

Report No.: **170334873b 001**

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Client: **SHENZHEN FABULUX TECHNOLOGY CO., LTD**

Contact Information: Factory 1201, No.14 of Xiawei Industrial Zone, Zhangkengjing Community, Guanhu Street, Longhua District, Shenzhen, Guangdong, P. R. China

Test item(s): 281 materials

Identification/ LED DISPLAY

Model No(s): Master2.6, Master2.9, Master3.9, MasterO2.9, MasterO3.9, MasterO4.8, Master1.95 Mini, Master2.6 Mini

Condition at delivery: Test item complete and undamaged.

Sample Receiving date: 2023-01-12, 2023-03-06, 2023-03-08, 2023-03-17

Testing Period: 2023-02-16 - 2023-03-28

Place of testing: Chemical laboratory Guangzhou

**Test Specification:**

**Test result:**

1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE), ROHS Phthalates (BBP, DBP, DEHP, DIBP)  
According to RoHS(recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment (EU) 2015/863

PASS

**Other information:**

The result relates only to the items tested.

For and on behalf of  
TÜV Rheinland (Guangdong) Ltd.



2023-04-14

Jennifer Yuan / Project Engineer

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.  
This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.  
"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

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**Material List:**

Item: LED DISPLAY

 Master2.6, Master2.9, Master3.9, MasterO2.9, MasterO3.9, MasterO4.8, Master1.95 Mini,  
 Master2.6 Mini

Material No.	Material	Color	Location
B001	Electronic components	white	Refer to photo
B002	Plastic	black	Refer to photo
B003	Coating	black	Refer to photo
B004	Metal	silvery	Refer to photo
B005	Plastic	black	Refer to photo
B006	Metal	golden	Refer to photo
B007	Plastic	black	Refer to photo
B008	Plastic + printing + adhesive	white/ black	Refer to photo
B009	Electronic components	black	Refer to photo
B010	Electronic components	black	Refer to photo
B011	Metal	golden	Refer to photo
B012	Electronic components	black	Refer to photo
B013	Metal	silvery	Refer to photo
B014	Metal	silvery	Refer to photo
B015	PCB board	black	Refer to photo
B016	Electronic components	black	Refer to photo
B017	Electronic components	black	Refer to photo
B018	Metal	golden	Refer to photo
B019	Plastic	black	Refer to photo
B020	Plastic	black	Refer to photo
B021	Plastic	black	Refer to photo
B022	Metal	silvery/ black	Refer to photo
B023	Plastic	black	Refer to photo
B024	PCB board	yellow	Refer to photo
B025	Metal	silvery	Refer to photo
B026	Metal	silvery	Refer to photo
B027	Plastic	black	Refer to photo

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B028	Plastic	black	Refer to photo
B029-1	Metal	silvery	Refer to photo(retest of B029)
B030	Plastic	black	Refer to photo
B031	Plastic	beige	Refer to photo
B032	Paper + printing + adhesive	light yellow-green/ black	Refer to photo
B033	Electronic components	black	Refer to photo
B034	Paper + printing + adhesive	yellow/ black	Refer to photo
B035	Electronic components	black	Refer to photo
B036	Metal	silvery	Refer to photo
B037	Metal	silvery	Refer to photo
B038	Plastic	white	Refer to photo
B039	Plastic	black	Refer to photo
B040	Plastic	black	Refer to photo
B041	Plastic	black	Refer to photo
B042	Metal	silvery/ black	Refer to photo
B043	Glue	yellow	Refer to photo
B044	Metal	golden	Refer to photo
B045	Plastic	black	Refer to photo
B047	Electronic components	black	Refer to photo
B048	Electronic components	black	Refer to photo
B049	Electronic components	black	Refer to photo
B050	Electronic components	black	Refer to photo
B051	PCB board	dark green	Refer to photo
B052	Plastic + printing + adhesive	white/ muticolor	Refer to photo
B053	Magnet	black	Refer to photo
B054	Electronic components	black	Refer to photo
B055	Plastic	beige	Refer to photo
B056	Metal	golden	Refer to photo
B057	Electronic components	black	Refer to photo
B058	Plastic	orange	Refer to photo

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B059-1	Solder	silvery	Refer to photo(retest of B059)
B060	Plastic	black	Refer to photo
B061	Plastic	black	Refer to photo
B062	Metal	silvery	Refer to photo
B063	Metal	silvery	Refer to photo
B064	Plastic	yellow/ green	Refer to photo
B065	Plastic + printing	black/ white	Refer to photo
B066	Plastic	dark brown	Refer to photo
B067	Plastic	dark blue	Refer to photo
B068	Metal	silvery	Refer to photo
B069	Metal	silvery	Refer to photo
B070-1	Plastic	blue	Refer to photo(retest of B070)
B071	Plastic + printing	yellow/ green/ black	Refer to photo
B072	Plastic + printing	dark brown/ white	Refer to photo
B073	Plastic + printing	dark blue/ white	Refer to photo
B074	Metal	silvery	Refer to photo
B075	Plastic	black	Refer to photo
B076	Plastic	white	Refer to photo
B077	Plastic	dark blue	Refer to photo
B078	Plastic	black	Refer to photo
B079	Metal	silvery	Refer to photo
B080	Plastic	red	Refer to photo
B081	Metal	silvery	Refer to photo
B082	Metal + plating	silvery/ multi-color	Refer to photo
B083	Metal + plating	silvery/ light blue	Refer to photo
B084	Metal + plating	silvery/ grey	Refer to photo
B085	Metal	silvery	Refer to photo
B086	Metal + plating	silvery/ black	Refer to photo
B087	Metal	silvery	Refer to photo
B088	Metal	silvery	Refer to photo
B089	Metal	silvery	Refer to photo
B090	Metal	silvery	Refer to photo

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B091	Plastic	black	Refer to photo
B092	Metal	silvery	Refer to photo
B093	Plastic	white	Refer to photo
B094	Plastic	grey	Refer to photo
B095	Plastic	black	Refer to photo
B096	PCB board	dark green	Refer to photo
B097	Metal	silvery	Refer to photo
B098	Metal	silvery	Refer to photo
B099	Metal	silvery	Refer to photo
B100	Plastic	transparent	Refer to photo
B101	Plastic	blue	Refer to photo
B102	Metal	silvery	Refer to photo
B103	Plastic + printing	black/ white	Refer to photo
B104	Metal	silvery	Refer to photo
B105	Plastic	green	Refer to photo
B106	Metal	coppery	Refer to photo
B107	Plastic	green/ white	Refer to photo
B108	Plastic	orange	Refer to photo
B109	Plastic	orange/ grey	Refer to photo
B110	Plastic	brown	Refer to photo
B111	Plastic	blue/ white	Refer to photo
B112	Plastic	blue	Refer to photo
B113	Metal	coppery	Refer to photo
B114	Plastic	brown/ white	Refer to photo
B115	Metal	coppery	Refer to photo
B116	Metal	silvery	Refer to photo
B117	PCB board	dark green	Refer to photo
B118	Plastic	black	Refer to photo
B119	Plastic	black	Refer to photo
B120	Metal	silvery	Refer to photo
B121	Plastic	black	Refer to photo
B122	Metal	silvery	Refer to photo

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B123	Metal	golden	Refer to photo
B124	Metal + plating	silvery/ black	Refer to photo
B125	Metal + plating	silvery/ black	Refer to photo
B126	Metal	silvery	Refer to photo
B127	Metal	silvery	Refer to photo
B128	Metal	silvery	Refer to photo
B129	Plastic	red	Refer to photo
B130	Metal	silvery	Refer to photo
B131	Metal	silvery	Refer to photo
B132	Metal	silvery	Refer to photo
B133	Metal + plating	silvery/ black	Refer to photo
B134	Metal	silvery	Refer to photo
B135	Metal	silvery	Refer to photo
B136	Metal + plating	silvery/ black	Refer to photo
B137	Metal + plating	silvery/ light blue	Refer to photo
B138	Metal + plating	silvery/ light blue	Refer to photo
B139	Metal + plating	silvery/ light blue	Refer to photo
B140	Metal	silvery	Refer to photo
B141	Metal	silvery	Refer to photo
B142	Metal	silvery	Refer to photo
B143	Metal	silvery	Refer to photo
B144	Metal	silvery	Refer to photo
B145	Metal + plating	silvery/ black	Refer to photo
B146	Metal + plating	silvery/ black	Refer to photo
B147	Metal + plating	silvery/ black	Refer to photo
B148	Metal	silvery	Refer to photo
B149	Metal	silvery	Refer to photo
B150	Metal + plating	silvery/ light blue	Refer to photo
B151	Metal + plating	silvery/ light blue	Refer to photo
B152	Metal + plating	silvery/ light blue	Refer to photo
B153	Metal + plating	silvery/ blak	Refer to photo
B154	Metal + plating	silvery/ light blue	Refer to photo

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B155	Metal	silvery	Refer to photo
B156	Metal + plating	silvery/ black	Refer to photo
B157	Metal	silvery	Refer to photo
B158	Metal	silvery	Refer to photo
B159	Metal + plating	silvery/ black	Refer to photo
B160	Metal	silvery	Refer to photo
B161	Metal + plating	silvery/ black	Refer to photo
B162	Metal	golden	Refer to photo
B163	Metal	silvery	Refer to photo
B164	Plastic + printing + adhesive	white/ black	Refer to photo
B165	Textile + adhesive	dark grey	Refer to photo
B166	Glue	dark grey	Refer to photo
B167	Plastic	white	Refer to photo
B168	Glue	dark red	Refer to photo
B169	Metal	silvery	Refer to photo
B170	Metal	silvery	Refer to photo
B171	Glue	light yellow	Refer to photo
B172	Metal	silvery	Refer to photo
B173	Electronic components	blue	Refer to photo
B174	Metal	silvery	Refer to photo
B175	Electronic components	black	Refer to photo
B176	Electronic components	black	Refer to photo
B177	PCB board	dark green	Refer to photo
B178	Metal	coppery	Refer to photo
B179	Magnet	black	Refer to photo
B180	Plastic + adhesive	yellow	Refer to photo
B181	Glue	light yellow	Refer to photo
B182	Magnet	dark green	Refer to photo
B183	Metal	coppery	Refer to photo
B184	Plastic	black	Refer to photo
B185	Electronic components	blue	Refer to photo
B186	Glue	black	Refer to photo

