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检测  
TESTING  
CNAS L5772



# Test Report

Report No.: PTC23080110701C-EN01

Issue Date: Aug. 17, 2023

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**Applicant:** CIXI CHALLUX TECHNOLOGY CO.,LTD

**Address:** 291 BRIGHTON ROAD SOUTH CROYDON UNITED KINGDOM CR2 6EQ

The following merchandise was (were) submitted and identified by client as:

**Sample Name:** Emergency LED Light

**Model:** CH-400-2

**Manufacturer:** NINGBO TIANQI INTELLIGENT TECHNOLOGY CO., LTD

**Address:** XINLIAN VILLAGE, GAOQIAO TOWN, HAISHU DISTRICT 315016 NINGBO  
ZHEJIANG (CHINA)

**Sample Received Date:** Aug. 02, 2023

**Completed Date:** Aug. 08, 2023

**Test Requested:** As specified by client, with reference to RoHS Directive 2011/65/EU and its subsequent amendments regulation EU No.2015/863.(Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium( $\text{Cr}^{6+}$ ), PBBs and PBDEs, Phthalates (DBP, BBP,DEHP,DIBP))

**Conclusion(s):** According to the test results of below test parameters, the tested materials of submitted samples complied with the requirements for RoHS Directive 2011/65/EU and its subsequent amendments regulation EU No.2015/863.

**Test Result(s) and Test Method(s):** Please refer to next page(s).



Prepared by: Anne

Checked by: Crystal

Approved by: Miya

Anne

Crystal

Miya

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## Test Result(s):

### 1.1) RoHS Directive 2011/65/EU -(Lead (Pb)/Cadmium(Cd)/Mercury(Hg)/Hexavalent Chromium(Cr<sup>6+</sup>)/PBBs/PBDEs)

Test Method: IEC62321-3-1: 2013, IEC62321-6:2015, analyzed by EDXRF & GC-MS.

No.	Materials Description	EDXRF Result(s) (mg/kg)					Chemical Result (mg/kg)	Conclusion
		Pb	Cd	Hg	Cr	Br		
1	Black plastic (case)	BL	BL	BL	BL	BL	--	PASS
2	Transparent plastic (lid)	BL	BL	BL	BL	BL	--	PASS
3	Red soft plastic (keys)	BL	BL	BL	BL	BL	--	PASS
4	Orange soft plastic (gasket)	BL	BL	BL	BL	BL	--	PASS
5	Silver metal copper-colored metal with white coating (lamp strip)	BL	BL	BL	BL	--	--	PASS
6	White/yellow plastic (light)	BL	BL	BL	BL	BL	--	PASS
7	White plastic (light frame)	BL	BL	BL	BL	BL	--	PASS
8	Silver metal (spring)	BL	BL	BL	BL	--	--	PASS
9	Silver magnet (core)	BL	BL	BL	BL	--	--	PASS
10	Silver metal (screws)	BL	BL	BL	BL	--	--	PASS
11	Green PCB (PCB "SMTK-V6")	BL	BL	BL	BL	IN	PBBs: N.D. PBDEs: N.D.	PASS
12	Silver metal with black printing (case, capacitor, PCB "SMTK-V6")	BL	BL	BL	BL	--	--	PASS
13	Silver metal (fixed frame, PCB "SMTK-V6")	BL	BL	BL	BL	--	--	PASS
14	Silvery solder ( semi-product )	BL	BL	BL	BL	--	--	PASS

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- Note:**
1. mg/kg = milligram per kilogram (ppm).
  2. N.D. = Not Detected
  3. The result are obtained by EDXRF for primary screening, if the result exceeds the below limit (BL), and further chemical testing.
  4. For EDXRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine.

## Screening limits in mg/kg for regulated elements in various matrices

Elements	Polymer	Metal	Composite Materials
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$
Br	$BL \leq (300-3\sigma) < X$	--	$BL \leq (250-3\sigma) < X$

BL = Below Limit, OL = Over Limit, IN = Inconclusive, LOD = Limit of Detection

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## Chemical Testing - Detection Limit & 2011/65/EU Limit:

