



EN 55032:2015/A1:2020 EN 55035:2017/A11:2020

TEST REPORT

For

Lithium Battery

MODEL NUMBER: CR123A, 2CR5S, 6024, 6025, CR1/3N, CR1216, CR1632, CR2, CR2NP, CR3220, CRP2, CR2477, CR1220, CR1616, CR1620, CR2016, CR2025, CR2354, CR2412, CR2430, CR2450, CR2460, CR2032

REPORT NUMBER: E04A23120482E00301

ISSUE DATE: Dec. 29, 2023

Prepared for

Ropla Elektronik Sp. z o.o. ul. Wrocławska 1C, 52-200 Suchy Dwór

Prepared by

Guangdong Global Testing Technology Co., Ltd.

Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808

This report is based on a single evaluation of the submitted sample(s) of the above mentioned Product, it does not imply an assessment of the production of the products.

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Revision History

Rev.	Issue Date	Revisions	Revised By
VO	Dec. 29, 2023	Initial Issue	

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Summary of Test Results

Emission						
Standard Test Item Limit Result						
EN 55032:2015/A1:202	Radiated emissions below 1GHz	Clause 5	Pass			
0	Radiated emissions above 1GHz	Clause 5	N/A (NOTE 1, 2)			

Immunity (EN 55035:2017/A11:2020)							
Basic Standard	Basic Standard Test Item Test Specification						
IEC 61000-4-2:2008	Electrostatic Discharge	Contact +/- 4 kV; Air +/- 2 kV;+/- 4 kV;+/- 8 kV	В	Pass			
IEC 61000-4-3:2006 +A1:2007+A2:2010	Continuous RF electromagnetic field disturbances	3 V/m, 80 %; 1 kHz, AM 80 MHz-1000 MHz; 1800 MHz,2600 MHz,3500 MHz,5000 MHz	А	Pass			

Note:

- 1. N/A: In this whole report not applicable.
- 2. If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.

^{*}This test report is only published to and used by the applicant, and it is not for evidence purpose in China.

^{*}The measurement result for the sample received is <Pass> according to <EN 55032:2015/A1:2020, EN 55035:2017/A11:2020> when <Accuracy Method> decision rule is applied.

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Ropla Elektronik Sp. z o.o.

Address: ul. Wrocławska 1C, 52-200 Suchy Dwór

Manufacturer Information

Company Name: Ropla Elektronik Sp. z o.o.

ul. Wrocławska 1C, 52-200 Suchy Dwór Address:

Factory Information

Company Name: Ropla Elektronik Sp. z o.o.

ul. Wrocławska 1C, 52-200 Suchy Dwór Address:

EUT Information

Product Description: Lithium Battery

Model: CR123A

Series Model: 2CR5S, 6024, 6025, CR1/3N, CR1216, CR1632, CR2, CR2NP,

> CR3220, CRP2, CR2477, CR1220, CR1616, CR1620, CR2016, CR2025, CR2354, CR2412, CR2430, CR2450, CR2460, CR2032

Brand:

Sample Received Date: Dec. 13, 2023

Sample Status: Normal

Sample ID: A23120482 002 Date of Tested: Dec. 13, 2023

APPLICABLE STANDARDS				
STANDARD TEST RESULTS				
EN 55032:2015/A1:2020	Pass			
EN 55035:2017/A11:2020 Pass				

Prepared By: Checked By:

obal Testing 7

CERTIFICAT

Lucy Su

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Approved By:

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Laboratory Manager

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2. TEST METHODOLOGY

All tests were performed in accordance with the standard EN 55032:2015/A1:2020, EN 55035:2017/A11:2020

3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 6947.01)
	Guangdong Global Testing Technology Co., Ltd.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1343)
	Guangdong Global Testing Technology Co., Ltd.
	has been recognized to perform compliance testing on equipment
Accreditation Certificate	subject to Supplier's Declaration of Conformity (SDoC) and
	Certification rules
	ISED (Company No.: 30714)
	Guangdong Global Testing Technology Co., Ltd.
	has been registered and fully described in a report filed with ISED.
	The Company Number is 30714 and the test lab Conformity
	Assessment Body Identifier (CABID) is CN0148.

Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808

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4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Measurement Frequency Range	К	U(dB)
Radiated emissions below 1GHz	30 MHz -1 GHz	2	3.79

Note1: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name		Lithium Battery		
Model		CR123A		
Series Model		2CR5S, 6024, 6025, CR1/3N, CR1216, CR1632, CR2, CR2NP, CR3220, CRP2, CR2477, CR1220, CR1616, CR1620, CR2016, CR2025, CR2354, CR2412, CR2430, CR2450, CR2460, CR2032		
Model Difference		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 CR123A, but the circuit and the electronic construction do not change, declared by the manufacturer. The only difference between the test model and the series model is the model name.		
EUT Classification	n	Class B		
Ratings		Rated Capacity: 1500mAh Rated Voltage: 3V		
Power Supply	DC	3V		
Power Supply	Battery	3V 1500mAh		

5.2. TEST MODE

Test Mode	Description
M01	Charging
M02	Discharging

5.3. MONITORING OF EUT FOR ALL IMMUNITY TEST

Other	Observe whether the charge and discharge of the sample work normally		
Other	during the test		

5.4. SUPPORT UNITS FOR SYSTEM TEST

The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Slide Rheostat	XinSheng	BX7-12	N/A	GTG Support

6. MEASURING EQUIPMENT AND SOFTWARE USED

Test Equipment of Radiated emissions below 1GHz							
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date		
Chamber	ETS	9*6*6	Q2146	2022/8/30	2025/8/29		
Receiver	R&S	ESCI3	101409	2023/9/18	2024/9/17		
Loop Antenna	ETS	6502	243668	2022/3/30	2025/3/30		
Pre-Amplifier	HzEMC	HPA-9K0130	HYPA21001	2023/9/18	2024/9/17		
Biconilog Antenna	Schwarzbeck	VULB 9168	1315	2022/10/10	2025/10/9		
Biconilog Antenna	ETS	3142E	243646	2022/3/23	2025/3/22		
EZ-EMC	Farad	Ver/FA-03A2 RE+	N/A	N/A	N/A		

Test Equipment of Electrostatic Discharge						
Equipment Manufacturer Model No. Serial No.				Last Cal.	Due Date	
ESD Simulator	TESEQ	NSG437	336	2023/9/20	2024/9/19	

Test Equipment of Continuous RF electromagnetic field disturbances							
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due Date		
Stacked Log-Per- Broadband Antenna	Schwarzbeck	STLP 9129	170	N/A	N/A		
Power amplifier	MiCOTOP	MPA-80- 1000-500	MPA220933 6	2023/9/18	2024/9/17		
Power amplifier	MiCOTOP	MPA-1000- 6000-100	MPA220933 7	2023/9/18	2024/9/17		
EPM Series Power Meter	Keysight	N1914A	MY53240003	2023/9/18	2024/9/17		
Average Power Sensor	Keysight	E9304A	MY41498925	2023/9/18	2024/9/17		
Average Power Sensor	Keysight	E9304A	MY41497454	2023/9/18	2024/9/17		
EXG Analog Signal Generator	Keysight	N5171B	MY61252624	2023/9/18	2024/9/17		
Field Probe	Narda	EP 601	811ZX11137	2023/9/21	2024/9/20		
Microphone kit	Magasig	MPA 663	220803075	2023/9/21	2024/9/20		
FASLAB-RS	HzEMC	V2/7/2/3	N/A	N/A	N/A		

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7. EMISSION TEST

7.1. RADIATED EMISSIONS BELOW 1GHZ

LIMITS

(a). Limits up to 1 GHz

FREQUENCY (MHz)	Clas	ss A	Class B		
	At 10 m	At 3 m	At 10 m	At 3 m	
	dBμV/m	dBμV/m	dBµV/m	dBμV/m	
30 – 230	40	50	30	40	
230 – 1000	47	57	37	47	

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBµV/m)=20log Emission level (uV/m).
- (3) If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, the measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 6 GHz, whichever is less.

