

Industrial products for electronics, cosmetology, low vision and other applications



## Magnification is essential to a large number of applications

Many industrial operations including assembly, inspection and rework, rely on the use of illuminated magnifiers for the proper viewing of a product's components. Low vision customers rely on quality illuminated magnifiers to provide users with accurate color rendering and magnification. Cosmetics and cosmetology applications depend on illuminated magnifiers to withstand the rigors of everyday use in health spas and beauty salons.

A number of industries are particularly sensitive to electrostatic discharges (ESD), and need to establish measures for eliminating static. ESD-Safe magnifiers are a valuable tool in these industries as they help guard against uncontrolled static dissipation. UV magnifiers, which contain UV-A lightsources, allow for the inspection of conformal coatings, welds, solder joints, and other areas of stress contamination. Under ultraviolet light, UV tracers glow a dark purple color allowing technicians to ensure proper coverage.

### The history of Luxo illuminated magnifiers

Luxo's history of lighting for the individual began with the development of the L-1 task light in 1937. The freedom of movement and the ability to place light exactly where it was needed forever changed the way task lights are used.

L-1 was designed by Luxo's founder, the Norwegian industrialist Jac Jacobsen, and is still in production today. The lamp arm is balanced by springs that work on the action and reaction principle of human arm muscles. Jac Jacobsen soon realized that his spring-balanced arm could carry a variety of different luminaires, including illuminated magnifiers, for numerous purposes.

The decades following saw Luxo's development of a range of illuminated magnifiers for industrial applications, electronics, therapy and cosmetology, low vision and the healthcare sector.





# Perfect balance, maximum flexibility

Luxo's magnifiers are specially designed to maximize horizontal and vertical movement. They provide significant horizontal reach, and will always stay in the right position without drifting. The arms are balanced by spring systems which ensure smooth and easy positioning – no knobs to tighten, nothing to adjust.

The ability to position the lens and direct the light exactly where it is needed is the hallmark of Luxo's illuminated magnifiers. The flexibility of the lamp head means that it is easy to adjust the magnifier for your personal needs.

#### Friction-free lamp head movements

It is the combination of arm and head movements that determines the degree of flexibility in a magnifier. Luxo's magnifiers are highly flexible, offering a combination of the three all-important head movements:

- Horizontal side-to-side movement (yaw)
- Up and down movement (tilt)
- Rotation around a horizontal axis (roll)

The flexibility of the self-balancing arm and friction-free joint between the lamp head and arm makes exact positioning easy.



Self-balancing, friction-free arm.



Friction-free joint between the lamp head and





## The importance of light quality

At Luxo we know how important light is for the working environment and for the health and well-bring of an individual in a workplace. Good lighting reduces the risk of health problems, increases safety, and enhances productivity.

For this reason, Luxo places great importance on the light quality of our illuminated magnifiers. They are not just magnifiers with light, but powerful luminaires with excellent light output. The quality and exact positioning of the lightsources in relation to the lens allows for virtually shadow-free magnification and excellent color rendering capabilities

#### LED: Lightsource of the future

Over the past few years, Luxo has designed and manufactured a new generation of luminaires, all featuring LED instead of traditional lightsources. Light Emitting Diodes (LEDs) are semiconductors that emit light when an electric current passes through them. LEDs can be used on their own, or assembled into modules for added power.

### Ergonomic. Energy-efficient. Economic.

Luxo's modern LED magnifiers are designed to provide the best possible ergonomics, while saving energy. They use only a fraction of the energy required by luminaires with traditional lightsources.

LEDs have an incredibly long life span. The diodes in Luxo LED magnifiers have a life expectancy of more than 50,000 hours. That equates to 25 years or more with normal use.

