





# AVIOR FAMILY

# uer

AVIOR MOTION AVIOR SURFACED AVIOR TRACK AVIOR TRACK TW AVIOR TRACK MTW









# wide-ranging illumination possibilities and excellent lighting







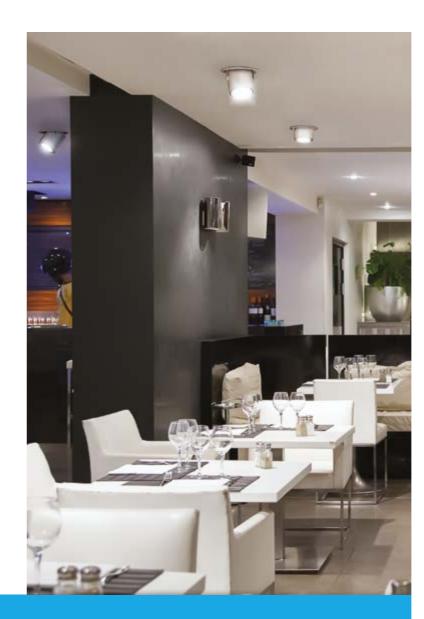
ECO FRIENDLY



ENERGY SAVING







# AVIOR MOTION

AVIOR MOTION is uniquely adaptable to any interior and lighting design need. Determined for ceiling recessed installation it can be used both as a discreet downlight or ejected as a fully adjustable spotlight. The highly effective reflector is available in three beam angles and can be easily changed without the need for tools. So many features and still with an impressive efficacy of 87 lm/W.





