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Applicant: Shenzhen Aoolif Technology Co., Ltd.

Address: 2nd Floor, Building C, Yucai Industrial Area Phase 1, NO.40, Qiaotang Road,

Qiaotou Community, Fuyong Town, Bao'an, Shenzhen City, China

The following sample was submitted and identified by/on behalf of the client as:

POWER BANK/HAND WARMER Sample Name:

Model No.: HT540

Client Reference Information: HT541,HT542,HT543,HT546

Sample Received Date: 2016.08.17

Testing Period: 2016.08.17-2016.08.30

Test Requested: According to customer's requirements, Split the sample and determine the

Pb, Cd, Hg, Cr(VI), PBBs & PBDEs content of the parts.

Test Method: 1. Sample prepared with reference to IEC 62321-2:2013

2. Sample Screening testing with reference to IEC 62321-3-1:2013

3. Wet Chemical Test Method

a. Determination of Lead ,Cadmium by ICP-OES with reference to IEC

62321-5:2013

b. Determination of Mercury by ICP-OES with reference to IEC

62321-4:2013

c. Determination of Hexavalent Chromium in colourless and coloured

corrosion-protected coatings on metals by UV-VIS method reference to

IEC 62321-7-1:2015

d. Determination of Hexavalent Chromium in polymers and electronics

by UV-Vis Method with reference to IEC 62321:2008, Annex C

e. Determination of PBBs and PBDEs by GC-MS with reference to IEC

62321-6:2015

Test Result(s): Please refer to the following page(s).

Conclusion: Base upon the performed tests by submitted sample, the test results comply

with the limits as set by Directive (EU) 2015/863 - Amendment of EU RoHS

Directive 2011/65/EU (RoHS 2.0) Annex II.

Remark: Only selected materials were tested as per client's requirement.

Checked by

Chis Thorn

Chris Zhong

Signed for and on behalf of TCT

Kim Zhana **Technical Manager** 



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Test Result(s):

Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
1	Black plastic	Pb Cd Hg Cr(VI) PBBs	BL BL BL BL	   	Comply Comply Comply Comply	Aug. 18, 2016
Z)	Silvery color metal shell	PBDEs Pb Cd	BL BL BL	<u>-(c)</u> 	Comply Comply Comply Comply	((0))
2	with pink coating	Hg Cr(VI) PBBs PBDEs	BL	)  	Comply Comply NA NA	Aug. 18, 2016
3	White plastic	Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL BL BL		Comply Comply Comply Comply Comply	Aug. 18, 2016
4	Silvery color metal screw	Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL 		Comply Comply Comply NA NA	Aug. 18, 2016
5	Red plastic with silvery color coating	Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL IN BL BL	 N.D. 	Comply Comply Comply Comply Comply	Aug. 18, 2016 Aug. 30, 2016



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
		Pb	BL		Comply	
	(	Cd	BL		Comply	
	Black plastic	Hg	BL		Comply	A
6	tub	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs	BL		Comply	
	$(C_{\mathcal{O}})$	PBDEs	BL	下(0,)	Comply	$(C_{\mathcal{O}})$
		Pb	BL		Comply	
		Cd	BL		Comply	
	Transparent	Hg	BL		Comply	10.0010
7	plastic	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs	BL		Comply	
		PBDEs	BL	<del></del>	Comply	
	(0)	Pb	BL	70)	Comply	(0)
	\\/\bita plactic	Cd	BL		Comply	
	White plastic	Hg	BL		Comply	Aug. 18, 2016
8	with silvery	Cr(VI)	IN	N.D.	Comply	Aug. 30, 2016
	color coating	PBBs	BL		Comply	
		PBDEs	BL		Comply	
		Pb	BL		Comply	
	(6)	Cd	BL	7(0)	Comply	
9	Red enameled	Hg	BL		Comply	Aug. 18, 2016
9	wire	Cr(VI)	BL		Comply	Aug. 18, 2010
<b>(</b> ()		PBBs	BL		Comply	(40
		PBDEs	BL		Comply	
		Pb	BL		Comply	
		Cd	BL		Comply	
10	Black matter	Hg	BL	_	Comply	Aug. 18, 2016
10	DIACK HIALLEI	Cr(VI)	BL		Comply	Aug. 10, 2010
		PBBs	BL		Comply	
<b>(</b> ()		PBDEs	BL		Comply	(40



