

# Test Report



**Report No.** A2200025264101003R1

**Applicant** SHINEON (NANCHANG) TECHNOLOGY CO., LTD.

**Address** BUILDING 7-1, CEC LOW-CARBON TECHNOLOGY PARK, NO. 699 TIANXIANG AVENUE,  
HIGH-TECH DEVELOPMENT DISTRICT, NANCHANG CITY, JIANGXI PROVINCE,  
P.R.CHINA

**The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client**

Sample Name EMC LED  
Part No. 3030  
Client Reference 4014、2016  
Information  
Sample Received Date Feb. 20, 2020  
Testing Period Feb. 20, 2020 to Feb. 26, 2020

**Test Requested** As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Beryllium(Be), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I) in the submitted sample(s), to screen Sulfur (S) in the submitted sample(s).

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

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



Tested by

*Cain*

Approved by

*Monica*

Monica

Technical Manager

Reviewed by

*Bmily*

Date

Mar. 20, 2020

No. R199378266

# Test Report

Report No. A2200025264101003R1

Page 2 of 7

## Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead(Pb)	IEC 62321-5:2013	ICP-OES
Cadmium(Cd)	IEC 62321-5:2013	ICP-OES
Mercury(Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium(Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls(PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
Beryllium(Be)	Refer to US EPA 3052:1996 & US EPA 6010D:2014	ICP-OES
Fluorine (F)	Refer to EN 14582:2016	IC
Chlorine (Cl)	Refer to EN 14582:2016	IC
Bromine (Br)	Refer to EN 14582:2016	IC
Iodine (I)	Refer to EN 14582:2016	IC
Sulfur(S)	Refer to EN 14582:2016	IC

# Test Report

Report No. A2200025264101003R1

Page 3 of 7

## Test Result(s)

Tested Item(s)	Result	MDL
Lead(Pb)	N.D.	2 mg/kg
Cadmium(Cd)	N.D.	2 mg/kg
Mercury(Hg)	N.D.	2 mg/kg
Hexavalent Chromium(Cr(VI))	N.D.	8 mg/kg
Tested Item(s)	Result	MDL
<b>Polybrominated Biphenyls(PBBs)</b>		
Monobromobiphenyl	N.D.	5 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg
Tribromobiphenyl	N.D.	5 mg/kg
Tetrabromobiphenyl	N.D.	5 mg/kg
Pentabromobiphenyl	N.D.	5 mg/kg
Hexabromobiphenyl	N.D.	5 mg/kg
Heptabromobiphenyl	N.D.	5 mg/kg
Octabromobiphenyl	N.D.	5 mg/kg
Nonabromobiphenyl	N.D.	5 mg/kg
Decabromobiphenyl	N.D.	5 mg/kg
Tested Item(s)	Result	MDL
<b>Polybrominated Diphenyl Ethers (PBDEs)</b>		
Monobromodiphenyl ether	N.D.	5 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg
Tribromodiphenyl ether	N.D.	5 mg/kg
Tetrabromodiphenyl ether	N.D.	5 mg/kg
Pentabromodiphenyl ether	N.D.	5 mg/kg
Hexabromodiphenyl ether	N.D.	5 mg/kg
Heptabromodiphenyl ether	N.D.	5 mg/kg
Octabromodiphenyl ether	N.D.	5 mg/kg
Nonabromodiphenyl ether	N.D.	5 mg/kg
Decabromodiphenyl ether	N.D.	5 mg/kg

# Test Report

Report No. A2200025264101003R1

Page 4 of 7

**Test Result(s)**

Tested Item(s)	Result	MDL
<b>Phthalates (DBP, BBP, DEHP, DIBP)</b>		
Diisobutyl phthalate(DIBP) CAS#:84-69-5	N.D.	50 mg/kg
Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg
Butyl benzyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg
Di-(2-ethylhexyl) phthalate(DEHP) CAS#:117-81-7	N.D.	50 mg/kg
<b>Tested Item(s)</b>		
Beryllium(Be)	N.D.	10 mg/kg
<b>Tested Item(s)</b>		
Fluorine(F)	N.D.	10 mg/kg
Chlorine(Cl)	N.D.	10 mg/kg
Bromine(Br)	N.D.	10 mg/kg
Iodine(I)	N.D.	10 mg/kg
<b>Tested Item(s)</b>		
Sulfur(S)*	N.D.	50 mg/kg

**Sample/Part Description**      Mixed test, two kinds of LED

**Remark:**      The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury, Beryllium. As specified by client, the test was conducted by mixing several samples together. The result(s) shown on this report may be different from the content of any homogeneous material.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL )

-mg/kg = ppm = parts per million

-\* = The test result of the item is converted from the test result of Sulfate ion (SO<sub>4</sub><sup>2-</sup>).

