

# TEST REPORT

Product Name : paper shredder  
PN415D, PN310D, PN210D,  
Model Number : ES531546AAA, PNxyyD,  
PN3bbD, PNzwwD

Prepared for : NINGBO WONGHING INTELLIGENT MANUFACTURING  
CO., LTD  
Address : Zhengjia 17 House Settlement, XiePu ZhenHai, Ningbo,  
Zhejiang, 315203, P.R.China

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Report Number : ENB2404010172E00301R  
Date(s) of Tests : April 01, 2024 to April 11, 2024  
Date of issue : April 16, 2024



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APPENDIX I (Photos of the EUT) (8 pages)

## TEST REPORT DESCRIPTION

Applicant : NINGBO WONGHING INTELLIGENT MANUFACTURING CO., LTD  
Manufacturer : NINGBO WONGHING INTELLIGENT MANUFACTURING CO., LTD  
Trade Mark : N/A  
EUT : paper shredder  
Model No. : PN415D, PN310D, PN210D, ES531546AAA, PNxyyD, PN3bbD, PNzwwD  
Power Supply : AC 100V, 50/60Hz



Test Procedure Used:

J55014-1 (H27)

The device described above is tested by EMTEK (NINGBO) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (NINGBO) CO., LTD. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliant with the J55014-1 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of EMTEK (NINGBO) CO., LTD.

Date of Test : April 01, 2024 to April 11, 2024

Prepared by :

June Gao/Engineer

Reviewer :

Ade Wang/Supervisor

Approved & Authorized Signer :

Tony Wei/Manager



## Modified History

Version	Report No.	Revision date	Summary
	ENB2404010172E00301R	/	Original Report



## 1. SUMMARY OF TEST RESULT

EMISSION			
Description of Test Item	Standard	Limits	Results
Conducted Emissions at Mains Terminals	J 55014-1(H27)	Table 1	Pass
Conducted Emissions at Load Terminals and Additional Terminals	J 55014-1(H27)	Table 1	N/A
Click	J 55014-1(H27)	Section 4.2	Pass
Disturbance Power	J 55014-1(H27)	Table 2a&2b	Pass
Radiated Emission	J 55014-1(H27)	Table 3	N/A
Note: N/A is an abbreviation for Not Applicable.			

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

EUT : paper shredder

Model Number : PN415D, PN310D, PN210D, ES531546AAA, PNxyyD, PN3bbD, PNzwwD  
(Note: All models are the same except the knife head.  
“x” can be 4 to 6 which indicates customer code; letter “z” can be 1 to 2 which indicates customer code. Letter “ww” denote micro-cut units and can be 01 to 10 which indicates the amount of paper shredded; “bb” denote micro-cut units and can be 01 to 10 which indicates the amount of paper shredded. “yy” denote cross-cut units and can be 01 to 15 which indicates the amount of paper shredded.  
Model ES531646AAA is same as model PN310D except the model name, We prepared model PN415D for EMC test.)

Test Voltage : AC 100V/60Hz

Highest Frequency : Below 108 MHz

Sample Number : ENB2404010172E003-1-1

Applicant : NINGBO WONGHING INTELLIGENT MANUFACTURING CO., LTD

Address : Zhengjia 17 House Settlement, XiePu ZhenHai, Ningbo, Zhejiang, 315203, P.R.China

Manufacturer : NINGBO WONGHING INTELLIGENT MANUFACTURING CO., LTD

Address : Zhengjia 17 House Settlement, XiePu ZhenHai, Ningbo, Zhejiang, 315203, P.R.China

Date of receiver : April 01, 2024

Date of Test : April 01, 2024 to April 11, 2024

### 2.2. Input / Output Ports

Port #	Name	Type*	Cable Max. >3m	Cable Shielded	Comments
1	AC mains	AC	No	Unshielded	None
/	/	/	/	/	/

\*Note: Use abbreviations:

AC= AC Power port

DC= DC Power port

N/E= Non-Electrical

A/D=Analogue/digital data port (signal/control port, antenna port, wired network port, broadcast receiver tuner port, optical fibre port)

## 2.3. Independent Operation Modes

- A. FWD
- B. REV



## 2.4. Test Voltage and Frequency for J 55014-1

A test at about 160 kHz and at about 50 MHz shall be made over a range of 0,9 to 1,1 times the rated voltage in order to check whether the level of disturbance varies considerably with the supply voltage; in which case, the measurements are to be made at the voltage that causes maximum disturbance.

If an appliance has a rated voltage range, the multipliers 0,9 and 1,1 apply to the lowest and highest, most common nominal supply voltages that fall within the rated voltage range that is specified by the manufacturer.

NOTE The most common nominal supply voltages are 100 V, 110 V, 115 V, 120 V, 127 V, 220 V, 230 V, 240 V and 250 V.

If an appliance has more than one rated voltage the multipliers 0,9 and 1,1 apply to the rated voltage that causes maximum disturbance.

For appliances with a frequency range of 50 Hz to 60 Hz, a test at about 160 kHz and at about 50 MHz shall be made using supply frequencies of 50 Hz and 60 Hz at the above determined supply voltage, in order to check whether the level of disturbance varies considerably with the supply frequency; in which case, the measurements are to be made at the supply frequency which causes maximum disturbance.

We prepared AC 110V/60Hz voltage for EMC test.

## 2.5. Test Manner

Test Items	Test Voltage	Operation Modes	Worst case
Conducted Emissions at Mains Terminals	AC 110V/60Hz	Mode A Mode B	Mode A Mode B
Click	AC 110V/60Hz	Mode A	Mode A
Disturbance Power	AC 110V/60Hz	Mode A Mode B	Mode A Mode B



## 2.6. Description of Test Facility

Site Description  
EMC Lab.

: **Accredited by CNAS**

The Certificate Registration Number is L6666.

The Laboratory has been assessed and proved to be in compliance with  
CNAS-CL01:2018 (identical to ISO/IEC 17025:2017)

**Designation by FCC**

Designation Number: CN1354

Test Firm Registration Number: 427606

**Accredited by A2LA**

The Certificate Number is 4321.03.

The certificate is valid until May 31, 2025

**Designation by Industry Canada**

The Conformity Assessment Body Identifier is CN0114

Name of Firm

: EMTEK (NINGBO) CO., LTD.

Site Location

: No. 8, Building 8, Lane 216, Qingyi Road, Hi-Tech Zone, Ningbo, Zhejiang,  
China

## 2.7. Support Device

N/A

## 2.8. Measurement Uncertainty

Conducted Emission Uncertainty

: 2.08dB (9 k-150 kHz)  
2.40dB (150 k-30 MHz)

Click Uncertainty

: 1.50dB

Disturbance Power Uncertainty

: 4.34dB

### 3. MEASURING DEVICE AND TEST EQUIPMENT

#### 3.1. For Conducted Emissions at Mains Measurement

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-001	EMI Test Receiver	R & S	ESCI	101108	Dec 14, 2023	1 Year
ENE-158	L.I.S.N	Schwarzbeck	NNLK 8129	0373	Nov 17, 2023	1 Year
ENE-004	L.I.S.N	Schwarzbeck	NSLK 8126	8126-462	July 06, 2023	1 Year
ENE-006	Pulse Limiter	MTS-systemtechnik	IMP-136	2611115-001-0033	July 06, 2023	1 Year
ENE-278	RF Switching Unit	HTEC	HRSU	222101	July 06, 2023	1 Year
ENE-083	RF Cable	Hubber Suhner/Swiss	CBL-RE-3	/	May 31, 2023	1 Year
ENE-162-2	RF Cable	TIMES	2M(N-N)	605236-0002	May 31, 2023	1 Year
ENE-149	Conduction Test Room 1#	SKET	11.5*5*4m	/	Dec 17, 2021	3 Year

