CERAMIC METAL HALIDE

UPDATED: 12/11/2014

CERA ARC EX / Outdoor

CERA ARC PRO / Indoor

Long Life up to 24000 hrs

Low maintenance

Lamps need to be changed less often, therefore saving on maintenance costs, reducing waste, and lessening their environmental impact. Extra long lamp life EYE Twin Cera Arc lamp has a rated lamp life of 50,000 hrs.

High-Efficacy up to 132ℓm/W

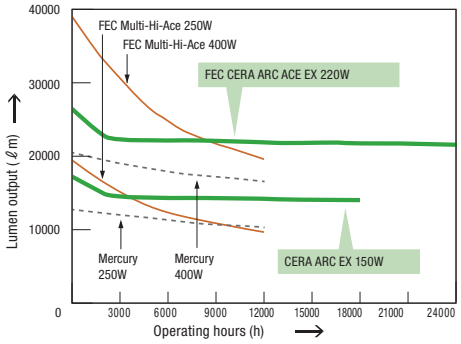
Reduced Carbon Footprint

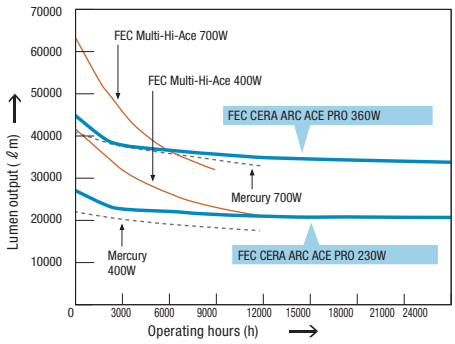
The use of a more efficient light source leads to reduced energy consumption and CO_2 emissions.
Cera Arc lamp efficacy is on par with LED lamps.

High Lumen Maintenance

Bright light right to the end

Engineered to suppress the rate of lumen depreciation, the lamps will offer a high rate of lumen maintenance, providing a high level of output for as long as the lamp is in operation.





Same Gear – Better Light

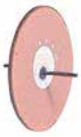
A simple direct replacement upgrade

Utilising the same outer bulbs as their Mercury Vapour / High-Pressure Sodium predecessors, the arc tube also remains in the same position, meaning that the same light distribution can be achieved.

Built-in FEC Ignitor

Can be used directly on your existing Mercury & High Pressure Sodium control gears

The built-in FEC ignitor means that the lamps are compatible for use with both types of control gear.



Lighten the load on your control gear

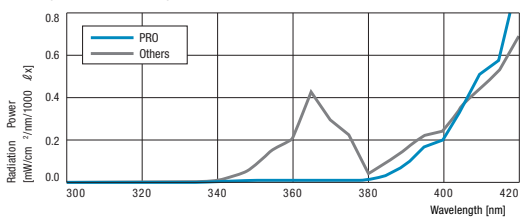
Iwasaki's unique FEC ignitor ignites the lamp efficiently and effectively using a low-voltage pulse, thereby reducing the burden on the control gear when the product has reached the end of its lamp life.
The low voltage of the ignition pulse ensures that less strain is placed upon the control gear in the event of a power surge, making these a control gear-friendly range of lamps.
In the event of an arc tube or outer bulb leakage, the FEC ignitor cross-burns itself, thus terminating the ignition pulse; this in turn ensures no damage is done to the control gear.

UV Block Coating

Yes to Light, No to insects

With its UV block coating on the outer bulb, the UV output of the lamp is reduced by 90%, making this light source a far less inviting one for insects.

Comparison on UV Output



∗ CERA ARC EX T: 150W, FEC CERA ARC ACE EX T: 230W/375W, CERA ARC EX T: 230W/375W are also applicable.

Protected From the Inside

No need for cover glass

In the rare event of an arc tube rupture at the end of the product's lamp life, the protective shroud around the arc tube ensures that the damage is contained within, with no effect on the outer bulb.

