



Light is brilliant POWERBALL HCI[®]

Efficient metal halide lamps with ceramic technology
and optimized color rendering

Light is OSRAM

OSRAM 

When quality and efficiency are the top priority: POWERBALL HCI® from OSRAM



OSRAM: Light specialist and solution provider

For more than 100 years, the OSRAM brand has represented innovative, sustainable development on the global lighting market. As one of the world's largest suppliers of innovative products and customized solutions for a wide range of customer requirements, OSRAM can revert to many years of experience and internally acquired know-how, also in the high-intensity discharge lamp sector. The result: a complete product range for almost every requirement and application.



Standard or premium: POWERBALL HCI® – always the right choice

OSRAM offers a wide range of ceramic lamps with POWERBALL HCI® technology:

- POWERBALL HCI® set the standard with outstanding power in the standard segment
- POWERBALL HCI® Plus and POWERBALL HCI® Shoplight offer outstanding features in the premium shop lighting segment
 - HCI® Plus: higher efficiency and better color rendering
 - HCI® Shoplight: even better color rendering, especially with red color shades
- POWERBALL HCI®-TT and HCI®-ET for efficient outdoor and industry lighting

The perfect system:

POWERBALL HCI® and POWERTRONIC® PTi/PT-FIT

POWERBALL HCI®, HCI® Plus and HCI® Shoplight deliver maximum power in perfectly harmonized interaction with compatible OSRAM electronic ballasts POWERTRONIC® PTi/PT-FIT.

- Higher system efficiency saves energy and money
- Intelligent electronic design for greater reliability and safety
- Long lifetime and robustness

Ceramic lamps redefined: POWERBALL HCI® Plus

Metal halide lamps with ceramic burners are still the ultimate benchmark in professional applications requiring brilliant light and high efficiency. With POWERBALL HCI® Plus, this technology has been further developed.

Advantages of POWERBALL HCI® Plus over POWERBALL HCI®

- About 10 % higher luminous efficacy
- 80 % of the original luminous flux remain after 12 000 hours
- Optimized color rendering ($R_a \geq 90$)

The premium solution for your shop lighting: POWERBALL HCI® Plus

- Outstanding choice for your shop lighting – no compromises
- Top performance in terms of long lifetime and energy efficiency
- Brilliant colors across the entire color spectrum



Perfect lamp/ECG system: POWERBALL HCI® Plus and POWERTRONIC®

POWERBALL HCI® Plus achieve outstanding values when operated with electronic ballasts. Particularly well suited are OSRAM ECGs that have been adapted accordingly: POWERTRONIC® PTi and PT-FIT provide optimum operating parameters and ensure perfect interaction with lamps from the second generation.

Ideal for new luminaires: greater light effect for lower operating costs

POWERBALL HCI® Plus are outstandingly suitable for existing luminaires, but achieve a higher performance in extremely efficient modern luminaires. As a result, it is possible to design lighting concepts with a much lower connected load and subsequently a much lower power consumption. For example, the conventional 70 W lamp used in luminaires with reflectors specially developed for POWERBALL® technology can be substituted by more efficient HCI® Plus in 50 W or even 35 W to create similar light solutions.

„A good light dramaturgy
draws attention and evokes
positive emotions.“

Ansgar Hellmich | Architect



Showcase Mexx

Mexx introduced its new Metropolitan store concept in 2010. The core theme is urban lifestyle in lofts. Mexx has now added more business fashion to its product line and refined the concept with a town house character. The two first stores with an extended town house design opened in Amsterdam and Den Bosch in the spring of 2012.

Perfect blend of architecture and products

In Amsterdam, 278 modern spot lights were used over an area of 550 m² – all fitted with the innovative OSRAM POWERBALL HCI® Plus 35 W. Given the high efficiency of both the spot lights and the lamps, POWERBALL HCI® Plus 35 W lamps can be substituted even for conventional 70 W ceramic lamps. Products are presented brilliantly with an extra sparkle and there is a balanced mix of illumination

and accentuation, while textures and the finest color nuances are clearly visible. The power consumption also decreases to approx. 22 W/m² due to the lower connected load while an average illuminance of 1300 lux is maintained.

Even Ansgar Hellmich, the internationally responsible architect, is impressed by the brilliant light effect and high efficiency of OSRAM lamps: "We deliberately changed the original lamps in the luminaires to OSRAM POWERBALL HCI® Plus lamps. The results are obvious in every respect." In future, the unique light quality and efficiency of the POWERBALL HCI® Plus 35 W and POWERTRONIC® PTi 35 from OSRAM may be demonstrated in other Mexx stores. The Metropolitan Concept is a great success: Both employees and customers appreciate the high quality ambiance and sales have increased by up to 25 %.



