

No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 1 of 42

Applicant : UNI-TREND TECHNOLOGY (CHINA) CO.,LTD.

Address : No 6, Gong Ye Bei 1 st Road, Songshan Lake National High-Tech Industrial

Development Zone, Dongguan City, Guangdong Province, China

: Professional AC/DC Clamp Meter-SOLAR Sample Name

Style/Item No. : UT219PV

: UNI-TREND TECHNOLOGY (CHINA) CO.,LTD. Manufacturer/Factory

: No 6, Gong Ye Bei 1 st Road, Songshan Lake National High-Tech Industrial Address

Development Zone, Dongguan City, Guangdong Province, China

Brand name UNI-T

Received Date : Oct. 12, 2023

Test Period : Oct. 12, 2023 ~ Dec. 12, 2023

Test Requested As requested by the client, to evaluate the compliance of the submitted sample with

> EU RoHS Directive 2011/65/EU Annex II and its amendment (EU) 2015/863 on the restriction of the use of certain hazardous substances in electrical and electronic

equipment.

Test Method 1. Review was performed for the sample and the related Bill of Materials submitted

by the Applicant.

2. a) Refer to the standard IEC 62321-3-1:2013: Screening by XRF Spectroscopy.

b) Wet chemical test

1) Refer to IEC 62321-5:2013, determine the Cadmium, Lead content by

2) Refer to IEC 62321-4:2013+A1:2017, determine the Mercury content by

ICP-OES:

3) Refer to IEC 62321-7-1:2015 & IEC 62321-7-2:2017, determine the

Hexavalent Chromium content by UV-VIS.

4) Refer to IEC 62321-6:2015, determine the Polybrominated Biphenyls and

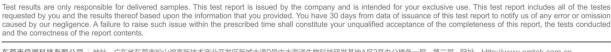
Polybrominated Diphenyl Ethers by GC-MS.

5) Refer to IEC 62321-8:2017, determine the Dibutyl phthalate(DBP),

Benzylbutyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP) and

Diisobutyl phthalate(DIBP) by GC-MS.

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







Date: Dec. 12, 2023 No.: EDG2310120046C00101R Page 2 of 42

Conclusion:

Basing on the test results obtained from the homogenous materials, the submitted sample COMPLIES with the EU RoHS Directive 2011/65/EU Annex II and its amendment (EU) 2015/863.



Signed for and on behalf of UAA

EMTEK(Dongguan) Co., Ltd

Prepared by:

Report Engineer

Reviewed by:

Zeng Xingji, Cindy

Supervisor

Approved by:

Li Wei, Lisa Authorized signatory

Dec. 12, 2023





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 3 of 42

Test Results:

1. Pb, Cd, Hg, Cr6+, PBBs, PBDEs Test Results:

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			No comment
		Cd	Cd	BL	NA		
1	Bright black	Hg	Hg	BL	IVA	Pass	
ı	hard plastic	Cr ⁶⁺	Cr	BL		F 455	No comment
		PBBs	Br	Х	ND		
		PBDEs	5	Λ	ND		
		Pb	Pb	BL			
	2 Red hard plastic	Cd	Cd	BL			
2		Hg	Hg	BL	NA	Pass	No comment
	Red Hald plastic	Cr ⁶⁺	Cr	BL	INA	F 455	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
	Black soft plastic	Pb	Pb	BL		Pass	No comment
		Cd	Cd	BL			
3		Hg	Hg	BL	NA		
3		Cr ⁶⁺	Cr	BL		F 455	
		PBBs	Br	BL			
		PBDEs	ב	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
4	Transparent	Hg	Hg	BL	NA	Pass	No comment
4	hard plastic	Cr ⁶⁺	Cr	BL	IVA	rass	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
5	Silver metal	Hg	Hg	BL	NA	Pass	No comment
3	Silver metal	Cr ⁶⁺	Cr	BL	INA	F 455	NO COMMENT
		PBBs	Br	NA			
		PBDEs	וט	INA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 4 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			No comment
6	Spring-silver	Hg	Hg	BL	NA	Door	
0	metal	Cr ⁶⁺	Cr	BL	IVA	Pass	NO Comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
	Digal, bard	Cd	Cd	BL			
7	Black hard plastic with	Hg	Hg	BL	NA	Doos	No comment
7	multicolor	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
	printing	PBBs PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
0	Copper metal	Hg	Hg	BL	NA	Dana	No comment
8		Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs PBDEs	Br	NA			
		PBDES	Pb	OL			
		Cd	Cd	OL BL			
9	Silver metal	Hg Cr ⁶⁺	Hg Cr	BL BL	Pb:25504	Pass	See remark (3)
		PBBs	Ci	DL			
		PBDEs	Br	NA			
		PBDES	Pb	Ol			
				OL			
		Cd	Cd	BL BL			
10	Copper metal	Hg Cr ⁶⁺	Hg		Pb:32214	Pass	See remark (3)
			Cr	BL			233 /3/1/4/1/ (0)
		PBBs	Br	NA			
	PBDEs						