	Code	Watts (W)	Finish	Burning Position	Product Description	Lamp Voltage (V)	Lamp Current (A)	Beam Lumens (ℓm)	Colour Temp. (K)	Colour Rendering (Ra)	Life (hrs)	Efficacy (ℓm/W)	Base	Fig
EYE Cera Arc™ EX (T) For use with High Pressure Sodium Control Gear (IEC 60662)														
CMH	**116240**	50	Clear	Universal	CMT50/EX/U	80	0.76	5000	3500	75	18000	100	E27	**1**
	116345	70	Clear	Universal	CMT70/EX/U	85	0.98	7700	3500	75	18000	110	E27	**1**
	116355	70	Clear	Universal	CMT70/EX/U-I*	85	0.98	7700	3500	75	18000	110	E27	**1**
	116425	100	Clear	Universal	CMT100/EX/U	95	1.20	11500	3500	75	18000	115	E40	**2**
	116430	150	Clear	HOR±45°	CMT150/EX/HOR	100	1.80	17300	3500	75	24000	115	E40	**(2)**
	116435	250	Clear	HOR±45°	CMT250/EX/HOR	100	3.00	33000	3500	80	24000	132	E40	**3**

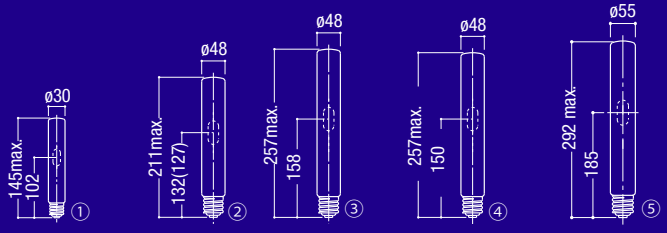
*With built-in FEC ignitor - external ignitor not required.

EYE Cera Arc™ EX (T) For use with Mercury Vapour Control Gear (IEC 60188) with designated ignitor														
CMH	**116550**	230	Clear	HOR±45°	CMT220/EX/HOR	130	2.13	27700	3500	75	24000	120	E40	**4**
	116555	375	Clear	HOR±45°	CMT360/EX/HOR	135	3.25	45000	3500	75	24000	120	E40	**5**

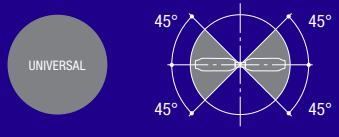
CMH = Ceramic Metal Halide Lamp.

Pictorial is representative only. Specifications may change without notice.

DIMENSIONS

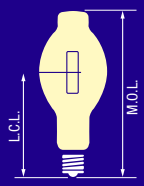


BURNING POSITION



UNIVERSAL HORIZONTAL ± 45°

EXPLANATIONS



M.O.L. :
Maximum Overall Length

L.C.L. :
Light Centre Length
(top of base fins)

UPDATED: 12/11/2014

	Code	Watts (W)	Finish	Burning Position	Product Description	Lamp Voltage (V)	Lamp Current (A)	Initial Lumens (ℓm)	Colour Temp. (K)	Colour Rendering (Ra)	Life (hrs)	Efficacy (ℓm/W)	Base	Fig
EYE Cera Arc™ ACE EX (E, BT & T) For use with Mercury Vapour Control Gear (IEC 60188)														
CMH	**116495**	45	Coated	HOR±60°	CM45FLS/EX/HOR	90	0.61	4100	3500	75	16000	91	E27	**1**
	116560	45	Coated	BU or BD ±30°	CM45FLS/EX/BUD	90	0.61	4100	3500	75	16000	91	E27	**1**
	116536	72	Coated	HOR±60°	CM70FLS/EX/HOR	105	0.80	7700	3500	75	20000	107	E27	**2**
	116565	72	Coated	BU or BD ±30°	CM70FLS/EX/BUD	105	0.80	7700	3500	75	20000	107	E27	**2**
	116570	115	Coated	HOR±45°	CM115FLS/EX/HOR	115	1.15	13800	3500	75	24000	120	E27	**3**
	116575	375	Coated	HOR±45°	CM360FLS/EX/HOR	135	3.25	43100	3500	75	24000	115	E40	**4**
	116540	230	Clear	HOR±45°	CMT220LS/EX/HOR	130	2.13	27700	3500	75	24000	120	E40	**5**
	116545	375	Clear	HOR±45°	CMT360LS/EX/HOR	135	3.25	45000	3500	75	24000	120	E40	**6**

