

# Optika<sup>®</sup> 777

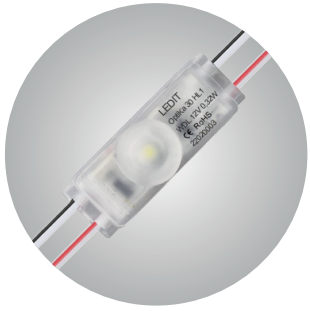
SIGNAGE - Backlighting ————— 10 20 30 HL —————

**Long Life & Warranty  
packed in the thinnest  
module**



**7 YEARS**  
**70.000hrs**  
**L70**

- ▶ For Block letters and 30mm depth very uniformly lit applications
- ▶ Up to 113lm/W Slim module with regulation for long and stable life
- ▶ Choose from 5 different white color temperatures or R, G and B colors
- ▶ MacAdam ellipse 3 to achieve consistent light always



**7 YEARS**  
70.000hrs  
L70



IP67



150°



100 MOD. MAX  
IN SERIES



CUTTABLE  
EVERY 1 MOD.



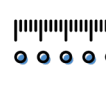
NO NEED



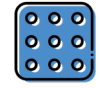
12V



11 TO 14V



14 TO 20  
MOD./ML



133 TO 400  
MOD./M<sup>2</sup>



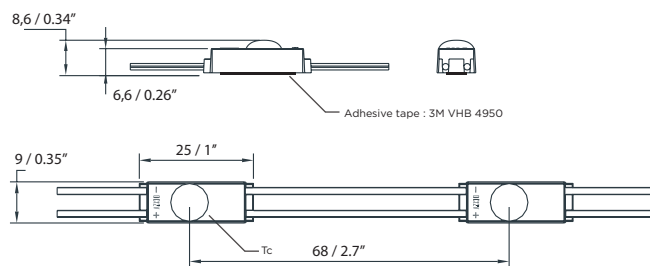
-30°/+50°C

### TECHNICAL DATA

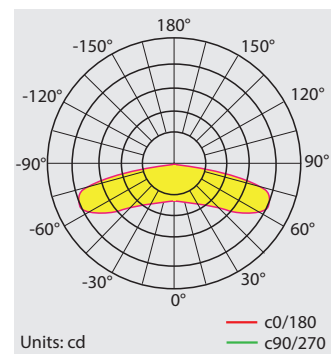
Code	Designation	Color Temperature / Wavelength	Typical power / module (W)	Lumen output (lm/module)	Efficiency (Lm/W)	Mod / chain	Mod distance - axe to axe (mm / in)
22020031	OptiKa 10 HL1 WS 100mod 68mm 0,1W 12V IP67	WS 8700-10000K	0,09	9	100	100	68±5 / 2,68"
22020032	OptiKa 10 HL1 OW 100mod 68mm 0,1W 12V IP67	OW 6800-7500K	0,09	10	105	100	68±5 / 2,68"
22020033	OptiKa 10 HL1 WDL 100mod 68mm 0,1W 12V IP67	WDL 6000-6500K	0,09	10	113	100	68±5 / 2,68"
22020034	OptiKa 10 HL1 NW 100mod 68mm 0,1W 12V IP67	NW 3850-4250K	0,09	10	112	100	68±5 / 2,68"
22020035	OptiKa 10 HL1 WW 100mod 68mm 0,1W 12V IP67	WW 2900-3100K	0,09	10	111	100	68±5 / 2,68"
22020036	OptiKa 20 HL1 WS 100mod 68mm 0,2W 12V IP67	WS 8700-10000K	0,19	18	98	100	68±5 / 2,68"
22020037	OptiKa 20 HL1 OW 100mod 68mm 0,2W 12V IP67	OW 6800-7500K	0,19	19	103	100	68±5 / 2,68"
22020038	OptiKa 20 HL1 WDL 100mod 68mm 0,2W 12V IP67	WDL 6000-6500K	0,19	21	111	100	68±5 / 2,68"
22020039	OptiKa 20 HL1 NW 100mod 68mm 0,2W 12V IP67	NW 3850-4250K	0,19	20	109	100	68±5 / 2,68"
22020040	OptiKa 20 HL1 WW 100mod 68mm 0,2W 12V IP67	WW 2900-3100K	0,19	20	108	100	68±5 / 2,68"
22020005	OptiKa 30 HL1 WS 100mod 68mm 0,3W 12V IP67	WS 8700-10000K	0,28	27	95	100	68±5 / 2,68"
22020004	OptiKa 30 HL1 OW 100mod 68mm 0,3W 12V IP67	OW 6800-7500K	0,28	28	100	100	68±5 / 2,68"
22020003	OptiKa 30 HL1 WDL 100mod 68mm 0,3W 12V IP67	WDL 6000-6500K	0,28	30	106	100	68±5 / 2,68"
22020002	OptiKa 30 HL1 NW 100mod 68mm 0,3W 12V IP67	NW 3850-4250K	0,28	30	105	100	68±5 / 2,68"
22020001	OptiKa 30 HL1 WW 100mod 68mm 0,3W 12V IP67	WW 2900-3100K	0,28	29	103	100	68±5 / 2,68"
22020063	OptiKa 30 HL1 WDL 50mod 152mm 0,3W 12V IP67 x2	WDL 6000-6500K	0,28	30	106	50	152±5/5,36"
22020076	OptiKa 30 HL1 WW 50mod 152mm 0,3W 12V IP67 x2	WW 2900-3100K	0,28	29	103	50	152±5/5,36"
22020077	OptiKa 30 HL1 R 100mod 68mm 0,32W 12V IP67	R 625-630 nm	0,32	12	38	100	68±5 / 2,68"
22020078	OptiKa 30 HL1 G 100mod 68mm 0,32W 12V IP67	G 520-525 nm	0,32	18	56	100	68±5 / 2,68"
22020079	OptiKa 30 HL1 B 100mod 68mm 0,32W 12V IP67	B 465-470 nm	0,32	4	13	100	68±5 / 2,68"

