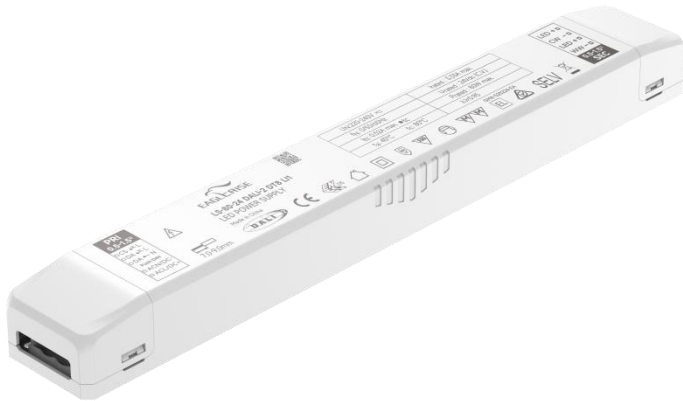# 80W DT8+PUSH Dimming constant Voltage

Features

- For luminaries of protection Class II，SELV，Independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OTP/OVP
- Power Factor：≥0.95（Typ.）
- Efficiency：≥89%（Typ.）
- Support Tunable White DT8, Push Dimming
- DALI maintainace(Part 251,252,253)
- 5 years warranty

Applications

- LED strips
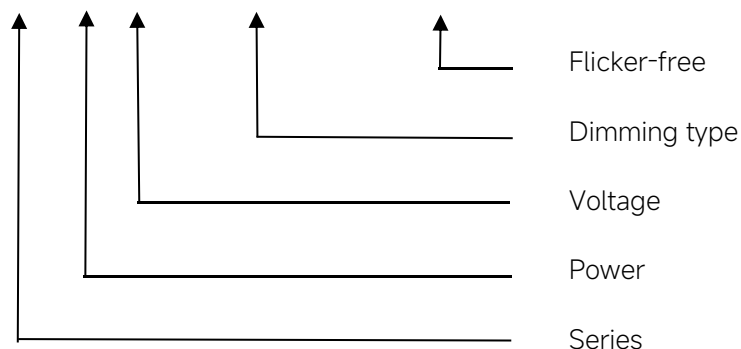
■Approve

CE CB EK CCC Note:Non IC

DALI 2 EL SELV

◆ Description

LS-80-24 DALI-2 DT8 LI1 is a 80W constant voltage LED driver that operates from 198-264Vac input with 24V output voltage. With it's compact dimensions from 318 x 38 x 30 mm. It is easy to integrate in LED strips products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

