

# Lighting Reference Design Kits

## Featured Reference Designs:

Reference Design	Part Number	Description
IRPLCFL4	IR2156	A 3-Way Dimming CFL Ballast
IRPLCFL5E	IR2520D	CFL Ballast for 26W/Spiral Lamp, 220VAC Input
IRPLCFL5U	IR2520D	CFL Ballast for 26W/Spiral Lamp, 120VAC Input
IRPLHALO1E	IR2161	Halogen Convertor, 220/230VAC Input, 12VAC Output, 100VA Max
IRPLLNR3	IR2167	Universal Input Linear Fluorescent Ballast using the IR2167
IRPLLNR4	IR2166	Universal Input Linear Fluorescent Ballast using the IR2166
IRPLMB1E	IR2520D	Mini-ballast for single 25W compact fluorescent ballast, 230VAC Input

## Additional Reference Design kits available at [www.irf.com](http://www.irf.com):

Reference Design	Part Number	Description
IRPLCFL2	IR2156	42W, single, compact fluorescent lighting ballast, IR2156 100/220VAC
IRPLCFL3	IR2156	A ballast that can be dimmed from a domestic (phase cut) dimmer.
IRPLDIM1E	IR21592	Dimming lighting ballast, IR2159, European version, 230VAC line, 36W/T8 lamp
IRPLDIM1U	IR21592	Dimming lighting ballast down to 1%, IR2159, U.S. version, 120VAC line, 32W/T8 lamp
IRPLDIM2E	IR21592	Digital dimming DALI (Digital Addressable Lighting Interface) compliant lighting linear ballast with 1% dimming, IR2159, European version, 230VAC line, 36W/T8 lamp
IRPLDIM2U	IR21592	Digital dimming DALI (Digital Addressable Lighting Interface) compliant lighting linear ballast with 1% dimming, IR2159, U.S. version, 120VAC line, 32W/T8 lamp
IRPLLNR2E	IR21571	Fully-integrated linear lighting ballast, IR21571, European version, 230VAC line, 36W/T8 lamp
IRPLLNR2U	IR21571	32W Fully-integrated linear lighting ballast, IR21571, U.S. version, 120VAC line, 32W/T8 lamp

## IRPLCFL4

### 3 Way dimming CFL ballast



#### Features

- 120 VAC supply
- Stable Dimming down to 30% output
- Failure to Strike and deactivated-lamp protection
- Lamp pre-heat
- Using IR2156

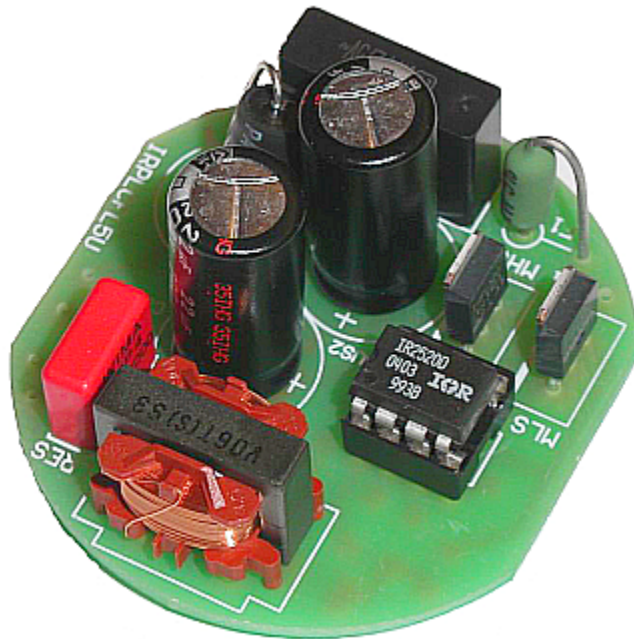
Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>

# IRPLCFL5U

**CFL Ballast for 26W Spiral Lamp, 120VAC Input**



## Features

- Programmable run frequency
- Programmable preheat time
- Open filaments and no-lamp protection
- Failure to Strike and deactivated-lamp protection
- Low AC line protection
- Using IR2520D

Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>

# IRPLCFL5E

**CFL Ballast for 26W Spiral Lamp, 220VAC Input**



## Features

- Programmable run frequency
- Programmable preheat time
- Open filaments and no-lamp protection
- Failure to Strike and deactivated-lamp protection
- Low AC line protection
- Using IR2520D

