



Test Report No.: 70.400.19.414.03-00.01

Dated: 2019-11-26

Applicant : DEQING DINGHUI LIGHT CO., LTD.
No.60, Yixi Road, Qianyuan Town, Deqing County
313216 Huzhou, Zhejiang
PEOPLE'S REPUBLIC OF CHINA

Attention : Xu Ying

Sample Description : LED Lamp

Style No. / Name / Design No. : NA

PO No. / Order No. : NA

Test Sample Receipt Date, Location : 2019-09-19, Shanghai
2019-10-18, Shanghai (sample 020)
2019-11-13, Shanghai (sample 010,036)

Test Period, Location : From 2019-09-19 to 2019-11-15, Shanghai
From 2019-10-18 to 2019-10-22, Shanghai (sample 020)
From 2019-11-13 to 2019-11-15, Shanghai (sample
010,036)

Test Result(s) : Refer to Section 3

Disclaimer Measurement Uncertainty:

Unless otherwise agreed upon, Pass or Fail verdicts are given base on the measured values without any considerations of measurement uncertainties.

Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

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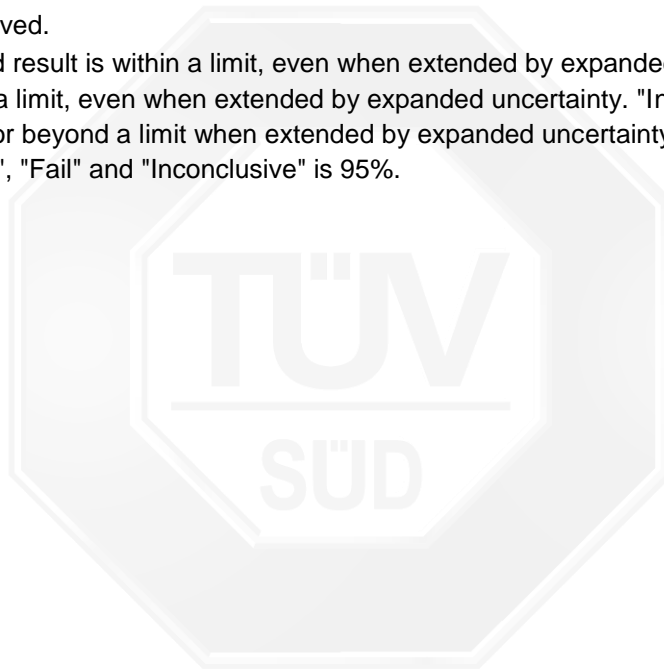


Purpose Of Examination / Conclusion:


No.	Test Item(s)	Conclusion
	Test according to Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU and its amendment Directive (EU) 2015/863	Complied
1.	Quantitative screening of Lead, Cadmium, Mercury, Chromium and Bromine	Inconclusive
2.	Heavy Metals Content Test (Total Cadmium, Total Lead, Total Mercury, Hexavalent Chromium)	Pass
3.	Brominated Flame Retardants (PBBs & PBDEs)	Pass
4.	Phthalates (DEHP, BBP, DBP and DIBP)	Pass

Remarks:

- (1) The results relate only to the items tested.
- (2) Samples are tested as received.
- (3) "Pass" means the measured result is within a limit, even when extended by expanded uncertainty. "Fail" means the measured result is beyond a limit, even when extended by expanded uncertainty. "Inconclusive" means the measured result can be within or beyond a limit when extended by expanded uncertainty. The confidence level of the expanded uncertainty for "pass", "Fail" and "Inconclusive" is 95%.



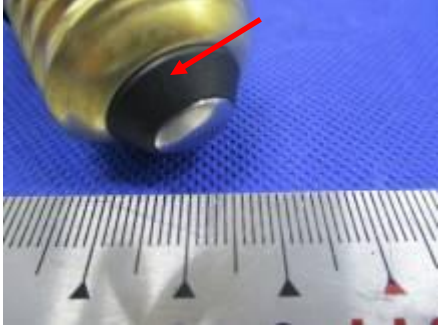
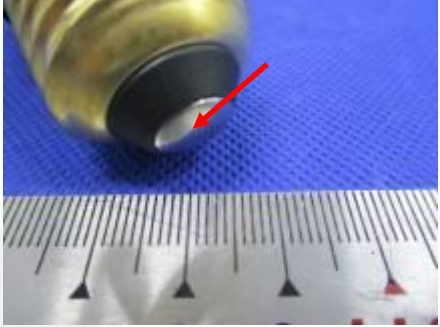
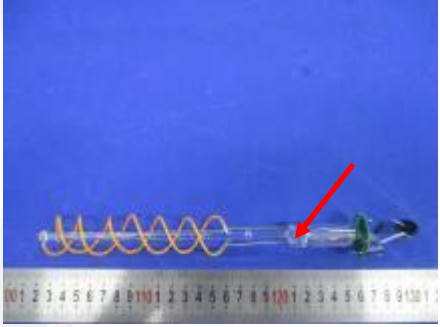
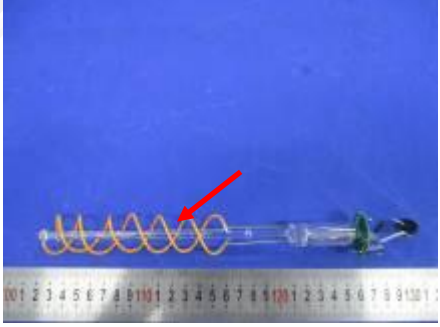
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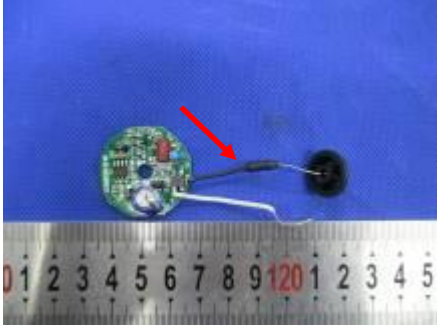

