



TEST REPORT

Reference No. : WTX21X12145966X1E
Applicant : Shenzhen Sunricher Technology Limited
Address : 3F & 5F, Building E, Qihang Innovation Industrial Park, No. 1008
Songbai Road, Nanshan District, Shenzhen, Guangdong 518055 China
Product : DALI+ Push AC Phase Cut Dimmer
Test Model : SR-2303SAC-HP
Standards : EN IEC 55015:2019
EN 61547:2009
Date of Receipt sample : Dec. 23, 2021
Date of Test : Dec. 23, 2021 to Dec. 30, 2021
Date of Issue : Jan. 06, 2022
Test Result : Pass

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Revision History

Report No.	Version	Description	Issue Date	Note
WTX21X12145966E	Original	Initial report	2021-12-30	Invalid
WTX21X12145966X1E	Re.1	1. Add mode description	2022-01-06	Valid

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:

Address of applicant:

Shenzhen Sunricher Technology Limited

3F & 5F, Building E, Qihang Innovation Industrial Park, No. 1008 Songbai Road, Nanshan District, Shenzhen, Guangdong 518055 China

Manufacturer:

Address of manufacturer:

Shenzhen Sunricher Technology Limited

3F & 5F, Building E, Qihang Innovation Industrial Park, No. 1008 Songbai Road, Nanshan District, Shenzhen, Guangdong 518055 China

General Description of EUT	
Product Name:	DALI+ Push AC Phase Cut Dimmer
Trade Name:	/
Model No.:	SR-2303SAC-HP
Adding Model(s):	SR-2303XAC-YYY-ZZZ, SR-2303XAC-YYY, SR-2303XX, SR-2303AC, SR-2303SAC-HPW, SR-2303SAC-HPU, SR-2303AC-4CH-DIN (" X " " Y " " Z " indicates the customer code for market purpose , it could be alphanumeric characters or blank)
<p><i>Note: The test data is gathered from a production sample, provided by the manufacturer.The appearance of others models listed in the report is different from main-test model SR-2303SAC-HP, but the circuit and the electronic construction do not change, declared by the manufacturer.</i></p>	

Technical Characteristics of EUT	
Rated Voltage:	AC 100-240V 50/60Hz
Rated Current:	/
Rated Power:	/
Power Adaptor Model:	/
Highest Internal Frequency:	Below 108MHz



1.2 Test Standards

The tests were performed according to following standards:

EN IEC 55015:2019: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.

EN 61547:2009: Electromagnetic for general lighting purposes - EMC immunity requirements.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with the standards EN IEC 55015 and EN 61547 for general lighting purposes equipment, and all related testing and measurement techniques intentional standards.





1.4 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission/immunity level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List				
Test Mode	Description	Remark	Power Supply Mode	
TM1	Working mode	/	AC 230V/50Hz	

EUT Cable List and Details					
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite	With / Without Chip	
/	/	/	/	/	/

Special Cable List and Details					
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite	With / Without Chip	
/	/	/	/	/	/

Auxiliary Equipment List and Details				
Description	Manufacturer	Model	Serial Number	
Lamp	/	/	/	/



1.5 Performance Criteria for EMS

All the test data has been collected, reduced, and analyzed within this report in accordance with Immunity requires the following as specific performance criteria:

- A. The apparatus shall continue to operate as intended during and after the test. The manufacturer specifies some minimum performance level. The performance level may be specified by the manufacturer as a permissible loss of performance.
- B. The apparatus shall continue to operate as intended after the test. This indicates that the EUT does not need to function at normal performance levels during the test, but must recover. Again some minimal performance is defined by the manufacturer. No change in operating state or loss of data is permitted.
- C. Temporary loss of function is allowed. Operation of the EUT may stop as long as it is either automatically reset or can be manually restored by operation of the controls.





1.6 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal. Date	Due. Date
<input checked="" type="checkbox"/> Chamber A:Below 1GHz					
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2021-03-30	2022-03-29
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-04-12	2022-04-11
Amplifier	Agilent	8447F	3113A06717	2021-04-12	2022-04-11
Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-20	2023-03-19
Trilog Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-20	2023-03-19
<input type="checkbox"/> Chamber A:Above 1GHz					
Amplifier	C&D	PAP-1G18	2002	2021-04-12	2022-04-11
Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
<input type="checkbox"/> Chamber B:Below 1GHz					
Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
Amplifier	Agilent	8447D	2944A10179	2021-04-12	2022-04-11
EMI Test Receiver	Rohde & Schwarz	ESPI	101391	2021-05-06	2022-05-05
<input type="checkbox"/> Chamber C:Below 1GHz					
EMI Test Receiver	Rohde & Schwarz	ESIB 26	100401	2021-12-03	2022-12-02
Trilog Broadband Antenna	Schwarz beck	VULB 9168	1194	2021-05-28	2023-05-27
Amplifier	HP	8447F	2944A03869	2021-04-15	2022-04-14
<input checked="" type="checkbox"/> Conducted Room 1#					
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2021-04-12	2022-04-11
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2021-04-15	2022-04-14
AC LISN	Schwarz beck	NSLK8126	8126-224	2021-04-12	2022-04-11
8-WIRE LISN	Schwarz beck	8158	CAT3-8158-0059	2021-04-12	2022-04-11
8-WIRE LISN	Schwarz beck	8158	CAT5-8158-0117	2021-04-12	2022-04-11
<input type="checkbox"/> Conducted Room 2#					
EMI Test Receiver	Rohde & Schwarz	ESPI	10129	2021-04-12	2022-04-11
LISN	Rohde & Schwarz	ENV 216	100097	2021-04-12	2022-04-11
<input checked="" type="checkbox"/> Radiated Electromagnetic Disturbances (9KHz-30MHz)					
Loop Antenna	ZHINAN	ZN30401	19037	2021-04-26	2023-04-25
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2021-04-12	2022-04-11
<input type="checkbox"/> Harmonics & Flicker					
Digital Power Analyzer	California Instrument	CTS	72831	2021-04-12	2022-04-11
Power Source	California Instrument	5001IX-CTS-400	25965	2021-04-12	2022-04-11
<input checked="" type="checkbox"/> Electrostatic discharges					
ESD Generator	LIONCEL	ESD-203B	0170901	2021-04-16	2022-04-15



<input checked="" type="checkbox"/> Power-frequency magnetic field (PFMF)					
PMF Generator	LIONCEL	PMF-801C-C	0171101	2021-04-12	2022-04-11
PMF Antenna	LIONCEL	PMF-801C-A	0180302	2021-04-12	2022-04-11
Instantaneous PMF Generator Module	LIONCEL	PMF-801C-T	0171001	2021-04-12	2022-04-11
<input checked="" type="checkbox"/> Electronic fast transient(EFT)/Surges/Dips					
Transient 2000	EMC PARTNER	TRA2000	863	2021-04-12	2022-04-11
Couple Clamp	EMC PARTNER	CN-EFT1000	513	2021-04-12	2022-04-11
<input checked="" type="checkbox"/> Radio frequency, continuous conducted (C/S)					
CONDUCTED IMMUNITY TEST SYSTEM	FRANKONIA	CIT-10/75	126B1247/2013	2021-12-27	2022-12-26
CDN	LIONCEL	CDN-T8	0210401	2021-05-06	2022-05-05
Attenuator	EMTEST	MA-5100/6BF2	1009	2021-03-30	2022-03-29
CDN	Luthi	L-801M2/M3	2665	2021-04-12	2022-04-11
<input checked="" type="checkbox"/> Radio frequency electromagnetic Field (R/S)					
Signal Generator	HP	8688B	3438A00604	2021-03-30	2022-03-29
Power Meter	KEITHLEY	3500	1162591	2021-03-27	2022-03-26
Power Meter	KEITHLEY	3500	1121428	2021-03-27	2022-03-26
RF Power Amplifier	MicoTop	MPA-80-1000-250	MPA1906239	2021-03-27	2022-03-26
RF Power Amplifier	MicoTop	MPA-80-1000-100	MPA1906238	2021-03-27	2022-03-26
Antenna	SCHWARZBECK	STLP 9129	9129 114	N/A	N/A



2. SUMMARY OF TEST RESULTS

Standards	Description of Test Item	Result
EN IEC55015	Disturbance Voltages	Compliant
	Radiated Electromagnetic Disturbances (Frequency range 9kHz to 30MHz)	Compliant
	Radiated Electromagnetic Disturbances (Frequency range 30MHz to 1000MHz)	Compliant
EN IEC 61000-3-2	Harmonic Current Emission	N/A
EN 61000-3-3	Voltage Fluctuation And Flicker	N/A
EN 61547	Electrostatic Discharge Immunity in accordance with EN 61000-4-2	Compliant
	Radio-Frequency Electromagnetic Field Immunity in accordance with EN 61000-4-3	Compliant
	Electrical Fast Transient/Burst Immunity in accordance EN 61000-4-4	Compliant
	Surges Immunity in accordance with EN 61000-4-5	Compliant
	Injected Currents Immunity in accordance with EN 61000-4-6	Compliant
	Power-frequency Magnetic Field Immunity in accordance with EN 61000-4-8	Compliant
	Voltage Dips/Interruptions Immunity in accordance with EN 61000-4-11	N/A

N/A: not applicable



3. Conducted Emission

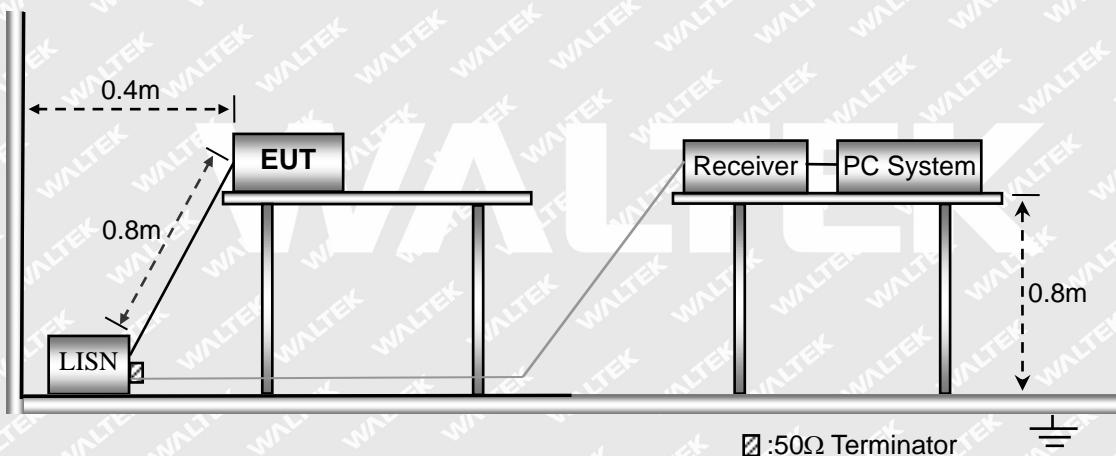
3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement:

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	9-150kHz $\pm 3.74\text{dB}$
		0.15-30MHz $\pm 3.34\text{dB}$

3.2 Basic Test Setup Block Diagram

AC port





3.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

3.4 Summary of Test Results

Please find the results below:

A large, semi-transparent watermark logo for 'WALTEK' is centered on the page. The word 'WALTEK' is written in a bold, sans-serif font, with each letter 'W', 'A', 'L', 'T', 'E', 'K' stacked vertically to form the word.

