

Report No.: STS2411168E01

Issued for

Mid Ocean Brands B.V.

7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong, China

Product Name: Rechargeable portable small juicer

Brand Name: N/A

Model Name: MO2574

Series Model(s): N/A

EN IEC 55014-1:2021

EN IEC 61000-3-2:2019/A1:2021

Test Standards: EN 61000-3-3:2013/A2:2021

EN IEC 55014-2:2021

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### **TEST REPORT**

Applicant's name:	Mid Ocean Brands B.V.

7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan,

Kowloon, Hong Kong, China

Manufacturer's Name .....: Mid Ocean Brands B.V.

7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan,

Kowloon, Hong Kong, China

**Product description** 

Product Name ...... Rechargeable portable small juicer

Brand Name .....: N/A

Model Name..... MO2574

Series Model(s)..... N/A

EN IEC 55014-1:2021

**Standards**..... EN IEC 61000-3-2:2019/A1:2021

EN 61000-3-3:2013/A2:2021

EN IEC 55014-2:2021

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Date of Test .....

Date of Receipt of Test Item .....: 28 Nov. 2024

Date (s) of Performance of Tests............ 28 Nov. 2024 ~ 05 Dec. 2024

Test Result...... Pass

Testing Engineer : Stan Deng

(Star Deng)

Technical Manager :

(Iony Liu)

Authorized Signatory: Toney

(Bovey Yang)



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# **Revision History**

Report No.: STS2411168E01

Rev.	Issue Date	Report No.	Effect Page	Contents
00	05 Dec. 2024	STS2411168E01	ALL	Initial Issue
		1		1.



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### 1. TEST SUMMARY

Test procedures according to the technical standards:

EMC Emission				
Standard	Test Item	Limit	Judgment	Remark
	Conducted Emission on AC And Telecom Port 150kHz to 30MHz		PASS	
EN IEC 55014-1:2021	Disturbance Power(30- 300MHz)	Meets the requirements	N/A	NOTE (1)
	Radiated Emission		PASS	
EN IEC 61000-3-2:2019/A1:2021	Harmonic Current Emission	Class A	N/A	NOTE (2)
EN 61000-3-3:2013/A2:2021	Voltage Fluctuations & Flicker		PASS	
	EMC Immunity			
Section EN IEC 55014-2:2021	Test Item	Performance Criteria	Judgment	Remark
EN 61000-4-2:2009	Electrostatic Discharge	В	PASS	
EN IEC 61000-4-3:2020	Continuous RF electromagnetic field disturbances	А	PASS	
EN 61000-4-4:2012	Electrical fast transients/burst	В	PASS	
EN 61000-4-5:2014/A1:2017	Surges	В	PASS	
EN 61000-4-6:2014/AC:2015	Continuous induced RF disturbances	А	PASS	
EN 61000-4-8:2010	Power Frequency Magnetic Field	А	N/A	
EN IEC 61000-4-11:2020	Voltage dips and interruptions	C/C/C	PASS	NOTE(3)

NOTE: (1) Clock frequency less than 30MHz and absorbing clamp met applicable limits (Table 7) reduced by the margin (Table 8).

(2) The power consumption of EUT is less than 75W and no Limits apply

(3) Voltage dip: 100% reduction – Performance Criteria C

Voltage dip: 30% reduction - Performance Criteria C

Voltage Dip: 60% reduction - Performance Criteria C

(4) N/A=Not Applicable.



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### 1.1 TEST FACTORY

Company Name:	Shenzhen STS Test Services Co. Ltd.
Address:	101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guang Dong, China
Telephone:	+86-755 3688 6288
Fax:	+86-755 3688 6277
	IC Registration No.: 12108A
Registration No.:	FCC test Firm Registration Number: 625569
	A2LA Certificate No.: 4338.01

### 1.2 MEASUREMENT UNCERTAINTY

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

# A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
STSC01	CISPR 16-4-2	9KHz-150KHz	2.19	
		150 KHz ~ 30MHz	2.53	

# B. Radiated Measurement:

Test S	Site Method	Measurement Frequency Range	U , (dB)	NOTE
STSC	02 CISPR 16-4	-2 30MHz ~ 1000MHz	4.18	
		1GHz ~ 6GHz	4.90	



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# 2. GENERAL INFORMATION

# 2.1 GENERAL DESCRIPTION OF EUT

Product Name	Rechargeable portable small juicer
Brand Name	N/A
Model Name	MO2574
Series Model(s)	N/A
Model Difference	N/A
Product Description	The EUT is a Rechargeable portable small juicer.  Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as a Lighting Device. More details of EUT technical specification, please refer to the User's Manual.
Immunity test category	Category III
Rating	Input: DC 5V
Adapter	N/A
Battery	Rated Voltage: 3.7V Charge Limit Voltage: 4.2V Capacity: 1200mAh
Hardware version number	N/A
Software version number	N/A



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### 2.2 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	Charging
Mode 2	Working

	For Conducted Test
Final Test Mode	Description
Mode 1	Charging

	For Radiated Test
Final Test Mode	Description
Mode 1	Charging

	For EMS Test
Final Test Mode	Description
Mode 1	Charging
Mode 2	Working

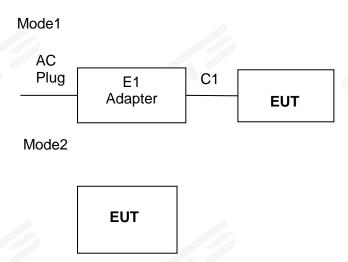
### Note:

- 1. In the conducted disturbance test, Mode 1 is the minimum margin mode, and this report only shows the minimum margin mode test data.
- 2. In the radiation disturbance test, Mode 1 is the minimum margin mode, and this report only shows the minimum margin mode test data.



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### 2.3 DESCRIPTION OF TEST SETUP



### 2.4 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	Brand	Model/Type No.	Note
E-1	Adapter	ZTC	NB-A515A	N/A

Item	Equipment	Ferrite Core	Length	Note
C-1	USB Cable	NO	110cm	N/A

### 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 <code>"Length\_"</code> column.



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# 2.5 MEASUREMENT INSTRUMENTS LIST

# 2.5.1 CONDUCTED TEST SITE

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
EMI Test Receiver	R&S	ESCI	101427	2024.9.23	2025.9.22
LISN	R&S	AiT-F01220	8130179	2024.9.23	2025.9.22
Absorbing Clamp	R&S	MDS-21	100668	2024.4.15	2025.4.14
CE Cable	N/A	C01	N/A	2024.9.23	2025.9.22
Temperature & Humidity	Anymetre	JR900	240686	2024.10.15	2025.10.14
Testing Software	EZ-EMC(Ver.STSLAB-03A1 CE)				

