

LUMITRONIX® Webinar: "Meet the FlexPerts – Driven by Ecodesign" - Questions and answers after the presentation, transcribed on 10/08/2022 / AL.

Questions about LumProtect:

Could you disclose the transparency on wavelength? More particularly on 260-400nm.

This information is available upon request, please contact our sales team: b2b@leds.de

What about temperature conduction to extract heat from LED to Heat sink?

On the backside of the LumProtect protected products there is a polymer layer which does not have the highest thermal conductivity and is therefore the limiting factor. If the heat generated on the LED module is too high for this thermal resistance, LumProtect cannot be used. In our experience, for most lighting applications with mid power LEDs up to 1W, it is not a problem to use LumProtect. For higher power applications with LEDs with an electrical output of 1W or more, things get tricky. Here we have to check the specification carefully.

May your flexible solution be applied to BOLB LED types? Nichia 310 nm?

We are currently evaluating the possibilities of using our lamination technology in combination with UV-B and UV-C LEDs. We see good chances to use it at least for UV-B LEDs around 310 nm. For lower wavelengths we are not sure yet, but we are testing. Please stay in touch with us, we will be able to share our results within the next month.

How about the thickness of protection layer?

The layer is very thin and has only a few hundred microns. The total added thickness is about 200 - 300 microns. The total thickness depends on the width of the LEDs - for the new standard LEDs it is usually less than 1 mm.

Will your polymer yellow or degenerate more rapidly?

We have specifically selected two different polymers that are very stable under UV radiation. They have a very low yellowing index. The yellowing is almost not visible even after years and there is no degeneration of the polymers within a certain period of several years. Long-term stability data for your specific application can be evaluated upon request.

Questions about Flex stripes:

You mentioned that the stripes are colour tunable, but are they also available with Tunable White LEDs (different colour temperature)?

We offer LED strips in various different colour temperatures, and we also offer LED strips with colour tunable white LEDs. We have versions which two different colored LEDs, which are tunable, for example 2000 K and 6500 K. And we have one version [LumiFlex560](#), which is assembled with 2-in-1 Tunable White LEDs and ensures the best color mixing possibility.

Is it possible to produce flex stripes with intelligent LEDs (Neopixel)?

We produce LED strips with individually addressable LEDs. We do not offer LED strips with Neopixel from China. Our strips have similar application possibilities, same technical functionality but higher quality. High quality means that every single LED has a specified lifetime. For example, if you switch to blue, each LED will have the same blue color, and you won't see any fancy color mixing in blue tones even after years.

When will the addressable tape be released?

We will offer the new product with individually controllable LEDs from stock at the beginning of next year. But you can also get the samples earlier. If you want to be included in the batch of samples in October, please contact our sales team.

What materials are used to make the flexible strips? Can they be used to make paper lanterns that were traditionally made using craft papers? How does cutting the strips affect the continuity of the circuitry?

Our standard material for the LED strips we offer is either polyimide or PET. But we are also using for flexible solutions paper as base material, we call the product [Paper-Flex](#). This product is available from stock, we can deliver samples or [higher quantities on a reel](#). From our point of view, Paper-Flex can be used for the production of paper lanterns. On all our flexible products you will find cutting marks. If you cut on these marks, you can use both parts of the cut module. None of these is destroyed by cutting.

Are the stripes automotive released?

We have no automotive certification.