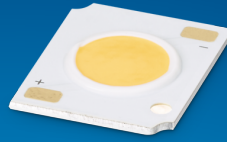


PHILIPS

Fortimo

LED

Fortimo SLM PW
1202 L06 1215 G7



Datasheet

Experience bright and vivid colors

Fortimo LED SLM PW 1202 L06 1215 G7

Fortimo LED SLM Gen7 continues to focus on the combination of Quality of Light and performance. By offering the CoB separate from the holder, even more flexibility in possible system combinations and specifications is achieved. This results in an extensive portfolio of lumen ranges, CCTs and spectra. Please also check the online Easy Design-in Tool for your perfect system combination (www.easydesignintool.com)

Key features and benefits

- Best quality of light available for all applications
- Extensive range of CCTs
- Small LES for narrow beam angles and small reflector designs
- Flexibility to select a different lumen output between 800 and 10000 lm
- State of the art Chip-on-Board (CoB) technology, enabling highest system efficacy
- System proposition (CoB + Holder + driver)
- Flexibility to optimize luminaire performance (lm/W or high lm output)
- Xitanium window drivers with SimpleSet for maximum flexibility
- Mini drivers for smallest possible luminaire designs
- Five years system warranty with over 50,000 hours lifetime
- Instant full light

August 2018

Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo SLM C 830 PW 1202 L06 1215 G7	8718696 844793 00	9290 015 82606	20
Fortimo SLM C 930 PW 1202 L06 1215 G7	8718696 844847 00	9290 015 82706	20
Fortimo SLM C 935 PW 1202 L06 1215 G7	8718696 844915 00	9290 015 82806	20
Fortimo SLM C 940 PW 1202 L06 1215 G7	8718696 845103 00	9290 015 82906	20

Not all products are globally available by default.

Please contact your local Philips Lighting representative for local availability.

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM PW 1202 L06 1215 G7	200	450	540	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	85	75	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)

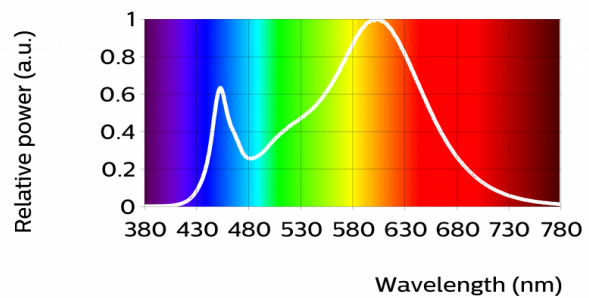
Fortimo SLM C 830 PW 1202 L06 1215 G7

Parameter	Min	Typ	Max	Unit
Luminous flux	801	890	979	lm
Module efficacy	116	129		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			3	SDCM
CRI	80	82		
Photobiological safety			RG1 unlimited	
Energy efficiency label		A+		

At currents higher than 446 mA the module might be classified as RG2

Measurement precision for flux +/- 5%. Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5

Operation point	830	lm	lm/W
80% I-nom 160mA	Tc 25 °C	799	143
	Tc-nom 85 °C	732	134
	Tc-max 95 °C	721	133
I-nom 200mA	Tc 25 °C	986	138
	Tc-nom 85 °C	890	129
	Tc-max 95 °C	874	127
I-life 450mA	Tc 25 °C	1924	110
	Tc-nom 85 °C	1673	98
	Tc-max 95 °C	1632	96



R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
83	95	92	80	84	93	80	58	10	88	79	79	86	96

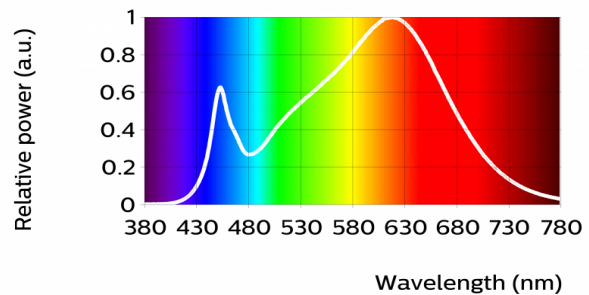
Fortimo SLM C 930 PW 1202 L06 1215 G7

Parameter	Min	Typ	Max	Unit
Luminous flux	684	760	836	lm
Module efficacy	99	110		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.422, 0.386)		-
Color consistency			3	SDCM
CRI	90	92		
Photobiological safety			RG1 unlimited	
Energy efficiency label		A+		

At currents higher than 524 mA the module might be classified as RG2

Measurement precision for flux +/- 5%. Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5

