



## NZWTA TESTS FOR COLOUR FASTNESS

## ISO 105-B02 Colour fastness to artificial light: Xenon arc fading lamp test

Hi Vis garments need to maintain their colour in order to remain compliant.

When in use, textile fabrics are exposed to sunlight, this light tends to destroy colouring materials, that result in faded fabric. Dyes vary enormously in their reaction to light and an objective measure of colour fastness to light is required according to AS NZS 1906.4:2023.

ISO 105-B02:2014 specifies a method intended for determining the effect on the colour of textiles of all kinds and in all forms to the action of an artificial light source representative of natural daylight (D65). The method is also applicable to white (bleached or optically brightened) textiles.

## **Principle**

Parts of the surface area of a test specimen are exposed to the Xenon Arc Lamp, whilst some parts are covered for comparison to reference fabrics that have a known colour resistance to light.



Figure 1: Faded fabric samples after exposure to Xenon Arc Lamp Test





NZWTA are specialists in measuring colour fastness to light. We also provide colour fastness to washing, chlorine, perspiration, photobleaching, rubbing, sea water and shampooing.

## **REFERENCES**

AS 2001.4.11, BS EN 20105-N01, AS 2001.4.15 AS 2001.4.5, ISO 105-E03 WNZ/TWC 133, ISO 105-B02, AS 2001.4.B02 AS 2001.4.16 AS 2001.4.17, WNZ/TWC 174, 175, ISO 105-E04 WRONZ TM WNZ/TWC 165, 232, AS/NZS 2111.19.1, AS 2001.4.3 AS 2001.4.E02, ISO 105-E02 AS/NZS 2111.19.2, WNZ/TWC 233 WNZ/TWC 193, 250, ISO 105-C06, AS 2001.4.15 WNZ/TWC 6, AS 2001.4.E01

If your business is dependent on meeting product quality standards and/or specifications relating to this test method, talk to the NZWTA team to see if we can help.

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