



NSAI

ECE TYPE-APPROVAL CERTIFICATE



Communication Concerning:² ~~Approval granted~~
~~Approval extended~~
~~Approval refused~~
~~Approval withdrawn~~
~~Production definitively discontinued~~

Of a type of ~~vehicle~~/component/~~separate technical unit~~² with regard to Regulation No. 10.
Of a type of electrical/electronic sub-assembly² with regard to Regulation No.10.

Approval No: E24*10R06/02*5438*00

Reason for extension: -N/A

1. Make (trade name of manufacturer):



2. Type and general commercial description:

BCD148
Car Refrigerator

Variant(s):

BCD50, BCD85, BCD148

3. Means of identification of type, if marked on the ~~vehicle~~/
component/separate technical unit²:

Type Designation

3.1 Location of that marking:

On back of product

4. Category of vehicle:

N/A

5. Name and address of manufacturer:

**Jiangsu Sanjo Intelligent Technology Co.,
Ltd No. 8, Jinguazi Road, Nandu Town,
Liyang City, Jiangsu Province, China**

6. In the case of components and separate technical units,
location and method of affixing of the approval mark:

Laser lettering on back of product

7. Address(es) of assembly plant(s):

**Jiangsu Sanjo Intelligent Technology Co.,
Ltd No. 8, Jinguazi Road, Nandu Town,
Liyang City, Jiangsu Province, China**



NSAI

Approval No: E24*10R06/02*5438*00

- | | |
|--|---|
| 8. Additional information (where applicable): | <i>See appendix below</i> |
| 9. Technical service responsible for carrying out the tests: | <i>SGS-TÜV Saar GmbH</i> |
| 10. Date of test report: | <i>23.01.2024</i> |
| 11. Number of test report: | <i>HOM ECN T23/168-00</i> |
| 12. Remarks (if any): | <i>See Appendix below</i> |
| 13. Place: | <i>Dublin</i> |
| 14. Date: | <i>1st March, 2024</i> |
| 15. Signature: |  |
16. The index to the information package lodged with the approval authority, which may be obtained on Request, is attached.



-
1. Distinguishing number of the country which issued/extended/refused or withdrawn approval. (see Regulation, provisions on approval).
 2. Strike out what does not apply.



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Approval No: E24*10R06/02*5438*00

Appendix

To type-approval communication concerning the type approval of an electrical/electronic sub-assembly under Regulation No.10.

1. Additional information
 - 1.1. Electrical system rated voltage: *DC 12V / 24V, negative ground*
 - 1.2. This ESA can be used on any vehicle type with the following restrictions: *See manufacturer's specifications.*
 - 1.2.1 Installation conditions, if any: *See manufacturer's specifications.*
 - 1.3. This ESA can only be used on the following vehicle types: *N/A*
 - 1.3.1 Installation conditions, if any: *N/A*
 - 1.4. The specific test method(s) used and the frequency ranges covered to determine immunity were: *N/A*
 - 1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: *SGS-TÜV Saar GmbH*
2. Remarks: *N/A*

Appendix to type-approval communication concerning the type approval of a vehicle under Regulation No.10.

1. Additional information
2. Electrical system rated voltage: *N/A*
3. Type of bodywork: *N/A*
4. List of electronic systems installed in the tested vehicle(s) not limited to the items in the information document: *N/A*
 - 4.1. Vehicle equipped with 24 GHz short-range radar equipment (yes/no/optional)²: *N/A*
5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: *N/A*
6. Remarks: *N/A*



NSAI

Approval No: E24*10R06/02*5438*00

Index to the Information Package

Date of issue:	<i>1st March, 2024</i>
Date of latest amendment:	<i>N/A</i>
Reason for extension/revision:	<i>N/A</i>
1. Additional conditions, and advisory notes on legal alternatives.	
2. Test report(s)	
- numbers(s):	<i>HOM ECN T23/168-00</i>
- date of issue:	<i>23.01.2024</i>
- date of latest amendment:	<i>N/A</i>
3. Information document	
- number(s):	<i>IF_BCD148_R10.06_00</i>
- date of issue:	<i>07.10.2024</i>
- date of latest amendment:	<i>N/A</i>
Documentation:	<i>106 pages</i>



NSAI

Approval No: E24*10R06/02*5438*00

Appendix: **Additional conditions, and advisory notes on legal alternatives**

A: Additional conditions:

1. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
2. Each device from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
3. Changes in the type are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
4. At regular intervals, any tests or associated checks prescribed by the applicable legislation to verify continued conformity with the approved type shall be carried out. The manufacturer shall demonstrate compliance with this by submitting to NSAI evidence of adequate arrangements and documented control plans for each type approved.
5. Any set of samples or test pieces showing evidence of non-conformity shall give rise to further sampling and testing and all steps shall be taken to restore conformity of production.
6. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B: Legal Options:

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

Technical Report

V00

Test standard:
ECE R10

Level of amendment:
06 Series of amendments, 02 supplement

Title:
Electromagnetic compatibility

Manufacturer:
Jiangsu Sanjo Intelligent Technology Co., Ltd

Type:
BCD148

Subject of testing:
Component

0 General:

- | | | |
|-------|---|--|
| 0.1 | Make
(trade name of manufacturer): |  |
| 0.2 | Type: | BCD148 |
| 0.2.1 | Commercial description(s): | Car Refrigerator |
| 0.2.2 | Variant: | BCD50, BCD85, BCD148 |
| 0.3 | Means of identification of type, if
marked on the vehicle / component
/ technical unit: | refer to information document |
| 0.3.1 | Location of that markings: | refer to information document |
| 0.4 | Category of vehicle: | n.a. |
| 0.5 | Manufacturer's name and address: | Jiangsu Sanjo Intelligent Technology Co., Ltd
No. 8, Jinguazi Road, Nandu Town, Liyang
City, Jiangsu Province, China |
| 0.8 | Name(s) and address(es) of
assembly plant(s): | refer to information document |
| 0.9 | Name and address of
representative: | n.a. |
| | Location of the approval mark: | refer to information document |

1 Appendices

1.1 Test Record See appendix A

1.2 List of modifications See appendix B

2 Attachments:

2.1 Information folder: No.: IF_BCD148_R10.06_00

Date of issue: 07.10.2023

2.2 Test Report: No.: SZEM230900610701

Date of issue: 27.12.2023

3 Statement of conformity:

The information folder as mentioned under no. 2.1 and the type described therein are in compliance with the test standard mentioned above. With regard to the required level of performance to be achieved, the test specimen were representative for the type to be approved.

The tests were carried out in accordance to the relevant requirements of the

EN ISO/IEC 17025

EN ISO/IEC 17020

Test Laboratory

SGS-TÜV Saar GmbH

notified by

KBA Kraftfahrt-Bundesamt, Germany No. KBA-P 00084-10	NSAI National Standards Authority of Ireland No. 101	RDW Rijksdienst voor het Wegverkeer, The Netherlands No. 99050064 00	TRANSPORT STYRELSEN, Sweden No. TT 0015
--	--	---	---

Formal review (Conformity Check) by:

Authorized by expert:




Cinney Zhang

Gangling Zhang

Shanghai, 23.01.2024



Technical Report
No.: HOM ECN T23/168-00
Type: BCD148

Page
5 of 12

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To assess the conformity, the laboratory refers to the "scope classification" of the Kraftfahrt-Bundesamt (KBA) – Federal Motor Transport Authority (in its valid version at the time of testing) and the specified consideration of the measurement uncertainty for the related test procedure.

In case the measurement uncertainty does not need to be considered according to the scope classification, the laboratory considers the result conform if its measured value is within the specification.

In case the measurement uncertainty does need to be considered according to the scope classification, the laboratory considers the result conform if its value incl. its measurement uncertainty is within the specification.

Test record

1 Test conditions

- 1.1 Test component
- 1.1.1 Function description Car Refrigerator
- 1.1.2 Type BCD148
- 1.1.3 Variant BCD148, BCD85
- 1.1.4 Tested operating mode(s) See test report of the enclosure.
- 1.1.5 Tested rated voltage(s) 12V 24V 12V/24V
- 1.1.6 The approval object is ...
- an ESA that is not related to a connection system for charging a REESS yes
 no
- a complete connection system for charging a REESS yes
 no
- a component of a connection system for charging a REESS yes
 no
- Have the HV voltages and HV currents been taken into account in the tests and measurements? yes
 no
 n.a.
- a light source or a part of a light source acc. to item 3.2.10 of the Regulation? yes
 no
 n.a.
- Approval number or number of test report n.a.
- 1.1.7 Do the devices of the type have immunity related functions? yes
 no
Reason if necessary: Car Refrigerator not related to safety functions and within ECE R10.06, 2.12.
- 1.1.8 Do the devices of the type have to be in operation during the engine start phase? yes
 no
- 1.1.9 Photo documentation of the examinee including existing labels See test report of the enclosure.

1.1.10 Remarks:

X	All the test modes and voltage were pre-scanned to determine the worst case and recorded in the test report.
---	--

1.2 Test equipment

Parameter of the test area:

The equipment, on which the tests were carried out, fulfilled the requirements of the Regulation.

2 Test Results

2.1	Test results in configurations <u>other</u> than „REESS charging mode coupled of the power grid	<input checked="" type="checkbox"/> fulfilled <input type="checkbox"/> not fulfilled <input type="checkbox"/> n.a.
	Remarks:	<input checked="" type="checkbox"/> n.a.
2.1.1	Measurement of <u>radiated broadband</u> electromagnetic emissions from electrical/ electronic subassemblies according to item 6.5 of the Regulation:	<input checked="" type="checkbox"/> fulfilled <input type="checkbox"/> not fulfilled <input type="checkbox"/> n.a.
2.1.1.1	Measurement procedure:	Quasi-peak-detector
2.1.1.2	Measurement setup:	Anechoic chamber
2.1.1.3	Measurement results:	The measured values, expressed in dB µV/m, are below the reference limits. See test report of the enclosure
2.1.1.4	Photo documentation of the measurement setup (if applicable):	See test report of the enclosure.
2.1.1.5	Remarks:	<input checked="" type="checkbox"/> n.a.
2.1.2	Measurement of <u>radiated narrowband</u> electromagnetic emissions from electrical/ electronic subassemblies according to item 6.6 of the Regulation:	<input checked="" type="checkbox"/> fulfilled <input type="checkbox"/> not fulfilled <input type="checkbox"/> n.a.
2.1.2.1	Measurement procedure:	Average-detector
2.1.2.2	Measurement setup:	Anechoic chamber
2.1.2.3	Measurement results:	The measured values, expressed in dB µV/m, are below the reference limits. See test report of the enclosure.
2.1.2.4	Photo documentation of the measurement setup (if applicable):	See test report of the enclosure.
2.1.2.5	Remarks:	<input checked="" type="checkbox"/> n.a.

2.1.3	Testing for <u>emission of transient conducted disturbances</u> of electrical/electronic subassemblies on 12/24/48 V supply lines according to item 6.7 of the Regulation:	<input checked="" type="checkbox"/> fulfilled <input type="checkbox"/> not fulfilled <input type="checkbox"/> n.a.
2.1.3.1	Test results:	The limits are kept. See test report of the enclosure.
2.1.3.2	Photo documentation of the measurement setup (if applicable):	See test report of the enclosure.
2.1.3.3	Remarks:	<input checked="" type="checkbox"/> n.a. <input type="checkbox"/> See below table.
2.1.4	Testing for <u>radiated immunity</u> of electrical/electronic subassemblies to electromagnetic radiation according to item 6.8 of the Regulation:	<input type="checkbox"/> fulfilled <input type="checkbox"/> not fulfilled <input checked="" type="checkbox"/> n.a.
2.1.4.1	Test procedure:	n.a.
2.1.4.2	Test setup:	n.a.
2.1.4.3	Test results:	n.a.
2.1.4.4	Photo documentation of the measurement setup (if applicable):	n.a.
2.1.4.5	Remarks:	<input checked="" type="checkbox"/> n.a. ESA safety-related according to item 2.12 of the Regulation.
2.1.5	Testing for <u>immunity to transient disturbances</u> conducted along on 12/24 V supply lines of electrical/electronic subassemblies according to item 6.9 of the Regulation:	<input checked="" type="checkbox"/> fulfilled <input type="checkbox"/> not fulfilled <input type="checkbox"/> n.a.
2.1.5.1	Test results:	During the test was no unacceptable degradation. See test report of the enclosure.
2.1.5.2	Photo documentation of the measurement setup (if applicable):	See test report of the enclosure.
2.1.5.3	Remarks:	<input checked="" type="checkbox"/> n.a.

2.2 Test results in configurations „REESS charging mode coupled of the power grid:

- fulfilled
- not fulfilled
- n.a.

Remarks:

- n.a.

Test component not related to REESS



List of modifications:

- | | | |
|---|------------------|------|
| 1 | Correction of: | n.a. |
| 2 | Modification of: | n.a. |
| 3 | Addition of: | n.a. |
| 4 | Deletion of: | n.a. |

- End of Technical Report -

TEST REPORT

Application No.: SZEM2309006107AU
Applicant: Jianguo Sanjo Intelligent Technology Co., Ltd.
Address of Applicant: No. 8 Jinguazi ROAD, NANDU TOWN, LIYANG CITY, JIANGSU, P.R. China
Manufacturer: Jianguo Sanjo Intelligent Technology Co., Ltd
Address of Manufacturer: No. 8 Jinguazi ROAD, NANDU TOWN, LIYANG CITY, JIANGSU, P.R. China
Factory: Jianguo Sanjo Intelligent Technology Co., Ltd
Address of Factory: No. 8 Jinguazi ROAD, NANDU TOWN, LIYANG CITY, JIANGSU, P.R. China

Equipment Under Test (EUT):

EUT Name: Car Refrigerator
Model No.: BCD50, BCD85, BCD148 ♣
♣ Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.

Trade Mark: 

Standard(s) : ECE R10.06 Supplement 02

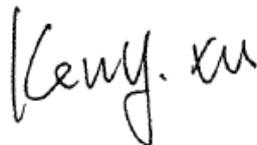
Date of Receipt: 2023-11-14

Date of Test: 2023-11-22 to 2023-12-20

Date of Issue: 2023-12-27

Test Result:	Pass*
---------------------	--------------

* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu
EMC Laboratory Manager



Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023-12-27		Original

Authorized for issue by:			
		<i>Powell Bao</i>	
		_____ Powell Bao/Project Engineer	
		<i>Eric Fu</i>	
		_____ Eric Fu/Reviewer	



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2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Radiated Emission(30MHz-1GHz)	ECE R10.06 Supplement 02	CISPR 25:2002	Clause 6.5 & 6.6 of R10-06	Pass
Conducted transient disturbances		ISO 7637-2:2004	Clause 6.7 of R10-06	Pass

Immunity Part				
Item	Standard	Method	Requirement	Result
Conducted transient immunity	ECE R10.06 Supplement 02	ISO 7637-2:2004	Clause 6.9 of R10-06	Pass

Declaration of EUT Family Grouping:

Model No.: BCD50, BCD85, BCD148

Only the model BCD148 and BCD85 were tested, since according to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions were identical for models BCD85 and BCD 50, with only difference on model No., appearance and rated power. The difference between BCD148 and BCD85 is that the compressor control board is different.



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Shenzhen Branch Testing & Calibration ELEC Laboratory

Room 105, Building A, Xinlong Technology Industrial Park, No. 50 Fangtang Road, Xintan Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

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中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

4 General Information

4.1 Details of E.U.T.

Power supply:	DC12V/24V
Test Voltage:	DC13.5V & DC27V

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
--	--	--	--

The EUT has been tested as an independent unit.

4.3 Measurement Uncertainty

Test Item	Measurement Uncertainty
Radiated Emission(30MHz-1GHz)	±4.5dB
Conducted transient immunity	±5%

Remark:

The U_{lab} (lab Uncertainty) is less than $U_{cispr/ETSI}$ (CISPR/ETSI Uncertainty), so the test results

– compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;

– non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

Room 105, Building A, Xinlong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

4.8 EMS Monitor

Visual: Monitored the work status of EUT



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Room 105, Building A, Xinlong Technology Industrial Park, No. 50 Fengtang Road, Xintian Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn

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5 Equipment List

Radiated Emission(30MHz-1GHz)					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
764 Anechoic Chamber	CRT	N/A	SEM001-12	2022-10-15	2025-10-14
Measurement Software	Rohde & Schwarz	EMC 32 V10.01.00	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM034-01	2023-05-15	2024-05-14
Biconical Antenna	Schwarzebeck	VHBB9124	SEM003-27	2023-10-15	2024-10-14
Log.-Per. Antenna	Schwarzebeck	VUSLP9111B	SEM003-28	2023-10-15	2024-10-14
Amplifier	Sonoma Instrument Co	310N	SEM005-03	2023-03-30	2024-03-29
EMI Test Receiver	Rohde & Schwarz	ESR	SEM004-03	2023-03-20	2024-03-19
LISN	Schwarzebeck	NNBM8124- 200	SEM007-20	2023-10-20	2024-10-19
LISN	Schwarzebeck	NNBM8124- 200	SEM007-21	2023-10-20	2024-10-19

Conducted transient disturbances					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Oscilloscope	Tektronix	MSO 4104	SEM022-02	2023-09-13	2024-09-12
Switch	EM TEST	BS 200B	SEM018-07	2023-09-14	2024-09-13
LISN	Schwarzebeck	NNBM8125	SEM007-18	2023-09-14	2024-09-13

Conducted transient immunity					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Automotive Transient Test System	Noiseken	ISS 7600	SEM050-13	2023-04-07	2024-04-06
DC Power supply	Noiseken	BP4610	SEM050-15	2023-03-30	2024-03-29
Measurement Software	EM Test/AG	ISMISO for windows V4.21	N/A	N/A	N/A
Oscilloscope	Tektronix	MSO 4104	SEM022-02	2023-09-13	2024-09-12

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	deli	8838	SEM002-48	2023-07-28	2024-07-27
Humidity/ Temperature Indicator	deli	8838	SEM002-49	2023-07-28	2024-07-27
Barometer	DUMAI	DYM3	SEM002-24	2023-08-30	2024-08-29



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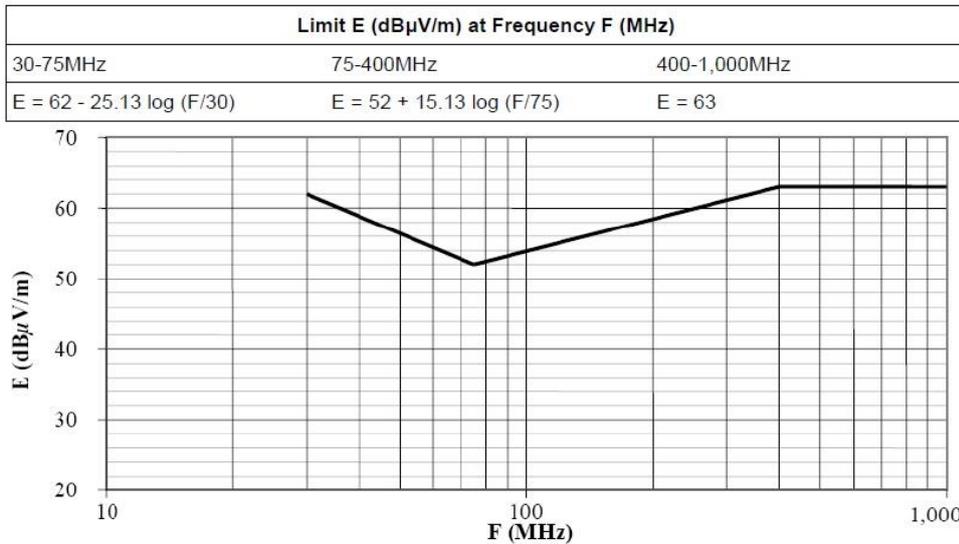
6 Emission Test Results

6.1 Radiated Emission(30MHz-1GHz)

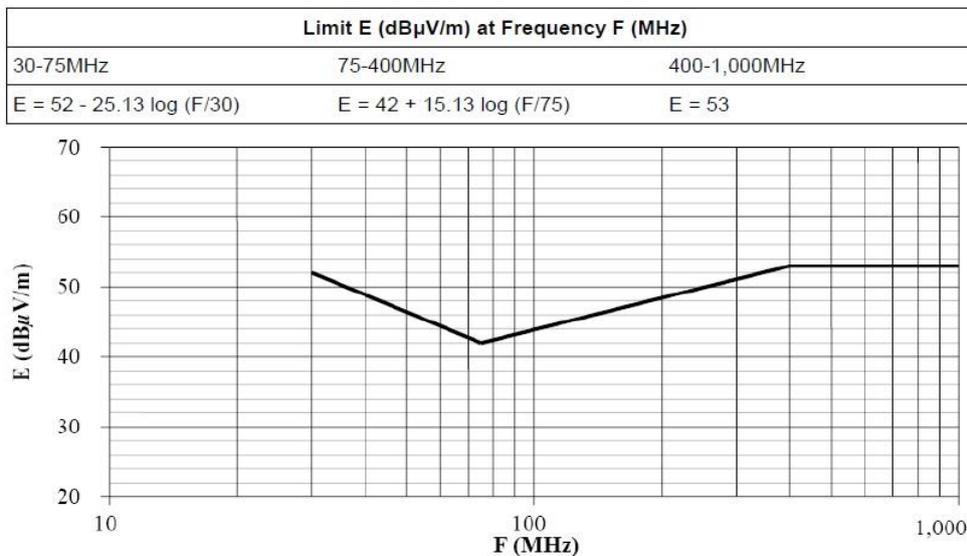
Test Requirement: ECE R10.06
 Test Method: CISPR 25:2002
 Test Distance: 1m

Limit:

Radiated Emission (Broadband Type) Limit for ESA



Radiated Emission (Narrowband Type) Limit for ESA



6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.3 °C Humidity: 54.0 % RH Atmospheric Pressure: 1000 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Pre-scan	00	DC 13.5V Power Supply_Keep EUT working at highest cooling mode(BCD148).
Final test	01	DC 13.5V Power Supply_Keep EUT working at lowest cooling mode(BCD148)..
Pre-scan	02	DC 27V Power Supply_Keep EUT working at highest cooling mode(BCD148)..
Final test	03	DC 27V Power Supply_Keep EUT working at lowest cooling mode(BCD148)..
Final test	04	DC 13.5V Power Supply_Keep EUT working at highest cooling mode(BCD85).
Pre-scan	05	DC 13.5V Power Supply_Keep EUT working at lowest cooling mode(BCD85)..
Final test	06	DC 27V Power Supply_Keep EUT working at highest cooling mode(BCD85)..
Pre-scan	07	DC 27V Power Supply_Keep EUT working at lowest cooling mode(BCD85)..

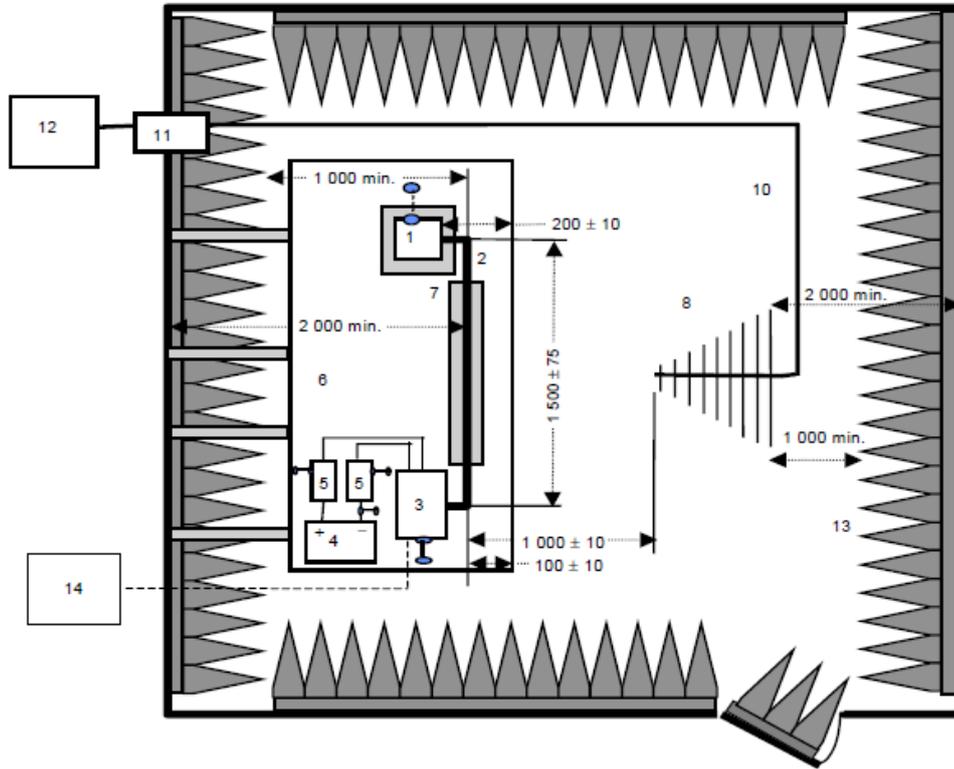


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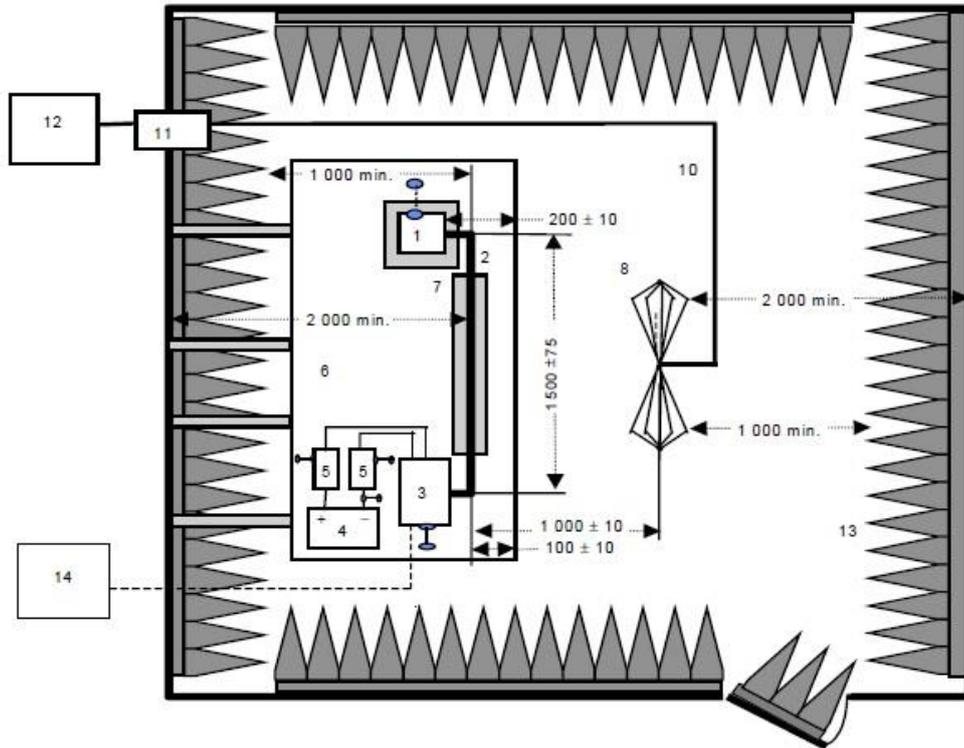
6.1.3 Test Setup Diagram



Key

1. EUT (grounded locally if required in test plan)	8. Log-periodic antenna
2. Test harness	10. High-quality coaxial cable
3. Load simulator	11. Bulkhead connector
4. Power supply (location optional)	12. Measuring instrument
5. Artificial network (AN)	13. RF absorber material
6. Ground plane (bonded to shielded enclosure)	14. Stimulation and monitoring system
7. Low relative permittivity support	

Figure – Example of test set-up – Log-periodic antenna



Key

1. EUT (grounded locally if required in test plan)	8. Biconical antenna
2. Test harness	10. High-quality coaxial cable
3. Load simulator	11. Bulkhead connector
4. Power supply (location optional)	12. Measuring instrument
5. Artificial network (AN)	13. RF absorber material
6. Ground plane (bonded to shielded enclosure)	14. Stimulation and monitoring system
7. Low relative permittivity support	

