



## Constant Current Dimmable Driver

Model: L75C150-700N-D-F



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (typical value)	Output Voltage	No load Voltage
L75C150-700N-D-F	150-700mA	0.36A	81W	8.1-75W	0.95	94.5%	54-240V	300V

\* Test result @230V, 50Hz, Full Load. Current setting @ 1mA-steps (NFC)

### 1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI-2
	Output Features	Non-Isolation
	IP Grade	IP20
	Insulation Class	Class I
Input	Rated Input Voltage	220-240V
	Range of Input Voltage	198-264VAC or 198-280VDC
	Frequency	0/50-60Hz
	Input Current	≤0.36A(230VAC, full load)
	Input Power	≤81W(230VAC, full load)
	Power Factor	≥0.95(230VAC, full load)
	THD	≤15%(230VAC, full load)
	Standby Power Consumption	≤0.5W Dim to off, 230VAC
Output	Output Voltage Range	54-240VDC
	No Load Voltage	300VDC Max.
	Output Current	150-700mA
	Max. Output Power	75W Max.
	Efficiency(typical value)	94.5%@230VAC, Output Volt Max
	Current Ripple (≤120HZ)	<3% (Imax-Imin)/(Imax+Imin)
	Current Accuracy	±5%
	PSTLM	≤1
	SVM	≤0.4
	Starting Time	≤1S (230VAC, full load, by DALI system)
	Emergency output coefficient	1
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length: 20m,same port of DALI)
	PUSH dimming terminal	PUSH dimming terminal (Max. lead wire length: 20m,same port of DALI)



	DALI function	DALI dimming (Max. lead wire length: 300m) Logarithmic or linear dimming curves are available DALI-2 certified incl. Parts 251, 252, 253,CLO
	Dimming range	DALI dimming: 1%-100% , Dim to off .
	Current Interface	Near field communication (NFC)
	Adjustable output current	1mA-steps (NFC)
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	/
	Insulation voltage	O/P to PE , 1.75KVac/1min I/P to PE , 1.75KVac/1min
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	< 250μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-20...+55℃
	Ts/Storage Temperature	-30...+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%-90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in
	PRI Wire preparation	0.75 -1.5□/ 8-9mm
	SEC Wire preparation	0.5-1.5□/ 8-9mm
	DALI Wire preparation	0.5-1.5□/ 8-9mm
	Dimension	360*30*11mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN61347-1,EN61347-2-13
	EMC Standards	EN55015,EN61000-3-2,EN61000-3-3,EN61547
	Performance	EN62384
	DALI performance	EN62386-101,102,207,251,252,253
	Surge	L-N:1KV (L/N)-PE:2KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h @Ta=55℃
	Noise	≤ 22dB @Background noise ≤15dB , Interval≥20cm

Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.

## 2. Connected quantities of different current Breaker

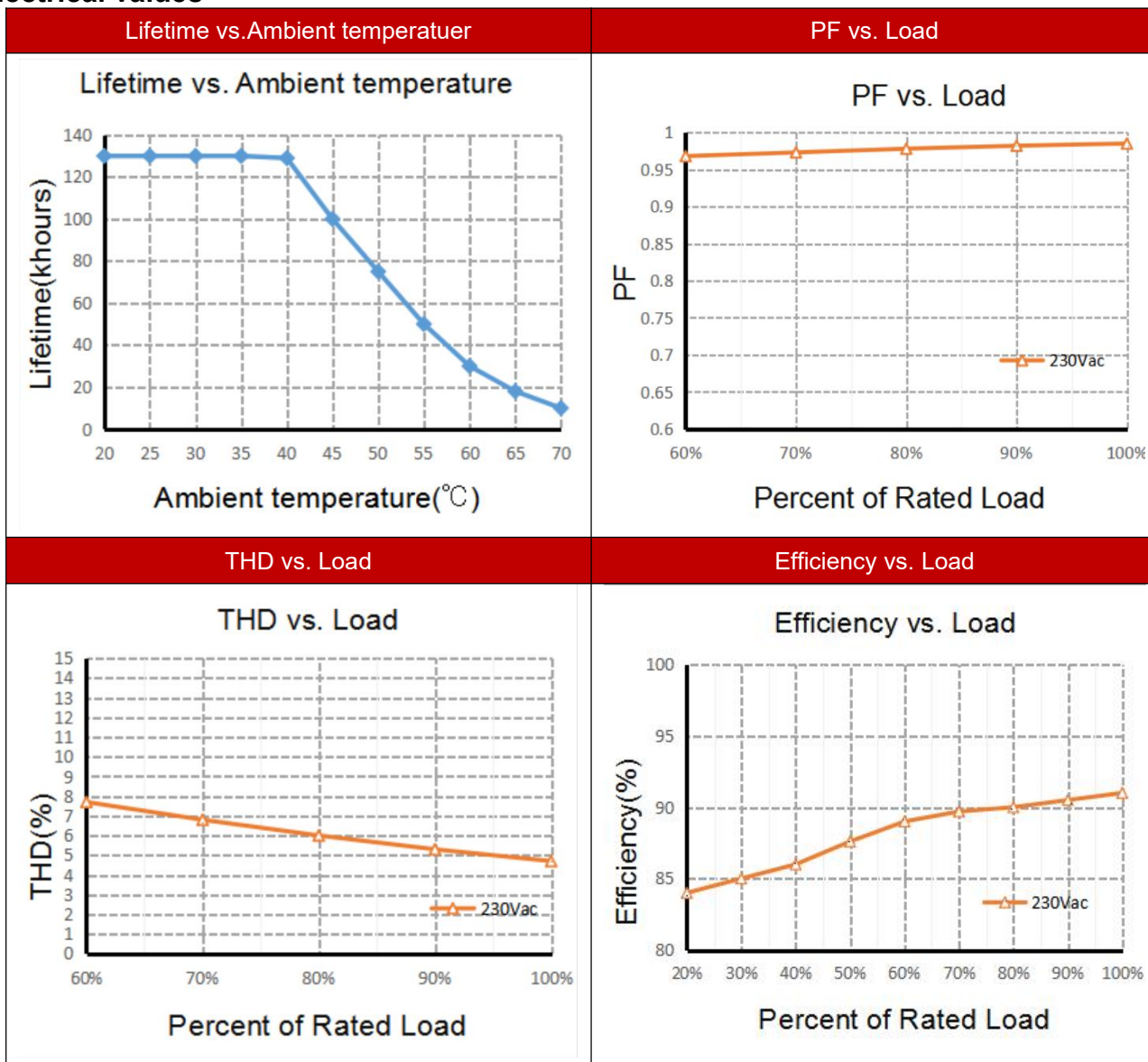
TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B		10	13	16	20	25	@230VAC	60	200us
TYPE C		16	21	26	32	40			
TYPE D		26	33	41	51	64			



3. Label

	<p><b>KGP</b> LED Dimmable Driver L35C75-400N-D-F Constant Current Type</p>	<p>Input Voltage:220-240V Input Frequency:0/50-60Hz Power Factor(<math>\lambda</math>):<math>\geq 0.95</math> <math>I_{in} \leq 0.19A</math></p>	<p><math>U_{rated}=54-240VDC</math> <math>I_{range}=75-400mA</math> Prange=4-38W <math>t_a:55^{\circ}C</math> <math>t_c:85^{\circ}C</math></p>			<p>Uout:Max.300VDC For LED modules only</p>	

4. Electrical values

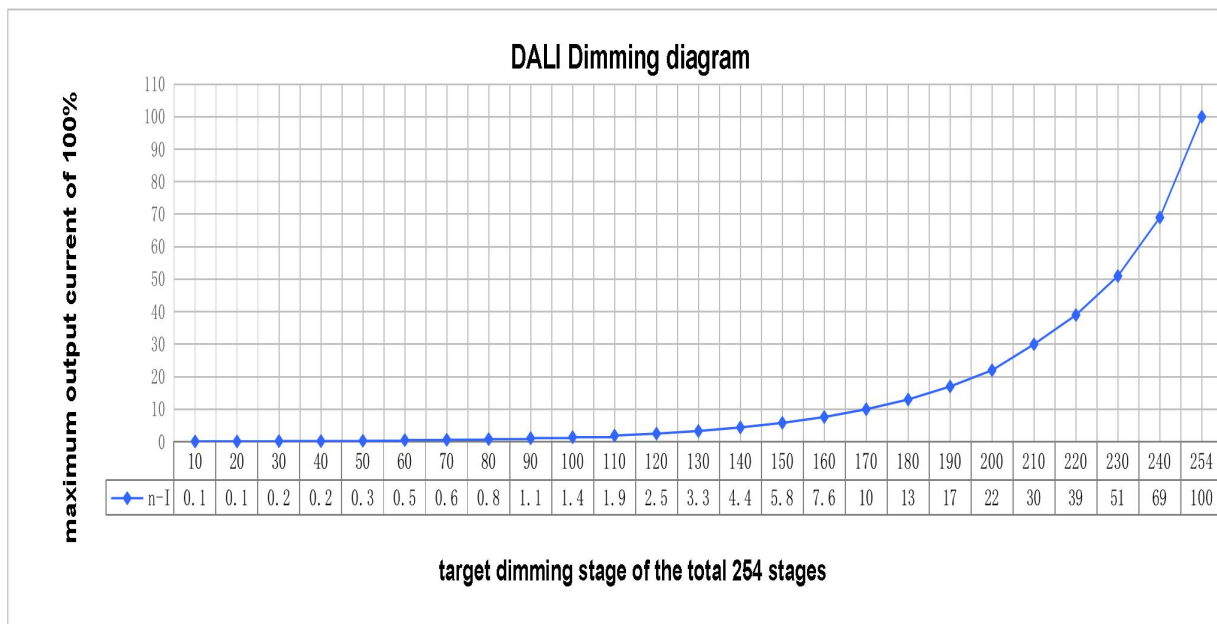


## 5. DALI dimming curve

4.1 formula for DALI dimming.