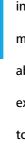




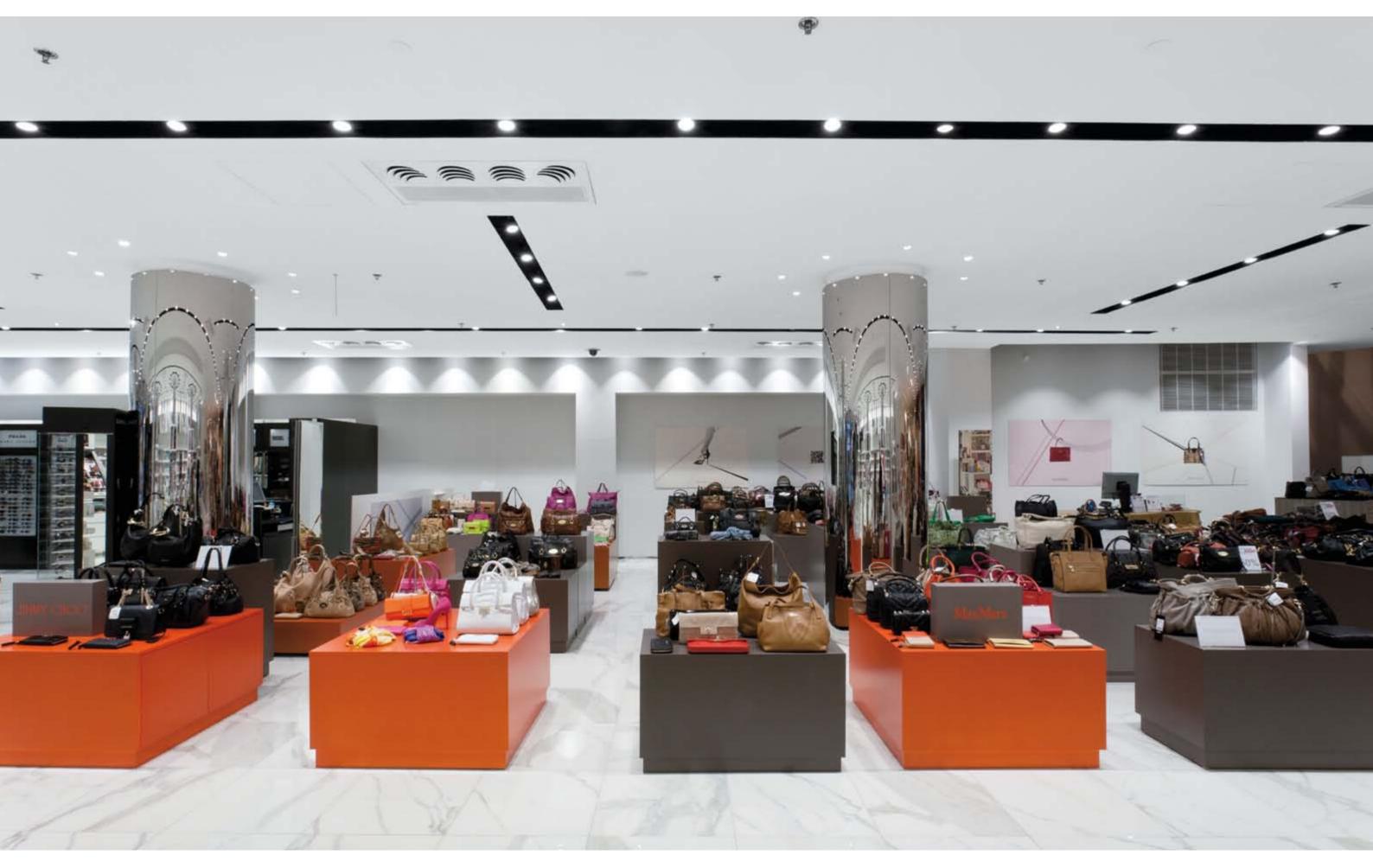








AVIOR SURFACED is the sophisticated embodiment of innovation and technology. Determined for surface mounting on both ceilings and walls, and fully adjustable, it can adapt to any space. With powerful optics, excellent colour rendition, toollessly changeable reflectors in three beam angles and a great system efficacy of 87 lm/W, what more could you need?



AVIOR FAMILY

AVIOR TRACK combines excellent lighting parameters with the extreme flexibility of the ceiling surfaced or suspended GLOBAL trac system. Fully adjustable, moveable and with toollessly changeable reflectors, this is the perfect track spotlight. All with a remarkable system efficacy of 87 lm/W.





## AVIOR TRACK





# AVIOR TRACK MTW



AVIOR TRACK TW / MTW is like nothing you have seen before. Designed for use with the GLOBAL trac ceiling surfaced or suspended track system, this fully adjustable and powerful spotlight ensures excellent colour rendition. However the key feature is that it allows you to manually adjust the colour temperature of the light output precisely to each display, providing the ultimate combination of lighting and practical flexibility.



## AVIOR TRACK TW







AVIOR FAMILY

# High Efficiency for business premises

# Linking minimalist design with motion



#### HOUSING

A key feature of the housing is that it acts for passive thermal management. The term 'passive' implies that energy-consuming mechanical components such as pumps, jets and fans are not used. Heatsinks are the most commonly used thermal management system found in LED luminaires, generally with a finned metal encasement that conducts heat away from the LED light source. The most efficient material for use in this type of cooling is die cast aluminium.

#### GEAR

High quality, efficient and with practical small dimensions, the control gears support FIX and DALI dimmable output (FIX only for TRACK versions). The inclusion of DALI allows for the incorporation of luminaires into complex lighting systems that can be controlled by sensors, touch panels, smart devices and computers, proving great lighting flexibility. AVIOR TRACK TW / MTW has the added advantage of simply implemented step or smooth changing of the CCT.

#### REFLECTOR

Highly effective aluminium reflectors, consisting of many small spherical surfaces (facets) with different angles of rotation, ensure excellent light distribution. Available in three beam angles (24°, 40° and 60°), the reflectors can be changed according to need without the use of any tools.

#### LUMINAIRE COVER

A compact luminaire cover (clear glass with or without foil connected to the ring and reflector) enables quick, tool-free changing.



#### LIGHT SOURCE

All members of the family have light sources with a CCT of 3000 K or 4000 K, although other CCTs are available on request in some models. AVIOR TRACK TW / MTW has an adjustable CCT of 2700-5700 K. Depending on the area of application it is possible to choose between CRI of  $\geq$  83 or  $\geq$  90. In AVIOR TRACK TW / MTW all colour temperatures have guaranteed CRI  $\geq$  90. Lumen packages range from 1300 lm to 4300 lm with power consumptions of 18, 31 and 53 W, providing an optimal system efficacy of 87 lm/W. AVIOR MOTION, AVIOR SURFACED and AVIOR TRACK are suitable to replace 70 W metal-halide conventional lighting fixtures.

#### **ACCESSORIES**

Possibility to use coloured filters on request



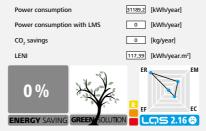


### UX- ACCENT X5 MT 70W

## EL-AVIOR TRACK 53 W



ERGONOMICS Colour rendering index (CRI) Glare prevention Illumination level (task area) Illumination level (task area) Lighting uniformity Harmonious distribution of brightness EMOTION Vertical illumination Ceiling illumination	2a)
Biological factor of illumination	
Accent lighting RGB colour mixing Ambient lighting	
ECOLOGY 1 Latest lamp technology System efficacy of luminaire Thermal output of lamp Dangerous material content Product life-time and maintenance costs	
EFFICIENCY I Presence detector Constant illuminance sensor Daylight sensor Calling of lighting scenes	
Working days: Mon 🔍 Tue 🔍 Wed 🔍 Thu 🔍 Fri Working hours / day: 10 Work	Sa Sun Sun Sun Sun Sun Sing hours / night: 2





