

TEST REPORT

Report No.: DG3230428-23119E

Date: June 07, 2023

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AOK LED Light Company Limited

1/F of 1#Building, East Block of 3/F of Building 1, And 2/F of Building 4, ST George's Science and Technology Industrial Park, Northside of Xinyu Road, Xiangshan Community, Xianqiao Street Baoan District, 518000 Shenzhen, Guangdong, CHINA

Report on the submitted samples said to be:

Sample Description: LED Solar Street Light

Style/Item No.: AOK-120WsD-DC-A5-00-5070-T3-A
AOK-20WsD-DC-aa-00-ccdd-T3-A-z
AOK-30WsD-DC-aa-00-ccdd-T3-A-z,
AOK-40WsD-DC-aa-00-ccdd-T3-A-z,
AOK-50WsD-DC-aa-00-ccdd-T3-A-z,
AOK-60WsD-DC-aa-00-ccdd-T3-A-z,
AOK-80WsD-DC-aa-00-ccdd-T3-A-z,
AOK-100WsD-DC-aa-00-ccdd-T3-A-z,
AOK-120WsD-DC-aa-00-ccdd-T3-A-z
("aa" Represent LED, can be A5 or L5 or S5;
"cc" represent the CCT, can be 27-65, e.g. 27=2700K, 65=6500K;
"dd" are CRI, can be 70 or 80 or 90;
"z" Represent versions, can be S or Blank)

Sample Information:

Sample Receiving Date: May 04, 2023

Testing Period: May 04, 2023 - May 18, 2023

Result: Please refer to next page(s).

Signed for and on behalf of

BACL



Checked by: _____

Chevy Feng



Approved by: _____

Jeff Duan





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Summary of Test Result:

TEST REQUEST	CONCLUSION
A As specified by client, refer to RoHS Directive 2011/65/EU and its amendment directives (EU) 2015/863	Pass
A.1 XRF screening test	Please refer to next page(s).
A.2 Wet Chemical Testing	
A.2.1 Total Lead content	Pass
A.2.2 Chromium VI (CrVI) content	Pass
A.2.3 PBBs & PBDEs content	Pass
A.3 Phthalates(DBP, BBP, DEHP, DIBP)content	Pass

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A As specified by client, refer to RoHS Directive 2011/65/EU and its amendment directives (EU) 2015/863

A.1 XRF screening test

Test method: IEC 62321-3-1:2013

Seq No.	Tested Part(s)	Result				
		Pb	Cd	Hg	Cr	Br
(1)*	Silvery metal (big screw, LED Solar Street Light)	IN	BL	BL	BL	---
(2)*	Silvery metal (small screw/washer, LED Solar Street Light)	IN	BL	BL	BL	---
(3)*	Silvery metal with black/white coating (holder, screw, LED Solar Street Light)	IN	BL	BL	BL	BL
(4)*	Silvery metal (fixity, battery, LED Solar Street Light)	IN	BL	BL	BL	---
(5)	Black plastic (body, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(6)	White foam (inner, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(7)	Green PCB (small PCB, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(8)	Brown plastic (ring, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(9)*	Green PCB (PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	IN
(10)	Silvery solder (PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	---
(11)	Black body (LED, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(12)	Red body (LED, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(13)	Transparent body (LED, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(14)	Brown body (capacitor, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(15)	White body (capacitor, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(16)	Black body (resistor, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(17)	Black body (IC, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(18)	Black body (triode, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(19)	Black body (diode, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(20)	Black body with white printing (resistor, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(21)	Black body (rectifier bridge, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(22)	Black PCB (small PCB, PCB, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(23)*	Silvery metal without coating (body, LED Solar Street Light)	OL	BL	BL	BL	---
(24)	Black coating (body, LED Solar Street Light)	BL	BL	BL	BL	BL
(25)	Black materials (solar panel, LED Solar Street Light)	BL	BL	BL	BL	BL
(26)	Transparent glass (solar panel, LED Solar Street Light)	BL	BL	BL	BL	BL
(27)	White glue (solar panel, LED Solar Street Light)	BL	BL	BL	BL	BL