-The sample is insufficient, the test is based on minimum amount, the test results are for reference only.

**Note:**      This testing report revised “Client Reference Information” based on the original report of No. A2200025264101003. This testing report displaces the original one which was invalid since the date of this testing report released.

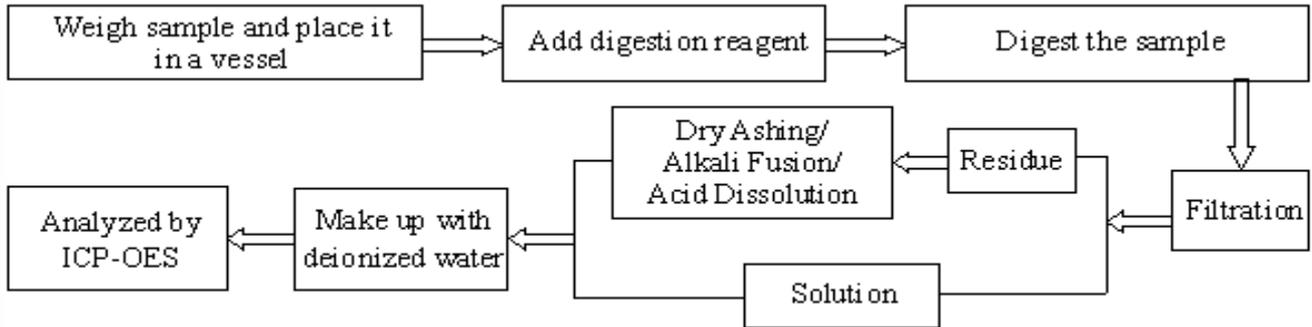
# Test Report

Report No. A2200025264101003R1

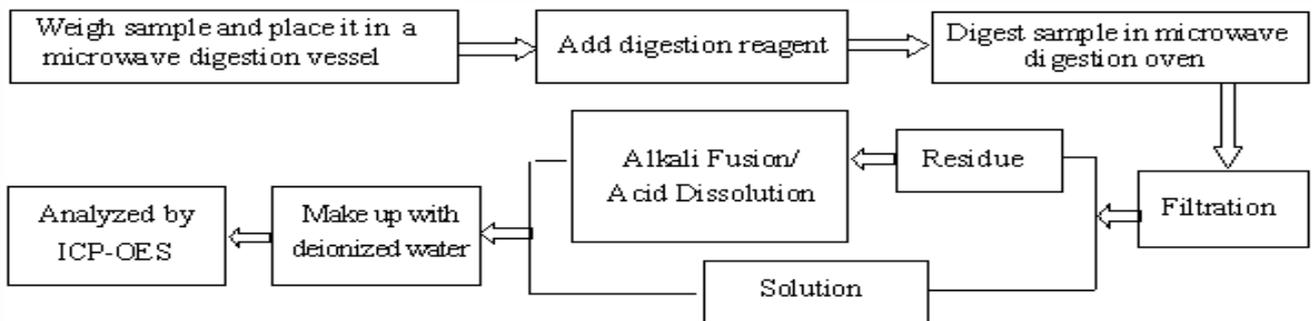
Page 5 of 7

## Test Process

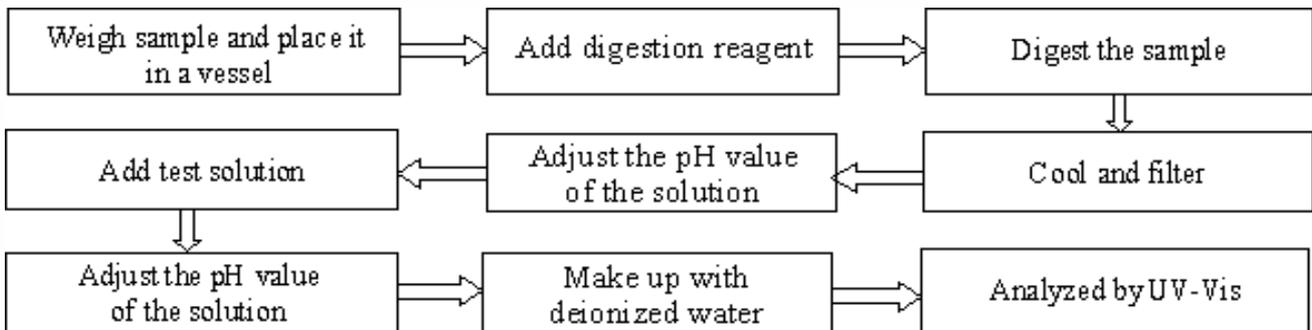
### 1. Lead(Pb), Cadmium(Cd), Chromium(Cr)



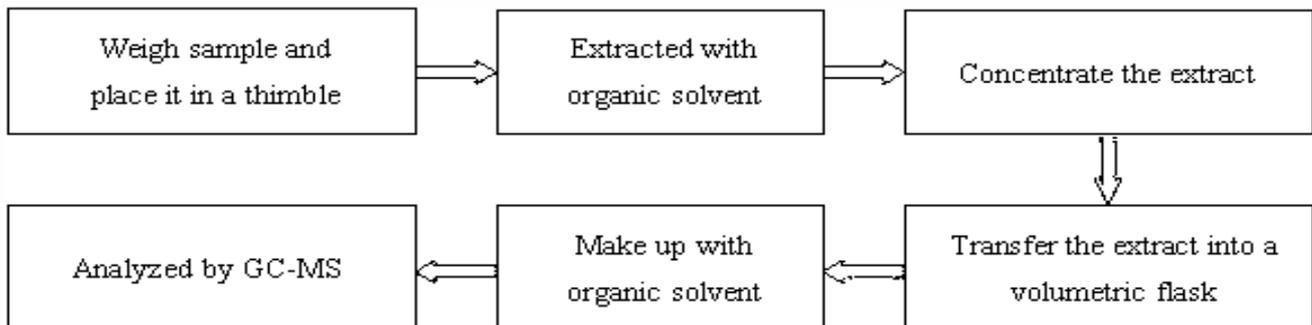
### 2. Mercury(Hg)