Operation point	930	lm	lm/W
80% I-nom 160mA	Tc 25 °C	682	122
	Tc-nom 85 °C	625	115
	Tc-max 95 °C	616	114
I-nom 200mA	Tc 25 °C	842	118
	Tc-nom 85 °C	760	110
	Tc-max 95 °C	747	108
I-life 450mA	Tc 25 °C	1643	94
	Tc-nom 85 °C	1428	83
	Tc-max 95 °C	1393	82



R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
93	97	97	91	93	95	90	80	58	93	91	83	95	99

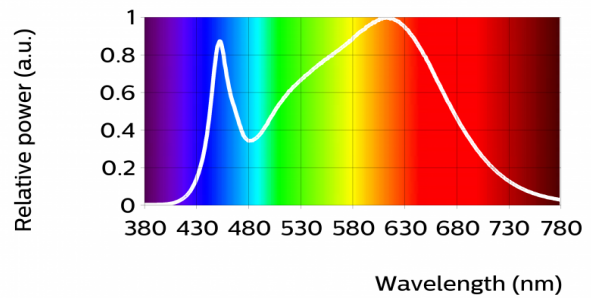
Fortimo SLM C 935 PW 1202 L06 1215 G7

Parameter	Min	Typ	Max	Unit
Luminous flux	729	810	891	lm
Module efficacy	105	117		lm/W
Correlated color temperature (CCT)		3500		K
Color coordinates (CIEx, CIEy)		(0.398, 0.376)		-
Color consistency			3	SDCM
CRI	90	92		
Photobiological safety			RG1 unlimited	
Energy efficiency label		A+		

At currents higher than 412 mA the module might be classified as RG2

Measurement precision for flux +/- 5%. Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5

Operation point	935	lm	lm/W
80% I-nom 160mA	Tc 25 °C	727	130
	Tc-nom 85 °C	666	122
	Tc-max 95 °C	656	121
I-nom 200mA	Tc 25 °C	897	126
	Tc-nom 85 °C	810	117
	Tc-max 95 °C	796	115
I-life 450mA	Tc 25 °C	1752	100
	Tc-nom 85 °C	1523	89
	Tc-max 95 °C	1485	87



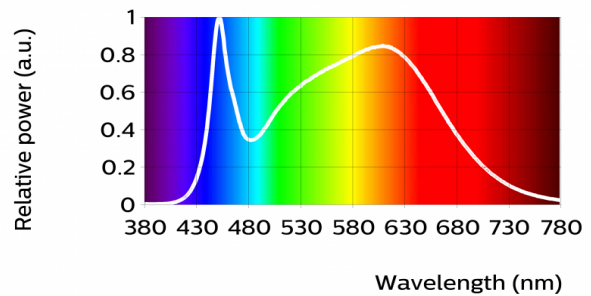
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
93	96	97	91	92	93	92	82	59	89	91	77	94	98

Fortimo SLM C 940 PW 1202 L06 1215 G7

Parameter	Min	Typ	Max	Unit
Luminous flux	747	830	913	lm
Module efficacy	108	120		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.374, 0.364)		-
Color consistency			3	SDCM
CRI	90	92		
Photobiological safety			RG2	
Ethr			1403	lux
Energy efficiency label		A+		

Measurement precision for flux +/- 5%. Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5

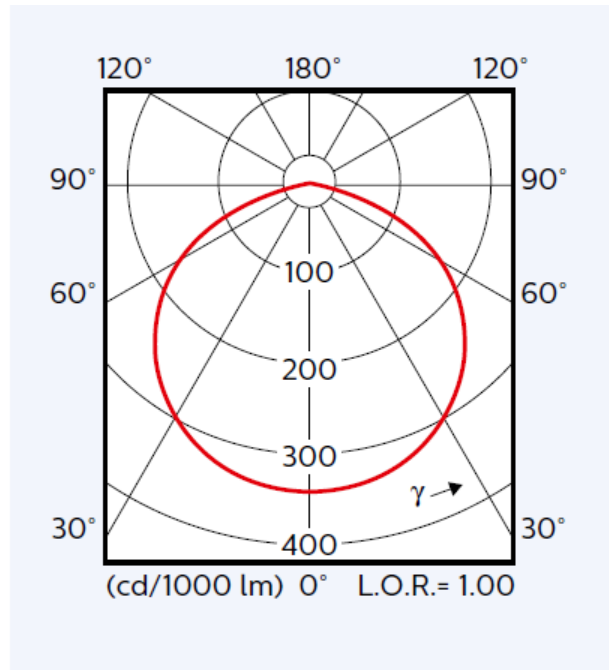
Operation point	940	lm	lm/W
80% I-nom 160mA	Tc 25 °C	745	133
	Tc-nom 85 °C	683	125
	Tc-max 95 °C	672	124
I-nom 200mA	Tc 25 °C	919	129
	Tc-nom 85 °C	830	120
	Tc-max 95 °C	815	118
I-life 450mA	Tc 25 °C	1796	102
	Tc-nom 85 °C	1562	91
	Tc-max 95 °C	1523	89



