PHILIPS

InteGrade

LED

InteGrade S

Datasheet

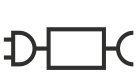
InteGrade S

InteGrade S enables superior visual displaying of merchandise at serve-over applications.
The modules are compatible with the InteGrade connectors and cables.
InteGrade S mounting profiles and mounting brackets are available.

Key features and benefits

- Slim design enabling for aesthetic integration
- Superior light distribution for serve-overs with symmetrical and wide beam angle
- Superior merchandising with Premium White and CRI 95
- Efficacy up to 125lm/W
- Flexibility with large variety of accessories
- Long life-time of > 50,000 hours
- Five year system warranty
- True system proposition with Philips Constant Voltage LED power drivers and accessories

October 2021



Ordering data

Commercial product name	EOC	12NC	Box quantity
InteGrade S WB Va 850mm 940 PW G1	8718699 711368 00	9290 021 31706	12
InteGrade S WB Va 1175mm 940 PW G1	8718699 711405 00	9290 021 31906	12
InteGrade S WB Va 850mm 956 G1	8718699 711382 00	9290 021 31806	12
InteGrade S WB Va 1175mm 956 G1	8718699 711429 00	9290 021 32006	12
InteGrade S WB Vi 130mm 930 PW G1	8718699 750671 00	9290 021 70306	12
InteGrade S WB Vi 250mm 930 PW G1	8718699 711146 00	9290 021 30606	12
InteGrade S WB Vi 850mm 930 PW G1	8718699 711221 00	9290 021 31006	12
InteGrade S WB Vi 1175mm 930 PW G1	8718699 711306 00	9290 021 31406	12
InteGrade S WB Vi 130mm 940 PW G1	8718699 750657 00	9290 021 70206	12
InteGrade S WB Vi 250mm 940 PW G1	8718699 711122 00	9290 021 30506	12
InteGrade S WB Vi 850mm 940 PW G1	8718699 711207 00	9290 021 30906	12
InteGrade S WB Vi 1175mm 940 PW G1	8718699 711283 00	9290 021 31306	12
InteGrade S WB Vi 130mm WWR G1	8718699 750695 00	9290 021 70406	12
InteGrade S WB Vi 250mm WWR G1	8718699 711160 00	9290 021 30706	12
InteGrade S WB Vi 850mm WWR G1	8718699 711245 00	9290 021 31106	12
InteGrade S WB Vi 1175mm WWR G1	8718699 711320 00	9290 021 31506	12

Key Specifications at Nominal conditions

Name	12NC	Power (W)	Luminous Flux (lm)	CRI
InteGrade S WB Va 850mm 940 PW G1	9290 021 31706	9.50	1150	
InteGrade S WB Va 1175mm 940 PW G1	9290 021 31906	12.9	1600	
InteGrade S WB Va 850mm 956 G1	9290 021 31806	9.50	1180	
InteGrade S WB Va 1175mm 956 G1	9290 021 32006	12.9	1620	
InteGrade S WB Vi 130mm 930 PW G1	9290 021 70306	2.20	250	
InteGrade S WB Vi 250mm 930 PW G1	9290 021 30606	4.20	480	
InteGrade S WB Vi 850mm 930 PW G1	9290 021 31006	14.4	1640	
InteGrade S WB Vi 1175mm 930 PW G1	9290 021 31406	19.6	2250	
InteGrade S WB Vi 130mm 940 PW G1	9290 021 70206	2.20	260	
InteGrade S WB Vi 250mm 940 PW G1	9290 021 30506	4.20	510	
InteGrade S WB Vi 850mm 940 PW G1	9290 021 30906	14.4	1730	
InteGrade S WB Vi 1175mm 940 PW G1	9290 021 31306	19.6	2370	
InteGrade S WB Vi 130mm WWR G1	9290 021 70406	1.60	170	
InteGrade S WB Vi 250mm WWR G1	9290 021 30706	3.20	340	
InteGrade S WB Vi 850mm WWR G1	9290 021 31106	10.6	1130	
InteGrade S WB Vi 1175mm WWR G1	9290 021 31506	14.4	1540	

Module temperatures

Parameter	Nominal*	Life**	Max***	Unit
T_a (ambient temperature)	25	25	30	°C

* Nominal value at which typical performance is specified

** Value at which life time is specified

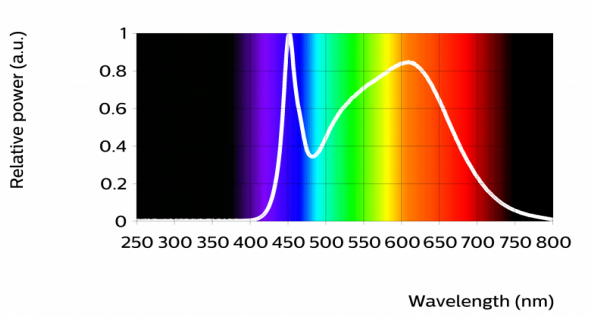
*** Maximum value for safe operation, do not operate above this value

