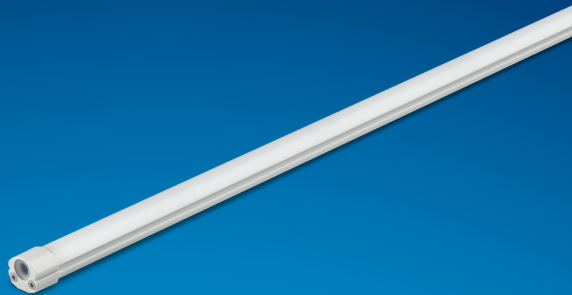


**PHILIPS**

**CertaFlux**

**LED**

CertaFlux RDL canopy  
G1



Datasheet

# CertaFlux RDL LED system

## Key features and benefits

- Lowest Total Cost of Ownership with rapid payback times
- Efficacy up to 120 lm/W for canopy lighting
- Choice of color temperatures 3000 K, 3500K, 4000 K, Meat Color
- Natural merchandise color with specially formulated CRI >80 LEDs
- Led engine lengths optimized to standard lengths optimized for the application
- Plug and play system for easy and fast assembly
- Miniaturized slim design for aesthetic integration
- Built-in lens provides bright illumination for attractive merchandising
- Enhanced safety with 24 V supply (Safety Extra Low Voltage – SELV)
- Virtually maintenance-free due to long life-time: >50,000 hours
- True System proposition with Philips Constant Voltage LED power drivers and accessories
- Five year system warranty

September 2018

## Ordering data

| Commercial product name            | EOC               | 12NC           | Box quantity |
|------------------------------------|-------------------|----------------|--------------|
| CertaFlux RDL canopy 575mm 830 G1  | 8718699 620660 00 | 9290 016 67406 | 24           |
| CertaFlux RDL canopy 575mm 835 G1  | 8718699 620684 00 | 9290 016 67706 | 24           |
| CertaFlux RDL canopy 575mm 840 G1  | 8718699 620707 00 | 9290 016 68006 | 24           |
| CertaFlux RDL canopy 575mm MC G1   | 8718699 620721 00 | 9290 016 68306 | 24           |
| CertaFlux RDL canopy 855mm 830 G1  | 8718699 621421 00 | 9290 016 67506 | 24           |
| CertaFlux RDL canopy 855mm 835 G1  | 8718699 621445 00 | 9290 016 67806 | 24           |
| CertaFlux RDL canopy 855mm 840 G1  | 8718699 620981 00 | 9290 016 68106 | 24           |
| CertaFlux RDL canopy 855mm MC G1   | 8718699 621001 00 | 9290 016 68406 | 24           |
| CertaFlux RDL canopy 1150mm 830 G1 | 8718699 620820 00 | 9290 016 67606 | 24           |
| CertaFlux RDL canopy 1150mm 835 G1 | 8718699 620844 00 | 9290 016 67906 | 24           |
| CertaFlux RDL canopy 1150mm 840 G1 | 8718699 620868 00 | 9290 016 68206 | 24           |
| CertaFlux RDL canopy 1150mm MC G1  | 8718699 620882 00 | 9290 016 68506 | 24           |

## Module temperatures

| Parameter                            | Nominal* | Life** | Max*** | Unit |
|--------------------------------------|----------|--------|--------|------|
| T <sub>a</sub> (ambient temperature) | 25       | 30     | 30     | °C   |

\* Nominal value at which typical performance is specified

\*\* Value at which life time is specified

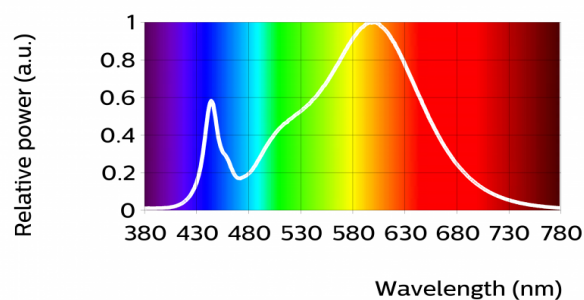
\*\*\* Maximum value for safe operation, do not operate above this value

