

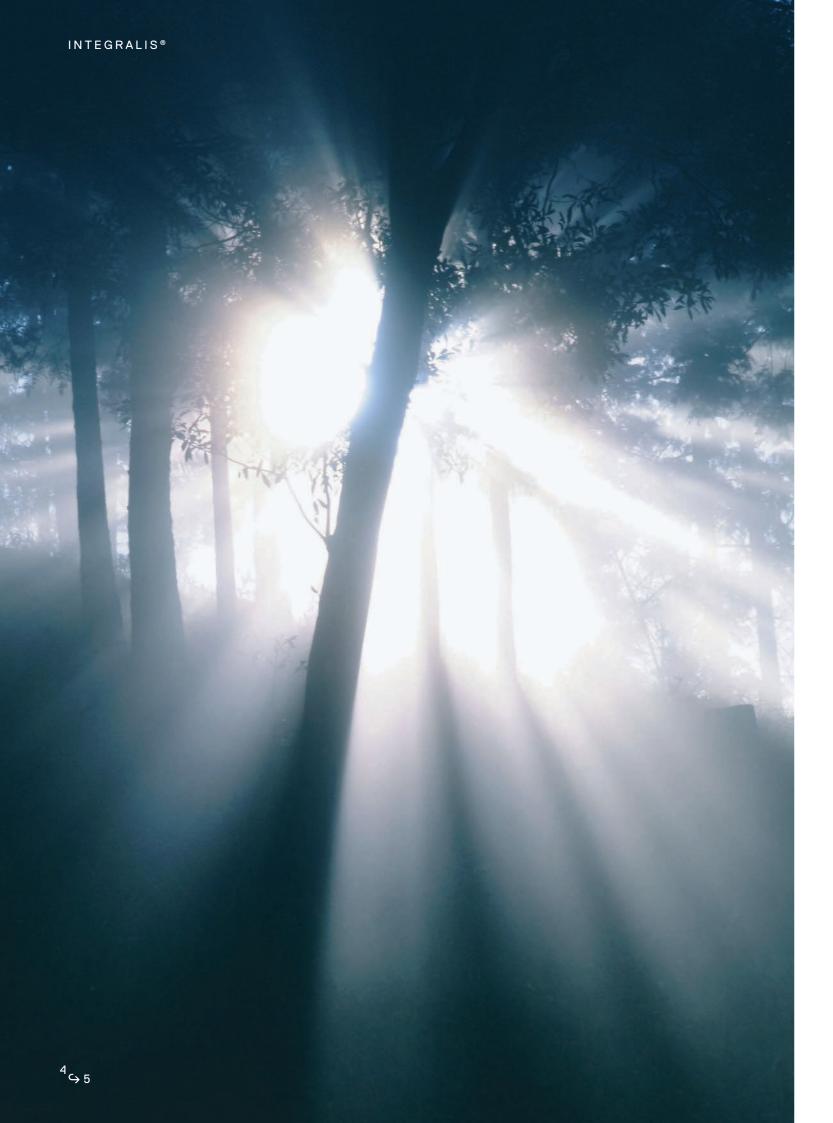


### INTEGRALIS<sup>®</sup> A light for a safe environment

PATENT PENDING

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INTEGRALIS<sup>®</sup> The Human & Scientific Light Light that defeats bacteria and viruses A light for a safe environment The right wavelength The right "dose" INTEGRALIS<sup>®</sup> eco-system Materials resistance The right light engine INTEGRALIS<sup>®</sup> collection **UVC INTEGRALIS** INTEGRALIS® applications INTEGRALIS<sup>®</sup> management



## The Human & Scientific Light

INTEGRALIS<sup>®</sup> is an innovative light, perfectly integrated into the products of the Artemide collections, that sanitizes spaces. **INTEGRALIS®** INTEGRALIS® combines sanitizing efficacy with luminous performance and design beauty. It also integrates itself in both the environments and moments of life by interpreting the rhythms and needs of mankind. INTEGRALIS® is managed by Artemide App, a digital interaction system accessible to all. INTEGRALIS® was born from Artemide's scientific and technological research and humanistic and social vision. **Environmental Quality** INTEGRALIS® is a project that associates and integrates the visible

and physiological well-being.

and invisible spectral range in an innovative formula capable of regenerating the environmental gualities of the space.

It is a light spectrum that can act against pathogenic microorganisms in the environment by just illuminating them.

INTEGRALIS® is a range of lighting solutions that protect human health helping people to live spaces more safely.

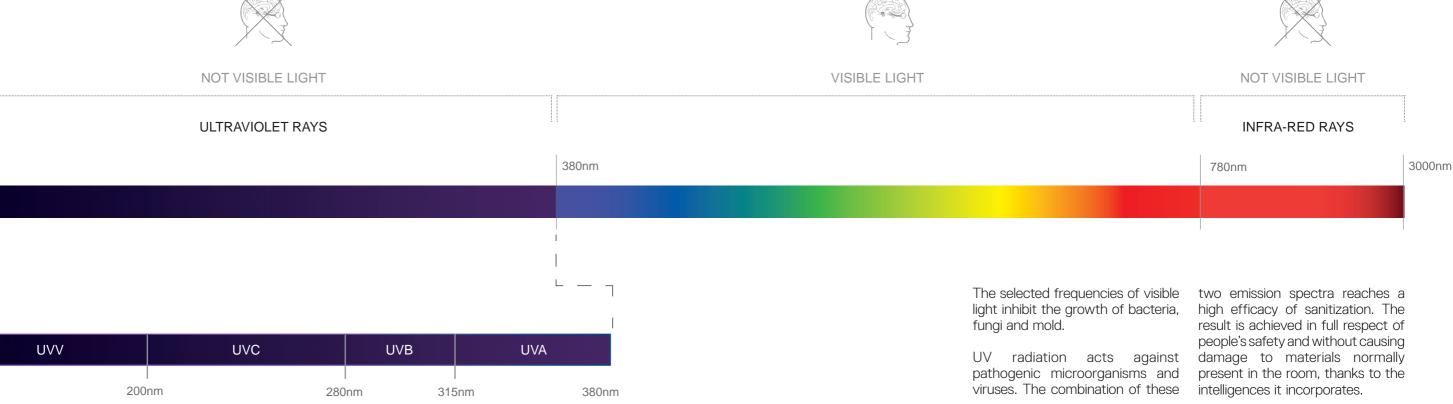
Environmental guality extends today beyond the theme of perception

INTEGRALIS® reduces the microbiotic load of surfaces for a healthy space that takes care of everyday life.

## Light that defeats **Bacteria & Viruses**

With the revolutionary technology INTEGRALIS<sup>®</sup>, Artemide provides a direct response to the current events of our time. In line with Artemide's humanistic and social values, INTEGRALIS® is a proprietary lighting solution that protects people's most valuable asset: their health.

Healty Space	A light that suppor paths that Artemide its approach to Hur
	A good light capat quality with an activ microorganisms is a Immunity to antibio while, up to now, no been selected.



100nm

100nm

ts our health through microbial control is one of the e research was developing as a natural continuation of man Light.

ble of combining functionality, efficiency, perceptual on that inhibits the growth and spread of pathogenic a concrete help in taking care of our health.

tics is an increasingly important issue for our daily life photo oxidative stress resistant microorganisms have

### → UVC RADIATION





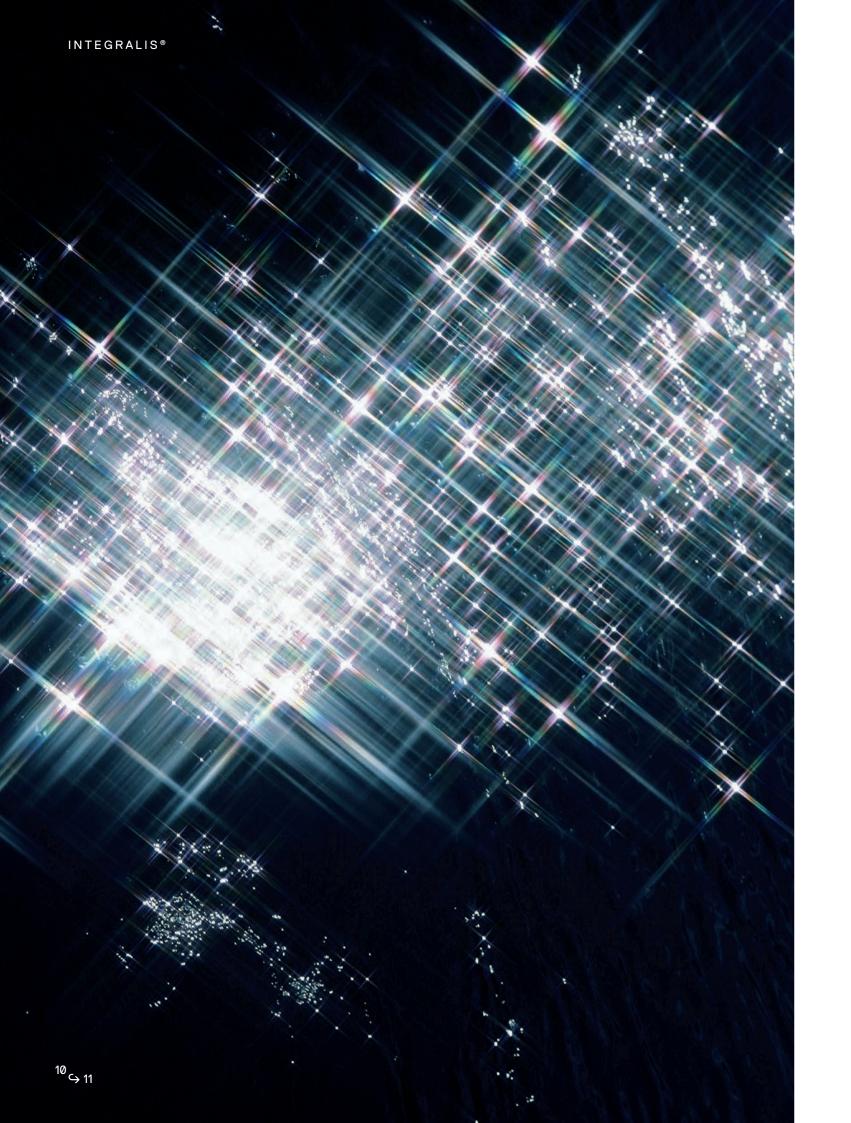
VIRUS BACTERIA FUNGI MOLD YEAST

VIRUS BACTERIA FUNGI MOLD YEAST

The UV-C frequencies (200 nm - 280 nm) are active against viruses, bacteria and other pathogens, but can also be harmful to humans, so they must be used only during people absence. They are not visible and therefore must be associated with intelligent management systems that ensure human safety. They can defeact pathogens in a very short time (sec-min).

The frequencies of blue-violet light (380 - 450 nm) are very effective against bacteria, fungi, molds and can act also on viruses. They are part of the visible spectrum and do not cause problems if used in people presence. They can defeat pathogens in a quite long time (hours).





# A light for a safe environment

With INTEGRALIS<sup>®</sup>, Artemide makes surfaces safe using an excellent light quality for a good and comfortable perception.

Light to stay together

INTEGRALIS® allows you to live spaces in safety, it can also act in the presence of people and supports our activities with perfect light, with performances comparable to traditional products.

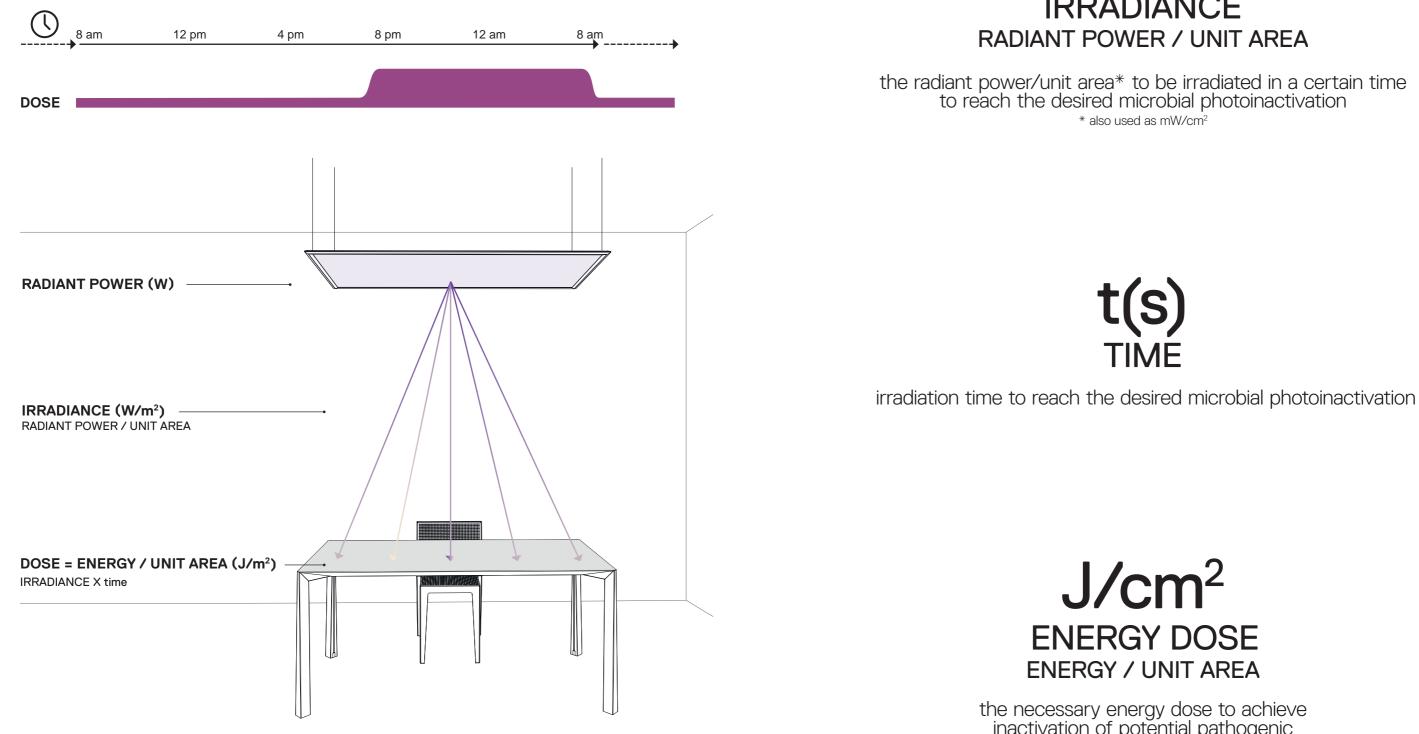
It is a light that guarantees a correct perception combined with different antimicrobial activities: preventing the microbial growth and/or microorganisms inhibition.

