

Made for Edibles. Ready for Anything.



Beverages | Beverage Enhancers | Gummies | Baked Goods | Chocolates | Mints | Hard Candies | Taffy | Pet Products | Flower | Biomass | Nanoemulsions | Young Plant | Concentrates | Processed Waste | Tinctures | Custom Modes

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

Orange Photonics' LightLab 3 HS 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 testing laboratories, LightLab 3 is an economical way to bring laboratory analysis into your facility.

Δ9-THC | THC-A | CBD | CBD-A | CBN | CBG | CBG-A | CBN-A | CBC | CBC-A | Δ8-THC | Δ10-THC THCV-A | THCV | Δ9-THC-O Acetate | Δ8-THC-O Acetate | Δ9-THCP | HHC

Ultra-Low Detection Limits

With 30 times higher sensitivity than LightLab 3, LightLab 3HS can quantify cannabinoids down to 1.7 ppm. That gives LightLab 3 HS analysis capability from 99% isolate all the way down to a 1mg infused beverage.

Proven Accuracy, Traceability

LightLab 3 has third-party proven accuracy, known repeatability and reproducibility, and is ready for GMP compliant facilities. LightLab arrives pre-calibrated using certified reference materials.

Detailed Results and COA

Results include up to 18 cannabinoids displayed as percent, mg per sample and mg per package. COAs can be instantly shared via mobile devices. Full HPLC chromatograms are available for deep analysis of results.

Dedicated Standard Operating Procedures (SOPs)

LightLab 3HS has a dedicated edibles user interface that automatically builds SOPs based on your particular sample. SOPs can be saved for later use, and even triggered by a barcode scan of a product SKU.

Economical, Accurate, Fast

LightLab's Selective Separation Column technology does sample cleanup for you. Traditional HPLC analysis requires specialized tools, expensive solvents and time-consuming preparations to avoid damaging expensive columns. LightLab's column design does double duty of separation and cleanup. Samples are easily prepared and, in some cases, can be analyzed with no sample preparation. Simple sample preparation removes errors and results in higher accuracy especially at the production line.

- Easy-To-Use Interface
- Guided Sample Prep
- Measures 18 Cannabinoids
- 20+ 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 High Sensitivity (HS) 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 1.7ppm (0.00017%), sample type and cannabinoid dependent.
Sample Preparation	Direct inject or simple solvent extraction, sample type dependent
Standard Operating Procedures	Automatically generated based on sample type, product presets
Products Measured	Beverages, gummies, chocolates, baked goods, hard candies, mints, nanoemulsions, taffy, enhancers, plant, pet products, concentrates, biomass, young plant, processed waste, tinctures, isolate. Custom mode.
Standard Cannabinoids Measured	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

