

**RETURNING UNITS** Please contact your retail store for returns.

**WARRANTY** This unit, when properly used will provide you with years of service. It is covered under a 3 year warranty (902210 - 400 Watt and 902230 - 1500W/240V have a 2 Year Warranty). This warranty will be voided if the unit is misused, abused or altered. Warranty repair or replacement will be at the sole discretion of the manufacturer. Defective units need to be returned to the place of purchase with proof of purchase/receipt.

This warranty is expressly in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness for use and of all other obligations or liabilities on the part of the seller. This warranty shall not apply to this product or any part thereof which has been damaged by accident, abuse, misuse, modification, negligence, alteration or misapplication. Manufacturer makes no warranty whatsoever in respect to accessories or parts not supplied by manufacturer. This warranty shall apply only to the United States, including Alaska, Hawaii and territories of the United States and Canada.

<b>Part 18 compliance</b>	This device complies with Part 18 of the FCC Rules.
<b>Advisory statement</b>	This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.
<b>The interference potential of the device or system</b>	The interference potential of the device or system is the operating frequency; 65 kHz.
<b>Maintenance of the system</b>	Unplug the unit, wait 30 seconds, and plug the unit back in.
<b>Simple measures that can be taken by the user to correct interference</b>	Move the unit away from any radio device.

▪ This product contains delicate electronic components. This means that if it is placed near an object that transmits radio signals, it could cause interference. This could be, for example, mobile telephones, walkie talkies, CB radios, remote controls and microwaves. If interference occurs, move such objects away from the appliance.

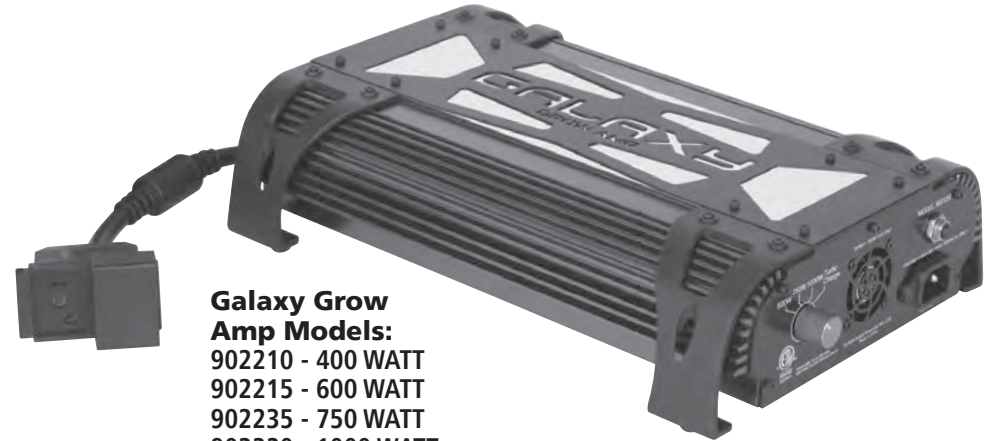
Galaxy Grow Amp Select-A-Watt 600/750/1000/Turbo Charge 120/240 Volt:  
FCC#: 2AEHV902220

Galaxy Grow Amp Select-A-Watt 400/600/1000/Turbo Charge 240 Volt Only:  
FCC#: 2AEHV902225

Galaxy Grow Amp Select-A-Watt 600/750/Turbo Charge 120/240 Volt:  
FCC#: 2AEHV902235



## Installation/Operating Instructions



**Galaxy Grow  
Amp Models:**  
902210 - 400 WATT  
902215 - 600 WATT  
902235 - 750 WATT  
902220 - 1000 WATT  
902225 - 1000 WATT/240V  
902230 - 1500 WATT/240V  
902227 - 1000 WATT/277V

### READ THESE INSTRUCTIONS BEFORE FIRING UP YOUR BALLAST

**KEEP ORIGINAL PACKAGING**— all returns need to be in the original packaging in order to avoid product damage during shipping. Any damage to products not in their original packaging will not be covered under warranty.

**SAFETY FIRST!** Failure to observe the following safety warnings may result in serious injury. In addition, failure to observe these safety warnings will result in a waiver of all liabilities and will void all warranties.

#### WARNING

- If the exterior of the lamp is damaged, replace lamp immediately.
- When re-lamping, make sure lamp has time to cool before touching.
- Make sure power cord and lamp cord are connected properly.
- Disconnect power before re-lamping.
- **DO NOT** hang by power or lamp cord.
- **DO NOT** make contact with the interior of the socket while power is on.
- **DO NOT** operate light systems in wet locations.
- **DO NOT** plug system into supply voltage other than what is designated on ballast.
- **DO NOT** attempt to rewire or reconfigure your system, it will void warranty and could cause serious safety hazards (i.e. power cord, lamp cord, lamp socket or ballast).
- Keep away from children.

## SAFETY FIRST!

- **DO NOT** alter or modify this unit in any way. It may cause bodily injury or death as this is a high power electrical device.
- **DO NOT** submerge in water or splash water on the unit.
- **DO NOT** plug or unplug the lamp cord while the ballast is energized.

These high performance Electronic Ballasts are extremely efficient. They have a high power factor and high luminous efficacy. It's stable performance creates constant power output even when power fluctuates (power surge). Short circuit protection technology prevents damage to the lamp and other ballasts connected to the same circuit.

