



## EMC TEST REPORT

**Product** : AC Servo Motor

**Trade mark** :  **Leadshine**®  雷赛智能®  
Leadshine

**Model/Type reference** : ELVM60XXV48\*\*-\*\*\*-\*\*  
("XX" stands for motor power,  
can be:20=200W, 40=400W, 60=600W;  
"\*" represents motor accessory configuration,  
including inertia shaft form encoder lock connector  
and other features."\*" is number from "0"to "9" or "A"  
to "Z" )

**Serial Number** : N/A

**Ratings** : 48V

**Report Number** : EED32O802737

**Date of Issue** : Mar. 31, 2022

**Regulations** : See below

Test Standards	Results
<input checked="" type="checkbox"/> EN IEC 61000-6-2:2019	PASS
<input checked="" type="checkbox"/> EN IEC 61000-6-4:2019	PASS

Prepared for:

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Date of Issue:

Mar. 31, 2022

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Check No.: 9026020322



## Modification Record

No.	Last Report No.	Modification Description
1	EED32N814148	First report
2	EED32O802737	Modify model name. Modify applicant address and manufacturer address.
Part test data come from the report of No. EED32N814148.		

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*(Note: N/A means not applicable)*



## 1. GENERAL INFORMATION

**Applicant:** China Leadshine Technology Co., Ltd.  
15-20/F, Block B, Nanshan I Valley, No.3185, Shahe West Road, Nanshan District, Shenzhen

**Manufacturer:** China Leadshine Technology Co., Ltd.  
15-20/F, Block B, Nanshan I Valley, No.3185, Shahe West Road, Nanshan District, Shenzhen

**EMC Directive:** 2014/30/EU

**Product:** AC Servo Motor

**Trade mark:**  **Leadshine**<sup>®</sup>  雷赛智能<sup>®</sup>  
Leadshine

**Model/Type reference:** ELVM60XXV48\*\*\_\*\*\_\*\_\*\_\*\_\*  
("XX" stands for motor power, can be:20=200W, 40=400W, 60=600W;  
"\*" represents motor accessory configuration, including inertia shaft form encoder lock connector and other features. "\*" is number from "0" to "9" or "A" to "Z" )

**Serial Number:** N/A

**Report Number:** EED32O802737

**Sample Received Date:** Dec. 22, 2021

**Sample tested Date:** Dec. 22, 2021 to Dec. 26, 2021

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.



## 2. TEST SUMMARY

The Product has been tested according to the following specifications:

EMISSION		
Standard	Test Item	Test
EN 61000-6-4	Conducted Emission	Yes
EN 61000-6-4	Radiated Emission	Yes

IMMUNITY (EN 61000-6-2)		
Standard	Test Item	Test
IEC 61000-4-2	Electrostatic discharge	Yes
IEC 61000-4-3	Radio-frequency electromagnetic field	Yes
IEC 61000-4-4	Fast transients	Yes
IEC 61000-4-5	Surges	Yes
IEC 61000-4-6	Radio-frequency common mode	Yes
IEC 61000-4-8	Power-frequency magnetic fields	N/A <sup>1</sup>
IEC 61000-4-11	Voltage dips and voltage interruptions	N/A <sup>2</sup>

Remark:

1. The Product doesn't contain any device susceptible to magnetic fields.
2. The Product is powered by DC power.

## 3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Value (dB)
Conducted disturbance	3.1
Radiated disturbance (30MHz to 1GHz)	4.9

## 4. PRODUCT INFORMATION AND TEST SETUP

### 4.1 PRODUCT INFORMATION

Ratings: 48V

The highest frequency of the internal sources of the EUT is :

- less than 108 MHz, the measurement shall only be made up to 1 GHz.
- between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz.
- between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz.
- above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.

**Model difference:**

Their electrical circuit design, layout, components used and internal wiring are identical. The difference is motor power, Inertia type and motor situation. The test model is ELVM6006V48EL-M17-HD and the test results are applicable to the others.

### 4.2 TEST SETUP CONFIGURATION

See test photographs attached in APPENDIX 1 PHOTOGRAPHS OF TEST SETUP for the actual connections between Product and support equipment.

### 4.3 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	Data Cable	Power Cord
1.	Servo Drive	Leadshine	LD2-7030	---	---	---

**Notes:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

## 5. FACILITIES AND ACCREDITATIONS

### 5.1 TEST FACILITY

All measurement facilities used to collect the measurement data are located at Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

### 5.2 TEST EQUIPMENT LIST

**Instrumentation:** The following list contains equipments used at CTI for testing. The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.

#### Equipment used during the tests:

Shielding Room No. 3 - Conducted disturbance Test				
Equipment	Manufacturer	Model	Serial No.	Due Date
Receiver	R&S	ESCI	100435	04/14/2022
LISN	R&S	ENV216	100098	03/03/2022

3M Semi-anechoic Chamber (2)- Radiated disturbance Test				
Equipment	Manufacturer	Model	Serial No.	Due Date
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/22/2022
Receiver	R&S	ESCI7	100938-003	10/11/2022
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	401	10/15/2022
Multi device Controller	matur	NCD/070/10711 112	---	---
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/14/2022
Microwave Preamplifier	Agilent	8449B	3008A02425	06/22/2022

Shielding Room No. 3 - Electrostatic discharge Test (EN 61000-4-2)				
Equipment	Manufacturer	Model	Serial No.	Due Date
ESD Simulator	TESEQ	NSG437	1182	06/27/2022



3M Full-anechoic Chamber - Radio-frequency electromagnetic field Test (EN 61000-4-3)				
Equipment	Manufacturer	Model	Serial No.	Due Date
3M Chamber & Accessory Equipment	ETS-LINDGREN	FACT-3	3510	05/29/2022
Power Amplifier	AR	150W1000	0322288	12/25/2022
Stacked double Log.-Per. Antenna	schwarzbeck	STLP 9128 E special	9128ES-110	---
Signal Generator	Agilent	E4438C	MY42082153	12/25/2022
Horn Antenna	AR	ATH800M5GA	0342530	---
Power Amplifier	RFLIGHT	NTWPA-106050	18019001	12/25/2022

Shielding Room No. 3 - Fast transients / Surges Test (EN 61000-4-4) (EN 61000-4-5)				
Equipment	Manufacturer	Model	Serial No.	Due Date
Compact Generator	EM-Test	UCS500M/6B	V0603101093	04/14/2022

Shielding Room No. 2 - Radio-frequency continuous conducted Immunity Test (IEC 61000-4-6)				
Equipment	Manufacturer	Model	Serial No.	Due Date
RF conduction immunity test system	TESEQ	NSG 4070C-80	59089	08/27/2022
Attenuator	BIRD	75-A-MFN-06	0543	08/03/2024
CDN	EM-Test	CDN M2/M3	0204-01	10/13/2022

