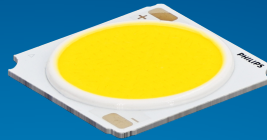


PHILIPS

Fortimo

LED

Fortimo SLM C 8xx 1210
L15 1919 G8N



Datasheet

Best offer of performance and value

Fortimo LED SLM CRI80 G8N Standard

The Fortimo SLM family is Signify's core portfolio, now in its latest generation - Gen 8. This new generation boasts improved efficacy compared to the previous one and an expanded portfolio that includes specific spectrums such as Premium White, Premium Color, and standard color for all applications. It maintains the same two footprints as the previous generation, enabling easy upgrades. Together with other Fortimo SLM G8 product lines, our Fortimo SLM G8 will continuously unlock the extraordinary potential of light, facilitate innovation, and inspire the next generation of luminaire design for our OEM customers. Please also visit the online Easy Design-in Tool for your perfect system combination at www.easydesignintool.com.

Key features and benefits

- +5% efficacy further improvement Vs G7
- Best quality of light available for all applications
- More complete portfolio for easy choice
- Same footprint for easy upgrade
- System proposition

March 2025



Ordering data

Commercial product name	EOC	12NC	EPREL registration #	Box quantity
Fortimo SLM C 827 1210 L15 1919 G8N	8721103 082374 00	9290 048 17601	2270475	20
Fortimo SLM C 830 1210 L15 1919 G8N	8721103 082404 00	9290 048 17701	2270489	20
Fortimo SLM C 835 1210 L15 1919 G8N	8721103 082435 00	9290 048 17801	2270451	20
Fortimo SLM C 840 1210 L15 1919 G8N	8721103 082466 00	9290 048 17901	2270448	20
Fortimo SLM C 850 1210 L15 1919 G8N	8721103 082497 00	9290 048 18001	2270479	20
Fortimo SLM C 857 1210 L15 1919 G8N	8721103 082527 00	9290 048 18101	2270478	20

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 8xx 1210 L15 1919 G8N	900	see performance window	2300	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	65	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)

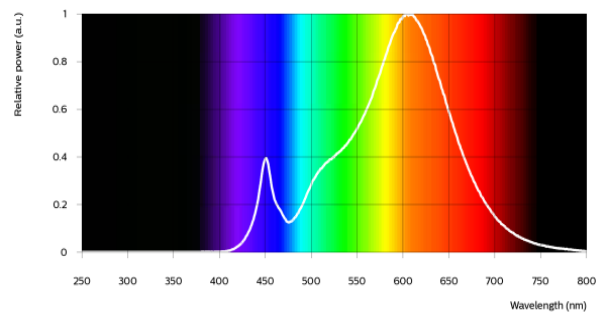
Fortimo SLM C 827 1210 L15 1919 G8N

Parameter	Min	Typ	Max	Unit
Luminous flux	4356	4585	5044	lm
Efficacy		148		lm/W
Correlated color temperature (CCT)		2700		K
Color coordinates (CIEx, CIEy)		(0.458, 0.410)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		827/359		
Photobiological safety		RG1 unlimited		



Measurement precision $\pm 5\%$ for the flux data and $\pm 6\%$ for the efficacy data. Measurement precision for color coordinates ± 0.005 . Measurement precision for CRI ± 1.5 .

Operation point	827	lm	lm/W
80% I-nom 720mA	Tc 25 °C	3897	158
	Tc-nom 65 °C	3728	153
	Tc-max 95 °C	3564	148
I-nom 900mA	Tc 25 °C	4795	153
	Tc-nom 65 °C	4585	148
	Tc-max 95 °C	4382	143
I-max 2300mA	Tc 25 °C	11073	122
	Tc-nom 65 °C	10545	117
	Tc-max 95 °C	10033	113



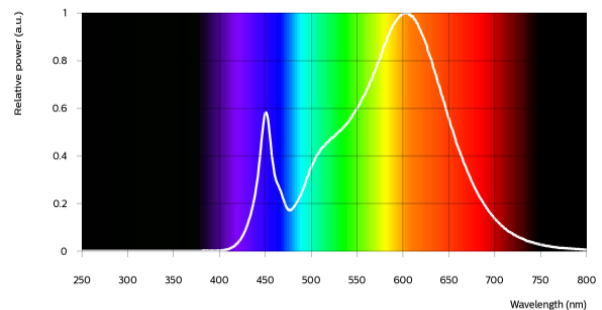
Fortimo SLM C 830 1210 L15 1919 G8N

Parameter	Min	Typ	Max	Unit
Luminous flux	4631	4875	5362	lm
Efficacy		157		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.434, 0.403)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		830/359		
Photobiological safety		RG1 unlimited		




Measurement precision $\pm 5\%$ for the flux data and $\pm 6\%$ for the efficacy data. Measurement precision for color coordinates ± 0.005 . Measurement precision for CRI ± 1.5 .