Name of Chemicals	Detection Limit (mg/kg)	2011/65/EU Limit (mg/kg)
Lead (Pb)	5	1000
Cadmium (Cd)	5	100
Mercury (Hg)	5	1000
Chromium VI (Cr VI)	Non-metal: 10 Metal: Negative	Non-metal: 1000 Metal: Negative
Polybromobiphenyls (PBBs) -Bromobiphenyl (MonoBB) -Dibromobiphenyl (DiBB) -Tribromobiphenyl (TriBB) -Tetrabromobiphenyl (TetraBB) -Pentabromobiphenyl (PentaBB) -Hexabromobiphenyl (HexaBB) -Heptabromobiphenyl (HeptaBB) -Octabromobiphenyl (OctaBB) -Nonabromobiphenyl (NonaBB) -Decabromobiphenyl (DecaBB)	Each 5	Sum: 1 000
Polybromodiphenyl ethers (PBDEs) -Bromodiphenyl ether (MonoBDE) -Dibromodiphenyl ether (DiBDE) -Tribromodiphenyl ether (TriBDE) -Tetrabromodiphenyl ether (TetraBDE) -Pentabromodiphenyl ether (PentaBDE) -Hexabromodiphenyl ether (HexaBDE) -Heptabromodiphenyl ether (HeptaBDE) -Octabromodiphenyl ether (OctaBDE) -Nonabromodiphenyl ether (NonaBDE) -Decabromodiphenyl ether (DecaBDE)	Each 5	Sum: 1 000

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## Test Result(s):

### 1.2) RoHS Directive 2011/65/EU and its subsequent amendments regulation EU No.2015/863 - (Phthalates DIBP, DBP, BBP, DEHP)

Method: IEC 62321-8: 2017, analyzed by Gas Chromatograph-Mass Spectrometry (GC-MS).

Substances	DBP	BBP	DEHP	DIBP	Conclusion
CAS No.	84-74-2	85-68-7	117-81-7	84-69-5	
Limit(s) (mg/kg)	1000	1000	1000	1000	
RL (mg/kg)	50	50	50	50	
Material No.	Result (mg/kg)				
1+2+7	N.D.	N.D.	N.D.	N.D.	PASS
3+4	N.D.	N.D.	N.D.	N.D.	PASS
6+11	N.D.	N.D.	N.D.	N.D.	PASS

- Note:**
1. mg/kg = milligram per kilogram (ppm).
  2. N.D. = Not Detected (<RL).
  3. RL=Reporting Limit.

## Test Material List

The following materials apply only to the samples submitted for phthalates testing.

Material No.	Description (Location)
1	Black plastic (case)
2	Transparent plastic (lid)
3	Red soft plastic (keys)
4	Orange soft plastic (gasket)
6	White/yellow plastic (light)
7	White plastic (light frame)
11	Green PCB (PCB "SMTK-V6")

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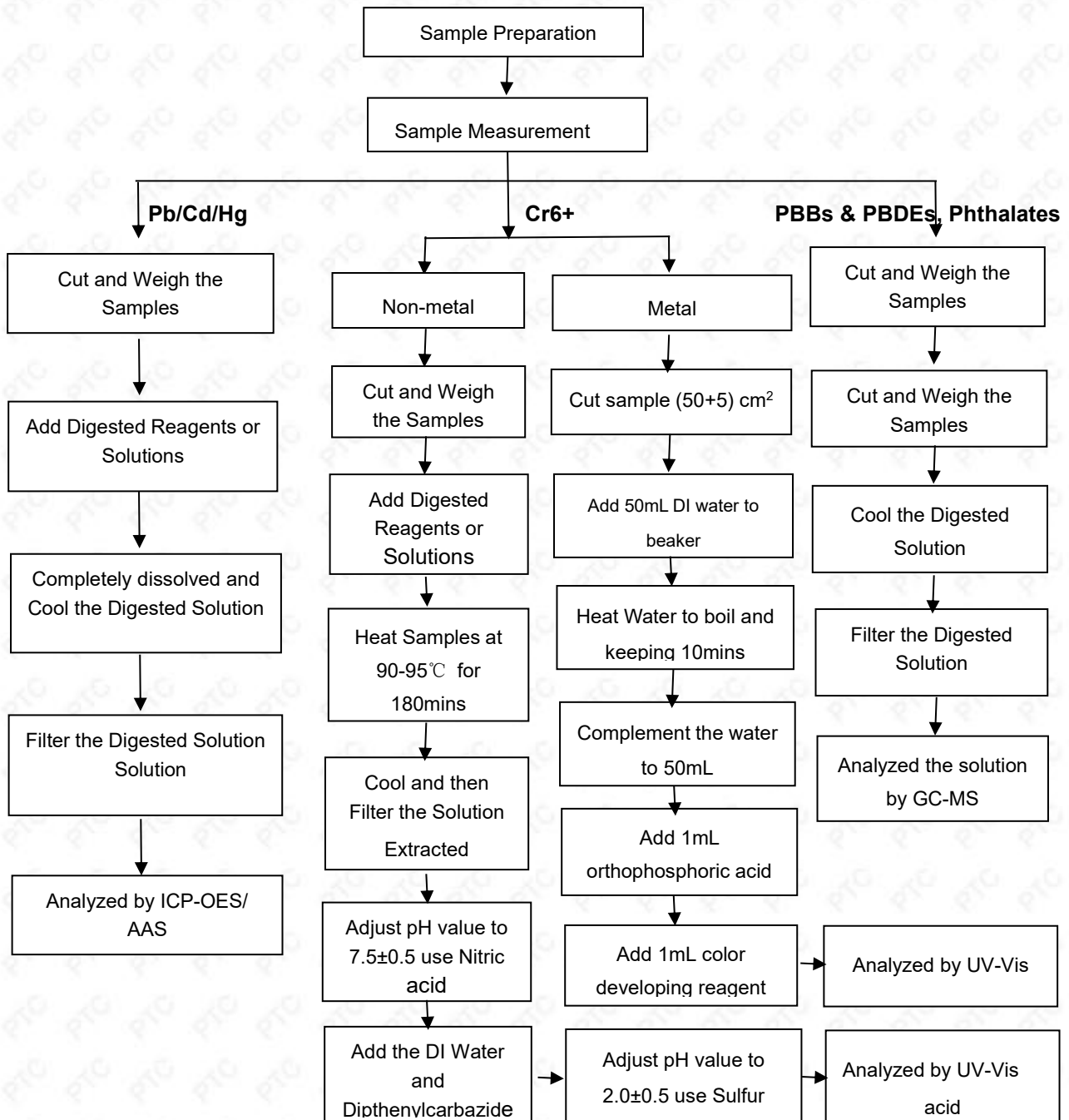
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## Pb/Cd/Hg/Cr6+/PBBs/PBDEs, Phthalates Testing Flow Chart



