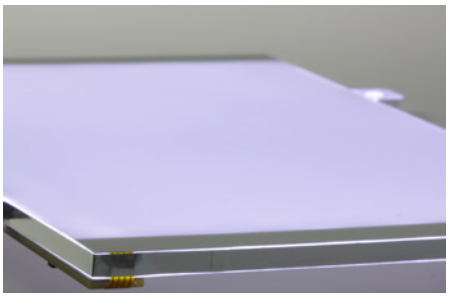
ADKOMunity I – January 2018

First of all, due to seasonal actuality we by now would like to wish all of our ADKOMunity readers a happy and successful New Year. Also after having celebrated our anniversary with all its activities, projects and festivities, product information, news and facts worth knowing ought to be increasingly standing in the focus of our publications.

To start with, we would like to draw an interesting comparison to standard diffusers and those with prismatic surface.



To look on the bright side of light

The classical meaning of a display backlight is the homogeneous illumination of the display. Responsible for distributing emitting Led-light are diffusers,

namely, special foils which spread yet another light structure evenly. Besides for displays optimized standard diffusers which are used generally, now prismatic diffusers are available on the market.

Prismatic diffusers come with a special surface which shows strung together microscopic peaks and avail henceforth again around 40-70 % more than by common standard diffusors absorbed light of illumination. The plus of usable light finally leads to a more of brilliance, brightness and homogeneous lighting.

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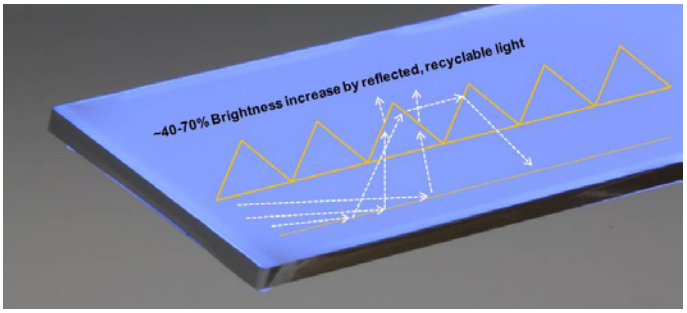
The listed measuring results out of our lab confirm the aforementioned advantage of prismatic diffusers in comparison to standard ones.

The measures clearly record a considerable yield of brightness for RGB-colors. It is also evident, that these values were attainable by direct viewing, however subject to viewing angle resulting in change of color consistency. This applies for red, green and blue. Using a white backlight you can observe this phenomenon, too – though not visible for the observer.

RGB	Prismatic Backlight Diffuser [cd/m²]	Standard Backlight Diffuser [cd/m²]	Brightness increase by Prismatic Diffuser
Red	552	223	248%
Green	780	318	245%
Blue	211	82	257%
White	2054	832	247%



For viewing angle dependent applications the fading of colors is per our view an aspect, which is rather owing to standard diffusers. Applications developed for direct viewing, e. g. pictograms, design elements or at eye level always horizontal viewed display's, prismatic diffusers offer a proper alternative creating a remarkable, brilliant lighting.

For him – CAD means Care About Design

Within our ADKOMunity publications we would like to provide an insight into offstage of our company. We already introduced our colleague Krystina Hauck and intend to continue with our technical team.
Since 2009 Emil Tischer, Dipl.-Ing. (FH), is responsible for project monitoring considering all aspects of a customized design and development.

Emil Tischer went along a lot of customers' projects in regard to feasibility, selection of display technology, design and control electronics. "To observe new developments and application profiles is challenging and fascinating" – so his personal statement to the question, how he is specifying his task. He also appreciates freedom in developing projects. Personally Mr. Tischer enjoys travelling with his family, which blends in being part of our yearly delegation meeting our Chinese and Taiwanese partners.

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