

L I A V e r i f i e d S c h e d u l e o f C e r t i f i c a t i o n



Schedule No. : TSD004-0043 (Issue 1)

Certificate No. : 004-0043

Certificate Holder: : Sunpower Group Ltd
Orion House
Calleva Park
Aldermaston
Berkshire
RG7 8SN



Web: : www.sunpower-uk.com

Date of Initial Registration : 13/03/2017

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This Schedule is to be read in conjunction with the accompanying certificate. The data shown relates only to the unit(s) tested. This schedule and any subsequent schedule(s) may not be reproduced except in full without the written approval of the Testing Laboratory.

Registered Office: Stafford Park 7, Telford, Shropshire, TF3 3BQ, United Kingdom
Tel: +44 (0) 1952 290907 Fax: +44 (0) 1952 290908 Email: lab@thelia.org.uk
Web: www.lialab.org.uk
Web: www.lialabcert.org.uk



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1. INTRODUCTION

This Schedule of certification accompanies the certificate identified on page one as part of the LIA Verified scheme for LED products. Assessment is carried out in line with the requirements set out in LIA Laboratories Technical Scheme Document TSD-004.

2. CERTIFICATION STATUS

Provisional - The products have passed the safety assessment and have achieved 2000 hours of operation as required by the scheme.

3. SCOPE

The products listed in Table 1, supplied by the certificate holder identified on page one have been assessed and are covered under certificate no. 004-0043.

Table 1. *Products covered under scope*

Model No.	Product Name
GEN2-22500	Genesis2



4. DOCUMENTATION

As part of the assessment process the following documents have been evaluated and form part of the Technical File held by the certificate holder and LIA Laboratories Ltd. It should be noted that in order to maintain certification the certificate holder is required to maintain up to date technical documentation related to all of the products identified in section three of this schedule.

All client documentation held by LIA Laboratories Ltd is maintained as strictly confidential.

Table 2. Critical Documents

Document reference	Title/Description
D001	IP report
D002	Integral LED module test
40031729 A	Cable safety approval40031729_300-3 2.01.3.1433
313997	Control gear CB report 313997
P16221388	Control gear Nemko Certificate
40031729 B	CORD VDE CERT
40031729 C	VDE cable cert
140987842001	Waterproof connector TUV
D003	Powerled - Industrial LED Lighting - Genesis2 Datasheet
D004	Control gear Nemko Certificate
MZC8RO8A54302504	Copper
MZC8RO8A54297504	Yellow PVC
MZC8RO8A54298504	Green PVC
MZC8RO8A54299504	Blue PVC
MZC8RO8A54300504	Brown PVC
SCL01I009642001	SCL01I009642001 black PVC ROHS
D003	GEN2-22500 Circuit Diagram
40031729	Cable safety approval40031729_300-3 2.01.3.1433
D004	GEN2-22500 BOM
GO15022601	GO15022601,3030- EN 62471, testreport
NO93832	PCCxxxxyyyE CB report 313997
313997	PCCxxxxyyyE CE AoC 313997
313997	PCCxxxxyyyE EMC-EMF report 313997
P16221388	PCCxxxxyyyE Nemko Certificate



5. OBSERVATIONS AND LIMITATIONS

When installed in accordance with the manufacturer's instructions, this product is deemed to comply with the specified end use



APPENDIX A

PRODUCT TECHNICAL SPECIFICATIONS

A.1. Genesis High Bay

A.1.1. PRODUCT DETAILS

Table A. 1 *Product Specifications*

Product Name	Genesis2
Model No.	GEN2-22500
Product Description	Genesis High Bay
Nominal Dimensions	320mm \varnothing ; H – 278mm
Product Supply Requirement	220-240V AC, 50/60Hz
Lamp Type and Power	LED 200W

