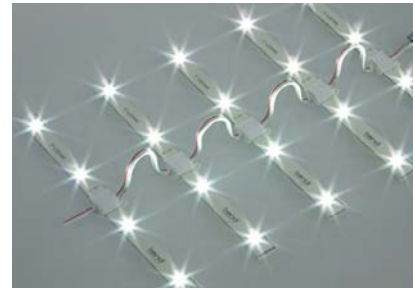
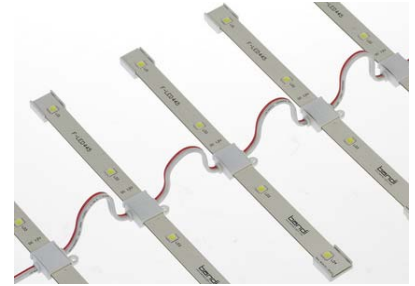


INTRODUCTION

Wamco **F-LED 445** is an LED illumination system for single-sided back lighting applications. **F-LED 445** is typically used in 100mm depth box signs or cabinet signs. **F-LED 445** provides many advantages including brilliant white light output, significant energy savings and reduced maintenance costs.



FEATURES

- Energy efficient
- Long service life (up to 30,000 hours)
- Easy installation and maintenance
- Waterproof (IP67) due to special coating
- Safety due to low voltage operation (12VDC)
- 3 year warranty

APPLICATIONS

- Cabinet & box signs
- Panel lighting
- Indoor & outdoor lighting decorations

CERTIFICATIONS

- UL (E258512), CE, RoHS



MATERIALS

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

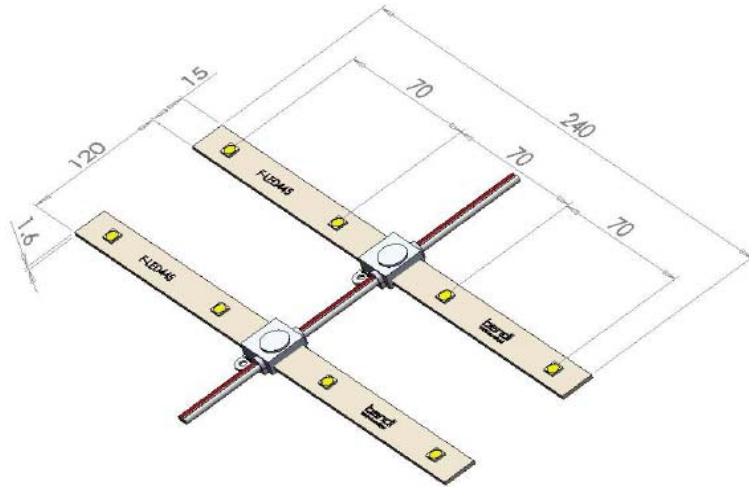
SPECIFICATIONS

• Operating Temp. : -20°C~+70°C

Color	White
Model	WL-BFL445-DW12
Input Voltage	12VDC
Operating Current	0.11A (Max.)
Power Consumption	1.32W (Max.)
Dimensions	240mm(L) x 15mm(W) x 7mm(H)
Viewing angle	120°
Luminous Flux (Typ.)	52lm
Wavelength Color Temp.	8,200K~15,000K 6,000K~8,200K

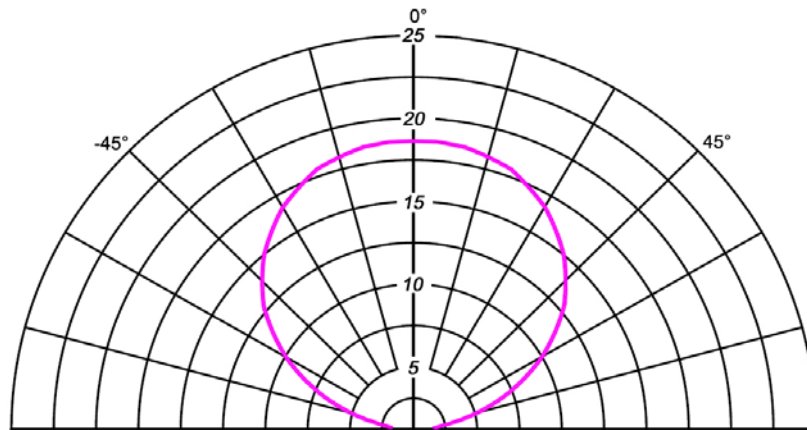


PHYSICAL SPECIFICATION (Unit : mm)

