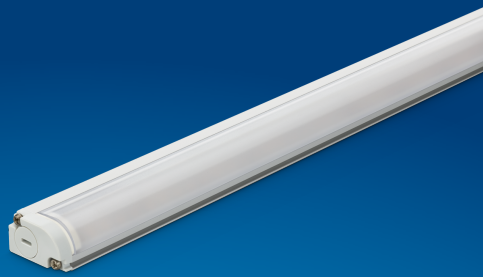


PHILIPS

InteGrade

LED

InteGrade engine vision
PW G4



Datasheet

Key features and benefits

- Miniaturized slim design for aesthetic integration
- Premium color consistency up to 3SDCM over lifetime
- Natural merchandise color with specially formulated LEDs up to CRI95
- State of the Art LED diode delivering up to 190 lm/W
- Modules performing up to 114 lm/w meeting SLR (Single Lighting Regulation)
- Unique Premium White light for brightest whites and outstanding merchandise attractiveness
- Maximum design flexibility with extensive range of engine lengths
- Color temperatures (3000 PW, 4000 PW)
- True System proposition with five-year system warranty with Philips LED Power Drivers
- Reduced power consumption for energy saving
- Long lifetime: >50,000 hours
- Dimmable

September 2021



Ordering data

Commercial product name	EOC	12NC	Box quantity
InteGrade engine Vi 140mm 930 PW G4	8718699 744298 00	9290 021 57906	24
InteGrade engine Vi 140mm 940 PW G4	8718699 744311 00	9290 021 58006	24
InteGrade engine Vi 575mm 930 PW G4	8718699 744335 00	9290 021 58106	24
InteGrade engine Vi 575mm 940 PW G4	8718699 744359 00	9290 021 58206	24
InteGrade engine Vi 855mm 930 PW G4	8718699 744373 00	9290 021 58306	24
InteGrade engine Vi 855mm 940 PW G4	8718699 744397 00	9290 021 58406	24
InteGrade engine Vi 1150mm 930 PW G4	8718699 744410 00	9290 021 58506	24
InteGrade engine Vi 1150mm 940 PW G4	8718699 744434 00	9290 021 58606	24

Key Specifications at Nominal conditions

Name	12NC	Power (W)	Luminous Flux (lm)	Useful Flux (lm)	CRI
InteGrade engine Vi 140mm 930 PW G4	9290 021 57906	1.60	164	164	94
InteGrade engine Vi 140mm 940 PW G4	9290 021 58006	1.60	183	183	94
InteGrade engine Vi 575mm 930 PW G4	9290 021 58106	6.90	703	703	94
InteGrade engine Vi 575mm 940 PW G4	9290 021 58206	6.90	784	784	94
InteGrade engine Vi 855mm 930 PW G4	9290 021 58306	10.1	1030	1030	94
InteGrade engine Vi 855mm 940 PW G4	9290 021 58406	10.1	1149	1149	94
InteGrade engine Vi 1150mm 930 PW G4	9290 021 58506	13.8	1406	1406	94
InteGrade engine Vi 1150mm 940 PW G4	9290 021 58606	13.8	1568	1568	94

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _a (ambient temperature)	5	30	50	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

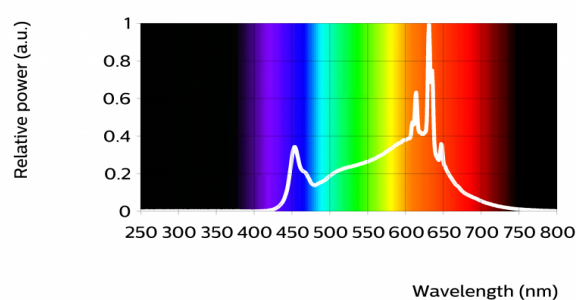
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

InteGrade engine Vi 140mm 930 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	151	164	196	lm
Module efficacy		102		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.419, 0.381)		-
Color consistency			3	SDCM
CRI	92	94		
R9	75			
Photometric code		930/359		
Peak intensity		74		cd
Photobiological safety			RG1 unlimited	

