

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. : TSD004-0042
Certificate No. : 004-0042
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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

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. 004-0042.

Table 1. *Products covered under scope*

Model No.	Product Name
LOWBAY 120+IP54	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
D001	IP report
D002	Integral LED module test
CANEC1420478203	Cable double insulated internal RoHS 2.0-Brown(2014.12.15)
40002540	Cable double insulated internal VDE7726 (2015.12.31)
E41613	Diffuser Polycarbonate UL V0 Makrolon et3113ul_UL
E41613-233143	Diffuser Polycarbonate UL V0 Makrolon 3100 (z)(f1) 3103 (z)(f1) ET3113...
CANEC1511607705	Insulator RoHS
GO15022601	Lextar chip GO15022601, EN 62471, testreport
LCS1607252051E	PCCxxxxyyL 2014-30-EU Directive Certificate
LCS1607252050S	PCCxxxxyyL 2014-35-EU Directive Certificate
LCS1607252051E	PCCxxxxyyL EN55015 EN61547 EMC report
LCS1607252050S	PCCxxxxyyL EN61347-2-13 Safety report
TBS-04- 0914A	Terminal Block T04-MS & T06-MMS Raised-Base
HKGC00003173	Terminal Block Vask-HK All Products ROHS 2015-2016

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. LOW BAY 120+ IP54

A.1.1. PRODUCT DETAILS

Table A. 1 *Product Specifications*

Product Name	LED Low Bay
Model No.	LOWBAY 120+IP54
Product Description	Low Bay Luminaire
Nominal Dimensions	750mm x 330mm x 90mm
Product Supply Requirement	220-240V AC 50/60Hz
Lamp Type and Power	LED 120W

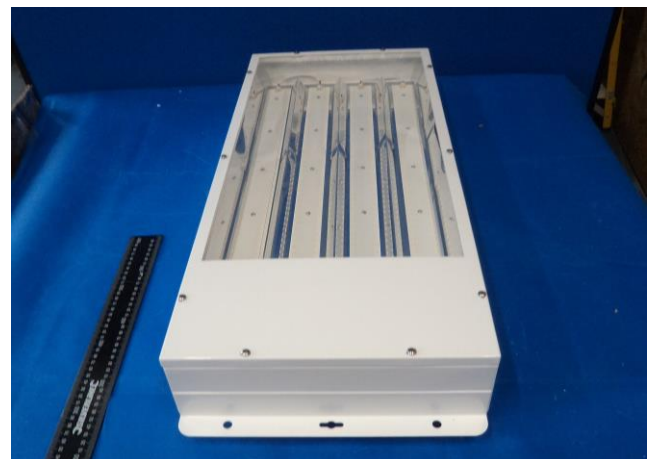


Figure 1. *Product Images*

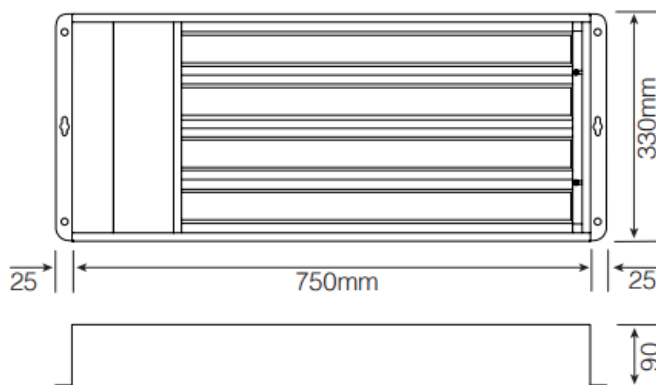


Figure 2. *Product diagram*

A.1.1. CENTRE BEAM INTENSITY AND BEAM ANGLE

Table A. 2 Beam Angle value for LOW BAY 120+ IP54

Centre Beam Intensity (cd)	Beam Angle (Lamp orientation)	Beam Angle Result (°)
7523	0° - 180°	83.5°
	90° - 270°	106.6°

