Technical Report No. 64.164.15.00385.01
Rev. 00
Dated 2015-03-11

Client:	ZhongShan LiangYi Lighting CO.,LTD BeiHai Industrial Zone,GuZhen Town,ZhongShan,GuangDong,P.R.China
Test Subject:	The submitted sample was identified and described by client as: Ceiling Lamp, Pendant Lamp, Spot Lamp, Wall Lamp, Table Lamp
Client reference Information:	According to declaration from client, The tested materials covered by the report were declared by the manufacturer to be used on Model: Ceiling Lamp: CL084A Pendant Lamp: P145SILVER, P612A(BLACK,GREEN,BLUE, SILVER, RED,WHITE),P662(WH) Spot Lamp: GU10119-1R CHR,GU10119-2R CHR,GU10119-3R CHR, GU10119-4S2 CHR,GU10119-4SP CHR Wall Lamp: T221-1W(WH),WL001 LIGHT WOOD,WL059, WL128, WL232A,WL494,WL516,WL14038,WL111103-1 Table Lamp: T433A
Test Method:	Tests were performed for the samples with test methods reference to EN 62321:2009: Procedures for the Determination of Level of Six Regulated Substances in Electrotechnical Products
Test Result:	Refer to the following page(s)
Test Requested and Conclusion:	Test according to RoHS (Restriction of Hazardous Substances) directive 2011/65/EU Annex II on submitted samples

- Heavy Metal (Pb, Cd, Hg and CrVI) Content — PASS
- Polybrominated Biphenyls (PBBs) and Polybrominated Diphenyl Ethers (PBDEs) Content — PASS

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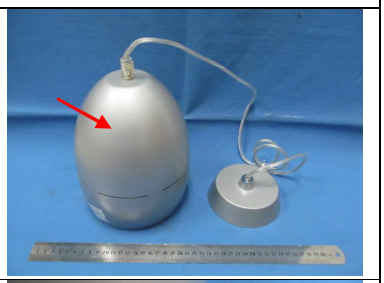
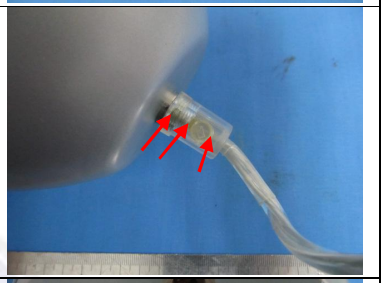
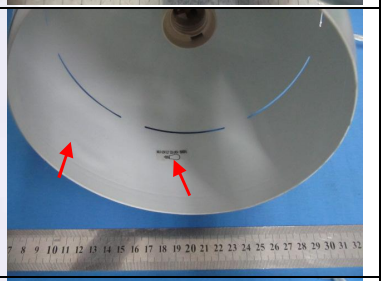
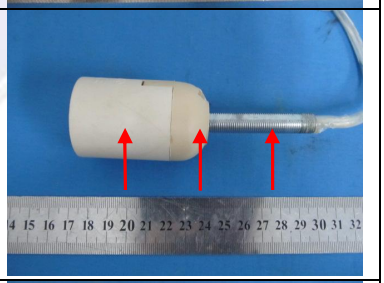
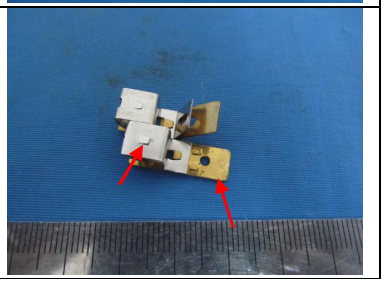
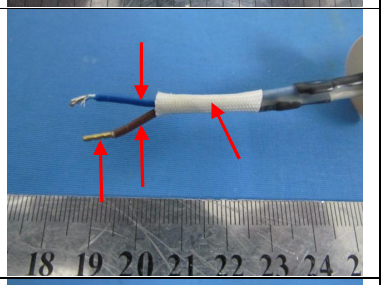
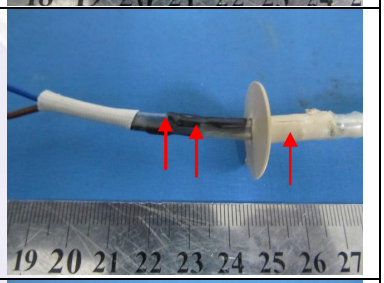
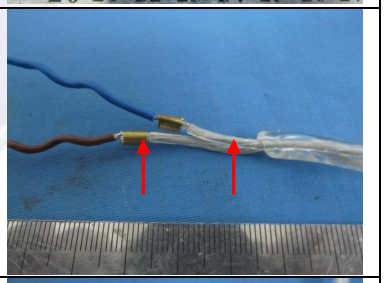
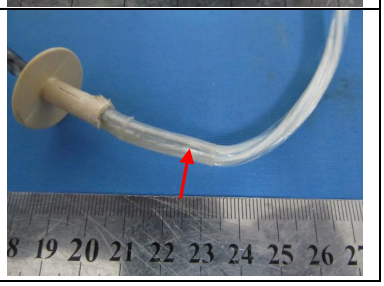
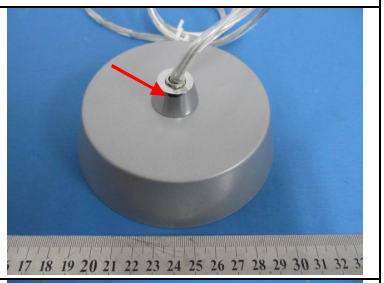
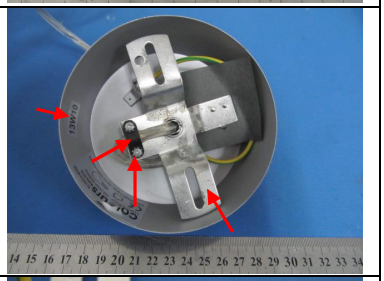
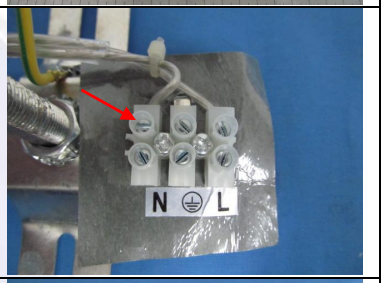
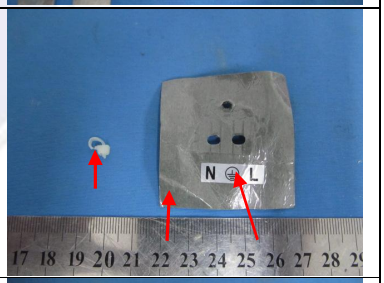
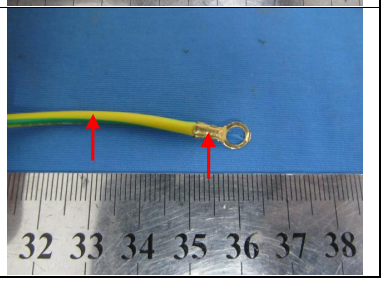
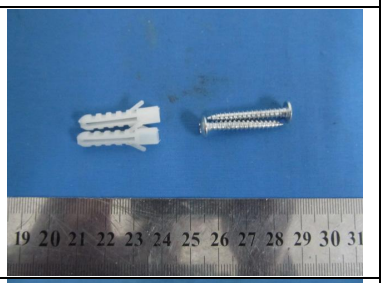
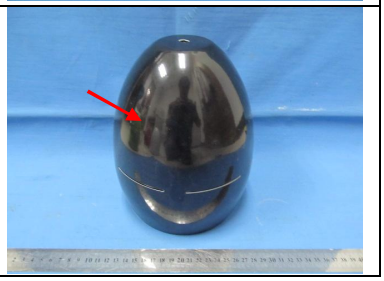
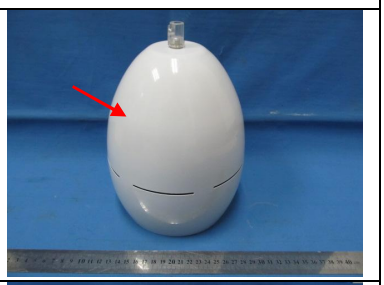
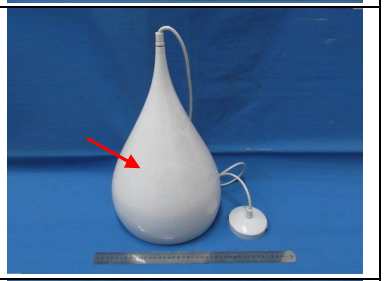
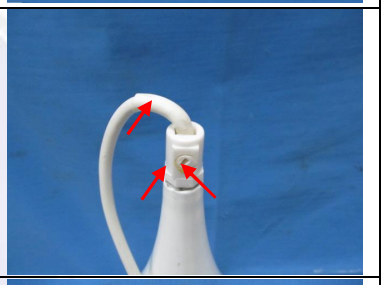
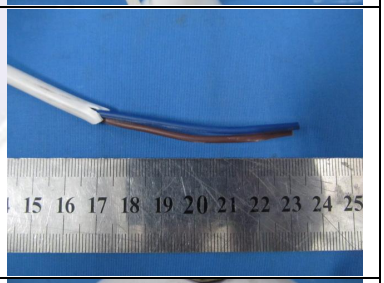
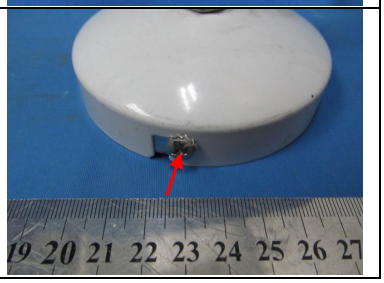
1. Description of the test subject

