

**INTRODUCING:** 

# **SAMSUNG ELECTRONICS**

LED Tube Technical data sheet [2014 2H]

## **LED Tube** \_CCG Compatible / AC Direct type



# L-Tube (Essential) Series

## : Energy-saving alternative to traditional fluorescent lamps

- L-tube installation without re-wiring of fixture\* (compatible with conventional ballast)
- lower facility maintenance costs (long lifetime → reduced re-lamping frequency)
- application: Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)

\*For CCG(magnetic ballast) type, Conventional Starter has to be changed with L-Starter(L-Tube Starter)









## [1200mm]

- 📵 GU14H3015V8IEU
- (3) GU14H3015T8IEU
- GU14H3015R8IEU

## [1500mm]

- GU15H3020V8IEU
- GU15H3020T8IEU
- 😉 GU15H3020R8IEU



## 1200mm / 15.5W / G13 / 160° / 3000K

#### ■ Product



Maker Samsung Electronics

Model Code / EAN Code GU14H3015V8IEU / 8806086251884

Voltage AC 220~240V (50/60Hz)

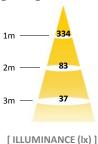
Power Consumption 15.5W

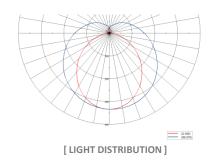
Product CCG Compatible/AC Direct LED tube

Lamp Socket holder G13

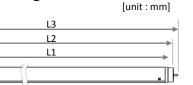


#### **■** Lighting Data





## ■ Dimensional drawing



| L1 (Nom) | L2 (Nom) | L3 (Nom) | D1 (Nom) |
|----------|----------|----------|----------|
| 1198.4   | 1205.6   | 1212.8   | 27.7     |

## **■** Specifications

| •                             |                    |                                |            |
|-------------------------------|--------------------|--------------------------------|------------|
| Tuno                          | LED Tube           | Nominal beam angle (°)         | > 160      |
| Туре                          | LED Tube           | Rated beam angle (°)           | > 160      |
| Nominal power consumption (W) | 15.5               | Operating temperature (℃)      | -20~+50    |
| Rated power consumption (W)   | 15.5               | Nominal lamp life time (hrs)   | 50,000     |
| Nominal luminous flux (lm)    | 1,500              | Rated lamp life time (hrs)     | 50,000     |
| Rated luminous flux (lm)      | 1,500              | Color description              | Warm White |
| Frequency (Hz)                | 50/60              | Color temperature (K)          | 3000       |
| Input current (mA)            | 78                 | CRI(Ra)                        | Min.80     |
| Power factor                  | > 0.9              | Diameter (mm)                  | Ф 27.7     |
| THD (%)                       | ≤ 20               | Overall length (mm)            | 1200       |
| Lumen Maintenance Factor      | L70                | Weight (g)                     | 200        |
| Warm-up time                  | Instant full light | Energy efficiency index        | A+         |
| Starting time (s)             | 0.1                | Energy consumption (kWh/1000h) | 16         |
| On/Off cycles                 | 50,000             | Certification                  | CE         |

## ■ Application

- \* Specifications are subject to change without notice
- \* Energy consumption is calculated based on AC direct type
- Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)

## ■ Packaging Details

| Packaging Type(Std.Pkg.Q'ty) | Single Box (1pc)     | Outer carton (20pc/box) |
|------------------------------|----------------------|-------------------------|
| Dimensions ( L×W×H )         | 1308mm x 34mm x 34mm | 1313mm x 185mm x 152mm  |
| Gross Weight                 | 287g                 | 6.6kg                   |

- more than 50,000 hours average operating life (5 times longer than fluorescent lamps)
- the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation.
- · compatible with an extensive range of ballast (\*please see recommended ballast list)
- Depending on compatible ballast, Energy consumption can be changed.
- emits no UV



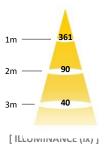
## 1200mm / 15.5W / G13 / 160° / 4000K

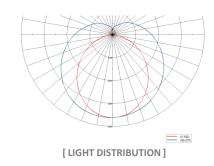
#### ■ Product

Maker Samsung Electronics Model Code / EAN Code GU14H3015T8IEU / 8806086251907 Voltage AC 220~240V (50/60Hz) **Power Consumption** 15.5W Product CCG Compatible/AC Direct LED tube Lamp Socket holder G13



