frequency electromagnetic immunity test(RS)

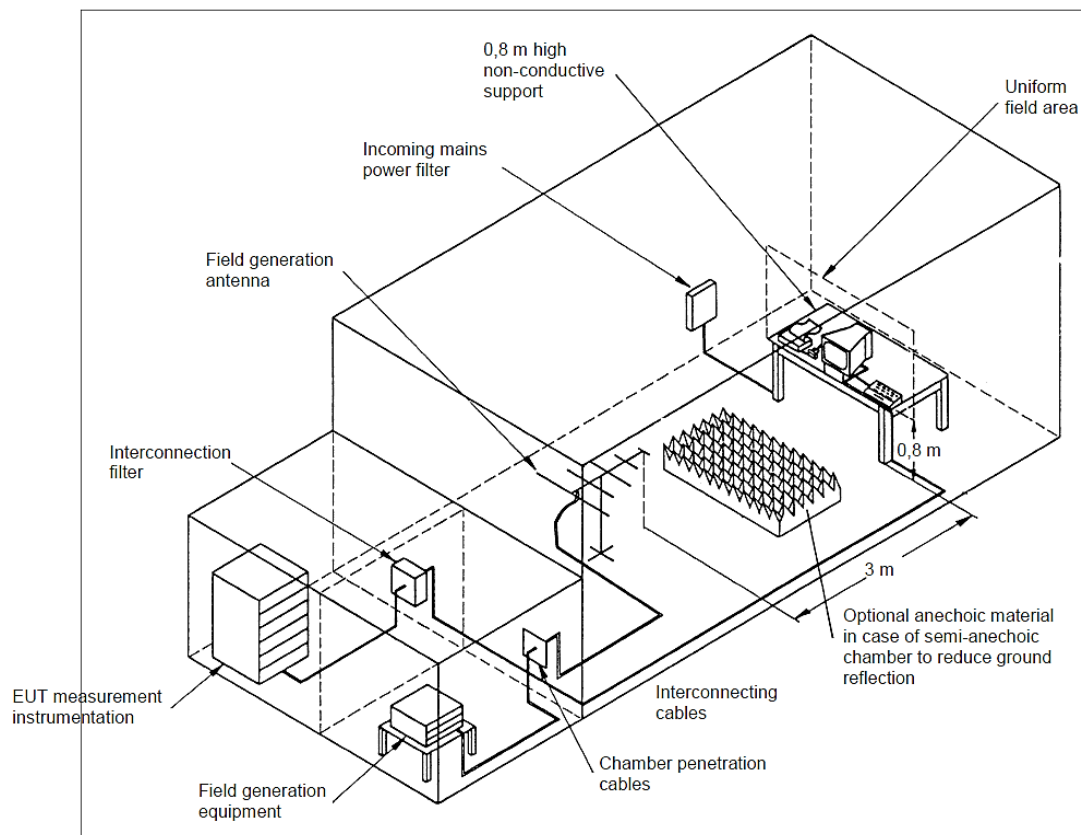
5.4.1. Test specification

Basic Standard:	EN 61000-4-3
Frequency Range:	80MHz~1000MHz 1800 MHz,2600 MHz,3500 MHz,5000 MHz
Field Strength:	3V/m
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Polarization of antenna	Horizontal and Vertical
Frequency Step:	1 % of preceding frequency value
Dwell Time	at least 3 seconds

5.4.2. Test procedures

1. Test Level Refer to EN 55035, test method reference EN 61000-4-3.
2. The EUT installed in a representative system as described in section 7 of EN 61000-4-3 was placed on a non-conductive table 0.8 m in height. The system under test was connected to the power and signal wire according to relevant installation instructions.
3. The testing was performed in a modified semi-anechoic chamber.
4. The frequency range is swept from 80 MHz to 1000 MHz, with the signal 80% amplitude modulated with a 1kHz sine wave.
5. The frequency range is swept from 1800 MHz, 2600 MHz, 3500 MHz and 5000 MHz, with the signal 80% amplitude modulated with a 1 kHz sine wave.
6. The field strength level was 3 V/m.
7. The test was performed with the EUT exposed to the vertical and horizontal polarization fields on the Back side.