Premium solutions for your shop lighting: POWERBALL HCI® Plus and Shoplight

POWERBALL HCI® Plus and Shoplight are the perfect choice for complex shop lighting where compromise is out of the question. The HCI® Plus scores top marks in terms of long lifetime and energy efficiency as well as brilliant colors across the entire color spectrum. HCI® Shoplight stand out due to the optimized rendering of red color shades.

Higher efficiency, longer lifetime and better color rendering: POWERBALL HCI® Plus



- Extremely efficient – up to 108 lm/W
- Long lifetime – average lifetime of up to 15 000 hours¹⁾ when operated with compatible electronic ballasts
- Improved luminous flux maintenance – 80 % after 12 000 hours
- Light color 930 WDL with color rendering R_a ≥ 90
- For enclosed luminaires

| POWERBALL® type | HCI®-T Plus 35W | HCI®-T Plus 50W | HCI®-T Plus 70W | HCI®-TC Plus 35W | HCI®-TC Plus 50W | HCI®-TC Plus 70W |
|-------------------|--------------------------------------|--------------------------|--------------------------------------|--------------------------------------|--------------------------|--------------------------------------|
| POWERTRONIC® type | ▼ PTi 35 PTi 2x35 PT-FIT 35 | ▼ PT-FIT 50 PTi 50 | ▼ PTi 70 PTi 2x70 PT-FIT 70 | ▼ PTi 35 PTi 2x35 PT-FIT 35 | ▼ PT-FIT 50 PTi 50 | ▼ PTi 70 PTi 2x70 PT-FIT 70 |

Even better rendering of red color shades: POWERBALL HCI® Shoplight



- Ideal red color rendering for exceptional product presentation, especially in the fashion industry
- Average lifetime of up to 15 000 hours¹⁾
- For enclosed luminaires

| POWERBALL® type | HCI®-T Shoplight 35W | HCI®-T Shoplight 70W | HCI®-TC Shoplight 35W | HCI®-TC Shoplight 70W |
|-------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| POWERTRONIC® type | ▼ PTi 35 PTi 2x35 PT-FIT 35 | ▼ PTi 70 PTi 2x70 PT-FIT 70 | ▼ PTi 35 PTi 2x35 PT-FIT 35 | ▼ PTi 70 PTi 2x70 PT-FIT 70 |

1) See tables on page 12/13 for specifications

Premium solutions for your outdoor and industry lighting: POWERBALL HCI®-TT/-ET Super 4Y and HCI®-TT/-ET



The POWERBALL HCI®-TT/-ET Super 4Y and HCI®-TT/-ET product lines offer a powerful package that sets high standards and is adapted perfectly to the application.

POWERBALL HCI®-TT/-ET Super 4Y and HCI®-TT/-ET lamps generate brilliant white light, offer a long lifetime and provide lasting quality in street and outdoor lighting applications.

Especially the new lamp generation of the POWERBALL HCI®-TT and -ET Super 4Y product lines provides a higher luminous flux, longer lifetime and therefore less service effort. High lamp efficiency and low failure rates provide a long-term solution to the increasing need for energy-saving and cost-saving technology.

1) See tables on page 12/13 for specifications

2) Availability scheduled for first quarter of 2014

3) Availability scheduled for second quarter of 2014

4) Availability scheduled for fourth quarter of 2014,
specification parameters not yet listed

Tubular, single ended: POWERBALL HCI®-TT Super 4Y

- Lifetime of 4 years
- Direct operation in NAV luminaires possible
- Dimmable on POWERTRONIC® PTo 3DIM, up to 60 % of the lamp wattage
- Lifetime B5 of up to 16 000¹⁾
- Compliant with EU directive 245/2009
- For enclosed luminaires

| POWERBALL® type | HCI®-TT 35W Super 4Y ⁴⁾ | HCI®-TT 50W Super 4Y ²⁾ | HCI®-TT 70W Super 4Y ³⁾ | HCI®-TT 100W Super 4Y ²⁾ | HCI®-TT 150W Super 4Y ⁴⁾ | HCI®-TT 250W Super 4Y ²⁾ |
|-------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|--|--|
| POWERTRONIC® type | ▼ PTo 35W | ▼ PTo 50 3DIM | ▼ PTo 70 3DIM | ▼ PTo 70 3DIM | ▼ PTo 150 3DIM | ▼ PTo 250 3DIM |

