PHILIPS

InteGrade

LED

InteGrade F NB Va
1460mm 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 155lm/W meeting SLR (Single Lighting Regulation)
- Unique tailored spectra, Rose, for outstanding red color meat type merchandize attractiveness
- Optimized spectra for meat discoloration perception reduction
- 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

100%
instant

Ordering data

Commercial product name	EOC	12NC	EPREL registration #	Box quantity
InteGrade F NB Va 1460mm Rose SD G4	8720169 172968 00	9290 034 27406	1407667	6
InteGrade F NB Va 1460mm Rose CTR G4	8720169 172982 00	9290 034 27506	1407668	6

Key Specifications at Nominal conditions

Name	12NC	Power (W)	Luminous Flux (lm)	Useful Flux (lm)	CRI
InteGrade F NB Va 1460mm Rose SD G4	9290 034 27406	10.5	1280	1113	87
InteGrade F NB Va 1460mm Rose CTR G4	9290 034 27506	21.1	2560	2227	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

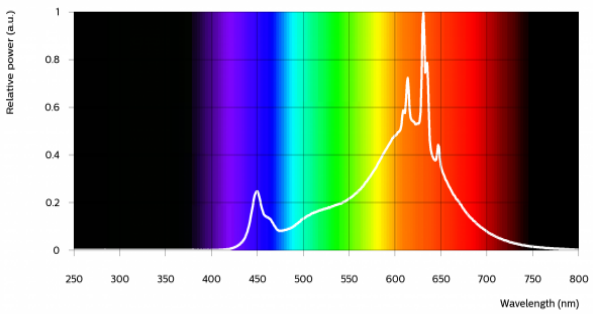
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

InteGrade F NB Va 1460mm Rose SD G4

Parameter	Min	Typ	Max	Unit
Luminous flux	1229	1280	1638	lm
Flux within 120° cone		1113		lm
Efficacy	117	121	155	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		1790		cd
Photobiological safety			RG1 unlimited	

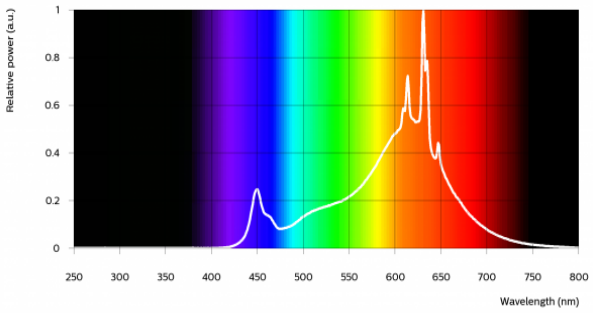
Measurement precision ± 5% for the flux data and ± 6% for the efficacy data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5.



InteGrade F NB Va 1460mm Rose CTR G4

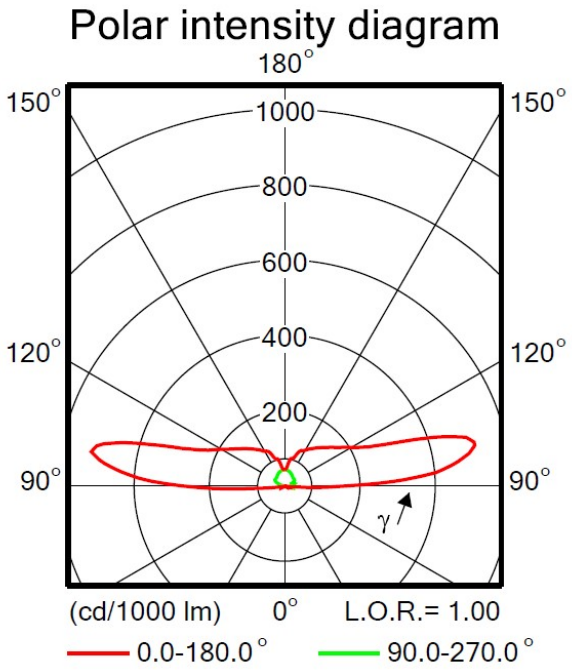
Parameter	Min	Typ	Max	Unit
Luminous flux	2457	2560	3276	lm
Flux within 120° cone		2227		lm
Efficacy	117	121	155	lm/W
Correlated color temperature (CCT)		2200		K
Color coordinates (CIEx, CIEy)		(0.479, 0.384)		-
Color consistency			3	SDCM
CRI	87			
R9	40			
Photometric code		822/359		
Radiation angle		26		deg
Peak intensity		1743		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.

