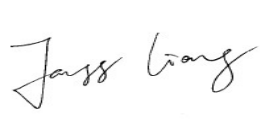



Test report No:
4378244.50

TEST REPORT

FCC Rules&Regulations 47 CFR Chapter I - Part 15

Identification of item tested	Range Hoods
Trademark	Greentec
Model and /or type reference	H606-xzyk, H608-xzyk, H609-xzyk, H611-xzyk, H612-xzyk. "xzyk"- detail refer product description.
FCC ID	2A6SP-GREENTEC
Features	110-120 Vac, 60 Hz
Derived model(s)	N/A
Applicant's name / address	Zhongshan Greentec Electric Appliance Co., Ltd. Mingle community, Dongfeng Town.
Test method requested, standard	FCC Rules and Regulations 47 CFR Chapter I Part 15 Subpart B:2022; ANSI C63.4:2014
Verdict Summary	IN COMPLIANCE
Tested by (name & signature)	Jazz Liang 
Approved by (name & signature)	Tim Yan 
Date of issue	2022-04-11
Report template No	TRF_EMC 2017-06-others

INDEX

	page
General conditions	3
Uncertainty	3
Environmental conditions	4
Possible test case verdicts	4
Definition of symbols used in this test report	4
Abbreviations	4
Document History	5
Remarks and Comments	5
1 General Information	6
1.1 General Description of the Item(s)	6
1.2 The environment(s) in which the EUT is intended to be used	9
1.3 Test data	9
1.4 Classification	9
1.5 User information for Part 15B devices	10
2 Description of Test Setup	11
2.1 Operating mode(s) used for tests	11
2.2 Port(s) of the EUT	11
2.3 Support / Auxiliary equipment / unit / software for the EUT	11
2.4 Test Configuration / Block diagram used for tests	11
3 Verdict summary section	12
3.1 Overview of results	12
4 Test Results	13
4.1 Conducted emissions	13
4.2 Radiated emissions	19
5 Identification of the Equipment Under Test	26
6 Annex 1 - Measurement Uncertainties	33
7 Annex 2 – Used Equipment	34
8 Annex 2 - Test Photos	35

GENERAL CONDITIONS

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. This report will not be used for social proof function in China market.

UNCERTAINTY

For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in EN 55016-4-2 (CISPR 16-4-2), EN/IEC 61000-4 series or a product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%. Refer to the Annex 1 for further information.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%
Atmospheric pressure	86 kPa – 106 kPa

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not tested	N/T

DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

<input checked="" type="checkbox"/>	Indicates that the listed condition, standard or equipment is applicable for this report/test/EUT.		
<input type="checkbox"/>	Indicates that the listed condition, standard or equipment is not applicable for this report/test/EUT.		
Decimal separator used in this report	<input checked="" type="checkbox"/>	Comma (,)	<input type="checkbox"/> Point (.)

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
DUT	: Device Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
U_N	: Nominal voltage
T_x	: Transmitter
R_x	: Receiver
N/A	: Not Applicable
N/M	: Not Measured
RGP	: Reference Ground Plane

DOCUMENT HISTORY

Report nr.	Date	Description
4378244.50	2022-04-11	First release.

REMARKS AND COMMENTS

The Equipment Under Test (EUT) / Device Under Test (DUT) as described in this report complies with the stated requirements.

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Description of the item	Range Hoods
Model / Type number	H606-xzyk, H608-xzyk, H609-xzyk, H611-xzyk, H612-xzyk. "xzyk"- detail refer producted description.
FCC ID	2A6SP-GREENTEC
Rating	110-120 Vac, 60 Hz
Trademark	Greentec
Manufacturer	Zhongshan Greentec Electric Appliance Co., Ltd. NO. 7 and 8 plant, Tongxing industrial district, Ming le community, Dongfeng town, Zhongshan, Guangdong, China
Factory	Zhongshan Greentec Electric Appliance Co., Ltd. NO. 7 and 8 plant, Tongxing industrial district, Ming le community, Dongfeng town, Zhongshan, Guangdong, China

Rated power supply	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	<input checked="" type="checkbox"/>	AC: 120 V, 60 Hz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	AC:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	DC:					
	<input type="checkbox"/>	Battery:					
Rated Power	Not provided						
Clock frequencies	≤ 15 MHz						
Other parameters	Not provided						
Software version	Not provided						
Hardware version	Not provided						
Dimensions in cm (W x H x D)	Not provided						
Mounting position	<input type="checkbox"/>	Table top equipment					
	<input checked="" type="checkbox"/>	Wall/Ceiling mounted equipment					
	<input type="checkbox"/>	Floor standing equipment					
	<input type="checkbox"/>	Hand-held equipment					
	<input type="checkbox"/>	Other:					

Intended use of the Equipment Under Test (EUT)

The apparatus as supplied for the test is rangehood which intended for residential use, the product without earth connection.

According to customer description, all models H606-xzyk, H608-xzyk, H609-xzyk, H611-xzyk, H612-xzyk are identical except for the appearance.

“xyzk” means that:

-“x” stand for length of the product, it can be = 60, 70, 71, 76, 80, 90

The length is 60= 600mm, 70= 700mm, 71= 710mm, 76= 760mm, 80= 800mm, 90= 900mm,

-“y” stand for the shape of LED, it can be = L1, L2

The shape is L1= circular, L2= strip,

-“z” stand for control panel, it can be = T9, P1,

The control panel is T9 = touch switch, P1= mechanical switch,

-“k” stand for the number of fan motor/vent, it can be = A, B

The A = single, B = double.

Hence, model H611-90L1T9B(electronic), H611-90L1P1B(electronic) were chosen for full test.

No	Module/parts of test item	Type	Manufacturer

No	Documents as provided by the applicant - Description	File name	Issue date

Modifications to the test item during testing	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	
---	-------------------------------------	-----	--------------------------	--

Copy of marking plate:N/A
No provide.

1.2 The environment(s) in which the EUT is intended to be used

The equipment under test (EUT) is intended to be used in the following environment(s):

<input checked="" type="checkbox"/>	Residential (domestic) environment.
<input checked="" type="checkbox"/>	Commercial and light-industrial environment.
<input type="checkbox"/>	Industrial environment.
<input type="checkbox"/>	Vehicular environment
<input type="checkbox"/>	Telecommunication centre environment

1.3 Test data

Test Location	DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch Block 5, No.3, Qiyun Road, Huangpu District, Guangzhou, Guangdong, China.
Date of receipt of test item	2021-07-14
Date (s) of performance of tests	2021-07-14 to 2022-02-17

1.4 Classification

The device under test (DUT) is classified as:

<input type="checkbox"/>	Class A	A digital device that is marketed for use in a commercial, industrial or business environment, exclusive of a device which is marketed for use by the general public or is intended to be used in the home.
<input checked="" type="checkbox"/>	Class B	A digital device that is marketed for use in a residential environment notwithstanding use in commercial, business and industrial environments. Examples of such devices include, but are not limited to, personal computers, calculators, and similar electronic devices that are marketed for use by the general public.

1.5 User information for Part 15B devices

The information to the user mentioned in the user manual for Part 15 devices shall include:

- A warning shall be mentioned that no modification shall be made by the user that can be of influence on the EMC behaviour of the device without permission of the manufacturer.
- Possible EMC precautions (for example shielded cables, filters, etc.) that are necessary in order to comply with the FCC rules shall be delivered together with the device. The user manual shall specify and mention these countermeasures.
- For a class A digital device the text mentioned in section 15.105(a) shall be mentioned in the user manual.

“This device has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. “
- For a Class B digital device the text mentioned in section 15.105(b) shall be mentioned in the user manual:

“This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

 - *Reorient or relocate the receiving antenna,*
 - *Increase the separation between the equipment and the receiver,*
 - *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected,*
 - *Consult the dealer or an experienced radio/TV technician for help.*

2 DESCRIPTION OF TEST SETUP

2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Operating mode	Description of the operating mode	Used for testing
1	Highest level of wind with light	<input checked="" type="checkbox"/>
2	Medium level of wind with light	<input checked="" type="checkbox"/>
3	Lowest level of wind with light	<input checked="" type="checkbox"/>
4		<input type="checkbox"/>
5		<input type="checkbox"/>
<u>Supplemental information:</u>		

2.2 Port(s) of the EUT

Port name and description	Connected to / Termination	Cable		
		Length used during test [m]	Attached during test	Shielded
AC input port	AC mains	1,5	<input type="checkbox"/>	<input type="checkbox"/>
	-		<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
<u>Supplemental information:</u>				

2.3 Support / Auxiliary equipment / unit / software for the EUT

The EUT has been tested with the following auxiliary equipment / unit / software: N/A

Auxiliary equipment / unit / software	Type / Version	Manufacturer	Supplied by
<u>Supplemental information:</u> N/A			

2.4 Test Configuration / Block diagram used for tests

The following test setup / configuration / block diagram has been used during the tests: N/A

3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

For the DUT the following measurement clauses are applicable:

47CFR Chapter I - Part 15 Subpart B unintentional radiators	
<input checked="" type="checkbox"/>	Section 15.107 (a) Conducted emissions – Class B
<input type="checkbox"/>	Section 15.107 (b) Conducted emissions – Class A
<input checked="" type="checkbox"/>	Section 15.109 (a) Radiated emissions – Class B
<input type="checkbox"/>	Section 15.109 (b) Radiated emissions – Class A

3.1 Overview of results

FCC Rules and Regulations 47 CFR Chapter I - Part 15 Subpart B				
Section	Requirement – Test case	Basic standard	Verdict	Remark
15.107	Conducted emissions	ANSI C63.4:2014	PASS	---
15.109	Radiated emissions (30-1000 MHz)	ANSI C63.4:2014	PASS	---
15.109	Radiated emissions (above 1 GHz)	ANSI C63.4:2014	N/A	See 1)
Supplementary information:				
1) The highest internal frequency of the DUT is less than 108 MHz.				

