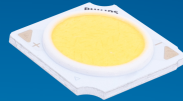


PHILIPS

Fortimo

LED

Fortimo SLM C 1304 L09
1313 G8N UHE



Datasheet

200lm/W chip-on-board that makes sense!

Fortimo SLM C 1304 L09 1313 G8N UHE

200lm/W claims are not new in the market for COB. While such claims, at a closer look, are either at very low temperature like 25°C, or at very low driving current and flux output, which doesn't make sense to real applications like retail.

To further build on the success of Fortimo SLM G7(N) HE and HE+ which is well recognized by the market, PHILIPS Fortimo SLM G8(N) UHE offers first-of-its-kind 200lm/W, at tc temperature of 50°C, which meets the actual application requirements.

Key features and benefits

- Specially engineered chip for optimal quantum efficiency at low driving current (contributing to the high efficacy)
- Further optimized phosphor recipe based on HE+ technology for even higher efficacy without sacrificing Quality of Light and Reliability
- Lower thermal resistance to enable lower operating temperature (better performance) or luminaire miniaturization
- Same footprint as Fortimo SLM G7(N), ensuring compatibility with existing holders and optics
- Optimized string configuration for higher system efficiency together with the existing PHILIPS indoor point drivers
- Available in both standard color, Premium White and Premium Ambiance

December 2025



Ordering data

Commercial product name	EOC	12NC	EPREL No.	Box quantity
Fortimo SLM C 930 1304 L09 1313 G8N UHE	8721103 146984 00	9290 048 68501	2522549	20
Fortimo SLM C 935 1304 L09 1313 G8N UHE	8721103 147011 00	9290 048 68601	2522554	20
Fortimo SLM C 940 1304 L09 1313 G8N UHE	8721103 147042 00	9290 048 68701	2522553	20
Fortimo SLM C 930 PW 1304 L09 1313 G8N UHE	8721103 147073 00	9290 048 68801	2522546	20
Fortimo SLM C 935 PW 1304 L09 1313 G8N UHE	8721103 147103 00	9290 048 68901	2522552	20
Fortimo SLM C 940 PW 1304 L09 1313 G8N UHE	8721103 147134 00	9290 048 69001	2522556	20

Not all products are globally available by default.

Please contact your local sales representative for local availability and activation conditions.

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 1304 L09 1313 G8N UHE	150	480	480	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	50	85	85	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

*** Maximum value for safe operation, do not operate above this value

Optical characteristics

Fortimo SLM C 930 1304 L09 1313 G8N UHE
Fortimo SLM C 935 1304 L09 1313 G8N UHE
Fortimo SLM C 940 1304 L09 1313 G8N UHE
Fortimo SLM C 930 PW 1304 L09 1313 G8N UHE
Fortimo SLM C 935 PW 1304 L09 1313 G8N UHE
Fortimo SLM C 940 PW 1304 L09 1313 G8N UHE

CCT	3000K	3500K	4000K	3000K PW	3500K PW	4000K PW	Unit
Luminous flux (Φuse)*	970	990	1010	965	975	995	lm
Efficacy	183	187	191	182	184	188	lm/W
Color consistency	2	2	2	2	2	2	SDCM
Color coordinates (CIEx, CIEy)	0.434, 0.403	0.407, 0.392	0.382, 0.380	0.422, 0.386	0.398, 0.376	0.374, 0.364	
Min. CRI	90	90	90	90	90	90	
Min. R9	50	50	50	50	50	50	
Photometric code	930/259	935/259	940/259	930/259	935/259	940/259	
Photobiological safety	RG1 unlimited	RG1 unlimited	RG1 unlimited	RG1 unlimited	RG1 unlimited	RG1 unlimited	
Energy label EPREL	C 	C 	C 	C 	C 	C 	

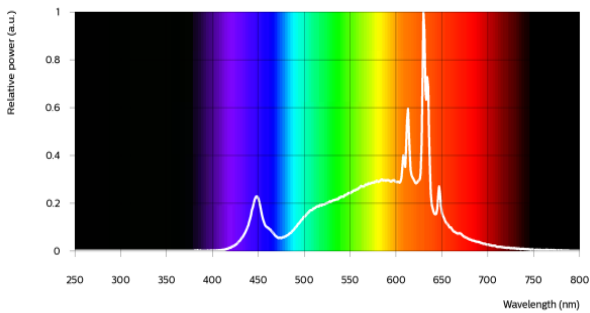
Measurement precision for flux +/- 5%. Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI 1.5.

