LED Precise™
AR111
15W equivalent for 85-100W Halogen products

Product information
This new High CRI AaR111 range is replacement for 85-100W Halogen products. It is available in three colour temperatures and two beam angles with 90Ra Colour Rendering Index and R9 > 50 combine for excellent light quality and accurate reproduction of deep red colours.

Features & Benefits
• 85-100W equivalent
• Total Lumens: up to 1000
• 25,000 hours solution (L70/B50)
• Three colour temperatures: 2700K, 3000K, 4000K
• A Energy Class
• Two Beam Angles: 25/40°
• Warranty: 2 years with maximum 8000 burning hours according to Tungsram Operations Kft. Standard Warranty conditions

Application areas
Hospitality Retail

IEC Standards
EN 55015: Limits and methods of measurement of radio disturbance characteristics of electrical lighting
EN 61547: Equipment for general lighting purpose EMC immunity requirements
EN 61000-3-3: Limitation of voltage fluctuations and flicker in low voltage supply systems (equipment rated current <=16A)
EN 61000-3-2: Limits — Limits for harmonic current emissions (equipment input current k 16 A per phase)
IEC 62471: Photo biological safety of lamps and lamp systems
IEC 60061: Lamp Caps and holders together with gauges for the control of interchangeability and safety
Specification summary

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Description</th>
<th>Nominal/ Rated Power (W)</th>
<th>Repl Watt (W)</th>
<th>Nominal/ Rated Beam Angle (°)</th>
<th>Nominal/ Rated Lumens (lm)</th>
<th>Nominal/ Rated Useful Lumens (lm)</th>
<th>Rated Peak Intensity (cd)</th>
<th>CCT (K)</th>
<th>CRI</th>
<th>WEC (kwh/ 1000h)</th>
<th>Pack Qty</th>
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Common attributes

• Nominal/ Rated Life (L70/B50 hours): 25 000 Hrs
• Cap/Base: G53
• Nominal/Rated Beam Angle : 25/40°
• Input Voltage 12V
• R9>50
• Colour Rendering Index >90
• Start-up/Warm-up time: <100 ms
• Switching Cycles: 50 000
• Power factor: >0.85
• Lumen Maintenance Factor: 0.7
• Colour consistency: <6 SDCM
• A Energy Efficiency
• Dimmable

Recommended operation temperature

• Ths Max 88°C

Dimensions (mm)

Packaging image

Operation and maintenance

• Store and use the lamps the same way as traditional lamps.
• Check your fixtures are properly wired and don't deliver voltage spike to lamps causing overheating/failure.
• Ambient temperature range -20° C to 40° C
• Lamps should be kept free from contamination.
• Good condition of the lamp-holder contacts is important to ensure proper operation of lamp.
• Ensure lamp is cool before removing.
• Switch off mains supply before installing/removing lamps.
• Not for use in totally enclosed recessed fixtures.
• These LED Precise™ AR111 lamps are dimmable on most leading and trailing edge dimmers, for more information please check our website www.tungsram.com/dimming-led
Spectral distributions

25° - 2700K

40° - 2700K

25° - 3000K

40° - 3000K

25° - 4000K

40° - 4000K

All values 180-400nm are 0

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