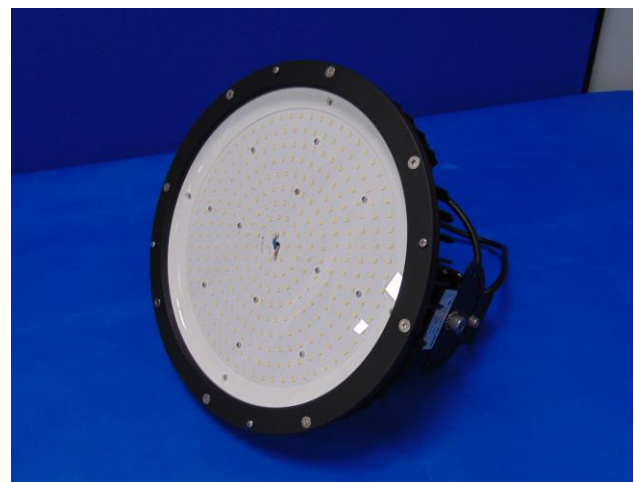


Figure 1. *Product Images*

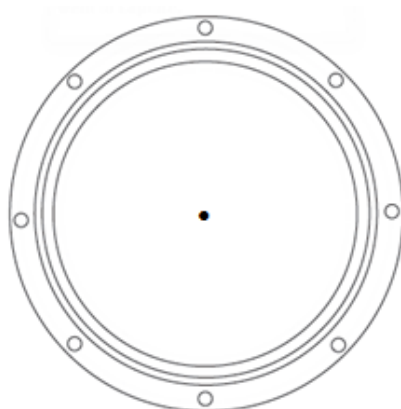


Figure 2. *Product diagram*

A.1.2. CENTRE BEAM INTENSITY AND BEAM ANGLE

Table A. 2 *Beam Angle value for GEN2-22500*

Centre Beam Intensity (cd)	Beam Angle (Lamp orientation)	Beam Angle Result (°)
8946	0° - 180°	112.7
	90° - 270°	112.7

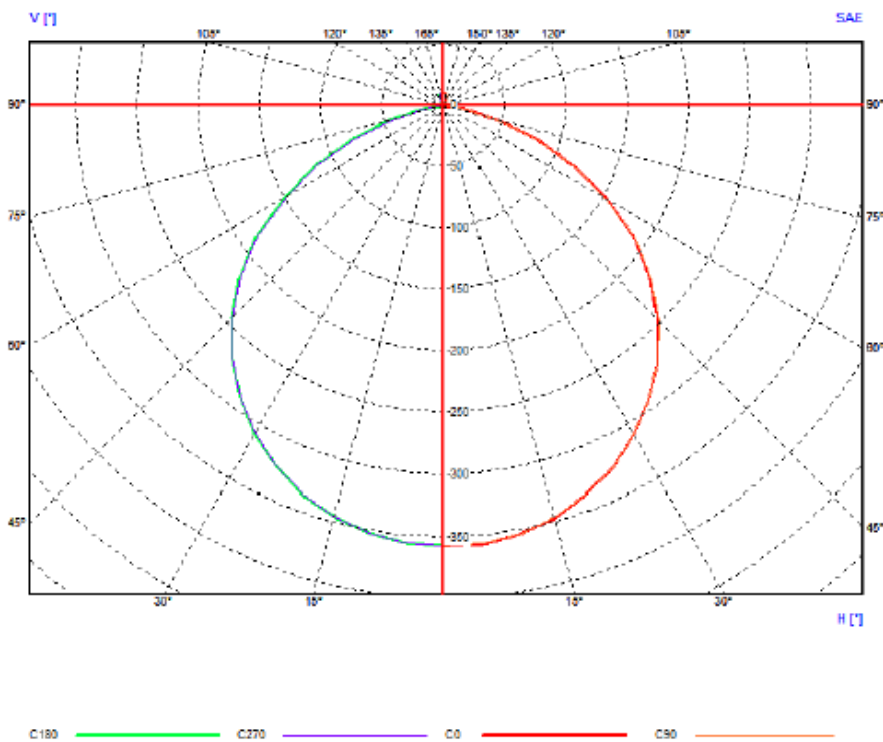


Figure 3. *Polar Diagram for GEN2-22500*

A.1.3. COLORIMETRY

Table A. 3 *Colorimetry values for GEN2-22500*

COLORIMETRY & LUMINOUS FLUX	x coordinate	0.3373
	y coordinate	0.3423
	u coordinate	0.2097
	v coordinate	0.3193
	u' coordinate	0.2097
	v' coordinate	0.4789
	Dominant Wavelength (nm)	585.0
	Purity (%)	10.6
	Correlated Colour Temperature (K)	5289
	Ra (%)	84.3
	R1 (%)	83.6
	R2 (%)	88.8
	R3 (%)	91.4
	R4 (%)	85.0
	R5 (%)	84.5
	R6 (%)	83.7
	R7 (%)	86.9
	R8 (%)	70.3
	R9 (%)	15.2
	R10 (%)	72.6
R11 (%)	84.8	
R12 (%)	65.7	
R13 (%)	84.9	
R14 (%)	95.4	
Lumen Output (lm) *	25080	