#### 3.2. For Click Measurement

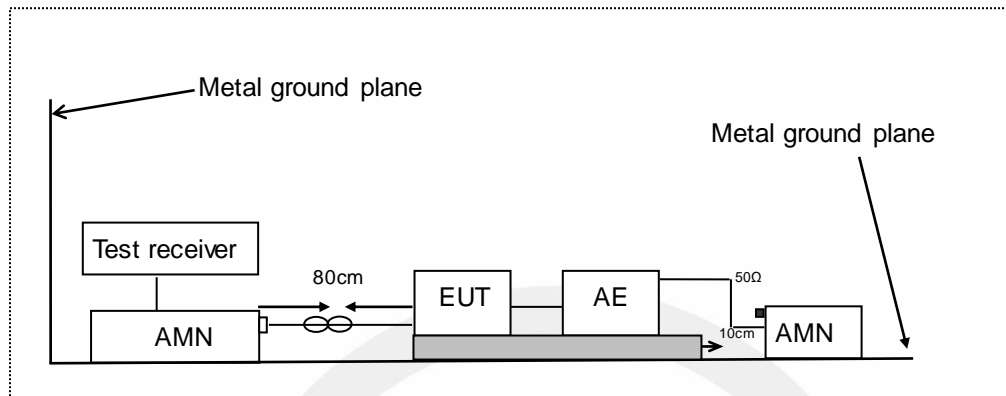
Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-003	L.I.S.N	R & S	ENV216	101193	July 06, 2023	1 Year
ENE-162-3	RF Cable	TIMES	2M(N-N)	605241-0001	May 31, 2023	1 Year
ENE-138-1	Click Switching Operation Box	A.F.J	SW04/32A	SW042137145	Nov 17, 2023	1 Year
ENE-138	Click Meter	A.F.J	DDA55+	14042134205	Nov 17, 2023	1 Year
ENE-150	Conduction Test Room2#	SKET	6.5*5*4m	/	Apr 17, 2023	3 Year

### 3.3. For Disturbance Power Measurement

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-001	EMI Test Receiver	R & S	ESCI	101108	Dec 14, 2023	1 Year
ENE-007	Absorbing Clamp	R & S	MDS21	100397	July 06, 2023	1 Year
ENE-008	Coaxial attenuator	R & S	MDS21	100397	July 06, 2023	1 Year
ENE-278	RF Switching Unit	HTEC	HRSU	222101	July 06, 2023	1 Year
ENE-165-2	RF Cable	TIMES	10M (N-N)	605239-0003	May 31, 2023	1 Year
ENE-162-2	RF Cable	TIMES	2M(N-N)	605236-0002	May 31, 2023	1 Year
ENE-149	Conduction Test Room 1#	SKET	11.5*5*4m	/	Dec 17, 2021	3 Year

## 4. CONDUCTED EMISSIONS AT MAINS MEASUREMENT

### 4.1. Block Diagram of Test Setup



AMN: Artificial mains network  
AE: Associated equipment  
EUT: Equipment under test

### 4.2. Measurement Standard

J 55014-1(H27)

### 4.3. Measurement Limits

☒ Mains Terminals

Frequency range MHz	Quasi-peak dBuV	Average dBuV
0.15 to 0.50	66 to 56*	59 to 46*
0.50 to 5	56	46
5 to 30	60	50

The lower limit applies at the transition frequencies.

\*: Decreasing linearly with logarithm of frequency from

☐ Tools Mains port

Frequency range	<input type="checkbox"/> $P \leq 700W$		<input type="checkbox"/> $700W < P \leq 1000W$		<input type="checkbox"/> $P > 1000W$	
MHz	Quasi-peak dBuV	Average dBuV	Quasi-peak dBuV	Average dBuV	Quasi-peak dBuV	Average dBuV
0.15 to 0.35	66 to 59*	59 to 49*	70 to 63*	63 to 53*	76 to 69*	69 to 59*
0.35 to 5	59	49	63	53	69	59
5 to 30	64	54	68	58	74	64

The lower limit applies at the transition frequencies.

\*: Decreasing linearly with logarithm of frequency from

Key: P = rated power of the motor only.

#### 4.4. Test Procedure

The EUT was placed on a desk 0.4 m height from the metal ground plane and 0.4 m from the conducting wall of the shielding room and it was kept at least 0.8 m from any other grounded conducting surface. The size of the table will nominally be 1.5 m x1.0 m.

The rear of the arrangement shall be flush with the back of the supporting tabletop unless that would not be possible or typical of normal use.

All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units.

Connect EUT to the power mains through a artificial mains network (AMN). Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

All the support units are connecting to the other AMN.

The AMN provides 50 ohm coupling impedance for the measuring instrument.

The CISPR states that the AMN with 50 ohm and 50 microhenry should be used.

Both sides of AC line were checked for maximum conducted interference.

For frequency band 150 KHz to 30 MHz, the bandwidth is set at 9 KHz. The frequency range from 150 kHz to 30 MHz is investigated.

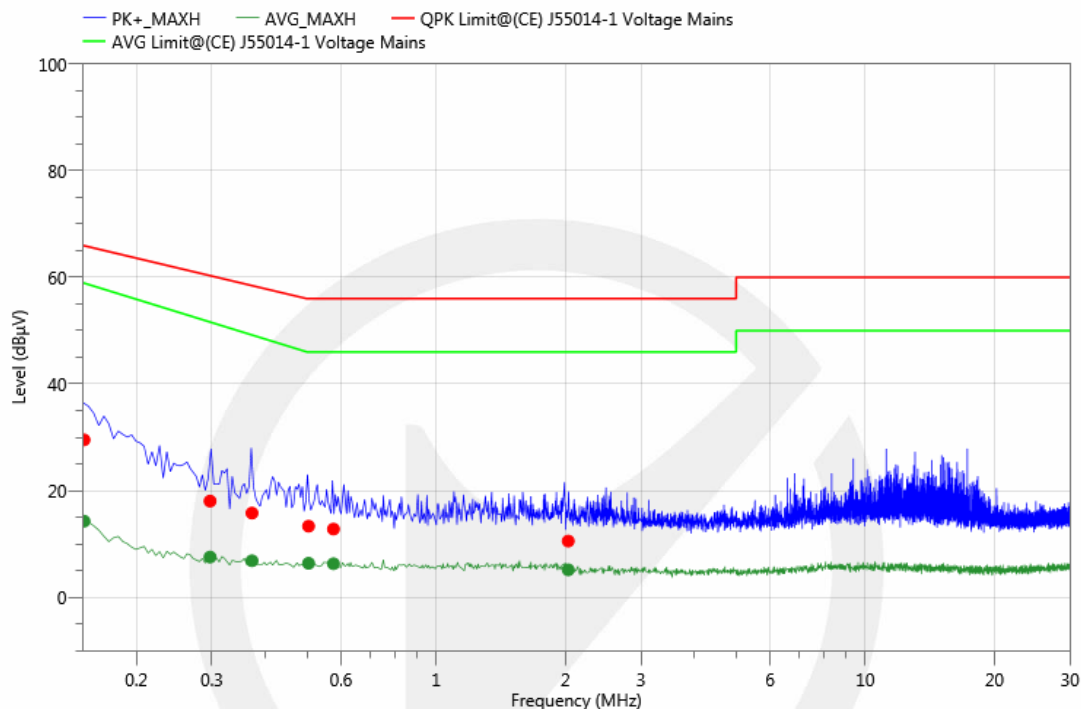
Set the test-receiver system to quasi peak detect function and average detect function, and to measure the conducted emissions values.

