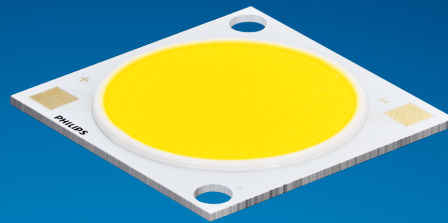


PHILIPS

Fortimo

LED

Fortimo SLM C 9xx 1818
L22 2828 G8N



Datasheet

Best offer of performance and value

Fortimo LED SLM CRI90 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 927 1818 L22 2828 G8N	8721103 085405 00	9290 048 27701	2270181	10
Fortimo SLM C 930 1818 L22 2828 G8N	8721103 085436 00	9290 048 27801	2270471	10
Fortimo SLM C 935 1818 L22 2828 G8N	8721103 085467 00	9290 048 27901	2270463	10
Fortimo SLM C 940 1818 L22 2828 G8N	8721103 085498 00	9290 048 28001	2270118	10
Fortimo SLM C 930 PW 1818 L22 2828 G8N	8721103 085528 00	9290 048 28101	2270150	10
Fortimo SLM C 935 PW 1818 L22 2828 G8N	8721103 085559 00	9290 048 28201	2270148	10
Fortimo SLM C 940 PW 1818 L22 2828 G8N	8721103 085580 00	9290 048 28301	2270127	10

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 9xx 1818 L22 2828 G8N	1620	see performance window	4140	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

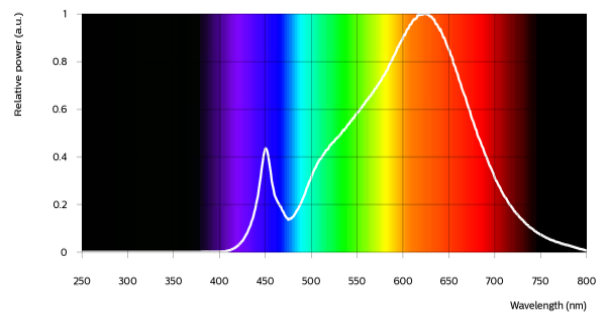
Optical characteristics - table per color (CCT)

Fortimo SLM C 927 1818 L22 2828 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	10146	10680	11748	lm
Efficacy		127		lm/W
Correlated color temperature (CCT)		2700		K
Color coordinates (CIEx, CIEy)		(0.458, 0.410)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		927/359		
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	927	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	9068	135
	Tc-nom 65 °C	8702	131
	Tc-max 95 °C	8307	127
I-nom 1620mA	Tc 25 °C	11132	130
	Tc-nom 65 °C	10680	127
	Tc-max 95 °C	10190	122
I-max 4140mA	Tc 25 °C	25434	104
	Tc-nom 65 °C	24306	101
	Tc-max 95 °C	23082	97

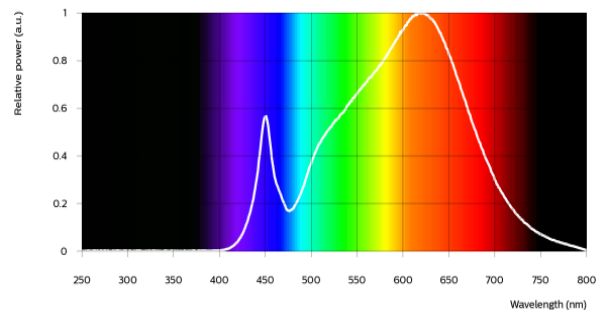


Fortimo SLM C 930 1818 L22 2828 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	10782	11350	12485	lm
Efficacy		135		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.434, 0.403)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		930/359		
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	930	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	9636	143
	Tc-nom 65 °C	9248	140
	Tc-max 95 °C	8829	135
I-nom 1620mA	Tc 25 °C	11830	139
	Tc-nom 65 °C	11350	135
	Tc-max 95 °C	10830	130
I-max 4140mA	Tc 25 °C	27032	111
	Tc-nom 65 °C	25836	107
	Tc-max 95 °C	24538	103

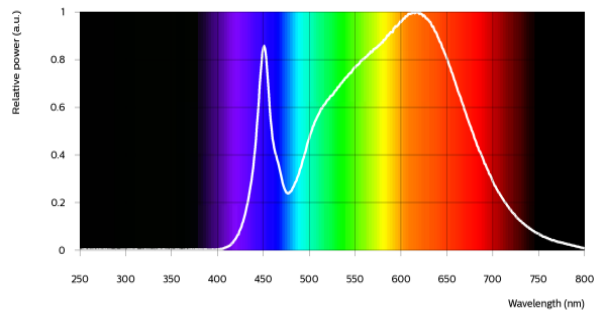


Fortimo SLM C 935 1818 L22 2828 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	11101	11685	12854	lm
Efficacy		139		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.408, 0.393)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		935/359		
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	935	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	9920	148
	Tc-nom 65 °C	9521	144
	Tc-max 95 °C	9089	139
I-nom 1620mA	Tc 25 °C	12179	143
	Tc-nom 65 °C	11685	139
	Tc-max 95 °C	11150	134
I-max 4140mA	Tc 25 °C	27831	114
	Tc-nom 65 °C	26601	111
	Tc-max 95 °C	25266	106

