





Project No: 10015722  
Report No: 10015722-6  
Issued Date: 2013-JUN-03  
Revision:

## Verification Services Test Report

Customer Company & Address
ARTEMIDE S.P.A. Via Bergamo 18 20010 Pregnana Milanese (MI)

<b>Manufacturer:</b>	Artemide S.P.A.
<b>Country of Origin:</b>	Italy
<b>Country of Export:</b>	N/A
<b>Product Category:</b>	DEMETRA
<b>Product Description:</b>	LED desk lamp
<b>Model Number(s):</b>	DEMETRA (1 prova LM-79)
<b>Electrical Ratings:</b>	120Vac 60Hz
<b>Test Sample(s) Received Date:</b>	2013-MAY-28
<b>Test Period:</b>	2013-MAY-28 to 2013-MAY-29
<b>The Sample(s) is(are) tested in accordance with the following:</b>	
IES LM-79-08	

Prepared By	Approved By
Giovanni Di Martino 	Walter Parmiani 
<b>Name &amp; Signatory</b>	<b>Name &amp; Signatory</b>

**This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report apply to the test sample(s) mentioned above at the time of the testing period only and are not to be used to indicate applicability to other similar products. This report does not imply that the product(s) has met the criteria for certification.**



UL International Italia S.r.l.  
Via XXV Aprile 3/B  
20875 Burago di Molgora (MB) Italy  
NVLAP Lab Code: 200985-0



Project No: 10015722  
Report No: 10015722-6  
Issued Date: 2013-JUN-03  
Revision:

## Verification Services Test Report

---

### Statement of Results

Test Flow	Test Method	Sample ID	Test Result
1.	Goniophotometer	012830-S001	Evaluated by Customer
2.	Integrating Sphere	012830-S001	Evaluated by Customer

### Measurement Uncertainty

N/A

### Deviation from Test Method (if any)

N/A

### Remarks (if any)

N/A



## Verification Services Test Report

### Test No. 1: Goniophotometer

**Sample ID / Test Round Number**

012830-S001 / 1

**Environmental Conditions**

Ambient Temperature
25.3 °C

**Test Equipment**

Local ID	Description	Model	Last cal	Next cal
BURVS0074	Goniophotometer system	LSI 6440T	08/apr/2013	By evidence
BURVS0078	AC PSU	ELGAR CW 1251	Reference only	Reference only
BURVS0077	Digital power meter	Yokogawa WT210	12/jul/2012	12/jul/2013
S541	CHRONOMETER	QUANTUM	22/may/2013	28/may/2014
BURVS0079	THERMOMETER	OMEGA MDSi8	16/jul/2012	16/jul/2013
BURVS0061	OMNIDIRECTIONAL CALIBRATION LAMP	STS STD-EHD 12C050	25/jun/2012	25/jun/2015

**Test Condition(s)**

Input Voltage	Input Current	Input Power	Power Factor
120.05 V	0.17 A	9.20 W	0.44

**Test Results**

Result Name	Result
Test Date	2013-MAY-29 01:52:00 PM
Current THD	0.1 %
Luminous Flux	427.0 lm
Luminous Efficacy	46.4 lm/W
Luminous Opening Length	1.2 in.
Luminous Opening Width	0.0 "
Luminous Opening Height	0.0 "



Project No: 10015722  
Report No: 10015722-6  
Issued Date: 2013-JUN-03  
Revision:

## Verification Services Test Report

### Test No. 2: Integrating Sphere

#### Sample ID / Test Round Number

012830-S001 / 1

#### Environmental Conditions

Ambient Temperature
24.5 °C

#### Test Equipment

Local ID	Description	Model	Last cal	Next cal
BURVS0053	INTEGRATING SPHERE	LABSPHERE 2m INTEGRATING SPHERE	08/apr/2013	By evidence
BURVS0058	SPECTRORADIOMETER	LABSPHERE CDS-1100	08/apr/2013	By evidence
BURVS0062	AC PSU	CHROMA 61603	Reference only	Reference only
BURVS0059	DIGITAL POWER METER	YOKOGAWA WT210	13/jul/2012	13/jul/2013
S541	DIGITAL CHRONOMETER	QUANTUM	22/may/2013	28/may/2014
BURVS0054	THERMOMETER	OMEGA MDSi8	16/jul/2012	16/jul/2013
BURVS0040	75W OMNIDIRECTIONAL CALIBRATION LAMP	EYE LIGHTING SCL1400 (JDV28V75W)	24/jan/2012	24/jan/2015

