

AQUUV™ mini – C series UVC LED Sterilizer Unit

SPECIFICATION P/N : AMCL-CI

DESCRIPTION

- ◆ AQUUV MINI is disinfection unit with UV LED
- ◆ This unit is designed for water tank sterilization



FEATURES

- ◆ Eco friendly product : No mercury, chemical
- ◆ using Deep ultraviolet LED (UVC)
- ◆ High disinfection rate : more than 99.99% (2Liters)
- ◆ Very low power consumption : less than 0.2W
- ◆ Waterproof
- ◆ Compact design
- ◆ Easy installation



APPLICATIONS

- ◆ Disinfection / Sterilization
- ◆ Water purifier / Dispenser
- ◆ Humidifier
- ◆ Ice room in Water purifier

Quantum Matrix Inc.

2F 212, Business Incubator Center, 237, Sangidaehak-ro, Siheung-si, Gyeonggi-do, 15073,
Republic of Korea. TEL: +82-31-497-8861, FAX: 0504-287-2616, e-mail: swlee.qm@gmail.com

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Product List

| No | Product Name | Input Voltage (VDC) | Wavelength (nm) | Radiant Flux (mW) |
|----|--------------|---------------------|-----------------|-------------------|
| 1 | AMCL-CI | 12V | 260~280 | Typ. 4.0 |

Notes:

1. DC Power source, Radiometric Power (Po) $\pm 10\%$.

Performance characteristics (Ta : 25°C)

| Item | Symbol | Min. | Typical | Max. | Unit |
|------------------------------|-----------------|------|---------|------|-------|
| DC Input Voltage | V_{DC} | 10 | 12 | 14 | V |
| Peak wavelength ¹ | λ_P | 260 | 275 | 280 | nm |
| Power consumption | P_D | 0.15 | 0.18 | 0.20 | W |
| Radiant Flux ² | Φ_E | | 4 | | mW |
| Spectrum Half Width | $\Delta\lambda$ | | 10 | | nm |
| Weight | WT | | 5 | | g |
| Water Proof | IP | | IPx7 | | - |
| Water Tank Capacity | V_{TANK} | | | 2 | liter |

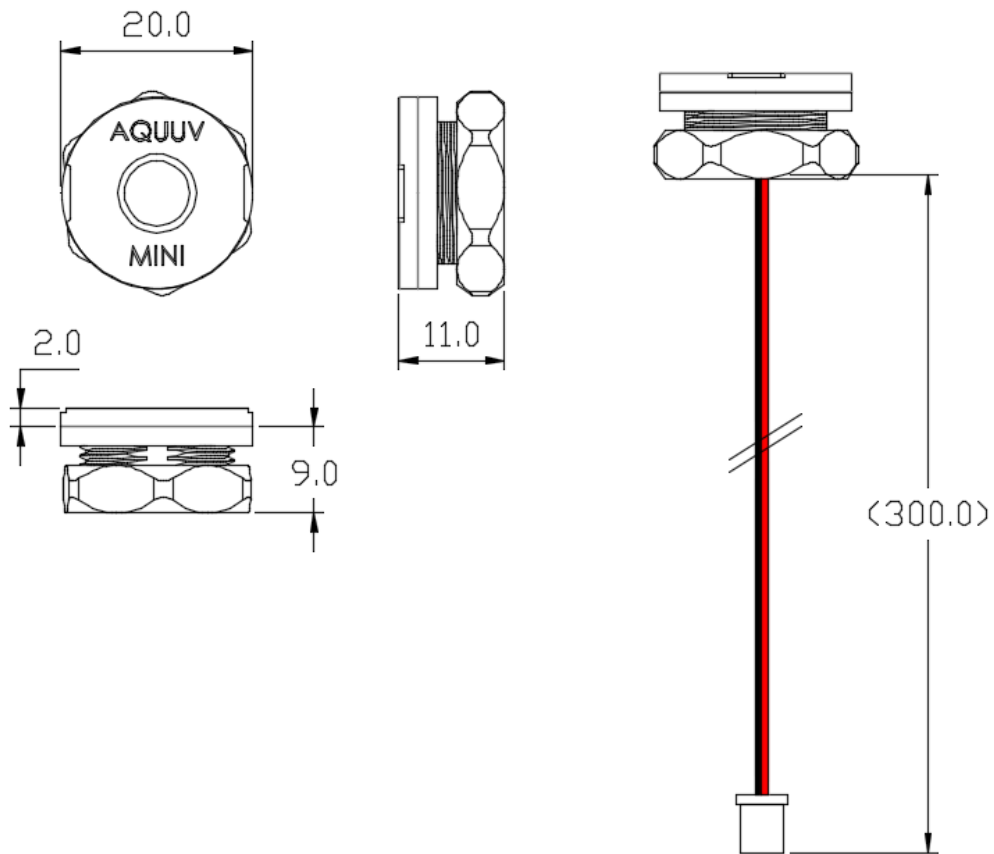
Notes

1. Peak wavelength measurement tolerance : $\pm 3\%$
2. Radiant Flux measurement tolerance : $\pm 10\%$
3. Water tank capacity is a range that the unit can cover more than 99.9% of reduction rate of E. coli ATCC 25992 tested by third party.

