



## E-candle data sheet

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## 1. Introduction

To replace the real candle, W3Product has developed a candle with an LED light source. The alternative candle resembles a real candle by using specially developed materials for the candle, the LED and the bulb for the flame.

[www.e-candle.co.uk/about-w3-product/movie/](http://www.e-candle.co.uk/about-w3-product/movie/)

## 2. E-candle G4

### 2.1 The benefits of the E-candle

- Low energy consumption;
- Version: hand blown bulb, clear or frosted in two sizes;
- Fitting: G4;
- Cutting edge LED technology always applicable, even with already mounted E-candle;
- Mounted with universal rubber candelabra base connector;
- LED type: COB;
- Voltage: 10-20 volts AC/DC;
- Dimmable: from 10% to 100%;
- Colour temperature: 2200K and 2700K. Other colours available on request;
- Beam angle 360°;
- Parallel two-wire connection (use of existing wiring possible);
- Extremely suitable for large projects.

## 2.2 Technical data of the E-candle

### 2.2.1 E-candle candle

The candle is available in various standard lengths, modifications available on request. See the table below:

Type	Length	Diameter	Material	Colour	Surface	Fitting	Connector
E-candle 140	140 mm	25.5 mm	ABS	Ivory	Glazes over	G4	18 mm 10x1
E-candle 200	200 mm	25.5 mm	ABS	Ivory	Glazes over	G4	18 mm 10x1
E-candle 250	250 mm	25.5 mm	ABS	Ivory	Glazes over	G4	18 mm 10x1

### 2.2.2 Embodiment of the E-candle flame

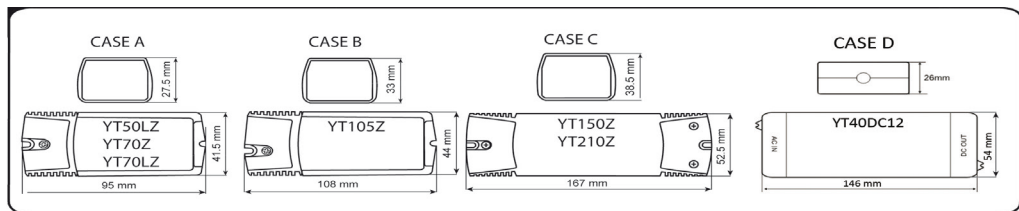
See the table below:

Shape	Base	V	W	K	CRI	LM	Bulb	Size
Flame	G4	12V AC/DC	2 watts	2200K	> 95	170 lm	Frosted	62 x 16 mm
Flame	G4	12V AC/DC	2 watts	2700K	> 95	210 lm	Frosted	62 x 16 mm
Flame	G4	12V AC/DC	2 watts	2200K	> 95	170 lm	Clear	62 x 16 mm
Flame	G4	12V AC/DC	2 watts	2700K	> 95	210 lm	Clear	62 x 16 mm
Flame	G4	12V AC/DC	2 watts	2200K	> 95	170 lm	Frosted	62 x 20 mm
Flame	G4	12V AC/DC	2 watts	2700K	> 95	210 lm	Frosted	62 x 20 mm
Flame	G4	12V AC/DC	2 watts	2200K	> 95	170 lm	Clear	62 x 20 mm
Flame	G4	12V AC/DC	2 watts	2700K	> 95	210 lm	Clear	62 x 20 mm

### 2.2.3 Power supplies of the E-candle

The E-candle LED lamp runs on 12 volts low voltage and every chandelier needs a transformer to supply power to the lamps. The maximum distance from the transformer to the chandelier is 100 metres. The transformer is also suitable for direct voltage. This makes it possible to use the chandelier for emergency lighting. See the table below:

Power	Number of E-candles	Size
0-50 watts	1 - 16	LxWxH = 95x41x28 mm
0-70 watts	8 - 24	LxWxH = 95x41x28 mm
0-105 watts	16 - 36	LxWxH = 108x44x33 mm
0-150 watts	16 - 50	LxWxH = 167x41x28 mm
0-210 watts	16 - 75	LxWxH = 167x41x28 mm



### 2.2.4 E-candle battery

A special version of the E-candle is the E-candle Battery, this is an E-candle that runs on a Li-ion battery. The candle burn time per charge is very high: 340 hours. See the table below:

Shape	Length	Diameter	Burn time	Charging time	Control	Group arrangement	Colour	Battery
Flame	180 mm	24 mm	340 hours	8 hours	Remote control	Yes	Beeswax	Li-ion 3.7V



### 2.2.5 E-candle assembly ring

The E-candle LED lamp runs on 12 volts low voltage and every chandelier needs a transformer to supply power to the lamps. The maximum distance from the transformer to the chandelier is 100 metres. The transformer is also suitable for direct voltage. This makes it possible to use the chandelier for emergency lighting. See the table below:

Type	Size	Connection
no. 1	19-21 mm	M10 x 1
no. 2	22-24 mm	M10 x 1
no. 3	25-28 mm	M10 x 1