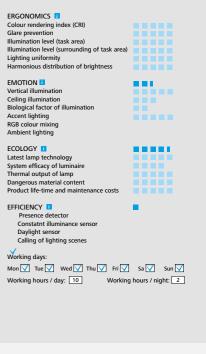
The original solution uses fully adjustable track mounted 70 W metal-halide spotlights to provide both accent lighting at a level of 1500 lx and general lighting at a level of 700 lx, corresponding to the ideal ratio of vertical to horizontal illumination of 2:1. This system performed well in the ergonomics category due to providing harmonious and homogenous distribution of the light whilst also allowing for the precise directing of light as needed. Metal-halide lamps have the inherent characteristic of rendering colours very well, with  $CRI \ge 90$ . However, another characteristic is the high level of glare such lamps cause. There is also no use of any dynamic lighting such as RGB colour mixing, ambient or biologically effective light, which means the system is limited in terms of emotional impact. The main disadvantage of this system is shown in the ecology category. Metal-

halide lamps consume a lot of energy, with a poor LENI of 117.39 kWh/year.m<sup>2</sup>, ranking the solution in energy class E. Moreover this type of lamp radiates a lot of IR radiation in the form of heat, increasing the ambient temperature of the space leading to a costly increase of cooling load on the air conditioning system and negatively effecting sensitive products. The lifetime of metal-halide lamps averages 12,000 hours, meaning that in this application the lamps need replacing every 2.5 years. Another factor to take into account is the hazardous material content of the lamps, materials such as mercury, which have a negative impact on the environment during both manufacture and disposal. Objective assessment of the system provides an LQS score of 2.16, which is below average. The low score due to the high energy consumption and maintenance factor of the lamps.



The new solution uses fully adjustable track mounted 53 W LED spotlights to provide both accent and general lighting with an ideal ratio of vertical to horizontal illumination of 2:1. This system performs perfectly in the ergonomics category due to providing harmoniously distributed, homogeneous and low-glare illumination with a high uniformity. The colour rendition is also very good at CRI  $\geq$  90. As in the original solution, there is no use of RGB colour mixing, ambient or biologically effective light, meaning the new solution also achieves an indifferent score in the emotion category. The main advantage of this system is shown in the ecology category, where we see the true benefits of using LED. With a good LENI of 78.76 kWh/year.m<sup>2</sup> the solution is ranked in energy class B. This combined with the long lifetime and low maintenance of LED technology means that costs are

much lower than with the originally used metal-halide lamps. In this application, the light sources would only need replacing once every 12 years. LEDs also emit negligible amounts of IR radiation which reduces the cooling load on the air conditioning and protects sensitive goods. The hazardous material content of LEDs is much lower than other light sources also reducing the environmental impact of manufacture and disposal. The new solution provides an overall energy saving of 33 % purely due to the use of more efficient light sources and newer, more refined optical technologies. Objective assessment of the system provides an LQS score of 3.33, which is above average





## TOTAL COST **OF OWNERSHIP**

#### UX-ACCENT X5 vs EL-AVIOR TRACK

TYPE OF LUMINAIRE		UX-TRACK ACCENT X5	AVIOR TRACK	
type of light source		MT	LED	
power consumption		70	53	W
number of light sources in luminaire		1	1	
control gear		ECG	ECG	
type of lighting control		none	none	
lifetime of light source		15,000	50,000	hours
power consumption of luminaire		79	53	W
luminous flux		6800	4000	lm
LOR		59	100	%
luminaire light output		4012	4000	lm
number of luminaires		94	94	
average time when luminaire switched on between 6	5.00-18.00	10	10	hour
average time when luminaire switched on between 1	8.00-6.00	2	2	hour
number of days in week when luminaire switched or	1	7	7	day
price for electrical energy		0.18	0.18	€/kW/hour
purchase price of luminaire		85	158	€
purchase price of light source		25	0	€
purchase price of service hour		20	20	€
time needed for the changing of one light source		0.25	0.25	hours
COOLING ENERGY				
cooling system usage factor		50	50	%
cooling efficiency		2.5	2.5	Wh/Wc
purchace price for initial installation		10,340.00	14,852.00	€
number of maintenance cycles required per 12 years		3	1	
maintenance fee		2820.00	470.00	€
power consumption of luminaire		79.00	53.00	W
power consumption of cooling system		15.80	10.60	W
total power consumption of room		8911.20	5 978.40	W
consumption of electrical energy per	day	106.93	71.74	kWh
	month	3252.59	2182.12	kWh
	year	39,031.06	26,185.39	kWh
CO emissions per	Ver	24,979.88	16,758.65	ka
CO <sub>2</sub> emissions per	year	24,3/3.00	10,730.03	kg
price of electrical energy consumed per	day	19.25	12.91	€
	month	585.47	392.78	€
	year	7025.59	4713.37	€
difference between input costs			4512.00	€
savings in energy consumption costs per	year		-2312.22	€
reduction in CO <sub>2</sub> emissions per	year		-8221.22	kg
payback excluding maintenance			2.0	years

