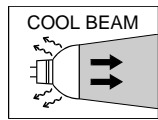
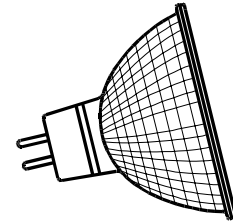


# DECOSTAR 51/51S

## 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.
- Base: GU 5,3
- Lampe life: 2000h



## Range:

	Order-code	Voltage	Wattage*	Beam angle**	Luminous intensity**	ILCOS-code
Lamp without cover lens	<b>41860 SP</b>	12V	20 W	10°	3150 cd	HRGS/UB 20-12-GU5,3-51/10
	<b>41860 WFL</b>	"	"	36°	510 cd	HRGS/UB 20-12-GU5,3-51/36
	<b>41865 SP</b>	"	35W	10°	6300 cd	HRGS/UB 35-12-GU5,3-51/10
	<b>41865 WFL</b>	"	"	36°	1050 cd	HRGS/UB 35-12-GU5,3-51/36
	<b>41870 SP</b>	"	50W	10°	8200 cd	HRGS/UB 50-12-GU5,3-51/10
	<b>41870 WFL</b>	"	"	36°	1500 cd	HRGS/UB 50-12-GU5,3-51/36
Lamp with cover lens	<b>44860 SP</b>	12V	20 W	10°	3000 cd	HRGS/UB 20-12-GU5,3-51/10
	<b>44860 WFL</b>	"	"	36°	480 cd	HRGS/UB 20-12-GU5,3-51/36
	<b>44865 SP</b>	"	35W	10°	6000 cd	HRGS/UB 35-12-GU5,3-51/10
	<b>44865 WFL</b>	"	"	36°	1000 cd	HRGS/UB 35-12-GU5,3-51/36
	<b>44870 SP</b>	"	50W	10°	7800 cd	HRGS/UB 50-12-GU5,3-51/10
	<b>44870 WFL</b>	"	"	36°	1450 cd	HRGS/UB 50-12-GU5,3-51/36

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

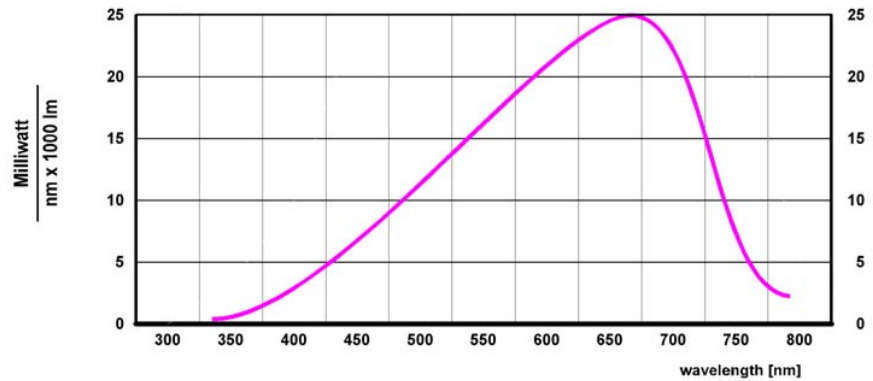
\*\*may vary according to tolerances specified in IEC 60357

**Technical light data:**

**Maintenance**

Decrease of axial luminous intensity < 20% after 75% of the nominal life time.

**Spectral distribution  
visible light**



DECOSTAR 12V/50W

**UV-radiation**

The irradiance is clear below the NIOSH-threshold values for skin and eye.

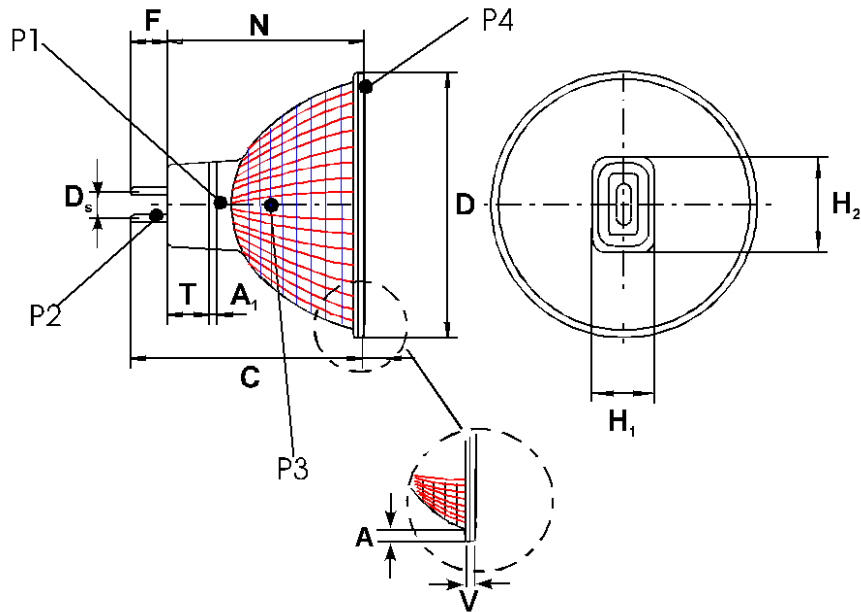
Due to UV-absorbing quartz glass respectively due to the integrated cover pan the bleaching is clear reduced (depending on radiated material).

**Light distribution**

Available at [www.myosram.com](http://www.myosram.com)

# DECOSTAR 51/51S

**Geometry:**



Values in mm	Nomin.*	DECOSTAR 51/51S	Dim. IEC-Norm*
Overall length	C	$N_{max.} + F_{max.}$	46 max.
Length of Reflector	N	$37,3 \pm 0,4$	35,8 - 38,4
Diameter of Reflector	D	$50,7 - 1,3$	49,4 - 50,7
Width of Reflector edge	A	0,3 min.	0,3 min.
Thickness of Reflector edge	V	$2 \pm 0,2$	1,8 - 2,4
collar nomin.	$H_1 \times H_2$	12,75 max. x 19,0 max. distance 14 mm from collar end	see free space IEC 60061
Position GU-groove	T	$7,85 \pm 0,35$	7,45 - 8,25
Depth GU-groove		$0,4 + 0,3$	0,4 min.
Width GU-groove	$A_1$	$1,5 + 0,5$	1,5 min.
Pin length	F	$7 \pm 0,5$	6,1 - 7,62
Pin distance	$D_s$	$5,33 \pm 0,25$	5,33
Pin diameter		1,53	1,45 - 1,60

Nominations and dimensions acc. IEC 60357, IEC 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			
Max. temperatures permitted acc. to IEC	350°C	250°C *	-	240°C
Operating temperatures measured free burning				
20W	155°C	100°C	115°C	110°C
35W	230°C	140°C	145°C	140°C
50W	300°C	185°C	165°C	160°C

\*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 only for orientation.**

## Operating conditions:

Burning positions	Any
Dimmability	100%
Areas of application	For outdoor applications and operation in damp locations special approved fixtures are required.
Near field	The lamps are not qualified for applications, whereat defined near field features are necessary.

## Safety informations:



According to IEC 60598-1/DIN VDE 0711 "minimum security distance" the max. temperature permitted is 90°C. This max. temperature has to be ensured by the minimum distance. This distance has to be determined through the luminaire manufacturer by appropriate measurements and specified on the luminaire.

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 sensitivity:

DECOSTAR 51/51S can be disposed of as household waste.  
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.