

RA 90+ SMD3528 Series

1. RA 90+, conform to the requirement of supplementary lighting.
2. Abundant CCT option: 2700K|3000K|3500K|4000K|5000K|6500K.
3. 60LEDs/96LEDs/112LEDs/120LEDs/180LEDs/182LEDs/238LEDs/240LEDs per meter for option.
4. 8MM,10MM,14MM FPC width for option.
5. White,brown,black FPC for option,but our standard FPC color is white.
6. Low consumption, excellent and reliable stability.
7. Long lifetime (>50 000h).

① ② ● ③ ④ ⑤

1

2700 K	3000 K	3500 K
4000 K	5000 K	6500 K

2

3

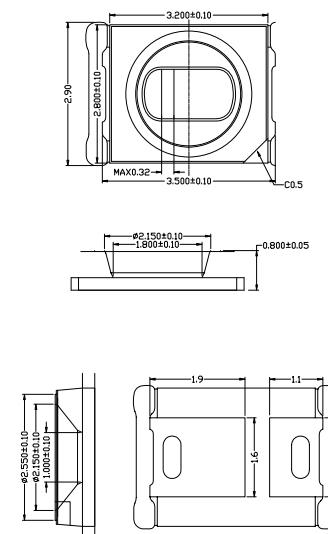
24VDC | 12VDC

4

IP20 | IP54 | IP65
IP67 | IP68

5

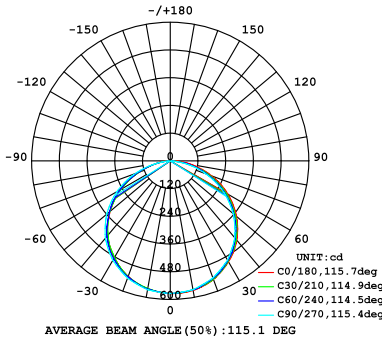
Model	CCT Wave lengths	Luminous Flux@20mA		I _F		CRI(Ra)
		Min.	Max.	Current	Max.	
SMD3528 	2700K	7LM	8LM	30mA	60mA	90+
	3000K	7LM	8LM	30mA	60mA	90+
	3500K	7LM	8LM	30mA	60mA	90+
	4000K	7LM	8LM	30mA	60mA	90+
	5000K	7LM	8LM	30mA	60mA	90+
	6500K	7LM	8LM	30mA	60mA	90+
	620-625 NM NM	— —	— —	30mA	60mA	— —
	585-590 NM NM	— —	— —	30mA	60mA	— —
	517-522 NM NM	— —	— —	30mA	60mA	— —
	465-470 NM NM	— —	— —	30mA	60mA	— —



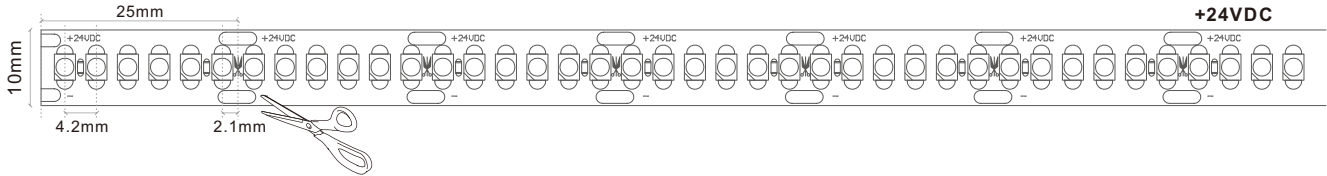
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-240-24-Y

Model	Color temp. Wave lengths	LM/M	Power/M	CRI (Ra)	FPC copper
EST-FS3528WW-240-24-Y	2700K	1564LM	<19.2W	90+	3OZ
EST-FS3528WW-240-24-Y	3000K	1564LM	<19.2W	90+	3OZ
EST-FS3528WW-240-24-Y	3500K	1564LM	<19.2W	90+	3OZ
EST-FS3528NW-240-24-Y	4000K	1600LM	<19.2W	90+	3OZ
EST-FS3528NW-240-24-Y	5000K	1600LM	<19.2W	90+	3OZ
EST-FS3528PW-240-24-Y	6500K	1650LM	<19.2W	90+	3OZ
EST-FS3528R-240-24-Y	620-625 NM NM	— —	<19.2W	— —	3OZ
EST-FS3528Y-240-24-Y	585-590 NM NM	— —	<19.2W	— —	3OZ
EST-FS3528G-240-24-Y	517-522 NM NM	— —	<19.2W	— —	3OZ
EST-FS3528B-240-24-Y	465-470 NM NM	— —	<19.2W	— —	3OZ



Strip length: CE:500CM UL:16.4FT

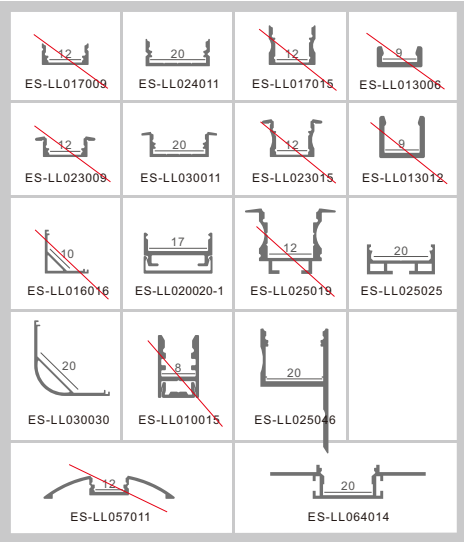


IP Rating:

- ☒ IP20---Non waterproof
- ☒ IP54---Nano coated
- ☒ IP65---Silicon coated
- ☒ IP67---Silicon coated & Wrapped heat shrink tube
- ☒ IP67---PVC extrusion
- ☒ IP67---Silicon extrusion
- ☒ IP67---Silicon tube(transparent)
- ☒ IP68---Silicon tube(transparent) & Inject silicon glue



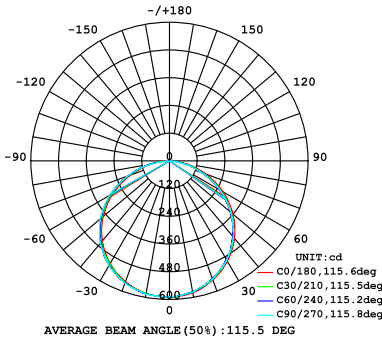
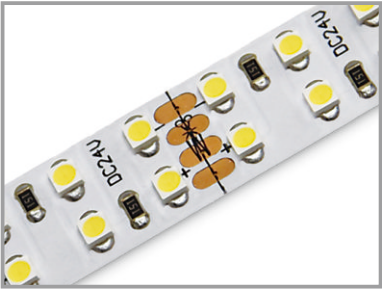
AL. profiles (mm)



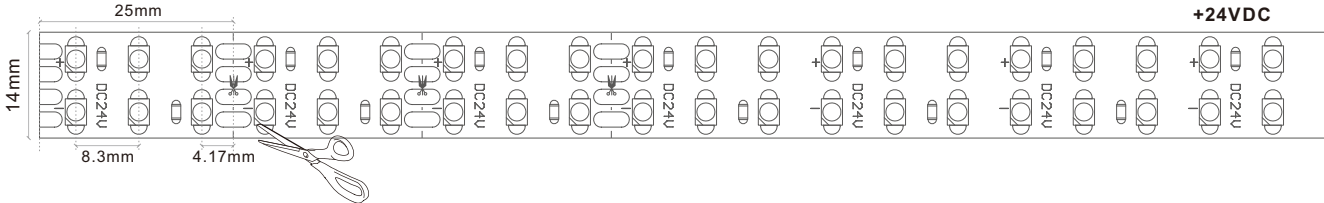
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-240H-24-Y

Model	Color temp. Wave lengths	LM/M	Power/M	CRI (Ra)	FPC copper
EST-FS3528WW-240H-24-Y	2700K	1564LM	<19.2W	90+	3OZ
EST-FS3528WW-240H-24-Y	3000K	1564LM	<19.2W	90+	3OZ
EST-FS3528WW-240H-24-Y	3500K	1564LM	<19.2W	90+	3OZ
EST-FS3528NW-240H-24-Y	4000K	1600LM	<19.2W	90+	3OZ
EST-FS3528NW-240H-24-Y	5000K	1600LM	<19.2W	90+	3OZ
EST-FS3528PW-240H-24-Y	6500K	1650LM	<19.2W	90+	3OZ
EST-FS3528R-240H-24-Y	620-625 NM NM	— —	<19.2W	— —	3OZ
EST-FS3528Y-240H-24-Y	585-590 NM NM	— —	<19.2W	— —	3OZ
EST-FS3528G-240H-24-Y	517-522 NM NM	— —	<19.2W	— —	3OZ
EST-FS3528B-240H-24-Y	465-470 NM NM	— —	<19.2W	— —	3OZ



Strip length: CE:500CM UL:16.4FT

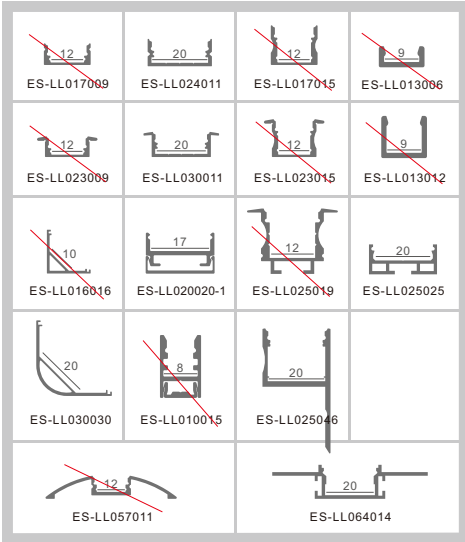


IP Rating:

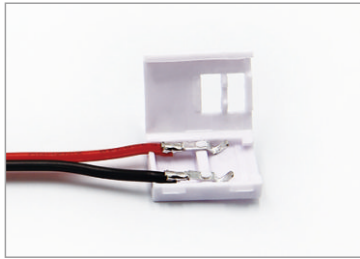
- ☒ IP20---Non waterproof
- ☒ IP54---Nano coated
- ☒ IP65---Silicon coated
- ☒ IP67---Silicon coated & Wrapped heat shrink tube
- ☒ IP67---PVC extrusion
- ☒ IP67---Silicon extrusion
- ☒ IP67---Silicon tube(transparent)
- ☒ IP68---Silicon tube(transparent) & Inject silicon glue



