

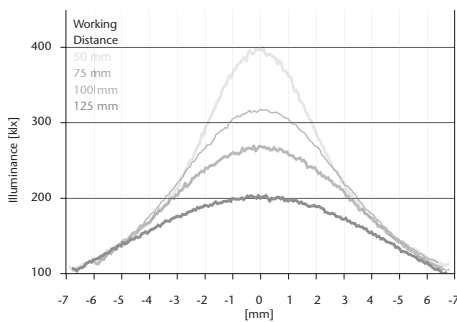
# SMD High Brightness (HB) LED Light Line

Customized HB LED Light Lines with high power Surface Mount Device (SMD) LEDs

## Standard Features:

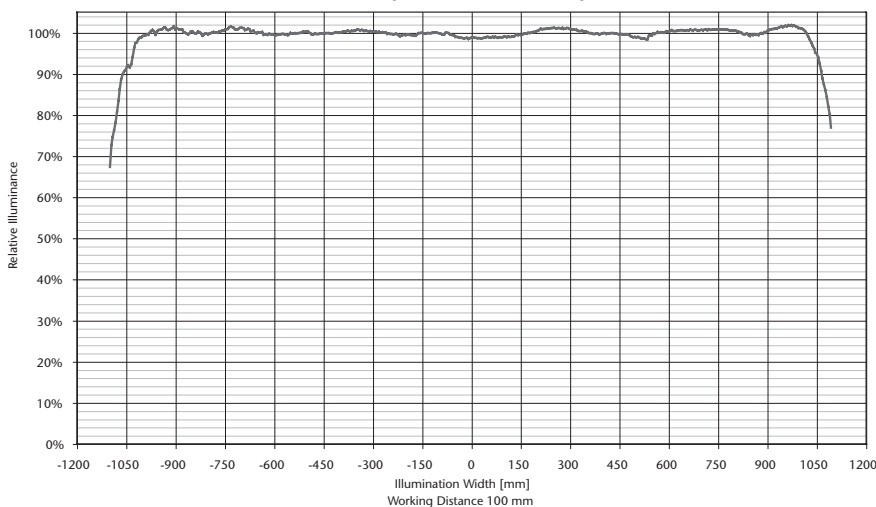
- White or red high power Surface-Mount-Device (SMD) LEDs
- Either active air-cooling or water-cooling. Continuous control of the LED board temperature prevents an overheating of the individual LEDs and thus ensures a safe operation of the HB LED Light Line.
- Design concept allows lengths of 300 mm to 3000 mm in increments of 150 mm.
- The LED boards can be custom tailored to most specific applications, even in regard to other color requirements. It also allows a future upgrade to even higher performance LEDs once they become available.
- The HB LED Light Line's acrylic cylindrical lens is integrated into the housing, and can be adjusted to modify the working distance between 50 mm and 100 mm. This allows to generate a focused Light Line with an illuminance of 400 klx at a working distance of 50 mm.
- The mechanical design is based on extruded side profiles that integrate MayTec profile grooves along the sides of the slim housing, allowing an easy and flexible mounting into manufacturing lines.
- Bord temperature read out with separate connector
- TTL Trigger Input
- No interference with CCD cameras due to constant current control
- 0 – 5 V brightness control input

Vertical intensity profile at different working distances



<b>Input voltage</b>	24 V DC $\pm$ 2%		
<b>Power consumption</b>	300 mm module: 450 mm module:	<b>Air-cooled</b> max. 72 W max. 108 W	<b>Water-cooled</b> max. 120 W max. 180 W
<b>Current</b>	300 mm module: 450 mm module:	max. 3.0 A max. 4.5 A	max. 5.0 A max. 7.5 A
<b>Brightness</b>	White LEDs: Red LEDs: at the center of the Light Lines (working distance 100 mm)	typ. 200 klx at 72 W per 300 mm module typ. 150 klx at 72 W per 300 mm module	
<b>LED color</b>	White: Red:	Color temperature 5000 K to 5650 K 627 nm, $\Delta\lambda$ 1/2 20 nm	
<b>Homogeneity</b>	$\pm$ 5%, typically $\pm$ 3%		
<b>Storage conditions</b>	Temperature: +5 °C ... +35 °C		Humidity: < 70%
<b>Operating conditions</b>	Temperature: +5 °C ... +35 °C no dust or oil saturated ventilation air		Humidity: < 70%
<b>Approvals</b>	CE and ETL according to Standard EN 61010, ROHS compliant		

