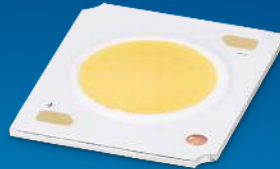


PHILIPS

Fortimo

LED

Fortimo SLM C 1205 L13
2024 G7 HE



Datasheet

Fortimo SLM C 1205 L13 2024 G7 HE

Fortimo LED SLM Gen 7 CRI90 HE continues to focus on the combination of Quality of Light and efficacy. The new HE range has a significant improvement on CRI90 efficacy and close the efficacy gap to < 5% vs. CRI80 range. In the meantime, the new HE range will be delivered with 2 SDCM color consistency. The superior efficacy and color consistency of Fortimo SLM G7 HE will further unlock the extraordinary potential of light, facilitate the innovation

Please also check the online Easy Design-in

Key features and benefits

- Best quality of light available for all application
- 10%-12% efficacy improvement vs. current G7 CRI90 range.
- Excellent color consistency management (2 SDCM)
- System proposition (Module + Driver + Holder)
- Flexibility to optimize luminaire performance (high efficacy or high lm output)
- 50,000 hours lifetime

September 2021



Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo SLM C 930 PW 1205 L13 2024 G7 HE	8719514 280267 00	9290 028 33606	20
Fortimo SLM C 930 PC 1205 L13 2024 G7 HE	8719514 280366 00	9290 028 34206	20

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 1205 L13 2024 G7 HE	500	See performance window	1050	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	85	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

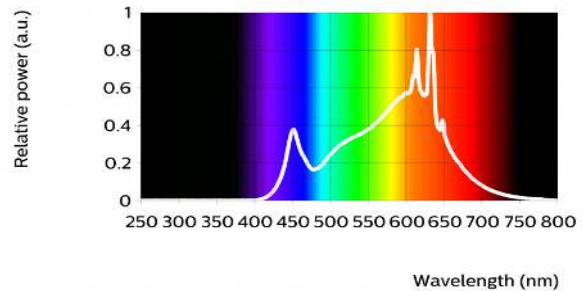
Optical characteristics - table per color (CCT)

Fortimo SLM C 930 PW 1205 L13 2024 G7 HE

Parameter	Min	Typ	Max	Unit
Luminous flux	2347	2471	2718	lm
Module efficacy		144		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			2	SDCM
CRI	90	92		
R9	50			
Photometric code		930/259		
Photobiological safety			RG1 unlimited	

Measurement precision for flux +/- 5%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI 1.5

Operation point	930	lm	lm/W
80% I-nom 400mA	Tc 25 °C	2254	164
	Tc-nom 85 °C	2030	151
	Tc-max 95 °C	1986	148
I-nom 500mA	Tc 25 °C	2766	158
	Tc-nom 85 °C	2471	144
	Tc-max 95 °C	2413	142
I-max 1050mA	Tc 25 °C	5206	130
	Tc-nom 85 °C	4511	115
	Tc-max 95 °C	4374	112

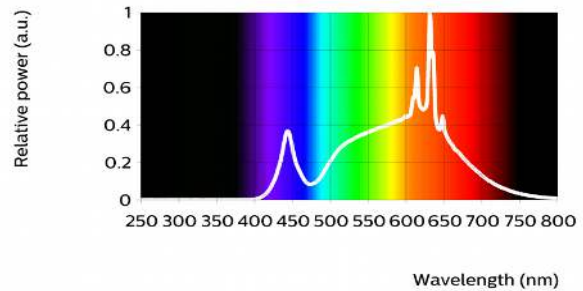


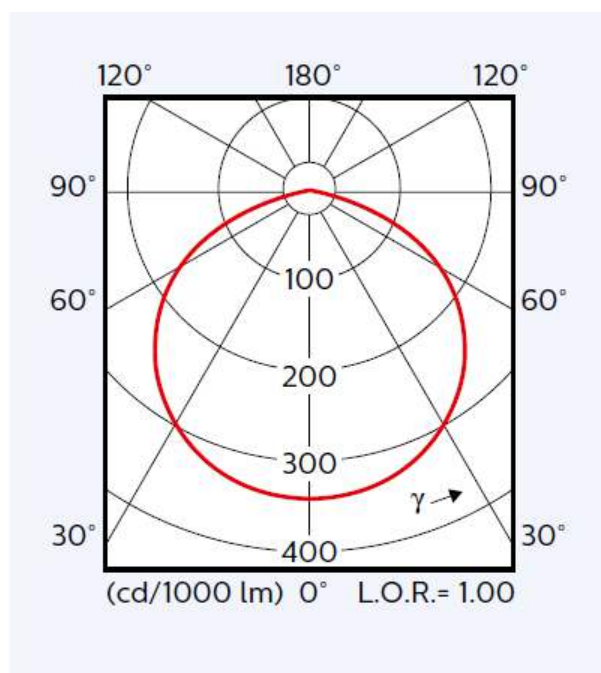
Fortimo SLM C 930 PC 1205 L13 2024 G7 HE

