

## EMC TEST REPORT

**Product** : Integrated Servo Motor  
**Trade mark** :  雷赛智能<sup>®</sup>  Leadshine<sup>®</sup>  
**Model/Type reference** : iSV2-CAN8075V48H,iSV2-RS8075V48H,  
iSV2-CAN8075V48G, iSV2-RS8075V48G  
iSV2-CAN8675V48H,iSV2-RS8675V48H,  
iSV2-CAN8675V48G, iSV2-RS8675V48G  
iSV2-\*\*\*8075V48\*\*\*, iSV2-\*\*\*8675V48\*\*\*, ""  
values are 0 to 9 and A to Z characters  
**Serial Number** : N/A  
**Ratings** : DC 24-70V  
**Report Number** : EED32O813035  
**Date of Issue** : Mar. 07, 2023  
**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:**  
**China Leadshine Technology Co., Ltd.**  
**15-20/F, Block B, Nanshan I Valley, No.3157, Shahe West Road, Nanshan District, Shenzhen**

**Prepared by:**  
**Centre Testing International Group Co., Ltd.**  
**Hongwei Industrial Zone, Bao'an 70 District,**  
**Shenzhen, Guangdong, China**  
**TEL: +86-755-3368 3668**  
**FAX: +86-755-3368 3385**



Compiled by: Wifi. Lei

Reviewed by: Deng Binbin

Approved by: Aaron Ma

Date of Issue: Mar. 07, 2023

Aaron Ma

Check No.: 7519220822

## Modification Record

No.	Last Report No.	Modification Description
1	EED32O813034	First report
2	EED32O813035	Change the product model

All test data come from the report of No. EED32O813035

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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.3157, Shahe West Road, Nanshan District, Shenzhen

**Manufacturer:** China Leadshine Technology Co., Ltd.  
15-20/F, Block B, Nanshan I Valley, No.3157, Shahe West Road, Nanshan District, Shenzhen

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

**Product:** Integrated Servo Motor

**Trade mark:**  

**Model/Type reference:** iSV2-CAN8075V48H,iSV2-RS8075V48H,  
iSV2-CAN8075V48G, iSV2-RS8075V48G  
iSV2-CAN8675V48H,iSV2-RS8675V48H,  
iSV2-CAN8675V48G, iSV2-RS8675V48G  
iSV2-\*\*\*8075V48\*\*\*, iSV2-\*\*\*8675V48\*\*\*; "\*\*\*" values are 0 to 9  
and A to Z characters

**Serial Number:** N/A

**Report Number:** EED32O813035

**Sample Received Date:** Aug . 25, 2022

**Sample tested Date:** Aug . 25, 2022 to Sep. 09, 2022

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 IEC 61000-6-4	Conducted Emission	Yes
EN IEC 61000-6-4	Radiated Emission	Yes

IMMUNITY (EN IEC 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*
IEC 61000-4-11	Voltage dips and voltage interruptions	Yes

Remark\*: The Product doesn't contain any device susceptible to magnetic fields.

### 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: DC24-70V

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 naming and software version. The test model is iSV2-CAN8075V48Hand the test results are applicable to the others.

#### 4.2 TEST SETUP CONFIGURATION

See test photographs attached in Appendix 1 for the actual connections between product and support equipment.

#### 4.3 TEST MODE DESCRIPTION

Test Mode	Test Status
Normal	The power supply of the product is in normal working condition

#### 4.4 MONITORING OF PRODUCT FOR THE IMMUNITY TEST

Visual: Observe whether EUT operates normally

#### 4.5 SUPPORT EQUIPMENT

No.	Device Type	Brand	Model	Series No.	Data Cable	Power Cord
1.	---	---	---	---	---	---

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	05/05/2023
LISN	R&S	ENV216	100098	02/28/2023

3M Semi-anechoic Chamber (2)- Radiated disturbance Test				
Equipment	Manufacturer	Model	Serial No.	Due Date
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/21/2025
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	401	10/15/2022
Multi device Controller	maturio	NCD/070/10711 112	---	---
Horn Antenna	schwarzbeck	BBHA 9120D	9120D-1869	04/16/2024
Pre-amplifier	Agilent	8449B	3008A02425	06/19/2023
Receiver	R&S	ESCI7	100938-003	10/13/2022

Shielding Room No. 3 - Electrostatic discharge Test (EN 61000-4-2)				
Equipment	Manufacturer	Model	Serial No.	Due Date
ESD Simulator	TESEQ	NSG437	1182	06/09/2023

<b>3M Full-anechoic Chamber - Continuous RF electromagnetic radiated field disturbances Test (IEC 61000-4-3)</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Due Date</b>
3M Chamber & Accessory Equipment	ETS-LINDGREN	FACT-3	3510	05/19/2025
Signal Generator	R&S	SMB 100B	103084	05/19/2023
Power Probe	R&S	NRP6A	103342	07/12/2023
Power Probe	R&S	NRP6A	103343	07/12/2023
Power Amplifier	R&S	BBA 150-BC500	104743	06/05/2023
Power Amplifier	BONN	BLMA 1060-100	2113427	08/24/2023
RF switch	R&S	OSP220	102205	---
Directional coupler	BONN	BDC 1060-40/500	2128343-04	12/02/2022
Stacked double Log.-Per. Antenna	schwarzbeck	STLP 9128 E special	9128ES-110	03/29/2024
Horn Antenna	schwarzbeck	STLP 9149	0776	05/21/2023

<b>Shielding Room No. 3 - Electrical fast transients/burst (EFT/B)/Surges Test (IEC 61000-4-4) (IEC 61000-4-5)</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Due Date</b>
Compact Generator	EM-Test	UCS500M/6B	V0603101093	03/31/2023

<b>Shielding Room No. 2 - Injected currents Test (IEC 61000-4-6)</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Due Date</b>
RF conduction immunity test system	TESEQ	NSG 4070C-80	59089	08/27/2023
Attenuator	BIRD	75-A-MFN-06	0543	07/25/2023
CDN	TESEQ	CDN M516AS	59088	09/13/2022

