

## AB-FYVVIZ Addressable Flexible Light Series

5V/12V/24V DC, addressable flexible light strip and rope light



### Features:

- UL listed
- IP20, IP65, IP68 options
- Addressable, wide viewing angle 120°/90°
- Storage temperature -40°C~70°C
- Operating temperature -20°C~50°C
- Environment humidity 40-70%RH

### Applications:

- Conference/meeting rooms
- Hospitals
- Commercial/ residential buildings
- Entertaining lighting
- Hotels



## AB-FYVVIZ Addressable Flexible Light Series

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**Part number naming system:**

Part numbers for AB-FYVVVIZ Addressable Flexible Light Series follow the convention below:

**AB – F Y V V V I Z – L L L W L – X A 1**

**Y** – Waterproof coating options (A- IP20 no coating, C-IP65 silicon coating, D-IP68 clear silicon tube, F-IP68 diffused silicon tube, H- 5mm IP68 diffused silicon tube)

**V V V** – Voltage (volt) of the light strip (005= 5V, 012=12V, 024=24V)

**Z** – Pin QTY of the IC LED (4- PLCC-4, 8- PLCC-8)

**L L L** – Light strip length (unit: inch);

Voltage	LED Count/M	Length selection increment	Maximum available length	Coating options
5V	90	0.43 inch	118 inches	FH
	120	0.31 inch	96 inches	FA, FC, FD, FF
12V	60	1.97 inch	197 inches	FA, FC, FD, FF
24V	60	3.94 inch	394 inches	FA, FC, FD, FF

**W L** – Lead length (unit: inch); standard length is 12 inches.

**X** – CRI (8 – 80, 9 – 90, X – not applicable)

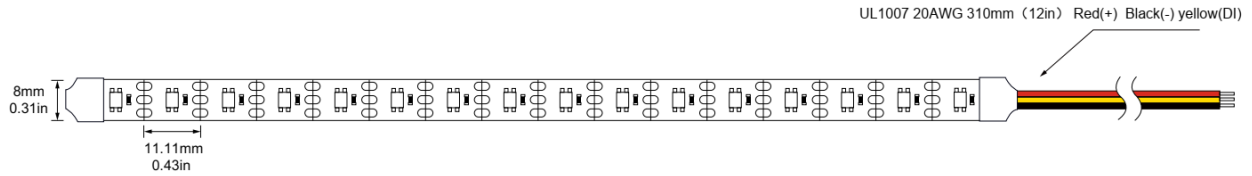
**Ax** – Version (Internal Code)

For example, the below part number of AB-FYVVVIZ Addressable Flexible Light Series stand for 12V, IP20, tape light 197 inches length, and lead 12 inches length, and addressable IC LED PLCC-8:

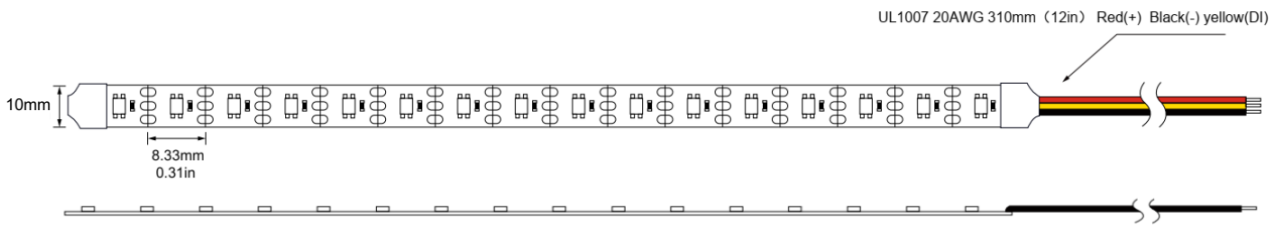
**AB – F A 0 1 2 | 8 – 1 9 7 1 2 – X A 1**