*Flux lower / upper spec limit: -5% / +10% of typical.

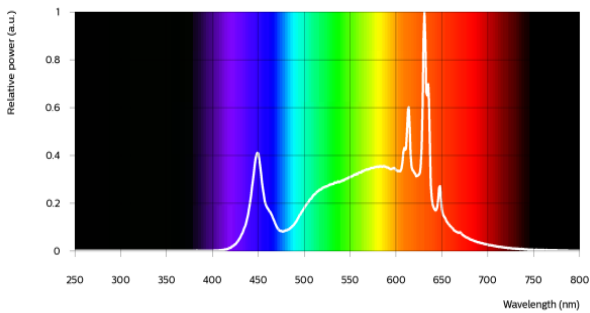
Tuning table

Operation Point		Current	3000K	3500K	4000K	3000K PW	3500K PW	4000K PW	Unit
Tc = 25°C	Luminous flux	80% I-nom 120mA	808	825	841	805	812	828	lm
		I-nom 150mA	1005	1026	1045	1001	1010	1030	lm
		I-max 480mA	3004	3066	3126	2992	3020	3079	lm
	Efficacy	80% I-nom 120mA	192	196	200	192	193	197	lm/W
		I-nom 150mA	190	194	197	189	191	194	lm/W
		I-max 480mA	161	164	167	160	162	165	lm/W
Tc = 50°C	Luminous flux	80% I-nom 120mA	780	796	811	777	784	799	lm
		I-nom 150mA	970	990	1010	965	975	995	lm
		I-max 480mA	2895	2955	3012	2883	2910	2968	lm
	Efficacy	80% I-nom 120mA	186	189	193	185	187	190	lm/W
		I-nom 150mA	183	187	191	182	184	188	lm/W
		I-max 480mA	156	160	163	156	157	160	lm/W
Tc = 85°C	Luminous flux	80% I-nom 120mA	733	748	763	730	737	751	lm
		I-nom 150mA	912	931	948	908	916	934	lm
		I-max 480mA	2715	2771	2825	2704	2730	2784	lm
	Efficacy	80% I-nom 120mA	179	183	186	178	180	183	lm/W
		I-nom 150mA	175	179	182	175	176	180	lm/W
		I-max 480mA	148	151	154	147	148	151	lm/W