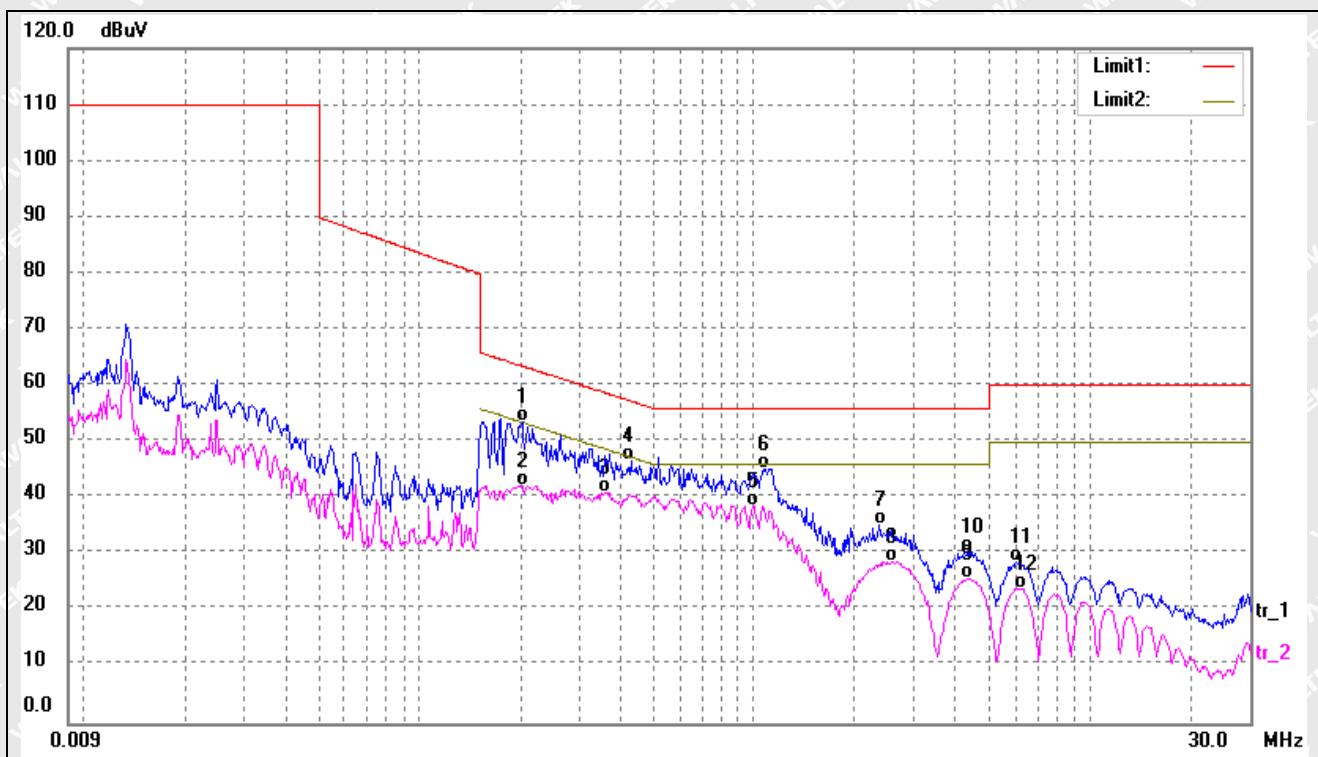


Test mode:

TM1

Polarity:

Line



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.2020	43.13	10.37	53.50	63.52	-10.02	QP
2	0.2020	31.92	10.37	42.29	53.52	-11.23	AVG
3	0.3620	30.74	10.31	41.05	48.68	-7.63	AVG
4	0.4300	36.25	10.28	46.53	57.25	-10.72	QP
5*	1.0020	27.95	10.56	38.51	46.00	-7.49	AVG
6	1.0859	34.73	10.53	45.26	56.00	-10.74	QP
7	2.3620	25.15	10.11	35.26	56.00	-20.74	QP
8	2.5620	18.60	10.11	28.71	46.00	-17.29	AVG
9	4.3780	15.75	10.03	25.78	46.00	-20.22	AVG
10	4.4140	20.31	10.03	30.34	56.00	-25.66	QP
11	6.0620	18.75	9.97	28.72	60.00	-31.28	QP
12	6.2380	14.02	9.97	23.99	50.00	-26.01	AVG

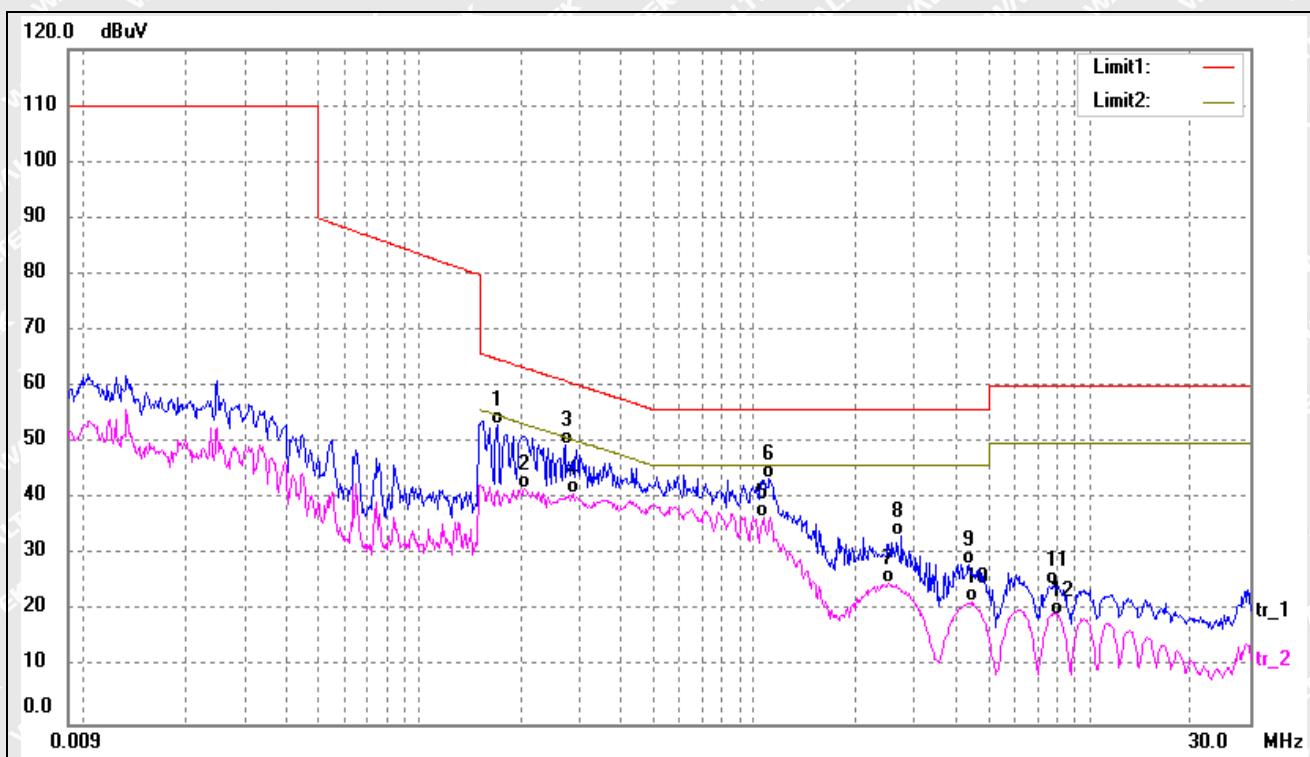


Test mode:

TM1

Polarity:

Neutral



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1700	42.92	10.37	53.29	64.96	-11.67	QP
2	0.2059	31.47	10.37	41.84	53.37	-11.53	AVG
3	0.2700	39.23	10.35	49.58	61.12	-11.54	QP
4	0.2860	30.63	10.34	40.97	50.64	-9.67	AVG
5*	1.0660	26.11	10.53	36.64	46.00	-9.36	AVG
6	1.1100	33.27	10.52	43.79	56.00	-12.21	QP
7	2.5100	14.80	10.11	24.91	46.00	-21.09	AVG
8	2.7620	23.24	10.10	33.34	56.00	-22.66	QP
9	4.3859	18.38	10.03	28.41	56.00	-27.59	QP
10	4.4820	11.60	10.02	21.62	46.00	-24.38	AVG
11	7.8419	14.92	9.92	24.84	60.00	-35.16	QP
12	8.0700	9.53	9.92	19.45	50.00	-30.55	AVG



