EMC TEST REPORT

For

LED Makeup Bag
Model No.: HZB01-P, HZB01-B

Prepared for	:	Jiangmen Linjun Intelligent Lighting Electrical Appliance Co., LTD
Address	:	3rd Floor, Building 5, No. 20, Gaoxin East Road, Jianghai District, Jiangmen City, Guangdong, China

Prepared By	:	Guangdong KAIXU Testing Technology Co., Ltd.
Address	:	Room 215, Building 2, No. 123, Dongcheng Section, Guanlong Road, Dongcheng Street, Dongguan City, Guangdong Province, China

Tel	:	+86-755-85254458
Fax	:	+86-755-85254458
Web	:	www.kti-lab.com

Report Number	:	KTi250617E1075
Date of Receipt	:	Jun.17, 2025
Date of Test	:	Jun.17-20, 2025
Date of Report	:	Jun.23, 2025

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Test Result Certification

Applicant's name:	Jiangmen Linjun Intelligent Lighting Electrical Appliance Co., LTD
Address:	3rd Floor, Building 5, No. 20, Gaoxin East Road, Jianghai District, Jiangmen City, Guangdong, China
Manufacture's Name:	Jiangmen Linjun Intelligent Lighting Electrical Appliance Co., LTD
Address:	3rd Floor, Building 5, No. 20, Gaoxin East Road, Jianghai District, Jiangmen City, Guangdong, China
Product name:	LED Makeup Bag
Model name:	HZB01-P, HZB01-B
Trademark:	N/A
Standards:	EN IEC 55015:2019+A11:2020 EN IEC 61547:2023 EN IEC 61000-3-2:2019+A2:2024 EN 61000-3-3:2013+A1:2019+A2:2021

This device described above has been tested by Guangdong KAIXU Testing Technology Co., Ltd.. and the test results show that the equipment under test (EUT) is in compliance with the EMC requirements. And it is applicable only to the tested sample identified in the report.

Tested by:	Kevin Yang	
	Kevin Yang	Jun.23, 2025
Reviewed by:	Terry Huang	
	Terry Huang	Jun.23, 2025
Approved by:	Store Chu	
	Store Chu	Jun.23, 2025

GUANGDONG KAIXU TESTING TECHNOLOGY CO., LTD. KTi APPROVAL

1 General Description

1.1 Description of EUT

Product name:	LED Makeup Bag
Model name:	HZB01-P
Series Model:	HZB01-B
Different of series model:	All model names differ only in color
Power supply:	DC 5V
Adapter information:	N/A

1.2 Test mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test mode	Description
Mode 1	Lighting+Charging
Mode 2	/
Mode 3	/
Note: The test modes were carried out for all operation modes. The final test mode of the EUT was the worst test mode for EMI, and its test data is showed.	

1.3 Test setup

See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Ancillary equipment

Equipment	Model	S/N	Manufacturer
Adapter	/	/	Xiaomi

2 Summary of Test Result

No.	Test Standard	Description of Test	Result	Remark
Emission				
1	EN IEC 55015:2019+A11:2020	Conducted emission	Pass	
2		Radiated Electromagnetic Disturbance	Pass	
3		Radiated emission	Pass	
4	EN IEC 61000-3-2:2019+A2:2024	Harmonic current emission	N/A	
5	EN 61000-3-3:2013+A1:2019+A2:2021	Voltage fluctuations &flicker	N/A	
Immunity				
1	EN IEC 61547:2023	Electrostatic discharges (ESD)	Pass	
2		Radiated electromagnetic field disturbances (RS)	Pass	
3		Conducted disturbances (CS)	N/A	
4		Power frequency magnetic field	N/A	
5		Electrical fast transients/burst (EFT/S)	N/A	
6		Surges	N/A	
7		Voltage dips and interruptions	N/A	
N/A: Mean not applicable.				

Note:
1) The test result verdict is decided by the limit of test standard
2) The information of measurement uncertainty is available upon the customer's request.

3 Test Facilities and Accreditations

3.1 Test laboratory

Test Site	Guangdong KAIXU Testing Technology Co., Ltd.
Test Site Location	Room 215, Building 2, No. 123, Dongcheng Section, Guanlong Road, Dongcheng Street, Dongguan City, Guangdong Province, China
Telephone:	(86-755)-85254458
Fax:	(86-755)-85254458
CNAS Registration No.:	/

3.2 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	20ºC~30ºC
Humidity	30%~70% (30%~60% for ESD)
Atmospheric pressure	98kPa~101kPa

3.3 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, U=2xUc(y)

Conducted emission(150kHz~30MHz)	± 2.5 dB
Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %

3.4 Test software

Software name	Manufacturer	Model	Version
EMI Measurement Software	Farad	EZ-EMC	V1.1.4.2
Conducted immunity test system	Scholder	EN61000-4-6.exe	V1.3.0
Harmonics and flicker test system	TTI	HA-PC Link	V2.02
DIPS Test Firmware	Prima	DRP61011AG	V4.1.2
EFT Test Firmware	HTEC	HCOMPACT	V1.0.1
Surge Test Firmware	HTEC+	HCOMPACT	V1.0.1

4 List of test equipment

Radiation emission							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	KTi-E004	Rohde&schwarz	ESPI	1000314	2024/10/10	2025/10/09
2	Triple-Loop Antenna	KTi-E021	PATCH PANEL	RF300	/	2024/10/10	2025/10/09
3	Broadband antenna	KTi-E006	schwarabeck	VULB9163	872	2024/10/10	2025/10/09
4	Horn antenna	KTi-E007	schwarabeck	BBHA9120D	1201	2024/10/10	2025/10/09
5	amplifier	KTi-E014	America	8447D	3113A06150	2024/10/10	2025/10/09
6	amplifier	KTi-E034	Agilent	8449B	3008A02400	2024/10/10	2025/10/09
7	18-40GHz amplifier	KTi-E052	Chengdu step Micro Technology	ZLNA-18-40G-21	1608001	2024/10/10	2025/10/09
8	spectrum analyzer	KTi-E049	Rohde&schwarz	FSP-38	100019	2024/10/10	2025/10/09
9	15-40G Antenna	KTi-E053	Schwarzbeek	BBHA9170	BBHA9170582	2024/10/10	2025/10/09
10	Active Loop Antenna 9kHz - 30MHz	KTi-E051	Schwarzbeck	FMZB 1519 B	00044	2024/10/10	2025/10/09

Conduction emission							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Artificial power network	KTi-E037	Schwarzbeck	NSLK8127	NSLK8127#841	2024/10/10	2025/10/09
2	EMI Test Receiver	KTi-E003	Rohde&schwarz	ESCI	101368	2024/10/10	2025/10/09
3	Artificial power network	KTi-E058	Schwarzbeck	NSLK8127	NSLK8127#841	2024/10/10	2025/10/09

Conduction immunity							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Conduction Immunity Signal Generator	KTi-E015	Schloder	CDG6000	126A1343/2015	2024/10/10	2025/10/09
2	Coupled decoupling network	KTi-E016	Schloder	CDA M2/M3	A2210332/2015	2024/10/10	2025/10/09

Voltage dips, short interruptions and voltage variations immunity							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Drop generator	KTi-E025	Prima/China	DRP61011AG	PR15056303	2024/10/10	2025/10/09

Working frequency magnetic field immunity							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	power frequency magnetic field generator	KTi-E011	china HTEC	HPFMF 100	153703	2024/10/10	2025/10/09

Electrostatic discharge immunity							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	ESD Simulator	KTi-E008	Schloder	SESD 30000	509325	2024/10/10	2025/10/09

Surge immunity							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Surge Generator	KTi-E010	china HTEC	HCWG 51	153702	2024/10/10	2025/10/09

Harmonic & flicker emissions							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	AC power source	KTi-E023	shenzhen tongyuan	TY-8205	20150916809	2024/10/10	2025/10/09
2	Harmonic scintillation Analyzer	KTi-E013	Laplace	AC2000A	311216	2024/10/10	2025/10/09

Electrical Fast Transient/Burst immunity							
Item	Equipment name	Equipment No.	Manufacturer	Model	Serial No.	Calibration date	Due date
1	Electrical Fast Transient Generator	KTi-E009	HTEC	HEFT 51	153701	2024/10/10	2025/10/09

Radiated electromagnetic field immunity					
Equipment	Manufacturer	Model	Serial No.	Calibration date	Due date
Signal Generator	R&S	SMB100A	106148	2024/10/10	2025/10/09
RF Power Amplifier	BONN Elektronik	STLP9128D	128740	2024/10/10	2025/10/09
Gestockte Breitband (S tacked) Log. -per.Antenna	SCHWARZBECK	STLP9128D	043	2024/10/10	2025/10/09
Power Meter	R&S	NRP2	102031	2024/10/10	2025/10/09
Amplifier	NJNT	NTWPAS-2560 025	2560025	2024/10/10	2025/10/09
Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120D-667	2024/10/10	2025/10/09

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

5 Emission test

5.1 Conducted emission

5.1.1 Limits

Frequency (MHz)	LIMITS(dBμV)	
	Quasi-peak	Average
0.009-0.05	110	N/A
0.05-0.15	90 – 80	N/A
0.15 - 0.5	66 – 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note:

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

2) The limit decreases in line with the logarithm of the frequency in the range of 0.15 MHz to 0.5 MHz

5.1.2 Test Procedures

a)The EUT and Support equipment, if needed, was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane. When the EUT is floor standing equipment, it is placed on the ground plane, which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane. The EUT should be 0.8 m apart from the AMN, where the mains cable supplied by the manufacturer is longer than 0.8 m, the excess should be folded at the centre into a bundle no longer than 0.4 m, Details please refer to test setup photography.

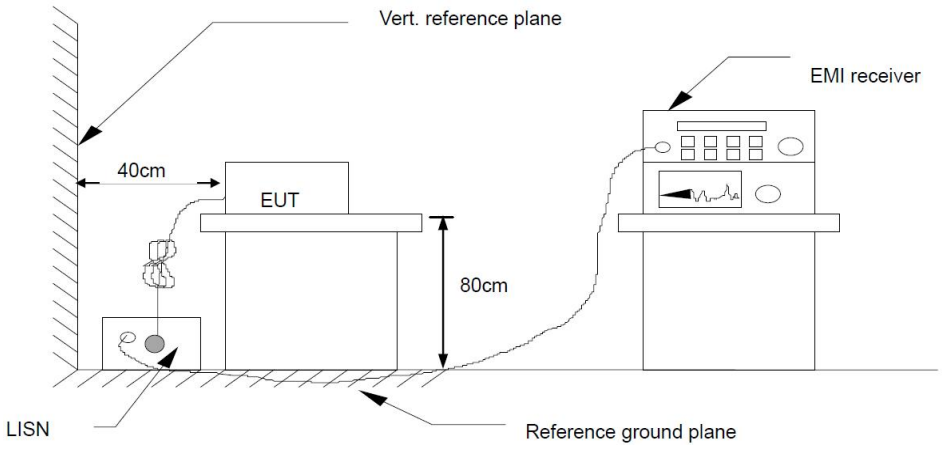
b)The Receiver scanned from 9 kHz to 30 MHz for emissions in each of the test modes.

c)During the above scans, the emissions were maximized by cable manipulation.

d)A scanning was taken on the power lines, Line and neutral, recording at least six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

Note: Test Software Name: e3, Software Version: 1.0.0.0.

