

TEST REPORT: 7191093841-CHM14-LYW

Date: 07 AUG 2014

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SUBJECT

Measurement of Solar Reflectance, Emittance and Calculation of Solar Reflectance Index (SRI)

CLIENT

ADVANCE AND SHARE SOLUTIONS PTE. LTD
1 KAKI BUKIT AVENUE 6
#02-64, AUTOBAY@KAKI BUKIT
SINGAPORE 417883

Attention: MR. JOHN TAN

SAMPLE SUBMISSION DATE

24 JUL 2014

DESCRIPTION OF SAMPLE

One sample named as the following was received.

1st coat: ANS Stabilis EP PR SF-2000

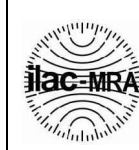
2nd & 3rd coat : ANS Stabilis WB HR Finish 1088 (Using 1% of the mixture of ColorVista-WB Cool+ Universal Heat Reflective Colorants.)

DATE OF ANALYSIS

06 AUG 2014



Laboratory:
TÜV SÜD PSB Pte. Ltd.
No.1 Science Park Drive
Singapore 118221



LA-2007-0380-A
LA-2007-0381-F
LA-2007-0382-B
LA-2007-0383-G
LA-2007-0384-G
LA-2007-0385-E
LA-2007-0386-C
LA-2010-0464-D

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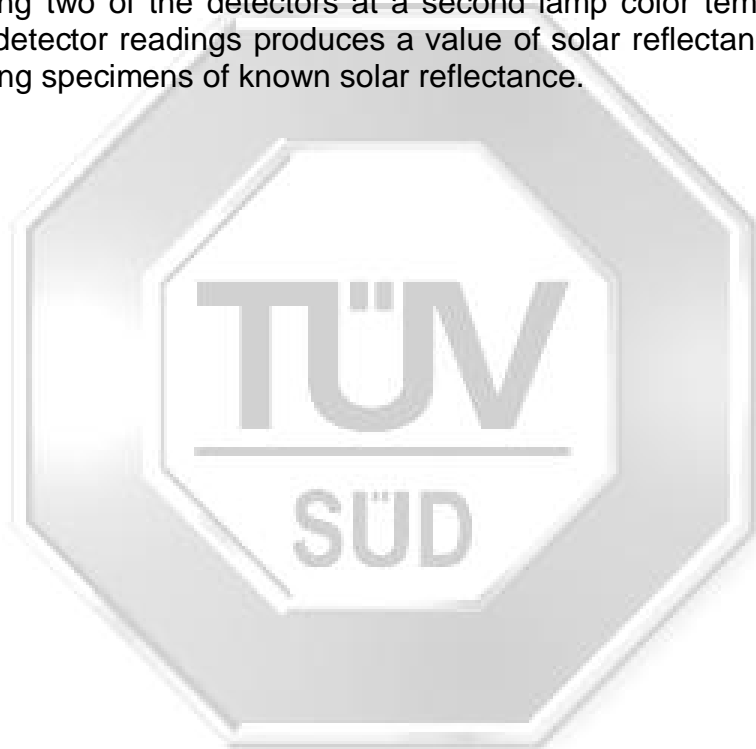
Regional Head Office:
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TUV®

METHODS OF TEST

The tests refers to the following standard:

ASTM C 1549 - 09 – Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.

The sample surface is illuminated diffusely by a tungsten-halogen lamp source and the reflected energy is measured at the specified incidence angle. A solar measurement spectrum is achieved by monitoring the reflected energy with four detectors that cover different wavelength ranges in the solar spectrum. Two additional virtual detectors are added by reading two of the detectors at a second lamp color temperature. A weighted sum of the six detector readings produces a value of solar reflectance. The reflectometer is calibrated using specimens of known solar reflectance.



RESULTS

Table 1 Solar reflectance of sample under the air mass 1.5.

Sample Names	Measurement 1	Measurement 2	Measurement 3	Average	Standard Deviation
1st coat: ANS Stabilis EP PR SF-2000 2nd & 3rd coat : ANS Stabilis WB HR Finish 1088 (Using 1% of the mixture of ColorVista-WB Cool+ Universal Heat Reflective Colorants.)	71.8%	71.7%	71.7%	71.7%	0.0577%

Environment temperature of test: 22.9°C
Relative humidity of test: 59 %

Solar Reflectance of the coated panel was about 71.7%.



MS LIN YUANWEN
TECHNICAL EXECUTIVE



DR TANG SONGBAI
PRODUCT MANAGER
SURFACE ANALYSIS
CHEMICAL & MATERIALS

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PSB Singapore

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July 2011

