

PHILIPS

Fortimo

LED

Fortimo LED SLM PW
1208 L15 2024 G6



Datasheet

Experience bright and vivid colors

Fortimo LED SLM PW 1208 L15 2024 G6

Fortimo LED SLM Gen6 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 CCT's
- 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
- Three dedicated product lines:
 - SLM Gen6 Premium White
 - SLM Gen6 CrispWhite
 - SLM Gen6 Food

December 2016

Ordering data

Commercial product name	EOC	12NC	Box quantity
Fortimo SLM C 830 PW 1208 L15 2024 G6	8718696 650622 00	9290 014 46706	20
Fortimo SLM C 930 PW 1208 L15 2024 G6	8718696 650646 00	9290 014 46806	20
Fortimo SLM C 935 PW 1208 L15 2024 G6	8718696 650660 00	9290 014 46906	20
Fortimo SLM C 940 PW 1208 L15 2024 G6	8718696 650684 00	9290 014 47006	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 LED SLM PW 1208 L15 2024 G6	750	1500	1500	mA

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _c (case temperature at T _c point)	85	85	95	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

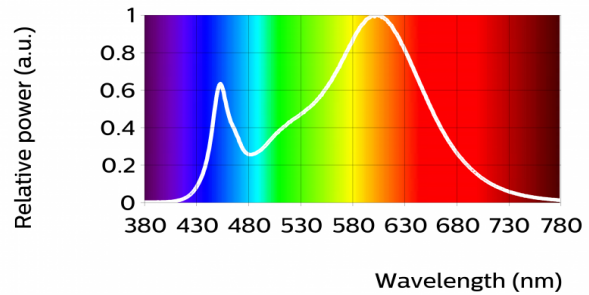
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

Fortimo SLM C 830 PW 1208 L15 2024 G6

Parameter	Min	Typ	Max	Unit
Luminous flux	3220	3580	3930	lm
Module efficacy		140		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	
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

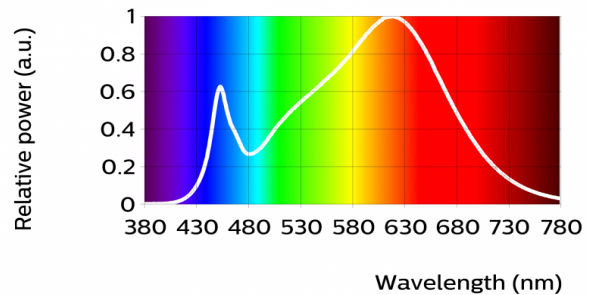


R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
83	95	92	80	84	93	80	58	10	88	79	79	86	96

Fortimo SLM C 930 PW 1208 L15 2024 G6

Parameter	Min	Typ	Max	Unit
Luminous flux	2730	3040	3340	lm
Module efficacy		119		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	
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



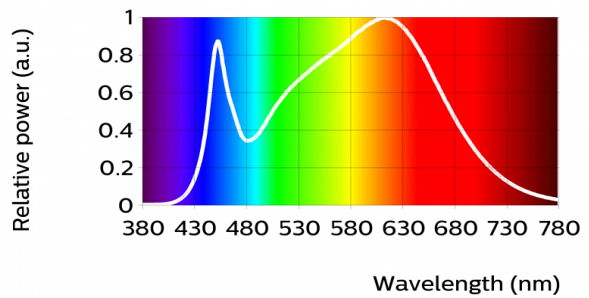
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93	97	97	91	93	95	90	80	58	93	91	83	95	99	

Fortimo SLM C 935 PW 1208 L15 2024 G6

Parameter	Min	Typ	Max	Unit
Luminous flux	2880	3200	3520	lm
Module efficacy		125		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	
Energy efficiency label		A++		

At currents higher than 1460 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



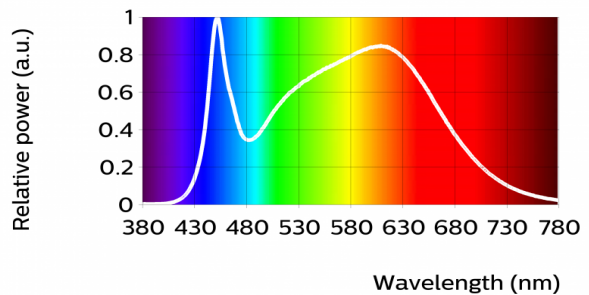
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93	96	97	91	92	93	92	82	59	89	91	77	94	98	

