



# **REPORT FOR ANALYSIS**

Report №.

2020FM04797R03E

Name of Sample YKX300-Q3 Plasma Air Purifier

Applicant

Guilin Woodpecker Medical Instrument Co., Ltd.

**Test Type** 



Address: Building 66, No.100 Central Xian Lie Road, Guangzhou, China Postcode: 510070

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Website : www.gddcm.com







# REPORT FOR ANALYSIS

Report №.:2020FM04797R03E Verification Code: 28974351

Name of Sample	YKX300-Q3 Plasma Air Purifier	Test Type	Entrustment Test	
Applicant	Guilin Woodpecker Medical Instrument Co., Ltd.	Address	Information Industrial Park, GuiLin National High-Tech Zone, GuiLin, GuangXi, 541004, P.R.China	
Sample Source	Submitted for Testing by the Applicant	Sample Quantity	One sample submitted	
Spec and Lot № of Sample	YKX300-Q3 Plasma Air Purifier	State and Characteristic	Machine	
Sample Received Date	2020-03-10	2020-03-10 Test Completion Date		
Test Standard and Method	WS	/T 648-2019 Append	lix B	
Item Tested	Air disinfection field test			

The test data of the sample(s) is attached to the page(s) of this report.

Test Conclusion

Remarks

Liuuanchun

Editor:

Issue Date: 2020-04-20 Approver: Ye Linoba Verifier: Sun Times



Report №.: 2020FM04797R03E



### GUANGDONG DETECTION CENTER OF MICROBIOLOGY

Action time	The test organism	Serial Number	Total bacteria (cfu/m <sup>3</sup> )	Reduced rate (%)
ଟି ଜିଁଟି		1	1.5×10 <sup>3</sup>	
0 (CK) Natural ba	Natural bacteria in air	2	1.7×10 <sup>3</sup>	
	and and and and and	3	1.5×10 <sup>3</sup>	and a second
6 6 6	a	0 1	99	93.40
2h	Natural bacteria in air	2	1.1×10 <sup>2</sup>	93.53
		3	1.2×10 <sup>2</sup>	92.00

### ANALYSIS AND TEST RESULT

(Blank below)

Remarks Method description: The prototype was turned on and switched to the maximum L4 gear for 2 hours in a 13m<sup>2</sup> test chamber, and then used six mesh impact type air microorganism sampler JWL-6 to sampling with air volume of 28.3 liters per minute. The sampling time of air was 5 minutes.





「音早」

Report №.: 2020FM04797R03E

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- 7. For the tested sample(s) submitted by the applicant, the sample information in the test report is provided by the applicant and the laboratory is not responsible for its authenticity.





# **REPORT FOR ANALYSIS**

Report №.

2020FM04797R04E

Name of Sample YKX300-Q3 Plasma Air Purifier

Applicant

Guilin Woodpecker Medical Instrument Co., Ltd.

**Test Type** 



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# REPORT FOR ANALYSIS



Report №.:2020FM04797R04E Verification Code: 17950286

Name of Sample	YKX300-Q3 Plasma Air Purifier	Test Type	Entrustment Test
Applicant	Guilin Woodpecker Medical Instrument Co., Ltd.	Address	Information Industrial Park, GuiLin National High-Tech Zone, GuiLin, GuangXi, 541004, P.R.China
Sample Source	Submitted for Testing by the Applicant	Sample Quantity	One sample submitted
Spec and Lot № of Sample	YKX300-Q3 Plasma Air Purifier	State and Characteristic	Machine
Sample Received Date	2020-03-13	Test Completion Date	2020-03-19
Test Standard and Method	e cale cale cale cale	НЈ 590-2010	SHOT SHOT SHOT SHOT SHOT
Item Tested	Ozone concent	ration (air in experin	nental chamber)

The test data of the sample(s) is attached to the page(s) of this report.

Test Conclusion

 Remarks
 Issue Date: 2000-04-20

 Remarks
 检验检测专用章

 Editor: Qiuwanchun
 Verifier: Sun Junio

 Approver: Yze Yżubao





<b>№</b> .	Test Item	Test Result	Standard requirement	Unit	-
Giloo	Ozone concentration (air in experimental chamber)	0.093	≤0.16	mg/m <sup>3</sup>	Galif
(estino)	adding realized realized realized	(Blank below)	المتلقى الملقي الملقي الملق	Lesing Lesing Lesing	estero.
					STIL
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# ANALYSIS AND TEST RESULT





Report №.: 2020FM04797R04E

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# **REPORT FOR ANALYSIS**

Report №.

2020FM04797R02E

Name of Sample YKX300-Q3 Plasma Air Purifier

Applicant

Guilin Woodpecker Medical Instrument Co., Ltd.

Test Type



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Fax : +86 20 87137668

Website : www.gddcm.com





REPORT FOR ANALYSIS



Report №.:2020FM04797R02E Verification Code: 58943271

Name of Sample	YKX300-Q3 Plasma Air Purifier	Test Type	Entrustment Test			
Applicant	Guilin Woodpecker Medical Instrument Co., Ltd.	Address	Information Industrial Park, GuiLin National High-Tech Zone, GuiLin, GuangXi, 541004, P.R.China			
Sample Source	Submitted for Testing by the Applicant	Sample Quantity	One sample submitted			
Spec and Lot № of Sample	YKX300-Q3 Plasma Air Purifier	State and Characteristic	Machine			
Sample Received Date	2020-03-10	Test Completion Date	2020-03-19			
Test Standard and Method	WS	/T 648-2019 Append	lix A			
Item Tested	Simulate	Simulated field test of air disinfection				
and and and	المتحر المتحر المحر المتحر	هري هري هري				

The test data of the sample(s) is attached to the page(s) of this report.

Test Conclusion

 Remarks
 Issue Date: 2000-04-20

 Remarks
 校验检测专用章

 Editor: Qiuwanchun
 Verifier: Sun Jui S





Action time	The test organism	Serial Number	The number of Bacteria in the air (cfu/m <sup>3</sup> )	Killing rate (%)
0 (CK) (Staphylococcus albus) 8032	61 6	$3.7 \times 10^4$	Contraction of	
		2	3.8×10 <sup>4</sup>	
	0032	3	3.9×10 <sup>4</sup>	
8° 6° 69	6 6 6 6 6	ି ଓ	14	99.96
2h (Stap	(Staphylococcus albus) 8032	2	21	99.94
	0052	3 0		99.96

### ANALYSIS AND TEST RESULT

(Blank below)

Remarks

Method description: The machine was turned on and switched to the maximum L4 gear for 2 hours and then sampling the air respectively with a Six level sieve pore striker air microorganism Sampler (JWL-6) at the flow rate 28.3/Lmin after it run for 1h and 2h. The sampling time was 1min for blank control group and 5min for tset group. The volume of tset chamber was 20m<sup>3</sup>.
 The result of kill rate has eliminated the natural decay of microorganisms in the air.





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Report №.: 2020FM04797R02E

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### **REPORT FOR ANALYSIS**

Report №.

2018FM01526R01E

Name of Sample Airdog X5 Air Purifier

Applicant

Suzhou BeiAng Air Tech Ltd.

**Test Type** 



Address: Building 59, No.100 Central Xian Lie Road, Guangzhou, China Postcode: 510070

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Website : www.gddcm.com



#### FOR ANALYSIS REPORT Report №::2018FM01526R01E Verification Code: 32716408 Name of Sample Airdog X5 Air Purifier Test Type Entrustment Test No.188 xincheng Road.,SIP, Applicant Suzhou BeiAng Air Tech Ltd. Address Suzhou, Jiangsu, China, Submitted for Testing by the Applicant One Sample Submitted Sample Source Sample Quantity KJ300F-X5 Master-test, Spec and Lot № State and Household appliances of Sample Characteristic Cover type KJ300F-X3 Sample Received **Test Completion** 2018-03-26 2018-03-05 Date Date Test Standard and Refer to Technical Standard for Disinfection (2002 Ministry of Health P.R.China)-2.1.3 Method Identification test of aerosolized virus elimination effect Item Tested

Test Conclusion

The test data of the sample(s) is attached to the page(s) of this report.

