ENGINEERING AND TEST DIVISION
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TEST REPORT NO.: 419640-98-01-R24-0655

DAYTON T. BROWN, INC. JOB NO.: 419640

CUSTOMER: EG4 ELECTRONICS
1130 COMO ST. SOUTH
SULPHUR SPRINGS, TX 75482

SUBJECT: ELECTROMAGNETIC SUSCEPTIBILITY TEST PROGRAM PERFORMED ON AN ESS WITH 18KPV AND LL WALL MOUNT/SERVER RACK

PURCHASE ORDER NO.: POEG40694

THIS REPORT CONTAINS: 40 PAGES

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TEST ENGINEER:	J. ALEXANDRE
QUALITY DEPARTMENT:	D. THORNE
DATE:	AUGUST 29, 2024

THE DATA CONTAINED IN THIS REPORT WAS OBTAINED BY TESTING IN COMPLIANCE WITH THE APPLICABLE TEST SPECIFICATION AS NOTE

Revision History

Table 1 - Revision History

Revision	Date	Section Affected	Change
-	08/29/2024	Original Release	-

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1.0 Abstract

This report details the results of the electromagnetic emissions and susceptibility test program on the ESS with 18kPV and LL Wall Mount/Server Rack. Testing was performed in accordance with Paragraph 2.0 and was performed at Dayton T. Brown, Inc., Bohemia, New York.

The ESS with 18kPV and LL Wall Mount/Server Rack, hereafter is referred to as EUT (Equipment Under Test).

The EUT components are as follows:

Table 2 - EUT Components

Component	Part No.	Model No.	Serial No.
ESS with 18kPV and LL Wall Mount/Server Rack	Consisting of below		
18kPV Hybrid Inverter	N/A	18kPV-12LV/1V-12000-HYB-AW-00	3464660222
EG4 LL280Ah 48V Wall Mount	N/A	EG4-LL/SR-48-100-IN-01	SC2024010608
EG4 LL100Ah 48V Server Rack	SC2022101794	51.2V100Ah	SC2022101794

EUT information was provided by the customer.

Pre and post-test inspections revealed no external physical damage.

1.1 Test Summary

Table 3 lists the tests performed and the corresponding test results:

Table 3 - Test Summary

Test	Test Description	Limit	EUT	Met the Spec. Requirements	
				Yes	No
*RS105 Modified	Radiated Susceptibility, Transient Electromagnetic Field	MIL-STD-461G, Figure RS105-1, 50,000 V/m	EG4 LL100Ah 48V Server Rack, S/N: SC2022101794	X	
*RS105 Modified	Radiated Susceptibility, Transient Electromagnetic Field	MIL-STD-461G, Figure RS105-1, 50,000 V/m	EG4 LL100Ah 48V Server Rack, EG4 18kPV Hybrid S/Ns: SC2022101794, 3464660222	X	
*RS105 Modified	Radiated Susceptibility, Transient Electromagnetic Field	MIL-STD-461G, Figure RS105-1, 50,000 V/m	EG4 18kPV Hybrid Inverter, EG4 LL280Ah 48V Wallmount, S/Ns: 3464660222, SC2024010608	X	
*RS105 Modified	Radiated Susceptibility, Transient Electromagnetic Field	MIL-STD-461G, Figure RS105-1, 50,000 V/m	EG4 18kPV Hybrid Inverter, S/N: 3464660222	X	
*RS105 Modified	Radiated Susceptibility, Transient Electromagnetic Field	MIL-STD-461G, Figure RS105-1, 50,000 V/m	EG4 LL280Ah 48V Wallmount, S/N: SC2024010608	X	

The test results recorded in this report apply only to the sample(s) as received and relate only to those items tested.

*See 9.2.2 for deviation

Note: At the customer's request, this document does not contain all of the information required by MIL-STD-461G. All pertinent MIL-STD-461G reporting requirements are maintained by DTB and can be made available upon request.

2.0 References

a) MIL-STD-461G, Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment, 11 December 2015.

b) DI-EMCS-80200C, Data Item Description, Electromagnetic Interference Test Report (EMITR), 30 November 2007.

3.0 Acronyms and Abbreviations

The following acronyms and abbreviations may be used throughout this document:

Table 4 - Acronyms and Abbreviations

Acronym/ Abbreviation	Description	Acronym/ Abbreviation	Description
A	Amperes	H-field	Magnetic Field
AC	Alternating Current	HERF	Hazards of Electromagnetic Radiation to Fuel
AF	Audio Frequency	HERO	Hazards of Electromagnetic Radiation to Ordnance
Amp	Amplifier	HERP	Hazards of Electromagnetic Radiation to Personnel
Amps	Amperes	HIRF	High Intensity Radiated Fields
ASW	Anti-submarine Warfare	HPM	High Power Microwave
BIT	Built in Test	Hz	Hertz
BW	Bandwidth	ISM	Industrial, Scientific and Medical
CI	Commercial Item	ISO	International Organization for Standardization
CW	Continuous Wave	k	Kilo
dB	Decibels	LISN	Line Impedance Stabilization Network
DC	Direct Current	M	Mega
DoD or DOD	Department of Defense	m	milli
DRG	Double Ridge Guide	m	Meter
DTB	Dayton T. Brown, Inc.	µ	micro
E3 or E^3	Electromagnetic Environmental Effects	NDI	Non-Developmental Item
E-Field	Electric Field	n	nano
ELF	Extremely Low Frequency	Ω	Ohm
EMC	Electromagnetic Compatibility	p	pico
EMCON	Emission Control	P-Static	Precipitation Static
EME	Electromagnetic Environment	PRF	Pulse Repetition Frequency
EMF	Electromotive Force	PWM	Pulse Width Modulation
EMI	Electromagnetic Interference	RBW	Resolution Bandwidth
EMICP	Electromagnetic Interference Control Procedure	RF	Radio Frequency
EMITP	Electromagnetic Interference Test Procedure	rms	Root-mean-square
EMITR	Electromagnetic Interference Test Report	T	Tesla
EMP	Electromagnetic Pulse	TEM	Transverse Electromagnetic
ERP	Effective Radiated Power	TPD	Terminal Protection Device
ESD	Electrostatic Discharge	UHF	Ultra High Frequency
EUT	Equipment Under Test	UUT	Unit Under Test
F	Farad	V	Volts
FCC	Federal Communication Commission	VHF	Very High Frequency
G	Giga	VBW	Video Bandwidth
GFE	Government Furnished Equipment	VLF	Very Low Frequency
H	Henries	W	Watts

4.0 Administrative Information

Table 5 - Administrative Information

a)	EUT Quantity Received:	3
b)	EUT Quantity Tested:	3
c)	Date EUT Received:	July 31, 2024
d)	Date(s) Tested:	July 31 to August 4, 2024
e)	Date EUT Shipped:	August 9, 2024
f)	Customer Representative(s) Present During All or Part of the Testing:	
	Name	Affiliation
	Ashwanth Vitoba Prabakar	EG4 Electronics

5.0 Test Sample Information

5.1 Modifications

No modifications were made to the EUT during the course of this testing program.

5.2 Power Required

During testing, the input power was periodically monitored and maintained for the below condition:

Table 6 - Power Required

Cable Length	Cable and Description	Current
2 feet	2/0 Battery to Inverter Cable	140 A
6 feet	4 AWG Battery to Inverter Cable	50 A
6 feet	6 AWG Load Cable	50 A
25 feet	Grid to Inverter Cable	N/A
25 feet	Battery to Inverter Cable	N/A

5.3 Interconnecting Cables

The EUT was tested with the interface and power cables provided by EG4 Electronics. All leads in the shielded enclosure were a minimum of 2 meters. The EUT was configured with the following interfaces and cables:

Table 7 - Interconnecting Cables

Cable Length	Cable Description
2 feet	EG4 Communication Cable

6.0 Test Sample Operation

6.1 Mode of Operation

All testing was performed with the EUT operating as follows:

Operational:

- Inverters - Powering the electrical loads. Powered through Utility power.
- ESS - Powering the Electrical loads as a system.
- Batteries - Powering the electrical loads by discharging the batteries.

Note: The mode of operation was supplied by the customer.

6.2 Susceptibility Criteria

During susceptibility testing, operation of the EUT was monitored for any indication of malfunction or degradation of operation. Operation of the EUT was monitored by the customer representative during the susceptibility testing for the following:

- Inverters – The full functionality and reliability is monitored.
- Batteries – The charging/discharging of the battery pack and functionality is monitored.
- The LCD screen of the batteries and inverters is monitored.

Note: The susceptibility criteria was supplied by the customer.

7.0 General Test Information

7.1 Test Facility

All testing was performed at Dayton T. Brown, Inc., Bohemia, New York.

7.2 Setup

For the RS105 testing, the EUT was supported above the ground plane, under the RS105 antenna, using dielectric material that produces a minimum distortion of the EMI field.

Interface cables passed through the shielded enclosure bulkhead to the anteroom via bulkhead aperture. This allowed their shields to be terminated at the bulkhead.

Photograph(s) of the test setups are included in each test method.

7.3 Line Impedance Stabilization Networks

The line impedance stabilization networks (LISNs) were inserted in each of the power leads

The cases of the LISNs were bonded to the ground plane.

All LISNs had their signal output port terminated into 50 ohms. Paragraph 4.3.6 of MIL-STD-461G has details of the LISN.