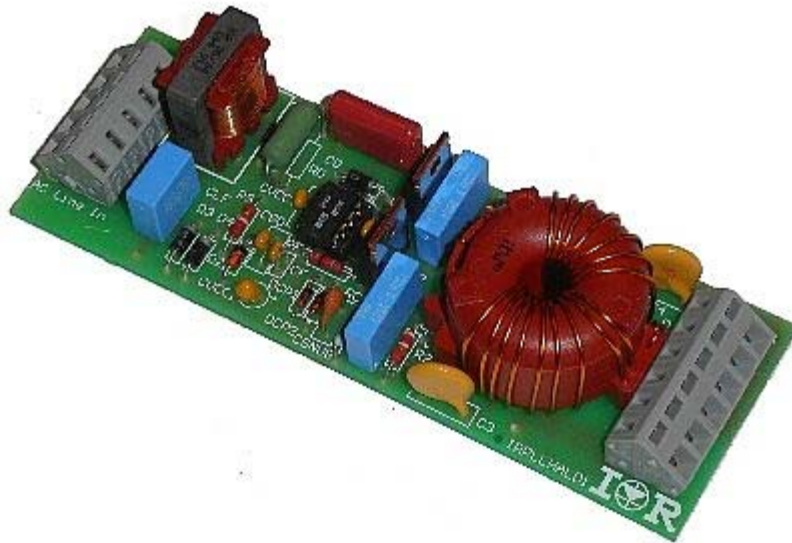
Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>

# IRPLHALO1E

**220/230VAC Input, 12VAC Output, 100VA Max Halogen Convertor**



## Features

Short Circuit and Overload Protection  
Fully dimmable with all dimmer types  
Compensated Load Regulation  
Over temperature shutdown  
EMI Filter  
Using IR2161

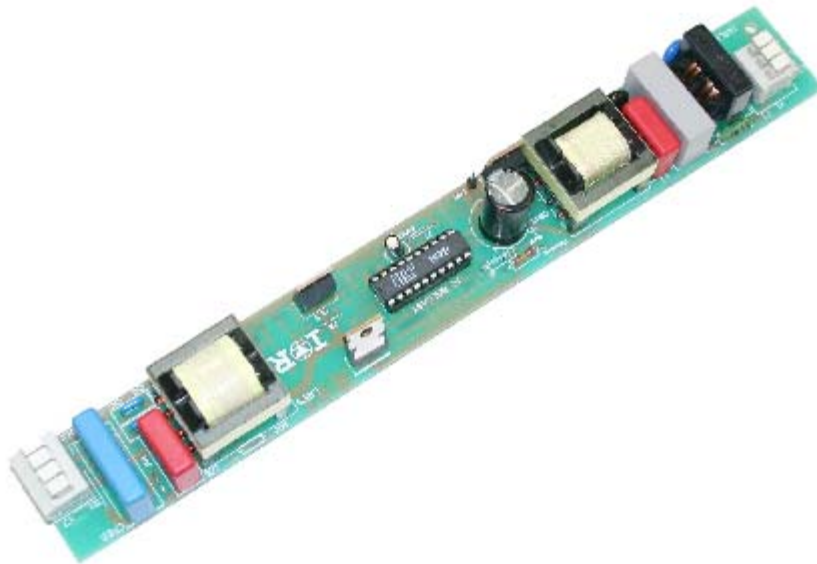
Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

*For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>*

# IRPLLNR3

## Universal Input Linear Fluorescent Ballast for 35W TL5 Lamp



### Features

- High Power Factor/Low THD
- High Frequency Operation
- Under Current Protection
- Thermal Overload Protection
- Lamp Filament Preheating
- Lamp Fault Protection with Auto-Restart
- Low AC Line Protection
- End of Lamp Life Shutdown
- Using IR2167 HVIC ballast controller

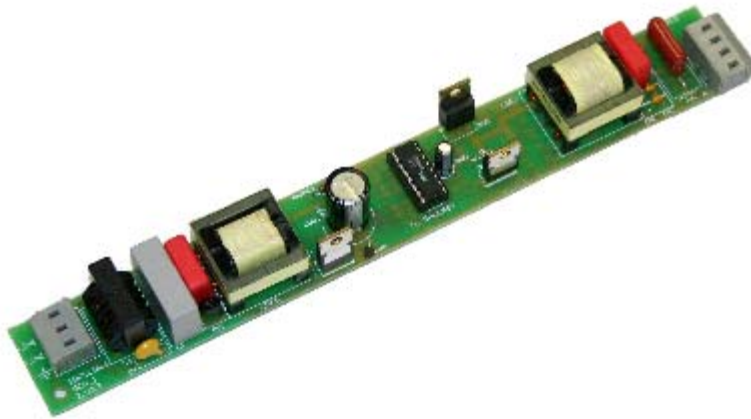
Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>

# IRPLLNR4

## Universal Input Linear Fluorescent Ballast for 35W TL5 Lamp



### Features

High Power Factor/Low THD  
High Frequency Operation  
Lamp Filament Preheating  
Lamp Fault Protection with Auto-Restart  
Low AC Line Protection  
End of Lamp Life Shutdown  
Using IR2166 HVIC ballast controller

Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>

# IRPLMB1E

**25W Small Sized Ballast, 220VAC Input**



## Features

Programmable run frequency & preheat time  
Open filaments and no-lamp protection  
Failure to Strike and deactivated-lamp protection  
Low AC line protection  
Re-lamp Auto-Restart Option (App Note)  
Using IR2520D

Design kit includes-

- Assembled and Tested demo board
- User Guide
- Schematic
- Bill of Materials
- Circuit Board Layout
- Datasheet
- Lighting Solutions CD

For a list of all available reference designs: <http://www.irf.com/technical-info/refdesigns/>