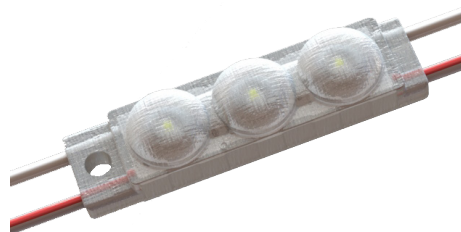




- LED chain for highlighting lines and edges and for backlighting complex contours, letters and symbols in signage applications
- Optimised for use in signage (lettering, surface backlighting)
- High color consistency (MacAdam 5)
- Beam characteristic: 155°
- LED module with plastic casing and strain relief with IP68 protection
- Integrated current source to stabilise luminous flux
- Flexible chain, can be split between any module
- Mounting with screw or premounted double-sided adhesive tape possible
- Nominal life-time up to 50,000 h (at Ta 60 °C with a failure rate max. 0.2 % per 1,000 h)



ORDERING GUIDE

Type	Article Number(s)	Color	Wavelength Range	Color Temperature ⁵
(3 Light Points per Module)				
LED P551E-S CW 12 200 100 68 B G1	28000717 / 87500717	Crystal White	N/A	7500K
LED P551E-S DL 12 150 100 68 B G1	28000365 / 87500297	Daylight White	N/A	6500K
LED P551E-S DL 12 200 100 68 B G1	28000366 / 87500298	Daylight White	N/A	6500K
LED P551E-S NW 12 200 100 68 B G1	28000432	Neutral White	N/A	4000K
LED P551E-S WW 12 200 100 68 B G1	28000433	Warm White	N/A	3000K

Packaging: 1 piece/roll, 30 pieces/carton, 180 pieces/pallet

SPECIFIC TECHNICAL DATA

Type	Photometric Code ²	Wave-length Range	Color Temperature ⁵	Typ. Luminous Flux Per Module ²	CRI ²	Supply Voltage DC ³	Typ. Current per Module ²	Typ. Power per Module	Luminous Efficacy	Energy Classification per Module
(3 Light Points per Module)										
LED P551E-S CW	775/5xx	N/A	7500K	60 lm	>63	12 V	58 mA	0.7 W	86 lm/W	A++
LED P551E-S DL	765/5xx	N/A	6500K	60 lm	>70	12 V	58 mA	0.7 W	86 lm/W	A++
LED P551E-S NW	840/5xx	N/A	4000K	66 lm	>80	12 V	58 mA	0.7 W	95 lm/W	A++
LED P551E-S WW	830/5xx	N/A	3000K	66 lm	>80	12 V	58 mA	0.7 W	95 lm/W	A++

¹ If the max temperature limits are exceeded, the life of the module will be greatly reduced or the module maybe damaged. For the precise position of the Tc point see the above diagram.

² Tolerance range for optical and electrical data: 320%.

³ Exceeding the max operating voltage leads to an overload on the uchain. This may, in turn, result in a reduction in life-time or even in destruction. Tolerance range for the supply voltage: 12 V: +2 V / -0 V. 4

⁴ Maximum submerge depth 1 m / 60 min.

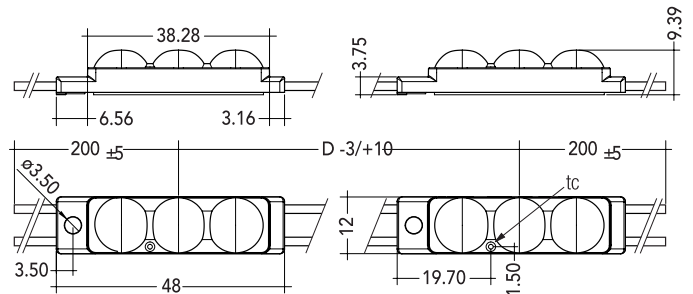
⁵ Colour temperature for information only. Valid colour see „Coordinates and tolerances according to CIE 1931“. All values at Ta = 25 °C.



TECHNICAL DATA

Ambient Temperature T_a	-40 — +60° C
Max Surface Temperature on Module T_c	+ 65° C
Storage Temperature T_s	-40 — +85° C
Type of Protection ⁴	IP68
Risk Group (EN 62471:2008)	0

DIMENSION DRAWINGS



TYPECODE

EXAMPLE: LED P551E-S DL 12 200 100 68 B G1

Category	LED P551E-S	DL	12	200	100	68	B	G1
Sub-Category	TALEXXchain	Color	Supply Voltage	Module distance D	# of Modules	Protection	Beam Characteristic	Generation
Spec. (=)	CRYSTAL SELECT	Daylight White	12 Volts	200 mm	100 modules	IP68	155°	Gen. 1

For more information call or email your Agilight contact.

PHOTOMETRIC CODE

Key for photometric code, e.g. 861.

