



SPECTROPHOTOMETER TEST RESULTS

LED Test Report

8W RGBW

LED Downlight V2

A-DL-8W-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 11:04:48	120.05 lm	606.7 nm	584.8 nm	62.7%	2623 K
 Red 11:06:14	82.73 lm	633.8 nm	623.8 nm	99.9%	1383 K
 Green 11:08:26	100.80 lm	516.7 nm	521.6 nm	80.2%	8426 K
 Blue 11:07:13	19.99 lm	458.2 nm	462.9 nm	98.1%	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 11:04:48 | 65% relative humidity

LUMINOUS FLUX

120.05 lm

PEAK WAVELENGTH

606.7 nm

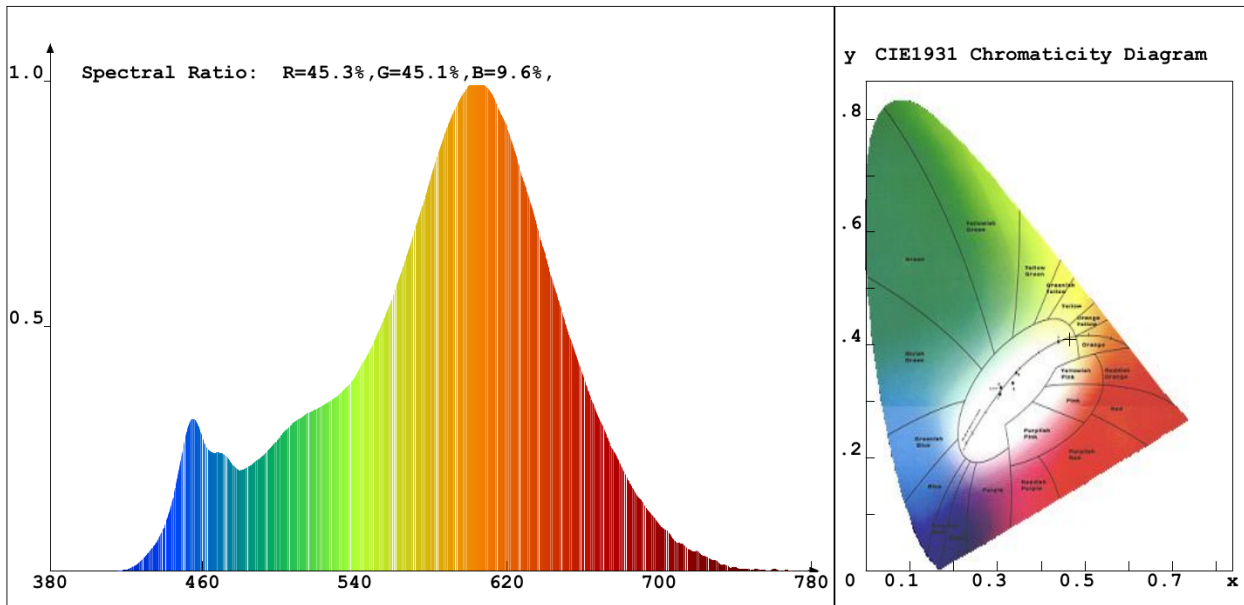
DOMINANT WAVELENGTH

584.8 nm

PURITY

62.7%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.4651 y 0.4099 u 0.2662 v 0.3519 Duv -0.0007

