

APPLICATION REPORT
On Behalf of
Shenzhen HY Industry Co., Ltd
piano lamp
Model: HY-LM003

Prepared For : **Shenzhen HY Industry Co., Ltd**
4F, Nantong BLD, Ainan Road, Longgang Area, Shenzhen, China

Prepared By : **Shenzhen Southern LCS Compliance Testing Laboratory Ltd.**
B Area, 1-2F, Building B, Zhongyu Green High-tech Industrial Park,
Wenge Road, Heshuikou, Gongming Street, Guangming New District,
Shenzhen, China

Date of Test : **July 02, 2018 – July 06, 2018**

Date of Report : **July 06, 2018**

Report Number : **LCS180702012BS**

TRF No. (EU) No 874/2012

Shenzhen Southern LCS Compliance Testing Laboratory Ltd.

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TEST REPORT	
COMMISSION DELEGATED REGULATION (EU) No 874/2012 of 12 July 2012	
supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of electrical lamps and luminaires	
Report reference No	LCS180702012BS
Tested by (name, function, signature)	James Zhang(Project Engineer)
Check by (name, function, signature)	Ian Luo(Ian Luo)
Approved by (name,function , signature)	Jesse Liu(Manager)
Date of issue	July 06, 2018
Contents	7 pages
Testing laboratory	
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Address	B Area, 1-2F, Building B, Zhongyu Green High-tech Industrial Park, Wenge Road, Heshuikou, Gongming Street, Guangming New District, Shenzhen, China
Testing location	As above
Client	
Name	Shenzhen HY Industry Co., Ltd
Address	4F, Nantong BLD, Ai'nan Road, Longgang Area, Shenzhen, China
Manufacturer	
Name	Shenzhen HY Industry Co., Ltd
Address	4F, Nantong BLD, Ai'nan Road, Longgang Area, Shenzhen, China
Test specification	
Standard	COMMISSION DELEGATED REGULATION (EU) No 874/2012 of 12 July 2012
Test procedure	COMMISSION DELEGATED REGULATION (EU) No 874/2012 of 12 July 2012
Non-standard test method	N/A

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<p>Test item Description : piano lamp</p> <p>Trademark : N/A</p> <p>Model and/or type reference..... : HY-LM003</p> <p>Rating(s)(V/Hz)..... : AC100-240V, 50/60Hz, 6W</p>								
<p>Test case verdicts</p> <p>Test case does not apply to the test object : N(N/A)</p> <p>Test item does meet the requirement : P(Pass)</p> <p>Test item does not meet the requirement ... : F(Fail)</p>								
<p>Testing</p> <p>Date of receipt of test item : July 02, 2018</p> <p>Date(s) of performance of test..... : July 02, 2018 – July 06, 2018</p>								
<p>General remarks</p> <p>The test results presented in this report relate only to the object tested.</p> <p>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p> <p>"(see Enclosure #)" refers to additional information appended to the report.</p> <p>"(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a comma (point) is used as the decimal separator.</p> <p>Remarks:</p> <p>COMMISSION DELEGATED REGULATION (EU) No 874/2012 of 12 July 2012.</p> <p>These tests full fill the requirements of standard ISO/IEC 17025.</p> <p>When determining the test conclusion, the Measurement Uncertainty of test has been considered.</p> <p>Measurements of power of 0.50 W or greater was made with an uncertainty of less than or equal to 2 % at the 95 % confidence level.</p> <p>Measurements of power of less than 0.50 W was made with an uncertainty of less than or equal to 0.01 W at the 95 % confidence level.</p> <p>The test report includes: ATTACHMENT 1(S) of product photos</p> <p style="text-align: center;">Modified Information</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Version</th> <th>Report No.</th> <th>Revision Data</th> <th>Summary</th> </tr> </thead> <tbody> <tr> <td>V1.0</td> <td>LCS180702012BS</td> <td>/</td> <td>Original Version</td> </tr> </tbody> </table>	Version	Report No.	Revision Data	Summary	V1.0	LCS180702012BS	/	Original Version
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V1.0	LCS180702012BS	/	Original Version					

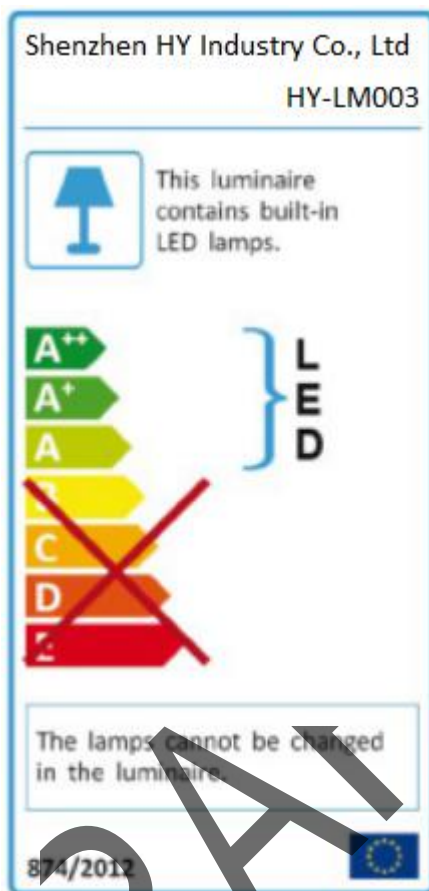
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Tables

