

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. : TSD004-0017 (Issue 2)
Certificate No. : 004-0017
Certificate Holder: : BSS LED Limited
Unit 5 Ashwood Business Park
Ashington
Northumberland
NE63 0XD



Web: : www.bssled.co.uk

Date of Initial Registration : 04/08/2015
Date of Issue : 19/10/2015
Date of Expiry : 03/08/2018

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



Contents

1. INTRODUCTION	3
2. CERTIFICATION STATUS	3
3. SCOPE	3
4. DOCUMENTATION	4
5. OBSERVATIONS AND LIMITATIONS	4
APPENDIX A	5
A.1. IP66 Low Bay LED Luminaire	6
A.1.1. PRODUCT DETAILS	6
A.1.2. SAFETY EVALUATION	7
A.1.3. COLORIMETRY	8
A.1.4. LIFE TEST	10



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. 004-0017.

Table 1. *Products covered under scope*

Model No.	Product Name
61601	IP66 Low Bay LED Luminaire



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	Floodlight Installation Instructions
D002	Declaration of Conformity for LED Driver
D003	LED Driver Data Sheet
LVD2013164	IP67 Test Report
D005	Internal Circuit diagram
D006	BSS LED Declaration of Conformity
D007	BSS LED Floodlight Data Sheet
D008	Bill of Materials
R 50185176	Certificate for LED Driver

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. IP66 Low Bay LED Luminaire

A.1.1. PRODUCT DETAILS

Table A.1 *Product Specifications*

Product Name	IP66 Low Bay LED Luminaire
Model No.	61601
Product Description	LED Floodlight
Nominal Dimensions	L. 315mm; H. 175mm; W. 190mm
Product Supply Requirement	100-240V AC 50/60Hz
Lamp Type and Power	LED 100W

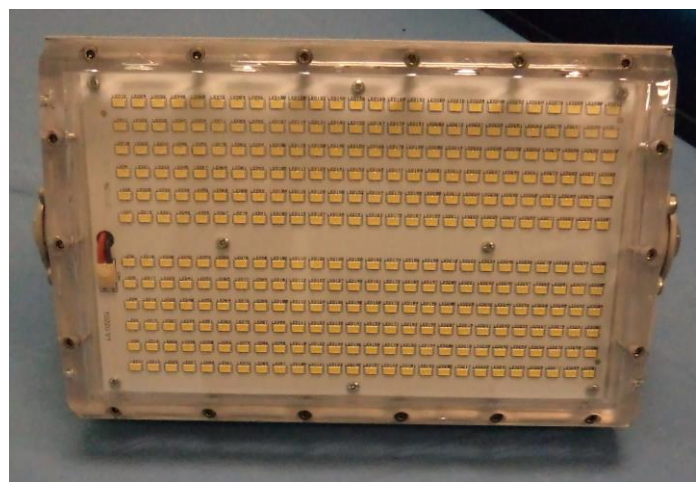


Figure 1. *Product Images*

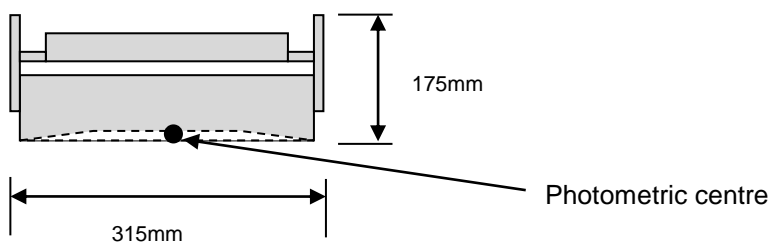


Figure 2. *Product diagram*

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
1.10.2	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)

The product was also assessed against IEC 60598-2-5:1998 (floodlights)

