

(No.): ETR24505680

(Date): 14-Jun-2024

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(EVERLIGHT ELECTRONICS CO., LTD.)

(NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

(The following sample(s) was/were submitted and identified by the applicant

as)

BASIC INFORMATION	
Type of Product	LAMP LED
Supplier Company Name	EVERLIGHT
Address	NO.6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN
Tel / Fax / Email	TEL:886-2685-6688
	FAX:886-2685-6699
	E-MAIL: lindawang@everlight.com
Contact Person	LI LING WANG
EVERLIGHT REPORT NO	LAMP LED SERIES
	LAMP / IR / HIR / PT / 2PT / PD PTD
	SERIES Sampling Product:334-15/F1C1-2WZA-SGS-14-Jun-2024
PRODUCT INFORMATION	
Product/component Sample	LIGHT-ELECTRICITY TRANSFER
description	
Quantity (numbers or weight)	0.2725 g
EVERLIGHT P/N	LAMP LED SERIES
	LAMP / IR / HIR / PT / 2PT / PD PTD
	SERIES Sampling Product:334-15/F1C1-2WZA
Product Lot No	SZ24052819-010315
Country of Origin	CHINA
TEST INFORMATION	•
Sample preparation	CUTTING
Test Method	RoHS: IEC 62321, Halogen: BS EN 14582
MDL	Cd, Pb, Hg: 2 mg/kg, PBBs/PBDEs: 5 mg/kg, Halogen: 50 mg/kg
(C 1 - C - 1 ! + + D \	(EVERTICAL ELECTRONICO COLLED.)

(Sample Submitted By) (EVERLIGHT ELECTRONICS CO., LTD.)

(Sample Receiving Date) : 31-May-2024

(Testing Period) : 31-May-2024 to 14-Jun-2024

(Test Results) (Please refer to following pages).





PIN CODE: 1FD79FA6



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(Test Items)	(Method)	(Unit)	MDL	No.1	(Result) No.2	No.3	(Limit)
	IEC 62321-4: 2013+ AMD1:	mg/kg	2	n.d.			1000
	2017						
	(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)						
	IEC 62321-7-2: 2017	mg/kg	8	n.d.			1000
	(With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.)						
(Monobromobiphenyl)		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
(Pentabromobiphenyl)		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
	IEC (2221 (, 201E	mg/kg	5	n.d.			-
	IEC 62321-6: 2015 / (With	mg/kg	5	n.d.			-
	/ (With reference to IEC 62321-6:	mg/kg		n.d.			1000
	2015, analysis was performed	mg/kg	5	n.d.			-
	by GC/MS.)	mg/kg	5	n.d.			-
(Tribromodiphenyl ether)	by GC/1013.)	mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
(Heptabromodiphenyl ether)		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	5	n.d.			-
		mg/kg	-	n.d.			1000



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(Test Items)	(Method)	(Unit)	MDL		(Result)		(Limit)
(BBP) (Butyl		mg/kg	50	No.1 n.d.	No.2	No.3	1000
benzyl phthalate (BBP))		mg/kg	50	n.d.			1000
(2-) (DEHP) (Di- (2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.			1000
(2 out)o.y., pa.a.c (22),		mg/kg	50	n.d.			1000
(DIDP) (Diisodecyl phthalate (DIDP)) (CAS		mg/kg	50	n.d.			-
		mg/kg	50	n.d.			-
	IEC 62321-8: 2017 / (With reference to IEC 62321-8:	mg/kg	50	n.d.			-
	2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-
		mg/kg	50	n.d.			-
		mg/kg	50	n.d.			-
(DMP) (Dimethyl phthalate (DMP)) (CAS No.: 131-11-		mg/kg	50	n.d.			-
3) (DIOP) (Diisooctyl phthalate (DIOP)) (CAS No.: 27554-26-3)		mg/kg	50	n.d.			-



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		MDL				
(Method)	(Unit)					(Limit)
			No.1	No.2	No.3	
IEC 62321-8: 2017	mg/kg	50	n.d.			-
/ (With						
reference to IEC 62321-8:						
2017, analysis was performed						
by GC/MS.)						
IEC 62321: 2008	mg/kg	5	n.d.			_
/ (With	0 0					
reference to IEC 62321: 2008,						
analysis was performed by						
GC/MS.)						



