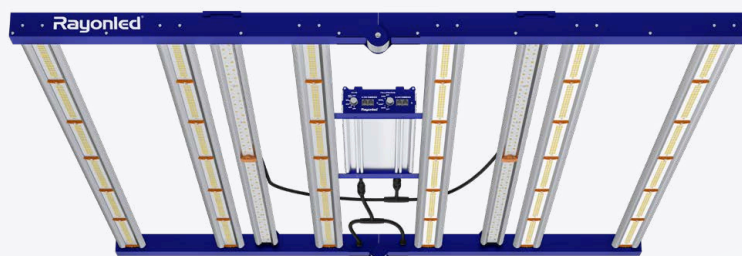




COMMERCIAL HORTICULTURE LIGHTING

Top light and under-canopy, working together

GLMF-800E full-spectrum top light and the Undercanopy 120W LED bar
— one controller, one supplier, light where the top light cannot reach.



Why light the lower canopy

A top light does its best work on the upper canopy. Below that, leaves shade leaves and light falls off fast; lower flower sites develop later, smaller and looser than the top of the plant. Under-canopy bars put photons directly onto that lower zone, so the whole plant finishes rather than just the top third.

The Undercanopy 120W is a 1.17 m sealed aluminum bar on folding legs, placed between rows at plant height. It runs at 120 W, delivers up to 340 $\mu\text{mol/s}$ at up to 2.9 $\mu\text{mol/J}$, and is IP66-rated so it stands up to irrigation, humidity and wash-down. Bars daisy-chain for power and for control, so a row is one cable in and one controller channel.

The GLMF-800E is the top light: 820 W, 2,160 $\mu\text{mol/s}$, PAR+ spectrum over a 4.5 × 4.5 ft footprint, with UV and far-red content for flowering. Both fixtures dim from the same 0–10 V controller, so canopy and under-canopy intensity can be scheduled together through the cycle.

	GLMF-800E	UNDERCANOPY 120W
Role	Top light	Under-canopy bar
Input power	820 W	120 W
PPF	2,160 $\mu\text{mol/s}$	Up to 340 $\mu\text{mol/s}$
Efficacy	2.7 $\mu\text{mol/J}$	Up to 2.9 $\mu\text{mol/J}$
Spectrum	PAR+ (full spectrum with UV / far-red)	R50 or R80
Coverage	4.5 × 4.5 ft (1.4 × 1.4 m)	1.17 m bar, 120° beam
Dimming	Manual knob or RJ14 controller	0–10 V, 40–100 % and off
Input	120–277 V (347 V optional)	120–277 V, 347 V
Rating	IP65	IP66
Warranty	5 years	5 years
Listing	cETL	ETL, CE, DLC

One controller for both. Up to 160 fixtures of either type on a single controller — 80 per channel on 0–10 V. Program sunrise and sunset ramps and run the under-canopy on its own schedule.



Undercanopy 120W bars placed between rows at lower flower-site height. Sealed IP66 housing, passive cooling, folding legs.



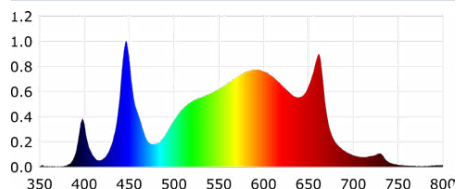
- **2,160 $\mu\text{mol/s}$ at 2.7 $\mu\text{mol/J}$** — 820 W input, power factor above 90 %
- **PAR+ spectrum** — full spectrum with UV and far-red, developed to increase THC, CBD, terpene, flavonoid and pigment expression
- **4.5 × 4.5 ft footprint** at 120° distribution; 42 × 45.5 in fixture
- **Dim from the fixture or the room** — manual knob on the driver, RJ14 port for the smart controller (up to 160 fixtures)
- **120–277 V, 50/60 Hz, NEMA 5-15P plug**; 347 V available
- cETL listed · IP65 · 5-year warranty



SPECIFICATIONS

Input power	820 W
PPF	2,160 $\mu\text{mol/s}$
Efficacy (PPE)	2.7 $\mu\text{mol/J}$
Spectrum	PAR+
Distribution	120°
Footprint	4.5 × 4.5 ft (1.4 × 1.4 m)
Fixture size	42 × 45.5 in (1067 × 1156 mm)
Dimming	Manual knob + RJ14 port
Input	120–277 V, 50/60 Hz · 347 V optional
Plug	NEMA 5-15P
Power factor	> 90 %
Ingress protection	IP65
Listing	cETL
Warranty	5 years

PAR+ SPECTRUM



Relative intensity by wavelength, 350–800 nm. Blue and red peaks for photosynthesis, broad green for canopy penetration, UV and far-red for secondary metabolite and flowering response.

SMART CONTROLLER

The RJ14 port connects to the Rayonled smart controller: up to 160 fixtures on one controller, with sunrise/sunset ramps, scheduled dimming and temperature-based auto shutdown.

