



# 广东省微生物分析检测中心

GUANGDONG DETECTION CENTER OF MICROBIOLOGY

# 分析检测报告

REPORT FOR ANALYSIS

报告编号

Report №.

2020SP2438R01D

样品名称

Name of Sample

紫外线杀菌盒

**UV** Sanitizer

委托单位

Applicant

检测类型

**Test Type** 

委托检测

Katrustment Tes

单位地址: 广州市先烈中路 100 号大院 66 号楼

Address: Building 66, No.100 Central Nian the Road Guing hou, China

邮政编码: 510070

Postcode:

电话号码: (020)87137666

Tel:

传真号码: (020)87137668

Fax:

网 址: www.gddcm.com

Website:





# 广东省微生物分析检测中心

# GUANGDONG DETECTION CENTER OF MICROBIOLOGY 分析检测报告

REPORT FOR ANALYSIS



中国认可 国际互认 检测 TESTING CNAS L17

报告编号(Report №.) 2020SP2438R01D 校验码(Verification Code): 53728146

样品名称 Name of Sample	紫外线杀菌盒 UV Sanitizer	检测类型 Test Type	委托检测 Entrustment Test
委托单位 Applicant	ç ş	地 址 Address	S' S'
样品来源 Sample Source	委托方送检 Submitted for Testing by the Applicant	样品数量 Sample Quantity	1台 One
样品规格和批号 Spec and Lot № of Sample	Grille Carille Alle Strille Grille	样品状态和特性 State and Characteristic	机器 Machine
接样日期 Sample Received Date	2020-04-07	检测完成日期 Completion Date	2020-04-10
检测依据和方法 Test Standard and Method		(卫生部 2002 年版 on(Ministry of Healtl	)第二部分-2.1.5.5 h, Edition 2002), section 2-2.1.5.5
检测项目 Item Tested		战消毒功效鉴定试验 nent disinfection effic	:紫外线消毒箱 acy test: Ultraviolet disinfection box
Childo Childo Tetino	o Testinos Testinos Testinos Testinos Testinos	Estinos Testinos Testinos  Grito Grito Grito	Testino Testino Testino Testino Testino Testino
检测结论 Test Conclusion	送检样品所检项目的实测数据见本The test data of the sample(s) is attach		f this report.
	Critico Tet Critico Critico Testinos Critico C		<b>汶日期: 2920-04-16 建 Date 201-14 201-</b>
<u>************************************</u>		190 190 190 190	机构盖章 Official Seal +

制表: Editor 审核: 建族 Verifier 批准: YSA Approver







# 广东省微生物分析检测中心

# GUANGDONG DETECTION CENTER OF MICROBIOLOGY 分析检测结果

ANALYSIS AND TEST RESULT

报告编号 (Report №.): 2020SP2438R01D

- 1. 作用位置 Action position: 送检样品内中间位置 Middle position in the sample.
- 2. 作用时间 Action time: 5min
- 3. 测试结果 Results:

测试菌株 Test organisms	试验 组别 Test group	试验组平均菌落数 Average cfu of testing groups (cfu/片 piece)	对照组平均菌落数 Average cfu of positive controls (cfu/片 piece)	杀灭率 Sterilization rate (%)	杀灭对数值 Sterilization logarithm (KL)
	1	<5	$2.0 \times 10^{6}$	>99.99	>5.58
大肠杆菌 ( <i>Escherichia coli</i> )	2	5	$1.8 \times 10^{6}$	>99.99	>5.58
8099	3	<5	$1.9 \times 10^{6}$	>99.99	>5.58
.0099	anic z	产均值 Average	$1.9 \times 10^{6}$	>99.99	>5.58
۸ ++ /۰ ++ ++ ++	1	<5	$4.0 \times 10^{6}$	>99.99	>5.90
金黄色葡萄球菌	× 2	<5,000	$4.0 \times 10^{6}$	>99.99	>5.90
( <i>Staphylococcus aureus</i> ) ATCC 6538	3	<5	$4.1 \times 10^{6}$	>99.99	>5.90
A100 0000	Chic Z	产均值 Average	$4.0 \times 10^{6}$	>99.99	>5.90
白色念珠菌	1	$3.9 \times 10^{2}$	$1.2 \times 10^{6}$	99. 97	3. 50
	2	$4.1 \times 10^{2}$	$1.2 \times 10^6$	99. 97	3. 48
(Candida albicans) ATCC 10231	3	$4.2 \times 10^{2}$	$1.3 \times 10^{6}$	99. 97	3. 47
MICC 10231	Cilcle Z	产均值 Average	$1.2 \times 10^{6}$	99. 97	3. 48

# 样品照片:



(以下空白, Blank below)





报告编号 (Report №.): 2020SP2438R01D

# 注意事项

# Notice Items

- 1. 检测报告无本单位检验检测专用章、骑缝章无效。
  - The Test report is invalid if not affixed with Authorized Stamp of Test and Paging Seal.
- <sup>2</sup>. 检测报告无审核人、批准人签字无效。
  - The Test report is invalid without signature of verifier and approver.
- 3. 检测报告涂改增删无效。
  - The Test report is invalid if being supplemented, deleted or altered.
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- 5. 除非另有说明,本报告检验结果仅对来样负责。
  Unless otherwise stated, the results shown in this test report refer only to the sample(s) submitted.
- 6. 对检测报告有异议的,应于收到报告之日起十五日内提出,逾期不予受理。
  Any dispute of the report must be raised to the testing body within 15 days after the report is received, exceeding which the dispute will not be accepted。
- 7. 对送检样品,样品信息由委托方提供,本单位不对其真实性负责。
  For the tested sample(s) submitted by the applicant, the sample information in the test report is provided by the applicant and the laboratory is not responsible for its authenticity.







# CERTIFICATE OF CONFORMITY

Registration No.: WST20N050133E

Technical Construction File No.: WST20N050133-1ER

Certificate's Holder:

Manufacturer:

Product:

**UV Sterilizer Box** 

Model (S):

6650

(All models of PCB layout and key components are the same

Trade Mark:

N/A

Rating:

Input: DC 5V, 2A, 10W

Directives:

2014/30/EU

Standard(s):

EN 55014-1:2017 EN 55014-2:2015

Remark: This Certificate of Compliance has been issued on a voluntary basis. WST confirms that a Technical Construction File (TCF) is existent for the above listed product(s). The TCF satisfactorily covers the essential requirements of the above listed Directive(s).

Other relevant Directives have to be observed in case they are applicable.

This Document is only valid for the equipment and configuration described and in conjunction with the TCF detailed above. Whereas the Manufacturer is responsible of the certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.

The Manufacturer is also responsible of the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Directive(s).

This certificate can be checked for validity at www.wstlab.com.



Wstlat Certification Manager

Date of issue: May 21, 2020



CE-EMC

**TEST REPORT** 

Test report
On Behalf of

For
UV Sterilizer Box
Model No.:
(Serial models see page 7)

Prepared for:

Prepared By: Shenzhen WST Testing Co., Ltd.

87 Guangshen Road, Baocheng 11st Zone, Xin'an Street, Bao'an, Shenzhen,

Guangdong, China

Date of Test: May 14, 2020 ~ May 21, 2020

Date of Report: May 21, 2020

Report Number: WST20N050133-1ER



Applicant's name .....:

# TEST RESULT CERTIFICATION

Address	:						
Manufacturer'	s Name:						
Address	:						
Product desc	ription						
Product name.	l	JV Steril	lizer Box				
Model and/or t		Serial m	odels see	page 7)			
Standards	È	EN 5501	4-2:2015				
equipment und	scribed above has ler test (EUT) is in to the tested sam	complia	nce with the	e 2014/30/E			
This report sha	Ill not be reproduce	ed excep	ot in full, wit	hout the wri	tten approval o	of WST, this	
-	be altered or revis	ed by W	/ST, persor	nal only, and	shall be noted	I in the revision o	of
the document.		430					
				CANCE.			
100 M	ormance of tests			2020 ~ May	21, 2020		
			May 21, 2	2020			
Test Result			Pass				
	Testing Engine	er :		Sam c	Jan		
			Me	(Sam Ta	an)	der	
	Technical Mana	ger :	Ta	inny z	hang	Mello	
				(Fanny Zh	iang) 🗼	FIC	
				Mala	1/43/	A POR	
	Authorized Sign	atory :	100	Timber	leng 15	SIJAB P	
			¥====	(Michael I	ina) *	NILS	



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# 1. TEST SUMMARY

Test procedures according to the technical standards:

	<b>EMC Emission</b>			
Standard	Test Item	Limit	Judgment	Remark
	Conducted Emission	Class B	N/A	10.
EN 55014-1	Radiated Emission	Class B	PASS	150
EN61000-3-2	Harmonic Current Emission	Class A or D	N/A	Nam
EN 61000-3-3	Voltage Fluctuations & Flicker		N/A	
	EMC Immunity			
Section EN55014-2	Test Item	Performance Criteria	Judgment	Remark
EN 61000-4-2	Electrostatic Discharge	В	PASS	
EN 61000-4-3	RF electromagnetic field	А	PASS	2
EN 61000-4-4	Fast transients	В	N/A	
EN 61000-4-5	Surges	В	N/A	1/30
EN 61000-4-6	Injected Current	А	N/A	
EN 61000-4-8	Power Frequency Magnetic Field	Α	N/A	Well
EN 61000-4-11	Volt. Interruptions Volt. Dips	C / C / C NOTE (3)	N/A	

# NOTE:

- (1)" N/A" denotes test is not applicable in this Test Report
- (2) Voltage dip: 0% reduction Performance Criteria C

Voltage dip: 30% reduction - Performance Criteria C

Voltage dip: 60% reduction - Performance Criteria C

(3) For client's request and manual description, the test will not be executed.