## 1. INSTALLATION PROCEDURE

- **DO NOT** alter or modify the electronic ballast in any way. Not only may it damage the unit, it will void the warranty.
- Lamp power rating must match electronic ballast power rating.

### OUTPUT TO HPS/MH LAMP

Connect "Sun System®" lamp cord with male plug to female receptacle on ballast



### CONNECT APPROPRIATE AC POWER PLUG HERE

AC input 120 (included) or 240V (purchase separately) (#902225 & #902230 include a 240V cord. #902227 includes a hardwired 277V cord).

These ballasts offer our exclusive Smart Volt® feature – They are "smart" ballasts — They will operate on either 120 or 240 volt power (except Galaxy® 1000 & 1500 watt 240 volt only ballast and 1000 watt 277 volt only ballast) by simply plugging in the appropriate power cord. There is no further modification necessary. It comes with a 120 volt power cord. If you wish to run this ballast on 240 volt, you must purchase the 240 volt power cord separately (part #903082 six foot or #903084 twenty foot).

The Galaxy 1000 watt 240 volt (#902225) and the Galaxy 1500 watt 240 volt (#902230), are designated voltage electronic ballasts. Run these ballasts only with 240 volts.

## 2. SPECIFICATIONS

- 120-240 Volts (#902225 & 902230 are 240V only and #902227 is 277V only)
- Power source frequency: 50/60Hz
- Power Factor (cosφ): > 0.99
- Ambient Temp: 50°F to 120°F
- Crest Factor: < 1.5
- Acoustic Resonance: none
- Total Harmonic Distortion: (THD): < 10.0%

## 3. NOTES

- The Galaxy Electronic Ballasts will operate with Metal Halide lamps and High Pressure Sodium lamps that are rated at the proper wattage.
- This unit offers short-circuit and power fluctuation.

**240V WIRING - VERY IMPORTANT!** All digital ballasts may malfunction if the 240V circuit has a neutral. The input for the ballast is 2 HOT WIRES and 1 GROUND WIRE. If you are using a light controller ONLY bring a ground wire and two hot leads from your electrical panels.

**HOT RESTRIKE** - It is **VERY IMPORTANT** that the lamp is given adequate time to cool down before it is reignited. You should allow a hot lamp to cool for 20-30 minutes before you try to restrike it. Hot restrikes cause permanent lamp failure and lumen output degradation. Additionally, the lamp should never be turned off before the lamp reaches full intensity.

**LAMP REPLACEMENT** - Be sure to disconnect the power source before changing lamps. Always use the specified wattage lamp. (A 400W halide lamp should not be used in a 600W ballast).

**MOUNTING LOCATION - DO NOT** install ballasts in areas of high heat, such as an attic or a closed closet. **DO NOT** mount the ballast to the reflector or blow exhaust air over them. **DO NOT** stack ballasts on top of each other. **DO NOT** allow contact with water. Mount units at least six inches apart. If a unit has any leaking resin, please relocate to a cooler area or place a fan near the ballasts.

**TIMER BOX** - If you are connecting a 240V ballast to a timer box, please make sure that it cuts off both legs when timer is switched off. If you continue to supply 120V to your ballast when the timer is switched off, it may damage your ballast.

**HPS/MH** - The ballasts operate both metal halide and high pressure sodium lamps. They will not light mercury vapor lamps.

**PLEASE NOTE:** The 750W ballast is HPS only.

**LAMP RECOMMENDATIONS** - The ballasts are designed to provide superior performance with several lamps manufactured to American specifications. There are several brands of lamps available for the U.S. market that were made according to European specifications. We do not recommend using these types of lamps, since they will provide inconsistent performance with your ballast.

## TROUBLESHOOTING GUIDE

Follow the troubleshooting tips below. If troubleshooting techniques fail, bring ballast back to your place of purchase to request warranty service.

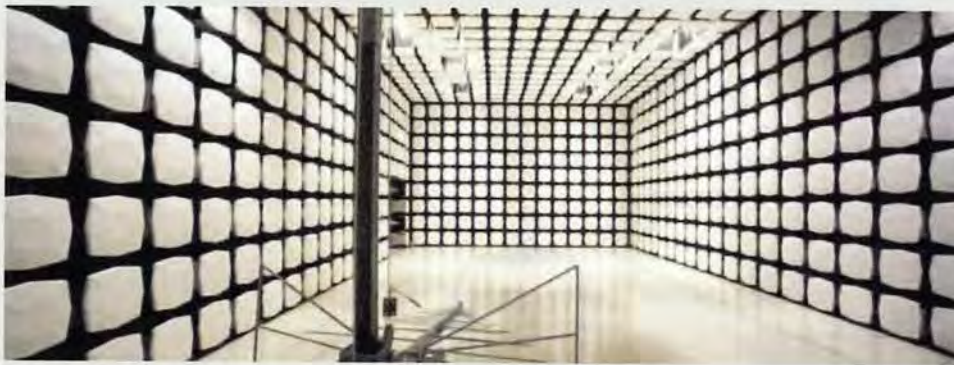
POSSIBLE CAUSES	CORRECTIVE MAINTENANCE
<b>LAMP LOOSE IN SOCKET</b>	Screw lamp firmly into socket. Make sure tab inside the socket makes proper contact with the base of the lamp. If lamp will not seat properly replace lamp.
<b>INCORRECT VOLTAGE</b>	Make sure you are using the correct input voltage with ballast. If using incorrect voltage, disconnect the ballast from the power source immediately.
<b>DEFECTIVE OR IMPROPER WIRING</b>	Examine wiring to ensure it agrees with wiring diagrams on ballast label. Check connections to see that they are secure. If wiring a 240V ballast, DO NOT use a neutral. The correct wiring is two hot wires and a ground.
<b>POOR ELECTRICAL CONNECTIONS</b>	Check wiring and lamp contact with socket. Make sure the lamp cord is firmly seated in output receptacle.
<b>INCORRECT LAMP</b>	Verify that you are using the proper wattage lamp with ballast. DO NOT use a lamp manufactured according to European or Asian specifications as they will not provide consistent performance.
<b>LAMP DAMAGE</b>	Investigate possibility of outer bulb damage, particularly where glass meets base. Lamps may have been twisted to firmly into socket. Look for broken tubes or loose metal parts. Replace lamp.
<b>BREAKER</b>	If lamp will not start, reset the breaker by pressing the white button located on the input side of the ballast.