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Seq No.	Tested Part(s)	Result				
		Pb	Cd	Hg	Cr	Br
(28)	Silvery adhesive plastic with black printing (sticker, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(29)	Black materials (body, SR-WB5, LED Solar Street Light)	BL	BL	BL	BL	BL
(30)*	Silvery metal without coating (holder, LED, LED Solar Street Light)	OL	BL	BL	BL	---
(31)	White PWB (PWB, LED, LED Solar Street Light)	BL	BL	BL	BL	BL
(32)	Silvery solder (PWB, LED, LED Solar Street Light)	BL	BL	BL	BL	---
(33)	White/yellow body (LED, PWB, LED, LED Solar Street Light)	BL	BL	BL	BL	BL
(34)	Translucent soft plastic (seal ring, PWB, LED, LED Solar Street Light)	BL	BL	BL	BL	BL
(35)	Transparent plastic (lampshade, LED, LED Solar Street Light)	BL	BL	BL	BL	BL
(36)*	Silvery metal (screw, LED, LED Solar Street Light)	BL	BL	BL	IN	---
(37)*	Silvery metal (plate, LED, LED Solar Street Light)	BL	BL	BL	IN	---
(38)	Translucent soft plastic (plug, holder, LED, LED Solar Street Light)	BL	BL	BL	BL	BL
(39)	Black plastic (body, cell box, LED Solar Street Light)	BL	BL	BL	BL	BL
(40)* ¹	Golden metal (nut, cell box, LED Solar Street Light)	OL	BL	BL	BL	---
(41)	Grey soft plastic (seal ring, cell box, LED Solar Street Light)	BL	BL	BL	BL	BL
(42)	Red plastic (body, wire connector, cell box, LED Solar Street Light)	BL	BL	BL	BL	BL
(43)*	White plastic (inner, wire connector, cell box, LED Solar Street Light)	BL	BL	BL	BL	IN
(44)	Silvery metal (connector, wire connector, cell box, LED Solar Street Light)	BL	BL	BL	BL	---
(45)	Silvery metal (pin, wire connector, cell box, LED Solar Street Light)	BL	BL	BL	BL	---
(46)*	Silvery metal (spring, wire connector, cell box, LED Solar Street Light)	BL	BL	BL	IN	---
(47)* ¹	Silvery metal (body, power switch, cell box, LED Solar Street Light)	OL	BL	BL	IN	---
(48)*	Silvery metal with silvery coating (key, power switch, cell box, LED Solar Street Light)	BL	BL	BL	IN	BL
(49)	Transparent plastic (inner, key, power switch, cell box, LED Solar Street Light)	BL	BL	BL	BL	BL
(50)	Translucent soft plastic (plug/seal ring, power switch, cell box, LED Solar Street Light)	BL	BL	BL	BL	BL
(51)	Silvery metal (needle, power switch, cell box, LED Solar Street Light)	BL	BL	BL	BL	---
(52)	Grey plastic (body, wire connector, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(53)	Orange plastic (key, wire connector, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(54)*	Silvery metal (connector, wire connector, power cable, LED Solar Street Light)	BL	BL	BL	IN	---
(55)	Silvery metal (pin, wire connector, power cable, LED Solar Street Light)	BL	BL	BL	BL	---
(56)	Silvery solder (wire, wire connector, power cable, LED Solar Street Light)	BL	BL	BL	BL	---

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Seq No.	Tested Part(s)	Result				
		Pb	Cd	Hg	Cr	Br
(57)* ^{#1}	Silvery metal (screwed conduit, power cable, LED Solar Street Light)	OL	BL	BL	BL	---
(58)* ^{#1}	Silvery metal (cover, screwed conduit, power cable, LED Solar Street Light)	OL	BL	BL	BL	---
(59)* ^{#1}	Silvery metal (nut, screwed conduit, power cable, LED Solar Street Light)	OL	BL	BL	BL	---
(60)	Silvery metal (connector, power cable, LED Solar Street Light)	BL	BL	BL	BL	---
(61)	Translucent plastic (clip, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(62)	Translucent soft plastic (plug, screwed conduit, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(63)	White soft plastic (plug, screwed conduit, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(64)	Black soft plastic (plug, screwed conduit, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(65)	Translucent soft plastic (seal ring, screwed conduit, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(66)	Red soft plastic (seal ring, screwed conduit, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(67)	Silvery metal (pin, socket, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(68)	Black plastic (socket, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(69)	Silvery solder (connector, solar panel, LED Solar Street Light)	BL	BL	BL	BL	---
(70)*	Black plastic (holder, connector, solar panel, LED Solar Street Light)	BL	BL	BL	BL	IN
(71)*	Black plastic (transverter, power cable, LED Solar Street Light)	BL	BL	BL	BL	IN
(72)* ^{#1}	Golden metal (pin, transverter, power cable, LED Solar Street Light)	OL	BL	BL	BL	---
(73)	Golden metal (connector, transverter, power cable, LED Solar Street Light)	BL	BL	BL	BL	---
(74)	Silvery metal with black plating (ring, transverter, power cable, LED Solar Street Light)	BL	BL	BL	BL	---
(75)	Black soft plastic (sleeve, transverter, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(76)	White plastic (inner, transverter, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(77)	Black soft plastic with white printing (cable jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(78)	Red soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(79)	Green soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(80)	Yellow soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(81)	White soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(82)	Blue soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(83)	Black soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(84)	Dull brown soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(85)	Dull blue soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL

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Seq No.	Tested Part(s)	Result				
		Pb	Cd	Hg	Cr	Br
(86)	Black soft plastic with white printing (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(87)	Black materials (cover, wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(88)	Red soft plastic with black printing (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(89)	Red soft plastic with white printing (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(90)	Dark brown soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(91)	Dark blue soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(92)	Yellow/green soft plastic (wire jacket, power cable, LED Solar Street Light)	BL	BL	BL	BL	BL
(93)	Coppery metal (wire, power cable, LED Solar Street Light)	BL	BL	BL	BL	---
(94)	Silvery metal (wire, power cable, LED Solar Street Light)	BL	BL	BL	BL	---
(95)*	Silvery metal with black/white plating (shell, driver, LED Solar Street Light)	BL	BL	BL	IN	---
(96)	Silvery adhesive plastic with black printing (sticker, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(97)	Grey materials (inner, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(98)*	Green PCB (PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	IN
(99)	Silvery solder (PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(100)	Black magnet (bobbin, inductor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(101)	Silvery metal with red plating (coil, inductor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(102)	Black soft plastic with white printing (sleeve , big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(103)	Yellow soft plastic with black printing (sleeve , big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(104)	Black soft rubber (base , big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(105)	Silvery metal (shell, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(106)	Silvery metal (foil, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(107)	Dull silvery metal (foil, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(108)	Brown paper with liquid (film, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(109)	Transparent adhesive plastic (tape, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(110)	Silvery metal (connector, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(111)	Silvery metal (pin, big capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---
(112)	Black body (IC, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(113)	Brown body (capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL

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Seq No.	Tested Part(s)	Result				
		Pb	Cd	Hg	Cr	Br
(114)	Black body with white printing (resistor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(115)	Black body (diode, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(116)	Black body (triode, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(117)	Black body (resistor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(118)	Grey body with black printing (inductor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(119)	White body (capacitor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(120)	Black body (inductor, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(121)	Black body (rectifier bridge, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(122)	White body with black printing (fuse, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	BL
(123)	Silvery metal (crystal, PCB, driver, LED Solar Street Light)	BL	BL	BL	BL	---

Note:

--- = Not Applicable.

* = Screening by XRF and detected by chemical method. The test result of chemical method please refer to next pages.

*1 = As claimed by the material declaration submitted by the client, the materials of the sample No. 40,47,57,58,59,72 are copper alloy. And according to RoHS directive 2011/65/EU and its amendments, Lead is exempted as an alloying element in Copper containing up to 4% (40000ppm) by weight.

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Remark:

i Result were obtained by XRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) are recommended to be performed, if the concentration exceeds the below warning value according to IEC62321-3-1:2013.

