

## 3- SMD LED BACKLIT MODULE



### Characteristics

- 160 degree wider beam angle
- High light 3V SMD5730 LEDs with heat sink PCB
- Constant voltage driving type
- Best sealed with moisture-proof, water-proof, dust proof and impact resistance.
- Professional multi-optic design, better average brightness and no lighting dots to eyes.
- IP65 protection level.
- Nice structure and injection molding process.
- All raw materials with RoHS standard
- Long lifespan and low failure rate

### Used For:

- Signs lighting
- Metro Signs
- Airport light boxes
- Back light Source

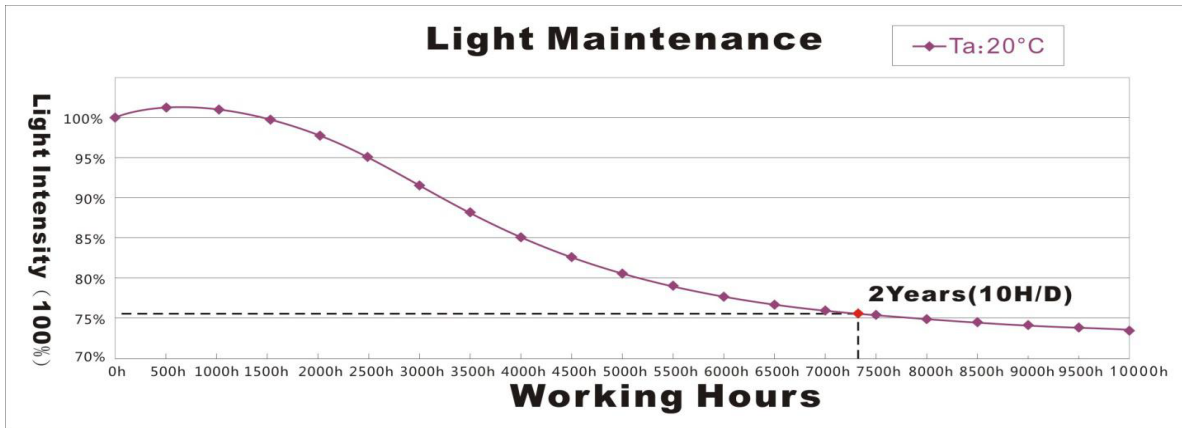
### Description

M6515-5730 module is a new patent of mid-power LED module. The remarkable multiple optic design technique, high light transmittance PMMA lens, 160 degree wide beam angle solved the normal similar LED modules in brighter dots on surface. Lighting average is better than those normal modules. Also the special LEDs circuit is made of constant voltage driving, which is has better competitive on cost.. This type module has been applied Patents in China now.

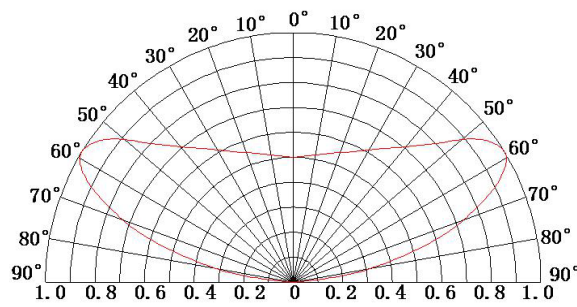
## Parameters

Parameters (Room temperature =25 )						
Items	Parameter					Unit
LED type	3V-SMD5730					
LED Quantity	3					PCS
Concatenation	20					PCS
Dimension	65*15*7.8					mm
Power	1.2±10%					W
Input V.	DC12					V
Input C.	0.10					A
Driving Type	Constant Current / Constant Voltage					
Surface Temp.	< 40					
Working Temp.	-25 ~ +60					
Storage Temp.	-30 ~ +65					
Protect Level	IP65					-
Optical and Electrical Parameters (Room temperature =25 )						
Test Item	Test Condition	Symbol	Parameters			Unit
			Min.	Typical	Max	
Color Temperature	AC220V/50Hz	CCT	6000	9000	15000	K
CRI	AC220V/50Hz	CRI	75	80	85	Ra
Luminous Flux	AC220V/50Hz	Φ	85	92	98	lm
Light Efficiency	AC220V/50Hz	LPW	108	118	129	lm/W
Visual Angle	AC220V/50Hz	Wd	157	160	162	Deg

