EMC TEST REPORT

Product	:	Rotary module
Trade mark	:	Wintec Dynamic
Model/Type reference	:	YH***-**A***-AAA*-A** (*indicates zhe numbers: 0~9, A represents zhe capital English letters:A~Z)
Serial Number	:	N/A
Ratings	:	12.5A/DC 48V/600W
Report Number	:	EED32R819788
Date of Issue	:	Nov. 21, 2025
Regulations	:	See below

Test Standards	Results
EN IEC 61000-6-2:2019	PASS
EN IEC 61000-6-4:2019	PASS

Prepared for:

Wintec Dynamic(ShenZhen)Ltd
Room 401, Building B, No.16, Baoshan Road, Jinlong Avenue, Pingshan District, Shenzhen City, Guangdong Province, China

Prepared by:

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Compiled by: Hugo Chen Reviewed by: Alan Chen

Approved by: David Wang Date of Issue: Nov. 21, 2025

David Wang Check No.: 2412271025

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(Note: N/A means not applicable)

1. GENERAL INFORMATION

Applicant:	Wintec Dynamic(ShenZhen)Ltd Room 401, Building B, No.16, Baoshan Road, Jinlong Avenue, Pingshan District, Shenzhen City, Guangdong Province, China
Manufacturer:	Wintec Dynamic(ShenZhen)Ltd Room 401, Building B, No.16, Baoshan Road, Jinlong Avenue, Pingshan District, Shenzhen City, Guangdong Province, China
EMC Directive:	2014/30/EU
Product:	Rotary module
Trade mark:	Wintec Dynamic
Model/Type reference:	YH***-**A***-AAA*-A** (*indicates zhe numbers: 0~9, A represents zhe capital English letters:A~Z)
Serial Number:	N/A
Report Number:	EED32R819788
State of Sample(s):	Normal
Sample Received Date:	Oct. 27, 2025
Sample tested Date:	Oct. 27, 2025 to Nov. 13, 2025

2. TEST SUMMARY

The Product has been tested according to the following specifications:

EMISSION		
Standard	**Test Item**	**Test**
EN IEC 61000-6-4	Conducted emissions	N/A[2]
EN IEC 61000-6-4	Radiated emissions	Yes

IMMUNITY (EN IEC 61000-6-2)		
Standard	**Test Item**	**Test**
IEC 61000-4-2	Electrostatic discharge (ESD)	Yes
IEC 61000-4-3	Radio-frequency electromagnetic field Immunity	Yes
IEC 61000-4-4	Electrical fast transients (EFT)	N/A[2]
IEC 61000-4-5	Surges	N/A[2]
IEC 61000-4-6	Radio-frequency continuous conducted Immunity	N/A[2]
IEC 61000-4-8	Power-frequency magnetic fields Immunity	N/A[1]
IEC 61000-4-11	Voltage dips and interruptions	N/A[2]

Remark:
1. The Product doesn't contain any device susceptible to magnetic fields.
2. The Product is powered by DC 48V power, and the cable is less than 3m.

3. TEST UNCERTAINTY

Where relevant, the following test 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 emissions	3.1
Radiated emissions (30MHz to 1GHz)	4.9
Radiated emissions (Above 1GHz)	4.7

4. PRODUCT INFORMATION AND TEST SETUP

4.1 PRODUCT INFORMATION

Ratings: 12.5A/DC 48V/600W

Model difference: All models electrical circuit design,layout,components used and internal wiring are identical, The differences are:the reducer and the reduction ratio,as well as zhe appearance and size.The test model is YH070-00R015-BCE2-V01, and the test results apply to other models as well.

The highest frequency of the internal sources of the EUT : Above 108MHz

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
①	Normal mode:EUT powered and connected to AE, then it works normally

4.4 SUPPORT EQUIPMENT

No.	Device Type	Brand	Series No.	Model	Data Cable	Power Cord
1.	Laptop	DELL	---	Dell G16 7620	--	--

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

3M Semi-anechoic Chamber (2)_Hongwei-Radiated emissions				
Equipment	**Manufacturer**	**Model**	**Series No.**	**Due Date**
3M Chamber & Accessory Equipment	TDK	SAC-3	--	01/12/2027
Receiver	R&S	ESR7	101697	09/12/2026
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	9163-401	09/05/2026
Microwave Preamplifier	Tonscend	EMC051845SE	980380	12/04/2025
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1869	04/06/2026
Automation Controller	SKET	BK-SC1001	S-C-TTAT-2623-002	--
Software-EZ	Farad Technology	--	EMEC-3A1-Pre	--

Shielding Room No. 1_Hongwei-Electrostatic discharge (ESD)				
Equipment	**Manufacturer**	**Model**	**Series No.**	**Due Date**
Electrostatic discharge simulator	3ctest	EDS 20H	ES031000222072	09/13/2026

3M Semi-anechoic Chamber (1)_Hongwei-Continuous RF electromagnetic radiated field disturbances				
Equipment	**Manufacturer**	**Model**	**Series No.**	**Due Date**
3M Chamber & Accessory Equipment	ETS-LINDGREN	FACT-3	3510	10/26/2026
Signal Generator	R&S	SMB 100B	103084	05/11/2026
Horn Antenna	Schwarzbeck	STLP 9149	0776	08/14/2026
Stacked double Log.-Per. Antenna	Schwarzbeck	STLP9128	9128ES-110	08/14/2026
Directional coupler	BONN	BDC 1060-40/500	2128343-04	11/09/2026
RF switch	R&S	OSP220	102205	--
Power Amplifier	BONN	BLMA 1060-100	2113427	07/14/2026
Power Amplifier	R&S	BBA 150-BC500	104743	05/11/2026
Power Probe	R&S	NRP6A	103343	06/15/2026
Power Probe	R&S	NRP6A	103342	06/15/2026
Software-EMC-32	R&S	--	V10.60.20-Y267_FU	--

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. RADIATED DISTURBANCE (RE)

6.1 LIMITS

30MHz ~ 1GHz(3m):

