

Dimming

Warranty policy on the dimming of Venture Lighting International metal halide lamps:

WARRANTY POLICY: Venture Lighting International, Inc. agrees to warrant their lamps per the standard lamp warranty when operated on dimmable ballasts provided the following conditions are met:

1) The reduced wattage level for a metal halide lamp must be achieved with a ballast which meets the recommended ANSI specifications for operation of an ANSI reference lamp¹ at the rated lamp power. See ANSI C78.43 for specifications.

2) A pulse start lamp must warm up for at least 5 minutes (15 minutes for probe start lamps) after the lamp has cold started or hot restarted before dimming can commence. The lamp must never be started in the dimmed operating mode.

- See Venture Lighting's individual Lamp Data Sheets for minimum dimmed lamp wattage levels.

3) Operating position requirements:

- See Venture Lighting's individual Lamp Data Sheets for dimmed lamp allowable orientations.

4) System Requirements

- For magnetic and electronic ballasts, see Venture Lighting's individual Ballast Specification Sheets for system/ballast wattage values in both full and minimum dimmed operating modes.

a) CWA/CWI Switched Capacitor Dimming

- The ballast must provide sufficient sustaining voltage to operate lamps throughout their rated life in both the full and dimmed wattage modes.

b) Electronic Ballast Dimming

- The ballast must provide sufficient voltage to sustain lamps throughout their rated life in both the full and dimmed wattage modes.

- On high frequency ballasts the dimming frequencies must be higher than the nominal wattage operating frequency.

- To reduce cycling as lamps age, it is recommended that the time for reduction in lamp wattage, i.e. ramp down, from 100% to the minimum dimmed lamp wattage level be no shorter than 30 seconds.

c) Line Voltage Dimming (Venture magnetic ballasts, only)

- Dimming must be accomplished by line voltage reduction only, not by waveform chopping, i.e. phase control.

- To reduce cycling problems as lamps age, it is recommended that the ramp down time for line voltage from 100% to the minimum specified line voltage level (see below) be no shorter than 60 seconds.

- For CWA/CWI ballasts line voltage must not drop below 70% of the minimum ANSI rated ballast input voltage

- For Lag (HX and Reactor) ballasts line voltage must not drop below 85% of the minimum ANSI rated ballast input voltage.

Notes:

1 = Reference lamps available upon request

2 = Available at www.nema.org/standards