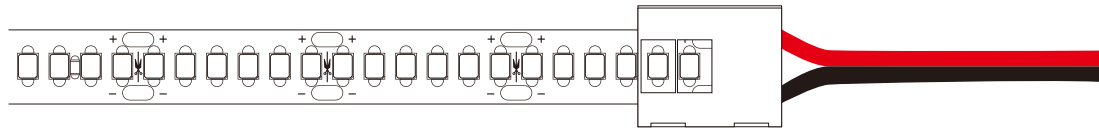
AL. profiles (mm)



Connector with cables



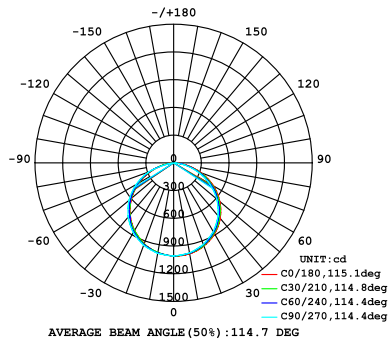
Suitable for SMD3528/2835,one meter with 240LED or 238LED
Item:ES-FS3528C-240-24-Y,ES-FS3528C-238-24-Y,ES-FS2835C-240-24-Y
Max.Current: 4A



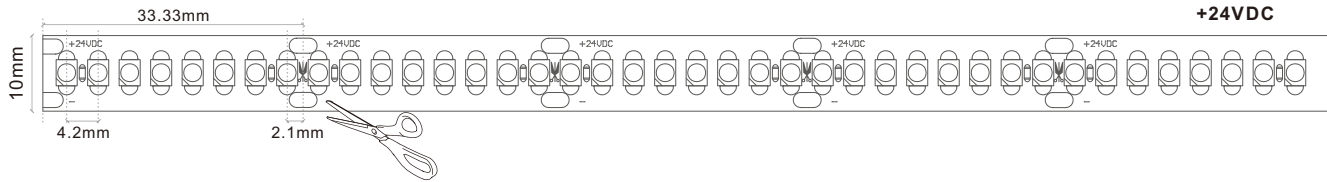
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-240-24-Y(High Efficiency)

Model	Color temp. Wave lengths	LM/M	Power/M	Light efficiency	CRI (Ra)	FPC copper
EST-FS3528WW-240-24-Y	2700K	2208LM	<19.2W	115LM/W	90+	3OZ
EST-FS3528WW-240-24-Y	3000K	2208LM	<19.2W	115LM/W	90+	3OZ
EST-FS3528WW-240-24-Y	3500K	2208LM	<19.2W	115LM/W	90+	3OZ
EST-FS3528NW-240-24-Y	4000K	2323LM	<19.2W	121LM/W	90+	3OZ
EST-FS3528NW-240-24-Y	5000K	2323LM	<19.2W	121LM/W	90+	3OZ
EST-FS3528PW-240-24-Y	6500K	2246LM	<19.2W	117LM/W	90+	3OZ
EST-FS3528R-240-24-Y	620-625 NM NM	---	<19.2W	---	---	3OZ
EST-FS3528Y-240-24-Y	585-590 NM NM	---	<19.2W	---	---	3OZ
EST-FS3528G-240-24-Y	517-522 NM NM	---	<19.2W	---	---	3OZ
EST-FS3528B-240-24-Y	465-470 NM NM	---	<19.2W	---	---	3OZ



Strip length: CE:500CM UL:16.4FT



IP Rating:

- ☒ IP20---Non waterproof
- ☒ IP54---Nano coated
- ☒ IP65---Silicon coated
- ☒ IP67---Silicon coated & Wrapped heat shrink tube
- ☒ IP67---PVC extrusion
- ☒ IP67---Silicon extrusion
- ☒ IP67---Silicon tube(transparent)
- ☒ IP68---Silicon tube(transparent) & Inject silicon glue



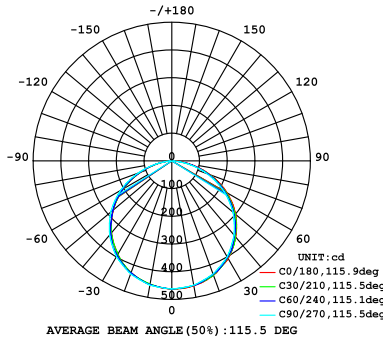
AL. profiles (mm)

ES-LL017009	ES-LL024011	ES-LL017015	ES-LL013006
ES-LL023009	ES-LL030011	ES-LL023015	ES-LL013012
ES-LL016016	ES-LL020020-1	ES-LL025019	ES-LL025025
ES-LL030030	ES-LL010015	ES-LL025016	
ES-LL057011	ES-LL064014		

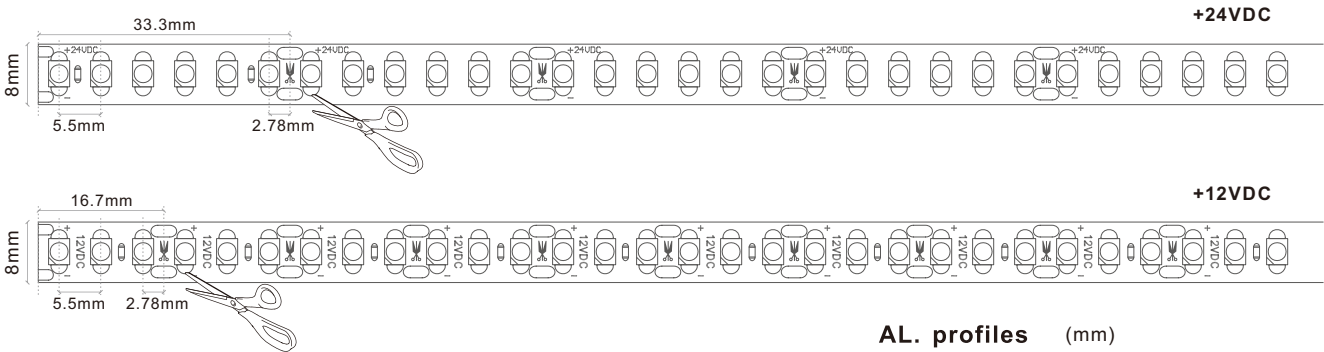
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-180-24-Y
Part Number:EST-FS3528C-180-12-Y

