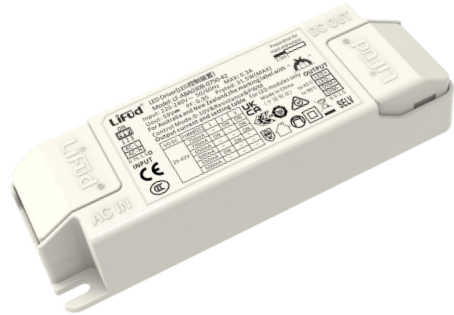


**Features**

- Supports 0-10V/PWM/Rx dimming
- THD <10%
- Output current adjustable via a DIP switch
- Surge: L-N 2kV
- Flicker free
- 1% Dimming depth
- IP20
- Suitable for Class II light fixtures
- 5-year warranty (please refer to the warranty condition)



**Applications**

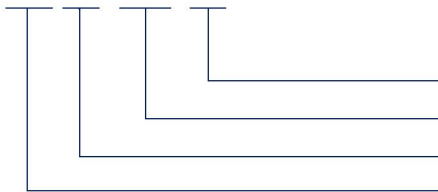
· Indoor office lighting · decorative lighting · commercial lighting · residential lighting

**Descriptions**

LF-ABA030B-0750-42 is a constant current LED driver with the maximum output power of 31.5W. Its rated input voltage range from 220 to 240Vac and its output current can be adjusted via a DIP switch from 500mA to 750mA with every 50mA as a step. Besides, it has all-round protections, including open circuit protection and short circuit protection. It is suitable for panel light, downlight and so on.

**Product Model**

LF - ABA 030B - 0750 - 42



- 42: maximum output voltage: 42V
- 0750: maximum output current: 750mA
- 030: rated power: 30W
- ABA: indoor 3-in-1 dimming LED driver series

### ■ Electrical Characteristics

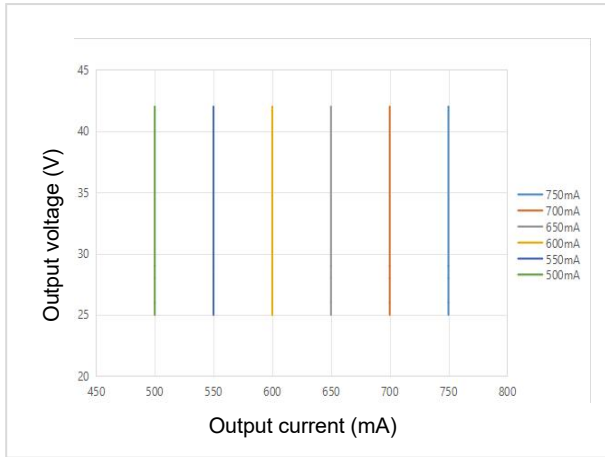
| Model                           |                                       | LF-ABA030B-0750-42   |       |       |       |       |       |
|---------------------------------|---------------------------------------|--|-------|-------|-------|-------|-------|
| <b>Output</b>                   | Output Voltage                        | 25-42V   |       |       |       |       |       |
|                                 | Output Current                        | 500mA  | 550mA | 600mA | 650mA | 700mA | 750mA |
|                                 | Ripple current (≤100Hz)               | ± 3.3%   |       |       |       |       |       |
|                                 | Flicker Index                         | IEC-Pst≤1, CIE SVM≤0.4 Complies with IEEE Std 1789-2015.                       |       |       |       |       |       |
|                                 | Current Tolerance                     | ± 5%   |       |       |       |       |       |
|                                 | Temperature Drift                     | ± 10%  |       |       |       |       |       |
|                                 | Startup Time                          | <1S  |       |       |       |       |       |
| <b>Input</b>                    | Rated Input Voltage                   | 220-240Vac   |       |       |       |       |       |
|                                 | Input Voltage Range                   | 198-264Vac   |       |       |       |       |       |
|                                 | Input Frequency                       | 50/60Hz <sup>①</sup>   |       |       |       |       |       |
|                                 | Input Current                         | 0.3A max.  |       |       |       |       |       |
|                                 | PF                                    | ≥0.95  |       |       |       |       |       |
|                                 | THD                                   | <10%   |       |       |       |       |       |
|                                 | Efficiency                            | ≥88%   |       |       |       |       |       |
|                                 | Inrush Current                        | <25A&120uS   |       |       |       |       |       |
|                                 | Loading Quantities of Circuit Breaker | Model  | B10   | C10   | B16   | C16   |       |
|                                 |                                       | Quantity (pcs)   | 26    | 26    | 42    | 42    |       |
|                                 | Leakage Current                       | <0.7mA   |       |       |       |       |       |
| Standby Power Consumption       | ≤0.5W (dim to off)                    |  |       |       |       |       |       |
| <b>Protections</b>              | Open Circuit                          | <59V   |       |       |       |       |       |
|                                 | Short Circuit                         | Hiccup mode (auto-recovery)  |       |       |       |       |       |
| <b>Environment Descriptions</b> | Operating Temperature                 | -30°C - +45°C  |       |       |       |       |       |
|                                 | Operating Humidity                    | 20-90%RH (without condensation)  |       |       |       |       |       |
|                                 | Storage Temperature/ Humidity         | -40°C~+80°C (6 months in Class I environment); 10-90%RH (without condensation) |       |       |       |       |       |
|                                 | Atmospheric Pressure                  | 86-106kPa  |       |       |       |       |       |
| <b>Surge</b>                    | L-N                                   | 2kV  |       |       |       |       |       |