Figure – Example of test set-up – Biconical antenna

6.1.4 Measurement Procedure and Data

Frequency Range:30MHz-1GHz



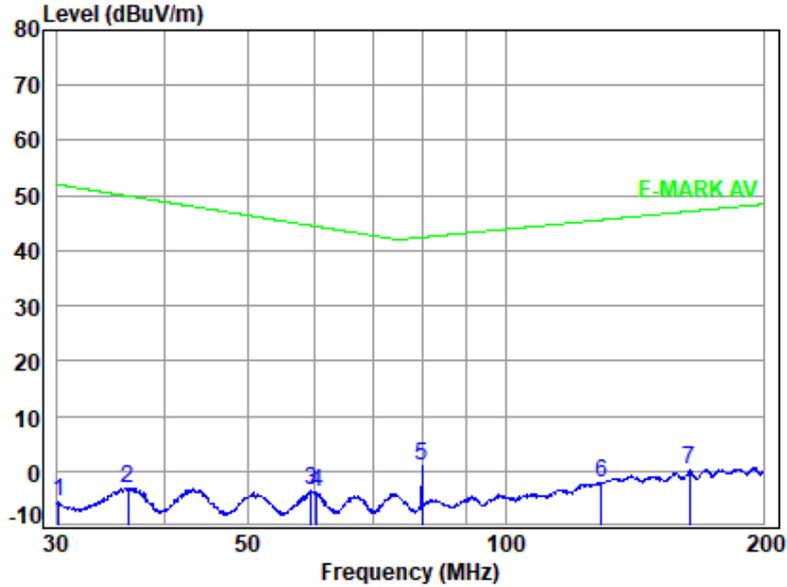
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30-200MHz, Detector: QP & AV
Mode 01: Polarization: Horizontal

Test Mode: 01



Condition: 1m Horizontal
Job No : 06107AU
Mode : 01

	Cable	Ant	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	30.1140	0.39	12.60	32.60	13.99	-5.62	51.96	-57.58	Average
2	36.2670	0.41	12.67	32.60	16.52	-3.00	49.93	-52.93	Average
3	59.2795	0.55	10.48	32.58	17.93	-3.62	44.57	-48.19	Average
4	60.1860	0.55	10.39	32.57	17.93	-3.70	44.40	-48.10	Average
5 pp	79.9985	0.66	9.80	32.53	23.02	0.95	42.42	-41.47	Average
6	129.5254	0.90	12.75	32.54	16.81	-2.08	45.59	-47.67	Average
7	164.1888	1.04	14.61	32.57	17.05	0.13	47.15	-47.02	Average

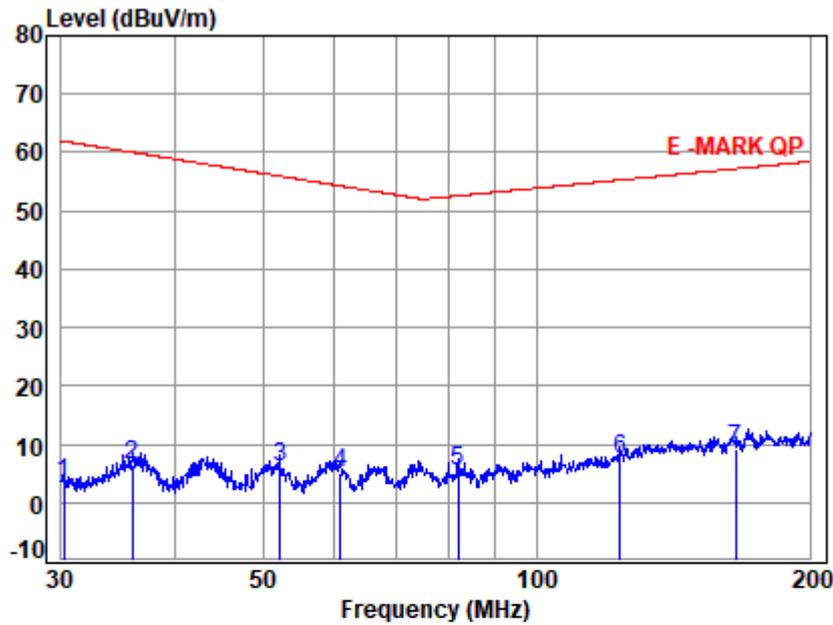


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Test Mode: 01



Condition: 1m Horizontal
Job No : 06107AU
Mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.1712	0.39	12.60	32.60	22.83	3.22	61.94	-58.72	QP
2	35.9247	0.41	12.66	32.60	25.91	6.38	60.03	-53.65	QP
3	52.2039	0.50	11.32	32.59	26.75	5.98	55.95	-49.97	QP
4	60.8750	0.56	10.36	32.57	26.74	5.09	54.28	-49.19	QP
5 pp	81.9960	0.67	9.86	32.53	27.51	5.51	52.59	-47.08	QP
6	123.7602	0.88	12.19	32.53	27.06	7.60	55.29	-47.69	QP
7	165.7536	1.04	14.69	32.57	26.14	9.30	57.21	-47.91	QP



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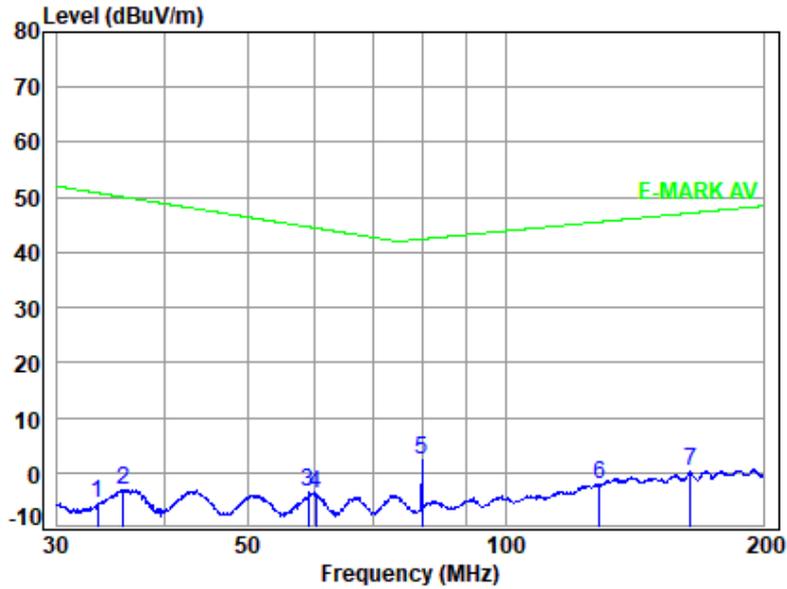
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30-200MHz, Detector: QP & AV

Mode 01: Polarization: Vertical

Test Mode: 01



Condition: 1m Vertical

Job No : 06107AU

Mode : 01

	Cable	Ant	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	33.4260	0.40	12.64	32.60	14.09	-5.47	50.82	-56.29	Average
2	35.8566	0.41	12.66	32.60	16.47	-3.06	50.05	-53.11	Average
3	58.9431	0.54	10.52	32.58	17.94	-3.58	44.63	-48.21	Average
4	60.0720	0.55	10.40	32.57	17.91	-3.71	44.42	-48.13	Average
5 pp	79.9985	0.66	9.80	32.53	24.48	2.41	42.42	-40.01	Average
6	128.7903	0.90	12.68	32.54	16.85	-2.11	45.55	-47.66	Average
7	164.5006	1.04	14.63	32.57	17.03	0.13	47.16	-47.03	Average

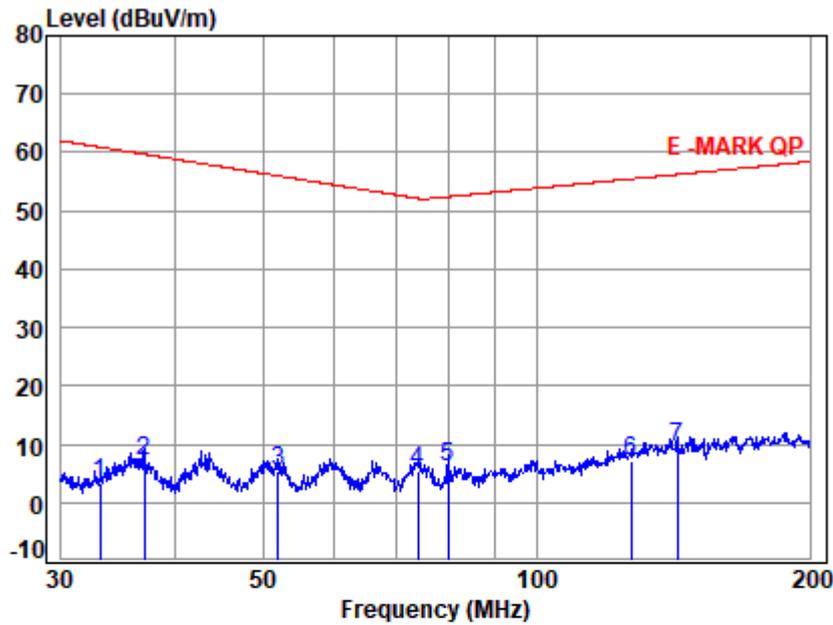


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Test Mode: 01



Condition: 1m Vertical

Job No : 06107AU

Mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	33.1104	0.40	12.63	32.60	22.92	3.35	60.92	-57.57	QP
2	37.0318	0.41	12.67	32.60	26.59	7.07	59.70	-52.63	QP
3	52.0062	0.50	11.34	32.59	26.08	5.33	56.00	-50.67	QP
4	74.1525	0.63	9.91	32.54	27.24	5.24	52.12	-46.88	QP
5	pp 79.9985	0.66	9.80	32.53	28.11	6.04	52.42	-46.38	QP
6	127.0913	0.89	12.52	32.53	26.33	7.21	55.47	-48.26	QP
7	142.9546	0.95	13.66	32.55	27.32	9.38	56.24	-46.86	QP



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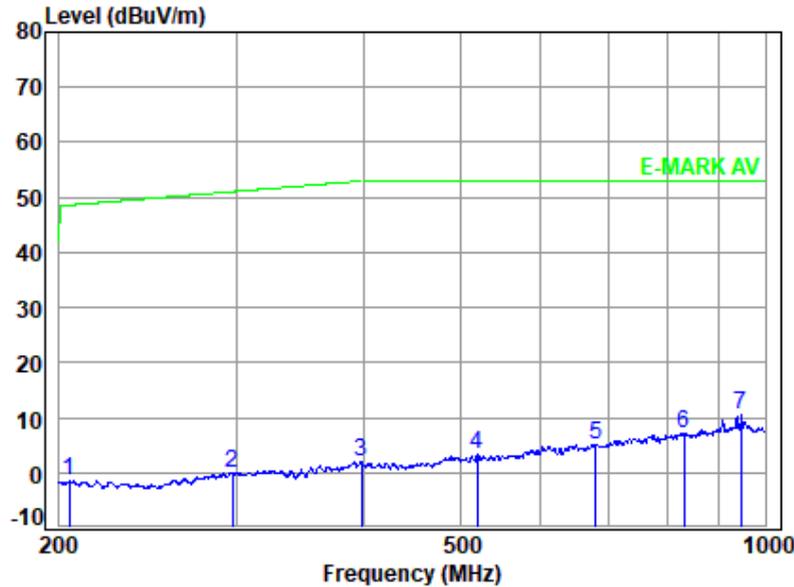
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200MHz-1GHz, Detector: QP & AV

Mode 01: Polarization: Horizontal

Test Mode: 01



Condition: 1m Horizontal

Job No : 06107AU

mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	
1	204.5576	1.19	13.30	32.59	16.58	-1.52	48.59	-50.11 Average
2	297.1506	1.50	14.48	32.50	16.58	0.06	51.05	-50.99 Average
3	398.2806	1.79	15.86	32.40	16.74	1.99	52.97	-50.98 Average
4	518.5853	2.08	16.89	32.40	16.64	3.21	53.00	-49.79 Average
5	679.5903	2.46	18.26	32.32	16.77	5.17	53.00	-47.83 Average
6	831.0333	2.79	19.69	32.01	16.66	7.13	53.00	-45.87 Average
7	946.7494	3.01	20.66	31.17	18.03	10.53	53.00	-42.47 Average

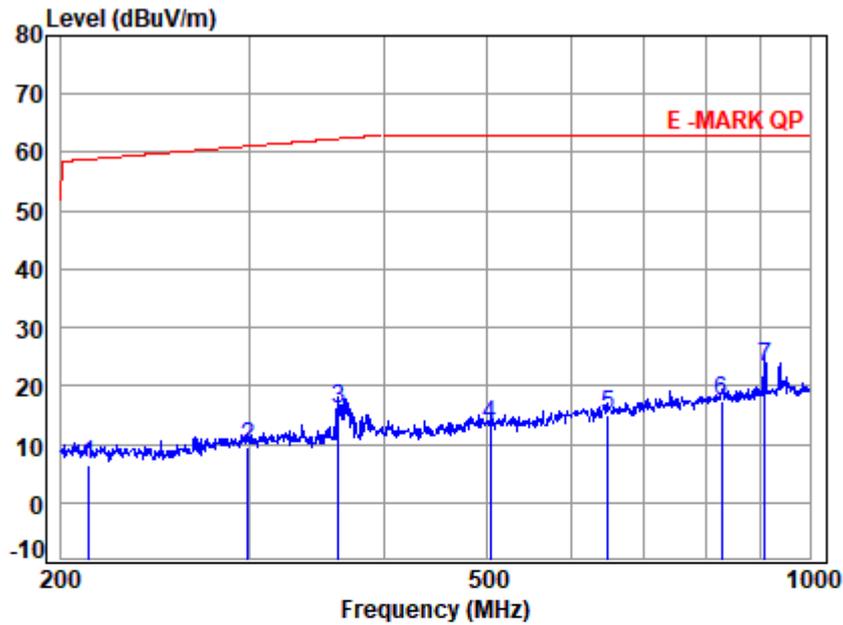


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中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

Test Mode: 01



Condition: 1m Horizontal

Job No : 06107AU

mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	212.2716	1.22	13.13	32.59	24.54	6.30	58.84	-52.54	QP
2	298.5888	1.51	14.54	32.50	25.87	9.42	61.08	-51.66	QP
3	363.3690	1.68	14.96	32.43	31.97	16.18	62.37	-46.19	QP
4	502.9674	2.04	16.98	32.40	26.50	13.12	63.00	-49.88	QP
5	647.5571	2.38	17.90	32.35	27.21	15.14	63.00	-47.86	QP
6	827.0305	2.78	19.66	32.03	26.86	17.27	63.00	-45.73	QP
7	pp 907.9497	2.94	20.20	31.52	31.51	23.13	63.00	-39.87	QP



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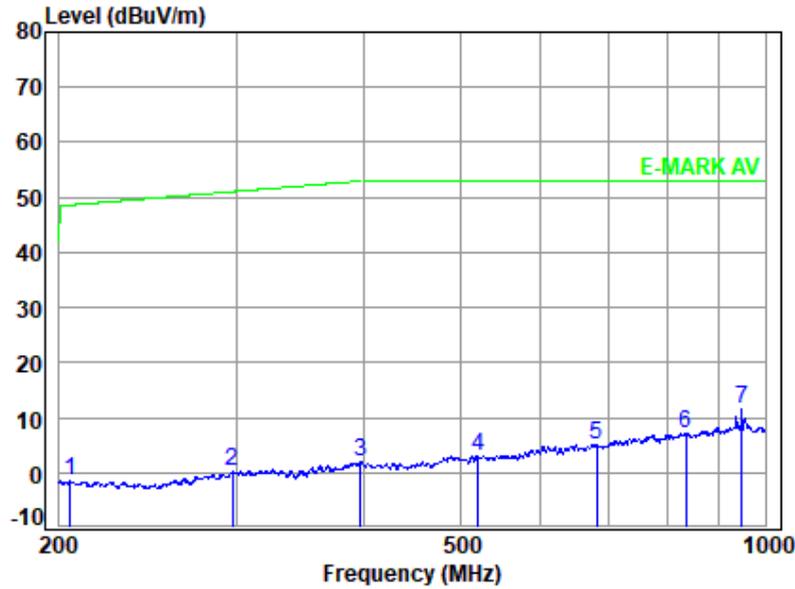
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200MHz-1GHz, Detector: QP & AV

Mode 01: Polarization: Vertical

Test Mode: 01



Condition: 1m Vertical

Job No : 06107AU

mode : 01

	Cable	Ant	Preamp	Read	Limit	Over		
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	205.2171	1.19	13.28	32.59	16.65	-1.47	48.61	-50.08 Average
2	296.6727	1.50	14.47	32.50	16.73	0.20	51.04	-50.84 Average
3	397.6401	1.78	15.84	32.40	16.86	2.08	52.96	-50.88 Average
4	520.2573	2.08	16.87	32.40	16.44	2.99	53.00	-50.01 Average
5	680.6850	2.46	18.27	32.32	16.73	5.14	53.00	-47.86 Average
6	835.0555	2.79	19.71	31.98	16.60	7.12	53.00	-45.88 Average
7 pp	948.2743	3.02	20.68	31.15	18.93	11.48	53.00	-41.52 Average

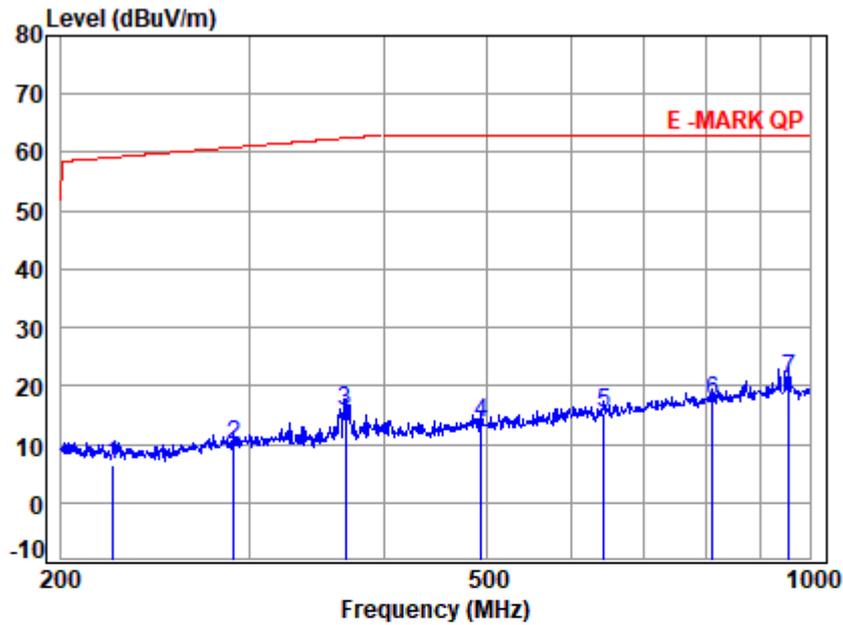


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Test Mode: 01



Condition: 1m Vertical

Job No : 06107AU

mode : 01

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	223.4904	1.25	12.90	32.57	24.71	6.29	59.17	-52.88	QP
2	290.0628	1.48	14.19	32.51	26.66	9.82	60.89	-51.07	QP
3	368.6707	1.70	15.11	32.43	31.34	15.72	62.46	-46.74	QP
4	493.3466	2.01	16.82	32.40	27.17	13.60	63.00	-49.40	QP
5	642.3671	2.37	17.91	32.36	27.34	15.26	63.00	-47.74	QP
6	811.2111	2.74	19.57	32.13	27.10	17.28	63.00	-45.72	QP
7	pp 955.9360	2.92	20.71	31.08	28.54	21.09	63.00	-41.91	QP



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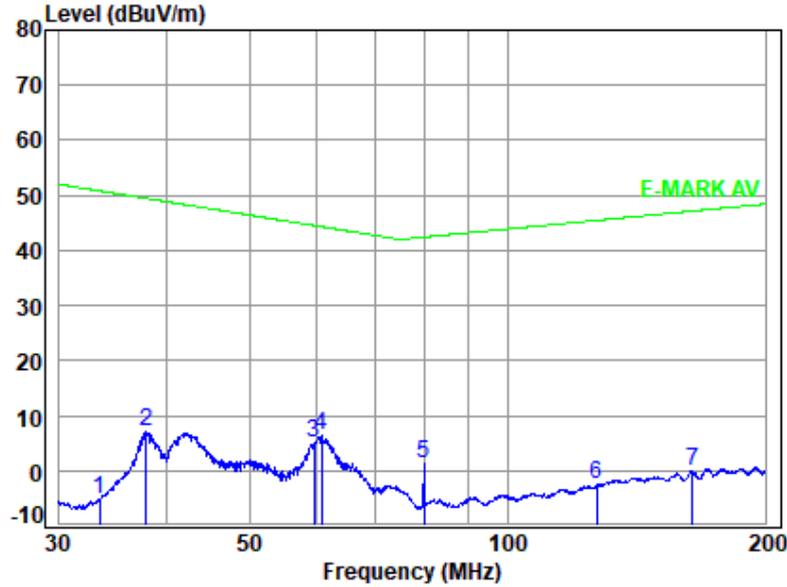
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30-200MHz, Detector: QP & AV
Mode 03: Polarization: Horizontal

Test Mode: 03



Condition: 1m Horizontal
Job No : 06107AU
Mode : 03

	Cable	Ant	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	0.40	12.64	32.60	14.48	-5.08	50.82	-55.90	Average	
2	0.42	12.68	32.60	26.64	7.14	49.45	-42.31	Average	
3	0.55	10.45	32.57	26.68	5.11	44.53	-39.42	Average	
4 pp	0.55	10.37	32.57	27.93	6.28	44.30	-38.02	Average	
5	0.66	9.80	32.53	23.31	1.24	42.42	-41.18	Average	
6	0.89	12.54	32.53	16.68	-2.42	45.48	-47.90	Average	
7	1.04	14.63	32.57	16.79	-0.11	47.16	-47.27	Average	

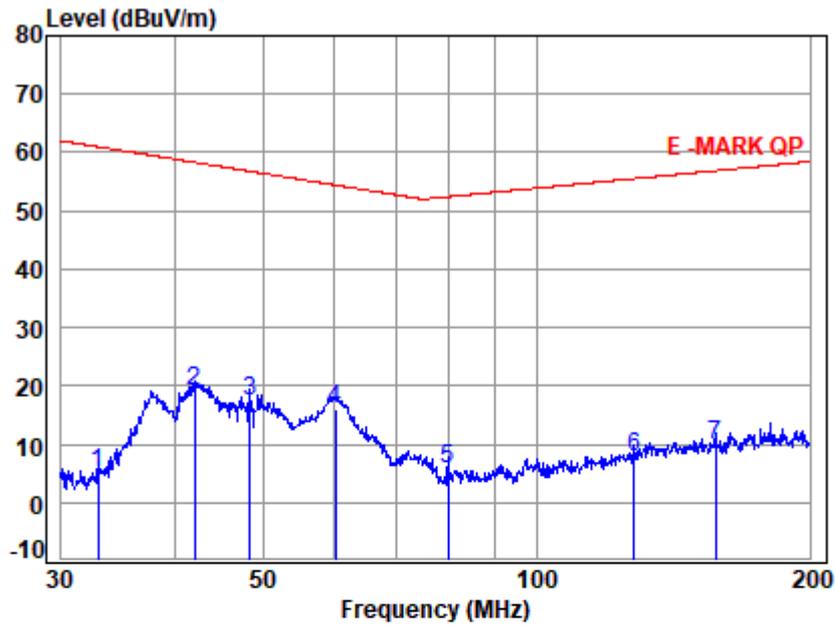


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Test Mode: 03



Condition: 1m Horizontal

Job No : 06107AU

Mode : 03

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	32.9225	0.40	12.63	32.60	24.61	5.04	60.99	-55.95	QP
2	42.0511	0.44	12.45	32.60	38.64	18.93	58.31	-39.38	QP
3	48.3890	0.48	11.76	32.60	37.84	17.48	56.78	-39.30	QP
4	pp 60.0720	0.55	10.40	32.57	37.72	16.10	54.42	-38.32	QP
5	79.9985	0.66	9.80	32.53	27.76	5.69	52.42	-46.73	QP
6	128.3026	0.89	12.64	32.54	26.84	7.83	55.53	-47.70	QP
7	157.4771	1.01	14.25	32.57	27.11	9.80	56.87	-47.07	QP



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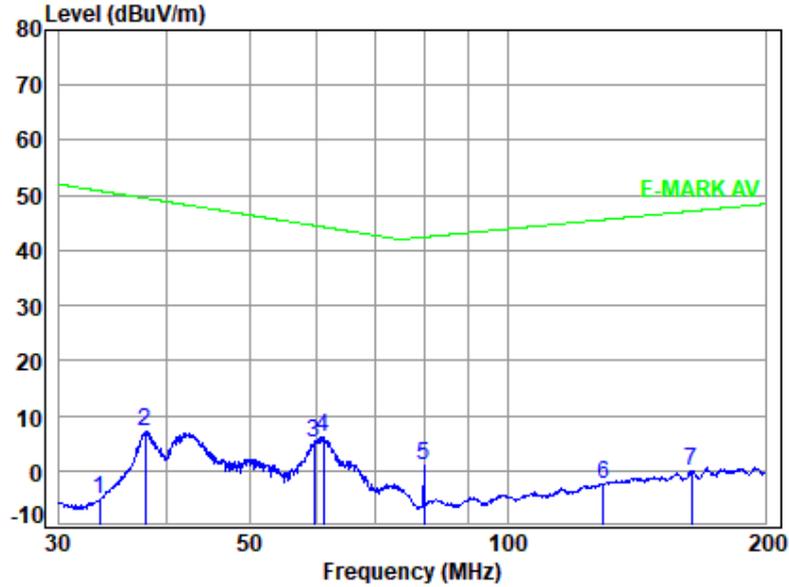
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30-200MHz, Detector: QP & AV

Mode 03: Polarization: Vertical

Test Mode: 03



Condition: 1m Vertical

Job No : 06107AU

Mode : 03

	Cable	Ant	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	0.40	12.64	32.60	14.49	-5.07	50.82	-55.89	Average	
2	0.42	12.68	32.60	26.55	7.05	49.47	-42.42	Average	
3	0.55	10.45	32.57	26.72	5.15	44.53	-39.38	Average	
4 pp	0.56	10.35	32.57	27.82	6.16	44.24	-38.08	Average	
5	0.66	9.80	32.53	23.09	1.02	42.42	-41.40	Average	
6	0.90	12.75	32.54	16.42	-2.47	45.59	-48.06	Average	
7	1.04	14.61	32.57	17.00	0.08	47.15	-47.07	Average	

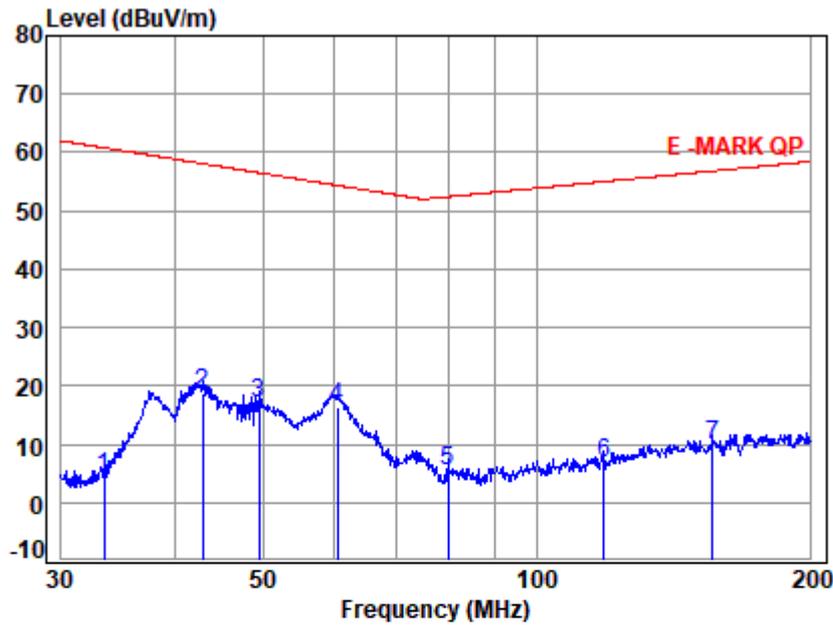


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Test Mode: 03



Condition: 1m Vertical

Job No : 06107AU

Mode : 03

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	33.4260	0.40	12.64	32.60	23.97	4.41	60.82	-56.41	QP
2	42.9378	0.45	12.35	32.60	38.55	18.75	58.09	-39.34	QP
3	49.5032	0.49	11.65	32.60	37.41	16.95	56.53	-39.58	QP
4	pp 60.4148	0.55	10.38	32.57	38.12	16.48	54.36	-37.88	QP
5	79.9985	0.66	9.80	32.53	27.59	5.52	52.42	-46.90	QP
6	118.7012	0.85	11.70	32.52	26.64	6.67	55.02	-48.35	QP
7	156.2866	1.01	14.18	32.56	27.05	9.68	56.82	-47.14	QP



