

Test Report

Applicant: GuangZhou STS Lighting Equipment Co., Ltd.
No.251 Tingshi North Road Chaoyang Shijing Town Baiyun District Guangzhou China

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

Sample Name: Lighting Equipment
Model: M WASH 920Z
Trade Mark: STSLITE
Date of Test: May 16, 2017 ~ May 23, 2017
Date of Report: May 23, 2017

Test Requested: As specified by client, to determine the Pb, Cd, Hg, Cr(VI), PBBs, PBDEs content in the submitted sample.

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

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

Test Conclusion: Base upon the performed tests by submitted sample, the test results comply with the limits as set by Directive (EU) 2015/863 - Amendment of EU RoHS Directive 2011/65/EU (RoHS 2.0) Annex II.

Checked By:



(Eric Zhang)

Approved By:



(Melon Tang)

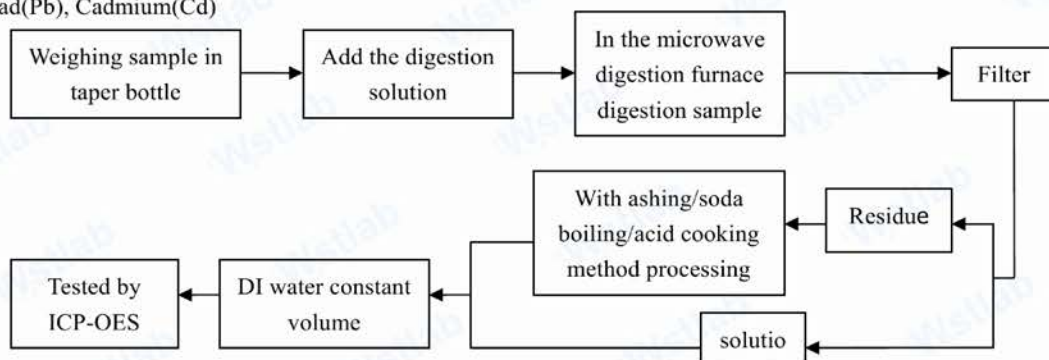
Test Method:

(1) With reference to IEC 62321:2008

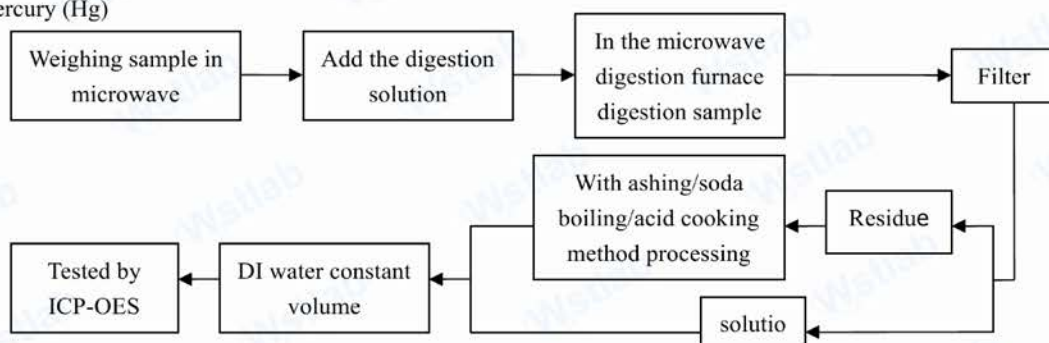
Testing item	Pretreatment method	Measuring instrument	MDL
Lead(Pb)	IEC 62321-5: 2013	ICP-OES	2 mg/kg
Cadmium(Cd)	IEC 62321-5: 2013	ICP-OES	2 mg/kg
Mercury(Hg)	IEC 62321-4: 2013	ICP-OES	2 mg/kg
Chromium(Cr VI)	IEC 62321:2008	UV-VIS	2 mg/kg
PBBs/ PBDEs	IEC 62321-6:2015	GC-MS	5 mg/kg