TEST PROCEDURE

Below 1 GHz and above 30 MHz

The setting of the spectrum analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak and QP
Trace	Max hold

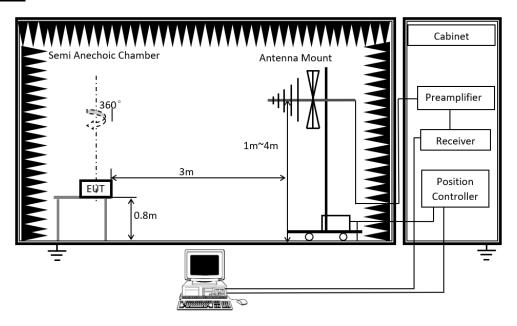
- 1. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp was used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 2. The EUT was placed on a turntable with 80 cm above ground.
- 3. 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.
- 4. 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.

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- 5. Cables of hand-operated devices, such as keyboards and mice, shall be placed as for normal used.
- 6. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 7. For measurement below 1 GHz, the initial step in collecting Radiated 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.

TEST SETUP



TEST ENVIRONMENT

Temperature	24 ℃	Relative Humidity	53%
Atmosphere Pressure	101.9kPa		

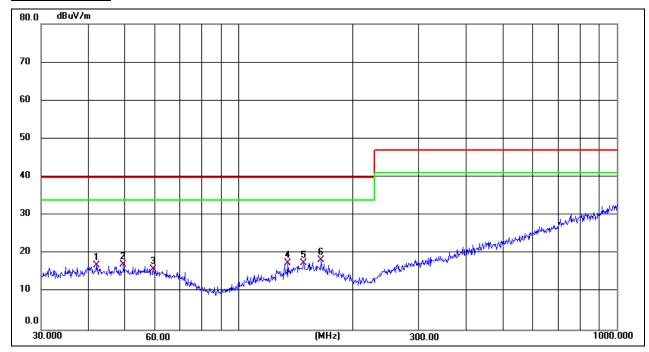
TEST MODE

Pre-test Mode:	M01 ~ M02
Final Test Mode:	M01, M02

Note: All test modes had been tested, but only the worst data recorded in the report.

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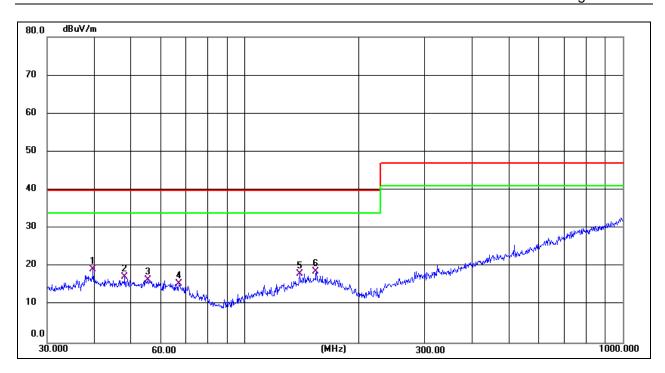
TEST RESULTS



Antenna::Horizontal Mode: M02

No	Frequenc	Reading	Correct	Measure-	Limit	Margi	Detecto	Commen
•	y	Level(dBuV	Factor(dB/m	ment(dBuV/m	(dBuV/m	n	r	t
	(MHz)))))	(dB)		
1	42.1540	29.10	-12.25	16.85	40.00	-23.15	QP	
2	49.5328	29.33	-12.28	17.05	40.00	-22.95	QP	
3	59.4405	28.65	-12.69	15.96	40.00	-24.04	QP	
4	134.5591	30.37	-12.91	17.46	40.00	-22.54	QP	
5	148.4410	29.45	-11.93	17.52	40.00	-22.48	QP	
6	164.9073	30.39	-12.09	18.30	40.00	-21.70	QP	

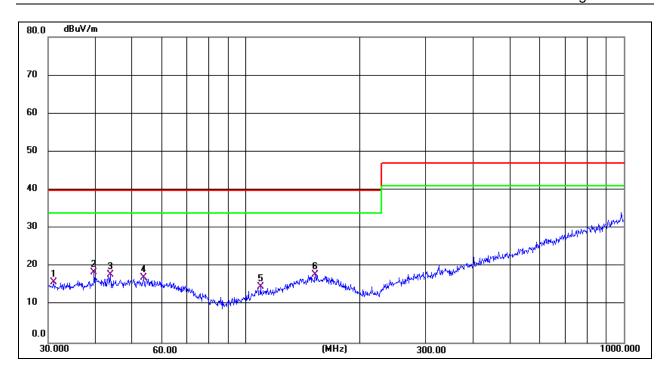
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Antenna::Vertical Mode: M02

