LumiLab

Accessibility News

LumiLab Access – LRV & Luminance Contrast Testing
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Need to Prove 30% Luminance Contrast on Your Product Labels? How to Get Your Labels Tested

The APVMA requires at least 30% luminance contrast between letters and their background. If you manufacture agricultural or veterinary chemical products, laboratory testing can provide objective LRV results for your finished label and packaging.



Your label looks contrasting. But how do you know it achieves 30%?

This is the practical question that follows any discussion about the Australian Pesticides and Veterinary Medicines Authority (**APVMA**) requirements for label colour.

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Under Section 3.5, Colour, of the APVMA label presentation and layout requirements, printed letters must contrast distinctly with their background.

More specifically: **There must be a luminance contrast of at least 30% between letters and background.**

Looking at a label and deciding the text appears clear helps during design, but visual judgement alone does not provide an LRV or a calculated luminance contrast result.

To determine the actual luminance contrast, start by establishing the Light Reflectance Value (**LRV**) of the relevant colours.

What is being measured?

LRV is a numerical measurement of the amount of visible light reflected from a surface.

Once the LRVs of the lettering and background are established, you can compare those values to determine the luminance contrast between them.

For an APVMA label, that might involve testing dark lettering against a light label background, light lettering against a dark colour panel, or other text and background combinations used on the finished packaging.

This is different from identifying a colour by its RGB, CMYK, HEX or Pantone reference.

Those systems help specify and reproduce colours, but the APVMA requirement is expressed as luminance contrast.

When verification is required, testing the physical product provides information about the actual finished surface rather than relying solely on the artwork's appearance on a screen.

Send us the finished label or packaging

LumiLab provides LRV and luminance contrast testing from our Melbourne test facility. For product label and packaging assessments, we need physical samples that represent the finished product.

Depending on the product, this might include finished printed labels, cartons, bottles, containers, tubs or other packaging on which the relevant text and background colours appear.

Where possible, send the actual production labels or packaging, rather than a colour printout of the artwork. Ink, substrate, surface finish, coating, and printing method can all affect the material's finished appearance. Ideally, provide a few labels so we can average these values.

Please also provide enough information for us to identify each sample correctly, including the product name, product code and colour name, where applicable. If the surface has a clear coating or sealer, please identify this as well.

If you need to assess several text/background combinations, clearly identify the areas requiring testing. A copy of the label artwork with the relevant areas marked can be useful.

If the areas requiring measurement are particularly small, contact LumiLab before cutting or preparing samples so we can discuss what will be suitable for testing.

Package the samples safely

Samples sent to LumiLab must be suitable for manual handling in a typical office environment.

All sample edges must be smooth and free from sharp edges, and samples must weigh no more than 10kg.

This is particularly relevant where a manufacturer intends to submit sections of rigid packaging, metal containers, cut panels or other materials rather than complete consumer-sized products.

Tell us which parts of the label need to be compared

This helps identify the specific text and background combinations that need assessment.

A label might contain white text against dark green, black text against yellow, coloured warning text against white and smaller lettering within another coloured panel.

Rather than assuming which combination is relevant, provide a copy of the artwork or mark the areas you want assessed. If there are several colour combinations, LumiLab can determine the relevant LRVs and, where required, undertake multiple comparisons.

This can be particularly useful before committing to a large production run.

What happens when the samples arrive?

LumiLab's normal laboratory process involves measuring the LRV of the submitted materials using specialist testing equipment.

The LRV results can then be used to assess luminance contrast between the nominated surfaces.

For label testing, the assessment generally considers the relationship between the printed lettering and the background on which it appears.

The result provides something that looking at a PDF cannot: measured values from the physical sample.

LumiLab can prepare a test certificate outlining the testing methodology and LRV findings. If you need a luminance contrast assessment of two or more materials or colours, we can also undertake the comparison and prepare a report.

The results are then provided electronically. Testing work is undertaken commercial-in-confidence.

Testing before a production run can be worthwhile

Manufacturers do not necessarily need to wait until a product is already on shelves before checking contrast.

If a proposed label design uses colour combinations with uncertain results, manufacturers can test representative production samples before the full packaging order proceeds.

This provides an opportunity to identify a potential contrast issue while changes to the artwork or printing specification are still manageable.

It can also be useful where a manufacturer is changing:

- a printing supplier;
- an ink or colour specification;
- the label material;
- a coating or laminate;
- the packaging substrate; or
- the graphic design of an existing product.

A colour combination that worked on one substrate should not automatically be assumed to produce exactly the same result on another.



Where to send your samples

Please address packages to:

LumiLab
Unit 29/89 Lewis Road
Wantirna South VIC 3152

Packages can be delivered between 9am and 5pm, Monday to Friday, excluding public holidays.

LumiLab personnel are not always in the building, so a video intercom and parcel drop boxes are available on site. Additional space is also provided beneath the parcel boxes for larger packages.

For information about LRV and luminance contrast testing services, visit www.lumilab.com.au.

Before sending a large or unusual sample

Most labels and standard product packaging are straightforward to submit. If the product is unusually large, heavy, difficult to handle, contains hazardous material, or the area requiring measurement is very small, contact LumiLab before sending it.

This lets us determine whether the sample is suitable for laboratory testing and what material we need to supply.

Don't leave contrast as a visual judgement

The APVMA requirement is expressed numerically: at least 30% luminance contrast between the letters and their background.

That means manufacturers have an objective benchmark against which to assess relevant colour combinations.

A label can look attractive. The text can appear reasonably clear on a monitor. The graphic designer can be satisfied with the colour palette.

None of those things, by themselves, provide an LRV measurement.

Where you need to establish the luminance contrast of the finished label, send representative samples to LumiLab. We can test the physical materials, determine the relevant LRVs, and assess luminance contrast.

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Please contact LumiLab to discuss your accessibility needs. Visit our website to learn more or call us on 1300 142 841.

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Reference: Australian Pesticides and Veterinary Medicines Authority (APVMA), Label presentation and layout, Section 3.5 - Colour, Australian Labelling Code.