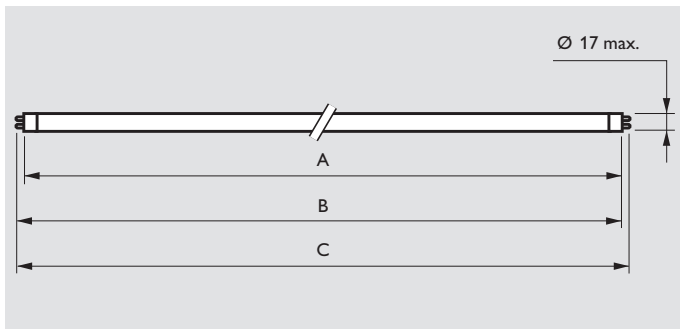
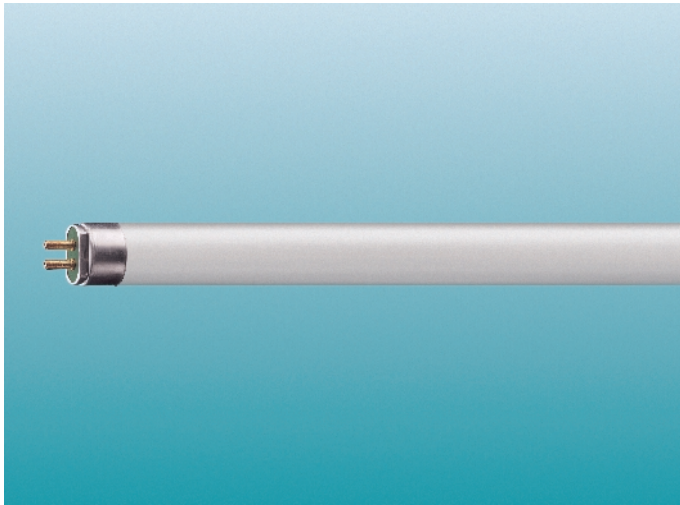


# Fluorescent lamps

# MASTER 'TL'5 High Output



Dimensions in mm

Type	A max.	B min.	B max.	C max.
'TL'5 HO 24W	549.0	553.7	556.1	563.2
'TL'5 HO 39W	849.0	853.7	856.1	863.2
'TL'5 HO 54W	1149.0	1153.7	1156.1	1163.2
'TL'5 HO 49W	1449.0	1453.7	1456.1	1463.2
'TL'5 HO 80W	1449.0	1453.7	1456.1	1463.2

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

### Definition

'TL'5 lamps are fluorescent lamps with a diameter of 16 mm, which is 40 % thinner than the diameter of existing 'TL'D lamps.

### Description

'TL'5 HO lamps are designed for high lumen output and system miniaturization.

The 'TL'5 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.
- 'TL'5 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 'TL'5 lamps allow more compact and efficient systems.

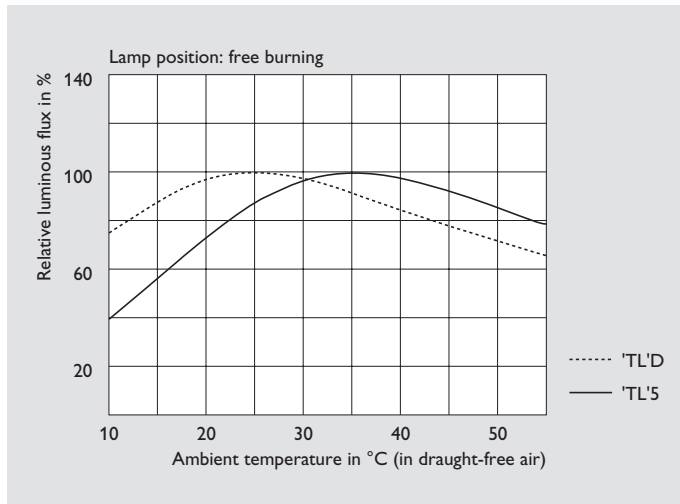
The smaller lamp and the higher lumen packages of the 'TL'5 HO range offer exciting opportunities for architectural lighting and customized solutions.

The high flux is more optimal for direct/indirect optics in aesthetic pendant 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.



# Fluorescent lamps

# MASTER 'TL'5 High Output



The 'TL'5 lamp is optimized for temperature conditions one may expect in 'TL'5 luminaires (35 °C), the 'TL'D lamp is optimized for 25 °C ambient temperature.