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B187	Plastic	black	Refer to photo
B188	Electronic components	pink/ multicolor	Refer to photo
B189	Plastic	black	Refer to photo
B190	Plastic	white	Refer to photo
B191	Plastic	transparent	Refer to photo
B192	Plastic	black	Refer to photo
B193	Plastic	yellow	Refer to photo
B194	Magnet	black	Refer to photo
B195	Plastic	transparent yellow	Refer to photo
B196	Magnet	black	Refer to photo
B197	Metal	coppery	Refer to photo
B198	Metal	silvery	Refer to photo
B199	Magnet	black	Refer to photo
B200	PCB board	dark green	Refer to photo
B201	Plastic	transparent green	Refer to photo
B202	Metal	coppery	Refer to photo
B203	Metal	silvery	Refer to photo
B204	Electronic components	black	Refer to photo
B205	Electronic components	black	Refer to photo
B206	Electronic components	black	Refer to photo
B207	Electronic components	black	Refer to photo
B208	Electronic components	black	Refer to photo
B209	Electronic components	black	Refer to photo
B210	Electronic components	black	Refer to photo
B211	Electronic components	black	Refer to photo
B212	Electronic components	black	Refer to photo
B213	Solder	silvery	Refer to photo
B214	Plastic + printing	black/ white	Refer to photo
B215	Plastic	black	Refer to photo
B216	Metal	silvery/ blue	Refer to photo
B217	Plastic	black	Refer to photo
B218	Plastic + printing	dark red/ white	Refer to photo



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B219	Glue	yellow	Refer to photo
B220	Plastic + printing	yellow/ black	Refer to photo
B221	Plastic	silvery	Refer to photo
B222	Plastic + printing	grey/ white	Refer to photo
B223	Glue	white	Refer to photo
B224	Plastic	silvery	Refer to photo
B225	Glue	black	Refer to photo
B226	Plastic + printing	dark grey/ white	Refer to photo
B227	Plastic	silvery	Refer to photo
B228	Magnet	black	Refer to photo
B229	Metal	coppery	Refer to photo
B230	Plastic + printing	black/ white	Refer to photo
B231	Electronic components	dark green	Refer to photo
B232	Plastic + printing	black/ white	Refer to photo
B233	Plastic + printing	blue/ black	Refer to photo
B234	Metal	golden	Refer to photo
B235	Plastic	dark grey	Refer to photo
B236	Plastic	grey	Refer to photo
B237	Plastic	blue	Refer to photo
B238	Plastic	white	Refer to photo
B239	Metal + plating	silvery/ light blue	Refer to photo
B240	Plastic	black	Refer to photo
B241	Plastic + printing	black/ white	Refer to photo
B243	Metal	dark grey	Refer to photo
B244	Paper	brown	Refer to photo
B245	Metal	silvery	Refer to photo
B246	Metal	silvery	Refer to photo
B247	Metal	silvery	Refer to photo
B248	Metal	silvery	Refer to photo
B249	Plastic	black	Refer to photo
B250-2	Plastic + printing	black/ white	Refer to photo(retest of B250)
B251	Plastic	black	Refer to photo

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B252	Plastic	transparent black	Refer to photo
B253	Metal	silvery	Refer to photo
B254	Metal	golden	Refer to photo
B255	Plastic	orange	Refer to photo
B256	Metal	coppery	Refer to photo
B257	Metal	silvery	Refer to photo
B258	Plastic	transparent	Refer to photo
B259	Plastic	green	Refer to photo
B260	Plastic	green/ white	Refer to photo
B261	Plastic	brown/ white	Refer to photo
B262	Plastic	brown	Refer to photo
B263	Plastic	blue	Refer to photo
B264	Plastic	blue/ white	Refer to photo
B265	Plastic	yellow/ white	Refer to photo
B266	Plastic	transparent	Refer to photo
B267-1	Plastic + printing	black/ white	Refer to photo(retest of B267)
B268	Plastic	blue	Refer to photo
B269	Metal	silvery	Refer to photo
B273	Metal + plating	silvery/ black	Refer to photo
B274	Metal	silvery	Refer to photo
B275	Metal	silvery	Refer to photo
B276	Metal	silvery	Refer to photo
B277	Plastic	blue	Refer to photo
B278	Plastic	white	Refer to photo
B279	Metal	coppery	Refer to photo
B280-1	Plastic	yellow/ green	Refer to photo(retest of B280)
B281-1	Plastic	dark brown	Refer to photo(retest of B281)
B282-1	Plastic	blue	Refer to photo(retest of B282)
B283	Coating	black	Refer to photo
B284	Metal	silvery	Refer to photo
B285	Metal	silvery	Refer to photo
B286	Metal	silvery	Refer to photo

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**1.Screening Test by XRF spectroscopy**

Test Method: Cadmium, Lead, Mercury, Chromium, Bromine  
 -- With reference to IEC 62321-3-1:2013

**Test Result:**

Material No.	Cd	Cr	Pb	Hg	Br
B001	BL	BL	BL	BL	BL
B002	BL	BL	BL	BL	BL
B003	BL	BL	BL	BL	BL
B004	BL	BL	BL	BL	n.a.
B005	BL	BL	BL	BL	BL
B006	BL	BL	d.(*1)	BL	n.a.
B007	BL	BL	BL	BL	BL
B008	BL	BL	BL	BL	BL
B009	BL	BL	BL	BL	BL
B010	BL	BL	BL	BL	BL
B011	BL	BL	d.(*1)	BL	n.a.
B012	BL	BL	BL	BL	BL
B013	BL	BL	BL	BL	n.a.
B014	BL	BL	BL	BL	n.a.
B015	BL	BL	BL	BL	d.(*1)
B016	BL	BL	BL	BL	BL
B017	BL	BL	BL	BL	d.(*1)
B018	BL	BL	d.(*1)	BL	n.a.
B019	BL	BL	BL	BL	d.(*1)
B020	BL	BL	BL	BL	BL
B021	BL	BL	BL	BL	BL
B022	BL	BL	BL	BL	n.a.
B023	BL	BL	BL	BL	BL
B024	BL	BL	BL	BL	d.(*1)
B025	BL	BL	BL	BL	n.a.
B026	BL	BL	BL	BL	n.a.
B027	BL	BL	BL	BL	d.(*1)
B028	BL	BL	BL	BL	d.(*1)
B029-1	d.(*1)	BL	d.(*1)	BL	n.a.
B030	BL	BL	BL	BL	BL
B031	BL	BL	BL	BL	BL
B032	BL	BL	BL	BL	BL
B033	BL	BL	BL	BL	BL
B034	BL	BL	BL	BL	BL
B035	BL	BL	BL	BL	BL
B036	BL	BL	BL	BL	n.a.
B037	BL	BL	BL	BL	n.a.

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B038	BL	BL	BL	BL	BL
B039	BL	BL	BL	BL	BL
B040	BL	BL	BL	BL	BL
B041	BL	BL	BL	BL	BL
B042	BL	BL	BL	BL	n.a.
B043	BL	BL	BL	BL	BL
B044	BL	BL	BL	BL	n.a.
B045	BL	BL	BL	BL	d.(*1)
B047	BL	BL	BL	BL	BL
B048	BL	BL	BL	BL	BL
B049	BL	BL	BL	BL	BL
B050	BL	BL	BL	BL	BL
B051	BL	BL	BL	BL	d.(*1)
B052	BL	BL	BL	BL	BL
B053	BL	BL	BL	BL	n.a.
B054	BL	BL	BL	BL	BL
B055	BL	BL	BL	BL	BL
B056	BL	BL	BL	BL	n.a.
B057	BL	BL	BL	BL	BL
B058	BL	BL	BL	BL	d.(*1)
B059-1	BL	BL	BL	BL	n.a.
B060	BL	BL	BL	BL	d.(*1)
B061	BL	BL	BL	BL	d.(*1)
B062	BL	d.(*1)	BL	BL	n.a.
B063	BL	d.(*1)	BL	BL	n.a.
B064	BL	BL	BL	BL	BL
B065	BL	BL	BL	BL	BL
B066	BL	BL	BL	BL	BL
B067	BL	BL	BL	BL	BL
B068	BL	BL	BL	BL	n.a.
B069	BL	BL	BL	BL	n.a.
B070-1	BL	BL	BL	BL	BL
B071	BL	BL	BL	BL	BL
B072	BL	BL	BL	BL	BL
B073	BL	BL	BL	BL	BL
B074	BL	BL	BL	BL	n.a.
B075	BL	BL	BL	BL	d.(*1)
B076	BL	BL	BL	BL	BL
B077	BL	BL	BL	BL	BL
B078	BL	BL	BL	BL	BL
B079	BL	BL	BL	BL	n.a.
B080	BL	BL	BL	BL	BL
B081	BL	BL	BL	BL	n.a.

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B082	BL	d.(*1)	BL	BL	n.a.
B083	BL	d.(*1)	BL	BL	n.a.
B084	BL	d.(*1)	BL	BL	n.a.
B085	BL	BL	d.(*1)	BL	n.a.
B086	BL	d.(*1)	BL	BL	n.a.
B087	BL	d.(*1)	BL	BL	n.a.
B088	BL	d.(*1)	BL	BL	n.a.
B089	BL	d.(*1)	BL	BL	n.a.
B090	BL	d.(*1)	BL	BL	n.a.
B091	BL	BL	BL	BL	BL
B092	BL	BL	d.(*1)	BL	n.a.
B093	BL	BL	BL	BL	BL
B094	BL	BL	BL	BL	d.(*1)
B095	BL	BL	BL	BL	d.(*1)
B096	BL	BL	BL	BL	d.(*1)
B097	BL	d.(*1)	BL	BL	n.a.
B098	BL	BL	BL	BL	n.a.
B099	BL	BL	BL	BL	n.a.
B100	BL	BL	BL	BL	BL
B101	BL	BL	BL	BL	BL
B102	BL	BL	BL	BL	n.a.
B103	BL	BL	BL	BL	BL
B104	BL	BL	BL	BL	n.a.
B105	BL	BL	BL	BL	BL
B106	BL	BL	BL	BL	n.a.
B107	BL	BL	BL	BL	BL
B108	BL	BL	BL	BL	BL
B109	BL	BL	BL	BL	BL
B110	BL	BL	BL	BL	BL
B111	BL	BL	BL	BL	BL
B112	BL	BL	BL	BL	BL
B113	BL	BL	BL	BL	n.a.
B114	BL	BL	BL	BL	BL
B115	BL	BL	BL	BL	n.a.
B116	BL	BL	BL	BL	n.a.
B117	BL	BL	BL	BL	d.(*1)
B118	BL	BL	BL	BL	d.(*1)
B119	BL	BL	BL	BL	BL
B120	BL	d.(*1)	BL	BL	n.a.
B121	BL	BL	BL	BL	BL
B122	BL	BL	BL	BL	n.a.
B123	BL	BL	BL	BL	n.a.
B124	BL	d.(*1)	BL	BL	n.a.