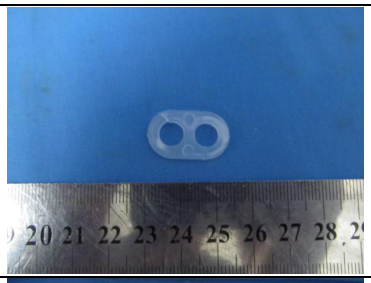
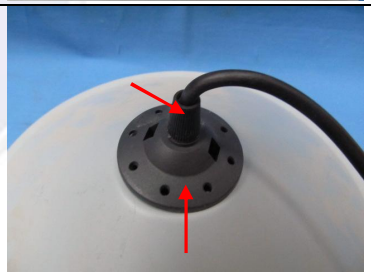
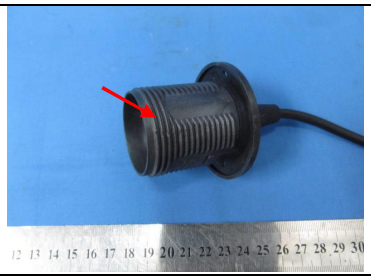
Sample No.	Model No.	Description	Photograph
001	P612A SILVER	Silvery coating on shell	
002		Silvery metal shell	
003		Silvery metal ring	
004		Transparent plastic part	
005		Silvery metal screw	
006		White coating on shell	
007		Transparent plastic label	
008		Beige plastic lamp holder	
009		Brown plastic base	
010		Silvery metal tube	
011		Silvery metal sheet	
012		Golden metal sheet	

Sample No.	Model No.	Description	Photograph
013	P612A SILVER	Silvery metal ring	
014		Silvery metal washer	
015		Silvery metal nut	
016		Golden metal joint	
017		Blue plastic wire jacket	
018		Brown plastic wire jacket	
019		Silvery metal wire jacket	
020		White fiber glass tube	
021		Transparent plastic tube	
022		Black plastic heat-shrinkable tube	
023		Beige plastic part	
024		Golden metal joint	
025		Transparent plastic tube	
026		Silvery metal wire	
027		Transparent plastic cable jacket	

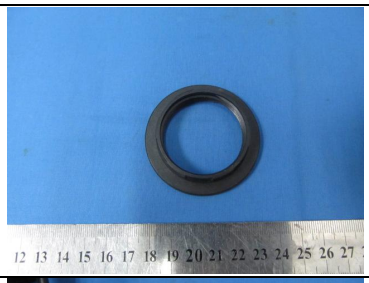
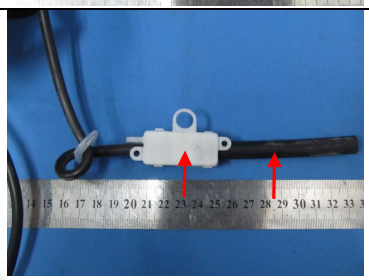
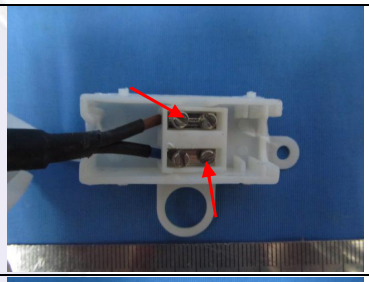
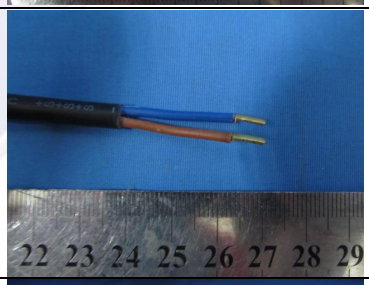
Sample No.	Model No.	Description	Photograph
028	P612A SILVER	Silvery metal part	
029		Silvery plastic label	
030		Black metal buckle	
031		Silvery metal screw	
032		Silvery metal part	
033		White plastic part	
034		Blue surfaced metal screw	
035		Blue surfaced metal block	
036		Translucent plastic tie	
037		Green paper board with transparent film	
038		Silvery plastic label	
039		Yellow/green plastic wire jacket	
040		Silvery metal wire	
041		Golden metal joint	

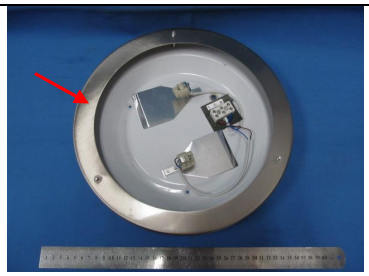
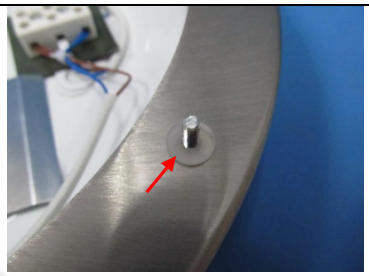
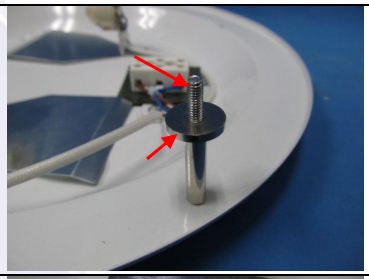
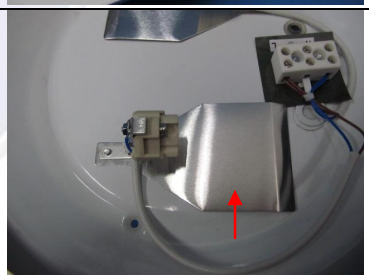
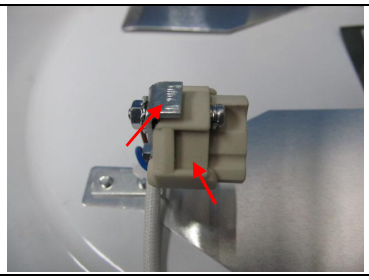
Sample No.	Model No.	Description	Photograph
042	P612A SILVER	White plastic part	
043		Silvery metal screw	
044	P612A RED	Red coating on shell	
045	P612A GREEN	Green coating on shell	
046	P612A BLUE	Blue coating on shell	
047	P612A BLACK	Black coating on shell	