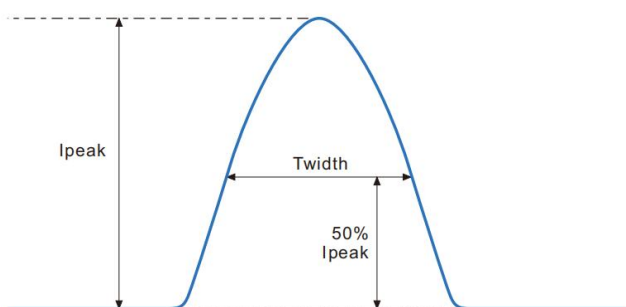## ◆ Model code

LS-80-24 DALI-2 DT8 LI1

- Flicker-free
- Dimming type
- Voltage
- Power
- Series

◆ Specification

Output	Constant Voltage	24VDC
	Current Range	0-3.33A
	Voltage Accuracy	±5%
	Output HF voltage ripple(≥1KHz)	±1%
	Output LF voltage ripple(≤120Hz)	±1%
	SVM	≤0.4
	Pst	≤1
	Efficiency(Typ.)	≥89%@Full load,230V
	EOFI	15%
Input	Rated input voltage	220-240V
	Range of input voltage	198-264VAC
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition
	Range input voltage(VDC)	176-280VDC
	Frequency(Hz)	0/50/60 Hz
	Displacement factor	≥0.9
	Power Factor	≥0.95 @full load, 230Vac
	Input Current max	0.52A Max @full load, 240Vac
	Start-up time	＜0.8S
	Switch over time(AC/DC mode)	＜0.5S
	Standby Power	≤0.5W, @DIM TO OFF, 230Vac
	Network Standby Power	≤0.5W, @DIM TO OFF, 230Vac
	THD (Typ.)	＜10% @230Vac,Full load
Dimming	Dimming	YES
	Dimming mode	DALI-2（IEC 62386-101,102,207,209,251,252,253） &Push Dimming (Corridor Function)
	Dimming depth	1%
	Dimming current range	1-100%
Protection	Over Load Protection	105-150%
		YES/Auto Resume
	Short circuit Protection	YES/Auto Resume
	Over Temperature Protection	YES/Auto Resume
capability	Surge capability (L-N)	1KV
	Surge capability (L/N-Ground)	NA
Environment	Operating Temperature	-20℃~+45℃
	Humidity	20%-90%RH
	Tc	85℃
	Storage Temperature	-30℃~+85℃
	Life time	＞50000h@Tc=80℃,230VAC,full load

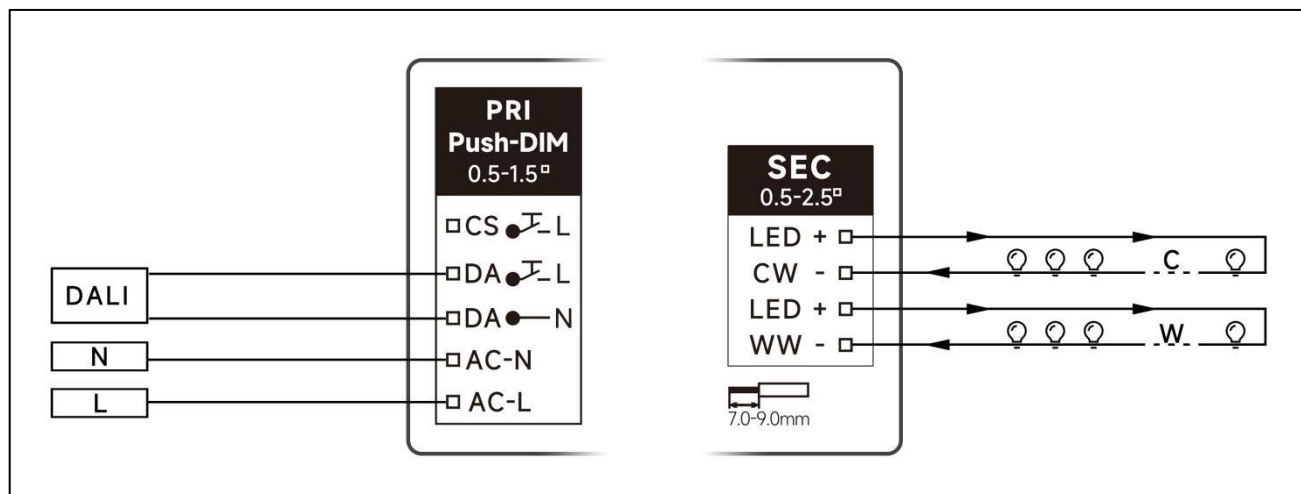| Surface	Ripple & Noise	≤25dB(A)@20cm
	Dimension	318X38X30(LXWXH)mm
	material	PC
Standards	Safety	IEC61347- 1, IEC61347-2- 13;EN61347- 1, EN61347-2- 13;EN61347- 1, EN61347-2- 13, EN62384;GB19510. 1, GB19510. 14;AS/NZS 61347- 1, AS/NZS 61347-2- 13
	EMC	EN55015, EN61000-3-2, EN61000-3-3, EN61547;GB/T17743;GB17625. 1;EN 62493
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
DALI performance	EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2,including part251,252,253)	
Note	1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25℃ of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor. 3.Switch and dimmer are not recommended to connect between this product output and luminaries. 4.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements，EMC is not considered.	

