

Sage Analytics Common Questions & Answers

1. My Luminary Profiler™ / Beacon™ won't turn on

- Is it plugged into a power source?
- Is the plug damaged?
- Has the power button been activated?

If all these things have been done and the device still doesn't turn on, the internal lightbulb may be damaged - you need to call for a replacement bulb.

2. Why do I need to wait 20 minutes for the system to warm up?

The system needs time for the optical components to reach a steady temperature, so it can produce the most stable results. This is a crucial step to obtaining accurate potency data.

3. Why do I need to calibrate the device every time I turn it on?

The white and black calibrations (akin to a light and dark balance on a camera) are necessary to account for any slight variations in the lightbulb from day to day. These calibrations are critical to the measurements, so special care should be used to make absolutely sure both the Luminary window and the white calibration puck are completely clean, that the white puck is properly centered on the Luminary window, and that no vibrations or jarring of the instrument occurs during the calibration procedure.

4. I've tested the same sample three times in a row and I got slightly different readings each time. Why?

The Luminary measures an optical signal then converts this into a potency value. The light that reflects off the sample has some randomness to it, which causes very slight differences that may result in different potency readings. Furthermore, there is a margin of error in the predicted value, which is on the order of 10% of the measured value. That means, for example, that a sample with 20% THC would produce a reading between 18-22% (10% of the 20% reading is 2%, so 20% +/- 2%).

5. Can I measure whole buds or do I need to grind the bud?

Since the cannabinoid density varies considerably across buds, it is always recommended to grind the bud for a more representative reading of the sample.

5a. I measured a whole bud and got one reading and then I turned it over and measured it again and got a completely different reading...why?

Cannabis is a natural product, and nature has a lot of variety, as per the description to #5, above. Additionally, if the sample moved between measurements (from bumps on the table, vibrations, or a breeze) then the readings will be different since it would be measuring a different region of the bud.

6. The label printer isn't working.

- Is the white cord plugged into the back of the Luminary or Beacon?
- Is the printer itself plugged into the wall?

6a. I can hear the label printer working, but nothing is printing on the labels.

Try flipping the labels over. These are labels specific for our thermal label printer, and therefore, if the labels are not properly loaded, you will not see anything printed on the label backing.

7. Why is my potency testing result different than what the Lab I use indicates?

The lab tested a bud or a couple of buds, but not the bud you just tested. Natural variation causes a huge difference in potency between different plants, between different buds, the same plant and even within the same bud. On top of this natural variation, there is very little standardization in how different labs produce their result. The labs use different measurement technologies, different techniques to obtain the measurement, and have their own margin of error in their test result. Combining these two factors (natural variation and lack of laboratory standardization) means that it is much more likely that your result will differ.

8. What is the standard error for the Luminary?

The error on each reported cannabinoid value is on the order of 10% of the measured value. That means, for example, that a sample with 20% THC would produce a reading between 18-22% (10% of the 20% reading is 2%, so 20% +/- 2%).

9. What is the difference between THCA and Total THC? What is the difference between CBDA and Total CBD?

The A in these cannabinoids refers to their acid form, and is the form of the cannabinoids that is most prevalent in the plants. Converting the acids to their neutral forms is done by heating (called decarboxylation), and it is the neutral form of THC that has psychoactive properties. The total THC is the sum of the neutral and the acid forms; same thing for CBDA and Total CBD. This summation does not use the formula for determining total potential $\Delta 9$ -THC.

10. How much of a sample should I use to obtain the most accurate reading?

For bud, ground product should loosely fill the bud holder, coming all the way to the top, then compressed by fully inserting the cap. Overfilling isn't a problem, but under filling will lead to errors. For extracts that use the disposable sample holders, the round dimple in the center of the sample holder must be completely full, leaving no space around this dimple, and devoid of bubbles or other gaps that would allow light to pass through without hitting the sample. The sample holder should not be overfilled, causing the sample holder to bulge. If you notice a bubble, or an uneven distribution of the sample in the dimple, flip the cell over on your counter, and press down on the silver circle. This may correct the sample filling issues. If not, add more sample until you achieve an even distribution, or the bubble is removed.