Model	Color temp. Wave lengths	LM/M	Power/M	CRI (Ra)	FPC copper
EST-FS3528WW-180-24-Y	2700K	1026LM	<14.4W	90+	3OZ
EST-FS3528WW-180-24-Y	3000K	1026LM	<14.4W	90+	3OZ
EST-FS3528WW-180-24-Y	3500K	1026LM	<14.4W	90+	3OZ
EST-FS3528NW-180-24-Y	4000K	1100LM	<14.4W	90+	3OZ
EST-FS3528NW-180-24-Y	5000K	1100LM	<14.4W	90+	3OZ
EST-FS3528PW-180-24-Y	6500K	1150LM	<14.4W	90+	3OZ
EST-FS3528R-180-24-Y	620-625 NM NM	— —	<14.4W	— —	3OZ
EST-FS3528Y-180-24-Y	585-590 NM NM	— —	<14.4W	— —	3OZ
EST-FS3528G-180-24-Y	517-522 NM NM	— —	<14.4W	— —	3OZ
EST-FS3528B-180-24-Y	465-470 NM NM	— —	<14.4W	— —	3OZ

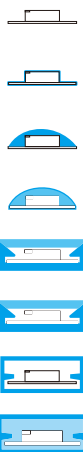


Strip length: CE:500CM UL:22.63FT(24V) | 13.12FT(12V)

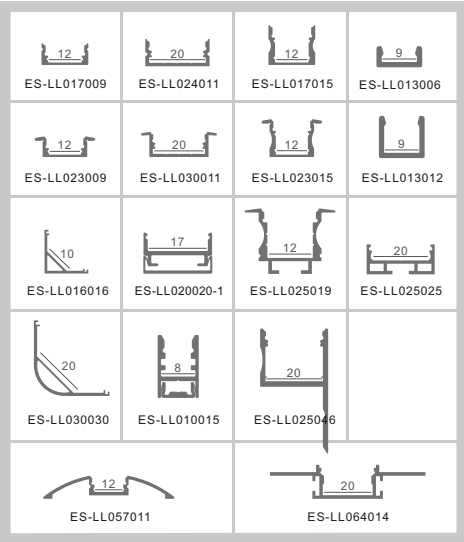


IP Rating:

- ✓ IP20---Non waterproof
- ✓ IP54---Nano coated
- ✓ IP65---Silicon coated
- ✓ IP67---Silicon coated & Wrapped heat shrink tube
- ✓ IP67---PVC extrusion
- ✓ IP67---Silicon extrusion
- ✓ IP67---Silicon tube(transparent)
- ✓ IP68---Silicon tube(transparent) & Inject silicon glue



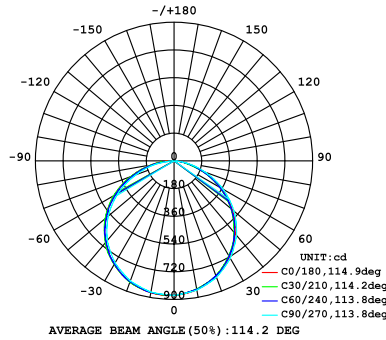
AL. profiles (mm)



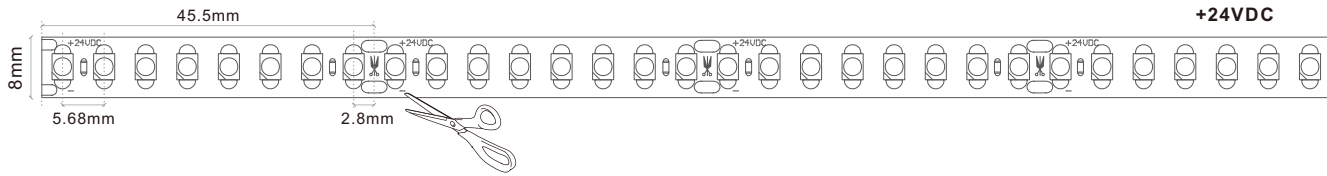
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-176-24-Y

Model	Color temp. Wave lengths	LM/M	Power/M	Light efficiency	CRI (Ra)	FPC copper
EST-FS3528WW-176-24-Y	2700K	1584LM	<14.4W	110LM/W	90+	3OZ
EST-FS3528WW-176-24-Y	3000K	1584LM	<14.4W	110LM/W	90+	3OZ
EST-FS3528WW-176-24-Y	3500K	1642LM	<14.4W	114LM/W	90+	3OZ
EST-FS3528NW-176-24-Y	4000K	1699LM	<14.4W	118LM/W	90+	3OZ
EST-FS3528NW-176-24-Y	5000K	1728LM	<14.4W	120LM/W	90+	3OZ
EST-FS3528PW-176-24-Y	6500K	1699LM	<14.4W	118LM/W	90+	3OZ
EST-FS3528R-176-24-Y	620-625 NM NM	— —	<14.4W	— —	— —	3OZ
EST-FS3528Y-176-24-Y	585-590 NM NM	— —	<14.4W	— —	— —	3OZ
EST-FS3528G-176-24-Y	517-522 NM NM	— —	<14.4W	— —	— —	3OZ
EST-FS3528B-176-24-Y	465-470 NM NM	— —	<14.4W	— —	— —	3OZ