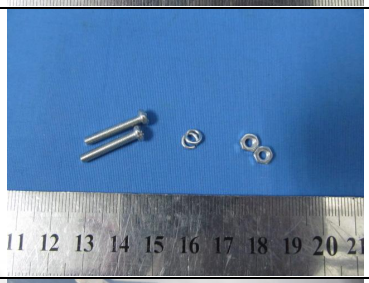
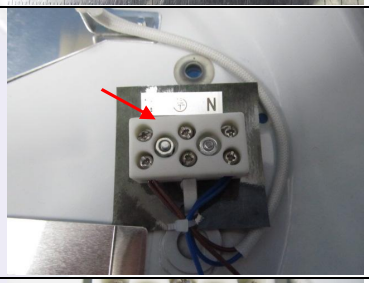
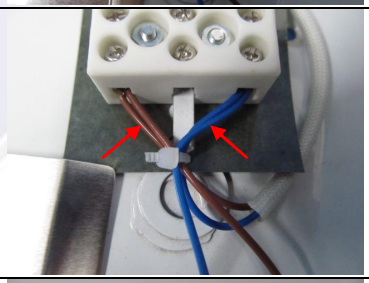
Sample No.	Model No.	Description	Photograph
048	P612A WHITE	White coating on shell	
049	P662(WH)	White coating on shell	
050		Silvery metal shell	
051		White plastic tube	
052		White plastic part	
053		White plastic screw	
054		White plastic cable jacket	
055		Blue plastic wire jacket	
056		Brown plastic wire jacket	
057		Copper metal wire jacket	
058		Dark silvery metal screw	

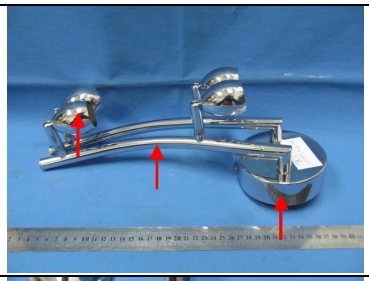
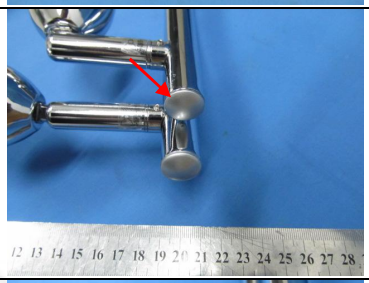
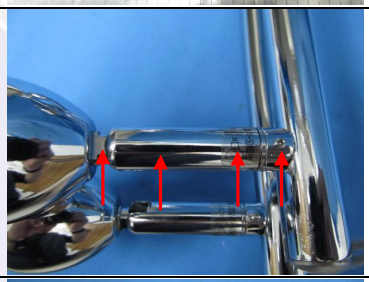
Sample No.	Model No.	Description	Photograph
059	P662(WH)	Transparent plastic buckle	
*060	P145 SILVER	Silvery coating on shell	
061		Silvery metal shell	
062		Black plastic cover	
063		Black plastic part	
064		Black plastic part	
065		Black plastic lamp holder	

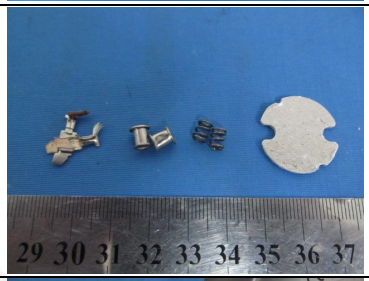
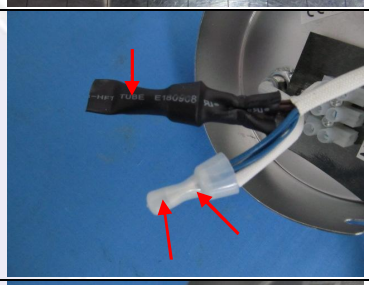
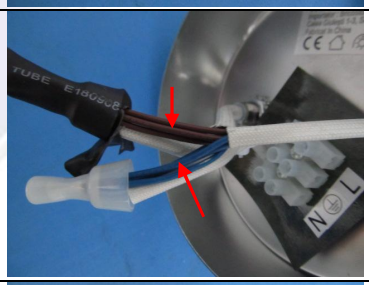
Remark: * means the retest sample was provided by client on 2015-03-10.

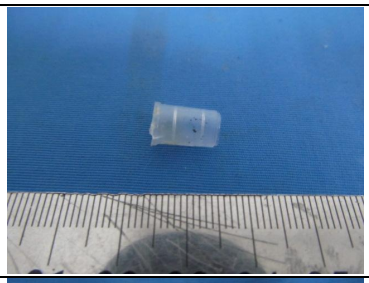
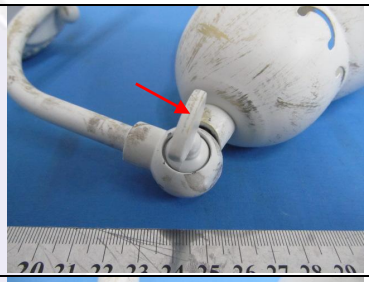
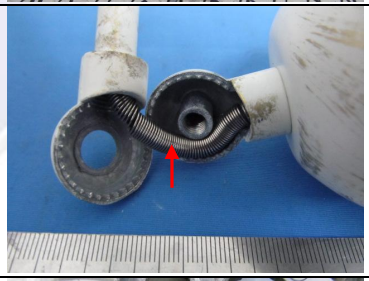
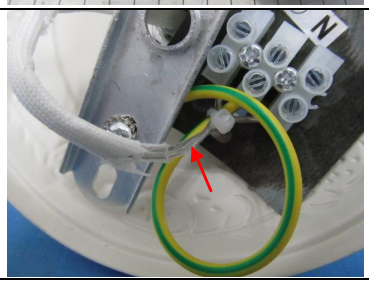
Sample No.	Model No.	Description	Photograph
066	P145 SILVER	Black plastic ring	
067		White plastic part	
068		Black soft plastic tube	
069		Silvery metal block	
070		Silvery metal screw	
071		Black plastic cable jacket	
072		Blue plastic wire jacket	
073		Brown plastic wire jacket	
074		Copper-colored metal wire	
075	CL084A	Transparent/white glass	
076		Silvery metal top	

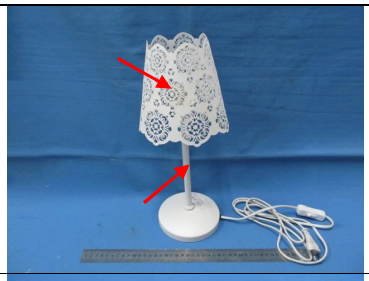
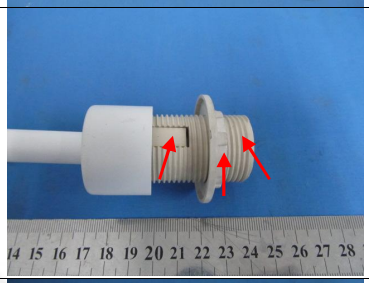
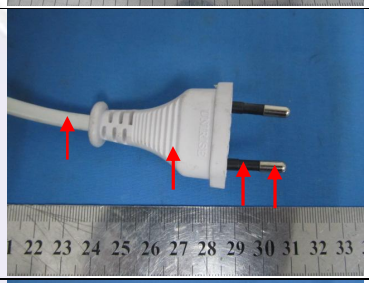
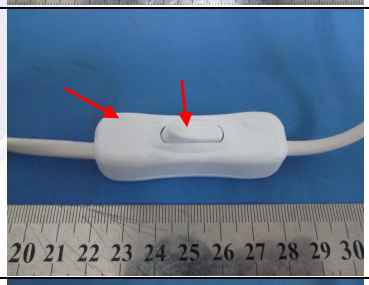
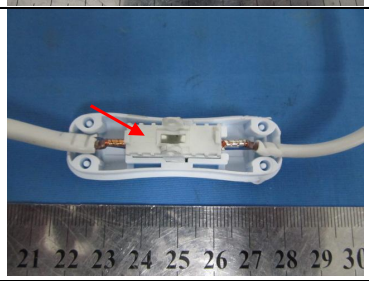
Sample No.	Model No.	Description	Photograph
077	CL084A	Silvery metal shell	
078		Translucent plastic ring	
079		Silvery metal screw	
080		Silvery metal part	
081		Silvery metal sheet	
082		Silvery metal part	
083		Beige plastic part	