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(2.4.1)	/I.I. I.I.	MDL				(1.1
(Method)	(Unit)		No.1	No.2	No.3	(Limit)
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			
	mg/kg	0.2	n.d.			



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(Toot Itoma)	(N.4.5 to 5.1)	(1.1:+)	MDL		(Docult)		(1 !:== !+)
(Test Items)	(Method)	(Unit)		No.1	(Result) No.2	No.3	(Limit)
(Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	US EPA 3052: 1996 (With reference to US EPA 3052: 1996, analysis was performed by ICP- OES.)	mg/kg	2	n.d.			-
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 application of modified digestion by surface etching, analysis was performed by ICP-OES.)		2		n.d.		100
(Pb) (Lead (Pb))			2		44.1		1000
(Hg) (Mercury (Hg))	IEC 62321-4: 2013+ AMD1: 2017 (IEC 62321-4: 2013+AMD1: 2017 application of modified digestion by surface etching, analysis was performed by ICP- OES.)	mg/kg	2		n.d.		1000
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (With reference to IEC 62321-5: 2013,	mg/kg	2			n.d.	100
(Pb) (Lead (Pb))	analysis was performed by ICP-OES.)	mg/kg	2			n.d.	1000
(Hg) (Mercury (Hg))	IEC 62321-4: 2013+ AMD1: 2017 (With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2			n.d.	1000



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	(Test Items)	(Method)	(Unit)	MDL		(Result)		(Limit)
					No.1	No.2	No.3	
(#2)		IEC 62321-7-1: 2015 - (With reference to IEC 62321-7- 1: 2015, analysis was performed by UV-VIS.)		0.1		n.d.	n.d.	-

(Test Items)	(Method)	(Unit)	MDL	(Result)	(Limit)
(Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	US EPA 3050B: 1996 (With reference to US EPA 3050B: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-

(Note)	
1.	mg/kg = ppm $0.1wt% = 0.1% = 1000ppm$	
2.	MDL = Method Detection Limit ()	
3.	n.d. = Not Detected (); MDL / Less that	ın MDL
4.	"-" = Not Regulated ()	
5.	"" = Not Conducted ()	
6.	(#2) =	
	a. 0.13 μg/cm ²	. / The sample is positive for Cr(VI) if the Cr(VI)
	concentration is greater than $0.13 \mu g/cm^2$. The sa	ample coating is considered to contain Cr(VI).
	b. n.d. (0.10 µg/cm²)	. / The sample is negative for Cr(VI) if Cr(VI) is
	n.d. (concentration less than 0.10 $\mu g/cm^{2}$). The ca	pating is considered a non-Cr(VI) based coating
	c. $0.10 0.13 \mu\text{g/cm}^2$./The result between 0.10 µg/cm² and
	$0.13\mu g/cm^{2}$ is considered to be inconclusive - ur	navoidable coating variations may influence the determination
7.	ILA C-G 8:09/2019	(W=0)
		ated, the decision rule for conformity reporting is based on
	•	=0) stated in II $\Delta C - G8.09/2019$ According to this rule, the

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judgement of conformity is based on the comparing test results with limits.)

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PAHs Remark

(AfPS): GSPAHs

AfPS (German commission for Product Safety): GS PAHs requirements

	1 (Category 1)	2 (Cat	2 (Category 2)		egory 3)
(Parameter)	(30) 2009/48/EC 3 (Materials intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or articles for children up to 3 years of age with intended long-term skin contact (> 30 seconds))	1 30 () (Materials that are not in Category 1, with intended or foreseeable long-term skin contact (> 30 seconds) or short-term repetitive contact with the skin) a. b. (Other (Use by consumer		covered by Catego	30 erials not ry 1 or 2, with eable short- 30 seconds)) b. (Other consumer
Naphthalene	< 1	< 2		< 1	" '
Phenanthrene					
Anthracene	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum
Fluoranthene	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum
Pyrene					
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[b]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[j]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[k]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[a]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[e]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Indeno[1,2,3-c,d] pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Dibenzo[a,h]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[g,h,i]perylene	< 0.2	< 0.2	< 0.5	< 0.5	< 1



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PFAS PFAS PFAS

(PFAS PFAS PFAS)

(The quantitative technology of PFAS is to analyze the specific structure of PFAS substances. However, PFAS acid and its salts with the same carbon number group have the same specific structure that can be identified. The tested results of the analyzed specific structure cannot be distinguished to identify the contribution from PFAS acid or its salts. Therefore, the tested results display the sum of concentrations of PFAS acids and its salts with the same carbon number group. The concentration of PFAS substances in the below table have been included in the tested results, please refer to the table for relevant information: (The listed PFAS substances are examples only, it do not include all PFAS salts with the same carbon number group.))

