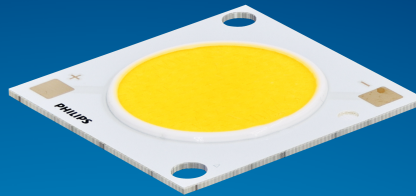


PHILIPS

Fortimo

LED

Fortimo SLM C 8xx 1211
L19 2828 G8



Datasheet

Best offer of performance and value

Fortimo LED SLM CRI80 G8 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 1211 L19 2828 G8	8721103 077387 00	9290 039 50001	2270276	10
Fortimo SLM C 830 1211 L19 2828 G8	8721103 077417 00	9290 039 50101	2270327	10
Fortimo SLM C 835 1211 L19 2828 G8	8721103 077448 00	9290 039 50201	2270281	10
Fortimo SLM C 840 1211 L19 2828 G8	8721103 077479 00	9290 039 50301	2270293	10
Fortimo SLM C 850 1211 L19 2828 G8	8721103 077509 00	9290 039 50401	2270325	10
Fortimo SLM C 857 1211 L19 2828 G8	8721103 077530 00	9290 039 50501	2270329	10
Fortimo SLM C 830 PW 1211 L19 2828 G8	8721103 077561 00	9290 039 50601	2270307	10

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 8xx 1211 L19 2828 G8	1200	see performance window	2530	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

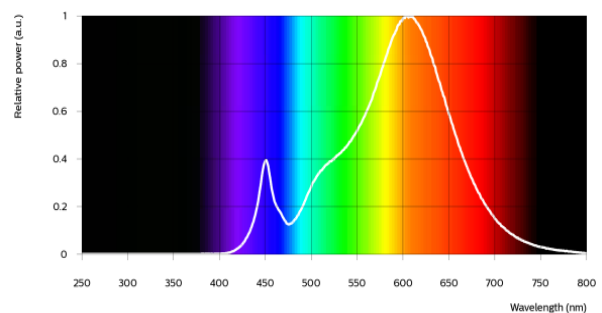
Optical characteristics - table per color (CCT)

Fortimo SLM C 827 1211 L19 2828 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	5904	6215	6836	lm
Efficacy		146		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 960mA	Tc 25 °C	5294	158
	Tc-nom 65 °C	5068	153
	Tc-max 95 °C	4843	147
I-nom 1200mA	Tc 25 °C	6498	152
	Tc-nom 65 °C	6215	146
	Tc-max 95 °C	5934	141
I-max 2530mA	Tc 25 °C	12550	125
	Tc-nom 65 °C	11921	120
	Tc-max 95 °C	11293	114

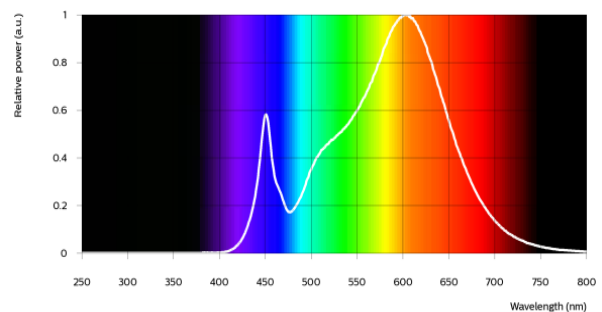


Fortimo SLM C 830 1211 L19 2828 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	6284	6615	7276	lm
Efficacy		156		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 960mA	Tc 25 °C	5633	168
	Tc-nom 65 °C	5393	162
	Tc-max 95 °C	5155	157
I-nom 1200mA	Tc 25 °C	6915	162
	Tc-nom 65 °C	6615	156
	Tc-max 95 °C	6316	150
I-max 2530mA	Tc 25 °C	13361	133
	Tc-nom 65 °C	12696	128
	Tc-max 95 °C	12031	122

