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TEST REPORT

Applicant xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Manufacturer xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

Product Name 6 in 1 Multi Cable

Model No. CBH100 100W

Trade Mark **N/A**

Rating(s) Input: USB-A/USB-C
Output: USB-C, 6Pin Lightning and Micro USB
Single: USB-C 5A max ,6Pin lightning 2Amax, Micro USB 2A max+
Double: USB-C+6Pin Lightning/Micro USB
USB-C 5A max 6Pin Lightning/Micro USB 1A
6Pin Lightning/Micro USB
6Pin Lightning 2Amax Micro USB 1A
Triple: USB-C+6Pin Lightning+Micro USB
USB-C 5A max, 6Pin Lightning+Micro USB 1A

Test Standard(s)
EN 55032:2015+A1 :2020
EN 55035:2017+A11:2020

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with above listed standard(s) requirements. This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt: Jul. 01, 2024

Date of Test: Jul. 01, 2024 to Jul. 05, 2024

Prepared By: Yee Huang
(Yee Huang)

Approved & Authorized Signer: KingKong Jin
(KingKong Jin)



Report No.:

XXXXXXXXXXXXXXXXXXXX

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1. General Information

1.1. Client Information

Applicant	XXXXXXXXXXXXXXXXXXXX
Address	XXXXXXXXXXXXXXXXXXXX
Manufacturer	XXXXXXXXXXXXXXXXXXXX
Address	XXXXXXXXXXXXXXXXXXXX
Factory	XXXXXXXXXXXXXXXXXXXX
Address	XXXXXXXXXXXXXXXXXXXX

1.2. Description of Device (EUT)

Product Name	6 in 1 Multi Cable
Model No.	CBH100 100W
Trade Mark	N/A
Test Power Supply	DC 20V via adapter/ DC 5V via PC
Test Sample No.	1-1-1
Adapter	N/A
Remark: (1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	

1.3. Auxiliary Equipment Used During Test

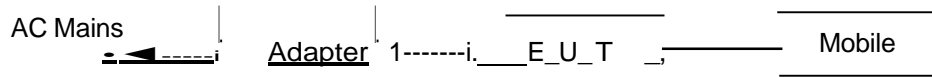
Title	Manufacturer	Model No.	Serial No.
Anker717 Charger(140W)	ANKER	A2341	/
Acer Computer	acer	N19W3	2020AJ3862
Mobile Phone	OnePlus	PHK110	e63fbd23
Apple Phone	Apple	iPhone 12	DNPDJC7T0DYF
HUAWEI Mobile	HUAWEI	JAT-AL00	TMENW19925001206



1.4. Description of Test Modes

Pretest Modes	Descriptions
TM1	Charging mode
TM2	Communication mode

For Mode 1 Block Diagram of Test Setup



For Mode 2 Block Diagram of Test Setup



1.5. Measurement Uncertainty

Parameter	Uncertainty
Conducted emissions (AMN 150kHz~30MHz)	3.4dB
Radiated emissions (30MHz~1000MHz)	Horizontal: 3.96dB; Vertical: 4.60dB
This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



1.6. Test Summary

Test Items	Test Modes	Status
Conducted emissions from AC mains power ports (150kHz-30MHz)	Mode1	p
Radiated emissions (30MHz-1GHz)	Mode1,2	p
Electrostatic discharges	Mode1,2	p
RF electromagnetic field disturbances	Mode1,2	p
Note: P: Pass N: N/A, not applicable		



1.7. Description of Test Facility

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

FCC-Registration No.:434132

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 434132.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.



1.8. EMS Performance Criteria

General Performance Criteria

Performance 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.

Performance 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.

Performance 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.



1.9. Test Equipment List

Conducted emissions from AC mains power ports (150kHz-30MHz)						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	L.I.S.N. Artificial Mains Network	Rohde & Schwarz	ENV216	100055	2024-01-18	2025-01-17
2	Three Phase V-type Artificial Power Network	CYBERTEK	EM5040DT	E215040D T001	2024-01-17	2025-01-16
3	Software Name EZ-EMC	Farad Technology	ANB-03A	N/A	/	/
4	EMI Test Receiver	Rohde & Schwarz	ESPI3	100926	2023-10-12	2024-10-11

