

(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 1 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

6-8 (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: allenchiang@everlight.com
Contact Person	Allen
EVERLIGHT REPORT NO	EVERLIGHT-LAMP LED SERIES, LAMP / IR / HIR / PT / 2PT / PD PTD
	SERIES Sampling Product : IR333C/H0/L10-SGS-12-Jul-2023
PRODUCT INFORMATION	
Product/component Sample	LIGHT-ELECTRICITY TRANSFER
description	
Quantity (numbers or weight)	0.3002 g
EVERLIGHT P/N	LAMP LED SERIES, LAMP / IR / HIR / PT / 2PT / PD PTD
	SERIES Sampling Product : IR333C/H0/L10
Product Lot No	SZ230627-2007829
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

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

(Sample Receiving Date) : 30-Jun-2023

(Testing Period) : 30-Jun-2023 to 12-Jul-2023

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





PIN CODE: 2AC684

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 2 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

(Test Requested : (1)

RoHS 2011/65/EU Annex II

(EU) 2015/863

, DBP, BBP, DEHP, DIBP (As specified by

client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP,

DEHP, DIBP contents in the submitted sample(s).)

(2) PAHs

(As specified by client, to test PAHs and

other item(s).)

(Conclusion) : (1)

, DBP, BBP,

DEHP, DIBP

RoHS 2011/65/EU Annex II

(EU) 2015/863

(Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive

2011/65/EU.)

(2)

(AfPS) GSPAHs

3 (Based upon the performed tests on the submitted sample(s), the test results of PAHs (15 items) comply with the limits of PAHs requirement (Category 3) Other consumer products as set by German

Committee on Product Safety (AfPS) GS PAHs.)

(Test Part Description)

No.1 : (BODY)

No.2 : (PLATING LAYER OF SILVER COLORED METAL PIN)
No.3 : (BASE MATERIAL OF SILVER COLORED METAL PIN)

No.4 : () (SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER))

(Test Results)

(Test Items)	(Method)	(Unit)	MDL		(Result))	(Limit)
				No.1	No.2	No.3	
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (With reference to IEC	mg/kg	2	n.d.			100
(Pb) (Lead (Pb))	62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.			1000



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 3 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

			MDL				
(Test Items)	(Method) (Unit) (Result)		` ′				
				No.1	No.2	No.3	
(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
Cr(VI) (Hexavalent Chromium Cr(VI))	IEC 62321-7-2: 2017 - (With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.)	mg/kg	8	n.d.			1000
(Cd) (Cadmium (Cd))	IEC 62321-5: 2013 (IEC 62321-5: 2013 application of modified digestion by	mg/kg	2		n.d.		100
(Pb) (Lead (Pb))	surface etching, analysis was performed by ICP-OES.)	mg/kg	2		38.3		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	mg/kg	2			n.d.	100
(Pb) (Lead (Pb))	62321-5: 2013, 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



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 4 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

MDL

(Method)

(Unit)

(Limit)

No.1 No.2 No.3



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 5 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

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.)



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 6 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

(Took House)	(A 4 - 4 4)	(11.31)	MDL				(Limit)
(Test Items)	(Test Items) (Method) (Unit		(Unit)		(Result) No.1 No.2 No.3		
(DIOP) (Diisooctyl phthalate (DIOP)) (CAS No.: 27554-26-3)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-
(DNNP) (Di-n- nonyl phthalate (DNNP)) (CAS No.: 84-76-4)	IEC 62321-8: 2017 / (With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.			-
(HBCDD) (- HBCDD, - HBCDD, - HBCDD) (Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (- HBCDD, - HBCDD, - HBCDD)) (CAS No.: 25637-99-4, 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	IEC 62321: 2008 / (With reference to IEC 62321: 2008, analysis was performed by GC/MS.)	mg/kg	5	n.d.			-
(F) (Fluorine (F)) (CAS No.: 14762- 94-8)		mg/kg	50	n.d.			-
(CI) (Chlorine (CI)) (CAS No.: 22537-15-1)	BS EN 14582: 2016	mg/kg	50	1150			-
(Br) (Bromine (Br)) (CAS No.: 10097-32-2)	(With reference to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	1150			-
(I) (Iodine (I)) (CAS No.: 14362- 44-8)		mg/kg	50	n.d.			-
(PFOS and its salts) (CAS No.: 1763-23-1 and its salts)	CEN/TS 15968: 2010 (With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.			-
(PFOA and its salts) (CAS No.: 335-67-1 and its salts)	CEN/TS 15968: 2010 (With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.			-
(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.			-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 7 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

