#### VISIT W: WWW.WAMCOINC.COM

# F-LED 255 (WIDE BEAM)

## INTRODUCTION

Wamco F-LED 255 is an LED illumination system for front and back lit channel letters as well as indoor and outdoor decorative lighting applications. F-LED 255 is typically used in small or narrow depth channel letters and box signs. F-LED 255 provides many advantages including brilliant light output, significant energy savings, and reduced maintenance cost.

#### s

### FEATURES

- Energy efficient
- Wide 155° beam angle
- Uniform light distribution
- Long service life (up to 50,000 hours L70)
- Easy installation and maintenance
- 100% waterproof (IP67)
- Safety due to low voltage operation (12VDC)
- 5 year warranty

#### **APPLICATIONS**

- Signage (narrow depth channel letters and box signs, 40 ~ 100mm)
- Indoor & outdoor lighting decorations

### CERTIFICATIONS

• UL (E258512), CE, RoHS

### **SPECIFICATIONS**

Color	White
Part Number	WL-BFL255-DW12
Input Voltage	12VDC
Operating Current	0.055A (Max.)
Power Consumption	0.66W (Max.)
Dimension	59mm(L) x 16mm(W) x 5.9mm(H)
Beam Angle	155°
Luminous Flux (Typ.)	40lm
Color Temperature (Typ.)	6500K (6000K~7000K)



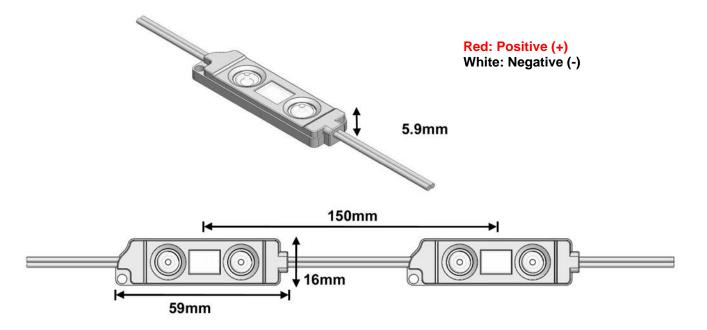




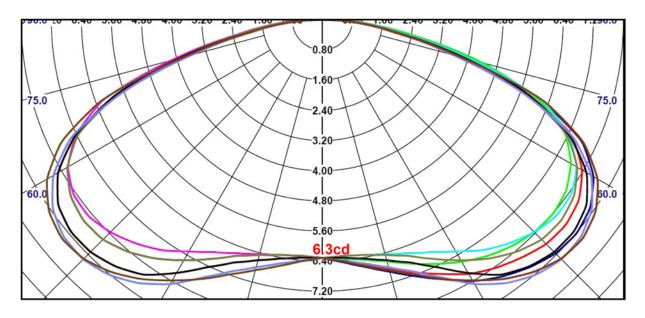
Operating Temp.: -20°C~+70°C



### PHYSICAL SPECIFICATIONS (unit: mm)



### LUMINOUS INTENSITY DISTRIBUTION (white, unit: cd)



# F-LED 255 (WIDE BEAM)



#### COLOR RANK

Ta = 2	2°C
--------	-----

						Tu – 23 C
Rank	C C		Color Co	ordinates		ССТ
B4	х	0.3065	0.3178	0.3165	0.3046	6,000K~ 7,000K
D4	у	0.3192	0.3401	0.3480	0.3285	0,000K~ 7,000K
Measurem	nent alle	owance is +0.01.				

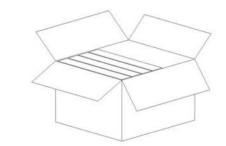
# SERIAL NUMBER

L	Manufacturing Year -2001 : A 20012 : L
3	Month - 1-9 : 1~9 (example: July = "7") - 10 : "X" - 11 : "Y" - 12 : "Z"
B4	Color Rank B4: 6000K~7000K
W	LED Color

### PACKAGING

#### 1 pack = 50 modules





30 packs (1,500 modules) Box size: 350mm x 560mm x 240mm Gross weight: 15kg

# F-LED 255 (WIDE BEAM)



#### INSTALLATION

• Determine number of modules, pitch and power supplies needed based on channel depth, stroke, cover materials, total power consumption of the modules, etc.



1) Clean inside the channel letters.



2) Remove VHB tape on the backside of the modules and attach modules according to the layout determined. For secure mounting, use screws or silicone.



3) Connect modules in series or parallel with wire nuts or electric tape after considering the maximum number of modules in series. Cap all unused wires. Place silicone in the wire nuts for maximum outdoor protection.



- **Caution:** Check polarity. All connections must be Red (+: Positive) to Red and White (-: Negative) to White.
- 4) Drill holes at the bottom or side of the letters for the wire connection to DC power supplies, place bushings into the holes and thread wires out of the letters.





5) Connect DC wires from the letters to DC power supplies and AC wires from input power source to DC power supplies. Check DC polarity (+: Positive, -: Negative) and AC connection (L, N, FG: 1 phase, 100~240VAC, 50/60Hz).



*Caution:* Electric power should be off when DC and AC wires are connected to DC power supplies.

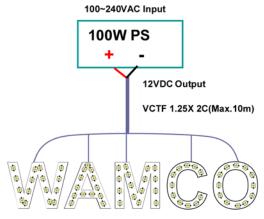
6) Turn on electric power and check all modules for illumination. Review all installation steps above if F-LED 255 fails to light.

# F-LED 255 (WIDE BEAM)

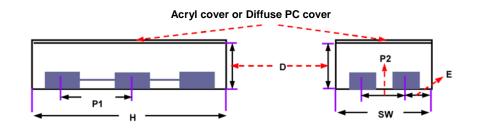


#### INSTALLATION

- Recommended depth: 40mm~100mm
- Recommended installation pitch between centers of the modules: 80~100mm at 40mm~60mm depth, 100~120mm at 60~80mm depth, 120~150mm at 80~100mm depth
- Maximum module number connected in series: 50 modules
- Installation layout (example): channel height 500mm, channel depth 80mm, stroke width 100mm



Total 68 modules (45W power consumption)



Н	Channel Letter Height	
D	Channel Letter Depth	40mm~100mm
SW	Channel Letter Stroke Width	
E	Distance Between Center of LED Module to Edge of Channel Letter	30mm~50mm
P1	Installation Pitch in a Row	80mm~150mm
P2	Installation Pitch in a Column	100~150mm

#### Primary DC Cable Specification Table

Number of Modules	Cable
Connected	Specification
$\sim$ 200 modules	VCTF 1.25X2C
$\sim$ 300 modules	VCTF 2.0X2C
$\sim$ 500 modules	VCTF 3.5X2C
$\sim$ 700 modules	VCTF 5.5X2C

#### Power Supply Capacity Table

Power	Maximum Number of
Supply	Modules Connected
20W 12VDC	25 modules
40W 12VDC	50 modules
60W 12VDC	75 modules
100W 12VDC	125 modules
300W 12VDC	375 modules
600W 12VDC	750 modules