TEST REPORT

Product Name : Adapter Box
Model Number : Adapter Box G2

Prepared for	:	SOLAX POWER NETWORK TECHNOLOGY (ZHEJIANG) CO., LTD.
Address	:	No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000, P. R. China
Prepared by	:	EMTEK (NINGBO) CO., LTD.
Address	:	No. 8, Building 8, Lane 216, Qingyi Road, Ningbo Hi-Tech Zone, Ningbo, Zhejiang, China Tel: +86-574-27907998 Fax: +86-574-27721538
Report Number	:	ENB2209290149E00801R
Date(s) of Tests	:	September 29, 2022 to December 08, 2022
Date of issue	:	December 22, 2022

TABLE OF CONTENT

Test Report Description Page

TEST REPORT DESCRIPTION

Applicant	:	SOLAX POWER NETWORK TECHNOLOGY (ZHEJIANG) CO., LTD.
Manufacturer	:	SOLAX POWER NETWORK TECHNOLOGY (ZHEJIANG) CO., LTD.
Trade Mark	:	SolaX Power
EUT	:	Adapter Box
Model No.	:	Adapter Box G2
Power Supply	:	AC 100-240V, 50/60Hz

Measurement Procedure Used:

AS/NZS CISPR 32:2015+AMD1:2020

The device described above is tested by EMTEK (NINGBO) CO., LTD. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and EMTEK (NINGBO) CO., LTD. is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the AS/NZS CISPR 32 requirement.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of EMTEK (NINGBO) CO., LTD.

Date of Test : September 29, 2022 to December 08, 2022

Prepared by : June Gao/Engineer

Reviewer : Ade Wang/Supervisor

Approved & Authorized Signer : Tony Wei/Manager

Modified History

Version	Report No.	Revision date	Summary
	ENB2209290149E00801R	/	Original Report

1. SUMMARY OF TEST RESULT

EMISSION				
Description of Test Item		Standard	Limits	Results
Conducted emissions from the AC mains power ports		AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A.10	Pass
Asymmetric mode conducted emissions	Wired network ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A. 12	Pass
	Optical fibre ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A. 12	N/A
	Broadcast receiver tuner ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A. 12	N/A
	Antenna ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A. 12	N/A
Conducted differential voltage emissions	TV broadcast receiver tuner ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A.13	N/A
	RF modulator output ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A.13	N/A
	FM broadcast receiver tuner ports	AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A.13	N/A
Radiated emissions at frequencies up to 1 GHz		AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A.4	Pass
Radiated emissions at frequencies above 1 GHz		AS/NZS CISPR 32:2015+AMD1:2020	Class B, Table A.5	Pass
Radiated emissions from FM receivers		AS/NZS CISPR 32:2015+AMD1:2020	Table A.6	N/A
Outdoor units of home satellite receiving systems		AS/NZS CISPR 32:2015+AMD1:2020	Table A.7	N/A
Note: N/A is an abbreviation for Not Applicable.				

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT	:	Adapter Box
Model Number	:	Adapter Box G2
Test Voltage	:	AC 240V/50Hz, AC 120V/60Hz
AC Adapter	:	M/N: ABT020120A Input: AC 100-240V, 50/60Hz, 1.5A Output: DC 12V, 2A, 24W
Highest Frequency	:	2400 MHz
Sample Number	:	ENB2209290149E008-1-1
Applicant	:	SOLAX POWER NETWORK TECHNOLOGY (ZHEJIANG) CO., LTD.
Address	:	No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000, P. R. China
Manufacturer	:	SOLAX POWER NETWORK TECHNOLOGY (ZHEJIANG) CO., LTD.
Address	:	No.288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000, P. R. China
Date of Received	:	September 29, 2022
Date of Test	:	September 29, 2022 to December 08, 2022

2.2. Input / Output Ports

Port #	Name	Type*	Cable Max. >3m	Cable Shielded	Comments
1	Enclosure	N/E	--	--	None
2	Net Port	A/D	--	--	None
3	AC Port	AC	--	--	None
4	DC Line	DC	No	Unshielded	None

*Note: Use abbreviations:
AC= AC Power port
DC= DC Power port
N/E= Non-Electrical
A/D=Analogue/digital data port (signal/control port, antenna port, wired network port, broadcast receiver tuner port, optical fibre port)

2.3. Independent Operation Modes

A. ON

2.4. Test Manner

Test Items	Test Voltage	Operation Modes	Worst case
Conducted emissions from the AC mains power ports	AC 240V/50Hz AC 120V/60Hz	Mode A	Mode A
Asymmetric mode conducted emissions	AC 240V/50Hz AC 120V/60Hz	Mode A	Mode A
Radiated emissions at frequencies up to 1 GHz	AC 240V/50Hz AC 120V/60Hz	Mode A	Mode A
Radiated emissions at frequencies above 1 GHz	AC 240V/50Hz AC 120V/60Hz	Mode A	Mode A

2.5. Description of Test Facility

Site Description

EMC Lab. : **Accredited by CNAS**
The Certificate Registration Number is L6666.
The Laboratory has been assessed and proved to be in compliance with CNAS-CL01:2018 (identical to ISO/IEC 17025:2017)

Accredited by FCC
Designation Number: CN1302
Test Firm Registration Number: 436491

Accredited by A2LA
The certificate is valid until May 31, 2023

Accredited by Industry Canada
The Conformity Assessment Body Identifier is CN0114

Name of Firm : EMTEK (NINGBO) CO., LTD.

Site Location : No. 8, Building 8, Lane 216, Qingyi Road, Ningbo Hi-Tech Zone, Ningbo , Zhejiang, China

2.6. Test Software

Item		Software
Conducted Emission	:	TS+ (Ver. 4.0.0.0)
Radiated Emission	:	TS+ (Ver. 4.0.0.0)

2.7. Support Device

Notebook	:	Manufacturer: LENOVO M/N: T430s S/N: R9RK4YK

2.8. Measurement Uncertainty

Test Item		Uncertainty
Conducted Emission Uncertainty		2.08dB (9 k-150 kHz) 2.40dB (150 k-30 MHz)
Radiated Emission Uncertainty (3m Chamber)	:	4.06 dB (Polarize: H) (30MHz-1000MHz) 4.04 dB (Polarize: V) (30MHz-1000MHz) 4.82 dB (Polarize: H) (1~18GHz) 4.80 dB (Polarize: V) (1~18GHz)

3. MEASURING DEVICE AND TEST EQUIPMENT

3.1. For Conducted Emission Measurement

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-002	EMI Test Receiver	Rohde & Schwarz	ESCI	101107	July 07, 2022	1 Year
ENE-003	L.I.S.N	Rohde & Schwarz	ENV216	101193	July 07, 2022	1 Year
ENE-004	L.I.S.N	Schwarzbeck	NSLK 8126	8126-462	July 07, 2022	1 Year
ENE-006	Pulse Limiter	MTS-systemtechnik	IMP-136	2611115-001-0033	July 07, 2022	1 Year
ENE-005	RF Switching unit	CD	RSU-M2	38400	July 07, 2022	1 Year

3.2. For Conducted Emissions at Telecommunications/network port Measurement

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-186	EMI Test Receiver	R&S	ESR7	102487	May 27, 2022	1 Year
ENE-067	I.S.N	Tsetq	ISNT8	51926	Jan. 10, 2022	1 Year
ENE-068	I.S.N	Tsetq	ISNT8-Cat 6	50583	Jan. 10, 2022	1 Year
ENE-159	Pulse Limiter	Schwarzbeck	VTSD 9561F-N	0929	Dec.20, 20021	1 Year
ENE-278	RF Switching unit	HTEC	HRSU	222101	August 22, 2022	1 Year
ENE-083	RF Cable	Hubber Suhner/Swiss	CBL-RE-3	/	April 07, 2022	1 Year

3.1. For Radiated Emission Measurement (Up to 1 GHz)

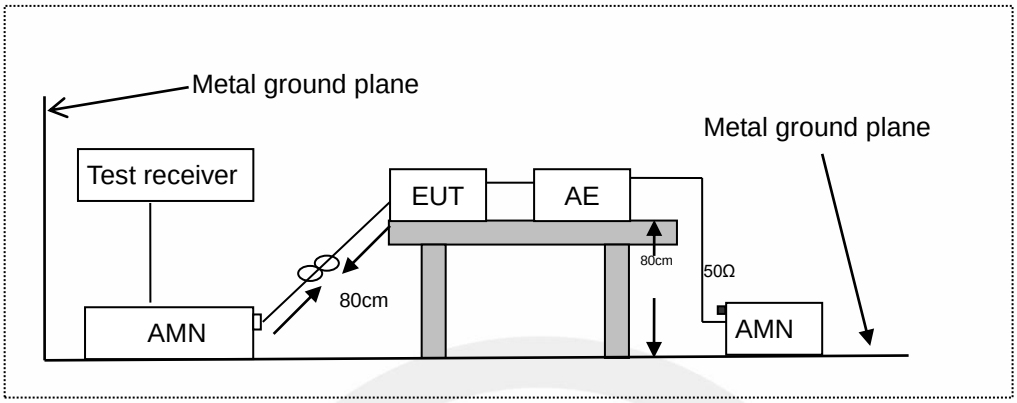
Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-185	EMI Test Receiver	R&S	ESR7	102480	May 18, 2022	1 Year
ENE-190	Antenna multiple	Schwarzbeck	VULB 9163	01499	May 21, 2022	2 Year
ENE-195	Pre-Amplifier	JS Denki	PA09K03-40	JSPA21019	May 18, 2022	1 Year
ENE-204	Low frequency notch filterRf switching	JS Denki	JSDSW-F	JSDSW2211 D02	May 27, 2022	1 Year
ENE-279-1	RF cable	Rosenberger	L17-C001-7 000	/	June 01, 2022	1 Year
ENE-279-2	RF cable	Rosenberger	L17-C001-3 500	/	June 01, 2022	1 Year
ENE-279-3	RF cable	Rosenberger	L17-C001-1 500	/	June 01, 2022	1 Year
ENE-279-4	RF cable	Rosenberger	/	/	June 01, 2022	1 Year
ENE-279-5	RF cable	Rosenberger	/	/	June 01, 2022	1 Year
ENE-279-6	RF cable	Rosenberger	L08-C446-1 500	/	June 01, 2022	1 Year
ENE-283	RF cable	Rosenberger	LU7-C1511-1 200	/	June 01, 2022	1 Year

3.2. For Radiated Emission Measurement (Above 1 GHz)

Equ. No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ENE-171	EXA Signal Analyzer	KEYSIGHT	N9010B	MY60242467	March 01, 2022	1 Year
ENE-191	Horn antenna	Schwarzbeck	BBHA 9120 D	02588	May 27, 2022	2 Year
ENE-198	Pre-amplifier	JS Denki	PA0118-50	JSPA21022	May 27, 2022	1 Year
ENE-193	Horn antenna	Schwarzbeck	BBHA 9170	01190	May 27, 2022	2 Year
ENE-199	Pre-amplifier	JS Denki	PA1840-55	JSPA21023	May 27, 2022	1 Year
ENE-279-1	RF cable	Rosenberger	L17-C001-70 00	/	June 01, 2022	1 Year
ENE-281-1	RF cable	Rosenberger	L17-C001-35 00	/	June 01, 2022	1 Year
ENE-281-2	RF cable	Rosenberger	L17-C001-15 00	/	June 01, 2022	1 Year
ENE-282-1	RF cable	Rosenberger	LA2-C125-35 00	/	June 01, 2022	1 Year
ENE-282-2	RF cable	Rosenberger	LA2-C125-15 00	/	June 01, 2022	1 Year
ENE-283	RF cable	Rosenberger	LU7-C1511-1 200	/	June 01, 2022	1 Year

4. CONDUCTED EMISSIONS FROM THE AC MAINS POWER PORTS

4.1. Block Diagram of Test Setup



AMN: Artificial Mains Network
AE: Associated equipment
EUT: Equipment under test

4.2. Limits

AS/NZS CISPR 32:2015+AMD1:2020, Class B, Table A.10

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

4.3. Test Procedure

The EUT was placed on a desk 0.8 m height from the metal ground plane and 0.4 m from the conducting wall of the shielding room and it was kept at least 0.8 m from any other grounded conducting surface. The size of the table will nominally be 1.5 m x1.0 m.

