



The new generation of energy saving tube lighting

MASTER LEDtube EM/Mains T8

The Philips MASTER LEDtube integrates a LED light source into a traditional fluorescent form factor. Its unique design creates a perfectly uniform visual appearance which cannot be distinguished from traditional fluorescent. For those that are looking for value for money within limited budget and re-lamping efforts for better light effect and lifetime.

Benefits

- Reduced operational cost thanks to lower energy consumption
- Lower maintenance cost thanks to 2-3 times longer lifetime than normal fluorescent tubes
- Fastest and easiest way to upgrade existing luminaire to LED technology; 100%-safe installation process

Features

- Only 50% energy consumption compared to fluorescent tubes
- Extra-long life of 40,000 hours
- Retrofit to existing T8 lamps on EM ballast installations
- Full safety features and EM Protector safety device
- No mercury

Application

- Parking lots / covered car parks
- Warehouses / coldrooms / signage
- Transport and distribution areas
- Food & Museums

MASTER LEDtube EM/Mains T8

Warnings and Safety

• -

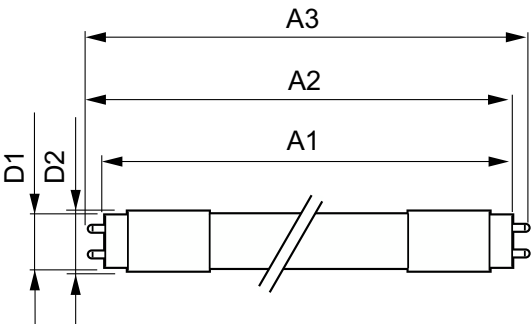
Versions



SPPR_MLED_APR_0014-Product photo

Standard Product Photo

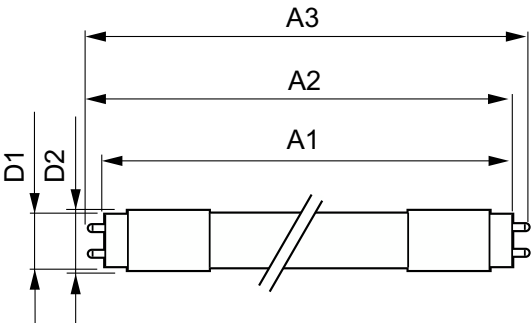
Dimensional drawing



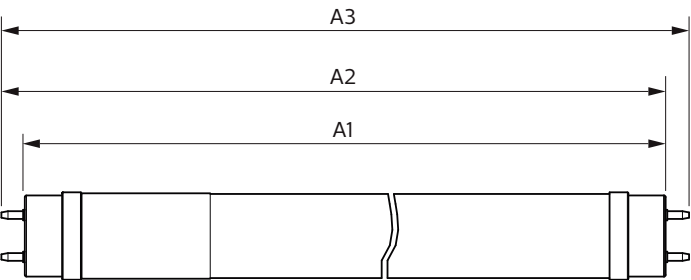
Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm UO 13.5W 830 T8 EELC	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm UO 13.5W 840 T8 EELB	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm UO 13.5W 865 T8 EELB	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm UO 14.7W 830 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm UO 14.7W 840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm UO 14.7W 865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1500mm UO 20W 830 T8 EELC	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm UO 20W 840 T8 EELB	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm UO 20W 865 T8 EELB	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm UO 21.7W 830 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm UO 21.7W 840 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm UO 21.7W 865 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 600mm HO 8W865 T8	25.78 mm	28 mm	588.5 mm	595.5 mm	602.5 mm
MAS LEDtube 900mm HO 12W 865 T8	25.78 mm	28 mm	893.3 mm	900.4 mm	907.5 mm

MASTER LEDtube EM/Mains T8

Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm HO 12.5W 840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 13W830 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 13W840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 13W865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1200mm HO 14W865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube 1500mm HO 18.2W 840 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 1500mm HO 18.2W 865 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
MAS LEDtube 600mm HO 8W830 T8	25.8 mm	28 mm	595.7 mm	598.8 mm	604 mm
MAS LEDtube 600mm HO 8W840 T8	25.8 mm	28 mm	595.7 mm	598.8 mm	604 mm
MAS LEDtube 600mm HO 8W865 T8	25.8 mm	28 mm	595.7 mm	598.8 mm	604 mm
MAS LEDtube STD 1200mm 10.5W865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube STD 1200mm 10W840 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm
MAS LEDtube STD 1200mm 10W865 T8	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm



Product	D1	D2	A1	A2	A3
MAS LEDtube DE 1200mm 13W865 100-240V T8	26 mm	28 mm	1,198 mm	1,205 mm	1,212 mm

MASTER LEDtube EM/Mains T8

General Information	
Switching Cycle	200,000
Light Technical	
LLMF At End Of Nominal Lifetime (Nom)	70 %
Operating and Electrical	
Input Frequency	50 to 60 Hz
Starting Time (Nom)	0.5 s
Controls and Dimming	
Dimmable	No
Mechanical and Housing	
Bulb Finish	Frosted
Bulb Shape	T8

General Information

Order Code	Full Product Name	Cap-Base	Nominal lifetime	Order Code	Full Product Name	Cap-Base	Nominal lifetime
68710900	MASTER LEDtube 900mm HO 12W 865 T8	G13 ROT	75,000 hour(s)	38803100	MASTER LEDtube 1500mm UO 20W 865 T8 EELB	G13 ROT	75,000 hour(s)
69751100	MASTER LEDtube 600mm HO 8W865 T8	G13 ROT	75,000 hour(s)	46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	G13	60,000 hour(s)
31656000	MASTER LEDtube 1200mm UO 14.7W 830 T8	G13 ROT	75,000 hour(s)	46850400	MASTER LEDtube 1200mm HO 14W865 T8	G13	60,000 hour(s)
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	G13 ROT	75,000 hour(s)	31591400	MASTER LEDtube 600mm HO 8W830 T8	G13	60,000 hour(s)
31660700	MASTER LEDtube 1200mm UO 14.7W 865 T8	G13 ROT	75,000 hour(s)	31593800	MASTER LEDtube 600mm HO 8W840 T8	G13	60,000 hour(s)
31662100	MASTER LEDtube 1500mm UO 21.7W 830 T8	G13 ROT	75,000 hour(s)	31597600	MASTER LEDtube 600mm HO 8W865 T8	G13	60,000 hour(s)
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	G13 ROT	75,000 hour(s)	31605800	MASTER LEDtube 1200mm HO 13W830 T8	G13	60,000 hour(s)
31666900	MASTER LEDtube 1500mm UO 21.7W 865 T8	G13 ROT	75,000 hour(s)	31607200	MASTER LEDtube 1200mm HO 13W840 T8	G13	60,000 hour(s)
38793500	MASTER LEDtube 1200mm UO 13.5W 830 T8 EELC	G13 ROT	75,000 hour(s)	31611900	MASTER LEDtube 1200mm HO 13W865 T8	G13	60,000 hour(s)
38795900	MASTER LEDtube 1200mm UO 13.5W 840 T8 EELB	G13 ROT	75,000 hour(s)	31601000	MASTER LEDtube STD 1200mm 10W840 T8	G13	60,000 hour(s)
38797300	MASTER LEDtube 1200mm UO 13.5W 865 T8 EELB	G13 ROT	75,000 hour(s)	31603400	MASTER LEDtube STD 1200mm 10W865 T8	G13	60,000 hour(s)
38799700	MASTER LEDtube 1500mm UO 20W 830 T8 EELC	G13 ROT	75,000 hour(s)	59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	G13 ROT	75,000 hour(s)
38801700	MASTER LEDtube 1500mm UO 20W 840 T8 EELB	G13 ROT	75,000 hour(s)	59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	G13 ROT	75,000 hour(s)
				59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	G13 ROT	75,000 hour(s)
				30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	G13	50,000 hour(s)