#### LED magnifiers

#### WAVE® LED

#### Rectangular lens LED magnifier

No knobs to tighten, nothing to adjust. The WAVE LED has a flexible, self-balancing shade and hands-free neck assembly which allow the lamp head to be secured in any position. The fully-enclosed neck design is ideal for cosmetics, cosmetology and other environments where foreign object debris (FOD) is a concern. An automatic shut-off feature further ensures energy savings. WAVE LED offers shadow-free magnification with light coming from both sides, as well as three-dimensional magnification lighting from the left or right. The 3D-feature is especially welcome when working with circuit boards and similar delicate objects in inspection and rework applications.

#### Technical details

Lightsource: Two 6W dimmable LED modules. 13W total energy consumed. 4600 lux at 11" focal length. CCT: 4000°K. CRI: 80.

Body material and color: Steel arm and die-cast aluminum shade. Fully-enclosed neck design. Colors: light gray and white. Optics: 3.5-(1.88X) or 5-diopter (2.25X), 6.75" x 4.5" rectangular white crown optical-quality glass lens.

Secondary lenses: For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

Arm technology and movement: Heavyduty internal-spring 45" or 30" parallel, three-pivot K-arm.

Timer and dimming: Step dimming 0-50-100%. 9/4 hour auto shut-off.

Mounting: Edge clamp or weighted base.



Part numbers	Old part numbers	
WAL025968	18845LG	WAVE LED, 3.5-diopter, 45", edge clamp, light gray
WAL025970	18846LG	WAVE LED, 3.5-diopter, 30", edge clamp, light gray
WAL026133	18847LG	WAVE LED, 3.5-diopter, 30", weighted base, light gra
WAL025969	18945LG	WAVE LED, 5-diopter, 45", edge clamp, light gray
WAL026445	-	WAVE LED, 5-diopter, 45", edge clamp, white
WAL025971	18946LG	WAVE LED, 5-diopter, 30", edge clamp, light gray
WAL026135	18947LG	WAVE LED, 5-diopter, 30", weighted base, light gray

#### KFM™ LED

#### Heavy-duty round lens LED magnifier

KFM LED produces double the light output of traditional KFM models. A heavy-duty, all-metal construction with sleek design, adjustable arm and excellent light output make the KFM suitable for a variety of applications. No knobs to tighten, nothing to adjust. A flexible, self-balancing shade and fully-enclosed, hands-free neck design is ideal for environments where foreign object debris (FOD) is a concern. The quality and positioning of the LEDs across two semi-circular modules allow for virtually shadow-free illumination and excellent color rendering.

#### Technical details

Lightsource: 9W dimmable LED modules. 11W total energy consumed. 3000 lux at 13" focal length. CCT: 4000°K. CRI: 80. Body material and color: Steel arm and die-cast aluminum shade. Fully-enclosed neck design. Colors: black, light gray and

Optics: 3- (1.75X) or 5-diopter (2.25X), 5" diameter white crown optical-quality glass lens.

Secondary lenses: For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens. Arm technology and movement: Heavyduty internal-spring 45" or 30" parallel,

three-pivot K-arm. Timer and dimming: Infinite dimming 1-100%. 9/4 hour auto shut-off.

Mounting: Edge clamp or weighted base.



Part numbers	Old part numbers	
KFL026023	18113BK	KFM LED, 3-diopter, 45", edge clamp, black
KFL026022	18113LG	KFM LED, 3-diopter, 45", edge clamp, light gray
KFL026274	18113WT	KFM LED, 3-diopter, 45", edge clamp, white
KFL026025	18115BK	KFM LED, 5-diopter, 45", edge clamp, black
KFL026024	18115LG	KFM LED, 5-diopter, 45", edge clamp, light gray
KFL026026	18115WT	KFM LED, 5-diopter, 45", edge clamp, white
KFL026028	18213LG	KFM LED, 3-diopter, 30", edge clamp, light gray
KFL026030	18215BK	KFM LED, 5-diopter, 30", edge clamp, black
KFL026029	18215LG	KFM LED, 5-diopter, 30", edge clamp, light gray
KFL026127	18253LG	KFM LED, 3-diopter, 30", weighted base, light gray
KFL026152	18255BK	KFM LED, 5-diopter, 30", weighted base, black
KFL026128	18255LG	KFM LED, 5-diotper, 30", weighted base, light gray

#### LED magnifiers

#### LFM LED

### Lighter-duty round lens LED magnifier

LFM LED is Luxo's most cost-effective LED Magnifier. A die-cast aluminum housing and flexible, spring-balanced Larm ensure the magnifier can be placed in any position. Auto shut-off and dimming features further ensure energy savings. LFM LED is suitable for a variety of industrial, cosmetology and low vision applications.

