



Potency Testing. In-House. In Orange.

Flower | Biomass | Young Plant | Concentrates | Processed Waste | Tinctures

LIGHTLAB IS THE MOST COST EFFECTIVE WAY TO BRING POTENCY TESTING IN-HOUSE.

Orange Photonics' LightLab 3 Cannabis Analyzer is a purpose-built, portable, HPLC capable of quickly and accurately determining the content of 18 cannabinoids and semi-quantitative terpenes in almost any cannabis-containing product. Utilizing the same liquid chromatography technique favored by nearly all cannabis laboratories, LightLab 3 is an economical way to bring laboratory analysis into your facility.

Δ 9-THC | THC-A | CBD | CBD-A | CBN | CBG | CBG-A | CBN-A | CBC | CBC-A | Δ 8-THC | Δ 10-THC
THCV-A | THC-V | Δ 9-THC-O Acetate | Δ 8-THC-O Acetate | Δ 9-THCP | HHC

Margin Management

Optimize margins with on-site testing capabilities. Make timely data-driven decisions about operations, compliance and product value.

Quality & Compliance

From supply chain management to process control, fast cannabinoid analysis helps you identify loss, optimize process and bring product to market faster.

Research & Development

Accelerate phenotyping, breeding, and formulation development with a purpose built HPLC. Increase your competitive advantage with fast CoAs.

Track. Share. Compare.

Track test progress from your free LightLab Dashboard account. Share results by text or email. Compare room performance with access to real-time test data.

Inform Operational Decisions

Select clones based on desired cannabinoid ratios, harvest at peak, optimize extraction, assess the curing process, ensure THC compliance in hemp products, validate biomass CoAs, and pre-test prior to third-party lab analysis.

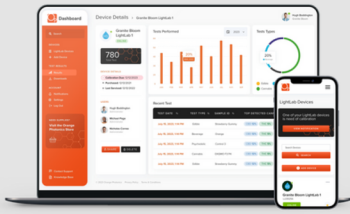
- Easy-To-Use Interface
- Guided Sample Prep
- Measures 18 Cannabinoids
- 6 Sample Formats

CERTIFICATE OF ANALYSIS.

Scan this QR code to view a sample LightLab 3 Certificate of Analysis (CoA).



Every LightLab 3 CoA bears a permanent QR code which provides an indelible record of the test. Scan the QR code on the CoA itself to view, download and share test results.



The easiest path toward applied testing data.

- Manage your LightLab 3 fleet performance.
- View sample details and test results.
- Share test results via text or email.
- View your complete test history.
- Compare and analyze test results.
- Download a CSV report.
- Generate and share Certificates of Analysis (CoAs).



Scan to see sample test results in LightLab Dashboard

LightLab 3 Cannabis Analyzer Specifications

Dimensions/Weight	18.5 x 6.9 x 14.1 inches/13.5 pounds
Power Requirements	18V, 1.5A (120-240 AC Adapter included)
Battery Type	Lithium Ion, 14.8V 4400mAh, 8 hours run time, rechargeable
Interface	7" touch screen
Analytical Technique	Variable injection volume liquid chromatography with multiple wavelength UV detector
Result Units	%, mg/serving, mg/package, mg/g, mg/ml
Data Access	On-screen, LightLab Dashboard online, CSV, CoA, chromatogram, text, email; Wi-Fi capable, not required for operation
Detection Limit	Down to 0.05%, sample type and cannabinoid dependent.
Sample Preparation	Simple solvent extraction
Standard Operating Procedures	Automatically generated based on sample type, product presets
Products Measured	Plants, concentrates, biomass, young plant, processed waste, tinctures, isolate, infused products.
Standard Analytes	D9THC, THC-A, CBD, CBD-A, CBN, CBG, CBG-A, CBN-A, CBC, CBC-A, D8-THC, D10-THC, THCV-A, THCV
Hemp-Derived Cannabinoids Module	Optional module includes D9-THC-O Acetate, D8-THC-O Acetate, D9-THCP, HHC
Terpenes	Total Terpenes (semi-quantitative)
Measurement Time	8.5 minutes, sample preparation 2-10 (sample type dependent)
Integration	Barcode reader, keyboard, scale
Warranty	1 year, extended options available