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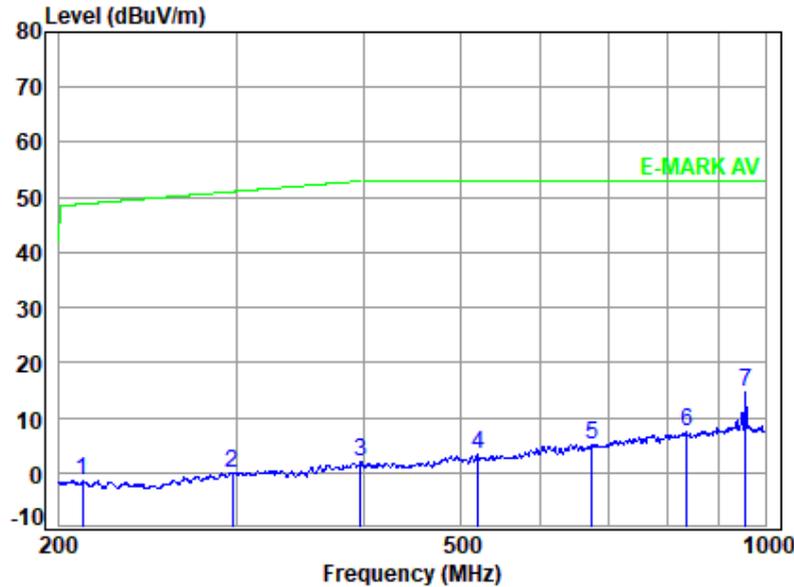
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200MHz-1GHz, Detector: QP & AV

Mode 03: Polarization: Horizontal

Test Mode: 03



Condition: 1m Horizontal

Job No : 06107AU

mode : 03

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	210.9094	1.21	13.16	32.59	16.69	-1.53	48.79	-50.32	Average
2	296.6727	1.50	14.47	32.50	16.55	0.02	51.04	-51.02	Average
3	397.6401	1.78	15.84	32.40	16.69	1.91	52.96	-51.05	Average
4	519.4207	2.08	16.88	32.40	16.75	3.31	53.00	-49.69	Average
5	674.1435	2.44	18.20	32.32	16.88	5.20	53.00	-47.80	Average
6	836.4006	2.80	19.72	31.97	16.78	7.33	53.00	-45.67	Average
7 pp	955.9360	2.92	20.71	31.08	22.05	14.60	53.00	-38.40	Average

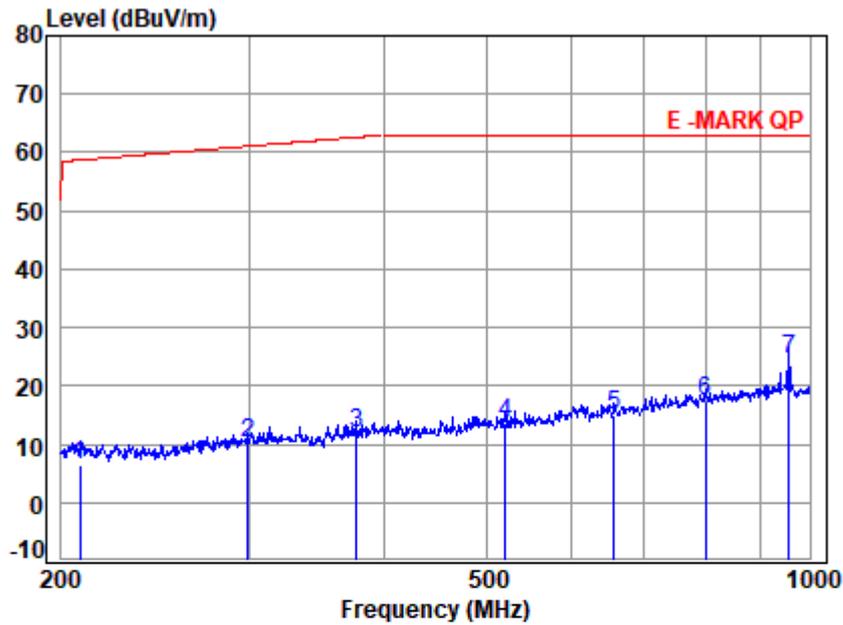


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Test Mode: 03



Condition: 1m Horizontal

Job No : 06107AU

mode : 03

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	208.2113	1.20	13.22	32.59	24.52	6.35	58.71	-52.36	QP
2	298.5888	1.51	14.54	32.50	26.50	10.05	61.08	-51.03	QP
3	377.0719	1.72	15.33	32.42	27.27	11.90	62.61	-50.71	QP
4	519.4207	2.08	16.88	32.40	27.05	13.61	63.00	-49.39	QP
5	657.0052	2.41	17.99	32.34	26.81	14.87	63.00	-48.13	QP
6	799.5455	2.71	19.50	32.20	27.29	17.30	63.00	-45.70	QP
7	pp 955.9360	2.92	20.71	31.08	31.94	24.49	63.00	-38.51	QP

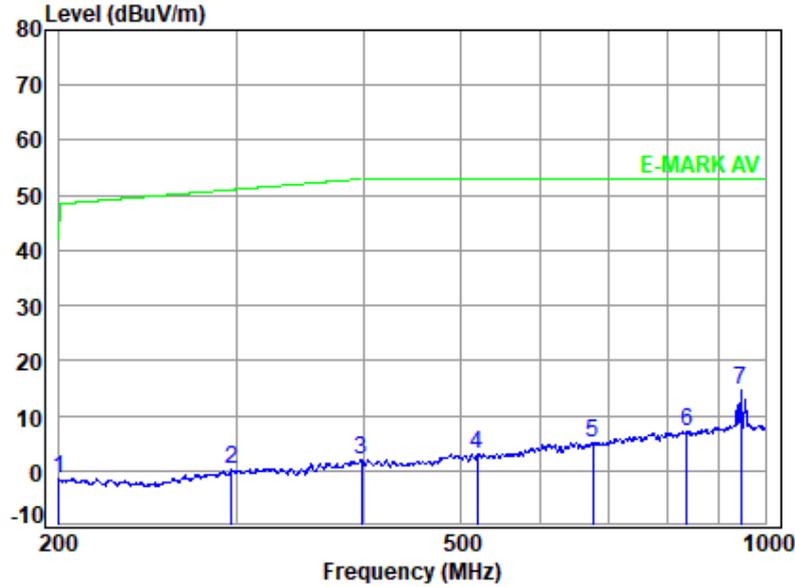


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200MHz-1GHz, Detector: QP & AV

Mode 03: Polarization: Vertical

Test Mode: 03



Condition: 1m Vertical

Job No : 06107AU

mode : 03

	Cable	Ant	Preamp	Read	Limit	Over			
Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark	
MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB		
1	200.0000	1.17	13.40	32.60	16.62	-1.41	48.45	-49.86	Average
2	296.1956	1.50	14.45	32.50	16.69	0.14	51.03	-50.89	Average
3	398.2806	1.79	15.86	32.40	16.62	1.87	52.97	-51.10	Average
4	518.5853	2.08	16.89	32.40	16.60	3.17	53.00	-49.83	Average
5	675.2294	2.45	18.21	32.32	16.85	5.19	53.00	-47.81	Average
6	836.4006	2.80	19.72	31.97	16.55	7.10	53.00	-45.90	Average
7 pp	945.2269	3.01	20.64	31.18	22.31	14.78	53.00	-38.22	Average

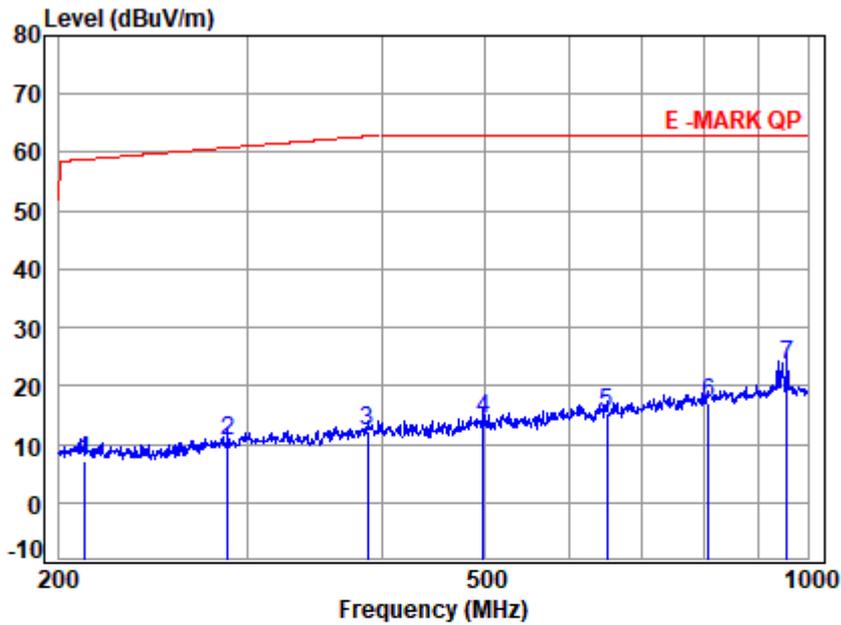


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Test Mode: 03



Condition: 1m Vertical
 Job No : 06107AU
 mode : 03

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	211.2491	1.21	13.15	32.59	25.41	7.18	58.80	-51.62	QP
2	287.2753	1.47	14.08	32.51	27.53	10.57	60.82	-50.25	QP
3	388.1554	1.76	15.61	32.41	27.15	12.11	62.80	-50.69	QP
4	498.1338	2.03	16.95	32.40	27.85	14.43	63.00	-48.57	QP
5	649.6449	2.39	17.90	32.35	27.29	15.23	63.00	-47.77	QP
6	807.3038	2.73	19.54	32.15	27.06	17.18	63.00	-45.82	QP
7	pp 955.9360	2.92	20.71	31.08	31.01	23.56	63.00	-39.44	QP



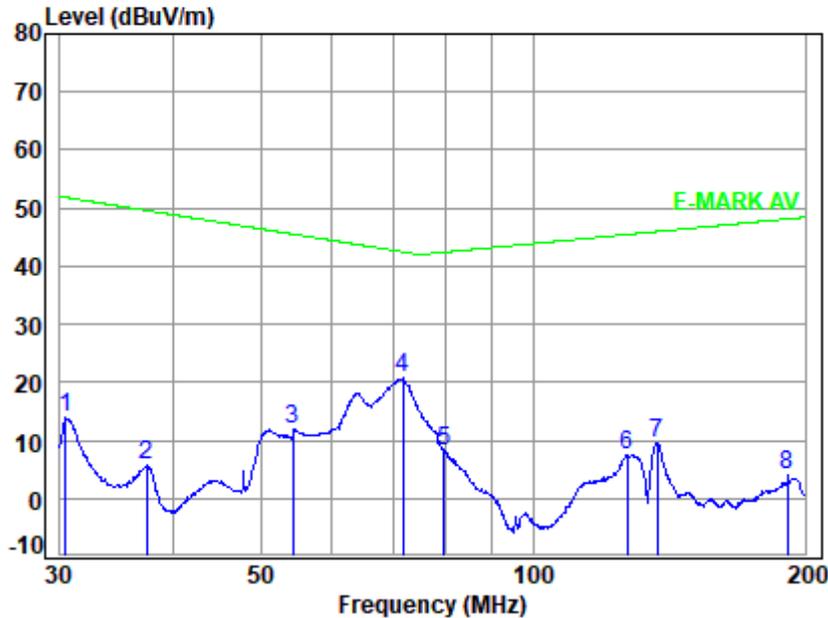
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30-200MHz, Detector: QP & AV
Mode 04: Polarization: Horizontal

Test Mode: 04



Condition: 1m Horizontal
Job No : 06107AU
Mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.4588	0.39	12.61	32.60	33.40	13.80	51.83	-38.03	Average
2	37.4558	0.42	12.68	32.60	25.10	5.60	49.58	-43.98	Average
3	54.3256	0.52	11.05	32.59	32.87	11.85	45.52	-33.67	Average
4 pp	71.7992	0.62	9.96	32.55	42.60	20.63	42.48	-21.85	Average
5	79.8469	0.66	9.80	32.53	30.32	8.25	42.41	-34.16	Average
6	127.0913	0.89	12.52	32.53	26.70	7.58	45.47	-37.89	Average
7	137.1110	0.93	13.37	32.55	27.85	9.60	45.96	-36.36	Average
8	191.4609	1.14	15.30	32.59	20.08	3.93	48.16	-44.23	Average

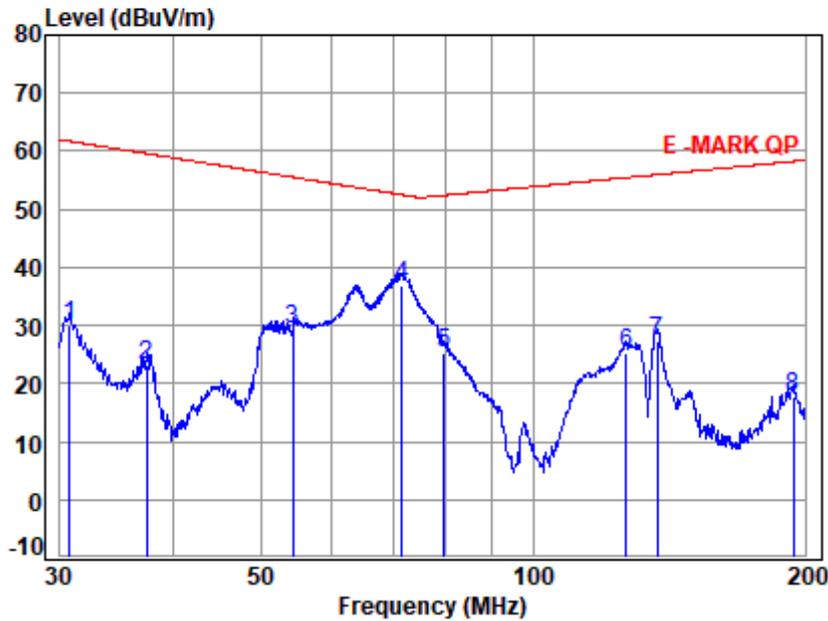


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Test Mode: 04



Condition: 1m Horizontal

Job No : 06107AU

Mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.7491	0.39	12.61	32.60	49.53	29.93	61.73	-31.80	QP
2	37.3848	0.41	12.68	32.60	42.67	23.16	59.60	-36.44	QP
3	54.3256	0.52	11.05	32.59	50.43	29.41	55.52	-26.11	QP
4 pp	71.6631	0.62	9.96	32.55	58.89	36.92	52.50	-15.58	QP
5	79.8469	0.66	9.80	32.53	47.46	25.39	52.41	-27.02	QP
6	126.8504	0.89	12.49	32.53	44.37	25.22	55.45	-30.23	QP
7	137.1110	0.93	13.37	32.55	45.50	27.25	55.96	-28.71	QP
8	194.3889	1.15	15.30	32.60	33.98	17.83	58.26	-40.43	QP



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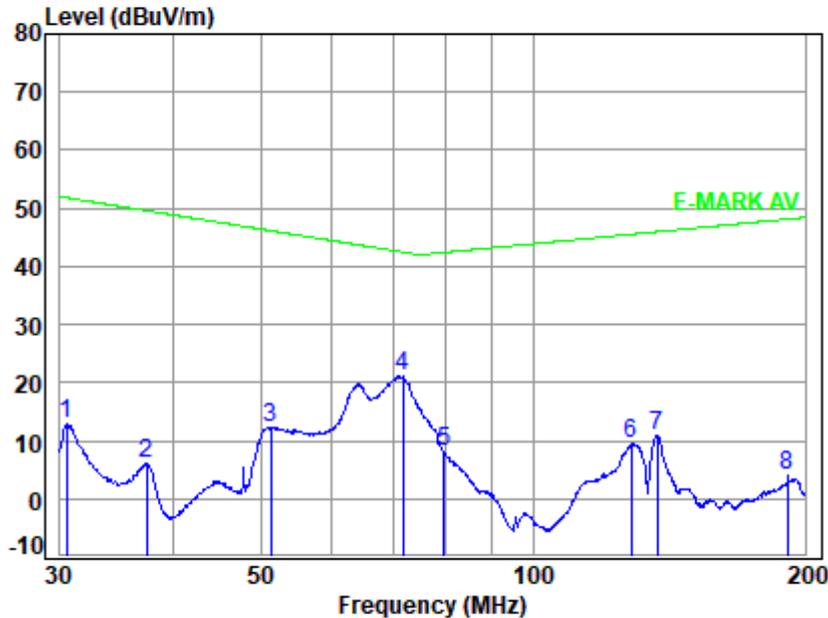
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30-200MHz, Detector: QP & AV

Mode 04: Polarization: Vertical

Test Mode: 04



Condition: 1m Vertical
Job No : 06107AU
Mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.5166	0.39	12.61	32.60	32.39	12.79	51.81	-39.02	Average
2	37.3848	0.41	12.68	32.60	25.51	6.00	49.60	-43.60	Average
3	51.3201	0.50	11.43	32.60	32.97	12.30	46.14	-33.84	Average
4 pp	71.7992	0.62	9.96	32.55	43.09	21.12	42.48	-21.36	Average
5	79.8469	0.66	9.80	32.53	30.13	8.06	42.41	-34.35	Average
6	128.5462	0.90	12.66	32.54	28.41	9.43	45.54	-36.11	Average
7	137.1110	0.93	13.37	32.55	29.23	10.98	45.96	-34.98	Average
8	191.4609	1.14	15.30	32.59	20.27	4.12	48.16	-44.04	Average

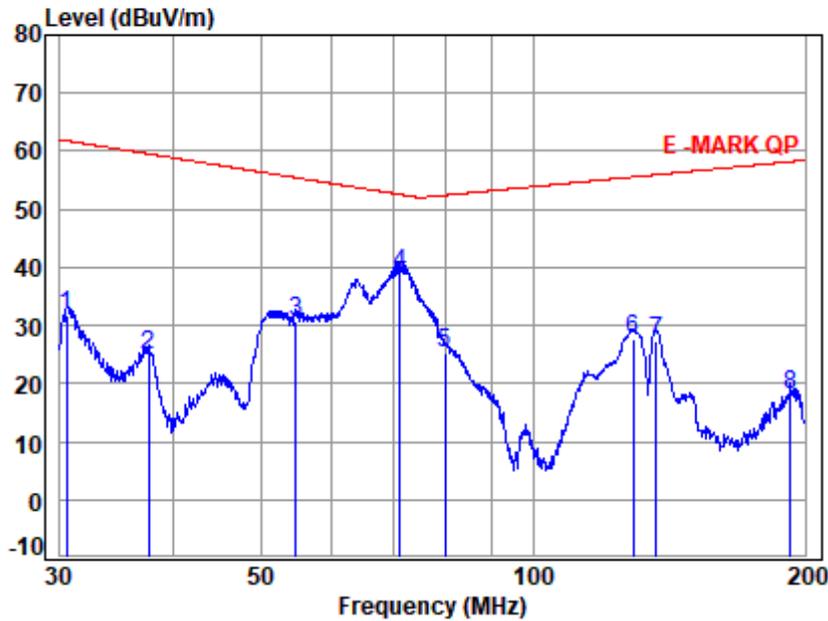


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Test Mode: 04



Condition: 1m Vertical

Job No : 06107AU

Mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.5166	0.39	12.61	32.60	51.19	31.59	61.81	-30.22	QP
2	37.5981	0.42	12.68	32.60	44.28	24.78	59.54	-34.76	QP
3	54.6357	0.52	11.02	32.59	51.78	30.73	55.46	-24.73	QP
4 pp	71.3917	0.62	9.97	32.55	60.85	38.89	52.54	-13.65	QP
5	79.9985	0.66	9.80	32.53	47.17	25.10	52.42	-27.32	QP
6	129.0349	0.90	12.71	32.54	46.41	27.48	55.57	-28.09	QP
7	136.8511	0.93	13.35	32.55	45.71	27.44	55.95	-28.51	QP
8	192.9193	1.14	15.30	32.59	34.12	17.97	58.21	-40.24	QP



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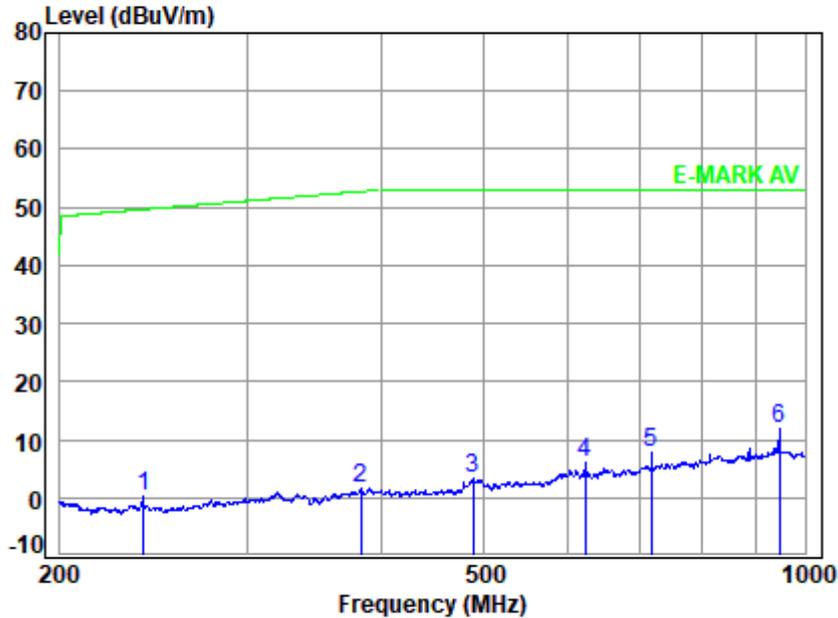
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200MHz-1GHz, Detector: QP & AV

Mode 04: Polarization: Horizontal

Test Mode: 04



Condition: 1m Horizontal

Job No : 06107AU

mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	
1	239.5050	1.31	12.59	32.56	19.08	53.00	-49.21	Average
2	383.1898	1.74	15.48	32.41	16.98	53.00	-50.93	Average
3	487.8198	2.00	16.67	32.40	16.95	53.00	-49.78	Average
4	622.0193	2.32	17.95	32.38	18.26	53.00	-46.85	Average
5	717.8144	2.54	18.72	32.28	18.78	53.00	-45.24	Average
6 pp	945.2269	3.01	20.64	31.18	19.48	53.00	-41.05	Average

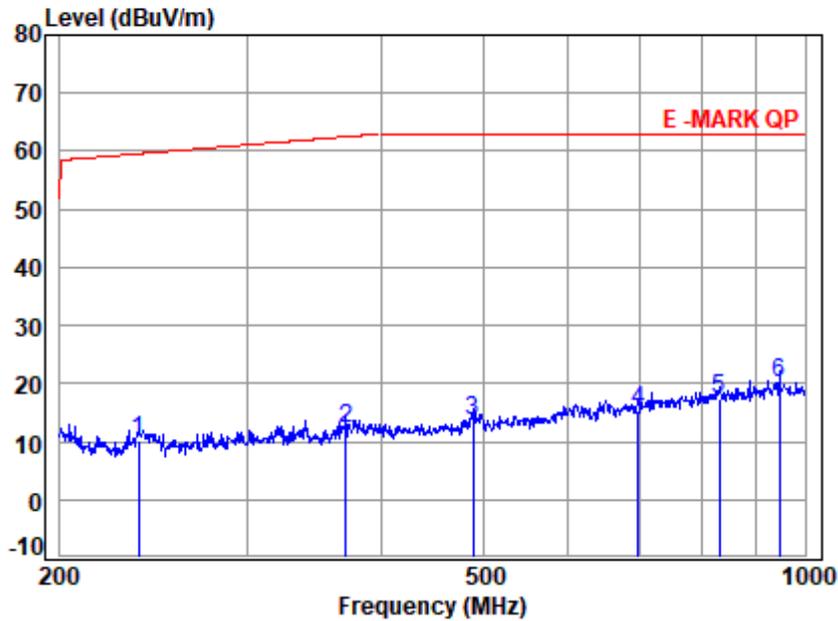


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Test Mode: 04



Condition: 1m Horizontal

Job No : 06107AU

mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	237.2034	1.30	12.64	32.56	28.75	10.13	59.57	-49.44 QP
2	371.0518	1.71	15.17	32.43	27.76	12.21	62.51	-50.30 QP
3	487.8198	2.00	16.67	32.40	27.45	13.72	63.00	-49.28 QP
4	697.3177	2.49	18.47	32.30	26.57	15.23	63.00	-47.77 QP
5	831.0333	2.79	19.69	32.01	26.79	17.26	63.00	-45.74 QP
6 pp	945.2269	3.01	20.64	31.18	27.62	20.09	63.00	-42.91 QP



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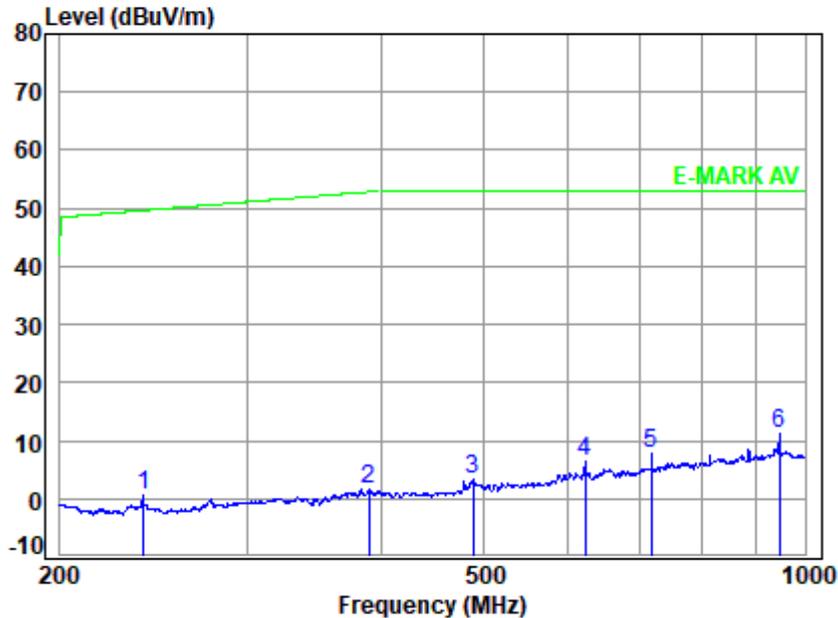
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Room 105, Building A, Xinlong Technology Industrial Park, No. 50 Fangtang Road, Xintan Community, Fuyong Street, Bao'an District, Shenzhen, China 518103 t (86-755) 26012053 f (86-755) 26710594 www.sgs.com.cn
中国·深圳·宝安区福永街道新田社区凤塘大道50号鑫龙科技工业园A栋105室 邮编: 518103 t (86-755) 26012053 f (86-755) 26710594 sgs.china@sgs.com

200MHz-1GHz, Detector: QP & AV

Mode 04: Polarization: Vertical

Test Mode: 04



Condition: 1m Vertical

Job No : 06107AU

mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	239.5050	1.31	12.59	32.56	19.30	0.64	49.63	-48.99 Average
2	390.0341	1.76	15.65	32.41	16.57	1.57	52.83	-51.26 Average
3	487.8198	2.00	16.67	32.40	16.93	3.20	53.00	-49.80 Average
4	622.0193	2.32	17.95	32.38	18.44	6.33	53.00	-46.67 Average
5	717.8144	2.54	18.72	32.28	18.66	7.64	53.00	-45.36 Average
6 pp	945.2269	3.01	20.64	31.18	18.64	11.11	53.00	-41.89 Average

