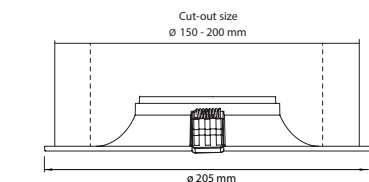


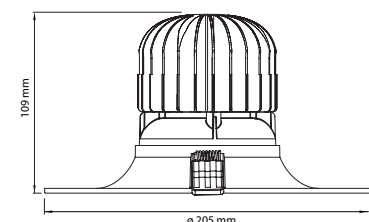
Index	2	Wiring diagram uni Casambi driver	7
Safety information	2	Wiring diagram uni DALI dim driver	7
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Always switch off mains power of the driver before connecting or maintaining any fixtures!			Do not stare into the LED	Ambiance Max. 40°	Qualified technician
	Make sure all connectors are connected properly	Use a source of AC power that complies to local electrical codes	Block access below the work area when maintaining the unit	Don't modify or install genuine parts on this product	Don't install in a flammable or explosive area
					Warning! Some surfaces can be hot

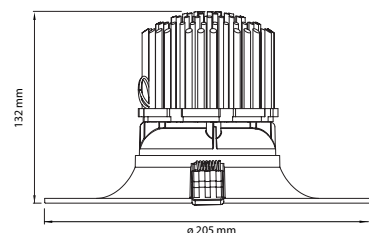
Emerald M



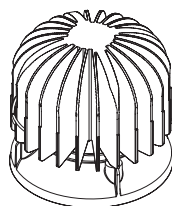
4 serie - Max. 15 Watt 5 serie - Max. 20 Watt 6 serie - Max. 28 Watt



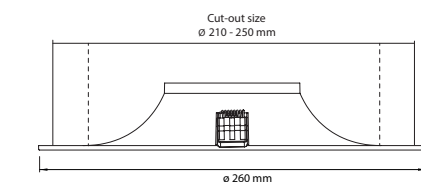
7 serie - Max. 36 Watt



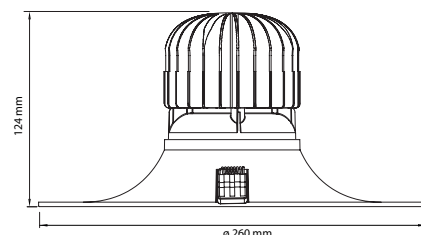
4 serie - Max. 15 Watt
5 serie - Max. 20 Watt
6 serie - Max. 28 Watt



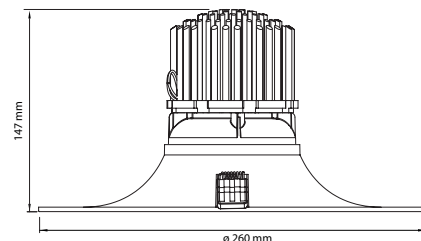
Emerald L



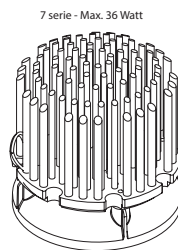
4 serie - Max. 15 Watt 5 serie - Max. 20 Watt 6 serie - Max. 28 Watt



7 serie - Max. 36 Watt



7 serie - Max. 36 Watt



Emerald 4 serie

LED: 1 x High Power CoB
Available colours: CRI-80: 2500K & 2700K
CRI-90: 2700K, 3000K, 3500K & 4000K
CRI-95: 2700K, 3000K & 4000K
CRI-98: 2700K, 3000K, 3500K & 4000K
Beam angle: 50° or 71°
Power supply: Max. 350mA
Power consumption: Max. 15 Watt
Housing: PC / aluminium
Weight: Emerald M: 246 gr
Emerald L: 336 gr
IP value: IP40
Measurements: Emerald M: 109 x 205 mm (hxø)
Emerald L: 124 x 260 mm (hxø)
Ambient temperature: -10° C till +40° C

Emerald 5 serie

LED: 1 x High Power CoB
Available colours: CRI-80: 2500K & 2700K
CRI-90: 2700K, 3000K, 3500K & 4000K
CRI-95: 2700K, 3000K & 4000K
CRI-98: 2700K, 3000K, 3500K & 4000K
Beam angle: 50° or 71°
Power supply: Max. 500mA
Power consumption: Max. 20 Watt
Housing: PC / aluminium
Weight: Emerald M: 324 gr
Emerald L: 464 gr
IP value: IP40
Measurements: Emerald M: 109 x 205 mm (hxø)
Emerald L: 124 x 260 mm (hxø)
Ambient temperature: -10° C till +40° C

