

CE EMC Test Report

(Declaration of Conformity)
For
Electromagnetic compatibility
Of

Product Name : desk lamp
Trade Mark : N/A
Model Number(s) : 2025218

Prepared for

Zhongshanshiyizhizhaoming Co., Ltd.
No. 45 Xinxing Avenue East, Guzhen Town, Zhongshan City, Ground Floor 3

Prepared by

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TEST RESULT CERTIFICATION

Applicant's Name : Zhongshanshiyizhizhaoming Co., Ltd.
Address..... : No. 45 Xinxing Avenue East, Guzhen Town, Zhongshan City,
 Ground Floor 3
Manufacturer's Name..... : Zhongshanshiyizhizhaoming Co., Ltd.
Address..... : No. 45 Xinxing Avenue East, Guzhen Town, Zhongshan City,
 Ground Floor 3
Product description
Product Name : desk lamp
Model Number(s) : 2025218
Standards..... : EN IEC 55015:2019+A11:2020
 EN IEC 61547:2023

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Test Sample Number..... : S2605150108-1#
Date of Test :
Date (s) of performance of tests..... : 19 May 2026 ~ 10 Jun. 2026
Date of Issue : 10 Jun. 2026
Test Result : **Pass**

Testing Engineer

:

Estelle Chen

(Estelle Chen)

Technical Manager

:

Sky Zhang

(Sky Zhang)

Authorized Signatory

:

Alex

(Alex)

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1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
EN IEC 55015:2019+A11:2020	Conducted Emission	-----	PASS	
	Radiated Emission	-----	PASS	
EMC Immunity				
Section EN IEC 61547:2023	Test Item	Performance Criteria	Judgment	Remark
EN IEC 61000-4-2	Electrostatic discharge	B	PASS	
EN IEC 61000-4-3	Radiated, radio-frequency, electromagnetic field	A	PASS	
EN 61000-4-4	Electrical fast transient/burst	-----	N/A	
EN 61000-4-5	Surge	-----	N/A	
EN IEC 61000-4-6	Conducted disturbances, induced by radio-frequency fields	-----	N/A	
EN 61000-4-8	Power frequency magnetic field	-----	N/A	Note (2)
EN IEC 61000-4-11	Voltage dips, short interruptions and voltage variations	-----	N/A	

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report
- (2) Applicable only to equipment containing devices intrinsically susceptible to magnetic fields, such as CRT monitors, Hall effect elements, electro-dynamic microphones, magnetic field sensors or audio frequency transformers.

1.1 TEST FACILITY

Shenzhen NTEK Testing Technology Co., Ltd.

Add. : Building 1/2/11/12, No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China

CNAS-Lab. : The Laboratory has been assessed and proved to be in compliance with CNAS-CL01:2018 (identical to ISO/IEC 17025:2017)
The Certificate Registration Number is L5516

ISED-Registration : The Company Number: 9270A.
CAB identifier: CN0074.

FCC- Accredited : Test Firm Registration Number: 463705
Designation Number: CN1184

A2LA-Lab. : The Certificate Registration Number is 4298.01
This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

Test Item	Measurement Frequency Range	K	U(dB)
Conducted Emission	0.009MHz ~ 0.15MHz	2	3.7
Radiated Emission(#1)	30MHz ~ 1000MHz	2	4.9
Radiated Emission(#2)	30MHz ~ 1000MHz	2	5.0

[illegible]

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name	desk lamp	
Model Number(s)	2025218	
Additional Model Number(s)	N/A	
Model Difference	The EUT has different appearance. Full tests performed on model 2025218	
Product Description	The EUT is a desk lamp.	
	Operating frequency:	Below 108 MHz (Declaration by Manufacturer)
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as a LED Lighting Device. More details of EUT technical specification, please refer to the User's Manual.		
Power Source	DC Voltage	
Power Rating	DC 5V powered by USB port	

2.2 ENVIRONMENTAL CONDITIONS

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

Temperature(°C):	23.6 ~ 26.9
Humidity(%RH):	52.0 ~ 59.1
Atmospheric pressure(kPa):	101

2.3 DESCRIPTION OF TEST MODES

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.

Pretest Mode	Description
Mode 1	Lighting

For Conducted Test

Final Test Mode	Description
Mode 1	Lighting

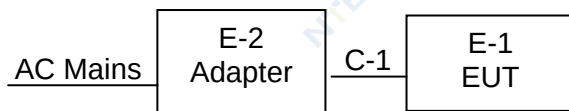
For Radiated Test

Final Test Mode	Description
Mode 1	Lighting

For EMS Test

Final Test Mode	Description
Mode 1	Lighting

2.4 DESCRIPTION OF TEST SETUP



2.5 DESCRIPTION TEST PERIPHERAL AND EUT PERIPHERAL

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Trade Mark	Model/Type No.	Series No.	Note
E-1	desk lamp	N/A	2025218	N/A	EUT
E-2	Adapter	N/A	KSA29B0500200D5	N/A	AE

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	130cm	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) "YES" means "shielded" "with core"; "NO" means "unshielded" "without core".

2.6 MEASUREMENT INSTRUMENTS LIST

2.6.1 CONDUCTED TEST

Item	Name of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Low Frequency Cable	/	R-03	/	2027/4/24
2	50Ω Coaxial Switch	Anritsu	MP59B	6200983704	2027/4/25
3	Single Phase LISN	R&S	ENV216	101313	2027/4/7
4	Single Phase LISN	R&S	ENV216	101490	2027/4/7
5	Single Phase LISN	R&S	ENV216	102849	2027/4/7
6	Single Phase LISN	R&S	ENV216	102827	2027/4/7
7	Three-Phase LISN	SCHWARZBECK	NNLK 8129	8129245	2027/4/7
8	EMI Test Receiver	R&S	ESCI	101160	2027/4/7
9	EMI Test Receiver	R&S	ESR7	102679	2027/4/7
10	EMI Test Receiver	R&S	ESPI3	100145	2027/4/7
11	EMI Test Receiver	R&S	ESPI3	101417	2026/7/22
12	DC-AMN LISN	SCHWARZBECK	PVDC 8301	8301-00117	2027/4/7

2.6.2 RADIATED TEST

Item	Name of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	3M Semi Anechoic Chamber	/	9*6*6	LES-318-C	2027/6/6
2	3M Semi Anechoic Chamber	/	9*6*6	LES-411-C	2027/6/17
3	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2027/4/25
4	EMI Test Receiver	R&S	ESCI	101160	2027/4/7
5	EMI Test Receiver	R&S	ESR7	102679	2027/4/7
6	EMI Test Receiver	R&S	ESPI3	100145	2027/4/7
7	EMI Test Receiver	R&S	ESPI3	101417	2026/7/22
8	Attenuator	Eastsheep	5W-N-JK-6G-6DB	/	2027/4/7
9	Attenuator	Eastsheep	5W-N-JK-6G-6DB	1#	2026/7/10
10	Attenuator	Eastsheep	5W-N-JK-6G-6DB	2#	2026/7/10
11	Attenuator	Eastsheep	5W-N-JK-6G-6DB	3#	2026/7/10
12	Cable	Talent Microwave	A81-NWMSMAM-1 2M	21120897	2027/4/25
13	Cable	Talent Microwave	A81-NMNM-10M	22084896	2027/4/25
14	Cable	Talent Microwave	A81-NMNM-2M	22084895	2027/4/25
15	Cable	Talent Microwave	A50-NMNM-2M	22084884	2027/4/25
16	Log-Periodic Antenna	SCHWARZBECK	VULB 9162	584	2027/4/10
17	Log-Periodic Antenna	SCHWARZBECK	VULB 9162	586	2027/4/17
18	Log-Periodic Antenna	SCHWARZBECK	VULB 9162	675	2027/4/24
19	Log-Periodic Antenna	SCHWARZBECK	VULB 9168	1742	2026/10/31
20	50Ω Coaxial Switch	Anritsu	MP59B	6200983704	2027/4/25
21	Triple Loop Antenna	EVERFINE	LLA-2	11020003	2027/4/7
22	CDNE	Beijing KeHuan Century	KH3663E	NO.36631034	2027/4/7

