FCC TEST REPORT

FCC ID: 2AQTM-STERILIZERBOX

Product	:	Multi-Function Portable UV Light Sterilizer
Model Name	:	PS-426
Brand	:	Power System
Report No.	:	PTC20062402901E-FC02

Prepared for

Power System Electronic Technology Co., Ltd.

No.1 Shangbian Road, Puxin Industrial District, Shipai Town, Dongguan City, Guangdong, China

Prepared by

Precise Testing & Certification Co., Ltd.

Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China

TEST RESULT CERTIFICATION

Applicant's name	:	Power System Electronic Technology Co., Ltd.
Address	:	No.1 Shangbian Road, Puxin Industrial District, Shipai Town, Dongguan City, Guangdong, China
Manufacture's name	:	Power System Electronic Technology Co., Ltd.
Address	:	No.1 Shangbian Road, Puxin Industrial District, Shipai Town, Dongguan City, Guangdong, China
Product name	:	Multi-Function Portable UV Light Sterilizer
Model name	:	PS-426
Test procedure		KDB680106 D01 RF Exposure Wireless Charging Apps v03
Test Date	:	Jun 30, 2020 to Jul 20, 2020
Date of Issue	:	Jul 20, 2020
Test Result	:	Pass

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

Leo Yang / Engineer

Technical Manager:

Chris Du / Manager

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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		

2.1 Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Magnetic field meter	NARDA	ELT-400	423623	Aug. 21, 2020	1 Year
2	E-Field Probe	Narda	EF0391	Q15221	Aug. 21, 2020	3 Year
3	H-Field Probe	Narda	HF3061	Q15835	Aug. 21, 2020	3 Year

3 General Information

3.1 General Description of E.U.T.

Product Name	:	Multi-Function Portable UV Light Sterilizer
Model Name	:	PS-426
Operation Frequency	:	110.1-205KHz
Type of Modulation	:	ASK
Antenna installation	:	Inductive loop coil Antenna
Antenna Gain	:	0 dBi
Power supply	:	Input: 100-240V~ 50/60Hz, 0.8A Output: DC 5V, 3A/DC 9V, 2.66A/DC12V, 2A
Hardware Version	:	N/A
Software Version	:	N/A

4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

4.1 Requirements

According to the item 5.b) of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

1) Power transfer frequency is less that 1 MHz

2) Output power from each primary coil is less than or equal to 15 watts.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils

4) Client device is inserted in or placed directly in contact with the transmitter

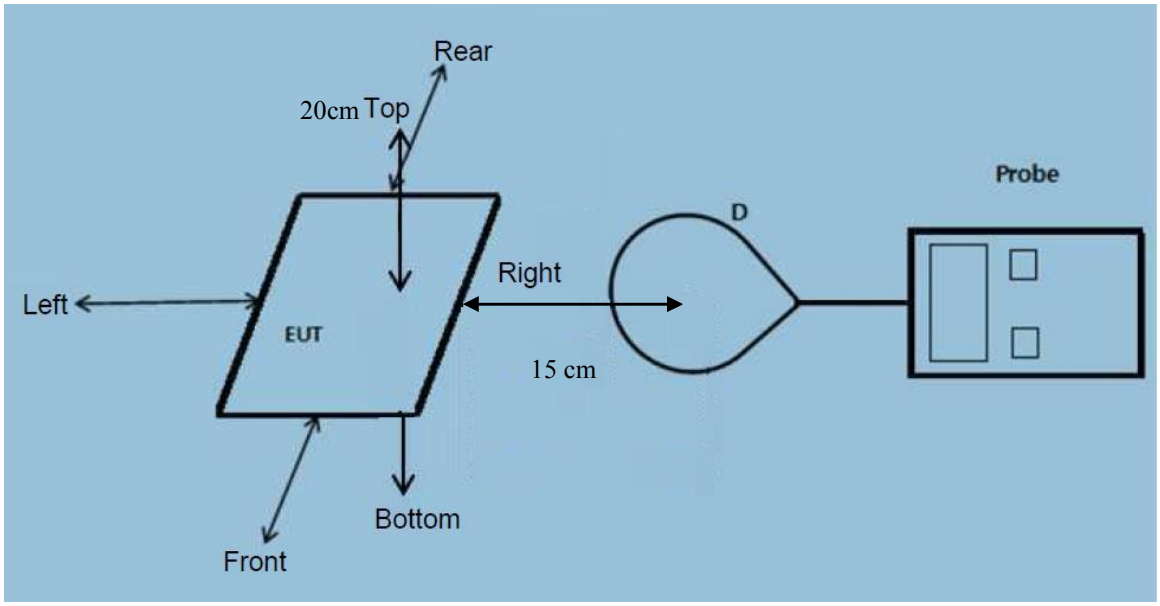
5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)

6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Limits For Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*($900/f^2$)	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30
F=frequency in MHz *=Plane-wave equivalent power density RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).				

4.2 Test Setup



Note: Measurements should be made at 15 cm surrounding the EUT and 20cm above the top surface of the EUT.

4.3 Test Procedure

1) The RF exposure test was performed in anechoic chamber.