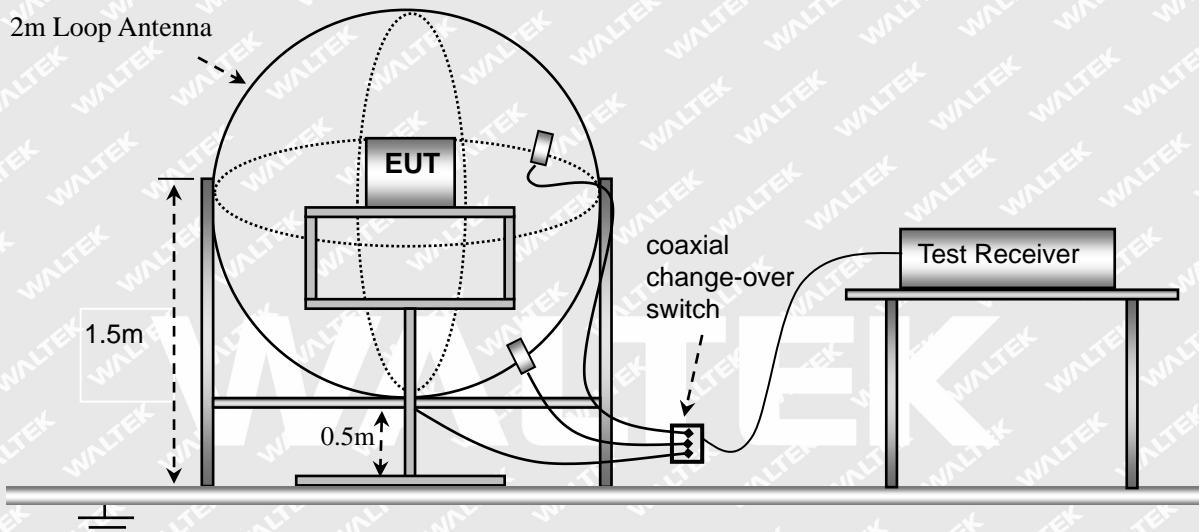
4. Radiated Electromagnetic Disturbances (9kHz to 30MHz)

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 3.6 dB.

4.2 Basic Test Setup Block Diagram

The Radiation Electromagnetic Disturbance (9kHz to 30MHz) test was performed in accordance with the EN IEC 55015



4.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

4.4 Summary of Test Results

Please find the results below:

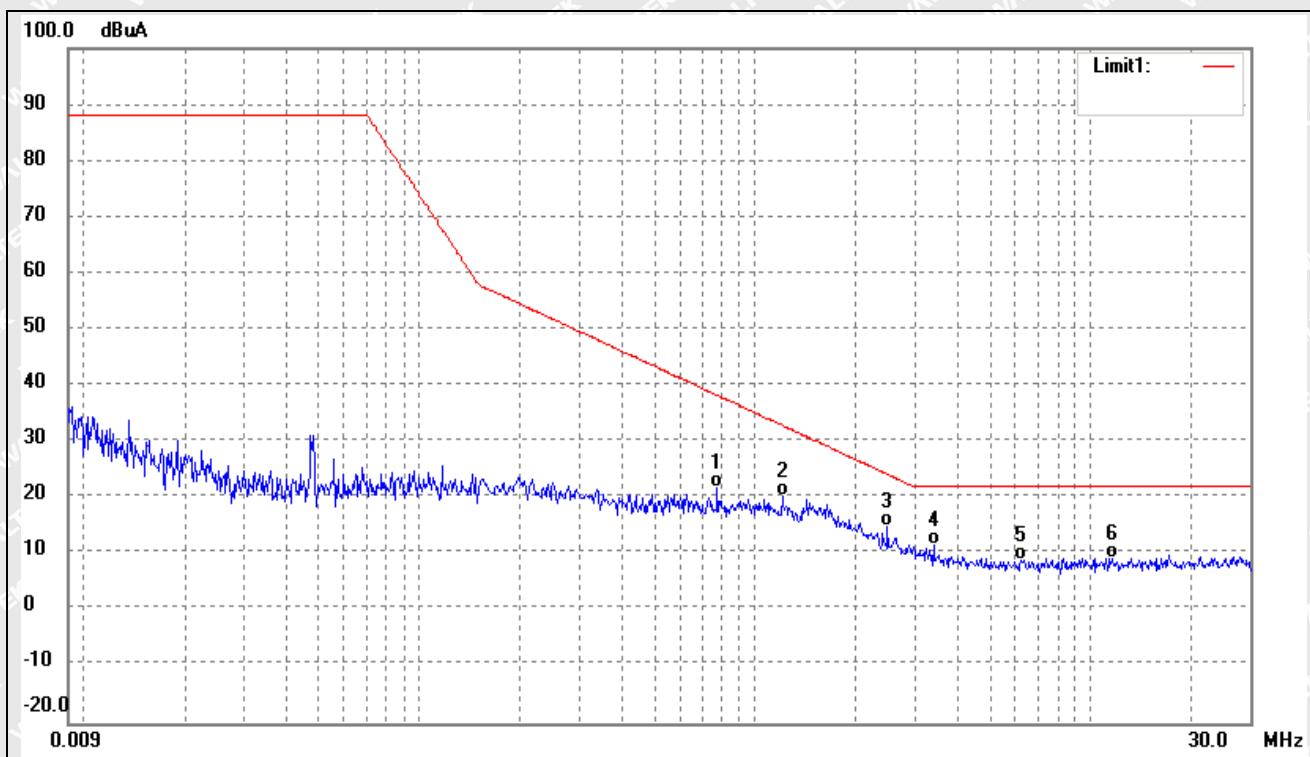


Test mode:

TM1

Polarity:

X



No.	Frequency (MHz)	Reading (dBuA)	Correct (dB/m)	Result (dBuA)	Limit (dBuA)	Margin (dB)	Detector
1	0.7740	21.07	0.76	21.83	38.28	-16.45	QP
2	1.2140	19.45	0.76	20.21	32.87	-12.66	QP
3*	2.4940	14.13	0.76	14.89	24.22	-9.33	QP
4	3.4300	10.86	0.76	11.62	22.00	-10.38	QP
5	6.2220	8.22	0.76	8.98	22.00	-13.02	QP
6	11.6380	8.59	0.77	9.36	22.00	-12.64	QP

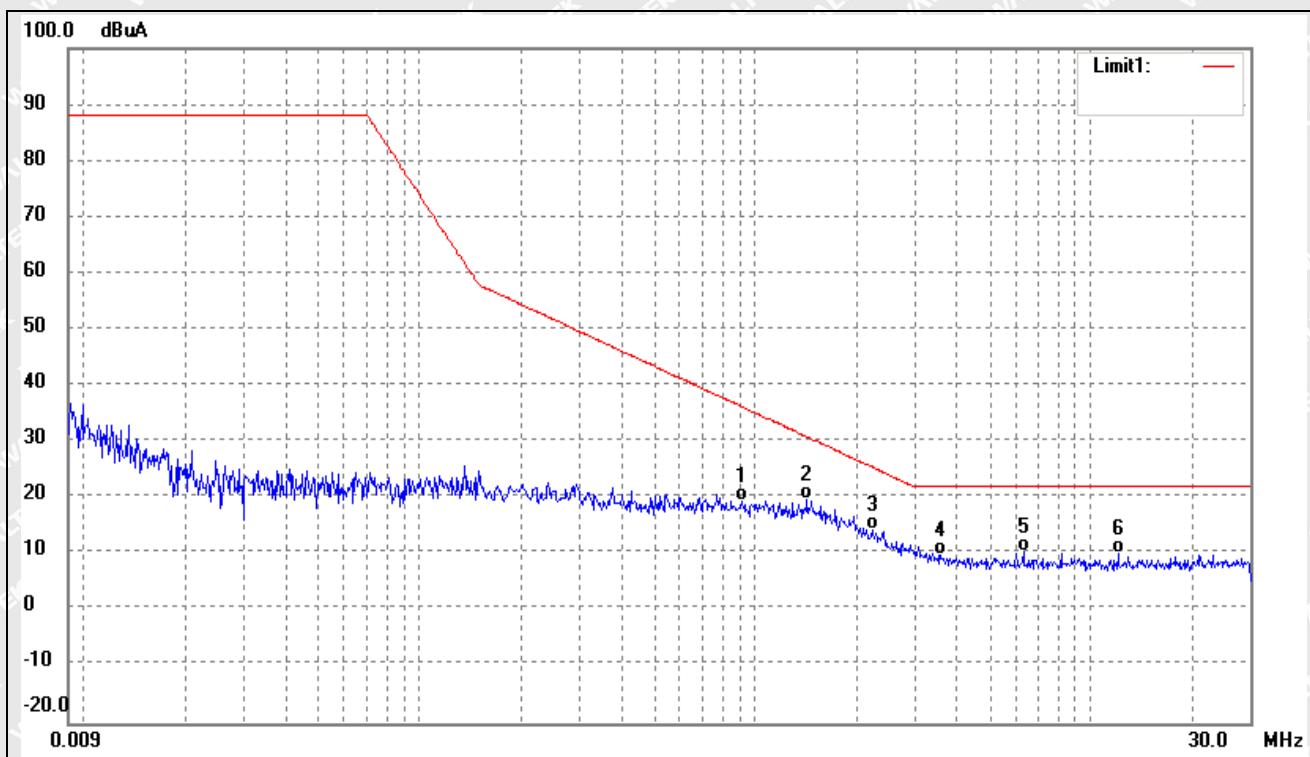


Test mode:

TM1

Polarity:

Y



No.	Frequency (MHz)	Reading (dB _{uA})	Correct (dB/m)	Result (dB _{uA})	Limit (dB _{uA})	Margin (dB)	Detector
1	0.9220	18.83	0.76	19.59	36.17	-16.58	QP
2*	1.4380	19.03	0.76	19.79	30.83	-11.04	QP
3	2.2500	13.50	0.76	14.26	25.46	-11.20	QP
4	3.5820	9.23	0.76	9.99	22.00	-12.01	QP
5	6.3220	9.61	0.76	10.37	22.00	-11.63	QP
6	12.0980	9.27	0.77	10.04	22.00	-11.96	QP

