

AC LED Light Engine Specification

Model:RL-HM280X30A2801H016-XXXTB

RL-LM280X30A2201N016-XXXFB

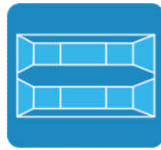
Key Features

- ◇ High total efficiency up to 110lm/W
- ◇ Various CCT available: 2700/3000/3500/4000/5000/5700/6500K
- ◇ CRI:80/90/95 options
- ◇ Macadam 3/5 steps color bin
- ◇ Solutions for linear light/troffer light/panel light/wall light
- ◇ AC line voltage 230V /120V input directly
- ◇ Power factor higher than 0.95
- ◇ Low THDI:<18%
- ◇ TRIAC dimmable

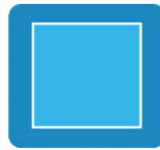
General application



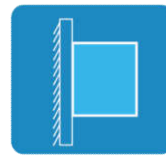
Linear light



Troffer light



Panel light



Wall light

Applied standards



- ◇ EN 62321
- ◇ EMC: EN 55015 EN 61547 EN 61000-3-2 EN 61000-3-3
- ◇ EMI: EN55015 EN61000-3-2 EN61000-3-3
- ◇ EMS: EN61547
- ◇ EMF: EN62493
- ◇ LVD: EN62471 EN62031

General information

P/N	Size	Input	Power	PF	Flux	Efficiency	CCT	CRI	Dimming
	mm	Vac	W	-	HM	LM/W	K	-	-
RL-HM280×30A2801H016-840TB	280×30	230	16	0.95	1760	110	4000	80	TRIAC
RL-LM280×30A2201N016-930FB	280×30	120	16	0.95	1376	86	3000	90	TRIAC

Note: 1-Variou CCT available (2700-6500K); RL-XXXXXXXXXXXXXXXX-840X (8-80CRI;40-4000K CCT)
 2-Typical Optical-electronic parameters above @ Ta=25°C

Selection guide Example: RL-HM280×30A2801H016-xxxTB

P/N	Size	Input	Power	PF	Flux	Efficiency	CCT	CRI	Dimming
	mm	Vac	W	-	HM	HM/W	K	-	-
RL-HM280×30A2801H016-827TB	280×30	230	16	0.95	1440	90	2700	80	TRIAC
RL-HM280×30A2801H016-830TB					1520	95	3000		
RL-HM280×30A2801H016-835TB					1600	100	3500		
RL-HM280×30A2801H016-840TB					1760	110	4000		
RL-HM280×30A2801H016-850TB					1760	110	5000		
RL-HM280×30A2801H016-857TB					1760	110	5700		
RL-HM280×30A2801H016-865TB					1600	100	6500		
RL-HM280×30A2801H016-927TB	280×30	230	16	0.95	1290	80	2700	90	TRIAC
RL-HM280×30A2801H016-930TB					1360	86	3000		
RL-HM280×30A2801H016-935TB					1424	89	3500		
RL-HM280×30A2801H016-940TB					1488	93	4000		
RL-HM280×30A2801H016-950TB					1536	96	5000		
RL-HM280×30A2801H016-957TB					1600	100	5700		
RL-HM280×30A2801H016-U27TB					280×30	230	16		
RL-HM280×30A2801H016-U30TB	1230	75	3000						
RL-HM280×30A2801H016-U35TB	1248	78	3500						
RL-HM280×30A2801H016-U40TB	1280	80	4000						
RL-HM280×30A2801H016-U50TB	1280	80	5000						
RL-HM280×30A2801H016-U57TB	1248	78	5700						

Part Number & Explanation

RL	-	H	M	280	×30	A	28	01	H	016	-	8	40	T
1		2	3	4	5	6	7	8	9	10		11	12	13
1		Relight												
2		H: AC230V L: AC120V C: constant current V: constant voltage												
3		M: Module series												
4		D: Round R: Ring												
5		Diameter												
6		A: Aluminum P: CEM3 F: FR4 C: Copper (PCB material)												
7		Circuit												
8		Circuit												
9		Efficiency level (H: high N: normal L: low)												
10		Power; Watt												
11		CRI (8:80;9:90;U95;V:98)												
12		CCT; 27:2700K ...												
13		Dimming function (N:non-dimmable; T:TRIAC ; A:0-10V ; P:PWM ; W:Wireless; TB: TRIAC balance; FB: Full balance)												