5.4.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.4.4. Test results

Temperature	23.4°C	Humidity	55% RH
Pressure	101.4kPa	Tested By	Seve Yang
Test Mode	Mode 1, 13, 25	Required Passing Performance	Criterion A
Test Date	2025-02-26		

Frequency Band	Field Strength V(r.m.s)	Antenna Polarization	EUT Face	Observation Criterion	Result
80MHz~1000MHz	3	H&V	Front& Back &Left& Right	A	PASS
1800MHz	3	H&V	Front& Back &Left& Right	A	PASS
2600MHz	3	H&V	Front& Back &Left& Right	A	PASS
3500MHz	3	H&V	Front& Back &Left& Right	A	PASS
5000MHz	3	H&V	Front& Back &Left& Right	A	PASS

For worst case: HDMI Playing

This test monitored the Earphone port by Audio Analyzer. Worst Measure result as below:

Tabulated Results for RF Electromagnetic Field 80 - 1000 MHz							
Signal source	Injection port	Measuring port	Exposed side	L0 [dBV]	L1 max hold [dBV]	L1-L0 [dB]	Result
Audio out L	enclosure	Earphone L	H	-30	-76.4	-46.4	Pass*
Audio out R	enclosure	Earphone R	H	-30	-78.4	-48.4	Pass*
Audio out L	enclosure	Earphone L	V	-30	-76.8	-46.8	Pass*
Audio out R	enclosure	Earphone R	V	-30	-77.2	-47.2	Pass*

Tabulated Results for RF Electromagnetic Field spot test (1800MHz, 2600MHz, 3500MHz, 5000MHz)							
Signal source	Injection port	Measuring port	Exposed side	L0 [dBV]	L1 max hold [dBV]	L1-L0 [dB]	Result
Audio out L	enclosure	Earphone L	H	-30	-79.0	-49.0	Pass*
Audio out R	enclosure	Earphone R	H	-30	-79.0	-49.0	Pass*
Audio out L	enclosure	Earphone L	V	-30	-79.9	-49.9	Pass*
Audio out R	enclosure	Earphone R	V	-30	-80.4	-50.4	Pass*

Remark: “*”: The measured acoustic interference ratio and/or the measured electrical interference ratio during the was -20 dB or better.