**Outline Dimension:**

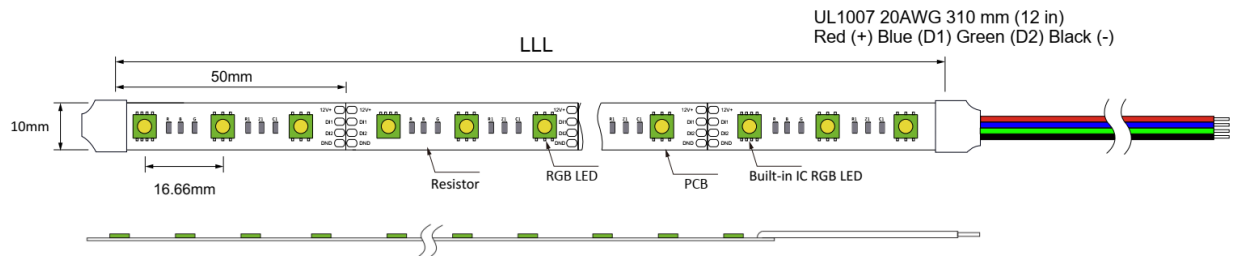
1. DC 5V – 90LED/M (available in AB-FH coating):



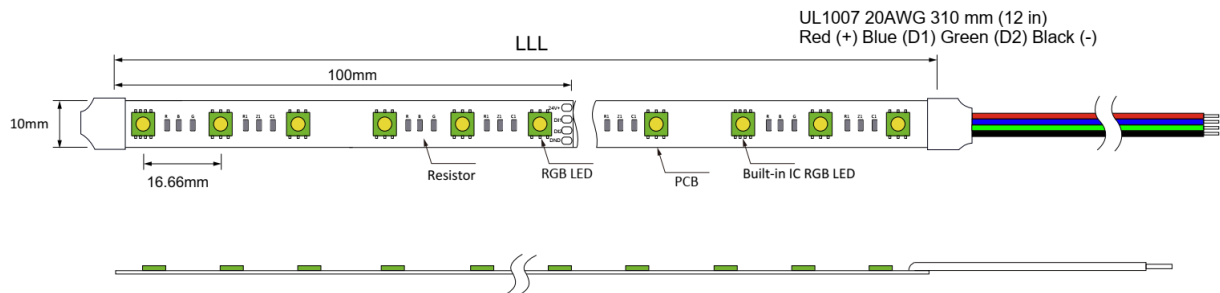
2. DC 5V – 120LED/M (available in AB-FA, FC, FD, FF coating):