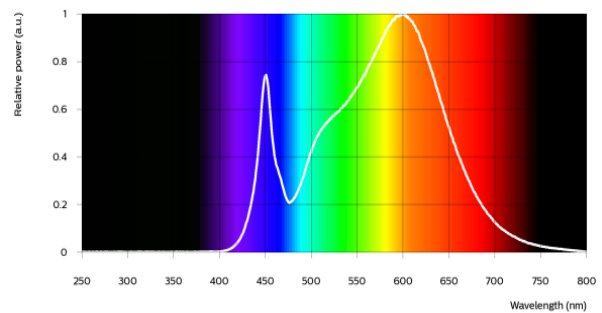


Fortimo SLM C 835 1211 L19 2828 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	6441	6780	7458	lm
Efficacy		160		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.407, 0.392)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		835/359		
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	835	lm	lm/W
80% I-nom 960mA	Tc 25 °C	5774	172
	Tc-nom 65 °C	5528	167
	Tc-max 95 °C	5284	161
I-nom 1200mA	Tc 25 °C	7088	166
	Tc-nom 65 °C	6780	160
	Tc-max 95 °C	6474	154
I-max 2530mA	Tc 25 °C	13695	136
	Tc-nom 65 °C	13014	131
	Tc-max 95 °C	12333	125

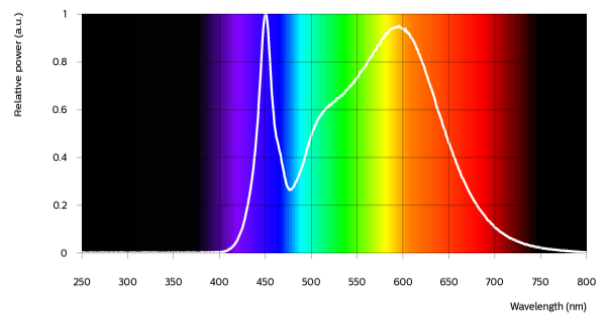


Fortimo SLM C 840 1211 L19 2828 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	6536	6880	7568	lm
Efficacy		162		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 $\pm 5\%$ 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	840	lm	lm/W
80% I-nom 960mA	Tc 25 °C	5858	175
	Tc-nom 65 °C	5609	169
	Tc-max 95 °C	5362	163
I-nom 1200mA	Tc 25 °C	7192	168
	Tc-nom 65 °C	6880	162
	Tc-max 95 °C	6570	156
I-max 2530mA	Tc 25 °C	13899	138
	Tc-nom 65 °C	13210	133
	Tc-max 95 °C	12521	127

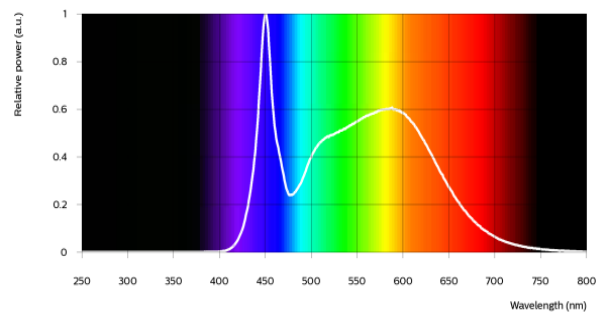


Fortimo SLM C 850 1211 L19 2828 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	6541	6885	7574	lm
Efficacy		162		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 $\pm 5\%$ 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	850	lm	lm/W
80% I-nom 960mA	Tc 25 °C	5861	175
	Tc-nom 65 °C	5613	169
	Tc-max 95 °C	5366	163
I-nom 1200mA	Tc 25 °C	7196	168
	Tc-nom 65 °C	6885	162
	Tc-max 95 °C	6576	157
I-max 2530mA	Tc 25 °C	13913	139
	Tc-nom 65 °C	13226	133
	Tc-max 95 °C	12540	127

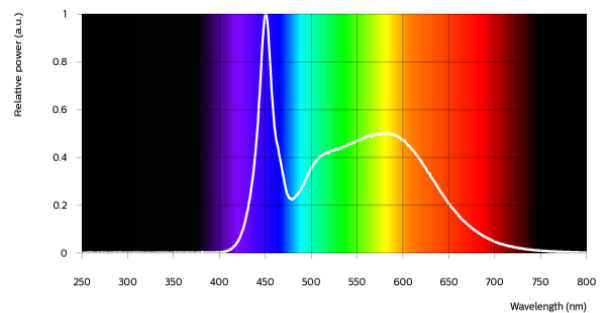


Fortimo SLM C 857 1211 L19 2828 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	6541	6885	7574	lm
Efficacy		162		lm/W
Correlated color temperature (CCT)		5700		K
Color coordinates (CIEx, CIEy)		(0.329, 0.342)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code		857/359		
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 .

