

Page 1 of 16

Test Report

Client Name : ShenZhen Runlite Technology Co.,Ltd

Address

Building A15,Tantou the 4th Industrial Estate,SongGang Town,Baoan District,ShenZhen,China

Product Name : SMD LED

Date : 2019-11-01

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Address: Zone B, 1/F., Building 2, Hengchangrong High–Tech Industrial Park, Huangtian, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China Tel:(86) 755–26066440 Fax: (86) 755–26014772 Email: service@anbotek.com





Page 2 of 16

TEST REPORT EN 62471:2008 Photobiological Safety of Lamps and Lamp Systems Report Reference No.....: PCANL191022009-01 Anbotel Tested by 5 Ocean Deng Ocean Deng Hora zhang (printed name + signature) * Approved Supervised by (printed name + signature): Flora Zhang Testing Laboratory.....: Shenzhen Anbotek Pengcheng Compliance Laboratory Limited Zone B, 1/F., Building 2, Hengchangrong High-Tech Industrial Park, Huangtian, Hangcheng Street, Bao'an District, Address Shenzhen, Guangdong, China. Testing location: Same as above Applicant's Name ShenZhen Runlite Technology Co.,Ltd Building A15, Tantou the 4th Industrial Estate, SongGang Town, Baoan Address District, ShenZhen, China Test Specification: Standard EN 62471:2008 Type Test Test procedure: Non-standard test method..... N/A Test Item Description SMD LED Trade Mark: N/A Manufacturer: ShenZhen Runlite Technology Co.,Ltd Building A15, Tantou the 4th Industrial Estate, SongGang Town, Baoan Address District, ShenZhen, China Model/Type reference: X2835X-W64SXXXXDXXXX-XXXX 6VDC, 0.9W Ratings:

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or use in part without prior written consent from Shenzhen Anbotek Pengcheng Compliance Laboratory Limited

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PC-EE-01-a



Page 3 of 16

Summary of Testing:				
Tests performed (name of test and test clause):	Testing location:			
This appliance complies with EN 62471:2008 standards requirements.	Shenzhen Anbotek Pengcheng Compliance Laboratory Limited			
The EUTs passed relevant tests.	Zone B, 1/F., Building 2, Hengchangrong High- Tech Industrial Park, Huangtian, Hangcheng Street,			
otek Anbotek Anbotek Anbotek A	Bao'an District, Shenzhen, Guangdong, China.			

Summary of Compliance with National Differences:

Report No.: PCANL191022009-01

N/A

N/A

Copy of Marking Plate:

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Date of receipt of test item	Report No.: PCANL191022009-01	Page 4 of 16
Tested lamp system	Test Item Particulars:	
Rated of the lamp	Tested lamp	N/A RG0 Exempt RG1 Low Risk RG2 Moderate Risk RG3 High Risk N/A
Possible Test Case Verdicts: Test case does not apply to the test object	Rated of the lamp	6VDC, 0.9W
Test object does meet the requirement	Possible Test Case Verdicts:	
Ambient temperature of tested	Test object does meet the requirement:	P (Pass)
Test inputs	Testing:	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a point is used as the decimal separator. List of test equipment must be kept on file and available for review. General Product Information: X2835X-W64SXXXDXXXX-XXXX and X2835X-WXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Test inputs Sample size for tested Date of receipt of test item	6 VDC 1pcs 2019-10-22
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a point is used as the decimal separator. List of test equipment must be kept on file and available for review. General Product Information: X2835X-W64SXXXXDXXXX-XXXX and X2835X-WXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	General Remarks:	
X2835X-W64SXXXXDXXXX-XXXX and X2835X-WXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	This report shall not be reproduced, except in full, with laboratory. "(See Enclosure #)" refers to additional information ap "(See appended table)" refers to a table appended to Throughout this report a point is used as the decimal	hout the written approval of the Issuing testing opended to the report. the report. separator.
Remark for series models X2835X-WXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	General Product Information:	
	Remark for series models X2835X-WXXXXXXXXXXX correlated color temperature, It can be any integer fro	XX-XXXX: The third "X" and the fourth"X"indicates the or 16 to 65, which states from 1600K to 6500K