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 5 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	OL			
		Cd	Cd	BL			See remark (3)
11	Coppor motal	Hg	Hg	BL	Pb:27047	Poss	
11	Copper metal	Cr ⁶⁺	Cr	BL	PD.27047	Pass	
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
	12 Silver metal	Cd	Cd	BL			
10		Hg	Hg	BL	NA	Doos	No comment
12		Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL	NA		
		Cd	Cd	BL		Pass	
40	Dad astrologic	Hg	Hg	BL			No commont
13	Red soft plastic	Cr ⁶⁺	Cr	BL			No comment
		PBBs		5.			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
14	Label	Hg	Hg	BL	NA	Pass	No comment
14	Labei	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	О.,	D			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
15	Black foam with	Hg	Hg	BL	NIA	Door	No comment
15	glue	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	D _r	DI			
		PBDEs	Br	BL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 6 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			No comment
16	Black soft	Hg	Hg	BL	NA	Pass	
10	plastic	Cr ⁶⁺	Cr	BL	IVA	F 455	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
17	Blue soft plastic	Hg	Hg	BL	NA	Pass	No comment
17		Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL			No comment
	Yellow soft plastic	Cd	Cd	BL			
18		Hg	Hg	BL	NA	Dana	
10		Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	Br	DI			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
19	Black hard	Hg	Hg	BL	NA	Pass	No comment
19	plastic	Cr ⁶⁺	Cr	BL	INA	F 455	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
20	White glue	Hg	Hg	BL	NA	Pass	No comment
20	vvilite glue	Cr ⁶⁺	Cr	BL	INA	F d 3 3	NO COMMENT
		PBBs	Br	BL			
		PBDEs	וט	DL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 7 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
04	Cil. m. m. atal	Hg	Hg	BL	NIA	Dana	No commont
21	Silver metal	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	OL			
		Cd	Cd	BL			
22	Coppor motal	Hg	Hg	BL	Pb:31533	Pass	Soo romark (2)
22	Copper metal	Cr ⁶⁺	Cr	BL		Pass	See remark (3)
		PBBs	Br	NA			
		PBDEs	БI	INA			
		Pb	Pb	BL			
	Dark grey hard plastic	Cd	Cd	BL	NA		
23		Hg	Hg	BL	INA	Pass	No comment
23		Cr ⁶⁺	Cr	BL	ND	Fass	NO COMMENT
		PBBs	Br	Х			
		PBDEs	ы	^	ND		
		Pb	Pb	BL			
		Cd	Cd	BL			
24	Dark brown	Hg	Hg	BL	NA	Pass	No comment
24	hard plastic	Cr ⁶⁺	Cr	BL	INA	r ass	NO COMMENT
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
25	Copper metal	Hg	Hg	BL	NA	Pass	No comment
20	Copper metal	Cr ⁶⁺	Cr	BL	INA	F d 5 5	NO COMMENT
		PBBs	Br	NA			
		PBDEs	וט	INA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 8 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
26	Black soft	Hg	Hg	BL	NA	Pass	No comment
20	plastic	Cr ⁶⁺	Cr	BL	IVA	Pass	NO Comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
	Orange plastic film	Cd	Cd	BL			
07		Hg	Hg	BL	NA	Door	No comment
21		Cr ⁶⁺	Cr	BL	NA NA	Pass	No comment
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL	NA		
	Green PCB	Cd	Cd	BL		Pass	
28		Hg	Hg	BL			No comment
20		Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	D.	V	ND ND		
		PBDEs	Br	X			
		Pb	Pb	BL			
		Cd	Cd	BL	NA		
29	Black hard	Hg	Hg	BL	INA	Pass	No comment
29	plastic	Cr ⁶⁺	Cr	BL		Pa55	No comment
		PBBs	Br	Х	ND		
		PBDEs	ы	^	ND		
		Pb	Pb	BL			
		Cd	Cd	BL			
20	Pin-silver metal	Hg	Hg	BL	NIA	Poss	No comment
30	rin-slivet metal	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	D۰	NΙΛ			
		PBDEs	Br	NA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 9 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			No comment
31	Cilver motel	Hg	Hg	BL	NIA	Pass	
31	Silver metal	Cr ⁶⁺	Cr	BL	NA		No comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
32	Label	Hg	Hg	BL	NA	Pass	No comment
32	Labei	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	Br	BL			
		PBDEs	D,	<u> </u>			
		Pb	Pb	BL		Pass	
		Cd	Cd	BL			
33	Shell-black hard	Hg	Hg	BL	NA		No comment
	plastic	Cr ⁶⁺	Cr	BL			140 COMMENT
		PBBs	Br	BL			
		PBDEs	5	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
34	Magnet-grey	Hg	Hg	BL	NA	Pass	No comment
34	solid	Cr ⁶⁺	Cr	BL	INA	1 033	NO COMMENT
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
35	Iron plate-silver	Hg	Hg	BL	NA	Pass	No commont
33	metal	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	D.	NIA			
		PBDEs	Br	NA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 10 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
36	Vibrating membrane-	Hg	Hg	BL	NA	Pass	No comment
30	silver metal	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
27	Avia ailvar matal	Hg	Hg	BL	NA	Door	N
37	Axle-silver metal	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL	NA		
		Cd	Cd	BL			
38	Copper	Hg	Hg	BL		Pass	No comment
30	enameled wire	Cr ⁶⁺	Cr	BL		Pa55	No comment
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
	Base-silver	Hg	Hg	BL		_	
39	metal	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	_				
		PBDEs	Br	NA			
		Pb	Pb	BL			
		Cd	Cd	BL	NIA		
40	0	Hg	Hg	BL	NA	Davis	No some t
40	Green PCB	Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	D	V	ND	1	
		PBDEs	Br	X	ND]	





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 11 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
41	Solder-silver	Hg	Hg	BL	NA	Pass	No comment
41	metal	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
	42 Pin-silver metal	Cd	Cd	BL			
40		Hg	Hg	BL	NA	Door	No comment
42		Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL		Pass	No comment
	SMD IC	Cd	Cd	BL			
40		Hg	Hg	BL	NA		
43		Cr ⁶⁺	Cr	BL			No comment
		PBBs	D	Di			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
44	SMD IC	Hg	Hg	BL	NA	Pass	No comment
44	SIVID IC	Cr ⁶⁺	Cr	BL	INA	F 455	NO Comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
ΛE	SMD resister	Hg	Hg	BL	NIA	Poss	No comment
45	Sivid lesister	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	Br	BL			
		PBDEs	DI	DL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 12 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
46	Silver metal	Hg	Hg	BL	NA	Pass	No comment
40	Silver metal	Cr ⁶⁺	Cr	BL	INA	rass	
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
	7 SMD diode	Cd	Cd	BL			
47		Hg	Hg	BL	NIA	Doos	No comment
47		Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL	Cr ⁶⁺ :Negative		
		Cd	Cd	BL			
40	Silver metal	Hg	Hg	BL		Dana	No comment
48	Silver metal	Cr ⁶⁺	Cr	Х		Pass	No comment
		PBBs	Br	NA			
		PBDEs					
		Pb	Pb	BL			
		Cd	Cd	BL			
49	SMD IC	Hg	Hg	BL	NA	Pass	No comment
		Cr ⁶⁺	Cr	BL			
		PBBs	Br	BL			
		PBDEs					
		Pb	Pb	BL			
		Cd	Cd	BL			
50	SMD triode	Hg	Hg	BL	NA	Pass	No comment
50	CIVID THOUGH	Cr ⁶⁺	Cr	BL	14/7	1 433	140 Commont
		PBBs	Br	BL			
		PBDEs	וט	DL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 13 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
51	SMD IC	Hg	Hg	BL	NA	Door	No commont
51	SIVID IC	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	Dr	BL			
		PBDEs	Br	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
50	Cil. m. m. atal	Hg	Hg	BL	NIA	_	No comment
52	Silver metal	Cr ⁶⁺	Cr	BL	NA	Pass	
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL	NIA		
		Cd	Cd	BL			
5 0	Blue PCB	Hg	Hg	BL	NA	Dana	No commont
53	Blue PCB	Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	D.	V	ND ND		
		PBDEs	Br	X			
		Pb	Pb	OL			
		Cd	Cd	BL			
54	SMD diode	Hg	Hg	BL	Pb:16788	Pass	See remark (3)
54	SIVID diode	Cr ⁶⁺	Cr	BL	PD. 10700	Pass	See lemark (S)
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL	NIA		
EE	Croon DCD	Hg	Hg	BL	NA	Door	No commant
55	Green PCB	Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	D۰	V	ND		
		PBDEs	Br	X	ND	1	