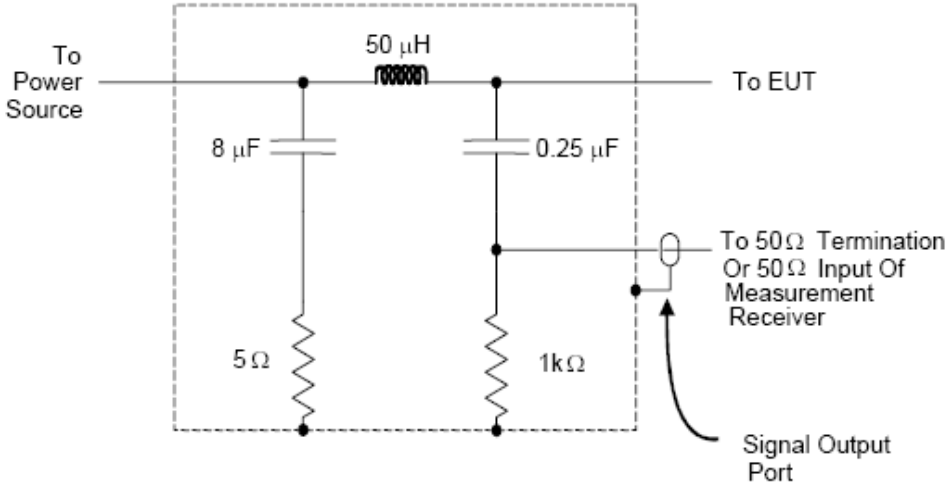
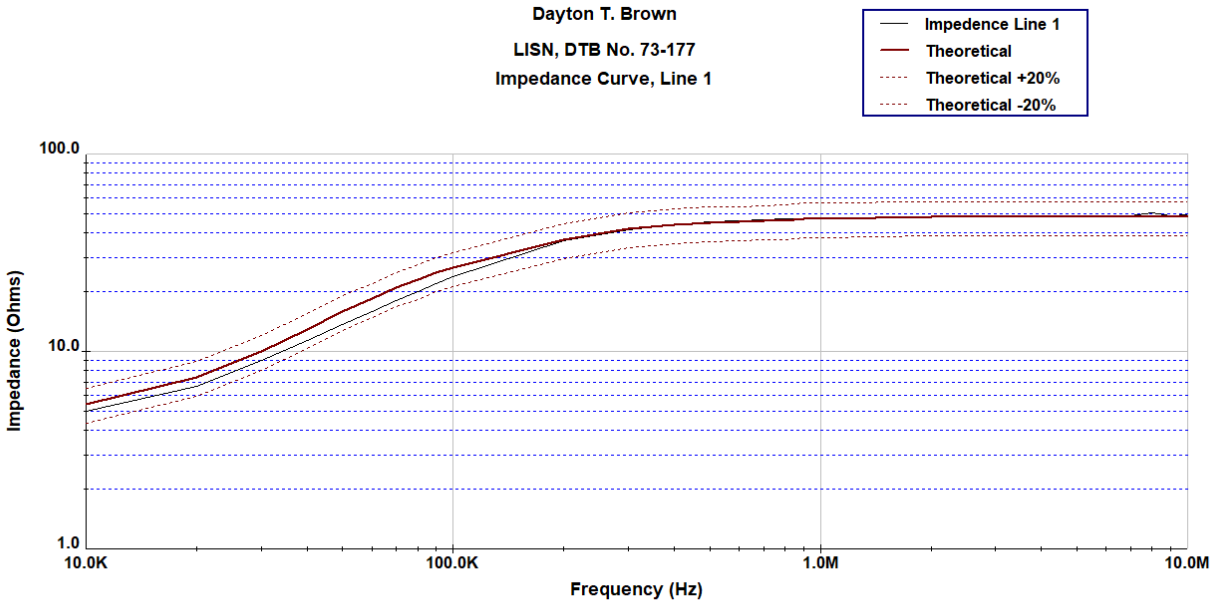
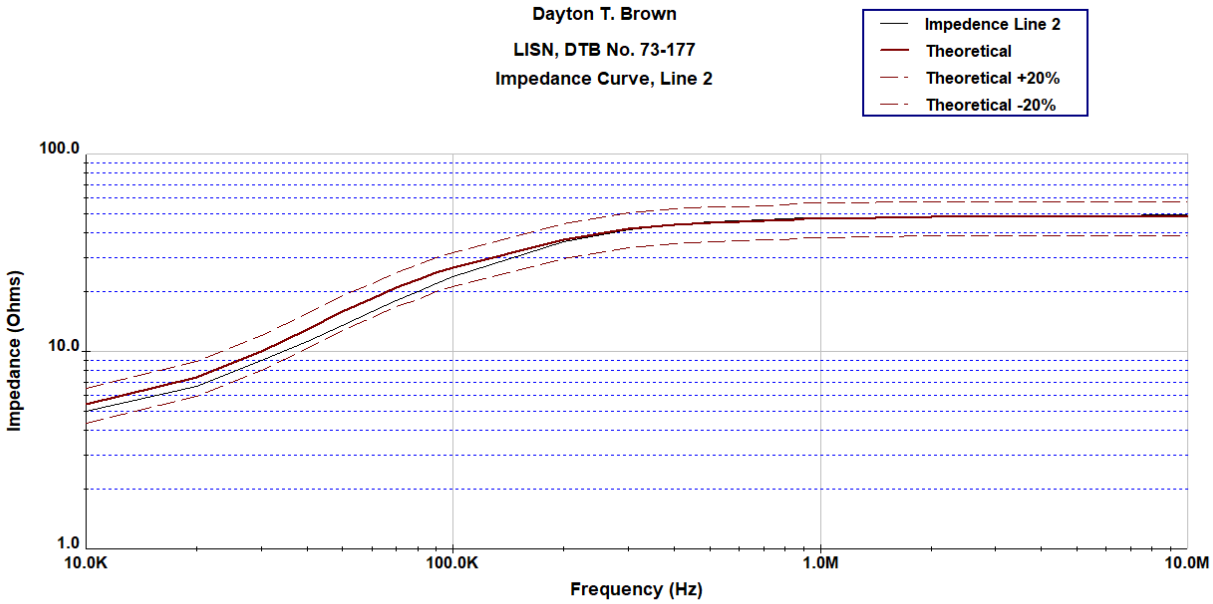


Figure 1 - LISN Schematic


Dayton T. Brown
LISN, DTB No. 73-177
Impedance Curve, Line 1
Impedence Line 1
Theoretical
Theoretical +20%
Theoretical -20%
100.0
10.0
1.0
Impedance (Ohms)
10.0K
100.0K
1.0M
10.0M
Frequency (Hz)


Dayton T. Brown
LISN, DTB No. 73-177
Impedance Curve, Line 2
Impedence Line 2
Theoretical
Theoretical +20%
Theoretical -20%
100.0
10.0
1.0
Impedance (Ohms)
10.0K
100.0K
1.0M
10.0M
Frequency (Hz)

8.0 Test Instrumentation

8.1 Tolerances

With any testing method there will be parameter variations due to the nature of testing. These parameter variations are controlled to be within a suitable range of the requirements of the specification. If no tolerances are given from the specification or customer procedure, any required parameter will have a tolerance of ± 20% or ± 6db, evaluated on a case by case basis.

8.2 Instrumentation Characteristics

Measurements are made using test equipment with performance monitored and, whenever possible, calibrated by the Dayton T. Brown, Inc. Metrology Department. The calibration system is set up to meet the applicable requirements stipulated in ISO/IEC 17025, ISO 9001, and ISO10012. All measuring instruments are calibrated with traceability to intrinsic, International, or National Standards such as NIST (National Institute of Standards and Technology) at periodic intervals. Details are on file at Dayton T. Brown, Inc., and will be made available upon request.

9.0 Test Methods

9.1 Bonding Measurements

9.1.1 Test Procedure

The DC resistance between the ground plane and the LISN is required to be 2.5 milliohms or less, as per MIL-STD-461G.

DC bonding measurements were made using a micro-ohmmeter. Measurements were taken from the LISNs to the ground plane.

9.1.2 Equipment List

Table 8 - Bonding, Equipment List

ITEM	MANUFACTURER	MODEL	DTB NO.	SERIAL NO.	CAL DUE DATE
FACILITY, RS105	Dayton T. Brown	RS105 FACILITY	01e-061	N/A	No Cal Required
OHMMETER, MICRO 1 µOhm - 2.5 kOhm	AEMC INSTRUMENTS	6255	9-252	130109TCDV	11/17/2024
L.I.S.N., 50 µH 4 LINE 20 AMP DC TO 400 HZ	Dayton T. Brown	461E-50-4	73-177	177	06/01/2025

9.1.3 Test Results

The Bonding Measurements met the requirements of MIL-STD-461G by verification to be less than 2.5 milliohms from the from the LISNs to the ground plane

9.1.3.1 Bonding Measurement, Test Data

	EG4 LL280Ah 48V Wall Mount EG4 LL100Ah 48V Server Rack		
Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	7/31/24
Customer:	EG4 Electronics	**Serial No.:**	See Table 2
Specification:	MIL-STD-461G	**Job No.:**	419640
Procedure:	MIL-STD-461G	**Technician:**	N.Vinas

Bonding Resistance Measurement **Met Requirement** **Yes** [X] **No** [ ]

Measurement Point (From)	Measurement Point (To)	Bonding Resistance (milliohms)	Spec. Limit (milliohms)	Remarks
LISN	Ground Plane	1.2	2.5	

9.2 Radiated Susceptibility, Method RS105, Transient Electromagnetic Field

9.2.1 Purpose

The purpose of this test is to verify the ability of the EUT to withstand transient electromagnetic fields.