Manufacturer: AnHui BeiAng Air Tech Ltd. (provided by the applicant)
 The sample KJ300F-X5 is add WIFI module to KJ300F-X5, no other difference. (provided by the applicant)

Editor: Chen ingt

Remarks

Verifier: Jun

Approver: X2e X200ba

Issue Date:



# ANALYSIS AND TEST RESULT

### Report №.: 2018FM01526R01E

Gmicro	Festing Grid	Action Tim	Store Cont	Virus and host cell	Data point	Aerosolized virus concentration in the test chamber (IU/m <sup>3</sup> )	Removal rate (%)	snic
esting	Testing Griter	Schico School	smico resirio	H3N2 Influenza virus	Before test	1.4×10 <sup>6</sup>		uno snic
	Cestino Gritos	Note: The natur	onio oni	ne microorganisms in the	After test air has been elim nk below)	$6.1 \times 10^2$ inated.	99.876	ones snic
	(estino	Statute Control Control Te	anico Testino	esting resting resting children and children	o resimo resimo			one of the
	restino Grid	Smico Testing Te		Smico Smico Testing Smico Testing		Grido Grido Grido	Strico Festing States Festing	Sing
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	Cesting Griff	Gnico Tesing (	snico tesnico	Shico Shico Saino Shico Shi	Gonesing Conico	Grico Grico Grico	sting testing testing te	ong onic
	Testino Gritor	Remarks	aler alere	eriment was performed in 3 state: Press L4( the spee		all <sup>e</sup> all <sup>e</sup> and	sting sting sting	ono



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Report №.: 2018FM01526R01E

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- This test report is for reference only to the applicant and does not have a proof of effect for others.







Date : 2020-04-17 No. : DM20040014 Page 1 of 14

Applicant:	Guilin Woodpecker Medical Instrument Co., Ltd. Information Industrial Park, GuiLin National High-Tech Zone, GuiLin, GuangXi, 541004, P.R.China			
Description of Sample(s):	Submitted sample(s) Product: Brand Name: Model Number:	said to be Plasma Air Purifier WOODPECKER YKX300-Q3		
Date Sample(s) Received:	2020-04-07			
Date Tested:	2020-04-07 to 2020-04-08			
Investigation Requested:	FCC Part 15 Subpart	В		
Conclusion(s):	The submitted product <u>COMPLIED</u> with the requirements of Federal Communications Commission [FCC] Rules and Regulations Part 15. The tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.			

Remark(s):



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STC (Dongguan) Company Limited



### Date : 2020-04-17

No. : DM20040014

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### **<u>1.0</u>** General Details

### 1.1 Equipment Under Test [EUT] Description of Sample(s)

Product:	Plasma Air Purifier
Manufacturer:	Guilin Woodpecker Medical Instrument Co., Ltd.
	Information Industrial Park, GuiLin National High-Tech Zone,
	GuiLin, GuangXi, 541004, P.R.China
Brand Name:	WOODPECKER
Model Number:	YKX300-Q3
Highest Internal Frequency:	20MHz
Measurement range in the	⊠30MHz - 1000MHz
radiated emission:	1000MHz - 6000MHz
Rating:	100-240Va.c. 50/60Hz, 55W

### 1.1.1 Description of EUT Operation

The Equipment Under Test (EUT) is a Plasma Air Purifier of Guilin Woodpecker Medical Instrument Co., Ltd.

During the test, the EUT was conducted under On mode(Max power, the worse case) to simulate the normal operating condition.

### 1.2 Date of Order

2020-04-07

### **1.3** Submitted Sample(s):

1 Sample

### 1.4 Test Duration

2020-04-07 to 2020-04-08

### 1.5 Country of Origin

China

#### STC (Dongguan) Company Limited



Date : 2020-04-17

No. : DM20040014

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### 2.0 <u>Technical Details</u>

### 2.1 Investigations Requested

Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15 and ANSI C63.4-2014.

### 2.2 Test Standards and Results Summary Tables

EMISSION Results Summary						
Test Condition	Test Requirement	Test Method	Class /	Т	est Result	
			Severity	Pass	Failed	N/A
Radiated Emissions	FCC 47CFR 15.109	ANSI C63.4-2014	Class B	$\boxtimes$		
Conducted Emissions	FCC 47CFR 15.107	ANSI C63.4-2014	Class B	$\boxtimes$		

Remark: N/A: Not Applicable

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Date : 2020-04-17

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3.0 Test Results

#### 3.1 Emission

#### 3.1.1 Radiated Emissions (30MHz to 1000MHz)

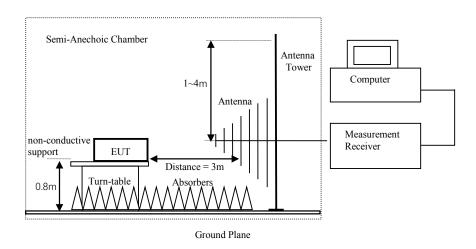
Test Requirement:	FCC 47CFR 15.109 Class B
Test Method:	ANSI C63.4-2014
Test Date:	2020-04-07
Mode of Operation:	On mode(Max power, the worse case)

#### **Test Method:**

The sample was placed 0.8m above the ground plane of semi-anechoic chamber\*. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

\*: Semi-anechoic chamber located on the G/F of DGSTC with a metal ground plane filed with the FCC pursuant to section 2.948 of the FCC rules, with Registration Number: 629686.

### **Test Setup:**



- Absorbers placed on top of the ground plane are for measurements above 1000MHz only.

- Measurements between 30MHz to 1000MHz made with Bi-log antennas, above 1000MHz horn antennas are used.

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Date : 2020-04-17 No. : DM20040014 Page 6 of 14

#### Limits for Radiated Emissions [FCC 47 CFR 15.109 Class B]:

#### **Radiated Limits below 1GHz**

Frequency Range	Quasi-Peak Limits		
MHz	$\mu V/m$	$dB(\mu V/m)$	
30-88	100	40.0	
88-216	150	43.5	
216-960	200	46.0	
Above960	500	54.0	
NOTE: The tighter limit shall apply at the boundary between two frequency ranges.			

#### **Radiated Limits above 1 GHz**

Frequency Range	Average Limits	Peak Limits
[MHz]	[dB(µV/m)]	[dB(µV/m)]
> 1000	54.0	74.0

The emission limits shown in the above table are based on measurement employing a CISPR quasi-peak detector and above 1000MHz are based on measurements employing an average detector.

Remark:

Calculated measurement uncertainty (30MHz – 1GHz): 4.6dB (1GHz – 6GHz): 4.4dB

Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

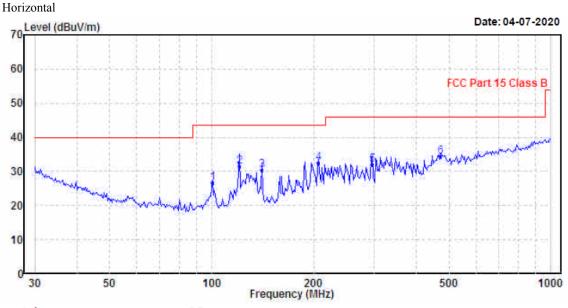
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Date : 2020-04-17 No. : DM20040014

Results of On mode(Max power, the worse case): Pass

Please refer to the following diagram for individual results.