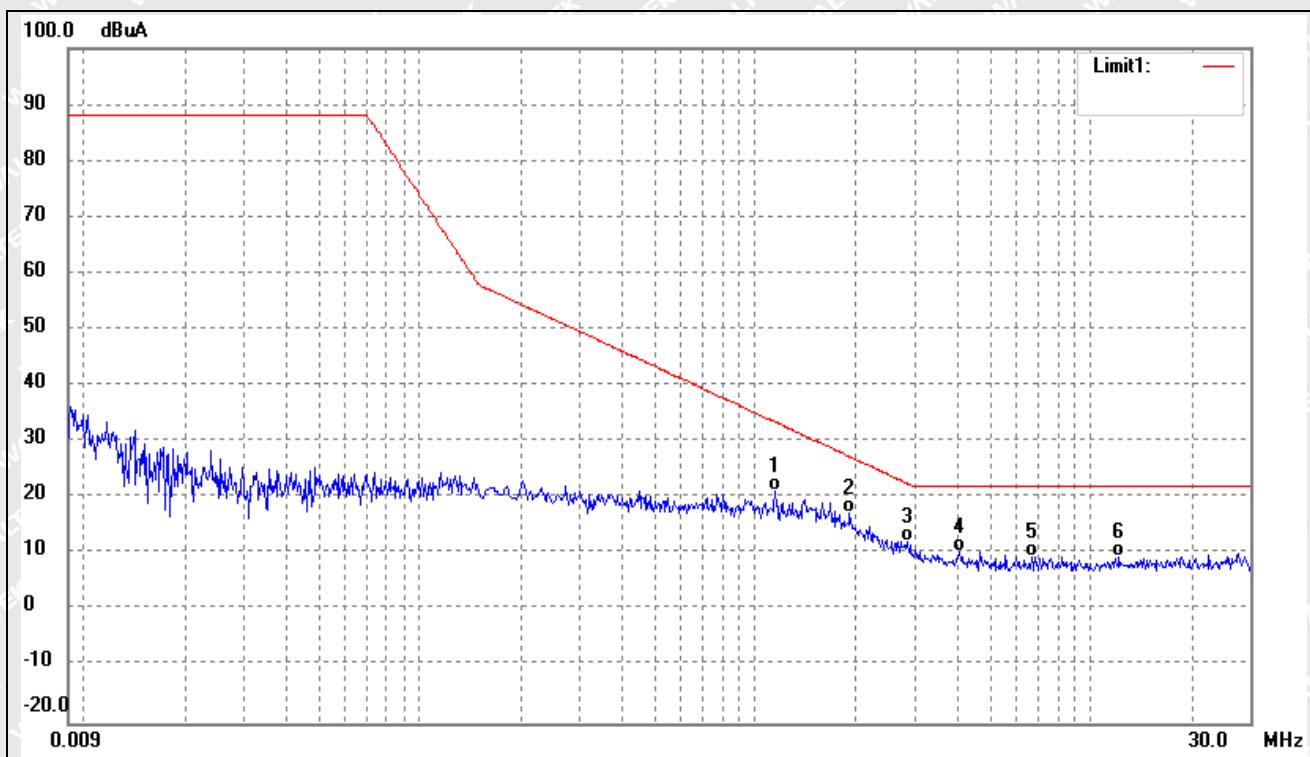


Test mode:

TM1

Polarity:

Z



No.	Frequency (MHz)	Reading (dB _{uA})	Correct (dB/m)	Result (dB _{uA})	Limit (dB _{uA})	Margin (dB)	Detector
1	1.1580	20.43	0.76	21.19	33.44	-12.25	QP
2*	1.9260	16.52	0.76	17.28	27.32	-10.04	QP
3	2.8740	11.57	0.76	12.33	22.52	-10.19	QP
4	4.0939	9.64	0.76	10.40	22.00	-11.60	QP
5	6.7140	8.74	0.76	9.50	22.00	-12.50	QP
6	12.2580	8.75	0.77	9.52	22.00	-12.48	QP



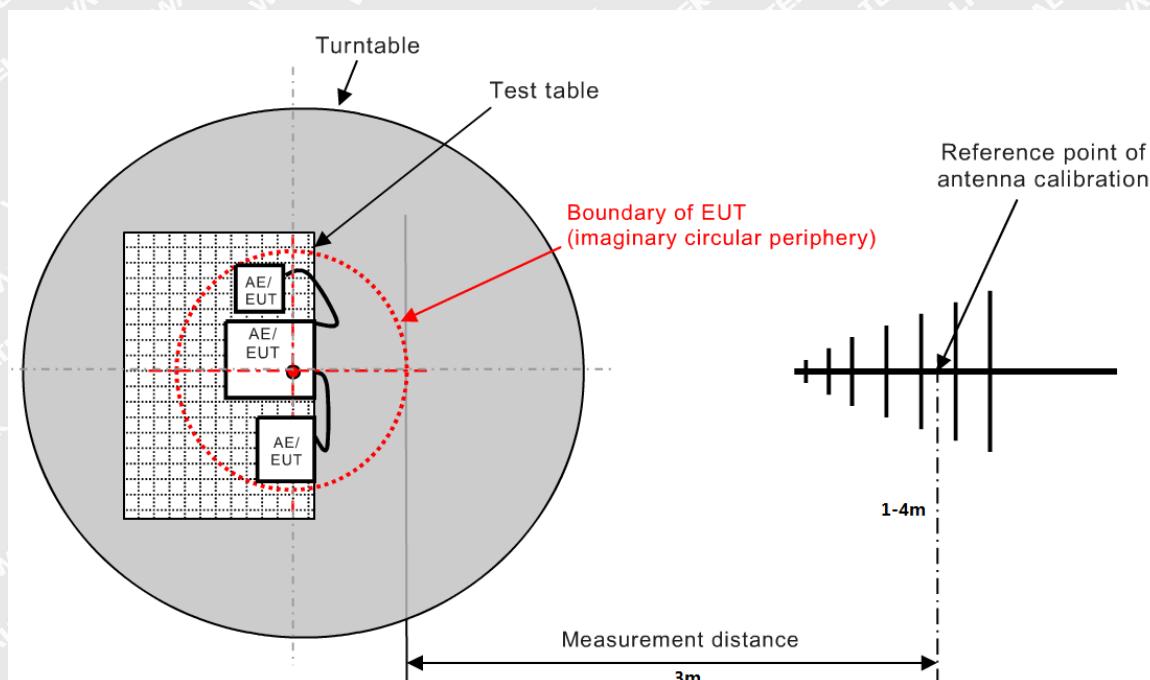
5. Radiated Electromagnetic Disturbances (30MHz to 1000MHz)

5.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement:

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Radiated Emissions	Radiated	30-200MHz $\pm 4.52\text{dB}$
		0.2-1GHz $\pm 5.56\text{dB}$
		1-6GHz $\pm 3.84\text{dB}$
		6-18GHz $\pm 3.92\text{dB}$

5.2 Basic Test Setup Block Diagram





5.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\begin{aligned}\text{Corr. Ampl.} &= \text{Indicated Reading} + \text{Correct} \\ \text{Correct} &= \text{Ant.Factor} + \text{Cable Loss} - \text{Ampl.Gain}\end{aligned}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit.

For example, a margin of $-6\text{dB}\mu\text{V}$ means the emission is $6\text{dB}\mu\text{V}$ below the maximum limit for a lighting device.

The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{EN IEC 55015 Limit}$$

5.4 Environmental Conditions

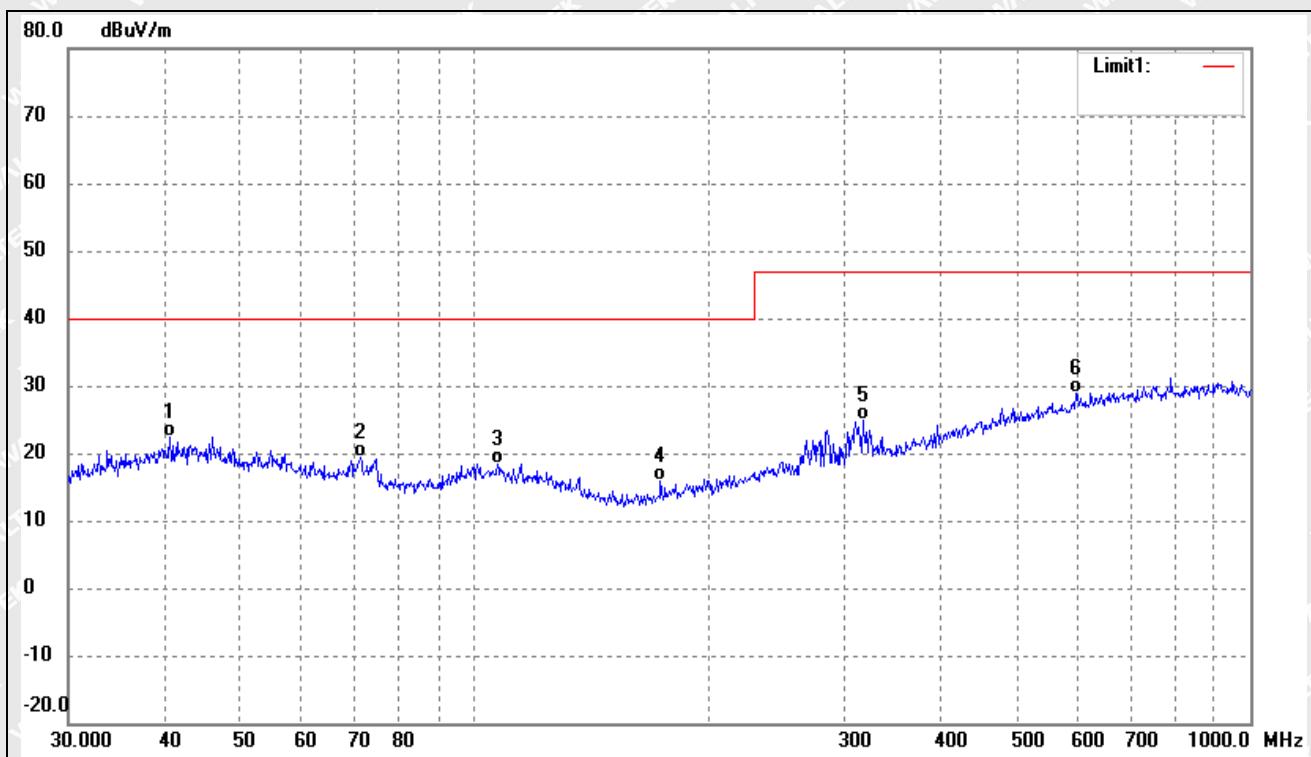
Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