With coated ellipsoid bulb, single ended: POWERBALL HCI®-ET Super 4Y

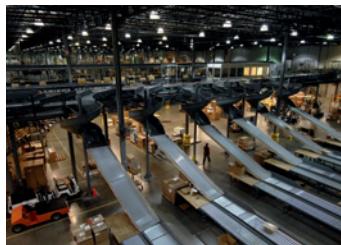
- Lifetime of 4 years
- Direct operation in NAV luminaires possible
- Dimmable on POWERTRONIC® PTo 3DIM, up to 60 % of the lamp wattage
- Lifetime B5 of up to 16 000¹⁾
- Compliant with EU directive 245/2009
- For enclosed luminaires
- Also suitable for decorative luminaires

| POWERBALL® type | HCI-ET 35W Super 4Y ⁴⁾ | HCI-ET 50W Super 4Y ²⁾ | HCI-ET 70W Super 4Y ³⁾ |
|-------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| POWERTRONIC® type | ▼ PTo 35W | ▼ PTo 50 3DIM | ▼ PTo 70 3DIM |

Tubular, single ended: POWERBALL HCI®-TT

- Direct operation in NAV luminaires possible
- Dimmable on POWERTRONIC® PTo 3DIM, up to 60 % of the lamp wattage
- Lifetime B5 of up to 16 000¹⁾
- For enclosed luminaires

| POWERBALL® type | HCI®-TT 35W ²⁾ | HCI®-TT 50W | HCI®-TT 70W | HCI®-TT 100W | HCI®-TT 150W | HCI®-TT 250W |
|-------------------|---------------------------|------------------|------------------|------------------|-------------------|---------------------------------|
| POWERTRONIC® type | ▼ PTo 35W | ▼ PTo 50 3DIM | ▼ PTo 70 3DIM | ▼ PTo 70 3DIM | ▼ PTo 150 3DIM | ▼ PTo 250 3DIM ²⁾ |

With coated ellipsoid bulb, single ended: POWERBALL HCI®-ET

- Direct operation in NAV luminaires possible
- Dimmable on POWERTRONIC® PTo 3DIM, up to 60 % of the lamp wattage
- Lifetime B5 of up to 16 000¹⁾
- For enclosed luminaires
- Also suitable for decorative luminaires

| POWERBALL® type | HCI®-ET 35W | HCI®-ET 50W | HCI®-ET 70W |
|-------------------|--------------|------------------|------------------|
| POWERTRONIC® type | ▼ PTo 35W | ▼ PTo 50 3DIM | ▼ PTo 70 3DIM |

An excellent choice for all applications: POWERBALL HCI®

Tubular, single ended: POWERBALL HCI®-T



- Average lifetime of up to 15 000 hours¹⁾
- For enclosed luminaires

| POWERBALL® type | HCI®-T 35W | HCI®-T 50W | HCI®-T 70W | HCI®-T 100W | HCI®-T 150W |
|-------------------|---------------------------------|---------------------|---------------------------------|-------------|-------------|
| POWERTRONIC® type | PTi 35 PTi 2x35 PT-FIT 35 | PTi 50 PT-FIT 50 | PTi 70 PTi 2x70 PT-FIT 70 | PTi 100 | PTi 150 |

Tubular, single ended: POWERBALL HCI®-TC



- Compact lamp
- Good light direction in luminaires with small reflector sizes
- Average lifetime of up to 15 000 hours¹⁾
- For enclosed luminaires

| POWERBALL® type | HCI®-TC 20W | HCI®-TC 35W | HCI®-TC 50W | HCI®-TC 70W |
|-------------------|-------------|---------------------------------|---------------------|---------------------------------|
| POWERTRONIC® type | PTi 20 | PTi 35 PTi 2x35 PT-FIT 35 | PTi 50 PT-FIT 50 | PTi 70 PTi 2x70 PT-FIT 70 |

Tubular, single ended: POWERBALL HCI®-TF



- Smallest HCI® lamp
- GU6.5 “Twist & Lock” base for easy handling
- Average lifetime of up to 15 000 hours¹⁾
- For enclosed luminaires

| POWERBALL® type | HCI®-TF 20W | HCI®-TF 35W |
|-------------------|-------------|---------------------------------|
| POWERTRONIC® type | PTi 20 | PTi 35 PTi 2x35 PT-FIT 35 |

1) See tables on page 12/13 for specifications

All standard versions of POWERBALL HCI® are an excellent choice for a wide variety of commercial lighting applications. Characterized by a high degree of reliability and robustness, they are much more efficient and color-true than lamps that use cylindrical ceramic technology. In addition, optimizing the lamp design has made it possible to extend the average lifetime of the most common POWERBALL HCI®-T, HCI®-TC, HCI®-TF and HCI®-TS types from 12 000 to 15 000 hours. POWERBALL HCI® products from OSRAM are available in different wattages and light colors as well as different base types and dimensions.

