

Project Name

Description

Type

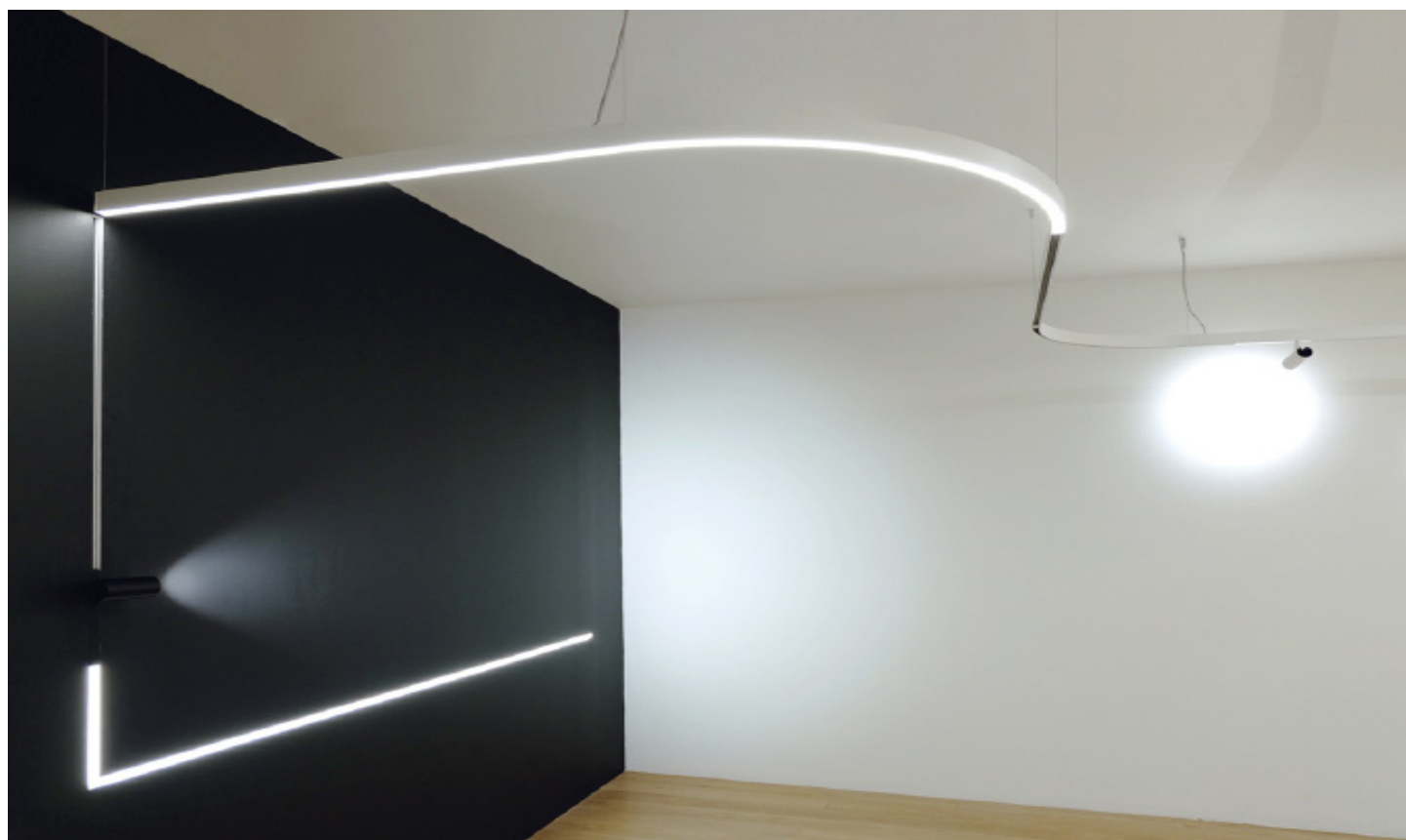
Notes

DESCRIPTION

A.24 is a hybrid system that can host a variety of performance options: diffused light, sharp optical units with three beam angles or a smart magnetic track, while following architecture with continuity, freedom, and flexibility. The system can be installed at a 90° angle or a curved formation using a special joint that feeds the electrical connection in both directions. It is possible to create open or closed configurations or to create an angular or geometric layout to match the architecture of a space.

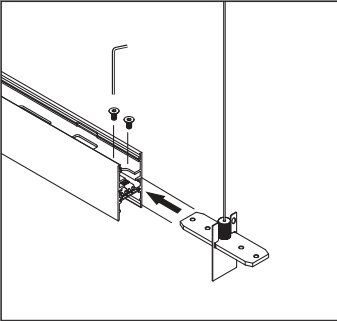
This makes A.24 an open platform that can accommodate other products from the Architectural collection, including Vector Spots. A.24 allows the various lighting systems to be joined with seamless electrical and mechanical continuity.

It is a fluid system that harbors a patented optoelectronic technology and can be used to design light in space. A single profile, only 24 mm thick can fit in any space as surface mounted, suspension with direct and indirect distribution.



102021-R3

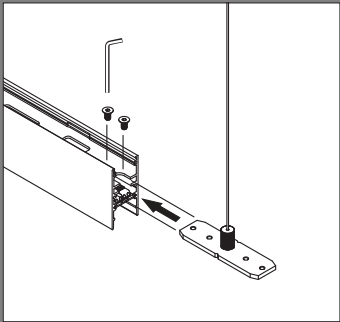
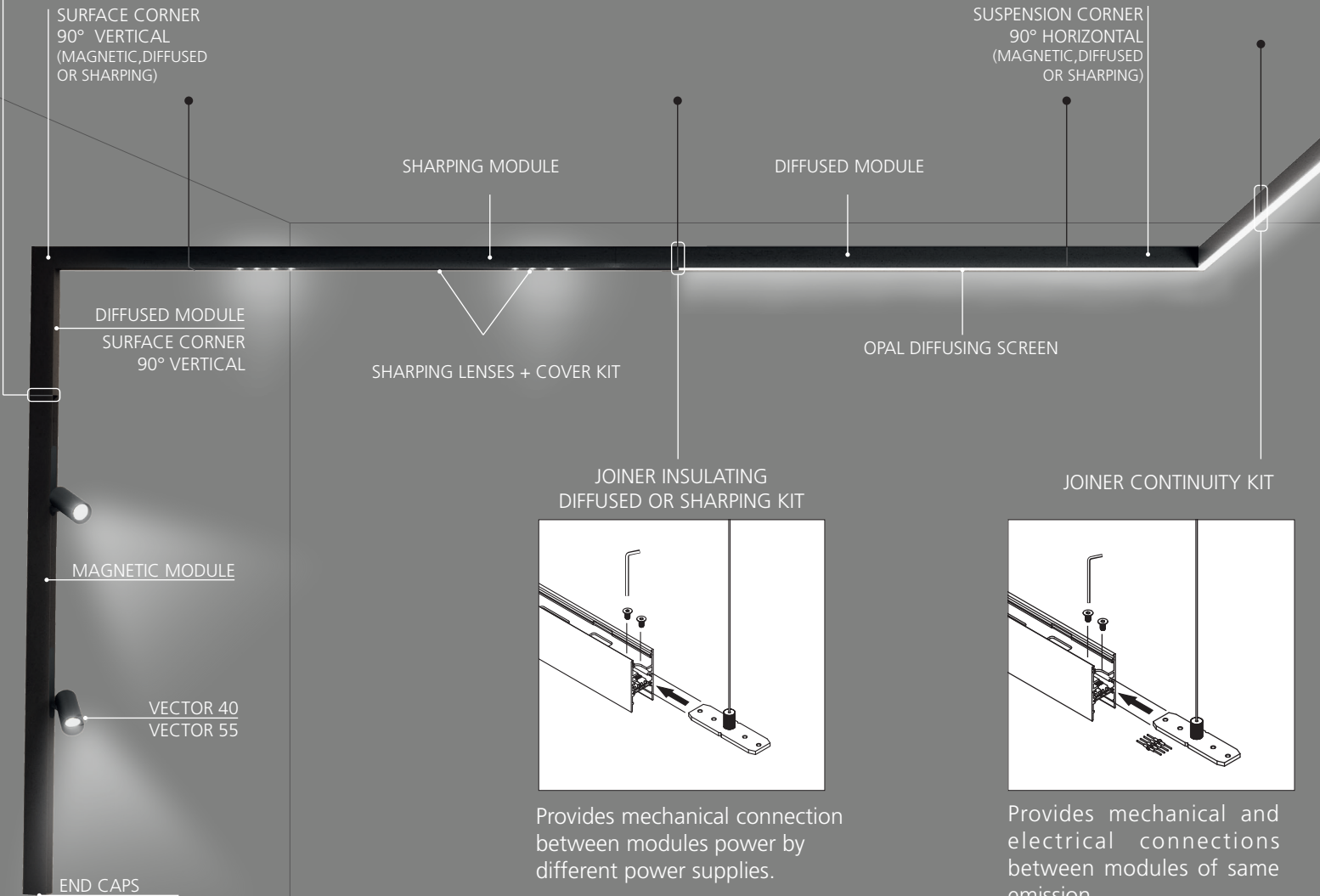
Compose your system with the help of the example below. All components can be found on the following pages and need to be ordered separately.



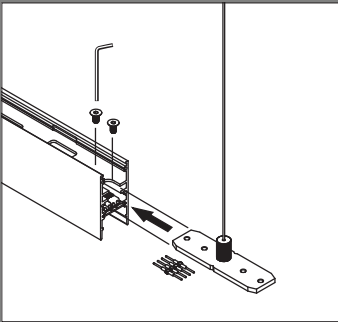
JOINER INSULATING MAGNETIC -
TRANSITION TO DIFFUSED / SHARPING KIT

Provides mechanical connection and prevents magnetic Vector head from overlap on two circuits. Avoids leaks between magnetic and another emission.

NOTE: Suspension joiner to be ordered separately.



Provides mechanical connection between modules power by different power supplies.



Provides mechanical and electrical connections between modules of same emission.

A.24 SYSTEM MODULES OPTIONS

An A.24 system is composed of several A.24 modules all electrically and/or mechanically connected together. In this way you can create infinite possibilities for your system. Modules can be ordered with the optics, shapes and mounting options below.

This booklet is focused on the Suspension system. It is possible to set different optics into the same system. Some parts of the system are not lit depending on the chosen typology, such as the curved and angled magnetic as well as the angled sharpening due to the electrical features of each optics. The suspended linear modules also come in diffused indirect light.

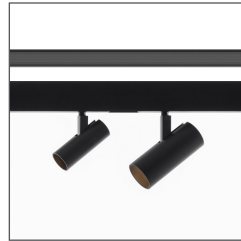
OPTICS

Magnetic modules can host Vector projectors to provide a focused light.

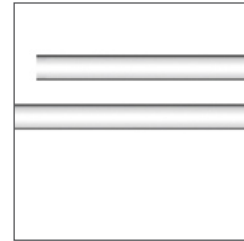
Diffused modules offer a bright and uniform lighting distribution running the entire optics.

Sharp modules offer a softer light, providing a more comfortable downlight distribution.

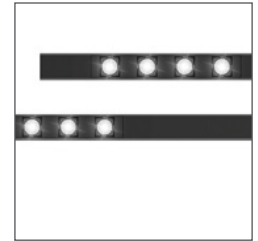
Magnetic



Diffused



Sharp



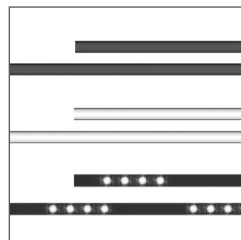
SHAPES

Linear modules are available in nominal 4ft and 8ft to create linear systems.

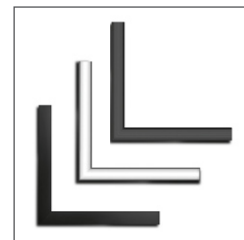
Corner allows geometric shapes to match to the architecture.

Curve provides smooth transitions between two linear modules and can integrate organic shapes to the system.

