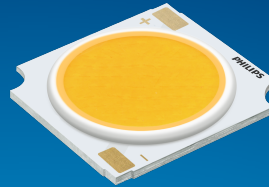


PHILIPS

Fortimo

LED

Fortimo SLM C 1208 L15
1919 G7N HE+



Datasheet

Fortimo SLM – best combination of performance and quality of light – now embraces industry standard footprint

Fortimo SLM C 1208 L15 1919 G7N HE+

The leading efficacy and Quality of Light of Fortimo SLM continues served in the industry-proven footprint! The new G7N HE+ family further improves efficacy and close the gap Vs Fortimo SLM G7 CRI80 HE series, keep in 2 SDCM with better color consistency. Please check the online Easy Design-in Tool for your perfect system combination (www.easydesignintool.com).

Key features and benefits

Most widely used footprint to enable ease of use

Best quality of light available for all application

Extended portfolio covering standard color and Premium White color

High Efficacy CRI90 series offers 15% higher efficacy than standard CRI90 with excellent color consistency (2 SDCM)

System proposition (Module + Driver + Holder)

Flexibility to optimize luminaire performance (high efficacy or high lm output)

>50,000 hours lifetime

November 2022



indirect



instant



Ordering data

Commercial product name	EOC	12NC	EPREL registration #	Box quantity
Fortimo SLM C 927 1208 L15 1919 G7N HE+	8720169 198609 00	9290 034 40180	1411558	20
Fortimo SLM C 930 1208 L15 1919 G7N HE+	8720169 198630 00	9290 034 40280	1411559	20
Fortimo SLM C 935 1208 L15 1919 G7N HE+	8720169 198661 00	9290 034 40380	1411560	20
Fortimo SLM C 940 1208 L15 1919 G7N HE+	8720169 198692 00	9290 034 40480	1411561	20
Fortimo SLM C 930 PW 1208 L15 1919 G7N HE+	8720169 198722 00	9290 034 40580	1411562	20
Fortimo SLM C 935 PW 1208 L15 1919 G7N HE+	8720169 198753 00	9290 034 40680	1411563	20
Fortimo SLM C 940 PW 1208 L15 1919 G7N HE+	8720169 198784 00	9290 034 40780	1411564	20

The products with EOC number are globally available by default. For those without EOC number are open only on request.
Please contact your local sales representative for local availability and activation conditions.

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM C 1208 L15 1919 G7N HE+	720	See performance window	1200	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

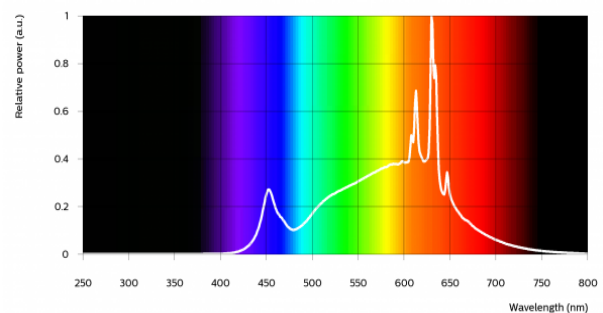
Optical characteristics - table per color (CCT)

Fortimo SLM C 927 1208 L15 1919 G7N HE+

Parameter	Min	Typ	Max	Unit
Luminous flux	3339	3515	3866	lm
Efficacy		142		lm/W
Correlated color temperature (CCT)		2700		K
Color coordinates (CIEx, CIEy)		(0.458, 0.410)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		927/259		
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 576mA	Tc 25 °C	3139	159
	Tc-nom 85 °C	2858	147
	Tc-max 95 °C	2796	145
I-nom 720mA	Tc 25 °C	3867	154
	Tc-nom 85 °C	3515	142
	Tc-max 95 °C	3437	139
I-max 1200mA	Tc 25 °C	6150	138
	Tc-nom 85 °C	5552	127
	Tc-max 95 °C	5418	124

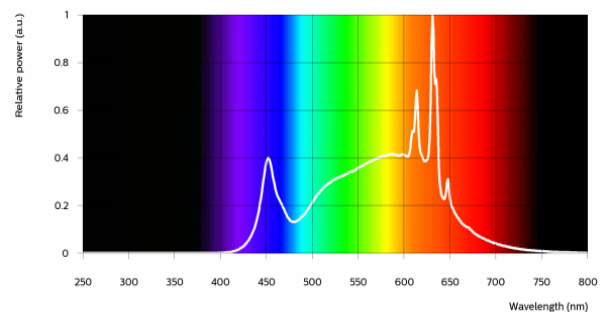


Fortimo SLM C 930 1208 L15 1919 G7N HE+

Parameter	Min	Typ	Max	Unit
Luminous flux	3553	3740	4114	lm
Efficacy		151		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.434, 0.403)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		930/259		
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 576mA	Tc 25 °C	3340	169
	Tc-nom 85 °C	3041	157
	Tc-max 95 °C	2975	154
I-nom 720mA	Tc 25 °C	4114	164
	Tc-nom 85 °C	3740	151
	Tc-max 95 °C	3657	148
I-max 1200mA	Tc 25 °C	6544	147
	Tc-nom 85 °C	5909	135
	Tc-max 95 °C	5767	132