Radiated emissions (30MHz-1GHz)						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	2024-01-17	2025-01-16
2	Pre-amplifier	Schwarzbeck	BBV-9745	9745-075	2024-01-17	2025-01-16
3	Bilog Broadband Antenna	SCHWARZBECK	VULB 9163	01109	2022-10-16	2025-10-15
4	Software Name EZ-EMC	Farad Technology	EMEC-3A1	N/A	/	/

Electrostatic discharges						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	ESD Simulators	emtest	ESD NX30.1	11936	2024-03-11	2025-03-10



RF electromagnetic field disturbances						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due Date
1	Signal Generator	Agilent	N5181A	MY501431 07	2024-01-23	2025-01-22
2	Power Meter	Agilent	E4417A	MY451013 84	2024-01-23	2025-01-22
3	Amplifier	Micotop	MPA-80- 1000-600	MPA21103 18	2024-01-17	2025-01-16
4	Amplifier	Micotop	MPA-1000- 6000-100	MPA21103 27	2024-01-17	2025-01-16
5	Log.-Per.-Antenna	Schwarzbeck	VULP 9118E	01012	/	/
6	Microwave Log.- Per. Antenna	Schwarzbeck	STLP 9149	00788	/	/
7	Power Sensor	KEYSIGHT	E9323A	US404106 47	2024-01-23	2025-01-22
8	Power Sensor	KEYSIGHT	E9323A	MY531000 07	2024-01-23	2025-01-22
9	Electric field Probe	Narda S.T.S /PMM	EP 601	811ZX103 51	2024-01-19	2025-01-18
10	Software	EMtrace	EM 3	/	/	/



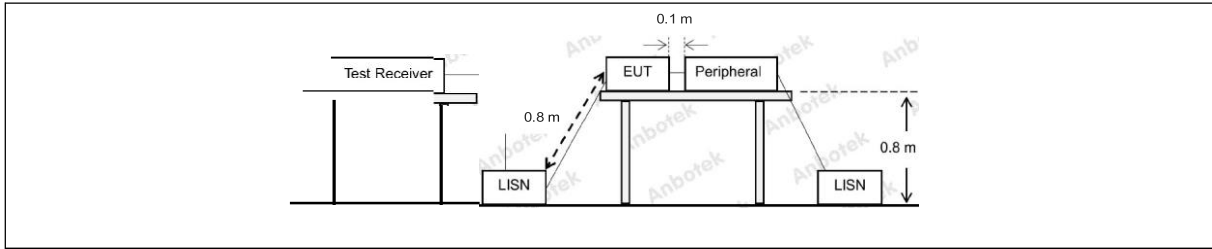
2. Conducted emissions from AC mains power ports (150kHz-30MHz)

Test Requirement:	Class B		
Test Limit:	Frequency Range	Limit (Quasi-Peak)	Limit (Average)
	0.15MHz to 0.5MHz	66dB(μV) to 56dB(μV)	56dB(μV) to 46dB(μV)
	0.5MHz to 5MHz	56dB(μV)	46dB(μV)
	5MHz to 30MHz	60dB(μV)	50dB(μV)
	Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.1SM to 30MHz	
Test Method:	Clause 7 of CISPR 16-2-1:2014/AMD1:2017		
Procedure:	An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected. Remark: Level= Read Level+ Cable Loss+ LISN Factor		

