

LED Lamp Module

A60 F0 type module



- **Maximum up to 7W**
- **CREE LEDs**
- **E26 and E27 lamp base**
- **UL plastic material**

The lamp base can be compatible to either E26 or E27 standard base.

The Heat dissipation of A60 F0 type module heat sink can be up to maximum 7 wattage.

A60 F0 type module uses UL listed material for all the plastic components.

A60 F0 type module will be the best solution for bulb lamp.

▶▶ Table of Contents

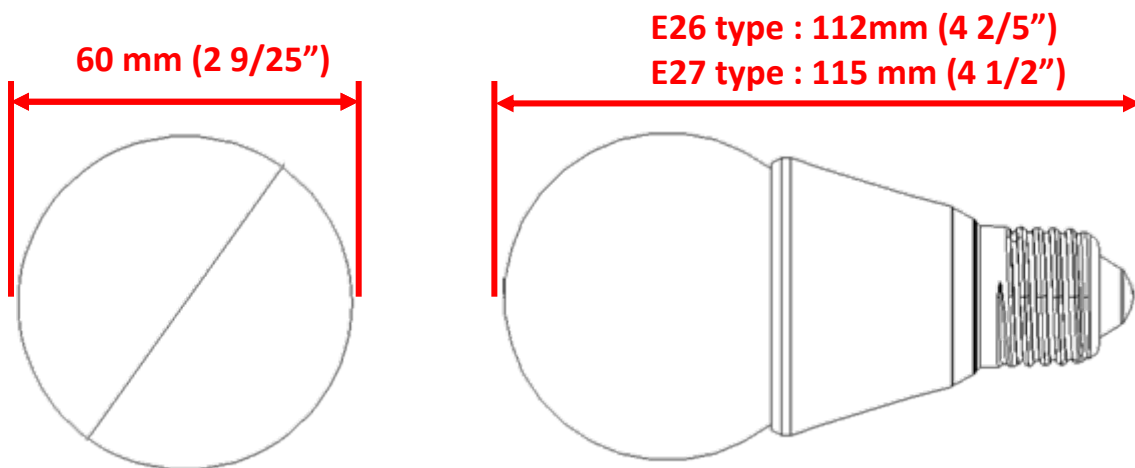
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Specifications

Module Name	A60 F0 type module	
With the use of LED	 CXA1512	
Rating Power	Maximum up to 7 Wattage	
LED Quantity	1pcs	
LED Dispose Mode	1S	
Lens efficiency	80%	
Lamp holder	E26 type	E27 type
Exterior Dimension	60*112 mm	60*115mm
Beam Angle	270 deg.	
Operate Temperature	-20°C ~+50°C	
Storage Temperature	-20°C ~+50°C	

Table 1 : The specifications for A60 F0 type.

▶▶ Exterior Dimension



Tolerance : 2.5 mm (1/10")

Figure 1 : The exterior dimension for A60 F0 type module.

▶▶ Nomenclature

M A60F0 B E27 – L B7 01 – BAG 00

X1 X2 X3 X4 X5 X6 X7 X8 X9

X1

Company Code

M : Ledlink Module

X2

Product Series Type

A60F0 : A60F0 type

X3

Exterior Color

W : White

B : Black

X4

Lamp Holder

E26 : E26 type

E27 : E27 type

X5

Lens type

L : Lampshade

X6

Beam Angle

B7 : 270 degrees

X7

Lens Quantity

01: Single

X8

Lens Number

BAG:BAG model

X9

Package

00 : series number

Figure 2 : The nomenclature for A60 F0 type module.

▶▶ Part Number

Part Number	Lamp Holder	Heat sink Material	Plastic Material	Plastic Color	Cover color
MA60F0BE26-LB701-BAG00	E26 type	ADC 12 + Anodized	UL approval Plastic*	Black	
MA60F0WE26-LB701-BAG00				White	
MA60F0BE27-LB701-BAG00	E27 type			Black	
MA60F0WE27-LB701-BAG00				White	

* : Please refer to "reference information" in page 11 ~ 15.

Table 2 : The part number for A60 F0 type.

