

Test Report No.: CANEC23001808009 **Date:** Apr 28, 2023 Page 1 of 8

Client Name: LUCKY LIGHT ELECTRONICS CO., LTD

Client Address: BUILDING U6, LIANDO U VALLEY CHINA-KOREA (HUIZHOU) INDUSTRIAL PARK

GUANGDONG, CHINA

Sample Name: PLCC LED

The above sample(s) and information were provided by the client.

SGS Job No.: SZP23-000025 Sample Receiving Date: Apr 17, 2023

Testing Period: Apr 17, 2023 ~ Apr 28, 2023

Test Requested: Select test(s) as requested by the client.

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

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive	
2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated	
biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl)	Pass
phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and	
Diisobutyl phthalate (DIBP)	

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Jessie-JX Li

Approved Signatory

Jessie Li





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Test Report No.: CANEC23001808009 **Date**: Apr 28, 2023 Page 2 of 8

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A2	CAN23-0018080-0001.C002	"PLCC LED"

Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017,

IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES, UV-Vis

and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A2
Cadmium(Cd)	100	mg/kg	2	2
Lead (Pb)	1000	mg/kg	2	29
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybromobiphenyl (PBBs)	1000	mg/kg	-	ND
Monobromobiphenyl (MonoBB)	-	mg/kg	5	ND
Dibromobiphenyl (DiBB)	-	mg/kg	5	ND
Tribromobiphenyl (TriBB)	-	mg/kg	5	ND
Tetrabromobiphenyl (TetraBB)	-	mg/kg	5	ND
Pentabromobiphenyl (PentaBB)	-	mg/kg	5	ND
Hexabromobiphenyl (HexaBB)	-	mg/kg	5	ND
Heptabromobiphenyl (HeptaBB)	-	mg/kg	5	ND
Octabromobiphenyl (OctaBB)	-	mg/kg	5	ND
Nonabromobiphenyl (NonaBB)	-	mg/kg	5	ND
Decabromobiphenyl (DecaBB)	-	mg/kg	5	ND
Polybromodiphenyl ether(PBDEs)	1000	mg/kg	-	ND
Monobromodiphenylether (MonoBDE)	-	mg/kg	5	ND
Dibromodiphenylether (DiBDE)	-	mg/kg	5	ND
Tribromodiphenylether (TriBDE)	-	mg/kg	5	ND
Tetrabromodiphenylether (TetraBDE)	-	mg/kg	5	ND
Pentabromodiphenylether (PentaBDE)	-	mg/kg	5	ND
Hexabromodiphenylether (HexaBDE)	-	mg/kg	5	ND
Heptabromodiphenylether (HeptaBDE)	-	mg/kg	5	ND
Octabromodiphenylether (OctaBDE)	-	mg/kg	5	ND
Nonabromodiphenylether (NonaBDE)	-	mg/kg	5	ND
Decabromodiphenylether (DecaBDE)	-	mg/kg	5	ND
Dibutyl Phthalate(DBP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate(BBP)	1000	mg/kg	50	ND



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Test Report No.: CANEC23001808009 Date: Apr 28, 2023 Page 3 of 8

Test Item(s)	Limit	Unit(s)	MDL	A2
Bis-(2-ethylhexyl) Phthalate(DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalate(DIBP)	1000	mg/kg	50	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



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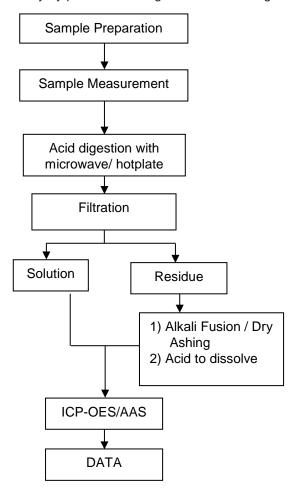
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 Page 4 of 8

Elements Testing Flow Chart

These samples were dissolved totally by pre-conditioning method according to below flow chart.





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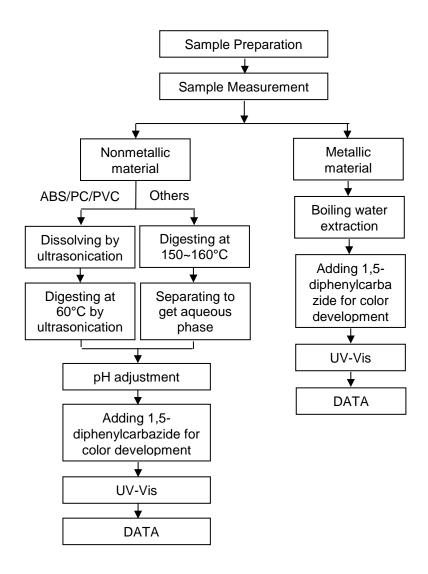
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Apr 28, 2023 Page 5 of 8

Hexavalent Chromium (Cr(VI)) Testing Flow Chart





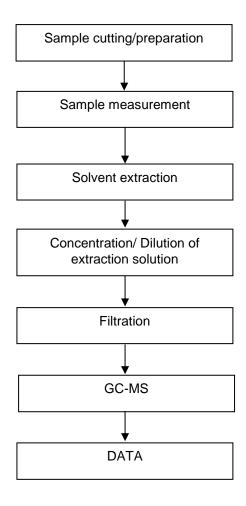
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PBBs/PBDEs Testing Flow Chart



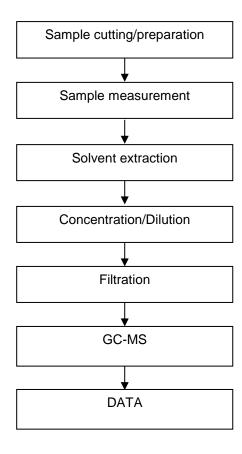


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Phthalates Testing Flow Chart





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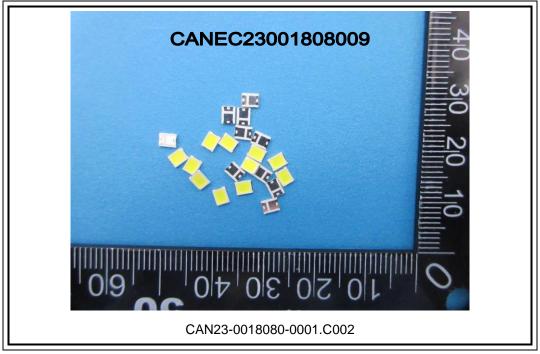
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Test Report No.: CANEC23001808009 **Date:** Apr 28, 2023 Page 8 of 8

Sample Photo:



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*** End of Report ***



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