◆ Inrush Current

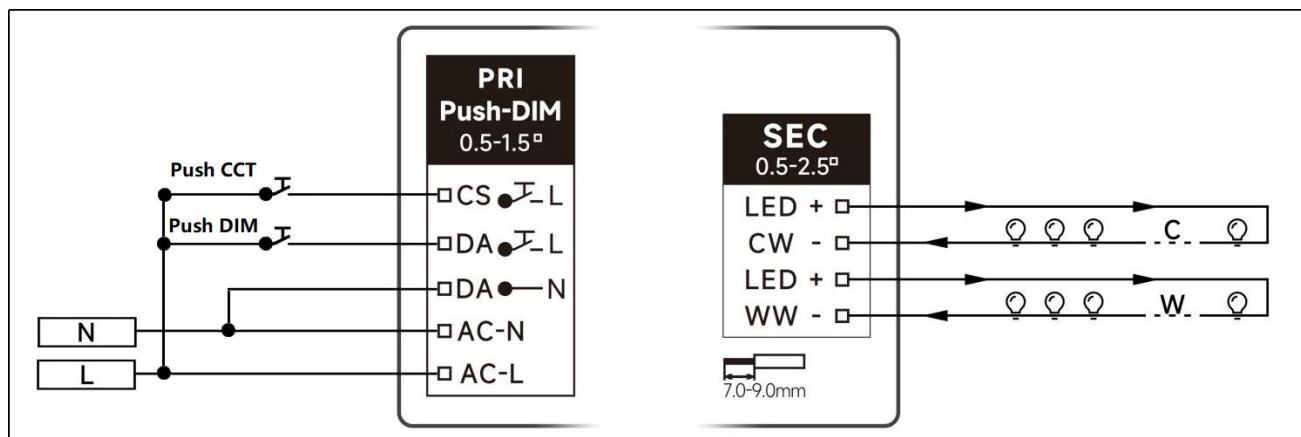| I^{peak}	T_{width}	B10	B16	B20	C10	C16	C20
30.3A	256μs	10pcs	16pcs	20pcs	15pcs	24pcs	30pcs

Remarks:

1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.

2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.
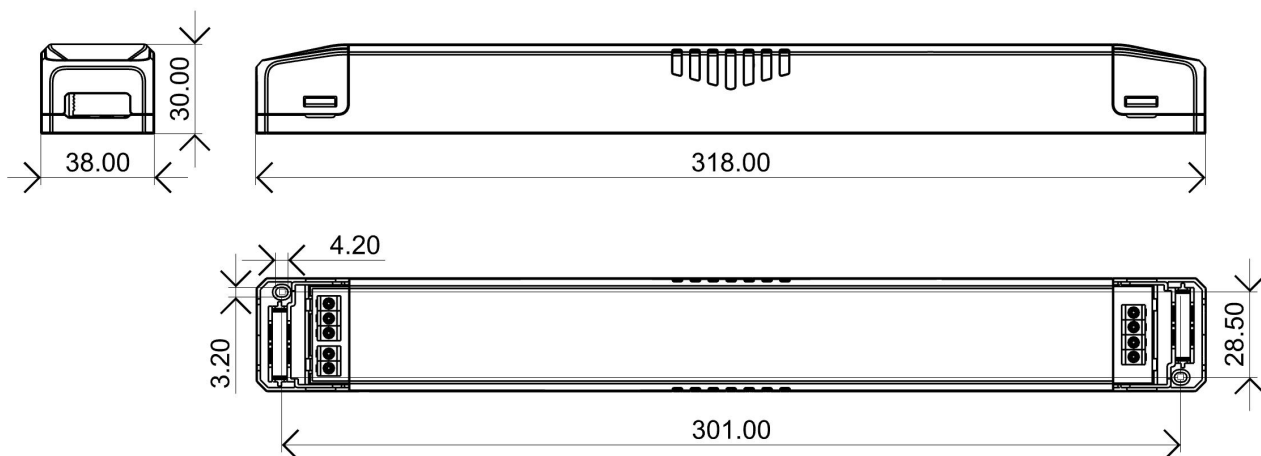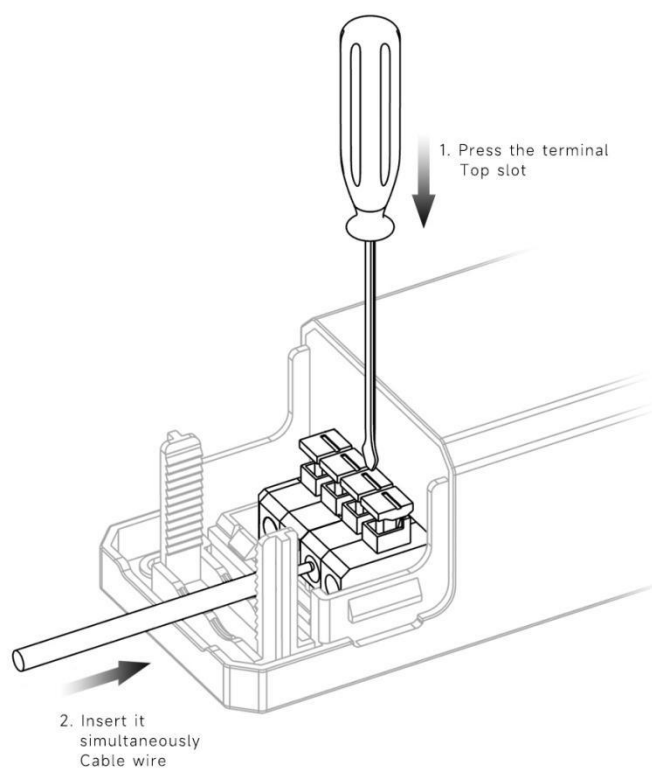
◆ Wiring diagram

