

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 Annex II to Directive 2011/65/EU.

Checked By:

Nana Lin

(Nana Lin)

Approved By:

Coco Tang

(Coco Tang)



Test Method:

(1) With reference to IEC 62321:2013

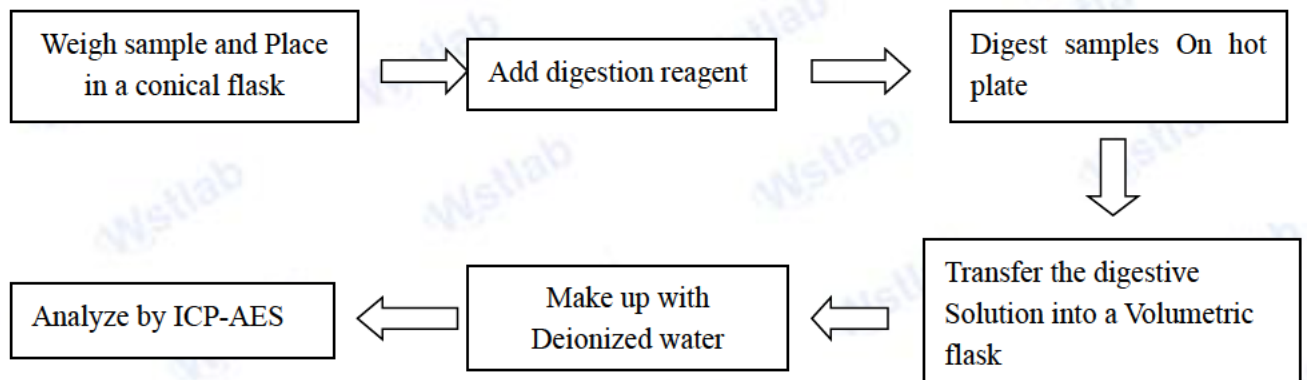
Testing item	Pretreatment method	Measuring instrument	MDL
Lead(Pb)	IEC 62321-5: 2013	ICP-OES	2 mg/kg
Cadmium(Cd)	IEC 62321-5: 2013	ICP-OES	2 mg/kg
Mercury(Hg)	IEC 62321-4: 2013	ICP-OES	2 mg/kg
Chromium(Cr VI)	IEC 62321-7:2015	UV-VIS	2 mg/kg
PBBs/ PBDEs	IEC 62321-6:2015	GC-MS	5 mg/kg

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

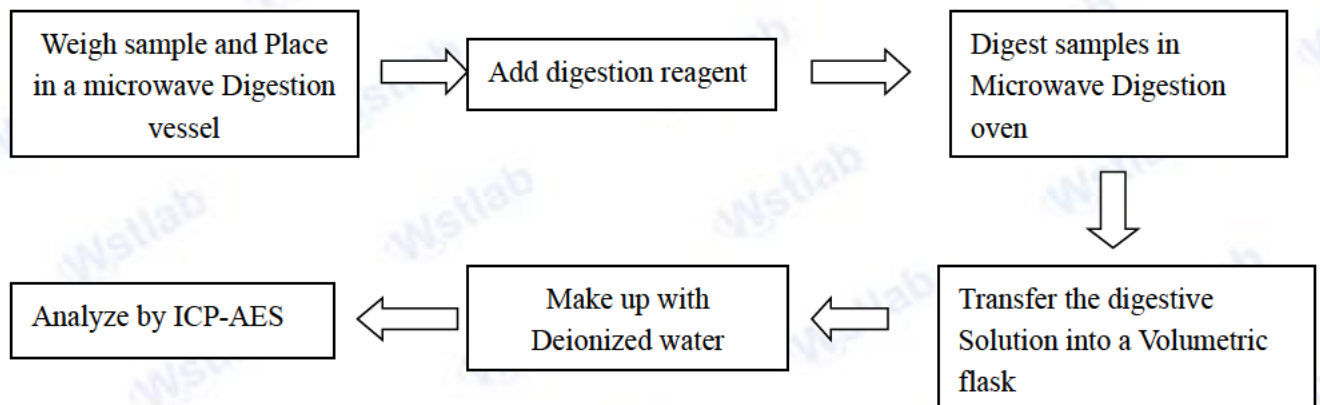
Testing item	Pretreatment method	Measuring instrument	MDL
DEHP, DBP, BBP, DIBP	EN 62321-8:2017	GC-MS	0.003 mg/kg

Test Process:

1. Test for Cd/Pb Content

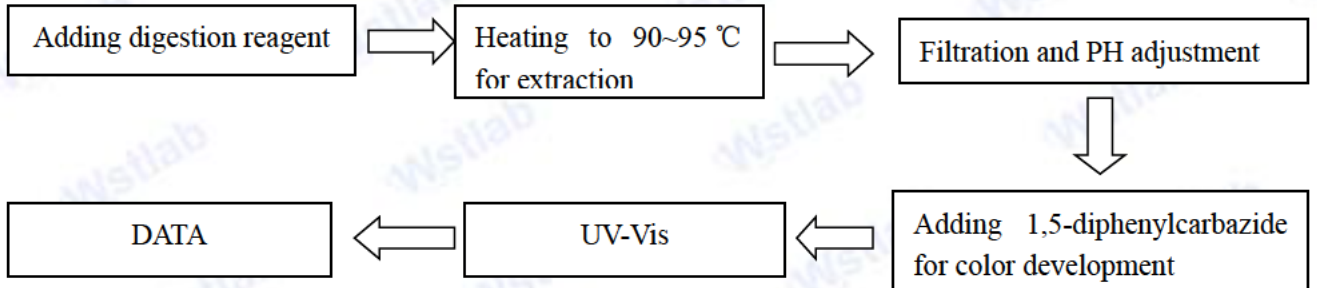


2. Test for Hg Content

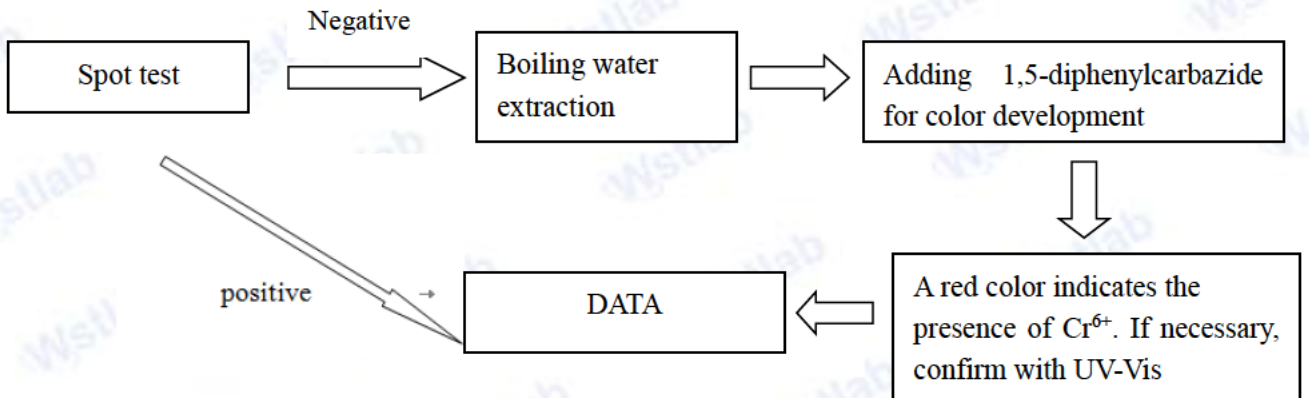


3. Test for Chromium(VI) Content

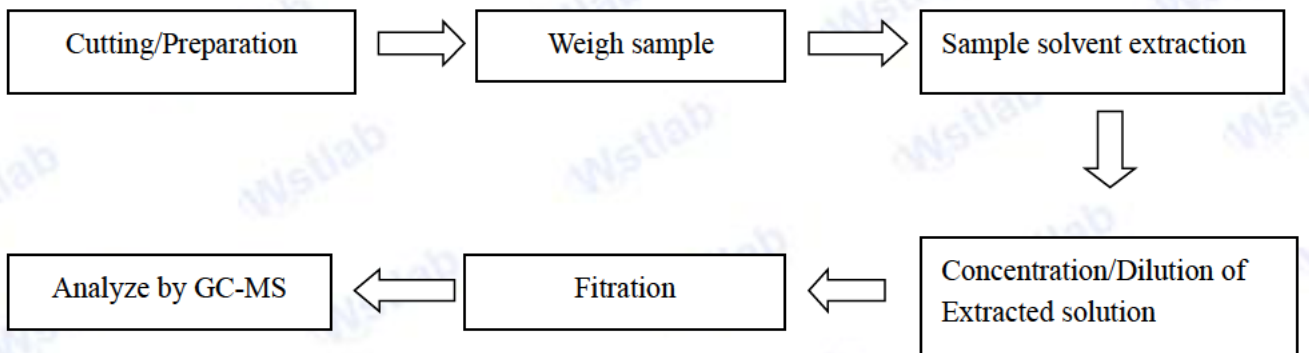
Nonmetallic material



Metallic material



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



Test Results:

Testing Item	Unit	ROHS Limit	Result					
			1	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	-	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	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	mg/kg	-	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	-	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	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	mg/kg	-	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	-	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl ether	mg/kg	-	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-ethylhexyl) 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

Testing Item	Unit	ROHS Limit	Result					
			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	-	/	N.D.	N.D.	/	/	N.D.
Dibromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.
Tribromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.
Tetrabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.
Pentabromobiphenyl	mg/kg	-	/	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	-	/	N.D.	N.D.	/	/	N.D.
Nonabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.
Decabromobiphenyl	mg/kg	-	/	N.D.	N.D.	/	/	N.D.
Sum of PBDEs	mg/kg	1000	/	N.D.	N.D.	/	/	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	-	/	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	-	/	N.D.	N.D.	/	/	N.D.
Decabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	/	/	N.D.
Diisobutyl phthalate (DIBP)	mg/kg	1000	/	N.D.	N.D.	/	/	N.D.
Bis-(2-ethylhexyl) 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.

