



Lab code: 200985-0

Project No.: 4787849444

Report No.: 4787849444.2

Issue Date: 2017/03/03

PHOTOMETRIC TEST REPORT

Testing Laboratory

UL International Italia S.r.l.

Via XXV Aprile 3/B - 20875 Burago di Molgora (Italy)

Customer Company & Address

ARTEMIDE SPA

VIA BERGAMO 18, PREGNANA MILANESE , MI 20010 - IT

Manufacturer: ARTEMIDE SPA
Model Name: DISCOVERY
Model Number: DISCOVERY
Product Type: LED Luminaire
Product Description: LED Luminaire for indoor use equipped with a power supply and 252 LEDs. The optical system is composed by a transparent diffuser.

LED Model: Lumileds - L235-3090AHLCAACO

Power Supply Model: HATCH - LC40-2100P-120-G

Electrical Ratings:

Input Voltage (V): 120

Input Current (A): -

Input Power (W) 50

Input Frequency (Hz): 60

Photometric Measurement: Absolute

Reference Standard: IES LM-79-08

Sample number: 786684

Total report pages: 12

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 products(s) has met the criteria for certification.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Prepared By

Luca Nobile

Project Handler

Name & Signatory

Approved By

Giovanni Di Martino

Reviewer

Name & Signatory



TEST RESULTS SUMMARY

Test Method: Integrating Sphere
Photometric Measurement: Absolute
Test Date: 2017/2/21

Environmental Conditions:

		Unit
Ambient Temperature:	24.1	°C
Relative Humidity:	29	%

Electrical Conditions:

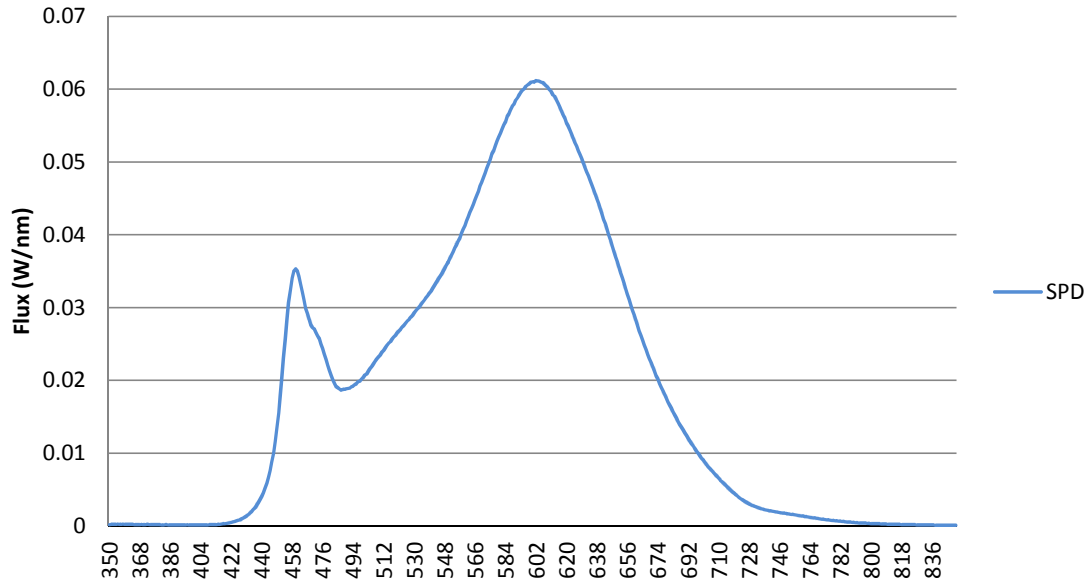
		Unit
Input Voltage:	120.06	V
Input Current:	0.415	A
Input Power:	49.34	W
Input Frequency:	60	Hz
Power Factor:	0.99	
THDi:	12	%

Photometric results:

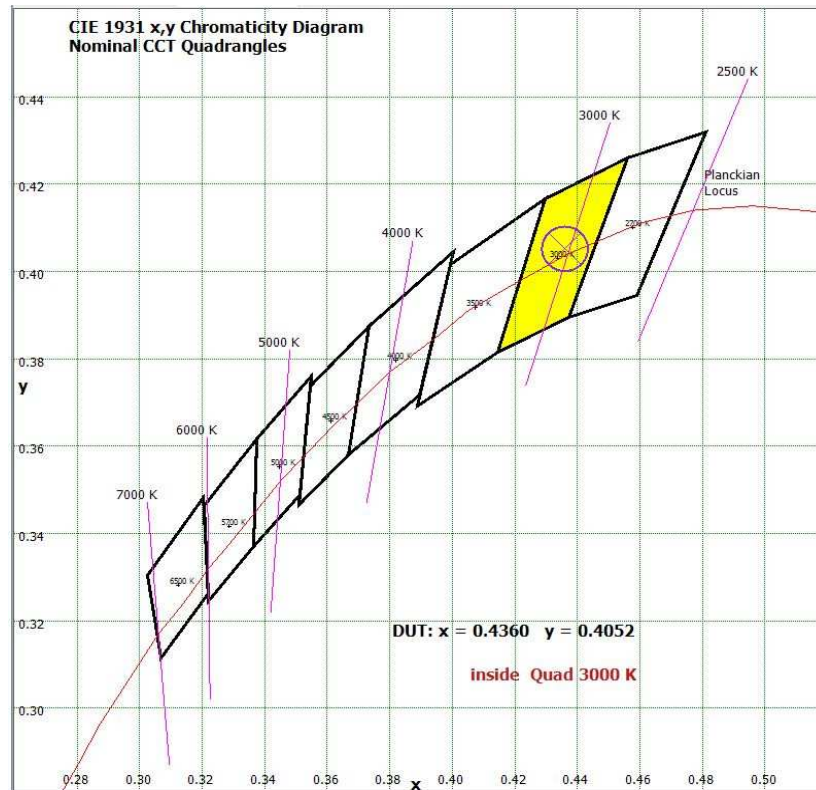
		Unit
Chrom x	0.4360	
Chrom y	0.4052	
Chrom u	0.2495	
Chrom v	0.3478	
Duv	0.0005	
Chrom u'	0.2495	
Chrom v'	0.5217	
Peak	602.8	nm
Dominant	582.5	nm
CCT	3023	K
Nominal CCT	3000	K
CRI	82.44	
R9	9.8	
Pre-burning time:	1.00	hrs
Stabilization time:	30	min
Test configuration:	4pi	



