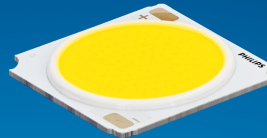


PHILIPS

Fortimo

LED

Fortimo SLM C 8xx 1206
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 1206 L15 1919 G8N	8721103 081230 00	9290 039 62701	2270459	20
Fortimo SLM C 830 1206 L15 1919 G8N	8721103 081261 00	9290 039 62801	2270445	20
Fortimo SLM C 835 1206 L15 1919 G8N	8721103 081292 00	9290 039 62901	2270105	20
Fortimo SLM C 840 1206 L15 1919 G8N	8721103 081322 00	9290 039 63001	2270115	20
Fortimo SLM C 850 1206 L15 1919 G8N	8721103 081353 00	9290 039 63101	2270123	20
Fortimo SLM C 857 1206 L15 1919 G8N	8721103 081384 00	9290 039 63201	2270125	20

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 8xx 1206 L15 1919 G8N	540	see performance window	1380	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

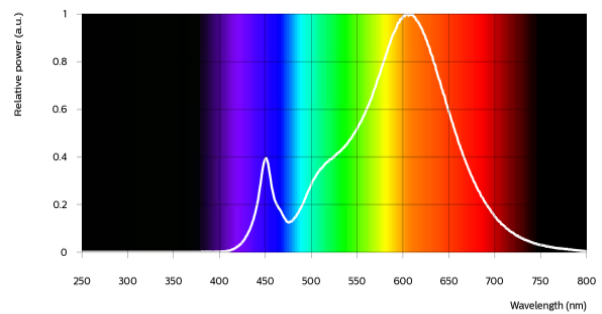
Optical characteristics - table per color (CCT)

Fortimo SLM C 827 1206 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	2688	2830	3113	lm
Efficacy		152		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 432mA	Tc 25 °C	2408	162
	Tc-nom 65 °C	2300	157
	Tc-max 95 °C	2191	152
I-nom 540mA	Tc 25 °C	2964	157
	Tc-nom 65 °C	2830	152
	Tc-max 95 °C	2695	147
I-max 1380mA	Tc 25 °C	6872	127
	Tc-nom 65 °C	6537	122
	Tc-max 95 °C	6197	117

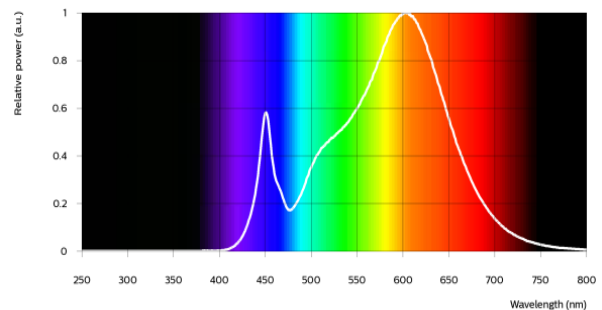


Fortimo SLM C 830 1206 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	2864	3015	3316	lm
Efficacy		162		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 432mA	Tc 25 °C	2565	173
	Tc-nom 65 °C	2450	168
	Tc-max 95 °C	2334	161
I-nom 540mA	Tc 25 °C	3158	167
	Tc-nom 65 °C	3015	162
	Tc-max 95 °C	2871	156
I-max 1380mA	Tc 25 °C	7323	135
	Tc-nom 65 °C	6966	130
	Tc-max 95 °C	6606	125

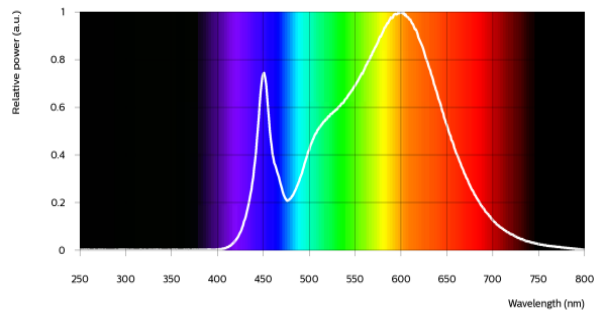


Fortimo SLM C 835 1206 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	2936	3090	3399	lm
Efficacy		166		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 432mA	Tc 25 °C	2629	178
	Tc-nom 65 °C	2511	172
	Tc-max 95 °C	2392	165
I-nom 540mA	Tc 25 °C	3236	171
	Tc-nom 65 °C	3090	166
	Tc-max 95 °C	2943	160
I-max 1380mA	Tc 25 °C	7505	138
	Tc-nom 65 °C	7140	133
	Tc-max 95 °C	6771	128