Ambient Temperature: 25C Relative Humidity : 50%

	Freq	Level		Over Limit	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB		
1	100.229	26.56	43.50	-16.94	QP	Horizontal
2	120.277	31.47	43.50	-12.03	QP	Horizontal
3	140.342	30.39	43.50	-13.11	QP	Horizontal
4	206.398	32.50	43.50	-11.00	QP	Horizontal
5	297.224	32.06	46.00	-13.94	QP	Horizontal
6	472.176	34.24	46.00	-11.76	QP	Horizontal

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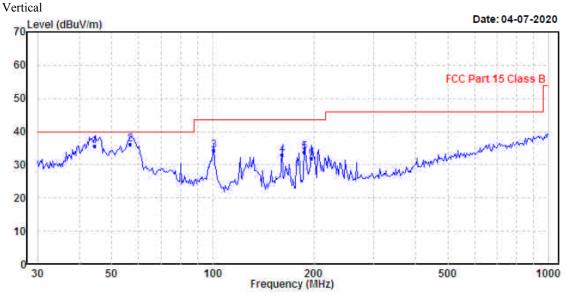
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Date : 2020-04-17 No. : DM20040014

**Results of On mode(Max power, the worse case): Pass** Please refer to the following diagram for individual results.



Ambient Temperature: 25C Relative Humidity : 50%

	Freq	Level		Over Limit	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB		
1	44.431	35.75	40.00	-4.25	QP	Vertical
2	56.792	36.28	40.00	-3.72	QP	Vertical
3	100.229	34.46	43.50	-9.04	QP	Vertical
4	160.346	33.09	43.50	-10.41	QP	Vertical
5	187.096	33.90	43.50	-9.60	QP	Vertical
6	196.510	31.99	43.50	-11.51	QP	Vertical

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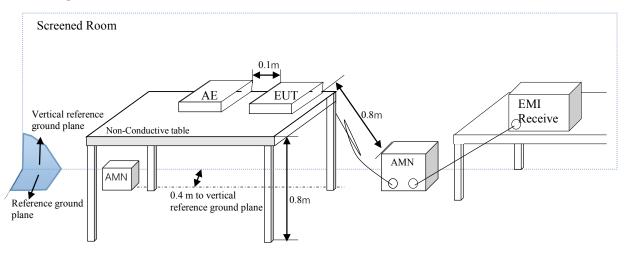
#### 3.1.2 Conducted Emissions (0.15MHz to 30MHz)

FCC 47CFR 15.107 Class B
ANSI C63.4-2014
2020-04-08
On mode(Max power, the worse case)

#### **Test Method:**

The test was performed in accordance with ANSI C63.4-2014, with the following: initial measurements were performed in peak and average detection modes on the live line, any emissions recorded within 30dB of the relevant limit lines were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

### **Test Setup:**



#### Limits for Conducted Emissions [FCC 47 CFR 15.107 Class B]:

Frequency Range	Quasi-Peak Limits	Average
MHz	dB(µV)	dB(µV)
0.15-0.5	66 to 56*	56 to 46*
0.5-5.0	56	46
5.0-30.0	60	50

\* Decreases with the logarithm of the frequency.

NOTE: The tighter limit shall apply at the boundary between two frequency ranges.

Remark:

Calculated measurement uncertainty (0.15MHz - 30MHz): 3.2dB

Emissions have been investigated and the worst-case test results are recorded in this report.

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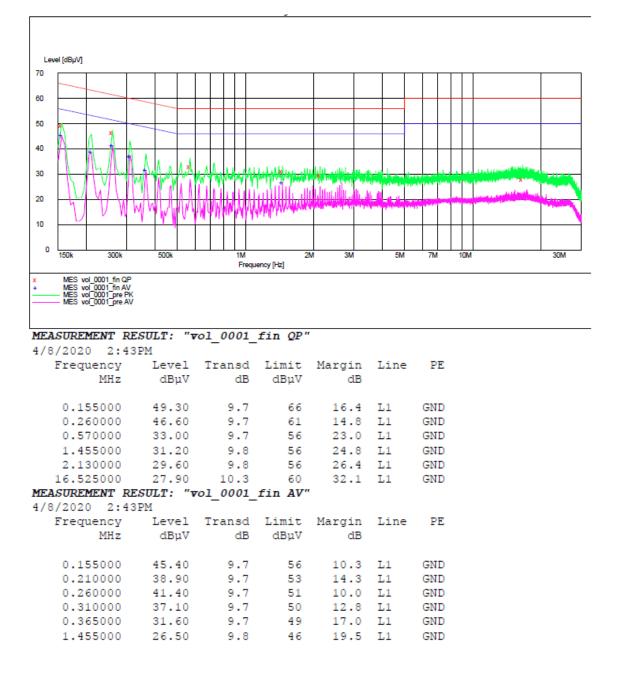


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Date : 2020-04-17 No. : DM20040014

Results of On mode(MAX power, the worse case) (L): Pass

Please refer to the following diagram for individual results.



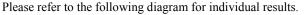
#### STC (Dongguan) Company Limited

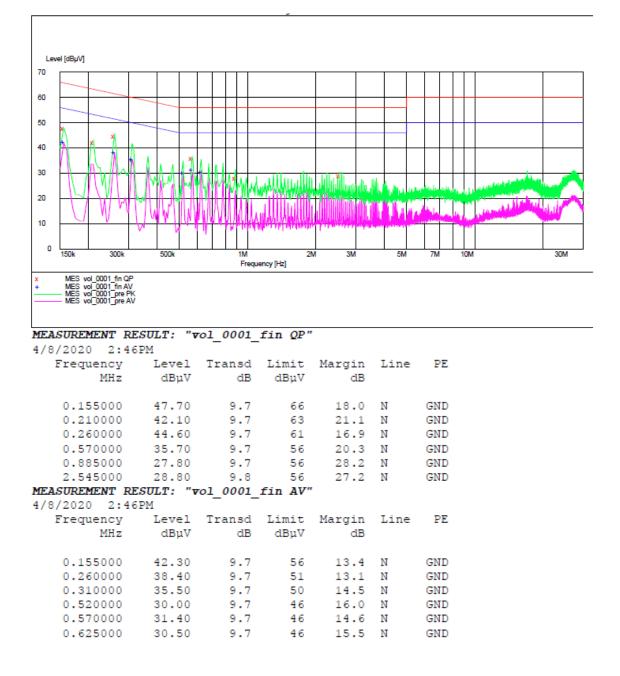


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Date : 2020-04-17 No. : DM20040014

Results of On mode(MAX power, the worse case) (N): Pass





#### STC (Dongguan) Company Limited



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### Appendix A List of Measurement Equipment

### **Radiated Emissions**

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD035	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100441	2019.04.19
EMD036	EMI Test Receiver	ROHDE & SCHWARZ	ESIB26	100388	2019.04.19
EMD061	Biconilog Antenna	ETS.LINDGREN	3142C	00060439	2019.01.05
EMD062	Double-Ridged Waveguide	ETS.LINDGREN	3117	00075933	2017.12.17
EMD084	MULTI-DVICE CONTROLLER	ETS.LINDGREN	2090	00060107	N/A
EMD088	Video Contol Unit	ETS.LINDGREN	Y21953A	2601073	N/A
EMD093	Monitor	ViewSonic	VA9036	Q8X064201876	N/A
EMD102	Intelligent Frequency	Ainuo Instrument Co., Ltd	AN97005SS	79707454	N/A
EMD105	FACT-3 EMC Chamber	ETS.LINDGREN	FACT-3	3803	2018.11.06
EMD165	Pre-Amplifier	A-INFO	LA1018N4014	J1010000355	2019.12.20
EMD-S02	RE Test software	AUDIX	e3	V9.14c31	N/A
EMD-S03	CE Test software	ROHDE & SCHWARZ	ESIB-K1	V1.20	N/A

### **Conducted Emissions**

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD004	ZWEILEITER-V- NETZNACHBILDUNG TWO- LINE V-NETWORK	ROHDE & SCHWARZ	ESH3-Z5	100102	2019.04.19
EMD009	Passive Voltage Probe	ROHDE & SCHWARZ	ESH2-Z3	100020	2019.04.19
EMD035	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100441	2019.04.19
EMD036	EMI Test Receiver	ROHDE & SCHWARZ	ESIB26	100388	2019.04.19
EMD041	TWO-LINE V-NETWORK	ROHDE & SCHWARZ	ENV216	100261	2019.04.19
EMD103	Intelligent Frequency	Ainuo Instrument Co., Ltd	AN97005SS	79707455	N/A
EMD106	Shielding Room #1	ETS.LINDGREN	RFD-100	3802	2018.11.06
EMD-S02	CE Test software	AUDIX	e3	V9.14c31	N/A
EMD-S03	CE Test software	ROHDE & SCHWARZ	ESIB-K1	V1.20	N/A
EM334	8-WIRE ISN	TESEQ	ISN T8-Cat6	38867	2019.09.24

Remark: N/A: Not Applicable

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Appendix B Photograph(s) of Product