The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result.

4 TEST RESULTS

4.1	Conducted emissions	VERDICT: PASS
-----	----------------------------	----------------------

Standard	FCC Rules & Regulations 47 CFR Chapter I - Part 15 Subpart B Clause 15.107
Basic standard	ANSI C63.4

Limits

47 CFR Chapter I - Part 15 Subpart B Clause 15.107(a) / Class B				
Frequency range [MHz]	Limit: QP [dB(μV) ¹⁾	Limit: AV [dB(μV) ¹⁾	IF BW	Detector(s)
0,15 - 0,50	66 - 56 ²⁾	56 - 46 ²⁾	9 KHz	QP, AV
0,50 - 5,0	56	46	9 KHz	QP, AV
5,0 - 30	60	50	9 KHz	QP, AV

¹⁾ At the transition frequency, the lower limit applies.
²⁾ The limit decreases linearly with the logarithm of the frequency.

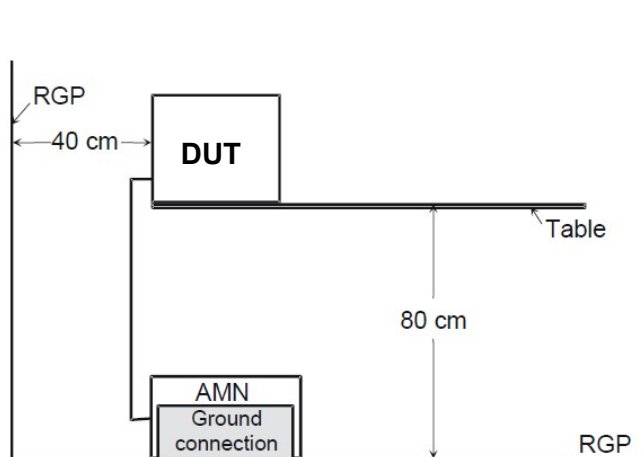
Measurement procedure

In accordance with section 15.107 the conducted radio frequency disturbance voltages between each of the power lines (live and neutral) and the ground terminal have been determined over the frequency range from 150 kHz to 30 MHz using test configuration described at chapter 2. The test set-up was in accordance with the requirements of ANSI C63.4:2014.

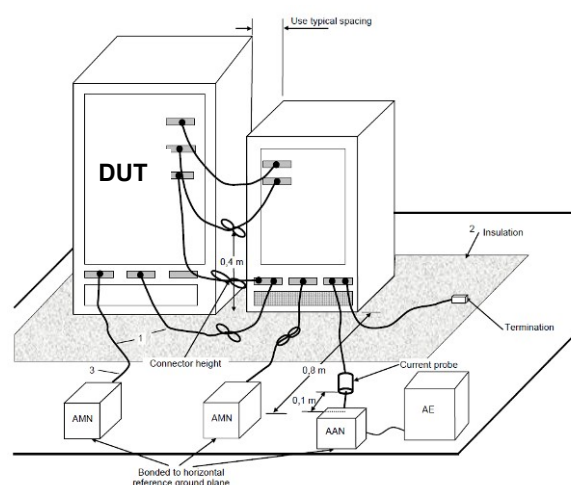
The AC power line conducted emission measurements were performed at the line voltage of 120 Vac and at the power frequency of 60 Hz.

The initial step in collecting conducted data was a peak scan measurement over the frequency range of interest. The significant peaks were marked and these peaks were re-measured using a quasi peak and average detectors.

This procedure was implemented by using EMI test receiver and control software (see used equipment section).



Test setup for "Table-top" DUT.



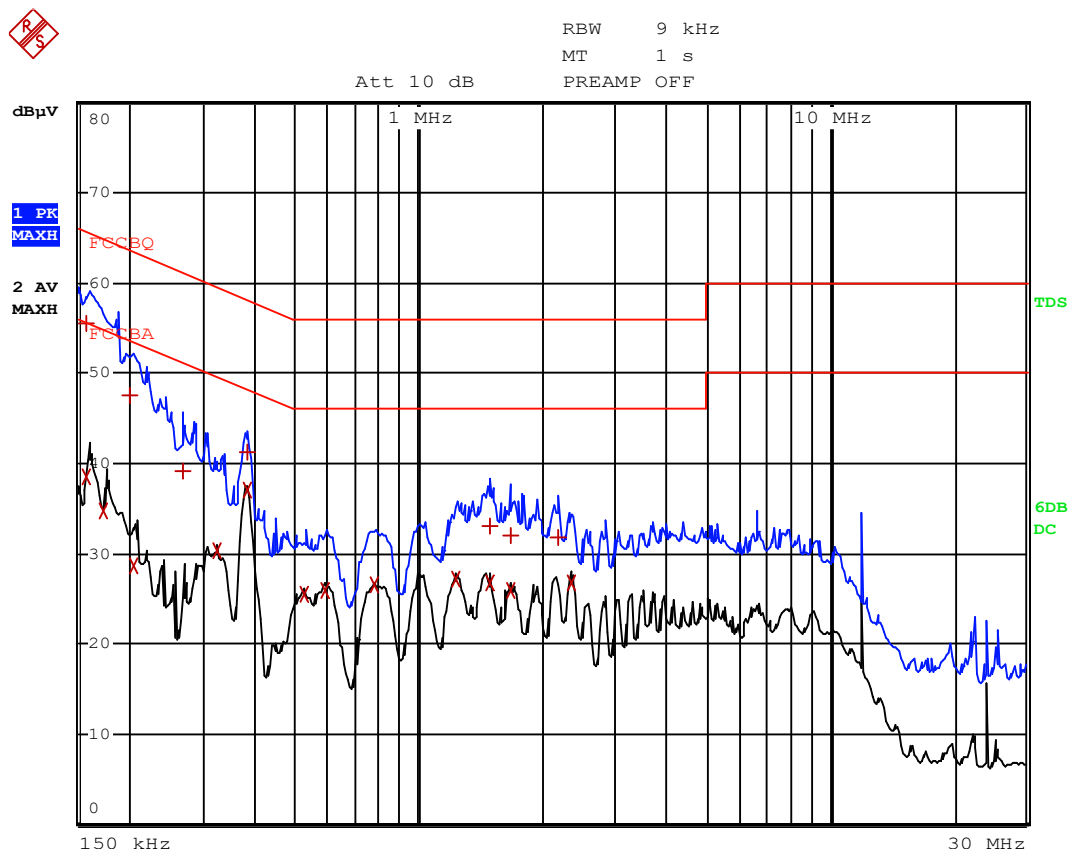
Test setup for "Floor-standing" DUT.

Measurement data

Port under test		Terminal							
<input checked="" type="checkbox"/>	AC mains input power	<input checked="" type="checkbox"/>	N	<input checked="" type="checkbox"/>	L1	<input type="checkbox"/>	L2	<input type="checkbox"/>	L3
<input type="checkbox"/>	DC input power	<input type="checkbox"/>	Positive (+)		<input type="checkbox"/>	Negative (-)			
Voltage – Mains [V]		120							
Frequency – Mains [Hz]		60							
Test method applied	<input checked="" type="checkbox"/>	Artificial mains network							
	<input type="checkbox"/>	Voltage probe							
Test setup	<input checked="" type="checkbox"/>	Table top	<input type="checkbox"/>	Artificial hand applied					
	<input type="checkbox"/>	Floor standing	<input type="checkbox"/>	Other:					
	Refer to the Annex 2 for test setup photo(s).								
Operating mode(s) used		Mode 1-3							
Remark		---							

Model	H611-90L1T9B(electronic)
Port	AC mains
Operation Mode (worst case)	Mode 1
Test Voltage	120 Vac