		1	MDL				
(Test Items)	(Method)	(Unit)			(Result)		
(rest items)	(Method)	(OTIIL)		No.1	No.2		(Limit)
(Polycyclic Aromatic Hydrocarbons) (PAHs)							
(a) (Benzo[a]pyrene) (CAS No.: 50-32-8)		mg/kg	0.2	n.d.			
(e) (Benzo[e]pyrene) (CAS No.: 192-97-2)		mg/kg	0.2	n.d.			
(Benzo[a]anthracene) (CAS No.: 56-55-3)		mg/kg	0.2	n.d.			
(b) (Benzo[b]fluoranthene) (CAS No.: 205-99-2)		mg/kg	0.2	n.d.			
(j) (Benzo[j]fluoranthene) (CAS No.: 205-82-3)		mg/kg	0.2	n.d.			
(k) (Benzo[k]fluoranthene) (CAS No.: 207-08-9)		mg/kg	0.2	n.d.			
(Chrysene) (CAS No.: 218-01-9)	A fPS GS 2019:01 PAK /	mg/kg	0.2	n.d.			
(Dibenzo[a,h]anthracene) (CAS No.: 53-70-3)	(With reference to AfPS GS 2019:01 PAK, analysis was performed by GC/MS.)	mg/kg	0.2	n.d.			
(Benzo[g,h,i]perylene) (CAS No.: 191-24-2)	GC/IVIS.)	mg/kg	0.2	n.d.			
(Indeno[1,2,3-c,d]pyrene) (CAS No.: 193-39-5)		mg/kg	0.2	n.d.			
(Anthracene) (CAS No.: 120-12-7)		mg/kg	0.2	n.d.			
(Fluoranthene) (CAS No.: 206-44-0)		mg/kg	0.2	n.d.			
(Phenanthrene) (CAS No.: 85-01-8)		mg/kg	0.2	n.d.			
(Pyrene) (CAS No.: 129-00-0)		mg/kg	0.2	n.d.			
(Naphthalene) (CAS No.: 91-20-3)		mg/kg	0.2	n.d.			
15 (Sum of 15 PAHs)		mg/kg	-	n.d.			



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 8 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

(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 0.1 wt% = 0.1% = 1000 ppm
2. MDL = Method Detection Limit ()
3. n.d. = Not Detected (); MDL / Less than MDL
4. "-" = Not Regulated ()
5. "" = Not Conducted ()
6. (PFOS and its salts including) :
CAS No.: 1763-23-1, 2795-39-3, 29457-72-5, 29081-56-9, 70225-14-8, 56773-42-3, 251099-16-8, 307-35-7,
91036-71-4, 4021-47-0 and others.
7. (PFOA and its salts including):
CAS No.: 335-67-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 3825-26-1 and others.
8. (#2) =
a. 0.13 μg/cm ² . / The sample is positive for Cr(VI) if the Cr(VI)
concentration is greater than 0.13 μg/cm ² . The sample coating is considered to contain Cr(VI).
b. n.d. ($0.10 \mu\text{g/cm}^2$) . / The sample is negative for Cr(VI) if Cr(VI) is
n.d. (concentration less than 0.10 µg/cm²). The coating is considered a non-Cr(VI) based coating
c. $0.10 0.13 \mu\text{g/cm}^2$. / The result between $0.10 \mu\text{g/cm}^2$ and
0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination.
9. ILA C-G 8:09/2019 (w=0)
(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. According to this rule, the
independ of conformity is based on the comparing test results with limits $)$

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 9 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

Remark

(AfPS): GSPAHs

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

1 (Category 1)

2 (Category 2)

3 (Category 3)

(Parameter)



(No.): ETR23605635

(Date): 12-Jul-2023

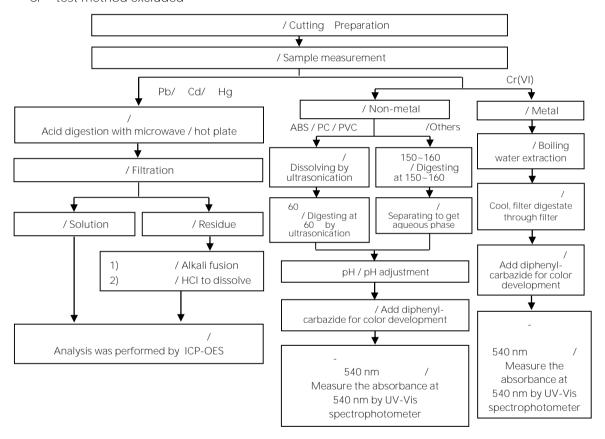
(Page): 10 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart of heavy metal

