

EMC TEST REPORT

Report Reference No.....: B-E00298E0650

Client ID.....: YY2226

Report Query.....: 

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Date of Test.....: 2025-10-10 to 2025-11-12

Date of issue.....: 2025-11-13

Testing Laboratory Name.....: Beide (Shenzhen) Product Service Limited

Address.....: 6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an
Dist, Shenzhen, China

Applicant's name.....: NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD

Address.....: Room 906, rooms (9-1), (9-2), Langmu building, Baisha road
sub district, Cixi City, Ningbo, Zhejiang Provice, China

Test specification.....:

Standard.....: EN IEC 61000-6-3:2021
EN IEC 61000-3-2:2019+A1:2021+A2:2024
EN 61000-3-3:2013+A1:2019+A2:2021
EN IEC 61000-6-1:2019

The device described above is tested by Beide(Shenzhen)Product Service Limited to determine the maximum emission levels emanating from the device, the severe levels which the device can endure and EUT's performance criterion. The test results are contained in this test report. Beide(Shenzhen)Product Service Limited is assumed of full responsibility for the accuracy and completeness of these tests.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Beide (Shenzhen) Product Service Limited.

Note: P=PASS, F=Fail, N/A= Not Applicable

Test item description.....: PDU (Power Distribution Unit)

Manufacturer.....: NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD

Model/Type reference.....: YS10061KGSU

Trade Mark.....: 

List Model	YS10XX1(KGSU), YS15XX1(KGSU), YS20XX1(KGSU), YS15XX1SP, YS10XX1SPIP, YS15XX1MPIP, YS15XX1MP (XX indicates the number of jacks, from 01 to 50) K: Switch G: overload protection S: Surge protection (Un: 250V~ 50/60Hz IR:16A In(8/20uS): 10KA) Ur<1000v Mp: L-N L-PE N-PE tA<25nS) U: USB charger 5V 2.1A
Ratings.....	: AC250V,50/60Hz,16A,3680W
Result.....	: PASS

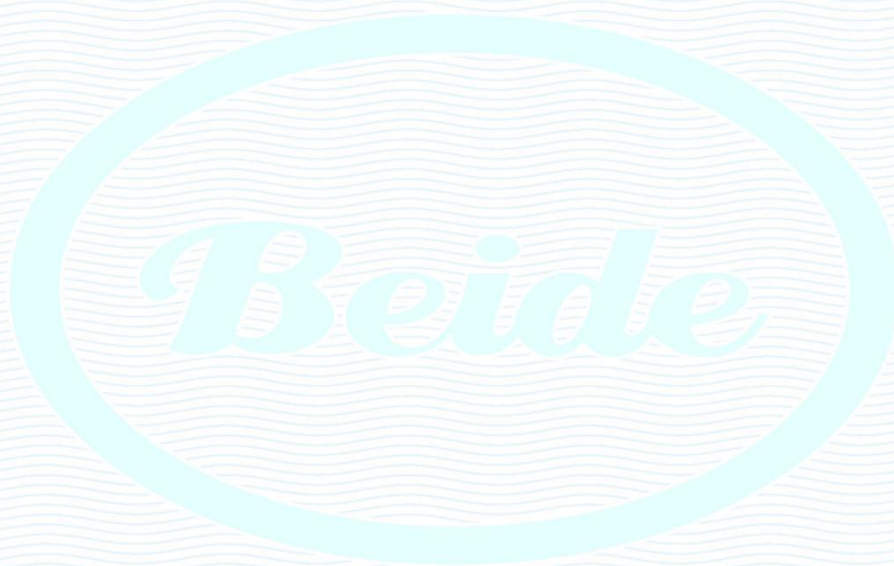


TABLE OF CONTENT

Description	Page
Test Report Declaration	
1. TEST RESULTS SUMMARY	5
2. GENERAL INFORMATION.....	6
2.1. Report Information	6
2.2. Description of Device (EUT).....	6
2.3. Test Facility	6
2.4. Test Uncertainty	6
2.5. Test Condition	7
2.6. Test Conditions	7
2.7. Performance Criterion	7
3. TEST INSTRUMENT USED	8
3.1. For Conducted Emission Test.....	8
3.2. For Radiation Emission Test.....	8
3.3. For Harmonic / Flicker Test.....	8
3.4. For Electrostatic Discharge Immunity Test	8
3.5. For Radio Frequency Electromagnetic Field	9
3.6. For Electrical Fast Transient/Burst Test.....	9
3.7. For Surge Test	9
3.8. For Injected Currents Susceptibility Test	9
3.9. For Magnetic Field Immunity Test.....	9
3.10. For Voltage Dips and Interruptions Test	9
4. POWER LINE CONDUCTED EMISSION TEST.....	10
4.1. Block Diagram of Test Setup	10
4.2. Test Standard.....	10
4.3. Power Line Conducted Emission Limit.....	10
4.4. EUT Configuration on Test.....	10
4.5. Operating Condition of EUT	11
4.6. Test Procedure.....	11
4.7. Power Line Conducted Emission Test Results	11
5. RADIATION EMISSION TEST.....	12
5.1. Block Diagram of Test Setup	12
5.2. Test Standard.....	12
5.3. Radiation Emission Limit.....	12
5.4. EUT Configuration on Test.....	12
5.5. Operating Condition of EUT	13
5.6. Test Procedure.....	13
5.7. Radiation Emission Test Results	13
6. HARMONIC CURRENT EMISSION TEST	14
6.1. Block Diagram of Test Setup	14
6.2. Test Standard.....	14
6.3. Operating Condition of EUT	14
6.4. Test Results	14
7. VOLTAGE FLUCTUATIONS & FLICKER TEST.....	15
7.1. Block Diagram of Test Setup	15
7.2. Test Standard.....	15
7.3. Operating Condition of EUT	15
7.4. Test Results	15
8. ELECTROSTATIC DISCHARGE TEST.....	16
8.1. Block Diagram of Test Setup	16
8.2. Test Standard.....	16
8.3. Severity level and Performance criterion	17

8.4. EUT Configuration on Test.....	17
8.5. Operating Condition of EUT	17
8.6. Test Procedure.....	17
8.7. Test Results	17
9. RF FIELD STRENGTH SUSCEPTIBILITY TEST	19
9.1. Block Diagram of Test Setup	19
9.2. Test Standard.....	19
9.3. Severity level and Performance criterion	19
9.4. EUT Configuration on Test.....	19
9.5. Operating Condition of EUT	20
9.6. Test Procedure.....	20
9.7. Test Results	20
10. ELECTRICAL FAST TRANSIENT/BURST TEST	22
10.1. Block Diagram of Test Setup	22
10.2. Test Standard.....	22
10.3. Severity level and Performance criterion	22
10.4. EUT Configuration on Test.....	22
10.5. Operating Condition of EUT	23
10.6. Test Procedure.....	23
10.7. Test Results	23
11. SURGE TEST	25
11.1. Block Diagram of Test Setup	25
11.2. Test Standard.....	25
11.3. Severity level and Performance criterion	25
11.4. EUT Configuration on Test.....	25
11.5. Operating Condition of EUT	25
11.6. Test Procedure.....	26
11.7. Test Results	26
12. INJECTED CURRENTS SUSCEPTIBILITY TEST	27
12.1. Block Diagram of Test Setup	28
12.2. Test Standard.....	28
12.3. Severity Levels and Performance Criterion.....	28
12.4. EUT Configuration on Test.....	28
12.5. Operating Condition of EUT	28
12.6. Test Procedure.....	28
12.7. Test Results	29
13. POWER FREQUENCY MAGNETIC TEST.....	31
13.1. Block Diagram of Test Setup	31
13.2. Test Standard.....	31
13.3. Severity level and Performance criterion	31
13.4. EUT Configuration on Test.....	31
13.5. Operating Condition of EUT	32
13.6. Test Procedure.....	32
13.7. Test Results	32
14. VOLTAGE DIPS AND INTERRUPTIONS TEST	34
14.1. Block Diagram of Test Setup	34
14.2. Test Standard.....	34
14.3. Severity level and Performance criterion	34
14.4. EUT Configuration.....	34
14.5. Operating Condition of EUT	35
14.6. Test Procedure.....	35
14.7. Test Results	35
APPENDIX I (Test Data)	(4 pages)
APPENDIX II (EUT PHOTOS)	(2 pages)

1.TEST RESULTS SUMMARY

Emission Measurement		
Radiated Emission	EN IEC 61000-6-3:2021	PASS
Conducted Emission	EN IEC 61000-6-3:2021	PASS
Harmonic Current Emissions	EN IEC 61000-6-3:2021 EN IEC 61000-3-2:2019+A1:2021+A2:2024	PASS
Voltage Fluctuations and Flicker	EN IEC 61000-6-3:2021 EN 61000-3-3:2013+A1:2019+A2:2021	PASS
Immunity Measurement		
Electrostatic Discharge	EN IEC 61000-6-1:2019 EN 61000-4-2:2009	PASS
RF Field Strength Susceptibility Test	EN IEC 61000-6-1:2019 EN 61000-4-3:2006+A2:2010	PASS
Electrical Fast Transient/Burst Test	EN IEC 61000-6-1:2019 EN 61000-4-4:2012	PASS
Injected Currents Susceptibility Test	EN IEC 61000-6-1:2019 EN 61000-4-6:2014+AC:2015	PASS
Magnetic Field Immunity Test	EN IEC 61000-6-1:2019 EN 61000-4-8:2010	PASS
Voltage Dips and Interruptions	EN IEC 61000-6-1:2019 EN 61000-4-11:2004+A1:2017	PASS
Surges	EN IEC 61000-6-1:2019 EN 61000-4-5:2014+A1:2017	PASS

2. GENERAL INFORMATION

2.1. Report Information

2.1.1. This report is not a certificate of quality, it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BEIDE approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BEIDE in any way guarantees the later performance of the product/equipment.