Surface Sanification

The antimicrobial activity of INTEGRALIS® light depends on the energy irradiated dose at the different frequencies affecting the surface over time.

In addition, to determine the correct light performance in the design of INTEGRALIS<sup>®</sup> luminaires, the irradiance value is then calculated to ensure the achievement of the energy dose necessary to control the growth of several potential pathogenic microorganisms.

Light as Energy for an antimicrobial action



Note: Microorganisms on surfaces that are not directly exposed to INTEGRALIS® light (hidden or in shadows) will not be eliminated.

<sup>12</sup> ↔ 13

### W/cm<sup>2</sup> **IRRADIANCE**





the necessary energy dose to achieve inactivation of potential pathogenic microorganisms



### THE PERFECT QUALITY OF THE WHITE LIGHT +

**ANTIMICROBIAL** PROPERTIES

# The right wavelength

Violet photons prevent the growth and spread of pathogenic microorganisms such as bacteria, fungi and mold while totally unnoticed by the human eye, since INTEGRALIS® achieves a perfect balance of optimal visual comfort and antimicrobial activity.

Light + Antimicrobial activity

microbial growing.



**VISIBLE LIGHT** 

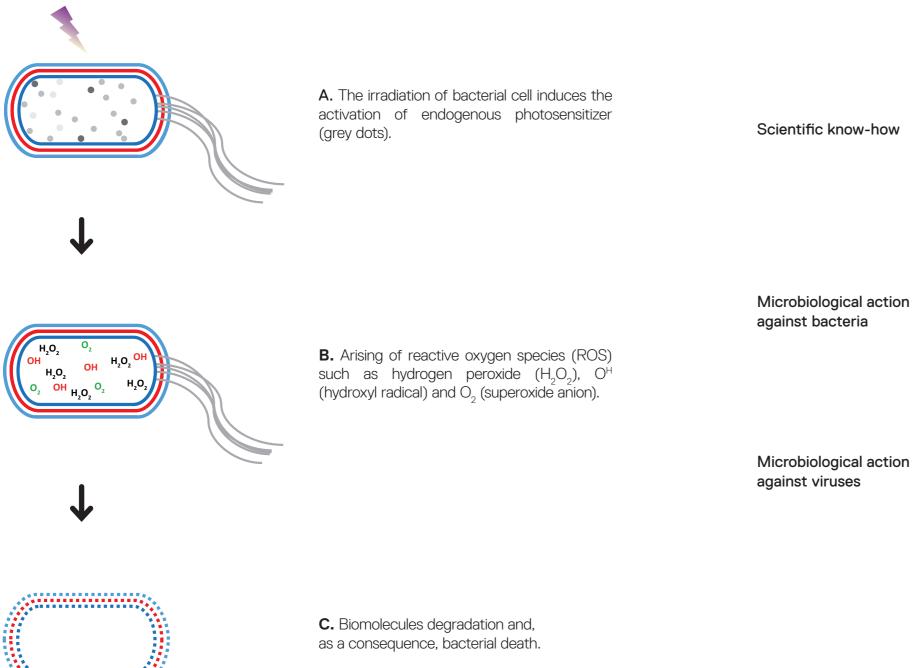
380nm

Only specific light wavelengths have the right energy to act against

Indeed, at the violet-blue wavelength, light has an antimicrobial activity against pathogenic microorganisms while not being offensive for people, pets and plants.

780nm

Hypotethical mechanism of photo-oxidative stress induced by blue light in bacterial cells.



In studying the effects of light on bacteria and viruses, Artemide has been supported by the expertise of specialized research institutes such as the University of Insubria and the University of Padua.

INTEGRALIS<sup>®</sup>.

Microbiological action against bacteria

> Bacterial endogenous molecules could be excited by violet-blue light and induce the rising of ROS (reactive oxygen species).

\*\*\*\*\*\*\*\*\*\*\*\*\*

Scheme of the microbiological effect of 405 nm light on bacteria.

In addition to the knowledge of the scientific evidence on the effects of light on potential pathogenic microorganisms, these collaborations have contributed to transfer the scientific evidence into applied research to design and verify the proprietary technology

Researchers have hypothesized that violet-blue light may induce a photo-oxidative stress in several pathogenic bacterial species.

ROS, such as hydrogen peroxide and O<sup>H</sup> (hydroxil radical), destroy macromolecules such as DNA, RNA, proteins, lipids and compromise the cellular integrity, causing bacterial death.

Regarding viruses, in particular Sars-CoV2, scientific laboratory tests conducted by Artemide have shown that the wavelength 405 nm contributes to the reduction of the viral load.

Infact, within the first four hours time, by using blue-light the riduction is 35% bigger than the natural virus delay.

Further scientific studies are underway to investigate these results.

### Effect of 405 nm light on the inactivation of biological agents

The use of visible light is one of the most disrupting and promising new antimicrobial approaches.

The scientific literature in fact in recent years has focused on the use of blue light as a possible approach for the reduction of biological contaminants. The need to control the diffusion of biological contaminants, such as prokaryotic microorganisms (bacteria), eukaryotic microorganisms (yeasts, fungi) and viruses is of fundamental importance in many types of application, including the healthcare, environmental, corporate, livestock and domestic settings.

### 405 nm light as a form of control for biological agents

Light in the violet-blue range (380 to 480 nm) in particular has been seen to be efficacious against a broad spectrum of microorganisms, including bacteria, yeasts and fungi. Its potential activity against viruses is being investigated, especially in the light of the current SARS-CoV-2 pandemic. The characteristics of visible light, such as its safety, ease of use and efficacy against many biological targets, make it a very interesting approach in a number of different settings. More specifically, 405 nm light is that which has shown the greatest antimicrobial potential.

### Microorganisms characterizing an "indoor" environment

The study on the effect of 405 nm light was conducted on a panel of both Gram-positive and Gram-negative bacteria of interest to the scientific community as potential pathogens. This technique has therefore been studied related to its important implications for hospital disinfection applications and for the treatment of skin and odontostomatological infections. Considering the high potential of this technology, given also the contingent needs, the aim is the diffusion of an "antimicrobial Blue Light" (aBL) application in nonhospital "indoor" settings.

In particular, reference is made to offices, hospitality spaces and domestic environments.

Each domestic indoor environment is characterised by a particular biological fingerprint resulting from a combination of factors. First and foremost, indoor environments are affected by the outdoor environment (soil and air), indoor characteristics such as ventilation, the degree of humidity and the materials present, and, last but not least, the number

of individuals and any pets present. It has been estimated that the dust inside a home can contain up to 500-1000 different microbial species that help make up the complex microbial community of an indoor environment. This community in turn influences the human microbiota and, consequently the state of health and illness (Shan et al, 2019). This makes it difficult to identify a microbial composition that is representative of the domestic environment A distinction can be made between the microorganisms commonly associated with humans (Streptococcaceae, Lactobacillaceae and Pseudomonadaceae) associated with the those environment (Intrasporangiaceae, Rhodobacteraceae) or both (Actinobacteria, Proteobacteria).

Generally speaking we can assume the following as the biological agents can be found in an indoor space as workplaces, schools and nursery schools:

Bacteria: Legionella, Staphylococci, Enterobacteria, Streptococci,

applied research.

Enterococci, Gram-negative bacteria - Fungi: Aspergillus app, Alternaria alternata

- Viruses: viruses responsible for influenza, respiratory tract diseases, gastroenteritis, rubella, mumps, chicken pox, mononucleosis, etc.

In addition to these pathogens, Artemide is also analyzing other bacteria, such as Pseudomonas aeruginosa, more typical of hospital environments and cause of numerous nosocomial infections.

Artemide INTEGRALIS® works on the photosensitive microbiological species, which are not 100% of the existing microbiological population. For a more in-depth information take contact with the experts for the correct identification of the performances and the targets of interest.

Extract from the scientific report of the University of Insubria, Laboratory of Applied Microbiology-DB-SV, specifically edited for Artemide INTEGRALIS®

# INTEGRALIS® is the frame of life

and supports our sense of belonging to spaces



# The right dose

### As the percentage of the violet photons particles increases, the effect starts from an inhibition of bacterial growth to be intensified up to the point of complete bacteria elimination.

A scalable formula

several variables.

parameters:

- Environment use destination

- People presence

- Finishing materials

INTEGRALIS<sup>®</sup> follows the rhythm of life working on the concept of "dose". A "dose" is the measure of the density of energy to be applied to the environment surface depending on the variables above to determine the desired antimicrobial effects.

### Space **ENVIRONMENTAL USE DESTINATION**



### Time FOR ANTIMICROBIAL ACTIVITY

**Materials ENVIRONMENTAL FINISHES**  INTEGRALIS<sup>®</sup> is an open platform, a scalable formula depending on

INTEGRALIS® operates according to a parametric approach that offers a scientific and measured answer starting from four main

- Time available for sanification

INTEGRALIS® adapts the antimicrobial activity according to the rhythm of permanence and absence of people in the spaces, to the type of environments and to the objective of the intervention.

### Dose calibration

In spaces where the presence of people is constant during the day but interrupted in the evening, such as in offices or shops, museum and educational spaces, disinfection with maximum radiation intensity can be carried out during the night without occupancy.

In the same space, during the day, thanks to the special spectral component of the patented INTEGRALIS® technology it is possible to opt for a non-offensive emission to control bacterial growth and spread. This approach offers a perfect functional white light which, at the same time, is active against bacteria.

In spaces with a limited perimeter such as service areas, elevators, toilets, dressing rooms, halls and waiting rooms, where the permanence of people is temporary, you can choose a localized "intermittent" sanitization.

This method is activated and deactivated through presence sensors, acting only in people absence with greater intensity and in less time in order to guarantee both the safety and sanitization of the space for each user.

INTEGRALIS® combined with traditional cleaning can lead over time to an incremental improvement of the environmental quality of the spaces.

Integrated antimicrobial effect

### How can the violet light work in environments?

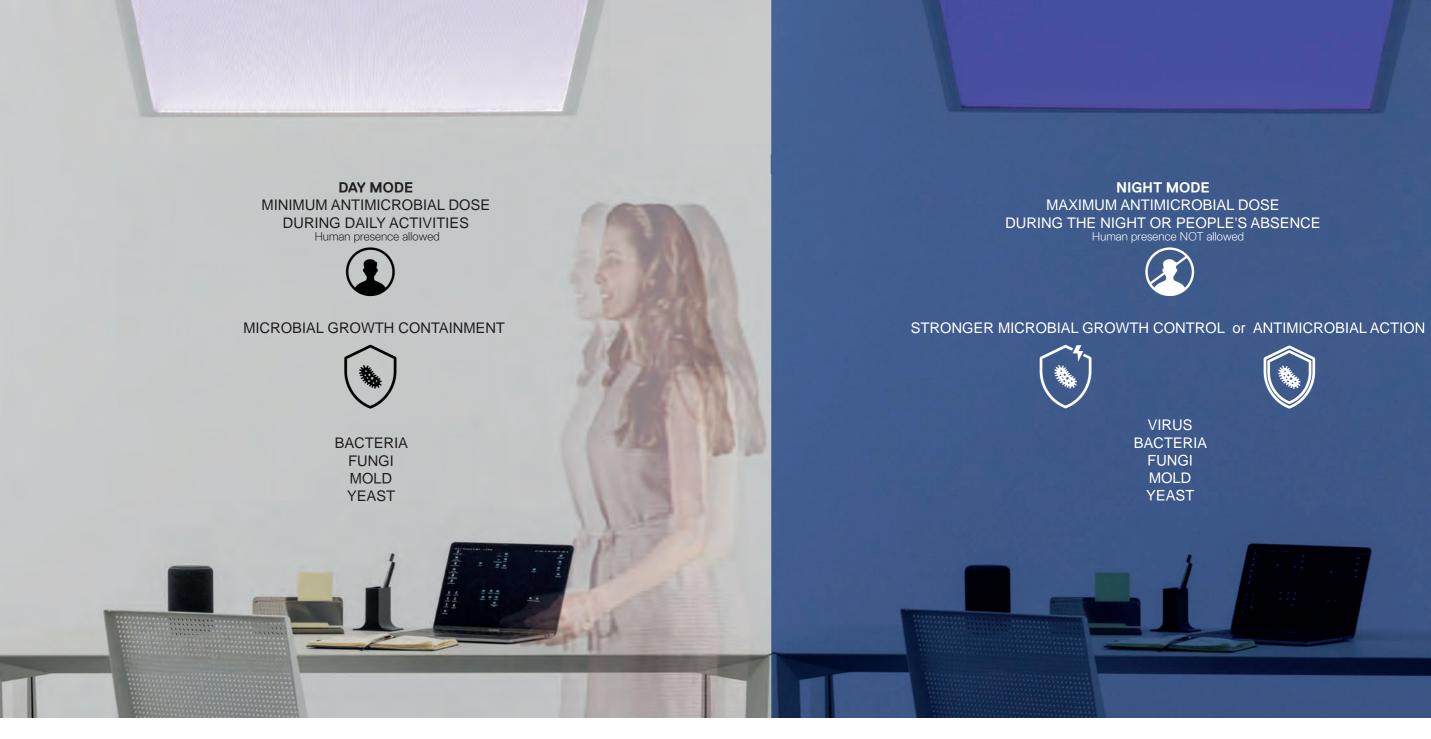
MODE A - DAY perception.