3. DC 12V – 60LED/M (available in AB-FA, FC, FD, FF coating)



4. DC 24V – 60LED/M (available in AB-FA, FC, FD, FF coating)



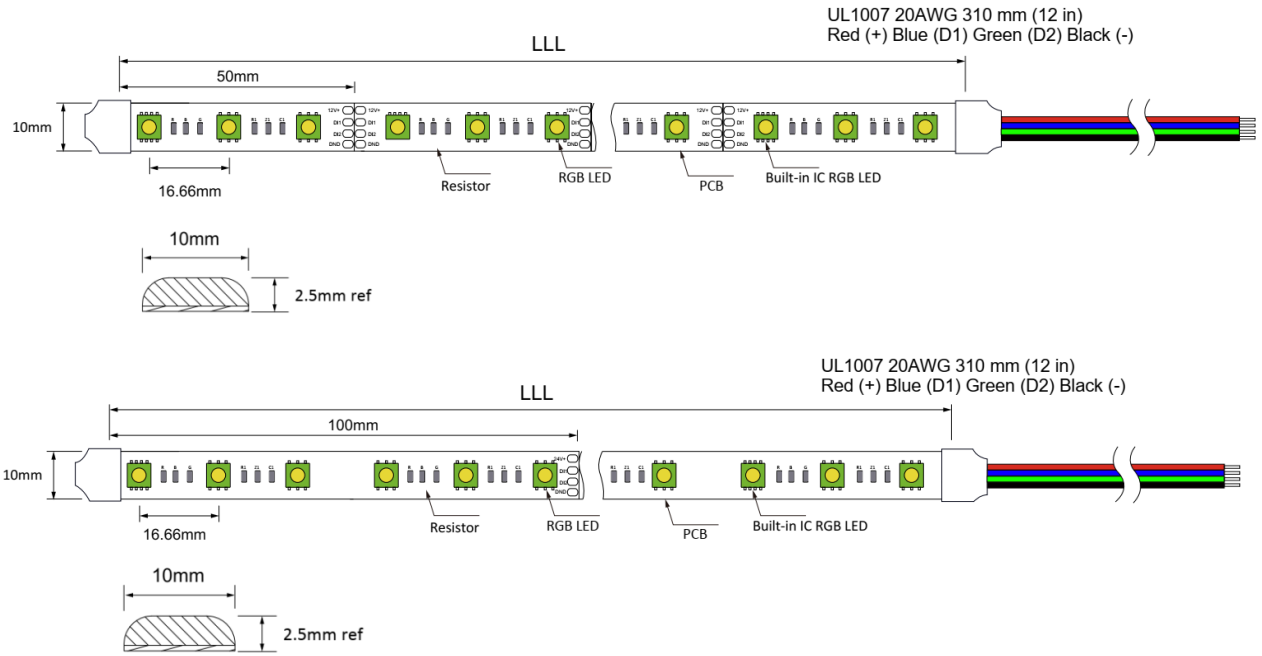
1,2

<sup>1</sup> Picture refers to AB-FA type, for other types of coating, please refer to AB-FC, AB-FD, AB-FF and AB-FH.

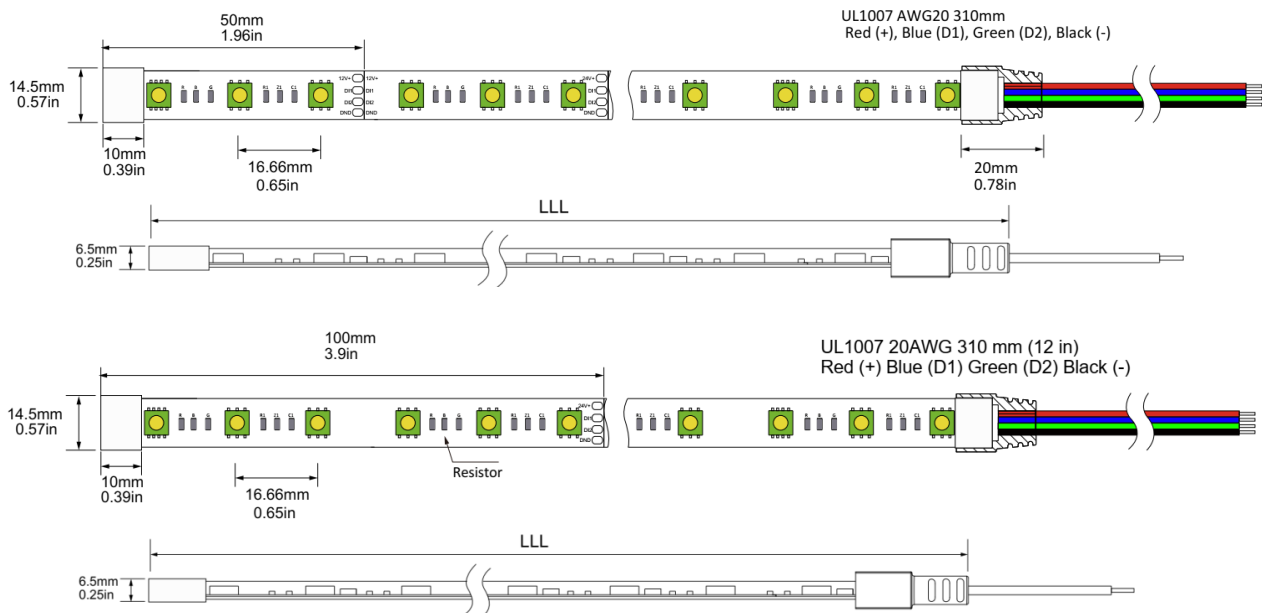
<sup>2</sup> Cuttable length:

Voltage	LED Count/M	Cuttable unit length
5V	90	0.43 inch
12V	60	1.97 inch
24V	60	3.94 inch