Spectral Power Distribution

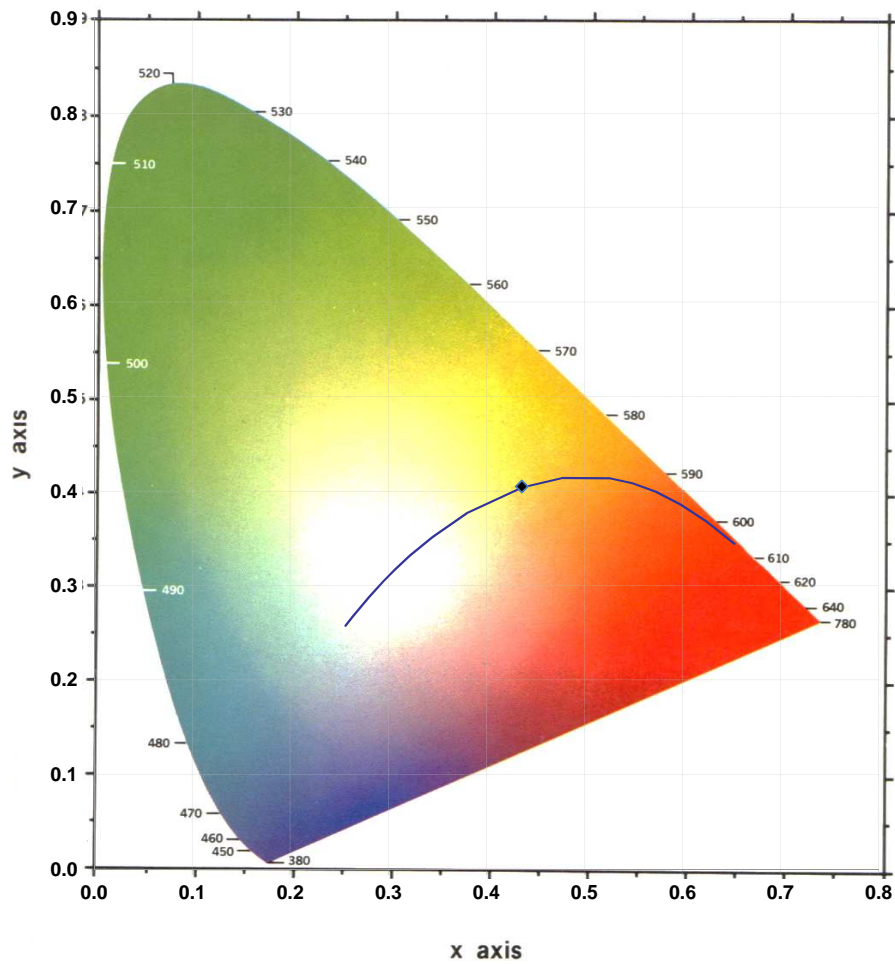


ANSI CCT Quadrangles





Chromaticity Diagram CIE 1931





TEST RESULTS SUMMARY

Test Method: Goniophotometer
Photometric Measurement: Absolute
Test Date: 2017/3/1

Environmental Conditions:

		Unit
Ambient Temperature:	24.5	°C
Relative Humidity:	29.5	%

Electrical Conditions:

		Unit
Input Voltage:	120.06	V
Input Current:	0.415	A
Input Power:	49.34	W
Input Frequency:	60	Hz
Power Factor:	0.99	
THDi:	12	%

Photometric results:

		Unit
Total Luminous Flux:	2835.48	Lm
System Efficacy:	57.47	Lm/W
Pre-burning time:	1.00	hrs
Stabilization time:	30	min
Test distance:	8.62	m

Dimensions:

	L	W	H	Unit
Sample:	700	700	18	mm
Luminous Area:	636	636	0	mm



Picture of the tested sample:

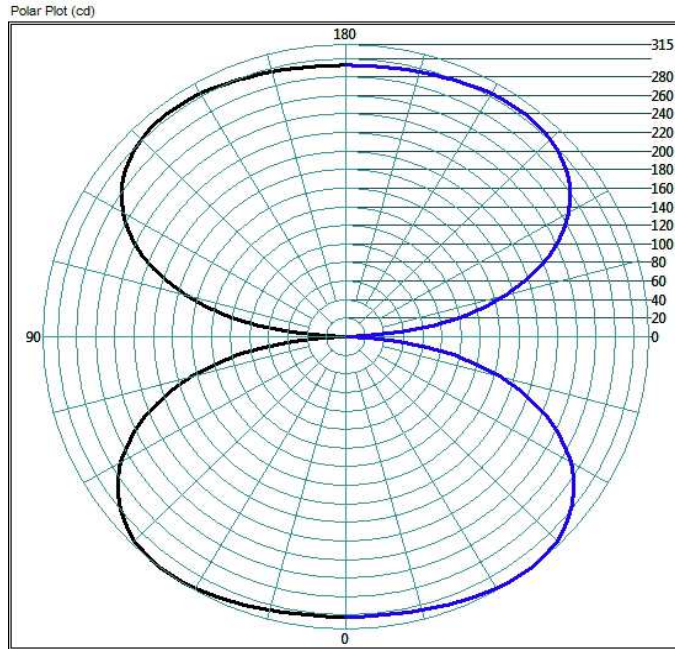


TEST EQUIPMENT

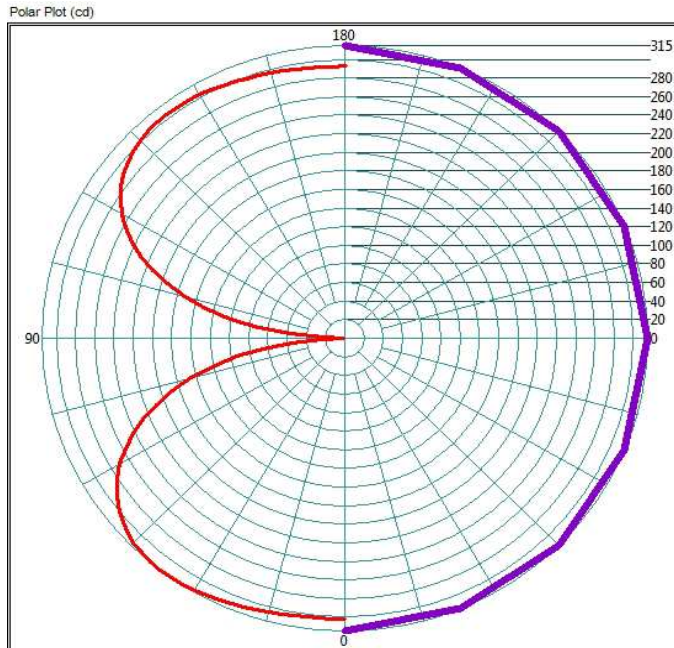
Global ID	Description	Last Cal	Next Cal
77595	Analyzer, Electrical Power	2016/10/26	2017/10/28
76513	Datalogger, Pressure & RH & Temperature	2016/5/11	2017/4/28
84677	Lamp, Used for Testing, Incandescent	2014/4/15	2017/4/15
84678	Lamp, Used for Testing, Incandescent	2014/4/15	2017/4/15
84679	Lamp, Used for Testing, Incandescent	2014/4/15	2017/4/15
77659	Light Meters & Sensors	2016/2/16	By evidence
77615	Power Supply, AC	Reference	Reference
77597	Thermometer, Digital, Benchtop	2016/7/25	2017/7/28
37602	Timer, Digital or Analog	2016/4/22	2017/4/28
77590	Analyzer, Electrical Power	2016/10/26	2017/10/28
76506	Datalogger, Pressure & RH & Temperature	2016/5/11	2017/4/28
88755	Lamp, Used for Testing, Incandescent	2015/2/3	2018/2/3
77675	Light Meters & Sensors	2017/2/13	By evidence
77621	Power Supply, AC	Reference	Reference
77631	Spectrometer	2017/2/13	By evidence
77600	Thermometer, Digital, Benchtop	2016/7/25	2017/7/28
37602	Timer, Digital or Analog	2016/4/22	2017/4/28



POLAR PLOT (cd)



