

EMC Test Report

Client Name : Shenzhen Bolong Technology Co., Ltd.

Client Address : Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China

Product Name : Galaxy Projector

Report Date : Jan. 16, 2023

Shenzhen Anbotech Compliance Laboratory Limited



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TEST REPORT

Applicant : Shenzhen Bolong Technology Co., Ltd.

Manufacturer : Shenzhen Bolong Technology Co., Ltd.

Product Name : Galaxy Projector

Test Model No. : BL-DQY02

Reference Model No. : N.A.

Trade Mark : N.A.

Rating(s) : Power Input: DC 5V 2A
Maximun Output Power: 10W

Test Standard(s) : EN IEC 55015: 2019+A11: 2020;
EN IEC 61000-3-2: 2019+A1: 2021;
EN 61000-3-3: 2013+A1:2019+A2:2021;
EN 61547: 2009;
(IEC 61000-4-2; IEC 61000-4-3; IEC 61000-4-4;
IEC 61000-4-5; IEC 61000-4-6; IEC 61000-4-8; IEC 61000-4-11)

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited 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 Shenzhen Anbotek Compliance Laboratory Limited 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 EN IEC 55015, EN IEC 61000-3-2, EN 61000-3-3, EN 61547 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt: Jan. 06, 2023

Date of Test: Jan. 06~Jan. 16, 2023

Prepared By:

We Zeng

(We Zeng)

Approved & Authorized Signer:

KingKong Jin

(KingKong Jin)



1. General Information

1.1. Client Information

Applicant	:	Shenzhen Bolong Technology Co., Ltd.
Address	:	Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China
Manufacturer	:	Shenzhen Bolong Technology Co., Ltd.
Address	:	Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China
Factory	:	Shenzhen Bolong Technology Co., Ltd.
Address	:	Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China

1.2. Description of Device (EUT)

Product Name	:	Galaxy Projector
Test Model No.	:	BL-DQY02
Reference Model No.	:	N.A.
Trade Mark	:	N.A.
Test Power Supply	:	DC 5V via adapter
Test Sample No.	:	1-1-1
Product Description	:	N/A
Remark: (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		

1.3. Auxiliary Equipment Used During Test

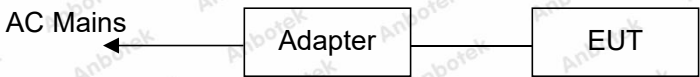
N/A	
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1.4. Description of Test Mode

Pretest Mode	Description
Mode 1	On

For Mode 1 Block Diagram of Test Setup



1.5. Test Summary

Test Items	Test Mode	Status
Power Line Conducted Emission Test	Mode 1	P
Magnetic Field Inducted Current	Mode 1	P
Magnetic Field Strength (9KHz-30MHz)	/	N
Radiated Emission Test (Below 1 GHz)	Mode 1	P
Harmonic Current Test	/	N
Voltage Fluctuations & Flicker Test	/	N
Electrostatic Discharge Immunity Test	Mode 1	P
RF Field Strength Immunity Test	Mode 1	P
Electrical Fast Transient/Burst Immunity Test	/	N
Surge Immunity Test	/	N
Injected Currents	/	N
Power Frequency Magnetic Field Immunity Test	/	N
Voltage Dips and Interruptions Immunity Test	/	N
P) Indicates "PASS". F) Indicates "Fail". N) Indicates "Not applicable".		



1.6. Test Equipment List☒ Power Line Conducted Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Oct. 23, 2022	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	Jul. 05, 2022	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
4.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Oct. 22, 2022	1 Year
5.	Software Name EZ-EMC	Ferrari Technology	ANB-03A	N/A	N/A	N/A

☒ Magnetic Field Inducted Current

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
2.	Triple-Loop Antenna(2M)	EVERFINE	LLA-2	905003	Oct. 23, 2022	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Oct. 22, 2022	1 Year
4.	Software Name EZ-EMC	Ferrari Technology	ANB-03A	N/A	N/A	N/A

☐ Magnetic Field Strength (9KHz-30MHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
2.	Pre-amplifier	Schwarzbeck	BBV-9745	9745-075	Oct. 23, 2022	1 Year
3.	Loop Antenna (9K-30M)	Schwarzbeck	FMZB1519B	00053	Oct. 23, 2022	1 Year
4.	Software Name EZ-EMC	Ferrari Technology	EMEC-3A1	N/A	N/A	N/A



☒ Radiated Emission Test (Below 1 GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
2.	Pre-amplifier	Schwarzbeck	BBV-9745	9745-075	Oct. 23, 2022	1 Year
3.	Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	01109	Oct. 16, 2022	3 Year
4.	Software Name EZ-EMC	Ferrari Technology	EMEC-3A1	N/A	N/A	N/A

☐ Harmonic Current and Flicker Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Programmable AC Power source	IVYTECH	APS-5005A	632734	Oct. 23, 2022	1 Year
2.	Harmonic and Flicker Analyzer	EMC-PARTNER	HMONICS 1000-1P	164	Oct. 23, 2022	1 Year
3.	Harmonics-1000	N/A	Ed.3.0+4.0	N.A	N/A	N/A

☒ Electrostatic Discharge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	ESD Simulators	emtest	ESD NX30.1	11936	Mar. 25, 2022	1 Year

☒ RF Field Strength Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Signal Generator	Agilent	N5182A	MY4818065 6	Oct. 13, 2022	1 Year
2.	Amplifier	Micotoop	MPA-80-100 0-250	MPA190309 6	Oct. 23, 2022	1 Year
3.	Amplifier	Micotoop	MPA-1000-6 000-100	MPA190312 2	Oct. 23, 2022	1 Year
4.	Log-Periodic Antenna	Schwarzbeck	VULP9118E	00992	N/A	N/A
5.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	Oct. 16, 2022	3 Year
6.	Power Sensor	Agilent	E9301A	MY4149890 6	Oct. 23, 2022	1 Year
7.	Power Sensor	Agilent	E9301A	MY4149808 8	Oct. 23, 2022	1 Year
8.	Power Meter	Agilent	E4419B	GB4020290 9	Oct. 23, 2022	1 Year
9.	Electric field Probe	Narda	EP 601	811ZX10351	Oct. 23, 2022	1 Year
10.	RS Test software	EMtrace	EM 3	V1.1.7	N/A	N/A



☐ Electrical Fast Transient/Burst Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Surge Generator	TESEQ	NSG 3060	1480	Oct. 23, 2022	1 Year
2.	CDN	TESEQ	CDN 3061	1408	Oct. 23, 2022	1 Year
3.	EFT-Clamp	PRIMA	EFT-Clamp	/	Oct. 13, 2022	1 Year

☐ Surge Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Combined Wave Lightning Surge Simulator	3Ctest	CCS600	ES3771702	Jul. 05, 2022	1 Year
2.	Three Phase Power Coupling Network	3Ctest	SEPN69100 T	ES0801757	Jul. 05, 2022	1 Year
3.	Telecom port surge generator	PMI	TW101	190411	May 13, 2022	1 Year

☐ Injected Currents Susceptibility Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	C/S Conducted Immunity Test System	FRANKONIA	CIT-10	126A1196/2012	Oct. 23, 2022	1 Year
2.	CDN	FRANKONIA	CDN - M2+ M3	A2210178/2012	Oct. 23, 2022	1 Year
3.	6dB Attenuator	FRANKONIA	DAM 26W	1172202	Oct. 23, 2022	1 Year
4.	CIT-10	FRANKONIA	Version1.1.7	N/A	N/A	N/A
5.	EM-Clamp	FRANKONIA	EMCL-20	18101728-0103	May 17, 2022	1 Year

☐ Power frequency Magnetic Field Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Power Frequency Magnetic Field Generator	EVERFINE	EMS61000-8 K	906002	Oct. 23, 2022	1 Year

☐ Voltage Dips and Interruptions Immunity Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	CYCLE SAG Simulator	PRIMA	DRP61011A G	PR12046234	Oct. 23, 2022	1 Year



1.7. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518128

1.8. EMS Performance Criteria

Performance criterion A

During the test, no change of the luminous intensity shall be observed and the regulating control, if any, shall operate during the test as intended.

Performance criterion B

During the test, the luminous intensity may change to any value. After the test, the luminous intensity shall be restored to its initial value within 1 min. Regulating controls need not function during the test, but after the test, the mode of the control shall be the same as before the test provided that during the test no mode changing commands were given.

Performance criterion C

During and after the test, any change of the luminous intensity is allowed and the lamp(s) may be extinguished. After the test, within 30 min, all functions shall return to normal, if necessary by temporary interruption of the mains supply and/or operating the regulating control.

Additional requirement for lighting equipment incorporating a starting device: After the test, the lighting equipment is switched off. After half an hour, it is switched on again. The lighting equipment shall start and operate as intended.



2. Power Line Conducted Emission Test

2.1. Test Standard and Limit

Test Standard:	EN IEC 55015
----------------	--------------

☒ Disturbance voltage limits at the electric power supply interface

Frequency (MHz)	Limits (dBμV)	
	Quasi-peak Level	Average Level
0.009 ~ 0.05	110	-
0.05 ~ 0.15	90~80	-
0.15 ~ 0.50	66~56	56~46
0.50 ~ 5.00	56	46
5.00 ~30.00	60	50

Remark:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases linearly with the logarithm of the frequency in the range 0.05MHz to 0.50MHz.

☐ Disturbance voltage limits at the electric power supply interface (Electrodeless lamp)

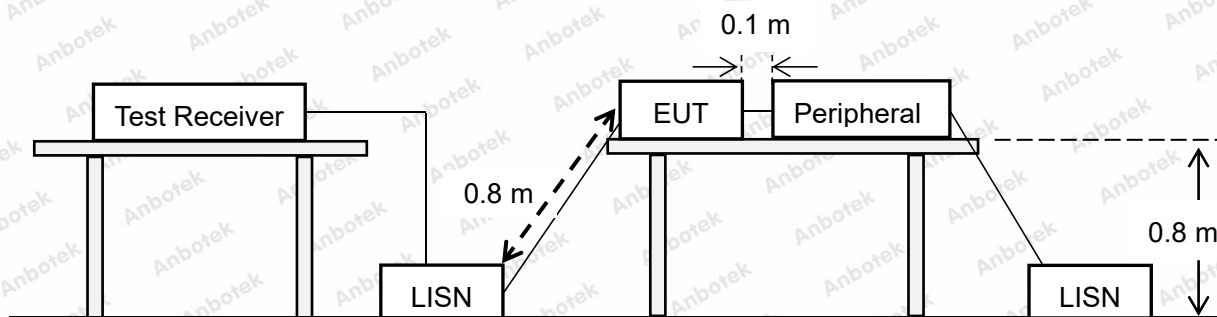
Frequency (MHz)	Limits (dBμV)	
	Quasi-peak Level	Average Level
0.009 ~ 0.05	110	-
0.05 ~ 0.15	90~80	-
0.15 ~ 0.50	66~56	56~46
0.50 ~ 2.20	56	46
2.20 ~ 3.00	73	63
3.00 ~ 5.00	56	46
5.00 ~30.00	60	50

Remark:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.



2.2. Test Setup



2.3. Test Procedure

The table-top EUT is placed on a non-conductive table 0.8 m above the horizontal ground reference plane, and the back of the EUT is 0.4 m away from the vertical ground reference plane, and at least 0.8 m from any other metal surface or ground plane. The floor-standing EUT is placed on an insulating support 0.1 m above the horizontal ground reference plate, at least 0.8 m away from other metal objects.

Connect EUT to the power mains through an LISN. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the center into a bundle no longer than 0.4 m, so that its length is shortened to 1 m. All the peripherals are connecting to the other LISN (Handheld devices shall be tested with a simulated hand) .

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

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

2.4. Test Results

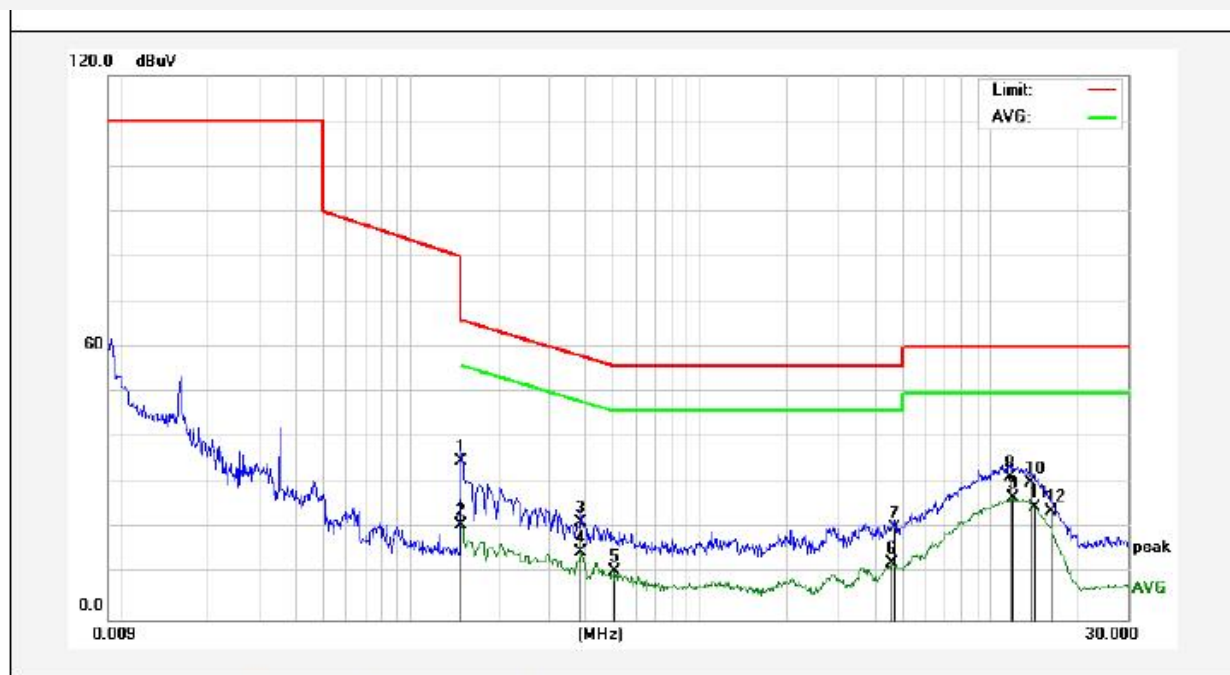
PASS

The test curves are shown in the following pages.



Power Line Conducted Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: Live Line
Temp.: 22.8°C Hum.: 51%



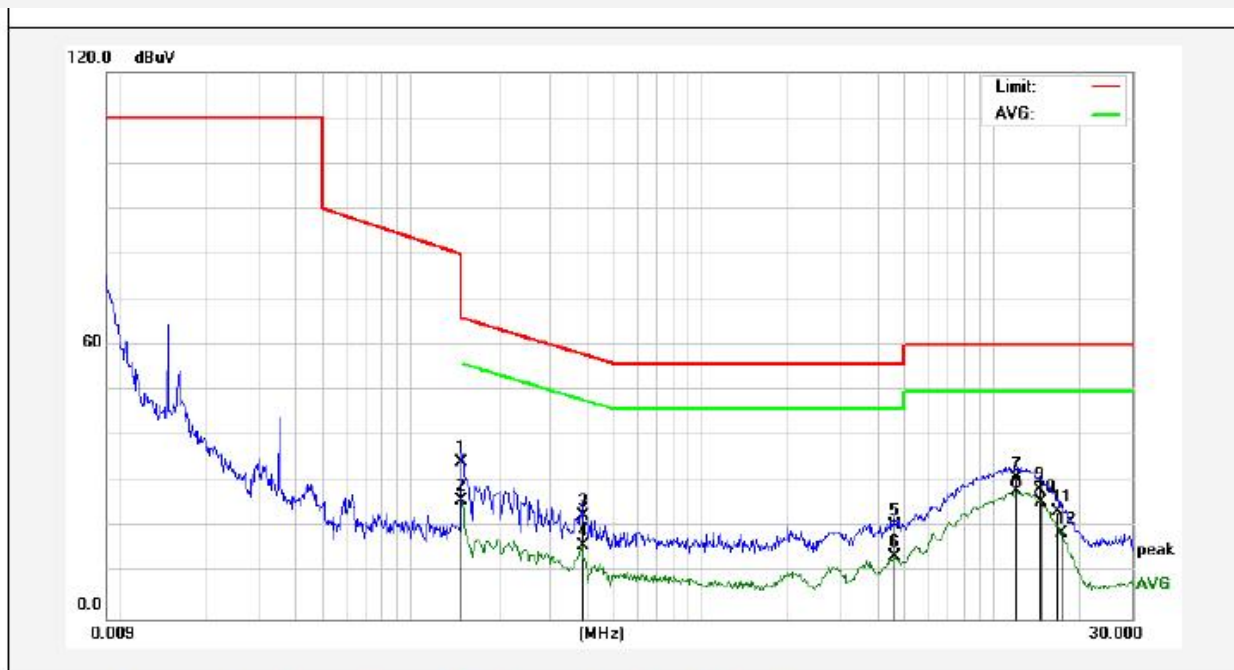
No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	25.26	9.56	34.82	65.99	-31.17	QP	
2	0.1500	11.43	9.56	20.99	55.99	-35.00	AVG	
3	0.3860	11.68	9.71	21.39	58.15	-36.76	QP	
4	0.3899	5.24	9.71	14.95	48.06	-33.11	AVG	
5	0.5060	0.75	9.89	10.64	46.00	-35.36	AVG	
6	4.5780	2.57	9.76	12.33	46.00	-33.67	AVG	
7	4.7140	10.35	9.75	20.10	56.00	-35.90	QP	
8	11.8500	21.34	9.87	31.21	60.00	-28.79	QP	
9	12.0740	16.89	9.88	26.77	50.00	-23.23	AVG	
10	13.9420	20.17	9.95	30.12	60.00	-29.88	QP	
11	14.3500	14.84	9.96	24.80	50.00	-25.20	AVG	
12	16.2099	13.79	10.01	23.80	60.00	-36.20	QP	

Note: Result = Reading + Factor Over Limit = Result - Limit



Power Line Conducted Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: Neutral Line
Temp.: 22.8℃ Hum.: 51%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	24.69	9.56	34.25	65.99	-31.74	QP	
2	0.1500	16.46	9.56	26.02	55.99	-29.97	AVG	
3	0.3899	12.86	9.71	22.57	58.06	-35.49	QP	
4	0.3899	6.24	9.71	15.95	48.06	-32.11	AVG	
5	4.5820	10.77	9.76	20.53	56.00	-35.47	QP	
6	4.5820	3.92	9.76	13.68	46.00	-32.32	AVG	
7	12.0060	20.85	9.87	30.72	60.00	-29.28	QP	
8	12.1459	18.23	9.88	28.11	50.00	-21.89	AVG	
9	14.4580	18.28	9.96	28.24	60.00	-31.76	QP	
10	14.6420	15.78	9.97	25.75	50.00	-24.25	AVG	
11	16.6780	13.46	10.02	23.48	60.00	-36.52	QP	
12	17.1460	8.87	10.03	18.90	50.00	-31.10	AVG	

Note: Result = Reading + Factor Over Limit = Result - Limit



3. Magnetic field induced current

3.1. Test Standard and Limit

Test Standard	EN IEC 55015
---------------	--------------

☒ Limits for the magnetic field induced current

Frequency (MHz)	limits (dBμA)		
	2m	3m	4m
0.009 ~ 0.070	88	81	75
0.070 ~ 0.150	88~58	81~51	75~45
0.150~3.000	58~22	51~15	45~9
3.000~30.000	22	15~16	9~12

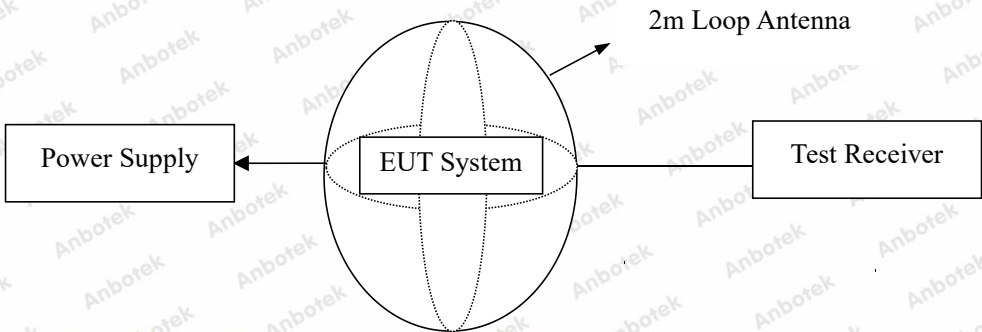
Remark:
The limit decreases linearly with the logarithm of the frequency in the range 0.070MHz to 3.000MHz.