## DIGITALLY ADDRESSABLE LIGHTING

#### DALI

The name 'Digitally Addressable Lighting Interface' (DALI) is self-explanatory. It facilitates the digital management of dimmable lighting systems, allowing the dimming of a luminaire's light output between 0–100 %. This open standard uses polarity-free twin core cable, the conductor cross-section of which depends on the size of the installation. In general, however, we recommend

the use of cable with a conductor crosssection of at least 1.5 mm<sup>2</sup>, and maximum length of 300 m. Each DALI bus enables the addressing and control of 64 devices that can be divided into 16 groups. It is possible to combine more DALI buses in order to create larger and more complex systems. Besides DALI controlled luminaires, it is also possible to control peripheral equipment and signalling. DALI allows for the independent control of each connected device,



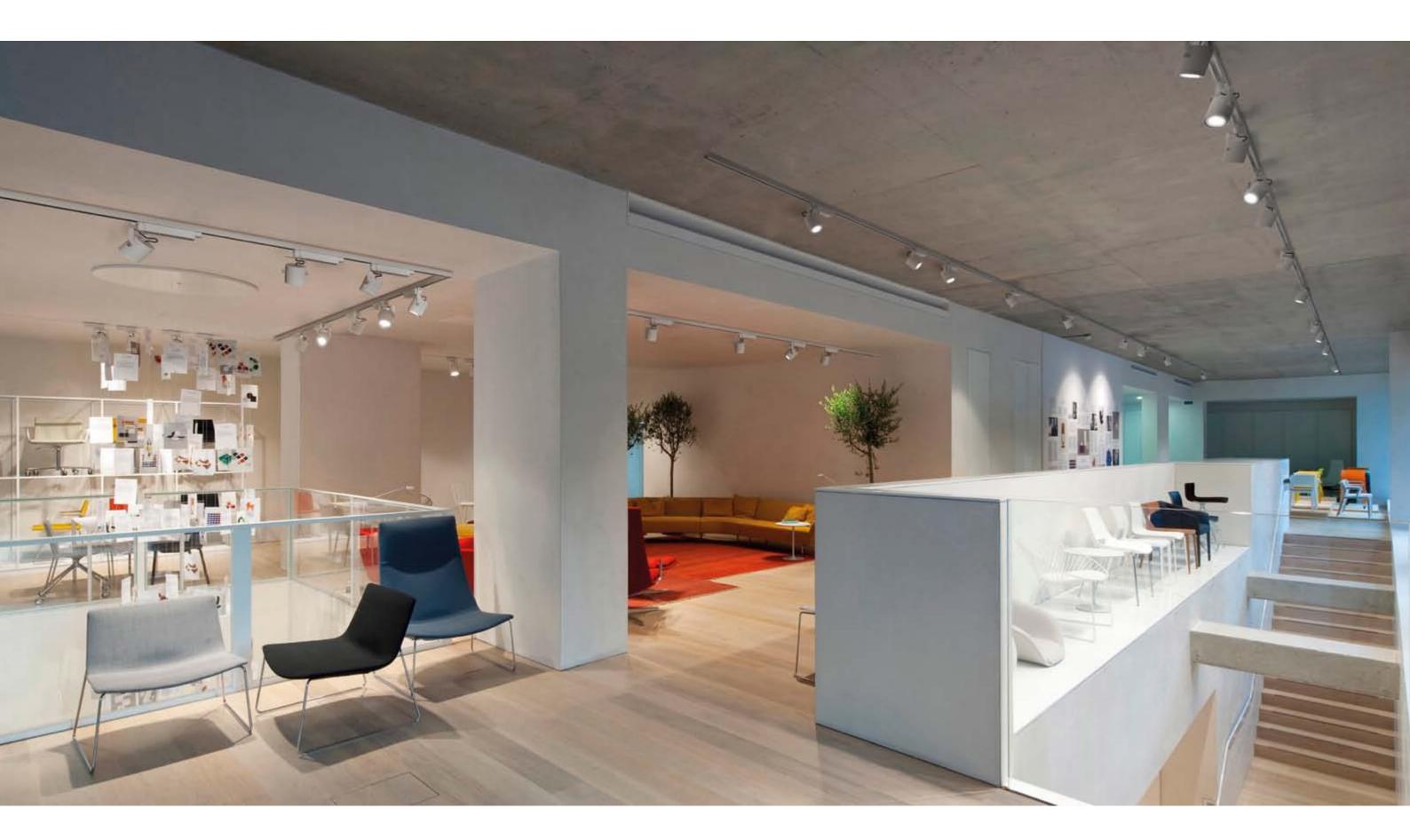
#### The OMS TOUCH PANEL

The OMS TOUCH PANEL is a 7" touchscreen display that is particularly suitable for use in office applications. It is also suitable for use in classrooms or smaller manufacturing

facilities. The OMS TOUCH PANEL is used to day. There is also the possibility to set up simulate daylight, allowing you to change the colour temperature of white light in the range of 2700 K to 5700 K. Using this system it is possible to set a desired colour temperature for a specific time or the whole

providing great flexibility. Another advantage of DALI is the feedback, which can inform you of the state of any device, luminaire or control gear, including damage or failure. DALI can be controlled easily by many different components, from standard wall push buttons and remote controls to touch panels, smart devices and computers. Control can be activated by various control components located in different locations, ensuring simple and comprehensive regulation.

automatic changes during the whole day, which simulates the properties of natural daylight.



# AVIOR MOTION



ON REQUEST

ECG



#### Features

4300 Im

<sup>up to</sup> 87 Im/W

> <sup>up to</sup> >90 Ra

passive cooling

- Fast and simple installation
- Latest LED technology ensures low maintenance costs