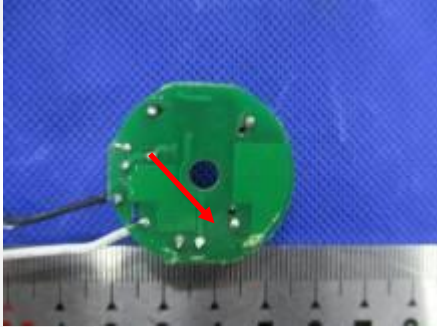
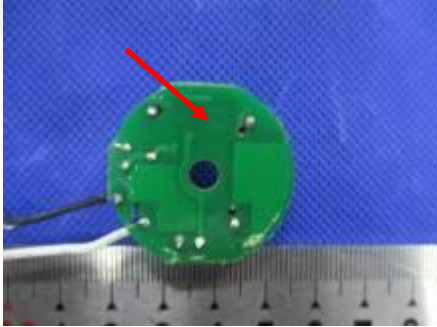
Sample Description	 <p data-bbox="874 884 1018 918">LED Lamp</p>
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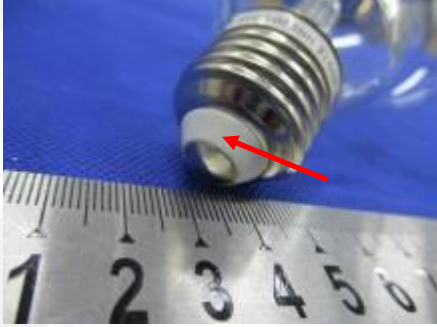



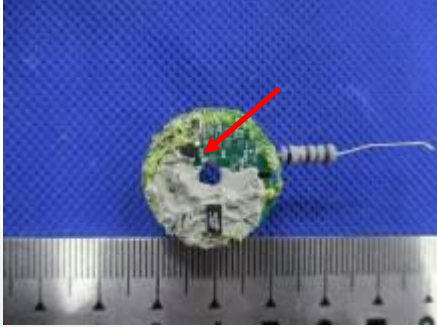
2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Yellow-transparent glass / (/)	
T2	002	Golden metal shell / (/)	
T3	003	Golden metal shell / (/)	
T4	004	Black plastic bracket / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T5	005	Black plastic block / (/)	
T6	006	Silvery metal / (/)	
T7	007	Transparent glass rod / (/)	
T8	008	Yellow block / (/)	




T. No.	Sample No.	Colour and Description	Photograph
T9	009	Black tube / (/)	
T10	010	White plastic jacket / (/)	
T11	011	Silvery metal solder / (/)	
T12	012	Green PCB / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T13	013	Transparent glass / (/)	
T14	014	Silvery metal shell / (/)	
T15	015	White plastic block / (/)	
T16	016	White plastic block / (/)	





T. No.	Sample No.	Colour and Description	Photograph
T17	017	Silvery metal solder / (/)	
T18	018	Green PCB / (/)	
T19	019	Transparent glass / (/)	
T20	020	Yellow coating / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T21	021	Silvery metal shell / (/)	
T22	022	Silvery metal solder / (/)	
T23	023	White plastic block / (/)	
T24	024	Brown plastic jacket / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T25	025	Silvery metal shell / (/)	
T26	026	Transparent adhesive tape / (/)	
T27	027	Brown film / (/)	
T28	028	Silvery metal piece / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T29	029	Gray plastic piece / (/)	
T30	030	Black plastic piece / (/)	
T31	031	Silvery metal pin / (/)	
T32	032	Black component / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T33	033	Silvery metal solder / (/)	
T34	034	White PCB / (/)	
T35	035	Transparent glass shell / (/)	
T36	036	White coating / (/)	

T. No.	Sample No.	Colour and Description	Photograph
T37	037	Glass shell / (/)	
T38	038	Transparent glass shell / (/)	
T39	039	Pink coating / (/)	
T40	040	Black semi-transparent glass shell / (/)	

3. Test Result

3.1 Quantitative screening of Lead, Cadmium, Mercury, Chromium and Bromine

Test Method: EN 62321-2:2014, EN 62321-3-1:2014, analyzed by Energy-Dispersive X-Ray Fluorescence Spectrometers (XRF)

[Reporting Limit = 60 mg/kg for Cadmium, 300 mg/kg for Bromine, and 600 mg/kg for others]

Sample	Total Cadmium [mg/kg]	Total Lead [mg/kg]	Total Chromium [mg/kg]	Total Mercury [mg/kg]	Total Bromine [mg/kg]
001	BL	BL	BL	BL	BL
002	BL	BL	BL	BL	--
003	BL	BL	BL	BL	--
004	BL	BL	BL	BL	Inconclusive ^(b)
005	BL	BL	BL	BL	Inconclusive ^(b)
006	BL	BL	BL	BL	--
007	BL	BL	BL	BL	BL
008	BL	BL	BL	BL	BL
009	BL	BL	BL	BL	BL
010	BL	BL	BL	BL	BL
011	Inconclusive ^(a)	Inconclusive ^(a)	BL	BL	--
012	BL	BL	BL	BL	Inconclusive ^(b)
013	BL	BL	BL	BL	BL
014	BL	BL	BL	BL	--
015	BL	BL	BL	BL	Inconclusive ^(b)
016	BL	BL	BL	BL	Inconclusive ^(b)
017	BL	BL	BL	BL	--
018	BL	Inconclusive ^(a)	BL	BL	Inconclusive ^(b)
RoHS Requirement	100	1000	1000	1000	1000

- Note
1. "mg/kg" denotes milligram per kilogram
 2. "BL" denotes below the limit
 3. "OL" denotes over the limit
 4. "--" denotes Not Applicable
 5. "(a)" denotes further confirmation test was conducted, results are listed in 3.2
 6. "(b)" denotes further confirmation test was conducted, results are listed in 3.3

