

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. : TSD004-0013 (Issue 3)
Certificate No. : 004-0013
Certificate Holder: : BSS LED Lighting
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Date of Initial Registration : 10/03/15
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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.

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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

The products have passed the safety assessment and have achieved 2,000 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. 004-0013.

Table 1. *Products covered under scope*

Model No.	Product Name
80001	100W LED Low Bay

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
PV120_D001	Low Bay Brochure
PV120_D002	Low Bay Installation Instructions
PV120_D003	Bill of Materials
PV120_D004	Circuit Diagram
PV120_D005	ENEC Certificate, Certificate No. 2174553.01
PV120_D006	OSRAM DURIS E5 White LM80-08 Test Report, Report No. 130308W6
PV120_D007	OSRAM DURIS Datasheet GW-JDSRS1.EC

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. 100W LED Low Bay

A.1.1. PRODUCT DETAILS

Table A. 1 Product Specifications

Product Name	100W LED Low Bay
Model No.	80001
Product Description	LED Luminaire
Nominal Dimensions	L. 605mm; H. 190mm; W. 320mm
Product Supply Requirement	240V AC 50Hz
Lamp Type and Power	LED 100W



Figure 1. Product Images

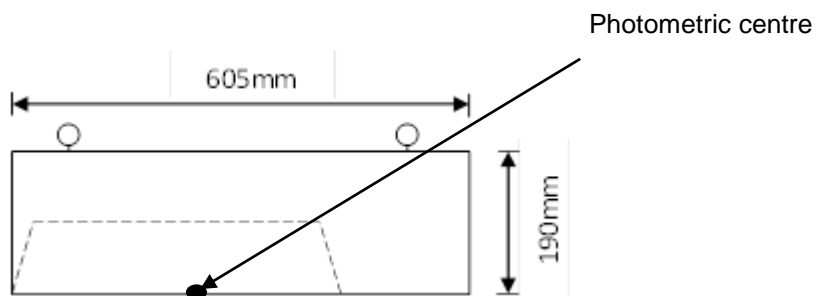


Figure 2. Product diagram

A.1.2. SAFETY EVALUATION

Safety assessment was carried out in accordance with the requirements set in LIA Laboratories' Technical Scheme document TSD-004, the clauses verified are shown in Table 2 and have been evaluated against IEC 60598-1:2008 and IEC 60598-2-1:1989.

The product has been found to conform to the requirements laid out in the identified clauses.

Table A. 2 Safety Test Results

Clause No.	Title
1.3	Marking
1.4	Construction
1.8	Protection against Electric Shock
1.10	Insulation Resistance and Electric Strength, Touch Current and Protective Conductor Current
1.11	Creepage Distances and Clearances
1.12.4	Thermal Test Only (Normal Operation)

A.1.3. COLORIMETRY

Table A. 3 *Colorimetry values for 100W LED Low Bay*

COLORIMETRY & LUMINOUS FLUX	x coordinate	0.3337
	y coordinate	0.3356
	u coordinate	0.2099
	v coordinate	0.3166
	u' coordinate	0.2099
	v' coordinate	0.4749
	Dominant Wavelength (nm)	592.0
	Purity (%)	7.7
	Correlated Colour Temperature (K)	5438
	Ra (%)	87.0
	R1 (%)	87.1
	R2 (%)	91.9
	R3 (%)	93.1
	R4 (%)	87.3
	R5 (%)	87.4
	R6 (%)	86.3
	R7 (%)	88.3
	R8 (%)	74.6
	R9 (%)	29.0
	R10 (%)	79.2
R11 (%)	86.9	
R12 (%)	67.7	
R13 (%)	88.6	
R14 (%)	96.4	
Lumen Output (lm)	13015	