The rear of the arrangement shall be flush with the back of the supporting tabletop unless that would not be possible or typical of normal use.

All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units.

Connect EUT to the power mains through a artificial mains network (AMN). Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

All the support units are connecting to the other AMN.
The AMN provides 50 ohm coupling impedance for the measuring instrument.
The CISPR states that the AMN with 50 ohm and 50 microhenry should be used.
Both sides of AC line were checked for maximum conducted interference.

The frequency range from 150 kHz to 30 MHz was sweep.

Set the test-receiver system to quasi peak detect function and average detect function, and to measure the conducted emissions values.

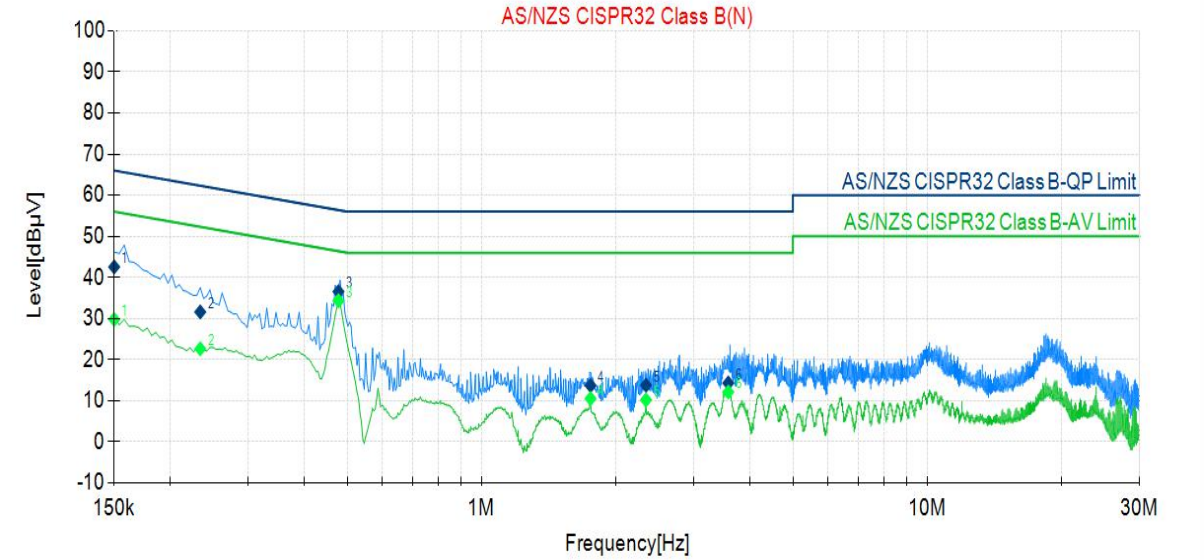
Test results were obtained from the following equation:
Measurement (dBμV) =Correct Factor (dB) + Reading (dBμV)
Over (dB) = Measurement (dBμV) - Limit (dBμV)

4.4. Measuring Results

Pass.

Please refer to the following pages.

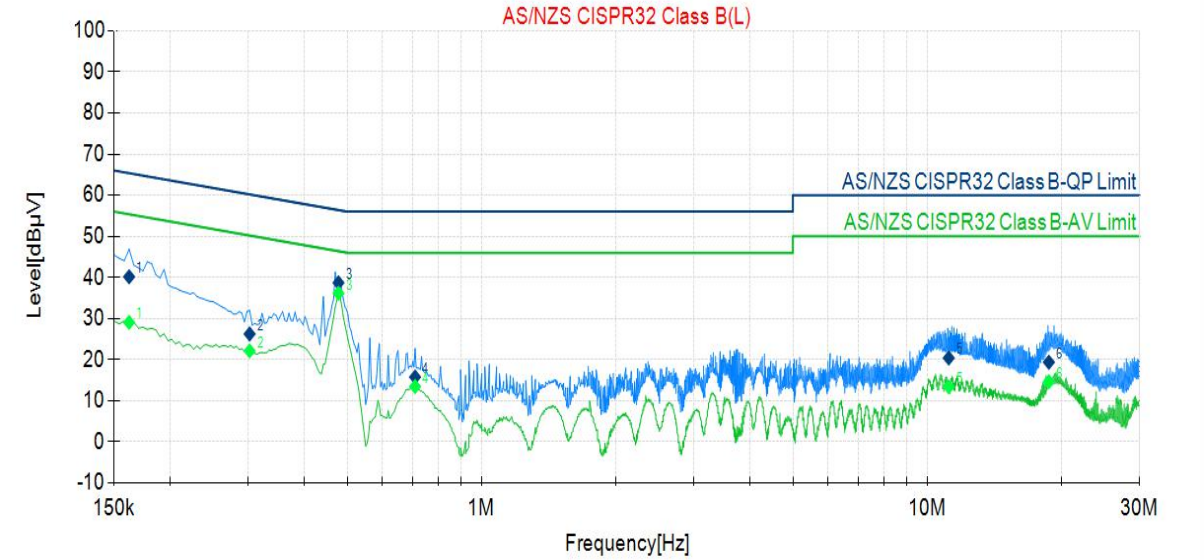
Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 24℃, Humi:52%	Engineer:	Allen Tang



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.150	10.50	32.05	42.55	66.00	23.45	19.28	29.78	56.00	26.22	Pass
2	0.234	10.45	21.16	31.61	62.31	30.70	12.18	22.63	52.31	29.68	Pass
3	0.478	10.41	26.13	36.54	56.37	19.83	23.91	34.32	46.37	12.05	Pass
4	1.758	10.54	3.15	13.69	56.00	42.31	-0.03	10.51	46.00	35.49	Pass
5	2.342	10.59	3.19	13.78	56.00	42.22	-0.41	10.18	46.00	35.82	Pass
6	3.582	10.69	3.61	14.30	56.00	41.70	1.43	12.12	46.00	33.88	Pass

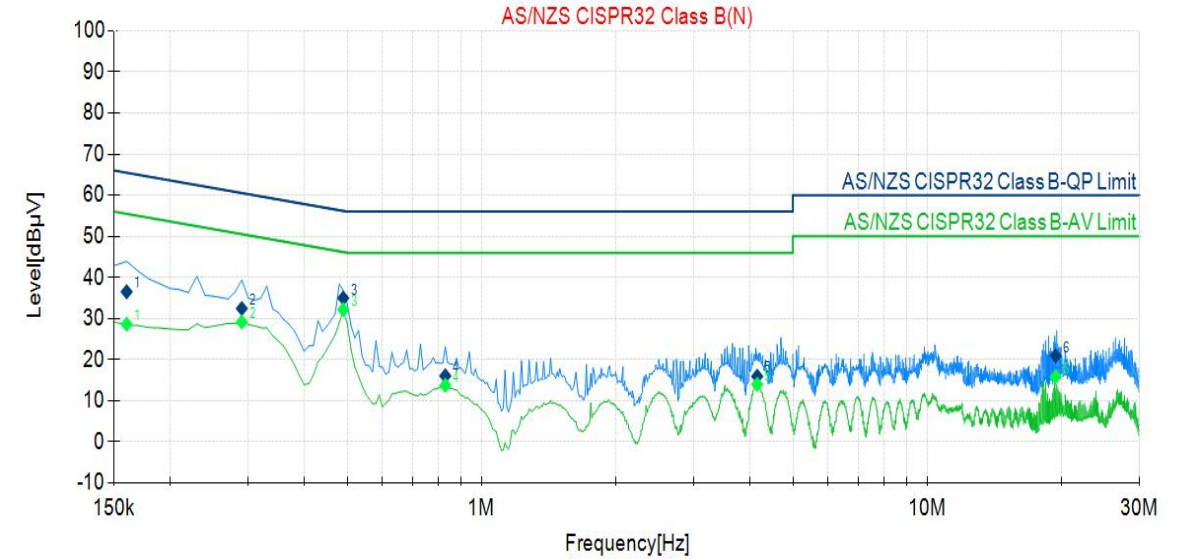
Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 24℃, Humi:52%	Engineer:	Allen Tang



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.162	10.51	29.64	40.15	65.36	25.21	18.55	29.06	55.36	26.30	Pass
2	0.302	10.47	15.77	26.24	60.19	33.95	11.65	22.12	50.19	28.07	Pass
3	0.478	10.40	28.29	38.69	56.37	17.68	25.72	36.12	46.37	10.25	Pass
4	0.710	10.34	5.42	15.76	56.00	40.24	3.11	13.45	46.00	32.55	Pass
5	11.190	10.67	9.72	20.39	60.00	39.61	2.69	13.36	50.00	36.64	Pass
6	18.774	10.73	8.63	19.36	60.00	40.64	3.91	14.64	50.00	35.36	Pass

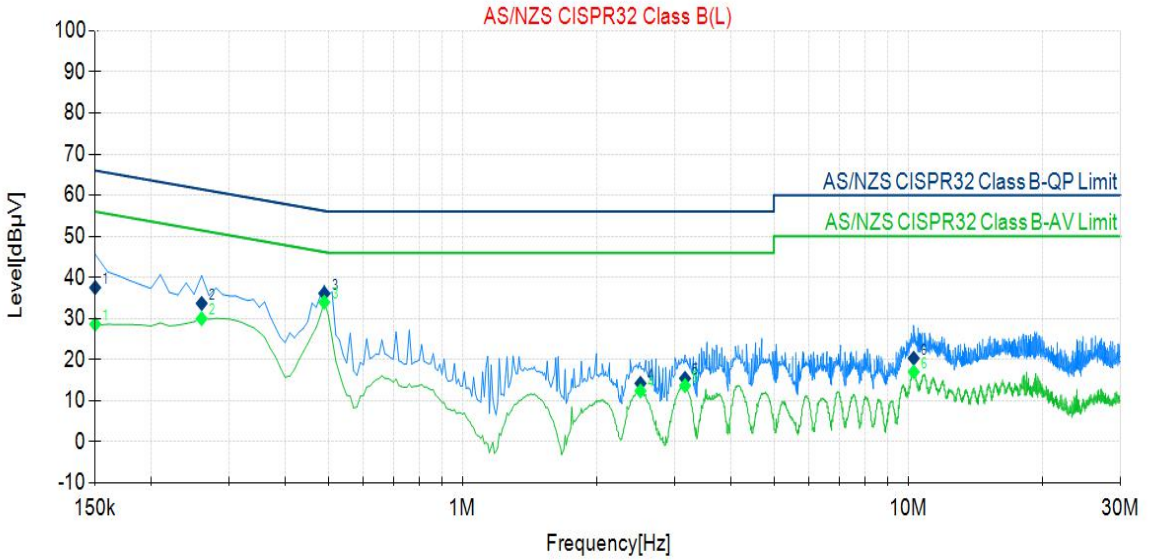
Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 24℃, Humi:52%	Engineer:	Allen Tang