WHAT'S IN THE BOX

1. GLMF-800E fixture
2. External RJ14 network cable
3. Input power cable
4. Power supply
5. 8 × screws
6. 4 × 1/8 in rope ratchets
7. Mounting brackets for power supply

Undercanopy 120W LED

Sealed linear bar for inter-canopy and lower-canopy lighting



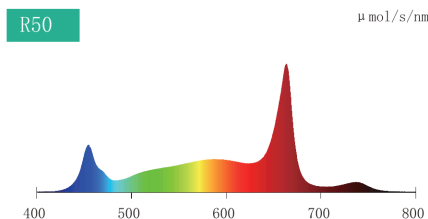
- **Up to 340 $\mu\text{mol/s}$ at up to 2.9 $\mu\text{mol/J}$ from 120 W**
- **Two spectra** — R50 balanced, or R80 red-dominant for flowering
- **IP66 sealed**, passive cooling, no fans — built for wet rooms and wash-down
- **Daisy-chain power and control** — up to 20 bars per line at 277 V, 80 per controller channel, 160 per controller
- **0–10 V dimming**, 40–100 % and off
- 120–277 V and 347 V input · L90 over 50,000 h · 5-year warranty



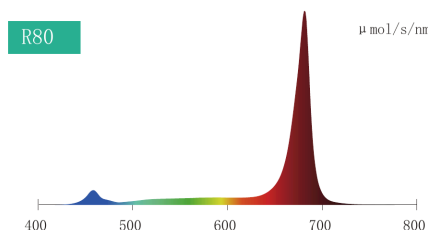
SPECIFICATIONS

Input power	120 W
PPF	Up to 340 $\mu\text{mol/s}$
Efficacy (PPE)	Up to 2.9 $\mu\text{mol/J}$
Spectrum	R50 or R80
Distribution	120°
Dimming	0–10 V · 40–100 % / off
Input	120–277 V, 347 V · 50/60 Hz
Input current	1.0 A @ 120 V · 0.43 A @ 277 V · 0.35 A @ 347 V
Size (L × W × H)	1170 × 85 × 84 mm (46.1 × 3.3 × 3.3 in)
Weight	2.6 kg (5.7 lb)
Max. ambient	35 °C (95 °F)
Cooling	Passive
Rated life	L90 > 50,000 h
Ingress protection	IP66
Listing	ETL, CE, DLC
Warranty	5 years

SPECTRUM OPTIONS

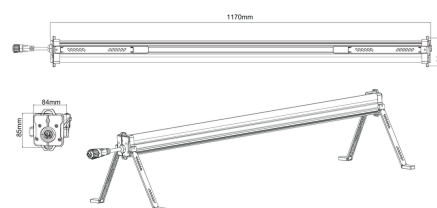


R50 — balanced: blue at 450 nm, broad green-yellow, red peak at 660 nm with far-red. General-purpose under-canopy.



R80 — red-dominant: concentrated 660 nm output with minimal blue. For flowering rooms where the top light already supplies the blue.

DIMENSIONS



Bar 1170 mm; body 85 × 84 mm; end caps 86 mm. Folding legs for floor or bench placement; connectors at both ends for pass-through.

RESULTS

The spectrum, in practice

Rayonled®

What the PAR+ wavelengths do, and what growers are producing under them

BLUE · 400–500 NM

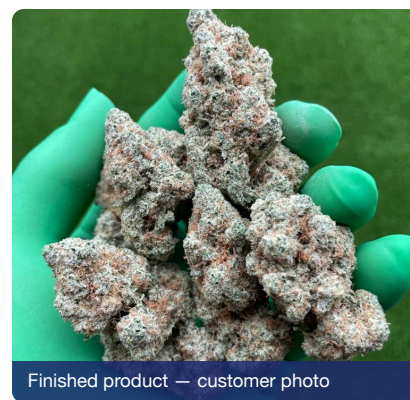
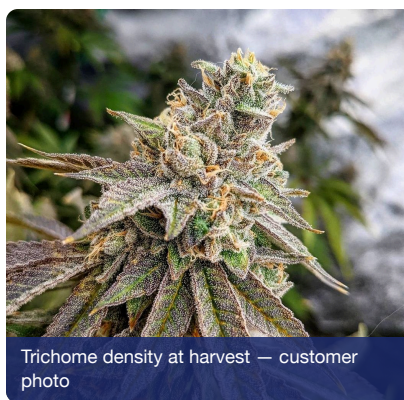
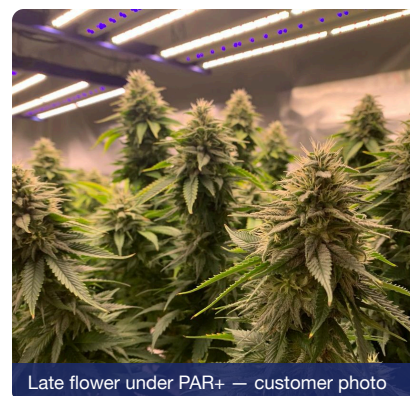
Drives a compact, stalkier plant with tighter nodes and stronger stems, and builds root structure. Rayonled's vegetative spectrum is weighted here; PAR+ keeps the blue peak at 450 nm so plants stay tight through flowering.

