

# **TEST REPORT**

Reference No	425-LU4201-R02 ver. 0
Applicant	VALUXILLUMINACION
Address	POL.OLIVERAL NORTE FASEIII NAVE 19, 46190 RIBA-ROJA DE TURIA VALENCIA ESPANA.
Manufacturer	VALUXILLUMINACION
Address	POL.OLIVERAL NORTE FASEIII NAVE 19, 46190 RIBA-ROJA DE TURIA VALENCIA ESPANA.
Product Name	Decorative light column
Model No	Andalosia
Ratings	200-240V~, 50-60Hz, 10W
Standards	IES LM-79-08 Electrical and Photometric Measurements of Solid-State Lighting Products
Date of Receipt sample	04-10-2019
Date of Test	07-10-2019 to 08-10-2019
Date of Issue	10-10-2019
Test Report Form No	655-LU55095A-01B
Test Result	See the attached sheets

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

#### Prepared By: VALUXILLUMINACION

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Complied by:

Ing. Feliciano Bertina

Test engineer

19 00

Approved by:

Ing. Michael Paschier Reviewer

ACION, S.L. C.I.R. 8-98.329.097 C/.Morvedre.30-B 16117-BETERA (Valencia) SPAIN

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Measurement Point:	
Ν	
Characteristic data	
(not shown on the marking plate)	
N	
Purpose of the product	
(Description of intended use)	
LED flood lighting for generally lighting	
Other information refers to photos in e	nd page.
Possible test case verdicts:	
<ul> <li>test case does not apply to the test of</li> </ul>	pject:N(.A.) / not included in the order
- test object does meet the requiremen	tP(ass)
- test object does not meet the requirer	nent: F(ail)
Possible suffixes to the verdicts:	
- suffix for detailed information for the c	lient: - C(omment)
- suffix for important information for fac	tory inspection; - M(anufacturing)
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# Test summary:

Testing is performed in accordance with the procedures outlined in IES LM-79-08. The sample is evaluated for photometric and electrical characteristics using an integrating sphere and a goniophotometer, located in an accredited, temperature and humidity-controlled, draft free photometric laboratory.

# Test No. 1 : Integrating Sphere Test

The sample was tested according to the IES LM-79-08.

Photometric paramters were measured using an integrating sphere, a spectroradiometer and software. The ambient temperature condition inside the sphere was maintained at  $25^{\circ}$  C ±  $1^{\circ}$  C.

The sample measurements were made using a spectroradiometer connected by a fiber optic cable and detector through the detector port of the integrating sphere. The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load. The AC power supply, while operating the product, shall have a sinusoidal voltage waveshape at the prescribed frequency 50Hz or 60Hz such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item. It was stabilized before measurement. Chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm.

Test No.2: Goniophotometer Test

The sample was tested according to the IES LM-79-08.

Photometric paramters were measured using a type C goniophotometer and software.

The ambient temperature shall be maintained at  $25^{\circ}$  C  $\pm$   $1^{\circ}$  C, measured at a point not more than 1 m from the sample and at the same height as the sample.

The sample was operated at Rated Volts(see Table 1). The voltage of an AC power supply (RMS voltage) or DC power supply (instantaneous voltage) applied to the device under test shall be regulated to within ±0.2 percent under load. The AC power supply, while operating the product, shall have a sinusoidal voltage waveshape at the prescribed frequency 50Hz or 60Hz such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item. It was stabilized before measurement. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at 1° vertical intervals and 15° horizontal intervals and chromaticity coordinates, correlated color temperature and color rendering index were calculated from the spectral radiant flux measurements taken at 1 nm intervals over the range of 380 to 780 nm by center test position.



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IES LM-79-08

	Clause	Requirement – Test	Measuring result – Remark	Verdict
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2.0	Ambient Conditions		Р
2.1	General		Р
2.2	Air Temperature		Р
2.3	Thermal Condition for Mounting SSL Products		Р
2.4	Air Movement		Р
3.0	Power Supply Characteristics		Р
3.1	Waveshape of AC power supply		N
3.2	Voltage regulation		N
4.0	Seasoning of SSL Product		N
	No seasoning of SSL product		N
5.0	Stabilisation of SSL Product		Р
	SSL product has sufficiently stabilized before measurement	Stabilized 30 minute	Р
6.0	Operation Orientation		Р
	SSL product shall be stabilized and measured in intended operating orientation	As normal working	Р
7.0	Electrical Settings		Р
	SSL product shall be operated at rated voltage		Р
	SSL product with dimming capability are tested at maximum input power condition		N
	SSL product with different modes are measured in all relevant modes		N
8.0	Electrical Instrumentations		Р
8.1	Circuits		Р
8.2	Uncertainties		Р
9.0	Test Methods for Luminous Flux measurement		Р
9.1	Integrating sphere with a spectroradiometer (Sphere-spectroradiometer system)		Р
9.2	Integrating sphere with a photometer head (Sphere-photometer system)		N
9.3	Goniophotometer		Р
10.0	Luminous Intensity Distribution		Р
	Reporting acc. to IES LM-63		Р
11.0	Luminous Efficacy		Р
	Calculation	See table 1	Р
12.0	Test Methods for Color Characteristics of SSL Pro	oducts	Р
	Measurements	See table 1	Р
13.0	Uncertainty statement		N