▶▶ The circuit design reference

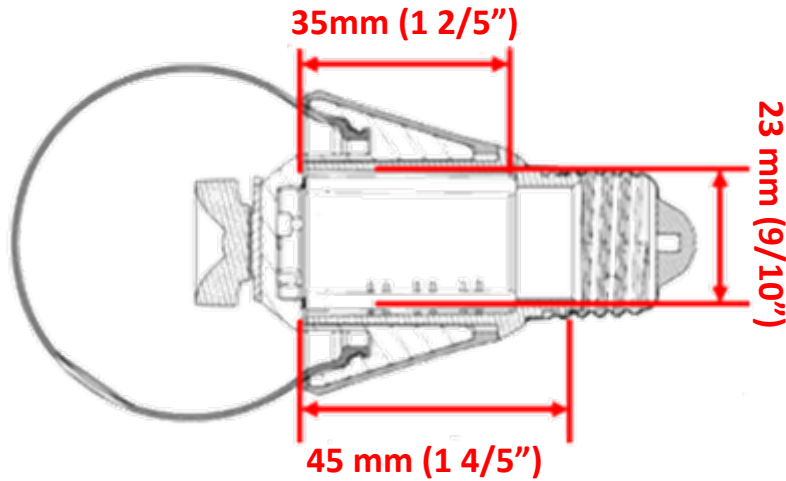


Figure 3 : The maximum size of the circuit area for A60 F0 type module.

Notification : A60 F0 type module doesn't include the circuit part

▶▶ Life Time

Lighting Output

Ambient temperature

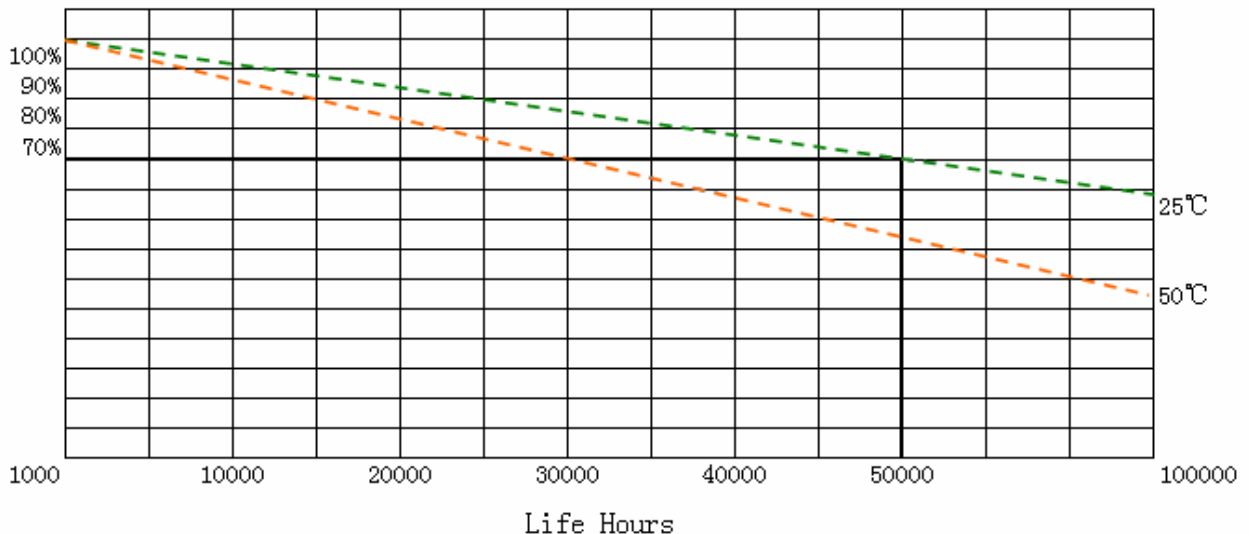


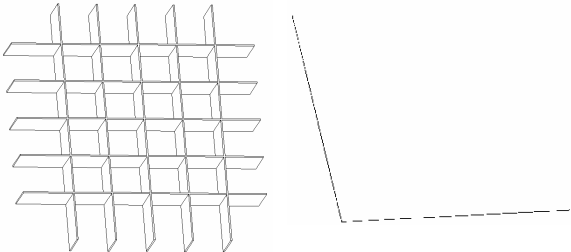
Figure 4: Lighting Output & Life Hours

►► Package information

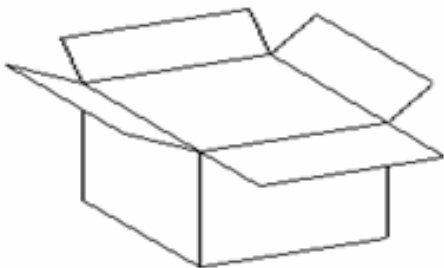
Lamp shade part :



