

# 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.** : TSD004-0063 (Issue 1)  
**Certificate No.** : 004-0063  
**Certificate Holder:** : Quest Product Sourcing Global Ltd  
13 Castle Street  
St Helier  
Jersey  
JE4 5UT  
**Web:** : [www.qpsglobal.co.uk](http://www.qpsglobal.co.uk)



**Date of Initial Registration** : 31/07/2018  
**Date of Issue** : 31/07/2018  
**Date of Expiry** : 31/07/2021

**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](mailto:lab@thelia.org.uk)  
Web: [www.lialab.org.uk](http://www.lialab.org.uk)  
Web: [www.lialabcert.org.uk](http://www.lialabcert.org.uk)



## Contents

<b>1.</b>	<b>INTRODUCTION .....</b>	<b>3</b>
<b>2.</b>	<b>CERTIFICATION STATUS.....</b>	<b>3</b>
<b>3.</b>	<b>SCOPE .....</b>	<b>3</b>
<b>4.</b>	<b>DOCUMENTATION .....</b>	<b>4</b>
<b>5.</b>	<b>OBSERVATIONS AND LIMITATIONS .....</b>	<b>4</b>
	<b>APPENDIX A.....</b>	<b>5</b>
<b>A.1.</b>	<b>High Bay 200W Dimmable.....</b>	<b>6</b>
A.1.1.	PRODUCT DETAILS .....	6
A.1.2.	SAFETY EVALUATION .....	7
A.1.3.	CENTRE BEAM INTENSITY AND BEAM ANGLE .....	8
A.1.4.	COLORIMETRY.....	9
A.1.5.	LIFE TEST .....	11
<b>A.2.</b>	<b>High Bay 150W Dimmable.....</b>	<b>12</b>
A.2.1.	PRODUCT DETAILS .....	12
A.2.2.	SAFETY EVALUATION .....	13
A.2.3.	CENTRE BEAM INTENSITY AND BEAM ANGLE .....	14
A.2.4.	COLORIMETRY.....	15
A.2.5.	LIFE TEST .....	17
<b>A.3.</b>	<b>High Bay 100W Dimmable.....</b>	<b>18</b>
A.3.1.	PRODUCT DETAILS .....	18
A.3.2.	SAFETY EVALUATION .....	19
A.3.3.	CENTRE BEAM INTENSITY AND BEAM ANGLE .....	20
A.3.4.	COLORIMETRY.....	21
A.3.5.	LIFE TEST .....	23



## 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 100 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. 004-0063.

**Table 1. *Products covered under scope***

<b>Model No.</b>	<b>Product Name</b>
QPS-UFO-200WD-LIFSAM30-5700K	High Bay 200W Dimmable
QPS-UFO-150WD-LIFSAM30-5700K	High Bay 150W Dimmable
QPS-UFO-100WD-LIFSAM30-5700K	High Bay 100W Dimmable



#### 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
DE 2-023096	IECEE CB certificate
50131697 001	IECEE CB safety test report
AE 50404970 0001	EMC test certificate
50105265 004	EMC test report
R 50405254	LVD Safety test certificate
50131698 001	LVD Safety test report
RSZ150717507-10	IESNA LM-80-2008 test report
D001	QPS instruction manual
PV190 Interim Report	LIA test report

#### 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. High Bay 200W Dimmable

### A.1.1. PRODUCT DETAILS

Table A.1 *Product Specifications*

Product Name	High Bay 200W Dimmable
Model No.	QPS-UFO-200WD-LIFSAM30-5700K
Product Description	LED High Bay
Nominal Dimensions	Ø - 260mm; H – 180mm
Product Supply Requirement	220-240V AC, 50/60Hz
Lamp Type and Power	LED, 200W



Figure 1. *Product Images*

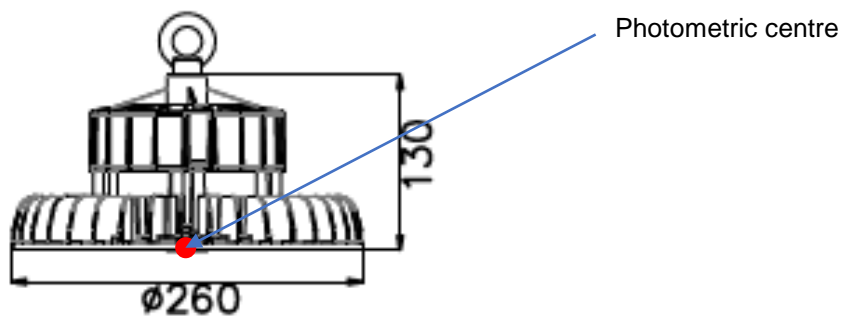


Figure 2. *Product diagram*

## A.1.2. 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 60598-1:2014 and IEC 60598-2-1:1979+A1.

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
1.5	Marking
1.6	Construction
1.7	Creepage Distances and Clearances
1.8	Provision for Earthing
1.9	Terminals
1.10	External and Internal Wiring
1.11	Protection against Electric Shock
1.12	Endurance Tests and Thermal Tests
1.13	Resistance to Dust and Moisture – IP65
1.14	Insulation Resistance and Electric Strength
1.15	Resistance to Heat, Fire and Tracking

