Features

- Metal casing design
- High performance
- High efficiency and high PF
- Suitable for Class I light fixtures

Applications

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

Descriptions

LC-CMR080YS is a 80.5W non-isolated constant current LED driver with metal casing design. Its rated input voltage range is 220-240Vac and its output voltage range is 170-230Vdc. The output current can be adjusted via a DIP switch from 200 to 350mA, in steps of 50mA.

Product Model

LC-CMR 080 YS

- Y: conforms to certifications; S: serial number
- 080: maximum output power: 80W
- F: non-isolated design; MR: tri-proof light series

■ Electrical Characteristics

Model		LC-CMR080YS				
Output	Output Voltage	170-230V				
	Output Current	Adjustable output current via a DIP switch (optional)				
		200mA	250mA	300mA	350mA	
	Ripple Current (<100Hz)	±5%				
	Flicker Index	Complies with IEEE Std 1789-2015				
	CIE SVM	≤0.4				
	IEC-Pst	≤1				
	Current Tolerance	±5%				
	Temperature Drift	±10%				
	Startup Time	<0.5S				
Input	Rated Input Voltage	220-240Vac				
	Input Voltage Range	200-264Vac				
	DC Input Voltage	180-264Vdc①				
	Input Frequency	0/50/60Hz				
	Input Current	0.5A max.				
	PF	≥0.95				
	THD	≤20%				
	Efficiency	≥93%				
	Inrush Current	≤36A②				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	12	20	19	32
	Leakage Current	≤0.5mA				
	Standby Power Consumption	/				
Protection Characteristics	Open Circuit	<450V				
	Short Circuit	Hiccup mode (auto-recovery)				
	Overload	If the maximum load is exceeded by a defined internal limit, the LED Driver turns off the LED output. The driver will recover automatically once the overload is eliminated.				
Environment Descriptions	Operating Temperature	-30℃ - +50℃				
	Operating Humidity	20-95%RH (without condensation)				
	Storage Temperature/ Humidity	-30℃ - 80℃ (6 months in Class I environment); 0-95%RH (without condensation)				
	Atmospheric Pressure	86-106kPa				

■ Electrical Characteristics

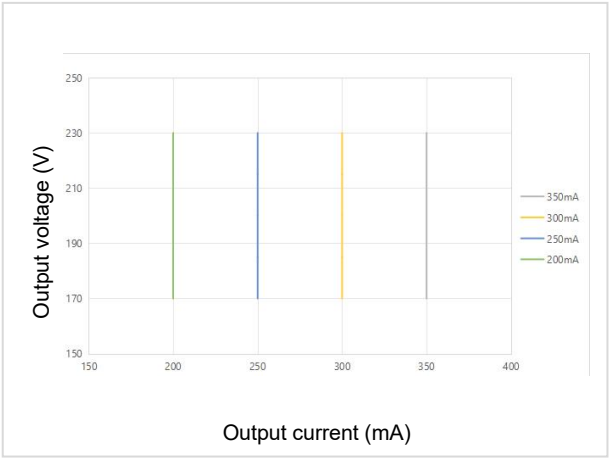
Surge	L-N	1kV
	L/N-PG	2kV
Safety & EMC	Certifications	EL, ENEC, CE, CB, UKCA, RCM, SAA, CCC
	Withstand Voltage	I/P-PG：1.5kV&5mA&60S
	Insulation Resistance	I/P-FG O/P-FG：＞100MΩ@500VDC
	Safety Standards	ENEC:EN 61347-2-13:2014/A1:2017,EN 61347-1:2015/A1:2021,EN IEC62384:2020 CE-LVD:EN 61347-2-13:2014/A1:2017，EN 61347-1:2015/A1:2021 CB:IEC61347-1:2015，IEC61347-1:2015/AMD1:2017，IEC61347-2-13:2014 IEC61347-2-13:2014/AMD1:2016 UKCA-LVD:EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017 EN 62493:2015 EL:EN IEC 61347-2-13 Annex J CCC:GB 19510.1-2009，GB 19510.14-2009
	EMI	CE-EMC/RCM:EN55015，EN61000-3-2，EN61000-3-3 UKCA-EMC:EN IEC 55015:2019/A11:2020, EN 61547:2009, EN IEC 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021 EL:EN IEC 61347-2-13 Annex J CCC:GB/T17743，GB17625.1，GB17625.2
	EMS	CE-EMC/RCM: EN61000-4-2,3,4,5,6,11 CCC:GB/T17626.2,3,4,5,6,11
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Tc Max	90℃
Test Equipment	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.	
Test Remark	If there are no special remarks, the above parameters are tested at the ambient temperature of 25℃, humidity of 50%, maximum output power and input voltage of 230Vac/50Hz.	