Anb

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Page 5 of 16



Page 6 of 16

	EN 62471:2008		
lause	Requirement + Test	Result – Remark	Verdict
potek Anbotek Anbotek	To protect against retinal photochemical injury from chronic blue-light exposure, the integrated spectral radiance of the light source weighted against the blue-light hazard function, $B(\lambda)$, i.e., the blue-light weighted radiance, LB, shall not exceed the levels defined by:	Anbotek Anbotek Anbotek	N/A
anbo ak Ar	$L_{B} \cdot t = \sum_{\substack{300 \\ t}}^{700} \sum_{t} L_{\lambda}(\lambda, t) \cdot B(\lambda) \cdot \Delta t \cdot \Delta \lambda \le 10^6 \qquad J \cdot m^{-2} \cdot sr^{-1}$	Anbotek Anbotek Anb	N/A
	$L_{\rm B} = \sum_{300}^{700} L_{\lambda} \cdot B(\lambda) \cdot \Delta \lambda \le 100 \qquad \qquad {\rm W} \cdot {\rm m}^{-2} \cdot {\rm sr}^{-1}$	Anbotek Anbote A	N/A
3.4	Retinal blue light hazard exposure limit - small source	K abotet And	P
Anbotek	Thus the spectral irradiance at the eye $E\lambda$, weighted against the blue-light hazard function $B(\lambda)$ shall not exceed the levels defined by:100s	otek Anbotek Anbotek	P
K AN	$E_{\rm B} \cdot t = \sum_{300}^{700} \sum_{t} E_{\lambda}(\lambda, t) \cdot B(\lambda) \cdot \Delta t \cdot \Delta \lambda \le 100 \qquad \rm J \cdot m^{-2}$	Anbotek Anbotek Anbo	ten P 1
	$E_{\rm B} = \sum_{300}^{700} E_{\lambda} \cdot B(\lambda) \cdot \Delta \lambda \le 1 \qquad \qquad {\rm W} \cdot {\rm m}^{-2} {\rm even}^{100}$	Anbotek Anbo	Anbore
.3.5	Retinal thermal hazard exposure limit	stek unboro	P
Anbo	To protect against retinal thermal injury, the integrated spectral radiance of the light source, L λ , weighted by the burn hazard weighting function R(λ)	hotek Anbotek Anbotek	Panto
	(from Figure 4.2 and Table 4.2), i.e., the burn hazard weighted radiance, shall not exceed the levels defined by:	Anbotek Anbotek Anbo	potek .tek
nbotek	$L_{R} = \sum_{380}^{1400} L_{\lambda} \cdot R(\lambda) \cdot \Delta \lambda \le \frac{50000}{\alpha \cdot t^{0,25}} \qquad W \cdot m^{-2} \cdot sr^{-1}$	Anbotek Anbotek	Anbor P Anbotel
.3.6	Retinal thermal hazard exposure limit - weak visual s	timulus	Pab
Anbote Anb	For an infrared heat lamp or any near-infrared source where a weak visual stimulus is inadequate to activate the aversion response, the near infrared (780 nm to 1400 nm) radiance, LIR, as viewed by the eye for exposure times greater than 10 s shall be limited to:	Anbotek Anbotek Anbot Anbotek Anbotek Anbot Anbotek Anbotek Anb	ek P Jotek Anbotek
	$L_{\rm HR} = \sum_{780}^{1400} L_{\lambda} \cdot R(\lambda) \cdot \Delta \lambda \le \frac{6000}{\alpha} \qquad W \cdot {\rm m}^{-2} \cdot {\rm sr}^{-1}$	Anboisek Anboitek	AntPren
3.7	Infrared radiation hazard exposure limits for the eye	at boten Anbo	Р
ek Anbr	The avoid thermal injury of the cornea and possible delayed effects upon the lens of the eye (cataractogenesis), ocular exposure to infrared radiation, EIR, over the wavelength range 780 nm to 3000 nm, for times less than 1000 s, shall not exceed:	Anbotek	otek
Anbotek	$E_{\rm IR} = \sum_{780}^{3000} E_{\lambda} \cdot \Delta \lambda \le 18000 \cdot t^{-0,75} \qquad \rm W \cdot m^{-2}$	ok Anbotek Anbotek	Anbot Anbot

