





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

PATENT PENDING

## Index

INTEGRALIS <sup>®</sup> The Human & Scientific Light	4
Light that defeats bacteria and viruses	6
A light for a safe environment	10
The right wavelength	14
The right "dose"	22
INTEGRALIS <sup>®</sup> eco-system	32
Materials resistance	41
The right light engine	42
INTEGRALIS <sup>®</sup> collection	44
UVC INTEGRALIS	86
INTEGRALIS <sup>®</sup> applications	96
INTEGRALIS <sup>®</sup> management	120

# The Human & Scientific Light

INTEGRALIS®	INTEGRALIS® is an innovative light, perfectly integrated into the products of the Artemide collections, that sanitizes spaces.
	INTEGRALIS <sup>®</sup> 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.
	$\rm INTEGRALIS^{\tiny (8)}$ is managed by Artemide App, a digital interaction system accessible to all.
	INTEGRALIS <sup>®</sup> 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 invisible spectral range in an innovative formula capable of regenerating the environmental qualities of the space.
	It is a light spectrum that can act against pathogenic microorganisms in the environment by just illuminating them.
	$\rm INTEGRALIS^{\tiny (8)}$ is a range of lighting solutions that protect human health helping people to live spaces more safely.
	Environmental quality extends today beyond the theme of perception and physiological well-being.
	INTEGRALIS <sup>®</sup> 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®, 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.



NOT VISIBLE LIGHT



**Healty Space** 

A light that supports our health through microbial control is one of the paths that Artemide research was developing as a natural continuation of its approach to Human Light.

A good light capable of combining functionality, efficiency, perceptual quality with an action that inhibits the growth and spread of pathogenic microorganisms is a concrete help in taking care of our health. Immunity to antibiotics is an increasingly important issue for our daily life while, up to now, no photo oxidative stress resistant microorganisms have been selected.



The selected frequencies of visible light inhibit the growth of bacteria, fungi and mold.

UV radiation acts against pathogenic microorganisms and viruses. The combination of these

two emission spectra reaches a high efficacy of sanitization. The result is achieved in full respect of people's safety and without causing damage to materials normally present in the room, thanks to the intelligences it incorporates.

### → UVC RADIATION



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).

### → VIOLET LIGHT (380/450 nm)



BACTERIA FUNGI MOLD YEAST

The frequencies of blue-violet light (380 nm - 450 nm) are very effective against bacteria, fungi and molds. 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).

36

18

.

...

# 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 <sup>®</sup> 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.



the radiant power/unit area\* to be irradiated in a certain time to reach the desired microbial photoinactivation \* also used as mW/cm<sup>2</sup>



irradiation time to reach the desired microbial photoinactivation



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<sup>®</sup> achieves a perfect balance of optimal visual comfort and antimicrobial activity.

Light + Antimicrobial activity

Only specific light wavelengths have the right energy to act against microbial growing.

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



**VISIBLE LIGHT** 

380 nm

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



**A.** The irradiation of bacterial cell induces the activation of endogenous photosensitizer (grey dots).



**B.** Arising of reactive oxygen species (ROS) such as hydrogen peroxide  $(H_2O_2)$ ,  $O^H$  (hydroxyl radical) and  $O_2$  (superoxide anion).



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

Scientific know-how	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.
	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 INTEGRALIS <sup>®</sup> .
Microbiological action against bacteria	Researchers have hypothesized that violet-blue light may induce a photo-oxidative stress in several pathogenic bacterial species.
	Bacterial endogenous molecules could be excited by violet-blue light and induce the rising of ROS (reactive oxygen species).
	ROS, such as hydrogen peroxide and ${\rm O}^{\rm H}$ (hydroxil radical), destroy macromolecules such as DNA, RNA, proteins, lipids and compromise the cellular integrity, causing bacterial death.
Microbiological action against viruses	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.

А distinction be made can between the microorganisms commonly associated with humans (Streptococcaceae, Lactobacillaceae and Pseudomonadaceae) associated with those the 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, 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® applied research.

# INTEGRALIS® is the frame of life

### and supports our sense of belonging to spaces



### Space ENVIRONMENTAL USE DESTINATION

### People PRESENCE & STAYING

### **Time** FOR ANTIMICROBIAL ACTIVITY

### Materials ENVIRONMENTAL FINISHES

# 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

INTEGRALIS® is an open platform, a scalable formula depending on several variables.

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

- Environment use destination
- People presence
- Time available for sanification
- 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.

INTEGRALIS<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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?

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:

#### MODE A - DAY

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

#### **MODE B - NIGHT**

Used alone applied at the maximum of its radiant power.



### WHITE LIGHT

Discovery space square Case history - Office application

# **NIGHT MODE** MAXIMUM ANTIMICROBIAL DOSE DURING THE NIGHT OR PEOPLE'S ABSENCE Human presence NOT allowed STRONGER MICROBIAL GROWTH CONTROL or ANTIMICROBIAL ACTION VIRUS BACTERIA FUNGI MOLD YEAST

**VIOLET-BLUE LIGHT** 

5 2

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

T









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



 $\left( \left( \right) \right)$ 





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® 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 <sup>®</sup> 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.