Parameter	Min	Typ	Max	Unit
Luminous flux	2140	2252	2477	lm
Module efficacy		132		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			2	SDCM
CRI	91	93		
R9	70			
Photometric code		930/259		
Photobiological safety			RG1 unlimited	

Measurement precision for flux +/- 5%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI 1.5

Operation point	930	lm	lm/W
80% I-nom 400mA	Tc 25 °C	2055	149
	Tc-nom 85 °C	1851	138
	Tc-max 95 °C	1811	135
I-nom 500mA	Tc 25 °C	2521	144
	Tc-nom 85 °C	2252	132
	Tc-max 95 °C	2199	129
I-max 1050mA	Tc 25 °C	4744	119
	Tc-nom 85 °C	4109	105
	Tc-max 95 °C	3984	102





Electrical characteristics

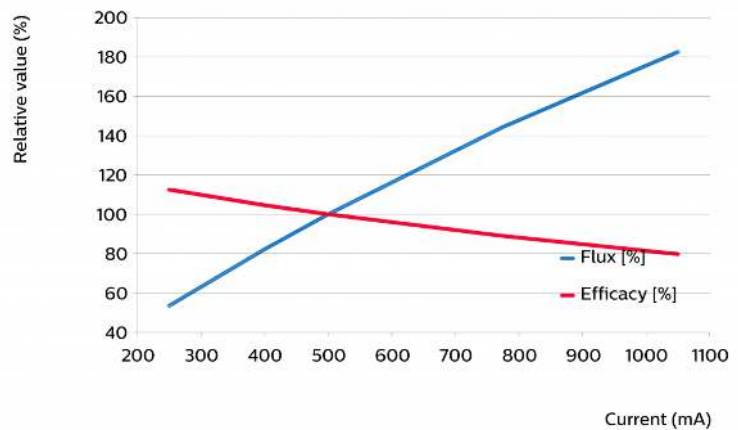
Parameter	Min	Typ	Max	Unit
Forward voltage	31.7	34.2	36.7	V
Power consumption	15.9	17.1	18.3	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

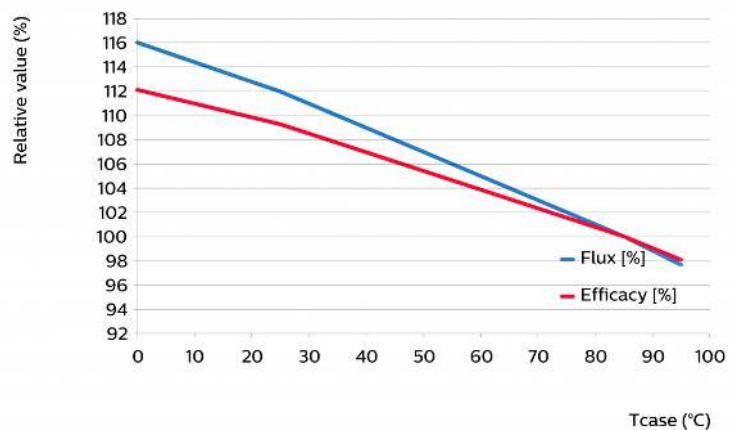
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1050	182	80
775	144	89
500	100	100
400	82	105
250	53	113



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

Tc [°C]	Flux [%]	Efficacy [%]
95	98	98
85	100	100
25	112	109
0	116	112



Lumen maintenance

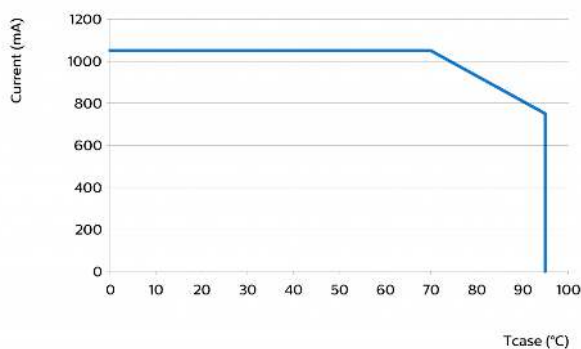
Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I nom 400mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	>50	41
	Tc nom 85°C	>50	>50	>50	>50	48	39	35	23	18
	Tc max 95°C	>50	>50	42	>50	33	26	24	16	12
I nom 500mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	47	38
	Tc nom 85°C	>50	>50	>50	>50	44	35	32	21	17
	Tc max 95°C	>50	48	39	46	30	24	22	13	11
I max 1050mA	Tc 65°C	>50	>50	>50	>50	>50	42	38	25	20
	Tc nom 85°C	>50	40	32	38	25	20	18	12	9
	Tc max 95°C	43	28	23	27	18	14	13	8	7

Lifetime

Parameter	Value	Unit
C10 at Tc life	50000	hours
M70F50 nominal	>50000	hours
M70F50 life	>50000	hours

Switching cycles in accordance to EU 1194/2012: >15000.

Performance Window



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1050	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

Application information

Application	
Dimming	Yes



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