



SPECTROPHOTOMETER TEST RESULTS

LED Test Report

12W RGBW

LED Downlight V2

A-DL-12W-RGBW-24V-V2



CHANNELS TESTED



Measured output at a glance

Results below are reproduced from the four source reports; units and precision are retained.

CHANNEL	FLUX	PEAK	DOMINANT	PURITY	CCT
 Warm white - 3000 K 11:11:42	186.70 lm	606.7 nm	581.8 nm	54.1%	3054 K
 Red 11:13:04	153.11 lm	629.6 nm	621.9 nm	99.9%	1351 K
 Green 11:15:26	274.55 lm	520.8 nm	528.2 nm	81.8%	7738 K
 Blue 11:14:02	35.45 lm	452.7 nm	457.6 nm	98.3%	100000 K

What is included

- Spectral distribution and CIE 1931 chart
- Chromaticity, wavelength and purity values
- Warm-white CRI sample values R1 through R15
- Non-zero photometric and instrument readings

Test system

INSTRUMENT

Hopoo HP8000

HUMIDITY

65%

PRODUCT ID

201304315

SOURCE REPORT

HPLD Fast Spectrophotometer Test Report

OPERATOR

admin

REPORT LANGUAGE

English

Warm white - 3000 K

Tested January 5, 2026 at 11:11:42 | 65% relative humidity

LUMINOUS FLUX

186.70 lm

PEAK WAVELENGTH

606.7 nm

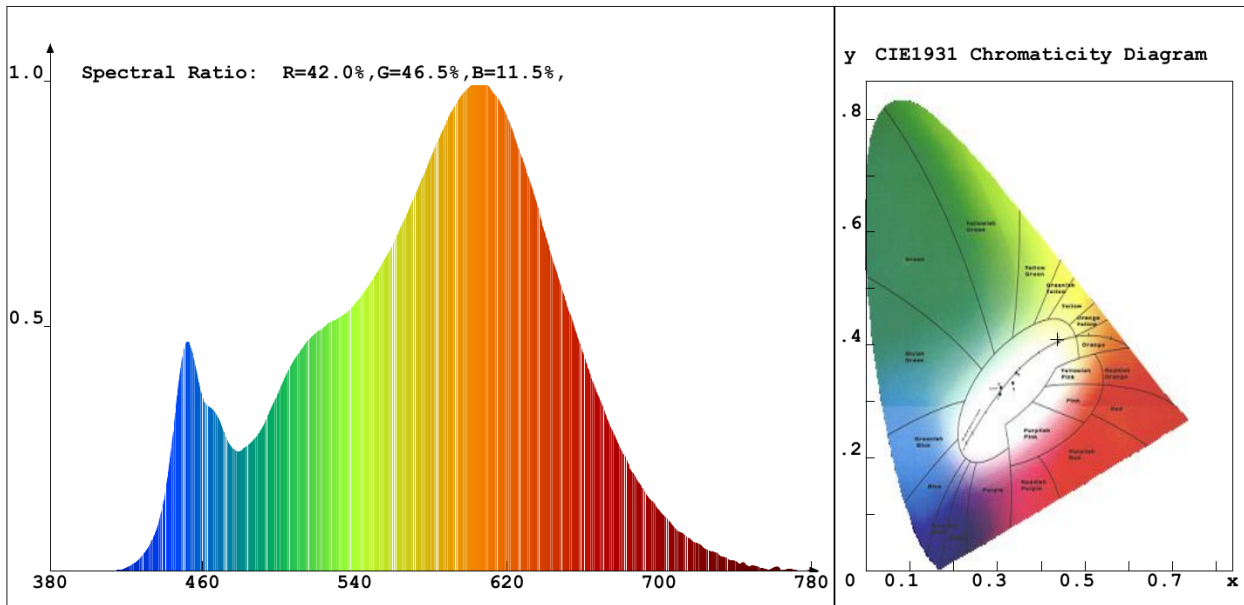
DOMINANT WAVELENGTH

581.8 nm

PURITY

54.1%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.4366 y 0.4101 u 0.2478 v 0.3491 Duv 0.0024

CCT 3054 K FLUX RGB RATIO R 22.8% / G 75.4% / B 1.8% HALF WIDTH 129.6 nm
SPECTRAL RATIO R 42.0% / G 46.5% / B 11.5%

Photometric results

LUMINOUS FLUX

186.70 lm

RADIANT POWER

743.2 mW

Color rendering

Ra 84.3

R1 83 R2 93 R3 96 R4 83 R5 85 R6 93 R7 82 R8 60 R9 10 R10 84 R11 84 R12 75 R13 85 R14 98 R15 74

INSTRUMENT

Hopoo HP8000

INTEGRATION

478.586 ms

VPEAK

15078

VDARK

1383

PRODUCT ID

201304315

Source metadata: product type GREEN; manufacturer 3000K; temperature admin °C; operator admin.