5.1.3 Test setup

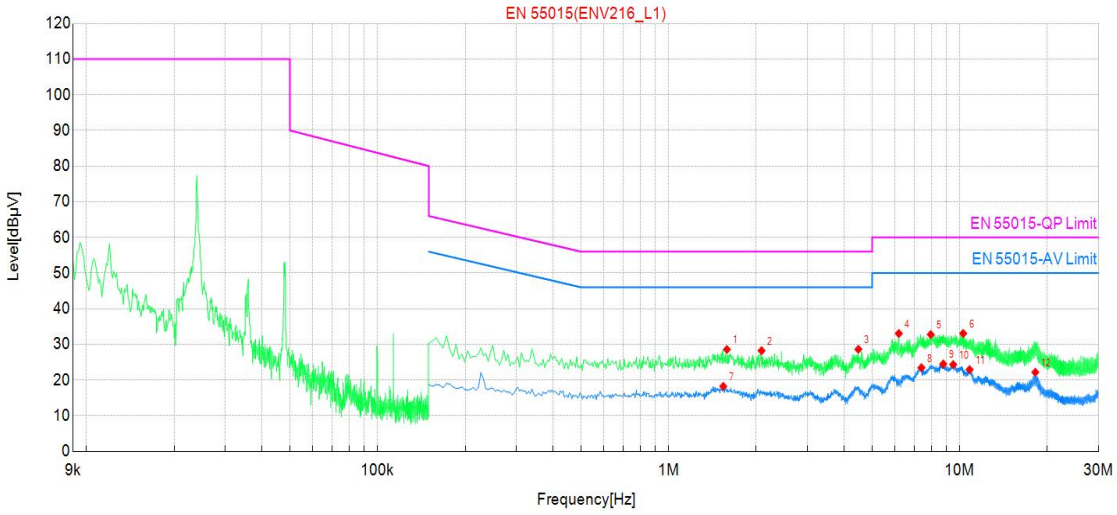


5.1.4 Test Result

PASS

EUT:	LED Makeup Bag	Model Number:	HZB01-P
Test voltage:	AC 230V/50Hz	Test mode:	Mode 1
Pressure:	101kPa	Polarization:	L1
Temperature:	24℃	Relative Humidity:	53%

Line:



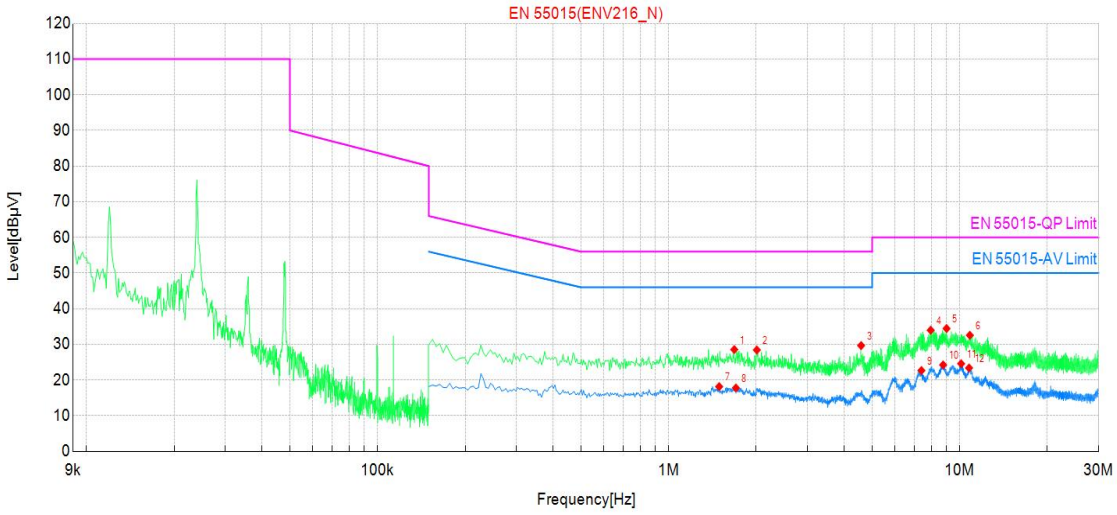
Suspected Data List

NO.	Frequency [MHz]	Reading [dBµV]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Phase	Detector	Verdict
1	1.585500	9.37	28.57	19.20	56.00	27.43	L1	QP	PASS
2	2.085000	9.03	28.23	19.20	56.00	27.77	L1	QP	PASS
3	4.483500	9.39	28.61	19.22	56.00	27.39	L1	QP	PASS
4	6.175500	13.88	33.04	19.16	60.00	26.96	L1	QP	PASS
5	7.948500	13.51	32.75	19.24	60.00	27.25	L1	QP	PASS
6	10.275000	13.61	33.06	19.45	60.00	26.94	L1	QP	PASS
7	1.540500	-0.99	18.21	19.20	46.00	27.79	L1	AV	PASS
8	7.381500	4.27	23.45	19.18	50.00	26.55	L1	AV	PASS
9	8.776500	5.15	24.48	19.33	50.00	25.52	L1	AV	PASS
10	9.496500	4.92	24.33	19.41	50.00	25.67	L1	AV	PASS
11	10.806000	3.49	22.92	19.43	50.00	27.08	L1	AV	PASS
12	18.177000	2.78	22.17	19.39	50.00	27.83	L1	AV	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

EUT:	LED Makeup Bag	Model Number:	HZB01-P,
Test voltage:	AC 230V/50Hz	Test mode:	Mode 1
Pressure:	101kPa	Polarization:	N
Temperature:	24℃	Relative Humidity:	53%

Neutral:



Suspected Data List

NO.	Frequency [MHz]	Reading [dBµV]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Phase	Detector	Verdict
1	1.680000	9.34	28.54	19.20	56.00	27.46	N	QP	PASS
2	2.008500	9.22	28.42	19.20	56.00	27.58	N	QP	PASS
3	4.582500	10.50	29.67	19.17	56.00	26.33	N	QP	PASS
4	7.944000	14.65	33.96	19.31	60.00	26.04	N	QP	PASS
5	9.006000	15.14	34.43	19.29	60.00	25.57	N	QP	PASS
6	10.828500	13.29	32.55	19.26	60.00	27.45	N	QP	PASS
7	1.491000	-1.06	18.14	19.20	46.00	27.86	N	AV	PASS
8	1.702500	-1.43	17.77	19.20	46.00	28.23	N	AV	PASS
9	7.381500	3.33	22.66	19.33	50.00	27.34	N	AV	PASS
10	8.767500	4.94	24.23	19.29	50.00	25.77	N	AV	PASS
11	10.108500	5.32	24.58	19.26	50.00	25.42	N	AV	PASS
12	10.761000	4.12	23.38	19.26	50.00	26.62	N	AV	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

5.2 RADIATED ELECTROMAGNETIC DISTURBANCE

5.2.1 Limits

Frequency (MHz)	Limits for loop diameter dB(μA)*		
	2 m	3 m	4 m
9 kHz-70 kHz	88	81	75
70 kHz-150 kHz	88-58**	81-51**	75-45**
150 kHz-3.0 MHz	58-22**	51-15**	45-9**
3.0 MHz-30 MHz	22	15-16***	9-12***
* At the transition frequency, the lower limit applies. ** Decreasing linearly with the logarithm of the frequency. *** Increasing linearly with the logarithm of the frequency.			

5.2.2 Test Procedures

a)The EUT and support equipment are positioned in the centre of loop antenna system (LAS). The LAS consists of three circular, mutually perpendicular large-loop antennas (LLAs), having a diameter of 2 m, supported by a non-metallic base. A 50 Ω coaxial cable between the current probe of an LLA and the coaxial switch, and between this switch and the measuring equipment, shall have surface transfer impedance smaller than 10 mΩ/m at 100 kHz and 1 mΩ/m at 10 MHz. The distance between the outer diameter of the loop antenna system and nearby objects, such as floor and walls, shall be at least 0.5 m as per CISPR 15/ EN 55015.

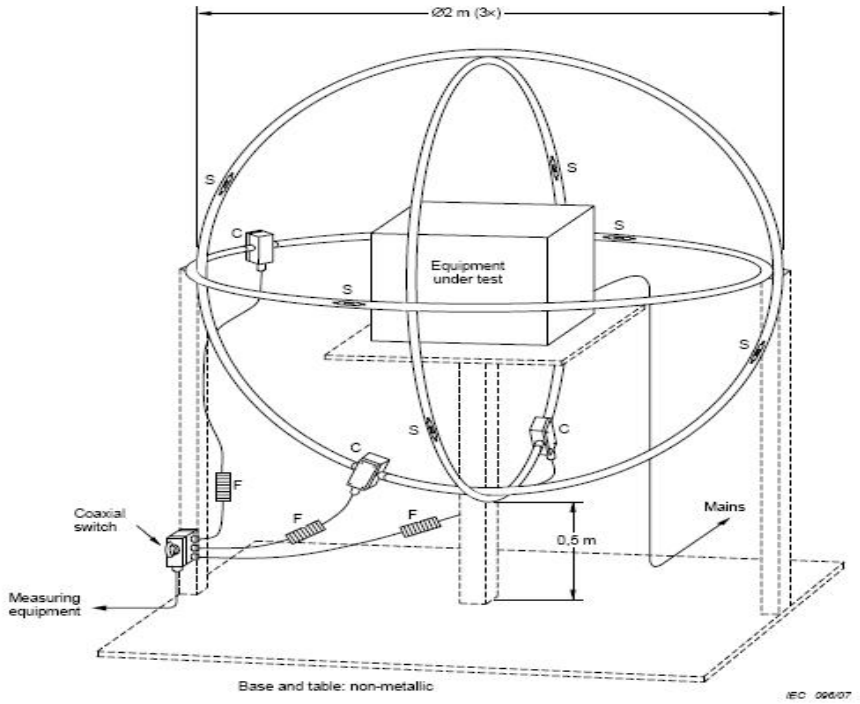
b)The induced current in the loop antenna is measured by means of a current probe (1 V/A) and the CISPR measuring receiver. By means of a coaxial switch, the three field directions (X, Y, Z) can be measured in sequence.

c)The receiver scanned from 9 kHz to 30 MHz for emissions in each of the test modes, and recorded at least the six highest emissions. Each value shall comply with the requirement given.

d)The test data of the worst-case condition(s) was recorded.

Note: Test Software Name: e3, Software Version: 1.0.0.0.