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
		Pb	BL		Comply	
	(	Cd	BL		Comply	
	Red plastic	Hg	BL		Comply	40.0040
11	jacket	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs			NA	
	$(C_{\mathcal{O}})$	PBDEs		<u>(</u> (C))	NA	$(C_{\mathcal{O}})$
		Pb	BL		Comply	
	0.1	Cd	BL		Comply	
	Silvery color	Hg	BL		Comply	40.0040
12	metal wire	Cr(VI)	BL		Comply	Aug. 18, 2016
	core	PBBs			NA	
		PBDEs			NA	
	(0)	Pb	BL	<u> ((0)</u>	Comply	(0)
		Cd	BL		Comply	
40	Black plastic	Hg	BL		Comply	A 40 . 0040
13	jacket	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs	BL		Comply	
		PBDEs	BL		Comply	
		Pb	BL	(3/1)	Comply	
	(60)	Cd	BL		Comply	(60)
14	Silvery color	Hg	BL		Comply	Aug 19 2016
14	metal	Cr(VI)	BL		Comply	Aug. 18, 2016
(C)	(	PBBs	(¿C)		NA	(0
	•	PBDEs			NA	
		Pb	BL		Comply	
		Cd	BL	-	Comply	
15	Black plactic	Hg	BL	-80	Comply	Aug 19 2016
15	Black plastic	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs	BL		Comply	
<b>(</b> ()	(	PBDEs	BL		Comply	60



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
		Pb	BL		Comply	
	(	Cd	BL		Comply	
40	Silvery color	Hg	BL		Comply	A
16	metal pin	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs			NA	
	((0))	PBDEs		下(0,)	NA	$(C_{\mathcal{O}})$
		Pb	BL		Comply	
		Cd	BL		Comply	
	Silvery color	Hg	BL		Comply	40.0040
17	metal	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs			NA	
		PBDEs			NA	
	(0)	Pb	BL	<u> (0)</u>	Comply	(0)
		Cd	BL		Comply	
10	\\/\bita =   aatia	Hg	BL		Comply	Aug. 18, 2016
18	White plastic	Cr(VI)	BL		Comply	Aug. 30, 2016
		PBBs	IN	N.D.	Comply	
		PBDEs	IN	N.D.	Comply	
		Pb	BL		Comply	
		Cd	BL		Comply	
19	Silvery color	Hg	BL		Comply	Aug. 19, 2016
19	metal pin	Cr(VI)	BL		Comply	Aug. 18, 2016
(i)	(	PBBs	<del></del> / <sub>x</sub> cî		NA	60
	,	PBDEs			NA	
		Pb	BL		Comply	
		Cd	BL	7	Comply	
20	Black plastic	Hg	BL		Comply	Aug. 18, 2016
20	Diack plastic	Cr(VI)	BL		Comply	Aug. 10, 2010
		PBBs	BL		Comply	
(C)	(	PBDEs	BL		Comply	60



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
		Pb	BL		Comply	
	(	Cd	BL		Comply	60
21	Silvery color	Hg	BL		Comply	Aug. 18, 2016
21	metal	Cr(VI)	IN	N.D.	Comply	Aug. 30, 2016
		PBBs			NA	
	$(C_{\mathcal{O}})$	PBDEs		で(0,)	NA	(C)
		Pb	BL		Comply	
		Cd	BL		Comply	
22	Die alc plantin	Hg	BL		Comply	A
22	Black plastic	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs	BL		Comply	
		PBDEs	BL		Comply	
	(0)	Pb	BL	7(0)	Comply	(0)
		Cd	BL		Comply	
00	\\/\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Hg	BL		Comply	A 40, 0040
23	White plastic	Cr(VI)	BL	)	Comply	Aug. 18, 2016
	•	PBBs	BL		Comply	
		PBDEs	BL		Comply	
		Pb	BL		Comply	
	(60)	Cd	BL	-(0)	Comply	
24	Transparent	Hg	BL		Comply	Aug 10 2016
24	dry glue	Cr(VI)	BL		Comply	Aug. 18, 2016
<b>(</b> )	(	PBBs	BL		Comply	(20
	,	PBDEs	BL		Comply	
		Pb	BL		Comply	
		Cd	BL		Comply	
25	Transparent	Hg	BL		Comply	Aug 19 2016
25	plastic	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs	BL		Comply	
(C)	(	PBDEs	BL		Comply	(20



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
		Pb	BL		Comply	
	(	Cd	BL		Comply	
200	Silvery color	Hg	BL		Comply	A 40, 0040
26	metal	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs			NA	
	(C))	PBDEs		Ť(Q,)	NA	$(C_{\mathcal{O}})$
		Pb	BL		Comply	
		Cd	BL		Comply	
	Copper color	Hg	BL		Comply	40.0040
27	metal	Cr(VI)	BL		Comply	Aug. 18, 2016
		PBBs			NA	
		PBDEs			NA	
	(0)	Pb	BL	<u> (0)</u>	Comply	(0)
		Cd	BL		Comply	
00	Silvery color	Hg	BL		Comply	Aug. 18, 2016
28	metal	Cr(VI)	IN	N.D.	Comply	Aug. 30, 2016
		PBBs			NA	
		PBDEs			NA	
		Pb	BL	(3)	Comply	
	(60)	Cd	BL	-(0)	Comply	(60)
29	Black	Hg	BL		Comply	A 10, 2010
29	capacitor	Cr(VI)	BL		Comply	Aug. 18, 2016
	(	PBBs	BL		Comply	(40)
	,	PBDEs	BL		Comply	
		Pb	BL		Comply	
	Diant	Cd	BL		Comply	
30	Black	Hg	BL		Comply	Aug 19 2010
30	electronic	Cr(VI)	BL		Comply	Aug. 18, 2016
-/-	component	PBBs	BL		Comply	
6)	(	PBDEs	BL		Comply	60



