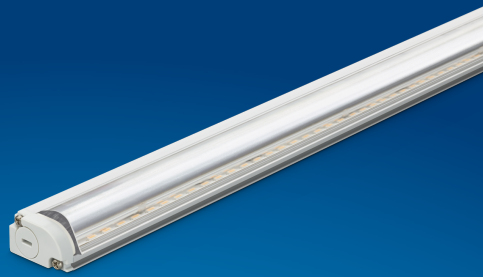


PHILIPS

InteGrade

LED

InteGrade engine NB Va
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 161 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



direct



instant

Ordering data

Commercial product name	EOC	12NC	EPREL registration #	Box quantity
InteGrade engine NB Va 140mm Rose G4	8720169 173064 00	9290 034 27906	1407672	24
InteGrade engine NB Va 575mm Rose G4	8720169 173088 00	9290 034 28006	1407673	24
InteGrade engine NB Va 1430mm Rose G4	8720169 173101 00	9290 034 28106	1407674	24

Key Specifications at Nominal conditions

Name	12NC	Power (W)	Luminous Flux (lm)	Useful Flux (lm)	CRI
InteGrade engine NB Va 140mm Rose G4	9290 034 27906	1.09	131	120	87
InteGrade engine NB Va 575mm Rose G4	9290 034 28006	4.06	510	469	87
InteGrade engine NB Va 1430mm Rose G4	9290 034 28106	10.3	1281	1178	87

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

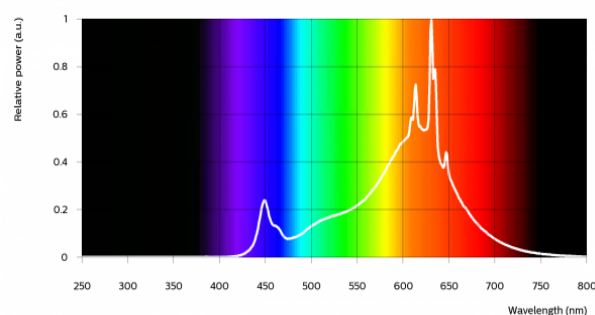
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

InteGrade engine NB Va 140mm Rose G4

Parameter	Min	Typ	Max	Unit
Luminous flux	125	131	167	lm
Flux within 120° cone		120		lm
Efficacy	115	120	153	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		26		deg
Peak intensity		141		cd
Photobiological safety			RG1 unlimited	

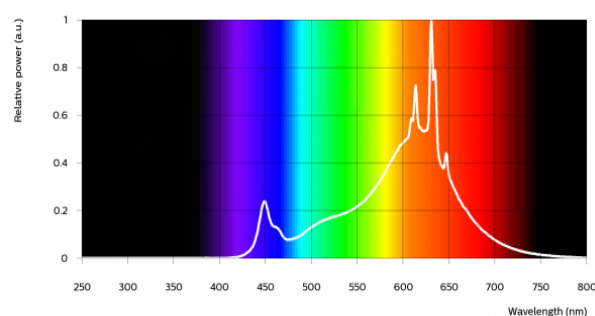
Measurement precision $\pm 5\%$ for the flux data and $\pm 6\%$ for the efficacy data. Measurement precision for color coordinates ± 0.005 . Measurement precision for CRI ± 1.5 .



InteGrade engine NB Va 575mm Rose G4

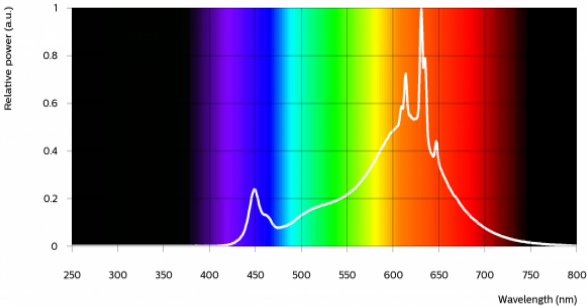
Parameter	Min	Typ	Max	Unit
Luminous flux	489	510	652	lm
Flux within 120° cone		469		lm
Efficacy	120	126	161	lm/W
Correlated color temperature (CCT)		2200		K
Color coordinates (CIEx, CIEy)		(0.479, 0.384)		-
Color consistency			3	SDCM
CRI	87			
R9	40			
Photometric code		822/359		
Radiation angle		26		deg
Peak intensity		549		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 .



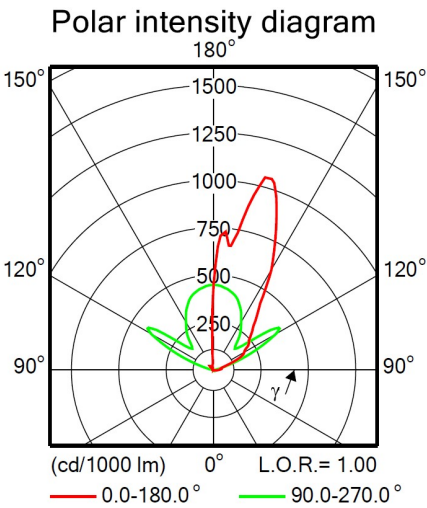
Parameter	Min	Typ	Max	Unit
Luminous flux	1229	1281	1639	lm
Flux within 120° cone		1178		lm
Efficacy	119	124	159	lm/W
Correlated color temperature (CCT)		2200		K
Color coordinates (CIEx, CIEy)		(0.479, 0.384)		-
Color consistency			3	SDCM
CRI	87			
R9	40			
Photometric code		822/359		
Radiation angle		26		deg
Peak intensity		1379		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 NB Va 140mm Rose G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		1.09		W = kWh/1000h
Number of modules per chain			40	