Requirements for radiated emissions

Frequency (MHz)	Quasi-peak limits at 3m dB(μV/m)
30-230	50
230-1000	57

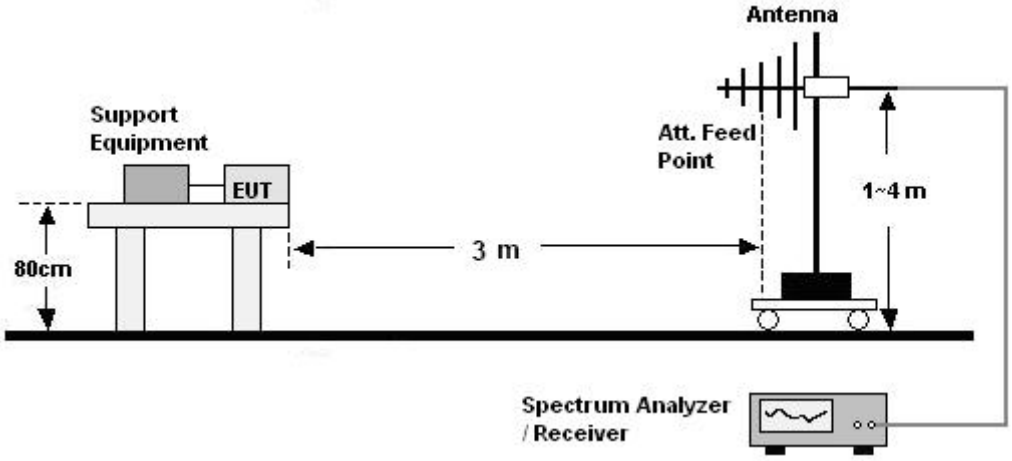
Above 1G(3m):

Requirements for radiated emissions

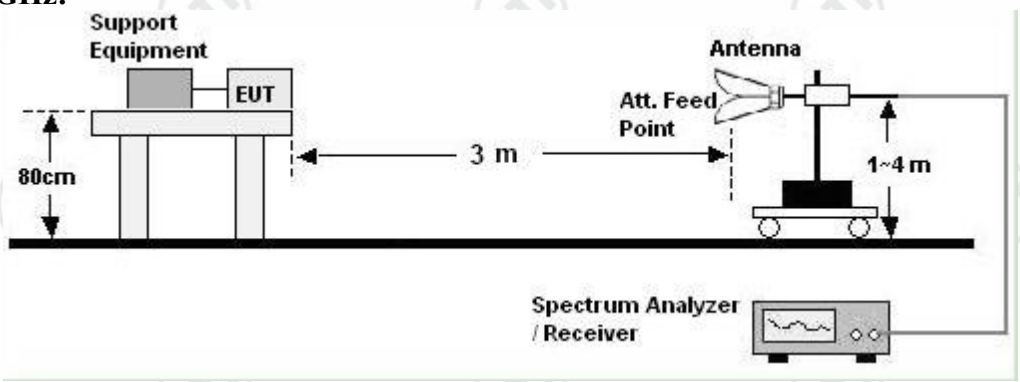
Frequency (GHz)	limit above 1GHz at 3m dB(μV/m)	
	Average	peak
1-3	56	76
3-6	60	80

6.2 BLOCK DIAGRAM OF TEST SETUP

30MHz ~ 1GHz(3m):



Above 1GHz:



6.3 TEST PROCEDURE

30MHz ~ 1GHz(Table Top**):**

a. The Product was placed on the non-conductive turntable 0.8 m above the ground at a chamber.

b. 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.

c. 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.

Above 1GHz(Table Top**):**

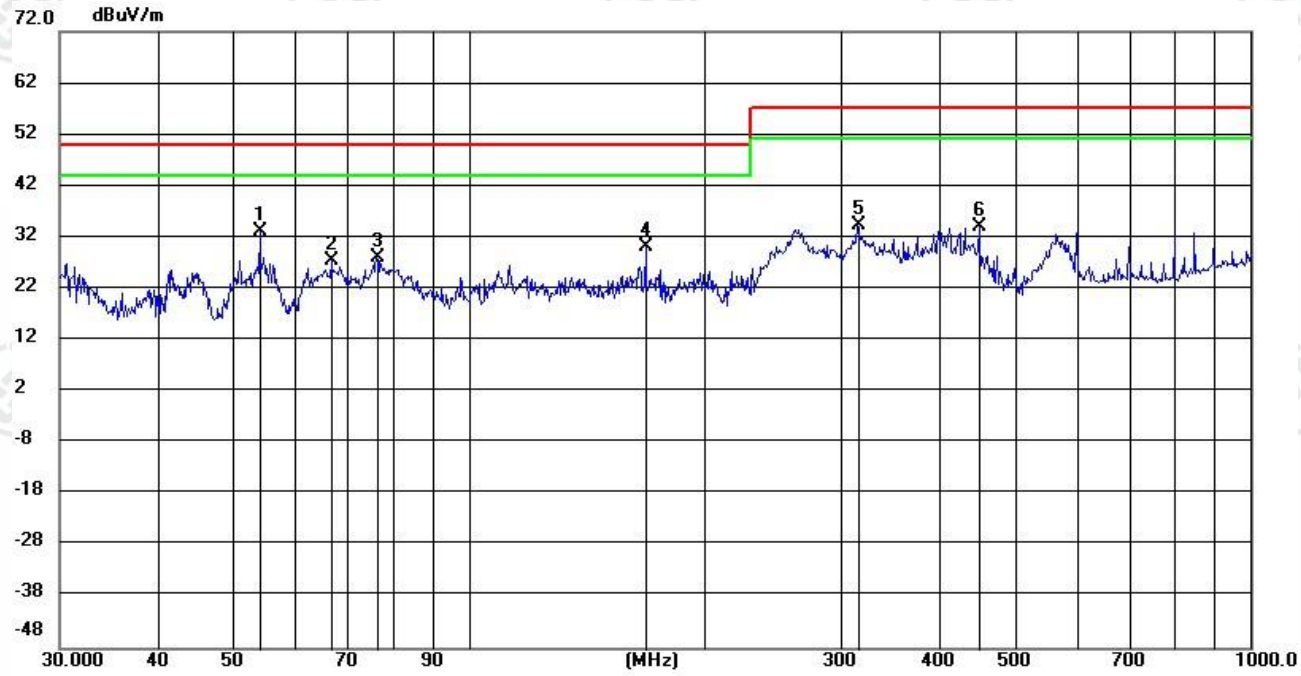
a. The Product was placed on the non-conductive turntable 0.8 m above the ground at a chamber.

b. Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 1MHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.

c. For each frequency whose maximum record was higher or close to limit, measure its AV value: rotate the turntable from 0 to 360 degrees to find the degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to AV value and specified bandwidth with Maximum Hold Mode, and record the maximum value.