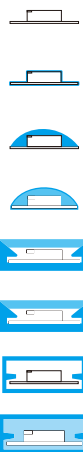


Strip length: CE:500CM UL:16.4FT

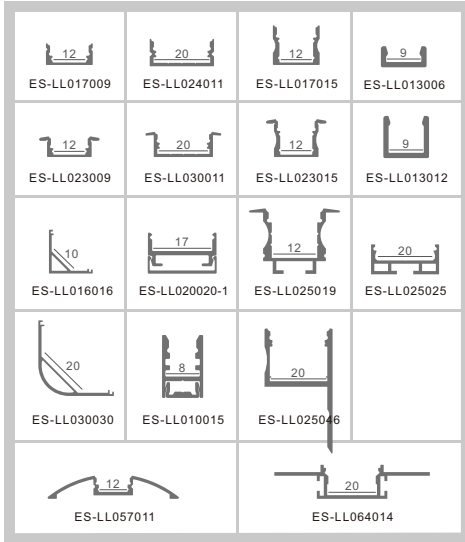


IP Rating:

- ✓ IP20---Non waterproof
- ✓ IP54---Nano coated
- ✓ IP65---Silicon coated
- ✓ IP67---Silicon coated & Wrapped heat shrink tube
- ✓ IP67---PVC extrusion
- ✓ IP67---Silicon extrusion
- ✓ IP67---Silicon tube(transparent)
- ✓ IP68---Silicon tube(transparent) & Inject silicon glue



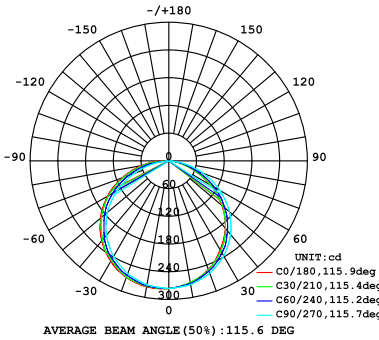
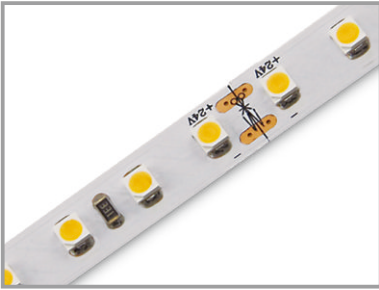
AL. profiles (mm)



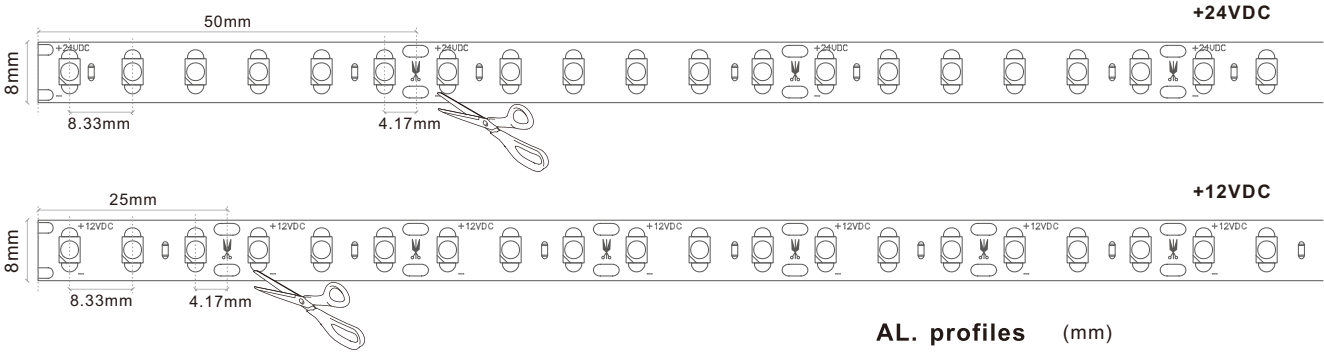
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-120-24-Y
Part Number:EST-FS3528C-120-12-Y

Model	Color temp. Wave lengths	LM/M	Power/M	CRI (Ra)	FPC copper
EST-FS3528WW-120-24-Y	2700K	740LM	<9.6W	90+	3OZ
EST-FS3528WW-120-24-Y	3000K	740LM	<9.6W	90+	3OZ
EST-FS3528WW-120-24-Y	3500K	740LM	<9.6W	90+	3OZ
EST-FS3528NW-120-24-Y	4000K	768LM	<9.6W	90+	3OZ
EST-FS3528NW-120-24-Y	5000K	768LM	<9.6W	90+	3OZ
EST-FS3528PW-120-24-Y	6500K	780LM	<9.6W	90+	3OZ
EST-FS3528R-120-24-Y	620-625 NM NM	— —	<9.6W	— —	3OZ
EST-FS3528Y-120-24-Y	585-590 NM NM	— —	<9.6W	— —	3OZ
EST-FS3528G-120-24-Y	517-522 NM NM	— —	<9.6W	— —	3OZ
EST-FS3528B-120-24-Y	465-470 NM NM	— —	<9.6W	— —	3OZ



