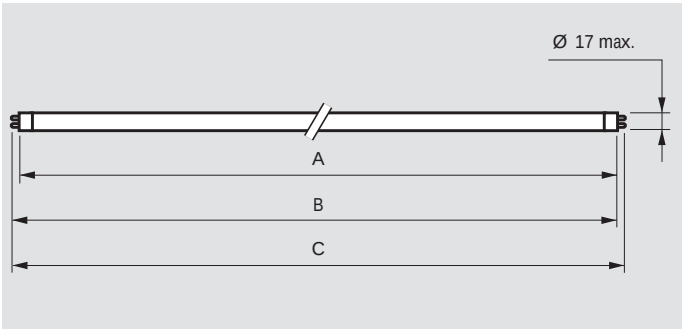
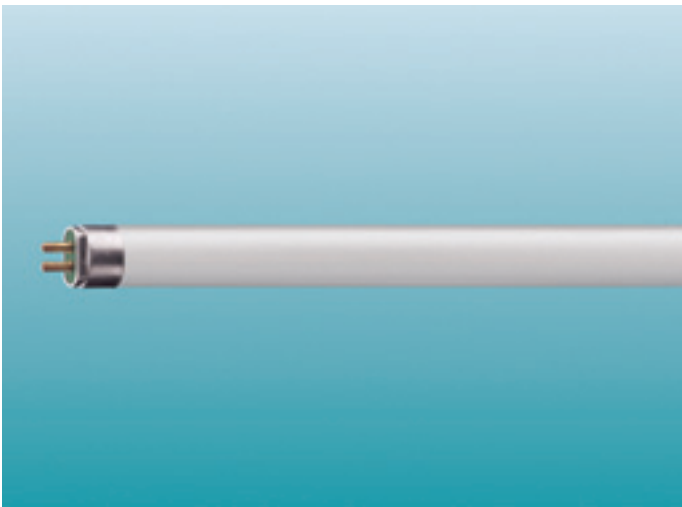




Dimensions in mm

Type	A max.	B min.	B max.	C max.
TL5 HO 24W	549.0	553.7	556.1	563.2
TL5 HO 39W	849.0	853.7	856.1	863.2
TL5 HO 54W	1149.0	1153.7	1156.1	1163.2
TL5 HO 49W	1449.0	1453.7	1456.1	1463.2
TL5 HO 80W	1449.0	1453.7	1456.1	1463.2

Note: The circumscription (inclusive the warp) of the lamps is 17 mm.



Definition

TL5 lamps are fluorescent lamps with a diameter of 16 mm, which is 40% thinner than the diameter of existing TL-D lamps.

Description

TL5 HO lamps are designed for high lumen output and system miniaturization.

The TL5 HO range is more optimal for installations which need high luminaire fluxes.

- The latest technology has been incorporated: a triphosphor layer in combination with precoating.
- If a so called cut-off HF electronic ballast without additional electrode heating (designed on nominal lamp specs.) is used, the maximum lumen output of the lamp will be reached at approx. 35 °C in free-burning position.
- TL5 HO lamps are especially designed for operation with electronic gear. Due to the high lamp voltages 50 Hz is not recommended or supported.
- The tube is 40% thinner than existing TL-D lamps which have a 26 mm diameter. This smaller lamp gives luminaire designers much greater freedom in the design of their products.
- The lamp lengths have been defined for easy fitting into ceiling module systems.

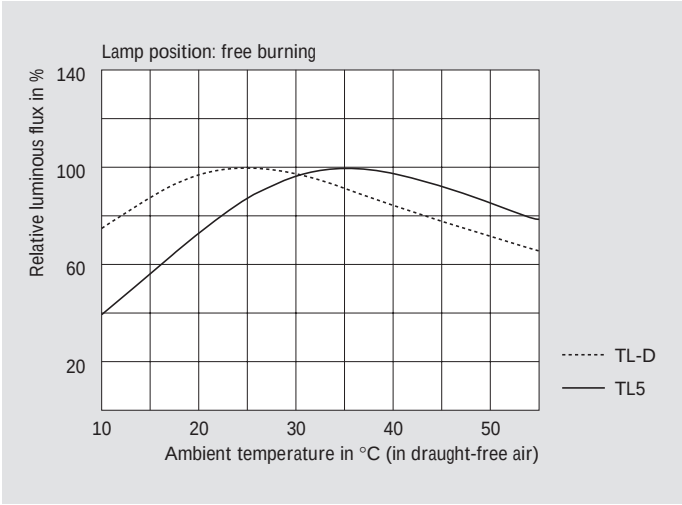
Characteristics

Philips quality implies an optimum quality:

- a high lumen output of 7000 lm (at the top);
- a lumen maintenance up to standards.
- a colour rendering index of 85.
- a low mercury dose.
- at a 3 hours switching cycle the lamps will last 20,000 burning hours if operated on appropriate HF warm start ballasts.
- the lamps are well-suited for dimming.
- the lamps can be ignited from -15 °C to +50 °C ambient temperature and are striation-poor even at low temperatures as compared to TL-D lamps.