2.1.2. The sample/s mentioned in this report is/are supplied by applicant, BEIDE therefore assumes no responsibility for the accuracy of information on the brand names, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the applicant at an additional fee. No third part can obtain a copy of this report through BEIDE, unless the applicant has authorized BEIDE in writing to do so.

2.2. Description of Device (EUT)

Description : PDU (Power Distribution Unit)
Number Model : YS10061KGSU
Applicant : NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD
Room 906, rooms (9-1), (9-2), Langmu building, Baisha road sub district, Cixi City, Ningbo, Zhejiang Provice, China

Manufacturer : NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD
Room 906, rooms (9-1), (9-2), Langmu building, Baisha road sub district, Cixi City, Ningbo, Zhejiang Provice, China

2.3. Test Facility

Site Description

Tested by : Beide (Shenzhen) Product Service Limited

Site Location : 6F, Bldg E, Hourui 3rd Ind Zone, Xixiang, Bao'an Dist, Shenzhen, China

2.4. Test Uncertainty

Conducted Emission = $\pm 3.66\text{dB}$
Uncertainty
Radiated Emission = $\pm 5.24\text{dB}$
Uncertainty

2.5. Test Condition

Test Mode: ON

2.6. Test Conditions

Temperature: 22°C-28°C

Relative Humidity: 45%-58%

2.7. Performance Criterion

Performance criterion A:

The equipment shall continue to operate as intended during the test.

No change of actual operating state (for example change of channel) is allowed as a result of the application of the test.

Multifunction equipment shall for each function meet the relevant requirements.

Evaluation is carried out for audio and video functions.

Performance criterion B:

The equipment shall continue to operate as intended after the test. No loss of function is allowed after the test when the apparatus is used as intended. But failures which are recovered automatically but which cause temporary delay in processing, are permissible. No change of actual operating state for example change of channel or stored data and settings is allowed as a result of the application of the test. During the test, degradation of performance is allowed.

Performance criterion C:

Temporary loss of function is allowed during the test, provided the function is Self-recoverable or can be restored by the operation of the controls.

If, as a result of the application of the tests defined in this standard, the EUT becomes

dangerous or unsafe, it shall be deemed to have failed the test.

3.TEST INSTRUMENT USED

3.1.For Conducted Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum analyzer	ADVANTEST	R3261C	51720141	2025.03.06	1 Year
2.	EMI Test receiver	R&S	ESS	92822-1	2025.03.06	1 Year
3.	Pre Amplifier	Anritsu	MH648A	0983	2025.03.06	1 Year
4.	LISN	Kyoritsu	KNW-242C	23-2	2025.03.06	1 Year
5.	RF Selector	TOYO	NS4000	432099	NCR	NCR

3.2.For Radiation Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMC Analyzer	Agilent	E7402A	7233	2025.03.06	1 Year
2.	EMI Test receiver	R&S	ESS	92822-1	2025.03.06	1 Year
3.	Pre Amplifier	Anritsu	MH648A	0983	2025.03.06	1 Year
4.	Bilog Antenna	SCHAFFNER	CBL6111C	9332	2025.03.06	1 Year
5.	RF Selector	TOYO	NS4901A	22302	NCR	NCR
6.	Turn Disc	HD	DS4901A	0292833	NCR	NCR
7.	Antenna Mast	HD	MA2400	09334	NCR	NCR

3.3.For Harmonic / Flicker Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Conditioning Unit	SCHAFFNER	CCN1000-1	23980/7	2025.03.06	1 Year
2.	Signal Phase Impedance Network	SCHAFFNER	INA2152	0929-2	2025.03.06	1 Year
3.	5KVA AC Power Source	SCHAFFNER	NSG1007	2983332	2025.03.06	1 Year

3.4.For Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	ESD Tester	Noiseken	ESS-200AX	0223	2025.03.07	1 Year

3.5.For Radio Frequency Electromagnetic Field

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Generator	IFR	2032	203002/100	2025.03.07	1 Year
2.	Amplifier	A&R	150W1000	301584	2025.03.07	1 Year
3.	Dual Directional Coupler	A&R	DC6080	301508	2025.03.07	1 Year
4.	Power Head	A&R	PH2000	301193	2025.03.07	1 Year
5.	Power Meter	A&R	PM2002	302799	2025.03.07	1 Year
6.	Field Monitor	A&R	FM5004	300329	2025.03.07	1 Year
7.	Field Probe	A&R	FP5000	300221	2025.03.07	1 Year

3.6.For Electrical Fast Transient/Burst Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Ultra Compact Simulator	EM TEST	UCS500M6	0500-19	2025.03.07	1 Year

3.7.For Surge Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Surge Tester	HAEFELY	PSURGE4.1	080107-04	2025.03.07	1 Year

3.8.For Injected Currents Susceptibility Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Generator	IFR	2032	203002/100	2025.03.07	1 Year
2.	Amplifier	A&R	150W1000	301584	2025.03.07	1 Year

3.9.For Magnetic Field Immunity Test

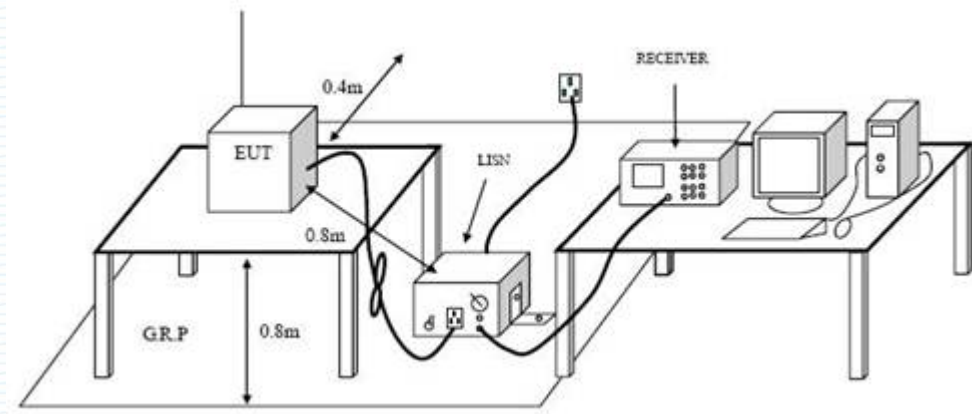
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Magnetic Field Tester	HAEFELY	MAG100	250040.1	2025.03.07	1 Year

3.10.For Voltage Dips and Interruptions Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Dips Tester	HEAFELY	PLINE 1610	083732-18	2025.03.07	1 Year

4. POWER LINE CONDUCTED EMISSION TEST

4.1. Block Diagram of Test Setup



4.2. Test Standard

EN IEC 61000-6-3:2021

4.3. Power Line Conducted Emission Limit

Frequency MHz	Limits dB(μ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes 1. *Decreasing linearly with logarithm of frequency.

:

2. The lower limit shall apply at the transition frequencies.

4.4. EUT Configuration on Test

The following equipments are installed on conducted emission test to meet the test requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

4.4.1. PDU (Power Distribution Unit)

Model Number : YS10061KGSU
Manufacturer : NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD

4.5.Operating Condition of EUT

4.5.1. Setup the EUT and simulators as shown in Section 4.1.

4.5.2. Turn on the power of all equipments.

4.5.3. Let the EUT work in test mode (ON) and test it.

4.6.Test Procedure

The EUT is put on the ground and connected to the AC mains through an Artificial Mains Network (L.I.S.N.). This provided 50ohm-coupling impedance for the tested equipments. Both sides of AC line are checked to find out the maximum conducted emission levels according to the EN IEC 61000-6-3 regulations during conducted emission test.

The bandwidth of the test receiver (R&S Test Receiver ESS) is set at 10kHz.