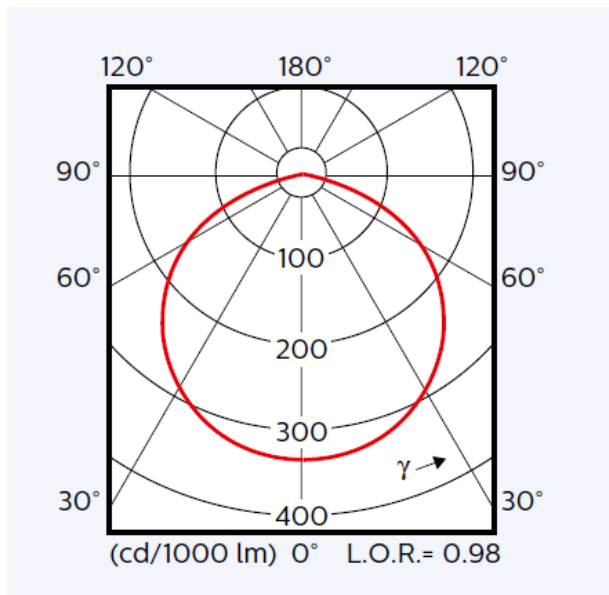
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
92	96	96	91	92	92	92	83	60	88	90	72	94	97

Beam shape

Bare CoB



CoB with a poke-in holder



Electrical characteristics

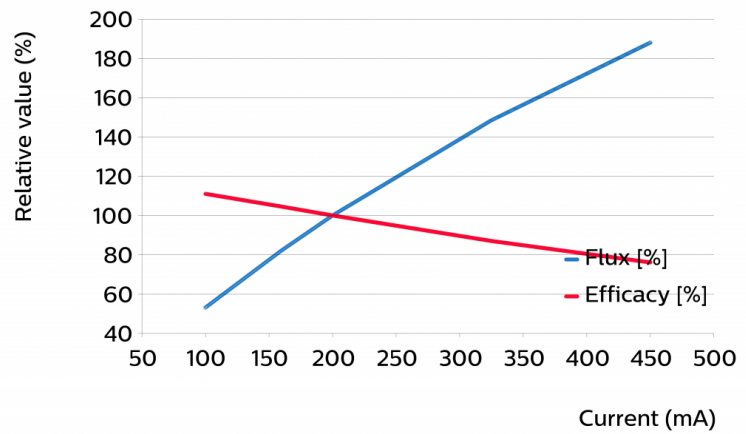
[Fortimo SLM C 830 PW 1202 L06 1215 G7](#)
[Fortimo SLM C 930 PW 1202 L06 1215 G7](#)
[Fortimo SLM C 935 PW 1202 L06 1215 G7](#)
[Fortimo SLM C 940 PW 1202 L06 1215 G7](#)

Parameter	Min	Typ	Max	Unit
Forward voltage	32.1	34.6	37.1	V
Power consumption	6.4	6.9	7.4	W
Number of modules in series per chain			1	
Number of modules in parallel per chain			1	

Tuning information

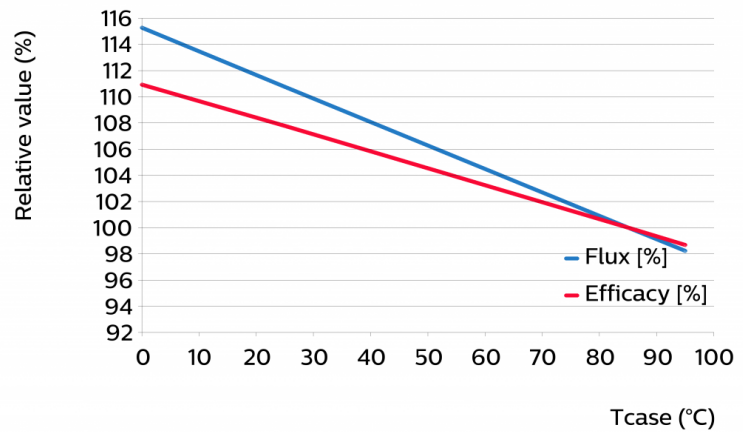
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
450	188	76
325	148	87
200	100	100
160	82	105
100	53	111