☐ Limits for the magnetic field induced current (Electrodeless lamp)

Frequency (MHz)	limits (dBμA)		
	2m	3m	4m
0.009 ~ 0.070	88	81	75
0.070 ~ 0.150	88~58	81~51	75~45
0.150~2.200	58~32	51~25	45~19
2.200~3.000	58	51	45
3.000~30.000	22	15~16	9~12

Remark:
The limit decreases linearly with the logarithm of the frequency in the range 0.070MHz to 2.200MHz.

3.2. Test Setup



3.3. Test Procedure

Place the test sample in the center of the three loop antenna so that each edge point of the test sample is more than 20cm away from the inner edge of the antenna. If this requirement cannot be met, please use the radiation method for testing.

Connect the tested equipment to the corresponding power supply, and connect all auxiliary equipment to the tested equipment.

3.4. Test Results

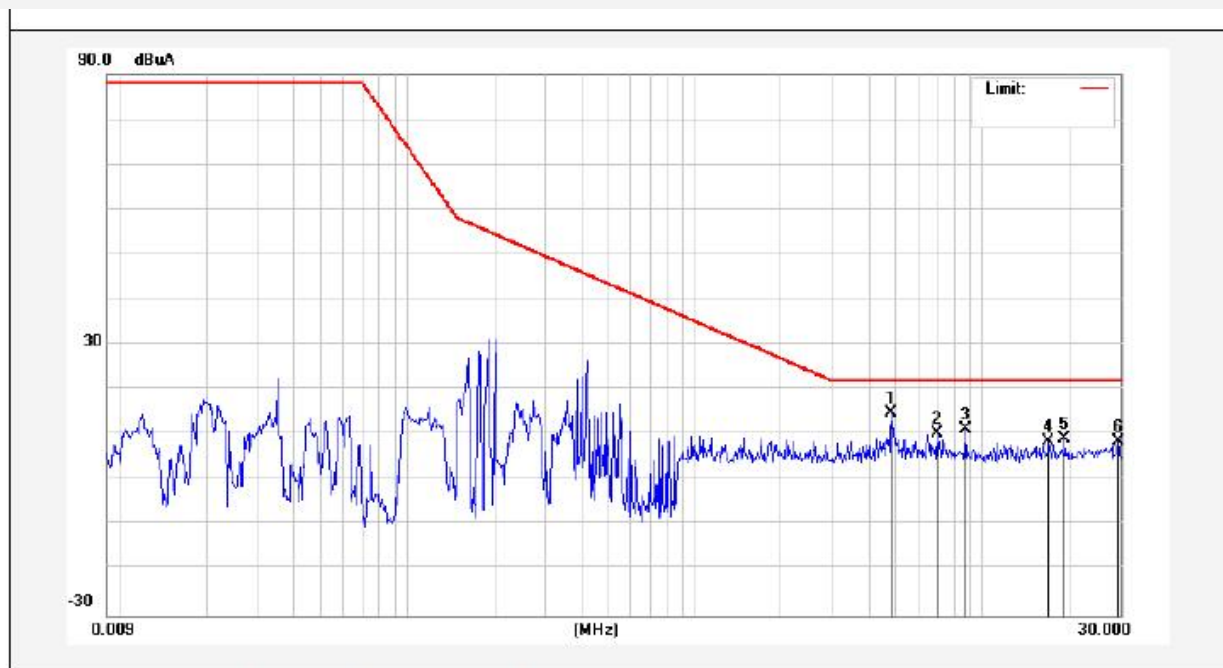
PASS

The test curves are shown in the following pages.



Magnetic field induced current Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: X
Temp.: 23.9°C Hum.: 45%



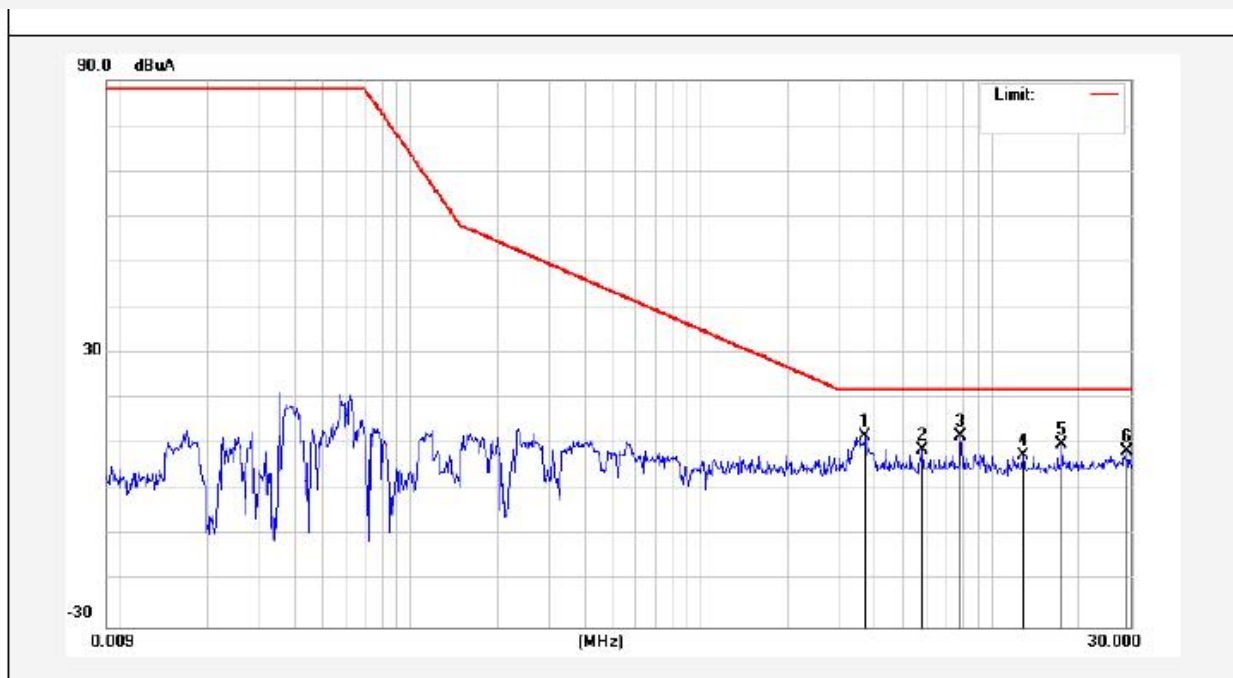
No.	Freq. (MHz)	Reading (dBuA)	Factor (dB)	Result (dBuA)	Limit (dBuA)	Over Limit (dB)	Detector	Remark
1	4.8060	14.76	0.04	14.80	22.00	-7.20	QP	
2	6.9260	10.33	0.08	10.41	22.00	-11.59	QP	
3	8.7299	11.13	0.04	11.17	22.00	-10.83	QP	
4	16.9020	8.61	0.02	8.63	22.00	-13.37	QP	
5	19.3414	9.15	0.02	9.17	22.00	-12.83	QP	
6	29.6380	8.59	0.02	8.61	22.00	-13.39	QP	

Note: Result = Reading + Factor Over Limit = Result - Limit



Magnetic field induced current Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: Y
Temp.: 23.9℃ Hum.: 45%



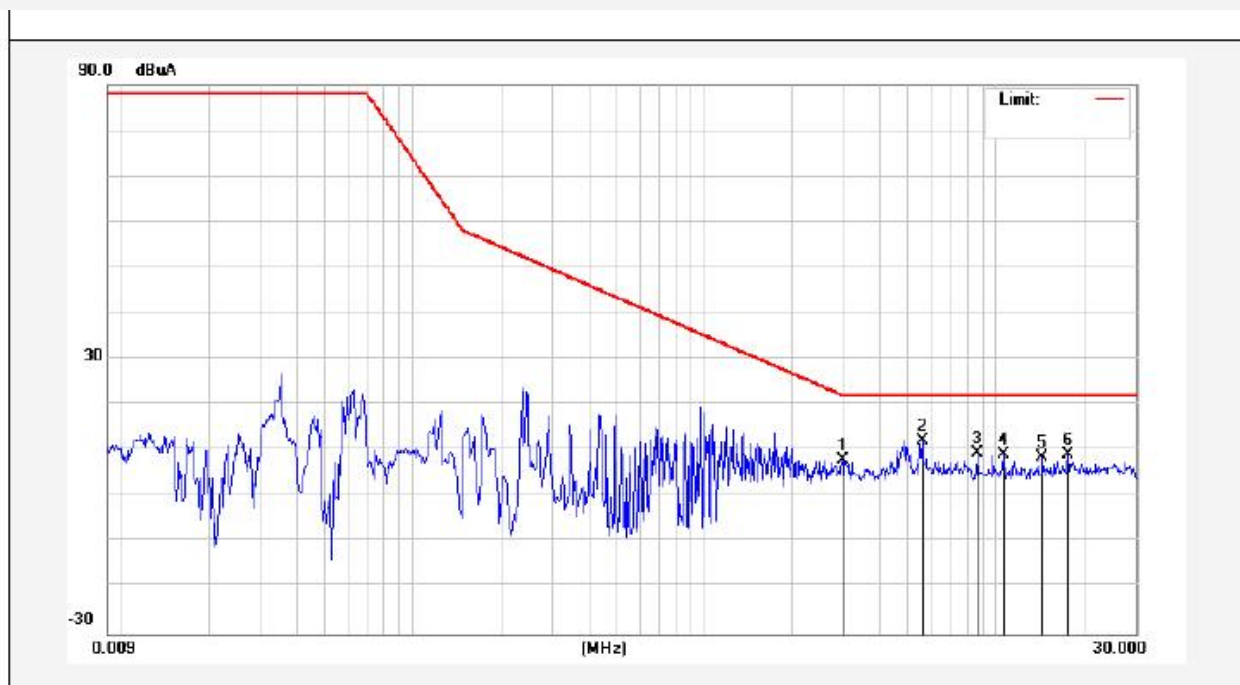
No.	Freq. (MHz)	Reading (dBuA)	Factor (dB)	Result (dBuA)	Limit (dBuA)	Over Limit (dB)	Detector	Remark
1	3.6859	11.81	0.03	11.84	22.00	-10.16	QP	
2	5.8258	8.86	0.06	8.92	22.00	-13.08	QP	
3	7.8140	11.82	0.06	11.88	22.00	-10.12	QP	
4	12.8740	7.56	0.02	7.58	22.00	-14.42	QP	
5	17.5100	9.93	0.02	9.95	22.00	-12.05	QP	
6	29.4540	8.39	0.02	8.41	22.00	-13.59	QP	

Note: Result = Reading + Factor Over Limit = Result - Limit



Magnetic field induced current Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: Z
Temp.: 23.9℃ Hum.: 45%



No.	Freq. (MHz)	Reading (dBuA)	Factor (dB)	Result (dBuA)	Limit (dBuA)	Over Limit (dB)	Detector	Remark
1	2.9739	8.05	0.02	8.07	22.10	-14.03	QP	
2	5.5620	12.24	0.05	12.29	22.00	-9.71	QP	
3	8.6416	9.36	0.04	9.40	22.00	-12.60	QP	
4	10.5380	9.28	0.01	9.29	22.00	-12.71	QP	
5	14.3696	8.65	0.02	8.67	22.00	-13.33	QP	
6	17.6539	9.25	0.02	9.27	22.00	-12.73	QP	

Note: Result = Reading + Factor Over Limit = Result - Limit



4. Magnetic field strength

4.1. Test Standard and Limit

Test Standard	EN IEC 55015
---------------	--------------

☐ Radiation disturbance limit of loop antenna for equipment with diameter ≥ 1.6 m

Frequency (MHz)	Limits at 3m distance (dB μ A/m)
	Quasi-peak Level
0.009 ~ 0.070	69
0.070 ~ 0.150	69~ 39 *
0.150~4.000	39~ 3 *
4.000~30.000	3

Remark:

The limit decreases linearly with the logarithm of the frequency in the range 0.070MHz to 4.000MHz.

☐ Radiation disturbance limit of loop antenna for equipment with diameter ≥ 1.6 m
(Electrodeless lamp)

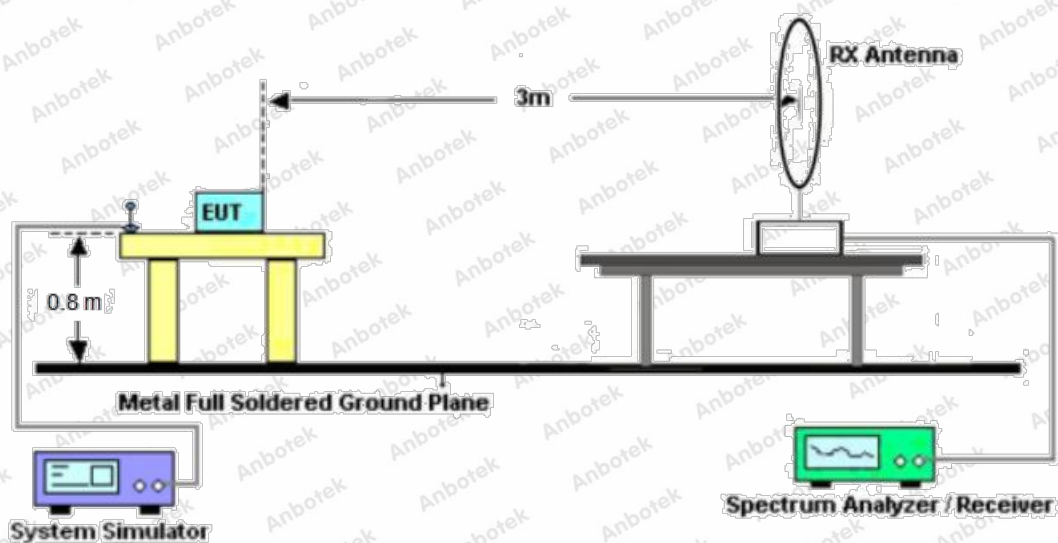
Frequency (MHz)	Limits at 3m distance (dB μ A/m)
	Quasi-peak Level
0.009 ~ 0.070	69
0.070 ~ 0.150	69~ 39 *
0.150~2.200	39~ 19.8 *
2.200~3.000	39
3.000~4.000	12.4~ 3 *
4.000~30.000	3

Remark:

The limit decreases linearly with the logarithm of the frequency in the range 0.070MHz to 4.000MHz.



4.2. Test Setup



4.3. Test Procedure

The table-top EUT is placed on a non-conductive table 0.8 m above the horizontal ground reference plane. The floor-standing EUT is placed on an insulating support 0.1 m above the horizontal ground reference plane.

The EUT shall be vertically above the center of the turntable, the antenna shall be 3m away from the center of the turntable, and the lower edge of the antenna shall be more than 1m away from the horizontal reference ground plane.

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

In the test frequency range of 0.009MHz-0.15MHz, the analytical bandwidth of the receiver is set to 200Hz, and in the test frequency range of 0.15MHz-30MHz, the analytical bandwidth of the receiver is set to 9KHz.

4.4. Test Results

Not applicable.



5. Radiated Emission Test (Below 1 GHz)

5.1. Test Standard and Limit

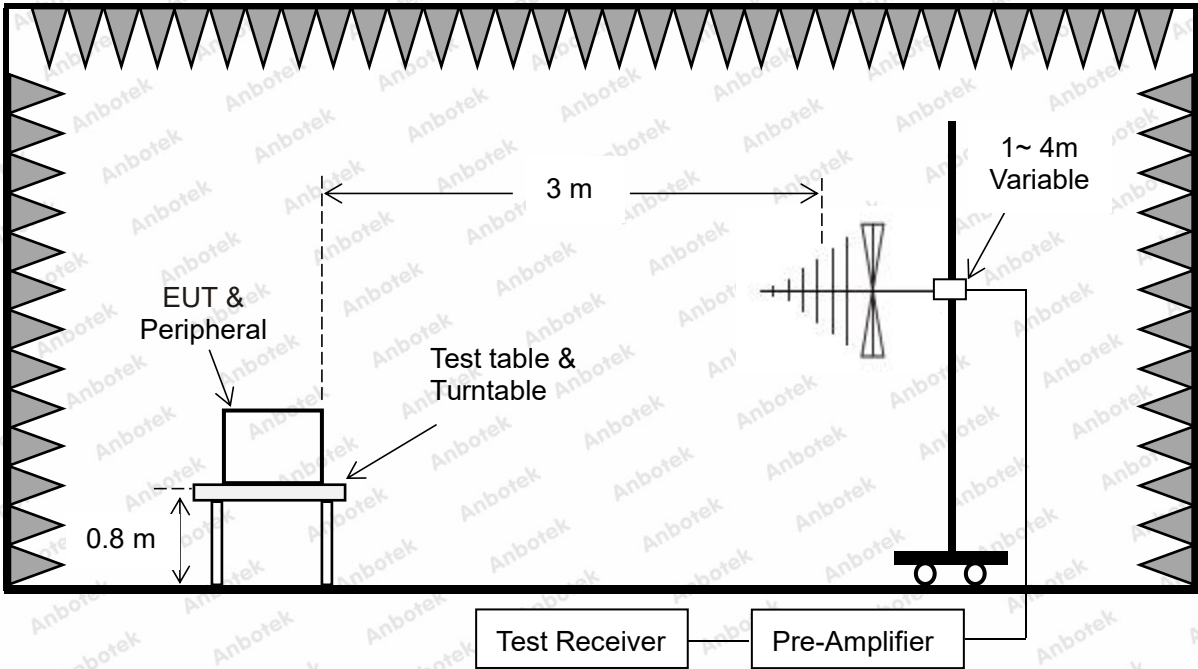
Test Standard	EN IEC 55015
---------------	--------------

Limit for radiated emissions at frequencies up to 1 GHz

Frequency (MHz)	Distance (Meters)	Field Strengths Limit (dBμV/m)
30 ~ 230	3	40
230 ~ 1000	3	47

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

5.2. Test Setup



5.3. Test Procedure

The table-top EUT is placed on a non-conductive table 0.8 m above the horizontal ground reference plane. The floor-standing EUT is placed on an insulating support 0.1 m above the horizontal ground reference plane.

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

5.4. Test Results

PASS

The test curves are shown in the following pages.



