Ref. Certif. No.

DK-154883-M1-UL

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Constant Voltage Built-in LED Module
Name and address of the applicant	Signify Netherlands B.V. High Tech Campus 48 EINDHOVEN 5656 AE Netherlands
Name and address of the manufacturer	Signify Netherlands B.V. High Tech Campus 48 EINDHOVEN 5656 AE Netherlands
Name and address of the factory	
Note: *When more than one factory, please report on page 2*	☒ Additional Information on page 2
Ratings and principal characteristics	24 V ⎓ t_c: 75 °C ☒ Additional Information on page 2 and 3
Trademark / Brand (if any)	PHILIPS or signify
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	InteGrade a o r l xmm (y") cz n f Gg s ☒ Additional Information on page 2 and 3
Additional information (if necessary may also be reported on page 2)	The report was revised to include technical modifications. National Differences: EU Group Differences ☒ Additional Information on page 3
A sample of the product was tested and found to be in conformity with	IEC 62031:2018
As shown in the Test Report Ref. No. which forms part of this Certificate	4791250693.3 issued on 2025-10-15

This CB Test Certificate is issued by the National Certification Body

UL Solutions

☐ UL Solutions (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
☒ UL Solutions (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
☐ UL Solutions (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
☐ UL Solutions (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2025-10-20
Original Issue Date: 2024-07-03

Signature:
Thomas Wilson

Factory(ies):

Additional Model Detail(s):
Product Key:
Main series:
InteGrade *a o r l* **x**mm *(y") cz n f* **G***g s*
Where:
a = Assembly type (may be “F” or “FIX” or ”fixture” or “engine”)
o = Optic type (may be “NB” (Narrow Beam) or “UB” (defrost Narrow Beam) or "ECO" (half scattered) or blank (defrost lens))
r = Version indication (may be “Va” or “value” or ”Vi” or “vision” or blank)
l = Lumen indication (may be “NB” (Narrow Beam) or “HL” (High Lumen) or “HF” (High Flux) or blank)
x = Module length in mm (three or four digits)
(y") = Module length in inch (one or two digits or blank)
c = CRI of LED divided by 10 (one character, may be “8” or “9” or “C” (Cool) or “W” (Warm) or blank)
z = CCT of LED module divided by 100 (two characters, may be a value between 22 and 65 or “WR” (White Red) or “XR” (Extra Red) or blank)
n = Color nuance (may be “PW” (Premium White) or “Rose” or blank)
f = Fixture type (may be “SD” or “CTR” or blank)
g = Number of LED module’s generation (may be “1” or “2” or “3” or “4” or “5” or blank)
s = Commercial suffix for commercial purposes (optional)

Maximum ratings:

Assembly Type	Length [mm]	Power [W]	DC Current [mA]	Number of LEDs	CCT [K]	t_c [°C]
LED module’s generation *g* ≤ 3						
engine	1725	60	2640	336	6500	70
F or FIX or fixture	1750	120	5280	672	6500	70
LED module’s generation *g* = 4						
engine	1750	51,1	2128	273	6500	70
F or FIX or fixture	1600	61	2540	528	6500	70
LED module’s generation *g* = 5						
engine	1660	24	1000	284	6500	75

Additional information (if necessary)

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Date: 2025-10-20
Original Issue Date: 2024-07-03

Signature:

Thomas Wilson

Additional Model Detail(s): (Cont'd)
Product Key:
Variant series:
CertaFlux LCM400 *r* **x**mm *cz* **Geng** *s*
Where:
r = Version indication (may be "Va" (value) or "Vi" (vision) or blank)
x = Module length in mm (three or four digits)
c = CRI of LED divided by 10 (one character, may be "8" or "9" or "C" (Cool) or "W" (Warm))
z = CCT of LED module divided by 100 (two characters, may be a value between 27 and 50 or "WR" (White Red))
g = Number of LED module's generation (may be "3")
s = Commercial suffix for commercial purposes (optional)

Maximum ratings:

Length [mm]	Power [W]	DC Current [mA]	Number of LEDs	CCT [K]	t_c [°C]
1200	12	500	112	5000	70

Additionally evaluated to:
EN IEC 62031:2020, EN IEC 62031:2020/A11:2021

- The LED Module shall be energized only by a separately approved power supply 24 V⎓ constant voltage, SELV and short-circuit proof. The connection to power supply shall be made by the DC plug with connecting leads (tails) provided with the Module.
- When two or more LED Modules are connected in a daisy chain configuration (string) the total maximum load of daisy chain shall be 100 W (Maximum supply current: 4,2 A).
- The customer is obligated to add an appropriated cooling system to the LED Module in order to not exceed t_c value.
- Connecting leads of the Module shall be considered as "internal wiring" on the appliances in which the Module will be installed.
- The Module has been evaluated according to IEC TR 62778:2014: Risk Group 1.
- The Module (as required by the client) has been also evaluated according to clause 4.14.1 of IEC/EN 60598-1 Standard, clauses 21.1, 22.31 and 30.2 of IEC/EN 60335-1 standard, clauses 7.1, 19.104 and Annex CC of IEC/EN 60335-2-24 standard, clauses 7.1, 19.103, 22.114 and Annex BB of IEC/EN 60335-2-89 standard and Clause 5.3 of IEC/EN 60079-7 (for G4 and G5) as required by clause 22.112 of IEC/EN 60335-2-89.
- The Module (as required by the client) have been also evaluated according to IEC 62262 (ed. 1.1) and IEC 60068-2-75 (ed. 2): IK 02 test performed with positive results.

Summary of Modifications:
Add InteGrade G5 models, and so updated product key, rating table and the relevant; add one factory.

Additional information (if necessary)

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