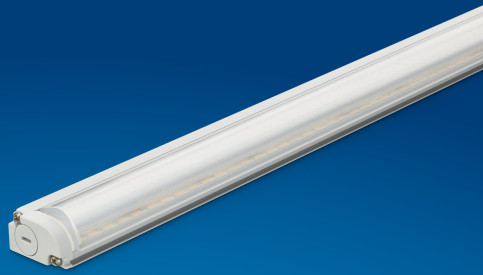


PHILIPS

InteGrade

LED

InteGrade engine UB Vi
Rose G4



Datasheet

Key features and benefits

- Wide range of lengths for modularity and easy installation on different size cabinets
- Miniaturized slim design for aesthetic integration
- Premium color consistency up to 3 SDCM over lifetime
- Natural merchandise color with specially formulated LEDs with min 87 CRI
- Modules performing up to 132 lm/W meeting SLR (Single Lighting Regulation)
- Unique tailored spectra, Rose, for outstanding red color meat type merchandize attractiveness
- Maximum design flexibility with extensive range of engine lengths and compatible with G4 accessories
- Correlated Color temperature Rose typ. 2200K
- True System proposition with five-year system warranty with Philips LED Power Drivers
- Reduced power consumption for energy saving
- Long lifetime: 100,000 hours
- Dimmable

December 2022



Ordering data

Commercial product name	EOC	12NC	EPREL registration #	Box quantity
InteGrade engine UB Vi 140mm Rose G4	8720169 173125 00	9290 034 28206	1407675	24
InteGrade engine UB Vi 855mm Rose G4	8720169 173149 00	9290 034 28306	1407676	24
InteGrade engine UB Vi 1150mm Rose G4	8720169 173163 00	9290 034 28406	1407677	24

Key Specifications at Nominal conditions

Name	12NC	Power (W)	Luminous Flux (lm)	Useful Flux (lm)	CRI
InteGrade engine UB Vi 140mm Rose G4	9290 034 28206	1.59	164	141	87
InteGrade engine UB Vi 855mm Rose G4	9290 034 28306	9.63	995	856	87
InteGrade engine UB Vi 1150mm Rose G4	9290 034 28406	12.9	1333	1146	87

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T _a (ambient temperature)	25	30	50	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

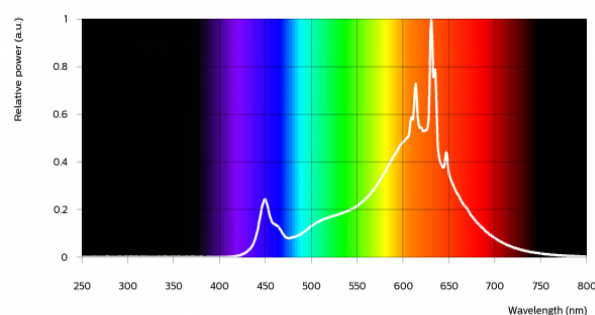
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

InteGrade engine UB Vi 140mm Rose G4

Parameter	Min	Typ	Max	Unit
Luminous flux	158	164	210	lm
Flux within 120° cone		141		lm
Efficacy	99	103	132	lm/W
Correlated color temperature (CCT)		2200		K
Color coordinates (CIEx, CIEy)		(0.479, 0.384)		-
Color consistency			3	SDCM
CRI	87			
R9	40			
Photometric code		822/359		
Radiation angle		40		deg
Peak intensity		122		cd
Photobiological safety			RG1 unlimited	

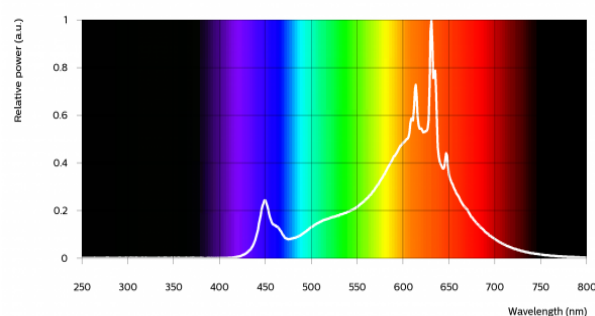
Measurement precision $\pm 5\%$ for the flux data and $\pm 6\%$ for the efficacy data. Measurement precision for color coordinates ± 0.005 . Measurement precision for CRI ± 1.5 .