<b>Shielding Room No. 2 - Voltage dips and interruptions Test (IEC 61000-4-11)</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Serial No.</b>	<b>Due Date</b>
AC / DC programmable regulated power supply	EM TEST	Net Wave 30	P1613178144	06/05/2023
Single / three phase scintillation simulator	EM TEST	503N32	P1613178045	06/05/2023
Three phase harmonic and scintillation analyzer	EM TEST	DPA 503N	P154516605	06/05/2023
Voltage dip simulator	EM test	PFS 503N32.2	P1919229535	03/31/2023

### 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

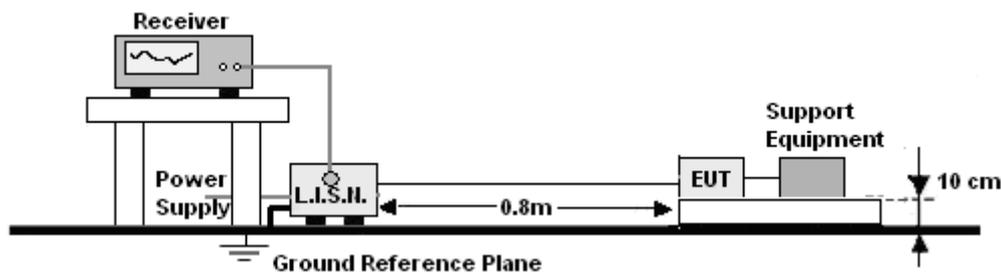
Limits for Group 1 class A Equipment

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60

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

### 6.2 BLOCK DIAGRAM OF TEST SETUP

For AC mains port:



### 6.3 TEST PROCEDURE

For AC mains port :

- The Product was placed on a nonconductive table 0.1m 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** : Integrated Servo Motor

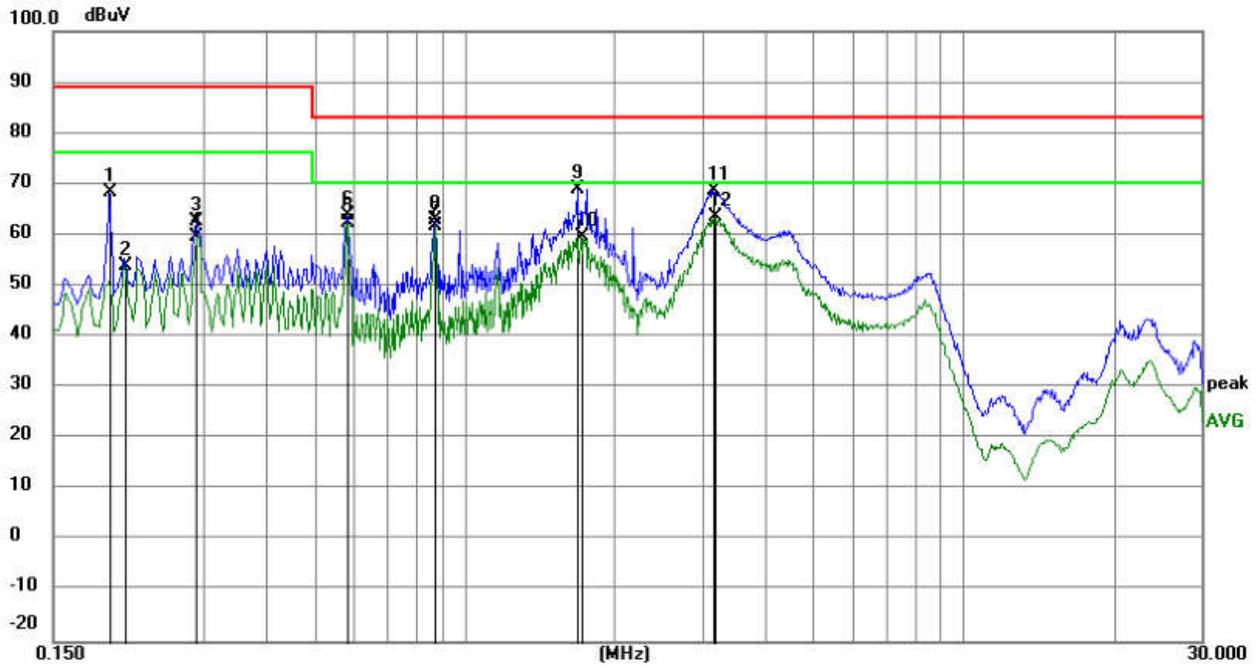
**Model/Type reference** : iSV2-CAN8075  
V48H

**Power** : DC 70V

**Temperature/Humidity** : 24°C/52%

**Mode** : Normal

**Polarization** : L



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1949	58.51	9.87	68.38	89.00	-20.62	QP	
2		0.2085	44.16	9.89	54.05	76.00	-21.95	AVG	
3		0.2895	52.50	10.05	62.55	89.00	-26.45	QP	
4		0.2895	49.62	10.05	59.67	76.00	-16.33	AVG	
5		0.5819	52.25	10.05	62.30	70.00	-7.70	AVG	
6		0.5820	53.69	10.05	63.74	83.00	-19.26	QP	
7		0.8744	51.89	9.85	61.74	70.00	-8.26	AVG	
8		0.8745	53.07	9.85	62.92	83.00	-20.08	QP	
9		1.6845	59.17	9.80	68.97	83.00	-14.03	QP	
10		1.7114	49.90	9.80	59.70	70.00	-10.30	AVG	
11		3.1514	58.88	9.79	68.67	83.00	-14.33	QP	
12	*	3.1829	53.81	9.79	63.60	70.00	-6.40	AVG	

