LINEAR OPTICS 1R FOR SMD W2

LINEAR OPTICS 1R FOR SMD W2

Thanks to their microprismatic surfaces and colour constancy (CLC), the optics made of high-quality PMMA offer very homogeneous light and a pixel-free appearance. They are ideally suited for use in continuous light bands and profile luminaires in offices, shops, industry and architecture.

Versions with single lenses, twin lenses as well as tunnel lenses for a variable number of LEDs are available.

The lenses are suitable for 3030 and 2835 midpower LEDs of common LED manufacturers. Typical LED types for use with this lens are Seoul STW8C2PB, STW8C12C, STW9C2PB (including Sunlike LEDs), Samsung LM301B, Nichia 757 (also as Tuneable White).

Extended light emission area (ELA) optics have more uniform luminance across the entire optical surface, thereby reducing visual glare.

Optics with Twin Lens Design (TLD) offer higher lumen output or higher efficiency and at the same time lower UGR.

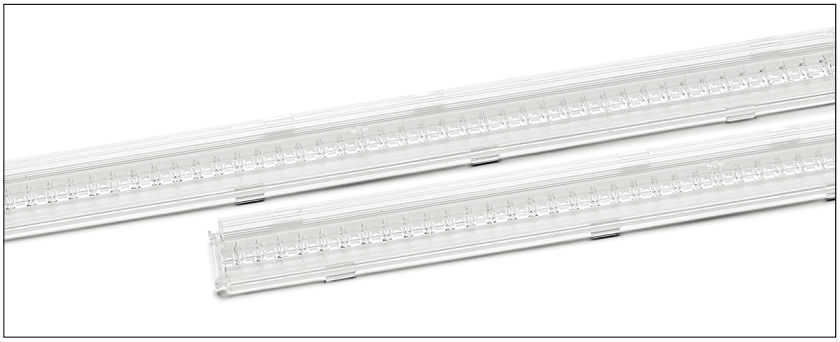
For faster and easier installation, the optics can be mounted without screws. This is an elegant solution for your luminaire. Furthermore, index pins allow mounting and positioning of the VS module LED Line SMD W2 at the same time.

Linear Optics 1R for SMD W2

- **HIGH-QUALITY OPTICAL MATERIAL**
- **OPTICAL EFFICIENCY > 95%** — E95%
- **OPTICS WITH TWIN LENS DESIGN (TLD)** — TLD
- **OPTICS WITH EXTENDED LUMINOUS AREA (ELA)** — ELA
- **OPTICS WITH CONSTANT LIGHT COLOUR OVER BEAM ANGLE (CLC)** — CLC
- **UGR OPTIMIZED OPTICS** — UGR
- **SCREWLESS CLIP FIXING**

