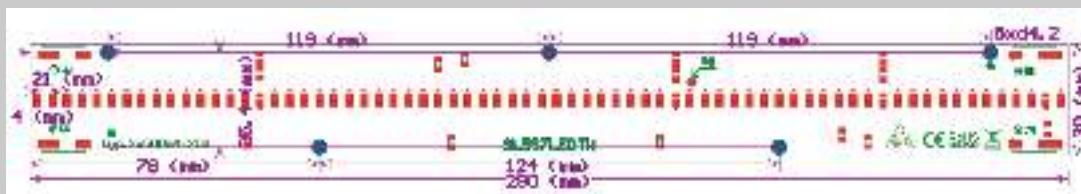


X-WING TW

Product description

- Ideal for panel and linear lights
- Luminous flux range from 2200 – 4500 Lm
- Efficacy of the module up to 185 Lm/W
- High colour rendering index CRI >80
- Small colour tolerance (MacAdam 4)
- Small luminous flux tolerances
- Colour temperatures from 2200 to 6500 K
- Tunable White option
- Push terminals for quick and simple wiring of LED modules
- Long life-time: 40,000 hours

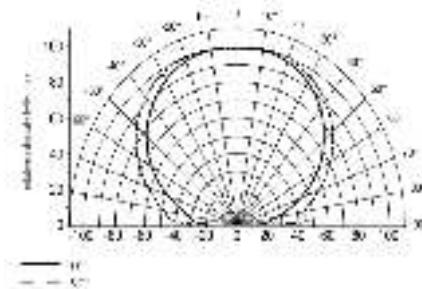
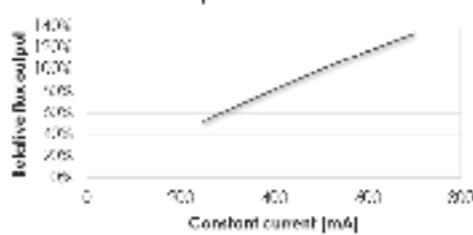
Tunable
White
Module



X-WING TW (SL5s7led TW) modules with Samsung/Osram LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in panel luminaires with MPO. The product range covers colour temperatures from 2200K to 6500K with CRI > 80 and module efficiency of up to 187 Lm/W. The module is driven by constant current max 700mA/channel with voltage of max 22V. The design is improved for simple installation. The module family covers the standard 280mm (1ft) – used in X-WING fixture. Now added Tunable white module with standard 2 channels with options for tuning from 2200K to 6500K.

X-WING (SL5s7ledTW)	Photo-metric code	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 45 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Typ. power consumption at tp = 45 °C	Luminous efficacy module at tp = 25 °C	CRI
High efficiency @ 350 mA / channel	830	2286 Lm	2209 Lm	18.9 V	13.22 W	13.14 W	173 Lm/W	>80
	840	2410 Lm	2229 Lm	18.9 V	13.22 W	13.14 W	182 Lm/W	>80
	850	2445 Lm	2363 Lm	18.9 V	13.22 W	13.14 W	185 Lm/W	>80
Typical current @ 500 mA / channel	830	3169 Lm	3062 Lm	19.25 V	19.25 W	19.11 W	164 Lm/W	>80
	840	3341 Lm	3228 Lm	19.25 V	19.25 W	19.11 W	173 Lm/W	>80
	850	3390 Lm	3276 Lm	19.25 V	19.25 W	19.11 W	176 Lm/W	>80
High output @ 700 mA / channel	830	4206 Lm	4064 Lm	19.74 V	27.64 W	27.44 W	152 Lm/W	>80
	840	4434 Lm	4284 Lm	19.74 V	27.64 W	27.44 W	160 Lm/W	>80
	850	4499 Lm	4347 Lm	19.74 V	27.64 W	27.44 W	163 Lm/W	>80
Tunable White @ 500 mA / channel	827	3070 Lm	2967 Lm	19.25 V	19.25 W	19.11 W	159 Lm/W	>80
	830	3169 Lm	3062 Lm	19.25 V	19.25 W	19.11 W	164 Lm/W	>80
	850	3390 Lm	3276 Lm	19.25 V	19.25 W	19.11 W	176 Lm/W	>80
	865	3341 Lm	3228 Lm	19.25 V	19.25 W	19.11 W	173 Lm/W	>80