Light Technical

Order Code	Full Product Name	Beam Angle (Nom)	Correlated Color Temperature (Nom)	Color rendering index		Luminous Flux
				(CRI)	Color Code	
68710900	MASTER LEDtube 900mm HO 12W 865 T8	160 degree(s)	6500 K	80	865	1,575 lm
69751100	MASTER LEDtube 600mm HO 8W865 T8	160 degree(s)	6500 K	83	865	1,050 lm
31656000	MASTER LEDtube 1200mm UO 14.7W 830 T8	160 degree(s)	3000 K	80	830	2,300 lm
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	160 degree(s)	4000 K	80	840	2,500 lm
31660700	MASTER LEDtube 1200mm UO 14.7W 865 T8	160 degree(s)	6500 K	80	865	2,500 lm
31662100	MASTER LEDtube 1500mm UO 21.7W 830 T8	160 degree(s)	3000 K	80	830	3,400 lm
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	160 degree(s)	4000 K	80	840	3,700 lm
31666900	MASTER LEDtube 1500mm UO 21.7W 865 T8	160 degree(s)	6500 K	80	865	3,700 lm

MASTER LEDtube EM/Mains T8

Order Code	Full Product Name	Beam Angle (Nom)	Correlated Color Temperature (Nom)	Color rendering index		Luminous Flux
				(CRI)	Color Code	
38793500	MASTER LEDtube 1200mm UO 13.5W 830 T8 EELC	160 degree(s)	3000 K	80	830	2,300 lm
38795900	MASTER LEDtube 1200mm UO 13.5W 840 T8 EELB	160 degree(s)	4000 K	80	840	2,500 lm
38797300	MASTER LEDtube 1200mm UO 13.5W 865 T8 EELB	160 degree(s)	6500 K	80	865	2,500 lm
38799700	MASTER LEDtube 1500mm UO 20W 830 T8 EELC	160 degree(s)	3000 K	80	830	3,400 lm
38801700	MASTER LEDtube 1500mm UO 20W 840 T8 EELB	160 degree(s)	4000 K	80	840	3,700 lm
38803100	MASTER LEDtube 1500mm UO 20W 865 T8 EELB	160 degree(s)	6500 K	80	865	3,700 lm
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	190 degree(s)	6500 K	80	865	1,600 lm
46850400	MASTER LEDtube 1200mm HO 14W865 T8	190 degree(s)	6500 K	80	865	2,100 lm
31591400	MASTER LEDtube 600mm HO 8W830 T8	190 degree(s)	3000 K	80	830	1,150 lm
31593800	MASTER LEDtube 600mm HO 8W840 T8	190 degree(s)	4000 K	80	840	1,200 lm
31597600	MASTER LEDtube 600mm HO 8W865 T8	190 degree(s)	6500 K	80	865	1,200 lm
31605800	MASTER LEDtube 1200mm HO 13W830 T8	190 degree(s)	3000 K	80	830	2,000 lm
31607200	MASTER LEDtube 1200mm HO 13W840 T8	190 degree(s)	4000 K	80	840	2,100 lm
31611900	MASTER LEDtube 1200mm HO 13W865 T8	190 degree(s)	6500 K	80	865	2,100 lm
31601000	MASTER LEDtube STD 1200mm 10W840 T8	190 degree(s)	4000 K	80	840	1,600 lm
31603400	MASTER LEDtube STD 1200mm 10W865 T8	190 degree(s)	6500 K	80	865	1,600 lm
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	160 degree(s)	4000 K	80	840	2,100 lm
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	160 degree(s)	4000 K	80	840	3,100 lm
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	160 degree(s)	6500 K	80	865	3,100 lm
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	240 degree(s)	6500 K	80	865	2,100 lm

Operating and Electrical

Order Code	Full Product Name	Line Frequency	Power	Wattage
			Consumption	Equivalent
68710900	MASTER LEDtube 900mm HO 12W 865 T8	50 to 60 Hz	12 W	-
69751100	MASTER LEDtube 600mm HO 8W865 T8	50 to 60 Hz	8 W	-
31656000	MASTER LEDtube 1200mm UO 14.7W 830 T8	50 to 60 Hz	14.7 W	-
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	50 to 60 Hz	14.7 W	-
31660700	MASTER LEDtube 1200mm UO 14.7W 865 T8	50 to 60 Hz	14.7 W	-
31662100	MASTER LEDtube 1500mm UO 21.7W 830 T8	50 to 60 Hz	21.7 W	-
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	50 to 60 Hz	21.7 W	-
31666900	MASTER LEDtube 1500mm UO 21.7W 865 T8	50 to 60 Hz	21.7 W	-
38793500	MASTER LEDtube 1200mm UO 13.5W 830 T8 EELC	-	13.5 W	-
38795900	MASTER LEDtube 1200mm UO 13.5W 840 T8 EELB	-	13.5 W	-
38797300	MASTER LEDtube 1200mm UO 13.5W 865 T8 EELB	-	13.5 W	-
38799700	MASTER LEDtube 1500mm UO 20W 830 T8 EELC	-	20 W	-
38801700	MASTER LEDtube 1500mm UO 20W 840 T8 EELB	-	20 W	-
38803100	MASTER LEDtube 1500mm UO 20W 865 T8 EELB	-	20 W	-
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	50 to 60 Hz	10.5 W	-
46850400	MASTER LEDtube 1200mm HO 14W865 T8	50 to 60 Hz	14 W	-
31591400	MASTER LEDtube 600mm HO 8W830 T8	-	8 W	18 W
31593800	MASTER LEDtube 600mm HO 8W840 T8	-	8 W	18 W
31597600	MASTER LEDtube 600mm HO 8W865 T8	-	8 W	18 W

