



## Test Report

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) said to be  
Product: Plasma Air Purifier  
Brand Name: WOODPECKER  
Model Number: YKX300-Q3

**Date Sample(s) Received:** 2020-04-07

**Date Tested:** 2020-04-07 to 2020-04-08

**Investigation Requested:** FCC Part 15 Subpart B

**Conclusion(s):** The submitted product COMPLIED 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):** ---

  
LONG Yun, Han, Along  
Authorized Signatory

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 2 of 14

### CONTENT:

Cover	Page 1 of 14
Content	Page 2 of 14
<b><u>1.0 General Details</u></b>	
1.1 Equipment Under Test [EUT] Description of EUT operation	Page 3 of 14
1.2 Date of Order	Page 3 of 14
1.3 Submitted Sample(s)	Page 3 of 14
1.4 Test Duration	Page 3 of 14
1.5 Country of Origin	Page 3 of 14
<b><u>2.0 Technical Details</u></b>	
2.1 Investigations Requested	Page 4 of 14
2.2 Test Standards and Results Summary	Page 4 of 14
<b><u>3.0 Test Results</u></b>	
3.1 Emission	Page 5-11 of 14
<b><u>Appendix A</u></b>	
List of Measurement Equipment	Page 12 of 14
<b><u>Appendix B</u></b>	
Photograph(s) of Product	Page 13-14 of 14

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 3 of 14

### **1.0 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 radiated emission:	<input checked="" type="checkbox"/> 30MHz - 1000MHz <input type="checkbox"/> 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

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 4 of 14

### 2.0 Technical Details

#### **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 / Severity	Test Result		
				Pass	Failed	N/A
Radiated Emissions	FCC 47CFR 15.109	ANSI C63.4-2014	Class B	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducted Emissions	FCC 47CFR 15.107	ANSI C63.4-2014	Class B	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remark:

N/A: Not Applicable

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 5 of 14

### 3.0 Test Results

#### 3.1 Emission

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

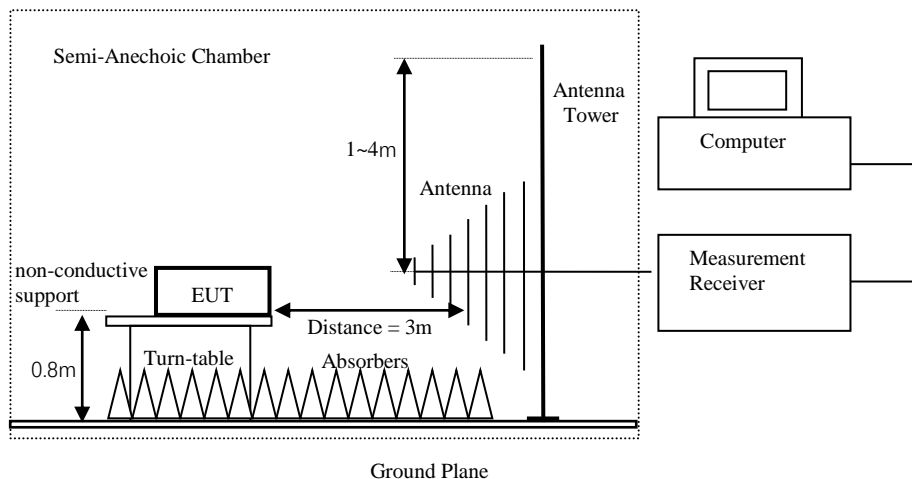
Test Requirement: FCC 47CFR 15.109 Class B  
Test Method: ANSI C63.4-2014  
Test Date: 2020-04-07  
Mode of Operation: On mode(Max power, the worse case)

#### **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.

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

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 MHz	Quasi-Peak Limits	
	$\mu\text{V/m}$	$\text{dB}(\mu\text{V/m})$
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 [MHz]	Average Limits [ $\text{dB}(\mu\text{V/m})$ ]	Peak Limits [ $\text{dB}(\mu\text{V/m})$ ]
> 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.