5.2.3 Test Setup



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.2.4 Test Result

Product name	LED Makeup Bag	Antenna Pole	X, Y, Z
Model	HZB01-P, HZB01-B	Antenna Diameter	2 m
Test Mode	Lighting	Detector Function	Peak
Environmental Conditions	24.2℃, 54.5% RH, 101.1 kPa	6 dB Bandwidth	200 Hz/9 kHz
Tested By	Kevin Yang	Test Result	Pass

5.3 RADIATED EMISSION MEASUREMENT

5.3.1 Limits

FREQUENCY (MHz)	Limit (dBμV/m) (At 3 m)	Limit (dBμV/m) (At 10 m)
30 ~ 230	40	30
230 ~ 1000	47	37

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

2) Emission level (dBμV/m) = 20 log Emission level (μV/m).

5.3.2 Test Procedures

a)The equipment was set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane. When the EUT is floor standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

b)The antenna was placed at 3 meter away from the EUT. The antenna connected to the spectrum analyzer via a cable and at times a pre-amplifier would be used.

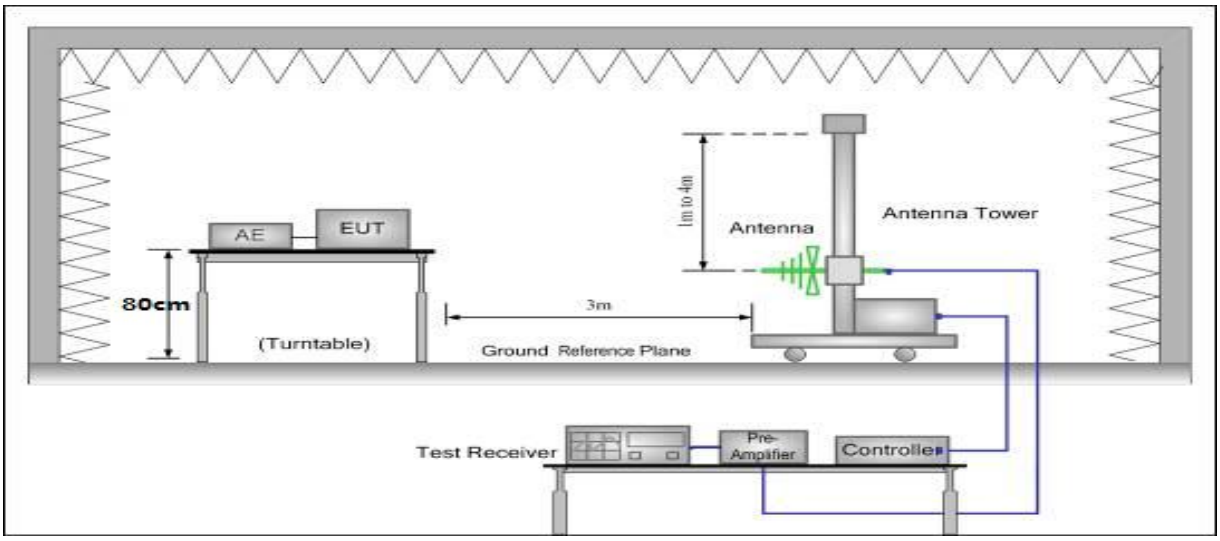
c)The analyzer / receiver quickly scanned from 30 MHz to 1000 MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

d)During the above scans, the emissions were maximized by cable manipulation. Each modes is measured, recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and only Q.P. reading is presented.

e)The test data of the worst-case condition(s) was recorded.

5.3.3 Test Setup

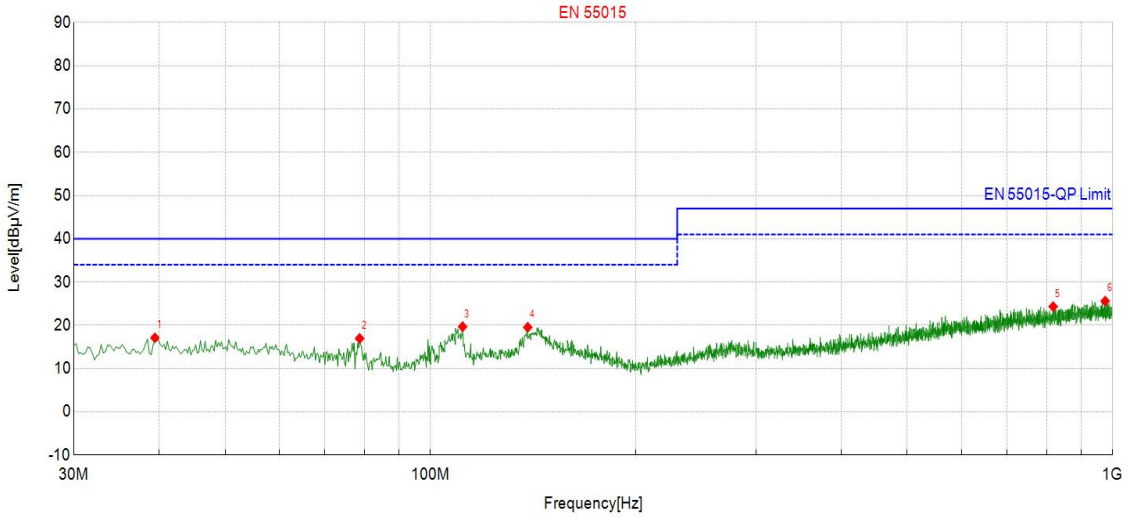
Radiated emission test-up frequency for 30MHz - 1GHz



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

5.3.4 Test Result

EUT:	LED Makeup Bag	Model Number:	HZB01-P,
Test voltage:	AC 230V/50Hz	Test mode:	Mode 1
Pressure:	101kPa	Polarization:	Horizontal
Temperature:	24℃	Relative Humidity:	53%

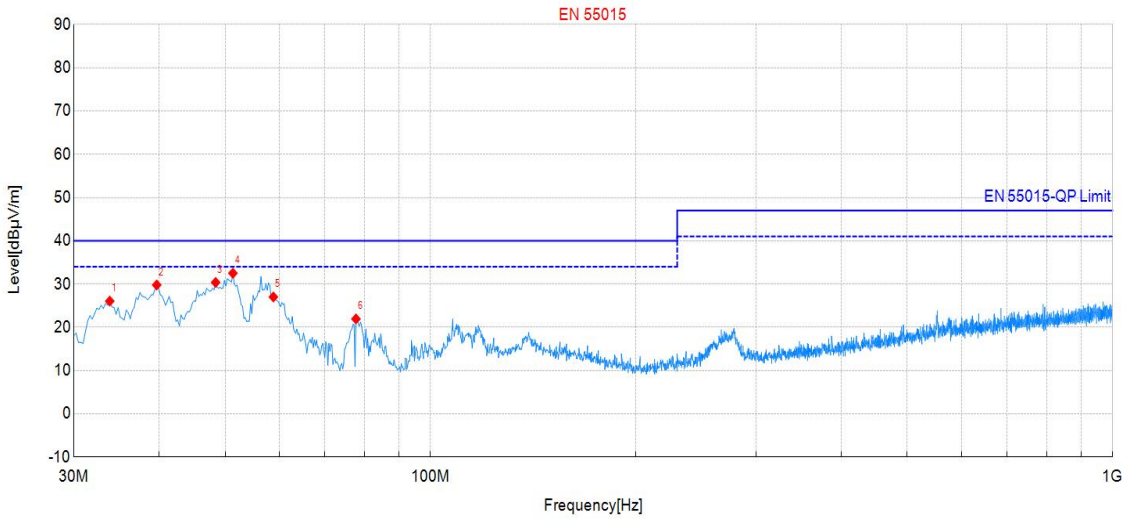


Suspected Data List

NO.	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	39.46	34.16	17.11	-17.05	40.00	22.89	100	170	QP	Hori	PASS
2	78.74	37.48	16.95	-20.53	40.00	23.05	100	290	QP	Hori	PASS
3	111.48	38.37	19.68	-18.69	40.00	20.32	100	60	QP	Hori	PASS
4	138.88	36.00	19.55	-16.45	40.00	20.45	100	330	QP	Hori	PASS
5	818.13	32.12	24.33	-7.79	47.00	22.67	100	230	QP	Hori	PASS
6	975.02	32.21	25.59	-6.62	47.00	21.41	100	210	QP	Hori	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

EUT:	LED Makeup Bag	Model Number:	HZB01-P
Test voltage:	AC 230V/50Hz	Test mode:	Mode 1
Pressure:	101kPa	Polarization:	Vertical
Temperature:	24℃	Relative Humidity:	53%



Suspected Data List

NO.	Frequency [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Det	Pol	Verdict
1	33.88	43.62	26.06	-17.56	40.00	13.94	100	340	QP	Vert	PASS
2	39.70	46.82	29.79	-17.03	40.00	10.21	100	150	QP	Vert	PASS
3	48.43	47.57	30.38	-17.19	40.00	9.62	100	160	QP	Vert	PASS
4	51.34	49.84	32.51	-17.33	40.00	7.49	100	40	QP	Vert	PASS
5	58.86	44.97	27.02	-17.95	40.00	12.98	100	360	QP	Vert	PASS
6	77.77	42.36	21.94	-20.42	40.00	18.06	100	290	QP	Vert	PASS

Note:(1)Level=Reading+Factor
(2)Margin=Limit-Level

5.4 Harmonic current emission

5.4.1 Limit

(c) Limits for Class C equipment

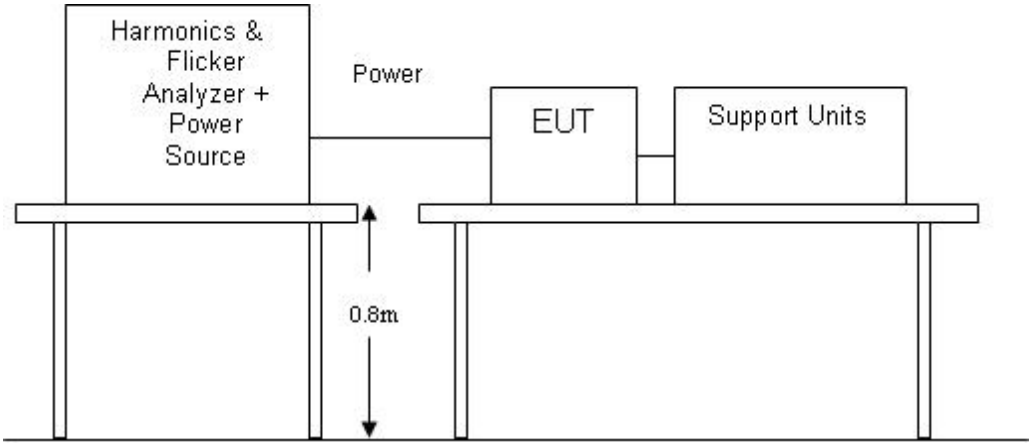
Harmonics Order n	Maximum permissible harmonic current expressed as a percentage of the input current at the fundamental frequency %
2	2
3	30 . λ*
5	10
7	7
9	5
11<n<39 (odd harmonics only)	3
* λ is the circuit power factor	

5.4.2 Test Procedures

The EUT was installed and placed on a non-conductive table 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 / voltage fluctuations & flicker emanated from EUT. The measure time shall be not less than the time necessary for the EUT to be exercised.

