



AC LED Light Engine Specification

Model: RL-HMD100A2802H

RL-LMD100A1404H

RL-HMD070A2801H

RL-LMD070A1402H

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 Down light/Ceiling light
- ✧ AC line voltage 230V /120V inputdirectly
- ✧ Power factor higher than 0.95
- ✧ Low THDI:<18%
- ✧ TRIAC/0-10V dimmable

General application



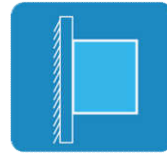
Down light



Ceiling light



Pendant light



Wall light

Applied standards



- ✧ EN 62321
- ✧ EMC: EN 55015 EN 61547EN 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	-	Lm	Lm/W	K	-	-
RL-HMD100A2802H016-840N	Ø100	230	16	0.95	1760	110	4000	80	-
RL-HMD100A2802H016-840T	Ø100	230	16	0.95	1760	110	4000	80	TRIAC
RL-HMD100A2802H016-840A	Ø100	230	16	0.95	1760	110	4000	80	0-10V
RL-LMD100A1404H016-840T	Ø100	120	16	0.95	1760	110	4000	80	TRIAC
RL-LMD100A1404H016-840A	Ø100	120	16	0.95	1760	110	4000	80	0-10V
RL-HMD070A2801H009-840N	Ø70	230	9	0.95	990	110	4000	80	-
RL-HMD070A2801H016-840T	Ø70	230	16	0.95	1600	100	4000	80	TRIAC
RL-HMD070A2801H016-840A	Ø70	230	16	0.95	1600	100	4000	80	0-10V
RL-LMD070A1402H016-840T	Ø70	120	16	0.95	1600	100	4000	80	TRIAC
RL-LMD070A1402H016-840A	Ø70	120	16	0.95	1600	100	4000	80	0-10V

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-HMD100A2802H016-xxN

P/N	Size	Input	Power	PF	Flux	Efficiency	CCT	CRI	Dimming
	mm	Vac	W	-	Lm	Lm/W	K	-	-
RL-HMD100A2802H016-827N	Ø100	230	16	0.95	1520	95	2700	80	-
RL-HMD100A2802H016-830N					1600	100	3000		
RL-HMD100A2802H016-835N					1600	100	3500		
RL-HMD100A2802H016-840N					1760	110	4000		
RL-HMD100A2802H016-850N					1760	110	5000		
RL-HMD100A2802H016-857N					1600	100	5700		
RL-HMD100A2802H016-865N					1600	100	6500		
RL-HMD100A2802H016-927N					1440	90	2700		
RL-HMD100A2802H016-930N					1520	95	3000		
RL-HMD100A2802H016-935N					1520	95	3500		
RL-HMD100A2802H016-940N					1600	100	4000		
RL-HMD100A2802H016-950N					1600	100	5000		
RL-HMD100A2802H016-957N	1520	95	5700						
RL-HMD100A2802H016-U27N	Ø100	230	16	0.95	1200	75	2700	95	-
RL-HMD100A2802H016-U30N					1280	80	3000		
RL-HMD100A2802H016-U35N					1280	80	3500		
RL-HMD100A2802H016-U40N					1360	85	4000		
RL-HMD100A2802H016-U50N					1360	85	5000		
RL-HMD100A2802H016-U57N					1280	80	5700		

Part Number & Explanation

RL	-	H	M	D	100	A	28	02	H	016	-	8	40	N
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)												

Characteristics

Input	100-130Vac or 200-250Vac
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

Mechanical dimension (Unit: mm)

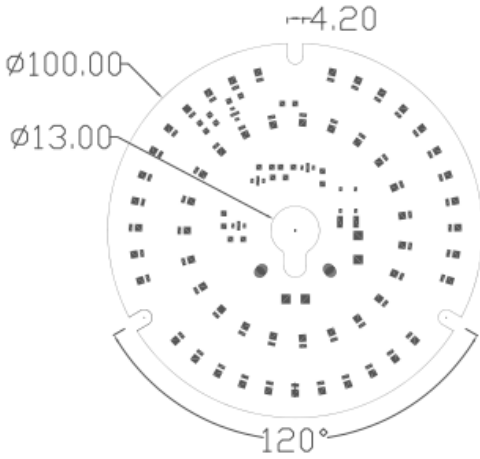


Fig1: RL-XMD100Aseries outline

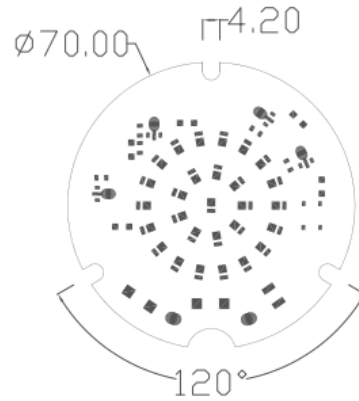


Fig2: RL-XMD070Aseries outline

Mechanical dimension of safety cover (Unit: mm)

