

SURGICAL LIGHT Q-FLOW

New era in surgical lights

Merivaara Q-Flow $^{\text{TM}}$ surgical light improves the working environment in operating rooms as well as offers a new way to reduce the risk of infections.

Designed and manufactured in Finland, Q-Flow $^{\text{TM}}$ is the light of choice for any surgical team.

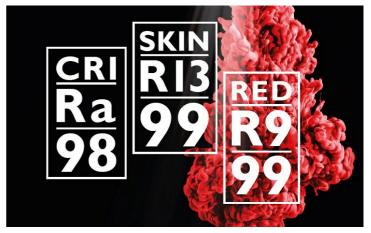




OPTIMISED FOR THE OPERATING ROOM AIR FLOW

Q-Flow™ is the intelligent solution for any operating theatre.

The design is optimised for the operating room air flow, because it decreases the air flow circulation in the operating area, thus reducing the potential for contamination. The standard turbulence intensity should be below 37.5 % but the Q-Flow boasts 15.9 % according to the DIN 1946-4:2008 standard.



SUPERB COLOUR RENDERING

The light gives superb colour rendering (Ra 98), particularly in red and skin shades, which make the product perfect for a variety of surgeries such as internal or plastic surgery. R9 and R13 values are the best in their classes (R9 99, R13 99).



INTUITIVE STERILE SURGEON CONTROL (INTUERI™)

Intuitive Sterile Surgeon Control (Intueri™) makes surgical operations safer and the OR environment more ergonomic for surgeons. The user interface design is simplicity itself – anyone can use it.



DYNAMIC OBSTACLE COMPENSATION (DOCTM)

Dynamic Obstacle Compensation (DOC™) of Q-Flow™ automatically adapts to the shadows in the light field.



GREEN AMBILITE

Q-Flow[™] has excellent illumination properties, providing a deep column of light – not forgetting green ambilite, delivering consistent light for seeing images and reading monitors.



FULL HD CAMERA

Q-Flow™ system with Full HD Camera provides excellent video stream quality. Integrated camera is controlled via same intuitive user interface as the light itself. Wireless transmission enables live video feed to external monitors e.g. in training or consulting.



reddot award 2017 winner

REDDOT 2017 WINNER

Merivaara Q-Flow™ has received the distinction "Red Dot" from the expert committee for the Red Dot Award: Product Design 2017. With Q-Flow™, Merivaara Corp. has created an

FENNIAprize 17

GRAND PRIX

FENNIA PRIZE 2017 GRAND PRIX WINNER

Q-Flow surgical light by Merivaara has won the prestigious Fennia Prize Grand Prix for industrial design.

Q-Flow™ surgical light features in a nutshell:

- Optimised for an OR's air flow (Q-OptiFlow TM)
- Dynamic Obstacle Compensation (DOCTM)
- Excellent colour rendering
- Green ambilite
- Intuitive User Interface
- Deep column of light
- Wireless full HD Camera

Surgical light Q-FlowTM can be controlled through OpenOR integrated operating room management system and/or through multifunctional remote control MerimoteTM.