InteGrade engine UB Vi 855mm Rose G4

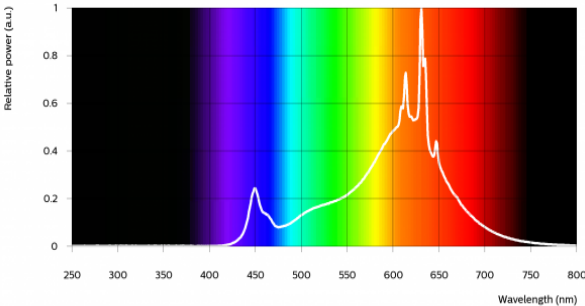
Parameter	Min	Typ	Max	Unit
Luminous flux	955	995	1274	lm
Flux within 120° cone		856		lm
Efficacy	99	103	132	lm/W
Correlated color temperature (CCT)		2200		K
Color coordinates (CIEx, CIEy)		(0.479, 0.384)		-
Color consistency			3	SDCM
CRI	87			
R9	40			
Photometric code		822/359		
Radiation angle		40		deg
Peak intensity		740		cd
Photobiological safety			RG1 unlimited	

Measurement precision $\pm 5\%$ for the flux data and $\pm 6\%$ for the efficacy data. Measurement precision for color coordinates ± 0.005 . Measurement precision for CRI ± 1.5 .



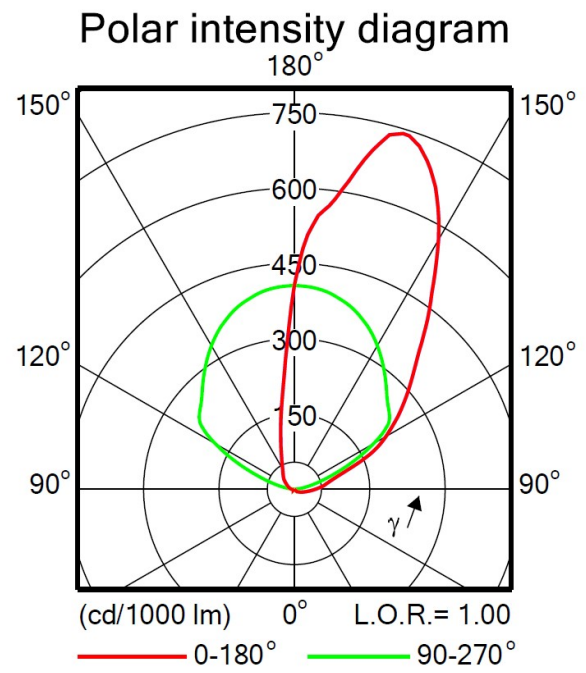
Parameter	Min	Typ	Max	Unit
Luminous flux	1280	1333	1706	lm
Flux within 120° cone		1146		lm
Efficacy	99	103	132	lm/W
Correlated color temperature (CCT)		2200		K
Color coordinates (CIEx, CIEy)		(0.479, 0.384)		-
Color consistency			3	SDCM
CRI	87			
R9	40			
Photometric code		822/359		
Radiation angle		40		deg
Peak intensity		992		cd
Photobiological safety			RG1 unlimited	

Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5.



Beam shape

Light distribution, scaled to cd per 1000lm



Electrical characteristics

InteGrade engine UB Vi 140mm Rose G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		1.59		W = kWh/1000h
Number of modules per chain			12	

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

InteGrade engine UB Vi 855mm Rose G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		9.63		W = kWh/1000h
Number of modules per chain			3	

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

InteGrade engine UB Vi 1150mm Rose G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		12.9		W = kWh/1000h
Number of modules per chain			3	

Measurement precision for Vf +/- 3%. 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	>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