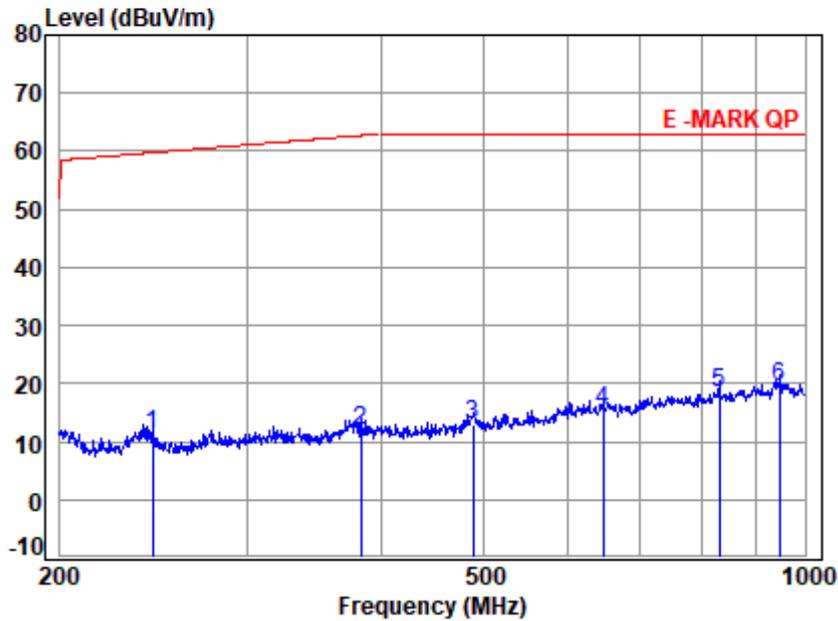


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Test Mode: 04



Condition: 1m Vertical

Job No : 06107AU

mode : 04

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	244.1756	1.32	12.51	32.55	29.92	11.20	59.76	-48.56	QP
2	383.1898	1.74	15.48	32.41	27.01	11.82	62.72	-50.90	QP
3	488.6055	2.00	16.69	32.40	26.63	12.92	63.00	-50.08	QP
4	646.5158	2.38	17.91	32.35	27.48	15.42	63.00	-47.58	QP
5	831.0333	2.79	19.69	32.01	27.89	18.36	63.00	-44.64	QP
6 pp	946.7494	3.01	20.66	31.17	26.88	19.38	63.00	-43.62	QP



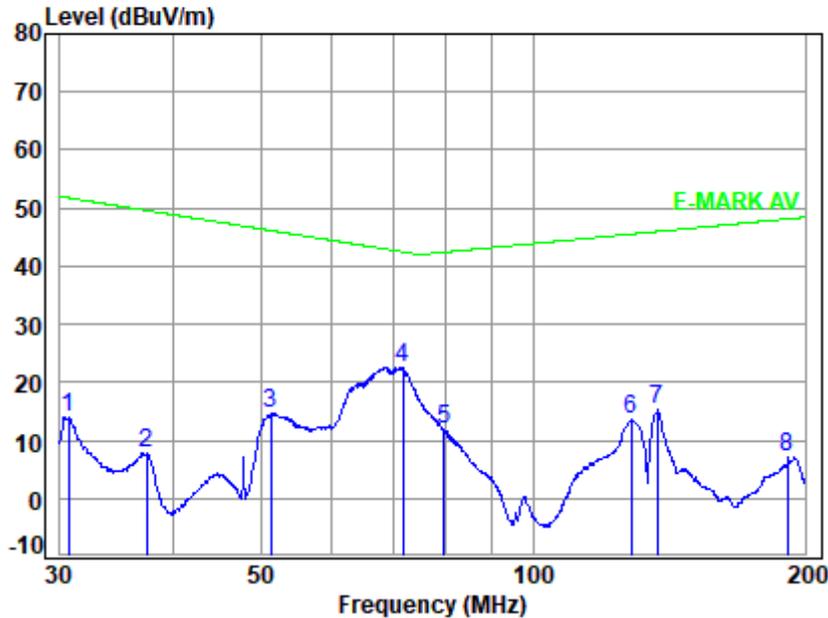
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30-200MHz, Detector: QP & AV
Mode 06: Polarization: Horizontal

Test Mode: 06



Condition: 1m Horizontal
Job No : 06107AU
Mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	30.6908	0.39	12.61	32.60	33.65	14.05	51.75	-37.70 Average
2	37.4558	0.42	12.68	32.60	27.38	7.88	49.58	-41.70 Average
3	51.3201	0.50	11.43	32.60	35.27	14.60	46.14	-31.54 Average
4 pp	71.7992	0.62	9.96	32.55	44.52	22.55	42.48	-19.93 Average
5	79.8469	0.66	9.80	32.53	33.97	11.90	42.41	-30.51 Average
6	128.5462	0.90	12.66	32.54	32.45	13.47	45.54	-32.07 Average
7	137.3713	0.93	13.40	32.55	33.42	15.20	45.98	-30.78 Average
8	191.4609	1.14	15.30	32.59	23.30	7.15	48.16	-41.01 Average

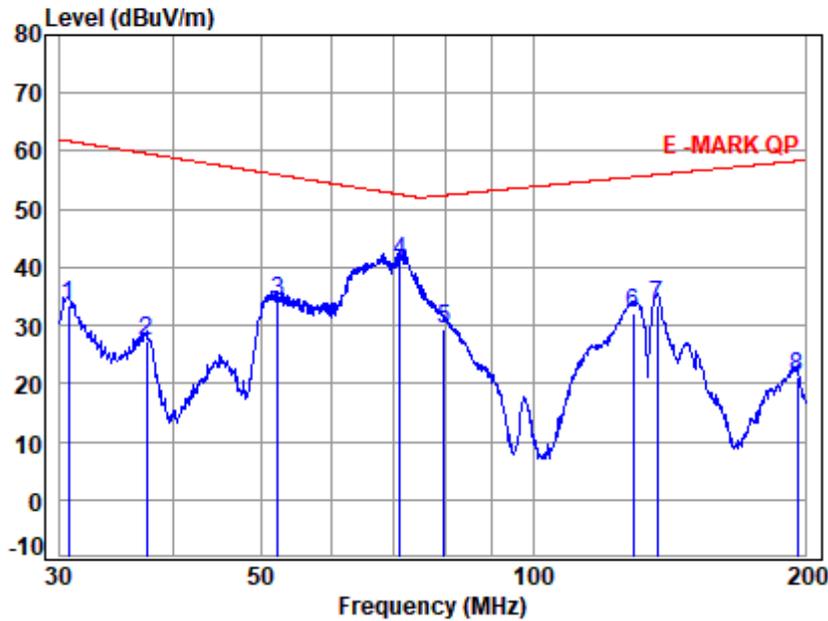


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Test Mode: 06



Condition: 1m Horizontal

Job No : 06107AU

Mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.6326	0.39	12.61	32.60	52.89	33.29	61.77	-28.48	QP
2	37.3848	0.41	12.68	32.60	46.69	27.18	59.60	-32.42	QP
3	52.3030	0.50	11.30	32.59	54.77	33.98	55.93	-21.95	QP
4 pp	71.3917	0.62	9.97	32.55	62.83	40.87	52.54	-11.67	QP
5	79.8469	0.66	9.80	32.53	51.34	29.27	52.41	-23.14	QP
6	129.0349	0.90	12.71	32.54	50.98	32.05	55.57	-23.52	QP
7	137.1110	0.93	13.37	32.55	51.62	33.37	55.96	-22.59	QP
8	196.2415	1.16	15.30	32.60	37.30	21.16	58.32	-37.16	QP



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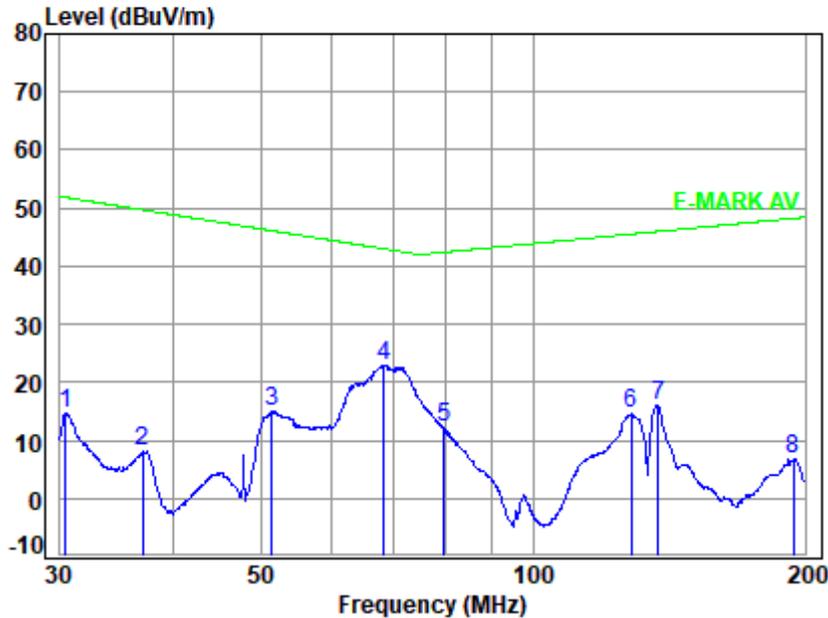
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30-200MHz, Detector: QP & AV

Mode 06: Polarization: Vertical

Test Mode: 06



Condition: 1m Vertical

Job No : 06107AU

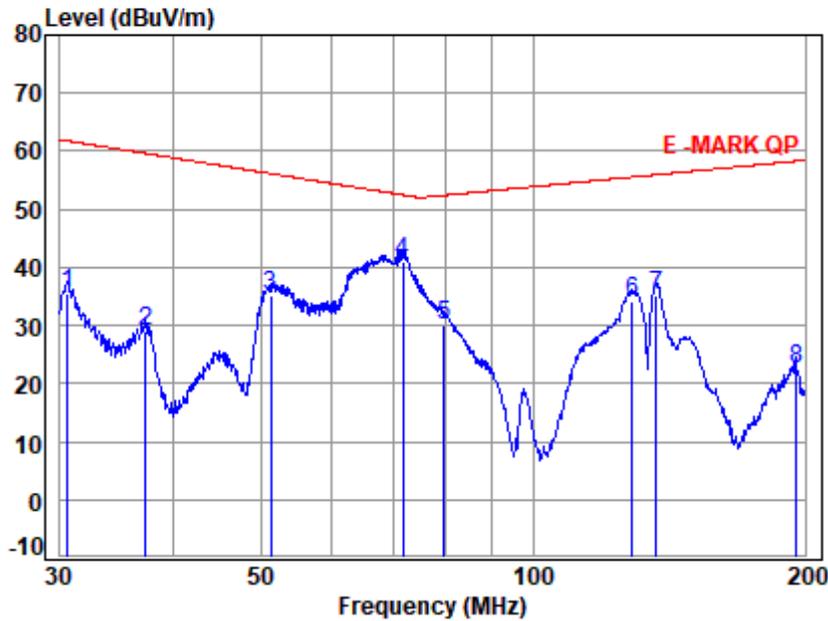
Mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.4588	0.39	12.61	32.60	34.14	14.54	51.83	-37.29	Average
2	37.0318	0.41	12.67	32.60	27.65	8.13	49.70	-41.57	Average
3	51.4176	0.50	11.42	32.60	35.56	14.88	46.12	-31.24	Average
4 pp	68.4734	0.60	10.06	32.55	44.84	22.95	42.99	-20.04	Average
5	79.8469	0.66	9.80	32.53	34.16	12.09	42.41	-30.32	Average
6	128.5462	0.90	12.66	32.54	33.55	14.57	45.54	-30.97	Average
7	137.6322	0.93	13.42	32.55	34.32	16.12	45.99	-29.87	Average
8	194.3889	1.15	15.30	32.60	22.89	6.74	48.26	-41.52	Average



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Test Mode: 06



Condition: 1m Vertical

Job No : 06107AU

Mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	30.5746	0.39	12.61	32.60	55.21	35.61	61.79	-26.18	QP
2	37.3139	0.41	12.68	32.60	48.49	28.98	59.62	-30.64	QP
3	51.3201	0.50	11.43	32.60	55.84	35.17	56.14	-20.97	QP
4 pp	71.7992	0.62	9.96	32.55	62.98	41.01	52.48	-11.47	QP
5	79.8469	0.66	9.80	32.53	52.17	30.10	52.41	-22.31	QP
6	128.7903	0.90	12.68	32.54	53.00	34.04	55.55	-21.51	QP
7	136.8511	0.93	13.35	32.55	53.57	35.30	55.95	-20.65	QP
8	195.4984	1.15	15.30	32.60	38.72	22.57	58.30	-35.73	QP



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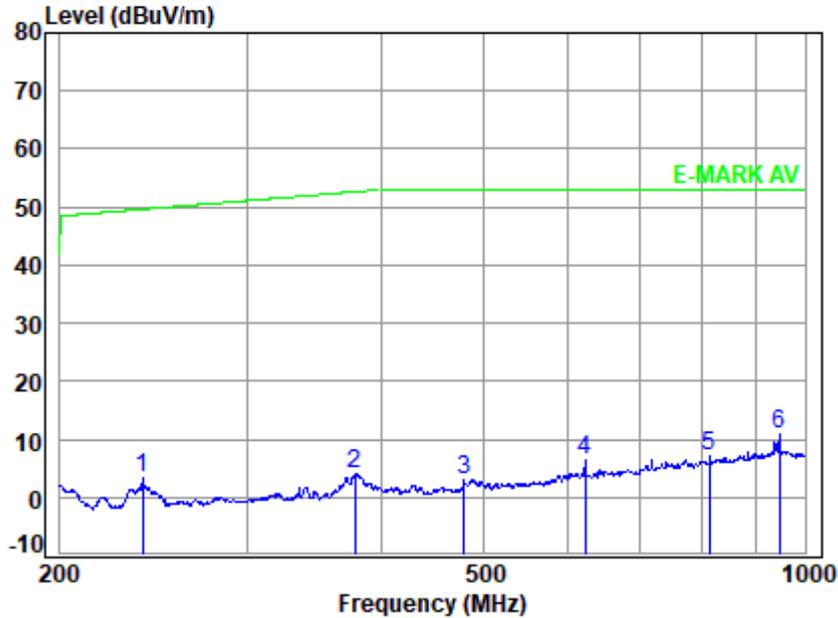
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200MHz-1GHz, Detector: QP & AV

Mode 06: Polarization: Horizontal

Test Mode: 06



Condition: 1m Horizontal

Job No : 06107AU

mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	239.1199	1.31	12.60	32.56	22.08	3.43	49.62	-46.19 Average
2	378.2876	1.73	15.36	32.42	19.34	4.01	52.63	-48.62 Average
3	478.4888	1.98	16.42	32.40	17.17	3.17	53.00	-49.83 Average
4	622.0193	2.32	17.95	32.38	18.57	6.46	53.00	-46.54 Average
5	813.8265	2.74	19.58	32.11	16.77	6.98	53.00	-46.02 Average
6 pp	945.2269	3.01	20.64	31.18	18.44	10.91	53.00	-42.09 Average

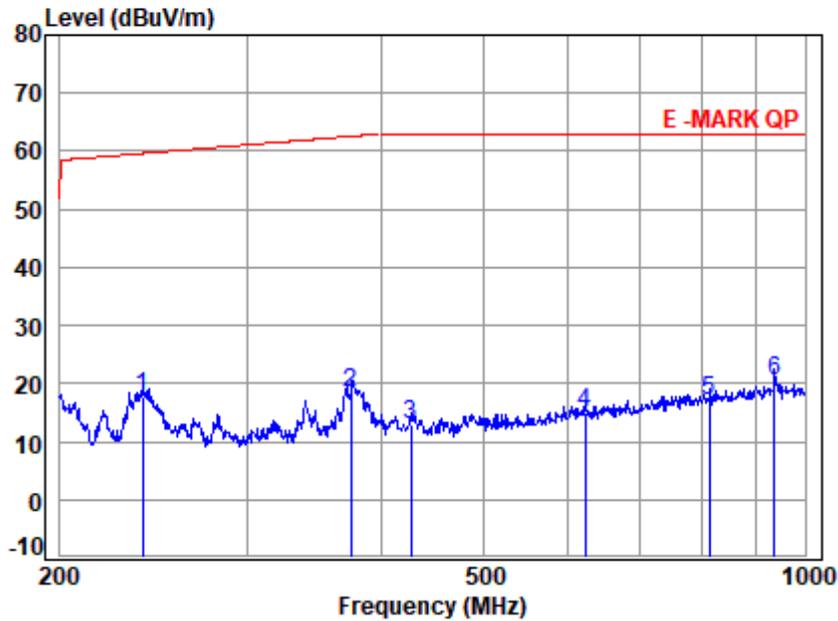


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Test Mode: 06



Condition: 1m Horizontal

Job No : 06107AU

mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 239.1199	1.31	12.60	32.56	36.36	17.71	59.62	-41.91	QP
2	375.2557	1.72	15.28	32.42	33.79	18.37	62.58	-44.21	QP
3	426.8201	1.86	15.73	32.40	27.77	12.96	63.00	-50.04	QP
4	622.0193	2.32	17.95	32.38	27.13	15.02	63.00	-47.98	QP
5	813.8265	2.74	19.58	32.11	26.97	17.18	63.00	-45.82	QP
6	936.1431	3.00	20.54	31.26	28.24	20.52	63.00	-42.48	QP



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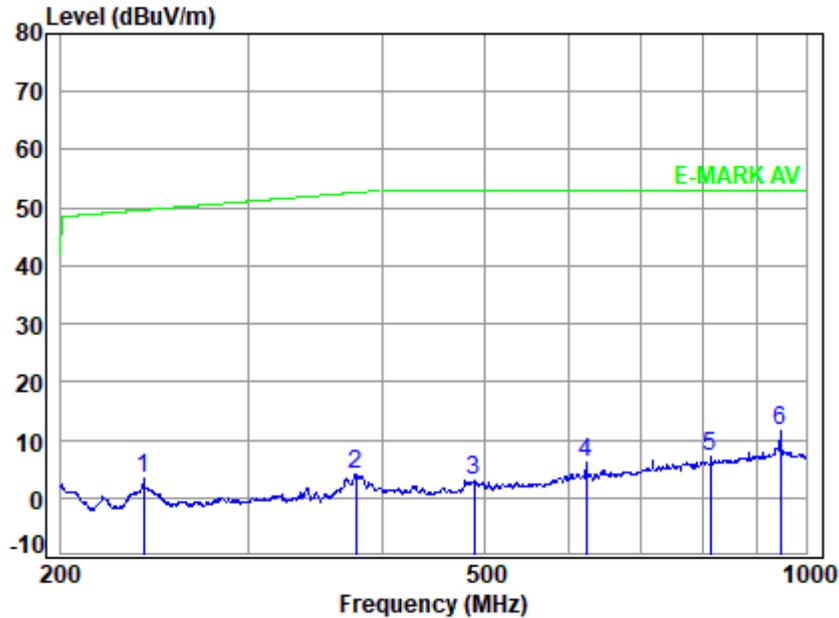
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200MHz-1GHz, Detector: QP & AV

Mode 06: Polarization: Vertical

Test Mode: 06



Condition: 1m Vertical

Job No : 06107AU

mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	239.1199	1.31	12.60	32.56	21.91	3.26	49.62	-46.36 Average
2	378.2876	1.73	15.36	32.42	19.26	3.93	52.63	-48.70 Average
3	488.6055	2.00	16.69	32.40	16.69	2.98	53.00	-50.02 Average
4	622.0193	2.32	17.95	32.38	18.32	6.21	53.00	-46.79 Average
5	813.8265	2.74	19.58	32.11	16.85	7.06	53.00	-45.94 Average
6 pp	945.2269	3.01	20.64	31.18	19.07	11.54	53.00	-41.46 Average

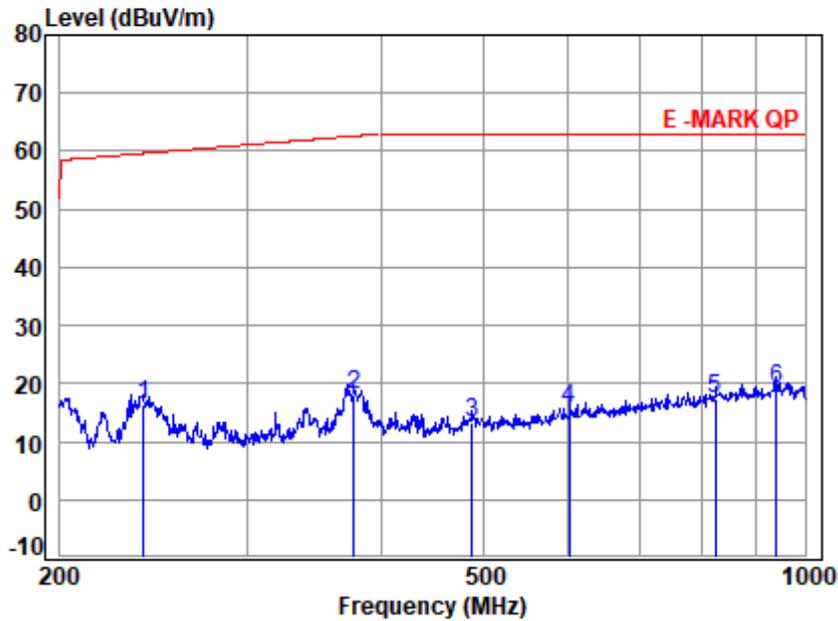


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Test Mode: 06



Condition: 1m Vertical

Job No : 06107AU

mode : 06

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 239.5050	1.31	12.59	32.56	34.89	16.23	59.63	-43.40	QP
2	377.6793	1.73	15.34	32.42	33.25	17.90	62.62	-44.72	QP
3	487.0353	2.00	16.65	32.40	27.06	13.31	63.00	-49.69	QP
4	601.3475	2.27	18.00	32.40	27.69	15.56	63.00	-47.44	QP
5	824.3727	2.77	19.65	32.05	26.97	17.34	63.00	-45.66	QP
6	940.6740	3.00	20.59	31.22	26.61	18.98	63.00	-44.02	QP



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6.2 Conducted transient disturbances

Test Requirement: ECE R10.06
 Test Method: ISO 7637-2:2004

Limit:

Table – Limits of transient disturbances

Polarity of pulse amplitude	Maximum allowed pulse amplitude for	
	Vehicles 12V systems	Vehicles 24V systems
Positive	+75	+150
Negative	-100	-450

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.6 °C Humidity: 51.2 % RH Atmospheric Pressure: 1000 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	DC 13.5V Power Supply_Keep EUT working at highest cooling mode(BCD148).
Pre-scan	01	DC 13.5V Power Supply_Keep EUT working at lowest cooling mode(BCD148)..
Final test	02	DC 27V Power Supply_Keep EUT working at highest cooling mode(BCD148)..
Pre-scan	03	DC 27V Power Supply_Keep EUT working at lowest cooling mode(BCD148)..
Final test	04	DC 13.5V Power Supply_Keep EUT working at highest cooling mode(BCD85).
Pre-scan	05	DC 13.5V Power Supply_Keep EUT working at lowest cooling mode(BCD85)..
Final test	06	DC 27V Power Supply_Keep EUT working at highest cooling mode(BCD85)..
Pre-scan	07	DC 27V Power Supply_Keep EUT working at lowest cooling mode(BCD85)..

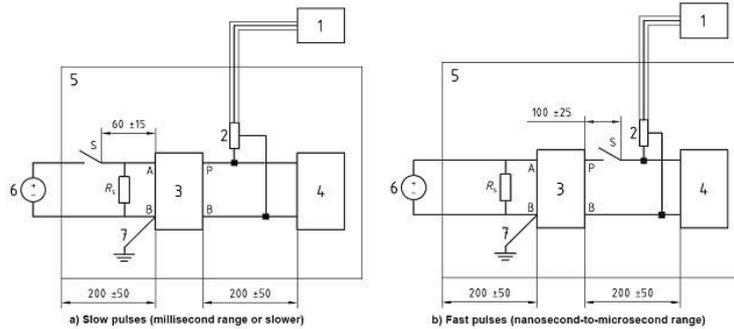


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6.2.3 Test Setup Diagram



Key	
1. oscilloscope	5. ground plane
2. voltage probe	6. power supply
3. artificial network	7. Ground connection; length 100 mm
4. EUT(source of transient)	

6.2.4 Measurement Procedure and Data

Mode:00

For 12V system

Limit	Measured Value [V]			
	Slow pulse OFF→ON	Slow pulse ON→OFF	Fast pulse OFF→ON	Fast pulse ON→OFF
+75V	+3.2V	+0.6V	+4.4V	+0.4V
-100V	-14V	-14V	-13.8V	-13.8V

Mode:02

For 24V system

Limit	Measured Value [V]			
	Slow pulse OFF→ON	Slow pulse ON→OFF	Fast pulse OFF→ON	Fast pulse ON→OFF
+150V	+5.6V	+1.8V	+10V	+1.2V
-450V	-28.4V	-28.4V	-28.4V	-28V



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Mode:04

For 12V system

Limit	Measured Value [V]			
	Slow pulse OFF→ON	Slow pulse ON→OFF	Fast pulse OFF→ON	Fast pulse ON→OFF
+75V	+0.9V	+0.9V	+0.5V	+0.9V
-100V	-13.9V	-13.9V	-13.9V	-13.7V

Mode:06

For 24V system

Limit	Measured Value [V]			
	Slow pulse OFF→ON	Slow pulse ON→OFF	Fast pulse OFF→ON	Fast pulse ON→OFF
+150V	+9V	+1.8V	+7.4V	+1V
-450V	-28.6V	-27.8V	-27.8V	-27.8V