(Group Name)	(Substance Name)	CAS No.
V	(Perfluorooctane sulfonates) (PFOS)	1763-23-1
	(PFO S-K) Potassium perfluorooctanesulfonate (PFOS-K)	2795-39-3
	(PFOS-Li) Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5
	$\label{eq:pfosnh4} \mbox{(PFOS-NH}_4)$ Perfluorooctanesulfonic acid, ammonium salt $\mbox{(PFOS-NH}_4)$	29081-56-9
PFOS, & (PFOS, its salts & derivatives)	$\label{eq:pfos-nh} (PFOS-NH(OH)_2)$ Perfluorooctane sulfonate diethanolamine salt $(PFOS-NH(OH)_2)$	70225-14-8
	$(PFOS-N(C_2H_5)_4)\\ Perfluorooctanesulfonic\\ acid, tetraethylammonium salt\\ (PFOS-N(C_2H_5)_4)\\$	56773-42-3
	(PFOS-DDA) N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluorooctane-1-sulfonate (PFOS-DDA)	251099-16-8



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(Group Name)	(Substance Name)	CAS No.
	$ (PFOS-N (C_4H_9)_4) \\ TetrabutylAmmonium \\ perfluorooctanesulfonate (PFOS-N(C_4H_9)_4) $	111873-33-7
	(POSF) Perfluorooctane sulfonyl fluoride (POSF)	307-35-7
PFOS, & (PFOS, its salts & derivatives)	(PFO S-Mg) Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)	91036-71-4
	(PFO S-N a) Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0
	Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate	71463-74-6
	(Perfluorooctanoic acid) (PFOA)	335-67-1
	(PFO A - N a) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	(PFO A - K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	(PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	(PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
PFOA, & (PFOA, its salts & derivatives)	(A PFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
	(PFO A - Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
	(PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6
	(PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9
	(PFO A - Cr(3 ⁺)) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluoro-, chromium(3+) (PFOA-Cr(3 ⁺))	68141-02-6



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		CAS No.
(Group Name)	(Substance Name)	
PFOA, &	- (2:1) PFOA-NH(C ₄ H ₁₀ N) Pentadecafluorooctanoic acidpiperazine (2/1)PFOA-NH(C ₄ H ₁₀ N)	423-52-9
	Pentadecafluorooctanoate (anion)	45285-51-6
		33496-48-9
	Perfluorooctanoic Anhydride	



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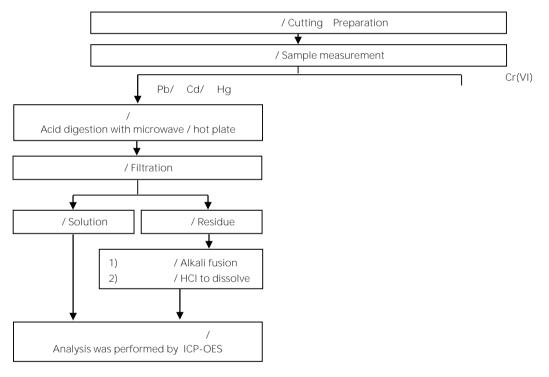
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/ Analytical flow chart of heavy metal

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

Cr6+ test method excluded





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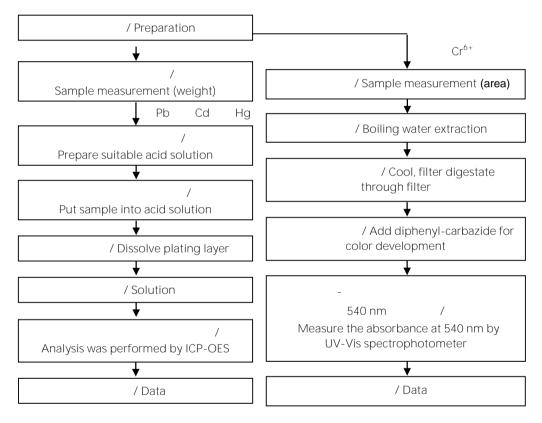
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/ Flow chart of stripping method for metal analysis