5.4.3 Test Setup



5.4.4 Test Result

Harmonic current emission:

N/A

5.5 VOLTAGE FLUCTUATION AND FLICKS MEASUREMENT

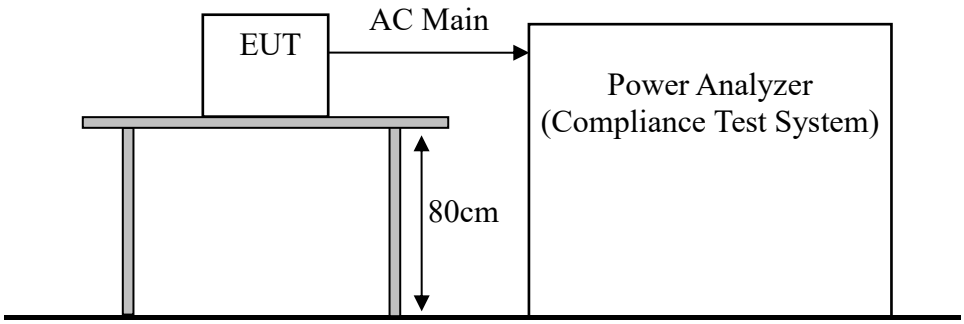
Test Item	Limit	Note
Pst	1.0	Pst means Short-term flicker indicator
Plt	0.65	Plt means long-term flicker indicator
Tdt	0.2	Tdt means maximum time that dt exceeds 3%
dmax(%)	4%	dmax means maximum relative voltage change.
dc(%)	3%	dc means relative steady-state voltage change.

5.5.1 Test Procedures

a)The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the most unfavorable sequence of voltage changes under lighting operating conditions.

b)During the flick measurement, the measure time shall include that part of whole operation cycle in which the EUT produce the most unfavorable sequence of voltage changes. The observation period for short-term flicker indicator is 10 minutes and the observation period for long-term flicker indicator is 2 hours.

5.5.2 Test Setup



5.5.3 Test Result

VOLTAGE FLUCTUATION AND FLICKS MEASUREMENT

N/A

6 Immunity test

6.1 Performance criteria

A functional description of performance criteria, during or as a consequence of the immunity testing, shall be provided by the manufacturer and noted in the test report

The performance of lighting equipment shall be assessed by monitoring:

– the luminous intensity of the luminaire or of the lamp(s);

– the functioning of the control in the case of equipment which includes a regulating control

or concerns the regulating control itself;

– the functioning of the starting device, if any.

Performance criteria	
Performance criterion	Description
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.
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.
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.
A change of luminous intensity may be checked by visual observation but, in case of doubt, the following applies. The luminous intensity of a luminaire or of the lamp(s) shall be measured by means of a illuminance (lux) meter which is positioned in an axis perpendicular to the main plane of the luminaire or lamp(s), in its centre and at a distance for proper operation of the lux meter. The luminous intensity shall be deemed to be unchanged if the measured intensities do not deviate by more than 15 %. Care shall be taken to ensure the ambient light level does not influence the measurement results. Precautions to achieve reproducible results given in the relevant lamp performance standards shall be observed.	

6.2 Electrostatic discharge (ESD)

6.2.1.Test Procedures

a)The test generator necessary to perform direct and indirect application of discharges to the EUT in the following manner:

Contact discharge was applied to conductive surfaces and coupling planes of the EUT. During the test, it was performed with single discharges. For the single discharge time between successive single discharges was at least 1 second.

b)Vertical Coupling Plane (VCP):

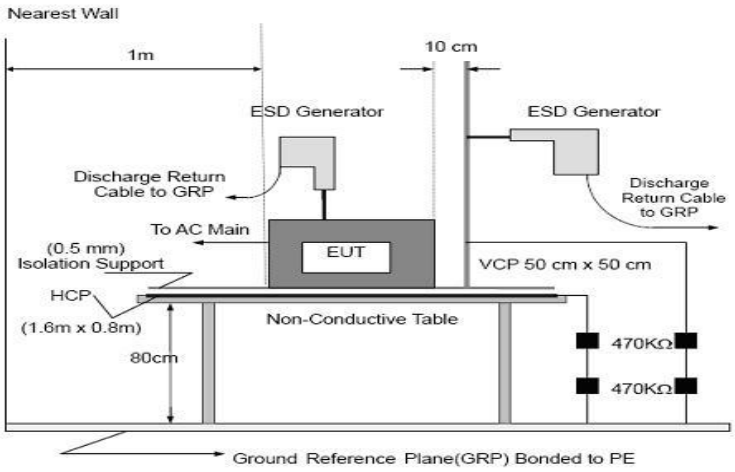
The coupling plane, of dimensions 0.5m x 0.5m, is placed parallel to, and positioned at a distance 0.1m from, the EUT, with the Discharge Electrode touching the coupling plane. The four faces of the EUT will be performed with electrostatic discharge.

c)Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1m from the EUT, with the Discharge Electrode touching the coupling plane. The four faces of the EUT will be performed with electrostatic discharge.

Air discharges at insulation surfaces of the EUT. It was at least ten single discharges with positive and negative at the same selected point. For the actual test configuration, please refer to the related Item –EUT Test Photos.

6.2.2.Test Setup



6.2.3. Immunity requirements

Environmental phenomenon	Test specification		Performance criteria
ESD	Contact discharge	±4KV	B
	Air discharge	±8KV	B

6.2.4.Test Result

EUT:	LED Makeup Bag	Model Name:	HZB01-P, HZB01-B
Temperature:	24℃	Relative Humidity:	52%
Pressure:	101kPa	Test mode:	All mode

No.	Test Point	Contact discharge level (kV)	Number and polarity	Criterion met	Criterion Required	Result
1	VCP-Front side	☐..2 ☒..4 ☐..6 ☐..8	10 (+)	A	B	Compliance
			10 (-)	A		
2	VCP-Rear side	☐..2 ☒..4 ☐..6 ☐..8	10 (+)	A		
			10 (-)	A		
3	VCP-Left side	☐..2 ☒..4 ☐..6 ☐..8	10 (+)	A		
			10 (-)	A		
4	VCP-Right side	☐..2 ☒..4 ☐..6 ☐..8	10 (+)	A		
			10 (-)	A		
5	HCP	☐..2 ☒..4 ☐..6 ☐..8	10 (+)	A		
			10 (-)	A		

No.	Test Point	Contact discharge level (kV)	Air discharge level (kV)	Number and polarity	Criterion met	Criterion Required	Result
1	Each nonconductive location touchable	☐..2 ☐..4 ☐..6 ☐..8	☐..2 ☐..4 ☐..6 ☒..8	10 (+)	A	B	Compliance
				10 (-)	A		
2	Each conductive location touchable	☐..2 ☒..4 ☐..6 ☐..8	☐..2 ☐..4 ☐..6 ☐..8	10 (+)	A		
				10 (-)	A		
Note1: Please see the photographs blew about the details of test points.							

6.3 RADIATED, RADIO-FREQUENCY, ELECTROMAGNETIC FIELD (RS)

6.3.1.Test Procedures

a)The EUT and support equipment, which are placed on a table that is 0.8 meter above ground and the testing was performed in a fully-an echoic chamber.

b)The testing distance from antenna to the EUT was 3 meters.

c)The other condition as following manner:

i. The field strength level was 3V/m.

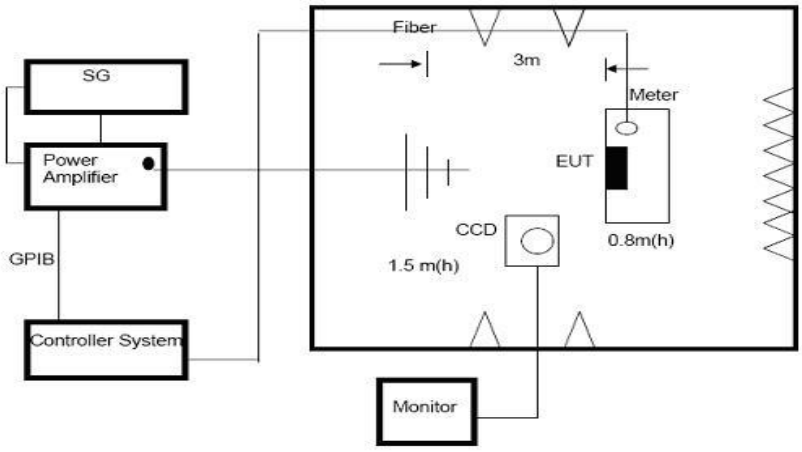
ii. The frequency range is swept from 80 MHz to 1000 MHz with the signal 80%amplitude modulated with a 1kHz sine wave. The rate of sweep did not exceed 1.5x 10-3 decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.

d)The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.

e)The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

f) For the actual test configuration, please refer to the related Item –EUT Test Photos.

6.3.2.Test setup



6.3.3. Immunity requirements

Environmental phenomenon	Test specification		Performance criteria
Continuous RF Electromagnetic field disturbance	80-1000MHz	3V/m	A

6.3.4.Test Result

EUT:	LED Makeup Bag	Model Name:	HZB01-P, HZB01-B
Temperature:	24℃	Relative Humidity:	52%
Pressure:	101kPa	Test mode:	All mode

Frequency Range (MHz)	RF Field Position	R.F. Field Strength	Azimuth	Perform. Criteria	Measurement	Result
80- 1000	H / V	3 V/m (rms) AM Modulated 1000Hz, 80%	Front	A	A	Compliance
			Rear			
			Left			
			Right			

6.4 Conducted disturbances (CS)

6.4.1.Test Procedures

a)The EUT are placed on an insulating support 0.1m high above a ground reference plane. CDN (coupling and decoupling device) is placed on the ground plane about 0.3m from EUT. Cables between CDN and EUT are as short as possible, and their height above the ground reference plane shall be between 30 and 50 mm (where possible).

b)The disturbance signal described below is injected to EUT through CDN.

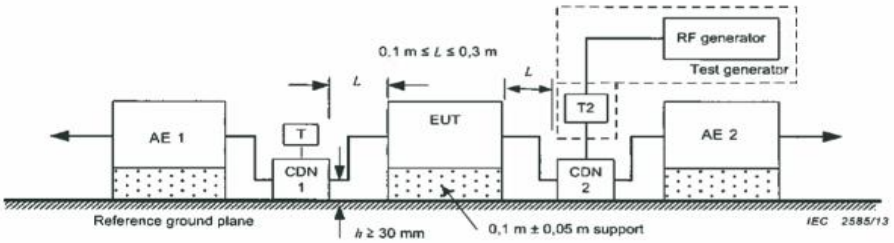
c)The EUT operates within its operational mode(s) under intended climatic conditions after power on.

d)The frequency range is swept from 0.150MHz to 80MHz using 3V signal level, and with the disturbance signal 80% amplitude modulated with a 1 kHz sine wave.