5.5. Electrical fast transient(EFT)

5.5.1. Test specification

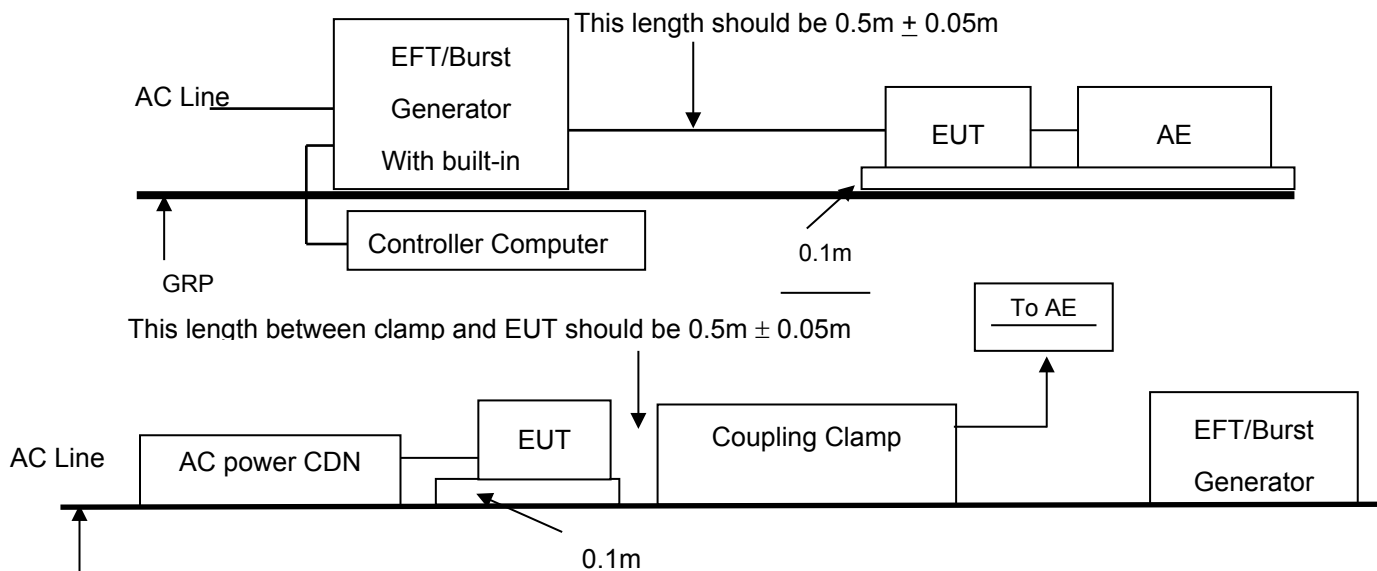
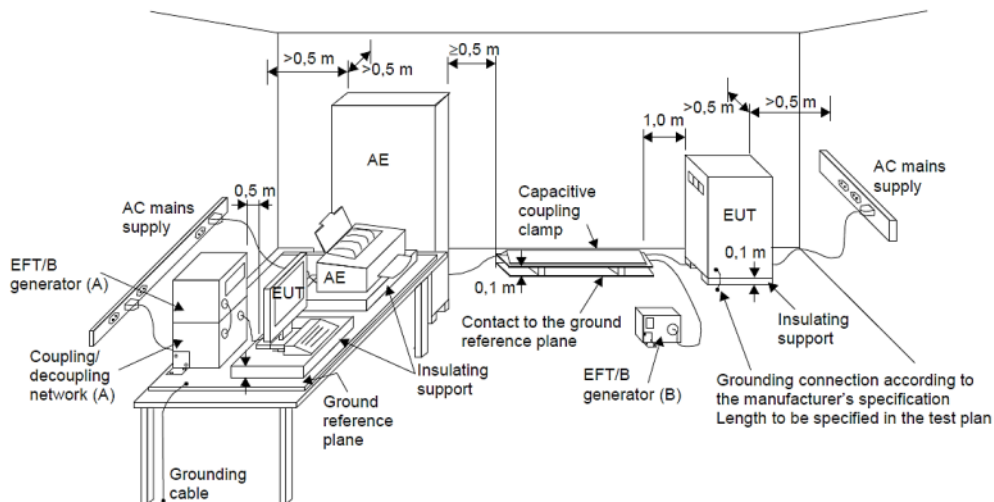
Basic Standard:	EN 61000-4-4
Test Voltage:	AC Power Port: ± 1 kV I/O Port: 0.5 kV
Polarity:	Positive & Negative
Impulse Frequency:	5 kHz
Impulse Wave-shape:	5/50 ns
Burst Duration:	15 ms
Burst Period:	300 ms
Test Duration:	Not less than 1 min.

5.5.2. Test procedures

1. Test method reference EN 61000-4-4.
2. In order to minimize the effect of environmental parameters on test results, the climatic conditions when test is carrying out shall comply with the following requirements:
 - Ambient temperature: 15 °C to 35 °C.
 - Relative humidity: 20 % to 75 %.
 - Atmospheric pressure: 86 kPa (860 mbar) to 106 kPa (1060 mbar).
3. In order to minimize the effect of environmental parameters on test results, the electromagnetic environment of the laboratory shall not influence the test results.
4. The variety and diversity of equipment and systems to be tested make it difficult to establish general criteria for the evaluation of the effects of fast transients/bursts on equipment and systems.
5. The test results may be classified on the basic of the operating conditions and the functional specification of the equipment under test, according to the following performance criteria:
 - Normal performance within the specification limits.

- Temporary degradation or loss of function or performance which is self-recoverable.
- Temporary degradation or loss of function or performance which requires operator intervention or system reset.
- Degradation or loss of function which is not recoverable due to damage of equipment (components).

5.5.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.5.4. Test results

Temperature	23.4°C	Humidity	51% RH
Pressure	101.2kPa	Tested By	Lemon He
Test Mode	Mode 1, 13, 25	Required Passing Performance	Criterion B
Test Date	2025-03-03		

Test Point	Test Level (kV)	Observation Criterion	Result
L	±1	A	PASS
N	±1	A	PASS
L-N	±1	A	PASS
PE	±1	B	PASS
L-PE	±1	B	PASS
N-PE	±1	B	PASS
L-N-PE	±1	B	PASS

5.6. Surge immunity test

5.6.1. Test specification

Basic Standard:	EN 61000-4-5
Wave-Shape:	Combination Wave 1.2/50 μ s Open Circuit Voltage 8/20 μ s Short Circuit Current 10/700 μ s Open Circuit Voltage
Test Voltage:	Power port: Line to Line: ± 1 kV for 1.2/50(8/20) Line to Ground: ± 2 kV for 1.2/50(8/20) LAN/Phone Port: Line to Ground: ± 1 kV for 10/700(5/320) Performance Criterion B
Generator Source Impedance:	Power Line: 2 ohm between networks 12 ohm between network and ground Signal port: 40 ohm between network and ground
Polarity:	Positive/Negative
Phase Angle:	0° / 90° / 180° / 270°
Pulse Repetition Rate:	1 time / min. (maximum)
Number of Tests:	5 positive and 5 negative at selected points