**MODE B - NIGHT** Used alone applied at the maximum of its radiant power.

The antimicrobial effect of INTEGRALIS® visible light can operate according to a more traditional cleaning or episodic disinfection ensuring, over time, a lower environmental bacterial charge.

Depending on bacterial species and time exposure we can assume two different uses of violet-blue light related to its intensity:

Operating in the background being integrated as a small percentage of the operative white light thus not affecting its guality and



### WHITE LIGHT

**VIOLET-BLUE LIGHT** 

Discovery space square Case history\_Office application







INTEGRALIS®

Case history of dose calibration- Workplace BIG offices in DUMBO, New York

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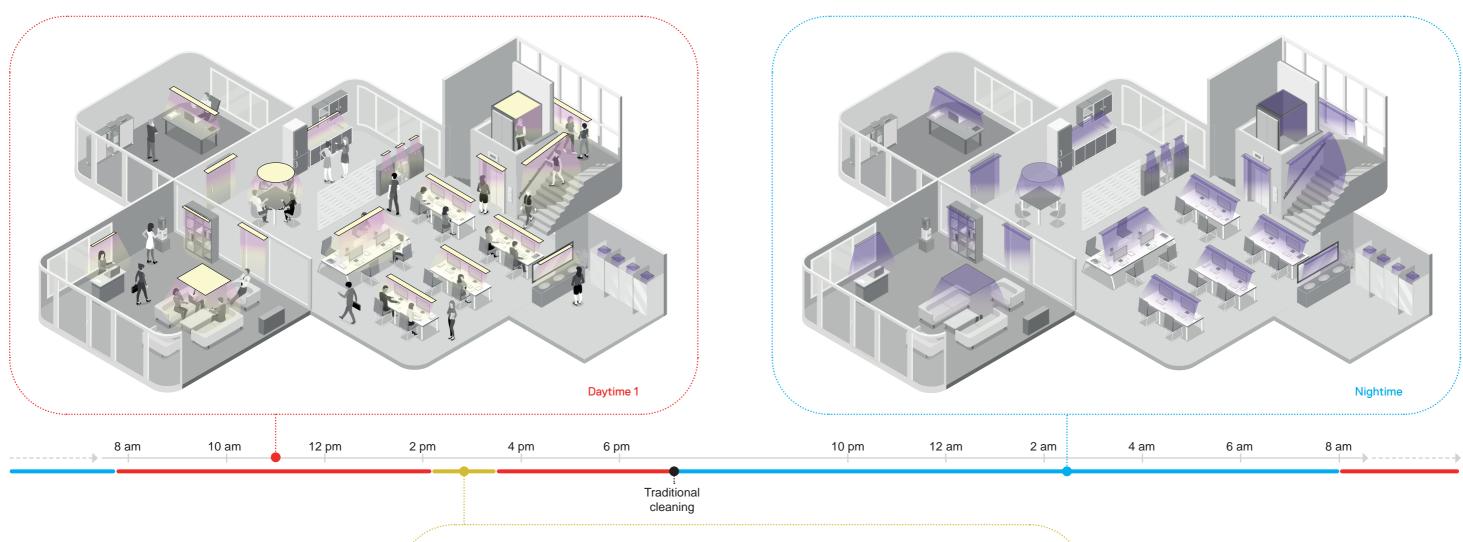
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15

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-







Daytime 1 INTEGRALIS® lighting performance is working in Microbial growth control mode in order to control the bacterial load while people presence during normal daily activities.



### Daytime 2

Thanks to presence sensors, selected INTEGRALIS® lighting appliances are working in Antimicrobial activity mode in order to eliminate the bacterial load in specific areas while people absence.



Case history of dose calibration - Workplace Application



Nightime INTEGRALIS® is working completely in Antimicrobial activity mode in order to eliminate the bacterial load while people absence all night long.

### **INTEGRALIS®** eco-system

INTEGRALIS<sup>®</sup> follows the rhythm of life. It combines four independent solutions and can also benefit from the addition of a UV technology that reliably is able to kill viruses. The various tecnologies can be used individually or in combination one with the other depending on the intervention target, power, time, results and costs.

### Safe lighting solutions

INTEGRALIS® is an open and versatile platform that includes different declinations and can be integrated into different products of the Artemide collection.

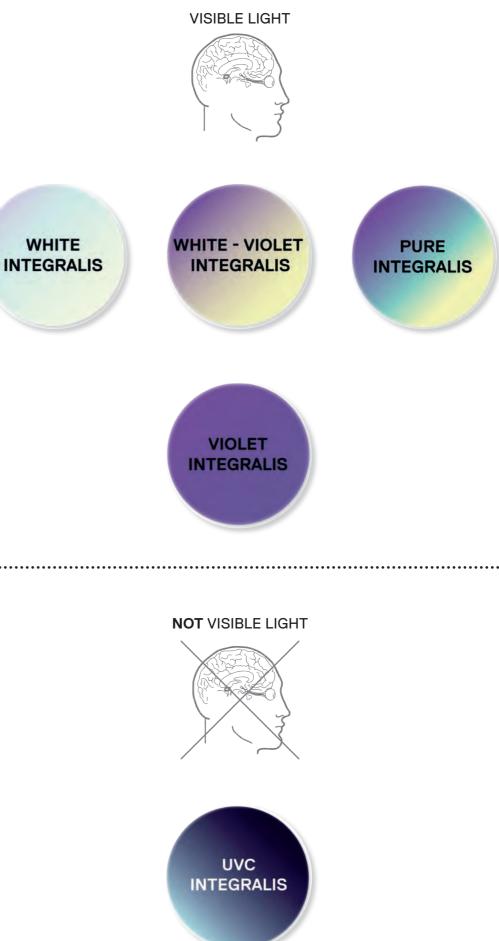
PURE INTEGRALIS is the most complete solution that combines microbial growth control and antimicrobial function with excellent efficiency and perceptive quality of light. The uniform broadbend spectrum allows a high color rendering index and thus a significant light quality.

WHITE-VIOLET INTEGRALIS combines white light with an emission in the violet frequencies that can activate a microbial growth control or an antimicrobial action depending on the irradiance of the emission components.

WHITE INTEGRALIS offers a white emission for a perfect perception in accordance with the human presence and which at the same time combines an effect of bacterial growth containment. It can vary in intensity and is available with a fixed CCT of 5000K.

VIOLET INTEGRALIS was created to combine an antimicrobial effect with a functional light already present or to intensify the effectiveness against pathogenic microorganisms in spaces where a quicker sanitizing intervention is required (ex bathrooms, dressing rooms...) due to a higher intermittance of human presence.

INTEGRALIS® can also include UVC, that operates in the absence of people in some applications.



THE GOOD LIGHT TO SUPPORT DAILY HUMAN ACTIVITIES







DAY MODE DURING DAILY ACTIVITIES NIGHT MODE DURING PEOPLE ABSENCE





WHITE INTEGRALIS 5000K CRI 90

### WHITE - VIOLET INTEGRALIS

PURE INTEGRALIS

**VIOLET INTEGRALIS** 

**UVC INTEGRALIS** 250 / 280 nm

INTEGRALIS®



### White 🕥 **INTEGRALIS**



- Microbial growth control.
- Full spectrum & good perception.
- Fixed 5000K color temperature.
- CRI 90.
- Dimmable (0-100%).
- Human presence ever allowed.

### White - violet 🥏 **INTEGRALIS**



- mode.

Microbial growth control through white+violet emission with fixed percentage mix.

 Stronger Microbial growth control through total violet emission.

 Dimmable in Microbial growth control mode (0-100%).

• A prolonged human presence is allowed in Microbial growth control

It is not recommended in Stronger Microbial growth control mode.

**INTEGRALIS®** 



### Pure 🥥 INTEGRALIS

- - Microbial growth control with a perfect quality of the white light.
- Antimicrobial action through total violet emission.
- Dimmable in Microbial growth control mode (10-100%).
- Very high efficacy.
- A prolonged human presence is allowed only in Microbial growth control mode. It is not recommended in Antimicrobial action mode.
- Safety sensors are recommended during Antimicrobial action mode.

### Violet 🥥 INTEGRALIS

- - Not dimmable.
  - action mode.



• Antimicrobial action.

 A prolonged human is not recommended in Antimicrobial

 Safety sensors and/or locked ambient required.



### UVC • INTEGRALIS



### Sanification

- Not dimmable.
- Available as Pure UV-C and Hybrid solution (white light + UV-C)
- Living beings presence is forbidden
- Safety sensors are necessary.
- Possible damage of finishing materials.

### Materials resistance

UV materials resistance

When applying INTEGRALIS® technology in living spaces, it is advisable to take into account the UV wavelength degradation effect, present to some extent, on the finishing materials of the environments.

The possible changes in the materials, depending on the extent of their resistance to UV, can in fact impact on various aesthetic aspects (such as yellowing, discolouration, whitening of the surface with the formation of stress cracks and streaks) and/or a variation in the mechanical properties such as embrittlement, softening and deformation.

than UV-Č.

**Ceramics:** UV resistant thanks to very strong chemical bonds that require very high energy levels to break chemical bonds.

In the development of an INTEGRALIS® project, Artemide can suggest materials that are, by their nature, more suitable for these exposures, even if a final comparison with the manufacturer of the materials themselves will be necessary to verify their compatibility of use.

40 <sub>(→</sub> 41

Resistance to ultraviolet rays is defined as the ability of a material to resist UV radiation, which can have a strong impact on the appearance and mechanical properties of materials.

Artemide has carried out accelerated aging tests on the main materials, reproducing the damage caused by exposure to the wavelengths used in the PURE INTEGRALIS and UV-C technologies. The results of these tests have made it possible to determine guidelines for the identification of any critical applications based on the behaviour of the different families of materials studied. They also highlighted how visible radiation is less damaging or degrading

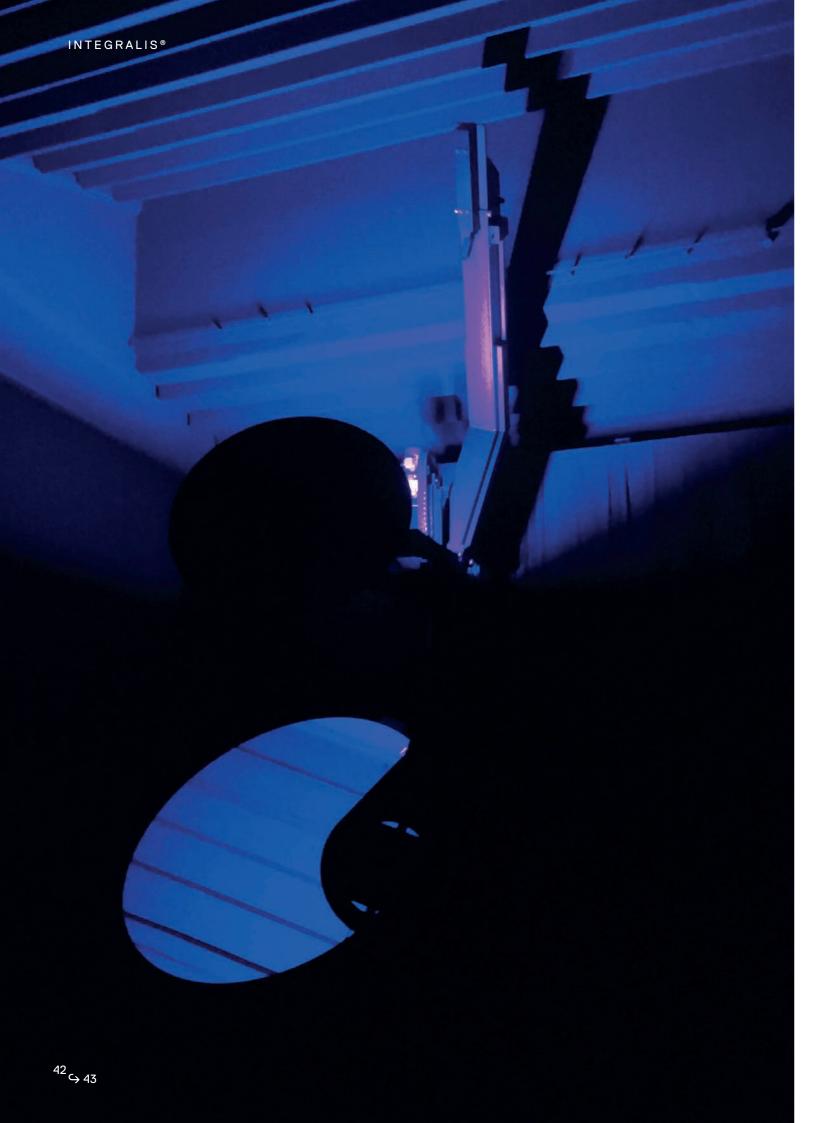
**Metals:** UV resistant thanks to the presence of free electrons that absorb energy from photons, so UV-C does not cause any chemical bond disassociation (instead typical of polymers).

Polymers: generally susceptible to UV degradation due to the presence of fairly weak covalent bonds, polymers with double C-C bonds are the most subjected to degradation.

The most frequent degradation mechanisms are photolysis (breaking the polymer chain) and the formation of radicals that can react in the presence of water or oxygen (hydrolysis or oxidation).

The deterioration can also affect the physical characteristics (eq ductibility, mechanical strength) or produce yellowing.

There are also paints with metals inside them (absorbing UV) that can protect polymers (still to be investigated).



## The right light engine

Qualitative and quantitative balance between perception and consumption

INTEGRALIS® is a light designed to return to appropriate places and feel safe together, its light as well as fighting pathogenic microorganisms is designed for the well-being of people who live in spaces respecting the planet.

INTEGRALIS® products that offers the "white emission" too, for normal daily activities, have balanced efficiencies in compliance with the Ecodesign legislation requirements for consumption.

environment.

limits imposed by the standards: IEC 62778 IR-RADIATION).

the installation.