#### **■** Lighting Data





#### ■ Dimensional drawing



|          | L3   |
|----------|--|
|          | L2   |
|          | L1   |
| *        | The state of the s |
|          |  |
| <b>†</b> |  |

| L1 (Nom) | L2 (Nom) | L3 (Nom) | D1 (Nom) |
|----------|----------|----------|----------|
| 1198.4   | 1205.6   | 1212.8   | 27.7     |

#### Specifications

|                               |                    | Nominal beam angle (°)         | > 160         |
|-------------------------------|--------------------|--------------------------------|---------------|
| Туре                          | LED Tube           | Rated beam angle (°)           | > 160         |
| Nominal power consumption (W) | 15.5               | Operating temperature (℃)      | -20~+50       |
| Rated power consumption (W)   | 15.5               | Nominal lamp life time (hrs)   | 50,000        |
| Nominal luminous flux (lm)    | 1,550              | Rated lamp life time (hrs)     | 50,000        |
| Rated luminous flux (lm)      | 1,550              | Color description              | Neutral White |
| Frequency (Hz)                | 50/60              | Color temperature (K)          | 4000          |
| Input current (mA)            | 78                 | CRI(Ra)                        | Min.80        |
| Power factor                  | > 0.9              | Diameter (mm)                  | Ф 27.7        |
| THD (%)                       | ≤ 20               | Overall length (mm)            | 1200          |
| Lumen Maintenance Factor      | L70                | Weight (g)                     | 200           |
| Warm-up time                  | Instant full light | Energy efficiency index        | A+            |
| Starting time (s)             | 0.1                | Energy consumption (kWh/1000h) | 16            |
| On/Off cycles                 | 50,000             | Certification                  | CE, RCM       |

## Application

- \* Specifications are subject to change without notice
- \* Energy consumption is calculated based on AC direct type
- Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)

## ■ Packaging Details

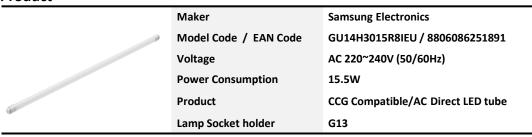
| Packaging Type(Std.Pkg.Q'ty) | Single Box (1pc)     | Outer carton (20pc/box) |
|------------------------------|----------------------|-------------------------|
| Dimensions ( L×W×H )         | 1308mm x 34mm x 34mm | 1313mm x 185mm x 152mm  |
| Gross Weight                 | 287g                 | 6.6kg                   |

- more than 50,000 hours average operating life (5 times longer than fluorescent lamps)
- the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation.
- · compatible with an extensive range of ballast (\*please see recommended ballast list)
- Depending on compatible ballast, Energy consumption can be changed.
- · emits no UV



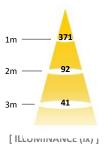
## 1200mm / 15.5W / G13 / 160° / 5000K

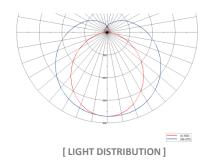
#### ■ Product





#### **■** Lighting Data





#### ■ Dimensional drawing



| $\forall$ | L2       |
|-----------|----------|
|           | L1       |
| *         |          |
| - 1       | <u> </u> |
| <b>†</b>  |          |
|           |          |

| L1 (Nom) | L2 (Nom) | L3 (Nom) | D1 (Nom) |
|----------|----------|----------|----------|
| 1198.4   | 1205.6   | 1212.8   | 27.7     |

