Cold Cathode UV Lamp Series

Miyakawa Corporation

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Cold Cathode UV Lamp

Ultraviolet radiation (UV) is an electromagnetic wave that has wavelength of lower region of visible radiation to around 1nm.
Ultraviolet radiation is divided into three regions and they are called UV-A that is close to visible radiation, and to shorter wavelengths UV-B and UV-C.
Miyakawa Corporation (Miyakawa) has a wide range of sources (lamps) of ultraviolet radiation from UV-A to UV-C to meet customer's various requirements in the area of the photochemical reaction.

Small-Sized Ultraviolet Lamp

Miyakawa, who is a specialized manufacturer of small-sized lamps, develops and manufactures small-sized UV lamps as well.
In the fields of photo catalysis, sterilization and deodorization, UV lamps are more often used and equipment for these applications can be miniaturized or thinned down by using Miyakawa's UV lamps.

Extra Thin Black Light Blue Lamp (TBB Series)

Black Light Blue lamps (BLB) TCB series effectively generate UV radiation with wavelength of 365nm.
The lamps utilize special phosphor and blue filter glass so that visible radiation is cut and desired wavelength is emitted.

Features:

* Thin diameter - 3.0mm.
* High UV conversion rate.
* Average rated life of 10,000 hours
  (under rated conditions).
* High reliability.

Applications:

* Photo catalyst: Activation of titanium oxide.
* Detection of ink: Flaws and counterfeit notes.
* Curing: UV-hardened resin.

Extra Thin UV Lamp (TCG Series)

TCG series germicidal lamps are low-pressure mercury lamps that effectively generate UV radiation at 254nm (UV-C).
By utilizing special UV-transparent glass for the envelope, UV output is efficiently attained.

Features:

* Thin diameter – 3mm.
* High UV-transparency glass.
* Average rated life of 5,000 hours (under rated conditions).
* High reliability.

Applications:

* Sanitation: e.g. hair-dressing
* Sterilization: Medical service, food, containers, tools and materials, water sterilization,
* Surface modification.
* Light source: Measuring equipment and others.

Cold Cathode UV Lamp Specification Table

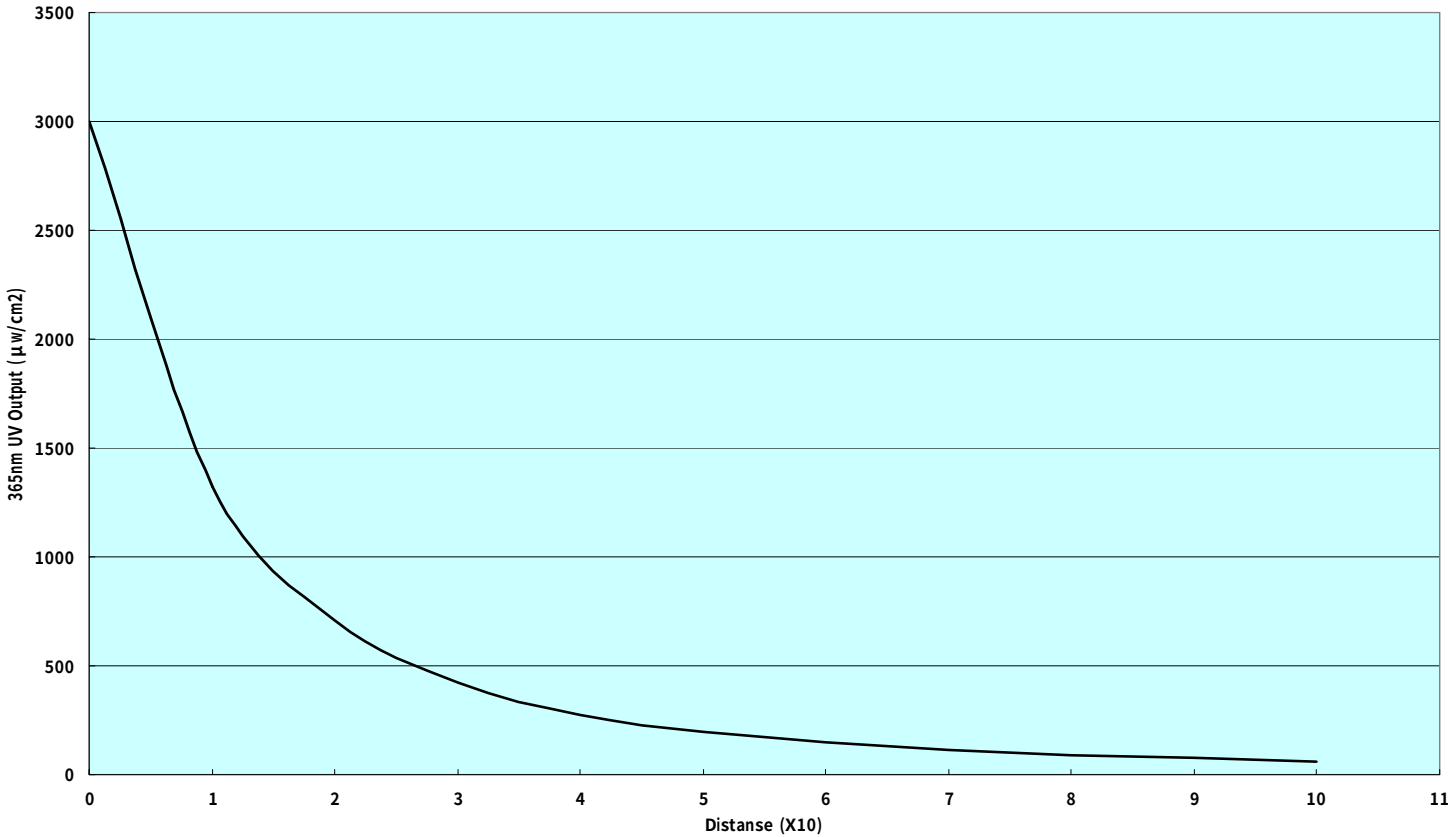
Type	Buld Outer Dia. (mm)	Bulb Length (mm)	Lamp Current (mA rms)	Lamp Power (W)	UV Output Intensity (µw/cm2) : (d=0 mm)	Life (Hrs.)
<TBB 30 Series / Peakwave Length: 365nm UV-A>						
TBB30	3.0	30-200	5.0	0.80-2.55	365nm Intensity: 3,000	10,000
<TCG 30 Series / Peakwave Length: 254nm UV-C>						
TCG30	3.0	30-200	5.0	0.80-2.55	254nm Intensity: 4,000	10,000

* Please contact to the Miyakawa Corporation for more required detail of each lamp type.
* These specifications may change without a prior notice.

<Note>

1. The above specification is referent measured data under the condition as following.
   Ambient temperature: 25 C degree with no wind.
2. Life: at 50% of the initial brightness.
3. For a 30mm length bulb of the above, a value of an UV output intensity may be weaker than an above-mentioned value of the another length bulbs.

BLB Lamp UV Output Intensity Graph (TBB30)



UV Lamp UV Output Intensity Graph (TCG30)