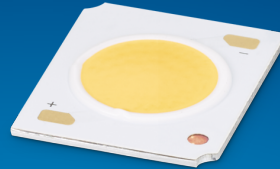


PHILIPS

Fortimo

LED

Fortimo SLM Food
1205 G7



Datasheet

Fortimo LED SLM Food 1205 L13 2024 G7

Fortimo LED SLM Gen7 continues to focus on the combination of Quality of Light and performance. Food Gen 7 range extends more application with dedicated design on the spectrum to deliver a more appealing light effect to deliver excellent shopping experiences.

Key features and benefits

Extensive flux ranges from 2000lm to 5000lm (@norm)

Extensive application covers Meat, Bread, Iced Seafood, Live Seafood, Vegetables and Fruit.

Flexibility to optimize luminaire performance (lm/w or high lm output)

System approach (CoB + Holder + Driver)

50,000 hours lifetime

August 2020



Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo SLM C 925 FWW 1205 L13 2024 G7	8718699 730741 00	9290 021 44406	20
Fortimo SLM C 930 FPR 1205 L13 2024 G7	8718699 730703 00	9290 021 44106	20
Fortimo SLM C 865 FIS 1205 L13 2024 G7	8718699 730826 00	9290 021 45006	20

Drive currents

Parameter	Nominal*	Life**	Max***	Unit
Fortimo SLM Food 1205 G7	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)

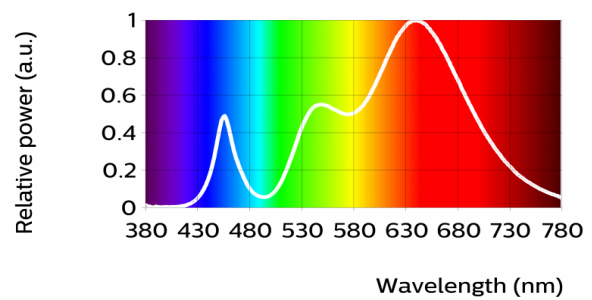
Fortimo SLM C 925 FWW 1205 L13 2024 G7

Parameter	Min	Typ	Max	Unit
Luminous flux	1417	1524	1676	lm
Module efficacy		89		lm/W
Correlated color temperature (CCT)		2500		K
Color coordinates (CIEx, CIEy)		(0.457, 0.385)		-
Color consistency			3	SDCM
CRI	88	90		
R9	88			
Photometric code		925/359		
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	825	lm	lm/W
80% I-nom 400mA	Tc 25 °C	1352	99
	Tc-nom 85 °C	1248	93
	Tc-max 95 °C	1227	92
I-nom 500mA	Tc 25 °C	1659	95
	Tc-nom 85 °C	1524	89
	Tc-max 95 °C	1497	88
I-max 1050mA	Tc 25 °C	3138	78
	Tc-nom 85 °C	2829	72
	Tc-max 95 °C	2768	70

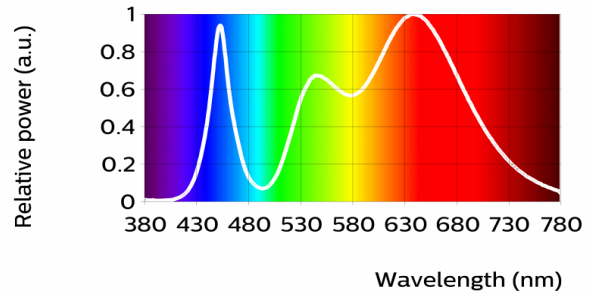


Parameter	Min	Typ	Max	Unit
Luminous flux	1502	1615	1777	lm
Module efficacy		94		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.406, 0.350)		-
Color consistency			3	SDCM
CRI	87	89		
R9	73			
Photometric code		830/359		
Photobiological safety			RG1 unlimited	

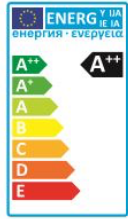


Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5

Operation point	830	lm	lm/W
	Tc 25 °C	1426	104
80% I-nom 400mA	Tc-nom 85 °C	1322	98
	Tc-max 95 °C	1302	97
	Tc 25 °C	1750	100
I-nom 500mA	Tc-nom 85 °C	1615	94
	Tc-max 95 °C	1590	93
	Tc 25 °C	3318	83
I-max 1050mA	Tc-nom 85 °C	3022	77
	Tc-max 95 °C	2967	76

