

Introducing  
**FGLED6™**  
The successor to **FGLED7™**



**JCC** **FGLED™**

High performance fire-rated LED downlights



# The market leading halogen replacement

- 88% energy saving against halogen
- Patented design that ensures reliability
- Crystal clear engineered lenses
- Fire tested for 30, 60 & 90 minute ceilings

**ADVANCED LED LIGHTING**

\*10 year for domestic dwellings, 5 year for commercial properties. Requires online registration.

**10**  
**YEAR**  
**EXTENDED**  
**WARRANTY\***

## Market leading performance & quality

FGLED™ is a family of quality, high performance LED downlights with a durable steel and aluminium construction. Unlike many lamps installed into fire-rated fittings, FGLED™ products are fully integrated and have been rigorously fire tested to ensure compliance with the England and Wales building regulations. The LEDs are focused through a specially designed lens to provide crisp clear light whilst the integrated heat sink is optimised to cool the LEDs and maximise their life. Double intumescent seals, one around the bezel and the other on the top of the can, come as standard on all fittings to provide reassurance in the event of a fire.

## Industry leading 10 year warranty ✓

We believe that a manufacturers warranty is your assurance of quality. This is why we have always provided our FGLED™ products with the industry leading 10 year domestic and 5 year commercial warranty.

We thoroughly test our products in our state-of-the-art test facility. This ensures that our products perform exactly as we state.



**ADVANCED LED LIGHTING**

# Introducing FGLED6™

The successor to FGLED7™

Launched in 2011, FGLED7™ quickly became the market leading fire-rated LED downlight due to its quality, reliability and great looks.

Since then LED technology has continued to advance rapidly and so we decided to create a successor that maintained the key benefits which have made FGLED7™ so successful but incorporated the latest cutting edge LED technology.

*We therefore undertook the industry's most comprehensive customer survey on fire-rated LED downlights and asked our customers what else they wanted?*

## Same light, less energy



**FGLED7** ▶ 500 LUMENS  
Cool white 500 lumens / Warm white 450 lumens

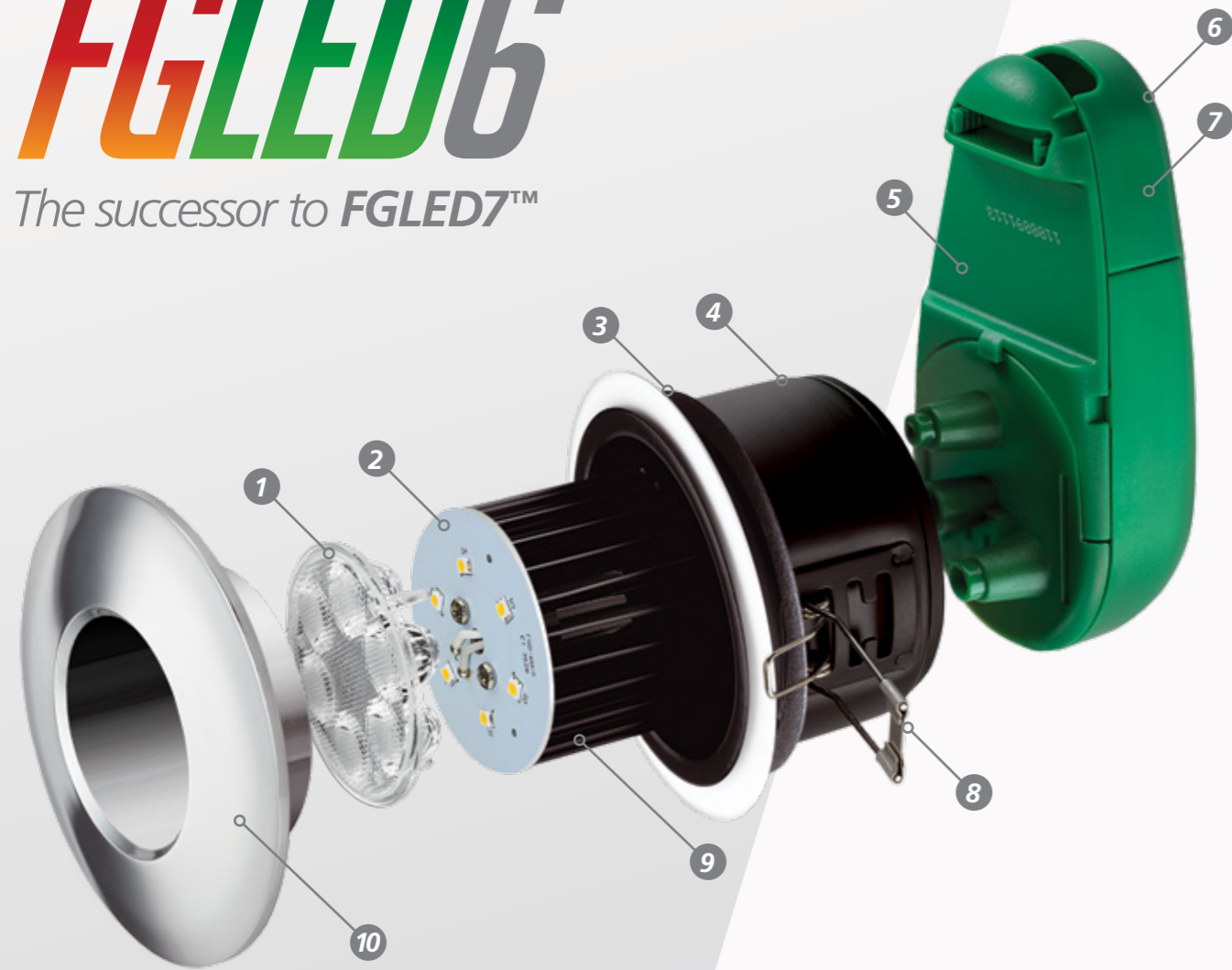
**FGLED6** ▶ 500 LUMENS  
Cool white 500 lumens / Warm white 450 lumens

