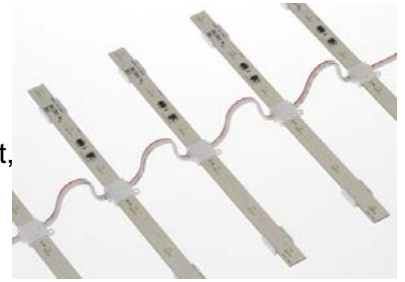


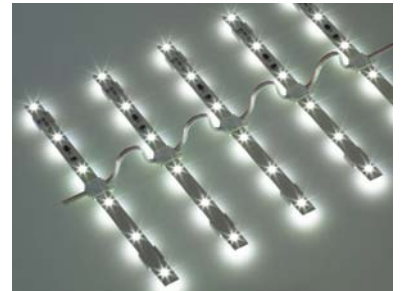
INTRODUCTION

Wamco WL-F-LED 645 is a LED illumination system for double sided lighting applications like cabinet sign and box sign. WL-F-LED 645 is usually applied to 150mm~200mm depth box or cabinet signs for double sided lighting. White color is available. WL-F-LED 645 provides many advantages like the brilliant light output, energy cost saving and maintenance cost reduction.



FEATURES

- **Double sided (front & back) lighting**
- Energy efficient
- Long life time (up to 30,000hrs in white color)
- Easy installation and maintenance
- Waterproof (IP67) due to special coating
- Safety due to low working voltage (**24VDC**)
- 3 year warranty
- 3 chip SMD LED applied



APPLICATIONS

- Double sided (front & back) cabinet signs and box signs
- Indoor & outdoor lighting decorations

CERTIFICATIONS

- UL(E258512), CE, RoHS



MATERIALS

- CASE: PBT(UL Recognized), WIRE: SPT-1(105°C)

