

D^{med}® **triango**
LED TREATMENT LIGHTS



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LED



reddot design award
winner 2012

PRODUCT INFORMATION

D^{med}® **triango**

D^{med}® **triango** 30 C

The universal treatment light D^{med}® **triango** provides the best lighting conditions for the nursing staff and the practitioners. Illumination, light colour and colour rendering are optimally adapted for the work in the medical sector. Good light further contributes to the well-being at work. The flexible light of D^{med}® **triango** is adapted for user needs and allows a safe diagnosis.

The pleasant design meets the highest requirements of the designers of consulting rooms and hospitals.

D^{med}® **triango** – The polyvalent light
The ideal work light in consulting rooms and hospitals.



Homogeneous illuminated working area

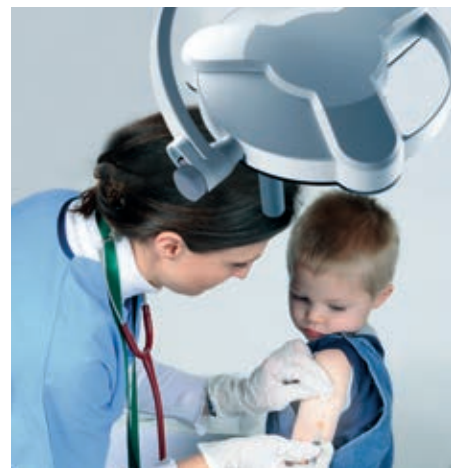
Intense light flux
55 000 lux / 1.0 m

No glare
adjustable light intensity

Excellent colour rendering
of the lighted patient's body –
CRI > 95

Hygienic
The handle is removable and sterilisable,
easy cleaning of the luminaire
thanks to its closed construction





PRODUCT INFORMATION

PRODUCT ADVANTAGES

D^{med}® **triango** – The polyvalent light.

Perfect in aesthetic and function. The modern shape of D^{med}® **triango** follows the motto “Keep it smart and simple” and convinces with its consistent functionalism: elegant design combined with the most modern LED technology – adapted to today’s working environment.



Mobile and universally usable

Thanks to its turnover axis, the luminaire guarantees the largest action radius possible. Every position is continuously adjustable and the luminaire remains in position. Its operation is particularly simple and all components used are extremely robust.

D^{med}® **triango** is offered in three versions.

Ceiling and wall mounting:

The possibility of ceiling and wall mounting allows a universal use of D^{med}® **triango**, especially in rooms where a maximum freedom of movement is required.

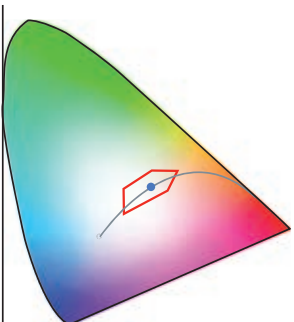
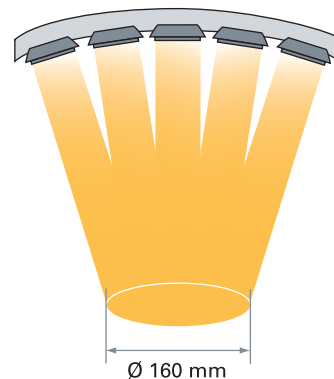
Roller stand:




This mobile light suits the most various uses in the most different sectors of medicine.



Homogeneous illuminated area

The unique optic developed by Derungs ensures an optimum light field. The illuminated area meets the highest technical lighting requirements for treatment lights. The reflection-, shadow- and glare-free lighting generates an ideal field of vision for concentrated and safe working.



-  Black Body Curve
-  EN 60601-2-41
-  ● ● ● optimal light colour temperature

Colour rendering

Accurate rendering of the colours of the locally illuminated body of the patient – no colour falsification.

- CRI > 95
- R9 > 90

This allows a clear recognition of different colour shades within the tissue. The illuminated area appears natural and contrasted. This is important in order to allow an accurate diagnosis.



Maintenance-free*

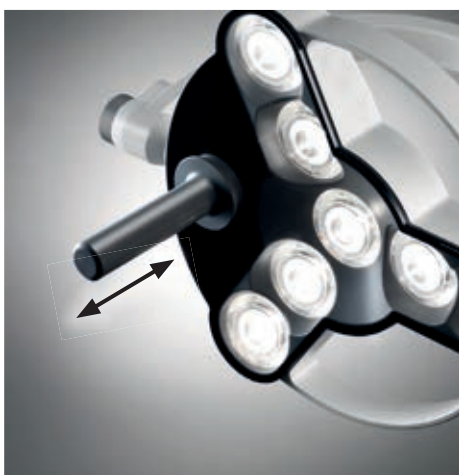
No more maintenance intervals, thanks to the long life time of the used LED's. No light source replacement is required for the whole service life.