#### Technical details

Lightsource: 7W dimmable LED modules. 9.5W total energy consumed. 1500 lux at 13" focal length. CCT: 4000°K. CRI: 80. Body material and color: Die-cast aluminum housing. Colors: light gray and white. Optics: 3-(1.75X) or 5-diopter (2.25X), 5" diameter lens.

**Secondary lenses:** For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

**Arm technology and movement:** Lighter-duty external-spring 45" or 30" L-arm.

**Timer and dimming:** Step dimming 0-50-100%.

**Mounting:** Edge clamp or weighted base. **UL/cUL listed** 



Part numbers	Old part numbers	
LFL026106	18345LG	LFM LED, 3-diopter, 45", edge clamp, light gray
LFL026107	18346LG	LFM LED, 5-diopter, 45", edge clamp, light gray
LFL026465	18346WT	LFM LED, 5-diopter, 45", edge clamp, white
LFL026108	18350LG	LFM LED, 3-diopter, 30", edge clamp, light gray
18351LG	18351LG	LFM LED, 3-diopter, 30", weighted base, light gray
LFL026109	18352LG	LFM LED, 5-diopter, 30", edge clamp, light gray
18353LG	18353LG	LFM LED, 5-diopter, 30", weighted base, light gray

#### Circus LED

### Powerful LED magnifier with large glass lens

Circus LED is designed to withstand the rigors of everyday use in cosmetology, industrial, manufacturing and cleanroom applications. Circus LED also has a large lens which permits comfortable viewing for individuals with impaired vision. No knobs to tighten, nothing to adjust. Circus LED has a highly flexible, self-balancing lamp head allowing it to be positioned vertically, horizontally and laterally. The fully enclosed neck and internal spring-balanced arm make the Circus LED ideal for environments where cleanliness and sanitation are sought.

#### Technical details:

**Lightsource:** 10W total energy consumed. 1360 lux at 8" focal length. 3830 lux at 11" focal length. CCT: 4000°K. CRI: 90.

Body material and color: Steel arm with aluminum head. Fully-enclosed neck design. Color: white with black accents.

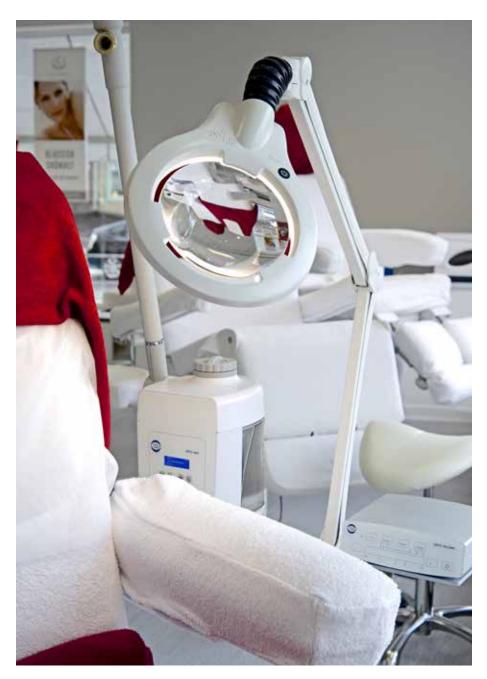
**Optics:** 3.5- (1.88X) or 5-diopter (2.25X), 6.5" diameter white crown optical-quality glass lens.

**Secondary lenses:** For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

Arm technology and movement: Heavyduty internal-spring 45" parallel, three-pivot arm with .75" steel tubing.