Fortimo SLM C 940 PW 1208 L15 2024 G6

Parameter	Min	Typ	Max	Unit
Luminous flux	2960	3290	3610	lm
Module efficacy		129		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			RG1	
Energy efficiency label		A++		

At currents higher than 1219 mA the module might be classified as RG2

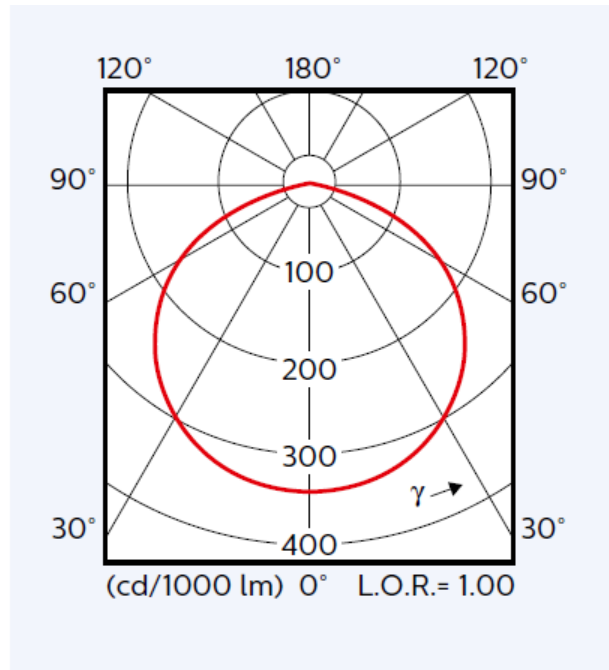
Measurement precision for flux +/- 5%. Measurement precision for efficacy +/- 6%. Measurement precision for x, y +/- 0.005. Measurement precision for CRI +/- 1.5



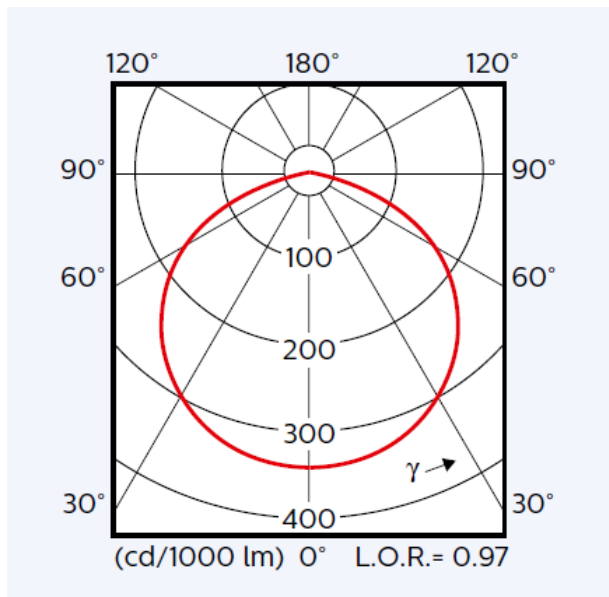
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92	96	96	91	92	92	92	83	60	88	90	72	94	97	

Beam shape

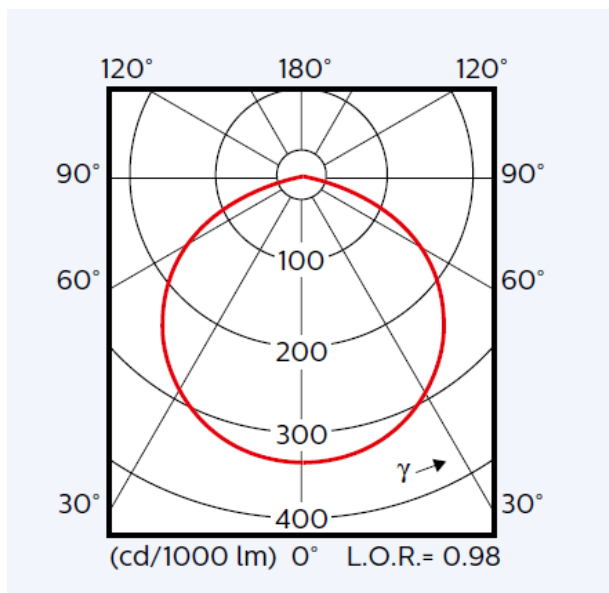
Bare CoB



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



CoB with a poke-in holder



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[Fortimo SLM C 935 PW 1208 L15 2024 G6](#)
[Fortimo SLM C 940 PW 1208 L15 2024 G6](#)