### A.1.3. CENTRE BEAM INTENSITY AND BEAM ANGLE

Table A.3 *Beam Angle value for model QPS-UFO-200WD-LIFSAM30-5700K*

Centre Beam Intensity (cd)	Beam Angle (Lamp orientation)	Beam Angle Result (°)
11778	0° - 180°	113.8
	90° - 270°	114.1

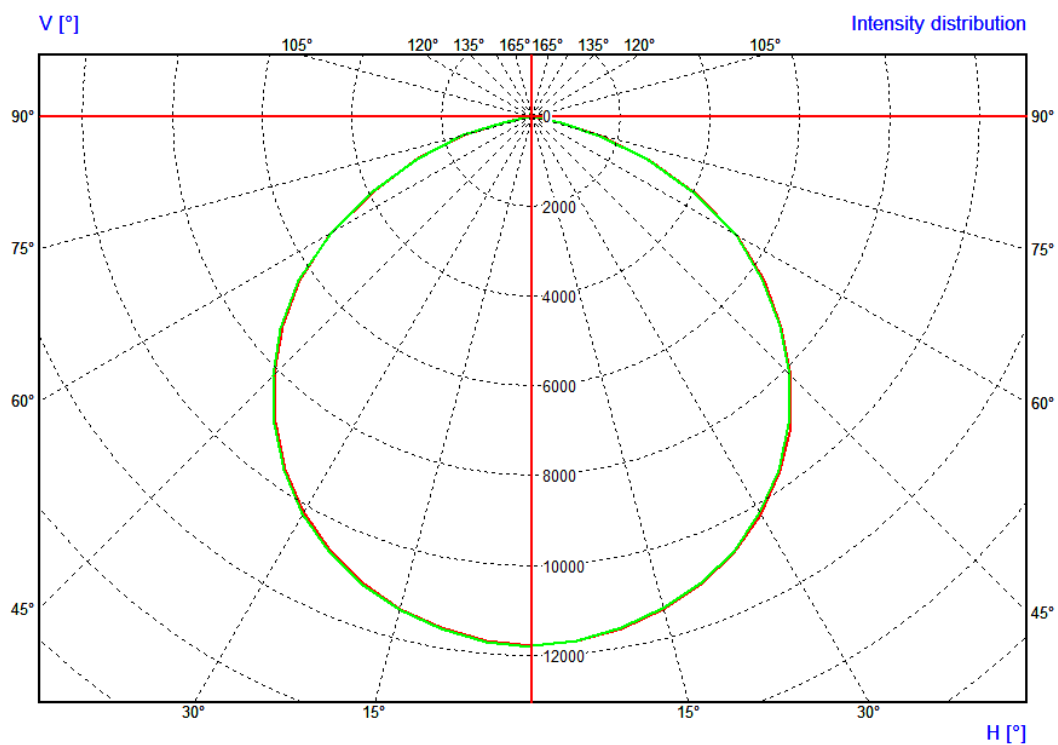


Figure 3. *Polar Diagram for QPS-UFO-200WD-LIFSAM30-5700K*



#### A.1.4. COLORIMETRY

Table A.4 Colorimetry values for *model QPS-UFO-200WD-LIFSAM30-5700K*

<b>COLORIMETRY &amp; LUMINOUS FLUX</b>	x coordinate	0.3269
	y coordinate	0.3409
	u' coordinate	0.2032
	v' coordinate	0.4766
	Correlated Colour Temperature (K)	5746
	Ra (%)	84
	R1 (%)	83
	R2 (%)	91
	R3 (%)	94
	R4 (%)	83
	R5 (%)	83
	R6 (%)	85
	R7 (%)	87
	R8 (%)	68
	R9 (%)	9
	R10 (%)	77
	R11 (%)	82
R12 (%)	62	
R13 (%)	85	
R14 (%)	97	
Lumen Output (lm)	33159	

