
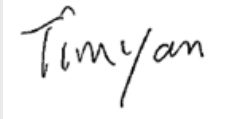


Test report No:

4394311.52

## TEST REPORT

### FCC Rules&Requations 47 CFR Chapter I - Part 18

Identification of item tested	Wireless chargers
Trademark	-
Model and /or type reference	Edge/ED, Cirque/CQ, EcoDesk/ECD, Ring/RG, Savanna/SV
Features	Input: 5 Vdc, 1.5A or 9Vdc, 1.5A Output: 10W (MAX)
Derived model(s)	N/A
Applicant's name / address	Flashbay Electronics. Building2 ,Jixun Industrial Park ,Xinjiao ,Dong'ao Village ,Shatian Town ,Huiyang District ,Huizhou City , Guangdong Province,P.R.China
Test method requested, standard	FCC Rules and Regulations 47 CFR Chapter I - Part 18; FCC MP-5:1986
Verdict Summary	IN COMPLIANCE
Tested by (name & signature)	Jazz Liang 
Approved by (name & signature)	Tim Yan 
Date of issue	2022-10-09
Report template No	TRF_EMG 2017-06-others

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## GENERAL CONDITIONS

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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

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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

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Report nr.	Date	Description
4394311.52	2022-10-09	First release.

## REMARKS AND COMMENTS

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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 .....	Wireless chargers
Model / Type number .....	Edge/ED, Cirque/CQ, EcoDesk/ECD, Ring/RG, Savanna/SV
Serial number .....	/
Trademark .....	/
Ratings.....	Input: 5 Vdc, 1.5A or 9Vdc, 1.5A Output: 10W (MAX)
Manufacturer.....	Same as Applicant
Address .....	Same as Applicant

Rated power supply .....	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	<input type="checkbox"/>	AC:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	DC: 5V or 9V (for charging)					
Mounting position.....	<input type="checkbox"/>	Battery:					
	<input checked="" type="checkbox"/>	Table top equipment					
	<input 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 Wireless chargers which intended for residential use, the product contains electronic control circuitry.
According to customer description, models Edge/ED, Cirque/CQ, EcoDesk/ECD, Ring/RG, Savanna/SV are used the same PCB except for the external structure are different.
Hence, model Edge/ED 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"/>
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Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

### 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.

### 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	2022-08-30
Date (s) of performance of tests	2022-08-30 to 2022-09-21

## 1.4 Classification

The following procedure has been selected to confirm the compliance of the equipment/device under test:

Procedure		Description
<input checked="" type="checkbox"/>	Supplier's Declaration of Conformity (SDoC)	Sections 2.906 through 2.1077 describe the procedure for a Supplier's Declaration of Conformity and the procedures to be followed in obtaining certification and the conditions attendant to such a grant.
<input type="checkbox"/>	Certification	Certification is an equipment authorization approved by the Commission or issued by a Telecommunication Certification Body (TCB) and authorized under the authority of the Commission, based on representations and test data submitted by the applicant.

## 1.5 User information for Part 18 devices

According to section 18.213, Information on the following matters shall be provided to the user in the instruction manual or on the packaging if an instruction manual is not provided for any type of ISM equipment:

- The interference potential of the device or system
- Maintenance of the system
- Simple measures that can be taken by the user to correct interference
- Manufacturers of RF lighting devices must provide an advisory statement, either on the product packaging or with other user documentation, similar to the following: This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Variations of this language are permitted provided all the points of the statement are addressed and may be presented in any legible font or text style.



## 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	Charing mode (input 5Vdc)	<input checked="" type="checkbox"/>
2	Charing mode (input 9Vdc)	<input checked="" type="checkbox"/>
3	Idel mode	<input checked="" type="checkbox"/>
Supplemental information:		

### 2.2 Port(s) of the EUT

Port name and description	Connected to / Termination	Cable		
		Length used during test [m]	Attached during test	Shielded
DC input	DC power supply port	0.6	<input type="checkbox"/>	<input type="checkbox"/>
Enclosure	-	-	<input type="checkbox"/>	<input type="checkbox"/>
Supplemental information:				

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

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

Auxiliary equipment / unit / software	Type / Version	Manufacturer	Supplied by
Adaptor	---	---	Client
Wireless charging tester	---	---	Dekra
Supplemental information:			

### 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 18 - Industrial, Scientific and Medical Equipment	
<input checked="" type="checkbox"/>	Section 18.307 Conducted emissions
<input checked="" type="checkbox"/>	Section 18.305 Radiated emissions

<input type="checkbox"/>	The DUT is battery operated and cannot be operated during charging. No conducted emission testing is required.
<input type="checkbox"/>	The DUT is a non-consumer ISM device. No conducted emission limits apply.

#### 3.1 Overview of results

FCC Rules and Regulations 47 CFR Chapter I - Part 18 - Industrial, Scientific and Medical Equipment				
Section	Requirement – Test case	Basic standard	Verdict	Remark
18.307	Conducted emissions	FCC MP-5:1986	PASS	---
18.305	Radiated emissions	FCC MP-5:1986	PASS	---
<b>Supplementary information: N/A</b>				

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

<b>4.1</b>	<b>Conducted emissions</b>	<b>VERDICT: PASS</b>
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Standard	FCC Rules & Regulations 47 CFR Chapter I - Part 18 Clause 18.307
Basic standard	FCC MP-5

### Measurement procedure

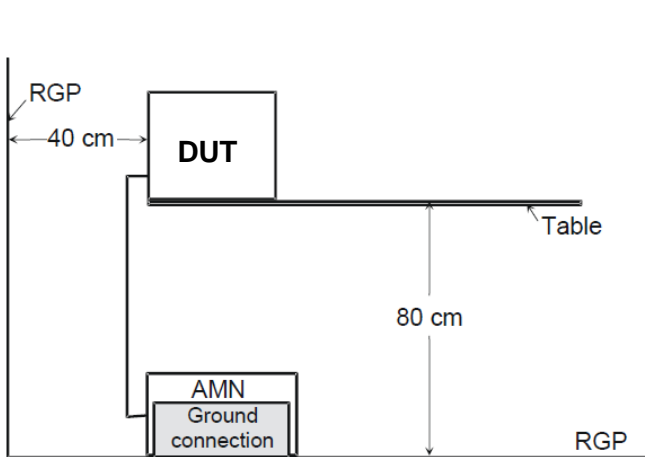
In accordance with section 18.307 the conducted radio frequency disturbance voltages between each of the power lines (live and neutral) and the ground terminal have been determined over the frequency range from 9 kHz / 150 kHz to 30 MHz.

The test set-up and method of measurements was in accordance with the requirements of FCC Measurement Procedure MP-5 (Methods of Measurements of Radio Noise Emissions from ISM equipment). The DUT has been configured as described at chapter 2.

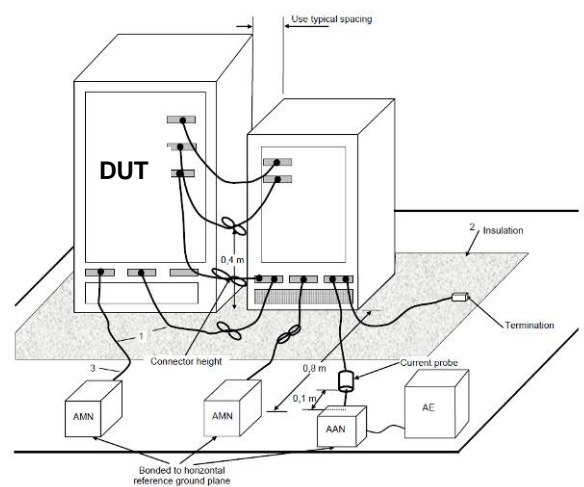
The AC power line conducted emission measurements were performed at the line voltage of 120 Vac and at the power frequency of 60 Hz.