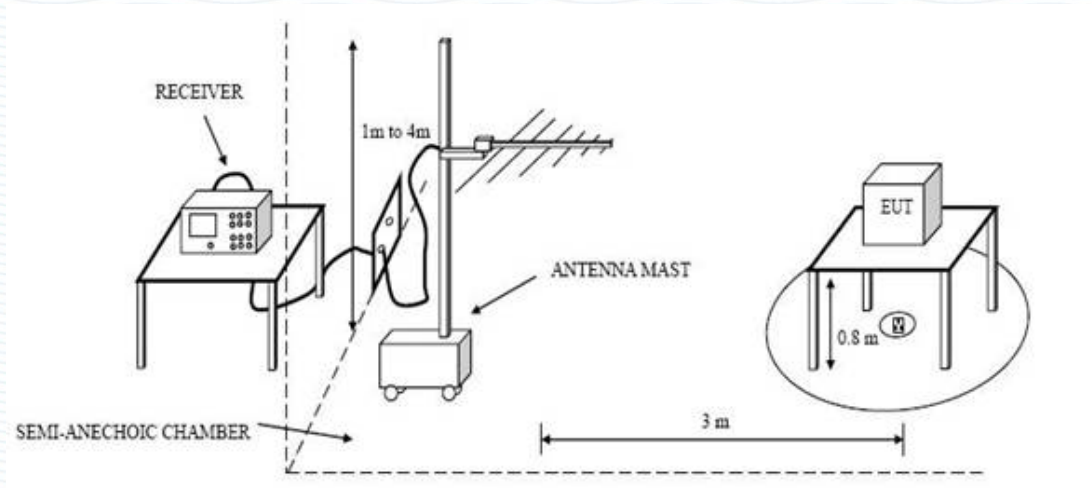
The frequency range from 150 kHz to 30 MHz is investigated.

4.7.Power Line Conducted Emission Test Results

PASS

5. RADIATION EMISSION TEST

5.1. Block Diagram of Test Setup



5.2. Test Standard

EN IEC 61000-6-3:2021

5.3. Radiation Emission Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dB μ V/m)
30 ~ 230	3	40
230 ~ 1000	3	47

Notes 1. The tighter limit shall apply at the edge between two frequency bands.

:

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT.

5.4. EUT Configuration on Test

The test Class B regulations test method must be used to find the maximum emission during radiated emission test.

The configuration of EUT is same as used in the test.

5.5.Operating Condition of EUT

- 5.5.1. Setup the EUT as shown on Section 5.1.
- 5.5.2. Turn on the power of all equipments.
- 5.5.3. Let the EUT work in test mode (ON) and measure it and test it.

5.6.Test Procedure

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level. Broadband antenna(calibrated by dipole antenna) are used as a receiving antenna. Both horizontal and vertical polarization of the antenna is set on test.

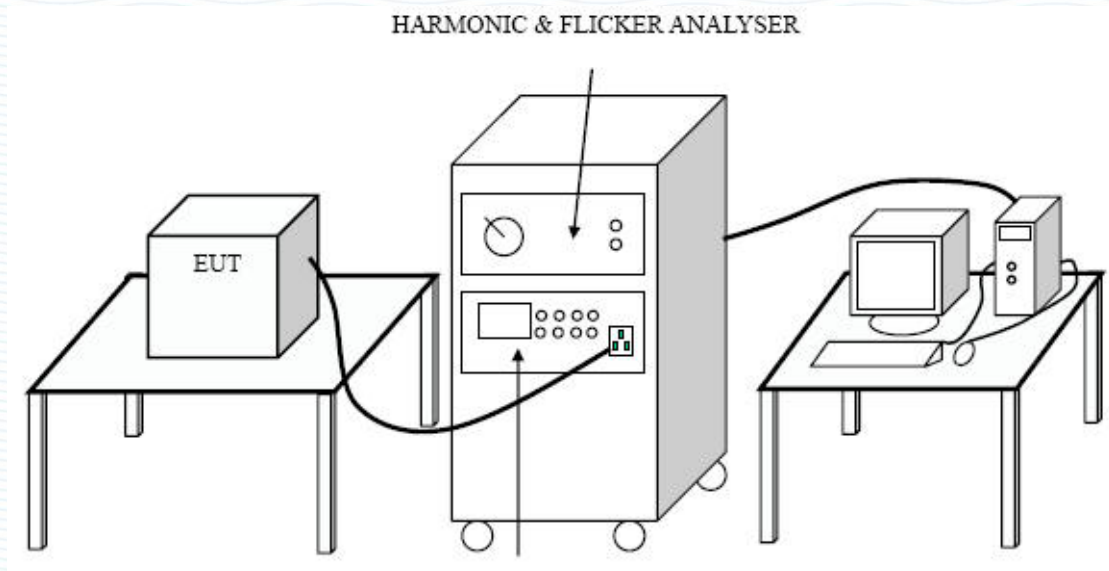
The bandwidth setting on the test receiver(R&S TEST RECEIVER ESS) is 120kHz. The EUT is tested in Anechoic Chamber.

5.7.Radiation Emission Test Results

PASS

6.HARMONIC CURRENT EMISSION TEST

6.1.Block Diagram of Test Setup



6.2.Test Standard

EN IEC 61000-3-2:2019+A1:2021+A2:2024, Class-A

6.3.Operating Condition of EUT

Same as Section 4.5 except the test set up replaced by Section 6.1.

6.4.Test Results

PASS

7.VOLTAGE FLUCTUATIONS & FLICKER TEST

7.1.Block Diagram of Test Setup

Same as Section 6.1.

7.2.Test Standard

EN 61000-3-3:2013+A1:2019+A2:2021

7.3.Operating Condition of EUT

Same as Section 4.5 except the test set up replaced by Section 7.1.

7.4.Test Results

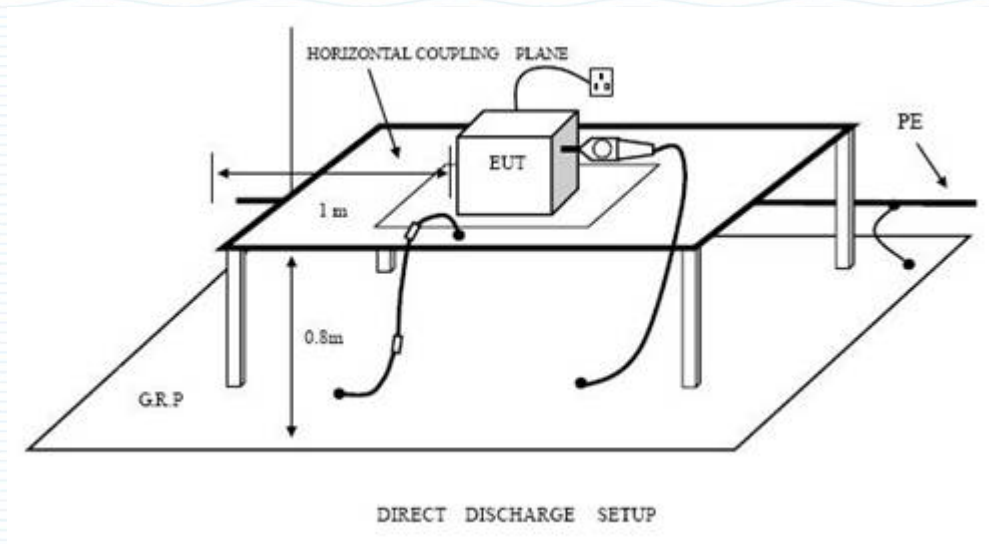
PASS



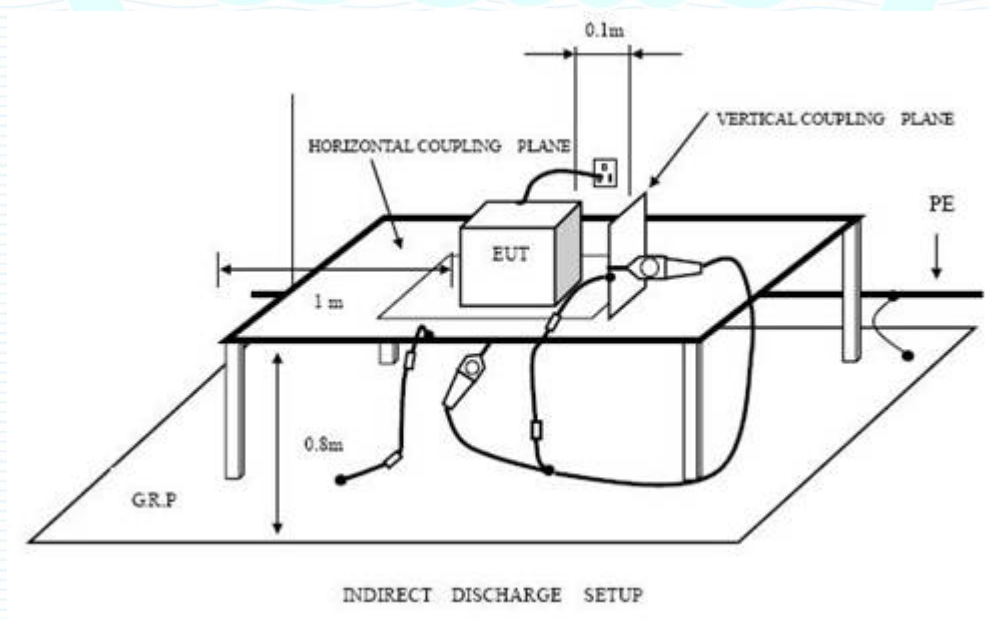
8.ELECTROSTATIC DISCHARGE TEST

8.1.Block Diagram of Test Setup

8.1.1. Block Diagram of ESD Test Setup (Direct Discharge)



8.1.2. Block Diagram of ESD Test Setup (Indirect Discharge)



8.2.Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-2:2009)
Severity Level 3 for Air Discharge at 8kV
Severity Level 2 for Contact Discharge at 4kV