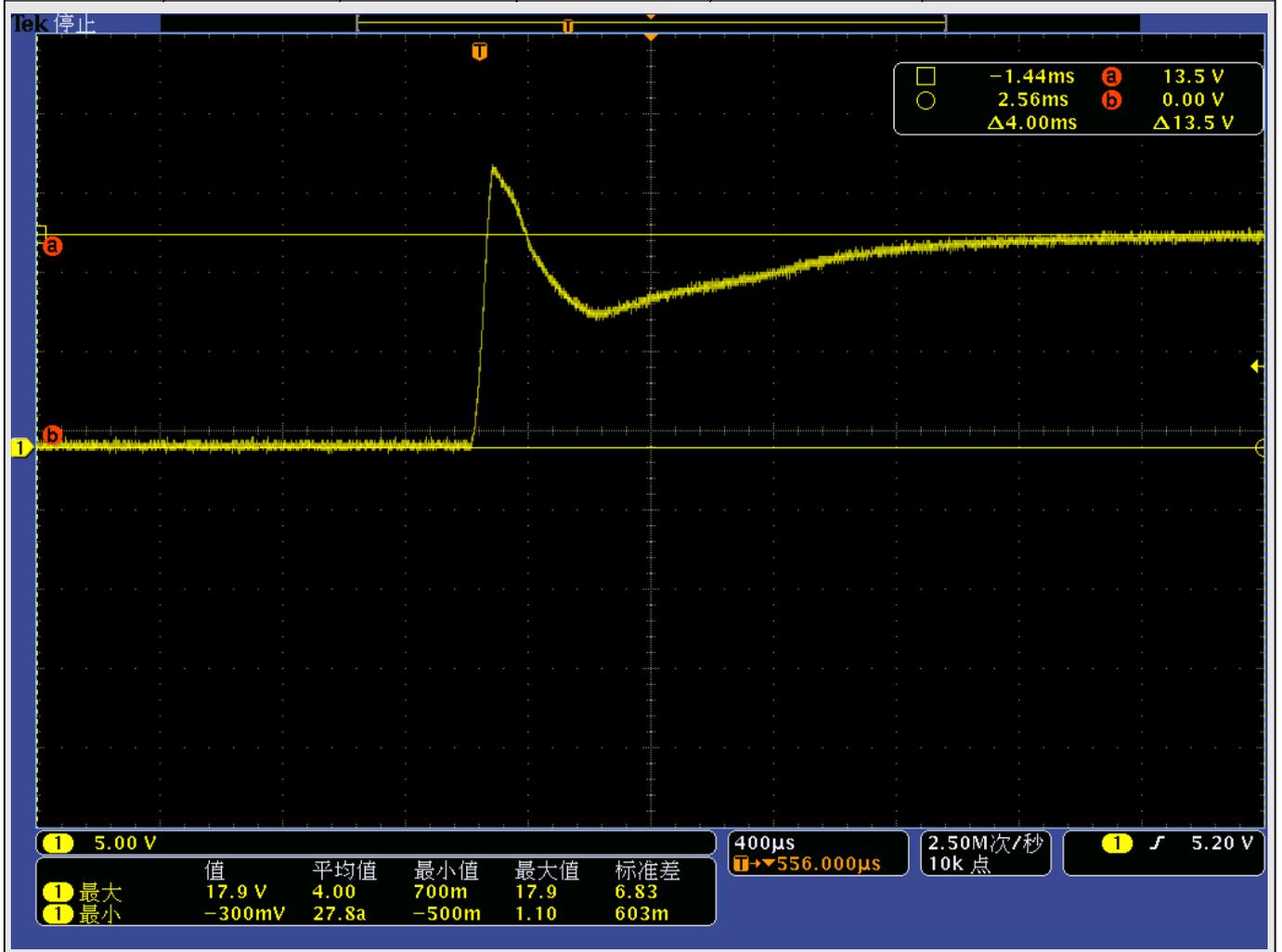


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Mode 00					
Switch type	Pulse	Test Times	Off → On		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+4.4V	+75V	Pass
	Negative		-13.8V	-100V	Pass



maximum amplitude



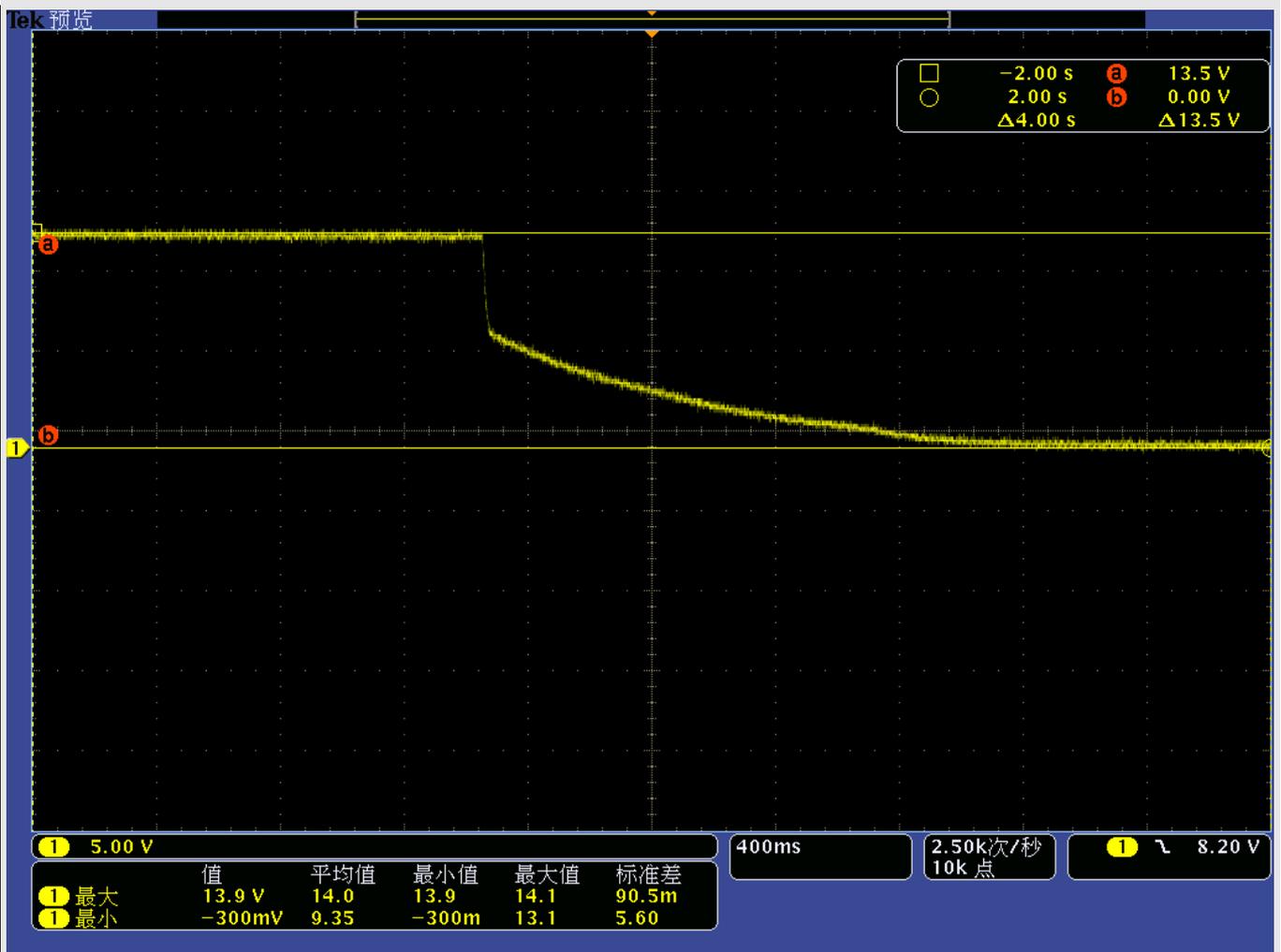
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Mode 00					
Switch type	Pulse	Test Times	On → Off		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+0.4V	+75V	Pass
	Negative		-13.8V	-100V	Pass



maximum amplitude



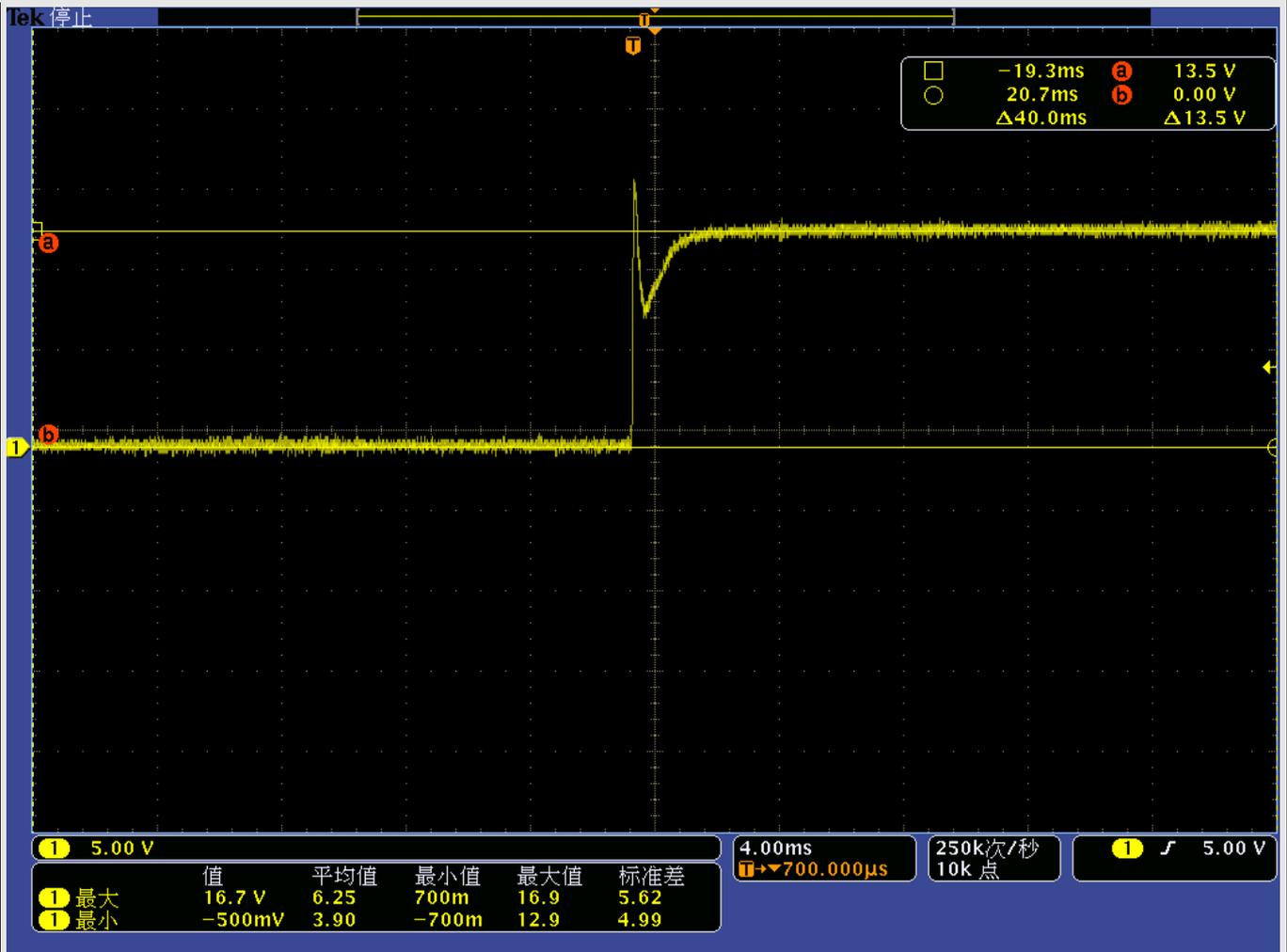
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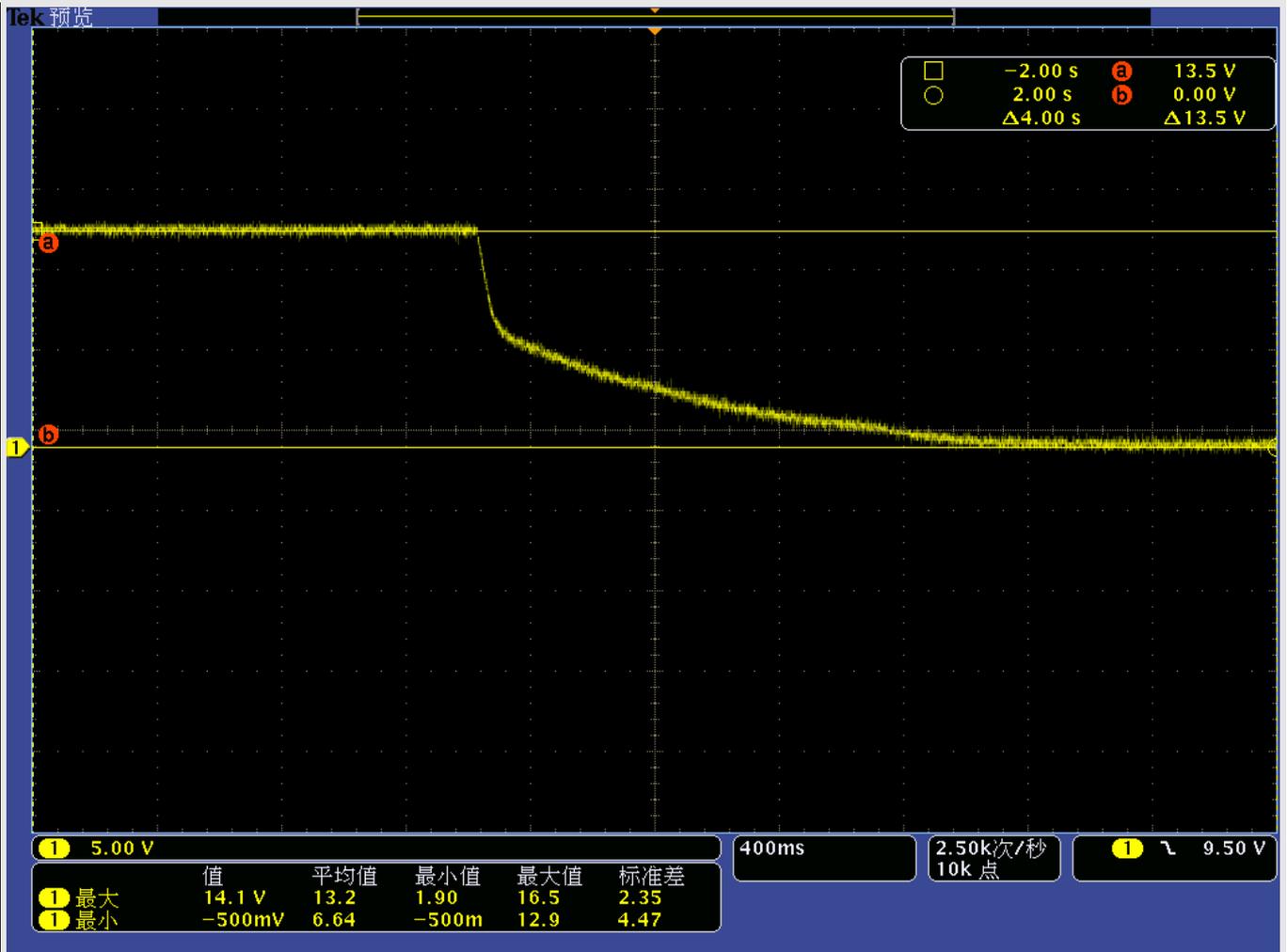
Mode 00					
Switch type	Pulse	Test Times	Off → On		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+3.2V	+75V	Pass
	Negative		-14V	-100V	Pass



maximum amplitude



Mode 00					
Switch type	Pulse	Test Times	On → Off		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+0.6V	+75V	Pass
	Negative		-14V	-100V	Pass



maximum amplitude



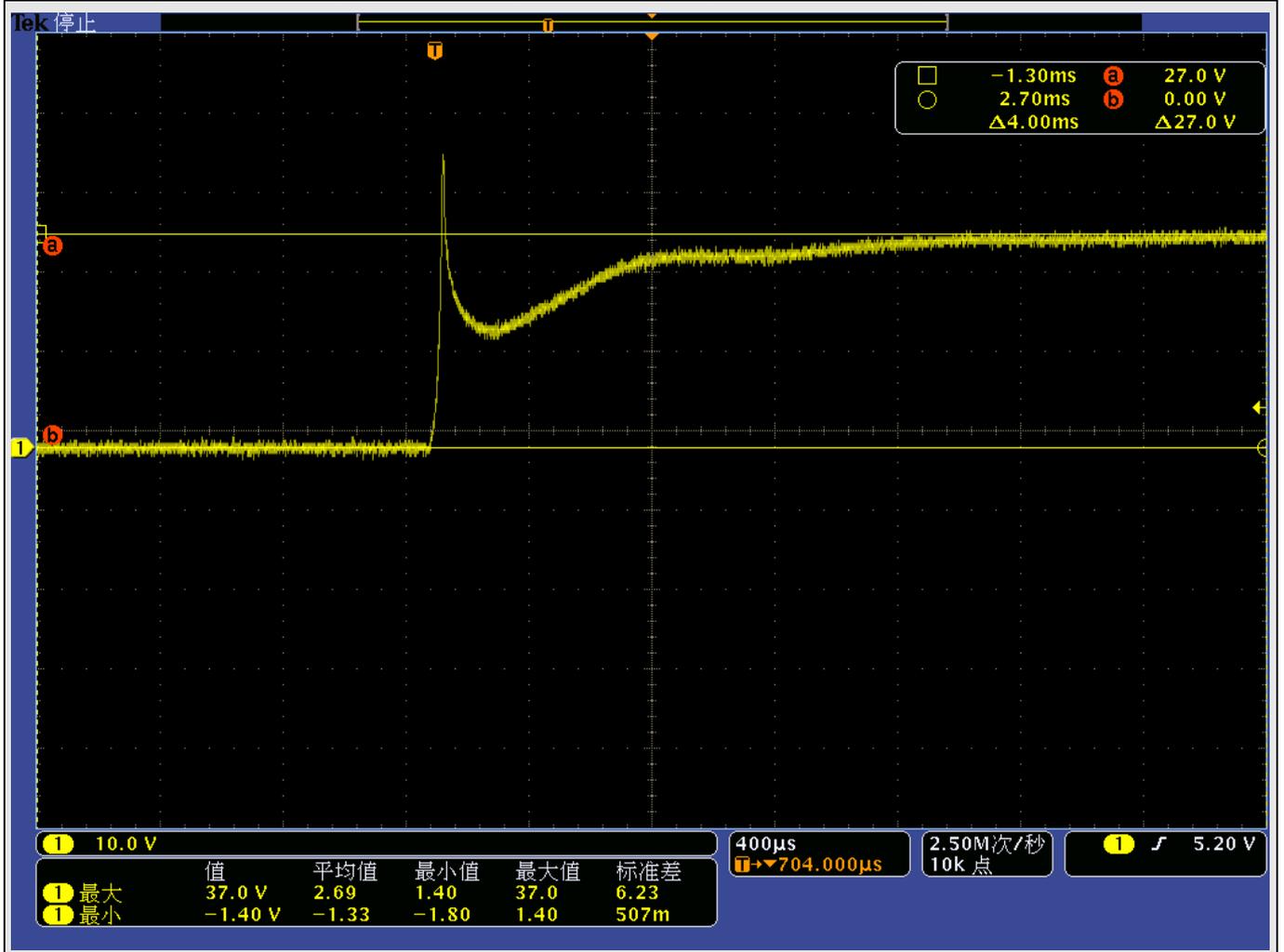
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Mode 02					
Switch type	Pulse	Test Times	Off → On		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+10V	+150V	Pass
	Negative		-28.4V	-450V	Pass



maximum amplitude

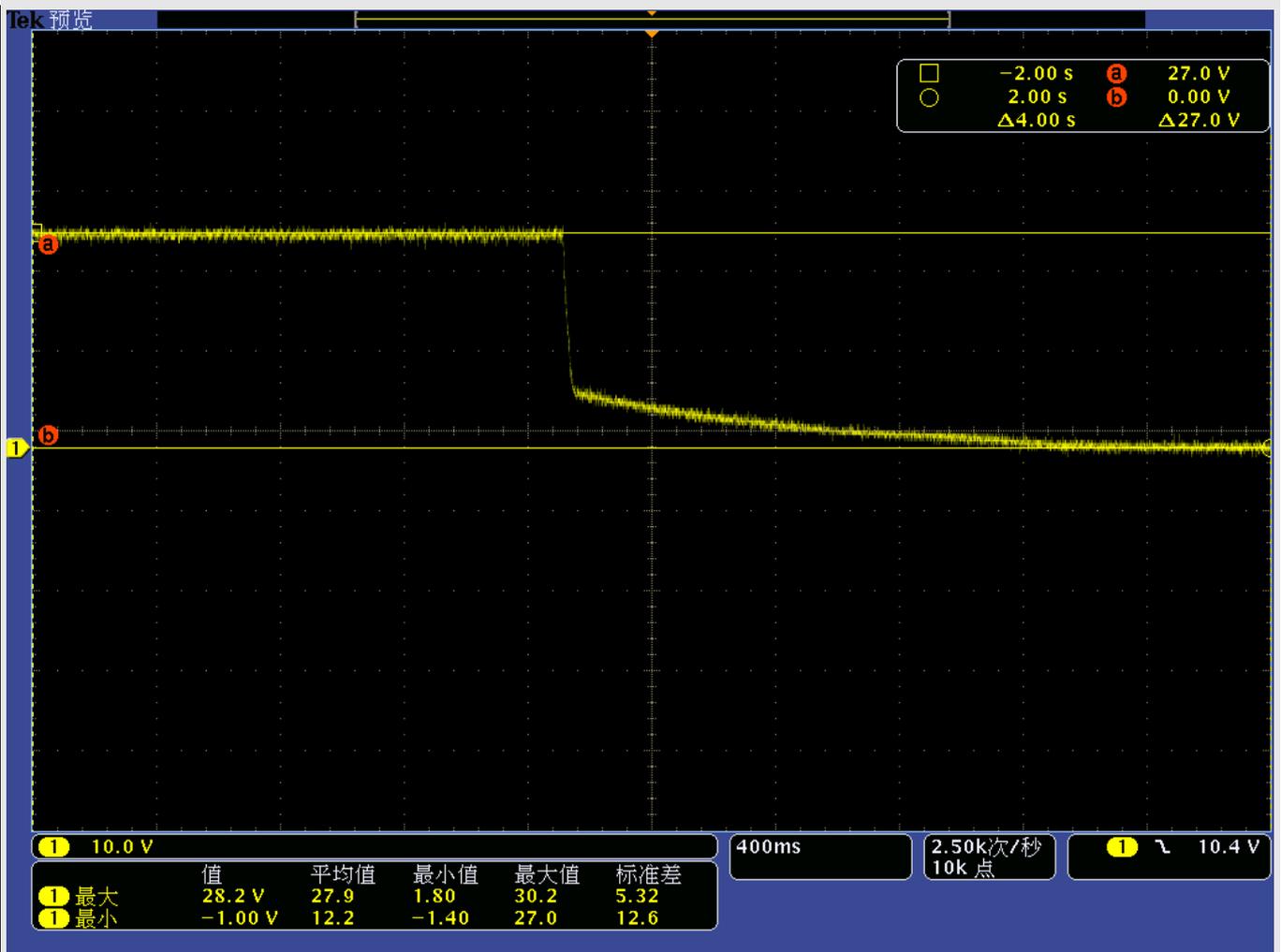


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Mode 02					
Switch type	Pulse	Test Times	On → Off		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+1.2V	+150V	Pass
	Negative		-28V	-450V	Pass



maximum amplitude

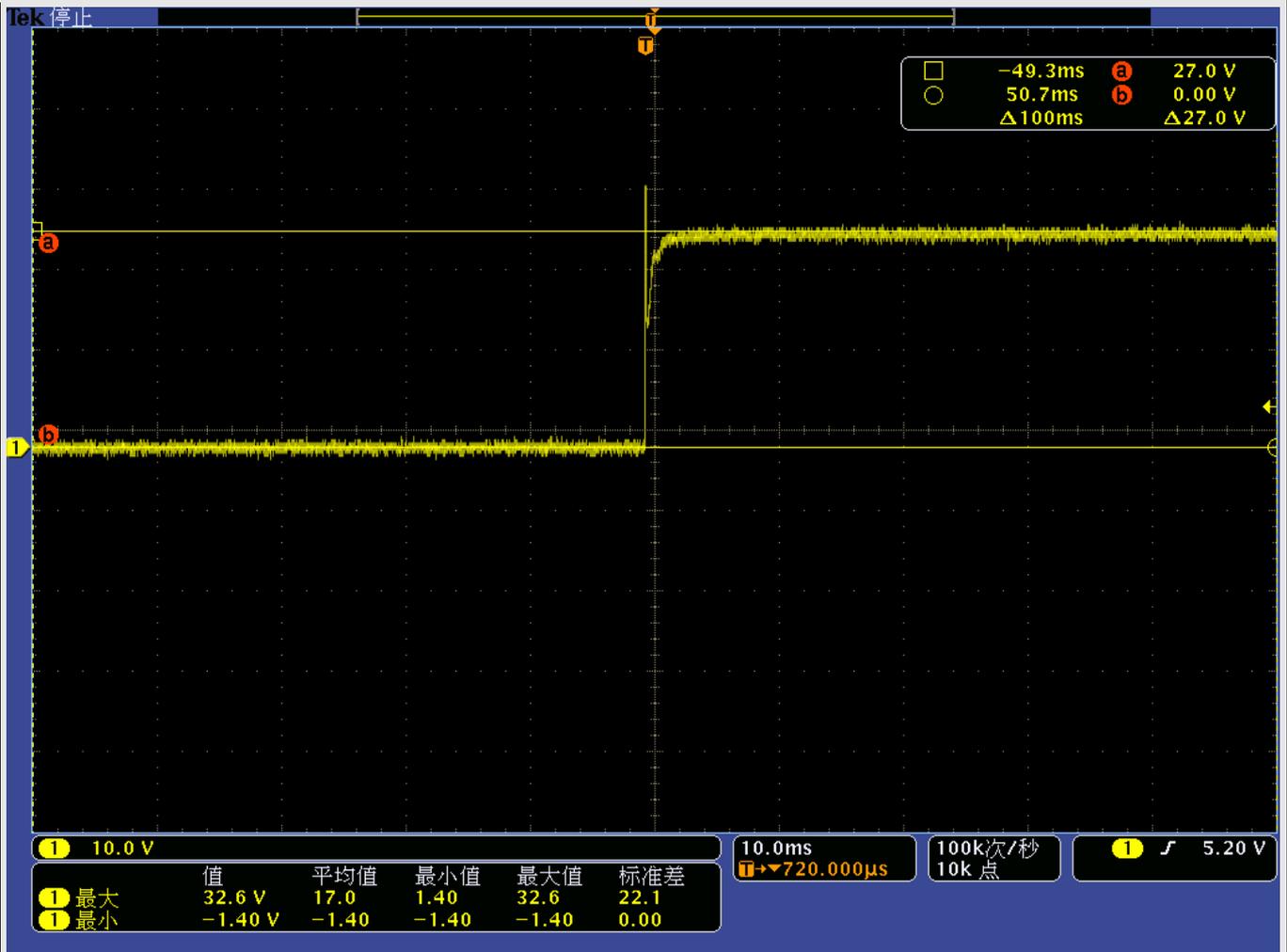


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Mode 02					
Switch type	Pulse	Test Times	Off → On		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+5.6V	+150V	Pass
	Negative		-28.4V	-450V	Pass



maximum amplitude

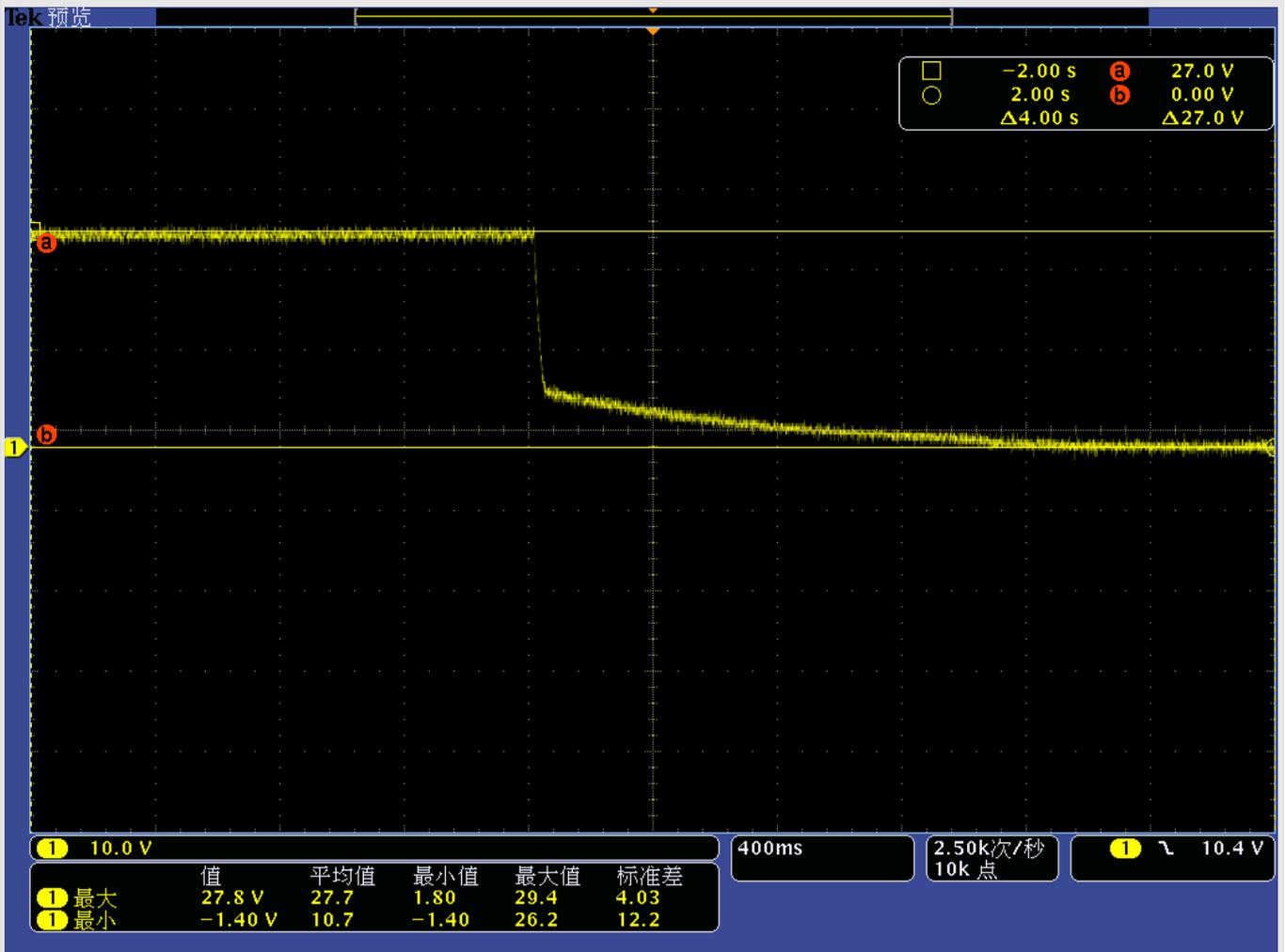


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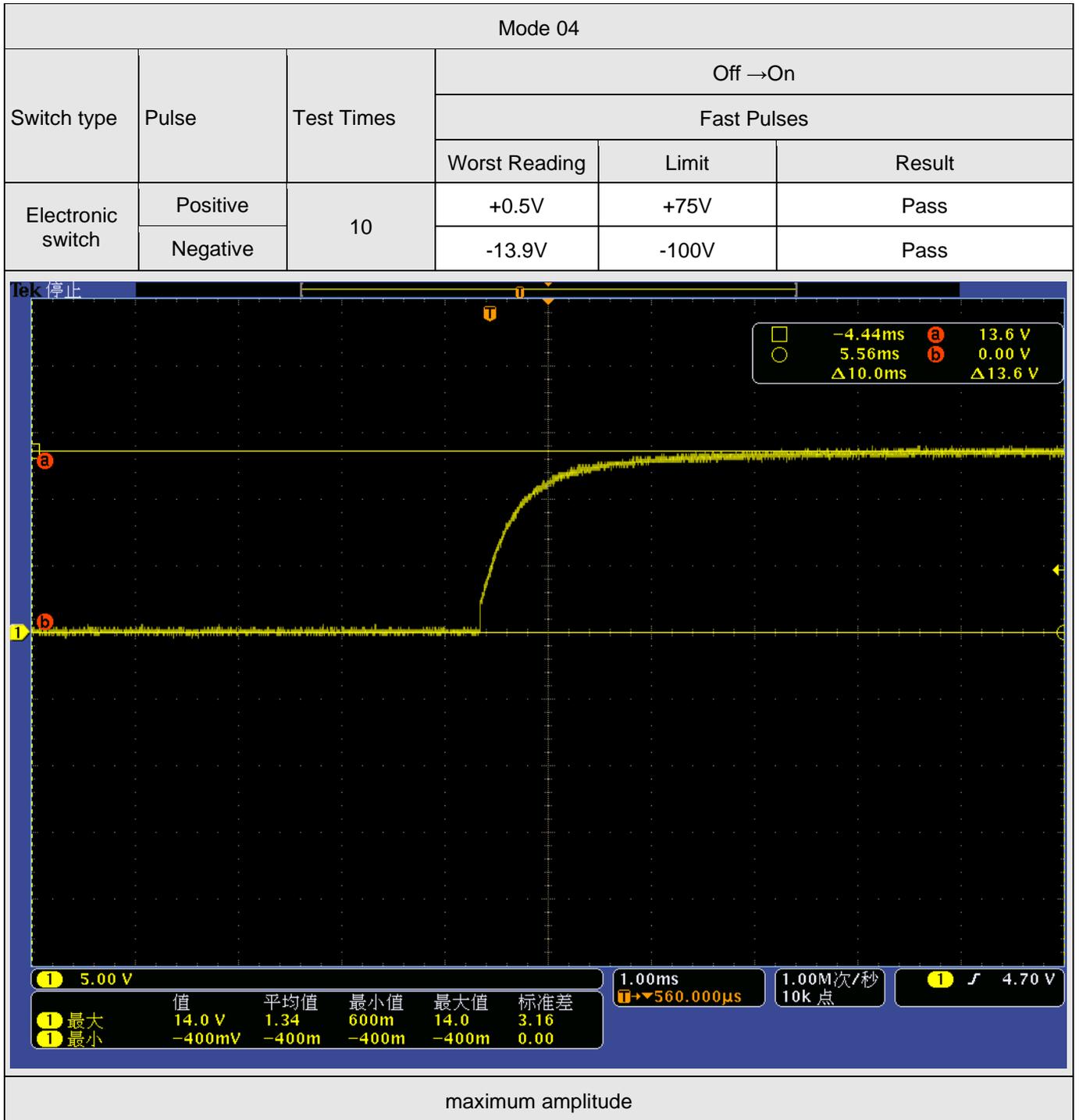
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Mode 02					
Switch type	Pulse	Test Times	On → Off		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+1.8V	+150V	Pass
	Negative		-28.4V	-450V	Pass