#### DAY MODE DURING DAILY ACTIVITIES




ENERGY DOSE



### **NIGHT MODE** DURING PEOPLE ABSENCE





### WHITE O INTEGRALIS



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



### WHITE - VIOLET () INTEGRALIS



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 mode.
  - It is not recommended in Stronger Microbial growth control mode.



### 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



Antimicrobial action.

- Not dimmable.
- A prolonged human presence is not recommended in Antimicrobial action mode.
- 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<sup>®</sup> 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.

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.

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.

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 than UV-C.

**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).

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

**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 (eg ductibility, mechanical strength) or produce yellowing.

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

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.



1

### The right light engine

Qualitative and quantitative balance between perception and consumption INTEGRALIS<sup>®</sup> 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.

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 qualified external laboratories.

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

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

Great attention is then referred to health and in particular to photobiological risk through the correspondence of all the frequencies emitted to the limits imposed by the standards: IEC 62778

IEC 62471 (ACTINIC-UV, NEAR UV, BLUE-LIGHT, RETINAL THERMAL IR-RADIATION).

To ensure the safety of people according to the limits of the EU directive 2006/25, all products are qualified 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 the installation.



Discovery Space, Ernesto Gismondi

# INTEGRALIS® collection

INTEGRALIS® 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, A.39, Tagora, Sharp, Vector combine distinctive design with optimal visual comfort and a sense of hygienic well-being. INTEGRALIS® 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 WHITE-VIOLET INTEGRALIS

Ernesto Gismondi → 2020

<sup>48</sup> ↔ 49



DISCOVERY SPACE RECTANGULAR 75x150cm

XF

Beam Luminous Flux Radiant Flux

1686 mW

5109 mW

2778 lm

ND

W

63 W

63 W XF

DAY MODE

NIGHT MODE



Artemide App compatible.

MacAdam 3SDCM L70 B50 60000 h L70 B50 20000 h CRI =80

Artemide App

20020.10/30/60.IN1APP

Code

IP20 ⊜

### ↗ Technical Data

DISCOVERY	SPACE	SQUAF	RE 90x90cm				Artemide App
	W	Beam	Luminous Flux	Radiant Flux	ССТ	CRI	Code
DAY MODE	42 W	XF	1852 lm	1124 mW	2700 K	80	20000.10/30/60.IN1APP
NIGHT MODE	42 W	XF	ND	3406 mW			

CCT

2700 K

CRI

80



Г	_	_		

DISCOVERY VERTICAL Ø700							Artemide App
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	42 W	XF	1852 lm	1124 mW	2700 K	80	19922.10/30/60.IN1APP
NIGHT MODE	42 W	XF	ND	3406 mW			

DISCOVERY VERTICAL Ø1000							Artemide App
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	60 W	XF	2646 lm	1606 mW	2700 K	80	19932.10/30/60.IN1APP
NIGHT MODE	60 W	XF	ND	4866 mW			

$\cap$	
	$\bigcap$

DISCOVERY	Y VERTIC	CAL Ø1	400				Artemide App
	W	Beam	Luminous Flux	Radiant Flux	ССТ	CRI	Code
DAY MODE	84 W	XF	3704 lm	2248 mW	2700 K	80	19942.10/30/60.IN1APP
NIGHT MODE	84 W	XF	ND	6812 mW			



DISCOVER	Y FLOOR	(40×15	57cm)				Artemide App
	W	Beam	Luminous Flux	Radiant Flux	ССТ	CRI	Code
DAY MODE	67 W	XF	2972 lm	1804 mW	2700 K	80	20400.30.IN1APP
NIGHT MODE	67 W	XF	ND	5467 mW			





# Nur WHITE INTEGRALIS

Ernesto Gismondi ∽ 2020



XF	*Artemide App compatible.

WBeamLuminous FluxRadiant Flux45 WXF2423 lm1413 mW

WBeamLuminous FluxRadiant Flux80 WXF4739 lm2763 mW

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

Artemide App

A243310IN0APP\*

Code

Code

A243200IN0

**IP**20 ٢

### ↗ Technical Data

NUR LED - ALUMINUM GREY

NUR 1618 LED - ANTHRACITE GREY

DAY MODE

DAY MODE

NUR LED - ANTHRACITE GREY							Artemide App	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	45 W	XF	2423 lm	1413 mW	5000 K	90	A243300IN0APP*	

ССТ

ССТ

5000 K 90

5000 K 90

CRI

CRI







NUR 1618 LED - ALUMINUM GREY	





# Nur Acoustic WHITE INTEGRALIS

Ernesto Gismondi → 2020



XF	MacAdam 3SDCM	IP20
	L80 (10 K) 55000 h CRI =90 CCT (K) : 5000 K	( <del> </del> )

### ↗ Technical Data

NUR ACOUSTI	IC GREY						Push dimmable	-
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	80 W	XF	6733 lm	4553 mW	5000 K	90	A243700IN0	



W Beam Luminous Flux Radiant Flux CCT CRI Code	
DAY MODE 80 W XF 6733 lm 4553 mW 5000 K 90 A243720INO	