# 2.5.2 RADIATED TEST SITE

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
EMI Test Receiver	R&S	ESCI	101427	2024.9.23	2025.9.22
Bi-log Antenna	TESEQ	CBL6111D	45873	2024.9.28	2025.9.27
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1343	2024.9.28	2025.9.27
Pre-amplifier(1G-26.5G)	Agilent	HP8449B	3008A02383	2024.2.23	2025.2.22
Pre-amplifier(0.1M- 3GHz)	EM	EM330	060665	2024.2.23	2025.2.22
Spectrum Analyzer	Agilent	N9020A	MY49100060	2024.9.23	2025.9.22
RE Cable (9K-1G)	N/A	R01	N/A	2024.9.23	2025.9.22
RE Cable (1G-26G)	N/A	R02	N/A	2024.9.23	2025.9.22
Temperature & Humidity	Mieo	HH660	N/A	2024.9.26	2025.9.25
SAC	ChengYu	9*6*6	N/A	2023.9.05	2026.9.06
Testing Software EZ-EMC(Ver.ST			er.STSLAB-03A1	RE)	

# 2.5.3 HARMONICS AND FLICKER

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Harmonic Voltage & Flicker	LAPLACE	AC 2000A	311217	2024.9.23	2025.9.22
AC Power Source	MTONI	PHF-5010	631169	2024.9.23	2025.9.22
Temperature & Humidity	Anymetre	Anymetre JR900 240686 2024.10.			
Testing Software	HA-PC Link Version 3.03				



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# 2.5.4 ESD

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
ESD TEST GENERATOR	TESEQ	NSG438	1175	2024.10.14	2025.10.13
Temperature & Humidity	N/A	WS1066	N/A	2024.2.22	2025.2.21

# 2.5.5 SURGE, EFT/BURST, VOLTAGE INTERRUPTION/DIPS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Surger Generator	HTEC	HCWG 100	225202	2024.2.23	2025.2.22
Surger Generator	HTEC	HTW	152104	2024.9.23	2025.9.22
VOLTAGE DIPS & INTERRUPTIONS Generator	HTEC	HPFS 161P	143803	2024.2.23	2025.2.22
EFT/B Generator	HTEC	HEFT 51	1920001	2024.9.23	2025.9.22
Temperature & Humidity	Anymetre	JR900	240686	2024.10.15	2025.10.14

# 2.5.6 RS

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
Power Meter	Agilent	E4419B	QB43312265	2024.9.23	2025.9.22
Power Sensor	hp	E9300A	US39210170	2024.9.23	2025.9.22
Power Sensor	hp	E9300A	US39210476	2024.9.23	2025.9.22
Signal Generator	Agilent	N5181A	MY56144718	2024.9.23	2025.9.22
Power Amplifier	MICOTOP	MPA-80-1000-250	MPA1711489	2024.9.23	2025.9.22
Power Amplifier	MICOTOP	MPA-1000-6000- 100	MPA1904132	2024.9.23	2025.9.22
RS Test Antenna (80-1GHz)	SCHWARZBECK	VULP 9118E	000999	N/A	N/A
RS Test Antenna (1G-10GHz)	SCHWARZBECK	STLP 9149	000648	N/A	N/A
Universal Radio Communication Tester	R&S	CMU200	116337	2024.2.25	2025.2.24
Audio Analyzer	R&S	UPL	100689	2024.3.20	2025.3.19
Audio Breakthrough Shielding Box	SKET	SB_ABT/C35	N/A	N/A	N/A
Ear Simulator	SKET	AE_ABT/C35	N/A	N/A	N/A
Mouth Simulator	SKET	AM_ABT/C35	N/A	N/A	N/A
1KHz Standard	SKET	MSC_ABT/C35	N/A	2024.9.24	2025.9.23



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Source					
Field Probe	Narda	EP601	611WX80261	2024.2.23	2025.2.22
Temperature & Humidity	Anymetre	JR900	240686	2024.10.15	2025.10.14
Testing Software	EMC-S V1.4.0.53				

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# 2.5.7 INJECTION CURRENT

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Calibrated Until
CS	SCHLODER	CDG-6000-25	126A1280/2014	2024.9.23	2025.9.22
CDN	SCHLODER	CDN-M2+3	A2210275/2014	2024.9.23	2025.9.22
EM Clamp	FISCHER	F-203I-23MM	445	2024.4.22	2025.4.21
Attenuator	Nemtest	ATT-6DB-100	A100W224	2024.9.23	2025.9.22
Universal Radio Communication Tester	R&S	CMU200	116337	2024.2.25	2025.2.24
Audio Analyzer	R&S	UPL	100689	2024.3.20	2025.3.19
Audio Breakthrough Shielding Box	SKET	SB_ABT/C35	N/A	N/A	N/A
Ear Simulator	SKET	AE_ABT/C35	N/A	N/A	N/A
Mouth Simulator	SKET	AM_ABT/C35	N/A	N/A	N/A
1KHz Standard Source	SKET	MSC_ABT/C35	N/A	2024.9.24	2025.9.23
Temperature & Humidity	Anymetre	JR900	240686	2024.10.15	2025.10.14



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### 3. EMC EMISSION TEST

### 3.1 CONDUCTED EMISSION MEASUREMENT

# 3.1.1 POWER LINE CONDUCTED EMISSION (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)		s and additional s (dBuV)	At mains terminals (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	80.00	70.00	66 - 56 *	59 - 46 *
0.50 - 5.0	74.00	64.00	56.00	46.00
5.0 – 30.0	74.00	64.00	60.00	50.00

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.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

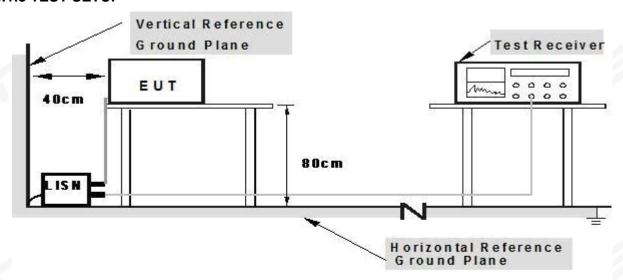
# 3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.



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### 3.1.3 TEST SETUP



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

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

### 3.1.4 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.



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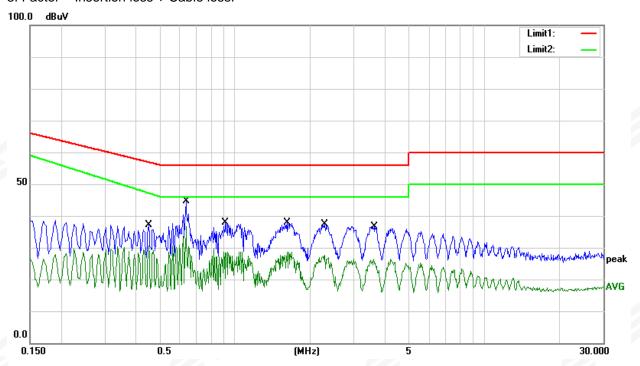
### 3.1.5 TEST RESULTS

Temperature:	25.1℃	Relative Humidity:	59%
Phase:	L	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz	Test Date:	2024.11.29

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4500	17.21	20.01	37.22	56.88	-19.66	QP
2	0.4500	10.49	20.01	30.50	47.14	-16.64	AVG
3	0.6340	24.79	19.88	44.67	56.00	-11.33	QP
4	0.6340	16.78	19.88	36.66	46.00	-9.34	AVG
5	0.9180	18.19	19.78	37.97	56.00	-18.03	QP
6	0.9180	9.83	19.78	29.61	46.00	-16.39	AVG
7	1.6220	18.03	19.78	37.81	56.00	-18.19	QP
8	1.6220	8.85	19.78	28.63	46.00	-17.37	AVG
9	2.2940	17.53	19.81	37.34	56.00	-18.66	QP
10	2.2940	7.71	19.81	27.52	46.00	-18.48	AVG
11	3.6180	16.76	19.83	36.59	56.00	-19.41	QP
12	3.6180	6.64	19.83	26.47	46.00	-19.53	AVG

### Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor )-Limit.
- 3. Factor = Insertion loss + Cable loss.