← Lamp shade



← Put Mode:
 $1\text{PCS} \times 36 = 36\text{pcs}$

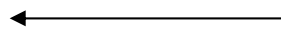


← Inner Box:
 $36\text{PCS} \times 6 = 216\text{pcs}$

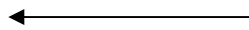
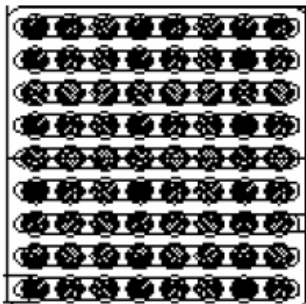
Figure 5: The package information for Lamp shade part.

Package information

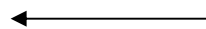
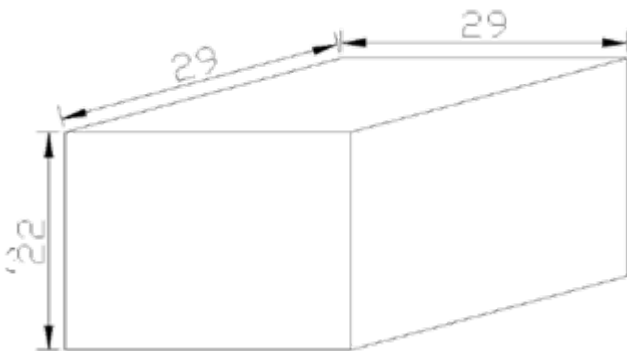
Lens part :



Lens



Put Mode:
 $8\text{PCS} \times 9 = 72\text{pcs}$

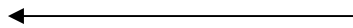


Inner Box:
 $72\text{PCS} \times 12 = 864\text{pcs}$

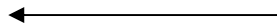
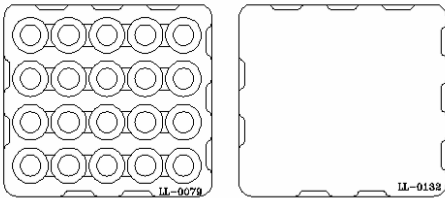
Figure 5: The package information for Lens part.

►► Package information

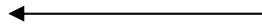
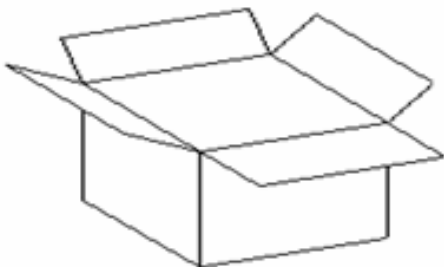
Heat sink part :



Heat sink



Put Mode:
20pcs



Inner Box:
 $20 \times 3 = 60$ pcs

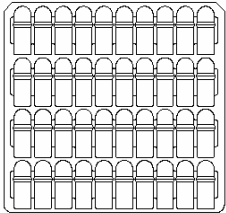
Figure 6 : The package information for heat sink part.

Package information

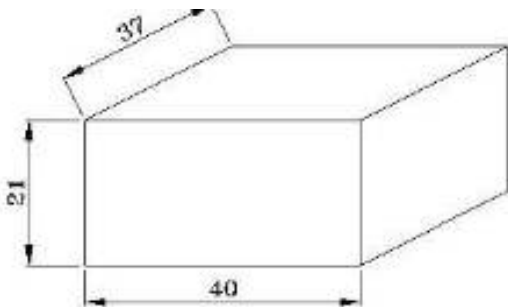
Lamp base part :



← Lamp Base



← Put Mode:
1*40=40pcs



← Inner Box:
40*6 Tier=240pcs

Figure 7 : The package information for lamp base part..