2.6.3 ESD

Item	Name of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Electrostatic Discharge Generator	Lioncel	ESD-203B	ESD203B0150 402	2027/5/27
2	ESD Generator	EVERFINE	EMS61000-2A	P615727TA142 1113	2027/4/29

2.6.4 RS

Item	Name of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Semi Anechoic Chamber	/	7*5*4	/	2027/7/2
2	RF Test System Controller	AR	SC1000	0350156	2027/4/25
3	Broadband Amplifier	AR	60S1G6	0350414	2027/4/28
4	Power Amplifier	rflight	NTWPA-00810200	17063153	2027/4/7
5	Bilog Antenna	ETS	3142E	00214344	2027/5/30
6	ESG Vetctor Signal Generator	Agilent	E4438C	MY45093347	2027/4/7
7	PSG Analog Signal Generator	Agilent	E8257D	MY51110112	2027/4/26

2.7 MEASUREMENT SOFTWARE

CONDUCTED TEST		
Software name	Manufacturer	Version number
EZ-EMC_CE	Farad	AIT-03A
RADIATED TEST		
Software name	Manufacturer	Version number
EZ-EMC_RE	Farad	EMEC-3A1+
RS TEST		
Software name	Manufacturer	Version number
RadiMation Pro	Raditeq	2024.1.6

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 9kHz-30MHz)

FREQUENCY (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.009 - 0.05	136	/
0.05 - 0.15	116 - 106 *	/
0.15 - 0.5	92 - 82 *	82 - 72 *
0.50 - 5.0	82	72
5.0 - 30.0	86	76

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

3.1.2 LOAD TERMINAL CONDUCTED EMISSION (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	80	70
0.50 - 30.0	74	64

Note:

- (1) The tighter limit applies at the band edges.
- (2) Based on our laboratory conditions, this test is not performed.

3.1.3 CONTROL TERMINAL CONDUCTED EMISSION (Frequency Range 150kHz-30MHz)

FREQUENCY (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	84 - 74*	74 - 64*
0.50 - 30.0	74	64

Note:

- (1) The tighter limit applies at the band edges.
- (2) Based on our laboratory conditions, this test is not performed.
- (3) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

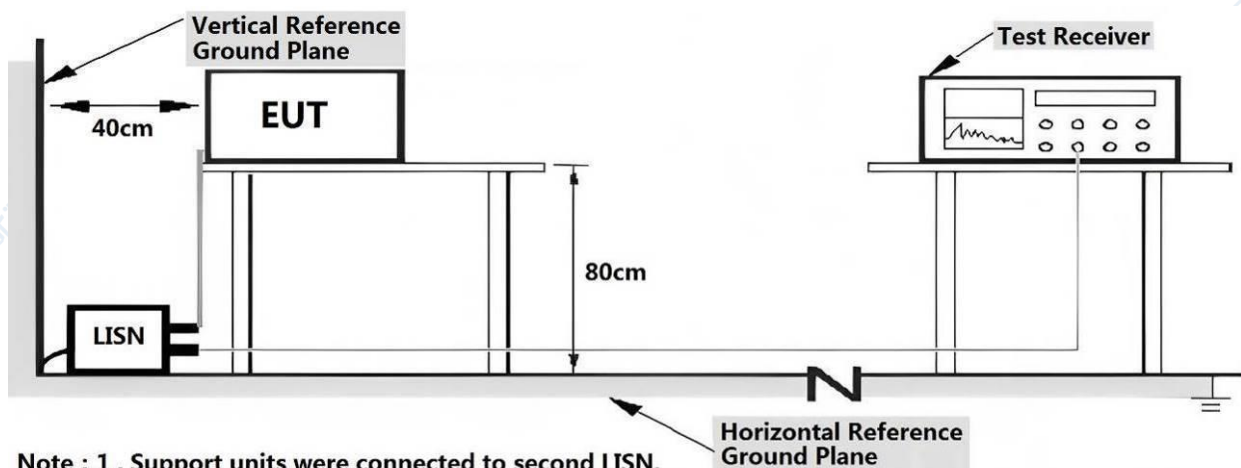
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	9 kHz
Stop Frequency	30 MHz
IF Bandwidth	200 Hz and 9 kHz

3.1.4 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.1.5 TEST SETUP



Note : 1 . Support units were connected to second LISN.

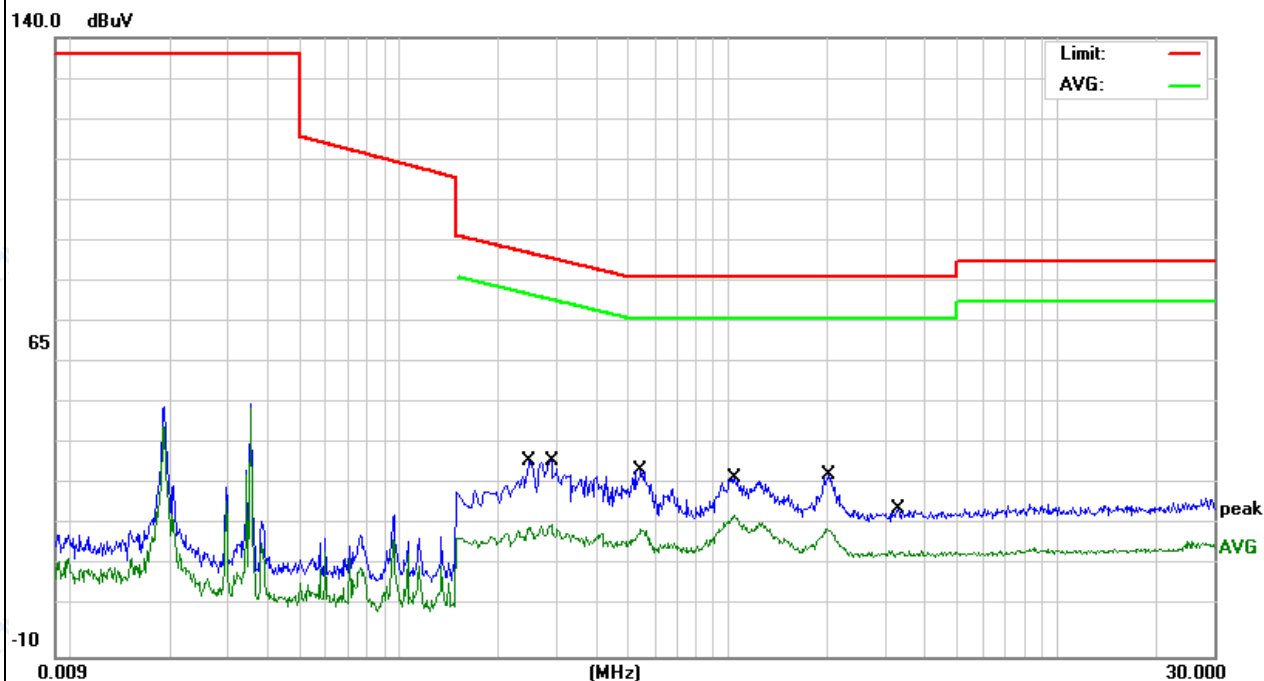
2 . Both of LISNs(AMN) are 80cm from EUT and at least 80 from other units and other metal planes.

3.1.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.