- Possibility to use coloured filters on request
- Colour rendering index >90 Ra available on request
- High system efficacy (up to 87 lm/W)
- Correlated colour temperature of 3000 K or 4000 K
- Up to 1 x 70 W metal-halide lamp replacement

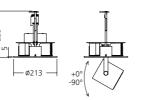
#### Areas of application

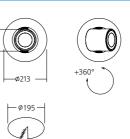
• boutiques, shops, receptions, showrooms, galleries, museums

Mounting Light source Optical system Light distribution Wiring	Ceiling recessed LED Reflector Direct Electronic control gear On request:
Materials	Dimmable electronic control gear DALI (10–100 %) Housing: die cast aluminium Trim: sheet steel Tilting and lifting mechanism: sheet steel, nickel plated steel, spring steel Reflector: facet anodised aluminium
Surface finish	White (RAL 9003) Other colours on request
Accesories	On request: Various coloured filter Exchangeable reflector
Service lifetime Ambient temp.	50,000 hours / L70 Up to + 35 °C



LC3

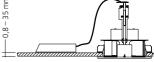




Туре	optical system REFLECTOR	net lumen output (at Ta = 25 °C)	power consumption	colour rendering index	correlated colour temperature	beam angle	thermal management	weight
FACET	FACETED	(Im)	(W)	CRI (Ra)	CCT (K)		PASSIVE	(kg)
AVIOR MOTION	•	1300	18	83*	3000	24°/40°/60°	•	3.1
AVIOR MOTION	•	1400	18	83*	4000	24°/40°/60°	•	3.1
AVIOR MOTION	•	2500	31	83*	3000	24°/40°/60°	•	3.1
AVIOR MOTION	•	2700	31	83*	4000	24°/40°/60°	•	3.1
AVIOR MOTION	•	4000	53	83*	3000	24°/40°/60°	•	3.1
AVIOR MOTION	•	4300	53	83*	4000	24°/40°/60°	•	3.1
* >90 Ra on request								

Luminous flux tolerance +/- 10 %

REFLECTOR 24°



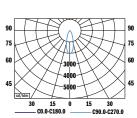






REFLECTOR 40°

RED FILTER



AVIOR MOTION LED 40° 1400 lm 4000 K



# AVIOR SURFACE

ON REQUEST

ECG



#### Features

4300 lm

up to 87 Im/W

<sup>up to</sup> >90 Ra

passive cooling

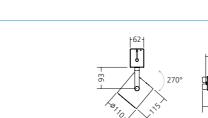
- Fast and simple installation
- Latest LED technology ensures low maintenance costs
- Possibility to use coloured filters on request
- Colour rendering index >90 Ra available on request
- High system efficacy (up to 87 lm/W)
- C orrelated colour temperature of 3000 K or 4000 K
- Up to 1 x 70 W metal-halide lamp replacement