Optical characteristics - table per color (CCT)

InteGrade S WB Va 850mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1093	1150	1380	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.367)		-
Color consistency			3	SDCM
CRI	95			
Photometric code		940/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

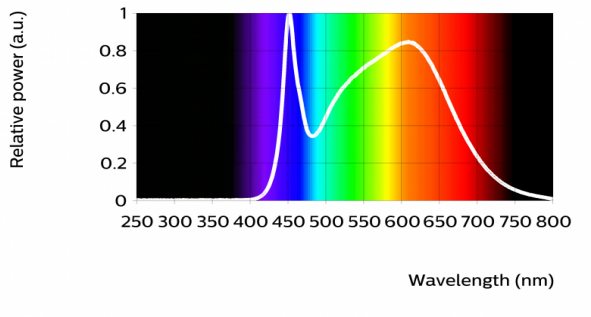
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Va 1175mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1520	1600	1920	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.367)		-
Color consistency			3	SDCM
CRI	95			
Photometric code		940/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

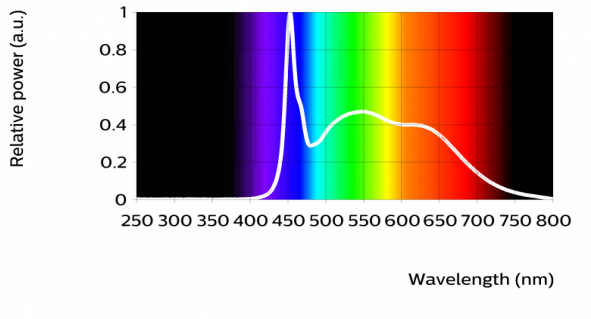
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Va 850mm 956 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1121	1180	1416	lm
Correlated color temperature (CCT)		5600		K
Color coordinates (CIEx, CIEy)		(0.336, 0.349)		-
Color consistency			5	SDCM
CRI	90			
Photometric code		956/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

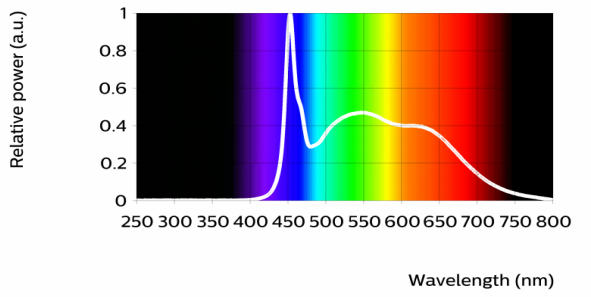
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Va 1175mm 956 G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1539	1620	1944	lm
Correlated color temperature (CCT)		5600		K
Color coordinates (CIEx, CIEy)		(0.336, 0.349)		-
Color consistency			5	SDCM
CRI	90			
Photometric code		956/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

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



InteGrade S WB Vi 130mm 930 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	238	250	300	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.426, 0.383)		-
Color consistency			3	SDCM
CRI	93			
Photometric code		930/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

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

InteGrade S WB Vi 250mm 930 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	456	480	576	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.426, 0.383)		-
Color consistency			3	SDCM
CRI	93			
Photometric code		930/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

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

InteGrade S WB Vi 850mm 930 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1558	1640	1968	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.426, 0.383)		-
Color consistency			3	SDCM
CRI	93			
Photometric code		930/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

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

InteGrade S WB Vi 1175mm 930 PW G1

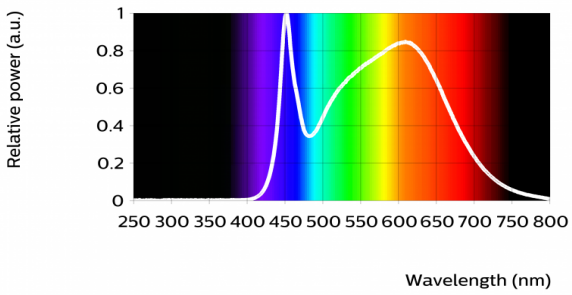
Parameter	Min	Typ	Max	Unit
Luminous flux	2138	2250	2700	lm
Correlated color temperature (CCT)		3000		K
Color coordinates (CIEx, CIEy)		(0.426, 0.383)		-
Color consistency			3	SDCM
CRI	93			
Photometric code		930/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

