

# Technical Report No. 68.140.13.068.01 Rev.001 Dated 2013-03-29

Client: Name: Shenzhen Clear Lighting Co., Ltd

Address: Bldg. 2, Guanlong Industrial Zone, Xili, 518055 Shenzhen,

PEOPLE'S REPUBLIC OF CHINA

Contact Person: Mr. Guo

Manufacturing

Manufacturer's name: Shenzhen Clear Lighting Co., Ltd

place:

Address: Bldg. 2, Guanlong Industrial Zone, Xili, 518055 Shenzhen,

PEOPLE'S REPUBLIC OF CHINA

Factory's name: Same as manufacturer

Address: Same as manufacturer

Test subject: Product: LED Neon F

Product: LED Neon Ribbon Light; LED Crystal Ribbon Light

Type: C-FR-F10, C-FR-F11, C-FR-F15X(X=A, B or S), C-FR-F21X(X=A, B or S),

C-FR-F22, C-FR-F05, C-FR-F07 [for LED Neon Ribbon Light]; C-FR-F16X(X=A or S), C-FR-F17 [for LED Crystal Ribbon Light]

Test specification:

1, Needle flame test according to clause 13.3.1 of EN 60598-1:2008+A1:2009;

2, Glow-wire test according to clause 13.3.2 of EN 60598-1:2008+A1:2009.

Purpose of examination:

 inspection according to specified requirements to realize the conformity with the Produktsicherheitsgesetz –ProdSG, version Nov 08, 2011

• Inspection according to specified requirements to realize the observance of

the protection aims of the following EC directives:

LVD directive 2006/95/EC

\_\_ EMC directive 2004/108/EC

Test according to the test specification.

Test result:

The test results show that the presented products are in compliance with the test

specification.

\*\*\*

This technical report may only be quoted in full. Any use for advertising purposes must be granted in writing. 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.



## 1 Description of the test subject

### 1.1 Function

 Manufacturer's specification for intended use: The materials used in LED light.

### 1.2 Consideration of the foreseeable misuse

- ☐ Not applicable
- ☑ Covered through the applied standard
- ☐ Covered by the following comment
- ☐ Covered by attached risk analysis

#### 1.3 Technical Data

Nil.

#### 2 Order

### 2.1 Date of Purchase Order, Customer's Reference

2013-03-19

### 2.2 Receipt of Test Sample, Location

20pcs samples were received on 2013-03-20, TEC Department, Shenzhen

### 2.3 Date of Testing

2013-03-20 to 2013-03-26

### 2.4 Location of Testing

TEC Department, Shenzhen

### 2.5 Points of Non-compliance or Exceptions of the Test Procedure

Nil.

\*\*\*

Technical Report No.: 68.140.13.068.01 Rev.001 2013-03-29

Page 2 of 6



#### 3 Test results

### 3.1 Needle flame test (clause 13.3.1 of EN 60598-1)

#### Test condition

The test process is as follows:

- a) The test specimens, the wooden board and the tissue paper were conditioned 24 h in an atmosphere having a temperature between 15 °C and 35 °C and a relative humidity between 45 % and 75 % before starting the test.
- b) A piece of flat smooth wooden board, approximately 10 mm thick covered in close contact with a single layer of wrapping tissue, is positioned at a distance of 200 mm ± 5 mm below the place where the needle-flame is applied to the test specimen. Wrapping tissue as specified in 4.215 of ISO 4046-4 is a soft and strong, lightweight wrapping tissue 12 g/m2 to 30 g/m2.
- c) Mounted the specimen, maintained an 8 mm spacing between the centre of the top of the burner and the remaining portion of the test specimen.
- d) The burner was tilted up to 45° from the vertical, and the test flame was applied to the specimen for 10 s at the point where the highest temperatures are likely to occur.