9.2.2 Limit

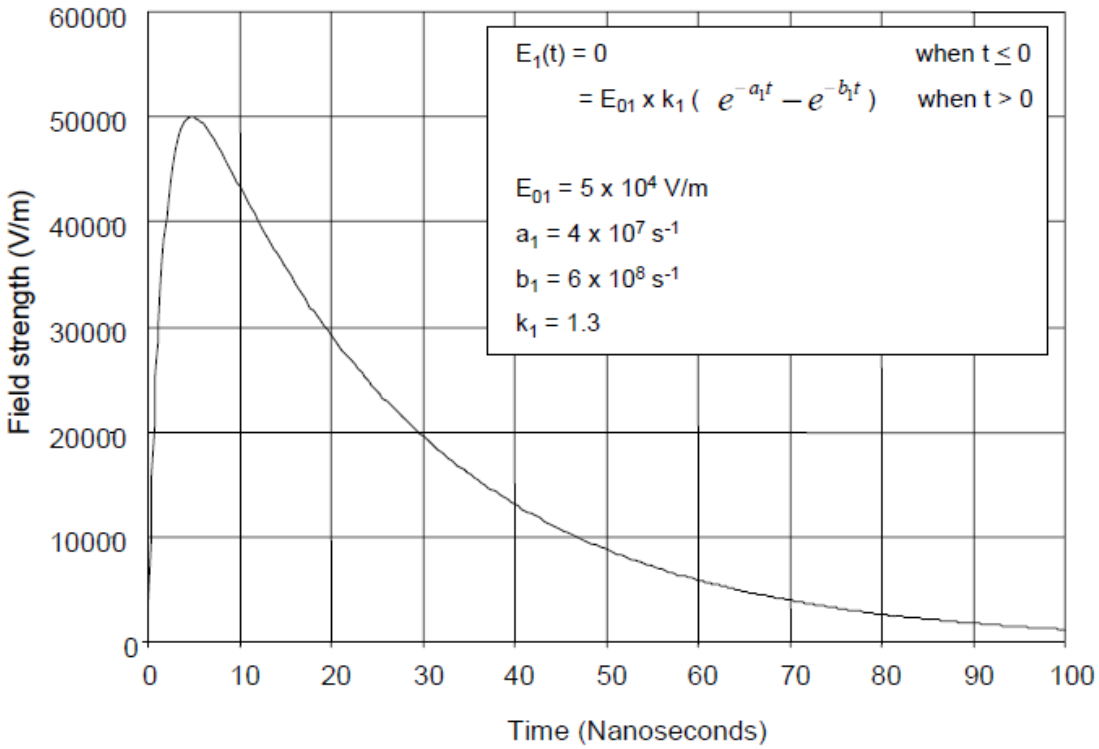


Figure 2 - RS105, Required Limit

Deviation: Risetime of 6 ns to 8 ns.

9.2.3 Equipment List

Table 9 - RS105, Equipment List

ITEM	MANUFACTURER	MODEL	DTB NO.	SERIAL NO.	CAL DUE DATE
Monitor, Free Space Magnetic Field	Montena	MOL3000, BL3-5G, SFM2G	65-467	4971, 4937	No Cal Required
EMP SIMULATOR SYSTEM	FCC	RS105	01e-043	001	No Cal Required
OSCILLOSCOPE, DIGITAL 4 CHANNEL 1 GHZ	TEKTRONIX	DPO4104B	1175591	C031042	07/20/2025
L.I.S.N., 50 µH 4 LINE 20 AMP DC TO 400 HZ	Dayton T. Brown	461E-50-4	73-177	177	06/01/2025

9.2.4 Test Setup

The test setup is as detailed in Paragraph 7.2 of this document.

Prior to setting up EUT for testing, the uniform field area of the RS105 test setup was verified

The EUT was placed within the working volume of the RS105 antenna array in such a manner that it did not exceed the usable volume of the radiation system (h/3, B/2, A/2)/(x,y,z) as shown in Figure RS105-3 of MIL-STD-461G (h is the maximum vertical separation of the plates). The test sample was located below the RS105 antenna, in the center of the uniform field area. A magnetic field sensor was used to measure the field.

The EUT was supported by dielectric material that produced a minimum distortion of the electromagnetic fields.

Cables for EUT operation were oriented to minimize induced currents and voltages on the cables. Cabling was oriented normal to the electric field vector and in a manner that minimizes the loop area normal to the magnetic field vector. Cables were directed below the ground plane through a bulkhead to minimize pickup.

The test setup employed was as detailed in the test setup photograph(s).

9.2.5 Calibration

Before the EUT was installed in the test setup, the field strength of the RS105 setup was verified.

The magnetic field sensor was placed in the center position of the five-point grid in the vertical plane where the front face of the EUT will be located.

Using the magnetic field sensor, it was verified that the pulsed field produced met the peak amplitude, rise time, and pulse width.

For 50,000 V/m the required magnetic field was 132.63 A/m.

Electric Field Strength = Magnetic Field Strength x Impedance of Air

Where:

Electric Field Strength (Target = 50,000 V/m)
Magnetic Field Strength Measured with sensor (Target = 132.63 A/m)
Impedance of Air = 377 Ohms

The pulse waveform was recorded on the oscilloscope.

The pulse generator settings and associated pulse drive amplitude were determined to satisfy the field requirements.

This process was repeated at each of the other four points of the grid.

The peak value of the electric or magnetic field for each grid position was verified to be 0 dB < magnitude < 6 dB above limit.

The calibration setup is illustrated in Figure 3.

9.2.6 Test Procedure

The pulse was applied at the calibrated generator setting to ensure that the drive pulse waveform characteristics were consistent with those noted during calibration.

The pulse was applied starting at approximately 20% (minimum possible with RS105 simulator system) of the pulse peak amplitude determined in calibration. The pulse amplitude was increased in step sizes of 2 or 3 until the required level was reached.

At least 5 pulses at a rate of not more than one pulse per minute were applied.

The EUT was monitored by the customer during and after each pulse for signs of susceptibility or degradation of performance.

The EUT was tested in three orthogonal orientations.

9.2.7 Test Results

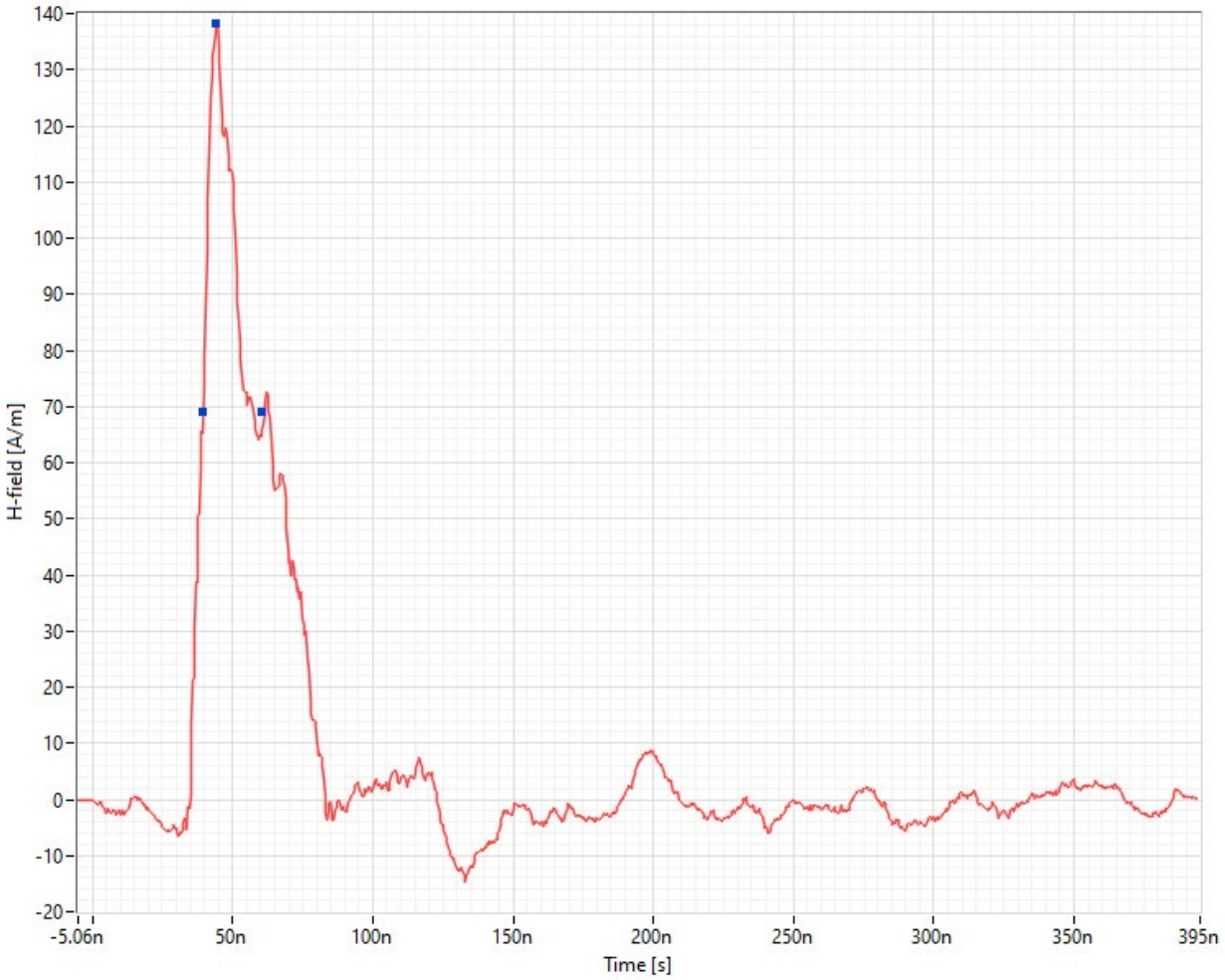
See Table 3 for EUT compliance.

See the following test data for detailed test results.