GREEN AND RED · 500–700 NM

Broad green lets light reach further down the canopy than red-and-blue-only fixtures, adding photosynthesis on lower leaves — and lets growers see true leaf colour, so problems are spotted early. The 660 nm red peak drives the sugars and carbon that build plant tissue and flower mass.

UV AND FAR-RED · <400 AND >700 NM

PAR+ adds UV and far-red on independently controllable bars. Rayonled reports higher THC, CBD, terpene, flavonoid and pigment expression; plants respond to UV by producing protective compounds and antioxidants, which also helps suppress mould. Far-red triggers the Emerson effect, pushing flower sites toward the light.



GROWING UNDER RAYONLED

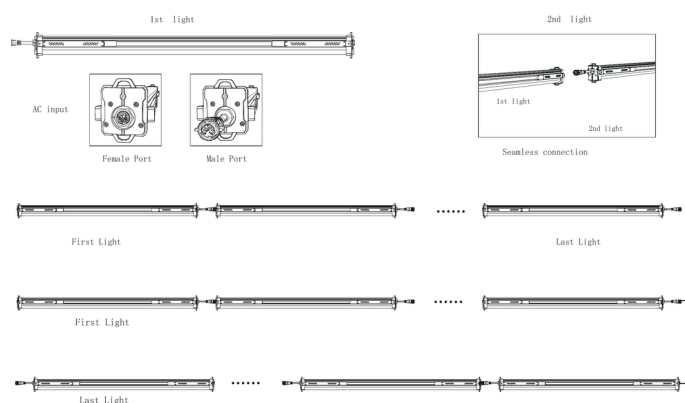


Installations include Concept Herbo, a licensed micro-cultivation producer in Québec. Results vary with the growing environment. Photographs supplied by Rayonled customers.

Power and control connections

Undercanopy 120W daisy-chain

POWER — ONE CORD PER LINE



Each bar has a female port at one end and a male port at the other. Plug the AC input cord into the first bar and connect bar to bar; lines can be run straight or turned back on themselves. Keep every bar in a line on the same outlet, and stay within the outlet limits below.

MAXIMUM BARS PER OUTLET (SINGLE LINE)

SUPPLY	110 V	120 V	208 V	220 V	240 V	277 V
Current per bar	1.1 A	1.0 A	0.58 A	0.55 A	0.5 A	0.43 A
Bars per line	8	9	15	16	17	20

CONTROL — 0-10 V OVER RJ11



1. Connect all bars in each line for power as shown at left.
2. Plug the RJ11 lead from the first bar of the first line into the single port of a cable splitter (sold separately).
3. Repeat for each line. Up to 80 bars may be joined on one channel.
4. Link adjacent splitters with RJ11 cables (sold separately).
5. Connect the first line's splitter to a channel on the 0-10 V controller. A second channel takes another 80 bars — 160 per controller.

GLMF-800E on the same controller. Top lights connect through their RJ14 port; up to 160 fixtures per controller. Run top light and under-canopy on separate channels so each can follow its own schedule.

Specifying a room

HOW TO SIZE IT

1. **Top light.** One GLMF-800E per 4.5 × 4.5 ft (1.4 × 1.4 m) of canopy. Mount height and dimming set the PPFD at the canopy; the PPFD chart is available on request for your bench layout.
2. **Under-canopy.** One Undercanopy 120W bar per 1.17 m of row, placed between plants at the height of the lower flower sites. Choose R50 for general use or R80 for flowering rooms.
3. **Power.** Count bars per outlet against the table on the installation page — 9 per line at 120 V, 20 at 277 V. The 800E ships with a NEMA 5-15P plug; 347 V versions of both fixtures are available.
4. **Control.** One smart controller handles up to 160 fixtures. Order RJ11 cable splitters and RJ11 patch leads for the under-canopy lines; the 800E includes its RJ14 lead.

WARRANTY AND SUPPORT

Both fixtures carry a five-year warranty. Rayonled is based in Brossard, Québec, and supports Canadian growers directly — commissioning guidance, replacement parts and controller programming help are a phone call away.

DOCUMENTS AVAILABLE ON REQUEST

- GLMF-800E PPFD chart and installation sheet
- Undercanopy 120W installation manual
- Listing certificates
- Smart controller specification

SOLD SEPARATELY

- Smart controller (0–10 V, two channels)
- RJ11 cable splitters and patch leads
- Driver extension cables for GLMF-800E



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