3.1.7 TEST RESULTS

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Phase:	+
Test Voltage:	DC 5V		

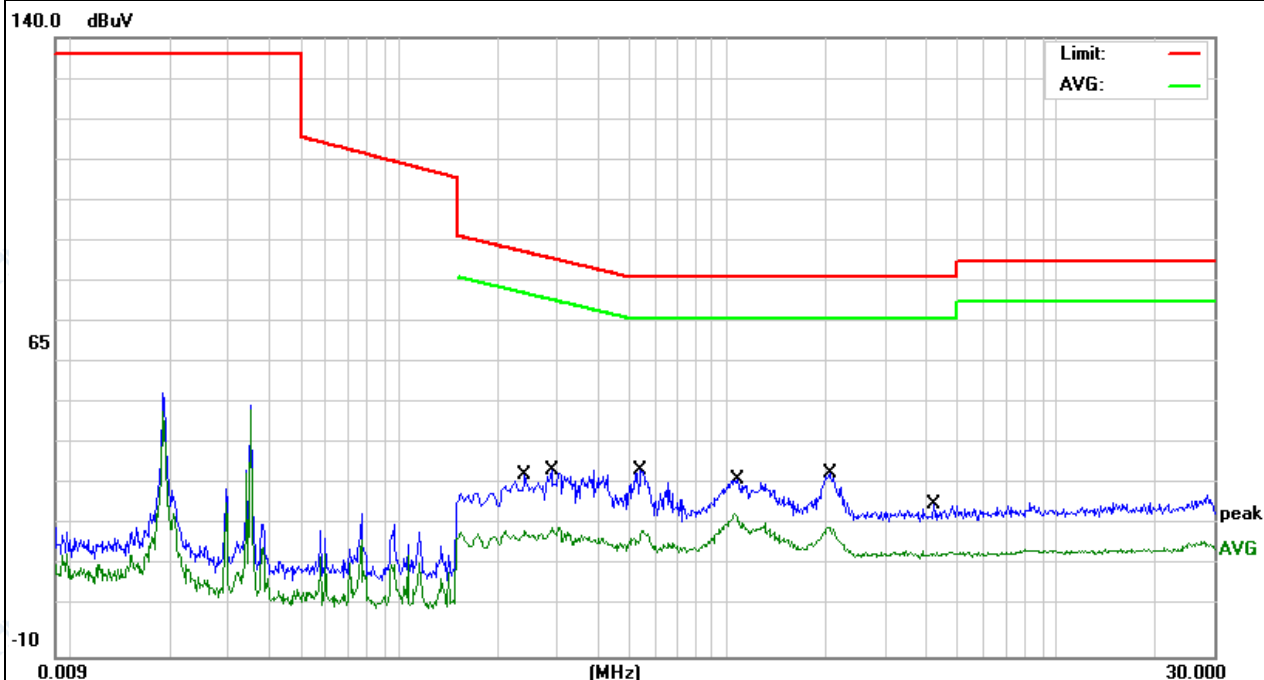


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.2500	17.89	19.49	37.38	87.75	-50.37	QP	
2		0.2500	1.92	19.49	21.41	77.75	-56.34	AVG	
3		0.2900	18.03	19.49	37.52	86.52	-49.00	QP	
4		0.2900	2.55	19.49	22.04	76.52	-54.48	AVG	
5	*	0.5420	15.68	19.50	35.18	82.00	-46.82	QP	
6		0.5420	1.58	19.50	21.08	72.00	-50.92	AVG	
7		1.0500	13.77	19.52	33.29	82.00	-48.71	QP	
8		1.0500	4.88	19.52	24.40	72.00	-47.60	AVG	
9		2.0140	14.63	19.53	34.16	82.00	-47.84	QP	
10		2.0140	1.17	19.53	20.70	72.00	-51.30	AVG	
11		3.2940	6.41	19.55	25.96	82.00	-56.04	QP	
12		3.2940	-4.28	19.55	15.27	72.00	-56.73	AVG	

Remark:

Factor = Insertion Loss + Cable Loss.

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Phase:	-
Test Voltage:	DC 5V		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2420	14.68	19.42	34.10	88.02	-53.92	QP	
2		0.2420	1.05	19.42	20.47	78.02	-57.55	AVG	
3		0.2900	15.81	19.44	35.25	86.52	-51.27	QP	
4		0.2900	1.83	19.44	21.27	76.52	-55.25	AVG	
5	*	0.5420	15.55	19.52	35.07	82.00	-46.93	QP	
6		0.5420	0.98	19.52	20.50	72.00	-51.50	AVG	
7		1.0660	13.41	19.52	32.93	82.00	-49.07	QP	
8		1.0660	4.76	19.52	24.28	72.00	-47.72	AVG	
9		2.0340	15.06	19.49	34.55	82.00	-47.45	QP	
10		2.0340	1.96	19.49	21.45	72.00	-50.55	AVG	
11		4.2420	7.39	19.58	26.97	82.00	-55.03	QP	
12		4.2420	-4.21	19.58	15.37	72.00	-56.63	AVG	

Remark:

Factor = Insertion Loss + Cable Loss.

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT (Below 1000MHz)

FREQUENCY (MHz)	☐ 2m (dB(μA))	☒ 3m (dB(μA))	☐ 4m (dB(μA))
0.009 ~ 0.07	88	81	75
0.07 ~ 0.15	88 to 58	81 to 51	75 to 45
0.15 ~ 3	58 to 22	51 to 15	45 to 9
3 ~ 30	22	15 to 16	9 to 12

FREQUENCY (MHz)	☐ At 10m (dBμV/m)	☒ At 3m (dBμV/m)
30 - 230	30	40
230 - 1000	37	47

Note:

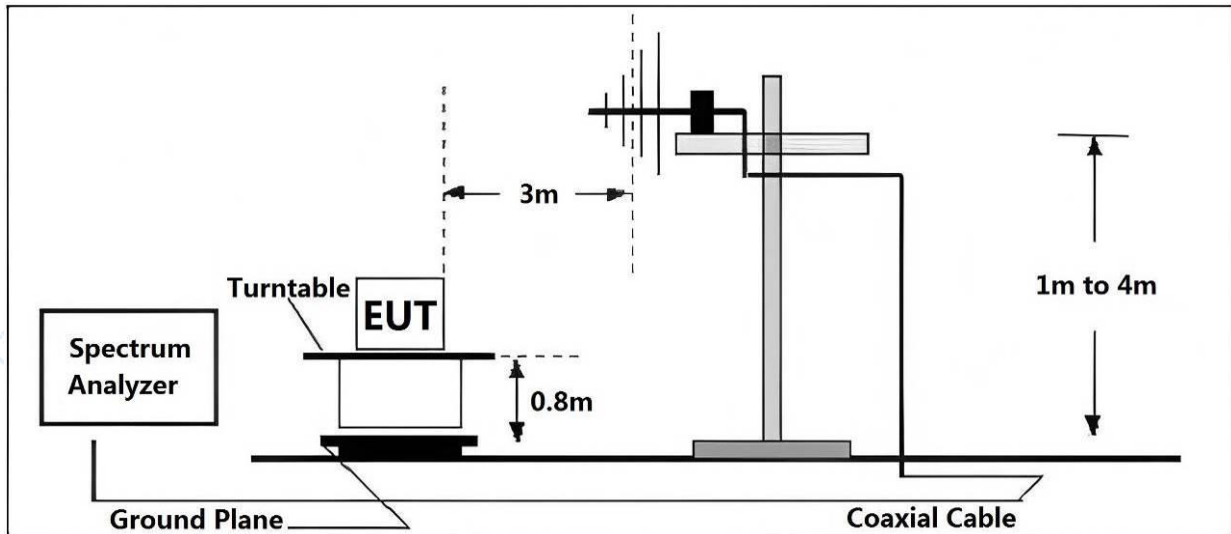
- (1) The limit for radiated test was performed according to as following: CISPR 15.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBμV/m)=20log Emission level (μV/m).