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Page 7 of 16

EN 62471:2008					
Clause	Requirement + Test	Result – Remark	Verdict		
	$E_{\rm IR} = \sum_{780}^{3000} E_{\lambda} \cdot \Delta \lambda \le 100 \qquad W \cdot m^{-2} \qquad \text{where}$	Anbotek Anbo	Anbotek		
4.3.8	Thermal hazard exposure limit for the skin	pino at botet	P		
Anboites Anbo	Visible and infrared radiant exposure (380 nm to 3000 nm) of the skin shall be limited to:	potek Anborek Anborek Anborek	PAnt		
stek Ar	$E_{H} \cdot t = \sum_{380}^{3000} \sum_{t} E_{\lambda}(\lambda, t) \cdot \Delta t \cdot \Delta \lambda \le 20000 \cdot t^{0.25} \qquad J \cdot m^{-2}$	Anbolen Anbolek	nbotek		
5	MEASUREMENT OF LAMPS AND LAMP SYSTEM	S And S Stek	Ada		
5.1	Measurement conditions	k boter Anto	Pate		
Anbotek	Measurement conditions shall be reported as part of the evaluation against the exposure limits and the assignment of risk classification.	otek Anbotek Anbotek	A P Anb		
5.1.1	Lamp ageing (seasoning)	abor Air	N/A		
nek pri	Seasoning of lamps shall be done as stated in the appropriate IEC lamp standard.	Anbotek Anbor An	N/A		
5.1.2	Test environment	onbote. Anu	P ⁶		
	For specific test conditions, see the appropriate IEC lamp standard or in absence of such standards, the	Anbotek Anbote	Ant P		
Anboten	appropriate national standards or manufacturer's recommendations.	tek Anbotek Anbo	Anb		
5.1.3	Extraneous radiation	hotek Anbort An	Р		
	Careful checks should be made to ensure that extraneous sources of radiation and reflections do not add significantly to the measurement results.	Anbotek Anbotek Anbo	pot ^{ek}		
5.1.4	Lamp operation	abotek Ana	P		
Anbotek	Operation of the test lamp shall be provided in accordance with:	Anbotek Anbotek	Ante Pek		
nboten	 the appropriate IEC lamp standard, or 	rek Anboten Anbo	N/A		
abote	 the manufacturer's recommendation 	tek nbotek Anbote	Р		
5.1.5	Lamp system operation	po' Ai otek anbot	Р		
All All	The power source for operation of the test lamp shall be provided in accordance with:	Anborot Anbo	pot ^{er} P		
,o. ;	 the appropriate IEC standard, or 	Anboi ok hotek	N/A		
Anbote	 the manufacturer's recommendation 	Anbote And Lotek	P		
5.2	Measurement procedure	ek Anboter Anbo	Pool		
5.2.1	Irradiance measurements	ak hotek Anbo	Р		
Dur	Minimum aperture diameter 7mm.	pote Arm ok both	PAR		
k publ	Maximum aperture diameter 50 mm.	otek Anbol An	A P		
otek A	The measurement shall be made in that position of the beam giving the maximum reading.	Ant Anbotek Ant	P		
abotek	The measurement instrument is adequate calibrated.	anbotek Anbote	In P.		
5.2.2	Radiance measurements	All otek suboter	Р		
5.2.2.1	Standard method	K prino. pri	P		
J.Z.Z.I	The measurements made with an optical system.	1001	P		

