



中国认可  
国际互认  
检测  
TESTING  
CNAS L10203



# TEST REPORT

**COMMISSION DELEGATED REGULATION (EU) No 874/2012 Supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labeling of electrical lamps and luminaires**

Report Reference No. ....: SZANL190107008-01

Tested by  
(printed name + signature) .....: Dick Xiao

*Dick Xiao*

Supervised by  
(printed name + signature) .....: Helen Li

*Helen Li*

Date of issue .....: 2019-01-10



**Testing Laboratory** .....: Shenzhen Anbotek Pengcheng Compliance Laboratory Limited  
Address.....: Floor 1, Building C, Gold Power Industrial Park, Julongshan Grand Industrial Zone, Pingshan District, Shenzhen, Guangdong, China.  
Testing location.....: Same as above

**Applicant's Name** .....: Shenzhen Qinhan Lighting Co., Limited  
Address.....: A building, Chuangze Industrial City, Dalang Town, Dongguan, Guangdong, China.

**Test Specification:**

Standard .....: COMMISSION REGULATION (EU) No 874/2012  
Test procedure.....: Test Report  
Non-standard test method.....: N/A

**Test Report Form No.** .....: 874/2012/EU\_V1.3  
Test Report Form(s) Originator .....: Shenzhen Anbotek Pengcheng Compliance Laboratory Limited  
Master TRF .....: N/A

**Test Item Description** .....: UFO LED HIGH BAY LIGHT

Trade Mark .....:   
Manufacturer.....: Shenzhen Qinhan Lighting Co., Limited  
Address.....: A building, Chuangze Industrial City, Dalang Town, Dongguan, Guangdong, China.  
Model/Type reference.....: QH-HBUFO-100W  
Ratings.....: 230 VAC, 50/60 Hz, 100 W

Summary of Testing:	
Tests performed (name of test and test clause):	Testing location:
<p>The sample(s) tested complies with the requirements of COMMISSION DELEGATED REGULATION (EU) No 874/2012.</p> <p>The test was conducted at 230 VAC, 50 Hz.</p>	<p>Shenzhen Anbotek Pengcheng Compliance Laboratory Limited</p> <p>Floor 1, Building C, Gold Power Industrial Park, Julongshan Grand Industrial Zone, Pingshan District, Shenzhen, Guangdong, China.</p>
Normative References:	
<p>Non-directional lamps</p> <p><input type="checkbox"/> CIE 84:1989</p> <p><input type="checkbox"/> EN60357:2017</p> <p><input type="checkbox"/> EN 60969:2004</p> <p><input type="checkbox"/> EN 62722-2-1:2016</p> <p><input type="checkbox"/> IEC 62717:2015</p>	<p>Directional lamps</p> <p><input type="checkbox"/> CIE 84:1989</p> <p><input type="checkbox"/> EN 60357:2017</p> <p><input type="checkbox"/> EN 60969:2004</p> <p><input type="checkbox"/> EN61167:2011</p> <p><input type="checkbox"/> EN 62612:2015</p> <p><input type="checkbox"/> IEC 62717:2015</p> <p><input checked="" type="checkbox"/> EN 62722-2-1:2016</p>
Summary of Compliance with National Differences:	
N/A	
Copy of Marking Plate:	
N/A	

**Test Item Particulars:**

Lamp cap.....: N/A  
Lamp type.....: LED Fluorescent lamps  
High-intensity discharge lamps  
Filament lamps  
Directionality type.....: Directional Non-directional

**Possible Test Case Verdicts:**

Test case does not apply to the test object .....: N/A (Not Applicable)  
Test object does meet the requirement.....: P (Pass)  
Test object does not meet the requirement.....: F (Fail)

**Testing:**

Date of receipt of test item.....: 2019-01-07  
Date (s) of performance of tests.....: 2019-01-07 to 2019-01-09

**General Remarks:**

The test results presented in this report relate only to the object tested.  
This report shall not be reproduced, except in full without the written approval of the Issuing testing laboratory.  
"(See Enclosure #)" refers to additional information appended to the report.  
"(See appended table)" refers to a table appended to the report.  
Throughout this report a comma (point) is used as the decimal separator.  
List of test equipment must be kept on file and available for review.

**General Product Information:**

N/A

**Measurement conditions:**

The ambient temperature in which measurements are being taken shall be maintained at  $25^{\circ}\text{C}\pm 1^{\circ}\text{C}$ , and relative humidity of 60%.