Emerald 6 serie

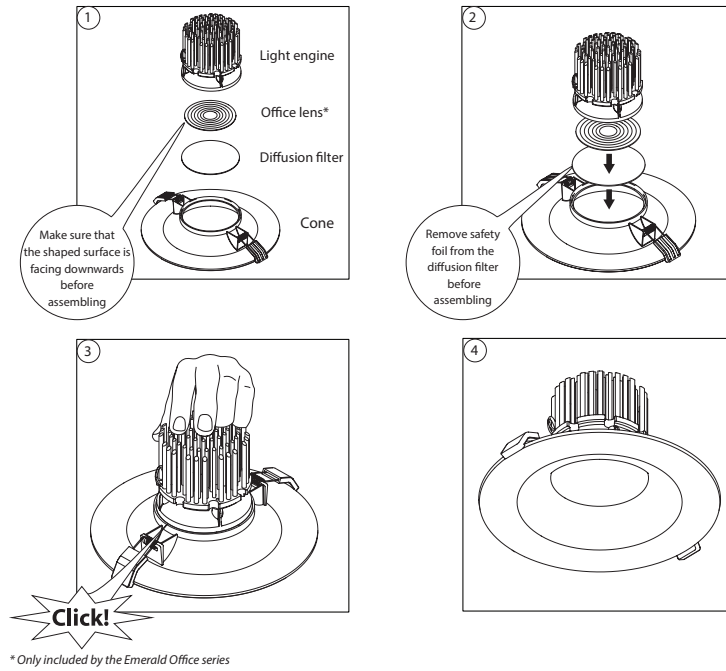
LED: 1 x High Power CoB
Available colours: CRI-80: 2500K & 2700K
CRI-90: 2700K, 3000K, 3500K & 4000K
CRI-95: 2700K, 3000K & 4000K
CRI-98: 2700K, 3000K, 3500K & 4000K
Dim To Warm: 1800K-3000K
Beam angle: 60° or 83°
Power supply: Max. 700mA
Power consumption: Max. 28 Watt
Housing: PC / aluminium
Weight: Emerald M: 324 gr
Emerald L: 464 gr
IP value: IP40
Measurements: Emerald M: 109 x 205 mm (hxø)
Emerald L: 124 x 260 mm (hxø)
Ambient temperature: -10° C till +40° C

Emerald 7 serie

LED: 1 x High Power CoB
Available colours: CRI-80: 2500K, 2700K
CRI-90: 2700K, 3000K, 3500K & 4000K
CRI-95: 2700K, 3000K & 4000K
CRI-98: 2700K, 3000K, 3500K & 4000K
Dim To Warm: 1800K-3000K
Beam angle: 60° or 83°
Power supply: Max. 900mA
Power consumption: Max. 36 Watt
Housing: PC / aluminium
Weight: Emerald M: 484 gr
Emerald L: 570 gr
IP value: IP40
Measurements: Emerald M: 132 x 205 mm (hxø)
Emerald L: 147 x 260 mm (hxø)
Ambient temperature: -10° C till +40° C

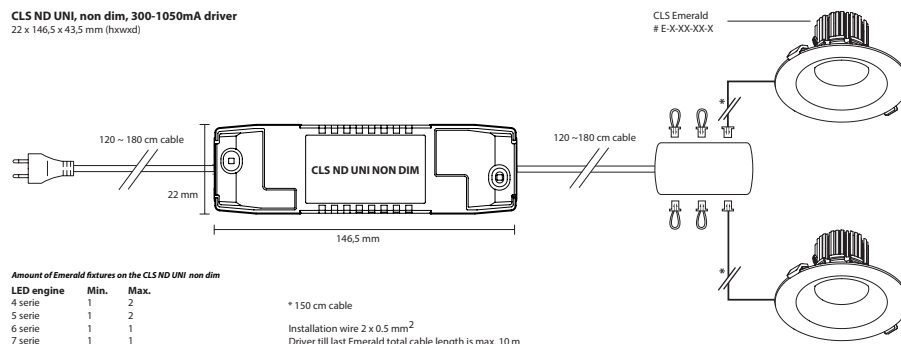
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ASSEMBLY

