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Report Template Version: V04 Report Template Revision Date: 2018-07-06

# TEST REPORT

Report No.: CQASZ20210300220E

Applicant: ShenZhen YingBoJingKong Technology Co., Ltd.

Address of Applicant: No. 602, West of 6th Floor, Building 713, PengJi Industrial Zone, Liantang Street,

Luohu District, Shenzhen, Guang Dong, China

**Equipment Under Test (EUT):** 

EUT Name: Sous Vide

Model No.: ISV-100W, ISV-200W, ISV-300W

Test Model No.: ISV-100W

Brand Name: N/A

FCC ID: 2AZDEISV10W

**Standards:** 47 CFR Part 15, Subpart B, Class B

Date of Receipt: 2021-3-6

**Date of Test:** 2021-3-6 to 2021-3-13

**Date of Issue:** 2021-3-22

Test Result: PASS\*

\*In the configuration tested, the EUT complied with the standards specified above

Tested By:

(Jun Li)

Reviewed By:

(Ares Liu)

Sheek Luo)

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CQA, this report can't be reproduced except in full.





# 1 Version

# **Revision History of Report**

Report No. Version		Description	Issue Date	
CQASZ20210300220E	Rev.01	Initial report	2021-3-22	





# 2 Test Summary

Test Item	Test Requirement	Test method	Result
Radiated Emission	47 CFR Part 15B	ANSI C63.4-2014	PASS
Conducted Emission (150KHz to 30MHz)	47 CFR Part 15B	ANSI C63.4-2014	PASS

Highest frequency generated or used in the device or on which the device operates or tunes  (MHz)	Upper frequency of measurement Range (MHz)	
Below 1.705	30	
1.705 to 108	1000	
108 to 500	2000	
500 to 1000	5000	

#### Remark:

The tested sample(s) and the sample information are provided by the client.

The highest frequency of the internal sources of the EUT is below 108 MHz.



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## 4 General Information

## 4.1 Client Information

Applicant:	ShenZhen YingBoJingKong Technology Co., Ltd.	
Address of Applicant:	No. 602, West of 6th Floor, Building 713, PengJi Industrial Zone,	
	Liantang Street,Luohu District, Shenzhen,GuangDong,China	
Manufacturer:	ShenZhen YingBoJingKong Technology Co., Ltd.	
Address of Manufacturer:	No. 602, West of 6th Floor, Building 713, PengJi Industrial Zone,	
	Liantang Street,Luohu District, Shenzhen,GuangDong,China	
Factory:	ShenZhen YingBoJingKong Technology Co., Ltd.	
Address of Factory:	No. 602, West of 6th Floor, Building 713, PengJi Industrial Zone,	
	Liantang Street,Luohu District, Shenzhen,GuangDong,China	

# 4.2 General Description of EUT

Product Name:	Sous Vide	
Model No.:	ISV-100W, ISV-200W, ISV-300W	
Test Model No.:	ISV-100W	
Brand Name:	N/A	
Power Supply:	AC120V/60Hz	

## 4.3 Product Specification subjective to this standard

Sample Type:	☐ Mobile	☐ Portable	
Test voltage:	120V 60H	Z	
Test Mode:			
Normal working		Keep the EUT a	t Normal working

#### Note:

Model No.: ISV-100W, ISV-200W, ISV-300W

Only the model ISV-100W was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance and model name.



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## 4.4 Test Environment and Mode

Operating Environment:		
Radiated Emission		
Temperature:	25.5 °C	
Humidity:	53 % RH	
Atmospheric Pressure:	1009 mbar	
Conducted Emission		
Temperature:	25.5 °C	
Humidity:	53 % RH	
Atmospheric Pressure:	1009 mbar	

## 4.5 Description of Support Units

The EUT has been tested with associated equipment below.

1) support equipment

Description	Manufacturer	Model No. Certification		Supplied by
1	1	1	1	

#### 2) Cable

Cable No. Description		Manufacturer	Cable Type/Length	Supplied by
/	/	/	1	/

### 4.6 Test Location

All tests were performed at:

Shenzhen Huaxia Testing Technology Co., Ltd.,

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

No tests were sub-contracted:

### 4.7 Deviation from Standards

None.