9.2.7.1 RS105, Calibration Data

	EG4 LL280Ah 48V Wallmount EG4 LL100Ah 48V Server Rack		
Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	7/28/2024
Customer:	EG4 Electronics	**Amplitude:**	50 kV/m
Test Mode:	Calibration, Rear Left	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	S. Gordon
Procedure:	MIL-STD-461G		

RS105, Transient Electromagnetic Field, H-Field Calibration

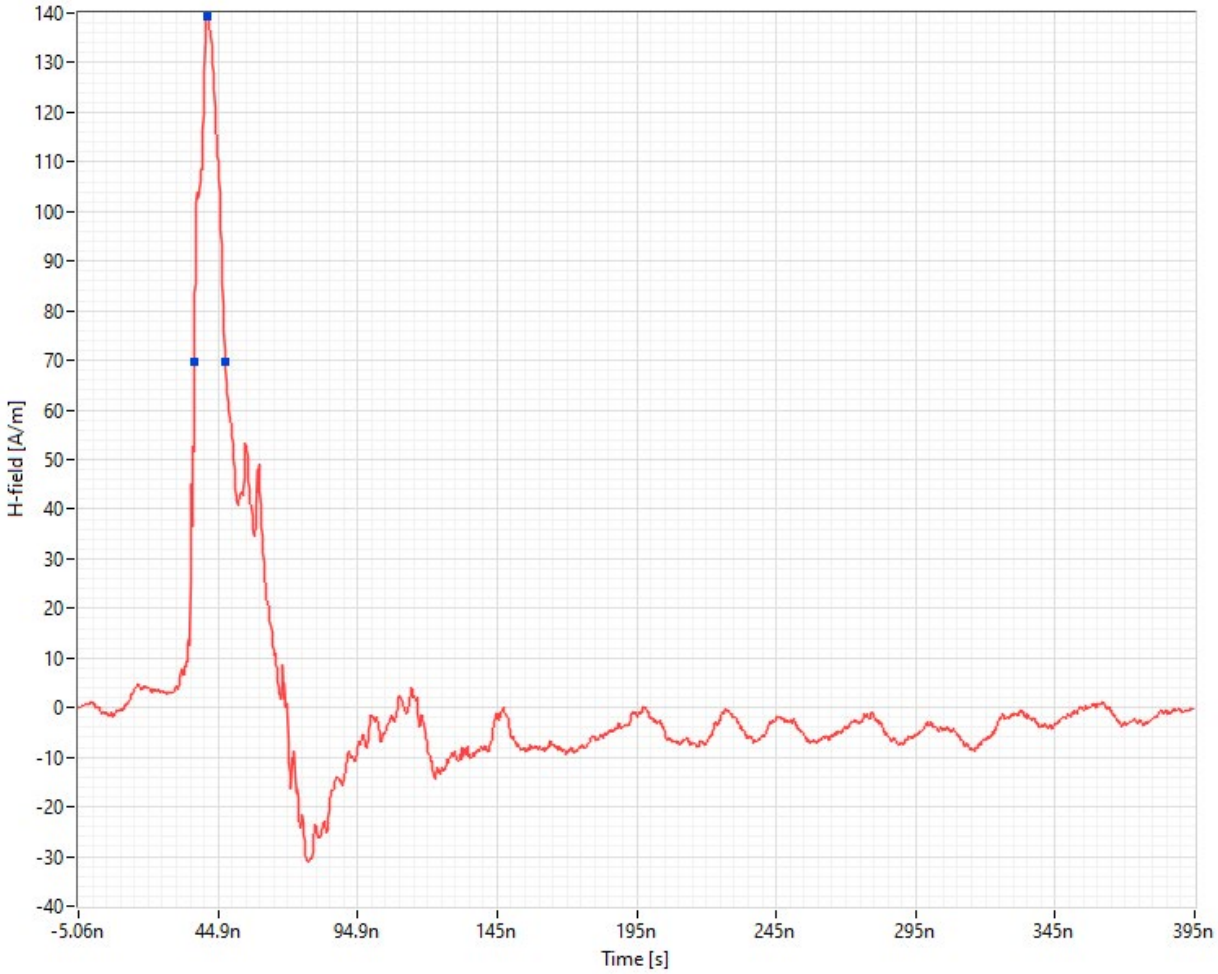


Required A/m: 132.6 Measured Ip: 138
Required V/m: 50,000 Measured Vp: 52,036 Power Supply Setting, kV: 32,000

Remarks:

	EG4 LL280Ah 48V Wallmount EG4 LL100Ah 48V Server Rack		
Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	7/28/2024
Customer:	EG4 Electronics	**Amplitude:**	50 kV/m
Test Mode:	Calibration, Rear Right	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	S. Gordon
Procedure:	MIL-STD-461G		

RS105, Transient Electromagnetic Field, H-Field Calibration

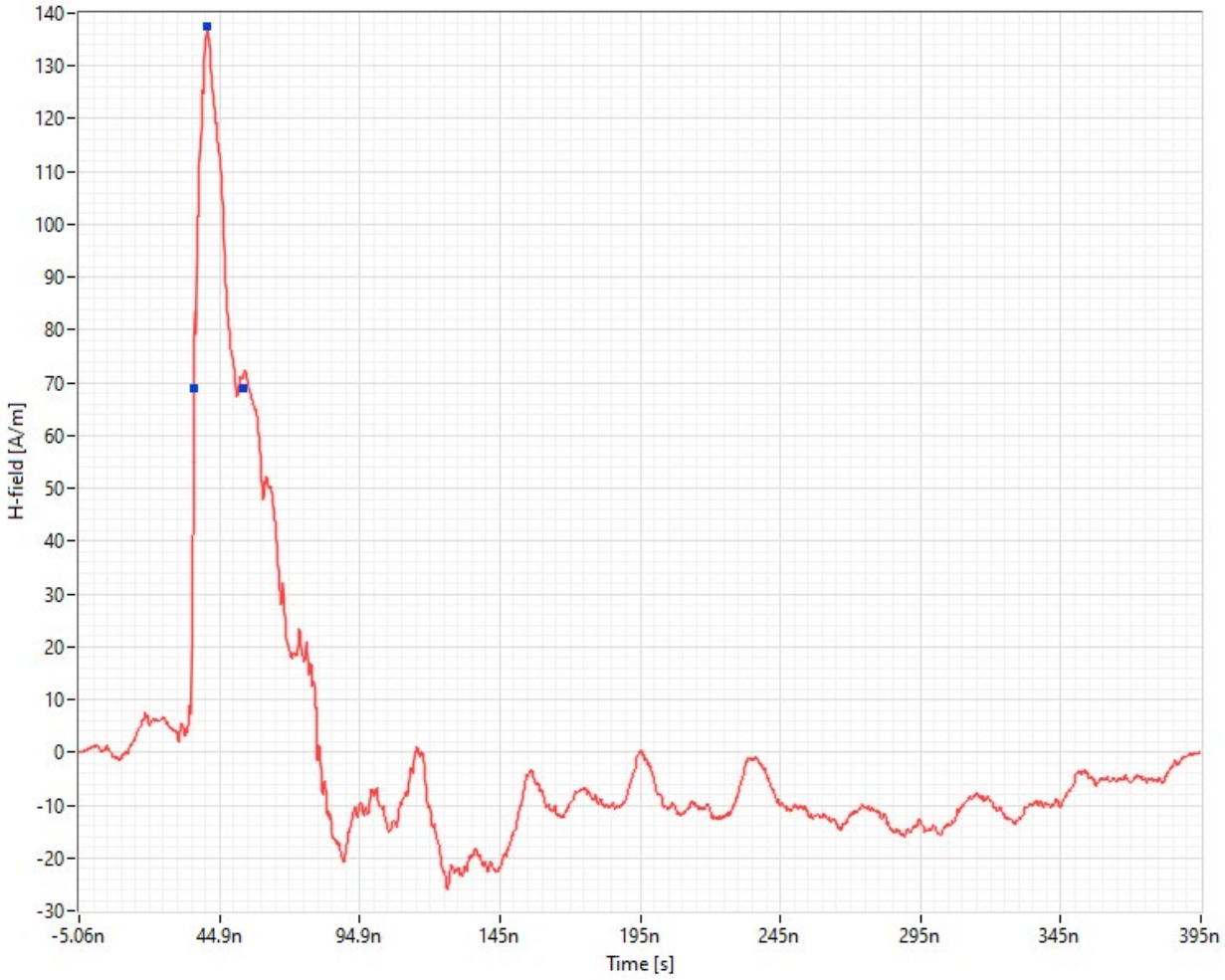


Required A/m: 132.6 Measured Ip: 139
Required V/m: 50,000 Measured Vp: 52,413 Power Supply Setting, kV: 32,000

Remarks:

	EG4 LL280Ah 48V Wallmount EG4 LL100Ah 48V Server Rack		
Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	7/28/2024
Customer:	EG4 Electronics	**Amplitude:**	50 kV/m
Test Mode:	Calibration, Front Right	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	S. Gordon
Procedure:	MIL-STD-461G		

