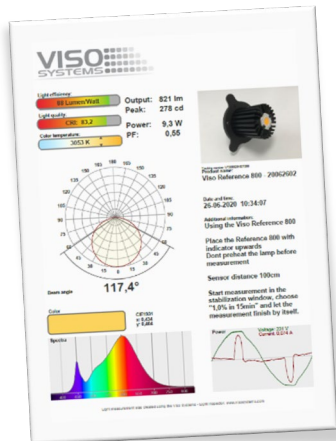


REF-800 Viso reference lamp

Checking the Calibration Status

A special Viso reference light source (Reference 800) is included in the package. The light source has its own power supply, and both parts are labelled with identical calibration date and numbers. Never measure without the original power supply.



Right after factory calibration of your system, the reference light source was measured, and a certificate was issued. The certificate is part of the delivery. The certificate can also be downloaded from Viso's website using the calibration number on the labels.

With the reference lamp you can quickly check your calibration status:

- Check whether the total flux in lumen and peak candela is close to the original values.
- Check whether the shape of the spectrum is close to the original shape.
- Check whether the spectrum looks spiky or jagged.

If you are not happy with the result, the system needs to be calibrated. Viso recommends calibration every year, or minimum every 2 years. Viso provides calibration service, or you may do your own calibrations using the Viso CALI-T50 or other traceable calibration light sources.

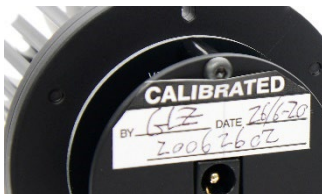
On the next pages, you will find procedures that fit your specific system.

Getting help

Share your measurement result with us directly from the software (Help -> Support -> Share Measurement. Add a comment and an email address).

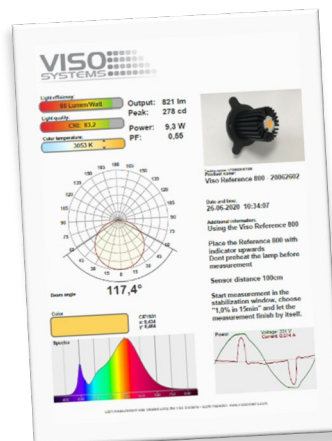
Also, photos/videos from the lab and setup are almost always also necessary to establish a full understanding of the problem. Even large videos can also be shared directly through the software.

So, to give the best possible support, we urge you to provide this information straight away with the first contact.



LabSpion: Check-up Procedure

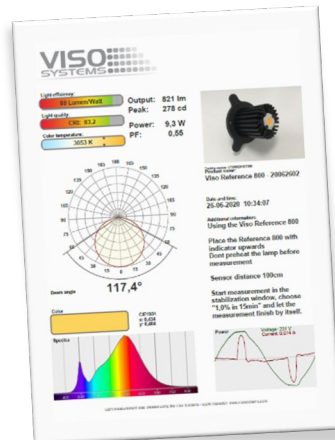
1. Make sure that your software and firmware is up-to-date – go to the Help menu and check. We recommend installing the latest beta version.
2. Perform reference measurements in a completely dark space with black surfaces. Making the measurement in a space that does not live up to these requirements may affect the precision.
3. Start your software and connect everything including the sensor at least one hour in advance. Mount or turn on the REF-800 at this stage. Make sure that the laboratory ambient temperature is 25 deg.
4. Lock the gonio base.
5. Put the gonio arm in a vertical position
6. Push the whole tower back or forth to align the front of the arm with the rotational center of the gonio base.
7. Move the sensor tripod to adjust to a distance of 200 cm measured to the gonio arm. Align the sensor as carefully as possible by using the mirror alignment procedure in the LabSpion user manual page 18 ff https://data.visosystems.com/content/manuals/labspion_user_manual.pdf
8. Remove the mirror
9. Place the Reference 800 with the indicator (the oblong hole in the base) upwards directly in middle hole in the goniometer arm.
10. Push the tower slightly back to center the light source (yellow COB area) in the gonio vertical rotation axis.
11. Measure the distance with the sensor laser
12. Connect REF-800 to the built-in mains outlet. Do not turn it on.
13. Do not preheat the light source before measurement.
14. Unlock the base.
15. Start a one-plane measurement.
16. In the stabilization window, choose “1,0% in 15 min.” and let the measurement finish by itself.
17. Check your results against the certificate values.



BaseSpion: Check-up Procedure

1. Make sure that your software and firmware is up-to-date – go to the Help menu and check. We recommend installing the latest beta version.
2. Perform reference measurements in a completely dark space with black surfaces. Making the measurement in a space that does not live up to these requirements may affect the precision.
3. Start your software and connect everything including the sensor at least one hour in advance. Mount or turn on the REF-800 at this stage. Make sure that the laboratory ambient temperature is 25 deg.
4. Lock the gonio base.
5. Remove the lamp bracket.
6. Place the Reference 800 with the indicator (the oblong hole in the base) upwards directly in middle hole in the lamp bracket frame.
7. Push the tower back/forth to center the light source (yellow COB area) exactly in the gonio vertical rotation axis.
8. Move the sensor to the 150 cm mark.
9. Connect REF-800 to the built-in mains outlet. Do not turn it on.
10. Do not preheat the light source before measurement.
11. Unlock the base.
12. Start a one-plane measurement.
13. In the stabilization window, choose “1,0% in 15 min.” and let the measurement finish by itself.

Check your results against the certificate values.



LightSpion: Check-up Procedure

1. Make sure that your software and firmware is up-to-date – go to the Help menu and check. We recommend installing the latest beta version.
2. Perform reference measurements in a completely dark space with black surfaces. Making the measurement in a space that does not live up to these requirements may affect the precision.
3. Start your software and connect everything including the sensor at least one hour in advance. Mount or turn on the REF-800 at this stage. Make sure that the laboratory ambient temperature is 25 deg.
4. Place the Reference 800 with the indicator (the oblong hole in the base) upwards on the lamp bracket.
5. Push the lamp holder back/forth to center the light source (yellow COB area) in the gonio vertical rotation axis.
6. Push the lamp holder up/down (using the height tool) to center the light source (yellow COB area) in sensor axis.
7. Connect REF-800 to the built-in mains outlet. Do not turn it on.
8. Do not preheat the light source before measurement.
9. Unlock the base.
10. Start a measurement.
11. In the stabilization window, choose “1,0% in 15 min.” and let the measurement finish by itself.

Check your results against the certificate values.