■ **Electrical Characteristics**

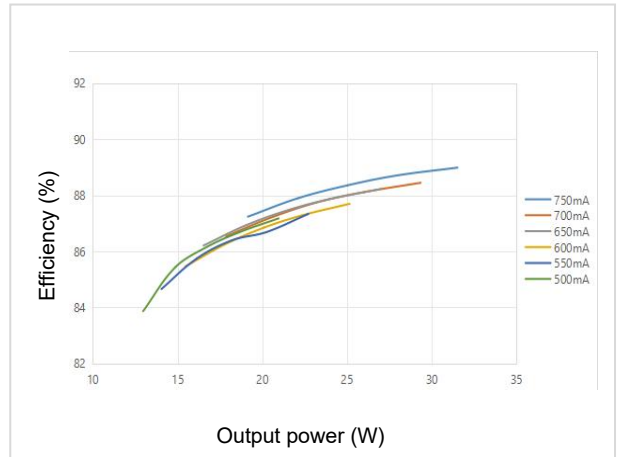
|                           |  |   |
|---------------------------|--|---|
| <b>Safety and EMC</b>     | Certifications   | ENEC, CE, RCM, CCC, UKCA  |
|                           | Withstanding Voltage   | I/P-O/P: 3.75kV&5mA&60S; I/P-DIM O/P-DIM: 1.5kV&5mA&60S   |
|                           | Insulation Resistance  | I/P-O/P I/P-DIM O/P-DIM: >100MΩ@500VDC  |
|                           | Safety Standards   | ENEC:EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384: 2020<br>CE-LVD:EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015<br>RCM:AS 61347.2-13:2018<br>SAA:AS 61347.1:2016+A1:2018 AS 61347.2.13:2018<br>CCC:GB19510.1-2009, GB19510.14-2009<br>UKCA: BS EN IEC 55015: 2019+A11: 2020, BS EN 61547: 2009,BS EN IEC 61000-3-2: 2019, BS EN 61000-3-3: 2013/A2: 2021 |
|                           | EMI  | CE-EMC/RCM:EN55015, EN61000-3-2, EN61000-3-3<br>CCC:GB/T17743, GB17625.1, GB17625.2   |
|                           | EMS  | CE-EMC/RCM: EN61000-4-2,3,4,5,6,11<br>CCC:GB/T17626.2,3,4,5,6,11  |
| <b>Other Parameters</b>   | IP Rating  | IP20  |
|                           | RoHS   | RoHS 2.0 (EU) 2015/863  |
|                           | Tc Max   | 90°C  |
|                           | Warranty Condition   | 5 years (Tc ≤90°C)  |
|                           | Noise Level  | ≤25dB (this data is measured in a soundproof room and the noise collector should be 10CM away from LED driver)  |
| <b>Testing Equipment</b>  | AC power source: CHROMA6530, digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: EEC SE7440, flicker tester (flicker-free coefficient test) Everfine LFA-3000, etc.   |   |
| <b>Additional Remarks</b> | <ol style="list-style-type: none"> <li>1. It is recommended that user install over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.</li> <li>2. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.</li> <li>3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.</li> <li>4. The above parameters are tested at the ambient temperature of 25°C, humidity of 50%, full load and input voltage of 230Vac without any special remarks.</li> <li>5. Lifud reserves the right to interpret any of the above parameters.</li> </ol> <p>Note: ① DC input is not supported.</p> |   |