## 25% faster installation



# Introducing FGLED6™

The successor to FGLED7™



## 1 Unique crystal clear lens

Provides smooth, even light distribution

## 2 Same light, less energy

Still 500 lumens, but 78 lumens per circuit Watt, and 24% further energy saving

## 3 Tried and tested intumescent seals

FGLED's dual patented seals to provide improved ventilation and improve the life of the light source

## 4 FGLED's trusted enclosed 'can' design

Protects the heat sink from the build up of flammable dust, in line with the Electrical Safety Council's recommendations

## 5 Redesigned integral driver

Rounded edges provide improved ceiling entry and smaller diameter clears the edges of the cutout

## 6 Accepts stranded & solid cable

Wider push fit terminal connections, for solid and stranded cable, enables quick and easy installation

## 7 Wider terminal access

Easier to loop in and loop out cables

## 8 Adjustable clips

FGLED™ high strength steel clips designed to accommodate different ceiling thicknesses

## 9 High performance heat sink

Specially designed heat sink that transfers the heat away from the LEDs and extends the operating life of the fitting

## 10 Die-cast metal bezel

FGLED7™ compatible, high quality fixed metal bezel. Saves valuable time during installation

**ADVANCED LED LIGHTING**

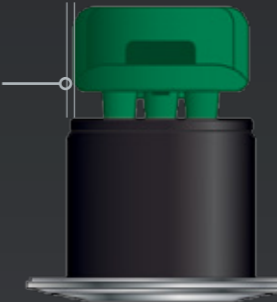
## 25% faster installation ✓

- Redesigned driver housing improves entry into ceiling cut out
- Smaller diameter clears edges of cut out

Rounded housing edges

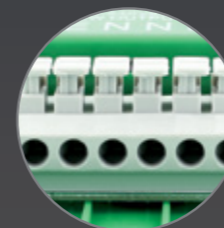


Driver housing sits within the diameter of the enclosed can for greater clearance of ceiling cut out

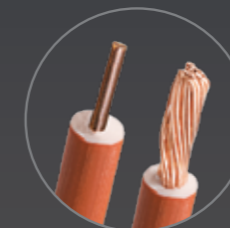


## Faster wiring connection ✓

- Push fit termination
- Greater access for wiring
- Accepts solid and stranded cable
- Wider terminal access
- Bigger terminal buttons
- Larger wire entry points