2.1. EUT Operation

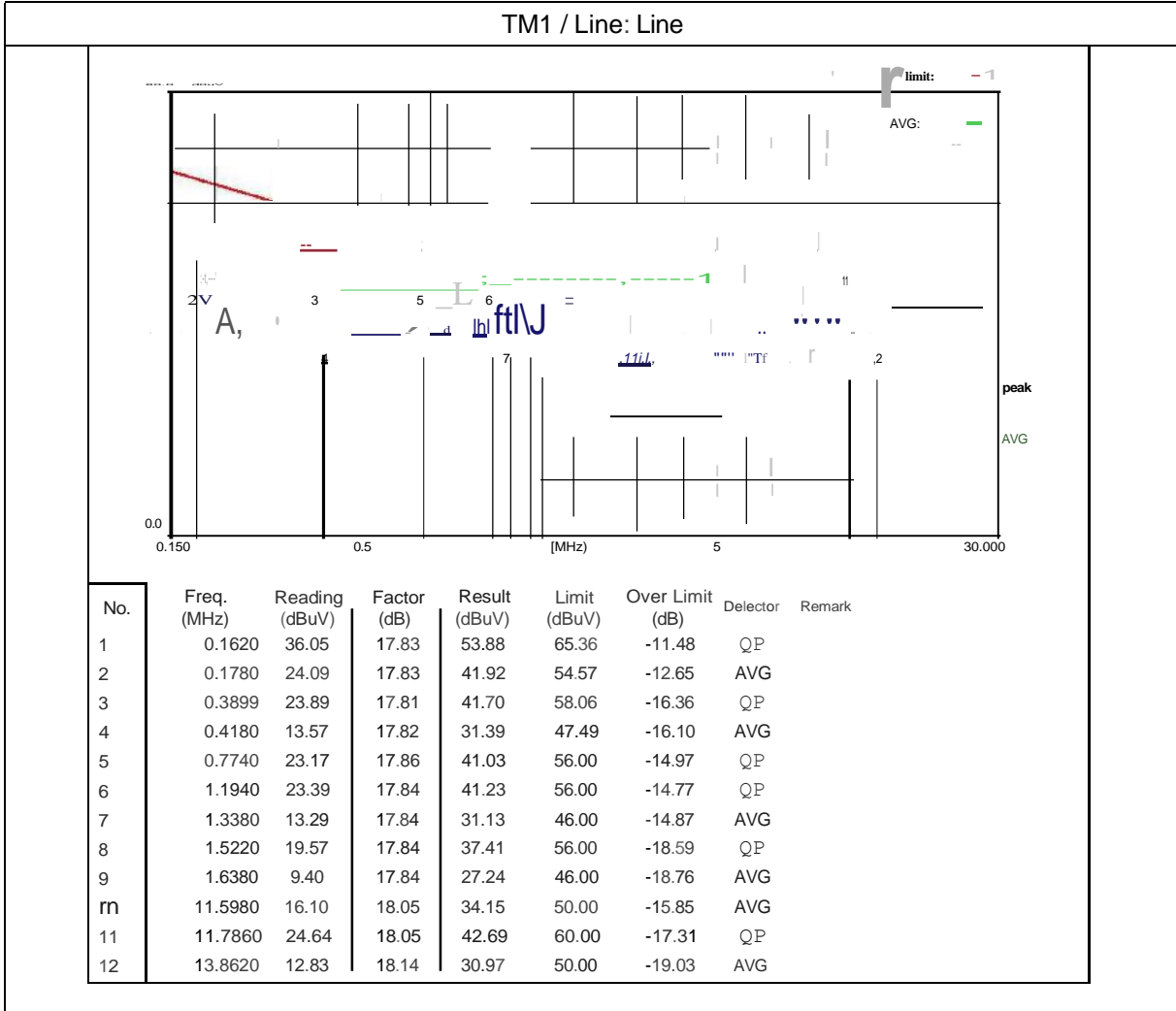
Operating Environment:
Test mode: I 1: TM1: Charging mode

