

TS31A

LED Tunnel Light



Specifications

Input Voltage:	100 ~ 277Vac
Input Frequency:	50 / 60Hz
Power Factor:	0.95
Surge Protection Level:	10kV line-earth
Working Environment:	-40°C ~ +50°C, 10% ~ 90% RH
CCT:	3000K, 4000K, 5000K, 5700K
CRI:	≥70
Housing:	Extrusion
IP Rating of LED Engine:	IP68
IP Rating of LED Driver:	IP67
Warranty:	5 Years Limited

Brackets Colors

Gray

Silver

Applications

- Tunnel lighting (tunnel, underpass, corridor...)

Features

Construction

- Whole structure heating dissipation design with efficient thermal conduction, radiation and convection.
- Unique patented IP68 LED light engines.
- Tool-less onsite replacement of light engines greatly reduces maintenance cost.

Electrical

- Flexible to reach desired power consumption by choosing appropriate light engines.

Optical

- Ergonomic and specialized lighting distributions.

Mounting

- L-shaped brackets adjustable within $\pm 160^\circ$.

Photos



TS31A

LED Tunnel Light

Ordering Information

Example: TS31A-3-180-M8B-CA-63-1390-7040-LU-MO-GY

Luminaire Type	Module Qty	System Power	LED Module	LED Package	Cable Standard	LED Qty per Module	
TS Tunnel light	1 1 module	40 40W	M31A M31A module	A 3535	A CCC+VDE C PSE H UL X Others	18 18pcs	
	2 2 modules	50 50W					
	3 3 modules	60 60W		C 3030		63 63pcs	
	4 4 modules	80 80W		B 5050			
	5 5 modules 240 240W 250 250W					
31A 31A series							
Lens Code		CRI & CCT		Brand of LEDs		Driver Brand	Brackets Color
3590 90 degree		7030 Ra≥70, CCT 3000K		LU LUMILEDS		MO MOSO	GY Gray SR Silver
2322 Type II Short Vertical	1310 Lambertian type	7040 Ra≥70, CCT 4000K		CM LUMILEDS		IN INVENTRONICS	
5390 90 degree			7050 Ra≥70, CCT 5000K		Customized		PH PHILIPS
				SS SAMSUNG		MW MEAN WELL	
				NI NICHIA		XX Others	
				CR CREE			
				LN LUMINUS			
				XX Others			
3108 Type II Short Vertical	2310 Lambertian type						
2190 90 degree							

Performance

Model	Power (W)	Module M31A-XA-18		Module M31A-XC-63		Module M31A-XB-18		Module M31A-XB-28	
		Efficacy (lm/W)	Flux (lm)	Efficacy (lm/W)	Flux (lm)	Efficacy (lm/W)	Flux (lm)	Efficacy (lm/W)	Flux (lm)
TS31A-1	40	130	5200	135	5400	152	6080	168	6720
	50	122	6100	130	6500	145	7250	163	8150
	60	117	7020	122	7320	133	7980	155	9300
TS31A-2	80	137	10960	140	11200	160	12800	175	14000
	100	130	13000	135	13500	150	15000	170	17000
	120	122	14640	127	15240	140	16800	163	19560
TS31A-3	120	137	16440	140	16800	160	19200	175	21000
	150	130	19500	135	20250	150	22500	170	25500
	180	122	21960	127	22860	140	25200	163	29340
TS31A-4	160	137	21920	140	22400	160	25600	175	28000
	200	130	26000	135	27000	150	30000	170	34000
	240	122	29280	127	30480	140	33600	163	39120
TS31A-5	200	137	27400	140	28000	160	32000	175	35000
	250	130	32500	135	33750	150	37500	170	42500

Note: 1. Values shown are subject to ±5%~±8% tolerance.

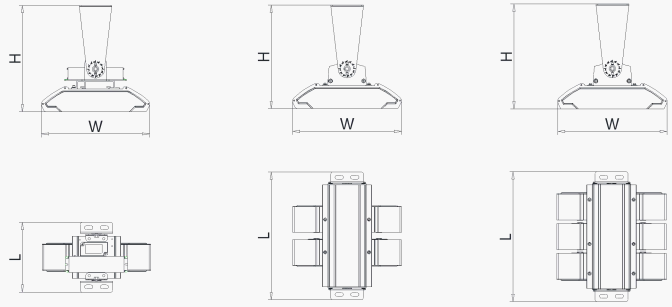
2. Efficacy of Ra70 3000K is 5% lower than that of CCT≥4000K.

TS31A

LED Tunnel Light

Product Dimensions

Model	L (mm)	W (mm)	H (mm)	N.W. (kg)
TS31A-1	190	300	295	2.5
TS31A-2	350	300	285	3.8
TS31A-3	350	300	285	4.5
TS31A-4	390	300	285	5.5
TS31A-5	470	300	285	6.5



Notes: Typical values. Tolerance of L/W/H: ± 5 mm. Tolerance of N.W.: 5%.

TS31A-1

TS31A-2

TS31A-3 (/ -4 / -5)

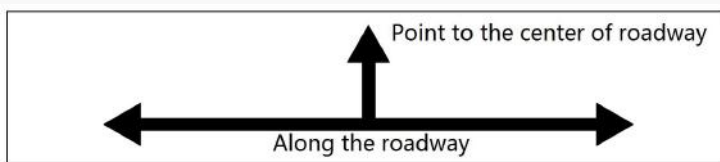
Package Information

Model	L (mm)	W (mm)	H (mm)	G.W. (kg)
TS31A-1	210	375	240	3.1
TS31A-2	375	375	230	4.7
TS31A-3	375	375	230	5.4
TS31A-4	415	375	230	6.4
TS31A-5	495	375	230	7.6

Notes: Typical values above. Tolerance of dimensions: ± 5 mm. Tolerance of G.W.: 5%.

