



8165 E Kaiser Blvd. Anaheim, CA 92808
www.lightlaboratory.com

Report No: L092012601G



Report No: L092012601G **Issue Date:** 9/30/2020

Report Prepared For: Horticulture Lighting Group
752 North State St, #208, Westerville, OH 43082

Model Number: HLG 650 Scorpion Diablo Sample M

Test: Photosynthetic Photon Flux Density (PPFD) values on 5' X 5' grid points

Standards Used: Appropriate part or all test guidelines were used for test performed:
ANSI C82.77:2002: Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

Description of Sample: Client submitted the sample. Received in working and undamaged condition. No modifications were necessary.

Special Test Condition:

1. Grid at mounting height 12", 18", and 24".
2. Lamp centered at center of Grid
3. PPFD measurement is an average of correspondig quadrants.

Sample Arrival Date: 9/25/20

Date of Tests: 9/29/20 - 9/30/20

Seasoning of Sample: No seasoning was performed.

Equipment List

| Equipment Used | Model No | Stock No | Calibration Due Date |
|-------------------------------|----------|----------|----------------------|
| Chroma Programmable AC Source | 61604 | PS-AC02 | -- |
| Xitron Digital Power Meter | 2801 | | |
| Fluke Digital Thermometer | 52K/J | MT-TP05 | 1/10/21 |
| LI-COR Handheld Meter | LI-250A | | -- |
| LI-COR Quantum Sensor | LI-190/R | | -- |

General Information

| | |
|-----------------------------|----------------------------------|
| Manufacturer: | Horticulture Lighting Group |
| Model Number: | HLG 650 Scorpion Diablo Sample M |
| Driver Model Number: | MEAN WELL HLG-600H-C5200AB |

Electrical Test Results

| | |
|----------------------------------|--------|
| Input Voltage (VAC/60Hz): | 220.02 |
| Input Current (Amp): | 3.0667 |
| Input Power (W): | 655.80 |
| Input Power Factor: | 0.9720 |
| Current ATHD (%): | 9.7% |

Test Condition

| | |
|------------------------------------|------|
| Ambient Temperature (°C): | 25.0 |
| Stabilization Time (Hours): | 0:30 |

