Full Field Electroretinogram (FF-ERG)

What you need to know

A full field electroretinogram is a test that looks at how your retina (the nerve layer that lines the back of your eye) responds to flashes of white and colored lights. FF-ERGs are done by a technologist, and the findings are looked at later by a doctor.

What is an FF-ERG?
The FF-ERG is a test that looks at how your retina (the nerve layer in the back of your eye) responds to flashes of white and colored lights. This test is done in the dark and then with the lights on.

How should I prepare?

- Make plans for someone to drive you home after the test. You cannot drive yourself.
- Do not wear eye makeup. It might cause an infection or injury to your eye.
- Call 206.598.4211 before your test if you have or have had:
  - Nystagmus (rapid movement of your eyeballs)
  - An eye infection, or your eyes have gotten red or swollen in the last month
  - Something in your eye in the last month, like a bit of dirt, a bug, or anything else
  - Chronic dry eyes
  - A corneal abrasion (scratch on the surface of your eye)
• You may eat and take your regular medicines before and after the test.

**How does the test work?**

Your *visual acuity* (how well you see) and color vision may be tested.

The technologist will place drops in your eye to *dilate* your pupil. This makes your pupil larger. If we are testing both eyes, we will place drops in both of them to dilate both of your pupils.

Your eye will then be covered with a patch to get it used to the dark.

After about 40 minutes, you will go into a dark exam room. The technologist will:

• Rub a gel onto your forehead and then attach a small metal disc (*electrode*).

• Remove the patch and place it over your other eye.

• Place an eye drop in your eye that is being tested. This will make it numb for a short time.

• Place a contact lens on your eye. This is the same kind of lens that people use instead of glasses, but this lens has a small frame that keeps your eyelids open.

When the lens is in place:

• You will rest your chin in front of a machine that flashes white and colored lights above your eye.

• This will be done in the dark, and then repeated with the lights on.

**It is important that you keep your head and eyes very still during the test.**
This procedure is then repeated on your other eye, if both of your eyes are being tested.

After the test, the technologist will remove the contact lens and place artificial teardrops in your eyes. You will be given dark plastic glasses to wear so bright lights will not bother you.

The FF-ERG takes about 3 hours. This includes the time it takes for your pupil to dilate.

**After the Test**

- Your pupil may stay dilated for up to 2 days. Your vision may be blurry during this time.
- Do **not** wear contact lenses for 24 hours.
- After the test, do not drive a car, use machines, or do anything else that would be dangerous if you do not see well.
- Rarely, this test may cause a corneal abrasion. This is a scratch on the eye surface that causes redness. An abrasion usually heals on its own and goes away in 2 days.
- **If you have eye pain that lasts longer than 1 hour after your test, call your doctor who referred you to us.**

**How do I get my test results?**

A *neurophysiologist* (a doctor who specializes in conditions of the nervous system) will send your test results to your doctor who referred you to us. Your own doctor will talk with you about your results.

**Where will the test be done?**

Your test will be done in Neurodiagnostics, on the 7th floor of the medical center. Take the Pacific elevator to the 7th floor.
Please arrive 5 to 10 minutes before your appointment time and check in at our reception desk in 7-East.

If you need to reschedule your test, please call 206.598.4211.

**How to Find UWMC**

UWMC is at 1959 N.E. Pacific St., Seattle, WA 98195. For driving directions, please ask for our handout “Driving Directions and Parking.” You can also find this handout online at:


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**Questions?**

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Neurodiagnostics, 7-East: 206.598.4211, weekdays from 8 a.m. to 4 p.m.