



TECHNICAL INFORMATION BULLETIN

Metal Halide

Order Code: **58242**

Description: **MF320/BU/HOR/PS/BT28 EYE**

ANSI Code: **M154/E**

Features:

- High Output, Position Oriented Metal Halide
- High initial and maintained lumens
- Superior lamp to lamp color consistency
- Pulse Start Performance

PERFORMANCE DATA

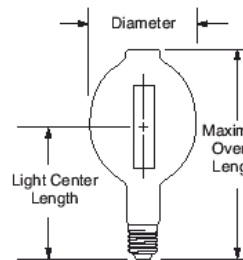
| | | |
|---|---------------|------|
| Initial lumens at rated watts after 100 hours operation | 30000V/28000H | lm |
| Mean lumens at 10 hours/start | 19700V/18400H | lm |
| Rated average life at 120hrs/start | NA | h |
| Rated average life at 10hrs/start | 20000V/15000H | h |
| Warm up time, typical | 2- 4 | min |
| Correlated color temperature | 3900 | K |
| CIE chromaticity | 0.387, 0.387 | x, y |
| Color rendering index (Ra) | 70 | |
| Operating Position | BU-HOR | |
| Time to hot re-start, typical | 5-7 | min |

ELECTRICAL CHARACTERISTICS

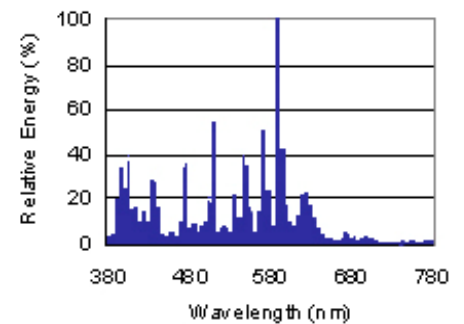
| | | |
|---------------------------------------|--|-------------------|
| Nominal lamp wattage | 320 | W |
| Nominal lamp voltage | 135 | V |
| Nominal lamp current | 2.63 | A _{rms} |
| Maximum current crest factor | 1.8 | - |
| Maximum starting current | 2.63 | A _{rms} |
| Minimum starting current | 4.0 | A _{rms} |
| Ballast requirements | Use with ballast rated for ANSI M1543/E lamp | |
| Open circuit voltage -30°C (-22°F) | 254 | V _{rms} |
| | 345 | V _{peak} |
| Igniter requirements | Igniter | |
| Minimum pulse height | 3.0 | kV |
| Maximum pulse height | 4.0 | kV |
| Minimum pulse width | 1.3 @ 2.7 | us@kV |
| Minimum pulse repetition rate | 1 | Per half cycle |
| Pulse position(s) | 64°-110° 244°-290° | °(cycle) |

PHYSICAL DESCRIPTION

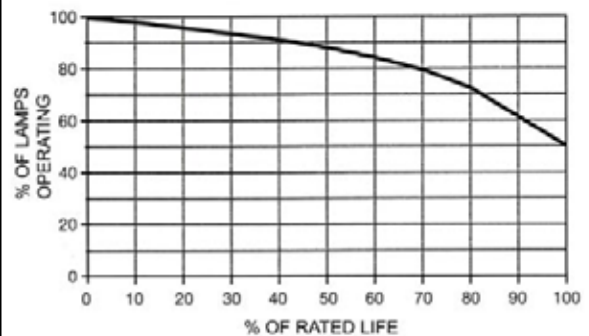
| | | |
|-------------------------------|---------------------------|---------|
| Maximum overall length | 211 (8.31) | mm (in) |
| Light center length | 127 (5.0) | mm (in) |
| Bulb diameter | 89 (3.5) | mm (in) |
| Max. base - bulb eccentricity | 3 | Degrees |
| Maximum base temperature | 250 (482) | °C (°F) |
| Maximum bulb temperature | 400 (752) | °C (°F) |
| Bulb designation | BT28 | |
| Bulb material | Borosilicate (Hard Glass) | |
| Arc tube material | Quartz | |
| Effective arc length | N/A | mm (in) |
| Bulb finish | Coated | |
| Base designation | E39 Mogul | |
| Base finish | Nickel Plated | |



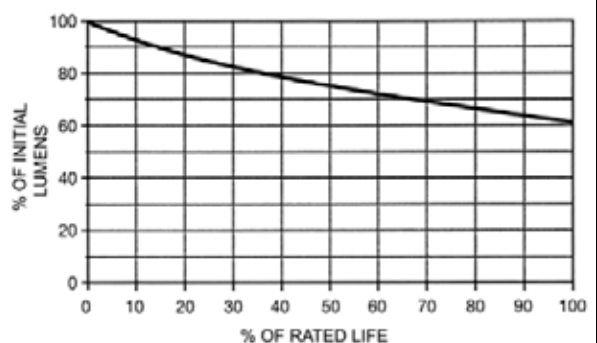
SPECTRAL DISTRIBUTION



LAMP MORTALITY



LUMEN MAINTENANCE



FIXTURE REQUIREMENT

E Rated - Enclosed fixture. Operating position base up through horizontal.



TECHNICAL INFORMATION BULLETIN

Metal Halide

⚠ WARNING

This lamp can cause serious skin burn and eye inflammation from short-wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available.

RISK OF ELECTRIC SHOCK

- Turn power off before inspection, installation or removal
- Protect lamp from direct contact with liquids to avoid breakage from thermal shock

RISK OF FIRE

- Keep combustible materials away from lamp during operation

UNEXPECTED LAMP RUPTURE MAY CAUSE INJURY, FIRE, OR PROPERTY DAMAGE

- Do not exceed rated ballast voltage
- Do not use lamp if outer glass is scratched or broken.
- Do not use beyond rated life
- Do not turn on lamp until fully installed
- Use only with a fixture and ballast rated for this product
- Turn lamp off at least once a week for 15 minutes
- Electrically insulate any metal to glass support in fixture

⚠ CAUTION

RISK OF BURN

- Allow lamp to cool before handling.

LAMP MAY SHATTER AND CAUSE INJURY

- Do not use excessive force when installing lamp
- Dispose of lamp in a closed container

LAMP OPERATING INSTRUCTIONS

This is a discharge lamp and requires some time to restart and come up to full brightness after a power interruption. If power supply dips or is interrupted, lamps may extinguish and not restart. **Turn off power supply for 10-15 minutes and allow lamp to fully cool. Lamp will restart when power is restored.**

R

Conforms to: USA: 21CFR1040.30

Hg-LAMP CONTAINS MERCURY

Manage in Accord with Disposal Laws

See: www.lamprecycle.org or 1-888-665-2677