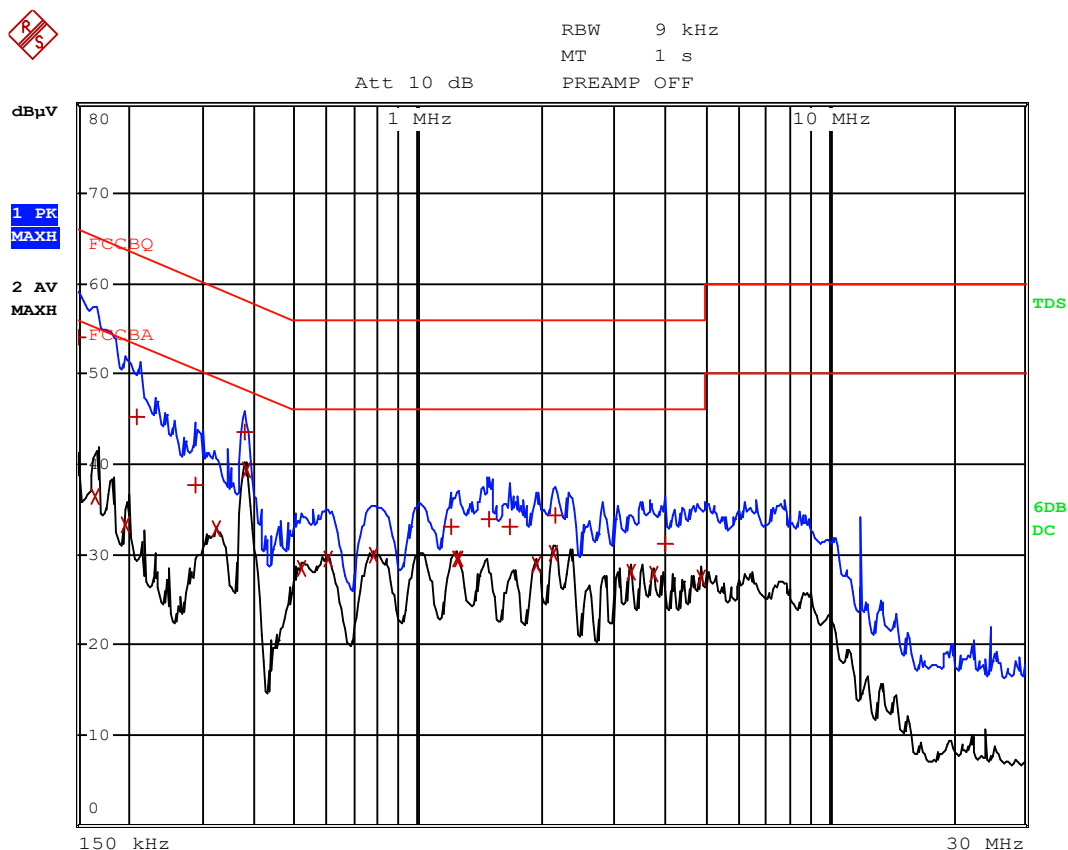
Live



EDIT PEAK LIST (Final Measurement Results)				
Trace1:	FCCBQ			
Trace2:	FCCBA			
Trace3:	---			
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB	
1 Quasi Peak	158 kHz	55.48	-10.08	
2 Average	382 kHz	37.11	-11.11	
1 Quasi Peak	202 kHz	47.59	-15.93	
1 Quasi Peak	382 kHz	41.30	-16.93	
2 Average	158 kHz	38.63	-16.93	
2 Average	1.238 MHz	27.09	-18.90	
2 Average	1.486 MHz	26.86	-19.13	
2 Average	2.354 MHz	26.78	-19.21	
2 Average	322 kHz	30.29	-19.35	
2 Average	782 kHz	26.59	-19.40	

No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

Neutral

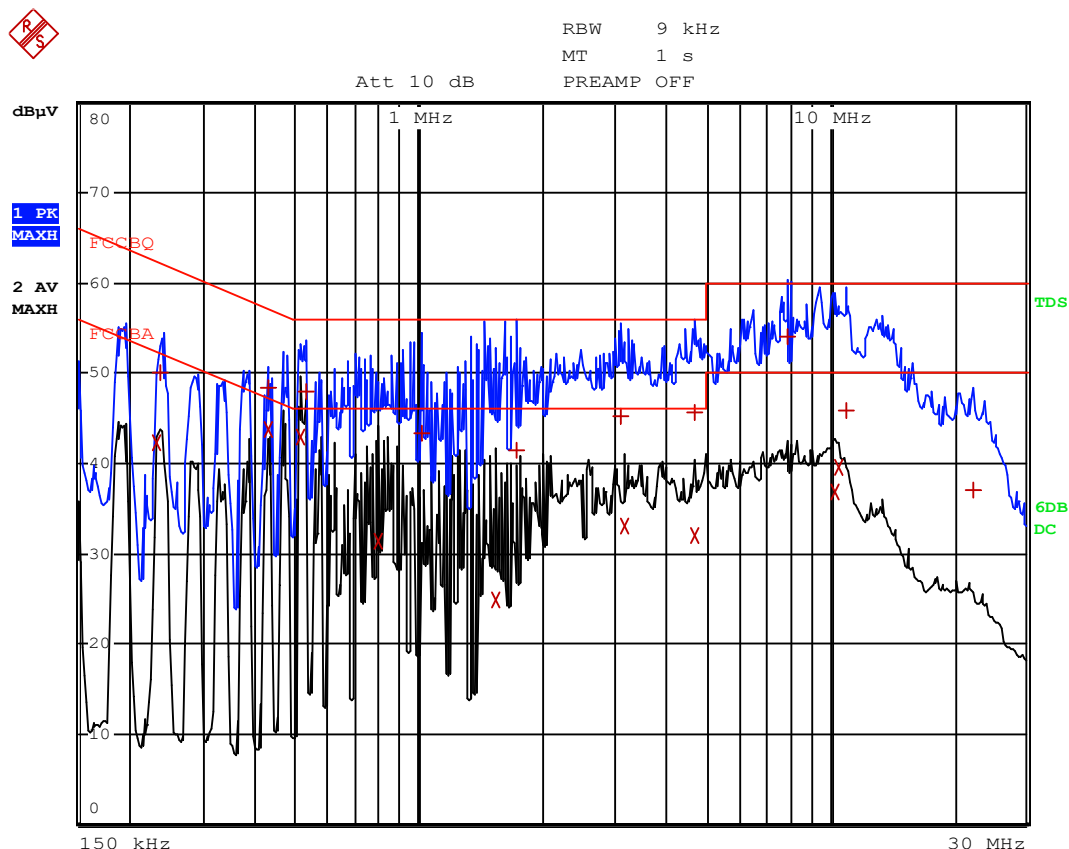


EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2 Average	382 kHz	39.40	-8.83
1 Quasi Peak	150 kHz	54.10	-11.90
1 Quasi Peak	378 kHz	43.47	-14.84
2 Average	2.142 MHz	30.11	-15.88
2 Average	782 kHz	29.94	-16.05
2 Average	1.242 MHz	29.55	-16.45
2 Average	602 kHz	29.51	-16.48
2 Average	1.254 MHz	29.45	-16.54
2 Average	322 kHz	32.77	-16.87
2 Average	1.95 MHz	28.90	-17.09
2 Average	518 kHz	28.39	-17.60

No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

Model	H611-90L1P1B(electronic)
Port	AC mains
Operation Mode (worst case)	Mode 1
Test Voltage	120 Vac

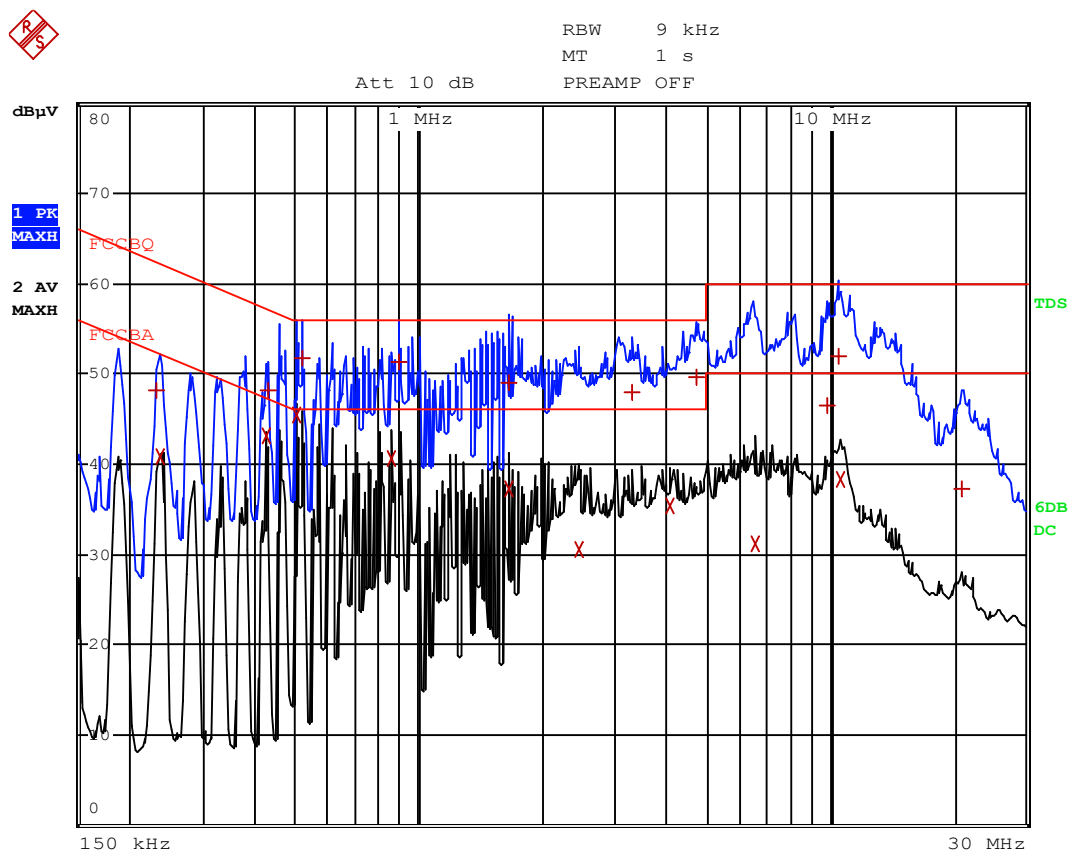
Live



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2 Average	514 kHz	42.94	-3.06
2 Average	430 kHz	43.68	-3.56
1 Quasi Peak	7.974 MHz	54.12	-5.87
1 Quasi Peak	530 kHz	48.01	-7.98
1 Quasi Peak	430 kHz	48.48	-8.76
2 Average	234 kHz	42.32	-9.98
1 Quasi Peak	4.686 MHz	45.71	-10.28
2 Average	10.546 MHz	39.47	-10.52
1 Quasi Peak	3.11 MHz	45.25	-10.74
1 Quasi Peak	238 kHz	50.17	-11.99
1 Quasi Peak	1.022 MHz	43.41	-12.58