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
31	Black electronic component	Pb Cd Hg Cr(VI) PBBs	BL BL BL BL	  	Comply Comply Comply Comply Comply	Aug. 18, 2016
32	Black electronic component	PBDEs Pb Cd Hg Cr(VI)	BL BL BL BL		Comply Comply Comply Comply	Aug. 18, 2016 Aug. 30, 2016
	Black	PBBs PBDEs Pb Cd	IN IN BL BL	N.D. N.D. 	Comply Comply Comply Comply	
33	electronic component	Hg Cr(VI) PBBs PBDEs	BL BL IN IN	 N.D. N.D.	Comply Comply Comply Comply	Aug. 18, 2016 Aug. 30, 2016
34	Black resistor	Pb Cd Hg Cr(VI) PBBs	BL BL BL BL	 	Comply Comply Comply Comply Comply	Aug. 18, 2016
35	Brown capacitor	PBDEs Pb Cd Hg Cr(VI) PBBs PBDEs	BL BL BL BL BL BL		Comply Comply Comply Comply Comply Comply Comply	Aug. 18, 2016



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Part No.	Part Description	Restricted Substances	Result of EDXRF (1)	Result of Chemical Testing (2) (mg/kg)	Conclusion on RoHS	Data Submitted / Resubmitted Date
		Pb	BL		Comply	
	(	Cd	BL		Comply	(.0
36	Copper color	Hg	BL		Comply	Aug. 18, 2016
30	metal	Cr(VI)	IN	N.D.	Comply	Aug. 30, 2016
		PBBs			NA	
	(C)	PBDEs		で(0,)	NA	$(C_{\mathcal{O}_{\mathcal{O}_{\mathcal{O}}}})$
		Pb	BL		Comply	
		Cd	BL		Comply	
27	Green PCB	Hg	BL		Comply	Aug. 18, 2016
37	Green PCB	Cr(VI)	BL		Comply	Aug. 30, 2016
		PBBs	IN	N.D.	Comply	
		PBDEs	IN	N.D.	Comply	
	(0)	Pb	BL	70)	Comply	(0)
		Cd	BL		Comply	
20	Disaleform	Hg	BL		Comply	A
38	Black foam	Cr(VI)	BL		Comply	Aug. 18, 2016
	•	PBBs	BL		Comply	
		PBDEs	BL		Comply	
		Pb	BL		Comply	
	(0)	Cd	BL	7(0)	Comply	
39	Transparent	Hg	BL		Comply	Aug. 18, 2016
39	plastic	Cr(VI)	BL		Comply	Aug. 16, 2016
( <sup>1</sup> )	(	PBBs	BL		Comply	(20
		PBDEs	BL		Comply	
		Pb	BL		Comply	
		Cd	BL		Comply	
40	Silvery color	Hg	BL		Comply	Aug. 18, 2016
40	metal	Cr(VI)	IN	N.D.	Comply	Aug. 30, 2016
		PBBs			NA	
(j)	(	PBDEs	-420		NA	(20



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#### Remark:

- (1) (a) It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is Cr<sup>6+</sup>.
  - (b)Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr<sup>6+</sup>) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC62321-3-1:2013 (unit: mg/kg)

	•	<u> </u>	, , ,
Element	Polymer	Metal	Composite Materials
Cd	BL≤(70-3σ) <x<(130+3σ) ≤OL</x<(130+3σ) 	BL≤(70-3σ) <x<(130+3σ) ≤OL</x<(130+3σ) 	LOD <x<(150+3σ) td="" ≤ol<=""></x<(150+3σ)>
Dh	BL≤(700-3σ) <x<(1300+3σ)< td=""><td>BL≤(700-3σ)<x<(1300+3σ< td=""><td>BL≤(500-3σ)<x<(1500+< td=""></x<(1500+<></td></x<(1300+3σ<></td></x<(1300+3σ)<>	BL≤(700-3σ) <x<(1300+3σ< td=""><td>BL≤(500-3σ)<x<(1500+< td=""></x<(1500+<></td></x<(1300+3σ<>	BL≤(500-3σ) <x<(1500+< td=""></x<(1500+<>
Pb	≤OL	) ≤OL	3σ) ≤OL
Ца	BL≤(700-3σ) <x<(1300+3σ)< td=""><td>BL≤(700-3σ)<x<(1300+3σ< td=""><td>BL≤(500-3σ)<x<(1500+< td=""></x<(1500+<></td></x<(1300+3σ<></td></x<(1300+3σ)<>	BL≤(700-3σ) <x<(1300+3σ< td=""><td>BL≤(500-3σ)<x<(1500+< td=""></x<(1500+<></td></x<(1300+3σ<>	BL≤(500-3σ) <x<(1500+< td=""></x<(1500+<>
Hg	≤OL	) ≤OL	3σ) ≤OL
Br	BL≤(300-3σ) <x< td=""><td><u>-</u></td><td>BL≤(250-3σ)<x< td=""></x<></td></x<>	<u>-</u>	BL≤(250-3σ) <x< td=""></x<>
Cr	BL≤(700-3σ) <x< td=""><td>BL≤(700-3σ)<x< td=""><td>BL≤(500-3σ)<x< td=""></x<></td></x<></td></x<>	BL≤(700-3σ) <x< td=""><td>BL≤(500-3σ)<x< td=""></x<></td></x<>	BL≤(500-3σ) <x< td=""></x<>