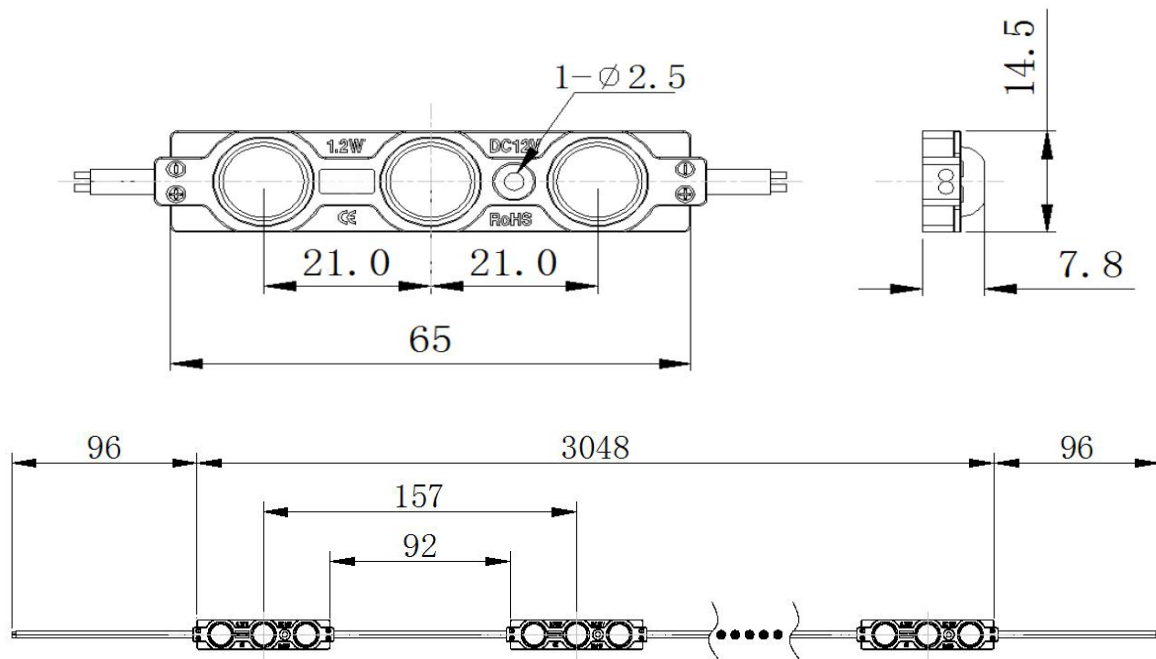
## Light Attenuation Graph



## Light Distribution Curve

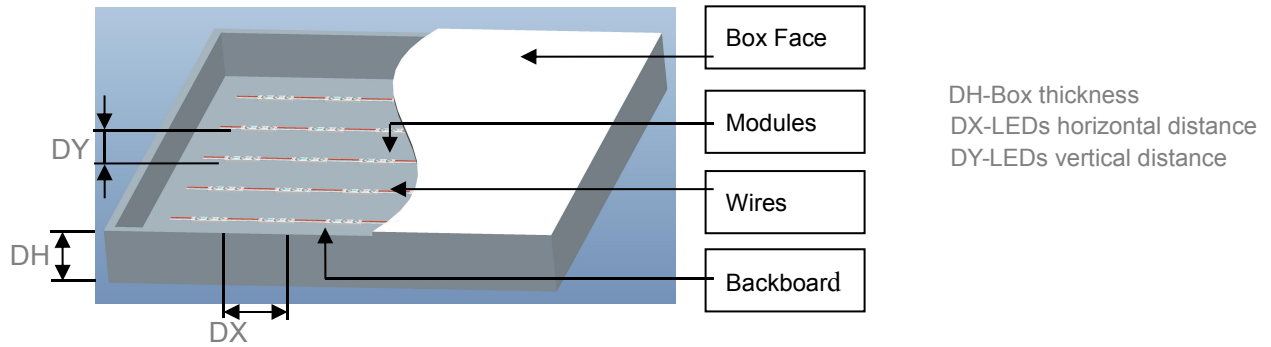


## Product Sketch



## Instructions

### 1. Modules Positioning (Vertical and Horizontal)



Item Code	Light box thickness DH (mm)	Module horizontal distance DX (mm)	Module vertical distance DY mm	Modules average in 1m <sup>2</sup> (pcs/m <sup>2</sup> )	Surface illumination (lux)
M6515-5730E	80-100	100-150	80-120	35-60	780-1320
Remarks: 1.The panel is 3mm acrylic board with transmittance 60%					

### 2. Installation

- First position the module with double sided tape onto the back of board, then fix with Silicon glue.
- Silicon glue directly fixing modules, but before installation, cleaning or polishing module surface.
- Screw mounting the modules on the board.

## Notice

- 1.The output of power supply should be matched with the module's working voltage as module doesn't have short circuit protection, overloading protection. So the selected power supply is strongly selected short circuit protection and overloading protection functions. The +/- of the modules should be connected rightly: red-anode and white-cathode.
- 2.Max 20pcs in one bunch, better not more than this as it will cause lower brightness or danger. If need over 20pcs modules, suggested first in series then parallels.
- 3.Power supply should be 20-30% more than the exact LEDs power, and wires should be a little bigger than the current which is needed.
- 4.Modules forbidden to put into a inflammable substance, never be covered with a tight cover or onto the heat insulated sheet materials.
- 5.In case of installation or replacement, sure first to cut off power.
- 6.This type LED modules are not for dimmable function.
- 7.If there is something unusual ( dark or flickering),please check firstly power is right on or output voltage is correct. If all is right, please change the module.
- 8.This modules are only used for light boxes, signs which have cover to protect modules, not used in outdoor or directly opening conditions.
9. Standard to: GB-24819 GB/T-24823 GB/T-24824

This product manual is just for reference; please take the accurate characteristics the same as your tested results.  
If this manual will be updated, there should be no extra notice.