maximum amplitude





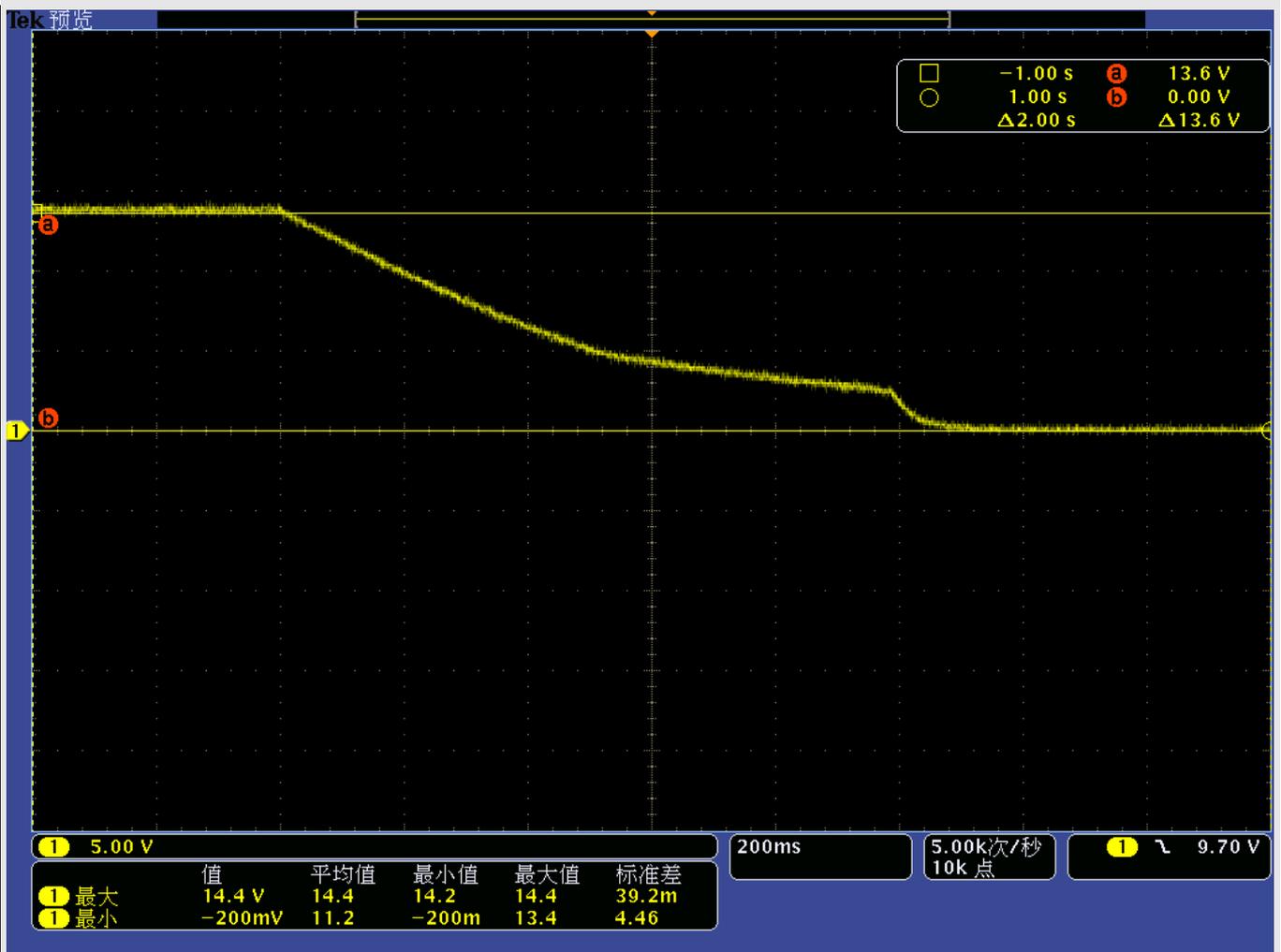
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Mode 04					
Switch type	Pulse	Test Times	On → Off		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+0.9V	+75V	Pass
	Negative		-13.7V	-100V	Pass



maximum amplitude



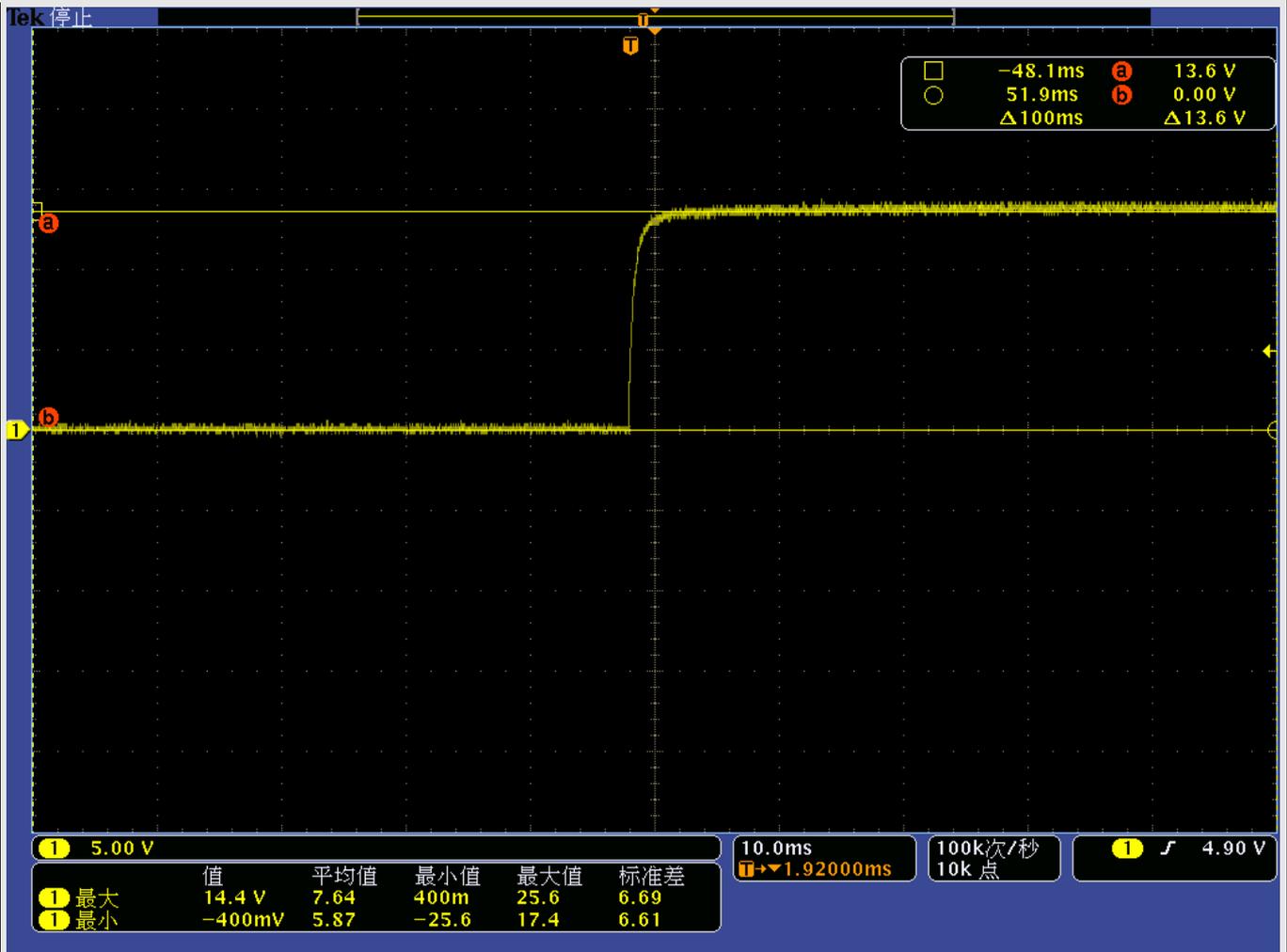
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Mode 04					
Switch type	Pulse	Test Times	Off → On		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+0.9V	+75V	Pass
	Negative		-13.9V	-100V	Pass



maximum amplitude

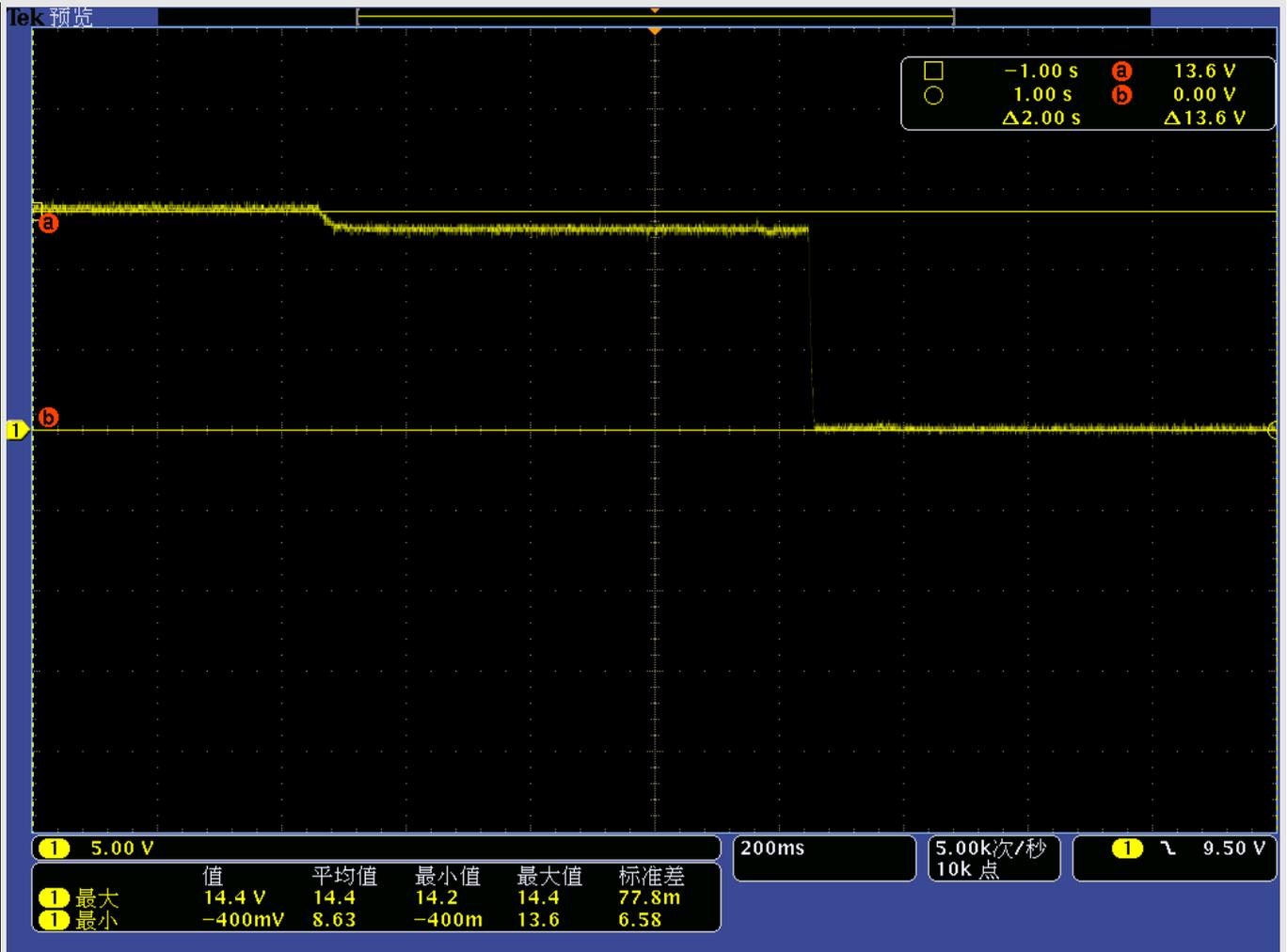


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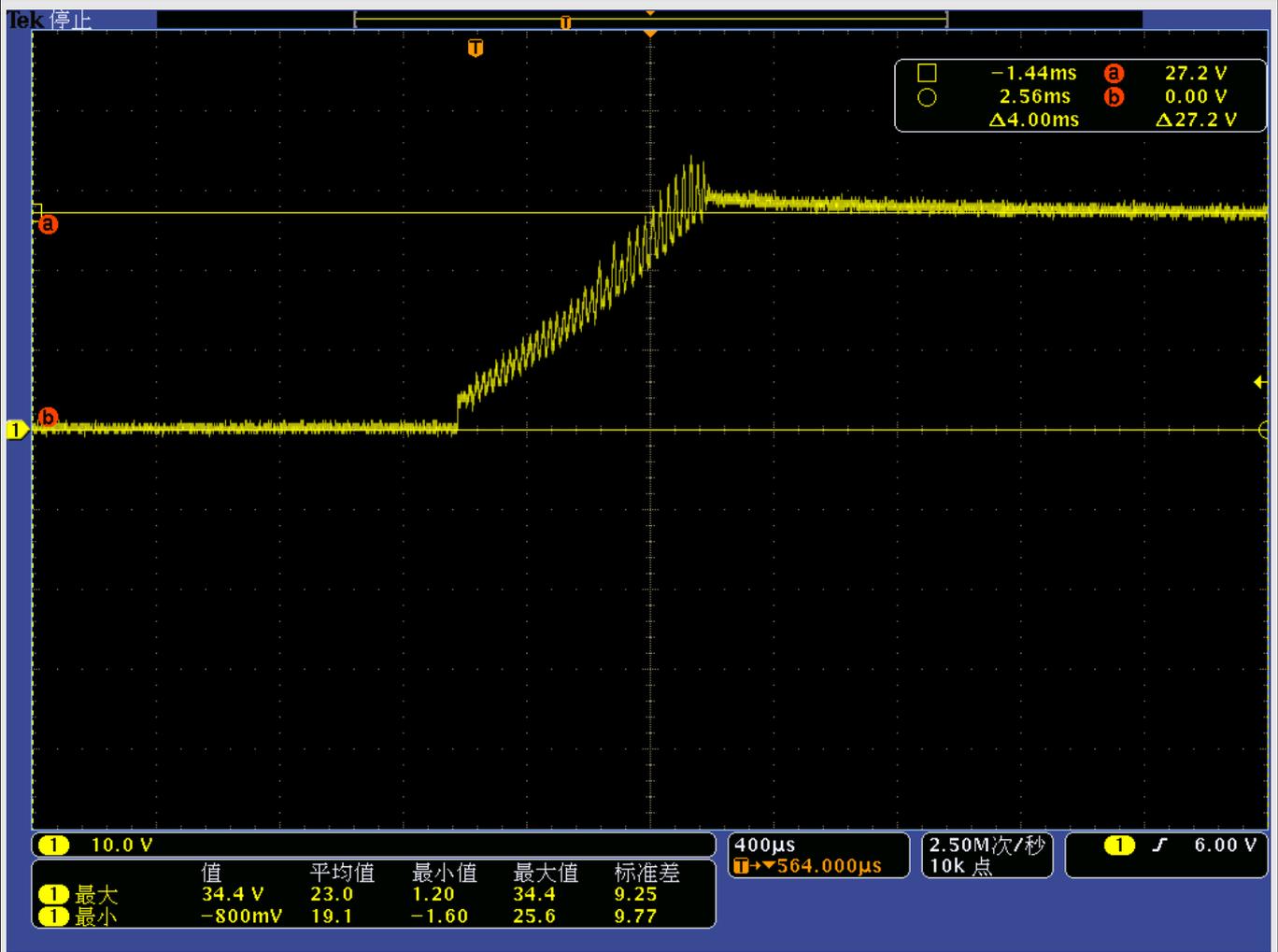
Mode 04					
Switch type	Pulse	Test Times	On → Off		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+0.9V	+75V	Pass
	Negative		-13.9V	-100V	Pass



maximum amplitude



Mode 06					
Switch type	Pulse	Test Times	Off → On		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+7.4V	+150V	Pass
	Negative		-27.8V	-450V	Pass



maximum amplitude

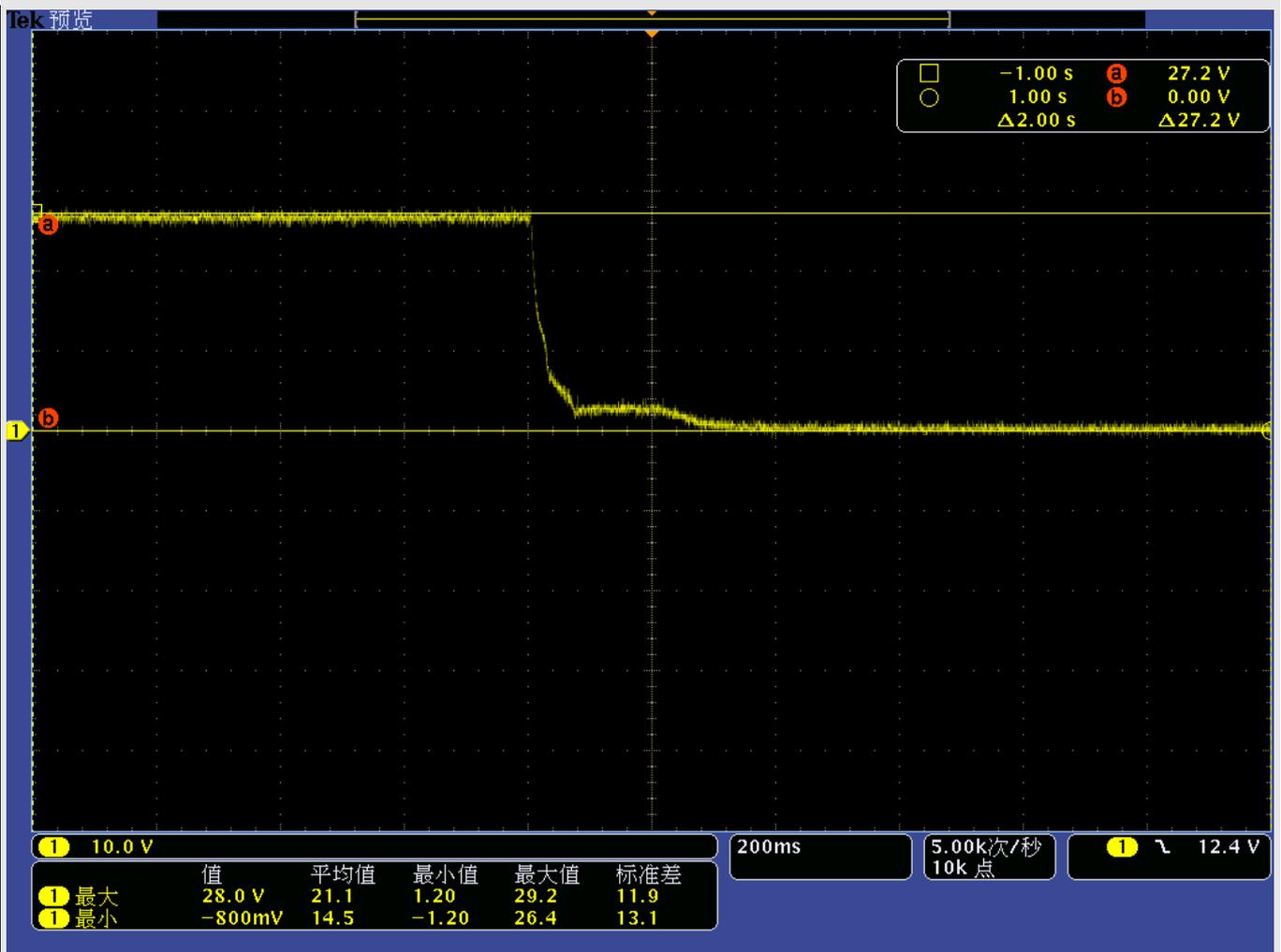


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Mode 06					
Switch type	Pulse	Test Times	On → Off		
			Fast Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+1V	+150V	Pass
	Negative		-27.8V	-450V	Pass



maximum amplitude

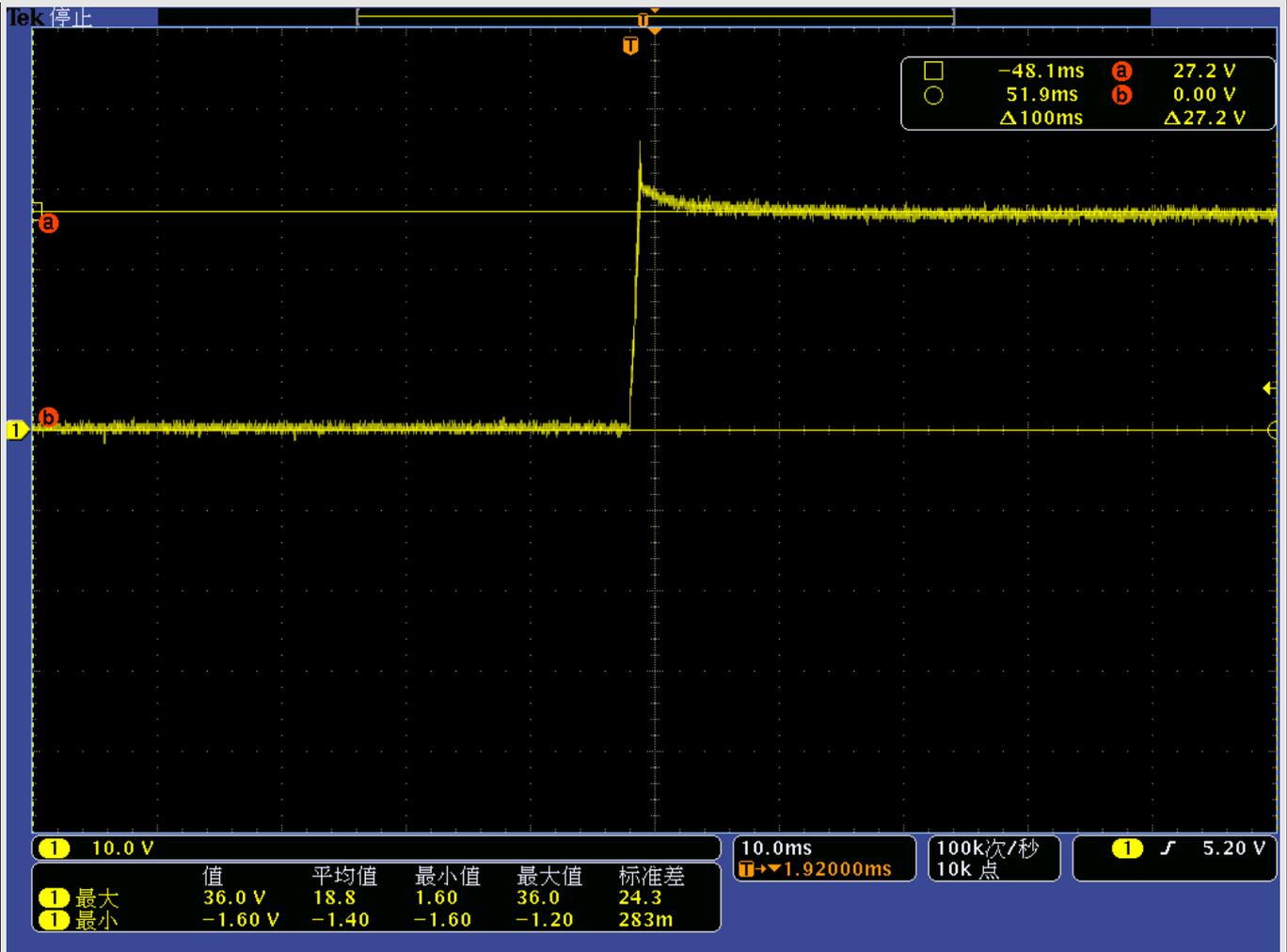


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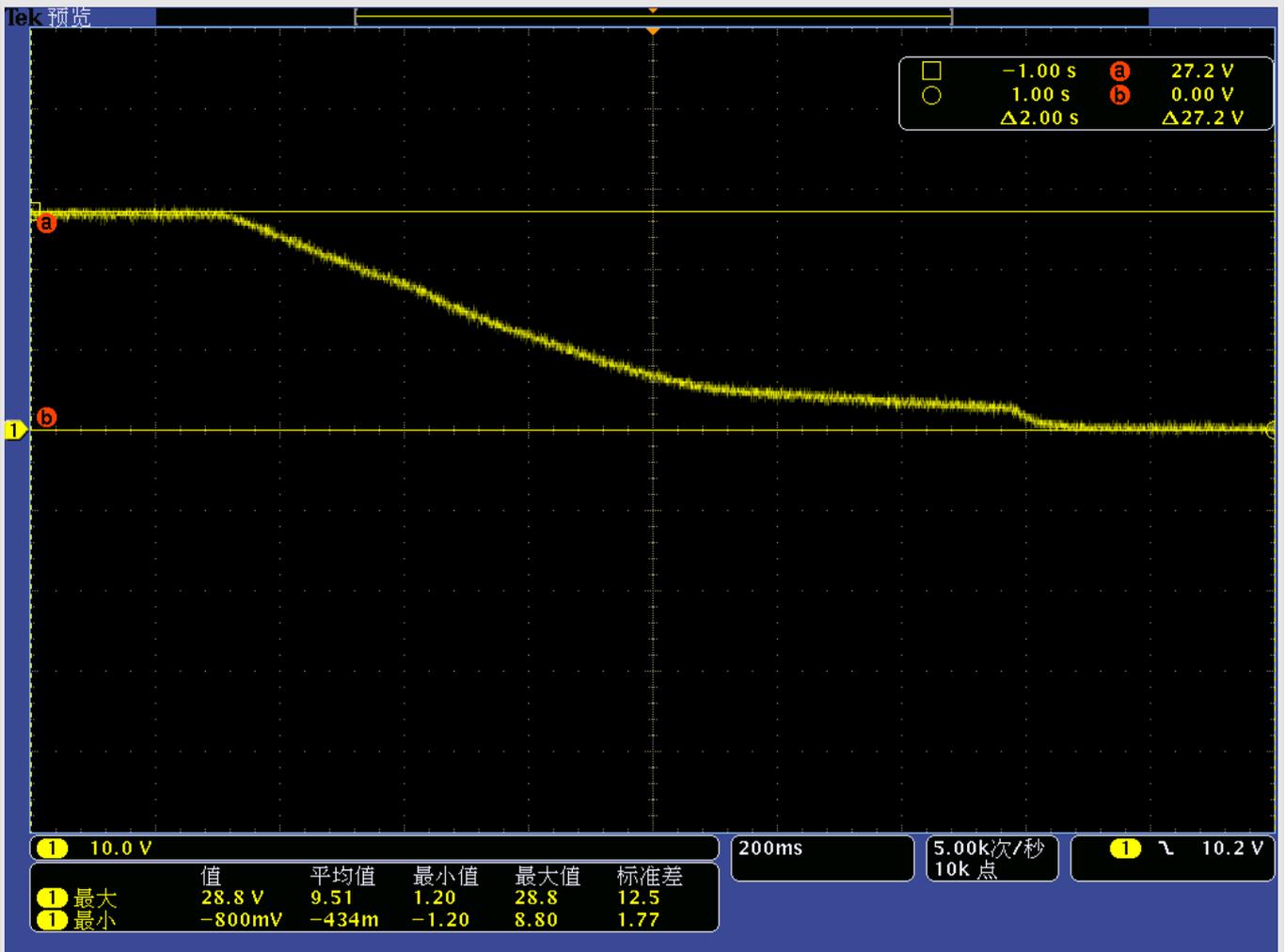
Mode 06					
Switch type	Pulse	Test Times	Off → On		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+9V	+150V	Pass
	Negative		-28.6V	-450V	Pass



maximum amplitude



Mode 06					
Switch type	Pulse	Test Times	On → Off		
			Slow Pulses		
			Worst Reading	Limit	Result
Electronic switch	Positive	10	+1.8V	+150V	Pass
	Negative		-27.8V	-450V	Pass



maximum amplitude



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7 Immunity Test Results

Performance Criteria Description in ECE R10-06, ISO 7637-2:2004, ISO 11452-2:2004 and ISO 11452-4:2011.

