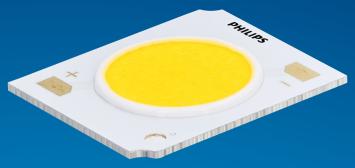
PHILIPS

Fortimo

LED

Fortimo SLM C 9xx 1205
L13 2024 G8



Datasheet

Best offer of performance and value

Fortimo LED SLM CRI90 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 927 1205 L13 2024 G8	8721103 075703 00	9290 039 44401	2270222	20
Fortimo SLM C 930 1205 L13 2024 G8	8721103 075734 00	9290 039 44501	2270249	20
Fortimo SLM C 935 1205 L13 2024 G8	8721103 075765 00	9290 039 44601	2270267	20
Fortimo SLM C 940 1205 L13 2024 G8	8721103 075796 00	9290 039 44701	2270204	20
Fortimo SLM C 930 PW 1205 L13 2024 G8	8721103 075826 00	9290 039 44801	2270263	20
Fortimo SLM C 935 PW 1205 L13 2024 G8	8721103 075857 00	9290 039 44901	2270206	20
Fortimo SLM C 940 PW 1205 L13 2024 G8	8721103 075888 00	9290 039 45001	2270198	20
Fortimo SLM C 930 PC 1205 L13 2024 G8	8721103 075918 00	9290 039 45101	2270318	20

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 9xx 1205 L13 2024 G8	500	see performance window	1150	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

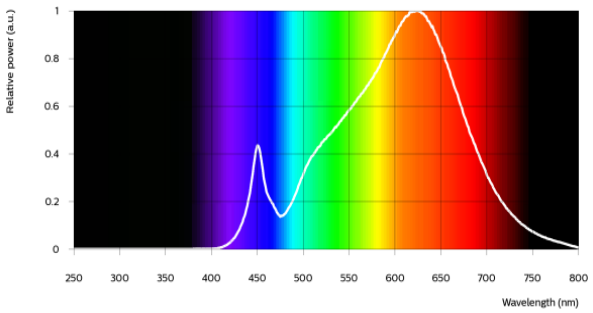
Optical characteristics - table per color (CCT)

Fortimo SLM C 927 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2095	2205	2426	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 ± 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	927	lm	lm/W
80% I-nom 400mA	Tc 25 °C	1872	137
	Tc-nom 65 °C	1795	132
	Tc-max 95 °C	1714	127
I-nom 500mA	Tc 25 °C	2301	132
	Tc-nom 65 °C	2205	127
	Tc-max 95 °C	2104	122
I-max 1150mA	Tc 25 °C	4825	107
	Tc-nom 65 °C	4597	103
	Tc-max 95 °C	4356	98

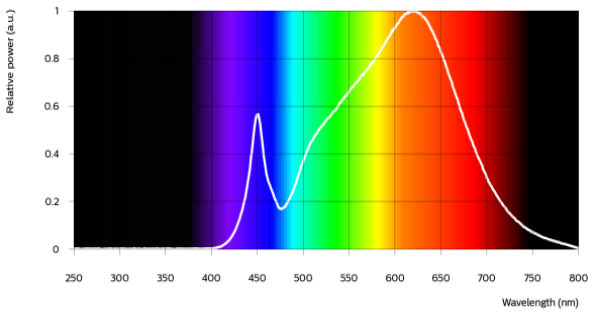


Fortimo SLM C 930 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2228	2345	2580	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 ± 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 400mA	Tc 25 °C	1991	145
	Tc-nom 65 °C	1909	140
	Tc-max 95 °C	1823	135
I-nom 500mA	Tc 25 °C	2447	140
	Tc-nom 65 °C	2345	135
	Tc-max 95 °C	2238	130
I-max 1150mA	Tc 25 °C	5132	114
	Tc-nom 65 °C	4891	110
	Tc-max 95 °C	4636	105