**View of The Product** 



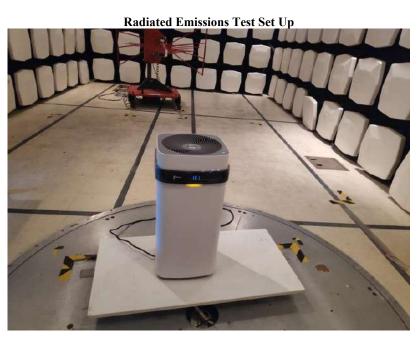
#### **View of The Product**





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Photograph(s) of Product



**Conducted Emissions Test Set Up** 



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

STC (Dongguan) Company Limited

### **Conditions of Issuance of Test Reports**

- 1. All samples and goods are accepted by The STC (Dongguan) Company Limited (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The Company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by the Company as a result of this application for testing service (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to his customer, supplier or other persons directly concerned. Subject to clause 3, the Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall be at liberty to disclose the testing-related documents and/or files anytime to any third-party accreditation and/or recognition bodies for audit or other related purposes. No liabilities whatsoever shall attach to the Company's act of disclosure.
- 4. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 5. The results in Report apply only to the sample as received and do not apply to the bulk, unless the sampling has been carried out by the Company and is stated as such in the Report.
- 6. When a statement of conformity to a specification or standard is provided, the ILAC-G8 Guidance document (and/or IEC Guide 115 in the electrotechnical sector) will be adopted as a decision rule for the determination of conformity unless it is inherent in the requested specification or standard, or otherwise specified in the Report.
- 7. In the event of the improper use the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 8. Sample submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
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- 10. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 11. Subject to the variable length of retention time for test data and report stored hereinto as to otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of this test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after the retention period. Under no circumstances shall we be liable for damages of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.
- 12. Issuance records of the Report are available on the internet at www.stc.group. Further enquiry of validity or verification of the Reports should be addressed to the Company.





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Applicant:	Guilin Woodpecker Medical Instrument Co., Ltd. Information Industrial Park, GuiLin National High-Tech Zone, GuiLin, GuangXi, 541004, P.R.China		
Description of Sample(s):	Submitted sample(s) Product: Brand Name: Model Number:	said to be Plasma Air Purifier WOODPECKER YKX300-Q3	
Date Sample(s) Received:	2020-04-07		
Date Tested:	2020-04-07 to 2020-0	04-10	
Investigation Requested:	Test for compliance with EMC requirements of EN 55014-1, EN 55014-2, EN IEC 61000-3-2 and EN 61000-3-3.		
Conclusion(s):	The submitted product <u>COMPLIED</u> with the requirements of EN 55014-1:2017, EN 55014-2:2015, EN IEC 61000-3-2:2019 and EN 61000-3-3:2013+A1:2019. The EMC tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.		
Remark(s):	•	ncy of the EUT: 20MHz. gory IV apparatus of EN55014-2.	





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2.1	Investigations Requested	Page 4 of 36
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- **<u>1.0</u>** General Details
- 1.1 Equipment Under Test [EUT] Description of Sample(s)

Product:	Plasma Air Purifier
Manufacturer:	Guilin Woodpecker Medical Instrument Co., Ltd.
	Information Industrial Park, GuiLin National High-Tech Zone,
	GuiLin, GuangXi, 541004, P.R.China
Brand Name:	WOODPECKER
Model Number:	YKX300-Q3
Rating:	100-240Va.c. 50/60Hz, 55W

### 1.2 Date of Order

2020-04-07

### 1.3 Submitted Sample(s):

1 Sample

### 1.4 Test Duration

2020-04-07 to 2020-04-10

### 1.5 Country of Origin

China

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### **<u>2.0</u>** Technical Details

#### 2.1 Investigations Requested

Perform ElectroMagnetic Interference [EMI] & ElectroMagnetic Susceptibility [EMS] tests for CE Marking

### 2.2 Test Standards and Results Summary Tables

	Test Standards
EN 55014-1:2017	Electromagnetic compatibility - Requirements for household appliances, electric
	tools and similar apparatus - Part 1: Emission
EN 55014-2:2015	Electromagnetic compatibility - Requirements for household appliances, electric
	tools and similar apparatus - Part 2: Immunity - Product family standard
EN IEC 61000-3-2:2019	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic
	current emissions (equipment input current $\leq 16$ A per phase)
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage
+A1:2019	changes, voltage fluctuations and flicker in public low - voltage supply systems,
	for equipment with rated current ≤16 A per phase and not subject to conditional
	connection

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### 2.2 Test Standards and Results Summary Tables

EMISSION Results Summary											
Test Condition	Test Requirement	Test Method	Class /	Test Result							
			Severity	Pass	Failed	N/A					
Radiated Emissions	EN 55014-1:2017	EN 55014-1:2017	Table 9	$\boxtimes$							
Conducted Emissions	EN 55014-1:2017	EN 55014-1:2017	Table 5, Columns 2 & 3	$\boxtimes$							
Harmonic current Emissions	EN IEC 61000-3-2:2019	EN IEC 61000-3-2:2019	Class A	$\boxtimes$							
Voltage changes, voltage fluctuations and flicker	EN 61000-3-3:2013 +A1:2019	EN 61000-3-3:2013 +A1:2019	N/A	$\boxtimes$							

SUSCEPTIBILITY Results Summary										
Test Condition	Test Requirement	Test Method	Class /	Test Result						
			Severity	Pass	Failed	N/A				
Electrostatic Discharge	EN 55014-2:2015	EN 61000-4-2:2009	±4.0kV Contact.							
			±8.0kV Air							
Radiated, radio-frequency,	EN 55014-2:2015	EN 61000-4-3:2006	3V/m	$\boxtimes$						
electromagnetic field		+A1:2008								
		+A2:2010								
Electrical fast transient/burst	EN 55014-2:2015	EN 61000-4-4:2012	±1.0kV	$\boxtimes$						
Surges	EN 55014-2:2015	EN 61000-4-5:2014	±1.0kV	$\boxtimes$						
			±2.0kV							
Conducted disturbances, induced by radio-frequency fields	EN 55014-2:2015	EN 61000-4-6:2014	3Vrms							
Voltage dips, short interruptions and voltage variations	EN 55014-2:2015	EN 61000-4-11:2004	0%, 40%, 70% of U <sub>T</sub>	$\square$						

Remark:

N/A: Not Applicable

U<sub>T:</sub> The nominal supply voltage

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3.0 Test Results

### 3.1 Emission

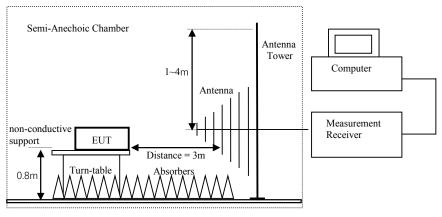
### 3.1.1 Radiated Emissions (30MHz to 1000MHz)

Test Requirement:	EN 55014-1
Test Method:	EN 55014-1
Level:	Table 9
Test Date(s):	2020-04-07
Mode of Operation:	On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 55014-1 at 3m test distance on a standard emission test site, with quasi-peak measurements performed if the maximised peak measurements were less than 6dB from the corresponding limit lines.

### **Test Setup:**



Ground Plane

- Absorbers placed on top of the ground plane are for measurements above 1000MHz only.
- Measurements between 30MHz to 1000MHz made with Bi-log antennas, above 1000MHz horn antennas are used.

### Limits for Radiated Emission:

Frequency Range	Quasi-Peak Limits (SAC, Measurement distance 3m)	
MHz	dB(µV/m)	
30-230	40.0	
230-1000	47.0	
NOTE: The lower limit applies at the transition frequency.		

Remark: Calculated measurement uncertainty (30 MHz - 1 GHz): 4.6dB Emissions in the vertical and horizontal polarizations have been investigated and the worst-case test results are recorded in this report.

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**Results of On mode(Max power, the worse case): Pass** Please refer to the following diagram for individual results.

Horizontal Date: 04-07-2020 Level (dBuV/m) 70 60 50 Limit QP Full www. Www. Www. Www. Www. www. 40 30 20 10 0 200 Frequency (MHz) 100 30 50 500 1000 Ambient Temperature: 23.0C

Relative Humidity : 56.0%

	Freq	Level		Over Limit	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB		
1	100.229	27.75	40.00	-12.25	QP	Horizontal
2	120.277	33.77	40.00	-6.23	QP	Horizontal
3	140.342	31.44	40.00	-8.56	QP	Horizontal
4	206.398	32.45	40.00	-7.55	QP	Horizontal
5	286.982	33.23	47.00	-13.77	QP	Horizontal
6	346.809	35.22	47.00	-11.78	QP	Horizontal

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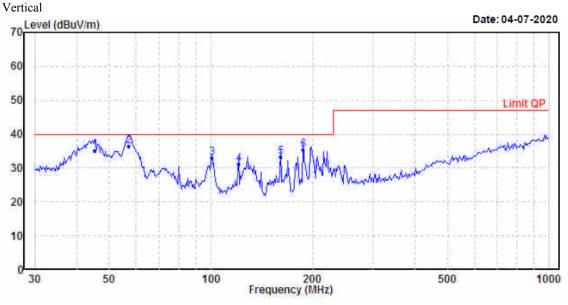
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**Results of On mode(Max power, the worse case): Pass** Please refer to the following diagram for individual results.