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Page 8 of 16

EN 62471:2008				
Clause	Requirement + Test	Result – Remark	Verdict	
unbotek hotek	The instrument shall be calibrated to read in absolute radiant power per unit receiving area and per unit solid angle to acceptance averaged over the	Anbotek Anbotek	Anbotek	
	field of view of the instrument.	Ant botek Anbotek	Anbo	
5.2.2.2	Alternative method	botek anbotek Anbore	N/A	
nbotek Ar	Alternatively to an imaging radiance set-up, an irradiance measurement set-up with a circular field stop placed at the source can be used to perform radiance measurements.	Anbotek Anbotek Anb	N/A	
5.2.3	Measurement of source size	K abotet Anbo	Pote	
Anbotek	The determination of α , the angle subtended by a source, requires the determination of the 50% emission points of the source.	otek Anbotek Anboten	AP Anb	
5.2.4	Pulse width measurement for pulsed sources	-botok Anbo. A.	N/A	
	The determination of Δt , the nominal pulse duration	tek aboton prib.	N/A	
	of a source, requires the determination of the time during which the emission is $> 50\%$ of its peak value.	Anbotek Anbotek A	hoter	
5.3	Analysis methods	K soboleh And	Ro ^{ve}	
5.3.1	Weighting curve interpolations	t stek unbote	P	
Anbor Anbor	To standardize interpolated values, use linear interpolation on the log of given values to obtain intermediate points at the wavelength intervals desired.	nbotek Anbotek Anbotek Anbotek	Pario	
5.3.2	Calculations	Anbolt An	P	
Anbolek	The calculation of source hazard values shall be performed by weighting the spectral scan by the appropriate function and calculating the total weighted energy.	Anbotek Anbotek Anbotek Anbotek	AnbotP Anbotel	
5.3.3	Measurement uncertainty	An lek boten	Pup.	
Aupor	The quality of all measurement results must be quantified by an analysis of the uncertainty.	botek Anborr Anborr	e⊁ P №	
6 An	Lamp Classification	Anboten Anbo stek un	potek P	
Joten I	For the purposes of this standard it was decided that the values shall be reported as follows:	Anboter Anbotek	AnbottP	
	 for lamps intended for general lighting service, the hazard values shall be reported as either irradiance or radiance values at a distance which produces an illuminance of 500 lux, but not at a distance less than 200 mm 	Distance=306mm	AntPie	
otek p	 for all other light sources, including pulsed lamp sources, the hazard values shall be reported at a distance of 200 mm 	Anbotek Anbotek Ant	N/A	
6.1	Continuous wave lamps	Anboy Alt	Aup P	
6.1.1	Risk Group 0 (Exempt)	et oboten Anbo	P	
Anbotek	In the except group are lamps, which does not pose any photobiological hazard. The requirement is met by any lamp that does not pose:	otek Anbotek Anbotek	PP An	

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PC-EE-01-a



Page 9 of 16

EN 62471:2008				
Clause	Requirement + Test	Result – Remark	Verdict	
Anbotek	 an actinic ultraviolet hazard (ES) within 8-hours exposure (30000 s), nor 	Anbotek Anbotek	Anbotek	
Anbote Anb	 a near-UV hazard (EUVA) within 1000 s, (about 16 min), nor 	ortek Anboren Anbor Anborek Anborek Anbore	P Anb	
nbotek p	 a retinal blue-light hazard (LB) within 10000 s (about 2,8 h), nor 	Anbotek Anbotek Anbotek	Anbotek	
Anbore	– a retinal thermal hazard (LR) within 10 s, nor	ak Anboro Ann Ann	Poter	
Anboro	 an infrared radiation hazard for the eye (EIR) within 1000 s 	otek Anbolek Ambo	P	
6.1.2	Risk Group 1 (Low-Risk)	Anbore Ann sek ab	N/A	
Hek A	In this group are lamps, which exceeds the limits for the except group but that does not pose:	Anbotek Anbur A	N/A	
	 an actinic ultraviolet hazard (ES) within 10000 s, nor 	Anborek Anborek	N/A	
Anbotek	 a near ultraviolet hazard (EUVA) within 300 s, nor 	htek Anbotek Anbotek	N/A	
Anbo	– a retinal blue-light hazard (LB) within 100 s, nor	botek Anbor An	N/A	
iek Ar	- a retinal thermal hazard (LR) within 10 s, nor	botek Anboten Ano	N/A	
botek	 an infrared radiation hazard for the eye (EIR) within 100 s 	Anbotek Anbotek Ar	N/A	
Anbotek Anbotek	Lamps that emit infrared radiation without a strong visual stimulus and do not pose a near-infrared retinal hazard (LIR), within 100 s are in Risk Group	ek Anbotek Anbotek	N/A	
6.1.3	Risk Group 2 (Moderate-Risk)	nbote And stek anbo	N/A	
ek An	This requirement is met by any lamp that exceeds the limits for Risk Group 1, but that does not pose:	Anbotek Anbou An	N/A	
	 an actinic ultraviolet hazard (ES) within 1000 s exposure, nor 	Anbotek Anbotek	N/A	
Anbotek	 a near ultraviolet hazard (EUVA) within 100 s, nor 	ek Anbotek Anbotek	N/A	
Anbolic K Anbolic	 a retinal blue-light hazard (LB) within 0,25 s (aversion response), nor 	potek Anborek Anbor	N/A	
otek I	 a retinal thermal hazard (LR) within 0,25 s (aversion response), nor 	Anbotek Anbotek Ant	N/A	
Anbotek Kotek	 an infrared radiation hazard for the eye (EIR) within 10 s 	Anboten Anbotek	N/A	
Anbotel	Lamps that emit infrared radiation without a strong visual stimulus and do not pose a near-infrared retinal hazard (LIR), within 10 s are in Risk Group 2.	otek Anbotek Anbotek	N/A	
6.1.4	Risk Group 3 (High-Risk)	boten And	N/A	