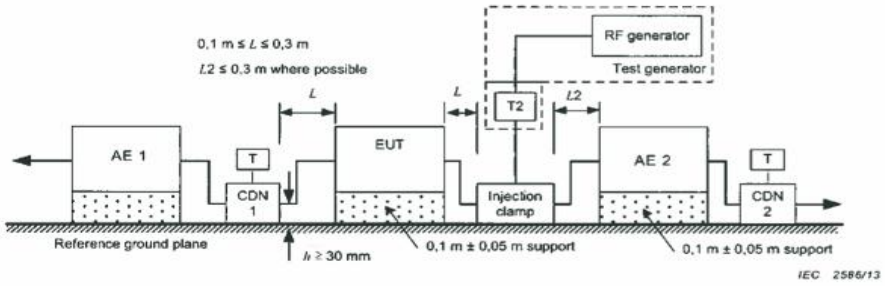
e)The rate of sweep shall not exceed 1.5*10-3decades/s. Where the frequency is swept incrementally; the step size shall not exceed 1% of the start and thereafter 1% of the preceding frequency value.

f) Recording the EUT operating situation during compliance testing and decide the EUT immunity criterion.

6.4.2.Test Setup



Schematic setup for immunity test used for CDN



Schematic setup for immunity test used for injection clamp

T	Termination 50 Ω
T2	Power attenuator (6 dB)
CDN	Coupling and decoupling network
Injection clamp:	Current clamp or EM clamp

6.4.3. Immunity requirements

Environmental phenomenon	Test specification		Performance criteria
Continuous induced RF disturbances (CS)	0.15 to 10MHz	3V	A
	10 to 30MHz	3V to 1V	
	30 to 80MHz	1V	
For analogue/digital data ports and DC network power ports: Applicable only to ports which according to the manufacturer's specification support cable lengths greater than 3 m			

6.4.4.Test Result

N/A

6.5 Electrical fast transients/burst (EFT/S)

6.6.1.Test Procedures

a)The EUT and its simulators were placed on the ground reference plane and were insulated from it by a wood support 0.1m + 0.01m thick. The ground reference plane was 1m*1m metallic sheet with 0.65mm minimum thickness. This reference ground plane was project beyond the EUT by at least 0.1m on all sides and the minimum distance between EUT and all other conductive structure, except the ground plane was more than 0.5m. All cables to the EUT was placed on the wood support, cables not subject to EFT/B was routed as far as possible from the cable under test to minimize the coupling between the cables.

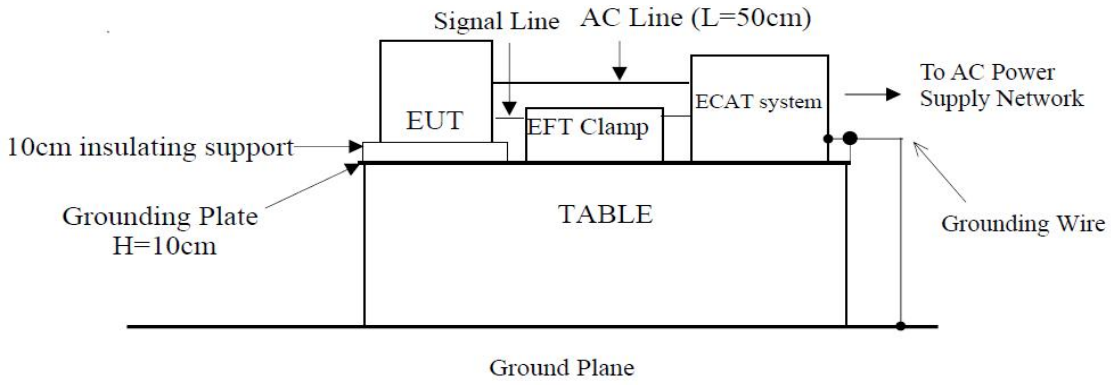
b)For input and AC power ports:

The EUT was connected to the power mains by using a coupling device that couples the EFT interference signal to AC power lines. Both positive transients and negative transients of test voltage were applied during compliance test and the duration of the test can't less than 1min.

c)For signal lines and control lines ports:

Ports which are intended to be connected to telecommunication networks (e.g. public switched telecommunication networks, integrated services digital networks, local area networks and similar networks.)

6.6.2.Test Setup



6.6.3. Immunity requirements

Port type	Test specification		Performance criteria
AC power ports	Tr/Th:5/50ns Repetition Frequency : 5 kHz	±1KV	B
Analogue/digital data ports	Tr/Th:5/50ns Repetition Frequency : 5 kHz	±0.5KV	B
DC network power ports	Tr/Th:5/50ns Repetition Frequency : 5 kHz	±0.5KV	B
For analogue/digital data ports and DC network power ports: Applicable only to ports which according to the manufacturer's specification support cable lengths greater than 3 m For CPE xDSL ports repetition frequency is100 kHz.			

6.6.4.Test Result

N/A

6.6 Surges

6.7.1.Test Procedures

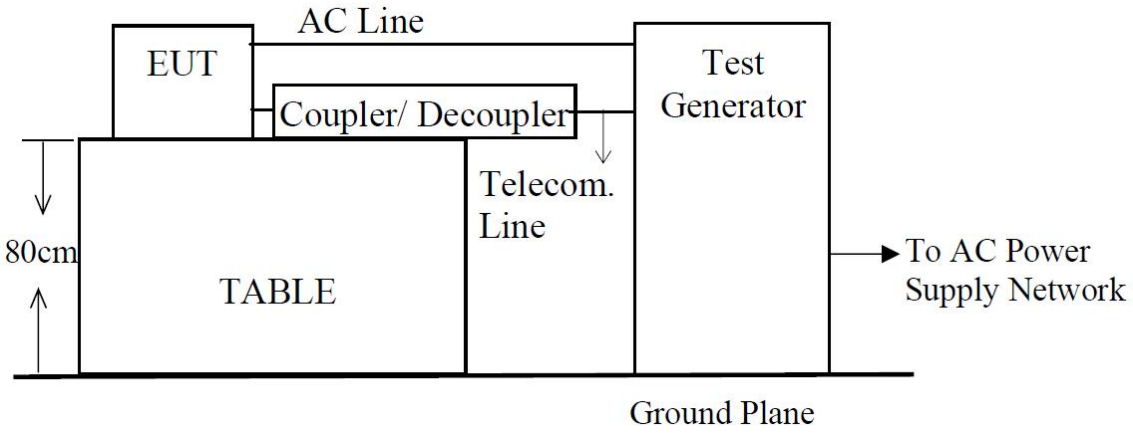
a)For line-to-line coupling mode, provide a 1kV 1.2/50us voltage surge (at open-circuit condition) and 8/20us current surge to EUT selected points, and for active line / neutral lines to ground are same except test level is 2kV.

b)At least 5 positive and 5 negative (polarity) tests with a maximum 1/min repetition rate are applied during test.

c)Different phase angles are done individually.

d)Record the EUT operating situation during compliance test and decide the EUT immunity criterion for above each test.

6.7.2.Test Setup



6.7.3. Immunity requirements

Port type	Test specification		Performance criteria
AC power ports	between line and line Tr/Th:1.2/50(8/20)us	±0.5KV（≤25W）	B
		±1KV（≥25W）	
	between line and earth Tr/Th:1.2/50(8/20)us	±1KV（≤25W）	
		±2KV（≥25W）	
Analogue/digital data ports	unshielded symmetrical Apply lines to ground		C
	Apply where primary protection is intended Tr/Th:10/700(5/320)us	±1&±4KV	
	Apply where primary protection is not intended Tr/Th: 10/700(5/320)us	±1KV	
	coaxial or shielded		B
	Apply: shield to ground Tr/Th:1.2/50(8/20)us	±0.5KV	
DC network power ports	Tr/Th:1.2/50(8/20)us	±0.5KV	B
For analogue/digital data ports and DC network power ports: Applicable only to ports which according to the manufacturer's specification support cable lengths greater than 3 m.			

6.7.4.Test Result

N/A

6.7 Voltage dips and interruptions

6.8.1.Test procedures

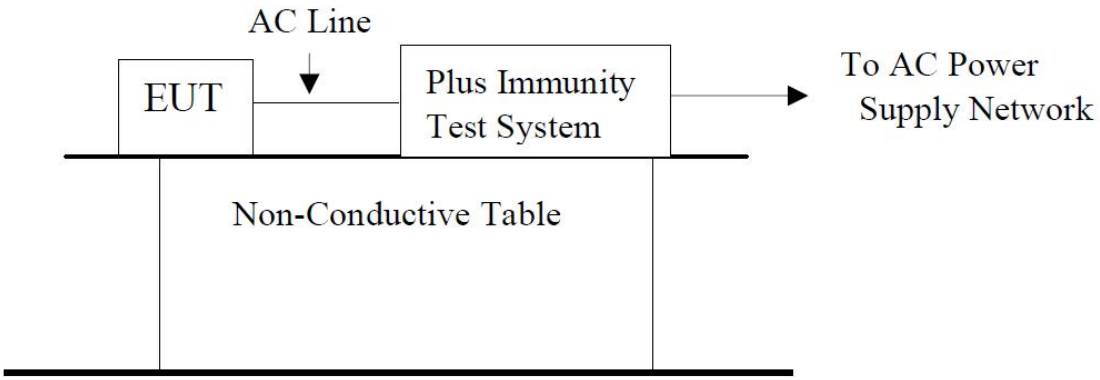
a)The EUT and support units were located on a wooden table, 0.8 m away from ground floor.

b)Setting the parameter of tests and then perform the test software of test simulator.

c)Changes to the voltage level shall occur at 0 degree crossing point in the a.c. voltage waveform.

d)Record the test result in test record form.