B125	BL	BL	BL	BL	n.a.
B126	BL	d.(*1)	BL	BL	n.a.
B127	BL	d.(*1)	BL	BL	n.a.
B128	BL	d.(*1)	BL	BL	n.a.
B129	BL	BL	BL	BL	BL
B130	BL	d.(*1)	BL	BL	n.a.
B131	BL	d.(*1)	BL	BL	n.a.
B132	BL	d.(*1)	BL	BL	n.a.
B133	BL	BL	BL	BL	n.a.
B134	BL	d.(*1)	BL	BL	n.a.
B135	BL	d.(*1)	BL	BL	n.a.
B136	BL	BL	BL	BL	n.a.
B137	BL	d.(*1)	BL	BL	n.a.
B138	BL	d.(*1)	BL	BL	n.a.
B139	BL	d.(*1)	BL	BL	n.a.
B140	BL	d.(*1)	BL	BL	n.a.
B141	BL	d.(*1)	BL	BL	n.a.
B142	BL	d.(*1)	BL	BL	n.a.
B143	BL	BL	BL	BL	n.a.
B144	BL	BL	BL	BL	n.a.
B145	BL	d.(*1)	BL	BL	n.a.
B146	BL	d.(*1)	BL	BL	n.a.
B147	BL	d.(*1)	BL	BL	n.a.
B148	BL	d.(*1)	BL	BL	n.a.
B149	BL	d.(*1)	BL	BL	n.a.
B150	BL	d.(*1)	BL	BL	n.a.
B151	BL	d.(*1)	BL	BL	n.a.
B152	BL	d.(*1)	BL	BL	n.a.
B153	BL	d.(*1)	BL	BL	n.a.
B154	BL	d.(*1)	BL	BL	n.a.
B155	BL	d.(*1)	BL	BL	n.a.
B156	BL	d.(*1)	BL	BL	n.a.
B157	BL	d.(*1)	BL	BL	n.a.
B158	BL	BL	BL	BL	n.a.
B159	BL	BL	BL	BL	n.a.
B160	BL	d.(*1)	BL	BL	n.a.
B161	BL	d.(*1)	BL	BL	n.a.
B162	BL	BL	d.(*1)	BL	n.a.
B163	BL	BL	BL	BL	n.a.
B164	BL	BL	BL	BL	BL
B165	BL	BL	BL	BL	BL
B166	BL	BL	BL	BL	BL
B167	BL	BL	BL	BL	d.(*1)

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B168	BL	BL	BL	BL	BL
B169	BL	BL	BL	BL	n.a.
B170	BL	BL	BL	BL	n.a.
B171	BL	BL	BL	BL	d.(*1)
B172	BL	BL	BL	BL	n.a.
B173	BL	BL	BL	BL	BL
B174	BL	BL	BL	BL	n.a.
B175	BL	BL	BL	BL	d.(*1)
B176	BL	BL	BL	BL	BL
B177	BL	BL	BL	BL	d.(*1)
B178	BL	BL	BL	BL	n.a.
B179	BL	BL	BL	BL	n.a.
B180	BL	BL	BL	BL	BL
B181	BL	BL	BL	BL	BL
B182	BL	BL	BL	BL	n.a.
B183	BL	BL	BL	BL	n.a.
B184	BL	BL	BL	BL	d.(*1)
B185	BL	BL	BL	BL	BL
B186	BL	BL	BL	BL	BL
B187	BL	BL	BL	BL	BL
B188	BL	BL	BL	BL	BL
B189	BL	BL	BL	BL	BL
B190	BL	BL	BL	BL	BL
B191	BL	BL	BL	BL	BL
B192	BL	BL	BL	BL	BL
B193	BL	BL	BL	BL	BL
B194	BL	BL	BL	BL	n.a.
B195	BL	BL	BL	BL	BL
B196	BL	BL	BL	BL	n.a.
B197	BL	BL	BL	BL	n.a.
B198	BL	BL	BL	BL	n.a.
B199	BL	BL	BL	BL	n.a.
B200	BL	BL	BL	BL	d.(*1)
B201	BL	BL	BL	BL	BL
B202	BL	BL	BL	BL	n.a.
B203	BL	BL	BL	BL	n.a.
B204	BL	BL	BL	BL	BL
B205	BL	BL	BL	BL	BL
B206	BL	BL	BL	BL	BL
B207	BL	BL	BL	BL	BL
B208	BL	BL	BL	BL	d.(*1)
B209	BL	BL	BL	BL	BL
B210	BL	BL	BL	BL	BL



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B211	BL	BL	BL	BL	BL
B212	BL	BL	BL	BL	BL
B213	BL	BL	BL	BL	n.a.
B214	BL	BL	BL	BL	BL
B215	BL	BL	BL	BL	BL
B216	BL	BL	BL	BL	n.a.
B217	BL	BL	BL	BL	BL
B218	BL	BL	BL	BL	BL
B219	BL	BL	BL	BL	d.(*1)
B220	BL	BL	BL	BL	d.(*1)
B221	BL	BL	BL	BL	BL
B222	BL	BL	BL	BL	d.(*1)
B223	BL	BL	BL	BL	d.(*1)
B224	BL	BL	BL	BL	BL
B225	BL	BL	BL	BL	d.(*1)
B226	BL	BL	BL	BL	d.(*1)
B227	BL	BL	BL	BL	BL
B228	BL	BL	BL	BL	n.a.
B229	BL	BL	BL	BL	n.a.
B230	BL	BL	BL	BL	BL
B231	BL	d.(*1)	BL	BL	BL
B232	BL	BL	BL	BL	BL
B233	BL	BL	BL	BL	BL
B234	BL	BL	d.(*1)	BL	n.a.
B235	BL	BL	BL	BL	BL
B236	BL	BL	BL	BL	BL
B237	BL	BL	BL	BL	BL
B238	BL	BL	BL	BL	d.(*1)
B239	BL	BL	BL	BL	n.a.
B240	BL	BL	BL	BL	BL
B241	BL	BL	BL	BL	BL
B243	BL	BL	BL	BL	BL
B244	BL	BL	BL	BL	BL
B245	BL	BL	BL	BL	n.a.
B246	BL	BL	BL	BL	n.a.
B247	BL	BL	BL	BL	n.a.
B248	BL	BL	BL	BL	n.a.
B249	BL	BL	BL	BL	d.(*1)
B250-2	BL	BL	BL	BL	BL
B251	BL	BL	BL	BL	BL
B252	BL	BL	BL	BL	BL
B253	BL	BL	BL	BL	n.a.
B254	BL	BL	BL	BL	n.a.

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B255	BL	BL	BL	BL	BL
B256	BL	BL	BL	BL	n.a.
B257	BL	BL	BL	BL	n.a.
B258	BL	BL	BL	BL	BL
B259	BL	BL	BL	BL	BL
B260	BL	BL	BL	BL	BL
B261	BL	BL	BL	BL	BL
B262	BL	BL	BL	BL	BL
B263	BL	BL	BL	BL	BL
B264	BL	BL	BL	BL	BL
B265	BL	BL	BL	BL	BL
B266	BL	BL	BL	BL	BL
B267-1	BL	BL	BL	BL	BL
B268	BL	BL	BL	BL	d.(*1)
B269	BL	BL	BL	BL	n.a.
B273	BL	d.(*1)	BL	BL	n.a.
B274	BL	BL	BL	BL	n.a.
B275	BL	BL	BL	BL	n.a.
B276	BL	BL	d.(*1)	BL	n.a.
B277	BL	BL	BL	BL	d.(*1)
B278	BL	BL	BL	BL	BL
B279	BL	BL	BL	BL	n.a.
B280-1	BL	BL	BL	BL	BL
B281-1	BL	BL	BL	BL	BL
B282-1	BL	BL	BL	BL	BL
B283	BL	BL	BL	BL	BL
B284	BL	BL	BL	BL	n.a.
B285	BL	BL	BL	BL	n.a.
B286	BL	BL	BL	BL	n.a.

**Abbreviation:** Pb = Lead  
 Cd = Cadmium  
 Hg = Mercury  
 Cr = Chromium  
 Br = Bromine  
 n.a. = Not applicable  
 BL = Below limit  
 OL = Over limit  
 d. = Detected

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**Remark:**

- (\*1) The screening result was detected in the inconclusive region or over limits, thus the further wet chemistry tests are suggested.
- (\*2) Component(s)/ materials(s) with an area of less than 2 mm x 2 mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.  
 For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.  
 Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.  
 All other materials will be sampled and tested at one test point representatively.

XRF Screening limits for different matrices :

Material	Concentration (%)				
	Cd	Cr	Pb	Hg	Br
<b>Polymeric</b>	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	BL≤0.029<X
<b>Metallic</b>	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	n.a.
<b>Composite materials</b>	BL≤0.004<X<0.016≤ OL	BL≤0.044<X	BL≤0.047<X<0.153≤ OL	BL≤0.046<X< 0.154≤OL	BL≤0.024<X

Remark: The symbol "X" marks the region where further investigation is necessary.

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**Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)**

Test Method: Total Cadmium, Lead, Mercury, Chromium- Ref. to IEC 62321-4:2013+AMD1:2017 and IEC 62321-5:2013

- Chromium (VI)  
 - For Metal material - Ref. to IEC 62321-7-1:2015  
 - For Plastic or Electronic material – Ref. to IEC 62321-7-2:2017  
 - For Leather material - # Ref. to EN ISO 17075-1:2017

PBBs, PBDEs – Ref. to IEC 62321-6:2015

**Test Result:**

	<b>Cd</b>	<b>Cr(VI)</b>	<b>Pb</b>	<b>Hg</b>	<b>PBBs</b>	<b>PBDEs</b>
<b>Maximum Permissible Limit (%)</b>	0.01	0.1	0.1	0.1	0.1	0.1

<b>Material No.</b>	<b>(%)</b>					
	<b>Cd</b>	<b>Cr<sup>^</sup></b>	<b>Pb</b>	<b>Hg</b>	<b>PBBs</b>	<b>PBDEs</b>
	<b>RL (%)</b>					
	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.01</b>	<b>0.01</b>
B006	n.a.	n.a.	3.73(*3)	n.a.	n.a.	n.a.
B011	n.a.	n.a.	3.48(*3)	n.a.	n.a.	n.a.
B015	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B017	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B018	n.a.	n.a.	3.40(*3)	n.a.	n.a.	n.a.
B019	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B024	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B027	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B028	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B029-1	0.006	n.a.	3.68(*3)	n.a.	n.a.	n.a.
B045	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B051	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B058	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B060	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B061	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B075	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B085	n.a.	n.a.	2.88(*3)	n.a.	n.a.	n.a.
B092	n.a.	n.a.	2.74(*3)	n.a.	n.a.	n.a.
B094	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B095	n.a.	n.a.	n.a.	n.a.	< RL	< RL

