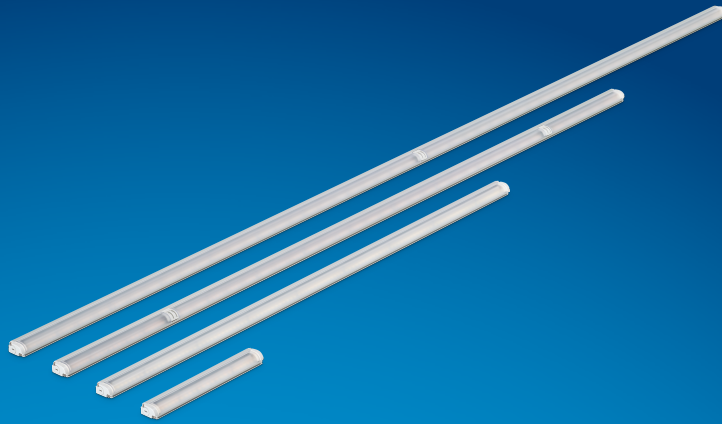


**PHILIPS**

**InteGrade**

**LED**

InteGrade engine  
value PW G3



Datasheet

# InteGrade premium white LED system

**Compact linear LED lighting for ultimate shopping experience**

## **Key features and benefits**

- Superior light quality with Premium White for enhanced white performance and astonishing lively rich colors
- State-of-art Efficacy up to 125 lm/W
- Breakthrough optical design directing the light precisely to shine the merchandise
- One look and feel in the stores when combined with premium white spot lighting solutions
- Miniaturized slim design for aesthetic integration
- Continuous line of light to eliminate undesirable hot spots, glare, reflections
- Long life-time: >50,000 hours
- Maximum design flexibility with extensive range of engine lengths, color temperatures and accessories
- True System proposition with Xitanium Constant Voltage LED power drivers
- Five year system warranty
- Dimmable

March 2017

## Ordering data

Commercial product name	EOC	12NC	Box quantity
InteGrade engine Va 140mm 930 PW G3	8718696 714584 00	9290 015 67506	24
InteGrade engine Va 575mm 930 PW G3	8718696 715642 00	9290 015 67606	24
InteGrade engine Va 855mm 930 PW G3	8718696 715888 00	9290 015 67706	24
InteGrade engine Va 1150mm 930 PW G3	8718696 716007 00	9290 015 67806	24
InteGrade engine Va 140mm 940 PW G3	8718696 714621 00	9290 015 67906	24
InteGrade engine Va 575mm 940 PW G3	8718696 715666 00	9290 015 68006	24
InteGrade engine Va 855mm 940 PW G3	8718696 715901 00	9290 015 68106	24
InteGrade engine Va 1150mm 940 PW G3	8718696 716021 00	9290 015 68206	24

## Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T <sub>ambient</sub>	5	30	30	°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

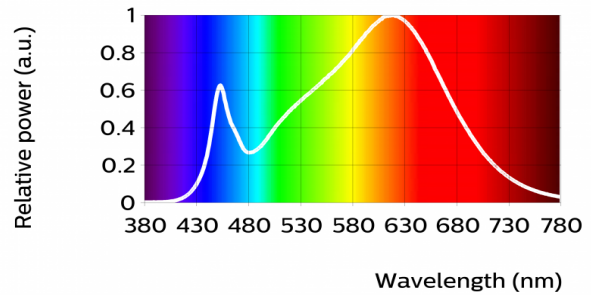
## Optical characteristics - table per color (CCT)

### InteGrade engine Va 140mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	68	85	102	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.423, 0.388)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A++		

R9 of 60, typical value

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

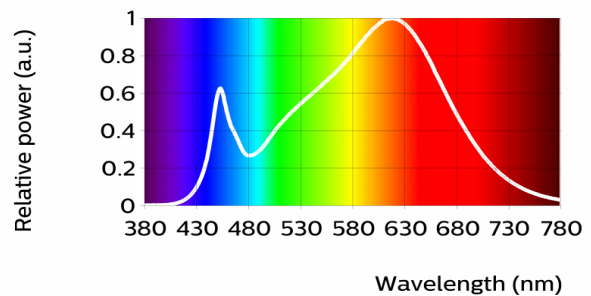


### InteGrade engine Va 575mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	304	380	456	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.423, 0.388)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A++		

R9 of 60, typical value

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

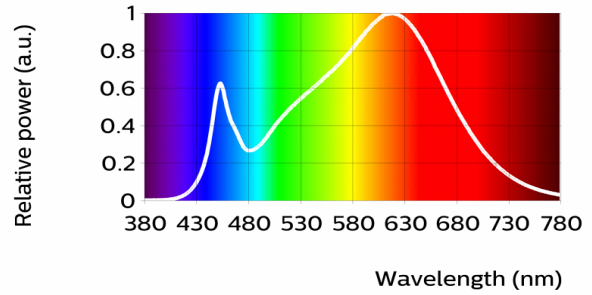


InteGrade engine Va 855mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	440	550	660	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.423, 0.388)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A+		

