

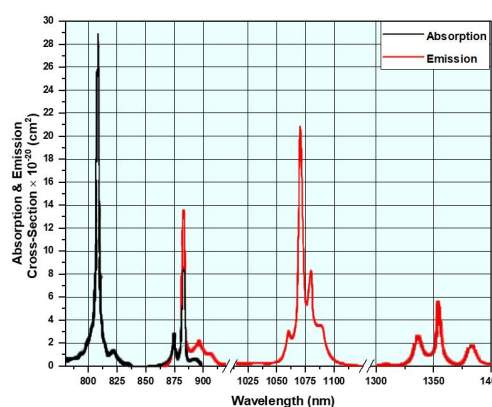
## Nd:KGW

Nd:KGW crystals are highly doped laser crystals with low pumping threshold and large emission cross section. Because of the W-O covalent bond, the cold shock effect of Nd<sup>3+</sup> ion in KGW crystal is weakened, so this crystal has a higher doping concentration of active ions. In addition, Nd<sup>3+</sup> ions in KGW crystals have an absorption bandwidth of about 12 nm half bandwidth at 808 nm, which can be well matched with the emission wavelength of commercial laser diodes.

### Main features:

- High doping concentration and wide absorption band
- Excitation cross section height
- High Efficiency Raman Transformer
- Coupling with LD pump light source
- Low laser output threshold

**Absorption and emission curves of Nd:KGW**



### Typical applications:

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

### Standard Products

Model	Diameter (mm)	Length (mm)	Doping (%)	Coating
N-K-301	3	3	5%	AR/AR@808 nm+1067 nm
N-K-302	3	5	5%	AR/AR@808 nm+1067 nm
N-K-303	3	5	3%	AR/AR@808 nm+1067 nm

For more information about products click on: [www.voyawave.com](http://www.voyawave.com)

## Technical Parameters

Names of Parameters	Values & Ranges
Directional	[010]
Length tolerance	+1.0/-0.0
Dimension tolerance	+/-0.1
Finish	20/10
Parallelism	< 30 arc sec
Perpendicularity	< 15 arc min
Doping concentration	3%, 5%, 8%
Coating	AR/AR coating at 1067 nm
Quality warranty period	1 year (under normal use)

See appendix P34 for more information