B096	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B117	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B118	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B162	n.a.	n.a.	3.73(*3)	n.a.	n.a.	n.a.
B167	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B171	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B175	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B177	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B184	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B200	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B208	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B219	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B220	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B222	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B223	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B225	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B226	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B234	n.a.	n.a.	2.84(*3)	n.a.	n.a.	n.a.
B238	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B249	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B268	n.a.	n.a.	n.a.	n.a.	< RL	< RL
B276	n.a.	n.a.	2.92(*3)	n.a.	n.a.	n.a.
B277	n.a.	n.a.	n.a.	n.a.	< RL	< RL

Material No.	Chromium VI content for metal materials (µg/cm <sup>2</sup> ) (*1) RL: 0.10 µg/cm <sup>2</sup>
	B062
B063	Negative
B082	Negative
B083	Negative
B084	Negative
B086	Negative
B087	Negative
B088	Negative
B089	Negative
B090	Negative
B097	Negative
B120	Negative

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B124	Negative
B126	Negative
B127	Negative
B128	Negative
B130	Negative
B131	Negative
B132	Negative
B134	Negative
B135	Negative
B137	Negative
B138	Negative
B139	Negative
B140	Negative
B141	Negative
B142	Negative
B145	Negative
B146	Negative
B147	Negative
B148	Negative
B149	Negative
B150	Negative
B151	Negative
B152	Negative
B153	Negative
B154	Negative
B155	Negative
B156	Negative
B157	Negative
B160	Negative
B161	Negative
B273	Negative

Material No.	Chromium VI content for other materials (%) RL: 0.01%
B231	< RL

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**Abbreviation:** Pb = Lead  
 Cd = Cadmium  
 Hg = Mercury  
 Cr = Chromium  
 Cr (VI) = Chromium (VI)  
 PBBs = Total Polybrominated Biphenyls  
 PBDEs = Total Polybrominated Diphenyl Ethers  
 < = Less than  
 RL = Reporting Limit  
 n.a. = Not Applicable  
 ^ = The total Chromium have been determined  
 % = Percentage

**Remark:**

(\*1) The Chromium (VI) content of metal sample in surface layer have been confirmed with reference to IEC 62321-7-1:2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1µg/cm <sup>2</sup>	The sample is negative (-ve) for Cr(VI). The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating
Inconclusive	≥0.1µg/cm <sup>2</sup> and ≤0.13 µg/cm <sup>2</sup>	The result is considered to be inconclusive. Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trails for the final determination.
Positive	>0.13 µg/cm <sup>2</sup>	The sample is positive (+ve) for Cr(VI). Concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

(\*2) The Chromium (VI) content of plastic sample or electronic sample have been confirmed with reference to IEC 62321-7-2:2017

(\*3) According to Annex of 2011/65/EU, "Copper alloy containing up to 4% lead by weight" is exempt from the requirements of Article 4(1). This exemption applies to testing sample No. B006, B011, B018, B029-1, B085, B092, B162, B234, B276.

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**BBP, DBP, DEHP, DIBP content**

Test Method: IEC 62321-8:2017

**Test Result:**

	<b>BBP</b>	<b>DBP</b>	<b>DEHP</b>	<b>DIBP</b>
<b>Maximum permissible Limit (%)</b>	0.1	0.1	0.1	0.1

<b>Test No.</b>	<b>Material No.</b>	<b>(%)</b>			
		<b>BBP</b>	<b>DBP</b>	<b>DEHP</b>	<b>DIBP</b>
		<b>RL (%)</b>			
		<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>
T001	B002 + B005 + B007 + B015 + B019	< RL	< RL	< RL	< RL
T002	B003 + B283	< RL	< RL	< RL	< RL
T003	B008 + B032 + B034	< RL	< RL	< RL	< RL
T004	B020 + B021 + B023 + B024 + B027	< RL	< RL	< RL	< RL
T005	B028 + B030 + B031 + B038 + B039	< RL	< RL	< RL	< RL
T006	B040 + B041 + B043 + B045 + B058	< RL	< RL	< RL	< RL
T007	B051 + B052 + B055	< RL	< RL	< RL	< RL
T008	B060 + B061 + B064 + B065 + B066	< RL	0.006	0.008	< RL
T009	B067	< RL	< RL	0.006	< RL
T010	B070-1	< RL	< RL	< RL	< RL
T011	B071	< RL	0.008	< RL	< RL
T012	B072	< RL	0.006	< RL	< RL
T013	B073	< RL	0.008	< RL	< RL
T014	B075 + B076 + B077 + B078 + B080	< RL	0.008	< RL	< RL
T015	B091 + B093 + B094 + B095 + B117	< RL	< RL	< RL	< RL
T016	B096 + B217	< RL	< RL	< RL	< RL
T017	B100 + B101 + B103 + B105 + B107	< RL	0.006	< RL	< RL



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T018	B108 + B109 + B110 + B111 + B112	< RL	< RL	< RL	< RL
T019	B114	< RL	< RL	< RL	< RL
T020	B118 + B119 + B121 + B129 + B164	< RL	0.008	0.007	< RL
T021	B165 + B166 + B167 + B168 + B171	< RL	< RL	< RL	< RL
T022	B177 + B180 + B181 + B184 + B186	< RL	< RL	< RL	< RL
T023	B187 + B189 + B190 + B191 + B192	< RL	< RL	< RL	< RL
T024	B193 + B195 + B200 + B201 + B214	< RL	< RL	< RL	< RL
T025	B215 + B218 + B219 + B220 + B221	< RL	< RL	< RL	< RL
T026	B222 + B223 + B224 + B225 + B226	< RL	< RL	< RL	< RL
T027	B227 + B230 + B232 + B233 + B235	< RL	< RL	< RL	< RL
T028	B236 + B237 + B238 + B240 + B241	< RL	< RL	< RL	< RL
T029	B249	< RL	< RL	< RL	< RL
T030	B250-2	< RL	0.018	0.009	< RL
T031	B251	< RL	0.033	< RL	< RL
T032	B252	< RL	< RL	< RL	< RL
T033	B255	< RL	< RL	< RL	< RL
T034	B258 + B259 + B260 + B261 + B262	< RL	< RL	< RL	< RL
T035	B263	< RL	< RL	< RL	< RL
T036	B264	< RL	< RL	< RL	< RL
T037	B265	< RL	< RL	< RL	< RL
T038	B266	< RL	< RL	< RL	< RL
T039	B267-1	< RL	0.017	0.018	< RL
T040	B268	< RL	< RL	< RL	< RL
T041	B277	< RL	< RL	< RL	< RL
T042	B278	< RL	< RL	< RL	< RL
T043	B280-1	< RL	0.006	< RL	< RL

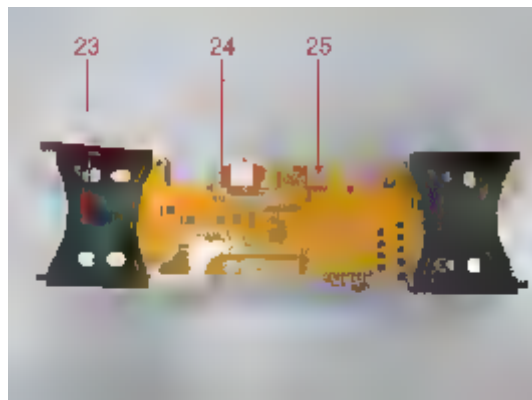
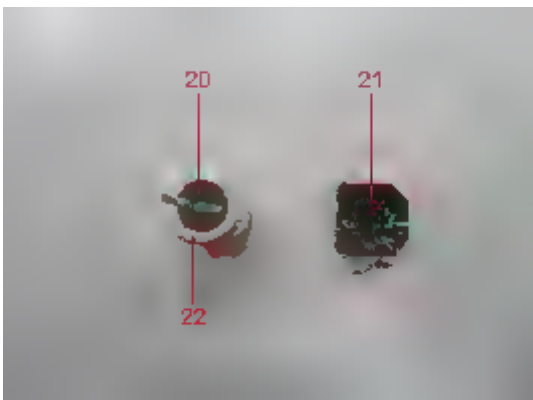
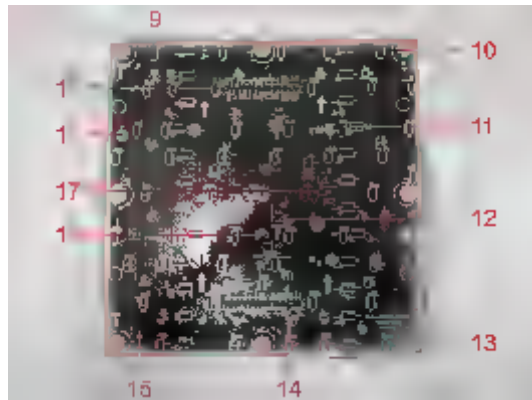
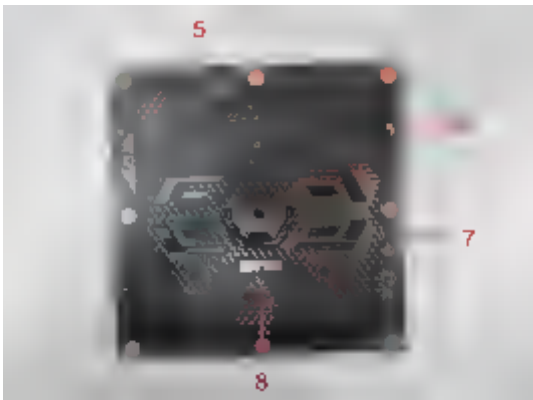
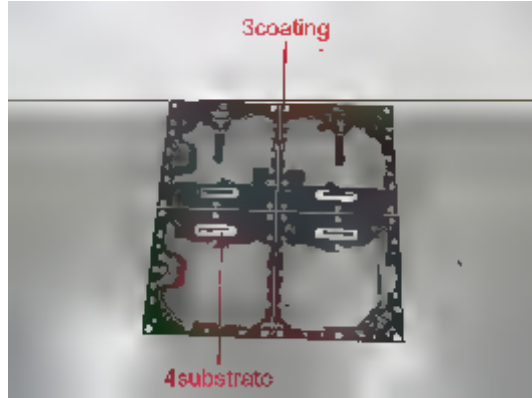
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T044	B281-1	< RL	0.008	0.007	< RL
T045	B282-1	< RL	0.009	0.006	< RL

