



TECHNICAL BULLETIN METAL HALIDE

EYE Color Arc® M70P36S/D

ANSI Code: M139/O

Product Code: 55438

Features:

- High color rendering, CRI=92
- Open fixture rated
- Compact PAR36 bulb with medium screw base
- UV-block coating on the outer bulb

PERFORMANCE DATA

Initial lumens at rated watts after 100 hours operation	3300	Lumens
Beam lumens	800	Lumens
Mean lumens (typical)	2310	Lumens
Beam angle @ 50% peak intensity	26	Degrees
Peak intensity	7800	Candela
Rated average life	6000	Hours
Warm up time (90% lumens)	4	Minutes
Correlated color temperature	6500	K
CIE chromaticity	0.312, 0.332	X, Y
Color rendering index	92	
Operating Position	Universal	
Time to hot re-start	15 max	Minutes

ELECTRICAL CHARACTERISTICS

Nominal lamp wattage	70	Watts
Nominal lamp voltage	90	Volts
Nominal lamp current	1.0	Amps
Current crest factor	1.8 max	
Min. Starting voltage	198	Vrms
Min. Starting voltage	280	Vpk
Max. Starting current	1.5	Amps
Socket rating	4.0	kV
Dimming capability	No	

Ignitor Requirements	Option 1	Option 2	
Min. Pulse Height	3.0	3.0	kV
Max. Pulse Height	4.0	4.0	kV
Min. Pulse Width	1.0@2.7	1.9@2.7	µsec@kV
Min. Pulse Repetition	2	1	/half cycle
Pulse Positions	60-90, 240-270	64-110, 244-290	degrees

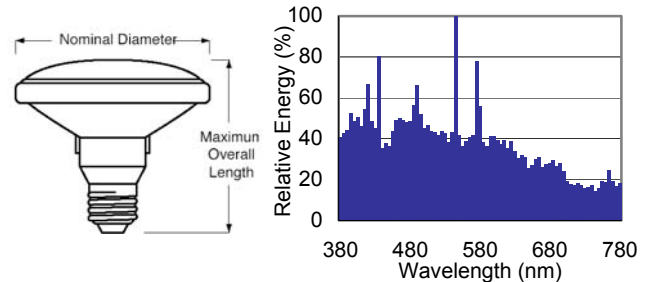
PHYSICAL DESCRIPTION

Maximum overall length	4.016(102)	in (mm)
Bulb diameter	4.410(112)	in (mm)
Base to bulb eccentricity	3	Deg Max.
Maximum base temperature	374(190)	°F (°C)
Maximum bulb temperature	752(400)	°F (°C)
Bulb designation	PAR36	
Bulb material	Hard glass	
Arc tube material	Quartz	
Bulb finish (front glass)	UV-block coating	
Bulb finish (reflector)	Aluminum coating	
Base designation	E26 Skirted Medium	

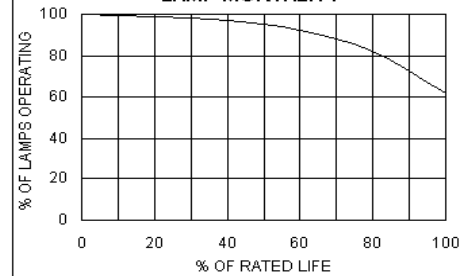
FIXTURE REQUIREMENT

O Rated – Open or enclosed fixtures. Protect lamp form direct contact with water.

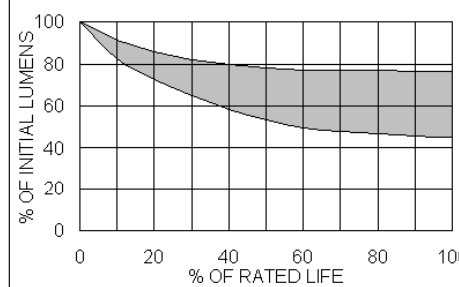
SPECTRAL DISTRIBUTION



LAMP MORTALITY



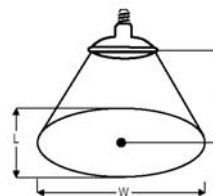
TYPICAL LUMEN MAINTENANCE



PHOTOMETRIC DATA

Initial Footcandles			
Beam Angle at 50% Peak Intensity 65°			
H (ft)	Foot Candle Beam Center	Beam Diameter L (ft)	Beam Diameter W (ft)
6	217	2.77	2.77
8	122	3.69	3.69
10	78	4.62	4.62
12	54	5.54	5.54
14	40	6.46	6.46

Candlepower Distribution	
Beam Angle	Candela
0°	5583
5°	5430
10°	4485
15°	2757
20°	1401
25°	735
30°	519
35°	456
40°	419
45°	350
50°	269
55°	232
60°	223
65°	246
70°	217
75°	217
80°	184
85°	149
90°	124



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

A SUBSIDIARY OF IWASAKI ELECTRIC CO., LTD.

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⚠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.

R	Conforms to: USA: 21CFR1040.30
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Hg-LAMP CONTAINS MERCURY

Manage in Accord with Disposal Laws
See: www.lamprecycle.org or 1-888-665-2677