Ambient Temperature: 23.0C Relative Humidity : 56.0%

	Freq	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB		
1	45.375	35.02	40.00	-4.98	QP	Vertical
2	57.191	36.52	40.00	-3.48	QP	Vertical
3	100.229	33.06	40.00	-6.94	QP	Vertical
4	120.277	31.28	40.00	-8.72	QP	Vertical
5	160.346	33.39	40.00	-6.61	QP	Vertical
6	187.096	35.40	40.00	-4.60	QP	Vertical

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### 3.1.2 Conducted Emissions (150kHz to 30MHz)

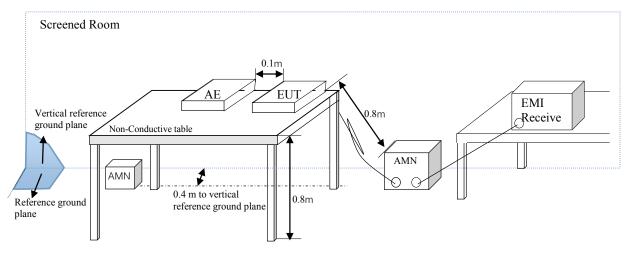
Test Requirement:	EN 55014-1
Test Method:	EN 55014-1
Level:	Table 5, Columns 2 & 3
Test Date(s):	2020-04-08
Mode of Operation:	On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 55014-1.

Initial measurements were performed in peak and average detection modes on the live line. Any emissions recorded within 30dB of the relevant limit lines were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

### Test Setup:



### Limit for conducted emission:

Frequency Range	Quasi-Peak	Average			
MHz	dB(µV)	dB(µV)			
0.15-0.5	66 to 56*	59 to 46*			
0.5-5.0	56	46			
5.0-30.0	5.0-30.0 60 50				
At the transition frequency, the more str	ingent limit shall apply.				
* Decreasing linearly with logarithm of	frequency.				

#### Remark:

Calculated measurement uncertainty (0.15MHz - 30MHz): 3.2dB

Emissions have been investigated and the worst-case test results are recorded in this report.

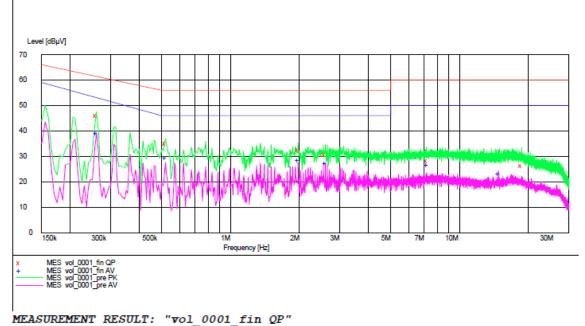
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**Results of On mode(Max power, the worse case) (L): Pass** Please refer to the following diagram for individual results.



4/8/2020 2:34PM

, .,						
Frequency MHz		ransd dB	Limit dBµV	Margin dB	Line	PE
0.260000	46.20	9.7	61	15.2	L1	GND
0.520000	35.00	9.7	56	21.0	L1	GND
1.975000	32.50	9.8	56	23.5	L1	GND
2.595000	30.60	9.8	56	25.4	L1	GND
7.220000	28.10	9.9	60	31.9	L1	GND
18.665000	26.30	10.3	60	33.7	L1	GND
	DECITE	0007				

MEASUREMENT RESULT: "vol 0001 fin AV"

4/8/2020 2:34PM

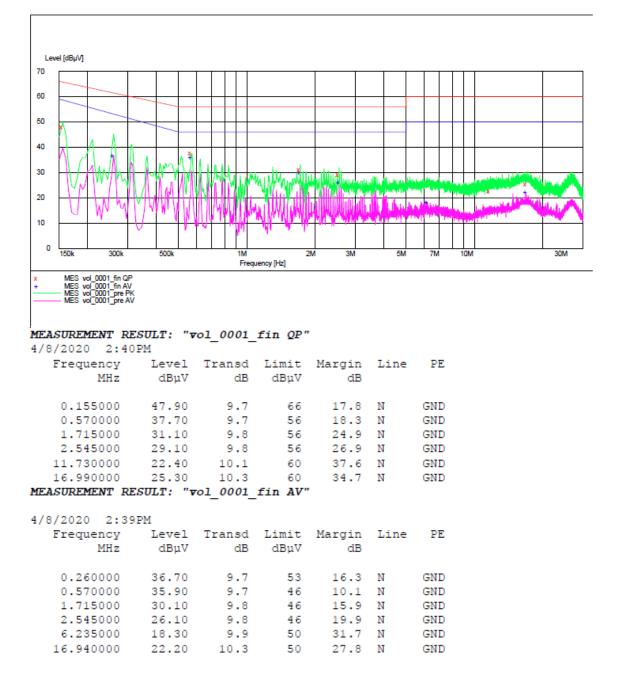
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.260000 0.520000 1.975000 2.600000 7.225000 14.810000	39.20 29.60 28.40 27.40 26.60 23.10	9.7 9.7 9.8 9.8 9.9 10.2	53 46 46 50 50	13.8 16.4 17.6 18.6 23.4 26.9	L1 L1 L1	GND GND GND GND GND GND

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**Results of On mode(Max power, the worse case) (N): Pass** Please refer to the following diagram for individual results.



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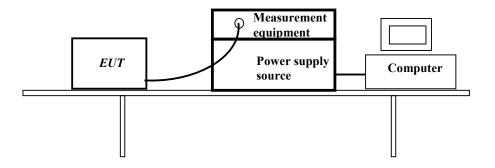
### 3.1.3 Harmonic current Emissions

EN IEC 61000-3-2
EN IEC 61000-3-2
Class A
2020-04-08
On mode(Max power, the worse case)
230Va.c.

### **Test Method:**

The test was performed in accordance with EN IEC 61000-3-2.

### **Test Setup:**



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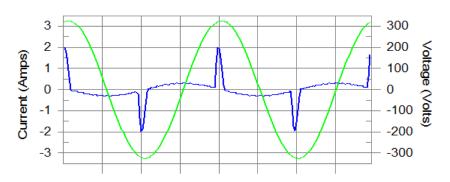
### **Results and limit line for Harmonic current Emissions:**

For limits for Harmonics Emission Test, please refer to limit lines (saw-tooth) in the following diagram.

#### **Results: Pass**

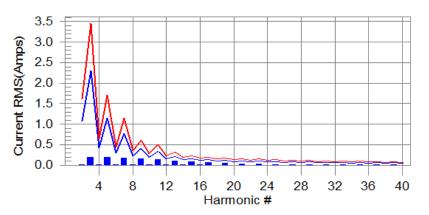
Please refer to the following table for individual results.

### Current & voltage waveforms





**European Limits** 



Remark:

- Upper limit line = 150 % limit

- Lower limit line = 100 % limit

Calculated measurement uncertainty: 7.1%

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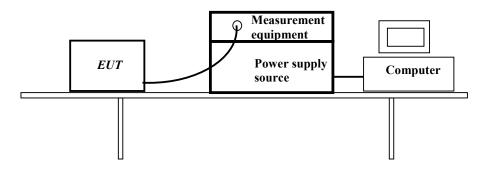
### 3.1.4 Voltage changes, voltage fluctuations and flicker

Test Requirement:	EN 61000-3-3
Test Method:	EN 61000-3-3
Level:	N/A
Test Date(s):	2020-04-08
Mode of Operation:	On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 61000-3-3.

### **Test Setup:**



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**Limits for Voltage changes, voltage fluctuations and flicker:** Refer to the result table for details.

#### **Results: Pass**

Please refer to the following table for individual results.