Test item: Radiation Test Polarization: Horizontal
Standard: (RE)EN IEC 55015 Power Source: DC 5V via adapter
Frequency Range: 30MHz ~ 1000MHz Temp.(°C)/Hum.(%RH): 23.5(°C)/48%RH
Distance: 3m

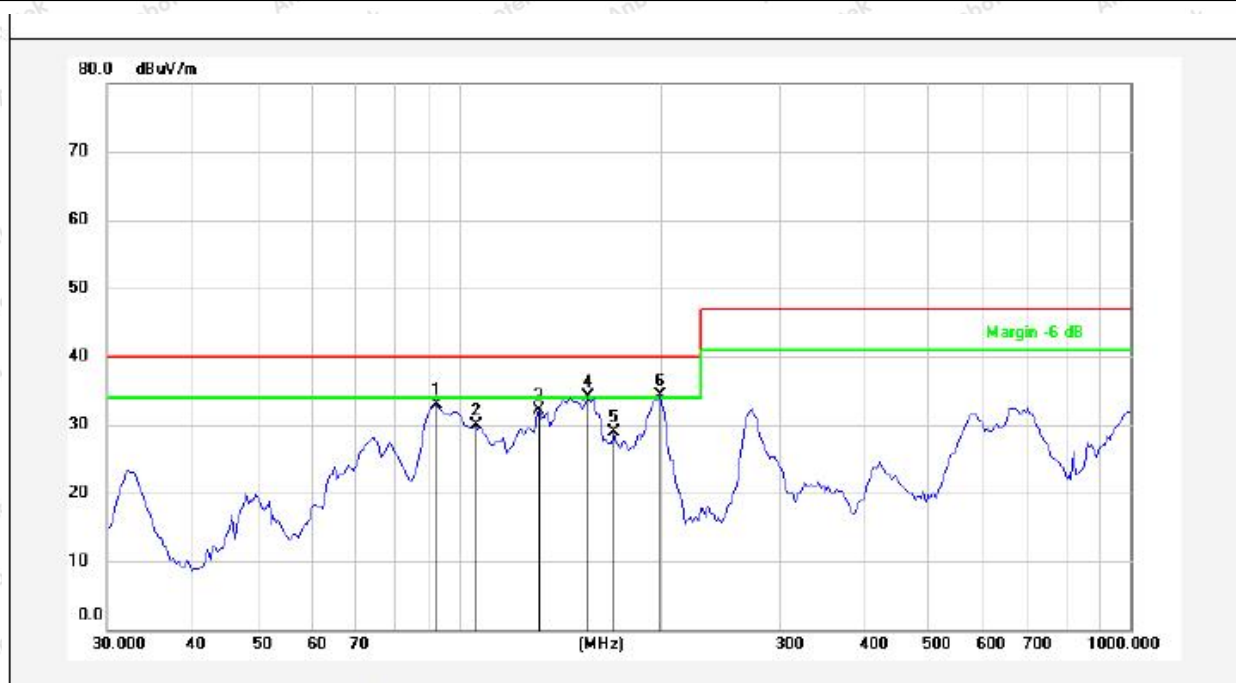


No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	74.6569	42.25	-21.67	20.58	40.00	-19.42	QP			
2	107.8877	47.29	-17.97	29.32	40.00	-10.68	QP			
3	144.0819	56.73	-21.26	35.47	40.00	-4.53	QP			
4	199.2855	51.34	-18.22	33.12	40.00	-6.88	QP			
5	275.6399	42.00	-15.45	26.55	47.00	-20.45	QP			
6	674.0252	39.83	-7.63	32.20	47.00	-14.80	QP			

Note: Result= Reading + Factor Over Limit=Result-Limit



Test item: Radiation Test Polarization: Vertical
Standard: (RE)EN IEC 55015 Power Source: DC 5V via adapter
Frequency Range: 30MHz ~ 1000MHz Temp.(°C)/Hum.(%RH): 23.5(°C)/48%RH
Distance: 3m



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	92.1388	50.91	-18.03	32.88	40.00	-7.12	QP			
2	106.0126	47.56	-17.73	29.83	40.00	-10.17	QP			
3	131.9889	53.05	-20.92	32.13	40.00	-7.87	QP			
4	155.9100	54.82	-20.77	34.05	40.00	-5.95	QP			
5	170.1947	48.80	-19.93	28.87	40.00	-11.13	QP			
6	199.2855	52.58	-18.22	34.36	40.00	-5.64	QP			

Note: Result= Reading + Factor Over Limit=Result-Limit

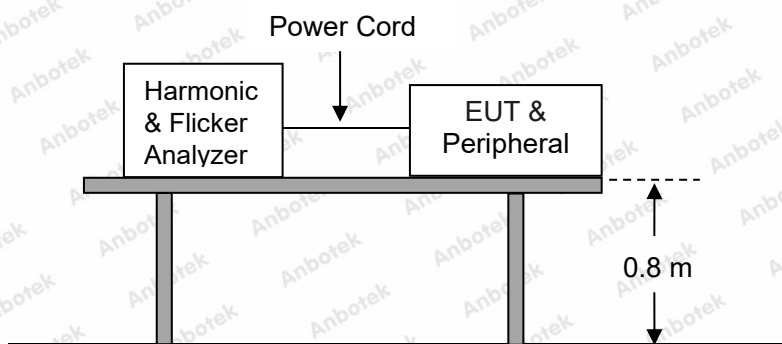


6. Harmonic Current Test

6.1. Test Standard

Test Standard:	EN IEC 61000-3-2
----------------	------------------

6.2. Test Setup



6.3. Test Procedure

The table-top EUT is placed on the top of a wooden table 0.8 m above the ground (0.1 m for the floor-standing EUT) and operated to produce the maximum harmonic components under normal operating conditions for each successive harmonic component in turn. The correspondent test program of test instrument to measure the current harmonics emanated from EUT is chosen. The measure time shall be not less than the necessary for the EUT to be exercised.

6.4. Test Results

Not applicable.

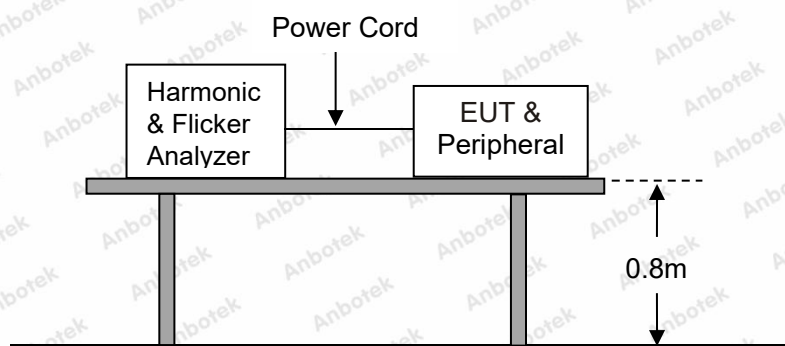


7. Voltage Fluctuations & Flicker Test

7.1. Test Standard

Test Standard:	EN 61000-3-3
----------------	--------------

7.2. Test Setup



7.3. Test Procedure

The table-top EUT is placed on the top of a wooden table 0.8 m above the ground (0.1 m for the floor-standing EUT) and operated to produce the most unfavorable sequence of voltage changes under normal conditions during the flicker measurement. The observation period for short-term flicker indicator is 10 minutes and the observation period for long-term flicker indicator is 2 hours.

7.4. Test Results

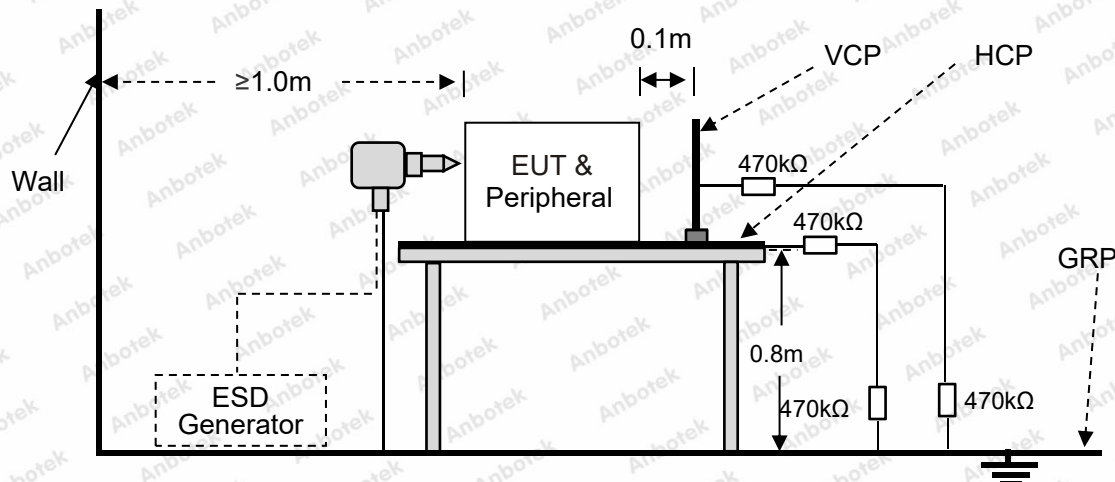
Not applicable.



8.1. Test Specification

Test Standard :	EN 61547	
Basic standard :	IEC 61000-4-2: 2008	
Performance criteria:	B	
Test Level :	± 8kV (Air Discharge)	± 4kV (Contact Discharge)

8.2. Test Setup



8.3. Test Procedure

- Ambient temperature: 15°C to 35°C;
- Relative humidity: 30% to 60%;
- Atmospheric pressure: 86 kPa (860 mbar) to 106 kPa (1060 mbar)

b. In the case of contact discharges, the tip of the discharge electrode shall touch the EUT before the discharge switch is operated.

c. In the case of painted surface covering a conducting substrate, the following procedure shall be adopted: - If the coating is not declared to be an insulating coating by the equipment manufacturer, then the pointed tip of the generator shall penetrate the coating so as to make contact with the conducting substrate. - Coating declared as insulating by the manufacturer shall only be submitted to the air discharge. - The contact discharge test shall not be applied to such surfaces.



d. In the case of air discharges, the round discharge tip of the discharge electrode shall be approached as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator (discharge electrode) shall be removed from the EUT. The generator is then retriggered for a new single discharge. This procedure shall be repeated until the discharges are completed. In the case of an air discharge test, the discharge switch, which is used for contact discharge, shall be closed.

e. The test voltage shall be increased from the minimum to the selected test severity level, in order to determine any threshold of failure. The final test level should not exceed the product specification value in order to avoid damage to the equipment.

f. The test shall be performed with both air discharge and contact discharge. The test shall be performed with single discharges. On each pre-selected point at least 10 single discharges (in the most sensitive polarity) shall be applied. For the time interval between successive single discharges an initial value of 1 s is recommended. Longer intervals may be necessary to determine whether a system failure has occurred.

g. Ensure that the applied charge on the EUT has been dis-charged before next ESD pulse.

8.4. Test Results

PASS

Please refer to the following page.



Electrostatic Discharge Test Results

Test Result:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	Temperature:	23.6℃
Power Supply:	DC 5V via adapter	Humidity:	48%
Location		Kind A-Air Discharge C-Contact Discharge	Result
Air discharge: ±2.0 kV, ±4.0 kV, ±8.0 kV		Contact discharge: ±4.0 kV	
Button	4 points	A	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
Slot	4 points	A	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
Type-C Port	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
Light	4 points	A	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
HCP	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
VCP of the front	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
VCP of the rear	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
VCP of the left	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
VCP of the right	4 points	C	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
Note: N/A			

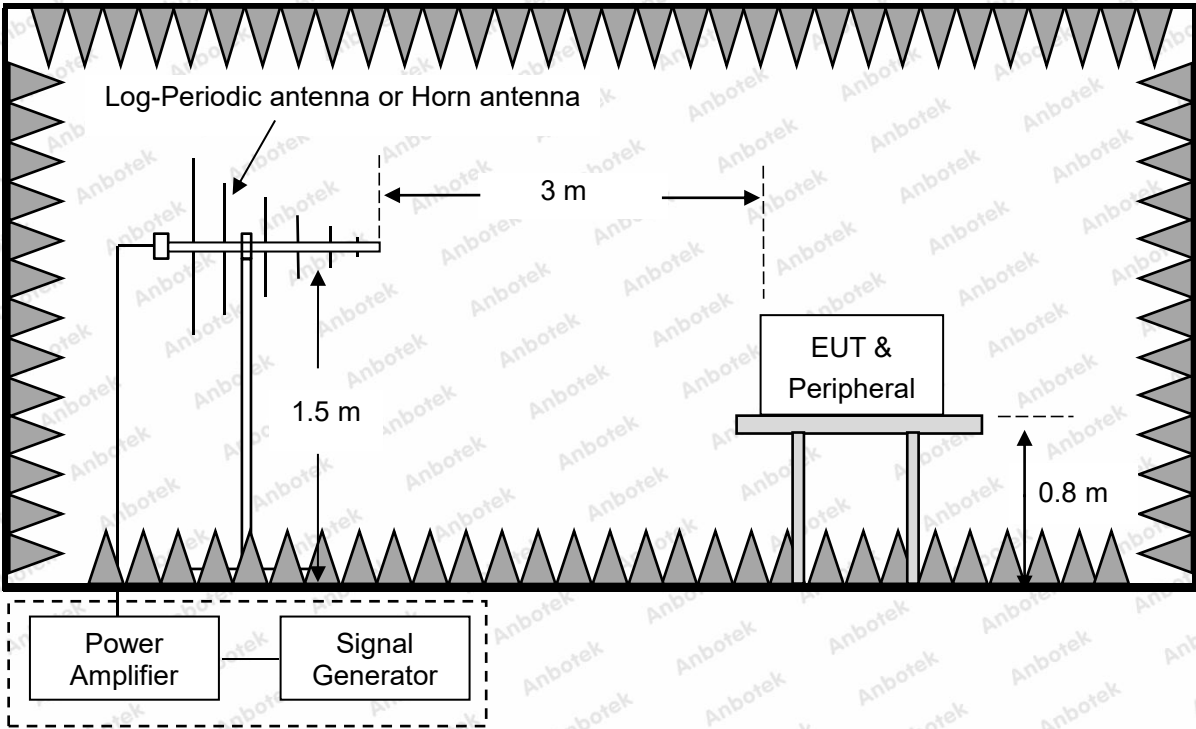


9. RF Field Strength Immunity Test

9.1. Test Specification

Test Standard:	EN 61547
Basic standard:	IEC 61000-4-3: 2020
Performance criteria:	A
Frequency Range:	80MHz to 1000MHz
Test level:	3 V/m
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of preceding frequency value
Polarity of Antenna:	Horizontal and Vertical
Test Distance:	3 m
Antenna Height:	1.5 m
Dwell Time:	at least 0.5s

9.2. Test Setup



9.3. Test Procedure

The procedure defined in this part requires the generation of electromagnetic fields within which the test sample is placed and its operation observed. To generate fields that are useful for simulation of actual (field) conditions may require significant antenna drive power and the resultant high field strength levels. To comply with local regulations and to prevent biological hazards to the testing personnel, it is recommended that these tests be carried out in a shielded enclosure or semi-anechoic chamber.

a. The antenna is placed 3 m from the equipment. The required field strength is determined by placing the field strength meter(s) on top of or directly alongside the equipment under test and monitoring the field strength meter via a remote field strength indicator outside the enclosure while adjusting the continuous-wave to the antenna.

b. The test shall normally be performed with the generating antenna facing each side of the EUT. When equipment can be used in different orientations (i.e. vertical or horizontal) all sides shall be exposed to the field during the test. When technically justified, some EUTs can be tested by exposing fewer faces to the generating antenna. In other cases, as determined for example by the type and size of EUT or the frequencies of test, more than four azimuths may need to be exposed.

c. The polarization of the field generated by each antenna necessitates testing each selected side twice, once with the antenna positioned vertically and again with the antenna positioned horizontally.

d. The step size of the frequency is set to 1%. The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised and to be able to respond. However, the dwell time should not exceed 5 s at each of the frequencies during the scan.

9.4. Test Results

PASS

Please refer to the following page.



RF Field Strength Susceptibility Test Results

Test Result:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	Temperature:	22.6℃		
Power Supply:	DC 5V via adapter	Humidity:	49%		
Frequency Range	Antenna Polarity	R.F. Field Strength	Dwell Time	Azimuth	Result
80 MHz ~ 1000 MHz	H / V	3 V/m	1s	Front	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
				Rear	
				Left	
				Right	
Note: N/A					



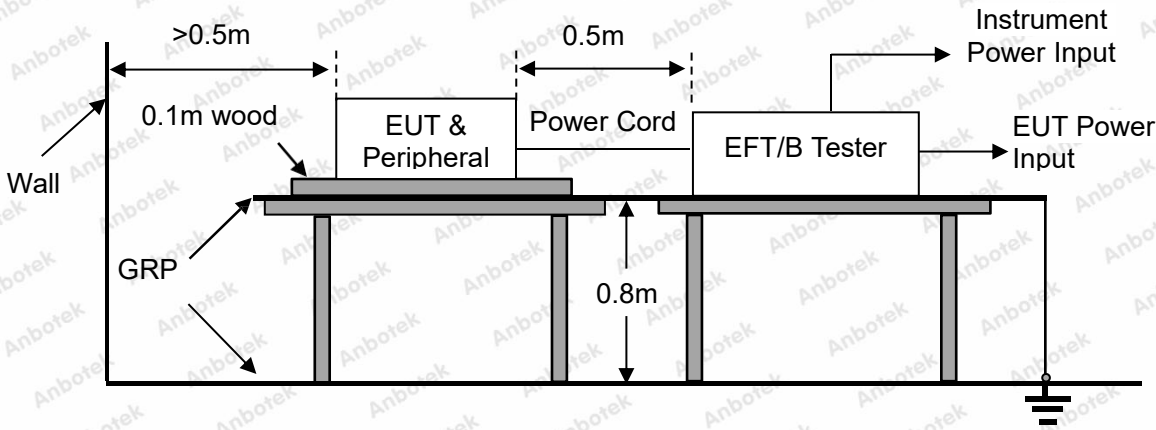
10. Electrical Fast Transient/Burst Immunity Test

10.1. Test Specification

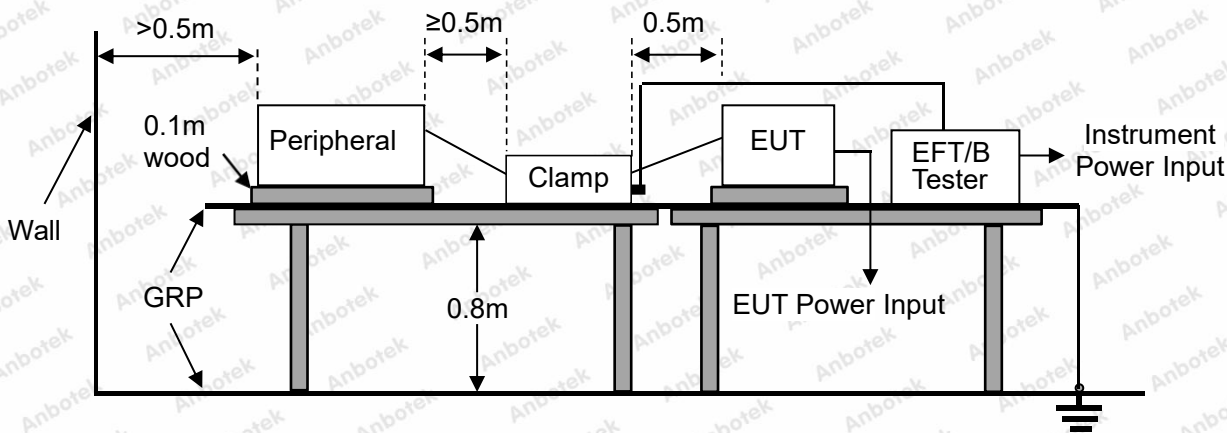
Test Standard:	EN 61547
Basic standard:	IEC 61000-4-4: 2012
Performance criteria:	B
Test Level:	<input checked="" type="checkbox"/> 1 kV, AC mains power ports
	<input type="checkbox"/> 0.5 kV, DC network power ports
	<input type="checkbox"/> 0.5 kV, Signal ports and control line

10.2. Test Setup

AC mains power ports and DC network power ports:



Analogue/digital data ports:



10.3. Test Procedure

The table-top EUT is placed on a table that is 0.8 m height, a ground reference plane is placed on the table, and uses 0.1 m insulation between the EUT and ground reference plane. The floor-standing EUT is placed on a ground reference plane and insulated from it by an insulating support with a thickness of 0.1 m. This reference ground plane shall project beyond the EUT by at least 0.1 m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane beneath the EUT, shall be more than 0.5 m.

All cables to the EUT shall be placed on the insulation support 0.1 m above the ground reference plane. Cables not subject to electrical fast transients shall be routed as far as possible from the cable under test to minimize the coupling between the cables.

10.4. Test Results

Not applicable.

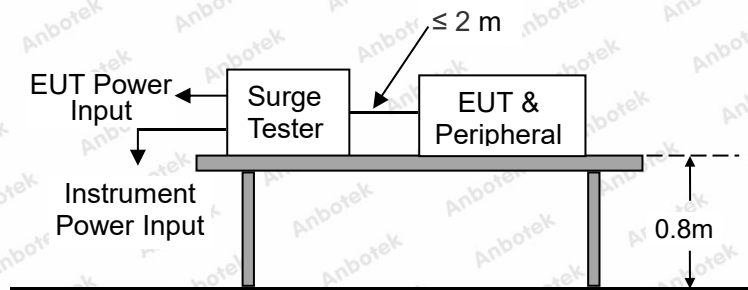


11. Surge Immunity Test

11.1. Test Specification

Test Standard:		EN 61547
Basic standard:		IEC 61000-4-5: 2014+A1:2017
Test level	Self-ballasted lamps and semi-luminaires	<input checked="" type="checkbox"/> 0.5 kV, Line to Line, Criterion C
		<input checked="" type="checkbox"/> 1kV, Line to Ground, Criterion C
	Luminaires and independent auxiliaries (Input power $\leq 25W$)	<input type="checkbox"/> 0.5 kV, Line to Line, Criterion C
		<input type="checkbox"/> 1kV, Line to Ground, Criterion C
	Luminaires and independent auxiliaries (Input power $> 25W$)	<input type="checkbox"/> 1 kV, Line to Line, Criterion C
		<input type="checkbox"/> 2kV, Line to Ground, Criterion C
Number of surges		5 (for each combination of parameters)
Repetition rate		1 minute / time
Polarity:		Positive / Negative
Phase angle:		90°, 270°
Waveform:		1.2 us / 50 us (8 us / 20us)

11.2. Test Setup



11.3. Test Procedure

Table-top EUT is placed on a table of 0.8 m heights above a metal ground reference plane. Floor standing EUT is placed on a ground reference plane and insulated from it by an insulating support with a thickness of 0.1 m. The length of the power cord between the EUT and the coupling/decoupling network is not more than 2 m, and the length of the interconnection line between the EUT and the coupling/decoupling network is not more than 2 m. The tests were done at repetition rate 1 per minute.

11.4. Test Results

Not applicable.



