

455  
kWh/1000h

A+  
energy class

102  
lumens/watt

## ConstantColor™ CMH Tubular Clear

CMH400/TT/UVC/U/830/E40 TU  
93102166

### Product information

**ConstantColor™ CMH lamps** combine the HPS technology (providing stability, efficiency & uniformity) and the Metal Halide Technology (providing bright white quality light) to produce highly efficient light sources with good colour rendering and consistent colour performance through life. This is achieved by using the ceramic arc tube material from the Lucalox™ lamp, which minimises the chemical changes inside the lamp through life. When combined with the halide doses used in Arcstream™ Metal Halide lamps then the quality and stability of the dose maintains the colour consistency. Hence the name ConstantColor™ CMH.

Metal halide lamps, traditionally made with quartz arc tubes, are prone to colour shift through life and lampto-lamp colour variation. Some of the dose, e.g. sodium, (an important component of metal halide lamps), can migrate through quartz to cause colour shift and loss of light through life. The ceramic arc tube resists this material loss, can be manufactured to tighter tolerances and

withstands a higher temperature to provide a more constant colour.

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### Application areas



Road and tunnel



Street and pedestrian



Commercial areas

## Product data

Product Code	93102166
Light Center Length [mm]	175
Bulb Shape	Tubular
Bulb Finish	Clear
Maximum Overall Length [mm]	270
Net weight per piece [g]	176
Gross weight per piece [g]	220
Operating position	U - Universal
Mercury Content [mg]	38
UV radiance	Exempt
Brand	Tungsräm
Cap/Base	E40

## Performance data

Colour Code	830
Rated Lumens [lm]	41600
Weighted energy consumption [kWh/1000h]	454.14
Nominal efficacy [LpW]	103
Rated efficacy [LpW]	100.8
Energy efficiency class (EEC)	A+
Nominal chromaticity coordinate X	0.43
Nominal chromaticity coordinate Y	0.39
Nominal correlated colour temperature (CCT) [K]	3050
Nominal lumens [lm]	41000
Colour Rendering Index (CRI) [Ra]	80

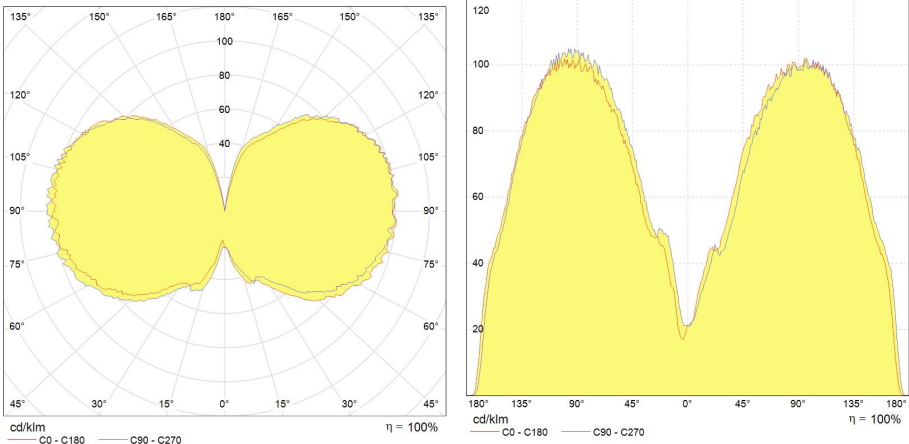
## Electrical data

Rated power [W]	412.9
Lamp Current [A]	4.2
Design Ambient Temperature [°C]	25
Run-up time (sec)	240
Hot restart time (sec)	900
Dimming Capability	No
Ballast Required	Yes
Nominal power [W]	400
Nominal lamp voltage [V]	120