Sample Description:

- 7: Solder
- 8: Black electrolytic capacitor film
- 9: Black rubber
- 10: Pin
- 11: Aluminum shell
- 12: Electrolytic paper

Testing Item	Unit	ROHS Limit	Result					
			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	-	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	-	N.D.	/	N.D.	N.D.	N.D.	/
Pentabromobiphenyl	mg/kg	-	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	-	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	-	N.D.	/	N.D.	N.D.	N.D.	/
Hexabromodiphenyl ether	mg/kg	-	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	-	N.D.	/	N.D.	N.D.	N.D.	/
Decabromodiphenyl ether	mg/kg	-	N.D.	/	N.D.	N.D.	N.D.	/
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	/	N.D.	N.D.	N.D.	/
Bis-(2-ethylhexyl) 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.	/

Sample Description:

- 13: Inductor body
- 14: Copper wire
- 15: Adhesive tape
- 16: White plastic wire
- 17: White silicone
- 18: Wire core

Testing Item	Unit	ROHS Limit	Result					
			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	-	/	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	-	/	N.D.	N.D.	N.D.	/	N.D.
Pentabromobiphenyl	mg/kg	-	/	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	-	/	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	-	/	N.D.	N.D.	N.D.	/	N.D.
Hexabromodiphenyl ether	mg/kg	-	/	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	-	/	N.D.	N.D.	N.D.	/	N.D.
Decabromodiphenyl ether	mg/kg	-	/	N.D.	N.D.	N.D.	/	N.D.
Diisobutyl phthalate (DIBP)	mg/kg	1000	/	N.D.	N.D.	N.D.	/	N.D.
Bis-(2-ethylhexyl) 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.

Sample Description:

- 19: Screw
- 20: White plastic shell
- 21: LED
- 22: Ink
- 23: Metal interface
- 24: USB

Testing Item	Unit	ROHS Limit	Result					
			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	-	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	-	N.D.	N.D.	/	N.D.	N.D.	/
Pentabromobiphenyl	mg/kg	-	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	-	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	-	N.D.	N.D.	/	N.D.	N.D.	/
Hexabromodiphenyl ether	mg/kg	-	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	-	N.D.	N.D.	/	N.D.	N.D.	/
Decabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	/
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	/	N.D.	N.D.	/
Bis-(2-ethylhexyl) 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.	/

Sample Description:

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

Testing Item	Unit	ROHS Limit	Result					
			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	-	N.D.	N.D.	/	/	/	/
Dibromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Tribromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Tetrabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Pentabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Hexabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Heptabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Octabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Nonabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
Decabromobiphenyl	mg/kg	-	N.D.	N.D.	/	/	/	/
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.	/	/	/	/
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	-	N.D.	N.D.	/	/	/	/
Heptabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/
Octabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/
Nonabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/
Decabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	/	/	/
Diisobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	/	/	/	/
Bis-(2-ethylhexyl) 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.	/	/	/	/

Sample Description:

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:

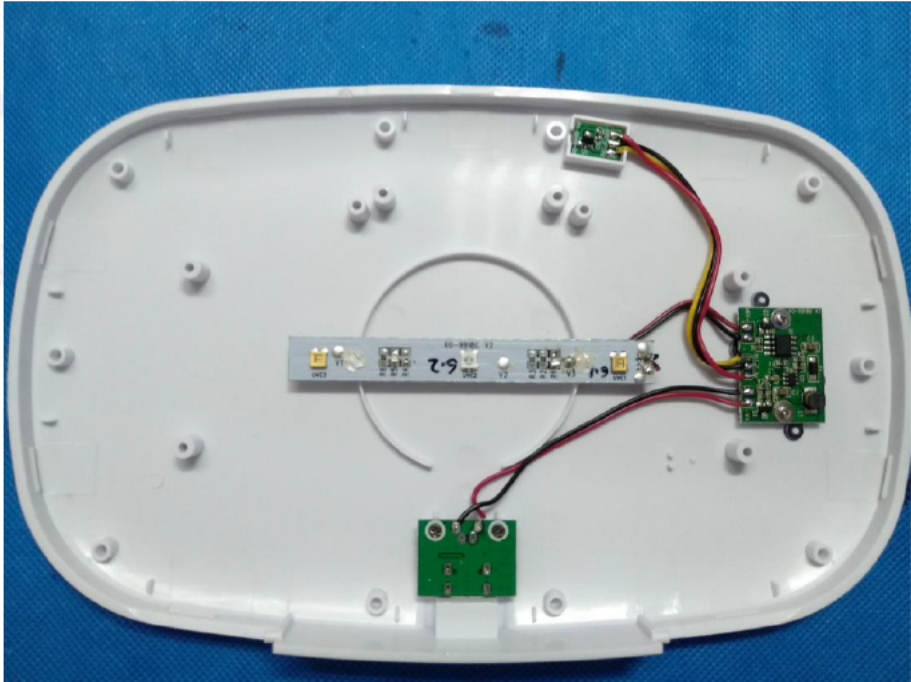
Photo 1



Photo 2



Photo 3



---The end of report---