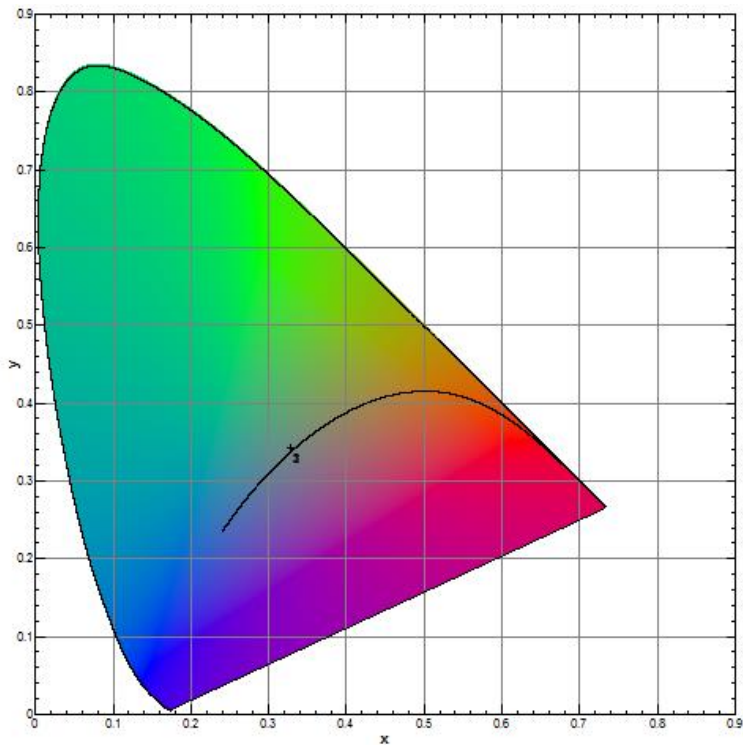


Figure 4. CIE 1931 diagram for model QPS-UFO-200WD-LIFSAM30-5700K

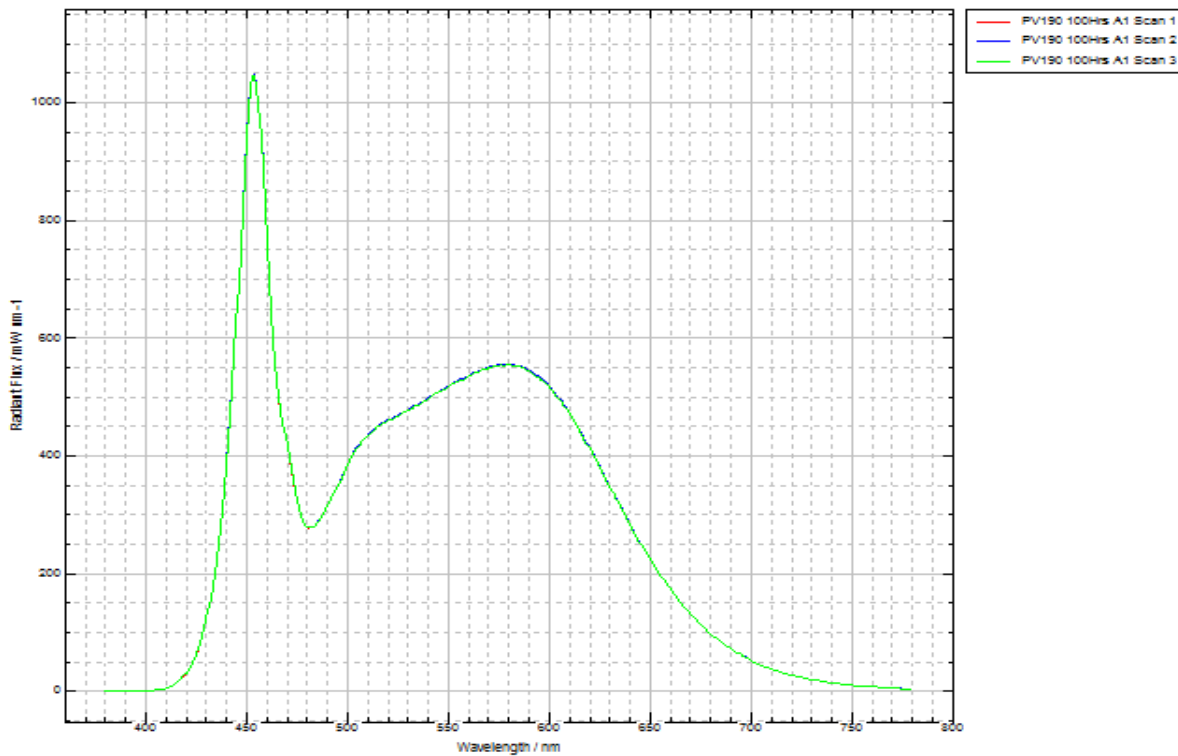
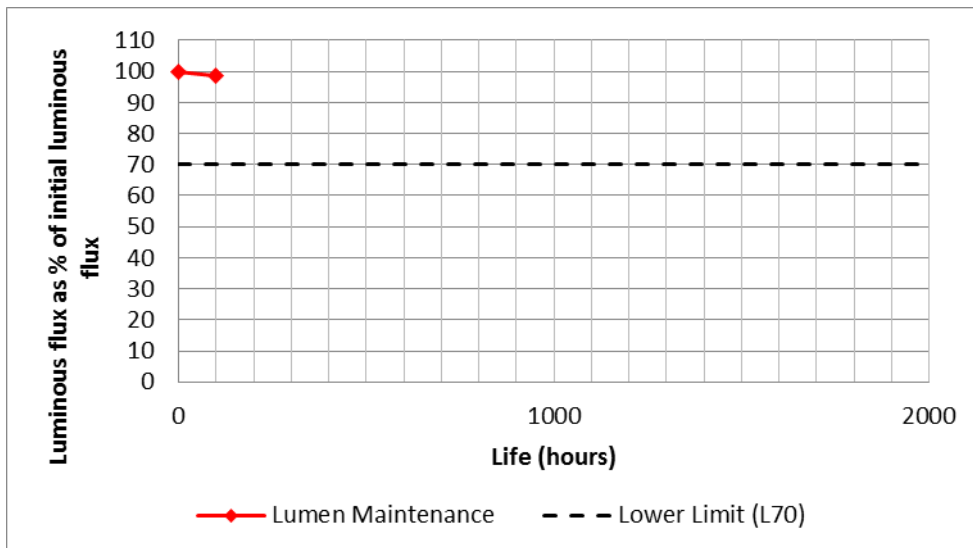