8.3. Severity level and Performance criterion

8.3.1. Severity level

Level	Test Voltage Contact Discharge (kV)	Test Voltage Air Discharge (kV)
1.	2	2
2.	4	4
3.	6	8
4.	8	15
X.	Special	Special

Performance criterion: **B**

8.4. EUT Configuration on Test

The configuration of EUT is listed in Section 4.4.

8.5. Operating Condition of EUT

8.5.1. Setup the EUT as shown in Section 4.5. except the test set up replaced by section 8.1.

8.6. Test Procedure

8.6.1. Air Discharge:

This test is done on non-conductive surfaces. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

8.6.2. Contact Discharge:

All the procedure shall be same as Section 8.6.1 except that the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

8.7. Test Results

PASS

Please refer to the following page.

Electrostatic Discharge Test Results

Beide (Shenzhen) Product Service Limited

Date: 2025-10-10

Applicant	: NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD	Test Date	: 2025-10-10
EUT	: PDU (Power Distribution Unit)	Temperature	: 24°C
M/N	: YS10061KGSU	Humidity	: 53%
Test Voltage	: AC 250V, 50Hz	Test Mode	: ON
Test Engineer Jack			
Air Discharge: ±8kV		For each point positive 10 times and negative 10 times	
Contact Discharge: ±4kV		For each point positive 25 times and negative 25 times	
Location	Kind A-Air Discharge C-Contact Discharge	Result	
Slot of EUT	A	A	
surface	A	A	
Shell	A	A	
Switch	C	A	
Indirect Discharge(HCP)	C	A	
Indirect Discharge(VCP)	C	A	

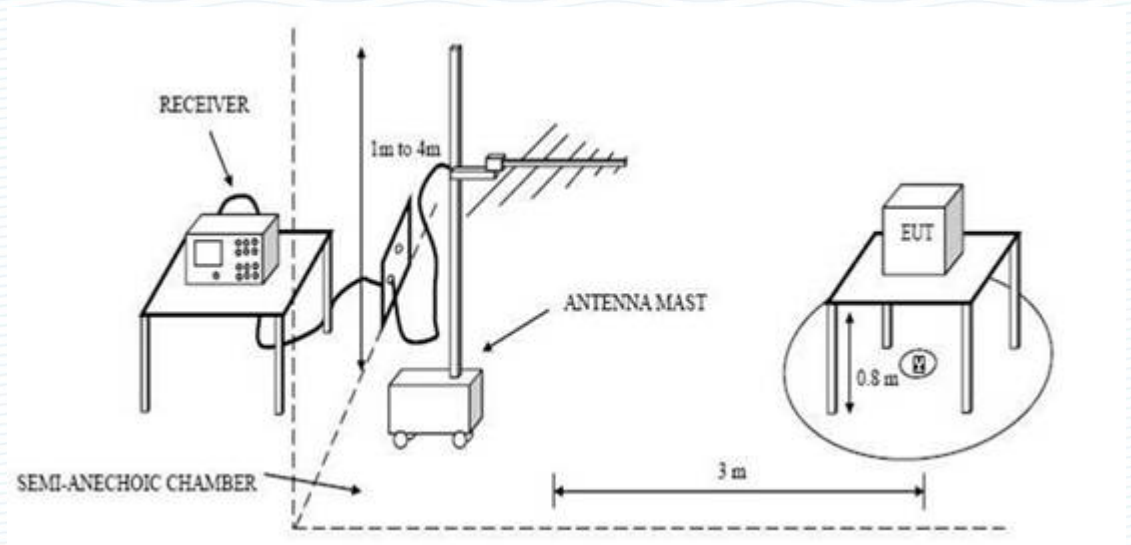
Discharge should be considered on Contact and Air and Horizontal Coupling Plane (HCP) and Vertical Coupling Plane (VCP).

Reviewer: Austin Zhang

9. RF FIELD STRENGTH SUSCEPTIBILITY TEST

9.1. Block Diagram of Test Setup

9.1.1. Block diagram of Test Setup



9.2. Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-3:2006+A2:2010)
Severity Level 2 at 3V/m

9.3. Severity level and Performance criterion

9.3.1. Severity level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X.	Special

Performance criterion : A

9.4. EUT Configuration on Test

The configuration of EUT is listed in Section 4.4.

9.5. Operating Condition of EUT

Setup the EUT as shown in Section 9.1. The operating conditions of EUT are listed in section 4.5.

9.6. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above the ground. The EUT is set 3 meters away from the transmitting antenna which is mounted on an antenna tower. Both horizontal and vertical polarization of the antenna are set on test. Each of the four sides of EUT must be faced this transmitting antenna and measured individually.

In order to judge the EUT performance, a CCD camera is used to monitor the EUT. All the scanning conditions are as follows:

Condition of Test	Remarks
1. Fielded Strength	3V/m
2. Radiated Signal	Modulated
3. Scanning Frequency	--
4. Sweeping time of radiated	0.0015 decade/s
5. Dwell Time	1 Sec.

9.7. Test Results

PASS

Please refer to the following page.

RF Field Strength Susceptibility Test Results

Beide (Shenzhen) Product Service Limited

Date: 2025-10-10

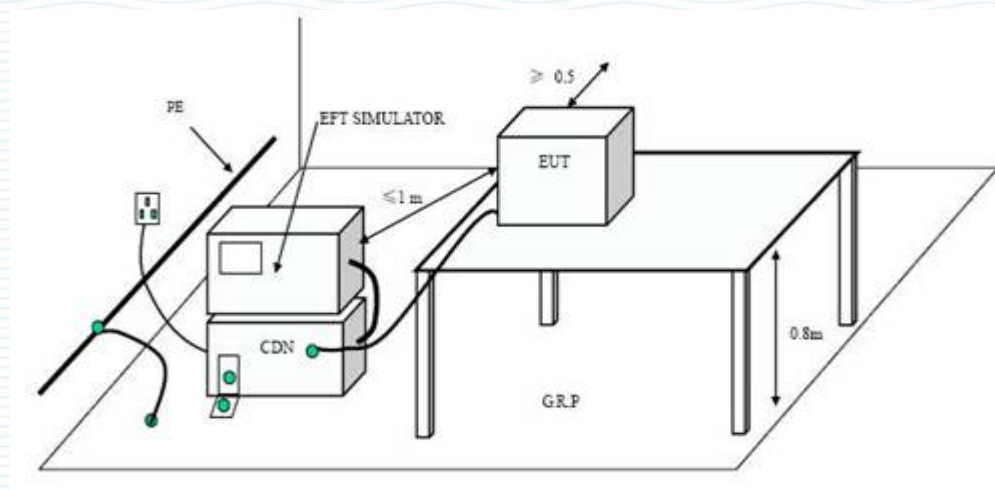
Applicant	: NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD	Test Date	: 2025-10-10
EUT	: PDU (Power Distribution Unit)	Temperature	: 24°C
M/N	: YS10061KGSU	Humidity	: 53%
Test Voltage	: AC 250V, 50Hz	Test Mode	: ON
Test Engineer Jack		Frequency Range	: -
Modulation:	☒ AM ☐ Pulse ☐ none	1 kHz	80%
Criterion	: A		
		Frequency Range:	80MHz-1000 MHz, 1.4 GHz-6.0 GHz
Steps	1%	1%	
	Horizontal	Vertical	
Front	Pass	Pass	
Right	Pass	Pass	
Rear	Pass	Pass	
Left	Pass	Pass	

Reviewer : Austin. Zhong

10. ELECTRICAL FAST TRANSIENT/BURST TEST

10.1. Block Diagram of Test Setup

10.1.1. Block diagram of Test Setup



10.2. Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-4:2012)
Severity Level 2 at 1kV

10.3. Severity level and Performance criterion

10.3.1. Severity level

Level	Open Circuit Output Test Voltage $\pm 10\%$	
	On Power Supply Lines	On I/O (Input/Output) Signal data and control lines
1.	0.5 kV	0.25 kV
2.	1 kV	0.5 kV
3.	2 kV	1 kV
4.	4 kV	2 kV
X	Special	Special

Performance criterion : **B**

10.4. EUT Configuration on Test

The configuration of EUT is listed in Section 4.4.