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.160	10.49	26.01	36.50	65.46	28.96	18.12	28.61	55.46	26.85	Pass
2	0.290	10.43	21.99	32.42	60.52	28.10	18.71	29.14	50.52	21.38	Pass
3	0.490	10.42	24.55	34.97	56.17	21.20	21.72	32.14	46.17	14.03	Pass
4	0.830	10.49	5.55	16.04	56.00	39.96	3.25	13.74	46.00	32.26	Pass
5	4.160	10.70	5.23	15.93	56.00	40.07	3.27	13.97	46.00	32.03	Pass
6	19.440	10.85	10.06	20.91	60.00	39.09	4.98	15.83	50.00	34.17	Pass

Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 24℃, Humi:52%	Engineer:	Allen Tang

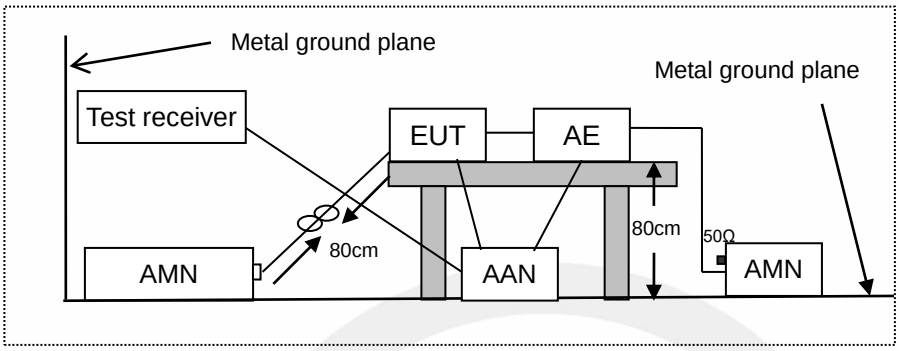


Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.150	10.51	27.01	37.52	66.00	28.48	18.10	28.61	56.00	27.39	Pass
2	0.260	10.48	23.19	33.67	61.43	27.76	19.48	29.96	51.43	21.47	Pass
3	0.490	10.39	25.72	36.11	56.17	20.06	23.56	33.95	46.17	12.22	Pass
4	2.510	10.43	3.78	14.21	56.00	41.79	1.94	12.37	46.00	33.63	Pass
5	3.160	10.44	4.98	15.42	56.00	40.58	3.21	13.65	46.00	32.35	Pass
6	10.300	10.67	9.66	20.33	60.00	39.67	6.33	17.00	50.00	33.00	Pass

5. ASYMMETRIC MODE CONDUCTED EMISSIONS AT WIRED NETWORK PORTS

5.1. Block Diagram of Test Setup



AMN: Artificial mains network
AE: Associated equipment
EUT: Equipment under test
AAN: Asymmetric artificial network

5.2. Limits

AS/NZS CISPR 32:2015+AMD1:2020, Class B, Table A.12

Frequency range (MHz)	Coupling device (see Table A.8)	Detector type / bandwidth	Class B voltage limits dB(μV)	Class B current limits dB(μA)
0.15 to 0.5	AAN	Quasi Peak / 9 kHz	84 to 74	N/A
0.5 to 30			74	
0.15 to 0.5	AAN	Average / 9 kHz	74 to 64	
0.5 to 30			64	
0.15 to 0.5	CVP and current probe	Quasi Peak / 9 kHz	84 to 74	40 to 30
0.5 to 30			74	30
0.15 to 0.5	CVP and current probe	Average / 9 kHz	74 to 64	30 to 20
0.5 to 30			64	20
0.15 to 0.5	Current Probe	Quasi Peak / 9 kHz	N/A	40 to 30
0.5 to 30				30
0.15 to 0.5	Current Probe	Average / 9 kHz		30 to 20
0.5 to 30				20

5.3. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and connected to the AC mains through artificial mains network(AMN) or connected to the wired network port through an asymmetric artificial network(ANN). AMN provided a 50ohm coupling impedance for the tested equipment AC mains port, ANN provided a common mode (asymmetric mode) impedance of 150 Ω to the wired network port under test. Both sides of AC line and the wired network line are investigated to find out the maximum conducted emission according to the EN 55032 regulations during conducted emission measurement.

The bandwidth of the receiver is set at 9 kHz in 150 kHz~30 MHz. The frequency range from 150 kHz to 30 MHz is investigated.

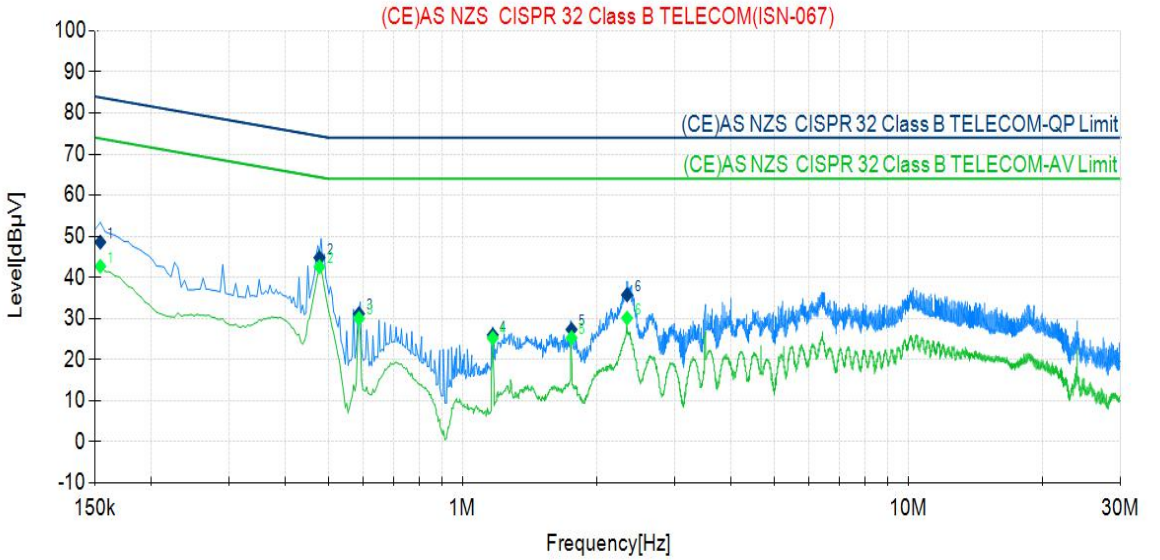
Test results were obtained from the following equation:
Measurement (dBμV) =Correct Factor (dB) + Reading (dBμV)
Over (dB) = Measurement (dBμV) - Limit (dBμV)

5.4. Measuring Results

Pass.

Please refer to the following pages.

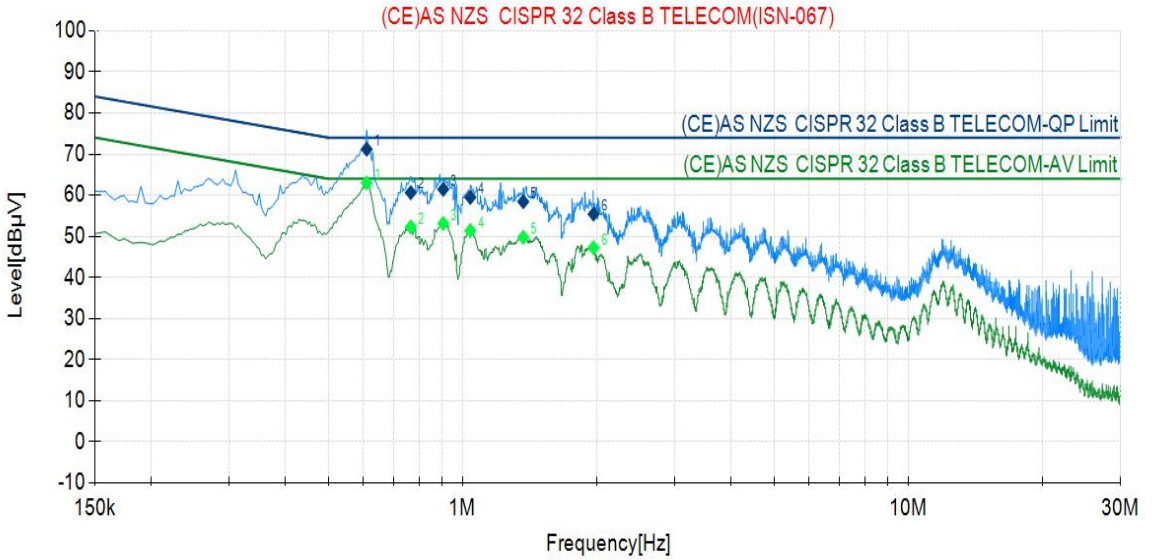
Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 24℃, Humi:52%	Engineer:	Allen Tang



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.154	10.06	38.52	48.58	83.78	35.20	32.65	42.71	73.78	31.07	Pass
2	0.478	10.31	34.48	44.79	74.37	29.58	32.24	42.55	64.37	21.82	Pass
3	0.586	10.35	20.81	31.16	74.00	42.84	19.65	30.00	64.00	34.00	Pass
4	1.170	10.49	15.49	25.98	74.00	48.02	14.73	25.22	64.00	38.78	Pass
5	1.758	10.52	16.80	27.32	74.00	46.68	14.78	25.30	64.00	38.70	Pass
6	2.342	10.55	25.21	35.76	74.00	38.24	19.55	30.10	64.00	33.90	Pass

Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 24℃, Humi:52%	Engineer:	Allen Tang

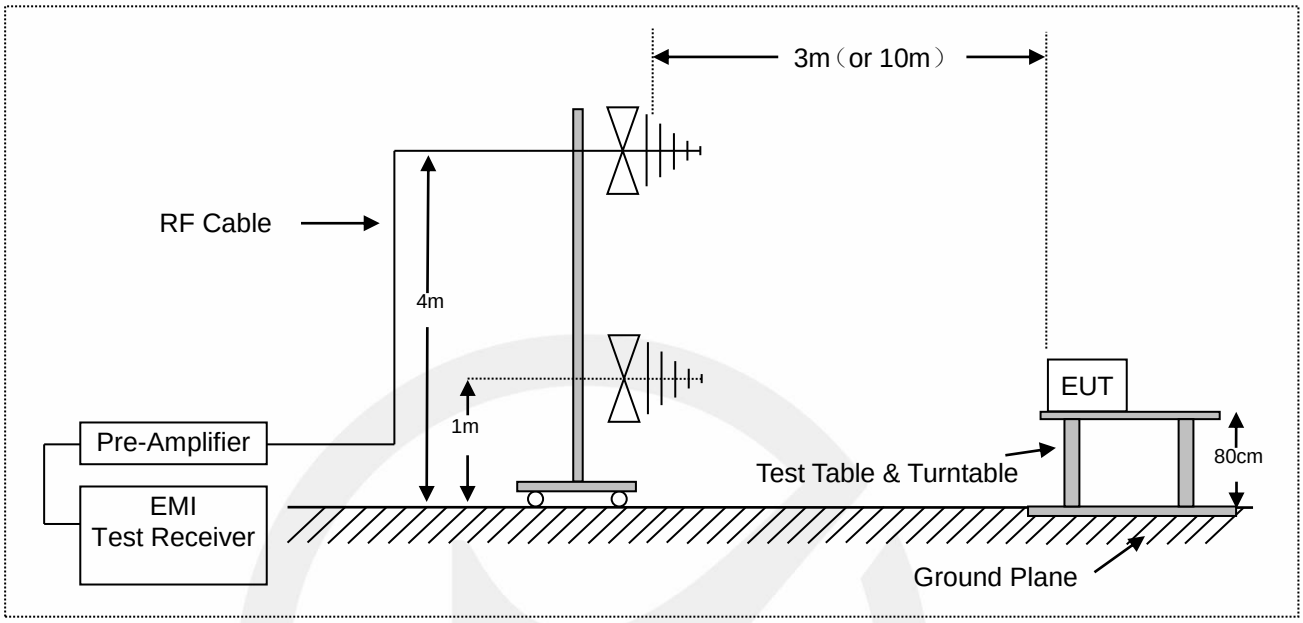


Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading [dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.158	10.07	37.53	47.60	83.57	35.97	32.33	42.40	73.57	31.17	Pass
2	0.494	10.32	33.14	43.46	74.10	30.64	30.23	40.55	64.10	23.55	Pass
3	0.586	10.35	21.65	32.00	74.00	42.00	19.99	30.34	64.00	33.66	Pass
4	1.170	10.49	15.87	26.36	74.00	47.64	14.55	25.04	64.00	38.96	Pass
5	1.758	10.52	15.68	26.20	74.00	47.80	14.71	25.23	64.00	38.77	Pass
6	10.418	10.84	20.92	31.76	74.00	42.24	16.04	26.88	64.00	37.12	Pass

