

Outdoor LED modules 5050

A rectangular solution for outdoor lighting. Compatible with standard 2x2 optics for example LEDiL's STRADA-2X2-5050.

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE
- Other CCT and CRI on request



The number and type of connectors may vary depending on the type of module.



RecLED CRI 70 LHP G6

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class	
RecLED 122x50mm 1900lm 730 24V 2x4 5050 LHP G6	1010 137 97646	3000	440	1900	1970	22	9.6	199	80	1600	B	
RecLED 173x50mm 2900lm 730 36V 2x6 5050 LHP G6	1010 137 98146		440	2850	2955	33	14	199	80	1600	B	
RecLED 224x50mm 3800lm 730 48V 2x8 5050 LHP G6	1010 137 76346		440	3801	3940	43	19	199	80	1600	B	
RecLED 274x50mm 4800lm 730 60V 2x10 5050 LHP G6	1010 137 98646		440	4751	4925	54	24	199	80	1600	B	
RecLED 122x50mm 1900lm 740 24V 2x4 5050 LHP G6	1010 137 97746		4000	440	2004	2078	22	9.6	210	80	1600	B
RecLED 173x50mm 2900lm 740 36V 2x6 5050 LHP G6	1010 137 98246			440	3007	3117	33	14	210	80	1600	B
RecLED 224x50mm 3800lm 740 48V 2x8 5050 LHP G6	1010 137 76446	440		4009	4156	43	19	210	80	1600	B	
RecLED 274x50mm 4800lm 740 60V 2x10 5050 LHP G6	1010 137 98746	440		5011	5195	54	24	210	80	1600	B	

RecLED CRI 70 LHP NTC G6

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class	
RecLED 122x50mm 1900lm 730 24V 2x4 5050 LHP NTC G6	1010 137 92646	3000	440	1900	1970	22	9.6	199	80	1600	B	
RecLED 173x50mm 2900lm 730 36V 2x6 5050 LHP NTC G6	1010 137 93146		440	2850	2955	33	14	199	80	1600	B	
RecLED 224x50mm 3800lm 730 48V 2x8 5050 LHP NTC G6	1010 137 93646		440	3801	3940	43	19	199	80	1600	B	
RecLED 274x50mm 4800lm 730 60V 2x10 5050 LHP NTC G6	1010 137 94146		440	4751	4925	54	24	199	80	1600	B	
RecLED 122x50mm 1900lm 740 24V 2x4 5050 LHP NTC G6	1010 137 92746		4000	440	2004	2078	22	9.6	210	80	1600	B
RecLED 173x50mm 2900lm 740 36V 2x6 5050 LHP NTC G6	1010 137 93246			440	3007	3117	33	14	210	80	1600	B
RecLED 224x50mm 3800lm 740 48V 2x8 5050 LHP NTC G6	1010 137 93746	440		4009	4156	43	19	210	80	1600	B	
RecLED 274x50mm 4800lm 740 60V 2x10 5050 LHP NTC G6	1010 137 94246	440		5011	5195	54	24	210	80	1600	B	

RecLED CRI 70 S9 G5

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class	
RecLED 122x50mm 1900lm 730 24V 2x4 5050 S9 G5	1010 147 00346	3000	435	1877	1926	22	9.5	197	80	1600	B	
RecLED 173x50mm 2900lm 730 36V 2x6 5050 S9 G5	1010 147 00846		435	2815	2889	33	14	197	80	1600	C	
RecLED 224x50mm 3800lm 730 48V 2x8 5050 S9 G5	1010 147 01346		435	3753	3852	44	19	197	80	1600	C	
RecLED 274x50mm 4800lm 730 60V 2x10 5050 S9 G5	1010 147 01846		435	4691	4815	55	24	197	80	1600	B	
RecLED 122x50mm 1900lm 740 24V 2x4 5050 S9 G5	1010 147 00446		4000	435	1974	2026	22	9.5	208	80	1600	B
RecLED 173x50mm 2900lm 740 36V 2x6 5050 S9 G5	1010 147 00946			435	2961	3040	33	14	208	80	1600	B
RecLED 224x50mm 3800lm 740 48V 2x8 5050 S9 G5	1010 147 01446	435		3948	4053	44	19	208	80	1600	B	
RecLED 274x50mm 4800lm 740 60V 2x10 5050 S9 G5	1010 147 01946	435		4935	5066	55	24	208	80	1600	B	