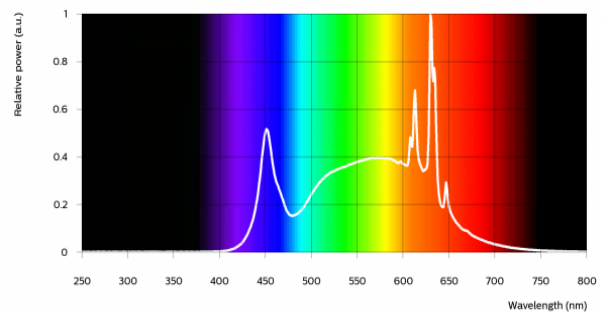


Fortimo SLM C 935 1208 L15 1919 G7N HE+

Parameter	Min	Typ	Max	Unit
Luminous flux	3681	3875	4262	lm
Efficacy		156		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.408, 0.393)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		935/259		
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	935	lm	lm/W
80% I-nom 576mA	Tc 25 °C	3460	176
	Tc-nom 85 °C	3151	162
	Tc-max 95 °C	3083	159
I-nom 720mA	Tc 25 °C	4262	170
	Tc-nom 85 °C	3875	156
	Tc-max 95 °C	3789	154
I-max 1200mA	Tc 25 °C	6781	152
	Tc-nom 85 °C	6124	140
	Tc-max 95 °C	5978	137

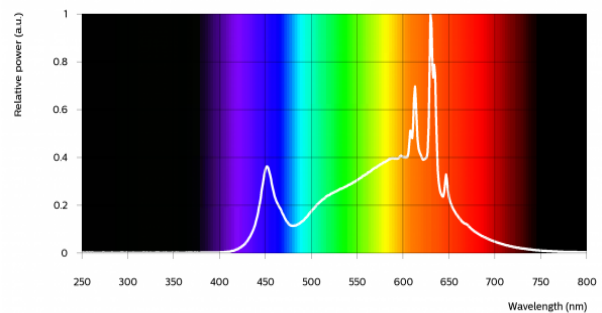


Fortimo SLM C 940 1208 L15 1919 G7N HE+

Parameter	Min	Typ	Max	Unit
Luminous flux	3772	3970	4367	lm
Efficacy		160		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.382, 0.380)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		940/259		
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	940	lm	lm/W
80% I-nom 576mA	Tc 25 °C	3544	180
	Tc-nom 85 °C	3228	166
	Tc-max 95 °C	3158	163
I-nom 720mA	Tc 25 °C	4365	174
	Tc-nom 85 °C	3970	160
	Tc-max 95 °C	3882	157
I-max 1200mA	Tc 25 °C	6947	156
	Tc-nom 85 °C	6275	143
	Tc-max 95 °C	6126	140

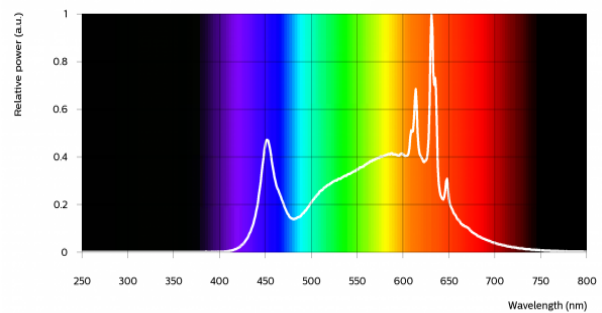


Fortimo SLM C 930 PW 1208 L15 1919 G7N HE+

Parameter	Min	Typ	Max	Unit
Luminous flux	3591	3780	4158	lm
Efficacy		153		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		930/259		
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 576mA	Tc 25 °C	3375	171
	Tc-nom 85 °C	3074	158
	Tc-max 95 °C	3007	155
I-nom 720mA	Tc 25 °C	4157	166
	Tc-nom 85 °C	3780	153
	Tc-max 95 °C	3696	150
I-max 1200mA	Tc 25 °C	6615	149
	Tc-nom 85 °C	5974	136
	Tc-max 95 °C	5831	133

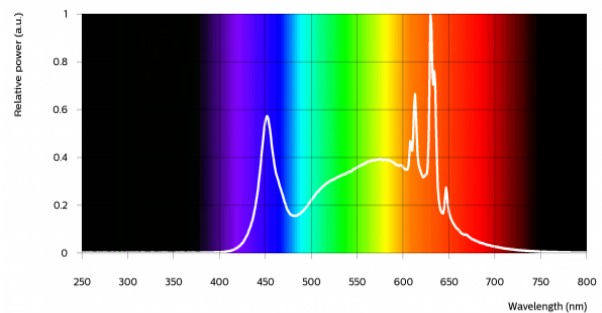


Fortimo SLM C 935 PW 1208 L15 1919 G7N HE+

Parameter	Min	Typ	Max	Unit
Luminous flux	3681	3875	4262	lm
Efficacy		156		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.398, 0.376)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		935/259		
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 .

