

**PHILIPS**

**Fortimo**

**LED**

Fortimo SLM C 8xx 1202  
L06 1215 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](http://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 1202 L06 1215 G8	8721103 073600 00	9290 039 37401	2270205	20
Fortimo SLM C 830 1202 L06 1215 G8	8721103 073631 00	9290 039 37501	2270221	20
Fortimo SLM C 835 1202 L06 1215 G8	8721103 073662 00	9290 039 37601	2270200	20
Fortimo SLM C 840 1202 L06 1215 G8	8721103 073693 00	9290 039 37701	2270191	20
Fortimo SLM C 850 1202 L06 1215 G8	8721103 073723 00	9290 039 37801	2270203	20
Fortimo SLM C 857 1202 L06 1215 G8	8721103 073754 00	9290 039 37901	2270234	20
Fortimo SLM C 830 PW 1202 L06 1215 G8	8721103 073785 00	9290 039 38001	2270199	20

## Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 8xx 1202 L06 1215 G8	200	see performance window	460	mA

## Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T <sub>c</sub> (case temperature at T <sub>c</sub> 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)

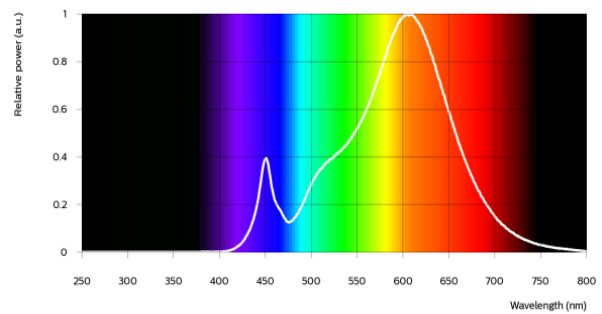
### Fortimo SLM C 827 1202 L06 1215 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	964	1015	1116	lm
Efficacy		147		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  $\pm 0.005$ . Measurement precision for CRI  $\pm 1.5$ .

Operation point	827	lm	lm/W
80% I-nom 160mA	Tc 25 °C	862	157
	Tc-nom 65 °C	826	153
	Tc-max 95 °C	799	148
I-nom 200mA	Tc 25 °C	1060	151
	Tc-nom 65 °C	1015	147
	Tc-max 95 °C	982	142
I-max 460mA	Tc 25 °C	2222	125
	Tc-nom 65 °C	2127	120
	Tc-max 95 °C	2057	118



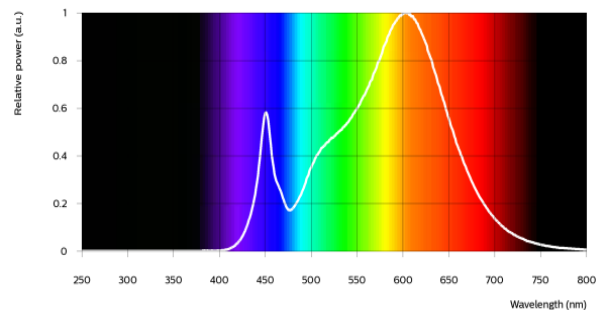
### Fortimo SLM C 830 1202 L06 1215 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	1026	1080	1188	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  $\pm 0.005$ . Measurement precision for CRI  $\pm 1.5$ .

Operation point	830	lm	lm/W
80% I-nom 160mA	Tc 25 °C	918	167
	Tc-nom 65 °C	879	163
	Tc-max 95 °C	850	157
I-nom 200mA	Tc 25 °C	1128	161
	Tc-nom 65 °C	1080	157
	Tc-max 95 °C	1045	151
I-max 460mA	Tc 25 °C	2365	133
	Tc-nom 65 °C	2264	128
	Tc-max 95 °C	2190	125