**Product** : Integrated Servo Motor

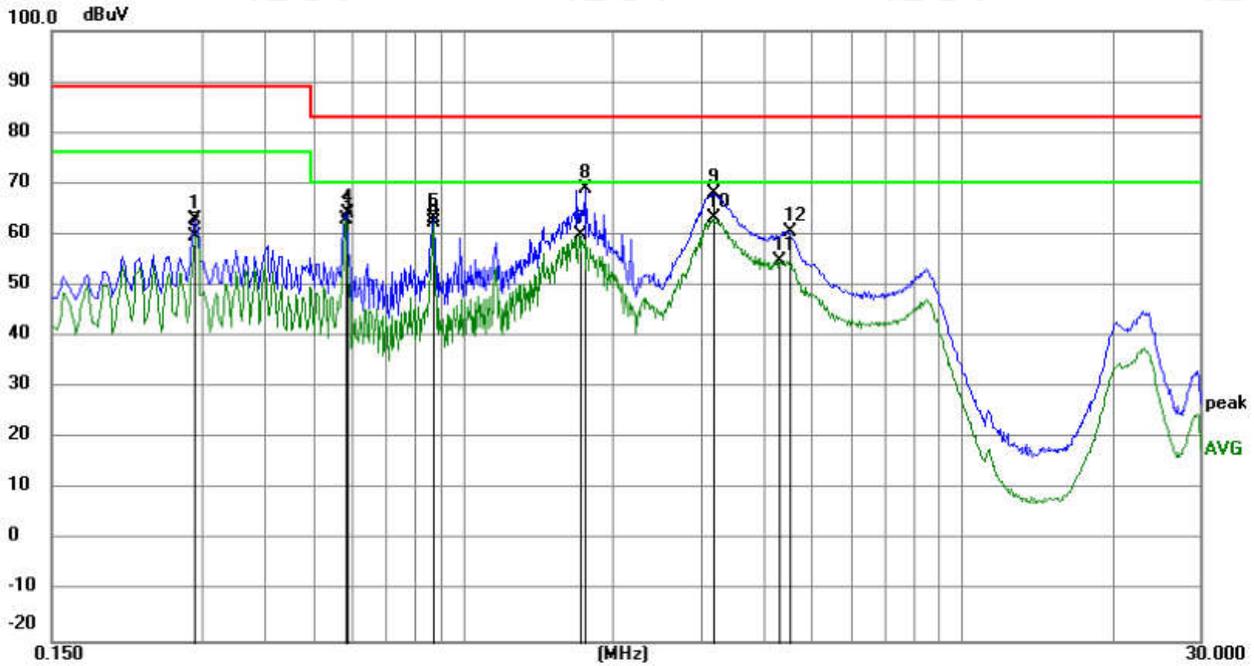
**Model/Type reference** : iSV2-CAN8075  
V48H

**Power** : DC 70V

**Temperature/Humidity** : 24°C/52%

**Mode** : Normal

**Polarization** : N



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.2895	53.01	10.05	63.06	89.00	-25.94	QP	
2		0.2895	49.73	10.05	59.78	76.00	-16.22	AVG	
3		0.5820	52.82	10.05	62.87	70.00	-7.13	AVG	
4		0.5865	54.25	10.05	64.30	83.00	-18.70	QP	
5		0.8745	53.33	9.85	63.18	83.00	-19.82	QP	
6		0.8745	52.37	9.85	62.22	70.00	-7.78	AVG	
7		1.7115	50.01	9.80	59.81	70.00	-10.19	AVG	
8		1.7610	59.28	9.80	69.08	83.00	-13.92	QP	
9		3.1695	58.30	9.79	68.09	83.00	-14.91	QP	
10	*	3.1829	53.53	9.79	63.32	70.00	-6.68	AVG	
11		4.3034	45.10	9.78	54.88	70.00	-15.12	AVG	
12		4.5195	50.90	9.78	60.68	83.00	-22.32	QP	

Note: 1. Margin(dB)=Limit(dBuV)-Measurement(dBuV).

