

# PRODUCT DATASHEET HCI-T 70 W/830 WDL PB

POWERBALL HCI®-T | Metal halide lamps with ceramic technology for enclosed luminaires



#### Areas of application

- Shop interiors, shop windows
- Shopping arcades
- Foyers, reception areas
- Museums, exhibitions
- Exhibition halls and trade fairs
- Factories and workshops
- Approved only for use in enclosed luminaires
- Outdoor applications only in suitable luminaires

## **Product benefits**

- Very high efficiency
- Good to excellent color rendering
- Very good color stability
- UV values significantly below the maximum permitted thresholds to IEC 61167 thanks to UV filter

#### **Product features**

- POWERBALL® ceramic technology
- Light colors: warm white (830 WDL, 930 WDL), neutral white (942 NDL)
- Average lifetime: 15,000 h (ECG with 70...400 Hz square-wave current)
- Average lifetime 150 W version: 20,000 h (ECG with 70...400 Hz square-wave current)
- Average lifetime: 12,000 h (with magnetic control gear)





## **TECHNICAL DATA**

## Electrical data

Nominal wattage	70 W
Construction wattage	73.00 W
Nominal voltage	95 V
Ignition voltage	3.6/5.0 kVp <sup>1)</sup>
Operating mode	Conventional control gear (CCG) and ignitor, Electronic control gear (ECG)
Nominal current	0.96 A
PFC capacitor at 50 Hz	12 µF

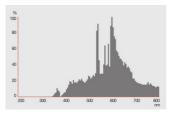
<sup>1)</sup> Minimum / for superimposed ignition with square wave electronic ballast 3.0 kVp are sufficient

## Photometrical data

Luminous flux	7400 lm <sup>1)</sup>
Luminous efficacy	101 lm/W <sup>2)</sup>
Color temperature	3000 K
Color rendering index Ra	89
Light color	830
Rated LLMF at 2,000 h	0.85
Rated LLMF at 4,000 h	0.79
Rated LLMF at 6,000 h	0.74
Rated LLMF at 8,000 h	0.70
Rated LLMF at 12,000 h	0.63
Rated LLMF at 16,000 h	0.58
Rated LLMF at 20,000 h	0.53
Rated lamp efficacy (standard co.)	99 lm/W
UV protection	Yes

<sup>1)</sup> In operation with electronic control gear with 70...400 Hz square-wave current. Operation with magnetic ballast can be less efficient

 $<sup>2) \ \ \</sup>text{In operation with low frequency square wave electronic ballast, } 70...400 \ \ \text{Hz. Operation with electromagnetic ballast may be less efficient.}$ 



384067\_HCI\_830\_WDL

# Dimensions & Weight

Overall length	100.00 mm
Light center length (LCL)	56,0 mm
Diameter	20,0 mm
Product weight	28.00 g

## Temperatures & operating conditions

Maximum permitted outer bulb temperature	500 °C
Maximum permitted pinch temperature	350 °C

## Lifespan

Rated lamp survival factor at 2,000 h	0.99
Rated lamp survival factor at 4,000 h	0.98
Rated lamp survival factor at 6,000 h	0.97
Rated lamp survival factor at 8,000 h	0.96
Rated lamp survival factor at 12,000 h	0.80
Rated lamp survival factor at 16,000	0.50
Rated lamp survival factor at 20,000 h	0.19
Lifespan B50	15000 h <sup>1)</sup>
Operation mode LLMF/LSF	ECG

<sup>1)</sup> At ECG

## Additional product data

Base (standard designation)	G12
Mercury content	7.6 mg <sup>1)</sup>
Mercury-free	No
Design / version	Clear

<sup>1) &</sup>lt;sub>Maximum</sub>

## Capabilities

Dimmable	Yes 1)
Burning position	Any
Enclosed luminaire required	Yes
Hot restart	No