# NORTHWEST EMC

**Sunlight Supply, Inc.**

**902215 400/600 Galaxy Grow Amp #2**

**Report # SNSY0041**



NVLAP Lab Code: 200630-0

*This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America. This Report may only be duplicated in its entirety*

# CERTIFICATE OF TEST



Last Date of Test: March 30, 2015  
Sunlight Supply, Inc.  
Model: 902215 400/600 Galaxy Grow Amp #2

## Emissions

### Standards

Specification	Method
FCC 18.305:2015 Consumer equipment	MP-5:1986
FCC 18.307:2015 Consumer equipment	MP-5:1986

### Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	
Conducted Emissions	Yes	Pass	

### Deviations From Test Standards

None

### Approved By:

Kyle Holgate, Operations Manager

*Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.*

# REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

# ACCREDITATIONS AND AUTHORIZATIONS

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## United States

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**FCC** - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

**A2LA** - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

**NVLAP** - Each laboratory is accredited by NVLAP to ISO 17025

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## Canada

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**IC** - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

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## European Union

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**European Commission** - Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

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## Australia/New Zealand

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**ACMA** - Recognized by ACMA as a CAB for the acceptance of test data.

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## Korea

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**MSIP / RRA** - Recognized by KCC's RRA as a CAB for the acceptance of test data.

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## Japan

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**VCCI** - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

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## Taiwan

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**BSMI** - Recognized by BSMI as a CAB for the acceptance of test data.

**NCC** - Recognized by NCC as a CAB for the acceptance of test data.

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## Singapore

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**IDA** - Recognized by IDA as a CAB for the acceptance of test data.

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## Israel

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**MOC** - Recognized by MOC as a CAB for the acceptance of test data.

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## Hong Kong

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**OFCA** - Recognized by OFCA as a CAB for the acceptance of test data.

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## Vietnam

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**MIC** - Recognized by MIC as a CAB for the acceptance of test data.

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## SCOPE

For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/accreditations/>

<http://gsi.nist.gov/global/docs/cabs/designations.html>

# EMISSIONS MEASUREMENTS

## Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable test description page. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

## Measurement Bandwidths

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

*Measurements were made using the bandwidths and detectors specified. No video filter was used.*

## Sample Calculations

### Radiated Emissions:

Field Strength	=	Measured Level	+	Antenna Factor	+	Cable Factor	-	Amplifier Gain	+	Distance Adjustment Factor	+	External Attenuation
33.5	=	42.6	+	28.6	+	3.1	-	40.8	+	0.0	+	0.0

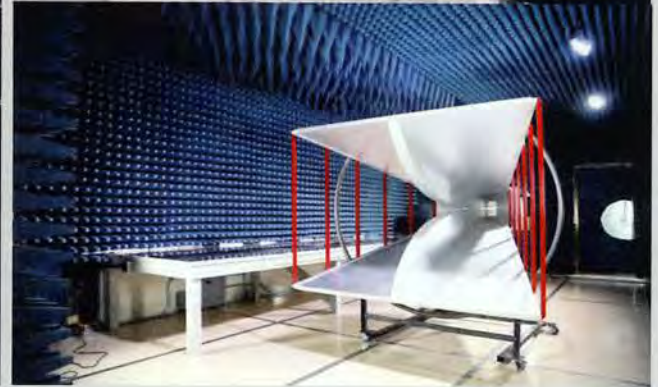
### Conducted Emissions:

Adjusted Level	=	Measured Level	+	Transducer Factor	+	Cable Factor	+	External Attenuation
47.1	=	26.7	+	0.3	+	0.1	+	20.0

# FACILITIES



<b>California</b> Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	<b>Minnesota</b> Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	<b>New York</b> Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	<b>Oregon</b> Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	<b>Texas</b> Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	<b>Washington</b> Labs NC01-05 19201 120 <sup>th</sup> Ave NE Bothell, WA 9801 (425)984-6600
<b>NVLAP</b>					
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
<b>Industry Canada</b>					
2834B-1, 2834B-3	2834E-1	N/A	2834D-1, 2834D-2	2834G-1	2834F-1
<b>BSMI</b>					
SL2-IN-E-1154R	SL2-IN-E-1152R	N/A	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
<b>VCCI</b>					
A-0029	A-0109	N/A	A-0108	A-0201	A-0110
<b>Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA</b>					
US0158	US0175	N/A	US0017	US0191	US0157