**Timer and dimming:** 10-100% dimming. 9/4 hour auto shut-off.

Mounting: Edge clamp.



Part numbers	
CIL026698	Circus LED, 3.5-diopter, edge clamp, white
CIL026699	Circus LED, 5-diopter, edge clamp, white

#### WAVE® LED ESD

### ESD-Safe rectangular lens LED magnifier

ESD-Safe WAVE LED is especially designed for use in static sensitive environments. WAVE LED ESD-UV is ideal for the inspection of conformal coatings as well as for the detailed inspection of welds, solder joints and other areas of stress concentration in static-sensitive environments. The shade and arm are powder-coated with a metal-laced paint that measures  $10^4 \Omega/\text{sq}$ . (conductive). The remaining components are molded in a material that measures  $10^{5}$ - $10^{6}$   $\Omega/\text{sq.}$  (static dissipative). Since the surfaces are no longer insulative, triboelectric charging results in drastically lower voltages, especially since any charge (under 50 volts) is uniformly distributed throughout the entire surface.

#### Technical details

Lightsource: WAVE LED ESD: Two 6W dimmable LED modules. 13W total energy consumed. 4600 lux at 11" focal length. CCT: 4000°K. CRI: 80. WAVE LED ESD-UV: Two 6W dimmable 400nm UV-A LED modules.

Body material and color: ESD-Safe steel arm and die-cast aluminum shade. Fully-enclosed neck design. Color: black.

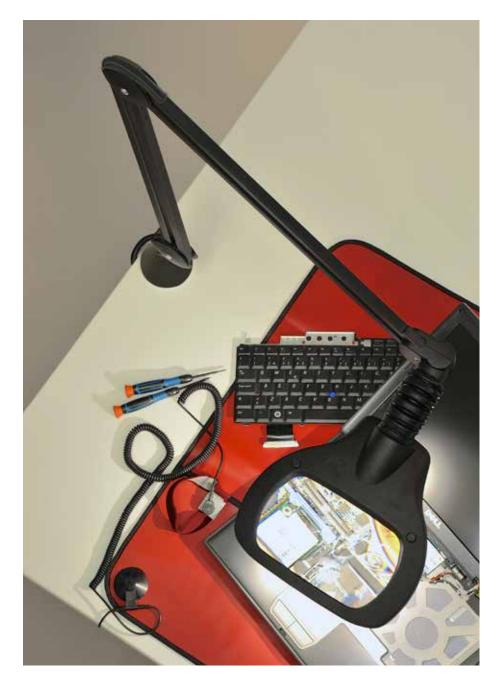
**Optics:** 3.5- (1.88X) or 5-diopter (2.25X), 6.75" x 4.5" rectangular white crown optical-quality glass lens.

**Secondary lenses:** For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

Arm technology and movement: Heavyduty internal-spring 45" or 30" parallel, three-pivot K-arm.

**Timer and dimming:** Step dimming 0-50-100%. 9/4 hour auto shut-off.

**Mounting:** Edge clamp or weighted base. **UL/cUL listed** 



Part numbers	Old part numbers	
WAL025972	18900BK	ESD-Safe, WAVE LED, 3.5-diopter, 45", edge clamp, black
WAL025974	18902BK	ESD-Safe, WAVE LED, 3.5-diopter, 30", edge clamp, black
WAL026134	18904BK	ESD-Safe, WAVE LED, 3.5-diopter, 30", weighted base, black
WAL025973	18910BK	ESD-Safe, WAVE LED, 5-diopter, 45", edge clamp, black
WAL026780	-	ESD-Safe, WAVE LED UV, 3.5-diopter, 45", edge clamp, black
WAL026781	-	ESD-Safe, WAVE LED UV, 5-diopter, 45", edge clamp, black

#### WAVE® LED UV

### UV Magnifier for electronic applications

WAVE LED UV is ideal for the detailed inspection of welds, solder joints and areas of stress contamination. UV tracer conformal coatings glow a dark purple color allowing for easy identification of uncoated areas. WAVE LED UV-ESD models are for use in static-sensitive environments. The shade and arm are powder-coated with a metal-laced paint that measures  $10^4\Omega/\text{sq}$ . (conductive). The remaining components are molded with a material that measures  $10^5-10^6\Omega/$ sq. (static dissipative). Since the surfaces are no longer insulative, triboelectric charging results in drastically lower voltages, especially since any charge (under 50 volts) is uniformly distributed throughout the entire surface.