Flux output vs current



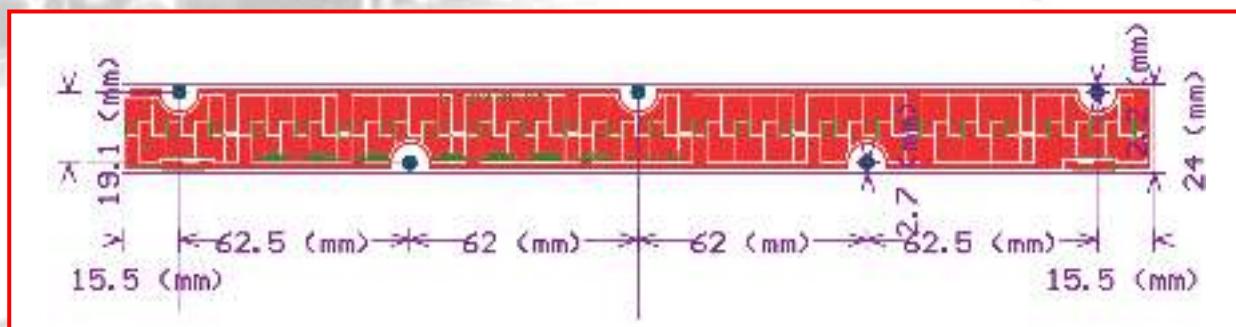
X-WING

Product description

- Ideal for linear and panel lights
- Luminous flux range from 1300 – 3900 Lm
- Efficacy of the module up to 180 Lm/W
- High colour rendering index CRI >80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Long life-time: 50,000 hours
- Good uniform light, when several LED modules are used together in a line
- Excellent thermal management thanks to the high thermoconductive aluminum base
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Zaga standard type screw position

X-WING module with OSRAM and Samsung LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in planar luminaires. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 180 Lm/W. The module is driven by constant current max 1050mA with voltage of max 19V. The design is improved for simple installation. The LED engine is designed for a single line of 2 modules in series to generate huge luminous flux – to cover 4 standard lines of 600mm fluorescent tubes. Based on the new design LED panel X-WING.

X-WING	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
SL 9x8 Operating mode High Efficiency at constant current 500mA	830	1946 Lm	23.2 V	11.6 W	168 Lm/W	>80
	840	2041 Lm	23.2 V	11.6 W	176 Lm/W	>80
	850	2104 Lm	23.2 V	11.6 W	181 Lm/W	>80
SL 9x8 Operating mode High Output at constant current 1050mA	830	3640 Lm	25.1 V	26.4 W	138 Lm/W	>80
	840	3817 Lm	25.1 V	26.4 W	145 Lm/W	>80
	850	3935 Lm	25.1 V	26.4 W	149 Lm/W	>80
SL 9x6 Operating mode High Efficiency at constant current 500mA	830	1358 Lm	17.4 V	8.7 W	156 Lm/W	>80
	840	1414 Lm	17.4 V	8.7 W	162 Lm/W	>80
	850	1446 Lm	17.4 V	8.7 W	166 Lm/W	>80
SL 9x6 Operating mode High Output at constant current 1050mA	830	2538 Lm	18.9 V	19.85 W	128 Lm/W	>80
	840	2646 Lm	18.9 V	19.85 W	133 Lm/W	>80
	850	2700 Lm	18.9 V	19.85 W	136 Lm/W	>80