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

InteGrade S WB Vi 130mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	247	260	312	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.367)		-
Color consistency			3	SDCM
CRI	95			
Photometric code		940/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

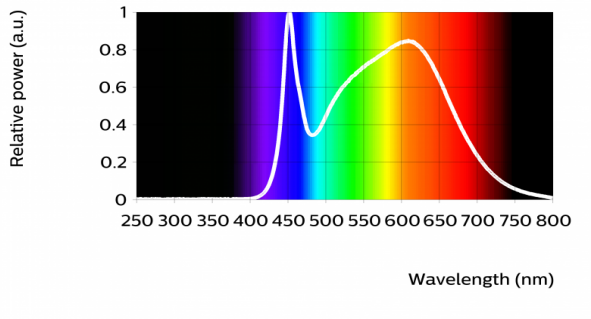
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Vi 250mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	485	510	612	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.367)		-
Color consistency			3	SDCM
CRI	95			
Photometric code		940/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

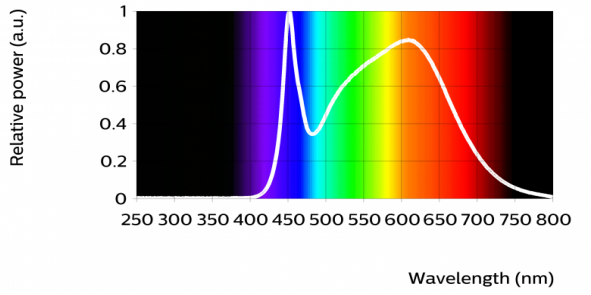
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Vi 850mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1644	1730	2076	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.367)		-
Color consistency			3	SDCM
CRI	95			
Photometric code		940/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

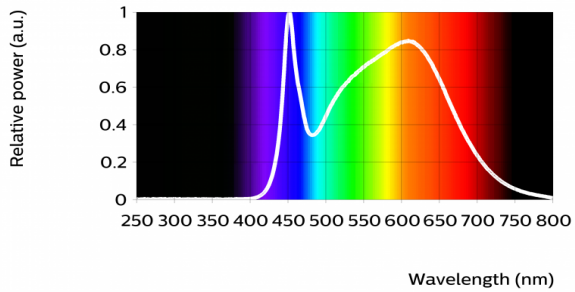
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Vi 1175mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Luminous flux	2252	2370	2844	lm
Correlated color temperature (CCT)		4000		K
Color coordinates (CIEx, CIEy)		(0.380, 0.367)		-
Color consistency			5	SDCM
CRI	95			
Photometric code		940/569		
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

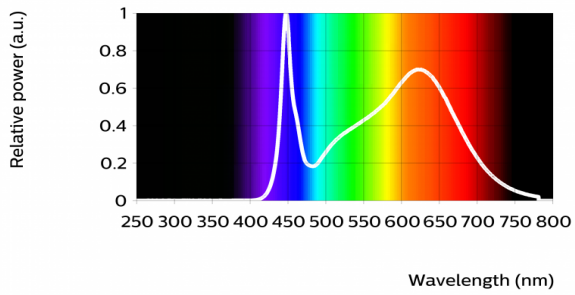
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Vi 130mm WWR G1

Parameter	Min	Typ	Max	Unit
Luminous flux	162	170	204	lm
Color coordinates (CIEx, CIEy)		(0.388, 0.325)		-
Color consistency			3	SDCM
CRI	90			
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

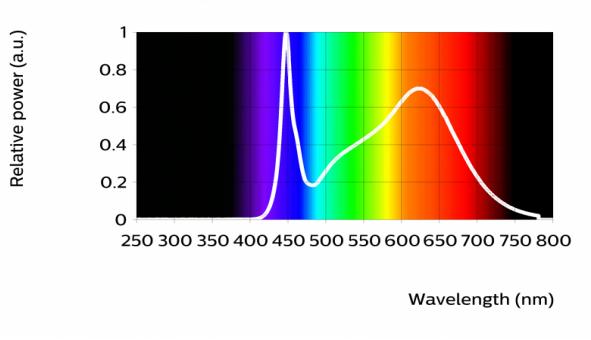
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Vi 250mm WWR G1

Parameter	Min	Typ	Max	Unit
Luminous flux	323	340	408	lm
Color coordinates (CIEx, CIEy)		(0.388, 0.325)		-
Color consistency			3	SDCM
CRI	90			
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