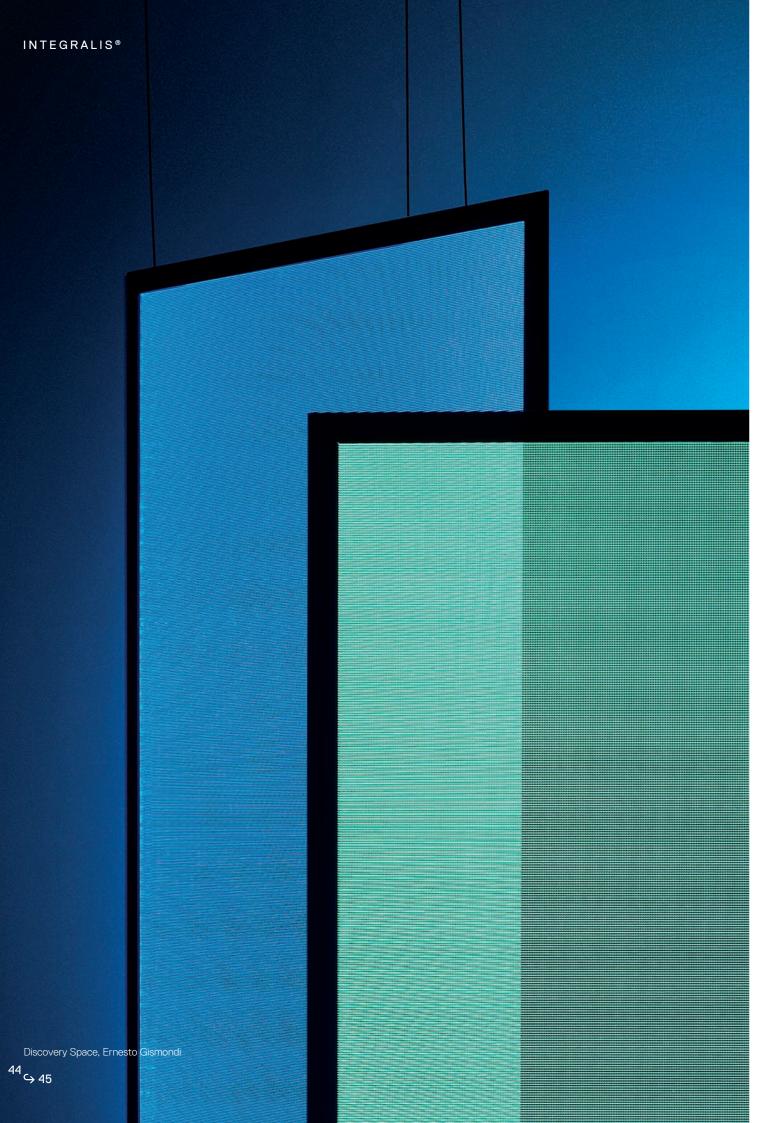
For this reason, the entire INTEGRALIS® collection is developed and tested with respect to a regulation that provides qualitative and quantitative characteristics, both in the internal laboratories in Artemide, as well as using gualified external laboratories.

The quality of the light complies with the EN12464 standard, following what is indicated for color temperature and color rendering for the office

Great attention is then referred to health and in particular to photobiological risk through the correspondence of all the frequencies emitted to the

IEC 62471 (ACTINIC-UV, NEAR UV, BLUE-LIGHT, RETINAL THERMAL

To ensure the safety of people according to the limits of the EU directive 2006/25, all products are gualified to provide the allowed minimum health and safety requirements regarding the exposure and the time of permanence under the appliances in "Microbial Growth Control" (DAY MODE) as well in "Antimicrobial action" (NIGHT MODE) according to



# INTEGRALIS® collection

INTEGRALIS<sup>®</sup> can be integrated in a range of lamps and lighting systems from the Artemide collections. Luminaires such as Ilio, Pipe, Athena, Nur and Nur Acoustic, Discovery Space, A.39, Tagora, Sharp, Vector combine distinctive design with optimal visual comfort and a sense of hygienic well-being. INTEGRALIS<sup>®</sup> is transversal in applications like Hospitality Health & Hospitals Workplaces Wellness, Retail, Education, Sport, Connectivity, Transportation.

INTEGRALIS® collection

For each application field, the most suitable products have been identified to host the various INTEGRALIS® technologies and offer a complete range of solutions.

Starting from the necessary light, the sanitizing energy was calibrated. Each INTEGRALIS<sup>®</sup> luminaire therefore offers a power balance between sanitizing efficiency and corresponding light performance.

Artemide's competence and know-how can then also be translated into customized project solutions through dedicated consultancy.

Discovery Vertical e Discovery Space, Ernesto Gismondi



### WHITE-VIOLET INTEGRALIS



### ↗ Technical Data

DISCOVER	Y SPACE	SQUA	RE 90x90cm				INTEGRALIS APP	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	42 W	XF	1852 lm	1124 mW	2700 K - 405nm	80	20000.10/30/60.IN1APP	
NIGHT MODE	42 W	XF	ND	3406 mW				

DISCOVERY SPACE RECTANGULAR 75x150cm								
	W	Beam	Luminous Flux	Radiant Flux	CCT			
DAY MODE	63 W	XF	2778 lm	1686 mW	2700 K - 405nn			
NIGHT MODE	63 W	XF	ND	5109 mW				

DISCOVERY	VERTIC	AL Ø7	00		
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	42 W	XF	1852 lm	1124 mW	2700 K - 405n
NIGHTMODE	42 W	XF	ND	3406 mW	

### DISCOVERY VERTICAL Ø1000

	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	60 W	XF	2646 lm	1606 mW	2700 K - 405nm
NIGHT MODE	60 W	XF	ND	4866 mW	

### DISCOVERY VERTICAL Ø1400

	W	Beam	Luminous Flux	Radiant Flux	CCT			
DAY MODE	84 W	XF	3704 lm	2248 mW	2700 K - 405nm			
NIGHTMODE	84 W	XF	ND	6812 mW				

### DISCOVERY FLOOR\* 40x157cm

	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	67 W	XF	2972 lm	1804 mW	2700 K - 405nm
NIGHTMODE	67 W	XF	ND	5467 mW	

### Discovery White-Violet INTEGRALIS

Ernesto Gismondi → 2020 MacAdam 3SDCM L70 B50 60000h L70 B50 20000h CRI = 80 IP20 ⊕

**CRI** 80 INTEGRALIS APP Code 20020.10/30/60.IN1APP



CRI nm 80 INTEGRALIS APP Code 19922.10/30/60.IN1APP



**CRI** m 80 INTEGRALIS APP Code 19932.10/30/60.IN1APP



CRI n 80 INTEGRALIS APP Code 19942.10/30/60.IN1APP



CRI m 80 INTEGRALIS APP Code 20400.30.IN1APP





## Nur White INTEGRALIS

Ernesto Gismondi ∽ 2020 WHITE INTEGRALIS

XF

### ↗ Technical Data

NUR LED - ANTHRACITE GREY									
	W	Beam	Luminous Flux	Radiant Flux	CCT				
DAY MODE	45 W	XF	2423 lm	1413 mW	5000 K				

45 W XF 2423 m 1413 mW 5000 K 90 A243310IN0APP

W         Beam         Luminous Flux         Radiant Flux         CCT           DAY MODE         80 W         XF         4739 lm         2763 mW         5000 K	NUR 1618 LED -	ANTHF	RACITE	GREY		
DAY MODE 80 W XF 4739 lm 2763 mW 5000 K		W	Beam	Luminous Flux	Radiant Flux	CCT
	DAY MODE	80 W	XF	4739 lm	2763 mW	5000 K

NUR 1618 LED -	ALUMI	INTEGRALIS					
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	80 W	XF	4739 lm	2763 mW	5000 K	90	A243210IN0

MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K IP20 ⊕

		INTEGRALIS APP	-
	CRI	Code	Ň
K	90	A243300IN0APP	6

	INTEGRALIS	
CRI	Code	
90	A243200IN0	



### WHITE INTEGRALIS

### XF

### ↗ Technical Data

NUR ACOUSTIC	GREY				
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	80 W	XF	6733 lm	4553 mW	5000 K

NUR ACOUS	IIC GREE	N					INTEGRALIS	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	80 W	XF	6733 lm	4553 mW	5000 K	90	A243770IN0	

### NUR ACOUSTIC WHITE W Beam Luminous Flux Radiant Flux CCT DAY MODE 80 W XF 6733 lm 4553 mW 5000 K

### W Beam Luminous Flux Radiant Flux CCT DAY MODE 80 W XF 6733 lm 4553 mW 5000 K

NUR ACOUSTIC BLUE

	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	80 W	XF	6733 lm	4553 mW	5000 K

# Nur Acoustic White INTEGRALIS

Ernesto Gismondi → 2020 MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K IP20 ⊕

	INTEGRALIS
CR	Code
90	A243700IN0

	INTEGRALIS	
CRI	Code	
90	A243720IN0	

	INTEGRALIS
CRI	Code
90	A243740IN0

**CRI** 90

INTEGRALIS Code A243750IN0











### WHITE INTEGRALIS

XF

### ↗ Technical Data

PIPE SUSPENS	SION					
	W	Beam	Luminous Flux	Radiant Flux	CCT	CF
DAY MODE	27 W	XF	2143 lm	1449 mW	5000 K	90

W         Beam         Luminous Flux         Radiant Flux         CCT           DAY MODE         27 W         XF         2143 lm         1449 mW         5000 K	PIPE CEILING	/WALL				
DAY MODE 27 W XF 2143 lm 1449 mW 5000 K		W	Beam	Luminous Flux	Radiant Flux	CCT
	DAY MODE	27 W	XF	2143 lm	1449 mW	5000 K

PIPE FLOOR

	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	27 W	XF	2143 lm	1449 mW	5000 K

# Pipe White INTEGRALIS

Herzog & de Meuron  $\hookrightarrow$  2020

MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K IP20 ⊕

	INTEGRALIS	
CRI	Code	
90	0672010IN0A	



INTEGRALIS Code 0671010IN0A





	INTEGRALIS	
CRI	Code	
90	0670010IN0A	





↗ Technical Data

ILIO RED					
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K

ILIO WHITE					
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K

ILIO GLOSSY	BLACK				
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K

ILIO BLACK					
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K

## llio White INTEGRALIS

Ernesto Gismondi  $\hookrightarrow 2020$ 

MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K

**IP**20 

INTEGRALIS APP Code 1640010IN0APP CRI

INTEGRALIS APP CRI Code 1640020IN0APP 90

INTEGRALIS APP Code 1640030IN0APP 90

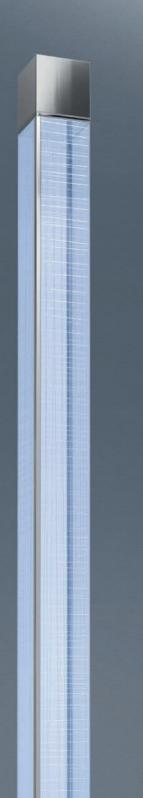
INTEGRALIS APP CRI Code 1640080IN0APP 90





90

CRI



WHITE INTEGRALIS

XF

. ... . \_ \_ \_

### ↗ Technical Data

MIMESI					
	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	42 W	XF	3887 lm	2629 mW	5000 K

# Mimesi White INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow$  2021 MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K IP20 ⊕

**CRI** 90 INTEGRALIS APP Code 1835010IN0APP



### Athena White INTEGRALIS

### Naoto Fukasawa ∽ 2021

WHITE INTEGRALIS

XF

### ↗ Technical Data

ATHENA BLACK								
	W	Beam	Luminous Flux	Radiant Flux	CCT			
DAY MODE	44 W	XF	4106 lm	2777 mW	5000 K			

### ATHENA WHITE

	W	Beam	Luminous Flux	Radiant Flux	CCT
DAY MODE	44 W	XF	4106 lm	2777 mW	5000 K

MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K IP20

 INTEGRALIS

 CRI
 Code

 90
 1833030IN0A

 INTEGRALIS

 CRI
 Code

 90
 18330201N0A



# Tolomeo table Pure INTEGRALIS

Michele De Lucchi, Giancarlo Fassina → 2021



PURE INTEGRALIS

### ↗ Technical Data

TOLOMEO TABLE*								
	W	Beam	Luminous Flux	Radiant Flux	CCT			
DAY MODE	9 W	XF	637 lm	473 mW	3700 K			

Accessories		Code
	Table base ø cm. 23 - Aluminium	A004030
$\downarrow$	Table clamp aluminium	A004100
5	Desk fixed support aluminium	A004200

\* Availability: Soon Available

MacAdam 4SDCM L80 (10K) 28500h CRI =80 CCT (K) : 3700K IP20 ⊕

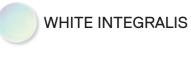
**CRI** 80 INTEGRALIS Code A004800IN2



# A.39 INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow$  2020





White Black Silver 01 04 05

↗ Technical Data

1480 mm DAY MODE

2368 mm DAY MODE

2960 mm DAY MODE

DAY MODE

1184 mm

Opal diffuser supplied separately. APP interface supplied separately. The APP driver can not be controlled by DALI dimming system and viceversa.

MacAdam 3SDCM Life L80 (10K) 55000h CRI = 90 \* Driver uses 1 DALI address

Dimmable DALI\* - INTEGRALIS

AT132.01/04/05.IN0

AT142.01/04/05.IN0

AT152.01/04/05.IN0

AT182.01/04/05.IN0

CRI Code

90

90

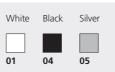
90

90

**IP**20 ≞

bd

### WHITE INTEGRALIS



Screens supplied separately. APP interface supplied separately. The APP driver can not be controlled by DALI dimming system and viceversa.

