

Test Report**Report No.: GZEE250700350431****Date: 2025-07-15**

The following sample(s) was/were submitted and identified on behalf of the client as:

Applicant: Guangzhou Tianxin Photoelectric Co., Ltd
#15-1, JinGu Road South, Xiutang, Huadong Town, Huadu District, Guangzhou, China

Manufacturer: Guangzhou Tianxin Photoelectric Co., Ltd
#15-1, JinGu Road South, Xiutang, Huadong Town, Huadu District, Guangzhou, China

Factory: Guangzhou Tianxin Photoelectric Co., Ltd
#15-1, JinGu Road South, Xiutang, Huadong Town, Huadu District, Guangzhou, China

Testing location/address: SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch
198 Kezhu Road, Science City, Economic & Technology Development Area, Guangzhou, Guangdong, China

Standard(s): IEC TR 62778: 2014
Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires

Product Name: LED

Test item description: LED chip

Trade Mark/Brand: **TYANSHINE**

Model/Type reference: See page 3 **General product information**

Ratings: See page 3 **General product information**

Test result: The test sample belongs to RG2 for all distances < dmin 1,128 m, RG1 for all distances > dmin 1,128 m

Remark: Throughout this report a comma is used as the decimal separator.

Alex Tan
Alex Tan
Reviewer
E&E Safety Laboratory

Junny Huang / Rudy Chen
Junny Huang / Rudy Chen
Project Engineer



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Copy of marking plate

N/A

Summary of testing:

1. The TX3570W40FSA4-NU3CD-A1 was selected for full tested since it has max. current for each die.
2. The TX3570W40FSA4-NU3CD-A1 was tested under 3200 mA input and meets the requirement of RG2 for all distances < dmin 1,128 m, RG1 for all distances > dmin 1,128 m according to IEC TR 62778: 2014.

Use of uncertainty of measurement for decisions on conformity (decision rule) :

No decision rule is specified by the standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

Test item particulars

Product evaluated: LED package
 LED module
 Lamp
 Luminaire

Rated CCT (K): 5500-6700

Rated Luminance (Mcd/m²): —

Component report data used: Not applicable
 LED package
 LED module
 Lamp

Report number:

Possible test case verdicts:

- test case does not apply to the test object : N/A
- test object does meet the requirement: P (Pass)
- test object does not meet the requirement : F (Fail)

Testing

Date of receipt of test item: 2025-07-01

Date (s) of performance of tests: 2025-07-01 to 2025-07-10

General product information:

LED chip, 5500-6700 K, contains several dies.



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Type / model	Ratings	Technical parameter	
TX3570W40FSA4-NU3CD-A1	DC 3200 mA; 13,0 - 14,0 V	Number of dies: 8 ; 4S2P	
TX3570W30FSA3-NU4CD-06	DC 3200 mA; 9,2 - 10,0 V	Number of dies: 6 ; 3S2P	
TX3570W30FSA3-NU3CD-03	DC 3200 mA; 9,2 - 10,0 V	Number of dies: 6 ; 3S2P	
TX4575W45FSA15-NU3CD-01	DC 1000 mA; 46,0 - 47,0 V	Number of dies: 15 ; 15S1P	
TX4575W80FSA15-NU3CH-01	DC 1500 mA; 46,0 - 47,0 V	Number of dies: 15 ; 15S1P	

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IEC TR 62778			
Clause	Requirement + Test	Result - Remark	Verdict
7	MEASUREMENT INFORMATION FLOW		
7.1	Basic flow		—
	'Law of conservation of luminance' applied		N/A
	Use of only true luminance/radiance values		N/A
	In case of luminaire: The light source is operated in the luminaire under similar conditions as when tested as a component		N/A
	In case E_{thr} value for RG2 was established the peak value was derived from angular light distribution		N/A
7.2	Conditions for the radiance measurement		—
	Standard condition applied (200mm distance, 0,011rad field of view)		P
	Non-standard condition applied		N/A
7.3	Special cases (I): Replacement by a lamp or LED module of another type		—
	Light source is a white light source		N/A
	Evaluation done based on highest luminance		N/A
	Evaluation done based on CCT value		N/A
7.4	Special cases (II): Arrays and clusters of primary light sources		—
	LED package is evaluated as: <input type="checkbox"/> RG0 unlimited <input type="checkbox"/> RG1 unlimited		N/A
	E_{thr} of LED package applies to array	—	N/A
8	RISK GROUP CLASSIFICATION		—
	Risk group achieved:		P
	-...Risk Group 0 unlimited		N/A
	-...Risk Group 1 unlimited		N/A
	- E_{thr} (lx) : 1180 Distance to reach RG1 (m) : 1,128		P