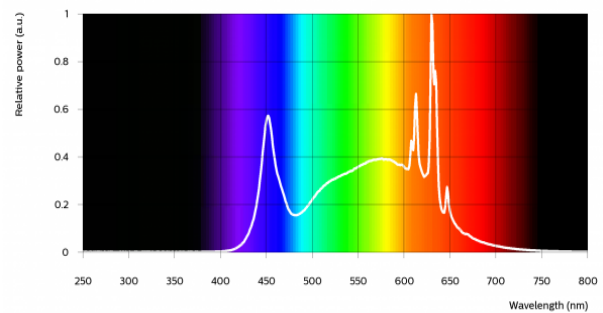
Operation point	935	lm	lm/W
80% I-nom 576mA	Tc 25 °C	3460	176
	Tc-nom 85 °C	3151	162
	Tc-max 95 °C	3083	159
I-nom 720mA	Tc 25 °C	4262	170
	Tc-nom 85 °C	3875	156
	Tc-max 95 °C	3789	154
I-max 1200mA	Tc 25 °C	6781	152
	Tc-nom 85 °C	6124	140
	Tc-max 95 °C	5978	137

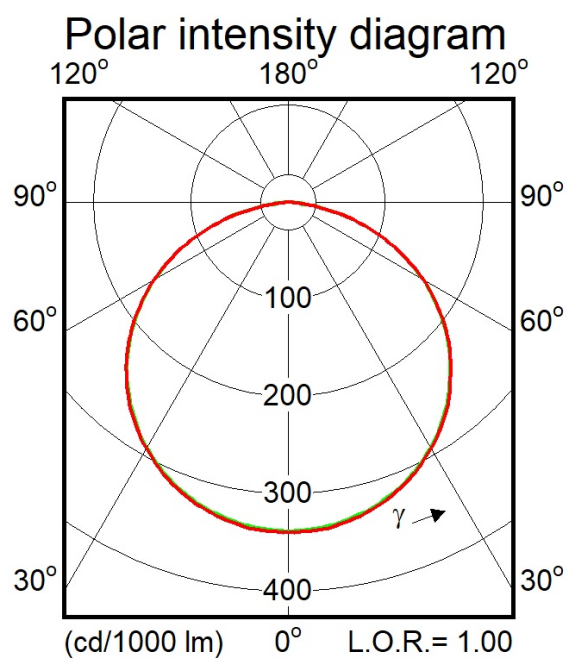


Parameter	Min	Typ	Max	Unit
Luminous flux	3772	3970	4367	lm
Efficacy		160		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.374, 0.364)		-
Color consistency			2	SDCM
CRI	90			
R9	50			
Photometric code		940/259		
Photobiological safety			RG1 unlimited	

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	940	lm	lm/W
80% I-nom 576mA	Tc 25 °C	3544	180
	Tc-nom 85 °C	3228	166
	Tc-max 95 °C	3158	163
I-nom 720mA	Tc 25 °C	4365	174
	Tc-nom 85 °C	3970	160
	Tc-max 95 °C	3882	157
I-max 1200mA	Tc 25 °C	6947	156
	Tc-nom 85 °C	6275	143
	Tc-max 95 °C	6126	140





Electrical characteristics

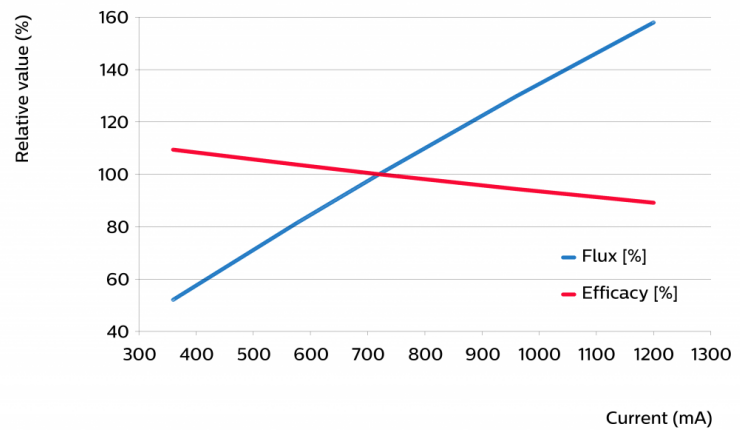
Parameter	Min	Typ	Max	Unit
Forward voltage	32.0	34.4	37.0	V
Power consumption	23.0	24.8	26.6	W = kWh/1000h
Number of modules in series per chain			1	
Number of modules per chain			1	
Number of modules in parallel			1	