Applications

The TL5 lamps allow more compact and efficient systems. The smaller lamp and the higher lumen packages of the TL5 HO range offer exciting opportunities for architectural lighting and customized solutions. The high flux is more optimal for direct/indirect optics in aesthetic pendants and furniture-mounted luminaires in offices, workshops, restaurants and reception areas. Furthermore it offers economic solutions with high-ceiling lighting in shops, industry and department stores as well as wall-washing/ shelf lighting applications.

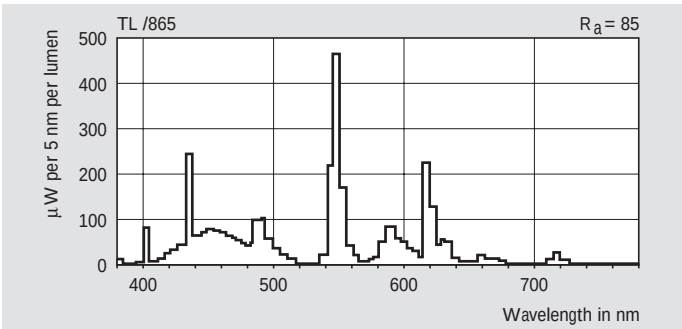
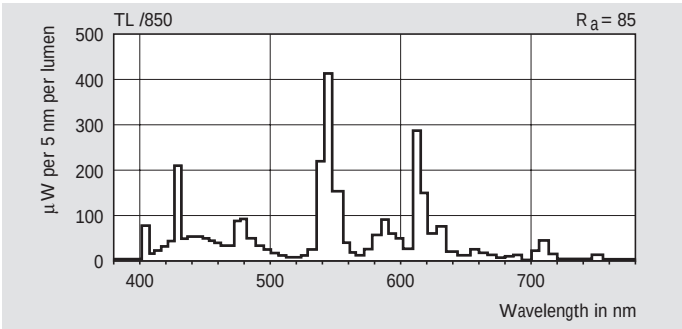
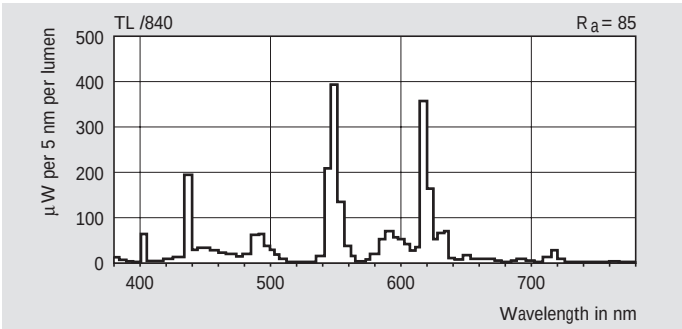
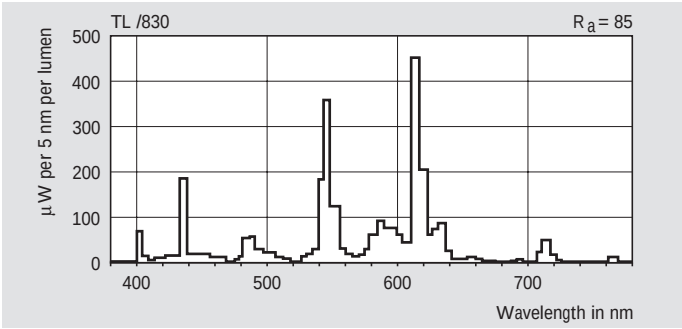
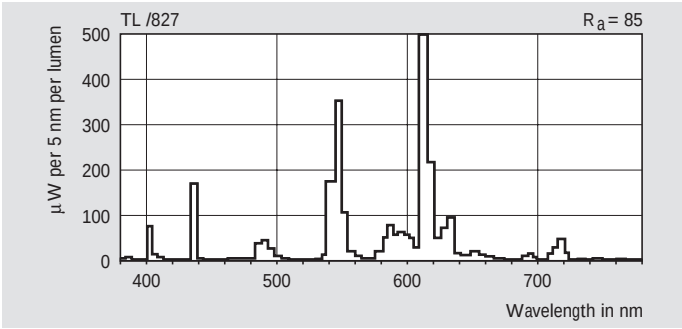


The TL5 lamp is optimized for temperature conditions that may be expected in TL5 luminaires (35 °C). The TL-D lamp is optimized for an ambient temperature of 25 °C.

