

**Test Report No. 7191146135-EEC16/01**  
dated 20 Oct 2016



PSB Singapore

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**Choose certainty.  
Add value.**

**Subject**

**TESTING OF FIRE RESISTANT CABLE**

**Client**

**ATL Technology Limited**  
1519 Chevalier Commercial Building  
8 Wang Hoi Road  
Kowloon Bay  
Hong Kong

Attn: Mr. Derek Wong

**Sample Submission Date**

05 Sep 2016

**Date(s) of Performance of Test**

06 Sep 2016 to 19 Oct 2016

**Description of Sample**

Type	:	CU/FR/XLPE/LSOH Control Cable
Brand	:	CALEDONIAN CABLES
Model	:	FIREFLIX-0801/0
Size	:	8C x 1.0 mm <sup>2</sup>
Voltage	:	450/750 V
Conductor	:	Stranded circular non-compacted plain copper wires (class 2)
Fire-barrier	:	Mica tape
Insulation	:	XLPE - White
Binder	:	Polyester tape
Sheath	:	LSOH - Black
Manufacturer	:	Caledonian Cables Limited
Country of origin	:	China



**Laboratory:**  
TÜV SÜD PSB Pte. Ltd.  
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**Regional Head Office:**  
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1 Science Park Drive, #02-01  
Singapore 118221  
**TÜV®**



**Method of Test**

The assessment detailed in this document was carried out in accordance with BS 6387:2013, Test method for resistance to fire of cables required to maintain circuit integrity under fire conditions (Protocols C, W and Z).

**Results**

Clause No.	Test Description	Results	Requirements
6	<u>Protocol C for resistance to fire alone</u> Overall diameter of cable: 17.4 mm Test voltage: 450/750 V Flame temperature: 950 ± 40 °C Application time: 3 h	Complied	None of the fuses (2A) ruptures and none of the lamps is extinguished during the period of the test.
7	<u>Protocol W for resistance to fire with water</u> Overall diameter of cable: 17.4 mm Test voltage: 450/750 V Flame temperature: 650 ± 40 °C Rate of water spray: between 0.25 L/m <sup>2</sup> /s and 0.30 L/m <sup>2</sup> /s Application time: After the flame has been applied for 15 min, turn on the water spray and continue the flame for a further 15 min.	Complied	None of the fuses (2A) ruptures and none of the lamps is extinguished during the period of the test.
8	<u>Protocol Z for resistance to fire with mechanical shock</u> Overall diameter of cable: 17.4 mm Test voltage: 450/750 V Flame temperature: 950 ± 40 °C Shocking interval time: 30±2 s Application time: 15 min	Complied	None of the fuses (2A) ruptures and none of the lamps is extinguished during the period of the test.

**Remark:**

The sample tested is deemed to comply with BS 6387:2013 (Protocols C, W and Z).

CINDY LEE  
TESTING OFFICER

FONG HICK SWANG  
SENIOR ASSOCIATE ENGINEER  
ELECTRICAL & ELECTRONICS

Appendix I

a) Marking: Printed on the sheath

CALEDONIAN CABLES TP302 8X1.0 FIRE RESISTANT CU/FR/XLPE/LSOH FIREFLIX-0801/0  
1881463 2015

b) General view of the cable



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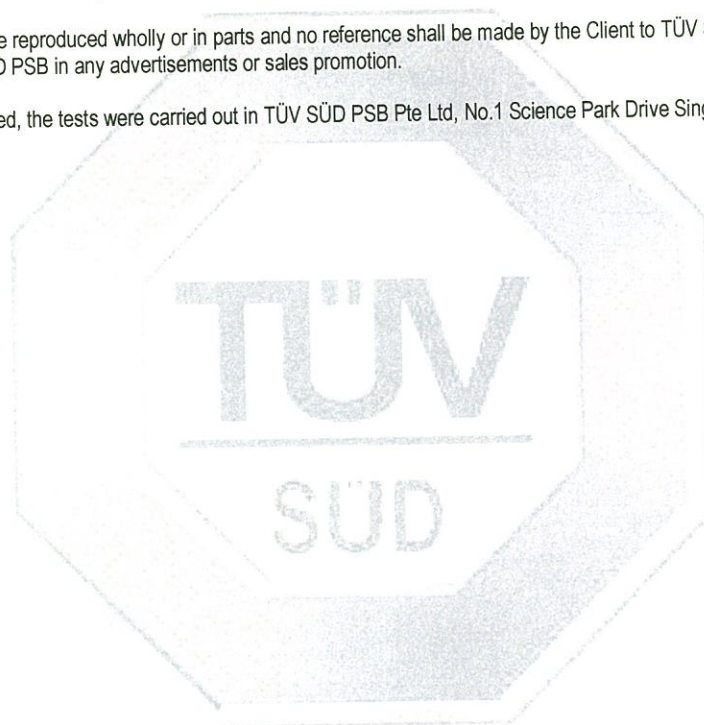


PSB Singapore

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July 2011



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**Subject**

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**Client**

**ATL Technology Limited**  
1519 Chevalier Commercial Building  
8 Wang Hoi Road  
Kowloon Bay  
Hong Kong

Attn: Mr. Derek Wong

**Sample Submission Date**

13 Sep 2016

**Date(s) of Performance of Test**

14 Sep 2016 to 19 Oct 2016

**Description of Sample**

Type	:	CU/FR/XLPE/LSOH Control Cable
Brand	:	CALEDONIAN CABLES
Model	:	FIREFLIX-1201/0
Size	:	12C x 1.0 mm <sup>2</sup>
Voltage	:	450/750 V
Conductor	:	Stranded circular non-compacted plain copper wires (class 2)
Fire-barrier	:	Mica tape
Insulation	:	XLPE - White
Binder	:	Polyester tape
Sheath	:	LSOH - Black
Manufacturer	:	Caledonian Cables Limited
Country of origin	:	China



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**Method of Test**

The assessment detailed in this document was carried out in accordance with BS 6387:2013, Test method for resistance to fire of cables required to maintain circuit integrity under fire conditions (Protocols C, W and Z).

**Results**

Clause No.	Test Description	Results	Requirements
6	<u>Protocol C for resistance to fire alone</u> Overall diameter of cable: 18.2 mm Test voltage: 450/750 V Flame temperature: 950 ± 40 °C Application time: 3 h	Complied	None of the fuses (2A) ruptures and none of the lamps is extinguished during the period of the test.
7	<u>Protocol W for resistance to fire with water</u> Overall diameter of cable: 18.2 mm Test voltage: 450/750 V Flame temperature: 650 ± 40 °C Rate of water spray: between 0.25 L/m <sup>2</sup> /s and 0.30 L/m <sup>2</sup> /s Application time: After the flame has been applied for 15 min, turn on the water spray and continue the flame for a further 15 min.	Complied	None of the fuses (2A) ruptures and none of the lamps is extinguished during the period of the test.
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**Remark:**

The sample tested is deemed to comply with BS 6387:2013 (Protocols C, W and Z).

CINDY LEE  
TESTING OFFICER

FONG HICK SWANG  
SENIOR ASSOCIATE ENGINEER  
ELECTRICAL & ELECTRONICS

Appendix I

a) Marking: Printed on the sheath

CALEDONIAN CABLES TP302 12X1.0 FIRE RESISTANT CU/FR/XLPE/LSOH FIREFLIX-1201/0  
1881387R10 2016

b) General view of the cable



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