No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

Neutral



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2 Average	506 kHz	45.41	-0.58
2 Average	426 kHz	43.04	-4.28
1 Quasi Peak	518 kHz	51.68	-4.31
1 Quasi Peak	898 kHz	51.24	-4.75
2 Average	854 kHz	40.56	-5.43
1 Quasi Peak	4.754 MHz	49.65	-6.34
1 Quasi Peak	1.654 MHz	48.99	-7.00
1 Quasi Peak	10.454 MHz	51.90	-8.09
1 Quasi Peak	3.31 MHz	47.88	-8.11
2 Average	1.654 MHz	37.28	-8.71
1 Quasi Peak	430 kHz	48.09	-9.16

No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

4.2 Radiated emissions	VERDICT: PASS
-------------------------------	----------------------

Standard	FCC Rules & Regulations 47 CFR Chapter I - Part 15 Subpart B Clause 15.109
Basic standard(s)	ANSI C63.4
Test method	Antenna method according to ANSI C63.4 standard.

Field strength limits

47 CFR Chapter I - Part 15 Subpart B Clause 15.109(a) / Class B				
Frequency [MHz]	Limit: QP@3m.[dB(μV/m) ¹⁾]	Limit: QP@3m.[(μV/m) ¹⁾]	IF BW	Detector
30 - 88	40,0	100	120 KHz	QP
88 - 216	43,5	150	120 KHz	QP
216 - 960	46,0	200	120 KHz	QP
960 - 1000	54,0	500	120 KHz	QP
Frequency [GHz]	PK@3m.[dB(μV/m) ²⁾]	AV@3m.[dB(μV/m)]	IF BW	Detector
above 1 GHz	74	54 (500 μV/m)	1 MHz	PK, AV
¹⁾ At the transition frequency, the lower limit applies. ²⁾ Above 1 GHz, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test (section 15.35.b).				

Measurement procedure

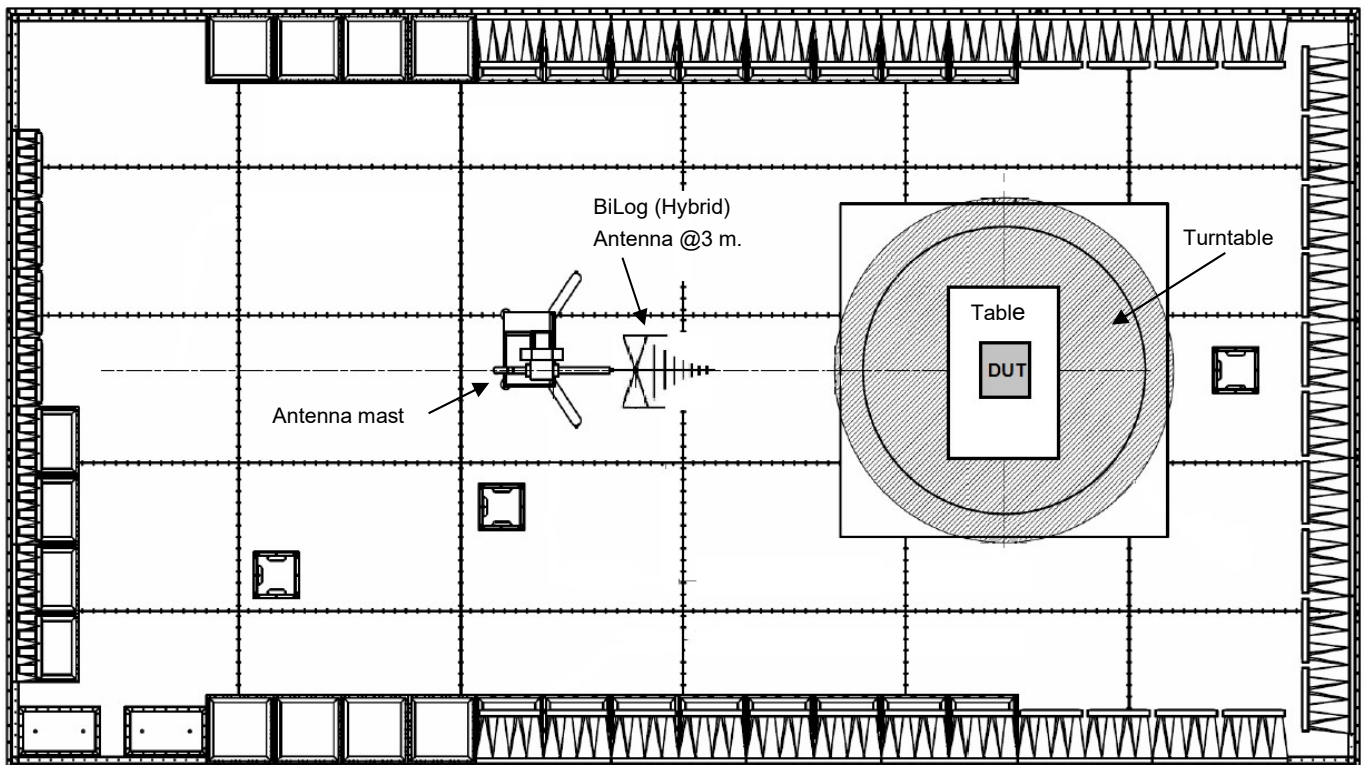
The field strength level of radiated emissions from Class B digital device has been determined according to the section 15.109 (a) of 47 CFR.

Measurements have been performed in a semi anechoic chamber at 3 meter measurement distance using the test setup described at chapter 2. The resulting field strength was calculated using the correction factors for cable loss and antenna.

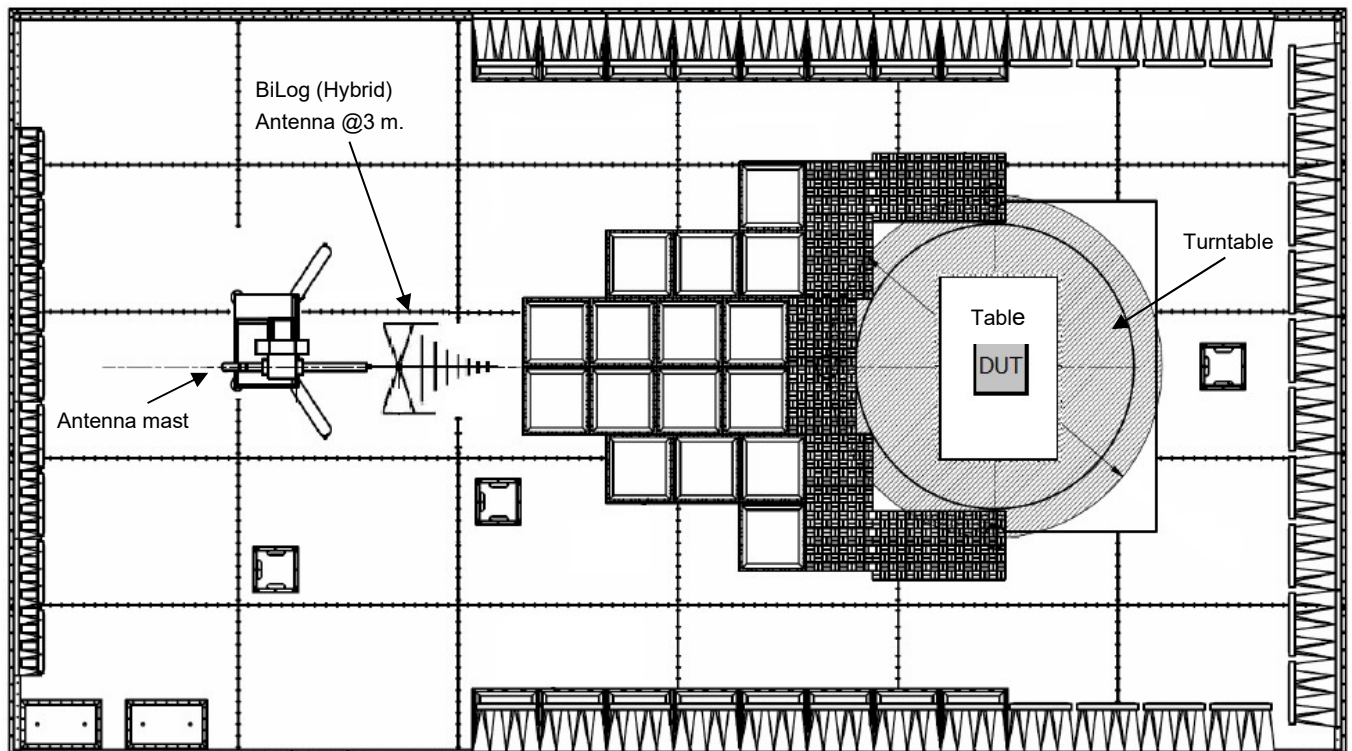
The measurements have been conducted in accordance with the methodology as described in ANSI C63.4:2014, as required by sections 15.31 and 15.33 of 47CFR.