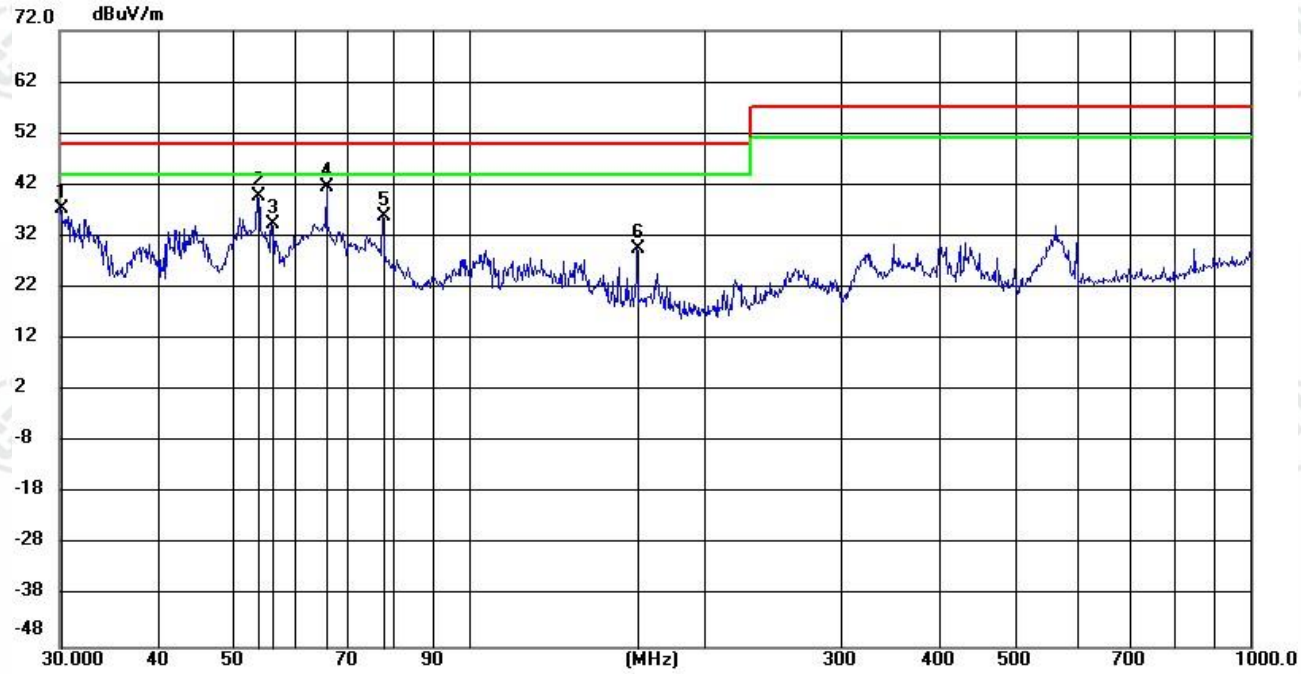
6.4 GRAPHS AND DATA

Product	:	Rotary module			
Model/Type reference	:	YH070-00R015-BCE2-V01			
Power	:	DC 48V	**Temperature**	:	24℃
Mode	:	①	**Humidity**	:	54%R.H.
Polarization	:	Horizontal	**Press**	:	101KPa



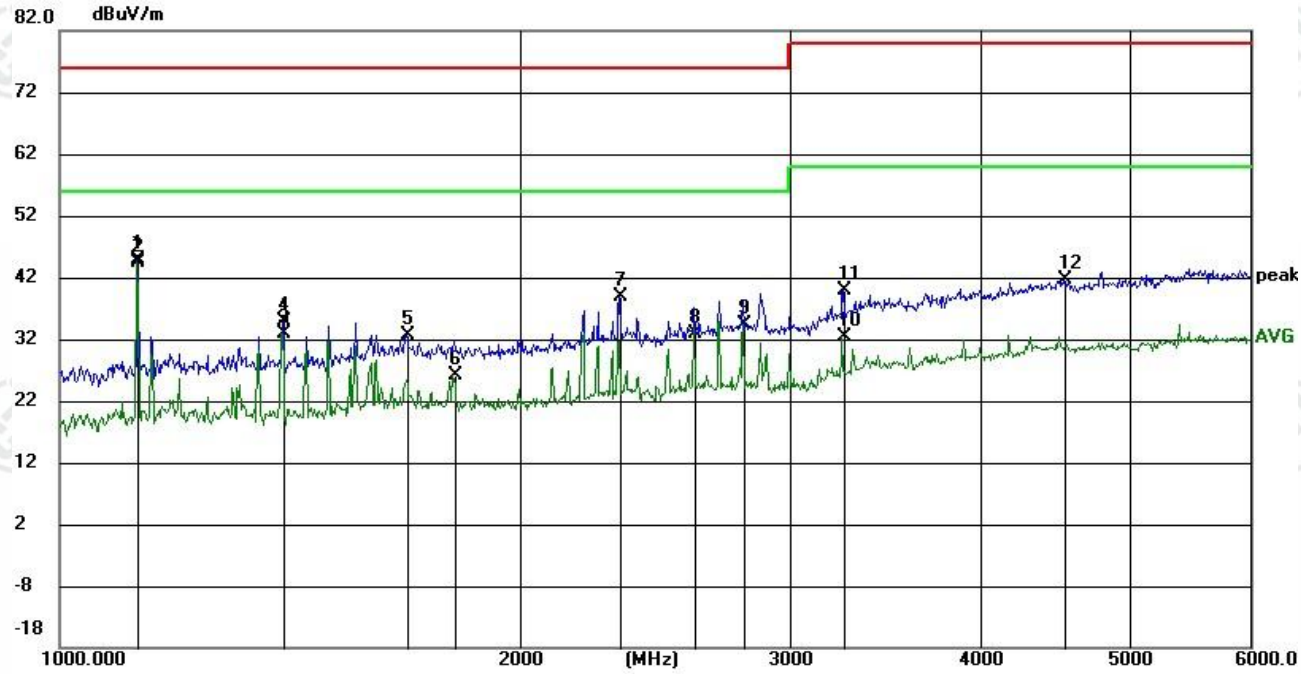
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	54.1089	19.09	14.18	33.27	50.00	-16.73	QP	200	171
2		66.8026	15.59	11.82	27.41	50.00	-22.59	QP	200	189
3		76.4316	17.85	10.20	28.05	50.00	-21.95	QP	200	189
4		168.4433	19.19	10.98	30.17	50.00	-19.83	QP	100	250
5		314.4315	17.58	16.80	34.38	57.00	-22.62	QP	100	345
6		450.0290	14.04	20.04	34.08	57.00	-22.92	QP	200	119

Product	:	Rotary module			
Model/Type reference	:	YH070-00R015-BCE2-V01			
Power	:	DC 48V	**Temperature**	:	24℃
Mode	:	①	**Humidity**	:	54%R.H.
Polarization	:	Vertical	**Press**	:	101KPa



