



Shade Fabric Test Report

Analysed for: Customer Name
 ARPANSA Ref: 33201-2

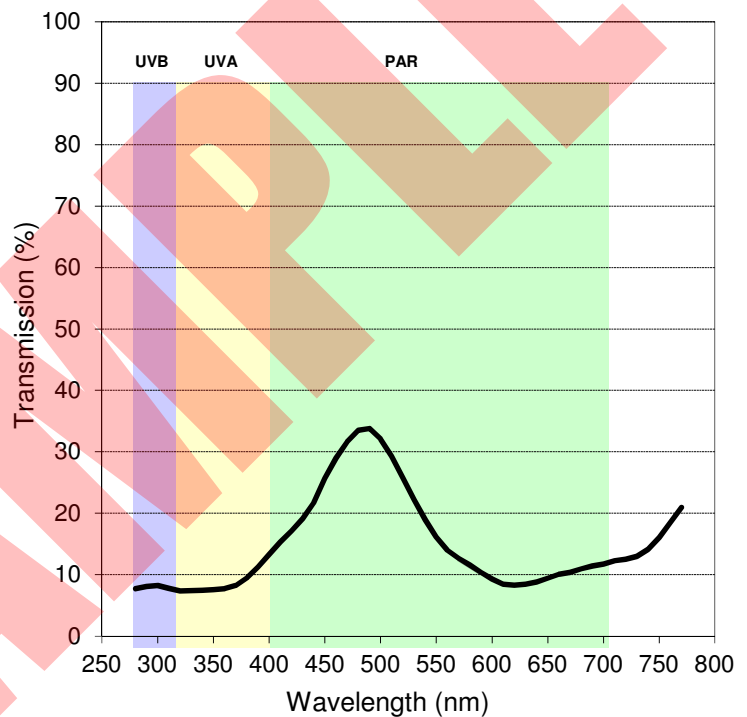
Client Reference: 275

Sample Information

Sample Type: Knitted Shade Fabric Sample Colour: Aqua
 Analysis Date: 30/07/2018 Instrumentation: Bentham DTMc300F, s/n 14294
 Description: Aqua 300gsm Shade Fabric, Batch 301

Shadecloth Test Results S.D. Transmission Characteristics

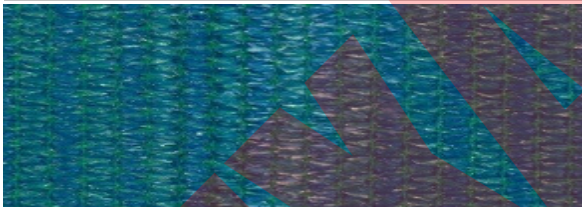
Cover Factor: 92.5 ± 1.4
 Designation: Extra-heavy cover
 Colour code: Lime Green
 Shade Factor: 84.9 ± 2.0
 % Tav: 15.1 ± 2.0
 % UVR: 8.7 ± 1.5
 % PAR: 17.4 ± 2.2
 % UVR Block: 91.3 ± 1.5
 Weight (gsm): 300
 Specimens Tested: 10



Ultraviolet Effectiveness Results

UVE (%): 92.1 ± 0.7
 Calculated UVE (%): 91
 Protection category: Very effective

Material Sample



Review of Results

NOTE: The following disclaimer must be used when quoting the ultraviolet effectiveness (UVE) results from this test report: "When shade fabric is used for purposes such as shade structures for human protection, the ultraviolet effectiveness (UVE) may not be an accurate guide to the protection provided and may be less than the measured value due to factors including variations in design, height and size of shade structures, stretching of the fabric, the distance of the fabric from the persons, the direction of sunlight, and the physical location of the persons within the shade structure (e.g. at the edge or at the centre)." For adequate protection of people consider using shade fabric with high UVE% ratings.

Disclaimer

Unless otherwise stated the sample was tested unstretched, dry and in new condition. This report has been prepared in accordance with standard AS 4174: 2018 - Knitted and Woven Shade Fabric, Appendices A, B and D. The results in this report are applicable to the sample tested and may not apply to other batches of the same material or similar materials. It is a condition of the provision of these test results that you do not use the name of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) or the Commonwealth of Australia, or any words, marks or devices which may imply a connection with ARPANSA or the Commonwealth of Australia, in connection with the promotion or sale of your products, unless ARPANSA has given express written authority to do so. This test report may only be reproduced in full and without alteration. Version 3.4 - 30/07/2018.

Technician: _____ / ____ / _____ Signatory: _____ / ____ / _____
 Technician Signatory

Guide to Interpretation of Shade Fabric Reports

At ARPANSA shade fabric testing is carried out in accordance with Australian Standard AS4174-2018 Knitted and woven shade fabrics.

Cover Factor: The UV radiation (350nm) transmitted through a specimen of shade fabric, determined in accordance with Appendix A of the standard AS 4174:2018.

Designation: The designated weight of the shade fabric according to the calculated cover factor as per Table 2.1 of the standard AS 4174:2018.

Colour Code: The colour according to the designated colour code shown in Table 2.1 of the standard AS 4174:2018, and shall be knitted, woven or attached to the edge of the shade fabric.

Shade Factor: The percentage of normally incident UV-visible radiation in the range 290nm to 770nm not transmitted by a material, determined in accordance with Appendix B of the standard AS 4174:2018.

%Tav: The average percentage transmission (290 to 770 nm).

%UVR: The average ultraviolet radiation (290 to 400 nm) passing through the test specimens.

%PAR: The average photosynthetically active radiation (400 to 700 nm) passing through the test specimens.

%UVR Block: The average UVR (290 to 400 nm) not transmitted by the test specimens.

Ultraviolet Effectiveness (UVE): A measure of the ability of the fabric to block ultraviolet radiation. UVE is calculated from the ratio of the photo-biologically effective ultraviolet radiation irradiance transmitted through air to the photo-biologically effective ultraviolet radiation irradiance transmitted through shade fabric which is determined in accordance with Appendix D of the standard AS 4174:2018 for each sample and then averaged for the number of specimens analysed and is expressed as a percentage.

Calculated UVE (%): The mean UVE (%) minus the standard deviation.

Standard Deviation (SD): This indicates how much variation there is across the sample.

Protection Category: The designated protection category of the shade fabric according to the calculated UVE (%) as per Table 3.1 of the standard AS 4174:2018.

Weight (gsm): the weight in grams per square metre of the sample after conditioning

Specimens Tested: This shows how many measurements (or scans) were made on the test sample.

Material Sample: For positive identification, a sample of the material tested, or an image of the product, is attached to the report.

Transmission Characteristics: The graph shows the average of the measured transmissions.