Criterion A	All functions of a device/system perform as designed during and after exposure to disturbance
Criterion B	All functions of a device/system perform as designed during exposure. However, one or more of them can go beyond specified tolerance. All functions return automatically to within normal limits after exposure is removed. Memory functions shall remain class A
Criterion C	One or more functions of a device/system do not perform as designed during exposure but return automatically to normal operation after exposure is removed
Criterion D	One or more functions of a device/system do not perform as designed during exposure and do not return to normal operation until exposure is removed and the device/system is reset by simple "operator/use" action
Criterion E	One or more functions of a device/system do not perform as designed during and after exposure and cannot be returned to proper operation without repairing or replacing the device/system

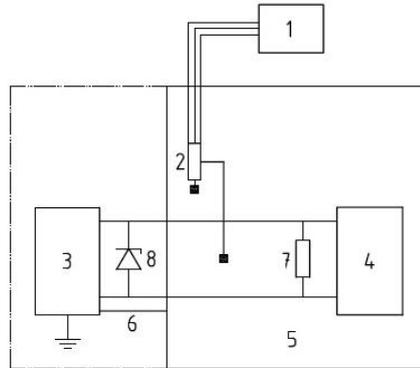


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7.1 Conducted transient immunity

Test Requirement: ECE R10.06
 Test Method: ISO 7637-2:2004

7.1.1 Test Setup Diagram



Key

- 1 oscilloscope or equivalent
- 2 voltage probe
- 3 test pulse generator with internal power supply
- 4 DUT
- 5 ground plane
- 6 Ground connection
- 7 optional resistor (R_i)^a
- 8 optional diode bridge^b

7.1.2 E.U.T. Operation

Operating Environment:

Temperature: 24.8 °C Humidity: 51.5 % RH Atmospheric Pressure: 1000 mbar

7.1.3 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	DC 13.5V Power Supply_Keep EUT working at highest cooling mode(BCD148).
Final test	01	DC 13.5V Power Supply_Keep EUT working at lowest cooling mode(BCD148)..
Final test	02	DC 27V Power Supply_Keep EUT working at highest cooling mode(BCD148)..
Final test	03	DC 27V Power Supply_Keep EUT working at lowest cooling mode(BCD148)..
Final test	04	DC 13.5V Power Supply_Keep EUT working at highest cooling mode(BCD85).
Final test	05	DC 13.5V Power Supply_Keep EUT working at lowest cooling mode(BCD85)..
Final test	06	DC 27V Power Supply_Keep EUT working at highest cooling mode(BCD85)..
Final test	07	DC 27V Power Supply_Keep EUT working at lowest cooling mode(BCD85)..

7.1.4 Test Condition and Results:



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZEM230900610701

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Test Pulse Number	Immunity Test Level	Min. number of pulses or test time	Performance Criterion required	Result / Observations
1	III (Us=-75V)	5000 pulses	D	C
2a	III (Us=+37V)	5000 pulses	D	A
2b	III (Us=+10V)	10 pulses	D	C
3a	III (Us=-112V)	1h	D	A
3b	III (Us=+75V)	1h	D	A
4	III (Us=-6V)	1 pulse	D	C
1	III (Us=-450V)	5000 pulses	D	C
2a	III (Us=+37V)	5000 pulses	D	A
2b	III (Us=+20V)	10 pulses	D	C
3a	III (Us=-150V)	1h	D	A
3b	III (Us=+150V)	1h	D	A
4	III (Us=-12V)	1 pulse	D	C

A: No degradation in the performance of the EUT was observed

C: The EUT resets periodicity during the test and recover automatically after the test.



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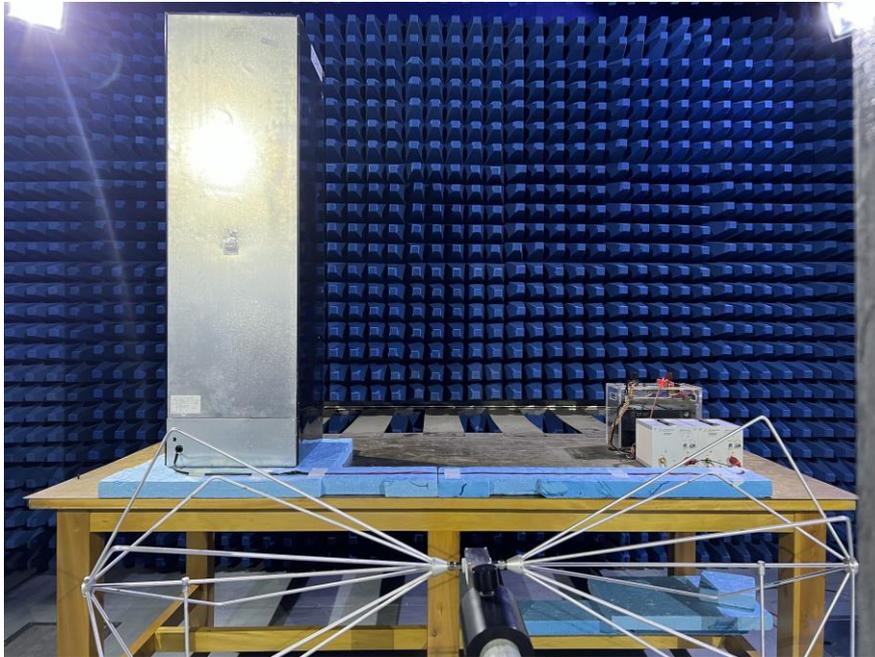
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8 Test Setup Photo

Radiated Emission(30MHz-1GHz)

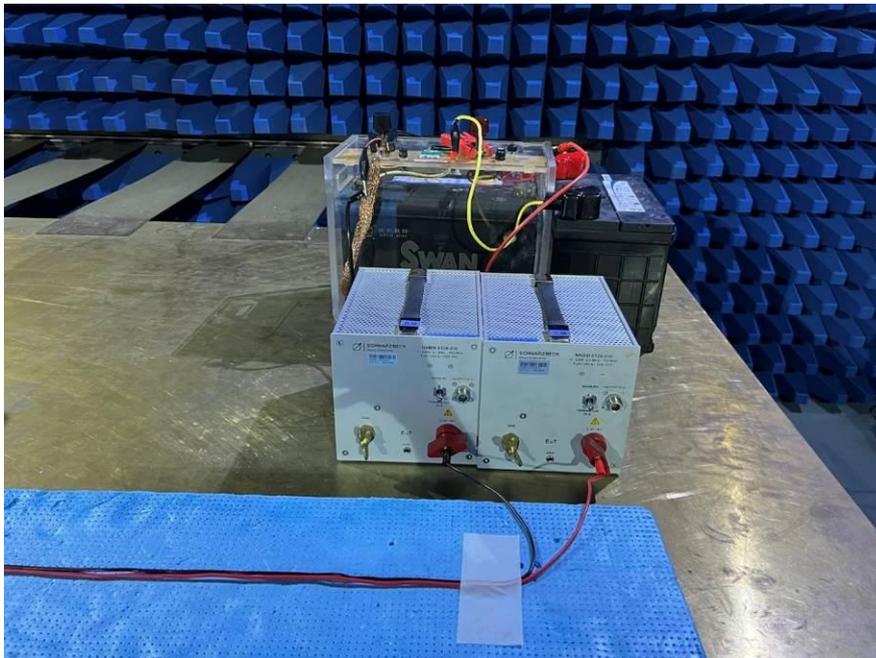
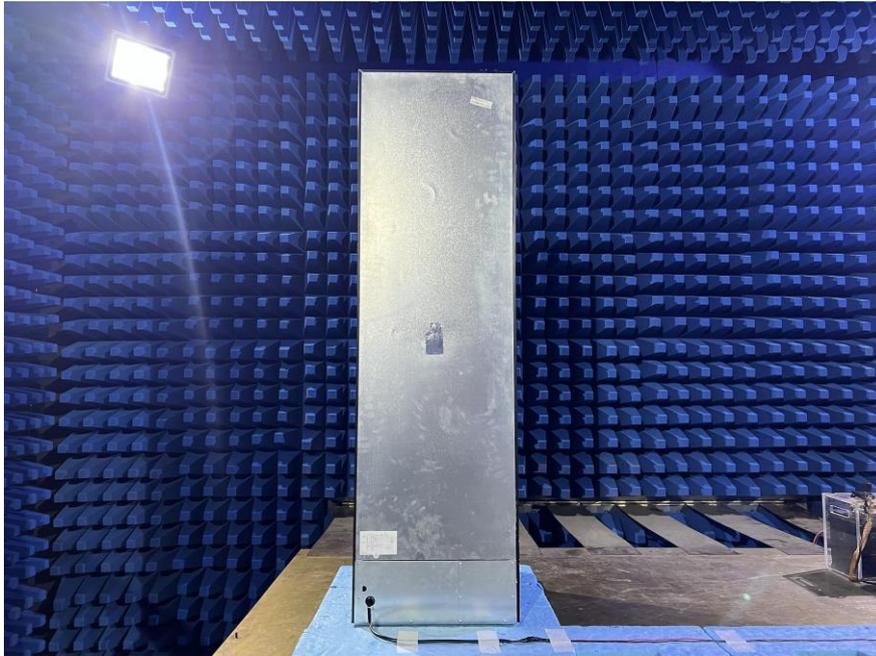
BCD148:



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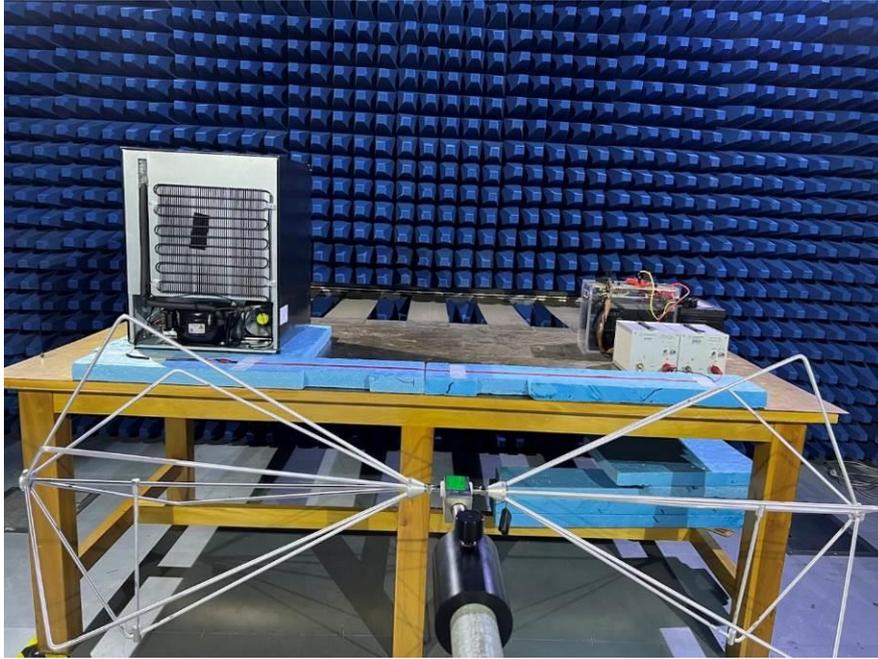


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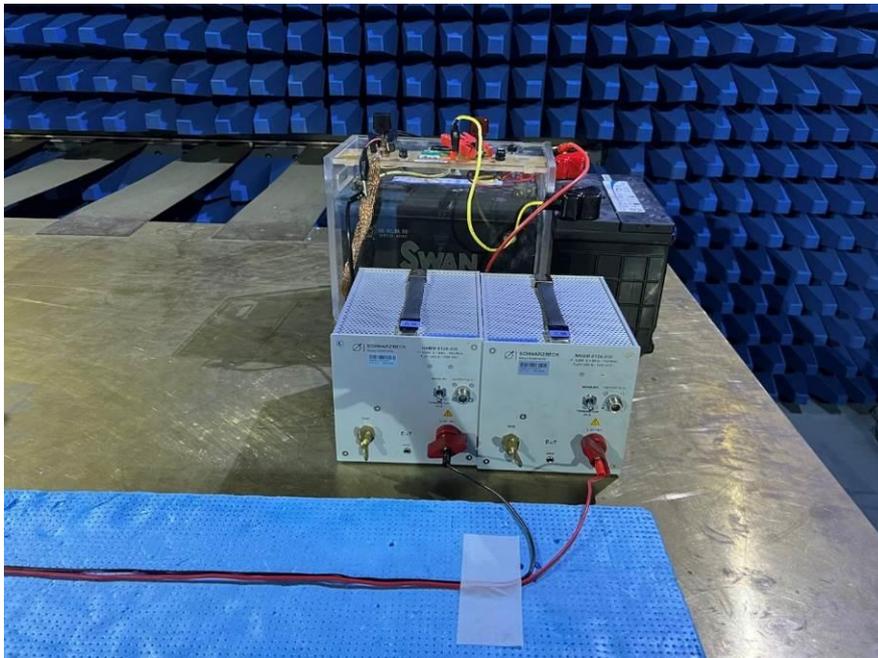
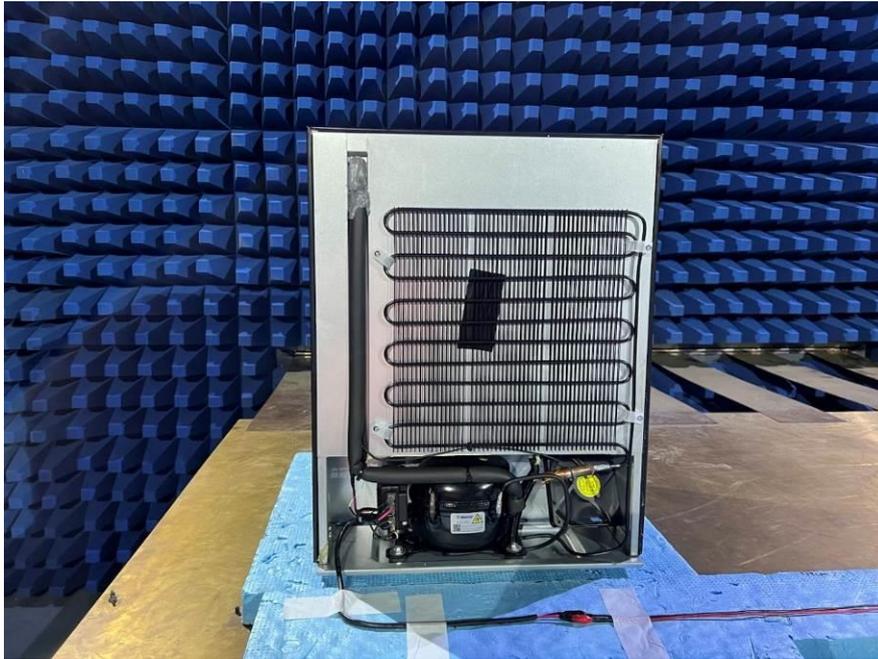
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Conducted transient disturbances

BCD148:



BCD85:



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Conducted transient immunity

BCD148:



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9 EUT Constructional Details (EUT Photos)

BCD148:



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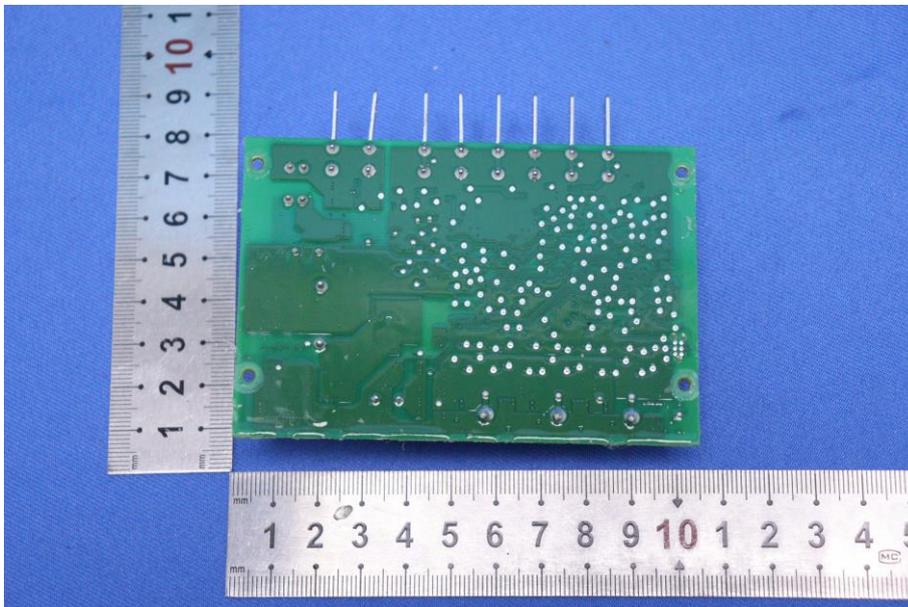
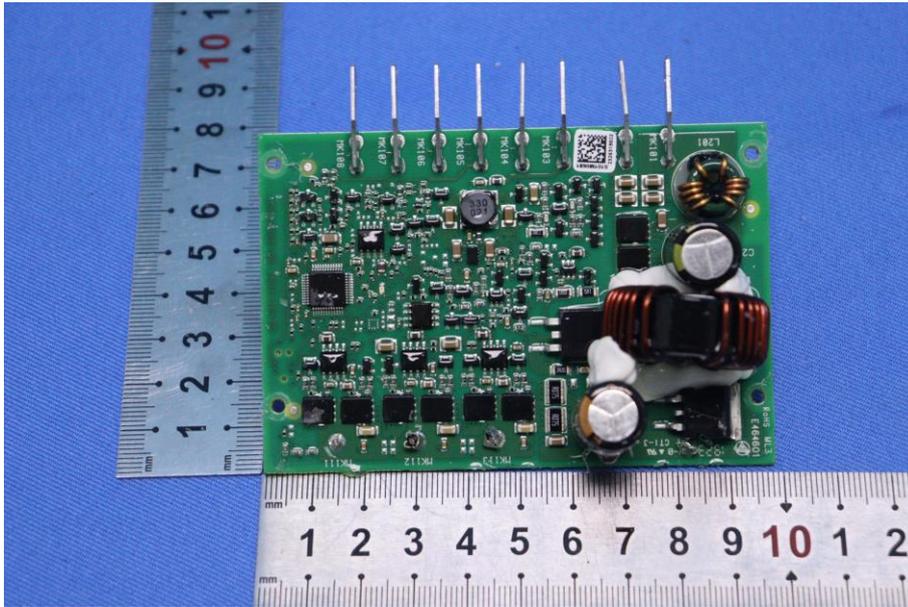


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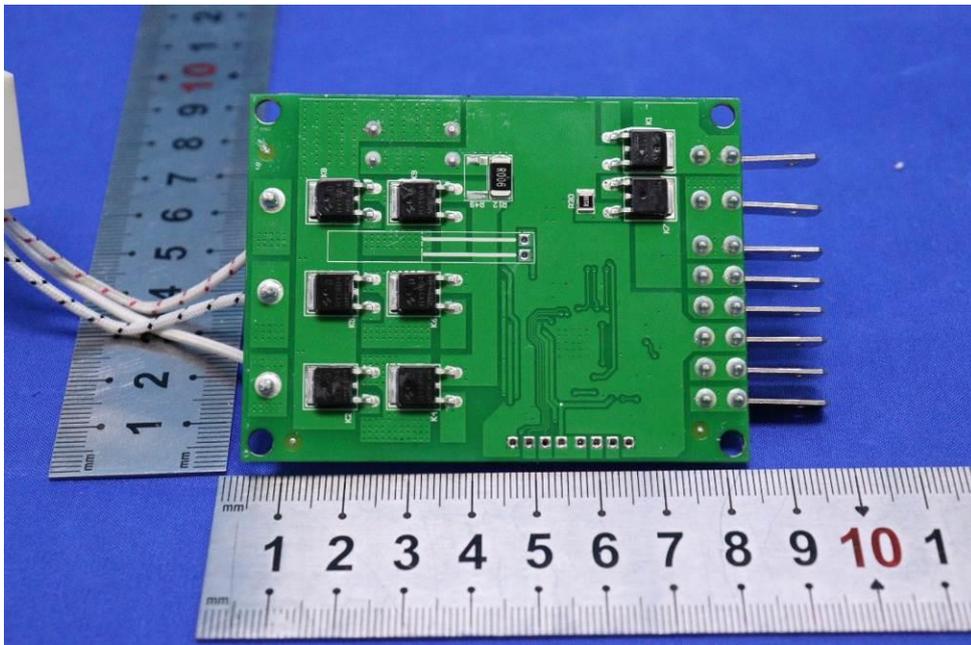
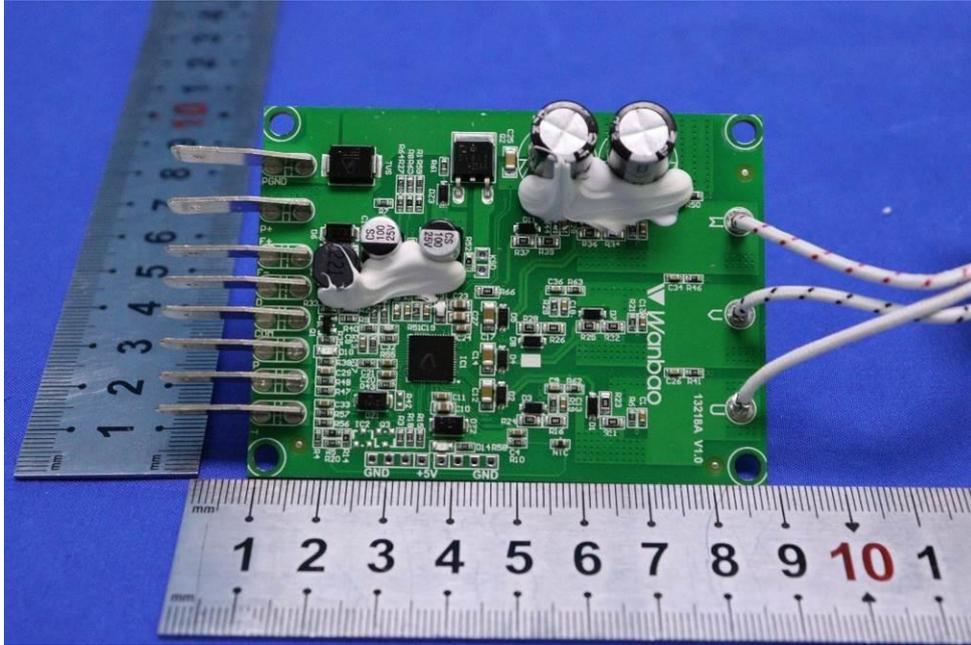
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- End of the Report -



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		Information document No.: IF_BCD148_R10.06_00
		Date: 07.10.2023
		Pages: Page 1 of 15

Application for Type Approval Pursuant
To ECE R10.06
Relating to Electromagnetic compatibility of an ESA

For: Jiangsu Sanjo Intelligent Technology Co., Ltd
Component: Car Refrigerator
Type: BCD148
Place: No. 8, Jinguazi Road, Nandu Town, Liyang City, Jiangsu Province, China

	Jiangsu Sanjo Intelligent Technology Co., Ltd.	Type: BCD148 Information document No.: IF_BCD148_R10.06_00
		Date: 07.10.2023
		Pages: Page 2 of 15

1.	Make (trade name of manufacturer)	
2.	Type	BCD148
2.1.	Variant	BCD50, BCD85, BCD148
3.	Means of identification of type, if marked on the component/separate technical unit	Type Designation
3.1.	Location of that marking	On back of product
4.	Name and address of manufacturer	Jiangsu Sanjo Intelligent Technology Co., Ltd No. 8, Jinguazi Road, Nandu Town, Liyang City, Jiangsu Province, China
	Name and address of authorized representative, if any	n.a
5.	In the case of components and separate technical units, location and method of affixing of the approval mark	Laser lettering on back of product
6.	Address (es) of assembly plant(s)	Jiangsu Sanjo Intelligent Technology Co., Ltd No. 8, Jinguazi Road, Nandu Town, Liyang City, Jiangsu Province, China
7.	This ESA shall be approved as a	Component
8.	Any restrictions of use and conditions for fitting	n.a
9.	Electrical system rated voltage	DC12V/24V, Negative ground
10.	Charger: on board/external	n.a.
11.	Charging current: direct current/alternating current (number of phases/frequency)	n.a.
12.	Maximal nominal current (in each mode if necessary)	n.a.

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		Date: 07.10.2023
		Pages: Page 3 of 15

- | | | |
|-----|--|------|
| 13. | Nominal charging voltage | n.a. |
| 14. | Basic ESA interface functions: | n.a. |
| 15. | Minimum Rsce value (see paragraph 7.11.
of this Regulation) | n.a. |

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This information document consists of pages 4 to 15 including Appendix and Attachments

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		Date: 07.10.2023
		Pages: Page 4 of 15

Appendix 1: Description of the ESA

1. Input range : DC12V/24V
2. Consumption power : BCD148: 78W
BCD85: 66W
BCD50: 60W
3. Resource of X-tal or oscillator : n.a.
4. Main dimensions : BCD148: 430W(mm)*540.8D(mm)*1498.5H(mm)
BCD85: 475W(mm)*553.1D(mm)*631.8H(mm)
BCD50: 380W(mm)*531.8D(mm)*498.7H(mm)
5. Description/Manual:

Applicable ambient T	5℃ ~45℃
Input voltage	DC12V/DC24V
Input current	6.5A/3.3A
Rated power	78W
DC input connector	Not included or on request
Refrigerant	R600a/R290
Foaming agent	Cyclopentane
Ultimate pressure	1.0MPa/2.0MPa

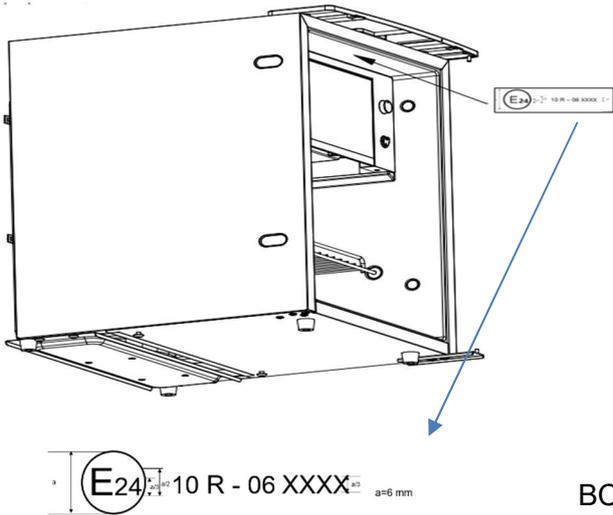
Declaration of EUT Family Grouping:

Model No.: BCD50, BCD85, BCD148

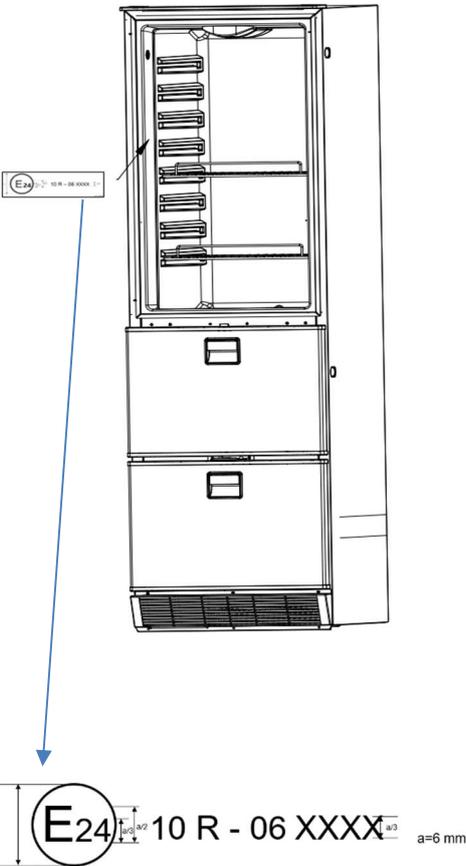
the electrical circuit design, layout, components used, internal wiring and functions were identical for models BCD85 and BCD 50, with only difference on model No., appearance and rated power. The difference between BCD148 and BCD85 is that the compressor control board is different.