Bigger terminal buttons and larger wire entry points



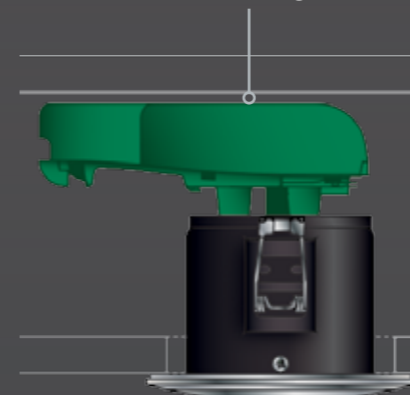
Accepts both solid and stranded cables



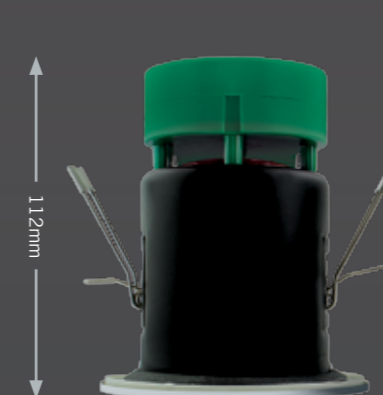
Wider access

## Suitable for shallow ceiling voids ✓

FGLED6™ has an 11mm height reduction



FGLED7™



FGLED6™







## Enclosed can provides complete fire safety

JCC's tried and tested enclosed can design stops flames from entering the ceiling void, forming a complete barrier in the event of a fire.

In addition, the steel 'can' protects the heat sink from flammable dust, ensuring maximum fire safety.

## Patented intumescent seals

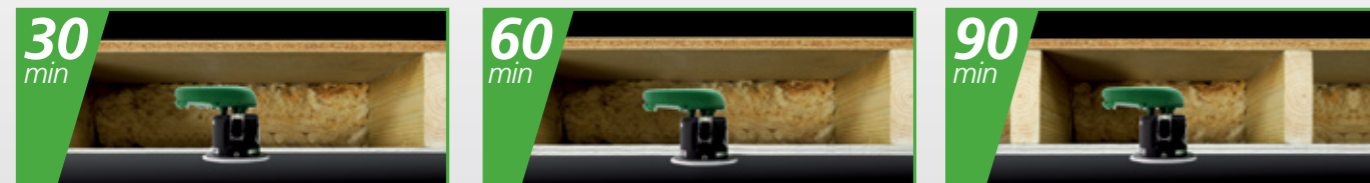
FGLED™ fire-rated downlights use intumescent material (which expands in the event of fire) to seal the gap that the downlight creates in the plasterboard ceiling.

- 1 FGLED™ products provide protection around the air vent on top of the fire proof can
- 2 Dual protection is provided from a further seal around the bezel



## Fire tested for 30, 60 & 90 minute ceilings

FGLED™ products are fully integrated and are rigorously fire tested to provide fire safety that you can trust.



- 600mm joist centres
- Single layer 12.5mm plasterboard

- 600mm joist centres
- Double layer 15.0mm plasterboard

- 450mm joist centres
- Double layer 15.0mm plasterboard

Complies with **Part L, B, C & E** of the 2014 building regulations

**ADVANCED LED LIGHTING**

## Unique 'driver on can' design

- Improves air flow and ensures reliability
- Allows insulation to be laid directly over the back of the fitting

FGLED's unique design allows for the driver 1 to be securely fixed on top of the steel 'can' 2 that surrounds the heat sink. The driver is positioned to give clear space between the vent above the heat sink and the base of the driver. Heat is dissipated effectively whilst shielding the opening from dust.

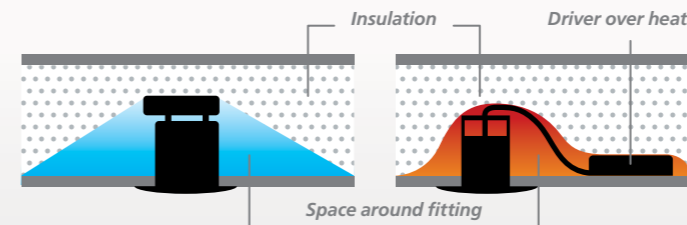
The 'driver on can' ensures that when the fitting is placed into ceilings which contain insulation, a clear space is created around the fitting\*. This controlled environment allows air to flow freely, maintaining the correct operating temperature.

### FGLED™ fittings

FGLEDs larger airpocket guarantees that the temperature of the driver remains at the correct operating level.

### Competitor with separate driver

Fire-rated downlights with separate drivers do not create adequate space for airflow and risk reliability issues due to over heating.



## Saves installation time

There is no need to cut holes in mineral wool insulation and no firehoods or firecages are required, saving costs and installation time.

