LKC TECHNOLOGIES
VISION *DEFINED*™

RETeval®

Improve Patient Outcome with ERG

INTUITIVE | OBJECTIVE | REPEATABLE

Go beyond structure. Measure function.

RETeval®

Visual Electrophysiology Testing

ERG and VEP tests provide objective information on how the visual system is functioning. It provides reliable guidance for medical professionals to manage functional changes that may impact a patient's vision.

The RETeval® device helps doctors to:

DETECT
Detect various retina and optic nerve diseases

PREDICT
Predict the progression of the disease

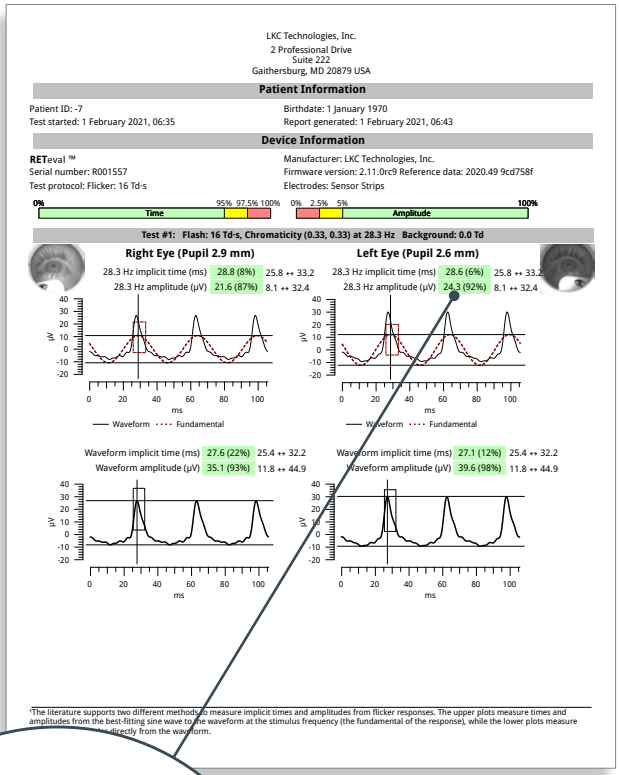
FOLLOW UP
Follow up on the course of the disease

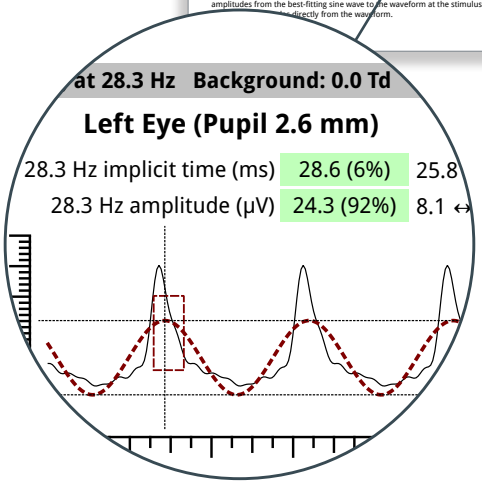
MONITOR
Monitor treatment success

Indications

DIABETIC RETINOPATHY
GLAUCOMA
INHERITED DISEASES
PEDIATRIC NYSTAGMUS
OPTIC NEUROPATHIES
CRVO
UNEXPLAINED VISION LOSS
ACQUIRED RETINA DISEASES
ACHROMATOPSIA
BIRDSHOT CHORIORETINOPATHY
RETINITIS PIGMENTOSA
CONE-ROD DYSTROPHIE
LCA
CSNB
DRUG TOXICITY MONITORING
CHOROIDEREMIA
RETINAL DETACHMENT
X-LINKED RETINOCHISIS
TOXOPLASMOSIS
VITAMIN A DEFICIENCY

Report





Color-coded age-adjusted reference data on report for easy interpretation.

Full ISCEV compliant ERG and VEP testing in a completely portable device

Usable with dilated and undilated eyes by built-in pupillometer to compensate for pupil size.

Non-invasive testing with the optional use of patented LKC Sensor Strip electrodes.

High test success rate at first attempt even with small pupils or media opacities.

Can be used in any location and with any patient type.

How It Works

1. RET*eval*® device will start flashing light into the patient's eye.
2. The retina responds to the flashes by generating small electrical signals that travel through the facial structure to the sensor strip.
3. RET*eval* sensor strip detects the electrical signals and compares the results to the normative database.

RETeval®

Improve your diagnosis with the right information in hand

ADVANCED TESTING IN 17 LANGUAGES FOR ALL YOUR NEEDS

- DR Assessment
- ISCEV compliant 5 and 6 steps
- Photopic Negative Response
- Flash / Flicker tests
- Flash VEP
- Scotopic Flash tests
- S-cone test
- On / Off
- Custom protocols for specific needs

1. Soft eye cup for patient comfort
2. IR camera to view eye during testing
3. Immediate test results right on the device
4. Simple joystick control
5. Ergonomic to fit comfortably in hand
6. Small charging base
7. Lithium Ion battery for up to 8 hours* of use
8. Docking station offers USB connectivity

**Approximately 70 patients before recharging, depending on protocol used.*

Light source	Red LED (621 nm)	Green LED (530 nm)	Blue LED (470 nm)	White RGB
	Flash luminance with or without background lights			
Input type	Custom 3 pin connector, input ±0.6 V			
Noise	< 0.1 µV at the flicker frequency for flicker protocols			
CMRR	> 100 dB at 50–60 Hz			
Frequency range	DC-coupled			
Sampling rate	Approximately 2 kHz			
Data resolution	71 nV/bit			
Pupil measurement	1.3–9.0 mm resolution < 9.1 mm, 28.3 Hz			
Flicker frequency	Approximately 28.3 Hz			
Timing accuracy	Accuracy (electronic eye): <± 0.1 ms, Precision (human eye): <± 1 ms			
Power source	Li-Ion battery (testing for approximately 70 patients), recharge time 4 h			
Size and weight	7 cm W x10 cm D x23 cm H (2.8' 'x 3.8" x 9")			
Protocols	ISCEV compliant and others, retinal illuminance (Td) and luminance (cd/m^2)			
Docking station	Convenient storage location, charging stand, and USB connectivity			

There are over 100 publications about the RET*eval*® device or where the RET*eval*® device was used. For the full list, please contact LKC Technologies Inc. at **sales@lkc.com**

The RET*eval*® device is in use in over 1500 locations all over the world. The manufacturing site is located in Maryland, US.

LKC TECHNOLOGIES

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