2.2. Test Setup

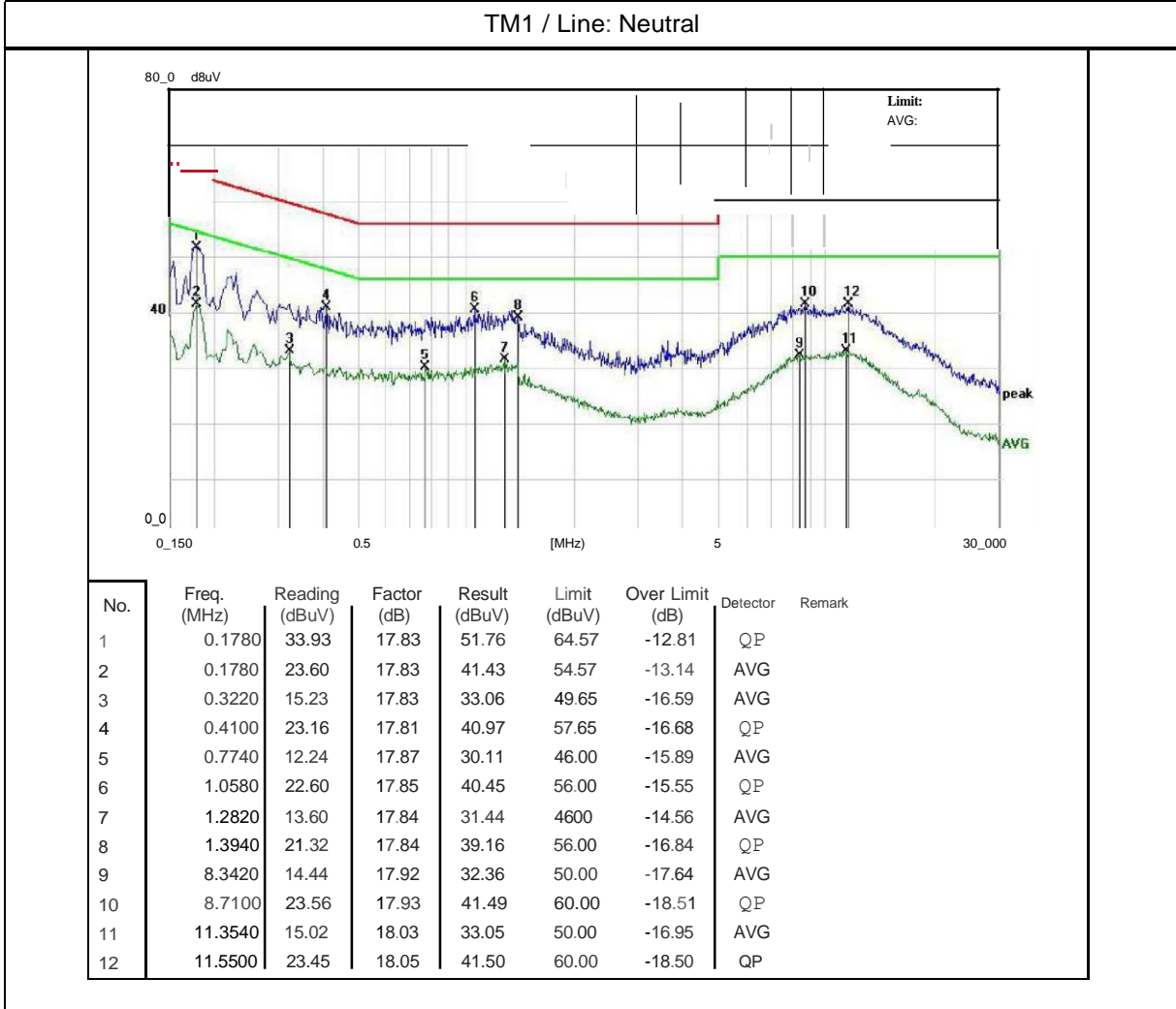


2.3. Test Data

Temperature: 24.6 °C Humidity: 52 % Atmospheric Pressure: 101 kPa



| Temperature: | 24.6 °C Humidity: 52 % | Atmospheric Pressure: 101 kPa



3. Radiated emissions (30MHz-1GHz)

Test Requirement:	Class B		
Test Limit:	Frequency (MHz)	Limit [dB(uV/m) at 10m]	Limit [dB(uV/m) at 3m]
	30 to 230	30	40
	230 to 1000	37	47
	Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to 1000MHz	
Test Method:	Clause 7.3 of CISPR 16-2-3:2016		
Procedure:	An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities. Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor		