CCT 2623 K FLUX RGB RATIO R 25.6% / G 72.9% / B 1.6% HALF WIDTH 96.8 nm
SPECTRAL RATIO R 45.3% / G 45.1% / B 9.6%

Photometric results

LUMINOUS FLUX

120.05 lm

RADIANT POWER

472.0 mW

Color rendering

Ra 78.7

R1 78 R2 94 R3 87 R4 74 R5 79 R6 95 R7 75 R8 47 R10 88 R11 74 R12 82 R13 82 R14 93 R15 68

INSTRUMENT

Hopoo HP8000

INTEGRATION

572.725 ms

VPEAK

13542

VDARK

1393

PRODUCT ID

201304315

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

Red

Tested January 5, 2026 at 11:06:14 | 65% relative humidity

LUMINOUS FLUX

82.73 lm

PEAK WAVELENGTH

633.8 nm

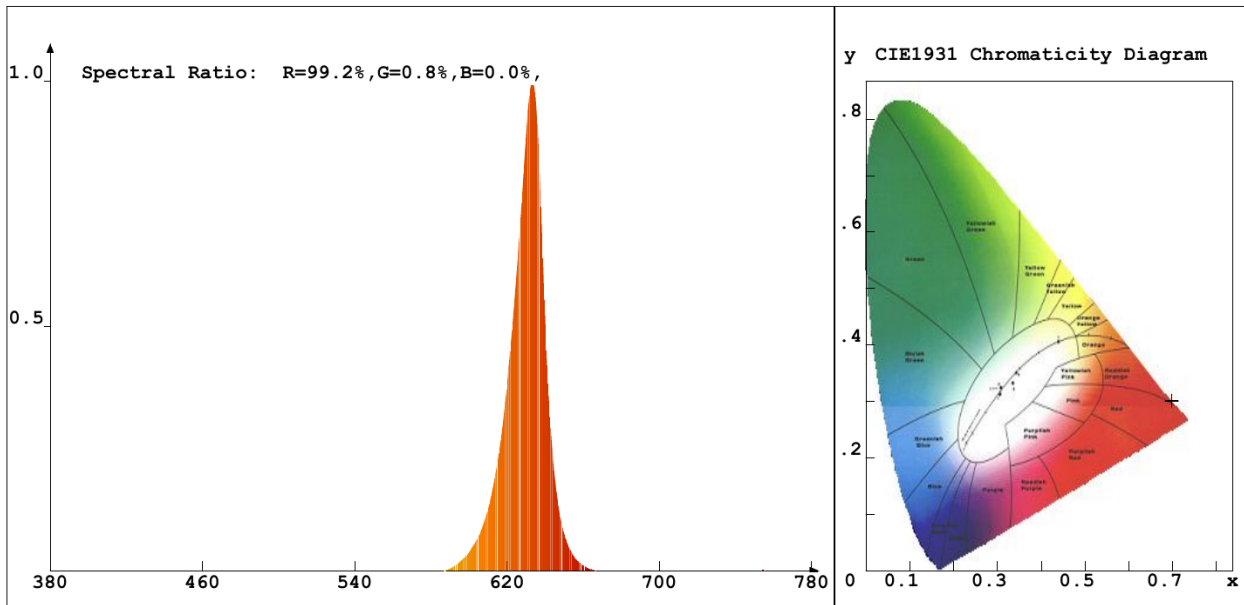
DOMINANT WAVELENGTH

623.8 nm

PURITY

99.9%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.6982 y 0.3014 u 0.5350 v 0.3464 Duv -0.0008