# PRODUCT DESCRIPTION

## Client and Equipment Under Test (EUT) Information

<b>Company Name:</b>	Sunlight Supply, Inc.
<b>Address:</b>	5408 NE 88th Street Bldg A101
<b>City, State, Zip:</b>	Vancouver, WA 98665
<b>Test Requested By:</b>	Ken Garver
<b>Model:</b>	902215 400/600 Galaxy Grow Amp #2
<b>First Date of Test:</b>	March 27, 2015
<b>Last Date of Test:</b>	March 30, 2015
<b>Receipt Date of Samples:</b>	March 27, 2015
<b>Equipment Design Stage:</b>	Production
<b>Equipment Condition:</b>	No Damage

## Information Provided by the Party Requesting the Test

<b>Functional Description of the EUT:</b>
Digital Ballast
<b>Highest frequency generated or used in the device:</b>
None Provided- Assumes < 108 MHz
<b>Testing Objective:</b>
Provide the specific EMC testing requested by the customer.

# CONFIGURATIONS

## Configuration SNSY0041- 1

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Digital Ballast	Sunlight Supply, Inc.	902215 400/600 Galaxy Grow Amp #2	Sample #2

Peripherals in test setup boundary			
Description	Manufacturer	Model/Part Number	Serial Number
HPS Lamp	Sunlight Supply, Inc.	Ultra Sun 600W 901526	None
Air Cooled Reflector	Sunlight Supply, Inc.	Magnum XXXL 6 Inch 904520	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Power	No	2.0m	Yes	AC Mains	Digital Ballast
AC Power	No	4.5m	Yes	Digital Ballast	Air Cooled Reflector

# MODIFICATIONS

## Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	3/27/2015	Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	3/30/2015	Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

# RADIATED EMISSIONS

## TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, a final radiated emissions test was performed. The frequency range investigated (scanned), is also noted in this report. Radiated emissions measurements were made at the EUT azimuth and antenna height such that the maximum radiated emissions level was detected. This required the use of a turntable and an antenna positioner. The preferred method of a continuous azimuth search was utilized for frequency scans of the EUT field strength with both polarities of the measuring antenna. A calibrated, linearly polarized antenna was positioned at the specified distance from the periphery of the EUT. Tests were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna was varied in height above the conducting ground plane to obtain the maximum signal strength. Though specified in the report, the measurement distance was 3 meters or 10 meters. At any measurement distance, the antenna height was varied from 1 meter to 4 meters. These height scans apply for both horizontal and vertical polarization, except that for vertical polarization the minimum height of the center of the antenna was increased so that the lowest point of the bottom of the antenna cleared the ground surface by at least 25 cm.

The EUT arrangement is configured as equivalent to that occurring in normal use. Tabletop equipment is placed on a 0.8 meter high non-conductive table & for Floor-standing equipment, it is placed on, but insulated from a ground reference plane by the use of its own rollers or stand-off supports. If measurements above 1 GHz were required, the test setup was modified to meet the regulatory requirements for higher frequency measurements. If required, RF absorber was placed on the floor between the measurement antenna and EUT.

The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Spectrum Analyzer	Agilent	E4443A	AFB	3/17/2015	03/17/2016
Pre-Amplifier	Miteq	AM-1551	AOY	8/14/2014	08/14/2015
Antenna, Biconilog	Teseq	CBL 6141B	AXR	7/7/2014	07/07/2016
EV11 Cables	N/A	10m Test Distance Cables	EVL	8/14/2014	08/14/2015

## MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	3.8 dB	-3.8 dB

## FREQUENCY RANGE INVESTIGATED

30 MHz TO 1000 MHz

## POWER INVESTIGATED

110VAC/60Hz

## CONFIGURATIONS INVESTIGATED

SNSY0041-1

## MODES INVESTIGATED

On, set to 600W

# RADIATED EMISSIONS

EUT:	902215 400/600 Galaxy Grow Amp #2	Work Order:	SNSY0041
Serial Number:	Sample #2	Date:	03/30/2015
Customer:	Sunlight Supply, Inc.	Temperature:	23.1°C
Attendees:	None	Relative Humidity:	38.8%
Customer Project:	None	Bar. Pressure:	1020.1 mb
Tested By:	Cole Ghizzone	Job Site:	EV11
Power:	110VAC/60Hz	Configuration:	SNSY0041-1

## TEST SPECIFICATIONS

Specification: RF lighting: consumer equipment FCC 18.305:2015	Method: MP-5:1986
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## TEST PARAMETERS

Run #:	1	Test Distance (m):	10	Ant. Height(s) (m):	1 to 4(m)
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## COMMENTS