### ↗ Technical Data

A.39 CONTROLLED EMISSIO	N - 3	SUSPENSION	, CEILING	DIRECT I	EM
W		Luminous Flux	Radiant Flux	CCT	

		~~	Luitilitious Flux	Naulant Flux	CCI
1184 mm	DAY MODE	35 W	2009 lm	1359 mW	5000 K
1480 mm	DAY MODE	44 W	2511 lm	1699 mW	5000 K
2368 mm	DAY MODE	70 W	4018 lm	2718 mW	5000 K
2960 mm	DAY MODE	88 W	5021 lm	3398 mW	5000 K

### A.39 DIFFUSED EMISSION - SUSPENSION DIRECT/INDIRECT EMISSION Dimmable DALI\* - INTEGRALIS

A.39 DIFFUSED EMISSION - SUSPENSION, CEILING DIRECT EMISSION

35 W 2940 lm

70 W 5880 lm

88 W 7350 lm

44 W

3675 lm

W Luminous Flux Radiant Flux CCT

1988 mW

2485 mW

3976 mW

4970 mW

5000 K

5000 K

5000 K

5000 K

		V	N	Luminous Flux	Radiant Flux	ССТ	CRI	Code
1184 mm	DAY MODE	Direct emission	35 W	2940 lm	1988 mW	5000 K	90	AT192.01/04/05.IN0
		Indirect emission 1	17 W	2000 lm	1166 mW			
1480 mm	DAY MODE	Direct emission 4	14 W	3675 lm	2485 mW	5000 K	90	AT222.01/04/05.IN0
		Indirect emission 1	17 W	2000 lm	1166 mW			
2368 mm	DAY MODE	Direct emission 7	70 W	5880 lm	3976 mW	5000 K	90	AT232.01/04/05.IN0
		Indirect emission	34 W	4000 lm	2332 mW			
2960 mm	DAY MODE	Direct emission 8	38 W	7350 lm	4970 mW	5000 K	90	AT242.01/04/05.IN0
		Indirect emission	34 W	4000 lm	2332 mW			



A.39 CON	NTROLLED EN	/ISSION - SUS	PENSI	ON DIREC	T/INDIREC	T EMISS	ION	Dimmable DALI* - INTEGRALIS
			W	Luminous Flux	Radiant Flux	CCT	CRI	Code
1184 mm	mm DAY MODE	Direct emission	35 W	2009 lm	1359 mW	5000 K	90	AT196.01/04/05.IN0
		Indirect emission	17 W	2000 lm	1166 mW			
1480 mm	DAY MODE	Direct emission	44 W	2511 lm	2485 mW	5000 K	90	AT226.01/04/05.IN0
		Indirect emission	17 W	2000 lm	1166 mW			
2368 mm	DAY MODE	Direct emission	70 W	4018 lm	3976 mW	5000 K	90	AT236.01/04/05.IN0
		Indirect emission	34 W	4000 lm	2332 mW			
2960 mm DAY MODE		Direct emission	88 W	5021 lm	4970 mW	5000 K	90	AT246.01/04/05.IN0
		Indirect emission	34 W	4000 lm	2332 mW			

Accessories suspension		Accessories ceiling	
	Code		Code
Dimmable or APP Feeding kit including 2	AT10500	End cap kit (2 pcs)	AT894.01/04/05
suspension cables 2000 mm (5 poles)	AT10500APP	-	
Mechanical joint including 1 suspension cable	AT09500	Ceiling bracket and mechanical joint	AT09501
End cap kit 2x	AT894.01/04/05	End ceiling bracket (2 pcs)	AT09502
		BLL interface for APP with antenna	DV1054APP

Up to 40 addresses

### Opal diffuser in polycarbonate (suspension, ceiling)

Length	Code
1184 mm	AT09505IN
2368 mm	AT09506IN
2960 mm	AT09507IN
10000 mm roll	AT10000IN
25000 mm roll	AT10800IN
50000 mm roll	AT10900IN

<sup>66</sup>⇔67

	Code
Dimmable or APP Feeding kit including 2	AT10500
uspension cables 2000 mm 5 poles)	AT10500APP
Mechanical joint including 1 suspension cable	AT09500
nd cap kit 2x	AT895.01/04/05

Optic	
Length	Code
1184 mm (4 pcs)	M186700IN
1480 mm (5 pcs)	AT09900IN

MacAdam 3SDCM Life L80 (10K) 55000h CRI = 90 \*Uses 1 DALI address \*\*Uses 2 DALI addresses **IP**20 ≞

ISSION						
CRI						
90						
90						
90						
90						

### Dimmable DALI\* - INTEGRALIS Code AT136.01/04/05.IN0 AT146.01/04/05.IN0 AT156.01/04/05.IN0 AT186.01/04/05.IN0



Accessories ceiling

End cap kit (2 pcs)

Ceiling bracket and mechanical joint

End ceiling bracket (2 pcs)

BLL interface for APP with antenna Up to 40 addresses

Screen quantity to order Length 1 M186700IN 1184 mm 1482 mm 1 AT09900IN 2368 mm 2 M186700IN 2960 mm 2 AT09900IN

Code AT895.01/04/05

AT09501

AT09502

DV1054APP

	PUR	RE INTE	GRALIS			
White	Black	Silver	Opal diffuser supplied separately.	Life L70 28400h CRI = 80 CCT= 4000 K	IP20 ⊕	

### ↗ Technical Data

		W	Luminous Flux	Radiant Flux	CCT	CRI	Code
1184 mm	DAY MODE	39 W	3007 lm	4544 mW	4000 K	80	AT132.01/04/05.IN2APP
	NIGHT MODE	54 W	ND	14022 mW			
1480 mm	DAY MODE	49 W	3759 lm	5681 mW	4000 K	80	AT142.01/04/05.IN2APP
	NIGHT MODE	68 W	ND	17528 mW			
2368 mm	DAY MODE	78 W	6014 lm	9090 mW	4000 K	80	AT152.01/04/05.IN2APP
	NIGHT MODE	108 W	ND	28044 mW			
2960 mm	DAY MODE	97 W	7518 lm	11362 mW	4000 K	80	AT182.01/04/05.IN2APP
	NIGHT MODE	135 W	ND	28044 mW			



A.39 DIFF	USED EMISS	ION*- SUSPEN	ISION I	DIRECT/IN	DIRECT EN	IISSION		INTEGRALIS APP
			W	Luminous Flux	Radiant Flux	ССТ	CRI	Code
1184 mm	DAY MODE	Direct emission	39 W	3007 lm	4544 mW	4000 K	80	AT192.01/04/05.IN2APP
		Indirect emission	17 W	2000 lm				
	NIGHT MODE		54 W	ND	14022 mW			
1480 mm	DAY MODE	Direct emission	49 W	3759 lm	5681 mW	4000 K	80	AT222.01/04/05.IN2APP
		Indirect emission	17 W	2000 lm				
	NIGHT MODE		68 W	ND	17528 mW			
2368 mm	DAY MODE	Direct emission	78 W	6014 lm	9090 mW	4000 K	80	AT232.01/04/05.IN2APP
		Indirect emission	34 W	4000 lm				
	NIGHT MODE		108 W	ND	28044 mW			
2960 mm	960 mm DAY MODE	Direct emission	97 W	7518 lm	11362 mW	4000 K	80	AT242.01/04/05.IN2APP
		Indirect emission	34 W	4000 lm				
	NIGHT MODE		135 W	ND	28044 mW			

Accessories suspension		Accessories ceiling	
	Code		Code
Undimmable Feeding kit including 2 suspension cables 2000 mm (3 poles)	AT10400	End cap kit (2 pcs)	AT894.01/04/05
Mechanical joint including 1 suspension cable	AT09500	Ceiling bracket and mechanical joint	AT09501
End cap kit 2x	AT894.01/04/05	End ceiling bracket (2 pcs)	AT09502

Opal diffuser in	methacrylate	(suspension,	ceiling)

Length	Code
1184 mm	AT09505IN
2368 mm	AT09506IN
2960 mm	AT09507IN
10000 mm roll	AT10000IN

\* Availability: Soon Available



### ↗ Technical Data

		W	Luminous Flux <sup>1</sup>	Radiant Flux <sup>1</sup>	CCT	CRI	Code
1184 mm	DAY MODE	39 W	1535 lm	2144 mW	4000 K	80	AT136.01/04/05.IN2APP
	NIGHT MODE	54 W	ND	6660 mW			
1480 mm	DAY MODE	49 W	1919 lm	2680 mW	4000 K	80	AT146.01/04/05.IN2APP
	NIGHT MODE	68 W	ND	8325 mW			
2368 mm	DAY MODE	78 W	3070 lm	4288 mW	4000 K	80	AT156.01/04/05.IN2APP
	NIGHT MODE	108 W	ND	13320 mW			
2960 mm	DAY MODE	97 W	3838 lm	5360 mW	4000 K	80	AT186.01/04/05.IN2APP
	NIGHT MODE	135 W	ND	16650 mW			

<sup>1</sup> Preliminary data.

			W	Luminous Flux <sup>1</sup>	Radiant Flux¹	CCT	CRI	Code	
184 mm	DAY MODE	Direct emission	39 W	1535 lm	2144 mW	4000 K	80	AT196.01/04/05.IN2APP	_
		Indirect emission	17 W	2000 lm					
	NIGHT MODE		54 W	ND	6660 mW				
480 mm	DAY MODE	Direct emission	49 W	1919 lm	2680 mW	4000 K	80	AT226.01/04/05.IN2APP	
		Indirect emission	17 W	2000 lm					
	NIGHT MODE		68 W	ND	8325 mW				
368 mm	DAY MODE	Direct emission	78 W	3070 lm	4288 mW	4000 K	80	AT236.01/04/05.IN2APP	
		Indirect emission	34 W	4000 lm					
	NIGHT MODE		108 W	ND	13320 mW				
960 mm	DAY MODE	Direct emission	97 W	3838 lm	5360 mW	4000 K	80	AT246.01/04/05.IN2APP	
		Indirect emission	34 W	4000 lm					
	NIGHT MODE		135 W	ND	16650 mW				

	Code
Undimmable Feeding kit including 2 suspension cables 2000 mm (3 poles)	AT10400
Mechanical joint including 1 suspension cable	AT09500

Optic**	
Length	Code
1184 mm (4 pcs)	M186700IN2
1480 mm (5 pcs)	AT09900IN2

\* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required.

\*\* Availability: Soon Available

<sup>68</sup>⇔69

Life L70 28400h CRI = 80 CCT= 4000 K



Accessories ceiling

End cap kit (2 pcs)

Ceiling bracket and mechanical joint

End ceiling bracket (2 pcs)

Code AT895.01/04/05

AT09501

AT09502

Length	Screen quantity to order
1184 mm	1 M186700IN2
1482 mm	1 AT09900IN2
2368 mm	2 M186700IN2
2960 mm	2 AT09900IN2

### WHITE INTEGRALIS



Screens supplied separately. APP interface supplied separately. The APP driver can not be controlled by DALI dimming system and viceversa.

### ↗ Technical Data

A.39 REFRACTIVE EMISS	SION	- SUSPENSION,	CEILING D	IRECT EMI
	W	Luminous Flux	Radiant Flux	CCT

		VV	Luminous Flux	Radiant Flux	CCI
1184 mm	DAY MODE	40 W	5330 lm	3167 mW	5000 K
1480 mm	DAY MODE	50 W	6662 lm	3960 mW	5000 K
2368 mm	DAY MODE	80 W	10660 lm	6334 mW	5000 K
2960 mm	DAY MODE	90 W	11993 lm	7126 mW	5000 K

A.39 REF	RACTIVE EM	IVE EMISSION - SUSPENSION DIRECT/INDIRECT EMISSION*					Undimmable	DALI	
			W	Luminous Flux	Radiant Flux	CCT	CRI	Code	Code
1184 mm	DAY MODE	Direct emission	35 W	2009 lm	1359 mW	5000 K	90	BZ036.01/04/05.IN0	BZ048.01/04/05.IN0
		Indirect emission	17 W	2000 lm	1166 mW				
1480 mm	DAY MODE	Direct emission	50 W	6662 lm	3960 mW	5000 K	90	BZ039.01/04/05.IN0	BZ051.01/04/05.IN0
		Indirect emission	17 W	2000 lm	1166 mW				
2368 mm	DAY MODE	Direct emission	80 W	10660 lm	6334 mW	5000 K	90	BZ042.01/04/05.IN0	BZ054.01/04/05.IN0
		Indirect emission	34 W	4000 lm	2332 mW				
2960 mm	DAY MODE	Direct emission	88 W	5021 lm	4970 mW	5000 K	90	BZ045.01/04/05.IN0	BZ057.01/04/05.IN0
		Indirect emission	34 W	4000 lm	2332 mW				

Accessories suspension		Accessories ceiling	
	Code		Cod
Undimmable Feeding kit including 2 suspension cables 2000 mm (3 poles)	AT10400	End cap kit (2 pcs)	BZO
Dimmable or APP Feeding kit including 2	AT10500	Ceiling bracket and mechanical joint	AT0
suspension cables 2000h mm (5 poles)	AT10500APP		
Mechanical joint including 1 suspension cable	AT09500	End ceiling bracket (2 pcs)	ATO

End cap kit 2x

BZ058. 01/04/05

Louvers	
Length	Code
1184 mm	BZ059. 01/04
1482 mm	BZ060. 01/04
2368 mm	BZ061. 01/04
2960 mm	BZ062. 01/04

## A.39 Refractive White INTEGRALIS

Carlotta de Bevilacqua ⇔ 2021

MacAdam 3SDCM Life L80 (10K) 55000h CRI = 90

**IP**20 ٢

SION*	U
CRI	Co
90	BZ

ndimmable ode BZ012.01/04/05.IN0 BZ024.01/04/05.IN0 BZ015.01/04/05.INO BZ027.01/04/05.INO Z018.01/04/05.INO BZ030.01/04/05.INO Z021.01/04/05.IN0 BZ033.01/04/05.IN0

DALI Code





BLL interface for APP with antenna Up to 40 addresses

ode **Z058.** 01/04/05

T09501

T09502

DV1054APF



### WHITE INTEGRALIS

XF



Louvres supplied separately. 220/240Vac 50/60Hz electroni ballast included.

