



**BUREAU
VERITAS**

TEST REPORT

LAB NO. : (6624)079-1417
DATE : Mar. 21, 2024
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Applicant:
LINHAI YULE LIGHTING CO.,LTD.
1-4F, NO. 5-28 SANJIA EAST ROAD, XUANZHU VILLAGE, DONGCHENG TOWN LINHAI CITY,
TAIZHOU, ZHEJIANG, CHINA

Date of Submission: 2023-06-05;2024-03-19
Date of Second Submission: 2023-06-09
Test Period: 2023-06-05 to 2023-06-12;2024-03-19 to 2024-03-21
Sample Mode: Sample Presentation
BV EE Ref. No.: /

Sample Description:	Sample(s) received is(are) stated to be: LED lighting		
Manufacturer:	/	Buyer:	/
Style No(s):	/	PO No.:	/
Country of Origin:	/	Country of Destination:	Oversea Country
Test Model:	/	Tested Additional Model(s):	/

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION
Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863	PASS

Remark :

- With the client's prior consent, below test is subcontracted to other lab/legal entities



REMARK

If there are questions or concerns on this report, please contact the following persons:

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BUREAU VERITAS CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)

Laboratory Test Location:
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PREPARED BY :

Ainnie

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This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

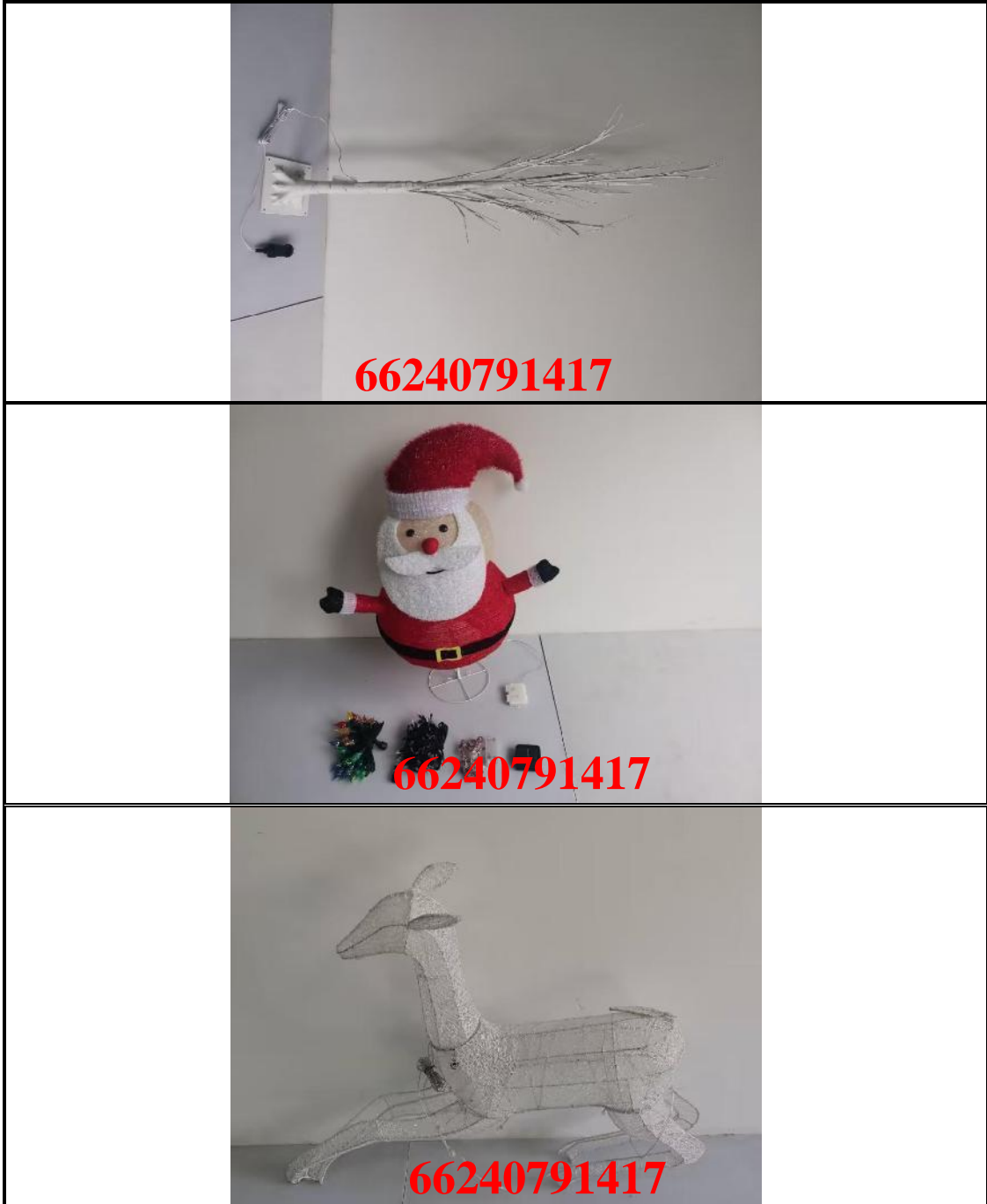


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Photo of the Submitted Sample

Tested Model





TEST RESULT

Compliance Test - Heavy Metals, Flame Retardants Content - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments

Test Method : See Appendix.

See Analytes and their corresponding Maximum Allowable Limit in Appendix

Parameter			Result					Conclusion
			Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium VI (Cr VI)	PBBs & PBDEs	
Unit			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
Test Item	Description	Location	-	-	-	-	-	-
1	White coating	Parts	ND	ND	ND	ND	ND	PASS
2	White plastic		ND	ND	ND	ND	ND	PASS
3	White plastic		ND	ND	ND	ND	ND	PASS
4	White plastic tape		ND	ND	ND	ND	ND	PASS
5	Silvery metal		ND	ND	ND	ND	NA	PASS
6	Black plastic		ND	ND	ND	ND	ND	PASS
7	Black plastic		ND	ND	ND	ND	ND	PASS
8	Black plastic		ND	ND	ND	ND	ND	PASS
9	Copper metal		ND	ND	ND	ND	NA	PASS
10	Silvery metal		ND	ND	ND	ND	NA	PASS
11	White plastic		ND	ND	ND	ND	ND*	PASS
12	White plastic wire jacket		ND	ND	ND	ND	ND	PASS
13	Copper metal wire		ND	ND	ND	ND	NA	PASS
14	White plastic		ND	ND	ND	ND	ND	PASS
15	Silvery metal		ND	ND	ND	ND	NA	PASS
16	Transparent lamp bead		ND	ND	ND	ND	ND*	PASS
17	White plastic		ND	ND	ND	ND	ND	PASS
18	White plastic		ND	ND	ND	ND	ND	PASS
19	Silvery metal		ND	ND	ND	ND	NA	PASS
20	Silvery metal solder ^{R1}		ND	ND	ND	ND	NA	PASS
21	Dark green plastic wire jacket		ND	ND	ND	ND	ND	PASS
22	Transparent plastic		ND	ND	ND	ND	ND	PASS
23	Dark green plastic		ND	ND	ND	ND	ND	PASS
24	Red and green plastic		ND	ND	ND	ND	ND	PASS
25	Silvery metal wire		ND	ND	ND	ND	NA	PASS
26	Silvery metal screw		ND	ND	ND	ND	NA	PASS
27	Transparent plastic		ND	ND	ND	ND	ND	PASS
28	Silvery metal		ND	ND	ND	ND	NA	PASS
29	Silvery metal		ND	ND	ND	ND	NA	PASS
30	Black plastic		ND	ND	ND	ND	ND	PASS
31	Transparent plastic wire jacket		ND	ND	ND	ND	ND	PASS
32	Yellow plastic		ND	ND	ND	ND	ND	PASS
33	Red plastic		ND	ND	ND	ND	ND	PASS
34	Green plastic		ND	ND	ND	ND	ND	PASS
35	Blue plastic		ND	ND	ND	ND	ND	PASS



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TEST RESULT

Compliance Test - Phthalate Test – (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : Reference to IEC 62321-8: 2017.