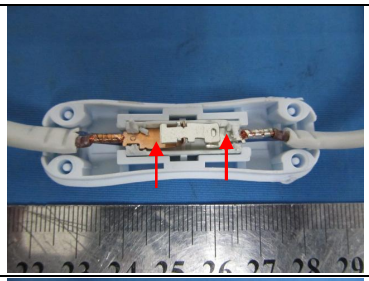
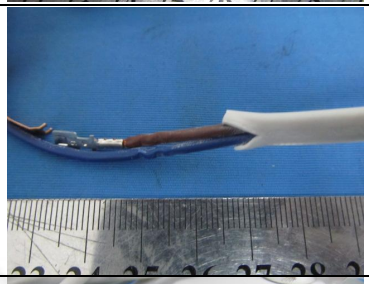
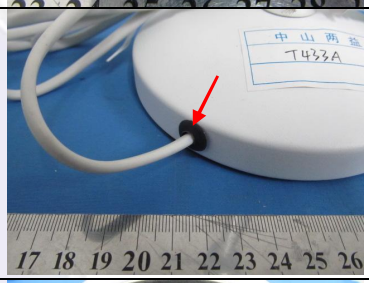
Sample No.	Model No.	Description	Photograph
084	CL084A	Silvery metal tube	
085		Silvery metal terminal	
086		Silvery metal clip	
087		Silvery metal screw	
088		Silvery metal ring	
089		Silvery metal nut	
090		White ceramic part	
091		Silvery metal screw	
092		Silvery metal block	
093		Brown plastic wire jacket	
094		Blue plastic wire jacket	
095		Silvery metal wire	
096		Transparent plastic ring	

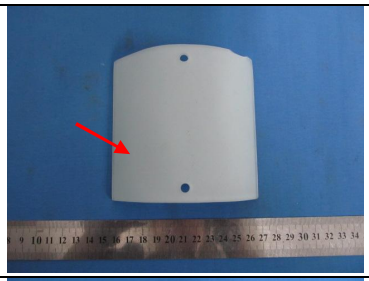
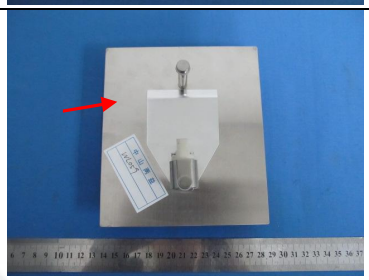
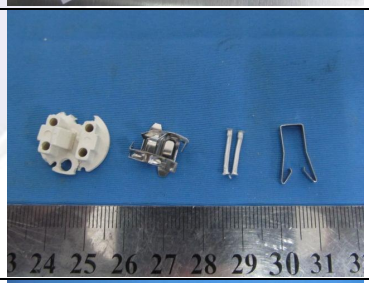
Sample No.	Model No.	Description	Photograph
097	GU10119-4S2 CHR	Silvery metal part	
098		Silvery metal axle	
099		Silvery metal shell	
100		Silvery coating on part	
101		Black plastic part	
102		Silvery metal joint	
103		Silvery metal part	
104		Transparent plastic label	
105		Silvery metal screw	
106		Silvery metal spring	
107		Silvery metal ring	
108		Silvery metal part	
109		Silvery metal ring	
110		Silvery metal bead	

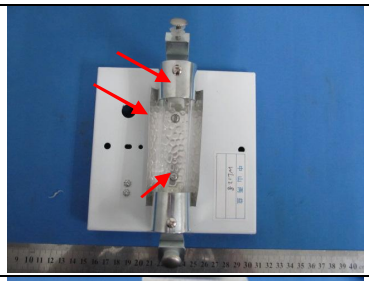
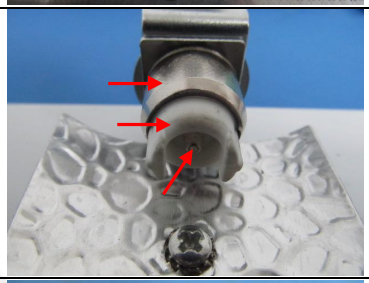
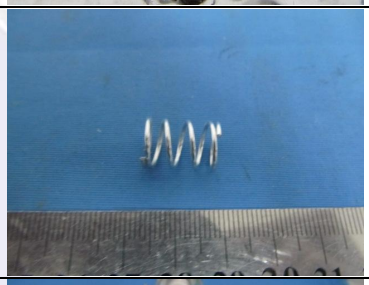
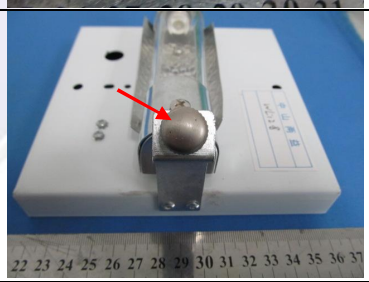
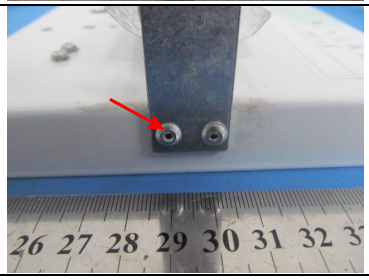
Sample No.	Model No.	Description	Photograph
111	GU10119-4S2 CHR	Beige ceramic	
112		Silvery metal terminal	
113		Silvery metal tube	
114		Grey metal spring	
115		Silvery foil	
116		Black plastic heat-shrinkable tube	
117		Translucent plastic cover	
118		Silver metal joint	
119		Brown plastic wire jacket	
120		Blue plastic wire jacket	
121		Silvery metal wire	
122		Brown plastic wire jacket	
123		Blue plastic wire jacket	
124		Silvery metal wire	

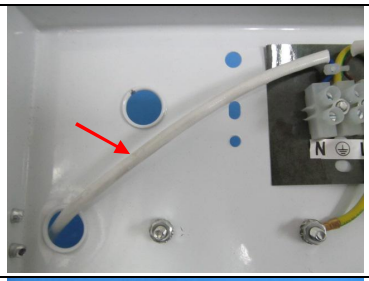
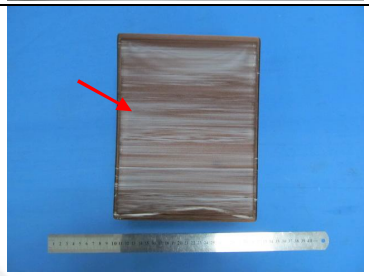
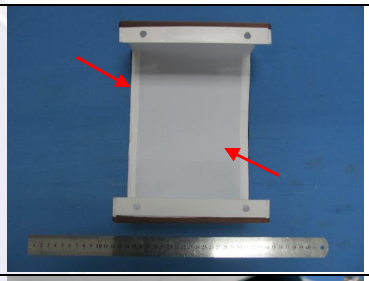
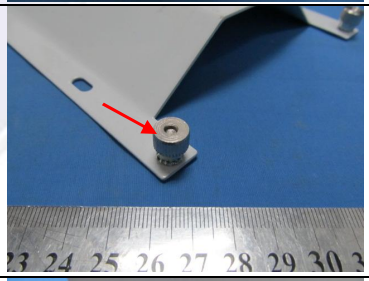
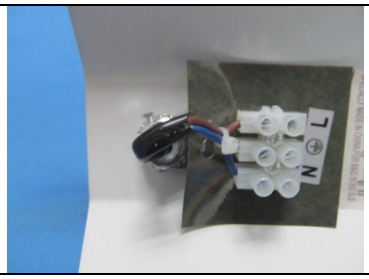
Sample No.	Model No.	Description	Photograph
125	GU10119-4S2 CHR	Transparent plastic tube	
126	T221-1W(WH)	White/golden coating on part	
127		Silvery metal part	
128		Silvery metal part	
129		Silvery metal spring	
130		Transparent plastic wire jacket	
131		Silvery metal wire	