RS105, Transient Electromagnetic Field, H-Field Calibration

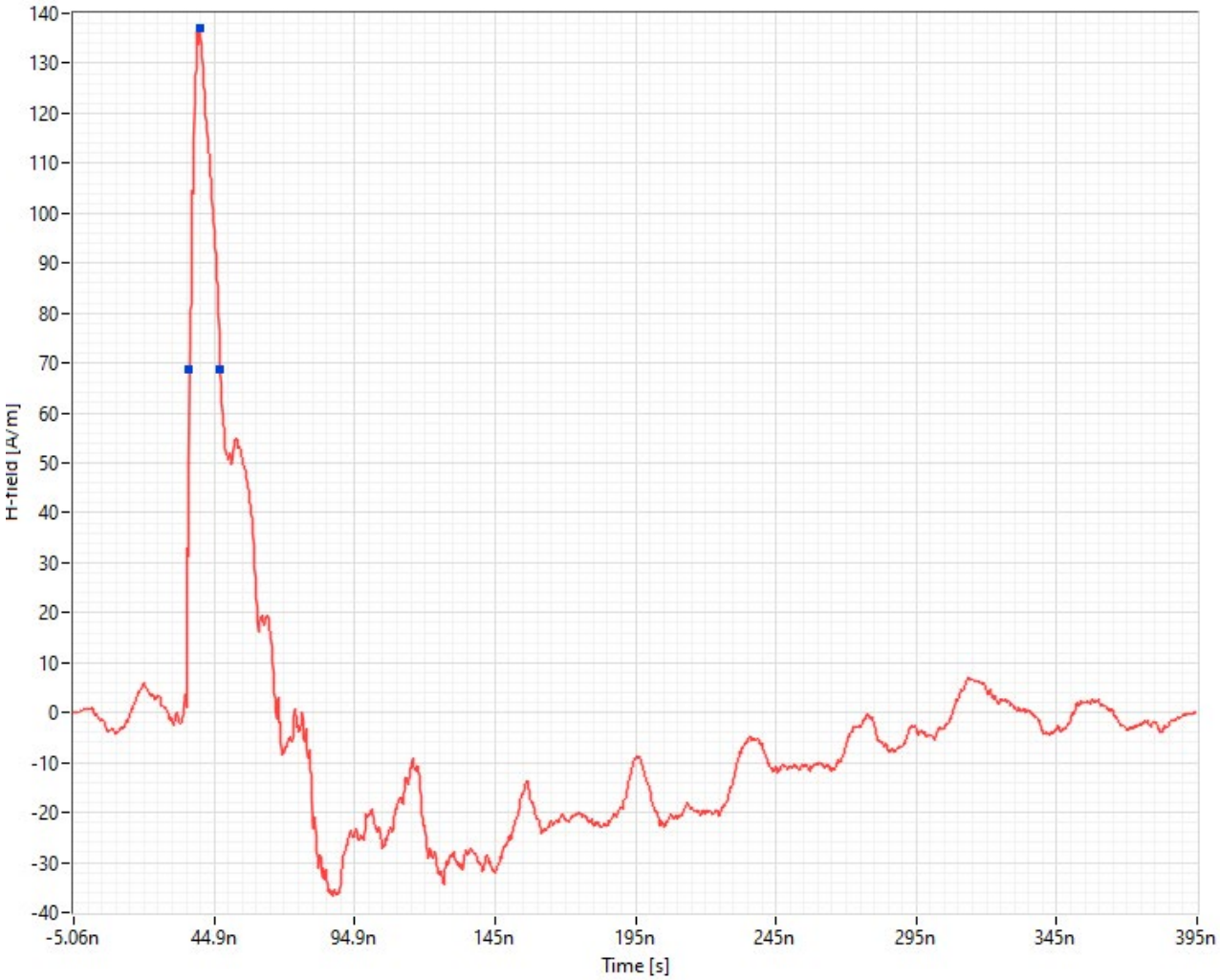


Required A/m: 132.6 Measured Ip: 138
Required V/m: 50,000 Measured Vp: 52,036 Power Supply Setting, kV: 32.000

Remarks:

	EG4 LL280Ah 48V Wallmount EG4 LL100Ah 48V Server Rack		
Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	7/28/2024
Customer:	EG4 Electronics	**Amplitude:**	50 kV/m
Test Mode:	Calibration, Front Left	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	S. Gordon
Procedure:	MIL-STD-461G		

RS105, Transient Electromagnetic Field, H-Field Calibration

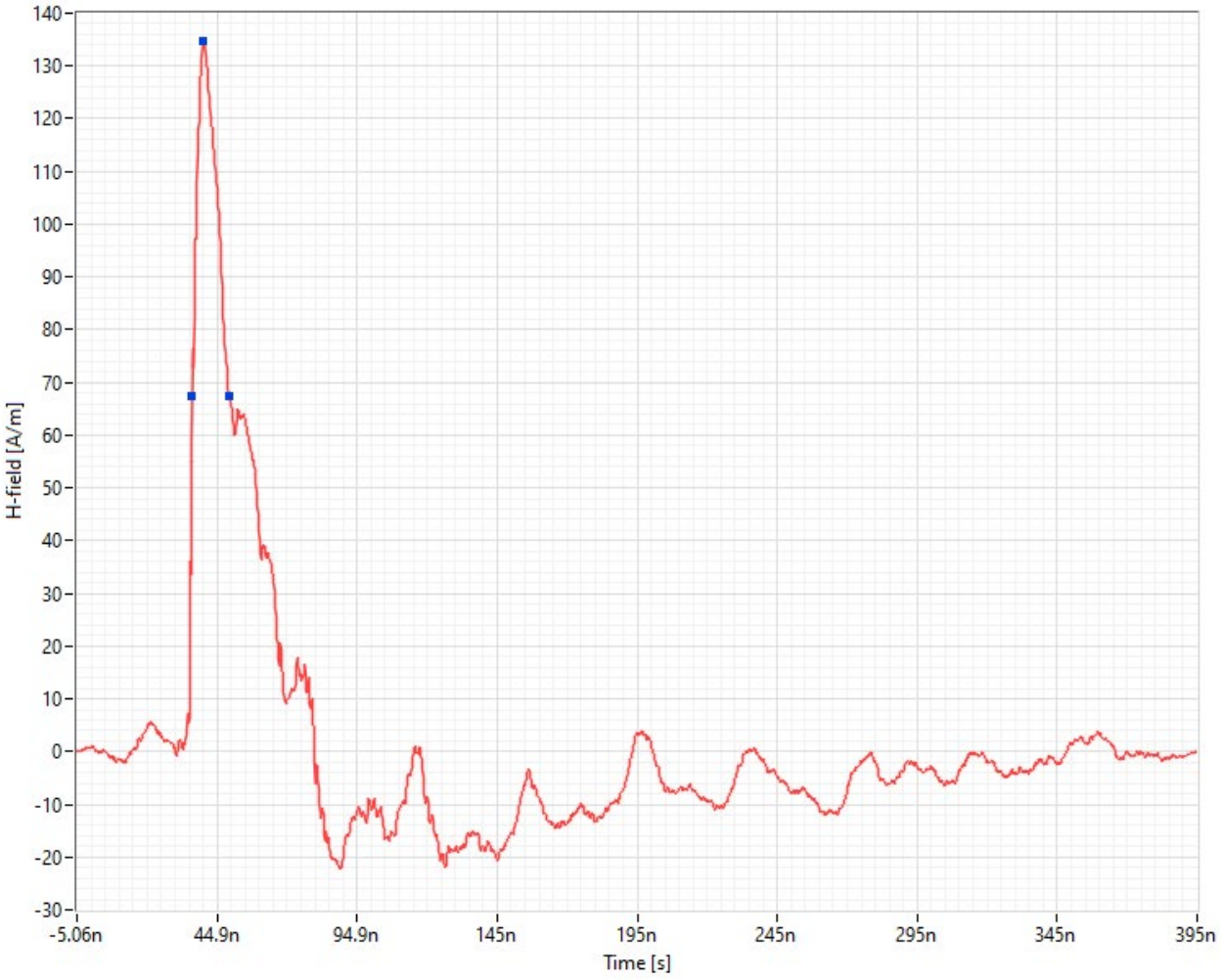


Required A/m: 132.6 Measured Ip: 137
Required V/m: 50,000 Measured Vp: 51,659 Power Supply Setting, kV: 32.000

Remarks:

	EG4 LL280Ah 48V Wallmount EG4 LL100Ah 48V Server Rack		
Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	7/28/2024
Customer:	EG4 Electronics	**Amplitude:**	50 kV/m
Test Mode:	Calibration, Center	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	S. Gordon
Procedure:	MIL-STD-461G		

RS105, Transient Electromagnetic Field, H-Field Calibration



Required A/m: 132.6 Measured Ip: 135
Required V/m: 50,000 Measured Vp: 50,904 Power Supply Setting, kV: 32.000

Remarks:

9.2.7.2 RS105, Test Data

Test Item:	EG4 LL100Ah 48V Server Rack	**Date:**	8/3/2024
Customer:	EG4 Electronics	**Serial No.:**	SC2022101794
Test Mode:	Standalone	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	N. Vinas
Procedure:	MIL-STD-461G		

Radiated Susceptibility, Method RS105, Transient Electromagnetic Field **Met Requirement** **Yes** [X] **No** [ ]

Applied Level (V/m)	Number of Pulses	Pulse Rate	Susceptibility Threshold Level (V/m)	Observation
50kV	5	1 Pulse per minute X-Axis	N/A	EUT functioned properly after application of the pulses.
50kV	5	1 Pulse per minute Y-Axis	N/A	EUT functioned properly after application of the pulses.
50kV	5	1 Pulse per minute Z-Axis	N/A	EUT functioned properly after application of the pulses.

