PHILIPS Lighting

MASTER LEDtube InstantFit HF T5

MAS LEDtube HF 1500mm HE 20W 840 T5

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. These T5 lighting tubes are the right choice for absolute performance and are designed to stand up to everyday conditions. Unparalleled savings thanks to low energy consumption and an exceptionally long lifetime make these T5 LED tubes the choice for every demanding application.

Product data

General Information

Cap-Base	G5
Nominal lifetime	60,000 hour(s)
Switching Cycle	50,000
Lighting Technology	LED
Flux measurement reference	Sphere

Light Technical

Color Code	840 [CCT of 4000K]
Beam Angle (Nom)	200 degree(s)
Luminous Flux	3,000 lm
Color Designation	Cool White (CW)
Correlated Color Temperature (Nom)	4000 K
Luminous Efficacy (rated) (Nom)	150 lm/W
Color Consistency	<6
Color rendering index (CRI)	80
LLMF At End Of Nominal Lifetime (Nom)	70 %

Photobiological safety according to EN 62471	RG0

Operating and Electrical

Line Frequency	30K to 100K Hz
Input Frequency	30K to 100K Hz
Power Consumption	20 W
Lamp Current (Max)	350 mA
Lamp Current (Min)	150 mA
Starting Time (Nom)	0.5 s
Warm-up time to 60% light	0.5 s
Power Factor (Fraction)	0.92
Voltage (Nom)	80-130 V
Ballast Compatibility	HF
LED alternative to fluorescent lamp power	35 W
Inrush current at mains	–
Max. lamp no. on MCB B type 10A – Mains	–
Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.	–

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Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.	–
Max. lamp no. on MCB B type 16A – Mains	–
Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.	–
Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.	–

Temperature

T–Case Maximum (Nom)	65 °C

Controls and Dimming

Dimmable	Yes – Check ballast compatibility

Mechanical and Housing

Bulb Finish	Frosted
Bulb Material	Glass
Product Length	1,500 mm
Bulb Shape	T5
Net Weight (Piece)	0.196 kg

Approval and Application

Energy Efficiency Class	D

Energy Saving Product	Yes
Approval Marks	RoHS compliance KEMA Keur certificate
Energy Consumption kWh/1000 h	20 kWh
EPREL Registration Number	1384138
CE mark	Yes
EU RoHS compliant	Yes
Ambient temperature range	–20 °C to 45 °C

Product Data

Order product name	MAS LEDtube HF 1500mm HE 20W 840 T5
Full product name	MAS LEDtube HF 1500mm HE 20W 840 T5
Full product code	871869674337900
Order code	929001391402
Material Nr. (12NC)	929001391402
Numerator – Quantity Per Pack	1
EAN/UPC – Product/Case	8718696743379
Numerator – Packs per outer box	10
EAN/UPC – Case	8718696743386

Dimensional drawing
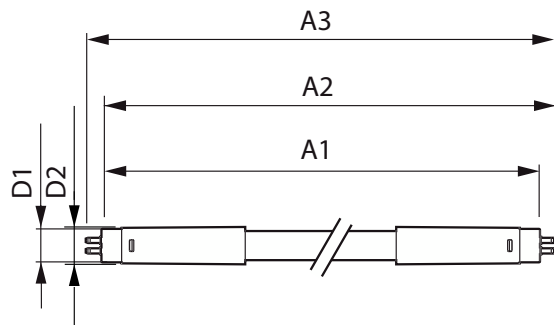
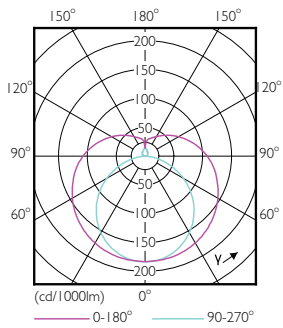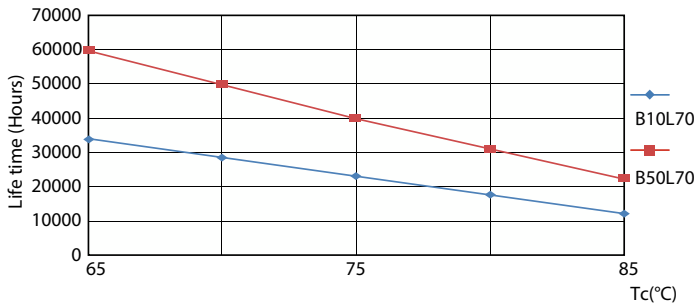| Product	D1	D2	A1	A2	A3
MAS LEDtube HF 1500mm HE 20W 840 T5	15.5 mm	18.8 mm	1,449 mm	1,456.1 mm	1,463.2 mm