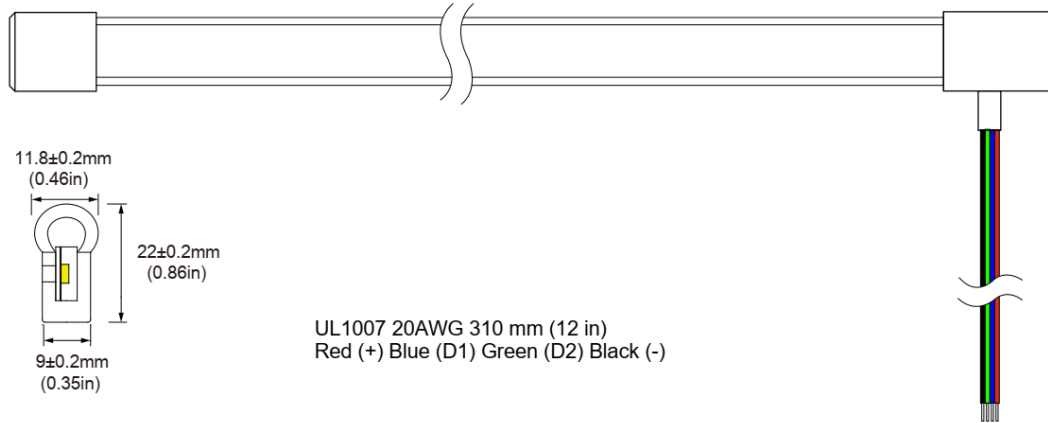
**AB-FC Coating:**



**AB-FD Coating:**

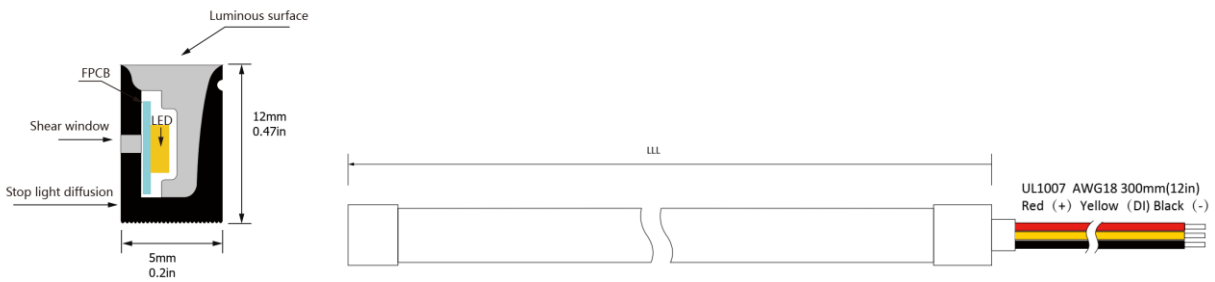


**AB-FF Coating:**



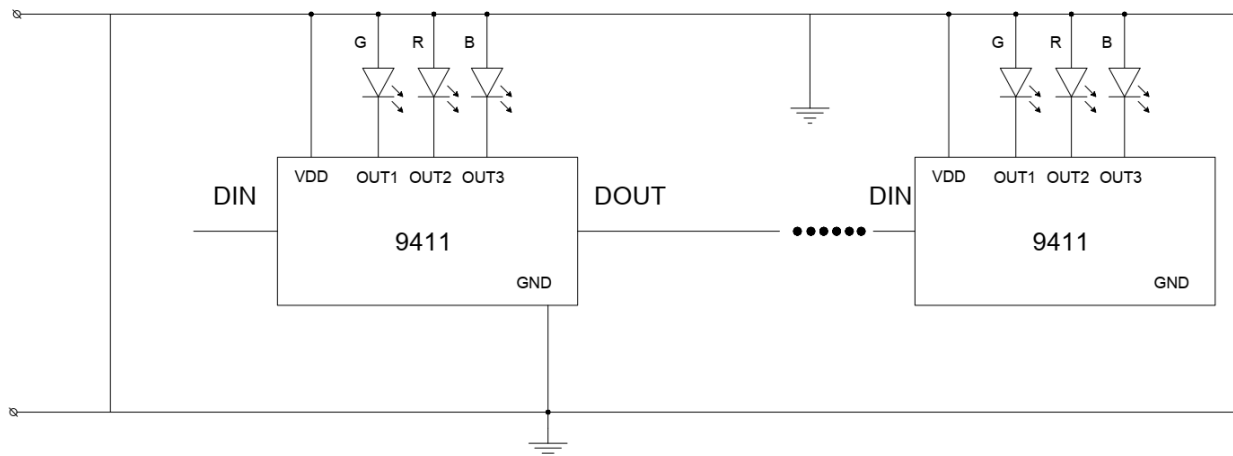
3