**No need for separate bezel**

**No need for insulation accessories**



\*Ceiling insulation can be laid over the top of the fitting but it is important that it is not packed around.



## The market leading halogen replacement

- 88% energy saving against 50W halogen
- Exceptionally low energy 6W LED
- Outstanding efficiency providing 78 lpcW
- Available in cool and warm white
- Dimmable options
- Fixed die-cast aluminium bezel
- Fully tested fire-rated downlight
- IP65 for use in bathrooms
- Building regulations compliant
- Quality metal construction



▲ JC94473  
Chrome



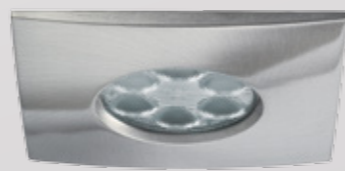
▲ JC94572  
Chrome



▲ JC94472  
Brushed Nickel



▲ JC94474  
White



▲ JC94572  
Brushed Nickel



▲ JC94572  
White

Colour Temperature	Lumens	LED Wattage	Lumens/Watt	IP Rating	Beam Angle
Warm white	450	6W	70	IP65	38°
Cool white	500	6W	78	IP65	38°



Dimming guides available online:  
[jcc.co.uk/fgled-dimming-guide](http://jcc.co.uk/fgled-dimming-guide)

### 1 Efficient heat transfer

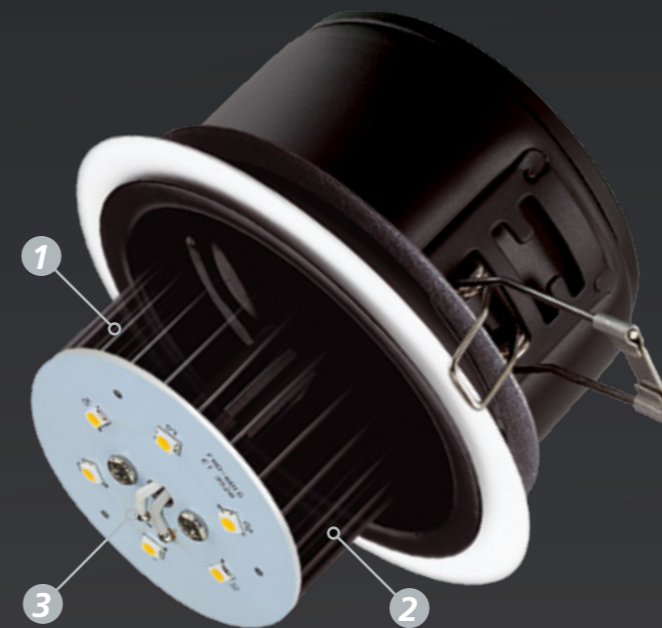
Conductive thermal paste ensures total transfer of heat from the LED mounting board to the advanced heat sink

### 2 Increased heat dissipation

Contoured heat sink fins provide a larger surface area to dissipate heat away from the LEDs and ensure reliability

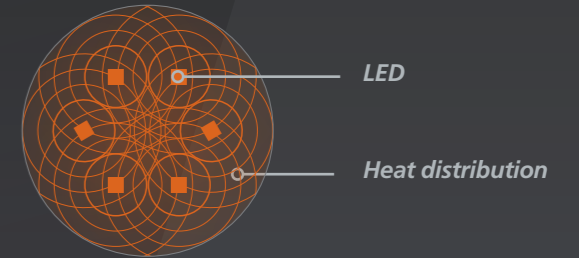


Larger surface area Contoured fins



### 3 Intelligent heat distribution

6 LED layout ensures a more even spread of heat to the heat sink. This allows maximum thermal transfer and keeps the LEDs cooler, improving reliability

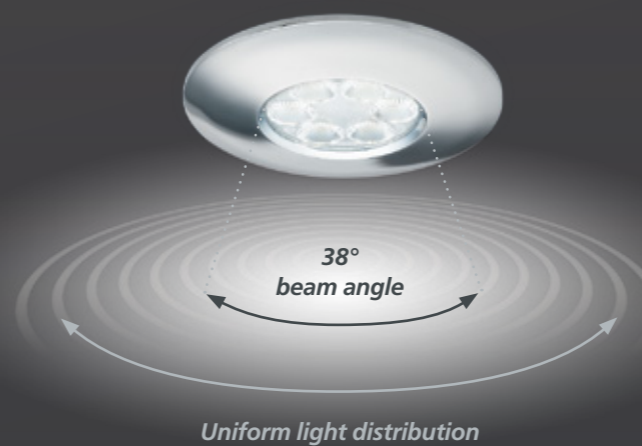


## Crystal clear engineered lenses

### Providing smooth & even light distribution

FGLED6™ contains a unique array of 6 high specification LEDs that are focussed through a specially designed composite lens to maximise light transmission and create crystal clear sparkling light. The light is projected through 6 individual lenses that combine to create a focussed beam which links together and improves light distribution.