▶▶ Reference information

The UL card of UL plastic material :

Component - Plastics

E135714

NYTEX COMPOSITES CO LTD

6 LANE 468 CHANGSUI RD, SEC 4, PEITOU HSIANG CHANGHUA HSIEN 523 TW

CM-5000

Polyamide 66/6 (PA66/6), blend, mineral fiber, flame retardant, furnished as pellets

	Min Thk	Flame			RTI	RTI	RTI
Color	(mm)	Class	HWI	HAI	Elec	Imp	Str
BK	1.6	V-0	2	1	65	65	65
	3.2	V-0	1	1	65	65	65

Comparative Tracking Index (CTI): -

Inclined Plane Tracking (IPT): -

Dielectric Strength (kV/mm): -

Volume Resistivity (10⁹ ohm-cm): -

High-Voltage Arc Tracking Rate (HVTR): -

High Volt, Low Current Arc Resis (D495): -

Dimensional Stability (%): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2013-03-19

Last Revised: 2013-03-19

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness	Value
Flammability	IEC 60695-11-10	Class (color)	Tested (mm)	
			1.6	V-0 (BK)
			3.2	V-0 (BK)
Glow-Wire Flammability (GWI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWI)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

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Figure8 : The UL card information of the sink part.

Reference information

The UL card of UL plastic material :

Component - Plastics

E206114

STYRON (HONG KONG) LTD

TSING YI R & D LABORATORY, 40-50 TSING YI RD, TSING YI ISLAND N T HK

EMERGE PC 8130-(i)(f1)

Polycarbonate (PC), "EMERGE", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	1.5	V-0	2	1	130	115	130
	3.0	V-0,5VA	2	1	130	115	130

Comparative Tracking Index (CTI): 2

Dielectric Strength (kV/mm): -

High-Voltage Arc Tracking Rate (HVTR): 1

Dimensional Stability (%): -

Inclined Plane Tracking (IPT): -

Volume Resistivity (10^x ohm-cm) : -

High Volt, Low Current Arc Resis (D495): 7

(f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

(i) - Followed by suffix numbers 3-15 incl. indicating melt flow rate

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2011-07-12

Last Revised: 2013-08-30

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10, IEC 60695-11-20	Class (color)	1.5	V-0 (ALL)
			3.0	V-0,5VA (ALL)
Glow-Wire Flammability (GWI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWI)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	3.0	137
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

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Figure 9 : The UL card information of the Lamp shade part.

▶▶ Reference information

The UL card of UL plastic material :

Component - Plastics

E48268

IDEMITSU KOSAN CO LTD

BASIC CHEMICALS DEPT, 1-1 ANESAKI-KAIGAN, ICHIHARA-SHI CHIBA-KEN 299-0193 JP

LEV1700

Polycarbonate (PC), furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
NC	0.42-1.9	V-2	-	-	80	80	80

Comparative Tracking Index (CTI): -

High-Voltage Arc Tracking Rate (HVTR): -

Dielectric Strength (kV/mm): -

Dimensional Stability (%): -

High Volt, Low Current Arc Resis (D495): -

Volume Resistivity (10⁸ ohm-cm): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2010-04-06

Last Revised: 2010-04-06

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.42-1.9	V-2 (NC)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

Underwriters Laboratories Inc®

Figure 10 : The UL card information of the lens part.

Reference information

The UL card of UL plastic material :

Component - Plastics					E48268		
IDEMITSU KOSAN CO LTD							
1-1 MARUNOUCHI 3-CHOME, CHIYODA-KU, TOKYO 100-0005 JP							
URC2500							
Polycarbonate (PC), furnished as pellets							
	Min Thk	Flame			RTI	RTI	RTI
Color	(mm)	Class	HWI	HAI	Elec	Imp	Str
WT	1.5	V-0	-	-	80	80	80
	3.0	V-0	-	-	80	80	80
Comparative Tracking Index (CTI): -				Dimensional Stability (%): -			
High-Voltage Arc Tracking Rate (HVTR): -				High Volt, Low Current Arc Resis (D495): -			
Dielectric Strength (kV/mm): -				Volume Resistivity (10 ^X ohm-cm): -			
UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by ULI.							
Report Date: 2006-09-18							
Last Revised: 2006-09-18		Underwriters Laboratories Inc®					
IEC and ISO Test Methods							
Test Name	Test Method	Units	Thickness Tested (mm)	Value			
IEC Flammability	IEC 60695-11-10	Class (color)	1.5	V-0 (WT)			
			3.0	V-0 (WT)			
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-			
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-			
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-			
IEC Ball Pressure	IEC 60695-10-2	C	-	-			
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-			
ISO Tensile Strength	ISO 527-2	MPa	-	-			
ISO Flexural Strength	ISO 178	MPa	-	-			
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-			
ISO Izod Impact	ISO 180	kJ/m ²	-	-			
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-			
Underwriters Laboratories Inc®							