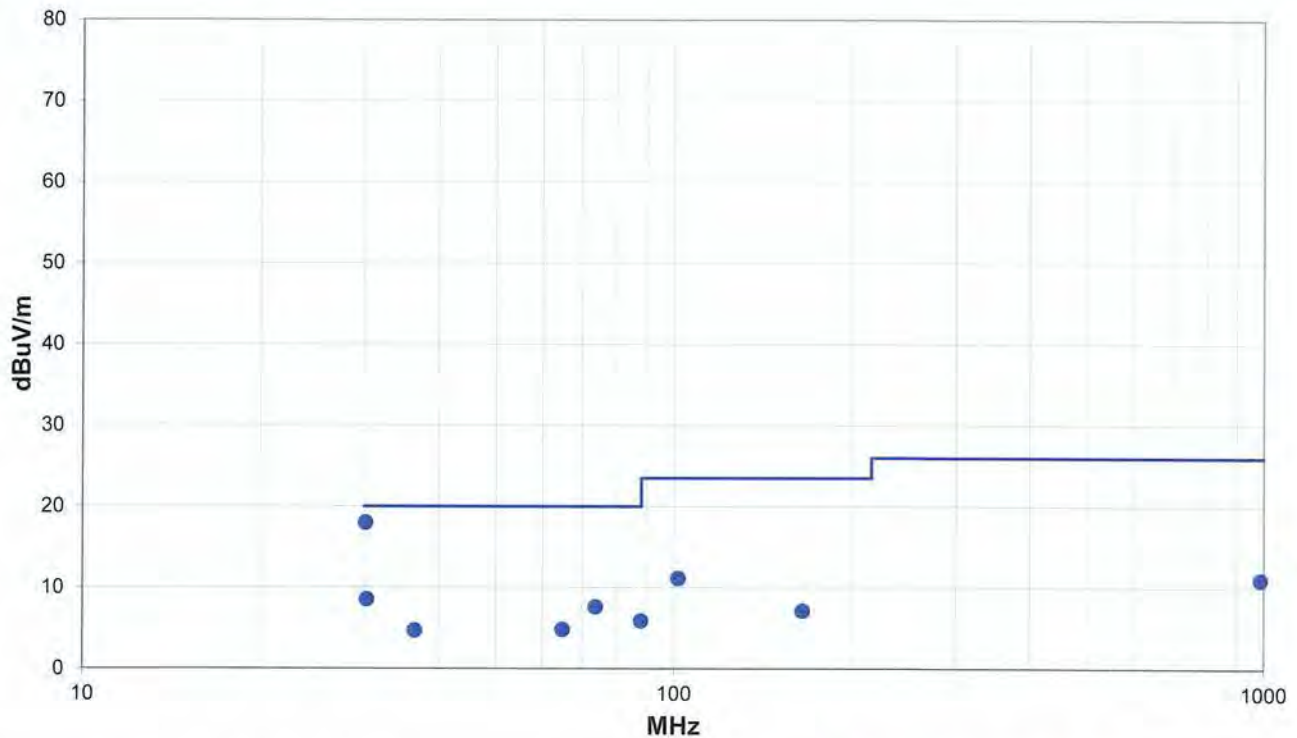
Using 120V power cord. Allowed 20 minutes to warm up.

## EUT OPERATING MODES

On, set to 600W

## DEVIATIONS FROM TEST STANDARD

None



Run #: 1

■ PK    ◆ AV    ● QP

# RADIATED EMISSIONS

## RESULTS - Run #1

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Ant. Height (m)	Azimuth (deg.)	Test Dist. (m)	Ext. Atten. (dB)	Polar. Trans. Type	Detect.	Dist. Adjust. (dB)	Adj. (dBuV/m)	Spec. Limit (dBuV/m)	Margin. (dB)
30.152	42.7	-15.2	1.0	14.0	10.0	0.0	Vert	QP	-9.5	18.0	20.0	-2.0
30.297	33.3	-15.2	1.1	40.0	10.0	0.0	Horz	QP	-9.5	8.6	20.0	-11.4
73.698	47.2	-30.0	3.8	184.0	10.0	0.0	Horz	QP	-9.5	7.6	20.0	-12.4
101.490	47.8	-27.1	4.0	161.0	10.0	0.0	Horz	QP	-9.5	11.1	23.5	-12.4
87.873	44.5	-29.1	4.0	75.0	10.0	0.0	Horz	QP	-9.5	5.9	20.0	-14.1
988.147	30.0	-9.5	3.8	117.0	10.0	0.0	Vert	QP	-9.5	11.0	26.0	-15.0
64.782	43.7	-29.3	4.0	197.0	10.0	0.0	Horz	QP	-9.5	4.8	20.0	-15.2
36.482	32.5	-18.2	2.8	36.0	10.0	0.0	Horz	QP	-9.5	4.7	20.0	-15.3
165.024	42.0	-25.3	3.8	360.0	10.0	0.0	Horz	QP	-9.5	7.1	23.5	-16.4

## CONCLUSION

Pass



Tested By

# CONDUCTED EMISSIONS

## TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50  $\Omega$  measuring port is terminated by a 50  $\Omega$  EMI meter or a 50  $\Omega$  resistive load. All 50  $\Omega$  measuring ports of the LISN are terminated by 50 $\Omega$ .

## TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Receiver	Rohde & Schwarz	ESCI	ARH	03/11/2015	03/11/2016
High Pass Filter	TTE	H97-100K-50-720B	HHD	01/05/2015	01/05/2016
Attenuator, BNC 10 Watt	Fairview Microwave	SA6B10W-20	TQQ	11/20/2014	11/20/2015
EV07 Cables	N/A	Conducted Cables	EVG	02/03/2015	02/03/2016
LISN	Solar Electronics	9252-50-R-24-BNC	LIR	10/07/2014	10/07/2015

## MEASUREMENT UNCERTAINTY

Description		
Expanded k=2	2.4 dB	-2.4 dB

## CONFIGURATIONS INVESTIGATED

SNSY0041-1

## MODES INVESTIGATED

On, set to 600W

# CONDUCTED EMISSIONS

EUT:	902215 400/600 Galaxy Grow Amp #2	Work Order:	SNSY0041
Serial Number:	Sample #2	Date:	03/27/2015
Customer:	Sunlight Supply, Inc.	Temperature:	22.6°C
Attendees:	None	Relative Humidity:	37.1%
Customer Project:	None	Bar. Pressure:	1017 mb
Tested By:	Cole Ghizzone	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	SNSY0041-1

## TEST SPECIFICATIONS

Specification: RF lighting: consumer equipment FCC 18.307:2015	Method: MP-5:1986
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## TEST PARAMETERS

Run #:	1	Line:	Neutral	Ext. Attenuation (dB):	20
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## COMMENTS

Using 120V power cord. Allowed 20 minutes to warm up.