Product video

Linear Optics 1R for SMD W2 30 Twin Lenses 560mm IP20/40



TLD | CLC | UGR | IP20 / IP40 | E95%

Technical Notes

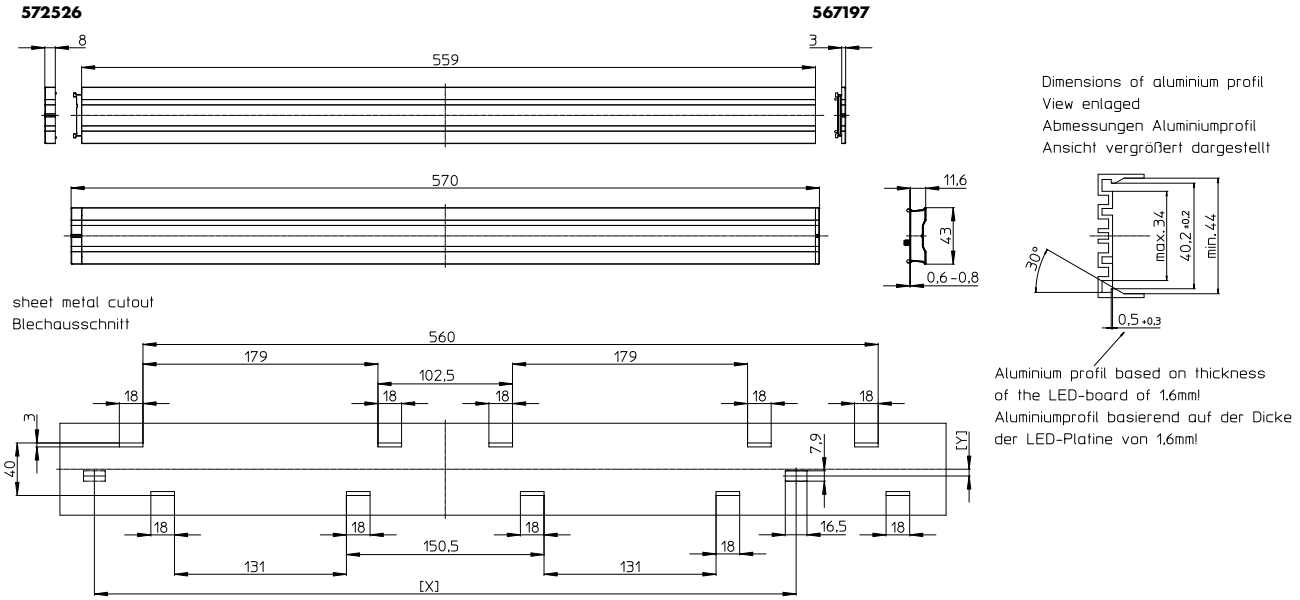
- For 3030 and 2835 midpower LEDs of common LED manufacturers
- Material: PMMA
- Max. allowed temperature: 80 °C
- Dimensions (LxWxH): 559x43x11.6 mm
- Clip fixation for metal sheets with wall thickness of 0.6–0.8 mm or aluminium profiles
- End caps for luminaires degree of protection IP40

Lighting properties

- Single lenses for two LED: Twin Lens Design (TLD)
- CLC (constant light colour): very low colour temperature deviations over beam angle
- UGR: optimized glare reduction

Light distribution	Type	**Ref. No.**	Lighting properties	Light transmission	Efficiency %	Weight g	Packaging unit pcs.
Wide 90°	97020	**573393**	TLD, CLC, UGR, E95	clear	96	104	72
Medium 60°	97023	**573394**	TLD, CLC, UGR, E95	clear	96	100	72
High Rack	97029	**573395**	TLD, CLC, UGR, E95	clear	96	98	72

* Measured on a white luminaire sheet



See dimensions x and y for cutout of the bottom connection terminals (BC) on the corresponding LED board drawing!
Siehe Maße x und y für Ausschnitt der rückseitigen Anschlussklemmen (BC) auf entsprechender LED Platinen Zeichnung!

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 30 Twin Lenses 560mm IP20/40

Typ. light distributions with VS LED modules (with Seoul STW8C2PB)

At www.vossloh-schwabe.com you will find further light distribution curves with other LED types as well as all data in .ldt and .ies format for download.

Wide 90°

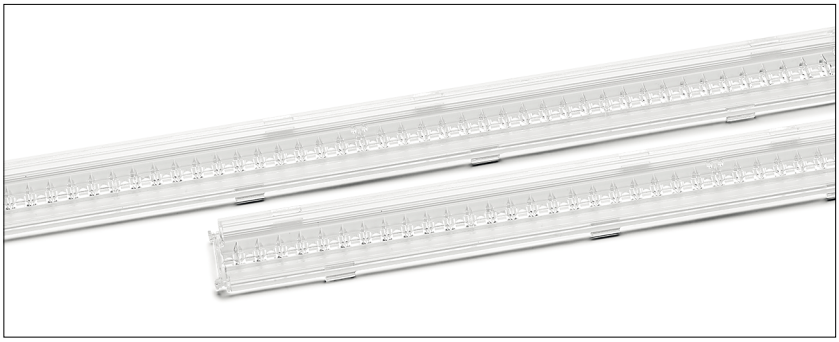
Medium 60°

High Rack

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 24 Single Lenses 280mm IP20/40



ELA | CLC | UGR | IP20 / IP40 | E95%

Technical Notes

- For 3030 and 2835 midpower LEDs of common LED manufacturers
- Material: PMMA
- Max. allowed temperature: 80 °C
- Dimensions (LxWxH): 279x43x11.6 mm
- Clip fixation for metal sheets with wall thickness of 0.6–0.8 mm or aluminium profiles
- End caps for luminaires degree of protection IP40

