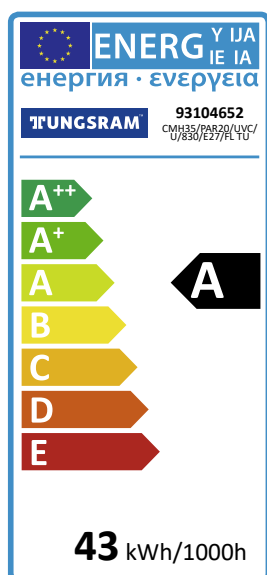


TUNGSRAM™

Innovation is our heritage
EST. 1896



43

kWh/1000h

A

energy class

60

lumens/watt

ConstantColor™ CMH PAR 20

CMH35/PAR20/UVC/U/830/E27/FL TU
93104652

Product information

ConstantColor™ CMH lamps combine the HPS technology (providing stability, efficiency & uniformity) and the Metal Halide Technology (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 lamp-to-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



Road and tunnel



Street and
pedestrian



Commercial
areas

Product data

Product Code	93104652
Bulb Shape	PAR
Bulb Finish	Clear
Bulb Diameter [mm]	64
Maximum Overall Length [mm]	92
Net weight per piece [g]	100
Gross weight per piece [g]	187
Operating position	U - Universal
Mercury Content [mg]	4.6
UV radiance	Exempt
Brand	Tungsräm
Cap/Base	E27

Performance data

Nominal/ Rated Beam Angle [°]	25
Nominal/ Rated Beam Angle (°)	24.3
Colour Code	830
Nominal center beam candlepower (CBCP) [cd]	7500
Rated peak intensity in [Cd]	7500
Rated Lumens [lm]	2209
Weighted energy consumption [kWh/1000h]	42.68
Useful lumens (at 90° cone) [lm]	2209
Nominal efficacy [LpW]	60
Rated efficacy [LpW]	56.9
Energy efficiency class (EEC)	A
Rated average life [h]	10000
Nominal chromaticity coordinate X	0.435
Nominal chromaticity coordinate Y	0.401
Nominal correlated colour temperature (CCT) [K]	3000
Nominal lumens [lm]	2100
Colour Rendering Index (CRI) [Ra]	84

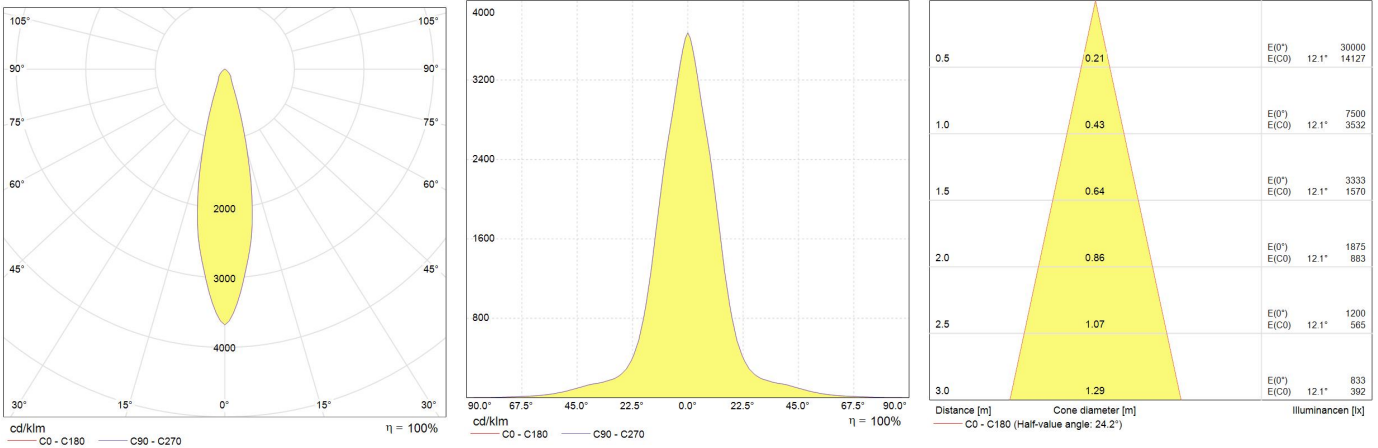
Electrical data

Rated power [W]	38.8
Lamp Current [A]	0.5
Design Ambient Temperature [°C]	25
Run-up time (sec)	180
Dimming Capability	No
Ballast Required	Yes
Nominal power [W]	35
Nominal lamp voltage [V]	90