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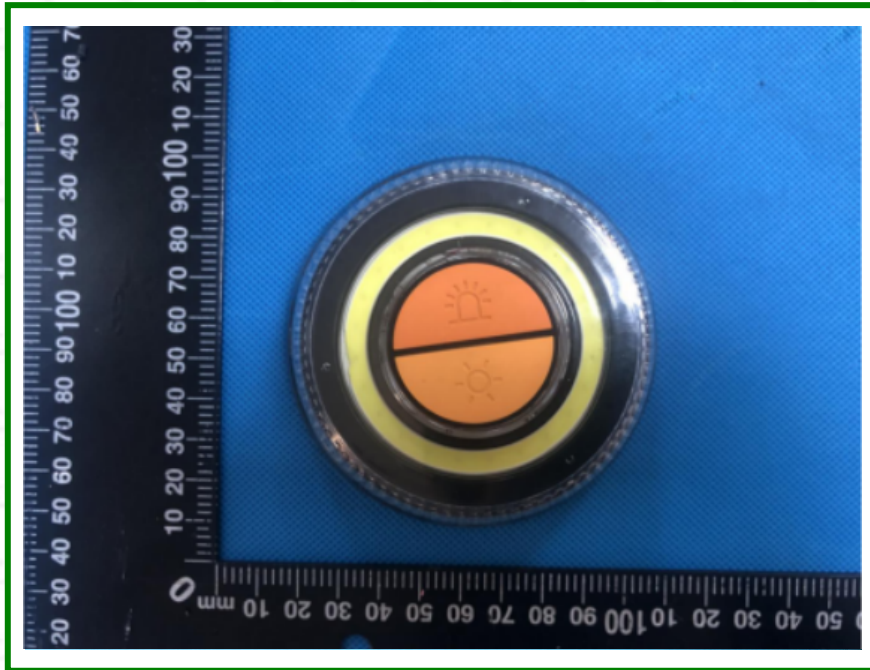
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Photo(s) of Sample:



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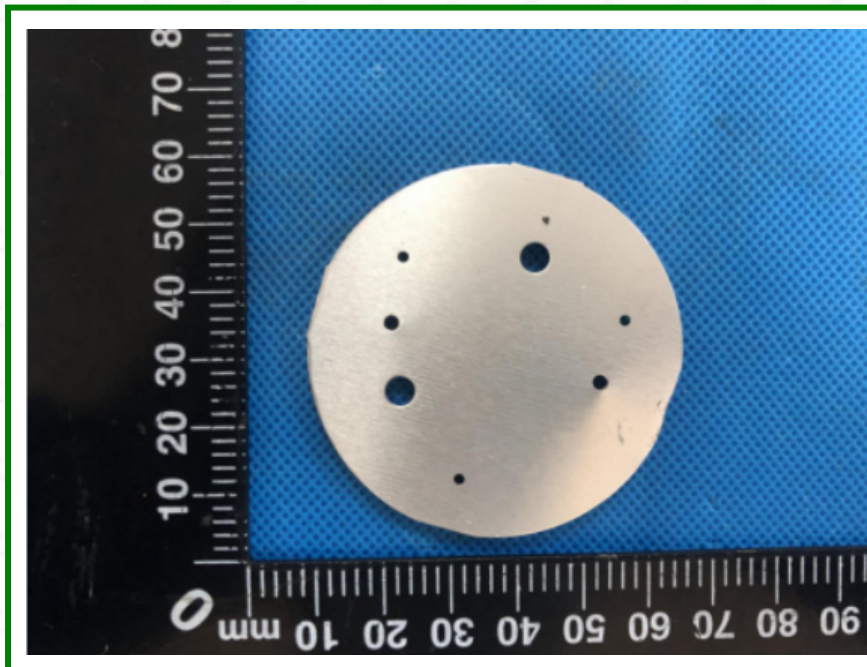