### 5.3 LABORATORY ACCREDITATIONS AND LISTINGS

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

## 6. CONDUCTED DISTURBANCE

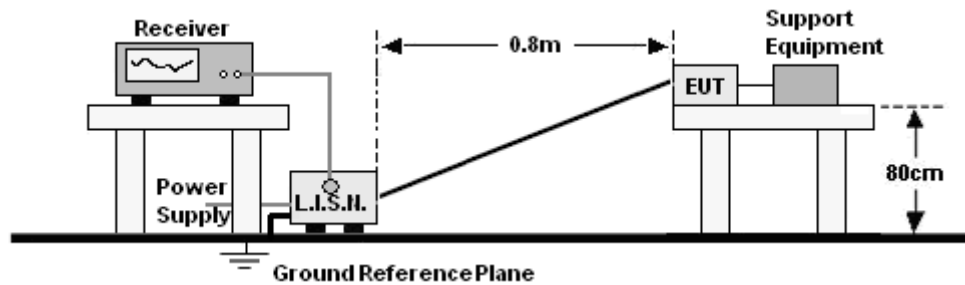
### 6.1 Limits

Frequency range (MHz)	Limits	
	Quasi-peak	Average
0,15 to 0,50	89	76
0,50 to 30	83	70

**NOTE:** The lower limit shall apply at the transition frequency.

### 6.2 BLOCK DIAGRAM OF TEST SETUP

For DC mains port:



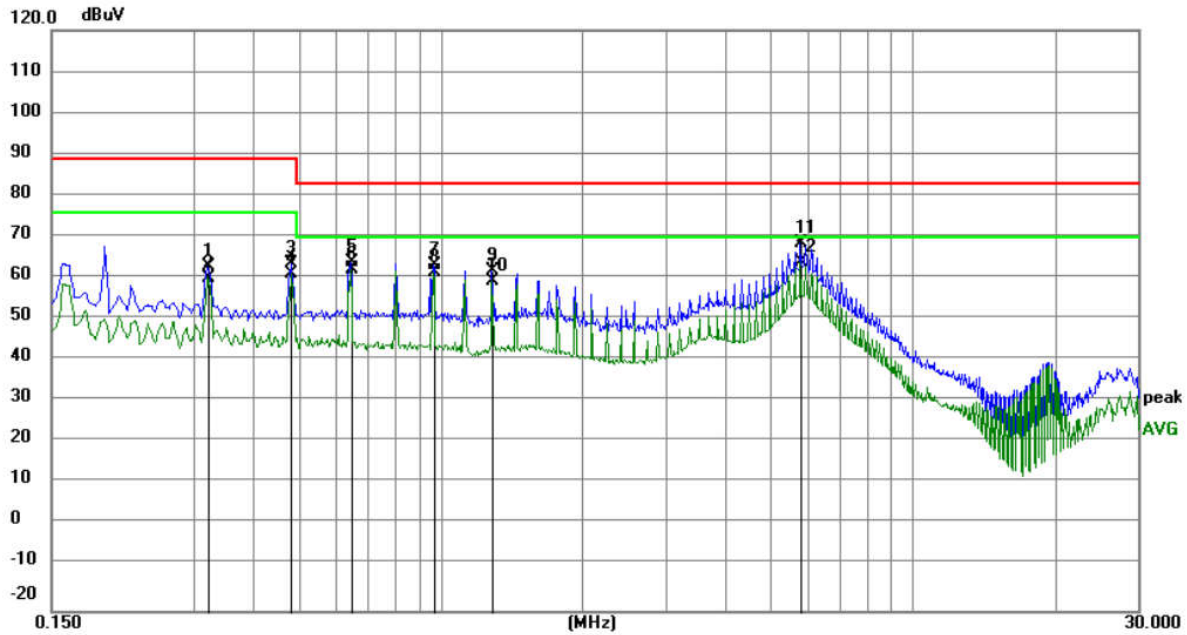
### 6.3 TEST PROCEDURE

For DC mains port :

- The Product was placed on a nonconductive table 0.8m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

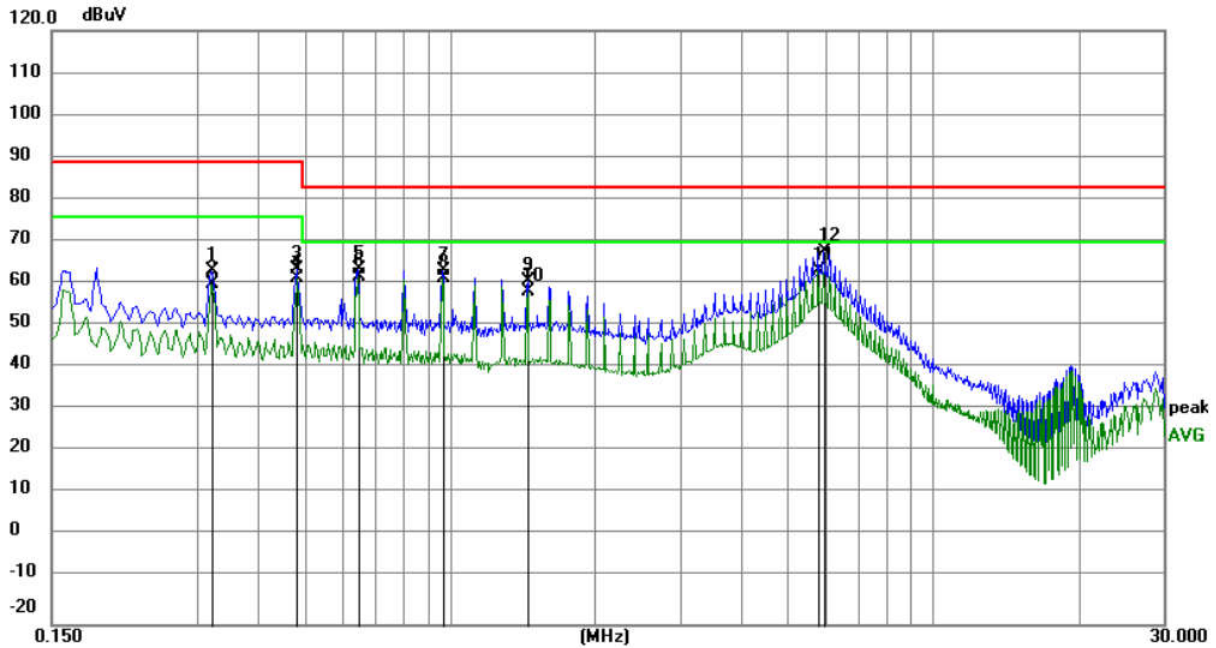
## 6.4 GRAPHS AND DATA

**Product** : AC Servo Motor    **Model/Type reference** : ELVM6006V48EL-M17-HD  
**Power** : DC 48V    **Temperature/Humidity** : 24°C/54%  
**Mode** : Running    **Polarization** : L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.3209	53.12	10.05	63.17	89.00	-25.83	QP	
2		0.3209	50.45	10.05	60.50	76.00	-15.50	AVG	
3		0.4830	53.73	9.95	63.68	89.00	-25.32	QP	
4		0.4830	51.58	9.95	61.53	76.00	-14.47	AVG	
5		0.6450	54.21	9.98	64.19	83.00	-18.81	QP	
6		0.6450	52.33	9.98	62.31	70.00	-7.69	AVG	
7		0.9645	53.57	9.84	63.41	83.00	-19.59	QP	
8		0.9645	51.78	9.84	61.62	70.00	-8.38	AVG	
9		1.2885	52.34	9.82	62.16	83.00	-20.84	QP	
10		1.2885	49.88	9.82	59.70	70.00	-10.30	AVG	
11		5.7975	58.81	9.78	68.59	83.00	-14.41	QP	
12	*	5.7975	54.55	9.78	64.33	70.00	-5.67	AVG	

