



# The shape of things to come.

Architainment lighting for indoor and outdoor in a new shape: 4ArXS HCD<sup>®</sup> Ceramic with spherical arc tube and XS technology



SEE THE WORLD IN A NEW LIGHT



# A new shape in Architainment Lighting: 4ArXS HCD® Ceramic from OSRAM



For the first time, innovative 4ArXS HCD® ceramic metal halide lamps from OSRAM combine two revolutionary lamp technologies – the optimized spherical ceramic arc tube and eXtreme-Seal technology. The result is an extremely effective and durable (8000 hours) generation of lamps that open up new horizons in creative architectural effect lighting.



**4ArXS:**  
For Architainment eXtreme Seal – is a special lamp family for architectural lighting

**HCD:**  
are 4ArXS lamps with spherical arc tube (H = Hg for mercury, C = Ceramic, D = Durable, long lamp life)

## The shape of things to come: 4ArXS HCD® Ceramic with spherical arc tube

The new 4ArXS HCD® from OSRAM has a number of brilliant advantages over other lamps for architainment lighting.

- **Excellent durable quality**  
With its innovative spherical ceramic arc tube, patented by OSRAM, the 4ArXS HCD® meets the highest demands in terms of quality of light, stability and color rendering. And with an extremely long service life. Average lamp life is an impressive 8000 hours.
- **Excellent color rendering at the red end of the spectrum**  
4ArXS HCD® lamps offer excellent color rendering – up to 90 CRI – thanks in particular to very high rendering in the red part of the spectrum.
- **Constant light and color performance**  
Thanks to ceramic technology and an optimized filling system, the luminous efficacy and color stability of 4ArXS HCD® lamps maintain the highest levels throughout their long life of 8000 hours – and in any burning position.
- **Spherical arc tube geometry means higher light output**  
Optimum geometry means that more light can be produced from the arc due to its spherical ceramic arc tube, which in turn increases the luminous efficacy of the 4ArXS HCD®. A uniform wall thickness within the arc tube prevents shadowing – usually caused by excessively thick regions of the ceramic.
- **UV filter protection**  
The outer bulb of the 4ArXS HCD® contains a UV filter. This reduces the UV-load on plastics and other materials in the luminaire and on illuminated objects and increases operational safety.
- **Fewer components mean greater stability**  
The discharge arc tube is comprised only of rounded components and has no regions where there is an abrupt change in wall thickness or diameter. This means that 4ArXS HCD® has greater mechanical stability and is less susceptible to vibrations.

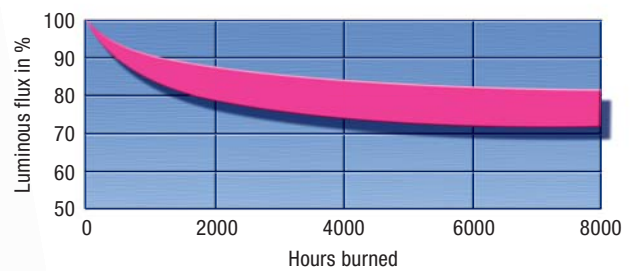


**4ArXS HCD® Ceramic always keeps its cool: greater thermal load capacity thanks to XS**

4ArXS HCD® also outperforms other metal halide lamps in terms of thermal loading. Thanks to OSRAM's innovative eXtreme Seal technology which treats the thermally sensitive weld point areas with a protective layer, the maximum pinch temperature has been raised from 350°C, common to other light sources, to 450°C.

The amount of cooling required can be reduced, which in turn means quieter, lighter weight, and more compact luminaires than those without XS technology. 4ArXS HCD® lamps are currently available in 35, 70 and 150 Watt versions, each with color temperatures of 3000 K and 4200 K. The rugged, compact design of the lamp and the thermal and mechanical stability of internal components ensure simple handling and safe operation, even under harsh conditions.