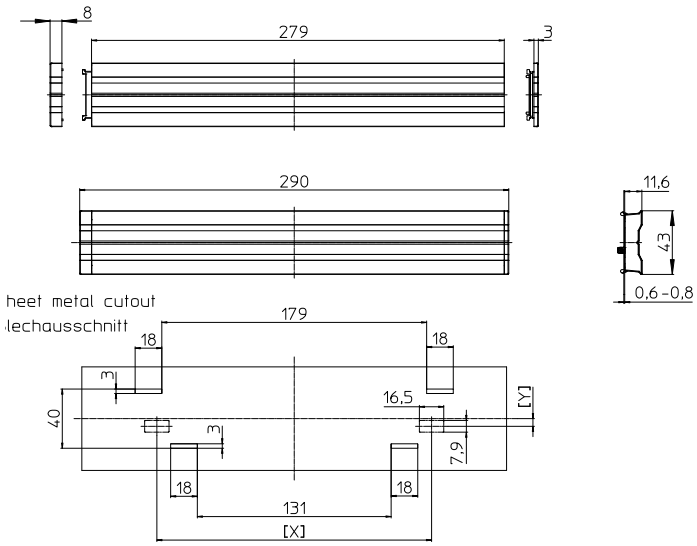
Lighting properties

- ELA (extended luminous area): light emission over the entire surface of the optics
- CLC (constant light colour): very low colour temperature deviations over beam angle
- UGR: optimized glare reduction

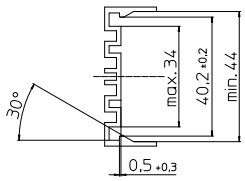
Light distribution	Type	**Ref. No.**	Lighting properties	Light transmission	Efficiency %	Weight g	Packaging unit pcs.
Wide 90°	97050	**569760**	ELA, CLC	clear	93	56	120
Medium 60°	97053	**569606**	ELA, CLC	clear	93	54	120
Medium 60° UGR	97057	**569770**	ELA, UGR, E95	clear	96	55	120
Retail SYM1	97051	**570528**	ELA, CLC	clear	93	55	120
Retail ASYM	97054	**570527**	ELA, CLC	clear	93	55	120
Diffuse 100°	97050	**571598**	ELA, CLC	diffuse	90	56	120

* Measured on a white luminaire sheet

572526 **567197**



Dimensions of aluminium profil
View enlaged
Abmessungen Aluminiumprofil
Ansicht vergrößert dargestellt



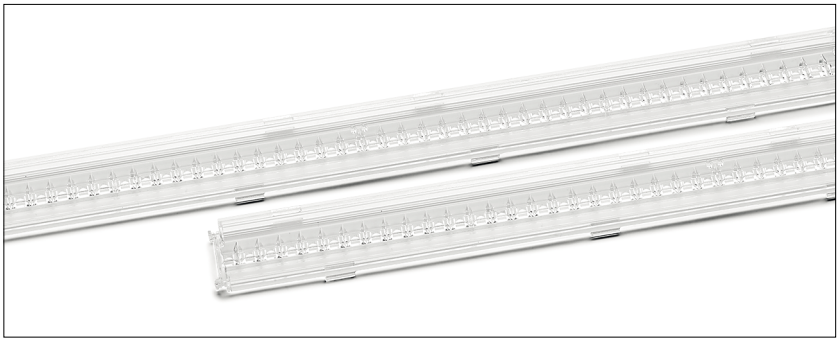
Aluminium profil based on thickness of the LED-board of 1.6mm!
Aluminiumprofil basierend auf der Dicke der LED-Platine von 1,6mm!

See dimensions x and y for cutout of the bottom connection terminals (BC) on the corresponding LED board drawing!
Siehe Maße x und y für Ausschnitt der rückseitigen Anschlussklemmen (BC) auf entsprechender LED Platinen Zeichnung!