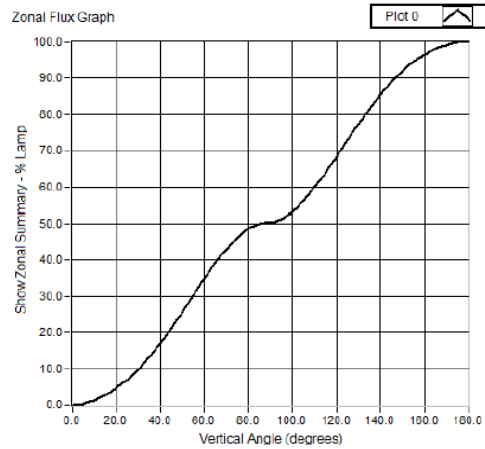
MAX CONE AND PLANE



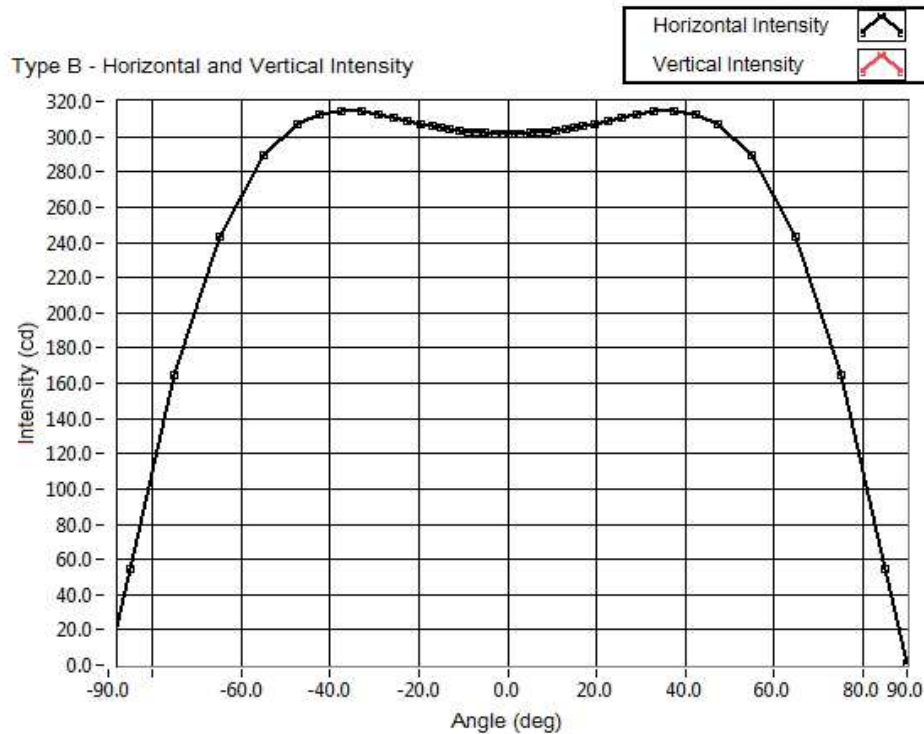


ZONAL LUMEN SUMMARY

	Summary Zonal Lumens	Zonal Lumens - % Lamp	Zonal Lumens - % Fixture
0 to 30	259.47	9.15	9.15
0 to 40	456.82	16.11	16.11
0 to 60	954.95	33.68	33.68
0 to 90	1426.70	50.32	50.32
40 to 90	969.87	34.20	34.20
60 to 90	471.74	16.64	16.64
90 to 180	1408.78	49.68	49.68
0 to 180	2835.48	100.00	100.00



CARTESIAN INTENSITY





Test Report Number: 4787849444.2
Test Item Number:

Candela Table (cd)

	360.0
0.0	301.9
2.5	301.8
5.0	302.0
7.5	302.5
10.0	303.1
12.5	303.9
15.0	304.9
17.5	306.1
20.0	307.3
22.5	308.7
25.0	310.2
27.5	311.7
30.0	312.9
32.5	313.9
35.0	314.6
37.5	314.7
40.0	314.2
42.5	312.9
45.0	310.8
47.5	307.5
50.0	302.9
52.5	297.0
55.0	289.6
57.5	280.5
60.0	269.7
62.5	257.1
65.0	242.8
67.5	226.5
70.0	208.1
72.5	187.6
75.0	165.0
77.5	140.4
80.0	113.8
82.5	85.3
85.0	55.0
87.5	24.0
90.0	0.8
92.5	22.2
95.0	56.5
97.5	89.8
100.0	120.2
102.5	147.6
105.0	172.1
107.5	193.7
110.0	212.8
112.5	229.5
115.0	244.0
117.5	256.4
120.0	267.1
122.5	276.1
125.0	283.6
127.5	289.7
130.0	294.6
132.5	298.2



Test Report Number: 4787849444.2
Test Item Number:

Candela Table (cd)

	0.0	22.5	45.0	67.5	90.0	112.5	135.0	157.5	180.0	202.5	225.0	247.5	270.0	292.5	315.0	337.5
135.0	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9	300.9
137.5	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6	302.6
140.0	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5	303.5
142.5	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8	303.8
145.0	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6	303.6
147.5	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0	303.0
150.0	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1	302.1
152.5	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1	301.1
155.0	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9	299.9
157.5	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6	298.6
160.0	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4	297.4
162.5	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3	296.3
165.0	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2	295.2
167.5	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3	294.3
170.0	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6	293.6
172.5	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1	293.1
175.0	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7	292.7
177.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5
180.0	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5	292.5



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Candela Table (cd)

	360.0
135.0	300.9
137.5	302.6
140.0	303.5
142.5	303.8
145.0	303.6
147.5	303.0
150.0	302.1
152.5	301.1
155.0	299.9
157.5	298.6
160.0	297.4
162.5	296.3
165.0	295.2
167.5	294.3
170.0	293.6
172.5	293.1
175.0	292.7
177.5	292.5
180.0	292.5