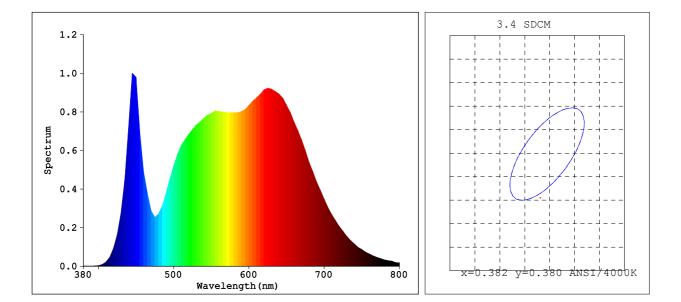
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Table 1	Test data			
Model:	Andalosia			
Rated Voltage:	200-240VAC	Rated Power (W):	10	
Rated luminous flux (Im):	N	Ambient temperature 25 ±1 (°C):	Refer to below table	
Test item		Measured Value		
		Integrating Sphere	Goniophotometer	
Key Photometric Result	S			
Luminous Efficacy (Lume	ens/Watt)		90,6	
Total Luminous Flux (Lun	nens)		904,1	
Peak Intensity (cd)			8116	
Total Radiant Flux (Watts)				
Correlated Color Temper	ature (CCT)	3034K		
Color Rendering Index (C	RI)	80,0		
Chromaticity (Chroma x / Chroma y)		0,4345/0,4032		
Chromaticity (Chroma u' / Chroma v')		0,2494/0,5207		
Duv Value		-2,99e-05		
Stabilization Time (Light and Power) (Minutes)		30	30	
Total Run Time (Minutes	)	35	90	
<b>Electrical Input Results</b>				
Input Power (Watts)			59,8	
Input Voltage (Volts AC)			239,9	
Input Current (Amps)			0,256	
Input Frequency (Hertz)			50	
Power Factor			0,976	
Additional Information				
Test Geometry Configuration		4π	Туре С	
Ambient Temperature (°C):		25,1	24,9	
ISTMT (In-Situ Temperat	ure Measurement) (°C):	N		

- Stabilisation was considered reached by: the variation (maximum-minimum) of at least 3 readings of the light output and electrical power over a period of 30 minutes is less than 0,5%.

## Spectrophotocolorimeter Test Report



# Light Source Test Report

#### Color Parameters:

EVERFINE<sub>。</sub>远方 www.everfine.CN

Chromaticity Coordinate:x=0.3803 y=0.3722/u'=0.2269 v'=0.4994 Tc=3960K Dominant WL:Ld=580.5nm Purity=24.9% Centroid WL:579.4nm Ratio:R=21.6% G=75.1% B=3.3% Peak WL:Lp=445.0nm HWL:23.7nm Render Index:Ra=92.9 R1 =97 R2 =95 R3 =90 **R4 =9**4 **R5 =9**5 R6 =92 R7 =91 R8 =95 R10=86 R9 =87 R11=94 R12=78 R13=96 R14=96 R15=94

## Photo Parameters:

Flux: 1219.8 lm W: 10.4225 W Efficacy:108.16 lm/W
LEVEL: WHITE:OUT

## **Electrical Parameters:**

Luminaire: U=220.5V I=0.09401A P=20.43W PF=0.9853

Instrument Status:		
Scan Range:380.0nm-800.0nm	<pre>Interval:5.0nm[0]</pre>	Ip=20022(G=4,D=69)
REF=22216 (R=4)	8=-0.0368	PMT: 24.1 centigrade [150.0]

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Product Type:Down Light Number:2 Temperature:25.3 deg Test Operator:DAMIN Software:V2.00.100 Manufacturer:Valux-iluminacion Test Department:EVERFINE Humidity:65.0% Test Date:2025-01-11 13:28:19 Instrument:PMS-80\_V1 (SN:1009079)