#### ↗ Technical Data

A.39 600X600 REFRACTIVE RECESSED*						
	W	Luminous Flux	Radiant Flux	CCT		
DAY MODE	30 W	4000 lm	2332 mW	5000 K		

A.39 600X600 REFRACTIVE CEILING*					
	W	Luminous Flux	Radiant Flux	CCT	
DAY MODE	30 W	4000 lm	2332 mW	5000 K	

### A.39 1200X300 REFRACTIVE RECESSED\*

	W	Luminous Flux	Radiant Flux	CCT
DAY MODE	40 W	5330 lm	3167 mW	5000 K

A.39 1200X300 REFRACTIVE CEILING*				
	W	Luminous Flux	Radiant Flux	CCT
DAY MODE	40 W	5330 lm	3167 mW	5000 K

## A.39 Refractive White INTEGRALIS

Carlotta de Bevilacqua → 2021

Recessed frame for installation on plasterboard
false ceiling. A.39 1200x300 Refractive

false ceiling. A.39 600x600 Refractive

FRAME FOR RECESSED VERSION

Recessed frame for installation on plasterboard

Code M160600 CD910000

#### LOUVRES

		Code
A.39 600x600 Refractive	4X (6pcs)	BZ063.01/04
A.39 1200x300 Refractive	4X (8pcs)	BZ059.01/04

\* Availability: Soon Available

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MacAdam 3SDCM L80 (10K) 55000h CRI =90 CCT (K) : 5000K IP20 ⊕

	INTEGRALIS
CRI	Code
90	CD0031.01/04.IN0



INTEGRALIS	
Code	
CD1031.01/04.IN0	
	Code

INTEGRALIS

CD0131.01/04.IN0

Code



**CRI** 90

CRI

90

INTEGRALIS <u>Code</u> CD1131.01/04.IN0









220/240Vac 50/60Hz electronic ballast included.

#### ↗ Technical Data

A.39 600X600 DIFFUSED RECESSED*								
	W	Luminous Flux	Radiant Flux	CCT				
DAY MODE	39 W	3007 lm	4544 mW	4000 K				
NIGHT MODE	54 W	ND	14022 mW					

## A.39 600x600 Diffused **Pure INTEGRALIS**

Carlotta de Bevilacqua ↔ 2021

> \* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required. \* Availability: Soon Available

Life L70 28400h CRI = 80 CCT= 4000 K

**IP**20 ٢

CRI 80

INTEGRALIS APP Code AT90001IN2APP





### Tagora 570 **Pure INTEGRALIS**

S. / R. Cornelissen ⇔ 2021

PURE INTEGRALIS

Orange Beige Blue Green Grey Black White Black Black White 3. 4. 1. 2. 6.

220/240Vac 50/60Hz electronic ballast included.

#### ↗ Technical Data

TAGORA 570* SUSPENSION								
	W	Luminous Flux	Radiant Flux	CCT				
DAY MODE	95 W	3232 lm	3603 mW	4000 K				
NIGHT MODE	103 W	ND	10843 mW					

#### TAGORA 570\* SUSPENSION DIRECT/INDIRECT EMISSION

		W	Luminous Flux	Radiant Flux	CCT
DAY MODE	Direct emission	95 W	3232 lm	3603 mW	4000 K
	Indirect emission	14 W	1200 lm		
NIGHT MODE		103 W	ND	10843 mW	1

#### TAGORA 570\* CEILING

	W	Luminous Flux	Radiant Flux	CCT
DAY MODE	95 W	3232 lm	3603 mW	4000 K
NIGHT MODE	103 W	ND	10843 mW	

\* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required.

Life L70 28400h CRI = 80 CCT= 4000 K

**IP**40 ⊕ 960°

CRI 80

INTEGRALIS APP Code M2493.1/2/3/4/6.1IN2APP



CRI

INTEGRALIS APP Code

80

CRI

80

M2403.1/2/3/4/6.1IN2APP

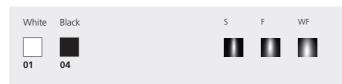
INTEGRALIS APP Code M2483.1/2/3/4/6.1IN2APP



## Vector White INTEGRALIS

Carlotta de Bevilacqua → 2021

### WHITE INTEGRALIS



#### VECTOR 55 TRACK 230V

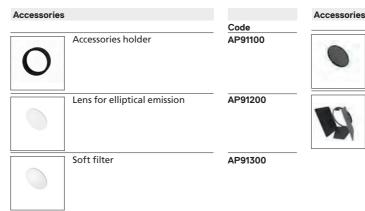
	W	Beam	Luminous Flux	Radiant Flux	ССТ	CRI	Undimmable - INTEGRALIS Code
DAY MODE	25 W	S 16°	1718 lm	1162 mW	5000 K	90	AN101.01/04.IN0
		F 22°	1718 lm	1162 mW			AN102.01/04.IN0
		WF 32°	1718 lm	1162 mW			AN103.01/04.IN0
							DALI - INTEGRALIS
							Code
DAY MODE	25 W	S 16°	1718 lm	1162 mW	5000 K	90	AN106.01/04.IN0
		F 22°	1718 lm	1162 mW			AN107.01/04.IN0
		WF 32°	1718 lm	1162 mW			AN108.01/04.IN0

VECTOR 55 MAGNETIC

						DALI - INTEGRALIS
W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
25 W	S 16°	1718 lm	1162 mW	5000 K	90	AP101.01/04.IN0
	F 22°	1718 lm	1162 mW			AP102.01/04.IN0
	WF 32°	1718 lm	1162 mW			AP103.01/04.IN0
		25 W S 16° F 22°	25 W S 16° 1718 lm	25 W S 16° 1718 lm 1162 mW F 22° 1718 lm 1162 mW	25 W S 16° 1718 lm 1162 mW 5000 K F 22° 1718 lm 1162 mW	25 W S 16° 1718 lm 1162 mW 5000 K 90 F 22° 1718 lm 1162 mW

#### VECTOR 55 PENDANT MAGNETIC

							DALI - INTEGRALIS	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	25 W	S 16°	1718 lm	1162 mW	5000 K	90	AP301.01/04.IN0	
		F 22°	1718 lm	1162 mW			AP302.01/04.IN0	
		WF 32°	1718 lm	1162 mW			AP303.01/04.IN0	



MacAdam 3SDCM Life L80 (10K) 55000h CRI 90

**IP**20





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ories			
		Color	Code
)	Anti-dazzle louvre		AP91400
	Adjustable dowsers	•	AP91500



### Vector Violet INTEGRALIS

Carlotta de Bevilacqua ⇔ 2021



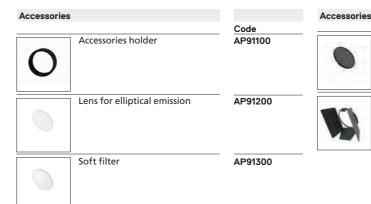
White	Black	S	F	WF
01	04	n	П	п

#### VECTOR 55 TRACK 230V

	W	Beam	Radiant Flux
NIGHT MODE	21 W	WF 30°	4087 mW

#### VECTOR 55 MAGNETIC

	W	Beam	Radiant Flux	
NIGHT MODE	21 W	WF 30°	4087 mW	



\* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required.

\* Availability: Soon Available

Life L70 50000h

**IP**20

able - INTEGRALIS 1/04**.IN4** 

DALI - INTEGRALIS Code AN108.01/04.IN4



DALI - INTEGRALIS Code AP103.01/04.IN4



Color Code Anti-dazzle louvre AP91400 Adjustable dowsers AP91500 



### ↗ Technical Data

SHARP SMD

W	Bean	n	Radiant Flux	
24 W	F	20°	6810 mW	
	WF	36°	6810 mW	
	XF	52°	6810 mW	



## Sharp Violet INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow$  2021



4X (1pc)

Code AF952.01/04

 \* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required.
 \* Availability: Soon Available

Louvres supplied separately. 220/240Vac 50/60Hz electronic ballast included. Life L70 50000h

**IP**20

Undimmable - INTEGRALIS Code AF463.01/04/05.IN4 AF464.01/04/05.IN4 AF465.01/04/05.IN4



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#### ↗ Technical Data

#### SHARP RECESSED TRIMLESS

		ILESS 4X*	De die act Elsas	INTEGRALIS	
W	Bean	n	Radiant Flux	Code	
11 W	F	20°	3495 mW	AF60600IN4	
	WF	36°	3495 mW	AF60700IN4	
	XF	52°	3495 mW	AF60800IN4	



**IP**20

LOUVRES		Code
-	4X (1pc)	AF952.01/04

VIOLET INTEGRALIS

White Black

01 04

SHARI	P TRIM	/LESS 8X*		INTEGRALIS	
W	Bean	Beam Radiant Flux		Code	
22 W	F	20°	6810 mW	AF65300IN4	
	WF	36°	6810 mW	AF65400IN4	
	XF	52°	6810 mW	AF65500IN4	



DI	RI	V	E	R	

DRIVER								
	Vac	Lmm	Wmm	Hmm	Optic units	Min. ceiling depht (mm)		Code
20 W 700mA	220-240	125	38	23	4x	60	Undimmable	DV1081
32 W 700mA	220-240	129,5	42	30	8x	80	Undimmable	DV1004
25 W 700mA	220-240	164	38	24,5	4x	150 / 130 / 80 / 60	DALI <sup>1</sup>	DV1003
32 W 700mA	220-240	156	53	26	4x / 8x	90	DALI <sup>1</sup>	DV1063
48 W 700mA	220-240	125	82	29	4x / 8x	100	DALI <sup>1</sup>	M077401
37 W 700mA	220-240	124	79	22	4x / 8x	80	Artemide App	DV1082IN4APP

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<sup>1</sup>DALI versions can be used ONLY in junction with presence detector and BMS. BMS have to send a switch-off command in case presence is detected.

### SHARP RECESSED TRIM

P TRIN	1 4X*		INTEGRALIS
Bear	n	Radiant Flux	Code
F	20°	3495 mW	AF106.01/04/05.IN4
WF	36°	3495 mW	AF107.01/04/05.IN4
XF	52°	3495 mW	AF108.01/04/05.IN4
	Bear F WF	WF 36°	Beam         Radiant Flux           F         20°         3495 mW           WF         36°         3495 mW



W	Bear	n	Radiant Flux	INTEGRALIS Code	
22 W	F	20°	6810 mW	AF153.01/04/05.IN4	20
	WF	36°	6810 mW	AF154.01/04/05.IN4	
	XF	52°	6810 mW	AF155.01/04/05.IN4	

\* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required.

\* Availability: Soon Available

#### FRAME FOR RECESSED INSTALLATION

		Code
	4X	AF90200
and the second se	8X	AF90300
And and a second s		

## UVC • **INTEGRALIS**

#### Shorter wavelengths UV irradiation

Ultraviolet rays (100-400 nm) are a type of naturally occurring radiation generated by the sun but only partially found on the earth due to the ozone layer in the atmosphere acting as a filter with a percentage of attenuation up to 100% for wavelengths shorter than UV-C.

By ultraviolet rays we mean electromagnetic waves which are divided into three main wavelength ranges.

- UV-A (315-400 nm) with tanning properties;
- UV-B (280-315 nm) with therapeutic and vitamin synthesis properties "D":
- UV-C (100-280 nm) with germicidal properties

UV-C rays have the strongest germicidal effect and are most effective at a wavelength of 265 nm.

The germicidal effect of UV-C radiation extends to viruses, bacteria, spores, mould fungi and mites. It is mainly due to the destructive effect exerted by UV-C radiation on their RNA / DNA: in fact, UV-C damages their genetic makeup, preventing their replication.

Viruses, bacteria, spores, fungi, moulds and mites are all sensitive, and can therefore be eliminated with UV-C rays even if different doses of energy are used.

Environmental sustainability

UV rays are environmentally sustainable.

Where it is not possible to eliminate the use of chemical disinfectants (food, pharmaceutical, health sectors etc.) the use of ultraviolet rays in disinfection allows a reduction in the quantities of use in favour of greater respect for the environment, while maintaining or improving the degree of disinfection of surfaces and spaces.

UV-C ray devices can be installed in production and non-production environments and programmed according to cycles capable of ensuring ideal conditions from a hygienic point of view, while eliminating the time and physical presence constraints typical of chemical-based systems that require human intervention. By way of example, the sanitisation of lifts and toilets which can be automated in the absence of people and with a controlled environment.

and water treatment systems.

All UV-C sources available today, whether they are mercury tubes or LEDs, are subject to a deterioration in performance over time; the expected useful technical lifespan is around 8-10,000 hours.

Environmental chemical pollution is inevitable when using normal disinfectants. There is also the risk that can occur from the direct inhalation of the vapours or from the ingestion of foodstuffs contaminated by contact with these same chemical disinfectants.

Currently UV-C rays are used on a daily basis in various industries including the food and pharmaceutical sectors, hospitals, air conditioning

#### Human safety

UV-C radiation can be safely used to disinfect surfaces or objects in a closed environment in the absence of occupants (humans, animals or plants) where the UV light does not escape outside.

Subject to exceptions, the transparency of materials to visible light does not coincide with transparency at UV-C wavelengths: ordinary glass and transparent plastics are opaque to UV-C.

Systems with UV-C sources installed on the wall or ceiling that generate UV-C light without protecting the user from exposure, represent a potential hazard depending on the wavelength, intensity and length of exposure, in view of the fact that UV-C radiation itself cannot be perceived by humans as it does not give out any thermal or other sensation (at least until the damage is manifested) and is not visible. In fact, as documented in literature, UV-C radiation in the 250 nm 280 nm range is capable of causing serious damage to the eyes and skin. In addition, UV-C radiation is a proven carcinogen for humans for ocular and skin cancers.

The limit values set by current legislation in relation to the use of germicidal lamps with UV-C 180-250 nm emission have recently been confirmed by the SCHEER (Scientific Committee on Environmental Health and Emerging Risks) in relation to the evidence that accidental exposure to UV-C generated by germicidal lamps in this wavelength range can cause serious skin damage, burns and severe forms of photokeratitis and photoconjunctivitis to subjects unknowingly exposed even for short periods (SCHEER - Health effects of UV-C lamps 2017).

Therefore, to prevent damage from accidental exposure, it is essential that the sources are turned on only if the presence of people, animals or plants in the irradiation area is excluded.