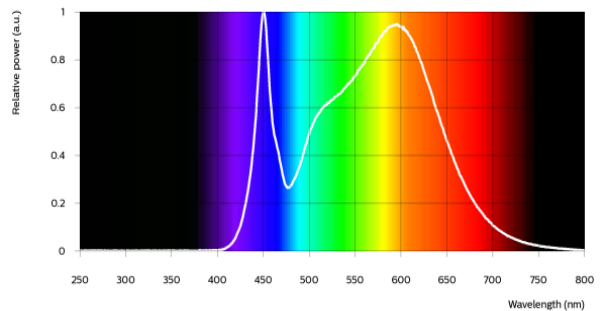


Fortimo SLM C 840 1206 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	2978	3135	3448	lm
Efficacy		169		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 432mA	Tc 25 °C	2667	180
	Tc-nom 65 °C	2547	174
	Tc-max 95 °C	2427	167
I-nom 540mA	Tc 25 °C	3283	174
	Tc-nom 65 °C	3135	169
	Tc-max 95 °C	2986	162
I-max 1380mA	Tc 25 °C	7615	140
	Tc-nom 65 °C	7245	135
	Tc-max 95 °C	6871	130

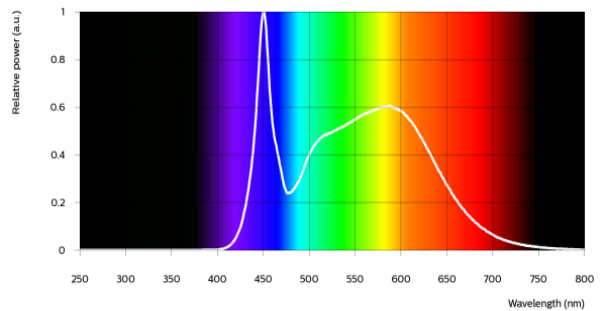


Fortimo SLM C 850 1206 L15 1919 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	2978	3135	3448	lm
Efficacy		169		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 432mA	Tc 25 °C	2667	180
	Tc-nom 65 °C	2547	174
	Tc-max 95 °C	2427	167
I-nom 540mA	Tc 25 °C	3283	174
	Tc-nom 65 °C	3135	169
	Tc-max 95 °C	2986	162
I-max 1380mA	Tc 25 °C	7615	140
	Tc-nom 65 °C	7245	135
	Tc-max 95 °C	6871	130

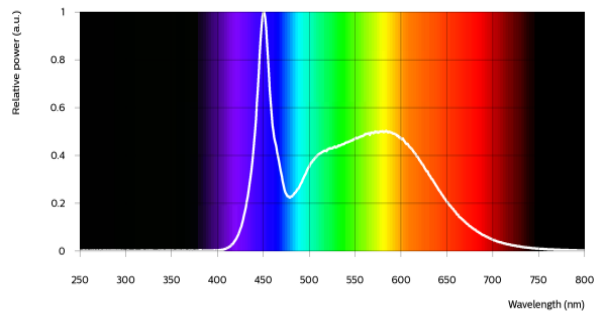


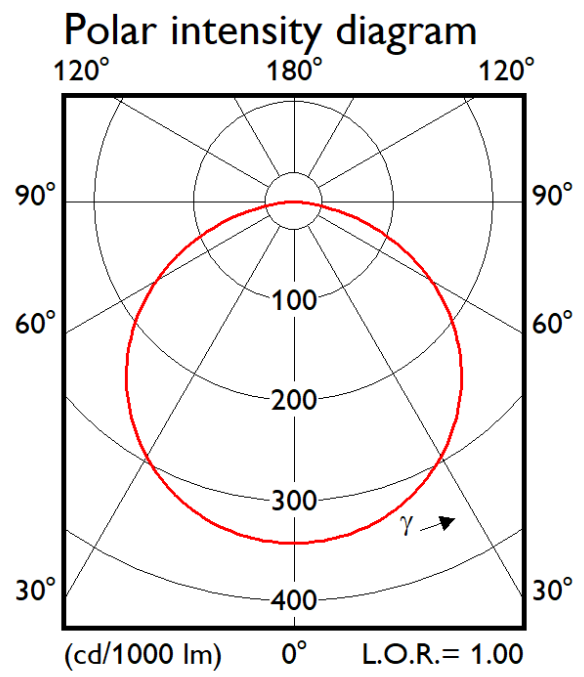
Fortimo SLM C 857 1206 L15 1919 G8N

Parameter	Min	Typ	Max	Unit
Luminous flux	2978	3135	3448	lm
Efficacy		169		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 432mA	Tc 25 °C	2667	180
	Tc-nom 65 °C	2547	174
	Tc-max 95 °C	2427	167
I-nom 540mA	Tc 25 °C	3283	174
	Tc-nom 65 °C	3135	169
	Tc-max 95 °C	2986	162
I-max 1380mA	Tc 25 °C	7615	140
	Tc-nom 65 °C	7245	135
	Tc-max 95 °C	6871	130





