

ELC-1024-40K20



- Professional COB LED strip 10 W/m, 8 mm wide

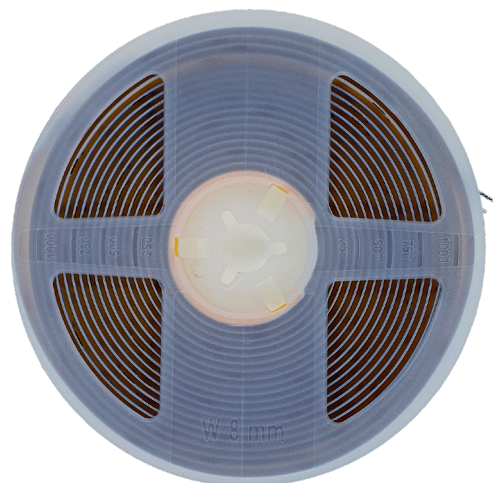
The **ELC-1024-40K20 LED strip** of medium power (10 W/m) of high quality is designed for professional use. A very high CRI color rendering index ensures very good reproduction of the colors of the illuminated objects. It is made of high-quality components on a double-sided flexible laminate, which ensures longer life and better protection against mechanical damage. COB LEDs (480 LEDs per meter) ensure even light distribution, no blackouts, discoloration and color artifacts. The tape guarantees a long lifetime and long trouble-free operation even at elevated temperatures.

MAIN ADVANTAGES:

- high luminous efficiency and efficiency
- high durability and lifetime
 - over 100,000 h@25°C
- very good optical parameters
- CRI above 90
- color space (Colour Gamut Index) close to 100

APPLICATION:

- lighting of advertisements, shop windows, showcases, exhibitions
- edge illumination of transparent plastics
- decorative lighting, mirrors, shelves, furniture
- lighting of interiors, rooms, corridors
- lighting of plants and aquariums



PARAMETER	VALUE
POWER SUPPLY	
Rated power supply voltage	24 VDC
Power consumption for 1 meter	10 W/m
Power consumption for 1 section	0.5 W
Energy consumption during 1000 hours of operation	10 kWh/meter
Current consumption per meter	0.42 A
Protection class against electrical shock	III
Works with PWM dimmers	Yes
DESIGN FEATURES	
LED type	COB LED
Number of LEDs per meter	480
Cutting section length	50 mm
Adhesive-tape type	Thermally conductive
Width	8 mm
Height	1.6 mm
FPC flexible substrate laminate (copper thickness)	0.35 mm, 3 oz
The color of the protective mask for the FPC substrate	White
Beam angle	140°
Ingress protection class	IP 20
For indoor use	Yes
Length of connecting wires	15 cm
ENVIRONMENTAL PARAMETERS	
Operating temperature range	-20 ... +40°C
Lifetime L80 at 25°C - see table	Over 100,000 h
Declarations and certificates	CE, RoHS
Number of meters per roll	10 m
Packaging	Antistatic bag
Guarantee	5 years
Manufacturer	ESPE

OPTICAL PARAMETERS

CCT range	4000 K
The color of the light	Neutral white
Correlated color temperature (CCT)	4000-4200 K
Luminous flux per meter (typical)	920 lm/m
Light output per watt (typical)	85 lm/W
Color Rendering Index CRI (typical)	92
Red Color Reproduction Ratio (R9) (typical)	48
Color space (Colour Gamut Index)	99
CIE1931 chromaticity (x and y) coordinates	x= 0.3754 y= 0.3751
Energy class	F

PRODUCT LIFETIME AS A FUNCTION OF TEMPERATURE

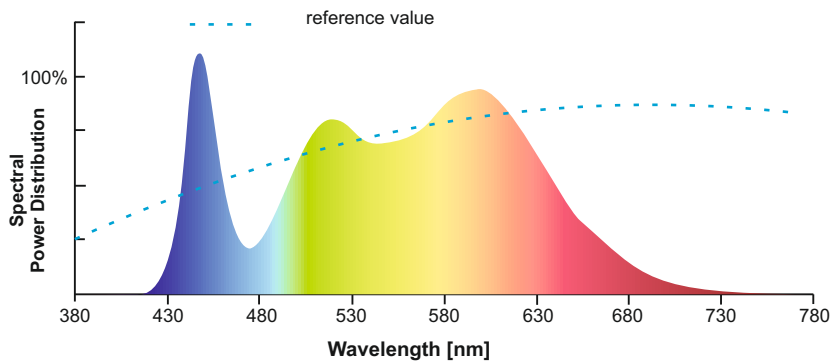
Working temperature	Lumen drop percentage (for the 6000 h test)	Projected lifetime [hours]
25°C	L90	over 100,000
	L80	over 100,000
	L70	over 100,000
40°C	L90	22000
	L80	48000
	L70	77000
50°C	L90	7500
	L80	16000
	L70	25000

L80 means LED tape operation time until the luminous efficiency drops to 80% of the initial value, i.e. the standard value defined by LM-80-08 and IES TM-21-11

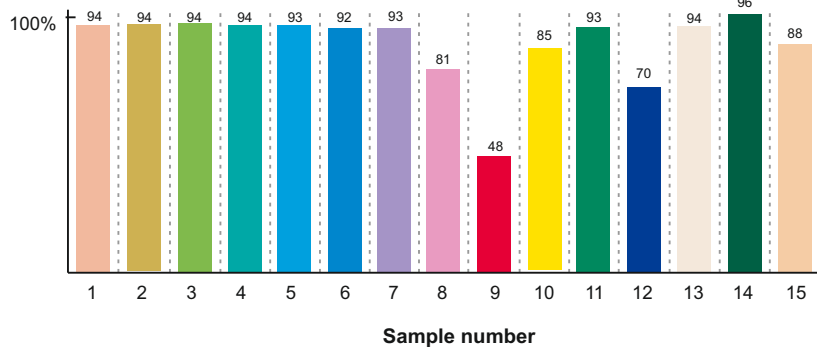
Additional data for technicians:


L90 - tape operation time until the lumen drops to 90% of the original value
L70 - tape operation time until the lumen drops to 70% of the original value

ENERGY LABEL



CRI test color samples (Ri)




 **ENERG**

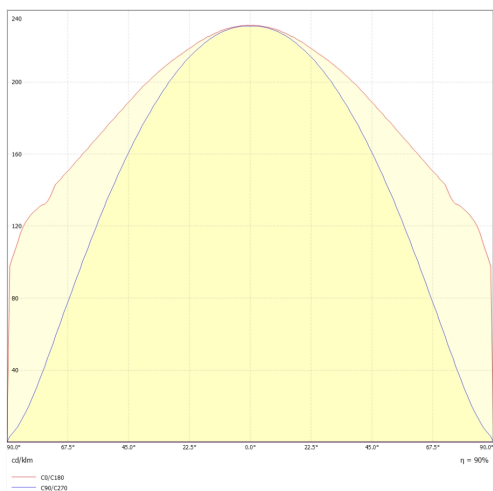
Amicus Sp. z o.o.
ELC-1024-40K20

A
B
C
D
E
F
G

10
kWh/1000h

 2019/2015

EMMISSION PATTERN



TECHNICAL DRAWING OF LOCATION OF LEDS ON THE TAPE