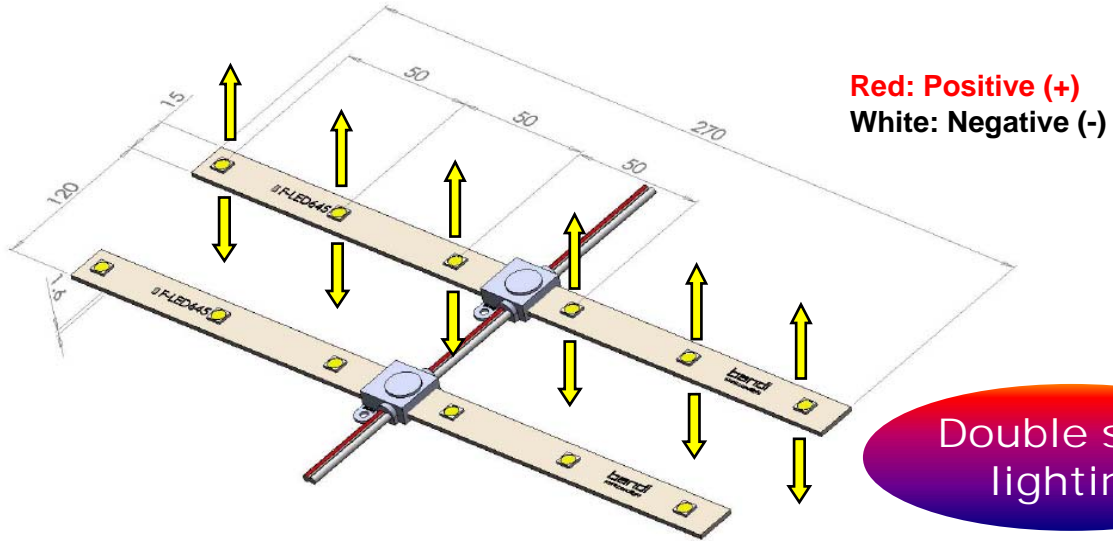
SPECIFICATIONS

• Operating Temp. : -20°C~+70°C

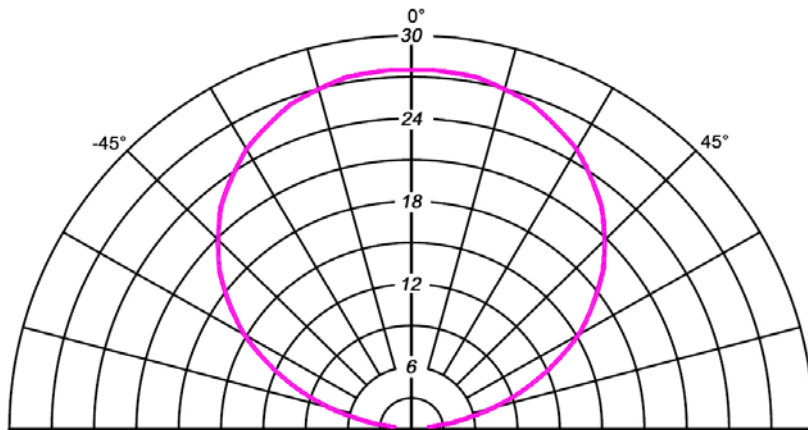
Color	White
Model No.	WL-BFL645-DW24
Input Voltage	24VDC
Operating Current	0.11A (Max.)
Power Consumption	2.64W (Max.)
Dimension	270mm(L) x 15mm(W) x 7mm(H)
View angle	120°
Luminous Flux (Typ.)	156lm
Wavelength Color Temp.	8,200K~15,000K 6,000K~8,200K



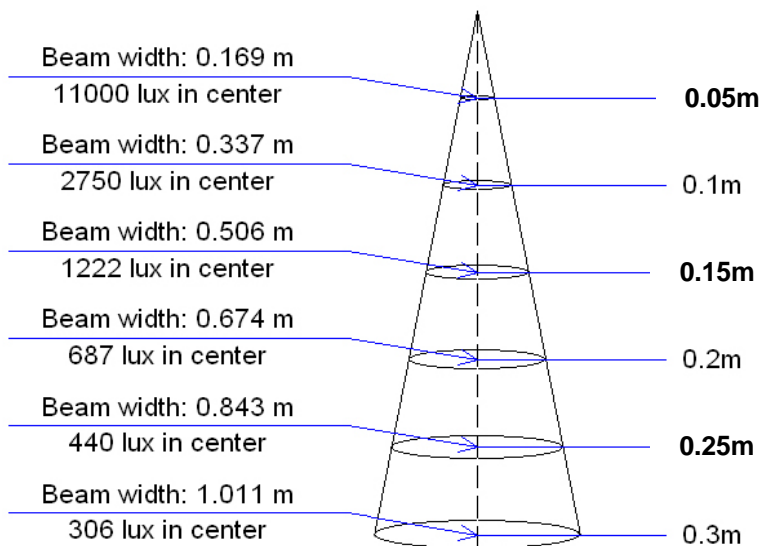
PHYSICAL SPECIFICATION (Unit : mm)



LUMINOUS INTENSITY DISTRIBUTION (WHITE, Unit: cd)



ILLUMINATION DISTRIBUTION (WHITE, Unit: lx)