Electrical Characteristics

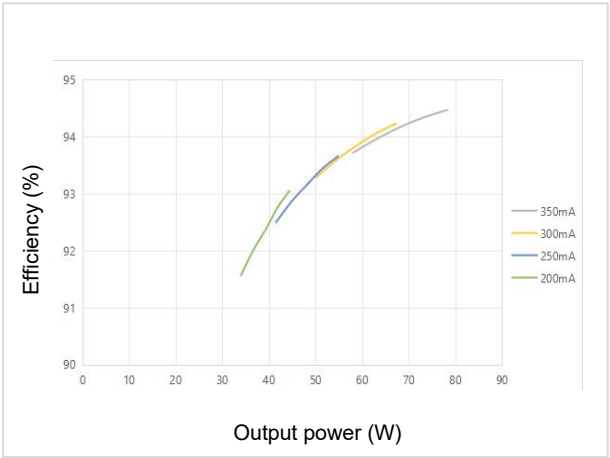
Remarks	1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. 2. The LED driver used in combination with the end device is one of the accessories of the whole 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. 3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current. 4. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above. 5. It is well-advised that the withstanding voltage of LEDs and aluminum substrates >3kV. 6. It is recommended to install double-pole switch at AC input terminal. If user uses the single-pole switch, make sure to connect it to wire L (live wire), otherwise the afterglow of light fixture would be incurred after the AC is disconnected. 7. Because there is parasitic capacitance between LEDs and the PCBA, and the PCBA (the light fixture) is grounding, there will be a slight flicker at the moment of AC power on. It's normal for non-isolated products, if you want to avoid the slight flicker, please replace it with our isolated products. Note: ①: DC input is only for emergency with the maximum using time of 90 mins ②: @180uS