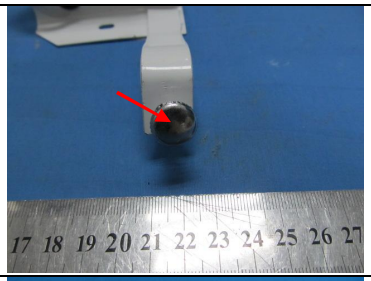
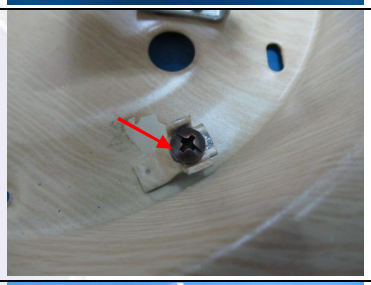
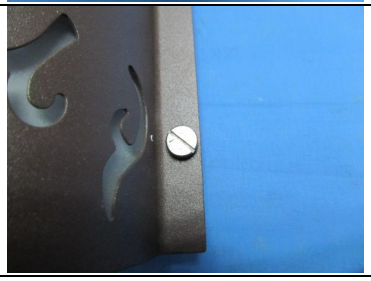
Sample No.	Model No.	Description	Photograph
132	T433A	White coating on part	
133		Silvery metal part	
134		Silvery metal axel	
135		Beige plastic base	
136		Beige plastic ring	
137		lamp holder	
138		White plastic cable jacket	
139		White plastic plug (UNIRISE UE-211)	
140		Black plastic holder	
141		Silvery metal pin	
142		White plastic shell	
143		White plastic button	
144		White plastic part	

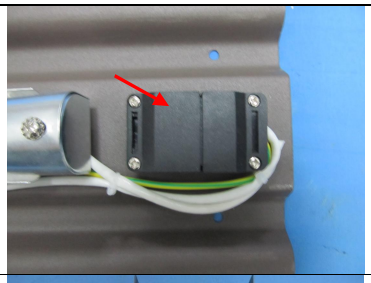
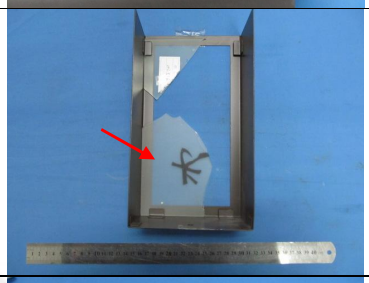
Sample No.	Model No.	Description	Photograph
145	T433A	Copper-colored metal sheet	
146		Silvery metal sheet	
147		Brown plastic wire jacket	
148		Blue plastic wire jacket	
149		Copper-colored metal wire	
150		Black soft plastic ring	
151		Black foam	
152		Black metal part	

Sample No.	Model No.	Description	Photograph
153	WL059	Translucent glass	
154		Silvery metal sheet	
155		White ceramic	
156		Silvery metal part	
157		White plastic base	
158		Silvery metal terminal	
159		Silvery metal rivet	
160		Silvery metal clip	
161		Silvery coating on part	
162		Silvery metal part	

Sample No.	Model No.	Description	Photograph
163	WL128	Silvery metal part	
164		Silvery metal sheet	
165		Transparent glass	
166		Silvery metal part	
167		White ceramic	
168		Silvery metal pin	
169		Silvery metal spring	
170		Silvery plated on part	
171		White plastic part	
172		Silvery metal rivet	

Sample No.	Model No.	Description	Photograph
173	WL128	White plastic/fiber glass tube	
174	WL494	Brown cloth rope	
175		White cloth tape	
176		White cloth	
177		Silvery metal part	
178		Black plastic cable jacket	
179		Brown plastic wire jacket	
180		Blue plastic wire jacket	
181		Copper-colored metal wire	

Sample No.	Model No.	Description	Photograph
182	WL14038	Silvery plated on part	
183		White plastic part	
184	WL001 LIGHT WOOD	Brown/beige coating part	
185		Copper-colored metal screw	
186	WL232A	Brown coating on part	
187		Grey metal screw	

Sample No.	Model No.	Description	Photograph
188	WL232A	Black plastic shell	
189	WL516	Transparent glass with black printing	
190		Brown coating on part	

2. Order

2.1 Date of Purchase Order

2015-01-28

2.2 Receipt of Test Sample, Location

2015-01-28,2015-03-10, Guangzhou

2.3 Date of Testing

2015-01-28 to 2015-03-11.

2.4 Location of Testing

The chemical testing was performed in TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Chemical lab and the XRF testing was performed at TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch. The test results were re-viewed at TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch.

3. Test Results

3.1 Screening test for the specified hazardous substances of RoHS for the selected materials of the submitted sample:

- Heavy Metal (Cadmium, Chromium, Mercury, Lead) Content Test
- Bromine Content Test

According to EN 62321: 2009, and Quantification analyzed with Energy Dispersive X-ray Fluorescence Spectrometers.

Sample No.	Total Cadmium	Total Lead	Total Mercury	Total Chromium	Total Bromine
Sample 001	BL	BL	BL	BL	BL
Sample 002	BL	BL	BL	BL	N.A.
Sample 003	BL	BL	BL	BL	N.A.
Sample 004	BL	BL	BL	BL	BL
Sample 005	BL	BL	BL	BL	BL
Sample 006	BL	BL	BL	BL	BL
Sample 007	BL	BL	BL	BL	BL
Sample 008	BL	BL	BL	BL	BL
Sample 009	BL	BL	BL	BL	BL
Sample 010	BL	BL	BL	BL	N.A.
Sample 011	BL	BL	BL	Inconclusive ^	N.A.
Sample 012	BL	BL	BL	BL	N.A.
Sample 013	BL	BL	BL	BL	N.A.
Sample 014	BL	BL	BL	BL	N.A.
Sample 015	BL	BL	BL	BL	N.A.
Sample 016	BL	BL	BL	BL	N.A.
Sample 017	BL	BL	BL	BL	Inconclusive ^
Sample 018	BL	BL	BL	BL	BL
Sample 019	BL	BL	BL	BL	N.A.
Sample 020	BL	BL	BL	BL	BL
Sample 021	BL	BL	BL	BL	BL
Sample 022	BL	BL	BL	BL	Inconclusive ^
Sample 023	BL	BL	BL	BL	BL
Sample 024	BL	BL	BL	BL	N.A.
Sample 025	BL	BL	BL	BL	BL