Maximum Allowable Limit : 0.1% (Each)

Parameter	CAS No.	Unit	MDL	Result		
				1+4	2+6+39	3+22+27+38
Dibutyl phthalate (DBP)	84-74-2	%	0.005	ND	ND	ND
Butyl benzyl phthalate (BBP)	85-68-7	%	0.005	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	%	0.005	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	ND	ND	ND
Conclusion	-	-	-	PASS	PASS	PASS

Parameter	CAS No.	Unit	MDL	Result		
				7+8	11+16+18+24+30	12+21+31
Dibutyl phthalate (DBP)	84-74-2	%	0.005	ND	ND	ND
Butyl benzyl phthalate (BBP)	85-68-7	%	0.005	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	%	0.005	ND	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	ND	ND	ND
Conclusion	-	-	-	PASS	PASS	PASS

Parameter	CAS No.	Unit	MDL	Result		
				14+36+37	17+23	32+33+34+35
Dibutyl phthalate (DBP)	84-74-2	%	0.005	ND	ND	ND
Butyl benzyl phthalate (BBP)	85-68-7	%	0.005	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	%	0.005	ND	0.019	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	ND	ND	ND
Conclusion	-	-	-	PASS	PASS	PASS

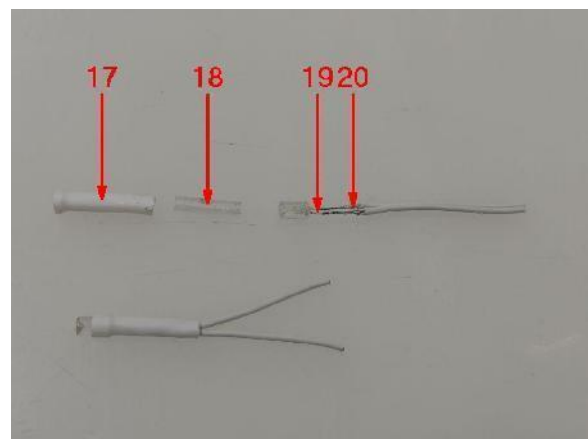
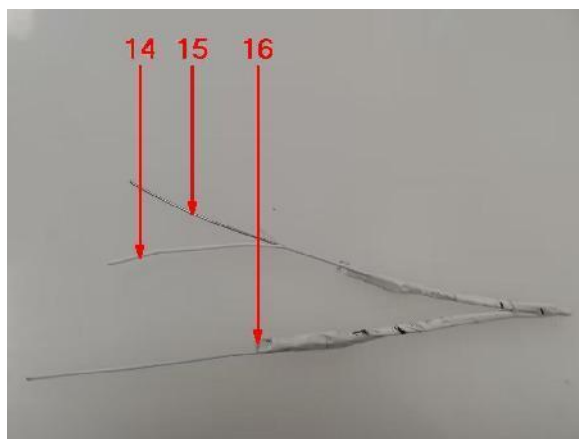
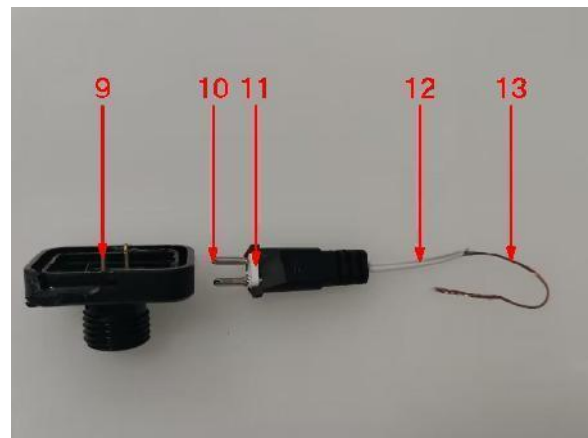
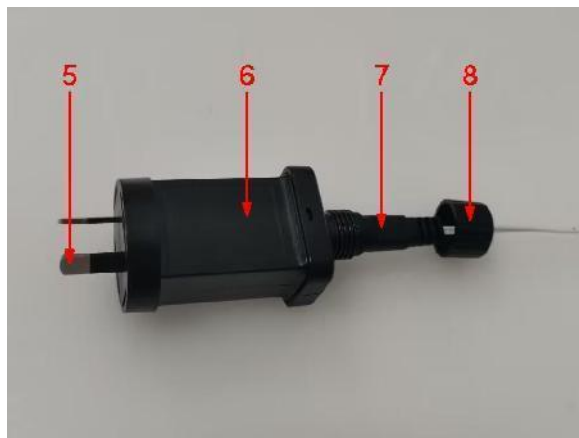
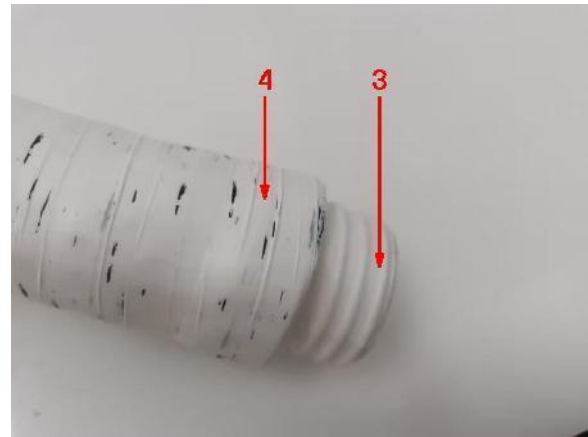
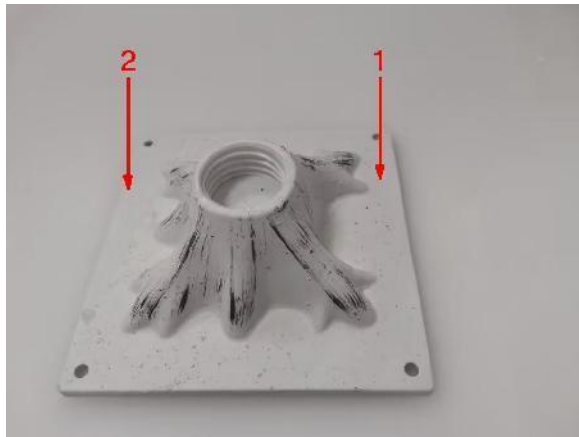
Parameter	CAS No.	Unit	MDL	Result		
				41	42	43
Dibutyl phthalate (DBP)	84-74-2	%	0.005	ND	ND	ND
Butyl benzyl phthalate (BBP)	85-68-7	%	0.005	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	%	0.005	0.007	ND	ND
Diisobutyl phthalate (DIBP)	84-69-5	%	0.005	ND	ND	ND
Conclusion	-	-	-	PASS	PASS	PASS