Operation point	830	lm	lm/W
80% I-nom 720mA	Tc 25 °C	4143	168
	Tc-nom 65 °C	3964	163
	Tc-max 95 °C	3790	157
I-nom 900mA	Tc 25 °C	5098	162
	Tc-nom 65 °C	4875	157
	Tc-max 95 °C	4659	152
I-max 2300mA	Tc 25 °C	11776	130
	Tc-nom 65 °C	11216	125
	Tc-max 95 °C	10673	120

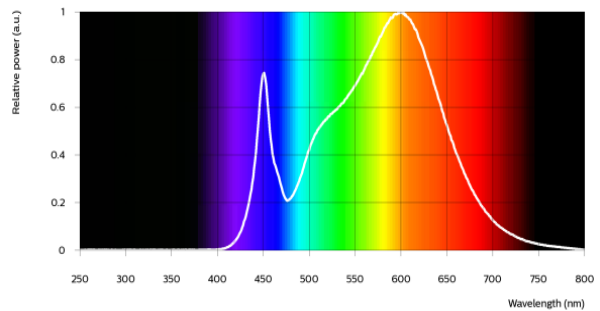


Fortimo SLM C 835 1210 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	4750	5000	5500	lm
Efficacy		161		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.408, 0.393)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		835/359		
Photobiological safety		RG1 unlimited		

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5.

Operation point	835	lm	lm/W
80% I-nom 720mA	Tc 25 °C	4249	172
	Tc-nom 65 °C	4065	167
	Tc-max 95 °C	3887	161
I-nom 900mA	Tc 25 °C	5229	167
	Tc-nom 65 °C	5000	161
	Tc-max 95 °C	4779	156
I-max 2300mA	Tc 25 °C	12079	133
	Tc-nom 65 °C	11505	128
	Tc-max 95 °C	10948	123

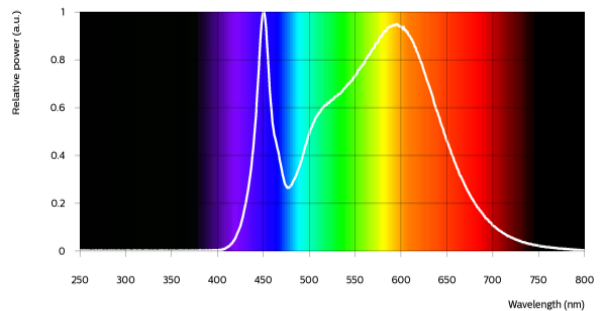


Fortimo SLM C 840 1210 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	4821	5075	5582	lm
Efficacy		164		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.382, 0.380)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		840/359		
Photobiological safety		RG1 unlimited		

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5.

Operation point	840	lm	lm/W
80% I-nom 720mA	Tc 25 °C	4313	175
	Tc-nom 65 °C	4126	170
	Tc-max 95 °C	3945	164
I-nom 900mA	Tc 25 °C	5307	169
	Tc-nom 65 °C	5075	164
	Tc-max 95 °C	4851	158
I-max 2300mA	Tc 25 °C	12261	135
	Tc-nom 65 °C	11679	130
	Tc-max 95 °C	11115	125

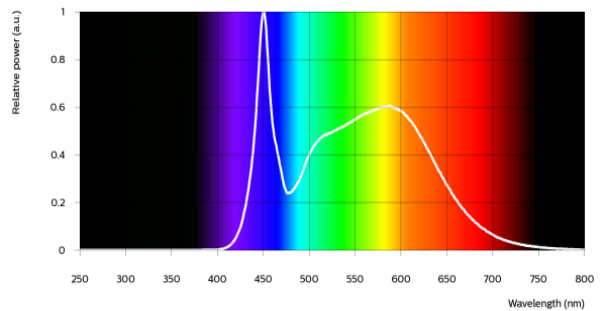


Fortimo SLM C 850 1210 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	4821	5075	5582	lm
Efficacy		164		lm/W
Correlated color temperature (CCT)		5000		K
Color coordinates (CIEx, CIEy)		(0.345, 0.355)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		850/359		
Photobiological safety		RG1 unlimited		

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5.