Primary voltage	T:41-	O Fla 4	O Fla 4:	O [](O []/:
Secondary voltage	Title	Q-Flow 4	Q-Flow 4i	Q-Flow 6	Q-Flow 6i
Homination intensity Ec at I m distance	Primary voltage	100 - 240 V			
Depth of illumination, @ 20% 20%	Secondary voltage	24 V	24 V	24 V	24 V
№ 20% Depth of Illumination, © 60% 700 mm 750 mm 750 mm 750 mm Colour temperature 3800/4500 K 3000/4500 K 3000		140000 lx	140000 lx	160000 lx	160000 lx
© 60% Colour temperature 3800/4500 K 3800 mm 200 - 380 mm 200 - 380 mm 300 mm 330 mm 330 mm 330 mm 330 mm 330 mm 330 mm 3800 mm 300 mm 360 mm 360 mm 750 - 1800 mm 98 98 98 98 98 98 98 98 99 99 99 99 99 90 90 Average life time of LEDs 31 kg 16 kg 16 kg 16 kg Skin colour r		1400 mm	1400 mm	1700 mm	1700 mm
Light field 200 - 340 mm 200 - 340 mm 200 - 380 mm 200 - 380 mm Light field diameter, value d10 310 mm 310 mm 330 mm 330 mm Light field diameter, value d50 170 mm 170 mm 180 mm 180 mm Working distance 700 - 1700 mm 700 - 1700 mm 750 - 1800 mm 750 - 1800 mm Colour rendering index (R4) 98 98 98 Red colour rendering index (R9) 99 99 99 Number of LEDs 69 69 90 90 Average life time of LED >50 000 h >50 000 h >50 000 h LED 560 mm 560 mm 700 mm 700 mm Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Integrated dimming (%) 35 % 35 % 15,9 % 15,9 % Power consumption (W) 110 110 150 50210, 520220, Product Code 520210, 520220,	•	700 mm	700 mm	750 mm	750 mm
Light field diameter, value d10 310 mm 310 mm 330 mm 330 mm Light field diameter, value d50 170 mm 170 mm 180 mm 180 mm Working distance 700 - 1700 mm 700 - 1700 mm 750 - 1800 mm 750 - 1800 mm Colour rendering index (Ra) 98 98 98 98 Red colour rendering index (R9) 99 99 99 99 Number of LEDs 69 69 90 90 Average life time of LED >50 000 h >50 000 h >50 000 h LED 560 mm 560 mm 700 mm 700 mm Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Integrated dimming (%) 35 % 15.9 % 15.9 % 15.9 % Power consumption (W) 110 110 150 50010, 520220, 5	Colour temperature	3800/4500 K	3800/4500 K	3800/4500 K	3800/4500 K
Value d10 Light field diameter, value d50 170 mm 170 mm 180 mm 180 mm Working distance 700 - 1700 mm 700 - 1700 mm 750 - 1800 mm 750 - 1800 mm Colour rendering index (Ra) 98 98 98 98 Red colour rendering index (R9) 99 99 99 Number of LEDs 69 69 90 90 Average life time of LED >50 000 h >50 000 h >50 000 h Size of light head 560 mm 560 mm 700 mm 700 mm Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 99 99 99 99 Integrated dimming (%) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Turbulence intensity, DIN 1946 (%) 35 % 35 % 15.9 % 15.9 % Power consumption (W) 110 110 150 50210, 520220, 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	Light field	200 - 340 mm	200 - 340 mm	200 - 380 mm	200 - 380 mm
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Colour rendering index (Ra) 98 98 98 98 Red colour rendering index (R9) 99 99 99 99 Number of LEDs 69 69 90 90 Average life time of LED >50 000 h >50 000 h >50 000 h Size of light head 560 mm 560 mm 700 mm 700 mm Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 99 99 99 99 Integrated dimming (%) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Turbulence intensity, DIN 1946 (%) 35 % 35 % 15.9 % 15.9 % Power consumption (W) 110 110 150 150 Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	_	170 mm	170 mm	180 mm	180 mm
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Index (R9) Number of LEDs 69 69 90 90 Average life time of LED >50 000 h >50 000 h >50 000 h >50 000 h Size of light head 560 mm 560 mm 700 mm 700 mm Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 99 99 99 99 Integrated dimming (%) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Turbulence intensity, DIN 1946 (%) 35 % 35 % 15.9 % 15.9 % Power consumption (W) 110 110 150 150 Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	_	98	98	98	98
Average life time of LED >50 000 h 50 000 h >50 000 h </th <th>_</th> <th>99</th> <th>99</th> <th>99</th> <th>99</th>	_	99	99	99	99
Size of light head 560 mm 560 mm 700 mm 700 mm Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 99 99 99 99 99 Integrated dimming (%) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Turbulence intensity, DIN 1946 (%) 35 % 35 % 15.9 % 15.9 % Power consumption (W) 110 110 150 150 Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	Number of LEDs	69	69	90	90
Weight of luminaire 13 kg 13 kg 16 kg 16 kg Skin colour rendering index (R13) 99 99 99 99 99 Integrated dimming (%) 10 - 100 % 10 - 100 % 10 - 100 % 10 - 100 % Turbulence intensity, DIN 1946 (%) 35 % 35 % 15.9 % 15.9 % Power consumption (W) 110 110 150 150 Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	_	>50 000 h	>50 000 h	>50 000 h	>50 000 h
Skin colour rendering index (R13) 99 99 99 99 Integrated dimming (%) 10 - 100 % 10 - 100 % 10 - 100 % Turbulence intensity, DIN 1946 (%) 35 % 35 % 15.9 % 15.9 % Power consumption (W) 110 110 150 150 Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	Size of light head	560 mm	560 mm	700 mm	700 mm
Integrated dimming (%) Turbulence intensity, DIN 1946 (%) Power consumption (W) Product Code 520210, 520220, 520220, 520220, 520210, 520220, 520220, 520220,	Weight of luminaire	13 kg	13 kg	16 kg	16 kg
(%) 35 % 35 % 15.9 % 15.9 % DIN 1946 (%) 110 110 150 150 Power consumption (W) 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	_	99	99	99	99
DIN 1946 (%) Power consumption (W) 110 110 150 150 Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,	-	10 - 100 %	10 - 100 %	10 - 100 %	10 - 100 %
(W) Product Code 520210, 520220, 520210, 520220, 520210, 520220, 520210, 520220,		35 %	35 %	15.9 %	15.9 %
	-	110	110	150	150
	Product Code				