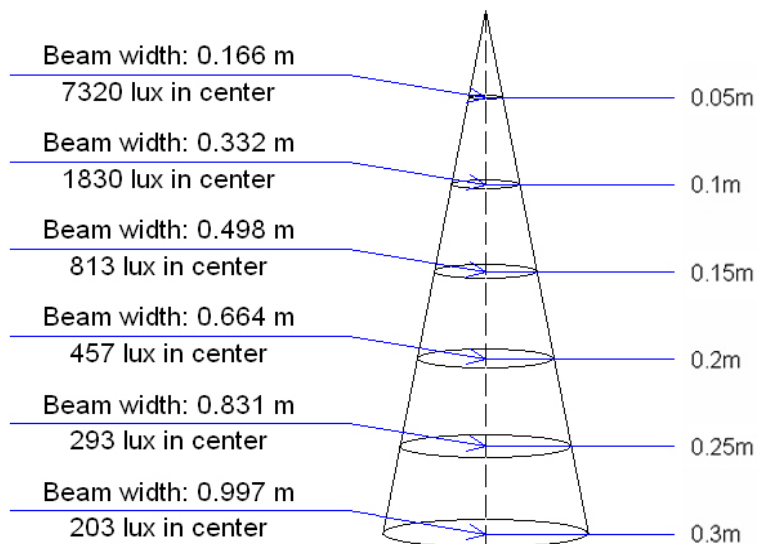


Red : Positive (+)
White : Negative (-)

LUMINOUS INTENSITY DISTRIBUTION (WHITE, Unit : cd)



ILLUMINATION DISTRIBUTION (WHITE, Unit : lx)



LUMINOUS FLUX RANK

Ta=25°C

Rank		White
O	44~60(lm)	●

* Measurement allowance is ± 10%

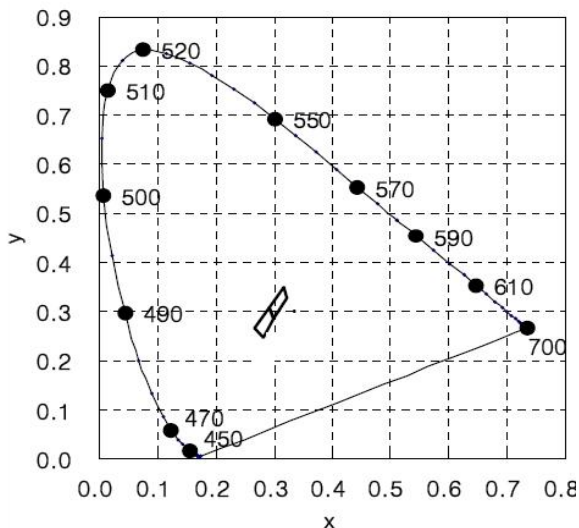
COLOR RANK

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

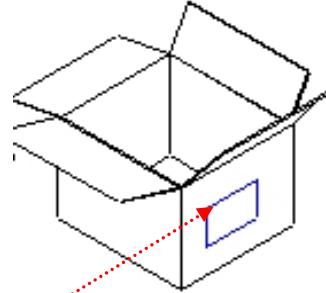
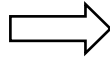
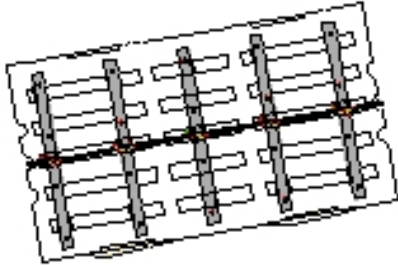
<Serial No.>