## **■** Specifications

|                               |                    | A                                     | . 160      |
|-------------------------------|--------------------|---------------------------------------|------------|
| Туре                          | LED Tube           | Nominal beam angle (°)                | > 160      |
| .,,,,                         |                    | Rated beam angle (°)                  | > 160      |
| Nominal power consumption (W) | 15.5               | Operating temperature ( $^{\circ}$ C) | -20~+50    |
| Rated power consumption (W)   | 15.5               | Nominal lamp life time (hrs)          | 50,000     |
| Nominal luminous flux (lm)    | 1,650              | Rated lamp life time (hrs)            | 50,000     |
| Rated luminous flux (Im)      | 1,650              | Color description                     | Cool White |
| Frequency (Hz)                | 50/60              | Color temperature (K)                 | 5000       |
| Input current (mA)            | 78                 | CRI(Ra)                               | Min.80     |
| Power factor                  | > 0.9              | Diameter (mm)                         | Ф 27.7     |
| THD (%)                       | ≤ 20               | Overall length (mm)                   | 1200       |
| Lumen Maintenance Factor      | L70                | Weight (g)                            | 200        |
| Warm-up time                  | Instant full light | Energy efficiency index               | A+         |
| Starting time (s)             | 0.1                | Energy consumption (kWh/1000h)        | 16         |
| On/Off cycles                 | 50,000             | Certification                         | CE         |

## ■ Application

- \* Specifications are subject to change without notice
- \* Energy consumption is calculated based on AC direct type
- Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)

## ■ Packaging Details

| Packaging Type(Std.Pkg.Q'ty) | Single Box (1pc)     | Outer carton (20pc/box) |
|------------------------------|----------------------|-------------------------|
| Dimensions ( L×W×H )         | 1308mm x 34mm x 34mm | 1313mm x 185mm x 152mm  |
| Gross Weight                 | 287g                 | 6.6kg                   |

- more than 50,000 hours average operating life (5 times longer than fluorescent lamps)
- the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation.
- · compatible with an extensive range of ballast (\*please see recommended ballast list)
- Depending on compatible ballast, Energy consumption can be changed.
- emits no UV



## **■ L-Tube Essential Range**



Samsung CCG Compatible L-Tube lamps are not for use with dimmers or dimming systems.

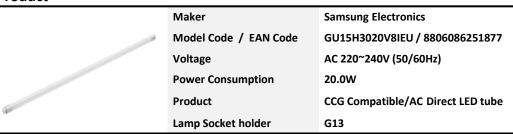
## **■** Ballast Compatibility

| Model            | Maker             | Model Name      |
|------------------|-------------------|-----------------|
| Essential 1200mm |                   | L36TL4          |
|                  | Helvar            | L36A-K          |
|                  |                   | L36A-T          |
|                  | KNOBEL            | 36-NG301        |
|                  | Simens            | VVG 5LZ 363     |
|                  | Vossloh & Schwabe | L36I.342        |
|                  |                   | VVG 36-120 CF30 |
|                  | ABB               | 36-120 CF55     |
|                  | TRIDONIC          | EC 36/40 C302K  |
|                  | TRIDONIC          | EC 36-1 C501K   |



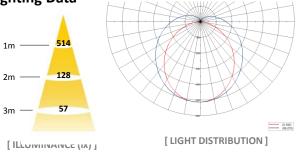
## 1500mm / 20.0W / G13 / 150° / 3000K

#### ■ Product

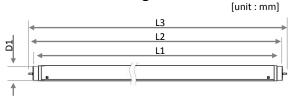




#### ■ Lighting Data



#### ■ Dimensional drawing



| L1 (Nom) | L2 (Nom) | L3 (Nom) | D1 (Nom) |
|----------|----------|----------|----------|
| 1499.0   | 1506.2   | 1513.4   | 27.7     |

## **■** Specifications

|                               |                    | Nominal beam angle (°)         | > 150      |
|-------------------------------|--------------------|--------------------------------|------------|
| Туре                          | LED Tube           | Rated beam angle (°)           | > 150      |
| Nominal power consumption (W) | 20.0               | Operating temperature (℃)      | -20~+50    |
| Rated power consumption (W)   | 20.0               | Nominal lamp life time (hrs)   | 50,000     |
| Nominal luminous flux (Im)    | 1,950              | Rated lamp life time (hrs)     | 50,000     |
| Rated luminous flux (Im)      | 1,950              | Color description              | Warm White |
| Frequency (Hz)                | 50/60              | Color temperature (K)          | 3000       |
| Input current (mA)            | 92                 | CRI(Ra)                        | Min.80     |
| Power factor                  | > 0.9              | Diameter (mm)                  | Ф 27.7     |
| THD (%)                       | ≤ 20               | Overall length (mm)            | 1500       |
| Lumen Maintenance Factor      | L70                | Weight (g)                     | 390        |
| Warm-up time                  | Instant full light | Energy efficiency index        | A+         |
| Starting time (s)             | 0.1                | Energy consumption (kWh/1000h) | 20         |
| On/Off cycles                 | 50,000             | Certification                  | CE         |