■ **Product Characteristic Curves**

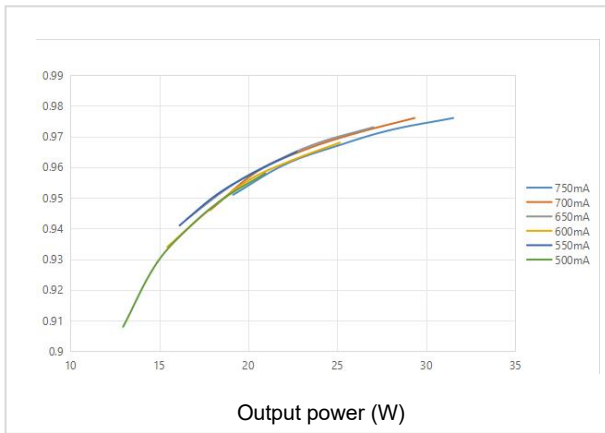
Working Window Curve



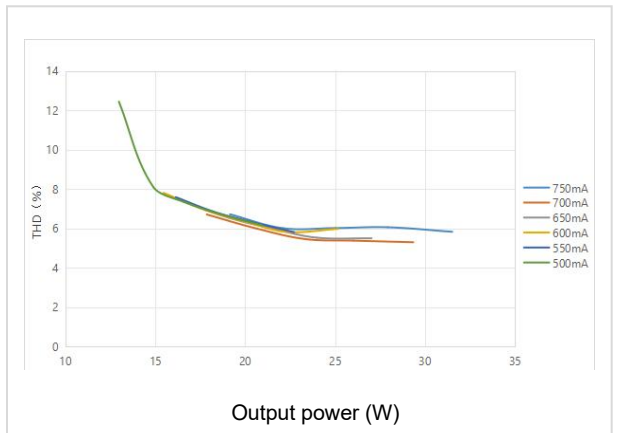
Efficiency Curve



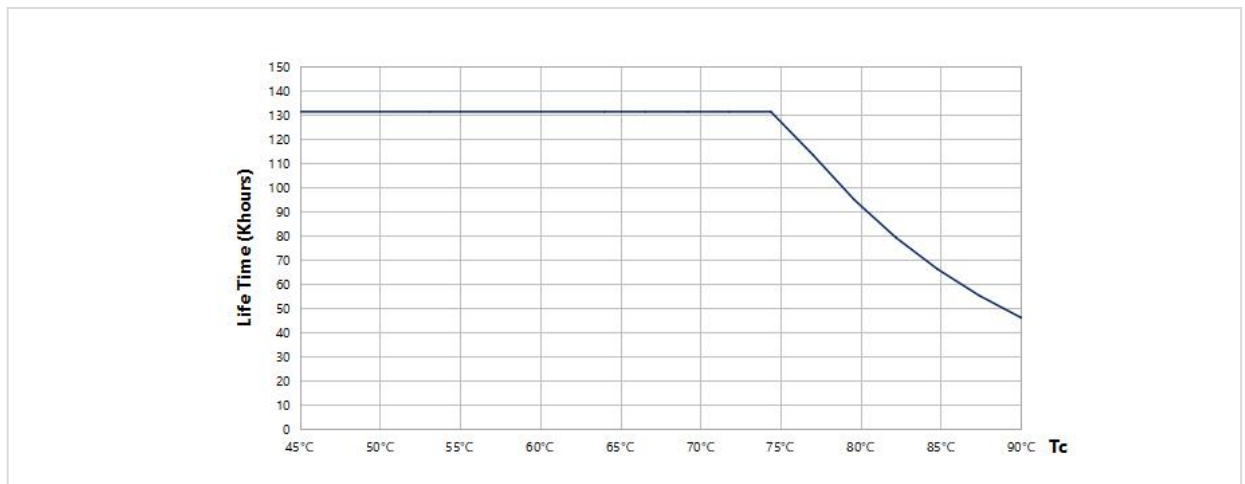
PF Curve



THD Curve



Lifetime Curve

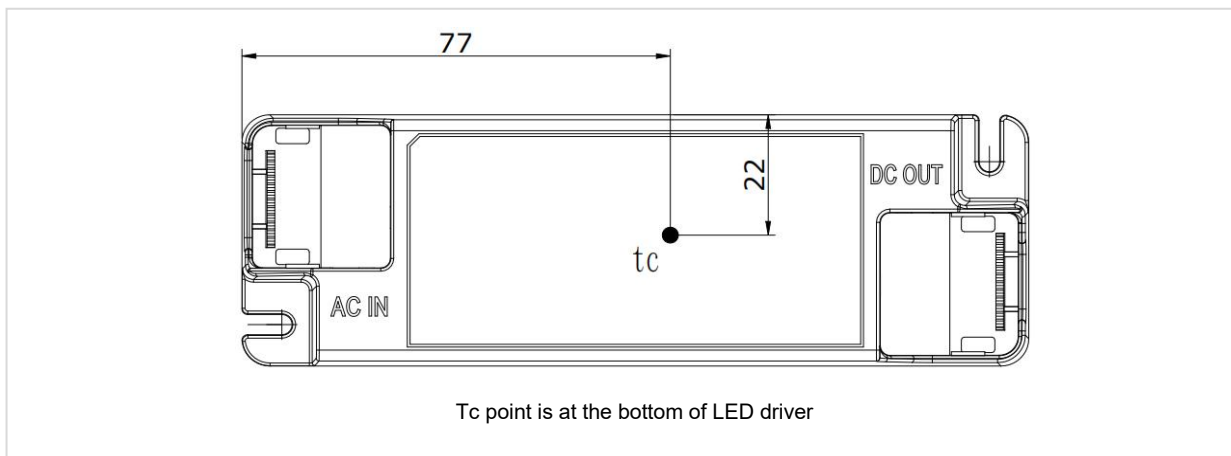


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■ **Product Characteristic Curves**

Tc Point Testing Diagram



■ **Definitions of Product Terminals**

| INPUT |                                   | OUTPUT |   |
|-------|-----------------------------------|--------|---|
| AC-L  | Input terminal of AC live wire    | LED+   | Positive electrode output of LED driver |
| AC-N  | Input terminal of AC neutral wire | LED-   | Negative electrode output of LED driver |
| /     | /                                 | DIM+   | Positive electrode of dimming           |
| /     | /                                 | DIM-   | Negative electrode of dimming           |

■ **Definitions of DIP Switch**

| Vo DC  | I rated (CC) | 1  | 2  | 3  |
|--------|--------------|----|----|----|
| 25-42V | 750mA        | -  | ON | ON |
|        | 700mA        | ON | -  | ON |
|        | 650mA        | -  | -  | ON |
|        | 600mA        | -  | ON | -  |
|        | 550mA        | ON | -  | -  |
|        | 500mA        | -  | -  | -  |

Remark: "-": shift OFF. Please do not use the DIP switch when the LED driver is powered on. If DIP switch function needed, please disconnect input AC power supply first.

