

# TECHNICAL REPORT



## Hunter Plastics Limited

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Our Ref: TMCMF30002

Your Ref:

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Delivery Date 27<sup>th</sup> August 2009  
Test Dates: 11<sup>th</sup> - 14<sup>th</sup> September 2009

## SAMPLE (S) FOR TEST

Wood grain effect sheet vinyl  
Reference - Vinyl VM-2107 A-17UV Dark Walnut

## TEST REQUIREMENTS

Colour fastness to artificial light: Xenon arc fading lamp test.  
(Based on in BS EN ISO 105-B02: 1999 – Textiles -Tests for colour fastness – Part B02  
Normal Conditions)

## PERFORMANCE SUMMARY

No visible colour change - Grey Scale 5

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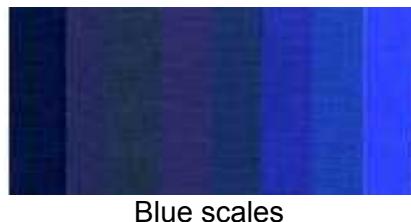
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## RESISTANCE OF CABINET FURNITURE MATERIALS TO COLOUR CHANGE UNDER XENON ARC LIGHT (SIMULATED SUNLIGHT).

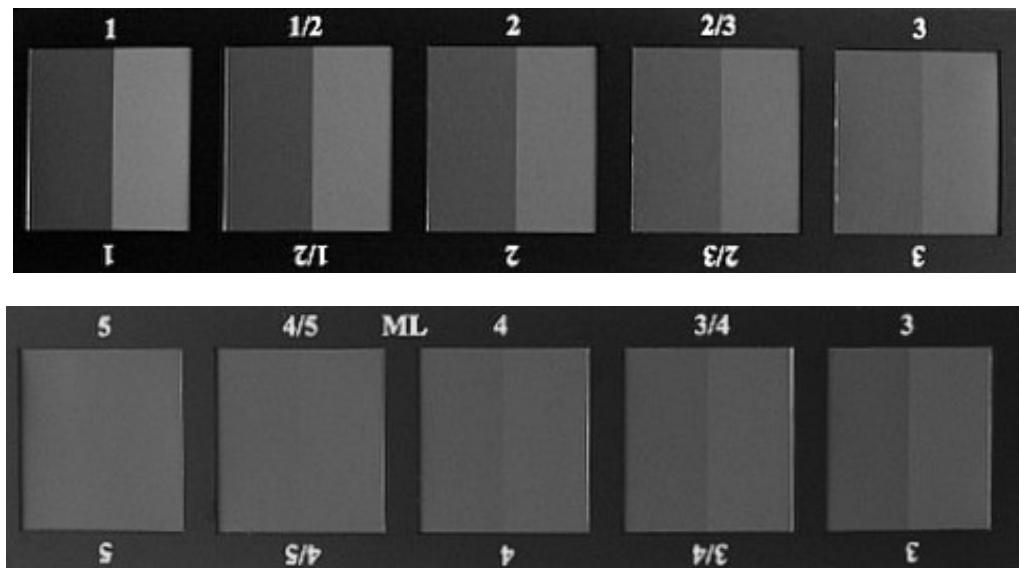
The submitted sample was tested to assess resistance to fading (simulated sunlight), according to the general test method and machine requirements described in BS EN ISO 105-B02: 1999 – Textiles -Tests for colour fastness – Part B02 Colour fastness to artificial light: Xenon arc fading lamp test.

Source Apollo Xenon Lamp 1500 W air cooled. Normal conditions: Irradiance (300-400nm), Chamber Temperature 30°C and Relative Humidity 45%.

The submitted sample was exposed to Xenon arc light until a 'Standard Blue Scale 6' (a dyed blue cloth) faded to match a change equivalent to Grey Scale 4 (approximately 72 hours). The standard blue scales are used as visual guide and ensure a sample receives reasonably consistent dosage of light exposure.



The degree of fading, or darkening in the case of some materials, of the test piece was then determined by comparing exposed and non-exposed areas of the test specimen with Standard Grey Scales (ISO 105 - AO2) where 1 = maximum contrast change and 5 = no visible change.



Guide to greyscale – (not a true reproduction)

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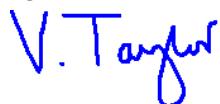
The exposure time is reckoned to simulate a period of service use of between approximately one month in a sunny south-facing window during summer and two years in less intensely lit areas within a room. British Standards for cabinet furniture finishes do not specify requirements for this test, but in FIRA's experience a contrast change equivalent to Grey Scale 3 or worse in test represents a significant appearance change which may result in customer complaints.

Reactions of cabinet furniture materials to light can be complex and fading or even darkening of surfaces can occur. Generally man made products such as plastics, paints, paper foils etc can be produced to exhibit good 'colour fastness' properties but in the case of natural products such as wood and wood veneers (simulated sunlight) colour fastness is less easily controlled.

## RESULTS

SAMPLE: Wood grain effect sheet vinyl Reference - Vinyl VM-2107 A-17UV Dark Walnut	EXPOSURE TO XENON ARC LIGHT	
	TEST RATING GREY SCALE	COMMENTS
	5	No visible colour change evident between exposed and non exposed areas
STATUS	PASS	

TESTED BY: L PRICE



APPROVED BY: V TAYLOR (SECTION HEAD - CABINET MATERIALS TECHNOLOGY)