

Most popular LIDT irradiation conditions

Pulse range	Laser	Effective pulse duration ⁽¹⁾	Wavelengths, nm	Pulse repetition rate, Hz
ns	Nd:YAG (single mode)	8-10 ns 6-7 ns 5-6 ns	1064 532 355	100
ps-fs	Yb:KGW	Tunable 200 fs - 12 ps ⁽²⁾	1030 515 343	50000
fs	Ti:Sapphire ⁽³⁾	50 fs	800	100-1000

Available irradiation condition (check for availability)

Nd:YAG (multi - mode) Nd:YAG (single - mode)	4 - 6 ns 5-10 ns	1064 532 355 266 213	1 - 10 1 - 100
Nd:YAG OPO	6 - 8 ns	710 - 810 1500 - 2100	1 - 100 ⁽²⁾
Yb:KGW	Tunable 200 fs - 12 ps ⁽²⁾	1030 515 343 258	Tunable 1 - 200000 ⁽²⁾
Ti:Sapphire ⁽³⁾	Tunable 40 fs - 12 ps ⁽²⁾	800 400	Tunable 1 - 1000
Ti:Sapphire OPO	~ 40 - 80 fs	250 - 2500 ⁽⁴⁾	Tunable 1 - 1000 ⁽²⁾

(1) effective pulse duration measured at Full Width Half Maximum

(2) maximum energy and pulse duration depends on the selected wavelength

(3) non-compressed pulses are available on demand (~130 ps)

(4) pulse duration at wavelengths <500 nm and >1600 nm is relative between 40 - 80 fs

**Available polarization state for all conditions: Circular/Linear (S, P);
available AOI: 0 - 75°**

Available test environment for all conditions: Air (room temperature), Vacuum (down to 10⁻⁶ mbar), cryogenic temperatures (down to 100K, for AOI: 0-60°)

Standard testing conditions: 1- or 2- inch round samples tested at 1064, 532 or 355 nm, 5-10 ns, 100 Hz. Standard tests are performed **within 10 work days turnaround**.

To get the best offer fill in an inquiry form at my.lidaris.com

Tell us what samples you have and what testing you need

Prepare your samples following our notes

Get update on your measurement status, receive the invoice

Use the results to achieve success!



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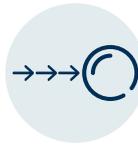
AVAILABLE TESTING PROCEDURES

ISO 1-on-1



The 1-on-1 test is a relatively simple technique for a "non-fatigue" LIDT determination.

ISO S-on-1



The S-on-1 test is the most common LIDT test. It is a multipulse procedure, which considers optics aging (fatigue) effects.

ISO Pass/Fail (Damage certification)



Pass/Fail test is designed to separate good and bad optics at predefined laser fluence.

R-on-1



The R-on-1 is a non-standard test. It provides rough information about LIDT for surface limited samples (e.g. fibers, small crystals).

Raster scan



The raster scan technique helps to detect very rare defects, which could be missed by applying the S-on-1 test.

Custom LIDT test



The custom LIDT test is designed to provide the maximum information about LIDT in specific cases.