Electrical characteristics

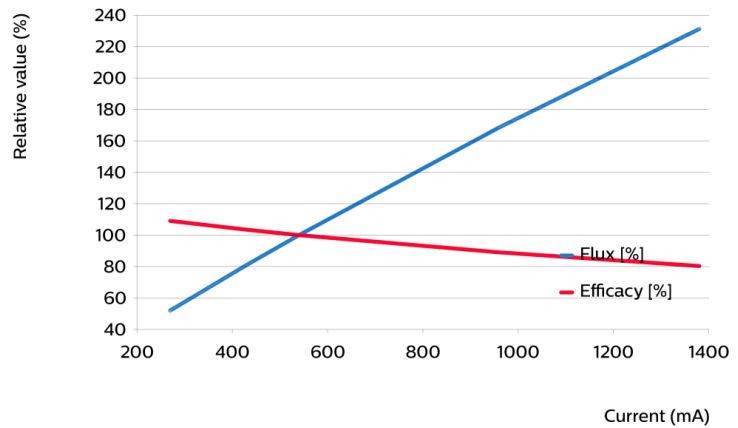
Parameter	Min	Typ	Max	Unit
Forward voltage	32.5	34.5	37.0	V
Power consumption	17.6	18.6	20.0	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

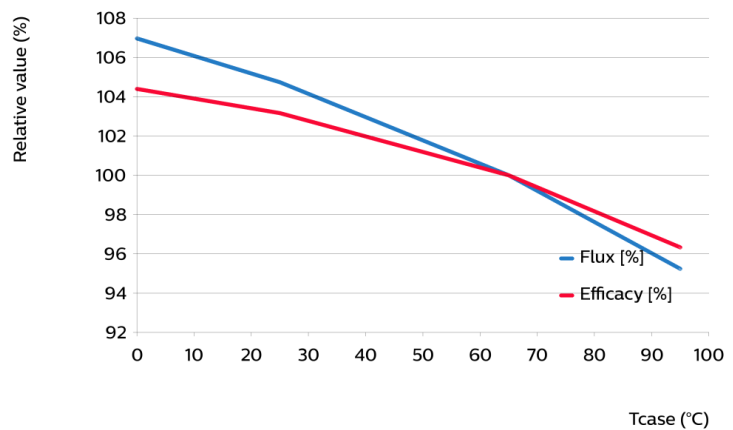
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1380	231	80
960	168	89
540	100	100
432	81	103
270	52	109



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

Tc [°C]	Flux [%]	Efficacy [%]
95	95	96
65	100	100
25	105	103
0	107	104



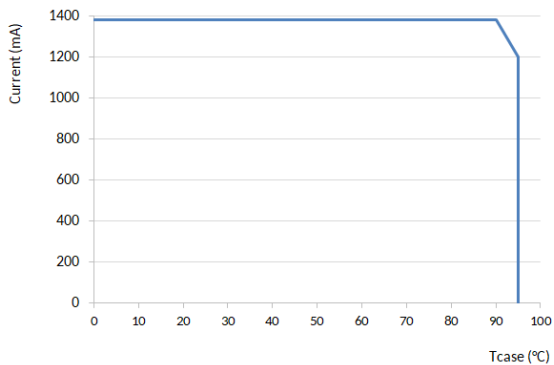
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 432mA	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 540mA	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 1380mA	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

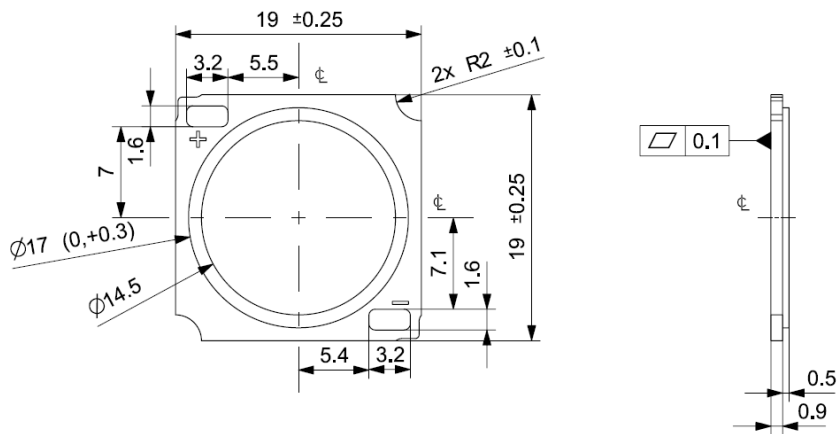
Parameter	Value	Unit
M70F50 nominal	>66000	hours

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		0.97		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1380	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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