Sample No.	Total Cadmium	Total Lead	Total Mercury	Total Chromium	Total Bromine
Sample 026	BL	BL	BL	BL	N.A.
Sample 027	BL	BL	BL	BL	BL
Sample 028	BL	BL	BL	Inconclusive ^	N.A.
Sample 029	BL	BL	BL	BL	BL
Sample 030	BL	BL	BL	BL	N.A.
Sample 031	BL	BL	BL	BL	N.A.
Sample 032	BL	BL	BL	BL	N.A.
Sample 033	BL	BL	BL	BL	BL
Sample 034	BL	BL	BL	Inconclusive ^	N.A.
Sample 035	BL	BL	BL	Inconclusive ^	N.A.
Sample 036	BL	BL	BL	BL	BL
Sample 037	BL	BL	BL	BL	BL
Sample 038	BL	BL	BL	BL	BL
Sample 039	BL	BL	BL	BL	BL
Sample 040	BL	BL	BL	BL	N.A.
Sample 041	BL	BL	BL	BL	N.A.
Sample 042	BL	BL	BL	BL	N.A.
Sample 043	BL	BL	BL	BL	BL
Sample 044	BL	BL	BL	BL	BL
Sample 045	BL	BL	BL	BL	BL
Sample 046	BL	BL	BL	BL	BL
Sample 047	BL	BL	BL	BL	BL
Sample 048	BL	BL	BL	BL	BL
Sample 049	BL	BL	BL	BL	BL
Sample 050	BL	BL	BL	BL	N.A.
Sample 051	BL	BL	BL	BL	BL
Sample 052	BL	BL	BL	BL	BL
Sample 053	BL	BL	BL	BL	BL
Sample 054	BL	BL	BL	BL	BL
Sample 055	BL	BL	BL	BL	BL
Sample 056	BL	BL	BL	BL	BL
Sample 057	BL	BL	BL	BL	N.A.
Sample 058	BL	BL	BL	BL	N.A.
Sample 059	BL	BL	BL	BL	BL
Sample 060 δ	BL	BL	BL	BL	BL

Sample No.	Total Cadmium	Total Lead	Total Mercury	Total Chromium	Total Bromine
Sample 061	BL	BL	BL	BL	N.A.
Sample 062	BL	BL	BL	BL	BL
Sample 063	BL	BL	BL	BL	BL
Sample 064	BL	BL	BL	BL	BL
Sample 065	BL	BL	BL	BL	BL
Sample 066	BL	BL	BL	BL	Inconclusive ^
Sample 067	BL	BL	BL	BL	Inconclusive ^
Sample 068	BL	BL	BL	BL	BL
Sample 069	BL	OL^	BL	BL	N.A.
Sample 070	BL	BL	BL	BL	N.A.
Sample 071	BL	BL	BL	BL	BL
Sample 072	BL	BL	BL	BL	BL
Sample 073	BL	BL	BL	BL	BL
Sample 074	BL	BL	BL	BL	N.A.
Sample 075	BL	BL	BL	BL	BL
Sample 076	BL	BL	BL	BL	N.A.
Sample 077	BL	BL	BL	BL	N.A.
Sample 078	BL	BL	BL	BL	BL
Sample 079	BL	BL	BL	BL	N.A.
Sample 080	BL	BL	BL	BL	N.A.
Sample 081	BL	BL	BL	BL	N.A.
Sample 082	BL	BL	BL	Inconclusive ^	N.A.
Sample 083	BL	BL	BL	BL	BL
Sample 084	BL	BL	BL	BL	N.A.
Sample 085	BL	BL	BL	Inconclusive ^	N.A.
Sample 086	BL	BL	BL	Inconclusive ^	N.A.
Sample 087	BL	BL	BL	BL	N.A.
Sample 088	BL	BL	BL	BL	N.A.
Sample 089	BL	BL	BL	BL	N.A.
Sample 090	BL	BL	BL	BL	BL
Sample 091	BL	BL	BL	BL	N.A.
Sample 092	BL	OL^	BL	BL	N.A.
Sample 093	BL	BL	BL	BL	BL
Sample 094	BL	BL	BL	BL	BL
Sample 095	BL	BL	BL	BL	N.A.

Sample No.	Total Cadmium	Total Lead	Total Mercury	Total Chromium	Total Bromine
Sample 096	BL	BL	BL	BL	BL
Sample 097	BL	BL	BL	BL	N.A.
Sample 098	BL	BL	BL	BL	N.A.
Sample 099	BL	BL	BL	Inconclusive ^	N.A.
Sample 100	BL	BL	BL	BL	BL
Sample 101	BL	BL	BL	BL	BL
Sample 102	BL	BL	BL	BL	N.A.
Sample 103	BL	BL	BL	Inconclusive ^	N.A.
Sample 104	BL	BL	BL	BL	BL
Sample 105	BL	BL	BL	BL	N.A.
Sample 106	BL	BL	BL	Inconclusive ^	N.A.
Sample 107	BL	BL	BL	BL	N.A.
Sample 108	BL	BL	BL	BL	N.A.
Sample 109	BL	BL	BL	BL	N.A.
Sample 110	BL	BL	BL	Inconclusive ^	N.A.
Sample 111	BL	BL	BL	BL	BL
Sample 112	BL	BL	BL	Inconclusive ^	N.A.
Sample 113	BL	BL	BL	BL	N.A.
Sample 114	BL	BL	BL	BL	N.A.
Sample 115	BL	BL	BL	BL	BL
Sample 116	BL	BL	BL	BL	BL
Sample 117	BL	BL	BL	BL	BL
Sample 118	BL	BL	BL	BL	N.A.
Sample 119	BL	BL	BL	BL	BL
Sample 120	BL	BL	BL	BL	BL
Sample 121	BL	BL	BL	BL	N.A.
Sample 122	BL	BL	BL	BL	BL
Sample 123	BL	BL	BL	BL	BL
Sample 124	BL	BL	BL	BL	N.A.
Sample 125	BL	BL	BL	BL	BL
Sample 126	BL	BL	BL	BL	BL
Sample 127	BL	BL	BL	BL	N.A.
Sample 128	BL	BL	BL	BL	N.A.
Sample 129	BL	BL	BL	Inconclusive ^	N.A.
Sample 130	BL	BL	BL	BL	BL

Sample No.	Total Cadmium	Total Lead	Total Mercury	Total Chromium	Total Bromine
Sample 131	BL	BL	BL	BL	N.A.
Sample 132	BL	BL	BL	BL	BL
Sample 133	BL	BL	BL	BL	N.A.
Sample 134	BL	BL	BL	BL	N.A.
Sample 135	BL	BL	BL	BL	BL
Sample 136	BL	BL	BL	BL	BL
Sample 137	BL	BL	BL	BL	Inconclusive ^
Sample 138	BL	BL	BL	BL	BL
Sample 139	BL	BL	BL	BL	BL
Sample 140	BL	BL	BL	BL	Inconclusive ^
Sample 141	BL	OL^	BL	BL	N.A.
Sample 142	BL	BL	BL	BL	Inconclusive ^
Sample 143	BL	BL	BL	BL	BL
Sample 144	BL	BL	BL	BL	BL
Sample 145	BL	BL	BL	BL	N.A.
Sample 146	BL	BL	BL	BL	N.A.
Sample 147	BL	BL	BL	BL	BL
Sample 148	BL	BL	BL	BL	BL
Sample 149	BL	BL	BL	BL	N.A.
Sample 150	BL	BL	BL	BL	BL
Sample 151	BL	BL	BL	BL	BL
Sample 152	BL	BL	BL	Inconclusive ^	N.A.
Sample 153	BL	BL	BL	BL	BL
Sample 154	BL	BL	BL	Inconclusive ^	N.A.
Sample 155	BL	BL	BL	BL	BL
Sample 156	BL	BL	BL	BL	N.A.
Sample 157	BL	BL	BL	BL	BL
Sample 158	BL	BL	BL	Inconclusive ^	N.A.
Sample 159	BL	BL	BL	BL	N.A.
Sample 160	BL	BL	BL	Inconclusive ^	N.A.
Sample 161	BL	BL	BL	BL	BL
Sample 162	BL	BL	BL	BL	N.A.
Sample 163	BL	BL	BL	BL	N.A.
Sample 164	BL	BL	BL	BL	N.A.
Sample 165	BL	BL	BL	BL	BL