Figure 11 : The UL card information of the lamp base part.(White)

▶▶ Reference information

The UL card of UL plastic material :

Component - Plastics

E48268

IDEMITSU KOSAN CO LTD

1-1 MARUNOUCHI 3-CHOME, CHIVODA-KU, TOKYO 100-0005 JP

LE1700

Polycarbonate (PC), furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
NC	0.45-0.50	V-2	-	-	80	80	80
	1.5	-	3	3	80	80	80

Comparative Tracking Index (CTI): -

Dielectric Strength (kV/mm): -

High-Voltage Arc Tracking Rate (HVTR): -

Dimensional Stability (%): -

Inclined Plane Tracking (IPT): -

Volume Resistivity (10^x ohm-cm): -

High Volt, Low Current Arc Resis (D495): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2000-03-31

Last Revised: 2009-03-30

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thickness Tested (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.45-0.50	V-2 (IIC)
			1.5	- (IIC)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m ²	-	-
ISO Izod Impact	ISO 180	kJ/m ²	-	-
ISO Charpy Impact	ISO 179-2	kJ/m ²	-	-

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Figure 12 : The UL card information of the lamp base part.(Black)

▶▶ Reference information

The SGS card of SGS plastic material :

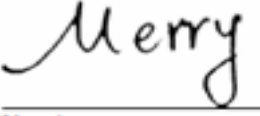
	
Test Report	No. CANEC1319750803 Date: 26 Dec 2013 Page 1 of 5
DONGGUANCITY DAHONG PLASTIC PRODUCTS FACTORY INDUSTRIAL DISTRICT, SHANGTONG VILLAGE QISHITOWN	
The following sample(s) was/were submitted and identified on behalf of the clients as : POWDER BLACK	
SGS Job No. :	CP13-065023 - GZ
Client Ref. Info. :	K401, K402, K402A, K403, K404, K417, K418, B2014, B2014A, B2014C, B2014E, B2014P, B2015, B8008, B8008-A, B8007, B8011, B8011A, B8012, B8015, B859, C90584 Mixture
Date of Sample Received :	17 Dec 2013
Testing Period :	17 Dec 2013 - 23 Dec 2013
Test Requested :	Selected test(s) as requested by client.
Test Method :	Please refer to next page(s).
Test Results :	Please refer to next page(s).
Conclusion :	Based on the performed tests on submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.
Signed for and on behalf of SGS-CSTC Ltd.	
	
Merry Lv Approved Signatory	
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 SGS China Technical Service, Ltd. Surveillance and Testing Laboratory	
18 Rely Road, Shantou Park, Guangzhou Economic and Technology Development Zone, Guangzhou, China 510663 T (86-20) 82135555 F (86-20) 82075113 www.sgs.com.cn 中国·广州·经济技术开发区科学城科城路188号 邮编: 510663 T (86-20) 82135555 F (86-20) 82075113 sgschina@sgs.com	

Figure 13 : The SGS card information of the lamp base part.(Black)

Reference information

The SGS card of SGS plastic material :



Test Report No. CANEC1319750803 Date: 26 Dec 2013 Page 2 of 5

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN13-197508.003	Black powder

Remarks :

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

RoHS Directive 2011/65/EU

Test Method : (1)With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
 (2)With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
 (3)With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
 (4)With reference to IEC 62321:2008, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
 (5)With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Limit	Unit	MDL	Q03
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND

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 Guangzhou Branch

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Member of the SGS Group (PCLIS S&L)

Figure 14 : The SGS card information of the lamp base part.(Black)