#### 4.5. Measuring Results

**Pass.**

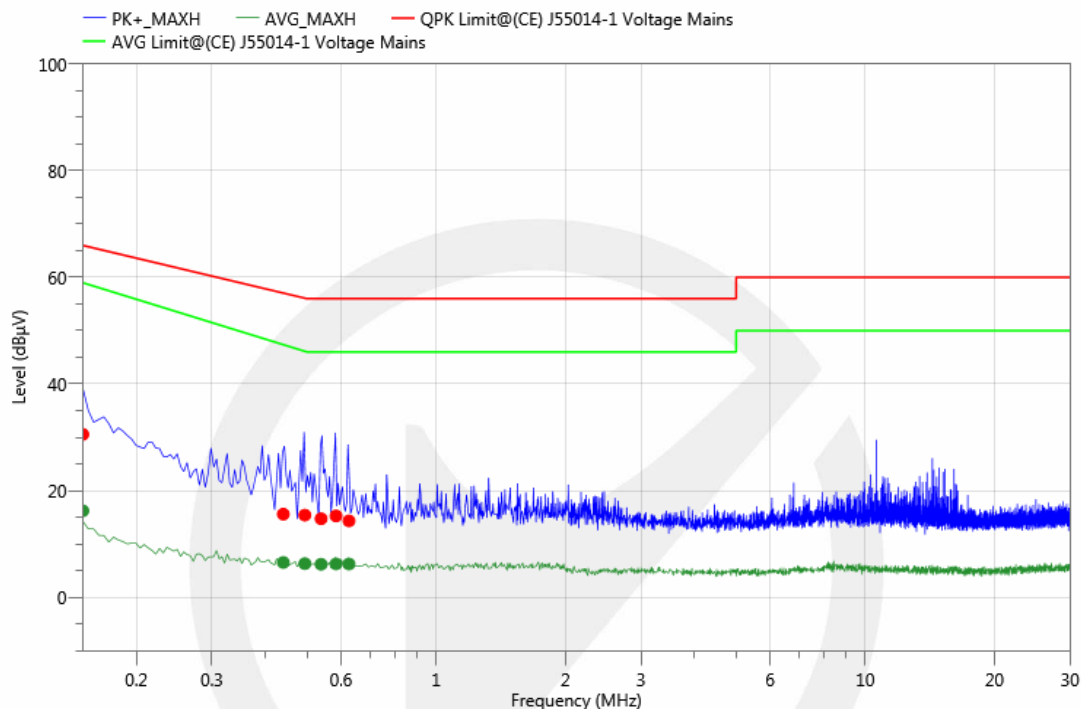
Please refer to the following pages.

Project Information			
Model :	PN415D	Mode :	FWD
Voltage :	AC 110V/60Hz	Engineer :	Alan Li
Temp :	21°C	Humi :	53%



Final Result (Margin=Limit-Meas.(Reading +Corr.))										
No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.151	19.69	9.83	29.52	65.94	36.42	QPK	N	GND	Pass
2	0.151	4.43	9.83	14.26	58.93	44.67	AVG	N	GND	Pass
3	0.297	8.13	9.9	18.03	60.33	42.30	QPK	N	GND	Pass
4	0.297	-2.37	9.9	7.53	51.62	44.09	AVG	N	GND	Pass
5	0.372	5.85	9.93	15.78	58.46	42.68	QPK	N	GND	Pass
6	0.372	-3.09	9.93	6.84	49.19	42.35	AVG	N	GND	Pass
7	0.504	3.34	9.98	13.32	56.00	42.68	QPK	N	GND	Pass
8	0.504	-3.62	9.98	6.36	46.00	39.64	AVG	N	GND	Pass
9	0.576	2.77	10.01	12.78	56.00	43.22	QPK	N	GND	Pass
10	0.576	-3.73	10.01	6.28	46.00	39.72	AVG	N	GND	Pass
11	2.030	0.33	10.2	10.53	56.00	45.47	QPK	N	GND	Pass
12	2.030	-5.06	10.2	5.14	46.00	40.86	AVG	N	GND	Pass

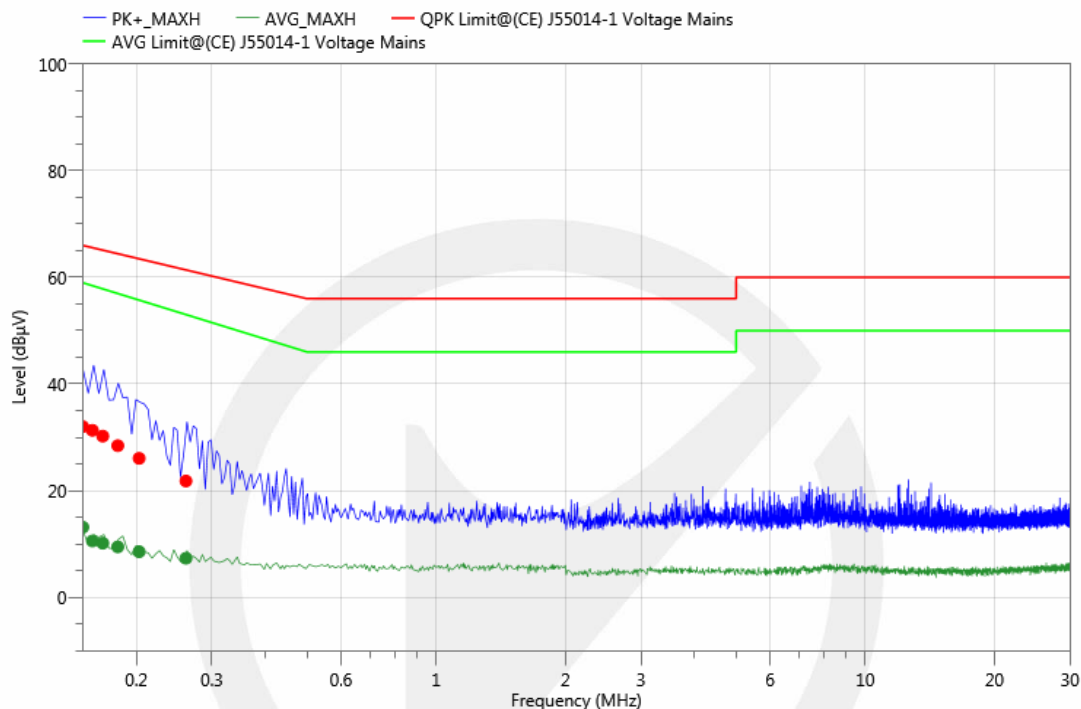
Project Information			
Model :	PN415D	Mode :	FWD
Voltage :	AC 110V/60Hz	Engineer :	Alan Li
Temp :	21°C	Humi :	53%



#### Final Result (Margin=Limit-Meas.(Reading +Corr.))

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.150	20.72	9.83	30.55	66.00	35.45	QPK	L1	GND	Pass
2	0.150	6.38	9.83	16.21	59.00	42.79	AVG	L1	GND	Pass
3	0.440	5.62	9.96	15.58	57.06	41.48	QPK	L1	GND	Pass
4	0.440	-3.44	9.96	6.52	47.38	40.86	AVG	L1	GND	Pass
5	0.494	5.43	9.97	15.40	56.10	40.70	QPK	L1	GND	Pass
6	0.494	-3.67	9.97	6.30	46.13	39.83	AVG	L1	GND	Pass
7	0.539	4.73	9.99	14.72	56.00	41.28	QPK	L1	GND	Pass
8	0.539	-3.81	9.99	6.18	46.00	39.82	AVG	L1	GND	Pass
9	0.584	5.23	10.01	15.24	56.00	40.76	QPK	L1	GND	Pass
10	0.584	-3.76	10.01	6.25	46.00	39.75	AVG	L1	GND	Pass
11	0.626	4.29	10.03	14.32	56.00	41.68	QPK	L1	GND	Pass
12	0.626	-3.80	10.03	6.23	46.00	39.77	AVG	L1	GND	Pass