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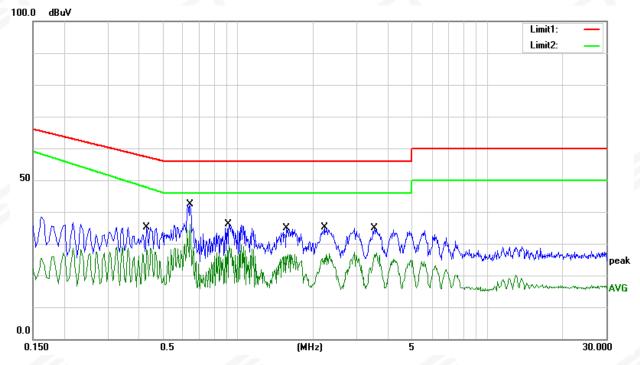
Temperature:	25.1℃	Relative Humidity:	59%
Phase:	N	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz	Test Date:	2024.11.29

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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.4300	15.20	20.02	35.22	57.25	-22.03	QP
2	0.4300	8.63	20.02	28.65	47.63	-18.98	AVG
3	0.6420	22.57	19.87	42.44	56.00	-13.56	QP
4	0.6420	16.19	19.87	36.06	46.00	-9.94	AVG
5	0.9220	16.39	19.79	36.18	56.00	-19.82	QP
6	0.9220	9.51	19.79	29.30	46.00	-16.70	AVG
7	1.5660	15.17	19.83	35.00	56.00	-21.00	QP
8	1.5660	6.91	19.83	26.74	46.00	-19.26	AVG
9	2.2220	15.12	19.89	35.01	56.00	-20.99	QP
10	2.2220	7.07	19.89	26.96	46.00	-19.04	AVG
11	3.5180	14.95	19.94	34.89	56.00	-21.11	QP
12	3.5180	7.24	19.94	27.18	46.00	-18.82	AVG

### Remark:

- 1. All readings are Quasi-Peak and Average values.
- 2. Margin = Result (Result = Reading + Factor )—Limit.
- 3. Factor = Insertion loss + Cable loss.





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### 3.2 DISTURBANCE POWER MEASUREMENT

### 3.2.1 LIMITS OF THE DISTURBANCE POWER MEASUREMENT (30MHz-300MHz)

Table 7 - Disturbance power limits - 30 MHz to 300 MHz

	145	10 7 2100	апранос р	ower mines		ols	! <del>=</del>	
Frequency range	General					P > 1 000 W		
1	2	3	4	5	6	7	8	9
MHz	Quasi- peak	Averag e dBpW	Quasi- peak dBpW	Average dBpW	Quasi- peak dBpW	Average dBpW	Quasi- peak dBpW	Average dBpW
00 000	Increasing linearly with the frequency from:							
30 ~ 300	44 ~ 55	35 ~ 45	44 ~ 55	35 ~ 45	49 ~ 59	39 ~ 49	55 ~ 65	45 ~ 55
Key P = rated power of the motor only.								

If the quasi-peak measurements meet the average limit, the EUT shall be deemed to meet both limits and the measurements using the average detector need not be carried out.

Table 8 - Reduction applicable to Table 7 limits

			Tools					
Frequency range	P≤/00 W		00 W < P≤ 1000W		1 000 W			
1	2	3	4	5	6	7	8	9
MHz	Quasi- peak	Average dBpW	Quasi- peak dBpW	Average dBpW	Quasi- peak dBpW	Average dBpW	Quasi- peak dBpW	Average dBpW
	Increasing linearly with the frequency from:							
200 ~ 300	0 ~ 10	0	0 ~ 10	0	0 ~ 10	0	0 ~ 10	0
NOTE This ta	ble only a	applies if m	ethod a) s	pecified in 4	1.3.4.2 is	followed.		

#### Notes:

- (1) The limit for radiated test was performed in the following: CISPR14.1
- (2) The tighter limit applies at the band edges.

### 3.2.2 TEST PROCEDURE

- a. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. EUT as the center to the edge of the auxiliary device, the distance from the maximum edge to the center of the antenna is 3 meter.
- c. The height of antenna is varied from 1 meter to 4 meter above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meter and the rotatable table was turned from 0 degrees to 360 degree to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

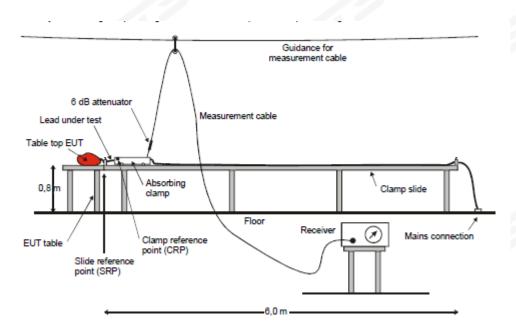


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f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 3.2.3 TEST SETUP

Disturbance Power Test Set-Up



### 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 DISTURBANCE POWER RESUL (30-300MHz)

Temperature:	<b></b> ℃	Relative Humidity:	%
Phase:	N/A	Test Mode:	N/A
Test Voltage:	N/A	Test Date:	N/A

Note: Not applicable



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### 3.3 RADIATED EMISSION MEASUREMENT

#### 3.3.1 LIMITS OF RADIATED EMISSION MEASUREMENT

FREQUENCY (MHz)	At 10m	At 3m
PREQUENCT (MINZ)	Quasi-peak (dBuV/m)	Quasi-peak (dBuV/m)
30 ~ 230	30	40
230 ~ 300	37	47
230 ~ 1000	37	47

EDECHENCY (MLI-)	At 3m			
FREQUENCY (MHz)	Peak (dBuV/m)	Avg (dBuV/m)		
1000 ~ 3000	70	50		
3000 ~ 6000	74	54		

### Notes:

- (1) The limit for radiated test was performed in the following: CISPR 14-1
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

#### 3.3.2 TEST PROCEDURE

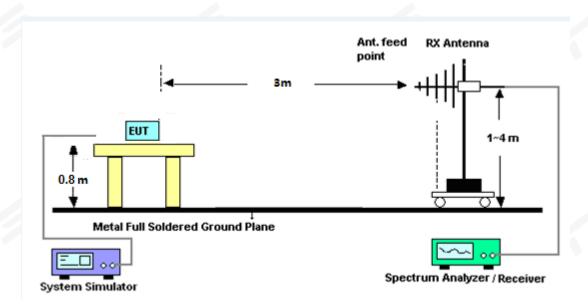
- a. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. EUT as the center to the edge of the auxiliary device, the distance from the maximum edge to the center of the antenna is 3 meter.
- c. The height of antenna is varied from 1 meter to 4 meter above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meter and the rotatable table was turned from 0 degrees to 360 degree to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.