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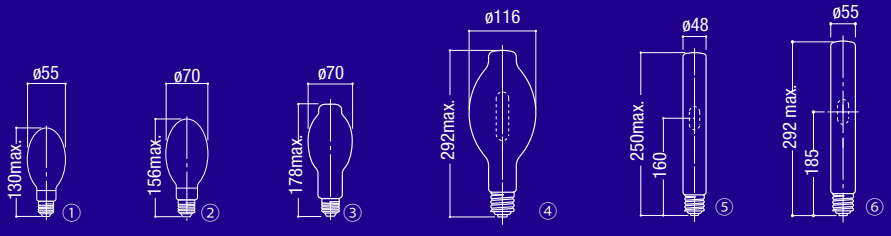
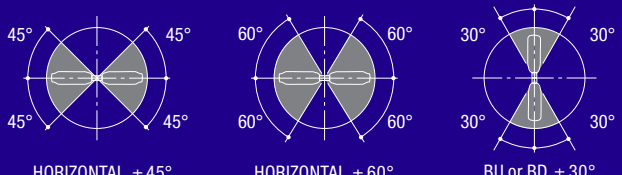
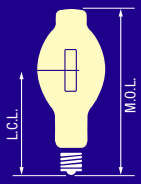


BURNING POSITION



EXPLANATIONS



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	Code	Watts (W)	Finish	Burning Position	Product Description	Lamp Voltage (V)	Lamp Current (A)	Initial Lumens (ℓm)	Colour Temp. (K)	Colour Rendering (Ra)	Life (hrs)	Efficacy (ℓm/W)	Base	Fig
EYE Cera Arc™ ACE PRO2 (BT) For use with Mercury Vapour Control Gear (IEC 60188)														
CMH	**116204**	660	Clear	BU ±15°	CM660LS/PRO2/BU	140	5.40	75000	4100	85	20000	113	E40	**1**
	116205	660	Coated	BU ±15°	CM660FLS/PRO2/BU	140	5.40	71300	4100	85	20000	108	E40	**1**
EYE Cera Arc™ PRO (BT) For use with Mercury Vapour Control Gear (IEC 60188) with designated ignitor														
CMH	**116510**	235	Clear	BU or BD ±45°	CM230/PRO/BUD	130	2.13	27900	4100	80	24000	119	E40	**2**
	116505	375	Clear	BU or BD ±45°	CM360/PRO/BUD	135	3.25	47000	4100	80	24000	125	E40	**3**
	116515	235	Coated	BU or BD ±45°	CM230F/PRO/BUD	130	2.13	25900	4100	80	24000	110	E40	**4**
	116500	375	Coated	BU or BD ±45°	CM360F/PRO/BUD	135	3.25	45300	4100	80	24000	121	E40	**5**
EYE Cera Arc™ ACE PRO (BT) For use with Mercury Vapour Control Gear (IEC 60188)														
CMH	**116520**	235	Clear	BU or BD ±45°	CM230LS/PRO/ BUD	130	2.13	27900	4100	80	24000	119	E40	**6**
	116530	375	Clear	BU or BD ±45°	CM360LS/PRO/ BUD	135	3.25	47000	4100	80	24000	125	E40	**3**
	116525	235	Coated	BU or BD ±45°	CM230FLS/PRO/ BUD	130	2.13	25900	4100	80	24000	110	E40	**6**
	116535	375	Coated	BU or BD ±45°	CM360FLS/PRO/ BUD	135	3.25	45300	4100	80	24000	121	E40	**5**

CMH = Ceramic Metal Halide Lamp.

