efora
electronic rep forum • bvba

- Sensing (input)
- Signal processing
- Safety management
- Switching (output)

Art. Nr.: EFO 1U3 T5 3500

SPECIFICATION

EFO 1U3 T5 3500

1350lm | 8.5W | 3500K | CRI83

Lamp length	549mm	*A (see drawing)*
Lamp power	8.5W	*Nominal wattage*
Colour consistency over lifetime	3 SDCM	*Colour stability over useful lifetime*
Lamp flux	1350lm	*Initial lumen*
Beam angle	120˚	*Lambertian emitter*
Energy efficiency rating	A++	
Ingress protection	IP65	*IP65 lamp-holder*
Glow wire flammability	850 ˚C	*IEC 60695-2-12*
Corrosive gas protection	200ppb SO2, 200ppb NO2, 10ppb H2S, 10ppb Cl2	*EN 60068-2-60 Method 4*
Photo-biological safety	Class 0 (Exempt)	*EN 62471*
Electrical safety	SELV equiv.	*< 60VDC*
Controllability	1% ~ 100%	*1-10V / DALI dimmable*
Ignition time	< 0.1 second	*Instantaneous*
Switching cycles	Unlimited	*No impact on lifetime*
Lamp service lifetime	70,000 hours	*L80B10*

SELV equiv. constant CURRENT RoHS compliance CE KEMA KEUR

efora
electronic rep forum • bvba

- Sensing (input)
- Signal processing
- Safety management
- Switching (output)

EFO 1U3 T5 3500

1. 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	350mA	

2. OPTICAL CHARACTERISTICS

Colour code	3500K
Colour rendering index	83
Lamp Initial flux	1350lm
Lamp stabilized flux	1318lm
Lamp initial efficacy	160lm/W
Lamp stabilized efficacy	155lm/W
Time to thermal balance	20 min.

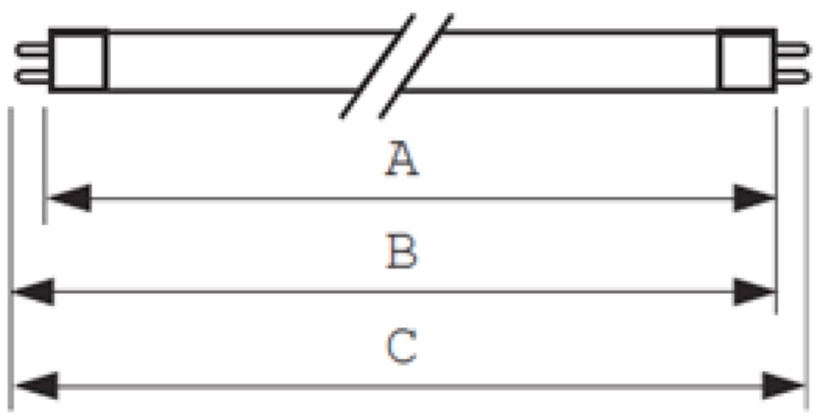
Note: luminous Flux tolerance +/-10%

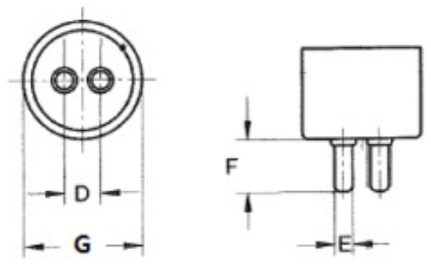
3. ELECTRICAL CHARACTERISTICS

Lamp power	8.5W
Lamp input current	350mA
Lamp forward voltage	24VDC

Note: Forward voltage tolerance +/-5%

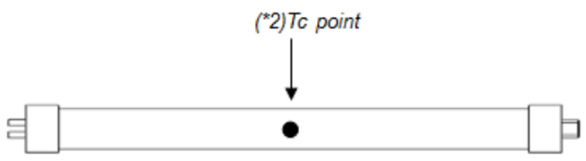
4. DIMENSIONS





Dimensions (mm)							
D		**E**		**F**		**G**	
Min	Max	Min	Max	Min	Max	Min	Max
4.45	5.05	2.30	2.50	6.65	7.05	18.20	18.80