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 48 Single Lenses 560mm IP20/40



ELA | CLC | UGR | IP20 / IP40 | E95%

Technical Notes

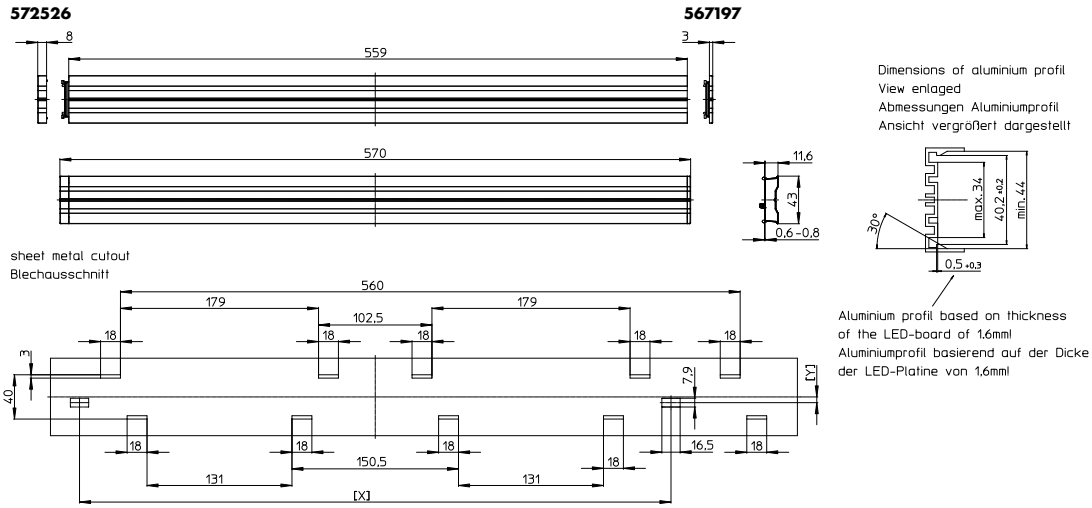
- For 3030 and 2835 midpower LEDs of common LED manufacturers
- Material: PMMA
- Max. allowed temperature: 80 °C
- Dimensions (LxWxH): 559x43x11.6 mm
- Clip fixation for metal sheets with wall thickness of 0.6–0.8 mm or aluminium profiles
- End caps for luminaires degree of protection IP40

Lighting properties

- ELA (extended luminous area): light emission over the entire surface of the optics
- CLC (constant light colour): very low colour temperature deviations over beam angle
- UGR: optimized glare reduction

Light distribution	Type	**Ref. No.**	Lighting properties	Light transmission	Efficiency %	Weight g	Packaging unit pcs.
Extra Wide 110°	97005	**568236**	ELA, CLC	clear	93	124	72
Wide 90°	97000	**568075**	ELA, CLC	clear	93	115	72
Wide 90° SYM	97010	**571980**	ELA, CLC, E95	clear	96	106	72
Medium 60°	97003	**568238**	ELA, CLC	clear	93	107	72
Medium 60° UGR	97007	**569721**	ELA, UGR, E95	clear	96	110	72
Narrow 30°	97002	**568239**	ELA, CLC	clear	93	104	72
Retail SYM 1	97001	**568240**	ELA, CLC	clear	93	108	72
Retail SYM 2	97001	**568413**	ELA, CLC	clear	93	108	72
Retail ASYM	97004	**568237**	ELA, CLC	clear	93	104	72
Diffuse 100°	97000	**568412**	ELA, CLC	diffuse	90	115	72
High Rack	97009	**571979**	ELA, UGR, E95	clear	96	110	72

* Measured on a white luminaire sheet



See dimensions x and y for cutout of the bottom connection terminals (BC) on the corresponding LED board drawing!
Siehe Maße x und y für Ausschnitt der rückseitigen Anschlussklemmen (BC) auf entsprechender LED Platinen Zeichnung!

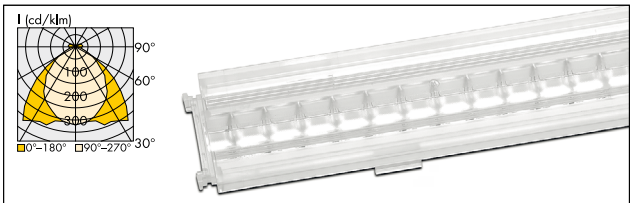
The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 24 Single Lenses 280mm IP20/40 and Linear Optics 1R for SMD W2 48 Single Lenses 560mm IP20/40

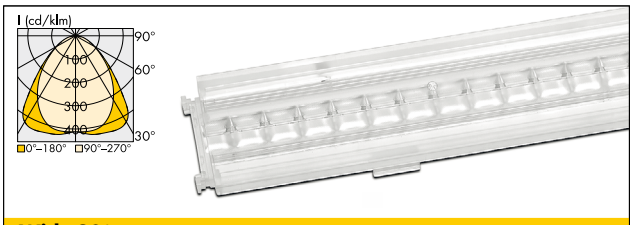
Typ. light distributions with VS LED modules (with Seoul STW8C2PB)

At www.vossloh-schwabe.com you will find further light distribution curves with other LED types as well as all data in .ldt and .ies format for download.