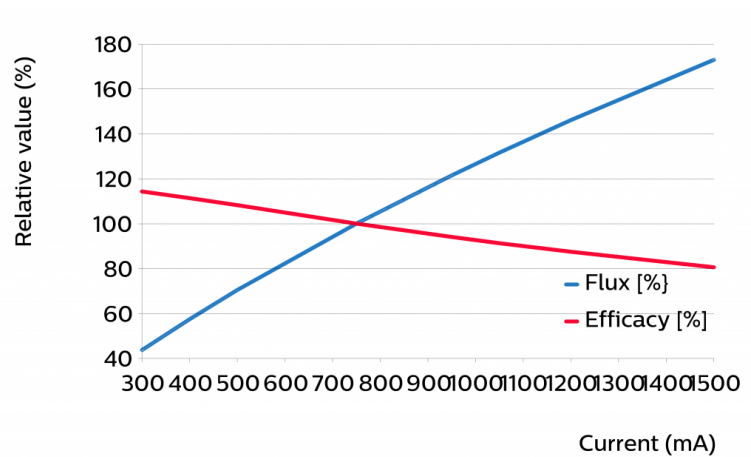
Parameter	Min	Typ	Max	Unit
Forward voltage		34.0	36.5	V
Power consumption		25.5	27.4	W
Thermal power		15.0		W

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

Tuning information

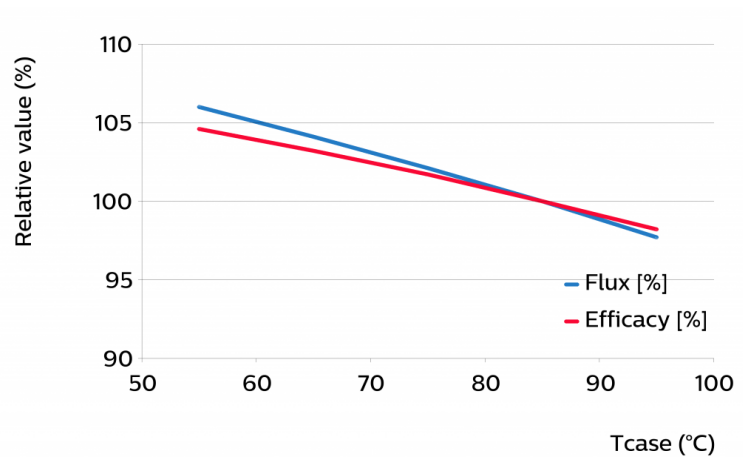
Flux and efficacy versus current (at Tc nominal)

I [mA]	Flux [%]	Efficacy [%]
300	44	114
400	57	111
500	70	108
750	100	100
950	122	94
1050	132	91
1200	146	88
1500	173	81



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

Tcase [°C]	Flux [%]	Efficacy [%]
55	106	105
65	104	103
75	102	102
85	100	100
95	98	98