Characteristics

Input	100-130Vac /200-240Vac
Frequency	50/60Hz
Rated power	Typical power (±10% tolerance)
PF	>0.95
Protection	IP20
Surge level	2.5KV
Hi-pot	1.5KVac
Storage temperature	-30-85°C
Operation temperature	-30-80°C (Ts ofled components)
Beam Angle	120 deg
Flicker index	<30% (RL-LM280x30xxxxxx series only , according to North American T24 requirement)

Mechanical dimension (Unit: mm)

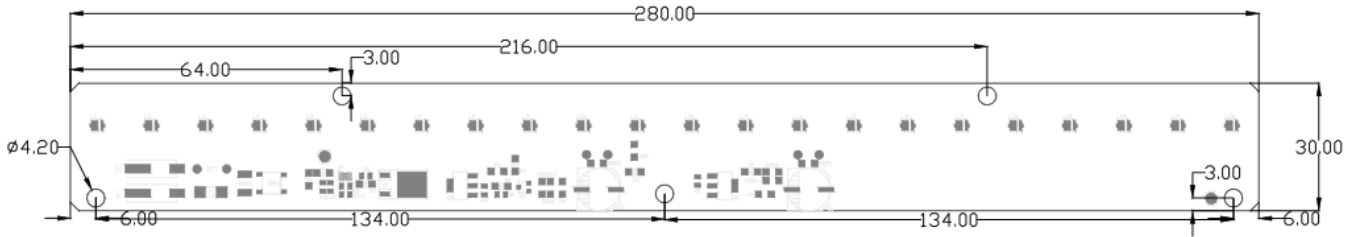


Fig1: RL-LM280*30A series outline

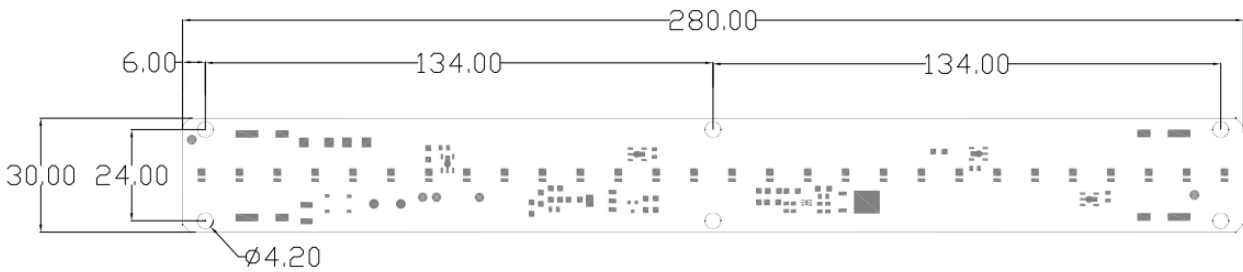


Fig2: RL-HM280*30A series outline

Wiring example (RL-HM280*30A series)