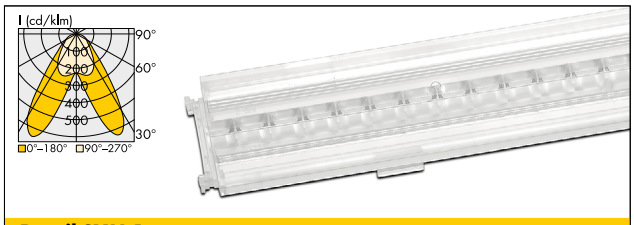


Extra Wide 110°

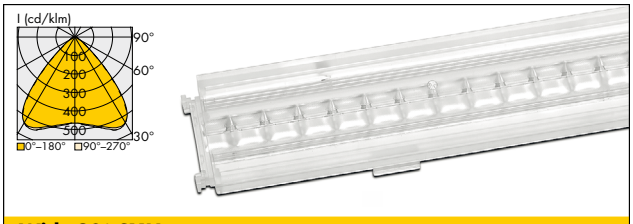
Narrow 30°



Wide 90°



Retail SYM 1



Wide 90° SYM

Retail SYM 2

Diffuse 100°

Retail ASYM

Medium 60°

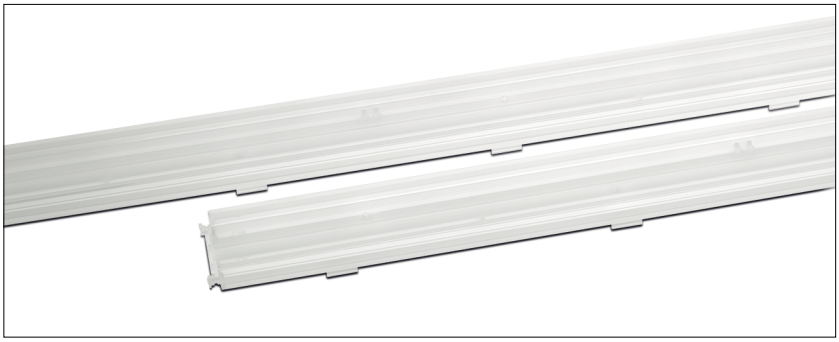
High Rack

Medium 60° UGR

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 Tunnel Lens 560mm IP20/40



ELA | IP20 / IP40

Technical Notes

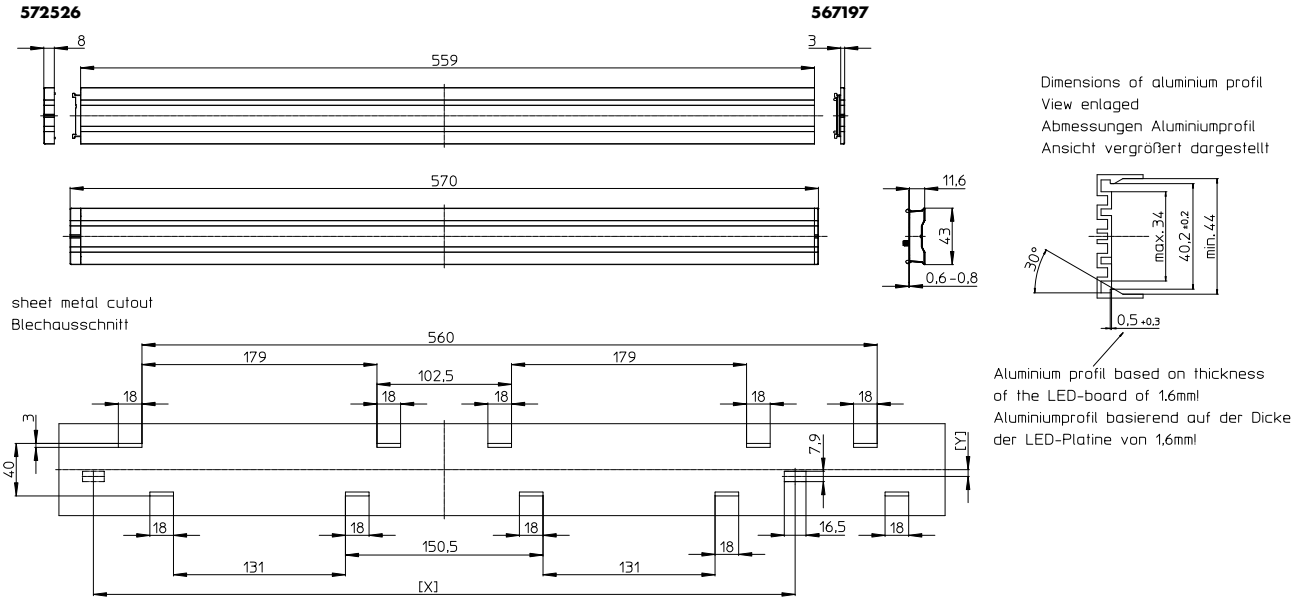
- For 3030, 2835* and 5630* midpower LEDs of common LED manufacturers (*mounted lengthwise)
- Material: PMMA
- Max. allowed temperature: 80 °C
- Dimensions (LxWxH): 559x43x11.6 mm
- Clip fixation for metal sheets with wall thickness of 0.6–0.8 mm or aluminium profiles
- End caps for luminaires degree of protection IP40