Since this is an application to be carried out in the absence of people, the difference between a safe, quality project and an application that is dangerous or harmful to humans and other living beings arises from knowledge of the subject and by compliance with the current regulations in force on this subject, as well as in the implementation of multiple and various levels of safety to guarantee the correct use of the technology which must be properly integrated in the plant design of the environment.

Artemide proposes the use of integrated and non-integrated UV-C systems, that is, equipped with double emission (UV-C and visible light) or UV-C only.

Artemide offers devices with safety sensors, which must be further combined and integrated with the safety system of the spaces in which the product is in turn installed and which involves the installer and the space manager.

Surface sanification and UV materials resistance

Air sanification

humans.

In the presence of an air conditioning system, when contaminants enter the air treatment plant (or AHU) and the channels that distribute it, the system itself, being dark and humid, becomes a fertile ground for their growth and multiplication, rendering the air that we breathe dangerous.

Irradiating the air inside the centralised system or setting up an air purifier complete with UV lamps reduces the chances that these pollutants can proliferate or be dispersed into the environment.

When a UV-C source is activated, a marked reduction in the microbes present in the ambient air and on the surfaces reached by the UV rays can be obtained, depending on the energy emitted.

Even where the use of chemical disinfectants is foreseen, irradiating the surfaces avoiding shaded areas (in the absence of people) with appropriate fast cycles can avoid the rapid recontamination of the surfaces and keep them in constant optimal conditions from a microbiological point of view.

An important aspect that should not be underestimated is the UV-C resistance of the finishing materials. Since these are very energetic wavelengths, the materials subjected to this type of radiation can show premature aging of an aesthetic and / or mechanical nature. The materials that have proved to be the most resistant are metals and ceramics, while plastics (unless properly treated), fabrics, wood and other materials of an organic nature have shown poor resistance to UV-C.

This is a fundamental variable to consider in the design phase, which will guide the project towards the choice of a specific technology not only for its antimicrobial effectiveness but also for its sustainability as dictated by the expected duration of an architectural space.

Viruses, bacteria and moulds, animal residues, mites, and pollen are among the main causes of dangerous infections and allergies. Each of these contaminants disperses in a different way.

Some, such as mites, spores and moulds, are continuously transported by the air, others like bacteria and viruses, "cling" to solid particles, such as the spores themselves or droplets of moisture and are breathed in by

To integrate the INTEGRALIS® technology, which acts by irradiating surfaces with appropriate wavelengths, Artemide is also developing a complementary system for air sanitisation.



Driver 150mA SELV. The 48 Vdc SELV power supply powers both the central white light channel and the UV-C channel. Consider the sum of the powers for the sizing of the power supply.

#### **DUAL FUNCTION LINE RECESSED\***

	W	Flux	CCT	Radiant Flux
DAY MODE	20 W	1400 lm	3000 K	
NIGHT MODE	12 W	-	λpeak: 274nm	138mW
(UV-C Emiiter)				



## **Dual Function Line UVC INTEGRALIS**

Carlotta de Bevilacqua, Fabio Zanola ⇔ 2021

#### DRIVER

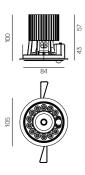
	Vdc	
50 W	48	
100 W	48	
200 W	48	

\* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required. \* Availability: Soon Available

White Light MacAdam 3SDCM Life L80 (9K) 50000h CRI = 90

	on demand	
X	Code	
	INTEGRALIS	





Code	
on demand	
on demand	
on demand	



## Sharp **UVC INTEGRALIS**

Carlotta de Bevilacqua ⇔ 2021

UVC INTEGRALIS
OVC INTEGRALIS

#### ↗ Technical Data

SHARP TRIMLESS 4X*           W         Beam           3 W         XF         52°           SHARP TRIMLESS 8X*           W         Beam           6 W         XF         52°           SHARP TRIMLESS 8X*           W         Beam           6 W         XF         52°           SHARP RECESSED TRI           SHARP TRIM 4X*           W         Beam           3 W         XF         52°	Radiant Flux 28 mW Radiant Flux 56 mW	INTEGRALIS Code on demand INTEGRALIS Code on demand	
W         Beam           3 W         XF         52°           SHARP         TRIMLESS 8X*           W         Beam           6 W         XF         52°           SHARP         XF         52°           SHARP         RECESSED TRI           SHARP         TRIM 4X*           W         Beam	Radiant Flux 28 mW Radiant Flux 56 mW	Code on demand INTEGRALIS Code on demand	
SHARP TRIMLESS 8X* W Beam 6 W XF 52° SHARP RECESSED TRI SHARP TRIM 4X* W Beam	Radiant Flux 56 mW	on demand INTEGRALIS Code on demand	
SHARP TRIMLESS 8X* W Beam 6 W XF 52° SHARP RECESSED TRI SHARP TRIM 4X* W Beam	Radiant Flux 56 mW	INTEGRALIS Code on demand	
W         Beam           6 W         XF         52°           SHARP         RECESSED TRI           SHARP         TRIM 4X*           W         Beam	Radiant Flux 56 mW	on demand	
6 W XF 52° SHARP RECESSED TRI SHARP TRIM 4X* W Beam	56 mW	on demand	•
SHARP RECESSED TRI SHARP TRIM 4X* W Beam			\$
SHARP TRIM 4X* W Beam	М		\$
SHARP TRIM 4X* W Beam	М		₩
	Radiant Flux 28 mW	Code on demand	
SHARP TRIM 8X*		INTEGRALIS	\$
W Beam	Radiant Flux	Code	
6 W XF 52°	56 mW	on demand	

SHARP			INTEGRALIS	
W	Beam	Radiant Flux	Code	
3 W	XF 52°	28 mW	on demand	
SHARP	P TRIMLESS 8X*		INTEGRALIS	۵
W	Beam	Radiant Flux	Code	
6 W	XF 52°	56 mW	on demand	
	RECESSED TRIM			۰
SHARP W	TRIM 4X* Beam	Radiant Flux	INTEGRALIS Code	•
	TRIM 4X*			
SHARP W 3 W	TRIM 4X* Beam XF 52°	Radiant Flux	Code on demand	
SHARP W 3 W	TRIM 4X*           Beam           XF         52°           TRIM 8X*	Radiant Flux 28 mW	Code on demand	
SHARP W 3 W	TRIM 4X* Beam XF 52°	Radiant Flux	Code on demand	

	P TRIMLESS 4X*		INTEGRALIS	
N	Beam	Radiant Flux	Code	
3 W	XF 52°	28 mW	on demand	6
SHARP V SW	P TRIMLESS 8X* Beam XF 52°	Radiant Flux 56 mW	INTEGRALIS Code on demand	*
				۵
SHARP	P RECESSED TRIM		INTEGRALIS	
		Radiant Flux 28 mW	INTEGRALIS Code on demand	
SHARP N 3 W	P TRIM 4X* Beam XF 52°	Radiant Flux	Code on demand	
SHARP N 3 W	P TRIM 4X* Beam	Radiant Flux	Code	

SHARP	TRIVILE33 4A		INTEGRALIS	
W	Beam	Radiant Flux	Code	
3 W	XF 52°	28 mW	on demand	
SHARF W	P TRIMLESS 8X* Beam	Radiant Flux	INTEGRALIS Code	۵
6 W	XF 52°	56 mW	on demand	
	P RECESSED TRIM		INTEGRALIS	۵
	P RECESSED TRIM P TRIM 4X* Beam XF 52°	Radiant Flux 28 mW	INTEGRALIS Code on demand	÷
SHARP W	P TRIM 4X* Beam	Radiant Flux	Code	÷
SHARP W 3 W	P TRIM 4X* Beam XF 52°	Radiant Flux	Code on demand	
SHARP W 3 W	P TRIM 4X* Beam XF 52°	Radiant Flux 28 mW	Code on demand	
SHARP W 3 W	P TRIM 4X* Beam XF 52°	Radiant Flux	Code on demand	



4X (1pc)





\* For professional use only - read the instruction sheet carefully. Installation must only be performed by qualified personnel. Coordination with environmental safety systems and sensors required. \* Availability: Soon Available

Driver 700mA SELV and louvres supplied separately.

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#### FRAME FOR RECESSED INSTALLATION

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3	*.*	2	2	Ξ	
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		1	1	-	

4X	
8X	

Code AF90200 AF90300

## **INTEGRALIS®** products matrix

	llio	Athena	Mimesi	Pipe family	Nur family	Nur Acoustic	Discovery family	Tolomeo table	Tagora 570	A.39	A.39 600x600 Diffused	A.39 Refractive	Vector 55	Sharp	Dual Function Line
							0						<b>⇒</b> ∦		
WHITE															
WHITE - VIOLE	Т														
PURE															
VIOLET															
UVC															







### **INTEGRALIS®** follows the rhythm of life in every space





















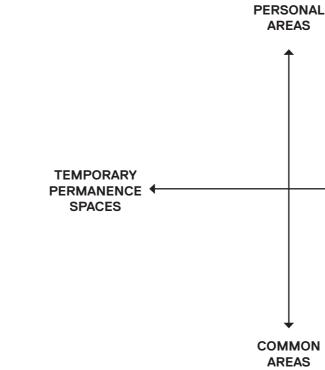








INTEGRALIS<sup>®</sup> follows the rhythm of life. It is transversal in applications and support the human activities in common or personal spaces according to different people permanences.



# Hospitality **Health & Hospital** Workplaces & Education Wellness Retail Sport Connectivity Transportation

STATIC PERMANENCE SPACES

Hospitality \_ Restaurant, kitchen area \*



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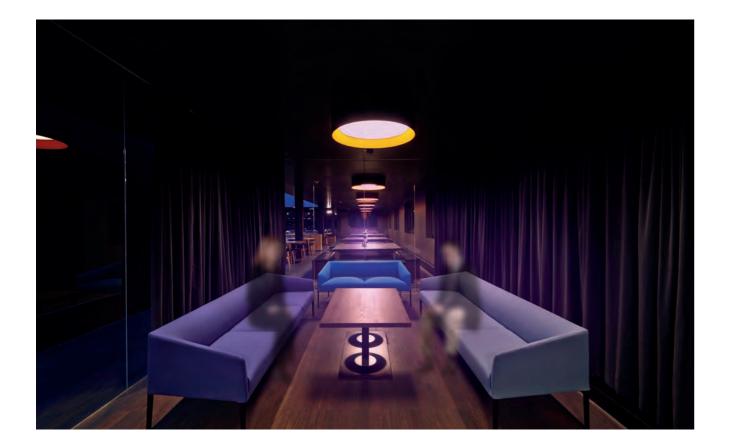
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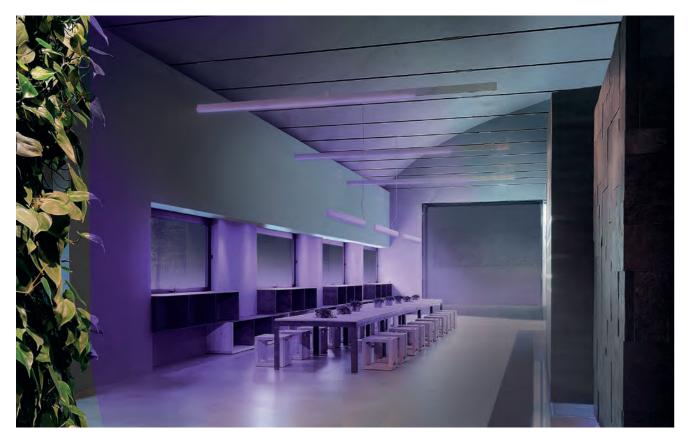
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French 1

Hospitality \_ Hall, lounge, restaurant, kitchen area, public restroom, private room & bathroom \*  $^{102}$  c> 103







Hospitality  $\_$  Hall, lounge, restaurant, kitchen area, public restroom, private room & bathroom  $^*$ 