Linear



Corner



Curve



MOUNTING OPTIONS

Surface



Suspension
Direct Emission



Suspension
Dir/Ind Emission



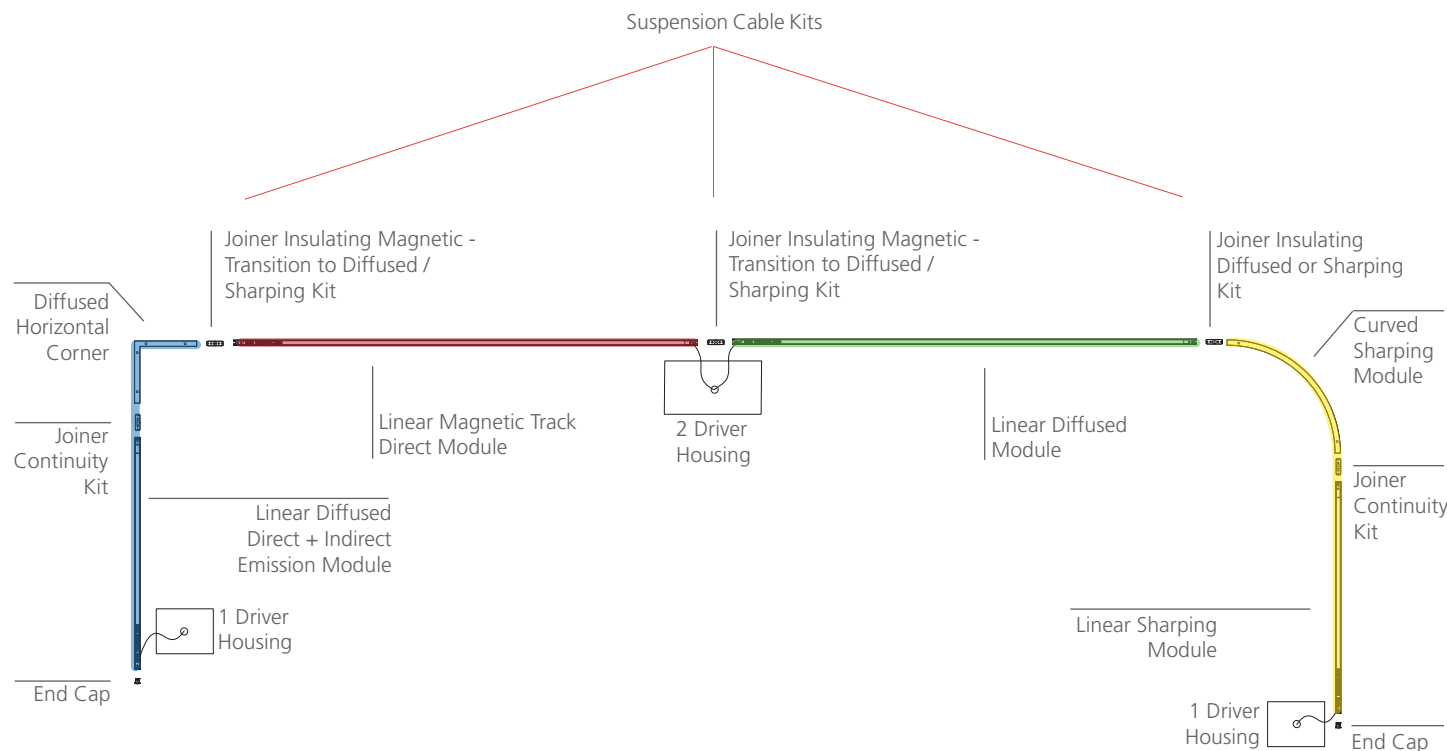
Surface modules can be mounted on wall and ceiling surfaces.

Direct systems allow thin suspended points on the ceiling.

Direct / Indirect systems allow thin suspended points on the ceiling.

EXAMPLE : ITEMS TO ORDER

To order a complete A.24 System, ensure to add the following in the order guide: Modules, joiner kits with the suspension cable and driver housings. The illustration below can be used as an example to make an exhaustive order.



1. **Choose modules according to the layout**, taking into consideration module length, optic and shape.
2. **Choose the appropriate suspension cable kits** depending on the trailing and leading modules connected to the joiner. (e.g. to connect one diffused module to a magnetic, order a Joiner Insulating Magnetic Kit.) Order the Auxiliary Suspension Kit for additional suspension leveling.
3. **Choose the appropriate finishing accessory** depending on what type of module used and the length. e.g. to cover a sharpening curve module, order a louver with the right radius and a flexible cover to conceal the rest.
4. **Distribute the system in 96W sections** (refer to the driver housing section for more details), and order as many driver housings as sections. Define the placement of driver housings in the system and communicate this layout to the installer.
5. **Order the end caps** depending if the system is a closed or open configuration.

Note: For the suspended version, please **order as many suspension cable kits as needed**. Please see suspension cable kits section to calculate the quantity required for your system layout.

PERFORMANCE OPTIONS

MAGNETIC TRACK MODULE



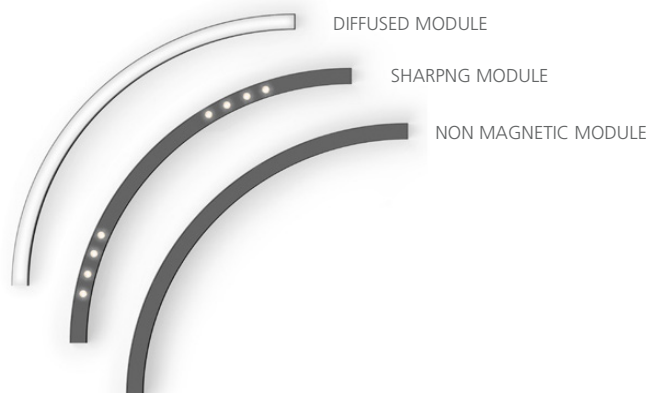
DIFFUSED MODULE



SHARPING MODULE



CURVED MODULES



ANGLED MODULES



COLORS

- White (Powder Coat Painted)
- Black (Powder Coat Painted)
- Brushed Silver (Brushed Anodized)*
- Brushed Copper (Brushed Anodized)*
- Brushed Bronze (Brushed Anodized)*

*Note: Brushed anodized finish is available by special order only.
Please contact your sales representative.

MAGNETIC TRACK
SUSPENSION

MAGNETIC TRACK +
INDIRECT EMISSION SUSPENSION




SUSPENSION MAGNETIC LINEAR TRACK

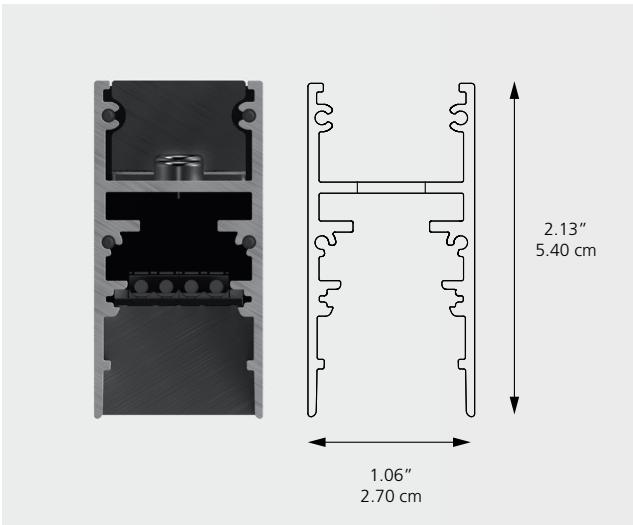
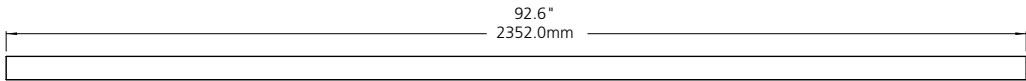
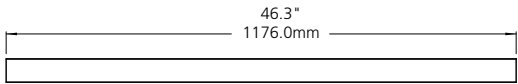
LENGTH ⁽¹⁾	L4 = 46.3" (1176mm) L8 = 92.6" (2352mm)
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

FEATURES


MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Module in aluminum body with integrated magnetic track.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20



SUSPENSION MAGNETIC LINEAR AND INDIRECT TRACK

FEATURES

LENGTH ⁽¹⁾	L4 = 4 feet (1176mm)				L8 = 8 feet (2352mm)			
CRI	8 = 80 CRI				8 = 80 CRI			
CCT (indirect)	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	16W				33W			
DELIVERED LUMEN	1502 lm	1525 lm	1559 lm	1593 lm	3004 lm	3049 lm	3118 lm	3186 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾							

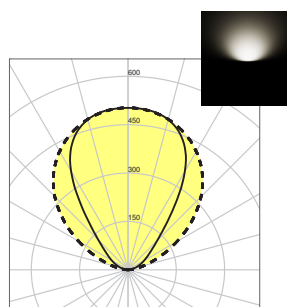
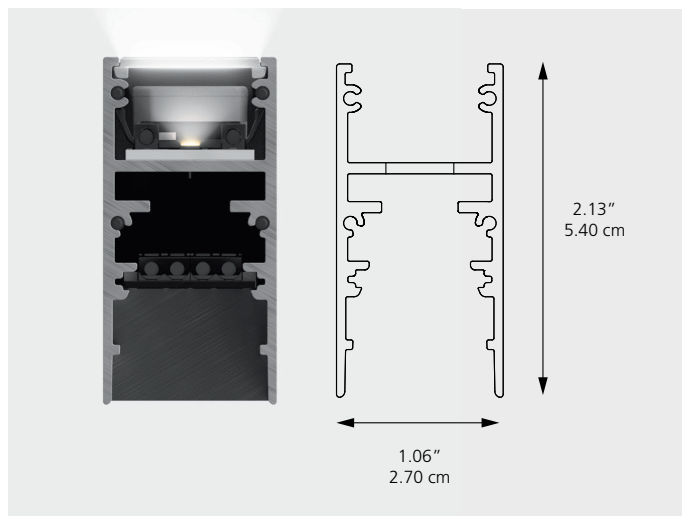
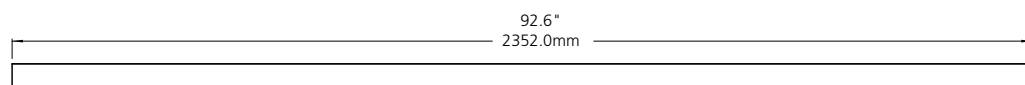
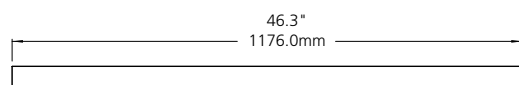
MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Module in aluminum body with integrated magnetic track.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20

*Wattage of the diffused indirect is added to the total load calculation.

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.




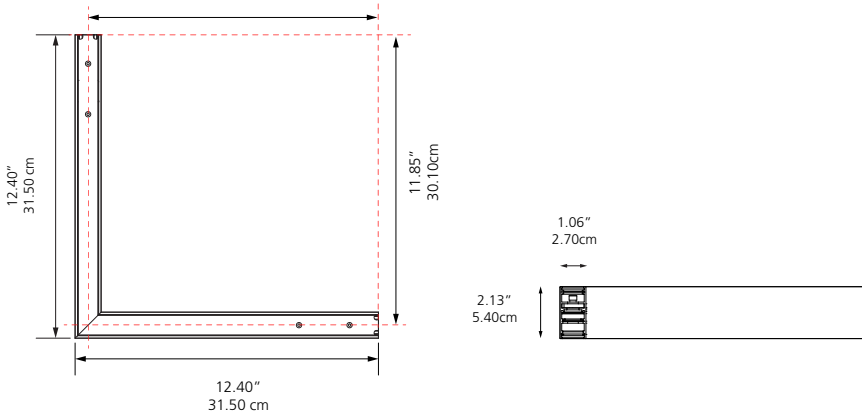
SUSPENSION MAGNETIC CORNER TRACK

MODEL	2 = 90° Horizontal 12" x 12"
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Module in aluminum body with integrated magnetic track.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20




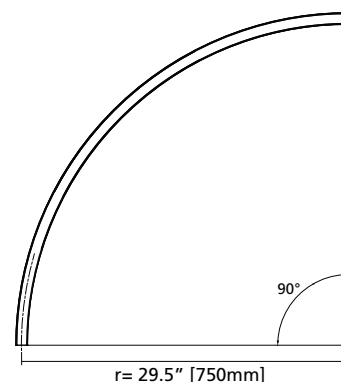
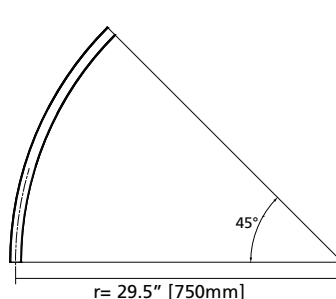
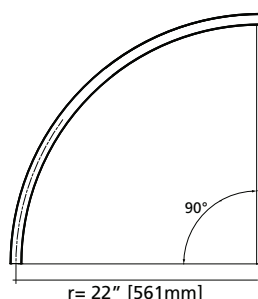
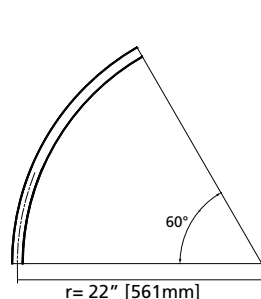
SUSPENSION MAGNETIC CURVED TRACK

MODEL	0 = Radius 22" (561mm) 60°
	1 = Radius 22" (561mm) 90°
	2 = Radius 29.5" (750mm) 45°
	3 = Radius 29.5" (750mm) 90°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽³⁾ Brushed anodized finish is available by special order only.
Please contact your sales representative.

FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Module in aluminum body.
FEATURE	Suitable for connecting modules.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20



VECTOR MAGNETIC 40

BEAM	1 = 13° Spot				2 = 20° Narrow Flood				3 = 28° Wide flood			
CRI	9 = 90 CRI				9 = 90 CRI				9 = 90 CRI			
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700k ⁽²⁾	30 = 3000k	35 = 3500K	40 = 4000k ⁽²⁾	27 = 2700k ⁽²⁾	30 = 3000k	35 = 3500K	40 = 4000k ⁽²⁾
INPUT POWER	10W				10W				10W			
DELIVERED LUMENS	505 lm	505 lm	505 lm	505 lm	542 lm	542 lm	542 lm	542 lm	490 lm	490 lm	490 lm	490 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾											

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

FEATURES

MATERIALS Die-cast aluminum with powder coat finish or anodised brushed finish.

