

## PHOTOMETRIC TEST REPORT

### Customer Company & Address

Artemide SPA  
Via Bergamo 18, 20010 - Pregnana Milanese (MI) - Italy

**Manufacturer:** Artemide SPA  
**Model Number:** EMPATIA 26  
**Product Type:** CEILING/WALL MOUNTING LED LUMINAIRE  
**Product Description:** LED luminaire with integrated control gear and transparent glass diffuser.

**LED Model:** CREE CXA1816  
**Power Supply Model:** Roal Strato RLSD035-12

**Electrical Ratings:**  
Input Voltage (V): 120  
Input Current (A): -  
Input Power (W) 16  
Input Frequency (Hz): 60

**Photometric Measurement:** Absolute  
**Reference Standard:** IES LM-79-08  
**Sample number:** 1981687  
**Total report pages:** 11

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**Prepared By**  
Giovanni Di Martino



**Name & Signatory**

**Approved By**  
Walter Parmiani



**Name & Signatory**

### TEST RESULTS SUMMARY

**Test Method:** Integrating Sphere  
**Photometric Measurement:** Absolute  
**Test Date:** 2014/11/17

#### Environmental Conditions:

		Unit
Ambient Temperature:	24,5	°C
Relative Humidity:	40,2	%

#### Electrical Conditions:

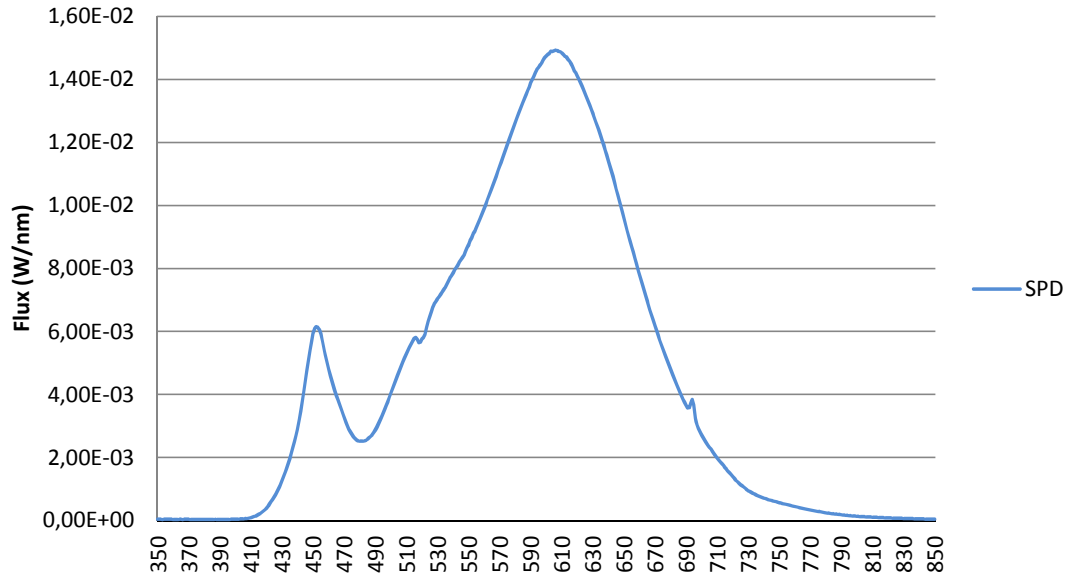
		Unit
Input Voltage:	120	V
Input Current:	0,138	A
Input Power:	15,876	W
Input Frequency:	60	Hz
THD V:	0,2	%
Power Factor:	0,95	