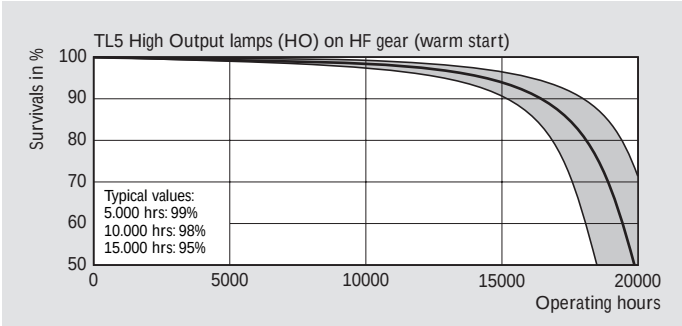


- Notes:
- Nominal luminous flux and electrical specifications defined at an ambient temperature of 25 °C in free burning position on reference ballast.
 - Efficacy (lm/W) and luminance defined at top of the lumen curve (approx. 35 °C).
 - The lamps require an end-of-life switch-off function.
 - Only 500 volt marked G5 holders to be used.
 - G5 cap contains marking dents to enable correct positioning at lamp mounting.

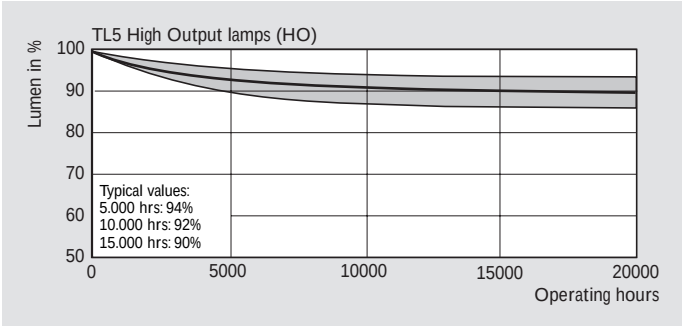
Commercial name	Type	Cap/ base	Lamp voltage	Lamp current	Nominal lumen output (25°C) lm	Colour designation	Corr. colour temp. K	Efficacy top lumens lm/W	Average luminance at top cd/cm²	Nett weight g	EOC sleeve	EOC tray pack
MASTER TL5 HO	TL5 HO 24W /827	G5	80	300	1750	INCAND. WHITE	2700	89	2.5	55	643087	636959
MASTER TL5 HO	TL5 HO 24W /830	G5	80	300	1750	WARM WHITE	3000	89	2.5	55	639585	636980
MASTER TL5 HO	TL5 HO 24W /840	G5	80	300	1750	COOL WHITE	4000	89	2.5	55	639608	637048
MASTER TL5 HO	TL5 HO 24W /850	G5	80	300	1650	DAYLIGHT	5000	84	2.4	55	-	637079
MASTER TL5 HO	TL5 HO 24W /865	G5	80	300	1650	COOL DAYLIGHT	6500	84	2.4	55	643933	637109
MASTER TL5 HO	TL5 HO 39W /827	G5	119	330	3100	INCAND. WHITE	2700	92	2.8	85	643100	637130
MASTER TL5 HO	TL5 HO 39W /830	G5	119	330	3100	WARM WHITE	3000	92	2.8	85	639622	637161
MASTER TL5 HO	TL5 HO 39W /840	G5	119	330	3100	COOL WHITE	4000	92	2.8	85	639646	637222
MASTER TL5 HO	TL5 HO 39W /865	G5	119	330	2950	COOL DAYLIGHT	6500	87	2.7	85	643872	637284
MASTER TL5 HO	TL5 HO 54W /827	G5	118	460	4450	INCAND. WHITE	2700	93	2.9	110	643148	637314
MASTER TL5 HO	TL5 HO 54W /830	G5	118	460	4450	WARM WHITE	3000	93	2.9	110	643162	637345
MASTER TL5 HO	TL5 HO 54W /840	G5	118	460	4450	COOL WHITE	4000	93	2.9	110	643186	637406
MASTER TL5 HO	TL5 HO 54W /850	G5	118	460	4250	DAYLIGHT	5000	89	2.8	110	-	637437
MASTER TL5 HO	TL5 HO 54W /865	G5	118	460	4250	COOL DAYLIGHT	6500	89	2.8	110	643919	637468
MASTER TL5 HO	TL5 HO 49W /827	G5	195	255	4300	INCAND. WHITE	2700	99	2.3	140	643124	637499
MASTER TL5 HO	TL5 HO 49W /830	G5	195	255	4300	WARM WHITE	3000	99	2.3	140	639547	637529
MASTER TL5 HO	TL5 HO 49W /840	G5	195	255	4300	COOL WHITE	4000	99	2.3	140	639561	637581
MASTER TL5 HO	TL5 HO 49W /865	G5	195	255	4100	COOL DAYLIGHT	6500	94	2.2	140	643896	637642
MASTER TL5 HO	TL5 HO 80W /830	G5	150	540	6150	WARM WHITE	3000	88	3.3	140	710406	644367
MASTER TL5 HO	TL5 HO 80W /840	G5	150	540	6150	COOL WHITE	4000	88	3.3	140	710451	644381
MASTER TL5 HO	TL5 HO 80W /865	G5	150	540	5850	COOL DAYLIGHT	6500	83	3.1	140	710475	644404



Spectral power distributions



Life expectancy



Lumen maintenance