**Product** : AC Servo Motor    **Model/Type reference** : ELVM6006V48EL-M17-HD  
**Power** : DC 48V    **Temperature/Humidity** : 24°C/54%  
**Mode** : Running    **Polarization** : N



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.3209	53.29	10.05	63.34	89.00	-25.66	QP	
2		0.3209	50.43	10.05	60.48	76.00	-15.52	AVG	
3		0.4830	53.86	9.95	63.81	89.00	-25.19	QP	
4		0.4830	51.73	9.95	61.68	76.00	-14.32	AVG	
5		0.6450	53.99	9.98	63.97	83.00	-19.03	QP	
6		0.6450	52.26	9.98	62.24	70.00	-7.76	AVG	
7		0.9645	53.69	9.84	63.53	83.00	-19.47	QP	
8		0.9645	51.78	9.84	61.62	70.00	-8.38	AVG	
9		1.4505	51.33	9.81	61.14	83.00	-21.86	QP	
10		1.4505	48.86	9.81	58.67	70.00	-11.33	AVG	
11	*	5.7975	53.65	9.78	63.43	70.00	-6.57	AVG	
12		5.9595	58.09	9.78	67.87	83.00	-15.13	QP	

Note: 1. Margin=Limit-Measurement.  
 2. Measurement=Reading\_Level+Correct Factor.  
 3. Correct Factor=Cable Loss+LISN Factor.

## 7. RADIATED EMISSION

### 7.1 LIMITS

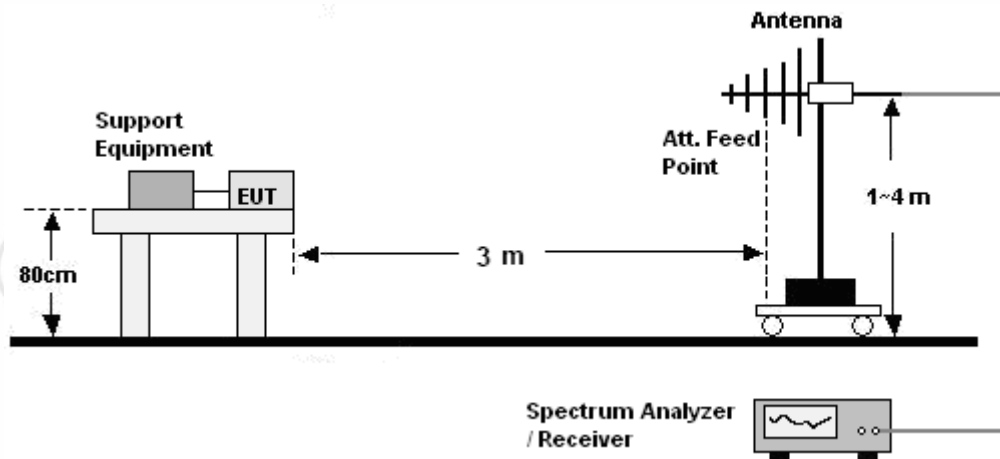
Limits for Group 1 class A Equipment

Frequency (MHz)	Quasi-peak limits at 3m dB( $\mu$ V/m) ( $\leq 20$ kVA)
30-230	50
230-1000	57

NOTE: The lower limit shall apply at the transition frequencies.

### 7.2 BLOCK DIAGRAM OF TEST SETUP

#### 30MHz ~ 1GHz:



### 7.3 TEST PROCEDURE

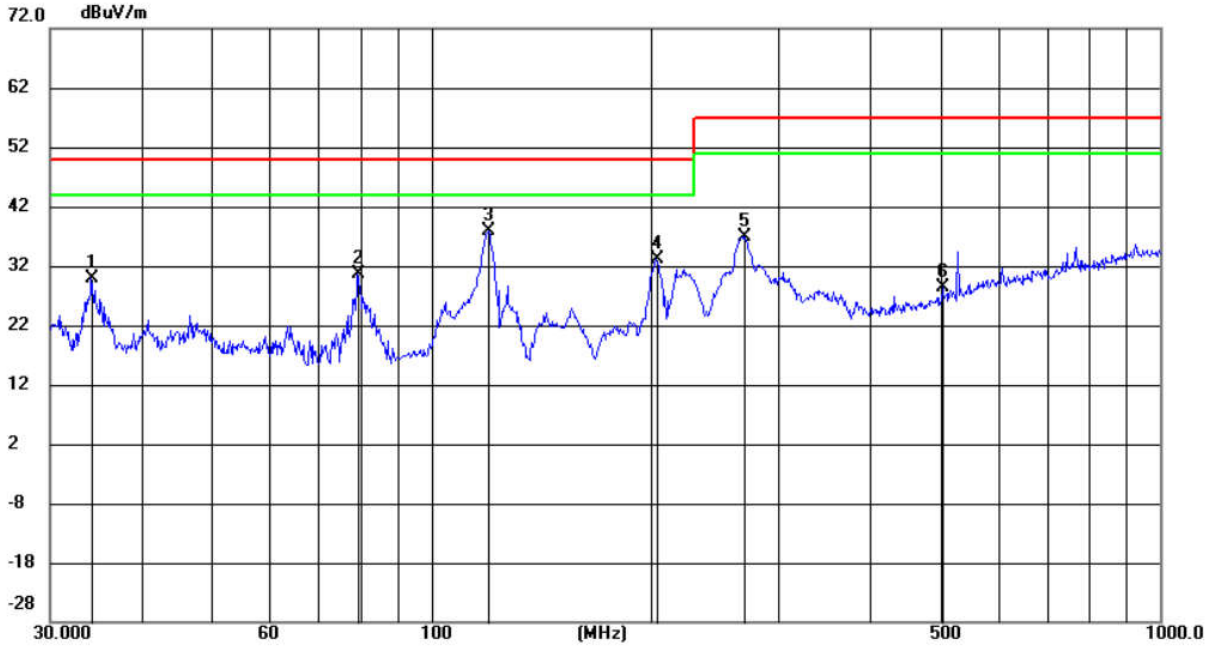
#### 30MHz ~ 1GHz:

- The Product was placed on the non-conductive turntable 0.8m above the ground at a chamber.
- Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 120 kHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied between 1~4 m in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.
- For each frequency whose maximum record was higher or close to limit, measure its QP value: vary the antenna's height and rotate the turntable from 0 to 360 degrees to find the height and degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to QP Detector and specified bandwidth with Maximum Hold Mode, and record the maximum value.