#### Photometric results:

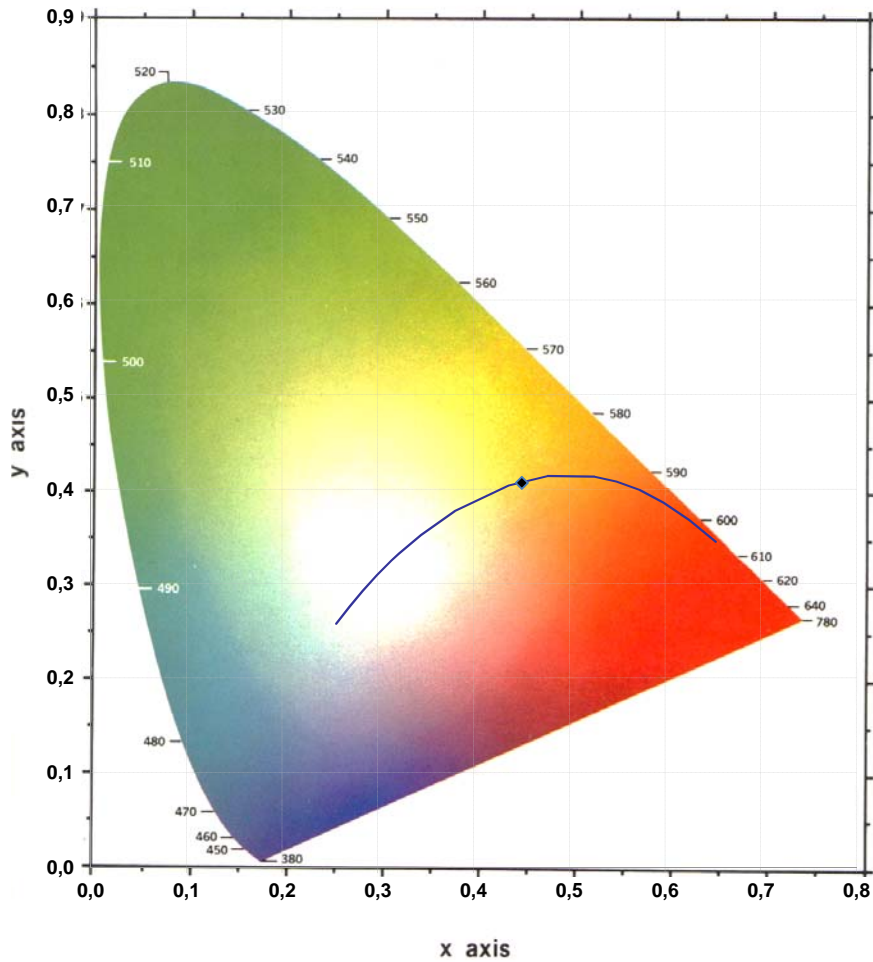
		Unit
Chrom x	0,4502	
Chrom y	0,4070	
Chrom u	0,2579	
Chrom v	0,3497	
Duv	0,0005	
Chrom u'	0,2579	
Chrom v'	0,5245	
Peak	606	nm
Dominant	583,8	nm
CCT	2809	K
CRI	82,40	
R9	10,8	
Pre-burning time:	1,00	hrs
Stabilization time:	30	min
Test configuration:	4pi	



### Spectral Power Distribution



### Chromaticity Diagram CIE 1931



### TEST RESULTS SUMMARY

**Test Method:** Goniophotometer  
**Photometric Measurement:** Absolute  
**Test Date:** 2014/11/17

#### Environmental Conditions:

		Unit
Ambient Temperature:	24	°C
Relative Humidity:	39,3	%

#### Electrical Conditions:

		Unit
Input Voltage:	120,06	V
Input Current:	0,137	A
Input Power:	15,84	W
Input Frequency:	60	Hz
THD V:	0,2	%

#### Photometric results:

		Unit
Total Luminous Flux:	648,59	Lm
System Efficacy:	40,95	Lm/W
Pre-burning time:	1,00	hrs
Stabilization time:	30	min
Test distance:	8,62	m