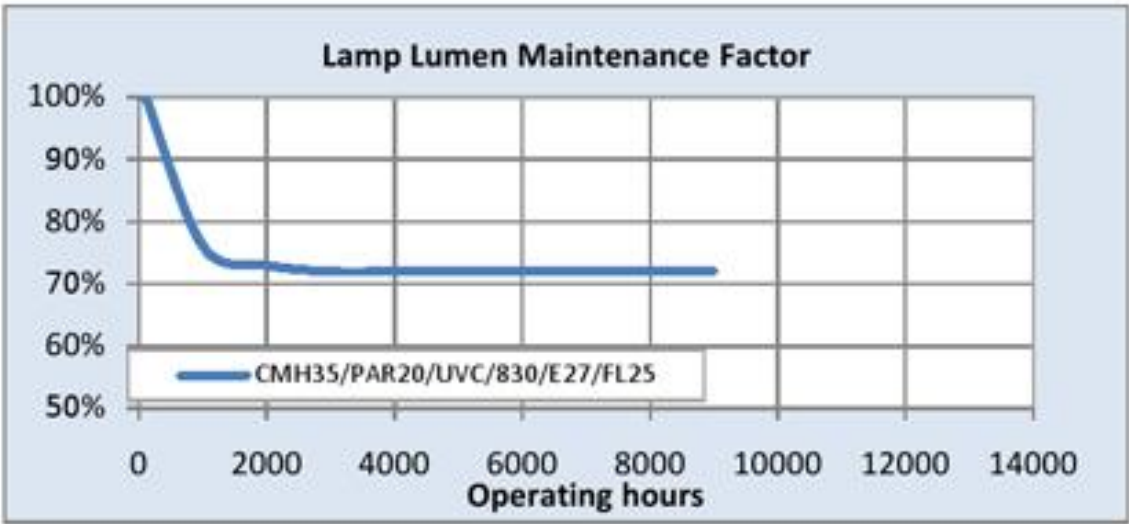
Logistic data

DUN Code	15994100019180
EAN Code	5994100019183
Pack Quantity	15
Layer quantity	135 EUR, 150 UK
Layer quantity EUR	135
Layer quantity UK	150
Pallet quantity EUR (PC)	810
Pallet quantity UK (PC)	900
Outer case size	253 x 383 x 161 (mm)
Product status	Available

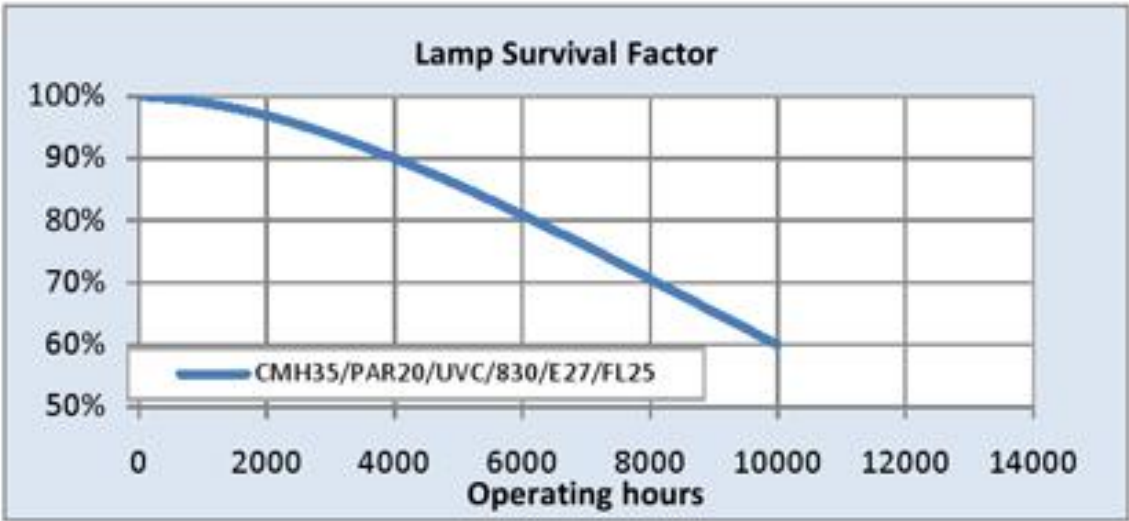
Light distribution



Lumen maintenance data



Survival data



Downloads & Links

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

[Photometry \(IES\)](#)

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

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



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