smartMAC™
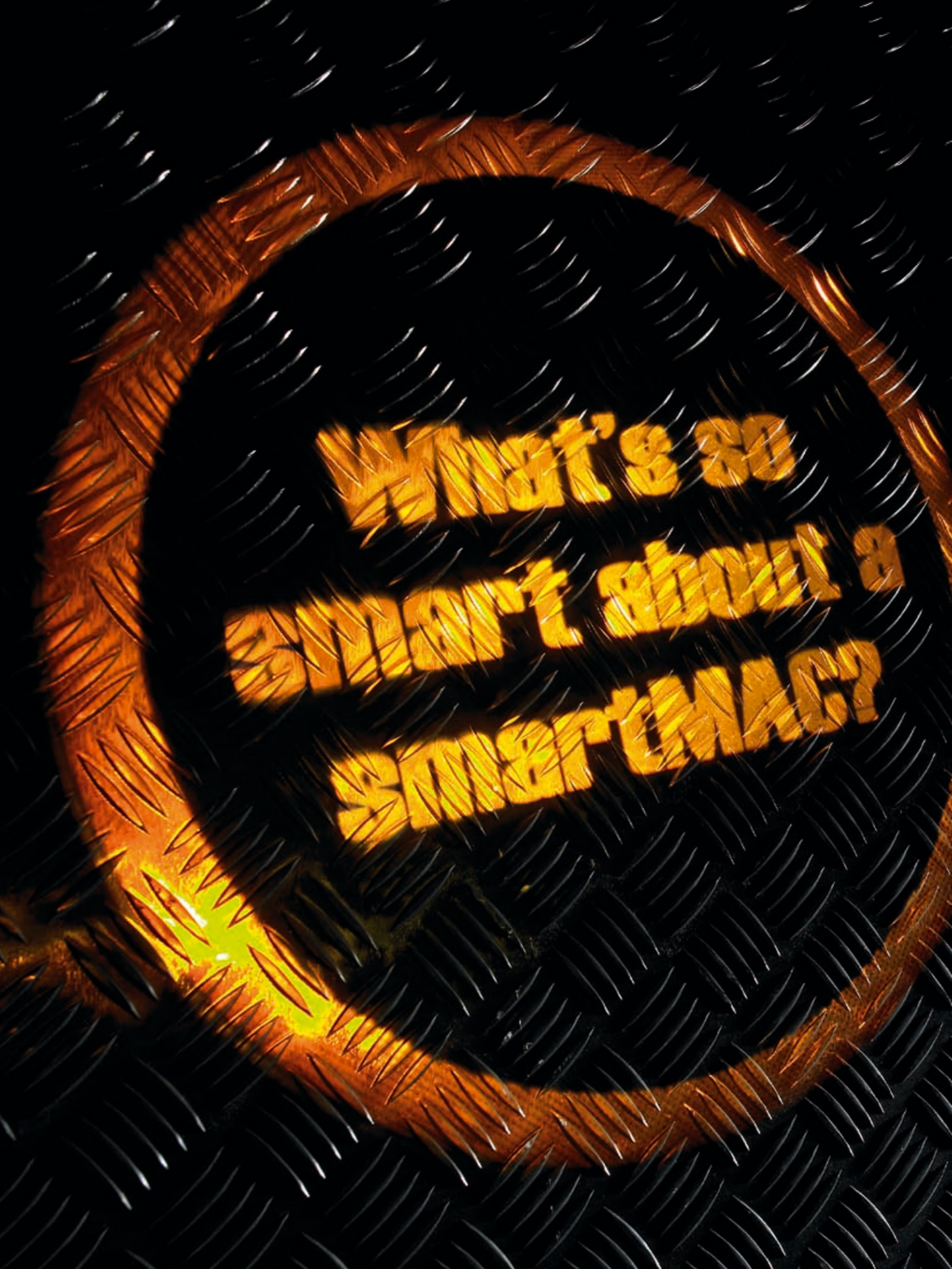
Martin®

The smartMAC is an extremely bright profile light and image projector, the most efficient profile luminaire available in its class.

Versatile and ideally suited for indoor venues and bars, smartMAC is also perfect for environments that require total silence such as conference rooms, auditoriums, the theatre, TV studios, lounges, restaurants, hotel receptions, and shops.

Pure nightclub, Las Vegas. Design: Adam Camp, Neu Visions Design

Clever solutions to old problems are what make smartMAC smart. In fact, some of the solutions are so new, we're getting them patented.