No	Frequenc	Reading	Correct	Measure-	Limit	Margi	Detecto	Commen
•	y	Level(dBuV	Factor(dB/m	ment(dBuV/m	(dBuV/m	n	r	t
	(MHz)))))	(dB)		
1 *	39.7146	31.57	-12.31	19.26	40.00	-20.74	QP	
2	48.1625	29.61	-12.27	17.34	40.00	-22.66	QP	
3	55.4147	28.77	-12.30	16.47	40.00	-23.53	QP	
4	66.9670	29.24	-13.65	15.59	40.00	-24.41	QP	
5	139.8507	30.34	-12.25	18.09	40.00	-21.91	QP	
6	154.8204	30.46	-11.72	18.74	40.00	-21.26	QP	

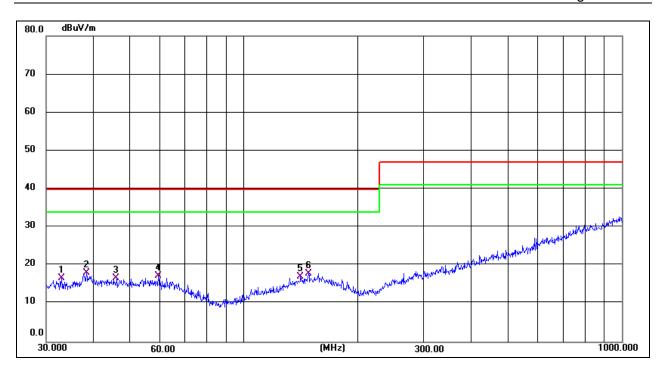
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Antenna::Horizontal	Mode: M01

No	Frequenc	Reading	Correct	Measure-	Limit	Margi	Detecto	Commen
•	y	Level(dBuV	Factor(dB/m	ment(dBuV/m	(dBuV/m	n	r	t
	(MHz)))))	(dB)		
1	31.0703	28.75	-12.77	15.98	40.00	-24.02	QP	
2 *	39.7146	30.78	-12.31	18.47	40.00	-21.53	QP	
3	43.8120	30.21	-12.26	17.95	40.00	-22.05	QP	
4	53.6931	29.32	-12.29	17.03	40.00	-22.97	QP	
5	109.4116	29.78	-15.01	14.77	40.00	-25.23	QP	
6	152.6640	29.51	-11.65	17.86	40.00	-22.14	QP	

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Antenna::Vertical	Mode: M01

No	Frequenc	Reading	Correct	Measure-	Limit	Margi	Detecto	Commen
•	y	Level(dBuV	Factor(dB/m	ment(dBuV/m	(dBuV/m	n	r	t
	(MHz)))))	(dB)		
1	32.9791	29.26	-12.48	16.78	40.00	-23.22	QP	
2 *	38.3462	30.42	-12.30	18.12	40.00	-21.88	QP	
3	46.1779	28.88	-12.05	16.83	40.00	-23.17	QP	
4	59.4405	29.97	-12.69	17.28	40.00	-22.72	QP	
5	141.3296	29.41	-12.20	17.21	40.00	-22.79	QP	
6	148.4410	29.93	-11.93	18.00	40.00	-22.00	QP	

Note: 1. Result = Reading +Correct (Amplifier Factor + Cable Loss + Antenna Factor)

2. Margin = Result - Limit

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8. IMMUNITY TEST

8.1. PERFORMANCE CRITERIA

EN 55035:2017/A11:2020

GENERAL PERFORMANCE CRITERIA

According to EN 55035 standard, the general performance criteria as following:

Criteria A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state 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.
Criteria B	During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test. After the test, 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), or recovery time, 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.
Criteria 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. A reboot or re-start operation is allowed. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

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PERFORMANCE CRITERIA FOR BROADCAST RECEPTION FUNCTION

The broadcast reception function shall comply with the general performance criteria given in Clause 8 and any relevant annex with the deviations defined in Table A.2.

Table A.2 – Modified test levels for performance criterion A for the broadcast reception function			
Performance Test type Group 1 Group 2			
criteria	table clause		
	1.2	The disturbance level is	No test requirements apply
	1.3	reduced to	
		1 V/m for in-band	
Criterion A		frequencies.	
	2.1	The disturbance level is	
	3.1	reduced to	
	4.1	1 V for in-band frequencies.	