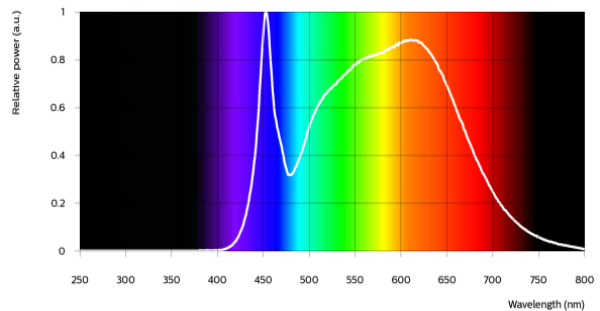


Fortimo SLM C 940 1818 L22 2828 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	11352	11950	13145	lm
Efficacy		142		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.382, 0.380)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		940/359		
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	940	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	10145	151
	Tc-nom 65 °C	9737	147
	Tc-max 95 °C	9295	142
I-nom 1620mA	Tc 25 °C	12455	146
	Tc-nom 65 °C	11950	142
	Tc-max 95 °C	11403	137
I-max 4140mA	Tc 25 °C	28463	117
	Tc-nom 65 °C	27206	113
	Tc-max 95 °C	25842	108

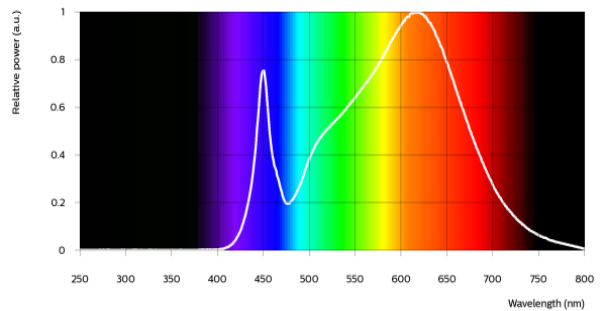


Fortimo SLM C 930 PW 1818 L22 2828 G8N


Parameter	Min	Typ	Max	Unit
Luminous flux	10782	11350	12485	lm
Efficacy		135		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		930/359		
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	930	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	9636	143
	Tc-nom 65 °C	9248	140
	Tc-max 95 °C	8829	135
I-nom 1620mA	Tc 25 °C	11830	139
	Tc-nom 65 °C	11350	135
	Tc-max 95 °C	10830	130
I-max 4140mA	Tc 25 °C	27033	111
	Tc-nom 65 °C	25838	107
	Tc-max 95 °C	24541	103

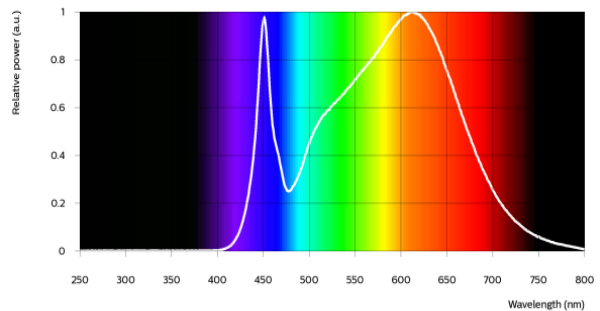



Fortimo SLM C 935 PW 1818 L22 2828 G8N

Parameter	Min	Typ	Max	Unit
Luminous flux	11101	11685	12854	lm
Efficacy		139		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.398, 0.376)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		935/359		
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.

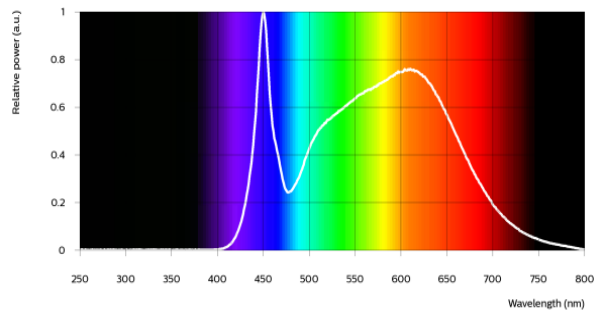
Operation point	935	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	9920	148
	Tc-nom 65 °C	9521	144
	Tc-max 95 °C	9089	139
I-nom 1620mA	Tc 25 °C	12179	143
	Tc-nom 65 °C	11685	139
	Tc-max 95 °C	11150	134
I-max 4140mA	Tc 25 °C	27832	114
	Tc-nom 65 °C	26602	111
	Tc-max 95 °C	25267	106



Parameter	Min	Typ	Max	Unit
Luminous flux	11352	11950	13145	lm
Efficacy		142		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.374, 0.364)		-
Color consistency			3	SDCM
CRI	90			
R9	50			
Photometric code		940/359		
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	940	lm	lm/W
80% I-nom 1296mA	Tc 25 °C	10145	151
	Tc-nom 65 °C	9737	147
	Tc-max 95 °C	9295	142
I-nom 1620mA	Tc 25 °C	12455	146
	Tc-nom 65 °C	11950	142
	Tc-max 95 °C	11403	137
I-max 4140mA	Tc 25 °C	28464	117
	Tc-nom 65 °C	27209	113
	Tc-max 95 °C	25846	108





