



# Test Report

Report No.: HLF15005219E

Date: May 27, 2015

Page 1 of 5

**Applicant** : SHENZHEN WHALEY ELECTRONICS TECHNOLOGY CO., LTD

**Address** : JINLUAN SHIDAI BUILDING 1213, LONGHUA OFFICE, LONGHUA NEW DISTRICT, SHENZHEN CITY

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

Sample Name : COB SPO2 Sensor and Detector assembly, Oximeter component

Sample Model : 5060 Series

Sample Lot : /

Sample Received Date : May 25, 2015

Test Completed Date : May 27, 2015

Test Method : Refer to the next page(s).

Test Results : Refer to the next page(s).

Test Requested	Conclusion
RoHS Directive 2011/65/EU Annex II – Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(CrVI), Polybrominated Biphenyls (PBBs), Polybrominated Biphenyl Ethers(PBDEs)	PASS
Draft Commission Delegated Directive amending Annex II to Directive 2011/65/EU – DBP, BBP, DEHP, DIBP	PASS

Reviewed by:

Lab Senior Engineer

Authorized Signature:

Technology Manager

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.



**FLION TESTING TECHNOLOGIES**

Add: Gangzi Industrial Park, Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City

Tel : 86-0755-2724 8885

Fax : 86-0755-2746 0090

Http://www.cnfft.com

# Test Report

Report No.: HLF15005219E

Date: May 27, 2015

Page 2 of 5

## Pb, Cd, Hg, Cr(VI), PBBs, PBDEs Test Results:

Test Item	Test method/Instrument	MDL (mg/kg)	Result (mg/kg)	Limit (mg/kg)
Lead(Pb)	IEC62321-5:2013/ICP-OES	2	N.D.	1000
Cadmium(Cd)	IEC62321-5:2013/ICP-OES	2	N.D.	100
Mercury(Hg)	IEC62321-4:2013/ICP-OES	2	N.D.	1000
Hexavalent Chromium(CrVI)	IEC62321:2008 /UV-VIS	2	N.D.	1000
Sum of PBBs	-	-	N.D.	1000
Monobromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Dibromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Tribromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Tetrabromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Pentabromodiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Hexabromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Heptabromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Octabromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Nonabromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Decabromobiphenyl	IEC62321:2008 /GC-MS	5	N.D.	--
Sum of PBDEs	-	-	N.D.	1000
Monobromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Dibromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Tribromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Tetrabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Pentabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Hexabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Heptabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Octabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Nonabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--
Decabromobiphenyl ether	IEC62321:2008 /GC-MS	5	N.D.	--

Note:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) N.D. = Not Detected (less than MDL)
- (3) MDL = Method Detection Limit
- (4) "--" = Not Regulated

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.

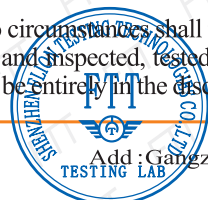
**FLION TESTING TECHNOLOGIES**

Add: Gangzi Industrial Park, Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City

Tel : 86-0755-2724 8885

Fax : 86-0755-2746 0090

Http://www.cnfft.com





# Test Report

Report No.: HLF15005219E

Date: May 27, 2015

Page 3 of 5

## Phthalates Test Results:

Test Item	CAS No.	Test Method / Instrument	MDL (%)	Result(%)	Limit (%)
Dibutyl phthalate (DBP)	84-74-2	EN14372(2004) / GC-MS	0.005	N.D.	0.1
Butyl benzyl phthalate (BBP)	85-68-7	EN14372(2004) / GC-MS	0.005	N.D.	0.1
Bis-(2-ethylhexyl)phthalate (DEHP)	117-81-7	EN14372(2004) / GC-MS	0.005	N.D.	0.1
Di-iso-butyl ortho-phthalate (DIBP)	84-69-5	EN14372(2004) / GC-MS	0.005	N.D.	0.1

Notes: Reference Information: RoHS Directive 2011/65/EU & 2014.12.17 draft commission delegated directive amending (G/TBT/N/EU/256): Bis-(2-ethylhexyl)phthalate(DEHP), Butyl benzyl phthalate(BBP), Dibutyl phthalate(DBP), Di-iso-butyl ortho-phthalate(DIBP) is listed as restricted substances.