Tubular, double ended: POWERBALL HCI®-TS



- Average lifetime of up to 15 000 hours¹⁾
- For enclosed luminaires

POWERBALL® type

HCI®-TS 70W HCI®-TS 150W

| POWERTRONIC® type | HCI®-TS 70W | HCI®-TS 150W |
|-------------------|---------------------------------|--------------|
| | PTi 70 PTi 2x70 PT-FIT 70 | PTi 150 |

PAR reflector, single ended: POWERBALL HCI®-PAR20/-PAR30



- Two reflector sizes and two beam angles
- Average lifetime of up to 12 000 hours¹⁾
- For open and enclosed luminaires

POWERBALL® type

HCI®-PAR20 35W

HCI®-PAR30 35W

HCI®-PAR30 70W

| POWERTRONIC® type | HCI®-PAR20 35W | HCI®-PAR30 35W | HCI®-PAR30 70W |
|-------------------|---------------------------------|---------------------------------|---------------------------------|
| | PTi 35 PTi 2x35 PT-FIT 35 | PTi 35 PTi 2x35 PT-FIT 35 | PTi 70 PTi 2x70 PT-FIT 70 |

With coated ellipsoid bulb, single ended: POWERBALL HCI®-E/P



- Average lifetime of up to 12 000 hours¹⁾
- For open and enclosed luminaires
- Also suitable for decorative luminaires

POWERBALL® type

HCI®-E/P 35W

HCI®-E/P 50W

HCI®-E/P 70W

HCI®-E/P 100W

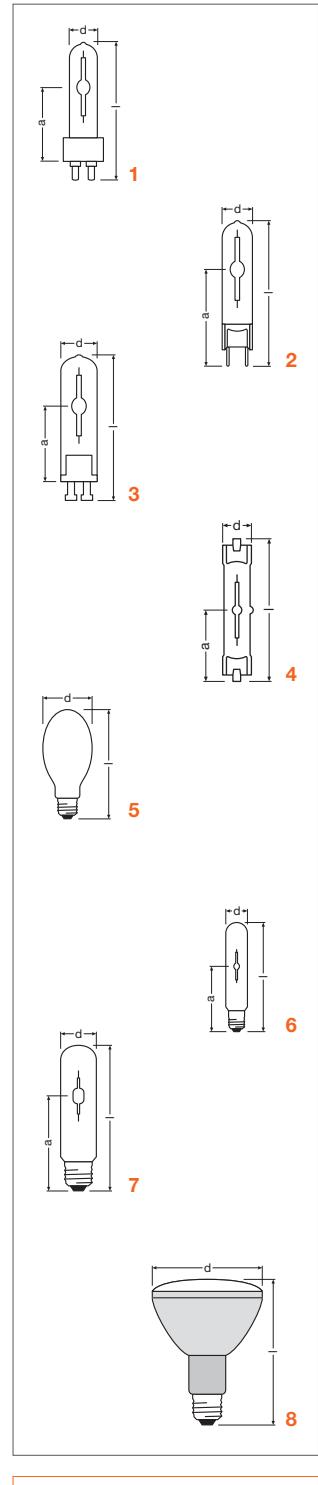
HCI®-E/P 150W

| POWERTRONIC® type | HCI®-E/P 35W | HCI®-E/P 50W | HCI®-E/P 70W | HCI®-E/P 100W | HCI®-E/P 150W |
|-------------------|---|------------------------------------|--|-------------------------|-------------------------|
| | PTi 35 PTi 2x35 PT-FIT 35 PTo 35 | PTi 50 PT-FIT 50 PTo 50 3DIM | PTi 70 PTi 2x70 PT-FIT 70 PTo 70 3DIM | PTi 100 PTo 100 3DIM | PTi 150 PTo 150 3DIM |

