

IEC62471A - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 62471 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES Photobiological safety of lamps and lamps systems			
Differences according to: EN 62471:2008			
Attachment Form No.: --			
Attachment Originator: DEKRA Testing and Certification (Shanghai) Ltd			
Master Attachment: 2013-10			

	CENELEC COMMON MODIFICATIONS (EN)		P
4	EXPOSURE LIMITS		P
	Contents of the whole Clause 4 of IEC 62471:2006 moved into a new informative Annex ZB		—
	Clause 4 replaced by the following:		P
	Limits of the Artificial Optical Radiation Directive (2006/25/EC) have been applied instead of those fixed in IEC 62471:2006	See appended Table 6.1	P
4.1	General		P
	First paragraph deleted		—

Table 6.1	Emission limits for risk groups of continuous wave lamps (based on EU Directive 2006/25/EC)								P
	Test condition: <input type="checkbox"/> GLS <input type="checkbox"/> Non GLS <input checked="" type="checkbox"/> Worst Case Lamp classification group: <input type="checkbox"/> exempt <input checked="" type="checkbox"/> risk 1 <input type="checkbox"/> risk 2 <input type="checkbox"/> risk 3								
Risk	Action spectrum	Symbol	Units	Emission Measurement For L1C1-GRN1000000000, $\alpha=3,5$ mrad					
				Exempt		Low risk		Mod risk	
				Limit	Result	Limit	Result	Limit	Result
Actinic UV	$S_{UV}(\lambda)$	E_s	$W \cdot m^{-2}$	0,001	0,0000	-	-	-	-
Near UV		E_{UVA}	$W \cdot m^{-2}$	0,33	0,0000	-	-	-	-
Blue light	$B(\lambda)$	L_B	$W \cdot m^{-2} \cdot sr^{-1}$	100	--	10000	--	4000000	
Blue light, small source	$B(\lambda)$	E_B	$W \cdot m^{-2}$	0,01*	0,19	1,0	0,19	400	--
Retinal thermal	$R(\lambda)$	L_R	$W \cdot m^{-2} \cdot sr^{-1}$	$28000/\alpha$	45906,89	$28000/\alpha$		$71000/\alpha$	
Retinal thermal, weak visual stimulus**	$R(\lambda)$	L_{IR}	$W \cdot m^{-2} \cdot sr^{-1}$	545000 $0,0017 \leq \alpha \leq 0,011$	--				
				$6000/\alpha$ $0,011 \leq \alpha \leq 0,1$	--				
IR radiation, eye		E_{IR}	$W \cdot m^{-2}$	100	0,00	570		3200	

* Small source defined as one with $\alpha < 0,011$ radian. Averaging field of view at 10000 s is 0,1 radian.

** Involves evaluation of non-GLS source

NOTE The action functions: see Table 4.1 and Table 4.2
 The applicable aperture diameters: see 4.2.1
 The limitations for the angular subtenses: see 4.2.2
 The related measurement condition 5.2.3 and the range of acceptance angles: see Table 5.5.