Test Flow:

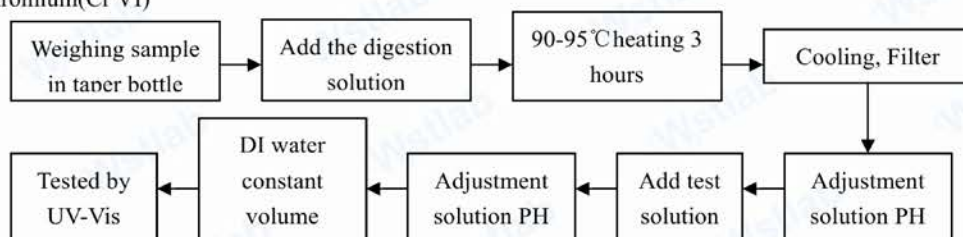
1. Lead(Pb), Cadmium(Cd)



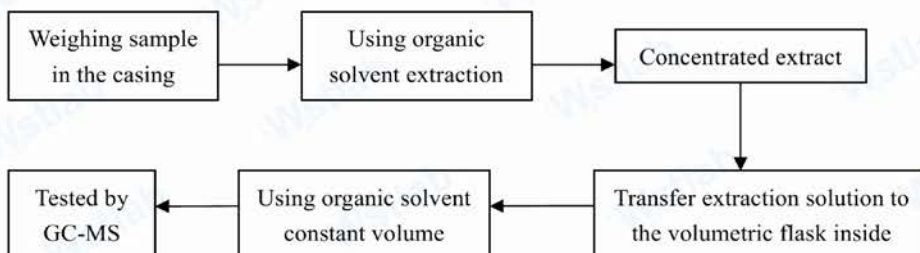
2. Mercury (Hg)



3. Chromium(Cr VI)



4. PBBs/ PBDEs



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.

Sample Description:

- 1: Hardware
- 2: Power Supply
- 3: X shaft motor
- 4: Y shaft motor
- 5: Focusing shaft motor
- 6: The qalun board

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.	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.

Sample Description:

- 7: Siamese Kalong seat
- 8: Cassette power male seat
- 9: Safety tube
- 10: Power cord
- 11: Circuit board
- 12: Light coupler plate

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.	N.D.
Monobromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Dibromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Tribromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Tetrabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Pentabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Hexabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Heptabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Octabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Nonabromobiphenyl	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Decabromobiphenyl	mg/kg	-	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.
Monobromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Dibromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Tribromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Octabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.
Decabromodiphenyl ether	mg/kg	-	N.D.	N.D.	/	N.D.	N.D.	N.D.

Sample Description:

13: Optocoupler

14: Lens

15: Magnet

16: Magnetic susceptibility

17: Magnetic sensitive plate

18: Lamp beads

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.	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.

Sample Description:

19: Aluminum substrate

20: Fan

21: X axle belt

22: Y axle belt

23: Machine foot

24: Wire rod

Testing Item	Unit	ROHS Limit	Result					
			25	26	27	28	29	/
Lead(Pb)	mg/kg	1000	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.	/
Mercury(Hg)	mg/kg	1000	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.	/
Sum of PBBs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	/
Monobromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Dibromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Tribromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Tetrabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Pentabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Hexabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Heptabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Octabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Nonabromobiphenyl	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Decabromobiphenyl	mg/kg	-	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.	/
Monobromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Dibromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Tribromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Tetrabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Pentabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Hexabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Heptabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Octabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Nonabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/
Decabromodiphenyl ether	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	/

Sample Description:

- 25: Display sticker
- 26: Quick locking seat
- 27: Plastic bags
- 28: Pearl cotton
- 29: Carton

Notes:

1mg/kg=1ppm = 0.0001%

N.D. = Not Detected (<MDL)

MDL = Method Detection Limit

/=Not Regulated

Breakdown of product

Sample photo: 1



-----End of report -----