Product Characteristic Curves

Working Window Curve

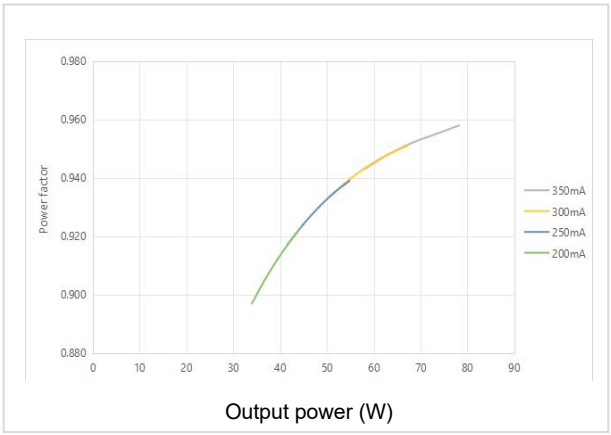


Efficiency Curve

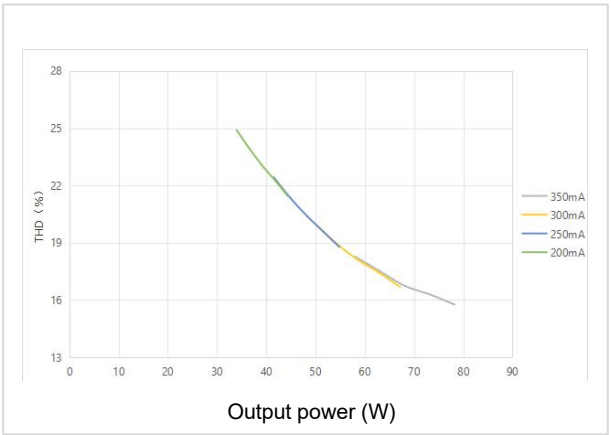


Product Characteristic Curves

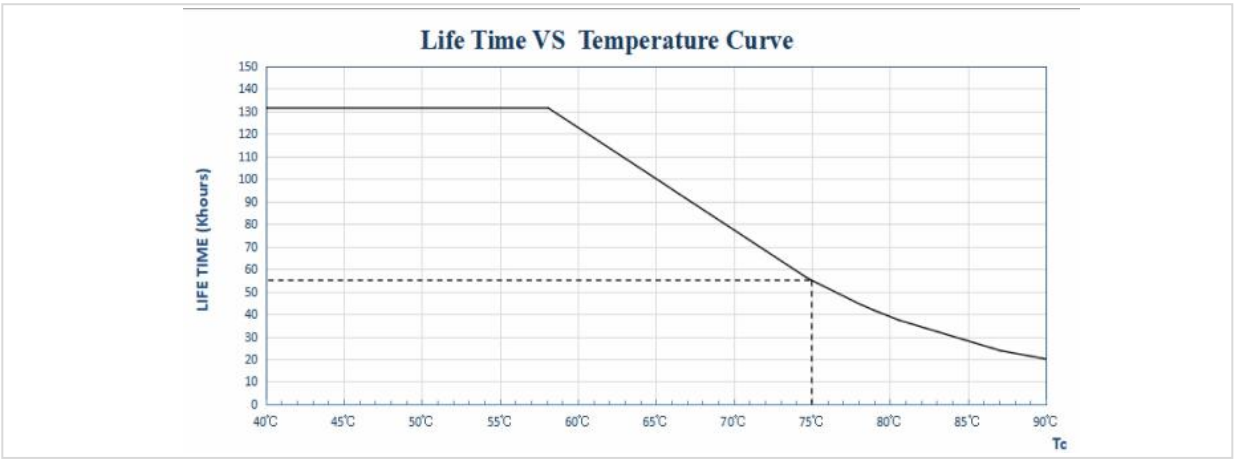
PF Curve



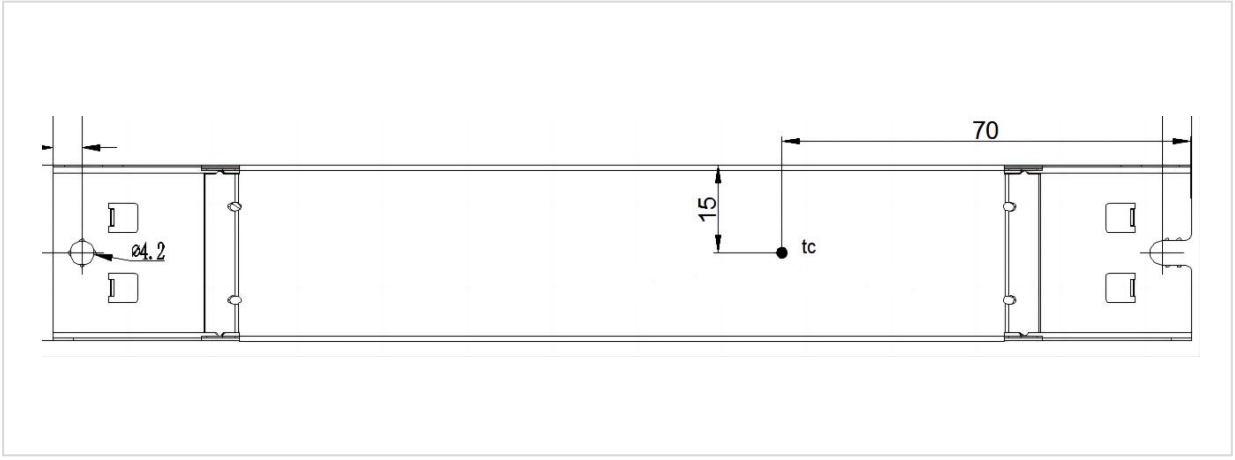
THD Curve



Lifetime Curve



Tc Point Test Diagram



■ Product Definitions

Product Terminals

INPUT	
AC-L	Input terminal of AC live wire
AC-N	Input terminal of AC neutral wire
⏚	Earth wire

OUTPUT	
LED+	Positive Electrode Output of LED Driver
LED-	Negative Electrode Output of LED Driver

Product DIP Switch

I rated (CC)	1	2	3
200mA	-	-	-
250mA	-	ON	-
300mA	-	-	ON
350mA	ON	ON	ON

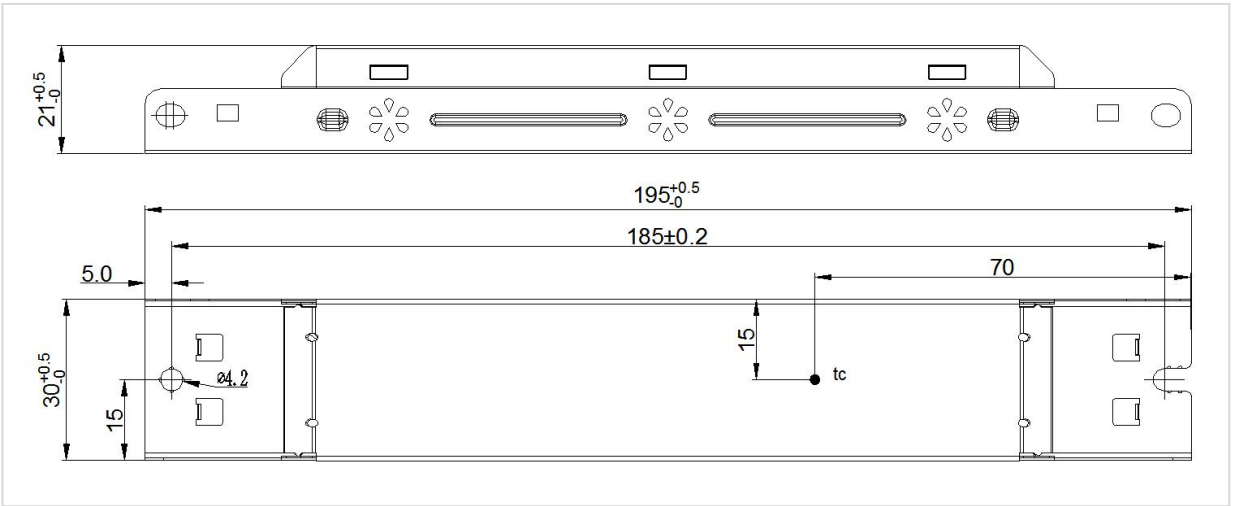
- Remark: "-": shift OFF. "*": default current. This chart is only for DIP switch version. DIP when power on is NOT allowed. Please disconnect the AC power before DIP.

■ Structure & Dimensions (unit: mm)

Product Definitions

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes	Diameter of Positioning Holes
LC-CMR080YS	195*30*21mm (±0.5mm)	185mm (±0.2mm)	4.2mm

Structure Diagram



■ Packaging Specifications

Model	LC-CMR080YS
Carton Size	385*285*210mm (L*W*H)
Quantity	8 pcs/layer；7 layers/ctn；56 pcs/ctn
Weight	0.160 kg±5%/pc; 9.19 kg±5%/ctn

■ Transportation & 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 LC 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 LC warranty service.

Remark: LC reserves the right to interpret any contents of this specification.