Photometric data
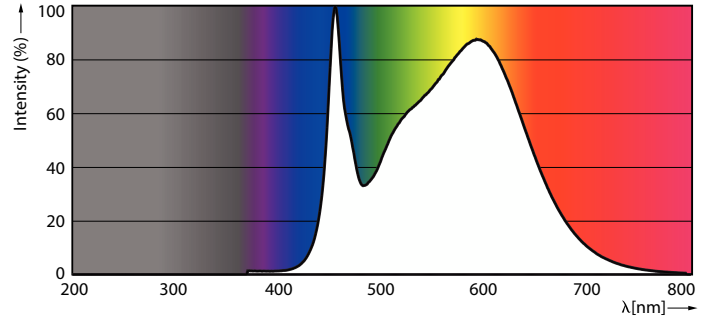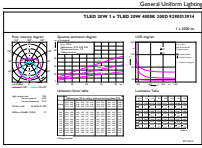
General uniform lighting – MAS LEDtube HF 1500mm HE 20W 840 T5

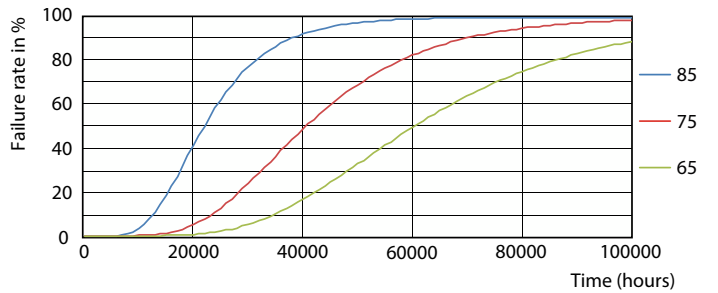**Spectral Power Distribution Colour – MAS LEDtube HF 1500mm HE 20W 840 T5**

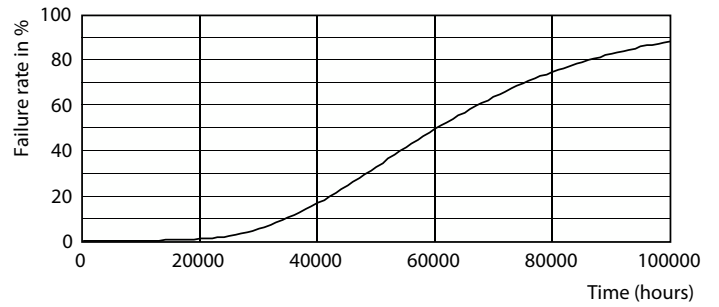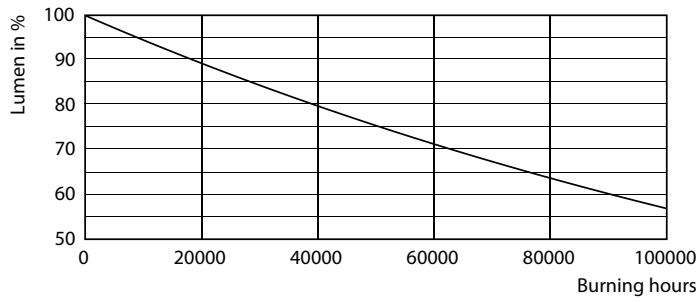**Light Distribution Diagram – MAS LEDtube HF 1500mm HE 20W 840 T5**

Lifetime

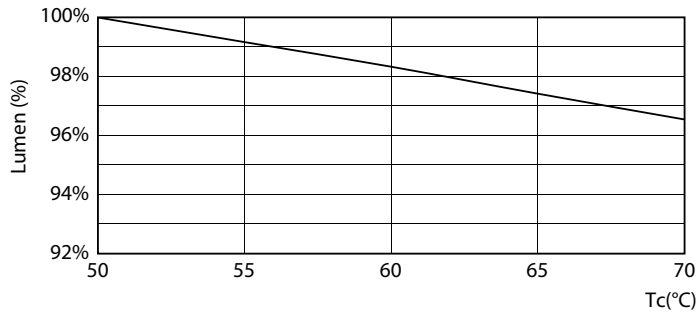**LifetimeVsTc**

FailureRate

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Lifetime

Lumen Maintenance Diagram – MAS LEDtube HF 1500mm HE 20W 840 T5

Life Expectancy Diagram

Lumen Maintenance Diagram – MAS LEDtube HF 1500mm HE 20W 840 T5