W         Beam         Luminous Flux         Radiant Flux         CCT         CRI         Code           DAY MODE         80 W         XF         6733 lm         4553 mW         5000 K         90         A243740IN0	NUR ACOUSTIC	RED						Push dimmable
DAY MODE 80 W XF 6733 lm 4553 mW 5000 K 90 A243740IN0		W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
	DAY MODE	80 W	XF	6733 lm	4553 mW	5000 K	90	A243740IN0

NUR ACOUSTIC	BLUE						Push dimmable
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	80 W	XF	6733 lm	4553 mW	5000 K	90	A243750IN0









# Pipe WHITE INTEGRALIS

Herzog & de Meuron  $\hookrightarrow$  2020



XF	MacAdam 3SDCM	<b>IP</b> 20
	L80 (10 K) 55000 h CRI =90	۲
	CCT (K) : 5000 K	

### ↗ Technical Data

PIPE SUSPE	NSION						Push dimmable	
	w	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	27 W	XF	2143 lm	1449 mW	5000 K	90	0672010IN0A	S.



PIPE CEILING	G/WALL						Push dimmable	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	27 W	XF	2143 lm	1449 mW	5000 K	90	0671010IN0A	



PIPE FLOOR							Push on stem dimmable
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	27 W	XF	2143 lm	1449 mW	5000 K	90	0670010IN0A



\_\_\_\_\_

# llio WHITE INTEGRALIS

Ernesto Gismondi → 2020



XF	Artemide App compatible.	MacAdam 3SDCM	<b>IP</b> 20
		CRI =90	
		CCT(K): 5000 K	

### ↗ Technical Data

ILIO RED							Push on stem dimmable	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K	90	1640010IN0APP	



ILIO WHITE							Push on stem dimmable	
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K	90	1640020IN0APP	_



ILIO GLOSSY BL	ACK						Push on stem dimmable
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K	90	1640030IN0APP



ILIO BLACK							Push on stem dimmable
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	45 W	XF	3920 lm	2651 mW	5000 K	90	1640080IN0APP

# Mimesi WHITE INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow$  2021



XF	Artemide App compatible.	MacAdam 3SDCM
		CRI =90 CCT (K) : 5000 K

↗ Technical Data

#### MIMESI

MIMESI							Push on cord dimmable	14
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	3 W + 42 W	XF	3887 lm	2629 mW	5000 K	90	1835010IN0APP	



IP20 ⊕

### Athena WHITE INTEGRALIS

Naoto Fukasawa ∽ 2021



XF	MacAdam 3SDCM	<b>IP</b> 20
	L80 (10 K) 55000 h CRI =90	
	CCT (K) . 5000 K	

### ↗ Technical Data

ATHENA BLACK							Push on stem dimmable
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	44 W	XF	4106 lm	2777 mW	5000 K	90	1833030IN0A



ITE						Push on ste
w	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
44 W	XF	4106 lm	2777 mW	5000 K	90	1833020IN
	ITE W 44 W	W         Beam           44 W         XF	W         Beam         Luminous Flux           44 W         XF         4106 lm	W         Beam         Luminous Flux         Radiant Flux           44 W         XF         4106 lm         2777 mW	W         Beam         Luminous Flux         Radiant Flux         CCT           44 W         XF         4106 lm         2777 mW         5000 K	W         Beam         Luminous Flux         Radiant Flux         CCT         CRI           44 W         XF         4106 lm         2777 mW         5000 K         90

sh on stem dimmable	
de	
3020IN0A	



# Tolomeo LED PURE INTEGRALIS

Michele De Lucchi, Giancarlo Fassina → 2021



MacAdam 4SDCM L80 (10 K) 28500 h CRI =80 CCT (K) : 3600 K IP20

٩

### ↗ Technical Data

TOLOMEO LED*	÷						Push on head dimmable
	W	Beam	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	7 W	XF	483 lm	465 mW	3600 K	80	A004800IN2







### A.39 INTEGRALIS

Carlotta de Be∨ilacqua ∽ 2020

#### INTEGRALIS®



White	Black	Silver
01	04	05

Opal diffuser supplied separately. Artemide App interface supplied separately. The App driver can not be controlled by DALI dimming system and viceversa. MacAdam 3SDCM Life L80 (10 K) 55000 h CRI = 90 \* 1 DALI address \* 2 DALI addresses IP20 ⊕

### ↗ Technical Data

A.39 DIFF	USED EMISS	ION - SU	SPENSION, C	EILING DIREC	T EMISSIC	N	Dimmable DALI	
		W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
1184 mm	DAY MODE	35 W	2940 lm	1988 mW	5000 K	90	AT132.01/04/05.IN0*	
1480 mm	DAY MODE	44 W	3675 lm	2485 mW	5000 K	90	AT142.01/04/05.IN0*	
2368 mm	DAY MODE	70 W	5880 lm	3976 mW	5000 K	90	AT152.01/04/05.IN0*	
2960 mm	DAY MODE	88 W	7350 lm	4970 mW	5000 K	90	AT182.01/04/05.IN0*	