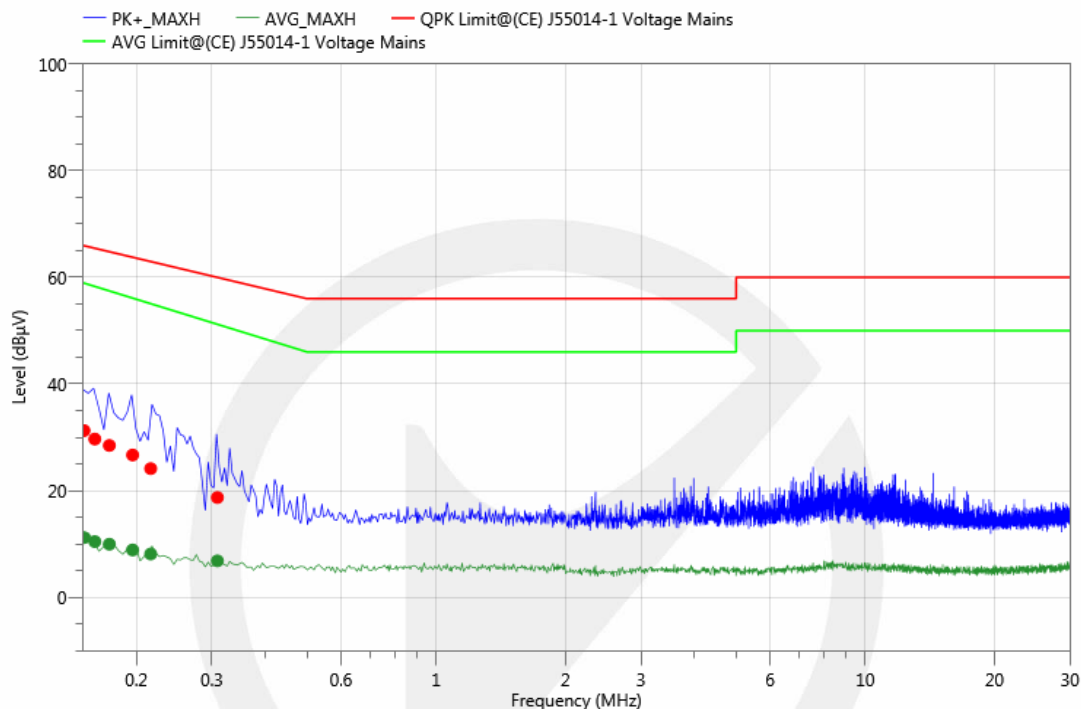
Project Information			
Model :	PN415D	Mode :	REV
Voltage :	AC 110V/60Hz	Engineer :	Alan Li
Temp :	21°C	Humi :	53%



Final Result (Margin=Limit-Meas.(Reading +Corr.))										
No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.150	22.17	9.83	32.00	66.00	34.00	QPK	L1	GND	Pass
2	0.150	3.30	9.83	13.13	59.00	45.87	AVG	L1	GND	Pass
3	0.158	21.47	9.84	31.31	65.57	34.26	QPK	L1	GND	Pass
4	0.158	0.71	9.84	10.55	58.44	47.89	AVG	L1	GND	Pass
5	0.167	20.38	9.84	30.22	65.11	34.89	QPK	L1	GND	Pass
6	0.167	0.29	9.84	10.13	57.84	47.71	AVG	L1	GND	Pass
7	0.181	18.58	9.85	28.43	64.44	36.01	QPK	L1	GND	Pass
8	0.181	-0.41	9.85	9.44	56.97	47.53	AVG	L1	GND	Pass
9	0.203	16.18	9.87	26.05	63.49	37.44	QPK	L1	GND	Pass
10	0.203	-1.34	9.87	8.53	55.73	47.20	AVG	L1	GND	Pass
11	0.261	11.91	9.89	21.80	61.40	39.60	QPK	L1	GND	Pass
12	0.261	-2.58	9.89	7.31	53.02	45.71	AVG	L1	GND	Pass



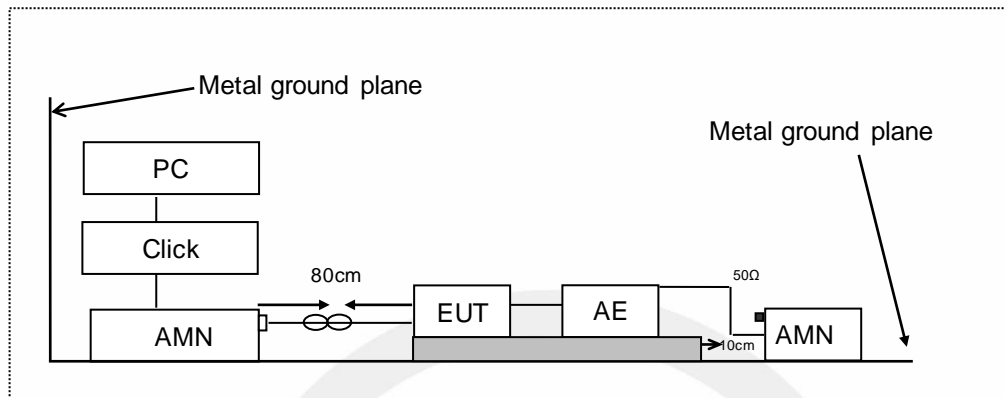
Project Information			
Model :	PN415D	Mode :	REV
Voltage :	AC 110V/60Hz	Engineer :	Alan Li
Temp :	21°C	Humi :	53%



Final Result (Margin=Limit-Meas.(Reading +Corr.))										
No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV)	Limit (dBμV)	Margin (dB)	Det.	Line	PE	Verdict
1	0.151	21.43	9.83	31.26	65.94	34.68	QPK	N	GND	Pass
2	0.151	1.34	9.83	11.17	58.93	47.76	AVG	N	GND	Pass
3	0.160	19.84	9.83	29.67	65.46	35.79	QPK	N	GND	Pass
4	0.160	0.60	9.83	10.43	58.30	47.87	AVG	N	GND	Pass
5	0.173	18.62	9.85	28.47	64.82	36.35	QPK	N	GND	Pass
6	0.173	0.09	9.85	9.94	57.46	47.52	AVG	N	GND	Pass
7	0.196	16.81	9.87	26.68	63.78	37.10	QPK	N	GND	Pass
8	0.196	-1.01	9.87	8.86	56.11	47.25	AVG	N	GND	Pass
9	0.216	14.24	9.88	24.12	62.97	38.85	QPK	N	GND	Pass
10	0.216	-1.77	9.88	8.11	55.06	46.95	AVG	N	GND	Pass
11	0.309	8.79	9.91	18.70	60.00	41.30	QPK	N	GND	Pass
12	0.309	-3.09	9.91	6.82	51.20	44.38	AVG	N	GND	Pass

## 5. CLICKS MEASUREMENT

### 5.1. Block Diagram of Test Setup



AMN: Artificial mains network  
AE: Associated equipment  
EUT: Equipment under test  
Click: Click Switching Operation Box and Click Meter

### 5.2. Measurement Standard

J 55014-1(H27)

### 5.3. Measurement Limits

According to Section 4.2 of standard J 55014-1.

### 5.4. Test Procedure

This test is done when switch operations in thermostatically controlled appliances, automatic program controlled machines and other electrically controlled or operated appliances may generate discontinuous disturbance (Click). The measurement of disturbance shall be performed at the following restricted number of frequencies: 150 KHz, 500 KHz, 1.4 MHz and 30 MHz. At each frequency, for appliances, which stop automatically, duration of the minimum number of complete programs necessary to produce 40 counted clicks or, where relevant, 40 counted clicks have not been produced, the test is stopped at the end of the program in course. The relevant click rate N. The appliance under test shall be deemed to comply with the limit if not more than a quarter of the number of the counted click registered during the observation time.

### 5.5. Test Result

**Pass.**

Please refer to the following pages.