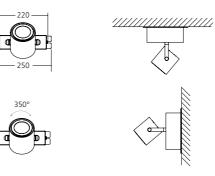
#### Areas of application

• boutiques, shops, receptions, showrooms, galleries, museums

Mounting	Ceiling surfaced
	Wall mounted
Light source	LED
Optical system	Reflector
Light distribution	Direct
Wiring	Electronic control gear
	On request:
	Dimmable electronic control gear DALI
	(10-100 %)
Materials	Housing: die cast aluminium
	Gearbox: sheet steel
	Tilting mechanism: sheet steel
	Reflector: facet anodised aluminium
Surface finish	Black (RAL 9005)
	Other colours on request
Accesories	On request:
	Various coloured filter
	Exchangeable reflector
Service lifetime	50,000 hours / L70
Ambient temp.	Up to + 35 °C

LC2





Туре	optical system REFLECTOR FACETED	net lumen output (at Ta = 25 °C) (Im)	power consumption (W)
	FACETED	(111)	(VV)
AVIOR SURFACED	•	1300	18
AVIOR SURFACED	•	1400	18
AVIOR SURFACED	•	2500	31
AVIOR SURFACED	•	2700	31
AVIOR SURFACED	•	4000	53
AVIOR SURFACED	•	4300	53
* >90 Ra on request			

Luminous flux tolerance +/- 10 %

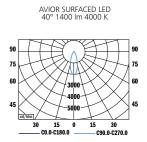
REFLECTOR 24°

colour rendering index CRI (Ra)	correlated colour temperature CCT (K)	beam angle	thermal management PASSIVE	weight (kg)
83*	3000	24°/40°/60°	•	1.9
83*	4000	24°/40°/60°	•	1.9
83*	3000	24°/40°/60°	•	1.9
83*	4000	24°/40°/60°	•	1.9
83*	3000	24°/40°/60°	•	1.9
83*	4000	24°/40°/60°	•	1.9





REFLECTOR 40°





# AVIOR TRACK



#### Features

4300 lm

<sup>up to</sup> 87 Im/W

> <sup>up to</sup> >90 Ra

passive cooling

- Fast and simple installation
- Latest LED technology ensures low maintenance costs
- Possibility to use coloured filters on request
- Colour rendering index >90 Ra available on request

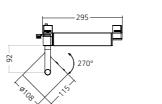
- High system efficacy (up to 87 lm/W)
- C orrelated colour temperature of 3000 K or 4000 K
- Up to 1 x 70 W metal-halide lamp replacement

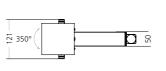
#### Areas of application

• boutiques, shops, receptions, showrooms, galleries, museums

Mounting	Suspended or ceiling surfaced lighting track system (suitable for GLOBAL trac)
Light source	LED
Optical system	Reflector
Light distribution	Direct
Wiring	Electronic control gear
Materials	Housing: die cast aluminium + sheet steel Reflector: facet anodised aluminium
Surface finish	Black (RAL 9005) Other colours on request
Accesories	Various types of connections and suspension equipment (GLOBAL trac) On request: Various coloured filter Exchangeable reflector
Service lifetime	50,000 hours / L70
Ambient temp.	Up to + 35 °C



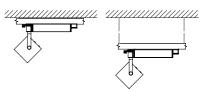




Туре	optical system REFLECTOR	net lumen output (at Ta = 25 °C)	power consumption	rende
	FACETED	(Im)	(W)	C
AVIOR TRACK	•	1300	18	
AVIOR TRACK	•	1400	18	
AVIOR TRACK	•	2500	31	
AVIOR TRACK	•	2700	31	
AVIOR TRACK	•	4000	53	
AVIOR TRACK	•	4300	53	
* >90 Ra on request				

Luminous flux tolerance +/- 10 %

colour dering index	correlated colour temperature	beam angle	thermal management	weight
CRI (Ra)	CCT (K)		PASSIVE	(kg)
83*	3000	24°/40°/60°	•	2.3
83*	4000	24°/40°/60°	•	2.3
83*	3000	24°/40°/60°	•	2.3
83*	4000	24°/40°/60°	•	2.3
83*	3000	24°/40°/60°	•	2.3
83*	4000	24°/40°/60°	•	2.3







REFLECTOR 60°

REFLECTOR 24°



REFLECTOR 40°

RED FILTER



# AVIOR TRACK MTW

#### STANDARD



#### Features

up to 1850 Im

сст 2700– 5700 К

<sup>up to</sup> >90 Ra

tunable white

passive cooling

- ${\, \bullet \,}$  Manually controlled Tunable White (push button control) 2700 K - 5700 K
- Two operating variants: Discreet mode (steps 2700 K/ 3000 K/ Optical 3500 K/ 4000 K/ 4500 K/ 5000 K/ 5500 K/ 5700 K) or Smooth Light di mode
- Passive cooling for optimum thermal management