The initial step in collecting conducted data was a peak scan measurement over the frequency range of interest. Significant peaks were marked, and these peaks were re-measured using a quasi peak and average detector. This procedure was implemented by using EMI test receiver and control software (see used equipment section). The test receiver used also meets the requirement as mentioned in section 2 of MP-5 document.

According to section 2.2.2 of MP-5 the test receiver employs an AV detector function with a bandwidth of 9 kHz for measurements from 150 kHz to 30 MHz and 200 Hz for measurements below 150 kHz. Unless otherwise specified for a given device.



Test setup for "Table-top" DUT.



Test setup for "Floor-standing" DUT.

## Limits

<input type="checkbox"/> Induction cooking ranges and ultrasonic equipment				
Frequency range [MHz]	Limit: QP [dB(μV) <sup>1) 2)</sup>	Limit: AV [dB(μV) <sup>1) 2)</sup>	IF BW	Detector(s)
0,009 - 0,050	110	---	200 Hz	QP
0,050 - 0,15	90 – 80 <sup>3)</sup>	---	200 Hz	QP
0,15 - 0,50	66 – 56 <sup>3)</sup>	56 - 46 <sup>3)</sup>	9 KHz	QP, AV
0,50 - 5,0	56	46	9 KHz	QP, AV
5,0 - 30	60	50	9 KHz	QP, AV

<sup>1)</sup> At the transition frequency, the lower limit applies.  
<sup>2)</sup> The limits apply only outside of the frequency bands specified in section 18.301.  
<sup>3)</sup> The limit decreases linearly with the logarithm of the frequency.

<input checked="" type="checkbox"/> All other part 18 Consumer devices				
Frequency range [MHz]	Limit: QP [dB(μV) <sup>1) 2)</sup>	Limit: AV [dB(μV) <sup>1) 2)</sup>	IF BW	Detector(s)
0,15 - 0,50	66 – 56 <sup>3)</sup>	56 - 46 <sup>3)</sup>	9 KHz	QP, AV
0,50 - 5,0	56	46	9 KHz	QP, AV
5,0 - 30	60	50	9 KHz	QP, AV

<sup>1)</sup> At the transition frequency, the lower limit applies.  
<sup>2)</sup> The limits apply only outside of the frequency bands specified in section 18.301.  
<sup>3)</sup> The limit decreases linearly with the logarithm of the frequency.

<input type="checkbox"/> Consumer RF lighting devices				
Frequency range [MHz]	Limit: QP [dB(μV) <sup>1) 2)</sup>	IF BW	Detector(s)	
0,45 - 2,51	48	9 KHz	QP	
2,51 - 3,0	69,5	9 KHz	QP	
3,0 - 30	48	9 KHz	QP	

<sup>1)</sup> At the transition frequency, the lower limit applies.  
<sup>2)</sup> The limits apply only outside of the frequency bands specified in section 18.301.

<input type="checkbox"/> Non-consumer RF lighting devices				
Frequency range [MHz]	Limit: QP [dB(μV) <sup>1) 2)</sup>	IF BW	Detector(s)	
0,45 - 1,6	60	9 KHz	QP	
1,6 - 30	69,5	9 KHz	QP	

<sup>1)</sup> At the transition frequency, the lower limit applies.  
<sup>2)</sup> The limits apply only outside of the frequency bands specified in section 18.301.

### Measurement data

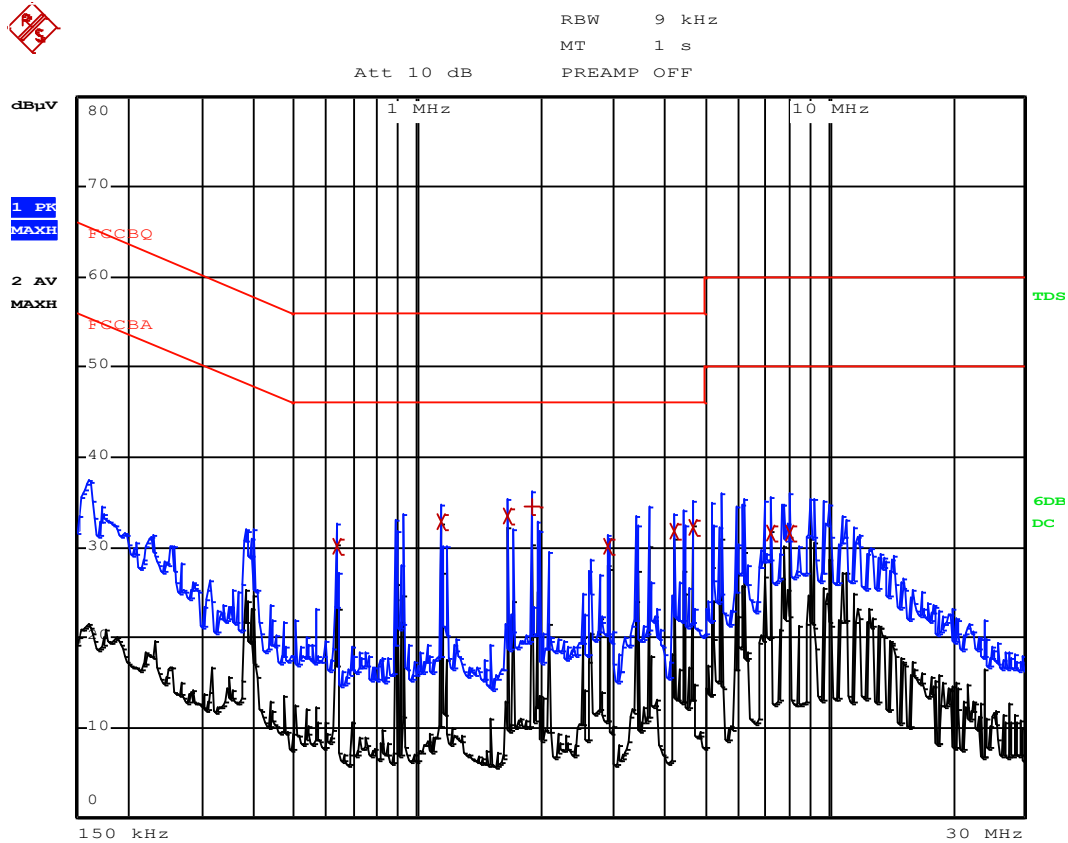
Port under test		Terminal							
<input checked="" type="checkbox"/>	AC mains input power	<input checked="" type="checkbox"/>	N	<input checked="" type="checkbox"/>	L1	<input type="checkbox"/>	L2	<input type="checkbox"/>	L3
<input type="checkbox"/>	DC input power	<input type="checkbox"/>	Positive (+)			<input type="checkbox"/>	Negative (-)		
Voltage – Mains [V]		120							
Frequency – Mains [Hz]		60							
Test method applied	<input checked="" type="checkbox"/>	Artificial mains network (50 $\mu$ H / 50 $\Omega$ )							
	<input type="checkbox"/>	Voltage probe							
	<input type="checkbox"/>	Artificial mains network (5 $\mu$ H / 50 $\Omega$ ), high power devices							
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(pre-test mode 1-3, mode 1 was the worst case which was recorded)							
Remark		-							

See next page.