#### Technical details:

Lightsource: Two 6W dimmable 400nm UV-A LED modules. 13W total energy consumed. 4600 lux at 11" focal length.

Body material and color: Steel arm and die-cast aluminum shade. Full-enclosed neck design. Color: light grey. ESD-Safe models are black.

**Optics:** 3.5- (1.88X) or 5-diopter (2.25X), 6.75" x 4.5" rectangular white crown optical-quality glass lens.

**Secondary lenses:** For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

**Arm technology and movement:** Heavy-duty internal-spring 45" or 30" parallel, three-pivot K-arm.

**Timer and dimming:** Step dimming 0-50-100%. 9/4 hour auto shut-off.

**Mounting:** Edge clamp or weighted base. **UL/cUL listed** 



Part numbers	
WAL026408	WAVE LED UV, 3.5-c
WAL026409	VVAVE LED UV, 5-dia
WAL026780	ESD-Safe, WAVE LE
WAL026781	ESD-Safe, WAVE LED

#### **ESD-Safe magnifiers**

#### KFM™ LED ESD

### ESD-Safe heavy-duty round lens LED magnifier

KFM LED ESD is especially designed for use in static sensitive environments. The shade and arm are powder-coated with a metal-laced paint that measures  $10^4~\Omega/\text{sq}$ . (conductive). The remaining components are molded in a material that measures  $10^{10}~\Omega/\text{sq}$ . (static dissipative). Since the surfaces are no longer insulative, triboelectric charging results in drastically lower voltages, especially since any charge (under 50 volts) is uniformly distributed throughout the entire surface of the head assembly.

#### Technical details

Lightsource: 9W dimmable LED modules. 1 1W total energy consumed. 3000 lux at 13" focal length. CCT: 4000°K. CRI: 80. Body material and color: ESD-Safe steel arm and die-cast aluminum shade. Fully-enclosed neck design. Color: black. Optics: 3- (1.75X) or 5-diopter (2.25X), 5" diameter optical-quality glass lens. Secondary lenses: For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens. Arm technology and movement: Heavy-duty internal-spring 45" parallel, three-pivot arm

Timer and dimming: Infinite dimming 1–100%. 9/4 hour auto shut-off.

Mounting: Edge clamp.



Part numbers	Old part numbers	
KFL026093	18310BK	ESD-Safe, KFM LED, 3-diopter, 45", edge clamp, black
KFL026027	18313BK	ESD-Safe, KFM LED, 5-diopter, 45", edge clamp, black

#### Circus

### Heavy-duty round lens magnifier with hinged lens cover

Circus is specially designed to withstand the rigors of everyday use in industrial and manufacturing environments as well as cosmetology, health spas, beauty salons and clean room applications where foreign object debris (FOD) is a concern. No knobs to tighten, nothing to adjust. The highly flexible, self-balancing shade allows the lamp head to be positioned horizontally, vertically and laterally and a removable tinted hinged lens cover protects the lens from unwanted dust, debris and contamination. A 22W T-5C fluorescent lightsource provides 40% greater light output than a traditional 22W T9 illuminated magnifier.

#### Technical details

**Lightsource:** 22W T-5C fluorescent. 3500 lux at 11" focal length. CCT: 4100°K. CRI: 82.

**Body material and color:** Heavy-duty diecast aluminum housing. Fully-enclosed neck design with protective rubber cover. Color: white.