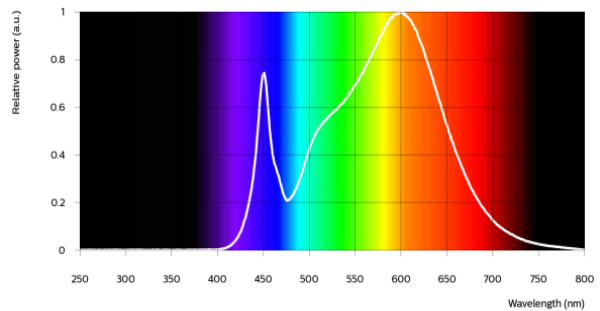


Fortimo SLM C 835 1202 L06 1215 G8


Parameter	Min	Typ	Max	Unit
Luminous flux	1054	1110	1221	lm
Efficacy		161		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 ± 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 160mA	Tc 25 °C	943	171
	Tc-nom 65 °C	903	167
	Tc-max 95 °C	874	162
I-nom 200mA	Tc 25 °C	1159	166
	Tc-nom 65 °C	1110	161
	Tc-max 95 °C	1074	156
I-max 460mA	Tc 25 °C	2431	137
	Tc-nom 65 °C	2327	131
	Tc-max 95 °C	2251	129

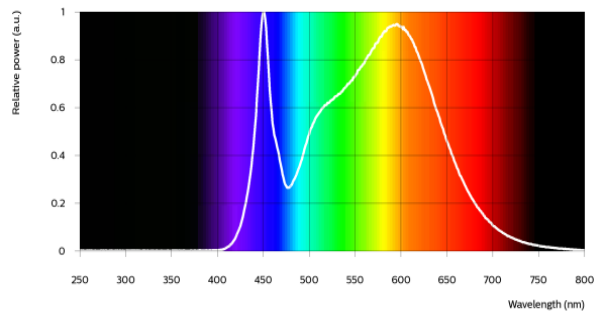


Fortimo SLM C 840 1202 L06 1215 G8


Parameter	Min	Typ	Max	Unit
Luminous flux	1069	1125	1238	lm
Efficacy		163		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 160mA	Tc 25 °C	956	174
	Tc-nom 65 °C	915	169
	Tc-max 95 °C	885	164
I-nom 200mA	Tc 25 °C	1175	168
	Tc-nom 65 °C	1125	163
	Tc-max 95 °C	1088	158
I-max 460mA	Tc 25 °C	2464	138
	Tc-nom 65 °C	2359	133
	Tc-max 95 °C	2282	130

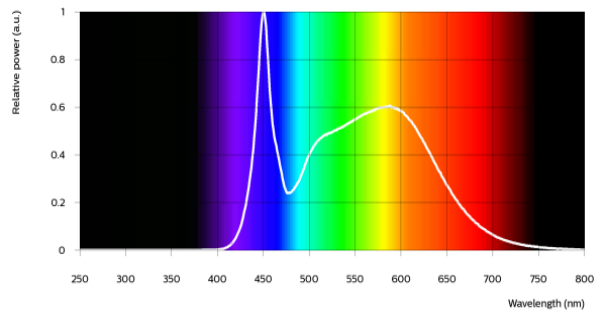


Fortimo SLM C 850 1202 L06 1215 G8


Parameter	Min	Typ	Max	Unit
Luminous flux	1069	1125	1238	lm
Efficacy		163		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 160mA	Tc 25 °C	956	174
	Tc-nom 65 °C	915	169
	Tc-max 95 °C	885	164
I-nom 200mA	Tc 25 °C	1175	168
	Tc-nom 65 °C	1125	163
	Tc-max 95 °C	1088	158
I-max 460mA	Tc 25 °C	2464	138
	Tc-nom 65 °C	2359	133
	Tc-max 95 °C	2282	130