Fig3: All modules connect to AC line separately by L and N connectors on board

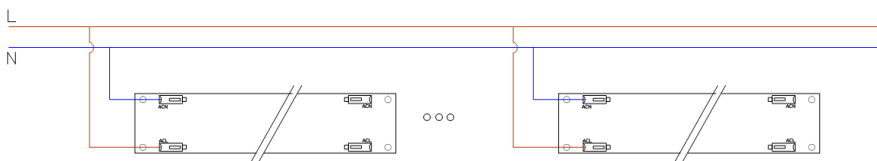
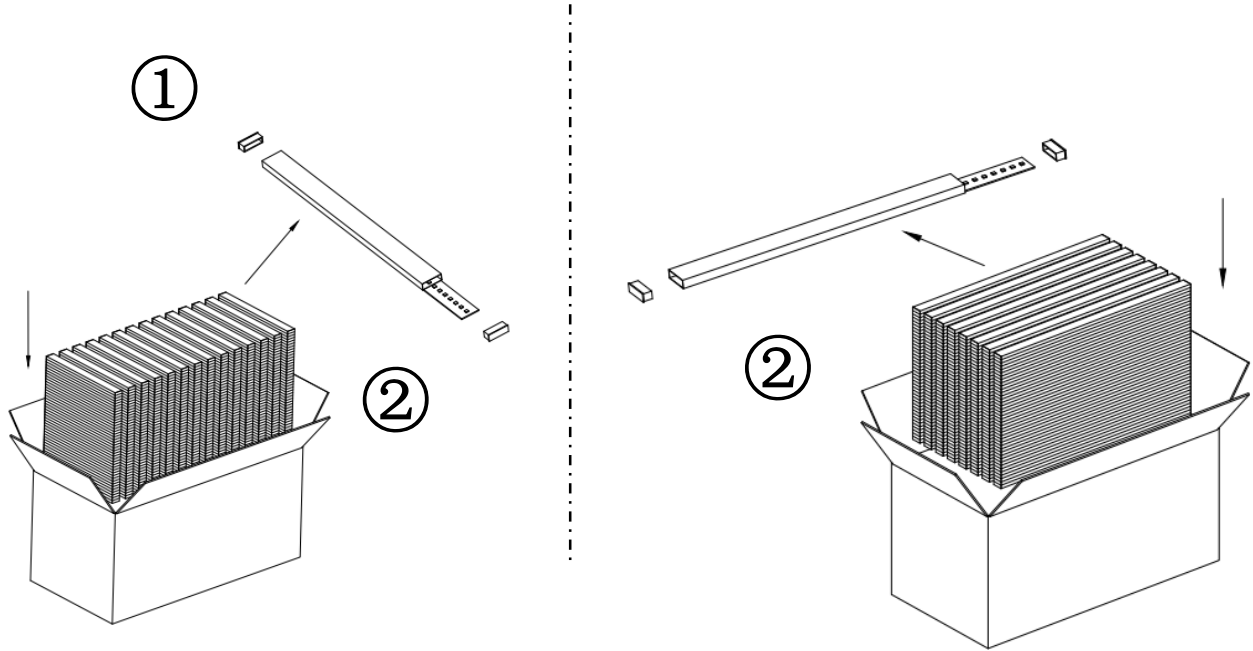


Fig4: All modules connect to each other by L and N connectors at opposite end, make sure the max quantities of module is less than 10 pcs in one cluster



Package



Type	Detail	Per PVC tube	Per carton
RL-CM280x24A	Modules	----pcs	400
	Weight	----Kg	28
	Dimension	----mm	700*320*320