- Optics with index pins are available for VS LED modules of the LED Line SMD W2 family.

Lighting properties

- ELA (extended luminous area): light emission over the entire surface of the optics

Light distribution	Type	**Ref. No.**	Lighting properties	Index pins	Light transmission	Efficiency %	Weight g	Packaging unit pcs.
Diffuse 105°	97100	**568618**	ELA	yes	diffuse	90	116	72
Wide 90°	97100	**568243**	ELA	yes	clear	93	116	72
Medium 60°	97103	**568246**	ELA	yes	clear	93	115	72
Retail SYM 1	97101	**568244**	ELA	yes	clear	93	118	72
High Rack	97102	**568245**	ELA	yes	clear	90	107	72

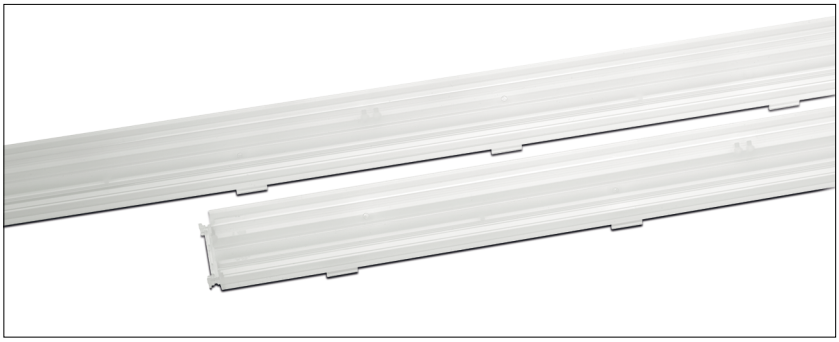
* Measured on a white luminaire sheet



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 Universal Tunnel Lens 560mm IP20/40