Brighter light for less

The brightest luminaire in its class, the 150 W fixture even outperforms many of its 250 W rivals. Why pay more for less?

Silent operation

Performs silently without fans, offering discreet image projection, subtle mood lighting, or dramatic effects for the eye, not the ear.

Longer service intervals

No dust and pollutants, fewer moving parts and greater energy efficiency offer significant savings in cleaning and maintenance.

Smaller power bills

High energy efficiency and reduced heat output mean savings on power bills – both for running smartMAC and with room air conditioning.

Compact fit and versatile

Slips in nicely under a low lounge ceiling, thanks to the slim mounting system. The small footprint means more headroom!

Entirely new way of changing gobos

Lift the cover and access the color and gobo wheels without tools – you haven't been able to do that before!

Brilliant image quality to promote your business, brand or venue, or to create your own unique mood – you decide!

Super sharp image

Superbly optimized optics provides very precise image quality and great depth of field, with excellent center-to-edge beam uniformity that keeps the image sharp.

Variable focus

The variable focus system lets you adjust image sharpness at any projection distance or create unfocused background effects.

Short, wide throw

At 25°, the cut-off angle is higher than for other comparable products, allowing for a greater projection diameter at shorter distances.
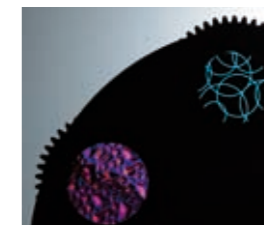
Customized image projection

Change color filters and gobos easily without tools simply by lifting the dedicated cover – this is a unique, patent pending Martin solution that lets you customize gobos for private parties, create your own unique mood, or throw your logo or name on any surface.

Range of effects

The smartMAC also has a fast shutter for instant or fade control of light intensity, strobe effects, and auto or music-triggered color and gobo effects.

Brighter than the rest

Preinstalled gobos

The smartMAC comes with its own unique set of pre-installed glass and metal gobos, designed for stages, dance floors, or venues. All gobos can be continuously rotated or indexed to any required and repeatable position.
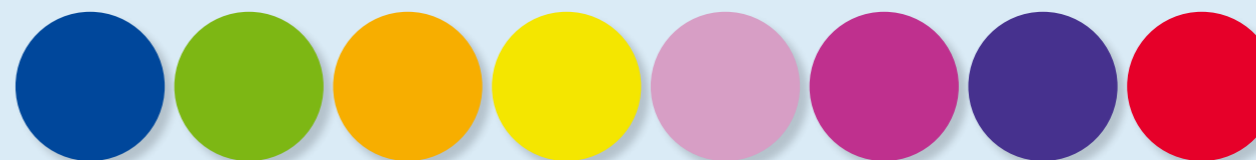
Color wheel

The color wheel has eight interchangeable color filters plus open, with full and split positions, offering a broad spectrum of colors.

Fast installation

The special mounting and bracket system significantly reduces installation costs and labor time, with the provision of a secondary fixing for safety. The low installation height and the small footprint make smartMAC ideal for venues with low ceilings.

Clever cable management

The smartMAC cleverly collects the cables in an easy to access port in the base. Simply click the lid into place to cover all cable connections.

Getting more out of the lamp

With smartMAC, the lamp performs in a clean environment that optimizes lamp life. Depending on the environment and lamp type, you get up to two years between lamp replacements – and the lamp is quick and easy to replace.

Almost takes care of itself

Incredibly easy to install and operate – and once running, you'll experience significant savings in cleaning, service and maintenance

Quick and easy maintenance

The reality for most luminaires is that they are mounted and then often forgotten – until something goes wrong. The smartMAC is virtually maintenance-free and if you need to get the ladder out, service is completed rapidly by just one pair of hands.

Dust-proof luminaire

The closed construction around the smartMAC lamp, optics and effect wheels creates a dust-resilient luminaire, which is made possible by thermal management technology that eliminates fans, keeping the head free of external sources of pollutants.

Bank the difference with smartMAC. Following the initial purchase price, smartMAC saves you money from day one on your power bills and service and maintenance checks.

Smaller power bills

Efficient lighting means substantial cost savings. The long-life 150 W discharge lamp delivers a 44% lumen output, equating to the highest lumen per watt ratio in the 150-250 W class. This exceeds in brightness what others achieve with 250 W and for you that means smaller power bills.