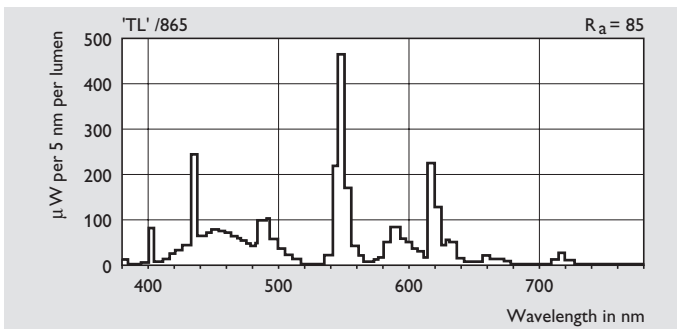
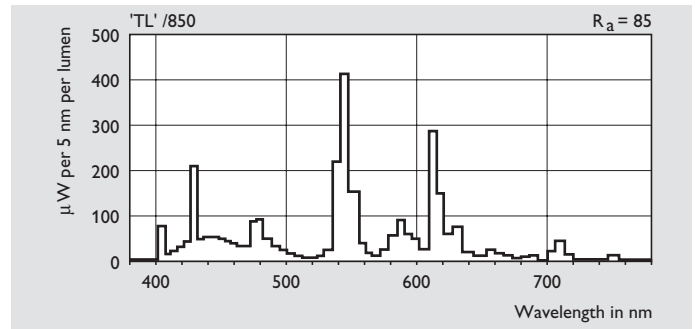
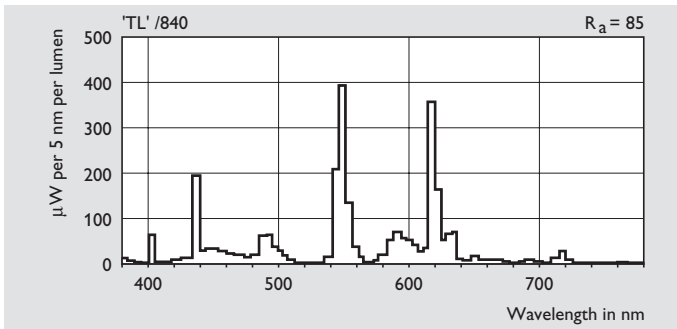
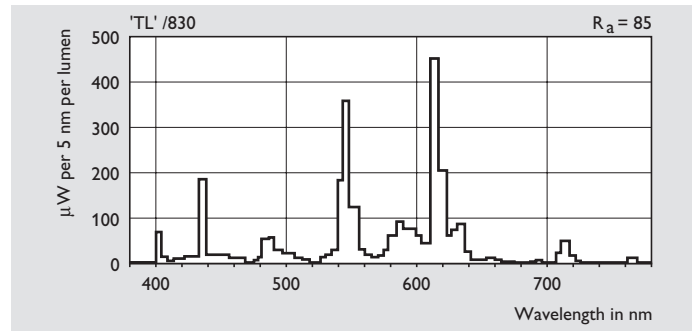
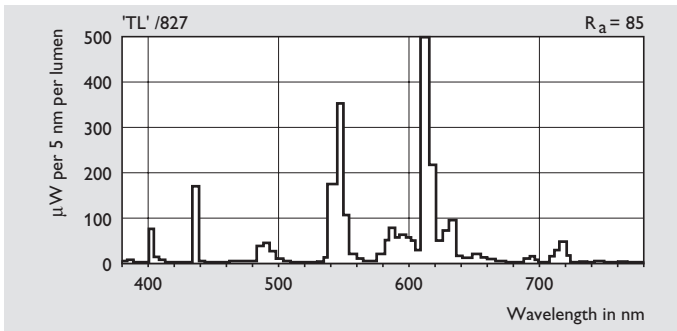
- Notes:
- Nominal luminous flux and electrical specifications defined at an ambient temperature of 25 °C in free burning position on reference ballast.
  - Efficacy (lm/W) and luminance defined at top of the lumen curve (approx. 35 °C).
  - The lamps require an end-of-life switch-off function.
  - Only 500 volt marked G5 holders to be used.
  - G5 cap contains marking dents to enable correct positioning at lamp mounting.
  - A tray pack (40 pcs) and an individually sleeved packing (30 pcs) is available.