DALI Connection

push DIM/CCT Connection

◆ 2D diagram

30.00

38.00

318.00

4.20

3.20

28.50

301.00

Terminal

1. Press the terminal
Top slot

2. Insert it
simultaneously
Cable wire

Stock code : 002922

Article information 2024/ 12/30   REV: B   lighting.eaglerise.com   YGE-DZ-YF-002-07A

◆ Wiring & Connections

	Specification item	Value （Unit ）
Input	Input wire cross-section	1.0...1.5 mm^2
	Input wire gauge.	16...18 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	1.0...1.5 mm^2
	Output wire gauge.	16...18 AWG
	Output wire strip length	7...9mm

◆ Recommended wire

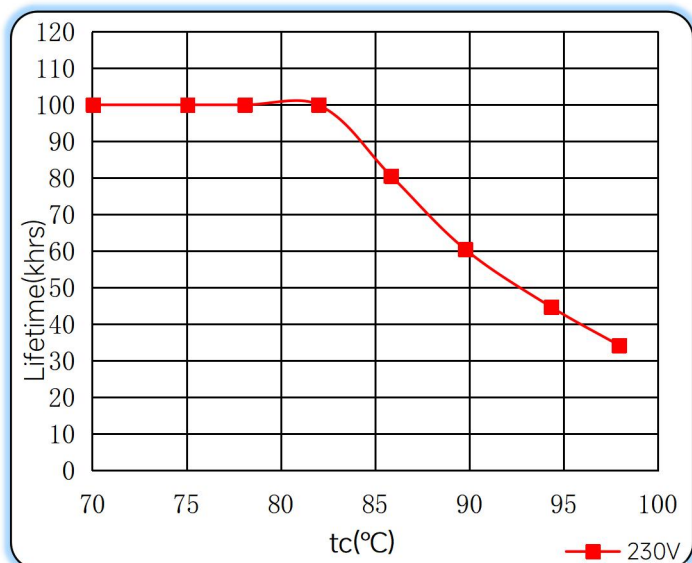| Wire cross-section	Wire type
2*0.5mm^2	H03VVH2-F 2core
2*0.75mm^2	H03VVH2-F 2core
1.5mm^2	CCC 08(RV-90)
16AWG(1.25mm^2)	UL1015