1.1 TEST FACILITY

Shenzhen WST Testing Co., Ltd.

Address: 87 Guangshen Road, Baocheng 11st Zone, Xin'an Street, Bao'an, Shenzhen, Guangdong, China

# 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $\mathbf{y} \pm \mathbf{U}$ , where expended uncertainty  $\mathbf{U}$  is based on a standard uncertainty multiplied by a coverage factor of  $\mathbf{k=2}$ , providing a level of confidence of approximately  $\mathbf{95}$  %.

## A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
WSTC01	ANSI	150 KHz ~ 30MHz	3.2	130

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
WSTA01	ANSI	30MHz ~ 1000MHz	4.7	1.42
13.00	1/8	1GHz ~6GHz	5.0	Lane.



# 2. GENERAL INFORMATION

# 2.1 GENERAL DESCRIPTION OF EUT

Equipment	UV Sterilizer Box
Model Name	Year and the second
Serial No	6650
Model Difference	All models of PCB layout and key components are the same.
Product Description	The EUT is a UV Sterilizer Box.  Operating frequency: N/A Connecting I/O port: DC Voltage  Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as a household electrical appliances Device. More details of EUT technical specification, please refer to the User's Manual.
Power Source	DC Voltage
Power Rating	Input: DC 5V, 2A, 10W



2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Running

For Conducted Test		
Final Test Mode	Description	
Mode 1	N/A	

For Radiated Test		
Final Test Mode	Description	
Mode 1	Running	

For EMS Test		
Final Test Mode	Description	
Mode 1	Running	



# 2.3 DESCRIPTION OF TEST SETUP

Mode 1:





2.4 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	UV Sterilizer Box	N/A	AP-267	N/A	EUT
	- aletlan	Mer	91		
	CM 25		100	del	12818
	400	lein	(9)	Men	012
	Mar	OF		100	
		ä		wie Hale	181
30	entstle		Maria	(Ast.	
				den	
	-10	130	1190	Maria	
USV	S. All	2			. 44

Item	Shielded Type	Ferrite Core	Length	Note	
100	len	2142		27.75	05
			6	Hap	"alejjo
	1130	Malle		M.S.	
	Albert .			class	
	Des		4190	MELLO	11/2
D.	and	- 6.0		040	
Yes.	153				

## Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- For detachable type I/O cable should be specified the length in cm in Length column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".



# 2.5 MEASUREMENT INSTRUMENTS LIST

# 2.5.1 CONDUCTED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	R&S	ENV216	101313	Jul. 06, 2020
2	LISN	EMCO	3816/2	00042990	Jul. 06, 2020
3	50Ω Switch	ANRITSU CORP	MP59B	6200983704	Jul. 06, 2020
4	Test Cable	N/A	C01	N/A	Jul. 06, 2020
5	Test Cable	N/A	C02	N/A	Jul. 06, 2020
6	Test Cable	N/A	C03	N/A	Jul. 06, 2020
7	EMI Test Receiver	R&S	ESCI	101160	Jul. 06, 2020
8	Passive Voltage Probe	ESH2-Z3	R&S	100196	Jul. 06, 2020
9	Triple-Loop Antenna	EVERFINE	LIA-2	11020003	Jul. 06, 2020
10	Absorbing Clamp	R&S	MDS-21	100423	Jul. 08, 2020

# 2.5.2 RADIATED TEST SITE

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Bilog Antenna	TESEQ	CBL6111D	31216	Jul. 06, 2020
2	Test Cable	N/A	R-01	N/A	Jul. 06, 2020
3	Test Cable	N/A	R-02	N/A	Jul. 06, 2020
4	EMI Test Receiver	R&S	ESCI-7	101318	Jul. 06, 2020
5	Antenna Mast	EM	SC100_1	N/A	N/A
6	Turn Table	EM	SC100	060531	N/A
7	50Ω Switch	Anritsu Corp	MP59B	6200983705	Jul. 06, 2020
8	Spectrum Analyzer	Aglient	E4407B	MY45108040	Jul. 06, 2020
9	Horn Antenna	EM	EM-AH-1018 0	2011071402	Jul. 06, 2020
10	Amplifier	EM	EM-30180	060538	Jul. 06, 2020

# 2.5.3 HARMONICS AND FILCK

Ite	em	Kind of Equipment	d of Equipment Manufacturer		Serial No.	Calibrated until	
	1	Harmonic & Flicker EM TEST		DPA500	0303-04	Jul. 06, 2020	
	2	AC Power Source	EM TEST	ACS500	0203-01	Jul. 06, 2020	

# 2.5.4 ESD

ſ	ltom	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
ŀ	пеш		Manuacturei	- /		Calibrated dritti
	1	ESD TEST	EVERFINE	EMS61000-2	11040001T	Jul. 06, 2020
		GENERATOR	LVEIXI IIVE	A-V200	11040011	001. 00, 2020



## 2.5.5 RS

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Signal Generator	R&S	SMT 06	832080/007	Jul. 24, 2020
2	Log-Bicon Antenna	Schwarzbeck	VULB9161	4022	Aug. 15, 2020
3	Power Amplifier	AR	150W1000M1	320946	Sep. 23, 2020
4	Microwave Horn Antenna	AR	AT4002A	321467	Jun. 11, 2020
5	Power Amplifier	AR	25S1G4A	308598	Sep. 23, 2020

# 2.5.6 SURGE, EFT/BURST, VOLTAGE INTERRUPTION/DIPS

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Surge Generator	irge Generator EVERFINE		1101002	Jul. 06, 2020
2	DIPS Generator	EVERFINE	EMS61000-1 1K	1011002	Jul. 06, 2020
Bee	EFT/B Generator	EVERFINE	EMS61000-4 A-V2	1012005	Aug. 04, 2020

# 2.5.7 INJECTION CURRENT

_					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Signal Generator	IFR	2023A	202301/368	Mar. 31, 2020
2	Power Amplifier	AR	75A250AM1	0320709	Sep. 23, 2020
3	CDN	FCC	FCC-801-M2	06043	Jun. 02, 2020
4	EM Clamp	FCC	F-203I-23MM	504	Jun. 09, 2020

# 2.4.8 MF

140,00	Kind of Farrings and	Manufacturer	Tuna Na	Carial Na	Calibrated until
nem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
3 1	Generator	EVERFINE	EMS61000-8 K	1007001	Jul. 06, 2020



# 3. EMC EMISSION TEST

## 3.1 CONDUCTED EMISSION MEASUREMENT

## 3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

Frequency Range	At mains	terminals	At load terminals and additional terminals	
(MHz)	Quasi-peak	Average	Quasi-peak	Average
	(dBuV)	(dBuV)	(dBuV)	(dBuV)
0.15 -0.5	66 - 56 *	56 - 46 *	80.00	70.00
0.50 -5.0	56.00	46.00	74.00	64.00
5.0 -30.0	60.00	50.00	74.00	64.00

#### 3.1.2 MAINS TERMINALS OF TOOLS

Frequency Range	Rated moto exceedir	r power not ng 700W	Rated mo above 700 exceeding	W and not	Rated mo	
(MHz)	dB (uV) Quasi-peak	dB (uV) Average**	dB (uV) Quasi-peak	dB (uV) Average**	dB (uV) Quasi-peak	dB (uV) Average**
0.15 -0.5	66.0 to 59.0*	59.0 to 49.0*	70.0 to 63.0*	63.0 to 53.0*	76.0 to 69.0*	69.0 to 59.0*
0.50 -5.0	59.0	49.0	63.0	53.0	69.0	59.0
5.0 -30.0	64.0	54.0	68.0	58.0	74.0	64.0

#### Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) "\*\*" If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.

