

IEC62471A - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

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

	<b>CENELEC COMMON MODIFICATIONS (EN)</b>		<b>P</b>
<b>4</b>	<b>EXPOSURE LIMITS</b>		<b>P</b>
	Contents of the whole Clause 4 of IEC 62471:2006 moved into a new informative Annex ZB		—
	Clause 4 replaced by the following:		<b>P</b>
	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	<b>P</b>
<b>4.1</b>	<b>General</b>		<b>P</b>
	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 type="checkbox"/> risk 1 <input checked="" type="checkbox"/> risk 2 <input type="checkbox"/> risk 3								
Risk	Action spectrum	Symbol	Units	Emission Measurement For L1C1- RYL 1000000000, $\alpha=3,5$ 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*	5,05	1,0	5,05	400	5,05
Retinal thermal	$R(\lambda)$	$L_R$	$W \cdot m^{-2} \cdot sr^{-1}$	28000/ $\alpha$	189,27	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.