Maximum Occurring Levels:

Pst:	0.064	Limit =	1.00	(The Highest Short Term Flicker Value)
Plt:	0.028	Limit =	0.65	(The Highest Long Term Flicker Value)
dc(%):	0.00	Limit =	3.30%	(The Highest Relative Steady State Voltage Change (1sec))
dmax:	0.00	Limit =	4.00%	(*The Highest Maximum Relative Voltage Change)
Tdt:	0.0	Limit =	500ms	(The Max Time (in milli-sec) that dt exceeds 3.3%)
Ut:	230.13			(EUT Test RMS Voltage)

Remark:

\* - Some products may have more relax limits (refer to Clause 5 of EN 61000-3-3) Calculated measurement uncertainty: 7.7%

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3.2 Immunity

3.2.1 Susceptibility Performance Criteria

Α	Normal performance within the specification limits
В	Temporary degradation or loss of function or performance which is self- recoverable
С	Temporary degradation or loss of function or performance which requires operator intervention or system reset
D	Degradation or loss of function which is not recoverable due to damage of equipment (components) or software, or loss of data

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### 3.2.2 Electrostatic Discharge

Test Requirement: Test Method: Severity: EN 55014-2 EN 61000-4-2 ±4kV for Direct & Indirect Contact Discharge ±8kV for Air Discharge **B** 23.2°C

### **Performance Criterion Requirement:** Ambient Temperature:

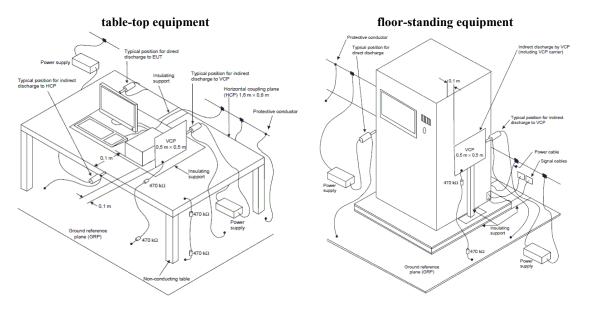
Relative Humidity: Atmospheric Pressure: Test Date(s): Mode of Operation:

#### 23.2°C 53.1% 101.1kPa 2020-04-10 On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 61000-4-2.

### **Test Setup:**



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#### Test Levels for Electrostatic Discharge test:

Level	Test Voltage Direct & Indirect Contact Discharge	Test Voltage Air Discharge
1	±2kV	±2kV
2	±4kV	±4kV
3	±6kV	±8kV
4	±8kV	±15kV
x <sup>a</sup>	Special	Special
a "x" can be any level above below or	in between the others. The level shall be speci	fied in the dedicated equipment

a "x" can be any level, above, below or in between the others. The level shall be specified in the dedicated equipment specification. If higher voltages than those shown are specified, special test equipment may be needed.

### **Results: Pass**

Please refer to the following table for individual results. Photograph depicting the exact ESD test points with discharge method identified was in appendix B.

Location		Discharge Mathed	Test Veltess	Individual Results	
		Discharge Method	Test Voltage	Pass	Failed
HCP	[Horizontal Coupling Plane]	Indirect Contact	/		
VCP	[Vertical Coupling Plane]	Indirect Contact	±4kV	$\boxtimes$	
Gaps		Air	$\pm 8 \mathrm{kV}$	$\square$	
Screen/Buttons		Air	$\pm 8 \mathrm{kV}$	$\square$	

***EUT Grounding	Grounded	Ungrounded
------------------	----------	------------

Remark:

\*\*\*For ungrounded EUT, the charge on the EUT shall be removed prior to each applied ESD pulse Calculated measurement uncertainty: Rise time  $t_r: 15\%$ Peak current  $I_p: 6.3\%$ 

Current at 30 ns and 60 ns: 6.3%

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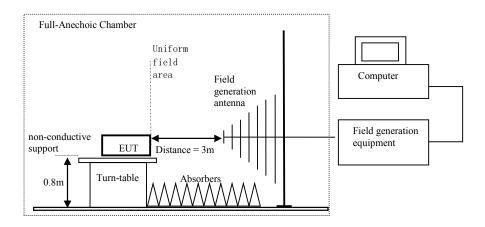
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3.2.3	Radiated, radio-frequency, electromagnetic field				
	Test Requirement:	EN 55014-2			
	Test Method:	EN 61000-4-3			
	Severity:	3V/m			
	Modulation:	1kHz 80% AM			
	Performance Criterion Requirement:	Α			
	Ambient Temperature:	23.2°C			
	Relative Humidity:	53.1%			
	Atmospheric Pressure:	101.1kPa			
	Test Date(s):	2020-04-10			
	Mode of Operation:	On mode(Max power, the worse case)			

#### **Test Method:**

The test was performed in accordance with EN 61000-4-3.

#### **Test Setup:**



- ptional anechoic material in case of full-anechoic chamber to reduce ground reflection.

- Measurements between 30MHz to 3000MHz made with Bi-log antennas, above 3000MHz horn antennas are used.

- Proximity fields from RF wireless communications equipment test distance was 1m.

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### Test Levels for Radiated, radio-frequency, electromagnetic field test:

Level	Field Strength V/m
1	1
2	3
3	10
4	30
x	Special
NOTE x is an open test level and the associated product standard.	field strength may be any value. This level may be given in the

### **Results: Pass**

Please refer to the following table for individual results.

Frequency	Face	Polarity	Level	Dwell Time	Sweep rate	Individu	al Results
(MHz)			(V/m)	(s)	(%)	Pass	Failed
80-1000	0°	Horizontal	3	3	1		
80-1000	90°	Horizontal	3	3	1		
80-1000	180°	Horizontal	3	3	1	$\boxtimes$	
80-1000	270°	Horizontal	3	3	1	$\square$	
80-1000	0°	Vertical	3	3	1		
80-1000	90°	Vertical	3	3	1	$\boxtimes$	
80-1000	180°	Vertical	3	3	1		
80-1000	270°	Vertical	3	3	1		

Remark:

The dwell time at each frequency is according to the standard being applied and the basic standard Calculated measurement uncertainty: 2.11dB

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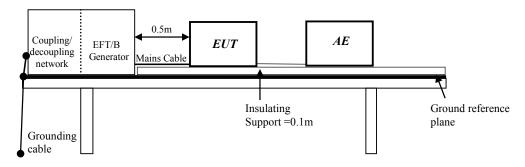
### 3.2.4 Electrical fast transient/burst

Test Requirement:	EN 55014-2
Test Method:	EN 61000-4-4
Severity:	±0.5kV for Signal and control ports
	±1kV for AC port
Performance Criterion Requirement:	В
Ambient Temperature:	53.2°C
Relative Humidity:	53.1%
Atmospheric Pressure:	101.1kPa
Test Date(s):	2020-04-10
Mode of Operation:	On mode(Max power, the worse case)
-	

### **Test Method:**

The test was performed in accordance with EN 61000-4-4.

### **Test Setup:**



EUT: Equipment Under Test AE: Auxiliary Equipment

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#### Test Levels for Electrical fast transient/burst test:

Level	Power ports, e	earth port (PE)	Signal and o	control ports				
	Voltage peak	Repetition rate	Voltage peak	Repetition rate				
	kV kHz		kV	kHz				
1	1 0.5 5.0	5.0	0.25	5.0				
2	1.0	1.0 5.0	0.50	5.0				
3	2.0	5.0	1.00	5.0				
4	4.0	5.0	2.00	5.0				
Xa	Special	Special	Special	Special				
<sup>a</sup> "X" can be any level	, above, below or in betw	<sup>a</sup> "X" can be any level, above, below or in between the others. The level shall be specified in the dedicated						

equipment specification.

#### **Results: Pass**

Please refer to the following table for individual results.