R9 of 60, typical value

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

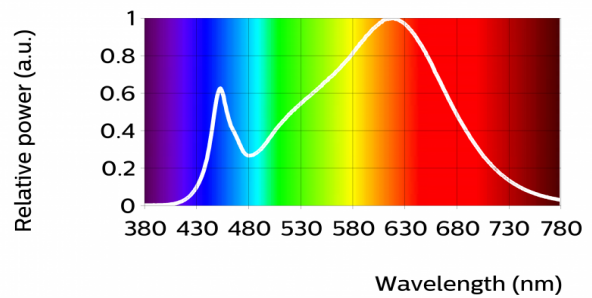


InteGrade engine Va 1150mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	608	760	912	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.423, 0.388)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A+		

R9 of 60, typical value

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

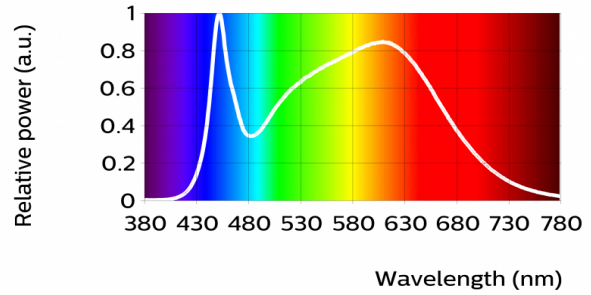


InteGrade engine Va 140mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	72	90	108	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.375, 0.366)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A++		

R9 of 60, typical value

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

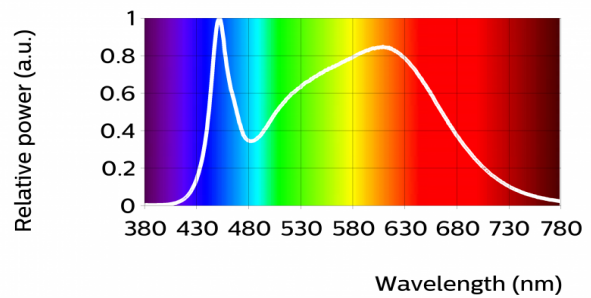


InteGrade engine Va 575mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	336	420	504	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.375, 0.366)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A++		

R9 of 60, typical value

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

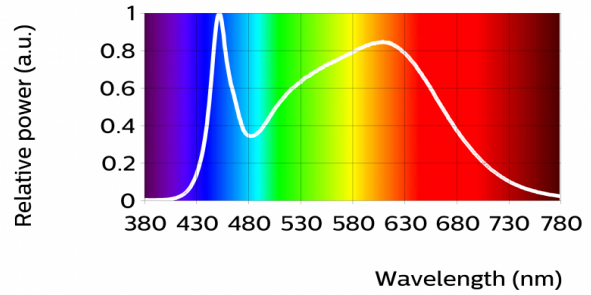


InteGrade engine Va 855mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	480	600	720	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.375, 0.366)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A++		

R9 of 60, typical value

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

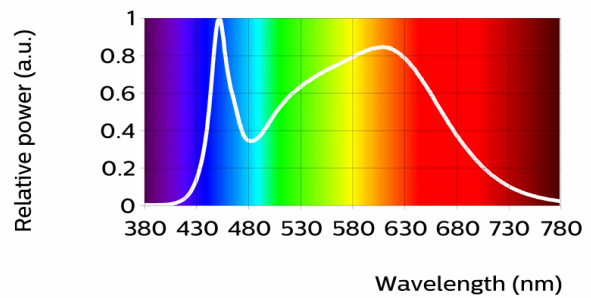


InteGrade engine Va 1150mm 940 PW G3

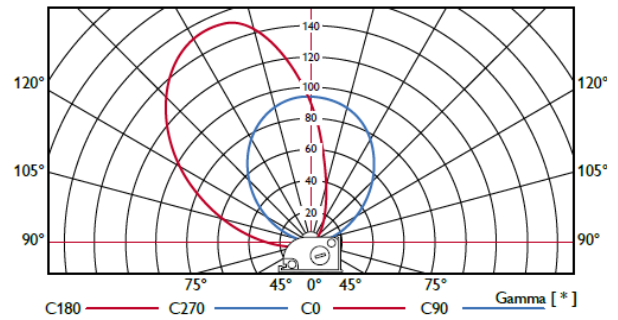
Parameter	Min	Typ	Max	Unit
Luminous flux	672	840	1008	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.375, 0.366)		-
Color consistency			5	SDCM
CRI	90	93		
Photobiological safety			RG1	
Energy efficiency label		A+		