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 14 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
56	Black hard	Hg	Hg	BL	NA	Pass	No comment
36	plastic	Cr ⁶⁺	Cr	BL	INA	Fass	
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
	7 Pin-silver metal	Cd	Cd	BL			
57		Hg	Hg	BL	NIA	Doos	No commont
57	Pin-sliver metal	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL	NA		
		Cd	Cd	BL			
58	SMD triode	Hg	Hg	BL		Pass	No comment
56	SIVID THOUSE	Cr ⁶⁺	Cr	BL		F 455	No comment
		PBBs	Br	BL			
		PBDEs					
		Pb	Pb	BL			
		Cd	Cd	BL			
59	SMD diode	Hg	Hg	BL	NA	Pass	No comment
00	Civib diede	Cr ⁶⁺	Cr	BL		1 455	rto commont
		PBBs	Br	BL			
		PBDEs		DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
60	SMD inductor	Hg	Hg	BL	NA	Pass	No comment
30	CIVID IIIQQCIOI	Cr ⁶⁺	Cr	BL	1.4/7	1 433	140 Commont
		PBBs	Br	BL			
		PBDEs	וט	DL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 15 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
64	SMD IC	Hg	Hg	BL	NA	Pass	No comment
61	SIMID IC	Cr ⁶⁺	Cr	BL	INA	Pass	
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
	62 Silver metal	Cd	Cd	BL			
60		Hg	Hg	BL	NA	Pass	No comment
62		Cr ⁶⁺	Cr	BL	IVA	Pass	
		PBBs	D.	NA			
		PBDEs	Br				
		Pb	Pb	BL			
		Cd	Cd	BL			
63	Plug-white hard	Hg	Hg	BL	NA	Pass	No comment
0.5	plastic	Cr ⁶⁺	Cr	BL	NA.	rass	rte comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
64	Plug-pin-silver	Hg	Hg	BL	NA	Pass	No comment
04	metal	Cr ⁶⁺	Cr	BL	INA	F a55	NO COMMENT
		PBBs	Br	NA			
		PBDEs	ום	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
65	Electric wire-red	Hg	Hg	BL	NA	Pass	No comment
00	soft plastic	Cr ⁶⁺	Cr	BL	IN/A	F d55	NO COMMENT
		PBBs	Br	BL			
		PBDEs	DI	DL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 16 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
66	Electric wire- black soft plastic	Hg	Hg	BL	NΙΔ	Pass	No comment
00		Cr ⁶⁺	Cr	BL	NA	Fass	No comment
		PBBs	D	Ē			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
07	Electric wire-	Hg	Hg	BL	N10	Davis	No comment
67	silver metal	Cr ⁶⁺	Cr	BL	NA NA	Pass	
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL			
		Cd	Cd	BL			
68	Black tube	Hg	Hg	BL	NA	Door	No comment
00	DIACK LUDE	Cr ⁶⁺	Cr	BL	IVA	Pass	No comment
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
		Hg	Hg	BL			
69	Green solid	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	<u> </u>				
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
		Hg	Hg	BL			
70	SMD resister	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs					
		PBDEs	Br	BL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 17 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
71	Beige hard	Hg	Hg	BL	NA	Pass	No comment
/ 1	plastic	Cr ⁶⁺	Cr	BL	IVA	F 455	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
72	Pin-silver metal	Hg	Hg	BL	NIA	Pass	No comment
12	Pin-sliver metal	Cr ⁶⁺	Cr	BL	NA NA	Pass	No comment
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL			
		Cd	Cd	BL			
73	Black solid	Hg	Hg	BL	NIA	Dana	No someont
/3	Black Solid	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	D.	DI			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
74	Pin-silver metal	Hg	Hg	BL	NA	Pass	No comment
74	Fin-Silver metal	Cr ⁶⁺	Cr	BL	IVA	F a 5 5	NO Comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
75	SMD capacitor	Hg	Hg	BL	NA	Page	No commont
/5	SIVID CAPACITOR	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	Br	RI			
		PBDEs	וט	BL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 18 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
76	SMD IC	Hg	Hg	BL	NA	Pass	No comment
76	SIVID IC	Cr ⁶⁺	Cr	BL	INA	Pa55	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
77	SMD conneitor	Hg	Hg	BL	NA	Pass	No comment
//	SMD capacitor	Cr ⁶⁺	Cr	BL		Pass	
		PBBs	Br	BL			
		PBDEs	ы	DL			
	Transparent hard plastic	Pb	Pb	BL			
		Cd	Cd	BL			
78		Hg	Hg	BL	NA	Pass	No comment
70		Cr ⁶⁺	Cr	BL		rass	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
79	Pin-silver metal	Hg	Hg	BL	NA	Pass	No comment
13	i iii-siivei iiietai	Cr ⁶⁺	Cr	BL	INA	1 433	140 Comment
		PBBs	Br	NA			
		PBDEs	ום	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
80	Transparent	Hg	Hg	BL	NA	Page	No comment
00	hard plastic	Cr ⁶⁺	Cr	BL	INA	Pass	NO COMMENT
		PBBs	Br	BL			
		PBDEs	וט	DL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 19 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
81	Pin-silver metal	Hg	Hg	BL	NΙΔ	Pass	No commont
01	or Fill-Sliver metal	Cr ⁶⁺	Cr	BL	NA	rass	No comment
		PBBs	Dr	NA			
		PBDEs	Br	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
00	Black hard	Hg	Hg	BL	N10	D	No comment
82	plastic	Cr ⁶⁺	Cr	BL	NA NA	Pass	
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
83	Black soft	Hg	Hg	BL	NA	Door	No commont
03	plastic	Cr ⁶⁺	Cr	BL	IVA	Pass	No comment
		PBBs PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
0.4	Transparent	Hg	Hg	BL	NIA.		NI .
84	glass	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs		6			
		PBDEs	Br	BL			
		Pb	Pb	BL			
		Cd	Cd	BL			
0.5	Black	Hg	Hg	BL	† <u></u>	D	No some t
85	translucent plastic film	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	Г.	D.			
		PBDEs	Br	BL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 20 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
86	White plastic	Hg	Hg	BL	NA	Pass	No comment
00	film	Cr ⁶⁺	Cr	BL	INA	P 455	
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
	White plastic film	Cd	Cd	BL			
07		Hg	Hg	BL	NA	Doos	No comment
87		Cr ⁶⁺	Cr	BL	NA NA	Pass	No comment
		PBBs	D.,	BL			
		PBDEs	Br	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
88	Silver plastic film with glue	Hg	Hg	BL	NA	Pass	No comment
00		Cr ⁶⁺	Cr	BL	IVA	rass	NO COMMENT
		PBBs	Br	BL			
		PBDEs	DI	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
89	White plastic	Hg	Hg	BL	NA	Pass	No comment
09	film	Cr ⁶⁺	Cr	BL	INA	F 455	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
90	Translucent	Hg	Hg	BL	NA	Pass	No commont
90	hard plastic	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	D,	DI			
		PBDEs	Br	BL			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 21 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
91	Solder-silver	Hg	Hg	BL	NA	Door	No commont
91	metal	Cr ⁶⁺	Cr	BL	INA	Pass	No comment
		PBBs	Br	NA			
		PBDEs	DI	INA			
		Pb	Pb	BL			
		Cd	Cd	BL	NIA		
00	Crass DCD	Hg	Hg	BL	NA	Pass	No comment
92	Green PCB	Cr ⁶⁺	Cr	BL			
		PBBs	D.,	V	ND		
		PBDEs	Br	X	ND		
		Pb	Pb	BL			
		Cd	Cd	BL			
93	SMD LED	Hg	Hg	BL	NA	Pass	No comment
93	SIMID LED	Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	Br	BL			
		PBDEs	DI	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
94	SMD IC	Hg	Hg	BL	NA	Pass	No comment
94	SIVID IC	Cr ⁶⁺	Cr	BL	INA	F 455	No comment
		PBBs	Br	BL			
		PBDEs	ы	DL			
		Pb	Pb	BL			
		Cd	Cd	BL			
95	Silver metal	Hg	Hg	BL	NIA	Poss	No commont
90	Silver metal	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	D=	NΙΛ			
		PBDEs	Br	NA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 22 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
06	96 Silver metal	Hg	Hg	BL	NΙΔ	Pass	No commont
90		Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL			
		Cd	Cd	BL			
07	Silver metal	Hg	Hg	BL	NIA	Door	No comment
97	Silver metal	Cr ⁶⁺	Cr	BL	NA NA	Pass	
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL			
		Cd	Cd	BL			
98	Silver metal with	Hg	Hg	BL	NA	Pass	No comment
90	black plating	Cr ⁶⁺	Cr	BL	INA	F 455	No comment
		PBBs PBDEs	Br	NA			
		Pb	Pb	BL			
		Cd	Cd	BL			
00	Silver metal with	Hg	Hg	BL	NIA	D	Nicolana
99	black plating	Cr ⁶⁺	Cr	BL	NA	Pass	No comment
		PBBs	D	NIA			
		PBDEs	Br	NA			
		Pb	Pb	BL			
		Cd	Cd	BL			
100	Silver metal with	Hg	Hg	BL	C =6+. N = =: = +:: :=	Dass	No porter and
100	black plating	Cr ⁶⁺	Cr	Х	Cr ⁶⁺ :Negative	Pass	No comment
		PBBs	D=	NΙΛ			
		PBDEs	Br	NA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 23 of 42