- (c) BL = Below Limit, OL = Over Limit, IN = Inconclusive, LOD = Limit of Detection,
  - -- = Not Regulated, NA = Not Applicable.
  - (d) The XRF screening test for RoHS elements The reading may be different to the actual content in the sample be of non-uniformity composition.
- (2)(a) 1mg/kg = 1ppm = 0.0001%, N.D.= Not Detected (<MDL), --- = Not Conducted.
  - (b) Unit and Method Detection Limit (MDL) in wet chemical test

Test Items	Pb	Cd	Hg
Units	mg/kg	mg/kg	mg/kg
MDL	2 (	2	2

The MDL for single compound of PBBs & PBDEs is 5 mg/kg and MDL of Cr<sup>6+</sup> for polymer & composite sample is 2 mg/kg.

(c) When  $Cr^{6+}$  for metal sample is testing according to IEC 62321-7-1:2015, the unit is  $\mu g/cm^2$ , and the MDL is 0,10  $\mu g/cm^2$ . When the Cr (VI) concentration is the 0,13  $\mu g/cm^2$ , the sample is positive for Cr(VI) and considered to contain Cr(VI); when the Cr (VI) concentration is N.D.(< the 0,10  $\mu g/cm^2$ ), the sample is negative for Cr(VI) and considered a non-Cr(VI) based coating; when the Cr (VI) concentration is  $\geq$  the 0,10  $\mu g/cm^2$  and  $\leq$  the 0,13  $\mu g/cm^2$ , the result is considered to be inconclusive - Unavoidable coating variations may influence the determination.



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(3) The maximum permissible limit is quoted from the Directive (EU) 2015/863 - Amendment of EU RoHS Directive 2011/65/EU (RoHS 2.0) Annex II.

RoHS Restricted Substances	Maximum Concentration Value (by weight in homogenous materials)		
Lead (Pb)	0.1%		
Cadmium (Cd)	0.01%		
Mercury (Hg)	0.1%		
Hexavalent Chromium (Cr VI)	0.1%		
Polybrominated biphenyls (PBBs)	0.1%		
Polybrominated diphenylethers (PBDEs)	0.1%		





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### **RoHS Exemptions**

		Exemptions	(C)
RoHS Directive	e 2011/65/EU ANNEX	( III	
	Exemption It	ems	Expires Date
exceeding (per	r burner):	t) fluorescent lamps not	
1(a), For gene	ral lighting purposes <	30 W:3.5 mg	2,5 mg shall be used per burner after 31 December 2012
1(b), For gene	ral lighting purposes≥ 3	30 W and < 50W:3.5mg	(.cj.)
		50 W and < 150 W: 5 mg	
	ral lighting purposes		
1(e), For gene	ral lighting purposes w be and tube diameter ≤	th circular or square	
	al purposes: 5 mg	·G`) (.G	(.G)
	n double-capped linear g purposes not exceed		
2(a)(1), Tri-bar	nd phosphor with normand (e.g. T2): 4 mg		
	nd phosphor with norma mm and ≤ 17 mm (e.		
	nd phosphor with norma 7 mm and   ≤ 28 mm (		
	nd phosphor with norma mm (e.g. T12): 5 mg	al lifetime and a tube	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012
2(a)(5), Tri-bar	nd phosphor with long I	ifetime (≥ 25 000 h): 5 mg	
	n other fluorescent lam		(6)
2(b)(2), Non-lir	near halophosphate lar	nps (all diameters): 15 mg	Expires on 13 April 2016
	near tri-band phosphor	lamps with tube diameter > 1	17
2(b)(4), Lamps induction lamp		ng and special purposes (e.c	
	nps (CCFL and EEFL)	t lamps and external electrod for special purposes not	de
3(a), Short len	gth (≤500 mm):3.5mg		
	ength (> 500 mm and :		(, (, )
\ //	gth (> 1 500 mm):13mg		
4(a), Mercury i	n other low pressure d	ischarge lamps (per lamp):15	5mg
ighting purpos	ses not exceeding (per	m (vapour) lamps for genera burner) in lamps with improve	
	ng index Ra > 60:	·C')	$G_{i}$
4(b) -I, P ≤155	<u> </u>		
	< P ≤ 405 W:40mg		
4(b) -III, P > 40			
general lighting	g purposes not exceed	Sodium (vapour) lamps for ing (per burner):	(3)
$4(c)-I, P \le 155$	W:25mg		