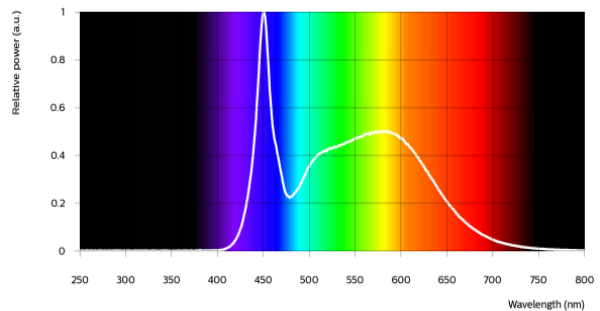


Fortimo SLM C 857 1202 L06 1215 G8


Parameter	Min	Typ	Max	Unit
Luminous flux	1069	1125	1238	lm
Efficacy		163		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 ± 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 160mA	Tc 25 °C	956	174
	Tc-nom 65 °C	915	169
	Tc-max 95 °C	885	164
I-nom 200mA	Tc 25 °C	1175	168
	Tc-nom 65 °C	1125	163
	Tc-max 95 °C	1088	158
I-max 460mA	Tc 25 °C	2464	138
	Tc-nom 65 °C	2359	133
	Tc-max 95 °C	2282	130

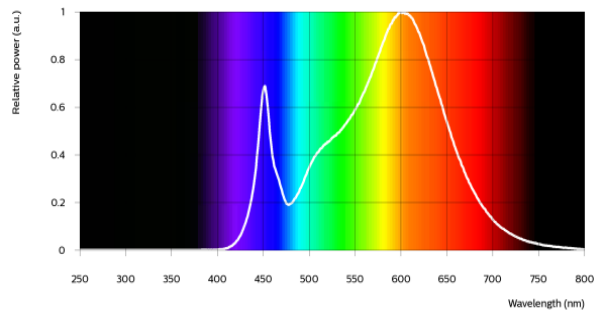


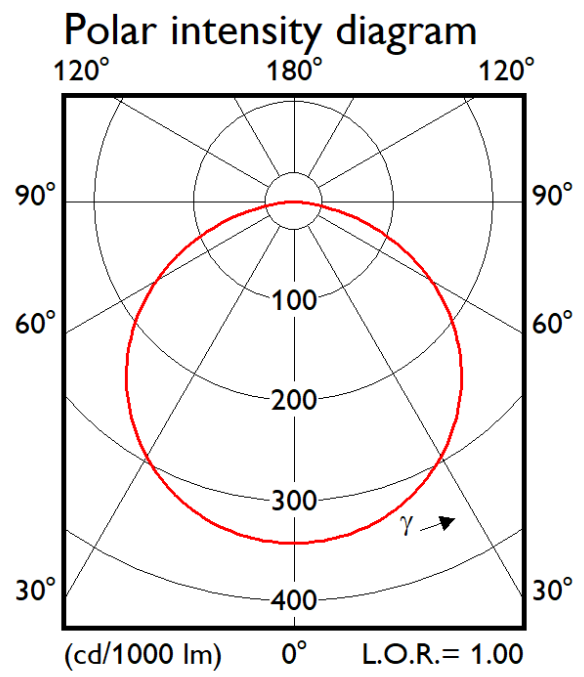
Fortimo SLM C 830 PW 1202 L06 1215 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	1016	1070	1177	lm
Efficacy		155		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		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 160mA	Tc 25 °C	909	165
	Tc-nom 65 °C	870	161
	Tc-max 95 °C	842	156
I-nom 200mA	Tc 25 °C	1118	160
	Tc-nom 65 °C	1070	155
	Tc-max 95 °C	1035	150
I-max 460mA	Tc 25 °C	2343	132
	Tc-nom 65 °C	2243	127
	Tc-max 95 °C	2170	124





## Electrical characteristics

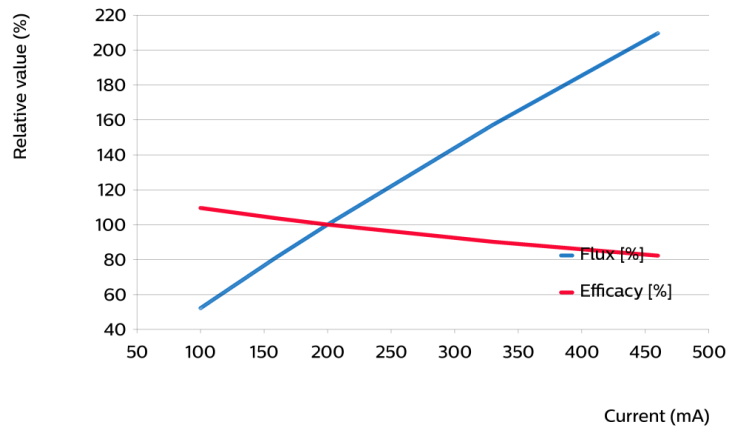
Parameter	Min	Typ	Max	Unit
Forward voltage	32.5	34.7	37.0	V
Power consumption	6.5	6.9	7.4	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