## TEST REPORT

**TEST PASS**

03/04/2023 18:17:41

Sample No : ENB2404010172E003-1-1 Time Test 00:06:30.18  
Temp : 21°C Executed by WK Luo  
Humi : 53%  
Model PN415D  
Type SN  
Report ENB2404010172E003  
Mode FWD f = 1

Type of Eut paper shredder

Rx 150 KHz Att. [dB]	20	Rx 500 kHz Att. [dB]	20
Rx 1.4 MHz Att. [dB]	20	Rx 30 MHz Att. [dB]	20
Rx 150 kHz Input Offset [dB]	0	Rx 500 kHz Input Offset [dB]	0
Rx 1.4 MHz Input Offset [dB]	0	Rx 30 MHz Input Offset [dB]	0
External Att. [dB]	NONE		
Remote	SW04 LT32 -NEUTRAL		

	150 kHz	500 kHz	1.4 MHz	30 MHz
<b>First Run</b>				
Short	9	22	19	0
Long	0	0	0	0
Long (10< t ≤20 ms)	0	0	0	0
Tot. Clicks Corr	0	0	0	0
Events	0	0	0	0
Time(s)	0.00	0.00	0.00	0.00
Sw.Op.	40	40	40	40
5.4.3.5 events	0	0	0	0
Limit dBuV	66	56	56	60
N	6.35	6.35	6.35	6.35
	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>

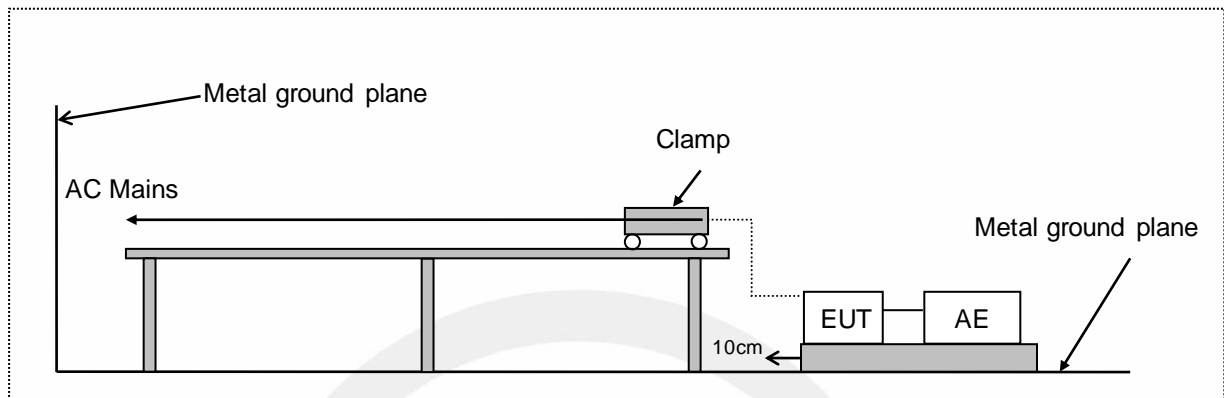
150 kHz	New Limit Calculated	500 kHz	New Limit Calculated
1.4 MHz	New Limit Calculated	30 MHz	No Clicks

New Limit [dBuV]	79.49	69.49	69.49	73.49
Allowed Clicks	2	5	4	0
Short	0	0	0	0
Long	0	0	0	0
Tot. Clicks Corr	0	0	0	0
Events	0	0	0	0
Time(s)	0.00	0.00	0.00	0.00
5.4.3.5 events	0	0	0	0
	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>



## 6. DISTURBANCE POWER MEASUREMENT

### 6.1. Block Diagram of Test Setup



### 6.2. Measurement Standard

J 55014-1(H27)

### 6.3. Measurement Limits

All emanations from devices or system shall not exceed the level of field strengths specified below:

6.3.1. Limits (Table 2a of standard J 55014-1)

Frequency range	<input checked="" type="checkbox"/> Household and similar appliances		Tools					
			<input type="checkbox"/> $P \leq 700W$		<input type="checkbox"/> $700W < P \leq 1000W$		<input type="checkbox"/> $P > 1000W$	
MHz	Quasi-peak dBpW	Average dBpW	Quasi-peak dBpW	Average dBpW	Quasi-peak dBpW	Average dBpW	Quasi-peak dBpW	Average dBpW
30 to 300	45 to 55*	35 to 45*	45 to 55*	35 to 45*	49 to 59*	39 to 49*	55 to 65*	45 to 55*

The lower limit applies at the transition frequencies.  
\*: Decreasing linearly with logarithm of frequency from  
Key: P = rated power of the motor only.

6.3.2. Margin when performing disturbance power measurement (Table 2b of standard J 55014-1)

Frequency range	<input checked="" type="checkbox"/> Household and similar appliances		Tools					
			<input type="checkbox"/> $P \leq 700W$		<input type="checkbox"/> $700W < P \leq 1000W$		<input type="checkbox"/> $P > 1000W$	
MHz	Quasi-peak dBpW	Average dBpW	Quasi-peak dBpW	Average dBpW	Quasi-peak dBpW	Average dBpW	Quasi-peak dBpW	Average dBpW
30 to 300	0 to 10*	0	0 to 10*	0	0 to 10*	0	0 to 10*	0

The lower limit applies at the transition frequencies.  
\*: Decreasing linearly with logarithm of frequency from  
Key: P = rated power of the motor only.

#### 6.4. Test Procedure

The EUT are placed on an insulating support 0.8m high above a ground reference plane and away from other metallic surface at least 0.8m. It is connected to the power mains through an extension cord of 6m min. The absorber clamp clamps the cord and moves from the far end to the EUT to measure the disturbing energy emitted from the cord.

The bandwidth of the receiver is set at 120 kHz in 30 MHz to 300 MHz. The frequency range from 30 MHz to 300 MHz is investigated.

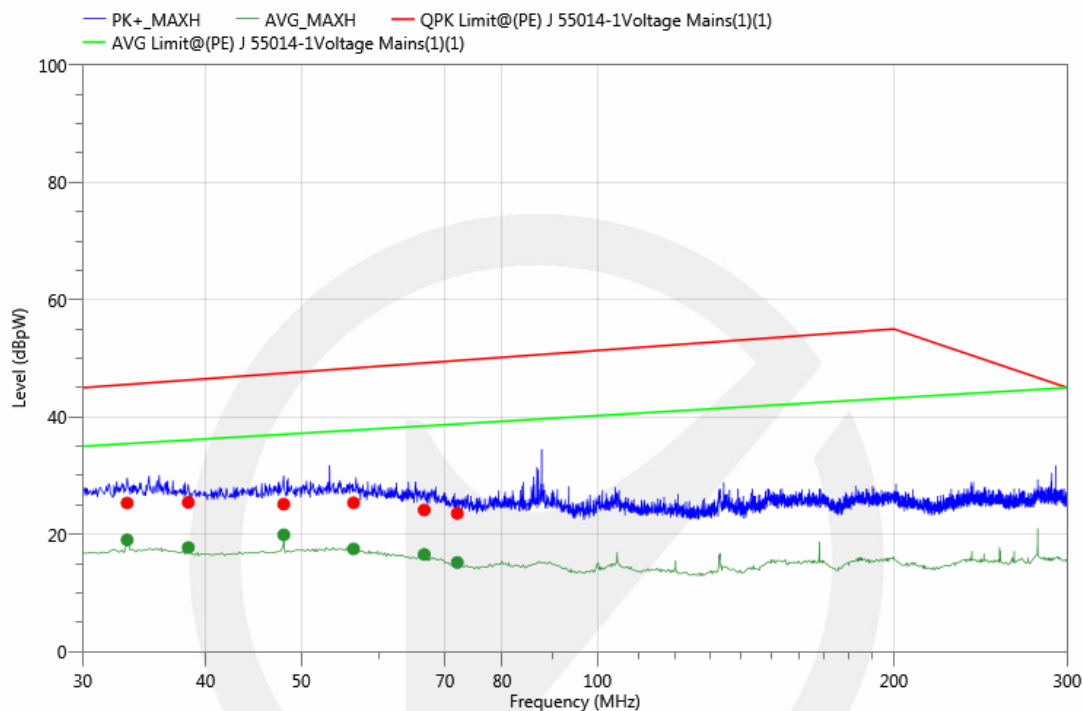
#### 6.5. Test Results

**Pass.**

Please refer to the following pages.