### Note:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) N.D. = Not Detected (less than MDL)
- (3) MDL = Method Detection Limit
- (4) "---" = Not Regulated

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.



**FLION TESTING TECHNOLOGIES**

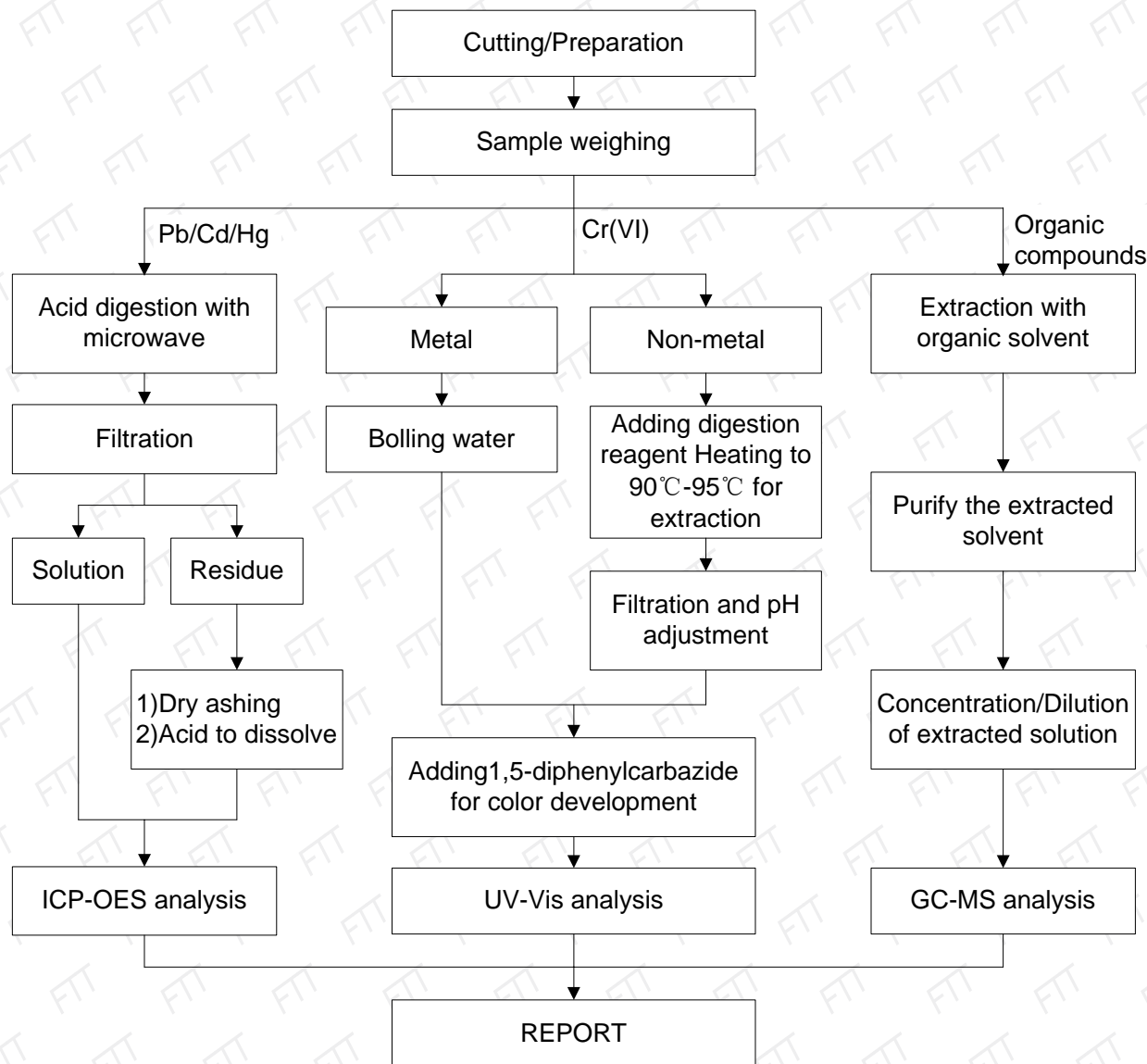
Add: Gangzi Industrial Park, Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City