11. What type of maintenance do I need to do on the Luminary / Beacon?

Keeping the measurement window clean is imperative, and is best accomplished using an alcohol wipe followed by a paper towel or tissue (to remove the haze from the alcohol wipe). Same goes for the white reference puck. Beyond those, changing the lightbulb when it burns out is the only real maintenance.

12. I spilled water/soda/beer on my device and now it won't turn on. What should I do? Is it still covered under warranty?

Wipe up as much of the liquid as possible. If you have a Luminary Profiler, you can wipe it down with a wet rag and it should still work just fine. If you have a Luminary Beacon, let the device sit in a well-ventilated area for at least a day to allow any liquid inside to dry out. If it still doesn't turn on, allow the system a bit more time for any liquid to evaporate. If it still won't power on, call Sage technical support for return options. While damage like this is not covered under warranty, it still may be repairable.

13. How do I clean the device?

The window should be cleaned with an alcohol wipe followed by a dry, lint-free cloth. The screen and the device can be wiped with a dry cloth. Solvents and cleaners may damage the screen or the system finish.

14. Can I leave the device on overnight?

Sure you can. It will require a new calibration after 24 hours, however.

16. I put something other than cannabis on the machine just to see what it would do and it gave me a potency measurement reading.

The Luminary is a cannabis potency profiler, not a cannabis detector. Many plants and herbs have chemical profiles very similar to cannabis, and may generate false potency readings.

17. Do I need to put it back in its storage case or can I leave it out on the counter for extended periods of time.

That's up to you.

18. How do temperature extremes affect the readings?

Wide temperature swings can cause higher or lower potency readings. It is recommended that the machine be kept in a moderate room temperature (~60-85F), and that the readings be performed at the same general temperature as when the device was last calibrated. If the room temperature changes enough that you can feel the change, a recalibration would be advised.

19. I lost my white reference puck...how do I order replacement parts?

Call Sage sales.

20. How long will the light bulb last and how do I order a new one?

The bulb is rated for about 2,000 hours of usage. Call Sage sales to order a new one, and consider picking up a spare so you can minimize downtime.

21. Is the Luminary / Beacon a state certified device? Can I just use this and not send out to the Lab anymore?

The Luminary and the Beacon were "trained" utilizing samples from labs that were either state or otherwise certified. Each state has their own certification and we have not sought approval from each individual state. If your state requires you to test, you must still send to a state certified lab.

22. The touchscreen is frozen and won't work.

First try restarting the unit. If that doesn't fix it, make sure the machine is plugged into an outlet that doesn't share connections with multiple other devices. "Dirty" electrical power from the wall is a frequent culprit to touchscreen issues. If these don't fix the sensitivity issues, call Sage technical support for return/repair options.

23. The machine feels extremely hot to the touch...should I be worried?

It is normal for the machine to get warm, but it should not get hot. First make sure that the machine is not being used in a high temperature environment (~85F and up). Try powering down the system and allowing it to cool off before restarting. If it continues to get hot, call Sage technical support for repair options.

24. If I test a sample, can I ingest it afterwards?

The machine doesn't alter the sample in any way, so what you do with it after you measure it is your decision.

25. I ran out of disposable sample cells, how do I order more?

Call 314-932-2920 or e-mail: finance@sageanalytics.com to order more.

26. Do I have to use the disposable sample cell for extracts or can I just place it directly on the measurement window? Will I get a different reading?

Yes, you must use the disposable sample holder. Placing samples other than bud on the window will lead to erroneous measurements.

27. Can I use the disposable sample cell for dry bud as well?

No, the dry bud must be placed in the bud holder. The disposable sample cell is for all products other than bud.

28. What is the best way to clean the measurement window?

Wipe the window with an alcohol wipe or a paper towel and ethanol. Then wipe with a dry, lint-free tissue or paper towel to remove any haze that may be present from the alcohol wipe.

29. Why do I need to clean the measurement window every time I test a new sample?

Oils from the sample can collect on the measurement window, which can foul the instrument's accuracy. Also, cleaning the window will eliminate the chances that fingerprints, dust, etc. are contaminating the measurement window.

30. Do I need to have Internet access in order to test samples?

No. Future developments will add further functionality via web connection, but the potency measurement does not require Internet connectivity.