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Attachment 1: Photo of the ESA



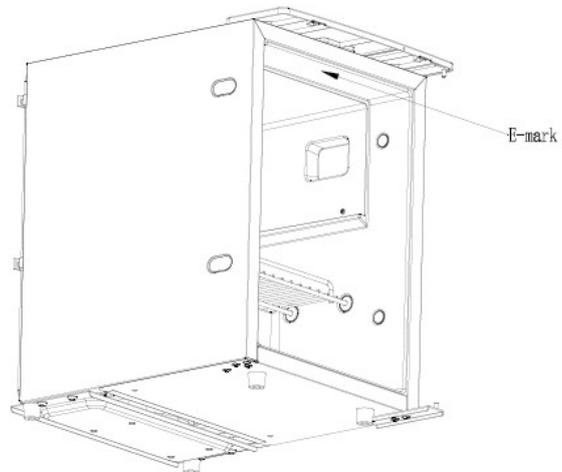
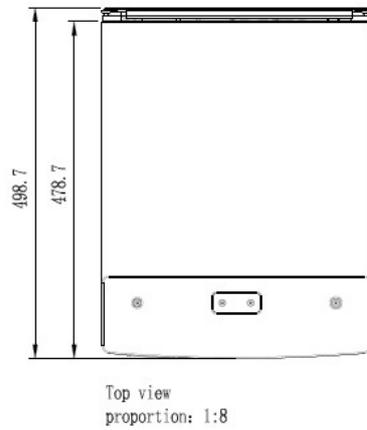
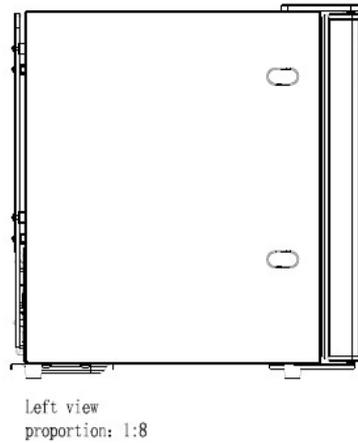
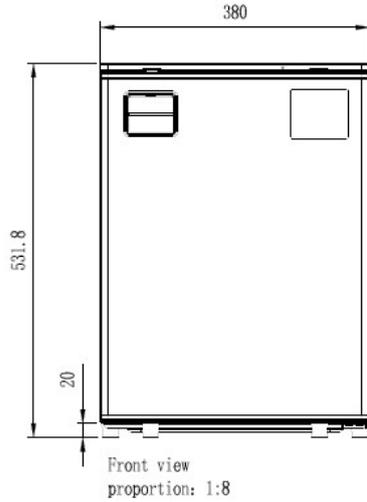
BCD85



BCD148

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Attachment 2: Dimensional drawing



BCD50

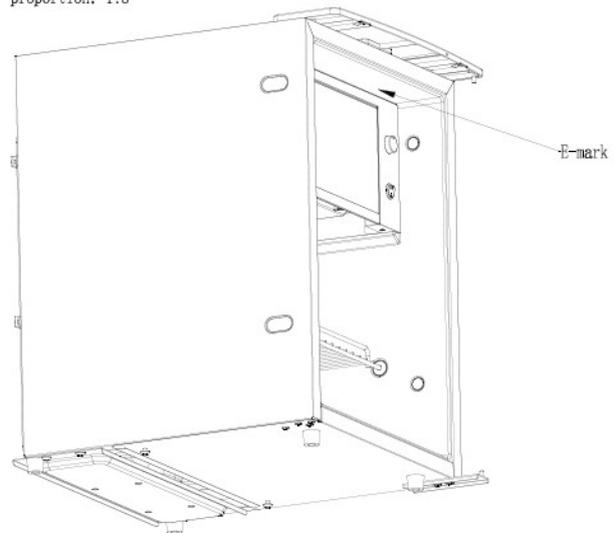
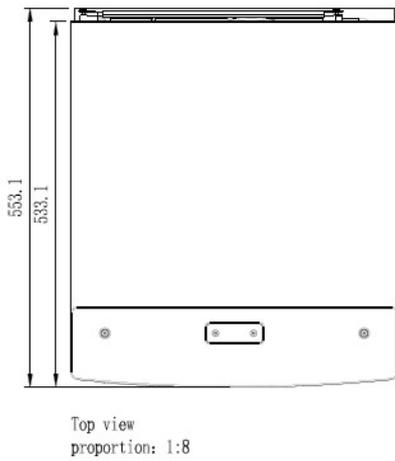
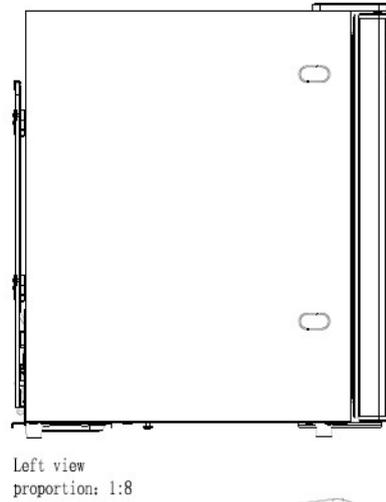
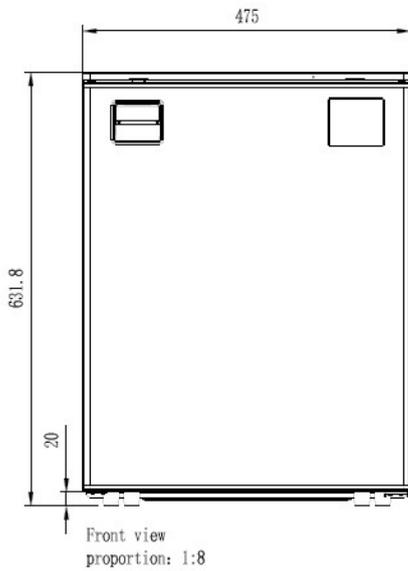


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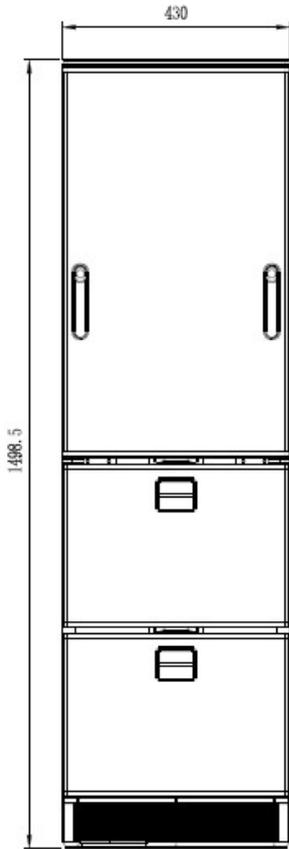


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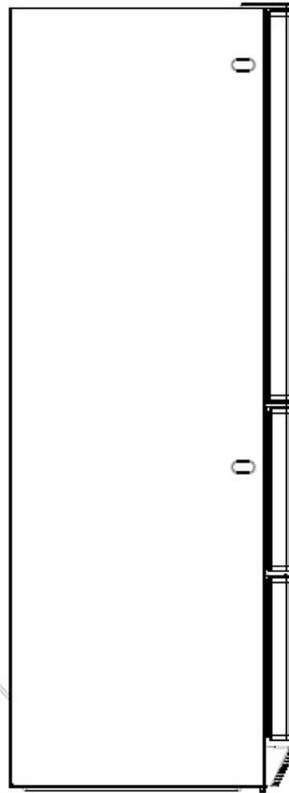
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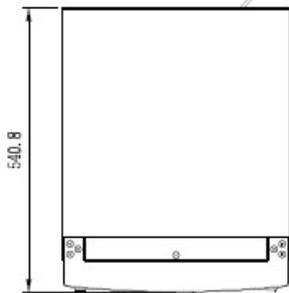
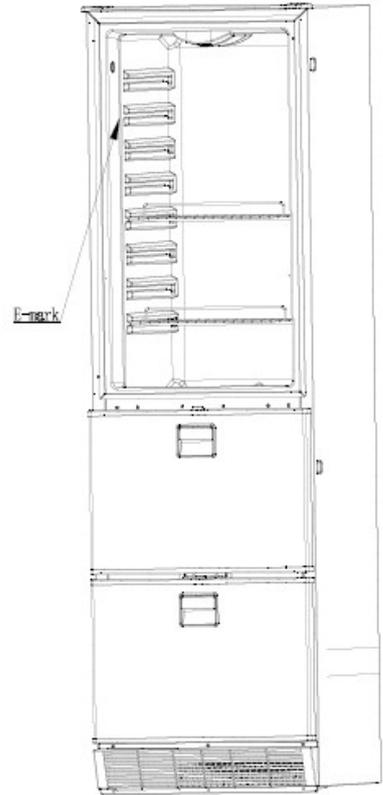
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Front view
 proportion: 1:8



Left view
 proportion: 1:8



Top view
 proportion: 1:8

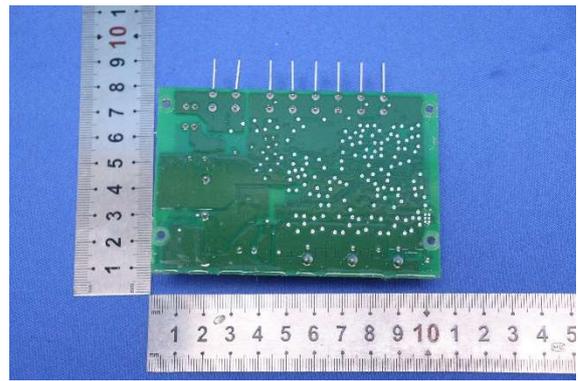
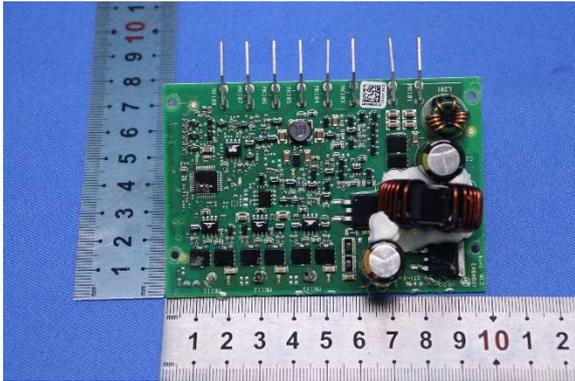
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04			
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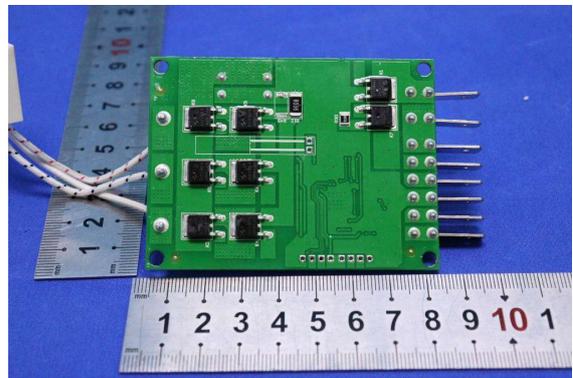
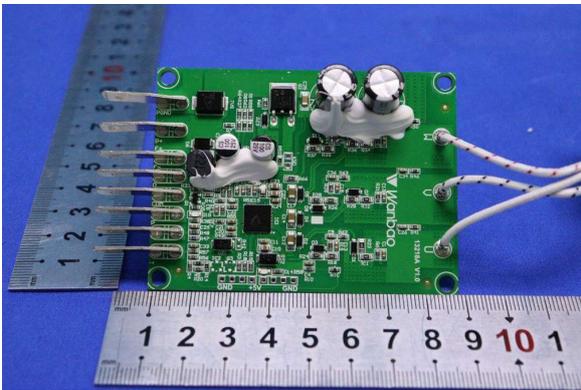
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Attachment 3: Photo of the PCB

BCD148:

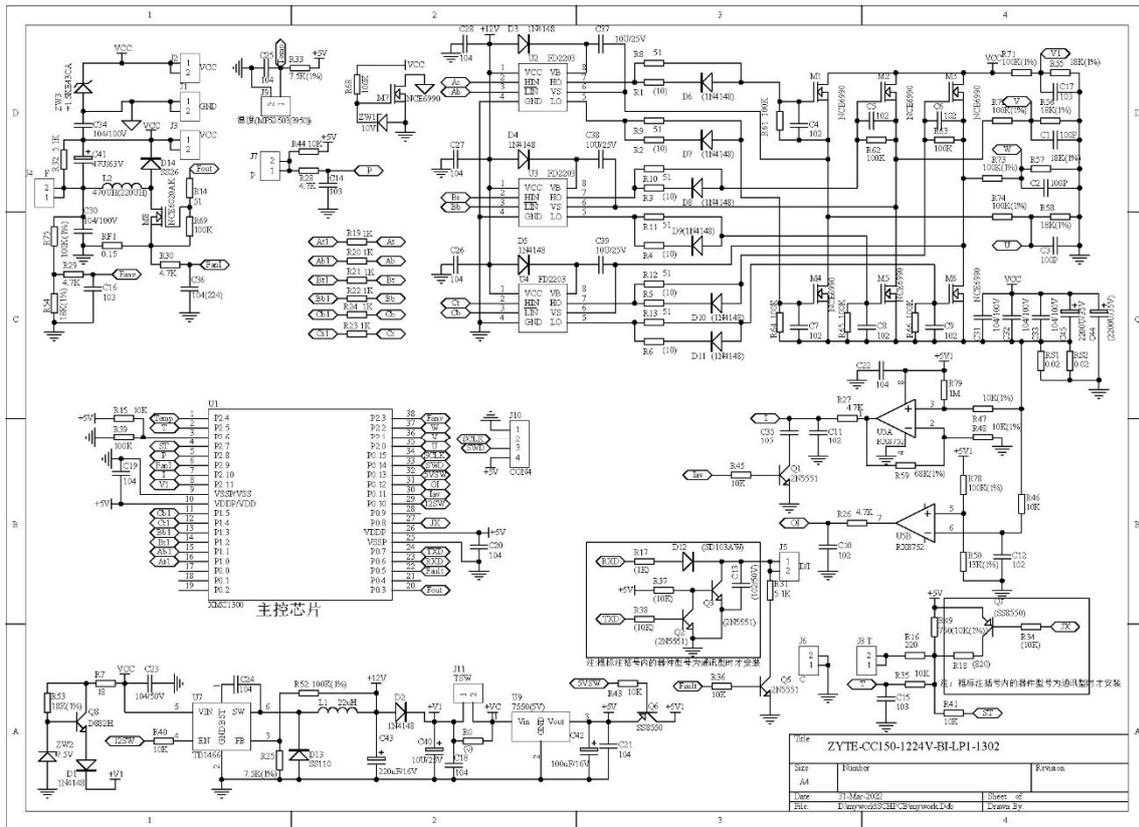


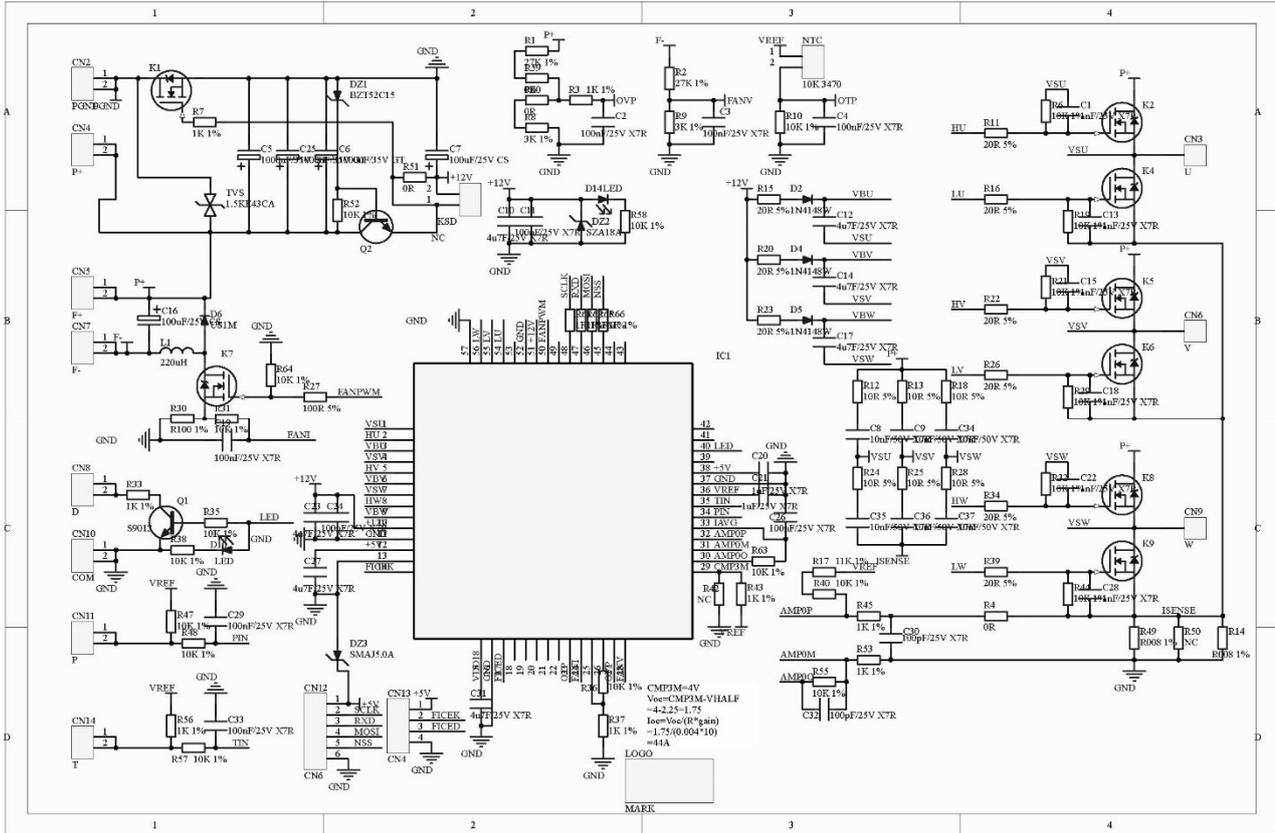
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Attachment 4: Electric Circuit Diagram

BCD148:





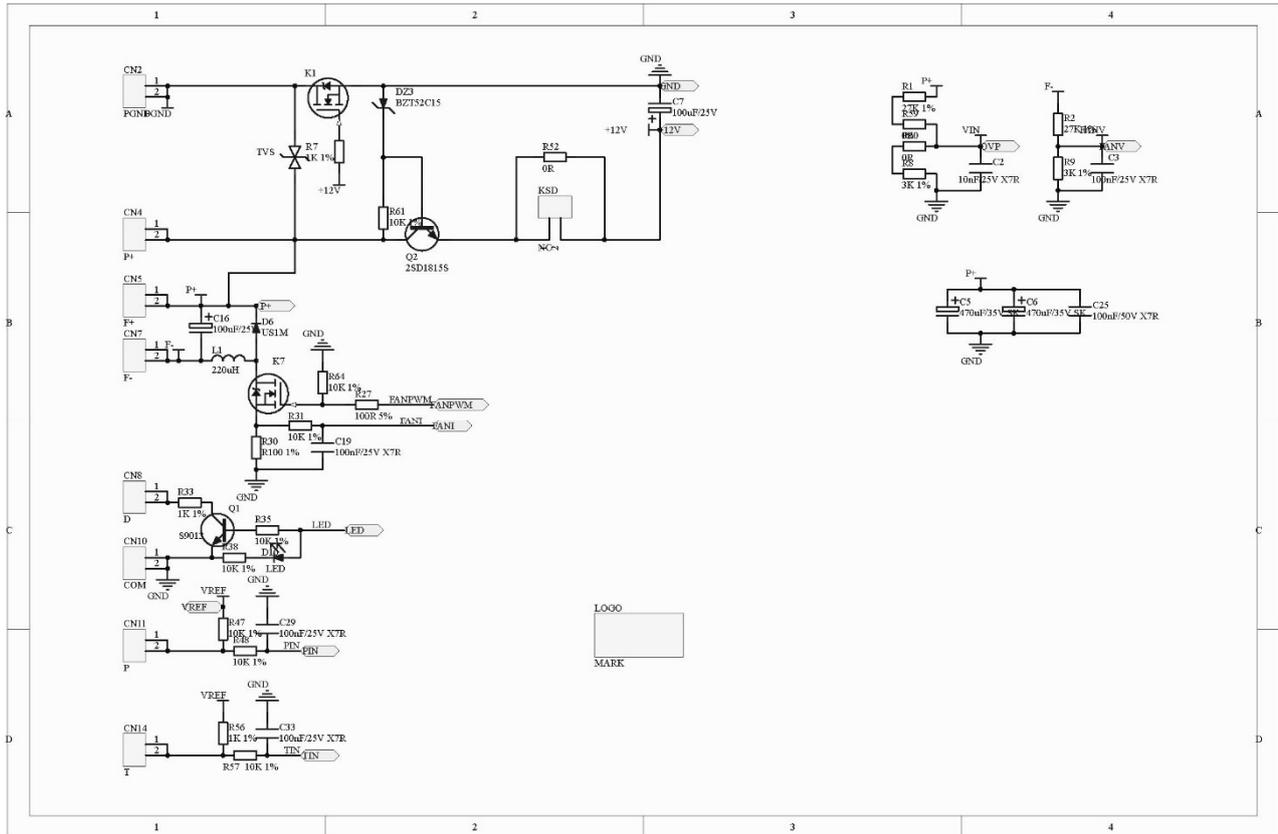


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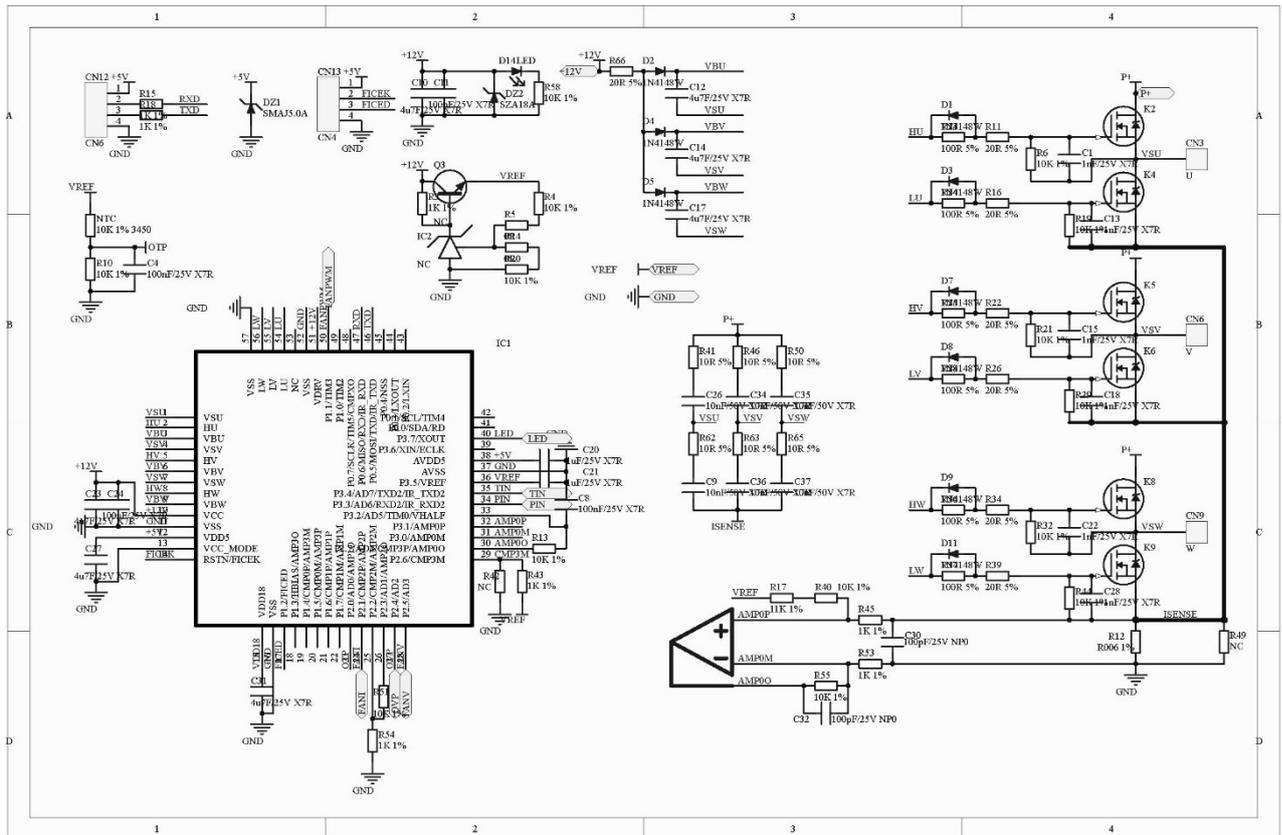
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BCD85:



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Attachment 5: Bill of Materials

BCD148 BOM					
No.	U9 No.	Process No.	Description	Type	Spec.
1	10603-0045	050	BC148 lamp	electric	25*75mm 12V/24V/30mA
2	10601-0001	050	RCN150LDC power cable	electric	14AWG L=480mm
3	10604-0523	050	Mechanical temperature controller	electric	60*52.4mm
4	10606-0003	050	D12BM12 Fan module	electric	DC12V/0.30A/2000N/S
5	10604-0334	050	RCE magnetic switch	corpuscle	150mm
6	10601-0268	010	BCD148 4pin cable	electric	
7	10607-0189	050	Wancool ECV60FC Compressor (Sample)	electric	ECV60FC (R600a)
8	10604-0588	050	Wancool controller	electric	21221
9	10607-0187	050	HUAYI DK52C Compressor (Sample)	electric	R600A

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10	10604-0604	050	HUAYI controller	electric	058
11	10607-0113	050	Secop BD80CN Compressor (Sample)	electric	R290
12	10604-0378	050	Secop controller	electric	101N0680

BCD85 BOM

No.	U9 No.	Process No.	Description	Type	Spec.
1	10601-0250	010	BCD50 4-PIN cable	electric	L=630mm/UL1569/24A WG 8.2K/1.5K
2	10601-0002	010	SVR50/DC power cable	electric	L=540mm
3	10604-0523	050	Mechanical temperature controller	electric	60*52.4mm
4	10603-0042	050	Silicone lamp panel	electric	12V/24v 0.1A 40*15 Belt mounting buckle
5	10606-0003	050	D12BM12 Fan module	electric	DC12V/0.30A/2000N/S
6	10604-0334	050	RCE magnetic switch	corpuscle	150mm
7	10607-0188	050	Wancool ECV40FC Compressor (Sample)	electric	ECV40FC (R600a) C.O.P 1.2
8	10604-0588	050	Wancool controller	electric	13218A
11	10607-0186	050	HUAYI DL35C Compressor (Sample)	electric	R600A
12	10604-0602	050	HUAYI controller	electric	022
13	10607-0135	050	Secop BD35K Compressor (Sample)	electric	R600A
14	10604-0378	050	Secop controller	electric	101N0680