6. RADIATED EMISSION MEASUREMENT (UP TO 1GHz)

6.1. Block Diagram of Test Setup



6.2. Radiated Emission Limits

AS/NZS CISPR 32:2015+AMD1:2020, Class B, Table A.4

Frequency range MHz	Measurement			Class B limits dB(μV/m)
	Facility	Distance (m)	Detector type / bandwidth	
30 to 230	OATS/SAC	10	Quasi Peak / 120 kHz	30
230 to 1 000				37
30 to 230	OATS/SAC	3		40
230 to 1 000				47

6.3. Test Procedure

The EUT was placed on a non-conductive table whose total height equaled 80cm. All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

The EUT was set 3 meters (or 10 meters) away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level.

The turntable can rotate 360 degree to determine the position of the maximum emission level.

The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.

The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

The bandwidth of the Receiver is set at 120 kHz.

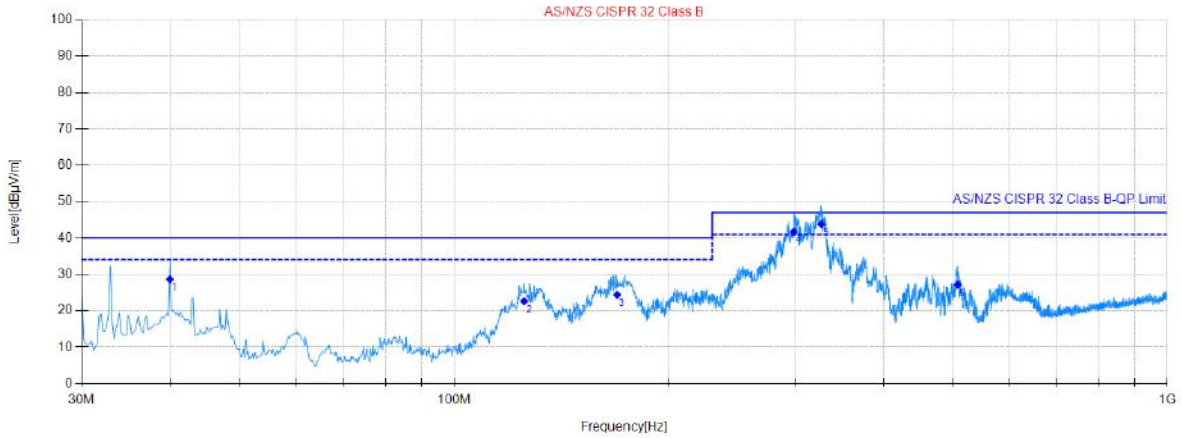
Test results were obtained from the following equation:
Measurement (dBμV) =Correct Factor (dB) + Reading (dBμV)
Over (dB) = Measurement (dBμV) - Limit (dBμV)

6.4. Measuring Results

Pass.

Please refer to the following pages.

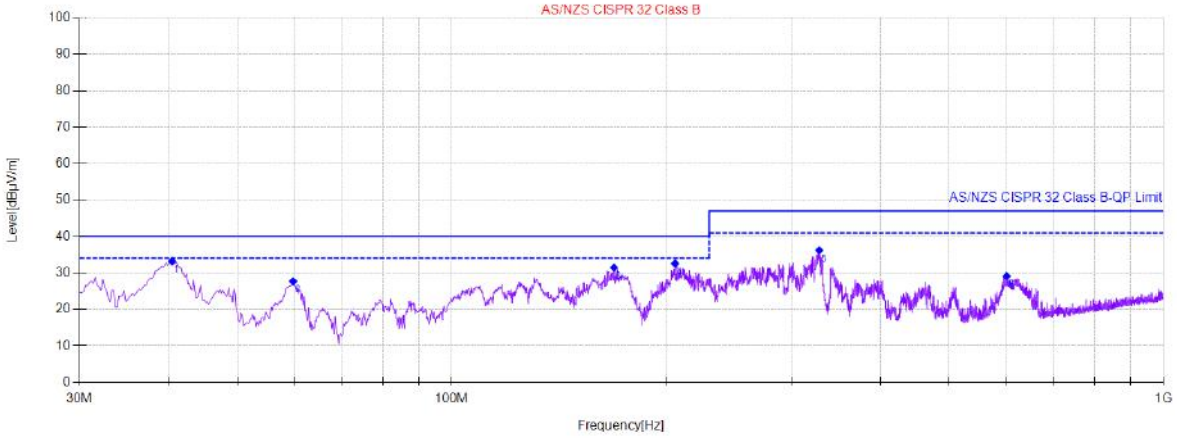
Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 25℃; Humi:60%	Engineer:	JACK ZHANG



Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	39.896	59.81	-31.18	28.63	40.00	11.37	100	144	Horizontal	Pass
2	125.273	56.00	-33.39	22.61	40.00	17.39	200	187	Horizontal	Pass
3	169.126	57.04	-32.65	24.39	40.00	15.61	200	325	Horizontal	Pass
4	299.326	70.09	-28.38	41.71	47.00	5.29	100	123	Horizontal	Pass
5	327.073	70.94	-27.14	43.80	47.00	3.20	100	144	Horizontal	Pass
6	507.918	50.32	-23.15	27.17	47.00	19.83	100	236	Horizontal	Pass

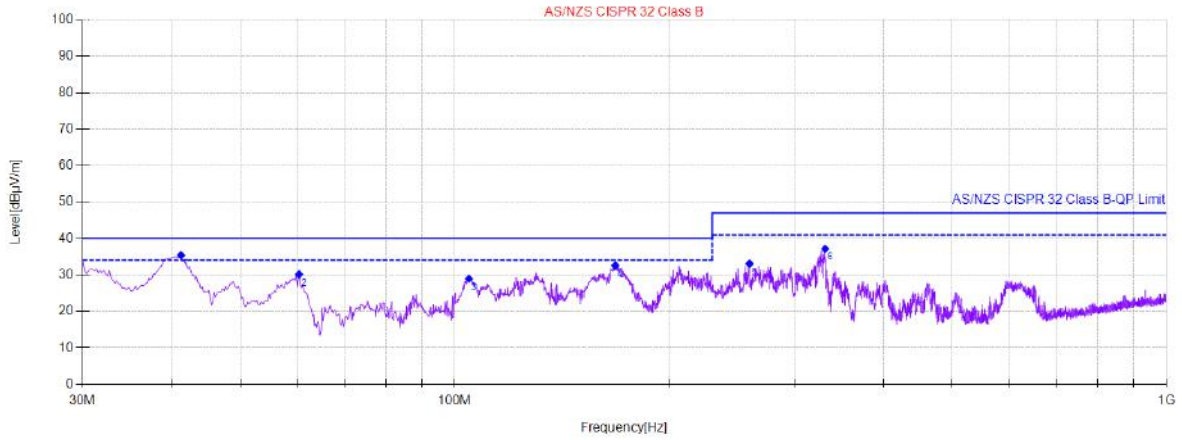
Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 25℃; Humi:60%	Engineer:	JACK ZHANG



Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	40.478	64.27	-31.08	33.19	40.00	6.81	100	68	Vertical	Pass
2	59.882	59.77	-32.09	27.68	40.00	12.32	100	287	Vertical	Pass
3	169.126	64.11	-32.65	31.46	40.00	8.54	100	312	Vertical	Pass
4	205.993	63.16	-30.58	32.58	40.00	7.42	100	350	Vertical	Pass
5	328.432	63.34	-27.14	36.20	47.00	10.80	100	92	Vertical	Pass
6	602.220	49.96	-20.83	29.13	47.00	17.87	100	186	Vertical	Pass

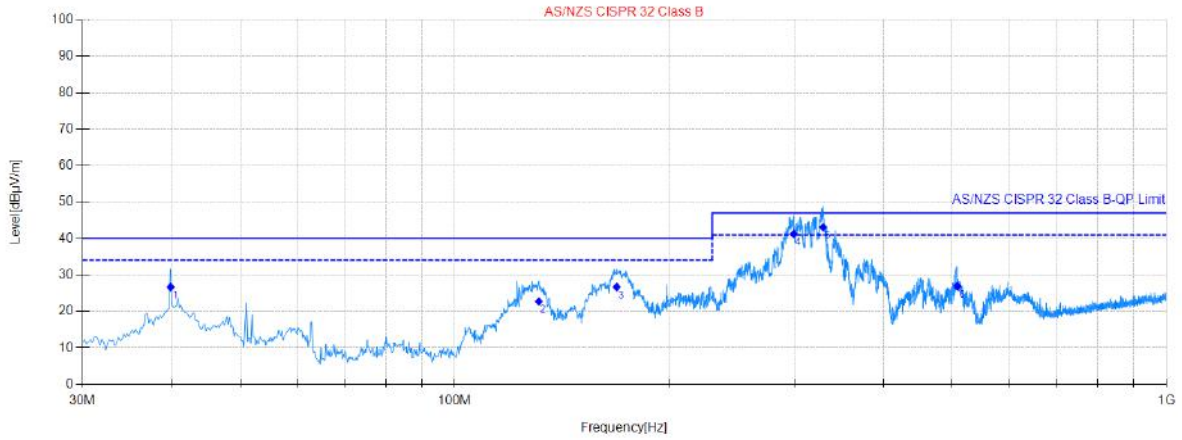
Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 25℃; Humi:60%	Engineer:	JACK ZHANG



Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	41.254	66.32	-30.91	35.41	40.00	4.59	100	105	Vertical	Pass
2	60.464	62.28	-32.14	30.14	40.00	9.86	100	348	Vertical	Pass
3	104.705	60.25	-31.28	28.97	40.00	11.03	100	360	Vertical	Pass
4	168.156	65.26	-32.67	32.59	40.00	7.41	100	348	Vertical	Pass
5	259.548	61.74	-28.67	33.07	47.00	13.93	100	327	Vertical	Pass
6	331.536	64.33	-27.15	37.18	47.00	9.82	100	77	Vertical	Pass

Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 25℃; Humi:60%	Engineer:	JACK ZHANG

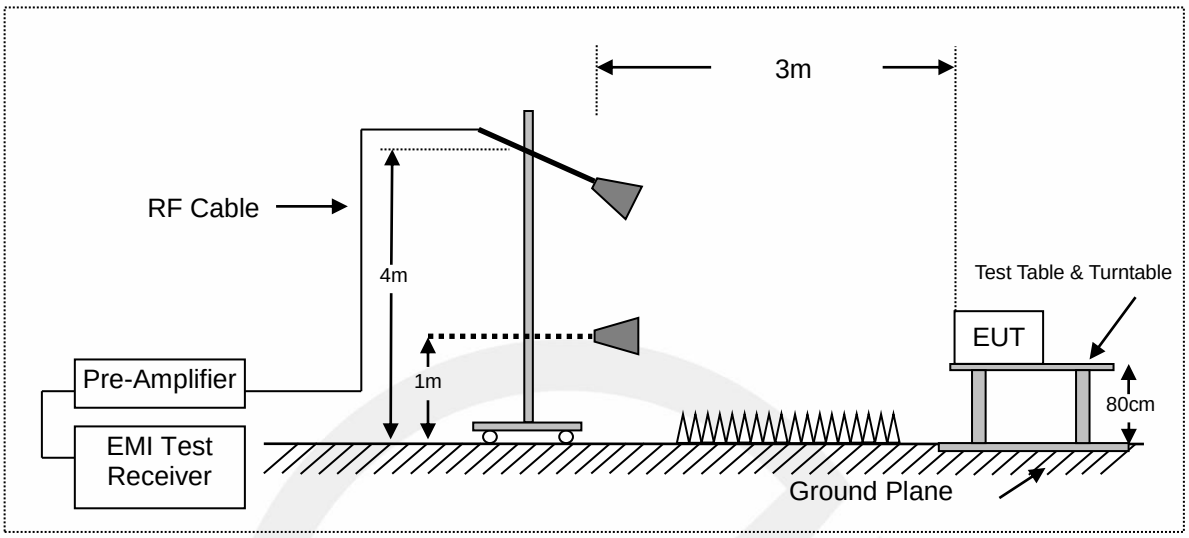


Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	39.896	57.85	-31.18	26.67	40.00	13.33	100	192	Horizontal	Pass
2	131.288	56.35	-33.64	22.71	40.00	17.29	200	34	Horizontal	Pass
3	168.932	59.35	-32.65	26.70	40.00	13.30	200	301	Horizontal	Pass
4	299.520	69.64	-28.38	41.26	47.00	5.74	100	168	Horizontal	Pass
5	329.208	70.24	-27.15	43.09	47.00	3.91	100	130	Horizontal	Pass
6	508.500	50.04	-23.14	26.90	47.00	20.10	100	217	Horizontal	Pass

7. RADIATED EMISSION MEASUREMENT (ABOVE 1GHz)

7.1. Block Diagram of Test Setup



7.2. Radiated Limit

AS/NZS CISPR 32:2015+AMD1:2020, Class B, Table A.5

Frequency range (MHz)	Measurement			Class B limits dB(μV/m)
	Facility	Distance (m)	Detector type/ bandwidth	
1000 to 3000	FSOATS	3	Average / 1 MHz	50
3000 to 6000				54
1000 to 3000			Peak /1 MHz	70
3000 to 6000				74

Note: The highest internal source of an EUT is defined as the highest frequency generated or used within the EUT or on which the EUT operates or tunes. If 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. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.

7.3. Test Procedure

The EUT was placed on a non-conductive table whose total height equaled 80cm. All units of equipment forming the system under test (includes the EUT as well as connected peripherals and associated equipment or devices) shall be arranged such that a nominal 0.1 m separation is achieved between the neighboring units. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, so that its length is shortened to 1 m.

The EUT was set 3 meters away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 meters to find out the maximum emission level.

The turntable can rotate 360 degree to determine the position of the maximum emission level.

The initial testing identified the frequency that has the highest disturbance relative to the limit while operating the EUT in typical modes of operation and cable positions in a test setup representative of typical system configuration.

The identification of the frequency of highest emission with respect to the limit was found by investigating emissions at a number of significant frequencies. The probable frequency of maximum emission had been found and that the associated cable and EUT configuration and mode of operation had been identified.

The frequency range above 1 GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz.

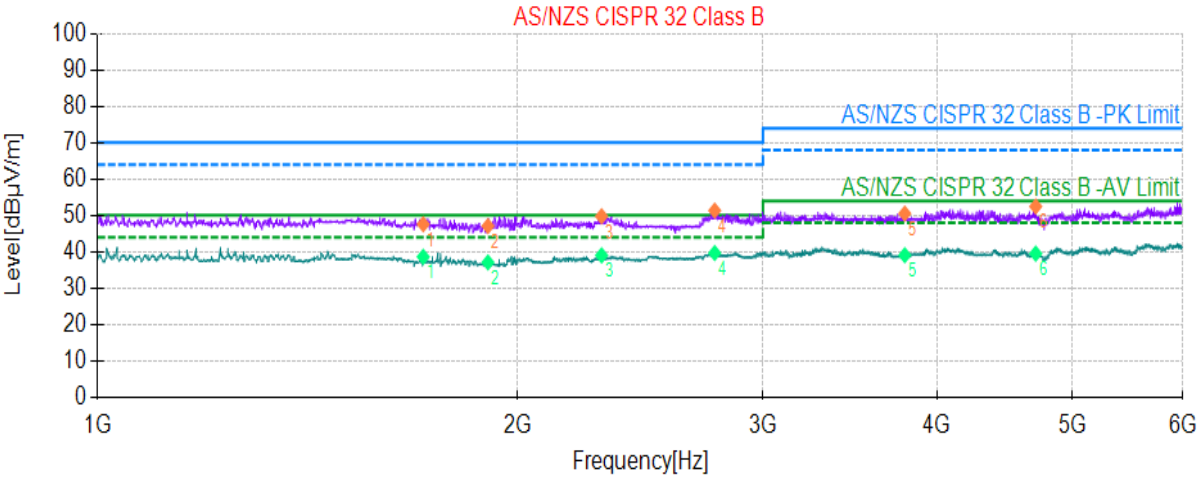
Test results were obtained from the following equation:
Measurement (dBμV) =Correct Factor (dB) + Reading (dBμV)
Over (dB) = Measurement (dBμV) - Limit (dBμV)

7.4. Measuring Results

Pass.

Please refer to the following pages.

Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 24℃; Humi:58%	Engineer:	JACK ZHANG



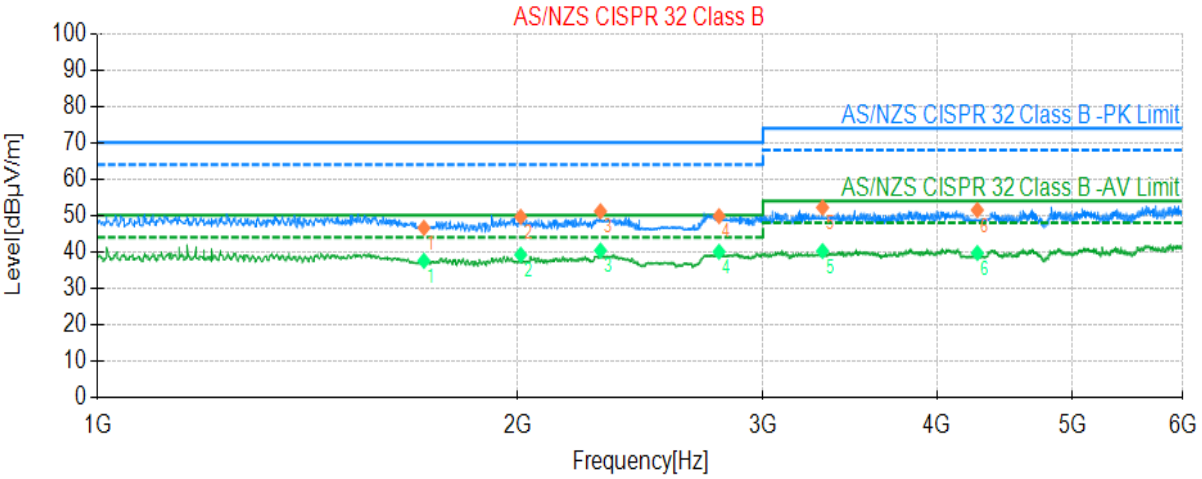
PK Final Data List

NO.	Freq. [MHz]	PK Reading [dBµV/m]	Factor [dB]	PK Value [dBµV/m]	PK Limit [dBµV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1712.142	61.46	-13.90	47.56	70.00	22.44	100	52	Vertical	Pass
2	1905.181	60.78	-13.71	47.07	70.00	22.93	100	77	Vertical	Pass
3	2298.260	63.06	-13.30	49.76	70.00	20.24	100	163	Vertical	Pass
4	2770.354	62.76	-11.42	51.34	70.00	18.66	100	81	Vertical	Pass
5	3791.558	58.76	-8.25	50.51	74.00	23.49	100	44	Vertical	Pass
6	4706.741	58.67	-6.21	52.46	74.00	21.54	100	120	Vertical	Pass

AV Final Data List

NO.	Freq. [MHz]	AV Reading [dBµV/m]	Factor [dB]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1712.142	52.49	-13.90	38.59	50.00	11.41	100	52	Vertical	Pass
2	1905.181	50.78	-13.71	37.07	50.00	12.93	100	77	Vertical	Pass
3	2298.260	52.29	-13.30	38.99	50.00	11.01	100	163	Vertical	Pass
4	2770.354	51.07	-11.42	39.65	50.00	10.35	100	81	Vertical	Pass
5	3791.558	47.29	-8.25	39.04	54.00	14.96	100	44	Vertical	Pass
6	4706.741	45.69	-6.21	39.48	54.00	14.52	100	120	Vertical	Pass

Project Information			
Mode:	ON	Voltage:	AC 240V/50Hz
Environment:	Temp: 24℃; Humi:58%	Engineer:	JACK ZHANG