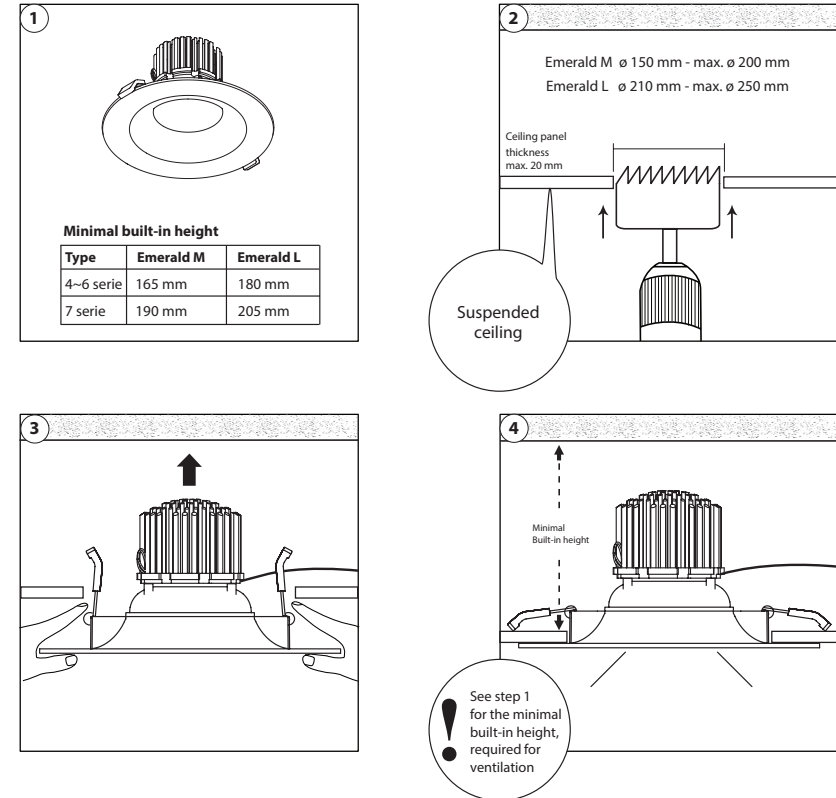


WIRING DIAGRAM UNI NON DIM DRIVER

CLS ND UNI, non dim, 300-1050mA driver
22 x 146,5 x 43,5 mm (hxwxd)



INSTALLATION

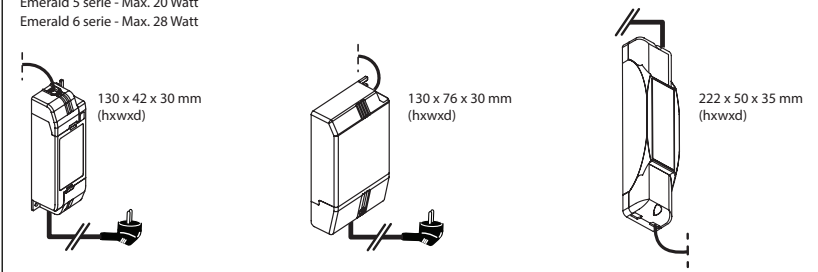


Drivers (included)

Emerald 4 serie - Max. 15 Watt
Emerald 5 serie - Max. 20 Watt
Emerald 6 serie - Max. 28 Watt

Emerald 7 serie - Max. 36 Watt

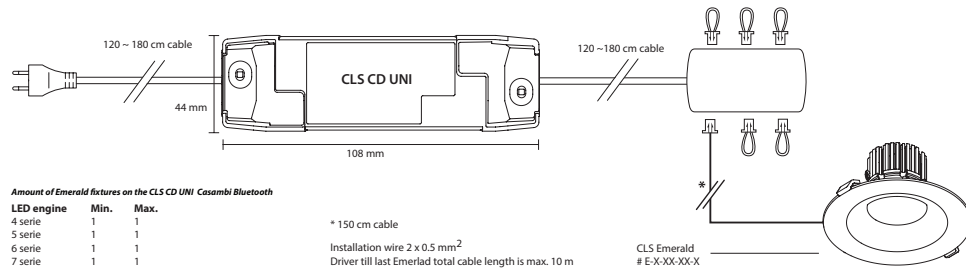
Emerald 4-7 serie



WIRING DIAGRAM CASAMBI BLUETOOTH

! Always switch off mains power of the driver before connecting any fixtures!