- Life time 30'000 h

Cleaning and sterilisation

The closed construction and the smooth surface allow for a quick, clinical cleaning. In addition, any penetration of dust, dirt or liquids is prevented. The removable handle is easy to sterilise.

- Removable and sterilisable handle



High-quality components

The robustness of D^{med}® **triango** is due to the exclusive use of high-quality product components.

Luminaire body:

Polycarbonate & acrylonitrile-butadiene-styrene copolymer (PC & ABS)

Front window:

Polymethyl methacrylate (PMMA)

An ABR-GL abrasion-proof coating makes the front window scratch proof.

Installation

The installation of the wall-mounted version and of the roller stand requires 1 person, that of the ceiling-mounted version requires 2 persons.

Service

In case of defective light sources, the whole head of the luminaire is replaced and sent back to the factory.



Illumination / Light intensity regulation*

Easy operation: only one control element for switching the light on/off and dimming, with 5 display levels. The setting of the light intensity with a dimming function provides the practitioner with a quick, flexible and individual adjustment of the illumination. Individually adaptable to the respective treatment conditions: according to the brightness of the object to be treated and to the ambient luminosity.

Glare-free

The light beam is focussed and thus glare-free, whatever the angle of sight. This avoids all bothersome reflections on the surface.

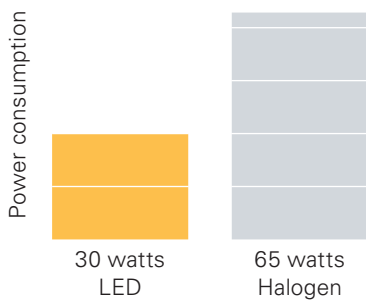
- Continuously dimmable from 10% - 100%
- 55 000 lux / 1 m
- Fixed illuminated area 160 mm
- CRI > 95
- Glare-free
- Shadow and reflection-free



Comfortable operation

The rotary switch is located on the head of the luminaire and is thus easily reachable from the work place. The ergonomically shaped handle lies well in the hand. The compact construction allows for more freedom of movement for the staff.

* Illumination data \pm 10% tolerance



Operating costs reduced to the minimum

Reduces the maintenance costs, since no maintenance work is required: no wear parts, no light source replacement. Universal converter 100-240 volts: can be used in all countries.

Improved energy efficiency

Notable energy savings thanks to the most up-to-date LED technology: high illumination with only 30 watts. If the lighting requirements are lower, the simple adjusting of the light intensity leads to a minimized current consumption. Scattering losses are avoided: LED's have a directional light beam. And the optic focuses the light.



No radiation of heat

An ideal working environment from the point of view of the lighting technique requirements of the physicians – the light emitted by LED's contains almost no infrared or UV radiation. Thus no heating light beam and almost no heat to be evacuated. Both physician and patient feel no warm point on the body – the area to be treated does not warm up.

The fact that the tissues do not dry during the treatment facilitates greatly the operations.

The external surface of the luminaire can always be touched with the hand without difficulty while it is on.



Good working conditions

The light often is located close to the head of the working physician. Its cold light ensures good thermal working conditions, preventing headaches and tiredness due to the heat and improving the performances of the operators.

The heat generated by the LED's is evacuated through the surface of the body of the luminaire and the handle. This allows working without a cooling fan, which ensures a silent working environment.



Safety / Standards

EN 60601-1
Medical electrical equipment. General requirements for basic safety and essential performance.

EN 60601-1-2
Electromagnetic compatibility (EMC)

EN 60601-1-6
Usability

EN 60601-2-41

Medical electrical equipment Particular requirements for the safety of surgical luminaires and luminaires for diagnosis.

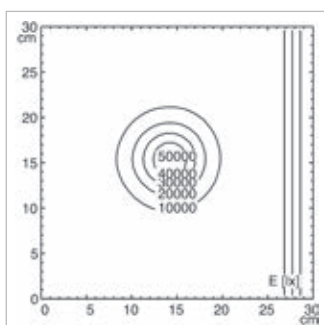
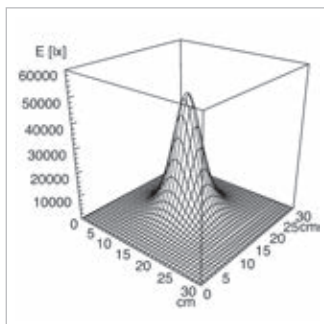
Dmed® triango 30 C