* Absolute value for luminous flux was calculated using the LMT Goniophotometer

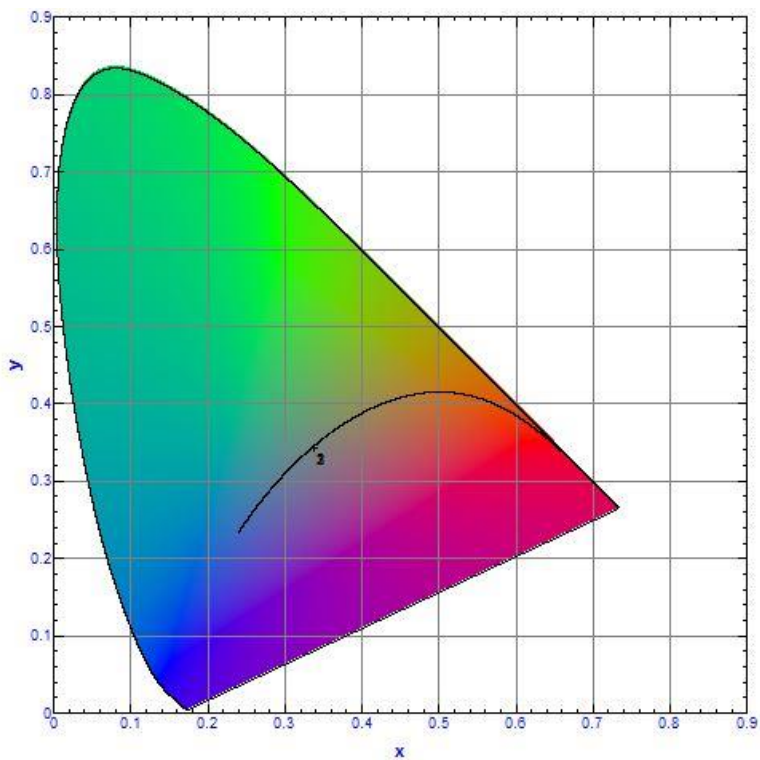


Figure 4. CIE 1931 diagram for GEN2-22500

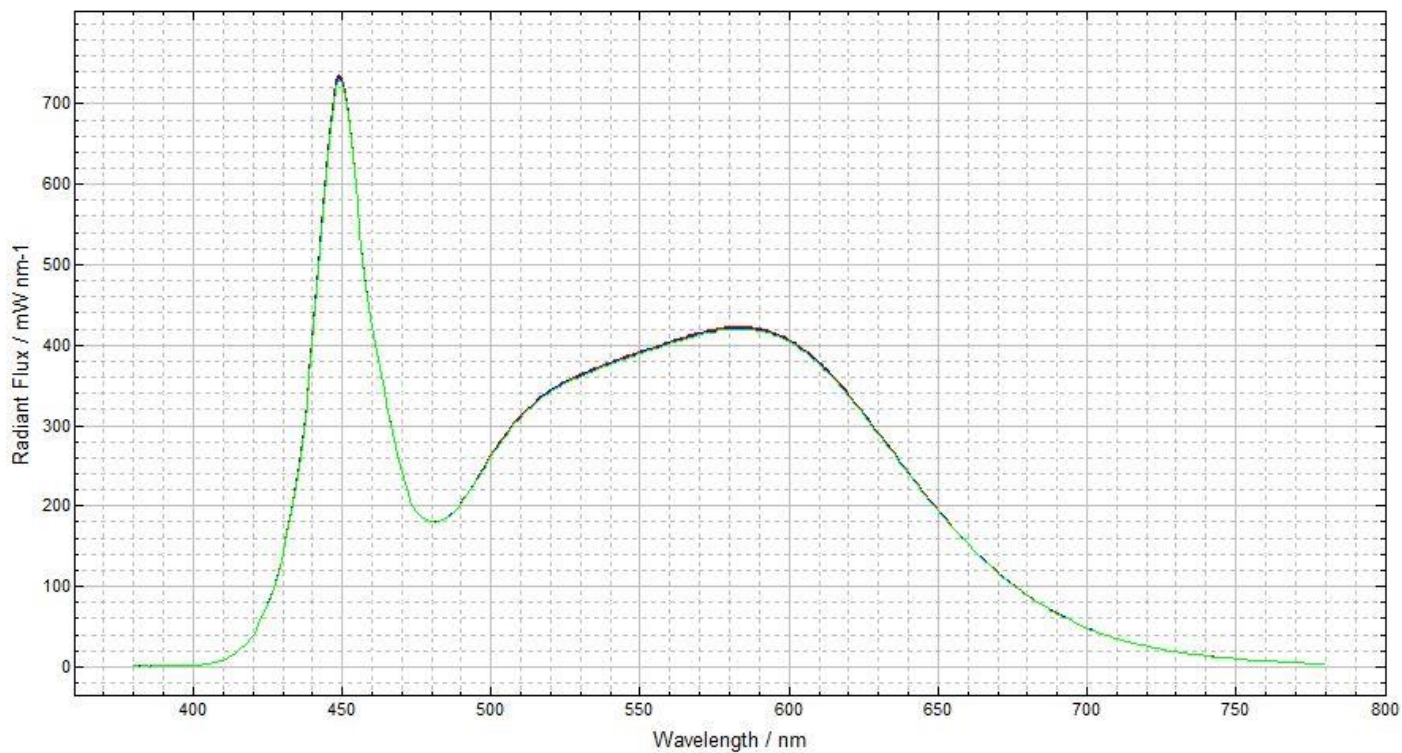


Figure 5. Spectral Irradiance for GEN2-22500

A.1.4. LIFE TEST

Table A. 4 *Colorimetry depreciation of GEN2-22500*

Measured Value	0 hours	100 hours	% Maintained (0-100hrs)	2000 hours	% Maintained (0-2000hrs)