## The following table is the setting of the receiver

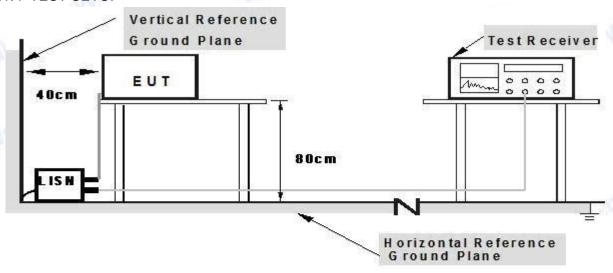
Setting		
10 dB		
0.15 MHz		
30 MHz		
9 kHz		



#### 3.1.3 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

#### 3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

#### 3.1.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.



# 3.1.6 TEST RESULTS

EUT:	UV Sterilizer Box	Model Name. :	- (c)(B)
Temperature :	<b>26</b> ℃	Relative Humidity:	54%
Pressure :	1010hPa	Test Date :	N/A
Test Mode :	N/A	Phase :	N/A
Test Voltage :	N/A		139 732

# Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2) There was not any unintentional transmission in standby mode.



#### 3.2 RADIATED EMISSION MEASUREMENT

# 3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1000MHz)

EDECLIENCY (MHz)	At 10m	At 3m
FREQUENCY (MHz)	dBuV/m	dBuV/m
30 – 230	30	40
230 – 1000	37	47

## 3.2.2 LIMITS OF DISTURBANCE POWER MEASUREMENT (Below 1000MHz)

	Household and similar appliances		Tools			
Frequen cy Range	ommar applianoes		Rated motor power not exceeding 700 W		Rated motor power above 700 W and not exceeding 1 000 W	
(MHz)	dB (pW) Quasi- peak	dB (pW) Averag*	dB (pW) Quasi-p eak	dB (pW) Averag*	dB (pW) Quasi-p eak	dB (pW) Averag*
30-300	44-55	35-45	44-55	35-45	49-59	39-49

#### Notes:

- (1) The limit for radiated test was performed according to as following: CISPR 14.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

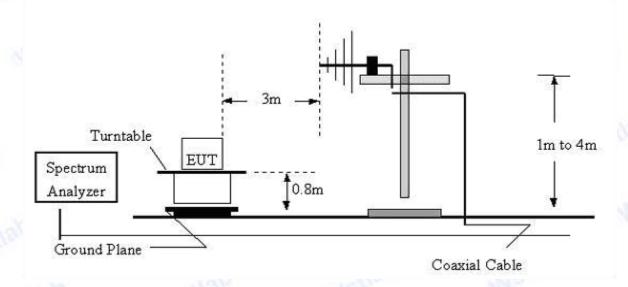
#### 3.2.3 TEST PROCEDURE

- a. The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP(AV) Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.

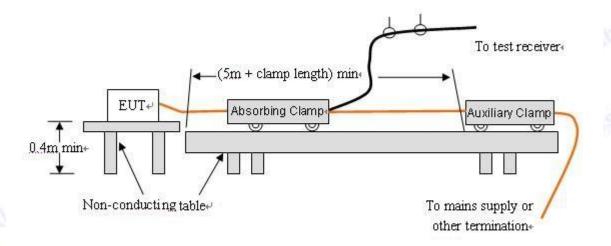


## 3.2.4 TEST SETUP

# (A) Radiated Emission Test Set-Up Frequency Below 1 GHz



# (B) Disturbance Power Test Set-UP Frequency Below 1GHz



# 3.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.



# 3.2.6 TEST RESULTS

EUT:	UV Sterilizer Box	Model Name:	
Temperature :	24 ℃	Relative Humidity:	54%
Pressure :	1010 hPa	Test Date :	2020-05-18
Test Mode :	Running	Polarization :	Horizontal
Test Power :	DC 5V	Welle	Mrs.

No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1*	948.7610	37.11	-6.15	30.96	47.00	-16.04			peak
2	207.8501	31.13	-17.51	13.62	40.00	-26.38			peak
3	102.7192	31.98	-18.56	13.42	40.00	-26.58			peak
4	50.4089	38.10	-20.64	17.46	40.00	-22.54			peak
5	43.3534	32.28	-17.19	15.09	40.00	-24.91			peak
6	30.3173	25.82	-7.40	18.42	40.00	-21.58			peak

#### Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Factor = Antenna Factor + Cable Loss.
- 3. N/A means All Data have pass Limit





EUT:	UV Sterilizer Box	Model Name :	-110
Temperature :	24 °C	Relative Humidity:	54%
Pressure :	1010 hPa	Test Date :	2020-05-18
Test Mode :	Running	Polarization:	Vertical
Test Power :	DC 5V		dala

No.	Frequency (MHz)	Reading (dBuV)	Correction factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (deg.)	Height (cm)	Remark
1	39.2991	35.52	-14.25	21.27	40.00	-18.73			peak
2	51.3005	45.03	-20.75	24.28	40.00	-15.72			peak
3	56.9912	43.53	-21.42	22.11	40.00	-17.89			peak
4	102.7192	36.51	-18.56	17.95	40.00	-22.05			peak
5	208.5803	34.10	-17.54	16.56	40.00	-23.44			peak
6*	948.7610	39.35	-6.15	33.20	47.00	-13.80			peak

## Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Factor = Antenna Factor + Cable Loss.
- 3. N/A means All Data have pass Limit





# 3.3 HARMONICS CURRENT

# 3.3.1 LIMITS OF HARMONICS CURRENT

IEC 555-2								
	Table -	I		Table -	-			
Equipment	Harmonic	Max. Permissible	Equipment	Harmonic	Max. Permissible			
Category	Order	Harmonic Current	Category	Order	Harmonic Current			
	n	(in Ampers)		n	(in Ampers)			
	Odd	Harmonics		Odd	Harmonics			
	3	2.30		3	0.80			
	5	1.14		5	0.60			
	7	0.77		7	0.45			
Non	9	0.40	TV	9	0.30			
Portable	11	0.33	Receivers	11	0.17			
Tools	13	0.21		13	0.12			
or	15≤n≤39	0.15 · 15/n		15≤n≤39	0.10 · 15/n			
TV	Even	Harmonics		Even	Harmonics			
Receivers	2	1.08		2	0.30			
	4	0.43		4	0.15			
	8	0.30						
	8≤n≤40	0.23 · 8/n		DC	0.05			

EN 61000-3-2/IEC 61000-3-2								
nent Harmonic	Max. Per	missible						
ory Order	Harmonio	Current						
n	(in A)	(mA/w)						
3 5 7 9 11 13≤n≤39	2.30 1.14 0.77 0.40 0.33 see Table I	3.4 1.9 1.0 0.5 0.35 3.85/n						
	13≤n≤39							



#### 3.3.1.1TEST PROCEDURE

a. The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the maximum harmonic components under normal operating conditions.

b. The classification of EUT is according to section 5 of EN 61000-3-2. The EUT is classified as follows:

Class A: Balanced three-phase equipment, Household appliances excluding equipment as Class D, Tools excluding portable tools, Dimmers for incandescent lamps, audio equipment, equipment not specified in one of the three other classes.

Class B: Portable tools. Portable tools.; Arc welding equipment which is not professional equipment.

Class C: Lighting equipment.

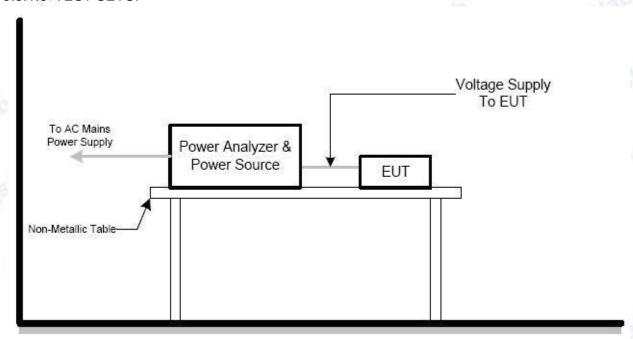
Class D: Equipment having a specified power less than or equal to 600 W of the following types: Personal computers and personal computer monitors and television receivers.

c. The correspondent test program of test instrument to measure the current harmonics emanated from EUT is chosen. The measure time shall be not less than the time necessary for the EUT to be exercised.

#### 3.3.1.2 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

#### **3.3.1.3 TEST SETUP**





# 3.3.2 TEST RESULTS

EUT:	UV Sterilizer Box	Model Name :	120
Temperature :	25 ℃	Relative Humidity:	45%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	day	15flab
Test Power :	N/A	Wer	de.

## Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2)There was not any unintentional transmission in standby mode.



#### 3.4 VOLTAGE FLUCTUATION AND FLICKERS

#### 3.4.1 LIMITS OF VOLTAGE FLUCTUATION AND FLICKERS

Tests	Lii	mits	Descriptions		
lesis	IEC555-3	IEC/EN 61000-3-3	Descriptions		
Pst	≤ 1.0, Tp= 10 min.	≤ 1.0, Tp= 10 min.	Short Term Flicker Indicator		
Plt	N/A	≤ 0.65, Tp=2 hr.	Long Term Flicker Indicator		
dc	≤ 3%	≤ 3.3%	Relative Steady-State V-Chang		
dmax	≤ 4%	≤ 4%	Maximum Relative V-change		
d (t)	N/A	$\leq 3.3\%$ for $>500~ms$	Relative V-change characteristic		

#### 3.4.1.1TEST PROCEDURE

#### a. Harmonic Current Test:

Test was performed according to the procedures specified in Clause 5.0 of IEC555-2 and/or Sub-clause 6.2 of IEC/EN 61000-3-2 depend on which standard adopted for compliance measurement.