TECHNICAL DATA

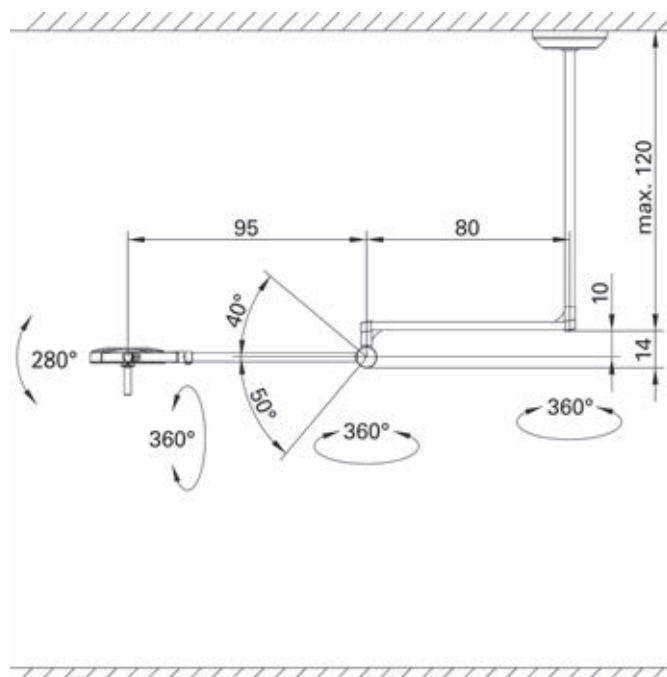
FITTED WITH	1 x LED lamp
LUMINOUS POWER	55 000 Lux / 1,0 m
COLOR TEMPERATURE	approx. 4500 K
ILLUMINANCE FIELD 1.0 M	Ø 16 cm
COLOR RENDERING INDEX	CRI > 95
WORK EQUIPMENT	Electronic converter
CONNECTED LOAD	100-240 V; 50/60 Hz
MAINS LEAD	Direct power supply
LUMINAIRE BODY	Polycarbonate & acrylonitrile butadiene styrene copolymer (PC & ABS)
WEIGHT (NET)	approx. 13.0 kg
POWER CONSUMPTION	approx. 30 W
USAGE	Rotary switch on the luminaire head
TECHNOLOGY	Single-pole secondary
BALANCE OF ARTICULATION JOINTS	Spring (weight compensation)
CLASS OF PROTECTION	I
NORMS	EN 60601-1, EN 60601-2-41
ACCESSORY	Sterilizable handle, adapter for suspended ceiling
SPECIAL FEATURES	Continuously dimmable, maintenance free
FASTENING	Ceiling mount, when mounting ceiling tube could be cut to length 30-120 cm, intermediate ceiling adapter (on request)
SYSTEM OF PROTECTION	IP 43
ORDER NUMBER	D15.170.000 - pure white - direct power supply



LIGHT DISTRIBUTION



TECHNICAL DRAWING



Illumination data \pm 10% tolerance

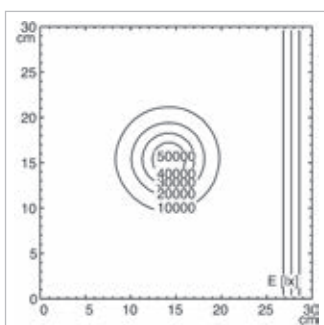
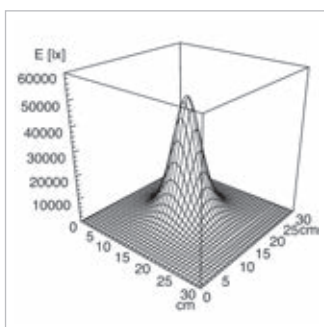
Dmed® triango 30 W

TECHNICAL DATA

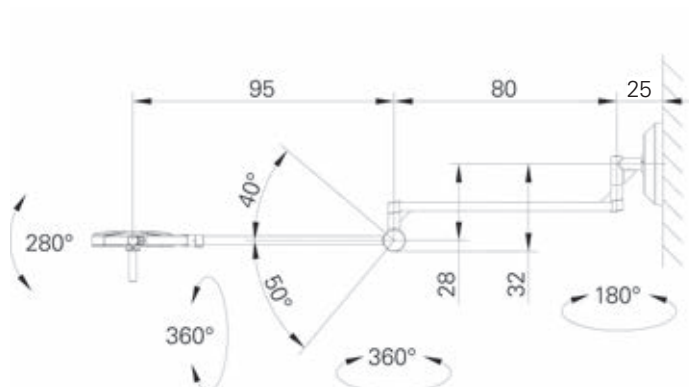
FITTED WITH	1 x LED lamp
LUMINOUS POWER	55 000 Lux / 1,0 m
COLOR TEMPERATURE	approx. 4500 K
ILLUMINANCE FIELD 1.0 M	Ø 16 cm
COLOR RENDERING INDEX	CRI > 95
WORK EQUIPMENT	Electronic converter
CONNECTED LOAD	100-240 V; 50/60 Hz
MAINS LEAD	Direct power supply
LUMINAIRE BODY	Polycarbonate & acrylonitrile butadiene styrene copolymer (PC & ABS)
WEIGHT (NET)	approx. 13.0 kg
POWER CONSUMPTION	approx. 30 W
USAGE	Rotary switch on the luminaire head
TECHNOLOGY	Single-pole secondary
BALANCE OF ARTICULATION JOINTS	Spring (weight compensation)
CLASS OF PROTECTION	I
NORMS	EN 60601-1, EN 60601-2-41
ACCESSORY	Sterilizable handle
SPECIAL FEATURES	Continuously dimmable, maintenance free
FASTENING	Wall mount
SYSTEM OF PROTECTION	IP 43
ORDER NUMBER	D15.175.000 - pure white - direct power supply