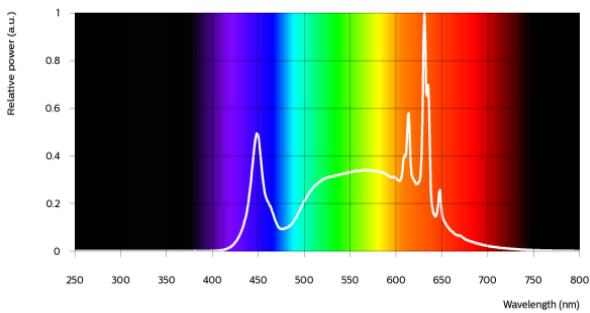
3000K



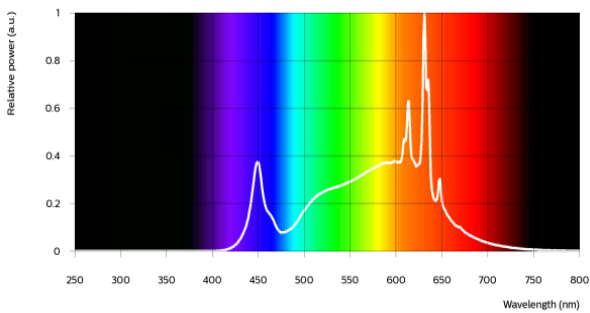
3500K



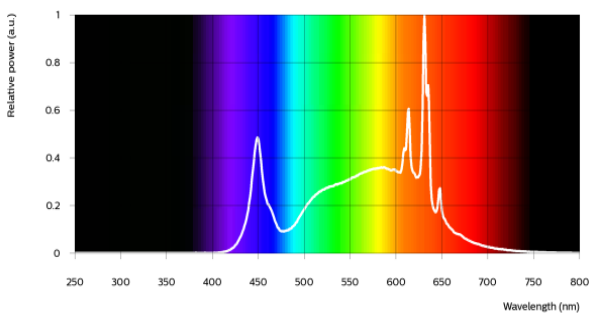
4000K



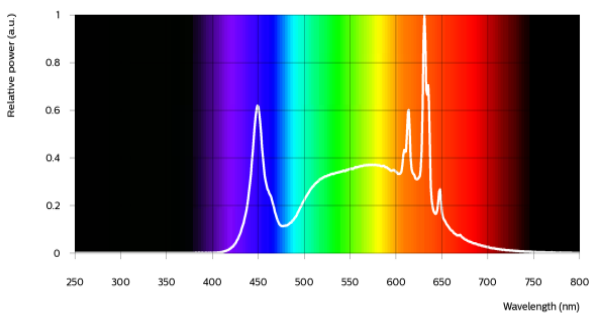
3000K PW

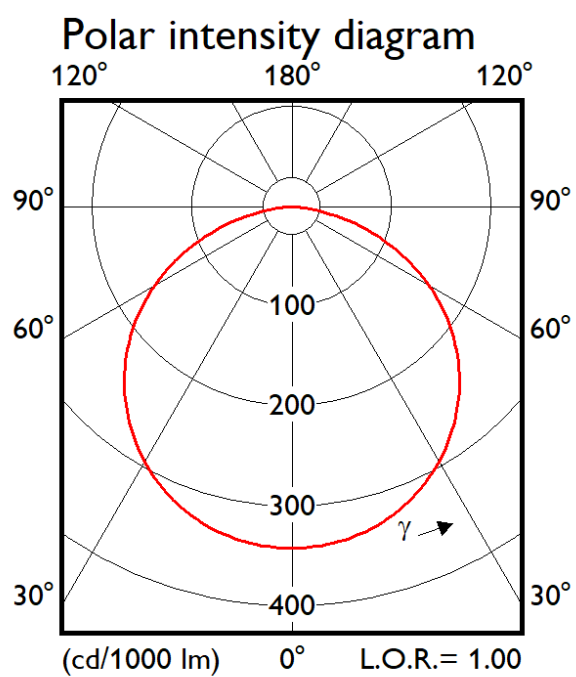


3500K PW



4000K PW





Electrical characteristics

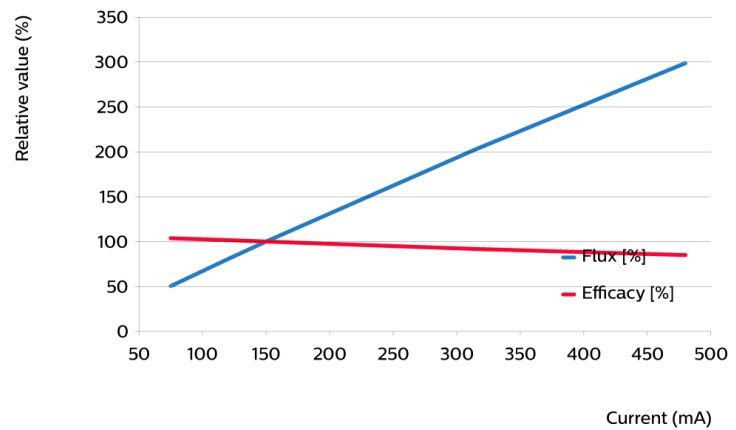
Parameter	Min	Typ	Max	Unit
Forward voltage	33.0	35.3	37.0	V
Power consumption		5.3		W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

Measurement precision for Vf +/- 3%. Measurement precision for power +/- 3.3%

Tuning information

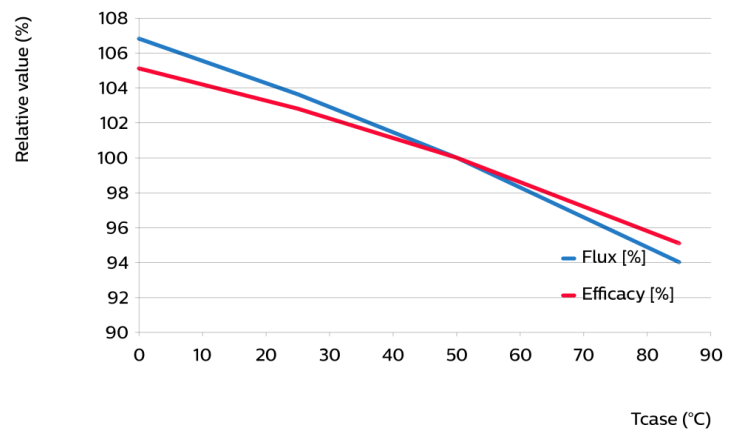
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
480	299	85
315	203	92
150	100	100
120	80	102
75	50	104



