

Specification

DS8144-48V-12mm



▼ General description

- 50m long strip driven by one end power supply with the same brightness from end to end
- Self-encapsulated design offers eight optional 1900-6000K white lights
- With life span over 60000H
- Ta: -25~40°C; Tc: 75°C (max)



▼ Dimension

※Max.length: 50000mm

Cutting unit: 24leds/166.67mm

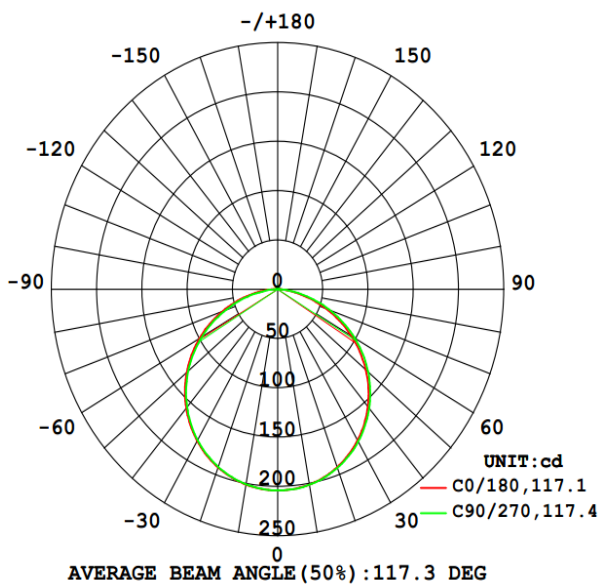
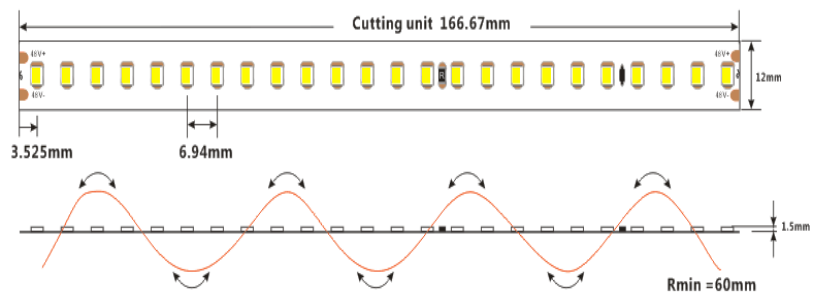
LED pitch: 6.94mm

Min. bend diameter: Φ60mm

Mounting: 3M tape

IP: IP20/IP65/IP67/IP68

※Warranty: 5years



Photometric of 1M strip

Flux out: 469.2 lm

Height	Eavg, Emax	Angle: 117.09deg	Diameter
1m	53.93, 204.11x		326.94cm
2m	13.48, 51.031x		653.88cm
3m	5.992, 22.681x		980.82cm
4m	3.370, 12.761x		1307.76cm
5m	2.157, 8.1651x		1634.69cm
6m	1.498, 5.6701x		1961.63cm
7m	1.101, 4.1661x		2288.57cm
8m	0.8426, 3.1891x		2615.51cm
9m	0.6657, 2.5201x		2942.45cm
10m	0.5393, 2.0411x		3269.39cm

AAI Figure

※Max.length data is based on 10% voltage drop

※Warranty is based on indoor use

▼ Electronic & output data

Input voltage: DC48V

Rated current: 0.112A(1m) /5.7A(50m)

Typical Power: 5.4W(1m) /274W(50m)

CRI: >80/95/98

Max.power: 5.8W

On-off times: 10000 (test times)