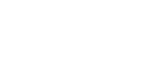
#### Areas of application

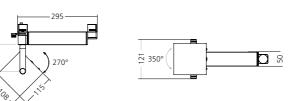
• Boutiques, shops, receptions, showrooms, galleries, museums

Mounting	Suspended or ceiling surfaced lighting track system(suitable for GLOBAL trac)
Light source	LED
Optical system	Reflector
Light distribution	Direct
Wiring	Electronic control gear
Materials	Housing: die cast aluminium + sheet steel
	Reflector: facet anodised aluminium
Surface finish	Black (RAL 9005)
Accesories	On request:
	Various types of connections and suspension
	equipment (GLOBAL trac)
	Various coloured filter
	Exchangeable reflector
Service lifetime	50,000 hours / L70
Ambient temp.	Up to + 35 °C

LC3

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Туре	optical system REFLECTOR	net lumen output (at Ta = 25 °C)	power consumption	colour rendering index	correlated colour temperature	beam angle	thermal management	weight
	FACETED		(W)	CRI (Ra)	CCT (K)		PASSIVE	(kg)
AVIOR TRACK MTW	•	1600 - 1850	31	83*	2700 - 5700	24°/40°/60°	•	1.6
Luminous flux tolerance +/- 10 %								

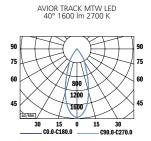






REFLECTOR 24°

REFLECTOR 40°





# AVIOR TRACK TW

#### STANDARD

#### ECG IP/

#### Features

up to 1850 Im

сст 2700– 5700 К

<sup>up to</sup> >90 Ra

tunable white

passive cooling

• Digitally controlled Tunable White (push button control) 2700 K -5700 K

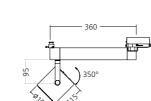
- Two operating variants: Discreet mode (steps 2700 K/ 3000 K/ Opt 3500 K/ 4000 K/ 4500 K/ 5000 K/ 5500 K/ 5700 K) or Smooth Light mode
- Passive cooling for optimum thermal management

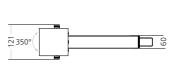
#### Areas of application

• Boutiques, shops, receptions, showrooms, galleries, museums

Mounting	Suspended or ceiling surfaced lighting track system(suitable for GLOBAL trac)
Light source	LED
Optical system	Reflector
Light distribution	Direct
Wiring	Dimmable electronic control gear DALI
	(10-100 %)
Materials	Housing: die cast aluminium + sheet steel
	Reflector: facet anodised aluminium
Surface finish	Black (RAL 9005)
Accesories	On request:
	Various types of connections and suspension
	equipment (GLOBAL trac)
	Various coloured filter
	Exchangeable reflector
Service lifetime	50,000 hours / L70
Ambient temp.	Up to + 35 °C

LC3

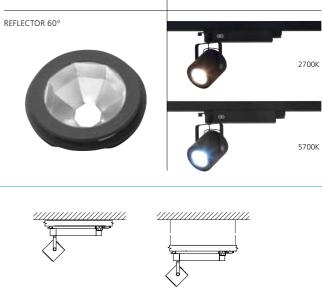




Туре	optical system REFLECTOR	net lumen output (at Ta = 25 °C)	power consumption
	FACETED	(Im)	(W)
AVIOR TRACK TW	•	1600 - 1850	31
Luminous flux tolerance +/- 10 %			

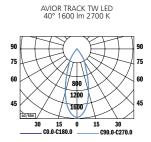
REFLECTOR 24°

colour rendering index	correlated colour temperature	beam angle	thermal management	weight	
CRI (Ra)	CCT (K)		PASSIVE	(kg)	
83*	2700 - 5700	24°/40°/60°	•	1.6	-