A.1.3. COLORIMETRY

Table A.3 *Colorimetry values for IP66 Low Bay LED Luminaire*

COLORIMETRY & LUMINOUS FLUX	x coordinate	0.3379
	y coordinate	0.3447
	u coordinate	0.2092
	v coordinate	0.3201
	u' coordinate	0.2092
	v' coordinate	0.4802
	Dominant Wavelength (nm)	583.0
	Purity (%)	11.5
	Correlated Colour Temperature (K)	5268
	Ra (%)	83.6
	R1 (%)	83.3
	R2 (%)	86.5
	R3 (%)	87.8
	R4 (%)	84.8
	R5 (%)	84.0
	R6 (%)	80.9
	R7 (%)	87.1
	R8 (%)	74.6
	R9 (%)	25.9
	R10 (%)	67.3
R11 (%)	84.5	
R12 (%)	65.4	
R13 (%)	83.5	
R14 (%)	93.1	
Lumen Output (lm)	11542	

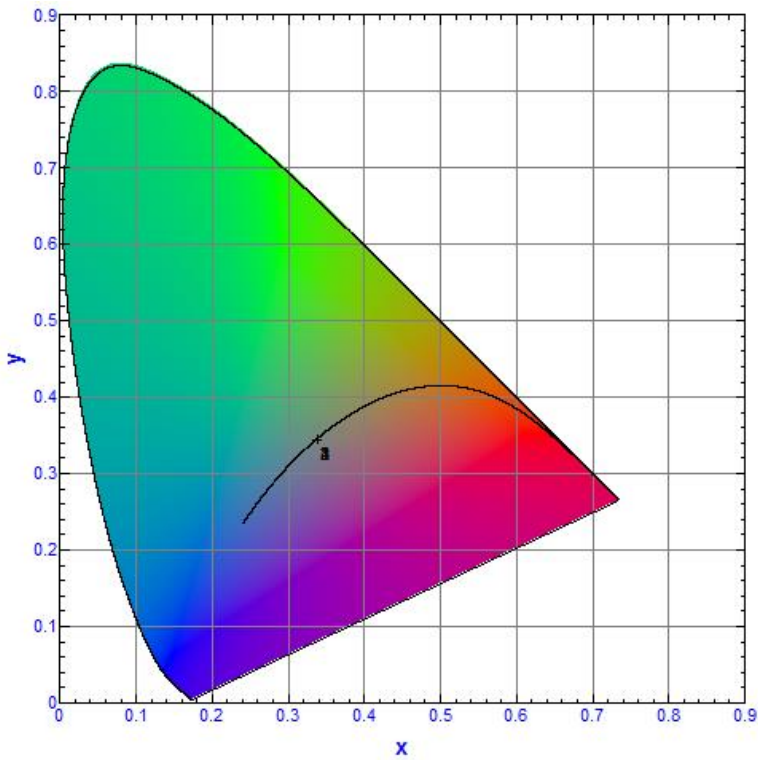


Figure 3. CIE 1931 diagram for IP66 Low Bay LED Luminaire