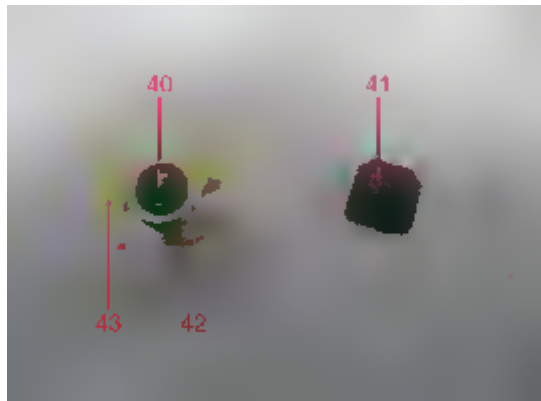
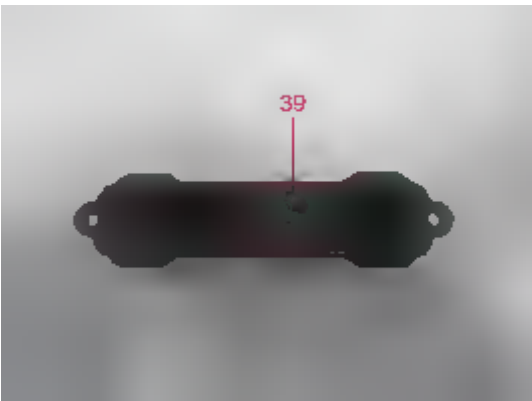
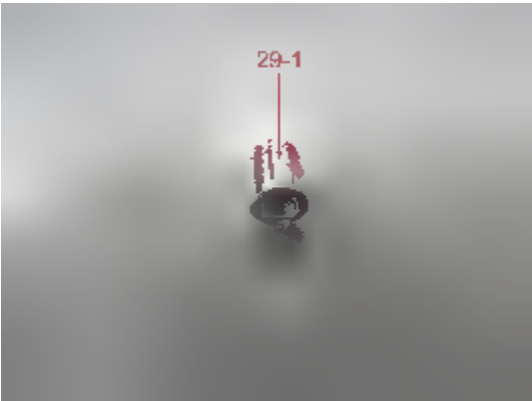
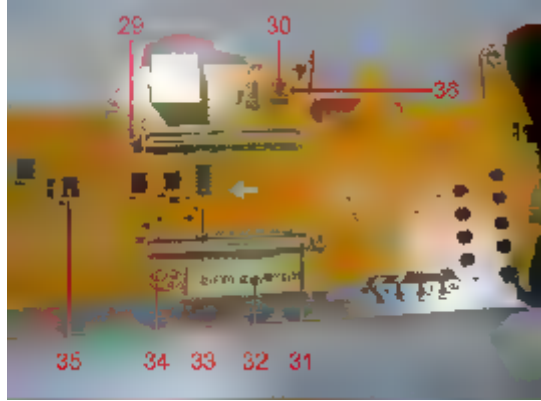
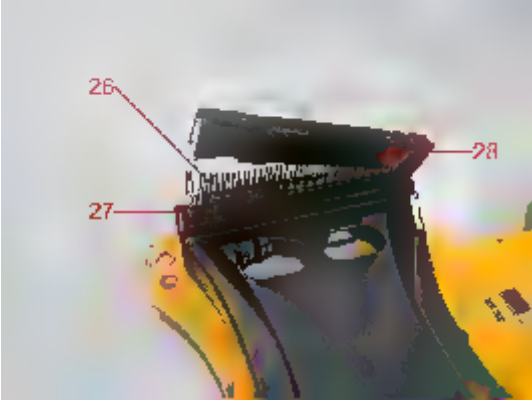
**Abbreviation:** BBP= Benzylbutyl phthalate  
 DBP= Dibutyl phthalate  
 DEHP= Bis(2-ethylhexyl) phthalate  
 DIBP= Diisobutyl phthalate  
 < = less than  
 RL = Reporting Limit  
 %= percentage

**Remark:**  
 \* The maximum permissible limit is required from the amendment (EU) 2015/863 of RoHS Directive 2011/65/EU.

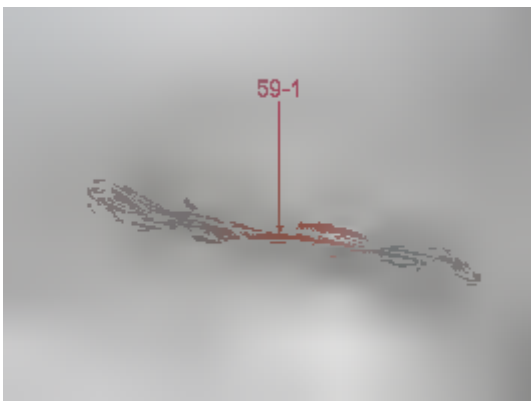
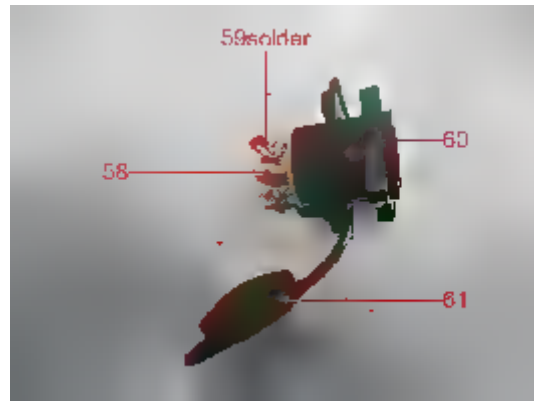
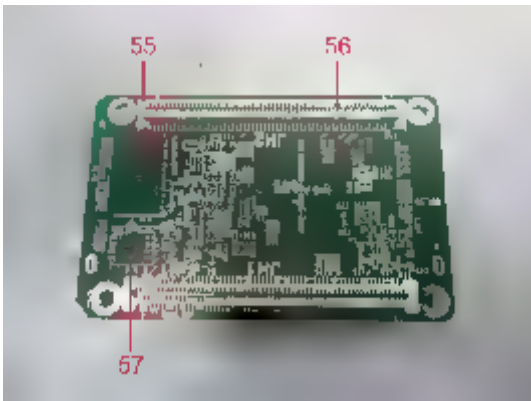
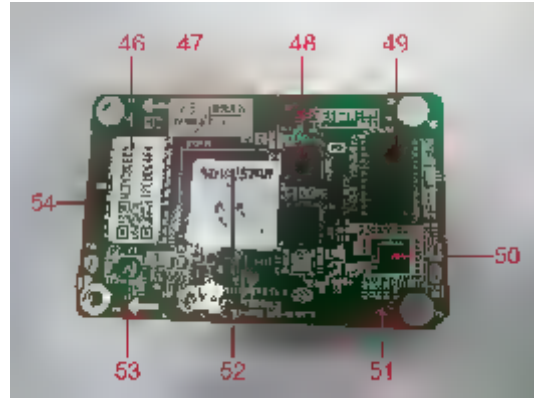
Sample Photos



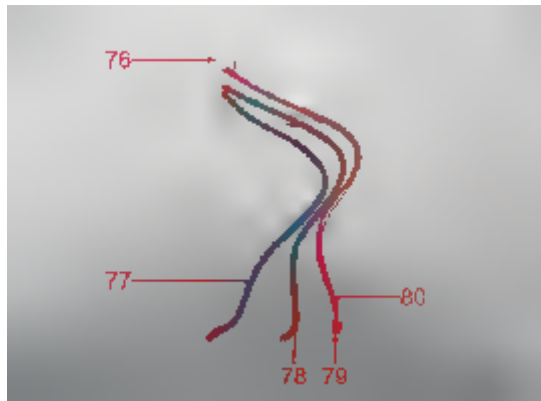
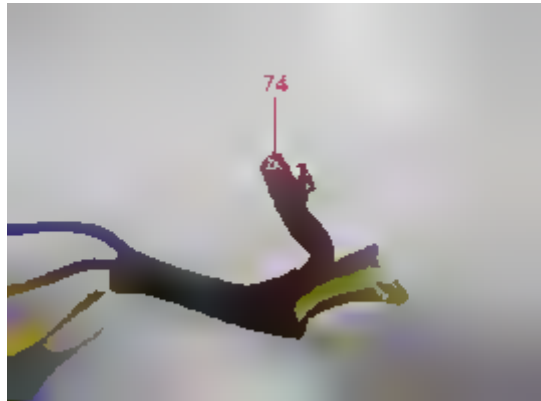
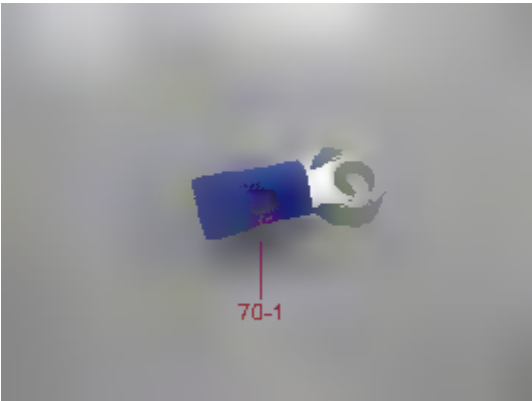
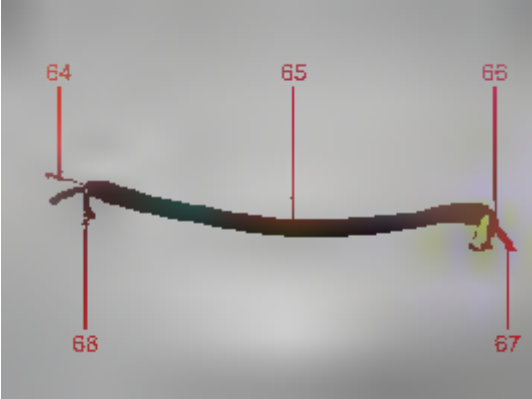
Sample Photos



