TEST REPORT **EN 62471:2008** **Photobiological safety of lamps and lamp systems**
Note:

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Test item particulars **Lamp classification group.....:Risk Group 1**
Possible test case verdicts
General remarks: **Remark:** **Appendix A - EUT photos** **Appendix B - Test equipment list**
General Product Information:

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	$L_B\ t=\sum_{300}^{700}\sum_{t} L\ (\ ,t)\ B(\ )\quad t$ $^{-2}$ $^{-1}$		
	$L_B=\sum_{300}^{700} L_\lambda\ B(\ )$		
		α	
	$E_B\ t=\sum_{300}^{700}\sum_{t} E_\lambda(\ ,t)\ B(\ )\quad t$ $^{-2}$		
	$E_B=\sum_{300}^{700} E_\lambda\ B(\ )$		
	$L_\infty=\sum_{38}^{1400} L_\lambda\cdot R(\lambda)\cdot\Delta\lambda\le\frac{50000}{\alpha\cdot t^{-0,25}}$ $W\cdot m^{-2}\cdot sr^{-1}$		
	$L_{IR}=\sum_{780}^{1400} L_\lambda\cdot R(\lambda)\cdot\Delta\lambda\le\frac{6000}{\alpha}$ $W\cdot m^{-2}\cdot sr^{-1}$		
	$E_{IR}=\sum_{780}^{3000} E_\lambda\cdot\Delta\lambda\le 18000\cdot t^{-0,75}$ $W\cdot m^{-2}$		

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	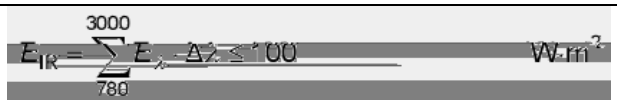		

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	α	α	

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Table 4.1			
Wavelength[1] λ, nm	**UV hazard function $S_{UV}(\lambda)$**	**Wavelength λ, nm**	**UV hazard function $S_{UV}(\lambda)$**

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Table 4.2		
Wavelength nm	**Blue-light hazard function B( )**	**Burn hazard function R( )**

Table 5.4					-
Hazard Name	**Relevant equation**	**Wavelength Range nm**	**Explosure aperture rad(deg)**	**Limiting aperture rad(deg)**	**EL in items of constant irradiance $W.m^{-2}$**
	$\sum_{\lambda} \lambda \Delta\lambda$				
	$\sum_{\lambda} \Delta\lambda$		≤		
	$\sum_{\lambda} \lambda \Delta\lambda$		≤		
	$\sum_{\lambda} \Delta\lambda$		≤		
	$\sum_{\lambda} \Delta\lambda$			π	

Table 5.5					-
Hazard Name	**Relevant equation**	**Wavelength Range nm**	**Explosure duration Sec**	**Field of view radians**	**EL in terms of constant radiance $W.m^{-2}.sr^{-1}$)**
	$\sum_{\lambda} \lambda \Delta\lambda$		≥	√ √	
	$\sum_{\lambda} \lambda \Delta\lambda$			√	α α
	$\sum_{\lambda} \lambda \Delta\lambda$				α

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	λ								
	λ								
	λ								
	λ			α α		α α		α α	
	λ								

