



# TECHNICAL BULLETIN

## METAL HALIDE

# EYE Pulse Start

## M320X/U/PS

ANSI CODE M132/E, 154/E

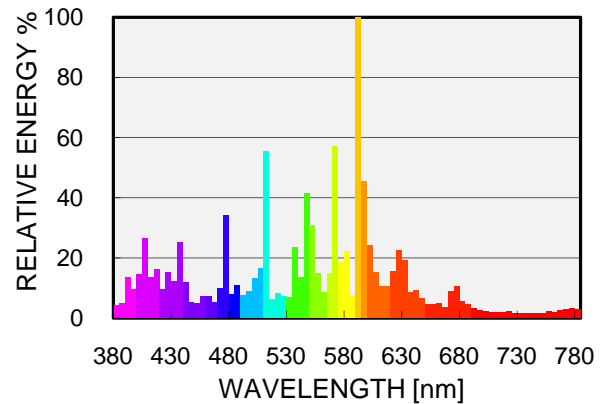
Product Code: 50578

- FEATURES:**
- High Output, Universal Metal Halide
  - High initial and maintained lumens
  - Superior lamp to lamp color consistency
  - Pulse Start Performance

PERFORMANCE DATA		
Initial lumens	31000(V) 29000(H)	lm
Mean lumens at 11 hours/start	23000(V) 20000(H)	lm
Rated average life	20000(V) 15000(H)	hr
Correlated color temperature	4000	°K
Color rendering index [Ra]	65	
Operating position	Universal	
Warm-up time (90%lumens)	<6	min
Time to hot re-start (max)	10	min

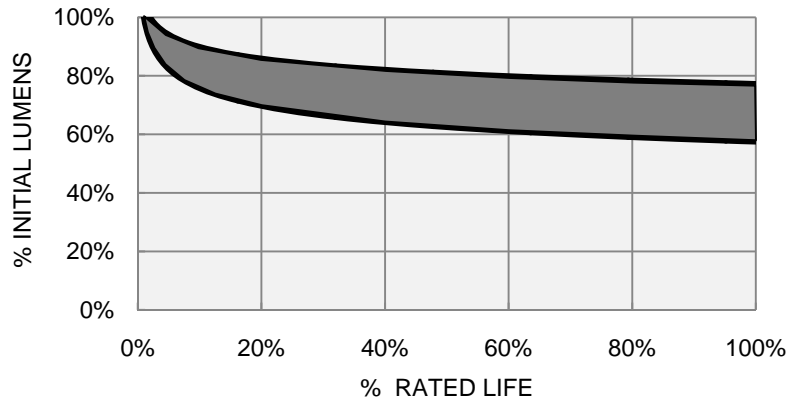


### SPECTRAL DISTRIBUTION



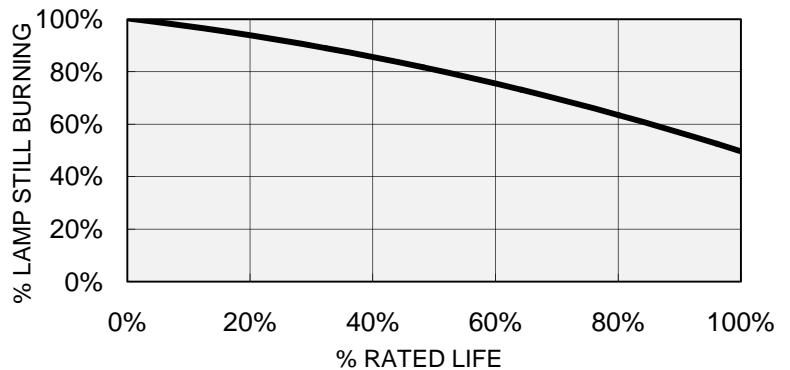
ELECTRICAL CHARACTERISTICS		
Nominal lamp wattage	320	W
Nominal lamp voltage	135	V
Nominal lamp current	2.63	A <sub>RMS</sub>
Current crest factor	1.8	
<b>Ballast requirements</b>		
Open Circuit Voltage -30°C(-22°F)	254	V <sub>RMS</sub>
	359	V <sub>PEAK</sub>
Min starting current	2.1	A <sub>RMS</sub>
Max starting current	3.2	A <sub>RMS</sub>

### LUMEN MAINTENANCE



PHYSICAL DESCRIPTION		
Effective arc length	36(1.4)	mm (in)
Maximum overall length	211(8.31)	mm (in)
Light center length	127±5	mm (in)
Bulb diameter	90(3.5)	mm (in)
Base to bulb eccentricity	3°	max
Maximum base temperature	210 (410)	°C (°F)
Maximum bulb temperature	400 (752)	°C (°F)
Bulb designation	BT28	
Bulb material	Borosilicate (hard glass)	
Arc tube material	Quartz	
Bulb finish	Clear	
Base designation	E39	

### LAMP MORTALITY



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: 888-66-LAMPS Fax: 800-811-7395 E-Mail: [sales@eyelighting.com](mailto: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.

<b>R</b>	<b>Conforms to:</b> USA: 21CFR1040.30    Canada: ANSI 136.1-2000
----------	---

<b>Hg</b>	<b>Lamp contains Mercury.</b> Manage in Accord with Disposal Laws
-----------	--

ISO 9001:2008 Certified ISO 14001:2004 Certified OSHAS 18001:2007 Certified ISO 17025:2005 Accredited