Strip length: CE:500CM UL:32.8FT(24V) | 19.69FT(12V)



IP Rating:

- IP20---Non waterproof
- IP54---Nano coated
- IP65---Silicon coated
- IP67---Silicon coated & Wrapped heat shrink tube
- IP67---PVC extrusion
- IP67---Silicon extrusion
- IP67---Silicon tube(transparent)
- IP68---Silicon tube(transparent) & Inject silicon glue



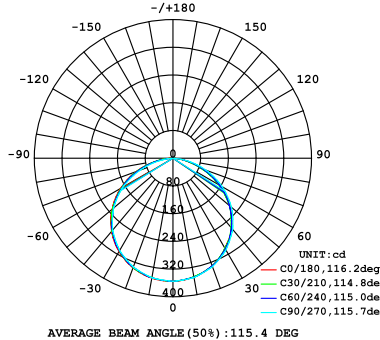
AL. profiles (mm)

 ES-LL017009	 ES-LL024011	 ES-LL017015	 ES-LL013006
 ES-LL023009	 ES-LL030011	 ES-LL023015	 ES-LL013012
 ES-LL016016	 ES-LL020020-1	 ES-LL025019	 ES-LL025025
 ES-LL030030	 ES-LL010015	 ES-LL025046	
 ES-LL057011		 ES-LL064014	

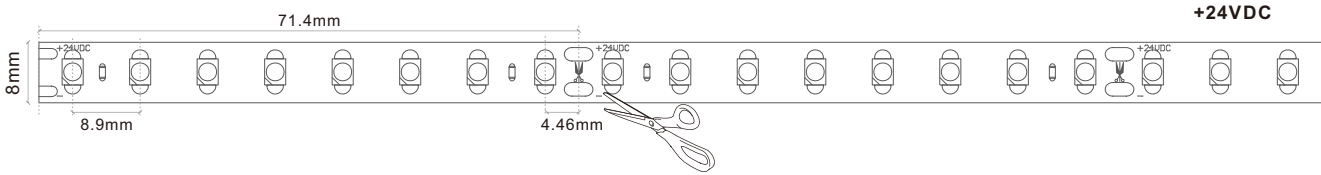
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-112-24-Y

Model	Color temp. Wave lengths	LM/M	Power/M	Light efficiency	CRI (Ra)	FPC copper
EST-FS3528WW-112-24-Y	2700K	1037LM	<9.6W	108LM/W	90+	3OZ
EST-FS3528WW-112-24-Y	3000K	1056LM	<9.6W	110LM/W	90+	3OZ
EST-FS3528WW-112-24-Y	3500K	1056LM	<9.6W	110LM/W	90+	3OZ
EST-FS3528NW-112-24-Y	4000K	1113LM	<9.6W	116LM/W	90+	3OZ
EST-FS3528NW-112-24-Y	5000K	1113LM	<9.6W	116LM/W	90+	3OZ
EST-FS3528PW-112-24-Y	6500K	1065LM	<9.6W	111LM/W	90+	3OZ
EST-FS3528R-112-24-Y	620-625 NM NM	— —	<9.6W	— —	— —	3OZ
EST-FS3528Y-112-24-Y	585-590 NM NM	— —	<9.6W	— —	— —	3OZ
EST-FS3528G-112-24-Y	517-522 NM NM	— —	<9.6W	— —	— —	3OZ
EST-FS3528B-112-24-Y	465-470 NM NM	— —	<9.6W	— —	— —	3OZ



Strip length: CE:500CM UL:34.18FT



IP Rating:

- IP20---Non waterproof
- IP54---Nano coated
- IP65---Silicon coated
- IP67---Silicon coated & Wrapped heat shrink tube
- IP67---PVC extrusion
- IP67---Silicon extrusion
- IP67---Silicon tube(transparent)
- IP68---Silicon tube(transparent) & Inject silicon glue



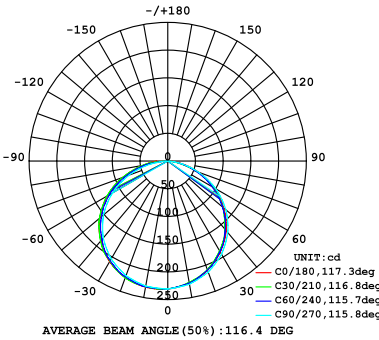
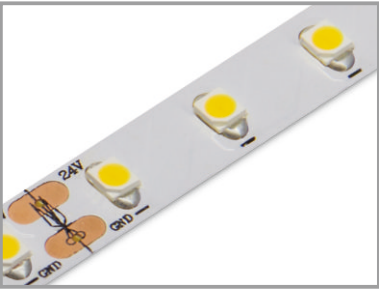
AL. profiles (mm)

 ES-LL017009	 ES-LL024011	 ES-LL017015	 ES-LL013006
 ES-LL023009	 ES-LL030011	 ES-LL023015	 ES-LL013012
 ES-LL016016	 ES-LL020020-1	 ES-LL025019	 ES-LL025025
 ES-LL030030	 ES-LL010015	 ES-LL025046	
 ES-LL057011		 ES-LL064014	