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

## Certificates & Standards

Energy efficiency class	F
Energy consumption	80.30 kWh/1000h

## Country-specific categorizations

ILCOS	MT/UB-70/830-H/SL-G12-20/90
Order reference	HCI-T 70W/830 W

## Energy labelling regulation data acc EU 2019/2015

Non-directional or directional         NDLS           Mains or non-mains         NMLS           Light source cap-type (or other electric interface)         G12           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         100.00 mm           Height         20,0 mm           Width         20,0 mm           Chromaticity coordinate x         0.433           Chromaticity coordinate y         0.395           Beam angle correspondence         SPHERE_360	Lighting technology used	МН
Light source cap-type (or other electric interface)  Connected light source (CLS)  No  Color-tuneable light source  Envelope  SECOND  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Claim of equivalent power  No  Length  Height  20,0 mm  Width  Chromaticity coordinate x  O.433  Chromaticity coordinate y  Oscilorated colour temperature y  Oscilorated colour temperature y  Oscilorated colour temperature type  SINGLE_VALUE  Oscilorated colour temperature type  Oscilorat	Non-directional or directional	NDLS
Connected light source (CLS)  No  Color-tuneable light source  Envelope  SECOND  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Claim of equivalent power  Length  Height  20,0 mm  Width  20,0 mm  Chromaticity coordinate x  0.433  Chromaticity coordinate y	Mains or non-mains	NMLS
Color-tuneable light source Envelope SECOND High luminance light source No Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Claim of equivalent power No Length 100.00 mm Height 20,0 mm  Width 20,0 mm  Chromaticity coordinate x 0.433 Chromaticity coordinate y	Light source cap-type (or other electric interface)	G12
Envelope SECOND  High luminance light source No  Anti-glare shield No  Correlated colour temperature type SINGLE_VALUE  Claim of equivalent power No  Length 100.00 mm  Height 20,0 mm  Width 20,0 mm  Chromaticity coordinate x 0.433  Chromaticity coordinate y 0.395	Connected light source (CLS)	No
High luminance light source  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Claim of equivalent power  No  Length  100.00 mm  Height  20,0 mm  Width  20,0 mm  Chromaticity coordinate x  0.433  Chromaticity coordinate y	Color-tuneable light source	No
Anti-glare shield No  Correlated colour temperature type SINGLE_VALUE  Claim of equivalent power No  Length 100.00 mm  Height 20,0 mm  Width 20,0 mm  Chromaticity coordinate x 0.433  Chromaticity coordinate y 0.395	Envelope	SECOND
Correlated colour temperature type  Claim of equivalent power  Length  Height  20,0 mm  Width  20,0 mm  Chromaticity coordinate x  0.433  Chromaticity coordinate y  SINGLE_VALUE  No  0.400  No  100.00 mm  20,0 mm  0.433	High luminance light source	No
Claim of equivalent power No  Length 100.00 mm  Height 20,0 mm  Width 20,0 mm  Chromaticity coordinate x 0.433  Chromaticity coordinate y 0.395	Anti-glare shield	No
Length100.00 mmHeight20,0 mmWidth20,0 mmChromaticity coordinate x0.433Chromaticity coordinate y0.395	Correlated colour temperature type	SINGLE_VALUE
Height 20,0 mm  Width 20,0 mm  Chromaticity coordinate x 0.433  Chromaticity coordinate y 0.395	Claim of equivalent power	No
Width 20,0 mm  Chromaticity coordinate x 0.433  Chromaticity coordinate y 0.395	Length	100.00 mm
Chromaticity coordinate x 0.433 Chromaticity coordinate y 0.395	Height	20,0 mm
Chromaticity coordinate y 0.395	Width	20,0 mm
	Chromaticity coordinate x	0.433
Beam angle correspondence SPHERE_360	Chromaticity coordinate y	0.395
	Beam angle correspondence	SPHERE_360

EPREL ID	1535153
Model number	AC13767

#### **DOWNLOAD DATA**

	Documents and certificates	Document name
PDF	User instruction / safety instructions	High-Intensity-Discharge lamps. Operation instructions

Photometric and lighting design files	Document name
Spectral power distribution	384067_HCI_830_WDL

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008321678430	Folding box 1	42 mm x 42 mm x 142 mm	43.00 g	0.25 dm <sup>3</sup>
4008321678447	Shipping box 12	180 mm x 161 mm x 139 mm	586.00 g	4.03 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

#### **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.