3.2.2 TEST PROCEDURE

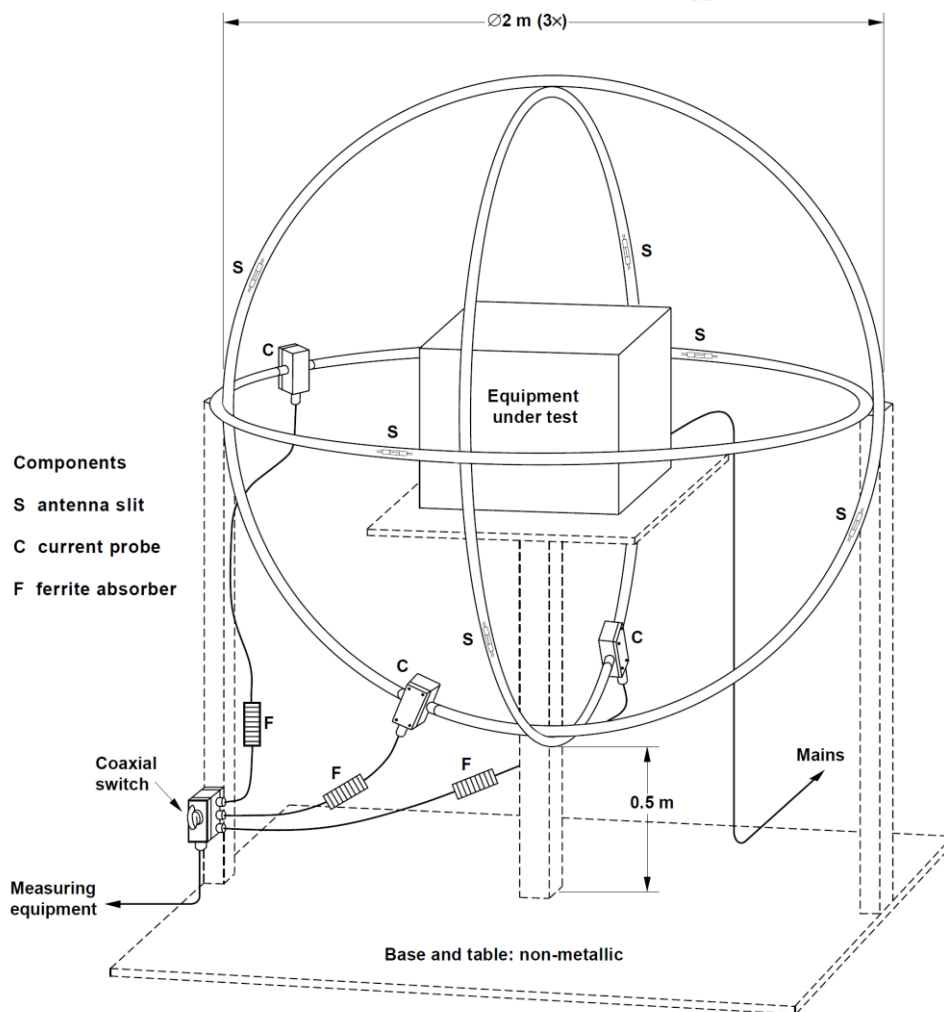
- a. The measuring distance of at 3m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured, above 1G Average detector mode will be instead.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP(AV) Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.

3.2.3 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Below 30 MHz

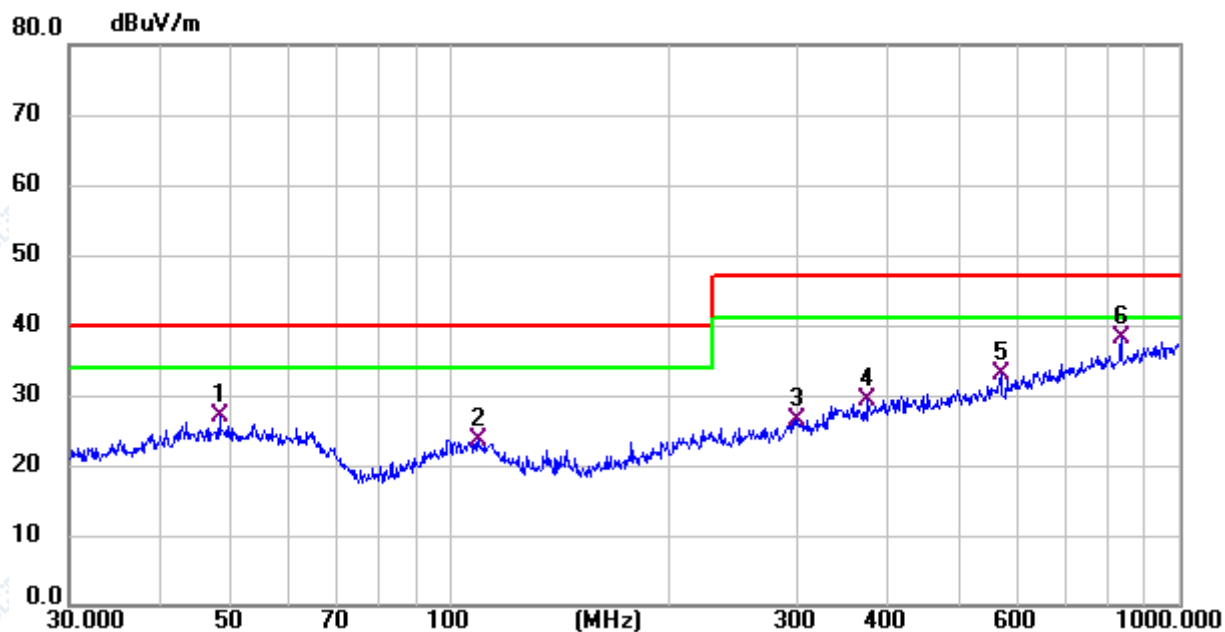


3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.5 TEST RESULTS (30-1000MHz)

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Polarization:	Horizontal
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	48.332	6.71	20.18	26.89	40.00	-13.11	QP			P	
2	109.796	5.79	17.83	23.62	40.00	-16.38	QP			P	
3	300.367	6.35	20.19	26.54	47.00	-20.46	QP			P	
4	374.623	7.16	22.20	29.36	47.00	-17.64	QP			P	
5	570.610	7.59	25.43	33.02	47.00	-13.98	QP			P	
6 *	833.317	8.38	29.72	38.10	47.00	-8.90	QP			P	

Remark:

Factor = Antenna Factor + Cable Loss.

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Polarization:	Vertical
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		



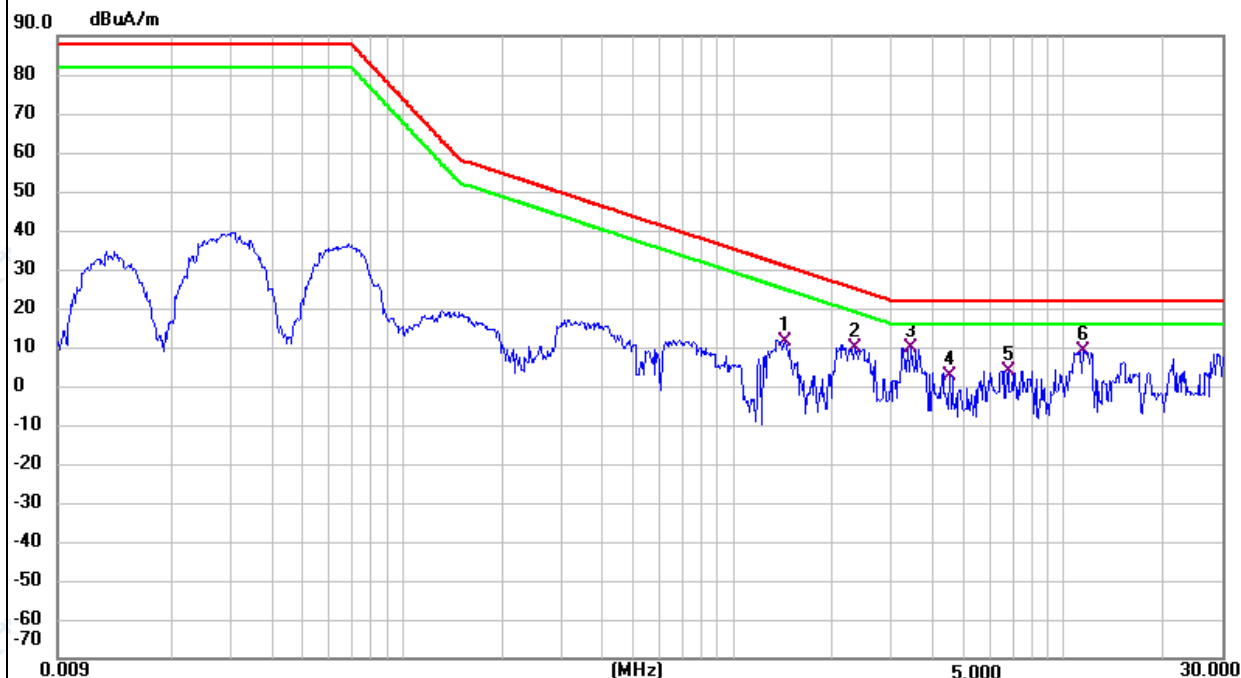
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	43.202	14.14	19.62	33.76	40.00	-6.24	peak			P	
2	49.707	11.29	19.98	31.27	40.00	-8.73	peak			P	
3	56.001	11.41	19.53	30.94	40.00	-9.06	peak			P	
4	60.918	13.41	18.88	32.29	40.00	-7.71	peak			P	
5	63.983	14.71	17.88	32.59	40.00	-7.41	peak			P	
6	948.761	7.32	30.56	37.88	47.00	-9.12	peak			P	

Remark:

Factor = Antenna Factor + Cable Loss.