5.6.2. Test procedures

1. Test method reference EN 61000-4-5
2. Climatic conditions

The climatic conditions shall comply with the following requirements:

- Ambient temperature : 15 °C to 35 °C
- Relative humidity: 20 % to 75 %
- Atmospheric pressure: 86 kPa to 106 kPa (860 mbar to 1060 mbar)

3. Electromagnetic conditions

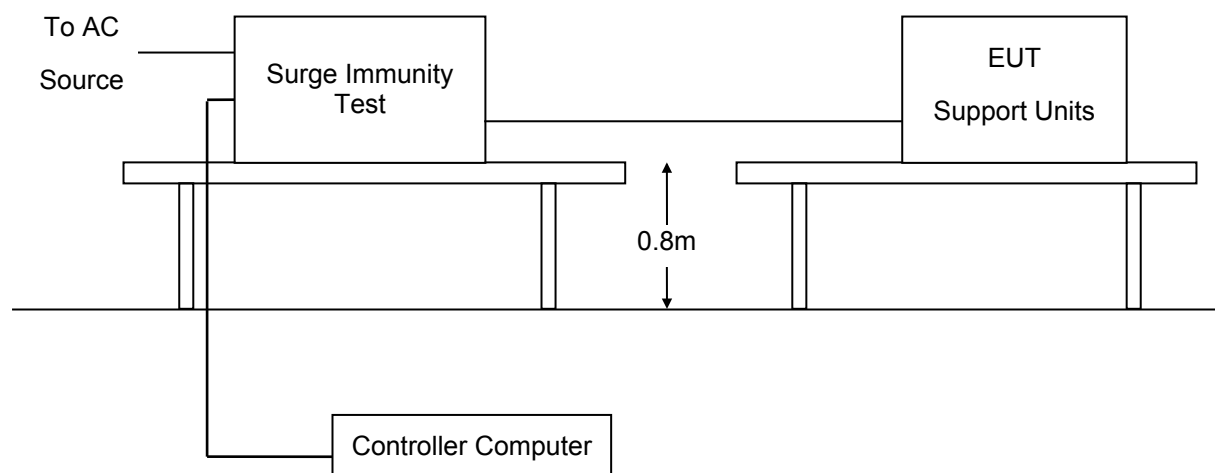
- The electromagnetic environment of the laboratory shall not influence the test results.

4. The test shall be performed according the test plan that shall specify the test set-up with.

If not otherwise specified the surges have to be applied synchronized to the voltage phase at the zero-crossing and the peak value of the a.c. voltage wave (positive and negative).

5. The surges have to be applied line to line and line(s) and earth. When testing line to earth, the test voltage has to be applied successively between each of the lines and earth, if there is no other specification.
6. The test procedure shall also consider the non-linear current-voltage characteristics of the equipment under test. Therefore the test voltage has to be increased by steps up to the test level specified in the product standard or test plan.
7. If the actual operating signal sources are not available, they may be simulated. Under no circumstances may the test level exceed the product specification. The test shall be carried out according to the test plan.
8. To find all critical points of the duty cycle of the equipment, a sufficient number of positive and negative test pulses shall be applied. For acceptance test a previously unstressed equipment shall be used and the protection devices shall be replaced.

5.6.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.6.4. Test Results

Temperature	23.4°C	Humidity	51% RH
Pressure	101.2kPa	Tested By	Lemon He
Test Mode	Mode 1, 13, 25	Required Passing Performance	Criterion B
Test Date	2025-03-03		

AC 230V, 50Hz Port(1.2/50 us+8/20 us)					
Test Point	Coupling Network (Ohm)	Phase Angle	Test Level (kV)		Result
			±1	±2	
L-N	2	0° / 90° / 180° / 270°	A	/	PASS
L-PE	12	0° / 90° / 180° / 270°	/	B	PASS
N-PE	12	0° / 90° / 180° / 270°	/	B	PASS

