

ENEC LICENCE

Licence No. ENEC-01244-A2
Page 1/4
Date of Issue 2017-02-28

Licence Holder Philips Lighting B.V.
High Tech Campus 45
Eindhoven, 5656 AE The Netherlands

Production site Philips Lighting Poland S A
UL PRZEMYSLOWA 29
PILA, 64-920 Poland

Certification Mark See Annex 1

Certified Product Built-in Self-Ballasted LED Module

Model Main series: Certaflux LLS ES xmm ylm zcc HVg a
See Page 2

Trademark **PHILIPS**

Rated Voltage / Frequency 220-240 V~ 50/60 Hz

Rated Current / Power -

Insulation Class --

Degree of protection (IP) --

Tested acc. to EN 62031:2008/A1:2013, EN 62031:2008/A2:2015, EN 62031:2008

Test Report No. 4787087861-2 issued on 2017-02-28

Additional tc: 95 °C

Certification Manager
Jan-Erik Storgaard

Certification Body

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this License, in accordance with the ENEC Requirements. The Designated License holder is entitled to use the ENEC 15 Mark (as shown in annex 1) for the Certified Product manufactured at the production site(s) identified above in accordance with the ENEC Mark Service Agreement including without limitation the ENEC Mark Testing and Certification Services Service Terms. Only those Products bearing the ENEC Mark should be considered as being covered by UL's ENEC Mark Service. This License shall remain valid unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).

UL International Demko A/S, Borupvang 5A, DK-2750
Ballerup, Denmark, Tel. +45 44 85 65 65, info.dk@ul.com
www.ul-europe.com



ENEC LICENCE

Licence No. ENEC-01244-A2
Page 2/4
Date of Issue 2017-02-28

Model Details:

Product Key:

Main series: **Certaflux LLS ES xmm ylm zcc HVg a**

Where:

- x = Product length in mm (four digits, may be "1150" or "1450")
- y = Lumen output (four digits, may be "4500" or "6750");
- z = CRI of LED divided by 10 (one digit, may be "8" or "9");
- cc = Color temperature of LED divided by 100 (two digits, may be between 30 and 65);
- g = Number of LED module's generation (one digit, may be "1" or "2");
- a = Commercial suffix for commercial purposes (optional)

Maximum ratings:

Lumen output (y) [lm]	Supply Voltage	Power [W]	Number of LEDs	t _c [°C]
6750	220-240 V~ 50/60 Hz	54	132	95
4500	220-240 V~ 50/60 Hz	35	80	95

Product Key:

Variant series: **LBA DLineC xft ylm zcc Hg**

Where:

- x = Product length in feet (one digit, may be "4" or "5")
- y = Lumen output (four digits, may be "4500" or "6750" or "6700");
- z = CRI of LED divided by 10 (one digit, may be "8" or "9");
- cc = Color temperature of LED divided by 100 (two digits, may be between 30 and 65);
- g = Number of LED module's generation (one digit, may be "6" or "7");

Maximum ratings:

Lumen output (y) [lm]	Supply Voltage	Power [W]	Number of LEDs	t _c [°C]
6750 or 6700	220-240 V~ 50/60 Hz	54	132	95
4500	220-240 V~ 50/60 Hz	35	80	95

Certification Body

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this License, in accordance with the ENEC Requirements. The Designated License holder is entitled to use the ENEC 15 Mark (as shown in annex 1) for the Certified Product manufactured at the production site(s) identified above in accordance with the ENEC Mark Service Agreement including without limitation the ENEC Mark Testing and Certification Services Service Terms. Only those Products bearing the ENEC Mark should be considered as being covered by UL's ENEC Mark Service. This License shall remain valid unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).



ENEC LICENCE

Licence No.	ENEC-01244-A2
Page	3/4
Date of Issue	2017-02-28

Model Details:

Additional Information:

- Customer shall maintain clearances and creepage distances between tracks/components on PCB and screws/accessible conductive parts in compliance with table 11.1 of IEC/EN 60598-1 standard.
- M3 fixing screws with diameter of their heads not exceeding 6 mm shall be used (if in metallic material). The fasteners used to secure the module to the mounting surface must be tightened with a torque between 0,6 and 1 Nm.
- The demarcated areas on PCBs for components and fixing screws and the installation drawings on datasheet shall be respected by the customer.
- The customer is obligated to add an appropriated cooling system to the LED module in order to not exceed t_c value and the maximum temperatures of the module's components. Temperature test shall be performed on the final product to verify the effectiveness of this cooling system.
- The integral LED controlgear of the module was evaluated as integral component according to IEC/EN 61347-2-13 and IEC/EN 61347-1.
- The module has been also evaluated according to IEC TR 62778 (Second Edition): **RISK GROUP 2** (Worst value of $E_{thr} = 338 \text{ lx}$) for modules using LEDs Lumileds 3020 series and **RISK GROUP 1 Unlimited** for modules using LEDs APT 2835 series.

The original report was modified to include the following changes/additions:

- Addition of one alternative LED (APT 2835 series) in the table of components (in bold).
- Changing of Number of LED module's generation into product keys of mains and variant series.

This certificate replaces the certificate no. ENEC-01244-A1 issued on 2016-03-09

Certification Body

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this License, in accordance with the ENEC Requirements. The Designated License holder is entitled to use the ENEC 15 Mark (as shown in annex 1) for the Certified Product manufactured at the production site(s) identified above in accordance with the ENEC Mark Service Agreement including without limitation the ENEC Mark Testing and Certification Services Service Terms. Only those Products bearing the ENEC Mark should be considered as being covered by UL's ENEC Mark Service. This License shall remain valid unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).



Annex 1 to Licence No.

ENEC-01244-A2

Annex of the form of the Mark



* Identification number of the Certification Body

Size of the mark:

The size of the mark may be reduced on the condition that it remains legible and that the ratio $b/a=1,7$ is kept

Certification Body

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this License, in accordance with the ENEC Requirements. The Designated License holder is entitled to use the ENEC 15 Mark (as shown in annex 1) for the Certified Product manufactured at the production site(s) identified above in accordance with the ENEC Mark Service Agreement including without limitation the ENEC Mark Testing and Certification Services Service Terms. Only those Products bearing the ENEC Mark should be considered as being covered by UL's ENEC Mark Service. This License shall remain valid unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).

