PHILIPS

Fortimo

LED

Fortimo SLM C 1208 L15 2024 G7 HE



Datasheet

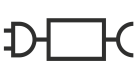
Fortimo SLM C 1208 L15 2024 G7 HE

Fortimo LED SLM Gen 7 CRI90 HE continues to focus on the combination of Quality of Light and efficacy. The new HE range has a significant improvement on CRI90 efficacy and close the efficacy gap to < 5% vs. CRI80 range. In the meantime, the new HE range will be delivered with 2 SDCM color consistency. The superior efficacy and color consistency of Fortimo SLM G7 HE will further unlock the extraordinary potential of light, facilitate the innovation and inspire the next generation luminaire design at our OEM customers. Please also check the online Easy Design-in Tool for your perfect system combination (www.easydesignintool.com).

Key features and benefits

Best quality of light available for all application
10%-12% efficacy improvement vs. current G7 CRI90 range.
Excellent color consistency management (2 SDCM)
System proposition (Module + Driver + Holder)
Flexibility to optimize luminaire performance (high efficacy or high lm output)
50,000 hours lifetime

June 2021









Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo SLM C 930 PW 1208 L15 2024 G7 HE	8719514 280281 00	9290 028 33706	20
Fortimo SLM C 930 PC 1208 L15 2024 G7 HE	8719514 280380 00	9290 028 34306	20

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 1208 L15 2024 G7 HE	750	see performance window	1500	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T_c (case temperature at T_c point)	85	see performance window	95	°C

* Nominal value at which typical performance is specified

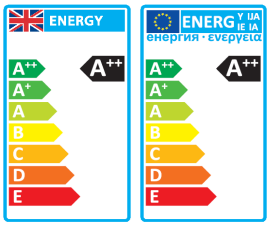
** Value at which life time is specified

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

Optical characteristics - table per color (CCT)

Fortimo SLM C 930 PW 1208 L15 2024 G7 HE

Parameter	Min	Typ	Max	Unit
Luminous flux	3530	3716	4087	lm
Module efficacy		146		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			2	SDCM
CRI	90	92		
R9	50			
Photometric code		930/259		
Photobiological safety			RG1 unlimited	

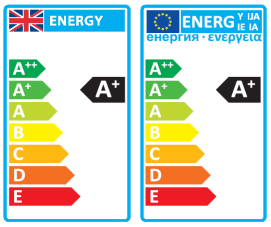


Measurement precision for flux +/- 5%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI 1.5

Operation point	930	lm	lm/W
80% I-nom 600mA	Tc 25 °C	3392	166
	Tc-nom 85 °C	3046	152
	Tc-max 95 °C	2982	149
I-nom 750mA	Tc 25 °C	4164	160
	Tc-nom 85 °C	3716	146
	Tc-max 95 °C	3633	143
I-max 1500mA	Tc 25 °C	7576	134
	Tc-nom 85 °C	6617	119
	Tc-max 95 °C	6439	116

Fortimo SLM C 930 PC 1208 L15 2024 G7 HE

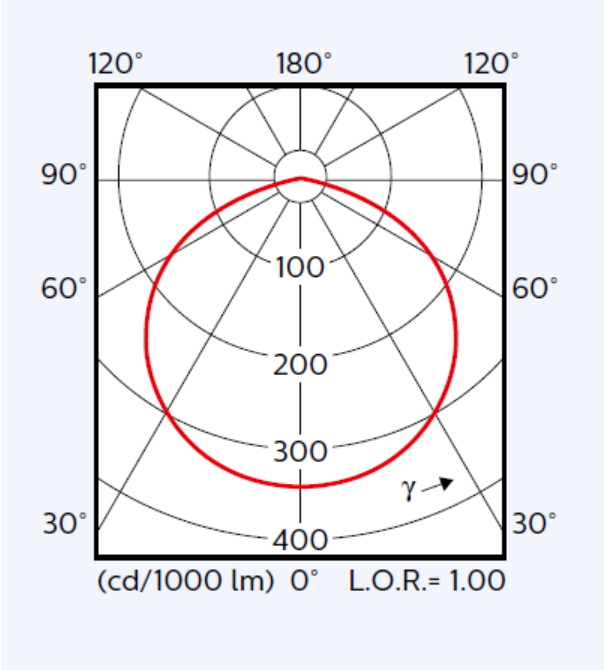
Parameter	Min	Typ	Max	Unit
Luminous flux	3218	3387	3726	lm
Module efficacy		133		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			2	SDCM
CRI	91	93		
R9	70			
Photometric code		930/259		
Photobiological safety			RG1 unlimited	



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

Operation point	930	lm	lm/W
80% I-nom 600mA	Tc 25 °C	3072	150
	Tc-nom 85 °C	2775	138
	Tc-max 95 °C	2715	136
I-nom 750mA	Tc 25 °C	3773	145
	Tc-nom 85 °C	3387	133
	Tc-max 95 °C	3310	130
I-max 1500mA	Tc 25 °C	6893	122
	Tc-nom 85 °C	6051	110
	Tc-max 95 °C	5881	107

