



TECHNICAL BULLETIN METAL HALIDE

EYE Multi Metal™ M320/BU-HOR/PS/BT28

ANSI Code: M154/E

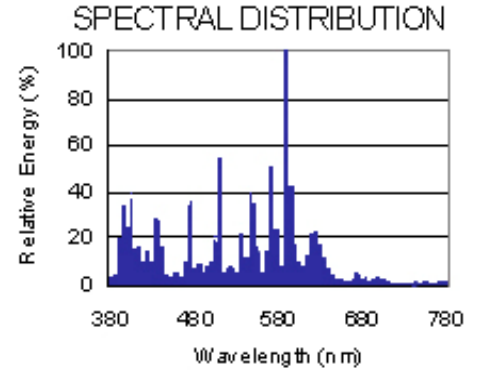
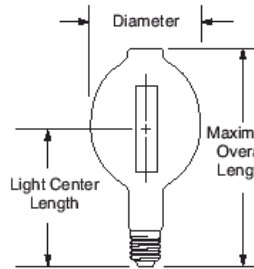
Product Code: 54334

Features:

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

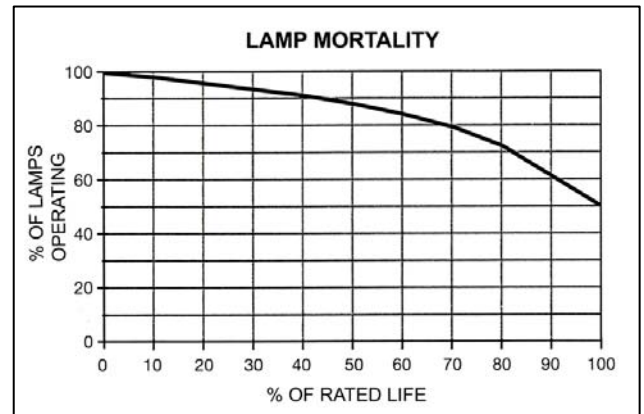
PERFORMANCE DATA

Initial lumens at rated watts after 100 hours operation	32000V 30000H	lm
Mean lumens at 10 hours/start	21000V 19700H	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	4300	K
CIE chromaticity	0.372, 0.388	x, y
Color rendering index (Ra)	65	
Operating Position	Base Up to Horizontal	
Time to hot re-start, typical	5-7	min



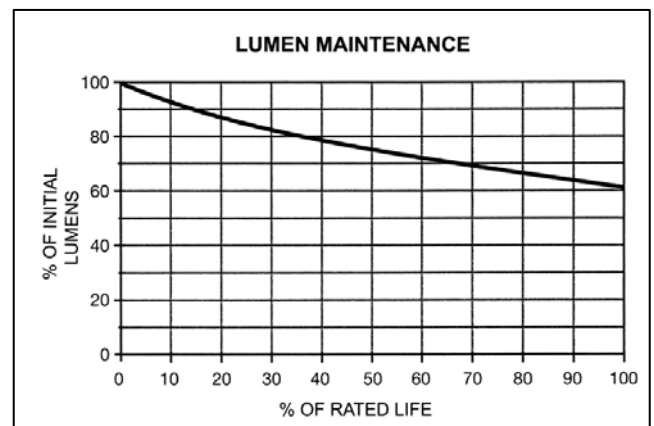
ELECTRICAL CHARACTERISTICS

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	4.0	A _{rms}
Minimum starting current	2.63	A _{rms}
Ballast requirements	Use with ballast rated for ANSI M154/E lamp	
Open circuit voltage -30°C (-22°F)	254	V _{rms}
	359	V _{peak}
Pulse requirements	Ignitor	
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	35 (1.38)	mm (in)
Bulb finish	Clear	
Base designation	E39 Mogul	
Base finish	Brass	



FIXTURE REQUIREMENT

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

ISO 9001:2008 Certified

ISO 14001:2004 Certified

OSHAS 18001:2007 Certified

ISO 17025:2005 Accredited



**EYE LIGHTING INTERNATIONAL
OF NORTH AMERICA, INC.**

A SUBSIDIARY OF IWASAKI ELECTRIC CO., LTD.

Address: 9150 Hendricks Rd., Mentor, OH 44060

Phone: 888-665-2677 Fax: 800-811-7395 E-Mail: sales@eyelighting.com

Phone: (440) 350-7000 Fax: (440) 350-7001 Web: www.eyelighting.com



⚠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
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Hg-LAMP CONTAINS MERCURY
Manage in Accord with Disposal Laws

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METAL HALIDE

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M320/BU-HOR/PS/BT28

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

ISO 9001:2000 Certified ISO 14001:2004 Certified



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April 9, 2009