3.1 Quantitative screening of Lead, Cadmium, Mercury, Chromium and Bromine

Test Method: EN 62321-2:2014, EN 62321-3-1:2014, analyzed by Energy-Dispersive X-Ray Fluorescence Spectrometers (XRF)

[Reporting Limit = 60 mg/kg for Cadmium, 300 mg/kg for Bromine, and 600 mg/kg for others]

Sample	Total Cadmium [mg/kg]	Total Lead [mg/kg]	Total Chromium [mg/kg]	Total Mercury [mg/kg]	Total Bromine [mg/kg]
019	BL	BL	BL	BL	BL
020	BL	BL	BL	BL	BL
021	BL	BL	BL	BL	--
022	BL	BL	BL	BL	--
023	BL	BL	BL	BL	Inconclusive ^(b)
024	BL	BL	BL	BL	BL
025	BL	BL	BL	BL	--
026	BL	BL	BL	BL	BL
027	BL	BL	BL	BL	BL
028	BL	BL	BL	BL	--
029	BL	BL	BL	BL	BL
030	BL	BL	BL	BL	BL
031	BL	BL	BL	BL	--
032	BL	BL	BL	BL	BL
033	BL	Inconclusive ^(a)	BL	BL	--
034	BL	BL	BL	BL	Inconclusive ^(b)
035	BL	BL	BL	BL	BL
036	BL	BL	BL	BL	BL
RoHS Requirement	100	1000	1000	1000	1000

Note 1. "mg/kg" denotes milligram per kilogram

2. "BL" denotes below the limit

3. "OL" denotes over the limit

4. "--" denotes Not Applicable

5. "(a)" denotes further confirmation test was conducted, results are listed in 3.2

6. "(b)" denotes further confirmation test was conducted, results are listed in 3.3

3.1 Quantitative screening of Lead, Cadmium, Mercury, Chromium and Bromine

Test Method: EN 62321-2:2014, EN 62321-3-1:2014, analyzed by Energy-Dispersive X-Ray Fluorescence Spectrometers (XRF)

[Reporting Limit = 60 mg/kg for Cadmium, 300 mg/kg for Bromine, and 600 mg/kg for others]

Sample	Total Cadmium [mg/kg]	Total Lead [mg/kg]	Total Chromium [mg/kg]	Total Mercury [mg/kg]	Total Bromine [mg/kg]
037	BL	BL	BL	BL	BL
038	BL	BL	BL	BL	BL
039	Inconclusive ^(a)	BL	BL	BL	BL
040	BL	BL	BL	BL	BL
RoHS Requirement	100	1000	1000	1000	1000

- Note
1. "mg/kg" denotes milligram per kilogram
 2. "BL" denotes below the limit
 3. "OL" denotes over the limit
 4. "--" denotes Not Applicable
 5. "(a)" denotes further confirmation test was conducted, results are listed in 3.2
 6. "(b)" denotes further confirmation test was conducted, results are listed in 3.3
- XRF screening limits in mg/kg for regulated elements in various matrices

ELEMENT	POLYMER		
	BL	INCONCLUSIVE	OL
Cd	$X < (70-3\sigma)$	$(70-3\sigma) < X < (130+3\sigma)$	$X > (130+3\sigma)$
Pb	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Hg	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Br	$X < (300-3\sigma)$	$X > (300-3\sigma)$	NA
Cr	$X < (700-3\sigma)$	$X > (700-3\sigma)$	NA
ELEMENT	METAL		
	BL	INCONCLUSIVE	OL
Cd	$X < (70-3\sigma)$	$(70-3\sigma) < X < (130+3\sigma)$	$X > (130+3\sigma)$
Pb	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Hg	$X < (700-3\sigma)$	$(700-3\sigma) < X < (1300+3\sigma)$	$X > (1300+3\sigma)$
Cr	$X < (700-3\sigma)$	$X > (700-3\sigma)$	NA
ELEMENT	COMPLEX MATERIAL		
	BL	INCONCLUSIVE	OL
Cd	$X < (50-3\sigma)$	$(50-3\sigma) < X < (150+3\sigma)$	$X > (150+3\sigma)$
Pb	$X < (500-3\sigma)$	$(500-3\sigma) < X < (1500+3\sigma)$	$X > (1500+3\sigma)$
Hg	$X < (500-3\sigma)$	$(500-3\sigma) < X < (1500+3\sigma)$	$X > (1500+3\sigma)$
Br	$X < (250-3\sigma)$	$X > (250-3\sigma)$	NA
Cr	$X < (500-3\sigma)$	$X > (500-3\sigma)$	NA



3.2 Heavy Metals Content Test (Total Cadmium, Total Lead, Total Mercury, Hexavalent Chromium)

Test method: Microwave digestion / Acid digestion by ICP-OES with reference to EN 62321-4:2014+A1:2017, EN 62321-5:2014

EN 62321-7-1:2015 and EN 62321-7-2:2017 (For Hexavalent Chromium)

[Reporting Limit= 10.0 mg/kg for Lead and Mercury, 2.0 mg/kg for Cadmium and 5.0 mg/kg for Chromium VI,

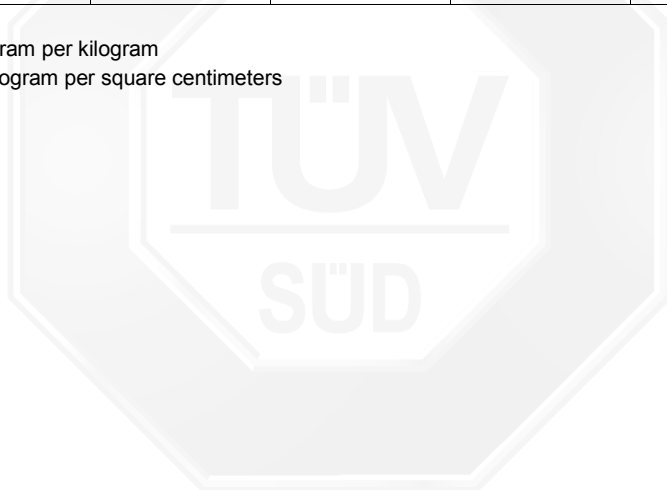
0.1 µg/cm² for Chromium VI]