Type C goniophotometer was used for measuring total luminous flux, luminous efficacy, luminous intensity distribution, which were calculated from the software taken at  $1^{\circ}$  vertical intervals and  $22.5^{\circ}$  horizontal intervals. The product was operated in its intended orientation.

EU 874/2012			
Clause	Requirement + Test	Result – Remark	Verdict
<b>ANNEX I</b>	<b>Label</b>		<b>N/A</b>
1	Label for electrical lamps presented at a point of sale		N/A
	(1) The label if it is not printed on the packaging		N/A
	(2) The required information shall be included on the label		N/A
	(3) If the label is printed on the packaging, the label shall then be chosen form directive		N/A
	(4) The design of the label		N/A
2.	Label for luminaires presented at a point of sale		N/A
	(1) The label shall be the relevant language version, and shall be as shown in directive required illustration		N/A
	(2) The required information shall be included in the label		N/A
	(3) The energy label for luminaire		N/A
	(4) The design of the label shall be as in the figure on directive		N/A
<b>ANNEX II</b>	<b>Product fiche for electrical lamps</b>		<b>N/A</b>
	The fiche shall contain the information specified for the label.		N/A
	Where product brochures are not supplied, the label provide with the product can also be considered to be the fiche.		N/A
<b>ANNEX III</b>	<b>Technical documentation</b>		<b>N/A</b>
	The technical documentation referred to in Article 3(1)(b) and (2)(a) shall include:		N/A
	(a) The name and address of the supplier;		N/A
	(b) A general description of the model, sufficient for it to be unequivocally and easily identified;		N/A
	(c) Where appropriate, the reference of the harmonized standards applied;		N/A
	(d) Where appropriate, the other technical standards and specification used;		N/A
	(e) The identification and signature of the person empowered to bind the supplier;		N/A
	(f) The technical parameters for determining energy consumption and energy efficiency in the case of electrical lamps, and compatibility with lamps in the case of luminaires, specifying at least one realistic combination of product settings and conditions in which to test the product;		N/A

EU 874/2012			
Clause	Requirement + Test	Result – Remark	Verdict
	(g) For electrical lamps, the results of calculations performed in accordance with Annex VII. The information contained in this technical documentation may be merged with the technical documentation provided in accordance with measures under Directive 2009/125/EC.		N/A
<b>ANNEX IV</b>	<b>Information to be provided in cases where final owners cannot be expected to see the product displayed</b>		<b>N/A</b>
1.	The information referred to in Article 4(1)(a) shall be provided in the following order:		N/A
	(a) The energy efficiency class as defined in Annex VI ;		N/A
	(b) Where required by Annex I, the weighted energy consumption in kWh per 1000 hours, rounded up to the nearest integer and calculated in accordance with part 2 of Annex VII.		N/A
2.	When other information contained in the product fiche is also provided, it shall be in the form and order specified in Annex II.		N/A
3.	The size and font in which all the information referred to in this Annex is printed or shown shall be legible. En 26.9.2012 Official Journal of the European Union L 258/17.		N/A
<b>ANNEX VI</b>	<b>Energy efficiency class</b>		<b>P</b>
	The energy efficiency class of a lamp shall be determined as follows:		
	Lamps operating on external halogen lamp control gear	$P_{cor}=P_{rated} \times 1.06$	N/A
	Lamps operating on external LED lamp control gear	$P_{cor}=P_{rated} \times 1.10$ $=98.56 \times 1.10$ $=108.42 \text{ W}$	P
	Fluorescent lamps of 16mm diameter (T5 lamps) and 4-pin single capped fluorescent lamps operating on external fluorescent lamp control gear	$P_{cor}=P_{rated} \times 1.10$	N/A
	Other lamps operating on external fluorescent lamp control gear	$P_{cor}=P_{rated} \times \frac{0,24\sqrt{\Phi_{use}} + 0,0103\Phi_{use}}{0,15\sqrt{\Phi_{use}} + 0,0097\Phi_{use}}$	N/A
	Lamps operating on external high-intensity discharge lamp control gear	$P_{cor}=P_{rated} \times 1.10$	N/A
	Lamps operating on external low pressure sodium lamp control gear	$P_{cor}=P_{rated} \times 1.15$	N/A
	For models with $\Phi_{use} < 1300$ lumen		N/A
	$P_{ref} = 0.88\sqrt{\Phi_{use}} + 0.049\Phi_{use}$		N/A
	For models with $\Phi_{use} \geq 1300$ lumen	11018.21	P
	$P_{ref} = 0.07341\Phi_{use}$	808.85	P