▶▶ Reference information

The SGS card of SGS plastic material :



Test Report
 No. CANEC1319750803
 Date: 26 Dec 2013
 Page 3 of 5

Test Item(s)	Limit	Unit	MDL	003
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND

Notes :

(1) The maximum permissible limit is quoted from the directive 2011/65/EU, Annex II

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Figure 15 : The SGS card information of the lamp base part.(Black)

Reference information

The SGS card of SGS plastic material :

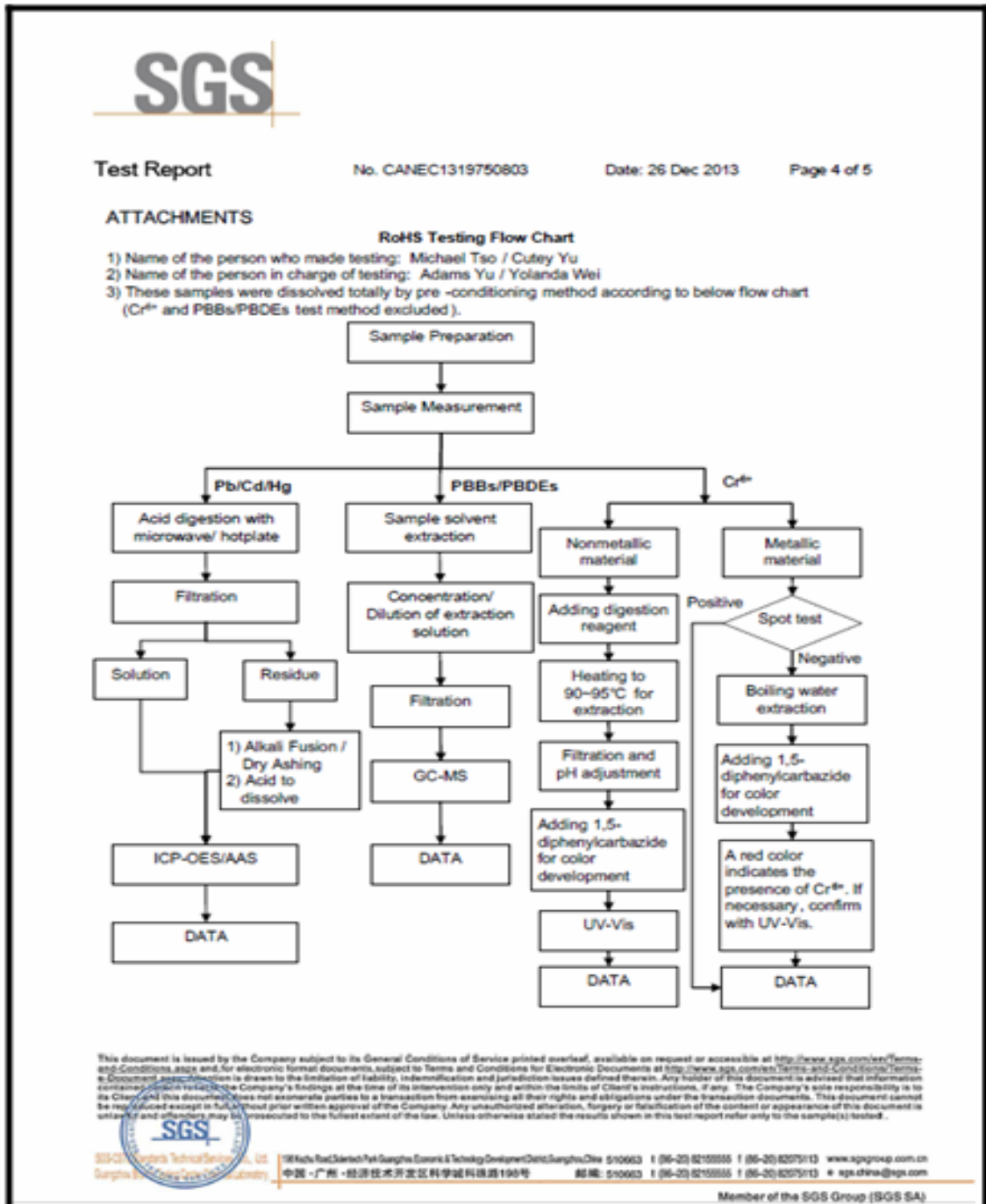


Figure 16 : The SGS card information of the lamp base part.(Black)