Marine Marine



Health & Hospital \_ Hall, common areas private room & bathroom, wellness area

-

The second

<sup>106</sup> ← 107

nd bar, medichal area & gym, public restroom,

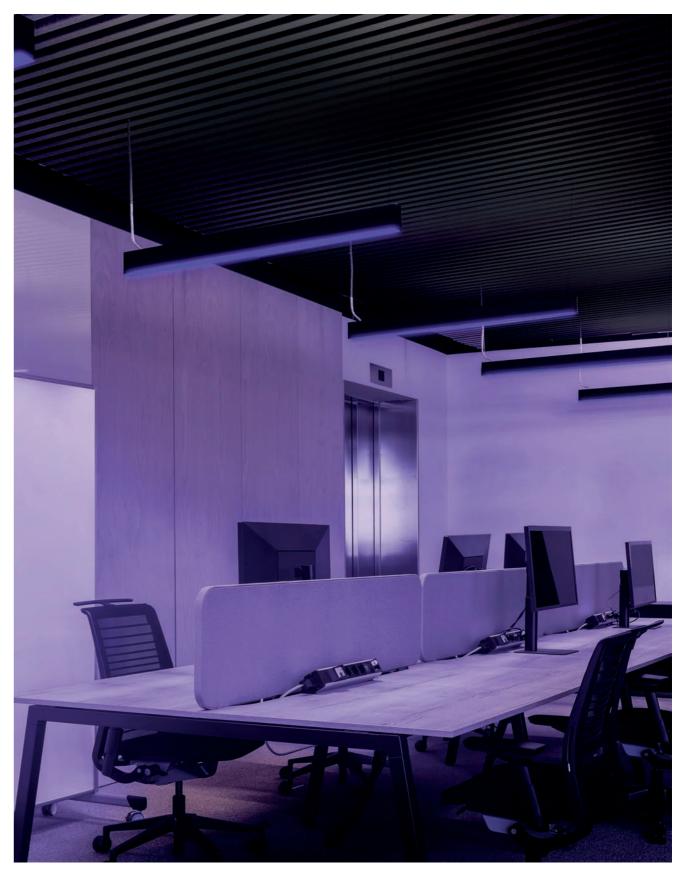
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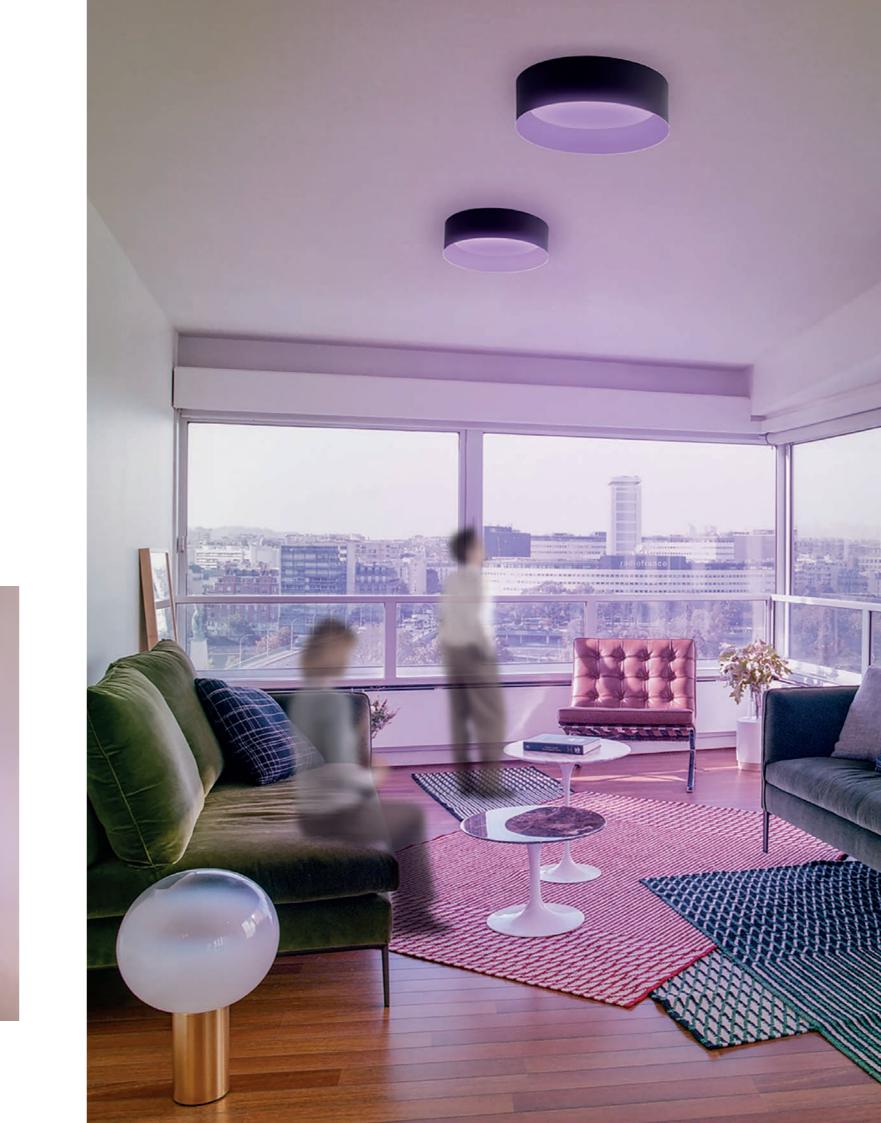


Workplace & Education \_ Hall, amenity space, cantine, open space area, private office, phone-booth, public restroom, playroom, reading room & library, classroom \*



Residential and private spaces  $\_$  Living room, kitchen, bathroom, bedroom  $\ast$ 





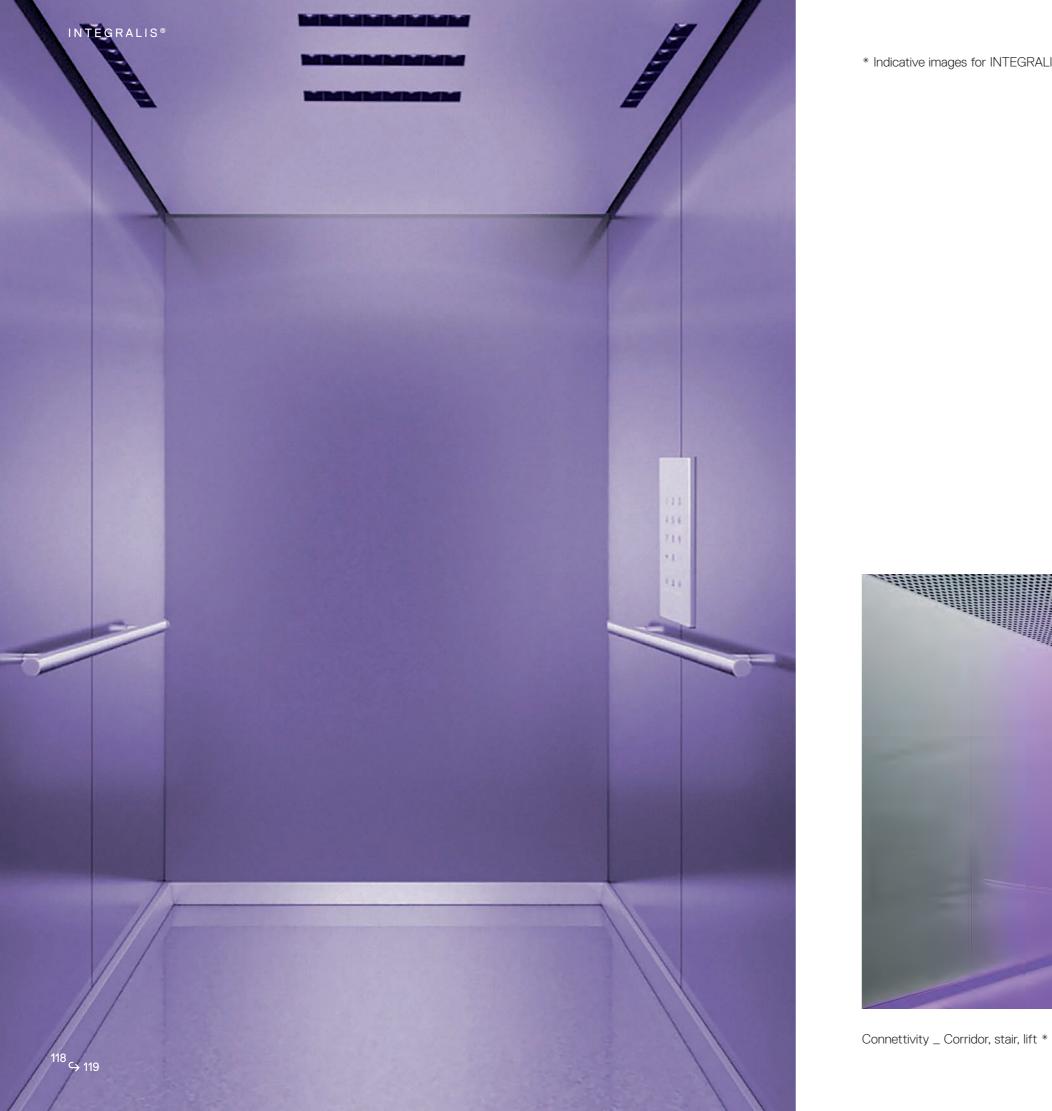
Retail \_ Stage area, counter area, changing room, lift, public bathroom \* 4





Sport  $\_$  Hall, common area, bar, gym area, classroom area, changing room, public restroom \*





\* Indicative images for INTEGRALIS® application, not references of installed projects.





### **INTEGRALIS®** management

INTEGRALIS® is Artemide App compatible. The degree of effectiveness and the duration of use can also be individually controlled easily using Artemide App.

Artemide App

Artemide App for

**INTEGRALIS®** 

Artemide designs products and services to allow a more advanced and flexible use thereof. Artemide App is a user-friendly and intuitive interface that can be used as a daily tool for private use and as well as a project variable for workplace and retail, public and urban spaces. Man is the centre of the project, the orchestra director of his light concerto.

Artemide App is an intelligent tool that allows you to easily enter spaces, even unexpectedly. In fact, it does not require any specific wiring, the dialogue between the fixtures and the application takes place through the wireless device present in the lamp. This represents an important saving of time and costs during installation and the freedom to fit into any space, even at the last minute with a complete and dynamic lighting project.

The control with Artemide App, thanks to a simple and intuitive interface, facilitates the user in choosing the most suitable control mode according to the chosen INTEGRALIS® technology.

detected by the sensor.



The integration with presence sensors and wireless switches ensures the total safety for humans especially in "Antimicrobial action" (NIGHT MODE and UV-C).

In fact, this is immediately deactivated in case of human presence

To see more details about the Artemide Safe Management see the corresponding section in the INTEGRALIS® technical addendum.

Artemide App user interfaces for different INTEGRALIS® technologies



In PURE and VIOLET INTEGRALIS the two activable modes are: MICROBIAL GROWTH CONTROL and ANTIMICROBIAL ACTIVITY.

Light intensity can be adjusted (0-100% in violet, 10-100% in pure INTEGRALIS) in MICROBIAL GROWTH CONTROL only.

### WHITE-VIOLET INTEGRALIS



In WHITE-VIOLET INTEGRALIS the two activable antimicrobial modes are: MICROBIAL GROWTH CONTROL and STRONGER MICROBIAL GROWTH CONTROL. Light intensity can be adjusted in 0-100% in MICROBIAL GROWTH CONTROL only.

Furthermore, the white light only is dimmable alone (0-100%).





In WHITE INTEGRALIS the activable modes is MICROBIAL GROWTH CONTROL. Light intensity can be adjusted 0-100%.

Artemide developed internally the specific interface for each INTEGRALIS® technology.

These same icons also play the role of buttons acting as recalling of the corresponding setting.

An alert icon, at the top right, also informs the end-user about the possible human presence during the specific function, thus increasing his awareness in using the lighting device in total safety.

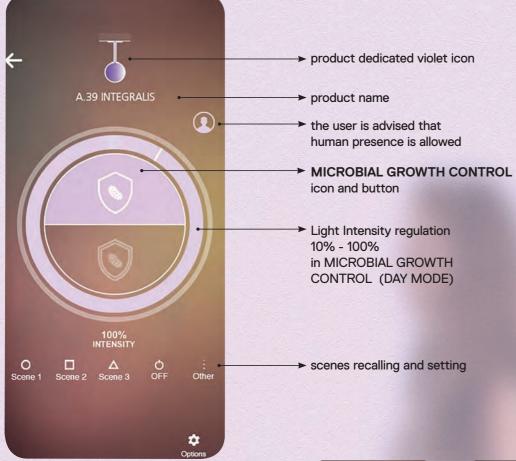
Consistently with the traditional controls of the Artemide App, through the four buttons at the bottom it is possible to recall three different scenes with different dimming levels of both white and antimicrobial light, up to the total switching off of each light performance through the OFF button.



Depending on the antimicrobial action chosen in real-time or programmed through the scheduling function, the interface displays specific icons so as to immediately communicate to the user the action that the lamp is carrying out.

Artemide APP user interfaces for PURE INTEGRALIS® Commands explanation

PURE INTEGRALIS



Light Intensity regulation 50% and 10% (minimum) in MICROBIAL GROWTH CONTROL (DAY MODE)

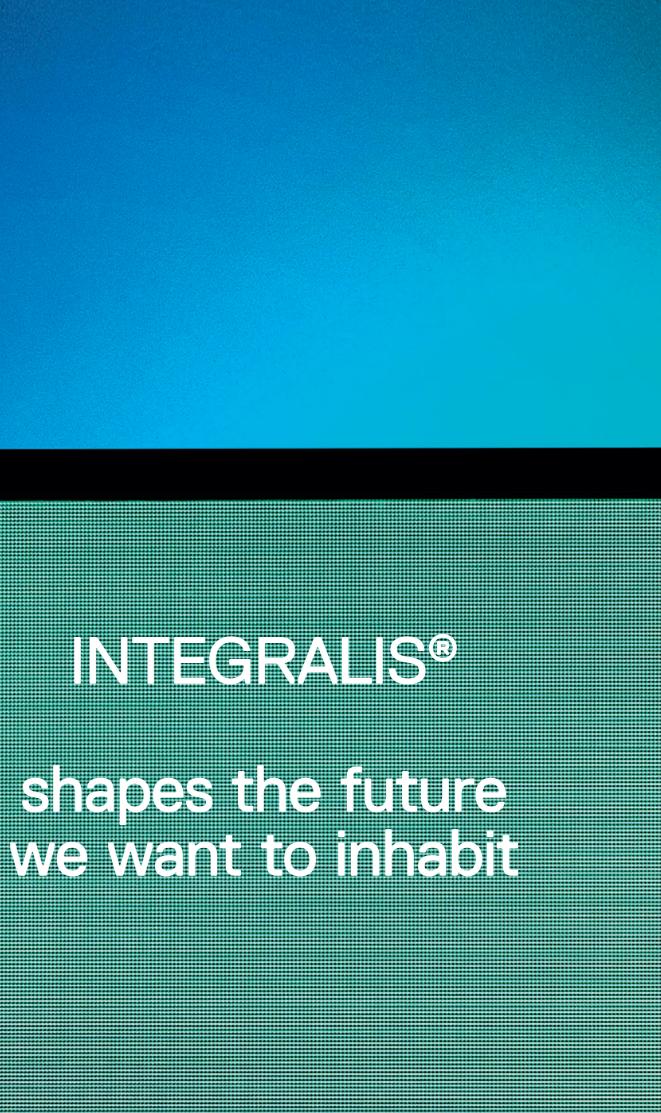
6 O D A O D A Ó Scene 1 Scene 2 Scene 3 OFF

A 39 INTEGRA

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- product dedicated violet icon
- → product name
- ➤ the user is advised that human presence is NOT allowed
- ANTIMICROBIAL ACTIVITY icon and button
- Light Intensity NOT adjustable in ANTIMICROBIAL ACTIVITY (NIGHT MODE)
- ➤ scenes recalling and setting



### Artemide

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#### **®IMQ**

**CTF STAGE2** ISO 17025

