

# Product card: G102 WiSDOM AiR





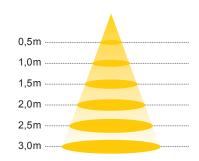






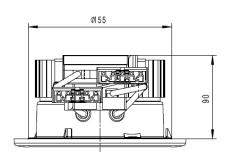


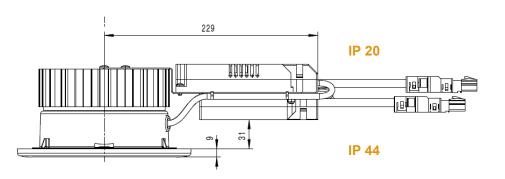
The new, safer, more efficient and more cost-effective method for disinfecting spaces and surfaces.



Product numbers	
G102 DES 2700K DALI	344.948-027
G102 DES 3000K DALI	344.948-017
G102 DES 4000K DALI	344.948-007

Luminous Intensity Distance / Lux 3000 K	
85°	
1m / 3200	
2,1m / 800	
3,1m / 350	
4,2m / 200	
5,2m / 125	
6,3m / 85	







## Eliminates microbes from frequently touched surfaces

→ Preventing outbreaks

### Fully automatic solution with consistent results

Easy implementation, no operational labour needed

### Eliminates unpleasant odours

→ Improving customer experience

### Long Lifetime with no maintenance

<del>──→</del> "Fit and forget"

### **Disinfection:**

- Toilets / Sanitary spaces
- Children Playgrounds
- Food galleys & Kitchens
- Spa areas
- Gyms

### **Odour removal:**

- Toilets / Sanitary spaces
- Smoking areas
- Casinos

## One luminaire with two functions

Blue light combined with Catalytic coating has been shown to destroy bacteria, mold, yeast, fungi, viruses, endospores, odours and harmful VOC's with high efficiency.

Photon disinfection system deploys blue light at night or whenever the targeted space is not in use.

The lights are typically controlled either manually (with a switch) or automatically (with a timer or a presence detector).

#### WHITE LIGHT MODE

(occupied room)





#### **BLUE LIGHT DISINFECTION MODE**

(unoccupied room)





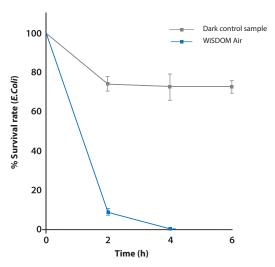


## The antimicrobial effect of blue light on E.Coli

In spring 2018, laboratory tests were conducted at Turku University of Applied Sciences to determine the efficiency of WiSDOM AiR photon disinfection light in the inactivation of Escherichia coli. Bacteria were plated on agar and irradiated at low intensity (0.7 mW/cm2).

The results were confirmed by conducting three separate tests, with each test utilizing three parallel samples from each point of analysis.





Survival rate of E.coli on agar plate after 2, 4 and 6 hours.

### Safe for materials and humans

**STUK** 

The Finnish Radiation and Nuclear Safety Authority (STUK) tested WiSDOM AiR photon disinfection luminaires in its laboratory on 12 April 2017. The test report shows that the radiation is non-ionizing.

The effects of blue light on human cells have been tested at high dosages. Even doses ten times higher than that used in LED Tailor's solutions caused no harmful or toxic changes to the cells.

Source: Liebmann et al., 2010. Blue-Light Irradiation Regulates Proliferation and Differentiation in Human Skin Cells. J Invest Dermatol. 2010 Jan;130(1):259-69. doi: 10.1038/jid.2009.194.

### **Catalytic Coating**

Blue light on itself is able to destroy bacteria, mold and yeast. Combined with a Catalytic coating treatment on all surfaces of the room, the system efficiently destroys also viruses, odours and harmful VOC-compounds from air and surfaces.

Catalytic coating utilizes a phenomenon known as photocatalysis, in which the energy of blue light triggers a chemical reaction that produces short-lived reactive oxygen species.

The nanocoating is applied with an extremely fine spray, resulting in an ultra-thin layer. Since the coating does not create a paint-like membrane, the permeability of the surface is not affected. Suitable for nearly all types of materials. Coating substance has been tested and proven non-hazardous and non-toxic.