Operation point	850	lm	lm/W
80% I-nom 720mA	Tc 25 °C	4313	175
	Tc-nom 65 °C	4126	170
	Tc-max 95 °C	3945	164
I-nom 900mA	Tc 25 °C	5307	169
	Tc-nom 65 °C	5075	164
	Tc-max 95 °C	4851	158
I-max 2300mA	Tc 25 °C	12261	135
	Tc-nom 65 °C	11679	130
	Tc-max 95 °C	11115	125

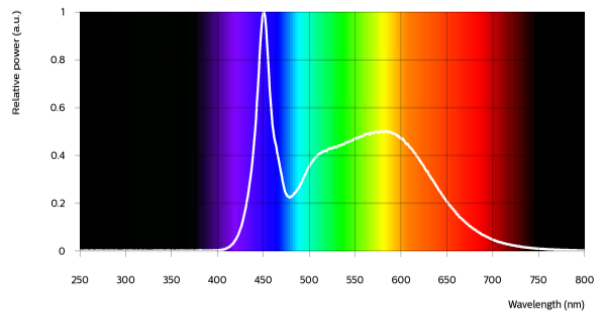


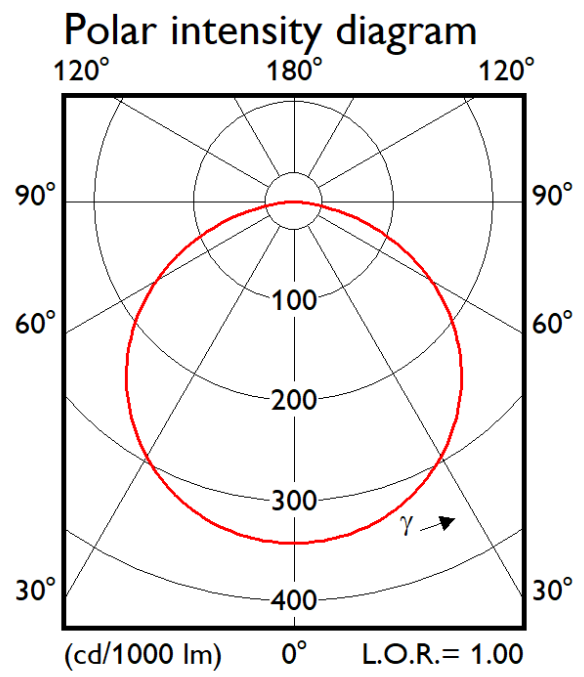
Fortimo SLM C 857 1210 L15 1919 G8N

Parameter	Min	Typ	Max	Unit
Luminous flux	4821	5075	5582	lm
Efficacy		164		lm/W
Correlated color temperature (CCT)		5700		K
Color coordinates (CIEx, CIEy)		(0.329, 0.343)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		857/359		
Photobiological safety		RG1 unlimited		

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5.

Operation point	857	lm	lm/W
80% I-nom 720mA	Tc 25 °C	4313	175
	Tc-nom 65 °C	4126	170
	Tc-max 95 °C	3945	164
I-nom 900mA	Tc 25 °C	5307	169
	Tc-nom 65 °C	5075	164
	Tc-max 95 °C	4851	158
I-max 2300mA	Tc 25 °C	12261	135
	Tc-nom 65 °C	11679	130
	Tc-max 95 °C	11115	125





Electrical characteristics

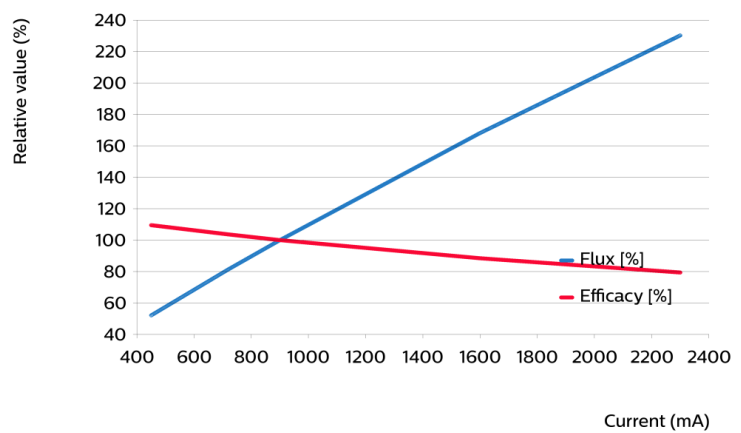
Parameter	Min	Typ	Max	Unit
Forward voltage	32.5	34.5	37.0	V
Power consumption	29.3	31.1	33.3	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