2. Measurement(dBuV)=Reading\_Level(dBuV)+Correct Factor(dB).

3. Through Pre-scan, DC 70V was the worst case; only the worst case was in the report.

## 7. RADIATED EMISSION

### 7.1 LIMITS

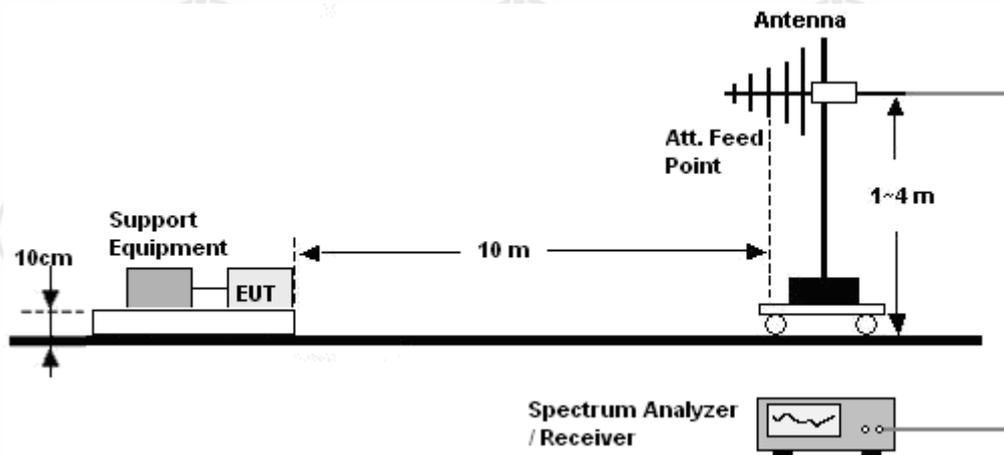
Limits for Group 1 class A Equipment

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** : Integrated Servo Motor

**Model/Type reference** : iSV2-CAN8075V  
48H

**Power** : DC 70V

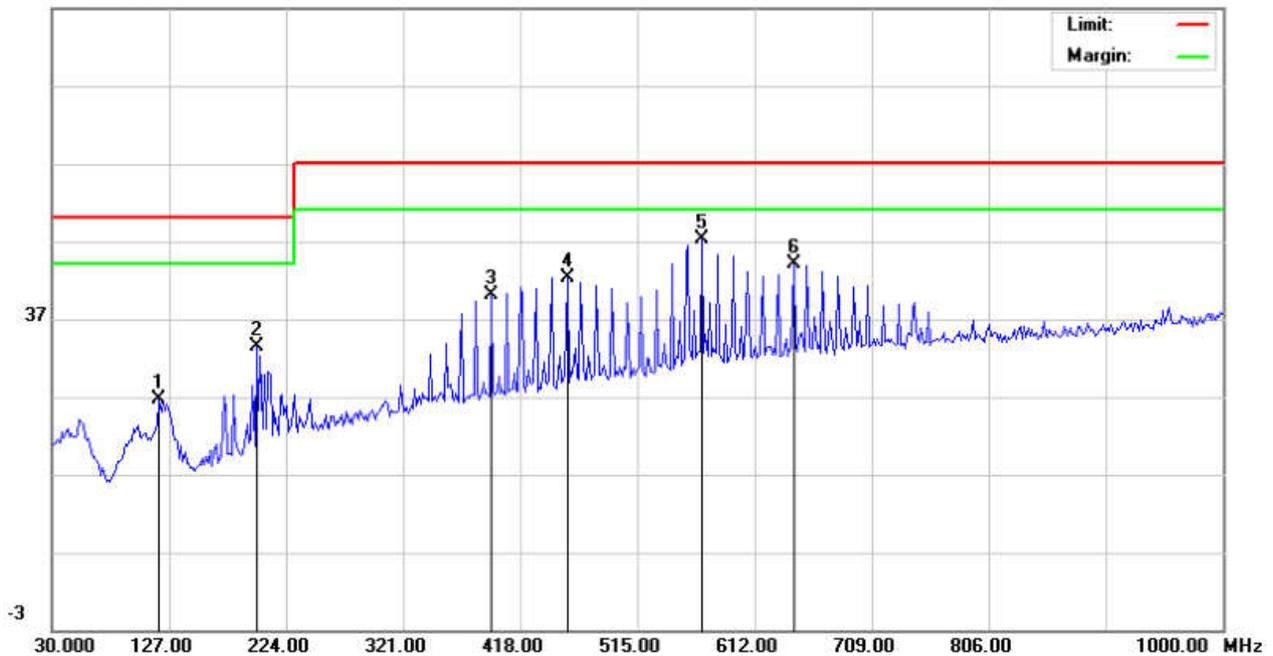
**Temperature/Humidity** : 22°C/53%

**Mode** : Normal

**Polarization** : Horizontal

**Note** : 30MHz-1GHz

76.9 dBuV/m



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV/m)			Limit (dBuV/m)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	118.9167	14.80	12.50		11.73	26.53	24.23	50.00						P
2	199.7500	20.96	18.61		12.42	33.38	31.03	50.00						P
3	393.7500	21.45	17.66		18.46	39.91	36.12	57.00						P
4	456.8000	22.25	20.52		19.88	42.13	40.40	57.00						P
5	568.3500	24.72	21.68		22.39	47.11	44.07	57.00						P
6	644.3333	20.35	18.52		23.70	44.05	42.22	57.00						P

**Product** : Integrated Servo Motor

**Model/Type reference** : iSV2-CAN8075V  
48H

**Power** : DC 70V

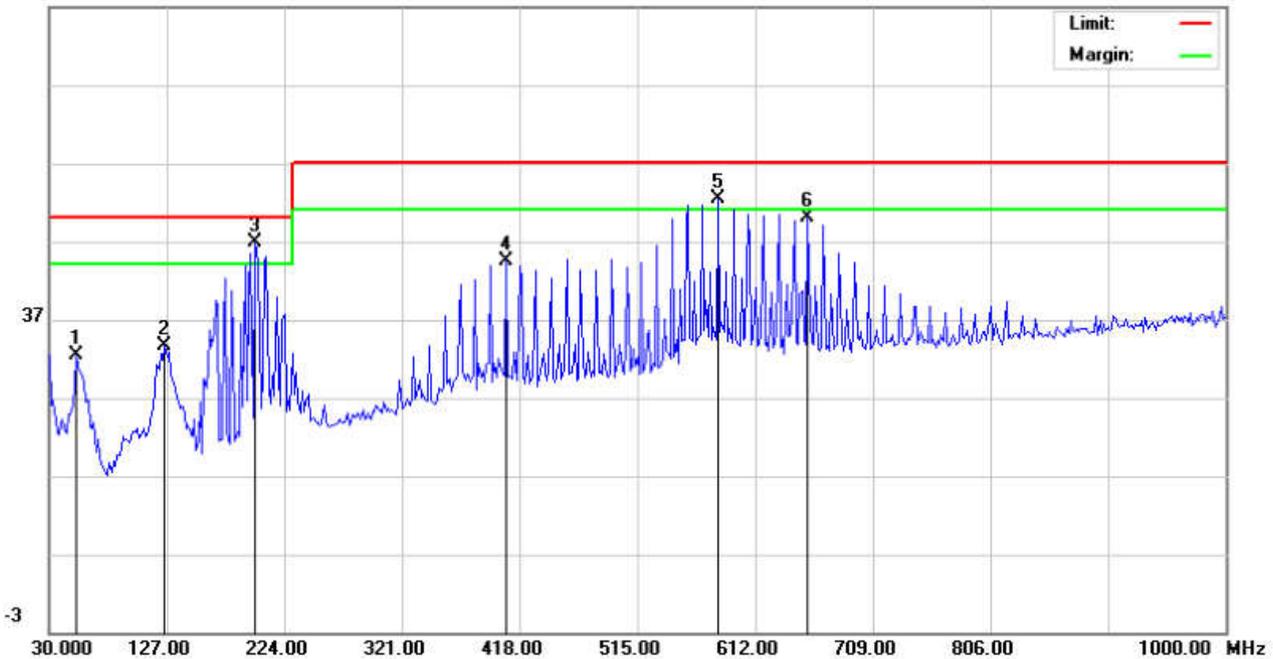
**Temperature/Humidity** : 22°C/53%

**Mode** : Normal

**Polarization** : Vertical

**Note** : 30MHz-1GHz

76.9 dBuV/m



No.	Freq. MHz	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV/m)			Limit (dBuV/m)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG		
1	52.6333	19.06	15.60		13.43	32.49	29.03	50.00						P
2	125.3833	23.07	22.10		10.56	33.63	32.66	50.00						P
3	199.7500	34.31	30.12		12.42	46.73	42.54	50.00						P
4	406.6833	25.63	21.50		18.77	44.40	40.27	57.00						P
5	581.2833	29.68	24.61		22.68	52.36	47.29	57.00						P
6	655.6500	26.09	22.50		23.86	49.95	46.36	57.00						P

Note: 1. Margin(dB)=Measurement-Limit.