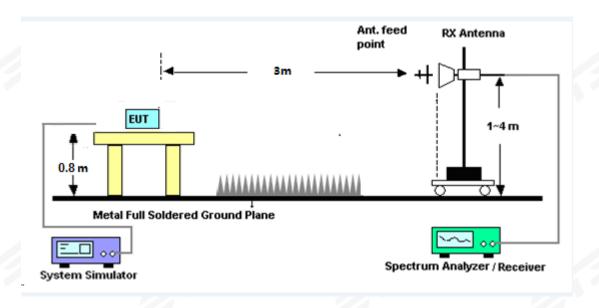
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### 3.3.3 TEST SETUP

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



(B) Radiated Emission Test Set-Up Frequency Above 1GHz



# 3.3.4 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.



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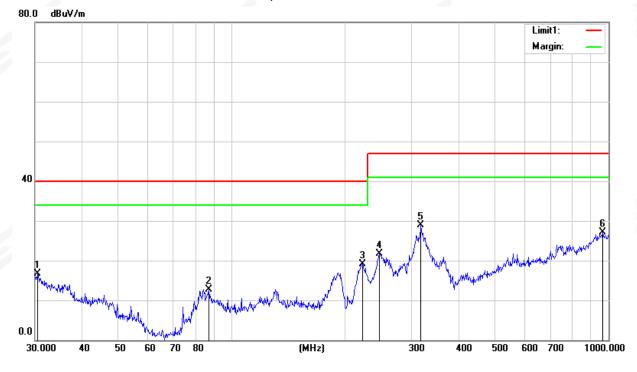
# 3.3.5 TEST RESULTS (30MHz-1000MHz)

Temperature:	26.1℃	Relative Humidity:	53%
Phase:	Horizontal	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz	Test Date:	2024.11.28

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.4238	27.98	-11.26	16.72	40.00	-23.28	QP
2	86.8068	34.80	-22.01	12.79	40.00	-27.21	QP
3	222.1698	38.48	-19.39	19.09	40.00	-20.91	QP
4	245.9510	39.81	-18.17	21.64	47.00	-25.36	QP
5	317.7011	43.77	-14.90	28.87	47.00	-18.13	QP
6	965.5421	29.01	-1.95	27.06	47.00	-19.94	QP

### Remark:

- 1. All readings are Quasi-Peak.
- Margin = Result (Result = Reading + Factor ) Limit.
   Factor = Cable Loss + Antenna Factor Amplifier Gain.





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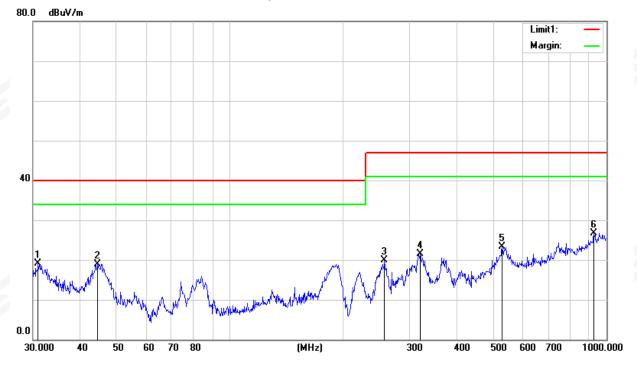
Temperature:	26.1℃	Relative Humidity:	53%
Phase:	Vertical	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz	Test Date:	2024.11.28

Report No.: STS2411168E01

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.9620	30.66	-11.57	19.09	40.00	-20.91	QP
2	44.5868	37.92	-18.92	19.00	40.00	-21.00	QP
3	257.4222	35.38	-15.38	20.00	47.00	-27.00	QP
4	319.9370	36.17	-14.73	21.44	47.00	-25.56	QP
5	528.2458	33.55	-10.25	23.30	47.00	-23.70	QP
6	925.7563	29.31	-2.63	26.68	47.00	-20.32	QP

### Remark:

- 1. All readings are Quasi-Peak.
- 2. Margin = Result (Result = Reading + Factor )-Limit.
- 3. Factor= Cable Loss +Antenna Factor-Amplifier Gain.





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### 3.4 HARMONICS CURRENT

### 3.4.1 LIMITS OF HARMONICS CURRENT

	EN 6	1000-3-2/IEC	61000-3-2		
Equipment Category	Max. Permissible Harmonic Current	Equipment Category	Harmonic Order		
	(in Ampers)		n	(in A)	(mA/w)
Class A	Same as Limits Specified in 4-2.1, Table - I, but only odd harmonics required	Class D	3 5 7 9 11 13≤n≤39	2.30 1.14 0.77 0.40 0.33 see Table I	3.4 1.9 1.0 0.5 0.35 3.85/n

#### 3.4.2 TEST PROCEDURE

- a. The EUT was placed on the top of a wooden table 0.8 meters above the ground and operated to produce the maximum harmonic components under normal operating conditions.
- b. The classification of EUT is according to section 5 of EN 61000-3-2. The EUT is classified as follows:
- Class A: Balanced three-phase equipment, Household appliances excluding equipment as
- Class D, Tools excluding portable tools, Dimmers for incandescent lamps, audio equipment, equipment not specified in one of the three other classes.
- Class B: Portable tools. Portable tools.; Arc welding equipment which is not professional equipment.
- Class C: Lighting equipment.
- Class D: Equipment having a specified power less than or equal to 600W of the following types: Personal computers and personal computer monitors and television receivers.
- c. The correspondent test program of test instrument to measure the current harmonics emanated from EUT is chosen. The measure time shall be not less than the time necessary for the EUT to be exercised.

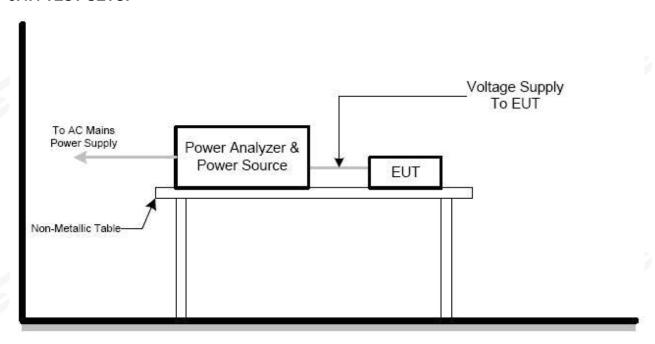
### 3.4.3 EUT OPERATING CONDITIONS

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



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### 3.4.4 TEST SETUP



### 3.4.5 TEST RESULTS

Temperature:	25℃	Relative Humidity:	45%
Test Voltage:	AC 230V/50Hz		

Note: The above limits for all equipment except for lighting equipment having an active input power>75 W and no limits apply for equipment with an active input power up to and including 75W.