MASTER LEDtube EM/Mains T8

Order Code	Full Product Name	Line Frequency	Power	Wattage
			Consumption	Equivalent
31605800	MASTER LEDtube 1200mm HO 13W830 T8	-	13 W	36 W
31607200	MASTER LEDtube 1200mm HO 13W840 T8	-	13 W	36 W
31611900	MASTER LEDtube 1200mm HO 13W865 T8	-	13 W	36 W
31601000	MASTER LEDtube STD 1200mm 10W840 T8	-	10 W	36 W
31603400	MASTER LEDtube STD 1200mm 10W865 T8	-	10 W	36 W

Order Code	Full Product Name	Line Frequency	Power	Wattage
			Consumption	Equivalent
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	50 to 60 Hz	12.5 W	-
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	50 to 60 Hz	18.2 W	-
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	50 to 60 Hz	18.2 W	-
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	50 to 60 Hz	13 W	-

Temperature

Order Code	Full Product Name	T-Case Maximum (Nom)
68710900	MASTER LEDtube 900mm HO 12W 865 T8	50 °C
69751100	MASTER LEDtube 600mm HO 8W865 T8	50 °C
31656000	MASTER LEDtube 1200mm UO 14.7W 830 T8	55 °C
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	55 °C
31660700	MASTER LEDtube 1200mm UO 14.7W 865 T8	55 °C
31662100	MASTER LEDtube 1500mm UO 21.7W 830 T8	60 °C
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	60 °C
31666900	MASTER LEDtube 1500mm UO 21.7W 865 T8	60 °C
38793500	MASTER LEDtube 1200mm UO 13.5W 830 T8 EELC	50 °C
38795900	MASTER LEDtube 1200mm UO 13.5W 840 T8 EELB	50 °C
38797300	MASTER LEDtube 1200mm UO 13.5W 865 T8 EELB	50 °C
38799700	MASTER LEDtube 1500mm UO 20W 830 T8 EELC	50 °C
38801700	MASTER LEDtube 1500mm UO 20W 840 T8 EELB	50 °C
38803100	MASTER LEDtube 1500mm UO 20W 865 T8 EELB	50 °C
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	50 °C

Order Code	Full Product Name	T-Case Maximum (Nom)
46850400	MASTER LEDtube 1200mm HO 14W865 T8	50 °C
31591400	MASTER LEDtube 600mm HO 8W830 T8	50 °C
31593800	MASTER LEDtube 600mm HO 8W840 T8	50 °C
31597600	MASTER LEDtube 600mm HO 8W865 T8	50 °C
31605800	MASTER LEDtube 1200mm HO 13W830 T8	50 °C
31607200	MASTER LEDtube 1200mm HO 13W840 T8	50 °C
31611900	MASTER LEDtube 1200mm HO 13W865 T8	50 °C
31601000	MASTER LEDtube STD 1200mm 10W840 T8	50 °C
31603400	MASTER LEDtube STD 1200mm 10W865 T8	50 °C
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	50 °C
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	55 °C
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	55 °C
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	65 °C