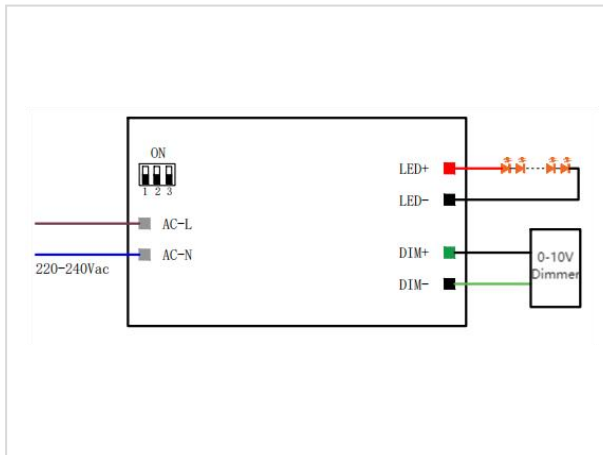
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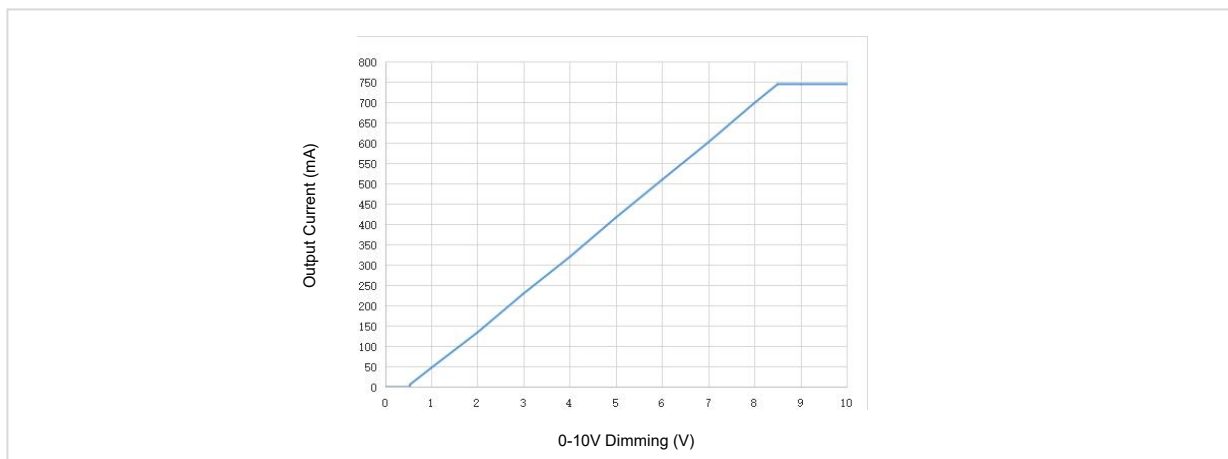
### 0-10V Dimming Operation

- Connect 0-10V signal to DIM terminal.
- In 0-10V dimming mode, when the input voltage is  $0.55V \pm 0.05V$ , the light turns on. When it's  $0.35V \pm 0.1V$ , the light turns off @ $U_o \text{ max} \& T_a = 25^\circ\text{C}$ .
- Dimming depth: 1%
- DIM+/- (without signal connected): 100% rated current output

### Wiring Diagram of 0-10V Dimming



### Dimming Curve of Dim-to-Off Version

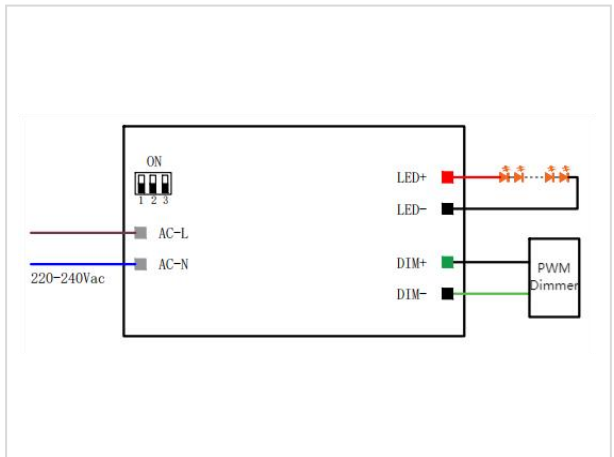


Input: 230Vac, output: 42Vdc/750mA (The data is measured by Lifud 0-10V dimmer and the chart is for reference only)

