



## Evaluation Report for Category B, Subcategory 2.1 Application

**Application Number:** 2022-5261  
**Application:** New End-Use Product  
**Product:** Sanilume, Model: SL-36KT-75, 120V Option  
**Registration Number:** #####  
**Active ingredients (a.i.):** Ultraviolet C (wavelength 100 - 280 nm) device  
**PMRA Document Number:** 3618248

### Purpose of Application

The purpose of this application was to register a commercial indoor ultraviolet C (UVC) device as an air sanitizer to control bacteria.

### Chemistry Assessment

A chemistry assessment was not required for this application.

### Health Assessments

Health concerns from potential exposure to ultraviolet radiation (UVR) include effects on the eyes and skin. The main acute skin lesion from exposure to ultraviolet radiation (UVR) is erythema or sunburn. The wavelength of light, skin type, and skin pigmentation all influence whether erythema will occur. Other acute skin responses to ultraviolet light include tanning and photosensitivity. The most important cellular target for UVR is DNA, which has an absorption peak in the UVC spectrum at 260 nm. It is generally accepted that UVC radiation is a cause of carcinogenicity in mammals.

Sanilume, SL-36KT-75 120V Option is an upper room germicidal device. The [device](#) emits UVC radiation (254 nm), and is for installation and continuous use to control bacteria in indoor air in areas where occupants congregate e.g. offices, schools, retirement homes, hospitals, sporting venues, gyms, government facilities, restaurants, theatres and casinos except for domestic dwellings. According to the UL 8820 Standard for Ultraviolet Germicidal Equipment and Systems, Sanilume, SL-36KT-75 120V Option has been classified as a Risk Group 0 (Exempt) device for actinic and near UV hazards when installed at a minimum prescribed distance from the floor.

Occupational exposure is expected, since continuous operation of the device is recommended in commercial and industrial settings. The risk due to exposure to individuals is acceptable when the device is installed and used according to label directions.

Because of the use pattern and the design of the device, bystander exposure to violet light and UVC radiation is expected. However, the risk due to exposure to bystanders is considered acceptable for the device when installed and used according to label directions.

The device is not for domestic settings however residents of long-term care homes and retirement homes may be exposed when used as an upper room germicidal device in congregation areas. The risk due to exposure to residents is acceptable when the device is installed and used according to label directions.

### **Environmental Assessment**

An environmental assessment was not required for this application.

### **Value Assessment**

Sanilume, SL-36KT-75, 120V Option is an upper room germicidal ultraviolet commercial device (UVC) for use in areas where occupants congregate. Laboratory data demonstrated that the device is able to reduce bacteria in rooms up to 984.6 ft<sup>3</sup> (27.9 m<sup>3</sup>) and 12572.2 ft<sup>3</sup> (35.6 m<sup>3</sup>) when using the lowest and highest aperture settings, respectively.

### **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information acceptable to support the registration of Sanilume, SL-36KT-75, 120V Option.

## References

### PMRA

#### Document

Number	Reference
3275510	2021, Sanilume SL-36KT-75-120 Owners Manual, DACO: 10.6,5.2
3275513	2020, Sanilume UL 1598 Listing, DACO: 0.8.9
3275514	2020, Sanilume UV Performance Testing, DACO: 10.6,5.2
3320518	2022, Illumisoft Intertek UL 8802 Radiation Safety Certificate, DACO: 10.6,5.2 CBI
3394655	2022, SL-36KT-75 120V Option DACO 5.2., DACO: 5.2
3394656	2022, SL-36KT-75 120V DACO 5.2. Correspondence Letter, DACO: 5.2
3394669	2022, Philips Lighting TUV 36T5 HO 4P SE UNP32 Spec Sheet, DACO: 10.6
3481535	2023, Sanilume SL-36KT-75-120 Owners Manual Sept 21 2021 English Final, DACO: 10.6,5.2
3481536	2023, Submission 2022-5261 Revised DACO 5.2, DACO: 5.2
3481537	2023, DACO 5.2 Correspondence Letter, DACO: 5.2
3481548	2021, UL 8802: Outline of Investigation for UV Germicidal Equipment and Systems, DACO: 10.6,5.2 CBI
3607723	2022-5261 Clarifications Response Illumisoft Lighting
3481545	2022, Sanilume Testing Raw Data, DACO: 10.2.3,10.2.3.1
3489702	2023, Submission 2022-5261 Revised DACO 10.2.3.1, DACO: 10.2.3.1

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