Required A/m: 132.6 Measured Ip: 135
Required V/m: 50,000 Measured Vp: 50,895 Power Supply Setting, kV: 28,140

Remarks:

Test Item:	EG4 LL100Ah 48V Server Rack, EG4 18kPV Hybrid Inverter	**Date:**	8/3/2024
Customer:	EG4 Electronics	**Serial No.:**	SC2022101794, 3464660222
Test Mode:	ESS	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	N. Vinas
Procedure:	MIL-STD-461G		

Radiated Susceptibility, Method RS105, Transient Electromagnetic Field **Met Requirement** **Yes** [X] **No** [ ]

Applied Level (V/m)	Number of Pulses	Pulse Rate	Susceptibility Threshold Level (V/m)	Observation
50kV	5	1 Pulse per minute X-Axis	N/A	EUT functioned properly after application of the pulses, as per the customer.
50kV	5	1 Pulse per minute Y-Axis	N/A	EUT functioned properly after application of the pulses, as per the customer.
50kV	5	1 Pulse per minute Z-Axis	N/A	EUT functioned properly after application of the pulses, as per the customer.

Required A/m: 132.6 Measured Ip: 139
Required V/m: 50,000 Measured Vp: 52,403 Power Supply Setting, kV: 28,140

Remarks:

Test Item:	EG4 18kPV Hybrid Inverter, EG4 LL280Ah 48V Wallmount	**Date:**	8/4/2024
Customer:	EG4 Electronics	**Serial No.:**	3464660222, SC2024010608
Test Mode:	Standalone	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	N. Vinas
Procedure:	MIL-STD-461G		

Radiated Susceptibility, Method RS105, Transient Electromagnetic Field **Met Requirement** **Yes** [X] **No** [ ]

Applied Level (V/m)	Number of Pulses	Pulse Rate	Susceptibility Threshold Level (V/m)	Observation
50kV	5	1 Pulse per minute X-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.
50kV	5	1 Pulse per minute Y-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.
50kV	5	1 Pulse per minute Z-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.

Required A/m: 132.6 Measured Ip: 136
Required V/m: 50,000 Measured Vp: 51,272 Power Supply Setting, kV: 28,140

Remarks:

Test Item:	EG4 18kPV Hybrid Inverter	**Date:**	8/2/2024
Customer:	EG4 Electronics	**Serial No.:**	3464660222
Test Mode:	Standalone	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	N. Vinas
Procedure:	MIL-STD-461G		

Radiated Susceptibility, Method RS105, Transient Electromagnetic Field **Met Requirement** **Yes** [X] **No** [ ]

Applied Level (V/m)	Number of Pulses	Pulse Rate	Susceptibility Threshold Level (V/m)	Observation
50kV	5	1 Pulse per minute X-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.
50kV	5	1 Pulse per minute Y-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.
50kV	5	1 Pulse per minute Z-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.

Required A/m: 132.6 Measured Ip: 136
Required V/m: 50,000 Measured Vp: 51,272 Power Supply Setting, kV: 28,140

Remarks:

Test Item:	EG4 LL280Ah 48V Wallmount	**Date:**	8/4/2024
Customer:	EG4 Electronics	**Serial No.:**	SC2024010608
Test Mode:	Operational	**Job No.:**	419640
Specification:	MIL-STD-461G	**Technician:**	N. Vinas
Procedure:	MIL-STD-461G		

Radiated Susceptibility, Method RS105, Transient Electromagnetic Field **Met Requirement** **Yes** [X] **No** [ ]

Applied Level (V/m)	Number of Pulses	Pulse Rate	Susceptibility Threshold Level (V/m)	Observation
50kV	5	1 Pulse per minute X-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.
50kV	5	1 Pulse per minute Y-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.
50kV	5	1 Pulse per minute Z-Axis	N/A	EUT functioned properly after application of the pulses as per the customer.

Required A/m: 132.6 Measured Ip: 141
Required V/m: 50,000 Measured Vp: 53,157 Power Supply Setting, kV: 28,140

Remarks:

9.2.8 RS105, Test Setup Diagram(s)

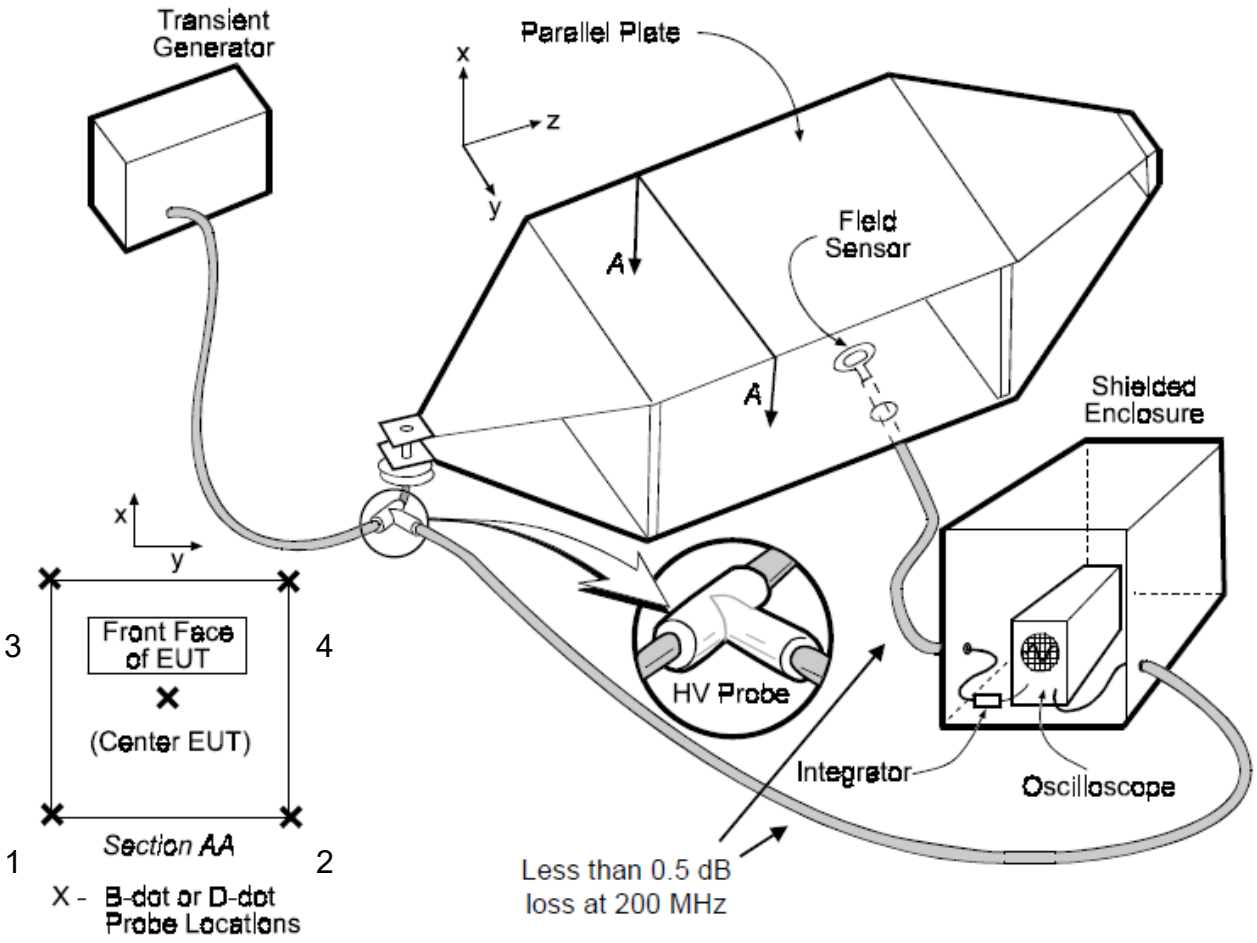


Figure 3 - RS105, Calibration Verification Setup

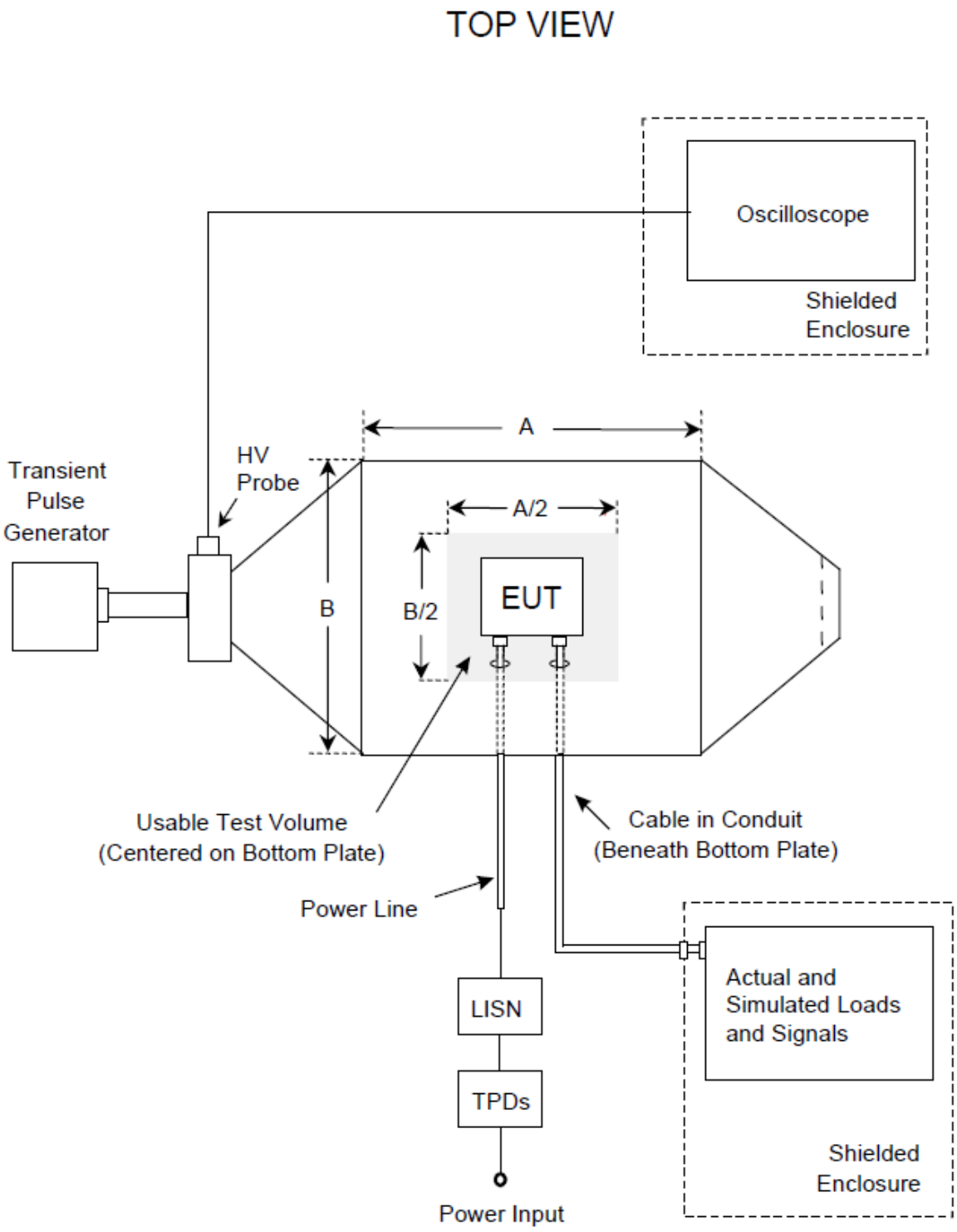
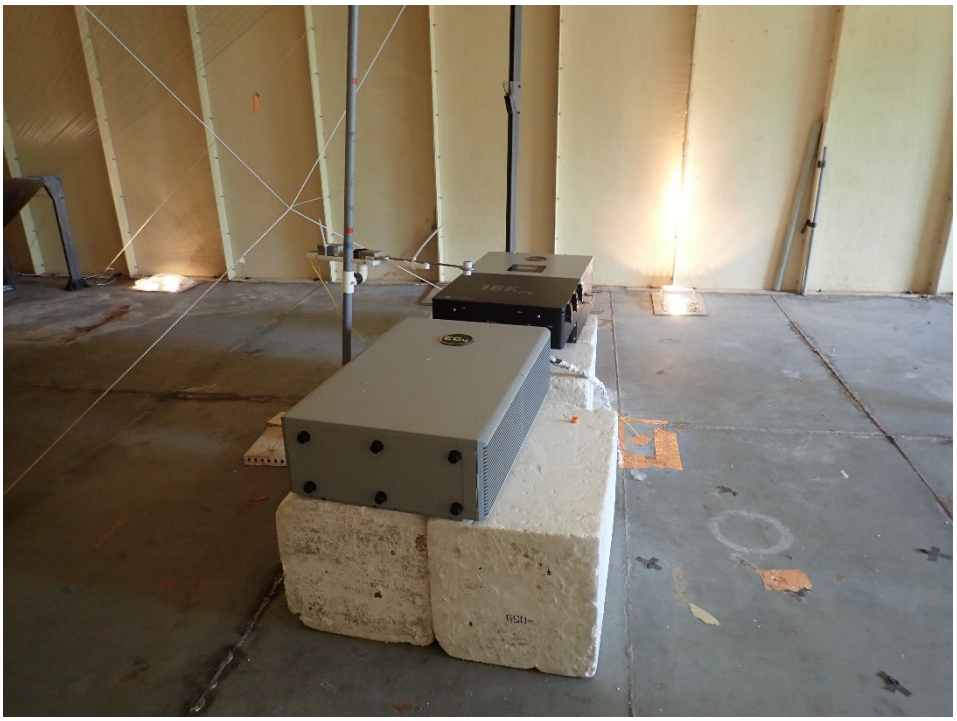
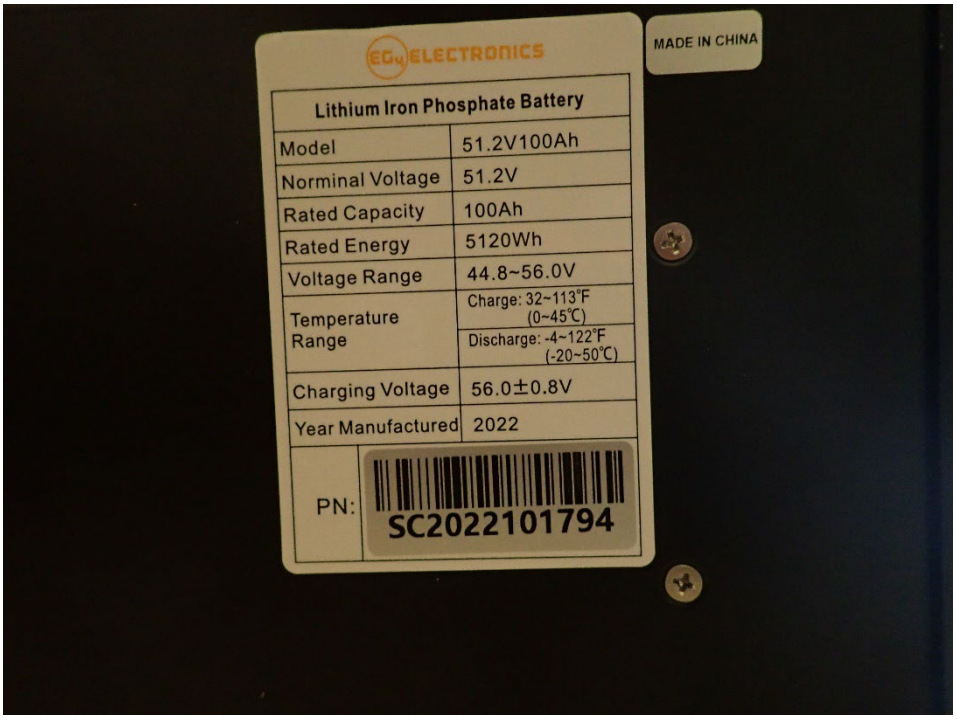


Figure 4 - RS105, Typical Test Setup

9.2.9 RS105, Test Setup Photograph(s)



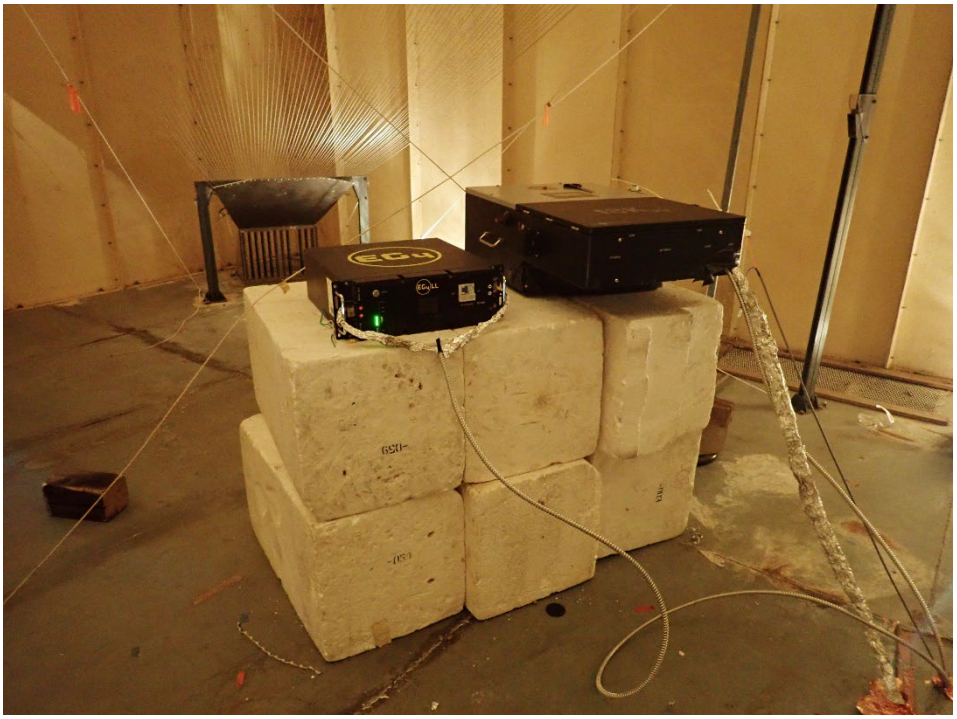
EG4 18kPV Hybrid Inverter EG4 LL280Ah 48V Wallmount on X Axis



Part Number of EG4 LL100Ah 48V Server Rack (Serial No. SC2022101794)

