

SPECIFICATION

MODEL : LX-ECO4-xxx

(Cover - 120° Angle)

Powerd by Samsung LED

Supplier		Customer
Written by	Approved by	Approved by

NCLED CO., LTD

Characteristic

CE, UL, KS CERTIFIED

HIGH EFFICIENCY SAMSUNG LED 5630 LED MOUNTED

IP68 RATING

120° COVER LENS APPLIED

DAMP.PROOF DESIGN TO PREVENT DAMAGE FOR LED & OTHER PARTS

EXCELLENT PROTECTION RATE AGAINST RAIN, DIRECT LIGHT AND ULTRAVIOLET RAYS

COMPACT DESIGN AND CONVENIENT USABILITY

TRACEABILITY MANAGEMENT SYSTEM & QUALITY CONTROL MARKING SERIAL CODE

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50,000HOURS RATED LIFE TIME (L70)



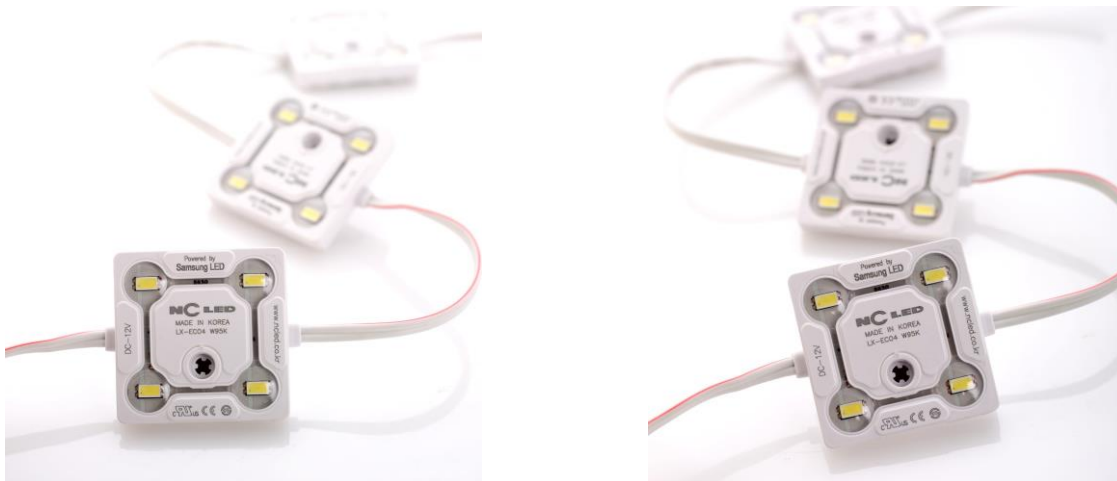
Application note

BEST SUBSTITUTE FOR GENERAL CHANNEL LETTER SIGNAGE

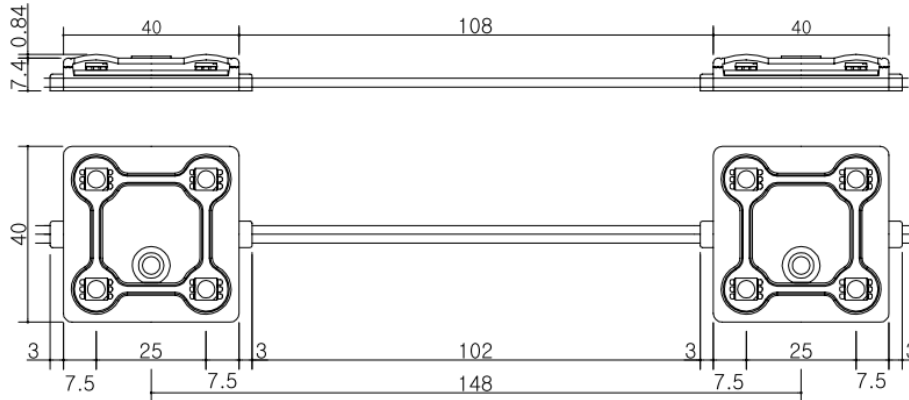
MODIFIED FOR THE BEST UNIFORMITY

BACK LIGHT FOR LIGHT BOX

Product Image



Dimension



Specification

Item	Value								Unit
Model no	W12	W95	W65		W50		W30		
Power Dissipation	1.44W								Watt
Forward Voltage	12								VDC
Forward Current	120								mA
Driving System	Constant Voltage								-
Luminous Flux	94	94	100		100		94		lm
Luminance Efficiency	65	65	70		70		65		lm/W
CCT(K)	12000	9500	6500		5000		3000		Kelvin
CRI (Ra)	75	75	80		80		80		%
Viewing angle	120°								deg
LED maker	5630PKG x 2EA / Samsung LED								-
Module Pitch	148 ±5								mm
Size	46 x 40 x 11								mm
Weight	13								g
Max in series	35								EA
Operating Temp	-20 ~ 50								°C
Storage Temp	-30 ~ 70								°C
Waterproof	IP68								
Life Time	50,000								Hour
Cable	AWM2468-AWG18x2C, UL								
LENS materials	PMMA, UL-94								
Case materials	PC/ABS, UL-94 , V-2								

Photometric characteristics

Color Parameters:

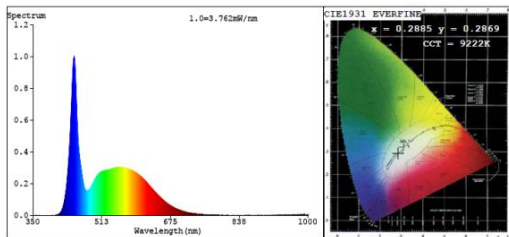
Chromaticity Coordinate: $x=0.2885$ $y=0.2869/u'=0.1967$ $v'=0.4402$
 CCT=9222K (Duv=-0.0057) Dominant WL:Ld =476.3nm Purity=19.6%
 Ratio:R=12.8% G=80.8% B=6.4% Peak WL:Lp=447.0nm FWHM=18.6nm
 Render Index:Ra=84.8

Photo Parameters:

Flux = 74.34 lm Eff. : 102.42 lm/W Fe = 266.7 mW

Electrical parameters:

V = 11.998 V I = 0.06050 A P = 0.7259 W PF = 1.000



LED Specification

Absolute Maximum Rating



Item	Symbol	Rating	Condition
LED junction temperature	T_J	110℃	-
Forward Current	I_F	150 mA	-
Peak Pulsed Forward Current	I_{FP}	300 mA	Duty 1/10 pulse width 10ms
Thermal resistance	$R_{th, j-s}$	16℃/W	Junction to solder point
ESD	-	5kV	HBM

LM80- Test Summary

Life test condition			Summary of result		
Test condition	Current (mA)	Case temperature (℃)	Test duration (h)	Average lumen maintenance (%)	Maximum chromaticity shift ($\Delta u'v'$)
1	100	53.8℃	6000	98.9	0.0010
2	100	84.6℃	6000	97.8	0.0018
3	100	104.9℃	6000	92.4	0.0032