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Page 10 of 16

	EN 62471:2008		
Clause	Requirement + Test	Result – Remark	Verdic
Inbotek	Lamps which exceed the limits for Risk Group 2 are in Group 3.	Amborek Ambor	N/A
6.2	Pulsed lamps	ek Anboten Anu	N/A
Anbotel	Pulse lamp criteria shall apply to a single pulse and to any group of pulses within 0,25 s.	potek Anbotek Anbotek Anbotek	N/A
otek A	A pulsed lamp shall be evaluated at the highest nominal energy loading as specified by the manufacturer.	Anbotek Anbotek A	N/A
Anboren	The risk group determination of the lamp being tested shall be made as follows:	Anbotek Anbotek	N/A
	 a lamp that exceeds the exposure limit shall be classified as belonging to Risk Group 3 (High- Risk) 	nbotek Anbotek Anbotek	N/A
hbotek Anbotek	 for single pulsed lamps, a lamp whose weighted radiant exposure or weighted radiance does is below the EL shall be classified as belonging to the Exempt Group 	Anborek Anborek A Anborek Anborek A	N/A
Anbotek Anbot	 for repetitively pulsed lamps, a lamp whose weighted radiant exposure or weighted radiance dose is below the EL, shall be evaluated using the continuous wave risk criteria discussed in clause 6.1, using time averaged values of the pulsed emission 	Anbotek Anbotek Anbotek Anbotek Anbotek Anbotek	N/A

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Page 11 of 16

EN 62471:2008						
Clause Requirement		Result – Remark				
Wavelength¹ λ, nm UV hazard function UV hazard function S _{uv} (λ)		Ultraviolet hazards for skin Wavelength λ, nm	and eye P UV hazard function S _{uv} (λ)			
200	0,030	313*	0,006			
205	0,051	315	0,003			
210	0,075	316	0,0024			
215	0,095	317	0,0020			
220	0,120	318	0,0016			
225	0,150	319	0,0012			
230	0,190	320	0,0010			
235	0,240	322	0,00067			
240	0,300	323	0,00054			
245	0,360	325	0,00050			
250	0,430	328	0,00044			
254*	0,500	330	0,00041			
255	0,520	333*	0,00037			
260	0,650	335	0,00034			
265	0,810	340	0,00028			
270	1,000	345	0,00024			
275	0,960	350	0,00020			
280*	0,880	355	0,00016			
285	0,770 Anboile	360	0,00013			
290	0,640	365*	0,00011			
295	0,540	370	0,000093			
297*	0,460	375	0,000077			
300	0,300	380	0,000064			
303*	0,120	385	0,000053			
305	0,060	390	0,000044			
308	0,026	395	0,000036			
310	0,015	400	0,000030			

¹ Wavelengths chosen are representative: other values should be obtained by logarithmic interpolation at intermediate wavelengths.

Emission lines of a mercury discharge spectrum.