5.7. Conducted radio frequency disturbances (CS)

5.7.1. Test specification

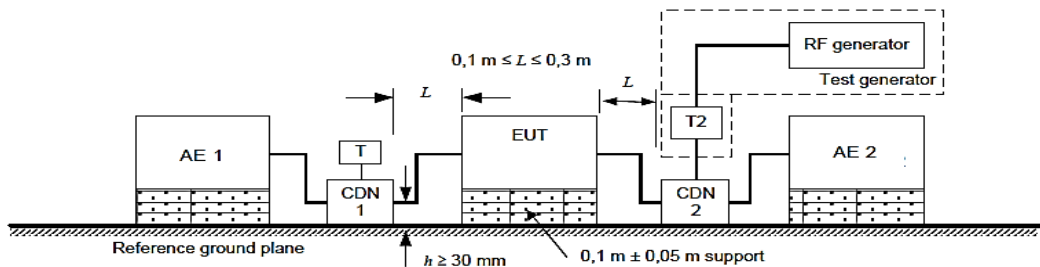
Basic Standard:	EN 61000-4-6
Frequency Range:	0.15 MHz ~ 80 MHz
Field Strength:	0.15~10MHz, 3V (r.m.s), 80% AM 10 ~30MHz, 3V to 1 V (r.m.s), 80% AM 30~80MHz 1V 80% AM
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of preceding frequency value
Dwell Time	at least 3 seconds

5.7.2. Test procedures

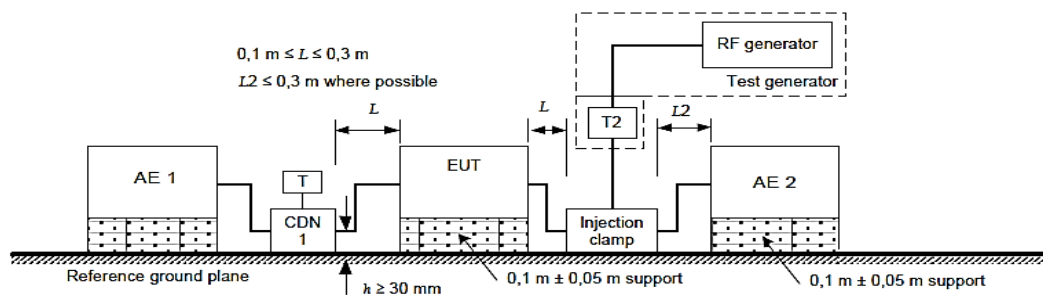
- 1 Test Level refer to EN 55035 test method reference EN 61000-4-6.
- 2 The EUT shall be operated within its intended climatic conditions. The temperature and relative humidity should be recorded.
- 3 The test shall be performed with the test generator connected to each of the coupling and decoupling.
- 4 Devices in turn while the other non-excited RF-input ports of the coupling devices are terminated by a 50 ohm load resistor.
- 5 The frequency range is swept from 150 kHz to 80 MHz, using the signal levels established during the setting process, and with the disturbance signal 80% amplitude modulated with a 1 kHz sine wave, pausing to adjust the RF-signal level or to switch coupling devices as necessary. The rate of sweep shall no exceed 1.5×10^{-3} decades/s. Where the frequency is swept incrementally, the step size shall no exceed 1% of the start and thereafter 1% of the preceding frequency value.

- 6 The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies e.g. clock frequency (ies) and harmonics or frequencies of dominant interest shall be analyzed separately.
- 7 In cases of dispute, the test procedure using a step size not exceeding 1% of the start and thereafter 1% of preceding frequency value shall take precedence.
- 8 Attempts should be made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility.
- 9 The use of special exercising programs is recommended.
- 10 Testing shall be performed according to a Test Plan, which shall be included in the test report.
- 11 It may be necessary to carry out some investigatory testing in order to establish some aspects of the test plan.