## Tuning information

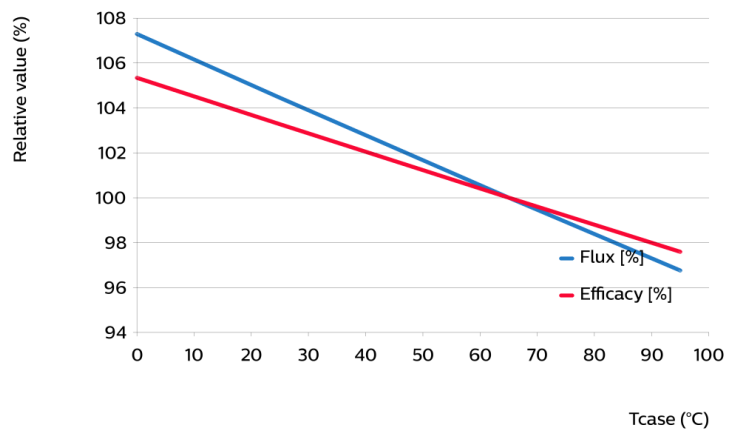
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
460	210	82
330	157	90
200	100	100
160	81	104
100	52	109



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

Tc [°C]	Flux [%]	Efficacy [%]
95	97	98
65	100	100
25	104	103
0	107	105



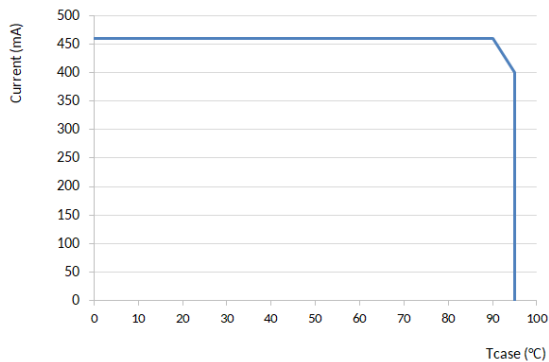
## Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 160mA	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 200mA	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	56	61
I-max 460mA	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

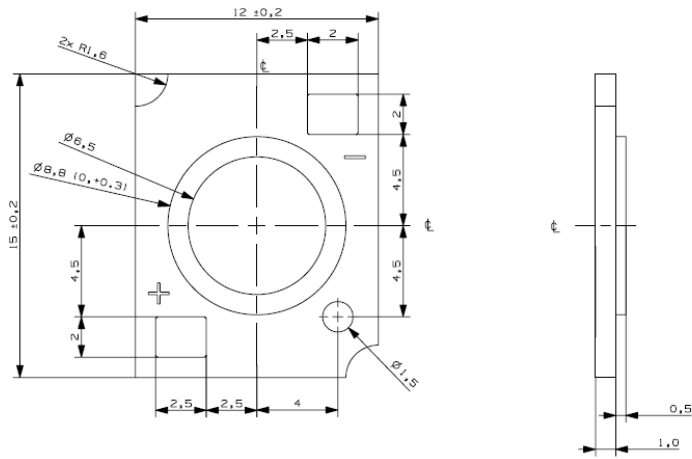
Parameter	Value	Unit
M70F50 nominal	>66000	hours

## Performance Window



## Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	14.8	15	15.2	mm
Width	11.8	12	12.2	mm
Height PCB	0.9	1	1.1	mm
Height including dam	1.2	1.5	1.8	mm
Product mass		0.43		gram



## Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		460	mA
Case temperature (Tc-max)		95	°C
ESD (direct contact)	8		kV
Working voltage		60	V <sub>dc</sub>
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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