No.	Sample description	Restricted substances	Analytical element	Results of EDXRF ⁽¹⁾	Results of Chemical Testing ⁽²⁾ (mg/kg)	Conclusion	Remark
		Pb	Pb	BL			
		Cd	Cd	BL			
101	Silver metal with	Hg	Hg	BL	- NA	Page	No comment
101	black plating	Cr ⁶⁺	Cr	BL		Pass	No comment
		PBBs	Br	NA			
		PBDEs	ы	INA			
		Pb	Pb	BL		Pass	No comment
		Cd	Cd	BL			
102	Silver metal with	Hg	Hg	BL	NIA		
102	black plating	Cr ⁶⁺	Cr	BL	NA NA		
		PBBs	Dr	NIA			
		PBDEs	Br	NA			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 24 of 42

Test Results:

2. Phthalates (DBP, BBP, DEHP, DIBP) Test Results:

Test Item	Te	est Result (mg/k	g)	MDL (mg/kg)	Requirement
rest item	1+2+3	4+7+13	14+15+16	MDE (mg/kg)	Limit (mg/kg)
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000
Conclusion	Pass	Pass	Pass		

Test Item	To	est Result (mg/k	MDL (mg/kg)	Requirement	
rest item	17+18+19	20+23+24	26+27+28	MDE (mg/kg)	Limit (mg/kg)
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000
Conclusion	Pass	Pass	Pass		

Test Item	Te	est Result (mg/k	MDL (mg/kg)	Requirement	
rest item	29+32+33	34+38+40	43+44+45	WIDE (Hig/kg)	Limit (mg/kg)
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000
Conclusion	Pass	Pass	Pass		

Test Item	Te	est Result (mg/k	MDL (mg/kg)	Requirement		
Test item	47+49+50	51+53+54	55+56+58	WDL (Hg/kg)	Limit (mg/kg)	
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000	
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000	
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000	
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000	
Conclusion	Pass	Pass	Pass			





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 25 of 42

Test Results:

2. Phthalates (DBP, BBP, DEHP, DIBP) Test Results:

Test Item	Te	est Result (mg/k	MDL (mg/kg)	Requirement		
rest item	59+60+61	63+65+66	68+69+70	MDE (mg/kg)	Limit (mg/kg)	
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000	
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000	
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000	
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000	
Conclusion	Pass	Pass	Pass			

Test Item	To	est Result (mg/k	MDL (ma/ka)	Requirement		
Test item	71+73+75	76+77+78	80+82+83	MDL (mg/kg)	Limit (mg/kg)	
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000	
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000	
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000	
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000	
Conclusion	Pass	Pass	Pass			