2. Measurement(dBuV/m)=Reading\_Level+Correct Factor.

3. Correct Factor(dB)=Ant Factor+Cable loss.

4. Through Pre-scan, DC 70V was the worst case;only the worst case was in the report.

## 8. IMMUNITY TEST

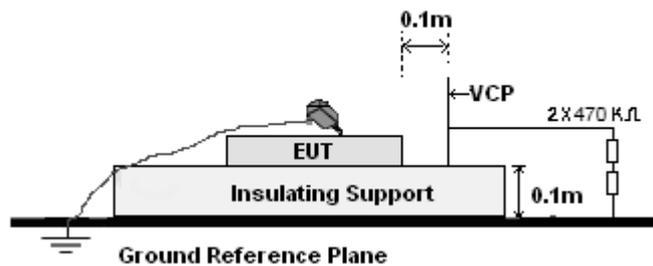
General Performance Criteria	
Product Standard	EN IEC 61000-6-2:2019
<b>CRITERION A</b>	The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus 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

**Product** : Integrated Servo Motor      **Model/Type reference** : iSV2-CAN8075V  
**Power** : DC 70V      **Temperature** : 23°C  
**Mode** : Normal      **Humidity** : 52%

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

Remark\*: This product is a landing equipment.

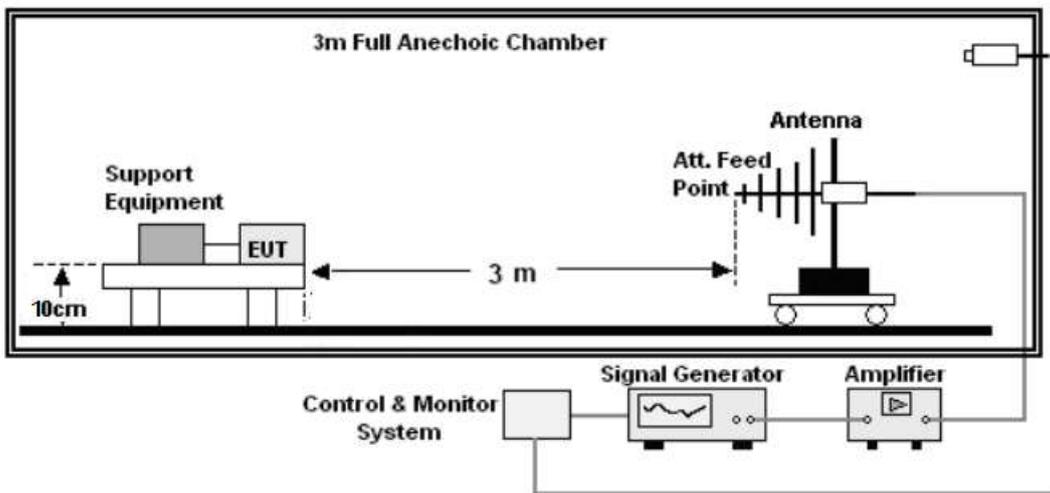
## 8.2 RADIO-FREQUENCY ELECTROMAGNETIC FIELD

### 8.2.1 TEST SPECIFICATION

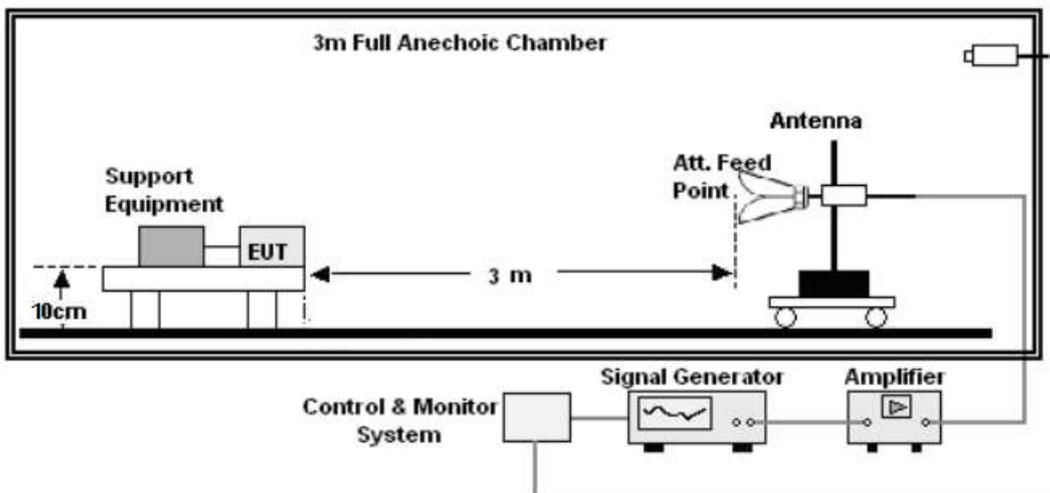
Basic Standard	: EN IEC 61000-6-2 & IEC 61000-4-3
Test Port	: Enclosure port
Step Size	: 1%
Modulation	: 1kHz, 80% AM
Dwell Time	: 1 second
Polarization	: Horizontal & Vertical

### 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

**Product** : Integrated Servo Motor      **Model/Type reference** : iSV2-CAN8075 V48H  
**Power** : DC 70V      **Temperature** : 23°C  
**Mode** : Normal      **Humidity** : 52%

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

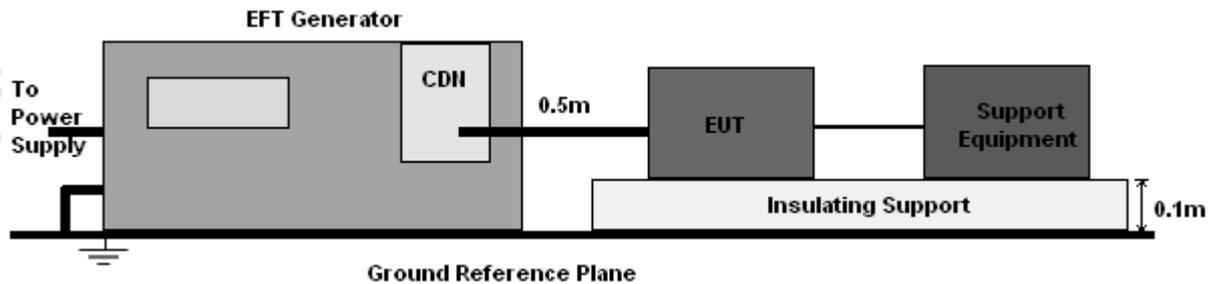
## 8.3 FAST TRANSIENTS

### 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 port
<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 AC 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>	: Integrated Servo Motor	<b>Model/Type reference</b>	: iSV2-CAN807 5V48H
<b>Power</b>	: DC 70V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Normal	<b>Humidity</b>	: 52%