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Exem	ptions
RoHS Directive 2011/65/EU ANNEX III	
Exemption Items	Expires Date
4(c)-II, 155 W < P ≤ 405 W:30mg	
4(c)-III, P > 405 W:40mg	
4(d), Mercury in High Pressure Mercury (vapour) la	mps (HPMV) Expires on 13 April 2015
4(e), Mercury in metal halide lamps (MH)	
4(f), Mercury in other discharge lamps for special p specifically mentioned in this Annex	urposes not
5(a), Lead in glass of cathode ray tubes	
5(b), Lead in glass of fluorescent tubes not exceed	ng 0,2 % by weight
6(a), Lead as an alloying element in steel for mach in galvanized steel containing up to 0,35 % lead by	ning purposes and
6(b), Lead as an alloying element in aluminium cor lead by weight	
6(c), Copper alloy containing up to 4 % lead by we	ght
7(a), Lead in high melting temperature type solders alloys containing 85 % by weight or more lead)	
7(b), Lead in solders for servers, storage and stora network infrastructure equipment for switching, sign transmission, and network management for telecor	nalling,
7(c)-I, Electrical and electronic components contair or ceramic other than dielectric ceramic in capacito piezoelectronic devices, or in a glass or ceramic m	rs, e.g. atrix compound
7(c)-II, Lead in dielectric ceramic in capacitors for a 125 V AC or 250 V DC or higher	
7(c)-III, Lead in dielectric ceramic in capacitors for less than 125 V AC or 250 V 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 mater being part of integrated circuits or discrete semicor	rials for capacitors Expires on 21 July 2016
8(a), Cadmium and its compounds in one shot pellocut-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
8(b), Cadmium and its compounds in electrical con	acts
9, Hexavalent chromium as an anticorrosion agent cooling system in absorption refrigerators up to 0,7 cooling solution	of the carbon steel
9(b), Lead in bearing shells and bushes for refriger compressors for heating, ventilation, air conditionin (HVACR) applications	
11(a), Lead used in C-press compliant pin connecte	or systems  May be used in spare parts for EEE placed on the market before 24 September 2010



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Exemptions		
RoHS Directive 2011/65/EU ANNEX III		
Exemption Items		Expires Date
11(b), Lead used in other than C-press co	ompliant pin connector	Expires on 1 January 2013
systems		and after that date may be used in spare parts for EEE placed on the market before 1
12 Load as a section material for the the	rmal conduction module	January 2013  May be used in spare parts fo
12, Lead as a coating material for the the C-ring	rmai conduction module	EEE placed on the market before 24 September 2010
13(a), Lead in white glasses used for opti	ical applications	belore 24 September 2010
13(b), Cadmium and lead in filter glasses reflectance standards	and glasses used for	
14, Lead in solders consisting of more that connection between the pins and the pact a lead content of more than 80 % and les	kage of micropro-cessors with	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
<ol> <li>Lead in solders to complete a viable es semiconductor die and carrier within integ packages</li> </ol>		
16, Lead in linear incandescent lamps wit	th silicate coated tubes	Expires on 1 September 2013
17, Lead halide as radiant agent in high in lamps used for professional reprography		
18(b), Lead as activator in the fluorescen or less) of discharge lamps when used as containing phosphors such as BSP (BaSi	t powder (1 % lead by weight s sun tanning lamps	
21, Lead and cadmium in printing inks for on glasses, such as borosilicate and soda	the application of enamels a lime glasses	
23, Lead in finishes of fine pitch compone with a pitch of 0,65 mm and less	ents other than connectors	May be used in spare parts for EEE placed on the market before 24 September 2010
24, Lead in solders for the soldering to m discoidal and planar array ceramic multila	——————————————————————————————————————	
25, Lead oxide in surface conduction elecused in structural elements, notably in the	e seal frit and frit ring	(0)
29, Lead bound in crystal glass as define 3 and 4) of Council Directive 69/493/EEC		
<ol> <li>Cadmium alloys as electrical/mechan conductors located directly on the voice of high-powered loudspeakers with sound pand more</li> </ol>	coil in transducers used in	
31, Lead in soldering materials in mercur (which e.g. are used for liquid crystal disp lighting)	olays, design or industrial	
32, Lead oxide in seal frit used for makin Argon and Krypton laser tubes	g window assemblies for	
33, Lead in solders for the soldering of th diameter and less in power transformers	in copper wires of 100 µm	
34, Lead in cermet-based trimmer potent	iometer elements	(.G)