ELA | IP20 / IP40

Technical Notes

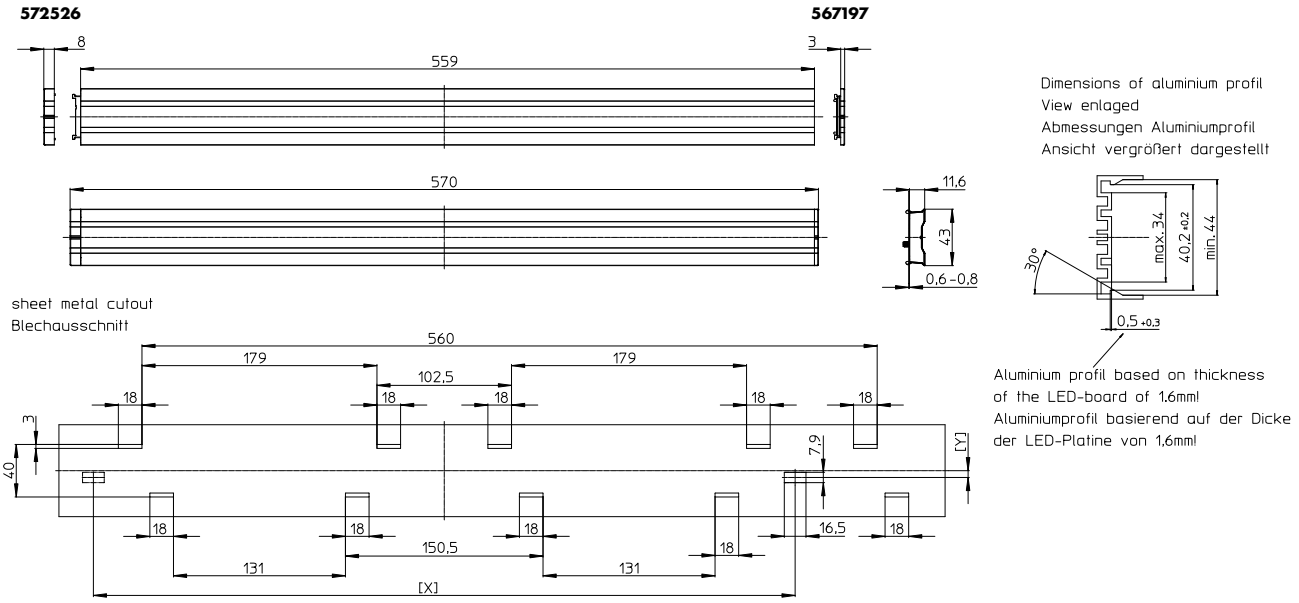
- For 3030, 2835* and 5630* midpower LEDs of common LED manufacturers (*mounted lengthwise)
- Material: PMMA
- Max. allowed temperature: 80 °C
- Dimensions (LxWxH): 559x43x11.6 mm
- Clip fixation for metal sheets with wall thickness of 0.6–0.8 mm or aluminium profiles
- End caps for luminaires degree of protection IP40
- SMD boards have to be attached separately and are additionally pressed on the index points by the optics.

Lighting properties

- ELA (extended luminous area): light emission over the entire surface of the optics

Light distribution	Type	**Ref. No.**	Lighting properties	Index pins	Light transmission	Efficiency %	Weight g	Packaging unit pcs.
Diffuse 105°	96600	**568617**	ELA	no	diffuse	90	116	72
Wide 90°	96600	**568608**	ELA	no	clear	93	116	72
Medium 60°	96603	**568611**	ELA	no	clear	93	115	72
Retail SYM 1	96601	**568609**	ELA	no	clear	93	118	72
High Rack	96602	**568610**	ELA	no	clear	90	107	72

* Measured on a white luminaire sheet



The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

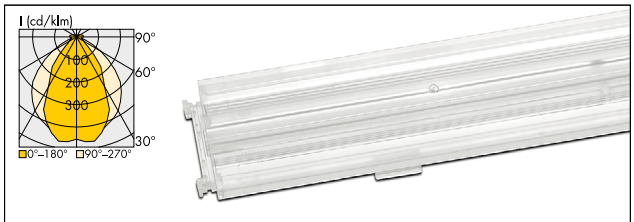
LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

Linear Optics 1R for SMD W2 Tunnel Lens 560mm IP20/40 and Linear Optics 1R for SMD W2 Universal Tunnel Lens 560mm IP20/40

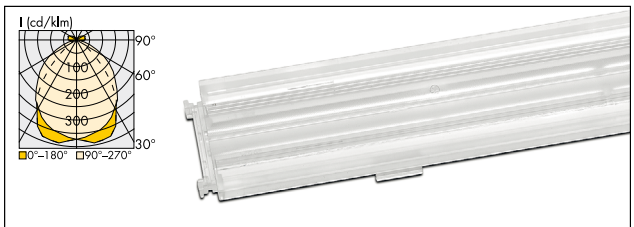
Typ. light distributions with VS LED modules (with Seoul STW8C2PB)

At www.vossloh-schwabe.com you will find further light distribution curves with other LED types as well as all data in .ldt and .ies format for download.