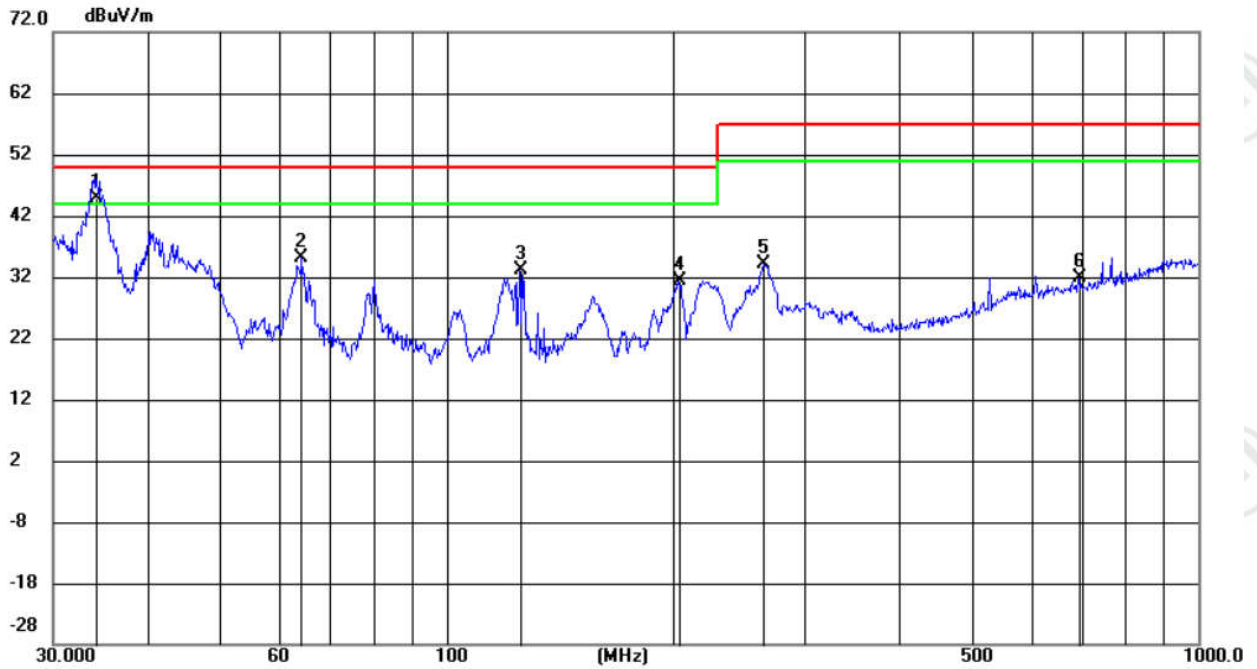
## 7.4 GRAPHS AND DATA

**Product** : AC Servo Motor    **Model/Type reference** : ELVM6006V48EL-M17-HD  
**Power** : DC 48V    **Temperature/Humidity** : 22°C/50%  
**Mode** : Running    **Polarization** : Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		34.1561	16.39	13.49	29.88	50.00	-20.12	QP 200	350	
2		79.2426	20.93	9.82	30.75	50.00	-19.25	QP 200	350	
3	*	119.8556	26.70	11.28	37.98	50.00	-12.02	QP 200	0	
4		203.5228	19.13	13.90	33.03	50.00	-16.97	QP 200	214	
5		268.4853	20.64	16.16	36.80	57.00	-20.20	QP 100	356	
6		502.9395	6.67	21.61	28.28	57.00	-28.72	QP 200	342	

**Product** : AC Servo Motor      **Model/Type reference** : ELVM6006V48EL-M17-HD  
**Power** : DC 48V                    **Temperature/Humidity** : 22°C/50%  
**Mode** : Running                    **Polarization** : Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	34.1561	31.41	13.49	44.90	50.00	-5.10	QP	266	
2		64.2074	22.92	12.10	35.02	50.00	-14.98	QP	356	
3		125.0066	22.73	10.43	33.16	50.00	-16.84	QP	133	
4		203.5228	17.39	13.90	31.29	50.00	-18.71	QP	216	
5		264.7457	18.03	16.02	34.05	57.00	-22.95	QP	190	
6		691.9867	7.07	24.69	31.76	57.00	-25.24	QP	356	

**Note:**

1. Margin=Measurement-Limit.
2. Measurement=Reading\_Level+Correct Factor.
3. Correct Factor=Ant Factor+Cable loss.

## 8. IMMUNITY TEST

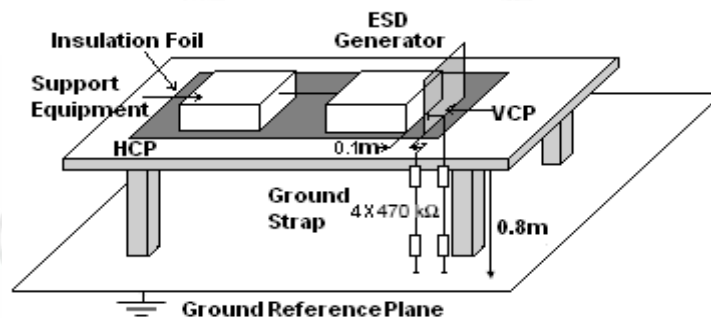
General Performance Criteria	
Product Standard	EN IEC 61000-6-2:2019
<b>CRITERION A</b>	The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.
<b>CRITERION B</b>	The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.
<b>CRITERION C</b>	Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

## 8.1 ELECTROSTATIC DISCHARGE

### 8.1.1 TEST SPECIFICATION

<b>Basic Standard</b>	: EN IEC 61000-6-2 & IEC 61000-4-2
<b>Test Port</b>	: Enclosure port
<b>Discharge Impedance</b>	: 330 ohm / 150 pF
<b>Discharge Mode</b>	: Single Discharge
<b>Discharge Period</b>	: one second between each discharge

### 8.1.2 BLOCK DIAGRAM OF TEST SETUP



### 8.1.3 TEST PROCEDURE

- Electrostatic discharges were applied only to those points and surfaces of the Product that are accessible to users during normal operation.
- The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.
- The time interval between two successive single discharges was at least 1 second.
- The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meters from the Product.
- Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.
- Air discharges were applied with the round discharge tip of the discharge electrode approaching the Product as fast as possible (without causing mechanical damage) to touch the Product. After each discharge, the ESD generator was removed from the Product and re-triggered for a new single discharge. The test was repeated until all discharges were complete.
- At least ten single discharges (in the most sensitive polarity) were applied to the Horizontal Coupling Plane at points on each side of the Product. The ESD generator was positioned vertically at a distance of 0.1 meters from the Product with the discharge electrode touching the HCP.
- At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane in sufficiently different positions that the four faces of the Product were completely illuminated. The VCP (dimensions 0.5m x 0.5m) was placed vertically to and 0.1 meters from the Product.