Test Item	Te	est Result (mg/k	MDL (mg/kg)	Requirement		
rest item	84+85+86	87+88+89	90+92	MDE (Mg/kg)	Limit (mg/kg)	
Dibutyl phthalate(DBP)	ND	ND	ND	30	1000	
Benzylbutyl phthalate(BBP)	ND	ND	ND	30	1000	
Di-2-ethylhexyl phthalate(DEHP)	ND	ND	ND	30	1000	
Diisobutyl phthalate(DIBP)	ND	ND	ND	30	1000	
Conclusion	Pass	Pass	Pass			

Test Item	Test Result (mg/kg) 93+94		Requirement Limit (mg/kg)
Dibutyl phthalate(DBP)	ND	30	1000
Benzylbutyl phthalate(BBP)	ND	30	1000
Di-2-ethylhexyl phthalate(DEHP)	ND	30	1000
Diisobutyl phthalate(DIBP)	ND	30	1000
Conclusion	Pass		

Note: mg/kg = parts per million = ppm

ND = Not Detected (less than MDL) MDL = Method Detection Limit





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 26 of 42

Test Materials List:

Item No.	Description
1	Bright black hard plastic
2	Red hard plastic
3	Black soft plastic
4	Transparent hard plastic
7	Black hard plastic with multicolor printing
13	Red soft plastic
14	Label
15	Black foam with glue
16	Black soft plastic
17	Blue soft plastic
18	Yellow soft plastic
19	Black hard plastic
20	White glue
23	Dark grey hard plastic
24	Dark brown hard plastic
26	Black soft plastic
27	Orange plastic film
28	Green PCB
29	Black hard plastic
32	Label
33	Shell-black hard plastic
34	Magnet-grey solid
38	Copper enameled wire
40	Green PCB
43	SMD IC
44	SMD IC
45	SMD resister
47	SMD diode
49	SMD IC





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 27 of 42

Item No.	Description						
50	SMD triode						
51	SMD IC						
53	Blue PCB						
54	SMD diode						
55	Green PCB						
56	Black hard plastic						
58	SMD triode						
59	SMD diode						
60	SMD inductor						
61	SMD IC						
63	Plug-white hard plastic						
65	Electric wire-red soft plastic						
66	Electric wire-black soft plastic						
68	Black tube						
69	Green solid						
70	SMD resister						
71	Beige hard plastic						
73	Black solid						
75	SMD capacitor						
76	SMD IC						
77	SMD capacitor						
78	Transparent hard plastic						
80	Transparent hard plastic						
82	Black hard plastic						
83	Black soft plastic						
84	Transparent glass						
85	Black translucent plastic film						
86	White plastic film						
87	White plastic film						
88	Silver plastic film with glue						





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 28 of 42

Item No.	Description
89	White plastic film
90	Translucent hard plastic
92	Green PCB
93	SMD LED
94	SMD IC

Note: As specified by the client, the samples were subjected to mixed testing.







No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 29 of 42

- Remark: (1) ① Results are obtained by XRF for primary screening, and further wet chemical testing by ICP-OES / AAS (for Cd, Pb, Hg), UV-VIS (for Cr(VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if an inconclusive result was found (as "X" in below table) (unit: mg/kg).
 - ② OL = Over Limit, BL = Below Limit, X = Inconclusive, NA= Not Applicable.
 - ③ XRF screening test for RoHS elements The test result may be different from the actual content in the non-uniformity composition sample.

Element	Polymer	Metal	Composite Materials
Cd	$BL \leq (70\text{-}3\sigma) < X < (130\text{+}3\sigma) \\ \leq OL$	$BL \leq (70\text{-}3\sigma) < X < (130\text{+}3\sigma) \\ \leq OL$	LOD < X <(150+3 σ)≤ OL
Pb	BL ≤(700-3 <i>σ</i>)< X <(1300+3 <i>σ</i>)≤ OL	BL ≤(700-3 σ)< X <(1300+3 σ)≤ OL	BL ≤(500-3 <i>σ</i>)< X <(1500+3 <i>σ</i>)≤ OL
Hg	BL \leq (700-3 σ)< X < (1300+3 σ) \leq OL	BL \leq (700-3 σ)< X <(1300+3 σ) \leq OL	BL ≤(500-3 <i>σ</i>)< X <(1500+3 <i>σ</i>)≤ OL
Br	BL ≤ (300-3 <i>σ</i>)< X	NA	BL ≤ (250-3 σ)< X
Cr	BL ≤ (700-3 <i>σ</i>)< X	BL ≤ (700-3 <i>σ</i>)< X	BL ≤ (500-3 σ)< X

- (2) ① mg/kg = ppm = 0.0001%, ND = Not Detected (less than MDL), MDL = Method Detection Limit.
 - 2 Unit, Method Detection Limit (MDL) and Requirement limit in wet chemical test.

Test items	Pb	Cd	Hg	Cr ⁶⁺ (Non-metal)	Cr ⁶⁺ (metal)	PBBs(single)	PBDEs(single)
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MDL	2	2	2	8	-	5	5
Requirement Limit	1000	100	1000	1000	Negative	1000	1000

- 3 According to IEC 62321-7-1:2015, result on Cr6+ for metal sample shall be shown as Positive/Negative.
 - The Cr(VI) concentration is more than 0.13 µg/cm², the sample is positive for Cr(VI), the coating is considered to contain Cr(VI).
 - The Cr(VI) concentration is less than 0.10 µg/cm², the sample is negative for Cr(VI), the coating is considered a non-Cr(VI) based coating.

Storage condition and production date of the tested sample are unavailable and thus results of Cr6+ represent status of the sample at the time of testing.

- According to IEC 62321-3-1:2013, this column represents the results of wet chem test. And "NA" means no need to perform wet chem test, when the XRF screening results are acceptable.
- (3) As declared by the client, No.9,10,11,22 the materials should be exempted for lead content requirement according to Annex III clause 6(c); No.54 the material should be exempted for lead content requirement according to Annex III clause 7(c)-l.