Test Result: Pass

Model No.	Appling needle flame time (s)	Duration of buring (s) (after 10s needle flame)	Observation	Result
C-FR-F10	10	0	No buring drop	Pass
C-FR-F11	10	1.3	No buring drop	Pass
C-FR-F15X(X=A,B or S)	10	0.9	No buring drop	Pass
C-FR-F21X(X=A,B or S)	10	1.6	No buring drop	Pass
C-FR-F22	10	0	No buring drop	Pass
C-FR-F05	10	0	No buring drop	Pass
C-FR-F07	10	0.9	No buring drop	Pass
C-FR-F16X(X=A or S)	10	2	No buring drop	Pass
C-FR-F17	10	2	No buring drop	Pass

\*\*\*

2013-03-29 Page 3 of 6

Technical Report No.: 68.140.13.068.01 Rev.001



## 3.2 Glow-wire test (clause 13.3.2 of EN 60598-1)

#### Test condition

- a) The wooden board and the tissue paper were conditioned 24 h in an atmosphere having a temperature between 15 °C and 35 °C and a relative humidity between 45 % and 75 % before starting the test.
- b) A piece of flat smooth wooden board, approximately 10 mm thick covered in close contact with a single layer of wrapping tissue, is positioned at a distance of 200 mm ± 5 mm below the place where the glow-wire is applied to the test specimen. Wrapping tissue as specified in 4.215 of ISO 4046-4 is a soft and strong, lightweight wrapping tissue 12 g/m2 to 30 g/m2.
- c) The specimen was mounted so that the planar area of the surface was vertical and the tip of the glow-wire was applied to the centre of the planar area of the surface.
- d) The glow-wire was heated to the specified temperature (650 °C), the tip of the glow-wire was then brought slowly into contact with the test specimen for 30 s.
- e) The penetration of the tip of the glow-wire into and through the test specimen was limited to  $7 \text{ mm} \pm 0.5 \text{ mm}$ .

#### Test Result: Pass

Model No.	Appling glow-wire time (s)	Duration of buring (s) (after 30s glow-wire)	Observation	Result
C-FR-F10	30	0	No buring and molten drop	Pass
C-FR-F11	30	0	No buring and molten drop	Pass
C-FR- F15X(X=A,B or S)	30	0	No buring and molten drop	Pass
C-FR- F21X(X=A,B or S)	30	0	No buring and molten drop	Pass
C-FR-F22	30	0	No buring and molten drop	Pass
C-FR-F05	30	0	No buring and molten drop	Pass
C-FR-F07	30	0	No buring and molten drop	Pass
C-FR-F16X(X=A or S)	30	0	No buring and molten drop	Pass
C-FR-F17	30	0	No buring and molten drop	Pass

Technical Report No.: 68.140.13.068.01 Rev.001 2013-03-29

Page 4 of 6



- 4 Remark
- 4.1 Annex 1: photo document.
- 5 Documentation

Nil.

6 Summary

The test specification is met.

Jiangsu TÜV Product Service Ltd. Shenzhen Branch TÜV SÜD Group

Engineer: ..

Sunny Yan

**Project Handler** 

Technical Report checked: .....

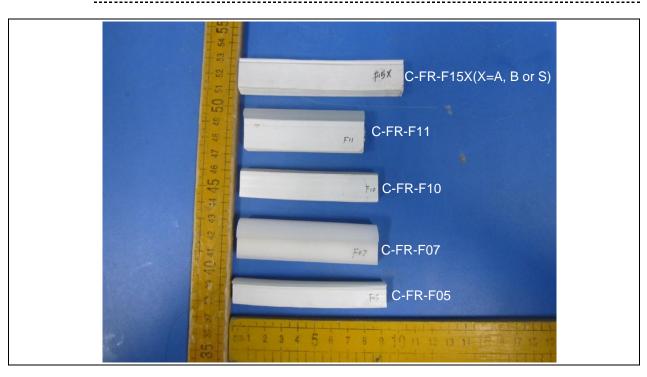
Taylor '

Designated Reviewer



### **Annex 1: Photo document**

Details of: Outlook view



Details of: Outlook view

