

ENEC+ LICENCE

Licence No. ENEC-01182-A3-PLUS-UL
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Licence Holder Philips Lighting B.V.
 High Tech Campus 45
 Eindhoven, 5656 AE The Netherlands

Production site



ENEC License No. ENEC-01182-A3

Certification Mark See Annex 1

Certified Product Model Built-in LED Module
 Fortimo SLM C zcc dd m Lee s Gi a
 See Page 3-4

Trademark **PHILIPS**

Rated Voltage / Frequency See Rated Current/Power

Rated Current / Power I_{max} 2750 mA V_{max} 42 V

(see Test Report for further performance ratings)

Insulation Class --

Degree of protection (IP) --

Complying with following European Standards for safety and the EPRS for performance EPRS 001 2015-01; IEC 62717 (ed.1)

EPRS Test Report No. Additional 4787363259.2 issue on 2016-06-30

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 and ENEC+ Requirements. The Designated License holder is entitled to use the ENEC 15 Mark(s) (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(s) should be considered as being covered by UL's ENEC and ENEC+ Mark Services. 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with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).

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Optical and electrical ratings (COB Type 1211, 1200mA, Tp 85°C):

Model	Min - Typ. Luminous Flux (lm)	Power (W)	Efficacy (lm/W)	CCT	CRI
Fortimo SLM C 930 CW 1211 L13 2024 G6	3660 - 4070	42	97	3000	92
Fortimo SLM C 925 FWW 1211 L19 2828 G6	3164 - 3516	41,6	84	2500	93
Fortimo SLM C 930 FPR 1211 L19 2828 G6	3185 - 3539	41,6	85	3000	88
Fortimo SLM C 830 PW 1211 L13 2024 G6	5018 - 5575	41,8	134	3000	82
Fortimo SLM C 930 PW 1211 L13 2024 G6	4315 - 4795	41,8	115	3000	92
Fortimo SLM C 935 PW 1211 L19 2828 G6	4535 - 5039	41,7	121	3500	92
Fortimo SLM C 940 PW 1211 L19 2828 G6	4656 - 5174	41,7	124	4000	92
Fortimo SLM C 740 1211 L19 2828 G6	5837 - 6485	41,5	156	4000	72
Fortimo SLM C 830 1211 L19 2828 G6	5115 - 5683	41,5	137	3000	82
Fortimo SLM C 835 1211 L19 2828 G6	5220 - 5800	41,5	140	3500	82
Fortimo SLM C 840 1211 L19 2828 G6	5325 - 5917	41,5	143	4000	82
Fortimo SLM C 850 1211 L19 2828 G6	5325 - 5917	41,5	143	5000	82
Fortimo SLM C 857 1211 L19 2828 G6	5326 - 5918	41,5	143	5700	82
Fortimo SLM C 927 1211 L19 2828 G6	4043 - 4492	41,5	109	2700	92
Fortimo SLM C 930 1211 L19 2828 G6	4197 - 4663	41,5	113	3000	92

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Appendix DEMKO CERTIFICATE

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Product Key:

Variant series : **Fortimo SLM C** *zcc dd m Lee s Gi a*

Where:

- z = CRI of LED divided by 10 (one digit, may be "7" or "8" or "9");
- c = Color temperature of LED divided by 100 (two digits, may be a value between 25 and 57);
- dd = Color of light (two or three characters or none, may be "CW" or "FP" or "FPR" or "FW" or "FWW" or "PW" or blank)
- m = Die matrix (4 digits, may be "1202s" or "1203" or "1204" or "1204s" or "1205" or "1208" or "1211" or "1216")
- ee = Diameter of Light Emitting Surface (LES) in mm (one or two digits, may be a value between 6,5 and 23);
- s = CoB size in mm (four digits, example 2828: CoB dimensions = 28 mm x 28 mm);
- i = Number of generation of COB (one digit, may be '6');
- a = Alphanumeric commercial suffix for commercial purposes (optional)

Maximum electrical ratings of the series:

CoB Type (Die matrix)	Diameter of LES of CoB [mm]	DC Current [mA]	Power [W]	Power Density of CoB [W/mm2]
1216	23	2750 (Vf tot 41 V)	113	0,27
1211	19	2400 (Vf tot 41 V)	98	0,35
1208	15	1710 (Vf tot 41 V)	70	0,40
1205	13	1050 (Vf tot 41 V)	43	0,32
1204	13	850 (Vf tot 41 V)	35	0,26
1204s	9	740 (Vf tot 41 V)	30,3	0,47
1203	9	570 (Vf tot 41 V)	23	0,36
1202s	6,5	380 (Vf tot 41 V)	15,5	0,47

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Appendix DEMKO CERTIFICATE

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Variant series : **Fortimo SLM zcc Lee hh s Gij a**

Where:

z = CRI of LED divided by 10 (one digit, may be "7" or "8" or "9");
cc = Color temperature of LED divided by 100 (two digits, may be a value between 25 and 57);
ee = Diameter of Light Emitting Surface (LES) in mm (one or two digits, may be a value between 6,5 and 23);
hh = Holder type (two characters or none, may be "DL" or "PI" or "ZP" or blank);
s = CoB size in mm (four digits, example 2828: CoB dimensions = 28 mm x 28 mm);
i = Number of generation of COB (one digit, may be '6');
j = Number of generation of Holder (one digit, may be "1" or "2");
a = Alphanumeric commercial suffix for commercial purposes (optional)

The variant series 3 differs from the variant series 2 for different product key, for the presence of LED CoB + LED Holder and for different maximum ratings for CoB Type 1216.

Maximum electrical ratings of the series:

CoB Type	Diameter of LES of CoB [mm]	DC Current [mA]	Power [W]	Power Density of CoB [W/mm2]
1216	23	2400 (Vf tot 41 V)	98	0,24
1211	19	2400 (Vf tot 41 V)	98	0,35
1208	15	1710 (Vf tot 41 V)	70	0,40
1205	13	1050 (Vf tot 41 V)	43	0,32
1204	13	850 (Vf tot 41 V)	35	0,26
1204s	9	740 (Vf tot 41 V)	30,3	0,47
1203	9	570 (Vf tot 41 V)	23	0,36
1202s	6,5	380 (Vf tot 41 V)	15,5	0,47



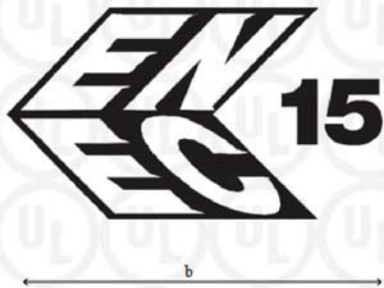
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Annex 1 to Licence No. ENEC-01182-A3-PLUS-UL

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

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