Figure 5. Spectral Flux for model QPS-UFO-200WD-LIFSAM30-5700K

### A.1.5. LIFE TEST

**Table A.5 Colorimetry depreciation of model QPS-UFO-200WD-LIFSAM30-5700K**

Measured Value	0 hours	100 hours	% Maintained (0-100hrs)	2000 hours	% Maintained (0-2000hrs)
Correlated Colour Temperature (K)	5746	5672	98.7	TBC	TBC
Ra (%)	84	85	101.2	TBC	TBC
Luminous Flux (lm)	33159	35284	106.4	TBC	TBC
Luminous Efficacy (lm/W)	170.1	177.9	104.6	TBC	TBC



**Figure 6. Luminous flux depreciation curve for model QPS-UFO-200WD-LIFSAM30-5700K**

## A.2. High Bay 150W Dimmable

### A.2.1. PRODUCT DETAILS

Table A.6 *Product Specifications*

Product Name	High Bay 150W Dimmable
Model No.	QPS-UFO-150WD-LIFSAM30-5700K
Product Description	LED High Bay
Nominal Dimensions	Ø - 260mm; H – 180mm
Product Supply Requirement	220-240V AC, 50/60Hz
Lamp Type and Power	LED, 150W



Figure 7. *Product Images*

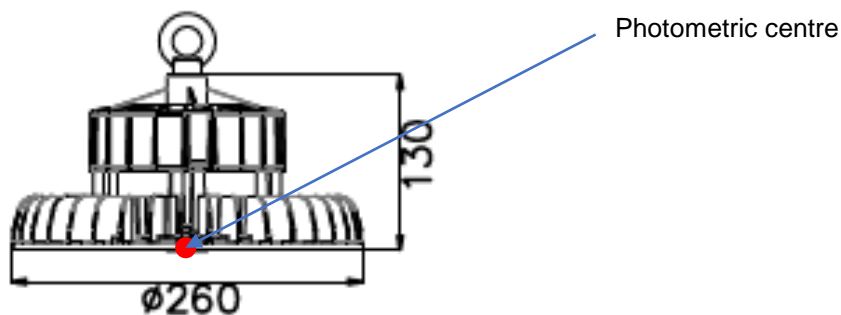


Figure 8. *Product diagram*

## A.2.2. 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 60598-1:2014 and IEC 60598-2-1:1979+A1.

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

**Table A.7 Safety Test Results**

Clause No.	Title
1.5	Marking
1.6	Construction
1.7	Creepage Distances and Clearances
1.8	Provision for Earthing
1.9	Terminals
1.10	External and Internal Wiring
1.11	Protection against Electric Shock
1.12	Endurance Tests and Thermal Tests
1.13	Resistance to Dust and Moisture – IP65
1.14	Insulation Resistance and Electric Strength
1.15	Resistance to Heat, Fire and Tracking

### A.2.3. CENTRE BEAM INTENSITY AND BEAM ANGLE

Table A.8 *Beam Angle value for model QPS-UFO-150WD-LIFSAM30-5700K*

Centre Beam Intensity (cd)	Beam Angle ( <i>Lamp orientation</i> )	Beam Angle Result (°)
9222	0° - 180°	114.1
	90° - 270°	114.0