Measurement data of model EDGE/ED	Port under test	AC mains input power
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Operating mode / voltage / frequency used during the test	Mode 1 / 120 Vac / 60 Hz
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Live



EDIT PEAK LIST (Final Measurement Results)			
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
2 Average	1.654 MHz	33.57	-12.42
2 Average	1.146 MHz	32.87	-13.12
2 Average	4.71 MHz	32.30	-13.69
2 Average	4.202 MHz	31.75	-14.24
2 Average	638 kHz	30.13	-15.86
2 Average	2.926 MHz	30.11	-15.88
2 Average	8.018 MHz	31.62	-18.37
2 Average	7.254 MHz	31.52	-18.47
1 Quasi Peak	1.91 MHz	34.51	-21.49

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

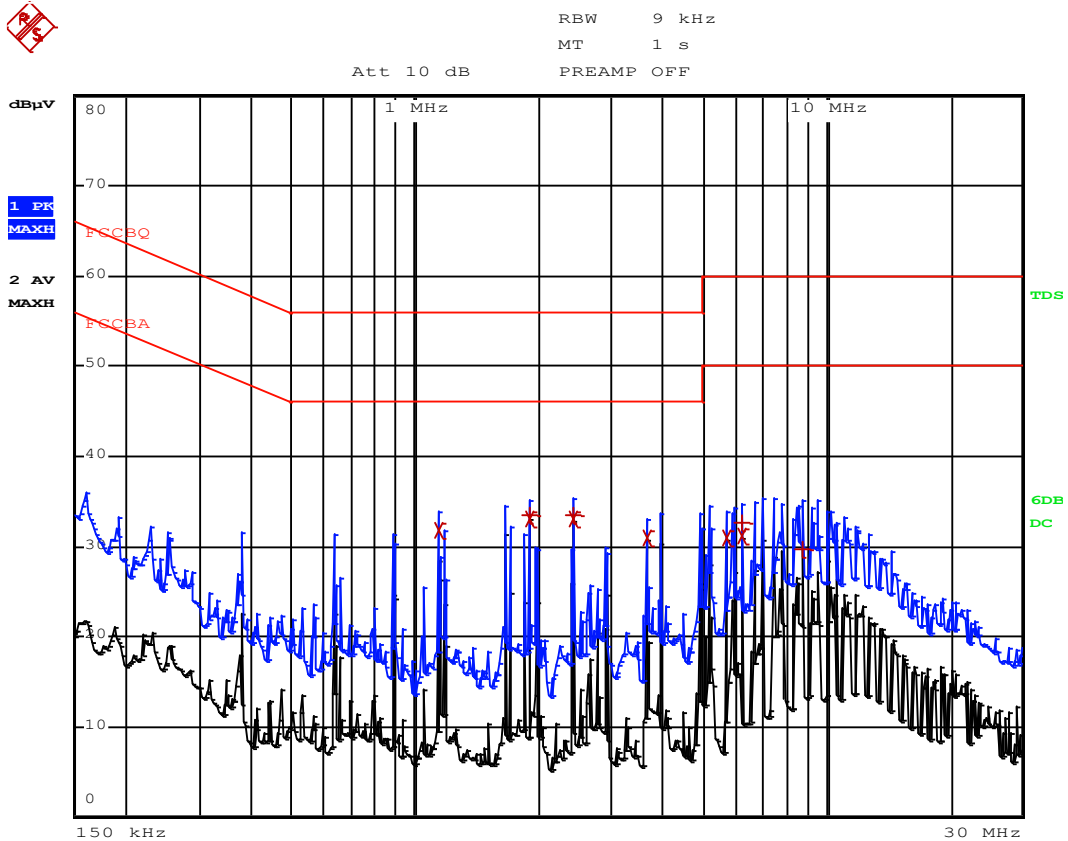
Remarks:

- 1) Level (final measurement) = received value + transducer (Lis+cable)
- 2) Delta = Level – Limit

Remark	The given graph is the combination of max-hold function of each line.
--------	---

Measurement data	Port under test	AC mains input power
Operating mode / voltage / frequency used during the test		Mode 1 / 120 Vac / 60 Hz

Neutral



EDIT PEAK LIST (Final Measurement Results)			
TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
Trace1:	FCCBQ		
Trace2:	FCCBA		
Trace3:	---		
2 Average	2.418 MHz	33.13	-12.86
2 Average	1.91 MHz	33.06	-12.93
2 Average	1.146 MHz	31.89	-14.10
2 Average	3.69 MHz	31.06	-14.93
2 Average	6.238 MHz	31.13	-18.86
2 Average	5.73 MHz	30.87	-19.12
1 Quasi Peak	1.91 MHz	33.54	-22.45
1 Quasi Peak	2.418 MHz	33.53	-22.46
1 Quasi Peak	6.238 MHz	32.55	-27.44
1 Quasi Peak	8.786 MHz	29.78	-30.21

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

Remarks:

- 3) Level (final measurement) = received value + transducer (Lisn+cable)
- 4) Delta = Level – Limit

Remark	The given graph is the combination of max-hold function of each line.
--------	---

<b>4.2 Radiated emissions</b>	<b>VERDICT: PASS</b>
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Standard	FCC Rules & Regulations 47 CFR Chapter I - Part 18 Clause 18.305
Basic standard(s)	FCC MP-5

**Measurement procedure**

The field strength levels of spurious radiated emissions from this non-ISM device have been determined according to the section 18.305 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 frequency band in which the non-ISM device is operating is 110-205kHz. Thus, according to the table below, the frequency range of interest was Below 1,705.