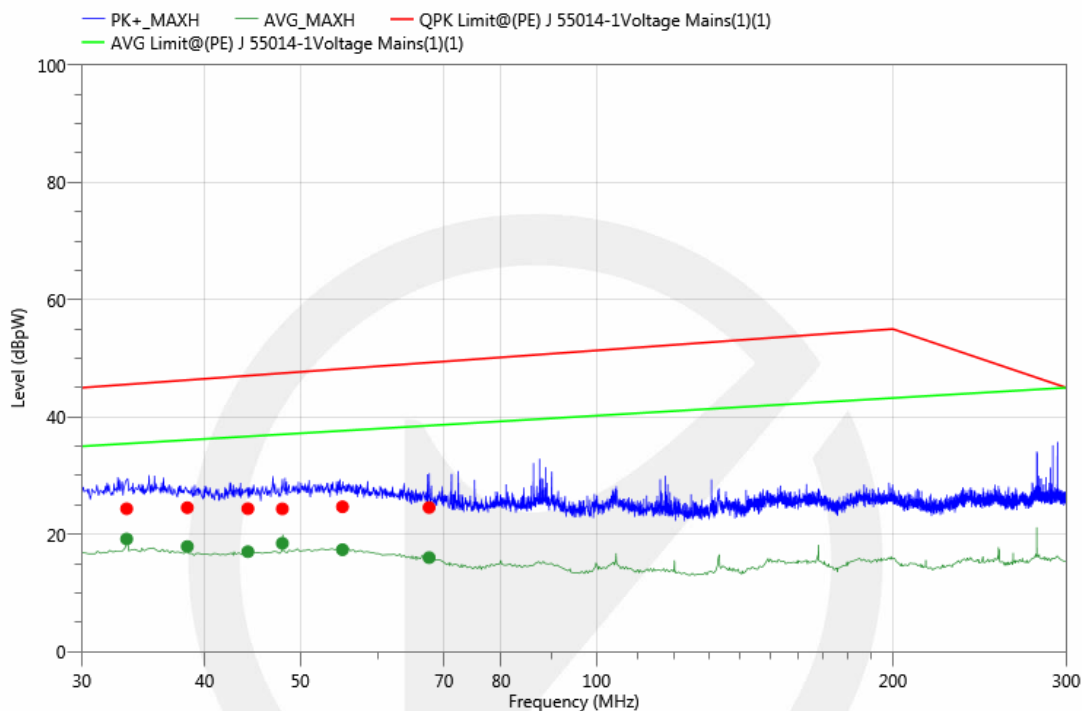
Project Information			
Model :	PN415D	Mode :	FWD
Voltage :	AC 110V/60Hz	Engineer :	Alan Li
Temp :	21°C	Humi :	53%



#### Final Result (Margin=Limit-Meas.(Reading +Corr.))

No.	Freq. (MHz)	Reading (dBpW)	Corr. (dB)	Meas. (dBpW)	Limit (dBpW)	Margin (dB)	Det.	Verdict
1	33.280	15.71	9.62	25.33	45.55	20.22	QPK	Pass
2	33.280	9.42	9.62	19.04	35.45	16.41	AVG	Pass
3	38.400	16.11	9.32	25.43	46.30	20.87	QPK	Pass
4	38.400	8.41	9.32	17.73	36.07	18.34	AVG	Pass
5	48.000	15.67	9.45	25.12	47.48	22.36	QPK	Pass
6	48.000	10.45	9.45	19.90	37.04	17.14	AVG	Pass
7	56.520	15.86	9.5	25.36	48.34	22.98	QPK	Pass
8	56.520	7.99	9.5	17.49	37.75	20.26	AVG	Pass
9	66.680	16.09	8.04	24.13	49.21	25.08	QPK	Pass
10	66.680	8.51	8.04	16.55	38.47	21.92	AVG	Pass
11	72.040	16.33	7.22	23.55	49.62	26.07	QPK	Pass
12	72.040	7.96	7.22	15.18	38.80	23.62	AVG	Pass

Project Information			
Model :	PN415D	Mode :	REV
Voltage :	AC 110V/60Hz	Engineer :	Alan Li
Temp :	21°C	Humi :	53%



**Final Result (Margin=Limit-Meas.(Reading +Corr.))**

No.	Freq. (MHz)	Reading (dBpW)	Corr. (dB)	Meas. (dBpW)	Limit (dBpW)	Margin (dB)	Det.	Verdict
1	33.320	14.73	9.62	24.35	45.55	21.20	QPK	Pass
2	33.320	9.57	9.62	19.19	35.46	16.27	AVG	Pass
3	38.400	15.21	9.32	24.53	46.30	21.77	QPK	Pass
4	38.400	8.59	9.32	17.91	36.07	18.16	AVG	Pass
5	44.240	15.11	9.25	24.36	47.05	22.69	QPK	Pass
6	44.240	7.78	9.25	17.03	36.69	19.66	AVG	Pass
7	47.960	14.89	9.44	24.33	47.47	23.14	QPK	Pass
8	47.960	9.02	9.44	18.46	37.04	18.58	AVG	Pass
9	55.200	14.96	9.72	24.68	48.21	23.53	QPK	Pass
10	55.200	7.64	9.72	17.36	37.65	20.29	AVG	Pass
11	67.600	16.64	7.92	24.56	49.28	24.72	QPK	Pass
12	67.600	8.10	7.92	16.02	38.53	22.51	AVG	Pass