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### 3.5 VOLTAGE FLUCTUATION AND FLICKERS

### 3.5.1 LIMITS OF VOLTAGE FLUCTUATION AND FLICKERS

Tests	Limit	Descriptions
rests	IEC/EN 61000-3-3	<ul> <li>Descriptions</li> </ul>
P <sub>st</sub>	≤ 1.0,Tp= 10 min.	Short Term Flicker Indicator
Plt	≤0.65, Tp=2 hr.	Long Term Flicker Indicator
T <sub>dt(s)</sub>	≤ 3.3%	Relative Steady-State V-Chang
d <sub>max</sub> (%)	≤ 4%	Maximum Relative V-Chang
d <sub>c</sub> (%)	≤ 3.3% for > 500 ms	Relative V-change Characteristic

### 3.5.2 TEST PROCEDURE

a. Fluctuation and Flickers Test:

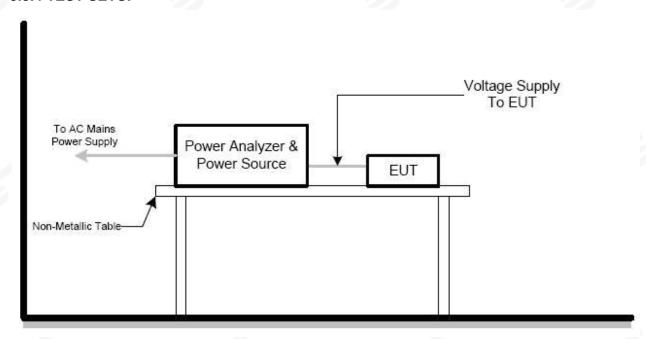
Tests was performed according to the Test Conditions/Assessment of Voltage Fluctuations specified in Clause 6.0/4.0 of EN 61000-3-3 depend.

b. All types of voltage fluctuation in this report are assessed by direct measurement using flicker-meter.

### 3.5.3 EUT OPERATING CONDITIONS

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

### 3.5.4 TEST SETUP





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### 3.5.5 TEST RESULTS

EUT: Rechargeable portable small juicer

**Operator: STAR** 

Test category: IEC 61000-3-3 Ed3.1:2017 Model/Type: MO2574 Measurement standard: IEC 61000-15 Ed2.0:2010 Serial number: End time: 11:40:26

Test date:2024-12-04 Start time: 11:30:25

Test duration (sec):600

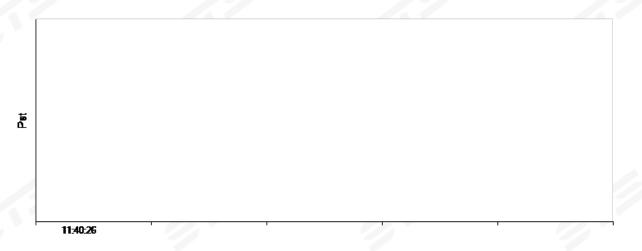
Describe:

**Load Power** : 4.000 W Power Factor: 0.388 **Load Current** : 0.042 mArms Crest Factor:4.595

Nominal Voltage : 230.68 Vrms

**Test Result: pass Status: Test Completed** 

Psti and limit line **European Limits** 



#### Result:

T-max (ms):	0.00	Test limit (ms):	500.00	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.00	Test limit:	1.00	Pass



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# 4. EMC IMMUNITY TEST

# 4.1 STANDARD COMPLIANCE/SERVRITY LEVEL/CRITERIA

Tests Standard No.	TEST SPECIFICATION	Test Mode Test Ports	Perform. Criteria
1. ESD IEC/EN 61000-4-2	8KV air discharge 4KV contact discharge	Direct Mode	В
1EG/EN 01000-4-2	4KV HCP discharge 4KV VCP discharge	Indirect Mode	В
2. RS IEC/EN 61000-4-3	80 MHz - 1000 MHz,1800MHz,2600MHz,3500MHz,50 00MHz, 1000Hz, 80%, AM modulated	Enclosure	А
0 FFT/D	5/50ns Tr/Th 5KHz Repetition Freq.	Power Supply Port	В
3. EFT/Burst IEC/EN 61000-4-4	5/50ns Tr/Th 5KHz Repetition Freq.	CTL/Signal Data Line Port	В
4. Surges	1.2/50(8/20) Tr/Th us	L-N	В
IEC/EN 61000-4-5	1.2/50(8/20) Tr/Th us	L-PE N-PE	В
	0.15 MHz to 80 MHz, 1000Hz 80%, AM Modulated 150Ω source impedance	CTL/Signal Port	А
5. Injected Current IEC/EN 61000-4-6	0.15 MHz to 80 MHz, 1000Hz 80%, AM Modulated 150Ω source impedance	AC Power Port	А
	0.15 MHz to 80 MHz, 1000Hz 80%, AM Modulated 150Ω source impedance	DC Power Port	А
6. Volt. Interruptions	Voltage dip 100%		С
Volt. Dips IEC/EN 61000-4-11	Voltage dip 30% Voltage dip 60%	AC Power Port	C C



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### **4.2 GENERAL PERFORMANCE CRITERIA**

According to **EN 55014-2** standard, the general performance criteria are as follows:

_		
Criterion A		The apparatus shell continues 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 apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the manufacturer does not specify the minimum performance level or the permissible performance loss, 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
		After test, the apparatus shell continues to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomenon below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance.
	Criterion B	During the test, degradation of performance is however allowed. However, no change of operating state if stored data is allowed to persist after the test. If the manufacturer does not specify the minimum performance level or the permissible performance loss, 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 C	Temporary loss of function is allowed, provided the functions is self-recoverable or can be restored by the operation of controls by the user in accordance with the manufacturer instructions.  Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost

### 4.2.1 GENERAL PERFORMANCE CRITERIA TEST SETUP

The EUT tested system was configured as the statements of **2.2** or **2.3** Unless otherwise a special operating condition is specified in the follows during the testing.



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#### 4.3 ESD TESTING

#### 4.3.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-2		
Discharge Impedance:	330 ohm / 150 pF		
Required Performance:	В		
Disabassas Valtassas	Air Discharge: 2KV/4KV/8KV (Direct)		
Discharge Voltage:	Contact Discharge: 4KV (Direct/Indirect)		
Polarity: Positive & Negative			
Number of Discharge:	Air Discharge: at least 10 times on each point Contact Discharge: at least 10 times on each point		
Discharge Mode:	Single Discharge		
Discharge Period:	1 second minimum		

### **4.3.2 TEST PROCEDURE**

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

a. Electrostatic discharges were applied only to those points and surfaces of the EUT that are accessible to users during normal operation

The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.

The time interval between two successive single discharges was at least 1 second.

The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meter from the EUT.

Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.

Air discharges were applied with the round discharge tip of the discharge electrode approaching the EUT as fast as possible (without causing mechanical damage) to touch the EUT. After each discharge, the ESD generator was removed from the EUT and re-triggered for a new single discharge. The test was repeated until all discharges were complete.

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.

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.

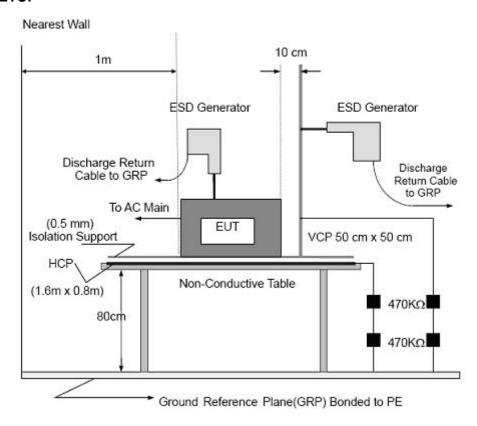
b. Air discharges at insulation surfaces of the EUT.