10.5. Operating Condition of EUT

Setup the EUT as shown in Section 10.1. The operating condition of EUT is listed in section 4.5.

10.6. Test Procedure

The EUT is put on the table which is 0.8 meter high above the ground reference plane which is a min 1m*1m metallic sheet with 0.65mm minimum thickness. This reference ground plane shall project beyond the EUT by at least 0.8m on all sides and the minimum distance between the EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5m.

10.6.1. For input and output AC power ports:

The EUT is connected to the power mains by using a coupling device which couples the EFT interference signal to AC power lines. Both polarities of the test voltage should be applied during compliance test and the duration of the test is 2 mins.

10.6.2. For signal lines and control lines ports:

It's unnecessary to test.

10.6.3. For DC output line ports:

It's unnecessary to test.

10.7. Test Results

PASS

Please refer to the following page.

Electrical Fast Transient/Burst Test Results

Beide (Shenzhen) Product Service Limited

Date: 2025-10-13

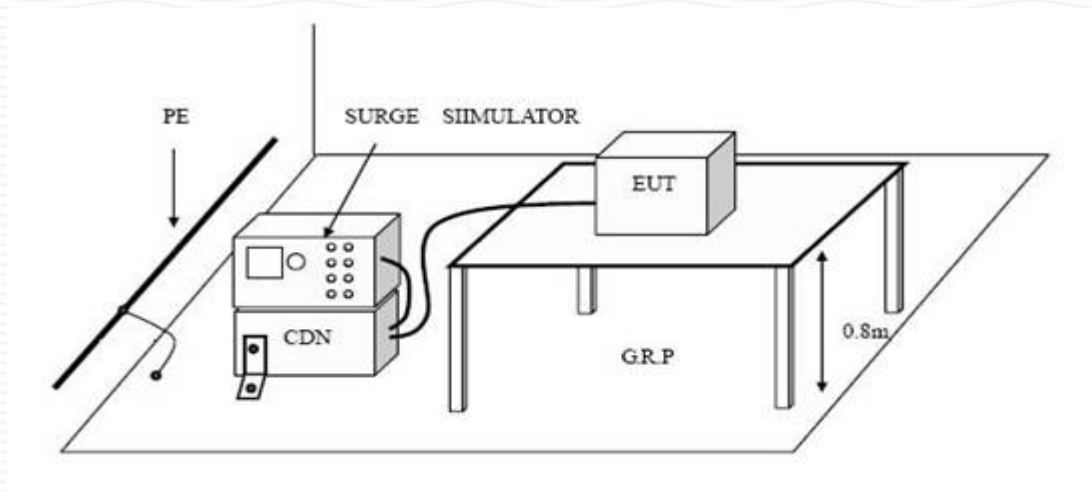
Applicant	: NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD	Test Date	: 2025-10-13						
EUT	: PDU (Power Distribution Unit)	Temperature	: 24°C						
M/N	: YS10061KGSU	Humidity	: 53%						
Test Voltage	: AC 250V, 50Hz	Test Mode	: ON						
Test Engineer Jack									
Inject Place : AC Mains									
Inject Line	Voltage kV	Inject Time(s)	Inject Method	Results	Inject Line	Voltage kV	Inject Time(s)	Inject Method	Results
AC Power Line	±1	120	Direct	PASS					
Signal line									
DC line									
L+N+PE	±1	120	Direct	PASS					

Reviewer: Austin Zhong

11. SURGE TEST

11.1. Block Diagram of Test Setup

11.1.1. Block diagram of Test Setup



11.2. Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-5:2014+A1:2017)

Severity Level 2 at 1kV for line-line, Severity Level 3 at 2 kV for line-earth

11.3. Severity level and Performance criterion

11.3.1. Severity level

Severity Level	Open-Circuit Test Voltage kV
1	0.5
2	1.0
3	2.0
4	4.0
*	Special

Performance criterion : **B**

11.4. EUT Configuration on Test

The configuration of EUT is listed in Section 4.4.

11.5. Operating Condition of EUT

Setup the EUT as shown in Section 11.1. The operating condition of EUT is listed in section 4.5.

11.6. Test Procedure

- 1) Set up the EUT and test generator as shown on section 11.1.
- 2) For line to line coupling mode, provide a 1kV 1.2/50us voltage surge (at open-circuit condition) and 8/20us current surge to EUT selected points.
- 3) At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are conducted during test.
- 4) Different phase angles are done individually.
- 5) Repeat procedure 2) to 4) except the open-circuit test voltage change from 1kV to 2kV for line to earth coupling mode test.
- 6) Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

11.7. Test Results

PASS

Please refer to the following page.



Surge Immunity Test Results

Beide (Shenzhen) Product Service Limited

Date : 2025-10-13

Applicant : <u>NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD</u> EUT : <u>PDU (Power Distribution Unit)</u> M/N : <u>YS10061KGSU</u> Test Voltage : <u>AC 250V, 50Hz</u>				Test Date : <u>2025-10-13</u> Temperature : <u>24°C</u> Humidity : <u>53%</u> Test Mode : <u>ON</u>		
Location	Polarity	Phase Angle	No of Pulse	Pulse Voltage (kV) IEC 61000-4-5	Result	
L1+N	±	0	5	1	A Pass	
	±	90	5	1		Pass
	±	180	5	1		Pass
	±	270	5	1		Pass
L1-PE, N-PE	±	0	5	2	A Pass	
	±	90	5	2		Pass
	±	180	5	2		Pass
	±	270	5	1		Pass

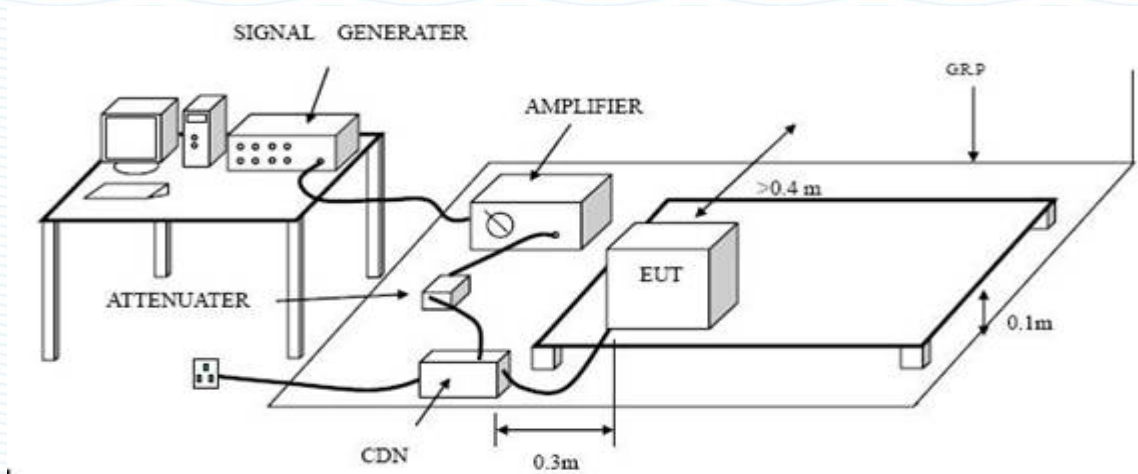
Remark:

Reviewer:

Justin Zhong

12. INJECTED CURRENTS SUSCEPTIBILITY TEST

12.1. Block Diagram of Test Setup



12.2. Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-6:2014+AC:2015)
Severity Level 2 at 3V (rms), 0.15MHz ~ 80MHz

12.3. Severity Levels and Performance Criterion

12.3.1 Severity level

Level	Field Strength V/m
1.	1
2.	3
3.	10
X	Special

Performance criterion: A

12.4. EUT Configuration on Test

The configuration of EUT is listed in Section 4.4.

12.5. Operating Condition of EUT

- 12.5.1 Setup the EUT as shown in Section 12.1.
- 12.5.2 Turn on the power of all equipments.

12.6. Test Procedure

- 1) Set up the EUT, CDN and test generators as shown on Section 12.1.
- 2) Let the EUT work in test mode and test it.
- 3) The EUT are placed on an insulating support 0.8m high above a ground reference plane CDN(coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).
- 4) The disturbance signal described below is injected to EUT through CDN.
- 5) The EUT operates within its operational mode(s) under intended climatic conditions after power on.
- 6) The frequency range is swept from 150kHz to 80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1 kHz sine wave.
- 7) The rate of sweep shall not exceed 1.5×10^{-3} decades/s. Where the frequency is swept incrementally, the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.
- 8) Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

12.7. Test Results

PASS

Please refer to the following page.