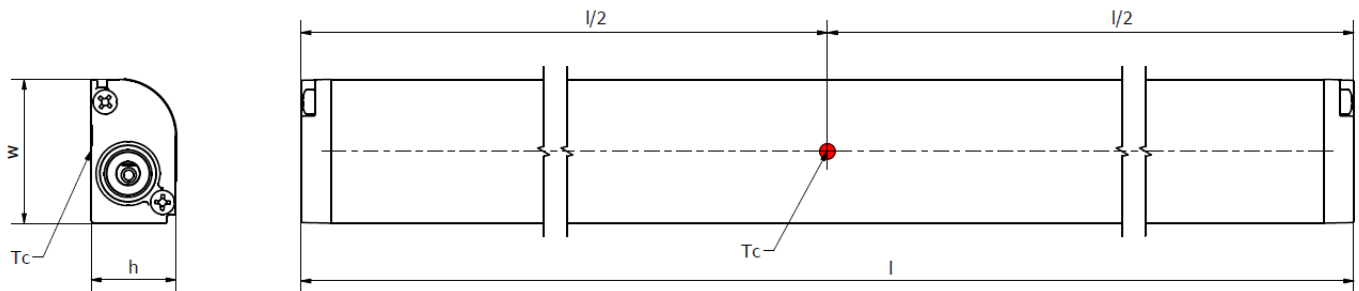
Parameter	Value	Unit
M70F50 nominal	100000	hours
M70F50 life	100000	hours

Mechanical characteristics

InteGrade engine UB Vi 140mm Rose G4

Parameter	Min	Typ	Max	Unit
Length	136	140	144	mm
Width	19.3	19.7	20.1	mm
Height total	12.4	12.9	13.4	mm
Product mass		30		gram

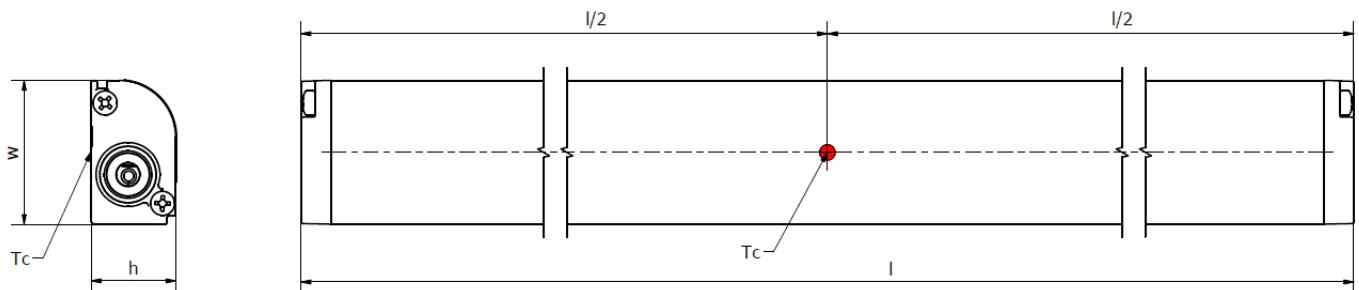
Thermal expansion from -30°C to +30°C is included in the tolerances



InteGrade engine UB Vi 855mm Rose G4

Parameter	Min	Typ	Max	Unit
Length	851	855	859	mm
Width	19.3	19.7	20.1	mm
Height total	12.4	12.9	13.4	mm
Product mass		180		gram

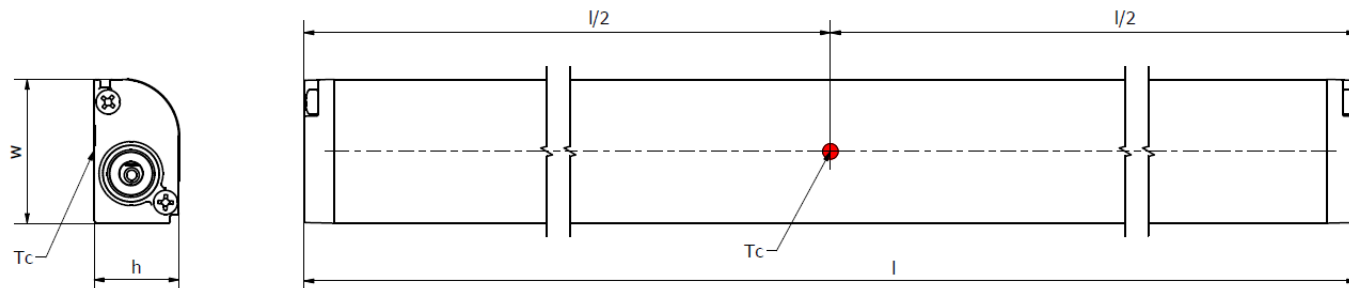
Thermal expansion from -30°C to +30°C is included in the tolerances



InteGrade engine UB Vi 1150mm Rose G4

Parameter	Min	Typ	Max	Unit
Length	1146	1150	1154	mm
Width	19.3	19.7	20.1	mm
Height total	12.4	12.9	13.4	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

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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06/12/2022