Lumen maintenance

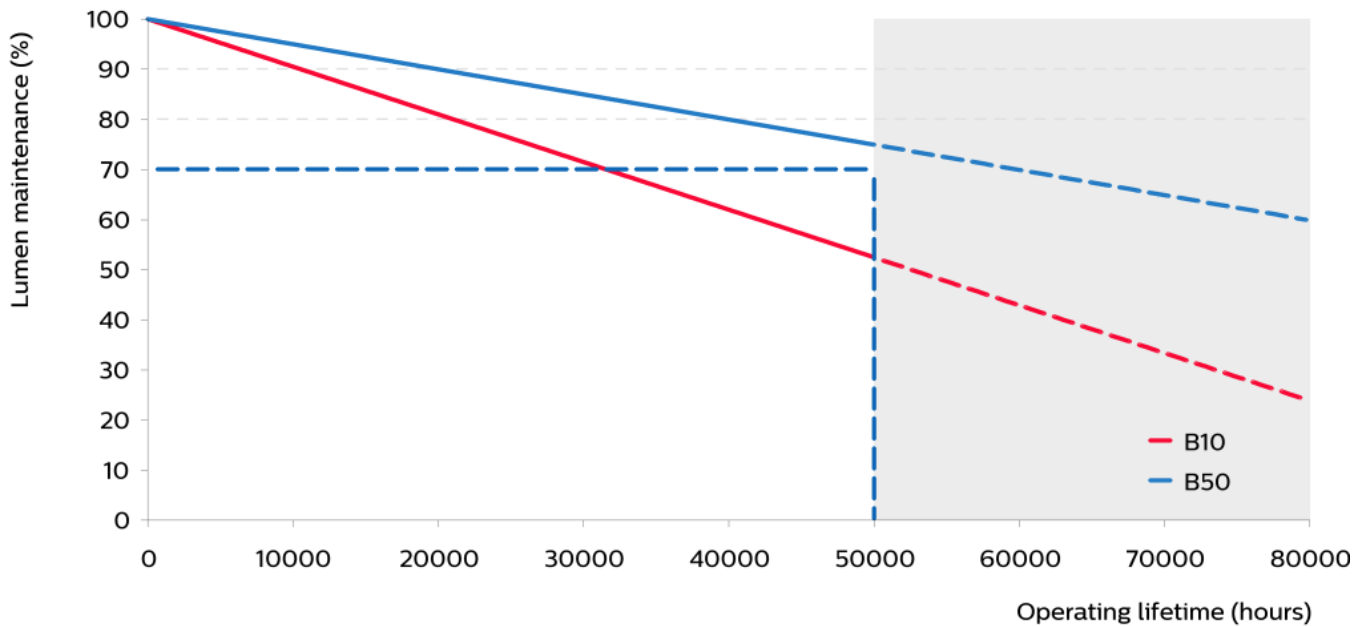
Operation point	Lumen maintenance x 1000 hours	L70			L80			L90		
		B50	B20	B10	B50	B20	B10	B50	B20	B10
80% I nom 600 mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	>50	40
	Tc nom 85°C	>50	>50	>50	>50	47	38	34	22	18
	Tc max 95°C	>50	>50	41	79	32	26	23	15	12
I nom 750 mA	Tc 65°C	>50	>50	>50	>50	>50	>50	>50	45	36
	Tc nom 85°C	>50	>50	>50	>50	43	34	31	20	16
	Tc max 95°C	>50	47	37	45	29	23	21	14	11
I life 1500 mA	Tc 65°C	>50	>50	>50	>50	>50	42	38	25	20
	Tc nom 85°C	>50	39	32	37	25	20	18	12	9
	Tc max 95°C	42	28	22	26	17	14	12	8	7

