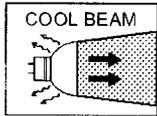
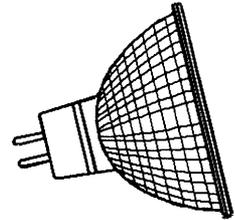


# DECOSTAR 51/51S

**Product characteristics:**



- Dichroic reflector reduces thermal radiation in the light beam by 66%
- Low pressure technology complies to IEC 60598-1. Lamp can be used without extra protection from the luminaire.
- Integrated cover pan prevents the soiling of the reflector.
- Meets the most stringent UV-protection thresholds (NIOSH). Bleaching reduced.
- Lamp life: 2000h



**Range:**

	Order-code	Voltage	Wattage*	Base	Bear angle	Luminous intensity	ILCOS-code
Lamp without cover lens	41860 SP	12V	20 W	GU5,3	10°	3150 cd	HRGS/UB 20-12-GU5,3-51/10
	41860 WFL	"	"	"	38°	510 cd	HRGS/UB 20-12-GU5,3-51/38
	41865 SP	"	35W	"	10°	6300 cd	HRGS/UB 35-12-GU5,3-51/10
	41865 WFL	"	"	"	38°	1050 cd	HRGS/UB 35-12-GU5,3-51/38
	41870 SP	"	50W	"	10°	8200 cd	HRGS/UB 50-12-GU5,3-51/10
	41870 WFL	"	"	"	38°	1500 cd	HRGS/UB 50-12-GU5,3-51/38
Lamp with cover lens	44860 SP	12V	20 W	GU5,3	10°	3000 cd	HRGS/UB 20-12-GU5,3-51/10
	44860 WFL	"	"	"	38°	480 cd	HRGS/UB 20-12-GU5,3-51/38
	44865 SP	"	35W	"	10°	6000 cd	HRGS/UB 35-12-GU5,3-51/10
	44865 WFL	"	"	"	38°	1000 cd	HRGS/UB 35-12-GU5,3-51/38
	44870 SP	"	50W	"	10°	7800 cd	HRGS/UB 50-12-GU5,3-51/10
	44870 WFL	"	"	"	38°	1450 cd	HRGS/UB 50-12-GU5,3-51/38

\* Maximum permitted tolerance nominal value +8% acc. IEC 60357

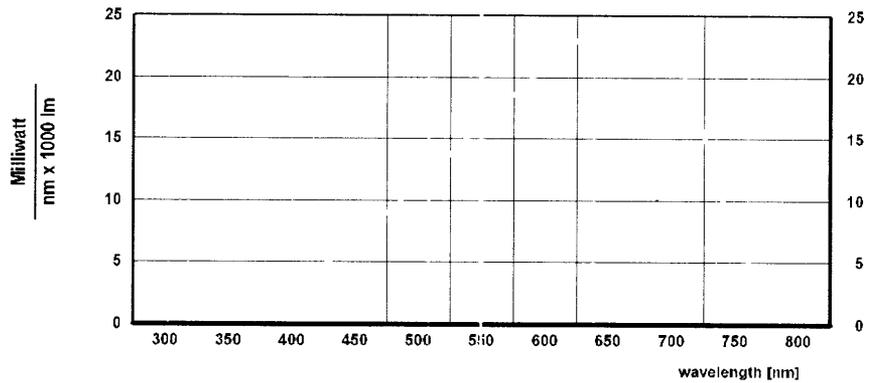
108-283 →

**Technical light data:**

**Colour temperature** 3000K ± 100

**Maintenance** Decrease of axial luminous intensity < 15% after 75% of the nominal life time.

**Spectral distribution  
visible light**



DECOSTAR 12V/50W

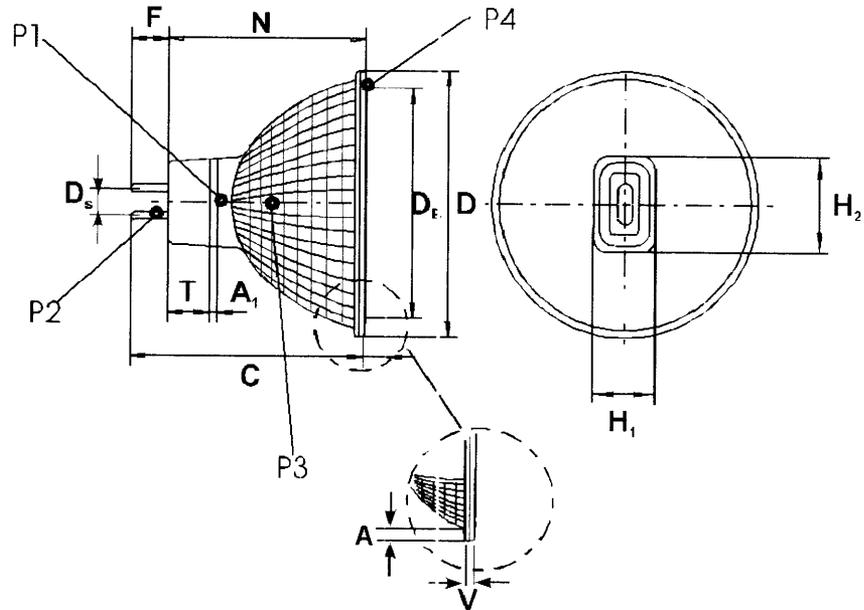
**NIOSH/Erythema Thresholds** Biological effective radiation is distinctly below the permitted limits

