LIGHTING: SELECTION CRITERIA

RISK	CONSEQUENCE	SOLUTION
PHOTOTOXICITY *Excessive HEV blue in the cold LED spectrum.* Toxic blue peack: The pupil improperly regulates the light which induces the over-illumination of the retina by the HEV blues.	**Retina over-illumination** in the HEV blues: Premature aging of the eye, AMD, retinitis, cataract ... Aggravating factor: long and regular observation of powerful light reflected by the teeth.	*Eliminating the toxic spectrum of LEDs protects the HEALTH of your eyes.* **PHOTOBIOLOGICAL SAFETY**
VISUAL FATIGUE *Too much contrast in the treatment room and/or in the operating lamp spot.* The rods located on the periphery of the retina are less well illuminated than the centre of the retina. The image seen in levels of grey is less sharp.	**Under-illumination of the rods:** The image seen loses its sharpness. As in radiology, the sharpness is in the number of shades of grey. If the rods are under-illuminated, they do not form the black and white image well. The more contrast there is, the more the eye has to adjust and the more tiring it is to "see sharp".	*Eliminating all the contrast ensures visual COMFORT.* North light in the treatment room & uniformity across the whole surface of the operating lamp spot. **ILLUMINATION UNIFORMITY**
IMPRECISION OF OPERATING PROCEDURE *Light spectrum different from that of natural light.* The retina cones function less well. An unsuitable spectrum affects acuity and colour vision	**Harm to the spectral sensitivity of the cones:** Errors in the view of the observed tooth shapes, the microgeometry of their surfaces, the luminosity, the shade and the saturation.	*Choosing the right LED spectrum guarantees PERFORMANCE.* Perfect teeth copying and colour selection in the chair and at all times: D65 certified. **NATURAL LIGHT SPECTRUM**

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Degré K is a French company specialising in lighting system applications for the dental sector and is the originator of numerous innovations. Its founder is the AFNOR and ISO international expert for dental lighting.