#### b. Fluctuation and Flickers Test:

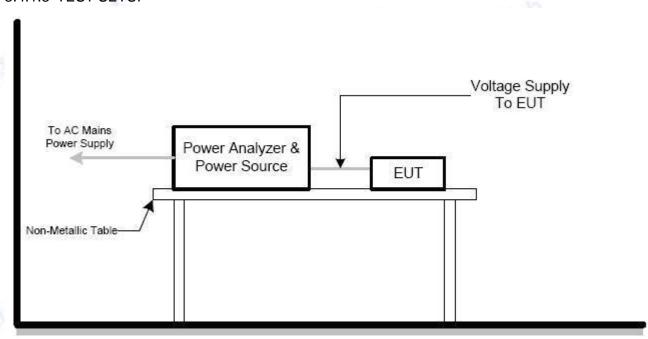
Tests was performed according to the Test Conditions/Assessment of Voltage Fluctuations specified in Clause 5.0/6.0 of IEC555-3 and/or Clause 6.0/4.0 of IEC/EN 61000-3-3 depend on which standard adopted for compliance measurement.

c. All types of harmonic current and/or voltage fluctuation in this report are assessed by direct measurement using flicker-meter.

# 3.4.1.2 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

#### 3.4.1.3 TEST SETUP





3.4.2 TEST RESULTS

EUT :	UV Sterilizer Box	Model Name :	1,200
Temperature :	25 ℃	Relative Humidity:	45%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	data	" Ellah
Test Power :	N/A	Wign	de

# Note:

1)N/A-denotes test is not applicable in this test report.

2) There was not any unintentional transmission in standby mode.



# 4. EMC IMMUNITY TEST

# 4.1 STANDARD COMPLIANCE/SERVRITY LEVEL/CRITERIA

Tests Standard No.	TEST SPECIFICATION	Test Mode Test Ports	Perform. Criteria	
1. ESD IEC/EN 61000-4-2	8KV air discharge 4KV contact discharge	Direct Mode	B	
IEC/EIN 61000-4-2	4KV HCP discharge 4KV VCP discharge	Indirect Mode	В	
2. RS IEC/EN 61000-4-3	80 MHz to 1000 MHz, 1000Hz, 80%, AM modulated	Enclosure	A	
3. EFT/Burst	5/50ns Tr/Th 5KHz Repetition Freq.	Power Supply Port	В	
IEC/EN 61000-4-4	5/50ns Tr/Th 5KHz Repetition Freq.	CTL/Signal Data Line Port	В	
4. Surges	1.2/50(8/20) Tr/Th us	L-N	В	
IEC/EN 61000-4-5	1.2/50(8/20) Tr/Th us	L-PE N-PE	В	
	0.15 MHz to 80 MHz, 1000Hz 80%, AM Modulated 150Ω source impedance	CTL/Signal Port	A	
5 Injected Current IEC/EN 61000-4-6	0.15 MHz to 80 MHz, 1000Hz 80%, AM Modulated 150Ω source impedance	AC Power Port	A	
	0.15 MHz to 80 MHz, 1000Hz 80%, AM Modulated 150Ω source impedance	DC Power Port	А	
6. Power Frequency Magnetic Field IEC/EN 61000-4-8	50 Hz,	Enclosure	A	
7. Volt. Interruptions Volt. Dips IEC/EN 61000-4-11	Voltage dip 0% Voltage dip 30% Voltage dip 60%	AC Power Port	C C C	



# 4.2 GENERAL PERFORMANCE CRITERIA

According to EN 55014-2 standard, the general performance criteria as following:

Criterion A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended.  The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
Criterion B	After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended
Criterion C	Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the

# 4.3 GENERAL PERFORMANCE CRITERIA TEST SETUP

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.



# 4.4 ESD TESTING

#### 4.4.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-2				
Discharge Impedance:	330 ohm / 150 pF				
Required Performance	В				
Discharge Voltage:	Air Discharge: 2kV/4kV/8kV (Direct)				
	Contact Discharge : 2kV/4kV (Direct/Indirect)				
Polarity:	Positive & Negative				
Number of Discharge:	Air Discharge: min. 20 times at each test point				
	Contact Discharge: min. 20 at each test point				
Discharge Mode:	Single Discharge				
Discharge Period:	1 second minimum				

#### 4.4.2 TEST PROCEDURE

The test generator necessary to perform direct and indirect application of discharges to the EUT in the following manner:

a. Contact discharge was applied to conductive surfaces and coupling planes of the EUT. During the test, it was performed with single discharges. For the single discharge time between successive single discharges was at least 1 second. The EUT shall be exposed to at least 200 discharges, 100 each at negative and positive polarity, at a minimum of four test points. One of the test points shall be subjected to at least 50 indirect discharges to the center of the front edge of the horizontal coupling plane. The remaining three test points shall each receive at least 50 direct contact discharges.

If no direct contact test points are available, then at least 200 indirect discharges shall be applied in the indirect mode. Test shall be performed at a maximum repetition rate of one discharge per second.

Vertical Coupling Plane (VCP):

The coupling plane, of dimensions  $0.5m \times 0.5m$ , is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge.

Horizontal Coupling Plane (HCP):

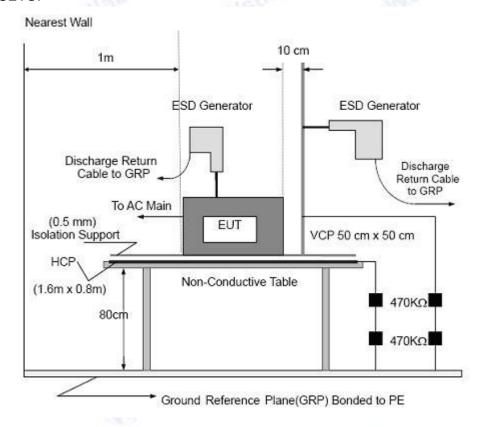
The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane. The four faces of the EUT will be performed with electrostatic discharge.

b. Air discharges at insulation surfaces of the EUT.

It was at least ten single discharges with positive and negative at the same selected point.



#### 4.4.3 TEST SETUP



#### Note:

#### **TABLE-TOP EQUIPMENT**

The configuration consisted of a wooden table 0.8 meters high standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum at least 0.25mm thick, and 2.5 meters square connected to the protective grounding system. A Horizontal Coupling Plane (1.6m x 0.8m) was placed on the table and attached to the GRP by means of a cable with 940k total impedance. The equipment under test, was installed in a representative system as described in section 7 of IEC /EN 61000-4-2, and its cables were placed on the HCP and isolated by an insulating support of 0.5mm thickness. A distance of1-meter minimum was provided between the EUT and the walls of the laboratory and any other metallic structure.

#### FLOOR-STANDING EQUIPMENT

The equipment under test was installed in a representative system as described in section 7 of IEC/EN 61000-4-2, and its cables were isolated from the Ground Reference Plane by an insulating support of 0.1-meter thickness. The GRP consisted of a sheet of aluminum that is at least 0.25mm thick, and 2.5meters square connected to the protective grounding system and extended at least 0.5 meters from the EUT on all sides.



4.4.4 TEST RESULTS

EUT :	UV Sterilizer Box	Model Name :	der
Temperature :	25 ℃	Relative Humidity:	45%
Pressure :	1010 hPa	Test Date :	2020-05-19
Test Mode :	Running	den	421131
Test Power :	DC 5V	War	de

Mode		Air Discharge							Contact Discharge							
	2	2KV	4	<b>〈</b>	81	<b>〈</b>	12	K۷	21	<b>(</b> V	4	<b>(</b> V	6k	<b>(</b> V	81	<b>〈</b>
Location	Р	N	Р	N	Р	N	Р	N	Р	N	Р	N	Р	N	Р	N
enclosure	1								Α	Α	Α	Α	30			
slit	Α	Α	Α	Α	Α	Α		113	2			ies	0			N.S.
HCP			771.				M,	100	Α	Α	Α	Α				
VCP		777							Α	Α	Α	Α		_W		
Criteria		В					B B									
Result		Α					A									
Judgment		PASS					PASS									

#### Note:

- 1) +/- denotes the Positive/Negative polarity of the output voltage.
- 2) Test condition:
  - Direct / Indirect (HCP/VCP) discharges: Minimum 50 times (Positive/Negative) at each point. Air discharges: Minimum 10 times (Positive/Negative) at each point.
- 3) Test location(s) in which discharge (Air and contact discharge) to be applied illustrated by photos shown in next page(s)
- 4) The Indirect (HCP/VCP) discharges description of test point as following: 1.left side 2.right side 3.front side 4.rear side
- 5) N/A denotes test is not applicable in this test report



#### 4.5 RS TESTING

#### 4.5.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-3				
Required Performance	A				
Frequency Range:	80 MHz - 1000 MHz				
Field Strength:	3 V/m				
Modulation:	1kHz Sine Wave, 80%, AM Modulation				
Frequency Step:	1 % of fundamental				
Polarity of Antenna:	Horizontal and Vertical				
Test Distance:	3 m				
Antenna Height:	1.5 m				
Dwell Time:	at least 3 seconds				

#### 4.5.2 TEST PROCEDURE

The EUT and support equipment, which are placed on a table that is 0.8 meter above ground and the testing was performed in a fully-anechoic chamber.