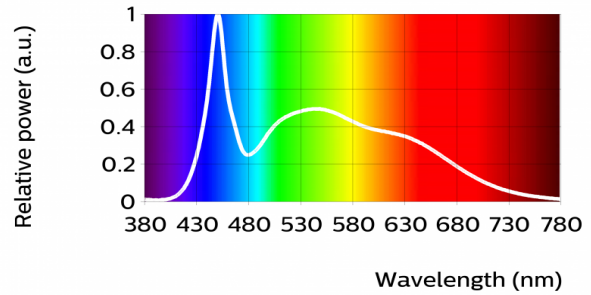


Parameter	Min	Typ	Max	Unit
Luminous flux	2198	2360	2596	lm
Module efficacy		138		lm/W
Correlated color temperature (CCT)		6500		K
Color coordinates (CIEx, CIEy)		(0.312, 0.328)		-
Color consistency			3	SDCM
CRI	81	83		
R9	43			
Photometric code		865/359		
Photobiological safety			RG2	
Ethr			922	lux



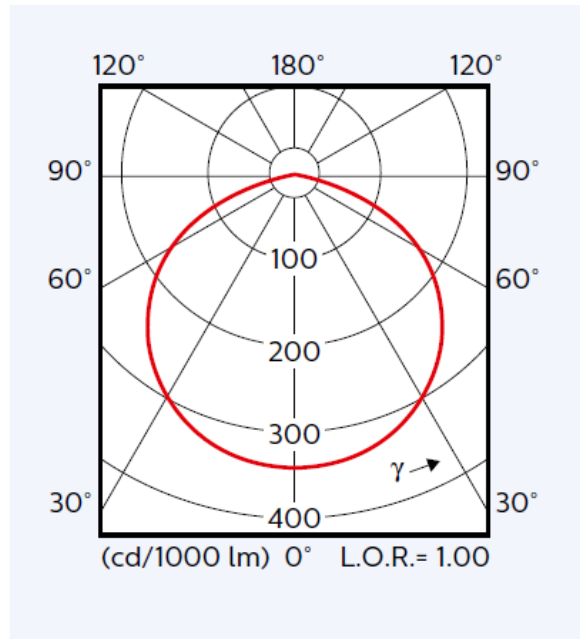
Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5

Operation point	865	lm	lm/W
	Tc 25 °C	2126	154
80% I-nom 400mA	Tc-nom 85 °C	1928	143
	Tc-max 95 °C	1893	141
	Tc 25 °C	2613	149
I-nom 500mA	Tc-nom 85 °C	2360	138
	Tc-max 95 °C	2315	136
	Tc 25 °C	4993	125
I-max 1050mA	Tc-nom 85 °C	4443	113
	Tc-max 95 °C	4345	111

