

Shanghai Jingsheng Communication Technology Co., LTD

Building 3,2nd floor, No.428, Zhongxin Road, Xiaokunshan Town, Songjiang District, Shanghai, China

Sample Description : 4-fibers SMG657A2 Double-sheathed Micro Distribution Cable LSZH
Project Nr. : 635044/01
Sample Nr. : 20470

The above sample(s) data and information was / were submitted and identified on behalf of the client. SGS is not responsible for the authenticity, integrity and results of the data and information and / or the validity of the conclusion arising therefrom. Results apply to the sample as received.

SGS Ref. No. : WHPL2506000573
Sample Receiving Date : Jun 18,2025
Testing Period : Jun 18,2025 to Jun 25,2025
Test Required : EN 50399:2022 Common test methods for cables under fire conditions—Heat release and smoke production measurement on cables during flame spread test- Test apparatus, procedures, and results, 20,5 kW Ignition source.
Test result(s) : See attached sheet

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Changzhou) Co., Ltd.

Matthew Fang
Approved signatory



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Test Requested:

EN 50399:2022 Common test methods for cables under fire conditions—Heat release and smoke production measurement on cables during flame spread test- Test apparatus, procedures, and results, 20,5 kW Ignition source.

I. Test Conducted

This test was conducted according to EN 50399:2022 Common test methods for cables under fire conditions—Heat release and smoke production measurement on cables during flame spread test- Test apparatus, procedures, and results, with 20,5 kW Ignition source.

II. Sample details

Description*	4-fibers SMG657A2 Double-sheathed Micro Distribution Cable LSZH
Model*	SM G657A2
Designation type*	SM G657A2
Generic construction*	250um fiber / LSZH / Aramid yarn / LSZH
Number of cores*	4
Color of sheath	White
Overall diameter	2.2mm
Sample length	3.5m
Manufacturer*	Shanghai Jingsheng Communication Technology Co., LTD
Address of Manufacturer*	Building 3,2nd floor, No.428, Zhongxin Road, Xiaokunshan Town, Songjiang District, Shanghai, China

*: Provided by the applicant.

This product is defined as Optical fibre cable according to EN 50575.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

III. Test details

Conditioning:

The test pieces were conditioned for at least 16 h at a temperature of (20 ±10)°C. The test pieces were dry.

Test conditions:

Number of test pieces	: 30	Flame application time	: 20 min
Number of burners	: 1	The heat output of the burner	: 20,5 kW
Backing board on ladder	: No	Airflow through the chamber	: 8000±400 l/min



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Mounting method of specimen:

1) The test sample shall be mounted, carefully and accurately, on the front of the ladder. The lower part of each test piece or bundle of test pieces shall extend between 200 mm and 300 mm under the horizontal centreline of the ribbon burner, dependent on their actual length, such that (3300~3325) mm of the cables are above the horizontal centreline of the ribbon burner. Non-circular cables shall be mounted such that the major axis is presented to the burner face.

Each test piece or bundle of test pieces shall be attached individually to each rung of the ladder by means of a metal wire using the crossed wire method of fixing. Steel wire is recommended. To fix the cables to the rungs two wires can be applied successively. The wire ends shall be cut off such that the lengths of these ends shall not exceed 10 mm.

For cables up to and including 50 mm diameter (or major axis dimension for non-circular cables), wire of (1,0 ± 0,3) mm in diameter shall be used. For cables above 50 mm diameter (or major axis dimension for non-circular cables), wire of (1,5 ± 0,3) mm in diameter shall be used. Mount all test pieces on the ladder with the bending (due to bending of the cable on the reel), if any, in the same direction, towards the back side of the test chamber as much as possible, see also IEC 60332-3-24 [4].

2) The test pieces were mounted according to the cable overall diameter.

Cable overall diameter	Mounted method
Less than or equal to 5mm	The cables shall be bundled in bundles of approximately 10 mm diameter. The bundles shall not be twisted. The spacing between bundles shall be 10 mm.

3) Number of layers: 1

IV. Test results

Parameters	1 st
Peak HRR (kW)	15.7
Peak SPR (m ² /s)	0.04
THR _{1200s} (MJ)	6.8
TSP _{1200s} (m ²)	14.6
FIGRA (W/s)	40.7
FS (m)	0.97
Flaming particles or droplets	No



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Note:

Peak HRR----Maximum value of heat release, excluding the burner output, determined during the whole burner application time, averaged over 30 s expressed in [kW]

Peak SPR---- Maximum value of smoke production, determined during the whole burner application time, averaged over 60 s, expressed in [m²/s]

*THR*_{1200s} ---- Total heat release (HRRsm30) from test start until end of test, excluding contribution from ignition source [MJ]

*TSP*_{1200s} ----Total smoke production (*SPRsm60*) from test start until end of test [m²]

FIGRA----Fire growth rate index used for classification purposes [W/s];

FS----Vertical flame spread [m] equals the damaged length of the sample

Statements:

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test. They are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The specimen was supplied by the sponsor and SGS-CSTC Standards Technical Services (Changzhou) Co., Ltd. was not involved in any selection or sampling procedure.