## ■ Application

- \* Specifications are subject to change without notice.
- \* Energy consumption is calculated based on AC direct type
   Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)
- Packaging Details

| Packaging Type(Std.Pkg.Q'ty) | Single Box (1pc)     | Outer carton (20pc/box) |
|------------------------------|----------------------|-------------------------|
| Dimensions ( L×W×H )         | 1608mm x 34mm x 34mm | 1613mm x 185mm x 152mm  |
| Gross Weight                 | 513g                 | 11.3kg                  |

- more than 50,000 hours average operating life (5 times longer than fluorescent lamps)
- the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation.
- compatible with an extensive range of ballast (\*please see recommended ballast list)
- Depending on compatible ballast, Energy consumption can be changed.
- · emits no UV



## 1500mm / 20.0W / G13 / 150° / 4000K

#### ■ Product

Maker Samsung Electronics

Model Code / EAN Code GU15H3020T8IEU / 8806086251853

Voltage AC 220~240V (50/60Hz)

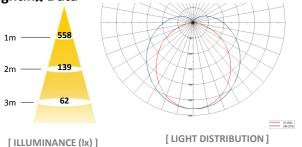
Power Consumption 20.0W

Product CCG Compatible/AC Direct LED tube

Lamp Socket holder G13

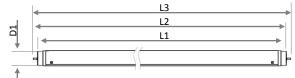


#### ■ Lighting Data



## ■ Dimensional drawing

[unit : mm]



| L1 (Nom) | L2 (Nom) | L3 (Nom) | D1 (Nom) |
|----------|----------|----------|----------|
| 1499.0   | 1506.2   | 1513.4   | 27.7     |

#### ■ Specifications

|                               |                    | Nominal beam angle (°)         | > 150         |
|-------------------------------|--------------------|--------------------------------|---------------|
| Туре                          | LED Tube           | Rated beam angle (°)           | > 150         |
| Nominal power consumption (W) | 20.0               | Operating temperature (℃)      | -20~+50       |
| Rated power consumption (W)   | 20.0               | Nominal lamp life time (hrs)   | 50,000        |
| Nominal luminous flux (lm)    | 2,000              | Rated lamp life time (hrs)     | 50,000        |
| Rated luminous flux (lm)      | 2,000              | Color description              | Neutral White |
| Frequency (Hz)                | 50/60              | Color temperature (K)          | 4000          |
| Input current (mA)            | 92                 | CRI(Ra)                        | Min.80        |
| Power factor                  | > 0.9              | Diameter (mm)                  | Ф 27.7        |
| THD (%)                       | ≤ 20               | Overall length (mm)            | 1500          |
| Lumen Maintenance Factor      | L70                | Weight (g)                     | 390           |
| Warm-up time                  | Instant full light | Energy efficiency index        | A+            |
| Starting time (s)             | 0.1                | Energy consumption (kWh/1000h) | 20            |
| On/Off cycles                 | 50,000             | Certification                  | CE, RCM       |

## ■ Application

- \* Specifications are subject to change without notice.
- \* Energy consumption is calculated based on AC direct type
- Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)

## ■ Packaging Details

| Packaging Type(Std.Pkg.Q'ty) | Single Box (1pc)     | Outer carton (20pc/box) |
|------------------------------|----------------------|-------------------------|
| Dimensions ( L×W×H )         | 1608mm x 34mm x 34mm | 1613mm x 185mm x 152mm  |
| Gross Weight                 | 513g                 | 11.3kg                  |

- more than 50,000 hours average operating life (5 times longer than fluorescent lamps)
- the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation.
- compatible with an extensive range of ballast (\*please see recommended ballast list)
- Depending on compatible ballast, Energy consumption can be changed.
- · emits no UV