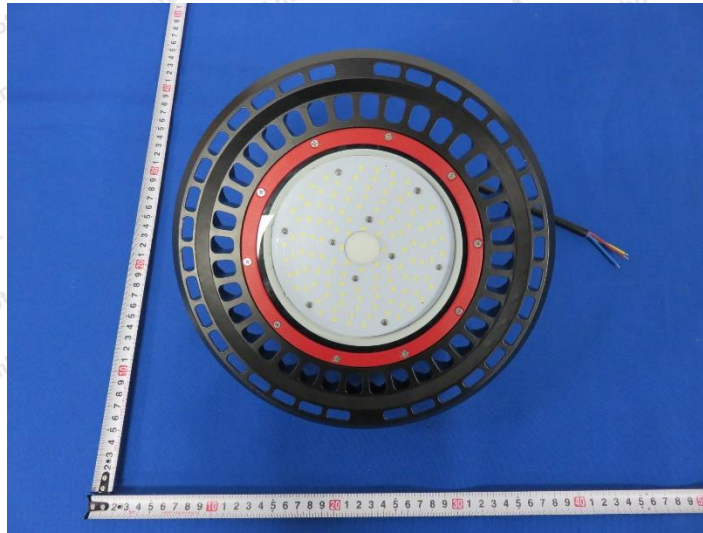
EU 874/2012					
Clause	Requirement + Test			Result – Remark	Verdict
	$E_{EI} = P_{cor} / P_{ref}$			108.42/808.85=0.13	P
	Energy efficiency class	<input type="checkbox"/> EEI for non-directional lamps	<input checked="" type="checkbox"/> EEI for directional lamps		P
	A++	$E_{EI} \leq 0.11$	$E_{EI} \leq 0.13$	A++	P
	A+	$0.11 < E_{EI} \leq 0.17$	$0.13 < E_{EI} \leq 0.18$		N/A
	A	$0.17 < E_{EI} \leq 0.24$	$0.18 < E_{EI} \leq 0.40$		N/A
	B	$0.24 < E_{EI} \leq 0.60$	$0.40 < E_{EI} \leq 0.95$		N/A
	C	$0.60 < E_{EI} \leq 0.80$	$0.95 < E_{EI} \leq 1.20$		N/A
	D	$0.80 < E_{EI} \leq 0.95$	$1.20 < E_{EI} \leq 1.75$		N/A
	E	$E_{EI} > 0.95$	$E_{EI} > 1.75$		N/A
<b>ANNEX VII</b>	<b>Energy consumption</b>				--
	<p>The weighted energy consumption (<math>E_c</math>) is calculated in kWh/1000 h as follows and is rounded to two decimal places:</p> <p><math>E_c = P_{cor} \times 1000 \text{ h} / 1000</math></p> <p>Where <math>P_{cor}</math> is the power corrected for any control gear losses in accordance with table 2 in directive</p>			<p><math>P_{cor} = 98.56 \times 1.10 = 108.42 \text{ W}</math></p> <p><math>E_c = 108.42 \text{ kWh} / 1000</math></p>	--

**Attachment A – Test Equipment List**

Equipment Name	Manufacturer	Model No.	Reference No.	Calibration Due Date
Goniophotometric System	SENSING	GMS-3000	SE-450	Before Use
Digital Power Meter	YOKOGAWA	WT310	SE-381	2019-06-05
Integrating Sphere (2.0m)	EVERFINE	YF-1000	SE-599	Before Use
Standard Lamp	EVERFINE	D062	SE-606	2019-06-05
Standard Lamp	SENSING	DC24V100W	SE-2091	2019-01-04
Digital Power Meter	YOKOGAWA	WT210	SE-074	2019-06-05
Temperature Recorder	Agilent	34970A	SE-574	2019-06-05
Digital Caliper	UPM	111-312	SE-012	2019-06-05
Digital Multimeter	FLUKE	15B+	SE-593	2019-06-05
AC Power Source	HUAYANG	HY9010	SE-114	2019-06-05
DC Power Source	EVERFINE	WY605	SE-605	2019-06-05



## Attachment B – Product Photo



\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*