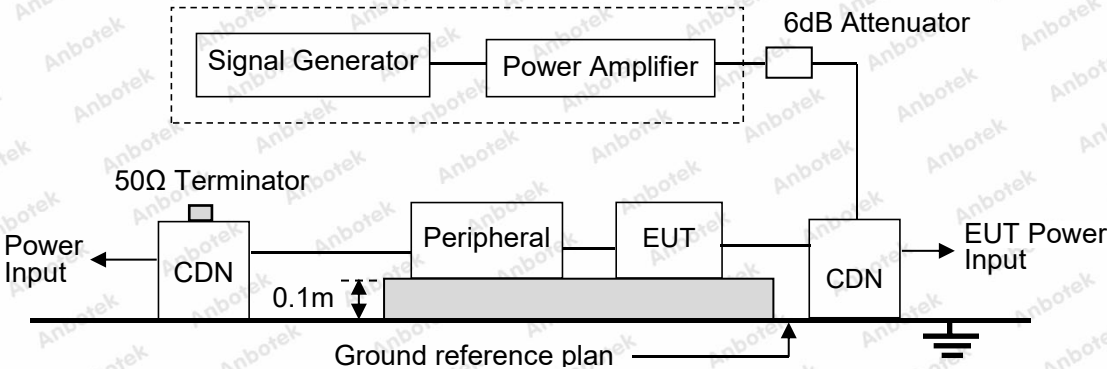
12. Injected Currents Susceptibility Test

12.1. Test Specification

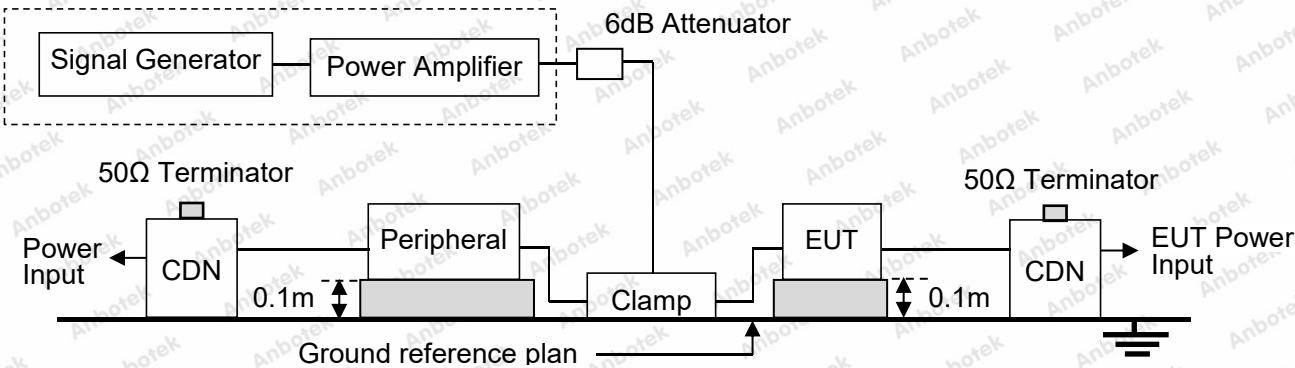
Test Standard:	EN 61547
Basic standard:	IEC 61000-4-6: 2013
Performance criteria:	A
Frequency range:	0.15MHz-80MHz
Test level:	<input checked="" type="checkbox"/> AC power ports: 3V/m(rms, unmodulated)
	<input type="checkbox"/> DC Power Ports: 3V/m(rms, unmodulated)
	<input type="checkbox"/> Signal ports,control lines: 3V/m(rms, unmodulated)
Modulation:	AM 80%, 1kHz sine-wave
Frequency Step:	1% of fundamental

12.2. Test Setup

CDN injection:



Clamp injection:



12.3. Test Procedure

- a. The EUT and peripheral are placed on an insulating support of 0.1 m height above a ground reference plan. The distance between EUT and CDN is 0.1 m to 0.3 m. All cables exiting the EUT are supported at a height of at least 30 mm above the ground reference plan.
- b. The frequency range is swept from 150 kHz to 80MHz, with the signal 80% amplitude modulated with a 1 kHz sine wave. The rate of sweep did not exceed 1.5×10^{-3} decade/s. The frequency range is swept incrementally. The step size was 1% of fundamental from 0.15MHz to 80MHz.
- c. The dwell time at each frequency isn't less than the time necessary for the EUT to be able to respond.

12.4. Test Results

Not applicable.

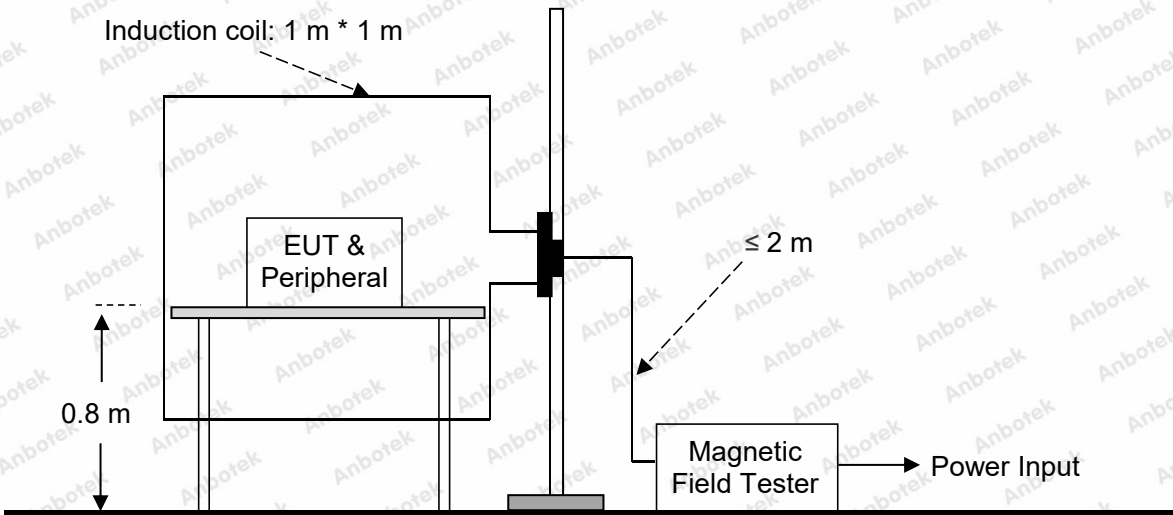


13. Power Frequency Magnetic Field Immunity Test

13.1. Test Specification

Test Standard:	EN 61547
Basic Standard	IEC 61000-4-8: 2009
Performance criteria	A
Test level	3A/m

13.2. Test Setup



13.3. Test Procedure

Table-top EUT is placed on a table that is 0.8 m height. Floor standing EUT is placed on a ground reference plane and insulated from it by an insulating support with a thickness of 0.1 m.

The EUT is placed in the middle of an induction coil. The proximity method is used when the EUT does not fit into the standard inductive coil

13.4. Test Results

Not applicable.

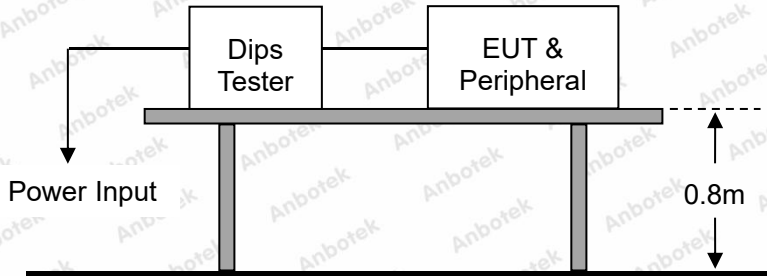


14. Voltage Dips and Interruptions Immunity Test

14.1. Test Specification

Test Standard:		EN 61547
Basic standard:		IEC 61000-4-11: 2020
	Voltage Dips	70%, 10 periods, Criteria C
	Voltage short interruptions	0%, 0.5 periods, Criteria B

14.2. Test Setup



14.3. Test Procedure

- a. Where the equipment has a rated voltage the following shall apply:
- If the voltage range does not exceed 20% of the lower voltage specified for the rated voltage range, a single voltage within that range may be specified as a basis for test level specification.
 - In all other cases, the test procedure shall be applied for both the lowest and highest voltages declared in the voltage range.
- b. Test Conditions
- Select operated voltage and frequency of EUT - Test of interval: 10 sec.
 - Level and duration: Sequence of 3 dips/interrupts.
 - Voltage rise (and fall) time: 1.5 μ s.
- c. Changes to occur at 0 degree crossover point of the voltage waveform.

14.4. Test Results

Not applicable.



APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of Power Line Conducted Emission Test

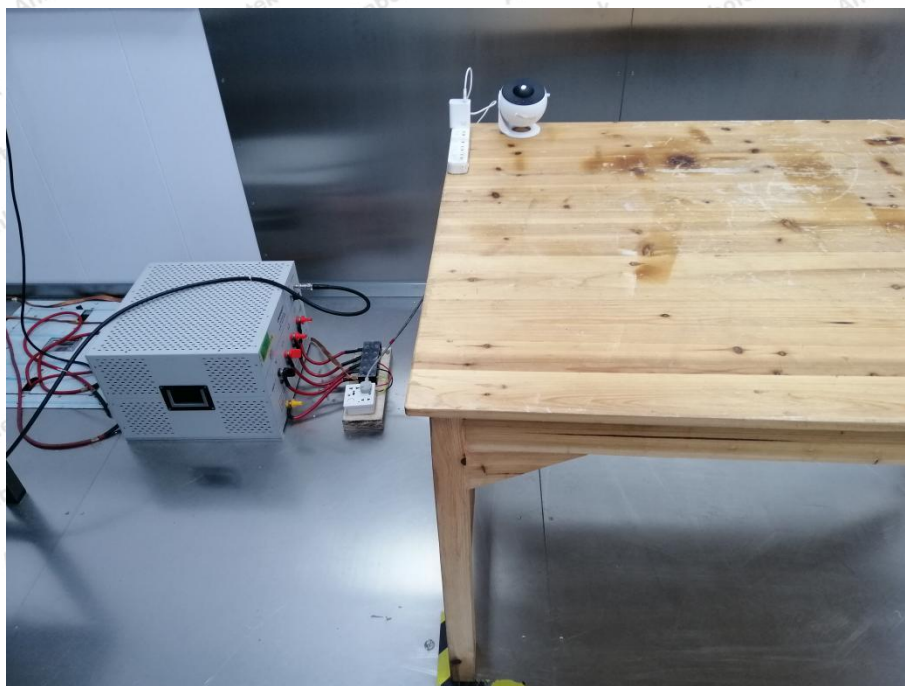


Photo of Magnetic Field Induced Current



Photo of Radiated Emission Test (Below 1 GHz)

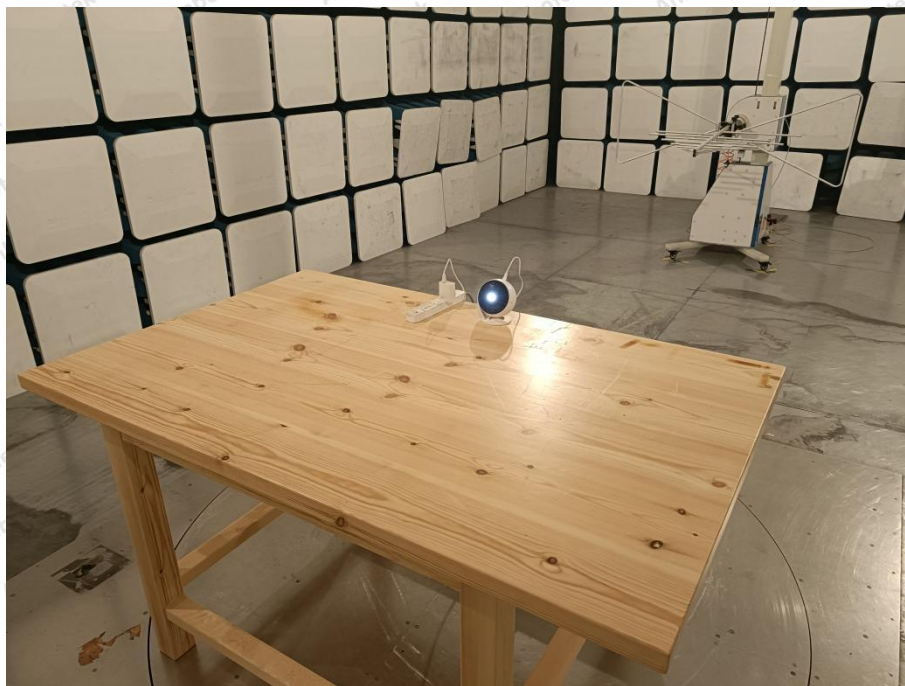


Photo of Electrostatic Discharge Immunity Test

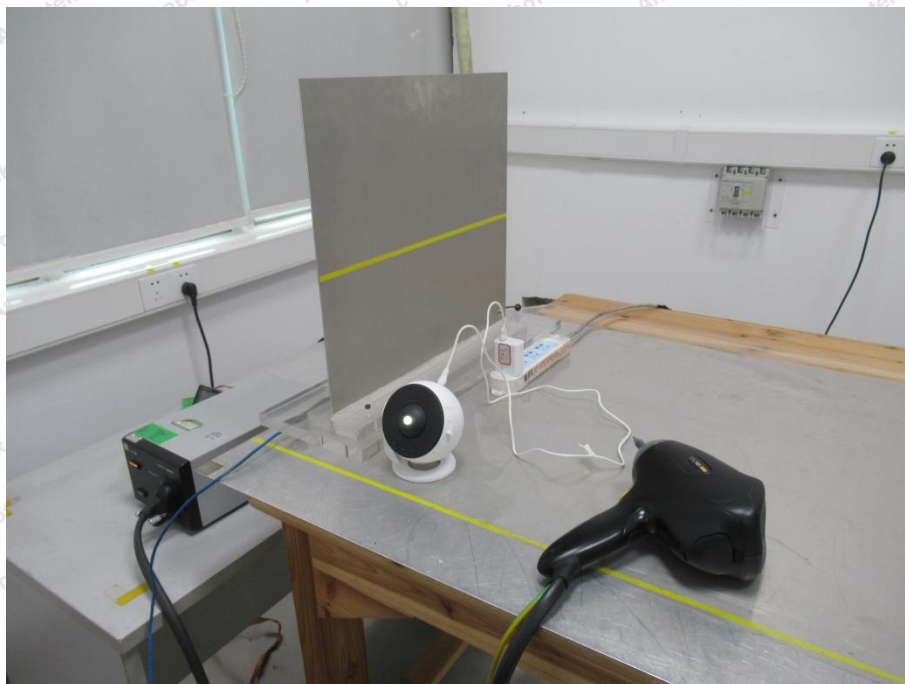
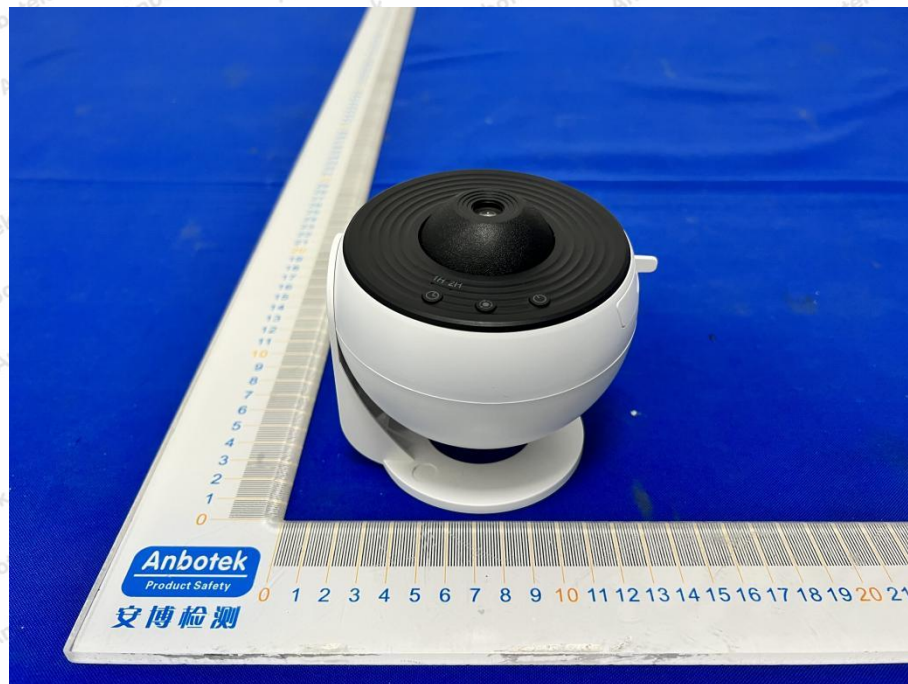
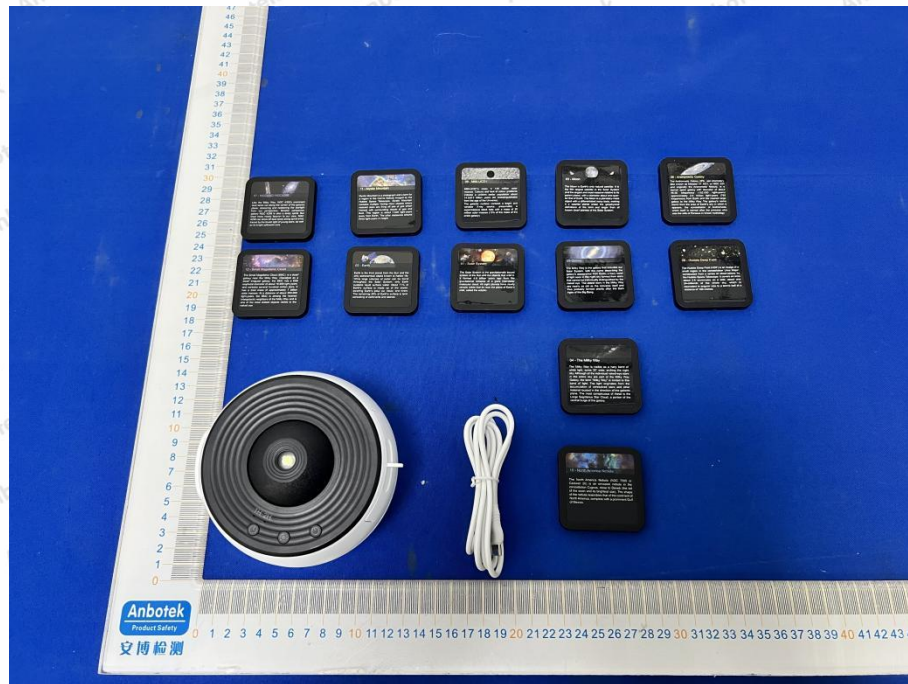
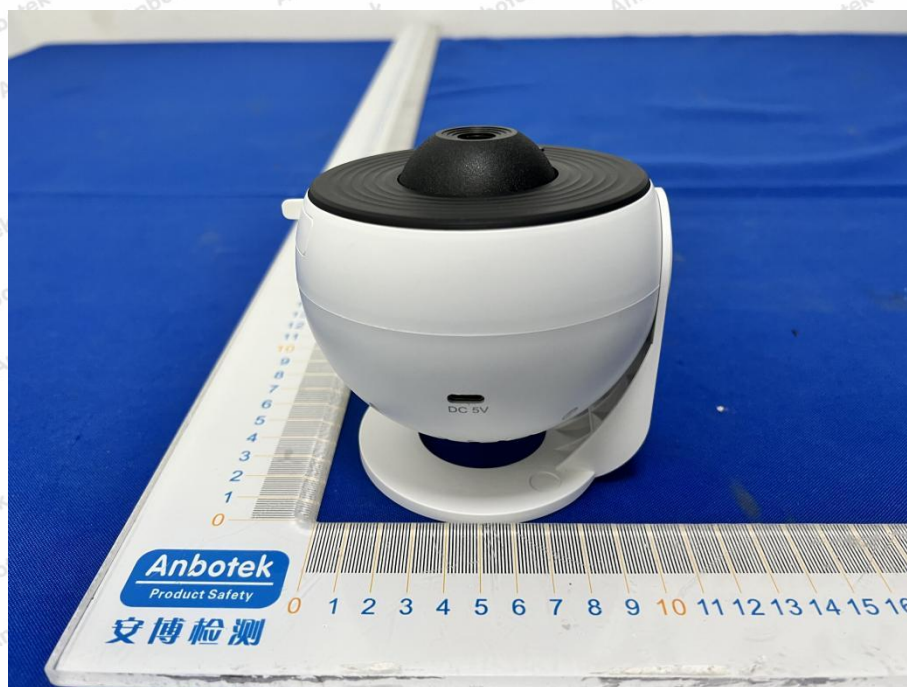
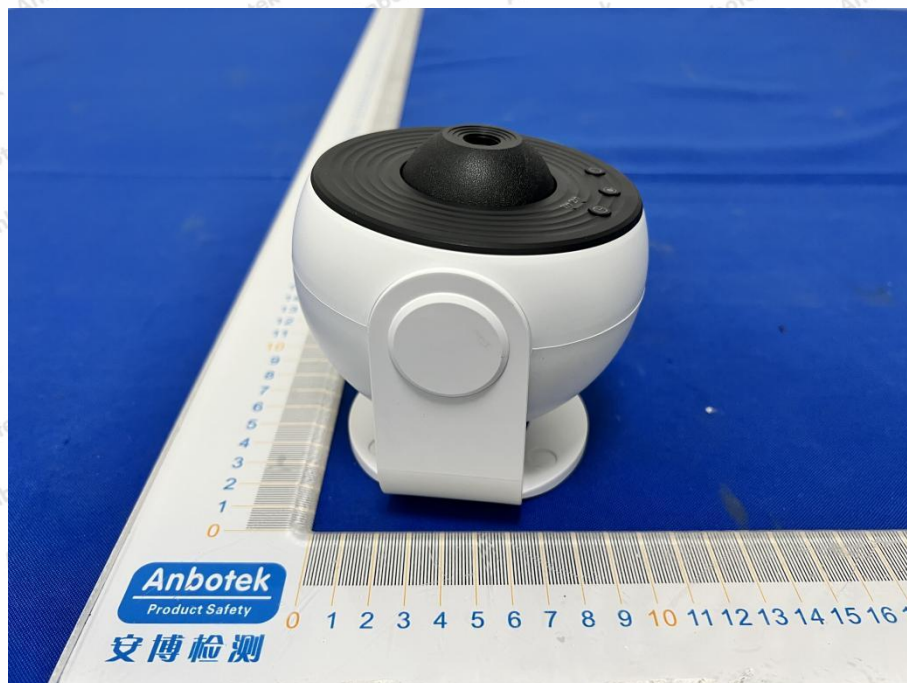