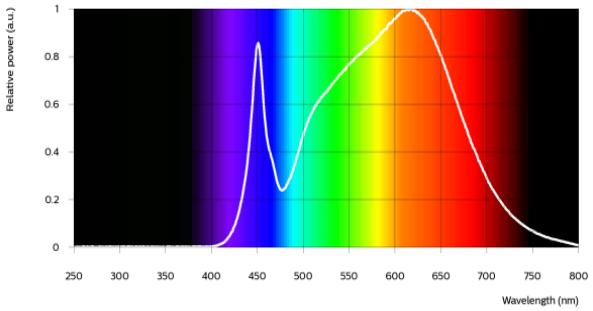


Fortimo SLM C 935 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2294	2415	2656	lm
Efficacy		139		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.407, 0.392)		-
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 400mA	Tc 25 °C	2050	150
	Tc-nom 65 °C	1966	145
	Tc-max 95 °C	1877	139
I-nom 500mA	Tc 25 °C	2520	144
	Tc-nom 65 °C	2415	139
	Tc-max 95 °C	2305	134
I-max 1150mA	Tc 25 °C	5286	118
	Tc-nom 65 °C	5038	113
	Tc-max 95 °C	4775	108

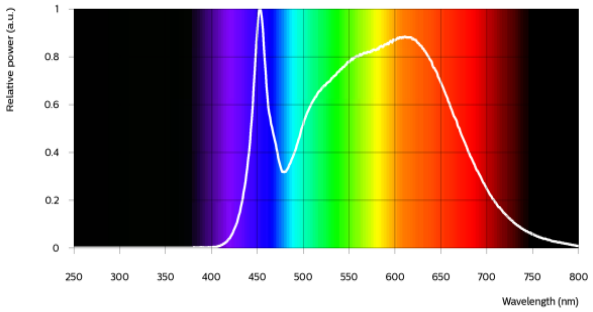


Fortimo SLM C 940 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2346	2470	2717	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 400mA	Tc 25 °C	2097	153
	Tc-nom 65 °C	2011	148
	Tc-max 95 °C	1920	142
I-nom 500mA	Tc 25 °C	2578	147
	Tc-nom 65 °C	2470	142
	Tc-max 95 °C	2357	137
I-max 1150mA	Tc 25 °C	5407	120
	Tc-nom 65 °C	5153	116
	Tc-max 95 °C	4885	110

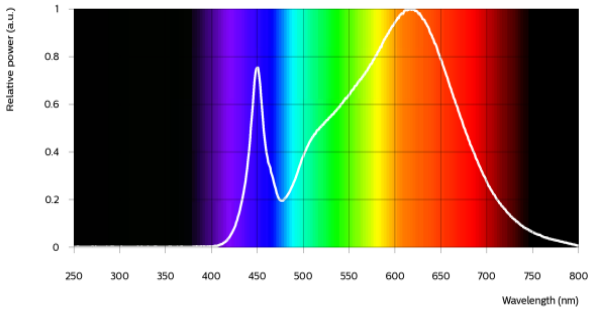


Fortimo SLM C 930 PW 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2228	2345	2580	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 400mA	Tc 25 °C	1991	145
	Tc-nom 65 °C	1909	140
	Tc-max 95 °C	1823	135
I-nom 500mA	Tc 25 °C	2447	140
	Tc-nom 65 °C	2345	135
	Tc-max 95 °C	2238	130
I-max 1150mA	Tc 25 °C	5132	114
	Tc-nom 65 °C	4891	110
	Tc-max 95 °C	4636	105

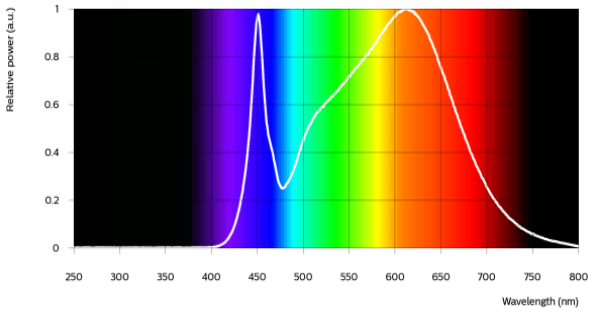


Fortimo SLM C 935 PW 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2294	2415	2656	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 400mA	Tc 25 °C	2050	150
	Tc-nom 65 °C	1966	145
	Tc-max 95 °C	1877	139
I-nom 500mA	Tc 25 °C	2520	144
	Tc-nom 65 °C	2415	139
	Tc-max 95 °C	2305	134
I-max 1150mA	Tc 25 °C	5286	118
	Tc-nom 65 °C	5038	113
	Tc-max 95 °C	4775	108