Conductor	Polarity & Level	Duration/Polarity	Individual Results	
	(kV)	(sec.)	Pass	Fail
Live - Neutral - Earth	±1.0	120	$\boxtimes$	

Remark:

Calculated measurement uncertainty: Peak voltage of the EFT/B: U=6.9%Rise time of the EFT/B voltage: U=6.5%Pulse width of the EFT/B voltage: U=4.9%

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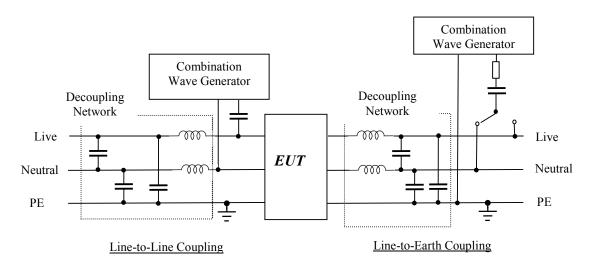
No. : DM20040012

3.2.5	Surges	
	Test Requirement:	EN 55014-2
	Test Method:	EN 61000-4-5
	Severity:	±1kV (Line-to-line)
		±2kV (Line-to-ground)
	Performance Criterion Requirement:	В
	Ambient Temperature:	23.2°C
	Relative Humidity:	53.1%
	Atmospheric Pressure:	101.1kPa
	Test Date(s):	2020-04-10
	Mode of Operation:	On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 61000-4-5.

### **Test Setup:**



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Test levels for Surges test:

Level	Open-circuit test voltage kV			
	Line-to-line Line-to-ground <sup>b</sup>			
1		0.5		
2	0.5	1		
3	1	2		
4	2	4		
Xª	Special	Special		

<sup>a</sup> "X" can be any level, above, below or in between the others. The level shall be specified in the dedicated equipment specification.

<sup>b</sup> For symmetrical interconnection lines the test can be applied to multiple lines simultaneously with respect to ground, i.e. "lines to ground".

### **Results: Pass**

Please refer to the following table for individual results.

Conductor	Level & Polarity	No. of surge	Phase Angle	Surge Interval	Individual Results	
	(kV)	per phase angle		(sec)	Pass	Fail
Line Newtral	+1.0	$\begin{array}{c c} +1.0 \\ \hline -1.0 \end{array}$ 5 $\begin{array}{c} 90^{\circ} \\ 270^{\circ} \end{array}$	90°	(0)	$\boxtimes$	
Live - Neutral	-1.0		270°	60	$\boxtimes$	
	+2.0	-	90°	(0)	$\boxtimes$	
Live - Earth	-2.0	5	270°	60	$\boxtimes$	
<b>F</b> 1 <b>X</b> 1	+2.0	<i>.</i>	90°	(0)	$\boxtimes$	
Earth - Neutral	-2.0	5	270°	60	$\boxtimes$	

Remark:

Calculated measurement uncertainty:

Peak of the surge open-circuit voltage: U= 8.4%

Front time of the surge open-circuit voltage: U= 15.6%

Duration of the surge open-circuit voltage: U= 0.51%

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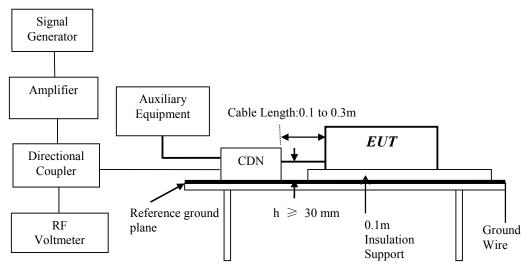
### 3.2.6 Conducted disturbances, induced by radio-frequency fields

, <b>,</b>	1 2
Test Requirement:	EN 55014-2
Test Method:	EN 61000-4-6
Severity:	3V(e.m.f.)
Modulation:	1kHz 80% AM
Performance Criterion Requirement:	Α
Ambient Temperature:	23.2°C
Relative Humidity:	53.1%
Atmospheric Pressure:	101.1kPa
Test Date(s):	2020-04-10
Mode of Operation:	On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 61000-4-6.

### **CDN Test Setup:**



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### Test Levels for Conducted disturbances, induced by radio-frequency fields test:

Level	equency range 150kHz - 80MHz Voltage leve	l (e.m.f.)
	Uo	Uo
	dB(µV)	V
1	120	1
2	130	3
3	140	10
X <sup>a</sup>	Special	Special

### **Results:** Pass

Please refer to the following table for individual results.

Conductor	Frequency	Level	Dwell Time	Sweep rate	Individual Results	
	(MHz)	(V)	(s)	(%)	Pass	Failed
Live - Neutral - Earth	0.15-230	3	3	1	$\boxtimes$	

Remark:

Calculated measurement uncertainty: Voltage test level using CDN: U= 1.40dB Voltage test level using Current clamp: U= 3.17dB

STC (Dongguan) Company Limited



### Date : 2020-04-17

No. : DM20040012

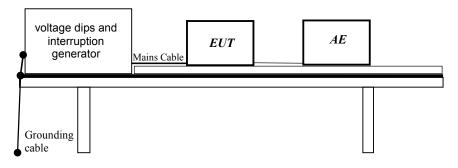
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#### 3.2.7 Voltage dips, short interruptions and voltage variations Test Requirement: EN 55014-2 Test Method: EN 61000-4-11 Severity: [0, 40, 70]% of U<sub>T</sub> **Performance Criterion Requirement:** С Ambient Temperature: 23.2°C Relative Humidity: 53.1% Atmospheric Pressure: 101.1kPa Test Date(s): 2020-04-10 Mode of Operation: On mode(Max power, the worse case)

### **Test Method:**

The test was performed in accordance with EN 61000-4-11.

### Test Setup:



EUT: Equipment Under Test AE: Auxiliary Equipment

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### Test Levels for Voltage dips, short interruptions and voltage variations test:

Severity Level % of UT	Voltage dip and short interruptions % of UT	Duration Cycles
0	100	0.5
40	60	10
70	30	25

### **Results: Pass**

Please refer to the following table for individual results.

Phase	Test Level	Duration	Individua	al Results
	(% of U <sub>T</sub> )	Cycles	Pass	Failed
0°, 180°	0	0.5	$\boxtimes$	
0°, 180°	40	10	$\boxtimes$	
0°, 180 °	70	25	$\boxtimes$	

Remark:

UT - Nominal supply voltage

The measurement uncertainty (with a 95% confidence level) for this test was 4.1% of tested voltage

STC (Dongguan) Company Limited



### Date : 2020-04-17 No. : DM20040012

Appendix A

#### List of Measurement Equipment

**Radiated Emissions** 

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD035	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100441	2019.04.19
EMD036	EMI Test Receiver	ROHDE & SCHWARZ	ESIB26	100388	2019.04.19
EMD061	Biconilog Antenna	ETS.LINDGREN	3142C	00060439	2019.01.05
EMD062	Double-Ridged Waveguide	ETS.LINDGREN	3117	00075933	2017.12.17
EMD084	MULTI-DVICE CONTROLLER	ETS.LINDGREN	2090	00060107	N/A
EMD088	Video Contol Unit	ETS.LINDGREN	Y21953A	2601073	N/A
EMD093	Monitor	ViewSonic	VA9036	Q8X064201876	N/A
EMD102	Intelligent Frequency	Ainuo Instrument Co., Ltd	AN97005SS	79707454	N/A
EMD105	FACT-3 EMC Chamber	ETS.LINDGREN	FACT-3	3803	2018.11.06
EMD165	Pre-Amplifier	A-INFO	LA1018N4014	J1010000355	2019.12.20
EMD-S02	RE Test software	AUDIX	e3	V9.14c31	N/A
EMD-S03	CE Test software	ROHDE & SCHWARZ	ESIB-K1	V1.20	N/A

#### **Conducted Emissions**

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD004	ZWEILEITER-V- NETZNACHBILDUNG TWO- LINE V-NETWORK	ROHDE & SCHWARZ	ESH3-Z5	100102	2019.04.19
EMD009	Passive Voltage Probe	ROHDE & SCHWARZ	ESH2-Z3	100020	2019.04.19
EMD035	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	100441	2019.04.19
EMD036	EMI Test Receiver	ROHDE & SCHWARZ	ESIB26	100388	2019.04.19
EMD041	TWO-LINE V-NETWORK	ROHDE & SCHWARZ	ENV216	100261	2019.04.19
EMD103	Intelligent Frequency	Ainuo Instrument Co., Ltd	AN97005SS	79707455	N/A
EMD106	Shielding Room #1	ETS.LINDGREN	RFD-100	3802	2018.11.06
EMD-S02	RE Test software	AUDIX	e3	V9.14c31	N/A
EMD-S03	CE Test software	ROHDE & SCHWARZ	ESIB-K1	V1.20	N/A