CLS CD UNI, Casambi Bluetooth, 350-700mA driver
30 x 108 x 44 mm (hxxwxd)

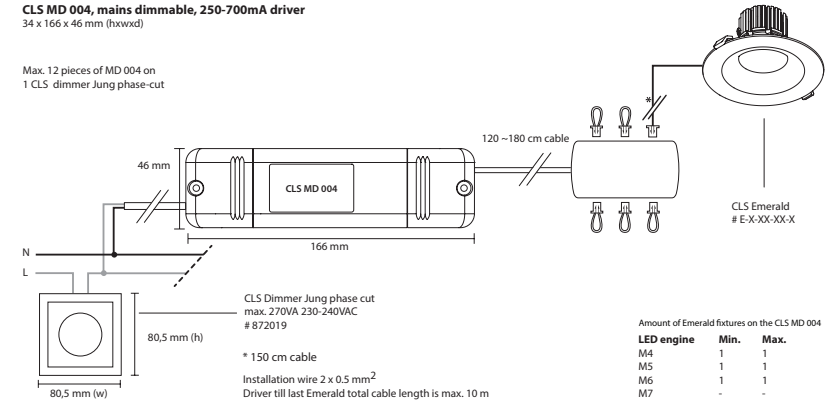


WIRING DIAGRAM MAINS DIM DRIVER

! Always switch off mains power of the driver before connecting any fixtures!

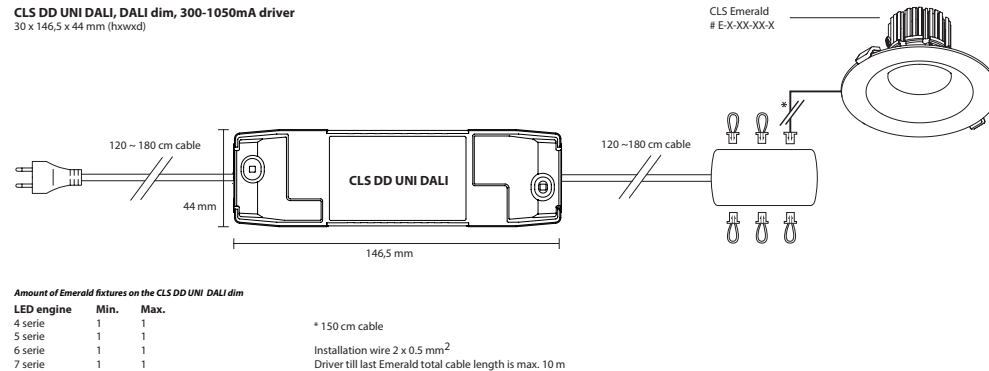
CLS MD 004, mains dimmable, 250-700mA driver
34 x 166 x 46 mm (hxxwxd)

Max. 12 pieces of MD 004 on
1 CLS dimmer Jung phase-cut



WIRING DIAGRAM UNI DALI DIM DRIVER

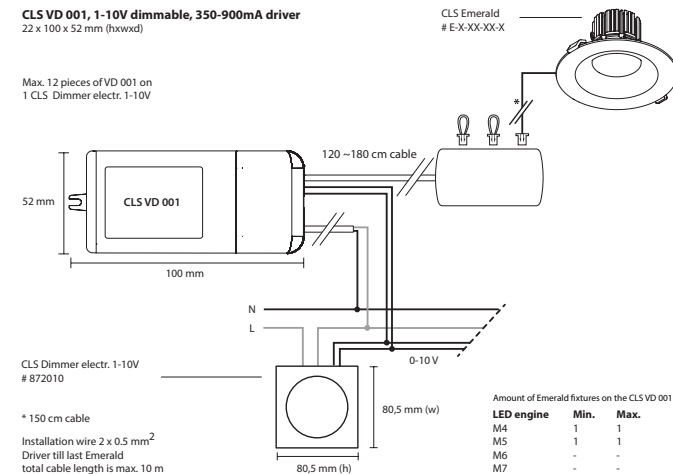
CLS DD UNI DALI, DALI dim, 300-1050mA driver
30 x 146,5 x 44 mm (hxxwxd)



WIRING DIAGRAM 1-10V DIM DRIVER

CLS VD 001, 1-10V dimmable, 350-900mA driver
22 x 100 x 52 mm (hxxwxd)