5.5 Summary of Test Results

Please find the results below:



Test mode:	TM1	Polarity:	Horizontal
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	40.5591	29.38	-7.00	22.38	40.00	-17.62	281	100	QP
2	71.3300	29.73	-10.25	19.48	40.00	-20.52	92	100	QP
3	107.1337	27.24	-8.83	18.41	40.00	-21.59	331	100	QP
4	173.8135	27.48	-11.55	15.93	40.00	-24.07	97	100	QP
5	316.5890	31.34	-6.44	24.90	47.00	-22.10	217	100	QP
6	595.1329	28.50	0.29	28.79	47.00	-18.21	115	100	QP

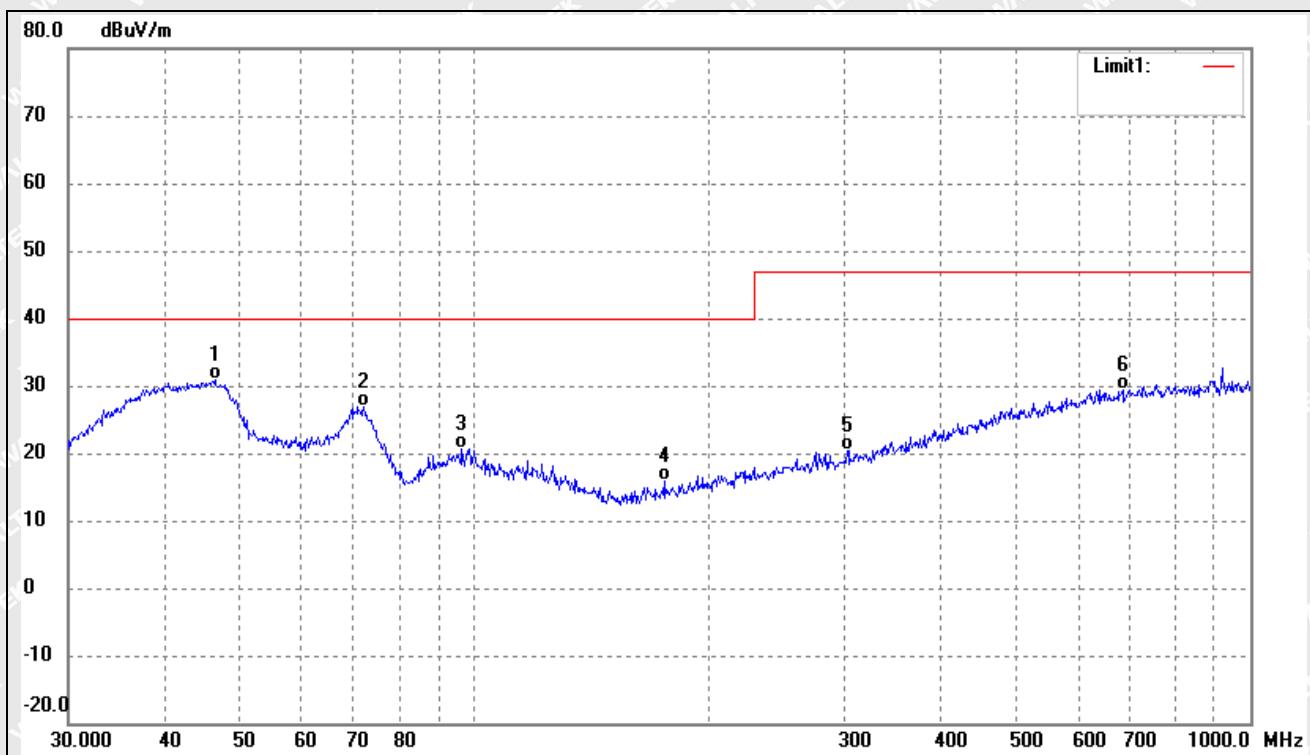


Test mode:

TM1

Polarity:

Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree (°)	Height (cm)	Remark
1	46.3402	37.81	-6.97	30.84	40.00	-9.16	149	100	QP
2	72.0843	37.17	-10.29	26.88	40.00	-13.12	114	100	QP
3	96.4362	30.10	-9.40	20.70	40.00	-19.30	97	100	QP
4	175.6516	27.32	-11.47	15.85	40.00	-24.15	132	100	QP
5	302.4812	27.32	-6.89	20.43	47.00	-26.57	184	100	QP
6	684.7454	28.21	1.27	29.48	47.00	-17.52	308	100	QP



6. Electrostatic Discharges (ESD)

6.1 Test Procedure

Test is conducted under the description of EN 61000-4-2.

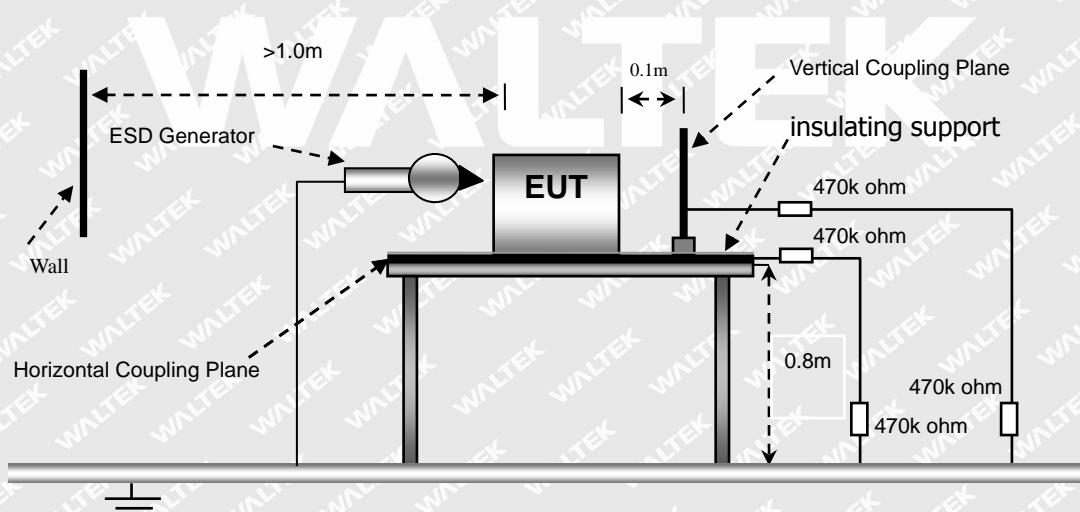
6.2 Test Performance

Performance Criterion: B

6.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

6.4 Basic Test Setup Block Diagram





6.5 Electrostatic Discharge Immunity Test Data

Table 1: Electrostatic Discharge Immunity (Air Discharge)

EN 61000-4-2 Test Points	Test Voltage (kV)									
	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Switch	A	A	A	A	A	A	A	A	/	/
Indicator light	A	A	A	A	A	A	A	A	/	/
Shell edge crack	A	A	A	A	A	A	A	A	/	/

Table 2: Electrostatic Discharge Immunity (Direct Contact)

EN 61000-4-2 Test Points	Test Voltage (kV)									
	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Screw	A	A	A	A	/	/	/	/	/	/

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP & VCP)

EN 61000-4-2 Test Points	Test Voltage (kV)									
	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
HCP (6 Sides)	A	A	A	A	/	/	/	/	/	/
VCP (4 Sides)	A	A	A	A	/	/	/	/	/	/

Test Result: Pass



7. Continuous RF electromagnetic field Disturbances (RS)

7.1 Test Procedure

Test is conducted under the description of EN 61000-4-3.

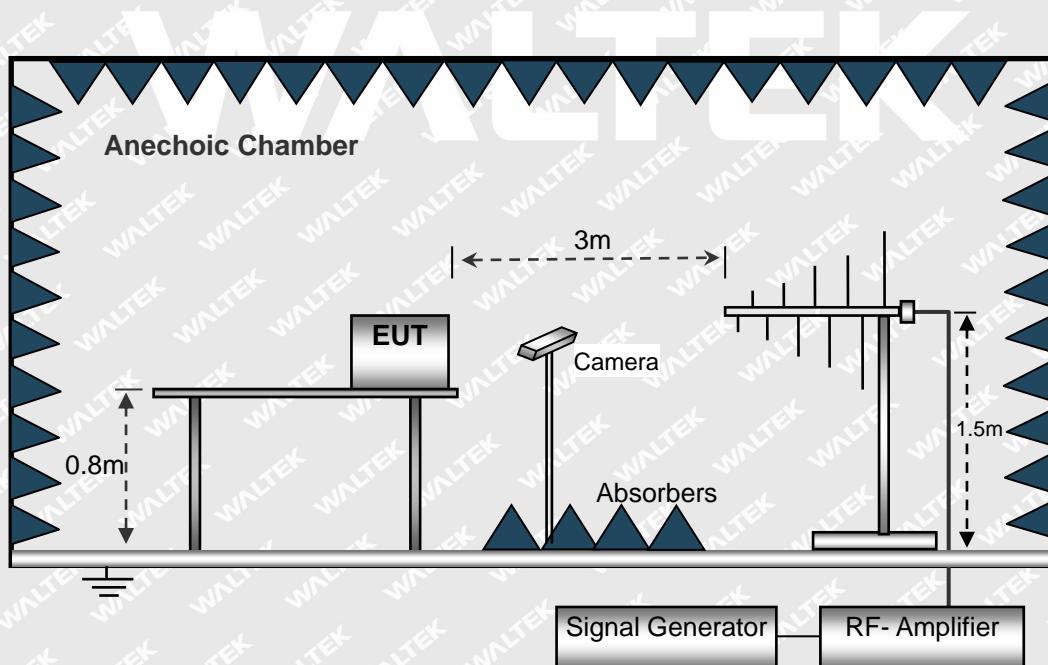
7.2 Test Performance

Performance Criterion: A

7.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

7.4 Basic Test Setup Block Diagram





7.5 Continuous Radiated Disturbances Test Data

Frequency step: 1% of fundamental

Dwell time: 1 second

Modulation: AM by 1kHz sine wave with 80% modulation depth

Frequency Range(MHz)	Field (V/m)	Front		Rear		Left Side		Right Side	
		VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
80-1000	3	A	A	A	A	A	A	A	A

Test Result: Pass

The logo is a large, bold, white 'WALTEK' text with a slight shadow effect, centered on the page.