\*These references have a 5-year warranty.

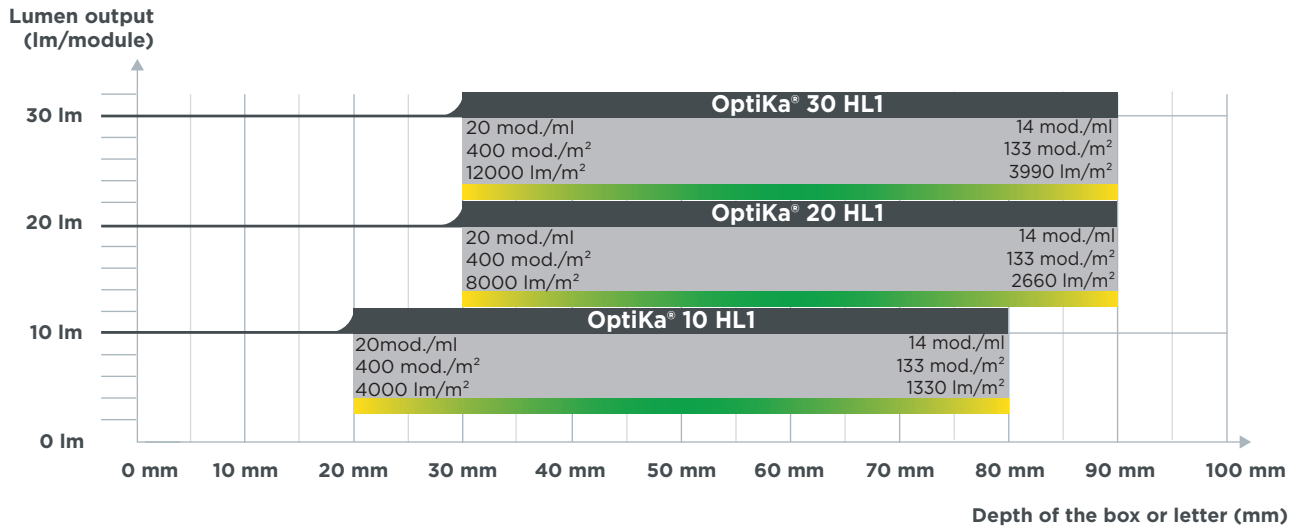
### DIMENSIONS



### LIGHT DISTRIBUTION



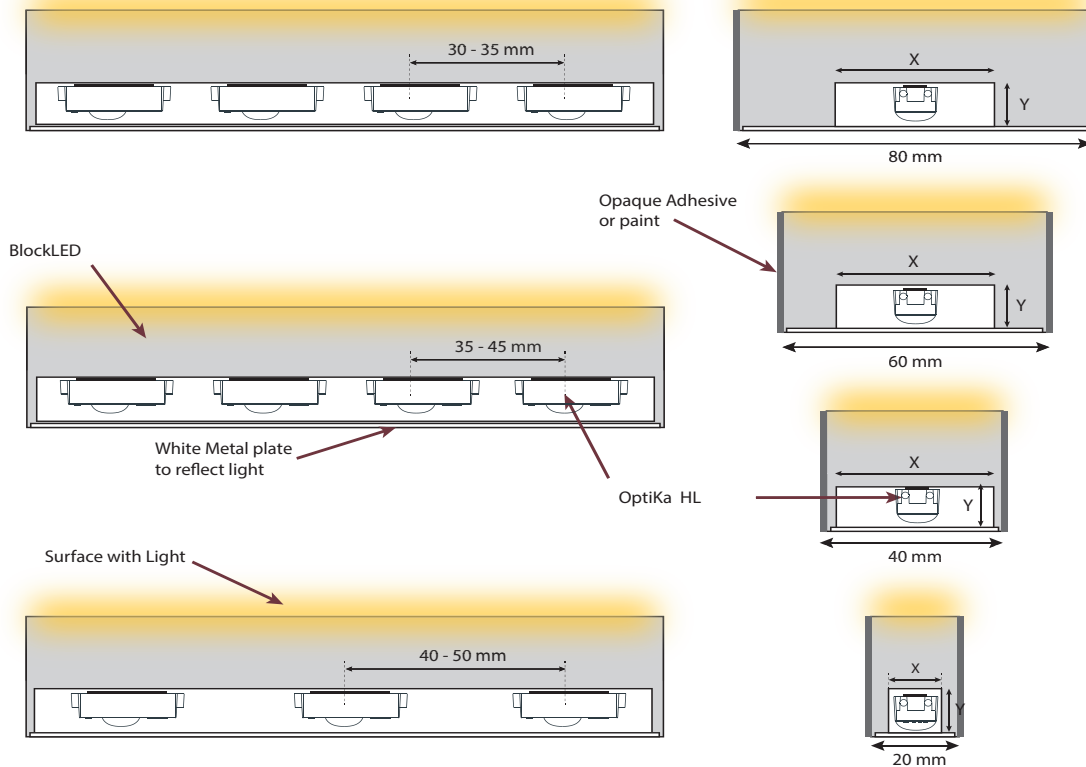
### APPLICATION - Letters and logos



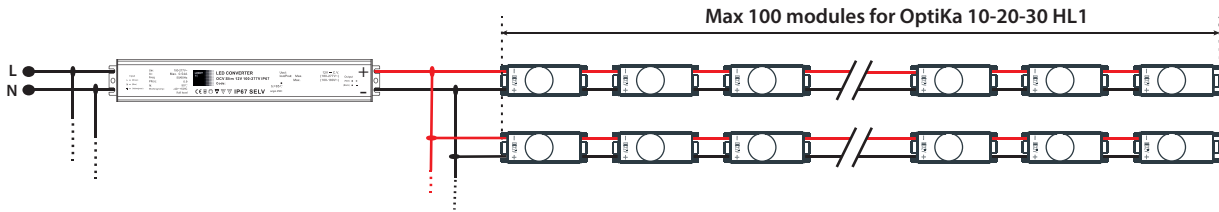
Possible under conditions Optimum

### APPLICATION - BLOCKLED

- ▶ Data and dimensions are given as recommendations based on standard 30mm BlockLED. Tests are always required for final confirmation. Always make a test or prototype to confirm results for your specific project.
- ▶ The light uniformity of your sign can be improved by creating different “holes” into the block. We recommend you to make tests how to achieve the best result (X & Y dimensions are critical to the width of the BlockLED letter).