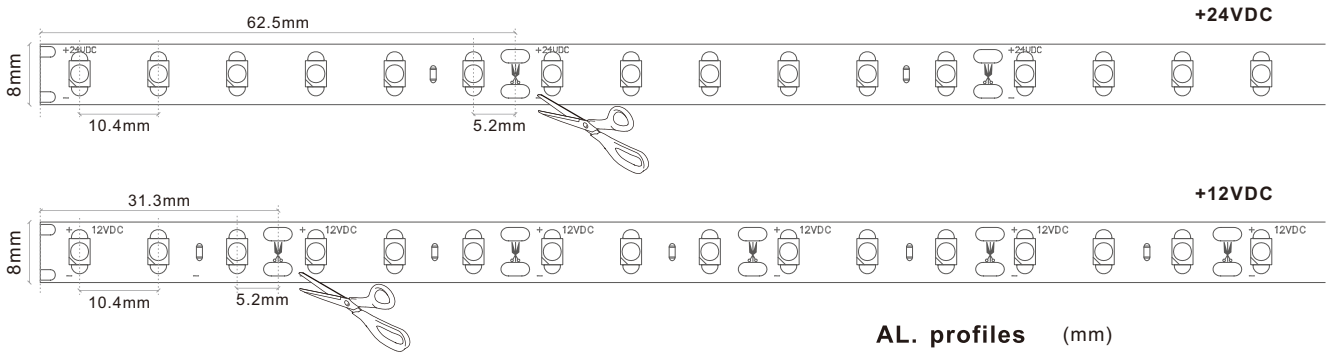
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-96-24-Y
Part Number:EST-FS3528C-96-12-Y

Model	Color temp. Wave lengths	LM/M	Power/M	CRI (Ra)	FPC copper
EST-FS3528WW-96-24-Y	2700K	430LM	<7.68W	90+	3OZ
EST-FS3528WW-96-24-Y	3000K	430LM	<7.68W	90+	3OZ
EST-FS3528WW-96-24-Y	3500K	430LM	<7.68W	90+	3OZ
EST-FS3528NW-96-24-Y	4000K	480LM	<7.68W	90+	3OZ
EST-FS3528NW-96-24-Y	5000K	530LM	<7.68W	90+	3OZ
EST-FS3528PW-96-24-Y	6500K	500LM	<7.68W	90+	3OZ
EST-FS3528R-96-24-Y	620-625 NM NM	---	<7.68W	---	3OZ
EST-FS3528Y-96-24-Y	585-590 NM NM	---	<7.68W	---	3OZ
EST-FS3528G-96-24-Y	517-522 NM NM	---	<7.68W	---	3OZ
EST-FS3528B-96-24-Y	465-470 NM NM	---	<7.68W	---	3OZ



Strip length: CE:500CM UL:47.57FT(24V) | 26.25FT(12V)



IP Rating:

- ✓ IP20---Non waterproof
- ✓ IP54---Nano coated
- ✓ IP65---Silicon coated
- ✓ IP67---Silicon coated & Wrapped heat shrink tube
- ✓ IP67---PVC extrusion
- ✓ IP67---Silicon extrusion
- ✓ IP67---Silicon tube(transparent)
- ✓ IP68---Silicon tube(transparent) & Inject silicon glue



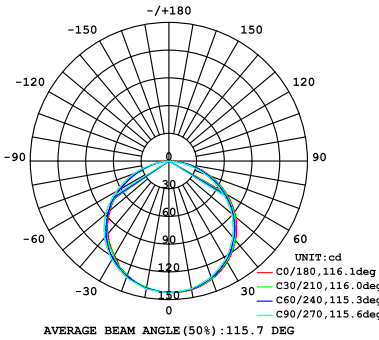
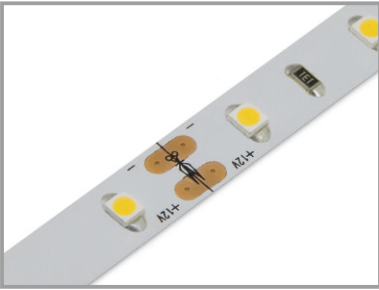
AL. profiles (mm)

 ES-LL017009	 ES-LL024011	 ES-LL017015	 ES-LL013006
 ES-LL023009	 ES-LL030011	 ES-LL023015	 ES-LL013012
 ES-LL016016	 ES-LL020020-1	 ES-LL025019	 ES-LL025025
 ES-LL030030	 ES-LL010015	 ES-LL025046	
 ES-LL057011		 ES-LL064014	