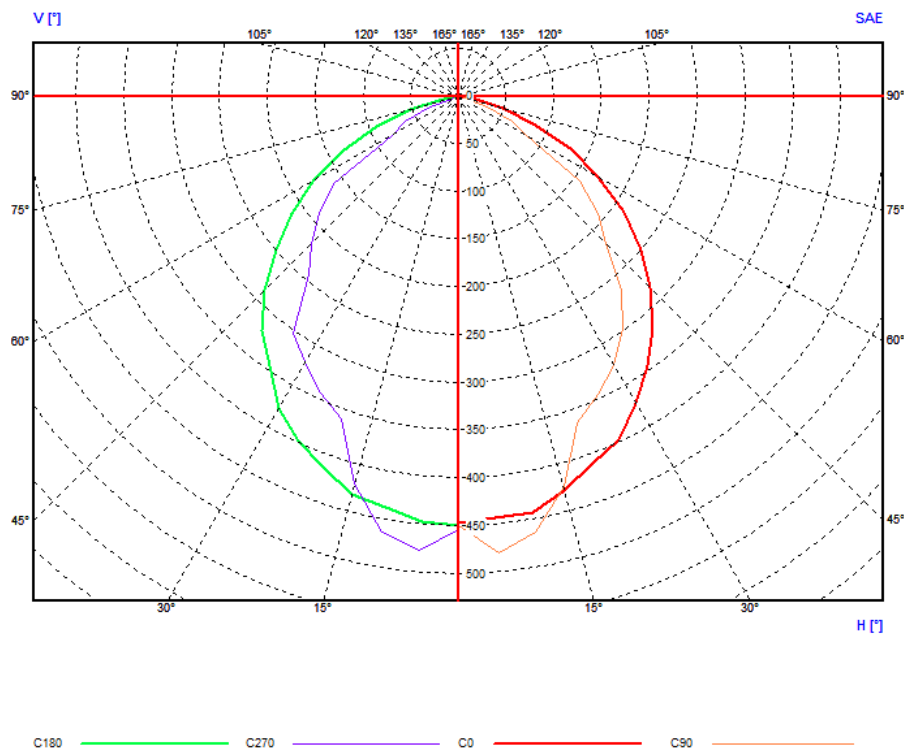


Figure 3. Polar Diagram for LOW BAY 120+ IP54

A.1.1. COLORIMETRY

Table A. 3 *Colorimetry values for LOW BAY 120+ IP54*

COLORIMETRY & LUMINOUS FLUX	x coordinate	0.3390
	y coordinate	0.3487
	u coordinate	0.2084
	v coordinate	0.3216
	u' coordinate	0.2084
	v' coordinate	0.4823
	Dominant Wavelength (nm)	581.0
	Purity (%)	12.7
	Correlated Colour Temperature (K)	5232
	Ra (%)	84.6
	R1 (%)	83.4
	R2 (%)	91.0
	R3 (%)	94.3
	R4 (%)	83.3
	R5 (%)	83.6
	R6 (%)	85.7
	R7 (%)	86.9
	R8 (%)	68.6
	R9 (%)	13.4
	R10 (%)	77.4
R11 (%)	82.5	
R12 (%)	63.2	
R13 (%)	85.8	
R14 (%)	97.3	
Lumen Output (lm)	15890	