EMC report

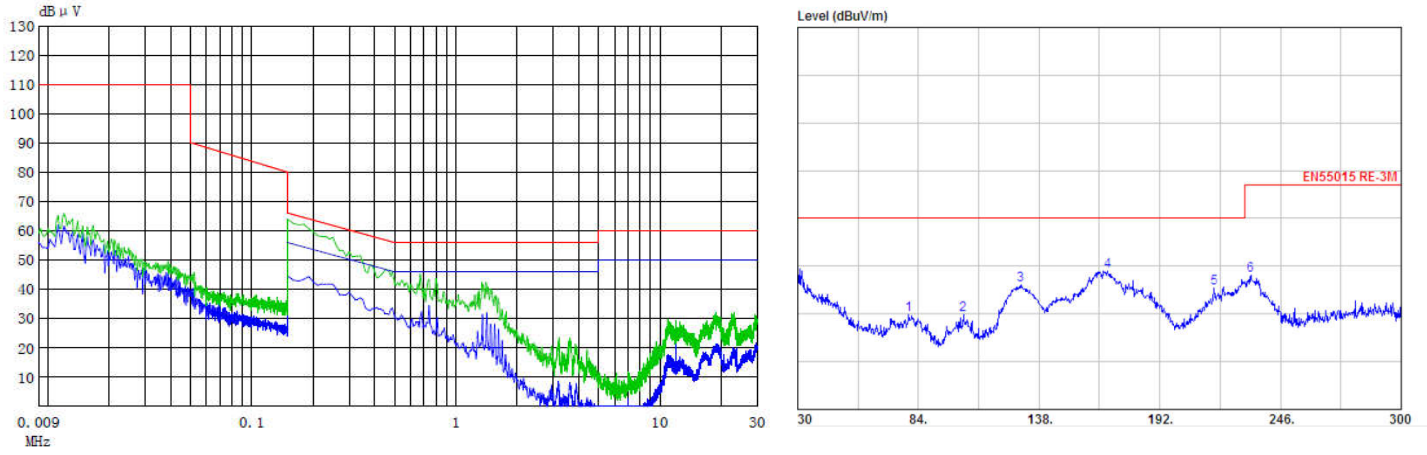


Fig5: RL-LM280*30A Series

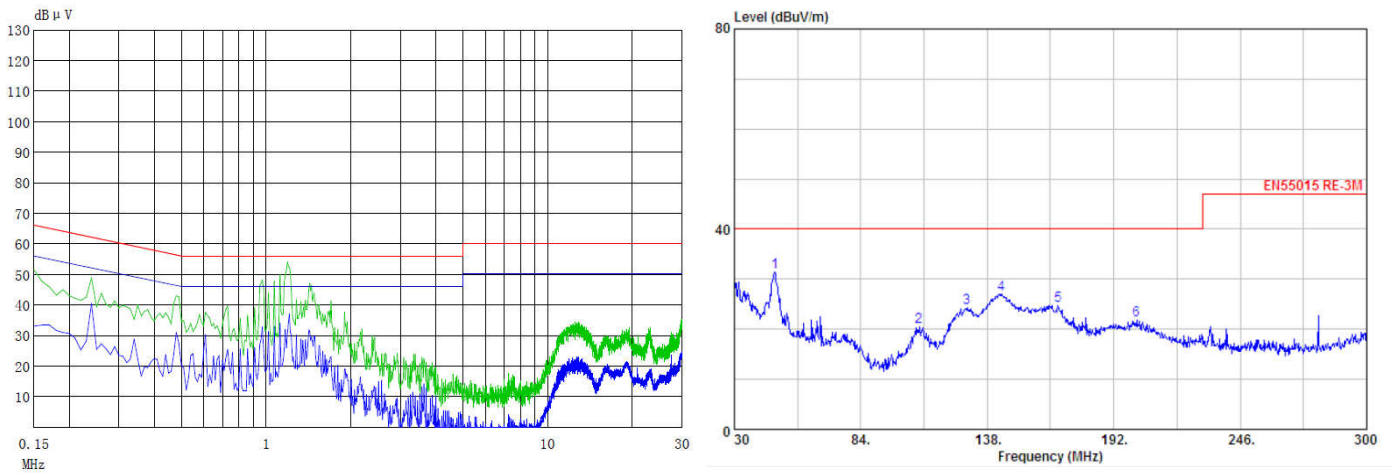


Fig6: RL-HM280*30A Series

Dimming range

P/N	Dimmer & Dimming level			Visible Flickering
	LUTRON CTCC-153P	CLIPSAL KB31RD400	CLIPSAL 630W	
RL-HM280×30A2801H016-840TB		2.4%	5.1%	NO
RL-LM280×30A2201N016-930FB	2.3%			NO

Line regulation

P/N	Voltage-Vac Vs Power-Watt							
	108Vac	120Vac	132Vac	144Vac	207Vac	230Vac	253Vac	264Vac
RL-HM280×30A2801H016-840TB					16	16.1	16	15.4
RL-LM280×30A2201N016-930FB	15.1	16.4	16.8	16.1				

Safety Information

1. The LED module and all its components shall not be subjected to mechanical stress
2. Correct electrical polarity, otherwise module may be damaged
3. Ensure the power supply is suitable for the total load.
4. Electrostatic Discharge (ESD) precautions shall be incorporated when handling or installing the module.
5. Installation of LED modules shall refer to all applicable electrical and safety standards.
6. Suitable for luminaire of protection class 1, grounding is mandatory to comply with safety standards
7. The AC light engine needs to be mounted to a heat sink with thermal interface material between them
8. It is better to use the AC led module with safety cover
9. Modules may be hot to touch. Use caution when handling.

Shenzhen Relight Technology Co.,Ltd

6th Floor, Building A, Guancheng
IndustrialPark,Gongming Town, Guangming
District, Shenzhen, China

www.relight-tech.com

Sales@relight-tech.com