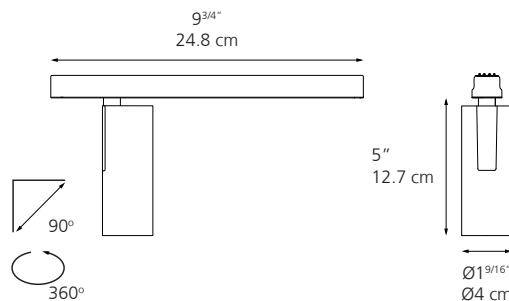
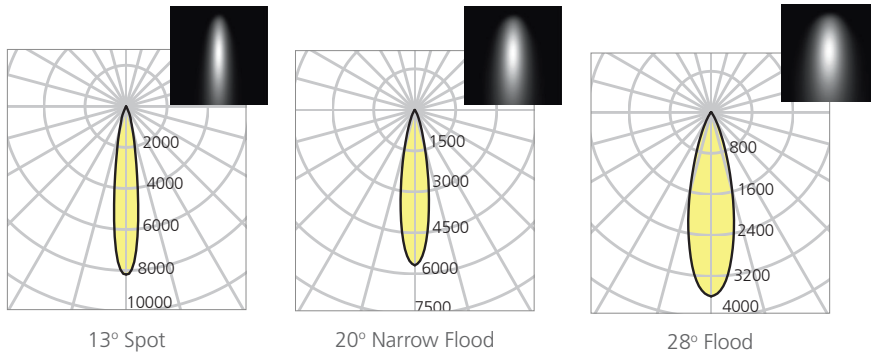
MOUNTING Mounted on magnetic track.

CONSTRUCTION The junction arm is integrated with the spotlight body. The center of balance is perfectly aligned with the track. The pivoting and arm orientation are lockable.

INSTALLATION Projector Track.

CERTIFICATION  Suitable for Damp Location. IP20

PHOTOMETRIC SUMMARY: 3000K 90CRI




VECTOR 55 MAGNETIC

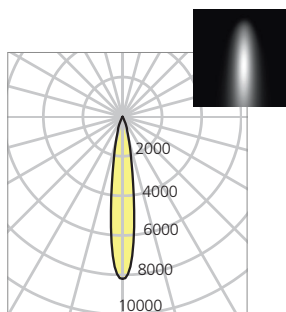
BEAM	16° Spot				22° Spot				32° Wide flood			
CRI	9 = 90 CRI				9 = 90 CRI				9 = 90 CRI			
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	26W				26W				26W			
DELIVERED LUMENS	1433 lm	1433 lm	1433 lm	1433 lm	1408 lm	1465 lm	1465 lm	1465 lm	1534 lm	1534 lm	1534 lm	1534 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾											

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

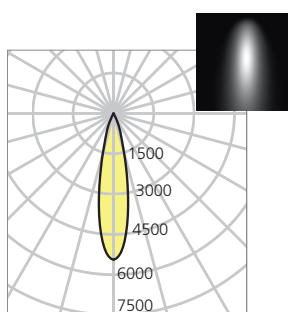
FEATURES

MATERIALS	Die-cast aluminum with powder coat finish or anodised brushed finish.
MOUNTING	Mounted on magnetic track.
CONSTRUCTION	The junction arm is integrated with the spotlight body. The center of balance is perfectly aligned with the track. The pivoting and arm orientation are lockable.
INSTALLATION	Projector Track
CERTIFICATION	 Suitable for Damp Location. IP20

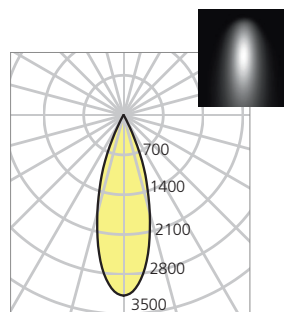
PHOTOMETRIC SUMMARY: 3000K 90CRI



16° Spot

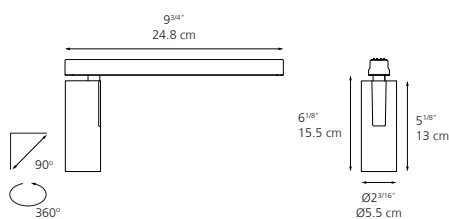


22° Narrow Flood

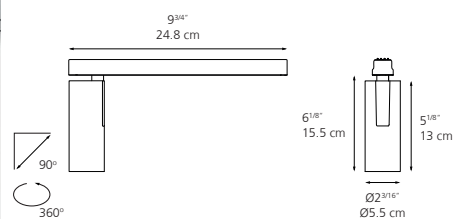


32° Flood

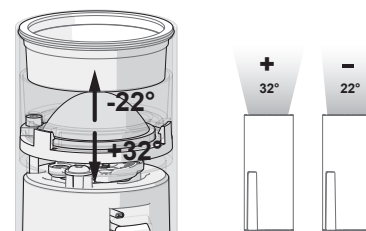
VECTOR 55 MAGNETIC



VECTOR 55 ZOOM MAGNETIC



VECTOR 55 ZOOM



Vector 55 Zoom feature adjustable lens from a 20° narrow beam to a 32° wide beam.

FEATURES

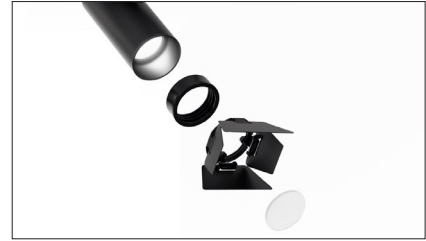
INSTALLATION

Accessories holder is required for add-on accessories.
Could overlap the four accessories in one holder.

CERTIFICATION



Suitable for Damp Location. IP20



VECTOR MAGNETIC ACCESSORIES

VECTOR 40

VECTOR 55

ACCESSORIES HOLDER



DESCRIPTION

A universal holder for all optical accessories.
To be used for the Vector 40 or Vector 50.
Refer to the order guide for the proper size.



LENS FOR ELLIPTICAL EMISSION



NOTE

Refer to Magnetic Vector 40 or Vector 55
for the spot's original data.

DESCRIPTION

Requires an accessory holder (bought
separately) to hold in place. To be used
for the Vector 40 or Vector 55.



SOFT FILTER



NOTE

Refer to Magnetic Vector 40 or Vector 55
for the spot's original data.

DESCRIPTION

Requires an accessory holder (bought
separately) to hold in place. To be used
for the Vector 40 or Vector 55.



ANTI-GLARE LOUVRE



NOTE

Refer to Magnetic Vector 40 or Vector 55 for
the spot's original data.

DESCRIPTION

Requires an accessory holder (bought
separately) to hold in place. To be used for
the Vector 40 or Vector 55.



ADJUSTABLE DOWSERS



DESCRIPTION

A universal holder for all optical accessories.
To be used for the Vector 50 only.



SUSPENSION
DIRECT EMISSION

SUSPENSION WITH
DIRECT & INDIRECT EMISSIONS



SUSPENSION DIFFUSED LINEAR DIRECT


FEATURES

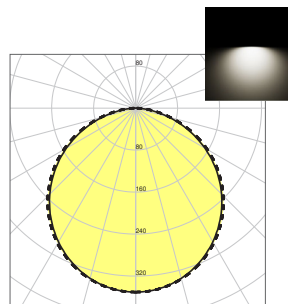
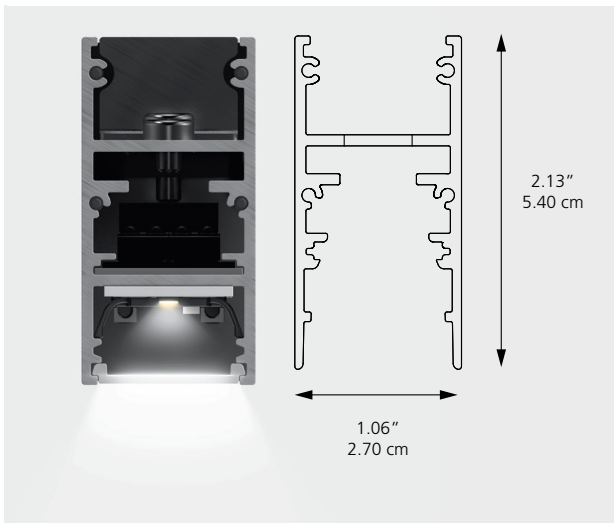
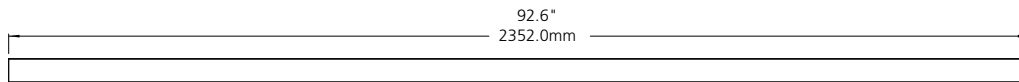
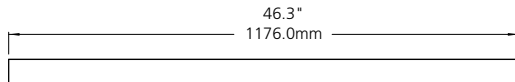
LENGTH ⁽¹⁾	L4 = 4 feet (1176mm)				L8 = 8 feet (2352mm)			
CRI	8 = 80 CRI				8 = 80 CRI			
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	33W				66W			
DELIVERED LUMEN	2841 lm	2884 lm	2958 lm	3014 lm	5683 lm	5769 lm	5916 lm	6027 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾							

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT available is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Module in aluminum body.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
DIFFUSER	Opal diffusing screen has to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20



SUSPENSION DIFFUSED LINEAR DIRECT / INDIRECT

LENGTH ⁽¹⁾	L4 = 4 feet (1176mm)				L8 = 8 feet (2352mm)			
CRI	8 = 80 CRI				8 = 80 CRI			
CCT (indirect)	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	49W				98W **			
DELIVERED LUMEN (Direct + Indirect)	2841 lm (direct) + 1502 lm (indirect)	2884 lm (direct) + 1525 lm (indirect)	2958 lm (direct) + 1563 lm (indirect)	3014 lm (direct) + 1592 lm (indirect)	5863 lm (direct) + 2823 lm (indirect)	5769 lm (direct) + 3049 lm (indirect)	5916 lm (direct) + 3126 lm (indirect)	6027 lm (direct) + 3186 lm (indirect)
TOTAL	4343 lm	4409 lm	4521 lm	4606 lm	8686 lm	8818 lm	9042 lm	9213 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾							

*Wattage of the indirect diffused is added to the total load calculation.

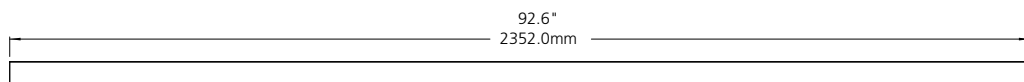
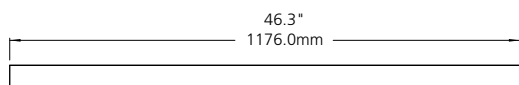
⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order. Please contact your sales representative.

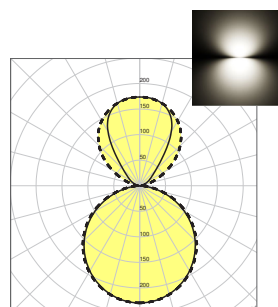
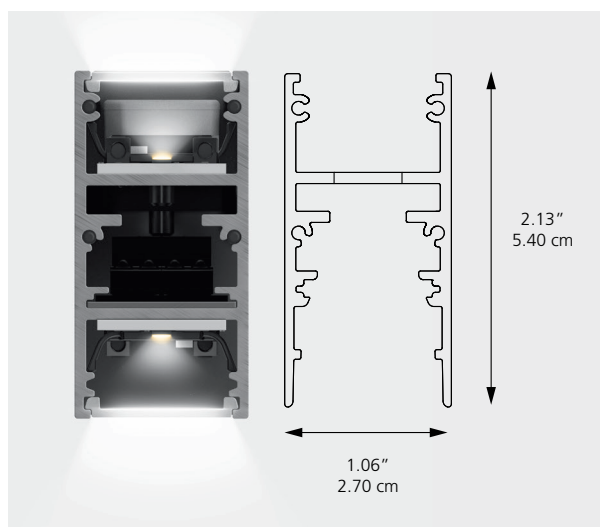
⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Each module is pre-assembled and equipped with its specific diffused optical diffused engine. Driver housing required to feed the module. Refer to the driver housing section.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
DIFFUSER	Opal diffusing screen has to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20



** 8ft Diffused Dir / Ind module is split in 2 circuits each feed by a separate driver. Double driver housing should be ordered.

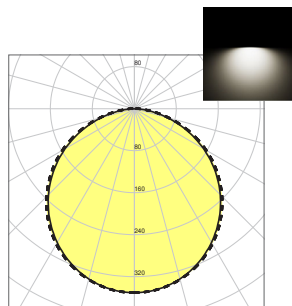
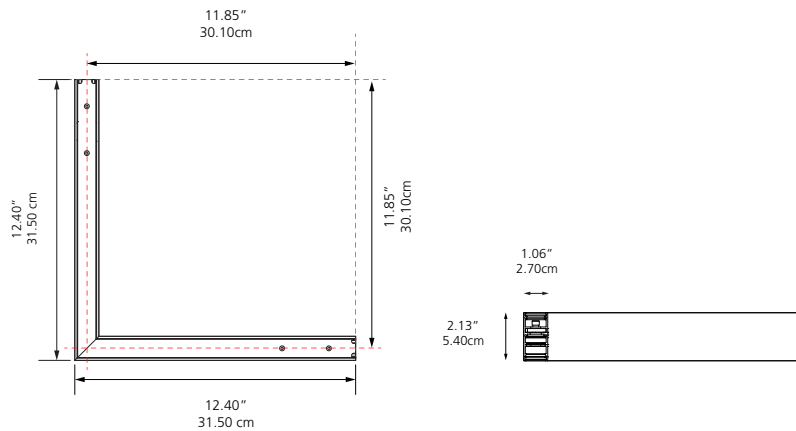


SUSPENSION DIFFUSED CORNER DIRECT

LENGTH ⁽¹⁾	H1 = 90° Horizontal 12"			
CRI	8 = 80 CRI			
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	16W			
DELIVERED LUMEN	1420 lm	1442 lm	1479 lm	1506 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾			

⁽²⁾ CCT is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.



FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Each module is pre-assembled and equipped with its specific diffused optical engine. Driver housing required to feed the module. Refer to the driver housing section.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
DIFFUSER	Opal diffusing screen has to be ordered separately.
CERTIFICATION	cUL _{us} Suitable for Damp Location. IP20

SUSPENSION DIFFUSED CURVED DIRECT

MODEL	0 = Radius 22" (561mm) 60° 2 = Radius 29.5" (750mm) 45°				1 = Radius 22" (561mm) 90°				3 = Radius 29.5" (750mm) 90°			
CRI	8 = 80 CRI				8 = 80 CRI				8 = 80 CRI			
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	16W				24W				33W			
DELIVERED LUMEN	1347 lm	1367 lm	1398 lm	1429 lm	2020 lm	2051 lm	2097 lm	2143 lm	2694 lm	2735 lm	2796 lm	2857 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾											

⁽²⁾ CCT is available by special order. Please contact your sales representative.

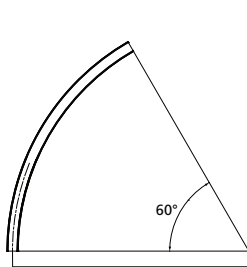
⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

FEATURES

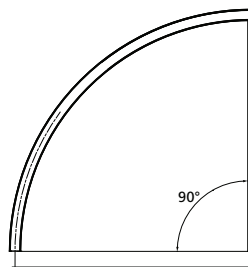
MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Each module is pre-assembled and equipped with its specific diffused optical engine. Driver housing required to feed the module. Refer to driver housing section for maximum Wattage.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.

CERTIFICATION

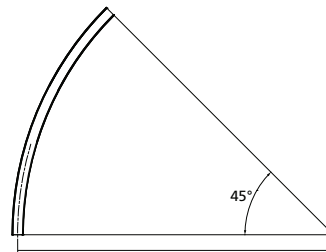
 Suitable for Damp Location. IP20



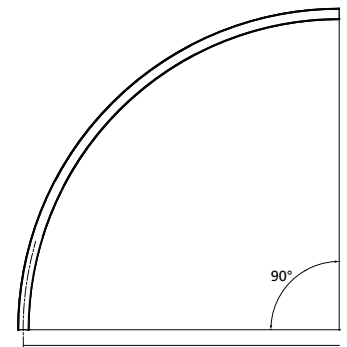
r= 22" [561mm]
Arc length = 1.9ft [0.6m]



r= 22" [561mm]
Arc length = 2.9ft [0.9m]



r= 29.5" [750mm]
Arc length = 1.9ft [0.6m]



r= 29.5" [750mm]
Arc length = 3.8ft [1.2m]



SPACE FITTING

DIRECT SHARPING
SUSPENSION EMISSION

DIRECT + INDIRECT
SHARPING SUSPENSION EMISSIONS




SUSPENSION SHARPING LINEAR DIRECT

LENGTH ⁽¹⁾	L4 = 4 feet (1176mm)							
BEAM	NF = 24° Narrow Flood				WF = 62° Wide flood			
CRI	9 = 90 CRI							
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40= 4000K ⁽²⁾	27 = 2700k ⁽²⁾	30 = 3000k	35 = 3500K	40 = 4000k ⁽²⁾
INPUT POWER	22W							
DELIVERED LUMEN	1528 lm	1628 lm	1628 lm	1742 lm	1624 lm	1731 lm	1731 lm	1852 lm

LENGTH ⁽¹⁾	L8 = 8 feet (2352mm)							
BEAM	NF = 24° Narrow Flood				WF = 62° Wide flood			
CRI	9 = 90 CRI							
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40= 4000K ⁽²⁾	27 = 2700k ⁽²⁾	30 = 3000k	35 = 3500K	40 = 4000k ⁽²⁾
INPUT POWER	45W							
DELIVERED LUMEN	3056 lm	3256 lm	3256 lm	3485 lm	3249 lm	3461 lm	3461 lm	3704 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾							

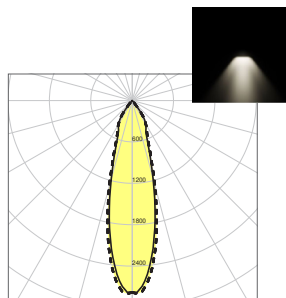
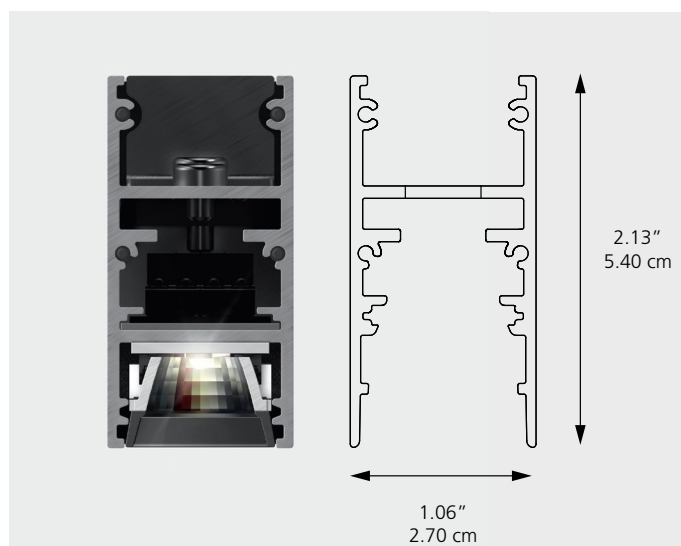
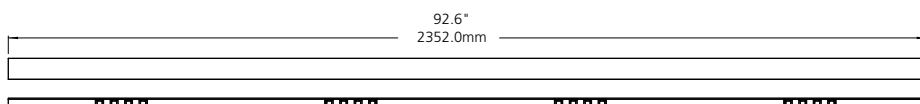
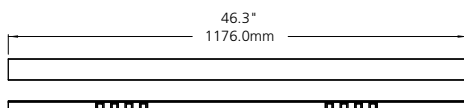
FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Each module is pre-assembled and equipped with its specific sharpening optical engine. Driver housing required to feed the module. Refer to the driver housing section.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
DIFFUSER	Sharpening kit (louvers and covers) has to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order. Please contact your sales representative.

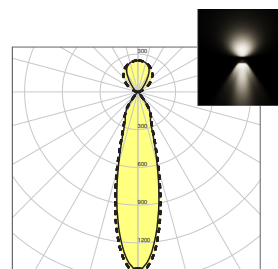
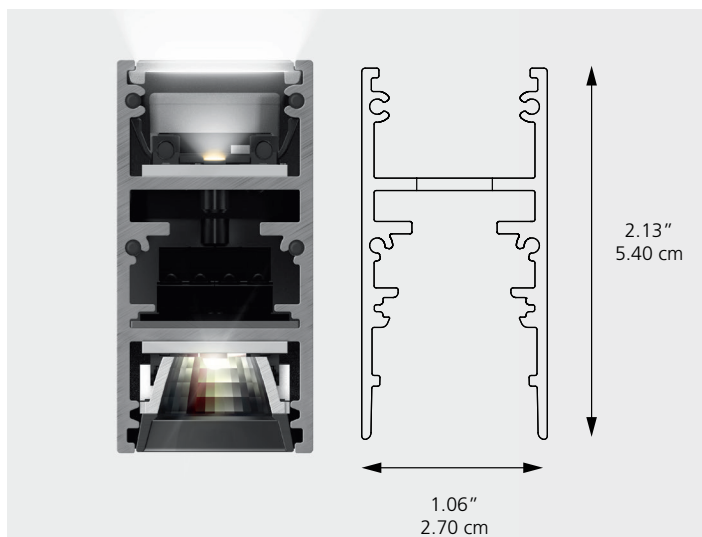
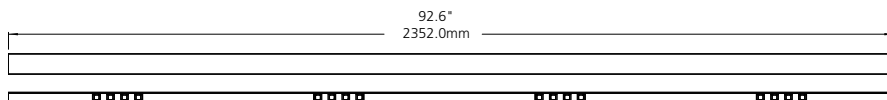
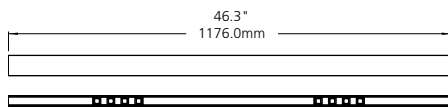
⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.




SUSPENSION SHARPING LINEAR DIRECT / INDIRECT

LENGTH ⁽¹⁾	L4 = 4 feet (1176mm)							
BEAM	NF = 24° Narrow Flood				WF = 62° Wide flood			
CRI	9 = 90 CRI							
CCT (indirect)	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40= 4000K ⁽²⁾	27 = 2700k ⁽²⁾	30 = 3000k	35 = 3500K	40 = 4000k ⁽²⁾
INPUT POWER	38W							
DELIVERED LUMEN	1528 lm (direct) + 1502 lm (indirect)	1628 lm (direct) + 1524 lm (inidrect)	1628 lm (direct) + 1563 lm (indirect)	1742 lm (direct) + 1593 lm (inidrect)	1624 lm (direct) + 1502 lm (indirect)	1731 lm (direct) + 1524 lm (indirect)	1731 lm (direct) + 1563 lm (indirect)	1858 lm (direct) + 1593 lm (indirect)
TOTAL	3030 lm	3152 lm	3191 lm	3335 lm	3126 lm	3255 lm	3294 lm	3451 lm

LENGTH ⁽¹⁾	L8 = 8 feet (2352mm)							
BEAM	NF = 24° Narrow Flood				WF = 62° Wide flood			
CRI	9 = 90 CRI							
CCT (indirect)	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40= 4000K ⁽²⁾	27 = 2700k ⁽²⁾	30 = 3000k	35 = 3500K	40 = 4000k ⁽²⁾
INPUT POWER	77W							
DELIVERED LUMEN	3056 lm (direct) + 3004 lm (indirect)	3256 lm (direct) + 3049 lm (inidrect)	3256 lm (direct) + 3127 lm (inidrect)	3485 lm (direct) + 3185 lm (inidrect)	3249 lm (direct) + 3004 lm (indirect)	3461 lm (direct) + 3049 lm (indirect)	3461 lm (direct) + 3127 lm (indirect)	3704 lm (direct) + 3185 lm (indirect)
TOTAL	6060 lm	6305 lm	6383 lm	6670 lm	6253 lm	6510 lm	6588 lm	6889 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾							



FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Each module is pre-assembled and equipped with its specific sharpening optical engine. Driver housing required to feed the module. Refer to the driver housing section.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
DIFFUSER	Sharpening kit (louvers and covers) has to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20

*Wattage of the Indirect diffused is added to the total load calculation.

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

SUSPENSION SHARPING CORNER (NO LIGHT)


MODULE TYPE	45 = Suspension Sharping 90° Horizontal Corner
COLOR	<ul style="list-style-type: none"> ○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized)⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized)⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized)⁽³⁾

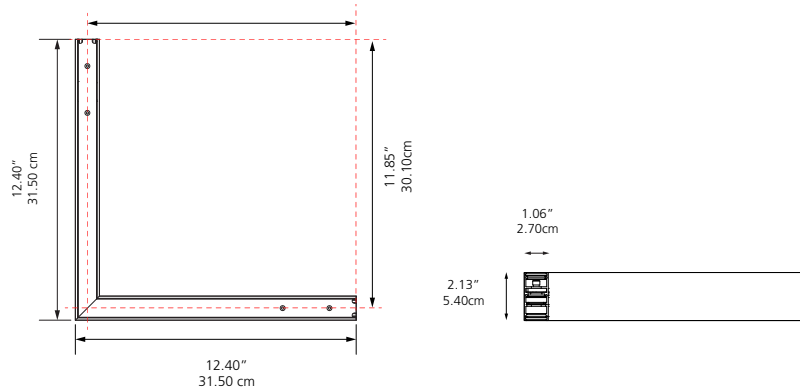
⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

FEATURES

MATERIALS	Aluminum extrusion with powder coat or brushed anodized finish.
MOUNTING	Suspension mount.
CONSTRUCTION	Driver housing not required to feed the module. Refer to driver housing section for wattage distribution.
INSTALLATION	All suspension and mechanical joiners need to be ordered separately.
DIFFUSER	Sharping kit (louvers and covers) has to be ordered separately.
CERTIFICATION	 Suitable for Damp Location. IP20



SUSPENSION SHARPING CURVED DIRECT

MODEL	0 = Radius 22" (561mm) 60°				2 = Radius 29.5" (750mm) 45°				3 = Radius 29.5" (750mm) 90°							
	1 = Radius 22" (561mm) 90°															
BEAM	NF = 24° Narrow Flood															
CRI	9 = 90 CRI						9 = 90 CRI									
CCT	27 = 2700K ⁽²⁾		30 = 3000K		35 = 3500K		40= 4000K ⁽²⁾		27 = 2700K ⁽³⁾		30 = 3000K		35 = 3500K		40 = 4000K ⁽²⁾	
INPUT POWER	11W						22W									
DELIVERED LUMEN	764 lm		814 lm		814 lm		871 lm		1528 lm		1628 lm		1628 lm		1742 lm	

MODEL	0 = Radius 22" (561mm) 60° 1 = Radius 22" (561mm) 90°				2 = Radius 29.5" (750mm) 45° 3 = Radius 29.5" (750mm) 90°			
BEAM	WF = 62° Narrow Flood							
CRI	9 = 90 CRI				9 = 90 CRI			
CCT	27 = 2700K ⁽²⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾	27 = 2700K ⁽³⁾	30 = 3000K	35 = 3500K	40 = 4000K ⁽²⁾
INPUT POWER	11W				22W			
DELIVERED LUMEN	812 lm	865 lm	865 lm	926 lm	1624 lm	1731 lm	1761 lm	1852 lm
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾							

FEATURES

MATERIALS Aluminum extrusion with powder coat or brushed anodized finish.