## 8.1.4 RESULTS & PERFORMANCE

<b>Product</b>	: AC Servo Motor	<b>Model/Type reference</b>	: ELVM6006V4 8EL-M17-HD
<b>Power</b>	: DC 48V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Running	<b>Humidity</b>	: 51%
<b>Press</b>	: 101kPa		

Discharge Method	Discharge Position	Voltage (±kV)	Min. No. of Discharge per polarity (Each Point)	Required Level	Performance Criterion
Contact Discharge	Conductive Surfaces	4	10	B	A
	Indirect Discharge HCP	4	10	B	A
	Indirect Discharge VCP	4	10	B	A
Air Discharge	Slots, Apertures, and Insulating Surfaces	8	10	B	A



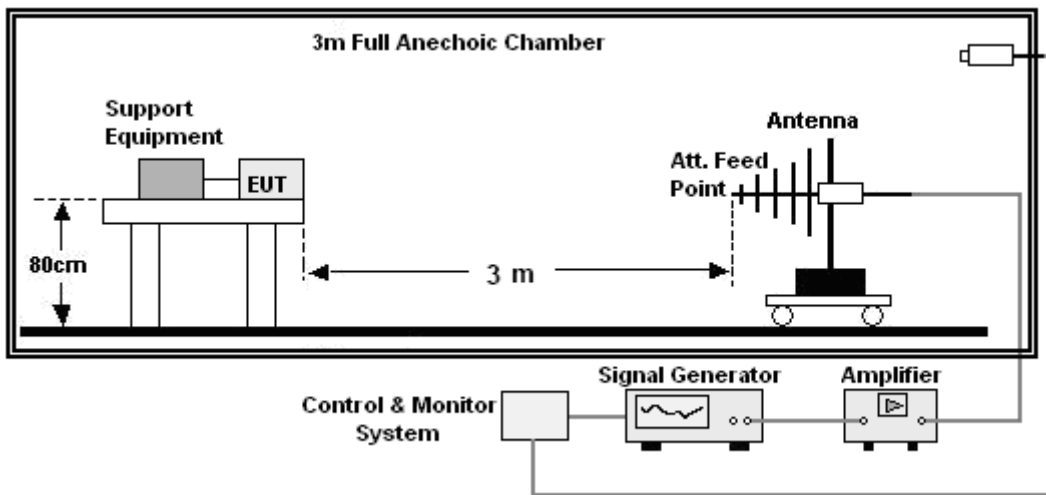
## 8.2 RADIO-FREQUENCY ELECTROMAGNETIC FIELD

### 8.2.1 TEST SPECIFICATION

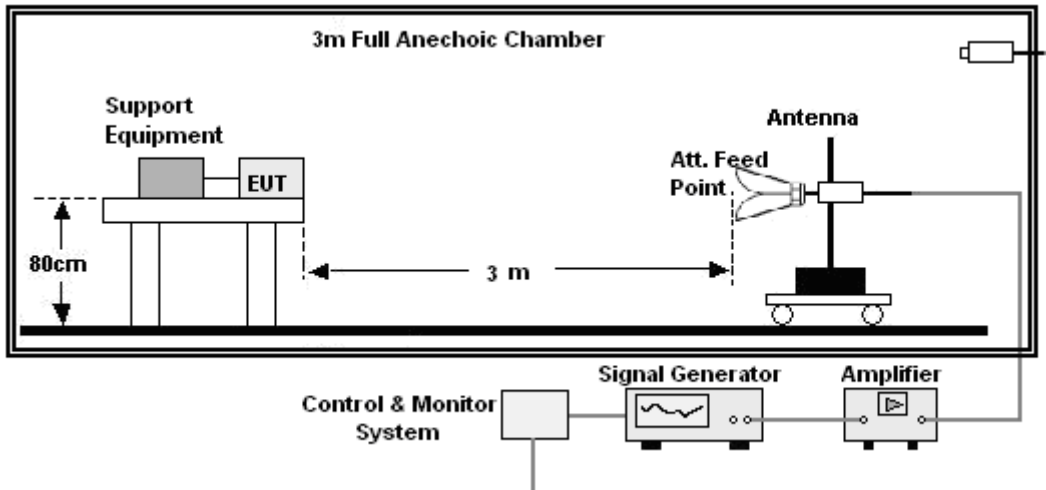
Basic Standard	: EN IEC 61000-6-2 & IEC 61000-4-3
Test Port	: Enclosure port
Step Size	: 1%
Modulation	: 1kHz, 80% AM
Dwell Time	: 1 second
Polarization	: Horizontal & Vertical

### 8.2.2 BLOCK DIAGRAM OF TEST SETUP

Below 1GHz:



Above 1GHz:



## 8.2.3 TEST PROCEDURE

- a. The testing was performed in a fully-anechoic chamber. The transmit antenna was located at a distance of 3m from the Product.
- b. The frequency range is swept from 80MHz to 1000MHz and 1400MHz to 6000MHz, with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed  $1.5 \times 10^{-3}$  decade/s. Where the frequency range is swept incrementally, the step size was 1%.
- c. The test was performed with the Product exposed to both vertically and horizontally polarized fields on each of the four sides.

## 8.2.4 RESULT & PERFORMANCE

<b>Product</b>	: AC Servo Motor	<b>Model/Type reference</b>	: ELVM6006V4 8EL-M17-HD
<b>Power</b>	: DC 48V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Running	<b>Humidity</b>	: 51%
<b>Press</b>	: 101kPa		

Frequency (MHz)	Position	Field Strength (V/m)	Required Level	Performance Criterion
80 - 1000	Front, Right, Back, Left	10	A	A
1400 - 6000	Front, Right, Back, Left	3	A	A

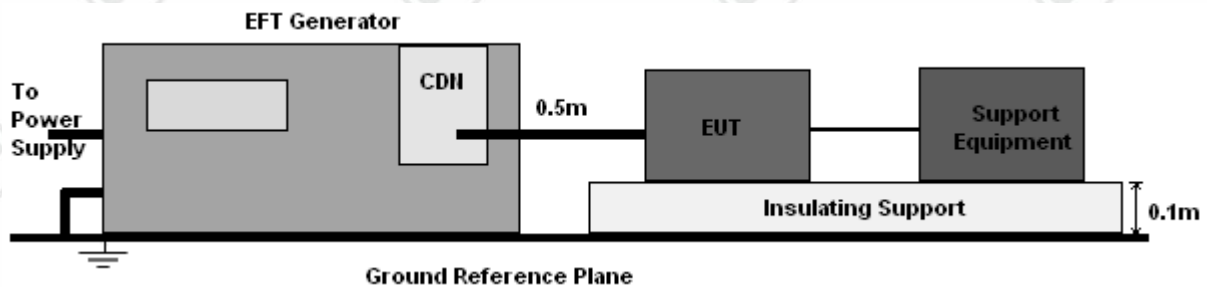
## 8.3 FAST TRANSIENTS

### 8.3.1 TEST SPECIFICATION

<b>Basic Standard</b>	: EN IEC 61000-6-2 & IEC 61000-4-4
<b>Test Port</b>	: Input DC power ports
<b>Impulse Frequency</b>	: 5 kHz
<b>Impulse Wave-shape</b>	: 5/50 ns
<b>Burst Duration</b>	: 15 ms
<b>Burst Period</b>	: 300 ms
<b>Test Duration</b>	: 2 minute per polarity

### 8.3.2 BLOCK DIAGRAM OF TEST SETUP

For input DC power ports:



### 8.3.3 TEST PROCEDURE

- The Product and support units were located on a non-conductive table above ground reference plane.
- A 0.5m-long power cord was attached to Product during the test.