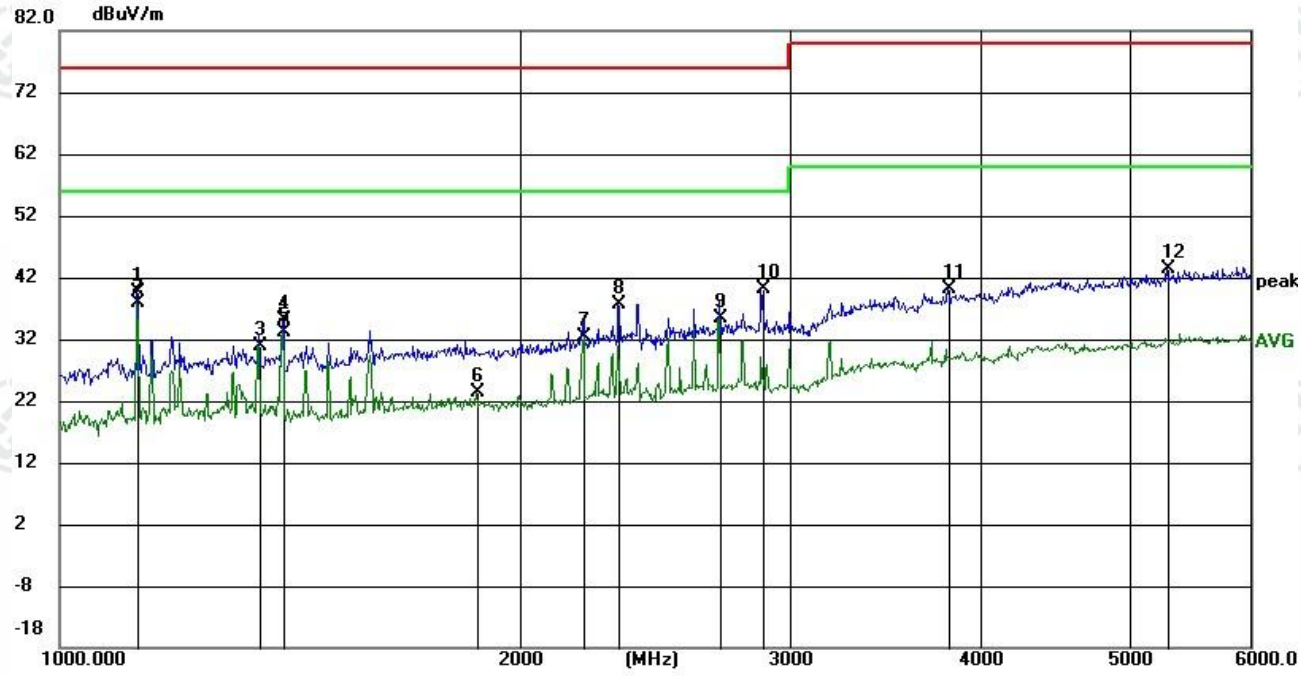
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		30.1847	24.89	12.47	37.36	50.00	-12.64	QP	100	119
2		53.8440	25.50	14.21	39.71	50.00	-10.29	QP	200	39
3		56.0302	20.38	13.96	34.34	50.00	-15.66	QP	200	126
4	*	65.9301	29.39	12.03	41.42	50.00	-8.58	QP	200	39
5		77.8517	25.79	10.03	35.82	50.00	-14.18	QP	200	56
6		164.3590	18.64	10.79	29.43	50.00	-20.57	QP	200	267

Product	:	Rotary module			
Model/Type reference	:	YH070-00R015-BCE2-V01			
Power	:	DC 48V	**Temperature**	:	24℃
Mode	:	①	**Humidity**	:	54%R.H.
Polarization	:	Horizontal	**Press**	:	101KPa



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		1124.928	60.28	-15.50	44.78	76.00	-31.22	peak	200	5
2	*	1124.928	59.80	-15.50	44.30	56.00	-11.70	AVG	200	5
3		1399.903	47.64	-14.67	32.97	56.00	-23.03	AVG	100	40
4		1400.028	49.55	-14.67	34.88	76.00	-41.12	peak	200	5
5		1687.106	46.45	-13.85	32.60	76.00	-43.40	peak	200	5
6		1812.460	39.58	-13.48	26.10	56.00	-29.90	AVG	200	20
7		2322.339	49.85	-11.00	38.85	76.00	-37.15	peak	100	40
8		2599.855	42.61	-9.68	32.93	56.00	-23.07	AVG	200	5
9		2800.042	43.49	-9.17	34.32	56.00	-21.68	AVG	100	40
10		3252.797	38.90	-6.58	32.32	60.00	-27.68	AVG	100	340
11		3254.254	46.51	-6.57	39.94	80.00	-40.06	peak	100	325
12		4536.905	42.60	-0.99	41.61	80.00	-38.39	peak	100	125

Product	:	Rotary module			
Model/Type reference	:	YH070-00R015-BCE2-V01			
Power	:	DC 48V	**Temperature**	:	24℃
Mode	:	①	**Humidity**	:	54%R.H.
Polarization	:	Vertical	**Press**	:	101KPa



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		1124.928	55.10	-15.50	39.60	76.00	-36.40	peak	100	6
2	*	1124.928	53.40	-15.50	37.90	56.00	-18.10	AVG	100	6
3		1349.899	45.82	-14.82	31.00	56.00	-25.00	AVG	100	20
4		1400.154	49.88	-14.67	35.21	76.00	-40.79	peak	100	329
5		1400.154	47.82	-14.67	33.15	56.00	-22.85	AVG	100	329
6		1874.889	36.58	-13.32	23.26	56.00	-32.74	AVG	100	104
7		2200.014	44.02	-11.75	32.27	56.00	-23.73	AVG	100	6
8		2321.091	48.54	-11.02	37.52	76.00	-38.48	peak	100	62
9		2700.027	44.81	-9.42	35.39	56.00	-20.61	AVG	100	20
10		2880.444	49.16	-8.96	40.20	76.00	-35.80	peak	100	329
11		3810.716	43.59	-3.52	40.07	80.00	-39.93	peak	100	174
12		5300.333	42.64	0.82	43.46	80.00	-36.54	peak	200	311

Note:
1. Margin=Measurement(Level)-Limit.
2. Measurement(Level)=Reading Level+Correct Factor.
3. In the test results, an asterisk (*) indicates Maximum Data, a cross (X) indicates over Limit, an exclamation mark (!) indicates over -6dB margin Limit.

7. IMMUNITY TEST

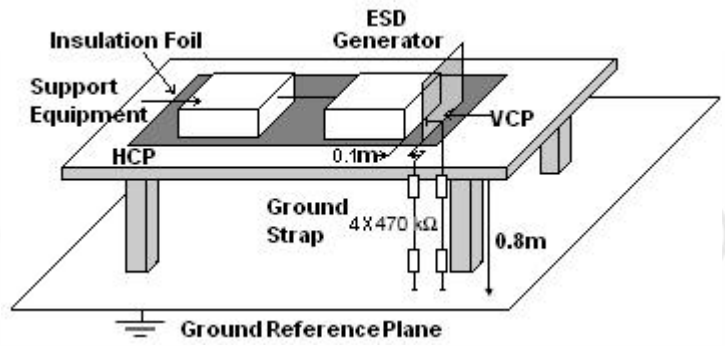
General Performance Criteria	
Product Standard	**EN IEC 61000-6-2:2019**
CRITERION A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment 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, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
CRITERION B	During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test. After the test, the equipment shall continue to operate as intended without operator intervention; no degradation of performance or loss of function is allowed, below a performance level specified by the manufacturer, when the equipment 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), or recovery time, is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
CRITERION C	Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

7.1 ELECTROSTATIC DISCHARGE (ESD)

7.1.1 TEST SPECIFICATION

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

7.1.2 BLOCK DIAGRAM OF TEST SETUP



7.1.3 TEST PROCEDURE

a. Electrostatic discharges were applied only to those points and surfaces of the Product that are accessible to users during normal operation.

b. The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.

c. The time interval between two successive single discharges was at least 1 second.

d. 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.

e. Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.

f. 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.

g. 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.

h. 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.