1st Digit	2nd + 3rd Digit
Code	CRI
7	67 - 76
8	77 - 86
9	87 - ≥90

Color temperature in Kelvin x 100

LED Control Gear Matrix | CRYSTAL SELECT P551

IN-BUILT LCU					
Type	LCU 15W 12V IP67	LCU 35W 12V IP67	LCU 60W 12V IP67 / LCU 60W 12V IP66	LCU 100W 12V IP67 / LCU 100W 12V IP66	LCU 180W 12V IP67
Article Number	28000507	28000508	28000509 / 28001026	28000510 / 28001027	28000511

Assignable LED Control Gear

Type	Number of Modules										Max. Chaining
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
LED P551E-S CW	2	18	5	43	8	74	13	124	23	223	100
LED P551E-S DL	2	18	5	43	8	74	13	124	23	223	100
LED P551E-S NW	2	18	5	43	8	74	13	124	23	223	100
LED P551E-S WW	2	18	5	43	8	74	13	124	23	223	100



STANDARDS

- EN 62031
- EN 62471

The product meets the "inbuilt LED module" classification according to EN 62031. The product passed the glow-wire test with 850 °C according to EN 62031.

Certificates

- UL file: E313318
- CSA file: 249699
- ENEC for light colour DL, NW, WW only

THERMAL BEHAVIOR

Operation temperature (operation, no defects)	T _a	-40 — +60° C
Storage temperature	T _s	-40 — +85° C
Max. temperature Tc point	T _c	-20 — +80° C

The values apply to operation at 100 % output, natural convection. If the maximum temperature limits are exceeded, the life of the module will be greatly reduced. The module can fail within a short time. The T_c point temperature of the module has to be measured in the thermally stable state and under operating conditions. Measurement setup e.g. according to IEC/EN 60598-1.

LUMEN MAINTENANCE¹

Lumen depreciation – the decrease in lumen output that occurs as a lamp is operated.

L70 or L70 – shorthand for lumen depreciation to 70 % of initial lumen output indicates 70 % lumen maintenance. L50 would be lumen depreciation of 50 %.

B50 – another aspect of LED life projection, used in conjunction with the lumen depreciation.

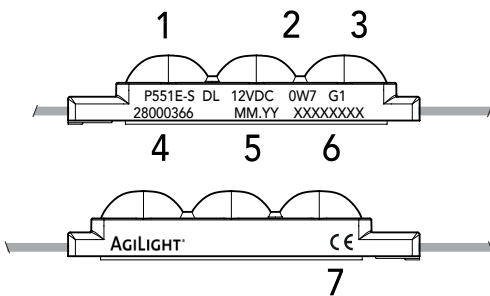
B50 indicates no more than 50% of a sample of LED devices would be expected to fail before a certain number of operating hours. Failure means light output drops below a target lumen maintenance level (such as L70 or L50). B10 would mean no more than 10% of the sample fails within the given time.

¹reference: LM-80 Test Report LED package supplier.

MAINTENANCE NOTE

The product is maintenance free. If cleaning during application only clear water without the addition of cleaning agents should be used.

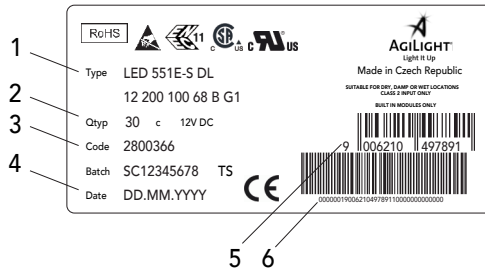
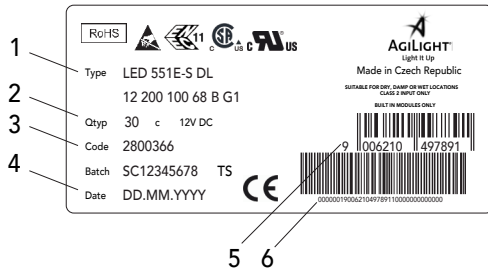
LABEL PRODUCT (SAMPLE)



KEY	
Code	
1	Type
2	Electr. Specification
3	Generation
4	Article Code
5	Production Date
6	Production Batch
7	Normative Symbols



LABEL PRODUCT PACKAGING & LABEL CARTON



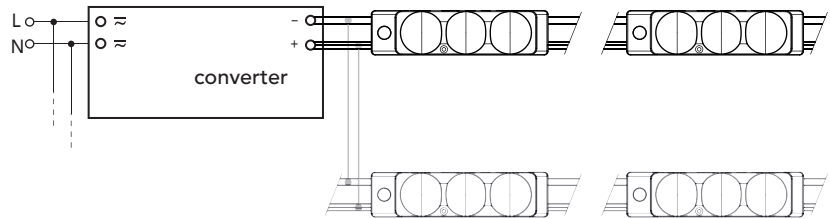
KEY (for both)	
Code	Type
1	Type
2	Packaging Quantity
3	Article Code
4	Production Date
5	Barcode EAN13 for packaging unit
6	Barcode EAN128 (includes EAN13 and batch number)