Red

Tested January 5, 2026 at 11:13:04 | 65% relative humidity

LUMINOUS FLUX

153.11 lm

PEAK WAVELENGTH

629.6 nm

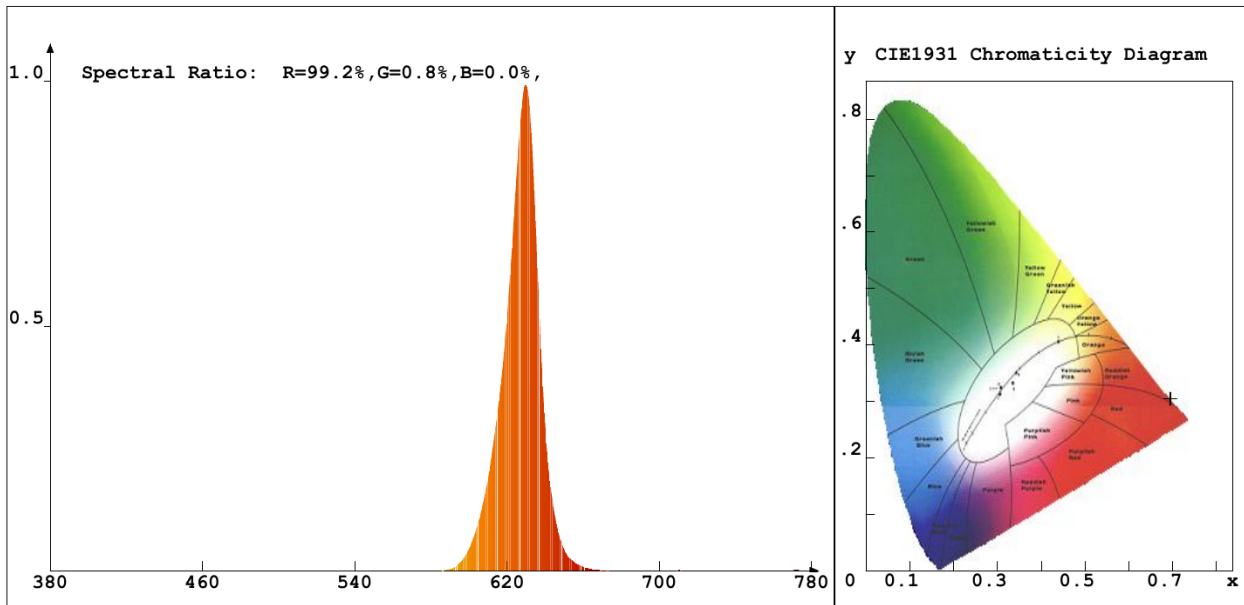
DOMINANT WAVELENGTH

621.9 nm

PURITY

99.9%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.6950 y 0.3047 u 0.5279 v 0.3471 Duv -0.0007

CCT

1351 K

FLUX RGB RATIO

R 98.2% / G 1.8%

HALF WIDTH

17.7 nm

SPECTRAL RATIO

R 99.2% / G 0.8%

Photometric results

LUMINOUS FLUX

153.11 lm

RADIANT POWER

993.2 mW

INSTRUMENT

Hopoo HP8000

INTEGRATION

71.767 ms

VPEAK

13334

VDARK

1130

PRODUCT ID

201304315

Source metadata: product type RED; manufacturer 3000K; temperature admin °C; operator admin.