7.1.4 RESULTS & PERFORMANCE

Product	:	Rotary module			
Model/Type reference	:	YH070-00R015-BCE2-V01			
Power	:	DC 48V	**Temperature**	:	24℃
Mode	:	①	**Humidity**	:	53%R.H.
Press	:	101kPa			

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
Contact Discharge	Indirect Discharge HCP	4	10	B	A
Contact Discharge	Indirect Discharge VCP	4	10	B	A
Air Discharge	Apertures and Insulating Surfaces	8	10	B	A

Observation:

A: No observable degradation in performance during and after test.

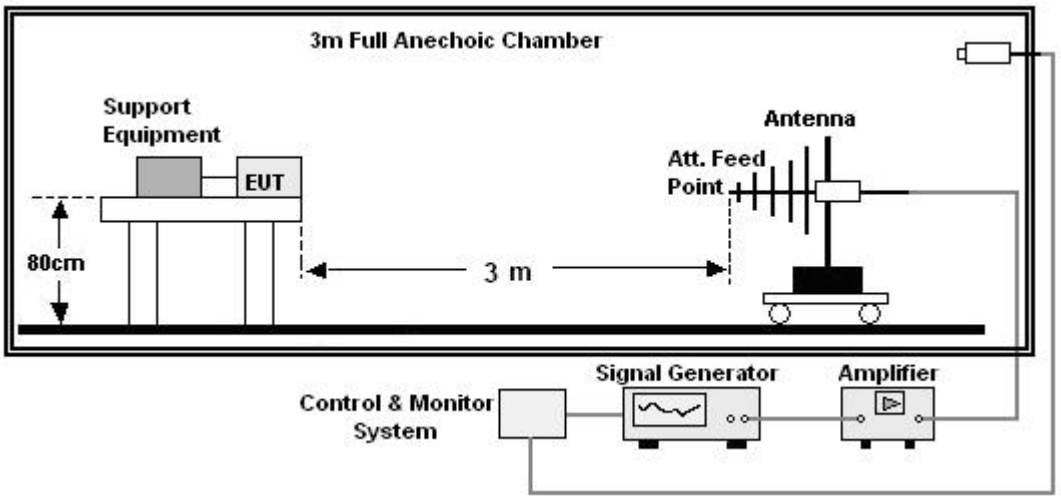
7.2 RADIO-FREQUENCY ELECTROMAGNETIC FIELD IMMUNITY

7.2.1 TEST SPECIFICATION

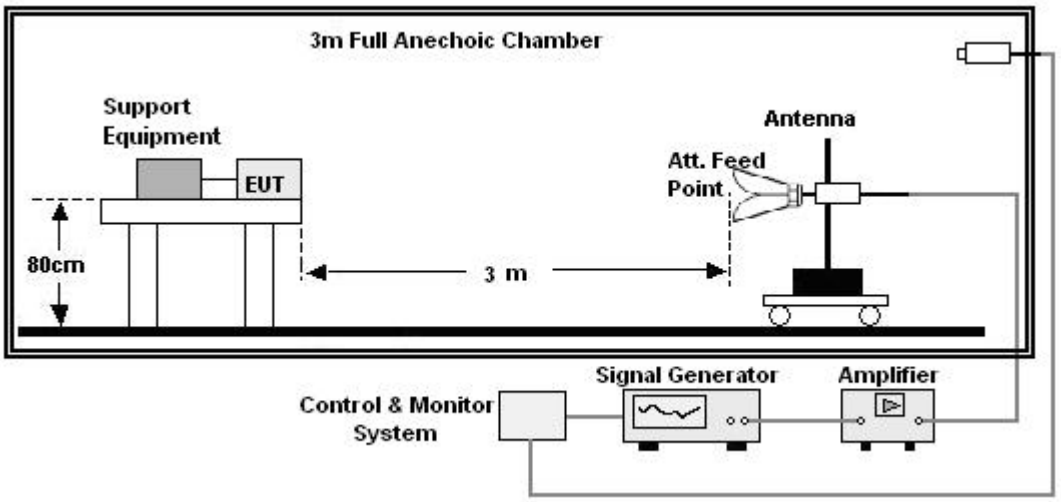
Basic Standard	:	EN IEC 61000-6-2 & IEC 61000-4-3
Test Port	:	Enclosure port
Sweep Step	:	1%
Dwell Time	:	1s
Modulation	:	1 kHz 80% AM

7.2.2 BLOCK DIAGRAM OF TEST SETUP

80-1000MHz:



Above 1000MHz:



7.2.3 TEST PROCEDURE

a. The testing was performed in a fully-anechoic chamber. The transmit antenna was located at a distance of 3 meters from the Product.

b. The frequency range is swept from 80MHz to 1000MHz, 1400MHz to 6000MHz with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed 1.5x 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.

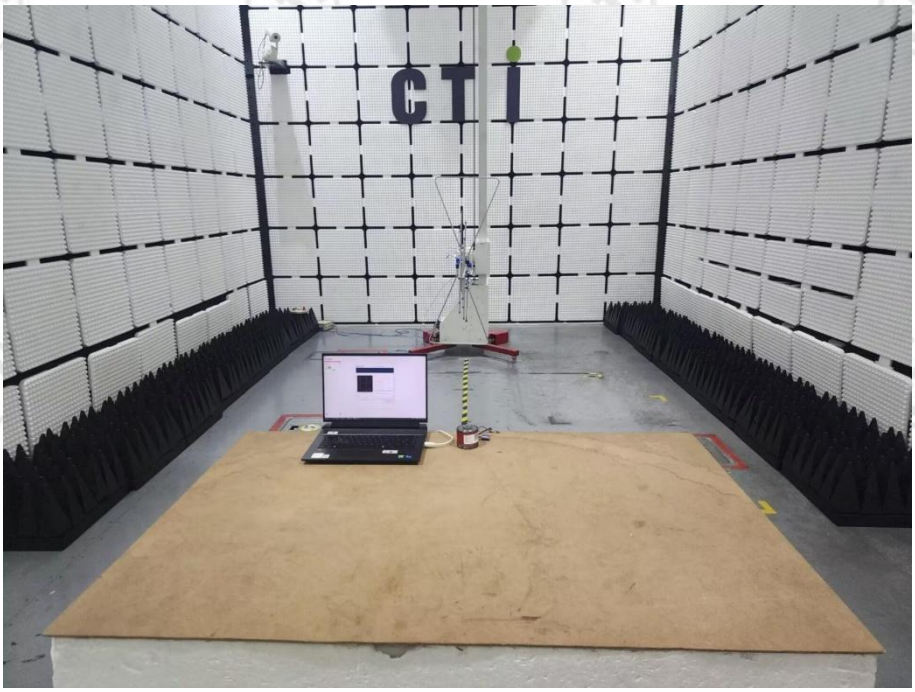
7.2.4 RESULTS & PERFORMANCE

Product	:	Rotary module			
Model/Type reference	:	YH070-00R015-BCE2-V01			
Power	:	DC 48V	**Temperature**	:	23℃
Mode	:	①	**Humidity**	:	53%R.H.
Press	:	101kPa			