6.8.2.Test setup



6.8.3. Immunity requirements

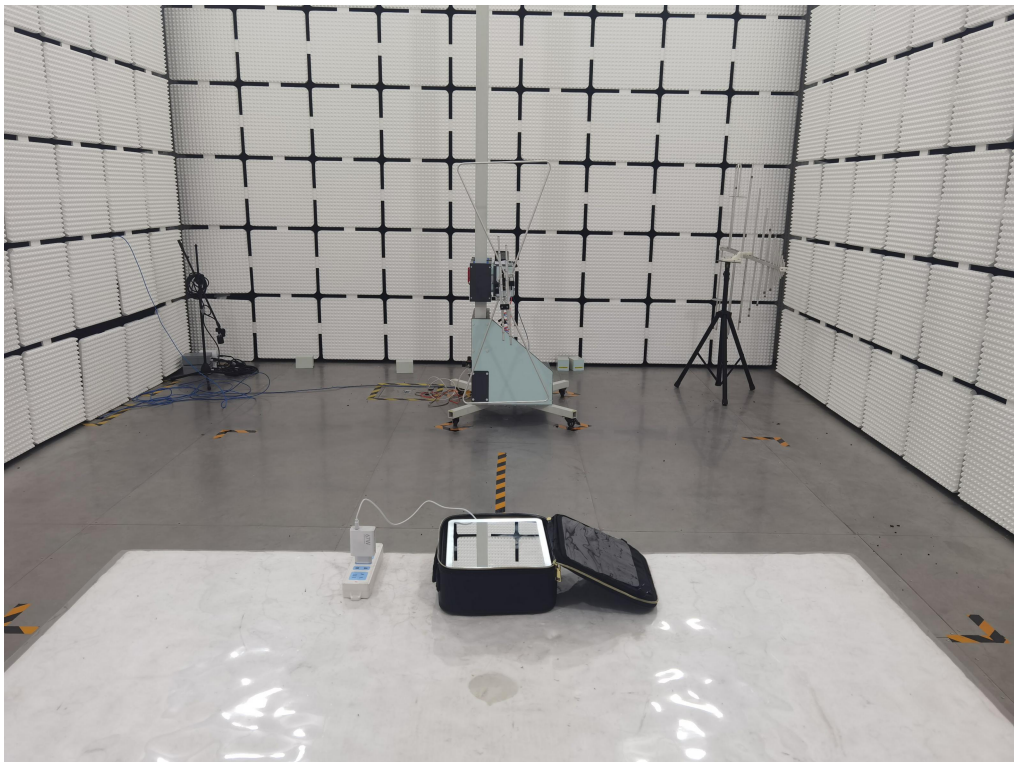
Environmental phenomenon	Residual voltage	Number of cycles	Performance criteria
Voltage dips	＜0%	0.5	B
	70%	10	C
Voltage interruptions	/	/	/
Apply at only one supply frequency of the MME.			