### 8.3.4 RESULTS & PERFORMANCE

<b>Product</b>	: AC Servo Motor	<b>Model/Type reference</b>	: ELVM6006V48 EL-M17-HD
<b>Power</b>	: DC 48V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Running	<b>Humidity</b>	: 51%
<b>Press</b>	: 101kPa		

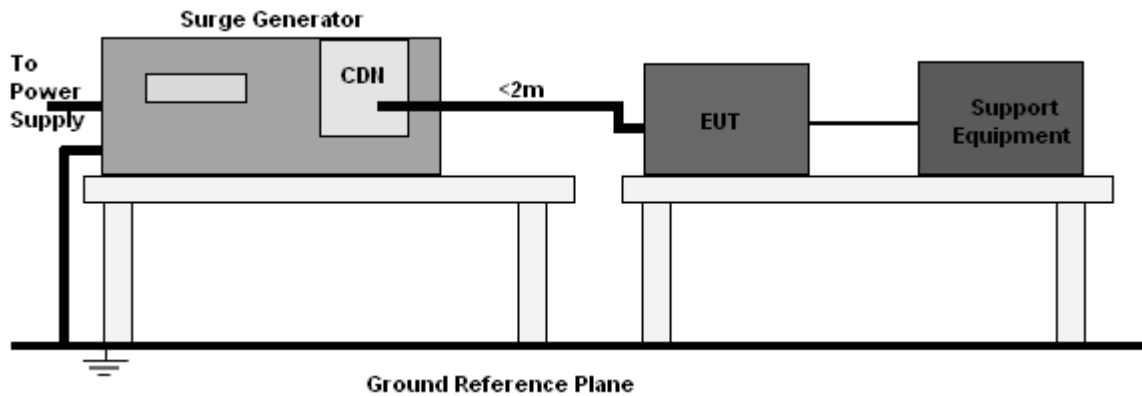
Coupling	Voltage (kV)	Polarity	Required Level	Performance Criterion
DC power ports	2	±	B	A

## 8.4 SURGES

### 8.4.1 TEST SPECIFICATION

<b>Basic Standard</b>	: EN IEC 61000-6-2 & IEC 61000-4-5
<b>Test Port</b>	: Input DC power ports
<b>Wave-Shape</b>	: Open Circuit Voltage - 1.2 / 50 us
<b>Pulse Repetition Rate</b>	: 1 pulse / min.
<b>Test Events</b>	: 5 pulses (positive & negative) for each polarity

### 8.4.2 BLOCK DIAGRAM OF TEST SETUP



### 8.4.3 TEST PROCEDURE

- The surge is to be applied to the Product power supply terminals via the capacitive coupling network. Decoupling networks are required in order to avoid possible adverse effects on equipment not under test that may be powered by the same lines, and to provide sufficient decoupling impedance to the surge wave.
- The power cord between the Product and the coupling/decoupling networks shall be 2 meters in length (or shorter). Interconnection line between the Product and the coupling/decoupling networks shall be 2 meters in length (or shorter).

### 8.4.4 RESULTS & PERFORMANCE

<b>Product</b>	: AC Servo Motor	<b>Model/Type reference</b>	: ELVM6006V48E L-M17-HD
<b>Power</b>	: DC 48V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Running	<b>Humidity</b>	: 51%
<b>Press</b>	: 101kPa		

Coupling Line	Voltage (kV)	Polarity	Required Level	Performance Criterion
DC port	0.5	±	B	A

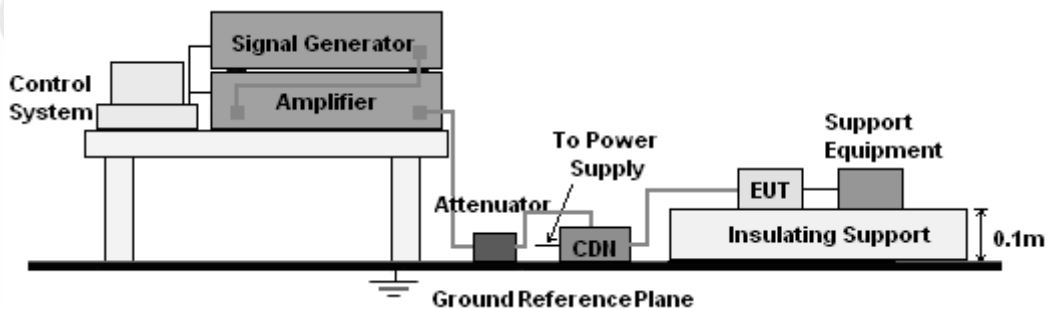
## 8.5 RADIO-FREQUENCY COMMON MODE

### 8.5.1 TEST SPECIFICATION

<b>Basic Standard</b>	: EN IEC 61000-6-2 & IEC 61000-4-6
<b>Test Port</b>	: Input DC power ports
<b>Step Size</b>	: 1%
<b>Modulation</b>	: 1kHz, 80% AM
<b>Dwell Time</b>	: 1 second

### 8.5.2 BLOCK DIAGRAM OF TEST SETUP

For input DC power ports:



### 8.5.3 TEST PROCEDURE

For DC power ports:

- The Product and support units were located at a ground reference plane with the interposition of a 0.1 m thickness insulating support and the CDN was located on GRP directly.
- The frequency range is swept from 150 kHz to 80MHz, with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed  $1.5 \times 10^{-3}$  decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- The dwell time at each frequency shall be not less than the time necessary for the Product to be able to respond.

### 8.5.4 RESULTS & PERFORMANCE

<b>Product</b>	: AC Servo Motor	<b>Model/Type reference</b>	: ELVM6006V48 EL-M17-HD
<b>Power</b>	: DC 48V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Running	<b>Humidity</b>	: 51%
<b>Press</b>	: 101kPa		