#### Harmonic current Emissions & Voltage changes, voltage fluctuations and flicker

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD013	AC POWER SOURCE	SCHAFFNER	NSG1007	54964	2019.04.19
EMD014	HARMONIC & FLICKER METER	SCHAFFNER	CCN1000	72104	2019.04.19
EMD-S05	Harmonics/ Flicker Test software	TESEQ	Win2100V3	V3.2.0.35	N/A

### Conducted disturbances, induced by radio-frequency fields

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD023	DUAL DIRECTIONAL COUPLER	AMPLIFIER RESEARCH	DC2600A	308682	2019.07.26
EMD024	AMPLIFIER	AMPLIFIER RESEARCH	75A250A	308682	2019.04.19
EMD025	POWER METER	ROHDE & SCHWARZ	NRVD	102051	2019.04.19
EMD026	SIGNAL GENERATOR	ROHDE & SCHWARZ	SML01	102439	2019.04.19
EMD029	COUPLING DECOUPLING NETWORK	FISCHER CUSTOM COMMUNICATIONS INC	30W1000B	4022	2019.04.19
EMD-S09	CI Test software	ROHDE & SCHWARZ	EMC32	V5.20.0	N/A

### STC (Dongguan) Company Limited

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List of Measurement Equipment

### **Electrostatic Discharge**

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD034	DEHUMIDIFIER	KAWASIMA ELECTRICAL APPLIANCE CO.,LTD	DH-820H	N/A	N/A
EMD100	THERMOHYGROGRAPH	SATO KEIRYOKI MFG.CO.,LTD.	7210-00	1633581	2019.11.12
EMD109	BAROGRAPH	SATO KEIRYOKI MFG.CO.,LTD.	NSII-BQ	567719	2019.11.12
EMD139	ESD Simulator	TESEQ	NSG 438	873	2019.11.11

#### Radiated, radio-frequency, electromagnetic field

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD111	Power meter	ROHDE & SCHWARZ	NRVD	102051	2019.04.19
EMD137	Signal Generator	ROHDE & SCHWARZ	SMB100A	1406600K02- 104532-DF	2019.04.19
EMD060	Biconilog Antenna	ETS.LINDGREN	3142C	00060445	2017.12.17
EMD130	Broadband Horn Antenna	Chengdu AINFO Inc.	JXTXLB-10180-SF	J2031090903006	2018.06.20
EMD063	Power Amplifier	BONN ELEKTRONIK	BLWA0810- 250/100D	066454A	2019.04.19
EMD064	Power Amplifier	BONN ELEKTRONIK	BLWA0840-50/30D	066454B	2019.04.19
EMD159	Power Amplifier	rflight	NTWPA-256050	18013015	2019.04.19
EMD104	SPACESAVER 26H EMC Chamber	ETS.LINDGREN	RFD-F-100	3801	2018.11.06
EMD-S07	RI Test software	ROHDE & SCHWARZ	EMC32	V8.40.0	N/A

### Electrical fast transient/burst

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD053	TRANSIENT IMMUNITY TEST SYSTEM	EMC-PARTNER	TRANSIENT2000	845	2019.04.19
EMD-S08	EFT Test software	EMC PARTNET	Test-Manager	V1.71	N/A

Surges							
EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL		
EMD053	TRANSIENT IMMUNITY TEST SYSTEM	EMC-PARTNER	TRANSIENT2000	845	2019.04.19		
EMD-S08	SURGE Test software	EMC PARTNET	Test-Manager	V1.71	N/A		

### Voltage dips, short interruptions and voltage variations

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EMD053	TRANSIENT IMMUNITY TEST SYSTEM	EMC-PARTNER	TRANSIENT2000	845	2019.04.19
EMD-S08	DIPS Test software	EMC PARTNET	Test-Manager	V1.71	N/A

Remark: N/A: Not Applicable

STC (Dongguan) Company Limited



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Appendix B

Photograph (S) Of Product

**View of The Product** 



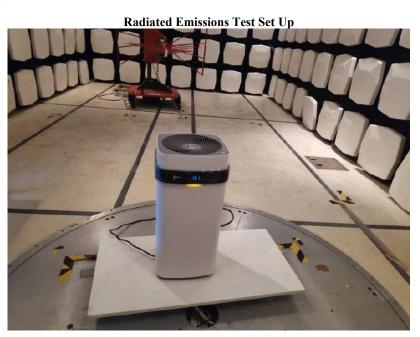
**View of The Product** 





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Photograph (S) Of Product



**Conducted Emissions Test Set Up** 



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Photograph (S) Of Product

Harmonic current Emissions & Voltage changes, voltage fluctuations and flicker Test Set Up



**Electrostatic Discharge Test Set Up** 



#### STC (Dongguan) Company Limited



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Photograph (S) Of Product

**Electrostatic Discharge Test points** 



**Electrostatic Discharge Test points** 



Air Discharge

### STC (Dongguan) Company Limited



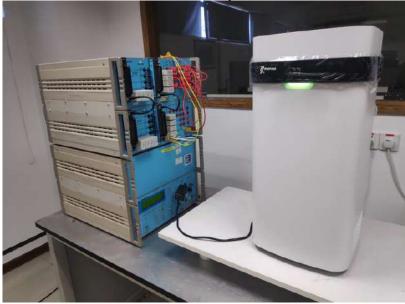
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Photograph (S) Of Product





Electrical fast transient/burst & Surges & Voltage dips, short interruptions and voltage variations
Test Set Up

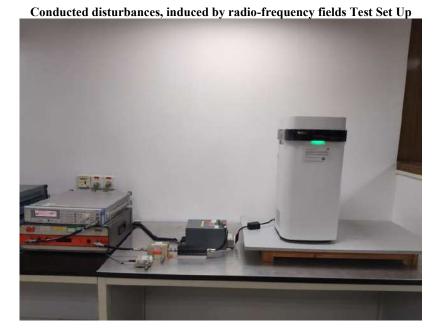


#### STC (Dongguan) Company Limited



Date : 2020-04-17 No. : DM20040012

Photograph (S) Of Product



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

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- 1. All samples and goods are accepted by The STC (Dongguan) Company Limited (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The Company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by the Company as a result of this application for testing service (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to his customer, supplier or other persons directly concerned. Subject to clause 3, the Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall be at liberty to disclose the testing-related documents and/or files anytime to any third-party accreditation and/or recognition bodies for audit or other related purposes. No liabilities whatsoever shall attach to the Company's act of disclosure.
- 4. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 5. The results in Report apply only to the sample as received and do not apply to the bulk, unless the sampling has been carried out by the Company and is stated as such in the Report.
- 6. When a statement of conformity to a specification or standard is provided, the ILAC-G8 Guidance document (and/or IEC Guide 115 in the electrotechnical sector) will be adopted as a decision rule for the determination of conformity unless it is inherent in the requested specification or standard, or otherwise specified in the Report.
- 7. In the event of the improper use the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 8. Sample submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 9. The Company will not be liable for or accept responsibility for any loss or damage howsoever arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 10. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 11. Subject to the variable length of retention time for test data and report stored hereinto as to otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of this test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after the retention period. Under no circumstances shall we be liable for damages of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.
- 12. Issuance records of the Report are available on the internet at www.stc.group. Further enquiry of validity or verification of the Reports should be addressed to the Company.



# STC (Dongguan) Company Limited EC VERIFICATION OF COMPLIANCE

### Reference Number: EMC-D205480VOC

Applicant:

Guilin Woodpecker Medical Instrument Co., Ltd. Information Industrial Park, GuiLin National High-Tech Zone, GuiLin, GuangXi, 541004, P.R.China

Description:	Plasma Air Purifier
Brand Name:	WOODPECKER
Model:	YKX300-Q3

We verify that the mentioned product complies with the requirements of the **EC Electromagnetic Compatibility Directive 2014/30/EU** 

### Applicable Standard(s) with amendments:

EN 55014-1:2017 EN 55014-2:2015 EN IEC 61000-3-2:2019 EN 61000-3-3:2013+A1:2019

General Remarks:

This verification confirmation is only valid when used in conjunction with the technical file(s) refers to DM20040012. This document applies specifically to the sample(s) investigated in the technical report mentioned above, and not to the bulk.

The CE marking as shown below can be affixed on the product after preparation of necessary conformity documentation, as stipulated in articles of above Directive(s).

