

Product Description

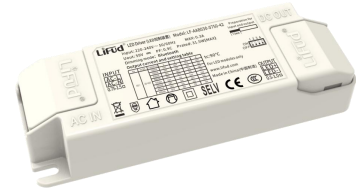
LF-AAB030-0750-42 series is a 30W constant current LED driver with the function of Bluetooth dimming. The input voltage: 198-264Vac. The output current can be adjusted via the DIP switch from 400mA to 750mA, in steps of 50mA.

Features

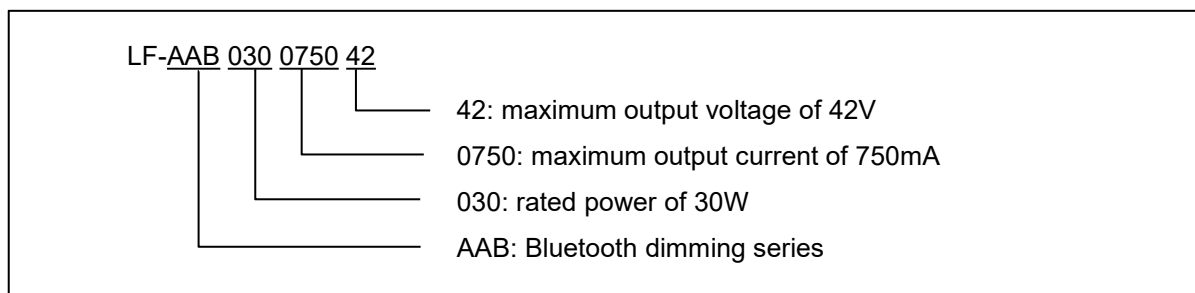
- IP20
- Suitable for Class II light fixtures
- Built-in active power factor correction function
- Standby power consumption <0.5W
- Tuya BT7L module is applied
- 5-year warranty (Please refer to the warranty condition.)

Applications

- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting
- Educational lighting



Naming



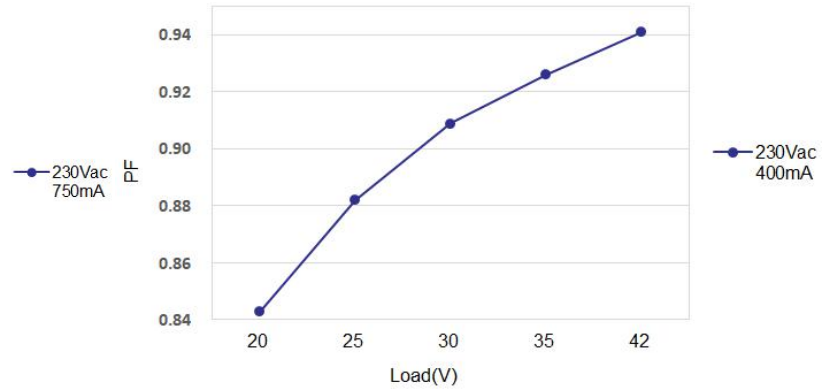
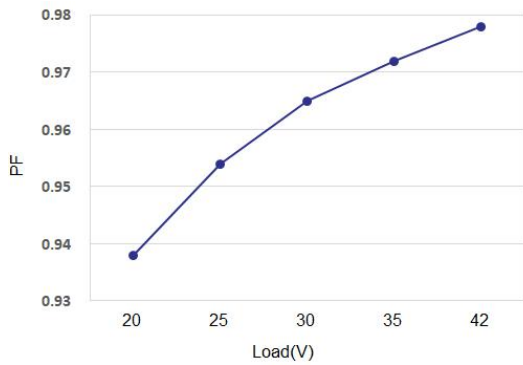
Electrical Characteristics

Model		LF-AAB030-0750-42								
Output	Output Voltage	20-42V								
	Output Current	Adjustable via the DIP switch, please refer to "DIP switch table".								
		400mA	450mA	500mA	550mA	600mA	650mA	700mA	750mA	
	Flicker Index	IEC-Pst \leq 1, CIE SVM \leq 0.9, Modulation Depth \leq 1% Conforms to the standard of flicker free (IEEE Std 1789-2015)								
	Ripple Current	<10% (rated current)								
	Voltage Tolerance	\pm 5%								
	Temperature Drift	\pm 5%								
Start-up Time	<1S @230Vac									
Input	Input Voltage	220-240Vac (voltage limit: 198-264Vac)								
	DC Input Voltage	180-280Vdc								
	Input Frequency	47Hz-63Hz								
	Input Current	0.3A Max								
	Power Factor	\geq 0.93	\geq 0.94	\geq 0.95						
	THD	\leq 15%@230Vac (DC full load)								
	Efficiency	\geq 83.5%	\geq 84.5%	\geq 85%	\geq 85.5%	\geq 86%	\geq 86.5%	\geq 87%		
	Inrush Current	\leq 60A & 10uS @230Vac								
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker Model	B10		C10		B16		C16	
		Quantity (pcs)	25		40		40		64	
	Anti Surge	L-N: 1KV								
	Leakage Current	\leq 0.7mA								
Standby Power Consumption	\leq 0.5W (when DALI signal is off)									
Protection Characteristics	Open Circuit	<59V								
	Short Circuit	Hiccup mode (auto-recovery)								
Environment Descriptions	Operating Temperature	-20 $^{\circ}$ C~+45 $^{\circ}$ C								
	Operating Humidity	20-90%RH (no condensation)								
	Storage Temperature/ Humidity	-40 $^{\circ}$ C~+ 80 $^{\circ}$ C (six months under class I environment);								
		10-90%RH (no condensation)								
Atmospheric Pressure	86KPa~106KPa									

