

## Lamp Measurement Report

Project Aruna  
 Test date. 10-10-2016  
 Lamp Description : Aruna, 400 V, 1000 W  
 Running hours: 100  
 Measured with sleeve : Yes  
 Type driver: Electronic Driver

## Measurement Results

Lamp batch	P mains [W]	U lamp [V]	I lamp [A]	P lamp [W]	Light value [μmol/s]	Light value @ 1016 W and no sleeve
<b>Minimum</b>						
	1039	253	3,8	1023	2036	<b>2091</b>
<b>Maximum</b>						
	1065	272	4,1	1030	2061	<b>2117</b>
<b>Average</b>						
	1056	261	3,9	1026	2048	<b>2101</b>
<b>Measurements</b>						
6375-791603	1060	266	3,9	1029	2045	<b>2092</b>
6375-791609	1058	256	4,0	1027	2041	<b>2092</b>
6375-791609	1058	253	4,1	1026	2061	<b>2114</b>
6375-791609	1065	262	3,9	1030	2048	<b>2093</b>
6375-791609	1039	262	3,8	1026	2051	<b>2104</b>
6375-791609	1058	254	4,0	1023	2058	<b>2117</b>
6375-791609	1056	259	3,9	1025	2050	<b>2105</b>
6375-791609	1057	272	3,8	1024	2049	<b>2106</b>
6375-791609	1057	265	3,9	1025	2036	<b>2091</b>
6375-791609	1057	259	4,0	1027	2046	<b>2097</b>

### Test conditions

Lamp voltage and frequency according to specification.  
 All lamps placed in the sphere of Ulbricht.  
 Test results on page 1.  
 Ambient temperature < 28° Celsius.

### Test field of Ulbricht's Sphere

#### Fluke Lem Norma 4000

Calibration date: 22-02-2016 Certificate nr 1615512

#### LI-190 / Q39300 Quantum Sensor (micromole measurement)

Calibration date: 30-03-2016

**Supply: Model JL-1020A / 2KVA / max. 500V.**

Ballast identification: 400V - 1000W

The measurements are performed with calibrated drivers. The measurement data thus obtained are only supplied to the delivered lamps. This measurement is not representative of a whole delivered batch of lamps, but is indicative. Tolerances in the measurements of + / - 2.5% may occur. Between the lamps themselves may be a difference of 10%. For more information, see technical specifications of the lamp manufacturer.