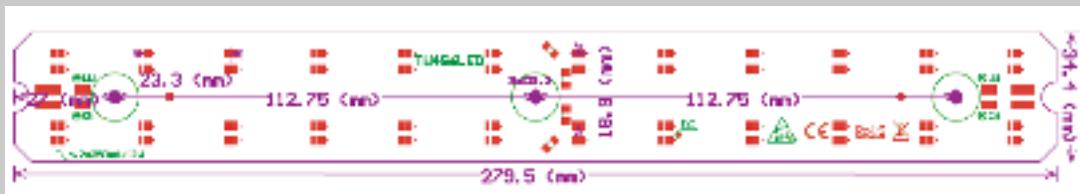


EMILI TW

Product description

- Ideal for panel and linear lights
- Luminous flux range 1400 – 2930 Lm
- Efficacy of the module up to 187 Lm/W
- High colour rendering index CRI >80
- Small colour tolerance (MacAdam 4)
- Small luminous flux tolerances
- Colour temperatures from 2200 to 6500 K
- Tunable White option
- Push terminals for quick and simple wiring of LED modules
- Long life-time: 40,000 hours

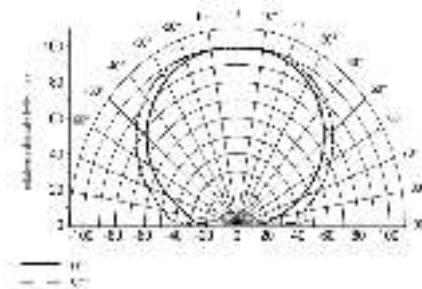
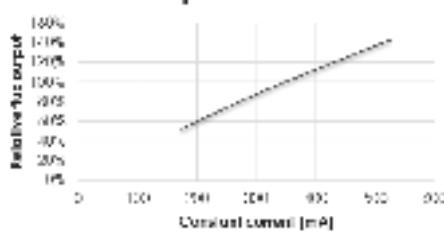
Tunable
White
Module



EMILI (TW4S6LED) modules with Samsung/Osram LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in panel luminaires with diffused light. The product range covers colour temperatures from 2200K to 6500K with CRI >80 and module efficiency of up to 187 Lm/W. The module is driven by constant current max 560mA with voltage of max 19V. The design is improved for simple installation. The module family covers the standard 280mm (1ft) – used in EMILI fixture. Now added Tunable white module with standard 2 channels with options for tuning from 2200K to 6500K.

EMILI (TW4S6LED)	Photo-metric code	Typ. luminous flux at tp = 25 °C	Typ. luminous flux at tp = 45 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Typ. power consumption at tp = 45 °C	Luminous efficacy module at tp = 25 °C	CRI
High efficiency @ 250 mA / channel	830	1408 Lm	1372 Lm	16.08 V	8.04 W	7.98 W	175 Lm/W	>80
	840	1484 Lm	1446 Lm	16.08 V	8.04 W	7.98 W	185 Lm/W	>80
	850	1506 Lm	1468 Lm	16.08 V	8.04 W	7.98 W	187 Lm/W	>80
Typical current @ 350 mA / channel	830	1928 Lm	1862 Lm	16.38 V	11.46 W	11.38 W	168 Lm/W	>80
	840	2032 Lm	1964 Lm	16.38 V	11.46 W	11.38 W	177 Lm/W	>80
	850	2062 Lm	1992 Lm	16.38 V	11.46 W	11.38 W	180 Lm/W	>80
High output @ 525 mA / channel	830	2740 Lm	2646 Lm	16.86 V	17.7 W	17.56 W	155 Lm/W	>80
	840	2888 Lm	2790 Lm	16.86 V	17.7 W	17.56 W	163 Lm/W	>80
	850	2930 Lm	2832 Lm	16.86 V	17.7 W	17.56 W	166 Lm/W	>80
Tunable White @ 350 mA / channel	827	1868 Lm	1804 Lm	16.38 V	11.46 W	11.38 W	163 Lm/W	>80
	830	1928 Lm	1862 Lm	16.38 V	11.46 W	11.38 W	168 Lm/W	>80
	850	2062 Lm	1992 Lm	16.38 V	11.46 W	11.38 W	180 Lm/W	>80
	865	2032 Lm	1964 Lm	16.38 V	11.46 W	11.38 W	177 Lm/W	>80