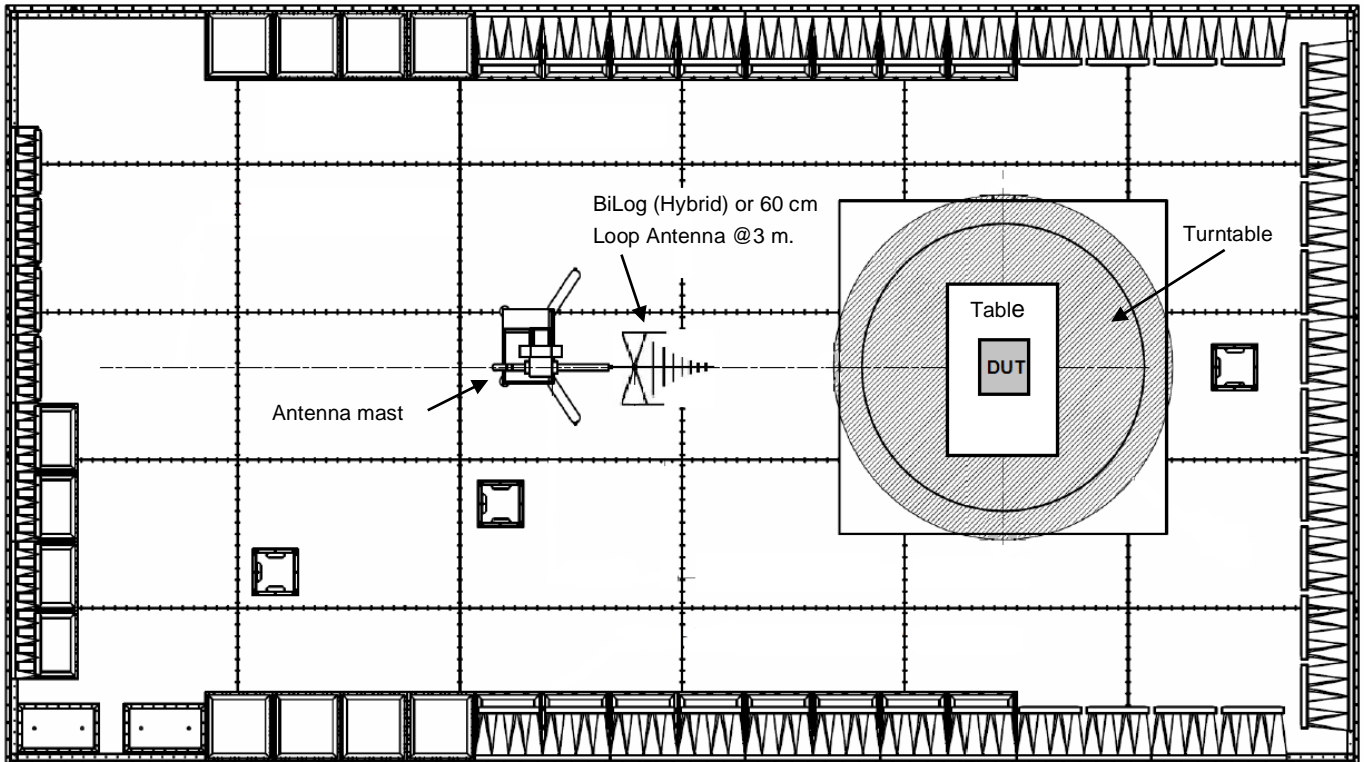
Frequency band in which device operates (MHz)	Range of frequency measurements	
	Lowest frequency	Highest frequency
Below 1,705	Lowest frequency generated in the device, but not lower than 9 kHz.	30 MHz.
1,705 to 30	Lowest frequency generated in the device, but not lower than 9 kHz.	400 MHz.
30 to 500	Lowest frequency generated in the device or 25 MHz, whichever is lower.	Tenth harmonic or 1000 MHz, whichever is higher.
500 to 1000	Lowest frequency generated in the device or 100 MHz, whichever is lower.	Tenth harmonic.
Above 1000	.....do	Tenth harmonic or highest detectable emission

The following IF bandwidths have been used during the measurements:

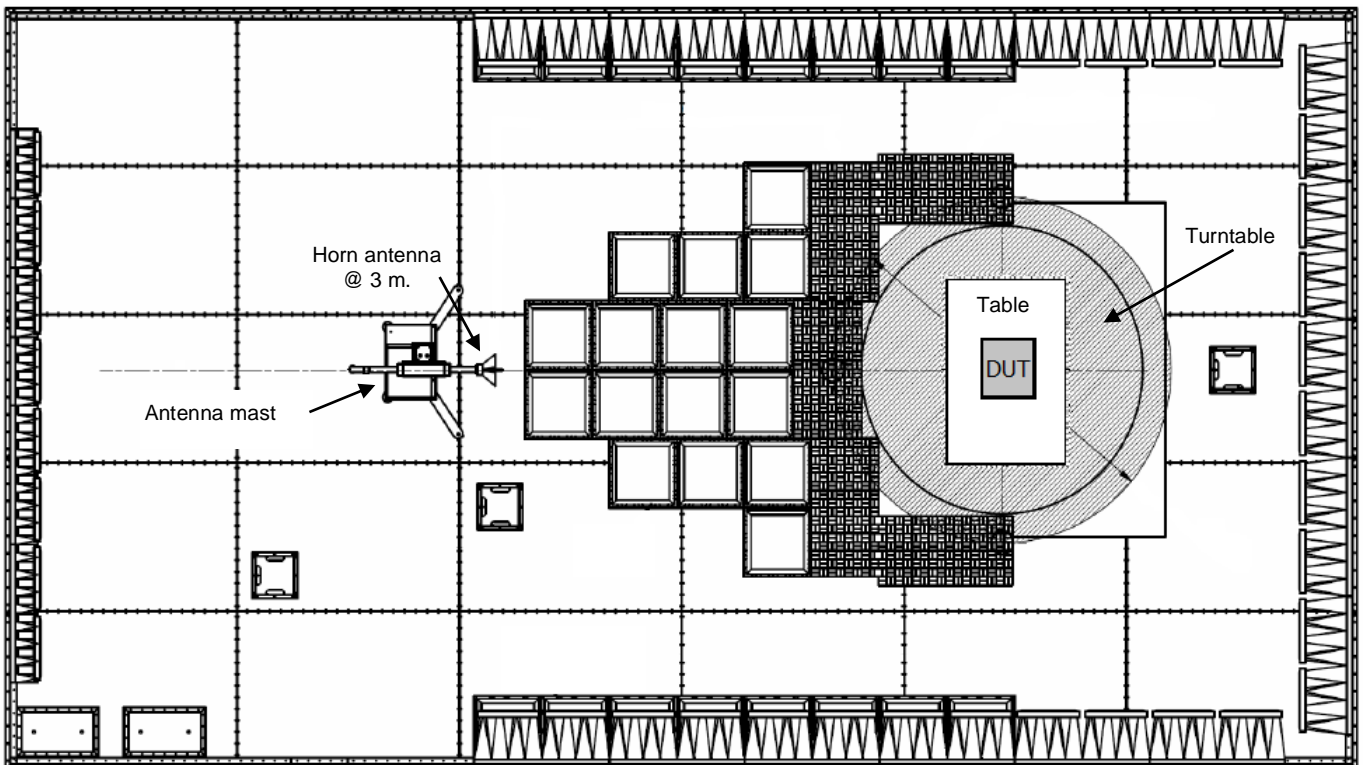
- 200 Hz for measurements below 150 KHz,
- 9 KHz for measurements from 150 KHz to 30 MHz,
- 120 KHz for measurements from 30 to 1000 MHz,
- 1 MHz for measurements above 1000 MHz



Test setup for "Spurious radiated emission" measurements at frequency range 9 KHz-1000 MHz is shown below.



Test setup for "Spurious radiated emission" measurements above 1 GHz is shown below.



### Field strength limits

Equipment		Operating frequency		DUT RF Power, P [W]		Limit: AV [ $\mu\text{V}/\text{m}$ ] <sup>5)</sup>	<sup>4)</sup> Distance [m]
<input checked="" type="checkbox"/>	Any type unless otherwise specified (miscellaneous)	Any ISM Frequency		<input type="checkbox"/>	< 500	25	300
				<input type="checkbox"/>	$\geq 500$	$25 \times \text{SQRT}(P/500)$	$300^{1)}$
		Any non-ISM frequency		<input checked="" type="checkbox"/>	< 500	15	300
				<input type="checkbox"/>	$\geq 500$	$15 \times \text{SQRT}(P/500)$	$300^{1)}$
<input type="checkbox"/>	Industrial heaters and RF stabilized arc welders	<input type="checkbox"/>	$\leq 5,725$ MHz	Any	10	1600	
		<input type="checkbox"/>	> 5,725 MHz	Any	<sup>2)</sup>	<sup>2)</sup>	
<input type="checkbox"/>	Medical diathermy	Any ISM Frequency		Any	25	300	
		Any non-ISM frequency		Any	15	300	
<input type="checkbox"/>	Ultrasonic	<input type="checkbox"/>	< 490 KHz	<input type="checkbox"/>	< 500	$2400 / f(\text{KHz})$	300
				<input type="checkbox"/>	$\geq 500$	$2400/f(\text{KHz}) \times \text{SQRT}(P/500)$	$300^{3)}$
		<input type="checkbox"/>	$\geq 490 - 1600$ KHz	Any	$2400 / f(\text{KHz})$	30	
		<input type="checkbox"/>	> 1600 KHz	Any	15	30	
<input type="checkbox"/>	Induction cooking ranges	<input type="checkbox"/>	< 90 KHz	Any	1500	30	
		<input type="checkbox"/>	$\geq 90$ KHz	Any	300	30	

<sup>1)</sup> Field strength may not exceed 10  $\mu\text{V}/\text{m}$  at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.