MOUNTING Suspension mount.

CONSTRUCTION Each module is pre-assembled and equipped with its specific sharpening optical engine. Driver housing required to feed the module. Refer to driver housing section for maximum Wattage.

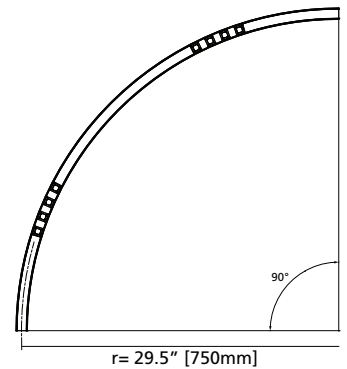
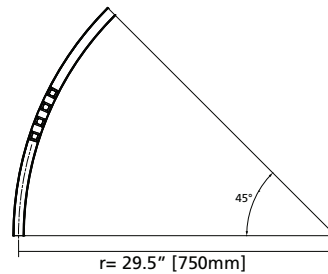
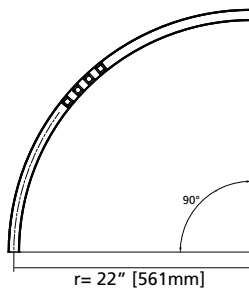
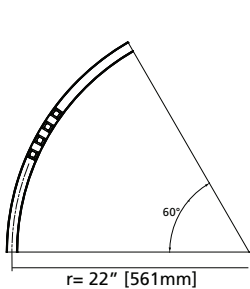
INSTALLATION All suspension and mechanical joiners need to be ordered separately.

DIFFUSER Sharpening kit (louvers and covers) has to be ordered separately.








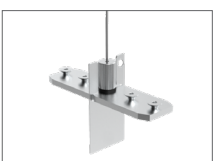


CERTIFICATION  Suitable for Damp Location. IP20

⁽²⁾ CCT is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.



SUSPENSION KITS

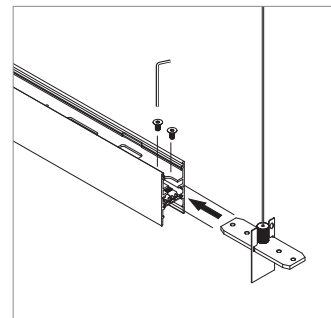
		DIFFUSED	SHARPING	MAGNETIC
	JOINER CONTINUITY Provides mechanical and electrical connections between modules of the same emission.			
	JOINER INSULATING - DIFFUSED OR SHARPING Provides mechanical connection between modules powered by different power supplies.			
	JOINER INSULATING MAGNETIC - TRANSITION TO DIFFUSED / SHARPING Provides mechanical connection and prevents magnetic Vector head to overlap on two circuits. Also avoids leak between magnetic and another emission.			

JOINER INSULATING MAGNETIC - TRANSITION TO DIFFUSED / SHARPING

SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted)

DESCRIPTION Provides suspension cable and mechanical connection joiner, used to interrupt the feeding line between two magnetic track modules. Also used to transition between different modules from Magnetic track to (Diffused or Sharping) emission that are suspension mounted.

MATERIAL Galvanized steel and sheet metal.

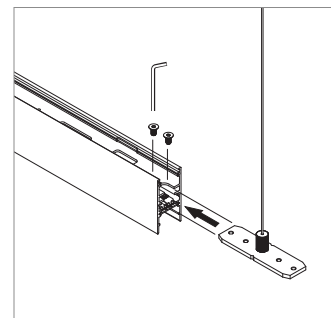


JOINER INSULATING - DIFFUSED OR SHARPING

SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable
--------------------------	---

DESCRIPTION Provides suspension cable and mechanical connection joiner. To be used to interrupt the feeding line between diffused or sharpening modules.

MATERIAL Galvanized steel and sheet metal.

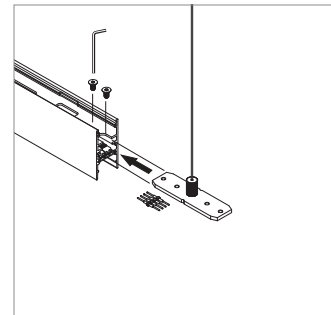


JOINER CONTINUITY

SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable
--------------------------	---

DESCRIPTION Provides suspension cable, mechanical and electrical connection to modules of same emission (e.g., diffused to diffused)

MATERIAL Galvanized steel and sheet metal.



OPAL DIFFUSING SCREEN

LENGTH	200 = 32ft (10m) 300 = 82ft (25m) 400 = 164ft (50m)	500 = 46in (1176mm) 600 = 92in (2352mm) 700 = 138in (3528mm)
DESCRIPTION	Provides a superior brightness and uniform soft glow. Compatible with a diffused module. Purchasing a roll will provide a seamless diffusion on long linear run.	
MATERIAL	Extruded polycarbonate snap-in diffuser, opal white color.	



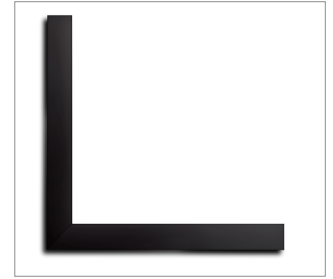
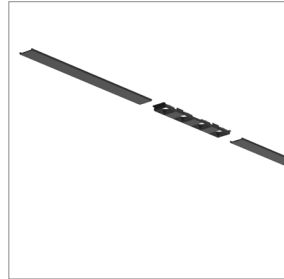
OPAL DIFFUSING SCREEN FOR CURVED ELEMENTS

LENGTH	000 = 32 ft (10m) 100 = 82 ft (25m) 200 = 164 ft (50m) 300 = 16ft (5m)
DESCRIPTION	Provides a uniform soft glow. Photometric differs compared with Polycarbonate opal lens. Used with curved diffused module and for a seamless transition from curved to a linear module and vice versa.
MATERIAL	Extruded PMMA snap-in diffuser, opal white color.



LOUVER FOR LINEAR AND ANGLED ELEMENTS

SHARPING KIT	0 = 4ft (1176mm) 2 louvers 1 intermediate cover 2 end covers	1 = 8ft (2352mm) 4 louvers 3 intermediate cover 2 end covers	2 = 90° angle cover (2pcs)
COLOR	○ 01 = White ● 04 = Black		
DESCRIPTION	Compatible with a sharpening module. Louvers provide optics with its 4-spot cluster and the covers to conceal the rest.		
MATERIAL	Molded louvers for 4 spot cluster, extruded polycarbonate snap-in interspatial covers.		



LOUVER FOR CURVED ELEMENTS

SHARPING KIT	1 = Louver for Curved Modules R = 561mm 60° QTY: 1pc 90° QTY: 1pc	R = 750mm 45° QTY: 1pc 90° QTY: 2pcs
COLOR	○ 01 = White ● 04 = Black	
DESCRIPTION	4- spot cluster for precise optics.	
MATERIAL	Molded TPU	



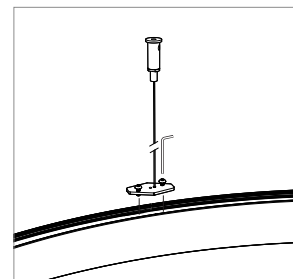
FLEXIBLE COVER FOR CURVED ELEMENTS

LENGTH	0 = 32 ft (10m) 1 = 6.5ft (2m)
COLOR	○ 01 = White ● 04 = Black
DESCRIPTION	Flexible cover is used with curved Sharping module as interspatial covers.
MATERIAL	Extruded TPU snap-in covers



AUXILIARY SUSPENSION KIT

SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable
DESCRIPTION	Provides mid-section leveling for suspended curved modules (e.g., S configuration)
MATERIAL	Galvanized steel.

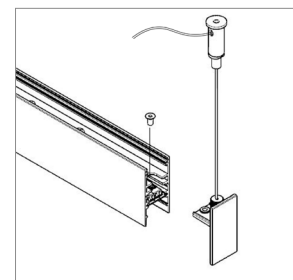


END CAPS (2PCS) & SUSPENSION KIT

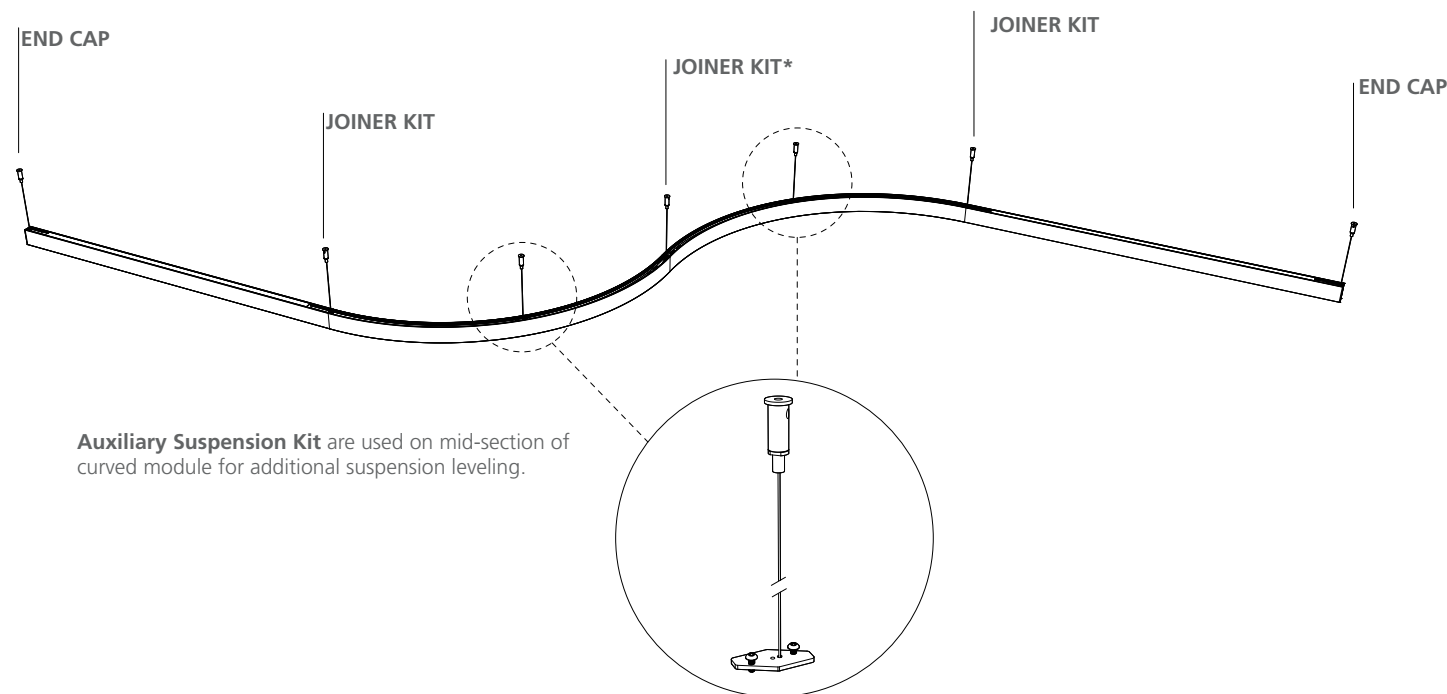
SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable
COLOR	<ul style="list-style-type: none"> ○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized)⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized)⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized)⁽³⁾

DESCRIPTION Provides suspension cable and to cap at both extremities of a module or a system.

MATERIAL Die-cast aluminum with powder coat finish.



CURVE MODULE SUSPENSION SYSTEM LEVELING




* Note: In a S curved configuration, when auxiliary suspension cable is used, the suspension cable on Joiner kit between 2 curved modules could be optionally installed. However mechanical and electrical connector must be used.

SURFACE DRIVER HOUSINGS

MODULE TYPE	DH = Driver Housing
MOUNTING	C = Surface
MODEL	196 = 1 driver 96W 296 = 2 drivers 96W
INPUT	00 = UNV - ON/OFF 08 = UNV - 0 -10V DIM
FEED CABLE LENGTH	06 = 6ft feed cable 20 = 20ft feed cable
HOUSING COLOR	○ W = White ● B = Black

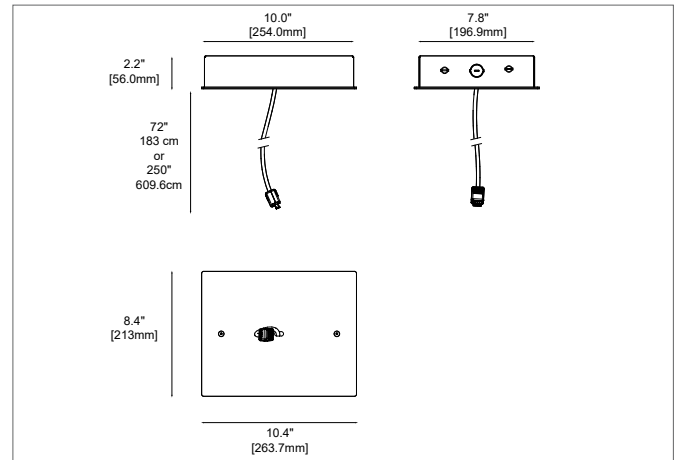
FEATURES

MATERIALS	Galvanized sheet metal housing and cover plate in powder coated paint.
MOUNTING	Surface mount over junction box.
CONSTRUCTION	6 ft / 20 ft power cord with proprietary connector, color matched to cover plate.
CERTIFICATION	 Suitable for Damp Location. IP20

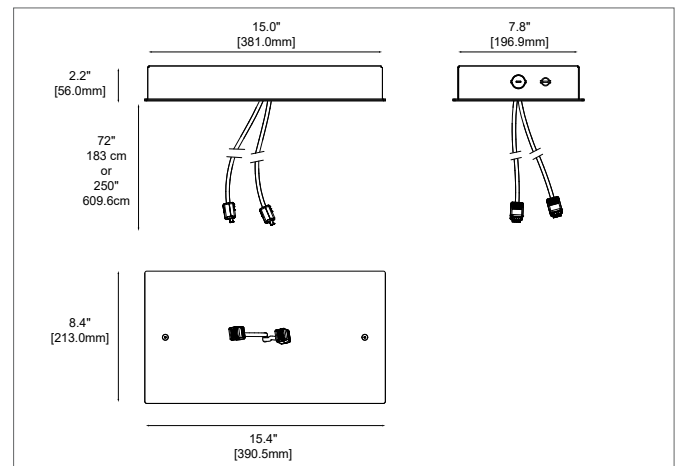
The driver housing is available in size small for 1 driver and large for 2 drivers with options of surface or recessed mounting. Each driver has a maximum of 96 W capacity per circuit. Please ensure the total wattage of modules does not exceed it.