R9 of 60, typical value

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



## Beam shape



## Electrical characteristics

[InteGrade engine Va 140mm 930 PW G3](#)  
[InteGrade engine Va 140mm 940 PW G3](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		0.8		W
Number of modules in series per chain			50	
Measurement precision for power +/-	3.3%			

[InteGrade engine Va 575mm 930 PW G3](#)  
[InteGrade engine Va 575mm 940 PW G3](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		3.4		W
Number of modules in series per chain			12	
Measurement precision for power +/-	3.3%			

[InteGrade engine Va 855mm 930 PW G3](#)  
[InteGrade engine Va 855mm 940 PW G3](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		4.9		W
Number of modules in series per chain			8	
Measurement precision for power +/-	3.3%			

[InteGrade engine Va 1150mm 930 PW G3](#)  
[InteGrade engine Va 1150mm 940 PW G3](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		6.7		W
Number of modules in series per chain			6	
Measurement precision for power +/-	3.3%			

## Lumen maintenance

Lumen maintenance x 1000 hours	L70			L80		
	B50	B20	B10	B50	B20	B10
-20°C	>75	>75	>75	>75	>75	>75
5°C	>75	>75	>75	65	64	64
30°C	>75	75	74	47	46	46

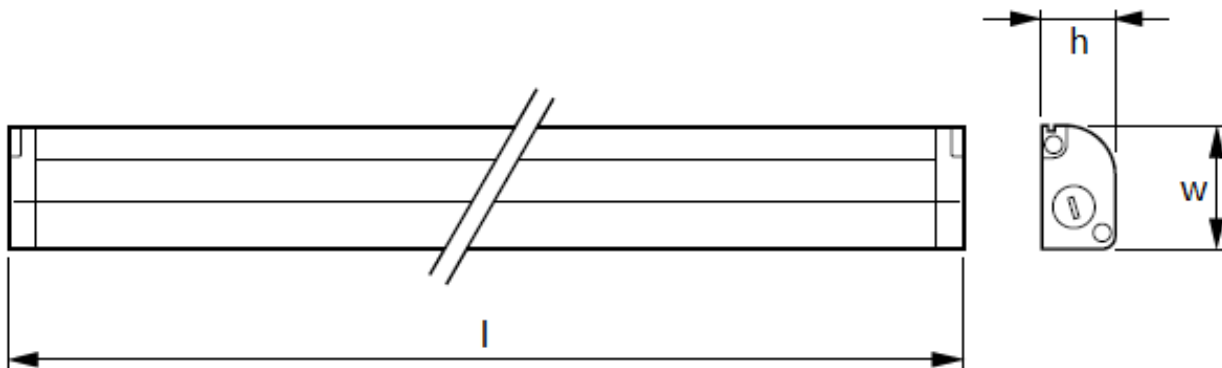
Values in the table are based on available LM80 LED data (9,000h)

## Mechanical characteristics

InteGrade engine Va 140mm 930 PW G3

InteGrade engine Va 140mm 940 PW G3

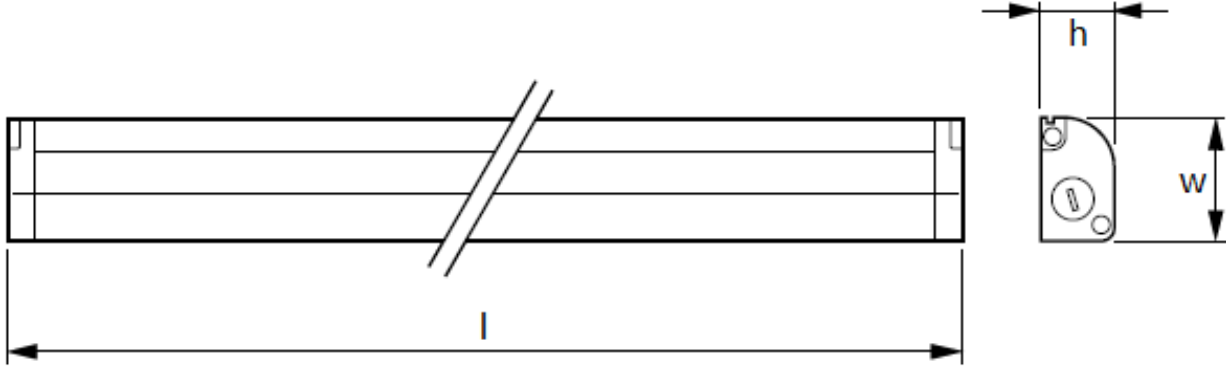
Parameter	Min	Typ	Max	Unit
Length		140		mm
Width		18.5		mm
Height		11		mm