8. Electrical Fast Transients (EFT)

8.1 Test Procedure

Test is conducted under the description of EN 61000-4-4.

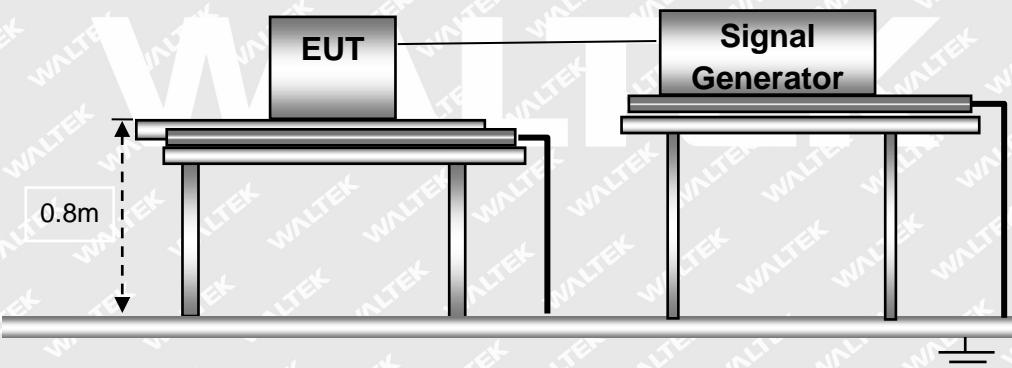
8.2 Test Performance

Performance Criterion: B

8.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

8.4 Basic Test Setup Block Diagram





8.5 Electrical Fast Transients Test Data

EN 61000-4-4 Test Points		Test Voltage (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Port of EUT	L1	/	/	A	A	/	/	/	/
	L2	/	/	A	A	/	/	/	/
	PE	/	/	/	/	/	/	/	/
	L1+L2	/	/	A	A	/	/	/	/
	L1 + PE	/	/	/	/	/	/	/	/
	L2 + PE	/	/	/	/	/	/	/	/
	L1+L2+PE	/	/	/	/	/	/	/	/
Signal ports	RJ45	/	/	/	/	/	/	/	/

Test Result: Pass

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9. Surges

9.1 Test Procedure

Test is conducted under the description of EN 61000-4-5.

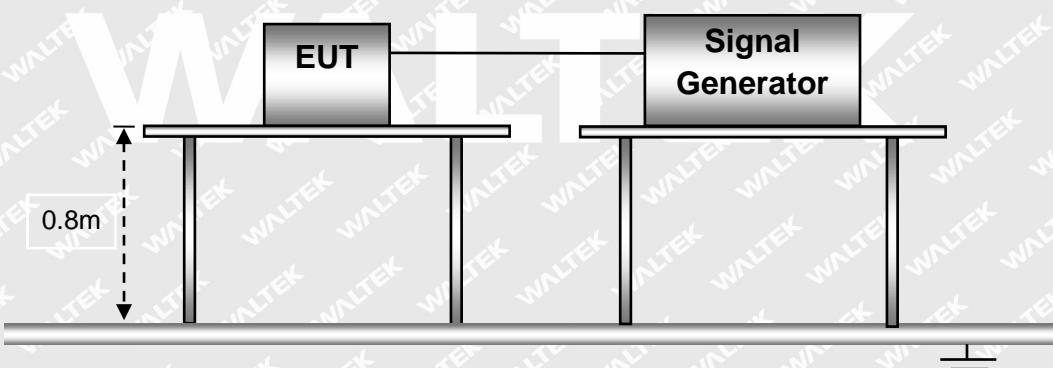
9.2 Test Performance

Performance Criterion: C

9.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

9.4 Basic Test Setup Block Diagram





9.5 Surge Test Data

Test Voltage	Poll	Path	Pass	Fail
0.5kV	±	L-N	/	/
1kV	±	L-N	A	/
2kV	±	L-PE, N-PE	/	/
4kV	±	L-N, L-PE, N-PE	/	/

Test Result: Pass





10. Continuous Induced RF Disturbances (C/S)

10.1 Test Procedure

Test is conducted under the description of EN 61000-4-6.

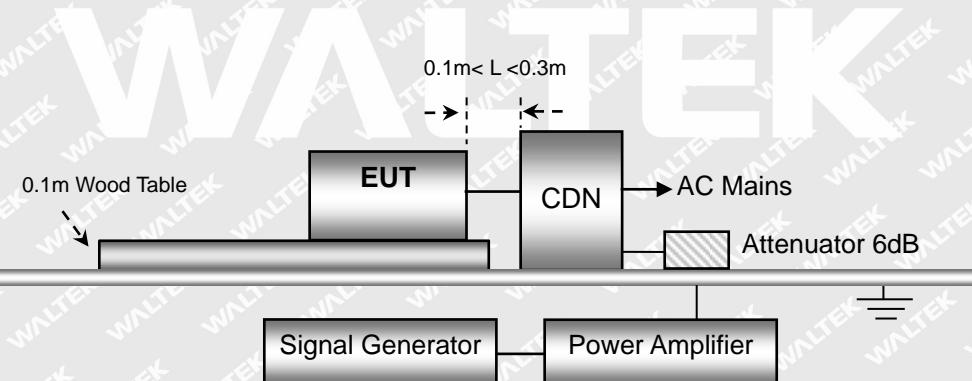
10.2 Test Performance

Performance Criterion: A

10.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

10.4 Basic Test Setup Block Diagram





10.5 Continuous Conducted Disturbances Test Data

Sweep frequency range: 0.15 MHz to 80 MHz

Frequency step: 1% of fundamental

Dwell time: 1 second

AC Port

Frequency MHz	Injected Position	Voltage level (e.m.f.)	Observations (Performance Criterion)	Result
0.15-80	AC Mains	1V	/	/
0.15-80	AC Mains	3V	A	Pass
0.15-80	AC Mains	10V	/	/

Test Result: Pass

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11. Power-Frequency Magnetic Fields (PFMF)

11.1 Test Procedure

Test is conducted under the description of EN 61000-4-8.

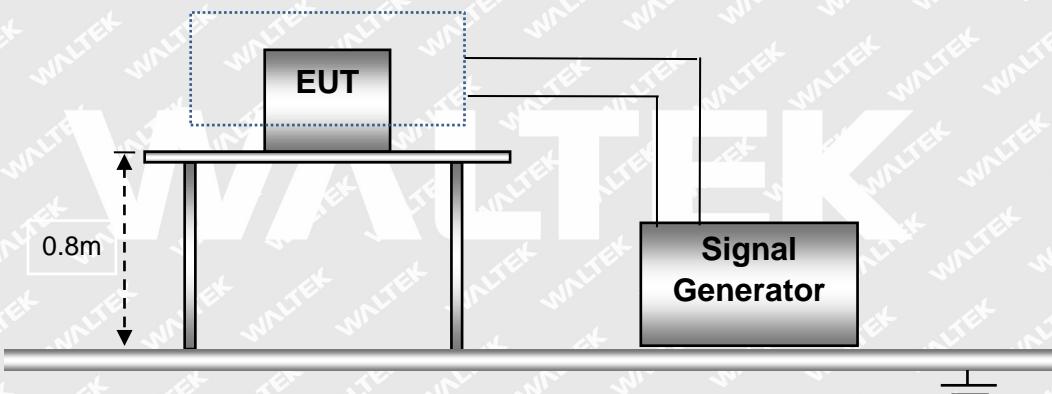
11.2 Test Performance

Performance Criterion: A

11.3 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	997 mbar

11.4 Basic Test Setup Block Diagram





11.5 Power-Frequency Magnetic Field Test Data

Level	Magnetic Field Strength (r.m.s) A/m	Frequency Hz	Induction Coil Postion	Pass	Fail
1	1	50	X, Y, Z	/	/
2	3	50	X, Y, Z	A	/
3	10	50	X, Y, Z	/	/
X	Special	/	/	/	/

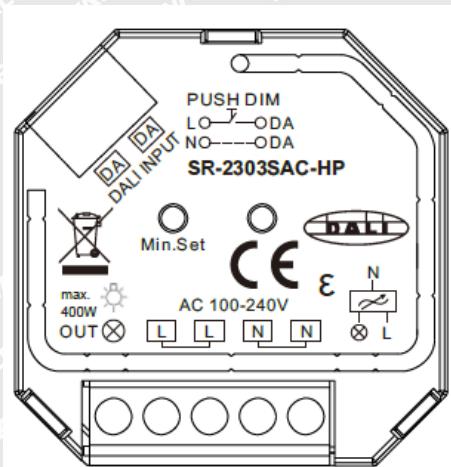
Test Result: Pass

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EXHIBIT 1 - PRODUCT LABELING

Proposed CE Label Format



Specifications: Text is Black in color and is justified. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT. The 'CE' marking must be affixed to the EUT or to its data plate. Where this is not possible or not warranted on account of the nature of the apparatus, it must be affixed to the packaging, if any, and to the accompanying documents. The 'CE' marking is allowed less than 5 mm but must clear. If the 'CE' marking is reduced or enlarged the proportions given in the above graduated drawing must be respected. The Importer name, address and Manufacturer name and address should indicate on marking label or packaging or in a document accompanying

