

# CFL SQUARE 4-Pin

EXREMELY FLAT DESIGN & FOR UNIFORM LIGHTING



CFL SQUARE® 4-Pin

QTP-M 2x26-32/220-240 S 2nd

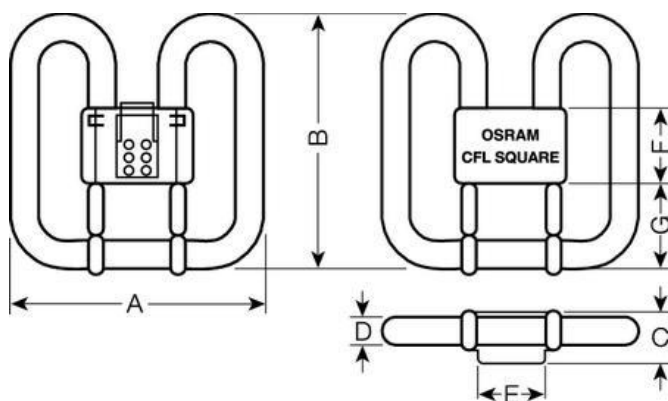
## Benefits

- Ideal for cost-effective creative illumination and decoration
- Extremely economical
- Good quality of light
- Long service life time
- Good lumen maintenance
- Environmental friendly

## Product Features

- Extremely flat dimensions
- Good color rendering (Ra 80...89)
- Average life time: up to 13.000 h
- Operation with electric and conventional control gear

## Dimensions<sup>1</sup>



Description	Base	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
CFL SQUARE® 4-Pin 16W	GR10q	138	141	27.5	15	41	40	49/51
CFL SQUARE® 4-Pin 28W	GR10q	205	207	33	24	41	49	74/77
CFL SQUARE® 4-Pin 38W	GR10q	205	207	33	24	41	49	74/77

## Electrical Data<sup>2</sup>

Lamps operated with **50Hz** reference ballast at 25 °C (100 h agged) ambient temperature

CFL SQUARE® 4- Pin	Lamp Voltage rated [V]	Lamp Current rated [mA]	Lamp Power rated [W]
CFL SQUARE® 4-Pin 16W	103	195	16
CFL SQUARE® 4-Pin 28W	108	320	28
CFL SQUARE® 4-Pin 38W	110	430	38.5

<sup>1</sup> Detail see IEC 60901

<sup>2</sup> According to IEC 60901

GL LB EU&LM FT, Edition: 26.02.2014. Subject to change without notice. Despite careful review, the possibility of mistakes cannot be excluded – no guarantee will be provided.

Lamps operated with HF<sup>3</sup> reference control gear at 25 °C (100 h agged) ambient temperature

CFL SQUARE® 4- Pin	Lamp Voltage rated [V]	Lamp Current rated [mA]	Lamp Power rated [W]
CFL SQUARE® 4-Pin 16W	84	180	15
CFL SQUARE® 4-Pin 28W	97	260	24.5
CFL SQUARE® 4-Pin 38W	96	355	34.5

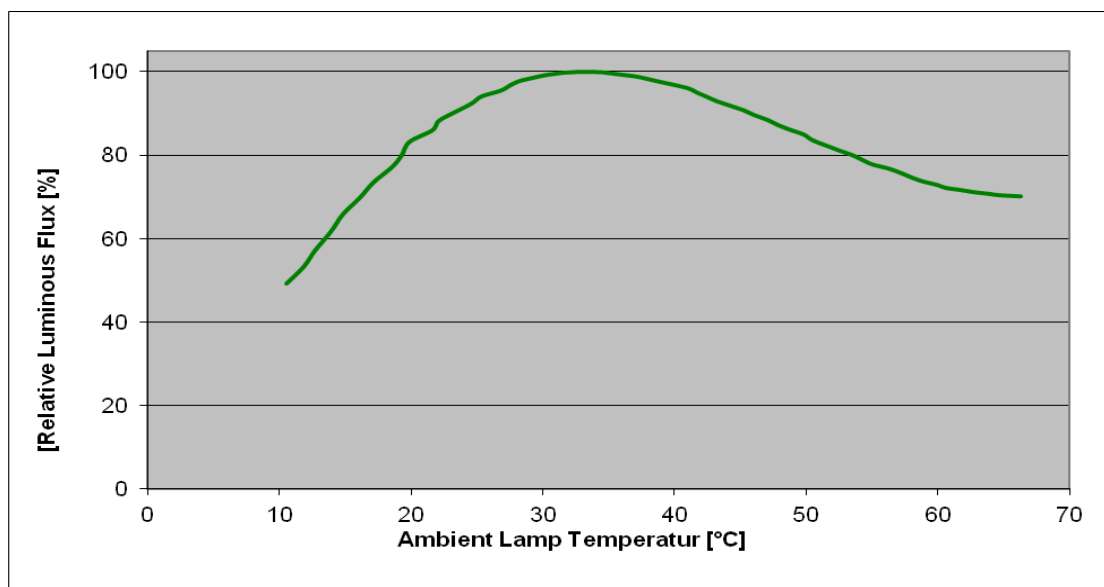
## Circuit (for CCG operation)