**Bleaching effect** Bleaching reduced up to 80% (depending on radiated material) due to UV-absorbing quartz glass respectively due to integrated cover pan (in comparison to conventional lamps).

**Light distribution** OSRAM PHODAT database available on CD-ROM

# DECOSTAR 51/51S

**Geometry:**



Values in mm	Nomin.*	DECOSTAR 51/51S	Dim. IEC-Norm*
Overall length	C	N <sub>max.</sub> + F <sub>max.</sub>	46 max.
Length of Reflector	N	37,3 ± 0,4	35,8 - 38,4
Diameter of Reflector	D	50,7 - 1,3	49,4 - 50,7
	D <sub>B</sub>	-	48,0 max.
Width of Reflector edge	A	0,3 min.	0,3 min.
Thickness of Reflector edge	V	2 ± 0,2	1,8 - 2,4
collar nomin.	H <sub>1</sub> x H <sub>2</sub>	12,75 max. x 19,0 max. distance 14 mm from collar end	see free space IEC 60061
Position GU-groove	T	7,85 ± 0,35	7,45 - 8,25
Depth GU-groove		0,4 ± 0,3	0,4 min.
Width GU-groove	A <sub>1</sub>	1,5 ± 0,5	1,5 min.
Pin length	F	7 ± 0,5	6,1 - 7,62
Pin distance	D <sub>s</sub>	5,33 ± 0,25	5,33
Pin diameter		1,53	1,45 - 1,60
Pin length difference		0,4 max.	-
Pin parallelism		via r orm gauge	via norm gauge
Pin oviform		via r orm gauge	via norm gauge

Nominations and dimensions acc. IEC 60357, EC 60061

**Please note:**

**Dimensions and tolerances are subject to change within the IEC regulations!  
Not explicitly given dimensions cannot be evaluated by measuring lamp samples!**



# DECOSTAR 51/51S

## Temperature behaviour:

	Pinch	Pin	Reflector	Joint
Measurement point see "Geometry"	P1	P2	P3	P4
Burning position	cap up	cap up	cap up	cap up
Max. temperatures permitted in luminaires	370° *	250° **	-	240°
Temperatures [°C]*				
20W	155°	100°	115°	110°
35W	230°	140°	145°	140°
50W	300°	185°	165°	160°

\*Special foils in the pinch allow higher temperatures than IEC 60357.

\*\*For 20W and lower only 220°C are permitted according to IEC 60432.

### Measurement conditions:

Measurement in the most unfavourable burning position for the pinch and pins.

The burning position only has a minimum influence on the temperature of the top part of the reflector and on the joint.

Surrounding temperature: 25° (acc to DIN 5032)

Voltage: 12,0V

Lamp holder: Bender & Wirth 884

**Operating temperatures for free burning use are not obliging and are useful for orientation.**



### Operating conditions:

**Burning positions** Any

**Dimmability** 100%

**Areas of application** The correct function for exterior use can't be guaranteed.

**Safety distance** Please observe the minimum safe distance given on the luminaire. The minimum safety distance for each luminaire type has to be determined through the luminaire manufacturer by appropriate measurements.



**When replacing conventional dichroic reflector lamps without cover pane by Decostar 51S, temperature inside the lighting will rise. For this reason the suitability of the use of a luminaire with a lamp with cover pane must be secured (see use instructions of control gear).**

**Environmental Friendliness:** DECOSTAR 51/51S can be disposed of as household waste. During operation no poisonous or harmful substances are released. In the first few hours of operation humidity may be expelled from the glue.

**Validity:** These technical information sheets (TI-sheets) are updated in irregular intervals. The user is responsible to ensure that the information they have is up to date and still valid. Once a new TI sheet has been issued, former editions are to be seen as invalid and disposed of.