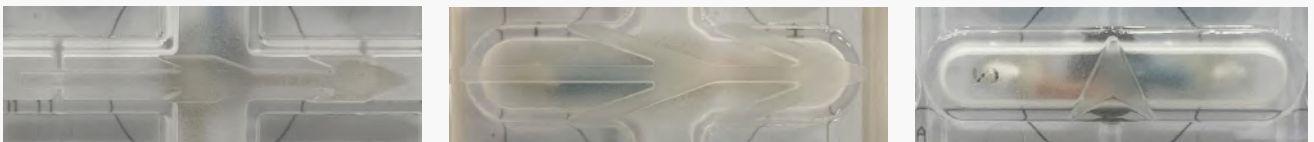
Mounting Direction Instructions

1. If there are arrows like below found on the fixture, follow the direction of its arrow in the middle as pointing to the center of the roadway instead of borders.

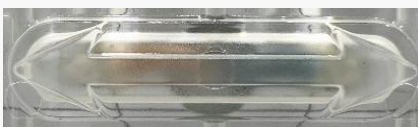


2. If there is no figure of arrows like above found on the fixture, check arrows on LED module lenses.

2.1. When there is only one arrow direction on the lens, follow the direction of arrows as pointing to the center of roadway instead of borders.



2.2. When there are opposite arrows on the lens, follow the direction as arrows being along the roadway.

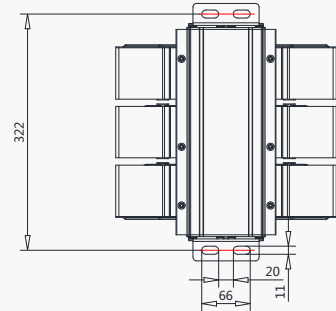
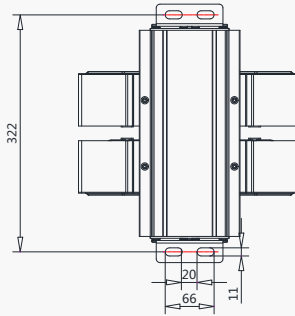
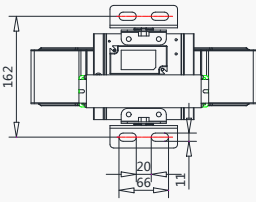


3. If there is no figure of arrow on LED module lens, it is a symmetric lighting distribution solution. No particular direction. Only adjust the brackets.

TS31A

LED Tunnel Light

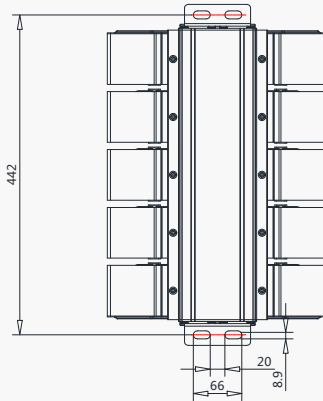
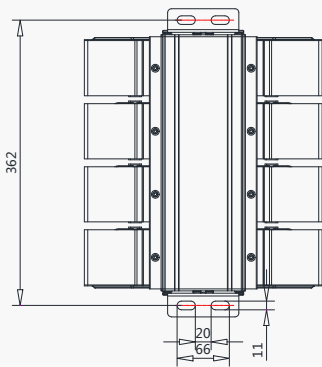
Mounting Holes Dimensions



TS31A-1

TS31A-2

TS31A-3



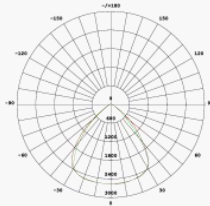
TS31A-4

TS31A-5

Notes: Unite: mm. Tolerance $\pm 0.5\text{mm}$

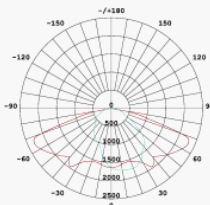
Typical Distributions

Module
M31A-XA-18

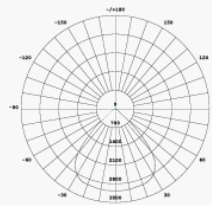


90D3590

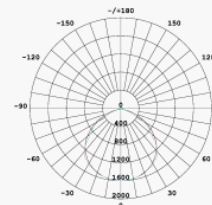
Module
M31A-XC-63



T2SV2322

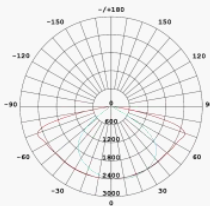


90D5390

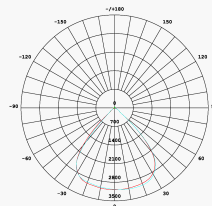


LBN1310

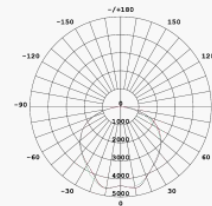
Module
M31A-XB-18/28



T2SV3108



90D2190



LBN2310

TS31A

LED Tunnel Light

Version History

Change Date	Version	Item	Description of Change	
			From	To
2019/11/28	Ver3.0	Datasheet in new format	/	/