Flux and efficacy versus temperature at Tc (at I nominal)

Tc [°C]	Flux [%]	Efficacy [%]
85	94	95
50	100	100
25	104	103
0	107	105



Lumen maintenance

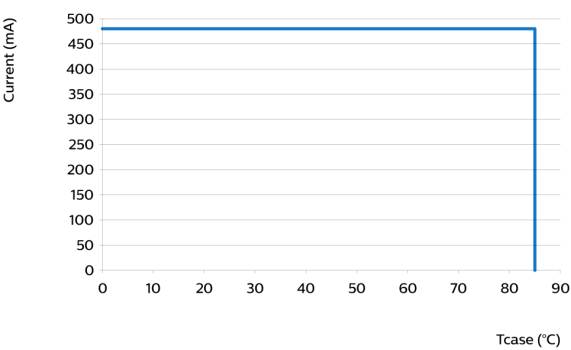
Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 120mA	Tc 50°C	>110	>110	>110	>110	>110	>110	>110	>110	>110
	Tc 65°C	>110	>110	>110	>110	>110	>110	>110	>110	>110
	Tc 85°C	>110	>110	>110	>110	>110	>110	>110	>110	>110
I-nom 150mA	Tc 50°C	>110	>110	>110	>110	>110	>110	>110	>110	>110
	Tc 65°C	>110	>110	>110	>110	>110	>110	>110	>110	>110
	Tc 85°C	>110	>110	>110	>110	>110	>110	>110	>110	>110
I-max 480mA	Tc 50°C	>110	>110	>110	>110	>110	>110	104	88	81
	Tc 65°C	>110	>110	>110	>110	>110	>110	79	67	61
	Tc 85°C	>110	>110	>110	>110	101	92	56	48	44

We use a Philips designed lifetime model, which uses LM80 data as only one of its inputs and assumes a continues operation of the module.
B20 and B10 values are calculated by means of statistical techniques.

Lifetime

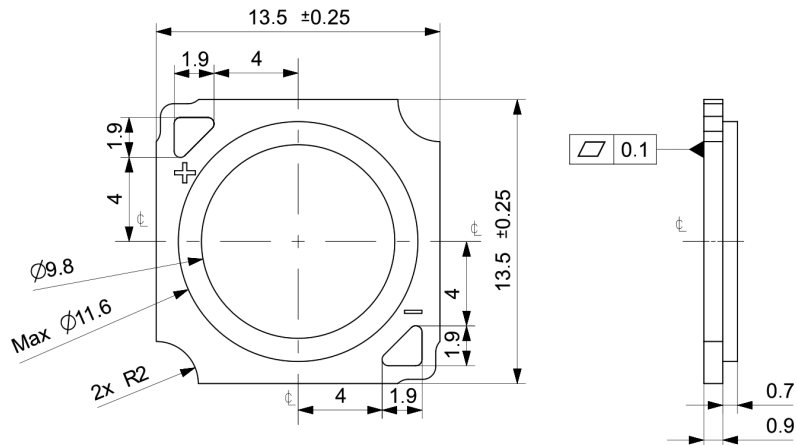
Parameter	Value	Unit
M70F50 nominal	>110000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	13.25	13.5	13.75	mm
Width	13.25	13.5	13.75	mm
Height PCB	0.8	0.9	1	mm
Height including dam	1.3	1.6	1.9	mm
Product mass		0.51		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		480	mA
Case temperature (Tc-max)		85	°C
ESD (direct contact)	8		kV
Working voltage		60	V _{dc}
Ambient temperature	-20	40	°C
Storage temperature	-40	80	°C

Application information

Certificates and Standards

CB
CE
ENEC
ENEC+
EPRS 001
IEC/EN 62031
UKCA
UL
UL 8750

Environmental

RoHS/REACH

Application

Dimming	Yes
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