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

			w	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*	1922
		Indirect emission	17 W	2000 lm	1349 mW				
1480 mm DAY MODE	DAY MODE	Direct emission	44 W	3675 lm	2485 mW	5000 K	90	AT222.01/04/05.IN0*	pin. and
		Indirect emission	17 W	2000 lm	1349 mW				
2368 mm	DAY MODE	Direct emission	70 W	5880 lm	3976 mW	5000 K	90	AT232.01/04/05.IN0**	
		Indirect emission	34 W	4000 lm	2698 mW				
2960 mm DAY MOD	DAY MODE	Direct emission	88 W	7350 lm	4970 mW	5000 K	90	AT242.01/04/05.IN0**	
		Indirect emission	34 W	4000 lm	2698 mW				

Accessories suspension		Accessories ceiling	
Dimmable or APP Feeding kit including 2 suspension cables 2000 mm (5 poles)	Code AT10500 AT10500APP (Up to 40 DALI addresses)	End cap kit (2 pcs)	Code 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

BLL interface for APP with antenna Up to 40 DALI addresses DV1054APP

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



White	Black	Silver
01	04	05

Screens supplied separately.

Artemide App interface supplied separately. The App driver can not be controlled by DALI dimming system and viceversa. MacAdam 3SDCM Life L80 (10 K) 55000 h CRI = 90 \* 1 DALI address \*\* 2 DALI addresses IP20 ⊕

### ↗ Technical Data

A.39 CON	NTROLLED EN	ISSION	- SUSPENSIO	N, CEILING D	IRECT EMI	SSION	Dimmable DALI	5
		W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
1184 mm	DAY MODE	35 W	2009 lm	1359 mW	5000 K	90	AT136.01/04/05.INO*	
1480 mm	DAY MODE	44 W	2511 lm	1699 mW	5000 K	90	AT146.01/04/05.IN0*	3
2368 mm	DAY MODE	70 W	4018 lm	2718 mW	5000 K	90	AT156.01/04/05.IN0*	
2960 mm	DAY MODE	88 W	5021 lm	3398 mW	5000 K	90	AT186.01/04/05.IN0*	11

#### A.39 CONTROLLED EMISSION - SUSPENSION DIRECT/INDIRECT EMISSION Dimmable DALI

			w	Luminous Flux	Radiant Flux	ССТ	CRI	Code	
1184 mm	DAY MODE	Direct emission	35 W	2009 lm	1359 mW	5000 K	90	AT196.01/04/05.INO*	
		Indirect emission	17 W	2000 lm	1349 mW				
1480 mm	DAY MODE	Direct emission	44 W	2511 lm	1699 mW	5000 K	90	AT226.01/04/05.INO*	
		Indirect emission	17 W	2000 lm	1349 mW				
2368 mm	DAY MODE	Direct emission	70 W	4018 lm	2718 mW	5000 K	90	AT236.01/04/05.IN0**	
		Indirect emission	34 W	4000 lm	2698 mW				
2960 mm	0 mm DAY MODE Dir		88 W	5021 lm	3398 mW	5000 K	90	AT246.01/04/05.IN0**	
		Indirect emission	34 W	4000 lm	2698 mW				

Accessories suspension		Accessories ceiling	
	Code		Code
Dimmable or APP Feeding kit including 2 uspension cables 2000 mm 5 poles)	AT10500 AT10500APP (Up to 40 DALI addresses	End cap kit (2 pcs)	AT895.01/04/05
Mechanical joint including 1 suspension cable	AT09500	Ceiling bracket and mechanical joint	AT09501
End cap kit 2x	AT895.01/04/05	End ceiling bracket (2 pcs)	AT09502
		BLL interface for APP with antenna Up to 40 DALI addresses	DV1054APP

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

Screen quantity to order
1 M186700IN
1 AT09900IN
2 M186700IN
2 AT09900IN





White Black Silver

Opal diffuser supplied separately. Artemide App electronic driver included. Life L70 28400 h CRI = 80 CCT= 4000 K IP20 ⊕

### ↗ Technical Data

A.39 DIFFUSED EMISSION - SUSPENSION, CEILING DIRECT EMISSION*							Artemide App
		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	4000 K 80	AT152.01/04/05.IN2APP
	NIGHT MODE	108 W	ND	28044 mW			
2960 mm	DAY MODE	97 W	97 W 7518 lm 11362 mW 4000 K	80 AT182.01/04/05.IN2APF	AT182.01/04/05.IN2APP		
NIGHT MODE 135 W ND		ND	28044 mW				



A.39 DIFFUSED EMISSION - SUSPENSION DIRECT/INDIRECT EMISSION* Artemide App								
			W	Luminous Flux	Radiant Flux	CCT	CRI	Code
1184 mm	DAY MODE	Direct emission	39 W	3007 lm	4544 mW	4000 K	80	AT192.01/04/05

				1 IGA	1 Iux			
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	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			



Opal diffuser in methacrylate (suspension, ceiling)			
Length 1184 mm 2368 mm 2960 mm 10000 mm roll	Code AT09505IN AT09506IN AT09507IN AT10000IN		
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
Optional control devices - BLL wireless switch			
		Code	



PURE INTEGRALIS mode: 2 pushes to enable/disable sanification mode (3<sup>rd</sup> contact to control security ring).