2) The measurement probe was placed at required test distance which is between the edge of the charger and the geometric center of probe.

3) The highest emission level was recorded and compared with limit as soon as measurement of each points

(A, B, C, D, E) were completed.(A is the right, B is the back, C is the left, D is the front, and E is the top.)

4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

Remark;

The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

4.4 Test Result

Equipment Approval Considerations item 5.b of KDB 680106 D01 v03.

1) Power transfer frequency is less that 1 MHz

- The device operate in the frequency range 110.1~205KHz

2) Output power from each primary coil is less than 15 watts

- The maximum output power of the primary coil is 10W.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils

- The transfer system including a charging system with two primary coils is to detect and allow only between individual pairs of coils.Only one coil works at a time.

4) Client device is inserted in or placed directly in contact with the transmitter

- Client device is placed directly in contact with the transmitter.

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)

6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

- Conducted the measurement with the required distance and the test results please refer to the section 2.4.2

Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b), 1.1310

Temperature:	23.8°C	Relative Humidity:	54%
Pressure:	1012 hPa	Test Voltage:	AC 120V, 60Hz for adapter

E-

F-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

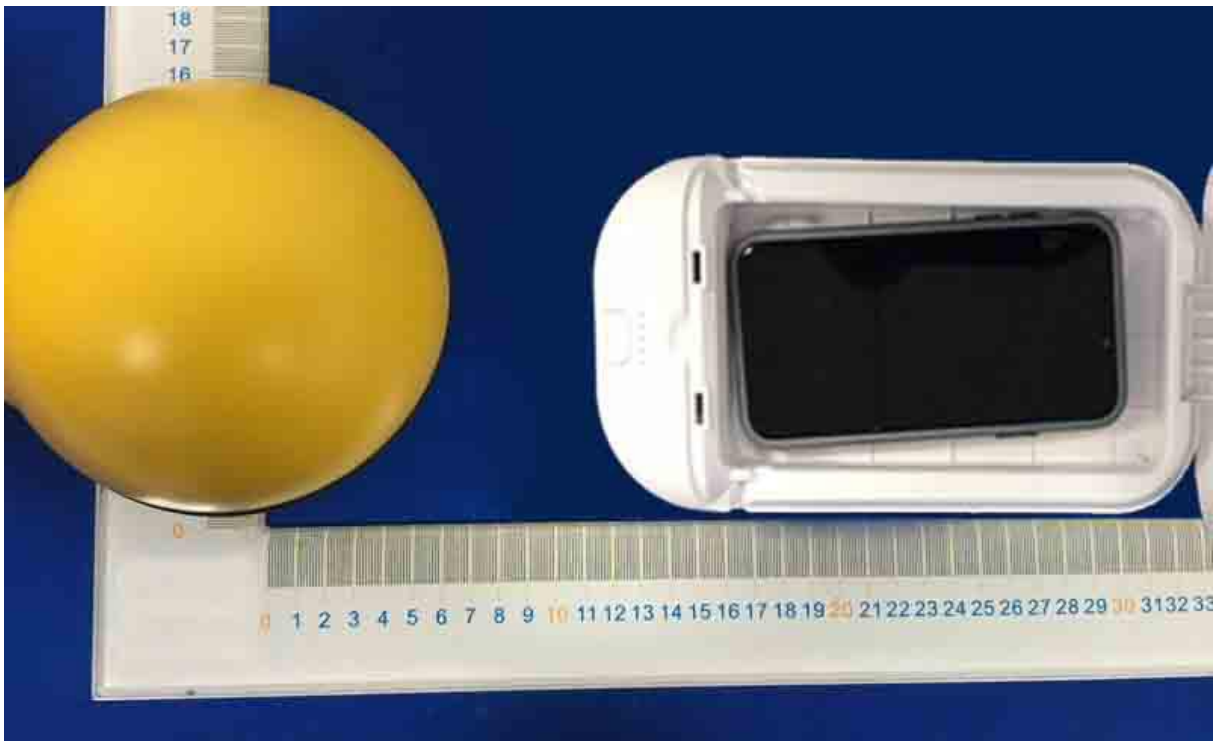
Battery power	Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
1%	110.1~205	0.29	0.43	0.34	0.46	0.97	307	614
50%	110.1~205	1.63	1.47	1.48	1.37	1.56	307	614
99%	110.1~205	2.35	2.39	2.33	2.22	2.03	307	614
Stand-by	110.1~205	0.59	0.42	0.89	0.43	0.54	307	614

H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery power	Frequency Range (KHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
1%	110.1~205	0.059	0.051	0.046	0.043	0.065	0.815	1.63
50%	110.1~205	0.38	0.56	0.34	0.42	0.42	0.815	1.63
99%	110.1~205	0.34	0.59	0.42	0.32	0.53	0.815	1.63
Stand-by	110.1~205	0.37	0.23	0.7	0.34	0.31	0.815	1.63

Remark: All the conditions have been tested. It is found that 10W is the worst mode, and the data in the report only reflects the worst mode.

APPENDIX I -- TEST SETUP PHOTOGRAPH



******THE END REPORT******