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).: PCANL191022009-01	

EN 62471:2008 lause Requirement + Test Result – Remark					
Clause	Requirement + Tes			Verdict P	
	sources	functions for assessing retinal hazards f	form broadband optical	Anbornek	
	Wavelength nm	Blue-light hazard function Β (λ)	Burn hazard fun R (λ)	ction	
aboter	300	0,01	aboten Ann		
Pr.	305	0,01	Het popore	bu	
PUDO	310	0,01	Ando	Het	
40	315 M	0,01	k aboten Ann	X	
	320	0,01	h. sek	abote	
boten	325	0,01	oter Anbo	otek	
- Hou	330	0,01	lek aboten	PUD	
Aupo,	335	0,01	uppor his sek	nbott	
hotek	340	0,01	boten Anbo		
bu.	345	0,01	Arr boter	AUL	
Anboi	350	0,01	Aupo. Au	104	
N	355	0,01	t hotek Anb	1	
bu bu	360	0,01	Am	boten	
otek	365	0,01	stek anbor A	Nor	
No.	370	0,01	at noter	Aupo	
Anbort	375	0,01	nborn Am	-bote	
otek	380	0,01	0,1	by.	
AUD	385	0,013	0,13	Anb	
anbox.	390	0,025	0,25	1/2	
	395	0,05	0,5	ta b	
PUL	400	0,10	1,0	wotek	
Het.	405	0,20	2,0	elk.	
	410	0,40	4,0	Anbois	
boter	415	0,80	8,0	-otek	
X94	420	0,90	9,0	Pupp	
Aupon	425	0,95	9,5	N0po	
bote	430	0,98	9,8	19-10-10-10-10-10-10-10-10-10-10-10-10-10-	
Person	435	1,00	10,0	by by	
e anb	440	1,00	10,0	-xelt	
-de	445	0,97	9,7	00°	
0. P	450	0,94	9,4	aboto	
hotek	455	0,90	9,0	-xek	
h.	460	0,80	8,0	Anva	
Anbors	465	0,70	7,0	100	
woter	470	0,62	6,2	P.1.	
Press	475	0,55	5,5	Se PU	
anbe	480	0,45	4,5	Yek	
N	485	0,40	4,0		
No. P	490	0,22	2,2	boten	
otek	495	0.16	atek 1,6	Ho.	
NPU V	500-600	10 ^[(450-λ)/50]	1,0	Anbore	
nboron	600-700	0,001	10	wot	
, tek	700-1050	not notek Anbo	10 ^[(700-λ)/500]	burn.	
PUPO.	1050-1150	whote hat all botet	0.2	K ant	
000	1150-1200	hotek Anbert Ant Jak	0,2.10 ^{0,02(1150-)}	λ)	
	1200-1400	And I have a ster have	0,02	01	

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Page 13 of 16

EN 62471:2008						
Clause	Requirement + Test	PUD-	Res	ult – Remark	.ex-	Verdict
Table 5.4	Summary of the ELs for values)	the surface of th	e skin or corne	ea (irradiance bas	sed	Anbote
Hazard Name	Relevant equation	Wavelength range (nm)	Exposure duration (sec)	Limiting aperture rad (deg)	constant	terms of irradiance •m ⁻²)
Actinic UV skin & eye	$E_{S} = \sum E_{\lambda} \cdot S(\lambda) \cdot \Delta \lambda$	200 – 400	< 30000	1,4 (80)	iontek 3	30/t
Eye UV-A	$E_{UVA} = \sum E_{\lambda} \bullet \Delta \lambda$	315 – 400	≤ 1000 > 1000	1,4 (80)	P	000/t 10
Blue-light small source	$E_{B} = \sum E_{\lambda} \bullet B(\lambda) \bullet \Delta \lambda$	300 – 700	≤ 100 > 100	< 0,011	apo.	00/t 1,0
Eye IR	$E_{IR} = \sum E_{\lambda} \bullet \Delta \lambda$	780 –3000	≤ 1000 > 1000	1,4 (80)	CIO DI)0/t ^{0,75} 00
Skin thermal	$E_{H} = \sum E_{\lambda} \bullet \Delta \lambda$	380 – 3000	< 10	2π sr	2000)0/t ^{0,75}

Table 5.5	Summary of the ELs for	the retina (radiar	nce based valu	es)	NOK P NO
Hazard Name	Relevant equation	Wavelength range (nm)	Exposure duration (sec)	Field of view radians	EL in terms of constant radiance (W•m ⁻² •sr ⁻¹)
Blue light	$L_{B} = \sum L_{\lambda} \cdot B(\lambda) \cdot \Delta \lambda$	300 – 700	0,25 – 10 10-100 100-10000 ≥ 10000	0,011•√(t/10) 0,011 0,0011•√t 0,1	10 ⁶ /t 10 ⁶ /t 10 ⁶ /t 100
Retinal thermal	$L_{R} = \sum L_{\lambda} \bullet R(\lambda) \bullet \Delta \lambda$	380 – 1400	< 0,25 0,25 – 10	0,0017 0,011•√(t/10)	50000/(α•t ^{0,25}) 50000/(α•t ^{0,25})
Retinal thermal (weak visual stimulus)	$L_{IR} = \sum L_{\lambda} \bullet R(\lambda) \bullet \Delta \lambda$	780 – 1400	> 10	0,011	6000/α