Dimensions

Notes

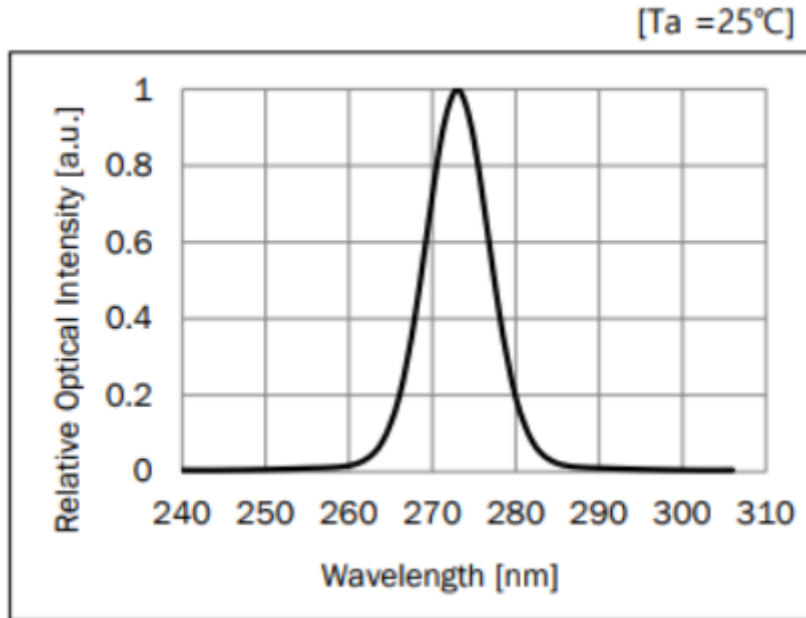
1. Unit : mm
2. Tolerance : $\pm 0.5\text{mm}$