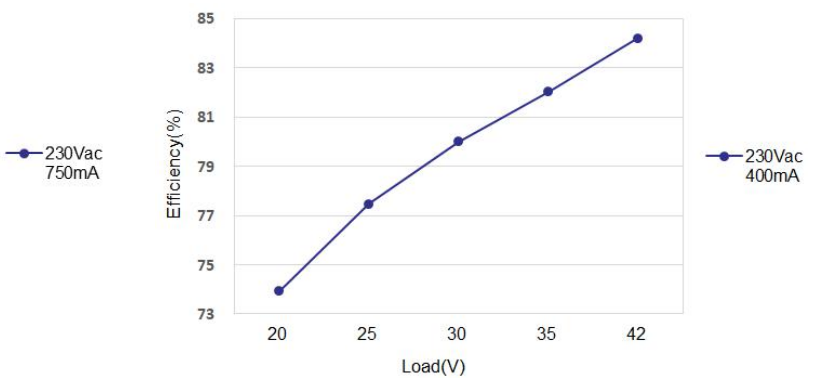
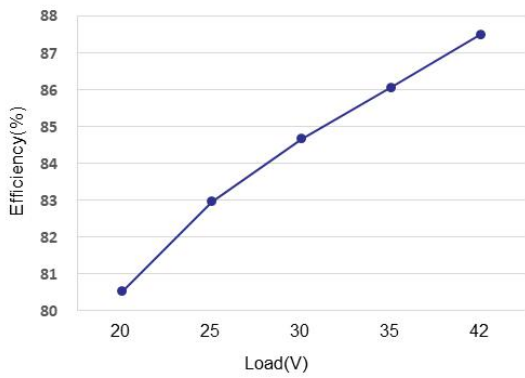
Safety and Electromagnetic Compatibility	Certifications	CE, CCC
	Withstanding Voltage	I/P-O/P: 3.75KV 5mA 60S
	Insulation Resistance	I/P-O/P: >100MΩ @500Vdc
	Safety Standards	CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN62493:2015 CCC: GB19510.1-2009, GB19510.14-2009
	EMI	CE-EMC: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2
	EMS	CE-EMC: EN61000-4-2, 3, 4, 5 (lightning strike 1KV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1KV), 6, 11
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty Condition	5 yrs (Tc≤88.2℃)
	Noise Level	≤29dBA (It is tested in a quiet room and the noise collector should be tested 10CM from the LED driver)
Remarks	<p>1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity.</p> <p>2. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer should re-confirm the EMC of the whole LED light fixture.</p> <p>3. The test conditions of the circuit breaker configuration quantity are the same as that of the inrush current test.</p> <p>4. Unless otherwise stated, the parameters above are test results under the conditions of ambient temperature of 25℃, humidity of 50%, Bluetooth signal input, 100% load, maximum output current, and input voltage of 230Vac.</p>	

