



# TECHNICAL BULLETIN METAL HALIDE

## EYE Multi Metal™ M400/BU/PS/BT37

ANSI Code: M155/S

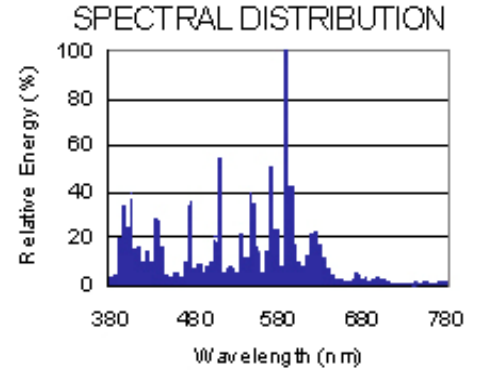
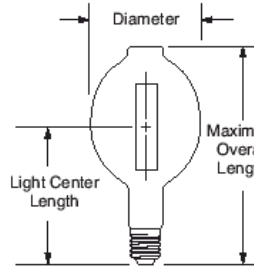
Product Code: 54351

**Features:**

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

### PERFORMANCE DATA

Initial lumens at rated watts after 100 hours operation	42000	lm
Mean lumens at 10 hours/start	31000	lm
Rated average life at 120hrs/start	30000	h
Rated average life at 10hrs/start	20000	h
Warm up time	2-4	min
Correlated color temperature	4000	K
CIE chromaticity	0.383, 0.388	X, Y
Color rendering index (Ra)	65	
Operating Position	Base Up +/-15°	
Time to hot re-start	5-7	min

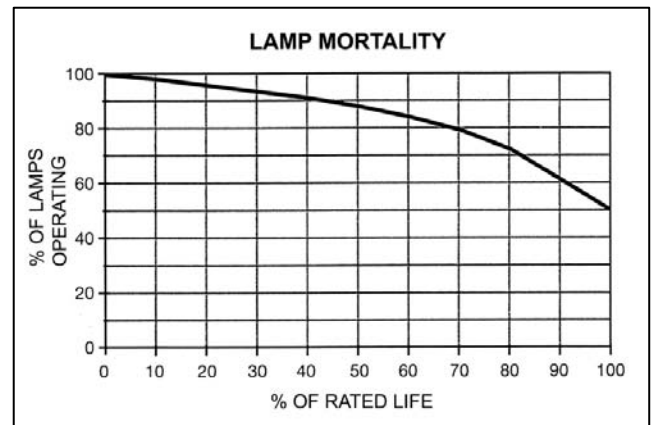


### ELECTRICAL CHARACTERISTICS

Nominal lamp wattage	400	W
Nominal lamp voltage	135	V <sub>rms</sub>
Nominal lamp current	3.25	A <sub>rms</sub>
Maximum current crest factor	1.8	-
Maximum starting current	5.0	A <sub>rms</sub>
Minimum starting current	3.2	A <sub>rms</sub>
Ballast requirements	Use with ballast rated for ANSI M155/S lamp	
Open circuit voltage -30°C (-22°F)	254	V <sub>rms</sub>
	483	V <sub>peak</sub>
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)

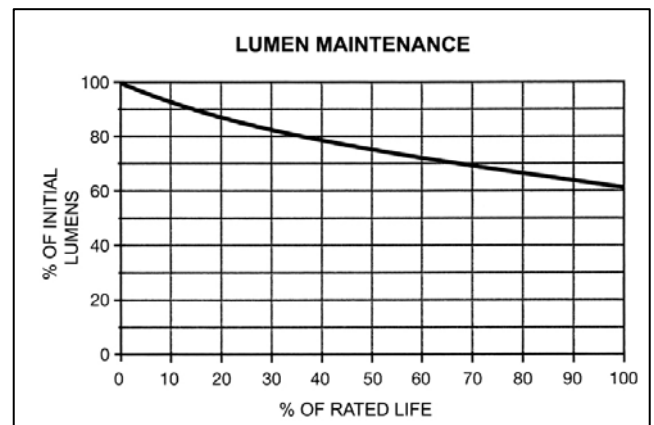
### PHYSICAL DESCRIPTION

Maximum overall length	292 (11.5)	mm (in)
Light center length	178 (7.0)	mm (in)
Bulb diameter	117 (4.6)	mm (in)
Max. base - bulb eccentricity	3	Degrees
Maximum base temperature	210 (410)	°C (°F)
Maximum bulb temperature	400 (752)	°C (°F)
Bulb designation	BT37	
Bulb material	Borosilicate (Hard Glass)	
Arc tube material	Quartz	
Effective arc length	38 (1.5)	mm (in)
Bulb finish	Clear	
Base designation	E39 Mogul	



### FIXTURE REQUIREMENT

S Rated - Open fixture. Operating position restricted to base up +/- 15° of vertical.



ISO 9001:2008 Certified    ISO 14001:2004 Certified  
**EYE LIGHTING INTERNATIONAL**  
**OF NORTH AMERICA, INC.**  
 A SUBSIDIARY OF IWASAKI ELECTRIC CO., LTD.

OSHAS 18001:2007 Certified    ISO 17025:2005 Accredited

Address: 9150 Hendricks Rd., Mentor, OH 44060  
 Phone: 888-66-LAMPS Fax: 800-811-7395 E-Mail: sales@eyelighting.com  
 Phone: (440) 350-7000 Fax: (440) 350-7001 [www.eyelighting.com](http://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 Canada: ANSI 136.1-2000

**Hg-LAMP CONTAINS MERCURY**

Manage in Accord with Disposal Laws

See: [www.lamprecycle.org](http://www.lamprecycle.org) or 1-888-665-2677

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