Injected Currents Susceptibility Test Results

Beide (Shenzhen) Product Service Limited

Date: 2025-10-13

Applicant : <u>NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD</u>			Test Date : <u>2025-10-13</u>	
EUT : <u>PDU (Power Distribution Unit)</u>			Temperature : <u>24°C</u>	
M/N : <u>YS10061KGSU</u>			Humidity : <u>53%</u>	
Test Voltage : <u>AC 250V, 50Hz</u>			Test Mode : <u>ON</u>	
Test Engineer : <u>Jack</u>				
Frequency Range (MHz)	Injected Position	Strength	Criterion	Result
0.15 ~ 80	AC Mains	3V(rms), Unmodulated	A	PASS
Remark : 1. Modulation Signal:1kHz 80% AM			Note:	

Reviewer:

Austin Zhong

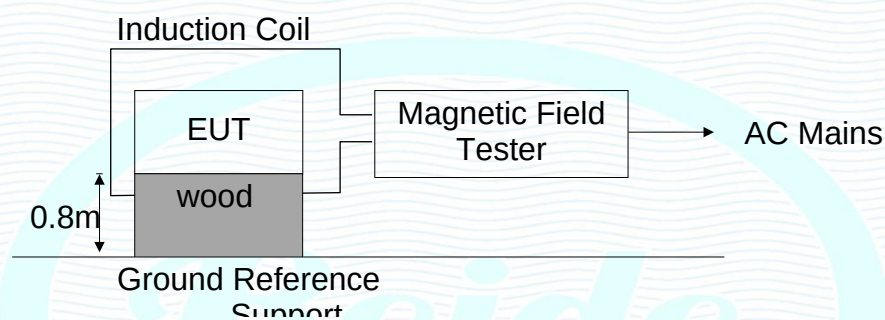
13. POWER FREQUENCY MAGNETIC TEST

13.1. Block Diagram of Test Setup

13.1.1. Block Diagram of the EUT



13.1.2. Block Diagram of Test Setup



13.2. Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-8:2010)
Severity Level 2 at 3A/m

13.3. Severity level and Performance criterion

13.3.1. Severity level

Level	Magnetic Field Strength A/m
1.	1
2.	3
3.	10
4.	30
5.	100
X.	Special

Performance criterion : A

13.4. EUT Configuration on Test

The test must be used to find severity level in different phrase performance criterion during test.

The configuration of EUT is same as used in the test.

13.5.Operating Condition of EUT

13.5.1. Setup the EUT as shown in Section 13.1.1 and 13.1.2

13.5.2. Turn on the power of all equipments.

13.5.3. Let the EUT work in test mode (ON) and test it.

13.6.Test Procedure

The EUT shall be subjected to the test magnetic field by using the induction coil of standard dimensions (1m×1m) and shown in Section 13.1.1.and 13.1.2 The induction coil shall then be rotated by 90° in order to expose the EUT to the test field with different orientations

13.7.Test Results

PASS

Please refer to the following page.

Magnetic Field Immunity Test Results

Beide (Shenzhen) Product Service Limited

Date: 2025-10-13

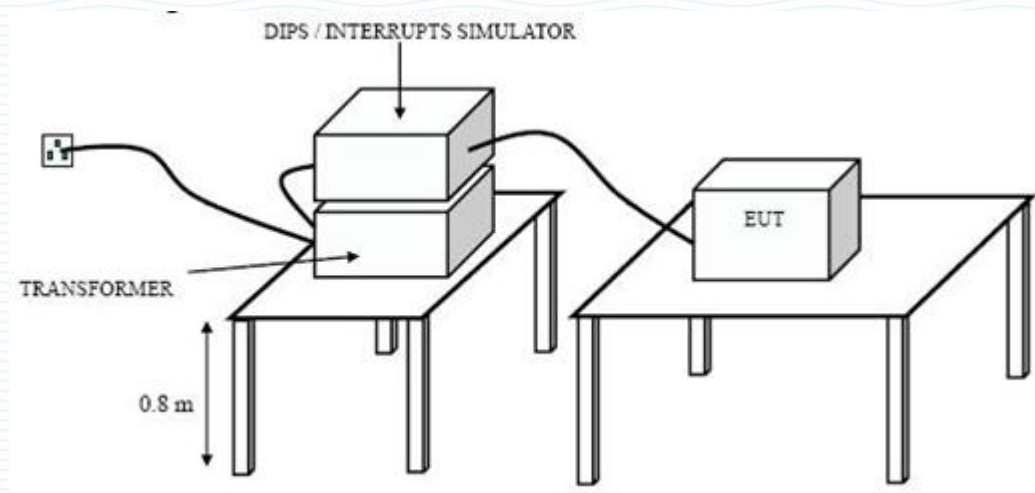
Applicant : <u>NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD</u> EUT : <u>PDU (Power Distribution Unit)</u> M/N : <u>YS10061KGSU</u> Test Mode: <u>ON</u> Test Voltage: <u>AC 250V, 50Hz</u>			Test Date : <u>2025-10-13</u> Temperature : <u>24°C</u> Humidity : <u>49%</u> Test Engineer : <u>Jack</u>	
Test Level	Testing Duration	Coil Orientation	Criterion	Result
3A/m	5 mins	X	A	PASS
3A/m	5 mins	Y	A	PASS
3A/m	5 mins	Z	A	PASS
Remark:		Test Equipment : Magnetic Field Tester EM TEST		

Reviewer: Justin Zhong

14. VOLTAGE DIPS AND INTERRUPTIONS TEST

14.1. Block Diagram of Test Setup

14.1.1. Block diagram of Test Setup



14.2. Test Standard

EN IEC 61000-6-1:2019 (EN 61000-4-11:2004+A1:2017)

14.3. Severity level and Performance criterion

14.3.1. Severity level

Test Level $\%U_T$	Voltage dip and short interruptions $\%U_T$	Duration (in period)
0	100	1P
40	60	10/12P
70	30	25/30P
0	100	250/300P

Performance criterion : B&C

14.4. EUT Configuration

The configuration of EUT is listed in section 4.4

14.5. Operating Condition of EUT

- 14.5.1. Setup the EUT as shown on Section 14.1.
- 14.5.2. Turn on the power of all equipments.
- 14.5.3. Let the EUT work in test mode (ON) and measure it and test it.

14.6. Test Procedure

- 1) Set up the EUT and test generator as shown on section 14.1.
- 2) The interruption is introduced at selected phase angles with specified duration.
There is a 3mins minimum interval between each test event.
- 3) After each test a full functional check is performed before the next test.
- 4) Repeat procedures 2 & 3 for voltage dips, only the test level and duration is changed. Record any degradation of performance.

14.7. Test Results

PASS

Please refer to the following page.