/ The plating layer

of samples were dissolved totally by pre-conditioning method according to below flow chart. ${\rm Cr}^{6+}$ test method excluded





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/ Analytical flow chart - PBBs/PBDEs

/ First testing process
/ Optional screen process
/ Confirmation process

/ Sample pretreatment

/ Screen analysis

/ Sample extraction
/ Soxhlet method

/
Concentrate/Dilute extracted solution

/ Filter

/ GC/MS

/ Data



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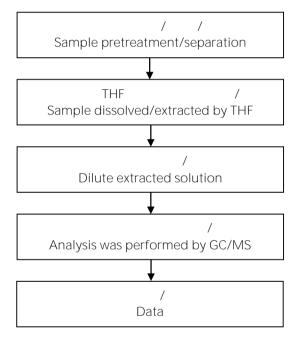
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/ Analytical flow chart - Phthalate

/Test method: IEC 62321-8





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/ Analytical flow chart -



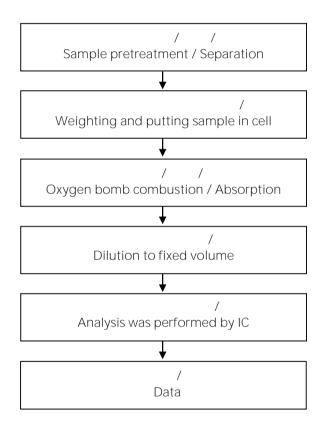
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/ Analytical flow chart - Halogen





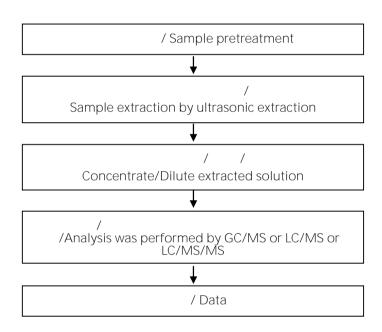
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(/ / /) / Analytical flow chart - PFAS (including PFOA/PFOS/its related compound, etc.)





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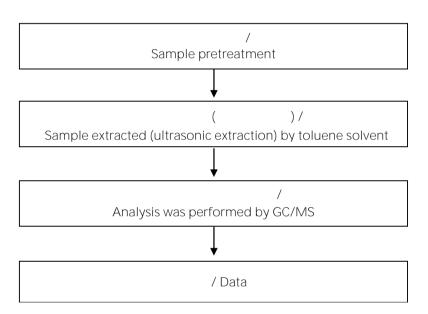
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Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)





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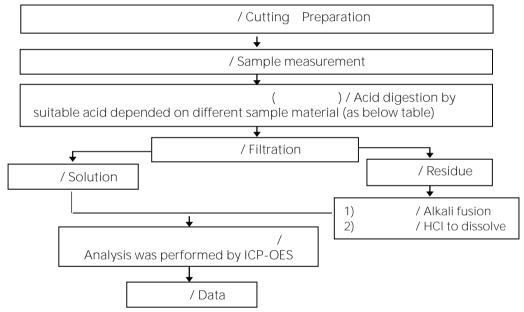
(EVERLIGHT ELECTRONICS CO., LTD.)
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ICP-OES

(Flow chart of digestion for the elements analysis performed by ICP-OES)

/ These samples were dissolved totally by

pre-conditioning method according to below flow chart.



, , , / Steel, copper, aluminum, solder	, , , , Aqua regia, $\rm HNO_3$, $\rm HCI$, $\rm HF$, $\rm H_2O_2$
/ Glass	, / HNO ₃ ,HF
, , , / Gold, platinum, palladium, ceramic	/ Aqua regia
/ Silver	/ HNO ₃
/ Plastic	, , , / H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , HCI
/ Others	/ Added appropriate reagent to total digestion



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(The tested sample / part is marked by an arrow if it's shown on the photo.)

ETR24505680 NO.1

ETR24505680 NO.2





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ETR24505680 NO.4



(End of Report) **