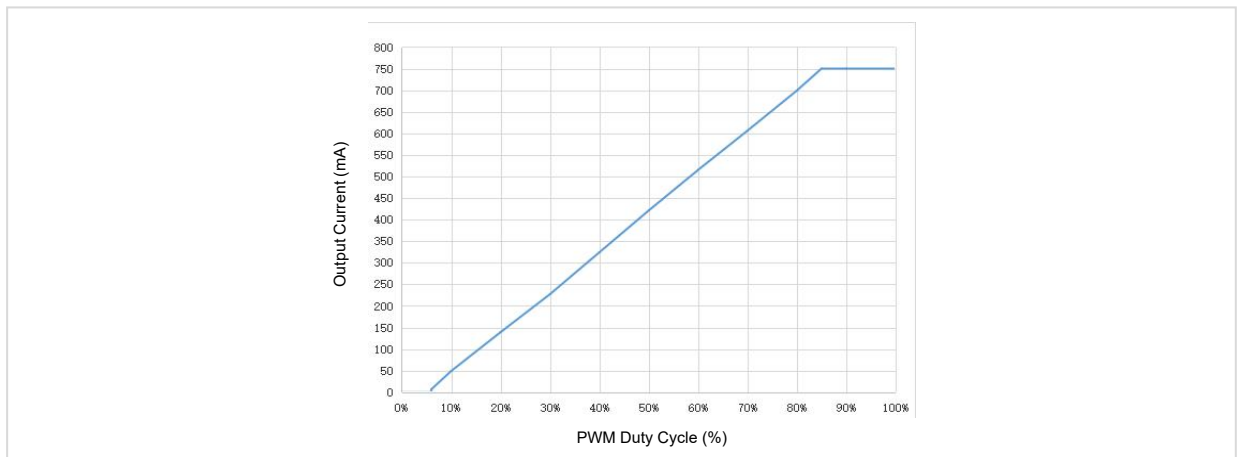
**PWM Dimming Operation**

- Connect PWM signal to DIM terminal.
- Compatible signal range: 400-1000(Hz); amplitude: 9-10(V)  
When it is  $6\% \pm 1\%$ , the light turns on;  
when it is  $3.5\% \pm 1\%$ , the light turns off.  
@ $U_o \text{ max} \& T_a = 25^\circ\text{C}$
- Dimming depth: 1%
- DIM+/- (without signal connected): 100% rated current output

**Wiring Diagram of PWM Dimming**



**Dimming Curve of Dim-to-Off Version**

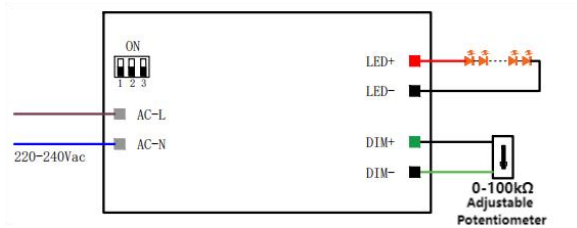


Input: 230Vac, output: 42Vdc/750mA (The data is measured by PWM signal generator RIGOL and the chart is for reference only)

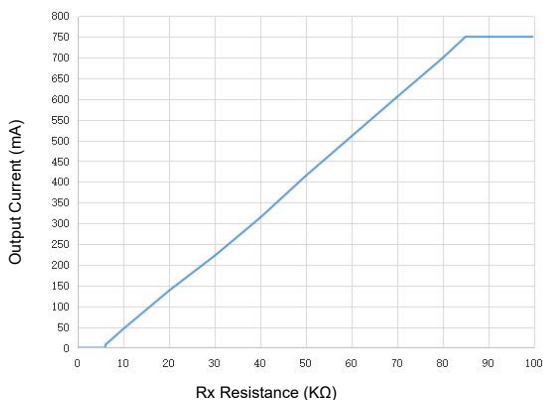
**Rx Dimming Operation**

- Connect Rx signal to DIM terminal.
- Range: 0-100KΩ@Uo max&Ta=25°C  
When it is 5.5KΩ ± 1KΩ, the light turns on;  
when it is 3KΩ ± 1KΩ, the light turns off.
- Dimming depth: 1%
- DIM+/- (without signal connected): 100% rated current output