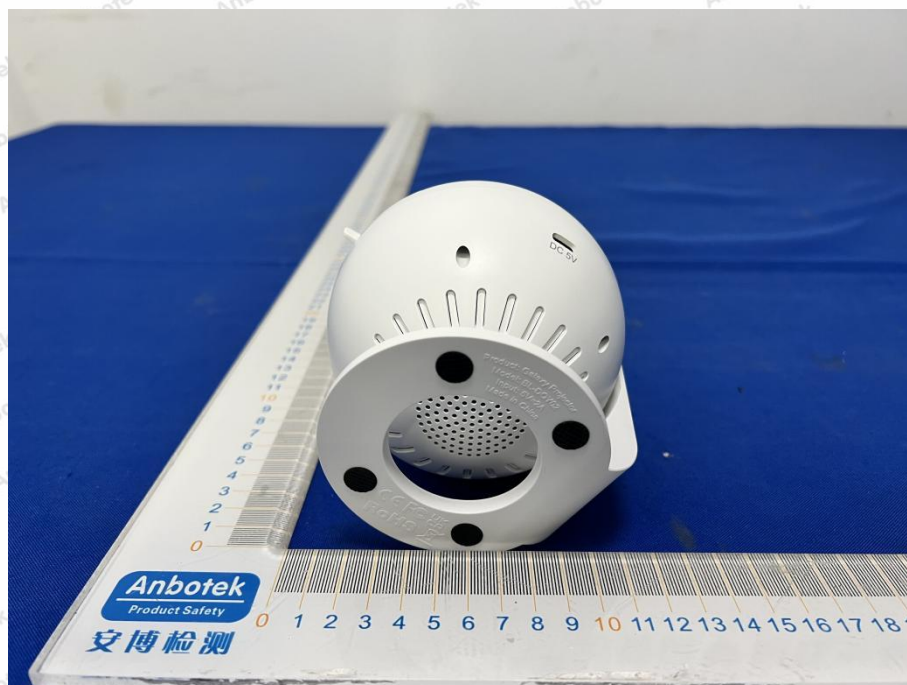
Photo of RF Field Strength Immunity Test

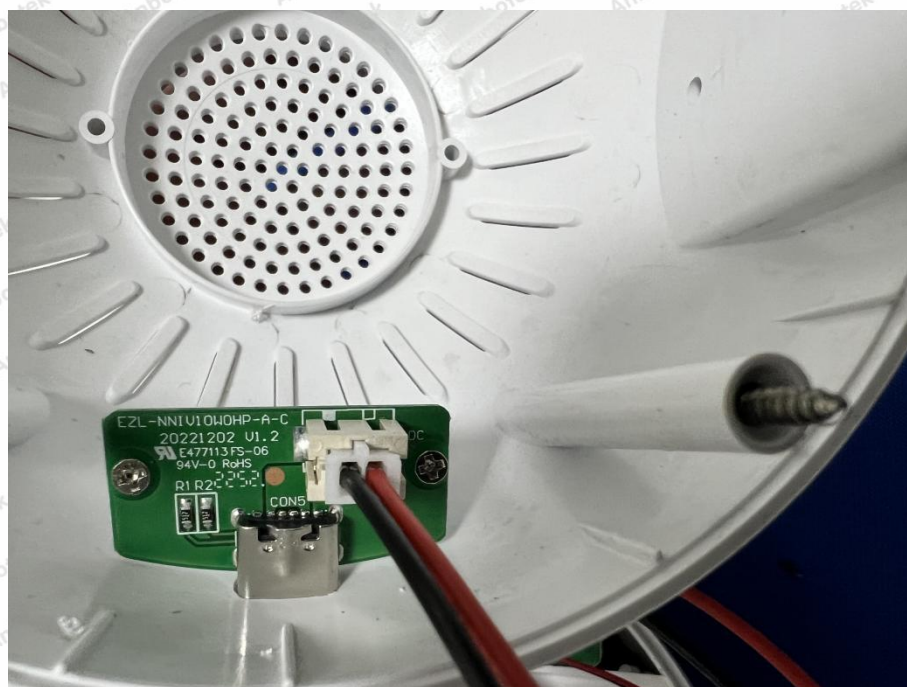


APPENDIX II -- EXTERNAL PHOTOGRAPH







APPENDIX III -- INTERNAL PHOTOGRAPH

CE Label

1. The CE conformity marking must consist of the initials 'CE' taking the following form:

If the CE marking is reduced or enlarged, the proportions given in the above graduated drawing must be respected.

2. The CE marking must have a height of at least 5 mm except where this is not possible on account of the nature of the apparatus.

3. The CE marking must be affixed to the product or to its data plate. Additionally it must be affixed to the packaging, if any, and to the accompanying documents.

4. The CE marking must be affixed visibly, legibly and indelibly.

It must have the same height as the initials 'CE'.

----- End of Report -----



CERTIFICATE

Anbotech
Product Safety

CERTIFICATE Of Conformity EU Council Directive 2014/30/EU Electromagnetic Compatibility

Registration No.: AT18240EC300007

Report No.: 18240EC30000701

Applicant : Shenzhen Bolong Technology Co., Ltd.

Room 415, 4th Floor, Building A, Youth Pioneer Park, Jianshe
East Road, Tsinghua Community, Longhua Street, Longhua
District, Shenzhen City, China

Product : Galaxy Projector

Identification : **Test Model** : BL-DQY02
No.

Reference : N.A.

Model No.

Trade Mark : N.A.

Rating : **Power Input:** DC 5V 2A
Maximun Output Power: 10W

Test Standards : EN IEC 55015: 2019+A11: 2020
EN IEC 61000-3-2: 2019+A1: 2021
EN 61000-3-3: 2013+A1:2019+A2:2021
EN 61547: 2009

The certificate of conformity is based on an evaluation of a sample of the above-mentioned product. Technical report and documentation are at the applicant's disposal. This is to certify that the tested sample is in conformity with all provisions of Annex II of Council Directive 2014/30/EU, in its latest amended version, referred to EMC Directive. The certificate does not imply assessment of the production and does not permit the use of Lab's logo. The applicant of the certificate is authorized to use this certificate in connection with EU declaration of conformity to Article 15 of the Directive.

Jan. 16, 2023
Date



Certified by

KingKong Jin



The CE Marking may only be used if all relevant and effective EU Directives are complied with



Shenzhen Anbotech Compliance Laboratory Limited

1/F, Building D, Sogood Science and Technology Park, Sanwei community,
Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518128
Tel: (86)755-26066440

Http://www.anbotech.com

Fax: (86)755-26014772

Email: service@anbotech.com



安博
检测

FCC Test Report

Client Name : Shenzhen Bolong Technology Co., Ltd.

Client Address : Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China

Product Name : Galaxy Projector

Report Date : Jan. 16, 2023



Shenzhen Anbotech Compliance Laboratory Limited



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TEST REPORT

Applicant : Shenzhen Bolong Technology Co., Ltd.

Manufacturer : Shenzhen Bolong Technology Co., Ltd.

Product Name : Galaxy Projector

Test Model No. : BL-DQY02

Reference Model No. : N.A.

Trade Mark : N.A.

Rating(s) : Power Input: DC 5V 2A
Maximum Output Power: 10W

Test Standard(s) : FCC 47 CFR Part 15 Subpart B: 2022

Test Method(s) : ANSI C63.4-2014

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited To determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC 47 CFR Part 15 Subpart B limits both radiated and conducted emissions. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited Is assumed full responsibility for the accuracy and completeness of these measurements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited

Date of Receipt: Jan. 06, 2023

Date of Test: Jan. 06~Jan. 16, 2023

Prepared By:

We Zeng

(We Zeng)

Approved & Authorized Signer:

KingKong Jin

(KingKong Jin)



1. General Information

1.1. Client Information

Applicant	:	Shenzhen Bolong Technology Co., Ltd.
Address	:	Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China
Manufacturer	:	Shenzhen Bolong Technology Co., Ltd.
Address	:	Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China
Factory	:	Shenzhen Bolong Technology Co., Ltd.
Address	:	Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China

1.2. Description of Device (EUT)

Product Name	:	Galaxy Projector
Test Model No.	:	BL-DQY02
Reference Model No.	:	N.A.
Trade Mark	:	N.A.
Test Power Supply	:	DC 5V via adapter
Test Sample No.	:	1-1-1
Product Description	:	N/A

Remark: (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.3. Auxiliary Equipment Used During Test

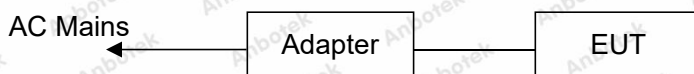
N/A	
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1.4. Description of Test Mode

Pretest Mode	Description
Mode 1	On

For Mode 1 Block Diagram of Test Setup



1.5. Test Summary

Test Items	Test Mode	Status
Power Line Conducted Emission Test	Mode 1	P
Radiated Emission Test (Below 1 GHz)	Mode 1	P
Radiated Emission Test (Above 1GHz)	/	N
P) Indicates "PASS". F) Indicates "Fail". N) Indicates "Not applicable".		

1.6. Test Equipment List

☒ Power Line Conducted Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	Oct. 23, 2022	1 Year
2.	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	Jul. 05, 2022	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
4.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Oct. 22, 2022	1 Year
5.	Software Name EZ-EMC	Ferrari Technology	ANB-03A	N/A	N/A	N/A



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☒ Radiated Emission Test (Below 1 GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Oct. 13, 2022	1 Year
2.	Pre-amplifier	Schwarzbeck	BBV-9745	9745-075	Oct. 23, 2022	1 Year
3.	Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	01109	Oct. 16, 2022	3 Year
4.	Software Name EZ-EMC	Ferrari Technology	EMEC-3A1	N/A	N/A	N/A

☐ Radiated Emission Test (Above 1GHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESR26	101481	Oct. 23, 2022	1 Year
2.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Oct. 23, 2022	1 Year
3.	Pre-amplifier	SONOMA	310N	186860	Oct. 23, 2022	1 Year
4.	Software Name EZ-EMC	Ferrari Technology	ANB-03A	N/A	N/A	N/A
5.	EMI Preamplifier	SKET Electronic	LNPA-0118G-45	SKET-PA-002	Oct. 13, 2022	1 Year
6.	Double Ridged Horn Antenna	SCHWARZBECK	BBHA 9120D	02555	Oct. 16, 2022	3 Year

1.7. Measurement Uncertainty

Radiation	:	Ur = 4.46 dB (Horizontal)
Uncertainty(30MHz-1GHz)	:	Ur = 5.04 dB (Vertical)
Radiation	:	Ur = 4.92 dB (Horizontal)
Uncertainty(1GHz-6GHz)	:	Ur = 4.92 dB (Vertical)
Conduction Uncertainty	:	Uc = 3.4 dB
Disturbance Uncertainty	:	Ud = 3.4 dB



1.8. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotech Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111.

ISED-Registration No.: 8058A

Shenzhen Anbotech Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotech Compliance Laboratory Limited.

1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518128



2. Power Line Conducted Emission Test

2.1. Test Standard and Limit

Test Standard:	FCC 47 CFR Part 15 Subpart B
----------------	------------------------------

☐ Limits for conducted emission at the AC mains power ports of Class A equipment

Frequency (MHz)	Limits (dB μ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	79.0	66.0
0.50 ~ 30.00	73.0	60.0

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

☒ Limits for conducted emission at the AC mains power ports of Class B equipment

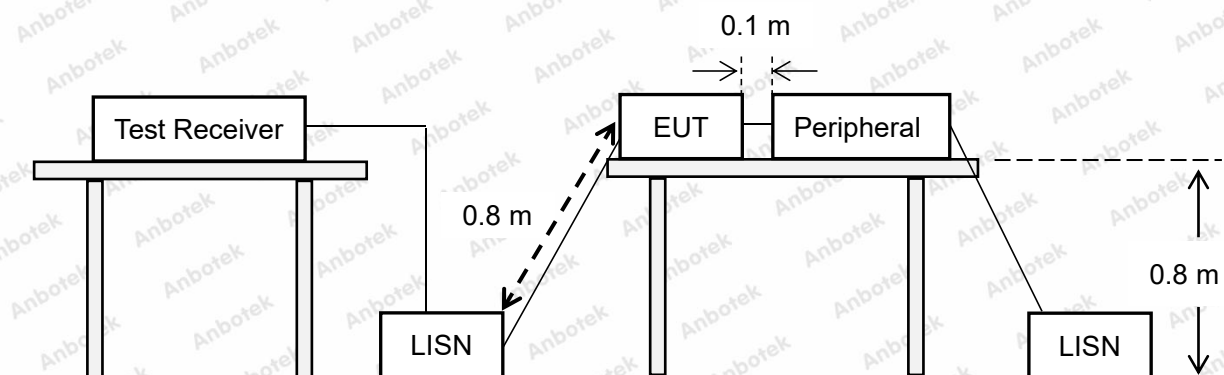
Frequency (MHz)	Limits (dB μ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50 ~ 5.00	56.0	46.0
5.00 ~ 30.00	60.0	50.0

Remark:

(1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.

2.2. Test Setup



2.3. Test Procedure

The table-top EUT is placed on a non-conductive table 0.8 m above the horizontal ground reference plane, and the back of the EUT is 0.4 m away from the vertical ground reference plane, and at least 0.8 m from any other metal surface or ground plane. The floor-standing EUT is placed on an insulating support 0.1 m above the horizontal ground reference plate, at least 0.8 m away from other metal objects.

Connect EUT to the power mains through an LISN. Where the mains cable supplied by the manufacturer is longer than 1 m, the excess should be folded at the center into a bundle no longer than 0.4 m, so that its length is shortened to 1 m. All the peripherals are connecting to the other LISN.

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

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

2.4. Test Results

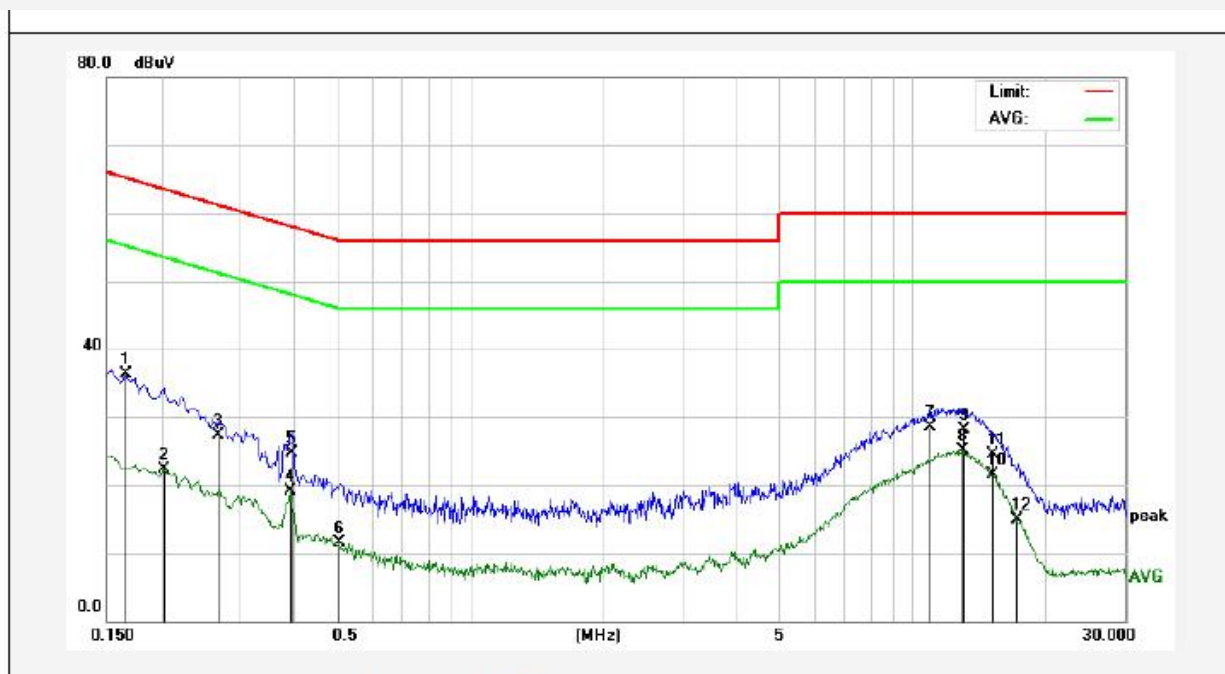
PASS

The test curves are shown in the following pages.



