



## MR<sup>®</sup> 480 UV Light Dosimeter (NDT)



### Product characteristics

- Personal protection dosimeter - designed to monitor and protect workers in areas exposed to artificial UV radiation in accordance with existing legislation.
- The reduction of risk due to exposure to artificial optical radiation is based on the principles of risk prevention laid down in Directive 89/391/EEC
- The device has an "electronic skin" (erythema sensor) and evaluates each artificial and natural UV radiation according to its hazard
- All erythema values are measured continuously every second and stored as an integral every 30 seconds
- When the legal limit values are reached, the device gives a visual and acoustic alarm
- Employees should then immediately contact a responsible safety officer
- Measured values can be read out via the supplied software and saved in Excel format
- Can be charged and read out via the supplied USB cable

\*\*Technical changes reserved!\*\*



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### Technical data

Housing:	ABS plastic white with clip
Weight & Dimensions:	20 g (20mmx15mmx5mm)
Measuring range:	0-450 mW/m <sup>2</sup>
Measuring accuracy:	± 15 %
Measurement uncertainty:	5 %
Measuring and storage cycle:	Measuring cycle: 1x/sec. Storage: every 30sec.
Safety class DIN EN 60529:	IP54
Maximum number of stored measured values:	2,880 with date and time ▶ Reset at 0:00 hrs
Working temperature:	10°C - 40°C
Alarm message according to daily (30 Jm <sup>2</sup> /24 hrs, starting at 0:00 o'clock each day):	-optical by bargraph LED -acoustic by warning tone every 30 seconds -then flashing blue LED
Battery life:	approx. 10 days
Battery charging:	weekly
Data storage:	weekly and when the limit value is reached optically by middle LED
Battery charge status:	Press button
Checking / assessing the state of danger at the workplace:	1 x green LED: workplace not dangerous 5 x red LED: workplace very dangerous

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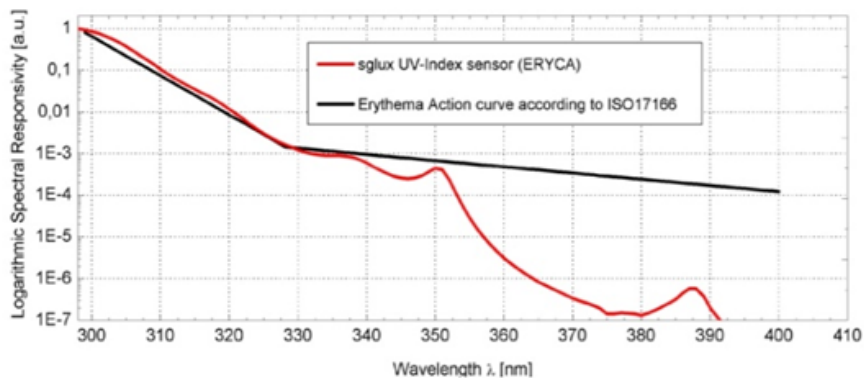
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## Technical appendix

Relative sensitivity of the erythema sensor:

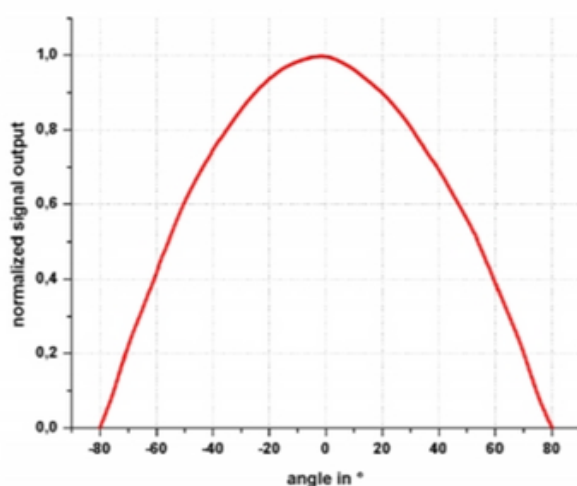
### NORMALIZED SPECTRAL RESPONSIVITY & ERYTHEMA ACTION CURVE

Weighting function to form an erythema



Input optics angle dependence cosine:

### FIELD OF VIEW



### Evaluation:

The erythema formation function is used to weight the registered UV light.

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