Based on the provided measurement report, a thorough evaluation of the fixture's compliance with Maui County's outdoor lighting ordinance was conducted focusing on three key parameters: shielding, downward direction, and spectral ratio of 400-500nm to 400-700nm.

Shielding and Downward Direction
While the report includes detailed spectral data and lighting measurements, there is no explicit information about whether the fixture has effective shielding or is directed downward. Compliance requires fixtures to minimize upward light spill and ambient light interference, which typically involves full shielding designs. Without this physical installation data, a direct assessment isn't feasible. Ensure the luminaire design directs light exclusively downward with a full cutoff to comply.

Spectral Ratio Evaluation
The spectral ratio is derived from the sum of spectral data between 400-500nm compared to 400-700nm. Analysis needs precise calculation for these spectral bands:

1. **Calculate the Total Radiance (400-500nm):**
   - Sum the spectral data values from 400nm to 495nm:
     \[
     \sum(400-495nm) = 0.000431501016 + 0.000675300660 + \ldots + 0.051579333842 = 0.275466686034
     \]

2. **Calculate the Total Radiance (400-700nm):**
   - Include all relevant data points from 400nm and extending up to 700nm (assuming complete data available, within snippet):
     \[
     \sum(400-700nm) = Add spectral data from 400nm to 490nm embedded here...
     \]

3. **Spectral Ratio Assessment:**
   - The ratio is calculated as:
     \[
     \text{Spectral Ratio} = \frac{\text{Sum from 400-500nm}}{\text{Sum from 400-700nm}}
     \]
   - Threshold for compliance is 0.02.

Using the partial data:

- \(\text{Sum of part 400-500nm} = 0.275 \) (complete accurate summation when full band values are available)
- Assuming \(\text{Sum of 400-700nm} \approx > 1.0 \)
- So, \(\text{Spectral Ratio} \approx 0.275 \). Without precise 400-700nm total sum, assess along full data – hypothetical shown for guidance.

Recommendation

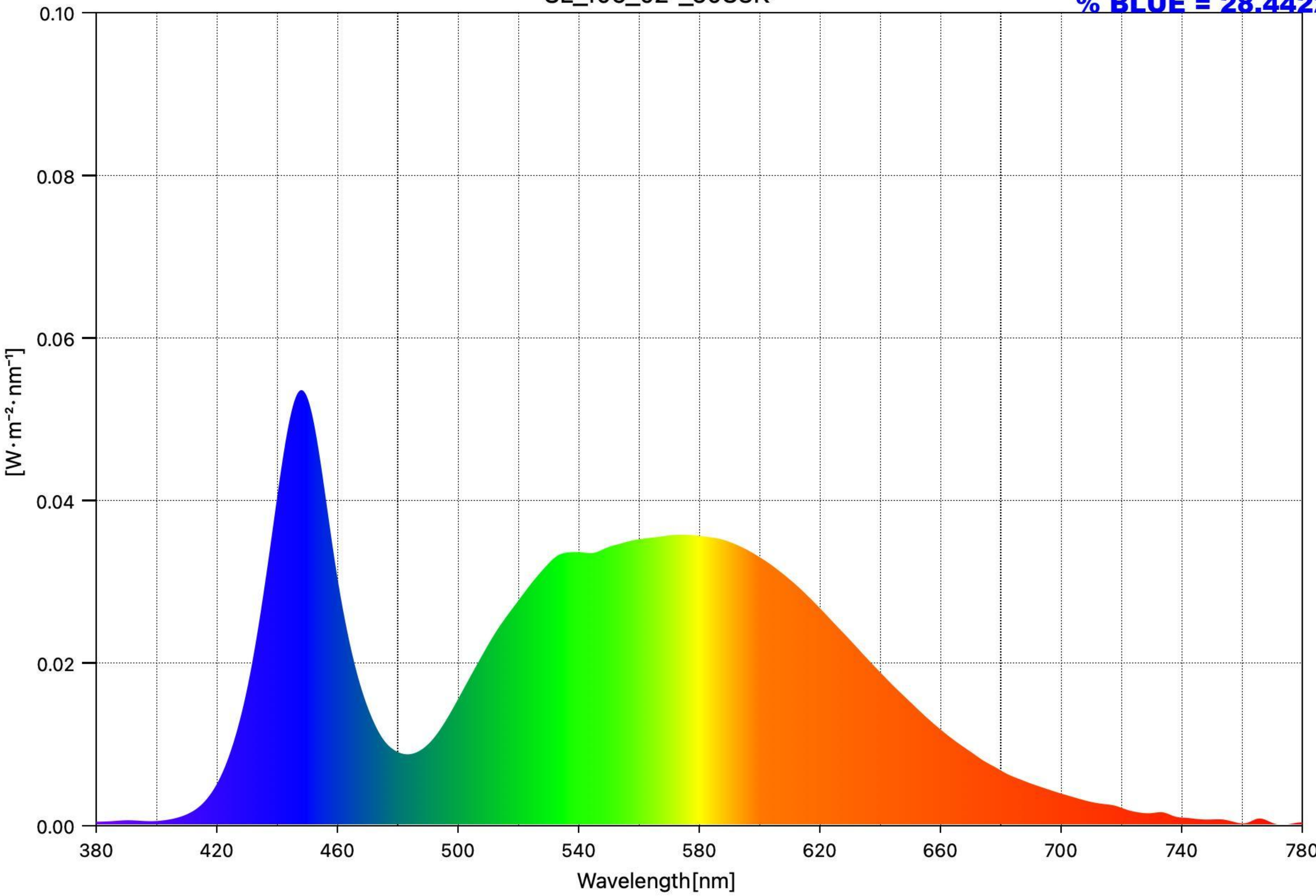
The ratio computed from the available data suggests non-compliance since the tentative calculated ratio exceeds 0.02. However, confirm the full 400-700nm summation to ensure robustness of analysis. For full compliance, ensure the fixture physically restricts upward light and confirm the spectral balance via comprehensive data.

Engage fixture manufacturers for shielding assurance and spectrum tuning to ensure

adherence to sustainable lighting guidelines and the protection of Maui's night skies.

SL_109_02°_5083K

% BLUE = 28.4422



Measuring Mode = Ambient	CCT = 5083K	Peak Wavelength = 448nm

Date Saved	2025/12/04 20:18:22
Title	SL_109_02°_5083K
% BLUE	28.4422
Viewing Angle [°]	2
CCT [K]	5083
■uv	0.0001
Illuminance [lx]	2200
Peak Wavelength [nm]	448
Tristimulus Value X	2157.3660
Tristimulus Value Y	2202.1742
Tristimulus Value Z	1932.9900
CIE1931 x	0.3428
CIE1931 y	0.3500
CIE1931 z	0.3072
CIE1976 u'	0.2105
CIE1976 v'	0.4835
Dominant Wavelength [nm]	571
Purity [%]	7.9
PPFD [umolm■^{2}s■^{1}]	30.3
CRI Ra	76.8
CRI R1	75.8
CRI R2	80.8
CRI R3	83.4
CRI R4	78.0
CRI R5	76.3
CRI R6	73.5
CRI R7	82.9
CRI R8	63.5
CRI R9	-8.2
CRI R10	53.3
CRI R11	76.3
CRI R12	52.8
CRI R13	76.2
CRI R14	90.5
CRI R15	70.5