Power Line Conducted Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: Live Line
Temp.: 22.8℃ Hum.: 51%



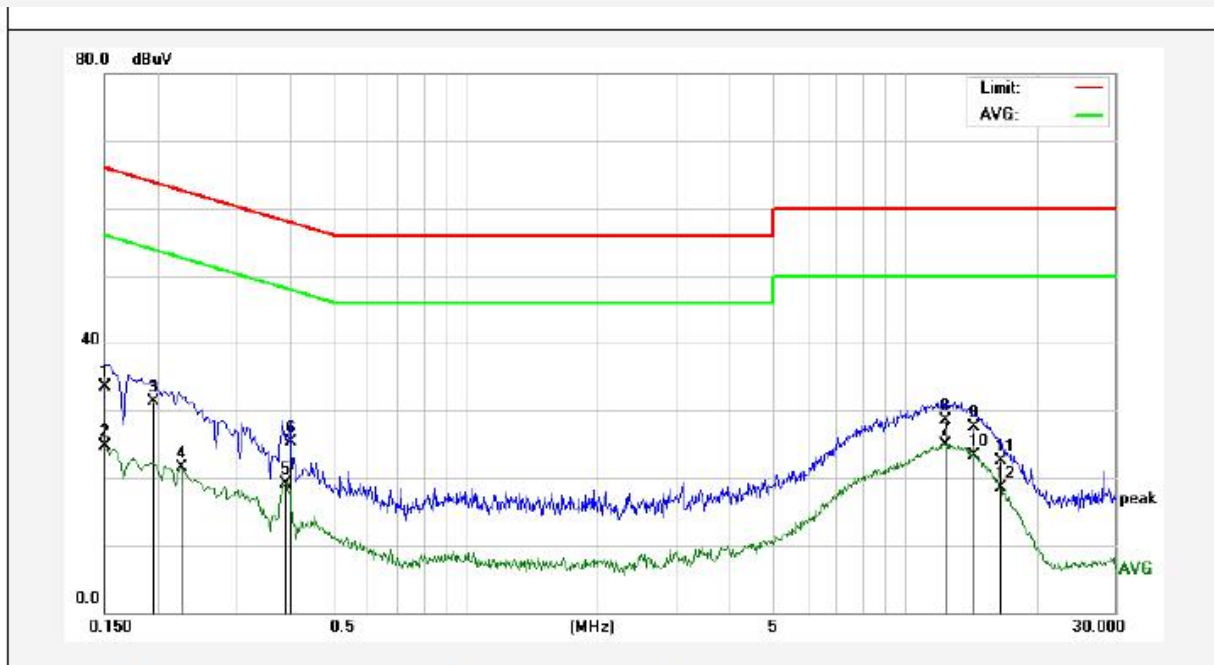
No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1660	26.72	9.58	36.30	65.15	-28.85	QP	
2	0.2020	12.65	9.57	22.22	53.52	-31.30	AVG	
3	0.2700	17.55	9.70	27.25	61.12	-33.87	QP	
4	0.3899	9.34	9.76	19.10	48.06	-28.96	AVG	
5	0.3940	14.87	9.76	24.63	57.98	-33.35	QP	
6	0.5060	1.70	9.84	11.54	46.00	-34.46	AVG	
7	10.9339	18.60	9.85	28.45	60.00	-31.55	QP	
8	12.8698	15.25	9.92	25.17	50.00	-24.83	AVG	
9	13.0219	18.15	9.93	28.08	60.00	-31.92	QP	
10	15.0619	11.43	9.99	21.42	50.00	-28.58	AVG	
11	15.0819	14.47	9.99	24.46	60.00	-35.54	QP	
12	17.1459	4.95	10.04	14.99	50.00	-35.01	AVG	

Note: Result = Reading + Factor Over Limit = Result - Limit



Power Line Conducted Test Data

Test Site: 1# Shielded Room
Test Specification: DC 5V via adapter
Comment: Neutral Line
Temp.: 22.8℃ Hum.: 51%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Over Limit (dB)	Detector	Remark
1	0.1500	23.87	9.58	33.45	65.99	-32.54	QP	
2	0.1500	15.21	9.58	24.79	55.99	-31.20	AVG	
3	0.1940	21.71	9.57	31.28	63.86	-32.58	QP	
4	0.2260	11.86	9.61	21.47	52.59	-31.12	AVG	
5	0.3899	9.29	9.76	19.05	48.06	-29.01	AVG	
6	0.3980	15.45	9.76	25.21	57.89	-32.68	QP	
7	12.2980	15.06	9.89	24.95	50.00	-25.05	AVG	
8	12.3380	18.59	9.89	28.48	60.00	-31.52	QP	
9	14.3980	17.49	9.97	27.46	60.00	-32.54	QP	
10	14.3980	13.37	9.97	23.34	50.00	-26.66	AVG	
11	16.4860	12.56	10.03	22.59	60.00	-37.41	QP	
12	16.4860	8.55	10.03	18.58	50.00	-31.42	AVG	

Note: Result = Reading + Factor Over Limit = Result - Limit



3. Radiated Emission Test (Below 1 GHz)

3.1. Test Standard and Limit

Test Standard	FCC 47 CFR Part 15 Subpart B
---------------	------------------------------

☐ Limit for radiated emissions at frequencies up to 1 GHz for class A equipment

Test Limit	Frequency (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT	
			μV/m	(dBμV/m)
	30 ~ 88	3	300	49.5
	88 ~ 216	3	500	54.0
	216 ~ 960	3	700	56.9
	960 ~ 1000	3	1000	60.0

Remark: (1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

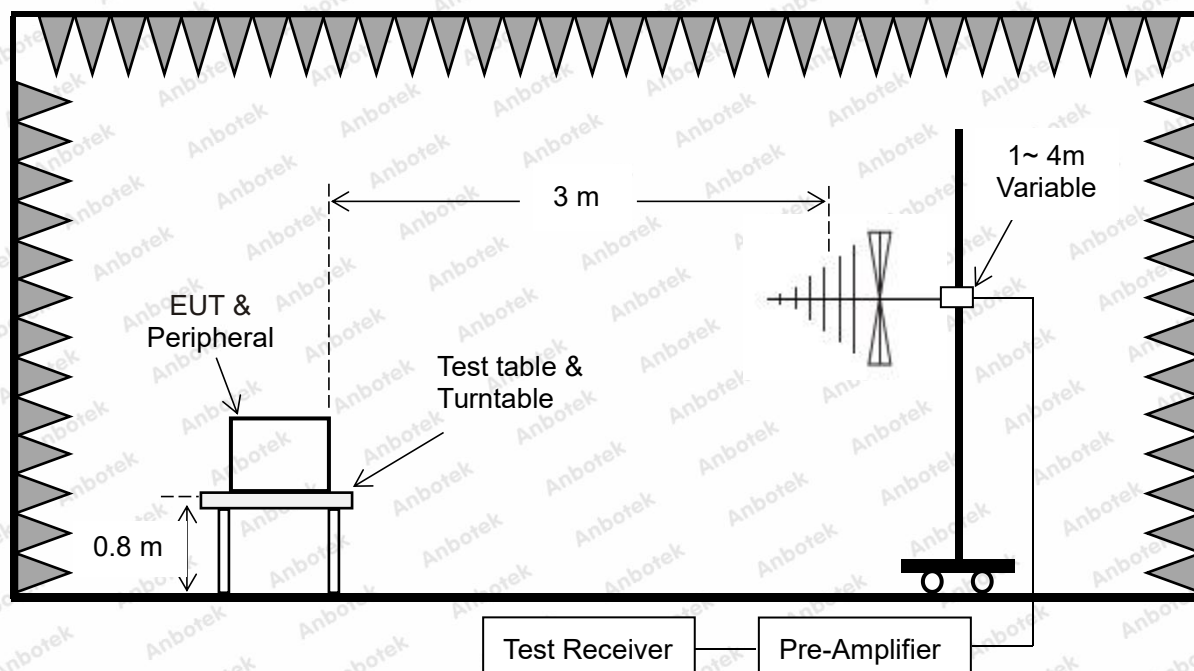
☒ Limit for radiated emissions at frequencies up to 1 GHz for class B equipment

Test Limit	Frequency (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMIT	
			μV/m	(dBμV/m)
	30 ~ 88	3	100	40
	88 ~ 216	3	150	43.5
	216 ~ 960	3	200	46
	960 ~ 1000	3	500	54

Remark: (1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



3.2. Test Setup



3.3. Test Procedure

The table-top EUT is placed on a non-conductive table 0.8 m above the horizontal ground reference plane. The floor-standing EUT is placed on an insulating support 0.1 m above the horizontal ground reference plane.

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



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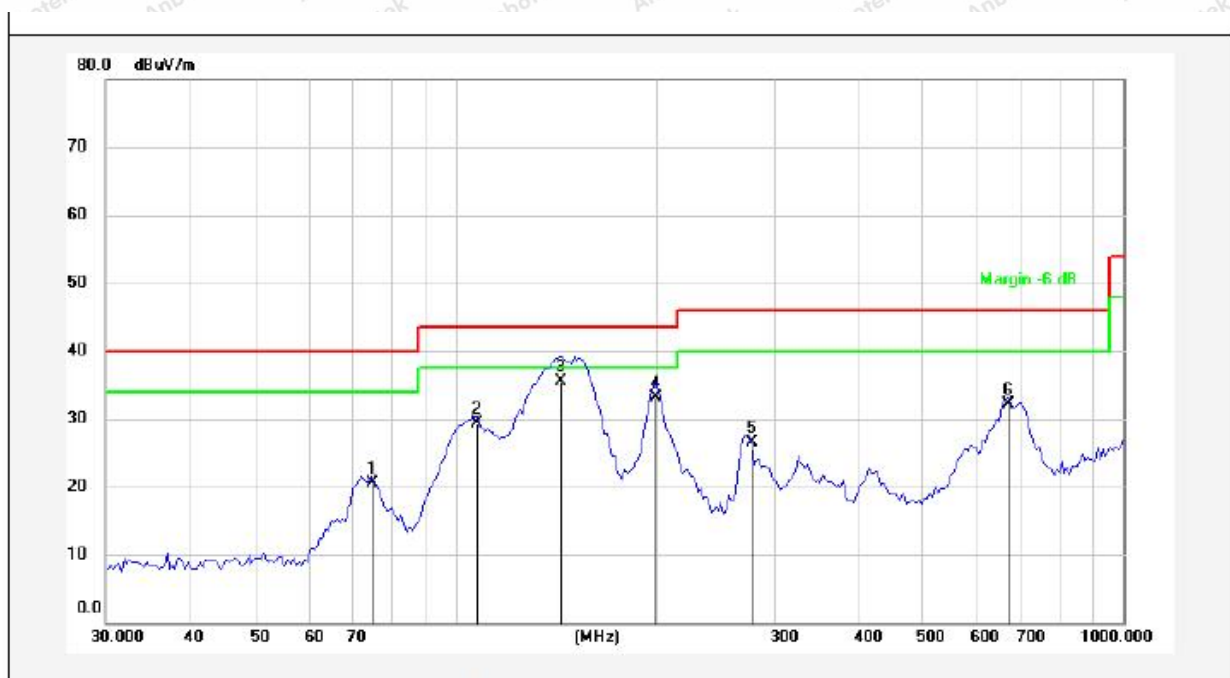
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3.4. Test Results**PASS**

The test curves are shown in the following pages.



Test item: Radiation Test Polarization: Horizontal
Standard: (RE)FCC 47 CFR Part 15 Subpart B Power Source: DC 5V via adapter
Frequency Range: 30MHz ~ 1000MHz Temp.(°C)/Hum.(%RH): 23.5(°C)/48%RH
Distance: 3m



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	74.6569	42.25	-21.67	20.58	40.00	-19.42	QP			
2	107.8877	47.29	-17.97	29.32	43.50	-14.18	QP			
3	144.0819	56.73	-21.26	35.47	43.50	-8.03	QP			
4	199.2855	51.34	-18.22	33.12	43.50	-10.38	QP			
5	275.6399	42.00	-15.45	26.55	46.00	-19.45	QP			
6	674.0252	39.83	-7.63	32.20	46.00	-13.80	QP			

Note: Result= Reading + Factor Over Limit=Result-Limit



Test item: Radiation Test

Polarization:

Vertical

Standard: (RE)FCC 47 CFR Part 15
Subpart B

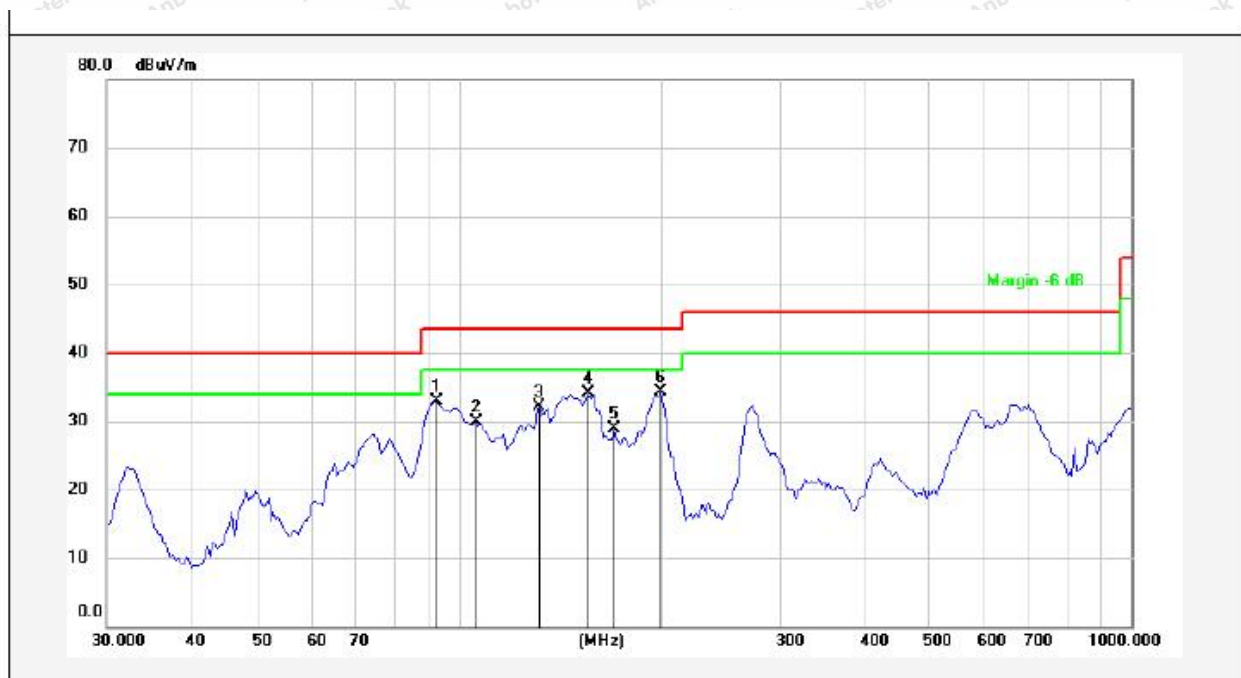
Power Source:

DC 5V via adapter

Frequency Range: 30MHz ~ 1000MHz

Temp.(°C)/Hum:(%RH): 23.5(°C)/48%RH

Distance: 3m



No.	Freq. (MHz)	Reading (dBuV)	Factor ()	Result (dBuV/m)	Limit (dBuV/m)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	92.1388	50.91	-18.03	32.88	43.50	-10.62	QP			
2	106.0126	47.56	-17.73	29.83	43.50	-13.67	QP			
3	131.9889	53.05	-20.92	32.13	43.50	-11.37	QP			
4	155.9100	54.82	-20.77	34.05	43.50	-9.45	QP			
5	170.1947	48.80	-19.93	28.87	43.50	-14.63	QP			
6	199.2855	52.58	-18.22	34.36	43.50	-9.14	QP			

Note: Result= Reading + Factor Over Limit=Result-Limit



4. Radiated Emission Test (Above 1GHz)

4.1. Test Standard and Limit

Test Standard	FCC 47 CFR Part 15 Subpart B
---------------	------------------------------

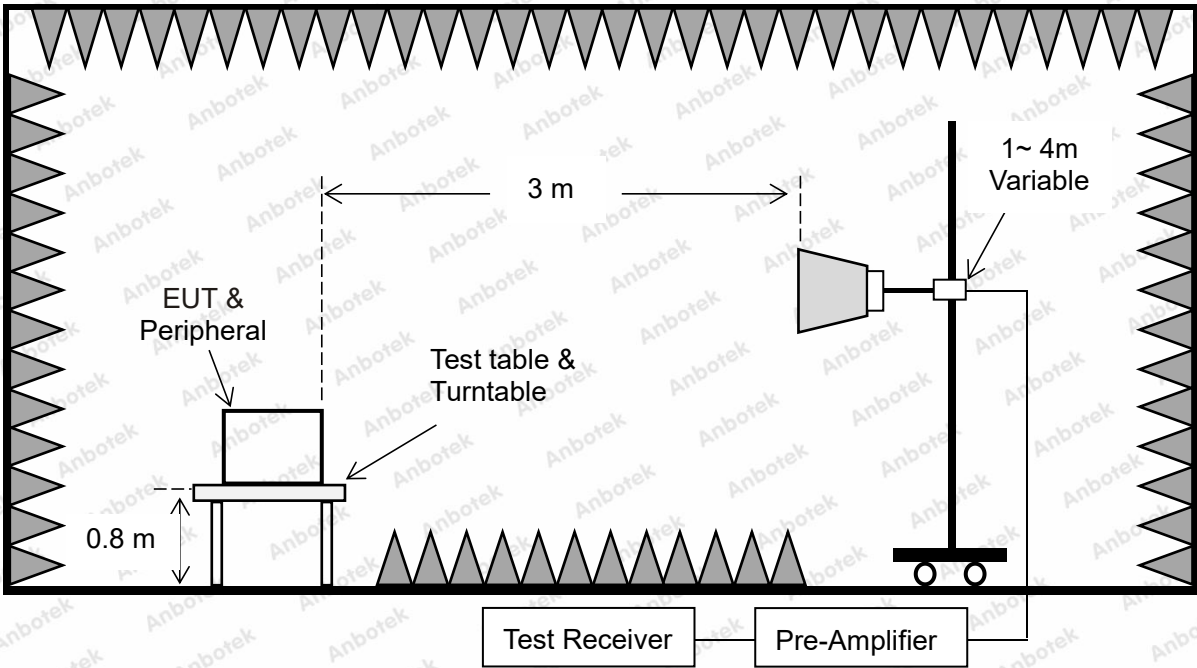
☐ Limit for radiated emissions at frequencies above 1 GHz for class A equipment

Frequency (MHz)	Distance (Meters)	Field Strengths Limit (dBμV/m)	
		Peak	Average
1000 ~ 6000	3	79.5	59.5
Remark: N/A			

☐ Limit for radiated emissions at frequencies above 1 GHz for class B equipment

Frequency (MHz)	Distance (Meters)	Field Strengths Limit (dBμV/m)	
		Peak	Average
1000 ~ 6000	3	74	54
Remark: N/A			

4.2. Test Setup



4.3. Test Procedure

The table-top EUT is placed on a non-conductive table 0.8 m above the horizontal ground reference plane. The floor-standing EUT is placed on an insulating support 0.1 m above the horizontal ground reference plane.

The EUT was set 3 m away from the receiving antenna that was mounted on a non-conductive mast. The antenna can move up and down between 1 to 4 m 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 test receiver is set to peak and average detects function.

The bandwidth of the test receiver is set at 1MHz.

4.4. Test Results

Not applicable.