Max. 12 pieces of VD 001 on
1 CLS Dimmer electr. 1-10V



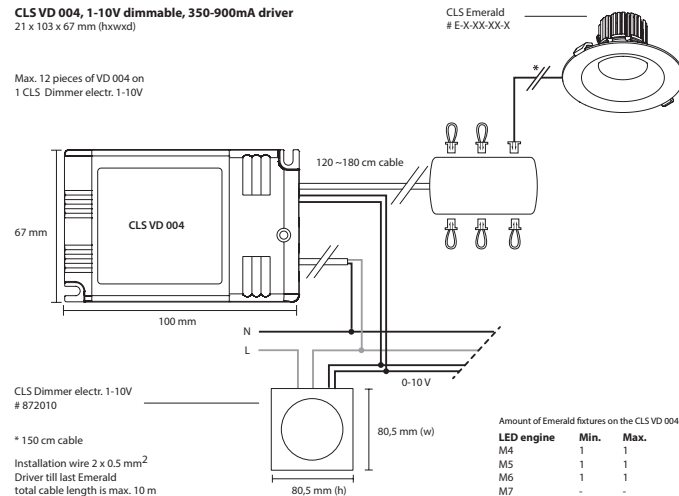
WIRING DIAGRAM 1-10V DIM DRIVER



Always switch off mains power of the driver before connecting any fixtures!

CLS VD 004, 1-10V dimmable, 350-900mA driver
21 x 103 x 67 mm (h x w x d)

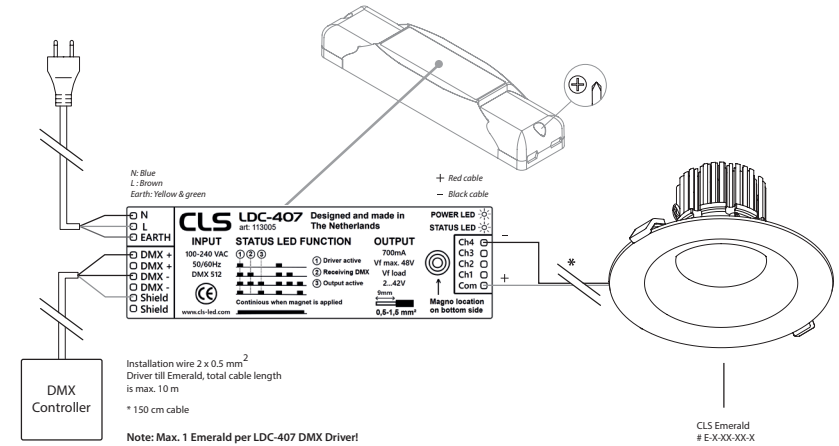
Max. 12 pieces of VD 004 on
1 CLS Dimmer electr. 1-10V



WIRING DIAGRAM LDC-407 DRIVER



Always switch off mains power of the driver before connecting any fixtures!

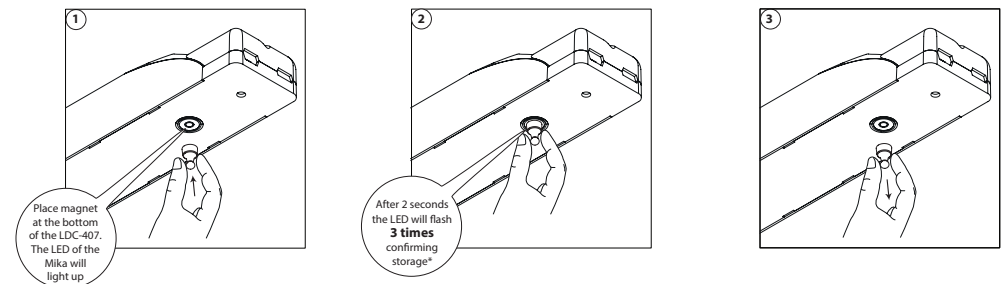


PROGRAMMING

All settings can be configured via DMX. Settings can be configured at once or separately. When one or a couple settings needs to be changed just leave all other setting values zero. This keeps those settings unchanged. Please check the table for more information.

Always use a DMX controller with digital interface. If not available, you can purchase the CLS D-ta DMX addresser unit (#122200).

First make sure to set the DATA on the DMX controller. To program the setting into the LED fixture follow the next steps.



* If the LEDs flashes 10 times, something went wrong. Please try again. If the problem continues to occur, please contact your local sales distributor.