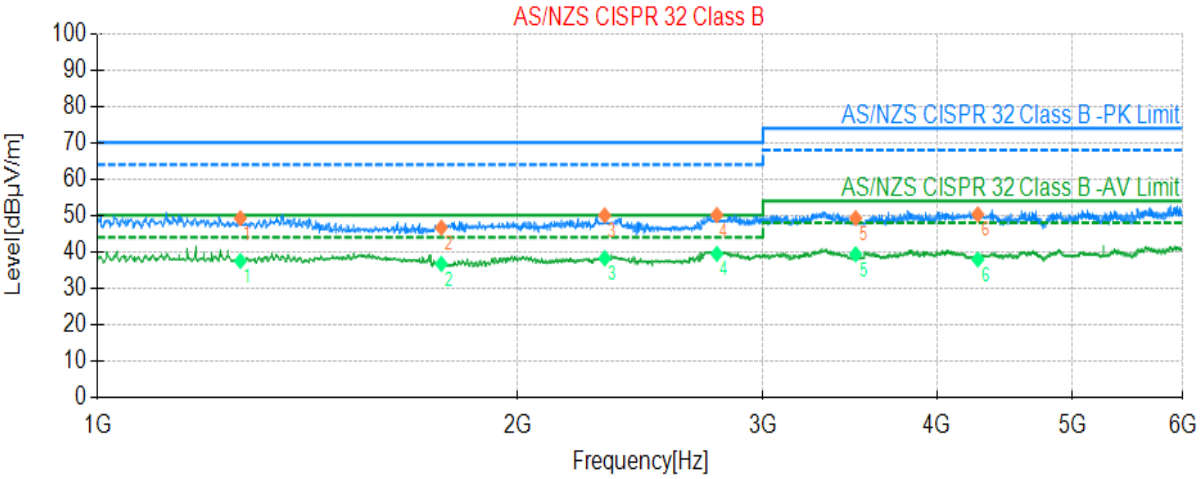
PK Final Data List

NO.	Freq. [MHz]	PK Reading [dBµV/m]	Factor [dB]	PK Value [dBµV/m]	PK Limit [dBµV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1714.143	60.46	-13.90	46.56	70.00	23.44	100	105	Horizontal	Pass
2	2011.202	63.21	-13.61	49.60	70.00	20.40	100	116	Horizontal	Pass
3	2294.259	64.43	-13.31	51.12	70.00	18.88	100	181	Horizontal	Pass
4	2790.358	61.09	-11.29	49.80	70.00	20.20	100	358	Horizontal	Pass
5	3310.462	61.67	-9.50	52.17	74.00	21.83	100	83	Horizontal	Pass
6	4274.655	58.64	-7.17	51.47	74.00	22.53	100	314	Horizontal	Pass

AV Final Data List

NO.	Freq. [MHz]	AV Reading [dBµV/m]	Factor [dB]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1714.143	51.39	-13.90	37.49	50.00	12.51	100	105	Horizontal	Pass
2	2011.202	52.78	-13.61	39.17	50.00	10.83	100	116	Horizontal	Pass
3	2294.259	53.64	-13.31	40.33	50.00	9.67	100	181	Horizontal	Pass
4	2790.358	51.27	-11.29	39.98	50.00	10.02	100	358	Horizontal	Pass
5	3310.462	49.69	-9.50	40.19	54.00	13.81	100	83	Horizontal	Pass
6	4274.655	46.79	-7.17	39.62	54.00	14.38	100	314	Horizontal	Pass

Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 24℃; Humi:58%	Engineer:	JACK ZHANG



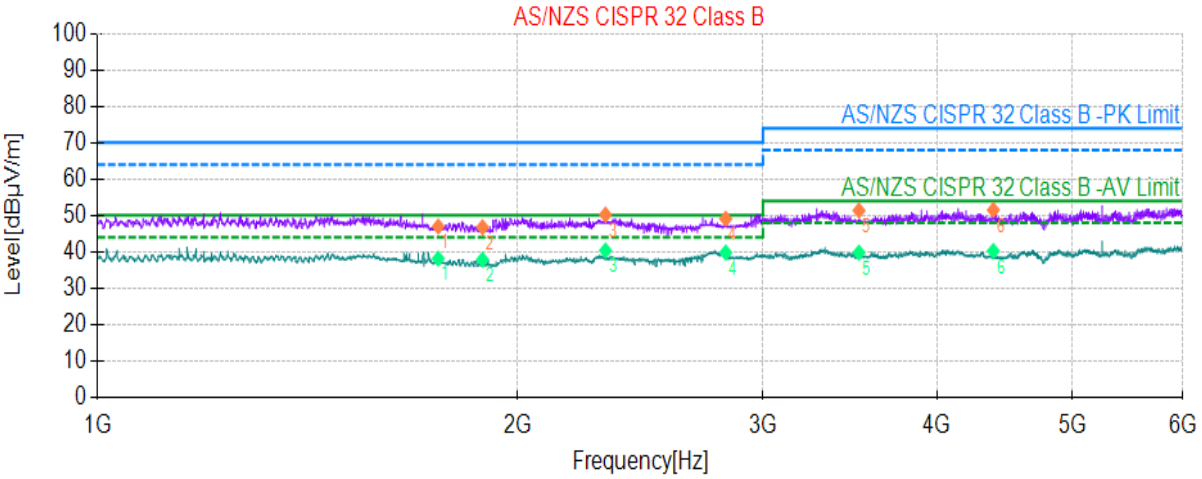
PK Final Data List

NO.	Freq. [MHz]	PK Reading [dBµV/m]	Factor [dB]	PK Value [dBµV/m]	PK Limit [dBµV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1266.053	63.26	-14.06	49.20	70.00	20.80	100	170	Horizontal	Pass
2	1764.153	60.46	-13.85	46.61	70.00	23.39	100	27	Horizontal	Pass
3	2310.262	63.28	-13.29	49.99	70.00	20.01	100	80	Horizontal	Pass
4	2780.356	61.43	-11.36	50.07	70.00	19.93	100	0	Horizontal	Pass
5	3496.499	58.46	-9.20	49.26	74.00	24.74	100	263	Horizontal	Pass
6	4277.656	57.43	-7.17	50.26	74.00	23.74	100	40	Horizontal	Pass

AV Final Data List

NO.	Freq. [MHz]	AV Reading [dBµV/m]	Factor [dB]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1266.053	51.49	-14.06	37.43	50.00	12.57	100	170	Horizontal	Pass
2	1764.153	50.49	-13.85	36.64	50.00	13.36	100	27	Horizontal	Pass
3	2310.262	51.49	-13.29	38.20	50.00	11.80	100	80	Horizontal	Pass
4	2780.356	50.76	-11.36	39.40	50.00	10.60	100	0	Horizontal	Pass
5	3496.499	48.49	-9.20	39.29	54.00	14.71	100	263	Horizontal	Pass
6	4277.656	45.04	-7.17	37.87	54.00	16.13	100	40	Horizontal	Pass

Project Information			
Mode:	ON	Voltage:	AC 120V/60Hz
Environment:	Temp: 24℃; Humi:58%	Engineer:	JACK ZHANG



PK Final Data List

NO.	Freq. [MHz]	PK Reading [dBµV/m]	Factor [dB]	PK Value [dBµV/m]	PK Limit [dBµV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1755.151	60.79	-13.86	46.93	70.00	23.07	100	112	Vertical	Pass
2	1888.178	60.46	-13.73	46.73	70.00	23.27	100	354	Vertical	Pass
3	2313.263	63.49	-13.28	50.21	70.00	19.79	100	192	Vertical	Pass
4	2821.364	60.16	-11.10	49.06	70.00	20.94	100	195	Vertical	Pass
5	3515.503	60.49	-9.14	51.35	74.00	22.65	100	170	Vertical	Pass
6	4388.678	58.49	-7.00	51.49	74.00	22.51	100	332	Vertical	Pass

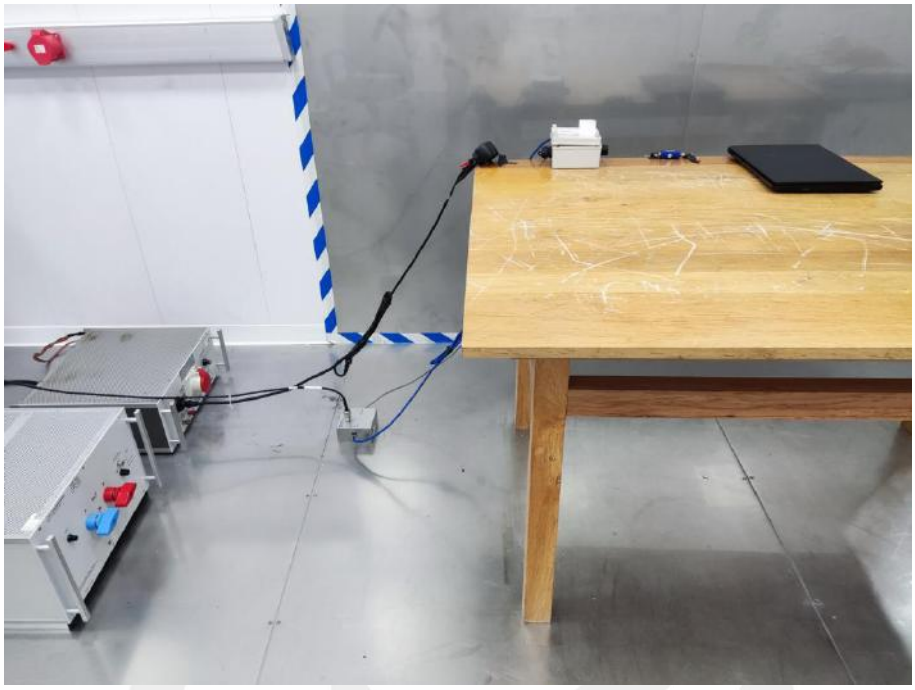
AV Final Data List

NO.	Freq. [MHz]	AV Reading [dBµV/m]	Factor [dB]	AV Value [dBµV/m]	AV Limit [dBµV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	1755.151	51.98	-13.86	38.12	50.00	11.88	100	112	Vertical	Pass
2	1888.178	51.54	-13.73	37.81	50.00	12.19	100	354	Vertical	Pass
3	2313.263	53.61	-13.28	40.33	50.00	9.67	100	192	Vertical	Pass
4	2821.364	50.86	-11.10	39.76	50.00	10.24	100	195	Vertical	Pass
5	3515.503	48.89	-9.14	39.75	54.00	14.25	100	170	Vertical	Pass
6	4388.678	47.20	-7.00	40.20	54.00	13.80	100	332	Vertical	Pass