Voltage Dips And Interruptions Test Results

Beide (Shenzhen) Product Service Limited

Date : 2025-10-13

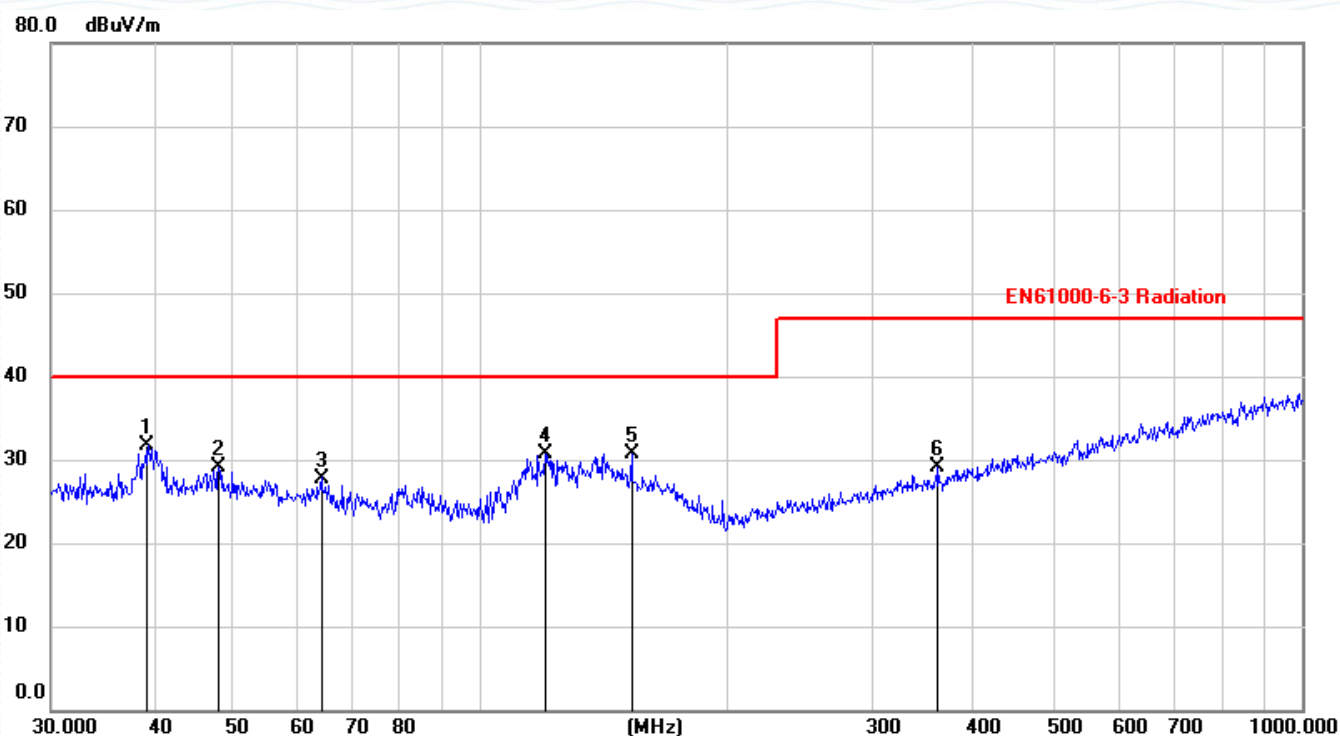
Applicant : <u>NINGBO YOSUN ELECTRIC TECHNOLOGY CO., LTD</u> EUT : <u>PDU (Power Distribution Unit)</u> M/N : <u>YS10061KGSU</u> Test Voltage : <u>AC 250V, 50Hz</u>				Test Date : <u>2025-10-13</u> Temperature : <u>24°C</u> Humidity : <u>53%</u>	
☒ Single Test Voltage				☐ Dual Test Voltage	
Test Mode: ON					
Test Level % U _T	Voltage Dips & Short Interruptions % U _T	Duration (in period)	Phase Angle	Result Criterion	
0	100	1P	0-360	B	PASS
40	60	10P	0-360	B	PASS
70	30	25P	0-360	A	PASS
0	100	250P	0-360	B	PASS
Remark: U _T is the rated voltage for the equipment.					

Reviewer: Austin Zhang

Beide

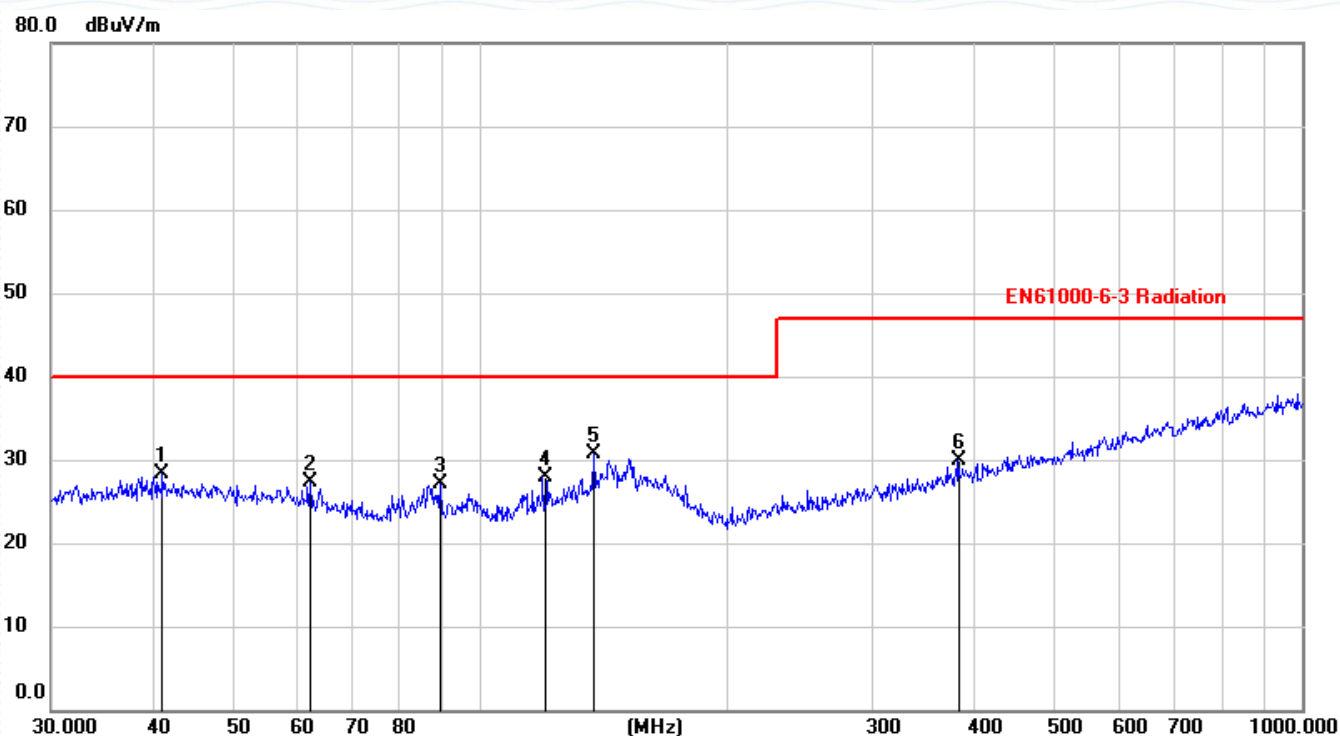
APPENDIX I (Test Data)

Job No.:		Polarization:	Vertical
Standard:	EN IEC 61000-6-3	Power Source:	AC 250V, 50Hz
Test item:	Radiation Emission Test	Date:	2025-10-14
Temp.(°C)/Hum.(%RH):	24°C/53%RH	Time:	
EUT:	PDU (Power Distribution Unit)	Distance:	3m
Model:	YS10061KGSU		
Note:			



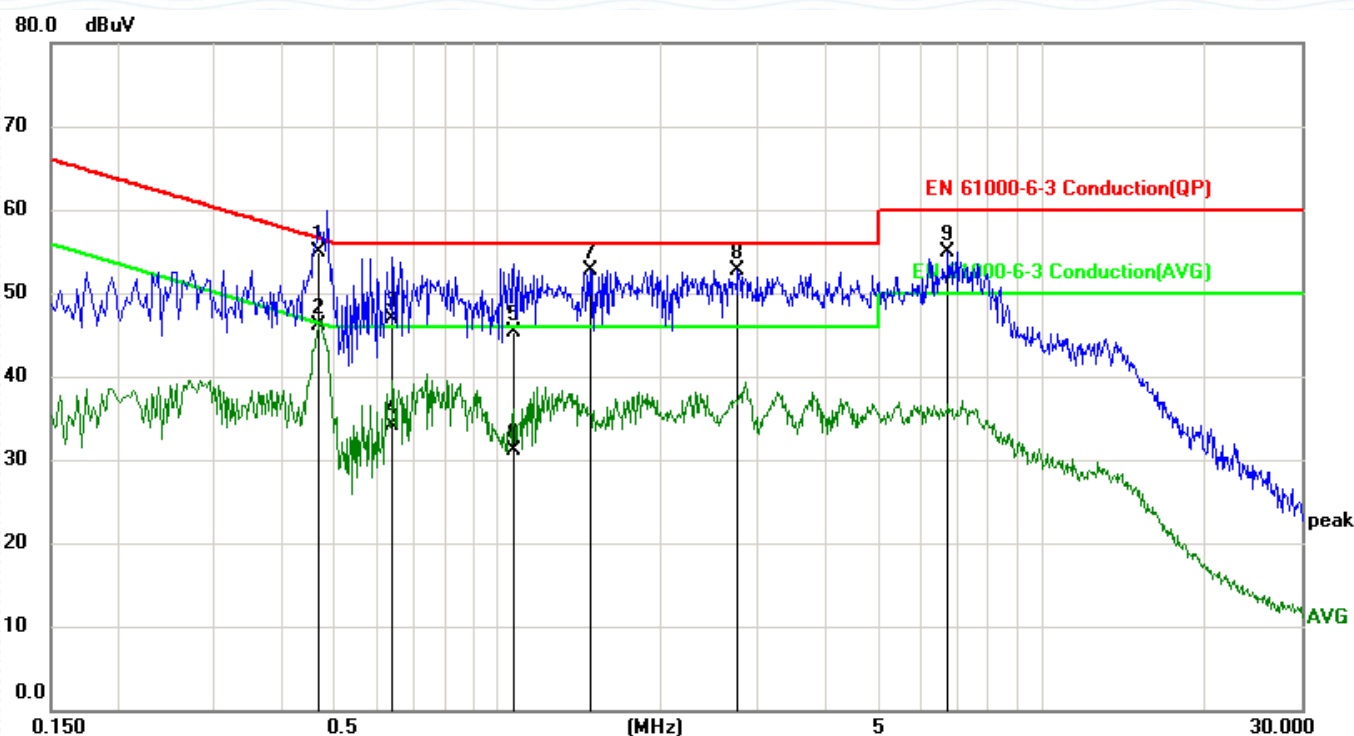
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	39.4371	17.42	14.22	31.64	40.00	-8.36	peak		
2		47.9940	15.35	13.69	29.04	40.00	-10.96	peak		
3		63.9828	15.58	12.22	27.80	40.00	-12.20	peak		
4		119.8556	18.13	12.58	30.71	40.00	-9.29	peak		
5		152.6641	16.22	14.55	30.77	40.00	-9.23	peak		
6		360.4476	14.66	14.53	29.19	47.00	-17.81	peak		