5.7.3. Test set-up



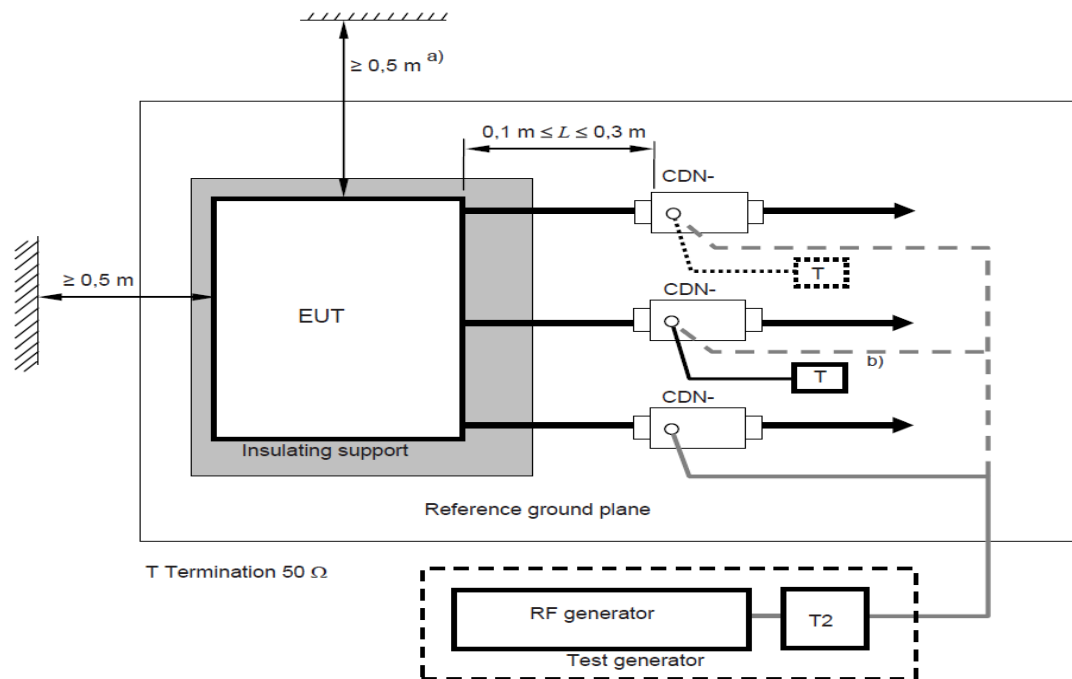
Schematic setup for immunity test used for CDN



Schematic setup for immunity test used for injection clamp

T	Termination $50\ \Omega$
T2	Power attenuator (6 dB)
CDN	Coupling and decoupling network
Injection clamp:	Current clamp or EM clamp

Schematic setup for immunity test to RF conducted disturbances



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.7.4. Test results

Temperature	23.4°C	Humidity	52% RH
Pressure	101.1 kPa	Tested By	Lemon He
Test Mode	Mode 1, 13, 25	Required Passing Performance	Criterion A
Test Date	2025-03-01		

Frequency Band (MHz)	Field Strength V(r.m.s)	Cable	Observation Criterion	Result
0.15~10	3	AC Port	A	PASS
10~30	3~1			
30~80	1			

For worst case: HDMI Playing

This test monitored the Earphone port by Audio Analyzer. Worst Measure result as below:

Tabulated Results for Conducted Radio Frequency Interference						
Signal source	Injection port	Measuring port	L0 [dBV]	L1 max hold [dBV]	L1-L0 [dB]	Result
Audio out L	AC	Earphone L	-30	-80.5	-50.5	Pass*
Audio out R	AC	Earphone R	-30	-81.7	-51.7	Pass*

Remark: “*”: The measured acoustic interference ratio and/or the measured electrical interference ratio during the was –20 dB or better.