Horizontal Light Distribution of 2250 mm Light Line



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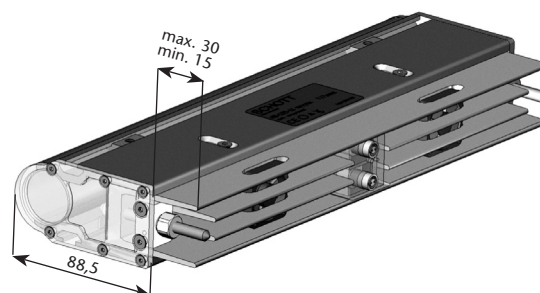
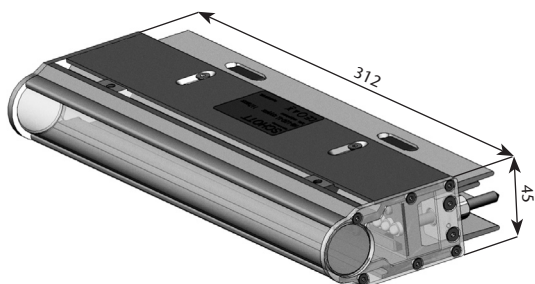
Length mm	White LEDs	Red LEDs
300	HB-LED-LL S300 WA*/w**	HB-LED-LL S300RA*/w**
450	HB-LED-LL S450 WA*/w**	HB-LED-LL S450RA*/w**
600	HB-LED-LL S600 WA*/w**	HB-LED-LL S600RA*/w**
750	HB-LED-LL S750 WA*/w**	HB-LED-LL S750RA*/w**
900	HB-LED-LL S900 WA*/w**	HB-LED-LL S900RA*/w**
1050	HB-LED-LL S1050 WA*/w**	HB-LED-LL S1050RA*/w**
1200	HB-LED-LL S1200 WA*/w**	HB-LED-LL S1200RA*/w**
1350	HB-LED-LL S1350 WA*/w**	HB-LED-LL S1350RA*/w**
1500	HB-LED-LL S1500 WA*/w**	HB-LED-LL S1500RA*/w**
1650	HB-LED-LL S1650 WA*/w**	HB-LED-LL S1650RA*/w**

Length mm	White LEDs	Red LEDs
1800	HB-LED-LL S1800 WA*/w**	HB-LED-LL S1800RA*/w**
1950	HB-LED-LL S1950 WA*/w**	HB-LED-LL S1950RA*/w**
2100	HB-LED-LL S2100 WA*/w**	HB-LED-LL S2100RA*/w**
2250	HB-LED-LL S2250 WA*/w**	HB-LED-LL S2250RA*/w**
2400	HB-LED-LL S2400 WA*/w**	HB-LED-LL S2400RA*/w**
2550	HB-LED-LL S2550 WA*/w**	HB-LED-LL S2550RA*/w**
2700	HB-LED-LL S2700 WA*/w**	HB-LED-LL S2700RA*/w**
2850	HB-LED-LL S2850 WA*/w**	HB-LED-LL S2850RA*/w**
3000	HB-LED-LL S3000 WA*/w**	HB-LED-LL S3000RA*/w**

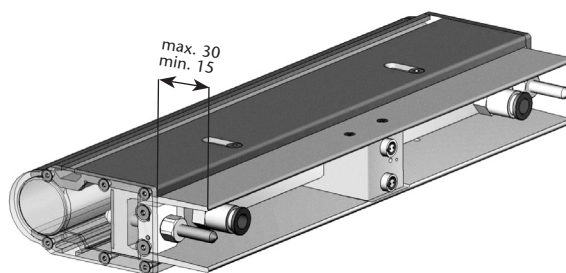
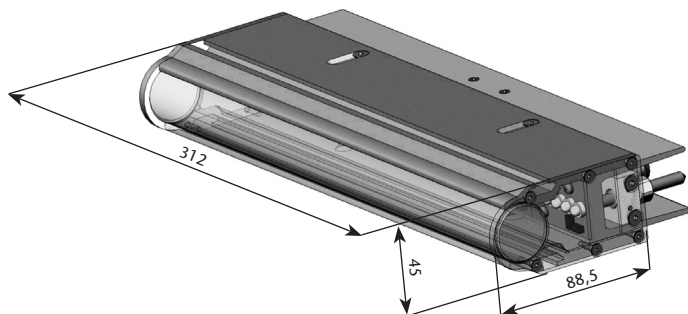
\* Air-cooled    \*\* Water-cooled

Depending on the LED type and the operating parameters the modular heat sink concept has an active air-cooling or a water-cooling.

## Air-cooled



## Water-cooled



Dimension specifications for a 300 mm module

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**SCHOTT**  
 glass made of ideas