PROGRAMMING TABLE

PROGRAMMING TABLE				
DMX	Function	Data	Parameters	Description
CH1	Set address 001 to 255	0	0 = no change	Use this DMX channel to set address from 1 to 255. (DMX address is called "n")
		1...255	DMX address = 1...255	
CH2	Set address 256 to 508	0	no change	Use this DMX channel to set address from 256 to 508. (DMX address is called "n")
		1...255	DMX address = 256...508	
CH3	Static behavior	0	no change	If no DMX is present the fixture will respond like set in this function.
		1	last DMX value	
		2	output off	
		3	load static values	
CH4	Soft dim	0	no change	When dynamic softdim is activated an extra DMX channel behind the colours and/or master controls the soft dim reaction. If fixed no extra DMX channel is used.
		1	off	
		2	Dynamic	
		3-250	Fixed interpolation delay	
CH5	Master control	0	no change	If master is first channel is selected the channel will be DMX channel "n". If master is last channel is selected the channel will be "n+x" ("x" is calculated in the output patch).
		1	no master used	
		2	master is first channel	
		3	master is last channel	
CH6	Output 1 patch	0	no change	Each output channel can be patched to respond to the desired DMX channel. This enables the user to mix up the colours according to the controller that is used.
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH7	Output 2 patch	0	no change	Example: all outputs are patched as 1 All outputs will be controlled by DMX channel "n". If master is used total DMX channels will be 2 otherwise it uses 1 channel ("x" = 1).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH8	Output 3 patch	0	no change	Example: output 1&2 are patched as 1 and 3&4 are patched as 2 Output 1 & 2 will be controlled by DMX channel "n". Output 3 & 4 will be controlled by DMX channel "n+1". If master is used total DMX channels will be 3 otherwise it uses 2 channels ("x" = 2).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH9	Output 4 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
CH10	Static output 1	0	no change	Each output channel can be set to a static intensity.
		1	output off	
		2...255	intensity 2...255	
CH11	Static output 2	0	no change	If no DMX is present and Static behavior is set to "load static values". The outputs will be set to the configured intensity values.
		1	output off	
		2...255	intensity 2...255	
CH12	Static output 3	0	no change	
		1	output off	
		2...255	intensity 2...255	
CH13	Static output 4	0	no change	
		1	output off	
		2...255	intensity 2...255	
CH14	Load default settings	0	no change	This function resets all settings to the Factory setting.
		1	Load Factory settings.	

	Number of DMX channels needed			
LED colour	1	2	3	4
Single colour	✓			
Tunable White		×		
ColourFlow				×

LIST OF SYMBOLS

	Protection class One, two or three		Retail & Food LED modules Clothing, furniture, kitchens, jewellery, shoes, bread, meat, fish and vegetables & fruit.
	Application area Indoor or outdoor		Colour Available colours: Amber, blue, red or green
	Application area Floor, wall or ceiling		White colour temperature In different Kelvin values: Cold white, neutral white, warm white or extra warm white
	Swivel Fixture is horizontally rotatable, indicated in degrees		Curve Minimal bending curve in centimeters
	Swivel Fixture is vertically rotatable, indicated in degrees		Cutting length Indicated by the cutting marks
	Multiple connection Daisychain connectivity		LED pitch Pitch between the LEDs in millimeters
	Installation depth In centimeters		Power supply In VDC, VAC or milliAmpere
	Installation size In centimeters		Power consumption In VA or Watt
	Cable length Maximum cable attached to the fixture in centimeters		Dimmable 1-10 Volt, Phase, individual, DMX dimmable or DALI
	Driver Inclusive or exclusive Internal or external		PWM dimming Traditional PWM dimming, DMX analog or DMX Hybrid dim
	Weight In grams/kilograms		Bluetooth controlled By Casambi
	Pressure Maximum pressure on the fixture in kg/cm²		Magne dimming Accurate dimming from 100 - 1% by using a magnet
	Lifespan Of the light source in hours		Dynamic Control Dynamic Power Control or Dynamic Temperature Control
	Lenses Available lenses, indicated in degrees		DMX input Fixture works on DMX512 protocol or Wireless DMX
	Performance Zoom Adjustable beam angle		Combined product Compose your own fixture
	LEDs Kind of LED used in the fixture		Warranty 3 or 5 years warranty on the product
	Plug & play Easy connection using the SmartConnect system		Conformité Européenne CE marking for free marketability of industrial goods within the EU
	IP value Ingress Protection classifies the degrees of protection provided against the intrusion of the product		Energy label
	Colour changing RGB, RGB-W, RGB-A, AWB or Tunable White		Lightsource Equipped with a CLS, Bridgelux or a Xicato LED module