APPENDIX I -- TEST SETUP PHOTOGRAPH

Photo of Power Line Conducted Emission Test

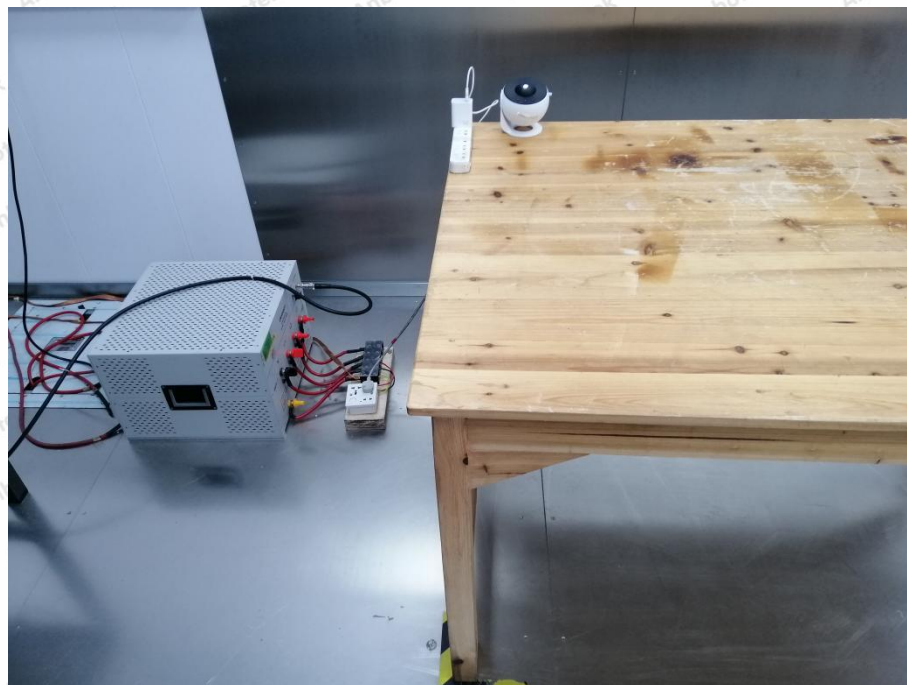
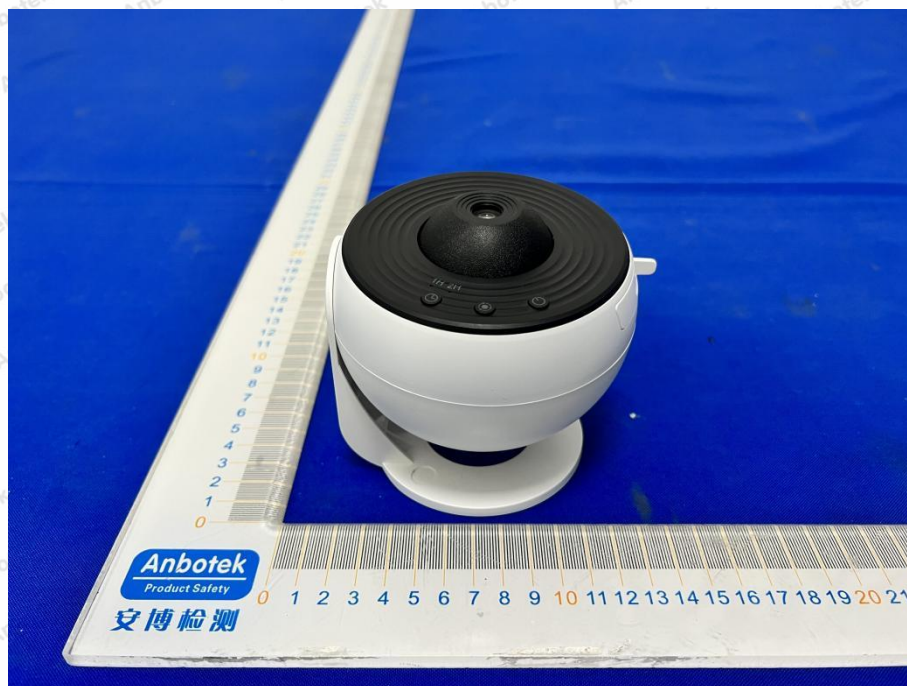
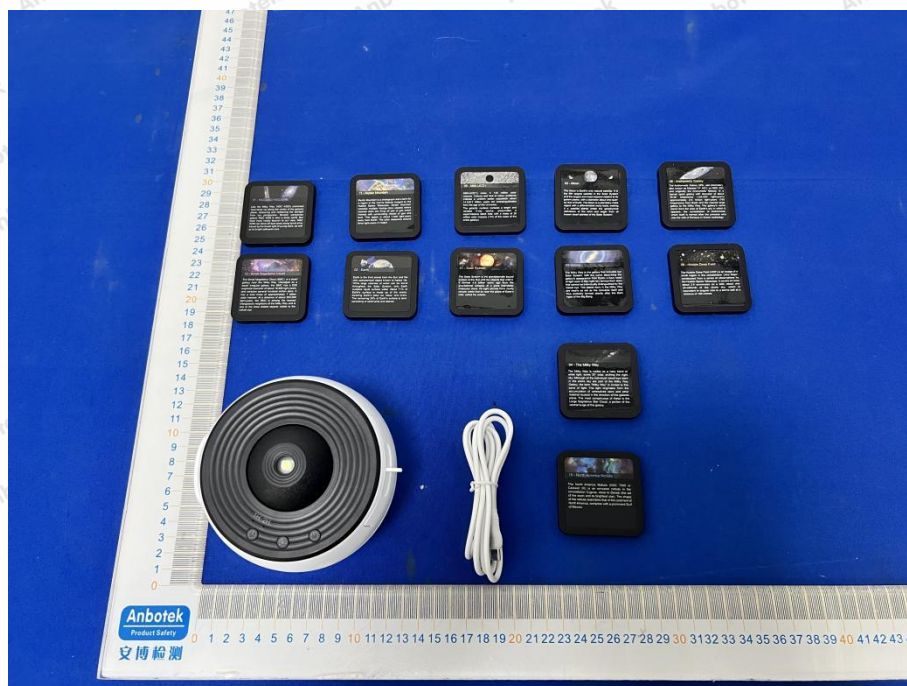
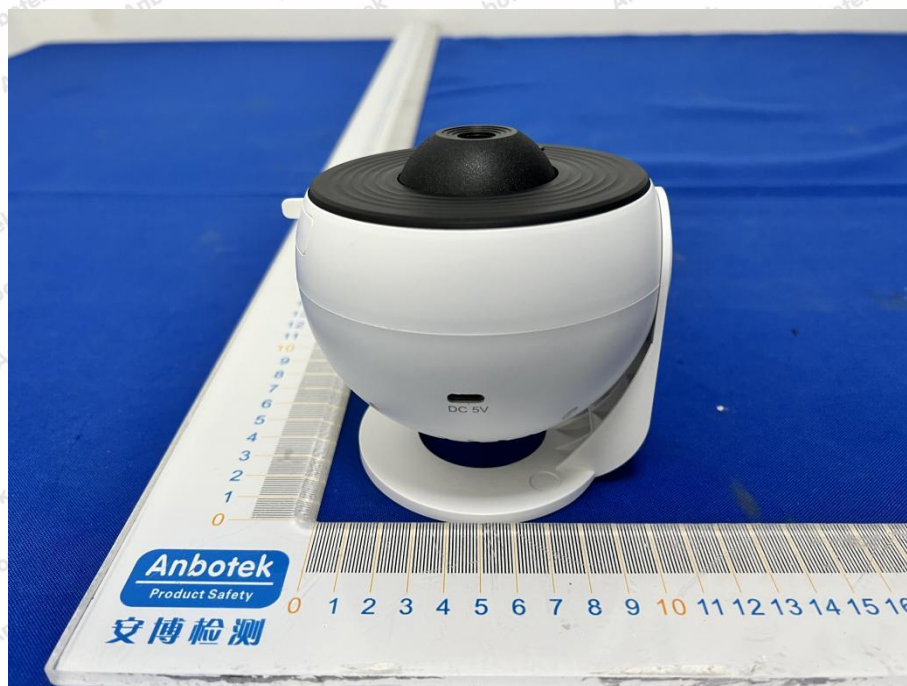
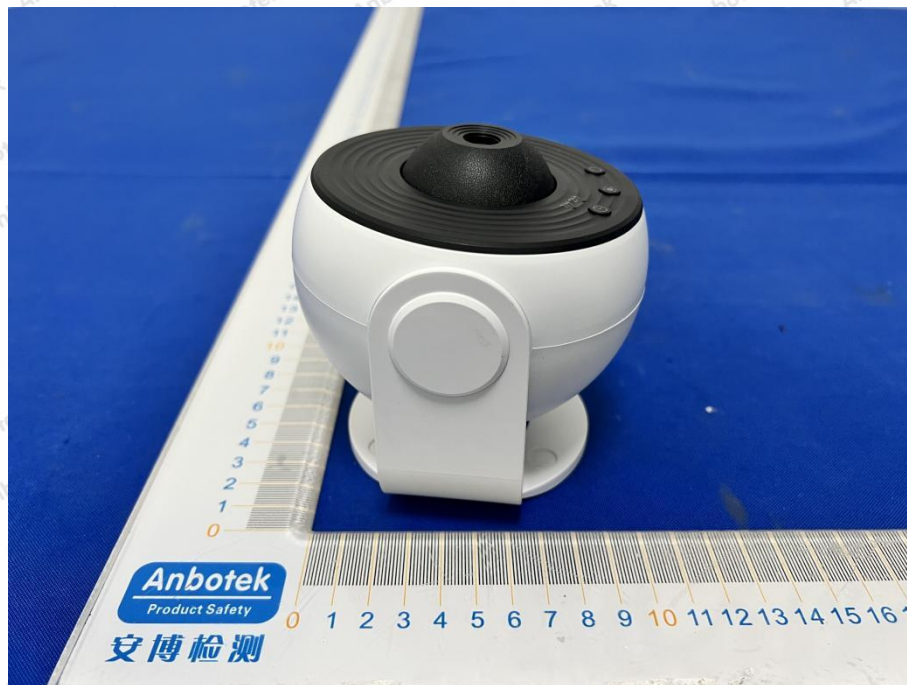
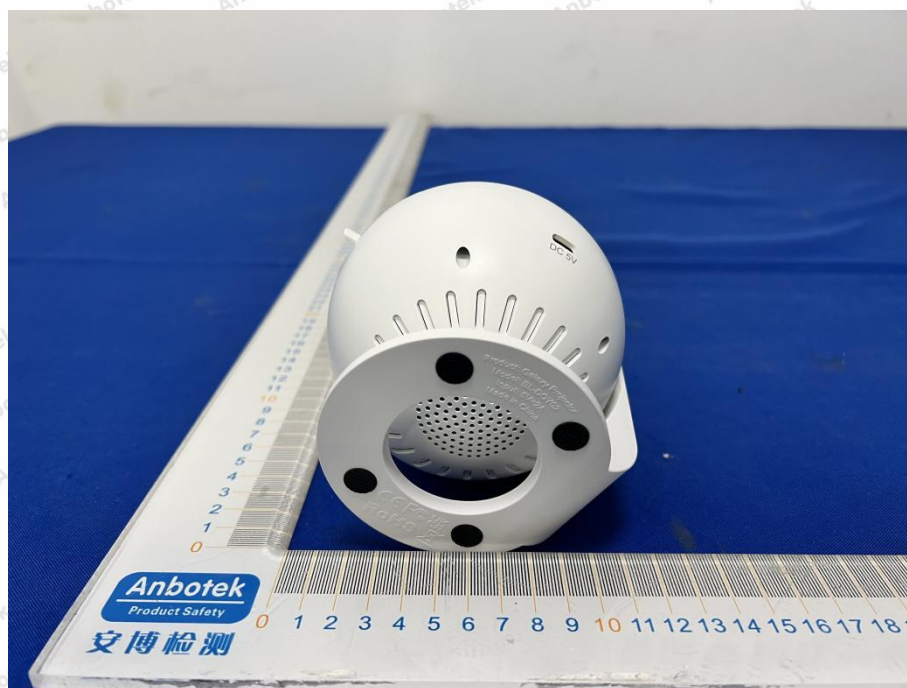


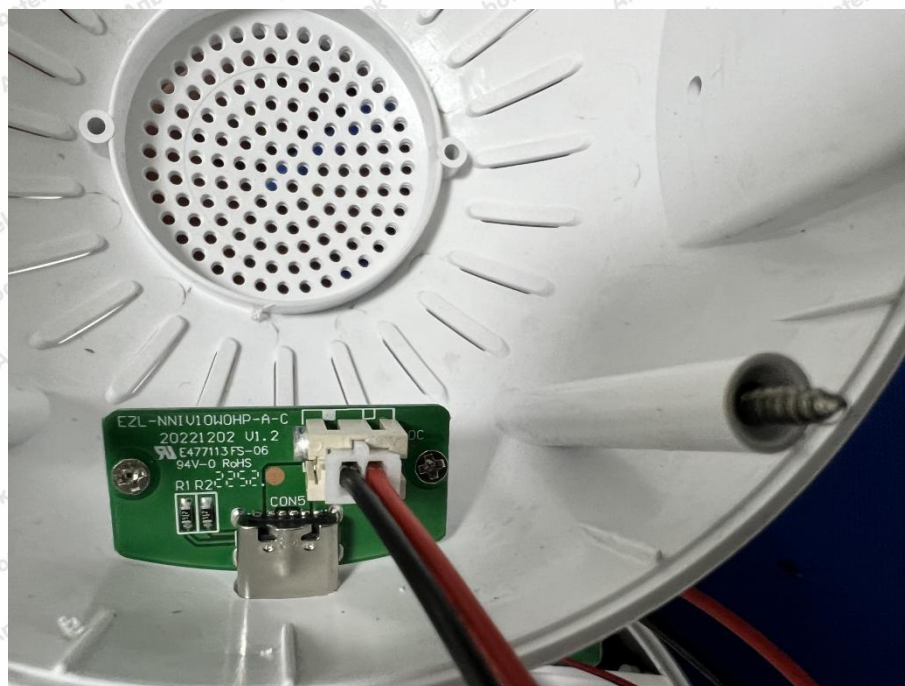
Photo of Radiated Emission Test (Below 1 GHz)



APPENDIX II -- EXTERNAL PHOTOGRAPH





APPENDIX III -- INTERNAL PHOTOGRAPH

----- End of Report -----





Federal Commu
nications Commission
Registration Number: 184111

Proof of Compliance under FCC Supplier's Declaration of Conformity

Applicant: Shenzhen Bolong Technology Co., Ltd.
Room 415, 4th Floor, Building A, Youth Pioneer
Park, Jianshe East Road, Tsinghua Community,
Longhua Street, Longhua District, Shenzhen City,
China

Equipment Under Test: Galaxy Projector

Test Model No.: BL-DQY02

Reference Model No.: N.A.

Trade Name: N.A.

Power Supply: Power Input: DC 5V 2A
Maximun Output Power: 10W

Test Standard(s): FCC 47 CFR Part 15 Subpart B: 2022

File Number: AT18240EC300008

Report Number: 18240EC30000801

Is here with confirmed to comply with the requirements set out in the FCC 47 CFR Part 15 Subpart B and CISPR PUB. 22 and the measurement procedures were according to ANSI C63.4-2014. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements. The test results of this report relate only to the tested sample identified in this report.



Certified by

Jan. 16, 2023
Date



KingKong Jin
KingKong Jin

Shenzhen Anbotek Compliance Laboratory Limited

1/F, Building D, Sogood Science and Technology Park, Sanwei community,
Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.518128
Tel: (86)755-26066440 Fax: (86)755-26014772
Http://www.anbotek.com Email: service@anbotek.com

Report No.: 18300RC30011701

Test Report

Client Name : Shenzhen Bolong Technology Co., Ltd.

Client Address : Room 415, 4th Floor, Building A, Youth
Pioneer Park , Jianshe East Road, Tsinghua
Community, Longhua Street, Longhua District,
Shenzhen City, China

Product Name : Galaxy Projector

Report Date : Jan. 17, 2023

Shenzhen Anbotech Compliance Laboratory Limited



Shenzhen Anbotech Compliance Laboratory Limited

Address: East of 4/F., Building A, Hourui No.3 Industrial Zone, Xixiang Street, Bao'an
District, Shenzhen, Guangdong, China
Tel: (86) 0755-26066126 Fax: (86) 0755-26066021 Email: service@anbotech.com

Hotline
400-003-0500
www.anbotech.com.cn



Test Report

Report No.: 18300RC30011701

Date: Jan. 17, 2023

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Applicant : Shenzhen Bolong Technology Co., Ltd.
Address : Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe East Road, Tsinghua Community, Longhua Street, Longhua District, Shenzhen City, China

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client

Sample Name : Galaxy Projector
Test Model No. : BL-DQY02
Country of Destination : Europe
Sample Received Date : Jan. 06, 2023
Testing Period : Jan. 09, 2023 to Jan. 17, 2023

Test Requested : As specified by client, to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Diisobutyl phthalate (DIBP), Dibutyl phthalate(DBP), Benzyl butyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP) in the selected material of the submitted sample in accordance with the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863 with effective from 22 July 2019.

Test Method: Please refer to the following page(s).

Test Result(s): Please refer to the following page(s).

Edited by

Beryl Jian

Reviewed by

Jackie

Authorized Signatory

Carl



Test Report

Report No.: 18300RC30011701

Date: Jan. 17, 2023

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Test Method:

A. XRF Screening Test

XRF screening limits in mg/kg for regulated elements according to IEC 62321-3-1:2013.

Element	Limit of IEC 62321-3-1:2013 Unit (mg/kg)		
	Polymers	Metals	Composite material
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	N.A.	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

Note:

-N.A. = Not Applicable

-BL = Under the XRF screening limit

-OL = Further chemical test will be conducted while result is above the screening limit

-X= The symbol "X" marks the region where further investigation is necessary

-3σ= The reproducibility of analytical instruments

-LOD= Detection limit

B. Chemical Test

Test Item(s)	Test Method	Measured Equipment(s)	MDL	Limit
Lead (Pb)	IEC 62321-5:2013	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013		2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017		2 mg/kg	1000 mg/kg
Hexavalent Chromium Cr(VI)	IEC 62321-7-1:2015	UV-VIS	0.10μg/cm ²	---
	IEC 62321-7-2:2017		8 mg/kg	1000 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	5 mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015		5 mg/kg	1000 mg/kg
Phthalates (DIBP, DBP, BBP, DEHP)	IEC 62321-8:2017		50 mg/kg	1000 mg/kg



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Test Results:

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
1	Black plastic shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
2	White plastic shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
3	Black rubber foot pad	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
		Pb	BL	/	
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
4	White plastic port	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
5	Silvery metal shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	X	Negative	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	
6	White plastic shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
7	Silvery metal shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	
8	Inductor	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	X	N.D.	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
9	IC	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
10	Black plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
11	Red plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
12	Silvery metal soldering tin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
13	White LED	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	X	N.D.	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
14	Green PCB board	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	X	N.D.	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
15	Yellow LED	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
16	White PCB board	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	X	N.D.	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
17	Transparent glass	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
18	White plastic wire sleeve	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
19	White plastic scarfskin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
20	Silvery metal shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	
21	Silvery metal shell	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	X	Negative	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	



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Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
22	Transparent plastic block	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
23	Black glass sheet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	



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Note:

- The screening results are only used for reference.
- When conducting the test for PBBs&PBDEs, XRF was introduced to screen Br Exclusively; When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.
- BL = Under the XRF screening limit
- OL = Further chemical test will be conducted while result is above the screening limit
- X= The symbol "X" marks the region where further investigation is necessary
- LOD= Detection limit
- MDL = Method Detection Limit
- N.A. = Not Applicable
- N.D. = Not Detected (<MDL)
- /=Not tested
- 1mg/kg = 1ppm = 0.0001%
- $\mu\text{g}/\text{cm}^2$ = microgramme per square centimetre
- "___"=
 - a. -Negative = Absence of Cr(VI) , the detected Cr(VI) concentration in the boiling water extraction solution is less than $0.10\mu\text{g}/\text{cm}^2$.
 - b. -Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is equal to or greater than $0.13\mu\text{g}/\text{cm}^2$.
 - c. The result is between $0.10\mu\text{g}/\text{cm}^2$ with $0.13\mu\text{g}/\text{cm}^2$ is considered to be inconclusive-unavoidable coating variations may influence the determination.



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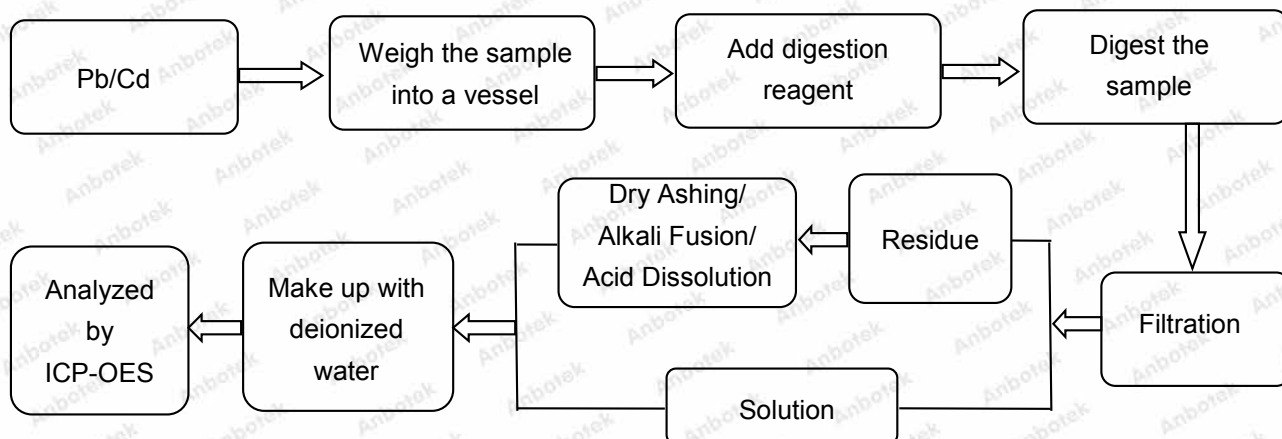
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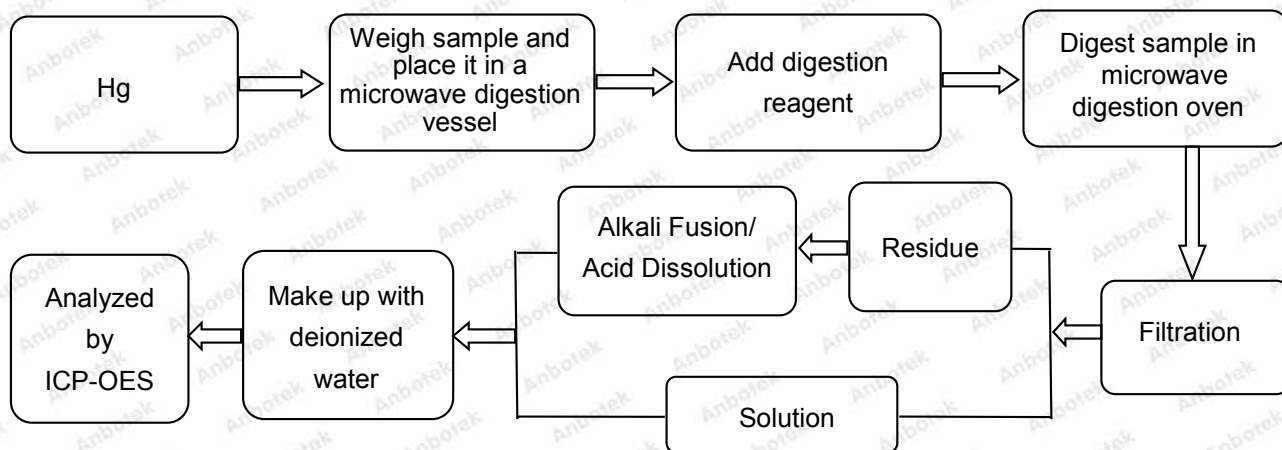
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Test Process:

◆ IEC 62321-5:2013



◆ IEC 62321-4:2013+AMD1:2017



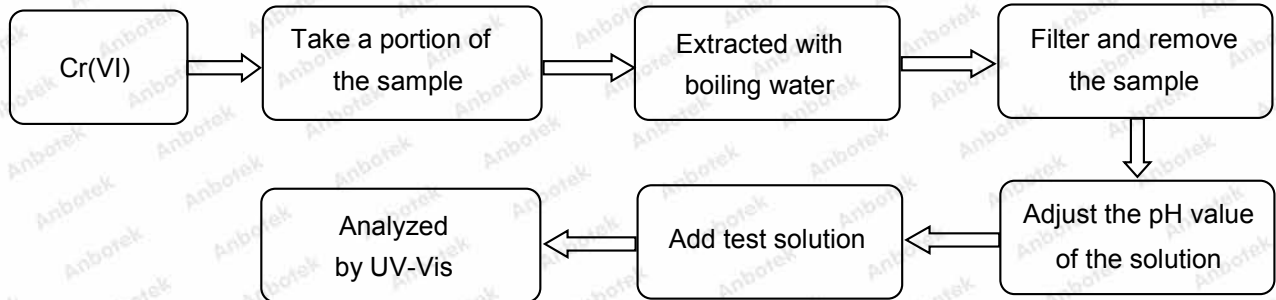
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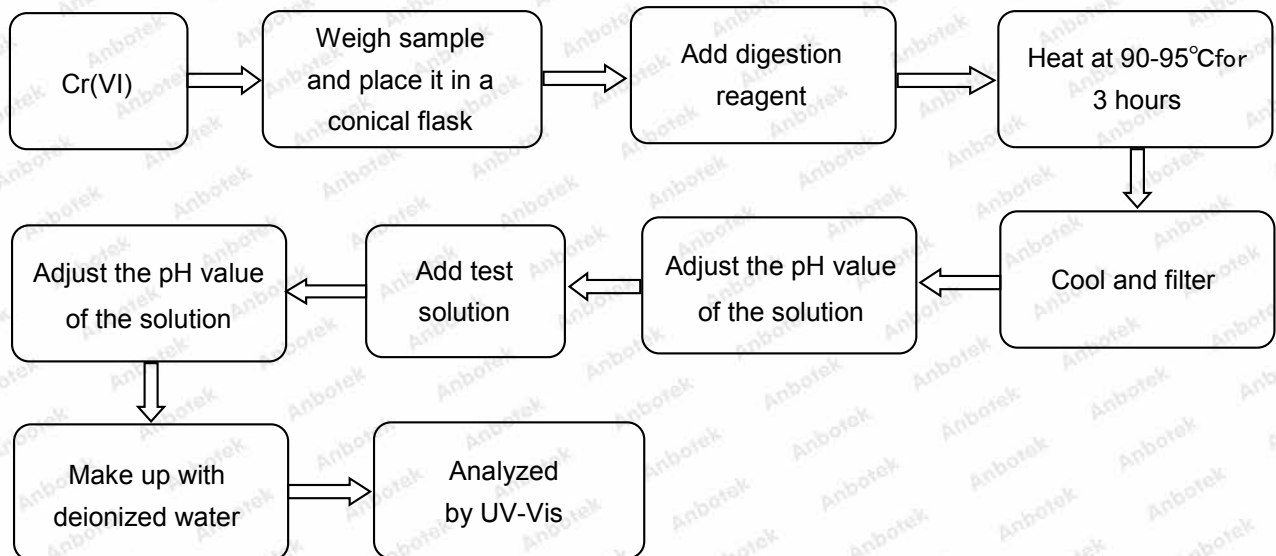
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◆ IEC 62321-7-1:2015



◆ IEC 62321-7-2:2017



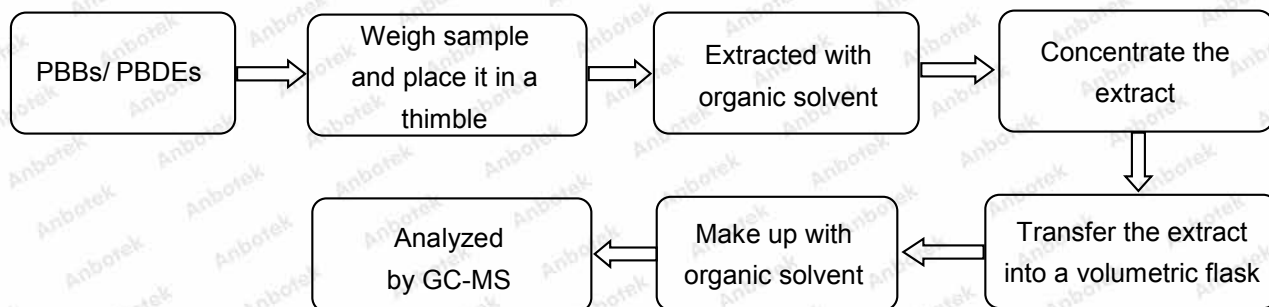
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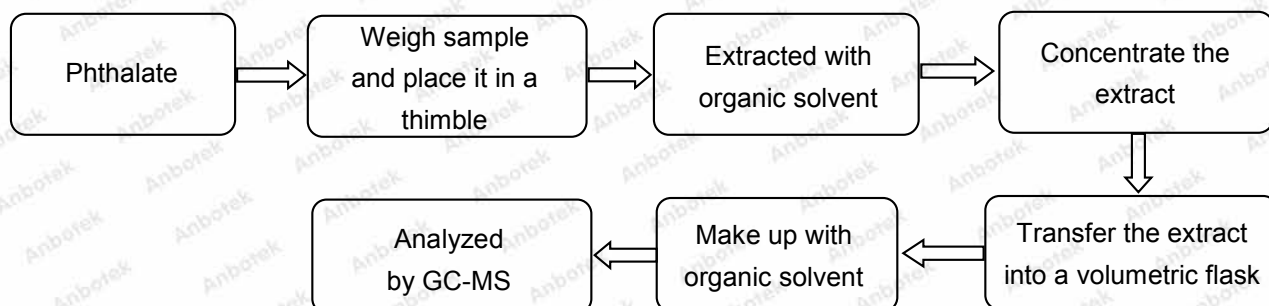
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◆ IEC 62321-6:2015



◆ IEC 62321-8:2017



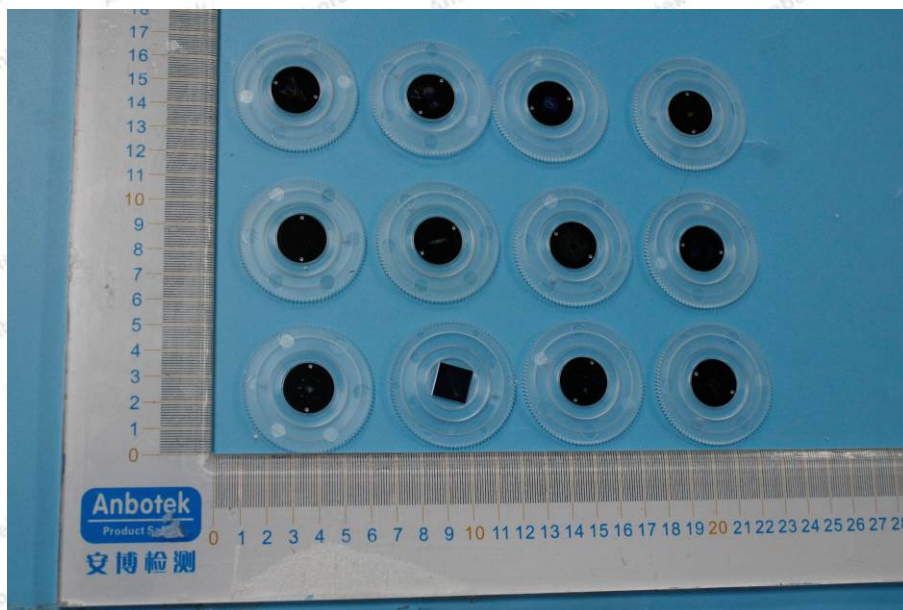
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Photograph of Sample



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Photo(s) of the tested component(s)

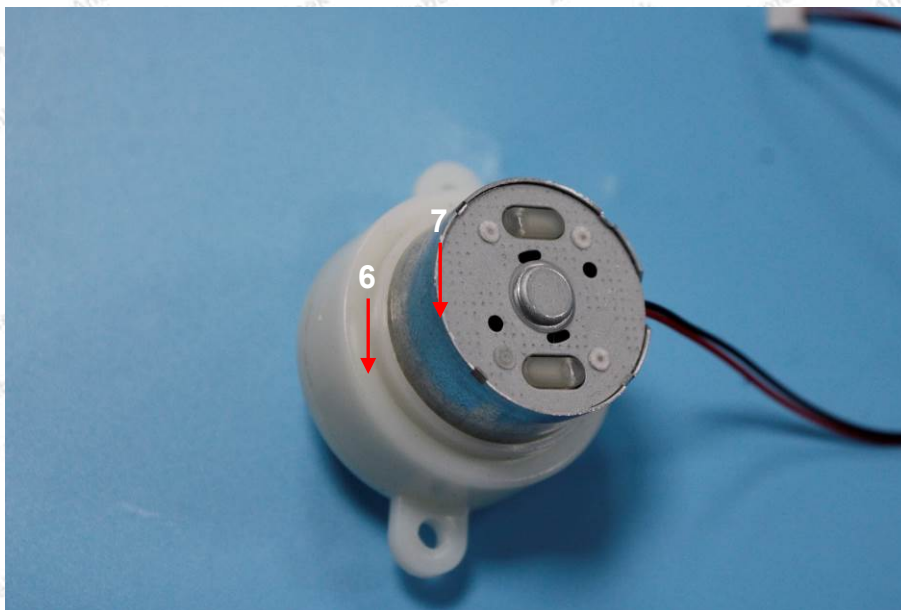


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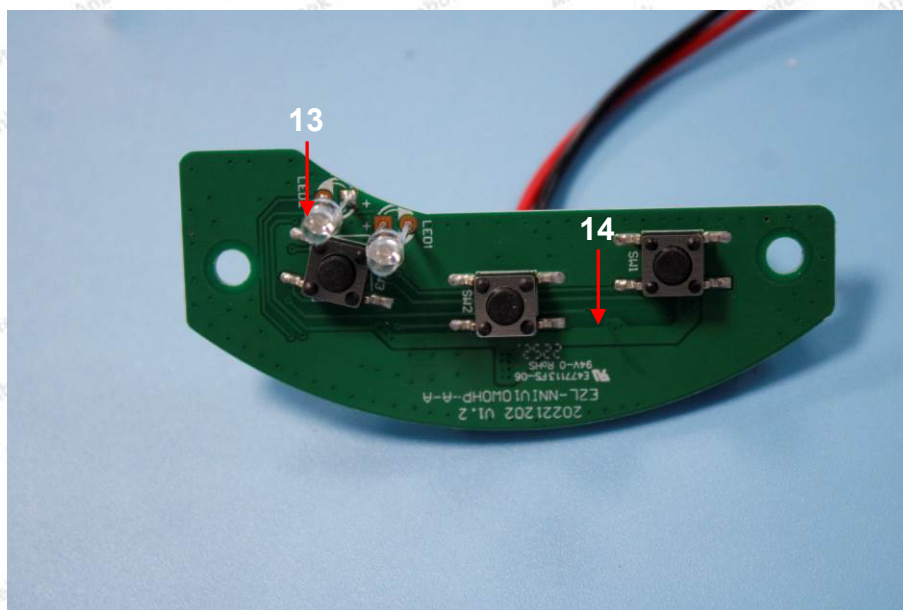
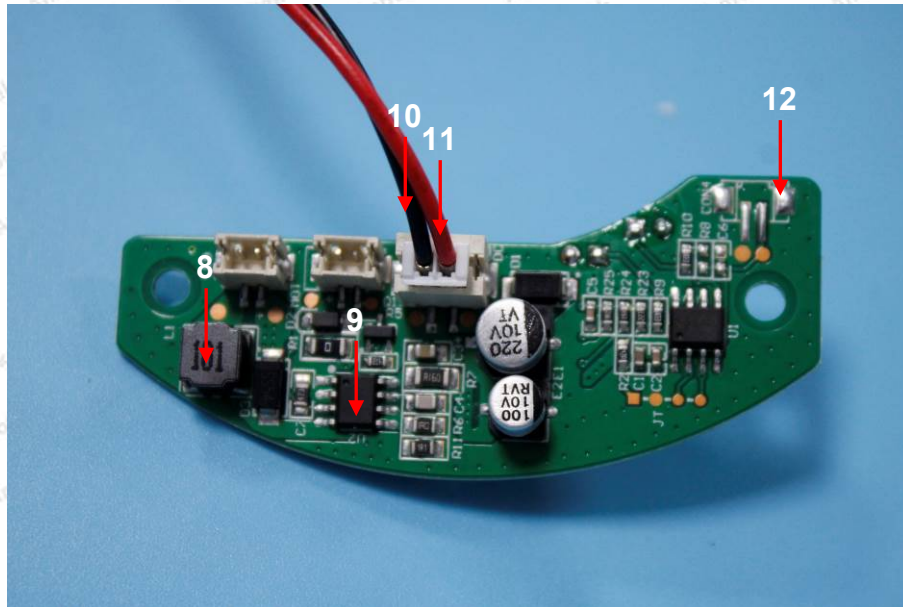


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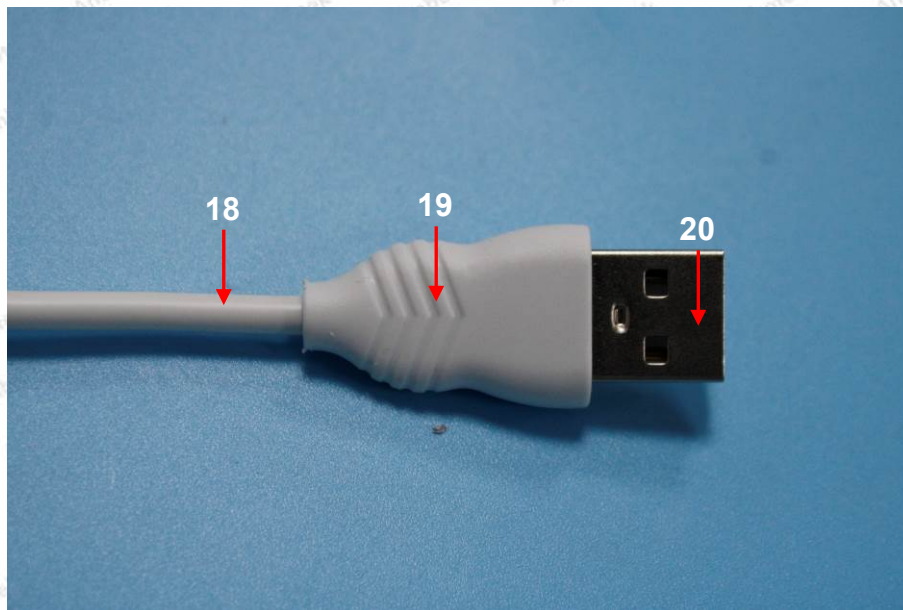
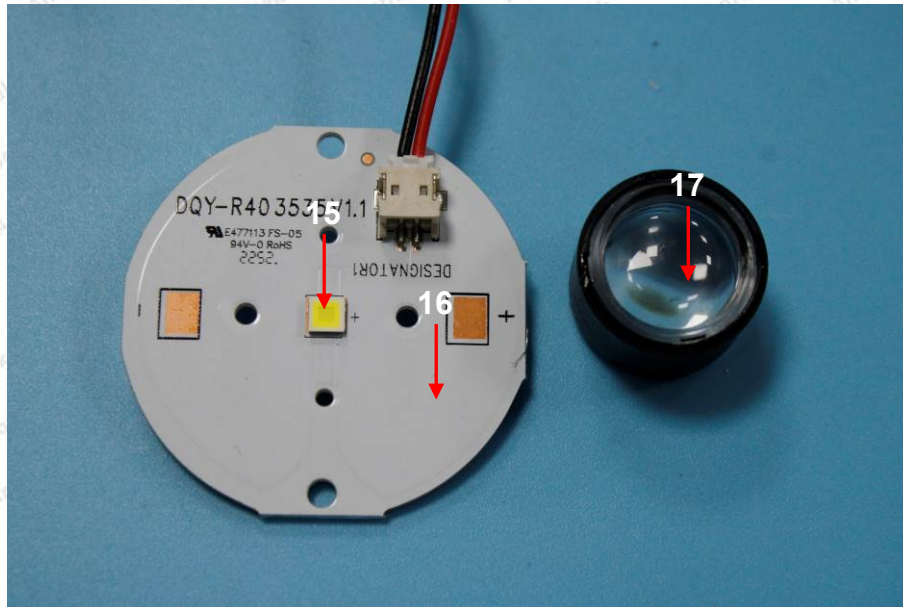


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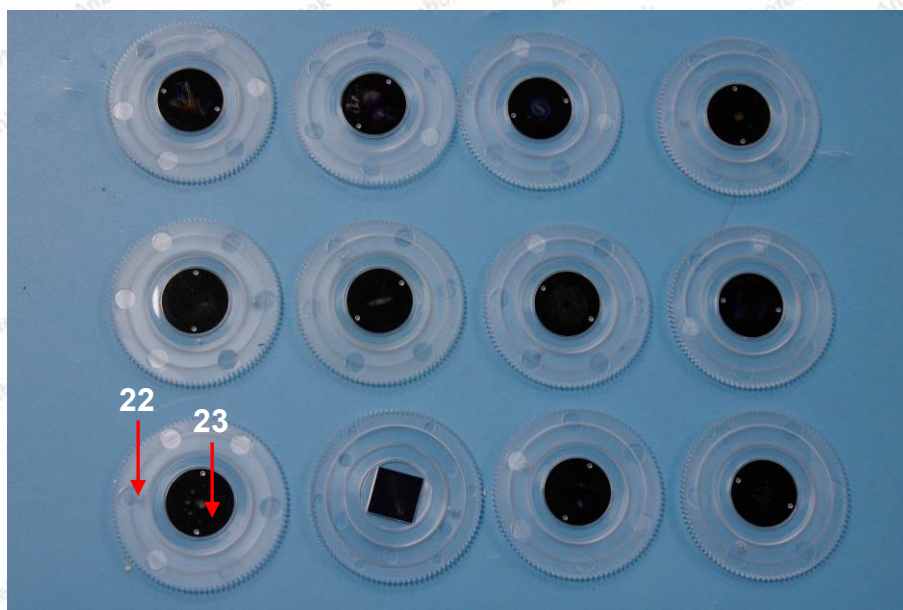
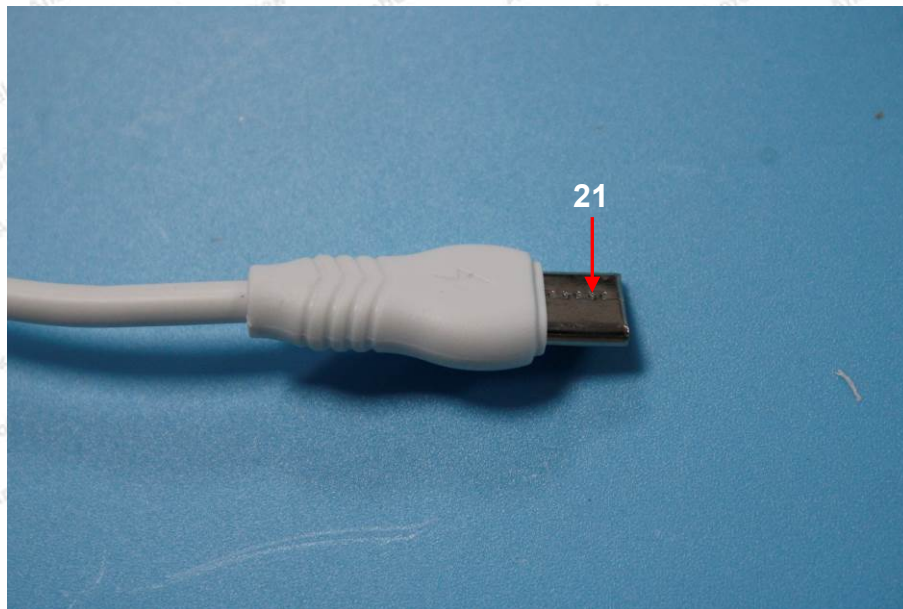


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***** End of Report *****

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Of Conformity

**EC Council Directive 2011/65/EU and amendment Commission
Delegated Directive (EU) 2015/863 with effective from 22 July 2019
Restriction of the Use of Certain Hazardous Substances
in Electrical and Electronic Equipment**

Registration No.: AT18300RC300117

Report No.: 18300RC30011701

Applicant : **Shenzhen Bolong Technology Co., Ltd.**
Room 415, 4th Floor, Building A, Youth Pioneer Park , Jianshe
East Road, Tsinghua Community, Longhua Street, Longhua
District, Shenzhen City, China

Product : Galaxy Projector

Test Model No. : BL-DQY02

Test Method : IEC 62321-3-1:2013, IEC 62321-5:2013,
IEC 62321-4:2013+AMD1:2017, IEC 62321-7-1:2015,
IEC 62321-7-2:2017, IEC 62321-6:2015,
IEC 62321-8:2017

This is to certify that, the certificate is based on Anbotek's test results and other related substance information provided by applicant. Selected material of the submitted sample fulfills the requirement of the Directive 2011/65/EU (RoHS) and amendment Commission Delegated Directive (EU) 2015/863 with effective from 22 July 2019.

Certified by

Carl

Jan. 17, 2023
Date



Shenzhen Anbotek Compliance Laboratory Limited

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