### 6 LED configuration



Uniform light distribution

### Competitor product



Uneven light distribution



## The **cost effective** reliable LED downlight

- Outperforms halogen & CFL\*
- Outstanding efficiency 85 lpcW
- Less than 70p energy usage per year
- Ultra low 3W energy usage
- Crisp, clear light from unique lens
- Ideal for shallow ceiling voids
- Designed for modern ceiling heights
- Quality metal construction



▲ JC94198  
Chrome



▲ JC94199  
Brushed Nickel



▲ JC94199  
White



▲ JC94398  
Chrome



▲ JC94398  
Brushed Nickel



▲ JC94398  
White

Colour Temperature	Lumens	LED Wattage	Lumens/Watt	IP Rating	Beam Angle
Warm white	250	3W	71	IP65	38°
Cool white	300	3W	85	IP65	38°

**ADVANCED LED LIGHTING**

\*11W GU10 CFL & 35W halogen GU10



Non-dimmable.  
Mains supply integrated driver.

## Why risk a lamp & can?



### Integrated fittings guarantee quality

- ✓ Fire protection you can trust
- ✓ Guarantee performance
- ✓ Unique design ensures airflow
- ✓ 10 year extended warranty†



### Replacement LED lamps compromise safety & reliability

- ✗ No guarantee of fire safety
- ✗ Not designed to operate with a can
- ✗ Heat build up reduces LED life
- ✗ May void warranty

FGLED3™ lasts at least **15 times longer** than GU10 halogen ✓

During FGLED3's life you would typically have to replace the equivalent halogen lamp more than 15 times\*\*



\*\* Based on average halogen lamp life of 2,000 hours

## Outstanding cost saving ✓

	Traditional GU10 halogen (35W)	FGLED3™ (3W)
No. of fittings	50	50
Overall energy usage	1750	150
Energy cost per hour	£0.21	£0.02
<b>Annual energy usage</b>	<b>£383.25</b>	<b>£32.85</b>

**Total annual saving £350.40 (£7.01 per fitting)**

Assumed domestic usage of 5 hours per day, 365 days a year at a cost of 12p per kW/h

Annual commercial maintenance saving of over £600 per annum

Cost Saving Calculator for iOS & Android – Available from App Store and Google Play.



DOWNLOAD OUR  
NEW APP

⌀71-73mm - 12.5mm thick,  
30 minute ceiling types

⌀80mm - 30mm thick,  
60-90 minute ceiling types



FULL PHOTOMETRIC.LDT  
FILES AVAILABLE ONLINE

†10 year for domestic dwellings, 5 year for commercial properties. Requires online registration.

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# FGLED6™ TILT

The performance of FGLED6™ with **unique tilt and rotate**

- Ideal for sloped ceilings or directing light
- 20° tiltable and 360° rotatable lens
- Equivalent to 50W halogen
- Dimmable as standard
- Available in cool and warm white



JC94481  
Chrome



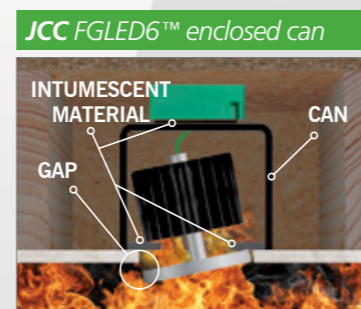
JC94481  
Brushed Nickel



JC94481  
White

## Enclosed can, essential for fire rating ✓

Tilting the lens in a standard LED fitting can create a gap that, in the event of a fire, will allow flames to penetrate into the ceiling void. However, the unique tiltable version of FGLED6™ has a patented design that incorporates an enclosed steel can and intumescent seal. FGLED6™ Tilt has been independently fire tested for 30, 60 and 90 minutes