Parameter	Value	Unit
C10 at Tc life	50000	hours

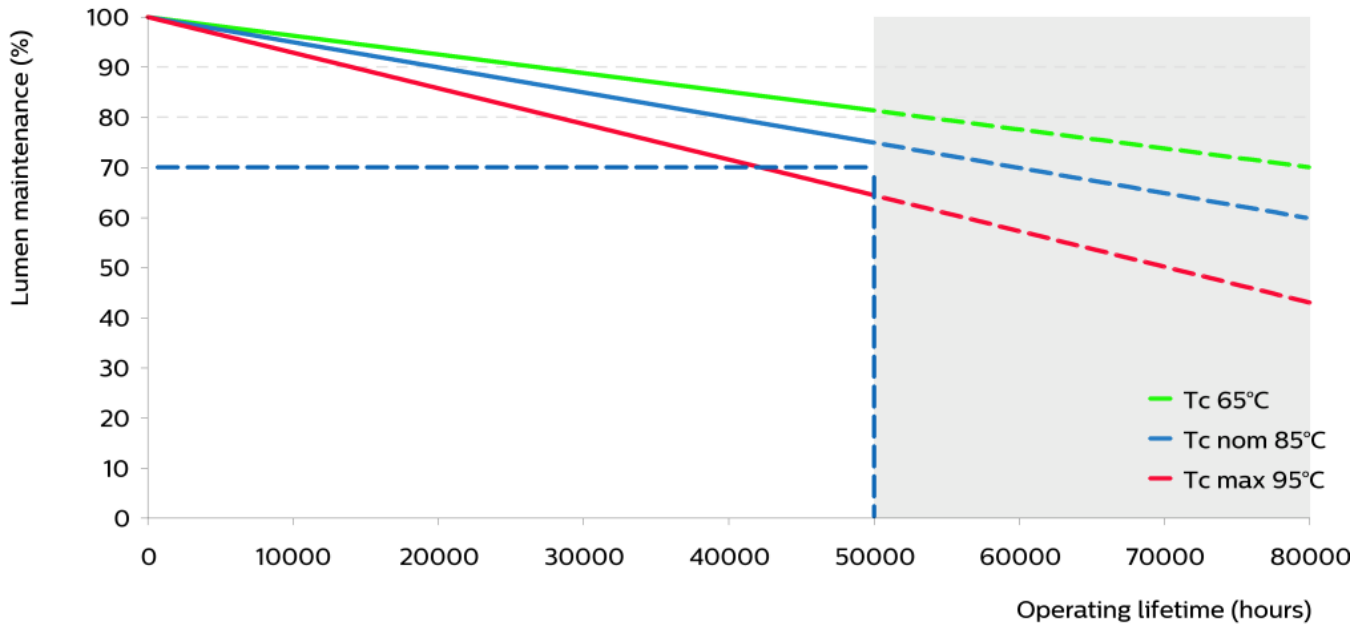
Please refer to the warranty window to ensure that your operating conditions are covered.
 >50 k hours claim is based on extrapolating raw LM80-data by using statistical techniques.

Lumen maintenance graphs

Lumen maintenance at I-life and Tc-life conditions



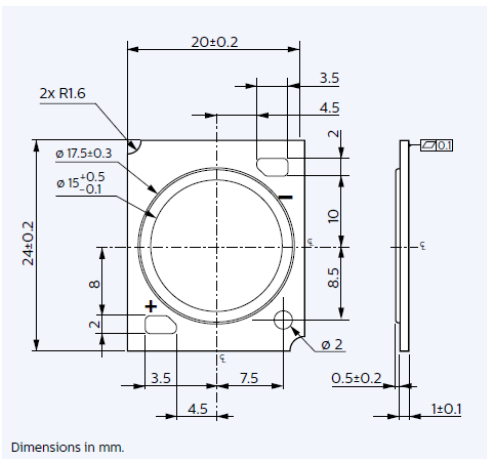
Lumen maintenance for B50 at current I-life conditions



Mechanical characteristics

Fortimo SLM C 830 PW 1208 L15 2024 G6
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 Fortimo SLM C 940 PW 1208 L15 2024 G6

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



Absolute ratings

Parameter	Min	Typ	Max	Unit
Current through the LED module (I-max)			1500	mA
Case temperature (Tc-max)			95	°C
Power at rated Vf-max and I-max			59.4	W
ESD Human Body Model (HBM) Class 3A JESD22-A114-E 8 kV			8	kV
ESD Machine Model (MM) Class B JESD22-A115-B			400	V
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

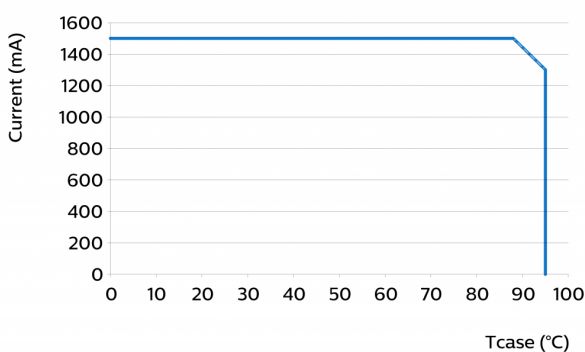
Environmental

RoHS/REACH

Application

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

Warranty Window



Notes

The slanted edge of the warranty window graph is defined for 2 switches per day or less. In case more switching cycles are required, please contact the Philips design-in team for more detailed information and support.