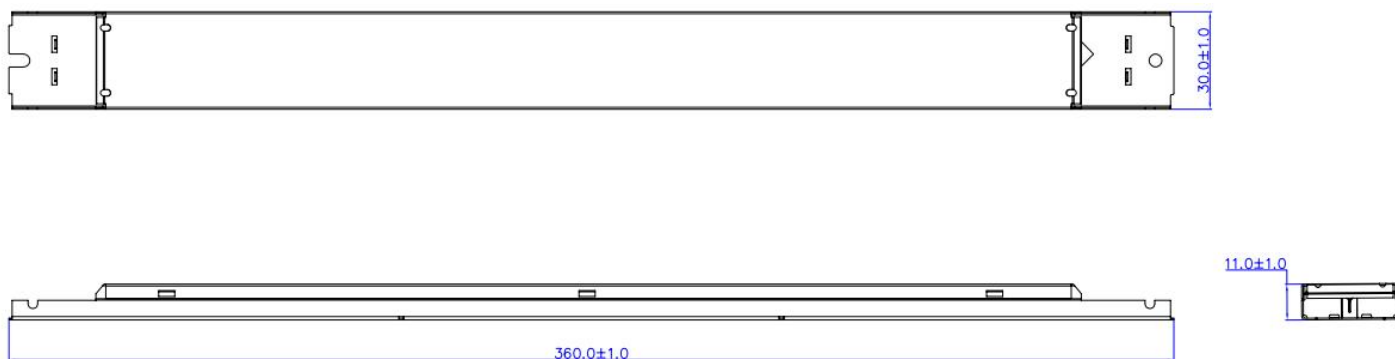
$$X(n) = 10^{\left\{ \left[ \frac{(n-1)}{(253/3)} \right] - 1 \right\}}$$

Here, n means the target dimming stage of the total 254 stages.



X(n) means the percent of the maximum output current

## 6. Dimension (Unit: mm)

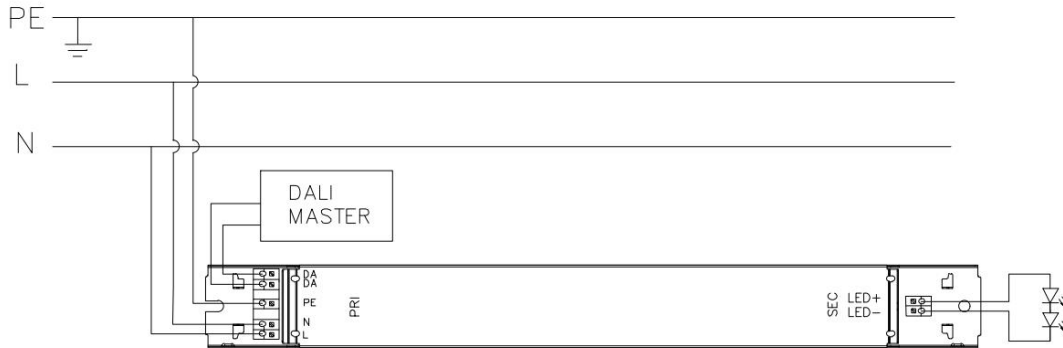


## 7. Packing information

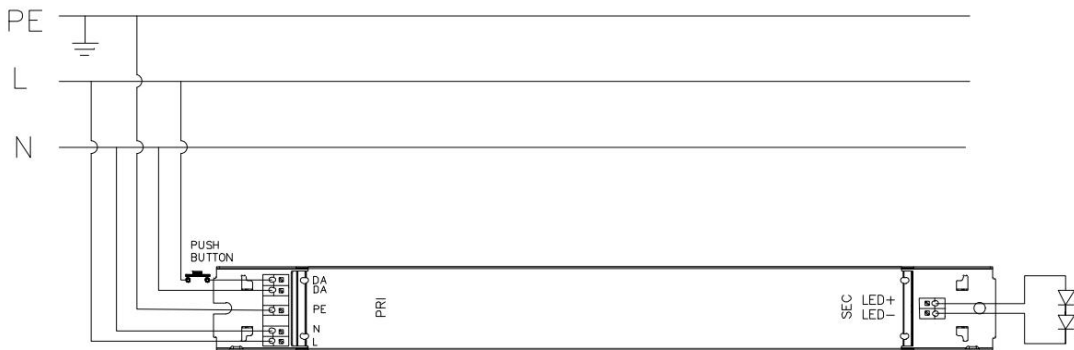
Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
L75C150-700N-D-F	385*330*140MM	80PCS	0.19	15.2	15.73



**Fig. A: DALI Dimming**



**Fig. B: Push Dimming**



**Remark: Push Dim function**

Action	Action duration	Function
Short push	<0.5s	Turn on/off
Short push five times	<3s	Quit Corridor mode
Long push	0.5-14s	Dimming up or down
Long push	10s-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 1mins 10% brightness.

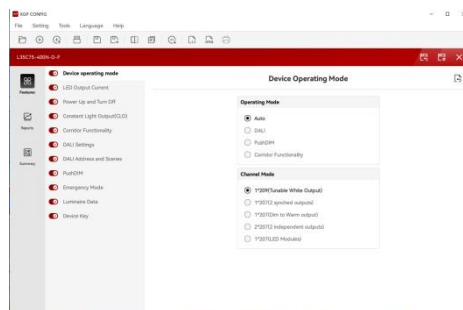
- 1.The factory default brightness is at 100%.
- 2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button
- 3.The maximum length of the cable from the push button to the last driver is 200 meters









## 9. NFC Reader (optional)

### Feature:

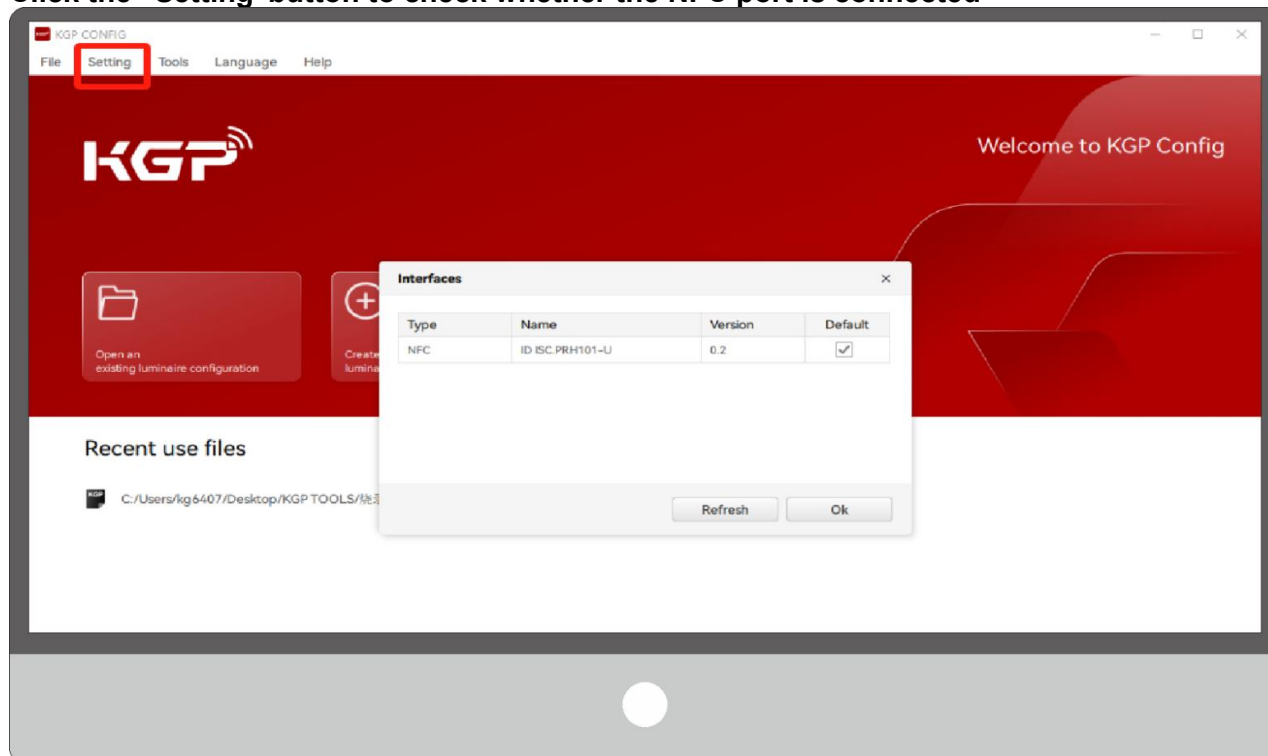
Easily on-line read a output current from a driver or write a new current data to a driver throughout KGP NFC reader within few seconds.