In-band is defined as the entire tuneable operating range of the selected broadcast reception function.

The tuned channel ± 0.5 MHz (lower edge frequency -0.5 MHz up to the upper edge frequency ± 0.5 MHz of the tuned channel) is excluded from testing.

Note: In some countries, there is a requirement to test the tuned channels. Refer to the relevant regional requirements for guidance.

PERFORMANCE CRITERIA FOR PRINT FUNCTION

Criterion A	Refer to chapter B.3.1 of EN 55035:2017/A11:2020
Criterion B	Refer to chapter B.3.2 of EN 55035:2017/A11:2020
Criterion C	Refer to chapter B.3.3 of EN 55035:2017/A11:2020

PERFORMANCE CRITERIA FOR SCAN FUNCTION

Criterion A	Refer to chapter C.3.1 of EN 55035:2017/A11:2020
Criterion B	Refer to chapter C.3.2 of EN 55035:2017/A11:2020
Criterion C	Refer to chapter C.3.3 of EN 55035:2017/A11:2020

PERFORMANCE CRITERIA FOR DISPLAY AND DISPLAY OUTPUT FUNCTION

Criterion A	Refer to chapter D.3.1 and D.3.2 of EN 55035:2017/A11:2020
Criterion B	Refer to chapter D.3.3 of EN 55035:2017/A11:2020
Criterion C	Refer to chapter D.3.4 of EN 55035:2017/A11:2020

PERFORMANCE CRITERIA FOR MUSICAL TONE GENERATING FUNCTION

Criterion A	Refer to chapter E.3.2 of EN 55035:2017/A11:2020
Criterion B	Refer to chapter E.3.3 of EN 55035:2017/A11:2020
Criterion C	Refer to chapter E.3.4 of EN 55035:2017/A11:2020

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PERFORMANCE CRITERIA FOR NETWORKING FUNCTION

General requirements for network functions		
Criterion A	Refer to chapter F.3.3.1 of EN 55035:2017/A11:2020	
Criterion B	Refer to chapter F.3.3.2 of EN 55035:2017/A11:2020	
Criterion C	Refer to chapter F.3.3.3 of EN 55035:2017/A11:2020	

Requirements for CPE containing xDSL ports		
Criterion A	Refer to chapter F.4.2 of EN 55035:2017/A11:2020	
Criterion B	Refer to chapter F.4.3 of EN 55035:2017/A11:2020	
Criterion C	Refer to chapter F.4.4 of EN 55035:2017/A11:2020	

PERFORMANCE CRITERIA FOR AUDIO OUTPUT FUNCTION

Criterion A	Refer to chapter G.7.1 of EN 55035:2017/A11:2020
Criterion B	Refer to chapter G.7.2 of EN 55035:2017/A11:2020
Criterion C	Refer to chapter G.7.3 of EN 55035:2017/A11:2020

PERFORMANCE CRITERIA FOR TELEPHONY FUNCTION

Criterion A	Refer to chapter H.4 Table H.1 of EN 55035:2017/A11:2020
Criterion B	Refer to chapter H.4 Table H.1 of EN 55035:2017/A11:2020
Criterion C	Refer to chapter H.4 Table H.1 of EN 55035:2017/A11:2020

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8.2. ELECTROSTATIC DISCHARGE

TEST SPECIFICATION

Standard:	EN 55035:2017/A11:2020 IEC 61000-4-2:2008
Criterion Required:	Performance criteria B
Discharge Impedance:	330(1±10 %) Ω / 150(1±10 %) pF
Polarity:	Positive & Negative
Number of Discharge:	Minimum 10 times at each test point
Discharge Mode:	Single Discharge
Discharge Period:	1 second minimum
Test Level:	Air Discharge: 2 kV, 4 kV, 8 kV (Direct); Contact Discharge: 4 kV (Direct/Indirect)

TEST PROCEDURE

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

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

Vertical Coupling Plane (VCP):

The coupling plane, of dimensions $0.5 \text{ m} \times 0.5 \text{ m}$, is placed parallel to, and positioned at a distance 0.1 m from, the EUT, with the Discharge Electrode touching the coupling plane.