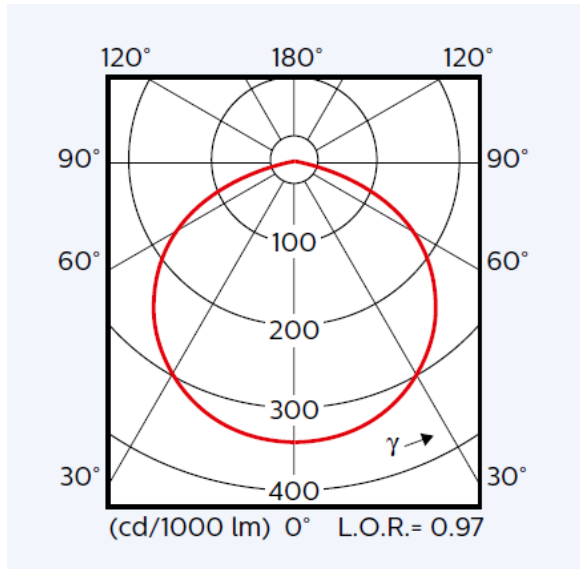


Beam shape

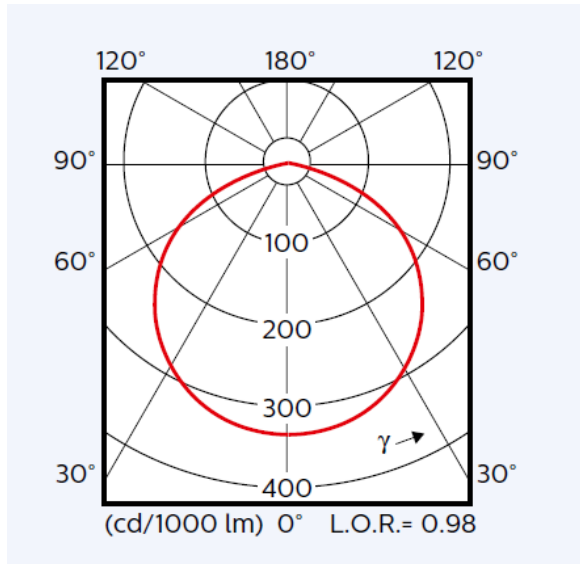
Bare CoB



CoB with a standard/ down-light/ Zhaga poke-in holder



CoB with a poke-in holder



Electrical characteristics

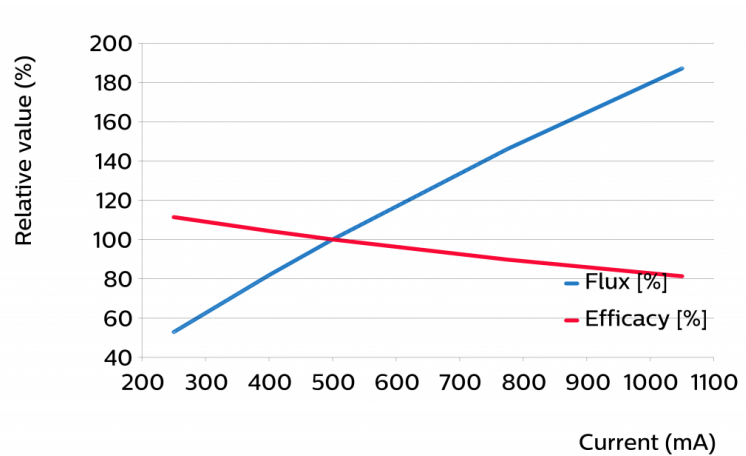
Parameter	Min	Typ	Max	Unit
Forward voltage	31.7	34.2	36.7	V
Power consumption	15.9	17.1	18.3	W = kWh/1000h
Number of modules in parallel			1	

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

Tuning information

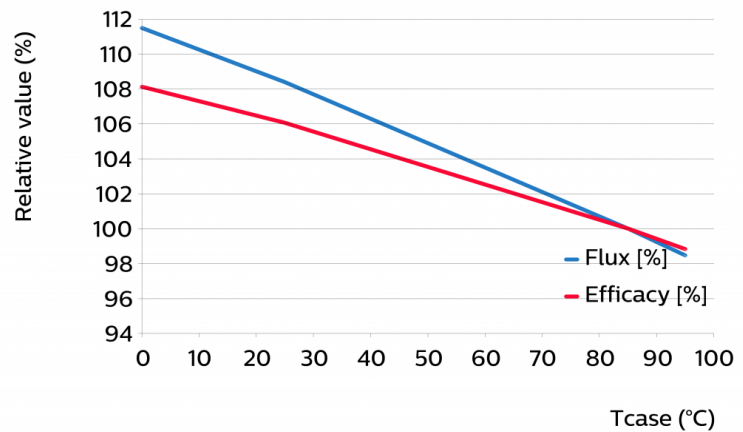
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
1050	187	81
775	146	90
500	100	100
400	82	104
250	53	111



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

Tc [°C]	Flux [%]	Efficacy [%]
95	98	99
85	100	100
25	108	106
0	111	108



Lumen maintenance

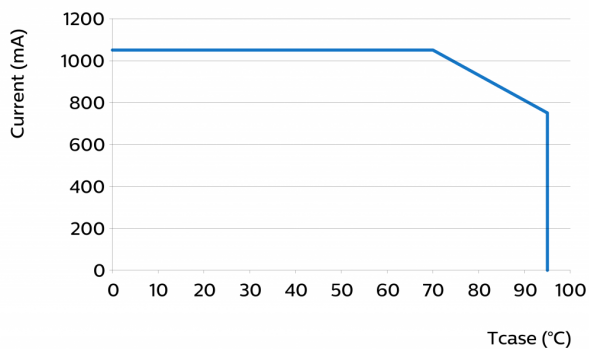
Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I nom 400mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	>50	41
	Tc nom 85°C	>50	>50	>50	>50	48	39	35	23	18
	Tc max 95°C	>50	>50	42	>50	33	26	24	16	12
I nom 500mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	47	38
	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

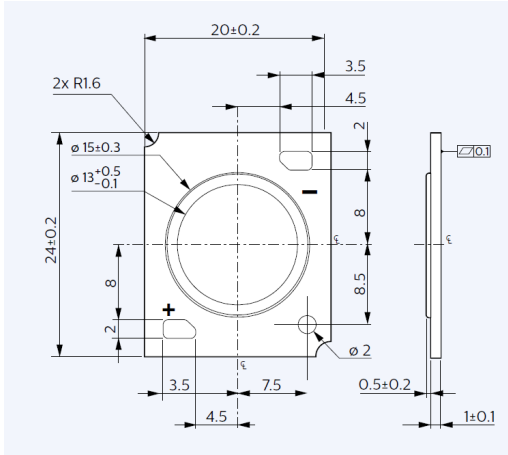
Switching cycles in accordance to EU 1194/2012: >15000

Performance Window



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		1.2		gram



Absolute ratings

Parameter	Min	Max	Unit
Current through the LED module (I-max)		1050	mA
Case temperature (Tc-max)		95	°C
Power at rated Vf-max and I-max		42.1	W
ESD (direct contact)		8	kV
Working voltage		330	V _{dc}
Ambient temperature	-20	40	°C
Storage temperature	-40	80	°C

Application information

Certificates and Standards

IEC 62031:2008/A1:2012/A2:2014

EN 62031:2008/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

Application

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



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26/08/2020