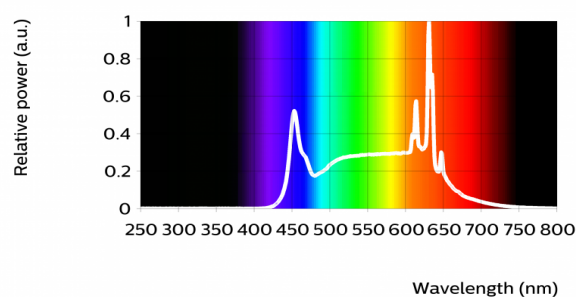
Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



InteGrade engine Vi 140mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	169	183	219	lm
Module efficacy		114		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.372, 0.359)		-
Color consistency			3	SDCM
CRI	92	94		
R9	85			
Photometric code		940/359		
Peak intensity		83		cd
Photobiological safety			RG1 unlimited	

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

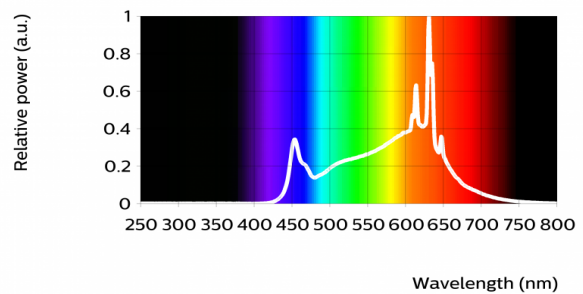


InteGrade engine Vi 575mm 930 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	650	703	844	lm
Module efficacy		102		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.419, 0.381)		-
Color consistency			3	SDCM
CRI	92	94		
R9	75			
Photometric code		930/359		
Peak intensity		317		cd
Photobiological safety			RG1 unlimited	



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

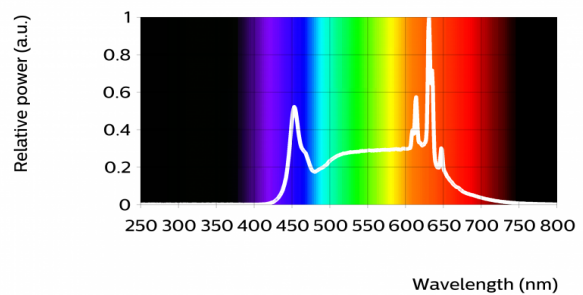


InteGrade engine Vi 575mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	725	784	941	lm
Module efficacy		114		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.372, 0.359)		-
Color consistency			3	SDCM
CRI	92	94		
R9	85			
Photometric code		940/359		
Peak intensity		354		cd
Photobiological safety			RG1 unlimited	



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

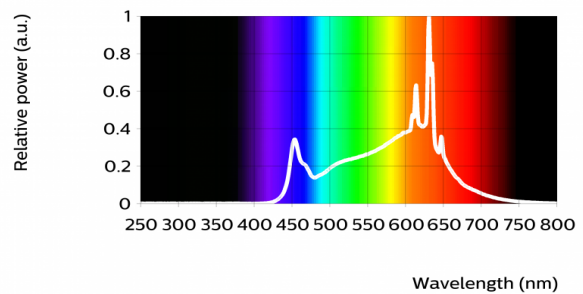


InteGrade engine Vi 855mm 930 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	953	1030	1236	lm
Module efficacy		102		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.419, 0.381)		-
Color consistency			3	SDCM
CRI	92	94		
R9	75			
Photometric code		930/359		
Peak intensity		464		cd
Photobiological safety			RG1 unlimited	



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

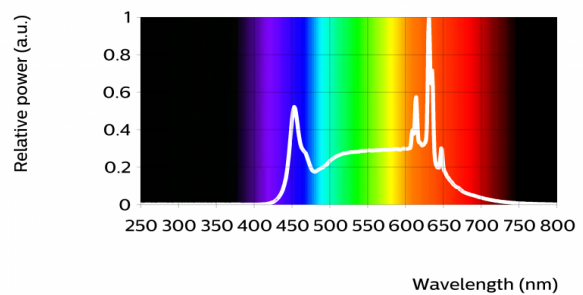


InteGrade engine Vi 855mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	1063	1149	1379	lm
Module efficacy		114		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.372, 0.359)		-
Color consistency			3	SDCM
CRI	92	94		
R9	85			
Photometric code		940/359		
Peak intensity		518		cd
Photobiological safety			RG1 unlimited	