Cheaper lamp – greater output

Replacement lamps are cheaper, too – buy a 150 W lamp and get the performance of a 250 W lamp. The long life (3000 hours) MSD 150/2 lamp is standard, and a very long life (9000 hours) CDM 150 lamp is also available.

Save money on service

With smartMAC there's no reason to climb ladders and blow dust out of the system, or to clean the inside of the lens and lamp fitting. With no fans, smartMAC has fewer moving parts and turns a greater proportion of energy into light, reducing heat and wear and tear on the system.

Increased resale value

In addition to savings on your total investment over the product lifetime, smartMAC holds its value and offers great resale value, because smartMAC is built for long life performance and durability.

Helps you make friends

The smartMAC is your hard-wearing, long-lifetime profile luminaire solution, perfect for every situation, helping you stay friends with your bank manager.

Bank the difference

Keeps cool without fans

With smartMAC, we've done the thinking for you with rugged, state-of-the-art technology and innovative solutions. And, you get the strength of Martin's global R&D, mass production facilities, and service. Why settle for less?

Available in black and white

The smartMAC is available with the casing in black and in white. The white model is less conspicuous on light-colored surfaces and in architectural environments.

Soft beam the front-end

The smartMAC is sold with the profile lens as standard. An alternative front-end casing is available as an option with a Fresnel lens and is easily installed with four quarter-turns, for creating a soft-edged beam.

Use around the world

With user-configurable voltage and frequency settings, smartMAC can be quickly adapted to electrical requirements around the world.

Environmentals

The smartMAC meets the new EU RohS standard, meaning no banned substances, such as lead solder, are used during manufacture. Parts of smartMAC are recyclable.

Easy maintenance & hassle-free service

Like all Martin products, smartMAC is designed and constructed to be used. If a product requires service, then this needs to be on-site and hassle-free. Martin's service organization ensures that wherever you have a smartMAC, we are not far away.

Ready to entertain

With hundreds of possible combinations from the pre-programmed pan/tilt and effects macros, smartMAC is ready to entertain. Access the macros via DMX or the onboard control panel.

Unprecedented reliability

The thermal management technology uses the aluminum casing and specially-designed fins to conduct heat away from the head, keeping the front of the luminaire cool and offering unprecedented reliability. We have a patent pending for this unique solution.

Specifications

PHYSICAL

Length:	387 mm (15.2 in.)
Width:	352 mm (13.9 in.)
Height, head straight up:	448 mm (17.6 in.)
Weight:	21 kg (46.3 lbs.)

LAMP

Type:	150 W discharge
Fitted as standard:	Philips MSD 150/2
Color temperature:	8500 K
CRI (Color rendering index):	70
Average lifetime:	3000 hours (9000 hours with CDM SA/T lamp)
Hot restrike:	No
Socket:	G12
Ballast:	Magnetic
Approved alternative lamp(s):	Philips CDM-SA/T 150

DYNAMIC EFFECTS

Color wheel:	8 interchangeable dichroic filters + open, full and split colors, music trig, continuous rotation, random color
Rotating gobo wheel:	6 interchangeable gobos + open, indexing, continuous gobo rotation & scrolling, shake
Shutter:	Strobe effect up to 9 Hz, pulse effects, instant open and blackout
Focus:	2 m (6.6 ft.) to infinity
Pan:	540°
Tilt:	257°

CONTROL AND PROGRAMMING

Control options:	DMX, stand-alone, synchronized (master/slave)
DMX channels:	12/15
Setting and addressing:	Control panel with LED display
Macro programs:	10 pan/tilt and 10 effects macros, all with staggered start/chase feature
Macro selection:	DMX or onboard control panel
16-bit control:	Rotating gobo indexing, pan & tilt
Movement control options:	Tracking and vector
Protocol:	USITT DMX512/1990
Stand-alone and master/slave programming:	Control panel with LED display
Receiver:	RS-485
Firmware update:	Serial upload via DMX link

CONSTRUCTION

Color(s):	Black or white
Housing:	UV-resistant fiber-reinforced composite
Reflector:	Glass, cold light
Protection rating:	IP 20

GOBOS

Outside diameter:	27.9 mm (1.1 in.) +0/- 0.3 mm (0.01 in.)
Maximum image diameter:	23 mm (0.9 in.)
Maximum thickness:	1.8 mm (0.1 in.)
Recommended glass:	High-temperature Borofloat or better with dichroic or enhanced aluminum coating
Recommended metal:	Aluminum (steel for temporary use only)