Element	Unit	Polymers	Metal	Composite Material
Cd	mg/kg	BL≤70-3σ<X <130+3σ≤OL	BL≤70-3σ<X <130+3σ≤OL	BL≤50-3σ<X <150+3σ≤OL
Pb	mg/kg	BL≤700-3σ<X <1300+3σ≤OL	BL≤700-3σ<X <1300+3σ≤OL	BL≤500-3σ<X <1500+3σ≤OL
Hg	mg/kg	BL≤700-3σ<X <1300+3σ≤OL	BL≤700-3σ<X <1300+3σ≤OL	BL≤500-3σ<X <1500+3σ≤OL
Cr	mg/kg	BL≤700-3σ<X	BL≤700-3σ<X	BL≤500-3σ<X
Br	mg/kg	BL≤300-3σ<X	--	BL≤250-3σ<X

Note:

BL = Below Limit

OL = Over Limit

IN / X = Inconclusive (questionable, need further chemical analysis)

ii The XRF screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition.

iii The maximum permissible limit is quoted from the RoHS directive 2011/65/EU:

RoHS Restricted Substances	Maximum Concentration Value (mg/kg) (by weight in homogenous materials)
Cadmium (Cd)	100
Lead (Pb)	1000
Mercury (Hg)	1000
Hexavalent Chromium (Cr(VI))	1000
Polybrominated biphenyls (PBBs)	1000
Polybrominated diphenylethers (PBDEs)	1000

Disclaimers:

This XRF Screening report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The result shown in this XRF screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

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A.2 Wet Chemical Testing

A.2.1 Total Lead content

Test method: IEC 62321-5:2013

Item	Unit	RL	Result			
			(23)	(30)	(40)	(47)
Lead(Pb)	mg/kg	10	21	320	29581	30199

Item	Unit	RL	Result			
			(57)	(58)	(59)	(72)
Lead(Pb)	mg/kg	10	32911	26163	13118	37504

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

A.2.2 Chromium VI (CrVI) content

Test method: IEC 62321-7-1:2015

Item	Unit	RL	Result						Client's Limit
			(1)	(2)	(3)	(4)	(36)	(37)	
hexavalent chromium(Cr VI)	µg/cm ²	0.10	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	See Remark
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	Pass	/

Item	Unit	RL	Result					Client's Limit
			(46)	(47)	(48)	(54)	(95)	
hexavalent chromium(Cr VI)	µg/cm ²	0.10	N.D.	N.D.	N.D.	N.D.	N.D.	See Remark
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	/

Limit Remark:

- The sample is positive for CrVI if the CrVI concentration is greater than 0.13µg/cm². The sample coating is considered to contain CrVI
 - The sample is negative for CrVI if CrVI is ND (concentration less than 0.10µg/cm²). The coating is considered a non-CrVI based coating
 - The result between 0.10µg/cm² and 0.13µg/cm² is considered to be inconclusive -unavoidable coating variations may influence the determination
- For corrosion protection coatings on metals: Information on storage conditions and production date of the tested sample is unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm

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A.2.3 PBBs & PBDEs content

Test method: IEC 62321-6:2015

Item	Unit	RL	Result					Client's Limit
			(9)	(43)	(70)	(71)	(98)	
Monobromobiphenyl (MonoBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Dibromobiphenyl(DiBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Tribromobiphenyl(TriBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Tetrabromobiphenyl(TetraBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Pentabromobiphenyl(PentaBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Hexabromobiphenyl(HexaBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Heptabromobiphenyl (HeptaBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Octabromobiphenyl(OctaBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Nonabromobiphenyl(NonaBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Decabromobiphenyl(DecaBB)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Monobromodiphenyl ether (MonoBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Dibromodiphenyl ether (DiBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Tribromodiphenyl ether (TriBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Tetrabromodiphenyl ether (TetraBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Pentabromodiphenyl ether (PentaBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Hexabromodiphenyl ether (HexaBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Heptabromodiphenyl ether (HeptaBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Octabromodiphenyl ether (OctaBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Nonabromodiphenyl ether (NonaBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
Decabromodiphenyl ether (DecaBDE)	mg/kg	25	N.D.	N.D.	N.D.	N.D.	N.D.	-
sum of MonoBB,DiBB, TriBB, TetraBB, PentaBB, HexaBB, HeptaBB, OctaBB, NonaBB, DecaBB	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	1000

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Item	Unit	RL	Result					Client's Limit
			(9)	(43)	(70)	(71)	(98)	
sum of MonoBDE,DiBDE,TriBDE,TetraBDE,PentaBDE,HexaBDE,HeptaBDE,OctaBDE,NonaBDE,DecaBDE	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	/

Note:

- N.D.= Not Detected or less than RL
- RL = Report Limit
- mg/kg = ppm
- The Result less than RL are not taken into account while calculating the sum contents.