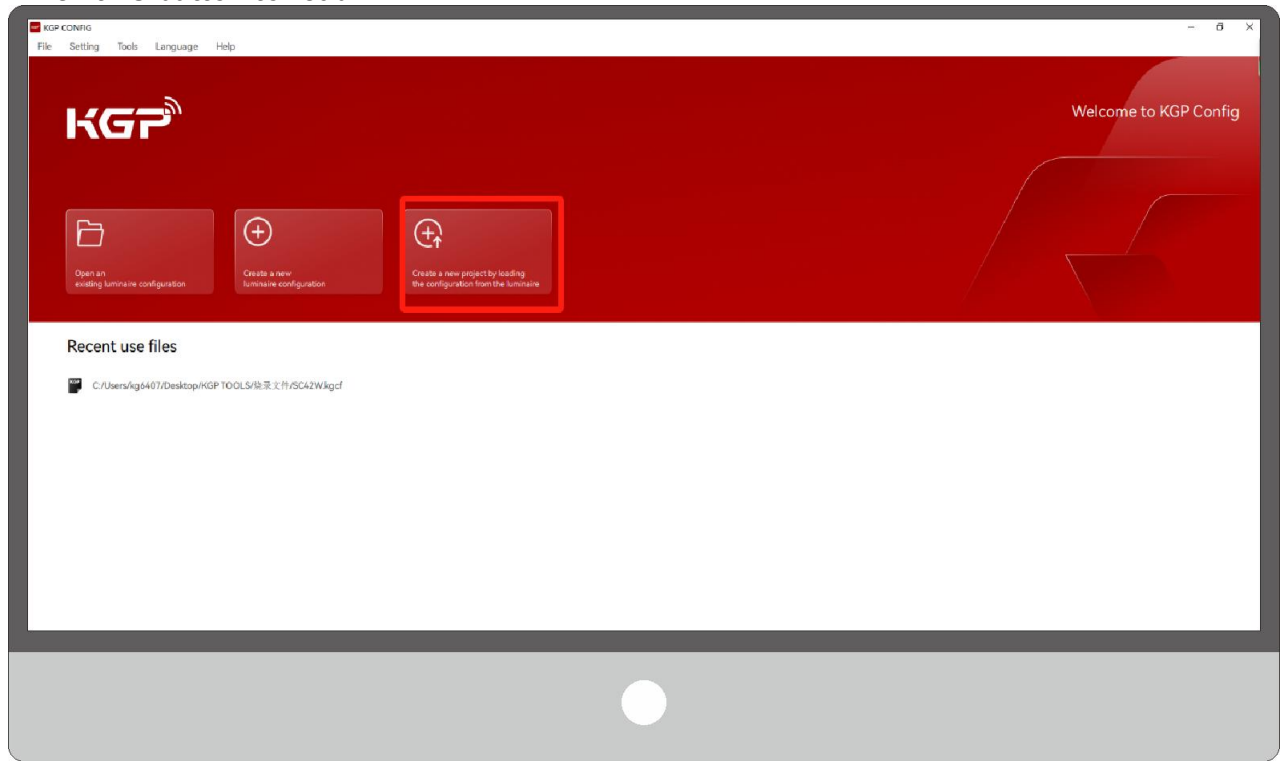
Product	Description	Interface	Matching antenna	Zhaga approval	Usage
 ID CPR30+	Desktop programmer	USB	Integrated	Yes	Single Programming on Desktop
 ID ISC.PR101-USB	Handheld programmer	USB	Integrated	Yes	Single Programming by Handheld
 ID ISC.MR102-USB	Middle range programmer , for connecting external antenna	USB	RF-MANT12786 	Yes	Single Programming on Product line
 ID ISC.LR1002-E	Long range programmer , for connecting external antenna	USB,RS232,TCP/IP	ID ISC.ANT310/310 	Yes	Multi Programming System

### 1. Connect FEIG reader

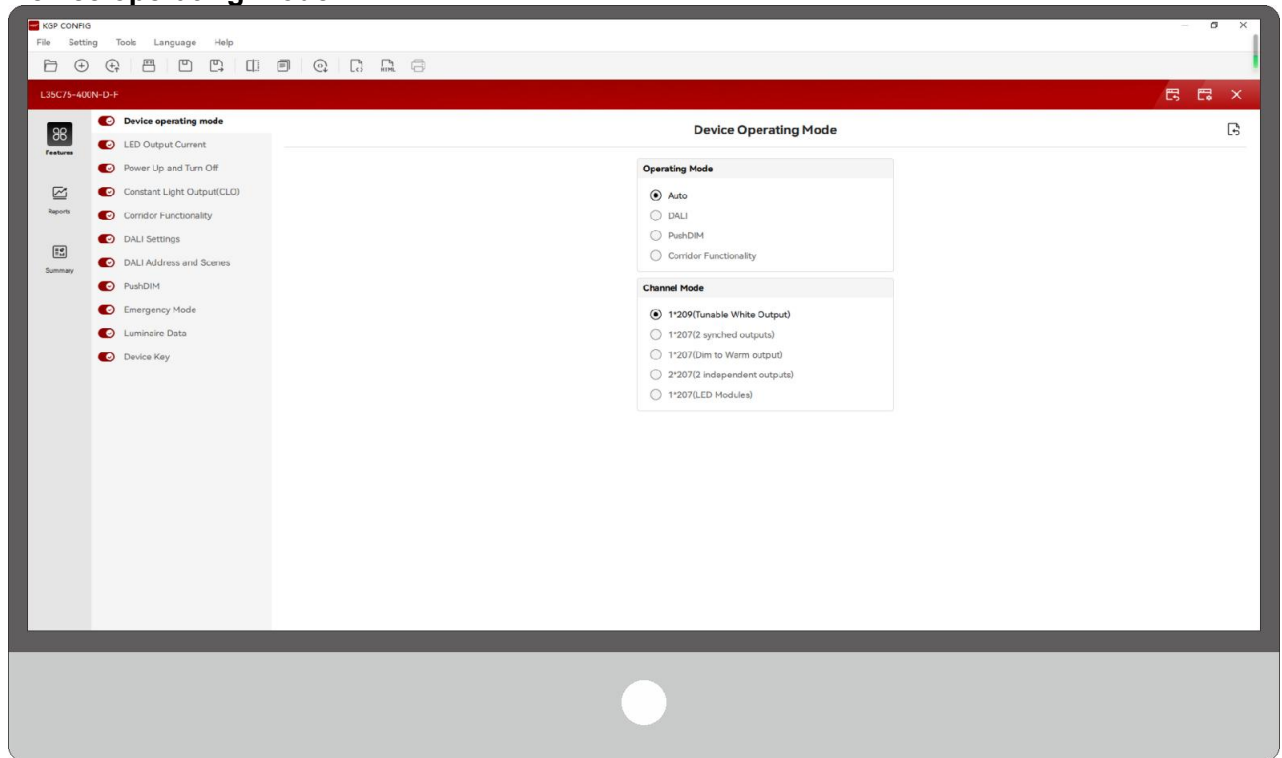
Click the “Setting” button to check whether the NFC port is connected