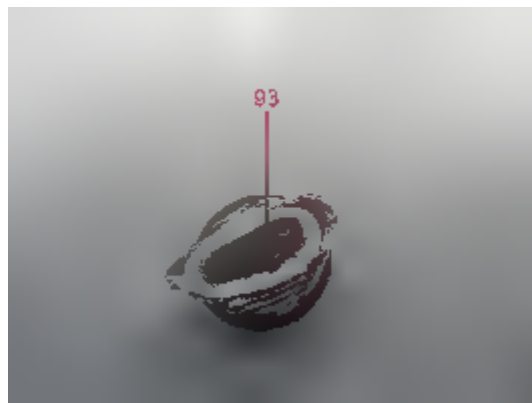
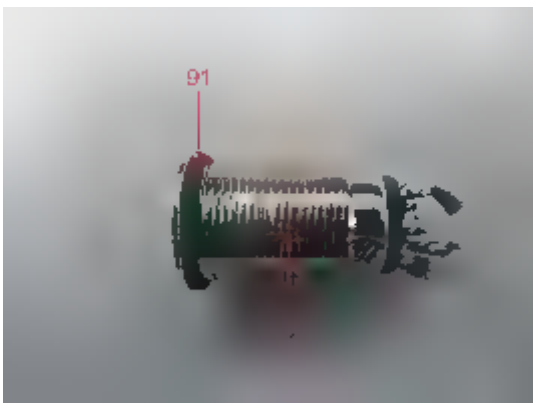
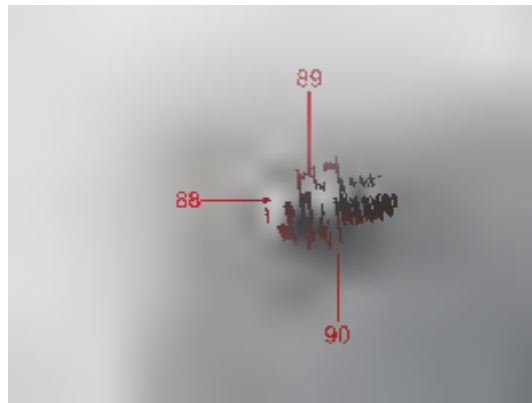
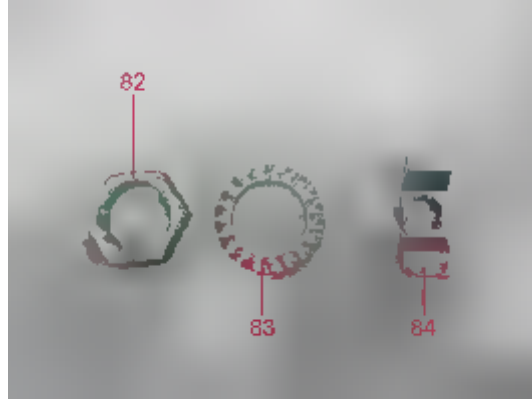
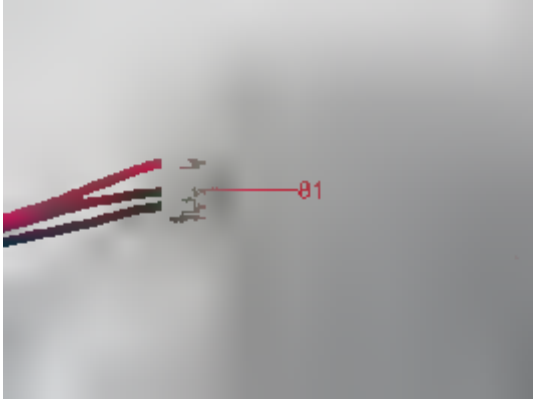
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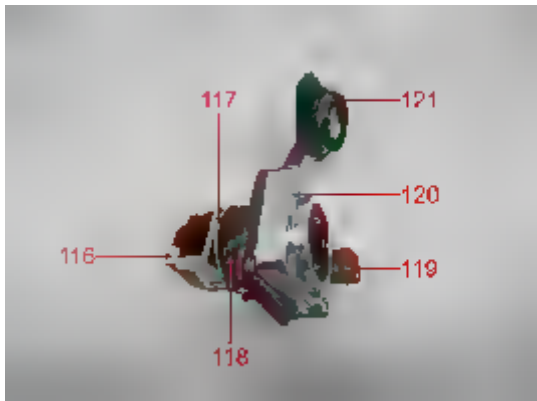
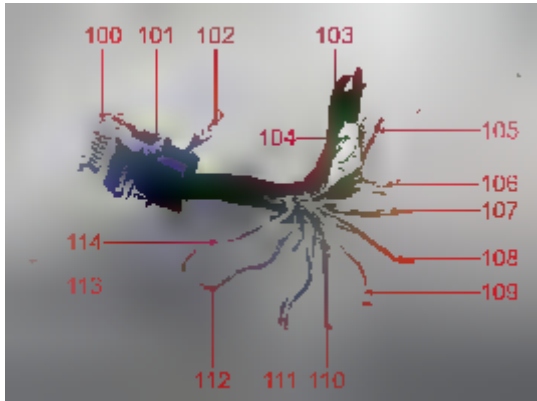
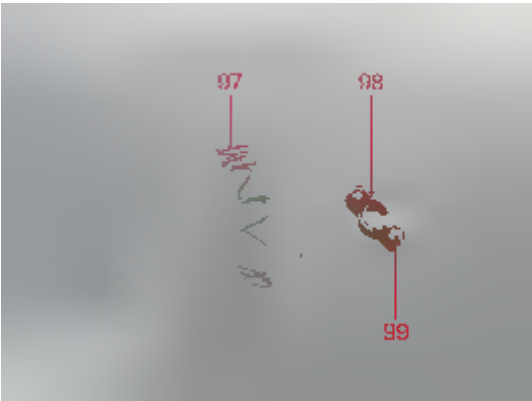
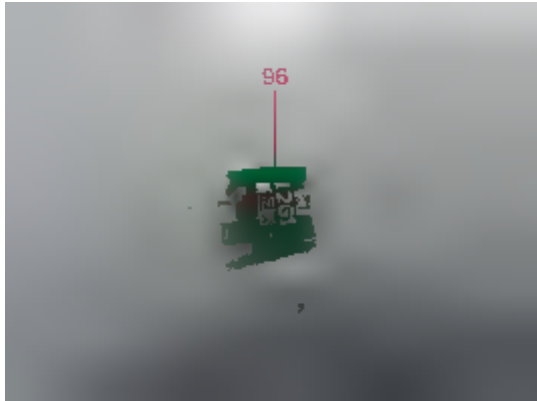
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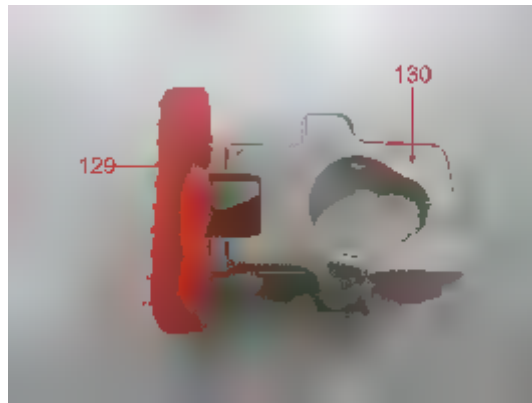
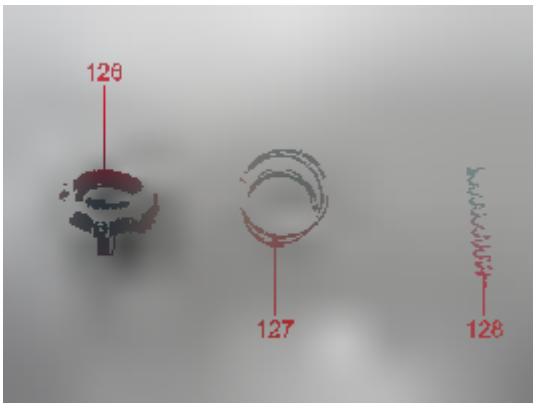


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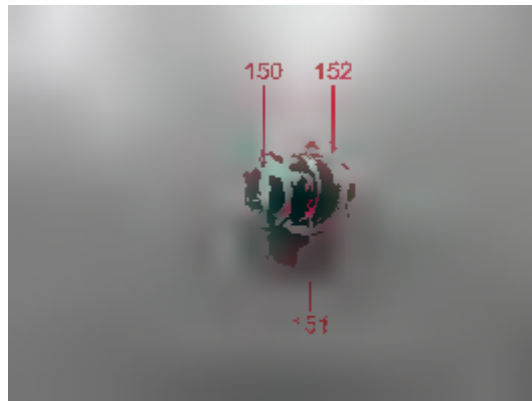
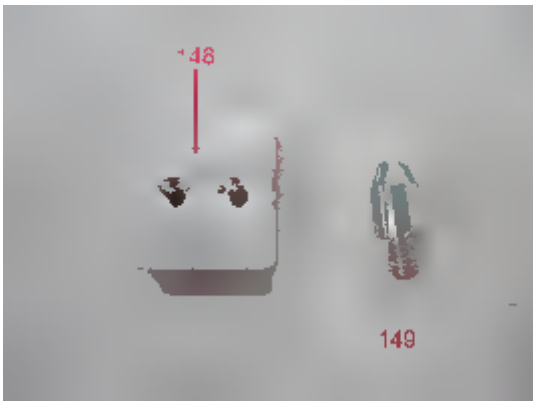
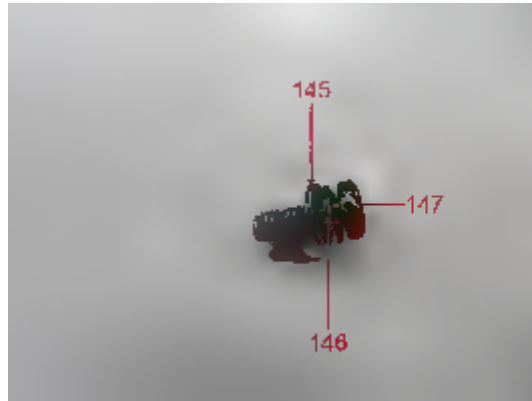
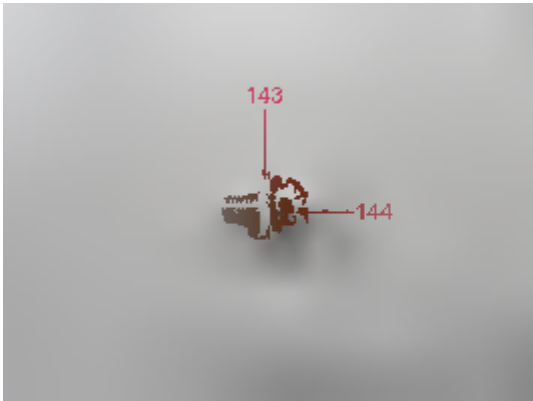
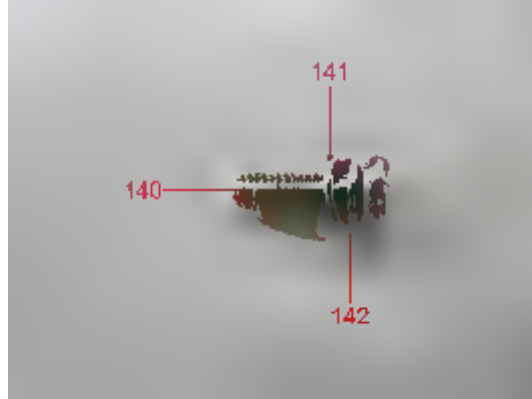
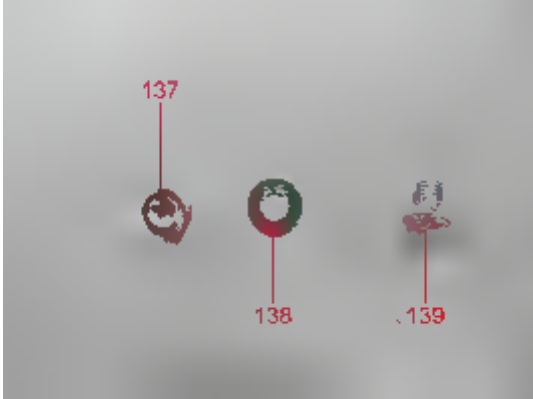