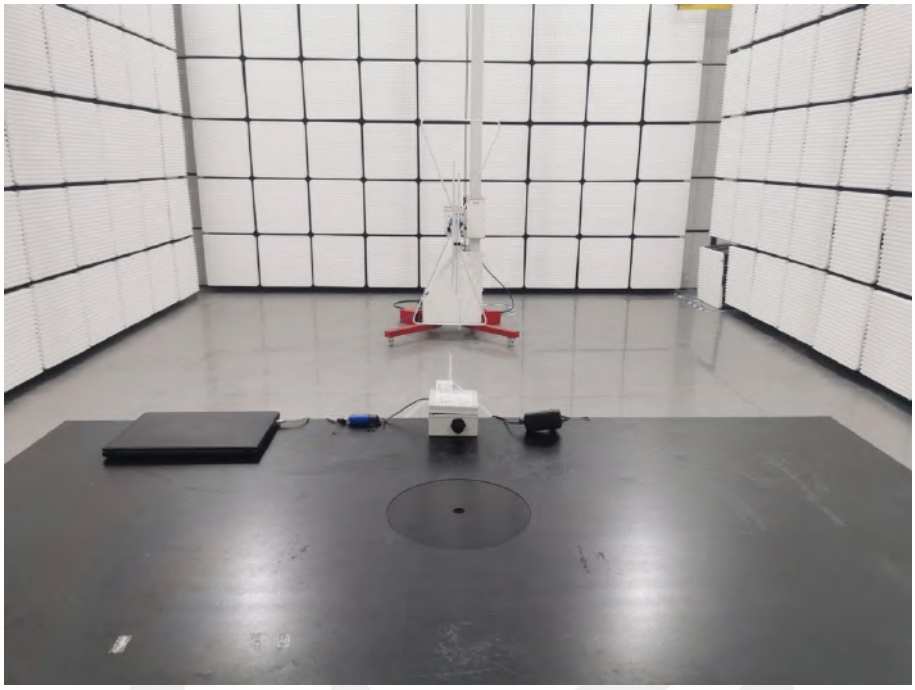
8. PHOTOGRAPH

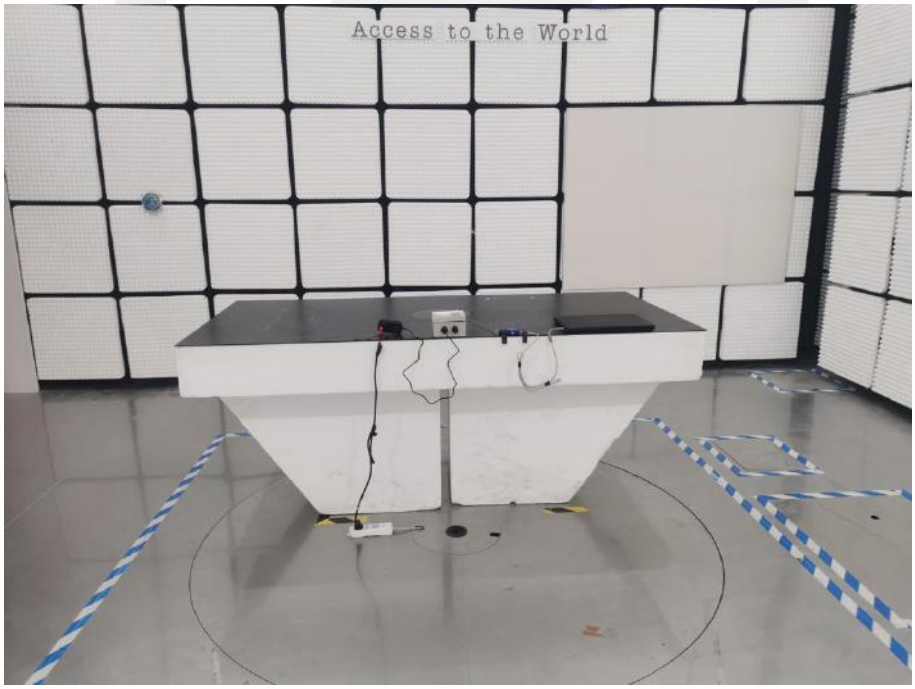
8.1. Photos of Conducted Emissions from the AC Mains Power Ports

8.2. Photo of Conducted Emissions at Telecommunications/network port Measurement

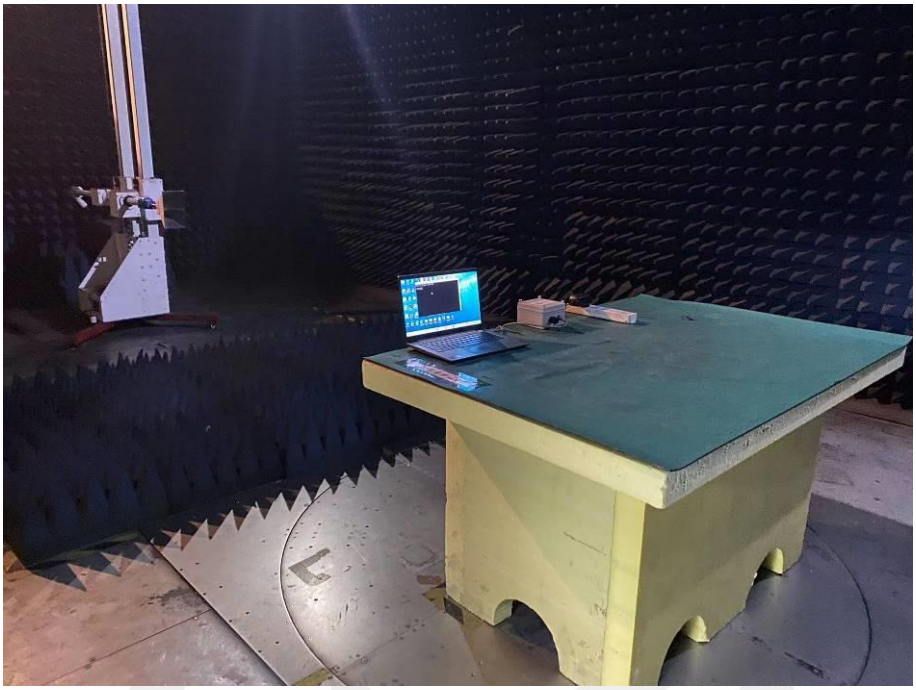


8.3. Photo of Radiation Emission Measurement (UP TO 1GHz)



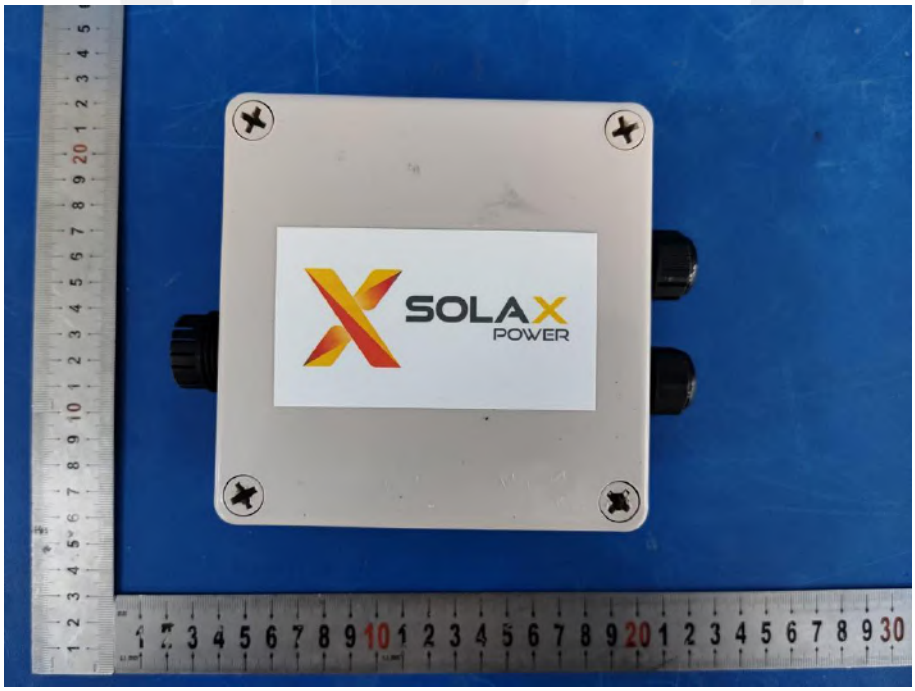


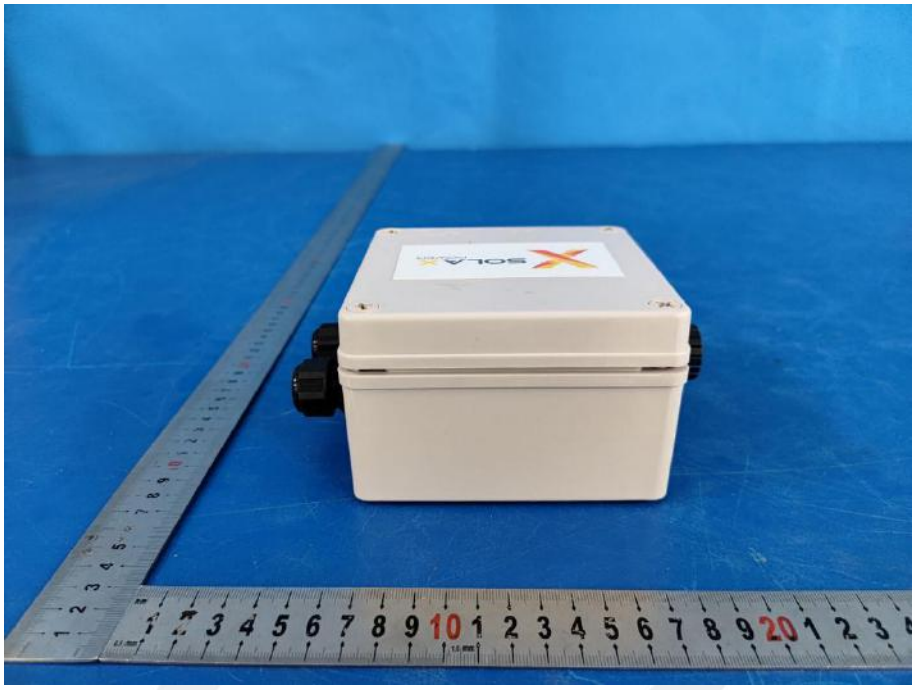
8.4. Photo of Radiation Emission Measurement (Above 1GHz)

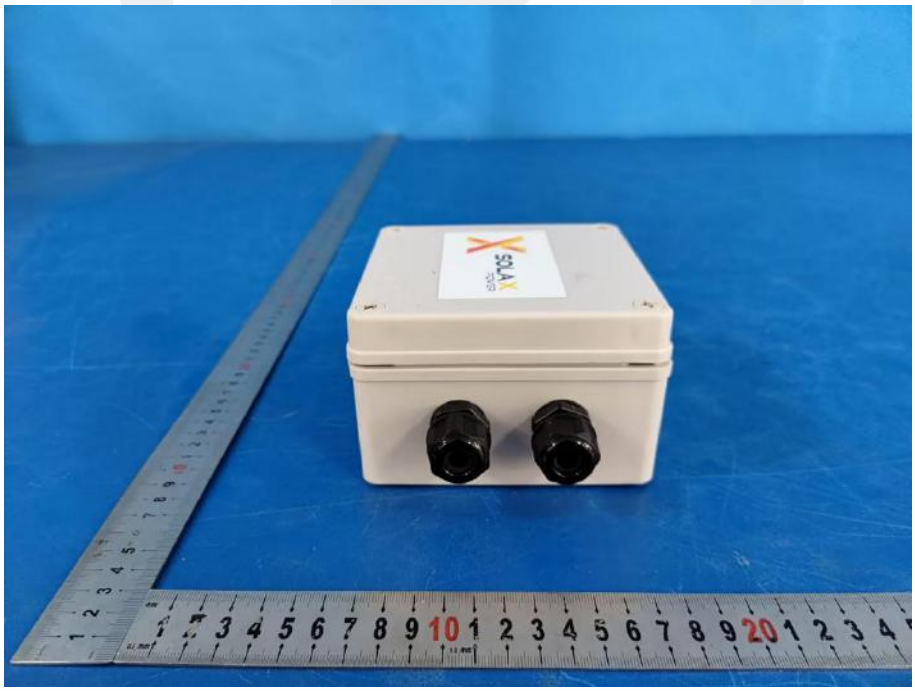


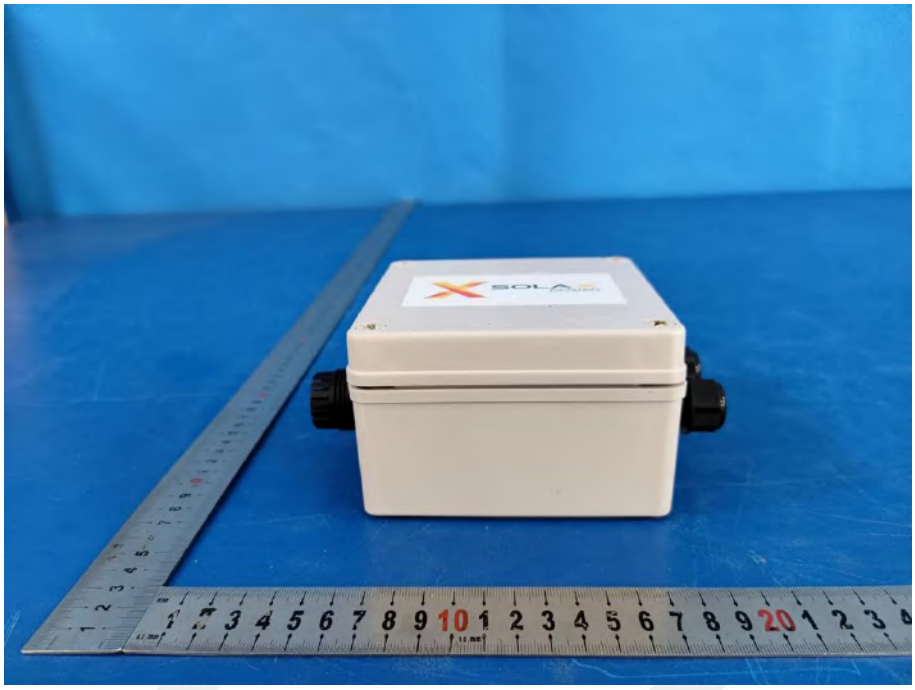
APPENDIX I
(Photos of EUT)