5.8. Voltage dips and Voltage interruption

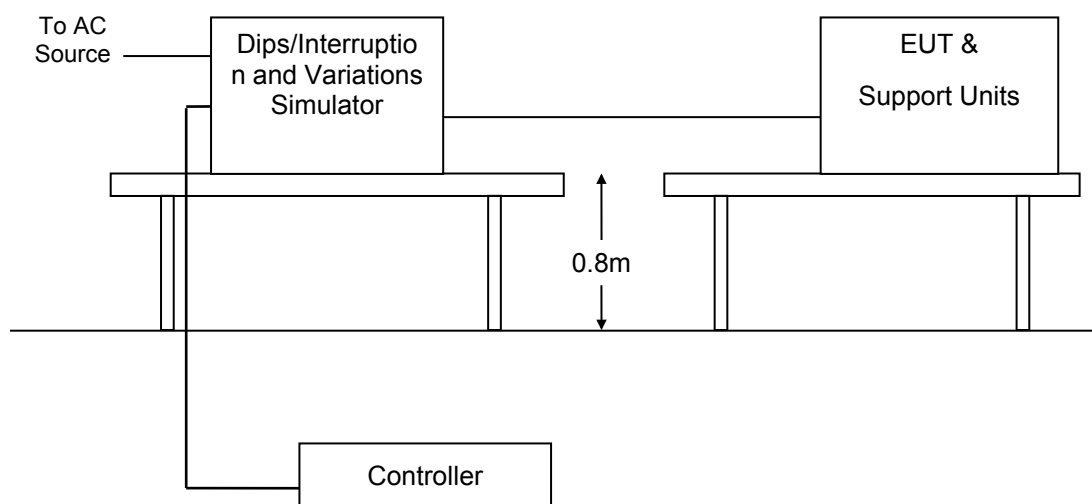
5.8.1. Test specification

Basic Standard:	EN 61000-4-11
Test duration time:	Minimum three test events in sequence
Interval between event:	Minimum 10 seconds
Phase Angle:	0° / 180°
Test cycle:	3 times

5.8.2. Test procedures

1. Test level refer to EN 55035, test method reference EN 61000-4-11.
2. Source voltage and frequency: AC 230V/50 Hz, Single phase.
3. Test of interval: 10 secs.
4. Level and duration: Sequency of 3 dips/interrupts.
5. Voltage rise (and fall) time: 1~5 μ s.

5.8.3. Test set-up



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration

5.8.4. Test results

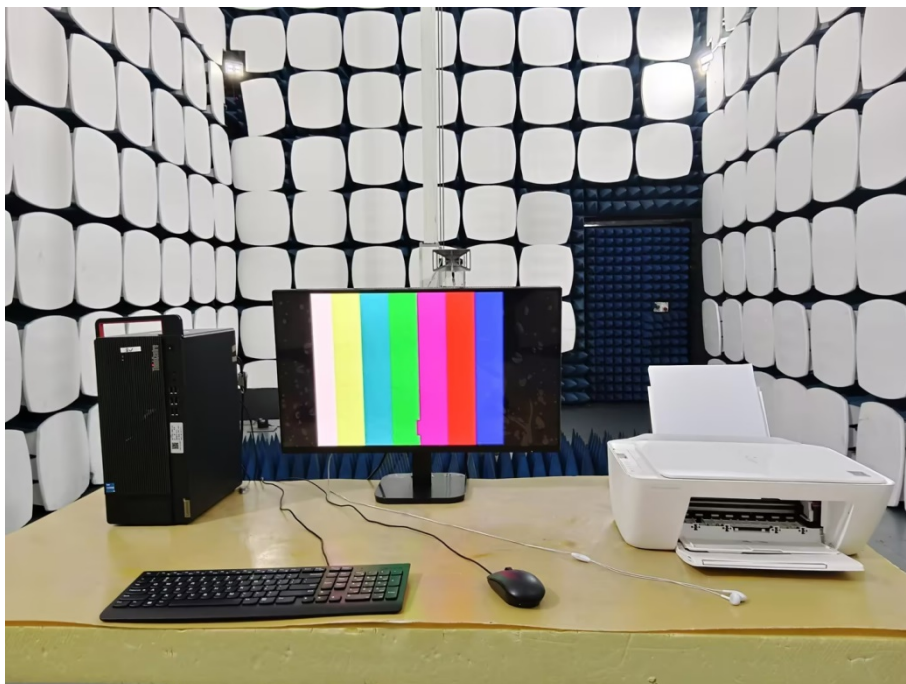
Temperature	23.4°C	Humidity	51% RH
Pressure	101.2kPa	Tested By	Lemon He
Test Mode	Mode 1, 13, 25	Required Performance	Passing Criterion B/C/C
Test Date	2025-03-03		

Test Voltage; AC 230V/50Hz				
Item	Voltage (%Residual)	Duration (Period)	Observation Criterion	Result
Voltage Dips	<5	0.5 Cycle	B	PASS
Voltage Dips	70	25 Cycles	B	PASS
Voltage interruption	<5	250 Cycles	C	PASS

Note:

1. Performance criterion B: Test degradation of performance, returned to normal after the test.
2. Performance criterion C: Restart during the test, and manually resume normal work after the test.

6. Test photographs



RE



CE



ESD



RS



DIPS, EFT, Surge



CS



Harmonics& Flicker

7. Photographs of EUT

Please refer to Appendix-A

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Standard Technology Co., Ltd.

Address: Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China

Tel: 0755-26024411

Email: service@hy-lab.cn

(END OF REPORT)