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

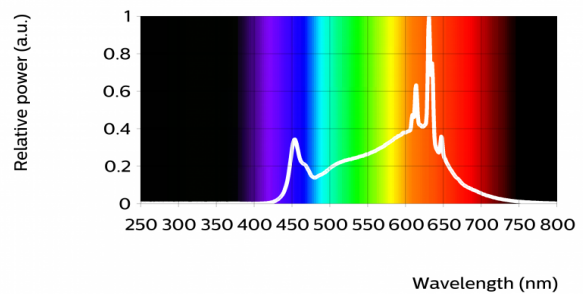


InteGrade engine Vi 1150mm 930 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	1301	1406	1687	lm
Module efficacy		102		lm/W
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.419, 0.381)		-
Color consistency			3	SDCM
CRI	92	94		
R9	75			
Photometric code		930/359		
Peak intensity		634		cd
Photobiological safety			RG1 unlimited	



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

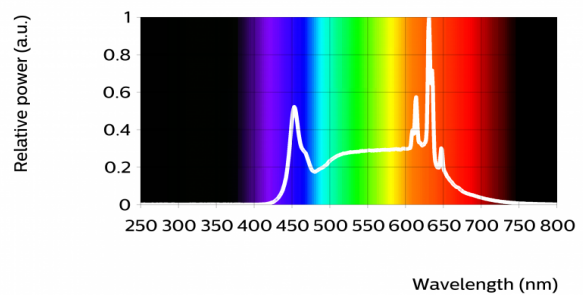


InteGrade engine Vi 1150mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Luminous flux	1451	1568	1882	lm
Module efficacy		114		lm/W
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.372, 0.359)		-
Color consistency			3	SDCM
CRI	92	94		
R9	85			
Photometric code		940/359		
Peak intensity		707		cd
Photobiological safety			RG1 unlimited	

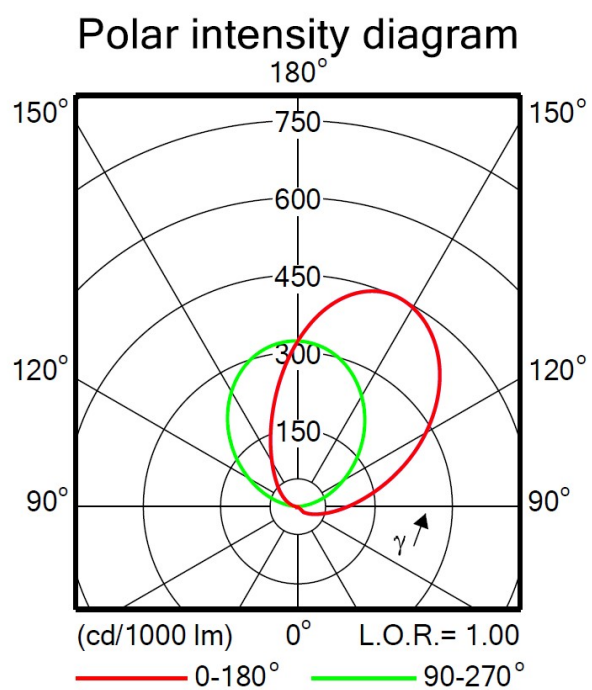


Measurement precision for flux +/- 5%, for efficacy +/- 6%., for x, y +/- 0.005, for CRI +/- 1.5



Beam shape

Light distribution, scaled to cd per 1000lm



Electrical characteristics

[InteGrade engine Vi 140mm 930 PW G4](#)

[InteGrade engine Vi 140mm 940 PW G4](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		1.60		W = kWh/1000h
Number of modules per chain			24	