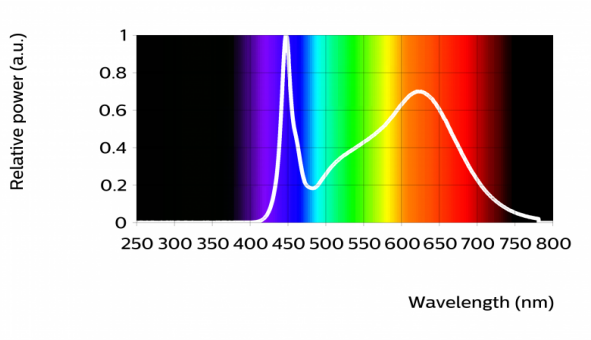
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



InteGrade S WB Vi 850mm WWR G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1074	1130	1356	lm
Color coordinates (CIEx, CIEy)		(0.388, 0.325)		-
Color consistency			3	SDCM
CRI	90			
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

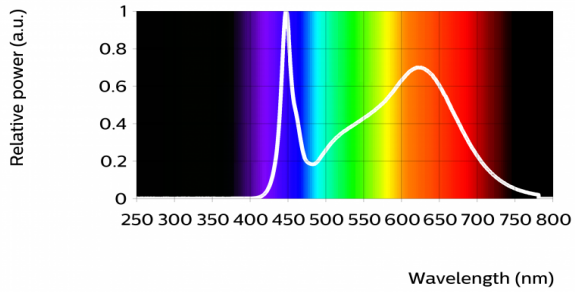
Measurement precision ± 5% for the flux data. Measurement precision for color coordinates ± 0.005. Measurement precision for CRI ± 1.5



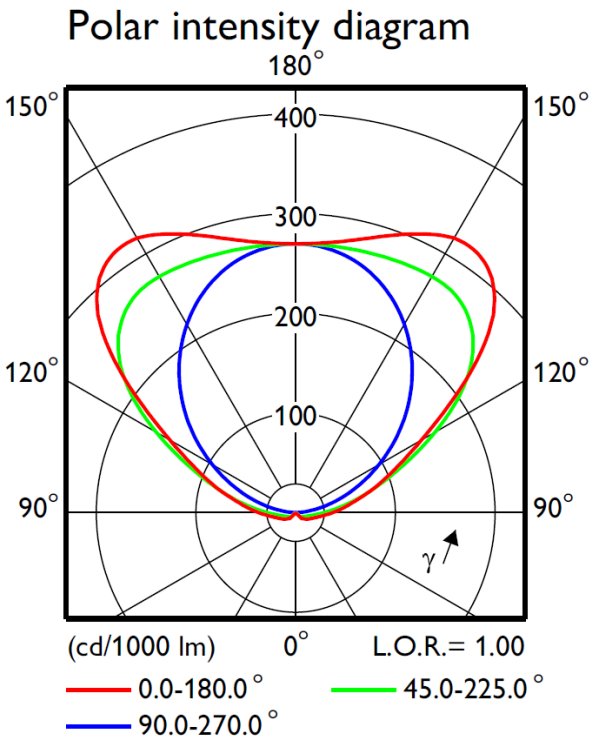
InteGrade S WB Vi 1175mm WWR G1

Parameter	Min	Typ	Max	Unit
Luminous flux	1463	1540	1848	lm
Color coordinates (CIEx, CIEy)		(0.388, 0.325)		-
Color consistency			3	SDCM
CRI	90			
Radiation angle		140		deg
Photobiological safety			RG1 unlimited	

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



Beam shape


Polar intensity diagram
180°
150°
150°
400
300
200
120°
120°
100
90°
90°
γ
(cd/1000 lm)
0°
L.O.R.= 1.00
0.0-180.0 °
45.0-225.0 °
90.0-270.0 °

Electrical characteristics

InteGrade S WB Vi 130mm 930 PW G1
InteGrade S WB Vi 130mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		2.20		W = kWh/1000h
Number of modules per chain			28	

InteGrade S WB Vi 130mm WWR G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		1.60		W = kWh/1000h
Number of modules per chain			28	

InteGrade S WB Vi 250mm 930 PW G1
InteGrade S WB Vi 250mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		4.20		W = kWh/1000h
Number of modules per chain			15	

InteGrade S WB Vi 250mm WWR G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		3.20		W = kWh/1000h
Number of modules per chain			4	

InteGrade S WB Va 850mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		9.50		W = kWh/1000h
Number of modules per chain			4	

InteGrade S WB Va 850mm 956 G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		9.50		W = kWh/1000h
Number of modules per chain			4	

InteGrade S WB Vi 850mm 930 PW G1
InteGrade S WB Vi 850mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		14.4		W = kWh/1000h
Number of modules per chain			4	

InteGrade S WB Vi 850mm WWR G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		10.6		W = kWh/1000h
Number of modules per chain			4	