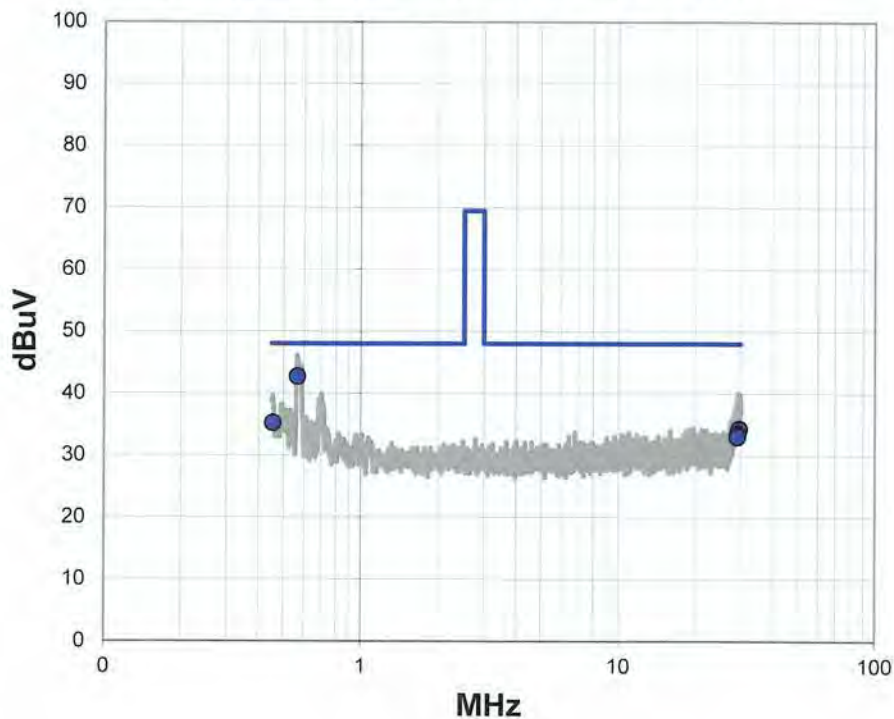
## EUT OPERATING MODES

On, set to 600W

## DEVIATIONS FROM TEST STANDARD

None

Quasi Peak Data - vs - Quasi Peak Limit





# CONDUCTED EMISSIONS

## RESULTS - Run #1

Peak Data – vs – Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.567	22.3	20.4	42.7	48.0	-5.3
0.456	14.8	20.4	35.2	48.0	-12.8
29.758	12.2	22.1	34.3	48.0	-13.7
29.644	12.1	22.1	34.2	48.0	-13.8
29.406	11.5	22.1	33.6	48.0	-14.4
29.282	11.3	22.1	33.4	48.0	-14.6
29.182	10.9	22.1	33.0	48.0	-15.0

## CONCLUSION

Pass



Tested By

# CONDUCTED EMISSIONS

EUT:	902215 400/600 Galaxy Grow Amp #2	Work Order:	SNSY0041
Serial Number:	Sample #2	Date:	03/27/2015
Customer:	Sunlight Supply, Inc.	Temperature:	22.6°C
Attendees:	None	Relative Humidity:	37.1%
Customer Project:	None	Bar. Pressure:	1017 mb
Tested By:	Cole Ghizzone	Job Site:	EV07
Power:	110VAC/60Hz	Configuration:	SNSY0041-1

## TEST SPECIFICATIONS

Specification: RF lighting: consumer equipment FCC 18.307:2015	Method: MP-5:1986
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## TEST PARAMETERS

Run #:	2	Line:	High Line	Ext. Attenuation (dB):	20
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## COMMENTS

Using 120V power cord. Allowed 20 minutes to warm up.