Flux output vs current



Zaga

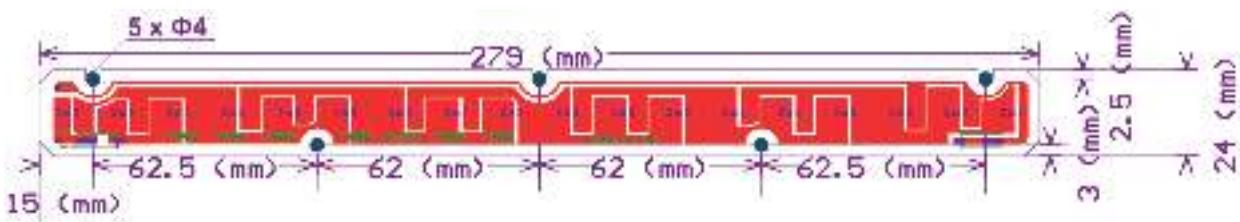
Product description

- Ideal for linear and panel lights
- Luminous flux range from 500 – 2800 lm
- Efficacy of the module up to 174 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K

- Good uniform light, when several LED modules are used together in a line
- Standard attachment holes location
- Push terminals for quick and simple wiring of LED module to LED module
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

Zaga module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for use in linear and planar luminaires. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 174 lm/W. The module is driven by constant current. The design is improved for simple installation. The module family has a wide range of forward voltage and current allowing the use of most of the standard power supplies and creating a fixture with desired power and respectively luminous flux output.

Zaga	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25°C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25°C	Colour rendering index CR
6x3 Operating mode High Efficiency at constant current 350mA	830	500 Lm	8.8 V	3.08 W	163 Lm/W	>80
	840	520 Lm	8.8 V	3.08 W	170 Lm/W	>80
	850	535 Lm	8.8 V	3.08 W	174 Lm/W	>80
6x3 Operating mode High Output at constant current 700mA	830	930 Lm	9.5 V	6.65 W	140 Lm/W	>80
	840	970 Lm	9.5 V	6.65 W	146 Lm/W	>80
	850	990 Lm	9.5 V	6.65 W	149 Lm/W	>80
3x6 Operating mode High Efficiency at constant current 175mA	830	500 Lm	17.5 V	3.06 W	163 Lm/W	>80
	840	520 Lm	17.5 V	3.06 W	170 Lm/W	>80
	850	535 Lm	17.5 V	3.06 W	174 Lm/W	>80
3x6 Operating mode High Output at constant current 350mA	830	930 Lm	19 V	6.65 W	140 Lm/W	>80
	840	970 Lm	19 V	6.65 W	146 Lm/W	>80
	850	990 Lm	19 V	6.65 W	149 Lm/W	>80
2x9 Operating mode High Efficiency at constant current 175mA	830	707 Lm	27.5 V	4.8 W	147 Lm/W	>80
	840	737 Lm	27.5 V	4.8 W	154 Lm/W	>80
	850	752 Lm	27.5 V	4.8 W	156 Lm/W	>80
3x15 Operating mode High Efficiency at constant current 175mA	830	1260 Lm	43.8 V	7.7 W	164 Lm/W	>80
	840	1310 Lm	43.8 V	7.7 W	170 Lm/W	>80
	850	1340 Lm	43.8 V	7.7 W	174 Lm/W	>80
3x15 Operating mode High Output at constant current 350mA	830	2330 Lm	47.2 V	16.5 W	141 Lm/W	>80
	840	2426 Lm	47.2 V	16.5 W	147 Lm/W	>80
	850	2800 Lm	47.2 V	16.5 W	170 Lm/W	>80