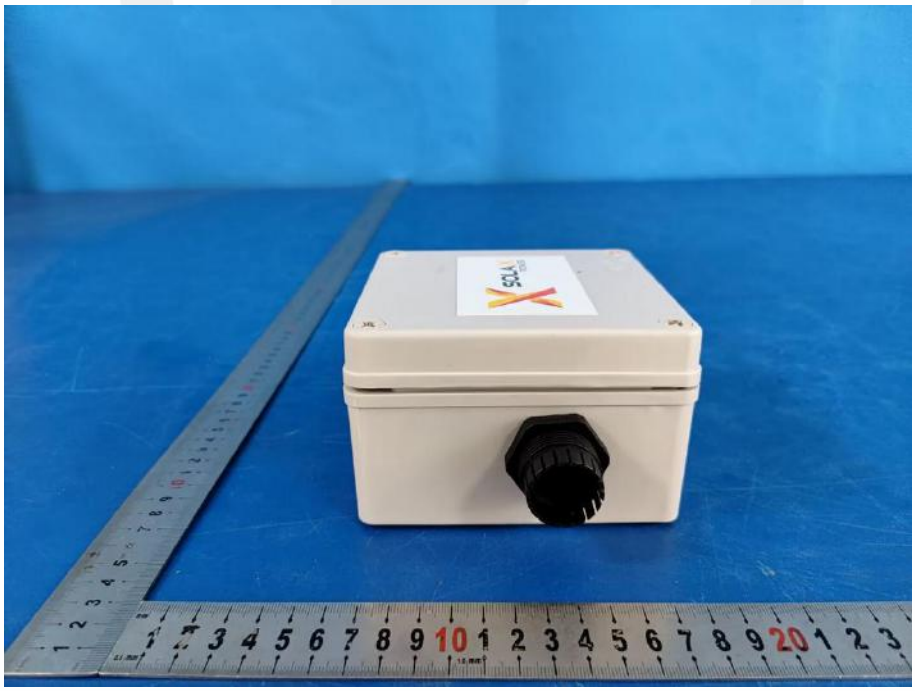

SOLAX
POWER

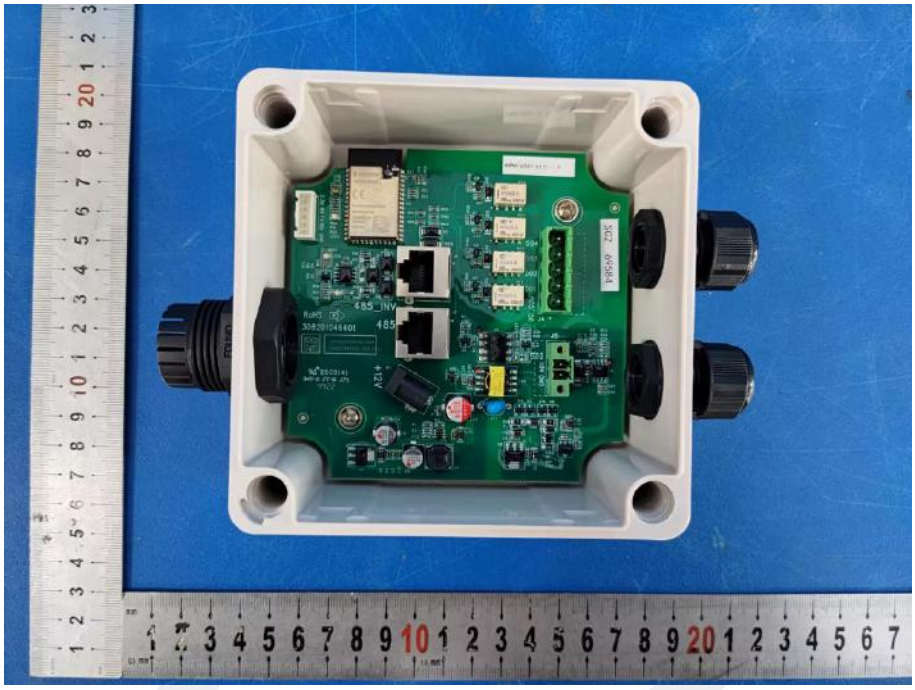

SOLAX
POWER

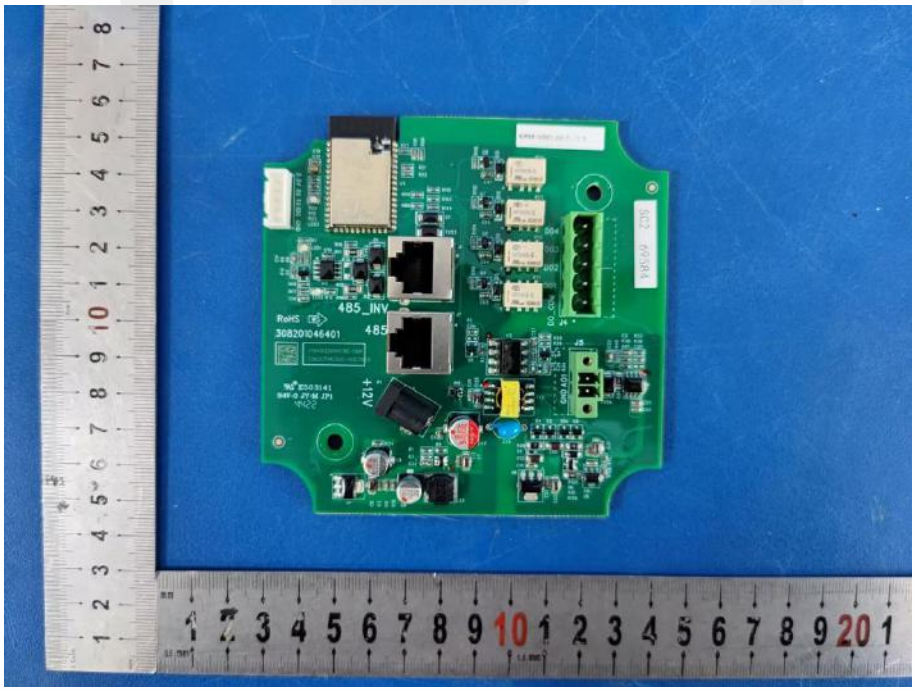


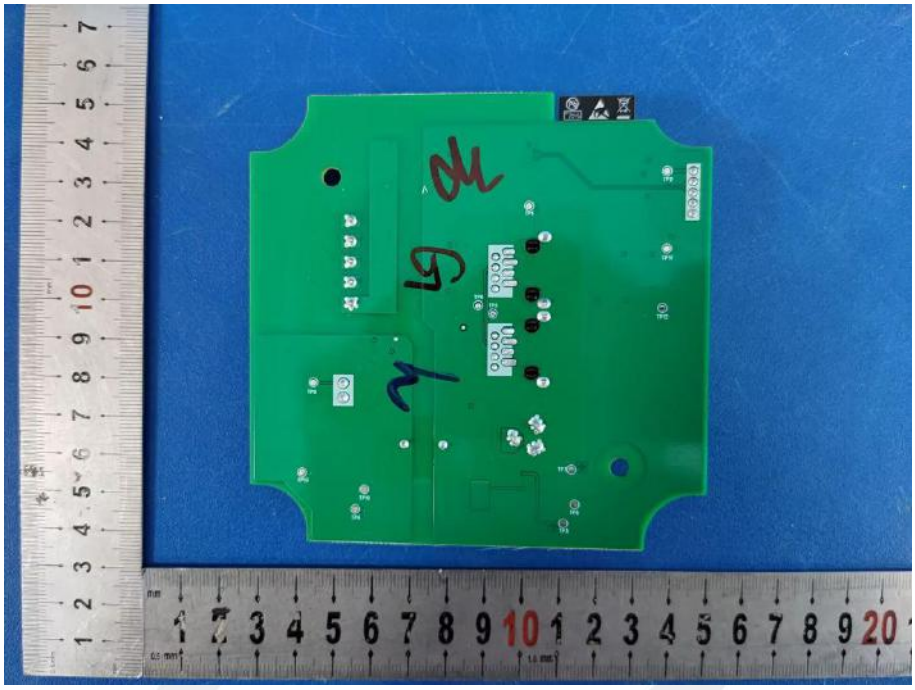


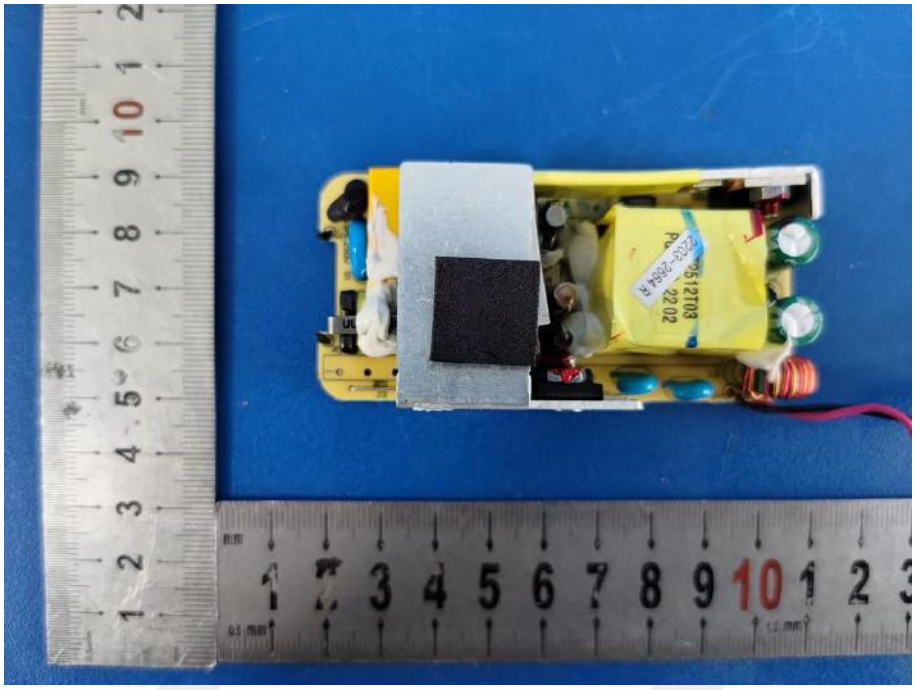





485_INV
RoHS
308201046401
485
+12V


485_INV
RoHS
308201046401
485
+12V





*** End of Report ***

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