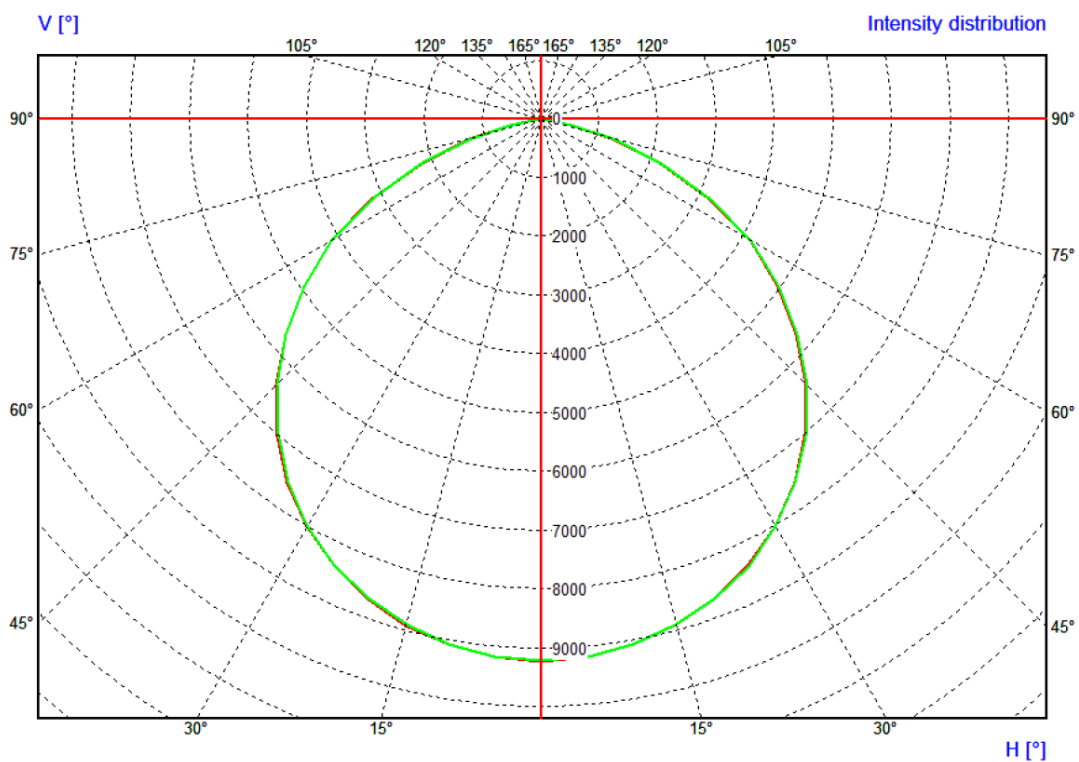


Figure 9. *Polar Diagram for QPS-UFO-150WD-LIFSAM30-5700K*

## A.2.4. COLORIMETRY

**Table A.9 Colorimetry values for model QPS-UFO-150WD-LIFSAM30-5700K**

<b>COLORIMETRY &amp; LUMINOUS FLUX</b>	x coordinate	0.3318
	y coordinate	0.3455
	u coordinate	0.2047
	v coordinate	0.3198
	u' coordinate	0.2047
	v' coordinate	0.4797
	Dominant Wavelength (nm)	579.0
	Purity (%)	9.9
	Correlated Colour Temperature (K)	5527
	Ra (%)	83.2
	R1 (%)	81.3
	R2 (%)	88.8
	R3 (%)	93.5
	R4 (%)	82.8
	R5 (%)	82.3
	R6 (%)	83.8
	R7 (%)	86.6
	R8 (%)	66.7
	R9 (%)	3.7
	R10 (%)	73.4
R11 (%)	82.4	
R12 (%)	63.0	
R13 (%)	83.4	
R14 (%)	96.8	
Lumen Output (lm)	26091	

