

# SPECIFICATION

Type	Excimer Lamp
Model	EX 240S10-222

DATE : 2020. May. 18



Unilam Co., Ltd.

R&D Center

# SPECIFICATION

1. This specification defines the following product manufactured by Unilam Co., Ltd.

2. **Type** : Excimer Lamp

3. **Model** : EX 240S10-222

4. **Application** : Air/Water Purification, Light Cleaning, Surface Modification

5. **Physical Characteristics**

1) This is a discharge lamp filled with an inert gas in a light emitting tube made of quartz glass.

2) Lamp Dimensions (Refer to Appendix 1)

Arc Length(mm)	Total Length(mm)	Arc Tube Dia.(mm)
240 ± 2.0	300 ± 2.0	Ø36 ± 1.0

6. **Optical Characteristics**

Main Wavelength(nm)	UV Intensity [ $\text{mW}/\text{cm}^2$ ]
222	14.0 above

1) The above characteristics are based on the following usage conditions.

2) The UV Intensity was measured at a distance of 40mm from the lamp, and the power supply was used as Unilam's standard conditions.

3) C9536 (sensor: H9535-222) of Hamamatsu Co., Ltd. was used as the UV meter, and the value may differ depending on the UV meter sensor used.

# SPECIFICATION

## 7. Using Condition

1) The lamp should be lit in a dedicated power supply & irradiation device.

2) When the lamp lights up, it must be cooled to satisfy the condition of Appendix 2.

## 8. Spectrum (Refer to Appendix 3)

It is the measured at a distance of 40mm in the horizontal direction from the center of the lamp with rated power.

## 9. Guaranteed Lifetime

### 1) Definition of Lifetime

If the conditions of Clause 7 are satisfied and continuous lighting, the following ①, ② occurrence is defined as the end of life.

① When the light energy is 60% of the initial value

② when it's unable to reignite the lamp after normal turn off in the lighting environment that satisfies the operating conditions of clause 7,

### 2) Guaranteed Lifetime & Management

Lamps are exchanged free of charge if the conditions of clause 7 and

1) of clause 9 are met within the time limit indicated in Table 1.

Life Conditions	Low UV intensity	Failure to ignite
Guaranteed Life	1,000 [hrs]	1,000 [hrs]

[Table 1] Guaranteed Life time

# SPECIFICATION

## 10. OTHERS

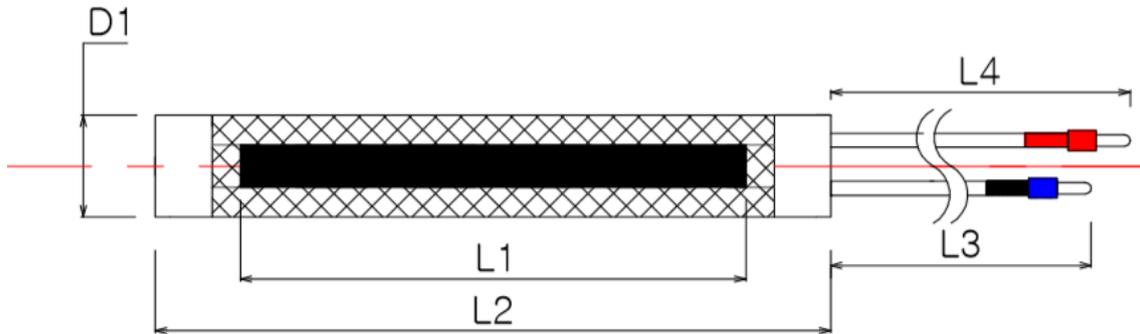
1) Matters not determined in this specification and drawings shall be decided by bilateral agreement.

### 2) Handling Precautions

- ① Don't touch the light emitting part of the lamp with your bare hands.
- ② If fingerprints or dust get on the surface of the lamp, clean it with alcohol.
- ③ When installing, be careful not to bias one side from the center of the cooling jacket.
- ④ Be careful when handling the lamp as it may cause damage due to impact.
- ⑤ Connect after confirming that there is no oxidation and discoloration of the electrical connection.
- ⑥ Turn on the lamp after confirming that the coolant flow or cooling fan operation is working smoothly.
- ⑦ When the lamp is turned on, strong ultraviolet rays are generated, so do not look with naked eyes.
- ⑧ When the lamp needs to be taken out, it should be done after cooling sufficiently.

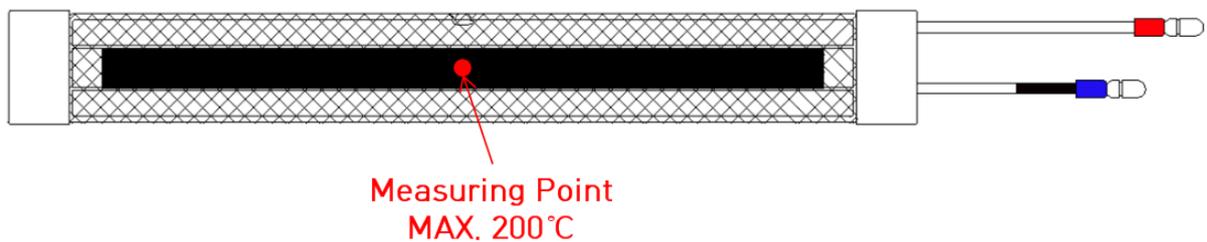
# SPECIFICATION

## APPENDIX. 1



1. D1 Outer tube Diameter:  $\text{Ø } 36 \text{ mm}$
2. L1 Arc Length: 240mm
3. L2 Total Length: 300mm
4. L3 Lead wire Length: 230 mm
5. L4 Lead wire Length: 250 mm

## APPENDIX. 2



# SPECIFICATION

## APPENDIX. 3