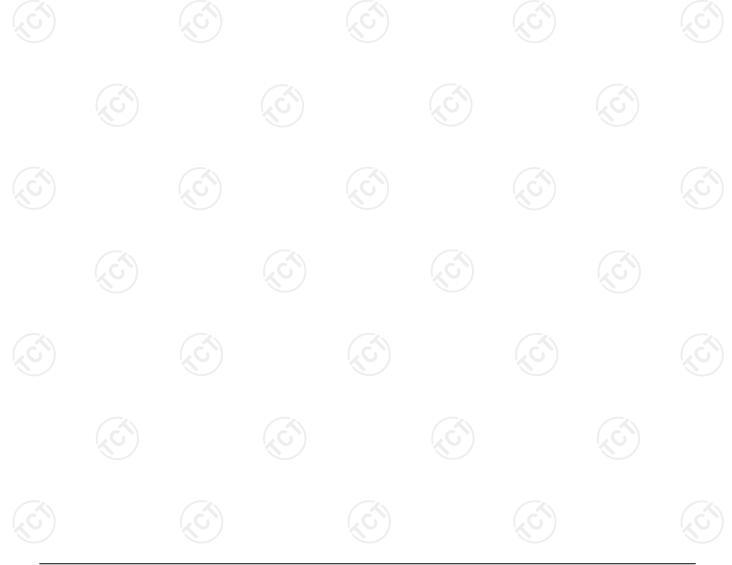


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Exemptions		
RoHS Directive 2011/65/EU ANNEX III		
Exemption Items	Expires Date	
37, Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body		
38, Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide		
39, Cadmium in colour converting II-VI LEDs (< 10 μg Cd per mm <sup>2</sup> of light-emitting area) for use in solid state illumination or display systems	Expires on 1 July 2014	
40, Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	Expires on 31 December 2013	

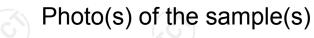
Note: 1. (1) OJ L 326, 29.12.1969, p.36.

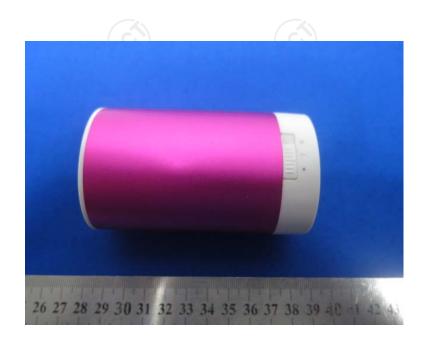
2. For the purposes of Directive 2011/65/EU, a maximum concentration value of 0,1 % by weight in homogeneous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) and of 0,01 % by weight in homogeneous materials for cadmium shall be tolerated.





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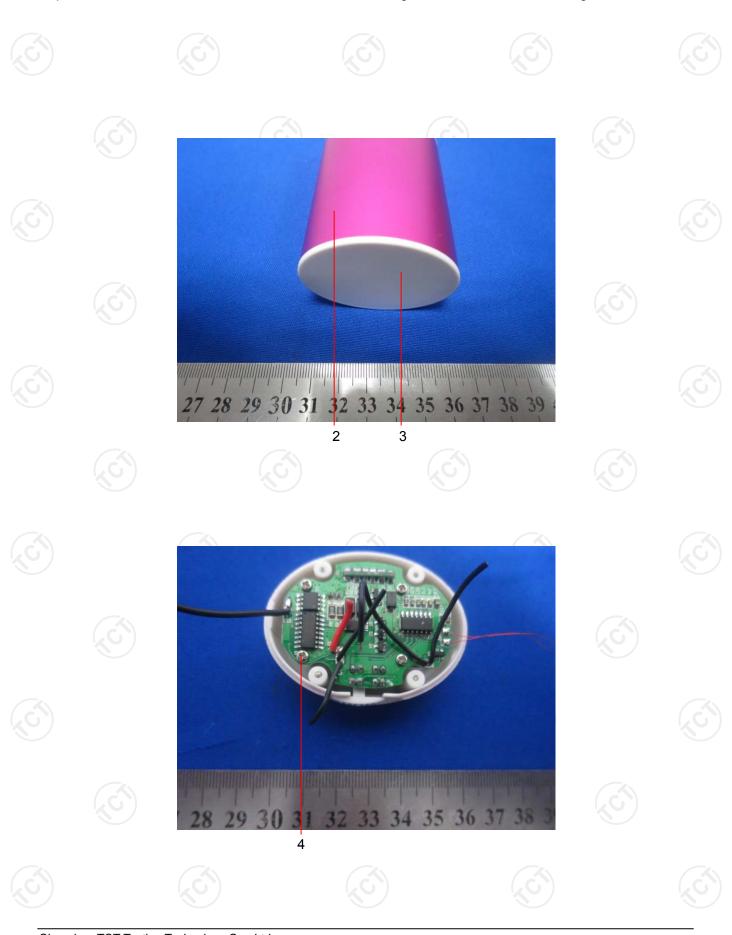