## 2. Read product information Click this button to read

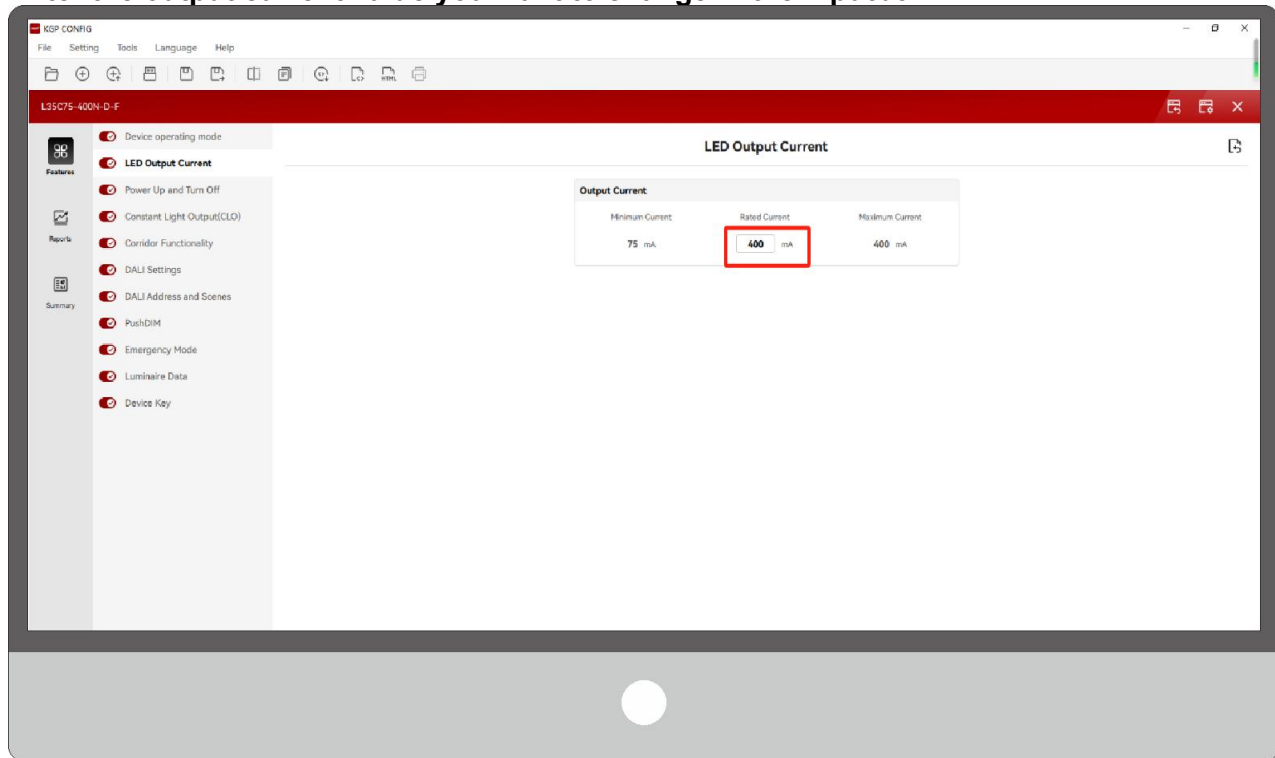


## 3. Few parameter interface, you can choose the setting based on your requirements. Device operating mode

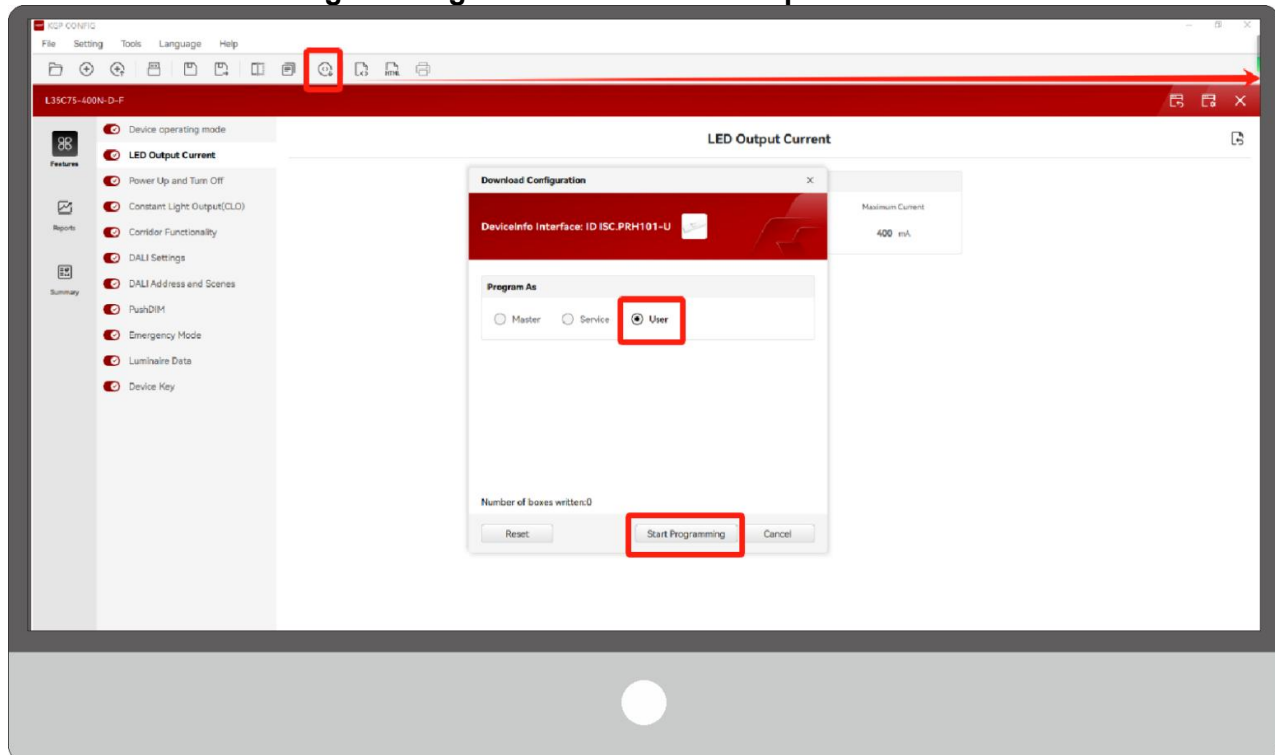


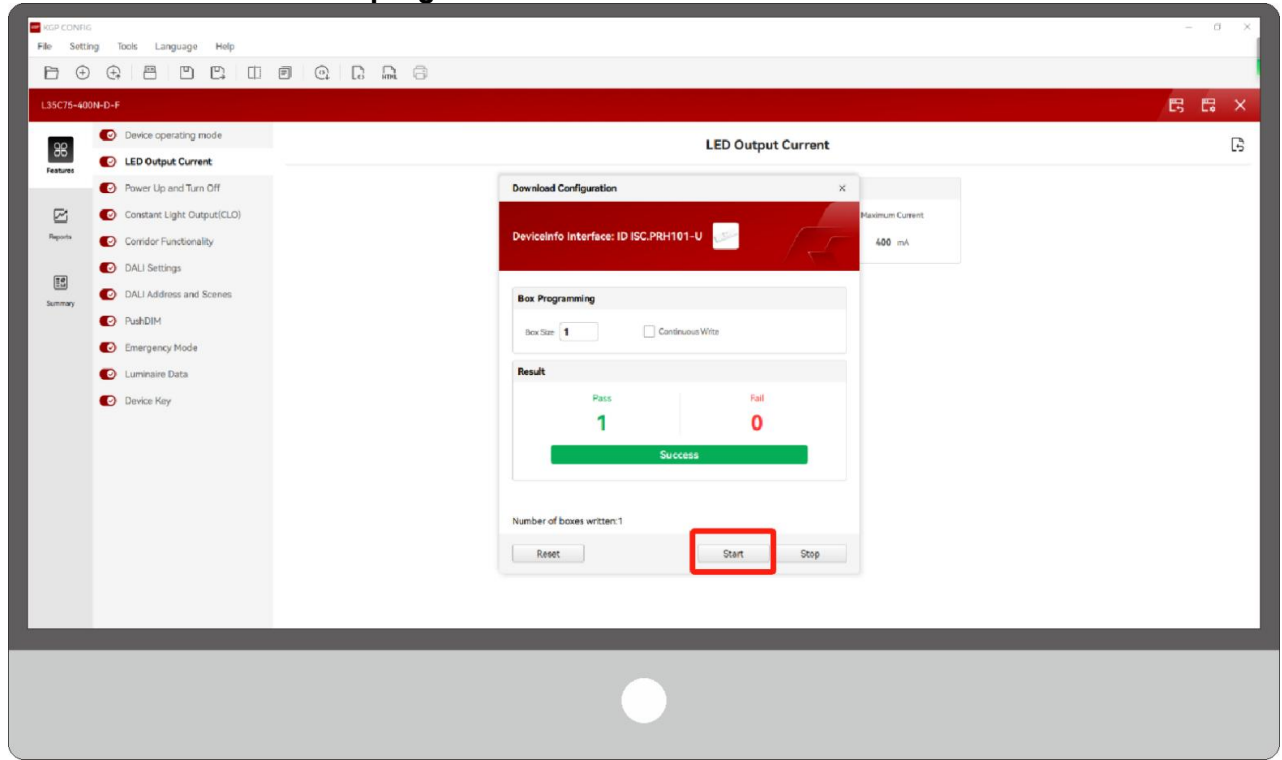
## LED Output Current

Enter the output current value you want to change in the inputbox