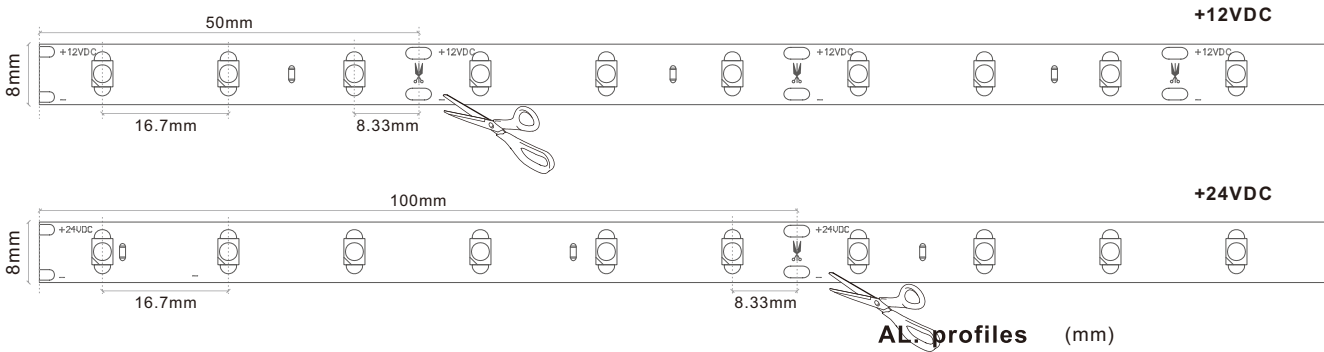
Economy--RA 90+ SMD3528

Part Number:EST-FS3528C-60-12-Y
Part Number:EST-FS3528C-60-24-Y

Model	Color temp. Wave lengths	LM/M	Power/M	CRI (Ra)	FPC copper
EST-FS3528WW-60-12-Y	2700K	360LM	<4.8W	90+	2OZ
EST-FS3528WW-60-12-Y	3000K	360LM	<4.8W	90+	2OZ
EST-FS3528WW-60-12-Y	3500K	360LM	<4.8W	90+	2OZ
EST-FS3528NW-60-12-Y	4000K	390LM	<4.8W	90+	2OZ
EST-FS3528NW-60-12-Y	5000K	390LM	<4.8W	90+	2OZ
EST-FS3528PW-60-12-Y	6500K	400LM	<4.8W	90+	2OZ
EST-FS3528R-60-12-Y	620-625 NM NM	---	<4.8W	---	2OZ
EST-FS3528Y-60-12-Y	585-590 NM NM	---	<4.8W	---	2OZ
EST-FS3528G-60-12-Y	517-522 NM NM	---	<4.8W	---	2OZ
EST-FS3528B-60-12-Y	465-470 NM NM	---	<4.8W	---	2OZ



Strip length: CE:500CM UL:41FT(12V) | 60.7FT(24V)



IP Rating:

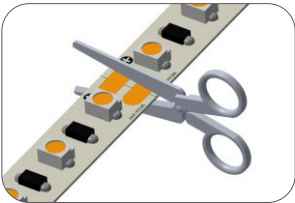
- ✓ IP20---Non waterproof
- ✓ IP54---Nano coated
- ✓ IP65---Silicon coated
- ✓ IP67---Silicon coated & Wrapped heat shrink tube
- ✓ IP67---PVC extrusion
- ✓ IP67---Silicon extrusion
- ✓ IP67---Silicon tube(transparent)
- ✓ IP68---Silicon tube(transparent) & Inject silicon glue



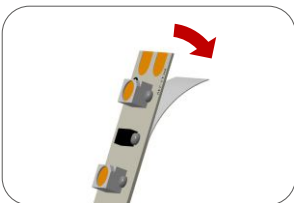
AL. profiles (mm)

 ES-LL017009	 ES-LL024011	 ES-LL017015	 ES-LL013006
 ES-LL023009	 ES-LL030011	 ES-LL023015	 ES-LL013012
 ES-LL016016	 ES-LL020020-1	 ES-LL025019	 ES-LL025025
 ES-LL030030	 ES-LL010015	 ES-LL025046	
 ES-LL057011		 ES-LL064014	

Connect Instructions



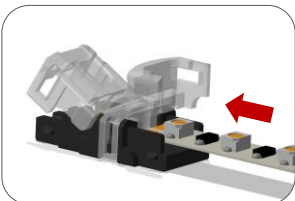
Unfold the LED strip, and cut into the required length according to the direction of the scissors.



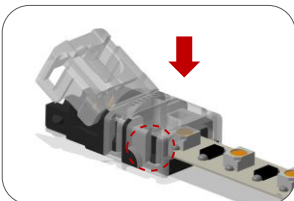
Peel away 3M tape from the cutting edge.



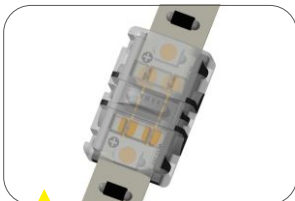
Fold the transparent cover to 90° (45° for high density strip).



Insert LED tape light, and press the transparent cover to lock with both bottoms of connector. (Attention: LED tape light should fit with the top of PIN).

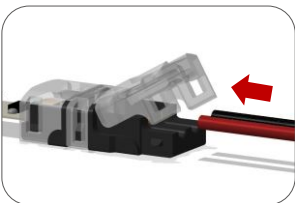


Installation of connecting tape-to-connector finished; As for connecting tape-to-tape, please use the same method.



Keep the positive and negative pole one-to-one correspondence while in connecting.

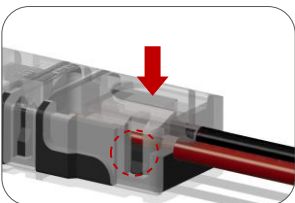
Connect Instructions for Wire-to-Connector



Cut wires into the length required, and keep the insulation, then insert into guide-groove.



Attention: Keep the positive and negative pole one-to-one correspondence while connecting wire with tape.



Use an electric plier to lock the transparent cover with both bottoms of connector.



Installation finished.

Power on but no light ?

Please try following tests to identify:

Cables: whether could be match with the LED tape light;

Positive and negative pole: whether connected accurately with LED tape light;

PCB: whether the PCB's thickness is enough to hold such power;

Distance of pad: whether it's too far away from the metal plate;

Check the integrity of LED tape light.

