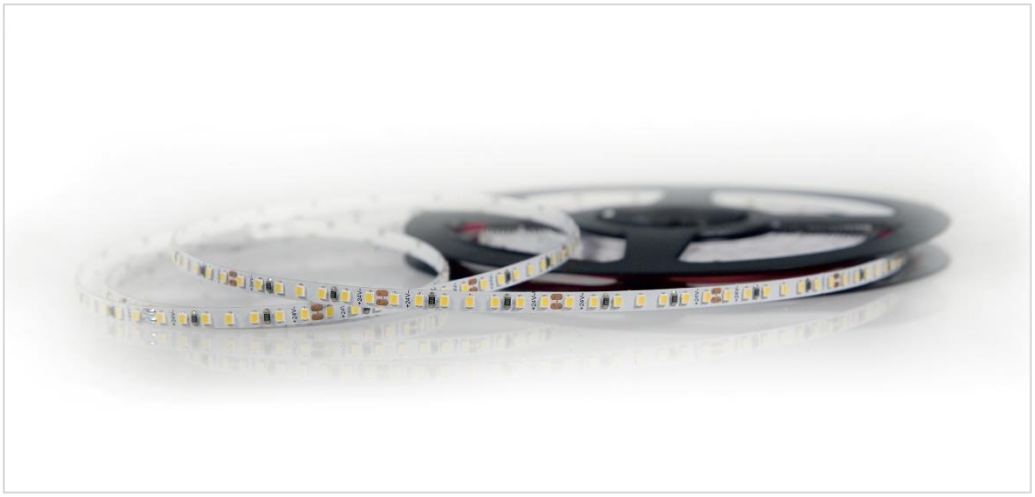
LED STRIPS – LED 2216 – 24V – IP20 – 4mm



Technical details

Product No.	**A41F241445xx**	**A41F242108xx**	**A41F24181130**
Led Q.ty (LEDs/m)	140	210	180
Led Type	2216	2216	2216
Power (W/M)	4,5	8	11
Voltage (V)	24 ±3%	24 ±3%	24 ±3%
Current (mA/M)	187	333	458
CRI (Ra)	> 80	> 80	> 80
Lenght/Reel (M)	5	5	5
Beam	120°	120°	120°
Water-proof rating	IP20	IP20	IP20

Non-directional or directional light source:	Non-directional (NDLS)
Mains or non-mains light source:	Non-mains (NMLS)
Dimmable:	Only with specific LED drivers
Cables type:	PVC 80°C 20AWG lenght 36cm (double ended)
Pcb material:	COPPER
Tape type:	3M 9080
Energy rating:	**F/E** (EU 2019/2015) *****
Protection against electric shock:	Class III
Version:	Integral
Safety isolating:	See electronic controlgear
Lumen maintenance factor:	96%
Survival factor:	100%
Nominal lifetime LM-80:	L_{70} B_{50} >36000 h
Photobiological Safety (Blue light hazard) according to IEC TR 627778:	Risk Exempt (RG0 group)

*****Energy class is calculated according to Spectrum test measurements

Lumens per meter

Color Temperature	A41F241445xx	A41F242108xx	A41F24181130
2700K	540 lm	980 lm	
3000K	620 lm	1080 lm	1070 lm
4000K	650 lm	1140 lm	

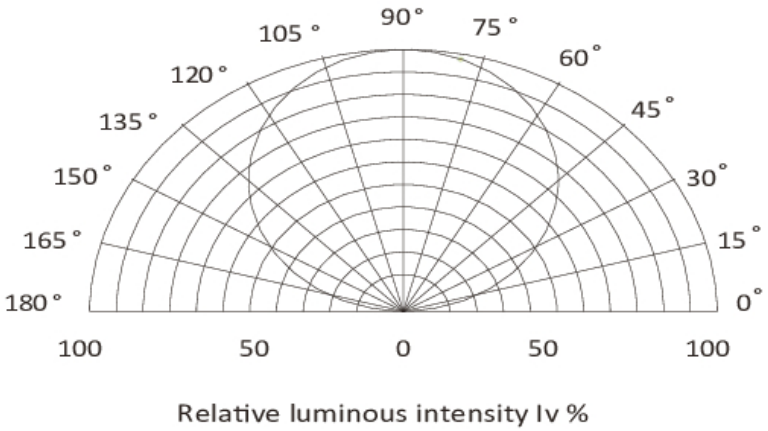
● **Due to tolerances of the production process and the electrical components, values for light output and electrical power can vary up to 10%.**

Efficacy

Color Temperature	A41F241445xx	A41F242108xx	A41F24181130
2700K	120 lmW	123 lmW	
3000K	138 lmW	135 lmW	97 lmW
4000K	144 lmW	143 lmW	