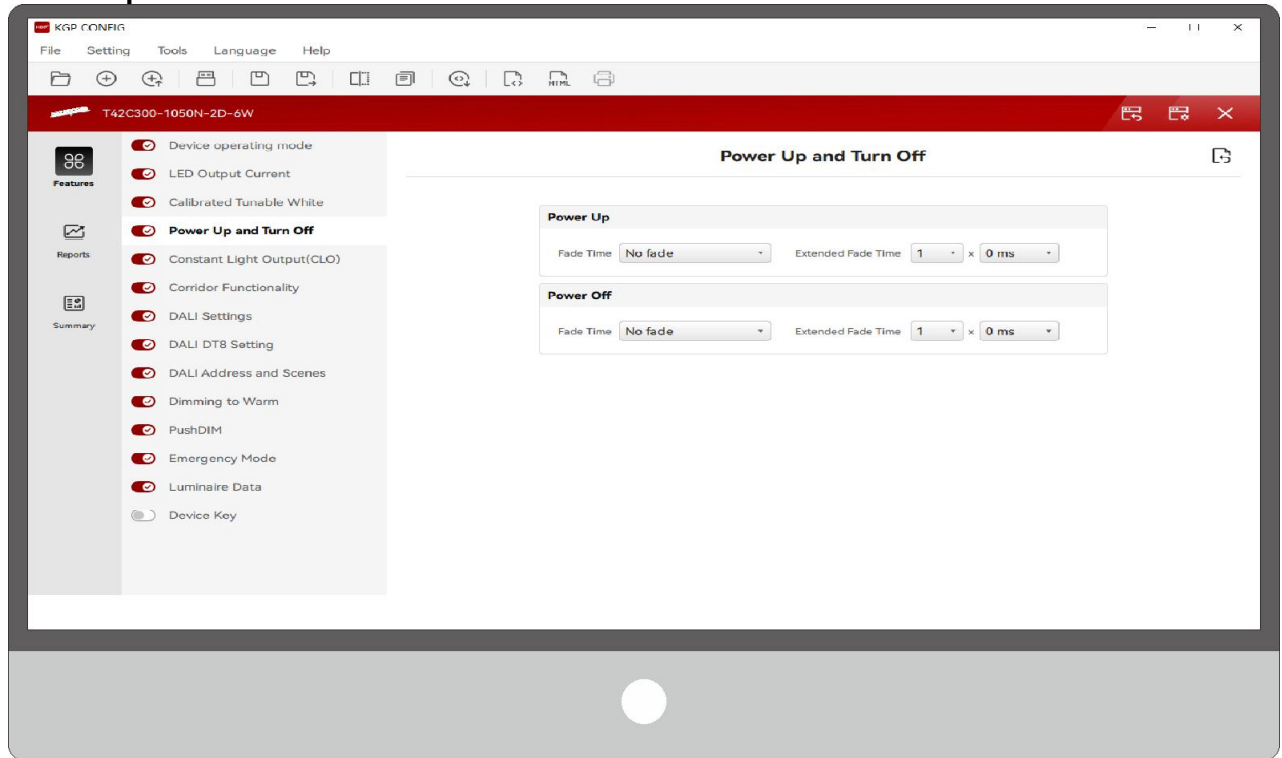


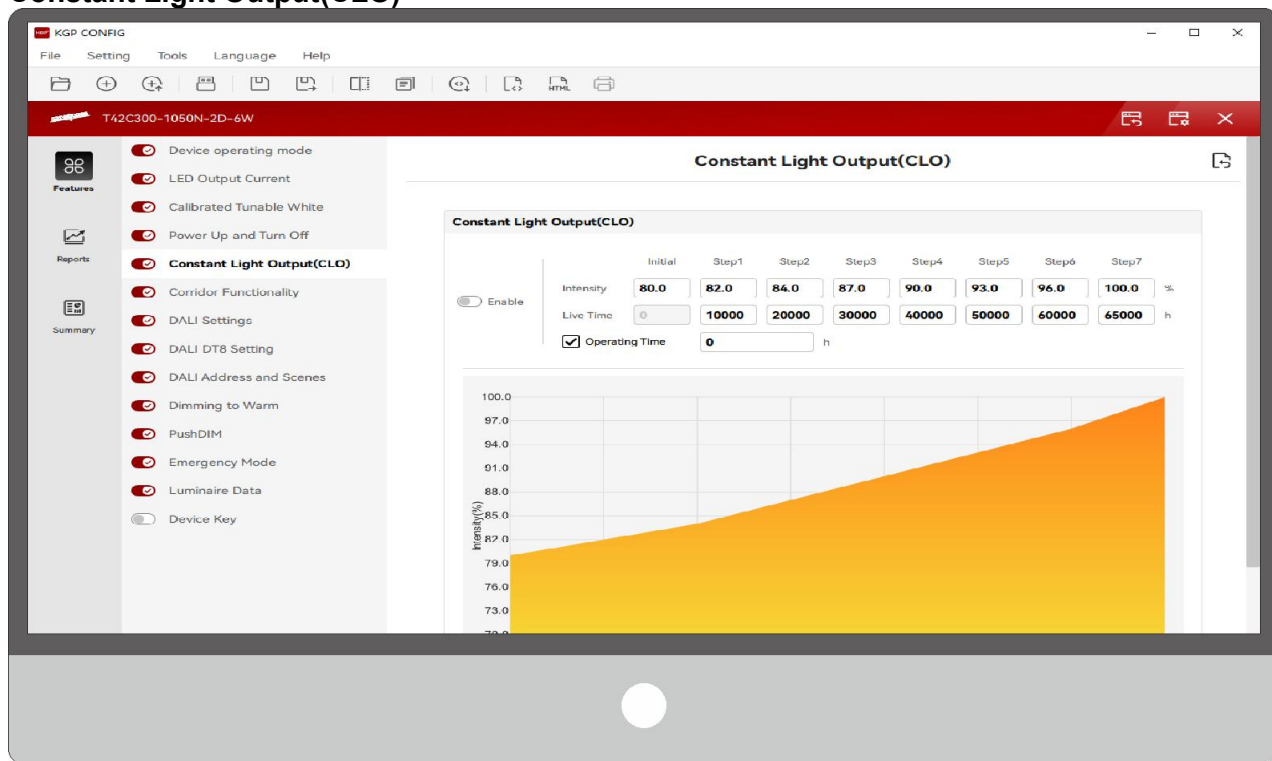
4. After the modification is complete, the download configuration page is displayed. Click this button to enter the "Download Configuration" window, select the "User" option box, and click the "Start Programming" button for the next step.