**Luminous flux behaviour 4ArXS HCD® 150 W/42**



**The benefits of 4ArXS HCD® Ceramic**

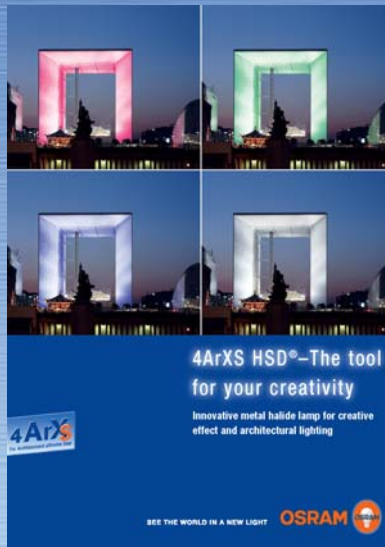
- Ultra long average service life of 8000 hours
- Increased light output due to spherical burner allows for improved efficiency
- Improved light distribution due to homogenous arc tube thickness
- Higher mechanical stability of arc tube
- Excellent color rendering and color stability
- Improved heat resistance through XS technology
- OSRAM POWERTRONIC® ECG available for all wattages (35–150 W)
- Plug&Play for a multitude of existing applications



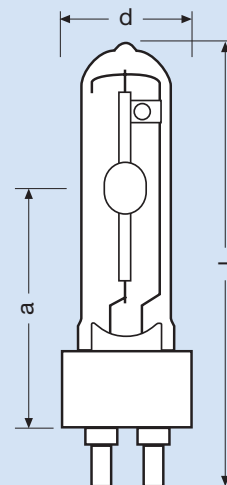
## Safety:

Because they operate at high pressure 4ArXS HCD® lamps must only be used in fully enclosed fixtures.

Innovative 4ArXS lamps from OSRAM are also available in HSD® versions with conventional quartz discharge short-arc technology. For more details see our latest product brochure entitled "4ArXS HSD®".



## Technical data



| Type                                 | 4ArXS HCD® 35W/30 | 4ArXS HCD® 35W/42 | 4ArXS HCD® 70W/30 | 4ArXS HCD® 70W/42 | 4ArXS HCD® 150W/30 | 4ArXS HCD® 150W/42 |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|
| Rated wattage                        | 35 W              | 35 W              | 70 W              | 70 W              | 150 W              | 150 W              |
| Lamp voltage                         | 90 V              | 90 V              | 100 V             | 90 V              | 99 V               | 92 V               |
| Operating current                    | 0,2 A             | 0,53 A            | 0,98 A            | 1,0 A             | 1,8 A              | 1,8 A              |
| Luminous flux                        | 3400 lm           | 3200 lm           | 6700 lm           | 6500 lm           | 14500 lm           | 14200 lm           |
| Luminous efficacy                    | 87 lm/W           | 86 lm/W           | 94 lm/W           | 90 lm/W           | 100 lm/W           | 98 lm/W            |
| Color temperature                    | 3000 K            | 4200 K            | 3000 K            | 4200 K            | 3000 K             | 4200 K             |
| Color rendering index R <sub>a</sub> | ≥ 80              | ≥ 90              | ≥ 85              | ≥ 90              | ≥ 85               | ≥ 90               |
| Burning position                     | universal         | universal         | universal         | universal         | universal          | universal          |
| Average lamp life                    | 8000 h            | 8000 h            | 8000 h            | 8000 h            | 8000 h             | 8000 h             |
| Base                                 | G12               | G12               | G12               | G12               | G12                | G12                |
| Length l                             | 100 mm            | 100 mm            | 100 mm            | 100 mm            | 105 mm             | 105 mm             |
| Diameter d                           | 19 mm             | 19 mm             | 19 mm             | 19 mm             | 25 mm              | 25 mm              |
| LCL a                                | 56 mm             | 56 mm             | 56 mm             | 56 mm             | 56 mm              | 56 mm              |

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