▶▶ Reference information

The SGS card of SGS plastic material :

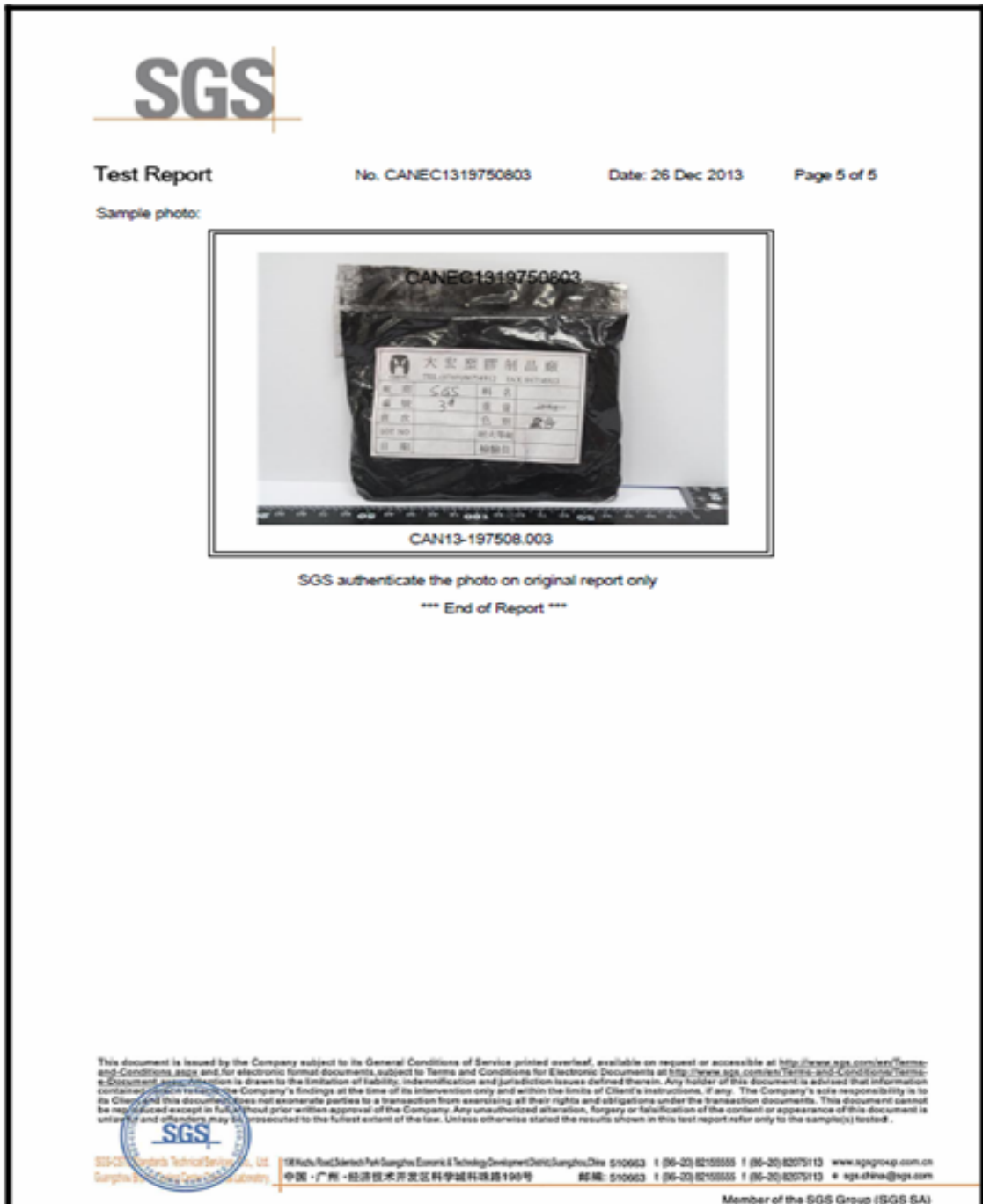


Figure 17: The SGS card information of the lamp base part.(Black)

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