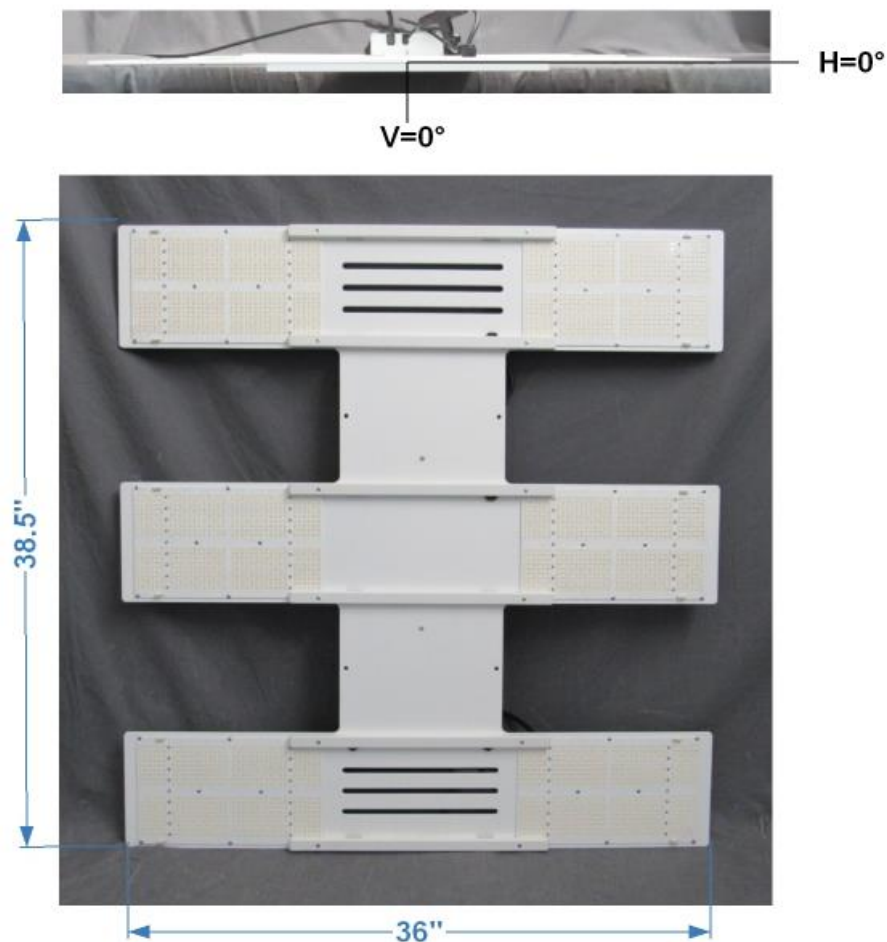
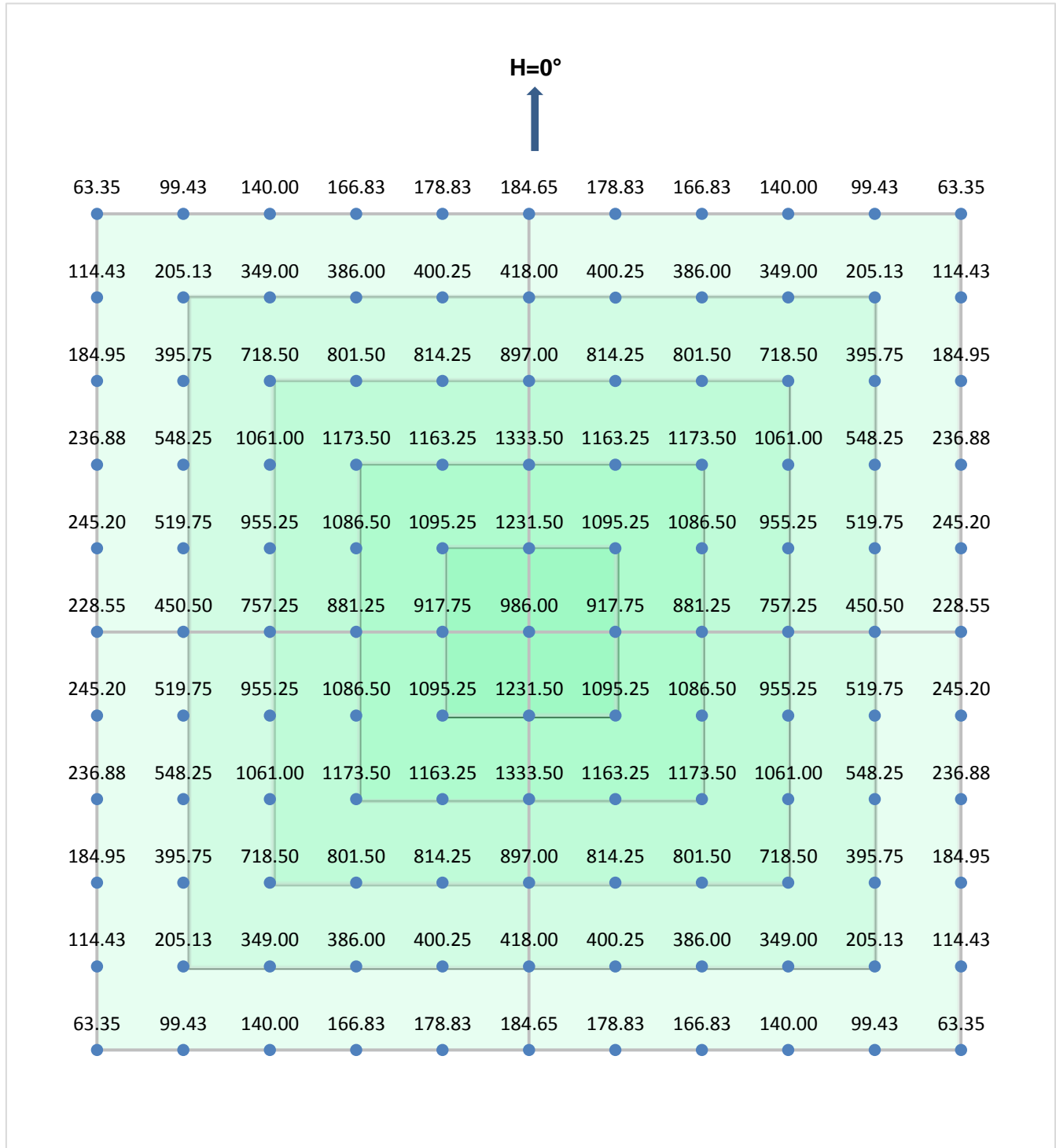