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

Tcase [°C]	Flux [%]	Efficacy [%]
95	98	99
85	100	100
25	111	108
0	115	111



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 75°C	>50	>50	>50	>50	>50	>50	39	34	30
	Tc 85°C	>50	>50	>50	50	43	39	24	20	19
	Tc 95°C	50	43	39	31	27	25	15	13	12
I-nom 200mA	Tc 75°C	>50	>50	>50	>50	>50	>50	33	28	25
	Tc 85°C	>50	>50	>50	42	36	33	20	17	15
	Tc 95°C	42	36	33	26	23	21	12	11	10
I-life 450mA	Tc 75°C	>50	45	42	33	28	26	15	13	12
	Tc 85°C	35	30	28	22	19	18	10	9	8
	Tc 95°C	22	19	17	14	12	11	6	6	5

Lifetime

Parameter	Value	Unit
C10 at Tc life	50000	hours

Please refer to the performance window to ensure that your operating conditions are covered.

>50 k hours claim is based on extrapolating raw LM80-data by using statistical techniques.

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

Mechanical characteristics

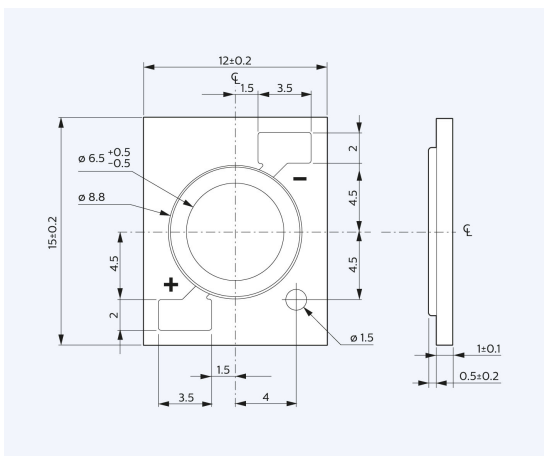
Fortimo SLM C 830 PW 1202 L06 1215 G7

Fortimo SLM C 930 PW 1202 L06 1215 G7

Fortimo SLM C 935 PW 1202 L06 1215 G7

Fortimo SLM C 940 PW 1202 L06 1215 G7

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



Absolute ratings

Parameter	Min	Typ	Max	Unit
Current through the LED module (I-max)			540	mA
Case temperature (Tc-max)			95	°C
Power at rated Vf-max and I-max			22.4	W
ESD (direct contact)			8	kV
Ambient temperature	-20		40	°C
Storage temperature	-40		80	°C

Application information

Certificates and Standards

IEC 62031:2008 (First Edition) + A1:2012 + A2:2014

EN 62031:2008 (First Edition) + A1:2013 + A2:2015

Relevant clauses of IEC 62471:2006 (Incl. IEC/TR 62471-2: 2009 and IEC/TR 62778: 2014)

Relevant clauses of IEC 60838-1:2004 + A1:2008 + A2:2011 with IEC 60838-2-2:2006 + A1:2012

Relevant clauses of EN 62471:2008 (With IEC/TR 62471-2: 2009 and IEC/TR 62778: 2014)

Relevant clauses of EN 60838-1:2004 + A1:2008 + A2:2011 with EN 60838-2-2:2006 + A1:2012

UL 8750

ENEC+

CE

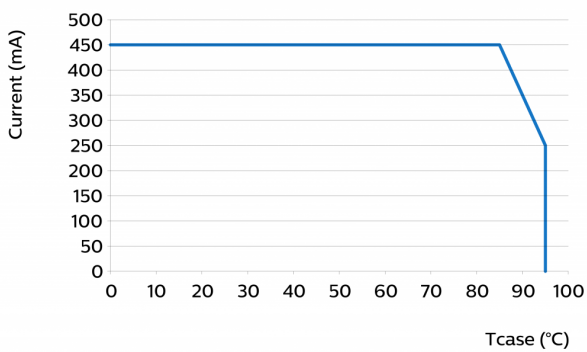
Environmental

RoHS/REACH

Application

IP rating	No IP-rating
Overheating protection	No
Luminaire class	IEC Class I and Class II
Dimming	Yes

Performance Window





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08/2018