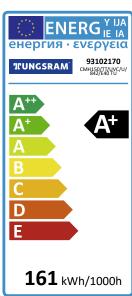
## **TUNGSRAM**

Innovation is our heritage EST. 1896









97 lumens/watt

### ConstantColor™ CMH Tubular Clear CMH150/TT/UVC/U/842/E40 TU 93102170

### **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.

## Application areas







#### Product data

Product Code	93102170
Light Center Length [mm]	132
Bulb Shape	Tubular
Bulb Finish	Clear
Regulatory comment	not EU compliant
Maximum Overall Length [mm]	207
Net weight per piece [g]	146
Gross weight per piece [g]	178
Operating position	U - Universal
Mercury Content [mg]	7
UV radiance	Exempt
Brand	Tungsram
Cap/Base	E40

#### Performance data

Colour Code	942
Rated Lumens [lm]	14970
Weighted energy consumption [kWh/1000h]	160.27
Nominal efficacy [LpW]	97
Rated efficacy [LpW]	102.7
Energy efficiency class (EEC)	A+
Nominal chromaticity coordinate X	0.377
Nominal chromaticity coordinate Y	0.376
Nominal correlated colour temperature (CCT) [K]]	4000
Nominal lumens [lm]	14500
Colour Rendering Index (CRI) [Ra]	89



#### Electrical data

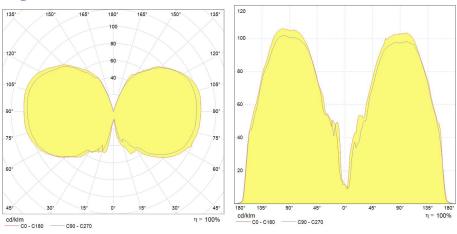
Rated power [W]	145.7
Lamp Current [A]	1.8
Design Ambient Temperature [°C]	25
Run-up time (sec)	180
Hot restart time (sec)	900
Dimming Capability	Yes
Ballast Required	Yes
Nominal power [W]	150
Nominal lamp voltage [V]	95

### Logistic data

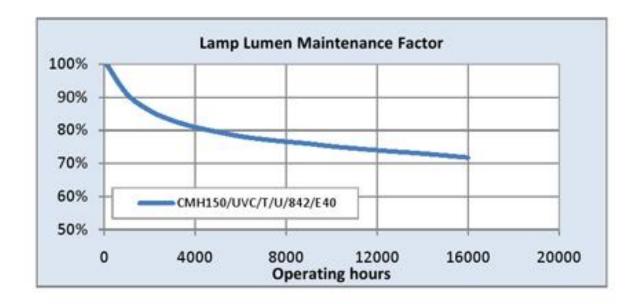
Shipment	Direct Shipment	
DUN Code	15994100016967	
EAN Code	5994100016960	
Pack Quantity	12	
Inner pack type	SLEEVE	
Outer pack type	OUTER BOX	
Layer quantity	288 EUR, 372 UK	
Layer quantity EUR	288	
Layer quantity UK	372	
Pallet quantity EUR (PC)	864	
Pallet quantity UK (PC)	1116	
Outer case size	215 x 162 x 284 (mm)	
Product status	Available	



### Light distribution



#### Lumen maintenance data

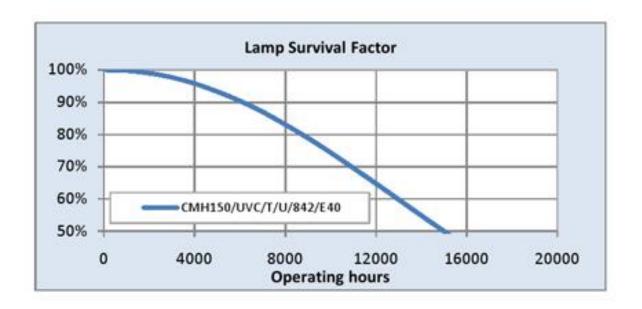




#### ConstantColor™ CMH Tubular Clear

CMH150/TT/UVC/U/842/E40 TU 93102170

#### Survival data



#### Downloads & Links

Go to the catalog site (HTTP)

Photometry (IES)

Product datasheet (PDF)

High-res images / Technical drawings (HTTP)