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
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower.

Test setup for “Radiated emission” measurements at frequency range 30-1000 MHz is shown below.



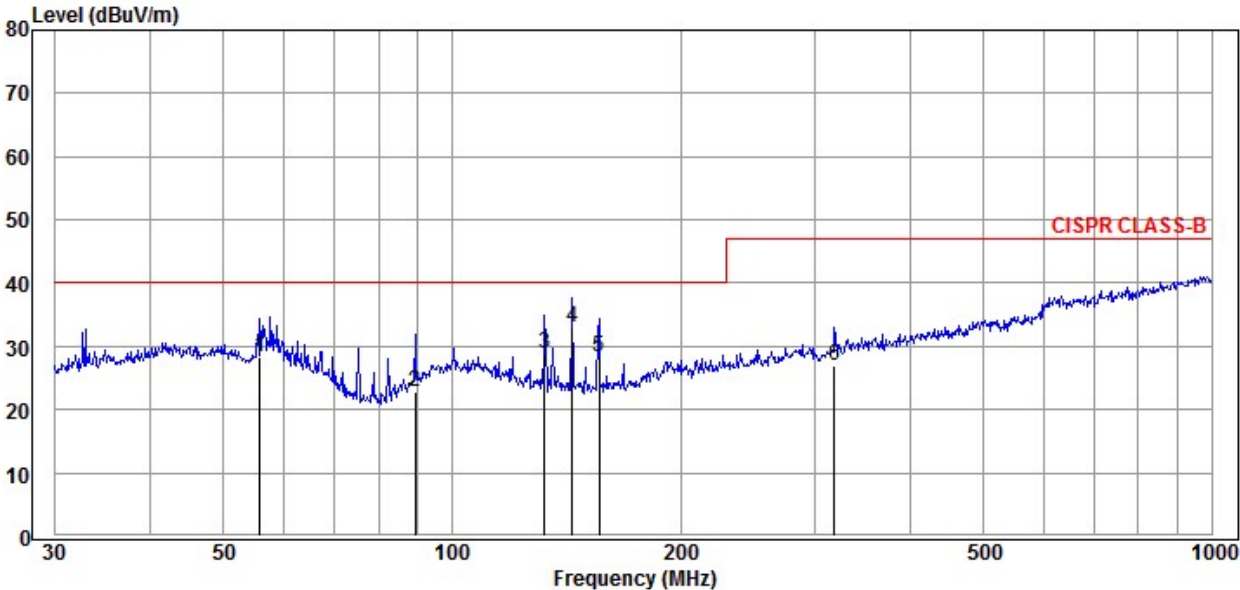
Test setup for “Radiated emission” measurements above 1 GHz is shown below.



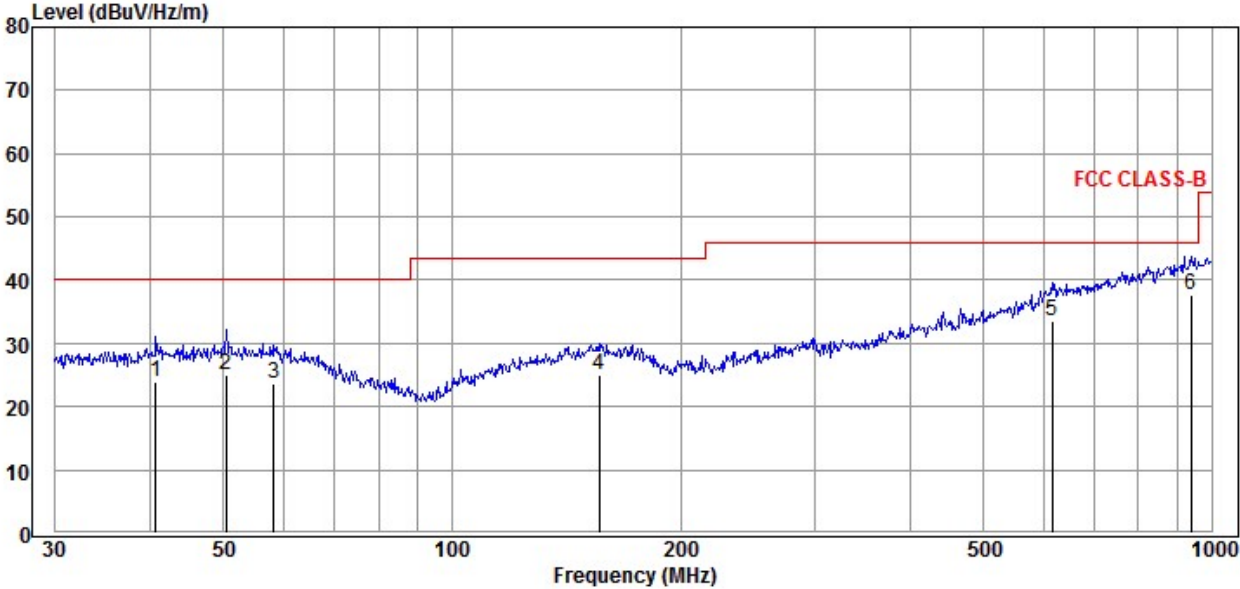
Measurement data

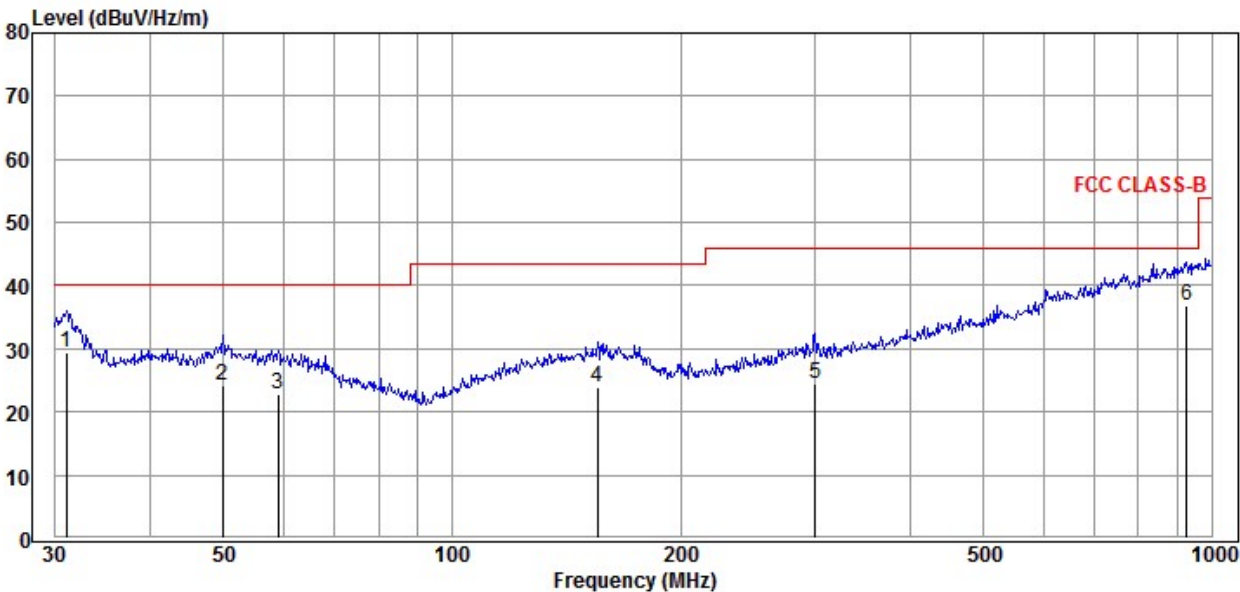
Port under test	Enclosure	
Voltage – Mains [V]	120	
Frequency – Mains [Hz]	60	
Test method applied (below 1 GHz)	<input checked="" type="checkbox"/>	OATS or SAC with measurement distance [m]: 3 m.
	<input type="checkbox"/>	OATS or SAC with measurement distance [m]: 5 m.
	<input type="checkbox"/>	OATS or SAC with measurement distance [m]: 10 m.
Test method applied (above 1 GHz)	<input type="checkbox"/>	Absorber-lined OATS or SAC with measurement distance [m]: 3 m.
	<input type="checkbox"/>	Absorber-lined OATS or SAC with measurement distance [m]: 1 m.
Test setup	<input checked="" type="checkbox"/>	Equipment on a table of 80 cm height
	<input type="checkbox"/>	Equipment on the floor (insulated from ground plane)
	<input type="checkbox"/>	Other:
	Refer to the Annex 2 for test setup photo(s).	
Operating mode(s) used	Mode 1-3	
Remark	---	

See next page.