3.2.6 TEST RESULTS (0.009-30MHz)

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Polarization:	X
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		

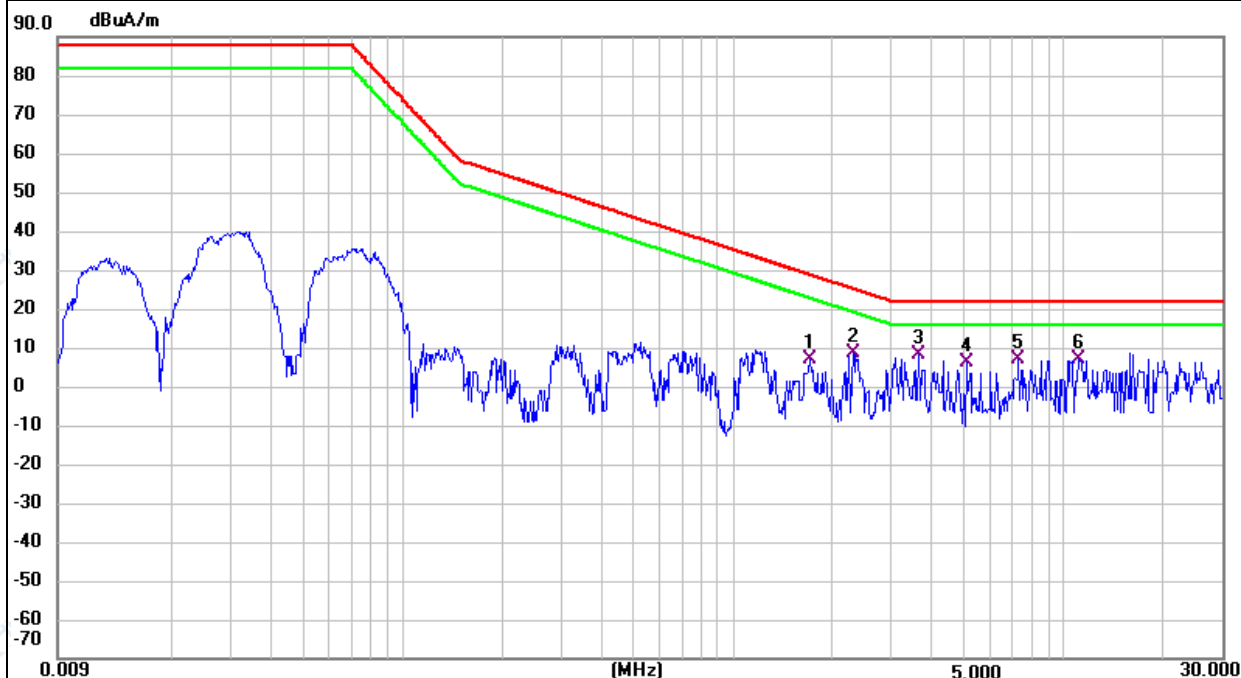


No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA/m)	Limit (dBuA/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1.4220	11.39	0.19	11.58	30.97	-19.39	QP			P	
2	2.3300	9.52	0.26	9.78	25.04	-15.26	QP			P	
3 *	3.4220	9.48	0.29	9.77	22.00	-12.23	QP			P	
4	4.5300	2.47	0.33	2.80	22.00	-19.20	QP			P	
5	6.7620	3.59	0.39	3.98	22.00	-18.02	QP			P	
6	11.4100	8.35	0.52	8.87	22.00	-13.13	QP			P	

Remark:

Factor = Antenna Factor + Cable Loss.

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Polarization:	Y
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		

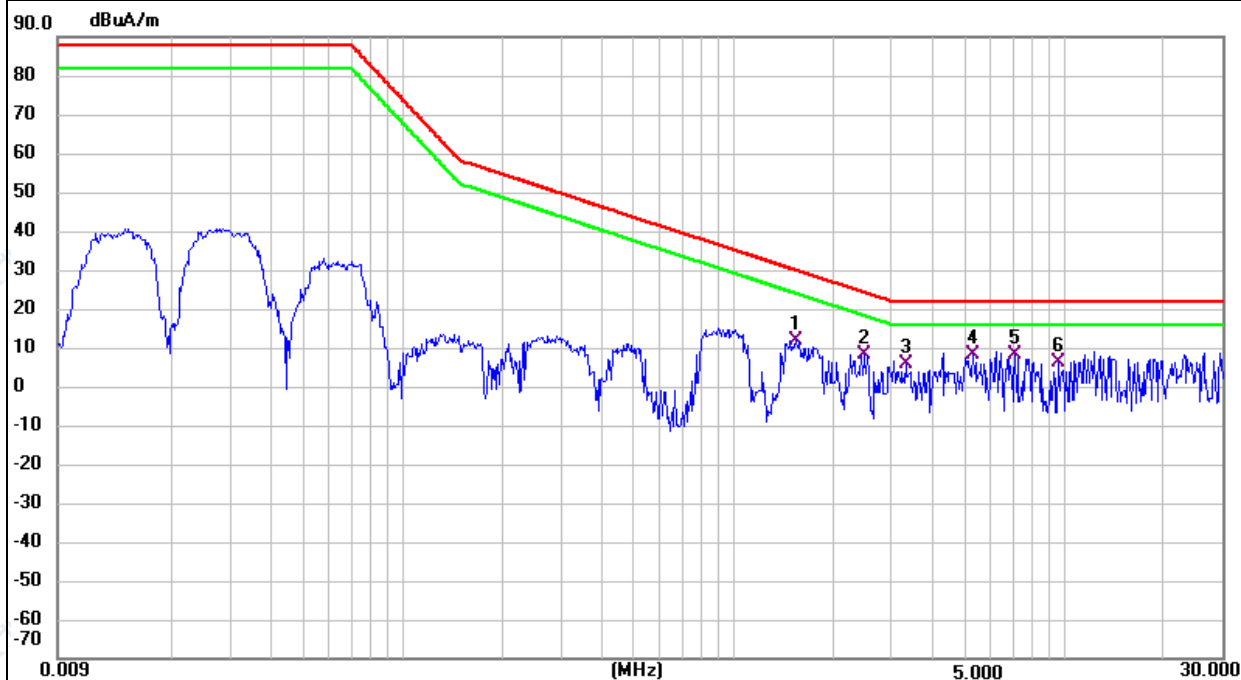


No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA/m)	Limit (dBuA/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1.7060	6.91	0.22	7.13	28.78	-21.65	QP			P	
2	2.2980	8.30	0.26	8.56	25.20	-16.64	QP			P	
3 *	3.6380	8.04	0.30	8.34	22.00	-13.66	QP			P	
4	5.0540	6.05	0.34	6.39	22.00	-15.61	QP			P	
5	7.3100	6.42	0.41	6.83	22.00	-15.17	QP			P	
6	11.0300	6.53	0.51	7.04	22.00	-14.96	QP			P	

Remark:

Factor = Antenna Factor + Cable Loss.

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1	Polarization:	Z
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		



No.	Frequency (MHz)	Reading (dBuA)	Factor (dB)	Level (dBuA/m)	Limit (dBuA/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	1.5420	11.55	0.20	11.75	30.00	-18.25	QP			P	
2	2.5020	7.79	0.27	8.06	24.18	-16.12	QP			P	
3	3.3060	5.48	0.29	5.77	22.00	-16.23	QP			P	
4	5.2900	7.75	0.35	8.10	22.00	-13.90	QP			P	
5 *	7.1020	7.73	0.40	8.13	22.00	-13.87	QP			P	
6	9.6260	5.66	0.48	6.14	22.00	-15.86	QP			P	

Remark:

Factor = Antenna Factor + Cable Loss.