## Optical characteristics - table per color (CCT)

### CertaFlux RDL canopy 575mm 830 G1

| Parameter                          | Min | Typ            | Max           | Unit |
|------------------------------------|-----|----------------|---------------|------|
| Luminous flux                      | 900 | 1000           | 1200          | lm   |
| Correlated color temperature (CCT) |     | 3000           |               | K    |
| Color coordinates (CIEx, CIEy)     |     | (0.435, 0.407) |               | -    |
| Color consistency                  |     |                | 5             | SDCM |
| CRI                                | 80  |                |               |      |
| Photobiological safety             |     |                | RG1 unlimited |      |
| Energy efficiency label            |     | A++            |               |      |

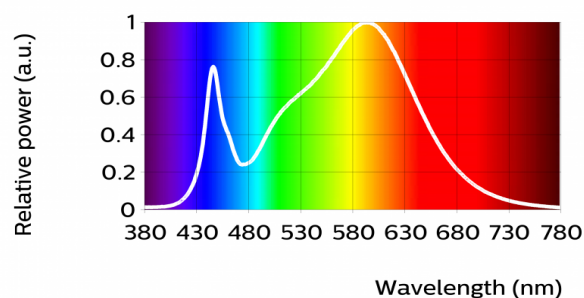
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



### CertaFlux RDL canopy 575mm 835 G1

| Parameter                          | Min | Typ            | Max           | Unit |
|------------------------------------|-----|----------------|---------------|------|
| Luminous flux                      | 900 | 1000           | 1200          | lm   |
| Correlated color temperature (CCT) |     | 3500           |               | K    |
| Color coordinates (CIEx, CIEy)     |     | (0.409, 0.394) |               | -    |
| Color consistency                  |     |                | 5             | SDCM |
| CRI                                | 80  |                |               |      |
| Photobiological safety             |     |                | RG1 unlimited |      |
| Energy efficiency label            |     | A++            |               |      |

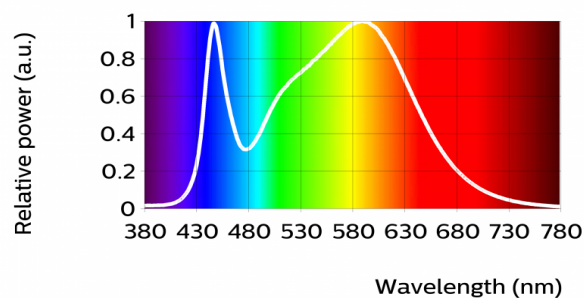
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



#### CertaFlux RDL canopy 575mm 840 G1

| Parameter                          | Min | Typ            | Max           | Unit |
|------------------------------------|-----|----------------|---------------|------|
| Luminous flux                      | 900 | 1000           | 1200          | lm   |
| Correlated color temperature (CCT) |     | 4000           |               | K    |
| Color coordinates (CIEx, CIEy)     |     | (0.382, 0.382) |               | -    |
| Color consistency                  |     |                | 5             | SDCM |
| CRI                                | 80  |                |               |      |
| Photobiological safety             |     |                | RG1 unlimited |      |
| Energy efficiency label            |     | A++            |               |      |

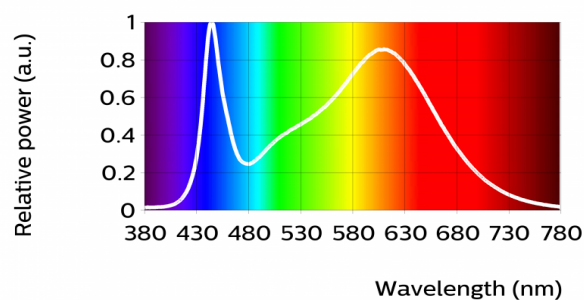
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