Note: mg/kg= milligram per kilogram % = percentage 1 mg/kg = 0.0001%
MDL = Method Detection Limit ND = Not Detected (< MDL) “-“ = Not Regulated

Comment :

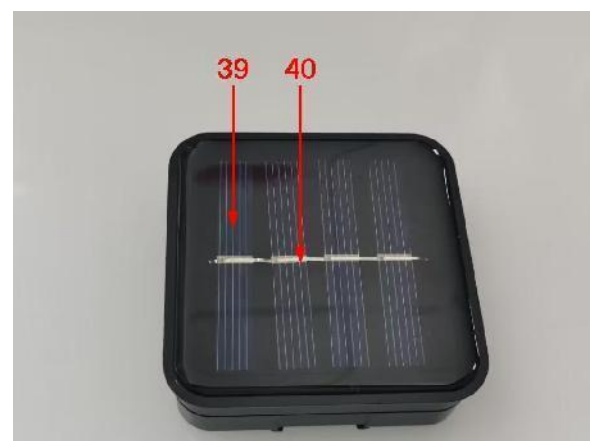
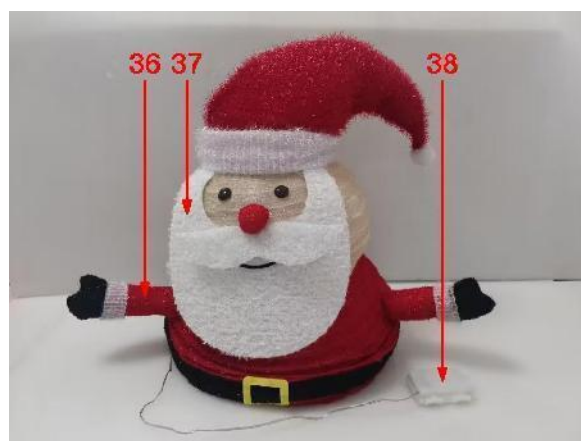
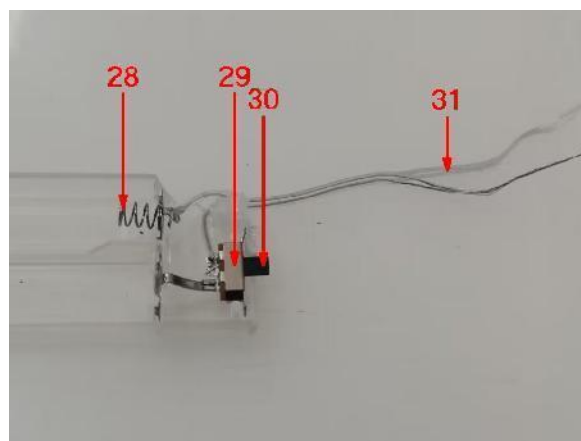
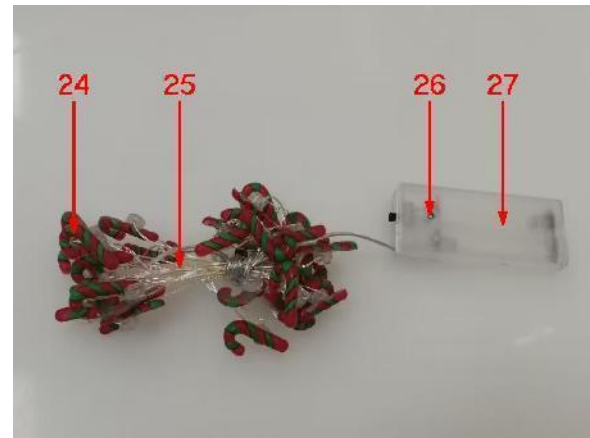
Photograph(s) [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

Photograph depicting Test Item(s)



Photograph(s) [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

Photograph depicting Test Item(s)



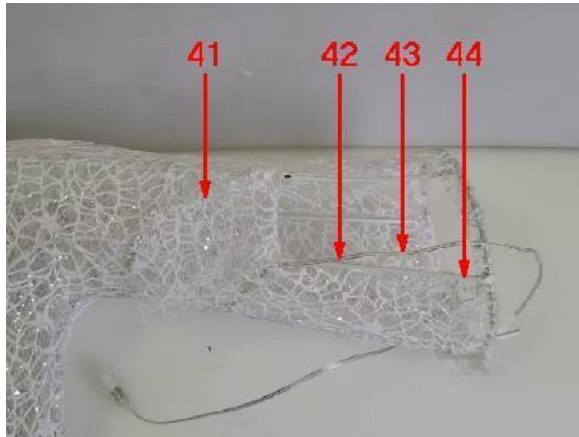


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Photograph(s) [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

Photograph depicting Test Item(s)



END



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APPENDIX

List of Analytes and their Corresponding Test Methods, Detection Limit and Maximum Allowable Limit [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