Sample	Total Cadmium [mg/kg]	Total Lead [mg/kg]	Total Mercury [mg/kg]	Hexavalent Chromium [mg/kg]	Hexavalent Chromium [µg/cm ²]	Conclusion
011	<2.0	65.4	--	--	--	Pass
018	--	327	--	--	--	Pass
033	--	26.3	--	--	--	Pass
039	<2.0	--	--	--	--	Pass
RoHS Requirement	100	1000	--	--	--	--

Note 1. "<" denotes less than

2. "mg/kg" denotes milligram per kilogram

3. "µg/cm²" denotes microgram per square centimeters





3.3 Brominated Flame Retardants (PBBs & PBDEs)

Test Method: With reference to EN 62321-6:2015, extraction with toluene and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

[Reporting Limit = 5mg/kg]

Test Item		Results [mg/kg]			RoHS Requirement [mg/kg]
		Sample 004	Sample 005	Sample 012	
PBBs	Monobromobiphenyl	<5	<5	<5	Sum of PBBs < 1000
	Dibromobiphenyl	<5	<5	<5	
	Tribromobiphenyl	<5	<5	<5	
	Tetrabromobiphenyl	<5	<5	<5	
	Pentabromobiphenyl	<5	<5	<5	
	Hexabromobiphenyl	<5	<5	<5	
	Heptabromobiphenyl	<5	<5	<5	
	Octabromobiphenyl	<5	<5	<5	
	Nonabromobiphenyl	<5	<5	<5	
	Decabromobiphenyl	<5	<5	<5	
	Sum of detected PBBs	<50	<50	<50	
PBDEs	Monobromodiphenyl ether	<5	<5	<5	Sum of PBDEs < 1000
	Dibromodiphenyl ether	<5	<5	<5	
	Tribromodiphenyl ether	<5	<5	<5	
	Tetrabromodiphenyl ether	<5	<5	<5	
	Pentabromodiphenyl ether	<5	<5	<5	
	Hexabromodiphenyl ether	<5	<5	<5	
	Heptabromodiphenyl ether	<5	<5	<5	
	Octabromodiphenyl ether	<5	<5	<5	
	Nonabromodiphenyl ether	<5	<5	<5	
	Decabromodiphenyl ether	<5	<5	<5	
	Sum of detected PBDEs	<50	<50	<50	

Note 1. "<" denotes less than
 2. "mg/kg" denotes milligram per kilogram

3.3 Brominated Flame Retardants (PBBs & PBDEs)

Test Method: With reference to EN 62321-6:2015, extraction with toluene and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

[Reporting Limit = 5mg/kg]

Test Item		Results [mg/kg]			RoHS Requirement [mg/kg]
		Sample 015	Sample 016	Sample 018	
PBBs	Monobromobiphenyl	<5	<5	<5	Sum of PBBs < 1000
	Dibromobiphenyl	<5	<5	<5	
	Tribromobiphenyl	<5	<5	<5	
	Tetrabromobiphenyl	<5	<5	<5	
	Pentabromobiphenyl	<5	<5	<5	
	Hexabromobiphenyl	<5	<5	<5	
	Heptabromobiphenyl	<5	<5	<5	
	Octabromobiphenyl	<5	<5	<5	
	Nonabromobiphenyl	<5	<5	<5	
	Decabromobiphenyl	<5	<5	<5	
	Sum of detected PBBs	<50	<50	<50	
PBDEs	Monobromodiphenyl ether	<5	<5	<5	Sum of PBDEs < 1000
	Dibromodiphenyl ether	<5	<5	<5	
	Tribromodiphenyl ether	<5	<5	<5	
	Tetrabromodiphenyl ether	<5	<5	<5	
	Pentabromodiphenyl ether	<5	<5	<5	
	Hexabromodiphenyl ether	<5	<5	<5	
	Heptabromodiphenyl ether	<5	<5	<5	
	Octabromodiphenyl ether	<5	<5	<5	
	Nonabromodiphenyl ether	<5	<5	<5	
	Decabromodiphenyl ether	<5	<5	<5	
	Sum of detected PBDEs	<50	<50	<50	

Note 1. "<" denotes less than
 2. "mg/kg" denotes milligram per kilogram

3.3 Brominated Flame Retardants (PBBs & PBDEs)

Test Method: With reference to EN 62321-6:2015, extraction with toluene and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

[Reporting Limit = 5mg/kg]

Test Item		Results [mg/kg]		RoHS Requirement [mg/kg]
		Sample 023	Sample 034	
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 detected PBBs	<50	<50	
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 detected PBDEs	<50	<50	

Note 1. “<” denotes less than
 2. “mg/kg” denotes milligram per kilogram



3.4 Phthalates (DEHP, BBP, DBP and DIBP)

Test Method: with reference to EN 62321-8:2017, extracted by organic solvent and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

[Reporting Limit = 50mg/kg]

Test Item	CAS No.	Result [mg/kg]	
		Sample 004+005+012+015+0 16	Sample 008
Di-iso-butyl Phthalate (DIBP)	84-69-5	<50	<200
Di-butyl Phthalate (DBP)	84-74-2	<50	<200
Butyl-benzyl Phthalate (BBP)	85-68-7	<50	<200
Di-(2-ethyl-hexyl) Phthalate (DEHP)	117-81-7	<50	<200
RoHS Requirement		Each < 1000	