Measurement data of H611-90L1T9B(electronic)	<input checked="" type="checkbox"/>	Horizontal	<input type="checkbox"/>	Vertical																																										
Operating mode / voltage / frequency used during the test		Mode 1(worst case)																																												
<div style="text-align: center;">  </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th>Freq (MHz)</th> <th>Reading (dBuV)</th> <th>C.F (dB)</th> <th>Result (dBuV/m)</th> <th>Limit (dBuV/m)</th> <th>Margin=limit-result (dB)</th> </tr> </thead> <tbody> <tr> <td>55.81</td> <td>13.08</td> <td>15.35</td> <td>28.43</td> <td>40.00</td> <td>11.57</td> </tr> <tr> <td>89.28</td> <td>11.93</td> <td>10.93</td> <td>22.86</td> <td>40.00</td> <td>17.14</td> </tr> <tr> <td>132.22</td> <td>18.78</td> <td>10.08</td> <td>28.86</td> <td>40.00</td> <td>11.14</td> </tr> <tr> <td>143.83</td> <td>23.59</td> <td>9.34</td> <td>32.93</td> <td>40.00</td> <td>7.07</td> </tr> <tr> <td>155.91</td> <td>18.77</td> <td>9.57</td> <td>28.34</td> <td>40.00</td> <td>11.66</td> </tr> <tr> <td>318.82</td> <td>11.52</td> <td>15.40</td> <td>26.92</td> <td>47.00</td> <td>20.08</td> </tr> </tbody> </table> <p style="margin-top: 10px;">Remarks: C.F (Correction Factor) = Antenna factor + Cable loss</p> <p style="margin-top: 10px;">No other significant emissions were recorded employing the QP detector at the frequency range of interest.</p>					Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)	55.81	13.08	15.35	28.43	40.00	11.57	89.28	11.93	10.93	22.86	40.00	17.14	132.22	18.78	10.08	28.86	40.00	11.14	143.83	23.59	9.34	32.93	40.00	7.07	155.91	18.77	9.57	28.34	40.00	11.66	318.82	11.52	15.40	26.92	47.00	20.08
Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)																																									
55.81	13.08	15.35	28.43	40.00	11.57																																									
89.28	11.93	10.93	22.86	40.00	17.14																																									
132.22	18.78	10.08	28.86	40.00	11.14																																									
143.83	23.59	9.34	32.93	40.00	7.07																																									
155.91	18.77	9.57	28.34	40.00	11.66																																									
318.82	11.52	15.40	26.92	47.00	20.08																																									
Remark																																														

Measurement data	<input type="checkbox"/>	Horizontal	<input checked="" type="checkbox"/>	Vertical																																										
Operating mode / voltage / frequency used during the test		Mode 1 (worst case)																																												
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Freq (MHz)</th> <th>Reading (dBuV)</th> <th>C.F (dB)</th> <th>Result (dBuV/m)</th> <th>Limit (dBuV/m)</th> <th>Margin=limit-result (dB)</th> </tr> </thead> <tbody> <tr> <td>31.51</td> <td>15.61</td> <td>13.12</td> <td>28.73</td> <td>40.00</td> <td>11.27</td> </tr> <tr> <td>43.20</td> <td>12.99</td> <td>15.77</td> <td>28.76</td> <td>40.00</td> <td>11.24</td> </tr> <tr> <td>62.87</td> <td>10.90</td> <td>13.20</td> <td>24.10</td> <td>40.00</td> <td>15.90</td> </tr> <tr> <td>143.83</td> <td>25.29</td> <td>9.34</td> <td>34.63</td> <td>40.00</td> <td>5.37</td> </tr> <tr> <td>239.99</td> <td>10.10</td> <td>13.48</td> <td>23.58</td> <td>47.00</td> <td>23.42</td> </tr> <tr> <td>929.01</td> <td>11.42</td> <td>24.92</td> <td>36.34</td> <td>47.00</td> <td>10.66</td> </tr> </tbody> </table>					Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)	31.51	15.61	13.12	28.73	40.00	11.27	43.20	12.99	15.77	28.76	40.00	11.24	62.87	10.90	13.20	24.10	40.00	15.90	143.83	25.29	9.34	34.63	40.00	5.37	239.99	10.10	13.48	23.58	47.00	23.42	929.01	11.42	24.92	36.34	47.00	10.66
Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)																																									
31.51	15.61	13.12	28.73	40.00	11.27																																									
43.20	12.99	15.77	28.76	40.00	11.24																																									
62.87	10.90	13.20	24.10	40.00	15.90																																									
143.83	25.29	9.34	34.63	40.00	5.37																																									
239.99	10.10	13.48	23.58	47.00	23.42																																									
929.01	11.42	24.92	36.34	47.00	10.66																																									
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss No other significant emissions were recorded employing the QP detector at the frequency range of interest.																																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Remark</td> <td></td> </tr> </table>					Remark																																									
Remark																																														

Measurement data of H611-90L1P1B(electronic)	<input checked="" type="checkbox"/>	Horizontal	<input type="checkbox"/>	Vertical																																											
Operating mode / voltage / frequency used during the test		Mode 1(worst case)																																													
																																															
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Freq (MHz)</th> <th>Reading (dBuV)</th> <th>C.F (dB)</th> <th>Result (dBuV/m)</th> <th>Limit (dBuV/m)</th> <th>Margin=limit-result (dB)</th> </tr> </thead> <tbody> <tr> <td>40.70</td> <td>8.44</td> <td>15.50</td> <td>23.94</td> <td>40.00</td> <td>16.06</td> </tr> <tr> <td>50.41</td> <td>9.26</td> <td>15.87</td> <td>25.13</td> <td>40.00</td> <td>14.87</td> </tr> <tr> <td>58.20</td> <td>8.20</td> <td>15.44</td> <td>23.64</td> <td>40.00</td> <td>16.36</td> </tr> <tr> <td>155.91</td> <td>9.41</td> <td>15.55</td> <td>24.96</td> <td>43.50</td> <td>18.54</td> </tr> <tr> <td>616.37</td> <td>10.07</td> <td>23.53</td> <td>33.60</td> <td>46.00</td> <td>12.40</td> </tr> <tr> <td>938.83</td> <td>9.65</td> <td>28.10</td> <td>37.75</td> <td>46.00</td> <td>8.25</td> </tr> </tbody> </table>						Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)	40.70	8.44	15.50	23.94	40.00	16.06	50.41	9.26	15.87	25.13	40.00	14.87	58.20	8.20	15.44	23.64	40.00	16.36	155.91	9.41	15.55	24.96	43.50	18.54	616.37	10.07	23.53	33.60	46.00	12.40	938.83	9.65	28.10	37.75	46.00	8.25
Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)																																										
40.70	8.44	15.50	23.94	40.00	16.06																																										
50.41	9.26	15.87	25.13	40.00	14.87																																										
58.20	8.20	15.44	23.64	40.00	16.36																																										
155.91	9.41	15.55	24.96	43.50	18.54																																										
616.37	10.07	23.53	33.60	46.00	12.40																																										
938.83	9.65	28.10	37.75	46.00	8.25																																										
Remarks: C.F (Correction Factor) = Antenna factor + Cable loss No other significant emissions were recorded employing the QP detector at the frequency range of interest.																																															
Remark																																															