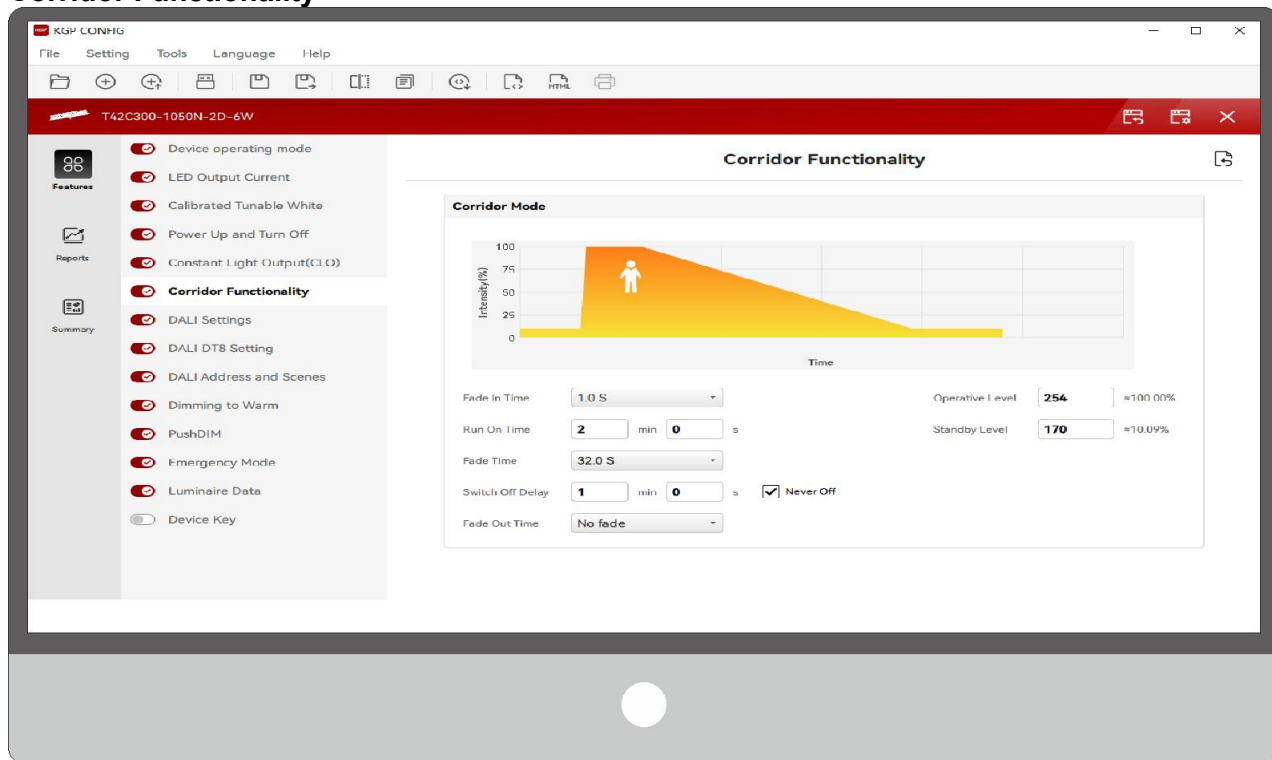


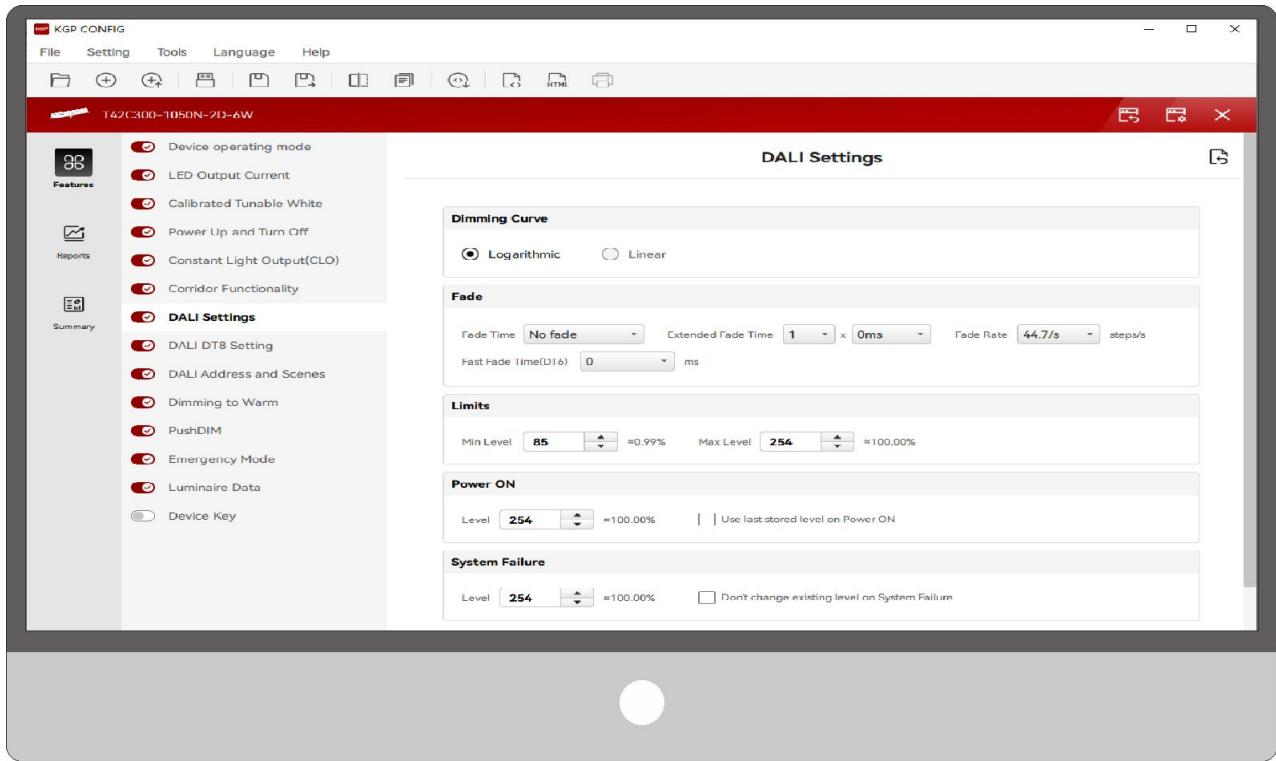
## Power Up and Turn Off



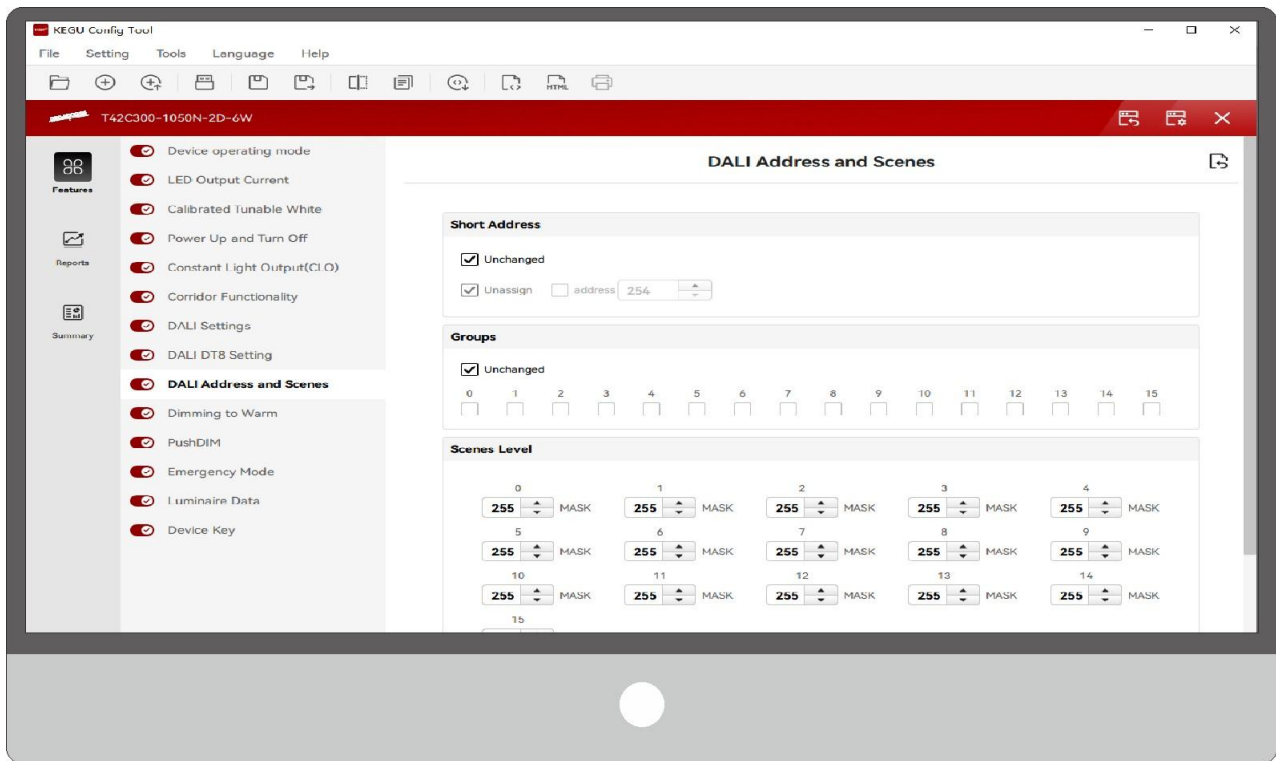


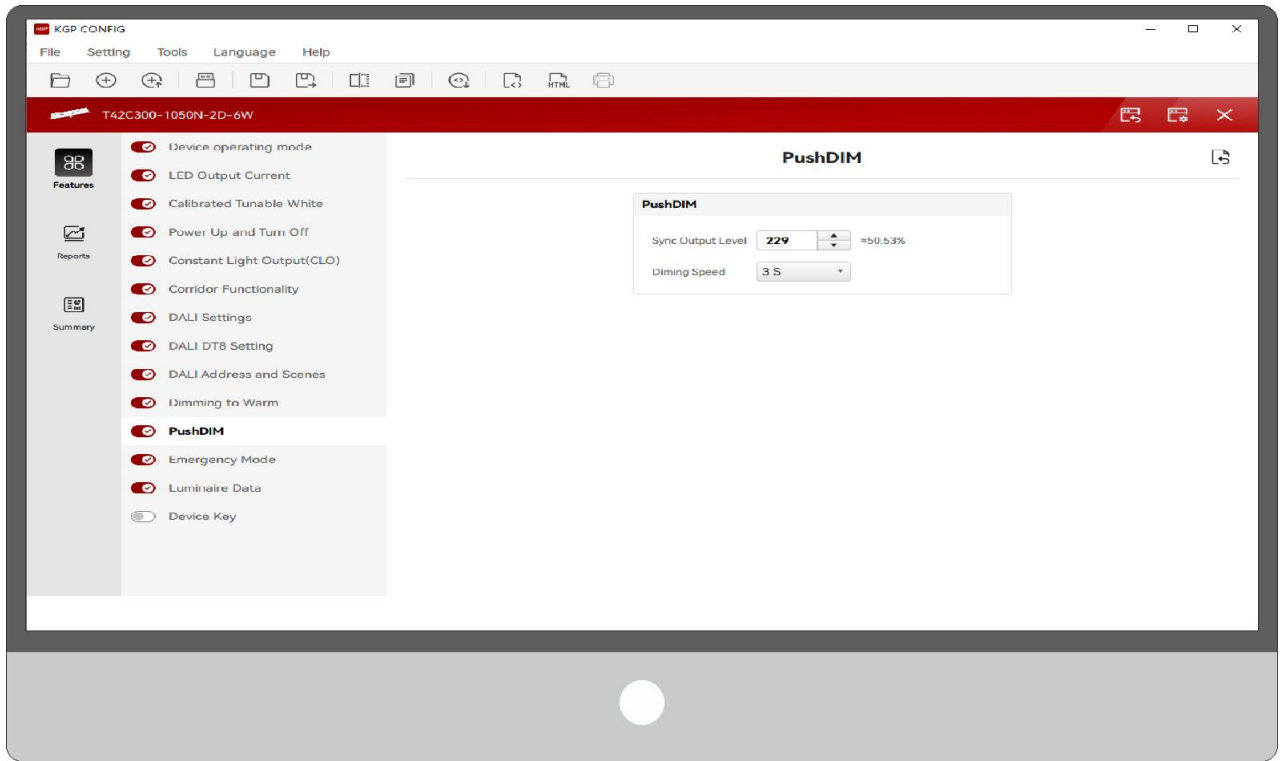
## Corridor Functionality



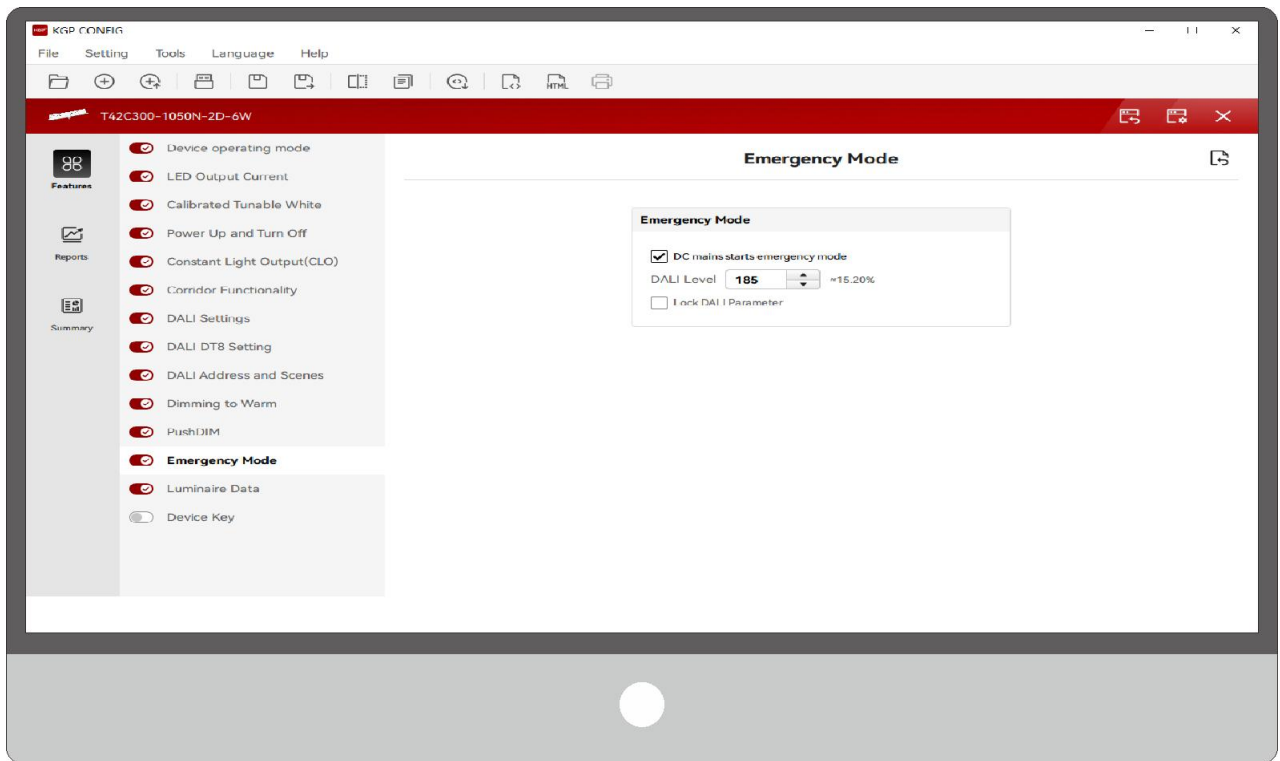


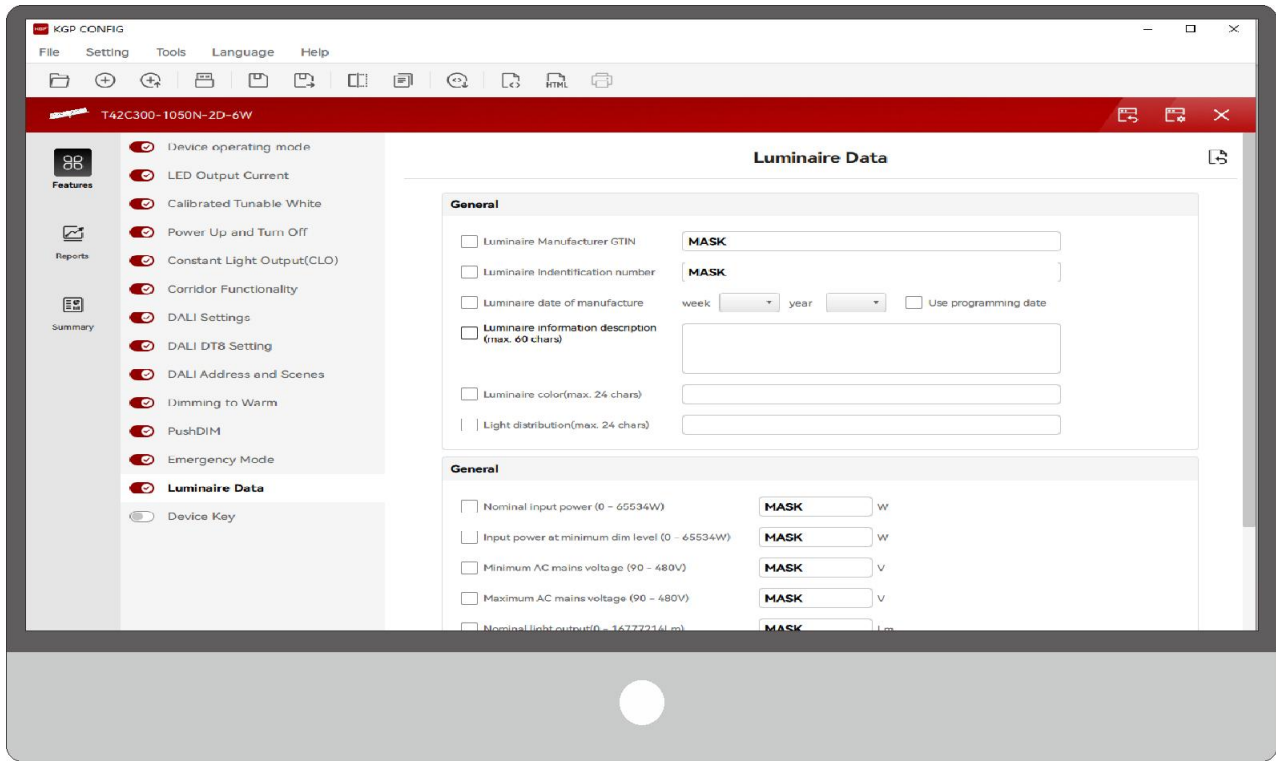
## DALI Address and Scenes





## Emergency Mode



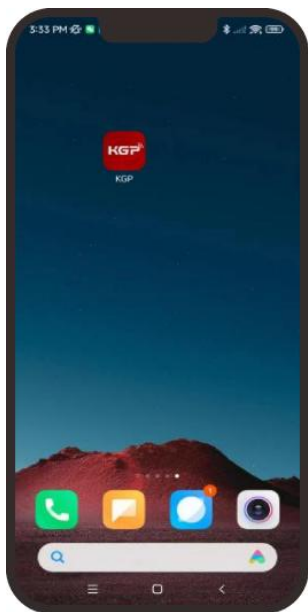


## mobile client:

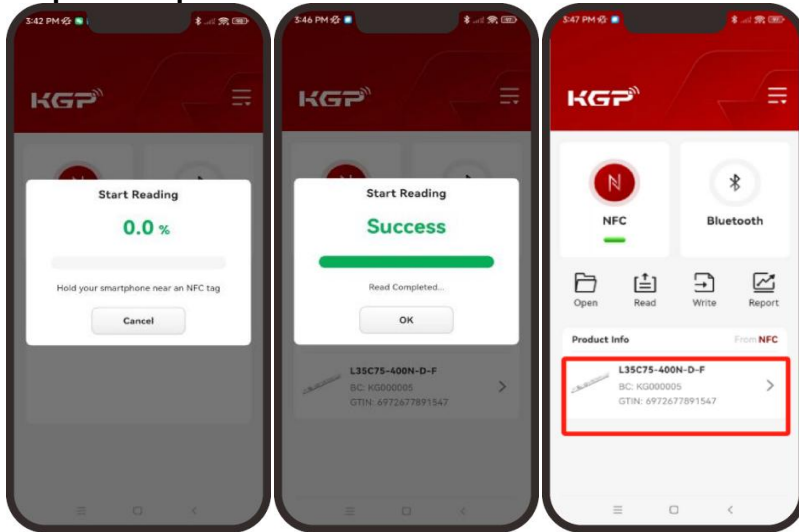