The four faces of the EUT will be performed with electrostatic discharge.

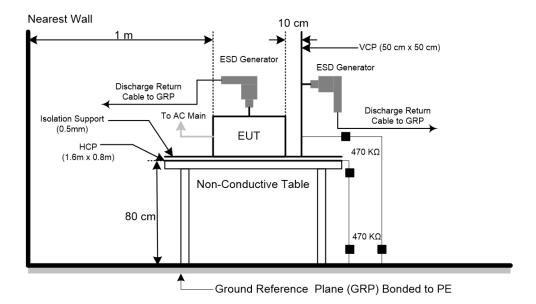
Horizontal Coupling Plane (HCP):

The coupling plane is placed under to the EUT. The generator shall be positioned vertically at a distance of 0.1 m 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.
- c. 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.
- d. For air discharge testing, the test shall be applied at all test levels 2 kV, 4 kV and 8 kV.
- e. For the actual test configuration, please refer to the related Item: EUT Test Photos.

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TEST SETUP



TEST ENVIRONMENT

Temperature	23.5℃	Relative Humidity	52.6%
Atmosphere Pressure	101.9kPa	Test Voltage	DC 3V

TEST MODE

Test Mode:	M01, M02
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TEST RESULTS

Mode	Level(kV)	Polarity	Test Point	Criteria	Result	Judgement
Air Discharge	2,4,8	+	All Slot	В	Α	Pass
Air Discharge	2,4,8	ı	All Slot	В	Α	Pass
Contact Discharge	4	+	All Metal	В	Α	Pass
Contact Discharge	4	ı	All Metal	В	Α	Pass
Horizontal Coupling	4	+	Front,rear,left,right	В	А	Pass
Horizontal Coupling	4	-	Front,rear,left,right	В	Α	Pass
Vertical Coupling	4	+	Front,rear,left,right	В	А	Pass
Vertical Coupling	4	-	Front,rear,left,right	В	А	Pass
Air Discharge	15	+	All Slot	/	/	/
Air Discharge	15	-	All Slot	/	/	/
Contact Discharge	8	+	All Metal	/	/	/
Contact Discharge	8	-	All Metal	1	/	/

Observation:

A: No observable change.

Conclusion: The EUT met the requirements of the standard

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8.3. CONTINUOUS RF ELECTROMAGNETIC FIELD DISTURBANCES

TEST SPECIFICATION

Standard:	EN 55035:2017/A11:2020 IEC 61000-4-3:2006 +A1:2007+A2:2010		
Criterion Required:	Performance criteria A		
Spot test:	1 800 MHz, 2 600 MHz, 3 500 MHz, 5 000 MHz		
Test Level:	Level 2: 3 V/m (measured unmodulated)		
Modulation:	The test signal shall be amplitude modulated to a depth of 80 % by a sinusoidal audio signal of 1 000 Hz.		
Frequency Step:	1 % of fundamental		
Dwell time:	1 seconds		
Antenna Polarization:	Horizontal and vertical		

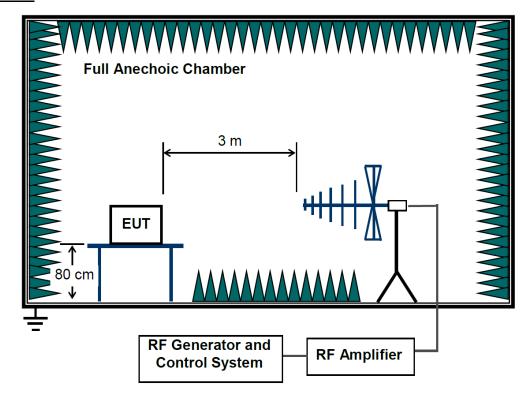
TEST PROCEDURE

The test procedure was in accordance with IEC 61000-4-3.

- 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 disturbance test signal shall be 80 % amplitude modulated by a sine wave, preferably having a frequency of 1 kHz. A frequency other than 1 kHz may be used where permitted within EN 55035 (for example Clause G.3).
- c. 1 % step size is preferred, the frequency range can be swept incrementally with a step size not exceeding 4 % of the previous frequency with a test level of twice the value of the specified test level.
- d. The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised and to be able to respond. However, the dwell time should not exceed 5 s at each of the frequencies during the scan.
- e. The test was performed with the EUT exposed to both vertically and horizontally polarized fields.