CFL SQUARE® 4- Pin	External Starter
16 W, 28 W, 38 W	ST 111 LONGLIFE

## Photometrical Data at 25 °C (100 h agged) ambient temperature<sup>4</sup>

CFL SQUARE® 4- Pin	Light Color LUMILUX®	Color Rendering Index (CRI), Ra	Target Color Coordinate X	Target Color Coordinate Y	Nominal Luminous Flux [lm]	Efficacy 25 °C [lm/W]	Energy Effi- ciency Class
16 W	827 INTERNA	80 ... 89	0.463	0.420	1050	66	B
16 W	835 White	80 ... 89	0.409	0.394	1050	66	B
28 W	827 INTERNA	80 ... 89	0.463	0.420	2050	73	B
28 W	835 White	80 ... 89	0.409	0.394	2050	73	B
38 W	827 INTERNA	80 ... 89	0.463	0.420	2735	71	B
38 W	835 White	80 ... 89	0.409	0.394	2735	71	B

## Relative Luminous Flux / Ambient Temperature



For more detailed information please refer to our technical guide – Compact Fluorescent Lamps. Free download at [www.osram.com](http://www.osram.com)

<sup>3</sup> High Frequency

<sup>4</sup> Measurement in accordance with IEC 60901, annex C and the relevant annex on rated colour characteristics in IEC 60081.

## Lifetime<sup>5</sup>

CFL SQUARE® 4- Pin	ECG <sup>6</sup> preheated IEC switching cycle <sup>7</sup>	CCG IEC switching cycle
<b>B50<sup>8</sup></b>	13000	10000
<b>Service life time<sup>9</sup></b>	9500	6000
<b>LLMF<sup>10</sup> 2000 h</b>	0.90	0,85
<b>LLMF 4000 h</b>	0.88	0.78
<b>LLMF 6000 h</b>	0.85	0.76
<b>LLMF 8000 h</b>	0.82	0.75
<b>LLMF 10000 h</b>	0.80	0.73
<b>LSF<sup>11</sup> 2000 h</b>	1.00	0.98
<b>LSF 4000 h</b>	0.99	0.90
<b>LSF 6000 h</b>	0.95	0.88
<b>LSF 8.000 h</b>	0.88	0.80
<b>LSF 10.000 h</b>	0.75	0.50

## Logistic Data

Description	EAN 10	EAN 40	Packaging Unit
CFL SQUARE® 4-Pin 16W/827	4050300816890	4050300816906	20
CFL SQUARE® 4-Pin 16W/835	4050300816876	4050300816883	20
CFL SQUARE® 4-Pin 28W/827	4050300816951	4050300816968	20
CFL SQUARE® 4-Pin 28W/835	4050300816982	4050300816999	20
CFL SQUARE® 4-Pin 38W/827	4050300817002	4050300817019	20
CFL SQUARE® 4-Pin 38W/835	4050300817026	4050300817033	20

For more information on ECG refer to <http://www.osram.com/ecg>

In case of lamp breakage: [www.osram.com/brokenlamp](http://www.osram.com/brokenlamp)

For more information technical Information see Technical guide. Free download at [www.osram.com](http://www.osram.com)

<sup>5</sup> Measurement in accordance with IEC 60901, annex C.

<sup>6</sup> Electronic Control Gear

<sup>7</sup> Switching cycle 165 min. on, 15 min. off (according to IEC)

<sup>8</sup> Average rated lamp life (B50) is the average value of the life values of individual lamps operated under standardized conditions (50% failure). In other words, this is the operation time at which, for a standardized 3-hour switching cycle (165 minutes on / 15 minutes off, see annex C, IEC 60901), 50% of a sample population of lamps have failed.

<sup>9</sup> Service life time is the mathematical life time (maintenance multiplied with the % of failed lamps e.g. B10) for lamps in an installation after which the installation luminous flux (100 h value) decreased with 30 % (decrease in luminous flux and failed lamps) for indoor lighting.

<sup>10</sup> Lamp Lumen Maintenance Factor (Lamp luminous flux in %): Ratio of the luminous flux of a specific quantity of lamps at a defined number of hours of operation to their luminous flux at 100 h

<sup>11</sup> Lamp Survival Factor (Lamp survival in %): Ratio of the number of electrically intact lamps to the total number of lamps