**Wiring Diagram of Rx Dimming**



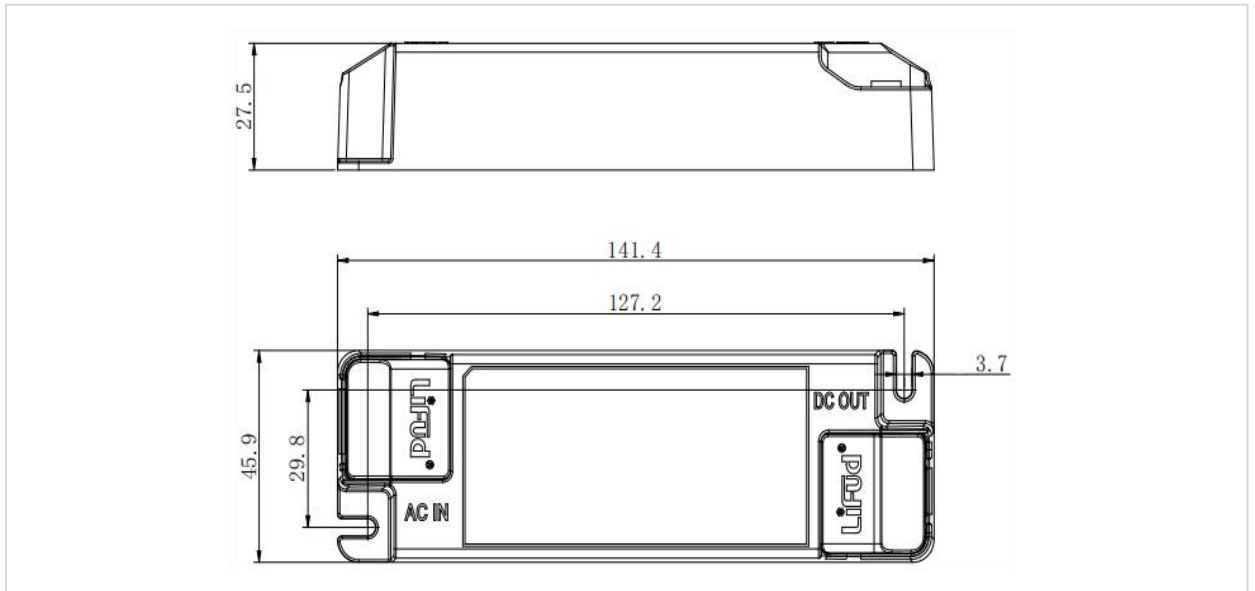
**Dimming Curve of Dim-to-Off Version**



Input: 230Vac, output: 42Vdc/750mA (The data is measured by LEVITON dimmer and the chart is for reference only)

■ **Structure & Dimensions (unit: mm; tolerance: ±0.5mm)**

| Model              | Overall Appearance Dimension (L*W*H) | Distance Between 2 Positioning Holes (L*W) | Diameter of Positioning Hole |
|--------------------|--------------------------------------|--|------------------------------|
| LF-ABA030B-0750-42 | 141.4*45.9*27.5 mm (±0.5mm)          | 127.2*29.8 mm (±0.5mm)                     | 3.7 mm                       |



■ **Packaging Specifications**

|             |  |
|-------------|--|
| Model       | LF-ABA030B-0750-42                     |
| Carton Size | 385*285*210 mm (L*W*H)                 |
| Quantity    | 10 pcs/layer; 7 layers/ctn; 70 pcs/ctn |
| Weight      | 0.11 kg ±5% /pc; 8.72 kg ±5% /ctn      |

## ■ Transportation and Storage

### 1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

### 2. Storage

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

## Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Technology Co., Ltd. reserves the right to interpret any contents of this specification.