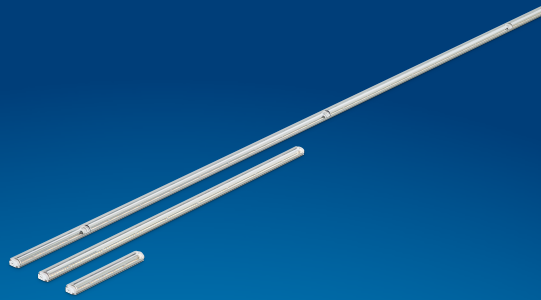


PHILIPS

InteGrade

LED

InteGrade engine NB
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 118 lm/W
- Uniform light distribution due to its breakthrough optical design
- 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

February 2019



Ordering data

Commercial product name	EOC	12NC	Box quantity
InteGrade engine NB Va 140mm 930 PW G3	8718696 714683 00	9290 015 69106	24
InteGrade engine NB Va 140mm 940 PW G3	8718696 714706 00	9290 015 69406	24
InteGrade engine NB Va 575mm 930 PW G3	8718696 715727 00	9290 015 69206	24
InteGrade engine NB Va 575mm 940 PW G3	8718696 715826 00	9290 015 69506	24
InteGrade engine NB Va 1430mm 930 PW G3	8718696 715628 00	9290 015 69306	24
InteGrade engine NB Va 1430mm 940 PW G3	8718696 714720 00	9290 015 69606	24

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _a (ambient temperature)	5	30	30	°C

* Nominal value at which typical performance is specified

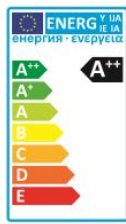
** Value at which life time is specified

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

Optical characteristics - table per color (CCT)

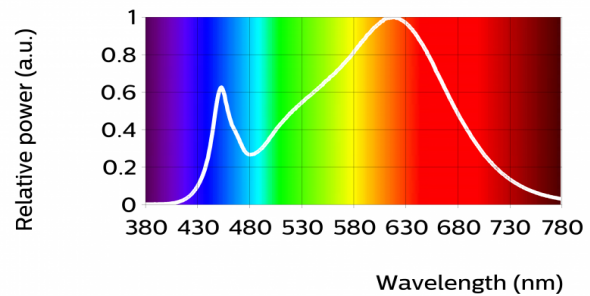
InteGrade engine NB Va 140mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	92	115	138	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 unlimited	



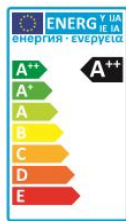
R9 of 60, typical value

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



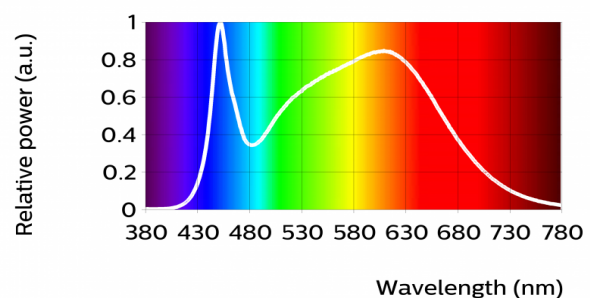
InteGrade engine NB Va 140mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	96	120	144	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 unlimited	



R9 of 60, typical value

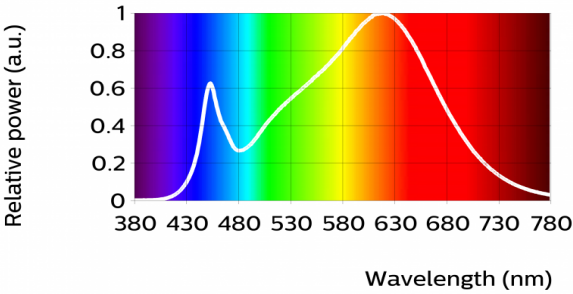
Measurement precision for flux +/- 5%, for efficacy +/- 6%, for x, y +/- 0.005, for CRI +/- 1.5



InteGrade engine NB Va 575mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	400	500	600	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 unlimited	

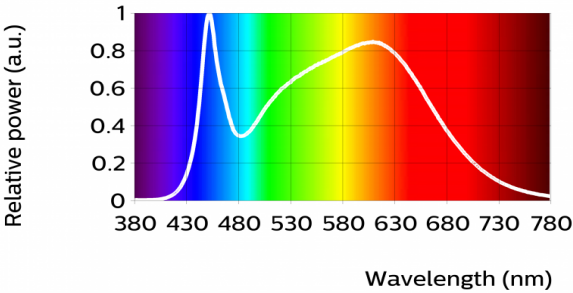
R9 of 60, typical value
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



InteGrade engine NB Va 575mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	424	530	636	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 unlimited	