Electrical characteristics

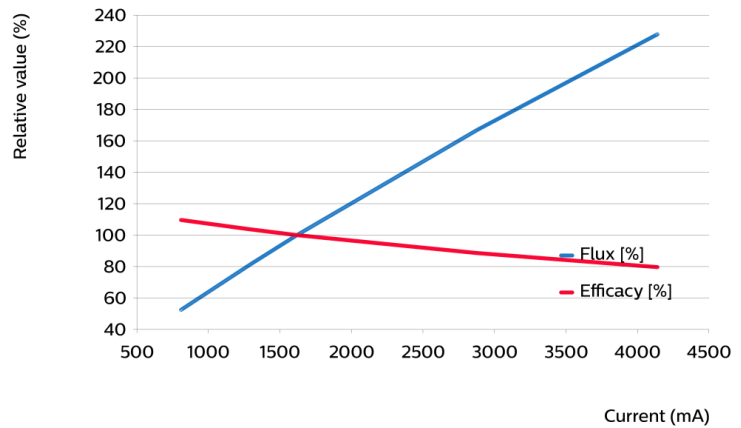
Parameter	Min	Typ	Max	Unit
Forward voltage	49.5	52.0	54.5	V
Power consumption	80.2	84.2	88.3	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

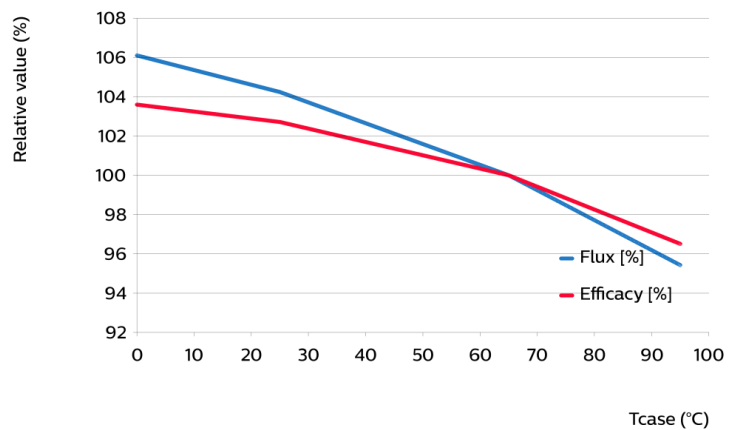
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
4140	228	80
2880	167	88
1620	100	100
1296	81	104
810	52	110



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

Tc [°C]	Flux [%]	Efficacy [%]
95	95	97
65	100	100
25	104	103
0	106	104



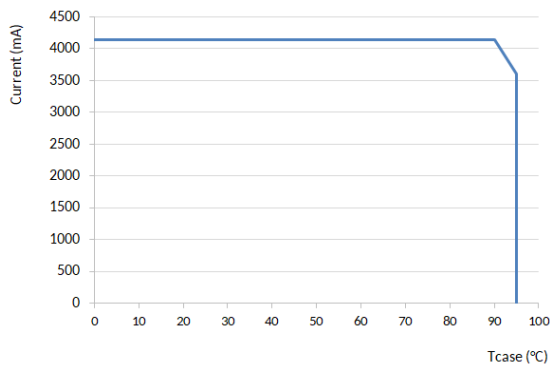
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 1296mA	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 1620mA	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 4140mA	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

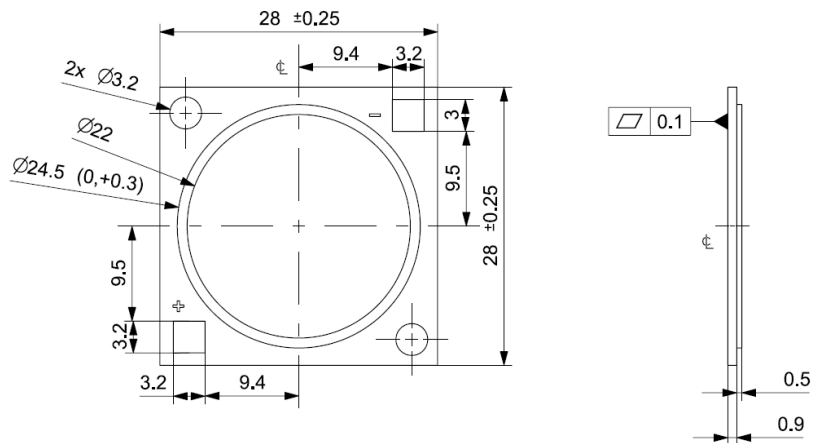
Parameter	Value	Unit
M70F50 nominal	>66000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	27.75	28	28.25	mm
Width	27.75	28	28.25	mm
Height PCB	0.8	0.9	1	mm
Height including dam	1.1	1.4	1.7	mm
Product mass		2.12		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		4140	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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10/03/2025