#### Test Condition(s)

Base Orientation	Input Voltage	Input Current	Input Power	Power Factor
Base Up	120.02 V	0.175 A	9.17 W	0.44



Project No: 10015722  
Report No: 10015722-6  
Issued Date: 2013-JUN-03  
Revision:

## Verification Services Test Report

---

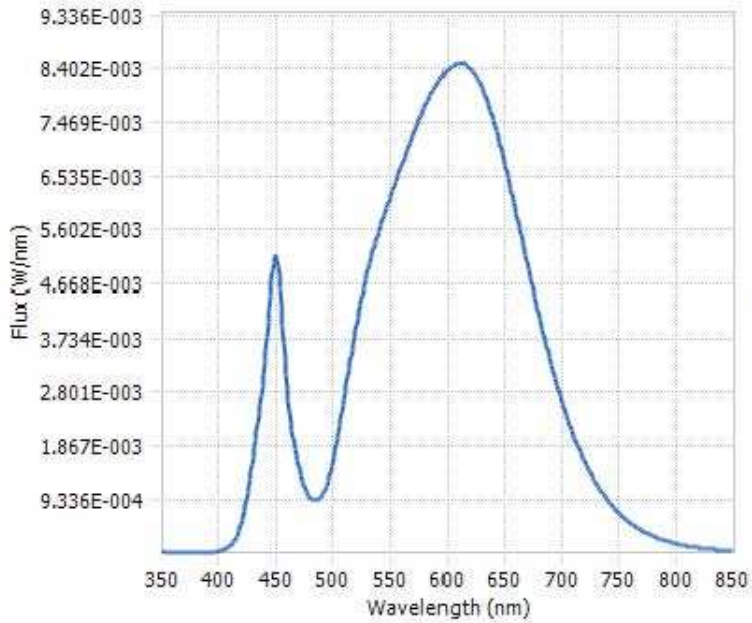
### Test Results

Result Name	Result
Test Time Point	2013-MAY-28 02:30:00 PM Hrs
Current THD	0.1 %
CCT	2937 K
CRI (Ra)	80.32
CRI (R9)	27.1
Duv	0.0032
x	0.4370
y	0.3968
u'	0.2538
v'	0.5185



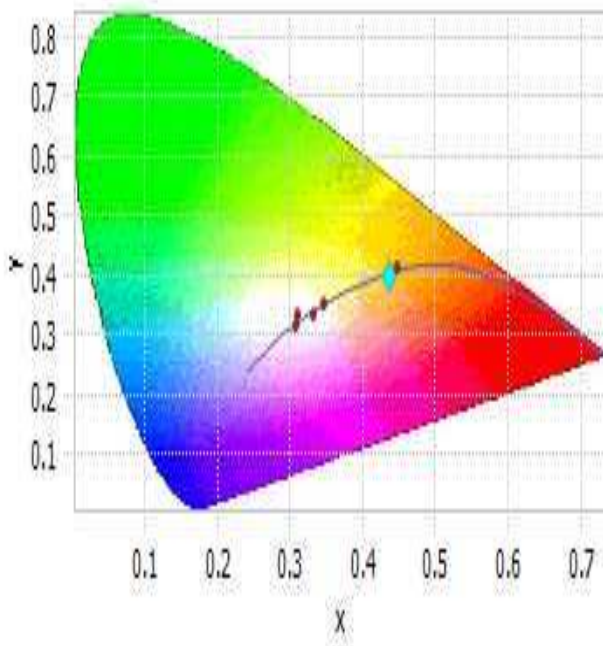
## Verification Services Test Report

### Spectral power distribution



### Chromaticity diagram

CIE 1931, 2 Degree





Project No: 10015722  
Report No: 10015722-6  
Issued Date: 2013-JUN-03  
Revision:

## Verification Services Test Report

---

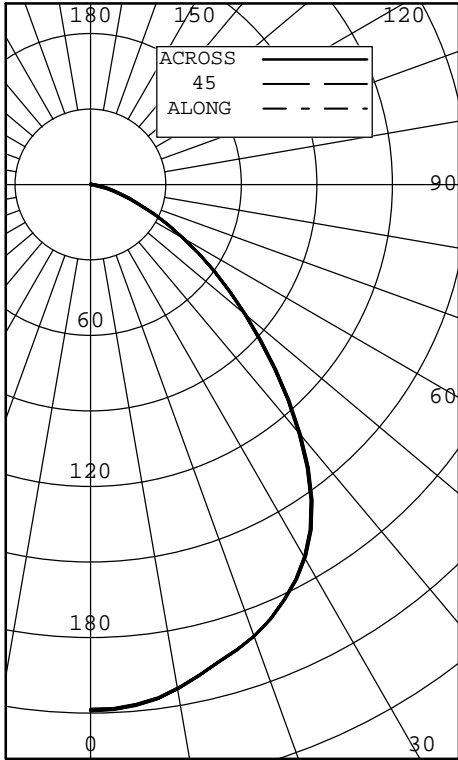
### Photo of Sample(s)



ARTEMIDE SPA, CAT# DEMETRA  
 DEMETRA  
 LED, CAT# LED. LUMINAIRE OUTPUT = 427 LMS.  
 OPERATING AT 120VAC 9.20W

INTENSITY (CANDLEPOWER) SUMMARY

ANGLE	MEAN CP	LUMENS
0	209	
5	208	20
10	203	
15	196	55
20	191	
25	182	84
30	170	
35	153	95
40	129	
45	104	80
50	80	
55	60	54
60	43	
65	28	28
70	17	
75	9	10
80	4	
85	0	1
90	0	



ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	159	37.24
0-40	254	59.42
0-60	388	90.74
0-90	427	100.00
40-90	173	40.58
60-90	40	9.26
90-180	0	0.00
0-180	427	100.00

EFFICACY (LUMENS PER WATT): 46.4

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

LUMINANCE SUMMARY - CD./SQ.M.

ANGLE	MEAN CD/SQ M
45	130
55	92
65	58
75	31
85	4

CERTIFIED BY:

DATE:  
 MAY 29, 2013

PREPARED FOR:

ARTEMIDE  
 SPA

TESTED IN ACCORDANCE WITH IES PROCEDURES.



UL INTERNATIONAL ITALIA SRL  
VIA XXV APRILE 3/B  
BURAGO DI MOLGORA, ITALY, ITALY 20875

TEST REPORT No. 10015722-6

ARTEMIDE SPA,CAT# DEMETRA  
DEMETRA  
LED,CAT# LED. LUMINAIRE OUTPUT = 427 LMS.  
OPERATING AT 120VAC 9.20W

INTENSITY(CANDLEPOWER) DATA  
IN 2.5 DEGREE STEPS

ANGLE	INTENSITY (CANDLEPOWER)	LUMENS
0.0	209	
2.5	209	
5.0	208	20
7.5	206	
10.0	203	
12.5	200	
15.0	196	55
17.5	194	
20.0	191	
22.5	187	
25.0	182	84
27.5	177	
30.0	170	
32.5	163	
35.0	153	95
37.5	142	
40.0	129	
42.5	116	
45.0	104	80
47.5	92	
50.0	80	
52.5	70	
55.0	60	54
57.5	51	
60.0	43	
62.5	35	
65.0	28	28
67.5	22	
70.0	17	
72.5	13	
75.0	9	10
77.5	6	
80.0	4	
82.5	2	
85.0	0	1
87.5	0	
90.0	0	

UL INTERNATIONAL ITALIA SRL  
VIA XXV APRILE 3/B  
BURAGO DI MOLGORA, ITALY, ITALY 20875

TEST REPORT No. 10015722-6

ARTEMIDE SPA, CAT# DEMETRA  
DEMETRA  
LED, CAT# LED. LUMINAIRE OUTPUT = 427 LMS.  
OPERATING AT 120VAC 9.20W

AVERAGE LUMINANCE DATA

CD./SQ.M (FOOTLAMBERTS)