To choose to feed the system with model 1 driver housing or model 2 driver housing, refer to page 4 or 30.

1 DRIVER SURFACE HOUSING



2 DRIVER SURFACE HOUSING



RECESSED DRIVER HOUSINGS

MODULE TYPE	DH = Driver Housing
MOUNTING	R = Recessed
MODEL	196 = 1 driver 96W 296 = 2 drivers 96W
INPUT	00 = UNV - ON/OFF 08 = UNV - 0 -10V DIM
FEED CABLE LENGTH	06 = 6ft feed cable 20 = 20ft feed cable
COLOR	○ W = White ● B = Black

FEATURES

MATERIALS Galvanized sheet metal housing.
Sheet metal cover plate powder coat painted.

MOUNTING Recessed ceiling mount. *

CONSTRUCTION 6 ft / 20 ft power cord with proprietary connector, color matched to cover plate.

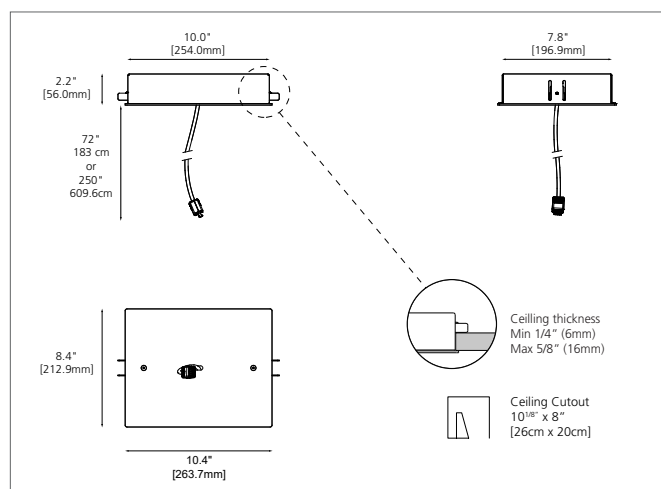
CERTIFICATION  Suitable for Damp Location. IP20

* Not suitable for concrete ceiling

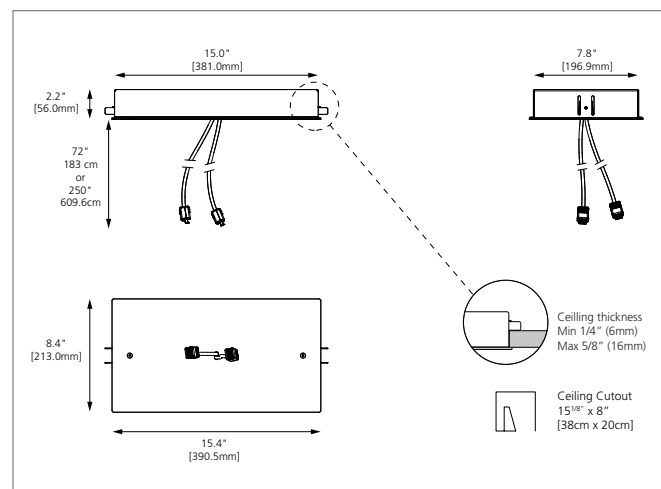
The driver housing is available in size small for 1 driver and large for 2 drivers with options of surface or recessed mounting. Each driver has a maximum of 96 W capacity per circuit. Please ensure the total wattage of modules does not exceed it.

To choose to feed the system with model 1 driver housing or model 2 driver housing, refer to page 4 or 30.

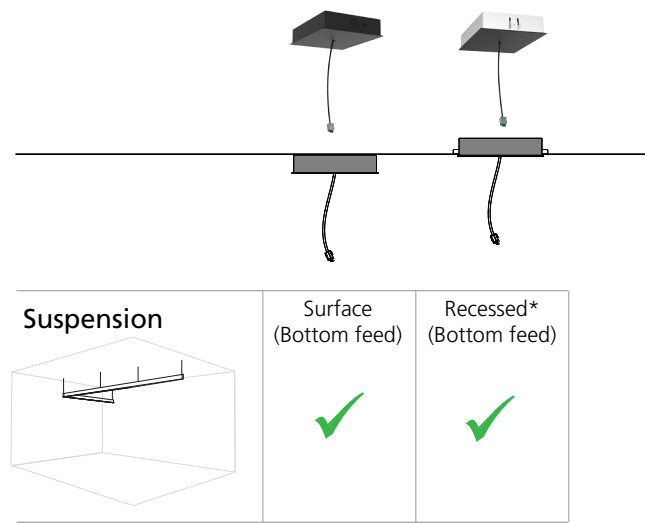
1 DRIVER RECESSED HOUSING



2 DRIVER RECESSED HOUSING

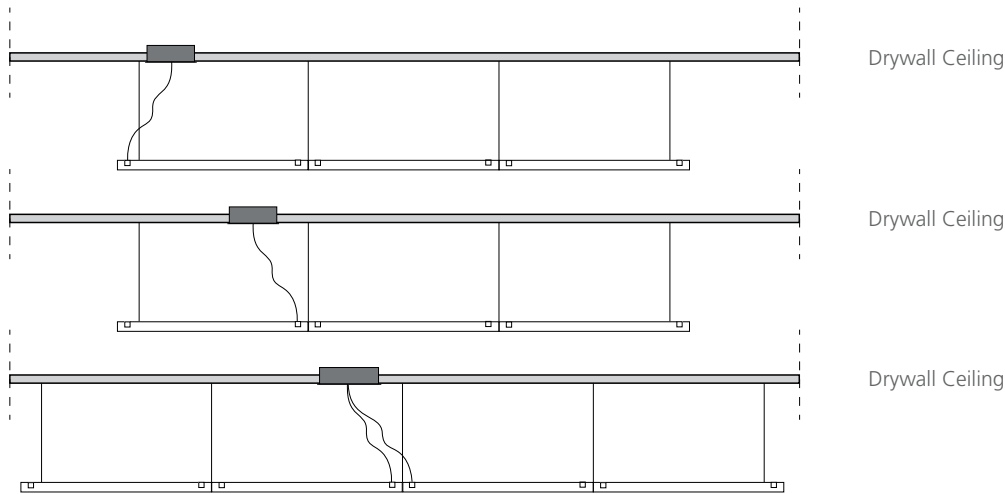


POWER SUPPLY MOUNTING EXAMPLES

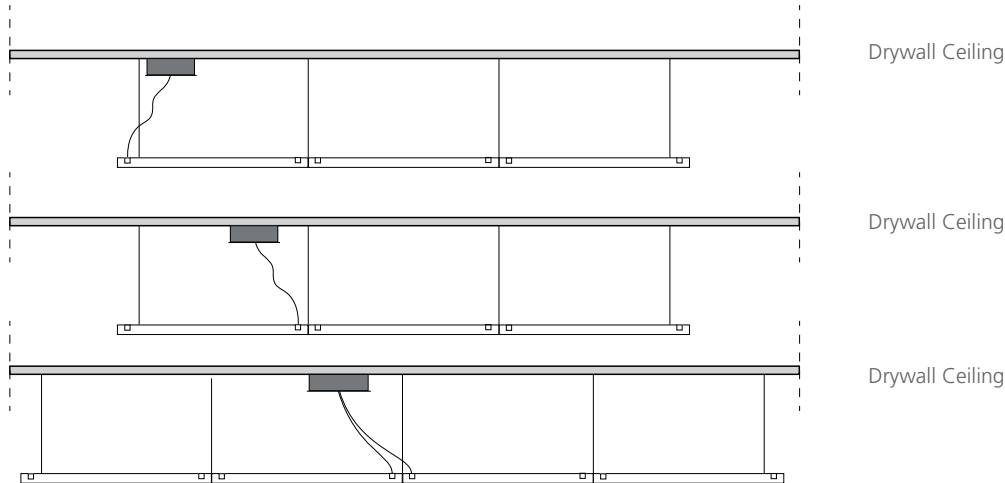


* Not suitable for concrete ceiling.

SUSPENSION MODULES - RECESSED MOUNT DRIVER BOX



SUSPENSION MODULES - SURFACE MOUNT DRIVER BOX



Before ordering driver housings you need to split the layout system in sections of 96W or less. Take in consideration that in order to split the dimming circuit, the module must be powered separately. Different emissions must be powered separately from the dimming circuit to dim the module independently. Follow the table and the example below. For more details about the composition and components of the configuration below, see page 4.

Note: Each driver can operate up to 96 W, refer to the sample below on how to distribute the wattage.

EXAMPLE OF WATTAGE DISTRIBUTION IN A SYSTEM

Section 1 (1 Driver Housing): Magnetic Linear 4ft / indirect emission (**16W**) + Magnetic Vector 40 spots **4 (10W) = 56W** < 96W

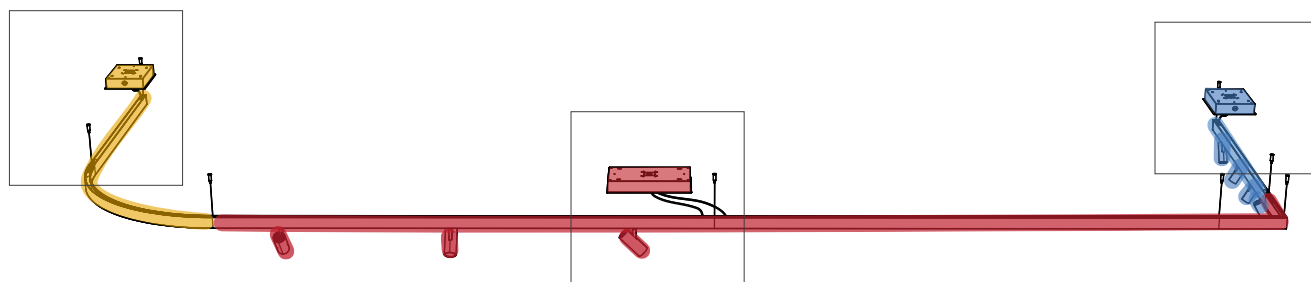
Section 2 (2 Driver Housing): Diffused Corner (**16W**) + Linear Diffused 8 ft (**66W**) = **82W** < 96W

Magnetic Linear 8ft / indirect emission (**33W**) + Magnetic Vector 40 spots **3 (10W) = 63W** < 96W

Section 3 (1 Driver Housing): Sharping Curved (**22W**) + linear sharpening 4ft (**22W**) = **44W** < 96W

WATTAGE PER MODULE

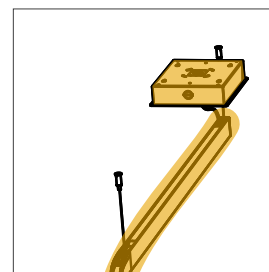
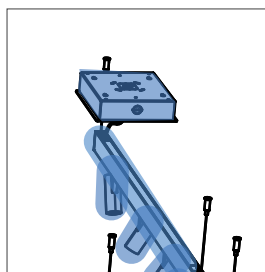
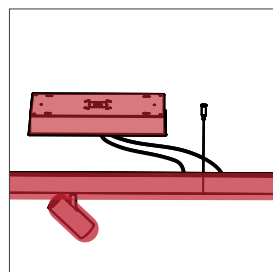
Magnetic Linear Track/ Indirect Emission	Diffused Corner Direct / Indirect	Diffused Linear Direct	Magnetic Linear Track/ Indirect Emission	Sharping Curve Direct	Sharping Linear Direct
4 feet (1176mm) + 4 Magnetic Vector Heads	90° Horizontal	8 feet (2352mm)	8 feet (2352mm) + 3 Magnetic Vector Heads	Radius 29.5" (750mm) 90°	4 feet (1176mm)
16W + 40W	16W	66W	33W + 30W	22W	22W



DRIVER HOUSING PLACEMENT

Large (2 Drivers) - Surface driver housing placed in between two modules.

Small (1 Driver) - Surface driver housing placed at the beginning or end to feed the module.