### Note:

1. Please Make sure that you have enabled NFC function with your mobile phone/ tablet.
2. Please Make sure that the "NFC position" is matched.
3. Please do not power on the device before setting.

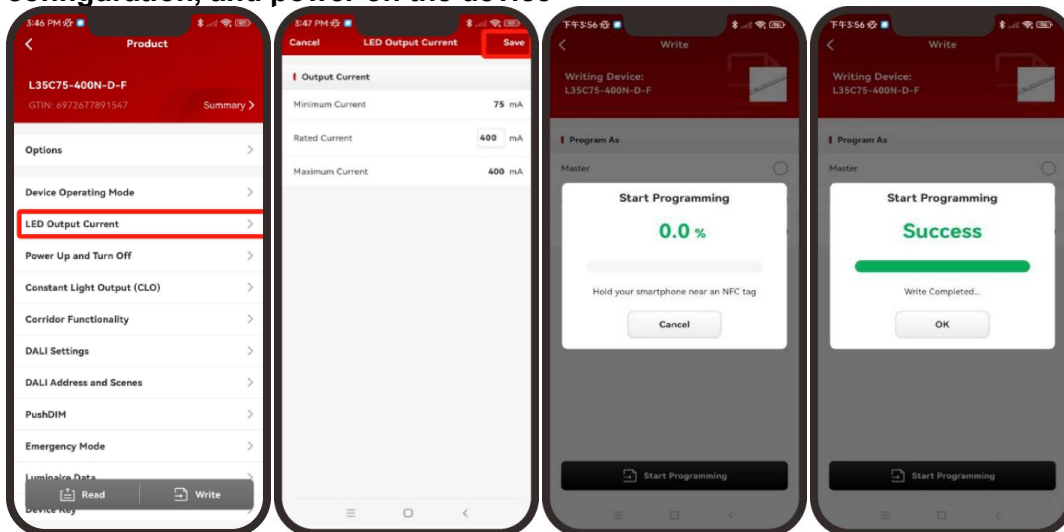
### Step 1: Download the APP ,Then open the APP



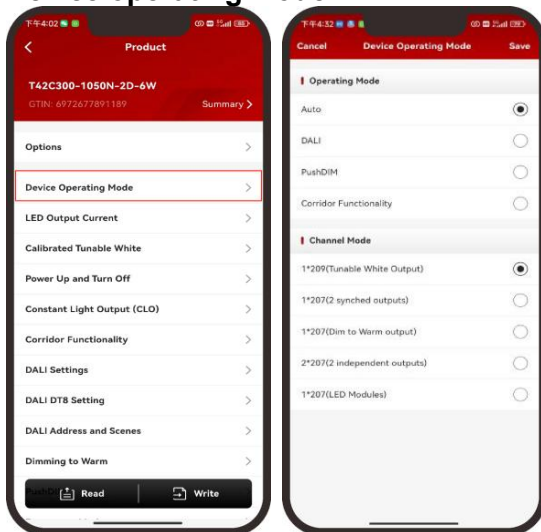
**Step2: Read product information**



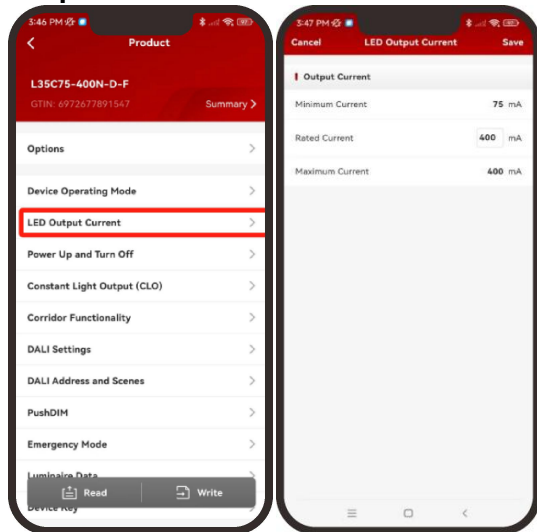
**Step3: You can choose to set the output current according to your needs, then write the configuration, and power on the device**