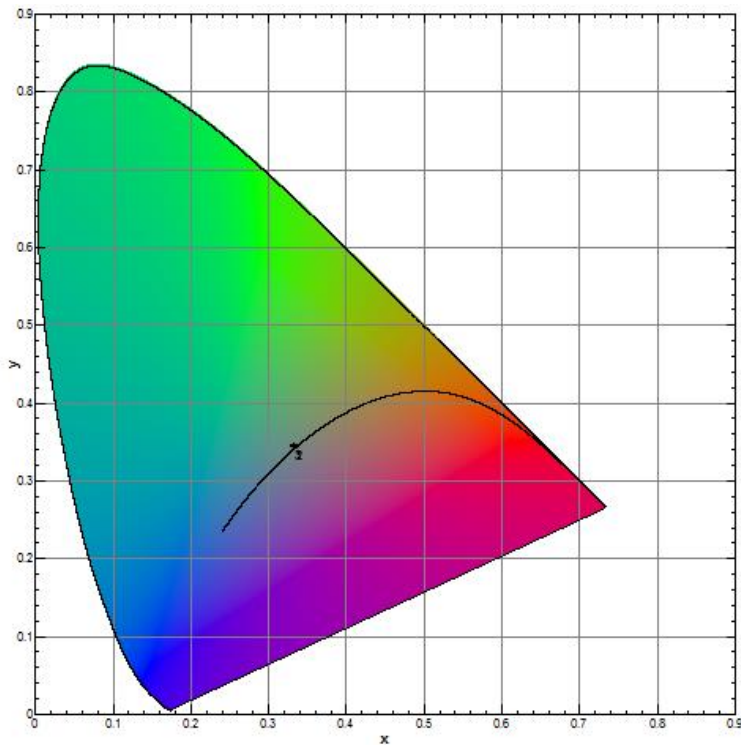


Figure 10. CIE 1931 diagram for model QPS-UFO-150WD-LIFSAM30-5700K

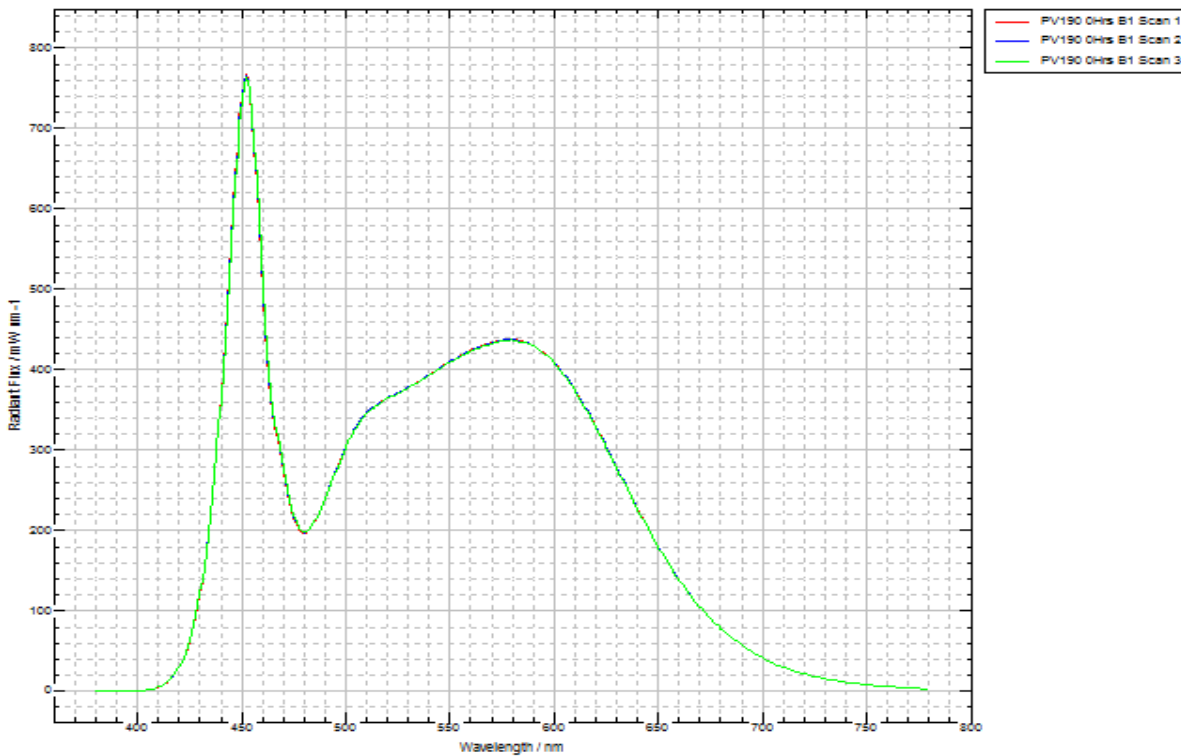


Figure 11. Spectral Flux for model QPS-UFO-150WD-LIFSAM30-5700K





### **A.2.5. LIFE TEST**

Due to the identical construction and critical components used in this model, the life assessment was carried out as a family variant. Life testing was conducted on the High Bay Dimmable 200W – Model No. QPS-UFO-200WD-LIFSAM30-5700K as this was considered to be the most onerous. Refer to section A.1.5 for the measured values

### A.3. High Bay 100W Dimmable

#### A.3.1. PRODUCT DETAILS

Table A.10 *Product Specifications*

Product Name	High Bay 100W Dimmable
Model No.	QPS-UFO-100WD-LIFSAM30-5700K
Product Description	LED High Bay
Nominal Dimensions	Ø - 260mm; H – 180mm
Product Supply Requirement	220-240V AC, 50/60Hz
Lamp Type and Power	LED, 100W



Figure 12. *Product Images*

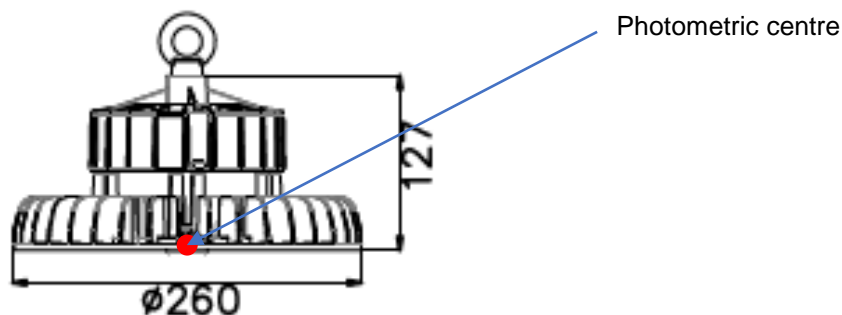


Figure 13. *Product diagram*

### A.3.2. 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 60598-1:2014 and IEC 60598-2-1:1979+A1.

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

**Table A.11 Safety Test Results**

Clause No.	Title
1.5	Marking
1.6	Construction
1.7	Creepage Distances and Clearances
1.8	Provision for Earthing
1.9	Terminals
1.10	External and Internal Wiring
1.11	Protection against Electric Shock
1.12	Endurance Tests and Thermal Tests
1.13	Resistance to Dust and Moisture – IP65
1.14	Insulation Resistance and Electric Strength
1.15	Resistance to Heat, Fire and Tracking