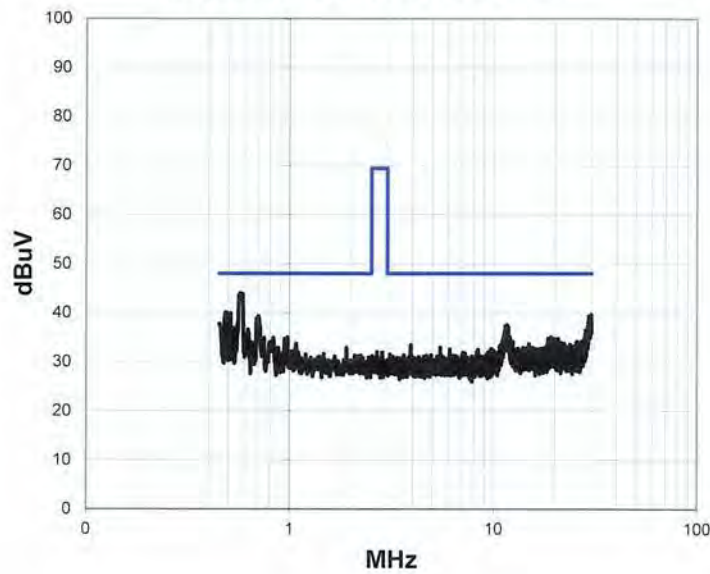
## EUT OPERATING MODES

On, set to 600W

## DEVIATIONS FROM TEST STANDARD

None

Peak Data - vs - Quasi Peak Limit



# CONDUCTED EMISSIONS

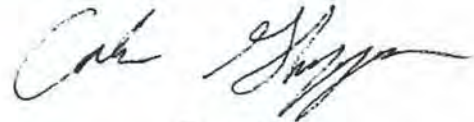
## RESULTS - Run #2

Peak Data – vs – Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.572	23.6	20.4	44.0	48.0	-4.0
0.483	19.7	20.4	40.1	48.0	-7.9
0.491	19.7	20.4	40.1	48.0	-7.9
0.513	19.5	20.4	39.9	48.0	-8.1
29.937	17.5	22.1	39.6	48.0	-8.4
29.623	17.3	22.1	39.4	48.0	-8.6
0.701	18.8	20.5	39.3	48.0	-8.7
29.801	17.2	22.1	39.3	48.0	-8.7
29.162	17.2	22.1	39.3	48.0	-8.7
29.538	17.1	22.1	39.2	48.0	-8.8
29.476	16.9	22.1	39.0	48.0	-9.0
29.368	16.9	22.1	39.0	48.0	-9.0
29.021	16.1	22.1	38.2	48.0	-9.8
29.091	15.8	22.1	37.9	48.0	-10.1
0.454	17.4	20.4	37.8	48.0	-10.2
11.644	16.5	21.0	37.5	48.0	-10.5
28.955	15.4	22.0	37.4	48.0	-10.6
11.456	16.3	21.0	37.3	48.0	-10.7
28.818	15.2	22.0	37.2	48.0	-10.8
11.814	16.1	21.0	37.1	48.0	-10.9
11.729	16.1	21.0	37.1	48.0	-10.9
11.519	16.1	21.0	37.1	48.0	-10.9
11.781	15.9	21.0	36.9	48.0	-11.1
0.528	16.5	20.4	36.9	48.0	-11.1
28.874	14.7	22.0	36.7	48.0	-11.3
0.624	16.2	20.4	36.6	48.0	-11.4

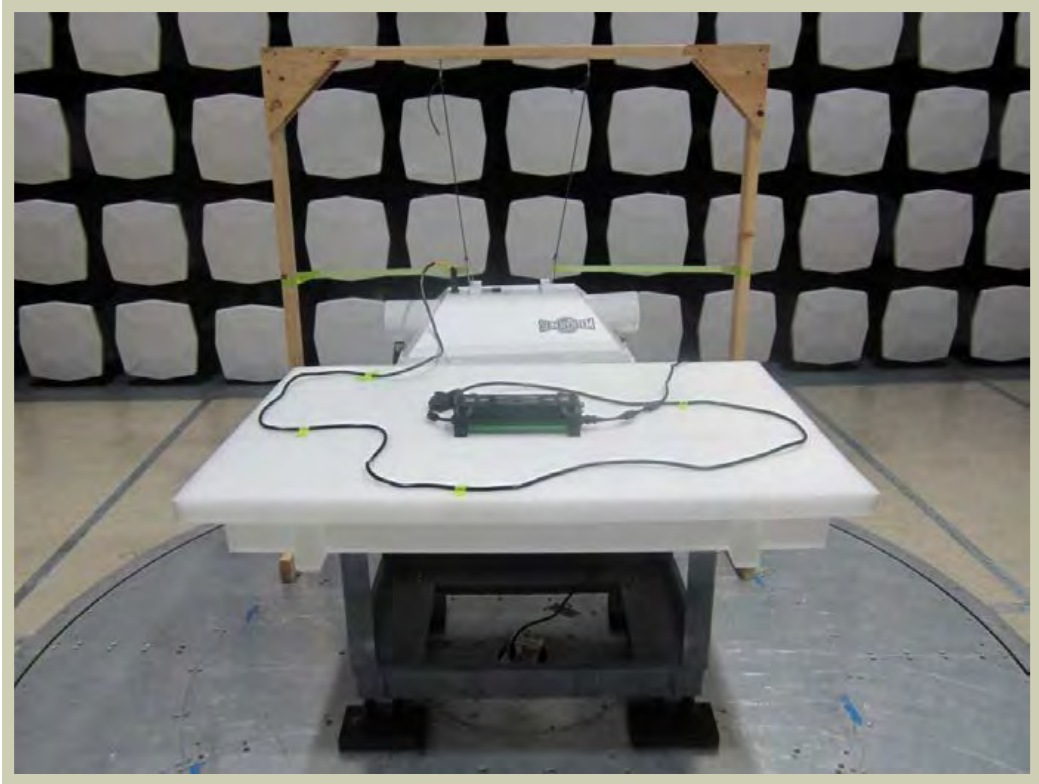
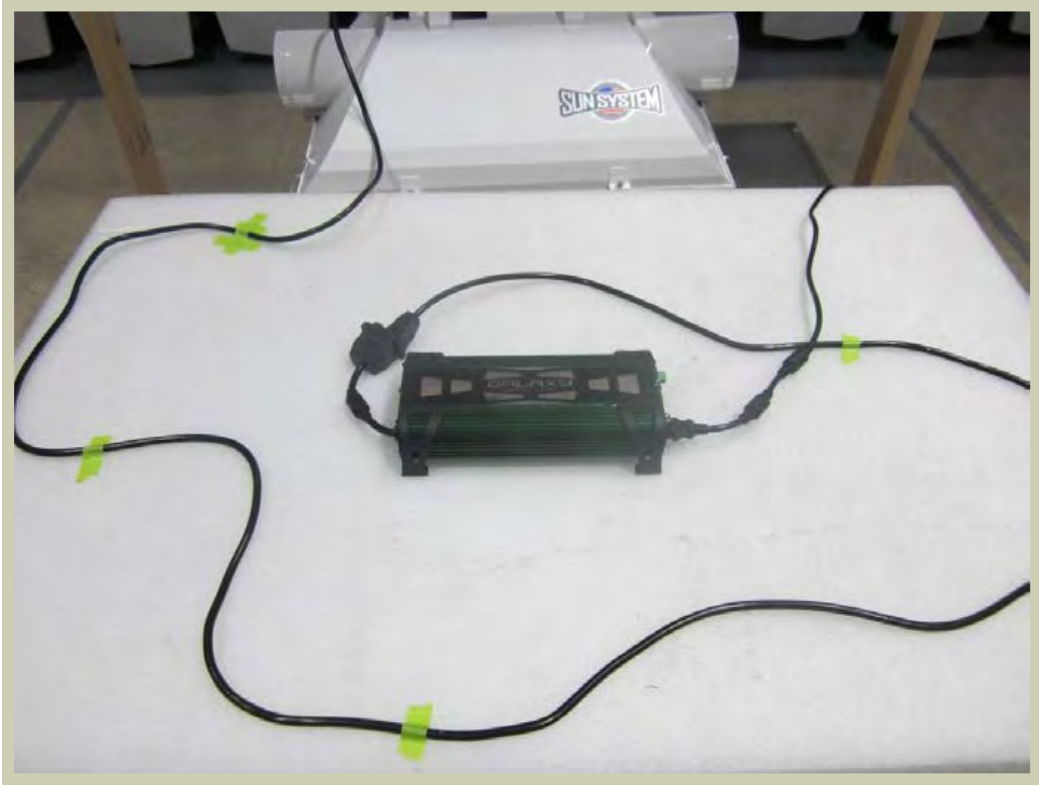
## CONCLUSION

