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Report No: L052311602



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Issue Date: 5/19/2023

Report Prepared For: Grow-It-LED
1730 Industrial Drive Auburn, CA 95603

Model Number: Excalibur 680X Alpha

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 24", 36", 48", 60", 72" and 84".
2. Lamp centered at center of Grid
3. PPFD measurement is an average of correspondig quadrants.

Date of Tests: 5/18/23

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	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S4	4/7/23
Fluke Digital Thermometer	52K/J	MT-TP05	1/11/2024
LI-COR Handheld Meter	LI-250A		--
LI-COR Quantum Sensor	LI-190/R		--

General Information

Manufacturer:	Grow-It-LED
Model Number:	Excalibur 680X Alpha
Driver Model Number:	INVENTRONICS EUM-680S15AMT

Electrical Test Results

Input Voltage (VAC/60Hz):	240.00
Input Current (Amp):	2.7637
Input Power (W):	658.20
Input Power Factor:	0.9923
Current ATHD (%):	6.9%

Test Condition

Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:35

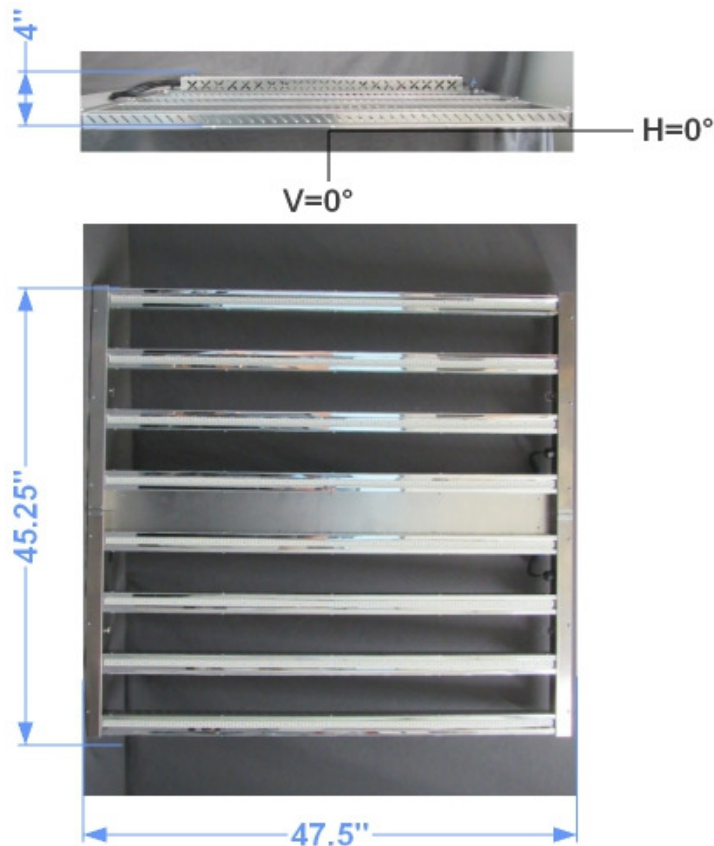
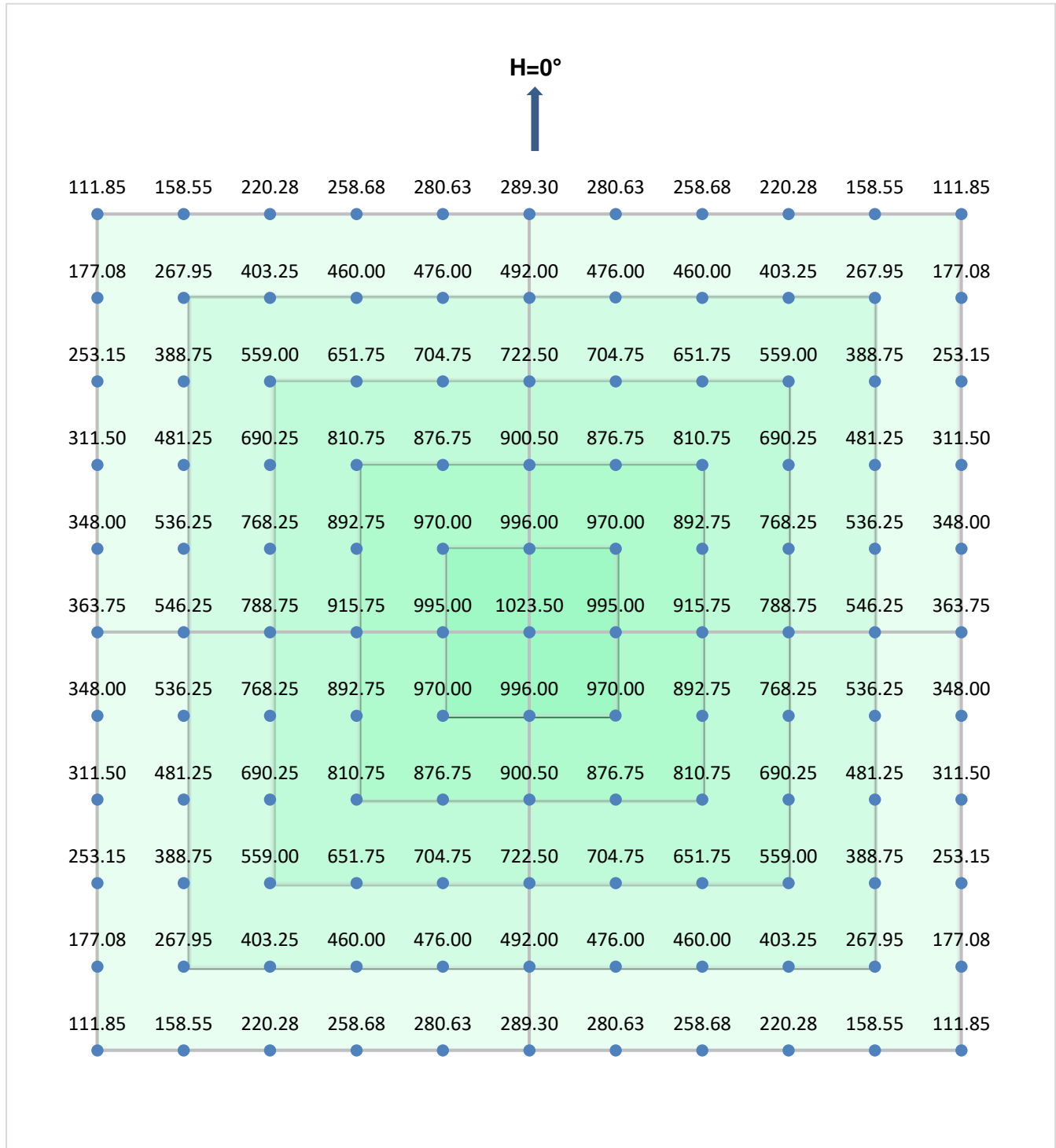


FIG. 1 LUMINAIRE

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



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.

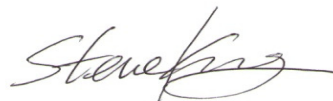
Electrical measurements are measured using the listed equipment.

Disclaimers:

"The results related only to the samples as received and tested." and "Test results may be affected by the deviation due to test under customer's special test condition requirement." This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

Report Prepared by : Kunjan Modi

Test Report Reviewed by:



Steve Kang
Quality Assurance