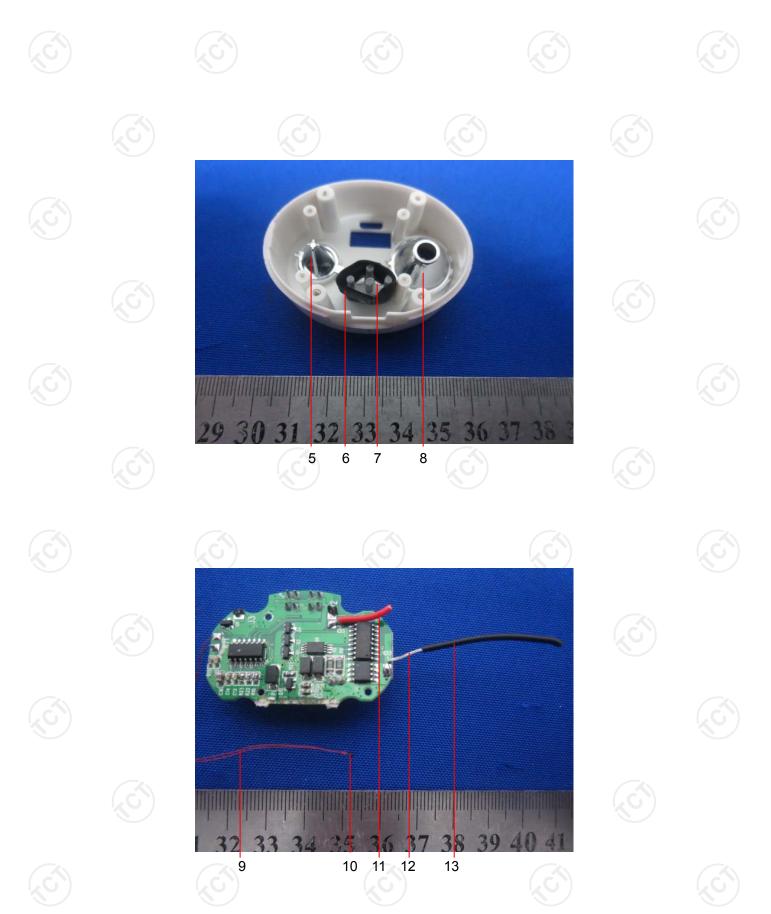


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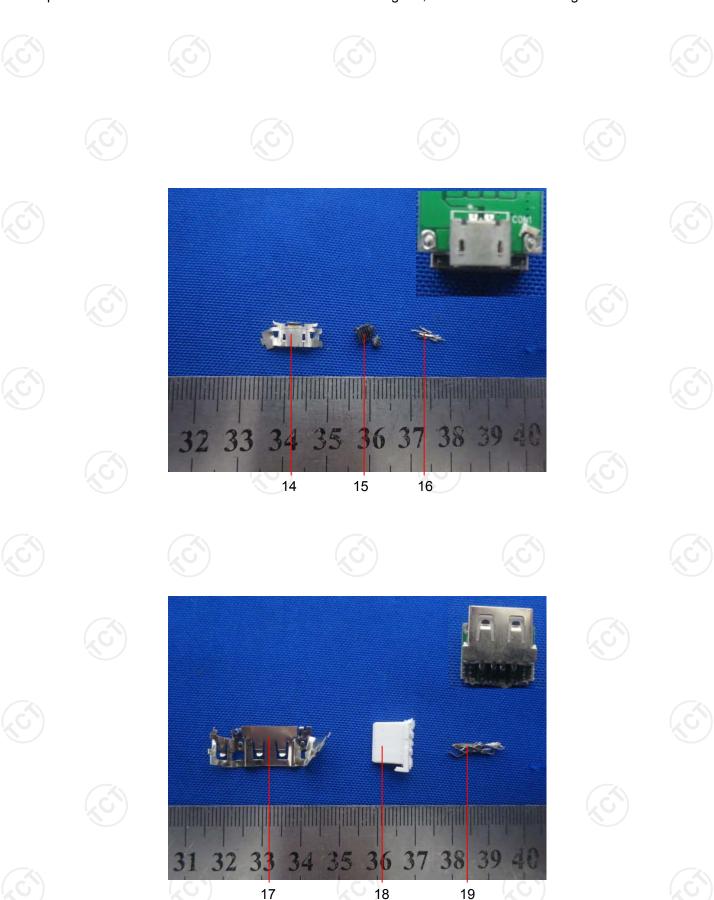