#### CertaFlux RDL canopy 575mm MC G1

| Parameter                      | Min | Typ            | Max           | Unit |
|--------------------------------|-----|----------------|---------------|------|
| Luminous flux                  | 630 | 700            | 840           | lm   |
| Color coordinates (CIEx, CIEy) |     | (0.391, 0.334) |               | -    |
| Color consistency              |     |                | 5             | SDCM |
| CRI                            | 80  |                |               |      |
| Photobiological safety         |     |                | RG1 unlimited |      |
| Energy efficiency label        |     | A+             |               |      |

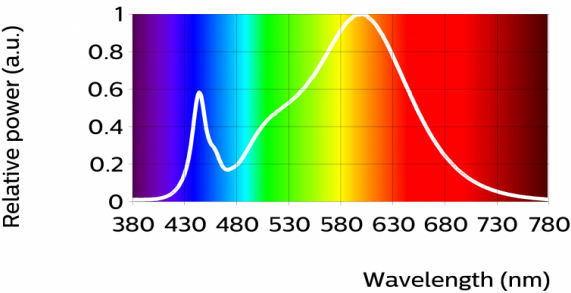
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



CertaFlux RDL canopy 855mm 830 G1

| Parameter                          | Min  | Typ            | Max           | Unit |
|------------------------------------|------|----------------|---------------|------|
| Luminous flux                      | 1350 | 1500           | 1800          | lm   |
| Correlated color temperature (CCT) |      | 3000           |               | K    |
| Color coordinates (CIEx, CIEy)     |      | (0.435, 0.407) |               | -    |
| Color consistency                  |      |                | 5             | SDCM |
| CRI                                | 80   |                |               |      |
| Photobiological safety             |      |                | RG1 unlimited |      |
| Energy efficiency label            |      | A++            |               |      |

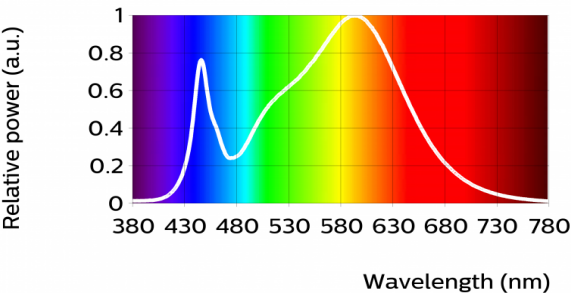
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



CertaFlux RDL canopy 855mm 835 G1

| Parameter                          | Min  | Typ            | Max           | Unit |
|------------------------------------|------|----------------|---------------|------|
| Luminous flux                      | 1350 | 1500           | 1800          | lm   |
| Correlated color temperature (CCT) |      | 3500           |               | K    |
| Color coordinates (CIEx, CIEy)     |      | (0.409, 0.394) |               | -    |
| Color consistency                  |      |                | 5             | SDCM |
| CRI                                | 80   |                |               |      |
| Photobiological safety             |      |                | RG1 unlimited |      |
| Energy efficiency label            |      | A++            |               |      |

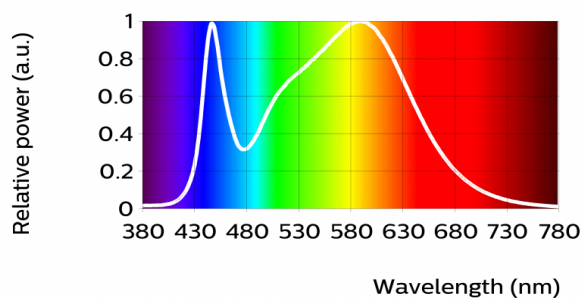
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



### CertaFlux RDL canopy 855mm 840 G1

| Parameter                          | Min  | Typ            | Max           | Unit |
|------------------------------------|------|----------------|---------------|------|
| Luminous flux                      | 1350 | 1500           | 1800          | lm   |
| Correlated color temperature (CCT) |      | 4000           |               | K    |
| Color coordinates (CIEx, CIEy)     |      | (0.382, 0.382) |               | -    |
| Color consistency                  |      |                | 5             | SDCM |
| CRI                                | 80   |                |               |      |
| Photobiological safety             |      |                | RG1 unlimited |      |
| Energy efficiency label            |      | A++            |               |      |