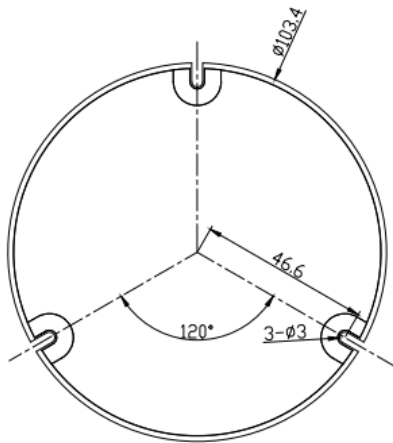


Fig3: RL-XMD100Aseries cover

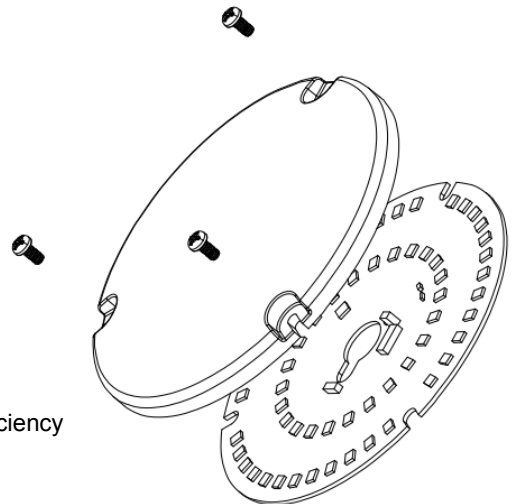
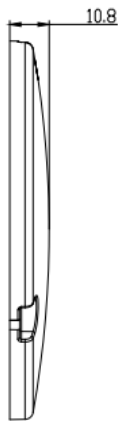


Fig4: Transparent PC Cover with >90% efficiency

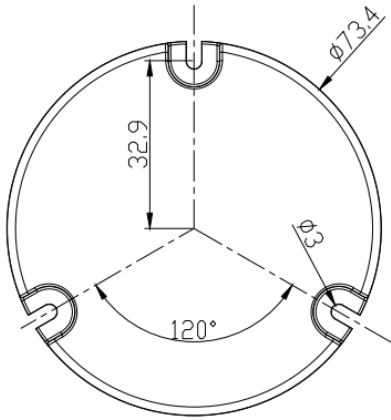


Fig5: RL-XMD070A series cover

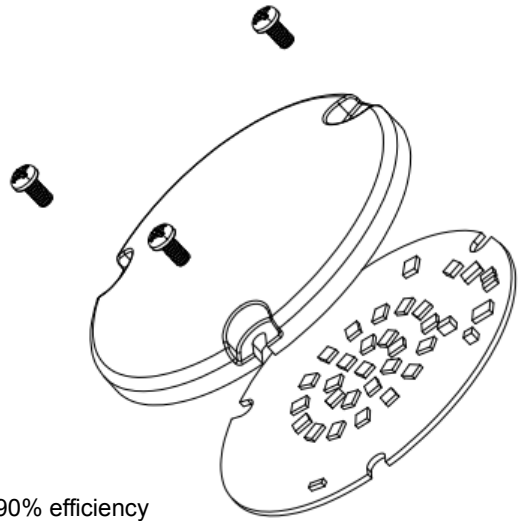
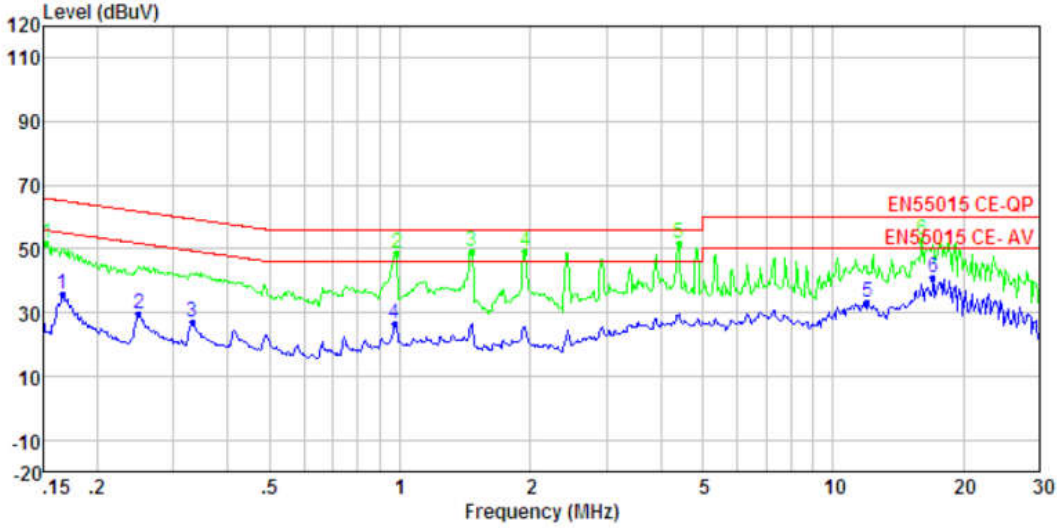