Beam shape



Electrical characteristics

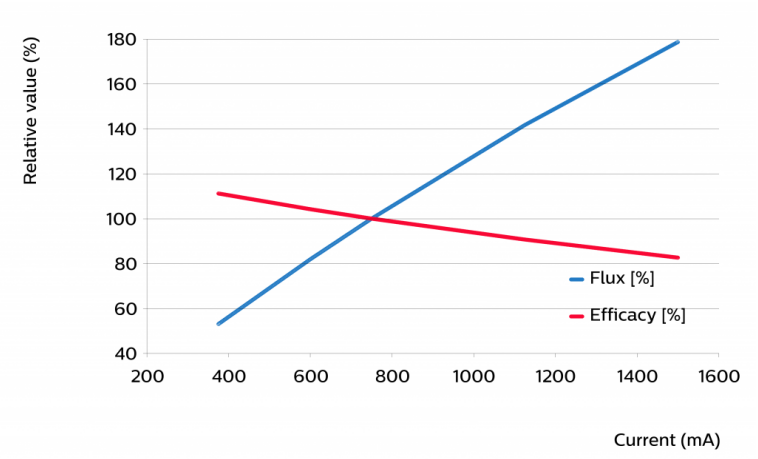
Parameter	Min	Typ	Max	Unit
Forward voltage	31.7	34.0	36.7	V
Power consumption	23.8	25.5	27.5	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

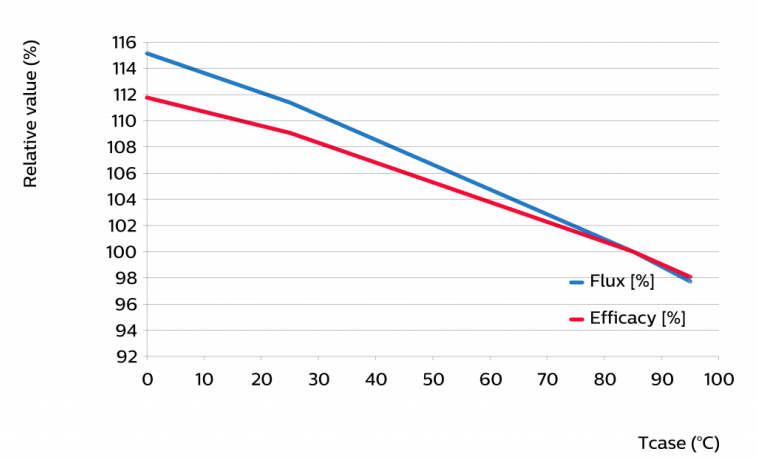
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1500	179	83
1125	142	91
750	100	100
600	82	104
375	53	111



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

Tc [°C]	Flux [%]	Efficacy [%]
95	98	98
85	100	100
25	111	109
0	115	112



Lumen maintenance

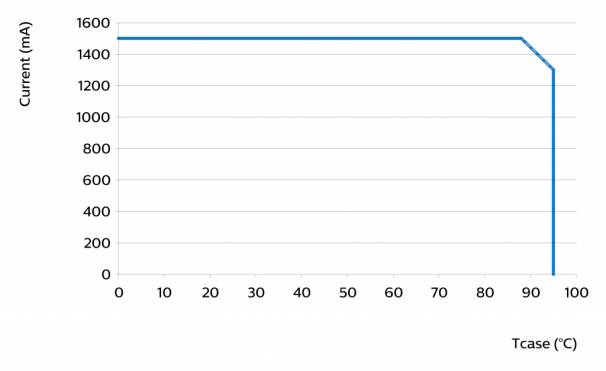
Operation point	Lumen maintenance	L70			L80			L90		
	x 1000 hours	B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I nom 600 mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	>50	40
	Tc nom 85°C	>50	>50	>50	>50	47	38	34	22	18
	Tc max 95°C	>50	>50	41	49	32	26	23	15	12
I nom 750 mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	45	36
	Tc nom 85°C	>50	>50	>50	>50	43	34	31	20	16
	Tc max 95°C	>50	47	38	45	29	24	21	14	11
I max 1500 mA	Tc 65°C	>50	>50	>50	>50	>50	42	37	24	20
	Tc nom 85°C	>50	39	31	37	24	20	18	12	9
	Tc max 95°C	42	27	22	26	17	14	12	8	7

Lifetime

Parameter	Value	Unit
C10 at Tc life	50000	hours
M70F50 nominal	>50000	hours
M70F50 life	>50000	hours

Switching cycles in accordance to EU 1194/2012: >15000.

Performance Window



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1500	mA
Case temperature (Tc-max)		95	°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
IEC 62031:2008/A1:2012/A2:2014
EN 62031:2008/A1:2013/A2:2015
Relevant clauses of IEC 62471:2006 (Incl. IEC/TR 62471-2: 2009 and IEC/TR 62778: 2014)
Relevant clauses of IEC 60838-1:2004/A1:2008/A2:2011 with IEC 60838-2-2:2006 /A1:2012
Relevant clauses of EN 62471:2008 (With IEC/TR 62471-2: 2009 and IEC/TR 62778: 2014)
Relevant clauses of EN 60838-1:2004/A1:2008/A2:2011 with EN 60838-2-2:2006/A1:2012
UL 8750
ENEC+
CE

Application	
Dimming	Yes



© 2021 Signify Holding, IBRS 10461, 5600VB, NL. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.
UK importer address: 3 Guildford Business Park, GU2 8XG

02/06/2021

www.philips.com/oem