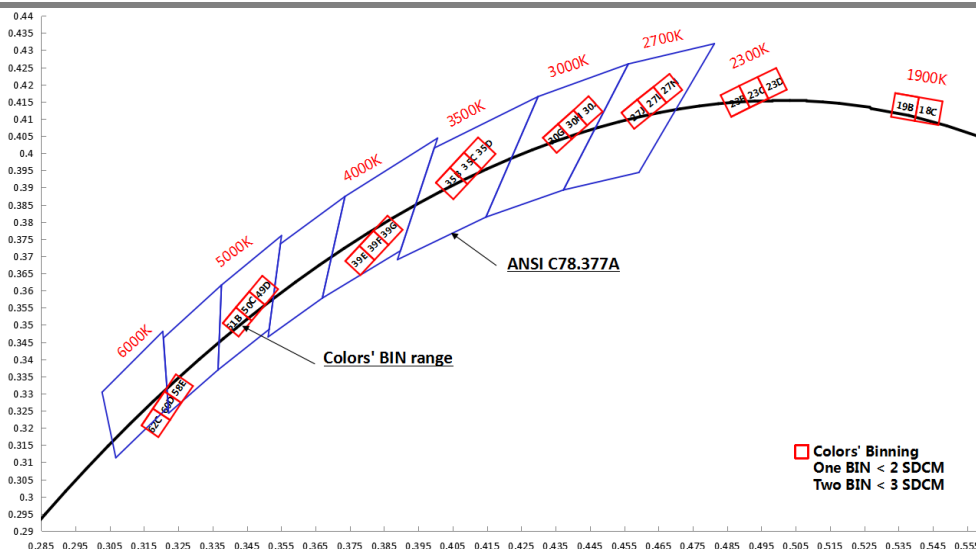
Power range: 5.1 ~ 5.8W

Copper foil: 3oz


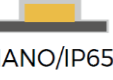
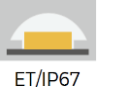

CRI	Color	CCT	Lumen(lm)	lm/W	Energy efficiency class
Ra>90	GW	1900K	440	82	A+
Ra>90	LW	2300K	490	91	A+
Ra>90	SW	2700K	530	98	A+
Ra>90	WW	3000K	550	103	A+
Ra>90	PW	3500K	560	104	A+
Ra>90	NW	4000K	580	107	A++
Ra>90	DW	5000K	580	107	A++
Ra>90	W	6000K	550	103	A+
Ra>95	SW	2700K	394	73	A+
Ra>95	WW	3000K	429	79	A+
Ra>95	PW	3500K	472	87	A+
Ra>95	NW	4000K	472	87	A+
Ra>98	SW	2700K	327	61	A+
Ra>98	WW	3000K	337	62	A+
Ra>98	NW	4000K	367	68	A+
0	G	525~530nm	/	/	/
0	B	465~470nm	/	/	/

- 1.The tolerance of output data can be vary up to 15%
- 2.the output data tested according to IES TM-30-15
- 3.the output data is based on IP20/1merter, data of 5m in only for reference
- 4.IP protection process leads changes to size, CCT and luminous flux








▼ BIN



▼ IP Process

IP Process	Picture	description	Size	optional CCT/color for finished product	lumen output rate
NO	 NO/IP20	No proof	12mm*1.5mm	1900K/2300K/2700K/3000K/ 3500K/4000K/5000K/6000K/G/B	100%
NA	 NANO/IP65	Nano-proof	12mm*1.6mm	1900K/2300K/2700K/3000K/ 3500K/4000K/5000K/6000K/G/B	98%
ET	 ET/IP67	Extrusion tube	14mm*4.8mm	1900K/2300K/2700K/3000K/ 3500K/4000K/5000K/6000K/G/B	88%
EF	 EF/IP68	Extrusion filling	14mm*5mm	2300K/2900K/3400K/3850K/ 5800K/8750K/15000K/G/B	86%

▼ Accessories Information

Name	Picture	Code	description
Connector for wire and FPC		94-03-00-0038	12mm width, 2PIN connector of wire and FPC,suitable for white color strip, NO/NA,2PIN wire18- 22AWG
Connector for FPC and FPC		94-03-00-0040	12mm width, 2PIN connector of FPC and FPC,suitable for white color strip,NO/NA
Fixed Clip		94-02-00-0004	Silicone clip, screw: PA 3*8mm, suitable for 12mm FPC,EH/EF/ET strip
Fixed Clip		94-02-00-0019	Fixed clip, transparent, 3*8mm self-tapping screws, suitable for 12mm FPC,NO/NA LED strip
Silicone end cap set		94-02-00-0023	including end cap and plug,suitable for 12mm FPC,EH/ET/EF silicone extrusion strip
Mounting groove		94-02-00-0026	Transparent PVC mounting groove,suitable for 12mm FPC,silicone extruded EF/ET strip
Stopper glue		94-16-03010001	Silicone gel,suitable for ST/ET/EH/EF/SF waterproof LED strip

▼ Order Code Formats

1: Category		2: LED		3: LED/m		4: Voltage		5:FPC Width		6: IP Process		7: CRI		8: CCT	
DS	-	8	2835	144	144 LED	48	48V	12	12mm	NO	NO	9	> 90	GW	1900K
										NA	NANO	H	> 95	LW	2300K
										EF	Extrusion filling	F	> 98	SW	2700K
										ET	Extrusion tube	0	0	WW	3000K
														PW	3500K
														NW	4000K
														DW	5000K
														W	6000K
														G	Green
														B	Blue
DS	-	8		144		48		12		NO		9		GW	