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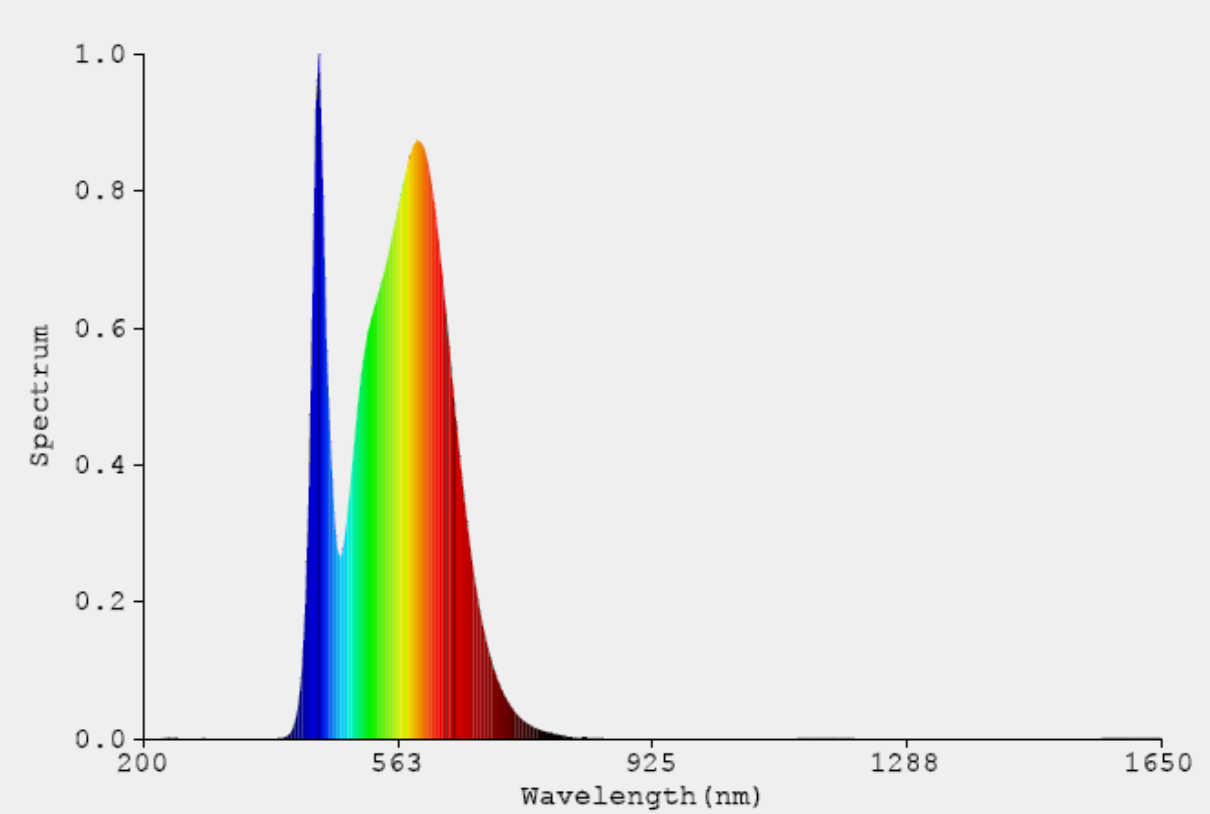
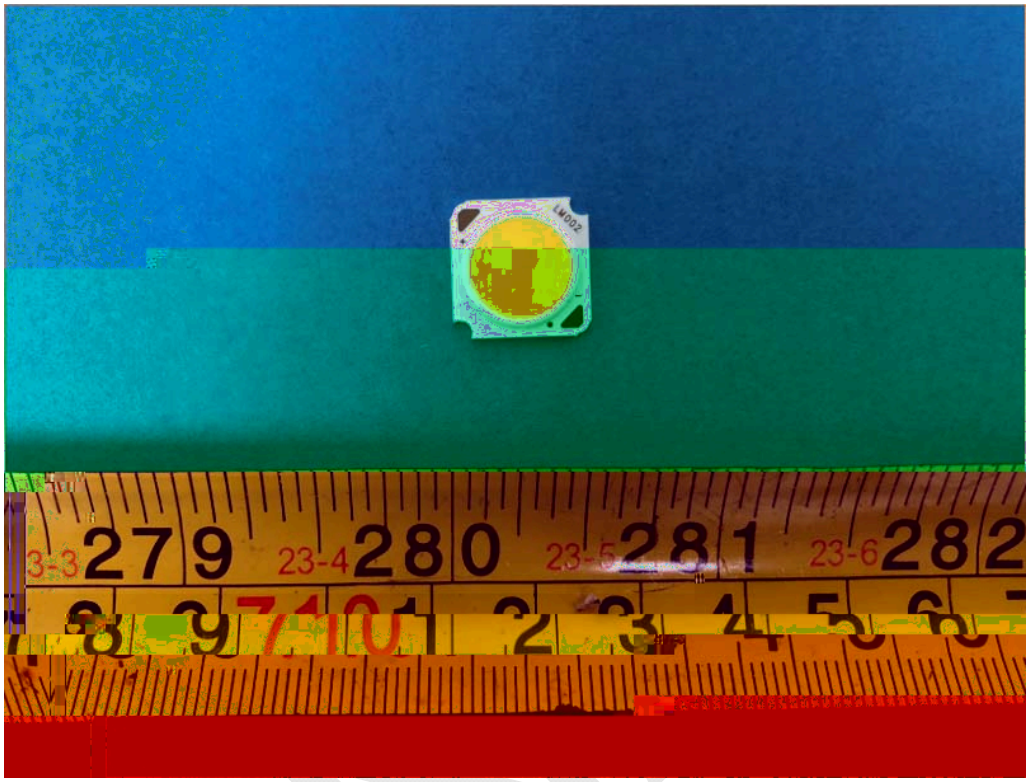
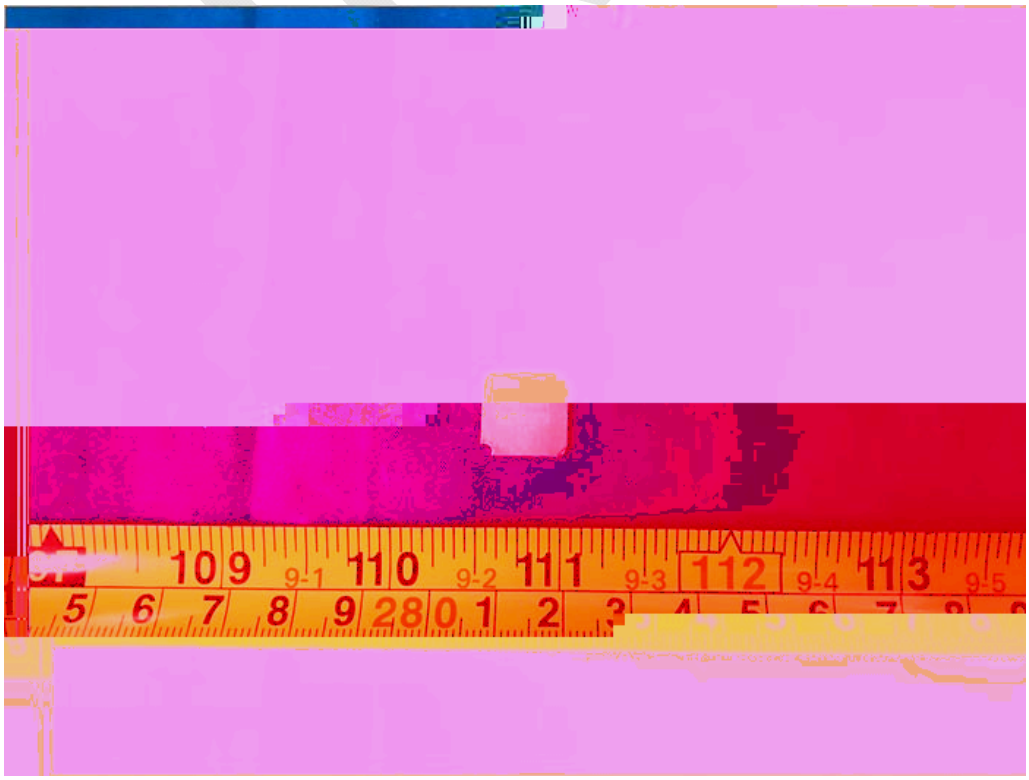

1.0
0.8
0.6
0.4
0.2
0.0
Spectrum
200
563
925
1288
1650
Wavelength(nm)

Thefrontview of EUT



Theback view of EUT



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