Commercial name	Type	Cap/ base	Lamp voltage	Lamp current	Nominal lumen output (25°C)	Colour designation	Corr. colour temp.	Efficacy top lumens	Average luminance at top	Nett weight	EOC sleeve	EOC tray pack
MASTER TL5 HO	'TL'5 HO 24W /827	G5	77	295	1750	INCAND. LIGHT	2700	89	2.5	55	643087	636959
MASTER TL5 HO	'TL'5 HO 24W /830	G5	77	295	1750	WARM WHITE	3000	89	2.5	55	639585	636980
MASTER TL5 HO	'TL'5 HO 24W /840	G5	77	295	1750	COOL WHITE	4000	89	2.5	55	639608	637048
MASTER TL5 HO	'TL'5 HO 24W /850	G5	77	295	1650	DAYLIGHT	5000	84	2.4	55	-	637079
MASTER TL5 HO	'TL'5 HO 24W /865	G5	77	295	1650	COOL DAYLIGHT	6500	84	2.4	55	643933	637109
MASTER TL5 HO	'TL'5 HO 39W /827	G5	117	325	3100	INCAND. LIGHT	2700	92	2.8	85	643100	637130
MASTER TL5 HO	'TL'5 HO 39W /830	G5	117	325	3100	WARM WHITE	3000	92	2.8	85	639622	637161
MASTER TL5 HO	'TL'5 HO 39W /840	G5	117	325	3100	COOL WHITE	4000	92	2.8	85	639646	637222
MASTER TL5 HO	'TL'5 HO 39W /865	G5	117	325	2950	COOL DAYLIGHT	6500	87	2.7	85	643872	637284
MASTER TL5 HO	'TL'5 HO 54W /827	G5	121	450	4450	INCAND. LIGHT	2700	93	2.9	110	643148	637314
MASTER TL5 HO	'TL'5 HO 54W /830	G5	121	450	4450	WARM WHITE	3000	93	2.9	110	643162	637345
MASTER TL5 HO	'TL'5 HO 54W /840	G5	121	450	4450	COOL WHITE	4000	93	2.9	110	643186	637406
MASTER TL5 HO	'TL'5 HO 54W /850	G5	121	450	4250	DAYLIGHT	5000	89	2.8	110	-	637437
MASTER TL5 HO	'TL'5 HO 54W /865	G5	121	450	4250	COOL DAYLIGHT	6500	89	2.8	110	643919	637468
MASTER TL5 HO	'TL'5 HO 49W /827	G5	200	250	4300	INCAND. LIGHT	2700	95	2.3	140	643124	637499
MASTER TL5 HO	'TL'5 HO 49W /830	G5	200	250	4300	WARM WHITE	3000	95	2.3	140	639547	637529
MASTER TL5 HO	'TL'5 HO 49W /840	G5	200	250	4300	COOL WHITE	4000	95	2.3	140	639561	637581
MASTER TL5 HO	'TL'5 HO 49W /865	G5	200	250	4100	COOL DAYLIGHT	6500	95	2.2	140	643896	637642
MASTER TL5 HO	'TL'5 HO 80W /830	G5	151	540	6150	WARM WHITE	3000	88	3.3	140	710406	644367
MASTER TL5 HO	'TL'5 HO 80W /840	G5	151	540	6150	COOL WHITE	4000	88	3.3	140	710451	644381
MASTER TL5 HO	'TL'5 HO 80W /865	G5	151	540	5850	COOL DAYLIGHT	6500	83	3.1	140	710475	644404

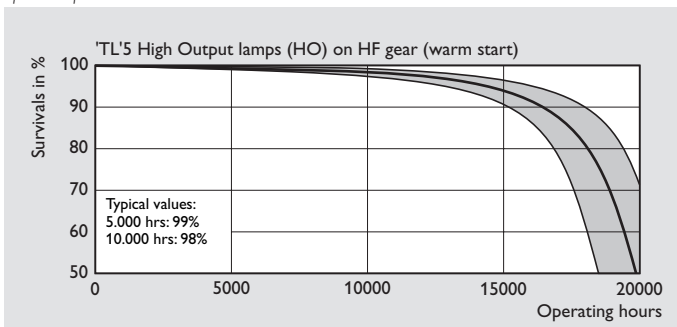


# Fluorescent lamps

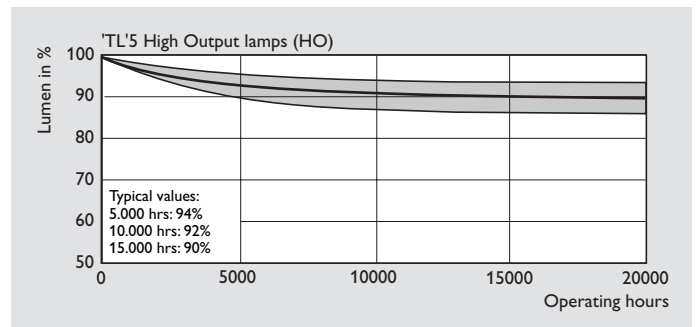
# MASTER 'TL'5 High Output



Spectral power distributions



Life expectancy



Lumen maintenance