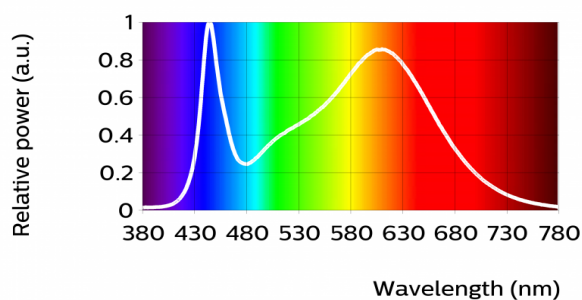
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



### CertaFlux RDL canopy 855mm MC G1

| Parameter                      | Min | Typ            | Max           | Unit |
|--------------------------------|-----|----------------|---------------|------|
| Luminous flux                  | 945 | 1050           | 1260          | lm   |
| Color coordinates (CIEx, CIEy) |     | (0.391, 0.334) |               | -    |
| Color consistency              |     |                | 5             | SDCM |
| CRI                            | 80  |                |               |      |
| Photobiological safety         |     |                | RG1 unlimited |      |
| Energy efficiency label        |     | A+             |               |      |

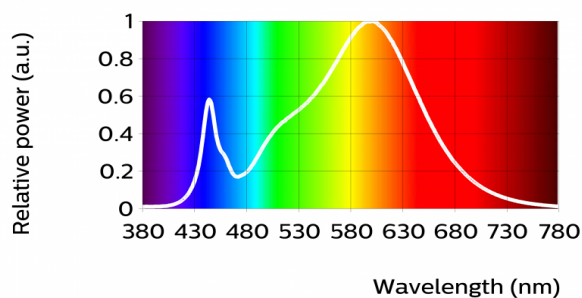
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



### CertaFlux RDL canopy 1150mm 830 G1

| Parameter                          | Min  | Typ            | Max           | Unit |
|------------------------------------|------|----------------|---------------|------|
| Luminous flux                      | 1800 | 2000           | 2400          | lm   |
| Correlated color temperature (CCT) |      | 3000           |               | K    |
| Color coordinates (CIEx, CIEy)     |      | (0.435, 0.407) |               | -    |
| Color consistency                  |      |                | 5             | SDCM |
| CRI                                | 80   |                |               |      |
| Photobiological safety             |      |                | RG1 unlimited |      |
| Energy efficiency label            |      | A++            |               |      |

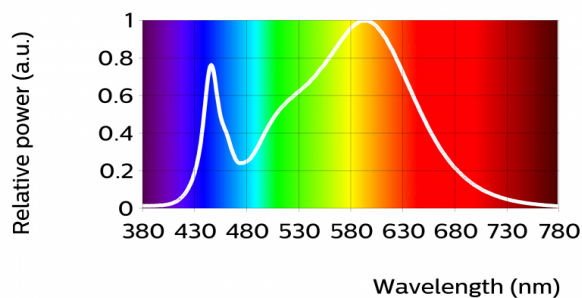
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



### CertaFlux RDL canopy 1150mm 835 G1

| Parameter                          | Min  | Typ            | Max           | Unit |
|------------------------------------|------|----------------|---------------|------|
| Luminous flux                      | 1800 | 2000           | 2400          | lm   |
| Correlated color temperature (CCT) |      | 3500           |               | K    |
| Color coordinates (CIEx, CIEy)     |      | (0.409, 0.394) |               | -    |
| Color consistency                  |      |                | 5             | SDCM |
| CRI                                | 80   |                |               |      |
| Photobiological safety             |      |                | RG1 unlimited |      |
| Energy efficiency label            |      | A++            |               |      |

