

## PRODUCT DATASHEET

### HCI-TT 70 W/830 SUPER 4Y

POWERBALL HCI®-TT SUPER 4Y | Metal halide lamps with ceramic technology for enclosed luminaires



#### Areas of application

- Streets
- Outdoor lighting
- Industrial installations
- Exhibition halls and trade fairs
- Approved only for use in enclosed luminaires
- Outdoor applications only in suitable luminaires

#### Product benefits

- Up to 15 % higher lumen maintenance factor compared to HCI-TT standard lamps
- Up to 30 % higher lum. efficacy for lamps  $\leq 100$  W (comp. to NAV-T Super 4Y/6Y)
- Good color rendering
- Operation in existing HPS installations as ignition voltage of IEC 60662 is met
- Energy savings of up to 70 % when replacing mercury vapor lamps (HQL)
- Optimum energy efficiency on POWERTRONIC® PTo 3DIM ECGs
- UV values significantly below the maximum permitted thresholds to IEC 61167 thanks to UV filter

#### Product features

- White light due to POWERBALL® ceramic technology
- Light color: warm white (830 WDL)
- Extended service lifetime: 4 years (at approx. 11 h/day)



- Very high luminous efficacy: up to 125 lm/W
- Lamp survival factor: 95 % after 16,000 h burning time
- Average lifetime: up to 24,000 h
- ErP compliant according to EU Regulation 245/2009
- Dimmable on conventional control gears and electronic control gears

TECHNICAL DATA

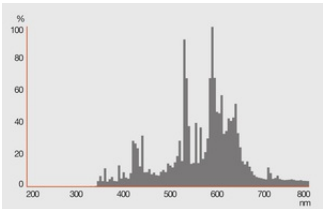
Electrical data

|                        |                                                                            |
|------------------------|----------------------------------------------------------------------------|
| Nominal wattage        | 70 W                                                                       |
| Construction wattage   | 77.00 W                                                                    |
| Nominal voltage        | 95 V                                                                       |
| Ignition voltage       | 1.8/5.0 kVp <sup>1)</sup>                                                  |
| Operating mode         | Conventional control gear (CCG) and ignitor, Electronic control gear (ECG) |
| Nominal current        | 1 A                                                                        |
| PFC capacitor at 50 Hz | 12 µF                                                                      |

1) Minimum / Maximum

Photometrical data

|                                    |          |
|------------------------------------|----------|
| Luminous flux                      | 8000 lm  |
| Luminous efficacy                  | 107 lm/W |
| Color temperature                  | 3200 K   |
| Color rendering index Ra           | 80       |
| Light color                        | 832      |
| Rated LLMF at 2,000 h              | 0.92     |
| Rated LLMF at 4,000 h              | 0.90     |
| Rated LLMF at 6,000 h              | 0.89     |
| Rated LLMF at 8,000 h              | 0.88     |
| Rated LLMF at 12,000 h             | 0.85     |
| Rated LLMF at 16,000 h             | 0.83     |
| Rated LLMF at 20,000 h             | 0.75     |
| Rated lamp efficacy (standard co.) | 104 lm/W |
| UV protection                      | Yes      |



502820\_HCI\_TT\_ET\_830\_SUPER\_4Y

### Dimensions & Weight

|                           |           |
|---------------------------|-----------|
| Overall length            | 150.00 mm |
| Light center length (LCL) | 102,0 mm  |
| Diameter                  | 35.00 mm  |
| Product weight            | 50.00 g   |

### Temperatures & operating conditions

|                                          |        |
|------------------------------------------|--------|
| Maximum permitted outer bulb temperature | 350 °C |
| Maximum permitted base edge temperature  | 210 °C |

### Lifespan

|                                        |         |
|----------------------------------------|---------|
| Rated lamp survival factor at 2,000 h  | 0.99    |
| Rated lamp survival factor at 4,000 h  | 0.99    |
| Rated lamp survival factor at 6,000 h  | 0.98    |
| Rated lamp survival factor at 8,000 h  | 0.97    |
| Rated lamp survival factor at 12,000 h | 0.97    |
| Rated lamp survival factor at 16,000   | 0.95    |
| Rated lamp survival factor at 20,000 h | 0.78    |
| Lifespan B10                           | 18000 h |
| Lifespan B5                            | 16000 h |
| Lifespan B50                           | 24000 h |
| Operation mode LLMF/LSF                | 50 Hz   |

### Additional product data

|                             |         |
|-----------------------------|---------|
| Base (standard designation) | E27     |
| Mercury content             | 8.0 mg  |
| Mercury-free                | No      |
| Design / version            | Clear   |
| System guarantee level      | 3 (2/5) |

### Capabilities

|                             |                   |
|-----------------------------|-------------------|
| Dimmable                    | Yes <sup>1)</sup> |
| Burning position            | Any               |
| Enclosed luminaire required | Yes               |

<sup>1)</sup> In combination with POWERTRONIC PTO

## Certificates & Standards

|                         |                 |
|-------------------------|-----------------|
| Energy efficiency class | F               |
| Energy consumption      | 84.70 kWh/1000h |

## Country-specific categorizations

|                 |                                |
|-----------------|--------------------------------|
| ILCOS           | MT/UB-70/830-H/E/SL-E27-32/155 |
| Order reference | HCI-TT 70W/830                 |

## Energy labelling regulation data acc EU 2019/2015

|                                                     |              |
|-----------------------------------------------------|--------------|
| Lighting technology used                            | MH           |
| Non-directional or directional                      | NDLS         |
| Mains or non-mains                                  | NMLS         |
| Light source cap-type (or other electric interface) | E27          |
| Connected light source (CLS)                        | No           |
| Color-tuneable light source                         | No           |
| Envelope                                            | SECOND       |
| High luminance light source                         | No           |
| Anti-glare shield                                   | No           |
| Correlated colour temperature type                  | SINGLE_VALUE |
| Claim of equivalent power                           | No           |
| Length                                              | 156.00 mm    |
| Height                                              | 35.00 mm     |
| Width                                               | 35.00 mm     |
| Chromaticity coordinate x                           | 0.420        |
| Chromaticity coordinate y                           | 0.394        |
| Beam angle correspondence                           | SPHERE_360   |
| EPREL ID                                            | 1535148      |
| Model number                                        | AC01721      |

## Safety advice

- Where possible, use a timer igniter (switch-off time of at least 15 minutes). Otherwise, switch off the luminaire for at least 15 minutes if a brief interruption has occurred to the mains voltage supply.
- Disconnect mains before installation.
- Must not be used if outer bulb is defective.
- Do not stare at the operating light source: The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 4 m is not expected.
- Lamp to be used only in a closed luminaire.

## DOWNLOAD DATA

| Documents and certificates                                                        |                             | Document name                               |
|-----------------------------------------------------------------------------------|-----------------------------|---------------------------------------------|
|   | Declarations of conformity  | Discharge lamps excluding fluorescent lamps |
| Photometric and lighting design files                                             |                             | Document name                               |
|  | Spectral power distribution | 502820_HCI_TT_ET_830_SUPER_4Y               |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4052899378339 | Sleeve<br>1                  | 39 mm x 39 mm x 196 mm               | 76.00 g      | 0.30 dm <sup>3</sup> |
| 4052899378346 | Shipping box<br>12           | 168 mm x 130 mm x 212 mm             | 953.00 g     | 4.63 dm <sup>3</sup> |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

## References / Links

– For more information on the system guarantee and the terms and conditions of the guarantee visit [www.ledvance.com/system-guarantee](http://www.ledvance.com/system-guarantee)

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