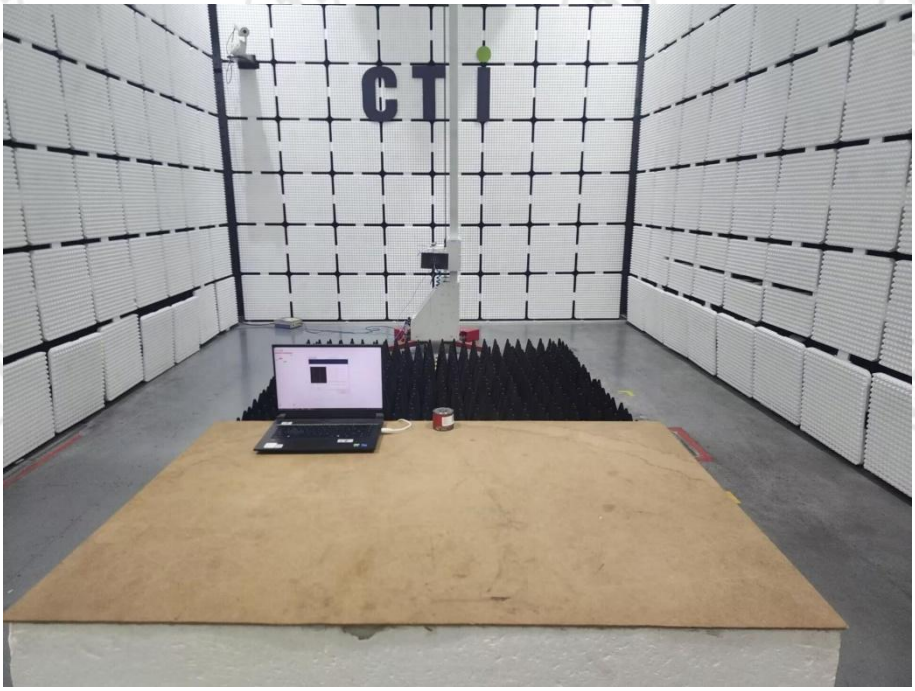
Frequency(MHz)	Position	Field Strength(V/m)	Performance Criterion	Test Result
80 - 1000	Front,Right,Back,Left	10	A	A
1400-6000	Front,Right,Back,Left	3	A	A

Observation:
A: No observable degradation in performance during and after test.