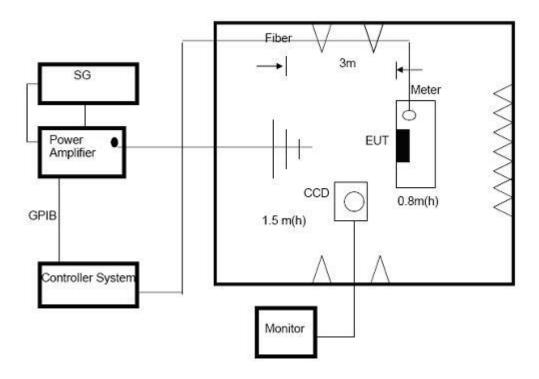
The testing distance from antenna to the EUT was 3 meters.

The other condition as following manner:

- a. The frequency range is swept from 80 MHz to 1000 MHz, & 1400MHz 2700MHz with the signal 80%amplitude modulated with a 1kHz sine wave. The rate of sweep did not exceed 1.5x 10-3 decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- b. Sweep Frequency 900 MHz, with the Duty Cycle:1/8 and Modulation: Pulse 217 Hz(if applicable)
- c. The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.
- d. The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.



#### 4.5.3 TEST SETU



#### Note:

## TABLE-TOP EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN 61000-4-3 was placed on a non-conductive table 0.8 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

# FLOOR-STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN 61000-4-3 was placed on a non-conductive wood support 0.1 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.



# 4.5.4 TEST RESULTS

EUT :	UV Sterilizer Box	Model Name :	der
Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Date :	2020-05-19
Test Mode :	Running	dela	Mellan
Test Power :	DC 5V	War	A.S.

Frequency Range (MHz)	RF Field Position	R.F. Field Strength	Azimuth	Perform. Criteria	Results	Judgment
0420	166	333	Front	the i	alo	
lab de	SHan	3 V/m (rms)	Rear	Vision	-	
80MHz - 1000MHz	H/V	AM Modulated 1000Hz, 80%	Left	A	A	PASS
Nb.		c/o	Right	101	-416	

#### Note:

- 1) N/A denotes test is not applicable in this test report.
- 2) Criteria A: There was no change operated with initial operating during the test.
- 3) Criteria B: The EUT function loss during the test, but self-recoverable after the test.
- 4) Criteria C: The system shut down during the test.



#### 4.6 EFT/BURST TESTING

#### 4.6.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-4
Required Performance	В
Test Voltage:	Power Line: 1 kV
	Signal/Control Line: 0.5 KV
Polarity:	Positive & Negative
Impulse Frequency:	5 kHz
Impulse Wave shape :	5/50 ns
Burst Duration:	15 ms
Burst Period:	300 ms
Test Duration:	Not less than 1 min.

#### 4.6.2 TEST PROCEDURE

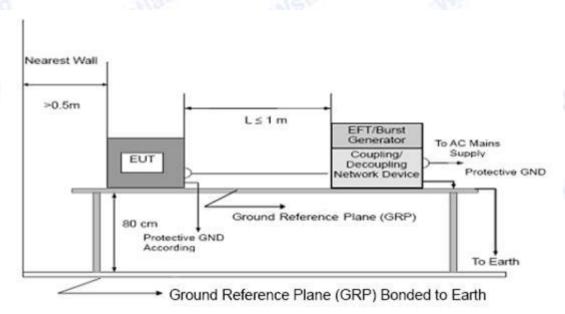
The EUT and support equipment, are placed on a table that is 0.8 meter above a metal ground plane measured 1m\*1m min. and 0.65mm thick min.

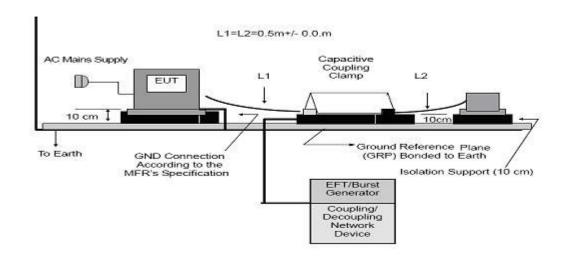
The other condition as following manner:

- a. The length of power cord between the coupling device and the EUT should not exceed 1 meter.
- b. Both positive and negative polarity discharges were applied.
- c. The duration time of each test sequential was 1 minute



#### 4.6.3 TEST SETUP





#### Note:

#### **TABLE-TOP EQUIPMENT**

The configuration consisted of a wooden table (0.8m high) standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum (at least 0.25mm thick and 2.5m square) connected to the protective grounding system. A minimum distance of 0.5m was provided between the EUT and the walls of the laboratory or any other metallic structure.

#### FLOOR-STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN 61000-4-4 and its cables, were isolated from the Ground Reference Plane by an insulating support that is 0.1-meter thick. The GRP consisted of a sheet of aluminum (at least 0.25mm thick and 2.5m square) connected to the protective grounding system.



# 4.6.4 TEST RESULTS

EUT:	UV Sterilizer Box	Model Name :	don
Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	den	Mellan
Test Power :	N/A	War	M.

#### Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2)There was not any unintentional transmission in standby mode.



#### 4.7 SURGE TESTING

#### 4.7.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-5	
Required Performance	В	
Wave-Shape:	Combination Wave	
	1.2/50 us Open Circuit Voltage	
	8 /20 us Short Circuit Current	
Test Voltage:	Power Line: 0.5 kV, 1 kV, 2 kV	
Surge Input/Output:	L-N, L-PE, N-PE	
Generator Source:	2 ohm between networks	
Impedance:	12 ohm between network and ground	
Polarity:	Positive/Negative	
Phase Angle:	0 /90/180/270°	
Pulse Repetition Rate:	1 time / min. (maximum)	
Number of Tests:	5 positive and 5 negative at selected points	

#### 4.7.2 TEST PROCEDURE

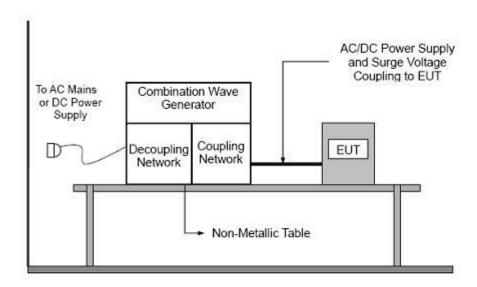
#### a. For EUT power supply:

The surge is to be applied to the EUT power supply terminals via the capacitive coupling network. Decoupling networks are required in order to avoid possible adverse effects on equipment not under test that may be powered by the same lines, and to provide sufficient decoupling impedance to the surge wave. The power cord between the EUT and the coupling/decoupling networks shall be 2meters in length (or shorter).

- b. For test applied to unshielded unsymmetrically operated interconnection lines of EUT: The surge is applied to the lines via the capacitive coupling. The coupling /decoupling networks shall not influence the specified functional conditions of the EUT. The interconnection line between the EUT and the coupling/decoupling networks shall be 2 meters in length (or shorter).
- c. For test applied to unshielded symmetrically operated interconnection /telecommunication lines of EUT:
- d. The surge is applied to the lines via gas arrestors coupling. Test levels below the ignition point of the coupling arrestor cannot be specified. The interconnection line between the EUT and the coupling/decoupling networks shall be 2 meters in length (or shorter).



#### 4.7.3 TEST SETUP





# 4.7.4 TEST RESULTS

EUT :	UV Sterilizer Box	Model Name :	don
Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	den	Mellan
Test Power :	N/A	War	M.

#### Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2) There was not any unintentional transmission in standby mode.