Job No.:		Polarization:	Horizontal
Standard:	EN IEC 61000-6-3	Power Source:	AC 250V, 50Hz
Test item:	Radiation Emission Test	Date:	2025-10-14
Temp.(°C)/Hum.(%RH):	24°C/53%RH	Time:	
EUT:	PDU (Power Distribution Unit)	Distance:	3m
Model:	YS10061KGSU		
Note:			



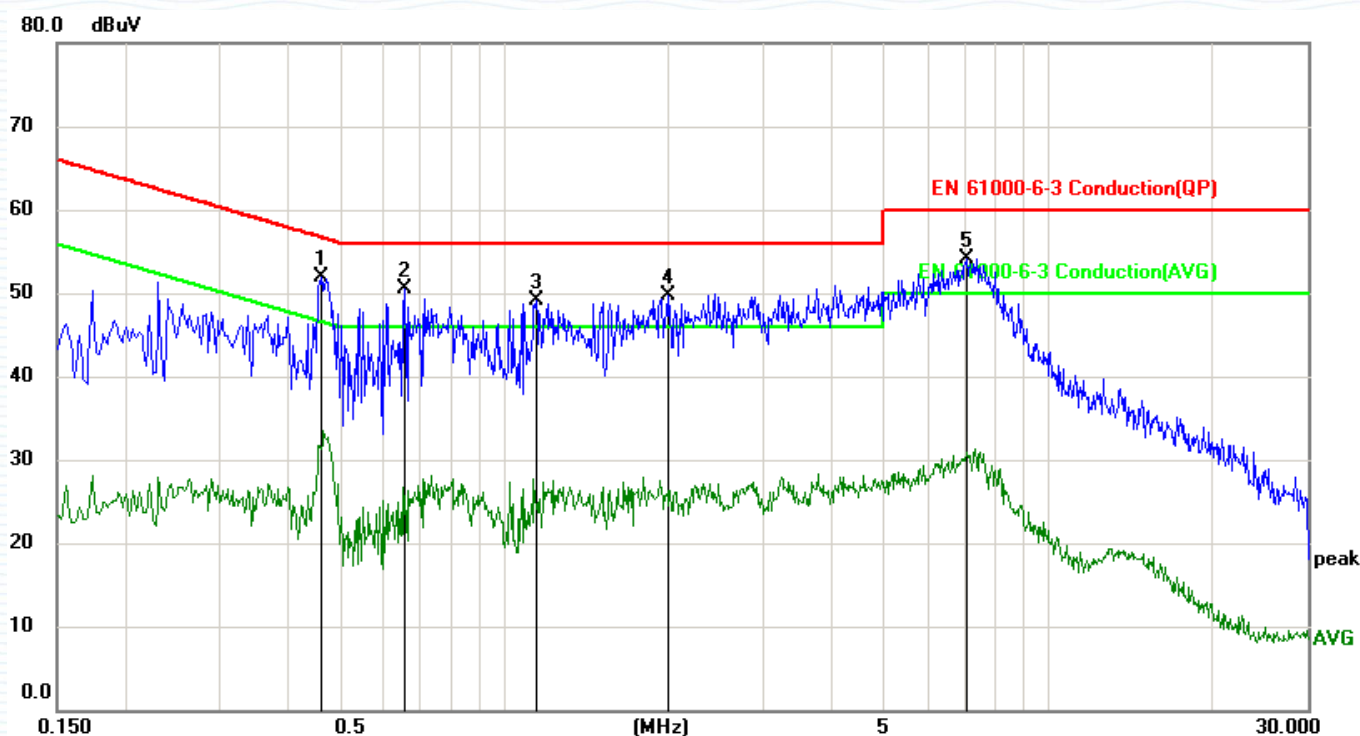
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Antenna	Table
		MHz	Level	Factor	ment			Height	Degree
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree
1		40.9881	14.13	14.11	28.24	40.00	-11.76	peak	
2		61.9951	14.76	12.55	27.31	40.00	-12.69	peak	
3		89.5899	17.28	9.78	27.06	40.00	-12.94	peak	
4		119.4361	15.33	12.54	27.87	40.00	-12.13	peak	
5	*	137.4202	17.06	13.67	30.73	40.00	-9.27	peak	
6		382.5879	14.44	15.39	29.83	47.00	-17.17	peak	

Job No.:		Polarization:	Line
Standard:	EN IEC 61000-6-3	Power Source:	AC 250V, 50Hz
Test item:	Conducted Emission Test	Date:	2025-10-14
Temp.(°C)/Hum.(%RH):	24°C/53%RH	Time:	
EUT:	PDU (Power Distribution Unit)	Test By:	
Model:	YS10061KGSU	Distance:	-
Note:			



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.4680	45.28	9.71	54.99	56.55	-1.56	QP	
2	*	0.4680	36.40	9.71	46.11	46.55	-0.44	AVG	
3		0.6390	37.13	9.72	46.85	56.00	-9.15	QP	
4		0.6390	24.35	9.72	34.07	46.00	-11.93	AVG	
5		1.0680	35.47	9.78	45.25	56.00	-10.75	QP	
6		1.0680	21.32	9.78	31.10	46.00	-14.90	AVG	
7		1.4730	42.93	9.82	52.75	56.00	-3.25	peak	
8		2.7540	42.70	9.97	52.67	56.00	-3.33	peak	
9		6.7200	44.76	10.24	55.00	60.00	-5.00	peak	

Job No.:		Polarization:	Neutral
Standard:	EN IEC 61000-6-3	Power Source:	AC 250V, 50Hz
Test item:	Conducted Emission Test	Date:	2025-10-14
Temp.(°C)/Hum.(%RH):	24°C/53%RH	Time:	
EUT:	PDU (Power Distribution Unit)	Test By:	
Model:	YS10061KGSU	Distance:	-
Note:			



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.4590	42.19	9.71	51.90	56.71	-4.81	peak	
2		0.6570	40.76	9.73	50.49	56.00	-5.51	peak	
3		1.1430	39.29	9.78	49.07	56.00	-6.93	peak	
4		2.0010	39.85	9.88	49.73	56.00	-6.27	peak	
5		7.0800	43.94	10.24	54.18	60.00	-5.82	peak	

APPENDIX II (Photos of the EUT)

Figure 1.
APPEARANCE OF EUT



Figure 2.
APPEARANCE OF EUT



Figure 3.
APPEARANCE OF EUT

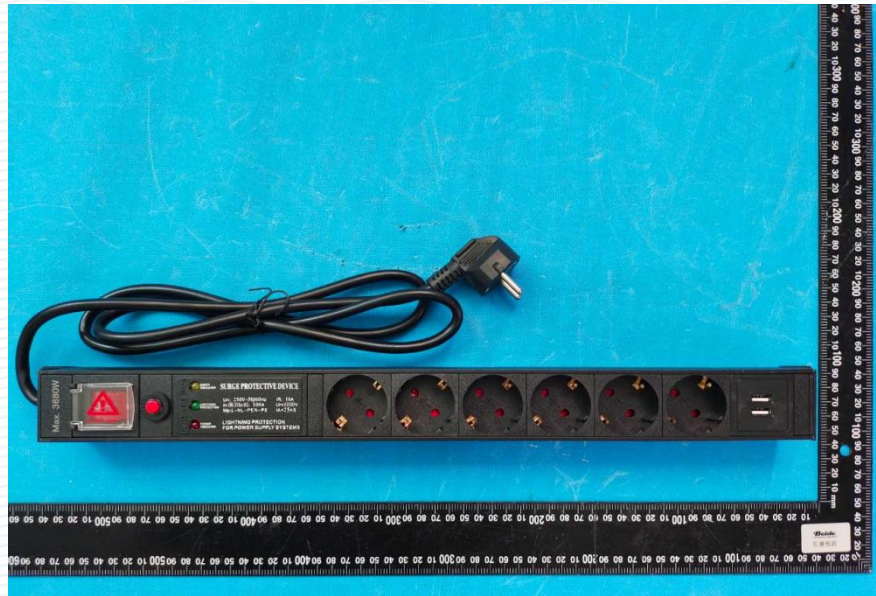


Figure 4.
APPEARANCE OF EUT