<sup>2)</sup> Reduced to the greatest extent possible.

<sup>3)</sup> Field strength may not exceed 10  $\mu\text{V}/\text{m}$  at 1600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.

<sup>4)</sup> According to section 18.305 note 2, testing at closer distances is permitted, the permissible field strength limit shall be adjusted using 1/d as attenuation factor.

<sup>5)</sup> The limits apply only outside of the frequency bands specified in section 18.301.

<input type="checkbox"/> Consumer RF lighting devices				
Frequency [MHz]	Limit: QP@30m.[dB( $\mu\text{V}/\text{m}$ ) <sup>1)</sup>	Limit: QP@30m.[( $\mu\text{V}/\text{m}$ ) <sup>1)</sup>	IF BW	Detector
30 - 88	20,0 (+20dB@3m.)	10	120 KHz	QP
88 - 216	23,5 (+20dB@3m.)	15	120 KHz	QP
216 - 1000	26,0 (+20dB@3m.)	20	120 KHz	QP

<sup>1)</sup> At the transition frequency, the lower limit applies.

<input type="checkbox"/> Non-consumer RF lighting devices				
Frequency [MHz]	Limit: QP@30m.[dB( $\mu\text{V}/\text{m}$ ) <sup>1)</sup>	Limit: QP@30m.[( $\mu\text{V}/\text{m}$ ) <sup>1)</sup>	IF BW	Detector
30 - 88	29,5 (+20dB@3m.)	30	120 KHz	QP
88 - 216	34,0 (+20dB@3m.)	50	120 KHz	QP
216 - 1000	36,9 (+20dB@3m.)	70	120 KHz	QP

<sup>1)</sup> At the transition frequency, the lower limit applies.

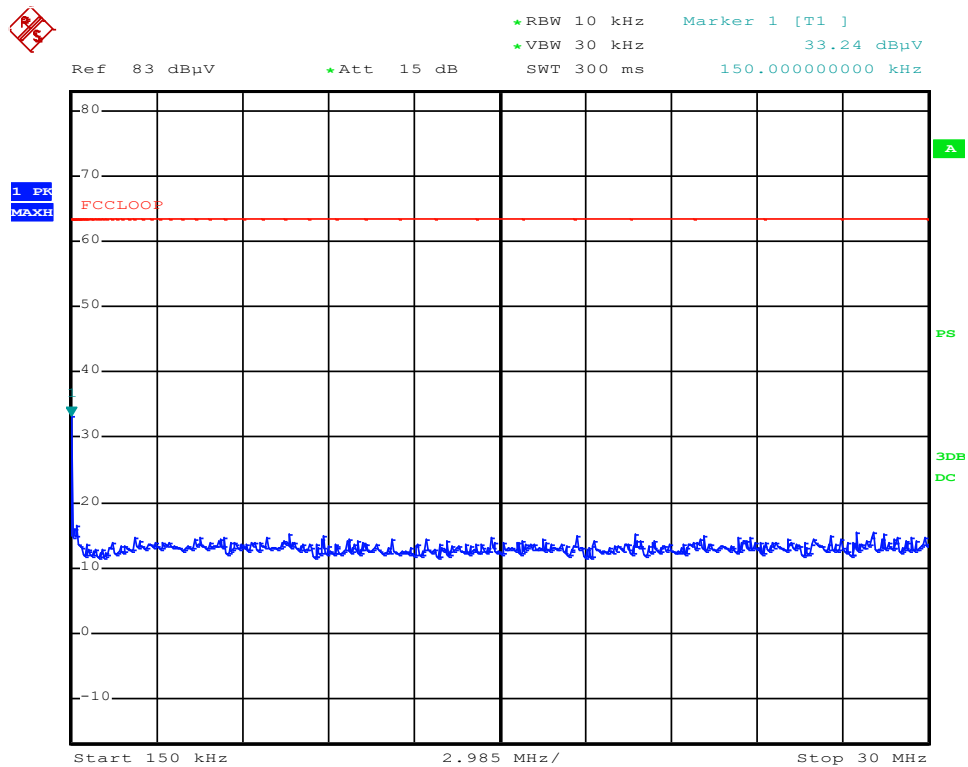
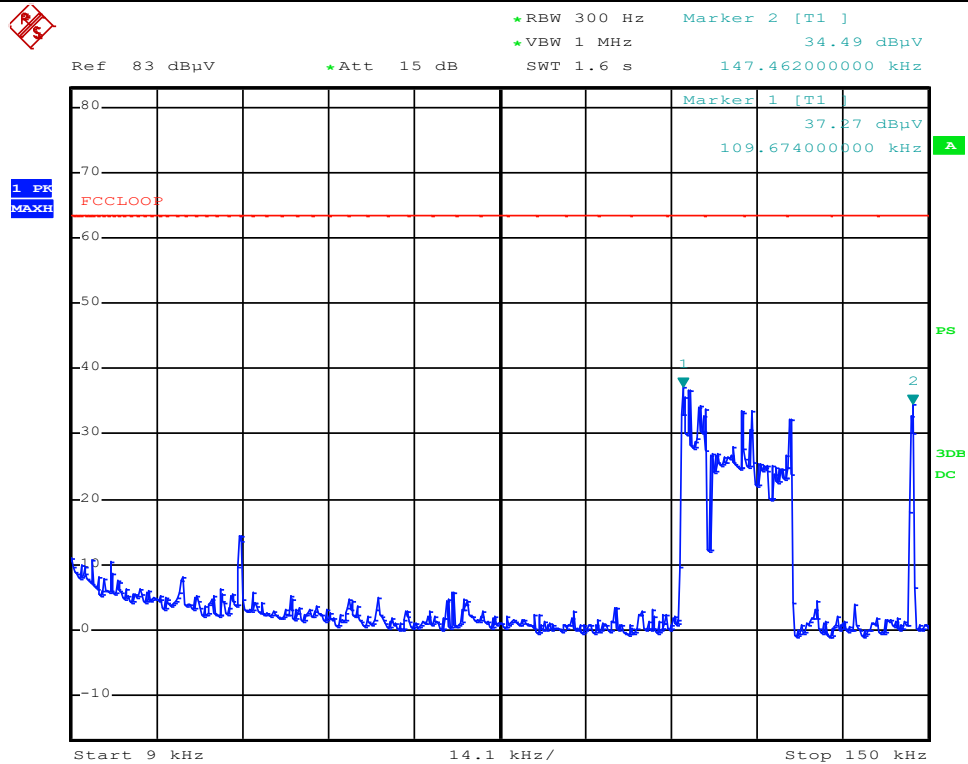
## Measurement data

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(pre-test mode 1-3, mode 1 was the worst case which was recorded)	
Remark	---	

See next page.