6.8.4.Test result

N/A

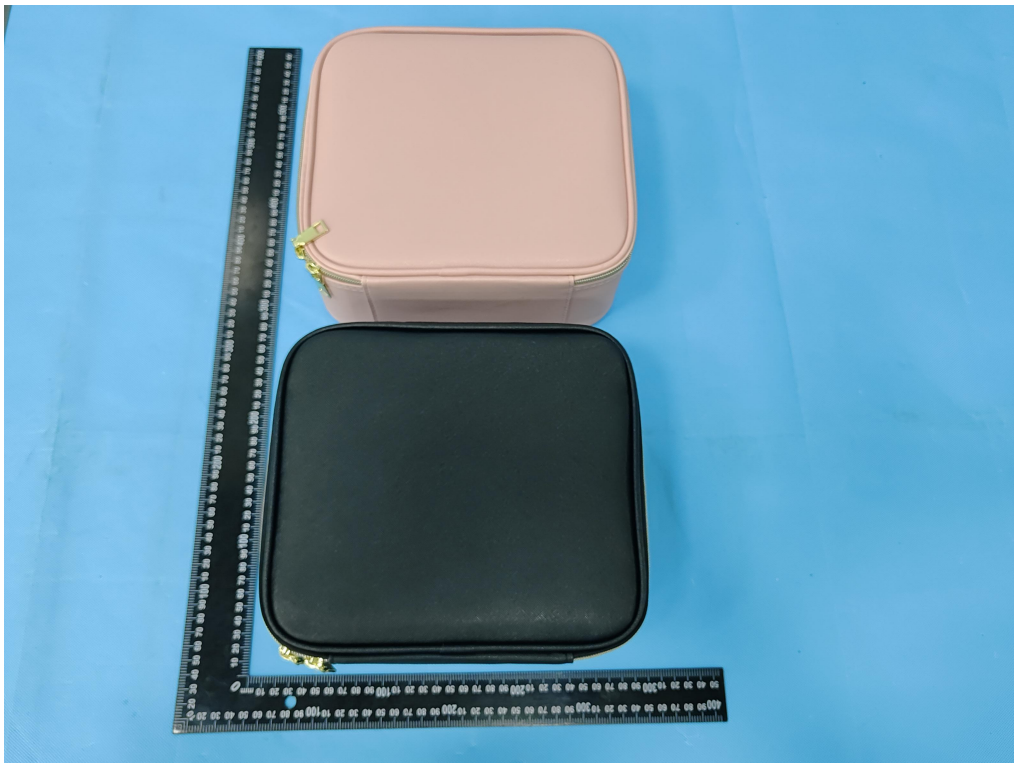
Test photographs of the EUT

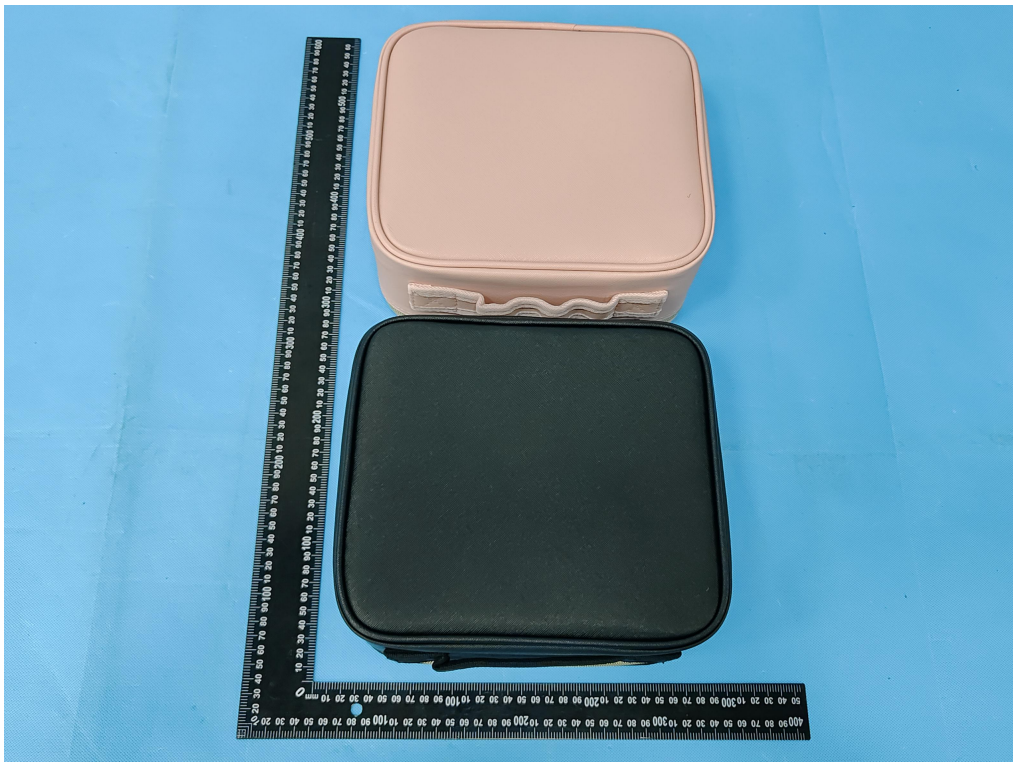
Conducted emission test

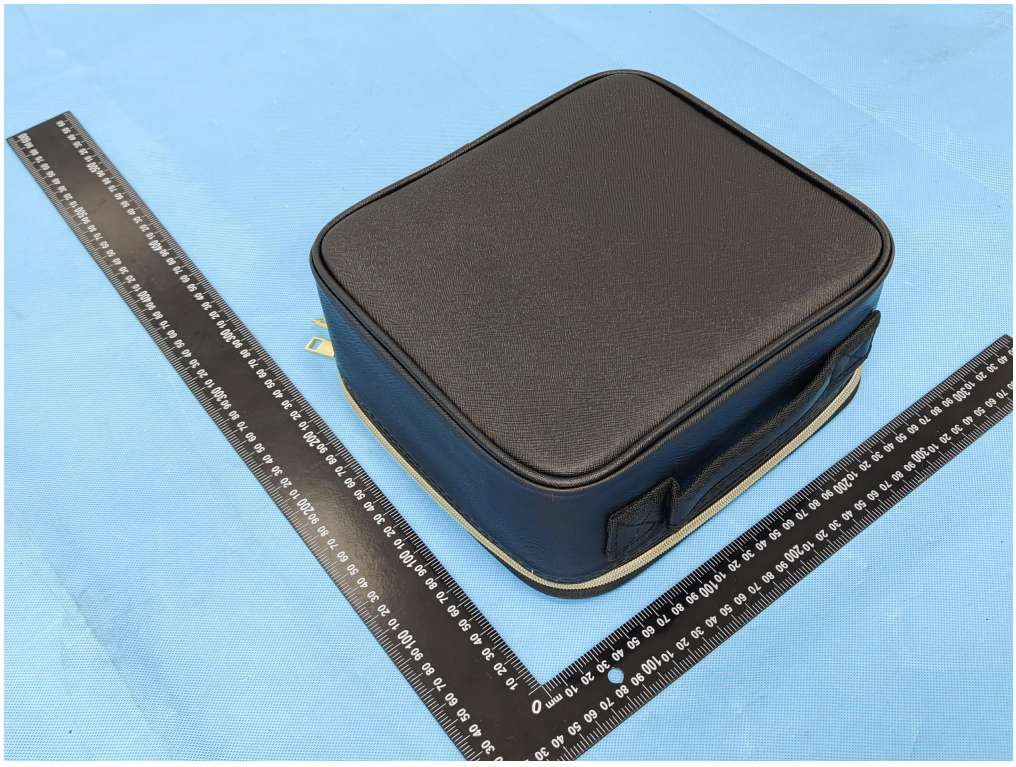
Radiated emission test


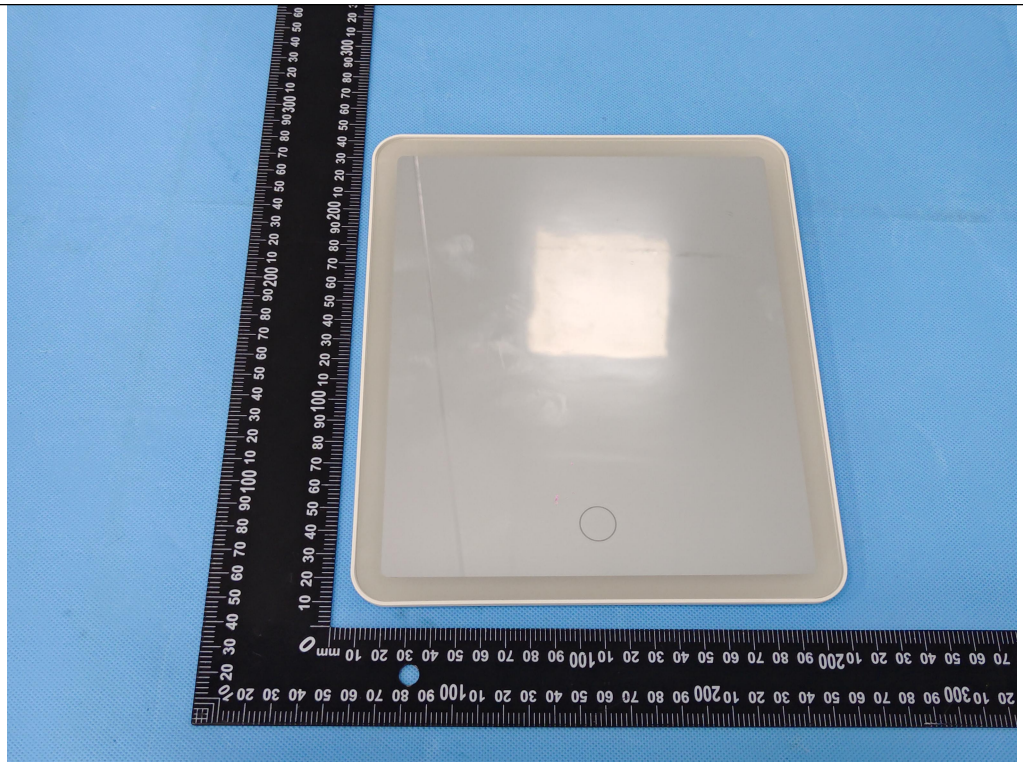
ESD test

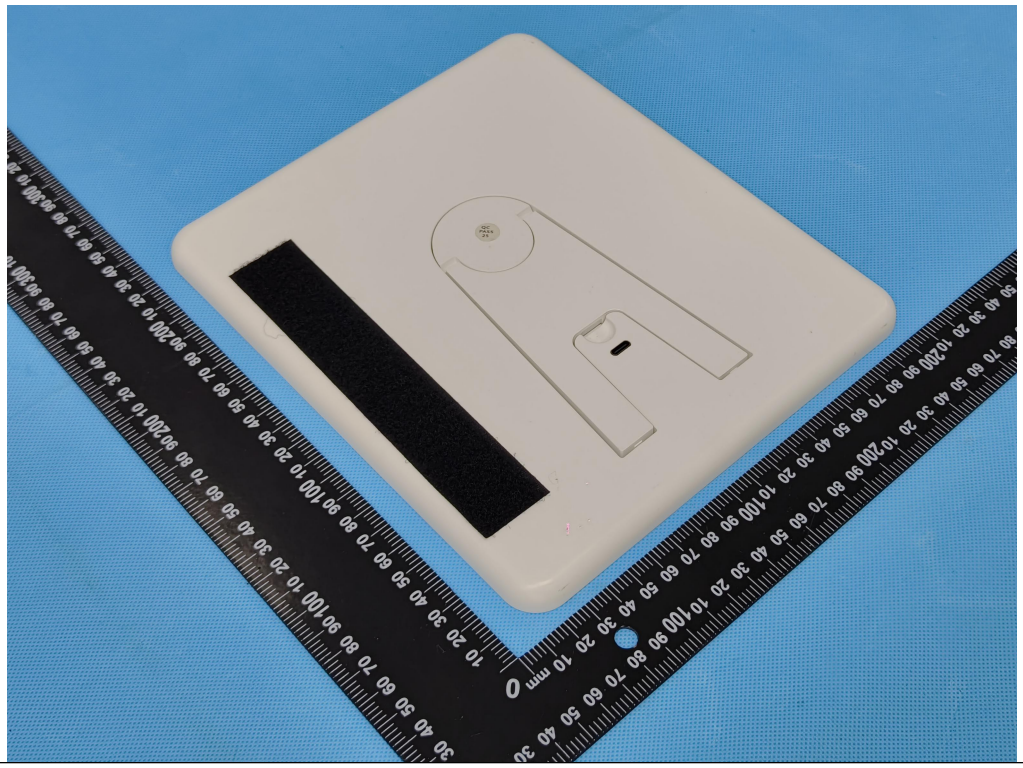

Photographs of the EUT

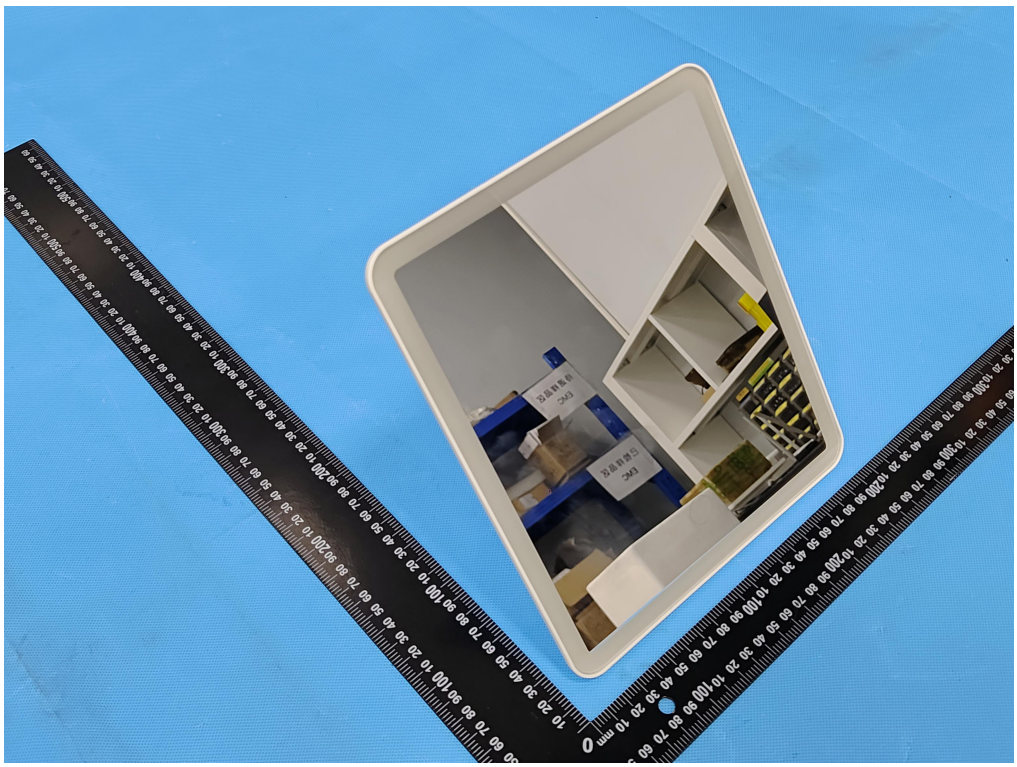