#### Dimensions:

	L	W	H	Unit
Sample:	∅ 260	-	300	mm
Luminous Area:	∅ 260	-	270	mm

**Picture of the tested sample:**



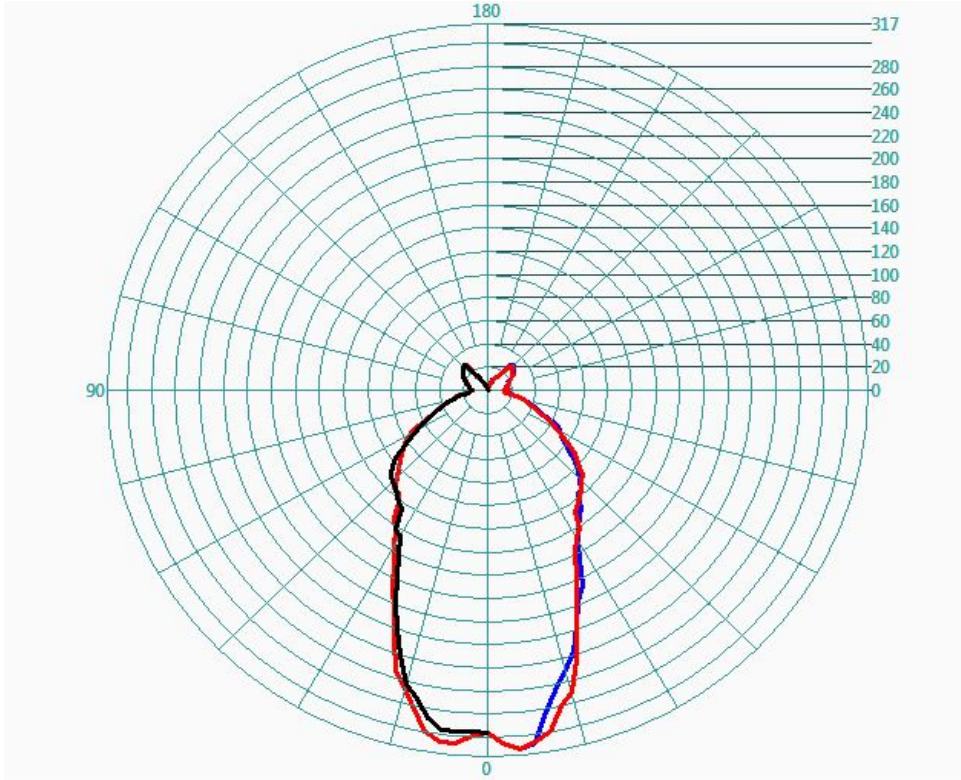
**TEST EQUIPMENT**

Local ID	Description	Model	Last Cal	Next Cal
BURVS0063	Goniophotometer system	LSI 6440T	2014/4/22	By evidence
BURVS0077	Digital power meter	Yokogawa WT210	2014/10/27	2015/10/28
BURVS0067	OMEGA MDSi8	OMEGA MDSi8	2014/9/1	2015/9/28
AT528	Ambient temp recorder	OMEGA Iserver	2014/4/7	2015/4/28
BURVS0053	Integrating sphere	Labsphere CSTM-LMS	2014/11/7	By evidence
BURVS0058	Spectroradiometer	Labsphere CDS-1100	2014/11/7	By evidence
BURVS0062	AC PSU	Chroma 61603	Reference	Reference
BURVS0059	Digital power meter	Yokogawa WT210	2014/10/27	2015/10/28
BURVS0054	Thermometer	OMEGA MDSi8	2014/9/1	2015/9/28
AT525	Ambient temp recorder	OMEGA Iserver	2014/4/7	2015/4/28

**Notes**

The results of this test extends to the suspended and to the 230 V version of this product.