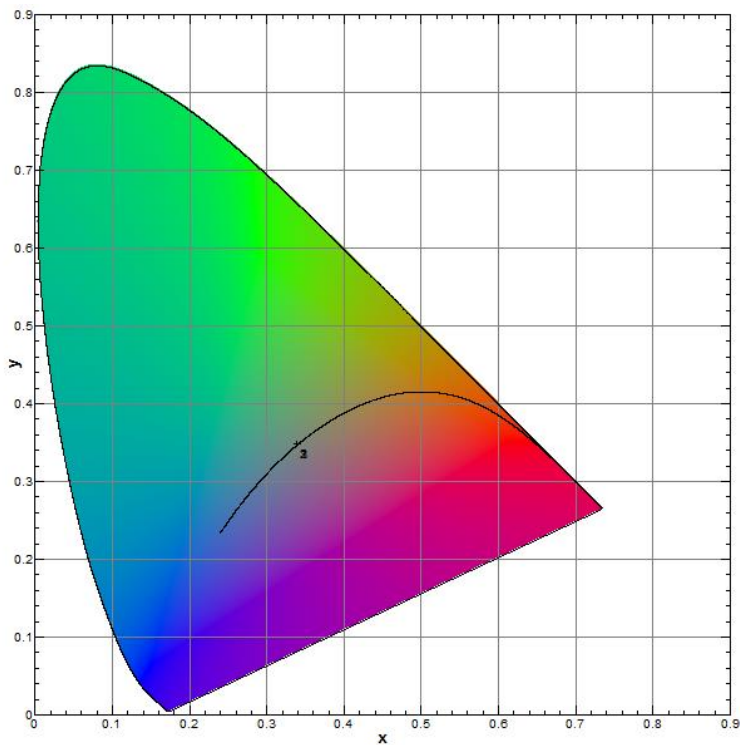


Figure 4. CIE 1931 diagram for LOW BAY 120+ IP54

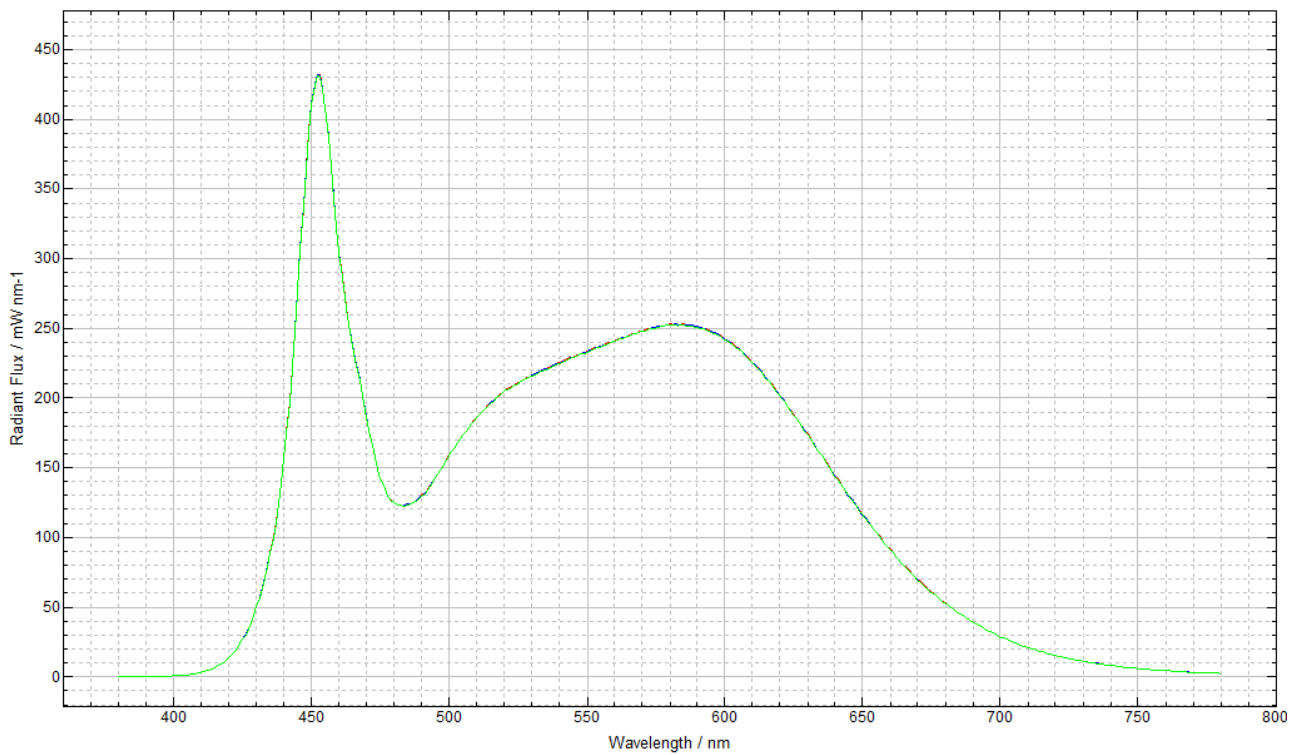


Figure 5. Spectral Irradiance for LOW BAY 120+ IP54

A.1.5. LIFE TEST

Table A. 4 *Colorimetry depreciation of LOW BAY 120+ IP54*

Measured Value	0 hours	100 hours	% Maintained (0-100hrs)	2000 hours	% Maintained (0-2000hrs)
Correlated Colour Temperature (K)	5074	5097	99.5	5231	100.0
Ra (%)	84.0	84.0	100.0	84.5	99.9
Luminous Flux (lm)	15348	15826	96.9	16560	104.2
Luminous Efficacy (lm/W)	121.6	124.8	97.4	129.5	103.1

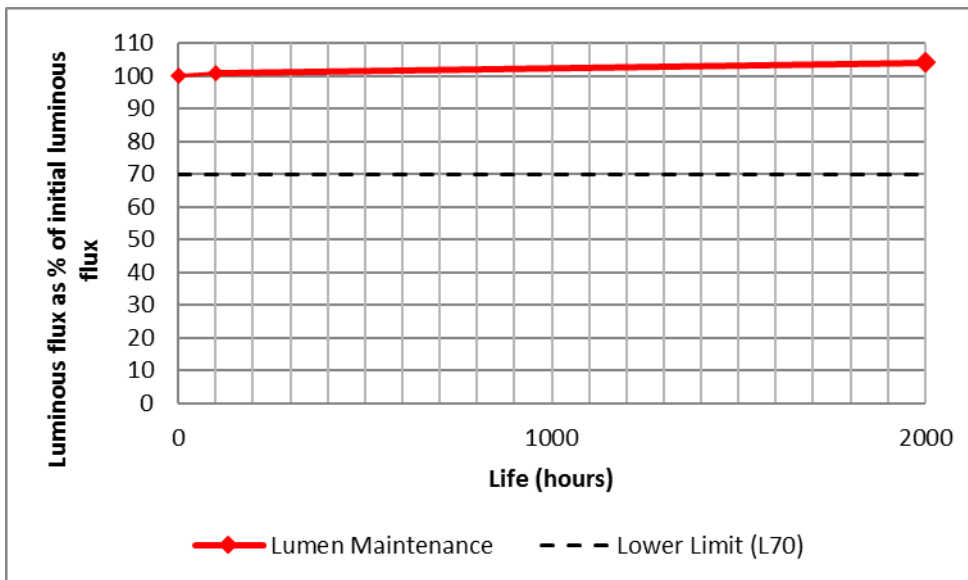


Figure 6. *Luminous flux depreciation curve for LOW BAY 120+ IP54*

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