1) See tables on page 12/13 for specifications

| Product reference | Product number (EAN10) | W | K | d [mm] | I [mm] | LCL a [mm] | Ballast ¹⁾ |
|---|------------------------|-----|------|--------|--------|---------------|-----------------------|
| POWERBALL with G12 base for enclosed luminaires | | | | | | | |
| HCI-T 35W/830 WDL PB | 4008321681850 | 35 | 3000 | 20 | 100 | 56 | ECG, CCG |
| HCI-T 35W/930 WDL PB Shoplight | 4008321681874 | 35 | 3000 | 20 | 100 | 56 | ECG, CCG |
| HCI-T 35W/930 WDL PB Plus | 4008321974266 | 35 | 3000 | 20 | 103 | 56 | ECG |
| HCI-T 35W/942 NDL PB | 4008321681898 | 35 | 4200 | 20 | 100 | 56 | ECG, CCG |
| HCI-T 50W/830 WDL PB | 4052899031760 | 50 | 3000 | 20 | 100 | 56 | ECG |
| HCI-T 50W/930 WDL PB Plus | 4008321974303 | 50 | 3000 | 20 | 103 | 56 | ECG |
| HCI-T 70W/830 WDL PB | 4008321678430 | 70 | 3000 | 20 | 100 | 56 | ECG, CCG |
| HCI-T 70W/930 WDL PB Shoplight | 4008321678508 | 70 | 3000 | 20 | 100 | 56 | ECG, CCG |
| HCI-T 70W/930 WDL PB Plus | 4008321974228 | 70 | 3000 | 20 | 103 | 56 | ECG |
| HCI-T 70W/942 NDL PB | 4008321678522 | 70 | 4200 | 20 | 100 | 56 | ECG, CCG |
| HCI-T 100W/830 WDL PB | 4008321682963 | 100 | 3000 | 20 | 105 | 56 | ECG, CCG |
| HCI-T 100W/942 NDL PB | 4008321682987 | 100 | 4200 | 20 | 105 | 56 | ECG, CCG |
| HCI-T 150W/830 WDL PB | 4008321682055 | 150 | 3000 | 25 | 105 | 56 | ECG, CCG |
| HCI-T 150W/942 NDL PB | 4008321682079 | 150 | 4200 | 25 | 105 | 56 | ECG, CCG |
| POWERBALL with G8.5 base for enclosed luminaires | | | | | | | |
| HCI-TC 20W/830 WDL PB | 4008321683007 | 20 | 3000 | 15 | 81 | 52 | ECG |
| HCI-TC 35W/830 WDL PB | 4008321681997 | 35 | 3000 | 15 | 81 | 52 | ECG, CCG |
| HCI-TC 35W/930 WDL PB Shoplight | 4008321682017 | 35 | 3000 | 15 | 81 | 52 | ECG, CCG |
| HCI-TC 35W/930 WDL PB Plus | 4008321974242 | 35 | 3000 | 15 | 85 | 52 | ECG |
| HCI-TC 35W/942 NDL PB | 4008321682031 | 35 | 4200 | 15 | 81 | 52 | ECG, CCG |
| HCI-TC 50W/830 WDL PB | 4052899031784 | 50 | 3000 | 15 | 81 | 52 | ECG |
| HCI-TC 50W/930 WDL PB Plus | 4008321974280 | 50 | 3000 | 15 | 85 | 52 | ECG |
| HCI-TC 70W/830 WDL PB | 4008321681799 | 70 | 3000 | 15 | 81 | 52 | ECG, CCG |
| HCI-TC 70W/930 WDL PB Shoplight | 4008321681812 | 70 | 3000 | 15 | 81 | 52 | ECG, CCG |
| HCI-TC 70W/930 WDL PB Plus | 4008321974204 | 70 | 3000 | 15 | 85 | 52 | ECG |
| HCI-TC 70W/942 NDL PB | 4008321681836 | 70 | 4200 | 15 | 81 | 52 | ECG, CCG |
| POWERBALL with GU6.5 base for enclosed luminaires | | | | | | | |
| HCI-TF 20W/830 WDL PB | 4008321683045 | 20 | 3000 | 13 | 57 | 30 | ECG |
| HCI-TF 35W/930 WDL PB | 4008321683021 | 35 | 3000 | 13 | 57 | 30 | ECG |
| POWERBALL with RX7s base for enclosed luminaires | | | | | | | |
| HCI-TS 70W/830 WDL PB | 4008321688309 | 70 | 3000 | 22 | 120 | 60 | ECG, CCG |
| HCI-TS 70W/942 NDL PB | 4008321688361 | 70 | 4200 | 22 | 120 | 60 | ECG, CCG |
| POWERBALL with RX7s-24 base for enclosed luminaires | | | | | | | |
| HCI-TS 150W/830 WDL PB | 4008321679857 | 150 | 3000 | 25 | 138 | 69 | ECG, CCG |
| HCI-TS 150W/942 NDL PB | 4008321679871 | 150 | 4200 | 25 | 138 | 69 | ECG, CCG |
