

LEDT5 LAMI

PECIFICATION



# EFO 2U3 T5 4000

2800lm | 17W | 4000K | CRI83

Lamp length
Lamp power
Colour consistency over lifetime
Lamp flux
Beam angle
Energy efficiency rating
Ingress protection
Glow wire flammability
Corrosive gas protection
Photo-biological safety
Electrical safety
Controllability
Ignition time
Switching cycles
Lamp service lifetime

| 149mm | 7W 3 SDCM 2800lm | 20° A++ IP65 850 °C 200ppb SO2, 200ppb NO2, 10ppb H2S, 10ppb Cl2 Class 0 (Exempt) SELV equiv. 1% ~ 100% < 0.1 second Unlimited 70,000 hours A (see drawing) Nominal wattage Colour stability over useful lifetime Initial lumen Lambertian emitter

> IP65 lamp-holder IEC 60695-2-12 EN 60068-2-60 Method 4 EN 62471 < 60VDC I-10V / DALI dimmable Instantaneous No impact on lifetime L80B10



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#### I. MAXIMUM RATINGS

Operating temperature	-40 °C ~ +45 °C	
Storage temperature	-40 °C ~ +85 °C	
Rated Tc temperature	+85 °C	See drawing (Tc point)
Permissible forward voltage	60VDC	
Permissible constant current	700mA	

### 2. OPTICAL CHARACTERISTICS

Colour code	4000K	
Colour rendering index	83	
Lamp Initial flux	2800lm	
Lamp stabilized flux	2720lm	
Lamp initial efficacy	I 65lm/W	
Lamp stabilized efficacy	I 60lm/W	
Time to thermal balance	20 min.	
		Note: luminous Flux tolerance +/-10%

### 3. ELECTRICAL CHARACTERISTICS

Lamp power	17W	
Lamp input current	700mA	
Lamp forward voltage	24VDC	
		Note: Forward voltage tolerance +/-5%

#### 4. **DIMENSIONS**



Α	В	С	weight
Nominal length (max)	Length from cap end to end of pin (max)	Length between end of pins	
1149mm	1153.7mm(min.) / 1156.1mm	1163.2mm	220g



## 5. PHOTOBIOLOGICAL SAFETY DATA

Intrinsically safe lamp and no special safety measure required

Actinic UV		RG 0 Exempt
Near UV		RG 0 Exempt
Retinal blue light	500Lux method	RG 0 Exempt
Retinal blue light	200mm method	RG 0 Exempt
Retinal thermal		RG 0 Exempt
Infrared		RG 0 Exempt



## 6. LIGHT DISTRIBUTION CURVE



## 7. SPECTRAL DISTRIBUTION





### 8. INSTRUCTIONS

EfOra LEDT5 lamp is not a retrofit Lamp for FLT8 or FLT5 (fluorescent) tube straight replacement. LEDT5 lamp requires external LED driver. SELV equiv. constant current LED driver must be used. Parallel wiring of the lamps is not permissible. Series wiring of the lamps is possible as long as total forward voltage does not exceed the maximum permissible output voltage of the LED driver. LED driver should be tested for compatibility with the lamp and qualified according to norms and LED driver supplier recommendations. If in doubt, the customer should contact relevant customer service.

SELV equivalent constant current LED driver should be used and multi-channel SELV LED driver recommended if several lamps are connected

Conformity to the following regulations applicable to LED drivers is mandatory:

. EN61347-1, EN61347-2-13, EN62384, EN6154, EN55015, EN62386-102

. IEC 60068-2-6, IEC 60068-2-2 and IEC 60068-2-29

COMPLIANCE TO IEC NORMS & EU/ROHS All measurements were conducted according to the following norm:

#### . IEC/EN 61195, IEC/EN 62031, IEC/EN 62717

The product is compliant with European Directive 2002/95/EC of January 2003 on restriction of the use of listed Hazardous Substances in Electrical & Electronic Equipment (RoHS)

#### 9. PRECAUTIONS

. Store in its original packing until assembly in the luminaire or installation on-site

- . Maintain in its original carton box within storage temperature between -40  $\circ C$  and +85  $\circ C$
- . Handle with care during assembly into the luminaire and on-site installation in accordance with supplier's mounting instructions
- . Switch off main power supply when mounting the lamps in the luminaire on-site
- . Make sure the electrically active part of the lamp is connected to the wired cap in the luminaire
- . Designing and specifying the driving electronics is the full responsibility of the luminaire maker
- . Voltage drive operation is not permissible
- . Do not exceed maximum ratings
- . Luminaire makers are urged to conform to the international standards of luminaire design: IEC 60598
- . Failure to conform to above listed norms, instructions and precautions will render the warranty null & void
- . The warranty is void if the product is not used for the purpose for which it is designed
- . Glass breakage during installation, use and maintenance is not covered by warranty
- . Lamps should be disposed according to national disposal & recycling regulations

#### **10. ENERGY EFFICIENCY RATING**



Efora LEDT5 is not a retrofit tube but an innovative exchangeable lamp delivering excellent energy efficiency and unsurpassed light quality. The frosted glass has a unique diffused surface ensuring minimal glare and a comfortable fluorescent-like aspect. Glass provides superior protection against ingress of corrosive gas and vapours that may cause premature aging or fatal destruction of the LED devices and other electronic components. Glass is also a very stable and durable material showing no discoloration and no mechanical deformation. Efora LEDT5 lamps adopt the global G5 standard for connectivity.