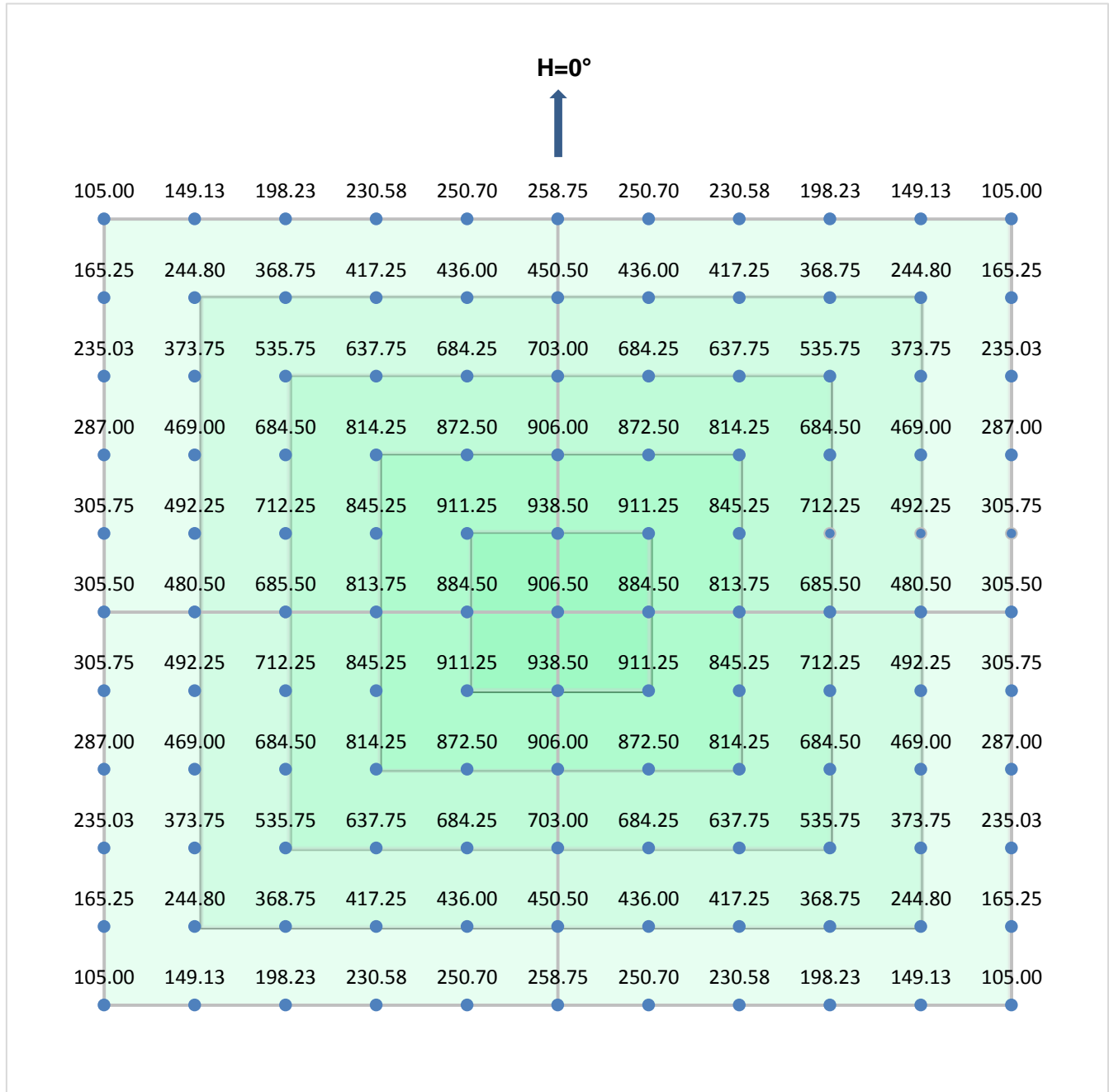