### A.3.3. CENTRE BEAM INTENSITY AND BEAM ANGLE

Table A.12 *Beam Angle value for model QPS-UFO-100WD-LIFSAM30-5700K*

Centre Beam Intensity (cd)	Beam Angle ( <i>Lamp orientation</i> )	Beam Angle Result (°)
6000	0° - 180°	113.6
	90° - 270°	113.7

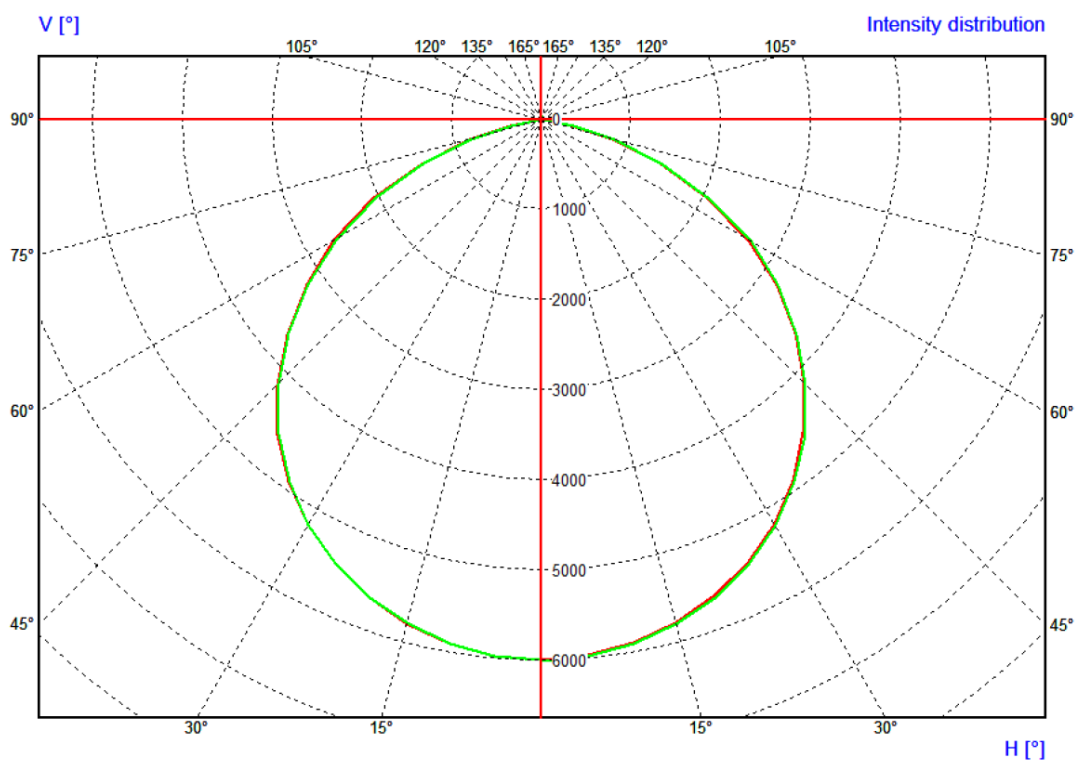


Figure 14. *Polar Diagram for model QPS-UFO-100WD-LIFSAM30-5700K*

### A.3.4. COLORIMETRY

Table A.13 Colorimetry values for model QPS-UFO-100WD-LIFSAM30-5700K

COLORIMETRY & LUMINOUS FLUX	x coordinate	0.3276
	y coordinate	0.3392
	u coordinate	0.2043
	v coordinate	0.3172
	u' coordinate	0.2043
	v' coordinate	0.4759
	Dominant Wavelength (nm)	582.0
	Purity (%)	7.0
	Correlated Colour Temperature (K)	5718
	Ra (%)	84.4
	R1 (%)	83.0
	R2 (%)	90.4
	R3 (%)	93.9
	R4 (%)	83.7
	R5 (%)	83.7
	R6 (%)	84.9
	R7 (%)	87.0
	R8 (%)	68.6
	R9 (%)	9.7
	R10 (%)	76.6
R11 (%)	83.5	
R12 (%)	62.0	
R13 (%)	85.4	
R14 (%)	97.2	
Lumen Output (lm)	16943	