ANGLE	LUMINANCE
0	184 ( 53)
30	174 ( 50)
40	149 ( 43)
45	130 ( 37)
50	110 ( 32)
55	92 ( 27)
60	75 ( 22)
65	58 ( 17)
70	43 ( 12)
75	31 ( 9)
80	19 ( 5)
85	4 ( 1)

UL INTERNATIONAL ITALIA SRL  
 VIA XXV APRILE 3/B  
 BURAGO DI MOLGORA, ITALY, ITALY 20875

TEST REPORT No. 10015722-6

ARTEMIDE SPA, CAT# DEMETRA  
 DEMETRA  
 LED, CAT# LED. LUMINAIRE OUTPUT = 427 LMS.  
 OPERATING AT 120VAC 9.20W

COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	90				80				70				50				30				10				0		
	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR	0	1.221	.221	.221	.22	1.191	.191	.191	.19	1.161	.161	.161	.16	1.111	.111	.111	.11	1.061	.061	.061	.06	1.021	.021	.021	.02	1.00	
	1	1.141	.101	.071	.04	1.121	.081	.051	.02	1.091	.061	.031	.00	1.020	.990	.97	0.980	.960	.94	0.950	.930	.92	0.90				
	2	1.061	.000	.950	.90	1.040	.980	.930	.89	1.020	.960	.920	.88	0.930	.890	.86	0.900	.870	.84	0.870	.850	.82	0.80				
	3	0.990	.900	.840	.78	0.970	.890	.830	.78	0.950	.870	.820	.77	0.850	.800	.76	0.820	.780	.74	0.800	.760	.73	0.72				
	4	0.930	.820	.750	.69	0.910	.810	.740	.69	0.890	.800	.740	.68	0.780	.720	.68	0.750	.710	.67	0.730	.690	.66	0.64				
	5	0.860	.750	.670	.61	0.840	.740	.660	.61	0.820	.730	.660	.61	0.710	.650	.60	0.690	.640	.60	0.670	.630	.59	0.57				
	6	0.800	.680	.600	.55	0.780	.670	.600	.54	0.770	.660	.590	.54	0.650	.580	.54	0.630	.570	.53	0.620	.570	.53	0.51				
	7	0.740	.620	.540	.49	0.730	.610	.530	.48	0.710	.600	.530	.48	0.590	.520	.48	0.570	.510	.47	0.560	.510	.47	0.45				
	8	0.690	.560	.490	.43	0.680	.560	.480	.43	0.660	.550	.480	.43	0.540	.470	.43	0.530	.470	.42	0.510	.460	.42	0.40				
	9	0.640	.520	.440	.38	0.630	.510	.430	.38	0.620	.500	.430	.38	0.490	.430	.38	0.480	.420	.38	0.470	.420	.38	0.36				
	10	0.600	.470	.390	.34	0.590	.470	.390	.34	0.580	.460	.390	.34	0.450	.390	.34	0.440	.380	.34	0.430	.380	.34	0.32				

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS  
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.  
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD  
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LUMINAIRE INPUT WATTS 9.2

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST  
 LUMINOUS OPENING OF LUMINAIRE.

UL INTERNATIONAL ITALIA SRL  
 VIA XXV APRILE 3/B  
 BURAGO DI MOLGORA, ITALY, ITALY 20875

TEST REPORT No. 10015722-6

CONE OF LIGHT  
 -----

MOUNTING HEIGHT ABOVE WORK PLANE (FT)	INITIAL FC AT NADIR -FCN (FC)	.1*FCN (FC)	10% LIGHTED DIAMETER (FT)	.5*FCN (FC)	50% LIGHTED DIAMETER (FT)
5	8.4	0.8	12.0	4.2	6.0
7	4.3	0.4	16.8	2.1	8.5
9	2.6	0.3	21.6	1.3	10.9
11	1.7	0.2	26.4	0.9	13.3
13	1.2	0.1	31.2	0.6	15.7
15	0.9	0.1	36.0	0.5	18.1
17	0.7	0.1	40.7	0.4	20.6
19	0.6	0.1	45.5	0.3	23.0

10% CONE ANGLE: 100.3 DEGREES  
 50% CONE ANGLE: 62.3 DEGREES