Pass

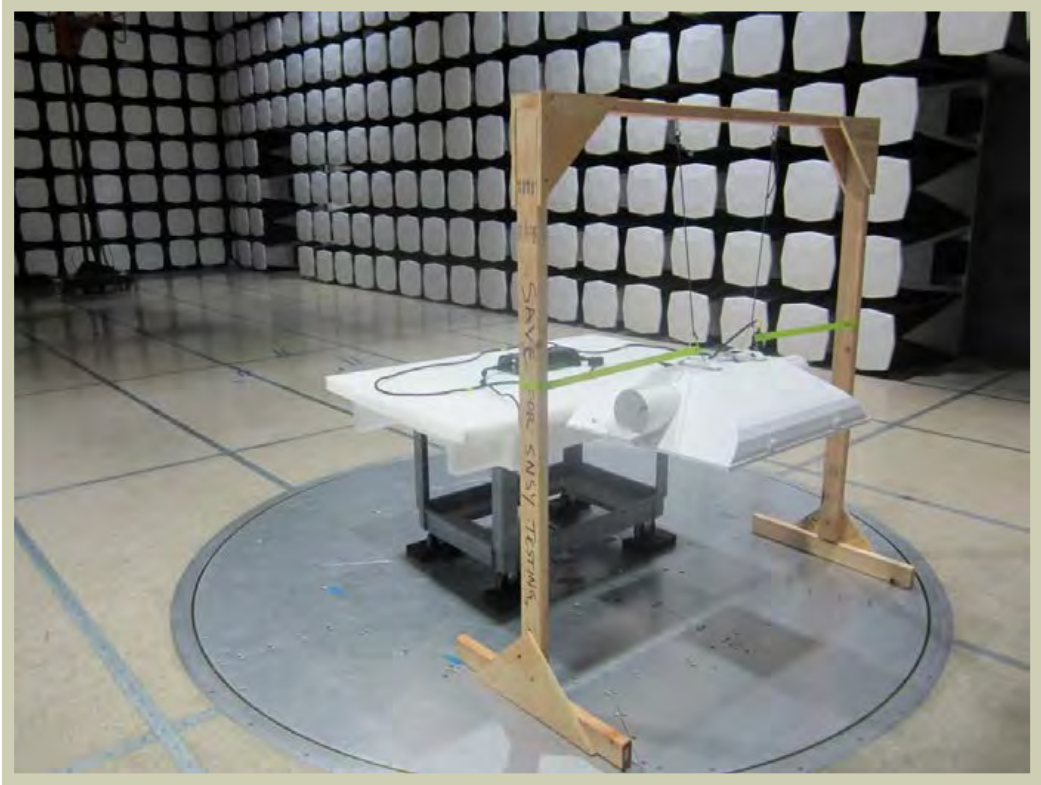


Tested By

# RADIATED EMISSIONS



# RADIATED EMISSIONS



# CONDUCTED EMISSIONS