### 2.2.6 E-candle Kensington

If a lot of light is required and the chandelier has a very robust appearance, W3Product recommends its specially designed W3Product E-candle at 230 volts with an E14 fitting: The E-candle Kensington. See the table below:

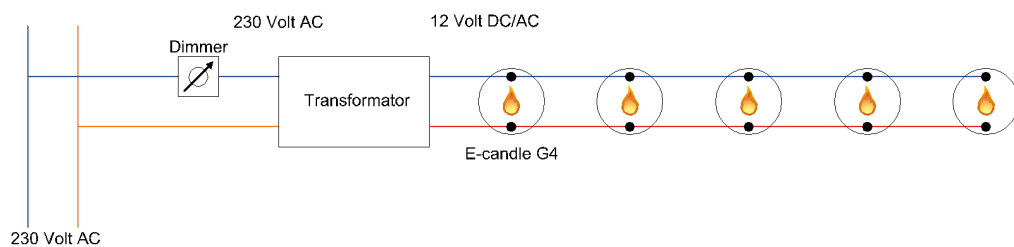
Shape	Length	Diameter	lamp type	Fitting	W	K	LM	Colour
Filament	235 mm	30 mm	Filament	E14	4 watts	2200K	240 lm	Ivory



### 3. Connecting the E-candle G4

#### Wiring diagram

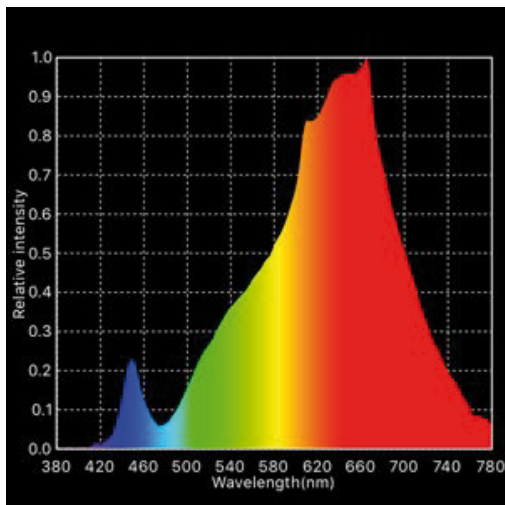
The dimmer is always connected to the primary (mains) side of the transformer. See the diagram below.



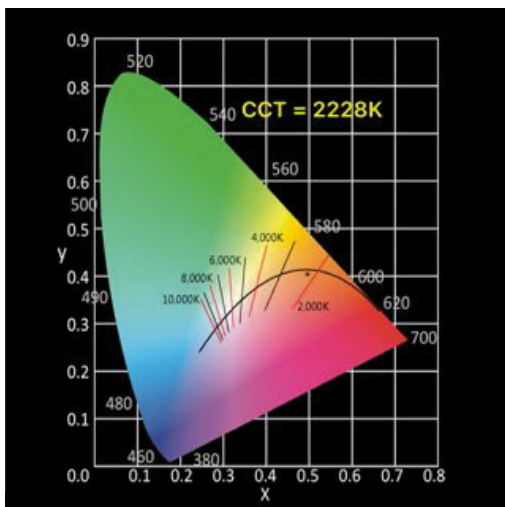
## 4. Light source Test Report

G4 Filament 2200K Spectrum

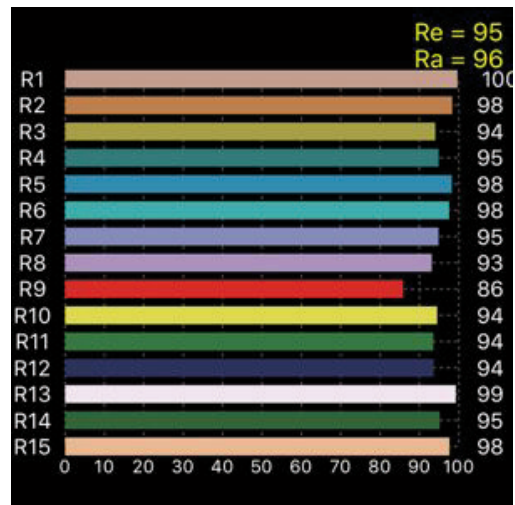
R1 ~ 15 Histogram



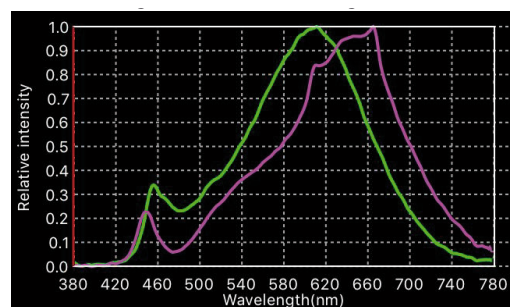
CIE1931



R1 ~ 15 Histogram



Colour temperature: Green line 2700





**W3** **E-candle**  
*Evolution in candlelight*