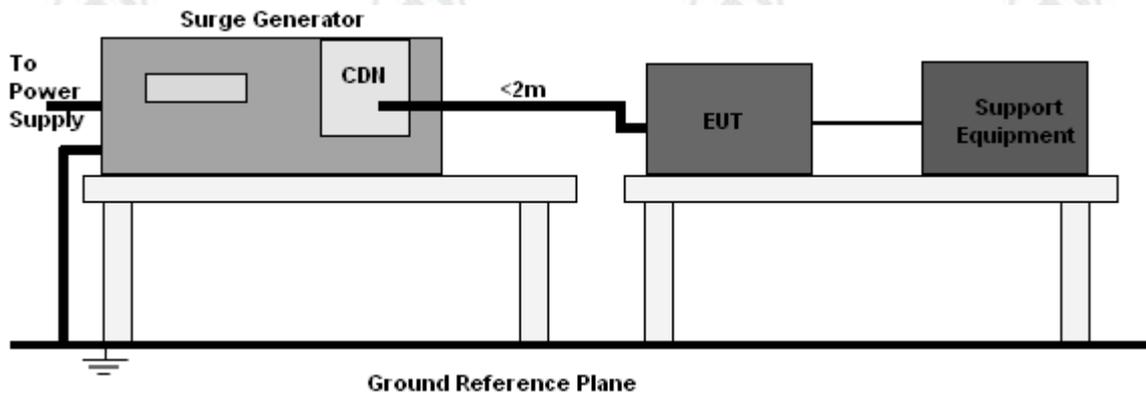
Coupling	Voltage (kV)	Polarity	Performance Criterion	Test Result
DC power ports	2	±	B	A

## 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 port
<b>Wave-Shape</b>	: Open Circuit Voltage - 1.2 / 50 us Short Circuit Current - 8 / 20 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

a. 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.

b. 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>	: Integrated Servo Motor	<b>Model/Type reference</b>	: iSV2-CAN8075V 48H
<b>Power</b>	: DC 70V	<b>Temperature</b>	: 23°C
<b>Mode</b>	: Normal	<b>Humidity</b>	: 52%

Coupling Line	Voltage (kV)	Polarity	Performance Criterion	Test Result
DC port	0.5	±	B	A

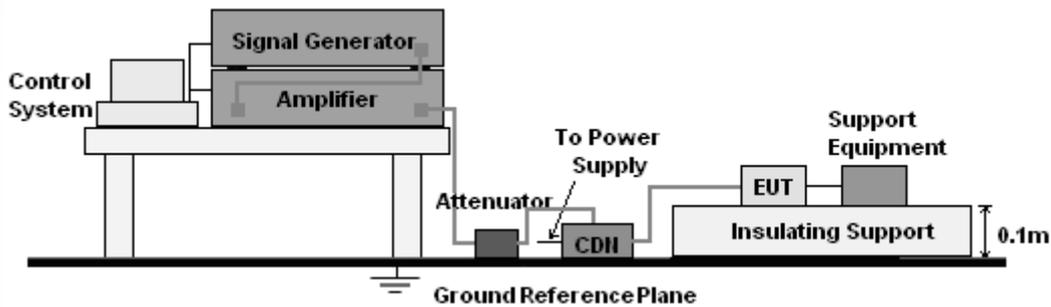
## 8.5 RADIO-FREQUENCY COMMON MODE

### 8.5.1 TEST SPECIFICATION

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

### 8.5.2 BLOCK DIAGRAM OF TEST SETUP

For input DC power port:



### 8.5.3 TEST PROCEDURE

For DC power port:

- 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

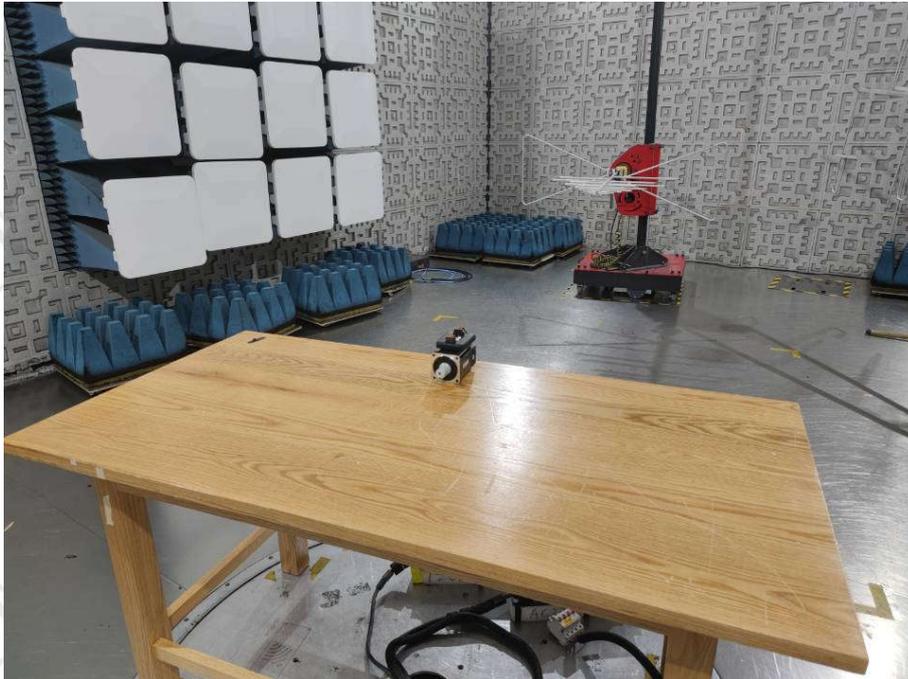
<b>Product</b> : Integrated Servo Motor	<b>Model/Type reference</b> : iSV2-CAN8075V 48H
<b>Power</b> : DC 70V	<b>Temperature</b> : 23°C
<b>Mode</b> : Normal	<b>Humidity</b> : 52%