RecLED CRI 70 S9 NTC G5

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class	
RecLED 122x50mm 1900lm 730 24V 2x4 5050 S9 NTC G5	1010 137 95146	3000	435	1877	1926	22	9.5	197	80	1600	B	
RecLED 173x50mm 2900lm 730 36V 2x6 5050 S9 NTC G5	1010 137 95646		435	2815	2889	33	14	197	80	1600	C	
RecLED 224x50mm 3800lm 730 48V 2x8 5050 S9 NTC G5	1010 137 96146		435	3753	3852	44	19	197	80	1600	C	
RecLED 274x50mm 4800lm 730 60V 2x10 5050 S9 NTC G5	1010 137 96646		435	4691	4815	55	24	197	80	1600	B	
RecLED 122x50mm 1900lm 740 24V 2x4 5050 S9 NTC G5	1010 137 95246		4000	435	1974	2026	22	9.5	208	80	1600	B
RecLED 173x50mm 2900lm 740 36V 2x6 5050 S9 NTC G5	1010 137 95746			435	2961	3040	33	14	208	80	1600	B
RecLED 224x50mm 3800lm 740 48V 2x8 5050 S9 NTC G5	1010 137 96246	435		3948	4053	44	19	208	80	1600	B	
RecLED 274x50mm 4800lm 740 60V 2x10 5050 S9 NTC G5	1010 137 96746	435		4935	5066	55	24	208	80	1600	B	

¹At nominal current and T_p

²At nominal current and 25°C

³It is recommended not to operate below minimum current in order to avoid un-even brightness

Tolerance range for optical and electrical ±10%

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Temperature & humidity

Specification item	Unit	Value
Tp	[°C]	55
Tp rated	[°C]	75
Tc	[°C]	95
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	[%]	5 ... 85

Tp - Temperature related to the performance parameters of the LED modules

Tp rated - Maximum operating temperature to which the rated performance characteristics are declared

Tc - Highest permissible value for safe operation

Technical data

Specification item	Unit	LHP	S9
Classification acc. to IEC 62031		built-in	built-in
Working voltage	[Vdc]	420	420
Beam angle	[deg]	120	120
Initial color consistency	[SDCM]	5	5
Photobiological safety		RG2 (Ethr=1007lx)	RG1
NTC type	[kΩ]	10'	10'

*Murata NCP18XH103J03RB

Color coordinates

According to CIE 1931

Specification item	CIEx	CIEy
2200K	0.5020	0.4156
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797

Certificates & standards

Specification item	Compliant
ENEC	Pending
ENEC+	No
CE	Yes
RoHS	Yes
REACH	Yes
IP rating	No IP rating

Lumen maintenance

LHP G6

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	75°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	85°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	95°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
1500mA	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	96 000	95 000
	75°C	>102 000	>102 000	>102 000	>102 000	94 000	93 000
	85°C	>102 000	>102 000	>102 000	>102 000	84 000	84 000
	95°C	>102 000	>102 000	99 000	96 000	42 000	41 000

Reported data based on LM80 LED data (17 000h)

S9 G5

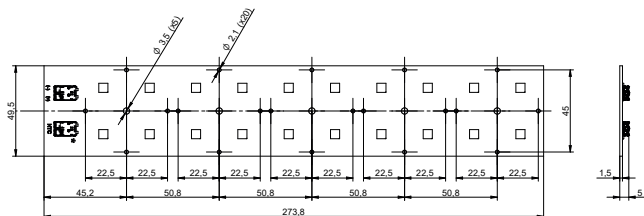
Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	55°C	>120 000	>120 000	>120 000	>120 000	101 000	99 000
	65°C	>120 000	>120 000	>120 000	>120 000	88 000	87 000
	75°C	>120 000	>120 000	>120 000	>120 000	80 000	76 000
	85°C	>120 000	>120 000	>120 000	>120 000	72 000	67 000
	95°C	>120 000	>120 000	>120 000	>120 000	66 000	59 000
If max	55°C	>120 000	>120 000	>120 000	65 000	69 000	39 000
	65°C	>120 000	106 000	100 000	53 000	54 000	29 000
	75°C	>120 000	78 000	78 000	44 000	43 000	22 000
	85°C	>120 000	59 000	61 000	37 000	35 000	17 000
	95°C	102 000	45 000	49 000	31 000	28 000	13 000