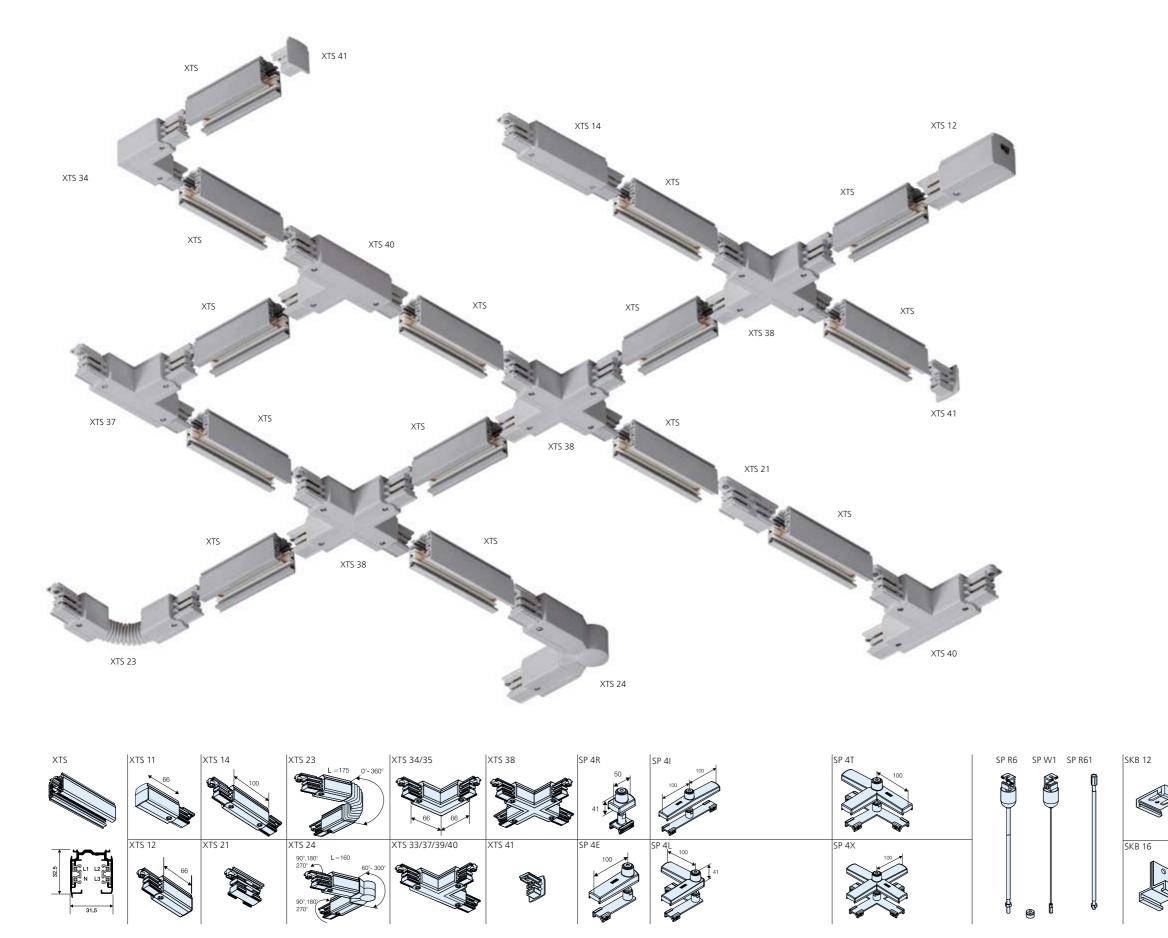




REFLECTOR 40°

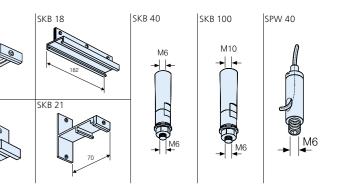


## GLOBAL trac SYSTEM



AVIOR FAMILY

ХТЅ	Track
XTS 11	End feed
XTS 12	End feed, mirror image
XTS 14	Middle feed
XTS 21	Straight connector
XTS 23	Flexible corner connector
XTS 24	Adjustable corner connector
XTS 34/35	L-connector
XTS 33/37/39/40	T-connector
XTS 38	X-connector
XTS 41	End cap
SP 4R	Point clamp suspension
SP 4E	End feed suspension
SP 4I	Middle feed suspension
SP 4L	L-feed suspension
SP 4T	T-feed suspension
SP 4X	X-feed suspension
SP R6	Rod suspension set
SP W1	Wire suspension set
SP R61	Rod extension set
SKB 12	Ceiling clamp
SKB 16	Suspension clamp
SKB 18	Support
SKB 21	Wall bracket
SKB 40	Height adjusting sleeve, adjustable to 20mm
SPW 40	Cable holder





AVIOR FAMILY



OMS spol. s r.o. Dojč 419 906 02 Dojč Slovakia Tel.: +421 34 694 0811 Fax: +421 34 694 0888 www.omslighting.com info@oms.sk





OMS spol. s r.o. Dojč 419 906 02 Dojč Slovakia Tel.: +421 34 694 0811 Fax: +421 34 694 0888 www.omslighting.com info@oms.sk