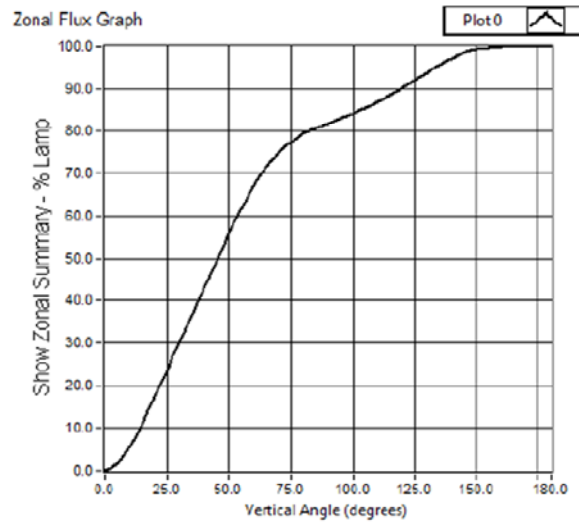
**POLAR PLOT (cd)**





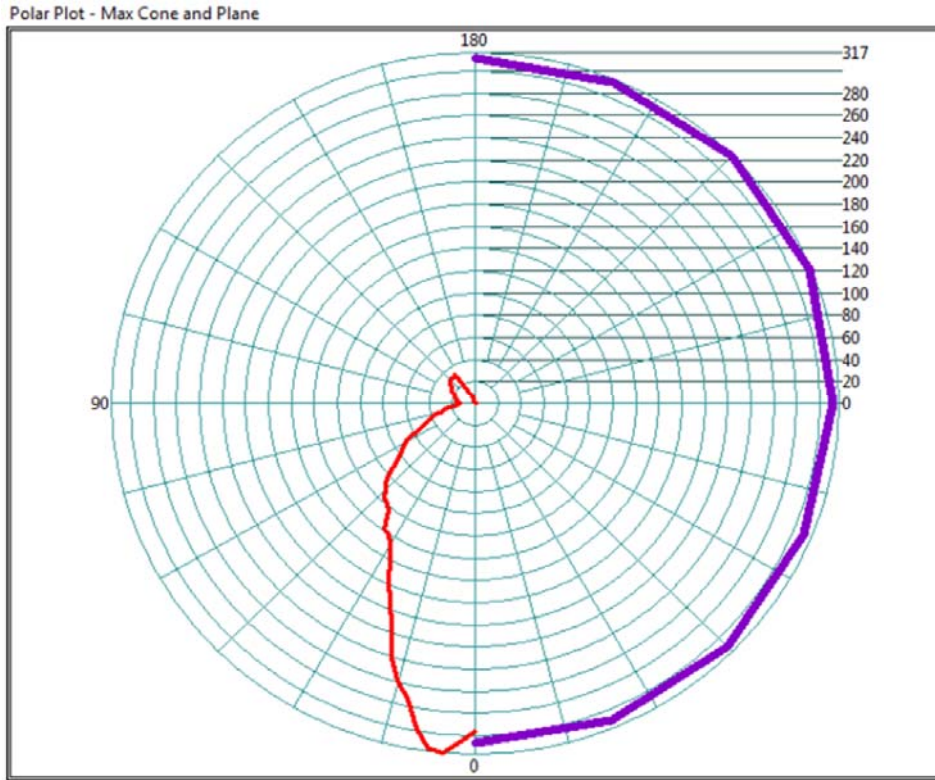
### ZONAL LUMEN SUMMARY

	Summary Zonal Lumens	Zonal Lumens - % Lamp	Zonal Lumens - % Fixture
0 to 30	184.54	28.45	28.45
0 to 40	267.33	41.22	41.22
0 to 60	425.97	65.68	65.68
0 to 90	527.70	81.36	81.36
40 to 90	260.37	40.14	40.14
60 to 90	101.72	15.68	15.68
90 to 180	120.89	18.64	18.64
0 to 180	648.59	100.00	100.00



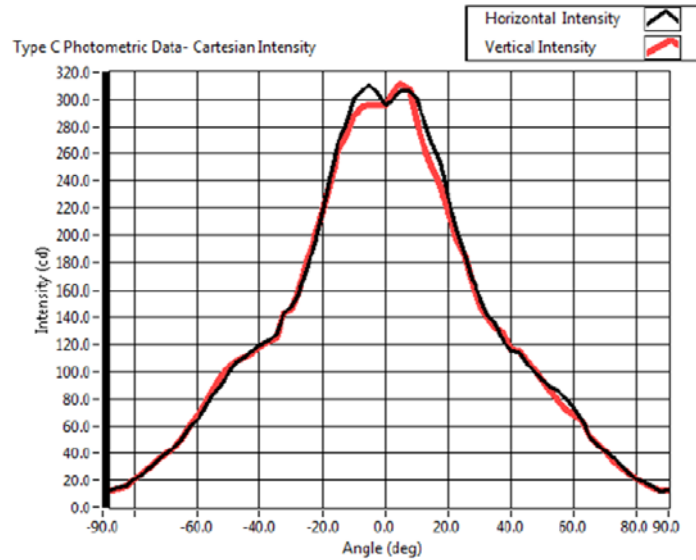


### MAX CONE AND PLANE





### CARTESIAN DIAGRAM



### CONE DIAGRAM

Illuminance at a Distance

Mounting Height (m)	Beam Cone Width (m)	Orthogonal Beam Cone Width (m)	Projected Illuminance (lx)
0.5	0.59	0.58	1183.2
1	1.19	1.16	295.8
2	2.38	2.31	74.0
3	3.56	3.47	32.9
4	4.75	4.63	18.5
5	5.94	5.79	11.8
6	7.13	6.94	8.2
8	9.50	9.26	4.6
10	11.88	11.57	3.0
20	23.76	23.15	0.7

Target % of Peak Intensity	Beam Angle to % Intensity Value (degrees)	Beam Angle to % Intensity Value (degrees) [-]
50.00	61.40	60.11



### ALLOWED VARIANTS

Product listed below are considered allowed variants since their different construction does not affect lighting performance.

<b>Model Name</b>	<b>Ratings</b>	<b>Notes</b>
EMPATIA 26	120 V - 60 Hz - 16 W	Suspended luminaire
EMPATIA 26	48 V - 11 W	Floor luminaire