Reported data based on LM80 LED data (20 000h)

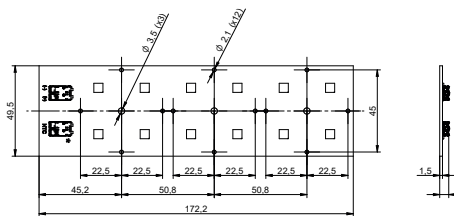
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Dimensions

RecLED 274x50mm 2x10

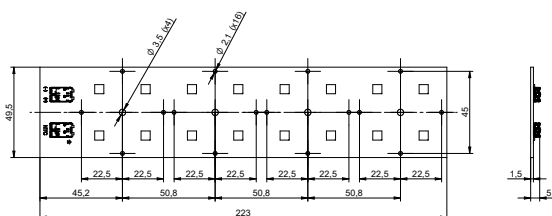


RecLED 173x50mm 2x6

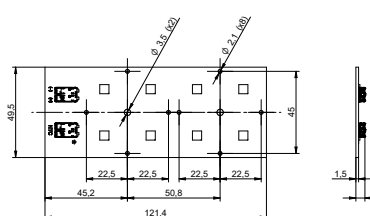


*only modules with NTC

RecLED 224x50mm 2x8



RecLED 122x50mm 2x4



Mounting

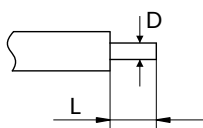
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

Protection against electric shock must be provided by the luminaire's enclosure.

Wiring

Wire cross section and strip length:



D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm ²	0.75mm ²
	AWG 24	AWG 18

L - strip length	Min	Max
	8mm	9mm

Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:

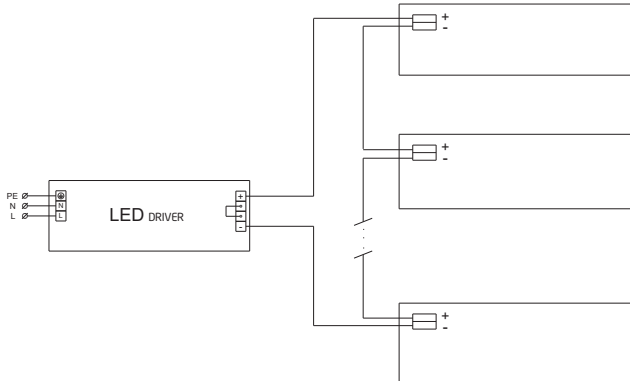


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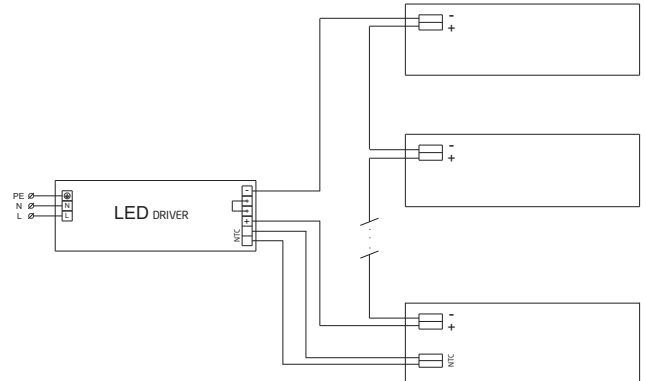
Connections