No.	Name of Analyte(s)	Detection Limit (mg/kg)				Wet Chemistry	Maximum Allowable Limit (mg/kg)
		X-ray fluorescence (XRF) ^[a]					
		Plastic	Metallic / glass / ceramic	Others			
1	Lead (Pb)	100	200	200	10 ^[b]	1 000	
2	Cadmium (Cd)	50	50	50	10 ^[b]	100	
3	Mercury (Hg)	100	200	200	10 ^[c]	1 000	
4	Chromium (Cr)	100	200	200	NA	NA	
5	Chromium VI (Cr VI)	NA	NA	NA	3 ^[g, h] / 10 ^[d] / See ^[e, i]	1 000 / Negative ^[i]	
6	Bromine (Br)	200	NA	200	NA	NA	
7	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	NA	NA	NA	Each 50 ^[f]	Sum 1 000	
8	Polybromodiphenyl ethers (PBDEs) - Bromodiphenyl ether (MonoBDE) - Dibromodiphenyl ether (DiBDE) - Tribromodiphenyl ether (TriBDE) - Tetrabromodiphenyl ether (TetraBDE) - Pentabromodiphenyl ether (PentaBDE) - Hexabromodiphenyl ether (HexaBDE) - Heptabromodiphenyl ether (HeptaBDE) - Octabromodiphenyl ether (OctaBDE) - Nonabromodiphenyl ether (NonaBDE) - Decabromodiphenyl ether (DecaBDE)	NA	NA	NA	Each 50 ^[f]	Sum 1 000	

NA = Not applicable IEC = International Electrotechnical Commission

[a] Test method with reference to International Standard IEC 62321-3-1: 2013.

[b] Test method with reference to International Standard IEC 62321-5: 2013.

[c] Test method with reference to International Standard IEC 62321-4: 2013+AMD1: 2017.

[d] Polymers and Electronics - Test method with reference to International Standard IEC 62321-7-2: 2017.

[e] Metal - Test method with reference to International Standard IEC 62321-7-1: 2015.

[f] Test method with reference to International Standard IEC 62321-6: 2015.

[g] Leather - Test method International Standard ISO 17075: 2017.

[h] Other Than Metal, Leather, Polymers and Electronics - Test method with reference to International Standard ISO 17075: 2017.

[i] Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Parliament and Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Parliament and Council Directive 2011/65/EU, Article 4(1).

Testing Approach [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

















The testing approach was with reference to the following document(s).

- 1 International Standards IEC 62321-1: 2013 and IEC 62321-2: 2021
- 2 "RoHS Enforcement Guidance Document Version 1" by EU RoHS Enforcement Authorities Informal Network. (May 2006)
- 3 "RoHS Regulations - Government Guidance Notes" by United Kingdom Department for Business Innovation & Skills. (February 2011)
- 4 "Final Report to RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium" by Belgium Federal Public Service Health, Food Chain Safety and Environment. (November 2005)






















Annex

The client declared that the materials tested will be used of below Styles :
 (The photo was provided by the client.)

			
830-600V90KK YL-301TWW01	830-602V90WT YL-151TWW01	830-629V90WT YL-151TWW02	830-775V70BN YL-301TWW02
			
830-775V71BN YL-301TWW03	830-775V72BN YL-301TWW04	YL-201TWW01	YL-122TWW01
			
YL-300TWW01	YL-300TWW02	YL-201TWW01	YL-600TWW09
			
YL-120TWW02	YL-120TWW03	YL-600TWW10	YL-300TWW03



















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YL-300TWW04	YL-300TWW05	YL-300TWW06	YL-60TWW06
			
YL-120TWW01	YL-200TWW01	YL-100TWW02	YL-300TWW07
			
YL-600TCW01	YLB0SS01 (844-739V00MX)	YL-8CCWH-4.5V-D (YL-8CCWH02-SF/ UOML2226)	
			
			










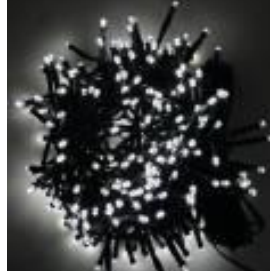








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YL-120LWW-31V-M (YL-120TWW01-D/ 830-549V90BK)	YL-150LWW-31V-M (YL-150TWW01-D/ 830-549V91BK)	YL-72LWW-31V-M (YL- 72TWW01/ 830-550V70WT/830- 550V80WT)	YL-96LWW-31V- M(YL-96TWW01/ 830-550V71WT/830- 550V81WT/830- 550V91WT)
			