SUSPENSION MAGNETIC MODULES

Magnetic Linear Module	Length	Wattage
	4ft - 1176mm	not lit
	8ft - 2352mm	not lit

Magnetic Linear Direct + Indirect Emission	Length	Wattage
	4ft - 1176mm	16W Indirect
	8ft - 2352mm	33W Indirect

Magnetic 90° Angle Module	Length	Wattage
	12" X 12" 301mm X 301mm	not lit

Magnetic Curved Module	Length	Alpha	Wattage
	561mm	60	not lit
		90	not lit
	750mm	45	not lit
		90	not lit

VECTOR MAGNETIC 40

Vector Magnetic Track Head 40	Beam	Wattage
	13°	10W
	20°	10W
	28°	10W

VECTOR MAGNETIC 55

Vector Magnetic Track Head 55	Beam	Wattage
	16°	26W
	22°	26W
	32°	26W

VECTOR MAGNETIC 55 ZOOM

Vector Magnetic Track Head 55 Zoom	Beam	Wattage
	22° to 32°	23W

MAXIMUM QUANTITY OF VECTOR HEADS
PER TRACK BY WATTAGE

Magnetic Linear Module Length	Vector 40	Vector 55	Vector 55 Zoom
4FT Direct track	4 QTY= 40W	3 QTY= 78W	4 QTY= 92W
4FT Dir/Indtrack (16W)	4 QTY= 40W	3 QTY= 78W	3 QTY= 69W
8FT Direct track	9 QTY= 90W	3 QTY= 78W	4 QTY= 92W
8FT Dir/Indtrack (33W)	6 QTY= 60W	2 QTY= 52W	2 QTY= 46W

Wattage for Indirect emission must be added to the total wattage of the Vector heads and it has to be less than 96W.

SUSPENSION DIFFUSED MODULES

Diffused Linear Direct Emission	Length	Wattage
	4ft - 1176mm	33W direct
	8ft - 2352mm	66W direct

Diffused Linear Direct + Indirect Emission	Length	Wattage
	4ft - 1176mm	49W direct + Indirect
	8ft - 2352mm	98W direct + Indirect

Diffused 90° Angle Direct Emission	Length	Wattage
	12" X 12" 301mm X 301mm	16W

Diffused Curved Direct + Indirect Emission	Length	Alpha	Wattage
	561mm	60	16W
		90	24W
	750mm	45	16W
		90	33W

SUSPENSION SHARPING MODULES

Sharping Linear Direct Emission	Length	Wattage
	4ft - 1176mm	22W direct
	8ft - 2352mm	45W direct

Sharping Linear Direct + Indirect Emission	Length	Wattage
	4ft - 1176mm	38W direct + Indirect
	8ft - 2352mm	77W direct + Indirect

Sharping 90° Angle Module	Length	Wattage
	12" X 12" 301mm X 301mm	not lit

Sharping Curved Direct + Indirect Emission	Length	Alpha	Wattage
	561mm	60	11W
		90	11W
	750mm	45	11W
		90	22W

Compose your **A.24 Suspension System**, by drawing it out below.

Project Name	
Description	
Type	
Notes	

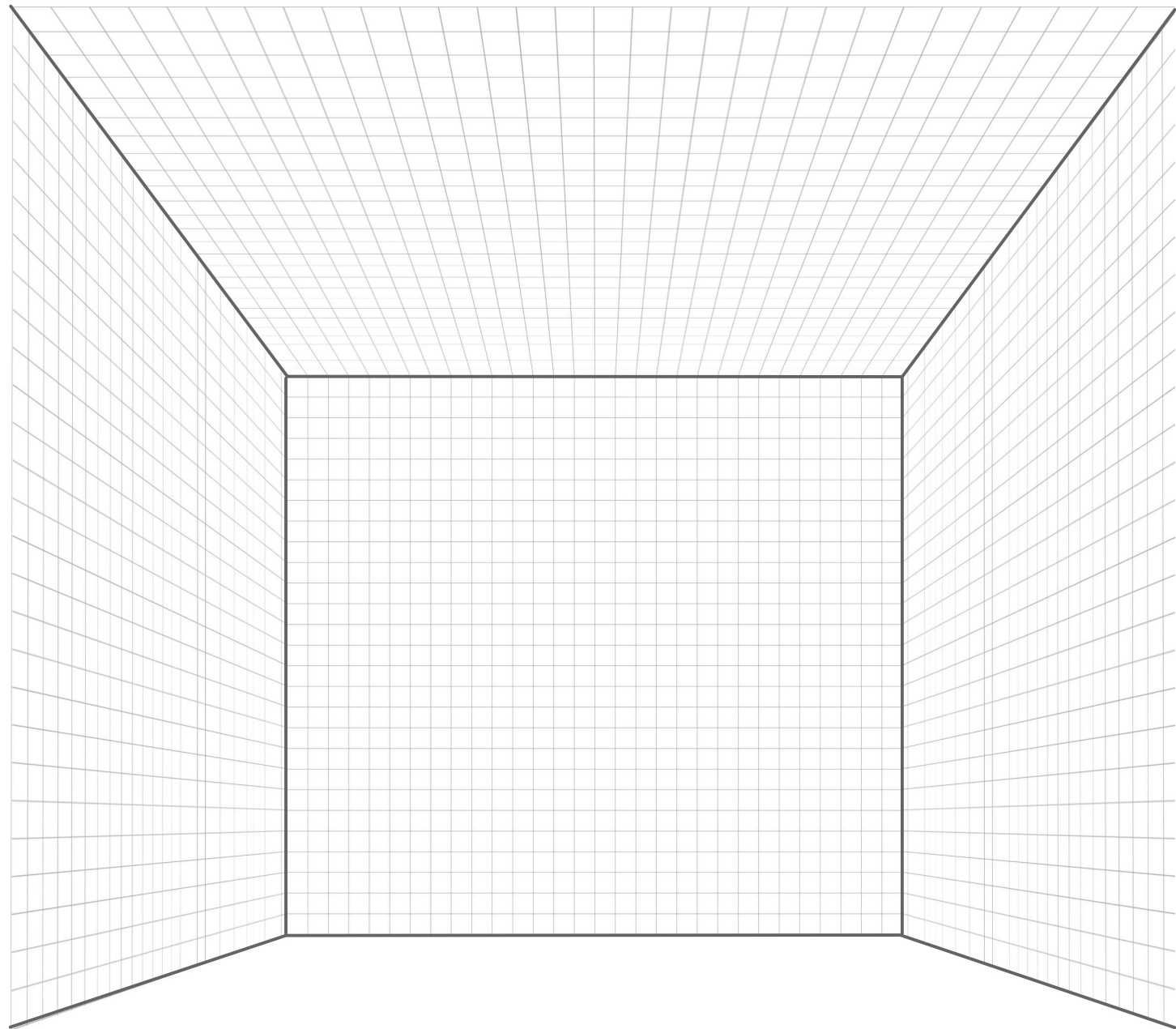
Draw your own configuration here:

[illegible]

Compose your **A.24 system**, by drawing it out below and completing the order guide.

Project Name	
Description	
Type	
Notes	

PERSPECTIVE VIEW : Draw your own configuration here.



STEPS ON HOW TO ORDER:

STEP 1 : MODULE TYPE	Choose modules according to the layout , take in consideration module length, color and the light configuration.
STEP 2 : JOINER KIT	Choose the appropriate suspension cable kits depending on the trailing and leading modules connected by the joiner. (e.g. to connect one diffused module to a magnetic, order a Joiner Insulating Magnetic Kit.) Order the Auxiliary Suspension Kit to stabilize curved modules.
STEP 3 : FINISHING ACCESSORY	Choose the appropriate finishing accessory depending on what type the module is and the length. (e.g. to cover a sharpening curve module, order a louver with the right radius and a flexible cover to cover the rest.)
STEP 4 : DRIVER BOX	Choose the driver housing take in consideration how will it be mounted and the size of the housing that will accomodate the number of drivers depending on the system's size.

MAGNETIC TRACK LINEAR MODULES

SUSPENSION MAGNETIC LINEAR TRACK

FAMILY	AQ = A.24 System
MODULE TYPE	40 = Suspension Linear Magnetic Track
LENGTH ⁽¹⁾	L4 = 4 feet (1176mm) L8 = 8 feet (2352mm)
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only.
Please contact your sales representative.

#CAT	Type	Length	Color	QTY
USC-AQ	40			
USC-AQ	40			
USC-AQ	40			
USC-AQ	40			
USC-AQ	40			

SUSPENSION MAGNETIC LINEAR AND INDIRECT TRACK

FAMILY	AQ = A.24 System
MODULE TYPE	40 = Suspension Linear Magnetic Track
LENGTH⁽¹⁾	L4 = 4 feet (1176mm) L8 = 8 feet (2352mm)
EMISSION	B = Linear + Indirect Emission
CRI	8 = 80 CRI
CCT (INDIRECT)	27 = 2700K⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K⁽²⁾
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order only. Please contact factory.

⁽³⁾ Brushed anodized finish is available by special order only.
Please contact your sales representative.

#CAT	Type	Length	Emission	CRI	CCT (Indirect)	Color	QTY
USC-AQ	40		B	8			
USC-AQ	40		B	8			
USC-AQ	40		B	8			
USC-AQ	40		B	8			
USC-AQ	40		B	8			

SUSPENSION MAGNETIC CORNER TRACK

FAMILY	AQ = A.24 System
MODULE TYPE	49 = Suspension Magnetic Track Corner
MODEL	2 = 90° Horizontal 12" x 12"
COLOR	<ul style="list-style-type: none"> ○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized)⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized)⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized)⁽³⁾

⁽³⁾ Brushed anodized finish is available by special order only.
Please contact your sales representative.

#CAT	Type	Model	Color	QTY
USC-AQ	49	2		
USC-AQ	49	2		
USC-AQ	49	2		
USC-AQ	49	2		
USC-AQ	49	2		

SUSPENSION MAGNETIC CURVED TRACK

FAMILY	AQ = A.24 System
MODULE TYPE	7 = Curved Suspension module
MODEL	0 = Radius 22" (561mm) 60°
	1 = Radius 22" (561mm) 90°
	2 = Radius 29.5" (750mm) 45°
	3 = Radius 29.5" (750mm) 90°
EMISSION	0 = Not Magnetic
COLOR	<ul style="list-style-type: none"> ○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized)⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized)⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized)⁽³⁾

⁽³⁾ Brushed anodized finish is available by special order only.
Please contact your sales representative.

#CAT	Type	Model	Emission	Color	QTY
USC-AQ	7		0		
USC-AQ	7		0		
USC-AQ	7		0		
USC-AQ	7		0		
USC-AQ	7		0		

LINEAR MAGNETIC TRACK HEADS

VECTOR MAGNETIC 40

FAMILY	AP = Vector
MODEL	0 = Vector 40
CCT	0 = 3000K 1 = 2700K 2 = 3500K 5 = 4000K
BEAM	1 = Narrow Spot 13° 2 = Spot 20° 3 = Narrow Flood 28°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Model	CCT	Beam	Color	QTY
USC-AP	0				
USC-AP	0				
USC-AP	0				
USC-AP	0				
USC-AP	0				

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

VECTOR MAGNETIC 55

FAMILY	AP = Vector
MODEL	1 = Vector 55
CCT	0 = 3000K 1 = 2700K 2 = 3500K 5 = 4000K
BEAM	1 = Spot 16° 2 = Spot 22° 3 = Narrow Flood 32°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Model	CCT	Beam	Color	QTY
USC-AP	1				
USC-AP	1				
USC-AP	1				
USC-AP	1				
USC-AP	1				

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

VECTOR MAGNETIC 55 ZOOM

FAMILY	AP = Vector
MODEL	1 = Vector 55
CCT	0 = 3000K 1 = 2700K 2 = 3500K 5 = 4000K
BEAM	4 = Spot 22° to Narrow Flood 32°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Model	CCT	Beam	Color	QTY
USC-AP	1		4		
USC-AP	1		4		
USC-AP	1		4		
USC-AP	1		4		
USC-AP	1		4		

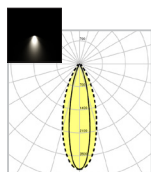
⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

ACCESSORIES HOLDER

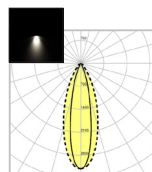


#CAT	Model	Color	QTY
USC-AP90100	VECTOR 40	BLACK	
USC-AP91100	VECTOR 55	BLACK	

ELLIPTICAL LENSES



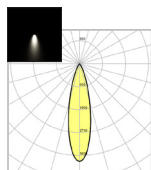
Vector 40 / Elliptical Lens
Beam 20° - 3000 K
Max Value: 3396 cd/klm



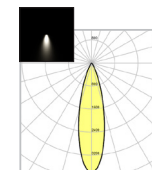
Vector 55 / Elliptical Lens
Beam 22° - 3000 K
Max Value: 3209 cd/klm

#CAT	Model	Color	QTY
USC-AP90200	VECTOR 40	N/A	
USC-AP91200	VECTOR 55	N/A	

SOFT FILTER



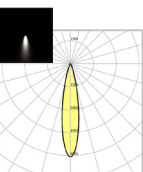
Vector 40 / Soft Lens
Beam 20° - 3000 K
Max Value: 3823 cd/klm



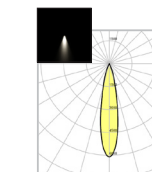
Vector 55 / Soft Lens
Beam 22° - 3000 K
Max Value: 3793 cd/klm

#CAT	Model	Color	QTY
USC-AP90300	VECTOR 40	N/A	
USC-AP91300	VECTOR 55	N/A	

ANTI-DAZZLE LOUVRE



Vector 40 / Anti-dazzle Louvre
Beam 20° - 3000 K
Max Value: 6076 cd/klm



Vector 55 / Anti-dazzle Louvre
Beam 22° - 3000 K
Max Value: 6105 cd/klm

#CAT	Model	Color	QTY
USC-AP90400	VECTOR 40	BLACK	
USC-AP91400	VECTOR 55	BLACK	

ADJUSTABLE DOWSERS



#CAT	Model	Color	QTY
USC-AP91500	VECTOR 55	BLACK	

LINEAR DIFFUSED EMISSION MODULES

SUSPENSION DIFFUSED LINEAR DIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	41 = Suspension Linear Diffused (Direct)
LENGTH ⁽¹⁾	L4 = 4 feet (1176mm) L8 = 8 feet (2352mm)
EMISSION	D = Direct
CRI	8 = 80 CRI
CCT	27 = 2700K ⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K ⁽²⁾
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Type	Length	Emission	CRI	CCT	Color	QTY
USC-AQ	41		D	8			
USC-AQ	41		D	8			
USC-AQ	41		D	8			
USC-AQ	41		D	8			
USC-AQ	41		D	8			

⁽¹⁾ Custom length available as special order. Please contact your sales representative.