DV1080APP

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



White	Black	Silver
01	04	05

Screens supplied separately. Artemide App electronic driver included. Life L70 28400 h CRI = 80 CCT= 4000 K

**IP**20 ٢

### ↗ Technical Data

A.39 CONTROLLED EMISSION* - SUSPENSION, CEILING DIRECT EMISSION					Artemide App			
		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				



A.39 CONTROLLED EMISSION* - SUSPENSION			ON DIRECT	/INDIRECT I	EMISSIO	Artemide App		
			W	Luminous Flux <sup>1</sup>	Radiant Flux <sup>1</sup>	ССТ	CRI	Code
1184 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			
1480 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			
2368 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	NODE		ND	13320 mW			
2960 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			

<sup>1</sup> Preliminary data.

Optic				
Length	Code	Length	Screen quantity to order	
1184 mm (4 pcs)	M186700IN2	1184 mm	1 M186700IN2	
1480 mm (5 pcs)	AT09900IN2	1482 mm	1 AT09900IN2	
		2368 mm	2 M186700IN2	
		2960 mm	2 AT09900IN2	
Accessories suspension		Accessories	Accessories ceiling	
	Code			Code
Undimmable Feeding kit including 2 suspension cables 2000 mm (3 poles)	AT10400	End cap kit (2	End cap kit (2 pcs)	
Mechanical joint including 1 suspension cable	AT09500	Ceiling brack	Ceiling bracket and mechanical joint	
End cap kit 2x	AT895.01/04/05	End ceiling bracket (2 pcs)		AT09502
Optional control devices - BLL wireless switch				
		Code		



PURE INTEGRALIS mode: 2 pushes to enable/disable sanification mode (3<sup>rd</sup> contact to control security ring).

DV1080APP

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



### A.39 Refractive WHITE INTEGRALIS

Carlotta de Bevilacqua → 2021


White	Black	Silver
01	04	05

### Screens supplied separately.

Artemide App interface supplied separately. The APP driver can not be controlled by DALI dimming system and viceversa. MacAdam 3SDCM Life L80 (10 K) 55000 h CRI = 90 IP20 ⊕

1 DALI address

- \*\* 2 DALI addresses
- \*\*\* 3 DALI addresses

\*

### ↗ Technical Data

A.39 REF	RACTIVE EMI	SSION -	SUSPENSION	, CEILING DI	RECT EMIS	SION	Undimmable	Dimmable DALI
		W	Luminous Flux	Radiant Flux	CCT	CRI	Code	Code
1184 mm	DAY MODE	40 W	5330 lm	3167 mW	5000 K	90	BZ012.01/04/05.IN0	BZ024.01/04/05.IN0*
1480 mm	DAY MODE	50 W	6662 lm	3960 mW	5000 K	90	BZ015.01/04/05.IN0	BZ027.01/04/05.INO*
2368 mm	DAY MODE	80 W	10660 lm	6334 mW	5000 K	90	BZ018.01/04/05.IN0	BZ030.01/04/05.IN0**
2960 mm	DAY MODE	90 W	11993 lm	7126 mW	5000 K	90	BZ021.01/04/05.IN0	BZ033.01/04/05.IN0**

### A.39 REFRACTIVE EMISSION - SUSPENSION DIRECT/INDIRECT EMISSION Undimmable Dimmable DALI Luminous Flux Radiant Flux W ССТ CRI Code Code 1184 mm DAY MODE Direct emission 40 W 5330 lm 3167 mW 5000 K BZ036.01/04/05.IN0 BZ048.01/04/05.IN0\*\* 90 2000 lm 1349 mW Indirect emission 17 W 1480 mm Direct emission 50 W BZ051.01/04/05.IN0\*\* DAY MODE 6662 lm 3960 mW 5000 K 90 BZ039.01/04/05.IN0 Indirect emission 17 W 2000 lm 1349 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\*\*\*\* 2698 mW Indirect emission 34 W 4000 lm BZ045.01/04/05.IN0 BZ057.01/04/05.IN0\*\*\* 2960 mm 5000 K 90 DAY MODE Direct emission 90 W 11993 lm 7126 mW Indirect emission 34 W 4000 lm 2698 mW

Accessories suspension		Accessories ceiling	
	Code		Code
Undimmable Feeding kit including 2 suspension cables 2000 mm (3 poles)	AT10400	End cap kit (2 pcs)	BZ058. 01/04/05
Dimmable or APP Feeding kit including 2 suspension cables 2000h mm (5 poles)	AT10500 AT10500APP (Up to 40 DALI addresses)	Ceiling bracket and mechanical joint	AT09501
Mechanical joint including 1 suspension cable	AT09500	End ceiling bracket (2 pcs)	AT09502
End cap kit 2x	BZ058. 01/04/05	BLL interface for APP with antenna Up to 40 DALI addresses	DV1054APP

Louvers	
Length	
1184 mm	
1482 mm	
2368 mm	
2960 mm	

Code BZ059. 01/04 BZ060. 01/04 BZ061. 01/04 BZ062. 01/04



### A.39 Refractive WHITE INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow$  2021



White	Black	XF
01	04	

Louvres supplied separately. DALI electronic driver included. MacAdam 3SDCM L80 (10 K) 55000 h CRI =90 CCT (K) : 5000 K

IP20 ⊕

### ↗ Technical Data

A.39 600X	600 REFRA	CTIVE RECESSED	)			Dimmable DALI	
	w	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	30 W	4000 lm	2332 mW	5000 K	90	CD0031.01/04.IN0	