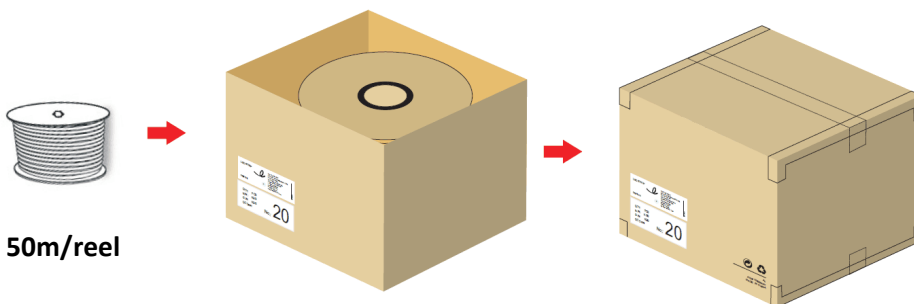
9: Silk Printing		10: Entry cable		11: Wire type		12: Wire length		13: Tape type		14: Label Type		15: Strip Length	
N	Neutral	S	Single	A	red and black cable	012	12cm	W	White 3M	C	COLORS	5000	50m
C	COLORS	D	Doubel	B	SM-male wire	020	20cm	Y	Yellow 3M	S	Customized		
S	Customized	X	Nothing	C	SM-female wire	050	50cm	R	Red tape				
				X	Nothing	100	100cm	X	Nothing				
						0	Nothing						
N		S		A		012		W		C		5000	

DS81444812NO-9GWNSA012WC5000

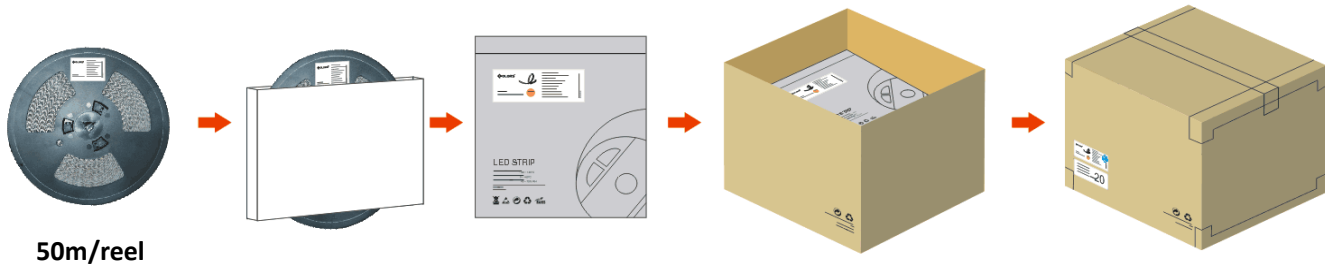
▼ Packing

Engineering packaging of ET(IP67)/EF(IP68)

(free-soldering end caps with 40 cover per box could be ordered separately if needed)



Engineering packaging of NO(IP20)/NA(IP65).



IP Process	Product size(mm)	Product quantity (m/reel)	Product quantity (m/case)	Product net weight(kg)	Net weight per box (kg)	Gross weight (kg)	Package size (cm)
NO	50000*12*1.5	50	500	1.5	15	17.25	41*41*26
NA	50000*12*1.6	50	500	1.53	15.3	17.595	41*41*26
ET	50000*14*4.8	50	100	5.5	11	12.65	25.5*25.5*26
EF	50000*14*5	50	100	6.3	12.6	14.49	25.5*25.5*26

Remark: data with 10% tolerance

▼Precautions

- ※ Please drive the led strip with 48VDC isolated power, and the ripple of the constant voltage source should be less than 5%.
- ※ Please do not bend the strip into an arc with a diameter less than 60mm to ensure the longevity and reliability.
- ※ Do not fold it in case any damage of LED beads.
- ※ Do not pull the power wire hard to ensure the longevity. Any Crash may damage the LED light is prohibited.
- ※ Please make sure the wire is connected to the anode and cathode correctly. The power output should be consistent with the voltage of the strip to avoid damage.
- ※ LED lights should be stored in dry, sealed environment. Please only unpack it before usage. Ambient temperature: -25°C~40°C.Storage temperature: 0°C~60°C.Please use the strips without waterproof within indoor environment with humidity less than 70%.
- ※ Please be careful during operation. Do not touch the AC power supply in case of electric shock.
- ※ Please leave at least 20% power for the power supply during using to ensure there is enough power supply to drive the product.
- ※ Do not use any acid or alkaline adhesives to fix the product (e.g.: glass cement).