InteGrade S WB Vi 1175mm 930 PW G1
InteGrade S WB Vi 1175mm 940 PW G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		19.6		W = kWh/1000h
Number of modules per chain			3	

InteGrade S WB Vi 1175mm WWR G1

Parameter	Min	Typ	Max	Unit
Forward voltage		24.0		V
Power consumption		14.4		W = kWh/1000h
Number of modules per chain			3	

InteGrade S WB Va 1175mm 940 PW G1
InteGrade S WB Va 1175mm 956 G1

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

Lumen maintenance

Operation point	Lumen maintenance	L70			L80		
	x 1000 hours	B50	B20	B10	B50	B20	B10
	Ta 5°C	>100	>100	>100	95	92	91
	Ta 30°C	>100	>100	>100	74	73	72

Lifetime

Parameter	Value	Unit
M70F50 nominal	>100000	hours

Mechanical characteristics

InteGrade S WB Vi 130mm 930 PW G1
InteGrade S WB Vi 130mm 940 PW G1
InteGrade S WB Vi 130mm WWR G1

Parameter	Min	Typ	Max	Unit
Length	129.3	130	130.7	mm
Width	14.4	15	15.6	mm
Height	13.7	14.5	15.3	mm
Product mass		25		gram

InteGrade S WB Vi 250mm 930 PW G1
InteGrade S WB Vi 250mm 940 PW G1
InteGrade S WB Vi 250mm WWR G1

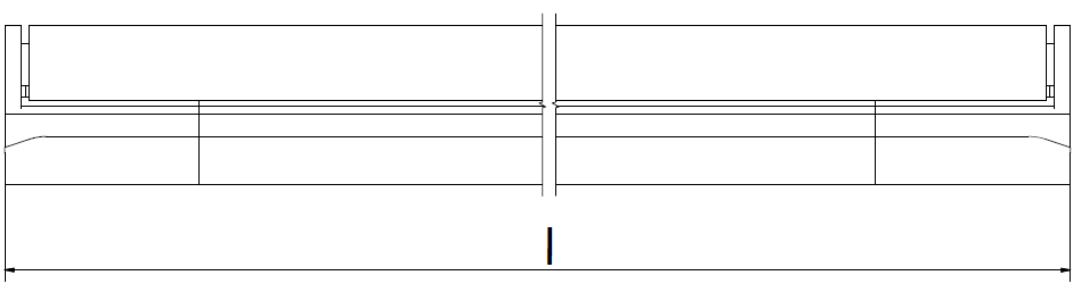
Parameter	Min	Typ	Max	Unit
Length	249.3	250	250.7	mm
Width	14.4	15	15.6	mm
Height	13.7	14.5	15.3	mm
Product mass		45		gram

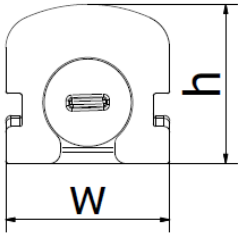
InteGrade S WB Va 850mm 940 PW G1
InteGrade S WB Va 850mm 956 G1
InteGrade S WB Vi 850mm 930 PW G1
InteGrade S WB Vi 850mm 940 PW G1
InteGrade S WB Vi 850mm WWR G1

Parameter	Min	Typ	Max	Unit
Length	849.3	850	850.7	mm
Width	14.4	15	15.6	mm
Height	13.7	14.5	15.3	mm
Product mass		170		gram

InteGrade S WB Va 1175mm 940 PW G1
InteGrade S WB Va 1175mm 956 G1
InteGrade S WB Vi 1175mm 930 PW G1
InteGrade S WB Vi 1175mm 940 PW G1
InteGrade S WB Vi 1175mm WWR G1

Parameter	Min	Typ	Max	Unit
Length	1174.3	1175	1175.7	mm
Width	14.4	15	15.6	mm
Height	13.7	14.5	15.3	mm
Product mass		227		gram





Absolute ratings

Parameter	Min	Max	Unit
Ambient temperature	-30	30	°C

Application information

Certificates and Standards
Annex BB of IEC/EN 60335-2-89
Annex CC of IEC/EN 60335-2-24
CE
IEC/EN 62031
IEC/EN 62471
NSF
Relevant clauses of IEC/EN 60335-1
UL/cRUus

Environmental
RoHS/REACH

Application	
IP rating	no IP-rating
Overheating protection	No protection
Luminaire class	IEC Class I, II and III
Luminaire class ANSI	UL class 2 input
Dimming	Yes

UK importer address: 3 Guildford Business Park, GU2 8XG

www.philips.com/oem

11/10/2021