Fig6: Transparent PC Cover with >90% efficiency

EMC report



Site : Shenzhen BST Technology Co.,Ltd.
 Condition:

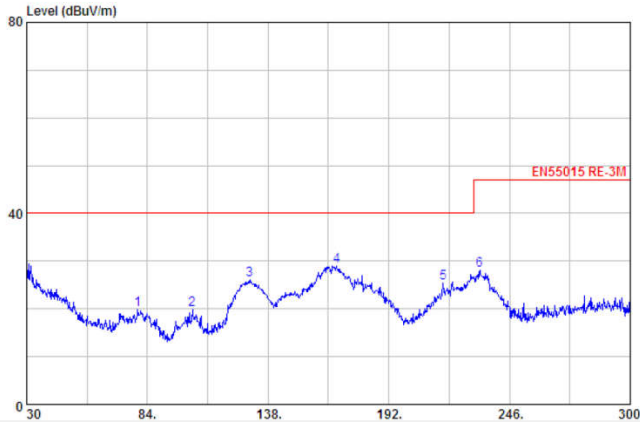
: RBW:9.000KHz VBW:30.000KHz

	Freq	Level	Limit	Over	Remark	Pol/Phase
	MHz	dBuV	Line	Limit	dB	
1	0.166	35.6	55.2	-19.6	Average	NEUTRAL
2	0.249	29.4	51.8	-22.4	Average	NEUTRAL
3	0.332	27.0	49.4	-22.4	Average	NEUTRAL
4	0.974	26.7	46.0	-19.3	Average	NEUTRAL
5 Max	11.996	33.1	50.0	-16.9	Average	NEUTRAL
6	17.018	40.7	50.0	-9.3	Average	NEUTRAL

Site : Shenzhen BST Technology Co.,Ltd.
 Condition:

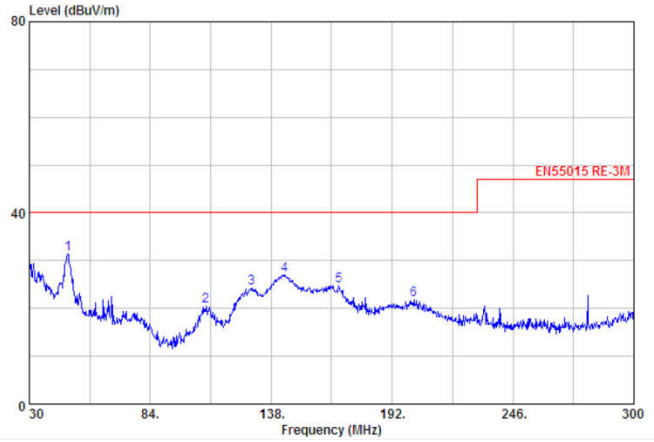
: RBW:9.000KHz VBW:30.000KHz

	Freq	Level	Limit	Over	Remark	Pol/Phase
	MHz	dBuV	Line	Limit	dB	
1	0.153	51.8	65.8	-14.0	Peak	NEUTRAL
2	0.984	48.7	56.0	-7.3	Peak	NEUTRAL
3	1.464	49.2	56.0	-6.8	Peak	NEUTRAL
4	1.949	49.3	56.0	-6.7	Peak	NEUTRAL
5 Max	4.407	51.6	56.0	-4.4	Peak	NEUTRAL
6	16.055	52.7	60.0	-7.3	Peak	NEUTRAL



Condition : EN55015 RE-3M 3m HORIZONTAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 : Shenzhen BST Technology Co.,Ltd.