These samples were dissolved totally by pre-conditioning method according to below flow chart. Cr⁶⁺ test method excluded



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 11 of 21

Test Report

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

/ Flow chart of stripping method for metal analysis

/ The plating layer

of samples were dissolved totally by pre-



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 12 of 21

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

/ 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



(No.): ETR23605635

(Date): 12-Jul-2023

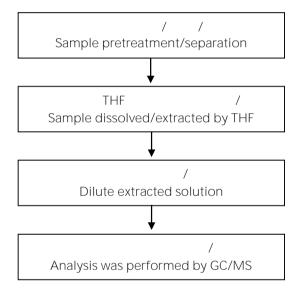
(Page): 13 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart - Phthalate

/Test method: IEC 62321-8





(No.): ETR23605635

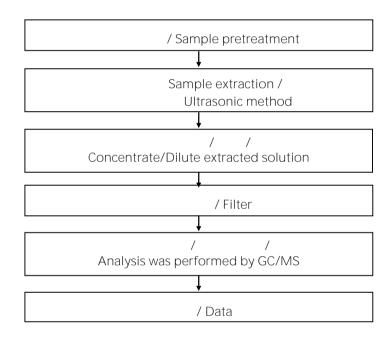
(Date): 12-Jul-2023

(Page): 14 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart - HBCDD





(No.): ETR23605635

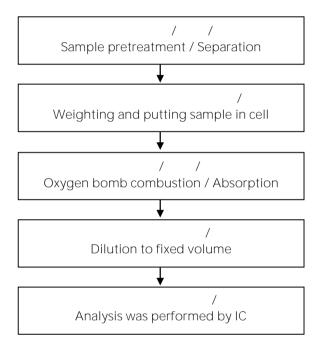
(Date): 12-Jul-2023

(Page): 15 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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

/ Analytical flow chart - Halogen

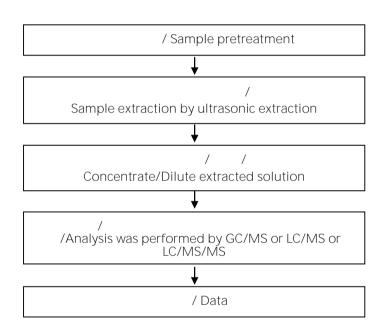




(No.): ETR23605635 (Date): 12-Jul-2023 (Page): 16 of 21

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

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





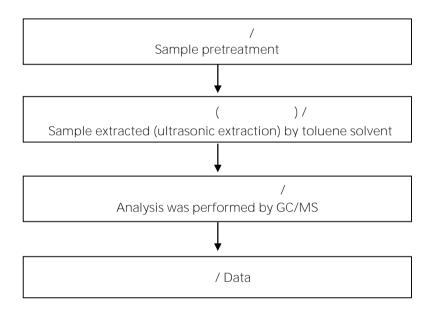
(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 17 of 21

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

Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)





(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 18 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 19 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

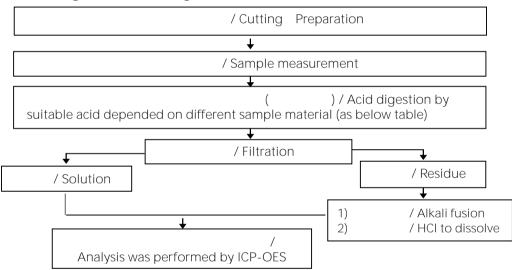
6-8 (NO. 6-8, ZHONGHUA RD., SHULIN DIST., NEW TAIPEI CITY 23860, TAIWAN)

ICP-OFS

(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 , HCl
/ Others	/ Added appropriate reagent to total digestion



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 20 of 21

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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and



(No.): ETR23605635

(Date): 12-Jul-2023

(Page): 21 of 21

(EVERLIGHT ELECTRONICS CO., LTD.)

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





(End of Report) **

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at https://www.sgs.com.tw/terms-of-service and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com.tw/terms-of-service. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and