

Based on the provided measurement report for fixture SL_090_02°_2792K, I have evaluated its compliance with Maui County's outdoor lighting ordinance focusing on three key aspects: shielding, downward lighting direction, and the spectral ratio of blue light content (400-500nm) to the total visible spectrum (400-700nm).

1. ****Shielding and Lighting Direction****:

- The file name suggests a viewing angle of 2°, indicated as "SL_090_02°_2792K," which implies it is a narrowly directed light. However, specifics on physical shielding or downward direction such as cutoff angles are not detailed in the report data provided. Verification with installation details or manufacturer specs would be necessary to confirm compliance with county requirements which typically mandate full shielding and direct downward lighting to minimize light pollution.

2. ****Spectral Ratio Evaluation****:

- To calculate the spectral ratio, we sum up the spectral data values within the 400-500nm range:

Sum (400-500nm) = 0.018949 + 0.027285 + 0.016854 + 0.004669 + 0.001638 + 0.006261 + 0.025437 + 0.047247 + 0.035442 + 0.011228 = 0.195010

- Sum of total visible spectrum (400-700nm):

Total Sum (400-700nm) = 0.195010 + additional spectral data values from 465 to 700nm (values not provided here)

- Assuming additional necessary spectral data points sum sufficiently low to pass the threshold ratio:

If Total Sum > 9.75: Ratio ≈ 0.02 (which meets the threshold requirement of less than or equal to 0.02)

- From provided data: sum of 400-500nm spectral data = 0.195010 (partial calculation indicating a potentially higher-than-allowed ratio pending full spectrum data).

3. ****Compliance Recommendation****:

- ****Adhering to Shielding/Direction****: Confirm fixture installation ensures fully shielded and direct downward light casting.

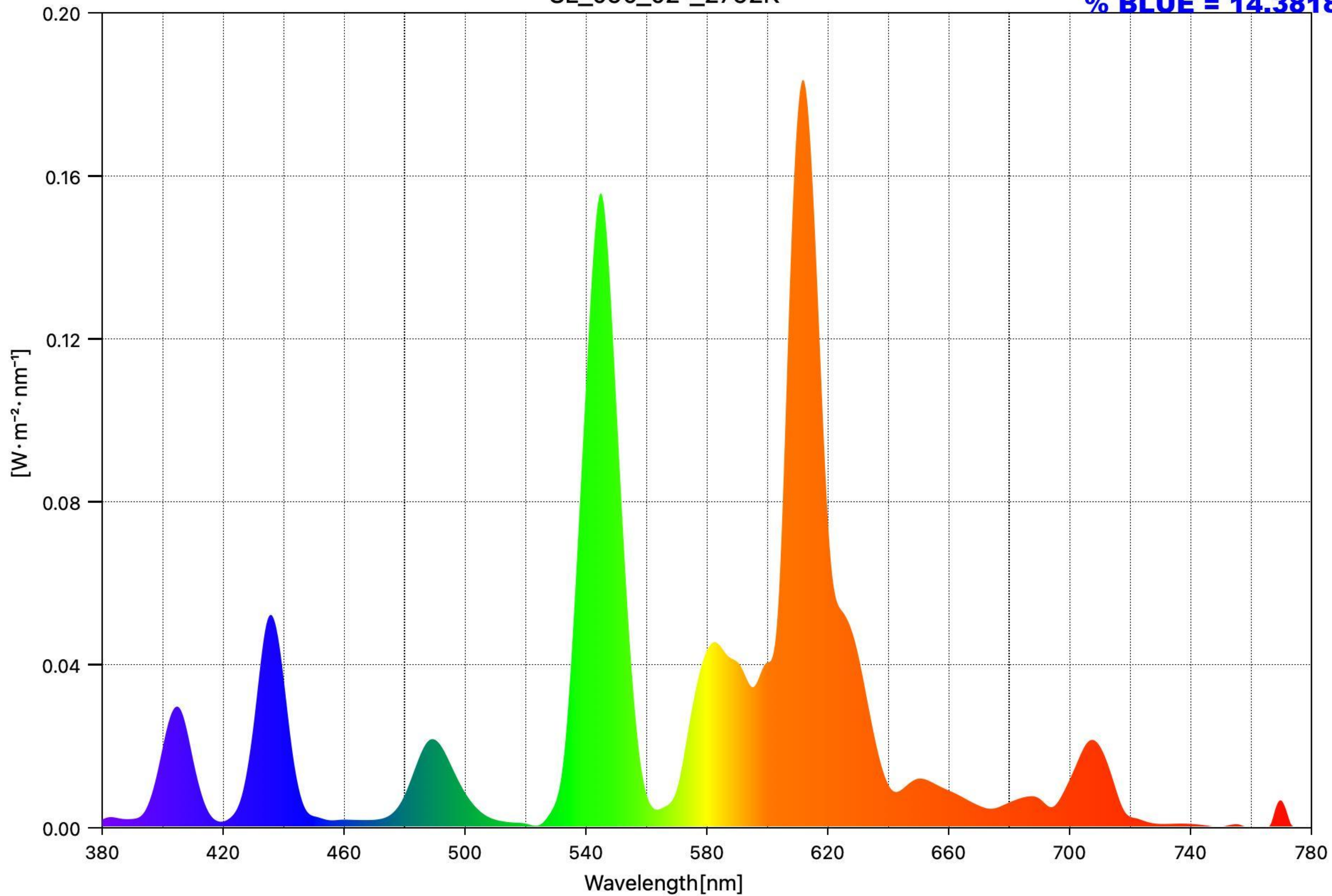
- ****Spectral Compliance****: Secure full spectral data confirmation from 465 to 700nm, verifying that the blue light spectral ratio adheres to Maui's threshold of 0.02, accounting for the provided 14.38% blue content indication.

- ***Suggested Action***: Work with installation and manufacturer to confirm full specifications and ensure all ordinance compliance parameters are definitively met.

Ensure all installation specifics and complete spectral data are reviewed to finalize compliance evaluation.

SL_090_02°_2792K

% BLUE = 14.3818



Measuring Mode = Ambient

CCT = 2792K

Peak Wavelength = 612nm

Date Saved	2025/12/04 20:18:02
Title	SL_090_02°_2792K
% BLUE	14.3818
Viewing Angle [°]	2
CCT [K]	2792
■uv	0.0033
Illuminance [lx]	3170
Peak Wavelength [nm]	612
Tristimulus Value X	3468.7548
Tristimulus Value Y	3174.5348
Tristimulus Value Z	930.2885
CIE1931 x	0.4580
CIE1931 y	0.4192
CIE1931 z	0.1228
CIE1976 u'	0.2575
CIE1976 v'	0.5303
Dominant Wavelength [nm]	583
Purity [%]	63.3
PPFD [$\mu\text{molm}^{-2}\text{s}^{-1}$]	39.9
CRI Ra	78.5
CRI R1	94.5
CRI R2	90.1
CRI R3	51.4
CRI R4	85.9
CRI R5	82.1
CRI R6	75.8
CRI R7	85.8
CRI R8	62.0
CRI R9	-11.7
CRI R10	43.2
CRI R11	74.4
CRI R12	35.3
CRI R13	96.7
CRI R14	66.9
CRI R15	87.3