CCT

1383 K

FLUX RGB RATIO

R 97.9% / G 2.1%

HALF WIDTH

17.4 nm

SPECTRAL RATIO

R 99.2% / G 0.8%

Photometric results

LUMINOUS FLUX

82.73 lm

RADIANT POWER

579.1 mW

INSTRUMENT

Hopoo HP8000

INTEGRATION

143.181 ms

VPEAK

15286

VDARK

1286

PRODUCT ID

201304315

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

Green

Tested January 5, 2026 at 11:08:26 | 65% relative humidity

LUMINOUS FLUX

100.80 lm

PEAK WAVELENGTH

516.7 nm

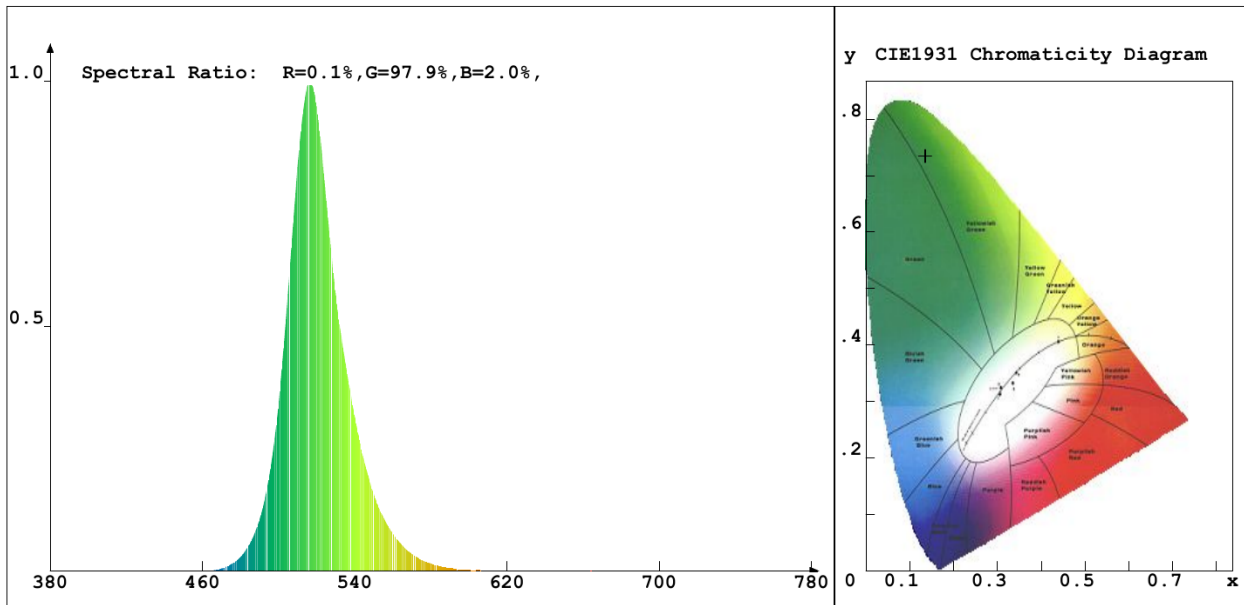
DOMINANT WAVELENGTH

521.6 nm

PURITY

80.2%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.1357 y 0.7346 u 0.0470 v 0.3818 Duv 0.1680

CCT

8426 K

FLUX RGB RATIO

G 99.5% / B 0.5%

HALF WIDTH

28.4 nm

SPECTRAL RATIO

R 0.1% / G 97.9% / B 2.0%

Photometric results

LUMINOUS FLUX

100.80 lm

RADIANT POWER

283.9 mW

INSTRUMENT

Hopoo HP8000

INTEGRATION

233.476 ms

VPEAK

14838

VDARK

1144

PRODUCT ID

201304315

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

Blue

Tested January 5, 2026 at 11:07:13 | 65% relative humidity

LUMINOUS FLUX

19.99 lm

PEAK WAVELENGTH

458.2 nm

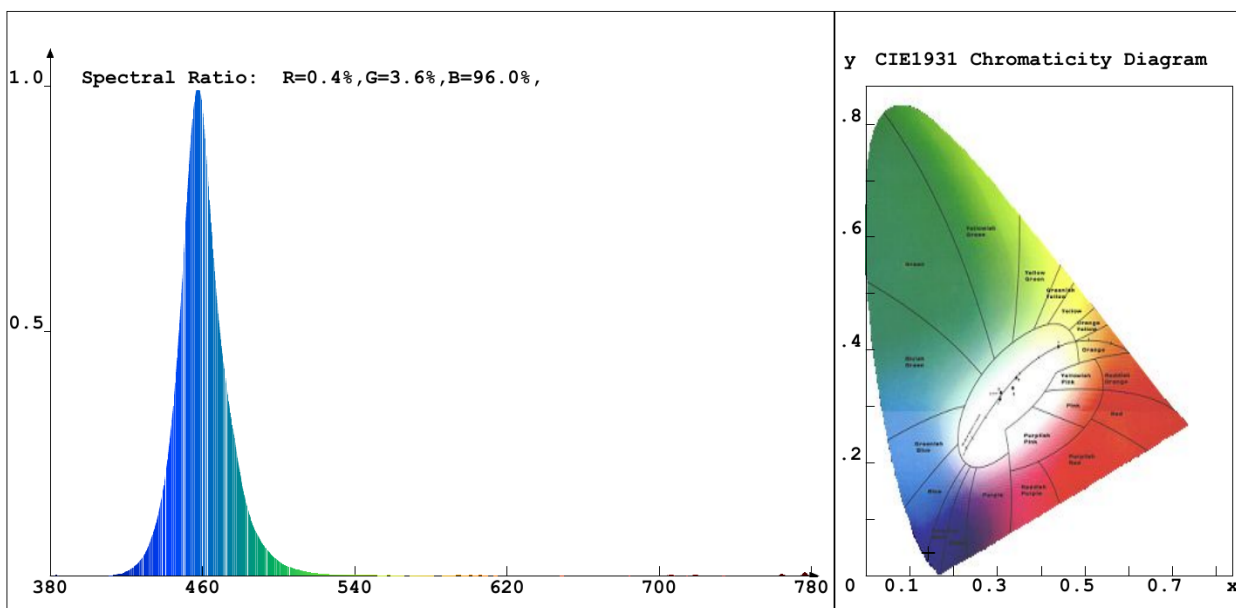
DOMINANT WAVELENGTH

462.9 nm

PURITY

98.1%

SOURCE SPECTRAL OUTPUT AND CIE 1931 POSITION



Color and spectrum

x 0.1430 y 0.0405 u 0.1787 v 0.0759 Duv -0.0452

CCT	100000 K	FLUX RGB RATIO	R 0.6% / G 18.8% / B 80.6%	HALF WIDTH	21.6 nm
SPECTRAL RATIO	R 0.4% / G 3.6% / B 96.0%				

Photometric results

LUMINOUS FLUX

19.99 lm

RADIANT POWER

533.9 mW

INSTRUMENT

Hopoo HP8000

INTEGRATION

114.544 ms

VPEAK

14758

VDARK

1292

PRODUCT ID

201304315

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