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

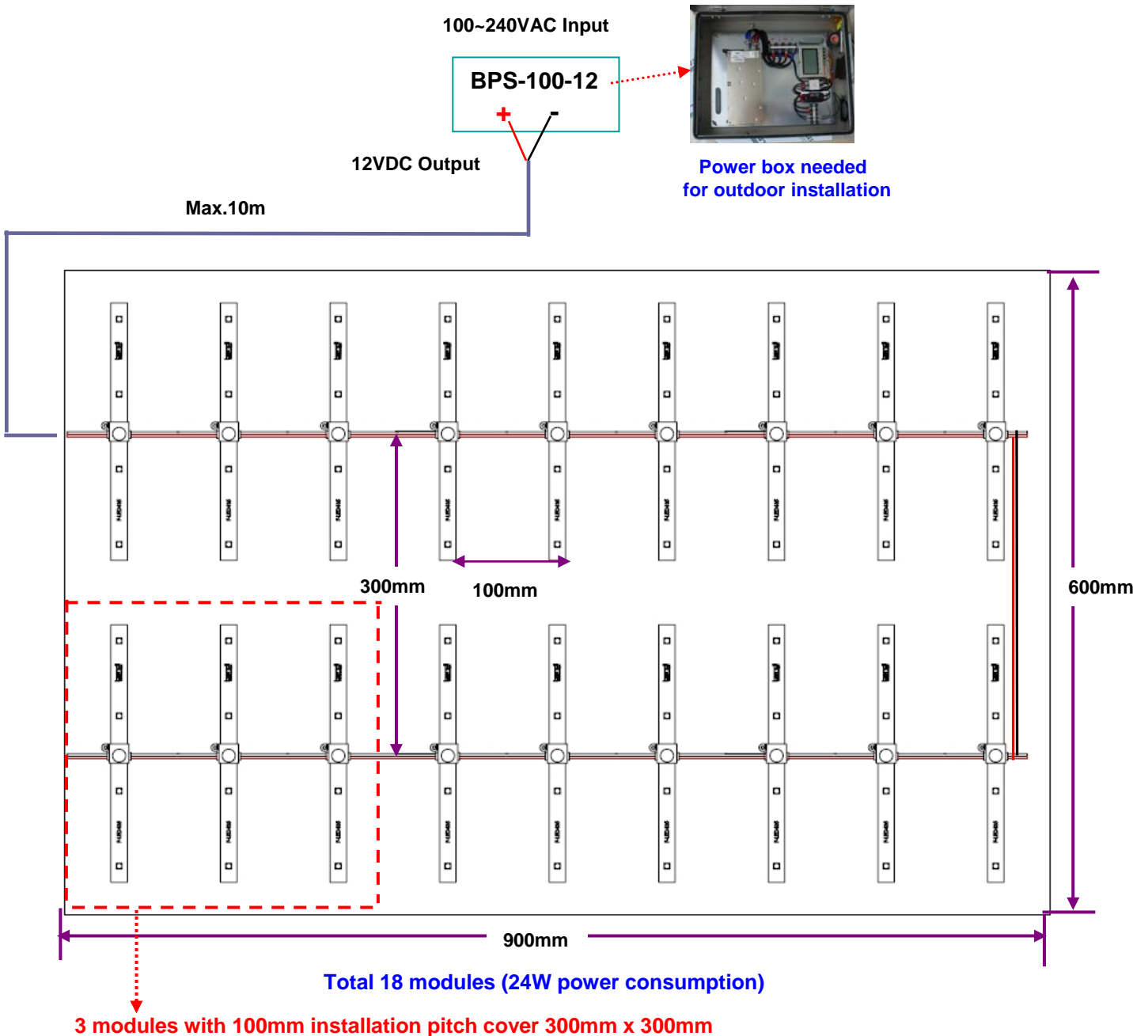


50 modules



INSTALLATION

- Recommended channel depth : **100mm** (less than 100mm depth, some dots may be seen through cover)
- Recommended installation pitch between centers of the modules : **100mm at 100mm depth**
- Maximum number of module connected in series : **50 modules**
- Installation layout (example) : Channel height-600mm, Channel width-900mm, Channel depth-100mm



■ Power Supply Capacity Table

Power Supply	Max. Module Number connected
BPS-100-12 (100W,Indoor)	50 modules
BPS-300-12 (300W,Indoor)	150 modules
BPS-600-12 (600W,Indoor)	300 modules