## WIRING DIAGRAM



## INGRESS PROTECTION IP67

“Inbuilt LED module” for Indoors or Outdoors.

The specified environmental protection of the LED module enclosure means that it is protected against dust ingress and water immersion up to 1m deep.

The certification requires products to pass a test 30min long at 1m depth. After 30min of submersion, the product could start to be affected or damaged.

Make sure that the application of the LED modules has proper drain holes for water to exit so that modules and any other electronic component are not submerged exceeding the IP67 certification limits.

## NORMS & CERTIFICATES

- ▶ EN55015:2013
- ▶ EN61547:2009
- ▶ EN61000-3-2:2014
- ▶ EN61000-3-3:2013
- ▶ EN62031:2008 + A1:2013
- ▶ IEC62321:2013
- ▶ EN62471:2008



## THERMAL BEHAVIOUR

The temperature limits indicated below are expressed in °C, at full load, after 3h of operation conditions, with natural convection:

- ▶ Operation temperature      Ta -30°C to +75°C
- ▶ Storage temperature        Ts -30°C to +80°C
- ▶ Max. temperature            Tc point +80°C

The life of the module will decrease when the maximum temperature limits are exceeded.

Operating for a continuous extended time at temperatures exceeding the maximum limits, the modules can fail and our warranty will be void.

## WHITE TOLERANCE

In order to ensure there is no color difference visible to the human eye, we adhere strictly to the following tolerance for White LEDs:

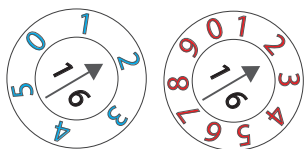
- ▶ MacAdam ellipse 5 between different production batches
- ▶ MacAdam ellipse 3 in the same production batch

## FAILURE RATE

Our LED system has a max failure rate of 0.2% per 1000 operating hours.

## IDENTIFICATION

You can find the following production date code at the back of the module.



Production Week **22**  
Production year **2016**

### LIFETIME

Type	L90		L80		L70		L50	
	Ta. 25°C	Ta. 50°C	Ta. 25°C	Ta. 50°C	Ta. 25°C	Ta. 50°C	Ta. 25°C	Ta. 50°C
OptiKa 10-20-30 HL1	45K hrs	30K hrs	70K hrs	53K hrs	86K hrs	70K hrs	110K hrs	83K hrs

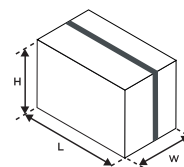
The L value describes the minimum Lumen Maintenance kept at the end of lifetime (it is the % of the initial intensity kept once the product reached its lifetime).

### INSTALLATION

- ▶ Always connect the LED modules to the power supply while it is OFF. Only then you can connect the power supply to electricity and turn it ON.
- ▶ Respect the maximum number of modules in a row.
- ▶ Check compatibility between LED and driver voltage.
- ▶ Install LED on a clean work station connected to the earth. All LEDs are sensitive to static electricity (ESD).
- ▶ Limit the cable length between LED and power supply (voltage drop). Please refer to **Cable Size and Distance manual**.
- ▶ Do not make direct pressure on LED chip, this could damage the internal connection.
- ▶ Secure LED module lines with mechanical fixation (screws, glue ...) in addition to the adhesive tape.

### PACKAGING

Type	SIZE - LxWxH (cm)	SIZE - LxWxH (ft)	Weight (kg)	Weight (lb)	Units
OptiKa 10-20-30 HL1	40x30x29	1,3x1x1,1	8,9	19,6	28



(When the min and max values are not indicated, the tolerance range for optical and electrical data is ±15 %.)