Proposed Label Location on EUT

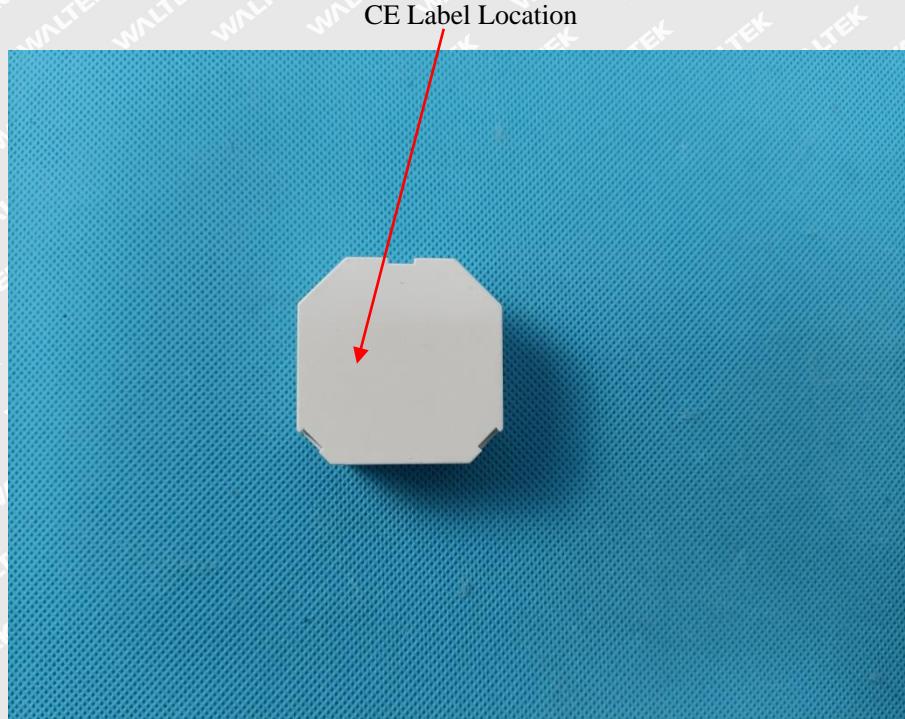


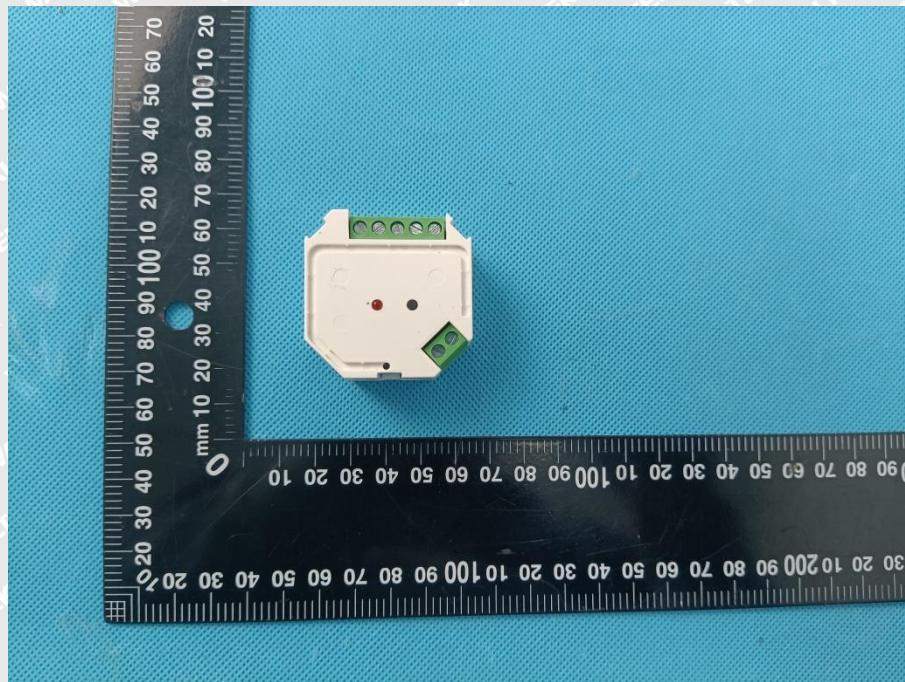


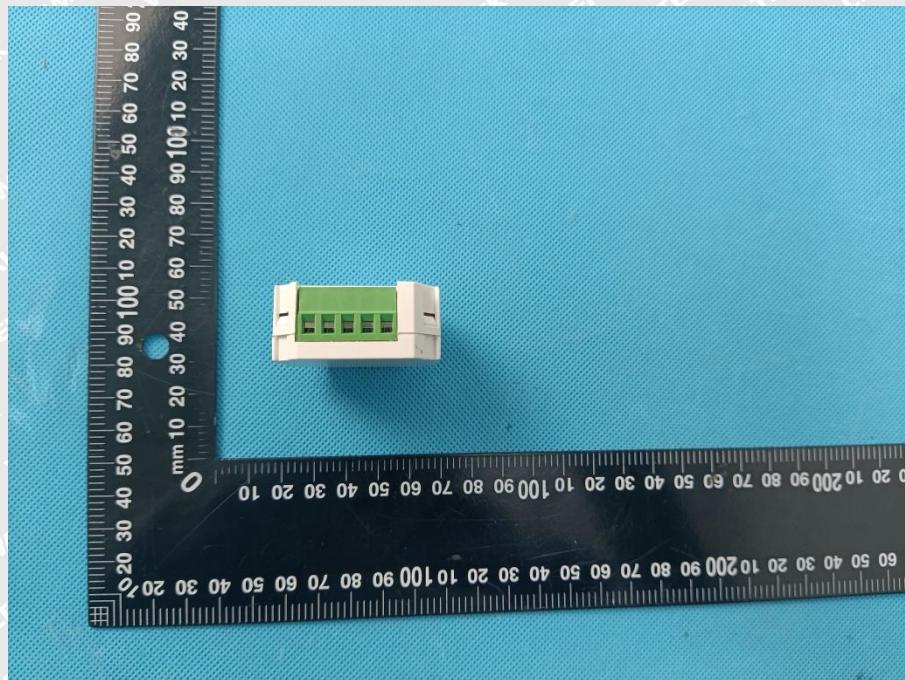
EXHIBIT 2 - EUT PHOTOGRAPHS

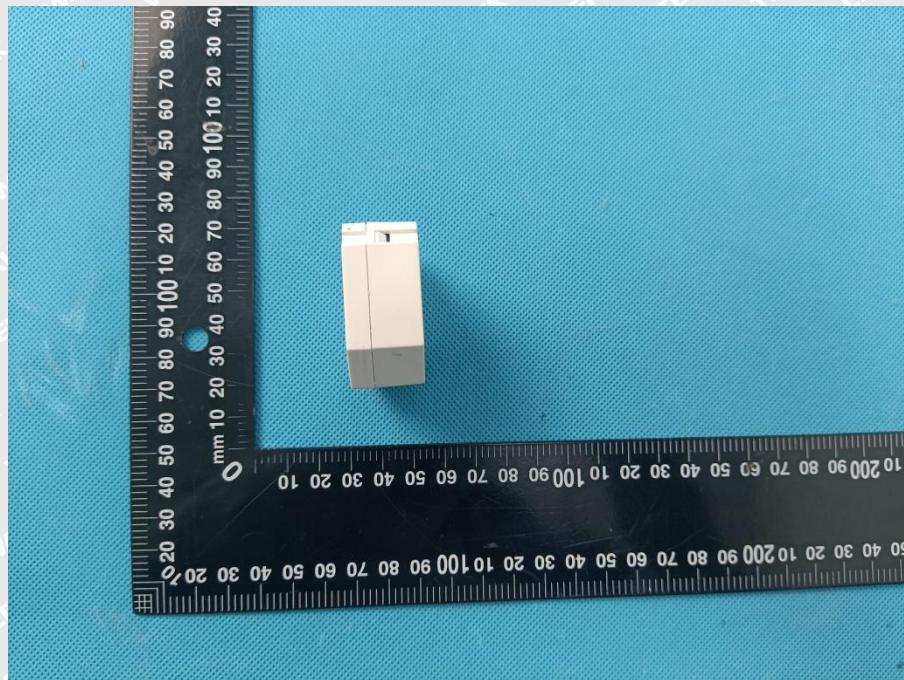
EUT View 1



EUT View 2



**EUT View 3****EUT View 4**

**EUT View 5****EUT View 6**

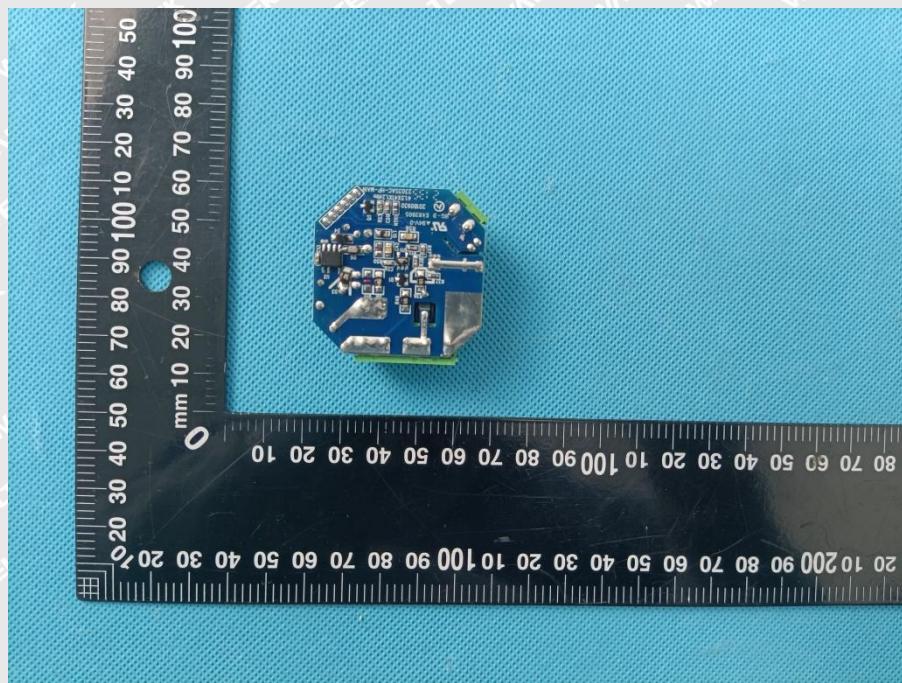
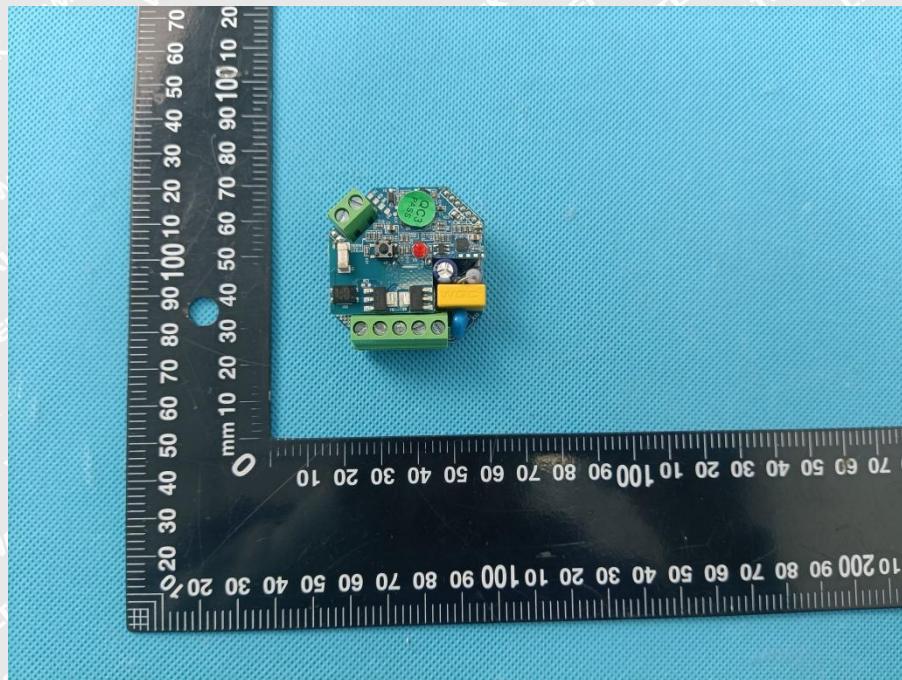
**Solder Board-Component View 1****Solder Board-Component View 2**