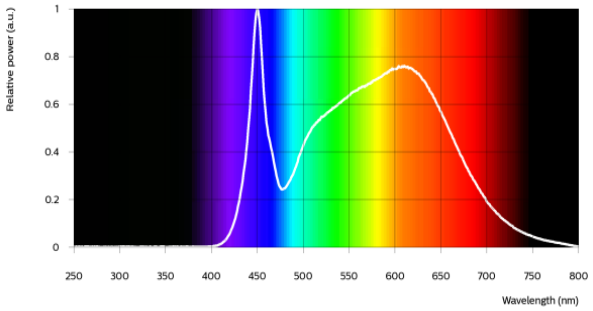


Fortimo SLM C 940 PW 1205 L13 2024 G8

Parameter	Min	Typ	Max	Unit
Luminous flux	2346	2470	2717	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 400mA	Tc 25 °C	2097	153
	Tc-nom 65 °C	2011	148
	Tc-max 95 °C	1920	142
I-nom 500mA	Tc 25 °C	2578	147
	Tc-nom 65 °C	2470	142
	Tc-max 95 °C	2357	137
I-max 1150mA	Tc 25 °C	5407	120
	Tc-nom 65 °C	5153	116
	Tc-max 95 °C	4885	110

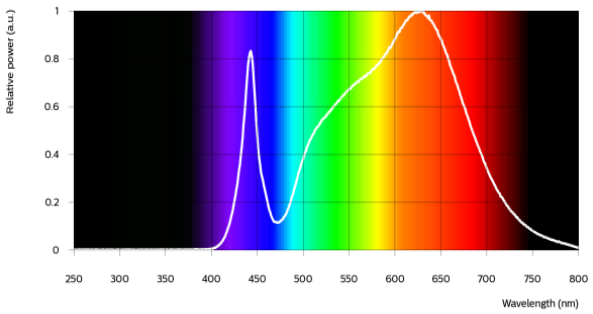


Fortimo SLM C 930 PC 1205 L13 2024 G8

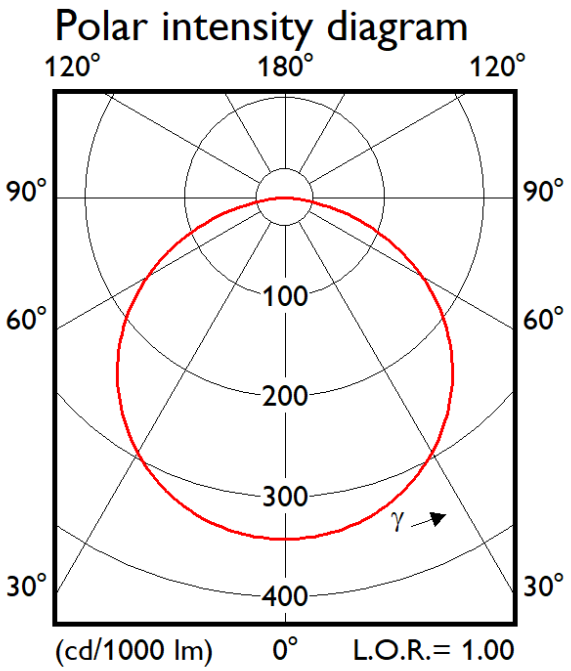
Parameter	Min	Typ	Max	Unit
Luminous flux	2095	2205	2426	lm
Efficacy		127		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			3	SDCM
CRI	90			
R9	>70			
Photometric code		930/359		
Photobiological safety		RG1 unlimited		

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 400mA	Tc 25 °C	1872	137
	Tc-nom 65 °C	1795	132
	Tc-max 95 °C	1714	127
I-nom 500mA	Tc 25 °C	2301	132
	Tc-nom 65 °C	2205	127
	Tc-max 95 °C	2104	122
I-max 1150mA	Tc 25 °C	4825	107
	Tc-nom 65 °C	4597	103
	Tc-max 95 °C	4356	98



Beam shape


Polar intensity diagram
120°
180°
120°
90°
90°
60°
60°
100
200
300
γ
30°
30°
400
(cd/1000 lm)
0°
L.O.R.= 1.00