4. EMC IMMUNITY TEST

4.1 STANDARD COMPLIANCE/SEVERITY LEVEL/CRITERIA

Tests Standard No.	TEST SPECIFICATION	Test Mode Test Ports	Perform Criteria
1. ESD IEC/EN IEC 61000-4-2	8kV air discharge 4kV contact discharge	Direct Mode	B
	4kV HCP discharge 4kV VCP discharge	Indirect Mode	B
2. RS IEC/EN IEC 61000-4-3	80 MHz to 1000 MHz; 1 kHz, 80%, AM modulated	Enclosure	A

4.2 GENERAL PERFORMANCE CRITERIA

According to **EN IEC 61547** standard, the general performance criteria as following:

Criterion A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
Criterion B	After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test.
Criterion C	Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

4.3 GENERAL PERFORMANCE CRITERIA TEST SETUP

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

4.4 ESD TESTING

4.4.1 TEST SPECIFICATION

Basic Standard:	IEC/EN IEC 61000-4-2
Discharge Impedance:	330ohm / 150pF
Required Performance:	B
Discharge Voltage:	Air Discharge: 2kV / 4kV / 8kV (Direct) Contact Discharge: 4kV (Direct / Indirect)
Polarity:	Positive & Negative
Number of Discharge:	Air Discharge: min. 20 times at each test point Contact Discharge: min. 20 times at each test point
Discharge Mode:	Single Discharge
Discharge Period:	1 second minimum

4.4.2 TEST PROCEDURE

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

a. Indirect application of the discharge:

Vertical Coupling Plane (VCP):

At least 10 single discharges (in the most sensitive polarity) shall be applied to the centre of one vertical edge of the coupling plane. The coupling plane, of dimensions 0,5 m × 0,5 m, is placed parallel to, and positioned at a distance of 0,1 m from, the EUT.

Discharges shall be applied to the coupling plane, with sufficient different positions such that the four faces of the EUT are completely illuminated. One VCP position is considered to illuminate 0,5 m × 0,5 m area of the EUT surface.

Horizontal Coupling Plane (HCP):

Discharge to the HCP shall be made horizontally to the edge of the HCP.

At least 10 single discharges (in the most sensitive polarity) shall be applied at the front edge of each HCP opposite the centre point of each unit (if applicable) of the EUT and 0.1m from the front of the EUT. The long axis of the discharge electrode shall be in the plane of the HCP and perpendicular to its front edge during the discharge.

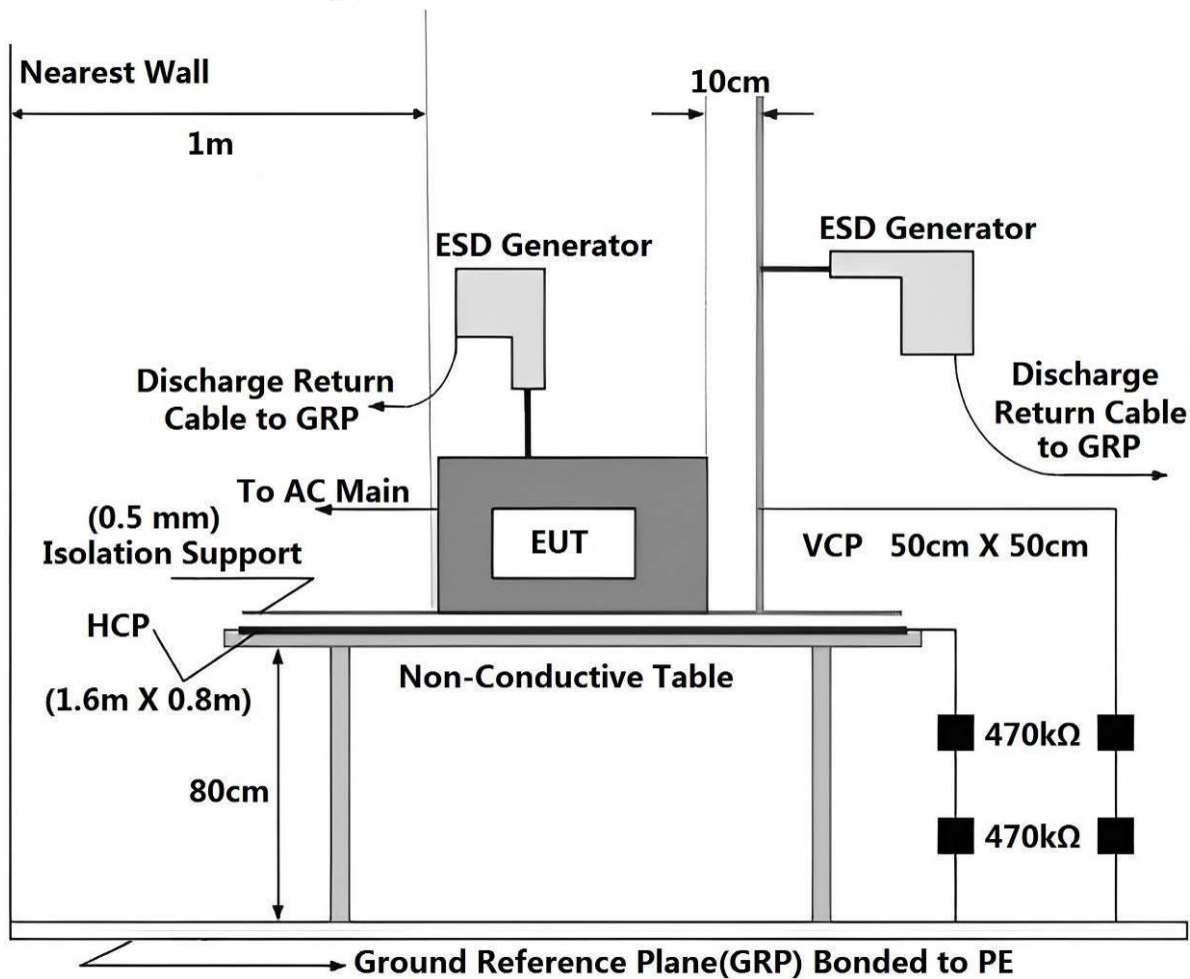
The discharge electrode shall be in contact with the edge of the HCP before the discharge switch is operated

b. Direct application of discharges to the EUT

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.

4.4.3 TEST SETUP



Note:

TABLE-TOP EQUIPMENT

The configuration consisted of a wooden table 0.8 meters high standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum at least 0.25mm thick, and 2.5 meters square connected to the protective grounding system. A Horizontal Coupling Plane (1.6m x 0.8m) was placed on the table and attached to the GRP by means of a cable with 940k total impedance. The equipment under test, was installed in a representative system as described in section 7 of IEC/EN IEC 61000-4-2, and its cables were placed on the HCP and isolated by an insulating support of 0.5mm thickness. A distance of 1-meter minimum was provided between the EUT and the walls of the laboratory and any other metallic structure.

FLOOR-STANDING EQUIPMENT

The equipment under test was installed in a representative system as described in section 7 of IEC/EN IEC 61000-4-2, and its cables were isolated from the Ground Reference Plane by an insulating support of 0.1-meter thickness. The GRP consisted of a sheet of aluminum that is at least 0.25mm thick, and 2.5meters square connected to the protective grounding system and extended at least 0.5 meters from the EUT on all sides.

