TEST REPORT

IEC 62471:2006

Photobiological safety of lamps and lamp systems

Colin Zhang

Alice . liu

General product information:

Model	Input parameters	CCT

Remarks:

	$L_B = \sum_{300}^{700} L_\lambda B(\lambda) \triangle\lambda \leq$		
	$E_B t = \sum_{300}^{700} E_\lambda(\lambda,t) B(\lambda) \triangle t \triangle\lambda \leq$ $^{-2}$		
	$E_B = \sum_{300}^{700} E_\lambda B(\lambda) \triangle\lambda \leq$		
	$L_R = \sum_{\alpha \cdot t}^{1400} L_\lambda \cdot R(\lambda) \cdot \Delta\lambda \leq \frac{50000}{0.25}$ $W \cdot m^{-2} \cdot sr^{-1}$ 380		
	$L_{IR} = \sum_{780}^{1400} L_\lambda \cdot R(\lambda) \cdot \Delta\lambda \leq \frac{6000}{\alpha}$ $W \cdot m^{-2} \cdot sr^{-1}$		
	$E_{IR} = \sum_{780}^{3000} E_\lambda \cdot \Delta\lambda \leq 18000 \cdot t^{-0,75}$ $W \cdot m^{-2}$		

	$E_{IR} = \sum_{780}^{3000} E_\lambda \cdot \Delta\lambda \le 100$ W·m^{-2}		
	$E_H \cdot t = \sum_{380}^{3000} \sum_{t} E_\lambda(\lambda,t) \cdot \Delta t \cdot \Delta\lambda \le 20000 \cdot t^{0,25}$ J·m^{-2}		

	△		

BACL
Bay Area Compliance Labs Corp.

Table 4.1

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

Table 4.2

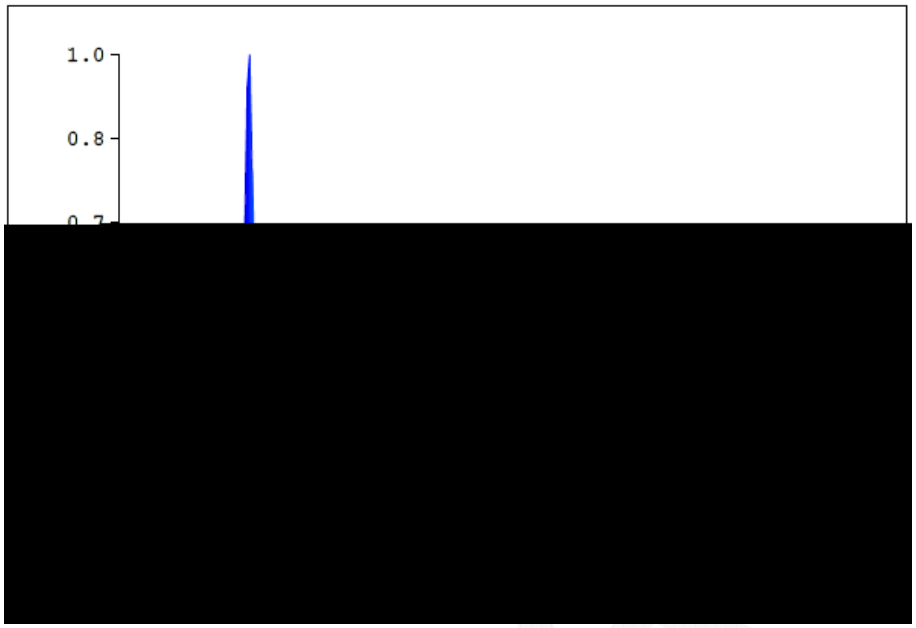
Wavelength nm	Blue-light hazard function B( )	Burn hazard function R( )

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

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

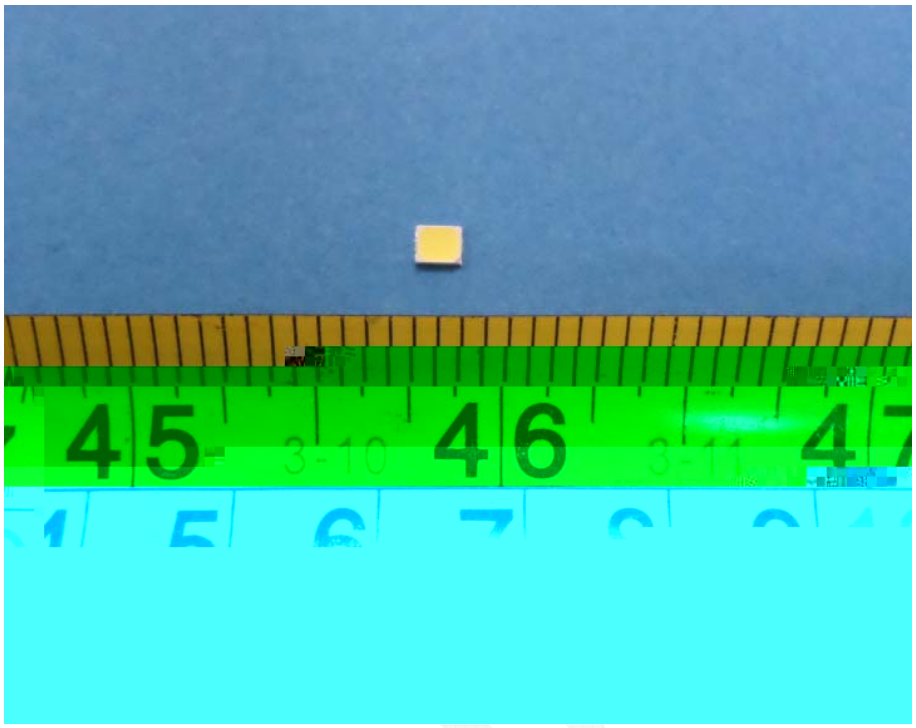
Appendix I Figure of Spectral distribution

Spectral distribution of 5700K



Appendix A - EUT Photos

1. General view of 5700K



Appendix B Test equipment list

Equipment Description	Model No	BACL#	Manufacturer	Last Cal	Cal Due