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 30 of 42

Sample Photo

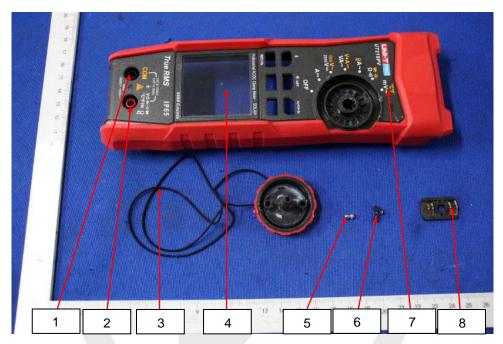


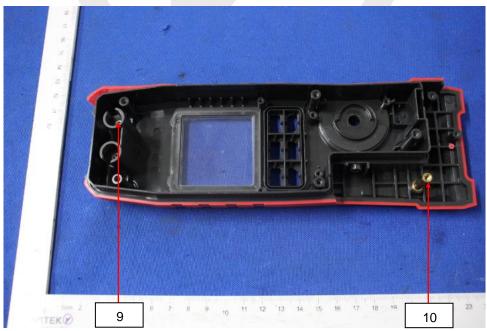




No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 31 of 42

Sample Photo





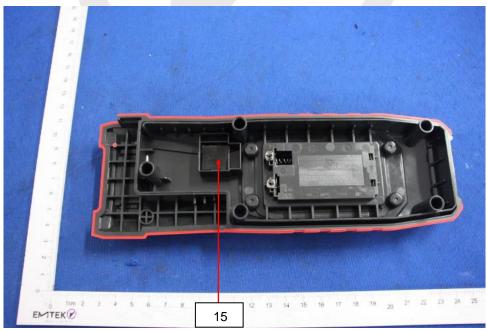




No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 32 of 42

Sample Photo



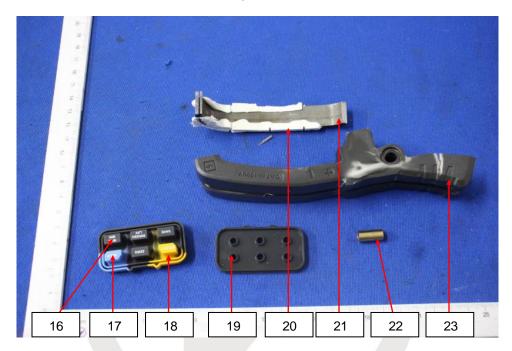






No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 33 of 42

Sample Photo



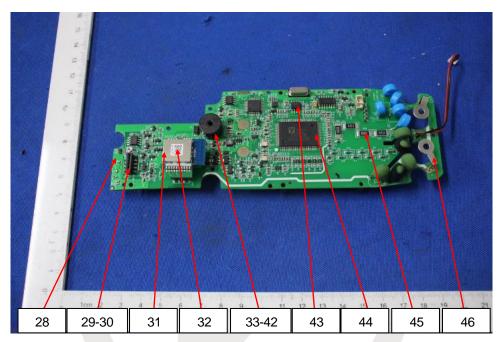


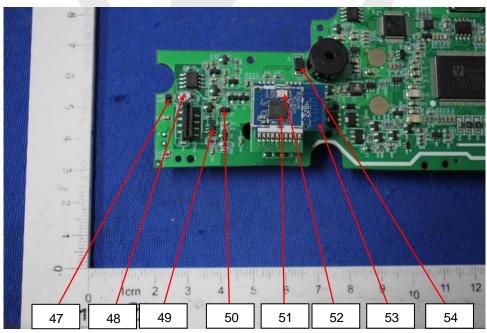




No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 34 of 42

Sample Photo



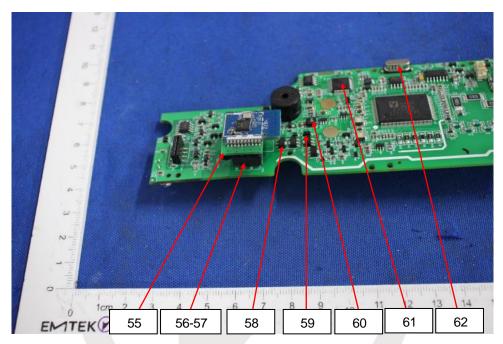


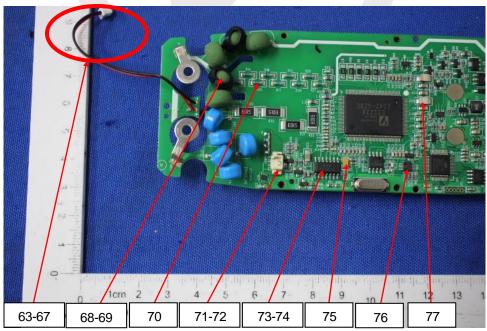




No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 35 of 42

Sample Photo



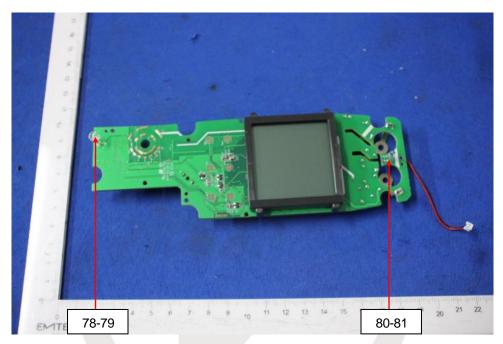


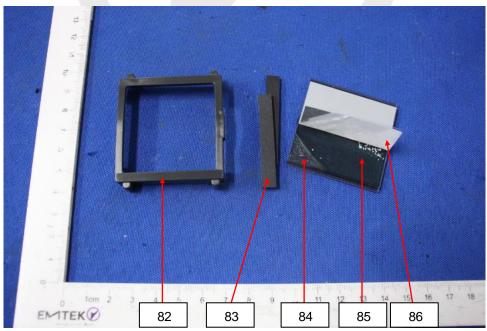




No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 36 of 42

Sample Photo



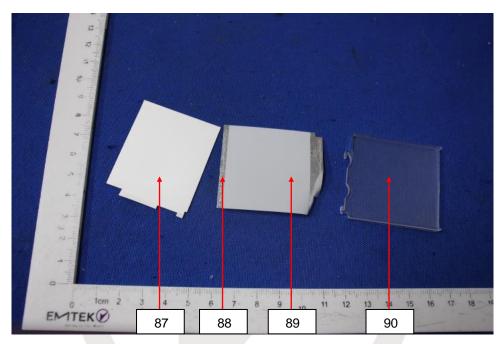


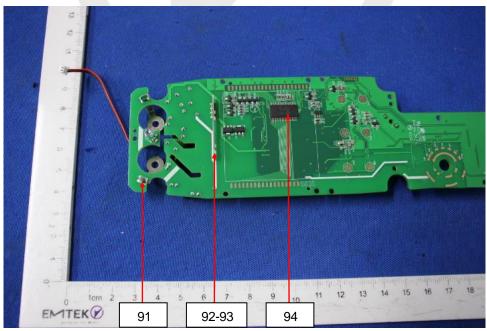




No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 37 of 42

Sample Photo



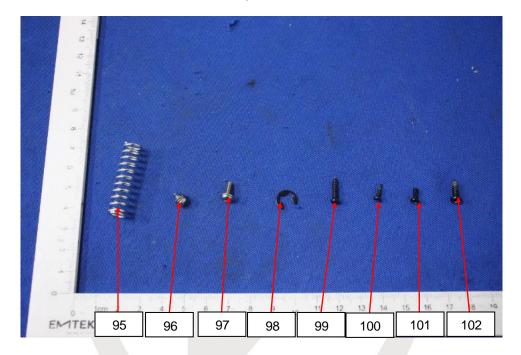






No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 38 of 42

Sample Photo



*** End of Report ***





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 39 of 42

ANNEX

EXEMPTION LIST

- Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):
- For general lighting purposes < 30W: 5mg (expires on 31 December 2011; 3.5mg may be used per burner after 31 December 2011 until 1(a) 31 December 2012; 2.5mg shall be used per burner after 31 December 2012)
- 1(b) For general lighting purposes ≥ 30W and <50W: 5mg (expires on 31 December 2011; 3.5mg may be used per burner after 31
- For general lighting purposes ≥ 50W and <150W: 5mg 1(c)
- For general lighting purposes ≥ 150W: 15mg 1(d)
- 1(e) For general lighting purposes with circular or square structural shape and tube diameter ≤17mm (no limitation of use until 31 December 2011; 7mg may be used per burner after 31 December 2011)
- 1(f) For special purposes: 5mg
- For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg (Expires on 31 December 2017) 1(g)
- Mercury in double-capped linear fluorescent lamps for general lighting purples not exceeding (per lamp): 2(a)
- Tri-band phosphor with normal lifetime and a tube diameter < 9mm (e.g. T2): 5mg (expires on 31 December 2011; 4mg may be used 2(a)(1) per lamp after 31 December 2011)
- 2(a)(2)Tri-band phosphor with normal lifetime and a tube diameter ≥ 9mm and ≤ 17mm (e.g. T5): 5mg (expires on 31 December 2011; 3mg may be used per lamp after 31 December 2011)
- Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg (expires on 31 December 2011; 3.5 mg 2(a)(3)may be used per lamp after 31 December 2011)
- Tri-band phosphor with normal lifetime and a tube diameter > 28mm (e.g. T12): 5mg (expires on 31 December 2012; 3.5mg may be 2(a)(4) used per lamp after 31 December 2012)
- Tri-band phosphor with long lifetime (≥ 25000h): 8mg (expires on 31 December 2011; 5mg may be used per lamp after 31 December 2(a)(5)
- Mercury in other fluorescent lamps not exceeding (per lamp): 2(b)
- 2(b)(2) Non-linear halophosphate lamps (all diameters): 15mg (expires on 13 April 2016)
- 2(b)(3)Non-linear tri-band phosphor lamps with tube diameter > 17mm (e.g. T9) (no limitation of use until 31 December 2011; 15mg may be used per lamp after 31 December 2011)
- 2(b)(4)Lamps for other general lighting and special purposes (e.g. induction lamps) (no limitation of use until 31 December 2011; 15mg may be used per lamp after 31 December 2011)
- Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):
- Short length (≤ 500mm) (No limitation of use until 31 December 2011; 3.5mg may be used per lamp after 31 December 2011) 3(a)
- Medium length (> 500 m and ≤ 1500 mm) (No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 3(b)
- Long length (> 1500mm) (No limitation of use until 31 December 2011; 13mg may be used per lamp after 31 December 2011) 3(c)
- Mercury in other low pressure discharge lamps (per lamp) (no limitation of use until 31 December 2011; 15mg may be used per lamp 4(a) after 31 December 2011)
- 4(b) Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60:
- P ≤ 155W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011) 4(b)-I
- 155W < P ≤ 405W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011) 4(b)-II
- 4(b)-III P > 405W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011)
- Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): 4(c)
- 4(c)-I P≤ 155W (no limitation of use until 31 December 2011; 25mg may be used per burner after 31 December 2011)
- 155W < P \(405W \) (no limitation of use until 31 December 2011; 30mg may be used per burner after 31 December 2011) 4(c)-II
- P > 405W (no limitation of use until 31 December 2011; 40mg may be used per burner after 31 December 2011) Mercury in High Pressure Mercury (vapour) lamps (HPMV) (expires on 13 April 2015) 4(c)-III
- 4(d)
- Mercury in metal halide lamps (MH) 4(e)
- Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex 4(f)
- 4(g) Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows: (Expires on 31 December 2018)
 - 20 mg per electrode pair + 0,3 mg per tube length in cm, but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20 °C;
 - 15 mg per electrode pair + 0,24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications.





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 40 of 42

ANNEX

EXEMPTION LIST

Continued

5(a)	Lead in glass of cathode ray tubes	
J(u)	Load in glass of balliode ray labes	

- 5(b) Lead in glass of fluorescent tubes not exceeding 0.2% by w eight
- 6(a) Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight
- 6(b) Lead as an alloying element in aluminium containing up to 0.4% lead by weight
- 6(c) Copper alloy containing up to 4% lead by weight.
- Lead in high melting temperature type solders (i.e. lead based alloys containing 85% by weight or more lead) 7(a)
- Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, 7(b) and network management for telecommunications
- 7(c)-l Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound
- Lead in dielectric ceramic in capacitors for a rated voltage of 125V AC or 250V DC or higher 7(c)-II
- 7(c)-III Lead in dielectric ceramic in capacitors for a rated voltage of less than 125V AC or 250V DC (expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013).
- 7(c)-IV Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors
- 8(a) Cadmium and its compounds in one shot pellet type thermal cut-offs (expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012)
- Cadmium and its compounds in electrical contacts 8(b)
 - Applies to categories 8, 9 and 11 and expires on:
 - 21 July 2021 for categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments;
 - 21 July 2023 for category 8 in vitro diagnostic medical devices;
 - 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11
- Cadmium and its compounds in electrical contacts used in: 8(b)-I
 - Applies to categories 1 to 7 and 10 and expires on 21 July 2021.
 - circuit breakers,
 - thermal sensing controls,
 - thermal motor protectors (excluding hermetic thermal motor protectors),
 - ACsw itches rated at: 6 A and more at 250 V AC and more, or
 - 12 A and more at 125 V AC and more,
 - DC sw itches rated at 20 A and more at 18 V DC and more, and
 - sw itches for use at voltage supply frequency ≥ 200 Hz.
- Hexavalent chromium as an anti-corrosion agent of the carbon steel cooling system in absorption refrigerators up to 0.75% by weight in 9 the cooling solution
- Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration 9(b) (HVACR) applications
- Lead used in other than C-press compliant pin connector systems (expires on 1 January 2013 and after that date may be used in spare 11(b) parts for EEE placed on the market before 1 January 2013)
- 13(a) Lead in white glasses used for optical applications
- Cadmium and lead in filter glasses and glasses used for reflectance standards 13(b)
- Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a 14 lead content of more than 80% and less than 85% by weight (expires on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011)
- Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip 15
- 17 Lead halide as radiant agent in High Intensity Discharge (HID) lamps used for professional reprography applications
- Lead as activator in the fluorescent powder (1% lead by weight or less) of discharge lamps when used as sun tanning lamps containing 18(b) phosphors such as BSP (BaSi₂O₅:Pb)
- Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glass
- Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors
- 25 Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring
- 29 Lead bound in crystal glass as defined in Annex 1 (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC
- Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-pow ered loudspeakers with sound pressure levels of 100 dB (A) and more