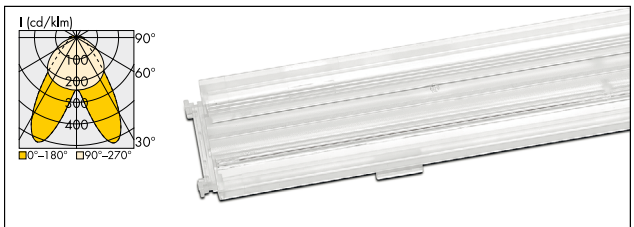
Diffuse 105° – IP20/40



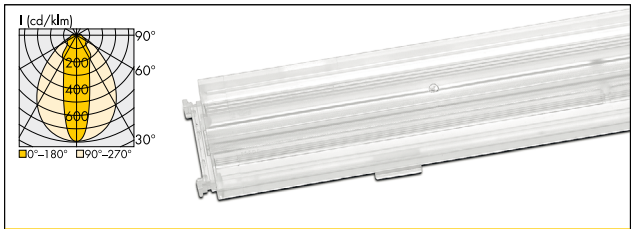
Medium 60° – IP20/40



Wide 90° – IP20/40



Retail SYM 1 – IP20/40



High Rack

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS
Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com

End caps for linear optics 1R for SMD W2

Lateral attachment on the optics

Material: PC, clear or diffuse

End cap type	For optics type	**Ref. No.**	Material colour	Weight g	Packaging unit pcs.
Tongue side	970, 971, 966	**572526**	clear	1.85	250
Tongue side	970, 971, 966	**572627**	diffuse	1.85	250
Groove side	970, 971, 966	**567197**	clear	1.45	250
Groove side	970, 971, 966	**568602**	diffuse	1.45	250

Suitable VS LED modules

Linear optics 1R for SMD W2 are suitable for LED modules with bottom connection (BC) or small top connection (STC).

VS LED modules	Module type	Connection terminals		**Optics type**		
		BC	STC	Single lenses	Tunnel lenses	Twin lenses
LED Line SMD W2 Comfort Gen. 3	MLC SC W2/280 x/12R/yzz G3 MLC SC W2/280 x/24/yzz G3 MLC SC W2/560 x/24R/yzz G3 MLC SC W2/560 x/48/yzz G3	BC	STC	yes	yes	no
	MLC SC W2/280 x/36/yzz HE G3 MLC SC W2/560 x/72/yzz HE G3	BC	STC	no	yes	no
LED Line SMD W2 Easy Gen. 3	MLE SC W2/280 x/12R/yzz G3 MLE SC W2/280 x/24/yzz G3 MLE SC W2/560 x/24R/yzz G3 MLE SC W2/560 x/48/yzz G3	BC	STC	yes	yes	no
	MLE SC W2/280 x/36/yzz HE G3 MLE SC W2/560 x/72/yzz HE G3	BC	STC	no	yes	no
LED Line SMD W2 Gen. 4	WU-M-574-S2, WU-M-575-S2, WU-M-577-S2, WU-M-578-S2	BC	STC	yes	yes	no
	WU-M-576-S2, WU-M-579-S2	BC	–	no	yes	no
LED Line SMD W2 Gen. 5	WU-M-657, WU-M-658, WU-M-660, WU-M-661	BC	STC	yes	yes	no
	WU-M-659, WU-M-662	BC	STC	no	yes	no
LED Line SMD W2 Comfort	WU-M-624, WU-M-625, WU-M-626, WU-M-627	BC	STC	yes	yes	no
LED Line SMD W2 Comfort Gen. 2	WU-M-669, WU-M-670, WU-M-671, WU-M-672	BC	STC	yes	yes	no
LED Line SMD SELV Comfort	WU-M-646, WU-M-647	BC	STC	yes	yes	no
LED Line SMD W2 TwinLED	WU-M-719	BC	STC	no	yes	yes

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.

LIGHTING SOLUTIONS

Vossloh-Schwabe Deutschland GmbH · Stuttgarter Straße 61/1 · 73614 Schorndorf · Germany · Phone +49 7181/8002-0 · Fax +49 7181/8002-122 · www.vossloh-schwabe.com