LUMINOUS FLUX RANK

Ta=25°C

Rank		White
O	132~180(lm)	●

* Measurement allowance is ± 10%

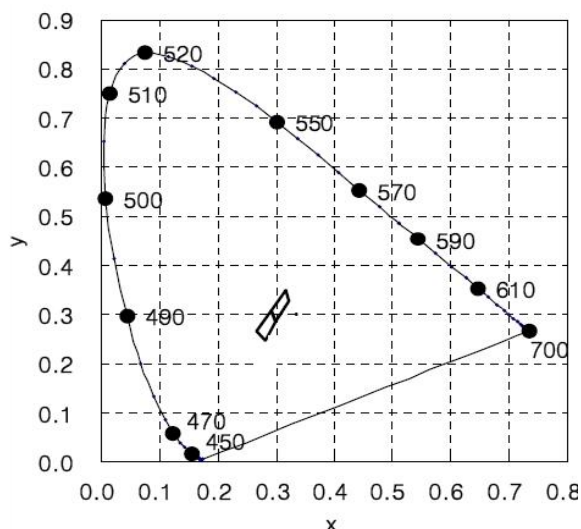
COLOR RANK

Ta=25°C

Rank		Color Coordinates				CCT	
A	x	0.2805	0.2896	0.2833	0.2725	10,200K~ 15,000K	
	y	0.2465	0.2648	0.2763	0.2564		
C	x	0.2725	0.2833	0.2783	0.2655		
	y	0.2564	0.2763	0.2854	0.2650		
B	x	0.2896	0.2995	0.2951	0.2833		8,200K~ 10,200K
	y	0.2648	0.2849	0.2981	0.2763		
D	x	0.2833	0.2951	0.2919	0.2783		
	y	0.2763	0.2981	0.3077	0.2854		
G	x	0.2951	0.3065	0.3046	0.2919	7,000K~ 8,200K	
	y	0.2981	0.3192	0.3285	0.3077		
E	x	0.2976	0.3081	0.3065	0.2951		
	y	0.2906	0.3110	0.3192	0.2981		
H	x	0.3065	0.3178	0.3165	0.3046		6,000K~ 7,000K
	y	0.3192	0.3401	0.3480	0.3285		
F	x	0.3081	0.3190	0.3178	0.3065		
	y	0.3110	0.3322	0.3401	0.3192		

* Measurement allowance is ± 0.01

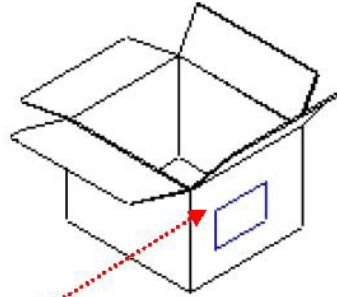
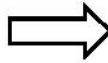
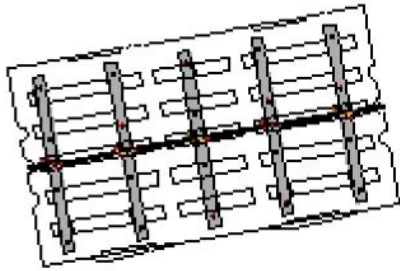
<Serial No.>



H 7 OG W	
H	Manufacturing year - 2001 : A,2008 : H.....
7	Month - 1~9 : 1~9 Ex) July. - "7" - 10 : "X" - 11 : "Y" - 12 : "Z"
OG	Rank (O : Luminous flux rank , G : Color rank)
W	LED Color



