

for Macroscopy Setups



Light Source Model Number	Excitation Wavelength	Emission for Fluorescent Proteins
FS/ULS-02 RB	440-460 nm	Cyan
FS/ULS-02 B2	460-495 nm	Green & Yellow
FS/ULS-02 G2	515-555 nm	Red
FS/ULS-02 OR	567-588 nm	OrangeRed

Features:

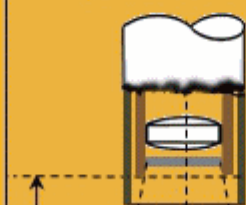
- a minimum 100% increase in light intensity
- built-in, continuous beam narrowing (15x intensity increase)
- wider excitation spectrum (UV; RB; B; G; R)
- compatible with the old and new head sets, the old "desk lamp", "flashlight" and excitation stand
- equivalent price to the old light source

MEASUREMENT SHEET

FS/ULS-02 B2

Excitation light source  
Defocused beam position

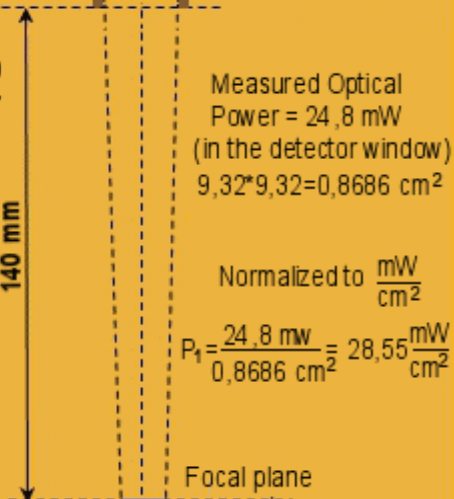
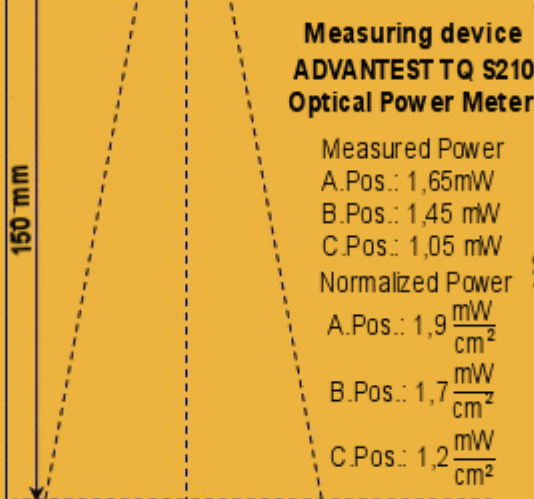
Excitation light source  
Focused beam position



Blue 480 nm  
Aspheric/Spheric lens  
Convex doublet  
Excitation filter 02B2



Blue 480 nm  
Aspheric/Spheric lens  
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Excitation filter 02B2



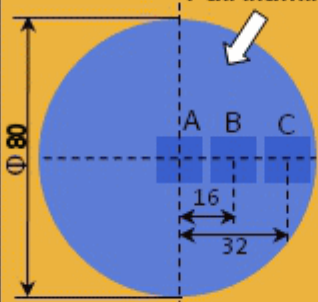
Measuring device  
ADVANTEST TQ S210  
Optical Power Meter

Measured Power  
A.Pos.: 1,65mW  
B.Pos.: 1,45 mW  
C.Pos.: 1,05 mW  
Normalized Power  
A.Pos.: 1,9  $\frac{mW}{cm^2}$   
B.Pos.: 1,7  $\frac{mW}{cm^2}$   
C.Pos.: 1,2  $\frac{mW}{cm^2}$

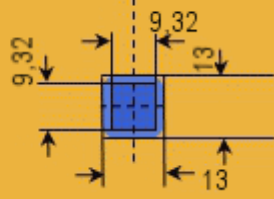
Measured Optical Power = 24,8 mW  
(in the detector window)  
 $9,32 \times 9,32 = 0,8686 \text{ cm}^2$

Normalized to  $\frac{mW}{cm^2}$   
 $P_1 = \frac{24,8 \text{ mW}}{0,8686 \text{ cm}^2} = 28,55 \frac{mW}{cm^2}$

Full illuminated area = 50,24 cm<sup>2</sup>



Focal plane on the detector



Full illuminated area = 1,69 cm<sup>2</sup>

Scale 1:2

Scale 1:2