⁽²⁾ CCT available as special order only. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

SUSPENSION DIFFUSED LINEAR DIRECT / INDIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	46 = Suspension Linear Diffused (Dir / Ind)
LENGTH ⁽¹⁾	L4 = 4 feet (1176mm) L8 = 8 feet (2352mm) **
EMISSION	B = Direct + Indirect
CRI	8 = 80 CRI
CCT	27 = 2700K ⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K ⁽²⁾
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Type	Length	Emission	CRI	CCT	Color	QTY
USC-AQ	46		B	8			
USC-AQ	46		B	8			
USC-AQ	46		B	8			
USC-AQ	46		B	8			
USC-AQ	46		B	8			

⁽¹⁾ Custom length available as special order. Please contact your sales representative.

⁽²⁾ CCT available as special order only. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

** 8ft Diffused Dir / Ind module is split in 2 circuits each feed by a separate driver. Double driver housing should be ordered.

OPAL DIFFUSING SCREEN

FAMILY	AQ = A.24 System
ACCESSORY TYPE	16 = Opal diffusing screen
LENGTH	200 = 33ft (10m) 300 = 82ft (24m) 400 = 164ft (50m) 500 = 46in (1176mm) 600 = 93in (2352mm) 700 = 139in (3528mm)

#CAT	Type	Length	QTY
USC-AQ	16		
USC-AQ	16		
USC-AQ	16		
USC-AQ	16		

SUSPENSION DIFFUSED CORNER DIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	41 = Suspension Linear Diffused (Direct)
MODEL	H1 = 90° Horizontal 12"
EMISSION	D = Direct
CRI	8 = 80 CRI
CCT	27 = 2700K ⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K ⁽²⁾
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Type	Model	Emission	CRI	CCT	Color	QTY
USC-AQ	41	H1	D	8			
USC-AQ	41	H1	D	8			
USC-AQ	41	H1	D	8			
USC-AQ	41	H1	D	8			
USC-AQ	41	H1	D	8			

⁽²⁾ CCT is available by special order only. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

SUSPENSION DIFFUSED CURVED DIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	7 = Suspension Curved Module
MODEL	0 = Radius 22" (561mm) 60°
	1 = Radius 22" (561mm) 90°
	2 = Radius 29.5" (750mm) 45°
	3 = Radius 29.5" (750mm) 90°
EMISSION	D = Direct
CRI	8 = 80 CRI
CCT	27 = 2700K ⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K ⁽²⁾
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Type	Model	Emission	CRI	CCT	Color	QTY
USC-AQ	7		D	8			
USC-AQ	7		D	8			
USC-AQ	7		D	8			
USC-AQ	7		D	8			
USC-AQ	7		D	8			

⁽¹⁾ Custom model is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order only. Please contact factory.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

OPAL DIFFUSING SCREEN FOR CURVED ELEMENTS

FAMILY	AQ = A.24 System
ACCESSORY TYPE	90 = Flexible Opal diffusing screen for Curved Module*
LENGTH	000 = 32ft (10m) 100 = 82 ft (25m) 200 = 164ft (50m) 300 = 16ft (5m)

*Flexible screen recommended for a seamless transition from curved to linear module and vice versa.

#CAT	Type	Length	QTY
USC-AQ	90		
USC-AQ	90		
USC-AQ	90		
USC-AQ	90		

LINEAR SHARPING EMISSION MODULES

SUSPENSION SHARPING LINEAR DIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	42 = Suspension Sharping (Narrow Flood) 44 = Suspension Sharping (Wide Flood)
LENGTH⁽¹⁾	L4 = 4 feet (1176mm) L8 = 8 feet (2352mm)
EMISSION	D = Direct
CRI	9 = 90 CRI
CCT	27 = 2700K⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K⁽²⁾
BEAM	NF = Narrow Flood 24° WF = Wide Flood 62°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order only. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

#CAT	Type	Length	Emission	CRI	CCT	Beam	Color	QTY
USC-AQ	42		D	9		NF		
USC-AQ	42		D	9		NF		
USC-AQ	42		D	9		NF		
USC-AQ	42		D	9		NF		
USC-AQ	42		D	9		NF		

#CAT	Type	Length	Emission	CRI	CCT	Beam	Color	QTY
USC-AQ	44		D	9		WF		
USC-AQ	44		D	9		WF		
USC-AQ	44		D	9		WF		
USC-AQ	44		D	9		WF		
USC-AQ	44		D	9		WF		

SUSPENSION SHARPING LINEAR DIRECT / INDIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	47 = Suspension Sharping (Sharping / Indirect)
LENGTH⁽¹⁾	L4 = 4 feet (1176mm) L8 = 8 feet (2352mm)
EMISSION	B = Direct + Indirect
CRI	9 = 90 CRI
CCT	27 = 2700K⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K⁽²⁾
BEAM	NF = Narrow Flood 24° WF = Wide Flood 62°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ● 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Type	Length	Emission	CRI	CCT	Beam	Color	QTY
USC-AQ	47		B	9				
USC-AQ	47		B	9				
USC-AQ	47		B	9				
USC-AQ	47		B	9				
USC-AQ	44		B	9				

⁽¹⁾ Custom length is available by special order. Please contact your sales representative.

⁽²⁾ CCT is available by special order only. Please contact your sales representative.

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

SUSPENSION SHARPING CORNER

FAMILY	AQ = A.24 System
MODULE TYPE	45 = Suspension Sharping 90° Horizontal Corner
EMISSION	0 = Not Lit
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

#CAT	Type	Emission	Color	QTY
USC-AQ	45	0		
USC-AQ	45	0		
USC-AQ	45	0		
USC-AQ	45	0		
USC-AQ	45	0		

SUSPENSION SHARPING CURVED DIRECT

FAMILY	AQ = A.24 System
MODULE TYPE	7 = Suspension Curved Module
MODEL	0 = Radius 22" (561mm) 60°
	1 = Radius 22" (561mm) 90°
	2 = Radius 29.5" (750mm) 45°
	3 = Radius 29.5" (750mm) 90°
EMISSION	D = Direct
CRI	9 = 90 CRI
CCT	27 = 2700K ⁽²⁾ 30 = 3000K 35 = 3500K 40 = 4000K ⁽²⁾
BEAM	NF = Narrow Flood 24° WF = Wide Flood 62°
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

#CAT	Type	Model	Emission	CRI	CCT	Beam	Color	QTY
USC-AQ	7		D	9				
USC-AQ	7		D	9				
USC-AQ	7		D	9				
USC-AQ	7		D	9				
USC-AQ	7		D	9				

⁽³⁾ Brushed anodized finish is available by special order only. Please contact your sales representative.

LOUVER FOR LINEAR AND ANGLED ELEMENTS

FAMILY	AQ = A.24 System
ACCESSORY TYPE	26 = Sharping Louver for Linear Module
SHARPING KIT	0 = 46.3" (1176mm) 2 louvers 1 intermediate cover 2 end covers
	1 = 92.6" (2352mm) 4 louvers 3 intermediate cover 2 end covers
	2 = 90° angle cover (2pcs)
COLOR	○ 01 = White ● 04 = Black

#CAT	Type	Sharping kit	Color	QTY
USC-AQ	26			
USC-AQ	26			
USC-AQ	26			

LOUVER FOR CURVED ELEMENTS

FAMILY	AQ = A.24 System
ACCESSORY TYPE	91 = Louver for curved modules
SHARPING KIT	1 = Louver for Curved Modules R = 22" (561mm) 60° order QTY: 1pc 90° order QTY: 1pc R = 29.5" (750mm) 45° 1pc QTY: 1pc 90° 2pcs QTY: 2 pcs
COLOR	<input type="radio"/> 01 = White <input checked="" type="radio"/> 04 = Black

#CAT	Type	Sharping kit	Color	QTY
USC-AQ	91	1		
USC-AQ	91	1		

FLEXIBLE COVER FOR CURVED ELEMENTS

FAMILY	AQ = A.24 System
ACCESSORY TYPE	92 = Flexible cover
LENGTH	0 = 32ft (10m) 1 = 6.5ft (2m)
COLOR	<input type="radio"/> 01 = White <input checked="" type="radio"/> 04 = Black

#CAT	Type	Length	Color	QTY
USC-AQ	92			
USC-AQ	92			

*Flexible screen recommended for a seamless transition from curved to linear module and vice versa.

ACCESSORY JOINER KITS

JOINER CONTINUITY

FAMILY	AQ = A.24 System
ACCESSORY TYPE	JC = Joiner Continuity
MOUNTING	S = Suspension
MODULE TYPE COMPATIBILITY	A = Diffused / Sharping / Magnetic
SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable

#CAT	Accessory Type	Mounting	Compatibility	Suspension Length	QTY
USC-AQ	JC	S	A		
USC-AQ	JC	S	A		

JOINER INSULATING MAGNETIC -
TRANSITION TO DIFFUSED / SHARPING

FAMILY	AQ = A.24 System
ACCESSORY TYPE	Jl = Joiner Insulating Magnetic - Transition to Diffused / Sharping
MOUNTING	S = Suspension
MODULE TYPE COMPATIBILITY	M = Magnetic
SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted)

#CAT	Accessory Type	Mounting	Compatibility	Suspension Length	Color	QTY
USC-AQ	Jl	S	M			
USC-AQ	Jl	S	M			

JOINER INSULATING - DIFFUSED OR SHARPING

FAMILY	AQ = A.24 System
ACCESSORY TYPE	Jl = Joiner Insulating Diffused / Sharping
MOUNTING	S = Suspension
MODULE TYPE COMPATIBILITY	D = Diffused / Sharping
SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable

#CAT	Accessory Type	Mounting	Compatibility	Suspension Length	QTY
USC-AQ	Jl	S	D		
USC-AQ	Jl	S	D		

AUXILIARY SUSPENSION KIT

FAMILY	AQ = A.24 System
ACCESSORY TYPE	JS = Joiner S curved
MOUNTING	S = Suspension
MODULE TYPE COMPATIBILITY	A = Diffused / Sharping / Magnetic
SUSPENSION LENGTH	06 = 6FT (200cm) Suspension Cable 20 = 20FT (610cm) Suspension Cable

#CAT	Accessory Type	Mounting	Compatibility	Suspension Length	QTY
USC-AQ	JS	S	A		
USC-AQ	JS	S	A		

END CAPS (2PCS) & SUSPENSION KIT

FAMILY	AQ = A.24 System
ACCESSORY TYPE	EC = End Cap
MOUNTING	S = Suspension
MODULE TYPE COMPATIBILITY	A = Diffused / Sharping / Magnetic
SUSPENSION LENGTH	06 = 6FT (200 cm) Suspension Cable 20 = 20FT (610 cm) Suspension Cable
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted) ○ 15 = Brushed Silver (Brushed Anodized) ⁽³⁾ ● 18 = Brushed Copper (Brushed Anodized) ⁽³⁾ ● 20 = Brushed Bronze (Brushed Anodized) ⁽³⁾

⁽³⁾Brushed anodized finish is available by special order only.
Please contact your sales representative.

#CAT	Accessory Type	Mounting	Compatibility	Suspension Length	Color	QTY
USC-AQ	EC	S	A			
USC-AQ	EC	S	A			
USC-AQ	EC	S	A			
USC-AQ	EC	S	A			
USC-AQ	EC	S	A			

SURFACE MOUNT DRIVER BOX

FAMILY	AQ = A.24 System
MODULE TYPE	DH = Driver Housing
MOUNTING	C = Surface
MODEL	196 = Driver 1 x 96W 296 = Drivers 2 x 96W
INPUT	00 = UNV - ON/OFF 08 = UNV - 0-10V DIM
FEED CABLE LENGTH	06 = 6ft feed cable 20 = 20ft feed cable
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted)

#CAT	Module Type	Mounting	Model	Input	Feed Cable Length	Color	QTY
USC-AQ	DH	C					
USC-AQ	DH	C					
USC-AQ	DH	C					
USC-AQ	DH	C					
USC-AQ	DH	C					
USC-AQ	DH	C					
USC-AQ	DH	C					

RECESSED MOUNT DRIVER BOX

FAMILY	AQ = A.24 System
MODULE TYPE	DH = Driver Housing
MOUNTING	R = Recessed
MODEL	196 = 1 driver 90W (small) 296 = 2 drivers 90W (large)
INPUT	00 = UNV - ON/OFF 08 = UNV - 0-10V DIM
FEED CABLE LENGTH	06 = 6ft feed cable 20 = 20ft feed cable
COLOR	○ 01 = White (Powder Coat Painted) ● 04 = Black (Powder Coat Painted)

#CAT	Module Type	Mounting	Model	Input	Feed Cable Length	Color	QTY
USC-AQ	DH	R					
USC-AQ	DH	R					
USC-AQ	DH	R					
USC-AQ	DH	R					
USC-AQ	DH	R					
USC-AQ	DH	R					
USC-AQ	DH	R					

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.