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

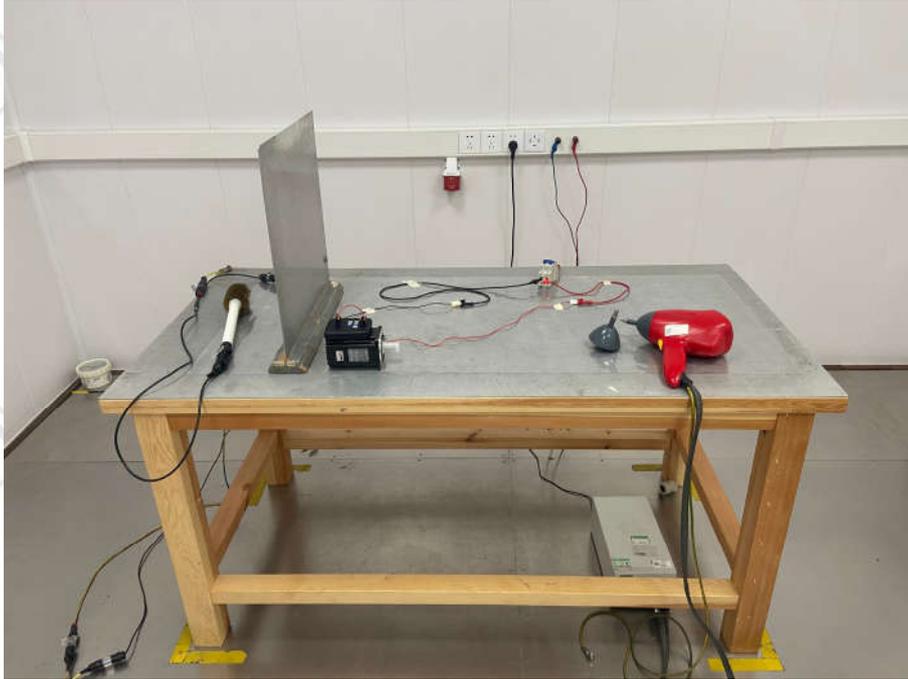
## APPENDIX 1 PHOTOGRAPHS OF TEST SETUP



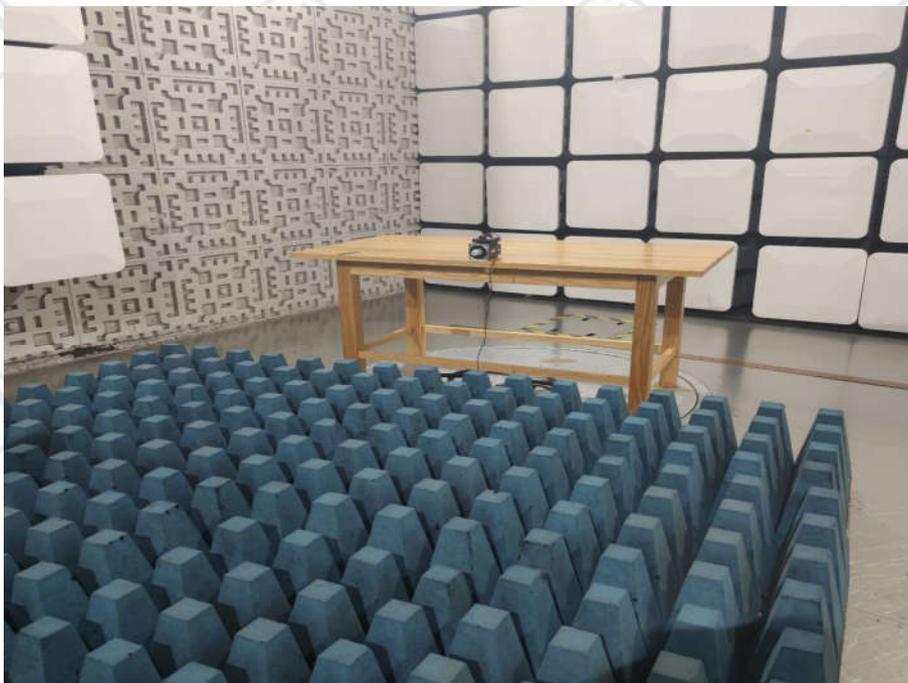
**CONDUCTED EMISSION**



**RADIATED EMISSION TEST SETUP**



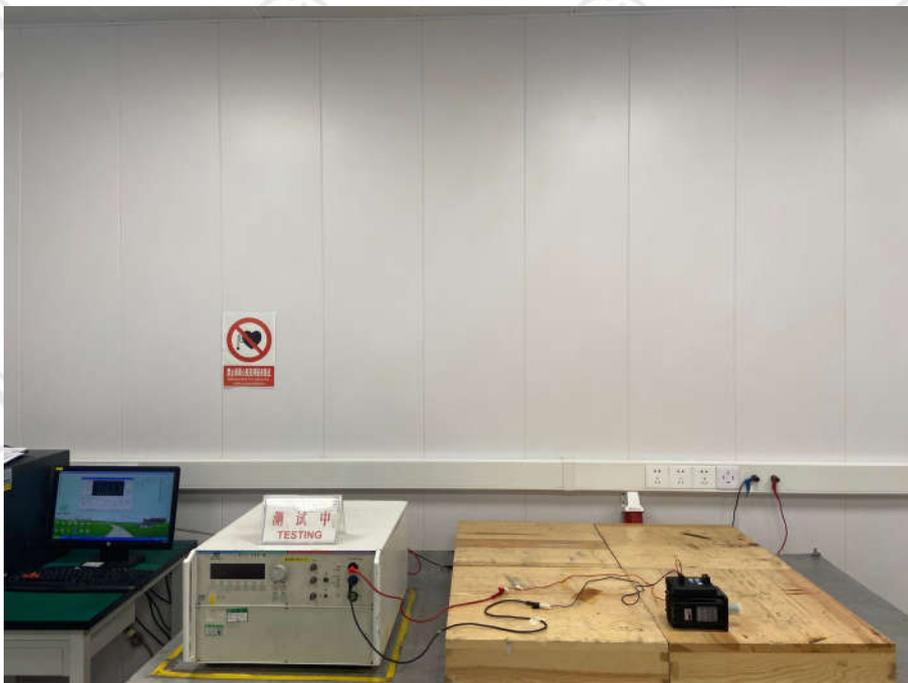
**ELECTROSTATIC DISCHARGE TEST SETUP**



**RADIO-FREQUENCY ELECTROMAGNETIC FIELD TEST SETUP**



**FAST TRANSIENTS TEST SETUP**