It was at least ten single discharges with positive and negative at the same selected point.



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### 4.3.3 TEST SETUP



Note:

### **TABLE-TOP EQUIPMENT**

The configuration consisted of a wooden table 0.8 meter high standing on the Ground Reference Plane. The GRP consisted of a sheet of aluminum at least 0.25mm thick. 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  $940k\Omega$  total impedance. The equipment under test was installed in a representative system as described in section 7 of IEC /EN 61000-4-2, and its cables were placed on the HCP and isolated by an insulating support of 0.5mm thickness. A distance of 0.8-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 61000-4-2, and its cables were isolated from the Ground Reference Plane by an insulating support of 0.1 meter thickness. The GRP was consisted of a sheet of aluminum that is at least 0.25mm thick, and extended at least 0.5 meter from the EUT on all sides.



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# **4.3.4 TEST RESULTS**

Temperature:	<b>24.7</b> ℃	Relative Humidity:	50%
Test Date:	2024.12.04	Test Mode:	Mode 1/2
LIDEL MULTAND.	AC 230V /50Hz DC 3.7V form battery		

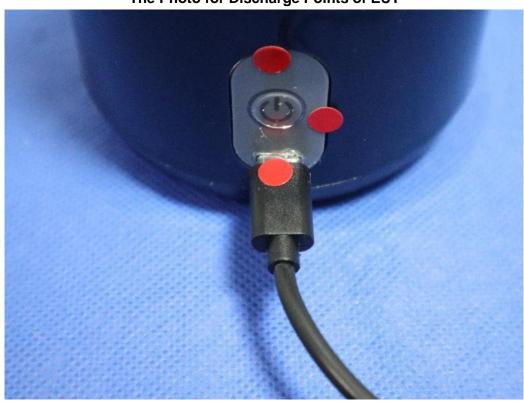
Discharg e Level	Polarity	Test Points	Contact Discharge	Air Discharge	Criterion	Test Result
4	+/-	VCP/HCP	Note	N/A	В	А
4,8	+/-	Red Dot	N/A	Note	В	А

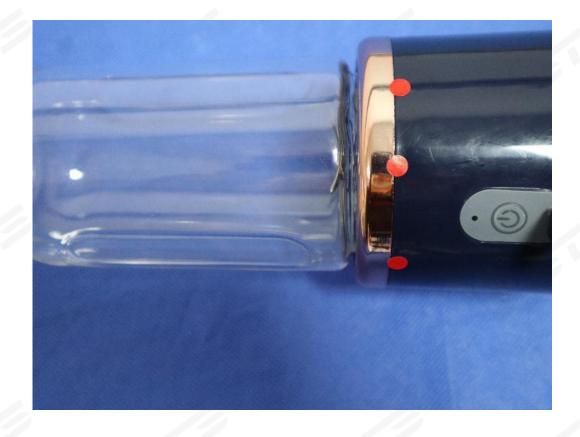
Note: The EUT function was correct during the test Red Dot —Air Discharged Green Dot —Contact Discharged



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### **4.4 RS TESTING**

### **4.4.1 TEST SPECIFICATION**

Basic Standard:	IEC/EN 61000-4-3	
Required Performance:	A	
Frequency Range:	80 MHz-6000 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:	at least 3 seconds	

#### **4.4.2 TEST PROCEDURE**

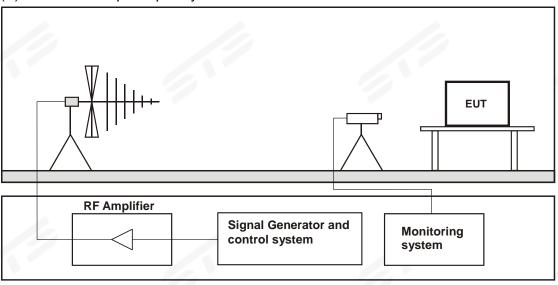
- a) The testing was performed in a fully anechoic chamber. The transmit antenna was located at a distance of 3 meters from the EUT.
- b) The frequency range is swept from 80 MHz to 6000 MHz, with the signal 80% amplitude modulated with a 1kHz sine-wave. The rate of sweep did not exceed 3s, where the frequency range is swept incrementally, the step size was 1% of preceding frequency value.
- c) 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.



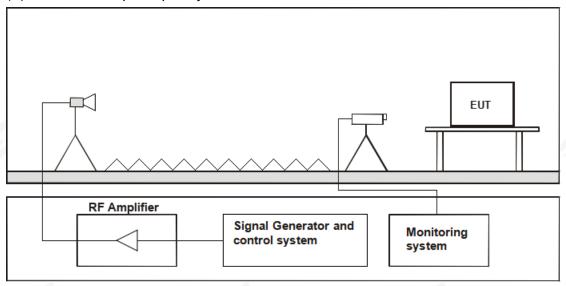
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### 4.4.3 TEST SETUP

# (A) RS Test Set-Up Frequency Below 1GHz



# (B) RS Test Set-Up Frequency Above 1GHz



### Note:

### **TABLE-TOP EQUIPMENT**

The EUT installed in a representative system as described in section 7 of IEC/EN 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 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.



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# **4.4.4 TEST RESULTS**

Temperature:	24.7℃	Relative Humidity:	50%
Test Date:	2024.12.04	Test Mode:	Mode 1/2
LIAST VOITAGE.	AC 230V /50Hz DC 3.7V form battery		

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



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### 4.5 EFT/BURST TESTING

### **4.5.1 TEST SPECIFICATION**

Basic Standard:	IEC/EN 61000-4-4			
Required Performance:	В			
Test Voltage:	Power Line: 1 KV Signal/Control Line: 0.5 KV			
Polarity:	Positive & Negative			
Impulse Frequency:	5 kHz			
Impulse Wave shape :	5/50 ns			
Burst Duration:	15 ms			
Burst Period:	300 ms			
Test Duration:	Not less than 1 min.			

### **4.5.2 TEST PROCEDURE**

The ground reference plane shall be a metallic sheet (copper or aluminum) of 0.25 mm minimum thickness; other metallic materials may be used, but they shall have at least 0.65 mm minimum thickness.