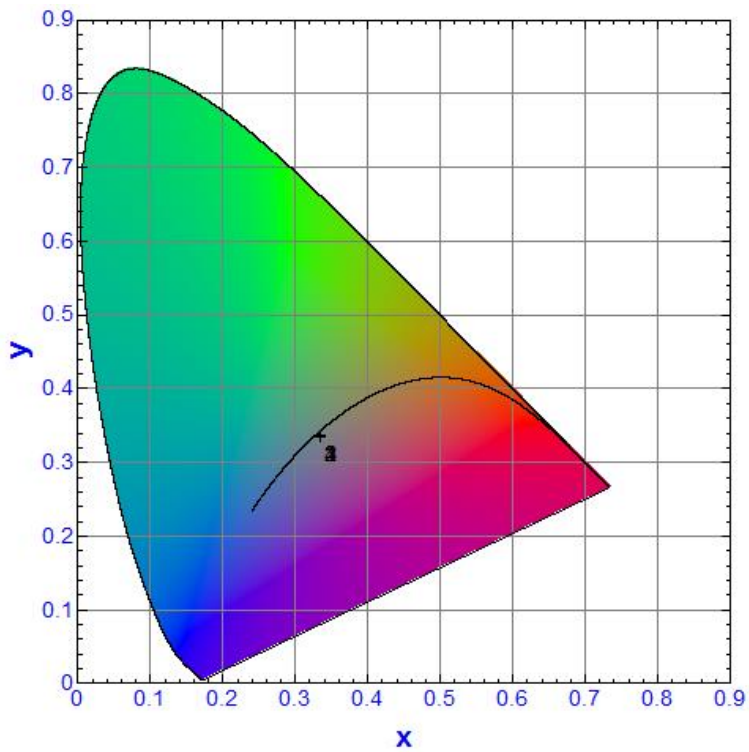


Figure 3. CIE 1931 diagram for 100W LED Low Bay

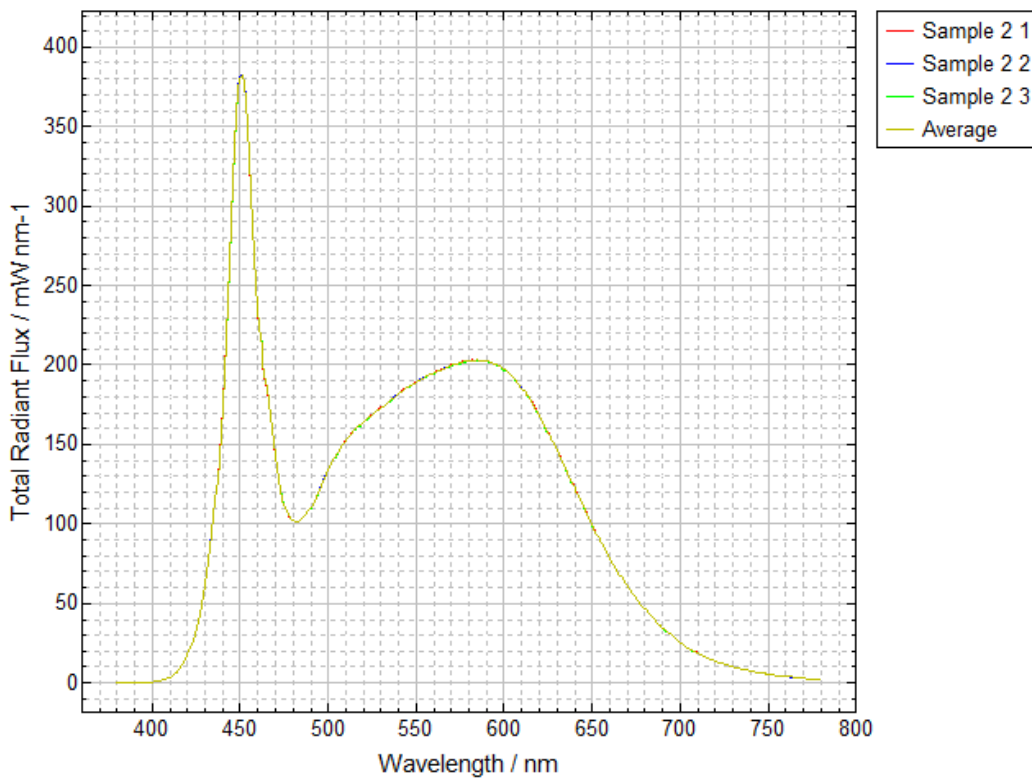


Figure 4. Spectral Irradiance for 100W LED Low Bay

A.1.4. LIFE TEST

Table A. 4 *Colorimetry depreciation of 100W LED Low Bay*

Measured Value	0 hours	100 hours	% Maintained (0-100hrs)	2000 hours	% Maintained (0-2000hrs)
Correlated Colour Temperature (K)	5438	5454	100.3	5442	100.1
Ra (%)	87.0	87.0	100.0	86.8	99.8
Luminous Flux (lm)	13015	12985	99.8	13200	101.4
Luminous Efficacy (lm/W)	129.4	127.9	98.8	129.5	100.1

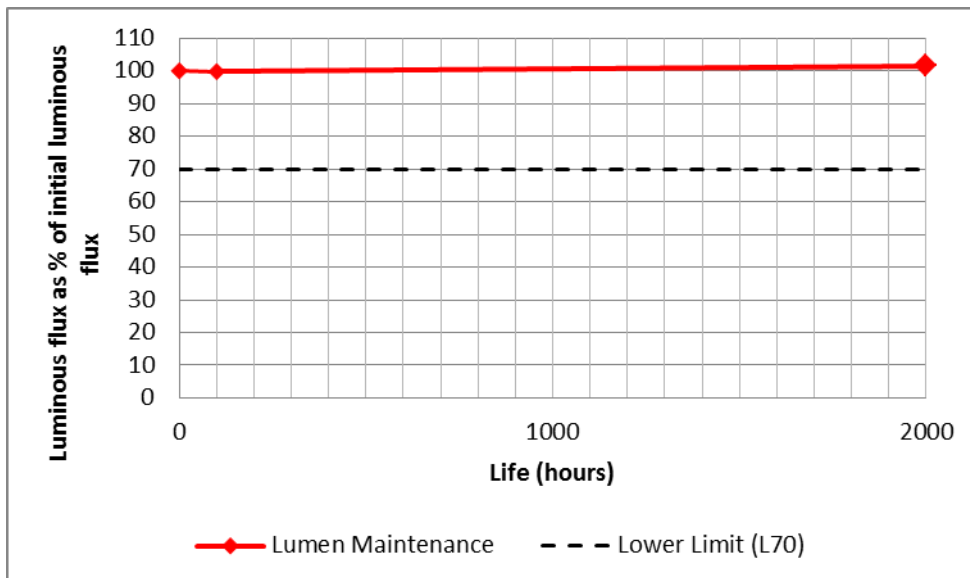


Figure 5. *Luminous flux depreciation curve for 100W LED Low Bay*

END