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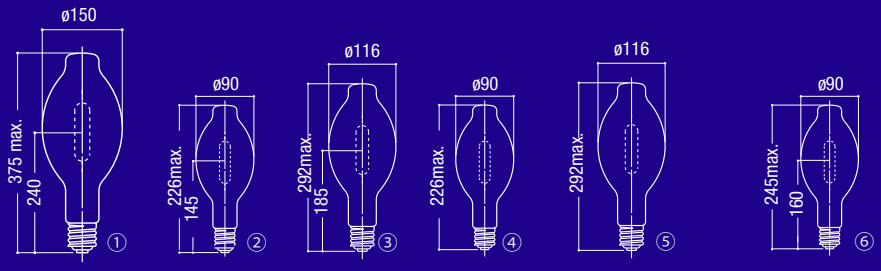

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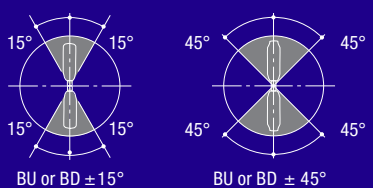

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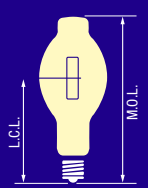

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EYE Cera Arc™ ACE PRO Reflector Lamp For use with Mercury Vapour Control Gear (IEC 60188)														
CMH	**116480**	115	Clear	BU±60°	CMR115LS/PRO/BU	115	1.15	9000	4100	70	18000	78	E27	**1**
	116485	245	Clear	BU±60°	CMR230LS/PRO/BU	130	2.16	18500	4100	80	20000	76	E40	**2**
	116490	375	Clear	BU±60°	CMR360LS/PRO/BU	135	3.3	31500	4100	80	20000	84	E40	**3**

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EYE Twin Cera Arc™ For use with High Pressure Sodium Control Gear (IEC 60662) with designated ignitor														
CMH	**116450**	150	Coated	BU or BD ±45°	CM150FTW/W/BUD	95	1.90	15800	4100	70	50000	105	E40	**4**
For use with Mercury Vapour Control Gear (IEC 60188) with designated ignitor														
CMH	**116460**	230	Coated	BU or BD ±15°	CM230FTW/W/BUD	130	2.13	25900	4100	80	50000	110	E40	**5**
	116470	375	Coated	BU or BD ±30°	CM360FTW/W/BUD	135	3.25	40000	4100	80	50000	107	E40	**5**

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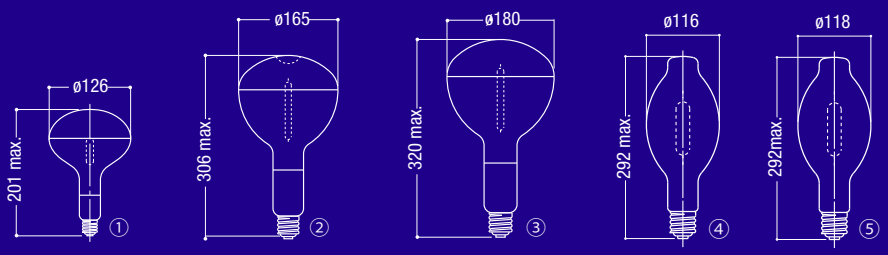

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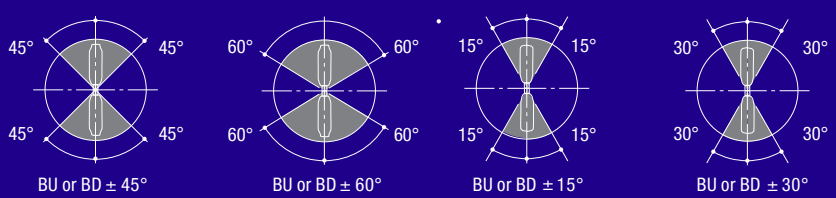

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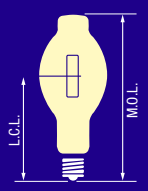