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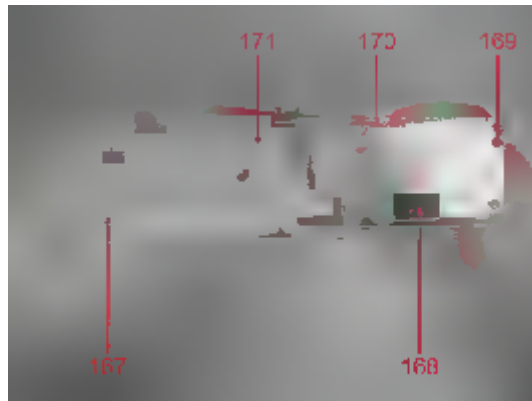
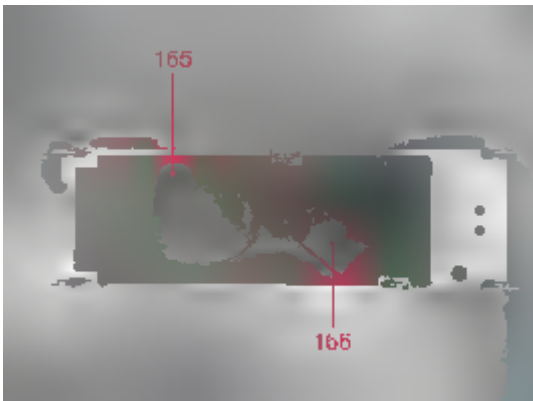
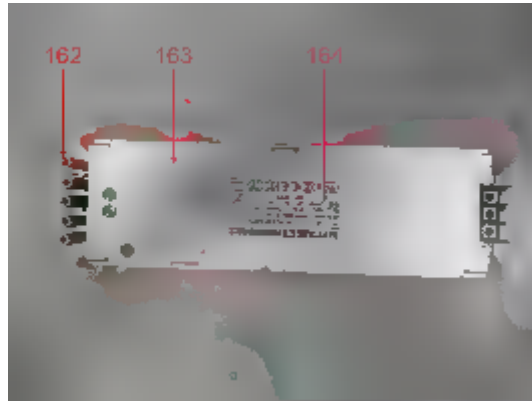
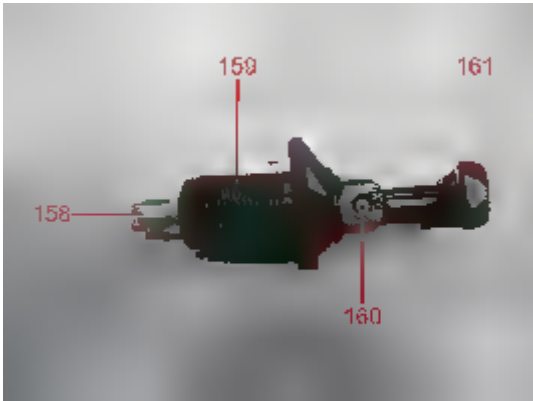
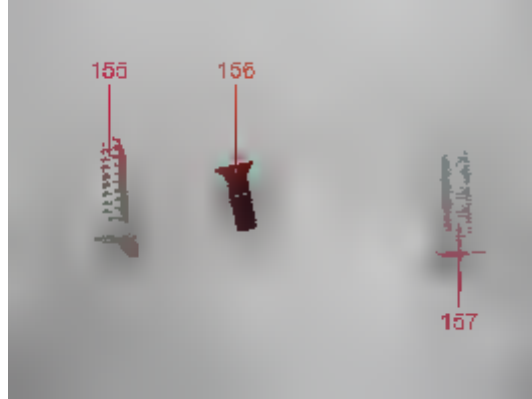
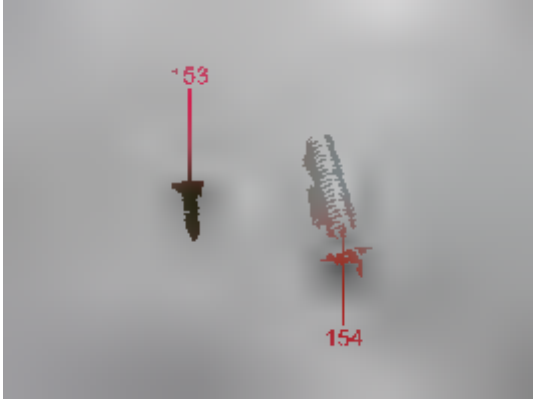


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Sample Photos

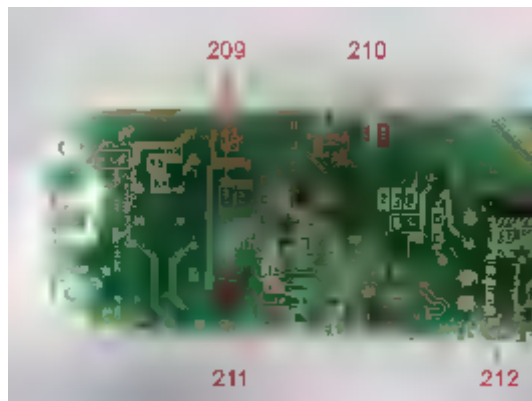
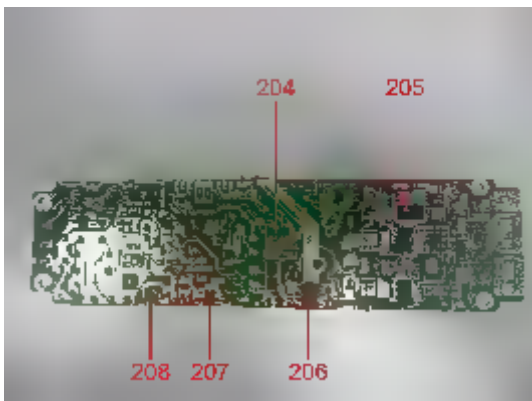
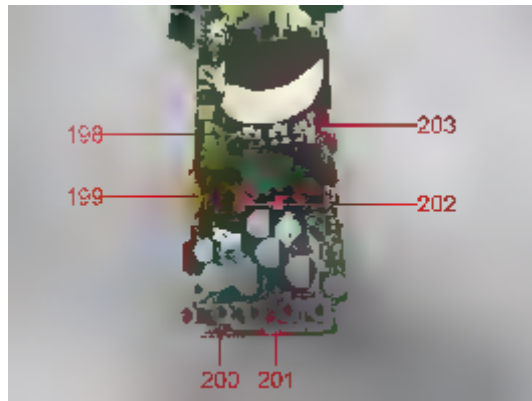
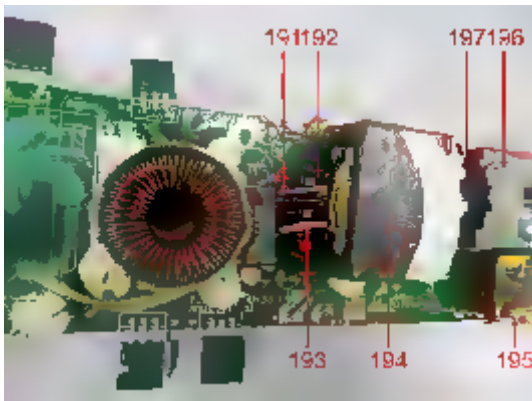
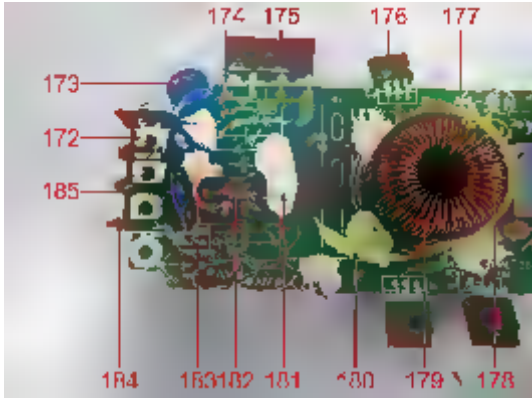


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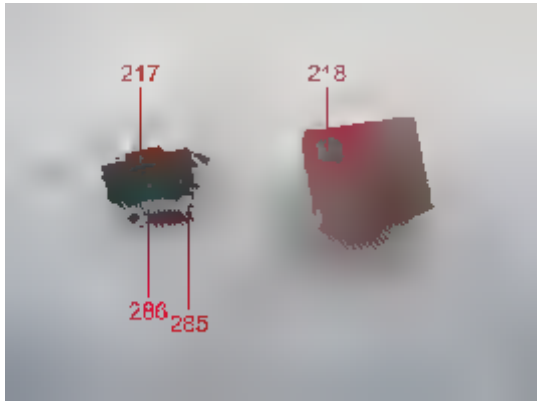
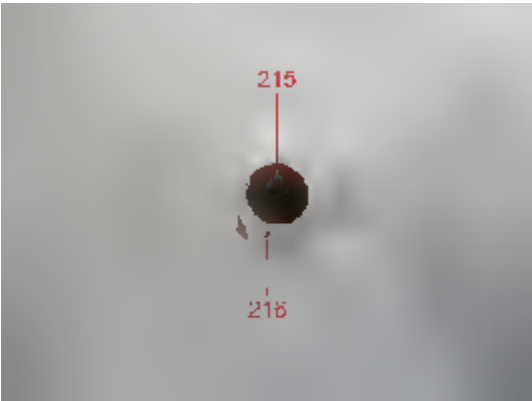
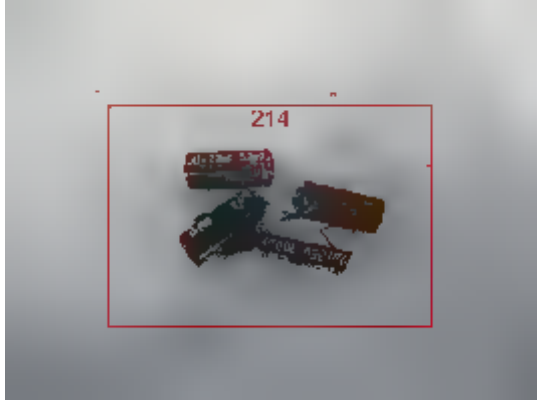
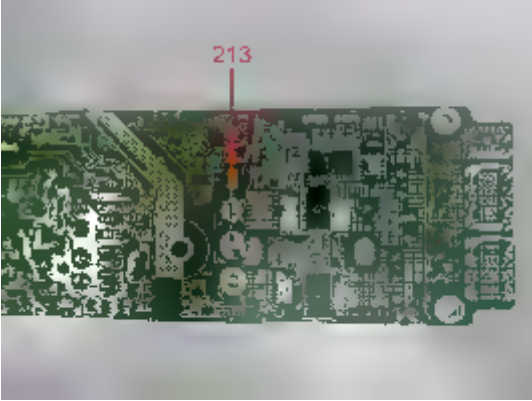