**Optics:** 3.5-diopter (1.88X) or 5-diopter (2.25X), 6.5" diameter white crown optical-quality glass lens.

**Secondary lenses:** For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

Arm technology and movement: Heavyduty internal-spring 45" parallel, three-pivot arm with .75" steel tubing.

**Shade:** Built-in handles for positioning of lamp head. Removable tinted hinged lens cover.

Mounting: Edge clamp.



Part numbers	Old part numbers	
CIRO25720	1 <i>7</i> 980WT	Circus, 3.5-diopter, 45", edge clamp, white
CIRO25725	1 <i>7</i> 981WT	Circus, 5-diopter, 45", edge clamp, white

#### Fluorescent magnifiers

### KFM™ Magnifier

#### Heavy-duty round lens multipurpose fluorescent magnifier

KFM has a sturdy all-metal construction with a sleek design, flexible arm and excellent light output suitable for a variety of industrial, laboratory, cosmetology and low vision applications. The flexibility of the neck assembly and patented internal spring K-arm make exact positioning easy.

#### Technical details

Lightsource: 22-Watt fluorescent. Instant-on switch ignites the fluorescent tube with just a touch.

Body material and color: Die-cast aluminum

housing.

Colors: black, white and light gray. Optics: 3- (1.75X) or 5-diopter (2.25X), 5" diameter optical-quality glass lens.

Secondary lenses: For additional magnification a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary lens.

Power supply: Supplied with cable and

plug. HF electronic ballast.

Arm technology: Heavy-duty internal-spring

45" or 30" K-arm.

Mounting: Edge clamp or weighted base.



Part numbers	Old part numbers	
KFK025817	17113BK	KFM, 3-diopter, 45", edge clamp, black
KFK025818	17113LG	KFM, 3-diopter, 45", edge clamp, light gray
KFK025820	17115BK	KFM, 5-diopter, 45", edge clamp, black
KFK025821	17115LG	KFM, 5-diopter, 45", edge clamp, light gray
KFK025822	17115WT	KFM, 5-diopter, 45", edge clamp, white
KFK025824	17213LG	KFM, 3-diopter, 30", edge clamp, light gray
KFK025827	17215LG	KFM, 5-diopter, 30", edge clamp, light gray
KFK025789	17253LG	KFM, 3-diopter, 30", weighted base, light gray
KFK025786	17255BK	KFM, 5-diopter, 30", weighted base, black
KFK025790	17255LG	KFM, 5-diopter, 30" weighted base, light gray

### IFM Magnifier

### Lighter-duty round lens fluorescent magnifier

IFM is an ideal lighter-duty magnifier for low-power inspection.

A 22W circline fluorescent lamp provides 360° shadow-free illumination and a lamp diffuser cover protects the bulb from damage. The IFM is a smart, economical choice for tight budgets.

#### Technical details

**Lightsource:** 22W circline fluorescent.

Built-in starter switch.

Body material and color: Stamped steel

shade.

Colors: light gray and white.

Optics: 3- (1.75X) or 5-diopter (2.25X),

5" diameter lens.

**Secondary lenses:** For additional magnification, a secondary 4-, 6- or 10-diopter STAYS lens can be attached to the primary

lens.

**Power supply:** Supplied with cable and plug. Electromagnetic ballast: 3-conductor single outlet receptacle at the base of the arm for models 16345WT and 16346WT. **Arm technology:** External-spring 45" or 30"

L-arm.

Mounting: Edge clamp or weighted base.



Part numbers	
16345LG	IFM, 3-diopter, 45", edge clamp, light gray
16345WT	IFM, 3-diopter, 45", edge clamp, white
16346LG	IFM, 5-diopter, 45", edge clamp, light gray
16346WT	IFM, 5-diopter, 45", edge clamp, white
16350LG	IFM, 3-diopter, 30", edge clamp, light gray
16351LG	IFM, 3-diopter, 30", weighted base, light gray
16352LG	IFM, 5-diopter, 30", edge clamp, light gray
16353LG	IFM, 5-diopter, 30", weighted base, light gray

#### Industrial task lighting

#### LS

### Compact fluorescent industrial task light

LS is Luxo's most versatile and best-selling Industrial task light which couples classic styling with superior arm technology. LS is mounted on a spring-balanced arm which provides complete flexibility over the workspace.