INSTALLATION

Mounting points:	Quick release mounting bracket or 2 pairs of 1/4-turn locks
Orientation:	Any
Minimum distance to illuminated surfaces:	250 mm (9.8 in.)
Minimum distance to combustible materials:	100 mm (3.9 in.) from head, no minimum distance from base

CONNECTIONS

AC power input:	3-pin IEC
DMX data in/out:	3-pin and 5-pin locking XLR

ELECTRICAL

AC power:	100-240 V nominal, 50/60 Hz
Power supply unit:	User-reconfigurable voltage and frequency settings
Main fuse:	4 AT (slow blow)

THERMAL

Cooling:	Convection
Maximum ambient temperature (Ta max.):	40° C (104° F)
Maximum surface temperature, steady state, Ta=40° C (104° F):	120° C (248° F)
Total heat dissipation (calculated, +/- 10%):	785 BTU/hr.

APPROVALS

EU safety:	EN 60598-1, EN 60598-2-17
EU EMC:	EN 55015, EN 55103-1, EN 55103-2, EN 61000-3-2, EN 61000-3-3
US safety (pending):	ANSI/UL 1573
Canadian safety (pending):	CAN/CSA E 60598-2-17

INCLUDED ITEMS

Philips MSD 150/2 lamp (installed):	P/N 97010117
Diffusion filter	
Quick release mounting bracket, smartMAC:	P/N 62406107
3 m (9.8 ft.) power cable, 3-pin IEC:	P/N 11501013
User manual:	P/N 35000208

ACCESSORIES

|	
Philips CDM-SA/T 150 W lamp:	P/N 97010111
Fresnel lens kit:	P/N 91610034
G-clamp:	P/N 91602003
Half-coupler clamp:	P/N 91602005
Omega bracket:	P/N 91602001
Quick trigger clamp:	P/N 91602007
Safety wire, universal, 50 kg (110.2 lbs.) safe work load:	P/N 91604003

ORDERING INFORMATION

smartMAC, black, in cardboard box:	P/N 90231000
smartMAC, white, in cardboard box:	P/N 90231030

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smartMAC Photometric Data

|	Philips MSD 150/2
Test lamp:	Philips MSD 150/2
Test conditions:	230 V, 50 Hz, no effects applied
Rated color temperature:	8500 K
Rated output:	10500 lumens
Rated life time:	3000 hours

Installed as standard
No diffuser

24° cut-off angle
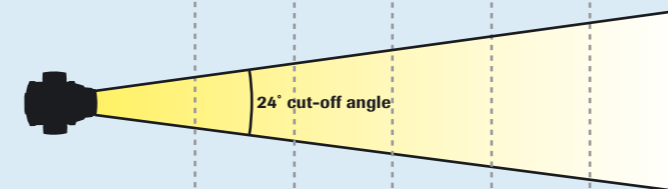
Distance	2 (m) / 7 (ft)	4 (m) / 13 (ft)	6 (m) / 20 (ft)	8 (m) / 26 (ft)	10 (m) / 33 (ft)
Cut-off diameter	0.8 (m) / 2.8 (ft)	1.7 (m) / 5.5 (ft)	2.5 (m) / 8.4 (ft)	3.4 (m) / 10.9 (ft)	4.2 (m) / 13.9 (ft)
Illuminance (lux)	54,500	13,625	6,056	3,406	2,180
Illuminance (fc)	5,063	1,290	545	322	200

Luminous intensity	Total output	Efficacy	Efficiency
218,000 candela	4,600 lumens	31 lumens per watt	44%

Cut-off diameter: 0.42 x distance

With optional diffuser

25° cut-off angle
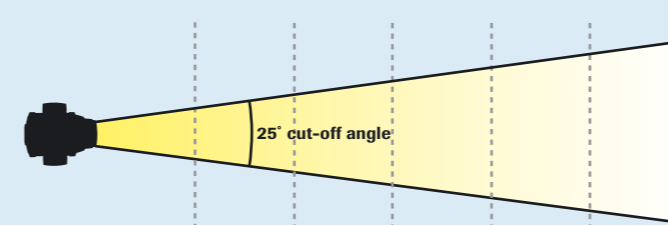
Distance	2 (m) / 7 (ft)	4 (m) / 13 (ft)	6 (m) / 20 (ft)	8 (m) / 26 (ft)	10 (m) / 33 (ft)
Cut-off diameter	0.9 (m) / 2.9 (ft)	1.8 (m) / 5.7 (ft)	2.6 (m) / 8.8 (ft)	3.5 (m) / 11.4 (ft)	4.4 (m) / 14.5 (ft)
Illuminance (lux)	29,500	7,375	3,278	1,844	1,180
Illuminance (fc)	2,741	698	295	175	108