Electrical characteristics

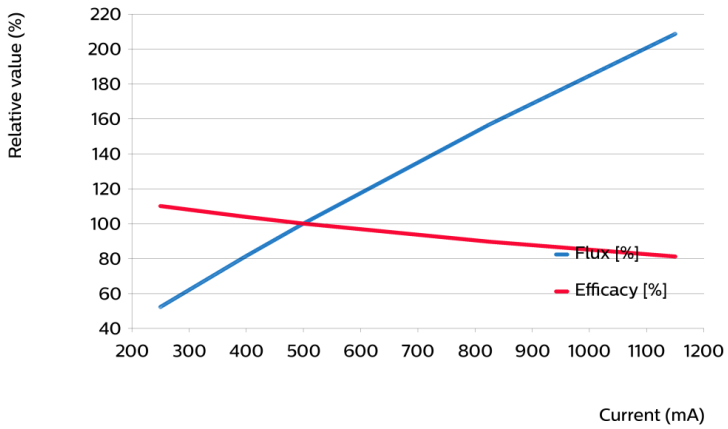
Parameter	Min	Typ	Max	Unit
Forward voltage	32.5	34.7	37.0	V
Power consumption	16.3	17.4	18.5	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

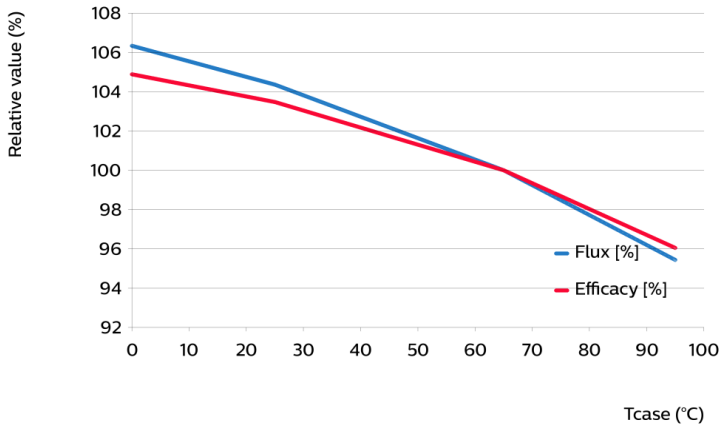
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1150	209	81
825	157	90
500	100	100
400	81	104
250	52	110



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

Tc [°C]	Flux [%]	Efficacy [%]
95	95	96
65	100	100
25	104	103
0	106	105



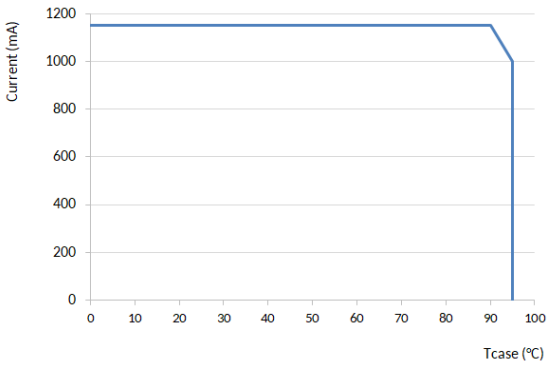
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 400mA	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 500mA	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	51
I-max 1150mA	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

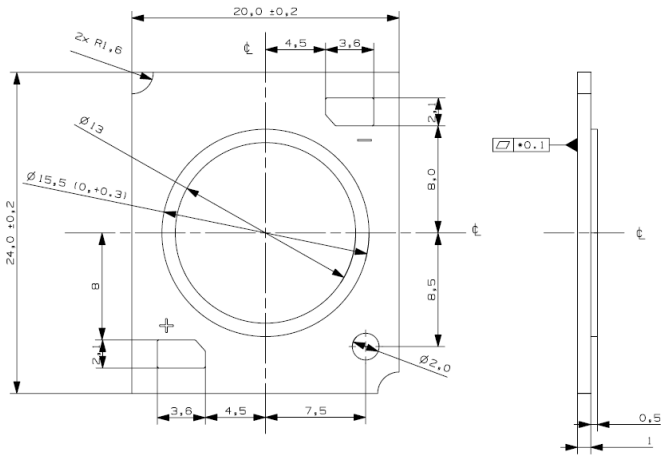
Parameter	Value	Unit
M70F50 nominal	>66000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	23.8	24	24.2	mm
Width	19.8	20	20.2	mm
Height PCB	0.9	1	1.1	mm
Height including dam	1.2	1.5	1.8	mm
Product mass		1.27		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1150	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

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