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

Tuning information

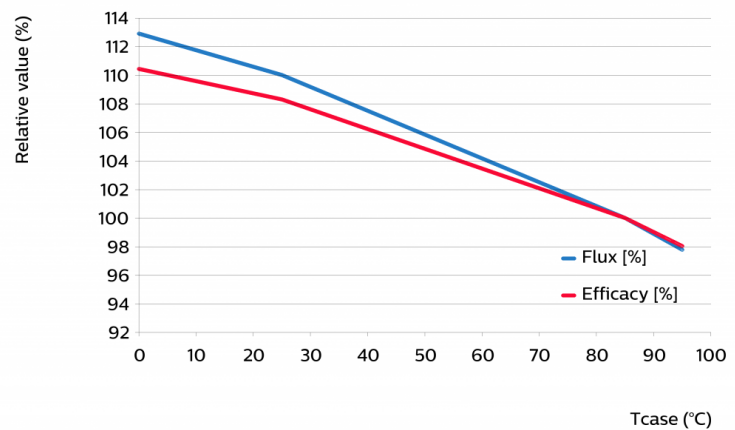
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1200	158	89
960	130	94
720	100	100
576	81	104
360	52	109



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

Tc [°C]	Flux [%]	Efficacy [%]
95	98	98
85	100	100
25	110	108
0	113	110



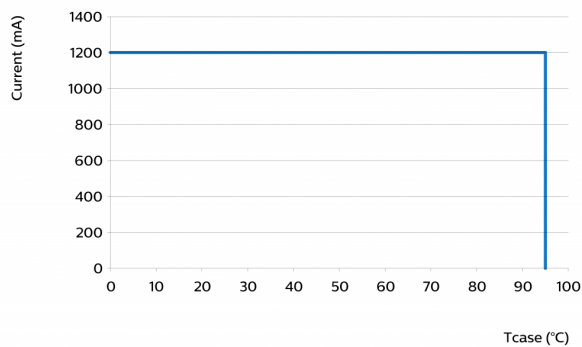
Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I-nom 576mA	Tc 75°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 85°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 95°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
I-nom 720mA	Tc 75°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 85°C	>66	>66	>66	>66	>66	>66	>66	>66	>66
	Tc 95°C	>66	>66	>66	>66	>66	>66	>66	>66	62
I-max 1200mA	Tc 75°C	>66	>66	>66	>66	>66	>66	44	37	34
	Tc 85°C	>66	>66	>66	>66	>66	61	37	31	29
	Tc 95°C	>66	>66	>66	>66	57	52	32	27	24

Lifetime

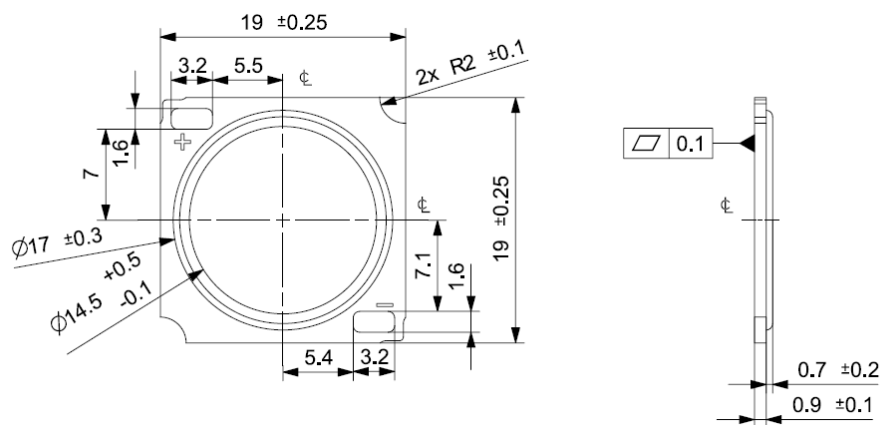
Parameter	Value	Unit
M70F50 nominal	>66000	hours

Performance Window



Mechanical characteristics

Parameter	Min	Typ	Max	Unit
Length	18.75	19	19.25	mm
Width	18.75	19	19.25	mm
Height PCB	0.8	0.9	1	mm
Height total	1.3	1.6	1.9	mm
Product mass		0.994		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1200	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

Certificates and Standards

CB
 CE
 ENEC
 ENEC+
 EPRS 001
 IEC/EN 62031
 UKCA
 UL
 UL 8750

Environmental

RoHS/REACH

Application

Dimming	Yes
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