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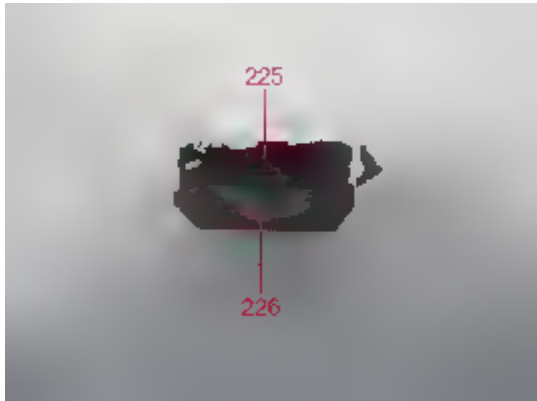
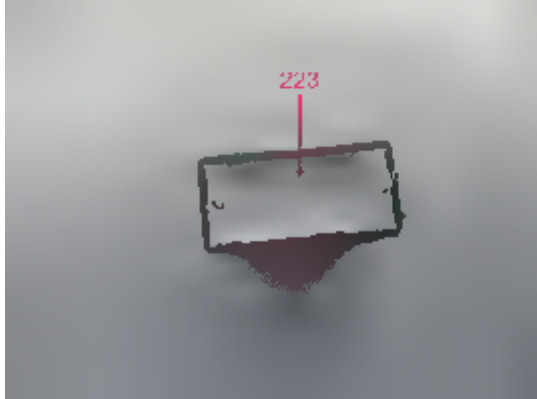
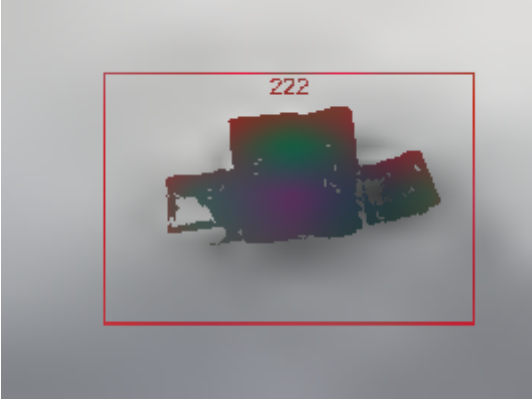
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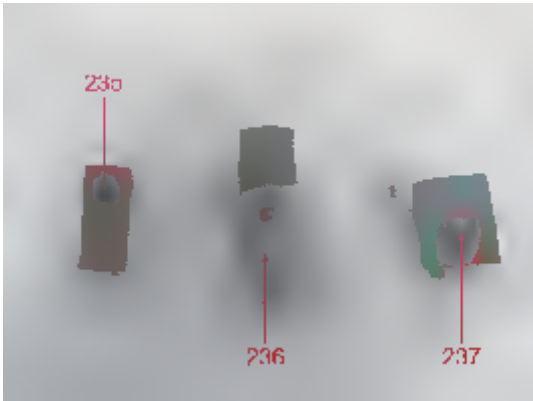
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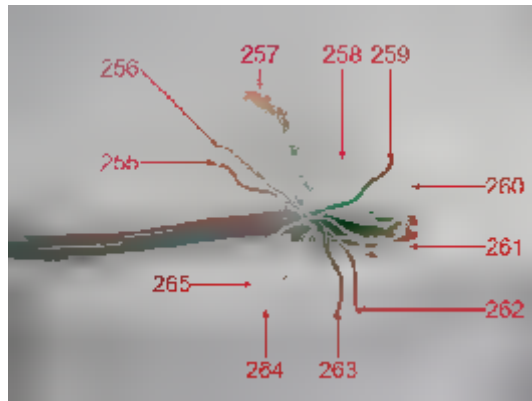
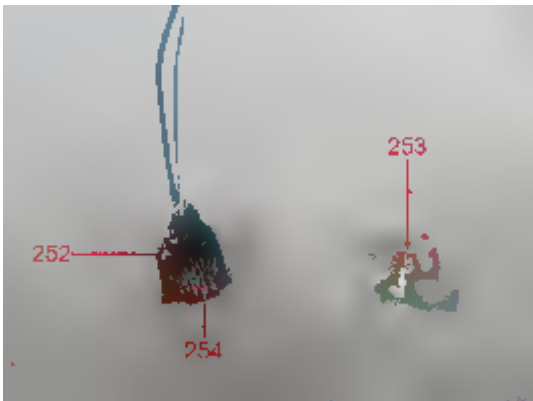
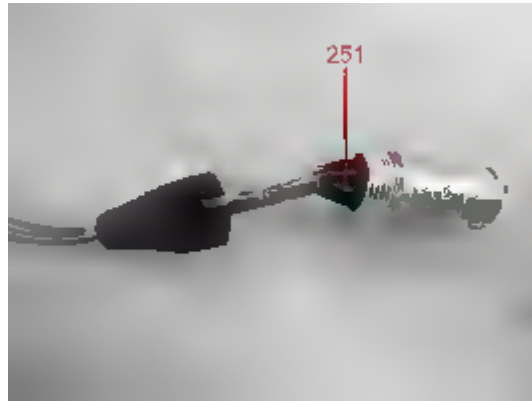
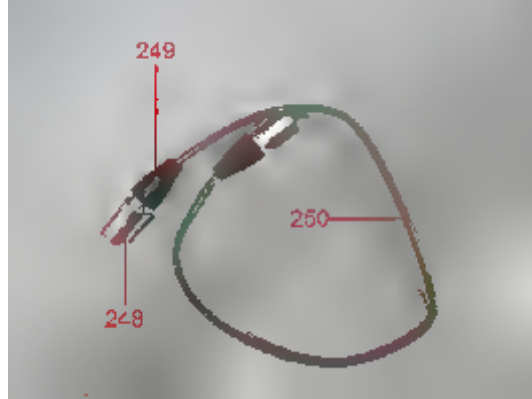
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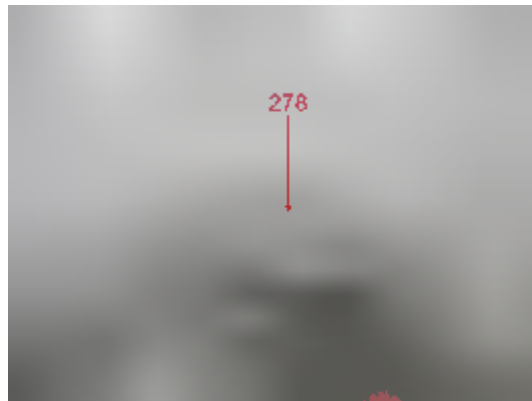
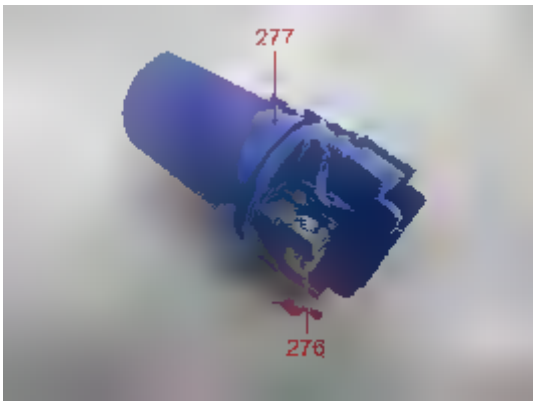
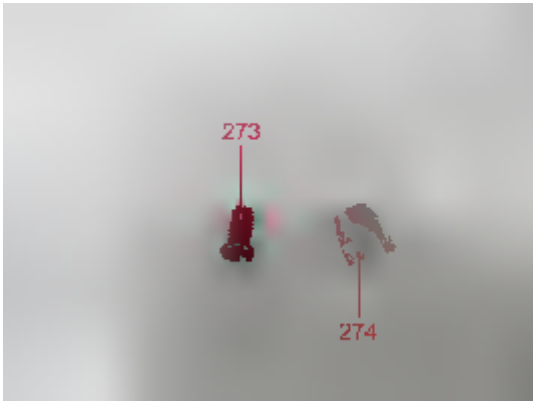


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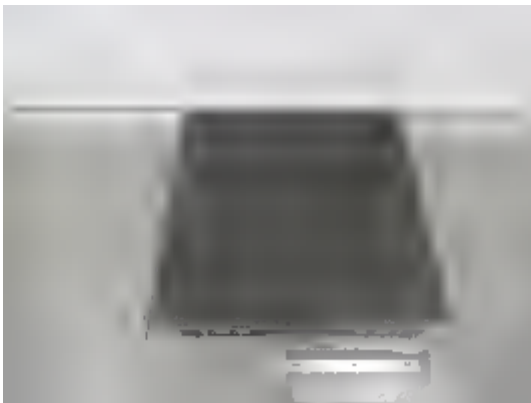
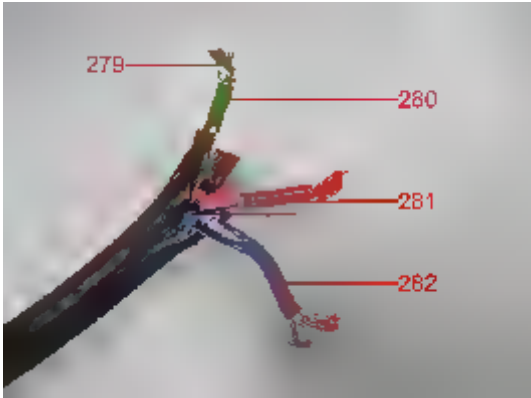




Sample Photos



Sample Photos



Product(Master2.6)

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