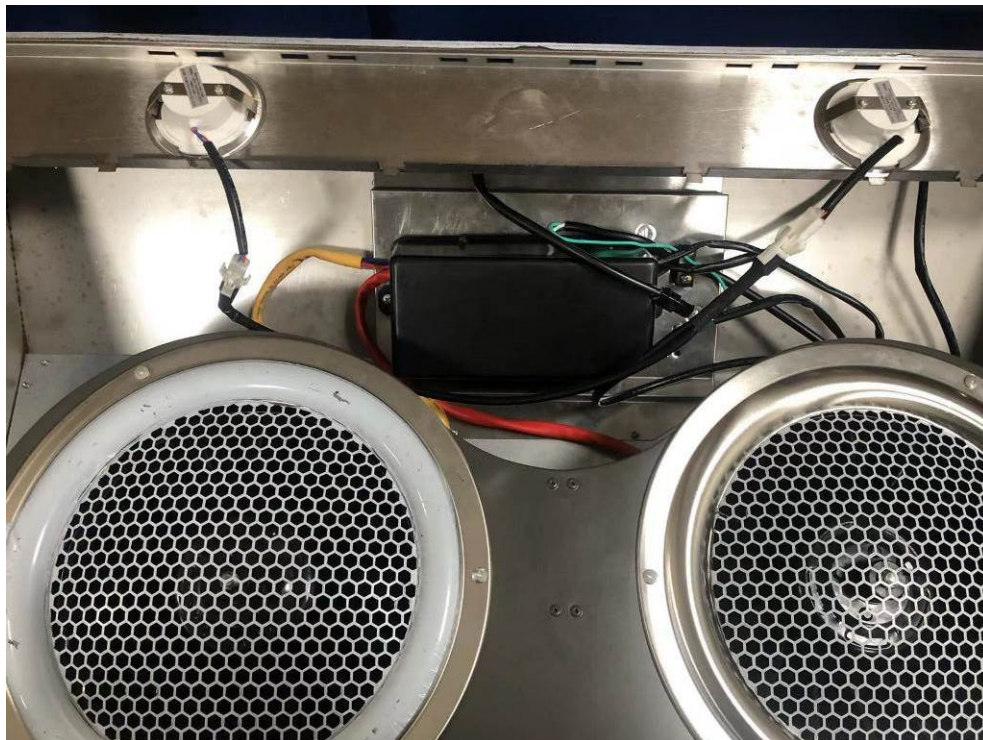
Measurement data	<input type="checkbox"/>	Horizontal	<input checked="" type="checkbox"/>	Vertical																																										
Operating mode / voltage / frequency used during the test		Mode 1 (worst case)																																												
 <p>The graph displays the electromagnetic emission level in dBuV/Hz/m against frequency in MHz. A red line represents the FCC CLASS-B limit, which is 40 dBuV/Hz/m from 30 MHz to 100 MHz, 43.5 dBuV/Hz/m from 100 MHz to 200 MHz, and 46 dBuV/Hz/m from 200 MHz to 1000 MHz. A blue line represents the test results, which are consistently below the limit. Six specific frequency points are marked with vertical lines and numbered 1 through 6, corresponding to the data in the table below.</p>																																														
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Freq (MHz)</th> <th>Reading (dBuV)</th> <th>C.F (dB)</th> <th>Result (dBuV/m)</th> <th>Limit (dBuV/m)</th> <th>Margin=limit-result (dB)</th> </tr> </thead> <tbody> <tr> <td>31.07</td> <td>15.11</td> <td>14.29</td> <td>29.40</td> <td>40.00</td> <td>10.60</td> </tr> <tr> <td>49.88</td> <td>8.19</td> <td>15.92</td> <td>24.11</td> <td>40.00</td> <td>15.89</td> </tr> <tr> <td>59.03</td> <td>7.48</td> <td>15.21</td> <td>22.69</td> <td>40.00</td> <td>17.31</td> </tr> <tr> <td>155.36</td> <td>8.56</td> <td>15.49</td> <td>24.05</td> <td>43.50</td> <td>19.45</td> </tr> <tr> <td>300.37</td> <td>8.11</td> <td>16.37</td> <td>24.48</td> <td>46.00</td> <td>21.52</td> </tr> <tr> <td>925.76</td> <td>8.90</td> <td>27.84</td> <td>36.74</td> <td>46.00</td> <td>9.26</td> </tr> </tbody> </table>					Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)	31.07	15.11	14.29	29.40	40.00	10.60	49.88	8.19	15.92	24.11	40.00	15.89	59.03	7.48	15.21	22.69	40.00	17.31	155.36	8.56	15.49	24.05	43.50	19.45	300.37	8.11	16.37	24.48	46.00	21.52	925.76	8.90	27.84	36.74	46.00	9.26
Freq (MHz)	Reading (dBuV)	C.F (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin=limit-result (dB)																																									
31.07	15.11	14.29	29.40	40.00	10.60																																									
49.88	8.19	15.92	24.11	40.00	15.89																																									
59.03	7.48	15.21	22.69	40.00	17.31																																									
155.36	8.56	15.49	24.05	43.50	19.45																																									
300.37	8.11	16.37	24.48	46.00	21.52																																									
925.76	8.90	27.84	36.74	46.00	9.26																																									
<p>Remarks: C.F (Correction Factor) = Antenna factor + Cable loss</p> <p>No other significant emissions were recorded employing the QP detector at the frequency range of interest.</p>																																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Remark</td> <td></td> </tr> </table>					Remark																																									
Remark																																														

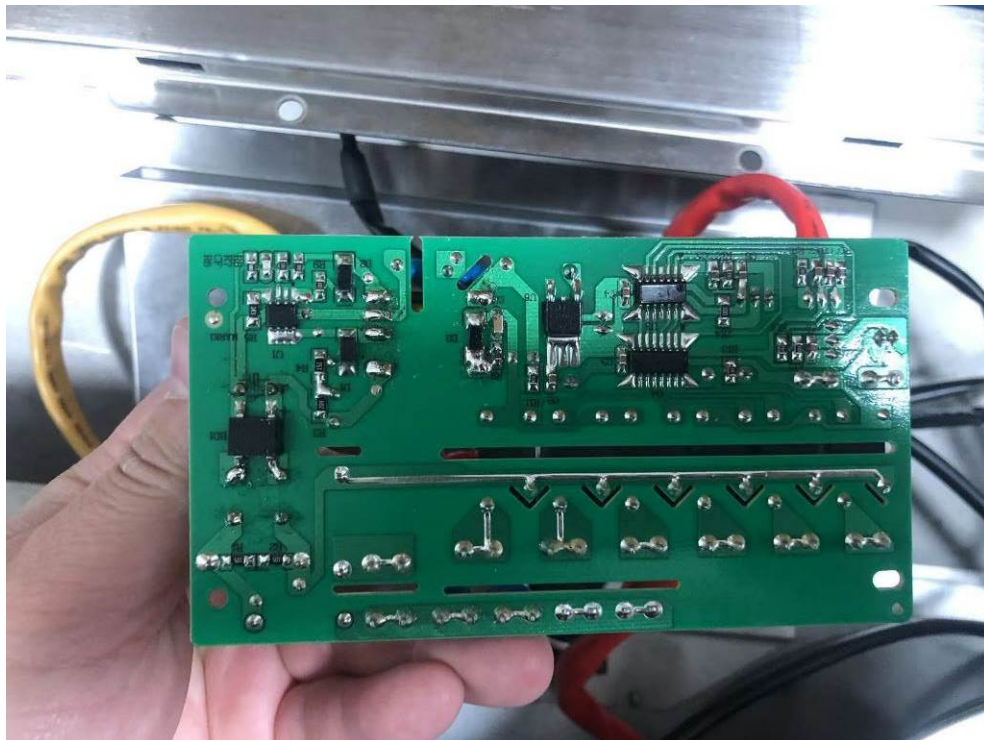
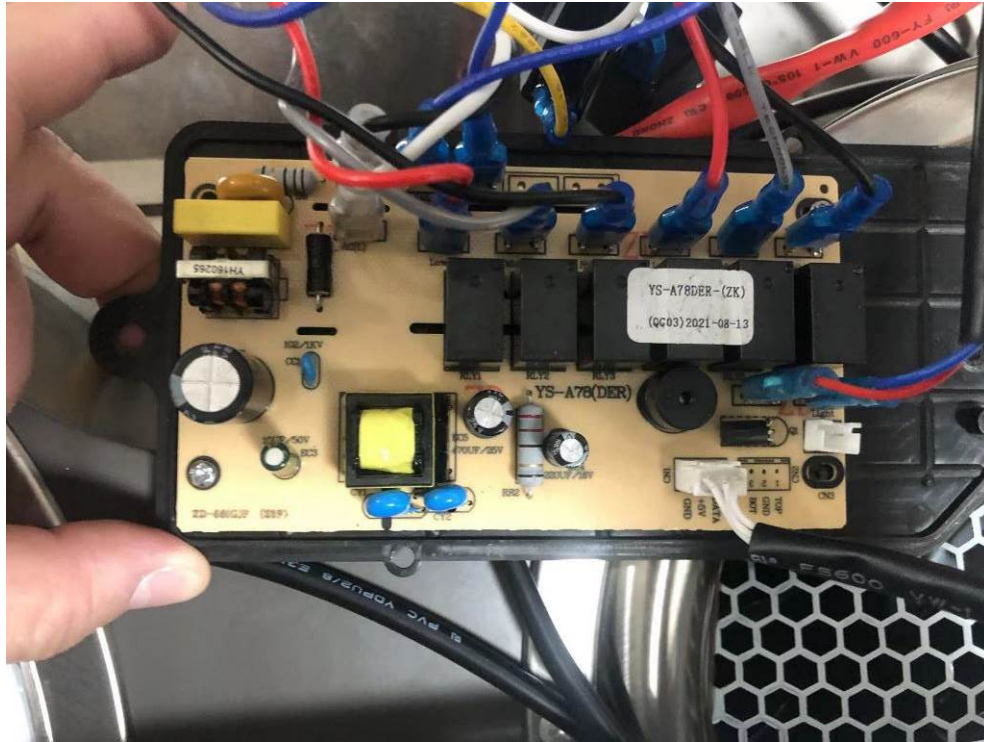
5 IDENTIFICATION OF THE EQUIPMENT UNDER TEST