#### 4.8 INJECTION CURRENT TESTING

#### 4.8.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-6
Required Performance	Α
Frequency Range:	0.15 MHz - 80 MHz
Field Strength:	3 Vr.m.s.
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of fundamental
Dwell Time:	at least 3 seconds

#### 4.8.2 TEST PROCEDURE

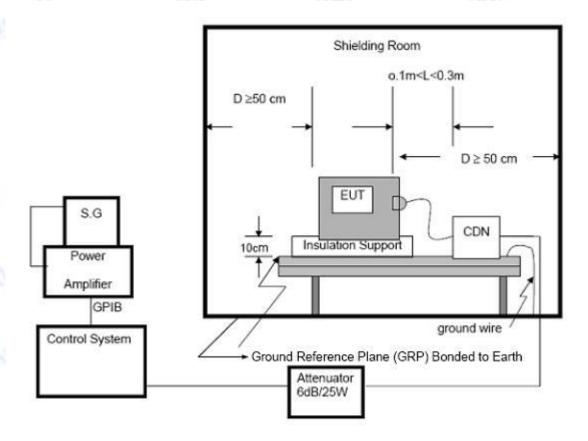
The EUT and support equipment, are placed on a table that is 0.8 meter above a metal ground plane measured 1m\*1m min. and 0.65mm thick min.

The other condition as following manner:

- a. The frequency range is swept from 150 KHz to 80 MHz, with the signal 80%amplitude modulated with a 1kHz sine wave. The rate of sweep did not exceed 1.5x 10-3 decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- b. The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.



#### 4.8.3 TEST SETUP



#### NOTE:

#### FLOOR-STANDING EQUIPMENT

The equipment to be tested is placed on an insulating support of 0.1 meters height above a ground reference plane. All relevant cables shall be provided with the appropriate coupling and decoupling devices at a distance between 0.1 meters and 0.3 meters from the projected geometry of the EUT on the ground reference plane.



# 4.8.4 TEST RESULTS

EUT:	UV Sterilizer Box	Model Name :	der
Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	dela	"IEHAD
Test Power :	N/A	Mar	M.

#### Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2)There was not any unintentional transmission in standby mode.



### 4.9 POWER FREQUENCY MAGNETIC FIELD TESTING

#### 4.9.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-8
Required Performance	Α
Frequency Range:	50Hz
Field Strength:	1 A/m
Observation Time:	1 minute
Inductance Coil:	Rectangular type, 1mx1m

#### 4.9.2 TEST PROCEDURE

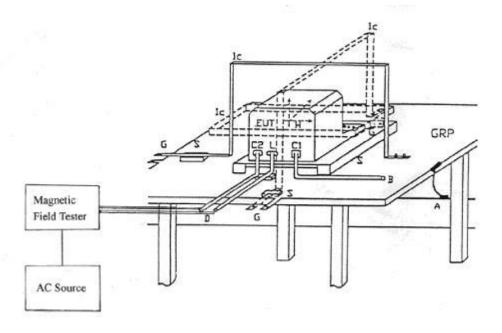
The EUT and support equipment, are placed on a table that is 0.8 meter above a metal ground plane measured 1m\*1m min. and 0.65mm thick min.

The other condition as following manner:

- a. The equipment cabinets shall be connected to the safety earth directly on the GRP via the earth terminal of the EUT.
- b. The cables supplied or recommended by the equipment manufacturer shall be used. 1 meter of all cables used shall be exposed to the magnetic field.



#### 4.9.3 TEST SETUP



#### Note:

#### TABLE-TOP EQUIPMENT

The equipment shall be subjected to the test magnetic field by using the induction coil of standard dimension (1 m  $\times$  1 m). The induction coil shall then be rotated by 90 degrees in order to expose the EUT to the test field with different orientations.

#### FLOOR-STANDING EQUIPMENT

The equipment shall be subjected to the test magnetic field by using induction coils of suitable dimensions. The test shall be repeated by moving and shifting the induction coils, in order to test the whole volume of the EUT for each orthogonal direction. The test shall be repeated with the coil shifted to different positions along the side of the EUT, in steps corresponding to 50 % of the shortest side of the coil. The induction coil shall then be rotated by 90 degrees in order to expose the EUT to the test field with different orientations.



#### 4.9.4 TEST RESULTS

EUT:	UV Sterilizer Box	Model Name :	der
Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	436	"ISHAL
Test Power :	N/A	War	de

#### Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2) There was not any unintentional transmission in standby mode.



#### 4.10 VOLTAGE INTERRUPTION/DIPS TESTING

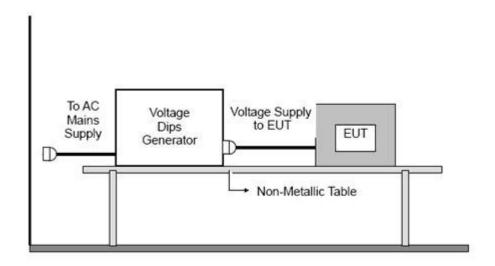
#### 4.10.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-11
Required Performance	C (For 0% Voltage Dips)
	C (For 30% Voltage Dips)
	C (For 60% Voltage Dips)
Test Duration Time:	Minimum three test events in sequence
Interval between Event:	Minimum ten seconds
Phase Angle:	0°/45°/90°/135°/180°/225°/270°/315°/360°
Test Cycle:	3 times

#### 4.10.2 TEST PROCEDURE

The EUT shall be tested for each selected combination of test levels and duration with a sequence of three dips/interruptions with intervals of 10 s minimum (between each test event). Each representative mode of operation shall be tested. Abrupt changes in supply voltage shall occur at zero crossings of the voltage waveform.

#### 4.10.3 TEST SETUP





# 4.10.4 TEST RESULTS

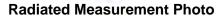
EUT:	UV Sterilizer Box	Model Name :	der
Temperature :	25 ℃	Relative Humidity:	60%
Pressure :	1010 hPa	Test Date :	N/A
Test Mode :	N/A	dela	"IEHAD
Test Power :	N/A	War	M.

#### Note:

- 1)N/A-denotes test is not applicable in this test report.
- 2)There was not any unintentional transmission in standby mode.



# **5. EUT TEST PHOTO**





**ESD Photo** 





# ATTACHMENT PHOTOGRAPHS OF EUT

Photo 1



Photo 2









Photo 4







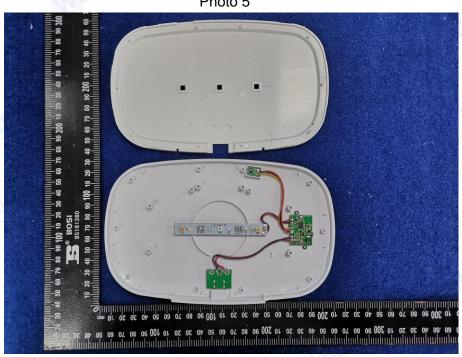
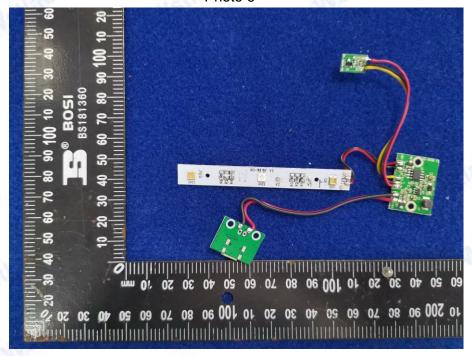
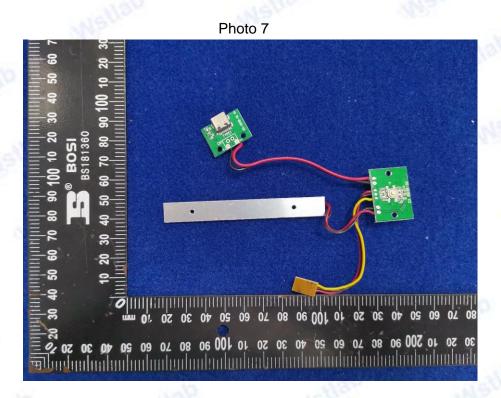


Photo 6







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





# CERTIFICATE OF CONFORMITY

Registration No.: WST20N050126S

Technical Construction File No.: WST20N050126-1SR

Certificate's Holder:

Manufacturer:

Product:

**UV Sterilizer Box** 

Model (S):

6650

Trade Mark:

N/A

Rating:

Input: DC 5V, 2A, 10W

Directives:

2014/35/EU

EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017

Standard(s): A1:2019 + A14:2019 + A2:2019

EN 62233:2008 + AC:2008

Remark: This Certificate of Compliance has been issued on a voluntary basis. WST confirms that a Technical Construction File (TCF) is existent for the above listed product(s). The TCF satisfactorily covers the essential requirements of the above listed Directive(s).

Other relevant Directives have to be observed in case they are applicable.

This Document is only valid for the equipment and configuration described and in conjunction with the TCF detailed above. Whereas the Manufacturer is responsible of the certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.

The Manufacturer is also responsible of the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Directive(s).

This certificate can be checked for validity at www.wstlab.com



Wstla Certification Manager

Date of issue: May 27, 2020





# CERTIFICATE OF CONFORMITY

Registration No.: WST20N050110R

Technical Construction File No.: WST20N050110-1RR

Certificate's Holder:

Manufacturer:

Product:

**UV Sterilizer Box** 

6650

Model (S):

(Additional model materials are the same as main model materials

Trade Mark:

N/A

Directives:

2011/65/EU

(EU) 2015/863 (EU) 2017/2102

Standard(s): IEC62321

Remark: This Certificate of Compliance has been issued on a voluntary basis. WST confirms that a Technical Construction File (TCF) is existent for the above listed product(s). The TCF satisfactorily covers the essential requirements of the above listed Directive(s).