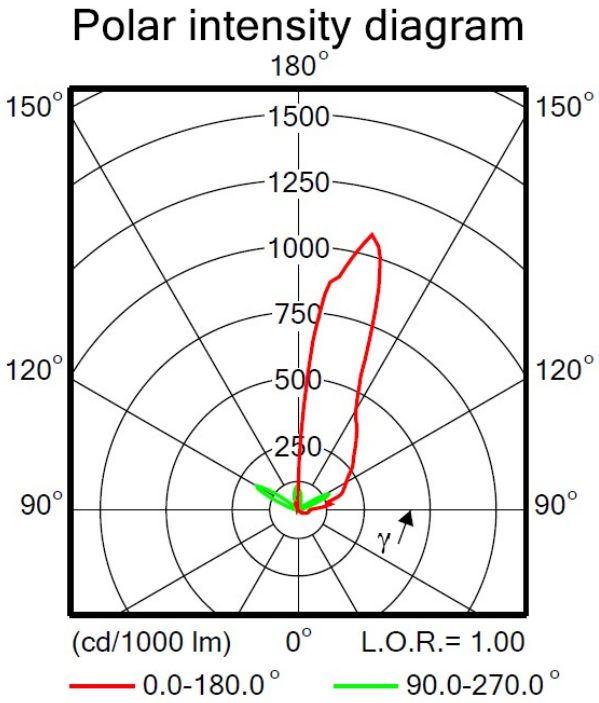


Beam shape

Light distribution of CTR fixture, scaled to cd per 1000lm



Light distribution of SD fixture, scaled to cd per 1000lm



Electrical characteristics

InteGrade F NB Va 1460mm Rose SD G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		10.5		W = kWh/1000h

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

InteGrade F NB Va 1460mm Rose CTR G4

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		21.1		W = kWh/1000h

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

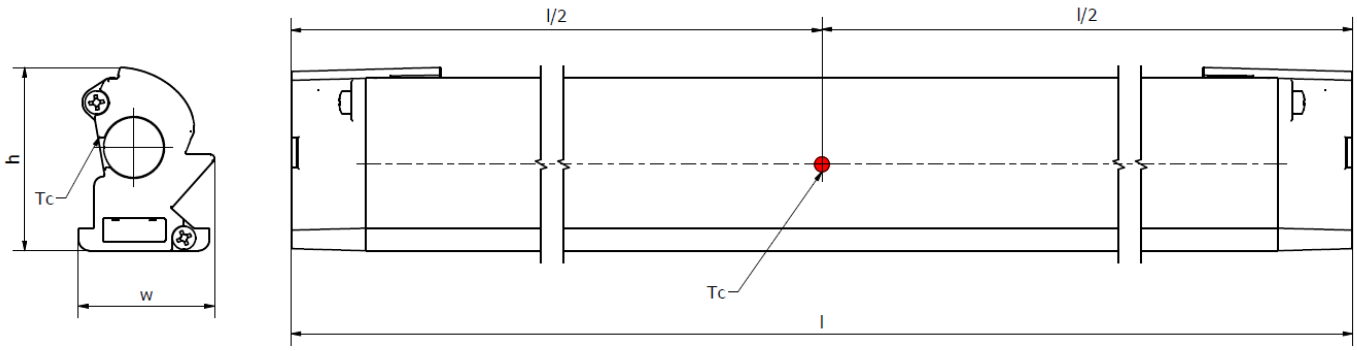
Parameter	Value	Unit
M70F50 nominal	100000	hours
M70F50 life	100000	hours

Mechanical characteristics

InteGrade F NB Va 1460mm Rose SD G4

Parameter	Min	Typ	Max	Unit
Length	1456	1460	1464	mm
Width	17.7	18.2	18.7	mm
Height total	23.9	24.5	25.1	mm
Product mass		454		gram

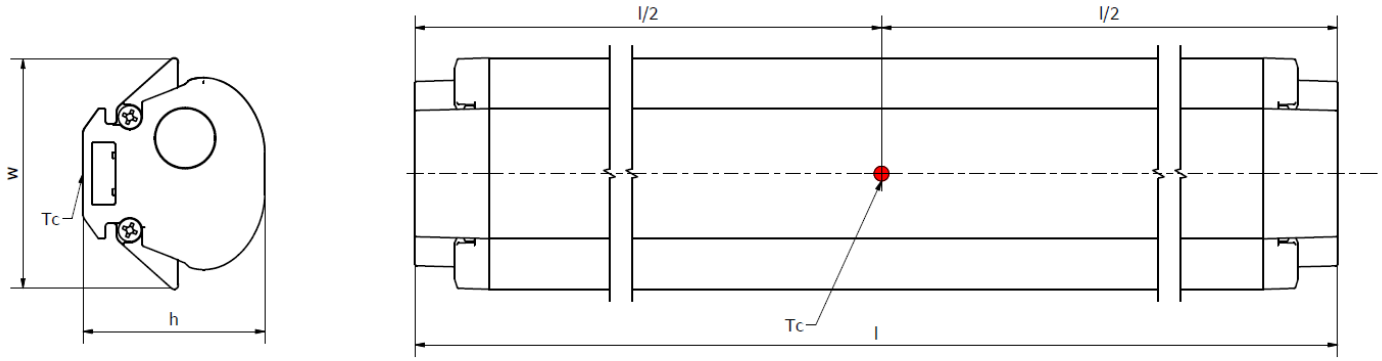
Thermal expansion from -30°C to +30°C is included in the tolerances



InteGrade F NB Va 1460mm Rose CTR G4

Parameter	Min	Typ	Max	Unit
Length	1456	1460	1464	mm
Width	30.6	31.1	31.6	mm
Height total	23.9	24.5	25.1	mm
Product mass		701		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

Environmental
RoHS/REACH

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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