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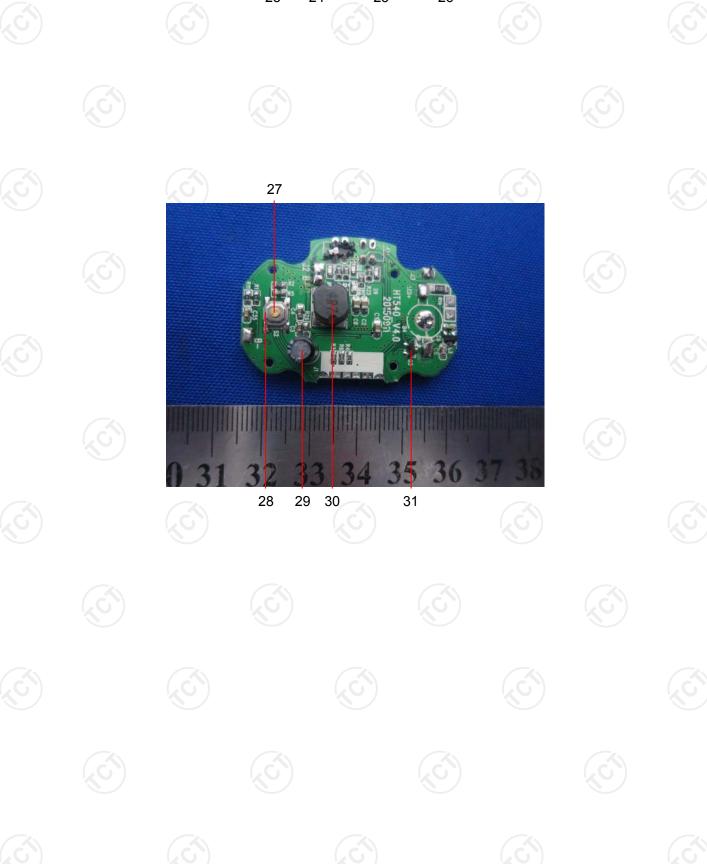
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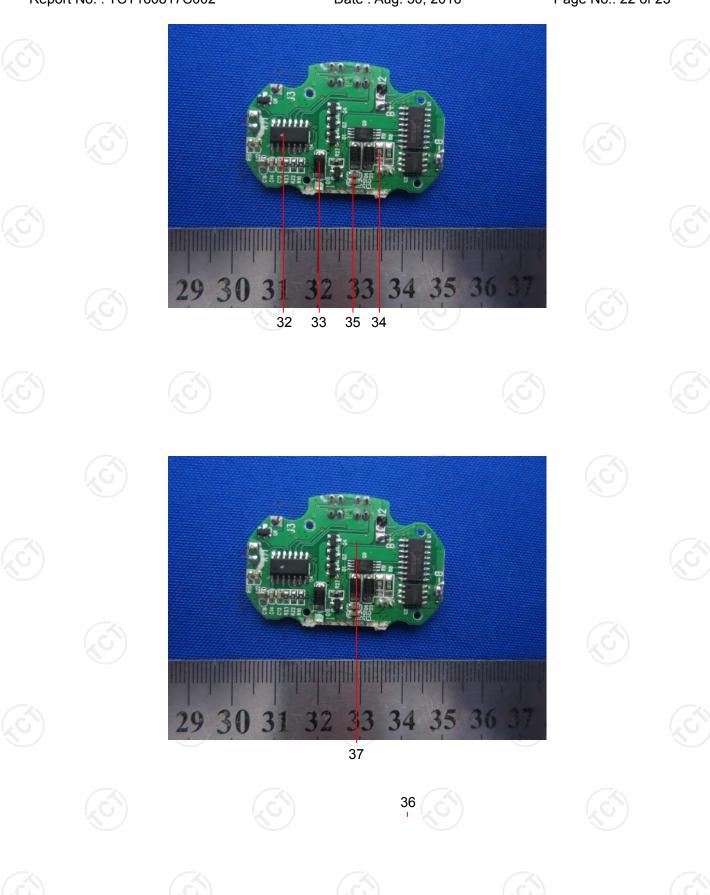
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23 24 25 26



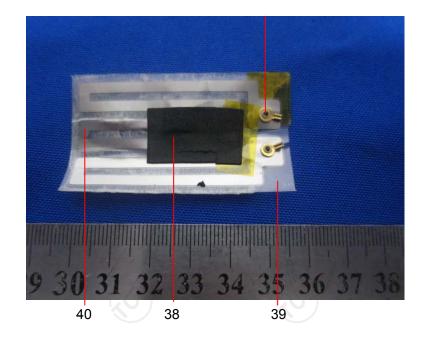


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\*\*\* End of Report \*\*\*

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