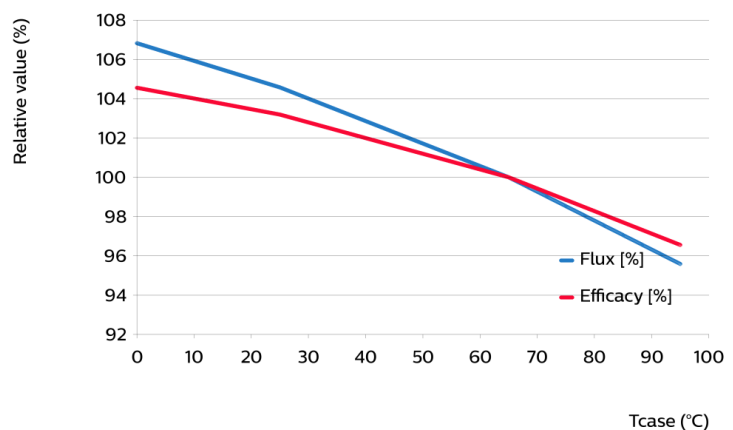
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
2300	230	79
1600	168	88
900	100	100
720	81	104
450	52	109



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

Tc [°C]	Flux [%]	Efficacy [%]
95	96	97
65	100	100
25	105	103
0	107	105



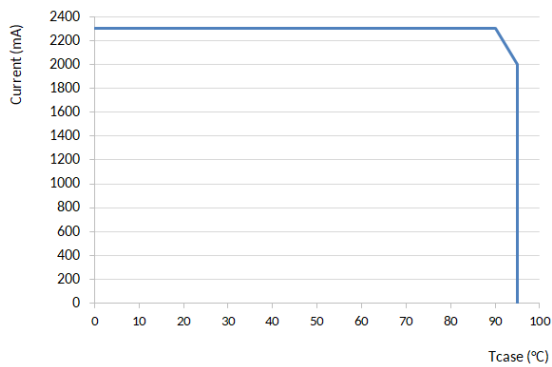
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 729mA	Tc 50°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 65°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 95°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
I-nom 900mA	Tc 50°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 65°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 95°C	>66	>66	>66	>66	>66	>66	>66	>66	62
I-max 2300mA	Tc 50°C	>66	>66	>66	>66	58	53	32	27	25
	Tc 65°C	>66	>66	64	51	43	40	24	20	18
	Tc 95°C	50	42	39	31	26	24	14	12	11

Lifetime

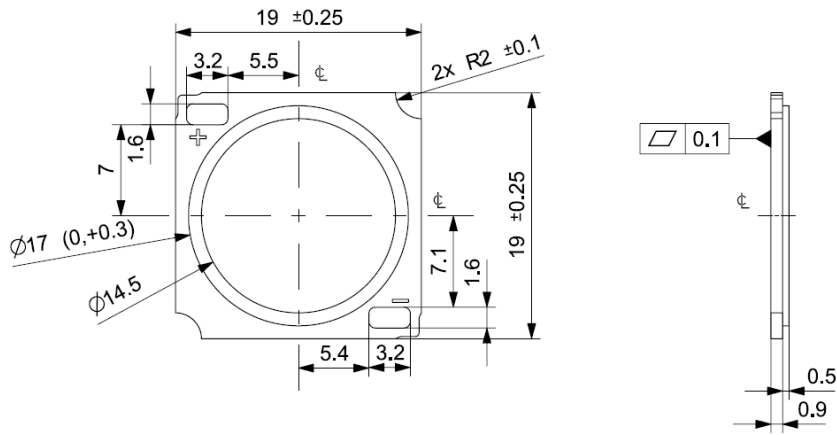
Parameter	Value	Unit
M70F50 nominal	>66000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	18.75	19	19.25	mm
Width	18.75	19	19.25	mm
Height PCB	0.8	0.9	1	mm
Height including dam	1.1	1.4	1.7	mm
Product mass		0.99		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		2300	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

At illumination levels exceeding 1372 lux risk group classification may be RG2.

Application information

Certificates and Standards

CB
 CE
 ENEC
 IEC/EN 62031
 UKCA
 UL
 UL 8750

Environmental

RoHS/REACH

Application

IP rating	No IP-rating
Overheating protection	No
Luminaire class	IEC Class I and Class II
Dimming	Yes



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