Test Item	CAS No.	Result [mg/kg]	
		Sample 009	Sample 010
Di-iso-butyl Phthalate (DIBP)	84-69-5	<200	<200
Di-butyl Phthalate (DBP)	84-74-2	<200	<200
Butyl-benzyl Phthalate (BBP)	85-68-7	<200	<200
Di-(2-ethyl-hexyl) Phthalate (DEHP)	117-81-7	<200	<200
RoHS Requirement		Each < 1000	

- Note 1. "<" denotes less than
 2. "mg/kg" denotes milligram per kilogram

3.4 Phthalates (DEHP, BBP, DBP and DIBP)

Test Method: with reference to EN 62321-8:2017, extracted by organic solvent and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

[Reporting Limit = 50mg/kg]

Test Item	CAS No.	Result [mg/kg]		
		Sample 018+023+026+027	Sample 020	Sample 024+030
Di-iso-butyl Phthalate (DIBP)	84-69-5	<50	<50	<50
Di-butyl Phthalate (DBP)	84-74-2	<50	<50	<50
Butyl-benzyl Phthalate (BBP)	85-68-7	<50	<50	<50
Di-(2-ethyl-hexyl) Phthalate (DEHP)	117-81-7	<50	<50	<50
RoHS Requirement		Each < 1000		

Test Item	CAS No.	Result [mg/kg]	
		Sample 029+032+034	Sample 036
Di-iso-butyl Phthalate (DIBP)	84-69-5	<50	<200
Di-butyl Phthalate (DBP)	84-74-2	<50	<200
Butyl-benzyl Phthalate (BBP)	85-68-7	<50	<200
Di-(2-ethyl-hexyl) Phthalate (DEHP)	117-81-7	<50	<200
RoHS Requirement		Each < 1000	

- Note 1. "<" denotes less than
 2. "mg/kg" denotes milligram per kilogram



3.4 Phthalates (DEHP, BBP, DBP and DIBP)

Test Method: with reference to EN 62321-8:2017, extracted by organic solvent and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS).

[Reporting Limit = 50mg/kg]

Test Item	CAS No.	Result [mg/kg]
		Sample 039
Di-iso-butyl Phthalate (DIBP)	84-69-5	<200
Di-butyl Phthalate (DBP)	84-74-2	<200
Butyl-benzyl Phthalate (BBP)	85-68-7	<200
Di-(2-ethyl-hexyl) Phthalate (DEHP)	117-81-7	<200
RoHS Requirement		Each < 1000

- Note 1. "<" denotes less than
 2. "mg/kg" denotes milligram per kilogram



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Dated: 2019-11-26



TÜV SÜD Certification and Testing (China) Co., Ltd.
Shanghai Branch Chemical Lab

Prepared by:

Bai Jian



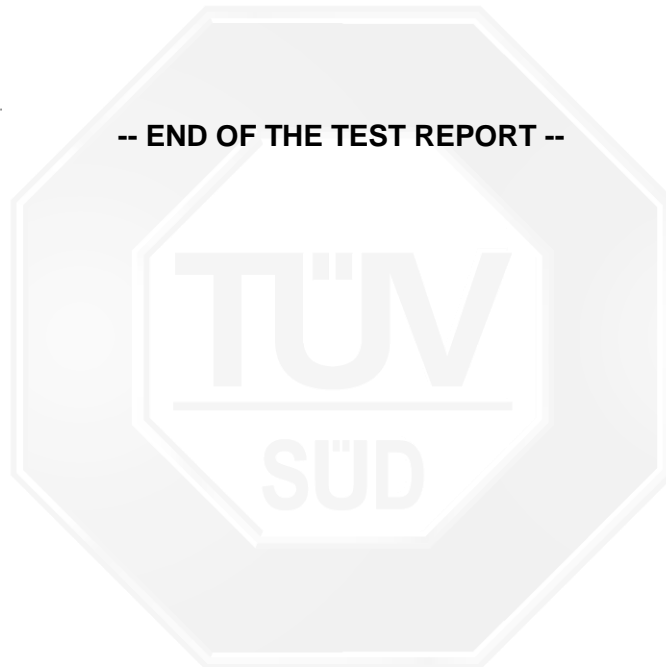
Reviewed by:

Yang Sirong

Bai, Jian
Project Engineer

Yang, Sirong
Project Engineer

-- END OF THE TEST REPORT --





APPENDIX I: Additional Style.

The client declared that the materials used of below styles are same as tested style .

Model	Power	Current	PCB	Size	lamp shape
UA48XZF	1-5W	10-30mA	PCB2	48x88mm	A48
VA60XZF	2,5-8,5W	20-60mA	PCB2	60x105mm	A60
VA70XZF	2,5-8,5W	20-60mA	PCB2	70x128mm	A70
WA130XZF	4-9W	20-60mA	PCB3	130x240mm	A130
WA160XZF; 200345 87188430325 92	4-9W	20-60mA	PCB3	160x298mm	A160
UC35XYF	1-5W	10-30mA	PCB1	35x97mm	C35
UC35XZF	1-5W	10-30mA	PCB2	35x97mm	C35
UCT35XYF	1-5W	10-30mA	PCB1	35x97mm	CT35
UCT35XZF	1-5W	10-30mA	PCB2	35x97mm	CT35
UCA35XYF	1-5W	10-30mA	PCB1	35x120mm	CA35
UCA35XZF	1-5W	10-30mA	PCB2	35x120mm	CA35
UG45XYF	1-5W	10-30mA	PCB1	45x78mm	G45
UG45XZF	1-5W	10-30mA	PCB2	45x75mm	G45
UG50XYF	1-5W	10-30mA	PCB1	50x85mm	G50
UG50XZF	1-5W	10-30mA	PCB2	50x85mm	G50
UG60XYF	1-5W	10-30mA	PCB1	60x90mm	G60
VG60XZF	2,5-8,5W	20-60mA	PCB2	60x90mm	G60
VG80XZF	2,5-8,5W	20-60mA	PCB2	80x115mm	G80
VG95XZF	2,5-8,5W	20-60mA	PCB2	95x135mm	G95