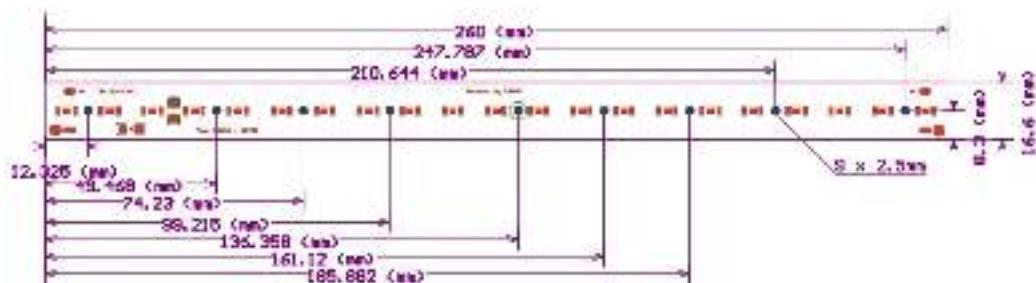
T8-260 OD

Product description

- Ideal for linear and panel lights
- Luminous flux range from 550 – 1040 lm
- Efficacy of the module up to 159 lm/W
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Good uniform light, when several LED modules are used together in a line
- Module for constant voltage with low flickering index
- Module for constant current for higher efficacy
- Simple installation (e.g. screws)
- Long life-time: 50,000 hours

T8-260OD module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed on aluminium plate for best heat dissipation and for use in planar luminaires. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI > 80 and module efficiency of up to 159 lm/W. There are two modules in this family - for constant voltage that guarantees low flickering index at 24VDC with additional DC/DC current driver and module driven by constant current with higher efficiency. The 24VDC module can be adjusted to custom power through the DC/DC driver. It is designed to be in a line with several others connected in parallel.

T8-260 OD	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Operating mode High Efficiency at constant voltage 24VDC flickering <0.2%	830	592 lm	24 V	5 W	118 lm/W	>80
	840	617 lm	24 V	5 W	123 lm/W	>80
	850	630 lm	24 V	5 W	126 lm/W	>80
Operating mode High Output at constant voltage 24VDC flickering <0.2%	830	831 lm	24 V	7.2 W	115 lm/W	>80
	840	867 lm	24 V	7.2 W	120 lm/W	>80
	850	885 lm	24 V	7.2 W	123 lm/W	>80
Operating mode High Efficiency at constant current 175mA	830	529 lm	20.3V	3.55 W	149 lm/W	>80
	840	554 lm	20.3V	3.55 W	156 lm/W	>80
	850	565 lm	20.3 V	3.55 W	159 lm/W	>80
Operating mode High Output at constant current 350mA	830	988 lm	22 V	7.7 W	128 lm/W	>80
	840	1032 lm	22 V	7.7 W	134 lm/W	>80
	850	1047 lm	22 V	7.7 W	136 lm/W	>80





14 OD

Product description

- Ideal for linear and panel lights
- Luminous flux range from 390 – 590 lm
- Efficacy of the module up to 125 lm/W
- Ultra-thin design – only 8mm.
- Standard length – 300mm
- High colour rendering index CRI > 80
- Small colour tolerance (MacAdam 3)
- Small luminous flux tolerances
- Colour temperatures from 2700 to 6500 K
- Good uniform light, when several LED modules are used together in a line
- Build in TVS for overvoltage protection
- Build in schottky diode for wrong polarity protection
- Simple installation (e.g. screws)
- Long life-time: 40,000 hours



14OD module with LED chips of the latest generation achieve maximum efficiency values and optimum light uniformity. The modules have been specifically developed for thin tubes and low-cost applications. The product range covers colour temperatures Warm White 2700, 3000K, Neutral White 4000K and Cold White 5000, 6000K with CRI >80 and module efficiency of up to 125 lm/W. The module is driven by constant voltage 24VDC. The design is improved for simple installation. The module's power can be customized up to 5W. It has build in protections against wrong connection of the power supply and overvoltage. Typical application is the LED module for shelves – In Light.

14 OD	Photometric code	Typ. luminous flux at tp = 25 °C	Typ. Voltage at tp=25 °C	Typ. power consumption at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Colour rendering index CR
Operating mode High Efficiency at constant current 140mA	830	395 Lm	24 V	3.36 W	118 Lm/W	>80
	840	411 Lm	24 V	3.36 W	122 Lm/W	>80
	850	420 Lm	24 V	3.36 W	125 Lm/W	>80
Operating mode High Output at constant current 200mA	830	554 Lm	24 V	4.8 W	115 Lm/W	>80
	840	578 Lm	24 V	4.8 W	120 Lm/W	>80
	850	590 Lm	24 V	4.8 W	123 Lm/W	>80