A.39 600X6	600 REFRA	ACTIVE CEILING				Dimmable DALI	
	W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	30 W	4000 lm	2332 mW	5000 K	90	CD1031.01/04.IN0	



W Luminous Flux Radiant Flux CCT CRI Code	4.39 1200X	(300 REFR/	ACTIVE RECESSE	D			Dimmable DALI	
DAY MODE 40 W 5330 lm 3167 mW 5000 K 90 CD0131.01/04.INO		W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
	DAY MODE	40 W	5330 lm	3167 mW	5000 K	90	CD0131.01/04.IN0	Construction of the second


A.39 1200>	<b>X300 REFR</b>	ACTIVE CEILING				Dimmable DALI	
	W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	40 W	5330 lm	3167 mW	5000 K	90	CD1131.01/04.IN0	Contraction of the second



Frame for recessed version			
		Code	
Recessed frame for installation on pla	asterboard	M160600	
false ceiling. A.39 600x600 Refractiv	e		
Recessed frame for installation on pla	asterboard	CD910000	
false ceiling. A.39 1200x300 Refracti	ve		
Louvres			
		Code	
A.39 600x600 Refractive	4X (6pcs)	BZ063.01/04	
A.39 1200x300 Refractive	4X (8pcs)	BZ059.01/04	

A.39 600x600 Refractive	4X (6pcs)
A.39 1200x300 Refractive	4X (8pcs)







### A.39 600x600 Diffused PURE INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow$  2021



White	Artemide App electronic driver included.	Life L70 28400 h	I <b>P</b> 20
		CRI = 80 CCT= 4000 K	(†)

### ↗ Technical Data

A.39 600X6	600 DIFFU	SED RECESSED*				Artemide App	
	W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	39 W	3007 lm	4544 mW	4000 K	80	AT90001IN2APP	
NIGHT MODE	54 W	ND	14022 mW				

### Optional control devices - BLL wireless switch



PURE INTEGRALIS mode: 2 pushes to enable/disable sanification mode (3<sup>rd</sup> contact to control security ring). Code DV1080APP

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



### Tagora 570 PURE INTEGRALIS

S. / R. Cornelissen  $\hookrightarrow$  2021



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

220	/240Vac 50/60Hz electronic ballast included.	
*	4 DALI addresses	

\*\* 5 DALI addresses

Life L70 28400 h CRI = 80 CCT= 4000 K

**IP**40 ٢ 960°

### ↗ Technical Data

TAGORA 57	70 SUSPEN	ISION <sup>1</sup>				Artemide App
	W	Luminous Flux	Radiant Flux	CCT	CRI	Code
DAY MODE	95 W	3232 lm	3603 mW	4000 K	80	M2493.1/2/3/4/6.1IN2APP*
NIGHT MODE	103 W	ND	10843 mW			



TAGORA 57	0 SUSPENSION	N DIRECT	/INDIRECT	EMISSION			Artemide App
		W	Luminous Flux	Radiant Flux	ССТ	CRI	Code
DAY MODE	Direct emission	95 W	3232 lm	3603 mW	4000 K	80	M2403.1/2/3/4/6.1IN2APP**
	Indirect emission	14 W	1200 lm				
NIGHT MODE		103 W	ND	10843 mW			

TAGORA 57	70 CEILING	<b>i</b> 1				Artemide App	
	W	Luminous Flux	Radiant Flux	CCT	CRI	Code	
DAY MODE	95 W	3232 lm	3603 mW	4000 K	80	M2483.1/2/3/4/6.1IN2APP*	
NIGHT MODE	103 W	ND	10843 mW				



### Optional control devices - BLL wireless switch



PURE INTEGRALIS mode: 2 pushes to enable/disable sanification mode (3<sup>rd</sup> contact to control security ring).

Code DV1080APP

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



### Vector WHITE INTEGRALIS

Carlotta de Bevilacqua → 2021



Track version for Onetrack tracks, undimmable or DALI dimmable. Magnetic version for A.24 tracks, D.ART dimmable. MacAdam 3SDCM IP20 Life L80 (10 K) 55000 h CRI 90

### ↗ Technical Data

04

01

VECTOR 55	TRACK 23	0V					Undimmable	
	W	Beam	Luminous Flux	Radiant Flux	ССТ	CRI	Code	
DAY MODE 2	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	6
		WF 32°	' 1718 lm	1162 mW			AN103.01/04.IN0	
							Dimmable DALI	
							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	