FIG. 1 LUMINAIRE

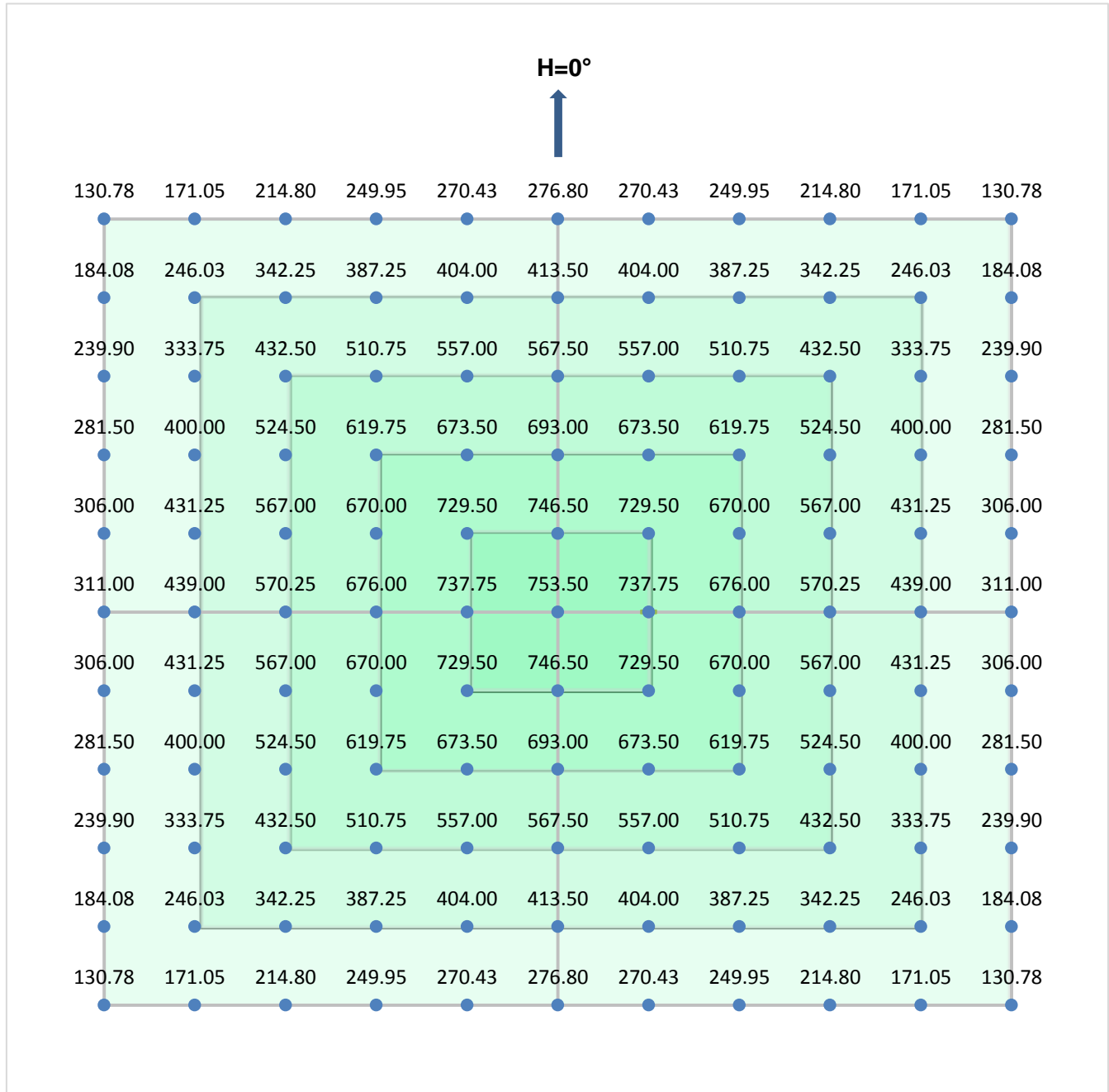
PPFD Measurement Result at 12" Height - 6 inch square Grid



PPFD Measurement Result at 18" Height - 6 inch square Grid



PPFD Measurement Result at 24" Height - 6 inch square Grid





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Test Methods

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Disclaimers:

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government.

Report Prepared by : Keyur Patel

Test Report Reviewed by:

Steve Kang
Quality Assurance