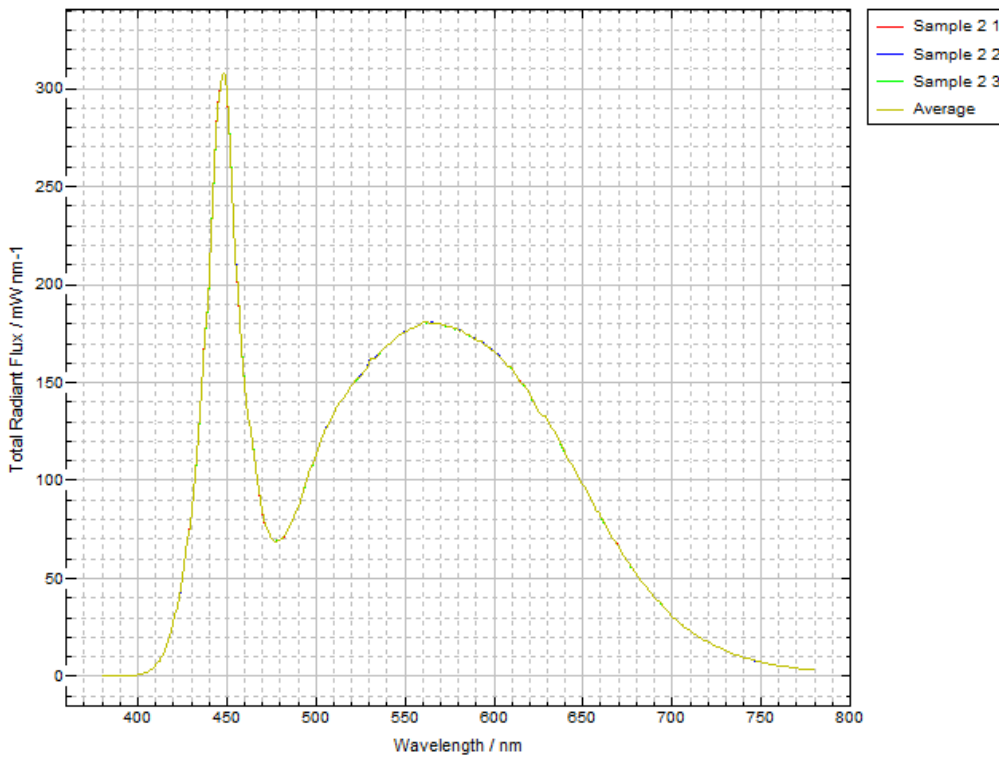


Figure 4. Spectral Irradiance for IP66 Low Bay LED Luminaire

A.1.4. LIFE TEST

Table A.4 *Colorimetry depreciation of IP66 Low Bay LED Luminaire*

Measured Value	0 hours	100 hours	% Maintained (0-100hrs)	2000 hours	% Maintained (0-2000hrs)
Correlated Colour Temperature (K)	5268	5324	101.1	5252	99.7
Ra (%)	83.6	83.2	99.5	82.7	98.9
Luminous Flux (lm)	11542	11923	103.3	11663	101.0
Luminous Efficacy (lm/W)	115.7	119.1	102.9	116.4	100.6

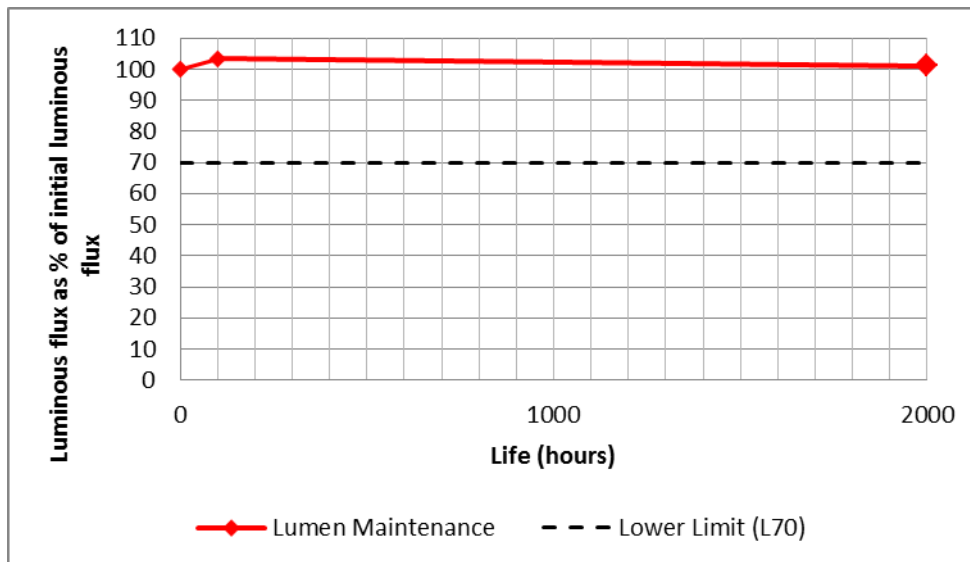


Figure 5. *Luminous flux depreciation curve for IP66 Low Bay LED Luminaire*

END