Measurement data of model EDGE/ED  X/Y/Z - Axis

Operating mode / voltage / frequency used during the test Mode 1 / 120 Vac / 60 Hz

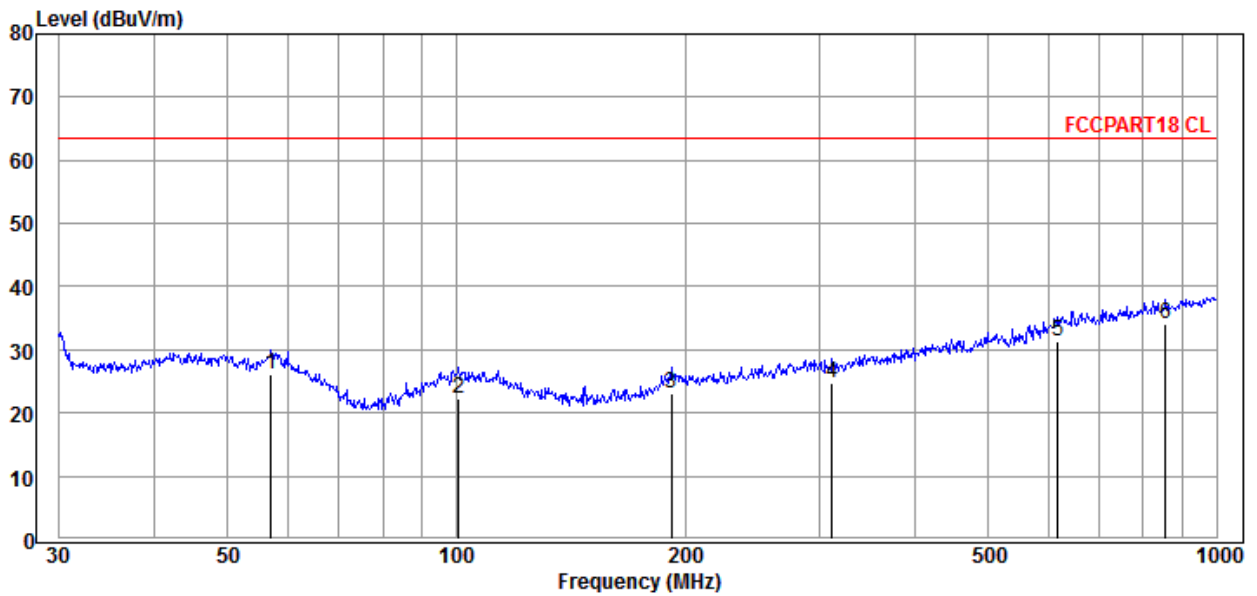


No other significant emissions were recorded employing the QP detector at the frequency range of interest.

Remark

Model	EDGE/ED
Port	Enclosure
Operation Mode (worst case)	Mode 1
Test Voltage	9 Vdc

**Horizontal**

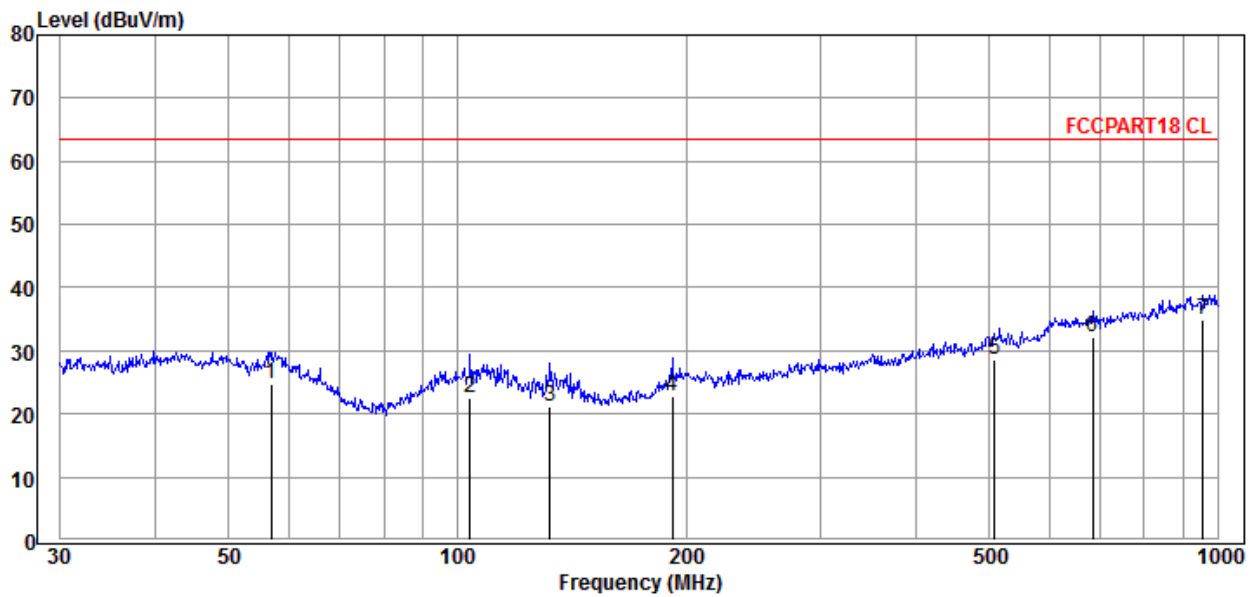


Freq MHz	Reading dBuV	C.F dB	Result dBuV/m	Limit dBuV/m	Margin dB
56.99	10.77	15.25	26.02	63.52	37.50
100.58	9.41	12.73	22.14	63.52	41.38
191.75	11.22	11.90	23.12	63.52	40.40
312.18	10.50	14.14	24.64	63.52	38.88
618.54	11.35	19.97	31.32	63.52	32.20
857.03	11.91	22.15	34.06	63.52	29.46

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

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

**Vertical**



Freq MHz	Reading dBuV	C.F dB	Result dBuV/m	Limit dBuV/m	Margin dB
56.79	9.62	15.20	24.82	63.52	38.70
103.81	9.85	12.63	22.48	63.52	41.04
132.22	11.77	9.30	21.07	63.52	42.45
191.75	10.95	11.90	22.85	63.52	40.67
508.26	10.58	18.13	28.71	63.52	34.81
684.75	11.96	20.20	32.16	63.52	31.36

