

# OSRAM Opto Semiconductors PASS Report



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**PASS Request No.: 69412**

**PASS Request Create Date: 03/13/2019**

**PASS Request Region: NAFTA**

**Report Issue Date: 03/27/2019**

**Project Title: System Metrology Happy leaf**

**Originator: External - Customer**

**Engineering Contact:**

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**Sales Contact:**

Name: Ryan Glazier  
Email: [Ryan.Glazier@osram-os.com](mailto:Ryan.Glazier@osram-os.com)

**Customer:**

Company Name: Happy Leaf LLC  
Contact Name: Victor Zaderej  
Position Title: Owner  
Phone Number: (630) 728-1107  
Email Address: [victor\\_zaderej@sbcglobal.net](mailto:victor_zaderej@sbcglobal.net)  
Address Line 1: 3588 S Daysville Rd  
City: Oregon  
Country: UNITED STATES  
State/Province/Region: IL  
Zip/Country Code: 61061

**Luminaire Name/ID:**

Pic of luminaire:  
Device Description: Happy Leaf fixture

## LED Part # (s): OSLON Family

### Application:

Horticulture LED Grow Light

### Primary Distributor/Sales Representative:

Company Name: TEQ Sales  
Contact Name: Gary OConnor  
Email: goconnor@teqsales.com

### AE Status:

Actual Complete Date: 03/27/2019

### Contents

Integrating Sphere Measurement

### System Metrology – Integrating Sphere Measurement

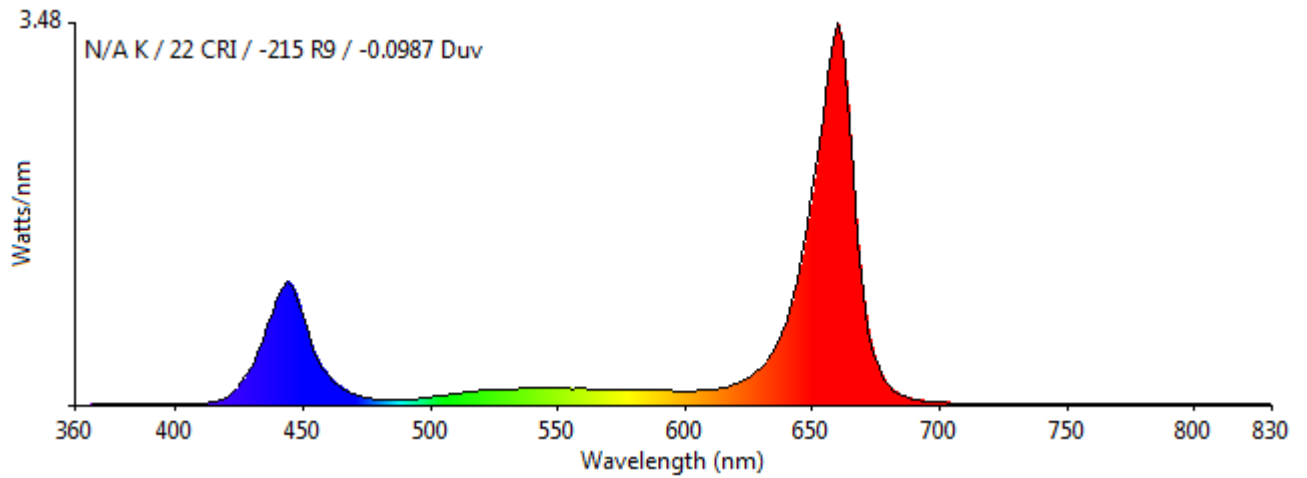
Two sets (4 Lights per set, 8 total). Customer would like to evaluate the following for each sets of Light:

1. Power Draw (included a "kill a watt" meter)
2. Total PAR (umol/sec)
3. Spectral Graph

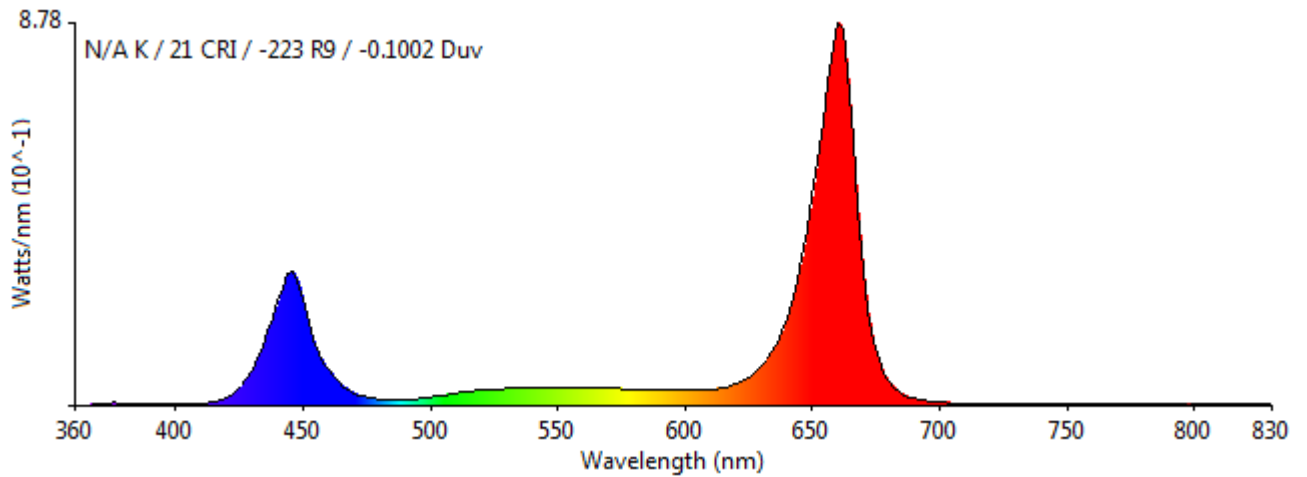
### Measured data instant:

Fixture/ Power Supply	PPF (umol/s)	Watts(J/s) using meter provided	umol/J
Fixture Marked 75W (Set of 4)	603	274	2.20
Fixture Marked 75W ( Set of 1)	158	71	2.22
Fixture Marked Mint Green (Set of 4)	594	282	2.10
Fixture Marked Mint Green (Set of 1)	151	74	2.04

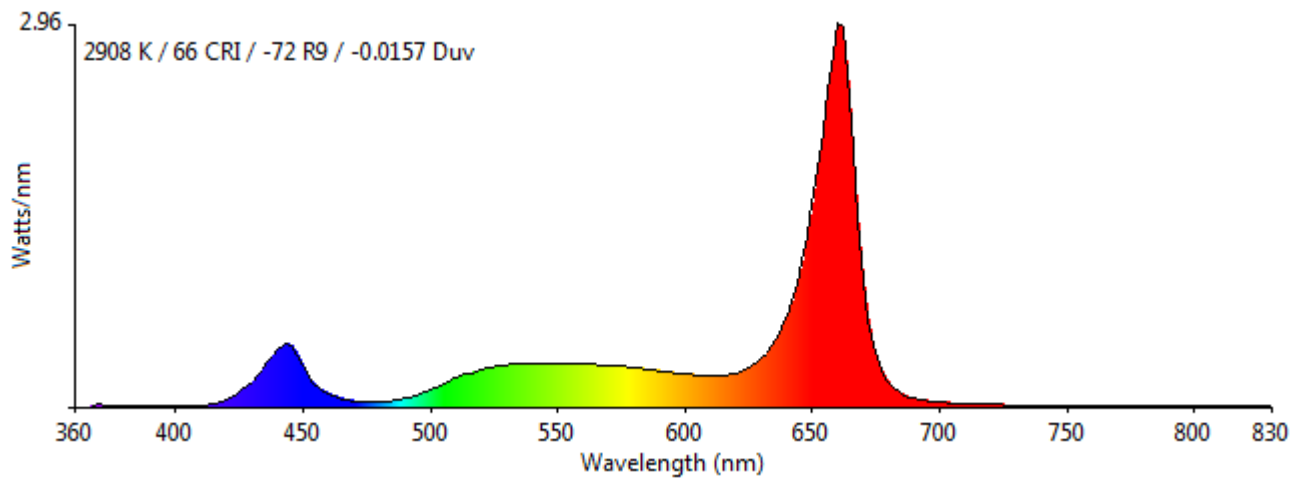
### 1. Fixture Marked 75W (Set of 4 fixtures)



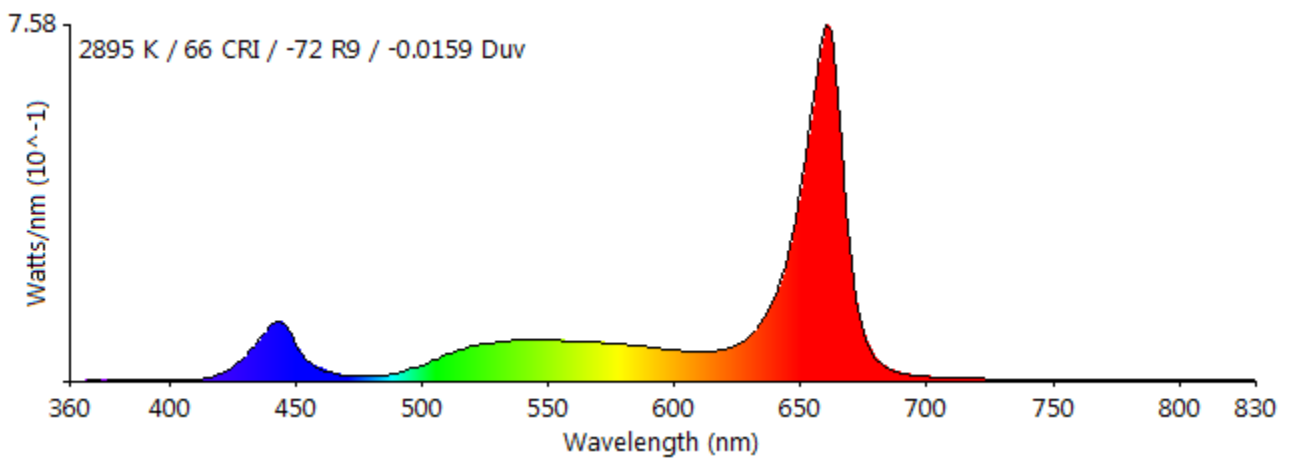
### 2. Fixture Marked 75W ( One fixture only)



### 3. Fixture Marked Mint Green (Set of 4 fixtures)



### 4. Fixture Marked Mint Green (One fixture only)



## **Conclusion:**

Provided two set of fixtures have been measured to find PPF (umol/s) and PPF efficacy (umol/j). For the set of fixture marked as "75W" (4 Fixture total) PPF and PPF efficacy found to be 603 umol/s and 2.20 umol/j respectively. For another set of fixture (4 Fixture total) marked as "Mint" is found to be 594 umol/s and 2.10 umol/j respectively.

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