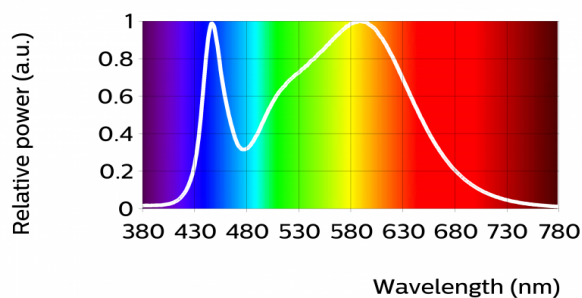
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



### CertaFlux RDL canopy 1150mm 840 G1

| Parameter                          | Min  | Typ            | Max           | Unit |
|------------------------------------|------|----------------|---------------|------|
| Luminous flux                      | 1800 | 2000           | 2400          | lm   |
| Correlated color temperature (CCT) |      | 4000           |               | K    |
| Color coordinates (CIEx, CIEy)     |      | (0.382, 0.382) |               | -    |
| Color consistency                  |      |                | 5             | SDCM |
| CRI                                | 80   |                |               |      |
| Photobiological safety             |      |                | RG1 unlimited |      |
| Energy efficiency label            |      | A++            |               |      |

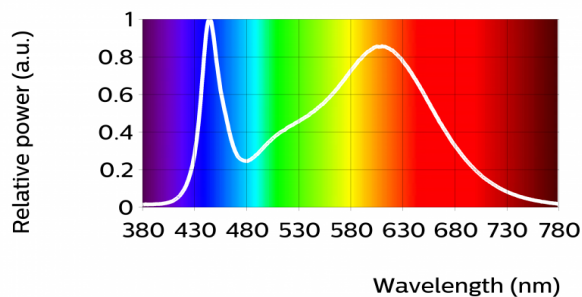
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



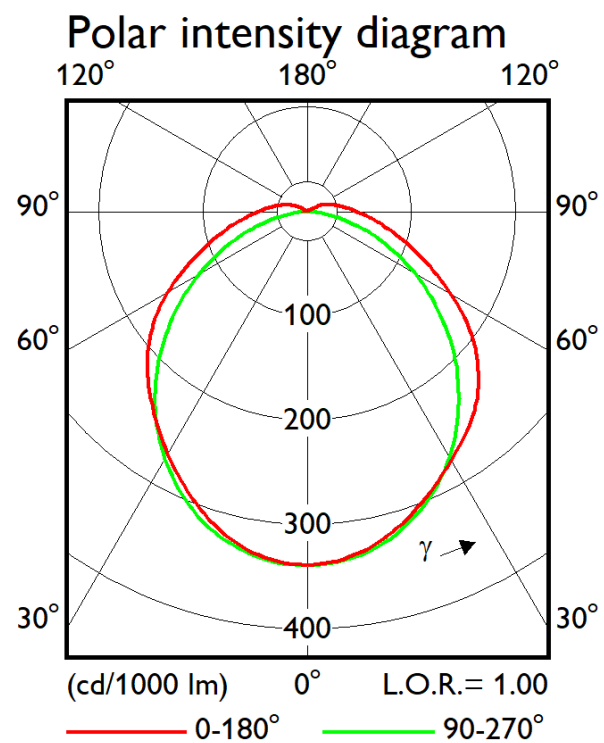
### CertaFlux RDL canopy 1150mm MC G1

| Parameter                      | Min  | Typ            | Max           | Unit |
|--------------------------------|------|----------------|---------------|------|
| Luminous flux                  | 1260 | 1400           | 1680          | lm   |
| Color coordinates (CIEx, CIEy) |      | (0.391, 0.334) |               | -    |
| Color consistency              |      |                | 5             | SDCM |
| CRI                            | 80   |                |               |      |
| Photobiological safety         |      |                | RG1 unlimited |      |
| Energy efficiency label        |      | A+             |               |      |

Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5







## Electrical characteristics

CertaFlux RDL canopy 575mm 830 G1  
 CertaFlux RDL canopy 575mm 835 G1  
 CertaFlux RDL canopy 575mm 840 G1  
 CertaFlux RDL canopy 575mm MC G1

| Parameter         | Min | Typ  | Max | Unit |
|-------------------|-----|------|-----|------|
| Forward voltage   |     | 24.0 |     | V    |
| Power consumption |     | 8.6  |     | W    |

CertaFlux RDL canopy 855mm 830 G1  
 CertaFlux RDL canopy 855mm 835 G1  
 CertaFlux RDL canopy 855mm 840 G1  
 CertaFlux RDL canopy 855mm MC G1

| Parameter         | Min | Typ  | Max | Unit |
|-------------------|-----|------|-----|------|
| Forward voltage   |     | 24.0 |     | V    |
| Power consumption |     | 12.9 |     | W    |

CertaFlux RDL canopy 1150mm 830 G1  
 CertaFlux RDL canopy 1150mm 835 G1  
 CertaFlux RDL canopy 1150mm 840 G1  
 CertaFlux RDL canopy 1150mm MC G1

| Parameter         | Min | Typ  | Max | Unit |
|-------------------|-----|------|-----|------|
| Forward voltage   |     | 24.0 |     | V    |
| Power consumption |     | 17.2 |     | W    |

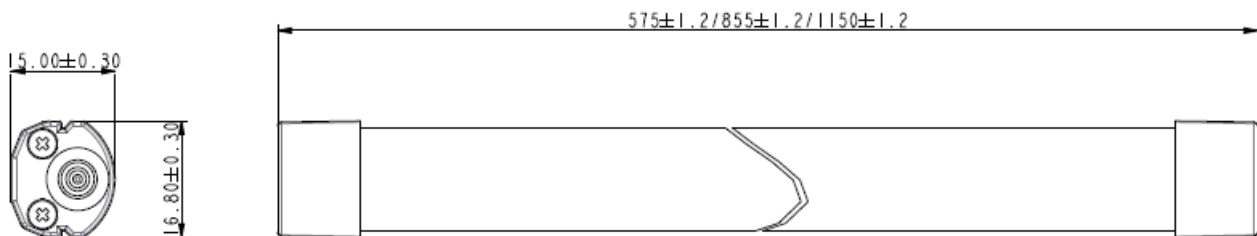
## Lumen maintenance

| Operation point | Lumen maintenance<br>x 1000 hours | L70 |     |     | L80 |     |     |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|-----|
|                 |                                   | B50 | B20 | B10 | B50 | B20 | B10 |
|                 | Ta -20°C                          | >54 | >54 | >54 | >54 | >54 | 53  |
|                 | Ta 5 °C                           | >54 | >54 | >54 | 46  | 43  | 42  |
|                 | Ta 30°C                           | >54 | 53  | 52  | 34  | 33  | 32  |

## Mechanical characteristics

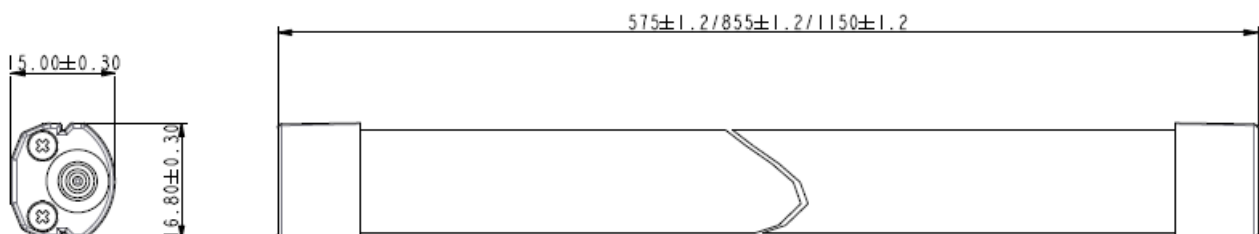
CertaFlux RDL canopy 575mm 830 G1  
 CertaFlux RDL canopy 575mm 835 G1  
 CertaFlux RDL canopy 575mm 840 G1  
 CertaFlux RDL canopy 575mm MC G1

| Parameter | Min   | Typ  | Max   | Unit |
|-----------|-------|------|-------|------|
| Length    | 573.8 | 575  | 576.2 | mm   |
| Width     | 16.5  | 16.8 | 17.1  | mm   |
| Height    | 14.7  | 15   | 15.3  | mm   |



