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Ushio BC2771

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Model: BC2771 G10T8

1. INTRODUCTION AND PRODUCT OVERVIEW

The Ushio BC2771 G10T8 is a 9.5W low-pressure mercury-arc lamp designed for germicidal applications. This lamp emits ultraviolet-C (UV-C) radiation, specifically peaking at 253.7 nanometers (Nm). This wavelength is highly effective in inactivating various microorganisms, including bacteria, viruses, yeasts, and molds, making it suitable for disinfection purposes.



Figure 1: Ushio BC2771 G10T8 Germicidal Lamp. This image displays the clear tubular glass body of the lamp with a G13 2-pin base at one end, showing the internal filament structure.

2. SAFETY INFORMATION

WARNING: This lamp emits UV-C radiation, which is harmful to skin and eyes. Direct exposure can cause severe burns and eye damage. Always ensure proper shielding and never look directly at an operating germicidal lamp.

- Avoid direct exposure to UV-C radiation.
- Wear appropriate UV-protective eyewear and clothing if exposure is unavoidable during maintenance.
- Ensure the lamp is installed in a fixture that provides adequate shielding for occupants.
- Disconnect power before installation, removal, or maintenance.
- Dispose of lamps according to local regulations for mercury-containing products.

3. SETUP AND INSTALLATION

This lamp is designed for use in compatible fixtures with a G13 2-pin base. Installation should only be performed by qualified personnel following all local electrical codes and safety guidelines.

1. **Power Disconnection:** Ensure the power supply to the fixture is completely disconnected before beginning

installation.

2. **Handling:** Handle the lamp by its base, not the glass tube. Avoid touching the glass with bare hands, as oils can create hot spots and reduce lamp life. If the glass is touched, clean it with an alcohol wipe before operation.
3. **Insertion:** Align the two pins of the lamp base with the corresponding slots in the G13 lamp holder. Gently push and twist the lamp until it is securely seated.
4. **Verification:** Ensure the lamp is firmly in place and the fixture provides adequate shielding from UV-C radiation.
5. **Power Connection:** Restore power to the fixture.

4. OPERATING INSTRUCTIONS

Once properly installed, the Ushio BC2771 G10T8 lamp operates by receiving electrical current through its G13 base, which energizes the mercury vapor within the lamp to produce UV-C radiation.

- **Activation:** Turn on the power switch connected to the fixture. The lamp will illuminate, emitting UV-C light.
- **Operation Duration:** The required operating time for effective disinfection depends on the application, air flow, and distance to the target. Consult specific system guidelines for optimal disinfection cycles.
- **Deactivation:** Turn off the power switch to deactivate the lamp.
- **Environmental Conditions:** Operate the lamp within recommended temperature and humidity ranges for optimal performance and lifespan.

5. MAINTENANCE

Regular maintenance ensures the continued effectiveness and longevity of your germicidal lamp.

- **Cleaning:** Periodically, with the power disconnected and the lamp cooled, gently wipe the glass tube with a clean, lint-free cloth moistened with isopropyl alcohol. This removes dust and fingerprints that can impede UV-C transmission.
- **Replacement:** The Ushio BC2771 G10T8 has a rated life of approximately 8,000 hours. While the lamp may continue to emit visible light beyond this period, its germicidal effectiveness (UV-C output) will diminish significantly. It is recommended to replace the lamp after 8,000 hours of operation or as specified by your system's maintenance schedule.
- **Disposal:** Dispose of used lamps in accordance with all local, state, and federal regulations for mercury-containing waste. Do not dispose of in regular trash.

6. TROUBLESHOOTING

If the lamp is not functioning correctly, consider the following:

- **Lamp Not Lighting:**
 - Check if the power supply to the fixture is active.
 - Ensure the lamp is correctly seated in the G13 base.
 - Inspect the lamp for visible damage (e.g., broken glass, loose pins).
 - Verify the ballast or starter in the fixture is functioning correctly.
- **Dim Light or Reduced Effectiveness:**
 - The lamp may be nearing the end of its effective germicidal life (8,000 hours). Consider replacement.
 - The lamp surface may be dirty. Clean as per maintenance instructions.

- Ensure the operating environment is within recommended parameters.

If issues persist after troubleshooting, consult a qualified electrician or the fixture manufacturer for assistance.

7. SPECIFICATIONS

Specification	Value
Brand	Ushio
Model Number	BC2771
Lamp Type	Germicidal Low Pressure Mercury-Arc Lamp
Wattage	9.5W
Bulb Base	G13 (2-pin)
Voltage	46 Volts
Shape	T8
UV-C Emission Peak	253.7 Nm
Rated Life	8,000 hours
Brightness (Luminous Flux)	8000 Lumen (Note: This refers to visible light, not UV-C output)
Material	Copper (base components)
Item Weight	1.76 ounces
Product Dimensions	13.75 x 1.25 x 1.25 inches
UPC	048777246375

8. WARRANTY AND SUPPORT

The manufacturer's warranty description for this product is stated as 'Not applicable'. For specific warranty details or support inquiries, please refer to the retailer or the original equipment manufacturer (OEM) of the fixture in which this lamp is used. Always retain your proof of purchase.