**AB-FH Coating:**



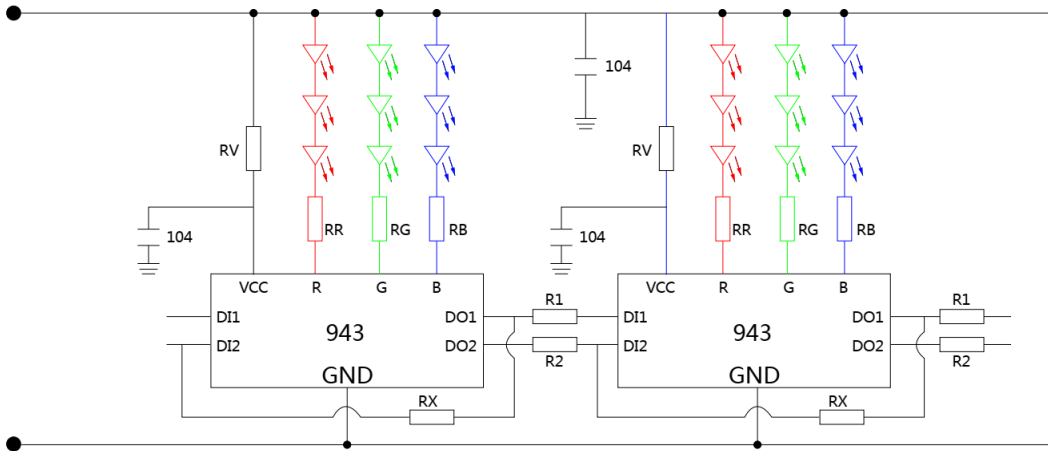
**Schematic Diagram:**

DC 5V:

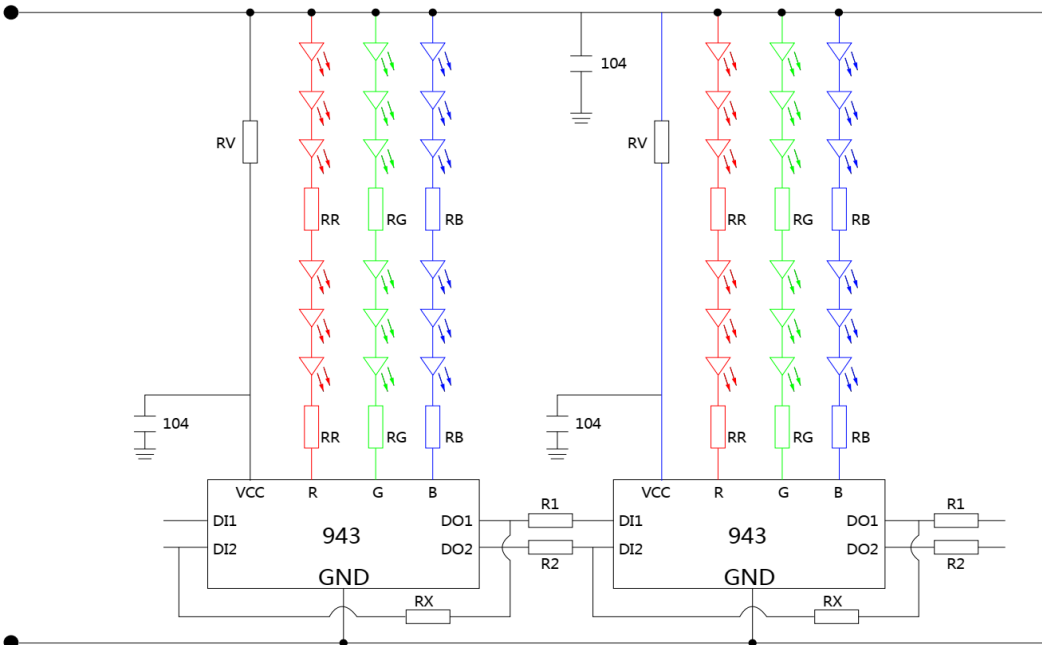


<sup>3</sup> Silicon tube: durometer, shore A 60~65 or equivalent. Color: White/Clear