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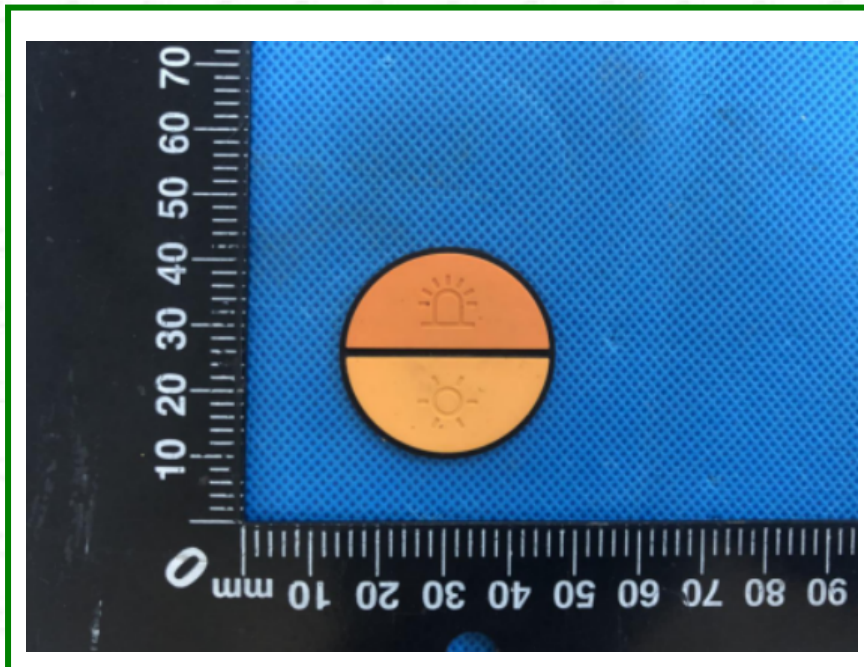
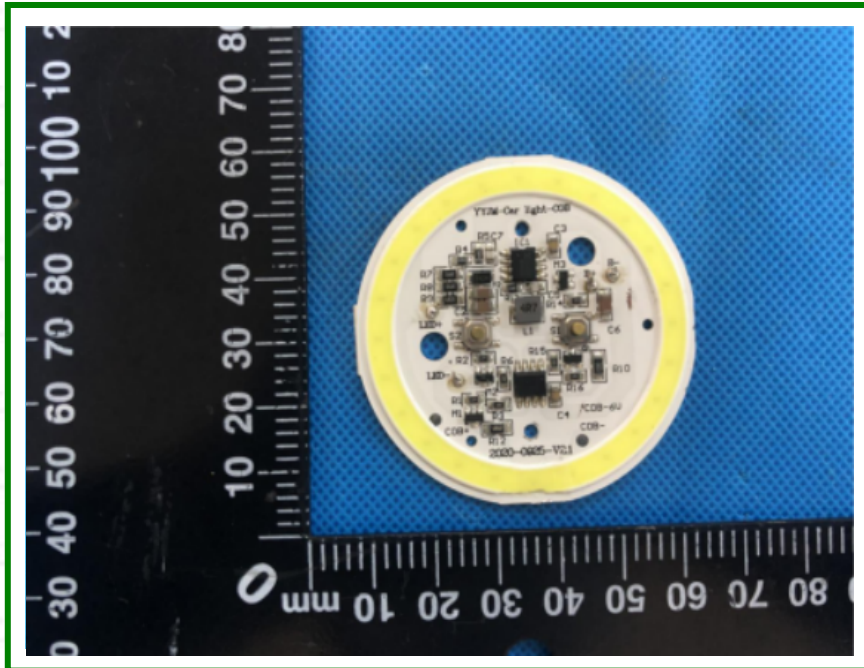


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\*\*\*End of Report\*\*\*

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