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TEST SETUP



TEST ENVIRONMENT

Temperature	22.8℃	Relative Humidity	54.6%
Atmosphere Pressure	101.9kPa	Test Voltage	DC 3V

TEST MODE

Test Mode:	M01, M02
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TEST RESULTS

Freq.Range (MHz)	Position (Face)	Polarity (H or V)	Field Strength (V/m) (unmodulated,r.m.s)	Criterion	Result	Judgment
80-1000; 1800; 2600; 3500; 5000;	0°	H&V	3 V/m	А	А	Pass
80-1000; 1800; 2600; 3500; 5000;	90°	H&V	3 V/m	А	А	Pass
80-1000; 1800; 2600; 3500; 5000;	180°	H&V	3 V/m	А	А	Pass
80-1000; 1800; 2600; 3500; 5000;	270°	H&V	3 V/m	А	А	Pass

Observation:

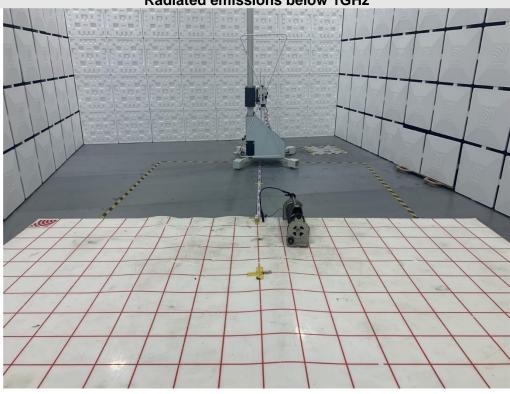
A: No observable change.

Conclusion: The EUT met the requirements of the standard

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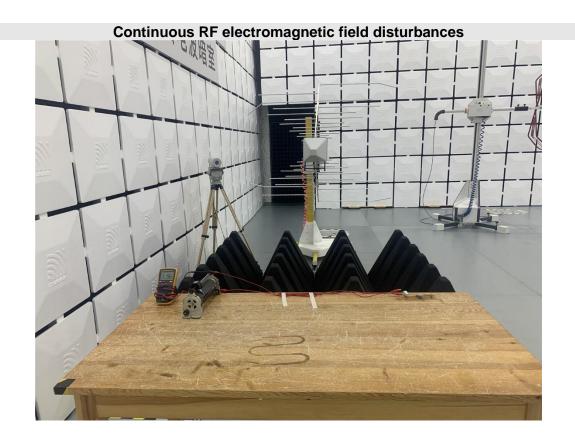
APPENDIX: PHOTOGRAPHS OF TEST CONFIGURATION

Radiated emissions below 1GHz



Electrostatic Discharge



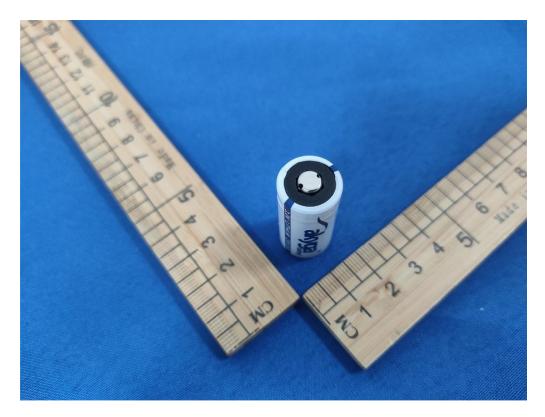


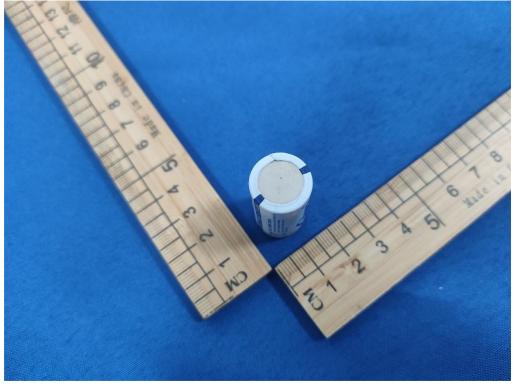
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APPENDIX: PHOTOGRAPHS OF THE EUT













END OF REPORT