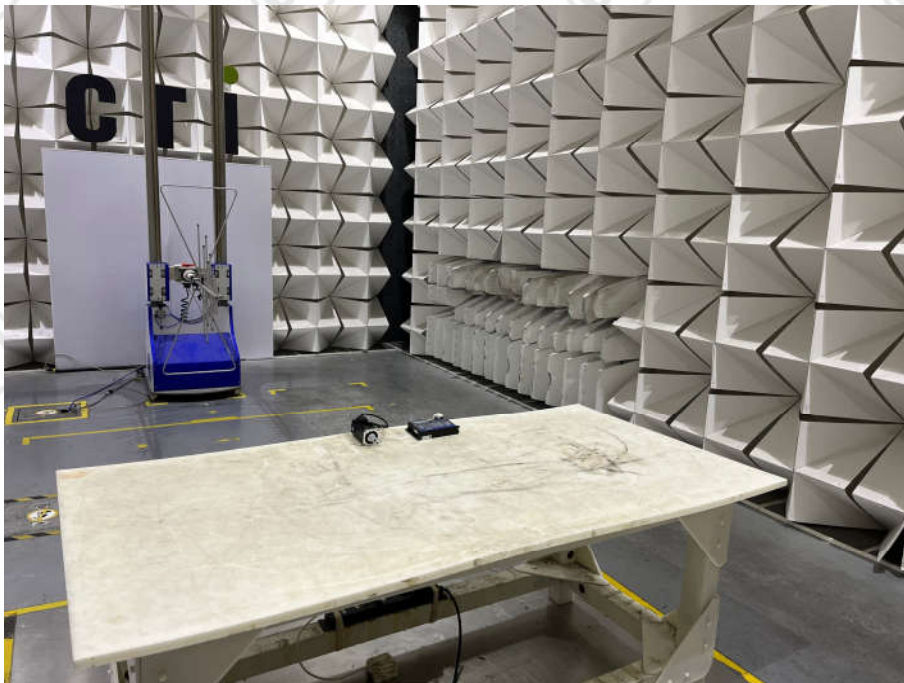
Inject Line	Frequency (MHz)	Voltage Level (V r.m.s.)	Required Level	Performance Criterion
DC power ports	0.15 - 80	10	A	A



