



TECHNICAL BULLETIN METAL HALIDE LAMP

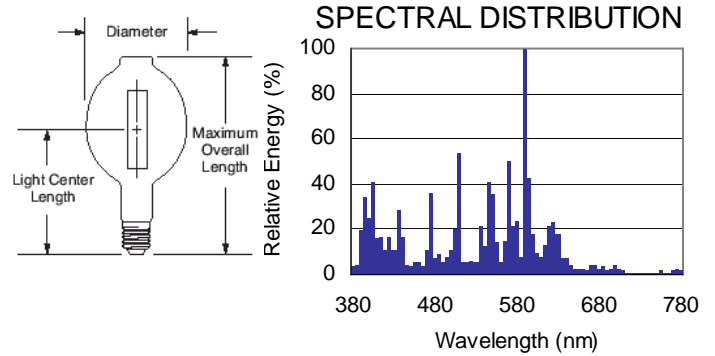
Metal Halide Retrofit from HPS
EYE Multi Metal Ace™
M1000BX/U/LU

ANSI Code:

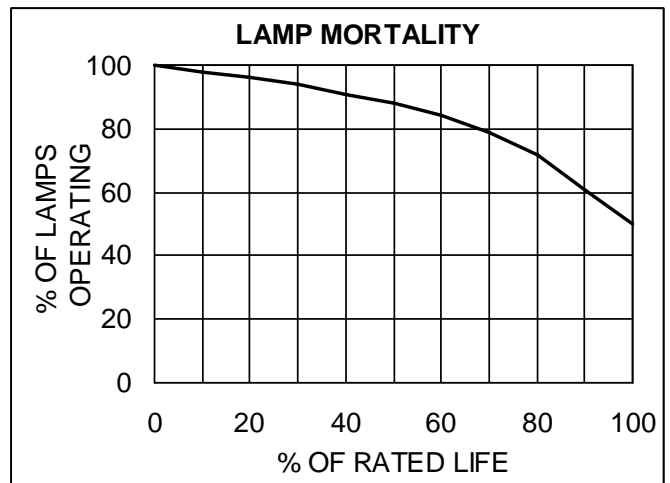
Product Code: 51605

Features:	▪ Works in all HPS lighting systems with an ignitor	▪ Nickel-plated base
	▪ Improves color rendering index from 20 CRI to 60 CRI	▪ Applications-Parking lots, manufacturing, warehouse
	▪ Excellent lamp to lamp color consistency	

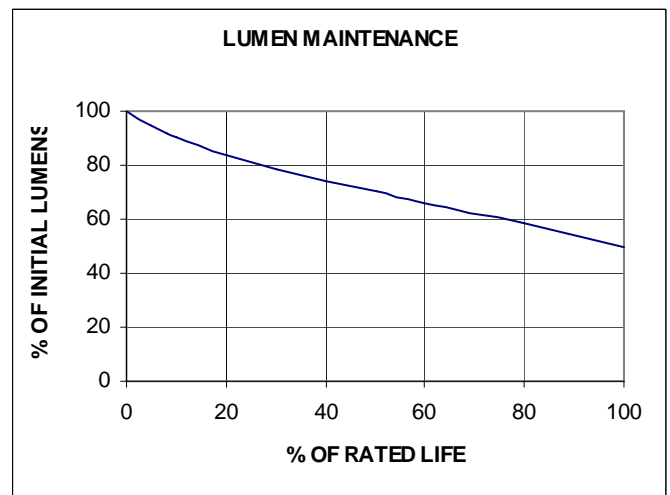
PERFORMANCE DATA		
Initial lumens at rated watts after 100 hours operation	110200V 105500H	lm
Mean lumens at 10 hours/start	85500V 81700H	lm
Average life	12000V 9000H	h
Warm up time, maximum	4	min
Correlated color temperature	4200	K
CIE chromaticity	0.376, 0.396	x, y
Color rendering index (Ra)	65	
Operating Position	Universal	
Time to hot re-start, maximum	15	min



ELECTRICAL CHARACTERISTICS		
Nominal lamp wattage	1000	W
Nominal lamp voltage	250	V
Nominal lamp current	4.7	A _{rms}
Maximum current crest factor	1.8	-
Maximum starting current	6.5	A _{rms}
Minimum starting current	4.7	A _{rms}
Ballast requirements	Use with ballast rated for ANSI S52 lamp	
Open circuit voltage (CWA) -30°C (-22°F)	456	V _{rms}
	645	V _{peak}
Lamp holder voltage rating	4	kV
IGNITOR REQUIREMENTS		
Min. Pulse Height	3000	V
Max. Pulse Height	5000	V
Min. Pulse Width	4.0@2700	µsec@V
Min. Pulse repetition	1	half cycle
Pulse Positions	60-90	degrees
	240-270	



PHYSICAL DESCRIPTION		
Maximum overall length	386 (15.38)	mm (in)
Light center length	222 (8.75)	mm (in)
Bulb diameter	178 (7.0)	mm (in)
Max. base - bulb eccentricity	3	deg
Maximum base temperature	210 (410)	°C (°F)
Maximum bulb temperature	400 (752)	°C (°F)
Bulb designation	BT56	
Bulb material	Borosilicate (Hard Glass)	
Arc tube material	Quartz	
Effective arc length	42 (1.65)	mm (in)
Bulb finish	Clear	
Base designation	E39 Mogul	



FIXTURE REQUIREMENT
E Rated-Enclosed, universal burning position

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.

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TECHNICAL BULLETIN

METAL HALIDE

Metal Halide Retrofit from HPS
EYE Multi Metal Ace™
M400X/U/LU

⚠ 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.

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Conforms to:
USA: 21CFR1040.30 Canada: ANSI 136.1-2000

Hg-LAMP CONTAINS MERCURY

Manage in Accord with Disposal Laws

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

ISO 9001:2000 Certified



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6/4/2009