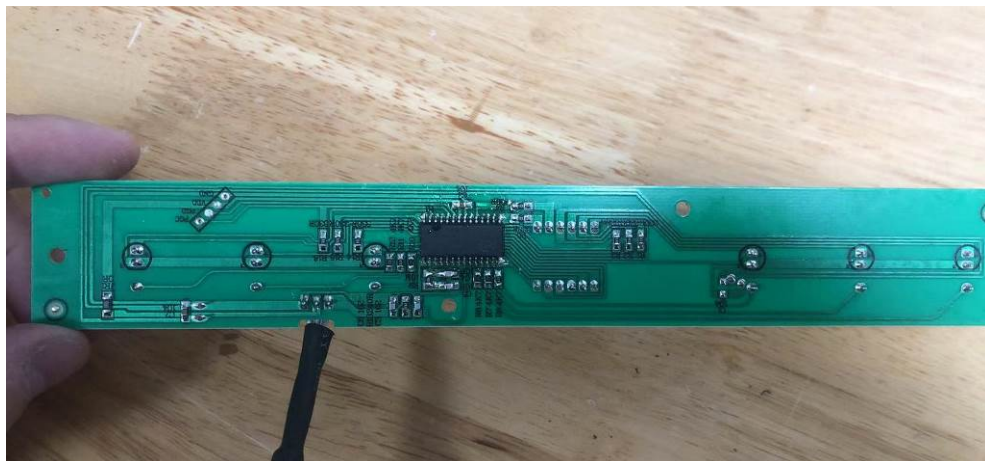
The photographs show the tested device.



model H611-90L1T9B(ELECTRONIC)







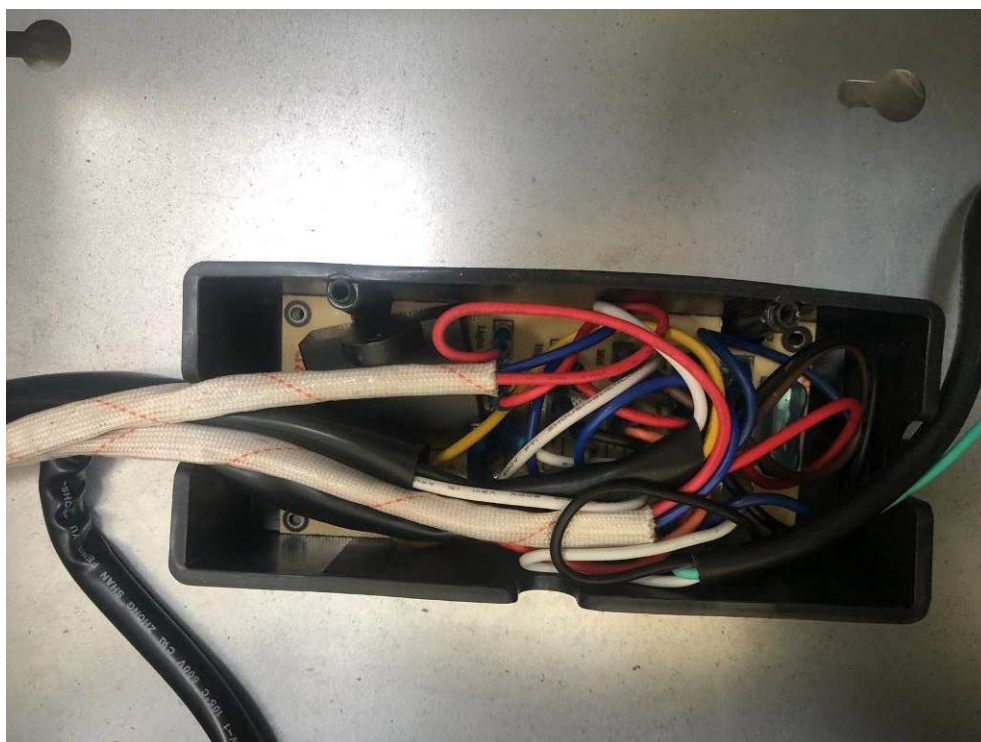
Control PCB module BF7412

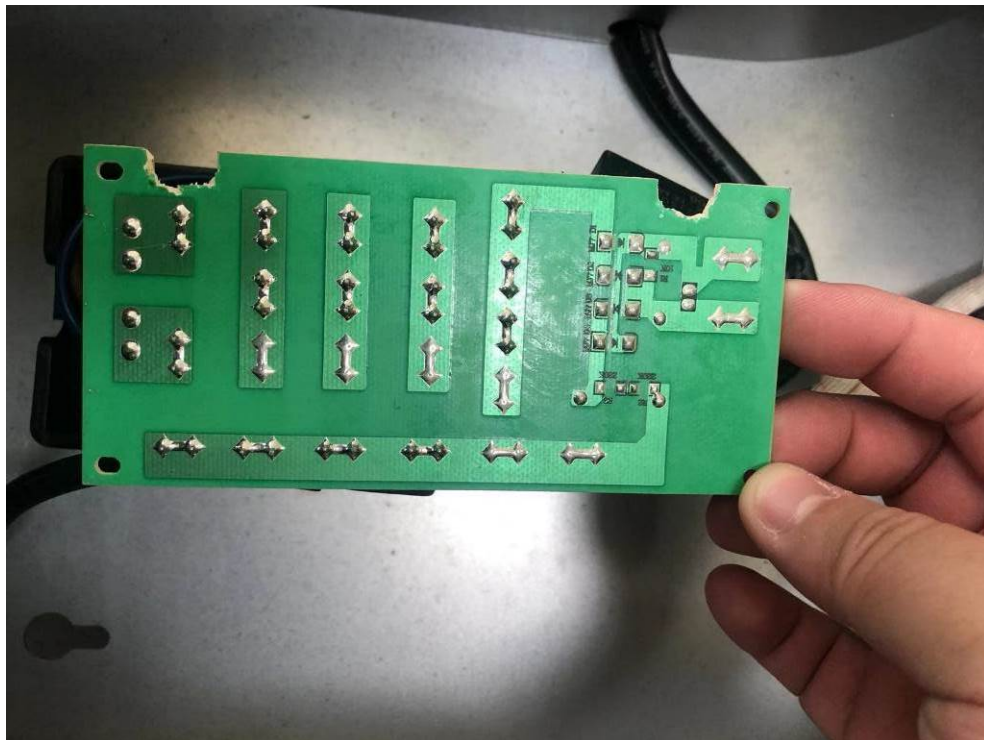
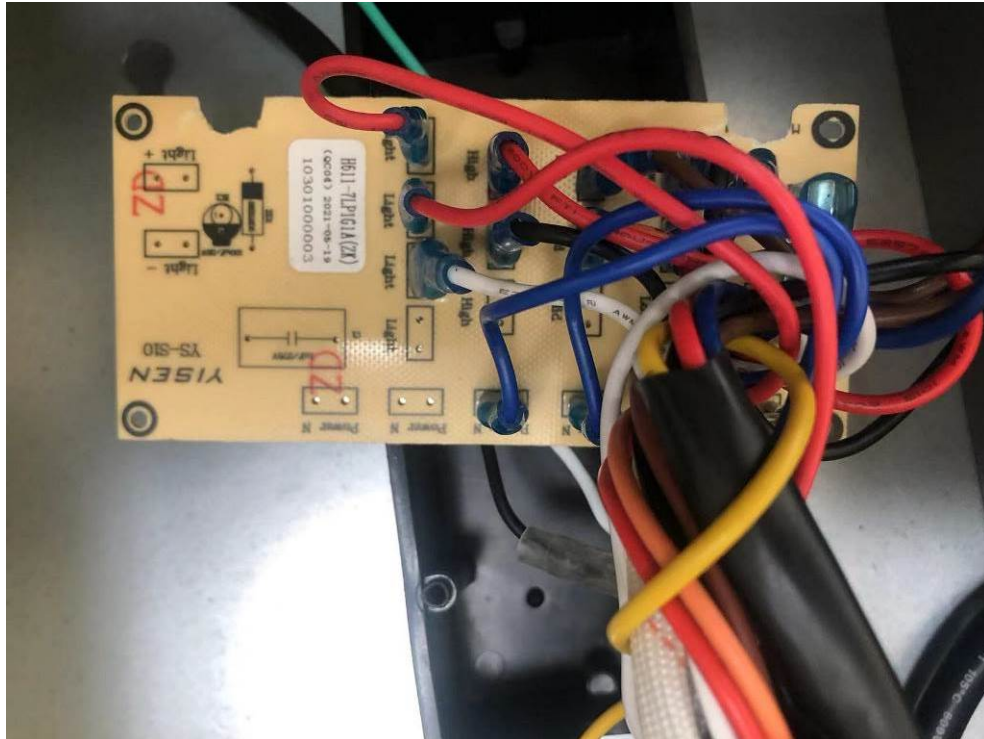


LED



model H611-90L1P1B(ELECTRONIC)







Series H608



Series H609



Series H611



Series H612

6 ANNEX 1 - MEASUREMENT UNCERTAINTIES

The table(s) below show(s) measurement uncertainties of the EMC test set-ups. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

Measurement	Uncertainty
Radiated EM field emission (30 MHz– 300 MHz)	4,72 dB
Radiated EM field emission (300 MHz– 1000 MHz)	4,88 dB

7 ANNEX 2 – USED EQUIPMENT

Location: DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch

Item	Instrumentation	Manufacturer	Model No.	Serial No.	Dekra No.	Cal. Interval
1	Shielding Room	Changzhou Feite	/	/	G/L861	2022/07/05
2	EMI receiver	R&S	ESCI	101205	G/L857	2022/10/12
3	Antenna (30MHz-3GHz)	SCHWARZBE CK	VULB9163	506	G/L864	2022/10/30

8 ANNEX 2 - TEST PHOTOS

Conducted emissions



Radiated emissions (30 - 1000 MHz)



-END-