**Lightsource:** 23W compact fluorescent.

**Reflector and louver:** Inner insulating reflector and venting louvers prevent the shade from becoming too warm. **Shade:** 6.75" diameter, heavy-duty spun aluminum shade. **Arm:** 45" powder-coated external spring-balanced arm.

Colors: Black, chrome and white.

**Mounting:** Edge clamp or weighted base. **Cord:** 6', 3-conductor cord.

Cord: 6', 3-conductor cord.

Ballast: Electronic ballast.

UL/cUL listed



### Combination industrial task light

LC is one of the most widely used task lights in the world. With combined circline fluorescent and compact fluorescent lightsources, LC provides the perfect balance of light output and good color rendering.



Lightsource: 22W circline fluorescent and 14W compact

fluorescent

**Switch:** Compact fluorescent bulb controlled via a switch at the base of the arm. Circline fluorescent bulb controlled via a switch at the top of the shade.

Reflector and louver: Inner insulating reflector and venting louvers

prevent the shade from becoming too warm.

**Shade:** 9.5" diameter, heavy-duty spun aluminum shade. **Arm:** 45" or 30" powder-coated external spring-balanced arm.

Colors: Black, light gray and white.

Mounting: Edge clamp or weighted base.

Part numbers	Old part numbers	
K110660001	LS1ABK	LS, 45", edge clamp, black
K110660002	LS1AWT	LS, 45", edge clamp, white
K110670001	LS1EBK	LS, 45", weighted base, black
K110650001	11065CH	LS, 45", weighted base, chrome
K110670002	LS1EWT	LS, 45", weighted base, white

Part numbers	Old part numbers	
K110620001	LC1ABK	IC, 45", edge clamp, black
K110620003	LC1ALG	LC, 45", edge clamp, light gray
K110620002	LC1AWT	LC, 45", edge clamp, white
K110630001	LC2FEBK	LC, 30", weighted base, black
K110630002	LC2FEWT	LC, 30", weighted base, white

Luxo illuminated magnifiers are suitable for use in a multitude of applications. Luxo offers a choice of accessories including mounting options and secondary lenses for increased levels of magnification.

	STAYS Lenses Self-Traction Accessory Yield System for use with KFM <sup>TM</sup> LED, KFM, WAVE <sup>®</sup> LED, LFM LED, IFM, Circus and Circus LED Magnifiers. 2" lens diameter (2.5" diameter including the silicon gasket frame).			
	50404	4-diopter STAYS Lens		
	50406	6-diopter STAYS Lens		
	50410	10-diopter STAYS Lens		
2	KFM LED Handles For use with KFM LED magnifiers.			
	SPD026588	KFM LED Handle, black		
	SPD026587	KFM LED Handle, light gray		
	SPD026586	KFM LED Handle, white		
	34" Rolling Floor Stand Painted steel pole and cast iron base includes both casters and glides.			
	50036BK	Rolling Floor Stand, black		
	50036LG	Rolling Floor Stand, light gray		
	50036WT	Rolling Floor Stand, white		
	SPA025674	Extra weight for Rolling Floor Stand, white (required for Circus magnifiers)		
	A-Edge Mount Bracket For mounting products to horizontal surfaces. Maximum 2.25" opening.			
	60001BK	A Edge Mount Bracket, black		
	60001LG	A Edge Mount Bracket, light gray		
	C-Surface Mount Bracket For permanent mounting to walls or other vertical surfaces.			
	50005BK	C Surface Mount Bracket, black		
	50005LG	C Surface Mount Bracket, light gray		
	B-Wall Mount For permanent mounting to walls or other vertical surfaces.			
	50003LG	B Wall Mount, light gray		
	50003WT	B Wall Mount, white		
	Flush/Surface Mount Bushing For flush mount surface installation. 19.3mm outer diameter. Available in chrome.			
	31639	Flush/surface mount bushing, aluminum		
	FE Base For use with 30" arm magnifiers and industrial task lights.			
	50010BK	FE Base, black		
	50010LG	FE Base, light gray		
	50010WT	FE Base, white		

### About magnification

Luxo offers a range of illuminated magnifiers for different applications. Luxo's line of magnifiers includes a selection of lenses (shape and size), materials and glass. Please refer to the product guide to determine which model is best suited for your needs.