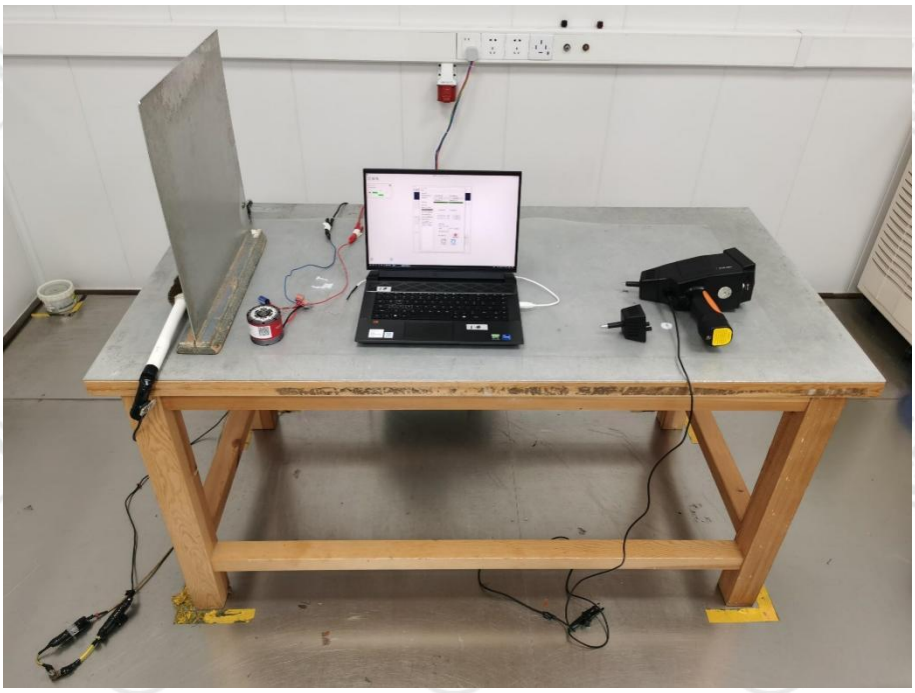
APPENDIX 1 PHOTOGRAPHS OF TEST SETUP



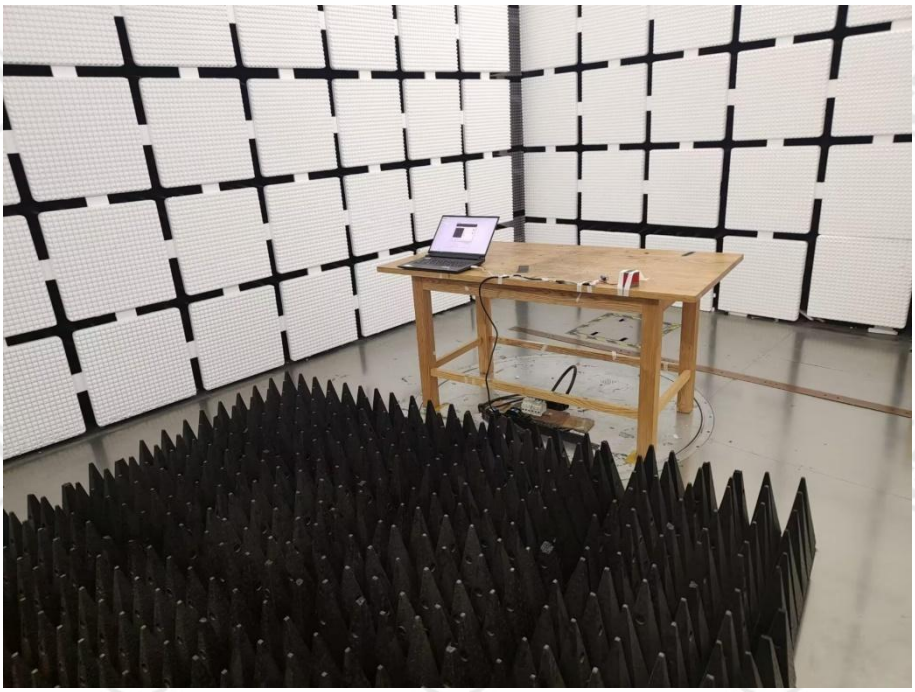
Radiated emissions Test Setup-1



Radiated emissions Test Setup-2

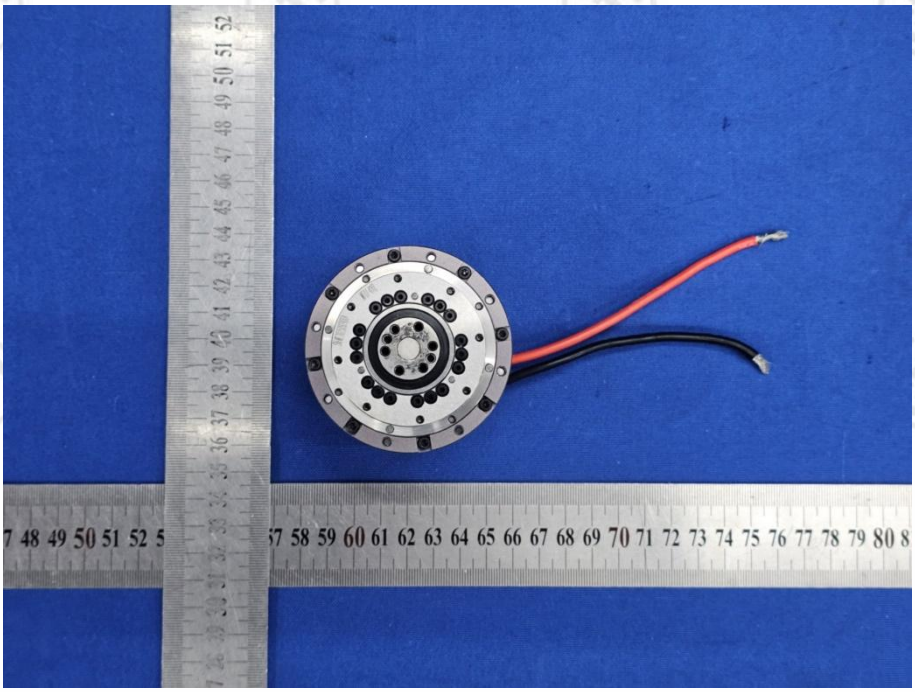


Electrostatic discharge Test Setup-1

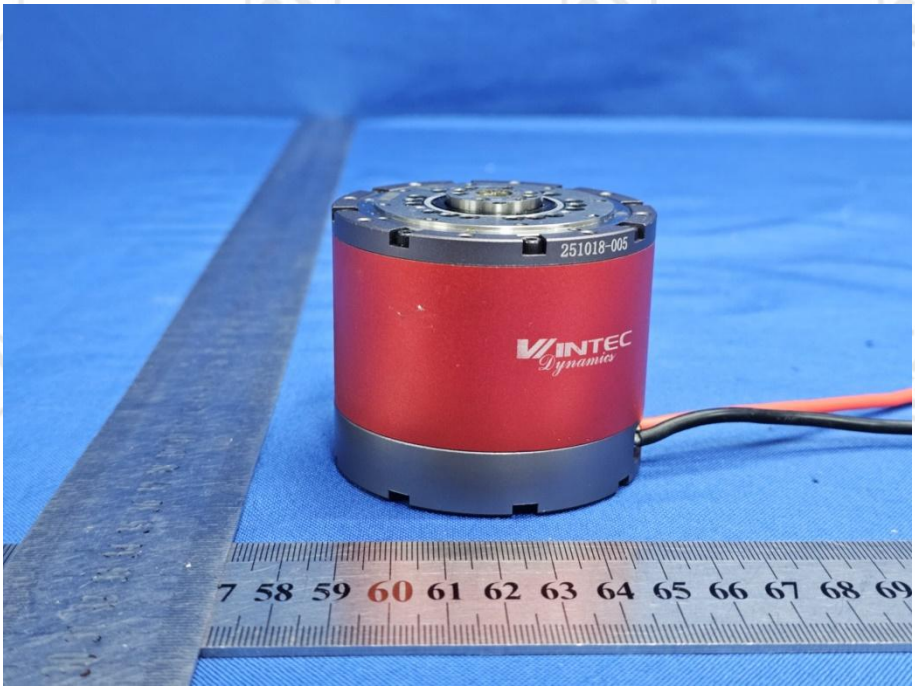


Continuous RF electromagnetic radiated field disturbances Test Setup-1

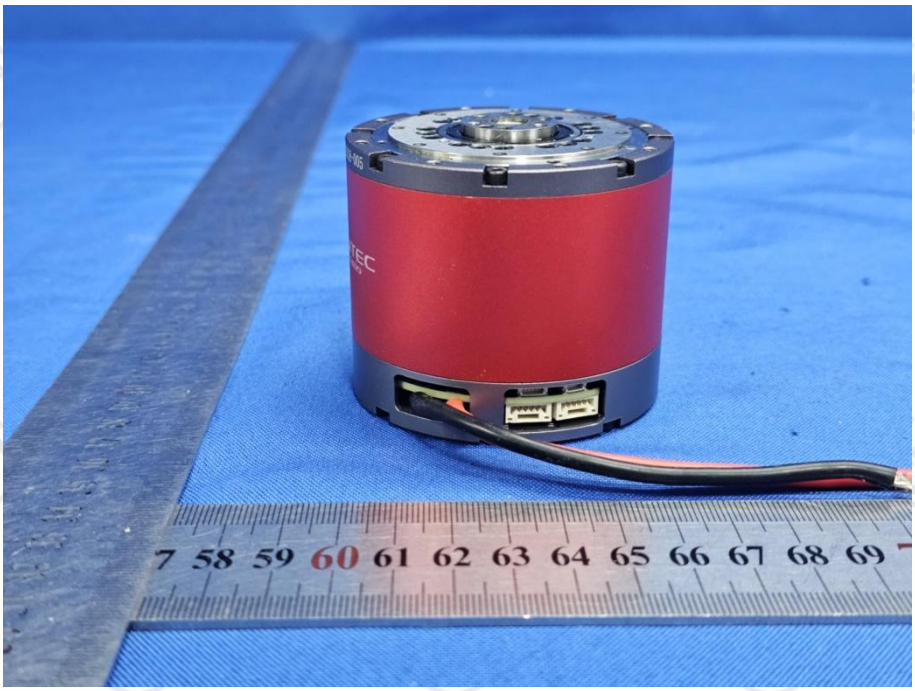
APPENDIX 2 PHOTOGRAPHS OF PRODUCT



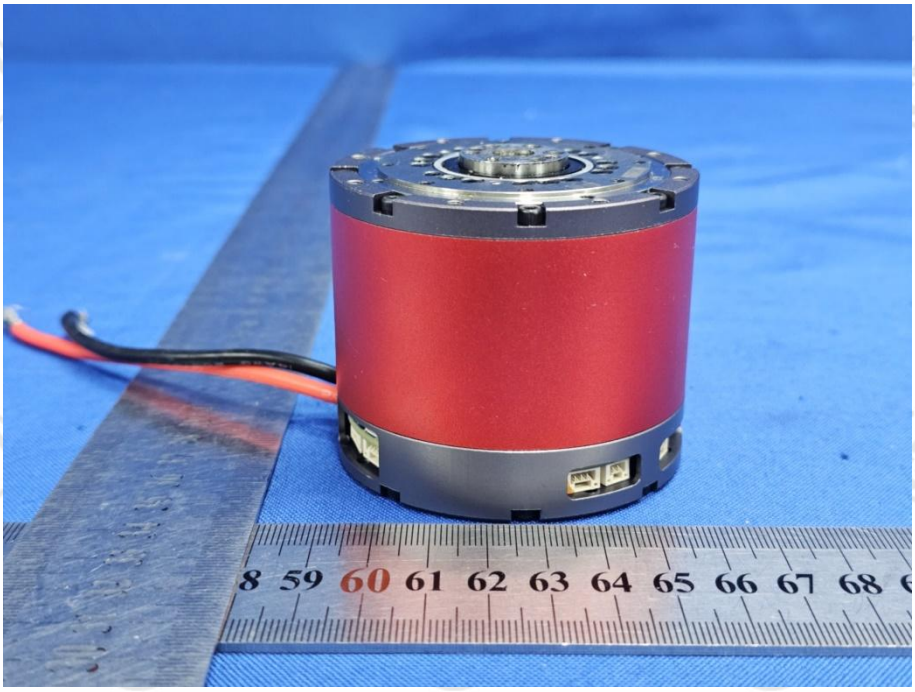
View Of Product-01



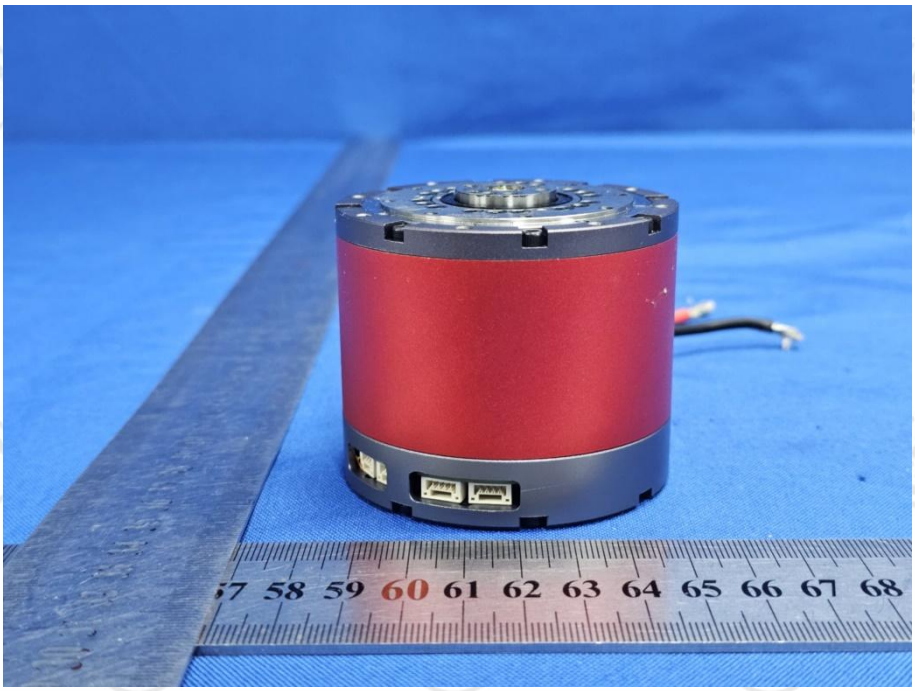