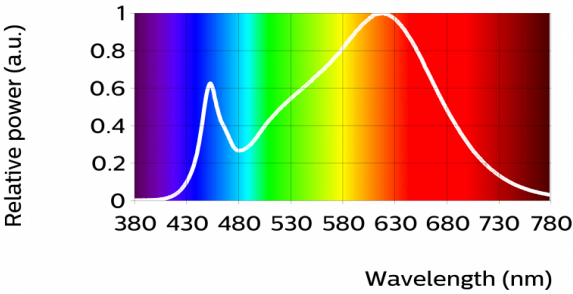
R9 of 60, typical value
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



InteGrade engine NB Va 1430mm 930 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	984	1230	1476	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 unlimited	

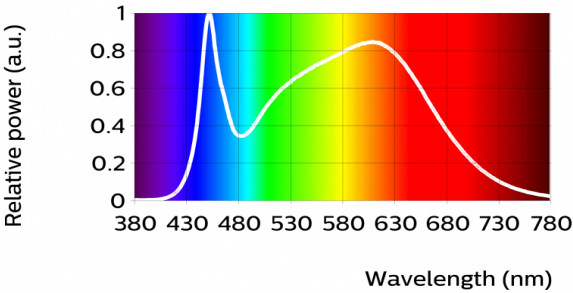
R9 of 60, typical value
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



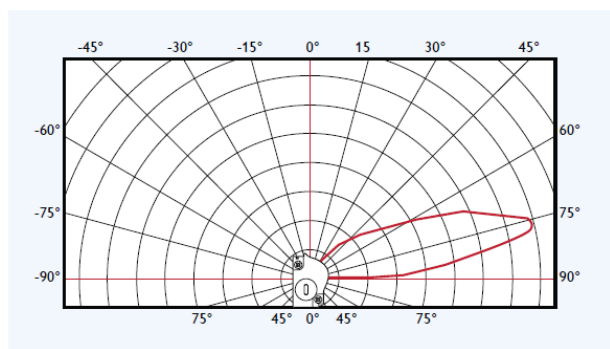
InteGrade engine NB Va 1430mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Luminous flux	1040	1300	1560	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 unlimited	

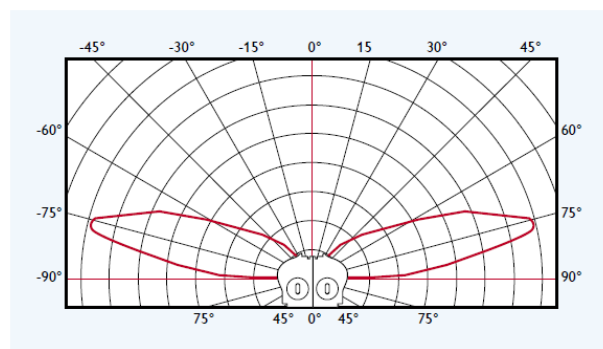
R9 of 60, typical value
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



Beam shape



InterGrade LED fixture SD (for edges)



InterGrade LED fixture CTR (for center)

Electrical characteristics

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

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

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		1.0		W = kWh/1000h
Number of modules in series per chain			40	
Measurement precision for power +/- 3.3%				

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

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

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		4.5		W = kWh/1000h
Number of modules in series per chain			10	
Measurement precision for power +/- 3.3%				

[InteGrade engine NB Va 1430mm 930 PW G3](#)

[InteGrade engine NB Va 1430mm 940 PW G3](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		11.0		W = kWh/1000h
Number of modules in series per chain			4	
Measurement precision for power +/- 3.3%				

Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80		
		B50	B20	B10	B50	B20	B10
	Ta -20°C	>75	>75	>75	>75	>75	>75
	Ta 5°C	>75	>75	>75	62	61	60
	Ta 30°C	73	71	70	45	44	44

Lifetime

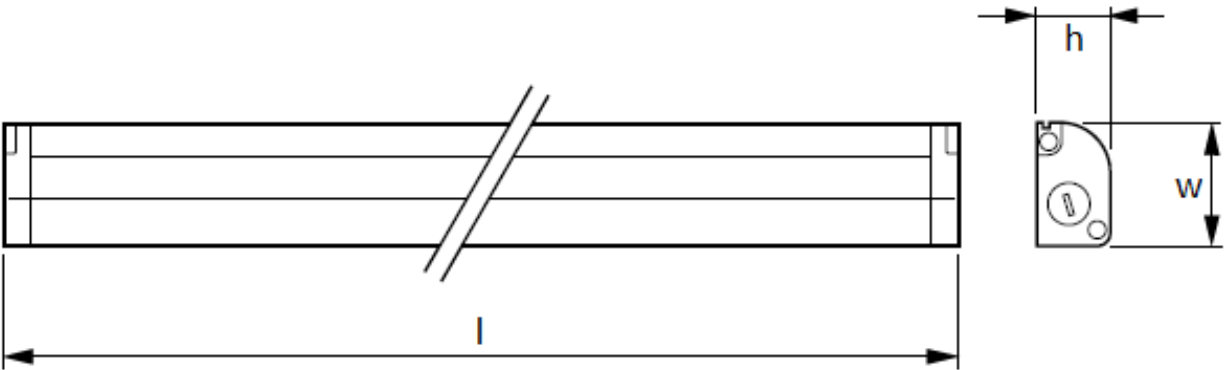
Parameter	Value	Unit
M70F50 nominal	100000	hours
M70F50 life	74000	hours