DC 12V:



DC 24V:





## Characteristics:

Table 1. Configurations for AB-FYVVVIZ Addressable Flexible Light Series.

OPERATING VOLTAGE (V)	CURRENT (A/m)	POWER (W/m)	LENGTH <sup>4</sup> m (inch)	LED COUNT/m
5	AB-FY005I4: 5.4	26.7	3 (118)	120
	AB-FH005I4: 2.64	13.2	3 (118)	90
12	AB-FY012I8: 1.4	17.1	5 (197)	60
24	AB-FY024I8: 0.7	17.1	5 (197)	60

Table 2. Product performance of AB-FYVVVI4 Addressable Flexible Light Series at T=25 degree C.

PART NUMBER	CCT/ WAVELENGTH	LUMINOUS FLUX <sup>5</sup> (lm/m)	LUMINOUS EFFICACY (lm/W)
AB-FA005I4-19712-XA1	RD: Red 620-630nm	90	/
	GR: Green 520-530nm	248	/
	BL: Blue 465-475nm	56	/
AB-FC005I4-19712-XA1	RD: Red 620-630nm	90	/
	GR: Green 520-530nm	248	/
	BL: Blue 465-475nm	56	/
AB-FD005I4-19712-XA1	RD: Red 620-630nm	90	/
	GR: Green 520-530nm	248	/
	BL: Blue 465-475nm	56	/
AB-FF005I4-19712-XA1	RD: Red 620-630nm	60	/
	GR: Green 520-530nm	190	/
	BL: Blue 465-475nm	40	/
AB-FH005I4-19712-XA5	RD: Red 620-630nm	60	/
	GR: Green 520-530nm	190	/
	BL: Blue 465-475nm	40	/

<sup>4</sup> Standard unit length: 5m or 10m/roll, for custom length, please contact [aboc@americanbrightled.com](mailto:aboc@americanbrightled.com).

<sup>5</sup> Luminous flux ±10% is allowed.

## AB-FYVVVIZ Addressable Flexible Light Series



Table 3. Product performance of AB-FYVVV18 Addressable Flexible Light Series at T=25 degree C.

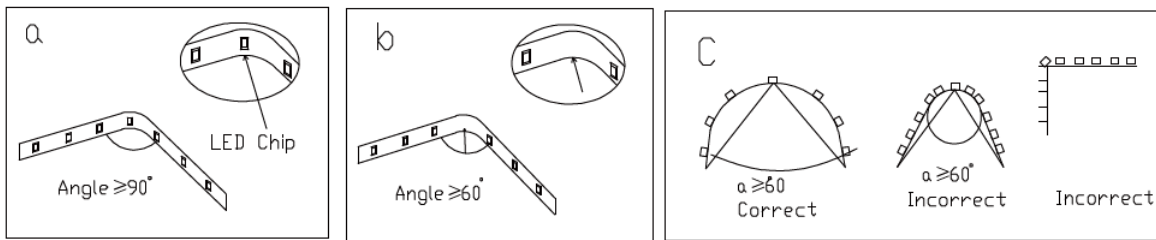
PART NUMBER	CCT/ WAVELENGTH	LUMINOUS FLUX (lm/m)	LUMINOUS EFFICACY (lm/W)
AB-FA012I8-19712-XA2 AB-FA024I8-19712-XA2	RD: Red 620-630nm	90	/
	GR: Green 520-530nm	248	/
	BL: Blue 465-475nm	56	/
AB-FC012I8-19712-XA2 AB-FC024I8-19712-XA2	RD: Red 620-630nm	90	/
	GR: Green 520-530nm	248	/
	BL: Blue 465-475nm	56	/
AB-FD012I8-19712-XA2 AB-FD024I8-19712-XA2	RD: Red 620-630nm	90	/
	GR: Green 520-530nm	248	/
	BL: Blue 465-475nm	56	/
AB-FF012I8-19712-XA2 AB-FF024I8-19712-XA2	RD: Red 620-630nm	60	/
	GR: Green 520-530nm	190	/
	BL: Blue 465-475nm	40	/