LIGHT DISTRIBUTION



TECHNICAL DRAWING



Illumination data $\pm 10\%$ tolerance

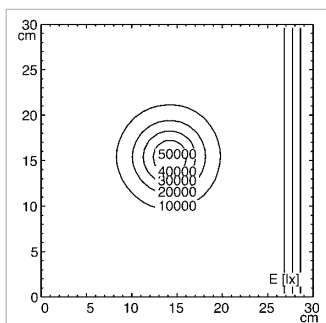
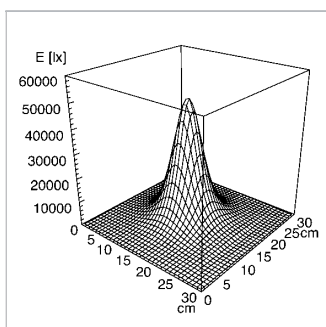
Dmed® triango 30 F

TECHNICAL DATA

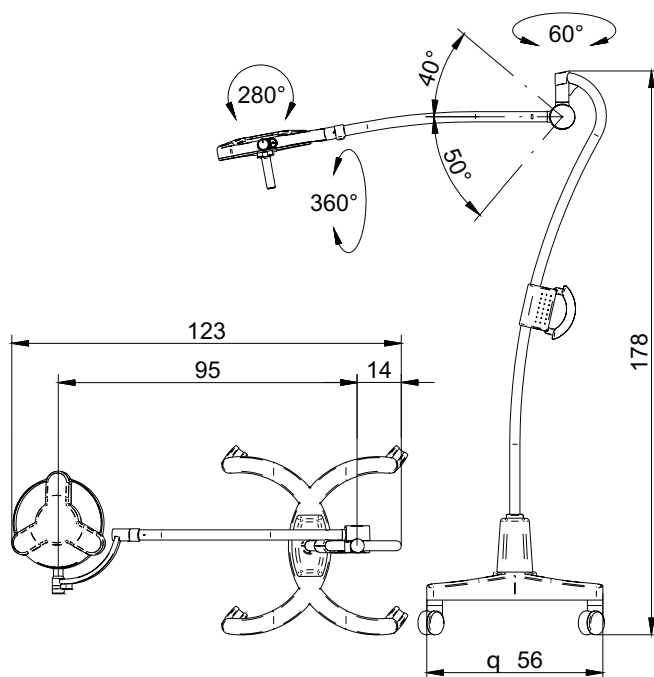
FITTED WITH	1 x LED lamp
LUMINOUS POWER	55 000 Lux / 1,0 m
COLOR TEMPERATURE	approx. 4500 K
ILLUMINANCE FIELD 1.0 M	Ø 16 cm
COLOR RENDERING INDEX	CRI > 95
WORK EQUIPMENT	Electronic converter
CONNECTED LOAD	100-240 V; 50/60 Hz
MAINS LEAD	approx. 3 m
LUMINAIRE BODY	Polycarbonate & acrylonitrile butadiene styrene copolymer (PC & ABS)
WEIGHT (NET)	approx. 20.0 kg
POWER CONSUMPTION	approx. 30 W
USAGE	Rotary switch on the luminaire head
TECHNOLOGY	Single-pole secondary
BALANCE OF ARTICULATION JOINTS	Spring (weight compensation)
CLASS OF PROTECTION	I
NORMS	EN 60601-1, EN 60601-2-41
ACCESSORY	Sterilizable handle
SPECIAL FEATURES	Continuously dimmable, maintenance free
FASTENING	Roller stand
SYSTEM OF PROTECTION	IP 43
ORDER NUMBER	D15.171.000 - pure white - Schuko D15.172.000 - pure white - CH D15.173.000 - pure white - UK



LIGHT DISTRIBUTION



TECHNICAL DRAWING



Illumination data ± 10% tolerance



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