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PC-EE-01-a

Clause	Requiremen	t + Test	Anbo	17	Re	sult – Rer	nark	N.	Verdict	
Table 6.1	Inequirement if reduce the frequencies of the frequen									
Risk	Action spectrum	Symbol	Units	Emission Measurement						
				Exempt		Low risk		Mod risk		
				Limit	Result	Limit	Result	Limit	Result	
Actinic UV	SUV(λ)	Es	W•m ⁻²	0.001	0.00e+00	0.003	0.00e+00	0.03	0.00e+00	
Near UV	Anboth	EUVA	W•m ⁻²	0.33	0.00e+00	33	0.00e+00	100	0.00e+00	
Blue light	Β(λ)	o ^{te^k LB A}	W•m ⁻² •sr ⁻¹	Anu	Ant	otek	Anbo,	Anb	otek - p	
Blue light, small source	Β(λ)	EB	W•m ⁻²	0.01	4.81e-04	Anbotek	2.64e-02	400	2.64e-02	
Retinal thermal	R(λ)	LR	W•m ⁻² •sr ⁻¹	5.12e+06	3.17e+03	5.12e+06	1.13e+04	1.30e+07	1.13e+04	
Retinal thermal, weak visual stimulus**	R(λ)	LIR LIR	W•m ⁻² •sr ⁻¹	5.45e+05	0.00e+00	5.45e+05	0.00e+00	5.45e+05	0.00e+00	
IR radiation, eye	Anbotek	EIR	W•m ⁻²	100	0.00e+00	570	0.00e+00	3200	0.00e+00	
Skin thermal	Anbotek	Ehanbo	W∙m-2	3.56e+03	1.53e-01	ek Anb	abotek	Arbotek	Anbo	

* Small source defined as one with α < 0.011 radian. Averaging field of view at 10000 s is 0.1 radian. ** Involves evaluation of non-GLS source.

Measurement Uncertainty Statement:

EB, Urel=2.52% (k=2) EUVA, Urel=2.52% (k=2) EIR, Urel=2.52% (k=2) Eh, Urel=2.52% (k=2) Es, Urel=15.14% (k=2) LB, Urel=2.84% (k=2) LR, Urel=2.84% (k=2) LIR, Urel=2.84% (k=2)

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Report No.: PCANL191022009-01 Test Equipment

Page 15 of 16

Equipment Name	Manufacturer	Model No.	Reference No.	Calibration Due Date	
Light Radiation Safety Test System	LINKCOLOR	LRS-104	SE-1164	2020-05-06	
AC power source	LINKCOLOR	LCP-500R	SE-1192	2020-05-06	
DC power supply	LINKCOLOR	M8874	SE-1193	2020-05-06	
Digital Power Meter	YOKOGAMA	WT310	SE-1194	2020-05-06	
Temperature & Humidity meter	Zhengzhou Boyang	HTC-1	SE-423	2020-05-06	
Illuminance Standard Lamp	LINKCOLOR	LCL-100	SE-1195	2020-05-06	
Brightness Standard Lamp	LINKCOLOR	LCL-200	SE-1196	2020-05-06	
Deuterium Lamp	LINKCOLOR	LCL-300	SE-1197	2020-05-06	
Illuminometer	LINKCOLOR	ST-80C	SE-1198	2020-05-06	

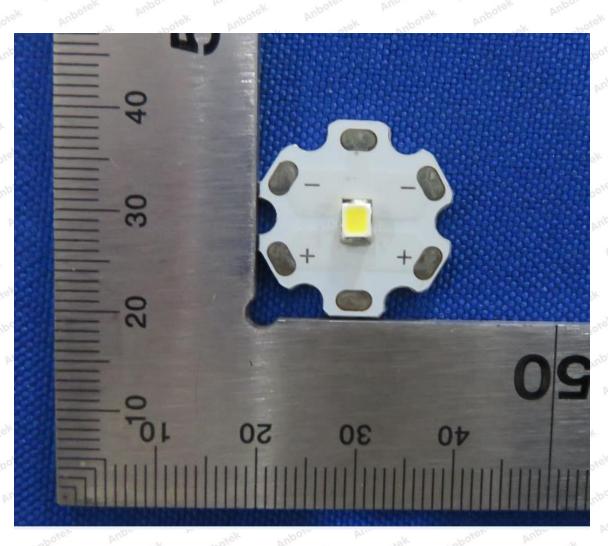
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Report No.: PCANL191022009-01 Attachment A – Product Photo



END OF TEST REPORT

Shenzhen Anbotek Pengcheng Compliance Laboratory Limited

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PC-EE-01-a