## 7. PHOTOGRAPHS OF TEST

### 7.1. Photo of Power Line Conducted Emission Measurement



## 7.2. Photo of Click Measurement



## 7.3. Photo of Disturbance Power Measurement

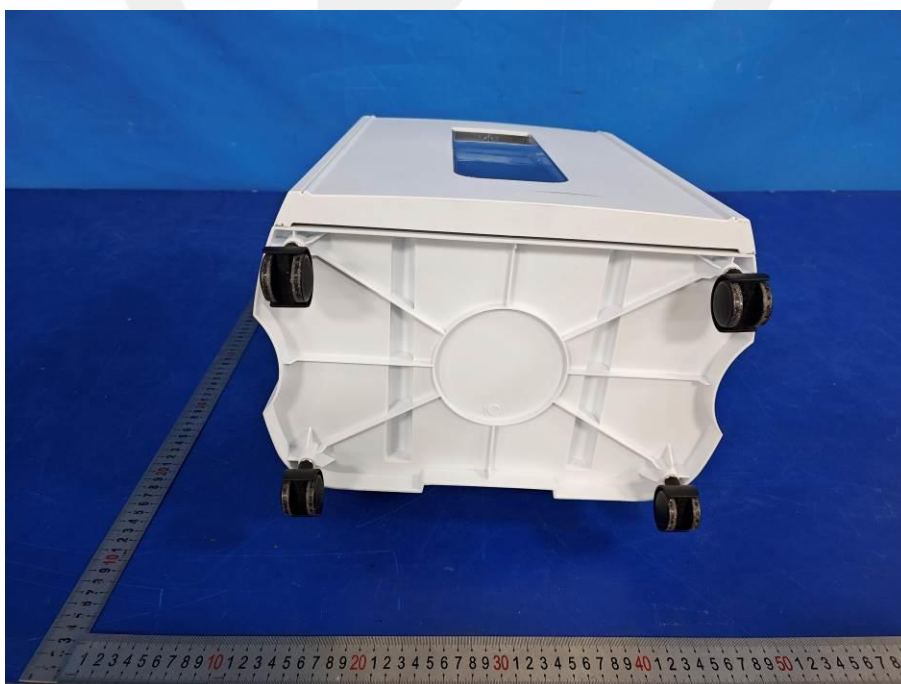


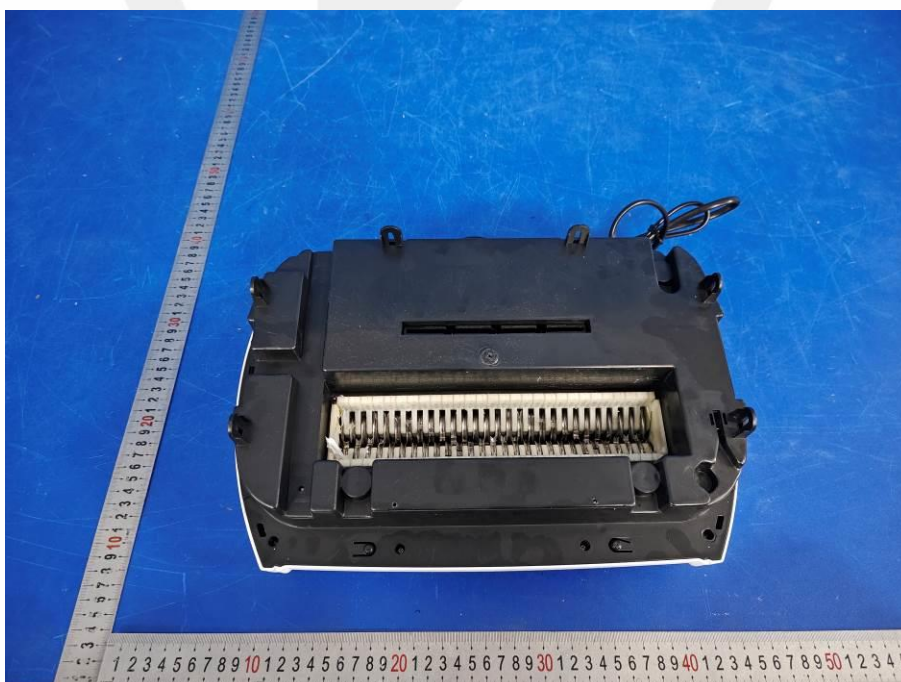
# APPENDIX I (Photos of EUT)

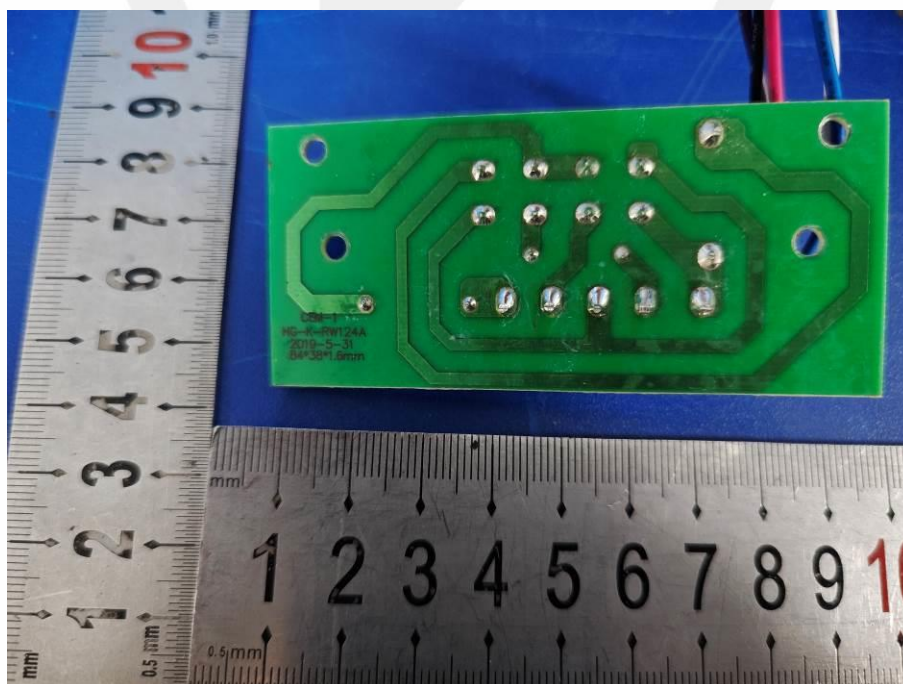
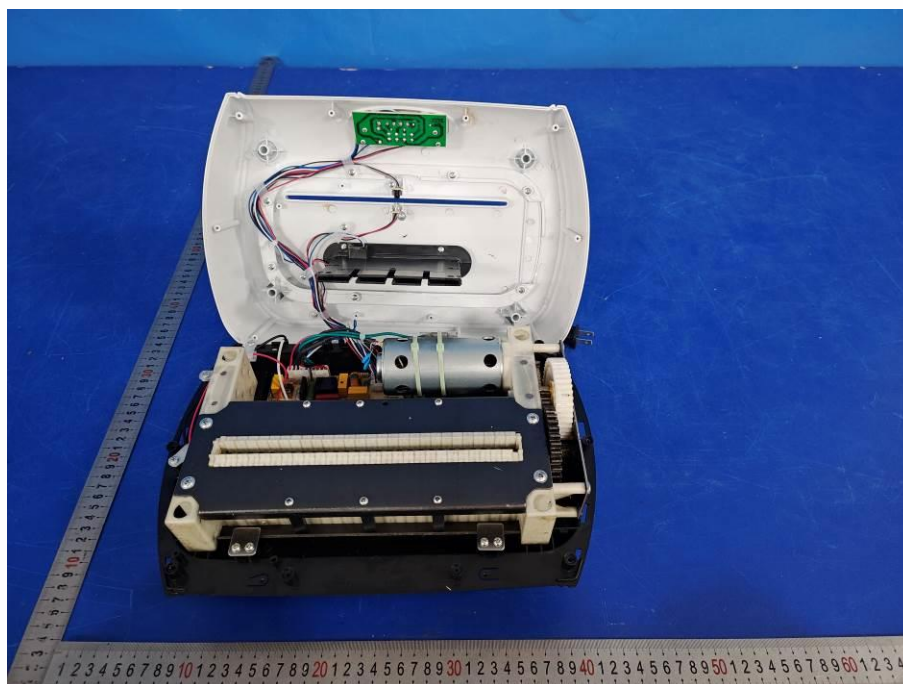




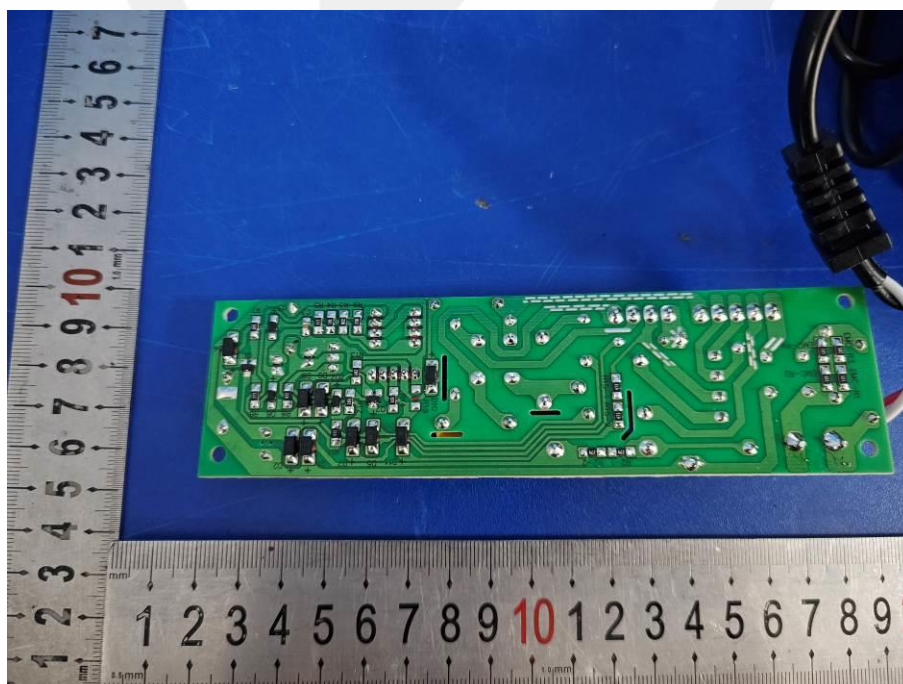
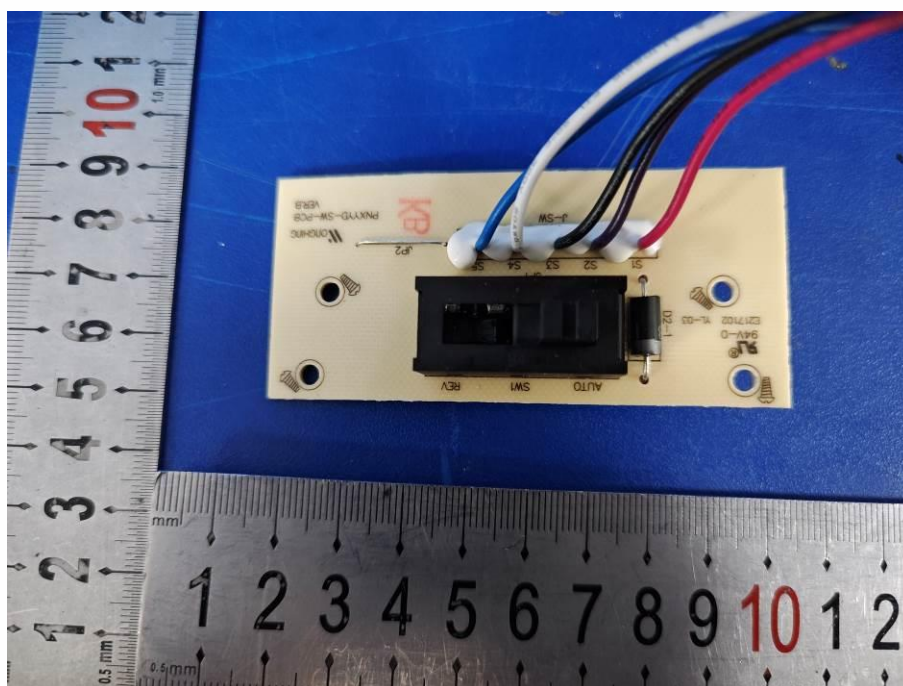