Tel : 86-0755-2724 8885

Fax : 86-0755-2746 0090

Http://www.cnfft.com

## Pb, Cd, Hg, Cr(VI), Organic compounds Testing Flow Chart:



In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.



**FLION TESTING TECHNOLOGIES**

Add : Gangzi Industrial Park, Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City

Tel : 86-0755-2724 8885

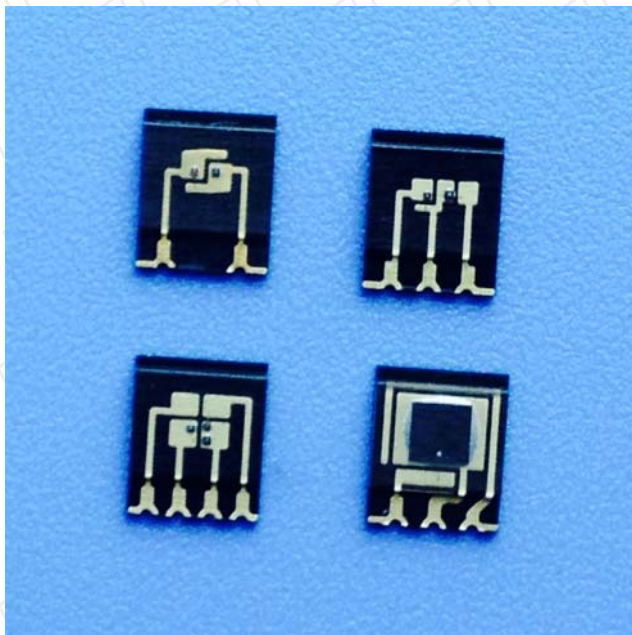
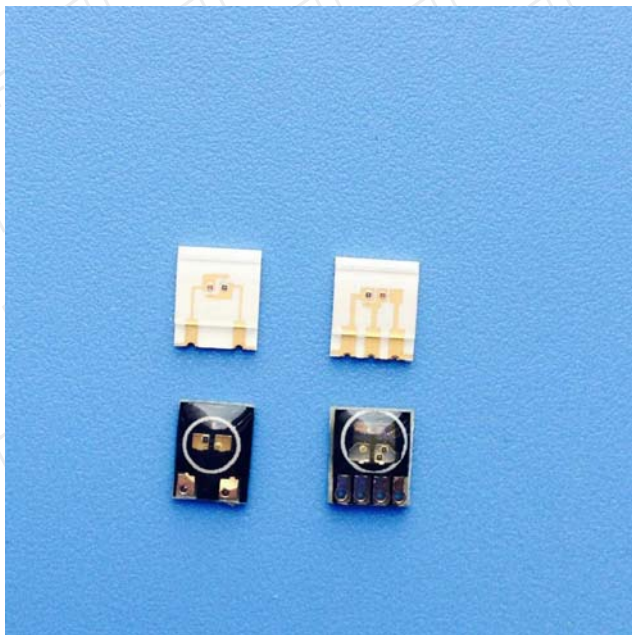
Fax : 86-0755-2746 0090

Http://www.cnfft.com



**Test Part Description:** Sensor and Detector assembly

**Sample Photo**



Remark: According to client's requirement, the submitted samples were mixed to perform the test

Note: The results shown in this report refer only to the sample(s) tested.

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

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.



**FLION TESTING TECHNOLOGIES**

Add : Gangzi Industrial Park, Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City

Tel : 86-0755-2724 8885

Fax : 86-0755-2746 0090

Http://www.cnfft.com