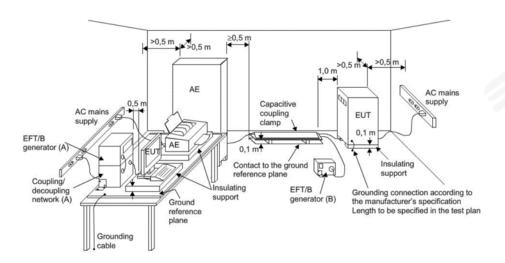
The other conditions required in the following manners:

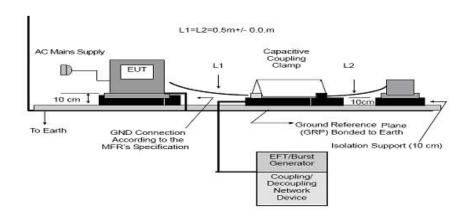
- a. The length of power cord between the coupling device and the EUT should not exceed 1
- b. Both positive and negative polarity discharges were applied.
- c. The duration time of each test sequential was 1 minute



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#### 4.5.3 TEST SETUP





#### Note:

## **TABLE-TOP EQUIPMENT**

- a. Table-top equipment and equipment normally mounted on ceilings or walls as well as built-in equipment shall be tested with the EUT located (0.1±0.01) m above the ground reference plane.
- b. Testing of large table-top equipment or multiple systems can be performed on the floor; maintaining the same distances as for the test setup of table-top equipment.
- c. The test generator and the coupling/decoupling network shall be bonded to the ground reference plane.
- d. The ground reference plane shall be a metallic sheet (copper or aluminum) of 0.25mm minimum thickness; other metallic materials may be used, but they shall have at least 0.65 mm minimum thickness.
- e. The minimum size of the ground reference plane is 0.8m x 1m. The actual size depends on the dimension of the EUT.
- f. The ground reference plane shall project beyond the EUT by at least 0.1m on all sides.



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- g. The ground reference plane shall be connected to the earth (PE) for safety reasons.
- h. The EUT shall be arranged and connected to satisfy its functional requirements according to the equipment installation specifications.
- i. The minimum distance between the EUT and all other conductive structures (including the generator, AE and the walls of a shielded room), except the ground reference plane, shall be more than 0.5m.
- j. All cables to the EUT shall be placed on the insulation support 0.1m above the ground reference plane. Cables not subject to electrical fast transients shall be routed as far as possible from the cable under test to minimize the coupling between the cables.
- k. The EUT shall be connected to the earth system in accordance with the manufacturer's installation specifications; no additional earth connections are allowed.
- I. The connection impedance of the coupling/decoupling network earth cables to the ground reference plane and all connectors shall provide a low inductance.
- m. Either a direct coupling network or a capacitive clamp shall be used for the application of the test voltages. The test voltages shall be coupled to all of the EUT ports in turn including those between two units of equipment involved in the test, unless the length of the interconnecting cable makes it impossible to test.

#### FLOOR-STANDING EQUIPMENT

When using the coupling clamp, the minimum distance between the coupling plates and all other conductive surfaces (including the generator), except the ground reference plane beneath the coupling clamp and beneath the EUT, shall be at least 0.5m.

The distance between any coupling devices and the EUT shall be (0.5 - 0/+0.1) m for tabletop

equipment testing, and  $(1.0 \pm 0.1)$  m for floor standing equipment, unless otherwise specified in product standards. When it is not physically possible to apply the distances mentioned above, other distances can be used and shall be recorded in the test report.

The cable between the EUT and the coupling device, if detachable, shall be as short as possible to comply with the requirements of this clause. If the manufacturer provides a cable exceeding the distance between the coupling device and the point of only of the EUT, the excess length of this cable shall be bundled and situated at a distance of 0.1m above the ground reference plane. When a capacitive clamp is used as a coupling device, the excess cable length shall be bundled at the AE side.

Parts of the EUT with interconnecting cables of a length less than 3m, which are not tested, shall be placed on the insulating support. The parts of the EUT shall have a distance of 0.5m between them. Excess cable length shall be bundled.



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# 4.5.4 TEST RESULTS

Temperature:	24.7℃	Relative Humidity:	50%
Test Date:	2024.12.04	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz		

		Test level (KV)									
Coupling Line		0.5		1		2		4		Criterion	Result
		+	-	+	ı	+	-	+	-		
	L	Α	Α	Α	Α						PASS
	N	Α	Α	Α	Α						PASS
	PE										
AC line	L+N	Α	Α	Α	Α						PASS
	L+PE									В	
	N+PE										
	L+N+PE										
D	C Line										
Sig	nal Line										



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#### 4.6 SURGE TESTING

#### 4.6.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-5
Required Performance:	В
Wave-Shape:	Combination Wave 1.2/50μs Open Circuit Voltage
Test Voltage:	Power line ~ line to line: 1 KV line to ground: 2 KV
Surge Input/Output:	L-N, L-PE, N-PE
Generator Source:	(L-N)2 ohm between networks
Impedance:	(L-PE, N-PE)12 ohm between network and ground
Polarity:	Positive/Negative
Phase Angle:	0°/90°/180°/270°
Pulse Repetition Rate:	1 time / min. (maximum)
Number of Tests:	5 positive and 5 negative at selected points

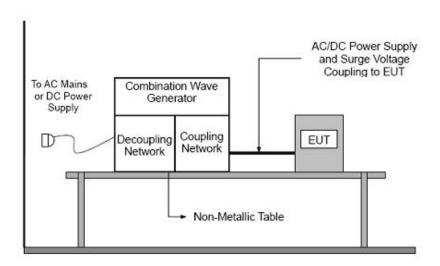
#### **4.6.2 TEST PROCEDURE**

- a. For EUT power supply:
  - The surge is to be applied to the EUT power supply terminals via the capacitive coupling network. Decoupling networks are required in order to avoid possible adverse effects on
- b. equipment not under test that may be powered by the same lines, and to provide sufficient decoupling impedance to the surge wave. The power cord between the EUT and the coupling/decoupling networks shall be 2meters in length (or shorter).
- c. For test applied to unshielded unsymmetrically operated interconnection lines of EUT:
- The surge is applied to the lines via the capacitive coupling. The coupling /decoupling networks shall not influence the specified functional conditions of the EUT. The interconnection line between the EUT and the coupling/decoupling networks shall be 2 meters in length (or shorter).



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### 4.6.3 TEST SETUP





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## **4.6.4 TEST RESULTS**

Temperature:	24.7℃	Relative Humidity:	50%
Test Date:	2024.12.04	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz		

					Test level							Criterion	
Coupling Line		0.5 KV		1 KV		2 KV		4 KV		Result			
				+	-	+	-	+	-	+	-		
			0°										
	L-	NI	90°			Α							PASS
		11	180°										
			270°				Α						PASS
			0°										
AC	L-F	)E	90°					1					
line	L-F	~_	180°										
			270°									В	
			0°										
	N-P	_	90°										
	IN-F	_	180°										
			270°										
Sign	al	Li	ne-Line										
Line	Э	Line	e-Ground					3					
		Line	otoo toot is										

Note: 1) N/A - denotes test is not applicable in this test report.



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#### 4.7 INJECTION CURRENT TESTING

#### 4.7.1 TEST SPECIFICATION

Basic Standard:	IEC/EN 61000-4-6
Required Performance:	A
Frequency Range:	0.15 MHz - 230 MHz
Field Strength:	3Vr.m.s.
Modulation:	1kHz Sine Wave, 80%, AM Modulation
Frequency Step:	1 % of fundamental
Dwell Time:	at least 3 seconds

#### **4.7.2 TEST PROCEDURE**

The EUT shall be tested within its intended operating and climatic conditions.

The test shell performed with the test generator connected to each of the coupling and decoupling devices in turn, while the other non-excited RF input ports of the coupling devices are terminated by a 50-ohm load resistor.

