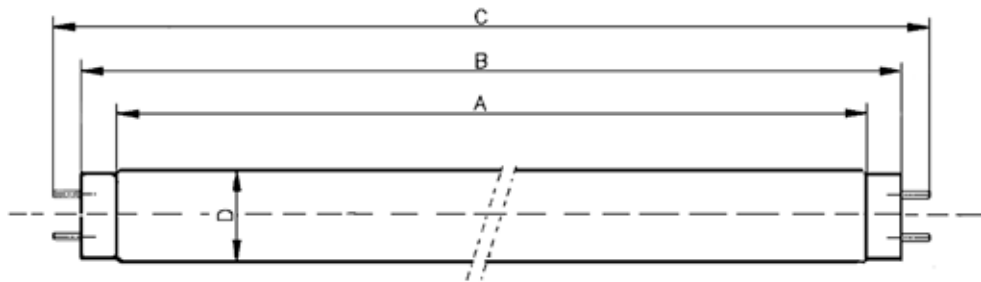
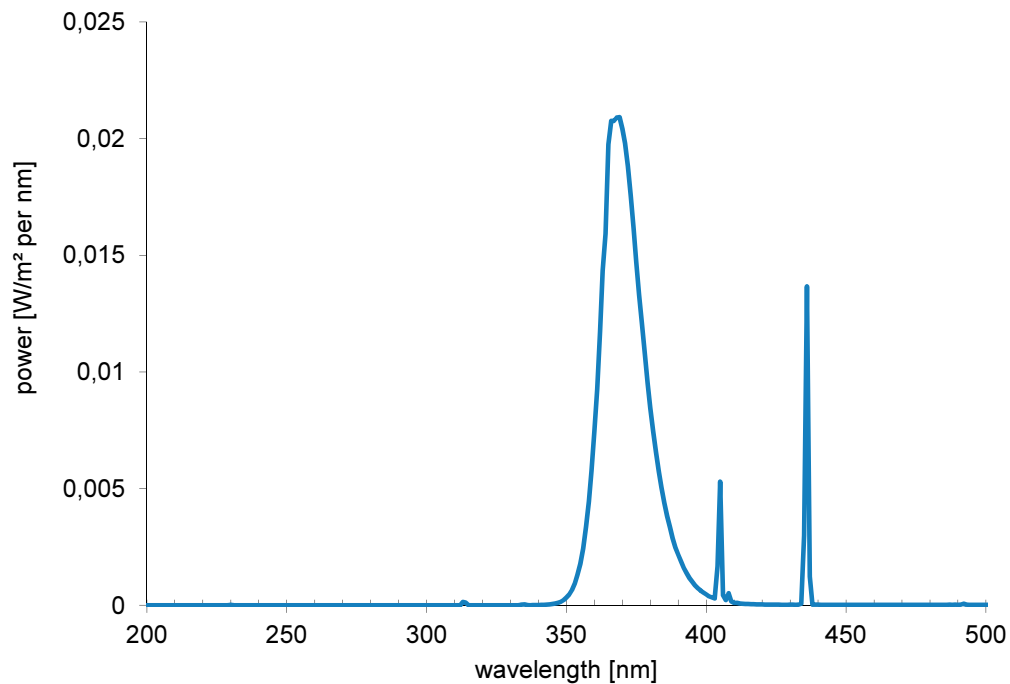


PRODUCT DESCRIPTION

Type	PHILIPS LONGLIFE LAMPS				
Article number	2.04.0312 and 2.04.0322 (SP)				
Properties	nominal			Cap	
	Lamp voltage (V)	Lamp current (mA)	Lamp diameter (mm)		
	51	335	25.85	G13	
Dimensions	A max. (mm)	B min. (mm)	B max. (mm)	C max. (mm)	D max. (mm)
	437.4	442.1	444.5	451.6	28.00



SPECTRAL OUTPUT CURVE



TYPE ACCEPTANCE

Attribute	Requirements	Instruction
Electrical characteristics		1) measured at 127V in combination with a "TL"D 15W reference ballast after 100 hrs. aging characteristics.
lamp current ¹⁾	335 mA nominal	
lamp voltage ¹⁾	51 V ± 4V	
lamp watts ¹⁾	15.0 W ± 5%	
U.V. radiation		
average (n ≥ 10)	3.9 UV-A W	
minimum average	95%	
minimum individual	90%	
U.V. maintenance	After Average: Min.ind.: 2000 h: ≥ 92% - 3% 85% 9000 h: ≥ 80% - 3% 80% 17.500 h: ≥ 75% - 3% 75%	Related to the 100 hrs. measurement.
RoHS Compliant	Yes	