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

Mechanical characteristics

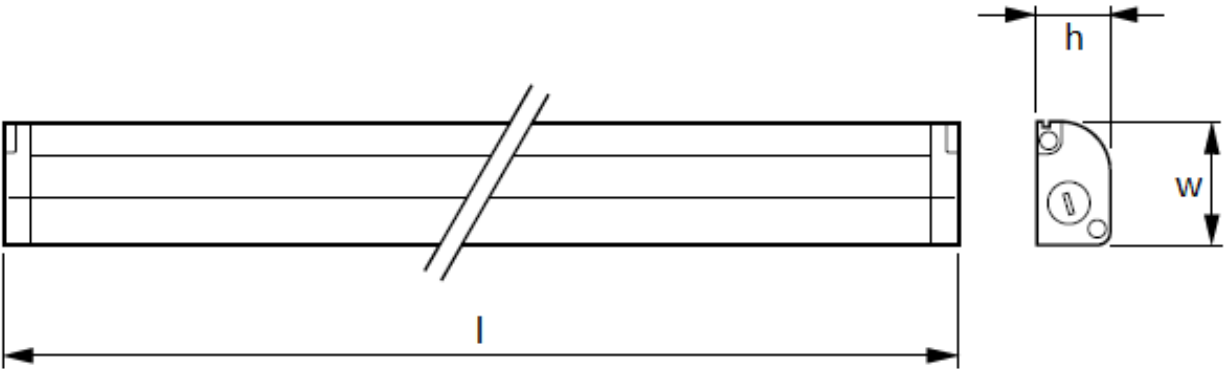
InteGrade engine NB Va 1430mm 930 PW G3
InteGrade engine NB Va 1430mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Length		1430		mm
Width		18.5		mm
Height		11		mm
Product mass		307		gram



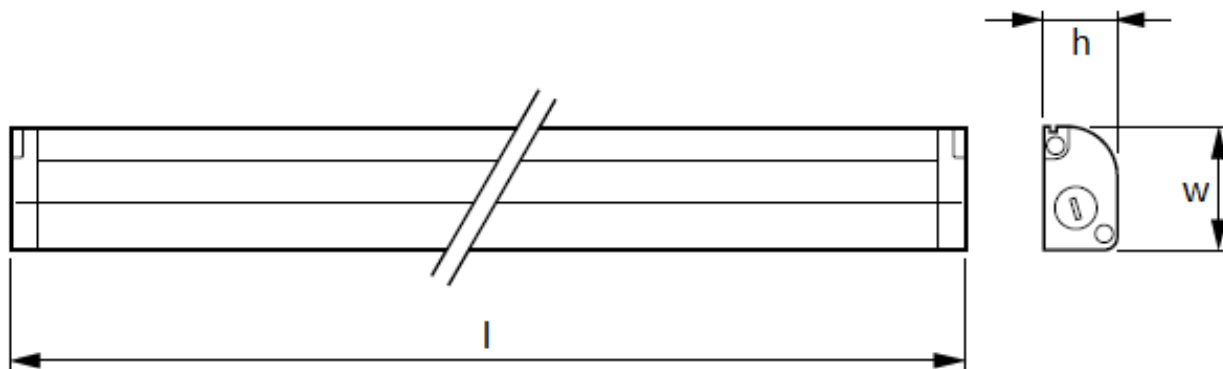
InteGrade engine NB Va 140mm 930 PW G3
InteGrade engine NB Va 140mm 940 PW G3

Parameter	Min	Typ	Max	Unit
Length	136	140	144	mm
Width	18.2	18.5	18.7	mm
Height	10.5	11	13.5	mm
Product mass		30		gram



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

Parameter	Min	Typ	Max	Unit
Length	571	575	579	mm
Width	18.2	18.5	18.7	mm
Height	10.5	11	13.5	mm
Product mass		140		gram



Absolute ratings

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

Application information

Certificates and Standards

IEC/EN 62031
 IEC/EN 62471
 Relevant clauses of IEC/EN 60335-1
 Annex BB of IEC/EN 60335-2-89
 Annex CC of IEC/EN 60335-2-24
 CSA C22.2 No.9
 UL 2108
 NSF (allows usage in the vicinity of Food)

Environmental

RoHS/REACH

Application

IP rating	No IP-rating, fit for use in coolers and freezers
Overheating protection	No protection
Luminaire class	IEC Class III if connected to a SELV driver
Dimming	Yes

The InteGrade system is certified with the household standard compliant SELV Philips LED Power drivers



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11/02/2019