VG125XZF; 200341 8718 843032578	2,5-8,5W	20-60mA	PCB2	125x175mm	G125
WG150XZF	4-9W	20-60mA	PCB3	150x195/240mm	G150
WG200XZF; 200345 87188430325 85	4-9W	20-60mA	PCB3	200x300mm	G200
WG300XZF	4-9W	20-60mA	PCB3	300x450mm	G300
UR39XYF	1-5W	10-30mA	PCB1	39x66mm	R39
UR50XYF	1-5W	10-30mA	PCB1	50x85mm	R50
VR63XZF	2,5-8,5W	20-60mA	PCB2	63x102mm	R63
VR80XZF	2,5-8,5W	20-60mA	PCB2	80x115mm	R80
VR95XZF	2,5-8,5W	20-60mA	PCB2	95x134mm	R95
VR125XZF	2,5-8,5W	20-60mA	PCB2	125x175mm	R125
WR135XZF	4-9W	20-60mA	PCB3	135x210mm	R135
WR160XZF	4-9W	20-60mA	PCB3	160x250mm	R160
WR180XZF	4-9W	20-60mA	PCB3	180x300mm	R180
WR250XZF	4-9W	20-60mA	PCB3	250x380mm	R250
WMR200XZF	4-9W	20-60mA	PCB3	200x200mm	MR200
QST26XYF	0,5-2W	5-20mA	PCB1	26x60mm	ST26
QST28XYF	0,5-2W	5-20mA	PCB1	28x65mm	ST28
VST58XZF	2,5-8,5W	20-60mA	PCB2	58x130mm	ST58
VST64XZF; 200341 8718 843032561	2,5-8,5W	20-60mA	PCB2	64x145mm	ST64
QT20XYF	0,5-2W	5-20mA	PCB1	20x80/114mm	T20
QT22XYF	0,5-2W	5-20mA	PCB1	22x58mm	T22



UT25XYF	1-5W	10-30mA	PCB1	25x60/85mm	T25
UT28XYF	1-5W	10-30mA	PCB1	28x85mm	T28
VT30XZF	2,5-8,5W	20-60mA	PCB2	30x125/185/225/300mm	T30
UT32XZF	1-5W	10-30mA	PCB2	32x128mm	T32
VT38XZF	2,5-8,5W	20-60mA	PCB2	38x100/138/300mm	T38
VT45XZF	2,5-8,5W	20-60mA	PCB2	45x110mm	T45
VD80XZF	2,5-8,5W	20-60mA	PCB2	80x120mm	D80
VD95XZF	2,5-8,5W	20-60mA	PCB2	95x135mm	D95
VD120XZF	2,5-8,5W	20-60mA	PCB2	120x170mm	D120
VD125XZF	2,5-8,5W	20-60mA	PCB2	125x165mm	D125
WE120XZF	4-9W	20-60mA	PCB3	120x430mm	E120
WE140XZF	4-9W	20-60mA	PCB3	140x320mm	E140
WED90XZF	4-9W	20-60mA	PCB3	90x220mm	ED90
WED120XZF	4-9W	20-60mA	PCB3	120x240mm	ED120
WBF180XZF	4-9W	20-60mA	PCB3	180x360mm	BF180
WBT118XZF	4-9W	20-60mA	PCB3	118x275mm	BT118
WBT180XZF	4-9W	20-60mA	PCB3	180x380mm	BT180
WTT76XZF	4-9W	20-60mA	PCB3	76x310mm	TT76
WTT80XZF	4-9W	20-60mA	PCB3	80x380mm	TT80
VH95XZF	2,5-8,5W	20-60mA	PCB2	95x135mm	H95
VH115XZF	2,5-8,5W	20-60mA	PCB2	115x160mm	H115
VH125XZF	2,5-8,5W	20-60mA	PCB2	125x170mm	H125
VS120XZF	2,5-8,5W	20-60mA	PCB2	120x160mm	S120
VS143XZF	2,5-8,5W	20-60mA	PCB2	143x173mm	S143
VS150XZF	2,5-8,5W	20-60mA	PCB2	150x184mm	S150

VS210XZF	2,5-8,5W	20-60mA	PCB2	210x245mm	S210
VP95XZF	2,5-8,5W	20-60mA	PCB2	95x135mm	P95
VP125XZF	2,5-8,5W	20-60mA	PCB2	125x170mm	P125
VSB95XZF	2,5-8,5W	20-60mA	PCB2	95x165mm	SB95
VPA95XZF	2,5-8,5W	20-60mA	PCB2	95x135mm	PA95
VPA120XZF	2,5-8,5W	20-60mA	PCB2	120x175mm	PA120
VPC75XZF	2,5-8,5W	20-60mA	PCB2	75x160mm	PC75
VGN80XZF	2,5-8,5W	20-60mA	PCB2	80x125mm	GN80
VDR95XZF	2,5-8,5W	20-60mA	PCB2	95x135mm	DR95
VSH95XZF	2,5-8,5W	20-60mA	PCB2	95x168mm	SH95
VSH150XZF	2,5-8,5W	20-60mA	PCB2	150x240mm	SH150
VL100XZF	2,5-8,5W	20-60mA	PCB2	100x150mm	L100
VL125XZF	2,5-8,5W	20-60mA	PCB2	125x190mm	L125
WS200XZF	4-9W	20-60mA	PCB3	200x390mm	S200
WPS165XZF	4-9W	20-60mA	PCB3	165x285mm	PS165
WVA188XZF	4-9W	20-60mA	PCB3	188x395mm	VA188

“Q” stands for power consumed, the unit is W; which could be 0,5;0,6;0,7;0,8;0,9;1;1,2;1,5;1,8;2;

“U” stands for power consumed, the unit is W; which could be 1;1,5;2;2,5;3;3,5;4;4,5;5;

“V” stands for power consumed, the unit is W; which could be 2,5;3;4;4,5;5;6;6,5;7;8,8,5;

“W” stands for power consumed, the unit is W; which could be 4;4,5;5;5,5;6;6,5;7;7,5;8,8,5;9;

“X” stands for the color of lamp glass, which could be “CL”, “FR”, “SW”, “G”, “PK”, “BK”; CL=Clear; FR=Frost; SW=Soft White; G=Golden; PK=Pink; BK=BLACK;

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Dated: 2019-11-26



“Y” stands for the lamp cap, which could be

“SES”,”SBC”; SES=E14;SBC=B15;

“Z” stands for the lamp cap, which could be

“ES”; “BC”; ES=E27; BC=B22;

“F” stands for shape of LED module, which could be

“H”,”S”; H=hard; S=soft.

