

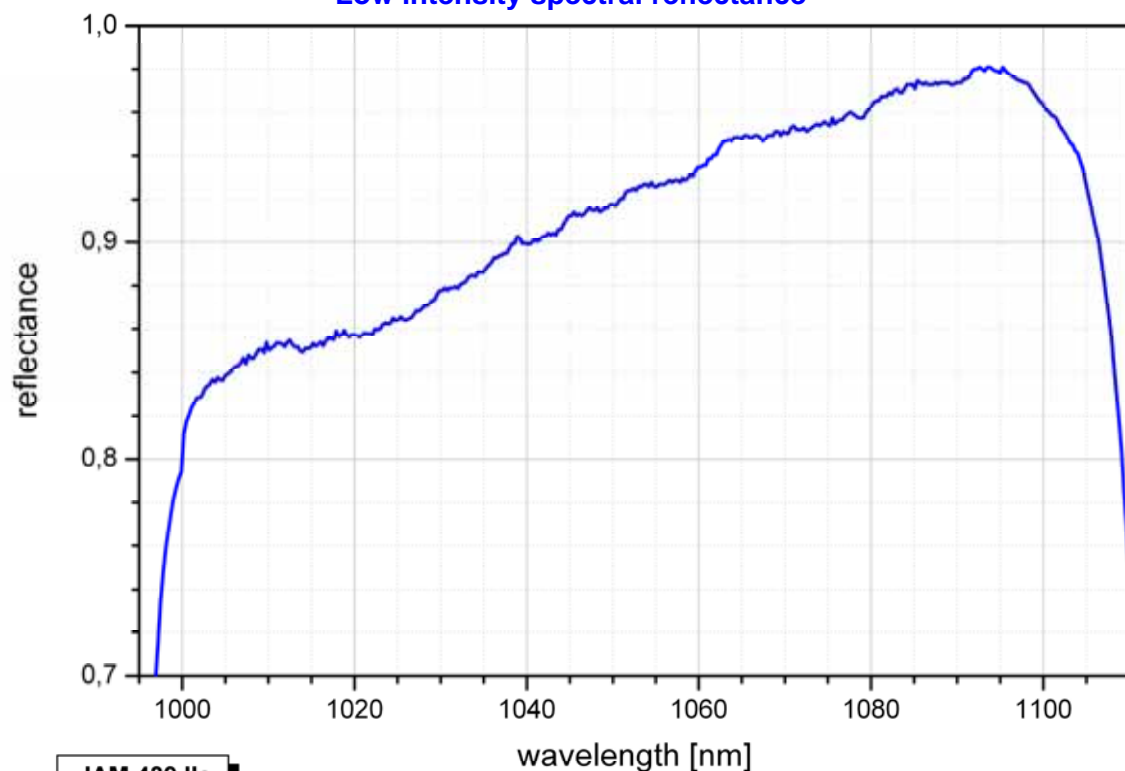
SAM™ Data Sheet SAM-1064-5-5ps-x, $\lambda = 1064 \text{ nm}$

Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band ($R > 85\%$)	$\lambda = 1010 \dots 1090 \text{ nm}$
Absorbance	$A_0 = 5 \%$
Modulation depth	$\Delta R = 3.5 \%$
Non-saturable loss	$A_{ns} = 1.5 \%$
Saturation fluence	$\Phi_{sat} = 231 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 5 \text{ ps}$
Damage threshold	$\Phi = 2.5 \text{ mJ}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	450 μm
Protection	the SAM is protected with a dielectric front layer

Mounting option **x** denotes the type of mounting as follows:

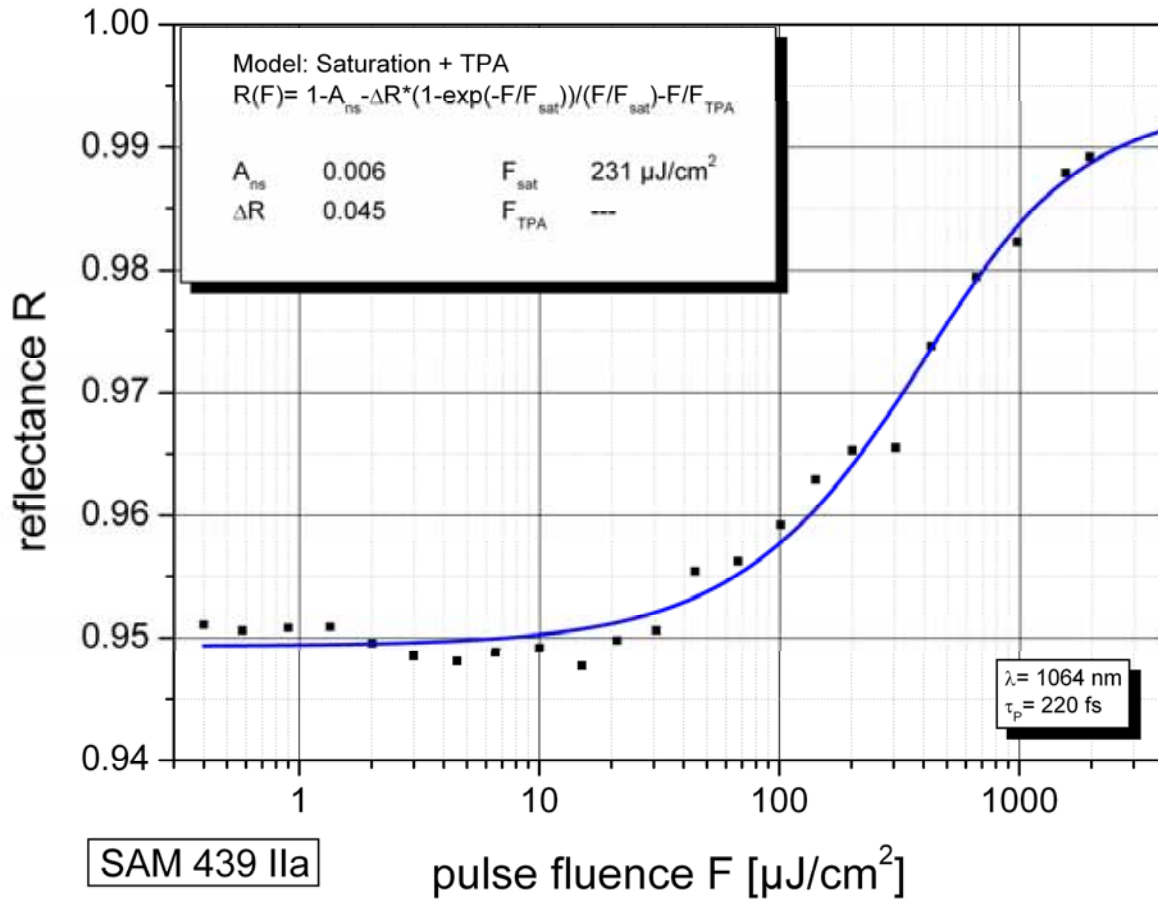
x = 0	unmounted
x = 12.7 g	glued on a gold plated Cu-cylinder with 12.7 mm \varnothing
x = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm \varnothing
x = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm \varnothing
x = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm \varnothing
x = 25.0 w	soldered on a water cooled Cu-cylinder with 25.4 mm \varnothing
x = FC	mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance



JAM 439 IIa

Saturation measurement



Remark: the absolute accuracy of the measured reflectance values is not better than ~ 1 %

Pump-probe measurement