Colour Temperature	Lumens	LED Wattage	Lumens/Watt	IP Rating	Beam Angle
Warm white	450	6W	70	IP20	38°
Cool white	500	6W	78	IP20	38°

ADVANCED LED LIGHTING

Dimming guides available online:  
[jcc.co.uk/fgled-dimming-guide](http://jcc.co.uk/fgled-dimming-guide)

Cut-Out  
ø85mm



# FGLED™ ANTI-GLARE

The quality of FGLED™ with **discreet light source**

- Anti-glare version of FGLED™ range
- Recessed LED module
- Black baffle to reduce glare
- IP65 suitable for bathrooms
- Dimmable as standard



JC94507  
Chrome



JC94507  
Brushed Nickel



JC94507  
White



JC94515  
Chrome



JC94515  
Brushed Nickel



JC94515  
White



FGLED™ Anti-Glare has a 25° beam angle that creates a strong, clean beam of light, producing **342 lux at 2 metres**

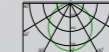
Ideal for corridors, bars, restaurants and retail applications

Colour Temperature	Lumens	LED Wattage	Lumens/Watt	IP Rating	Beam Angle
Warm white	272	6W	42.5	IP65	25°



ø 71-73mm - 12.5mm thick,  
30 minute ceiling types

ø 80mm - 30mm thick,  
60-90 minute ceiling types



FULL PHOTOMETRIC.LDT  
FILES AVAILABLE ONLINE

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# IP65 FOR USE IN BATHROOMS



## IP Numbers – Protection explained

First Numeral	Short Description	Example IP <sub>6</sub> X	Second Numeral	Short Description	Example IPX <sub>5</sub>
0	Non – Protected		0	Non – Protected	
1	Protected against solid objects greater than 50mm		1	Protected against dripping water	
2	Protected against solid objects greater than 12mm		2	Protected against dripping water when tilted up to 15°	
3	Protected against solid objects greater than 2.5mm		3	Protected against spraying water	
4	Protected against solid objects greater than 1.0mm		4	Protected against splashing water	
5	Dust – Protected		5	Protected against water jets	
6	Dust – Tight		6	Protected against heavy seas	
			7	Protected against the effects of immersion	
			8	Protected against submersion	

# EMERGENCY VERSION

- Emergency lighting is required in many commercial applications when the main power supply fails
- It operates fully automatically to provide 3 hours of illumination in important areas if the mains power supply fails. As a maintained fitting, FGLED6™ Emergency operates as a standard unit under normal conditions, but will also illuminate at 10% for a minimum of three hours
- Because FGLED6™ Emergency is a self-contained unit, the benefits include:
  - Easy installation at a lower cost
  - Greater system integrity as each luminaire is run independently
  - The system can be easily extended to accommodate more units



ADVANCED LED LIGHTING

# ACCESSORIES

## CONVERTER PLATE

- Allows the retrofit of a standard FGLED6™ unit where larger downlights were previously installed
- Part B compliant (fire-rated)
- Suitable for use in all ceiling types, for cut outs 80-135mm in diameter
- Chrome, white and brushed nickel finishes to match bezels
- FGLED6™ Tilt version available



JC94180CH



JC94180BN



JC94180WH

## CONCEALER RING

- A subtle retrofit option for the standard FGLED6™ & FGLED3™ units where the ceiling cut out may have suffered cosmetic damage
- For use with ceiling cut outs 80-110mm in diameter
- White finish to match ceilings
- Ideal for installing FGLED™ into suspended ceilings



JC94183



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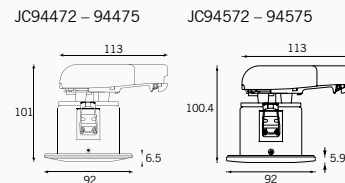




## FGLED6™ The market leading halogen replacement

- 88% energy saving against 50W halogen
- Exceptionally low energy 6W LED

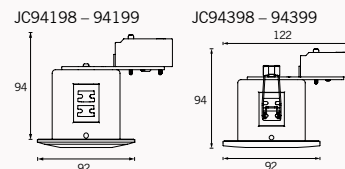
Code	Description	Bezel	Colour Temp	Watt	Lumens
JC94472	FGLED6™ dimmable	Round	Warm white	6W	450*
JC94473	FGLED6™ dimmable	Round	Cool white	6W	500*
JC94474	FGLED6™ non-dimmable	Round	Warm white	6W	450
JC94475	FGLED6™ non-dimmable	Round	Cool white	6W	500
JC94572	FGLED6™ dimmable	Square	Warm white	6W	450*
JC94573	FGLED6™ dimmable	Square	Warm white	6W	500*
JC94574	FGLED6™ non-dimmable	Square	Cool white	6W	450
JC94575	FGLED6™ non-dimmable	Square	Cool white	6W	500