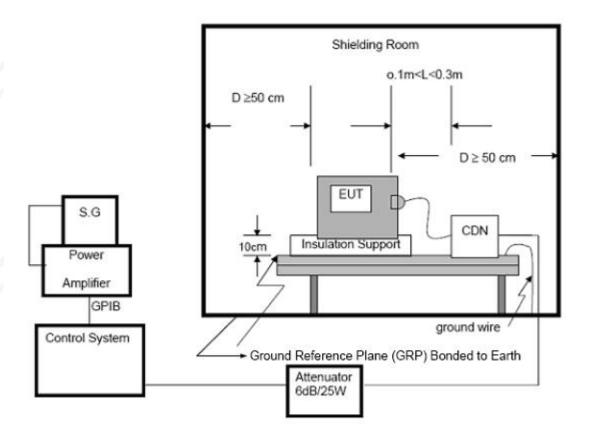
The frequency range was swept from 150 kHz to 230 MHz, using the signal level established during the setting process and with a disturbance signal of 80 % amplitude. The signal was modulated with a 1 kHz sine wave, pausing to adjust the RF signal level or the switch coupling devices as necessary. The sweep rate was 3s. Where the frequency range is swept incrementally, the step size was 1 % of preceding frequency value from 150 kHz to 230MHz.

The dwell time at each frequency was less than the time necessary for the EUT to be exercised, and able to respond. Sensitive frequencies such as clock frequency (ies) and harmonics or frequencies of dominant interest, was analyzed separately.

Attempts was made to fully exercise the EUT during testing, and to fully interrogate all exercise modes selected for susceptibility.

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#### 4.7.3 TEST SETUP



#### NOTE:

### FLOOR-STANDING EQUIPMENT

The equipment to be tested is placed on an insulating support of 0.1 meters height above a ground reference plane. All relevant cables shall be provided with the appropriate coupling and decoupling devices at a distance between 0.1 meters and 0.3 meters from the projected geometry of the EUT on the ground reference plane.



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## **4.7.4 TEST RESULTS**

Temperature:	24.7℃	Relative Humidity:	50%
Test Date:	2024.12.04	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz		

Test Ports (Mode)	Freq. Range MHz)	Field Strength	Perform. Criteria	Results	Judgement
Input/ Output AC. Power Port	0.15 - 80	3V(rms)  AM Modulated  1000Hz, 80%	А	А	PASS
Input/ Output DC. Power Port	0.15 - 80	1V(rms) AM Modulated 1000Hz, 80%	N/A	N/A	N/A
Signal Line	0.15 - 80	1V(rms)  AM Modulated  1000Hz, 80%	N/A	N/A	N/A

Note: 1) During the test, the Maximum Bit Error Ratio was less than 1x10<sup>-3</sup>.

<sup>2)</sup> N/A - denotes test is not applicable in this test report.



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### 4.8 VOLTAGE INTERRUPTION/DIPS TESTING

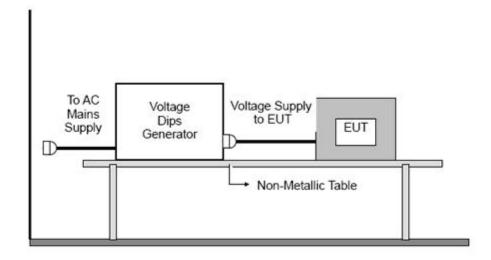
### **4.8.1 TEST SPECIFICATION**

Basic Standard:	IEC/EN 61000-4-11					
Required Performance:	C (For 100% Voltage Dips, 0.5 Cycle)					
	C (For 30% Voltage Dips, 25 Cycles)					
	C (For 60% Voltage Dips, 10 Cycles)					
Test Duration Time:	Minimum 3 test events in sequence					
Interval between Event:	Minimum 10 seconds					
Phase Angle:	0°/45°/90°/135°/180°/225°/270°/315°/360°					
Test Cycle:	3 times					

### **4.8.2 TEST PROCEDURE**

The EUT shall be tested for each selected combination of test levels and duration with a sequence of three dips/interruptions with intervals of 10 s minimum (between each test event). Each representative mode of operation shall be tested. Abrupt changes in supply voltage shall occur at zero crossings of the voltage waveform.

### 4.8.3 TEST SETUP





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## **4.8.4 TEST RESULTS**

Temperature:	<b>24.7</b> ℃	Relative Humidity:	50%
Test Date:	2024.12.04	Test Mode:	Mode 1
Test Voltage:	AC 230V/50Hz		

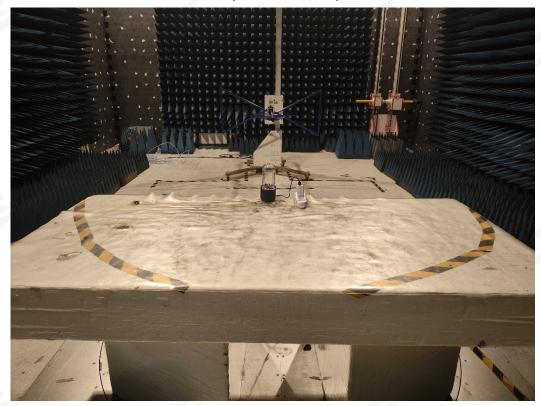
Interruption & Dips	Duration (T)	Perform Criteria	Results	Judgment
Interruption 0%	0.5	С	Α	PASS
Voltage dip 40%	10	С	А	PASS
Voltage dip 70%	25	С	А	PASS



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# **APPENDIX 1-PHOTO TEST OF EUT**

RE (30 - 1000 MHz)



CE

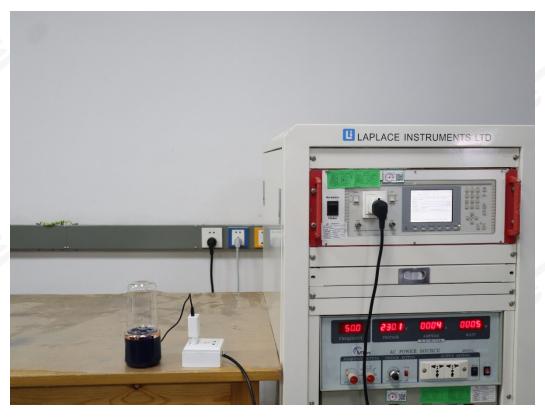




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# **FICKER**

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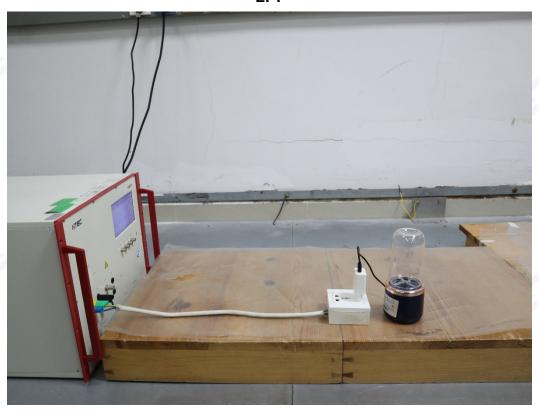
SURGE





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# **EFT**



# **DIPS**





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**ESD** 



cs





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# RS (80 - 1000 MHz)



\*\*\*\*END OF THE REPORT\*\*