#### 4.8 Abnormalities from Standard Conditions

None.

### 4.9 Other Information Requested by the Customer

None.



# 4.10 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty		
1		3.74dB (9kHz to 150kHz)		
l	Conduction emission	3.34dB (150kHz to 30MHz)		
2		5.12dB (Below 1GHz )		
	Radiated emission	4.60dB (Above 1GHz)		
3	Temperature	0.8°C		
4	Humidity	2.0%		



# 5 Equipment List

Conducted Emissions (150kHz-30MHz)					
Equipment	Inventory No.	Cal Date	Cal Due Date		
EMI Test Receiver	R&S	ESPI3	CQA-013	2020/9/26	2021/9/25
LISN	R&S	ENV216	CQA-003	2020/10/23	2021/10/22
Coaxial cable (9KHz~300MHz)	CQA	N/A	C021	2020/9/26	2021/9/25

Radiated Emissions									
Equipment	Manufacturer	Model No	Inventory No.	Cal Date	Cal Due Date				
Loop antenna	SCHWARZBECK	FMZB 1516	CQA-060	2020/10/21	2021/10/20				
Horn Antenna	R&S	BBHA 9170	CQA-088	2020/9/25	2021/9/24				
Horn Antenna	R&S	HF906	CQA-012	2020/9/26	2021/9/25				
Bilog Antenna	R&S	HL562	CQA-011	2020/9/26	2021/9/25				
EMI Test Receiver	EMI Test Receiver R&S		CQA-005	2020/10/25	2021/10/24				
Spectrum analyzer R&S		FSU26	CQA-038	2020/10/25	2021/10/24				
		AMF-6D-							
		02001800-		2020/10/25	2021/10/24				
Preamplifier	MITEQ	29-20P	CQA-036						
Coaxial cable	004	N/A	0007	0000/0/00	0004/0/05				
(1GHz~40GHz)	(1GHz~40GHz)		C007	2020/9/26	2021/9/25				
Coaxial cable	004	NI/A	0040	0000/0/00	0004/0/05				
(9KHz~1GHz)	CQA	N/A	C013	2020/9/26	2021/9/25				

	Manufacturer	Software brand
Radiated Emissions test software	Audix	e3
Conducted Emissions test software	Audix	e3





## 6 Test results and Measurement Data

### 6.1 Conducted Emissions

Test Requirement: 47 CFR Part 15B
Test Method: ANSI C63.4
Test frequency range: 150kHz to 30MHz

Limit:

Fraguency range (MUZ)	Limit (dBμV)				
Frequency range (MHz)	Quasi-peak	Average			
0.15-0.5	66 to 56*	56 to 46*			
0.5-5	56	46			
5-30	60	50			

<sup>\*</sup> Decreases with the logarithm of the frequency.

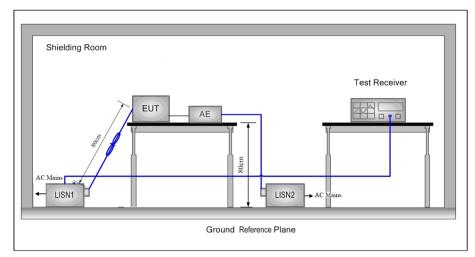
**Test Procedure:** 

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a  $50\Omega/50\mu H + 5\Omega$  linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4 on conducted measurement.



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Test Setup:



Instruments Used: Refer to section 5 for details

Test Mode: Normal working

Test Results: Pass

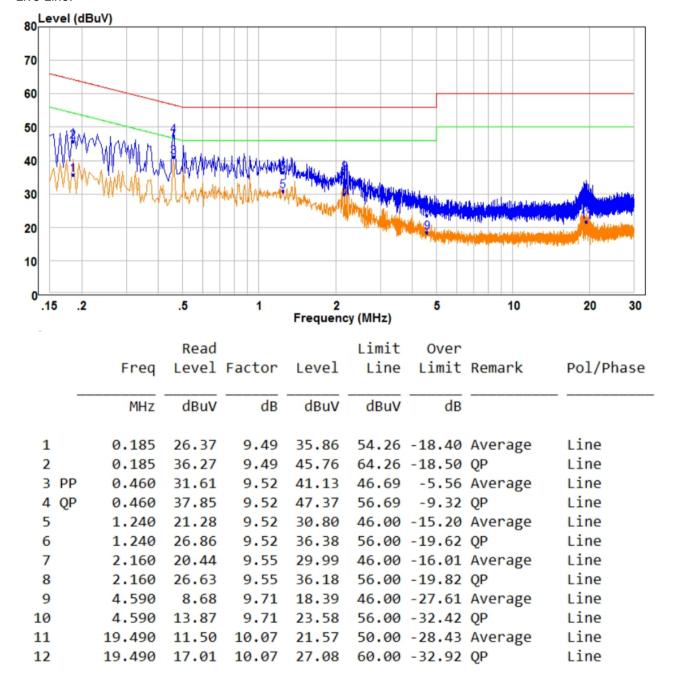


#### **Measurement Data**

An initial pre-scan was performed on the live and neutral lines with peak detector.

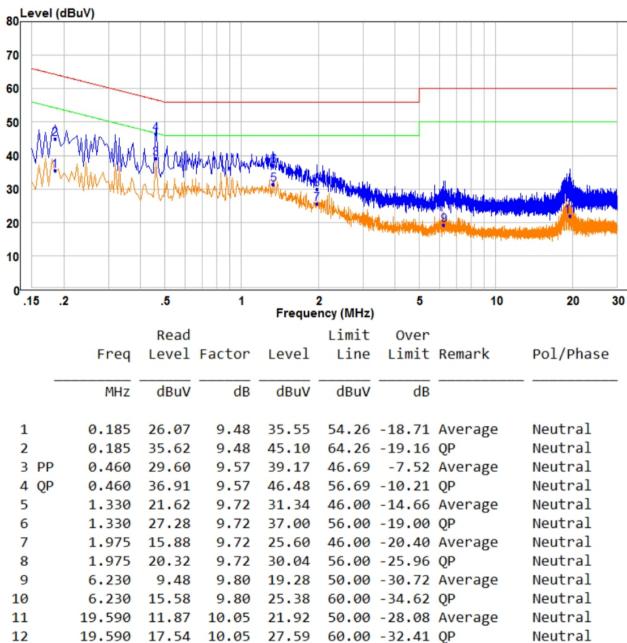
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

#### Live Line:









#### Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.



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### 6.2 Radiated Emission

Test Requirement: 47 CFR Part 15B
Test Method: ANSI C63.4

Test site: Measurement Distance: 3m (Semi-Anechoic Chamber)

Receiver setup:

Limit:

	Frequency	Detector Quasi-peak		RBW VBW		Remark			
	30MHz-1GHz			100kHz	300kHz	Quasi-peak Value			
	Freque	Frequency		_imit (dBµV/	/m @3m)	Remark			
	30MHz-88MHz		40.0			Quasi-peak Value			
	88MHz-216MHz		43.5			Quasi-peak Value			
	216MHz-960MHz			46.0	)	Quasi-peak Value			
960MHz-1GHz				54.0	)	Quasi-peak Value			

**Test Procedure:** 

#### Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.



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### Test Setup:

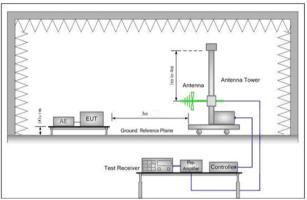


Figure 1. 30MHz to 1GHz

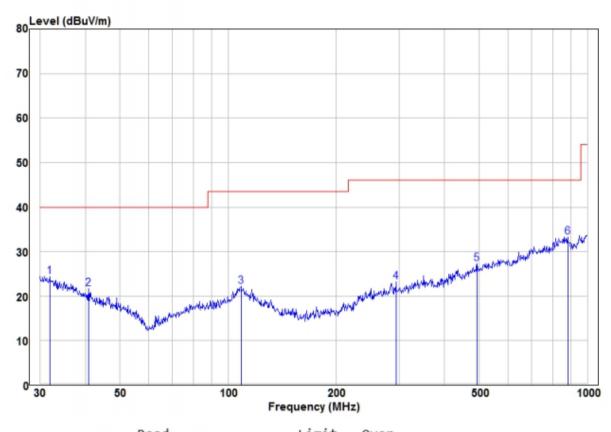
Instruments Used: Refer to section 5 for details