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

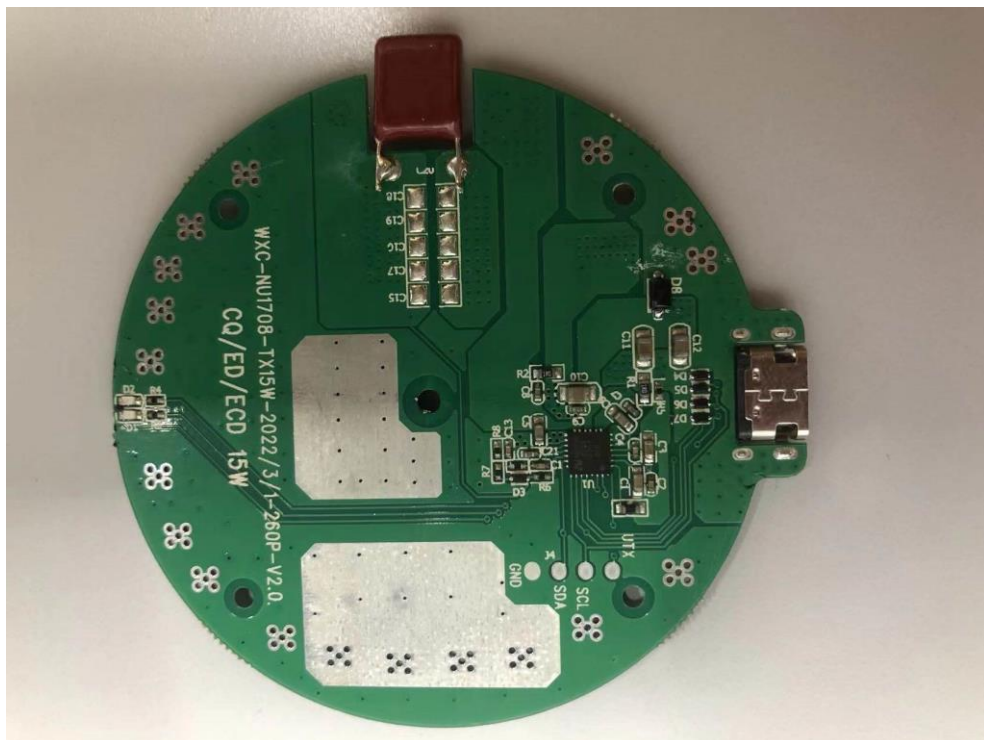
No other significant emissions were measured at the frequency range of interest employing both the QP and AV detectors.

## 5 IDENTIFICATION OF THE EQUIPMENT UNDER TEST

The photographs show the tested device.

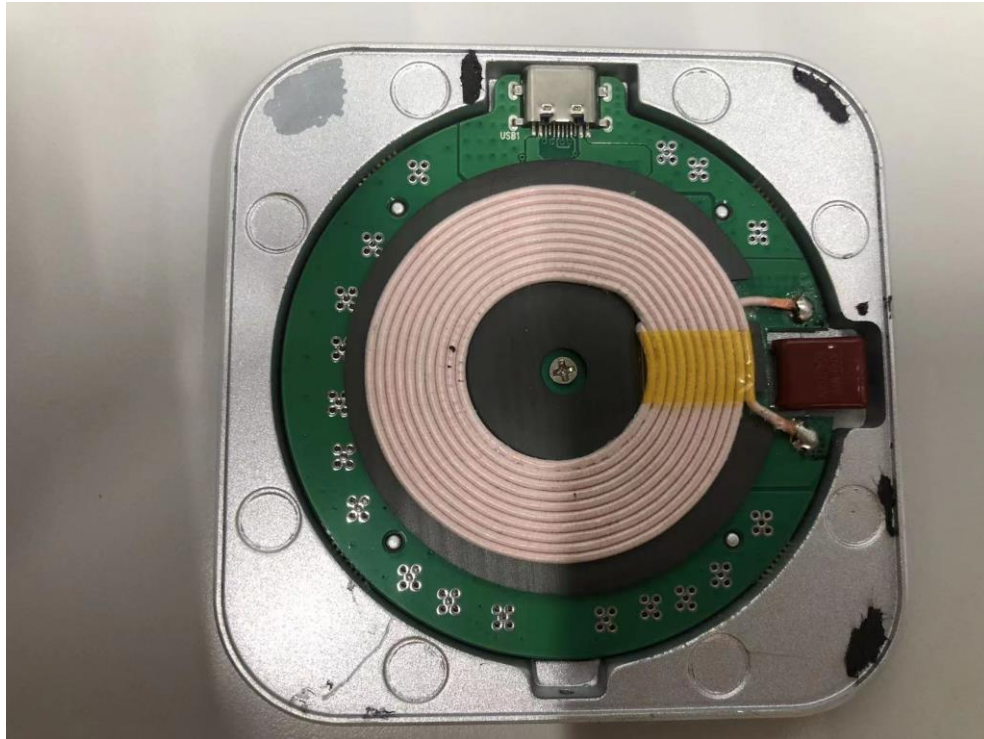


model EDGE/ED



PCB



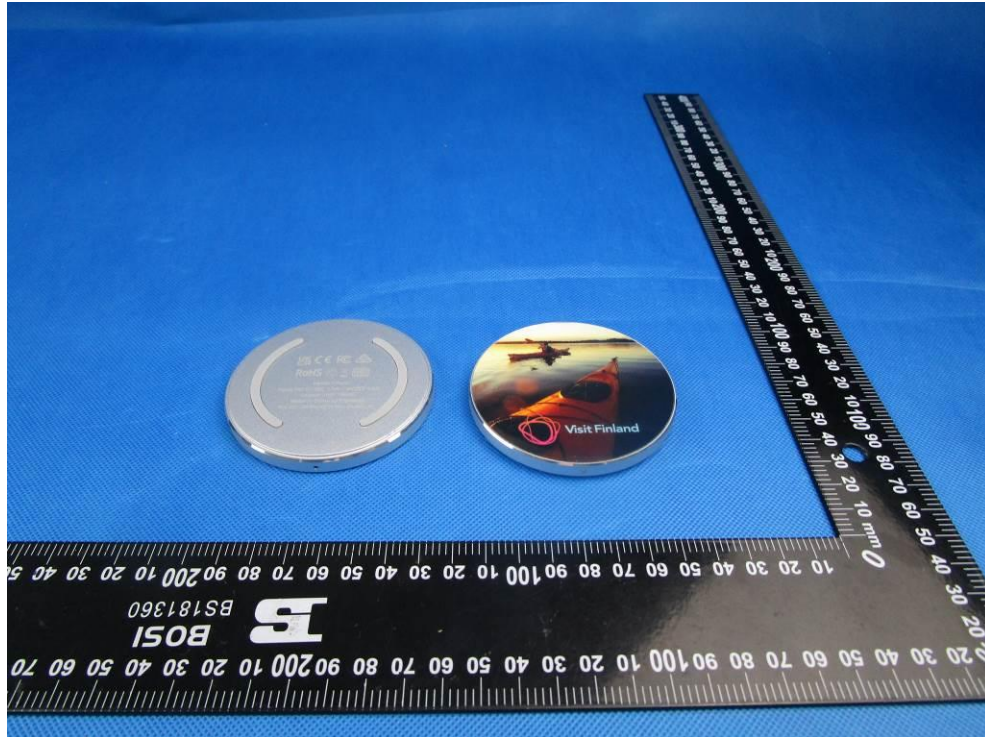


Antenna



Model EcoDesk/ECD





Model Cirque/CQ



Model Ring/RG



Model Savanna/SV

## 6 ANNEX 1 - MEASUREMENT UNCERTAINTIES

Measurement	Uncertainty
Unwanted Emissions, Radiated	2,96 dB
Mains disturbance voltage (150 kHz – 30 MHz)	2,82 dB

Remark :