3.1. EUT Operation

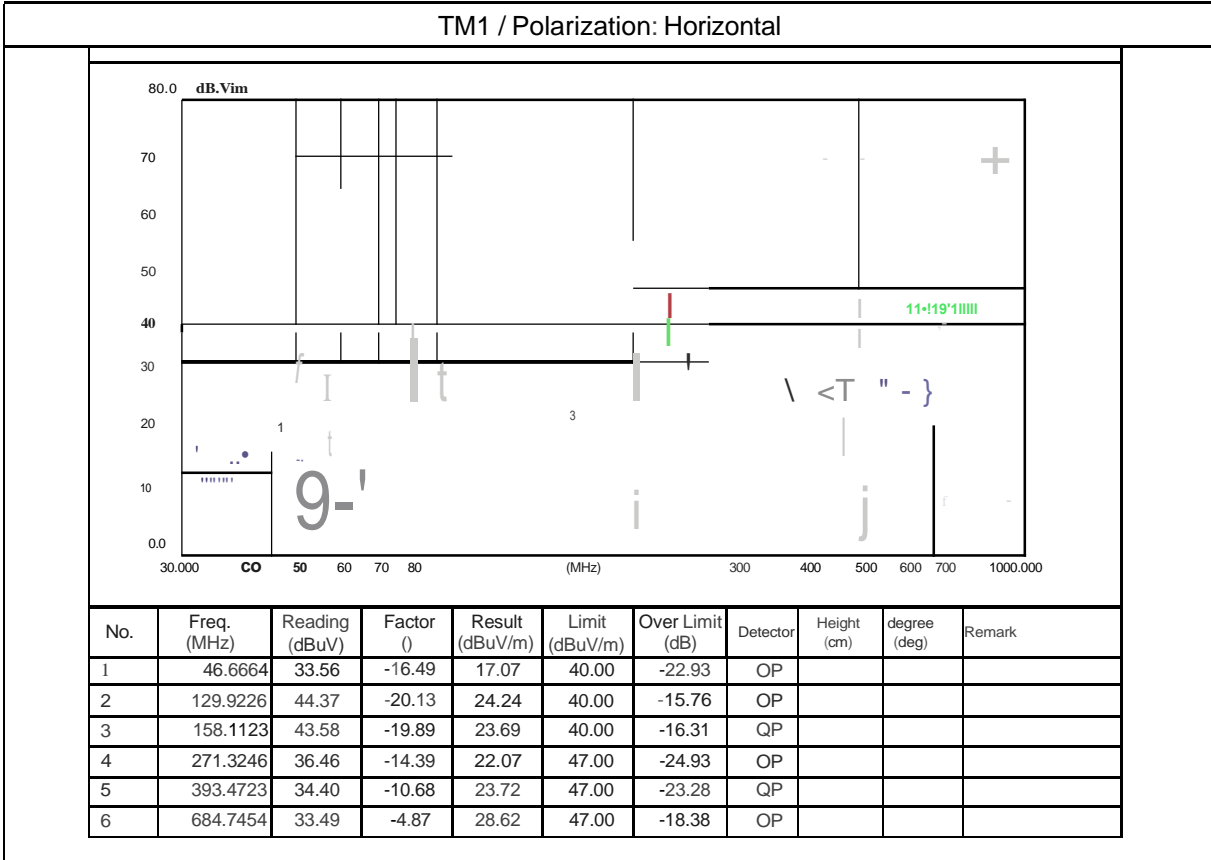
Operating Environment:
Testmode: 11: TM1: Charging mode 2: TM2: Communication mode