Max number of modules	Unit	Series	Parallel
RecLED 122x50mm 2x4 5050	[pcs]	16	-
RecLED 173x50mm 2x6 5050	[pcs]	10	-
RecLED 224x50mm 2x8 5050	[pcs]	8	-
RecLED 274x50mm 2x10 5050	[pcs]	6	-

without NTC



NTC



Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RecLED 224x50mm 3800lm 730 48V 2x8 5050 LHP G6	1010 137 76346	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 740 48V 2x8 5050 LHP G6	1010 137 76446	55	6600	300 x 266 x 83
RecLED 122x50mm 1900lm 730 24V 2x4 5050 LHP NTC G6	1010 137 92646	55	13200	150 x 266 x 83
RecLED 122x50mm 1900lm 740 24V 2x4 5050 LHP NTC G6	1010 137 92746	55	13200	150 x 266 x 83
RecLED 173x50mm 2900lm 730 36V 2x6 5050 LHP NTC G6	1010 137 93146	55	6600	300 x 266 x 83
RecLED 173x50mm 2900lm 740 36V 2x6 5050 LHP NTC G6	1010 137 93246	55	6600	300 x 266 x 83
RecLED 173x50mm 2900lm 740 36V 2x6 5050 LHP NTC G6	1010 137 93246	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 730 48V 2x8 5050 LHP NTC G6	1010 137 93646	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 740 48V 2x8 5050 LHP NTC G6	1010 137 93746	55	6600	300 x 266 x 83
RecLED 274x50mm 4800lm 730 60V 2x10 5050 LHP NTC G6	1010 137 94146	75	9000	300 x 266 x 83
RecLED 274x50mm 4800lm 740 60V 2x10 5050 LHP NTC G6	1010 137 94246	75	9000	300 x 266 x 83
RecLED 122x50mm 1900lm 730 24V 2x4 5050 S9 NTC G5	1010 137 95146	55	13200	150 x 266 x 83
RecLED 122x50mm 1900lm 740 24V 2x4 5050 S9 NTC G5	1010 137 95246	55	13200	150 x 266 x 83
RecLED 173x50mm 2900lm 730 36V 2x6 5050 S9 NTC G5	1010 137 95646	55	6600	300 x 266 x 83
RecLED 173x50mm 2900lm 740 36V 2x6 5050 S9 NTC G5	1010 137 95746	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 730 48V 2x8 5050 S9 NTC G5	1010 137 96146	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 740 48V 2x8 5050 S9 NTC G5	1010 137 96246	55	6600	300 x 266 x 83
RecLED 274x50mm 4800lm 730 60V 2x10 5050 S9 NTC G5	1010 137 96646	75	9000	300 x 266 x 83
RecLED 274x50mm 4800lm 740 60V 2x10 5050 S9 NTC G5	1010 137 96746	75	9000	300 x 266 x 83
RecLED 122x50mm 1900lm 730 24V 2x4 5050 LHP G6	1010 137 97646	55	13200	150 x 266 x 83
RecLED 122x50mm 1900lm 740 24V 2x4 5050 LHP G6	1010 137 97746	55	13200	150 x 266 x 83
RecLED 173x50mm 2900lm 730 36V 2x6 5050 LHP G6	1010 137 98146	55	6600	300 x 266 x 83
RecLED 173x50mm 2900lm 740 36V 2x6 5050 LHP G6	1010 137 98246	55	6600	300 x 266 x 83
RecLED 274x50mm 4800lm 730 60V 2x10 5050 LHP G6	1010 137 98646	75	9000	300 x 266 x 83
RecLED 274x50mm 4800lm 740 60V 2x10 5050 LHP G6	1010 137 98746	75	9000	300 x 266 x 83
RecLED 122x50mm 1900lm 730 24V 2x4 5050 S9 G5	1010 147 00346	55	13200	150 x 266 x 83
RecLED 122x50mm 1900lm 740 24V 2x4 5050 S9 G5	1010 147 00446	55	13200	150 x 266 x 83
RecLED 173x50mm 2900lm 730 36V 2x6 5050 S9 G5	1010 147 00846	55	6600	300 x 266 x 83
RecLED 173x50mm 2900lm 740 36V 2x6 5050 S9 G5	1010 147 00946	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 730 48V 2x8 5050 S9 G5	1010 147 01346	55	6600	300 x 266 x 83
RecLED 224x50mm 3800lm 740 48V 2x8 5050 S9 G5	1010 147 01446	55	6600	300 x 266 x 83
RecLED 274x50mm 4800lm 730 60V 2x10 5050 S9 G5	1010 147 01846	75	9000	300 x 266 x 83
RecLED 274x50mm 4800lm 740 60V 2x10 5050 S9 G5	1010 147 01946	75	9000	300 x 266 x 83