Other relevant Directives have to be observed in case they are applicable.

This Document is only valid for the equipment and configuration described and in conjunction with the TCF detailed above. Whereas the Manufacturer is responsible of the certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.

The Manufacturer is also responsible of the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Directive(s).

This certificate can be checked for validity at www.wstlab.com.

RoHS

Certification Manager

Date of issue: May 21, 2020





# **Test Report**

#### Applicant:

Report on the submitted sample(s) said to be:

Sample Name: UV Sterilizer Box

Model: 6650

(Additional model materials are the same as main model materials.)

Trade Mark: N/A

Date of Test: May 14, 2020 ~ May 21, 2020

Date of Report: May 21, 2020

Test Requested: 1. As specified by client ,to screen Lead(Pb), Cadmium(Cd), Mercury(Hg),

Chromium(Cr)and Bromine(Br)in the submitted sample(s)by XRF.

2. As specified by client, when screening results exceed the XRF screening limit in IEC62321:2013 Edition 1.0, further use of wet chemical methods are required to test

Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium (Cr(VI)),

Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the

submitted sample(s).

**Test Method:** Please refer to the following page(s).

**Test Result(s):** Please refer to the following page(s).

Conclusion: The test results comply with the limits of RoHS 2.0 Directive (EU) 2015/863 and

(EU) 2017/2102 amending Annes II to Directive 2011/65/EU.

Checked By:

(Nana Lin)

Approved By:

( Coco Tang ) \* SNILS

Tel: +86-755-2782 2785 E-mail: service@wstlab.com http://www.wstlab.com Page 1 of 12



#### Test Method:

#### (1) With reference to IEC 62321:2013

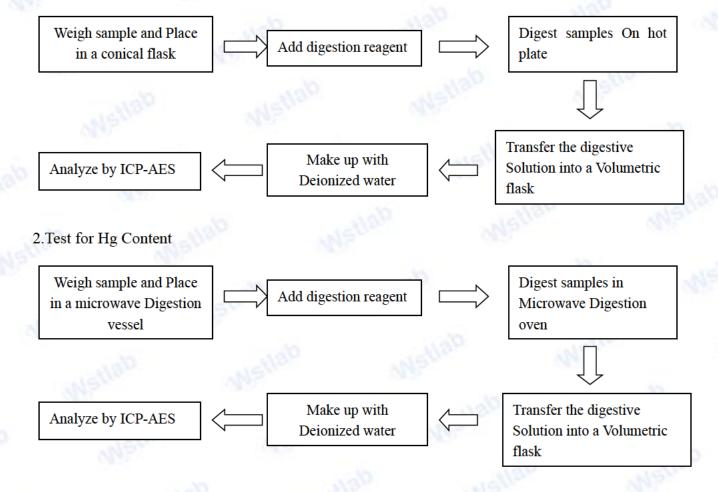
Testing item Pretreatment method		Measuring instrument	MDL
Lead(Pb)	IEC 62321-5: 2013	ICP-OES	2 mg/kg
Cadmium(Cd)	IEC 62321-5: 2013	ICP-OES	2 mg/kg
Mercury(Hg)	IEC 62321-4: 2013	ICP-OES	2 mg/kg
Chromium(Cr VI)	IEC 62321-7:2015	UV-VIS	2 mg/kg
PBBs/ PBDEs	IEC 62321-6:2015	GC-MS	5 mg/kg

#### (2)With reference to EN 62321-8:2017

Testing item	Pretreatment method	Measuring instrument	MDL
DEHP, DBP, BBP, DIBP	EN 62321-8:2017	GC-MS	0.003 mg/kg

#### **Test Process:**

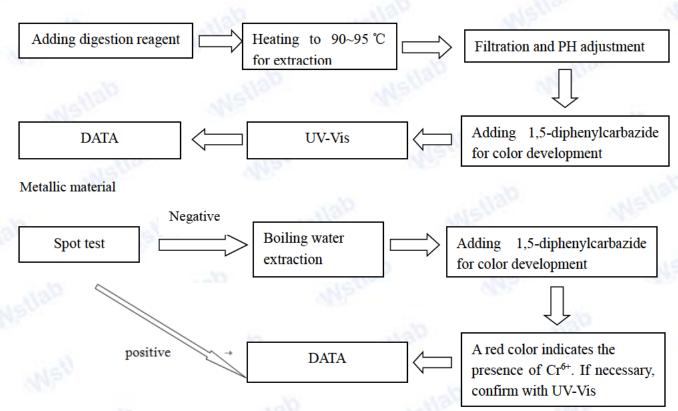
#### 1. Test for Cd/Pb Content



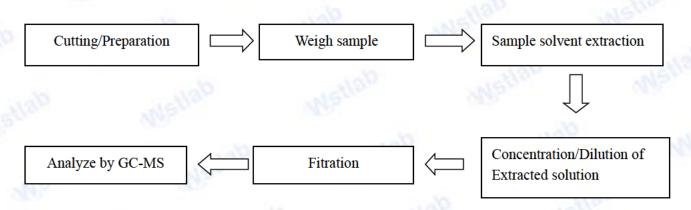


#### 3. Test for Chromium(VI) Content

#### Nonmetallic material



#### 4. Test for DBP, BBP, DEHP, DIHP, DIBP, PBB, PBDE Content





# Test Results:

Mar. Mer.	TT:4	ROHS	Result						
Testing Item	Unit	Limit	10	2	3	4	5	6	
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Sum of PBBs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Monobromobiphenyl	mg/kg	- C/ <sub>2</sub>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Dibromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Tribromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Tetrabromobiphenyl	mg/kg	10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Pentabromobiphenyl	mg/kg	19/10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Hexabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Heptabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Octabromobiphenyl	mg/kg	-478	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Nonabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Decabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Sum of PBDEs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Monobromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Dibromodiphenyl ether	mg/kg	· -	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Tribromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Tetrabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Pentabromodiphenyl ether	mg/kg	- 1-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Hexabromodiphenyl ether	mg/kg	1190	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Heptabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Octabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Nonabromodiphenyl ether	mg/kg	1251	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Decabromodiphenyl ether	mg/kg	11.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	

#### Sample Description:

- 1: PCB
- 2: IC
- 3: Triode
- 4: Resistance
- 5: Capacitance
- 6: Inductance

Shenzhen WST Testing Co., Ltd.



100		Albert City							
Testing Item	Unit	ROHS			Re	sult			
resting item		Limit	7	8	9	10	11	12	
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Sum of PBBs	mg/kg	1000	/	N.D.	N.D.	/	/	N.D.	
Monobromobiphenyl	mg/kg	-0/2	/	N.D.	N.D.	/	/	N.D.	
Dibromobiphenyl	mg/kg	600	/	N.D.	N.D.	/	/	N.D.	
Tribromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Tetrabromobiphenyl	mg/kg	- 5/0	/	N.D.	N.D.	/	/	N.D.	
Pentabromobiphenyl	mg/kg	19/10	/	N.D.	N.D.	/	/	N.D.	
Hexabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Heptabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Octabromobiphenyl	mg/kg	-478	/	N.D.	N.D.	/	/	N.D.	
Nonabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Decabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	1	N.D.	
Sum of PBDEs	mg/kg	1000	/	N.D.	N.D.	1	/	N.D.	
Monobromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Dibromodiphenyl ether	mg/kg		/	N.D.	N.D.	/	/	N.D.	
Tribromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Tetrabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Pentabromodiphenyl ether	mg/kg		/	N.D.	N.D.	/	/	N.D.	
Hexabromodiphenyl ether	mg/kg	1190	/	N.D.	N.D.	/	/	N.D.	
Heptabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Octabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	/	/	N.D.	
Nonabromodiphenyl ether	mg/kg	1/2/2	/	N.D.	N.D.	/	/	N.D.	
Decabromodiphenyl ether	mg/kg	110	/	N.D.	N.D.	/	/	N.D.	
Diisobutyl phthalate (DIBP)	mg/kg	1000	/	N.D.	N.D.	/	1	N.D.	
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	_/	N.D.	N.D.	/-	/	N.D.	
Benzylbutyl Phthalate (BBP)	mg/kg	1000	/	N.D.	N.D.	/	/	N.D.	
Dibutyl Phthalate (DBP)	mg/kg	1000	/	N.D.	N.D.	/	/	N.D.	