## FGLED3™ The cost effective reliable LED downlight

- Outstanding efficiency 85 lumens per circuit Watt
- Less than 70p energy usage per year

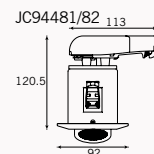
Code	Description	Bezel	Colour Temp	Watt	Lumens
JC94198	FGLED3™	Round	Warm white	3W	250
JC94199	FGLED3™	Round	Cool white	3W	300
JC94398	FGLED3™	Square	Warm white	3W	250
JC94399	FGLED3™	Square	Cool white	3W	300



## FGLED6™ TILT The performance of FGLED6™ with unique tilt and rotate

- Ideal for sloped ceilings or directing light
- 20° tiltable and 360° rotatable lens

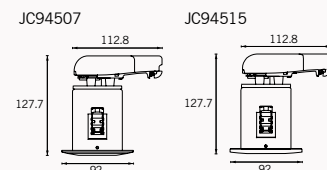
Code	Description	Bezel	Colour Temp	Watt	Lumens
JC94481	FGLED6™ tilt dimmable	Round	Warm white	6W	450*
JC94482	FGLED6™ tilt dimmable	Round	Cool white	6W	500*



## FGLED™ ANTI-GLARE The quality of FGLED6™ with discreet light source

- Anti-glare version of FGLED6™ range
- Recessed LED module

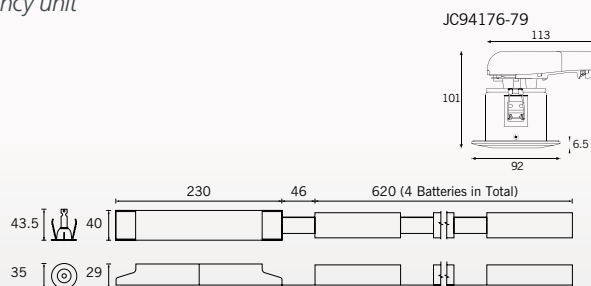
Code	Description	Bezel	Colour Temp	Watt	Lumens
JC94507	FGLED™ anti-glare dimmable	Round	Warm white	6W	272*
JC94511	FGLED™ anti-glare emergency	Round	Warm white	6W	272*
JC94515	FGLED™ anti-glare dimmable	Square	Warm white	6W	272*
JC94519	FGLED™ anti-glare emergency	Square	Warm white	6W	272*



## FGLED6™ EMERGENCY

- Emergency version of the FGLED6™ range
- Remote emergency unit

Code	Description	Bezel	Colour Temp	Watt	Lumens
JC94476	FGLED6™ dimmable emergency	Round	Warm white	6W	450*
JC94477	FGLED6™ dimmable emergency	Round	Cool white	6W	500*
JC94478	FGLED6™ non-dimmable emergency	Round	Warm white	6W	450
JC94479	FGLED6™ non-dimmable emergency	Round	Cool white	6W	500
JC94576	FGLED6™ dimmable emergency	Square	Warm white	6W	450*
JC94577	FGLED6™ dimmable emergency	Square	Cool white	6W	500*
JC94578	FGLED6™ non-dimmable emergency	Square	Warm white	6W	450
JC94579	FGLED6™ non-dimmable emergency	Square	Cool white	6W	500



Code	Description	Code	Description
JC94180	FGLED6™ convertor plate	JC94183	FGLED6™ & LED3 concealer ring (5 per pack)
JC94184	FGLED6™ Tilt convertor plate	JC94185	FGLED6™ tilt concealer ring white (5 per pack)

Fitting not included

Lamp	Construction	Bezel	Maximum void working temp
Warm White 3000K CRI: Ra (80) Cool White 4000K CRI: Ra (80)	Body – Pressed steel (Converter plate cast aluminium)	Bezel – Die-cast aluminium	Maximum void working temp 30°C

\*FGLED6™ dimmable not compatible with FGLED7™ dimmable.  
For compatible FGLED7™ driver, ask for original FGLED7™ product code.

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