| POWERBALL with E27 base for enclosed luminaires¹⁰⁾ | | | | | | | |
| HCI-ET 35W/830 WDL PB | 4008321821164 | 35 | 3000 | 71 | 156 | n.a. | ECG, CCG |
| HCI-TT 35W/830 WDL PB ⁷⁾ | 4052899925090 | 35 | 3000 | 32 | 155 | 102 | ECG, CCG |
| HCI-ET 50W/830 WDL PB | 4008321821188 | 50 | 3000 | 71 | 156 | n.a. | ECG, CCG |
| HCI-ET 50W/830 SUPER 4Y ⁷⁾ | 4052899108073 | 50 | 3000 | 71 | 156 | n.a. | ECG, CCG |
| HCI-TT 50W/830 WDL PB | 4008321688873 | 50 | 3000 | 32 | 155 | 102 | ECG, CCG |
| HCI-TT 50W/830 SUPER 4Y ⁷⁾ | 4052899108035 | 50 | 3000 | 32 | 155 | 102 | ECG, CCG |
| HCI-TT 70W/830 WDL PB | 4008321688897 | 70 | 3000 | 32 | 155 | 102 | ECG, CCG |
| HCI-TT 70W/830 SUPER 4Y ⁸⁾ | 4052899044715 | 70 | 3000 | 32 | 155 | 102 | ECG, CCG |
| HCI-ET 70W/830 WDL PB | 4008321688286 | 70 | 3000 | 71 | 156 | n.a. | ECG, CCG |
| HCI-ET 70W/830 SUPER 4Y ⁸⁾ | 4052899044753 | 70 | 3000 | 71 | 156 | n.a. | ECG, CCG |
| POWERBALL with E40 base for enclosed luminaires¹⁰⁾ | | | | | | | |
| HCI-TT 100W/830 WDL PB | 4008321688910 | 100 | 3000 | 47 | 210 | 132 | ECG, CCG |
| HCI-TT 100W/830 SUPER 4Y ⁷⁾ | 4052899108097 | 100 | 3000 | 47 | 210 | 132 | ECG, CCG |
| HCI-TT 150W/830 WDL PB | 4008321688934 | 150 | 3000 | 47 | 210 | 132 | ECG, CCG |
| HCI-TT 250W/830 WDL PB | 4008321688958 | 250 | 3000 | 47 | 226 | 158 | ECG, CCG |
| HCI-TT 250W/830 SUPER 4Y ⁷⁾ | 4052899081826 | 250 | 3000 | 47 | 226 | 158 | ECG, CCG |
| POWERBALL with E27 base for open and enclosed luminaires | | | | | | | |
| HCI-E/P 35W/830 WDL PB coated | 4008321692801 | 35 | 3000 | 54 | 138 | n.a. | ECG, CCG |
| HCI-E/P 50W/830 WDL PB coated | 4008321338488 | 50 | 3000 | 54 | 138 | n.a. | ECG, CCG |
| HCI-E/P 70W/830 WDL PB coated | 4008321692825 | 70 | 3000 | 54 | 138 | n.a. | ECG, CCG |
| HCI-E/P 100W/830 WDL PB coated | 4008321692849 | 100 | 3000 | 54 | 138 | n.a. | ECG, CCG |
| HCI-E/P 150W/830 WDL PB coated | 4008321692863 | 150 | 3000 | 54 | 138 | n.a. | ECG, CCG |
| POWERBALL with reflector and E27 base for open and enclosed luminaires | | | | | | | |
| HCI-PAR20 35W/830 WDL PB SP 10D | 4008321970756 | 35 | 3000 | 65 | 95 | – | ECG, CCG |
| HCI-PAR20 35W/830 WDL PB FL 30D | 4008321970794 | 35 | 3000 | 65 | 95 | – | ECG, CCG |
| HCI-PAR30 35W/830 WDL PB SP 10D | 4008321970831 | 35 | 3000 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 35W/830 WDL PB FL 30D | 4008321970855 | 35 | 3000 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 35W/942 NDL PB SP 10D | 4008321970879 | 35 | 4200 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 35W/942 NDL PB FL 30D | 4008321970893 | 35 | 4200 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 70W/930 WDL PB SP 10D | 4008321970930 | 70 | 3000 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 70W/930 WDL PB FL 30D | 4008321971012 | 70 | 3000 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 70W/942 NDL PB SP 10D | 4008321970954 | 70 | 4200 | 97 | 125 | – | ECG, CCG |
| HCI-PAR30 70W/942 NDL PB FL 30D | 4008321970978 | 70 | 4200 | 97 | 125 | – | ECG, CCG |