3.2. Test Setup

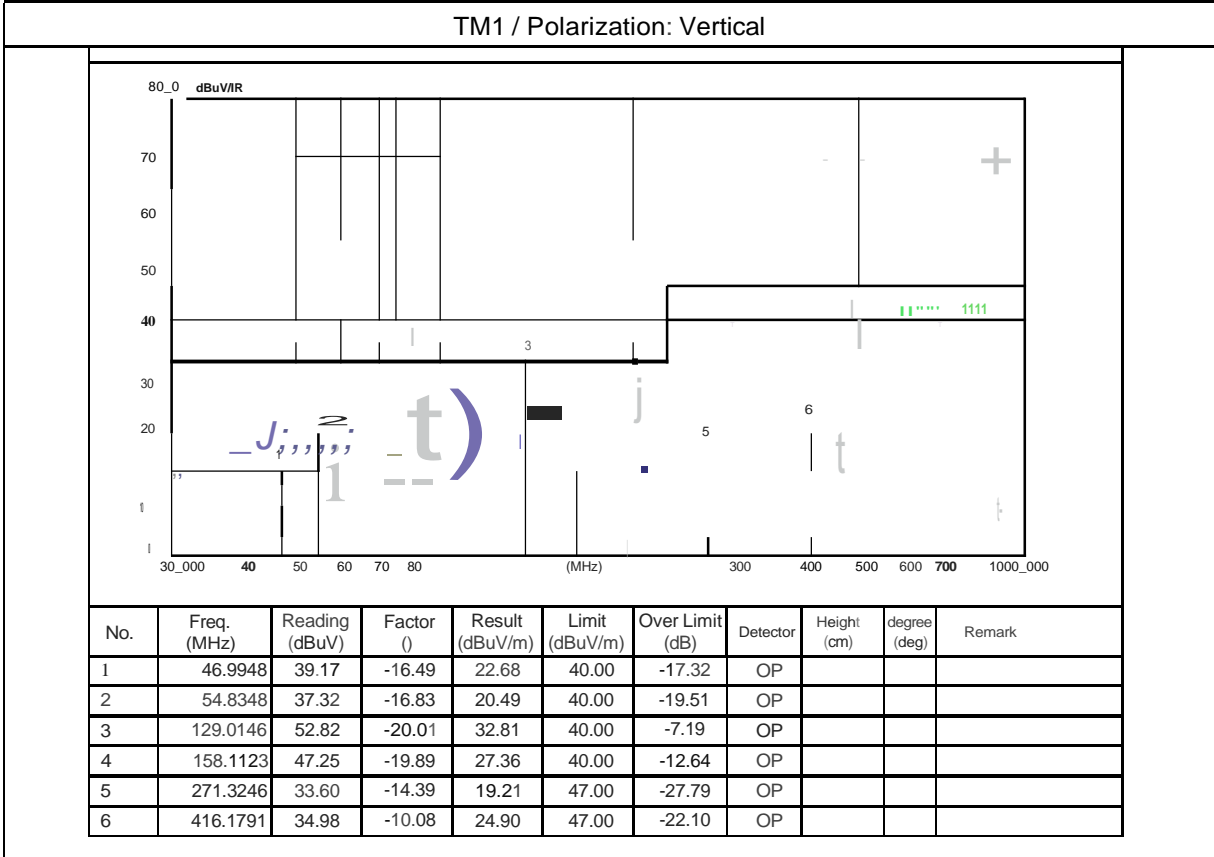


3.3. Test Data

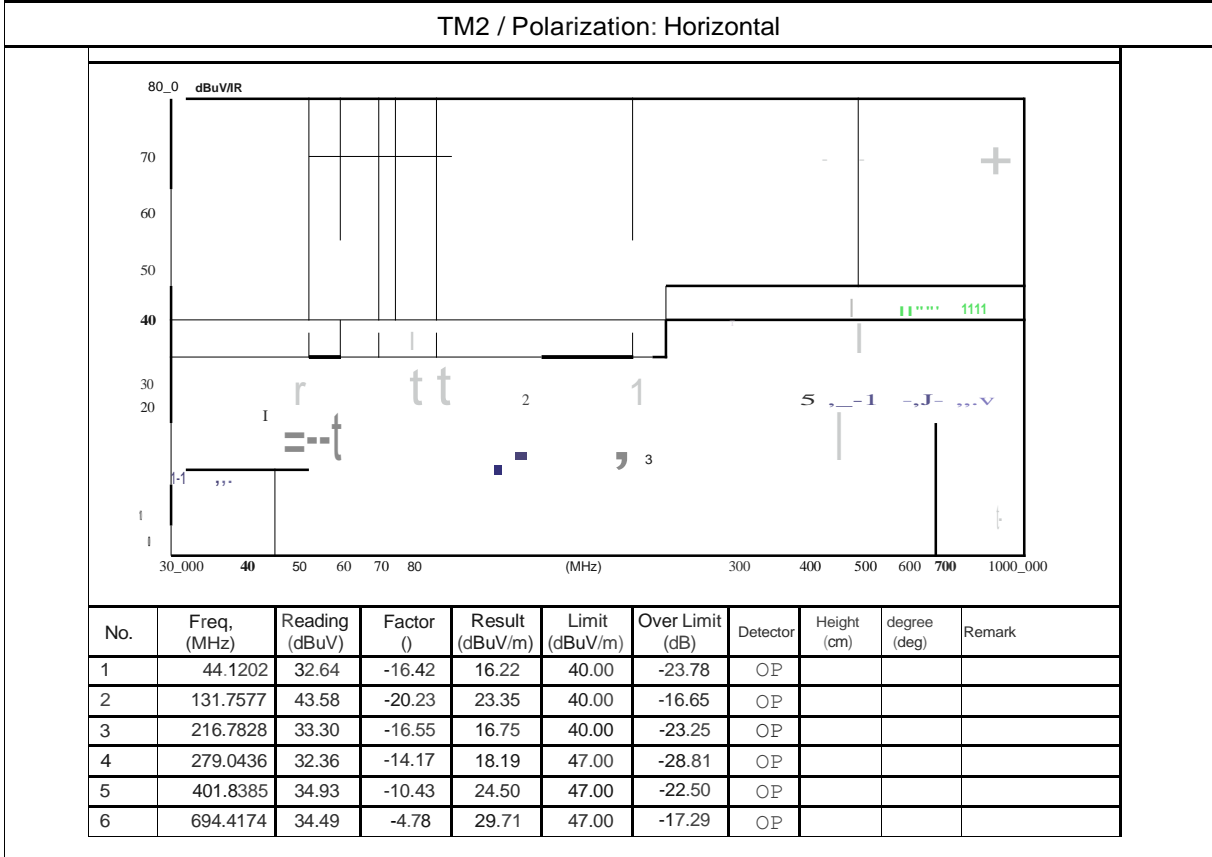
| Temperature: | 23.5 °C Humidity: 149 % | Atmospheric Pressure: 101 kPa