A	**B**	**C**	**weight**
Nominal length (max)	Length from cap end to end of pin (max)	Length between end of pins	
549mm	553.7mm(min.) / 556.1mm	563.2mm	110g

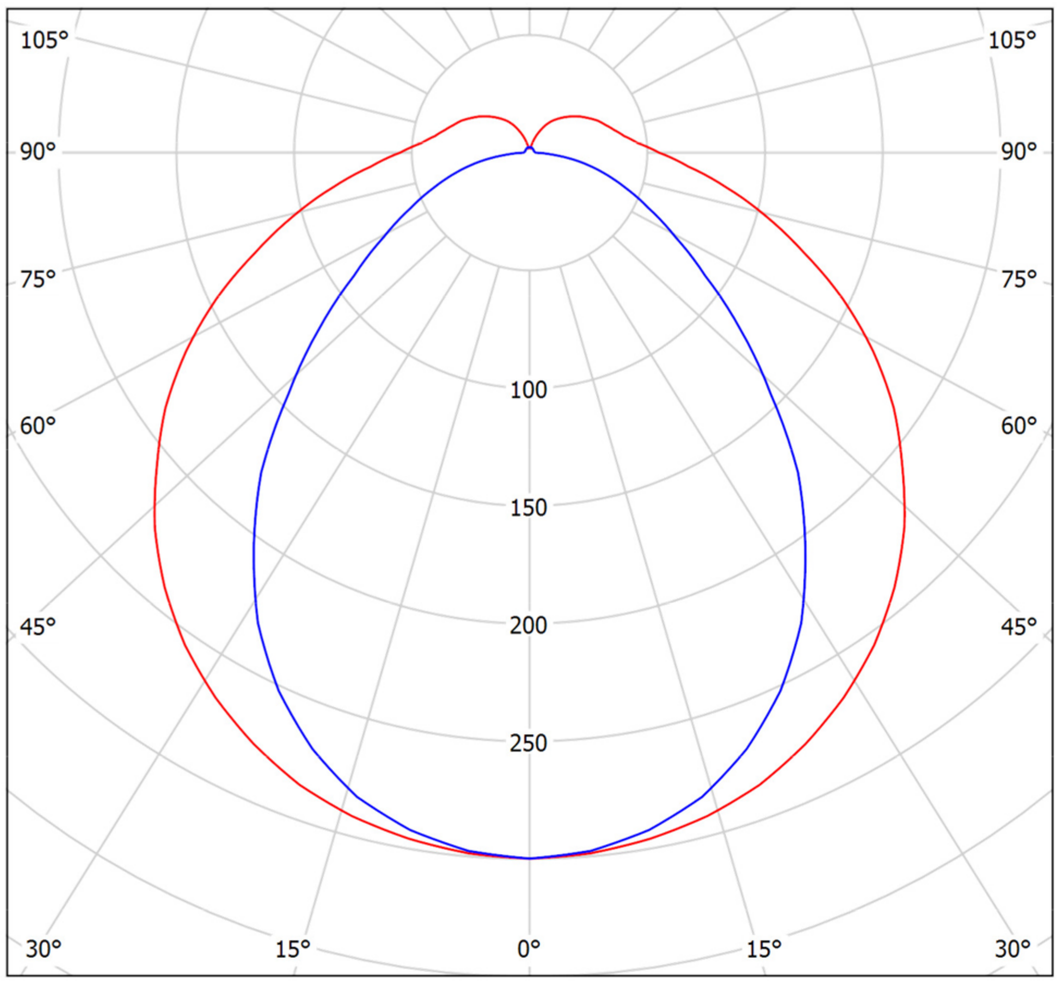


5. PHOTOBIOLOGICAL SAFETY DATA

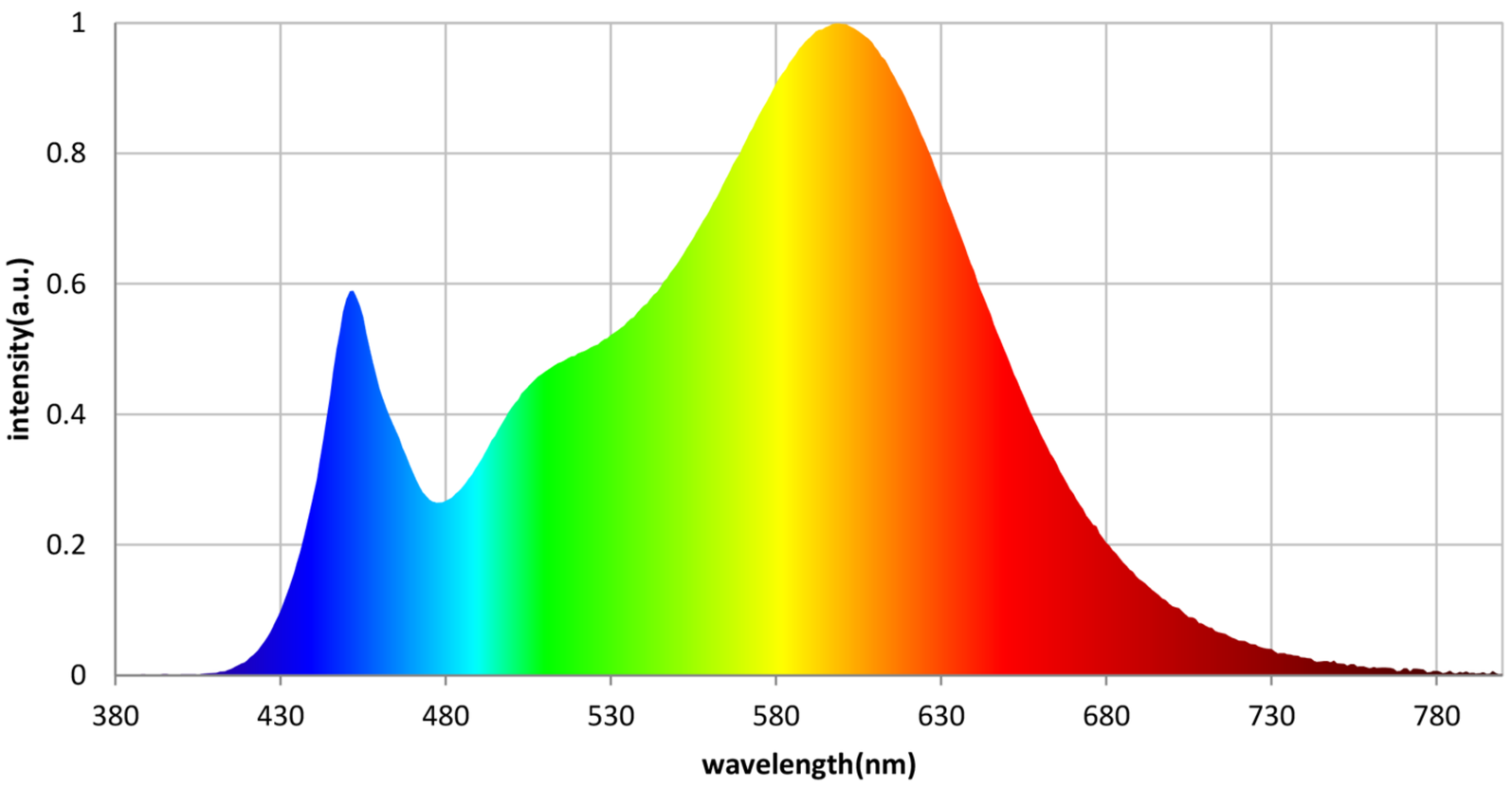
Intrinsically safe lamp and no special safety measure required

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:

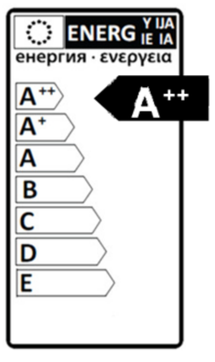
. IEC/EN 61195, IEC/EN 62031, IEC/EN 62717

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 ◦C and +85 ◦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.