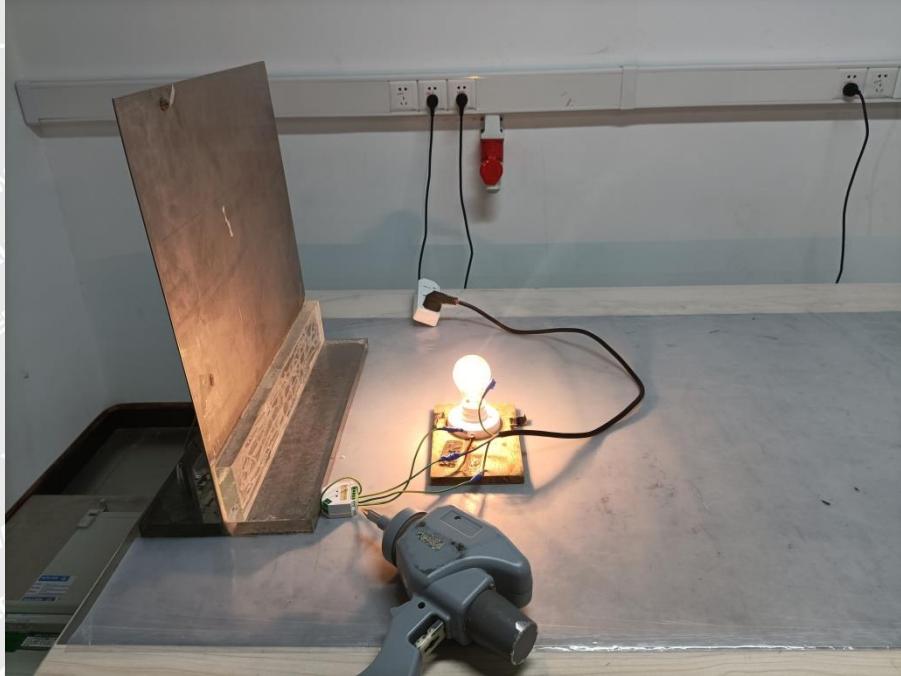
EXHIBIT 3 - TEST SETUP PHOTOGRAPHS

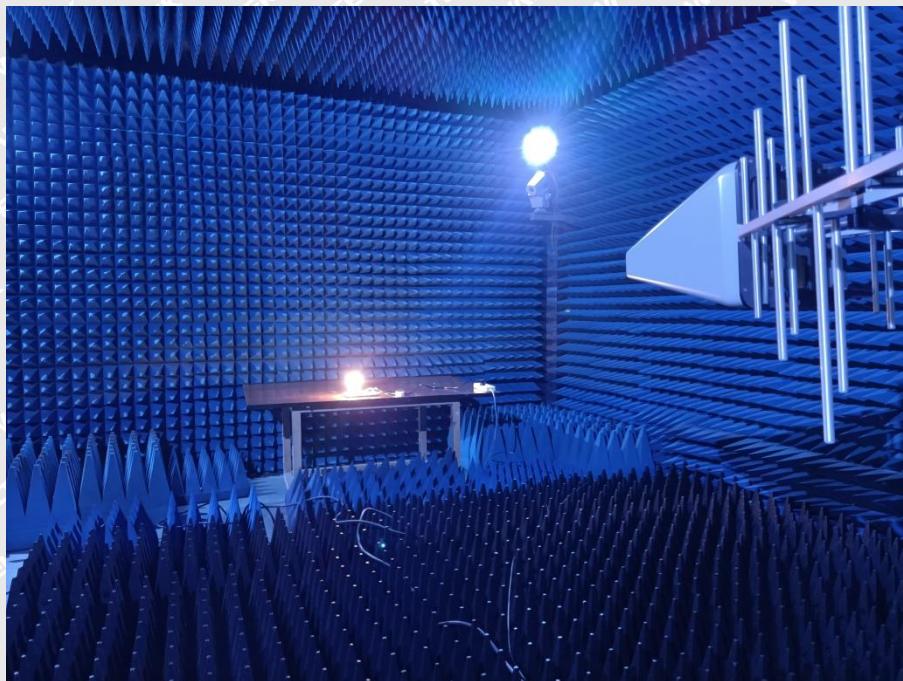
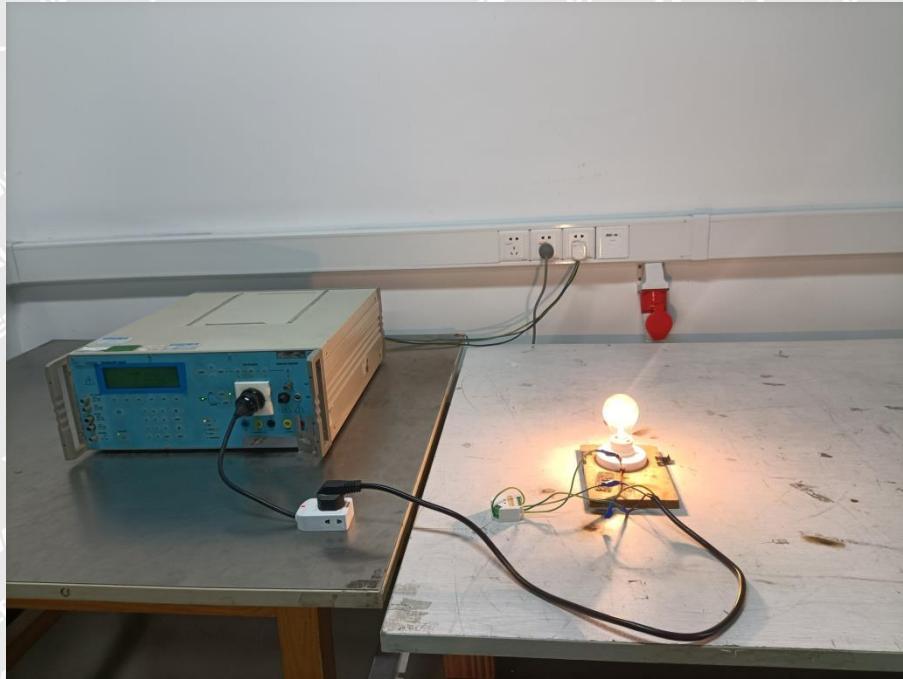
Conduction Emission Test View

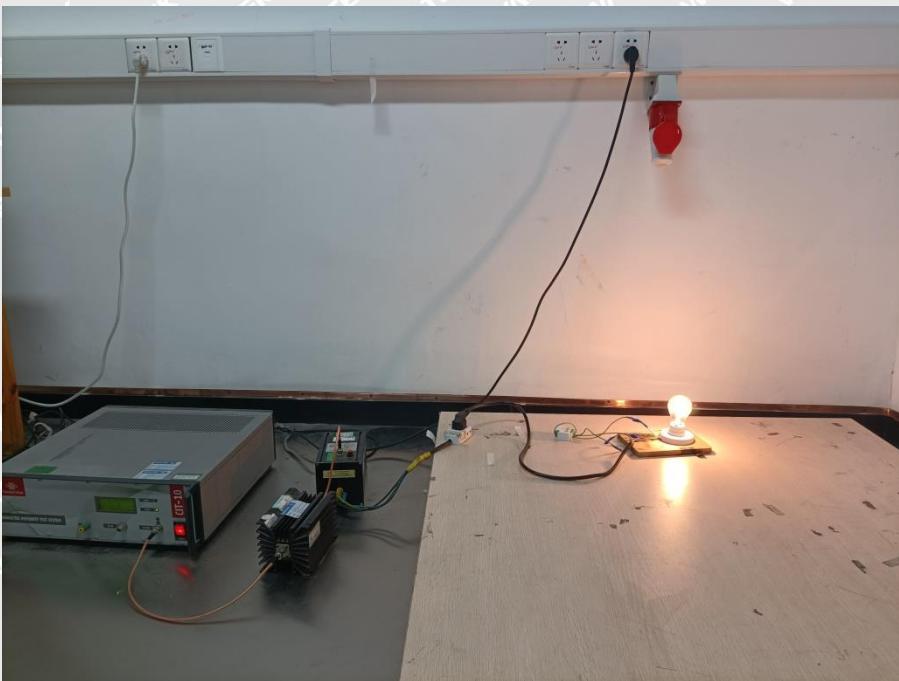


Radiation Emission Test View (9kHz~30MHz)



**Radiation Emission Test View (30MHz~1000MHz)****EN 61000-4-2 Test View**

**EN 61000-4-3 Test View****EN 61000-4-4/5 Test View**

**EN 61000-4-6 Test View****EN 61000-4-8 Test View**

***** END OF REPORT *****