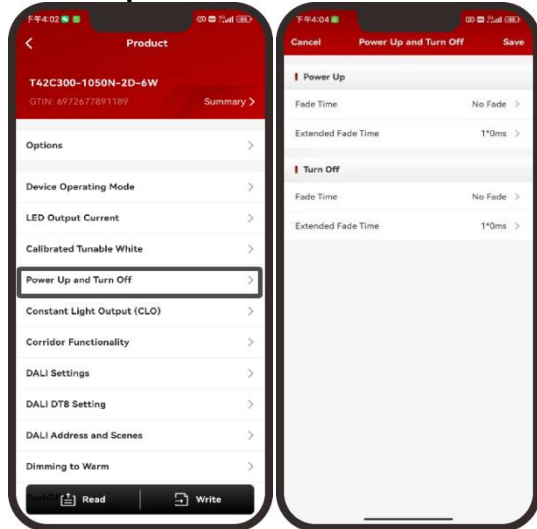
**Device operating Mode:**



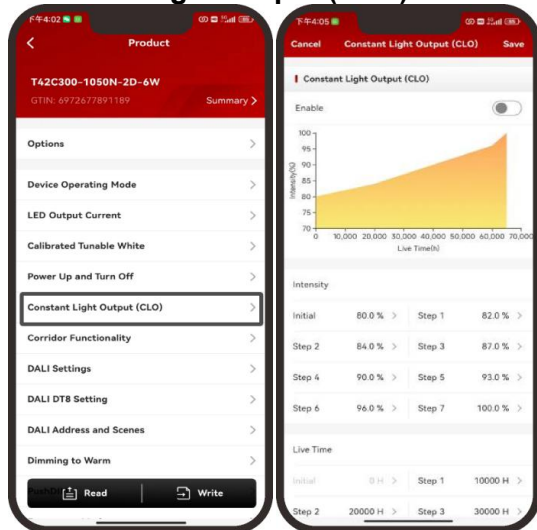
**Output current:**



**Power Up and Turn Off:**



**Constant Light Output (CLO):**



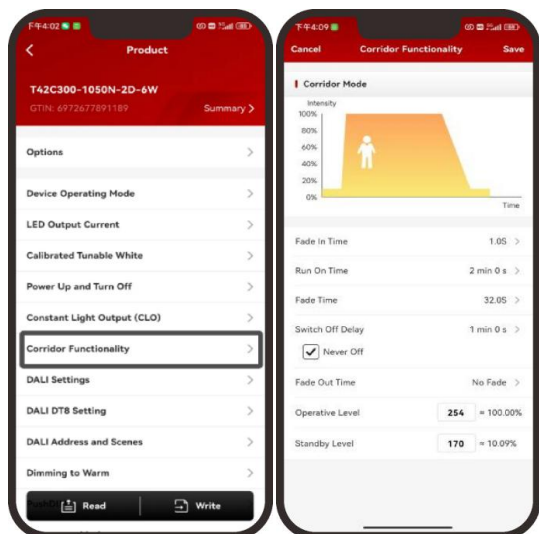


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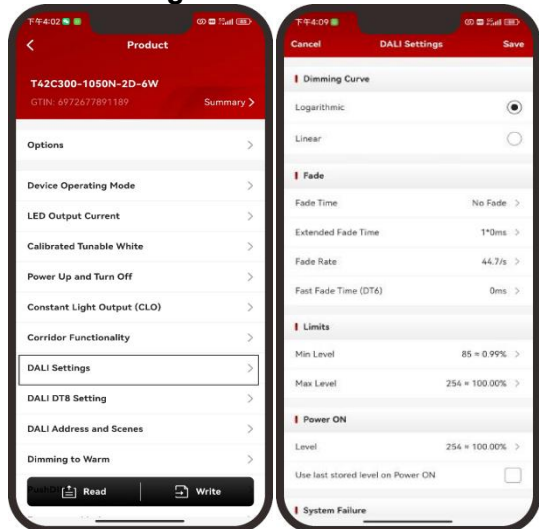
### Corridor Functionality:

Light up each lamp, luminate every corner

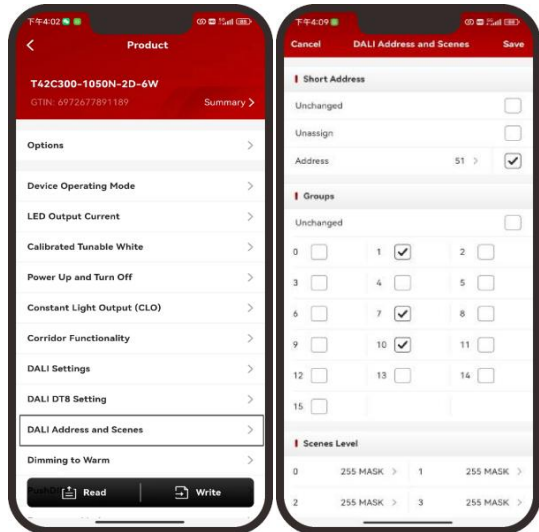
点亮每一盏灯 · 照亮每个角落

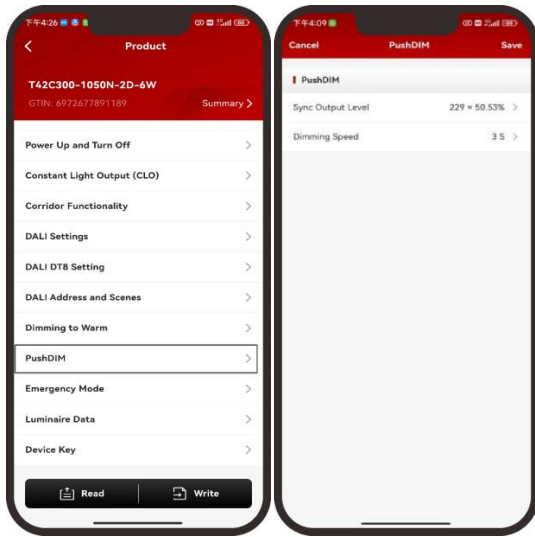


### DALI Settings:

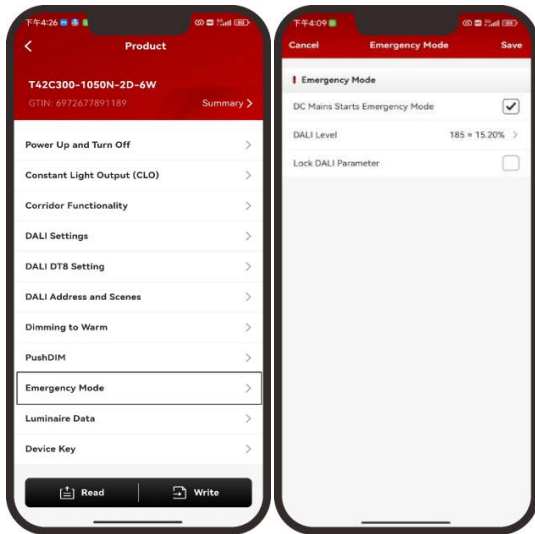


### DALI Address and Scenes:

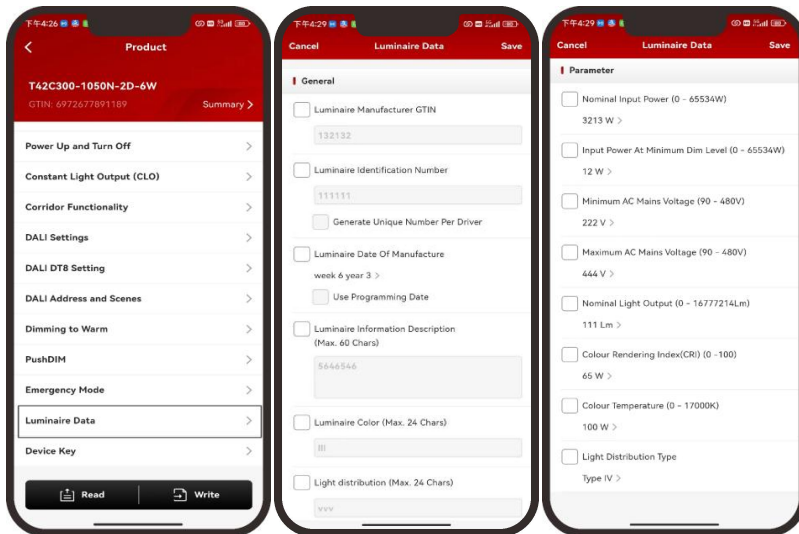




**Emergency Mode:**



**Luminaire Data:**



**Tips:**

- 1. NFC function doesn't require any power driver.
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ DALI IOT gateway.

**10. Wiring instructions**

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 3 m
- Secondary switching is not permitted ( Except for constant voltage )
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)

**11. Revision History**

Date	Revision	Remark
2024-6-7	V1.0	Initial release.