**SURGES TEST SETUP**



**RADIO-FREQUENCY COMMON MODE TEST SETUP**

## APPENDIX 2 PHOTOGRAPHS OF PRODUCT



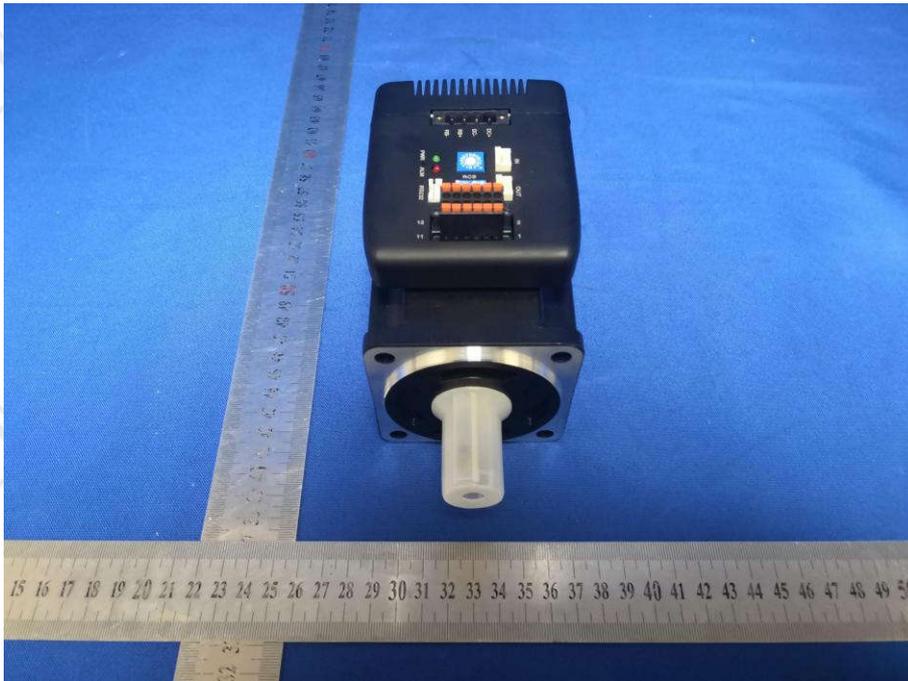
View of Product-1



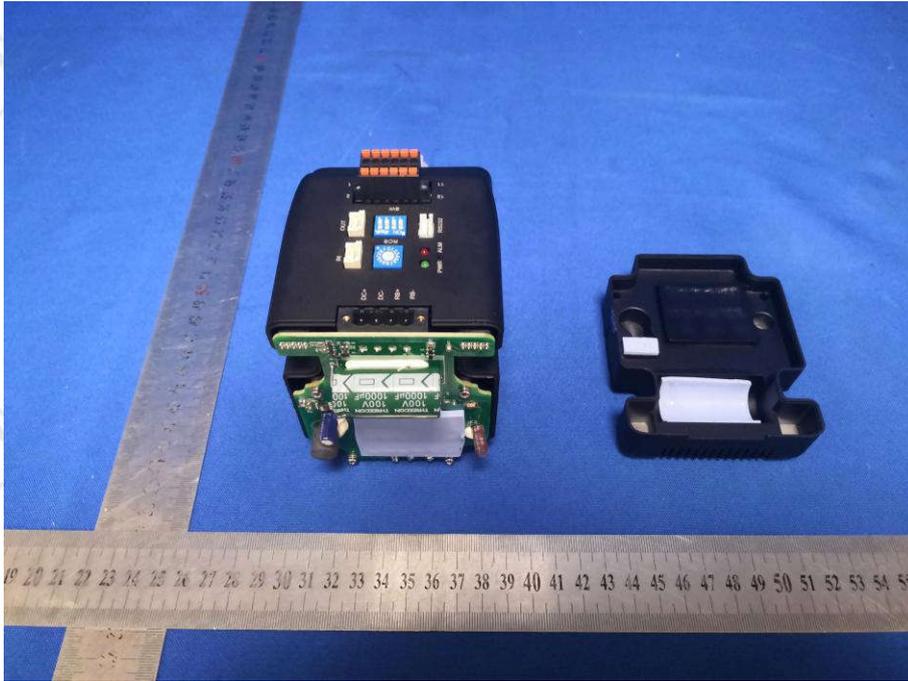
View of Product-2



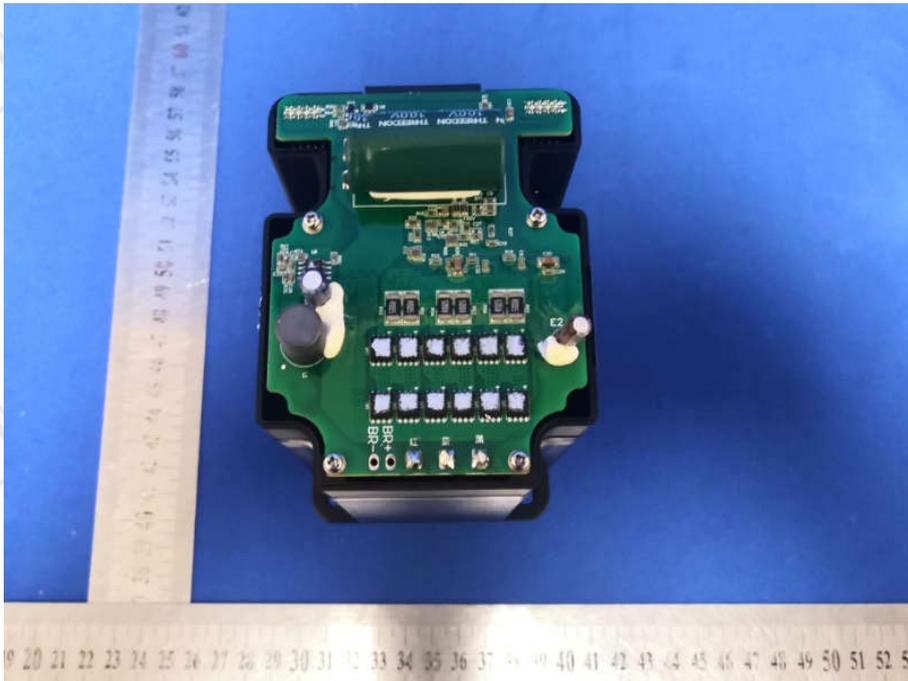
View of Product-3



View of Product-4



View of Product-5



View of Product-6

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