## 1500mm / 20.0W / G13 / 150° / 5000K

#### ■ Product

Maker Samsung Electronics

Model Code / EAN Code GU15H3020R8IEU / 8806086251839

Voltage AC 220~240V (50/60Hz)

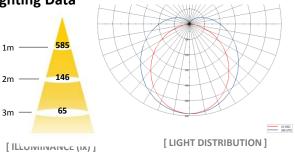
Power Consumption 20.0W

Product CCG Compatible/AC Direct LED tube

Lamp Socket holder G13

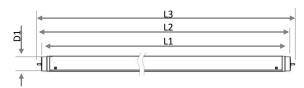


## ■ Lighting Data



## ■ Dimensional drawing

[unit:mm]



| L1 (Nom) | L2 (Nom) | L3 (Nom) | D1 (Nom) |
|----------|----------|----------|----------|
| 1499.0   | 1506.2   | 1513.4   | 27.7     |

#### **■** Specifications

| . •                           |                    |                                |            |
|-------------------------------|--------------------|--------------------------------|------------|
| Tune                          | LED Tube           | Nominal beam angle (°)         | > 150      |
| Туре                          | LED Tube           | Rated beam angle (°)           | > 150      |
| Nominal power consumption (W) | 20.0               | Operating temperature (℃)      | -20~+50    |
| Rated power consumption (W)   | 20.0               | Nominal lamp life time (hrs)   | 50,000     |
| Nominal luminous flux (lm)    | 2,100              | Rated lamp life time (hrs)     | 50,000     |
| Rated luminous flux (lm)      | 2,100              | Color description              | Cool White |
| Frequency (Hz)                | 50/60              | Color temperature (K)          | 5000       |
| Input current (mA)            | 92                 | CRI(Ra)                        | Min.80     |
| Power factor                  | > 0.9              | Diameter (mm)                  | Ф 27.7     |
| THD (%)                       | ≤ 20               | Overall length (mm)            | 1500       |
| Lumen Maintenance Factor      | L70                | Weight (g)                     | 390        |
| Warm-up time                  | Instant full light | Energy efficiency index        | A+         |
| Starting time (s)             | 0.1                | Energy consumption (kWh/1000h) | 20         |
| On/Off cycles                 | 50,000             | Certification                  | CE         |

## **■** Application

- \* Specifications are subject to change without notice.
- \* Energy consumption is calculated based on AC direct type
- Offices, Classrooms, Parking lots, Warehouses, Signage, Cove lighting (suitable for general lighting application)

## ■ Packaging Details

| Packaging Type(Std.Pkg.Q'ty) | Single Box (1pc)     | Outer carton (20pc/box) |
|------------------------------|----------------------|-------------------------|
| Dimensions ( L×W×H )         | 1608mm x 34mm x 34mm | 1613mm x 185mm x 152mm  |
| Gross Weight                 | 513g                 | 11.3kg                  |

- more than 50,000 hours average operating life (5 times longer than fluorescent lamps)
- the overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation.
- compatible with an extensive range of ballast (\*please see recommended ballast list)
- Depending on compatible ballast, Energy consumption can be changed.
- · emits no UV



## **■** L-Tube Essential Range

| <br>Product Code | Bar Code      | Specification                       |
|------------------|---------------|-------------------------------------|
| GU15H3020V8IEU   | 8806086251877 | 1950lm / 20.0W / 150D / 3000K / G13 |
| GU15H3020T8IEU   | 8806086251853 | 2000lm / 20.0W / 150D / 4000K / G13 |
| GU15H3020R8IEU   | 8806086251839 | 2100lm / 20.0W / 150D / 5000K / G13 |

Samsung CCG Compatible L-Tube lamps are not for use with dimmers or dimming systems.

## **■** Ballast Compatibility

| Model            | Maker             | Model Name |
|------------------|-------------------|------------|
| Essential 1500mm | Helvar            | L58A-T230  |
|                  | TRIDONIC          | EC58 C502K |
|                  | Vossloh & Schwabe | L58I.116   |