4.4.4 TEST RESULTS

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1		
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		

Mode	Contact Discharge (Indirect)									Criterion	Result	Judgment
Test Level(kV)	Test Point	2		4		6		8				
Test Location		+	-	+	-	+	-	+	-			
HCP / VCP	Front	/	/	P	P	/	/	/	/	B	P	Complies
	Rear	/	/	P	P	/	/	/	/			
	Left	/	/	P	P	/	/	/	/			
	Right	/	/	P	P	/	/	/	/			

Mode	Air Discharge								Contact Discharge								Criterion	Result	Judgment
Test Level(kV)	2		4		8		15		2		4		6		8				
Test Location	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-			
Shell	/	/	/	/	/	/	/	/	/	/	P	P	/	/	/	/	B	P	Complies
USB port	P	P	P	P	P	P	/	/	/	/	/	/	/	/	/	/			
Button	P	P	P	P	P	P	/	/	/	/	/	/	/	/	/	/			
Lamp	P	P	P	P	P	P	/	/	/	/	/	/	/	/	/	/			
GAP	P	P	P	P	P	P	/	/	/	/	/	/	/	/	/	/			

Note:

- (1) +/- denotes the Positive/Negative polarity of the output voltage.
- (2) In the table: 'P' represents 'PASS'; 'F' represents 'FAIL'.
- (3) Criteria A: Normal performance within limits specified by the manufacturer, requestor or purchaser.
- (4) Criteria B: Temporary loss of function or degradation of performance which ceases after the disturbance ceases, and from which the EUT recovers its normal performance, without operator intervention.
- (5) Criteria C: Temporary loss of function or degradation of performance, the correction of which requires operator intervention.
- (6) Criteria D: Loss of function or degradation of performance which is not recoverable, owing to damage to hardware or software, or loss of data.

4.5 RS TESTING

4.5.1 TEST SPECIFICATION

Basic Standard:	IEC/EN IEC 61000-4-3
Required Performance:	A
Frequency Range:	80 MHz to 1000 MHz
Field Strength:	3 V/m
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of fundamental
Polarity of Antenna:	Horizontal and Vertical
Test Distance:	3 m
Antenna Height:	1.5 m
Dwell Time:	3 seconds

4.5.2 TEST PROCEDURE

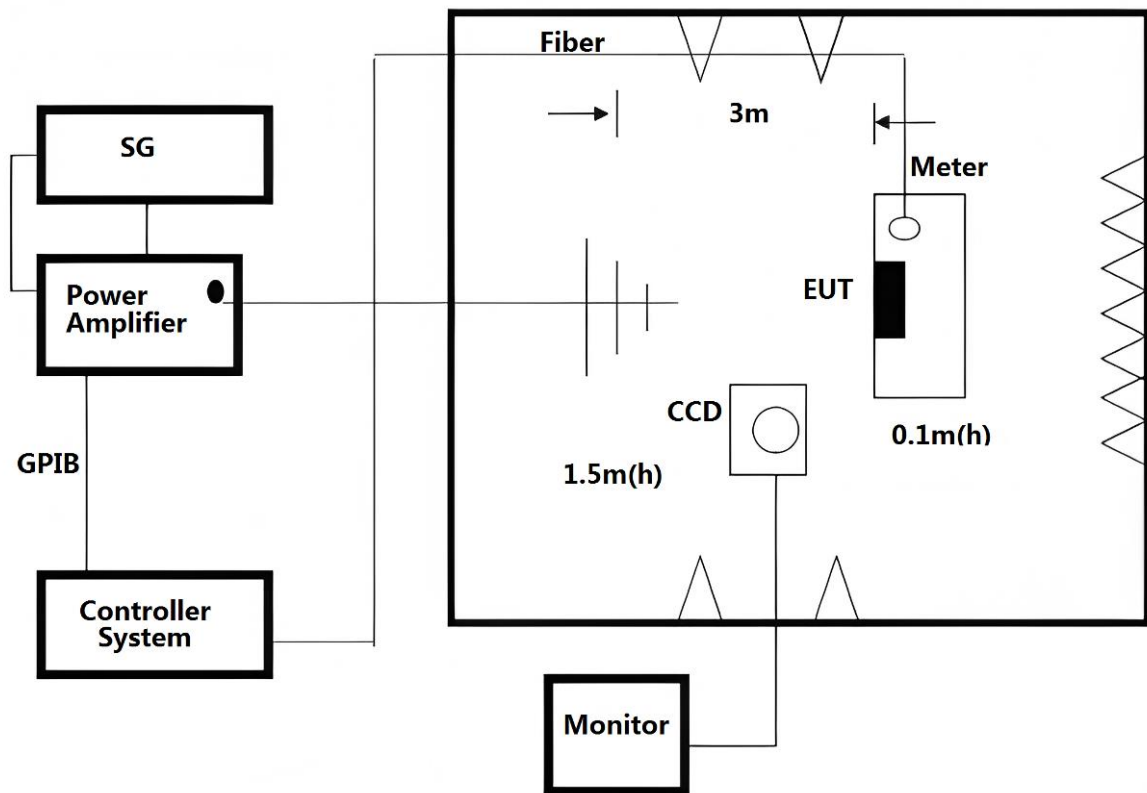
The EUT and support equipment, which are placed on a table that is 0.8 meter above ground and the testing was performed in a fully-anechoic chamber.

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

The other condition as following manner:

- 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 1.5×10^{-3} decade/s. Where the frequency range is swept incrementally, the step size was 1% of fundamental.
- Sweep Frequency 900 MHz, with the Duty Cycle: 1/8 and Modulation: Pulse 217 Hz (if applicable)
- The dwell time at each frequency shall be not less than the time necessary for the EUT to be able to respond.
- The test was performed with the EUT exposed to both vertically and horizontally polarized fields on each of the four sides.

4.5.3 TEST SETUP



Note:

TABLE-TOP EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN IEC 61000-4-3 was placed on a non-conductive table 0.8 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

FLOOR-STANDING EQUIPMENT

The EUT installed in a representative system as described in section 7 of IEC/EN IEC 61000-4-3 was placed on a non-conductive wood support 0.1 meters in height. The system under test was connected to the power and signal wire according to relevant installation instructions.

4.5.4 TEST RESULTS

EUT:	desk lamp	Test Model:	2025218
Test Mode:	1		
Test Power:	DC 5V powered by Adapter AC 230V/50Hz		

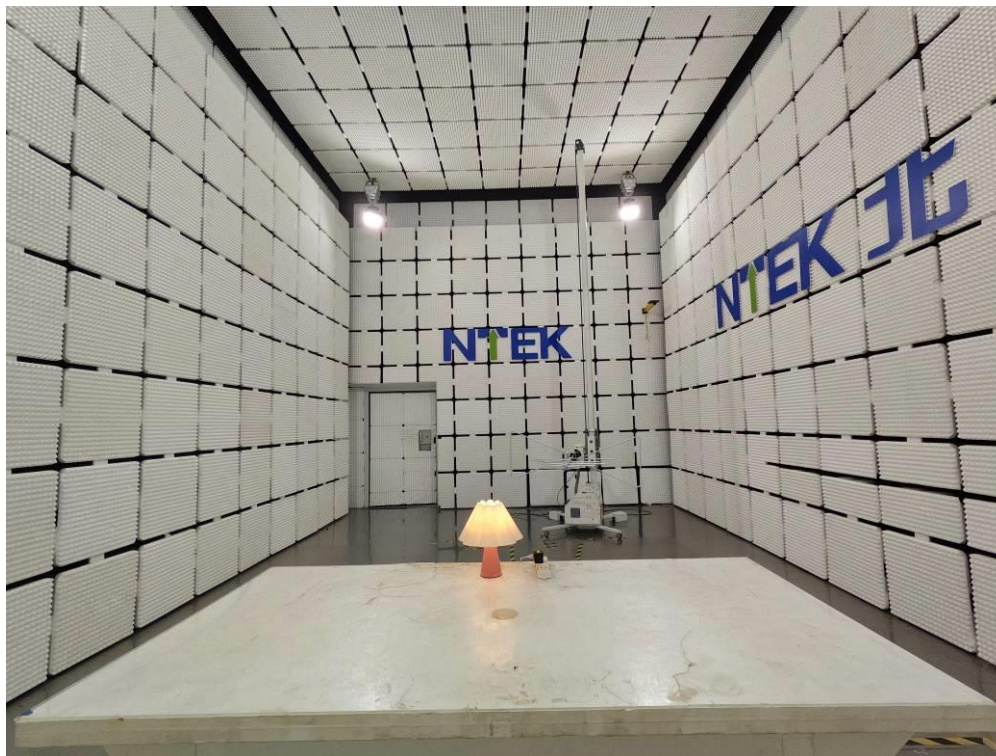
Frequency Range (MHz)	RF Field Position	R.F. Field Strength	Azimuth	Criterion	Result	Judgment
80 - 1000	H / V	3 V/m (r.m.s) AM Modulated 1000Hz, 80%	Front	A	P	Complies
			Rear			
			Left			
			Right			

Note:

- (1) In the table: 'P' represents 'PASS'; 'F' represents 'FAIL'.
- (2) Criteria A: There was no change operated with initial operating during the test.
- (3) Criteria B: The EUT function loss during the test, but self-recoverable after the test.
- (4) Criteria C: The system shut down during the test.