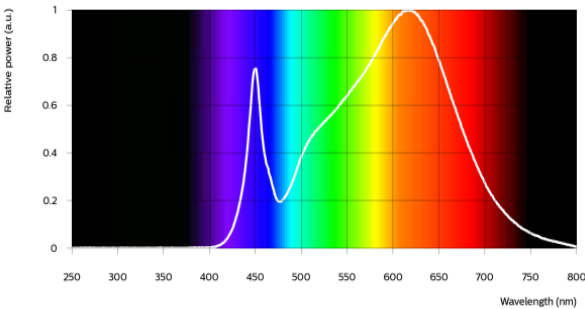
Operation point	857	lm	lm/W
80% I-nom 960mA	Tc 25 °C	5861	175
	Tc-nom 65 °C	5613	169
	Tc-max 95 °C	5366	163
I-nom 1200mA	Tc 25 °C	7196	168
	Tc-nom 65 °C	6885	162
	Tc-max 95 °C	6576	157
I-max 2530mA	Tc 25 °C	13913	139
	Tc-nom 65 °C	13226	133
	Tc-max 95 °C	12540	127

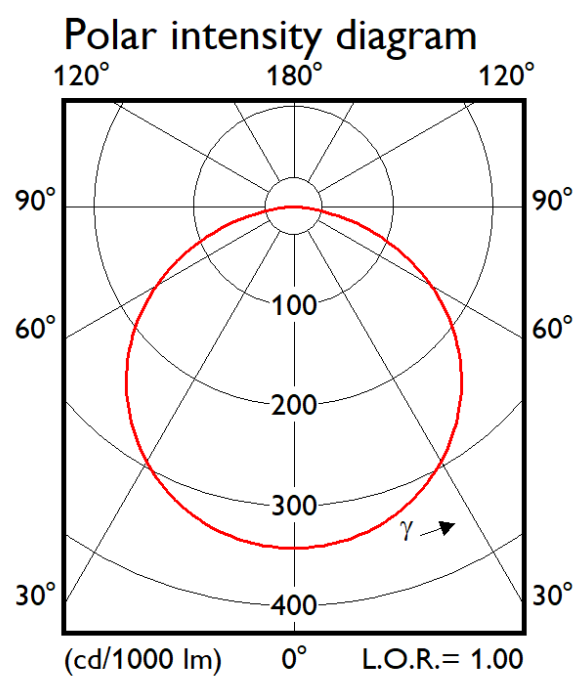


Parameter	Min	Typ	Max	Unit
Luminous flux	6222	6550	7205	lm
Efficacy		154		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			3	SDCM
CRI	80			
R9	>0			
Photometric code	D A↑G	830/359		
Photobiological safety		RG1 unlimited		

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	830	lm	lm/W
80% I-nom 960mA	Tc 25 °C	5578	167
	Tc-nom 65 °C	5340	161
	Tc-max 95 °C	5104	155
I-nom 1200mA	Tc 25 °C	6847	160
	Tc-nom 65 °C	6550	154
	Tc-max 95 °C	6254	149
I-max 2530mA	Tc 25 °C	13230	132
	Tc-nom 65 °C	12572	126
	Tc-max 95 °C	11914	121