YL-96LWW-31V-M (YL-96TWW02/ 830-550V72WT/830- 550V82WT/830- 550V92WT)	YL-150LWW-4.5V-M (YL- 150TWW01-WC/ 830-551V90GD)	YL-96LWH-31V-M (YL- 96TWH01/ 830-552V90WT)	YL-120LCWW-31V- D(YL-120LCWW01- S5/UOML2213)
			
YL-120LCMC-31V- D(YL-120LCMC01- S5/UOML2214)	YL-120LCWW-31V-D (YL-120LCWW01- WB/UOML2215)	YL-120LCWH-31V-D (YL-120LCWH01- WB/UOML2216)	YL-120LCMC-31V-D (YL-120LCCC01- WB/UOML2217)






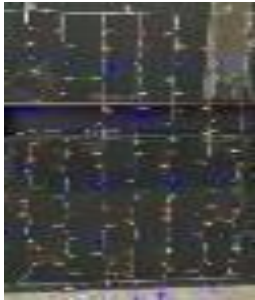




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YL-120LCRD-31V-D (YL-120LCRD01- WB/UOML2218)	YL-240LCWW-31V-D (YL-240LCWW01- WB/UOML2219)	YL-240LCWH-31V-D (YL-240LCWH01- WB/UOML2220)	YL-240LCMC-31V-D (YL-240LCCC01- WB/UOML2221)
			
YL-240LCRD-31V-D (YL-240LCRD01- WB/UOML2222)	YL-240LCWW-31V-D (YL-240LCWW02- WB/UOML2223)	YL-240LCWH-31V-D (YL-240LCWH02- WB/UOML2224)	YL-240LCMC-31V-D (YL-240LCCC021- WB/UOML2225)
			
YL-300LCWW-31V (YL-300LCWW02/ UOML9117)	YL-300LCWH-31V (YL-300LCWH02/ UOML9118)	YL-300LCMC-31V (YL-300LCMC02/ UOML9119)	YL-1000LCWW-31V (YL-1000LCWW02/ UOML9120)
			
YL-1000LCWH-31V(YL- 1000LCWH02/ UOML9121)	YL-1000LCMC-31V (YL-1000LCMC02/ UOML9122)	YL-2000LCWW-31V (YL-2000LCWW02/ UOML9123)	YL-2000LCWH-31V (YL-2000LCWH02/ UOML9124)



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<p>YL-2000LCMC-31V(YL-2000LCMC02/UOML9125)</p>	<p>YL-240CCWW-4.5V (YL-240CCWW01/UOML2002)</p>	<p>YL-240CCWH-4.5V (YL-240CCWH01/UOML2003)</p>	<p>YL-240CCMC-4.5V (YL-240CCMC01/UOML2004)</p>
			



















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YL-SS10001	YL-SS10002	YL-TL0016	YL-TL0017
			
YL-RF300L01 (844-996V70WT)	YL-RF300L01 (844-996V70WT)	YL-RF300L01 (844-996V70WT)	YL-RS23501 (844-995V70WT 844-995V80WT 844-995V90WT)
			
YL-175LWW01 (830-910V90OG)	YL-245LWW01 (830-910V91OG)	YL-315LWW01	YL-600LWW01 (830-913V90WT)
			
YL-816LWW01 (830-913V91WT)	YL-300TWW06 (830-911V70GN 830-911V80GN)	YL-450LWW01 (830-912V70PK)	YL-TL001



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YL-TL002	YL-TL003	YL-TL004	YL-TL005
			
YL-TL006	YL-TL007	YL-TL008	YL-TL009
			
YL-TL0010	YL-TL0011	YL-TL0012	YL-TL0013
			
YL-TL0014	YL-TL0015	YL-72LWW01	YL-120LWW01



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YL-72LWW-31V-M (YL-72TWW01/ 830-550V70WT/830-550V80WT//830-550V90WT)	830-909V90WT		

Remark:

Since the client was not able to provide the sample of additional Style, The above sample photo was provided by the client., but only based on the guarantee letter provided by the client. Bureau Veritas-CPS takes no responsibility for any mistakes and the problems of product consistency caused by inaccurate and/or invalid information submitted by the client. The client will take the responsibility of all discrepancy and risk.