Luminous intensity	Total output	Efficacy	Efficiency
118,000 candela	3,900 lumens	26 lumens per watt	37%

Cut-off diameter: 0.44 x distance

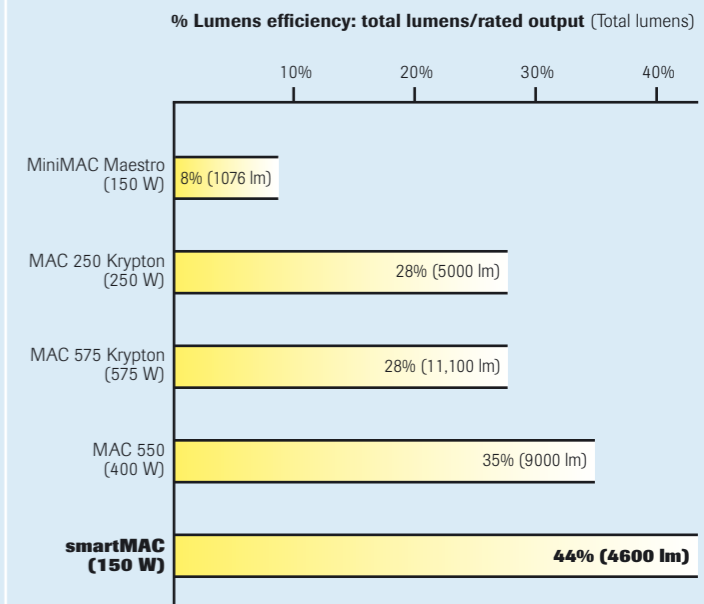|	Philips CDM-SA/T 150/942
Test lamp:	Philips CDM-SA/T 150/942
Test conditions:	230 V, 50 Hz, no effects applied, no diffuser
Rated color temperature:	4200 K
Rated output:	14000 lumens
Rated life time:	9000 hours

Avaliable as accessory

25° cut-off angle
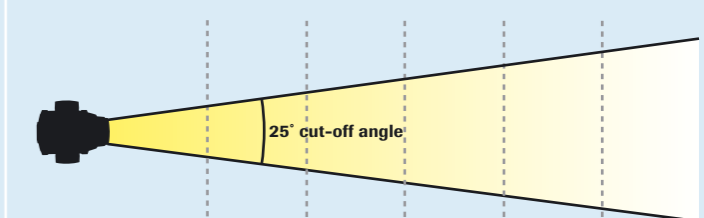
Distance	2 (m) / 7 (ft)	4 (m) / 13 (ft)	6 (m) / 20 (ft)	8 (m) / 26 (ft)	10 (m) / 33 (ft)
Cut-off diameter	0.9(m) / 3.2 (ft)	1.8 (m) / 5.9 (ft)	2.7 (m) / 9.0 (ft)	3.6 (m) / 11.7 (ft)	4.5 (m) / 14.9 (ft)
Illuminance (lux)	23,250	5,813	2,583	1,453	930
Illuminance (fc)	1,898	550	233	138	85

Luminous intensity	Total output	Efficacy	Efficiency
93,000 candela	4,400 lumens	29 lumens per watt	31%

Cut-off diameter: 0.45 x distance

Efficiency of smartMAC compared with other MAC profiles

% Lumens efficiency: total lumens/rated output (Total lumens)

MiniMAC Maestro (150 W)	8% (1076 lm)
MAC 250 Krypton (250 W)	28% (5000 lm)
MAC 575 Krypton (575 W)	28% (11,100 lm)
MAC 550 (400 W)	35% (9000 lm)
smartMAC (150 W)	44% (4600 lm)

Photometric data is available
from www.martin.com/service

6 reasons why you'll love it...

1   **Brighter light for less**

2   **Longer service intervals**

3   **Compact fit and versatile**

4   **Silent operation. No fans**

5   **Smaller power bills**

6   **Entirely new way of changing gobos**

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