NOTE:

200341 8718843032561 same as 4ST64GESS; just different products model;

200341 8718843032578 same as 4G125GESS; just different products model;

200345 8718843032585 same as 8G200GESS; just different products model;

200345 8718843032592 same as 8A160GESS; just different products model;

Remark :

1. The report covers material testing on specified samples
2. The tested materials covered by the report were declared by the manufacturer to be used on the models listed in the APPENDIX of the report.

1. General Information and Definitions

- (1.1) In the event that an order for any services is placed, the Client shall accept the General Terms and Conditions. The General Terms and Conditions shall be applicable to all orders, resulting contracts and other arrangements, including all offers made or services provided by the Company or any of its affiliated companies. They are not applicable if and as far as they are in conflict with the regulations on services performed on behalf of governments, government bodies or any other public entity, or they are in conflict with mandatory provisions of local law. The Client's placement of orders as well as the conclusion of contracts with the Company shall be regarded as awareness and acceptance of these General Terms and Conditions.
- (1.2) The Company strongly recommends any Client or potential Client to read the full text of these General Terms and Conditions prior to placement of any order to or conclusion of any contract with the Company. Ancillary agreements, promises and other statements made on the part of the Company staff or the experts called upon by them shall be binding only if they are expressly confirmed by the Company in writing. This shall also apply to any modifications of this clause.

2. Provision of Services

- (2.1) With due care and skill, the Company will provide services according to Client's specific instructions as made available by the Client. In the absence of Client's specific instructions, the following is deemed as instructions given to the Company:
- The terms of any standard specification sheet or standard order form provided by the Company; and/or
 - Any relevant usage, practice or trade custom; and/or
 - Such methods the Company considers technically, operationally and/or on financial grounds appropriate.
- (2.2) No other party is entitled to give any instructions particularly on the scope and type of the services or the reports delivered, or on the resulting certificates (the "Reports of Findings"), unless the Company receives prior written instructions to the contrary from the Client. The Client hereby irrevocably authorizes the Company to deliver Reports of Findings to a third party where so instructed by the Client or, at the Company's discretion, where it implicitly follows from circumstances, trade custom, usage or practice.
- (2.3) The Information stated in the Report of Findings is derived from the results of inspection or testing procedures carried out in accordance with the instructions and/or Company's assessment of such results on the basis of any technical standards, trade custom or practice, or other circumstances which should in Company's professional experience be taken into account.
- (2.4) Reports of Findings issued after the testing of samples refer the Company's opinion only on samples under testing and not to the lot from which the samples were drawn.
- (2.5) Client agrees that the Company's sole responsibility is to be present at the time of the third party's intervention and to forward the results, or confirm the occurrence of the intervention, in case Client requests the Company to witness any third party's intervention. Client agrees that the Company will use the test methods for analysis as requested in the request form, and if none is stated in the form, the Company will choose the appropriate test methods for analysis.
- (2.6) The Reports of Findings issued by the Company will reflect the facts as recorded by it at the time of its intervention only and within the limits of the instructions received or, in the absence of such instructions, within the limits of the alternative parameters applied as provided for in Clause 2.1. The Company is under no obligation to refer to, or report upon, any facts or circumstances, which are outside the specific instructions received or alternative parameters applied.
- (2.7) The performance of all or part of the services may be delegated to an agent or subcontractor by the Company. The Client authorizes the Company to disclose all information necessary for such performance to the agent or subcontractor.
- (2.8) Documents reflecting engagements contracted between the Client and third parties or third party documents, e.g. sales contract copies, letters of credit, bills of lading, etc. should be made available to the Company. These are considered to be for information only, and do not extend or restrict the scope of the services or the obligations accepted by the Company.
- (2.9) The Company agrees that, by providing the services to the Client, it neither takes the place of Client or any third party, nor otherwise assumes, abridges, abrogates or undertakes to discharge any duty of the Client to any third party or that of any third party to the Client. Also, it does not release the Client or any third party from any of their obligations.
- (2.10) Depending on the nature of each sample, all samples given to the Company shall be retained for a maximum of 3 months or for such other shorter time period as the nature of the sample permits, and then sent back to Client or otherwise disposed of at the Company's discretion. After that time the Company will not be responsible for the samples. Storage of samples for more than 3 months shall incur a storage fee payable by the Client. If samples are returned to the Client, the Client will be billed a handling and freight fees. Special disposal charges will be billed to the Client if incurred.

3. Client's Obligations

The Client shall:

- ensure that all required supporting documents, information and instructions as submitted are accurate, truthful and complete. These information are to be submitted in a timely not later than 2 working days from the date of which the services are requested by the Client
- ensure to give all necessary access for the Company's representatives to the premises where the services are to be performed and to take all necessary steps to eliminate or remedy any obstacles to, or interruptions in the performance of the services;
- make available any special equipment and personnel necessary for the performance of the services, if required;
- ensure that for the safety and security of working conditions, sites and installations, all necessary measures are taken during the performance of services. In this respect, the Client will not rely on the Company's advice whether required or not;
- inform the Company of any known hazards or dangers, actual or potential, associated with any order, samples, testing or any other service rendered by the Company well in advance. Those are, but are not limited to the presence or risk of radiation, environmental pollution or poisons-toxic or noxious or explosive elements or materials;
- fully exercise all its rights and discharge all its liabilities under any relevant sales or other contract with a third party.