| | W²⁾ LAMP | lm²⁾ | A²⁾ | lm/W²⁾ | R_a²⁾ | t [h] | Typical survival rate²⁾ after 12000 h | Typical lumen maintenance²⁾ after 12000 h | No. |
|-------------------|--------------------------------|------------------------|-----------------------|--------------------------|-----------------------------------|-------------------|---|---|------------|
| 39 | 3700 | — | 95 | 85 | 15000 ³⁾⁴⁾ | 80% | 73% | 1 | |
| 39 | 3100 | — | 79 | 93 | 15000 ³⁾⁴⁾ | 80% | 78% | 1 | |
| 39 | 4000 | — | 103 | 90 | 15000 ³⁾ | 80% | 80% | 1 | |
| 39 | 3400 | — | 87 | 91 | 15000 ³⁾⁴⁾ | 80% | 84% | 1 | |
| 50 | 5250 | — | 105 | 89 | 15000 ³⁾ | 80% | 80% | 1 | |
| 50 | 5400 | — | 108 | 90 | 15000 ³⁾ | 80% | 82% | 1 | |
| 73 | 7400 | — | 101 | 89 | 15000 ³⁾⁴⁾ | 80% | 75% | 1 | |
| 73 | 6800 | — | 93 | 93 | 15000 ³⁾⁴⁾ | 80% | 60% | 1 | |
| 73 | 7800 | — | 107 | 90 | 15000 ³⁾ | 80% | 82% | 1 | |
| 73 | 6800 | — | 93 | 95 | 15000 ³⁾⁴⁾ | 80% | 76% | 1 | |
| 100 | 11300 | — | 113 | 86 | 15000 ³⁾⁴⁾ | 80% | 76% | 1 | |
| 100 | 10500 | — | 105 | 95 | 15000 ³⁾⁴⁾ | 80% | 80% | 1 | |
| 147 | 15100 | — | 103 | 89 | 15000 ³⁾⁴⁾ | 80% | 69% | 1 | |
| 147 | 14700 | — | 100 | 95 | 15000 ³⁾⁴⁾ | 80% | 74% | 1 | |
| 20 | 1700 | — | 85 | 83 | 15000 ³⁾ | 80% | 65% | 2 | |
| 39 | 3700 | — | 95 | 85 | 15000 ³⁾⁴⁾ | 80% | 76% | 2 | |
| 39 | 3100 | — | 79 | 93 | 15000 ³⁾⁴⁾ | 80% | 80% | 2 | |
| 39 | 4000 | — | 103 | 90 | 15000 ³⁾ | 80% | 78% | 2 | |
| 39 | 3500 | — | 90 | 90 | 15000 ³⁾⁴⁾ | 80% | 85% | 2 | |
| 50 | 5250 | — | 105 | 89 | 15000 ³⁾ | 80% | 80% | 2 | |
| 50 | 5400 | — | 108 | 90 | 15000 ³⁾ | 80% | 82% | 2 | |
| 73 | 7200 | — | 99 | 89 | 15000 ³⁾⁴⁾ | 80% | 70% | 2 | |
| 73 | 6800 | — | 93 | 94 | 15000 ³⁾⁴⁾ | 80% | 60% | 2 | |
| 73 | 7700 | — | 105 | 91 | 15000 ³⁾ | 80% | 82% | 2 | |
| 73 | 6800 | — | 93 | 96 | 15000 ³⁾⁴⁾ | 80% | 80% | 2 | |
| 20 | 1700 | — | 85 | 89 | 15000 ³⁾ | 80% | 69% | 3 | |
| 39 | 3600 | — | 92 | 90 | 15000 ³⁾ | 80% | 80% | 3 | |
| 73 | 7000 | — | 96 | 88 | 15000 ³⁾⁴⁾ | 80% | 71% | 4 | |
| 73 | 6700 | — | 92 | 94 | 15000 ³⁾⁴⁾ | 80% | 71% | 4 | |
| 147 | 15000 | — | 102 | 89 | 15000 ³⁾⁴⁾ | 80% | 63% | 4 | |
| 147 | 14800 | — | 101 | 96 | 15000 ³⁾⁴⁾ | 80% | 65% | 4 | |
| 40 ⁹⁾ | 3800 ⁹⁾ | — | 95 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 80% ⁹⁾ | 5 | |
| 40 ⁹⁾ | 3800 ⁹⁾ | — | 95 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 80% ⁹⁾ | 6 | |
| 55 ⁹⁾ | 5100 ⁹⁾ | — | 93 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 75% ⁹⁾ | 5 | |
| 56 ⁹⁾ | 6100 ⁹⁾ | — | 105 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 97% ⁹⁾ | 85% ⁹⁾ | 5 | |
| 54 ⁹⁾ | 5350 ⁹⁾ | — | 99 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 75% ⁹⁾ | 6 | |
| 56 ⁹⁾ | 6100 ⁹⁾ | — | 109 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 97% ⁹⁾ | 85% ⁹⁾ | 6 | |
| 74 ⁹⁾ | 7200 ⁹⁾ | — | 97 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 75% ⁹⁾ | 6 | |
| 75 ⁹⁾ | 8000 ⁹⁾ | — | 107 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 97% ⁹⁾ | 85% ⁹⁾ | 6 | |
| 74 ⁹⁾ | 7200 ⁹⁾ | — | 97 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 75% ⁹⁾ | 5 | |
| 74 ⁹⁾ | 7900 ⁹⁾ | — | 107 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 97% ⁹⁾ | 85% ⁹⁾ | 5 | |
| 98 ⁹⁾ | 10600 ⁹⁾ | — | 108 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 80% ⁹⁾ | 7 | |
| 100 ⁹⁾ | 12000 ⁹⁾ | — | 120 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 97% ⁹⁾ | 85% ⁹⁾ | 7 | |
| 146 ⁹⁾ | 15700 ⁹⁾ | — | 108 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 75% ⁹⁾ | 7 | |
| 252 ⁹⁾ | 27700 ⁹⁾ | — | 110 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 96% ⁹⁾ | 70% ⁹⁾ | 7 | |
| 256 ⁹⁾ | 32000 ⁹⁾ | — | 125 ⁹⁾ | ≥ 80 ⁹⁾ | 16000 ⁵⁾⁶⁾ | 97% ⁹⁾ | 85% ⁹⁾ | 7 | |
| 38 ⁹⁾ | 3500 ⁹⁾ | — | 92 ⁹⁾ | 84 ⁹⁾ | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | 66% ⁹⁾ | 5 | |
| 53 ⁹⁾ | 4000 ⁹⁾ | — | 75 ⁹⁾ | 85 ⁹⁾ | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | 57% ⁹⁾ | 5 | |
| 73 ⁹⁾ | 7200 ⁹⁾ | — | 99 ⁹⁾ | 88 ⁹⁾ | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | 63% ⁹⁾ | 5 | |
| 97 ⁹⁾ | 10000 ⁹⁾ | — | 103 ⁹⁾ | 85 ⁹⁾ | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | 73% ⁹⁾ | 5 | |
| 147 ⁹⁾ | 15000 ⁹⁾ | — | 102 ⁹⁾ | 88 ⁹⁾ | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | 54% ⁹⁾ | 5 | |
| 39 | 22000 ¹¹⁾ | 10 | — | 84 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 39 | 5000 ¹¹⁾ | 30 | — | 84 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 39 | 45000 ¹¹⁾ | 10 | — | 83 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 39 | 8000 ¹¹⁾ | 30 | — | 83 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 39 | 36000 ¹¹⁾ | 10 | — | >90 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 39 | 7000 ¹¹⁾ | 30 | — | >90 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 72 | 60000 ¹¹⁾ | 10 | — | 95 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 72 | 12000 ¹¹⁾ | 30 | — | 95 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 72 | 70000 ¹¹⁾ | 10 | — | >90 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |
| 72 | 13000 ¹¹⁾ | 30 | — | >90 | 12000 ³⁾⁶⁾ | 50% ⁶⁾ | — | 8 | |