WIRING

Cable: AWG 18

Color	Red-White	White
Function	+	-

WIRING DIAGRAM



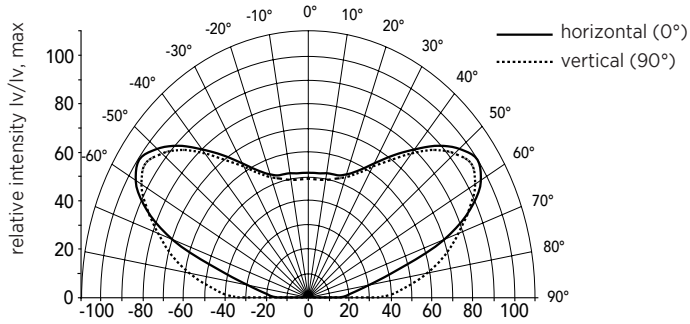
EMPIRICAL VALUES FOR DECREASE OF LUMINOUS FUX OVER CHAIN

Type	Color	Module Distance 150mm	Module Distance 200mm	Number of Modules
LED P551E-S CW	Crystal White	0%	--	100
LED P551E-S DL	Daylight White	0%	0%	100
LED P551E-S NW	Neutral White	0%	--	100
LED P551E-S WW	Warm White	0%	0%	100

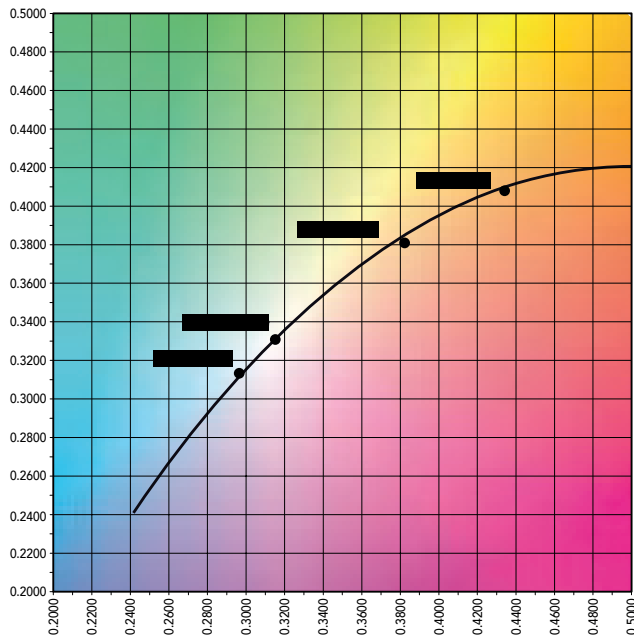


BEAM CHARACTERISTICS 155°

Light distribution $I_v/I_{v,max}$



COLOR DIAGRAM

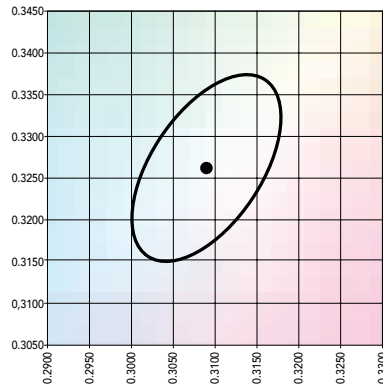




**COORDINATES AND TOLERANCES
ACCORDING TO CIE 1931**

Daylight White (DL)

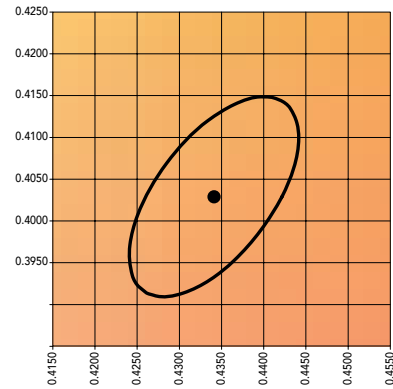
	x0	y0
Centre	0.3090	0.3260



MacAdam ellipse: 5SDCM

Warm White (WW)

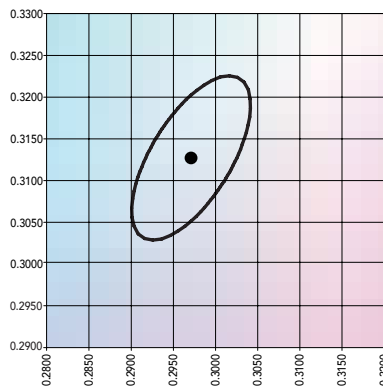
	x0	y0
Centre	0.4345	0.4033



MacAdam ellipse: 5SDCM

Crystal White (CL)

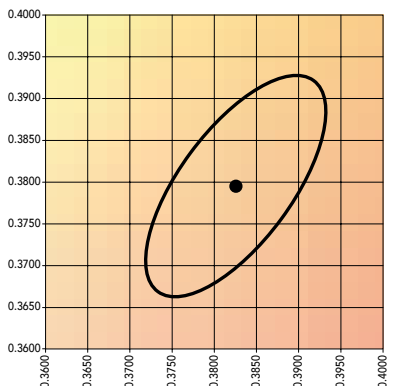
	x0	y0
Centre	0.2970	0.3132



MacAdam ellipse: 5SDCM

Neutral White (NW)

	x0	y0
Centre	0.3825	0.3796



MacAdam ellipse: 5SDCM