### 3. Hexavalent Chromium(Cr(VI))



### 4. Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers (PBDEs)

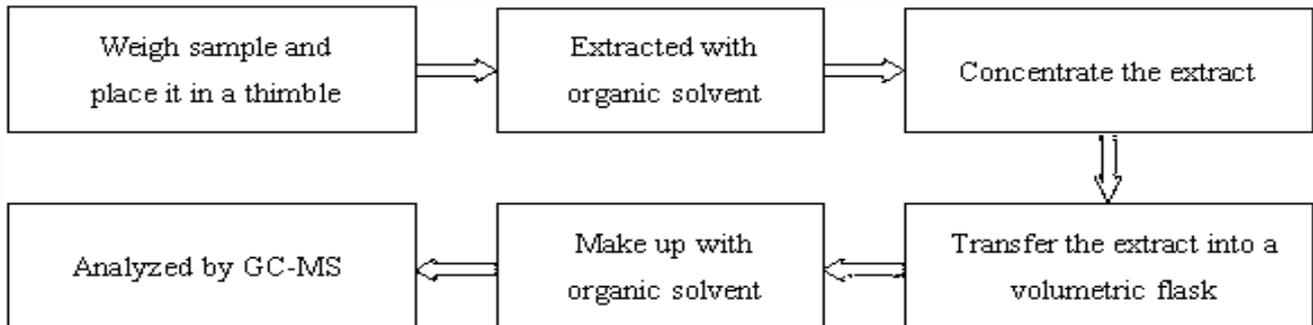


# Test Report

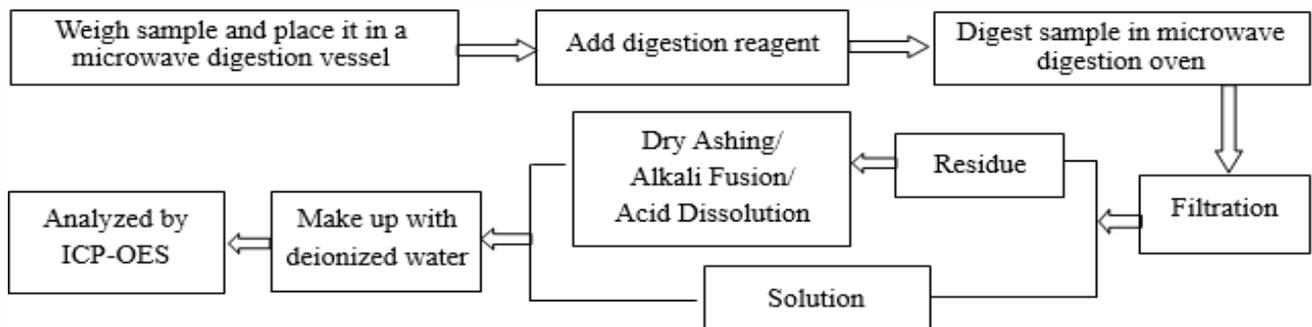
Report No. A2200025264101003R1

Page 6 of 7

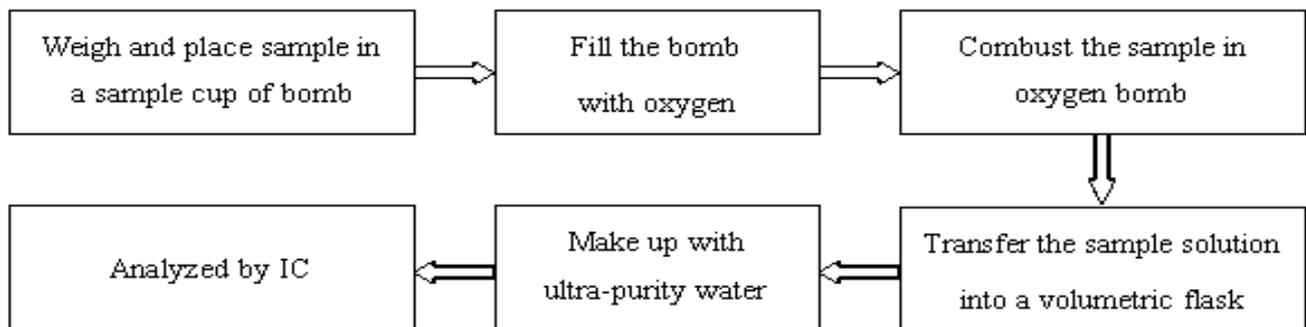
## 5. Phthalates (DBP, BBP, DEHP, DIBP)



## 6. Beryllium(Be)



## 7. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Sulfur(S)

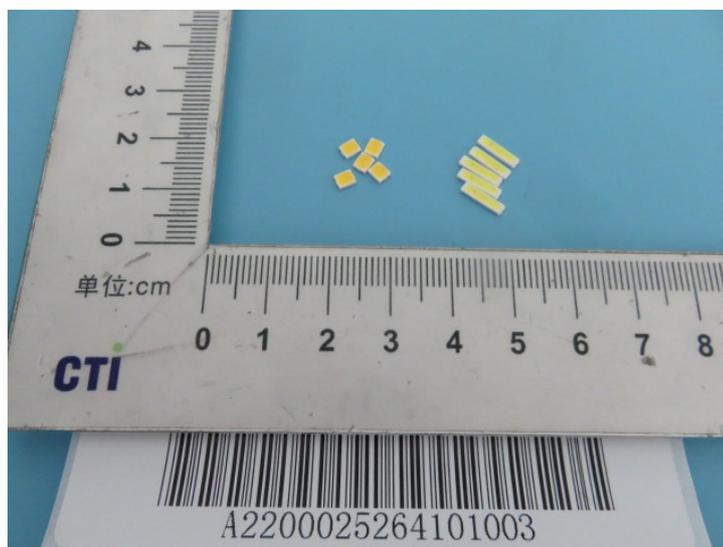


# Test Report

Report No. A2200025264101003R1

Page 7 of 7

## Photo(s) of the sample(s)



\*\*\* End of report \*\*\*

### Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.