View Of Product-02



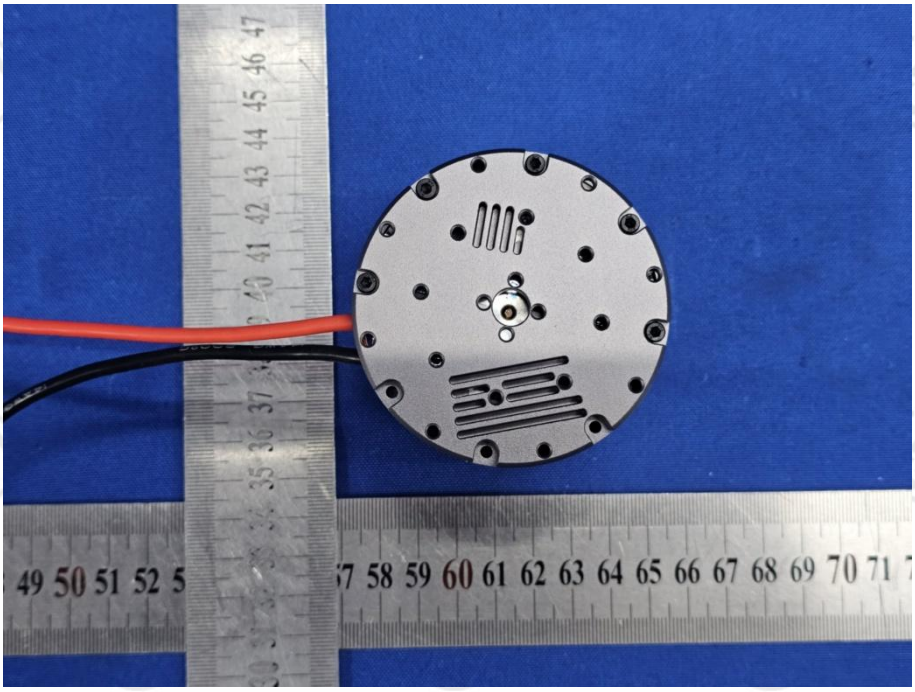
View Of Product-03



View Of Product-04



View Of Product-05



View Of Product-06

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;

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

3. The result(s) shown in this report refer(s) only to the sample(s) tested;

4. Unless otherwise stated,the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;

5. Without written approval of CTI, this report can't be reproduced except in full;

*** End of Report ***