



TEST REPORT

No. : SC100920857

Date : Sep. 30, 2010

Page: 1 of 3

CHANGSHU SYP SPECIAL GLASS CO., LTD.
NO.16 XINGANG ROAD, CHANGSHU ECONOMIC DEVELOPMENT ZONE, CHANGSHU JIANGSU PROVINCE

The following sample(s) was/ were submitted and identified on behalf of the client as:

- Sample Name : Low-iron Patterned Glass
- Sample Number : SC100920857
- Test Required : Please see the next page(s)
- Test Standard : Please see the next page(s)
- Date of Receipt : Sep. 08, 2010
- Test Period : Sep. 08, 2010 to Sep. 30,2010
- Test result(s) : For further details, please refer to the following page(s)

***** To be continued*****

Signed for SGS-CSTC Standards
Technical Services (Shanghai) Co., Ltd

Sally Xie

Sally Xie

Authorized signatory

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755)82871449, or email: CN_Docs@sgs.com

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/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, in particular, and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein 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 and such sample(s) are retained for 30 days only.



No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China 201319 t(86-21) 61196300

中国·上海·浦东康桥东路1159弄69号 邮编:201319 t(86-21)61196300

f(86-21) 68183122/68183920

f(86-21) 68183122/68183920

www.cn.sgs.com

e sgs.china@sgs.com

SHML 196844

TEST REPORT

No. : SC100920857

Date : Sep. 30, 2010

Page: 2 of 3

Test Conducted:

ISO 9050:2003(E) Glass in building — Determination of light transmittance, solar direct transmittance, total solar energy transmittance, ultraviolet transmittance and related glazing factors

I. Sample description:

Nominal dimension	100mm×100mm		
Actual thickness (mm)	Sample 1	Sample 2	Sample 3
	2.88	2.89	2.90

II. Test result:

No.	Test Item	Test Method	Test Result		
			Sample 1	Sample 2	Sample 3
1	Light transmittance (%)	ISO 9050:2003(E)	91.81	91.69	91.98
2	Light reflectance (%)		5.28	5.52	5.67
3	Solar direct transmittance (%)		91.62	91.40	91.59
4	Solar direct reflectance (%)		5.49	5.70	5.88
5	Solar direct absorptance (%)		2.89	2.90	2.53
6	UV transmittance (%)		86.69	86.85	87.29
7	UV reflectance (%)		9.27	9.30	9.25
8	Total solar energy transmittance (%)		92.37	92.15	92.24

Remark:

- $\epsilon_1 = 0.837$ was adopted for the calculation of No.8 total solar energy transmittance.
- In order to eliminate the secondary reflection, painting that has no reflection was painted on the non-testing side.

***** To be continued*****

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/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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 and such sample(s) are retained for 30 days only.



SHML 196845

No.69, Block 1159, East Kang Qiao Road, Pudong District, Shanghai, China 201319 t (86-21) 61196300

f (86-21) 68183122/68183920

www.cn.sgs.com

中国·上海·浦东康桥东路1159弄69号 邮编:201319 t (86-21) 61196300

f (86-21) 68183122/68183920

e sgs.china@sgs.com

TEST REPORT

No. : SC100920857
 Date : Sep. 30, 2010
 Page: 3 of 3

3. Formula (1) was adopted for the calculation of UV-reflectance:

$$\rho_{uv} = \frac{\sum_{\lambda=300nm}^{380nm} \rho(\lambda) S_{\lambda} \Delta\lambda}{\sum_{\lambda=300nm}^{380nm} S_{\lambda} \Delta\lambda} \dots\dots\dots (1)$$

Where : $\rho(\lambda)$ is the spectral external reflectance of the glazing;
 S_{λ} is the relative spectral distribution of UV-radiation;
 $\Delta\lambda$ is the wavelength interval.

Sample photo:



*****End of report*****

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/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. 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 and such sample(s) are retained for 30 days only.



SHML 196846

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755)83071443, or email: CN.Desctech@sgs.com