Correlated Colour Temperature (K)	5289	5315	100.5	5271	99.7
Ra (%)	84.3	84.3	100.0	84.0	99.6
Luminous Flux (lm)*	25080	25035	99.8	25329	101.0
Luminous Efficacy (lm/W)*	123.8	124.2	100.3	125.2	101.1

* Absolute value for luminous flux was calculated using the LMT Goniophotometer

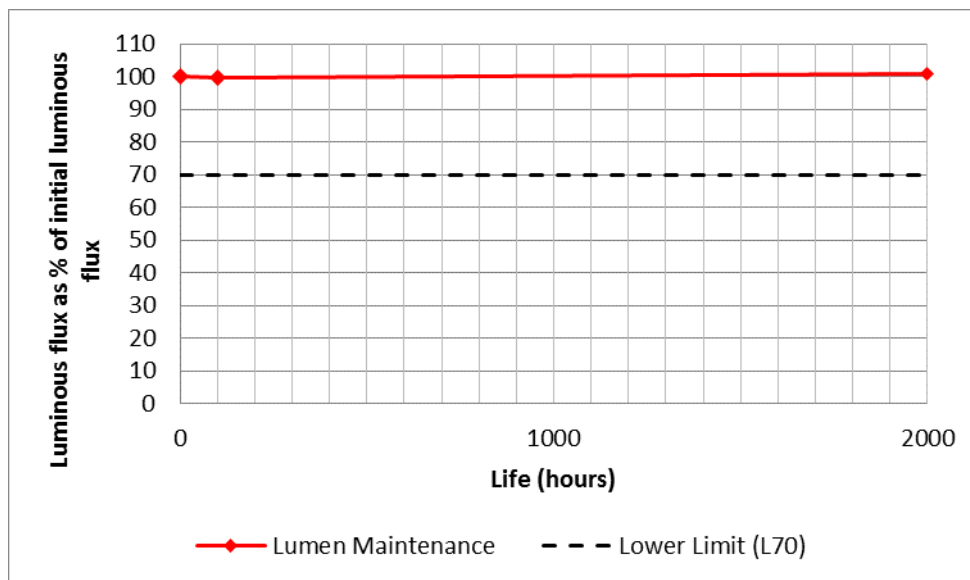


Figure 6. *Luminous flux depreciation curve for GEN2-22500*

END