## APPENDIX 1 PHOTOGRAPHS OF TEST SETUP



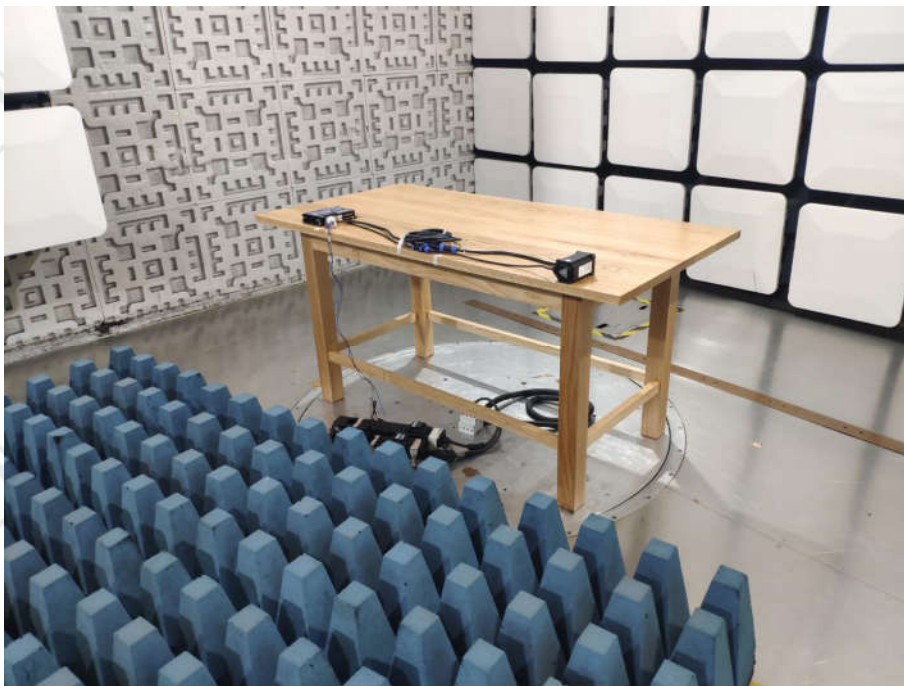
**CONDUCTED EMISSION TEST SETUP**



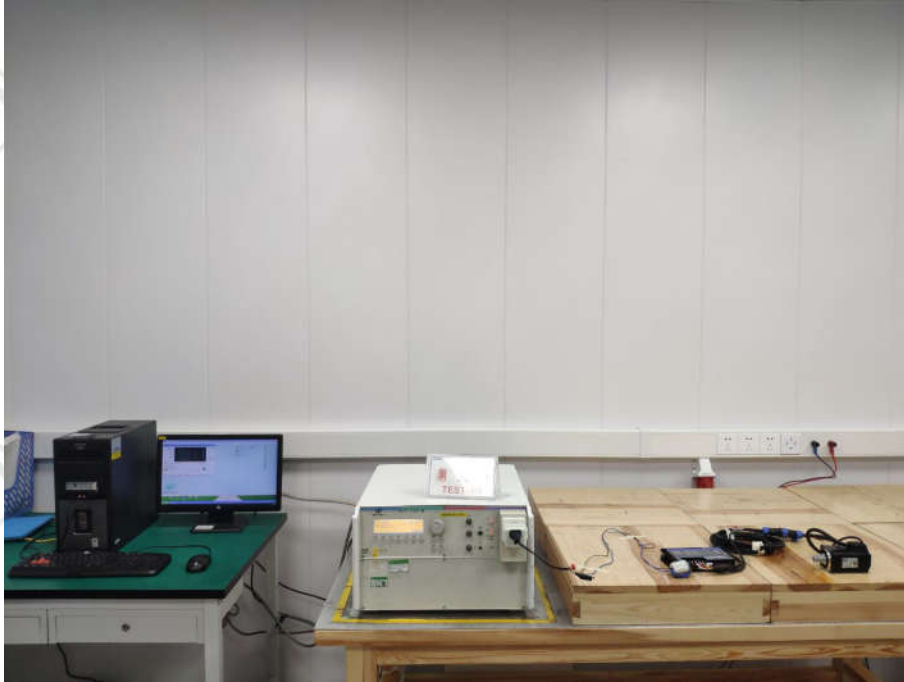
**RADIATED EMISSION TEST SETUP**



**ELECTROSTATIC DISCHARGE TEST SETUP**



**RADIO-FREQUENCY ELECTROMAGNETIC FIELD TEST SETUP**



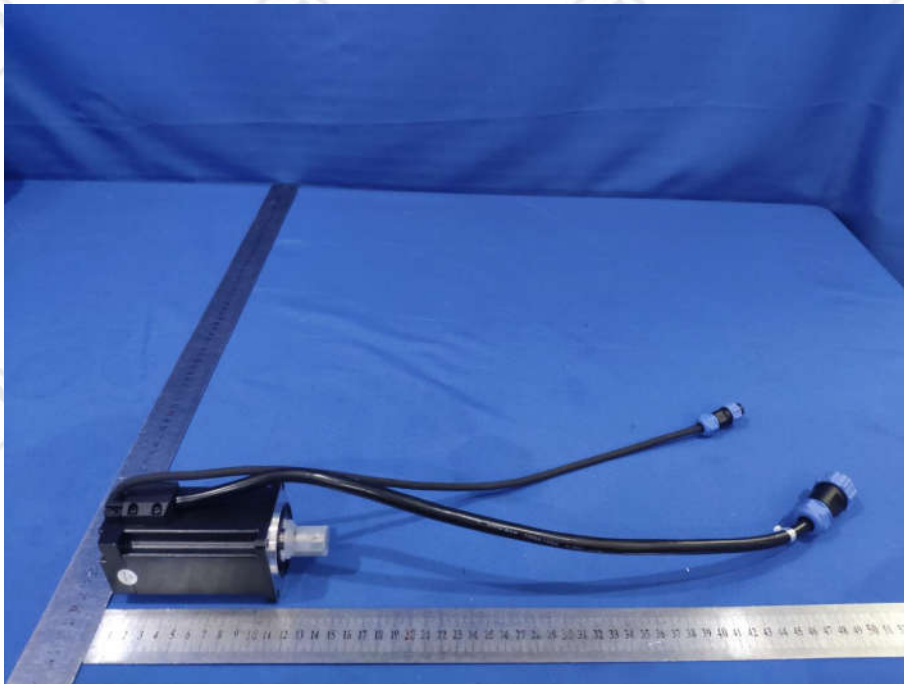
**FAST/SURGES TRANSIENTS TEST SETUP**



**RADIO-FREQUENCY COMMON MODE TEST SETUP**



**APPENDIX 2 PHOTOGRAPHS OF PRODUCT**



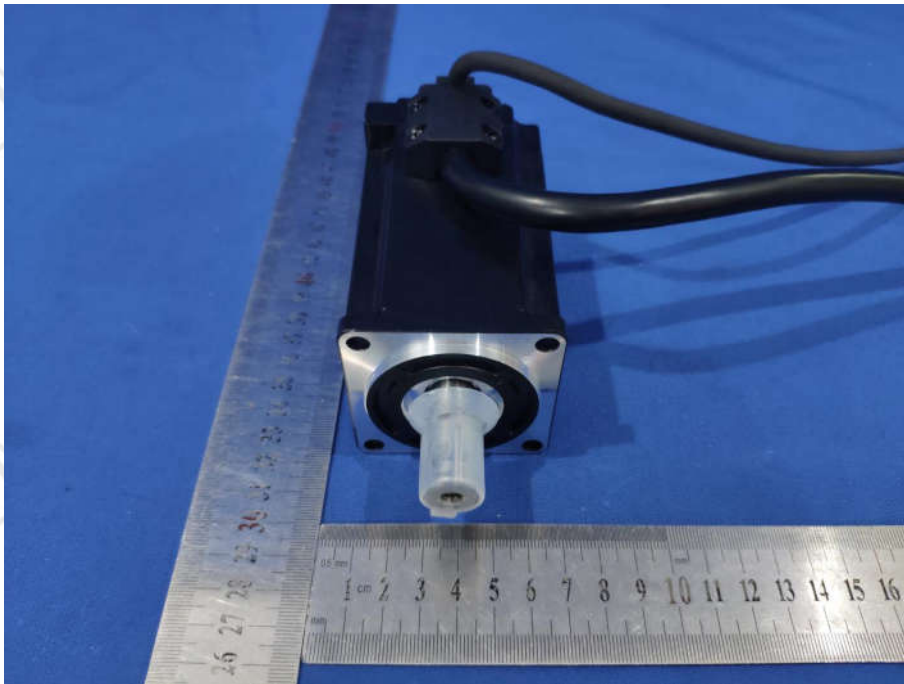
View of Product-1



View of Product-2

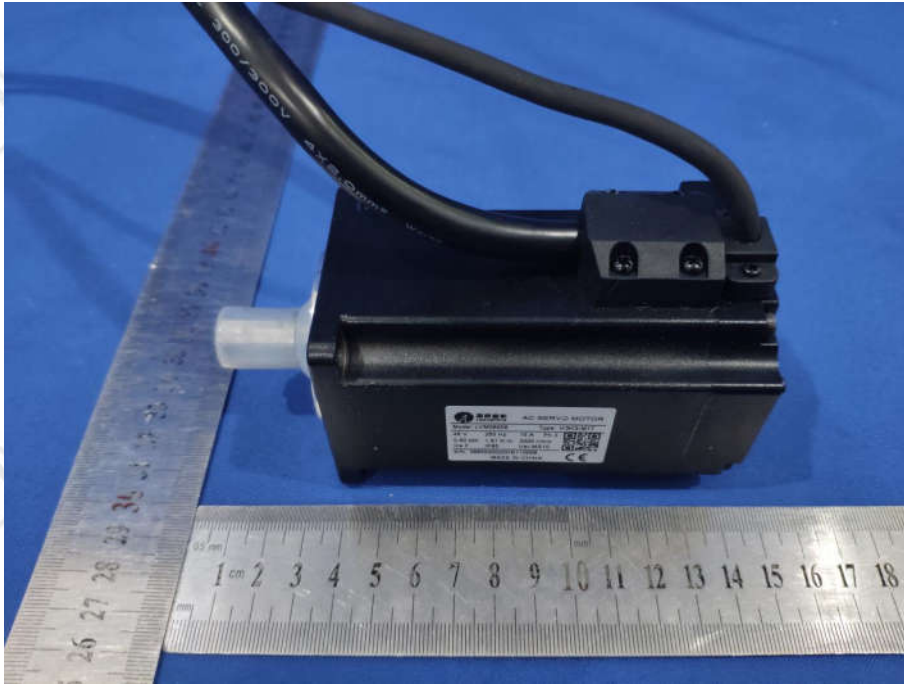


View of Product-3

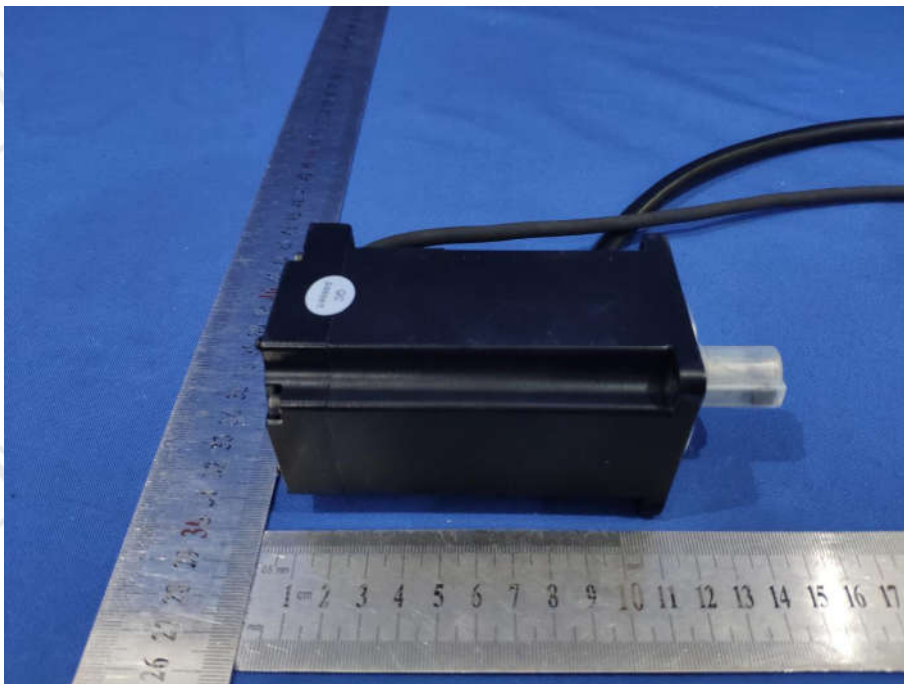


View of Product-4





View of Product-5



View of Product-6

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*