5. EUT TEST PHOTO

Radiated Measurement Photo



Conducted Measurement Photo



ATTACHMENT PHOTOGRAPHS OF EUT

Photo 1



Photo 2 Model:2025218(tested)



Photo 3

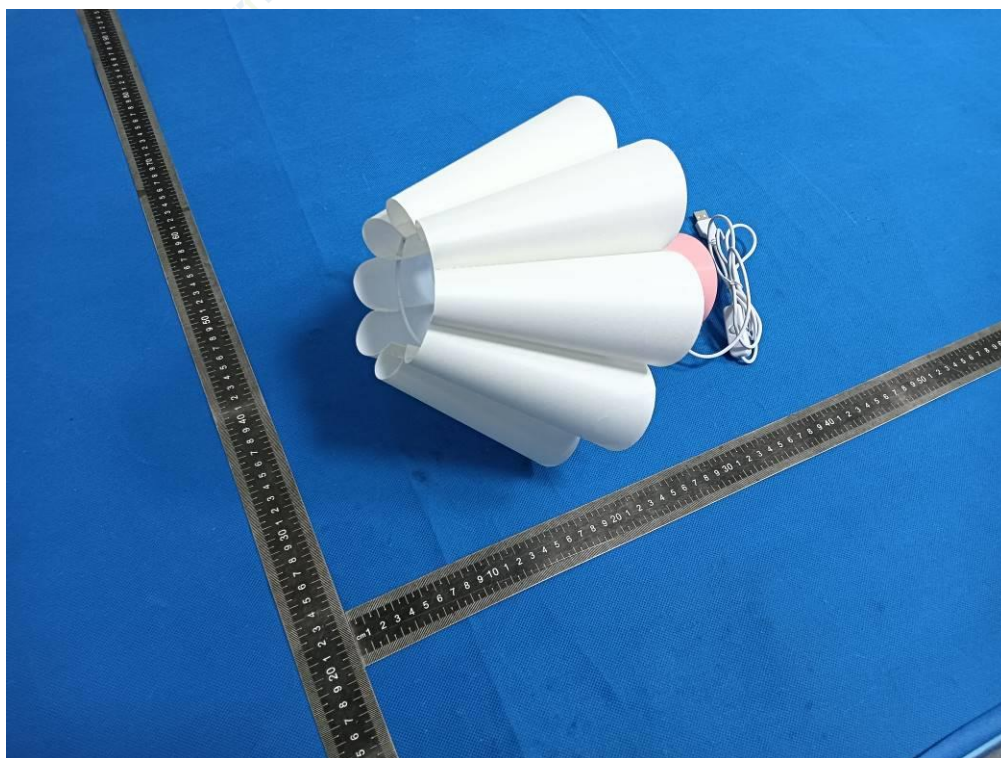


Photo 4



Photo 5

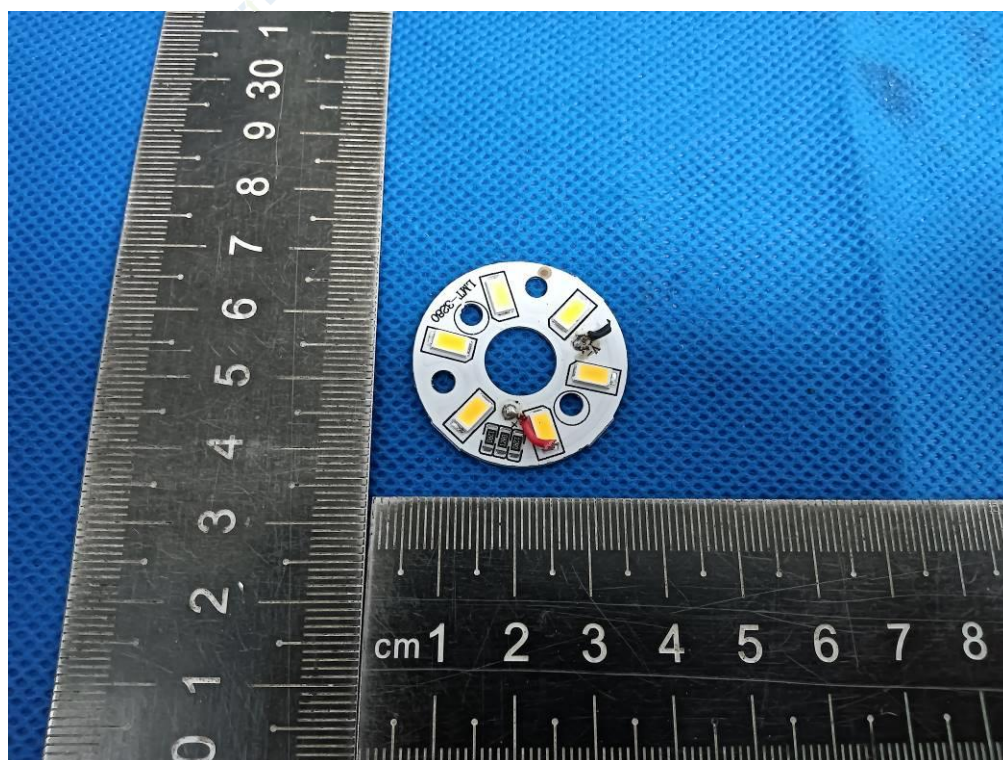


Photo 6

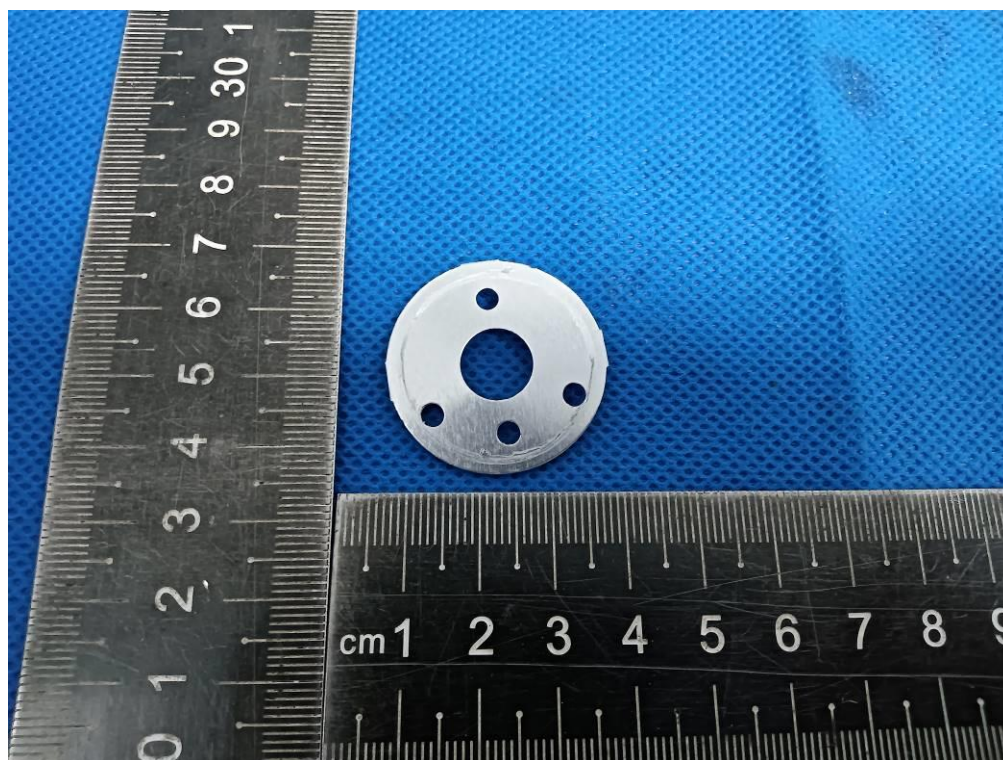


Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



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