Electrical characteristics

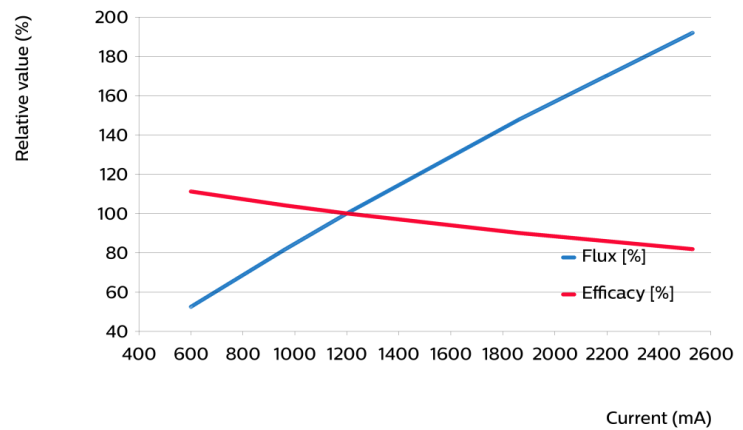
Parameter	Min	Typ	Max	Unit
Forward voltage	32.5	35.4	37.0	V
Power consumption	39.0	42.5	44.4	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

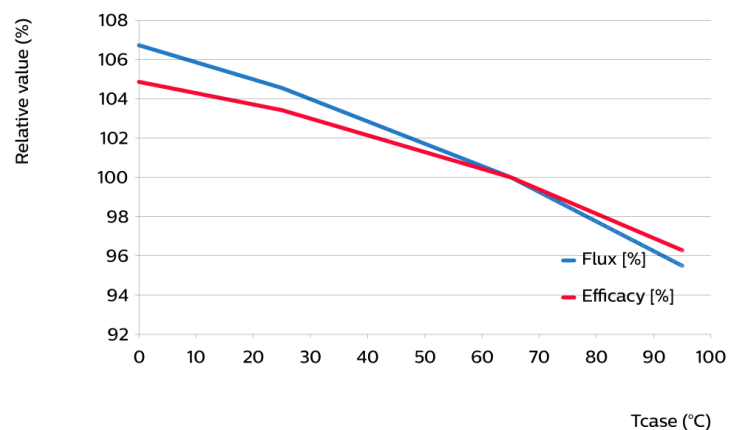
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
2530	192	82
1865	148	90
1200	100	100
960	82	104
600	52	111



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	105



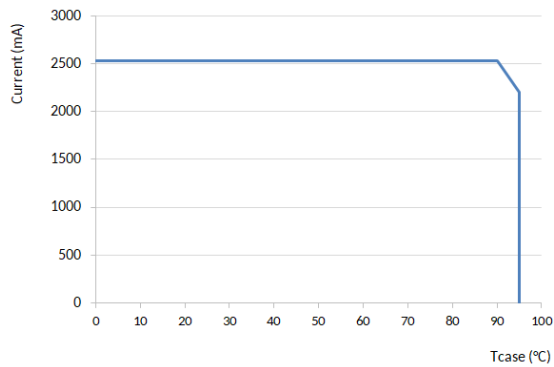
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 960mA	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 1200mA	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	57	48	44
I-max 2530mA	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

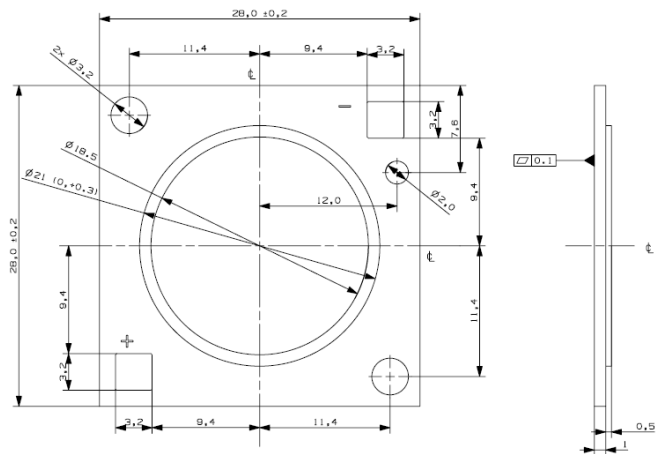
Parameter	Value	Unit
M70F50 nominal	>66000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	27.8	28	28.2	mm
Width	27.8	28	28.2	mm
Height PCB	0.9	1	1.1	mm
Height including dam	1.2	1.5	1.8	mm
Product mass		2.1		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		2530	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 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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05/03/2025