

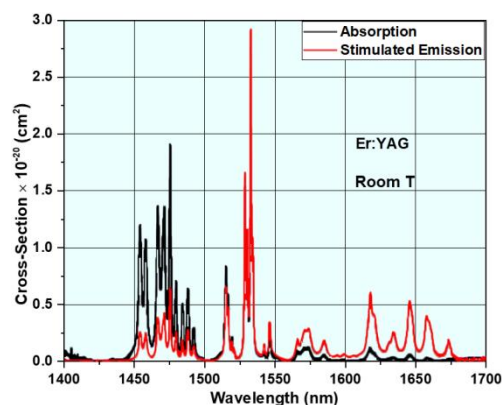
## Er:YAG

Er:YAG is an excellent laser crystal which lasers at 2940 nm with a laser wavelength of 2.94  $\mu\text{m}$ . This band is at the hydroxyl absorption peak which can be strongly absorbed by biological tissues. So it widely applies to medical area.

### Main features:

- Excellent optical quality
- High output and damage thresholds
- High efficiency slope and low scattering loss
- High doping concentration
- Excellent thermal and optical properties

**Absorption curve of Er:YAG**



### Typical applications:

- Glaucoma Surgery
- 2940 nm laser penetrating keratoplasty
- Plastic Surgery and Dentistry

### Standard Products

Model	Diameter (mm)	Length (mm)	Doping (%)	Edge of the end
E-Y-301	3	53	0.9	0/0
E-Y-302	3	65	0.8	0/0
E-Y-303	3	65	1.1	0/0
E-Y-401	4	65	0.8	3/3 Parallel
E-Y-402	4	65	1.1	3/3 Parallel

For more information please visit [www.voyawave.com](http://www.voyawave.com)

### Technical Parameters

Names of Parameters	Values & Ranges
Size tolerance	Diameter: +0.000"/-0.002", Length: $\pm 0.02$ "
Clear aperture	> 95%
Surface quality	10/5
Flatness	$\lambda/8@633\text{nm}$
Wavefront distortion	$\leq \lambda 0.125@1064\text{nm}$
Parallelism	$\leq 10$ arc sec
Perpendicularity	$\leq 5$ arc min
Doping concentration	~50%
Anti-reflection membrane system	$\leq 0.25\%$ (@2940nm)
Quality warranty period	1 year (under normal use)

See appendix P34 for more information