ANNEX III	ECODESIGN REQUIREMENTS		P
1	ENERGY EFFICIENCY REQUIREMENTS		P
1.1	Energy efficiency requirements for directional lamps		P
	The energy efficiency index (EEI) of the lamp is calculated as follows and rounded to two decimal places: $EEI = P_{cor} / P_{ref}$		P
	Lamps operating on external halogen lamp control gear: $P_{cor}=P_{rated} \times 1,06$		N
	Lamps operating on LED lamp control gear: $P_{cor}=P_{rated}$		N
	Lamps operating on external LED lamp control gear: $P_{cor}=P_{rated} \times 1,10$	$P_{rated}=5.5W$ $P_{cor}=P_{rated} \times 1.1=6.05W$	P
	Fluorescent lamps of 16 mm 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
	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
	Lamps operating on external high-intensity discharge lamp control gear: $P_{cor}=P_{rated} \times 1,10$		N
	Lamps operating on external low pressure sodium lamp control gear: $P_{cor}=P_{rated} \times 1,15$		N
	P_{ref} is the reference power obtained from the useful luminous flux of the lamp (Φ_{use}) by the following formula:	$\Phi_{use}= 243lm$	P
	For models with $\Phi_{use} < 1\ 300$ lumen: $P_{ref} = 0,88\sqrt{\Phi_{use}} + 0,049\Phi_{use}$	$P_{ref}= 25.63W$	P
	For models with $\Phi_{use} \geq 1\ 300$ lumen: $P_{ref}=0,07341\Phi_{use}$		N
	The maximum EEI of directional lamps:	$6.05W/25.63= 0.236$	P

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Tables

Table13A. Energy class					
Standard		Clause		Model No.	Verdict
EU 874/2012		Energy class		HY-LM003	P
Conditions		-Test procedure: COMMISSION DELEGATED REGULATION (EU) No 874/2012 of 12 July 2012 -test conditions: -ambition: $25^{\circ}\text{C}/65\%\text{R.H.}$ -Test voltage:230V			
Luminous Flux of the lamp		243lm			
Technical requirements			Test result		
EEL=Pcor/Pref		For non-direction lamp		For direction lamp	
Pcor which is Prated x Correction factors; Pref: for model with $\Phi_{\text{use}} < 1300$ lumen: $0.88\sqrt{\Phi_{\text{use}}} + 0.049\Phi_{\text{use}}$, for model with $\Phi_{\text{use}} > 1300$ lumen: $0,07341\Phi_{\text{use}}$		A++	$\text{EEI} \leq 0.11$	A++	$\text{EEI} \leq 0.13$
		A+	$0.11 < \text{EEI} \leq 0.17$	A+	$0.13 < \text{EEI} \leq 0.18$
		A	$0.17 < \text{EEI} \leq 0.24$	A	$0.18 < \text{EEI} \leq 0.40$
		B	$0.24 < \text{EEI} \leq 0.60$	B	$0.40 < \text{EEI} \leq 0.95$
		C	$0.60 < \text{EEI} \leq 0.80$	C	$0.95 < \text{EEI} \leq 1.20$
		D	$0.80 < \text{EEI} \leq 0.95$	D	$1.20 < \text{EEI} \leq 1.75$
Energy class		EEL=0.236	A	--	

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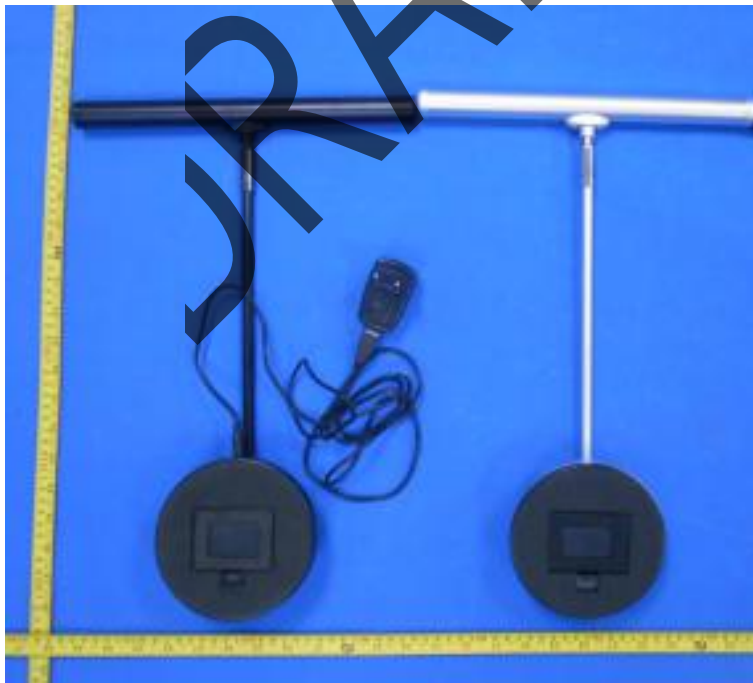
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ATTACHMENT 1(S)

Photos of HY-LM003



----- End of test report-----

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