TYPE ACCEPTANCE

Attribute	Requirements	Instruction
Life	17500 hr 75% HF preheat 8000 hr min indiv. AQL: 2.5%	
Torque test <i>for individual lamps</i>	≥ 6.0 Nm between cap and bulb	
Insulation test <i>for individual lamps</i>	≥ 6.0 Nm between cap and bulb	
High tension test <i>for individual lamps</i>	1500 Vac, no flashover or breakdown during 1 minute	

DELIVERY ACCEPTANCE (see MIL STD 105 D / ISO 2859)

Inspection of attributes:				
Sum of critical defects.		3	Not permissible	
Sum of major defects.		2	AQL = 1.0%	
Sum of minor defects.		1	AQL = 2.5%	
Classification of defects:		1	2	3
1	Packing/Labeling/Marking			
1.1	<i>Packing, packing label or lamp marking not according to instructions.</i>		X	
1.2	<i>Alien brand on packing label or in lamp marking.</i>			X
1.3	<i>Packing label or lamp marking not according to instructions.</i>		X	
1.4	<i>Unmarked, illegible or erasable marking.</i>		X	
2	Glass			
2.1	<i>Broken lamp.</i>		X	
2.2	<i>Leaky lamps or cracks which may cause leakers.</i>		X	
2.3	<i>Glass defects. Important optical defects.</i>		X	
2.4	<i>Glass defects. Small optical defects.</i>	X		
3	Coating			
3.1	<i>Powder-off in coating (hole $\varnothing \geq 15$ mm or equal area).</i>		X	
3.2	<i>Powder-off in coating (hole $\varnothing < 15$ mm or equal area).</i>	X		
3.3	<i>Uneven coating (strips, thin, irregular or coarse).</i>		X	
3.4	<i>Uncoated ends (> 2mm).</i>	X		
3.5	<i>Uncoated part of the bulb, length ≥ 15 mm.</i>		X	
4	Caps			
4.1	<i>Loose caps (before or after I.E.C. torque test).</i>		X	
4.2	<i>Loose pin (before or after I.E.C. torque test).</i>		X	
4.3	<i>Gauge defects (gauge does not fit on lampend).</i>		X	
4.4	<i>Damaged cap or pin (small damages or superfluous cement/tin)</i>	X		
4.5	<i>Damaged cap or pin (bigger but still fits in gauge)</i>		X	
4.6	<i>Soldering, welding or pinching defects: not.</i>		X	
4.7	<i>Long leadwire: so long that it may cause short circuit to cap.</i>			X
4.8	<i>Long leadwire: shorter.</i>	X		

DELIVERY ACCEPTANCE (see MIL STD 105 D / ISO 2859)

Inspection of attributes		
Sum of critical defects.	3	Not permissible
Sum of major defects.	2	AQL = 1.0%
Sum of minor defects.	1	AQL = 2.5%

Classification of defects	1	2	3
5 Safety			
5.1 <i>Insulation resistance too low (< 1.50 MΩ at 500 Vdc)</i>			X
5.2 <i>Flashover or breakdown in high voltage test (1500 Vac between pins and cap shell).</i>			X
5.3 <i>Long lead wire (see above).</i>			X
5.4 <i>Lamp length too short (IEC "B" - 0.2 mm).</i>			X
6 Function test			
6.1 <i>Ignition time too long at test voltage.</i>		X	
6.2 <i>No ignition at nominal voltage within 30 sec.</i>		X	
6.3 <i>Obvious improper functioning (after 10 min ageing).</i>		X	
7 Miscellaneous			
7.1 <i>Wrong dimensions (gauge defects).</i>		X	
7.2 <i>Loose part(s) in the lamp that may damage the coating.</i>		X	
7.3 <i>Short circuit between lead wires.</i>			X
7.4 <i>All appearance defects not mentioned above which do not influence proper functioning of the lamp (i.e. dirt, unclear marking, small damages, mercury stains etc...).</i>	X		

Machine and Product Documentation Lighting

QUALITY SPECIFICATION FOR FLUORESCENT LAMPS - **PHILIPS LONGLIFE LAMPS 15W**

DELIVERY ACCEPTANCE

Inspection by variables	AQL%	n	c
Lamp current	2.5		
Lamp voltage	2.5		
Lamp watts	2.5		
Min. individual UV-A output.	4		
Min. individual maintenance after 2000 h.	6.5		
Min. individual maintenance after 5000 h. average lives below 8000 h.	6.5 N.P.		

N.P. = not permissible.