Note:Solid wire is risky to use on an angled terminal.Stranded wire is recommended for this kind of use.
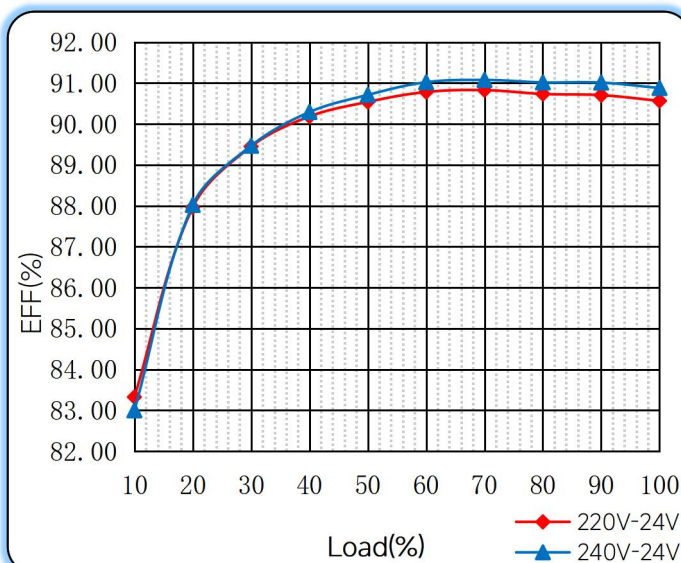
◆ Packaging

Model	Product Dimensions(mm)	weight/piece	Outer carton dimension(mm)	Quantity/carton	Net weight/carton(Kg)	Gross weight/carton(Kg)
LS-80-24 DALI-2 DT8 Ll1	318X38X30mm	0.3	370X275X215mm	35	11	11.6

◆ Curve for LS-80-24 DALI-2 DT8 LI1

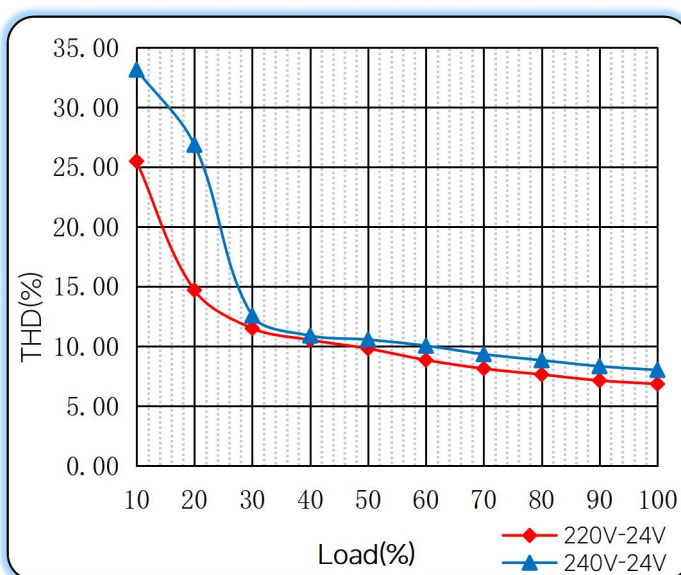### Lifetime vs. Temperature Curve

Efficiency vs. Load
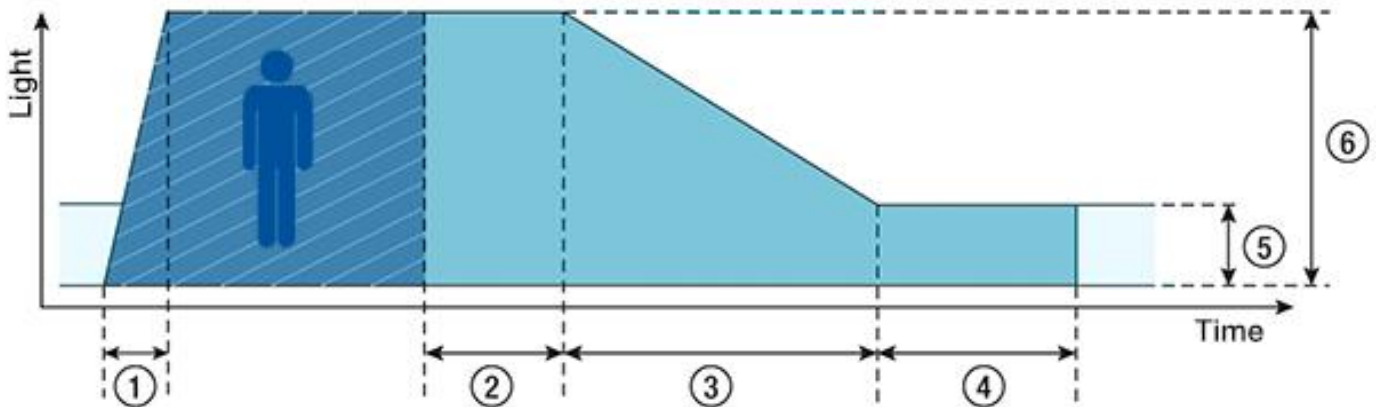

Power Factor Characteristics

THD vs. Load

Stock code : 002922

Article information 2024/ 12/30   REV: B   lighting.eaglerise.com   YGE-DZ-YF-002-07A