Test Mode: Normal working

Test Results: Pass



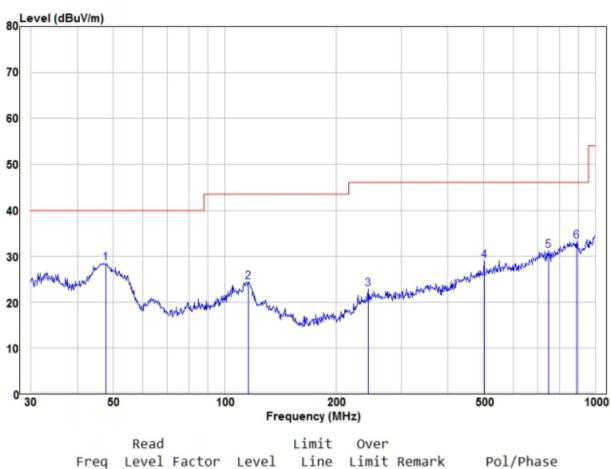
## Below 1GHz Horizontal



			Read			Limit	Over			
		Freq	Level	Factor	Level	Line	Limit	Remark	Pol/Phase	
	_	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB			
1		31.84	9.00	15.43	24.43	40.00	-15.57	Peak	HORIZONTAL	
2		40.84	9.34	12.40	21.74	40.00	-18.26	Peak	HORIZONTAL	
3		108.65	12.02	10.24	22.26	43.50	-21.24	Peak	HORIZONTAL	
4		293.08	9.69	13.51	23.20	46.00	-22.80	Peak	HORIZONTAL	
5		492.47	9.19	18.04	27.23	46.00	-18.77	Peak	HORIZONTAL	
6	pp	881.41	9.34	23.92	33.26	46.00	-12.74	Peak	HORIZONTAL	



### Vertical

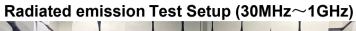


	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
<b>1</b> pp	47.83	19.41	9.11	28.52	40.00	-11.48	Peak	VERTICAL
2	116.13	13.98	10.50	24.48	43.50	-19.02	Peak	VERTICAL
3	244.23	10.92	11.87	22.79	46.00	-23.21	Peak	VERTICAL
4	501.18	10.79	18.29	29.08	46.00	-16.92	Peak	VERTICAL
5	747.48	9.28	21.90	31.18	46.00	-14.82	Peak	VERTICAL
6	890.73	9.47	23.88	33.35	46.00	-12.65	Peak	VERTICAL



# **APPENDIX 1 PHOTOGRAPHS OF TEST SETUP**

Test Model No.: ISV-100W





**Conducted Emissions Test Setup** 





# **APPENDIX 2 PHOTOGRAPHS OF EUT**

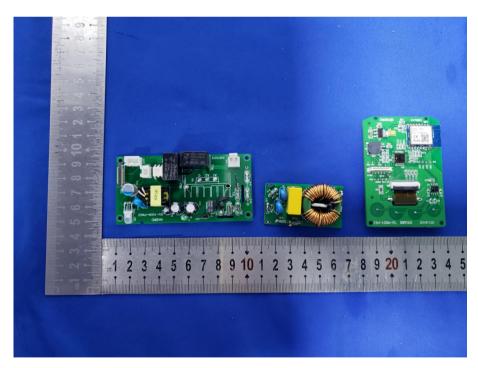
Test Model No.: ISV-100W



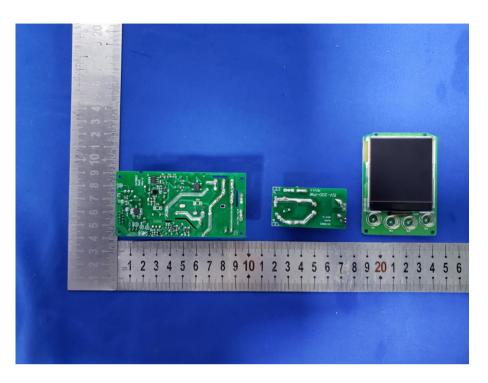












\*\*\* End of Report \*\*\*