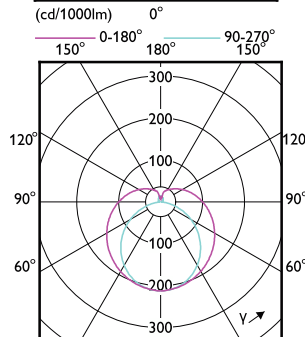
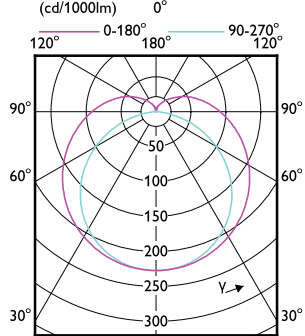
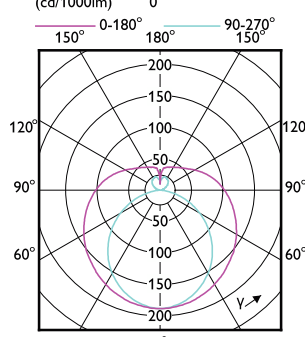
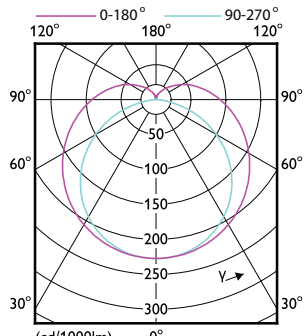
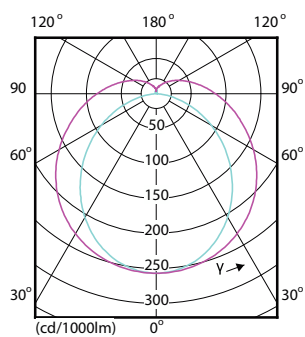
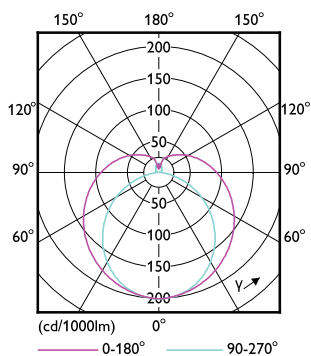
Approval and Application

Order Code	Full Product Name	Ambient temperature	Energy
		range	Consumption kWh/1000 h
68710900	MASTER LEDtube 900mm HO 12W 865 T8	-20 °C to 45 °C	12 kWh
69751100	MASTER LEDtube 600mm HO 8W865 T8	-20 °C to 45 °C	8 kWh
31656000	MASTER LEDtube 1200mm UO 14.7W 830 T8	-20 °C to 45 °C	15 kWh
31658400	MASTER LEDtube 1200mm UO 14.7W 840 T8	-20 °C to 45 °C	15 kWh
31660700	MASTER LEDtube 1200mm UO 14.7W 865 T8	-20 °C to 45 °C	15 kWh