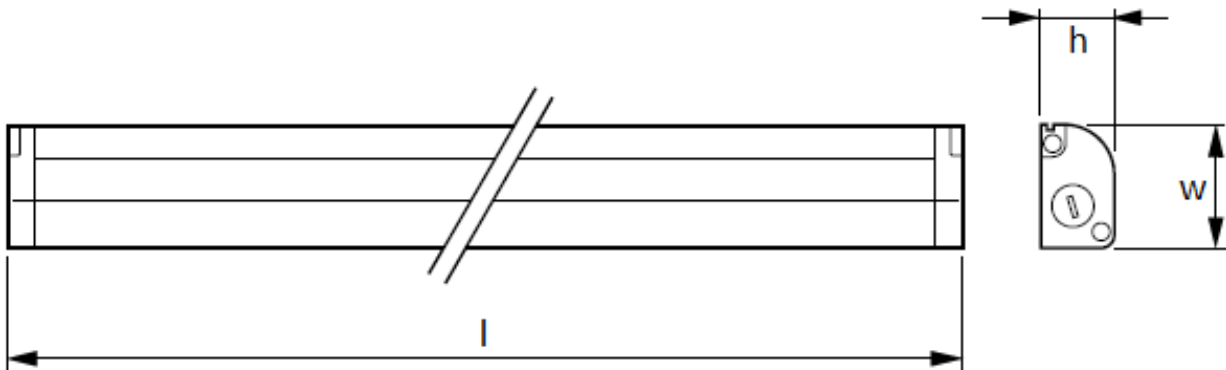
InteGrade engine Va 575mm 930 PW G3  
 InteGrade engine Va 575mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Length		575		mm
Width		18.5		mm
Height		11		mm



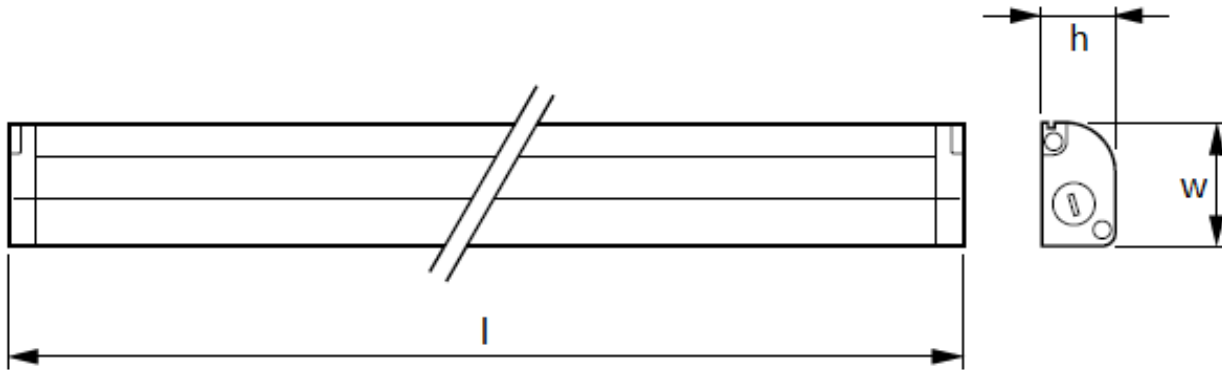
InteGrade engine Va 855mm 930 PW G3  
 InteGrade engine Va 855mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Length		855		mm
Width		18.5		mm
Height		11		mm



InteGrade engine Va 1150mm 930 PW G3  
 InteGrade engine Va 1150mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Length		1150		mm
Width		18.5		mm
Height		11		mm



### Absolute ratings

Parameter	Min	Typ	Max	Unit
Case temperature (Tc-max)			70	°C
ESD (direct contact)			4	kV
ESD (air)			8	kV
Ambient temperature	-30		30	°C
Storage temperature	-30		60	°C

### Application information

#### Certificates and Standards

EN 62031  
 EN 62471  
 IEC / EN 60335-2-24  
 IEC / EN 60335-2-89  
 UL 2108  
 CSA C22.2 No.9  
 IEC/TR 62278:2014

#### Environmental

RoHS/REACH

#### Application

IP rating	No IP-rating, fit for use in coolers and freezers
Overheating protection	No protection
Luminaire class	IEC Class II
Dimming	Yes

The InteGrade system is certified with Philips LED Power drivers



© 2017 Philips Lighting Holding B.V. All rights reserved.

This document contains information relating to the Philips Lighting portfolio, intended for companies who may be interested in developing their product offering. Note that the information provided is subject to change. Philips Lighting does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

[www.philips.com/technology](http://www.philips.com/technology)

03/2017