

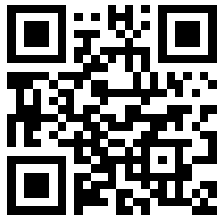
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ENEC-04756-M3

Issue date

2025-11-24



This is to acknowledge that

Signify Netherlands B.V.

High Tech Campus 48 EINDHOVEN 5656 AE Netherlands

has had

Built-in LED Module

Main series: Fortimo SLM C (z)(cc) (d) (m) L(ee) (s) G(i)(a)

See page 4 for additional Information

evaluated and meets the requirements of the standard

EN IEC 62031:2020, EN IEC 62031:2020/A11:2021

Test Report Nos. 4791109019-2 issued on 2025-11-20

Certification Manager

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See UL Product iQ® at <https://iq.ulprospector.com> for additional information.

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TECHNICAL DETAILS

Production site(s)

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Ratings SELV input, I_{max} 4140 mA $\overline{=}$ V_{max} 55 V

Maximum ratings of the series:

CoB Type (Die matrix)	Diameter of LES of CoB [mm]	CCT [K]	DC Current [mA]	Power [W]	Power Density/LES of CoB [W/mm ²]	t _c [°C]
1304	9,8	≤ 4000	480 (V _{f tot} 40V)	19,2	0,25	105
1313	18,5	≤ 4000	1560 (V _{f tot} 40V)	62,4	0,23	105
1309	15	≤ 4000	1080 (V _{f tot} 40V)	43,2	0,24	105
1319	23	≤ 4000	2280 (V _{f tot} 40V)	91,2	0,22	105
1201	6,5	≤ 5000	230 (V _{f tot} 41V)	9,4	0,28	105
1202	6,5	≤ 5000	460 (V _{f tot} 41V)	18,9	0,57	105
1202	6,5	≤ 5000	460 (V _{f tot} 41V)	18,9	0,57	105
1203	9,8	≤ 5000	690 (V _{f tot} 41V)	28,3	0,38	105
1203	9	≤ 5000	690 (V _{f tot} 41V)	28,3	0,44	105
1204	9,8	≤ 5000	920 (V _{f tot} 41V)	37,7	0,50	105
1204	9	≤ 5000	920 (V _{f tot} 41V)	37,7	0,59	105
1205	14,5	≤ 5000	1150 (V _{f tot} 41V)	47,2	0,29	105
1205	13	≤ 5000	1150 (V _{f tot} 41V)	47,2	0,36	105
1206	14,5	≤ 5000	1380 (V _{f tot} 41V)	56,6	0,34	105
1206	13	≤ 5000	1380 (V _{f tot} 41V)	56,6	0,43	105
1208	14,5	≤ 5000	1840 (V _{f tot} 41V)	75,4	0,46	105
1208	15	≤ 5000	1840 (V _{f tot} 41V)	75,4	0,43	105
1210	14,5	≤ 5000	2300 (V _{f tot} 41V)	94,3	0,57	105
1211	22	≤ 5000	2530 (V _{f tot} 41V)	103,7	0,27	105
1211	18,5	≤ 5000	2530 (V _{f tot} 41V)	103,7	0,39	105
1212	22	≤ 5000	2760 (V _{f tot} 41V)	113,2	0,30	105
1216	22	≤ 5000	3680 (V _{f tot} 41V)	150,9	0,40	105
1216	23	≤ 5000	3680 (V _{f tot} 41V)	150,9	0,36	105
1812	22	≤ 5700	2760 (V _{f tot} 55V)	151,8	0,39	105
1818	22	≤ 5700	4140 (V _{f tot} 55V)	227,7	0,588	105

Additional information:

These modules have been evaluated according to IEC/TR 62778 and the Lamp classification Group for Blue Light Hazard is Risk Group 1 Unlimited for modules having generation Gen8 UHE at maximum rated current, and is Risk Group 2 for modules having generation Gen8 and Gen8 HE at maximum rated currents. Gen8 and Gen8 HE are classified as of Risk Group 1 Unlimited if they are used according to the maximum currents listed below:

CoB Type (Gen8 UHE)					
CoB Type (Die matrix)		1319	1309	1304	1313
Maximum currents for RG1 [mA]	CCT ≤ 4000 K	2280	1080	480	1560

CoB Type (Gen8 HE)												
CoB Type (Die matrix)		1201	1202	1203	1204	1205	1206	1208	1210	1211	1212	1216
Maximum currents for RG1 [mA]	zcc=840	163	325	488	650	813	975	1300	1625	1788	1950	2600
	zcc=940	168	335	503	670	838	1005	1340	1675	1843	2010	2680
	zcc=850	120	240	360	480	600	720	960	1200	1320	1440	1920
	zcc=950	120	240	360	480	600	720	960	1200	1320	1440	1920

CoB Type (Gen8)												
CoB Type (Die matrix)		1201	1202	1203	1204	1205	1206	1208	1210	1211	1212	1216
Maximum currents for RG1 [mA]	zcc=757	125	250	375	500	625	750	1000	1250	1375	1500	2000
	zcc=857	125	250	375	500	625	750	1000	1250	1375	1500	2000
	zcc=940	125	250	375	500	625	750	1000	1250	1375	1500	2000

CoB Type (Gen8) con't			
CoB Type (Die matrix)		1812	1818
Maximum currents for RG1 [mA]	zcc=757	1500	2250
	zcc=857	1500	2250
	zcc=940	1500	2250

Additional Information

The report was revised to include technical modifications.

- Add G8 UHE (Die matrix 1304, 1313) models.
 - Update Annex 2.
 - Update marking plate.
 - Update ratings table in GPI.
 - Update photobiological test report number.
- See test report for details

This Certificate replaces earlier issued ENEC Certificate No. ENEC-04756-A2 dated 2025-06-17

Models (continued from page 1)

Series:

Product Key:

Main series: Fortimo SLM C (z)(cc) (d) (m) L(ee) (s) G(i)(a)

Where:

(z) = CRI divided by 10 (may be blank when d = "CED", or one digit, may be "7", "8", or "9");

(cc) = CCT divided by 100 (two digits or six characters (or blank when d = "CED"), may be a value between 22 and 57 (or "27-865" or "27-965" (when d = "TW")));

(d) = Flavour of light (two or three characters, may be "Px (x could be W, C, S, A or any character)" or "CW" or "FPR" or "FWW" or "FLS" or "FVF" or "FFS" or "FIS" or "CED" or "TW" or blank);

(m) = Die matrix (four digits, example 1216; chip configuration = 12 chips in series per string & 16 strings in parallels, (or blank when d = "CED"));

(ee) = Diameter of the Light Emitting Surface (LES) in millimeter (one or two digits, example 23; LES dimensions = 23mm);

(s) = PCB size in mm (four digits, example 2828: CoB dimension = 28mm × 28mm);

(i) = Number of generation of CoB (one digit, may be "8");

(a) = Suffix for commercial purposes, may contain a blank (optional).

*each of the brackets in product key are optional

ENEC LICENSE FORM OF THE ENEC MARK



15 is the 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.