MAGNETIC	2	Dimmable DALI					
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 329	° 1718 lm	1162 mW			AP103.01/04.IN0	
	MAGNETIC W 25 W	W Beam   25 W \$ 16°   F 22° WF 32°	W Beam Luminous Flux   25 W S 16° 1718 lm   F 22° 1718 lm WF 32°	MAGNETIC Beam Luminous Flux Radiant Flux   25 W S 16° 1718 lm 1162 mW   F 22° 1718 lm 1162 mW   WF 32° 1718 lm 1162 mW	MAGNETIC Beam Luminous Flux Radiant Flux CCT   25 W 5 16° 1718 lm 1162 mW 5000 K   F 22° 1718 lm 1162 mW 5000 K   W WF 32° 1718 lm 1162 mW	MAGNETIC Radiant Flux CCT CRI   25 W 5 16° 1718 lm 1162 mW 5000 K 90   F 22° 1718 lm 1162 mW 5000 K 90   W 532° 1718 lm 1162 mW 5000 K 90	MAGNETIC Dimmable DALI   W Beam Luminous Flux Radiant Flux CCT CRI Code   25 W 5 16° 1718 lm 1162 mW 5000 K 90 AP101.01/04.IN0   F 22° 1718 lm 1162 mW 5000 K 90 AP102.01/04.IN0   W 532° 1718 lm 1162 mW AP103.01/04.IN0 AP103.01/04.IN0



VECTOR 55	PENDANT	MAGN	IETIC				Dimmable DALI	
	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	



Accessories		Accessories		
Accessories holder	Code AP91100	Anti-dazzle louvre	Color	<u>Code</u> AP91400
Lens for elliptical emission	AP91200	Adjustable dowsers	•	AP91500
Soft filter	AP91300	_		

### Vector VIOLET INTEGRALIS

Carlotta de Bevilacqua  $\hookrightarrow 2021$ 

<sup>80</sup> ⇔ 81



White	Black	WF
01	04	п

Track version for Onetrack tracks, undimmable or DALI dimmable. Magnetic version for A.24 tracks, D.ART dimmable. Life L70 50000 h

**IP**20

### ↗ Technical Data

VECTOR 55 1	FRACK 230V*			Undimmable	
	W	Beam	Radiant Flux	Code	- Leo
NIGHT MODE	21 W	WF 30°	4087 mW	AN103.01/04.IN4	1
					0
				Dimmable DALI <sup>1</sup>	
				Code	п
NIGHT MODE	21 W	WF 30°	4087 mW	AN108.01/04.IN4	

<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.

VECTOR 55 N	AGNETIC*			Dimmable DALI	
	W	Beam	Radiant Flux	Code	
NIGHT MODE	21 W	WF 30°	4087 mW	AP103.01/04.IN4	



Accessories		Accessories		
	Code	Anti-dazzle louvre	Color	Code
O	AP91100			
Lens for elliptical emission	AP91200	Adjustable dowsers	•	AP91500
Soft filter	AP91300			

### Optional control devices - BLL wireless switch



VIOLET INTEGRALIS mode: 2 pushes to enable/disable sanification mode (3<sup>rd</sup> contact to control security ring).

Code DV1080APP

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.

### Sharp VIOLET INTEGRALIS

ALCOLUMN BR.

Carlotta de Bevilacqua → 2021

<sup>82</sup> ↔ 83

ATT THE



White	Black	Silver	F	WF	XF
01	04	05	I	U	П

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

**IP**20

### ↗ Technical Data

### SHARP SMD

SHARP SMD	8X*				Undimmable				
	W	Beam	ו	Radiant Flux	Code				
NIGHT MODE	24 W	24 W	24 W	24 W	F	20°	6810 mW	AF463.01/04/05.IN4	
		WF	36°	6810 mW	AF464.01/04/05.IN4				
		XF	52°	6810 mW	AF465.01/04/05.IN4				

١

### Louvres

4X (1pc)

Code AF952.01/04



\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.

### INTEGRALIS®



### ↗ Technical Data

### SHARP RECESSED TRIMLESS

SHARP TRIN	ILESS 4X	*			INTEGRALIS	
	W	Beam		Radiant Flux	Code	
NIGHT MODE	11 W	F	20°	3495 mW	AF60600IN4	
		WF	36°	3495 mW	AF60700IN4	
		XF	52°	3495 mW	AF60800IN4	



SHARP TRIN	<b>MLESS 8X</b>	*			INTEGRALIS		
	W	Bear	n	Radiant Flux	Code		
NIGHT MODE	22 W	F	20°	6810 mW	AF65300IN4		
		WF	36°	6810 mW	AF65400IN4	-	
		XF	52°	6810 mW	AF65500IN4		



### SHARP RECESSED TRIM

SHARP TRIN	/I 4X*				INTEGRALIS	
	W	Beam		Radiant Flux	Code	
NIGHT MODE	11 W	F	20°	3495 mW	AF106.01/04/05.IN4	
		WF	36°	3495 mW	AF107.01/04/05.IN4	ALC: NO
		XF	52°	3495 mW	AF108.01/04/05.IN4	



SHARP TRIM	∕I 8X*				INTEGRALIS	
W		Beam		Radiant Flux	Code	
NIGHT MODE	22 W	F	20°	6810 mW	AF153.01/04/05.IN4	0.
		WF	36°	6810 mW	AF154.01/04/05.IN4	AAAAAA
		XF	52°	6810 mW	AF155.01/04/05.IN4	
						۵

<sup>\*</sup> ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



White Black

Louvres		Frame for recessed installation		
	Code			Code
4X (1pc)	AF952.01/04		4X	AF90200
			8X	AF90300

Driver

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

<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.

### Optional control devices - BLL wireless switch



VIOLET INTEGRALIS mode: 2 pushes to enable/disable sanification mode (3<sup>rd</sup> contact to control security ring).

Code DV1080APP

### 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.

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.