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



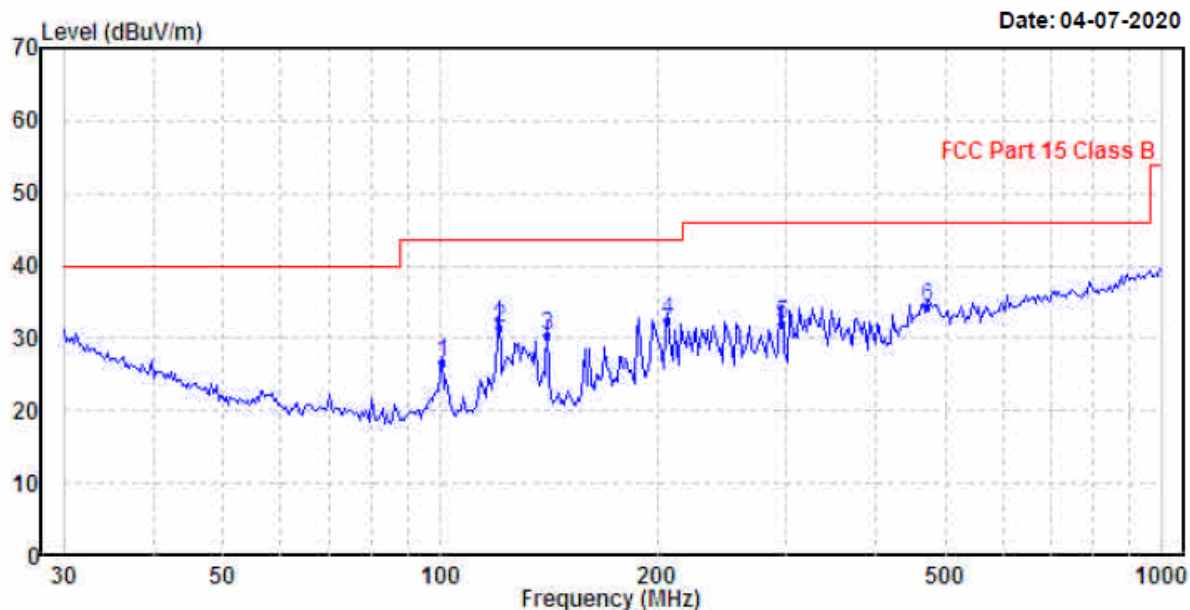
## Test Report

Date : 2020-04-17  
 No. : DM20040014

Page 7 of 14

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

Horizontal



Ambient Temperature: 25C  
 Relative Humidity : 50%

	Freq	Level	Limit	Over	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

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



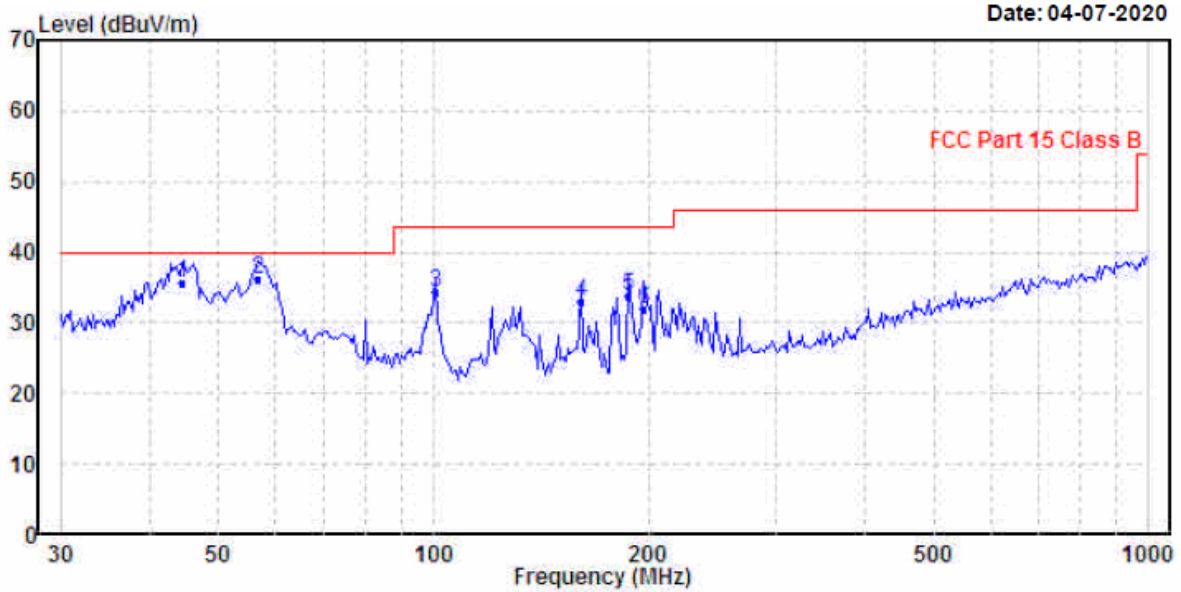
## Test Report

Date : 2020-04-17  
 No. : DM20040014

Page 8 of 14

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

Vertical



Ambient Temperature: 25C  
 Relative Humidity : 50%

	Freq	Level	Limit	Over	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

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2020-04-17  
 No. : DM20040014