PACKAGE

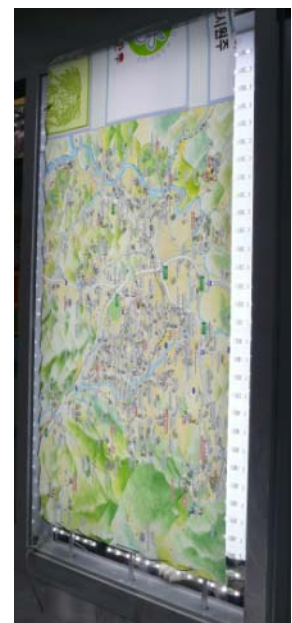
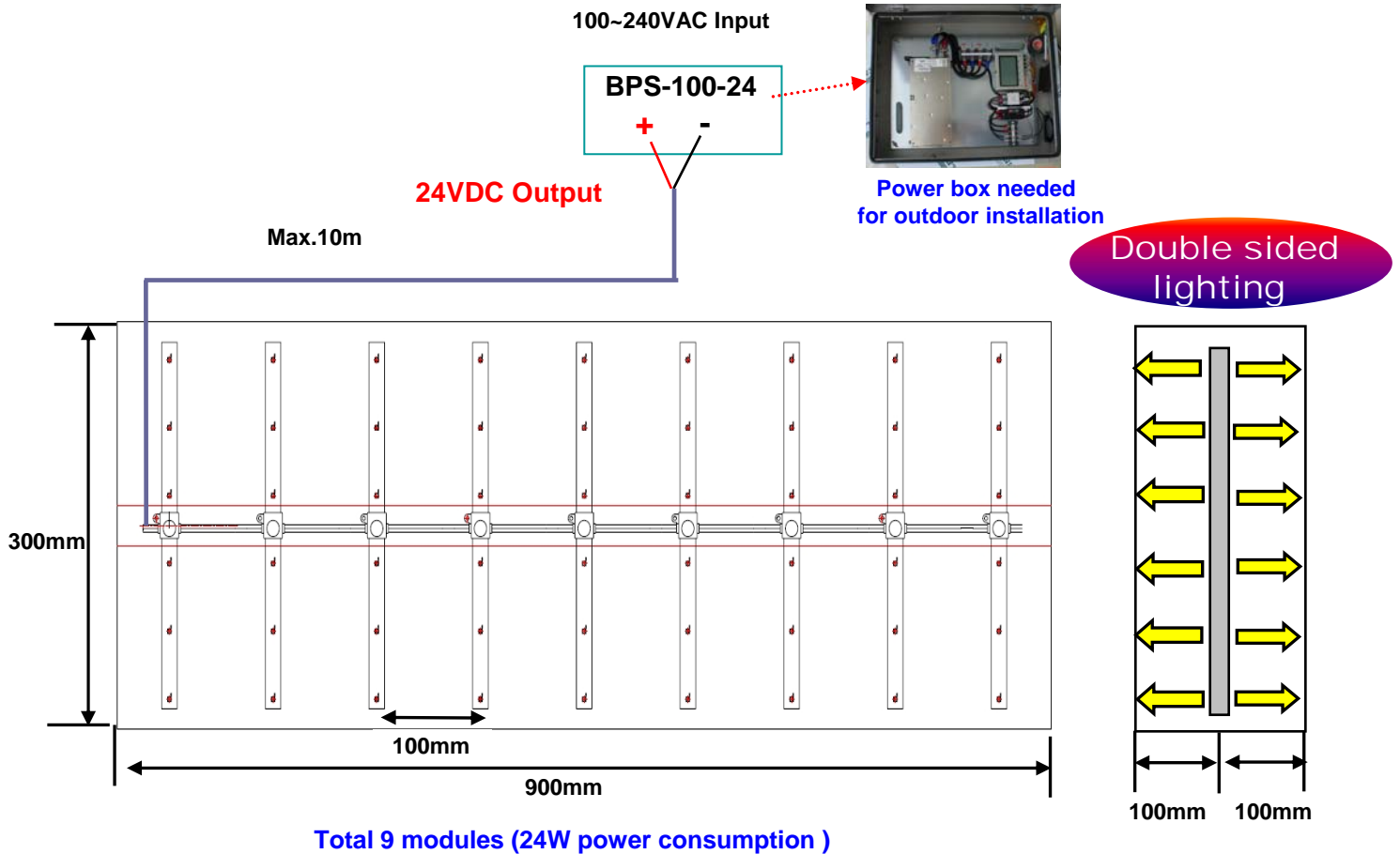


50 modules



INSTALLATION

- Recommendable channel depth: **100mm** (less than 100mm depth, some dots can be shown over the cover)
- Recommendable installation pitch between centers of the modules:
100mm at 200mm depth from double side (100mm depth from the single side)
- Max. Module Number connected in series: **50 modules**
- Installation layout (example): Channel height - 300mm, Channel width - 900mm, Channel depth - 200mm



■ Power Supply Capacity Table

Power Supply	Max. Module Number Connected
BPS-100-24 (100W, Indoor)	25 modules
BPS-300-24 (300W, Indoor)	75 modules
BPS-600-24 (600W, Indoor)	150 modules