

Report No.: TN18-02318E

October 11th, 2018

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Sample No.: CN18-02672

Contract No.: ISTCW18-01209

Commission Test

Test Report

Consigner

Caledonian Cables Limited

1/F., CMA Building, 64-66 Connaught Road Central, Hong Kong

Sample Name

RG6 Coaxial cable

Type and Size

CALEDONIAN RG6 CCS/F-PE/A/P/ALWB/LSZH

Sample Received Date

September 29th, 2018

Test Duration

September 29th, 2018 – October 11th, 2018

Test Conclusion

The test items of halogen acid gas content and toxicity index comply with consigner's technical specification, the other test items comply with the requirements of IEC 61034-2:2013, IEC 60754-2:2011, IEC 60332-1-2:2004+A1:2015.

This test report is only valid for the tested sample.

Authorized by

Shanghai Intelligent Service and Technology Co., Ltd.



李骥 Li Ji

Signature/Approver

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1 Sample Description

Manufacturer	Caledonian Cables Limited
Type and Size	CALEDONIAN RG6 CCS/F-PE/A/P/ALWB/LSZH
Quantity	20m
Marking	CALEDONIAN RG6 CCS/F-PE/A/P/ALWB/LSZH IEC 60332-1 POA3952 YR2018 1001M
Color	Black
Source	Sent by the consigner
Status	Normal appearance

2 Testing and Verdict Standards

2.1 Testing Standards

IEC 60332-1-2:2004+A1:2015	Test on electric and optical fibre cables under fire conditions- Part 1-2: Test for vertical flame propagation for a single insulated wire or cable- Procedure for 1kW pre-mixed flame
IEC 60754-1: 2011	Test on gases evolved during combustion of materials from cables – Part 1: Determination of the halogen acid gas content
IEC 60754-2: 2011	Test on gases evolved during combustion of materials from cables – Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2: 2013	Measurement of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements
Def Stan 02-713:2012	Determination of the Toxicity Index of the Products of Combustion from Small Specimens of Materials
Consigner's technical specification	

2.2 Verdict Standards

IEC 60332-1-2:2004+A1:2015	Test on electric and optical fibre cables under fire conditions- Part 1-2: Test for vertical flame propagation for a single insulated wire or cable- Procedure for 1kW pre-mixed flame
IEC 60754-2: 2011	Test on gases evolved during combustion of materials from cables – Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-2: 2013	Measurement of smoke density of cables burning under defined conditions – Part 2: Test procedure and requirements

3 Other Information

3.1 Sample information

CALEDONIAN RG6 CCS/F-PE/A/P/ALWB/LSZH

The sample's name, type and size, and manufacture name are provided by the consigner.

3.2 Symbol definition

Requirement: / not required by standard;

Verdict: P complying with requirement/Pass,

F not complying with requirement/Fail,

N not required.

4 Test

4.1 Smoke density test

Test method: IEC 61034-2: 2013.

Test parameters:

Length of test pieces	1	m
Pre-conditioning temperature	20	°C
Pre-conditioning duration	16	h
Number of test pieces	3	

Test Item	Unit	Requirement	Test Result	Verdict
- Light transmittance	%	≥60	68	P

4.2 The determination of halogen acid gas content, pH value and conductivity

Test method: IEC 60754-1: 2011 and IEC 60754-2: 2011.

Test Item	Unit	Requirement	Test Result	Verdict
HCl content	%	≤0.5	<0.5	P
- Sheath				
pH value		≥4.3	5.0	P
- Sheath				
Conductivity	μS/mm	≤10	0.66	P
- Sheath				

4.3 Toxicity Index

Test method: Def Stan 02-713:2012

Test parameters:

 The Volume of test chamber 0.7876 m³

Combustion time 2 min

Bonering temperature 1150 °C

Test Item	Unit	Requirement	Test Result	Verdict
Toxicity Index - Sheath	/	≤5	2	P

4.4 Test for vertical flame propagation for a single cable

Test method: IEC 60332-1-2:2004+A1:2015.

Test parameters:

Length of sample: 600 mm

Pretreatment temperature: 23 °C

Pretreatment relative humidity: 50 %

Pretreatment time: 16 h

Flame application time: 60 s

Test Item	Unit	Requirement	Test Result	Verdict
- the distance between the lower edge of the top support and the onset of charring	mm	>50	412	P
- the distance from the lower edge of the top support to the lower onset of charring	mm	≤540	522	P

- The End. -