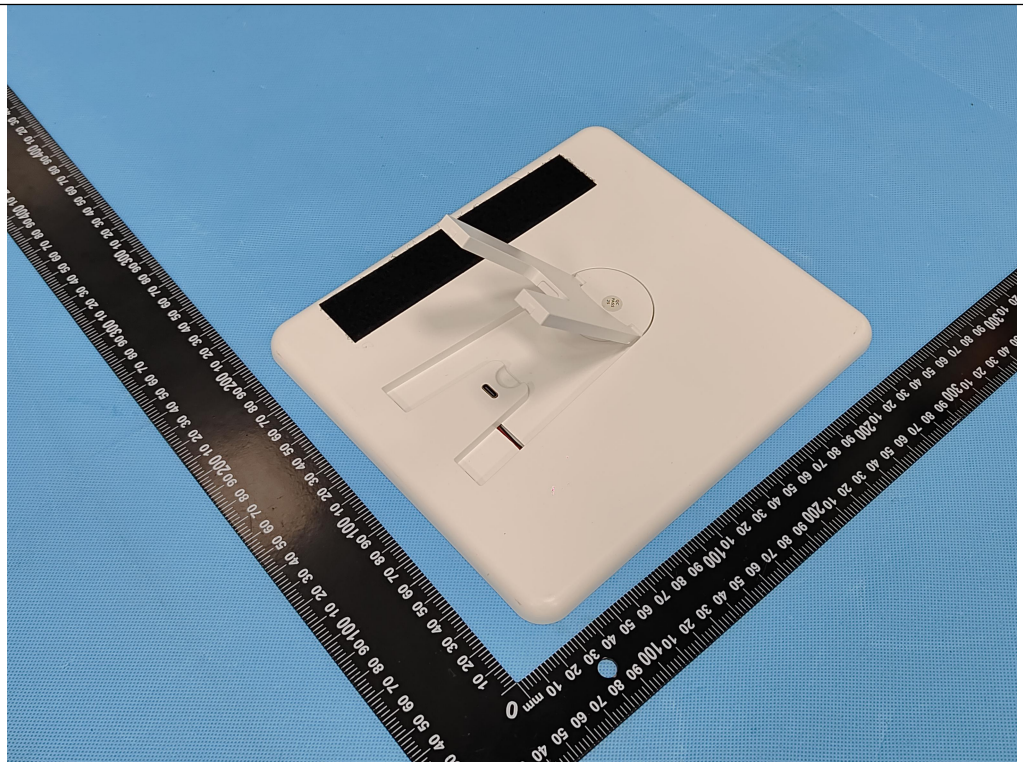


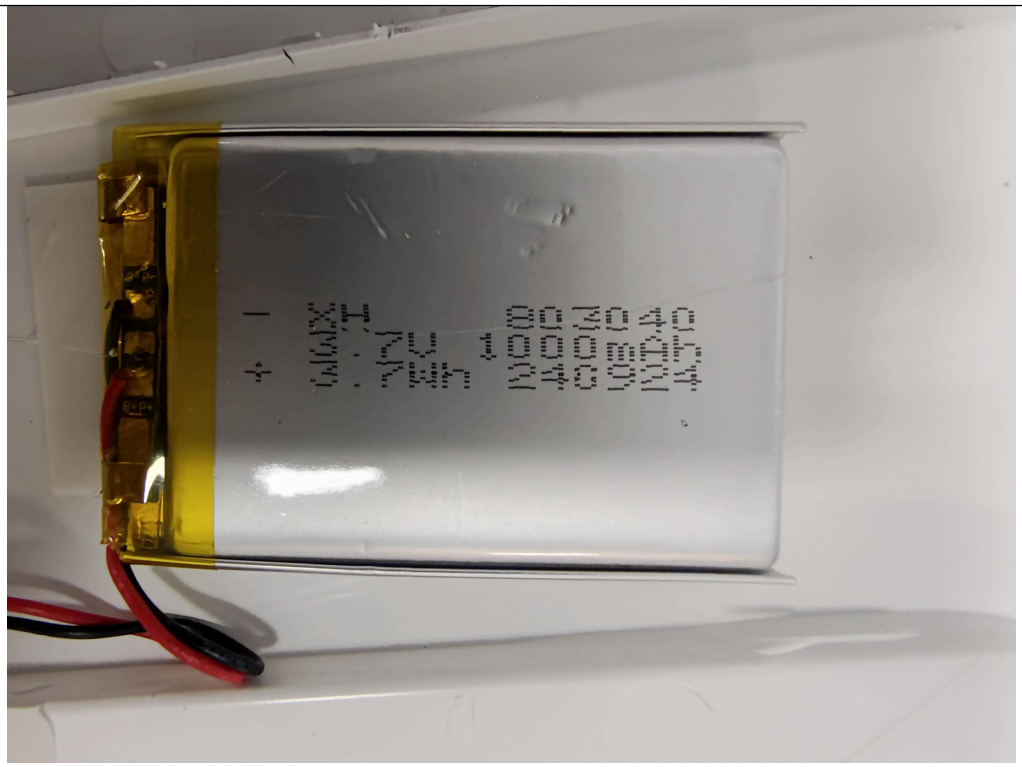


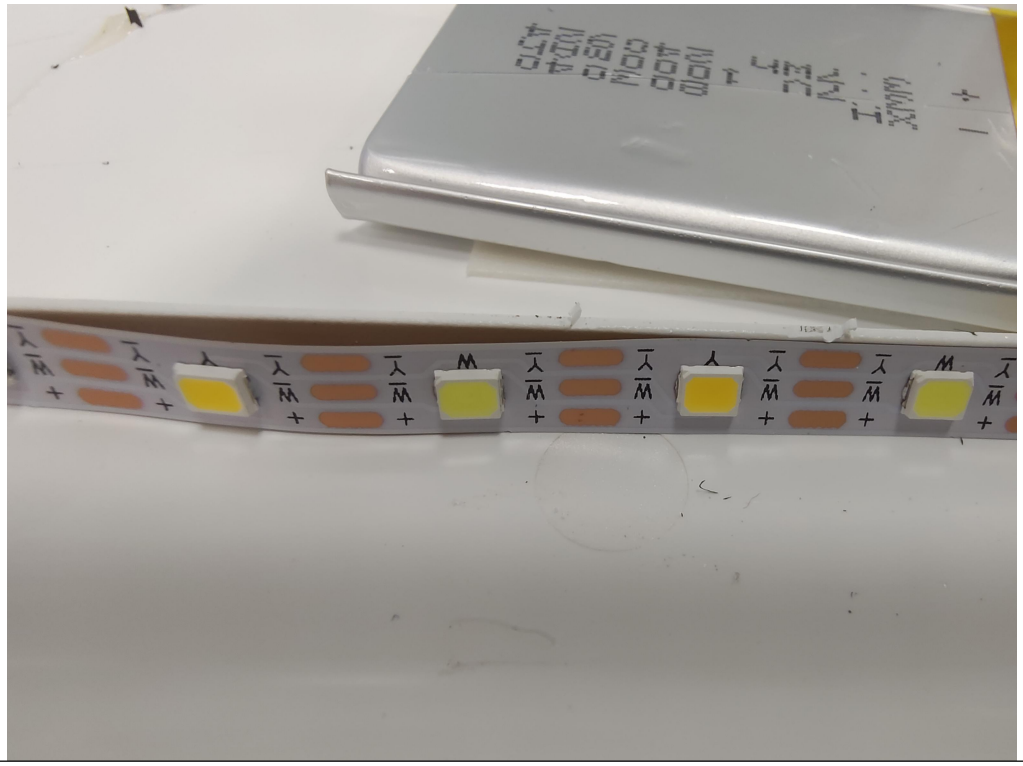


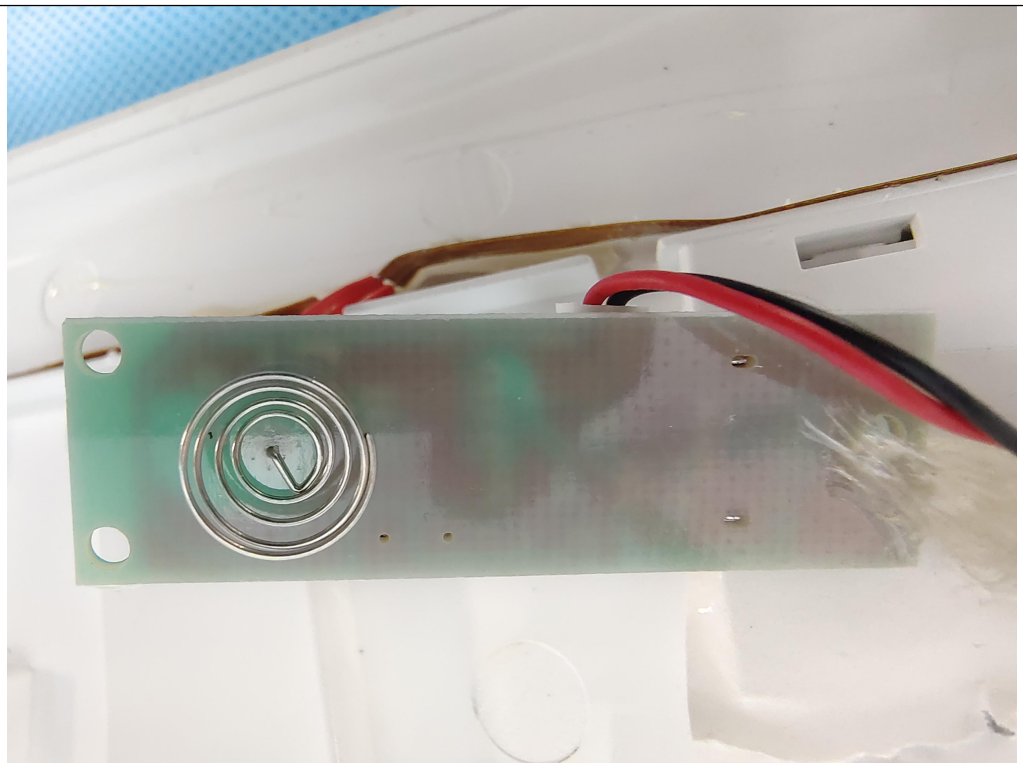


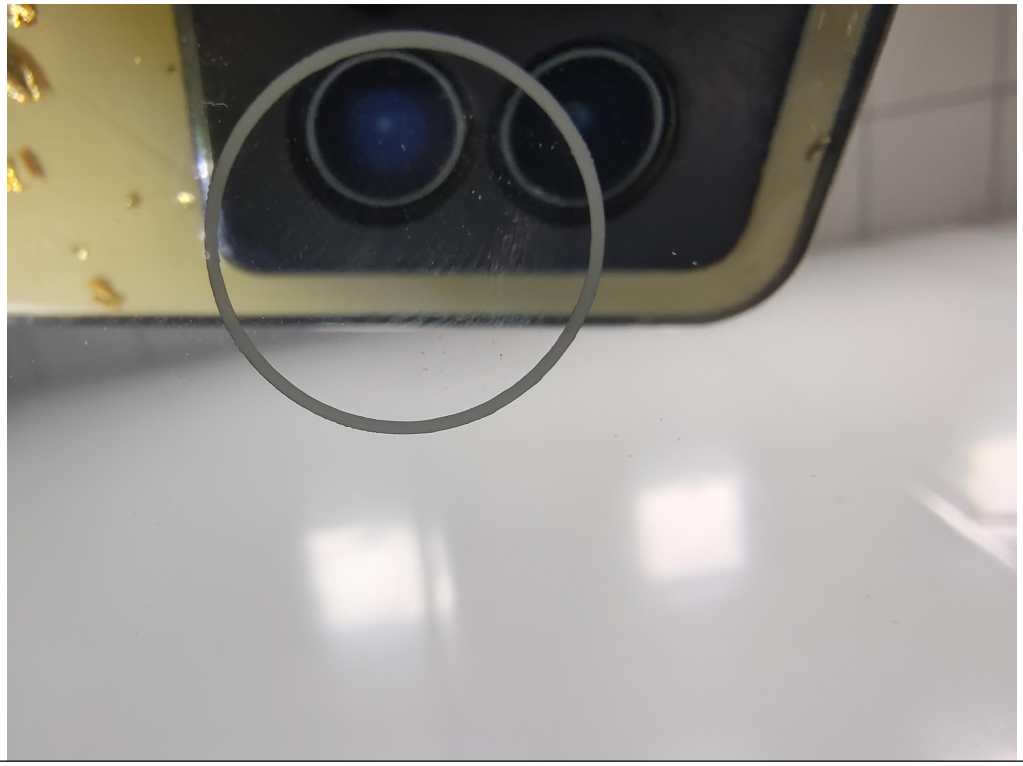


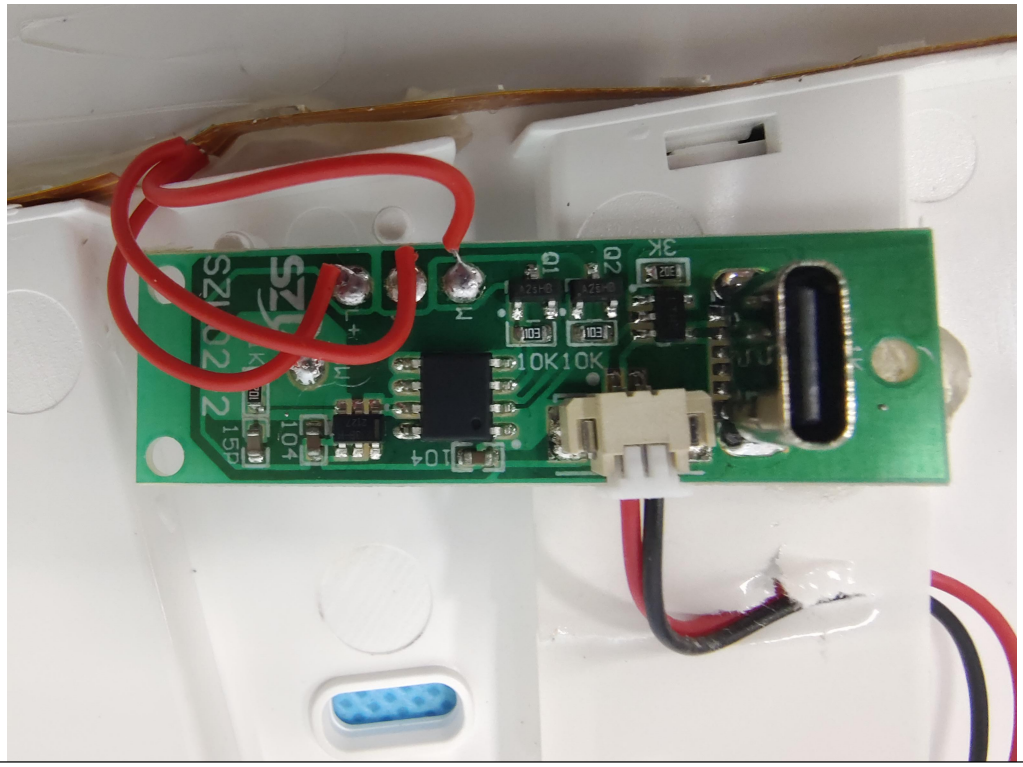



XH 803040
3.7V 1000mAh
3.7Wh 240924









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