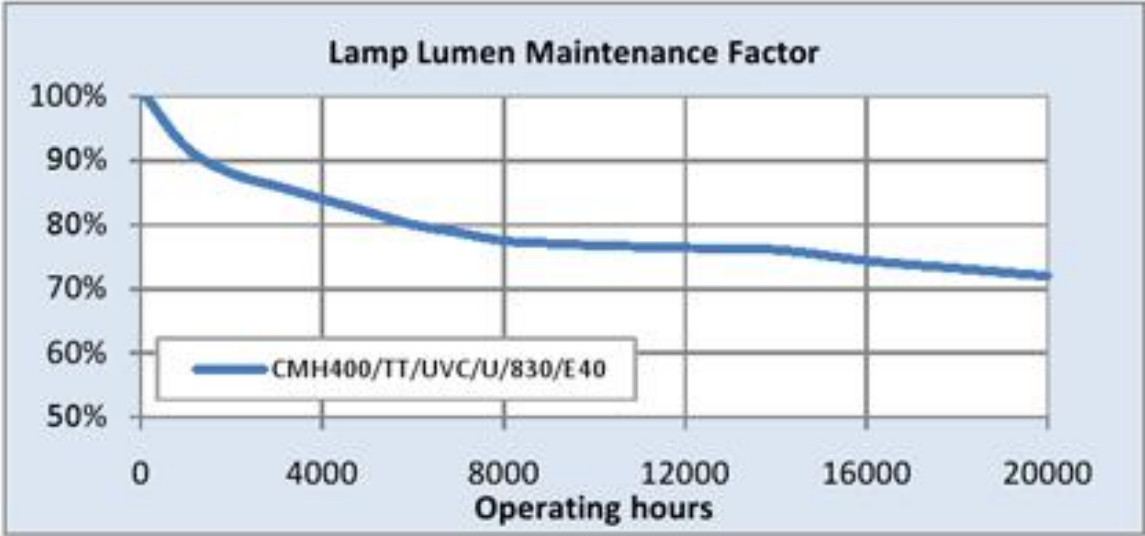
## Logistic data

DUN Code	15994100016929
EAN Code	5994100016922
Pack Quantity	12
Layer quantity	216 EUR, 264 UK
Layer quantity EUR	216
Layer quantity UK	264
Pallet quantity EUR (PC)	648
Pallet quantity UK (PC)	792
Outer case size	256 x 194 x 322 (mm)
Product status	Available

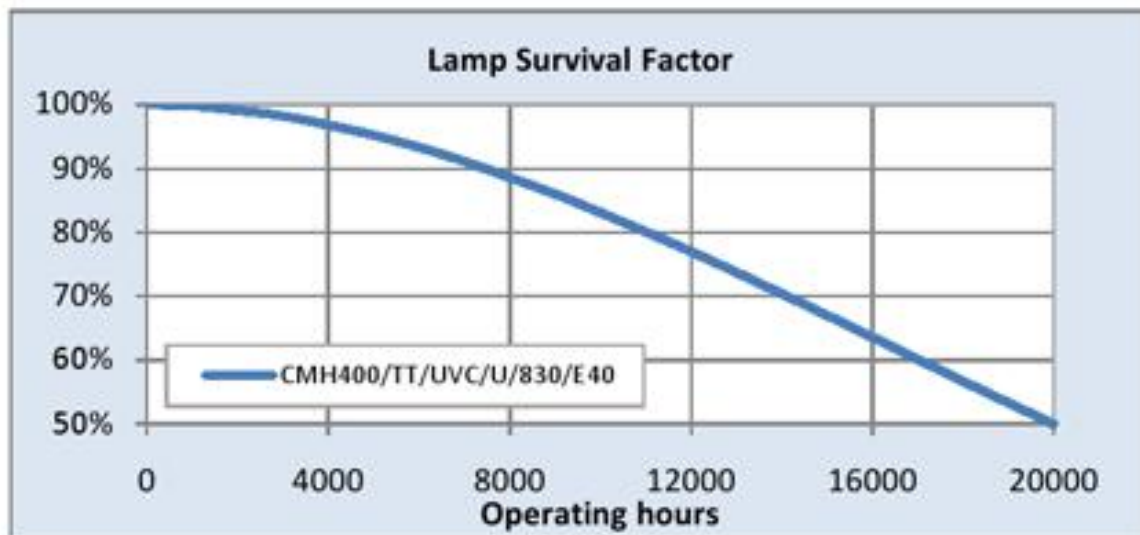
Light distribution



Lumen maintenance data



## Survival data



## Downloads & Links

[Go to the catalog site \(HTTP\)](#)

[Photometry \(IES\)](#)

[Product datasheet \(PDF\)](#)

[High-res images / Technical drawings \(HTTP\)](#)