◆ Push dimming operation

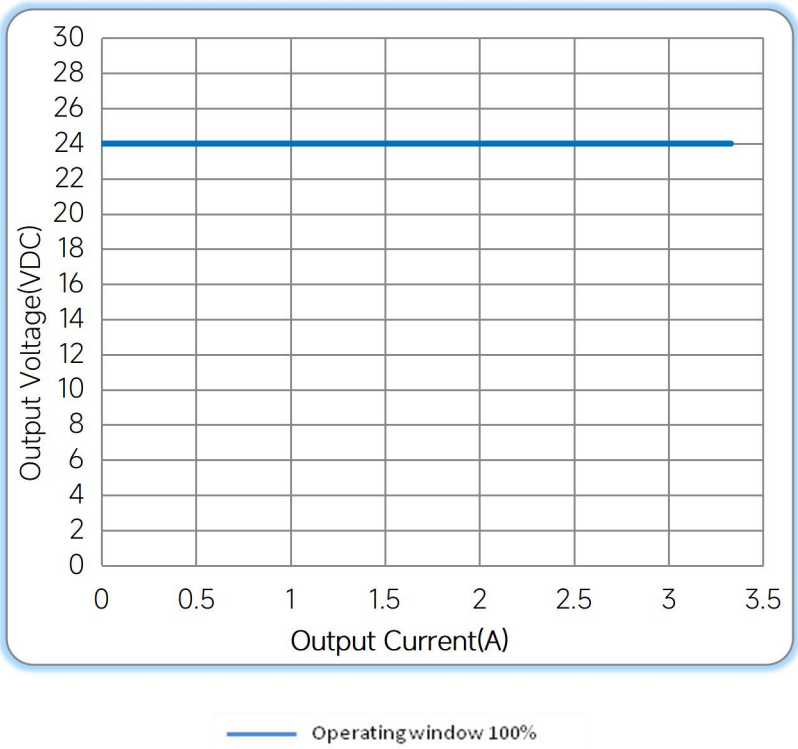| Action	Action duration	Function
Short push	<0.5s	Turn on/off
Short push twice	<0.5s	LED on：Save current brightness level LED off： Delete saved level and turn on at 100% brightness
Short push five times	<3s	Quit Corridor mode
Long push	0.5-14s	Dimming up or down
Long push	15s-2mins	Sync all LEDs to be 100% brightness
Long push	>2mins	Enter Corridor mode - LED keep 100% brightness for 2mins. Then brightness will turn to be 10% within 32s if no action during 2mins 100% brightness.

Note:

1.The factory default brightness is at 100%.

2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button

3.The maximum length of the cable from the push button to the last driver is 200 meters.

◆ Corridor mode

◆ ①**Fade-in time(0.5s):** the time that starts as soon as the presence of a person is detected. During the fade-in time the luminous intensity is faded up to the presence value.

◆ ②**Run-on time(120s):** the time that starts as soon as the presence of a person is no longer detected. If the presence of a person is detected again during the run-on time the run-on time is restarted from zero. If no presence is detected during the run-on time the fade time is started as soon as the run-on time expires.

◆ ③**Fade time(32s):** the time during which the luminous intensity is faded from the presence value to the absence value.

◆ ④**Switch-off delay (level=10%.Non-configurable):** the time during which the absence value is held before the lighting is switched off. Depending on the profile selected the switch-off delay may have different values or may not be defined.

◆ ⑤**Absence value(default: 10 %):** the luminous intensity when there is no person present.

◆ ⑥**Presence value (default: 100 %):** the luminous intensity when persons are present.

◆ Operating window

Operating window 100%

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/07/12
Tc	80℃	85℃	B	2024/12/30

Remark:The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : https://lighting.eaglerise.com

EAGLERISE   Manual