Green

Tested January 5, 2026 at 11:15:26 | 65% relative humidity

LUMINOUS FLUX

274.55 lm

PEAK WAVELENGTH

520.8 nm

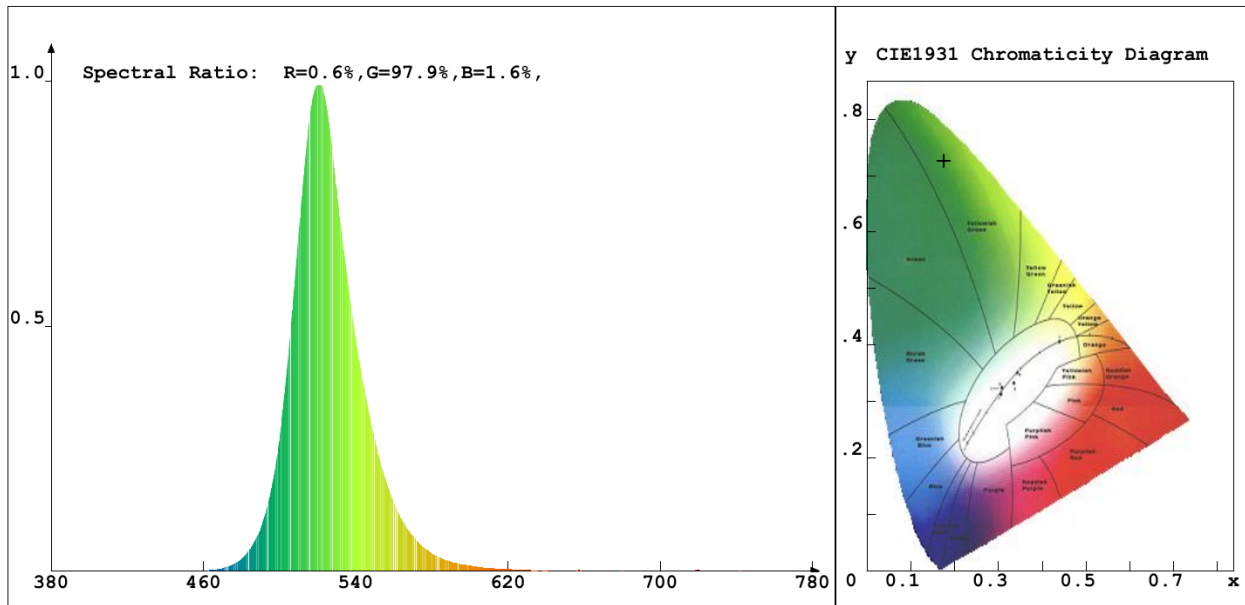
DOMINANT WAVELENGTH

528.2 nm

PURITY

81.8%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.1753 y 0.7264 u 0.0617 v 0.3834 Duv 0.1562

CCT

7738 K

FLUX RGB RATIO

R 0.3% / G 99.3% / B 0.3%

HALF WIDTH

33.0 nm

SPECTRAL RATIO

R 0.6% / G 97.9% / B 1.6%

Photometric results

LUMINOUS FLUX

274.55 lm

RADIANT POWER

735.1 mW

INSTRUMENT

Hopoo HP8000

INTEGRATION

107.598 ms

VPEAK

14486

VDARK

1141

PRODUCT ID

201304315

Source metadata: product type GREEN; manufacturer 3000K; temperature admin °C; operator admin.

Blue

Tested January 5, 2026 at 11:14:02 | 65% relative humidity

LUMINOUS FLUX

35.45 lm

PEAK WAVELENGTH

452.7 nm

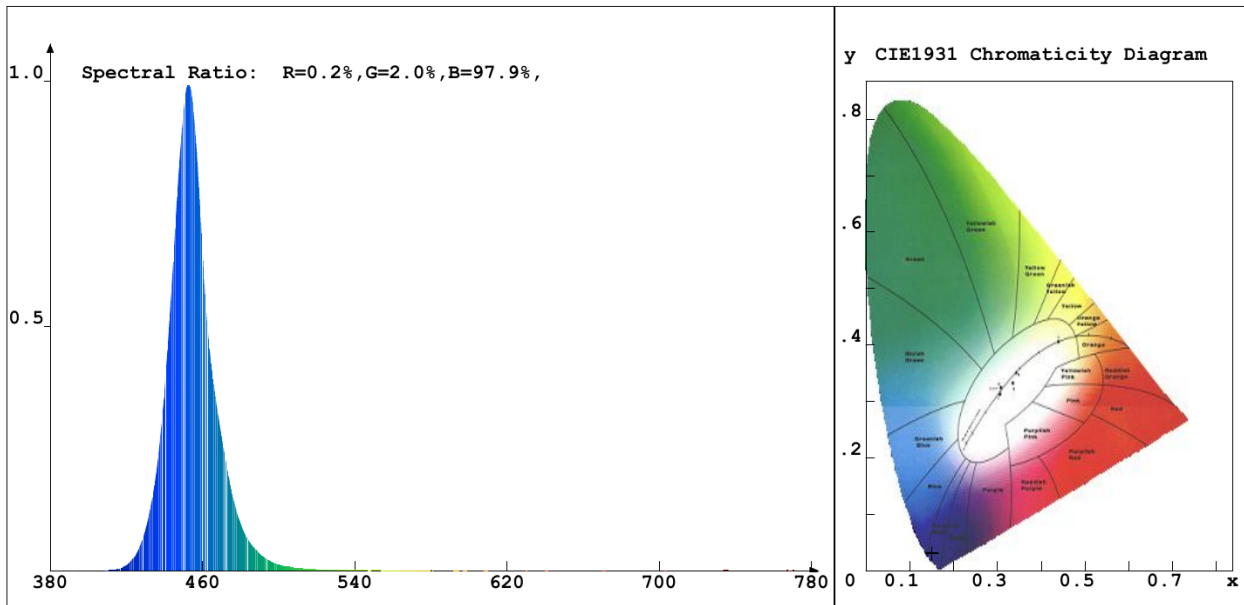
DOMINANT WAVELENGTH

457.6 nm

PURITY

98.3%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.1507 y 0.0312 u 0.1961 v 0.0610 Duv -0.0658

CCT	100000 K	FLUX RGB RATIO	R 0.5% / G 14.7% / B 84.8%	HALF WIDTH	20.2 nm
SPECTRAL RATIO		R 0.2% / G 2.0% / B 97.9%			

Photometric results

LUMINOUS FLUX

35.45 lm

RADIANT POWER

1325.8 mW

INSTRUMENT

Hopoo HP8000

INTEGRATION

42.221 ms

VPEAK

14902

VDARK

1283

PRODUCT ID

201304315

Source metadata: product type BLUE; manufacturer 3000K; temperature admin °C; operator admin.