[InteGrade engine Vi 575mm 930 PW G4](#)

[InteGrade engine Vi 575mm 940 PW G4](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		6.90		W = kWh/1000h
Number of modules per chain			6	

[InteGrade engine Vi 855mm 930 PW G4](#)

[InteGrade engine Vi 855mm 940 PW G4](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		10.1		W = kWh/1000h
Number of modules per chain			4	

[InteGrade engine Vi 1150mm 930 PW G4](#)

[InteGrade engine Vi 1150mm 940 PW G4](#)

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		13.8		W = kWh/1000h
Number of modules per chain			3	

Lumen maintenance

Operation point	Lumen maintenance x 1000 hours	L70			L80		
		B50	B20	B10	B50	B20	B10
	Ta -20°C	>100	>100	>100	>100	>100	>100
	Ta 5°C	>100	>100	>100	>100	>100	>100
	Ta 30°C	>100	>100	>100	>100	>100	>100

Lifetime

Parameter	Value	Unit
M70F50 nominal	100000	hours
M70F50 life	100000	hours

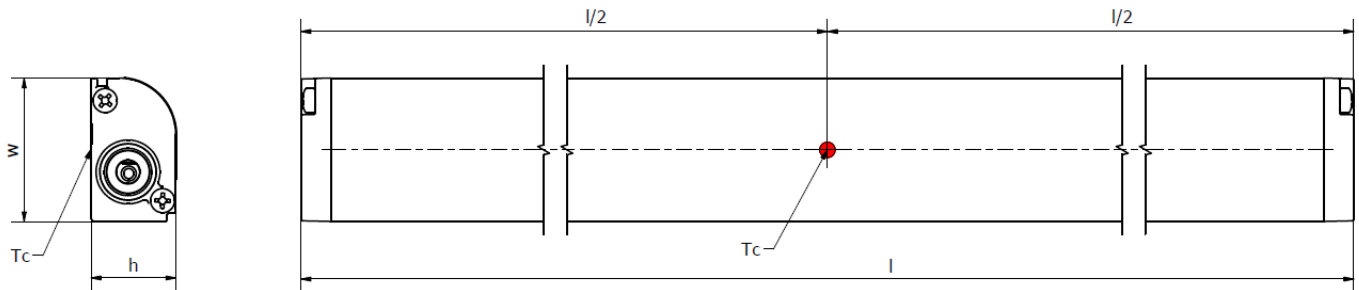
Mechanical characteristics

InteGrade engine Vi 140mm 930 PW G4

InteGrade engine Vi 140mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Length	136	140	144	mm
Width	18.2	18.5	18.7	mm
Height total	10.5	11	11.5	mm
Product mass		30		gram

Thermal expansion from -30°C to +30°C is included in the tolerances

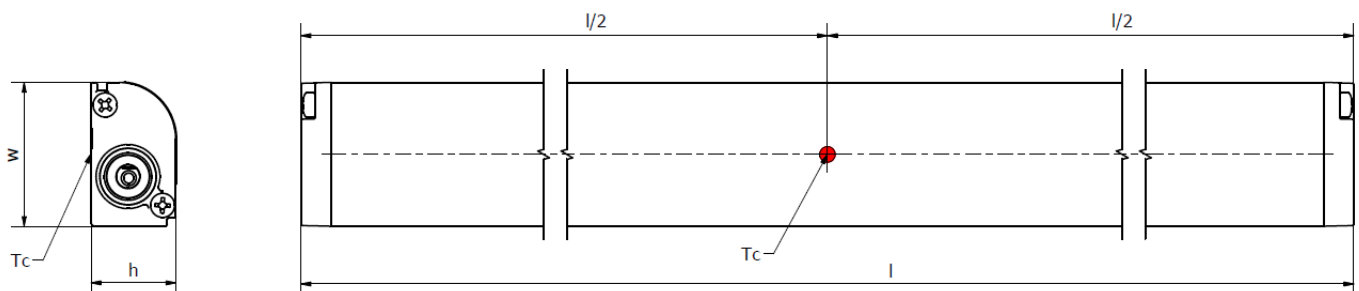


InteGrade engine Vi 575mm 930 PW G4

InteGrade engine Vi 575mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Length	571	575	579	mm
Width	18.2	18.5	18.7	mm
Height total	10.5	11	11.5	mm
Product mass		120		gram