The test results or test reports shall not be used for improper or illegal publicity.

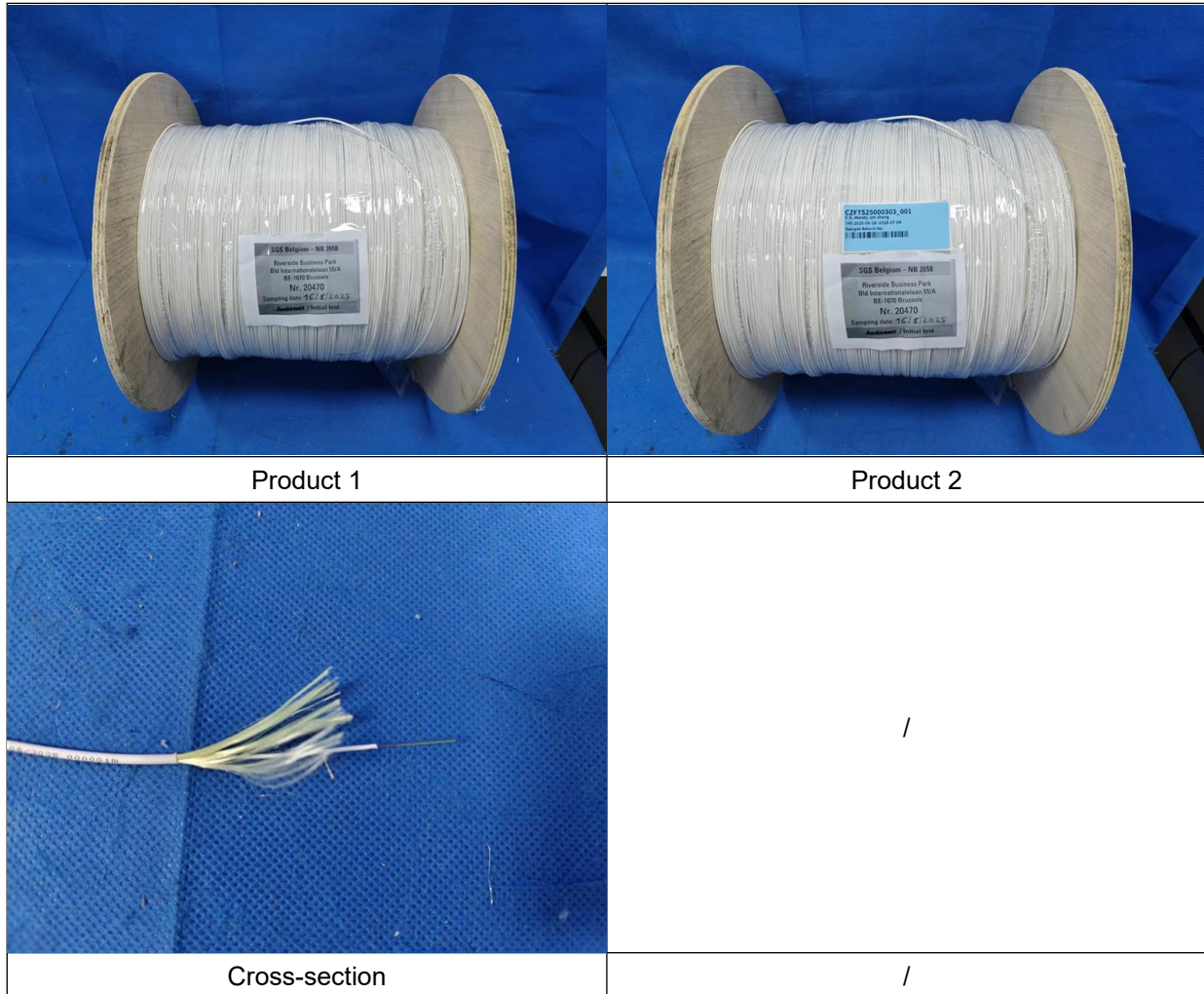
Test Address: No.3, Hehai East Road, Tianning District, Changzhou, Jiangsu, China



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Photo Appendix:



SGS authenticate the photo on original report only

Test applied for by SGS Belgium N.V Division SGS CEPEC. Boulevard Internationalelaan 55, B-1070 Brussel - Belgium, on behalf of Shanghai Jingsheng Communication Technology Co., LTD

End of Report



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com