A.3 Phthalates(DBP, BBP, DEHP, DIBP)content

Test method: IEC 62321-8:2017

Item	Unit	RL	Result						Client's Limit
			(3)+(48)	(5)	(6)	(7)+(68)+(122)	(8)+(9)+(22)	(11)+(12)+(13)	
Dibutyl Phthalate(DBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Benzyl Butyl Phthalate(BBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	Pass	/

Item	Unit	RL	Result						Client's Limit
			(14)+(15)+(16)	(17)+(18)+(19)	(20)+(21)+(26)	(24)	(25)+(29)+(34)	(27)+(28)+(31)	
Dibutyl Phthalate(DBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Benzyl Butyl Phthalate(BBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	Pass	/

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Item	Unit	RL	Result						Client's Limit
			(33)+(96)+(100)	(35)+(38)+(39)	(41)+(42)+(43)	(49)+(50)+(52)	(53)+(61)+(62)	(63)+(64)+(65)	
Dibutyl Phthalate(DBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Benzyl Butyl Phthalate(BBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	Pass	/

Item	Unit	RL	Result						Client's Limit
			(66)	(70)+(71)+(75)	(76)+(77)+(78)	(79)+(80)+(81)	(82)+(83)+(84)	(85)+(86)+(88)	
Dibutyl Phthalate(DBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Benzyl Butyl Phthalate(BBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	Pass	Pass	/

Item	Unit	RL	Result				Client's Limit
			(87)	(89)+(90)+(91)	(92)+(97)+(98)	(102)+(103)+(104)	
Dibutyl Phthalate(DBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Benzyl Butyl Phthalate(BBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	30	N.D.	79	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	/

Item	Unit	RL	Result				Client's Limit
			(108)+(109)+(112)	(113)+(114)+(115)	(116)+(117)+(118)	(119)+(120)+(121)	
Dibutyl Phthalate(DBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Benzyl Butyl Phthalate(BBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP)	mg/kg	30	N.D.	N.D.	N.D.	N.D.	1000
Conclusion	/	/	Pass	Pass	Pass	Pass	/



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Note:

- N.D. = Not Detected or less than RL
- RL = Report Limit
- 0.1% = 1000 mg/kg, mg/kg = ppm
- "+" = Mixed, Composite test has been performed in equal proportion for the components/material per client requested. And the result is calculated using the minimum sample weight. If the testing of specimen may have the obvious difference, and the result may exceed the number in this report. The applicant will undertake all differences and risk.

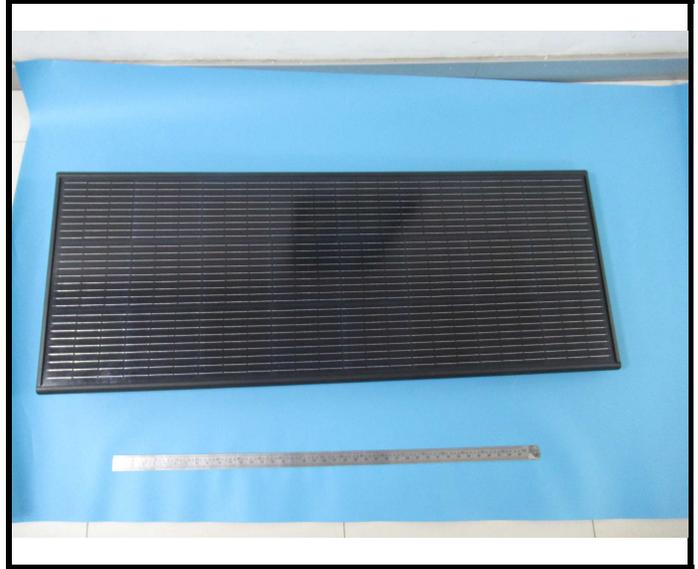
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Photograph of Sample



BACL authenticate the photo on original report only

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Statement:

- 1.This report cannot be reproduced except in full, without prior written approval of the Company.
- 2.Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
- 3.This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
- 4.Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
- 5.The information which provided by the applicant, such as sample description, sample name, material component, style/item No. , P.O. No. , manufacturer, age phase, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
- 6.The test samples were in good condition before testing.
- 7.The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

*** End of Report ***