Thermal expansion from -30°C to +30°C is included in the tolerances

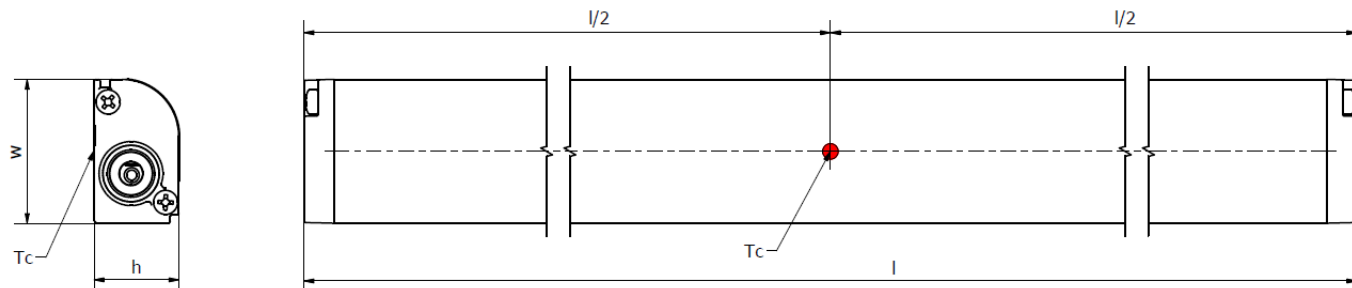


InteGrade engine Vi 855mm 930 PW G4

InteGrade engine Vi 855mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Length	851	855	859	mm
Width	18.2	18.5	18.7	mm
Height total	10.5	11	11.5	mm
Product mass		180		gram

Thermal expansion from -30°C to +30°C is included in the tolerances

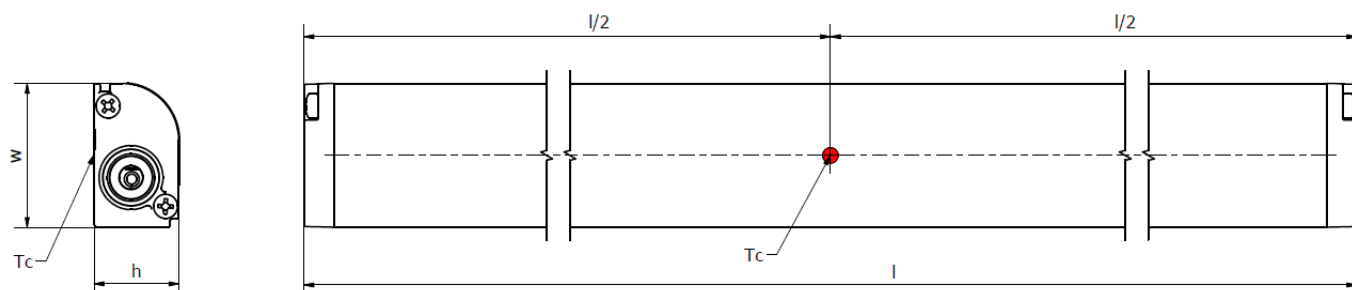


InteGrade engine Vi 1150mm 930 PW G4

InteGrade engine Vi 1150mm 940 PW G4

Parameter	Min	Typ	Max	Unit
Length	1146	1150	1154	mm
Width	18.2	18.5	18.7	mm
Height total	10.5	11	11.5	mm
Product mass		230		gram

Thermal expansion from -30°C to +30°C is included in the tolerances



Absolute ratings

Parameter	Min	Max	Unit
Case temperature (Tc-max)		70	°C
Ambient temperature	-30	50	°C

Application information

Certificates and Standards

IEC/EN 62031

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.250.0-08

UL 2108

NSF

Application

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

Do not use in highly polluted areas. Surface mounting only.



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