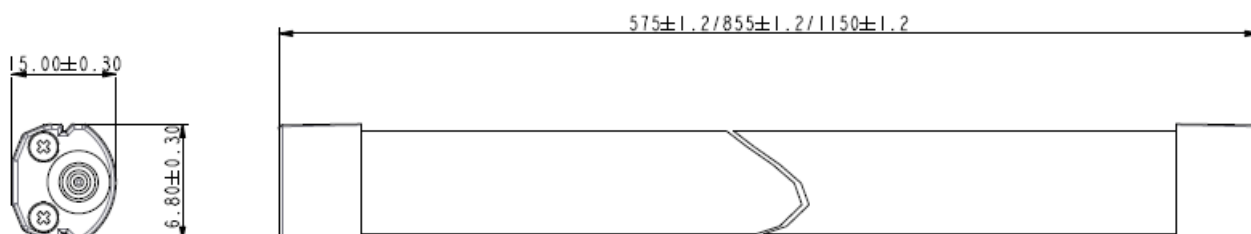
CertaFlux RDL canopy 855mm 830 G1  
 CertaFlux RDL canopy 855mm 835 G1  
 CertaFlux RDL canopy 855mm 840 G1  
 CertaFlux RDL canopy 855mm MC G1

| Parameter | Min   | Typ  | Max   | Unit |
|-----------|-------|------|-------|------|
| Length    | 853.8 | 855  | 856.3 | mm   |
| Width     | 16.5  | 16.8 | 17.1  | mm   |
| Height    | 14.7  | 15   | 15.3  | mm   |



CertaFlux RDL canopy 1150mm 830 G1  
 CertaFlux RDL canopy 1150mm 835 G1  
 CertaFlux RDL canopy 1150mm 840 G1  
 CertaFlux RDL canopy 1150mm MC G1

| Parameter | Min    | Typ  | Max    | Unit |
|-----------|--------|------|--------|------|
| Length    | 1148.8 | 1150 | 1151.2 | mm   |
| Width     | 16.5   | 16.8 | 17.1   | mm   |
| Height    | 14.7   | 15   | 15.3   | mm   |



## Absolute ratings

| Parameter                 | Min | Typ | Max | Unit |
|---------------------------|-----|-----|-----|------|
| Case temperature (Tc-max) |     |     | 70  | °C   |
| ESD (direct contact)      |     |     | 4   | kV   |
| ESD (air)                 |     |     | 8   | kV   |
| Ambient temperature       | -30 |     | 30  | °C   |
| Storage temperature       | -30 |     | 60  | °C   |

## Application information

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### Certificates and Standards

IEC/EN 62031

IEC/EN 62471

Relevant clauses of IEC/EN 60335-1

Relevant clauses of IEC/EN 60335-2-24

Relevant clauses of IEC/EN 60335-2-89

Compliant to the "Non-sparking 'n' electrical apparatus" requirements of IEC/EN 60335-2-24, Annex CC and IEC/EN 60335-2-89, Annex BB.

ENEC (Products are tested for safety and operation AND IEC approved by an accredited testhouse)

UL 2108

### Environmental

RoHS/REACH

### Application

|           |                                                                                |
|-----------|--------------------------------------------------------------------------------|
| IP rating | IP54, IK02                                                                     |
| System    | IEC Class III when connected to a SELV Philips Constant Voltage 24 VDC drivers |
| Dimming   | Yes                                                                            |



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09/2018