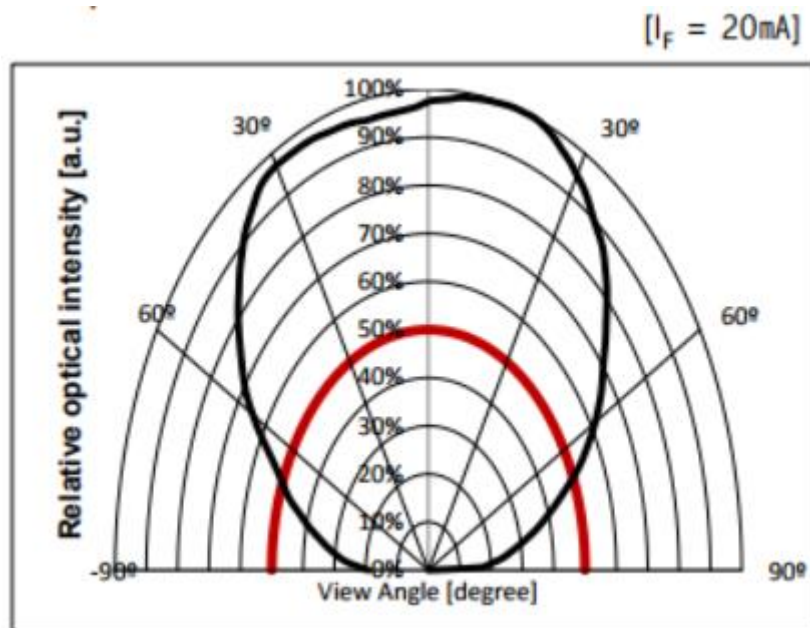
CNT : JST PHR-2 Female

Characteristic diagram

1. Spectrum



2. Typical spatial distribution



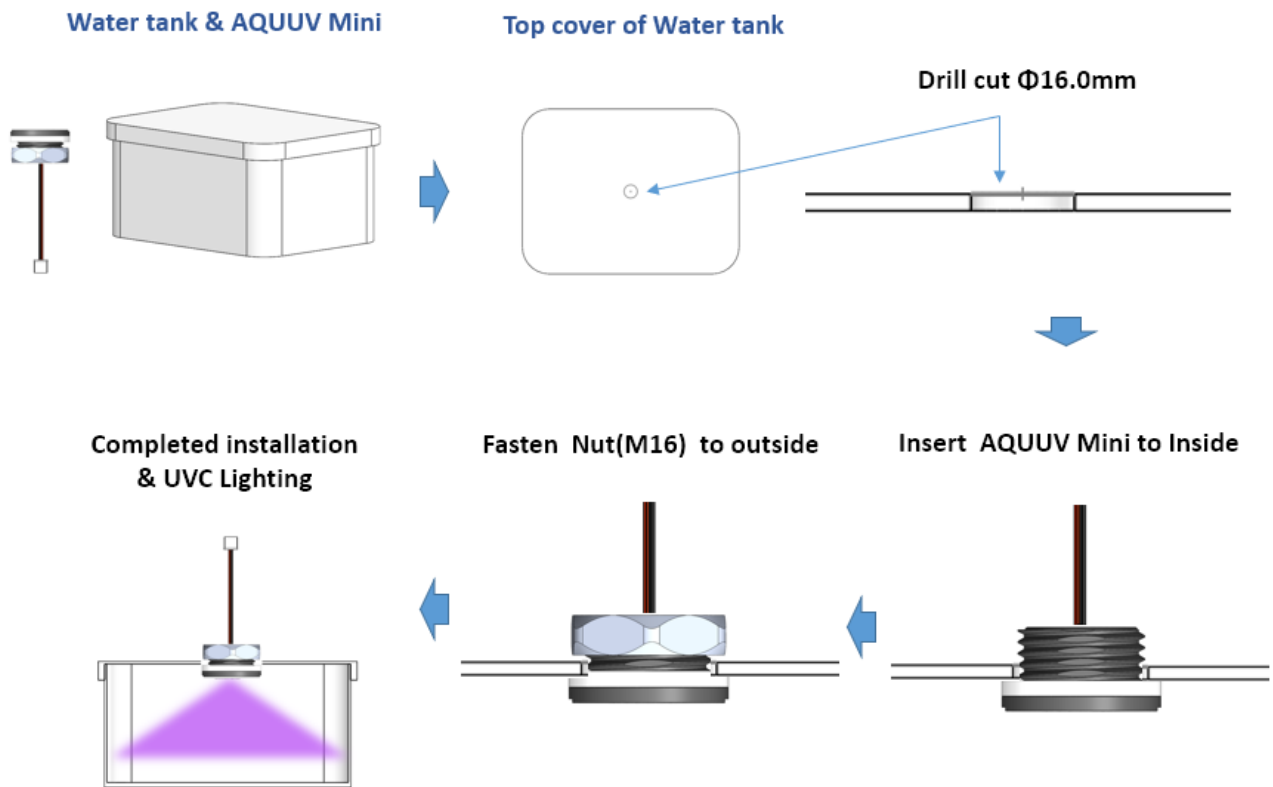
Reliability Test

| NO | Test Item | Test Conditions | Note | Ac /Sample size | Results |
|----|-----------------------------|------------------|----------|-----------------|---------|
| 1 | Steady State Operating Life | Ta=25°C, VDC 12V | 1000 hrs | 0/5 | Pass |

Notes

1.Judgment Criteria : 70% of initial Po value

Installation



Precautions

1. Storage

- 1.1 To avoid moisture penetration, we recommend storing UV Module in a dry box with a desiccant. The recommended temperature and Relative humidity are between 5°C and 30°C and below 50% respectively.
- 1.2 Replace the remained UV Module into the moisture-proof bag and reseal the bag after work to avoid those UV Module being exposed to moisture. Prolonged exposure to moisture can adversely affect the proper functioning of the UV Module.

2. Handling

- 2.1 Do not use inflammable material nearby the products.
- 2.2 Do not touch the products with wet hand
- 2.3 Do not fix or remodel the products.
- 2.4 Do not drop the machine, or give strong impact on the products.
- 2.5 UV Module needs to be handled carefully as below
- Avoid touching quartz glass parts especially with sharp tools such as Tweezers
 - Avoid leaving fingerprints cover parts.
 - UV Module will attract dust so use covered containers for storage.

3. Safety for eyes and skin

The Products emit high intensity ultraviolet light which can make your eyes and skin harmful, So do not look directly into the UV light and wear protective equipment during operation.

4. Cleaning

After assembly the product, empty the water and then wipe the UV Module with a dry towel.