Page 9 of 14

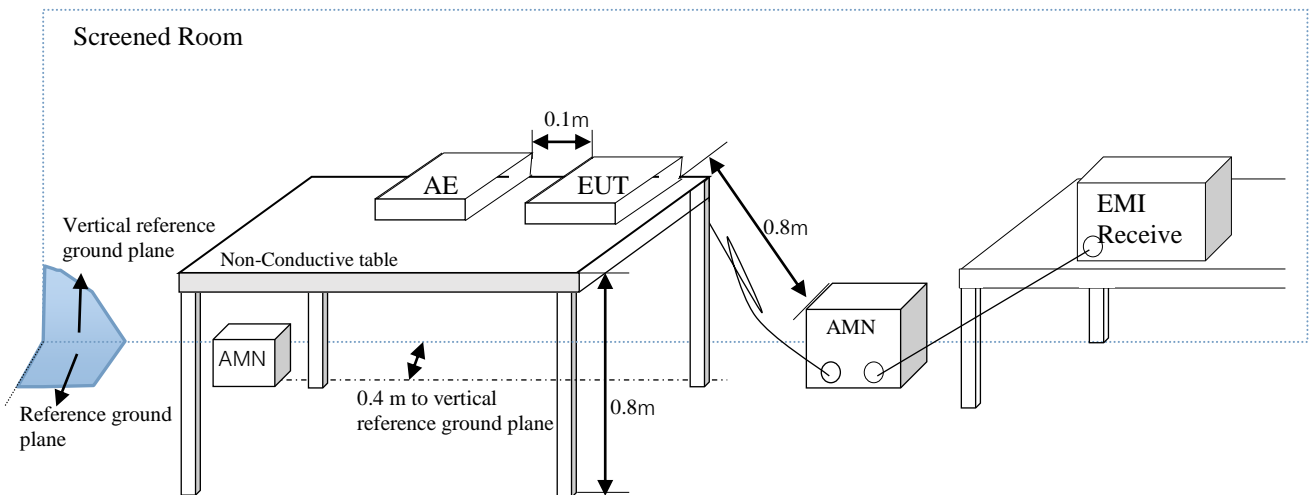
### 3.1.2 Conducted Emissions (0.15MHz to 30MHz)

Test Requirement:	FCC 47CFR 15.107 Class B
Test Method:	ANSI C63.4-2014
Test Date:	2020-04-08
Mode of Operation:	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 MHz	Quasi-Peak Limits dB(μV)	Average 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.