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 41 of 42

ANNEX

EXEMPTION LIST

Continued

- 31 Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial
- 32 Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes
- 33 Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers
- 34 Lead in cermet-based trimmer potentiometer elements
- 37 Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body
- 38 Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide
- Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm2 of light- emitting area) for use in solid state illumination or display systems (expires on 1 July 2014)
- 41 Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council (2)) (Expires on 31 December 2018)
- 43 Bis (2-ethylhexyl) phthalate in rubber components in engine systems, designed for use in equipment that is not intended solely for consumer use and provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin and concentration value of bis(2-ethylhexyl) phthalate does not exceed:
 - 30% by weight of the rubber for
 - gasket coatings;
 - solid-rubber gaskets; or
 - rubber components included in assemblies of at least three components using electrical, mechanical or hydraulic energy to do work, and attached to the engine.
 - 10% by weight of the rubber for rubber-containing components not referred to in point (a).
 - For the purposes of this entry, "prolonged contact with human skin" means continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day.
- Lead in solder of sensors, actuators, and engine control units of combustion engines within the scope of Regulation (EU) 2016/1628 of 44 the European Parliament and of the Council, installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users.





No.: EDG2310120046C00101R Date: Dec. 12, 2023 Page 42 of 42

声明 Statement

1.本检测报告首页所列信息中除样品来源、接样日期、检测日期、检测结果和检测结论外,均由委托方提供,委托方对样品的代表性和 资 料的真实性负责,本实验室不承担任何相关责任。

The information as listed on the first page of this test report was all provided by the client except the sample from, date received, test period, test results and test conclusion. The client shall be responsible for the representativeness of sample and authenticity of materials, for which EMTEK shall bear no responsibilities.

2.本检测报告以实测值进行符合性判定,未考虑不确定度所带来的风险,特别约定、标准或规范中有明确规定的除外。此种判定方式所带来的风险由客户自行承担,本实验室不承担相关责任。
The judgment method of determining the conformity in this test report is according to the measured value without considering the risk

caused by uncertainty, unless otherwise clearly stipulated in special agreement, standard or specification. The client shall assume the risk caused by the judgment method, and EMTEK shall not bear related responsibilities.

- 3. 检测报告无批准人签字及"检验检测专用章"无效,未经本实验室书面同意,不得整体或部分复制本报告。 The test report is effective only with both signature and specialized stamp. Without written approval of EMTEK, this report can't be
- 4.本检测报告的检测结果仅对送测样品负责,未加盖资质认定标志的检测报告不对社会具有公证证明作用,对于检测数据、结果的使用, 所产生的直接或间接损失及一切法律后果,本实验室不承担任何经济和法律责任。

This test data is only responsible for the tested sample. The data and results provided by the report without CMA accreditation are not to prove to the society, and EMTEK is not responsible for any economic and legal responsibility for the use of the test data, the direct or indirect losses resulting from the use of the test and all legal consequences.

5.本检测报告中检测项目标注有特殊符号则该项目不在本实验室资质认定能力范围内,该项目检测结果仅作为客户委托、科研、教学或内 部质量控制等目的使用。

The test items are marked with special symbols in the report is out of the scope of CMA accreditation. The test result only used for client's requirement, scientific researching ,teaching or internal quality control.

6.其它声明请查阅报告页脚及书面报告背页。

For other statements, please refer to the footer of the report.





签发测试报告条款 Conditions of Issuance of Test Reports

- 1. 东莞市信测科技有限公司(以下简称[本公司])为提供符合下述条款的测试和报告,而接受有关样品和货品。本公司基于下述条款提 供服务,下述条款为本公司与申请服务的个人,企业或公司(以下简称[客户])的协议。 All samples and goods are accepted by the EMTEK(Dongguan) Co., Ltd. (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the "Clients").
- 2.由此测试申请所发出的任何报告(以下简称[报告]),本公司会严格为客户保密。未经本公司的书面同意,报告的整体或部分不得复制,也不得用于广告或授权的其他用途。然而,客户可以将本公司印制的报告或认可的副本,向其客户、供货商或直接相关的其他人出示或提交。除非相关政府部门、法律或法规要求,否则未经客户同意,本公司不得将报告内容向任何第三方讨论或披露。 Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities. laws or court orders.
- 3.除非相关政府部门、法律或法院要求,否则未经公司预先书面同意,本公司毋需,也并无义务到法院对有关报告作证。 The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4.如果本公司确定报告被不当地使用,本公司保留撤回报告的权利,并有权要求其它适当的额外赔偿。 In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. 本公司接受样品进行测试的前提是,该测试报告不能作为针对本公司法律行动的依据。 Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6.如因使用本公司中心任何报告内的资料,或任何传播信息所描述与之有关的测试或研究导致的任何损失或损害,本公司概不负责。 The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7.若需要在法院审理程序或者仲裁过程中使用测试报告,客户必须在提交测试样品前将该意图告知本公司。 Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8.该测试报告的支持数据和信息本公司保存 10 年。个别评审机构有特别要求的,检测数据和报告的保存期可依情况变动。一旦超过上述提交的保存期限,数据和信息将被处理掉。任何情况下,本公司不必提供任何被处理的过期数据或信息。即使本公司事先被告知可能会发生相关的损害,本公司在任何情况下也不必承担任何损害,包括(但不限于)补偿性赔偿、利润损失、数据遗失、或任何形式的特殊损害、附带损害、间接损害、从属损害或任何违反约定、违反承诺、侵权(包括疏忽)、产品责任或其他原因的惩罚性

Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of ten years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