**Optional Mounting Accessories:**

Please refer to spec "[Accessories For Flexible Light.](#)"

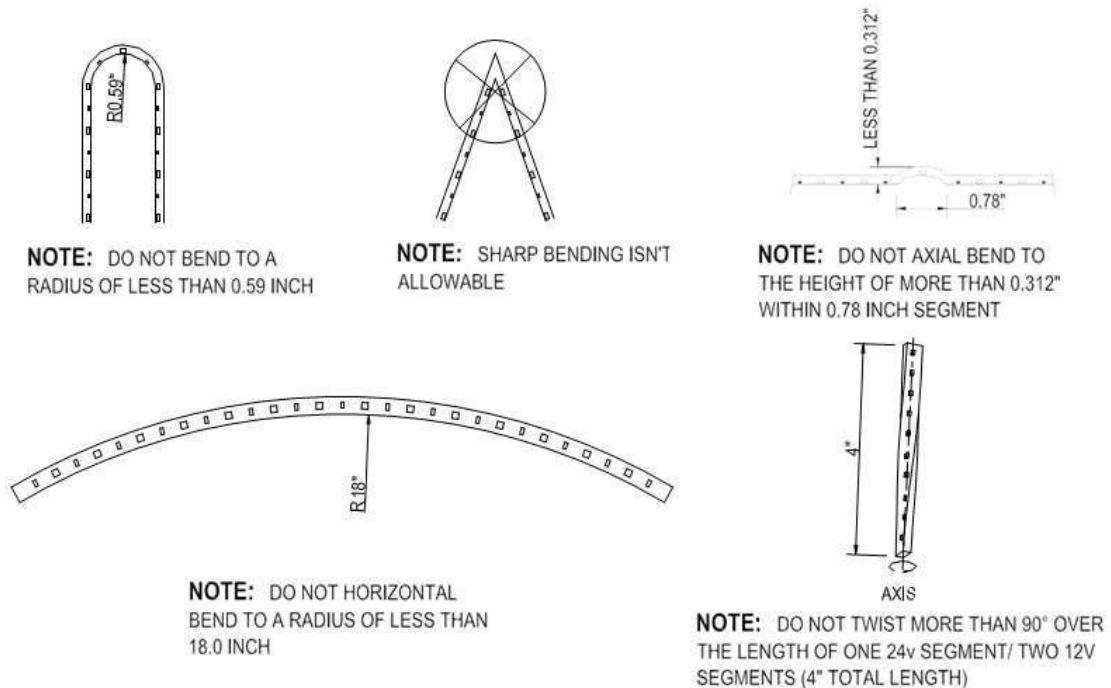


**Installation Instructions:**



- a: use an angle greater or equal to 90 degrees when there is an LED chip on the corner while placing, the strip in a concave position (Angle  $\geq 90$  degree)
- b: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing, the strip in a concave position (Angle  $\geq 60$  degree)
- c: use an angle greater or equal to 60 degrees when there is an LED chip on the corner while placing the strip in a concave position (Angle  $\geq 60$  degree) In the convex position the angle should not reach, 90 degrees. See above diagram.

**Maximum flexibility precaution:**



**AB-FYVVIZ Addressable Flexible Light Series**

**Packaging:**

Table 3. Packaging information

Model	QTY <sup>6</sup>	Image
AB-FA series AB-FC series AB-FD series	1 roll/per ESD bag 10 bags/carton	
AB-FB series AB-FF series AB-FH series	1 roll/per tray 10 trays/carton	

<sup>6</sup> Standard unit length: 5m or 10m/roll, 1 roll/bag. QTY/bag varies per different unit lengths.