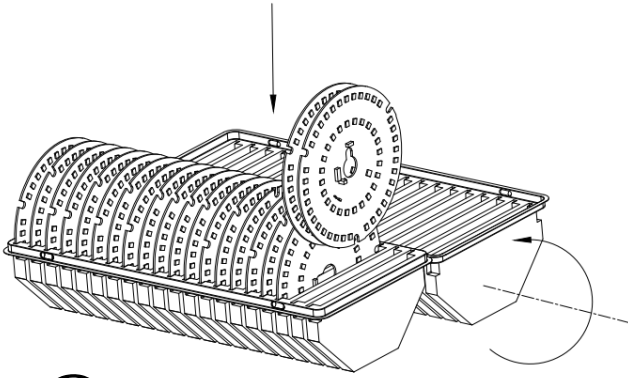
	Freq	Line	Level	Limit	Over	Remark	Pol/Phase
1	79.680	40.0	19.8	-20.2	Peak	HORIZONTAL	
2	104.250	40.0	19.9	-20.1	Peak	HORIZONTAL	
3	129.900	40.0	26.1	-13.9	Peak	HORIZONTAL	
4 max	168.780	40.0	29.0	-11.0	Peak	HORIZONTAL	
5	216.300	40.0	25.4	-14.6	Peak	HORIZONTAL	
6	232.770	47.0	28.2	-18.8	Peak	HORIZONTAL	



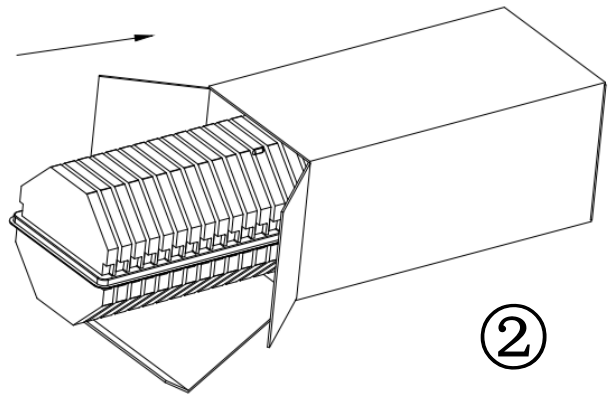
Condition : EN55015 RE-3M 3m VERTICAL
 : RBW:120.000KHz VBW:300.000KHz SWT:Auto
 : Shenzhen BST Technology Co.,Ltd.

	Freq	Line	Level	Limit	Over	Remark	Pol/Phase
1 max	47.280	40.0	31.5	-8.5	Peak	VERTICAL	
2	108.840	40.0	20.5	-19.5	Peak	VERTICAL	
3	129.360	40.0	24.4	-15.6	Peak	VERTICAL	
4	144.210	40.0	27.0	-13.0	Peak	VERTICAL	
5	168.240	40.0	24.6	-15.4	Peak	VERTICAL	
6	201.720	40.0	21.8	-18.2	Peak	VERTICAL	

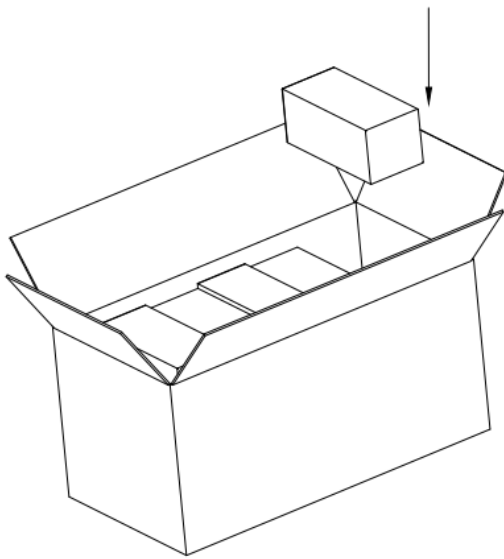
Package



①



②



③

		Per white box	Per carton
Modules	----pcs	20	300
Weight	----Kg	0.83	12.5
Dimension	----mm	255*118*108	600*270*365

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.

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