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

## 7 ANNEX 2 – USED EQUIPMENT

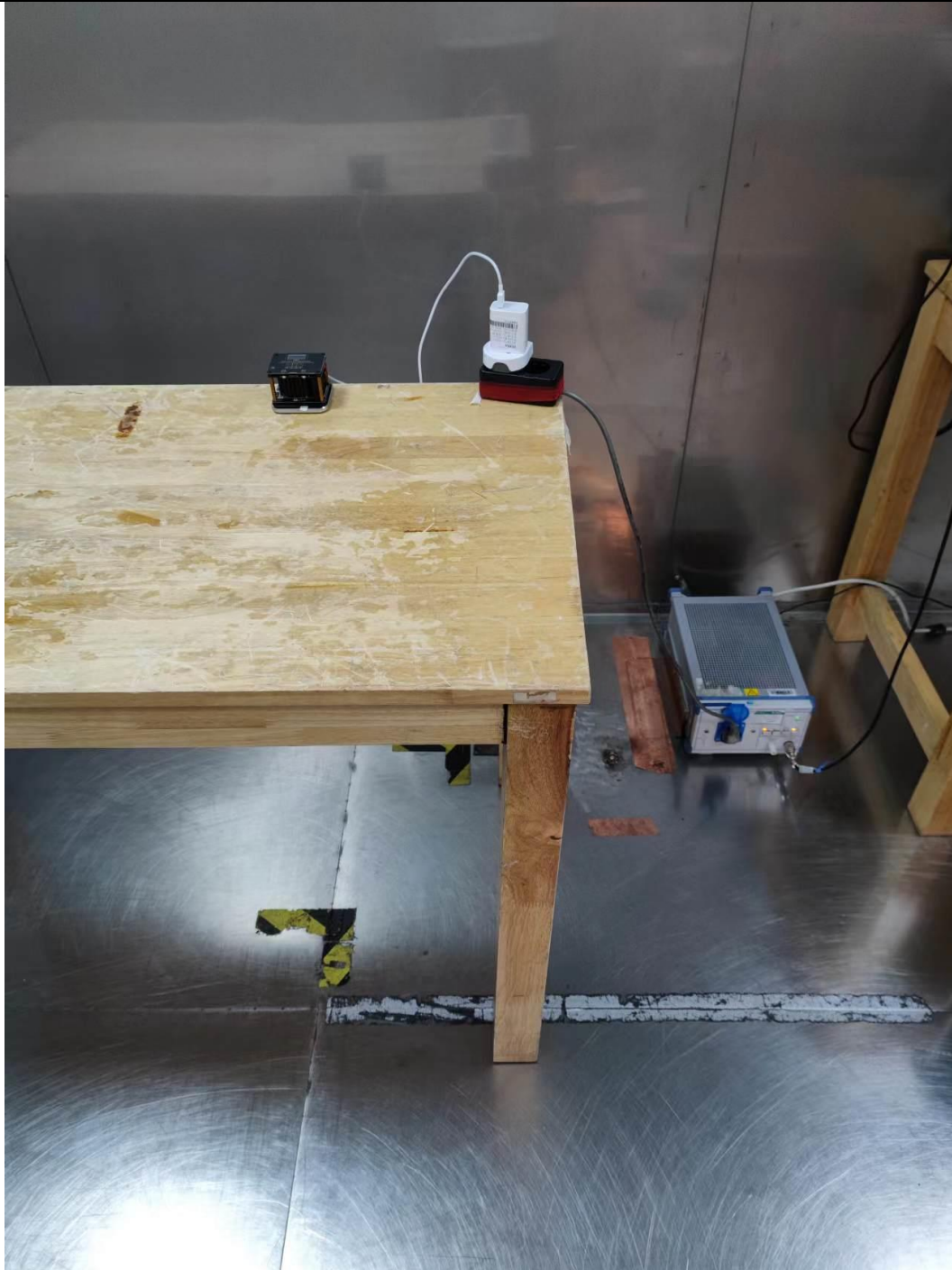
Location: DEKRA Testing and Certification (Shanghai) Ltd. Guangzhou Branch

Item	Instrumentation	Manufacturer	Model No.	Serial No.	Dekra No.	Cal. Interval
1	EMI Receiver	R&S	ESCI	101206	G/L858	2023/11/02
2	LISN	R&S	ENV216	101336	G/L859	2023/11/02
3	Shielding Room	Changzhou Feite	/	/	G/L861	2023/07/05
4	EMI receiver	R&S	ESCI	101205	G/L857	2023/10/12
5	Antenna (30MHz-3GHz)	SCHWARZBECK	VULB9163	506	G/L864	2023/10/30
6	Chamber	ETS	/	/	G/L856	2023/06/19
7	Antenna (9kHz-30MHz)	AMETEK	HLA 6121	/	GZ1905	2023/07/07

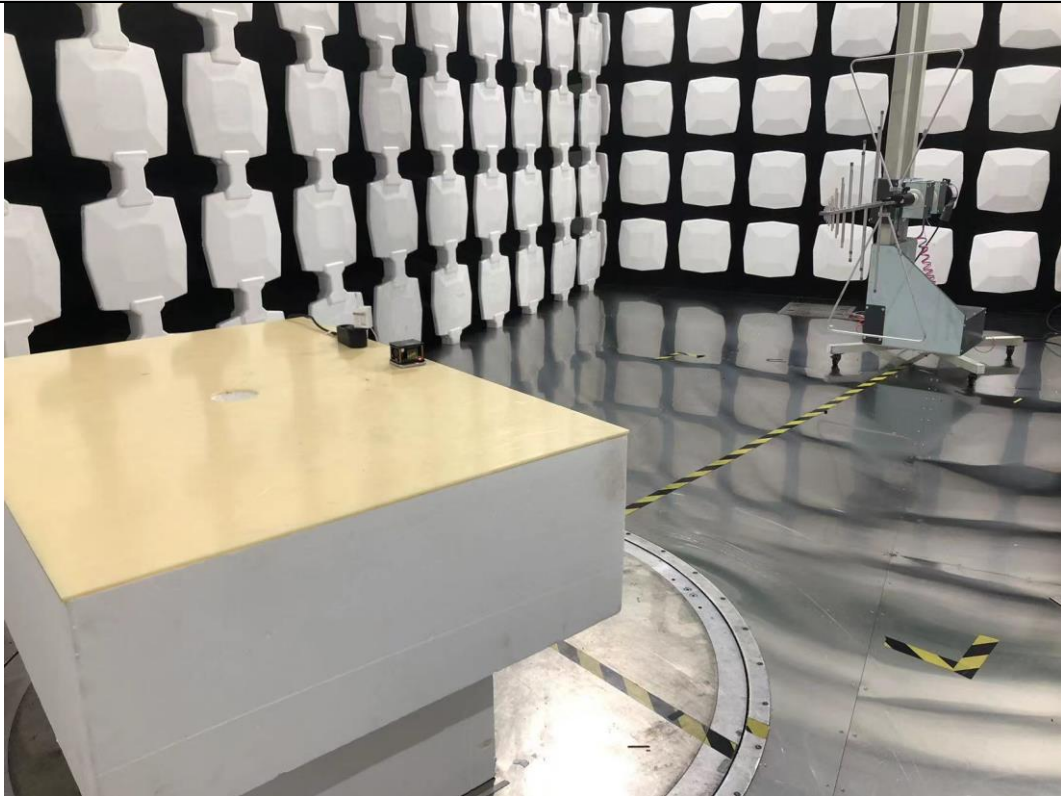


## 8 ANNEX 3 - TEST PHOTOS

Conducted disturbance voltage at AC mains terminals



**Radiated emissions (30 - 1000 MHz)**



**Radiated emissions (below 30 MHz)**



-END-