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

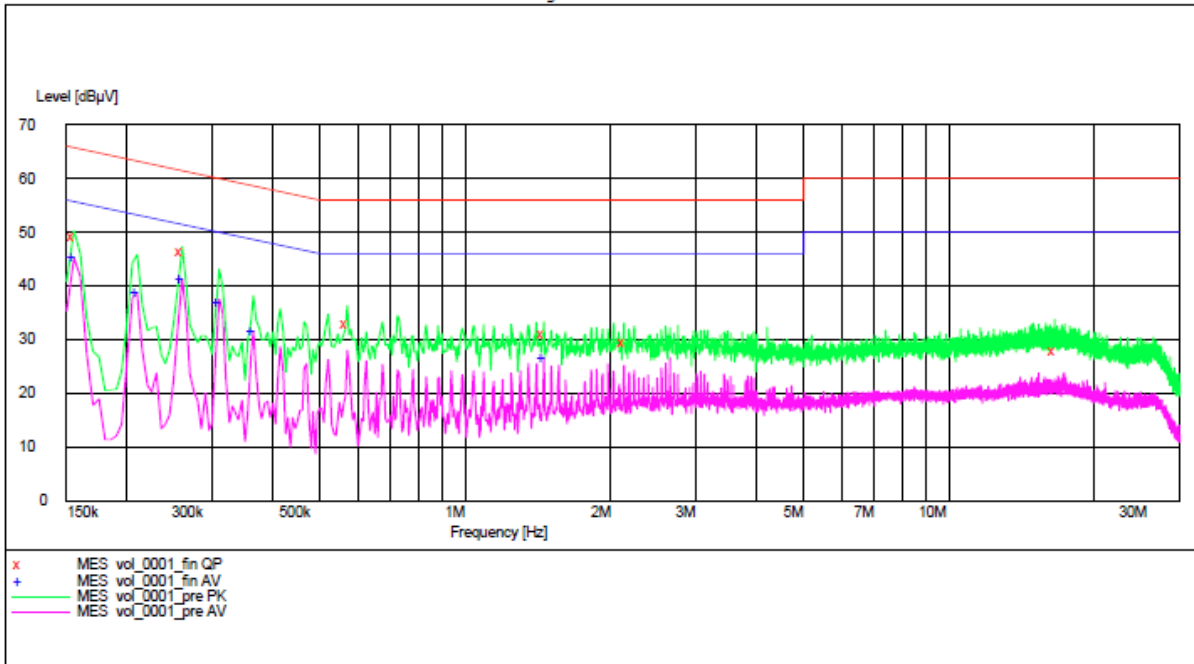


## Test Report

Date : 2020-04-17  
 No. : DM20040014

Page 10 of 14

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



**MEASUREMENT RESULT: "vol\_0001\_fin QP"**

4/8/2020 2:43PM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Line	PE
0.155000	49.30	9.7	66	16.4	L1	GND
0.260000	46.60	9.7	61	14.8	L1	GND
0.570000	33.00	9.7	56	23.0	L1	GND
1.455000	31.20	9.8	56	24.8	L1	GND
2.130000	29.60	9.8	56	26.4	L1	GND
16.525000	27.90	10.3	60	32.1	L1	GND

**MEASUREMENT RESULT: "vol\_0001\_fin AV"**

4/8/2020 2:43PM

Frequency MHz	Level dBuV	Transd dB	Limit dBuV	Margin dB	Line	PE
0.155000	45.40	9.7	56	10.3	L1	GND
0.210000	38.90	9.7	53	14.3	L1	GND
0.260000	41.40	9.7	51	10.0	L1	GND
0.310000	37.10	9.7	50	12.8	L1	GND
0.365000	31.60	9.7	49	17.0	L1	GND
1.455000	26.50	9.8	46	19.5	L1	GND