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.

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

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



### Dual Function Line UVC INTEGRALIS

Carlotta de Bevilacqua, Fabio Zanola ∽ 2021



Driver 150 mA 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.

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

### ↗ Technical Data

### DUAL FUNCTION LINE RECESSED\*

DUAL FUNCT	ION LINE REG	INTEGRALIS				
	W	Flux	ССТ	Radiant Flux	Code	
DAY MODE	20 W	1400 lm	3000 K		on demand	
NIGHT MODE (UV-C Emiiter)	12 W	-	<b>λ</b> peak: 274 nm	138 mW		





-				
- 13			1	
υ		v	e	I
-	•••	٠	c	1

	Vdc	Code
50 W	48	on demand
100 W	48	on demand
200 W	48	on demand

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



### Sharp UVC INTEGRALIS

Carlotta de Bevilacqua → 2021



XF п Driver 700mA SELV and louvres supplied separately.

### ↗ Technical Data

### SHARP RECESSED TRIMLESS

SHARP	TRIM	LESS 4X*		INTEGRALIS	
W	Beam	l	Radiant Flux	Code	
3 W	XF 52°		28 mW	on demand	



SHARP	TRIMLESS	8X*	INTEGRALIS
W	Beam	Radiant Flux	Code
6 W	XF 52°	56 mW	on demand



### SHARP RECESSED TRIM

SHARP TRIM 8X\*

w

6 W

Beam

52°

XF

SHARP	TRIM 4X*		INTEGRALIS	
W	Beam	Radiant Flux	Code	
3 W XF 52°		28 mW	on demand	<



T



Louvres



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

Radiant Flux

56 mW

### Frame for recessed installation

INTEGRALIS

on demand

Code



Code AF90200 AF90300

4X

8X

\* ONLY for professional use: contact qualified Artemide personnel to evaluate and validate the applicability in compliance with the minimum installation requirements. Coordination with environmental safety systems and sensors required. Installation must only be performed by qualified personnel. For further information contact Artemide.



### INTEGRALIS® products matrix

Tagora 570	A.39	A.39 600x600 Diffused	A.39 Refractive	Vector 55	Sharp	Dual Function Line
				J		-

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















D I

Helvetia Patria, St. Gallen, Svizzera. Project by Herzog & de Meuror



## Hospitality Health & Hospital

# Workplaces & Education

### Wellness

Retail

Sport

Connectivity

Transportation

INTEGRALIS® 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 \_ Hall, lounge, restaurant, kitchen area, public restroom, private room & bathroom \*







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

Health & Hospital \_ Hall, common areas as cantine and bar, medical area & gym, public restroom, private room & bathroom, wellness area  $\ast$ 

3

LAND

ALC: AL

State of the


Health & Hospital \_ Hall, common areas as cantine and bar, medical area & gym, public restroom, private room & bathroom, wellness area \*

-



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



<sup>110</sup> ↔ 111



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

INTEGRALIS®



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

<sup>112</sup> ↔ 113



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







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



INTEGRALIS®

يعد بعد بعد بعد بعد بعد بعد بعد العد

للمى تقدر لأعر إليدًا أغدًا الدًا إلمًا تلعًا

A STATEMENT

134

اعد ودر ود ود اط اط اط اط ا

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



Connectivity \_ Corridor, stair, lift \*



# INTEGRALIS® management

INTEGRALIS<sup>®</sup> 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 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.
Artemide App for INTEGRALIS®	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.
	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 detected by the sensor. To see more details about the <b>Artemide Safe Management</b> see the corresponding section in the INTEGRALIS <sup>®</sup> technical addendum.



Google pla

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%).

# WHITE INTEGRALIS



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

# Dedicated user interfacesArtemide developed internally the specific interface for each INTEGRALIS® technology.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.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

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. Artemide APP user interfaces for PURE INTEGRALIS Commands explanation

**PURE INTEGRALIS** 





I







# INTEGRALS®

shapes the future we want to inhabit

# Artemide

### Headquarters

Artemide S.p.A. Via Bergamo, 18 20010 Pregnana Milanese (MI), Italy Tel. +39 02 93518.1 Tel. +39 02 93526.1 Numero verde 800 834 093 (from Italy only) info@artemide.com artemide.com

### Communication and Marketing Department

Via Canova, 34 20145 Milan (MI), Italy Tel. +39 02.349611 marketing@artemide.com artemide.com

Artemide S.p.A. si riserva la facoltà di modificare, in qualunque momento e senza preavviso, le caratteristiche tecniche degli elementi illustrati nel presente catalogo.

Artemide S.p.A. reserves the right to change, at any time and without prior warning, the technical specifications of any product illustrated in this catalogue.

Artemide S.p.A. se réserve le droit de modifier, à n'importe quel moment et sans préavis, les caractéristiques techniques des éléments illustrés dans ce catalogue.

Artemide S.p.A. behält sich das Recht vor jederzeit und ohne Ankündigung die technischen Daten der im Katalog abgebildetem Produkte zu ändern.

Artemide S.p.A. se reserva la facultad de modificar, en cualquier y sin aviso previo, las características técnicas de los elementos ilustrados en el presente catálgo.







## 

CTF STAGE2 ISO 17025