4. Fees and Payment

- All Fees not agreed on between the Company and Client at the time the order is placed or a contract is concluded shall be determined by the Company's Schedule of Fees (which are subject to change). All applicable taxes shall be paid by Client, as far as mandatory laws do not provide otherwise.
- Unless a specific period is established in the invoice, the Client shall pay upon receiving the invoice, but not later than 30 days from the relevant invoice date or within such other period as may be established by the Company in the invoice (the "Due Date").
- The Client shall not be entitled to retain or defer due payment of any sums to the Company on account of any dispute, counter claim or set-off against the Company. The Company reserves the right to retain or defer any due payments if any dispute arises with or it raises any counterclaim against the Client. The Company is entitled to set off due payments against payments of the Client.

- For the collection of unpaid fees, the Company may decide to bring action in any court with competent jurisdiction. The corresponding collection costs, including attorney's fees and related costs, shall be borne by the Client, as far as the mandatory local law does not provide otherwise.
- In case of any unforeseen problems or expenses arise while carrying out the services, the Company informs the Client. In such cases, the Company shall be entitled to charge additional fees to cover extra time and to invoice extra costs necessarily incurred to complete the services.
- If the Company is unable to perform all or parts of the services for any cause whatsoever beyond the Company's control, including the failure by Client to comply with any of its obligations provided for in the foregoing Clause 3, the Company shall nevertheless be entitled to payments of:
 - The amount of all non-refundable expenses incurred by the Company; and
 - A proportion of the agreed fee equal to the proportion of the services actually carried out.

5. Suspension or Termination of Services

- In any case mentioned below, the Company shall be entitled to either suspend or terminate the provision of the services immediately and without any liability:
- Failure by the Client to comply with any of its obligations under these General Terms and Conditions and such failure is not remedied within 10 days after a notice of such failure has been delivered to the Client; or
 - Any suspension of payment, arrangement with creditors, bankruptcy, insolvency, receivership or cessation of business by Client.

6. Liability and Indemnification

- (6.1) Limitation of Liability.
- Clients seeking a guarantee against loss or damage should obtain appropriate insurance. The Company is neither an insurer nor a guarantor and disclaims all liability in such capacity.
 - Reports of Findings are issued on the basis of the information, documents and/or samples provided by, or on behalf of the Client and solely for the benefit of the Client who is obliged to act on the basis of such Reports of Findings. Neither the Company nor any of its staff, agents or subcontractors shall be liable to the Client nor to any third party for any actions taken or not taken on the basis of such Reports of Findings, or for any incorrect results arising from unclear, erroneous, incomplete, misleading or false information provided to the Company.
 - For any delayed, total or partial non-performance of the services arising directly or indirectly from any event beyond the Company's control, including failure by Client to comply with any of its obligations hereunder, the Company shall not be liable.
 - The liability of the Company in respect of any claim for loss, damage or expense of any nature and howsoever arising shall in no circumstances exceed a total aggregate sum equal to 10 times the amount of the fee paid in respect of the specific service which gives rise to such claim, and shall in any case not exceed the equivalent of 25,000 EUR in CNY.
 - For any indirect or consequential loss (including loss of profits), the Company shall not have any liabilities.
 - In case of any claim, the Client must give written notice to the Company within 30 days of discovery of the facts with all necessary documents to justify such claim. In any case, the Company shall be discharged from all liability for all claims for loss, damage or expense unless a lawsuit is brought within two years from:
 - the performance date of the Company for its services which refers to the claim; or
 - the date when the service should have been completed in the event of any alleged non-performance.
- (6.2) Indemnification. Against all claims (actual or threatened) by any third party for loss, damage or expenses of whatsoever nature including all legal expenses and related costs and howsoever arising relating to the performance, purported performance or non-performance of any services, the Client shall guarantee, hold harmless and indemnify the Company and its officers, employees, agents or subcontractors.

7. Obligation of Confidentiality, Copyright, Data Privacy Protection

- The Company shall be authorized to make file copies of written documents, which have been made available to it for review and which are important for processing the order.
- Insofar as Reports of Findings are prepared in the course of processing the order and which are subject to the protection of copyright, then the Company shall grant the Client a simple, non-transferable right to use, insofar as this is necessary and in accordance with the contractually presupposed purpose. Other rights shall not be transferred; in particular, the customer shall not be entitled to modify and/or edit audit reports or to make use of such outside of his business premises.
- The Company and its staff which may be called in shall not disclose or use trade and business matters about which they have gained knowledge during the performance of their work without proper authorization, or unless instructed by a court or authorized body (e.g. regulatory authority, accreditation body or certification scheme owner) or otherwise legally required.

8. Miscellaneous

- The validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired, even if any one or more provisions of these General Conditions are found to be illegal or unenforceable in any respect.
- Client shall not directly or indirectly entice, encourage or make any offer to Company's employees to leave their employment with the Company, during the course of providing the services and for a period of one year thereafter.
- Use of the Company's corporate name or registered marks for advertising purposes is not permitted without the Company's prior written authorization.

9. Governing Law, Jurisdiction and Dispute Settlement

- Unless specifically agreed otherwise, all disputes arising out or in connection with contractual relationship(s) hereunder shall be governed by the applicable laws and regulations of the People's Republic of China.
- Place of performance for any obligation arising out of this contract shall be Shanghai, the Place of the TÜV SÜD Certification and Testing (China) Co., Ltd., Shanghai branch, unless otherwise expressly agreed by the parties.

10. Languages

In the event of any discrepancy between the English and the Chinese version of these General Terms and Conditions, the English version shall prevail.