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

InteGrade engine NB Va 575mm Rose G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		4.06		W = kWh/1000h
Number of modules per chain			10	

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

InteGrade engine NB Va 1430mm Rose G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		10.3		W = kWh/1000h
Number of modules per chain			4	

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

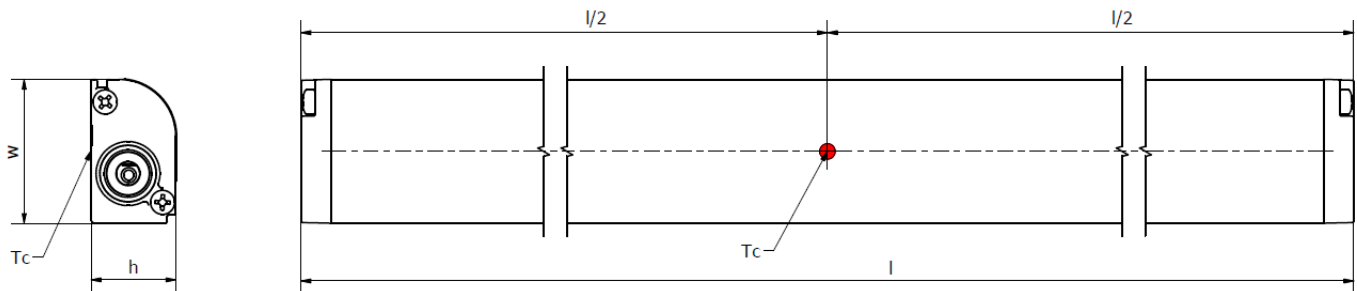
Parameter	Value	Unit
M70F50 nominal	100000	hours
M70F50 life	100000	hours

Mechanical characteristics

InteGrade engine NB Va 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

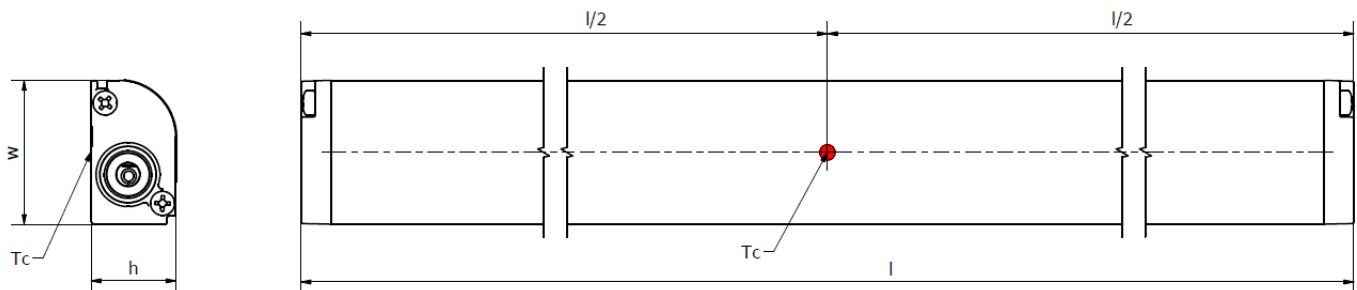
Thermal expansion from -30°C to +30°C is included in the tolerances



InteGrade engine NB Va 575mm Rose G4

Parameter	Min	Typ	Max	Unit
Length	571	575	579	mm
Width	19.3	19.7	20.1	mm
Height total	12.4	12.9	13.4	mm
Product mass		120		gram

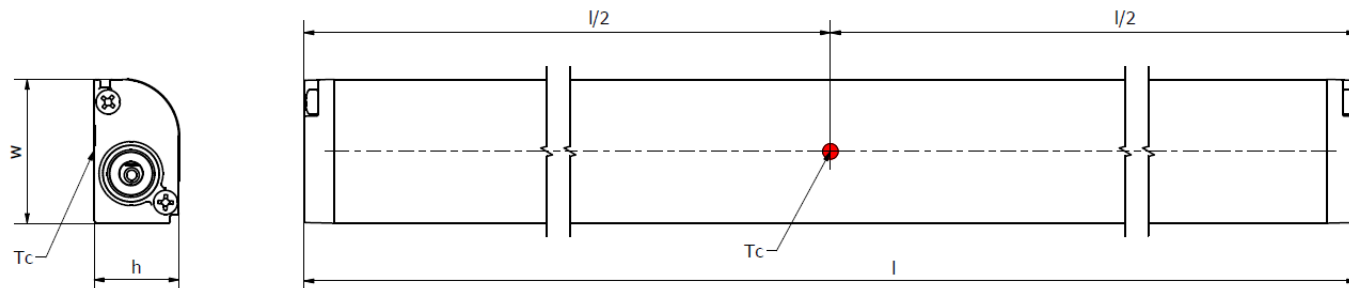
Thermal expansion from -30°C to +30°C is included in the tolerances



InteGrade engine NB Va 1430mm Rose G4

Parameter	Min	Typ	Max	Unit
Length	1426	1430	1434	mm
Width	19.3	19.7	20.1	mm
Height total	12.4	12.9	13.4	mm
Product mass		310		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