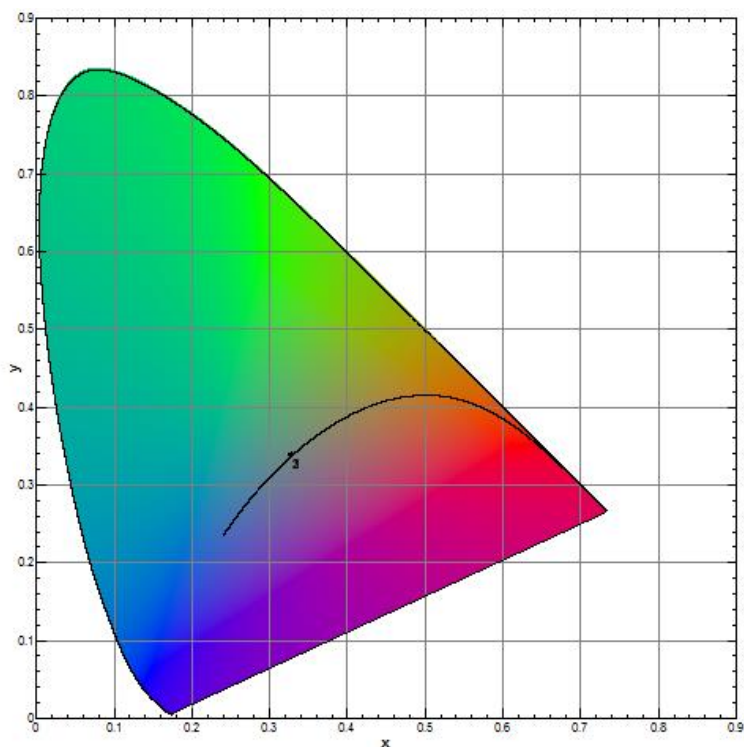


Figure 15. CIE 1931 diagram for model QPS-UFO-100WD-LIFSAM30-5700K

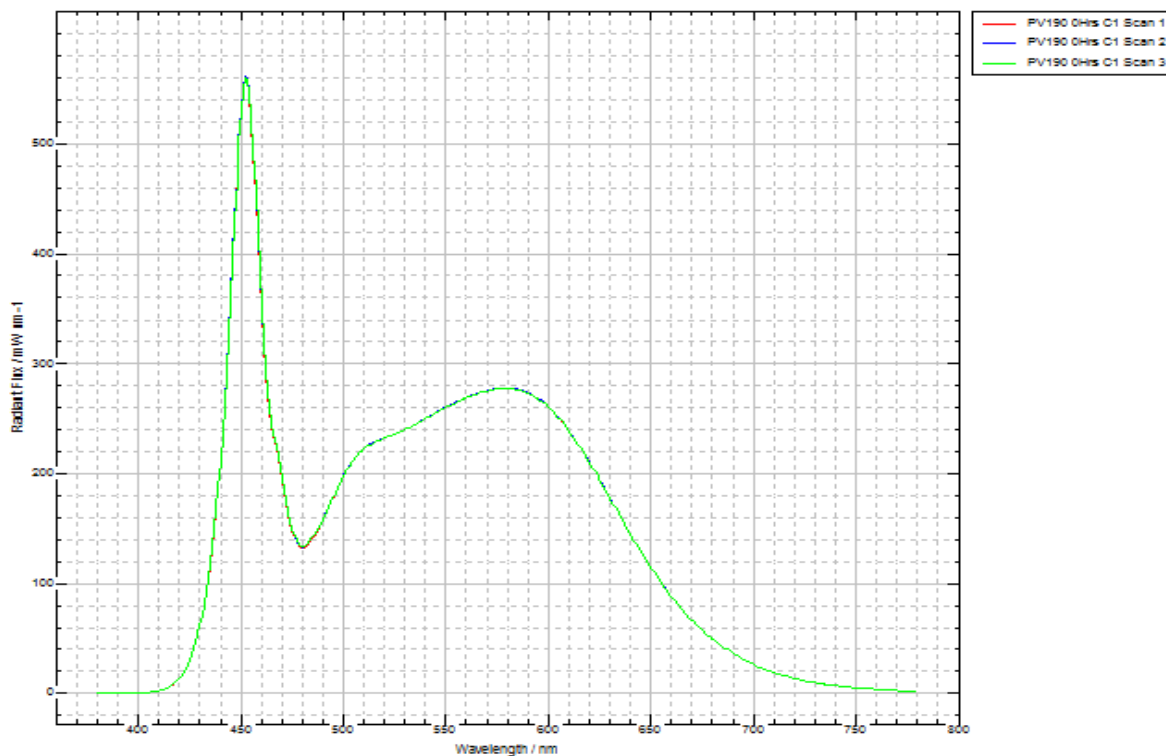


Figure 16. Spectral Flux for model QPS-UFO-100WD-LIFSAM30-5700K



### **A.3.5. LIFE TEST**

Due to the identical construction and critical components used in this model, the life assessment was carried out as a family variant. Life testing was conducted on the High Bay Dimmable 200W – Model No. QPS-UFO-200WD-LIFSAM30-5700K as this was considered to be the most onerous. Refer to section A.1.5 for the measured values

---

**END**