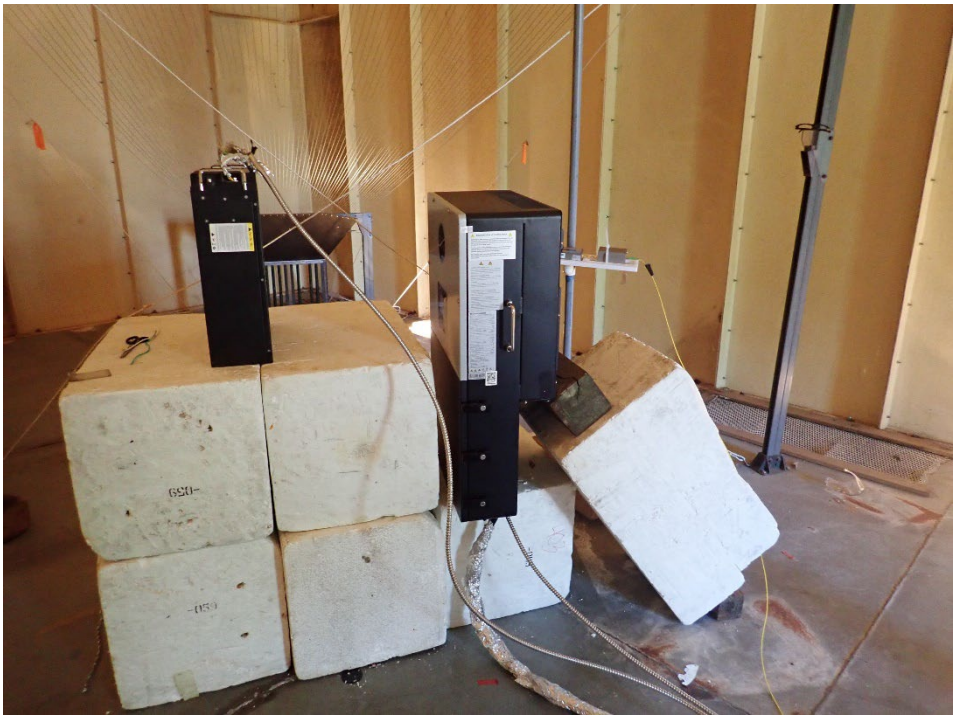
EG4 18kPV Hybrid Inverter (Serial No. 3464660222) with EG4 LL100Ah 48V Server Rack (Serial No. SC2022101794) on X Axis

Serial Number of EG4 18kPV Hybrid Inverter (Serial No. 3464660222)



Test Setup of EG 4LL100Ah 48V Sever Rack (Serial No. SC2022101794) and EG4 18kPV Hybrid Inverter (Serial No. 3464660222) on X Axis

Test Setup of EG4 LL100Ah 48V Server Rack (Serial No. SC2022101794) and EG4 18kPV Hybrid Inverter (Serial No. 3464660222) on Y Axis

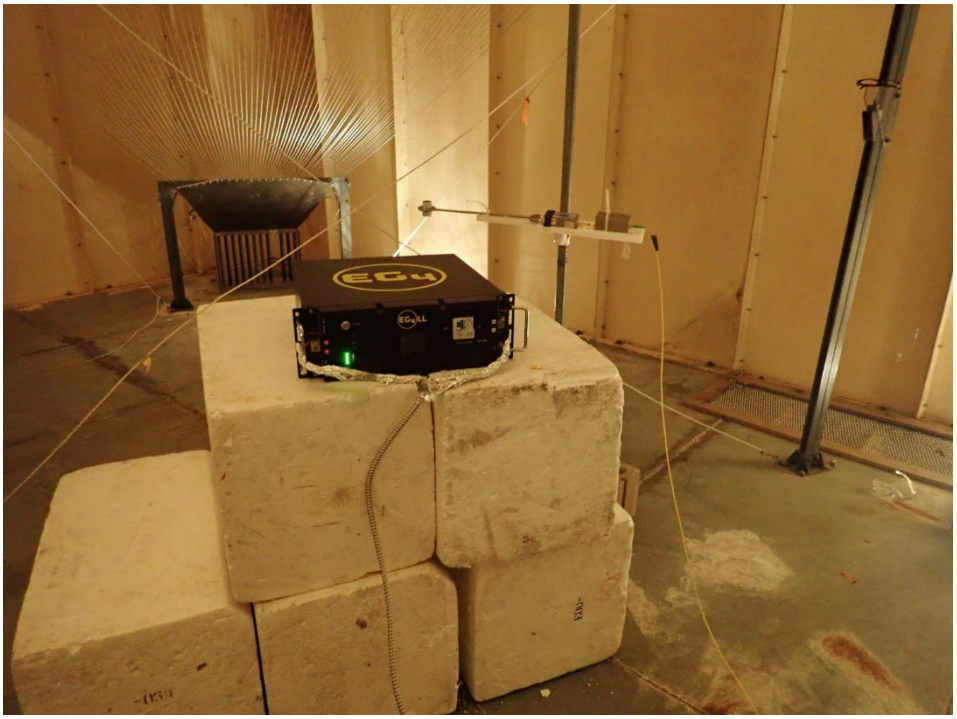


Test Setup of EG 4LL100Ah Server Rack (Serial No. SC2022101794) and EG4 18kPV Hybrid Inverter (Serial No. 3464660222) on Z Axis

Test Setup of EG4 18kPV Hybrid Inverter (Serial No. 3464660222) on Z Axis

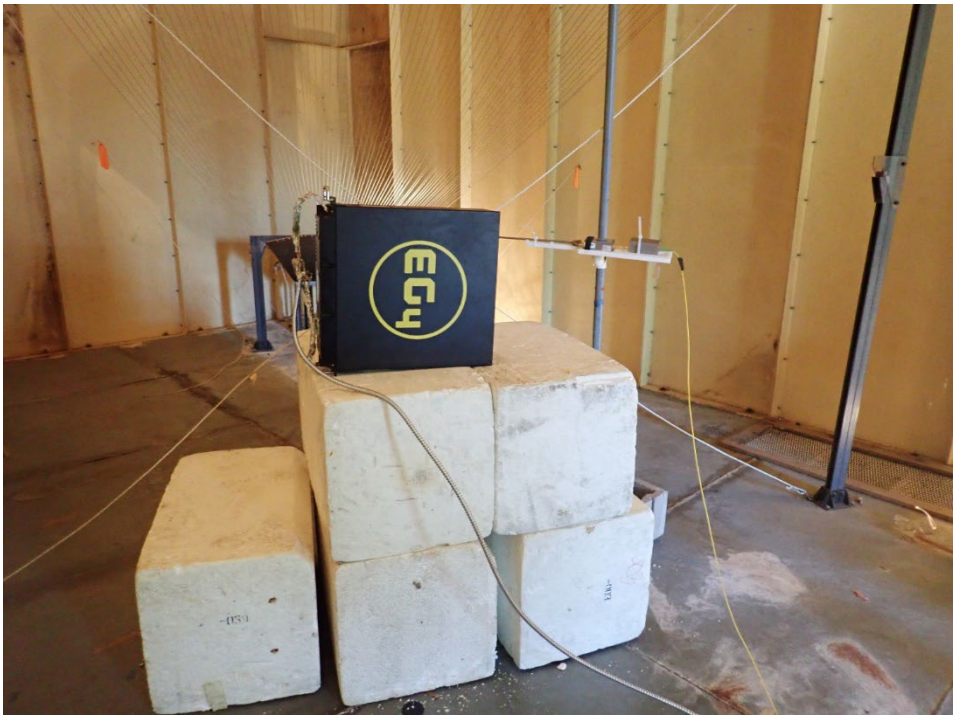
Test Setup of EG4 18kPV Hybrid Inverter (Serial No. 3464660222) on Y Axis

Test Setup of EG4 18kPV Hybrid Inverter (Serial No. 3464660222) on X Axis

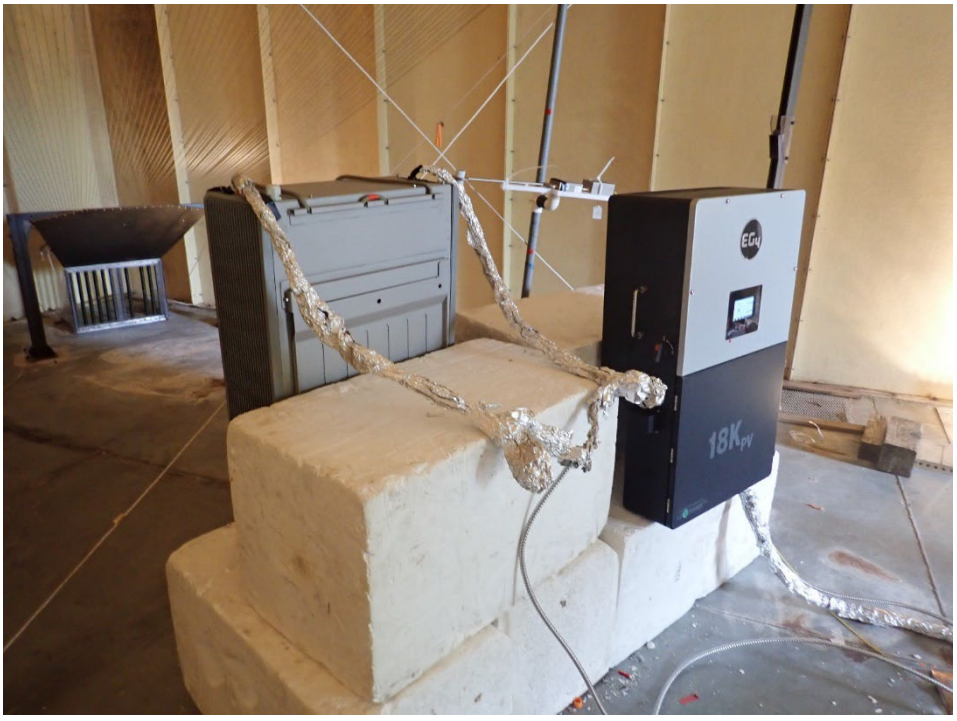


Test Setup of EG4 LL100Ah 48V Server Rack (Serial No. SC2022101794) on X Axis

Test Setup of EG4 LL100Ah 48V Server Rack (Serial No. SC2022101794) on Z Axis



Test Setup of EG4 LL100Ah 48V Server Rack (Serial No. SC2022101794) on Y Axis



Test Setup of Unit EG4 18kPV Hybrid Inverter (Serial No. 3464660222) and EG4 LL280Ah 48V Wallmount (Serial No. SC2024010608) in Z Axis

Test Setup of Unit EG4 18kPV Hybrid Inverter (Serial No. 3464660222) and EG4 LL280Ah 48V Wallmount (Serial No. SC2024010608) in Y Axis