Sample No.	Total Cadmium	Total Lead	Total Mercury	Total Chromium	Total Bromine
Sample 166	BL	BL	BL	BL	N.A.
Sample 167	BL	BL	BL	BL	BL
Sample 168	BL	BL	BL	BL	N.A.
Sample 169	BL	BL	BL	BL	N.A.
Sample 170	BL	BL	BL	BL	BL
Sample 171	BL	BL	BL	BL	N.A.
Sample 172	BL	BL	BL	BL	N.A.
Sample 173	BL	BL	BL	BL	BL
Sample 174	BL	BL	BL	BL	BL
Sample 175	BL	BL	BL	BL	BL
Sample 176	BL	BL	BL	BL	BL
Sample 177	BL	BL	BL	BL	N.A.
Sample 178	BL	BL	BL	BL	BL
Sample 179	BL	BL	BL	BL	BL
Sample 180	BL	BL	BL	BL	BL
Sample 181	BL	BL	BL	BL	N.A.
Sample 182	BL	BL	BL	BL	N.A.
Sample 183	BL	BL	BL	BL	BL
Sample 184	BL	BL	BL	BL	BL
Sample 185	BL	BL	BL	BL	N.A.
Sample 186	BL	BL	BL	BL	Inconclusive ^
Sample 187	BL	BL	BL	Inconclusive ^	N.A.
Sample 188	BL	BL	BL	BL	BL
Sample 189	BL	BL	BL	BL	BL
Sample 190	BL	BL	BL	BL	BL

Note:

1. All Concentrations express in “mg/kg” (milligram per kilogram), mg/kg ~ ppm
2. “OL” denotes “over limit”
3. “BL” denotes “below limit”
4. “N.A.” denotes “Not Applicable”
5. “Inconclusive” denotes result is intermediate between “OL” and “BL”
6. “^”denotes the screening result was inconclusive(X) or over limit (OL), thus further confirmation test was conducted, results are listed in 3.2 and 3.3.
7. δ means the retest result.

XRF screening limits for different materials:

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Metal	BL≤(70-3σ)<X<(130+3σ)≤OL	BL≤(700-3σ)<X	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	N.A.
Polymers	BL≤(70-3σ)<X<(130+3σ)≤OL	BL≤(700-3σ)<X	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(300-3σ)<X
Composite material	BL≤(50-3σ)<X<(150+3σ)≤OL	BL≤(500-3σ)<X	BL≤(500-3σ)<X<(1500+3σ)≤OL	BL≤(500-3σ)<X<(1500+3σ)≤OL	BL≤(250-3σ)<X

3.2 Test for Heavy Metals

– Lead, Cadmium, Hexavalent Chromium and Mercury Tests according to EN 62321: 2009.

Element	Total Cadmium [mg/kg]	Total Lead [mg/kg]	Total Mercury [mg/kg]	Hexavalent Chromium [-]	Hexavalent Chromium [mg/kg]
Reporting Limit	**5**	**5**	**5**	**Δ**	**5**
RoHS Limit	**100**	**1000**	**1000**	#	**1000**
Sample 011	/	/	/	Negative	/
Sample 028	/	/	/	Negative	/
Sample 034	/	/	/	Negative	/
Sample 035	/	/	/	Negative	/
Sample 069	/	**24900 Φ**	/	/	/
Sample 082	/	/	/	Negative	/
Sample 085	/	/	/	Negative	/
Sample 086	/	/	/	Negative	/
Sample 092	/	**31300 Φ**	/	/	
Sample 099	/	/	/	Negative	/
Sample 103	/	/	/	Negative	/
Sample 106	/	/	/	Negative	/
Sample 110	/	/	/	Negative	/
Sample 112	/	/	/	Negative	/
Sample 129	/	/	/	Negative	/
Sample 141	/	**19400 Φ**	/	/	/
Sample 152	/	/	/	Negative	/
Sample 154	/	/	/	Negative	/
Sample 158	/	/	/	Negative	/
Sample 160	/	/	/	Negative	/
Sample 187	/	/	/	Negative	/

Note:

1. All Concentrations express in “mg/kg”(milligram per kilogram), mg/kg ~ ppm.
2. “N.D.” = “Not Detected”.
3. Δ =Spot-Test:
   Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;
   (The tested sample should be further verified by boiling-water-extraction method if the spot test result is negative or cannot be confirmed.)
   Boiling-water-extraction:
   Negative = Absence of CrVI coating
   Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02mg/kg with 50 cm^2 sample surface area.
   Storage conditions and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing
4. # = Positive indicates the presence of CrVI on the tested areas.
   Negative indicates the absence of CrVI on the tested areas.
5. “-” = Not regulated
6. Φ means as the information (the main source of lead could be copper alloy base) provided by the client, when Lead as an alloying element in copper alloy containing up to 4% Lead by weight is exempted from RoHS Directive 2011/65/EU Annex III.

3.3 Test for Flame retardants

Test Method: With reference to EN 62321:2009, extracted by toluene and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting Limit: 5mg/kg]

Test Item		Result [mg/kg]		RoHS Limit [mg/kg]
		Sample 017	Sample 022	
PBBs	Monobromobiphenyl	< 5	< 5	Sum of PBBs < 1000
	Dibromobiphenyl	< 5	< 5	
	Tribromobiphenyl	< 5	< 5	
	Tetrabromobiphenyl	< 5	< 5	
	Pentabromobiphenyl	< 5	< 5	
	Hexabromobiphenyl	< 5	< 5	
	Heptabromobiphenyl	< 5	< 5	
	Octabromobiphenyl	< 5	< 5	
	Nonabromobiphenyl	< 5	< 5	
	Decabromobiphenyl	< 5	< 5	
	Sum of PBBs	< 5	< 5	
PBDEs	Monobromodiphenyl Ether	< 5	< 5	Sum of PBDEs < 1000
	Dibromodiphenyl Ether	< 5	< 5	
	Tribromodiphenyl Ether	< 5	< 5	
	Tetrabromodiphenyl Ether	< 5	< 5	
	Pentabromodiphenyl Ether	< 5	< 5	
	Hexabromodiphenyl Ether	< 5	< 5	
	Heptabromodiphenyl Ether	< 5	< 5	
	Octabromodiphenyl Ether	< 5	< 5	
	Nonabromodiphenyl Ether	< 5	< 5	
	Decabromodiphenyl Ether	< 5	< 5	
	Sum of PBDEs	< 5	< 5	

Note:
1. All Concentrations express in “mg/kg” (milligram per kilogram), mg/kg ~ ppm.
2. “<” denotes less than

Test Item		Result [mg/kg]		RoHS Limit [mg/kg]
		Sample 066	Sample 067	
PBBs	Monobromobiphenyl	< 5	< 5	Sum of PBBs < 1000
	Dibromobiphenyl	< 5	< 5	
	Tribromobiphenyl	< 5	< 5	
	Tetrabromobiphenyl	< 5	< 5	
	Pentabromobiphenyl	< 5	< 5	
	Hexabromobiphenyl	< 5	< 5	
	Heptabromobiphenyl	< 5	< 5	
	Octabromobiphenyl	< 5	< 5	
	Nonabromobiphenyl	< 5	< 5	
	Decabromobiphenyl	< 5	< 5	
	Sum of PBBs	< 5	< 5	
PBDEs	Monobromodiphenyl Ether	< 5	< 5	Sum of PBDEs < 1000
	Dibromodiphenyl Ether	< 5	< 5	
	Tribromodiphenyl Ether	< 5	< 5	
	Tetrabromodiphenyl Ether	< 5	< 5	
	Pentabromodiphenyl Ether	< 5	< 5	
	Hexabromodiphenyl Ether	< 5	< 5	
	Heptabromodiphenyl Ether	< 5	< 5	
	Octabromodiphenyl Ether	< 5	< 5	
	Nonabromodiphenyl Ether	< 5	< 5	
	Decabromodiphenyl Ether	< 5	< 5	
	Sum of PBDEs	< 5	< 5	

Note:

1. All Concentrations express in “mg/kg” (milligram per kilogram), mg/kg ~ ppm.
2. “<” denotes less than

Test Item		Result [mg/kg]		RoHS Limit [mg/kg]
		Sample 137	Sample 140	
PBBs	Monobromobiphenyl	< 5	< 5	Sum of PBBs < 1000
	Dibromobiphenyl	< 5	< 5	
	Tribromobiphenyl	< 5	< 5	
	Tetrabromobiphenyl	< 5	< 5	
	Pentabromobiphenyl	< 5	< 5	
	Hexabromobiphenyl	< 5	< 5	
	Heptabromobiphenyl	< 5	< 5	
	Octabromobiphenyl	< 5	< 5	
	Nonabromobiphenyl	< 5	< 5	
	Decabromobiphenyl	< 5	< 5	
	Sum of PBBs	< 5	< 5	
PBDEs	Monobromodiphenyl Ether	< 5	< 5	Sum of PBDEs < 1000
	Dibromodiphenyl Ether	< 5	< 5	
	Tribromodiphenyl Ether	< 5	< 5	
	Tetrabromodiphenyl Ether	< 5	< 5	
	Pentabromodiphenyl Ether	< 5	< 5	
	Hexabromodiphenyl Ether	< 5	< 5	
	Heptabromodiphenyl Ether	< 5	< 5	
	Octabromodiphenyl Ether	< 5	< 5	
	Nonabromodiphenyl Ether	< 5	< 5	
	Decabromodiphenyl Ether	< 5	< 5	
	Sum of PBDEs	< 5	< 5	

Note:

1. All Concentrations express in “mg/kg” (milligram per kilogram), mg/kg ~ ppm.
2. “<” denotes less than

Test Item		Result [mg/kg]		RoHS Limit [mg/kg]
		Sample 142	Sample 186	
PBBs	Monobromobiphenyl	< 5	< 5	Sum of PBBs < 1000
	Dibromobiphenyl	< 5	< 5	
	Tribromobiphenyl	< 5	< 5	
	Tetrabromobiphenyl	< 5	< 5	
	Pentabromobiphenyl	< 5	< 5	
	Hexabromobiphenyl	< 5	< 5	
	Heptabromobiphenyl	< 5	< 5	
	Octabromobiphenyl	< 5	< 5	
	Nonabromobiphenyl	< 5	< 5	
	Decabromobiphenyl	< 5	< 5	
	Sum of PBBs	< 5	< 5	
PBDEs	Monobromodiphenyl Ether	< 5	< 5	Sum of PBDEs < 1000
	Dibromodiphenyl Ether	< 5	< 5	
	Tribromodiphenyl Ether	< 5	< 5	
	Tetrabromodiphenyl Ether	< 5	< 5	
	Pentabromodiphenyl Ether	< 5	< 5	
	Hexabromodiphenyl Ether	< 5	< 5	
	Heptabromodiphenyl Ether	< 5	< 5	
	Octabromodiphenyl Ether	< 5	< 5	
	Nonabromodiphenyl Ether	< 5	< 5	
	Decabromodiphenyl Ether	< 5	< 5	
	Sum of PBDEs	< 5	< 5	

Note:

1. All Concentrations express in “mg/kg” (milligram per kilogram), mg/kg ~ ppm.
2. “<” denotes less than

4. Documentation

APPENDIX 01: Photos of submitted products

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
TÜV SÜD Group

Engineer: _____ **Technical Report checked:** _____

Eva Yuan **Ben Shao**

- END OF TEST REPORT -

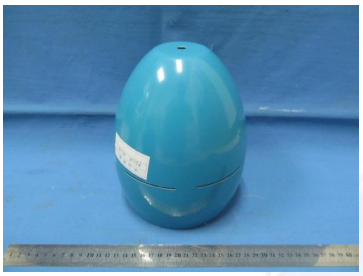
APPENDIX 01:

Photos of submitted products**:**

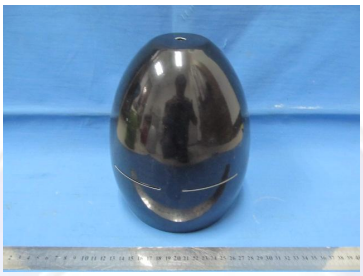
P612A SILVER

P612A RED

P612A GREEN



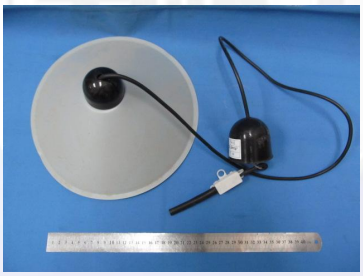
P612A BLUE



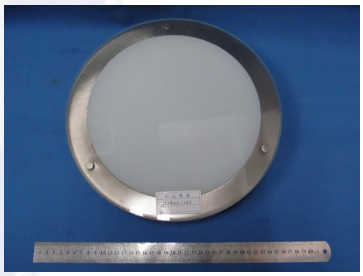
P612A BLACK

P612A WHITE

P662(WH)



P145 SILVER



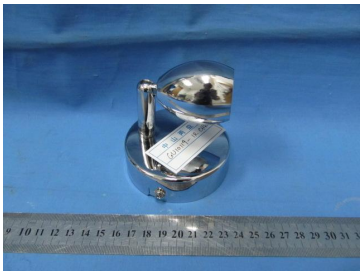
CL084A

GU10119-4S2 CHR

GU10119-4SP CHR

GU10119-3R CHR

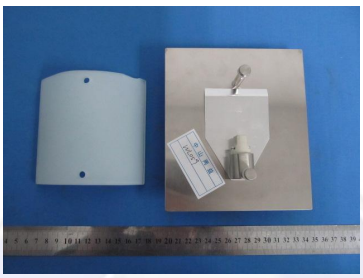
GU10119-2R CHR



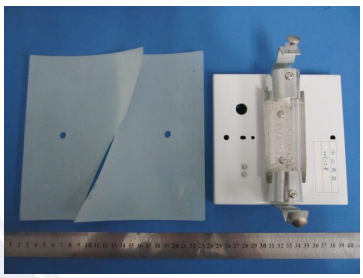
GU10119-1R CHR

T221-1W(WH)

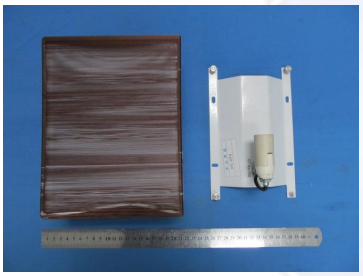
T433A



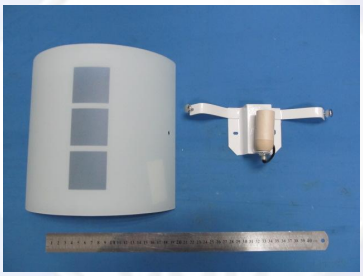
WL059



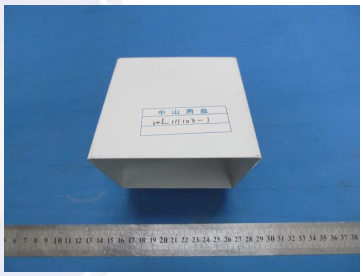
WL128



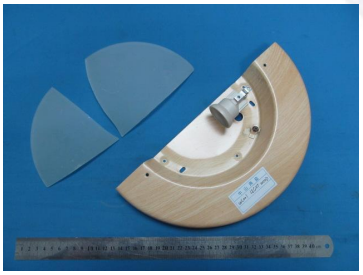
WL494



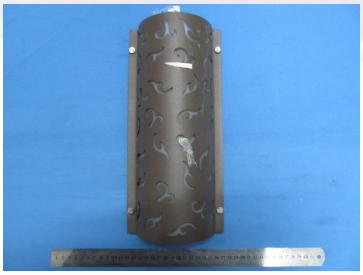
WL14038



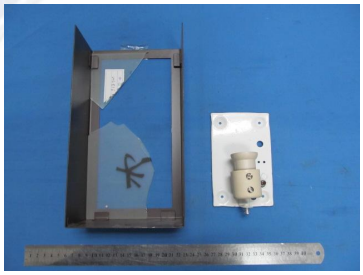
WL111103-1



WL001 LIGHT WOOD



WL232A



WL516

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