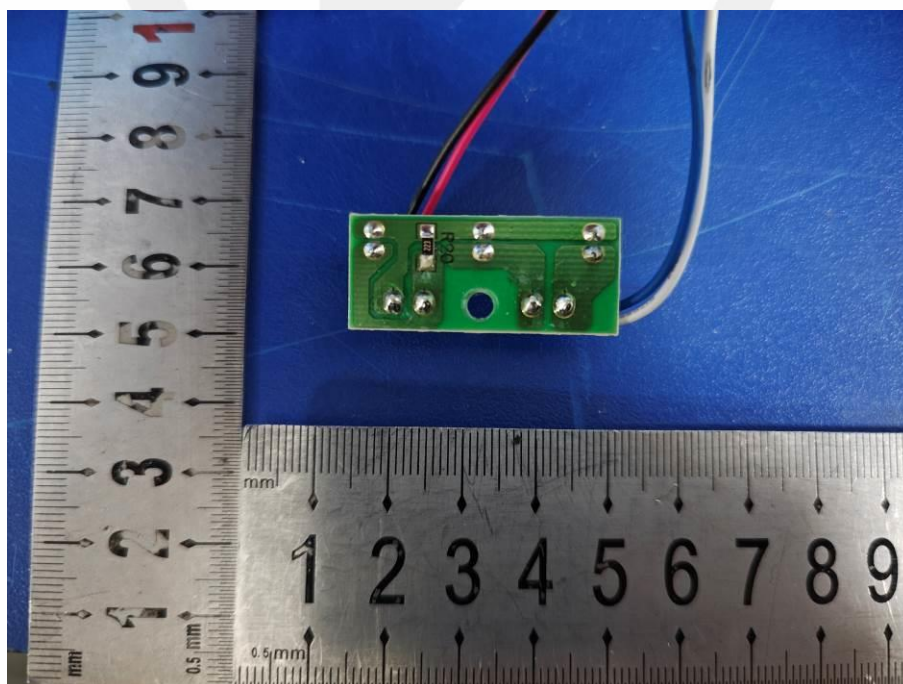
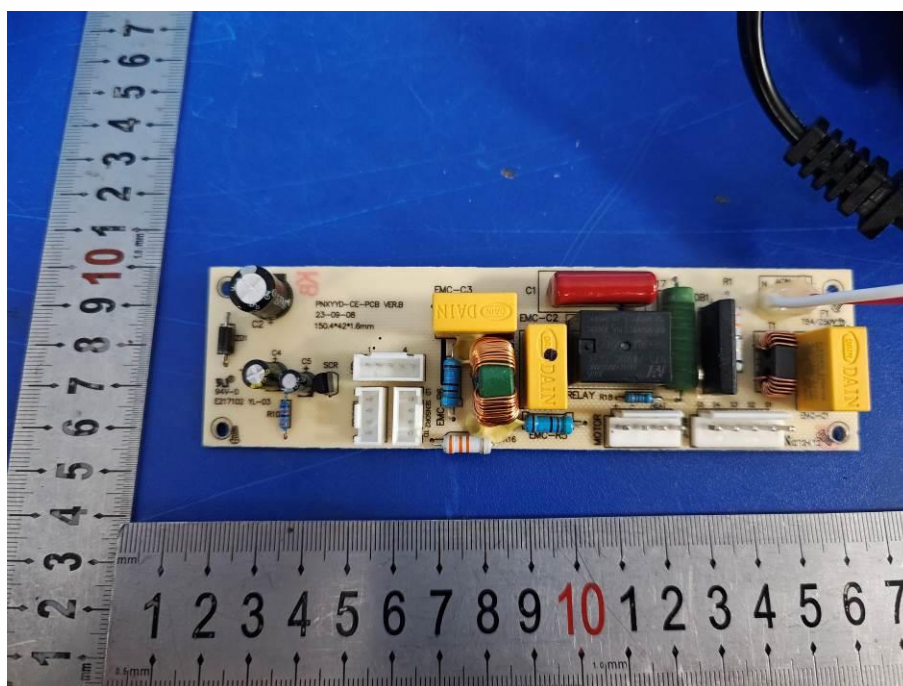


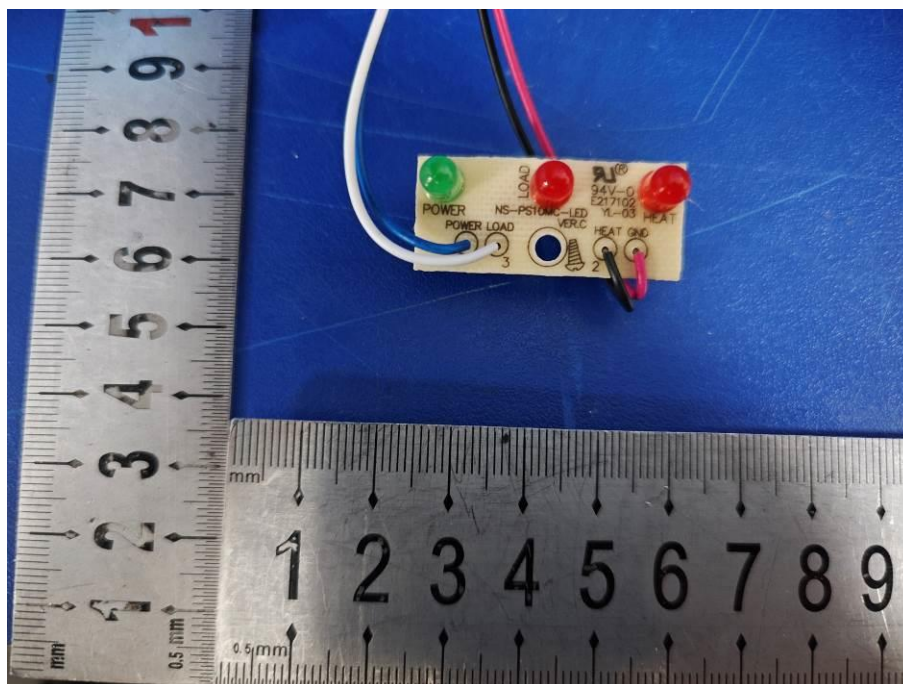












\*\*\* End of Report \*\*\*



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