● **Note: "xx"=CCT "27"(2700K)/"30"(3000K)/"40"(4000K)**

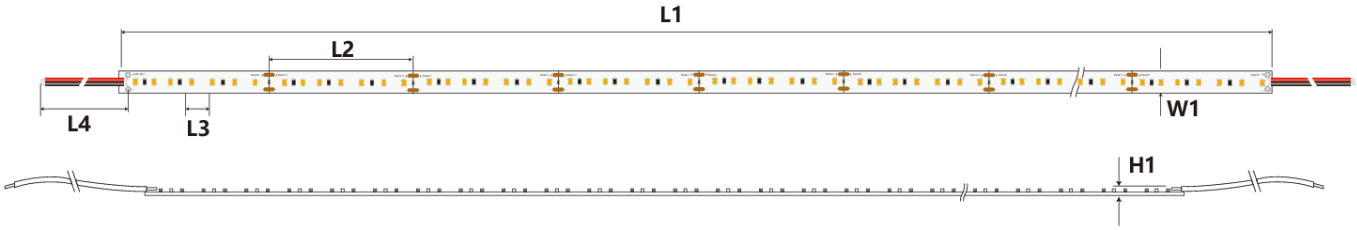
Light distribution



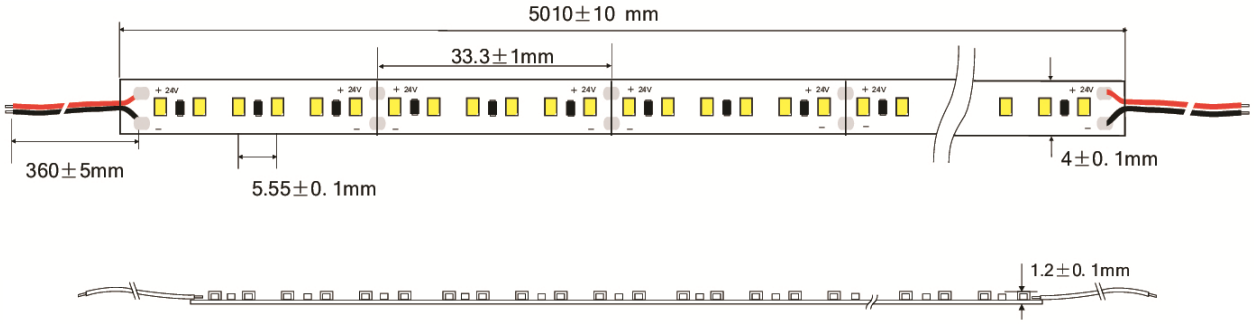
Working conditions

Working Temperature (°C)	-20 ÷ 50
Storage Temperature (°C)	-30 ÷ 80
Voltage Range (Vdc)	23 ÷ 25
Reverse Voltage (Vdc)	25
Reference temperature (Tc)	80° C

Dimensions – A41F241445xx / A41F242108xx



Dimensions – A41F24181130



Dimensions	A41F241445xx	A41F242108xx	A41F24181130	Tolerance
L1(mm)	5004	5004	5010	± 10
L2(mm)	50 (7 LED)	33.3 (7 LED)	33.3 (6 LED)	± 1
L3(mm)	7.1	4.8	5.55	± 0.1
L4(mm)	360	360	360	± 5
W1(mm)	4	4	4	± 0.1
H1(mm)	1.2	1.2	1.2	± 0.1

Weight/5m reel

A41F241445xx	70 gr.
A41F242108xx	75 gr.
A41F24181130	70 gr.

Energy labelling (EU 2019/2015) and Ecodesign (EU 2019/2020) regulations

Part Number	N° EPREL	EU 2019/2015 Energy rating	EU 2019/2020 Compliance
A41F24144527 – 2700K	979086	**E**	COMPLIANT
A41F24144530 – 3000K	979104	**E**	COMPLIANT
A41F24144540 – 4000K	979111	**E**	COMPLIANT
A41F24210827 – 2700K	979124	**E**	COMPLIANT
A41F24210830 – 3000K	979188	**E**	COMPLIANT
A41F24210840 – 4000K	979217	**E**	COMPLIANT
A41F24181130 – 3000K	996780	**F**	COMPLIANT

The scan of the QR Code on the energy label of the product refers directly to the description of the model in the EPREL (EU Product Database for Energy Labelling) database, where it is possible to download the energy labels and the information sheet of the product.

In alternative, it is possible to access the database using the model registration number (EPREL ID), which you can obtain from the product supplier.

Just insert in the browser the link https://eprel.ec.europa.eu/screen/product/lightsources/ and add the EPREL ID after the last slash.

Safety warning

- Install in accordance with national standards and local electrical codes.
- This product must be installed and maintained by a qualified electrician.
- Only install it with Class 2 DC constant voltage driver, do not use this product if it does not comply with Class 2 standard.
- The power of drive must meet the output of the rated power, and do not exceed the specified output power.
- Use a cable with rated temperature at least 80 ° C and be certified for external connection of the electrical equipment.
- Improper electrical installation may cause the cable to overheat and cause a fire. Please use a suitable cable between the driver, the lamp, and the controller. When selecting a wire, the voltage and current must meet the rated values.
- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- To avoid mechanical damage, the LED modules should be mounted securely to the intended substrate. Heavy vibration should be avoided.
- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity! Incorrect polarity will lead to no light emission and may cause damage of the LED module.

- Parallel connection is highly recommended as safe electrical operation mode. Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the LED module.
- When mounting on metallic or otherwise conductive surfaces, there needs to be an electrical isolation at soldering points between module and the mounting surface.
- Pay attention to ESD steps when mounting the module.
- Please ensure that the power supply is of adequate power to operate the total load.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable protection class.
- This product is not resistant to vulcanization, LED vulcanization damage will not be compensated. It is the responsibility of the user to provide appropriate protection against harmful sulphide components.