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WARNINGS AND CAUTIONS: CERAMIC METAL HALIDE

IN GENERAL

1. This is an electric discharge lamp for use only on proper circuits and with proper auxiliary equipment, compatible with electrical specifications established by the local authorities and the lamp manufacturer - failure to comply with this may result in poor lamp performance and possible personal injury or property damage for which EYE Lighting shall not be held responsible.
2. Do not touch hot lamps and keep away from any flammable goods during operation or immediately after the power is turned OFF.
3. Do not scratch bulb or subject lamp to undue pressure. This could result in lamp breakage.
4. This lamp can cause serious skin burn and eye inflammation from short-wave ultraviolet radiation if the outer envelope of the lamp is broken or punctured. Do not use in areas where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically turn off when the outer envelope is broken or punctured are commercially available.
5. When installing and replacing a lamp, power must be OFF to avoid possible electric shock hazards.
6. When the lamp has failed, replacement should be made as soon as possible after power is turned OFF.
7. When replacing a lamp, check the durability of the ballast, the wiring and the luminaire. If they have deteriorated, replace them with new ones immediately.
8. The lamp must have external protection against direct contact with water to minimise the possibility of glass bulb breakage.
9. The lamp should be firmly, but not forcibly, screwed into the socket.
10. Check the operating position of the lamps marked on the outer envelope. Lamps should be utilised in the correct operating position.
11. The lamp lumens will vary somewhat according to the operating position.
12. The lamp must have a suitable ballast. If it is connected directly without a ballast, the lamp will instantly fail.
13. For total supply load figures, add auxiliary watts to lamp watts.
14. Variation of line volts should be kept to within ±6% of the rated voltage of the ballast.
15. Do not use this lamp in a fixture designed for less than the rated lamp wattage.
16. These lamps normally exhibit some colour variation from lamp to lamp and a gradual change in colour throughout life. Operating conditions such as mounting and/or voltage variation can also effect the colour of these lamps.
17. When operating this lamp, the base temperature should not exceed 210°C (410°F) for E40 base and 190°C (374°F) for E27 base, the outer envelope should not exceed 400°C (752°F).
18. Do not use this lamp in a location subject to vibration or shock, unless an adequate vibration-proof fixture is used.
19. Do not use this lamp in a corrosive atmosphere, unless an adequate corrosion resistant-fixture is used.
20. The recommended ambient temperature limit for this lamp is -20°C (-4°F) minimum; 40°C (104°F) maximum.
21. This is a discharge lamp and requires a certain amount of time to restart and achieve full brightness after a power interruption.
22. Where lamps are to be operated continuously, they should be switched OFF and checked once a week for any abnormalities in order to prevent ballast damage or suitable protective measures should be taken to ensure that safety is maintained under this condition.
23. Replace the lamps at or before the end of rated life.

OPERATING INSTRUCTIONS

EYE CERA ARC™

1. EYE Cera Arc™ EX (T) operates on High Pressure Sodium Control Gear with designated ignitor.
2. EYE Cera Arc™ ACE EX (E, BT & T) operates on Mercury Vapour Control Gear.
3. EYE Cera Arc™ PRO (BT) operates on Mercury Vapour Control Gear with designated ignitor.
4. EYE Cera Arc™ ACE PRO (BT & Reflector) operates on Mercury Vapour Control Gear.
5. EYE Twin Cera Arc™ (150W) operates on High Pressure Sodium Control Gear with designated ignitor.
6. EYE Twin Cera Arc™ (230W) operates on Mecury Vapour Control Gear with designated ignitor.
7. For lamps with an integral ignitor the maximum wiring distances between the ballast and lamp should be limited to:
    a) EYE Cera Arc™ EX - CMT70/EX/U-I: 1m
    b) EYE Cera Arc™ ACE EX - 45W to 115W: 1m
    c) EYE Cera Arc™ ACE EX - 220W to 360W: 50m
    d) EYE Cera Arc™ ACE PRO - 115W to 360W: 50m
    e) EYE Cera Arc™ ACE PRO2 - 660W: 50m.

UPDATED: 12/11/2014