7: Solder

8: Black electrolytic capacitor film

9: Black rubber

10: Pin

11: Aluminum shell

12: Electrolytic paper



		Mar							
Testing Item	Unit	ROHS			Re	sult	30		
resting item	Om	Limit	13	14	15	16	17	18	
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Sum of PBBs	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/	
Monobromobiphenyl	mg/kg	-02	N.D.	/	N.D.	N.D.	N.D.	- /	
Dibromobiphenyl	mg/kg	600	N.D.	1	N.D.	N.D.	N.D.	/	
Tribromobiphenyl	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Tetrabromobiphenyl	mg/kg	- 5/0	N.D.	/	N.D.	N.D.	N.D.	/	
Pentabromobiphenyl	mg/kg	19/10	N.D.	/	N.D.	N.D.	N.D.	/	
Hexabromobiphenyl	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Heptabromobiphenyl	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Octabromobiphenyl	mg/kg	-478	N.D.	/	N.D.	N.D.	N.D.	/	
Nonabromobiphenyl	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Decabromobiphenyl	mg/kg	-	N.D.	_ /	N.D.	N.D.	N.D.	/	
Sum of PBDEs	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/	
Monobromodiphenyl ether	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Dibromodiphenyl ether	mg/kg		N.D.	/	N.D.	N.D.	N.D.	/	
Tribromodiphenyl ether	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Tetrabromodiphenyl ether	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Pentabromodiphenyl ether	mg/kg	100	N.D.	/	N.D.	N.D.	N.D.	/	
Hexabromodiphenyl ether	mg/kg	1190	N.D.	/	N.D.	N.D.	N.D.	/	
Heptabromodiphenyl ether	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Octabromodiphenyl ether	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/	
Nonabromodiphenyl ether	mg/kg	1/21-	N.D.	/	N.D.	N.D.	N.D.	/	
Decabromodiphenyl ether	mg/kg	17.0	N.D.	/	N.D.	N.D.	N.D.	/	
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/	
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/	
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/	
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/	

- 13: Inductor body
- 14: Copper wire
- 15: Adhesive tape
- 16: White plastic

#### wire

- 17: White silicone
- 18: Wire core

#### Shenzhen WST Testing Co., Ltd.



				AVS.						
Testing Item	Unit	ROHS			Re	sult	- 35			
	Om	Limit	19	20	21	22	23	24		
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.		
Sum of PBBs	mg/kg	1000	/	N.D.	N.D.	N.D.	/	N.D.		
Monobromobiphenyl	mg/kg	- C/2	/	N.D.	N.D.	N.D.	/	N.D.		
Dibromobiphenyl	mg/kg	· -	/	N.D.	N.D.	N.D.	/	N.D.		
Tribromobiphenyl	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Tetrabromobiphenyl	mg/kg	-5/0	/	N.D.	N.D.	N.D.	/	N.D.		
Pentabromobiphenyl	mg/kg	19/10	/	N.D.	N.D.	N.D.	/	N.D.		
Hexabromobiphenyl	mg/kg	- ·	/	N.D.	N.D.	N.D.	/	N.D.		
Heptabromobiphenyl	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Octabromobiphenyl	mg/kg	-676	-/	N.D.	N.D.	N.D.	/	N.D.		
Nonabromobiphenyl	mg/kg	0	/	N.D.	N.D.	N.D.	/	N.D.		
Decabromobiphenyl	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Sum of PBDEs	mg/kg	1000	/	N.D.	N.D.	N.D.	/	N.D.		
Monobromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Dibromodiphenyl ether	mg/kg		/	N.D.	N.D.	N.D.	/	N.D.		
Tribromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Tetrabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Pentabromodiphenyl ether	mg/kg		/	N.D.	N.D.	N.D.	/	N.D.		
Hexabromodiphenyl ether	mg/kg	1100	/	N.D.	N.D.	N.D.	/	N.D.		
Heptabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Octabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.		
Nonabromodiphenyl ether	mg/kg	1221-	/	N.D.	N.D.	N.D.	/	N.D.		
Decabromodiphenyl ether	mg/kg	Ale	/	N.D.	N.D.	N.D.	/	N.D.		
Diisobutyl phthalate (DIBP)	mg/kg	1000	/	N.D.	N.D.	N.D.	1	N.D.		
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	_/	N.D.	N.D.	N.D.	/	N.D.		
Benzylbutyl Phthalate (BBP)	mg/kg	1000	/	N.D.	N.D.	N.D.	/	N.D.		
Dibutyl Phthalate (DBP)	mg/kg	1000	/	N.D.	N.D.	N.D.	/	N.D.		

19: Screw

20: White plastic shell

21: LED

22: Ink

23: Metal interface

24: USB



		M97 M9							
Testing Item	Unit	ROHS			Re	sult	35		
resting item	Om	Limit	25	26	27	28	29	30	
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
Sum of PBBs	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	/	
Monobromobiphenyl	mg/kg	-02	N.D.	N.D.	1	N.D.	N.D.	_ /	
Dibromobiphenyl	mg/kg	600	N.D.	N.D.	/	N.D.	N.D.	/	
Tribromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Tetrabromobiphenyl	mg/kg	- 5/0	N.D.	N.D.	/	N.D.	N.D.	/	
Pentabromobiphenyl	mg/kg	19/10	N.D.	N.D.	1	N.D.	N.D.	/	
Hexabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Heptabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Octabromobiphenyl	mg/kg	-478	N.D.	N.D.	/	N.D.	N.D.	/	
Nonabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Decabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Sum of PBDEs	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	/	
Monobromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Dibromodiphenyl ether	mg/kg		N.D.	N.D.	0 /	N.D.	N.D.	/	
Tribromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Tetrabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Pentabromodiphenyl ether	mg/kg	100	N.D.	N.D.	/	N.D.	N.D.	/	
Hexabromodiphenyl ether	mg/kg	1190	N.D.	N.D.	/	N.D.	N.D.	/	
Heptabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Octabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/	
Nonabromodiphenyl ether	mg/kg	11/21-	N.D.	N.D.	/	N.D.	N.D.	/	
Decabromodiphenyl ether	mg/kg	17.0	N.D.	N.D.	/	N.D.	N.D.	/	
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	/	
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	/	
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	_ /	
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	/	

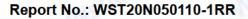
- 25: Display screen
- 26: White plastic button
- 27: Silver metal plug
- 28: White plastic baffle
- 29: Black magic post
- 30: Metal wire



Man Man		POHG	Result						
Testing Item	Unit	ROHS Limit					-30		
T (M)	/1		31	32	/	/	/		
Lead(Pb)	mg/kg	1000	N.D.	N.D.	/	/	/	/	
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	/	/	/	/	
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	/	/	/	/	
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	/	/	/	/	
Sum of PBBs	mg/kg	1000	N.D.	N.D.	/	/	/	/	
Monobromobiphenyl	mg/kg	· (1/2	N.D.	N.D.	/	/	/	_ /	
Dibromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/	
Tribromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/	
Tetrabromobiphenyl	mg/kg	Class.	N.D.	N.D.	/	/	/	/	
Pentabromobiphenyl	mg/kg	19110	N.D.	N.D.	1	/	/	/	
Hexabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/	
Heptabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/	
Octabromobiphenyl	mg/kg	-478	N.D.	N.D.	/	/	/	/	
Nonabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/	
Decabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	1	/	
Sum of PBDEs	mg/kg	1000	N.D.	N.D.	/	/	/	/	
Monobromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/	
Dibromodiphenyl ether	mg/kg	-	N.D.	N.D.	1	/	/	/	
Tribromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/	
Tetrabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/	
Pentabromodiphenyl ether	mg/kg		N.D.	N.D.	/	/	/	/	
Hexabromodiphenyl ether	mg/kg	1150	N.D.	N.D.	/	/	/	/	
Heptabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/	
Octabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/	
Nonabromodiphenyl ether	mg/kg	1251-	N.D.	N.D.	1	/	/	/	
Decabromodiphenyl ether	mg/kg	Ale	N.D.	N.D.	/	/	/	/	
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	/	/	1	/	
Bis-(2-ethylhecyl) Phthalate (DEHP)	mg/kg	1000	N.D.	N.D.	/	/-	/	/	
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	/	/	/	/	
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	/	/	/	/	

31: White paint

32: White plastic straps





#### Notes:

1mg/kg=1ppm = 0.0001%

N.D. = Not Detected (<MDL)

MDL = Method Detection Limit
/=Not Regulated



#### **Sample Photo:**

Photo 1

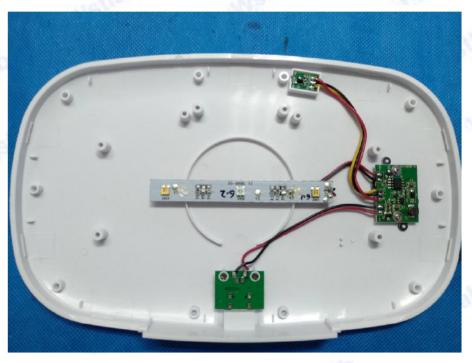


Photo 2









--- The end of report---