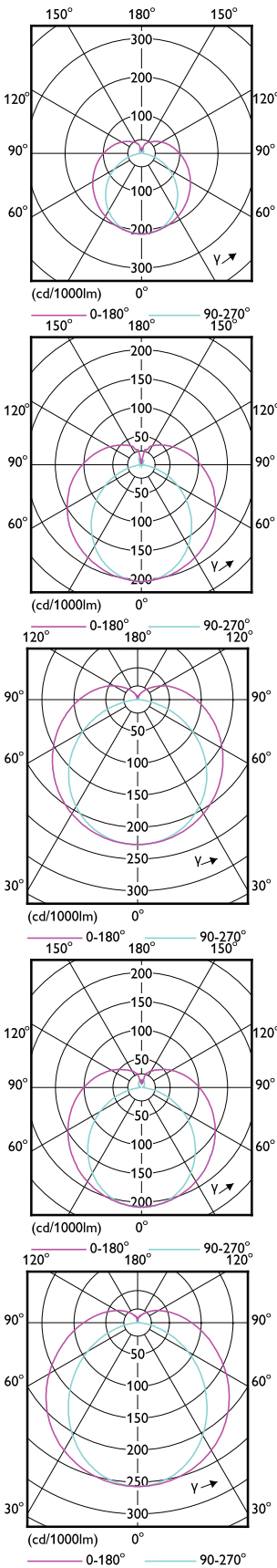
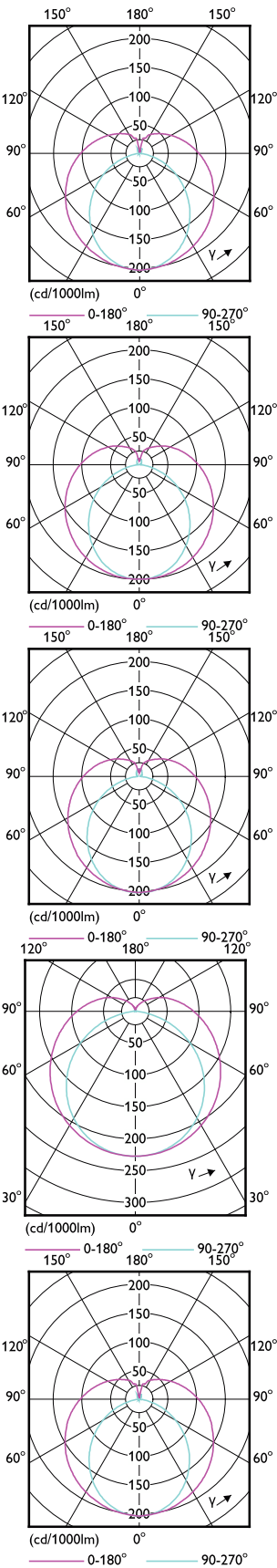
Order Code	Full Product Name	Ambient temperature	Energy
		range	Consumption kWh/1000 h
31662100	MASTER LEDtube 1500mm UO 21.7W 830 T8	-20 °C to 45 °C	22 kWh
31664500	MASTER LEDtube 1500mm UO 21.7W 840 T8	-20 °C to 45 °C	22 kWh
31666900	MASTER LEDtube 1500mm UO 21.7W 865 T8	-20 °C to 45 °C	22 kWh
38793500	MASTER LEDtube 1200mm UO 13.5W 830 T8 EELC	-20 to +45 °C	14 kWh
38795900	MASTER LEDtube 1200mm UO 13.5W 840 T8 EELB	-20 to +45 °C	14 kWh

MASTER LEDtube EM/Mains T8

Order Code	Full Product Name	Ambient temperature range	Energy Consumption kWh/1000 h
38797300	MASTER LEDtube 1200mm UO 13.5W 865 T8 EELB	-20 to +45 °C	14 kWh
38799700	MASTER LEDtube 1500mm UO 20W 830 T8 EELC	-20 to +45 °C	20 kWh
38801700	MASTER LEDtube 1500mm UO 20W 840 T8 EELB	-20 to +45 °C	20 kWh
38803100	MASTER LEDtube 1500mm UO 20W 865 T8 EELB	-20 to +45 °C	20 kWh
46844300	MASTER LEDtube STD 1200mm 10.5W865 T8	-20 °C to 45 °C	-
46850400	MASTER LEDtube 1200mm HO 14W865 T8	-20 °C to 45 °C	-
31591400	MASTER LEDtube 600mm HO 8W830 T8	-20 to +45 °C	-
31593800	MASTER LEDtube 600mm HO 8W840 T8	-20 to +45 °C	-
31597600	MASTER LEDtube 600mm HO 8W865 T8	-20 to +45 °C	-
31605800	MASTER LEDtube 1200mm HO 13W830 T8	-20 to +45 °C	-
31607200	MASTER LEDtube 1200mm HO 13W840 T8	-20 to +45 °C	-
31611900	MASTER LEDtube 1200mm HO 13W865 T8	-20 to +45 °C	-
31601000	MASTER LEDtube STD 1200mm 10W840 T8	-20 to +45 °C	-
31603400	MASTER LEDtube STD 1200mm 10W865 T8	-20 to +45 °C	-
59237000	MASTER LEDtube 1200mm HO 12.5W 840 T8	-20 °C to 45 °C	13 kWh
59243100	MASTER LEDtube 1500mm HO 18.2W 840 T8	-20 °C to 45 °C	19 kWh
59245500	MASTER LEDtube 1500mm HO 18.2W 865 T8	-20 °C to 45 °C	19 kWh
30112200	MASTER LEDtube DE 1200mm 13W865 100-240V T8	-20 °C to 45 °C	-



MASTER LEDtube EM/Mains T8



MASTER LEDtube EM/Mains T8