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TABLE: Spectroradiometric measurement				
Measurement performed on:		<input checked="" type="checkbox"/> LED package <input type="checkbox"/> LED module <input type="checkbox"/> Lamp <input type="checkbox"/> Luminaire		
Model number		TX3570W40FSA4-NU3CD-A1		
Test voltage (V)		—		
Test current (mA)		3200		
Test frequency (Hz)		—		
Ambient, t (°C)		24,9		
Measurement distance		<input checked="" type="checkbox"/> 20 cm <input type="checkbox"/> ... cm		
Source size		<input checked="" type="checkbox"/> Non-small: 4,3 mm <input type="checkbox"/> Small : mm		
Field of view		<input type="checkbox"/> 100 mrad <input checked="" type="checkbox"/> 11 mrad <input type="checkbox"/> 1,7 mrad (for small sources)		
Item	Symbol	Units	Result	Remark
Correlated colour temperature	CCT	K	6006	—
x/y colour coordinates			X: 0,3215; Y: 0,3429	—
Blue light hazard radiance	L _B	W/(m ² •sr ¹)	7,094 x 10 ⁴	—
Blue light hazard irradiance	E _B	W/m ²	—	—
Luminance	L	cd/m ²	8,370 x 10 ⁷	—
Illuminance	E	lx	40121	—
Supplementary information:				
The product belongs to RG2 for all distances < dmin 1,128 m, RG1 for all distances > dmin 1,128 m				



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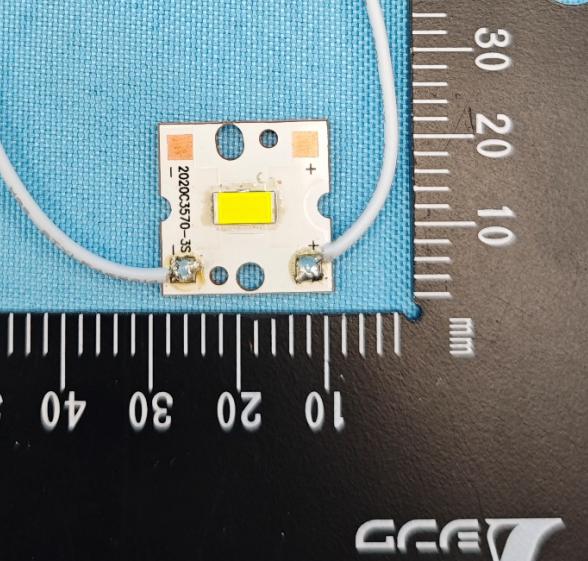
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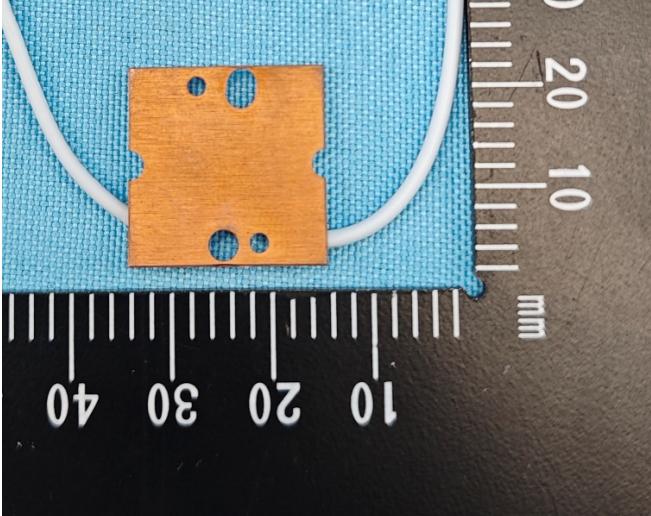
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Test Report**Report No.: GZEE250700350431****Date: 2025-07-15****Photo documentation:**Details of: View of the product

View:	
<input checked="" type="checkbox"/> general	
<input type="checkbox"/> front	
<input type="checkbox"/> rear	
<input type="checkbox"/> right	
<input type="checkbox"/> left	
<input type="checkbox"/> top	
<input type="checkbox"/> bottom	

Details of: View of the product

View:	
<input checked="" type="checkbox"/> general	
<input type="checkbox"/> front	
<input type="checkbox"/> rear	
<input type="checkbox"/> right	
<input type="checkbox"/> left	
<input type="checkbox"/> top	
<input type="checkbox"/> bottom	

- - - End of Report - - -



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