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

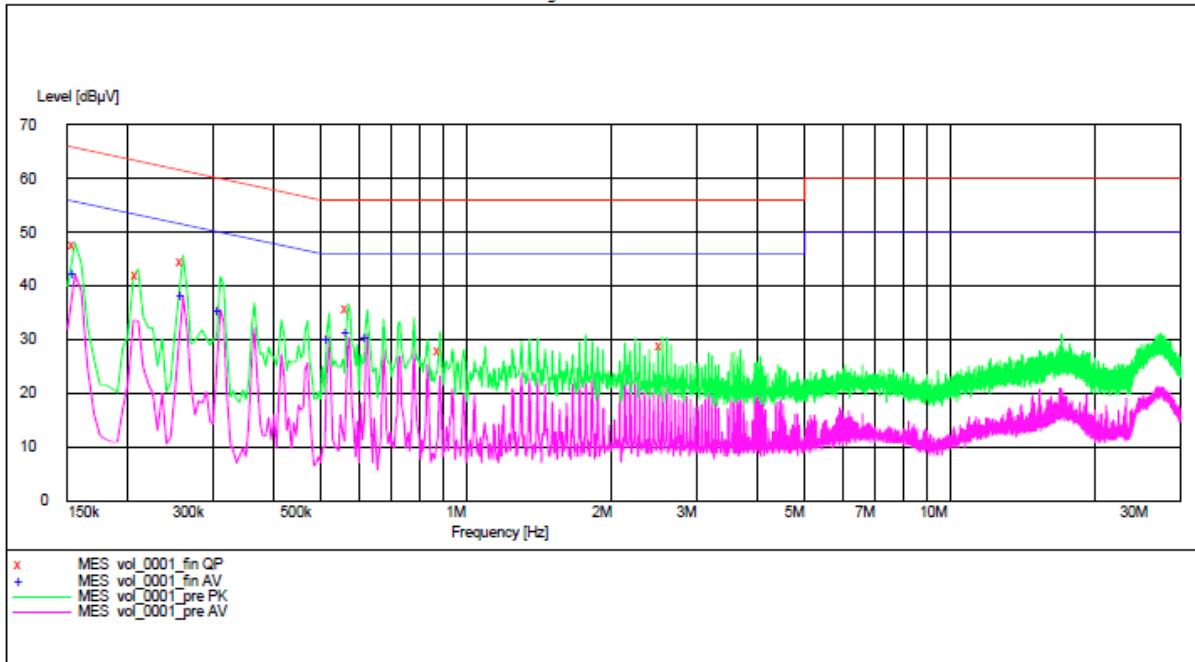


## Test Report

Date : 2020-04-17  
 No. : DM20040014

Page 11 of 14

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



**MEASUREMENT RESULT: "vol\_0001\_fin QP"**

4/8/2020 2:46PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.155000	47.70	9.7	66	18.0	N	GND
0.210000	42.10	9.7	63	21.1	N	GND
0.260000	44.60	9.7	61	16.9	N	GND
0.570000	35.70	9.7	56	20.3	N	GND
0.885000	27.80	9.7	56	28.2	N	GND
2.545000	28.80	9.8	56	27.2	N	GND

**MEASUREMENT RESULT: "vol\_0001\_fin AV"**

4/8/2020 2:46PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.155000	42.30	9.7	56	13.4	N	GND
0.260000	38.40	9.7	51	13.1	N	GND
0.310000	35.50	9.7	50	14.5	N	GND
0.520000	30.00	9.7	46	16.0	N	GND
0.570000	31.40	9.7	46	14.6	N	GND
0.625000	30.50	9.7	46	15.5	N	GND

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.



## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 12 of 14

**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	J10100000355	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

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 13 of 14

### Appendix B Photograph(s) of Product

**View of The Product**



**View of The Product**



STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

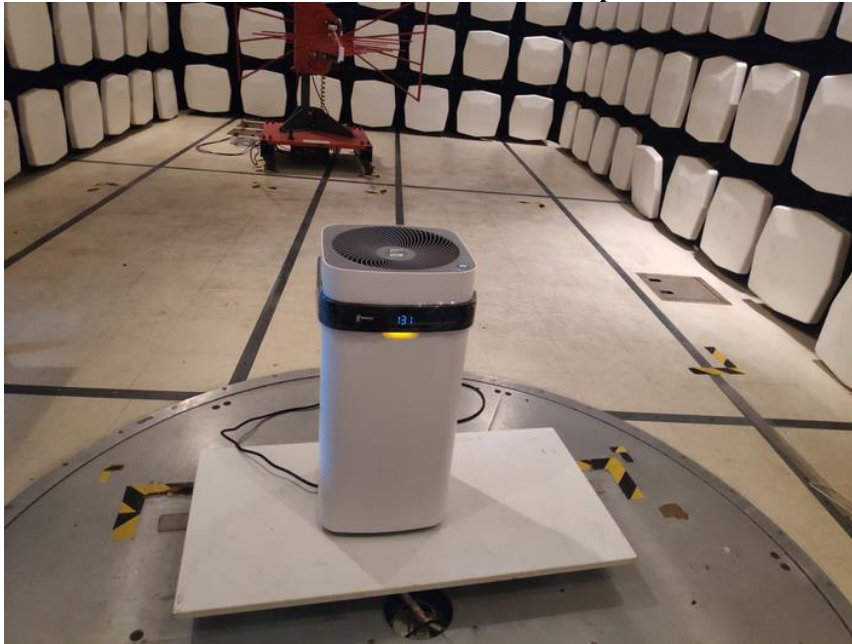
## Test Report

Date : 2020-04-17  
No. : DM20040014

Page 14 of 14

### Photograph(s) of Product

**Radiated Emissions Test Set Up**



**Conducted Emissions Test Set Up**



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

STC (Dongguan) Company Limited

68 Fumin Nan Road, Dalang, Dongguan, Guangdong, China. Zip Code: 523770

Tel : (86 769) 81119888 Fax : (86 769) 81116222 Email : dgstc@stc.group Website : www.stc.group

This report shall not be reproduced unless with prior written approval from STC (Dongguan) Company Limited.

For Conditions of issuance of this test report, please refer to "Conditions of Issuance of Test Reports" section or Website.

## 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.
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](http://www.stc.group). Further enquiry of validity or verification of the Reports should be addressed to the Company.