Please note:
All lamps for universal burning position,
except HCL-TS 70 and 150W, which
are approved for burning position p45.



1) ECG: Electronic ballast,
square-wave current, 70–400Hz;
CCG: Inductive ballast, mains frequency

2) When operated on ECG,
unless otherwise specified

3) Average lifetime until failure rate 50% (B50)

4) When operated on CCG;
when operated on ECG

5) Average lifetime until failure rate 5% (B5)

6) For both ECG and CCG operation

7) Availability scheduled for first

quarter of 2014

8) Availability scheduled for second

quarter of 2014

9) When operated on CCG

10) All values have been measured in

horizontal burning position

11) Luminous intensity [cd]

Which POWERBALL HCI® – for which application?

| | Premium | | | | | |
|--------------------------------------|---|---------------------------|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| | POWERBALL HCI®-T Plus | POWERBALL HCI®-TC Plus | POWERBALL HCI®-T Shoplight | POWERBALL HCI®-TC Shoplight | POWERBALL HCI®-TT Super 4Y | POWERBALL HCI®-ET Super 4Y |
| Shop window |  | ● | ● | ● | ● | |
| Sales floor |  | ● | ● | ● | ● | |
| Promotion spots |  | ● | ● | ● | ● | |
| Entrance area |  | ● | ● | | | |
| Restaurant/bar |  | ● | ● | | | |
| Industrial sector |  | | | | ● | ● |
| Facade |  | | | | ● | ● |
| Outdoor lighting¹⁾ |  | | | | ● | ● |

1) Streets, squares, pedestrian precincts, parking lots

StandardPOWERBALL
HCl®-TPOWERBALL
HCl®-TSPOWERBALL
HCl®-TCPOWERBALL
HCl®-TFPOWERBALL
HCl®-PARPOWERBALL
HCl®-E/PPOWERBALL
HCl®-TTPOWERBALL
HCl®-ET

Higher reliability with the OSRAM System⁺ guarantee

For operation of specific POWERBALL HCI® in a system with POWERTRONIC® control gear OSRAM offers a System⁺ guarantee of five years for POWERTRONIC® and two years (instead of one year) for POWERBALL HCI®.

Visit www.osram.com/system-guarantee for more information on the scope and conditions of the guarantee.



Symbols

| | | | |
|----------|----------------------------------|----------------------|--------------------------------------|
| W | Power [W] | lm | Luminous flux [lm] |
| K | Color temperature [K] | | Beam angle [°] |
| | Diameter d [mm] | | Luminous efficacy [lm/W] |
| | Length l [mm] | R_a | Color rendering index R _a |
| | Light center length (LCL) a [mm] | t [h] | Average lifetime [h] |
| | Power of lamp [W] | | Fig. no. |

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OSRAM