#### Using a Luxo magnifier

Luxo's illuminated magnifiers are working tools. They are designed for precision and comfort. We recommend using both eyes to view an object whenever possible.

In order to achieve maximum magnification without distortion, the user should position the lens a proper distance from the object, and fairly close to the eyes. Do not lean back and away from the lens in order to increase magnification.

Seating and worksurface height should be adjusted for good posture.

#### Definitions

#### Diopter

Diopter is an optical term referring to the refractive (light bending) capacity of a lens. Each diopter increases magnification by 25%.

#### Magnification

The degree to which a viewed object is enlarged. Expressed in percentage or by the symbol X. 100% magnification = 1X magnification. To determine the level of magnification based on diopters used, divide the total diopters by 4 and add 1. eg. 5D/4+1 = 2.25X.

#### Field-of-view

Field-of-view is the area which is visible as seen through a lens.

#### Focal length

Focal length is the distance from the center of the lens to the viewed object when in focus. As magnification increases, the focal length decreases.

#### Working distance

Working distance is the area between the underside of the magnifier and the top of the object being viewed when the object appears in focus.



#### Choice of magnification

The degree of magnification needed varies with the task at hand. With low level magnification an object can be studied while the edge of the object remains in focus. With increased magnification, small details are clearly visible but the blurring at the edge of the object increases.

### Magnification table

This table provides a complete overview of the total magnification options available by adding secondary lenses to Luxo's illuminated magnifiers.

Primary lens diopter	Secondary lens diopter	Total magni- fication	Total diopter	Magnifi- cation %	Focal length (in.)		
Wave® LED, Circus LED (incl. ESD-Safe and UV models)							
3.5		1.88X	3.5	188%	11		
3.5	4.0	2.88X	7.5	288%	5		
3.5	6.0	3.38X	9.5	338%	4		
3.5	10.0	4.38X	13.5	438%	3		
5.0		2.25X	5	225%	8		
5.0	4.0	3.25X	9	325%	4.3		
5.0	6.0	3.75X	11	375%	3.5		
5.0	10.0	4.75X	15	475%	2		
KFM™ LED, LFM LED, KFM, IFM (incl. ESD-Safe models)							
3.0		1.75X	3	175%	13		
3.0	4.0	2.75X	7	275%	5.5		
3.0	6.0	3.25X	9	325%	4.3		
3.0	10.0	4.25X	13	425%	2.8		
5.0		2.25X	5	225%	8		
5.0	4.0	3.25X	9	325%	4.2		
5.0	6.0	3.75X	11	375%	3.5		
5.0	10.0	4.75X	15	475%	2		



#### Added magnification with a secondary lens

For additional magnification, a secondary STAYS Lens can be attached to the primary lens. To apply the STAYS Lens, simply moisten the silicon ring around the lens and stick it onto the primary lens. STAYS Lenses are available in 4-, 6- and 10-diopter strengths, increasing magnification by 100%, 150% and 250% respectively.





### Luxo

For more than 80 years Luxo has designed arm-based innovative, ergonomic lighting and magnification products. Luxo products improve work efficiency, taking particular care of individual needs.

Luxo products and solutions are developed and tested by our engineers at our own research and testing facilities, and manufactured and certified in accordance with all relevant quality and environmental standards. They are based on the latest technology and expertise – and generations of experience.

#### Luxo

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Please refer to our website for information about our 5-year warranty.