Characteristic Curve

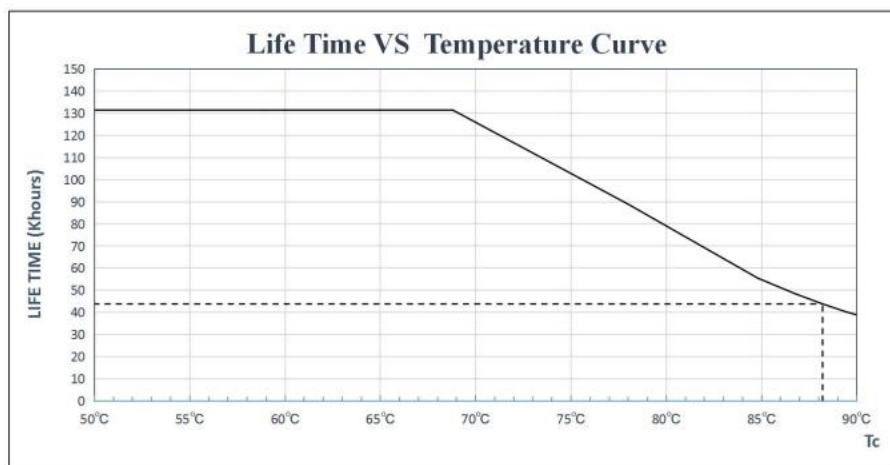
■ PF Curve



■ Power Curve



■ Lifetime Curve



Operations of Dimming

■ Terminals of the LED driver

INPUT

AC-L	AC live wire input
AC-N	AC neutral wire input

OUTPUT

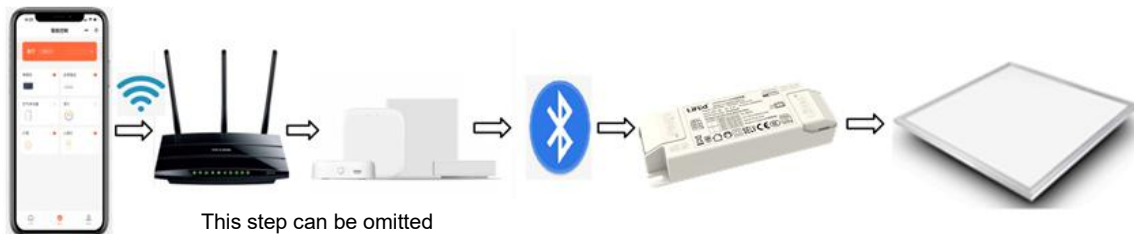
LED+	Positive electrode output of driver
LED-	Negative electrode output of driver

■ Definitions of Terminals

I rated (CC)	1	2	3	4
750mA	OFF	OFF	OFF	OFF
700mA	OFF	OFF	OFF	ON
650mA	OFF	OFF	ON	OFF
600mA	OFF	OFF	ON	ON
550mA	OFF	ON	OFF	OFF
500mA	OFF	ON	OFF	ON
450mA	OFF	ON	ON	OFF
400mA	OFF	ON	ON	ON

Note: Except the known DIP switch modes, the default maximum DIP switch mode is 750mA.

■ Bluetooth Dimming Operation System Diagram



■ Bluetooth Dimming Operation Instruction

- The standard of Bluetooth 5.0 protocol is used in the design.
- Network access & control distance: The distance is about 10m (measured in barrier-free condition).
- The number of gateway for matching the LED driver: A gateway can be matched with about 20 LED drivers (Measured by Tuya wireless gateway in barrier-free condition)
- Network access: First, turn on the Bluetooth on the phone and open the pre-installed App "Tuya Smart", and then click "add devices".
- When a device that has been connected to the network joins a new gateway, the network needs to be disconnected.

- Operations for Network connection and disconnection: If the AC input terminal of the LED driver is continuously on/off for 5 times (within 5S), and the output light turns on alternately for 3 times, it indicates that network connection or disconnection is successful. You can then search for devices again.
- Output current range of the LED driver:

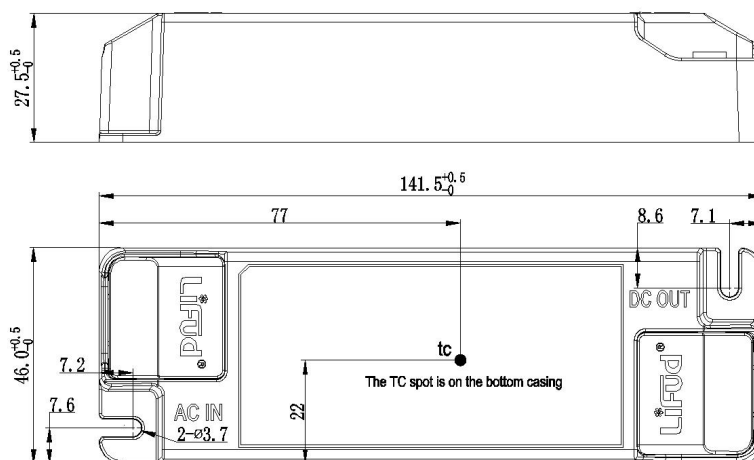
Wireless Dimming Value	Output Current
0%	The LED light is off
2%-100% (U _o MAX)	Dimming Frequency: 3.2kHz; PWM varies from 1% to 100%; Output current range: 14mA-750mA (Take 750mA as an example)

Note: The inner wall material and installation method of light fixtures will affect the transmission distance. The corresponding control distance can be extended by the relay function.

Label



Dimensions (unit: mm)



Packaging Specification

Model	LF-AAB030-0750-42
Packaging Box Size	385*285*210 mm (L*W*H)
Quantities	10 pcs/layer; 7 layers/ctn; 70 pcs/ctn
Weights	0.1355kg/pc; 10.35 kg/ctn

Transportation & Storage

■ Transportation

- Suitable transportation means: vehicles, boats and aircraft.
- During transportation, there should be awnings for rain protection and sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

■ Storage

- Storage in accordance with the provisions of the Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

Remark: The final interpretation right of the contents of this data sheet belongs to Lifud Technology Co., Ltd.