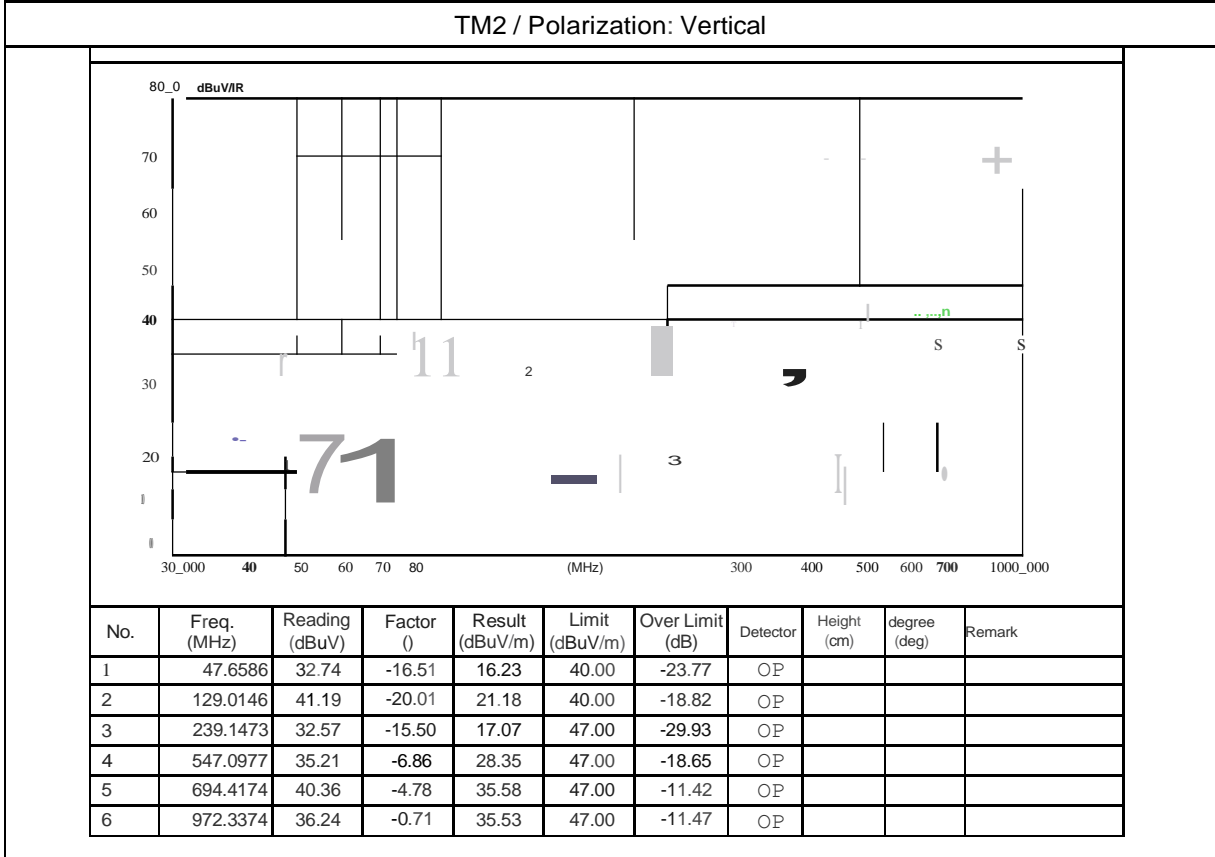
Temperature: 23.5 °C Humidity: 149 % Atmospheric Pressure: 101 kPa



Temperature: 23.5 °C Humidity: 149 % Atmospheric Pressure: 101 kPa



I Temperature: | 23.5 °C Humidity: 149 % J Atmospheric Pressure: 101 kPa



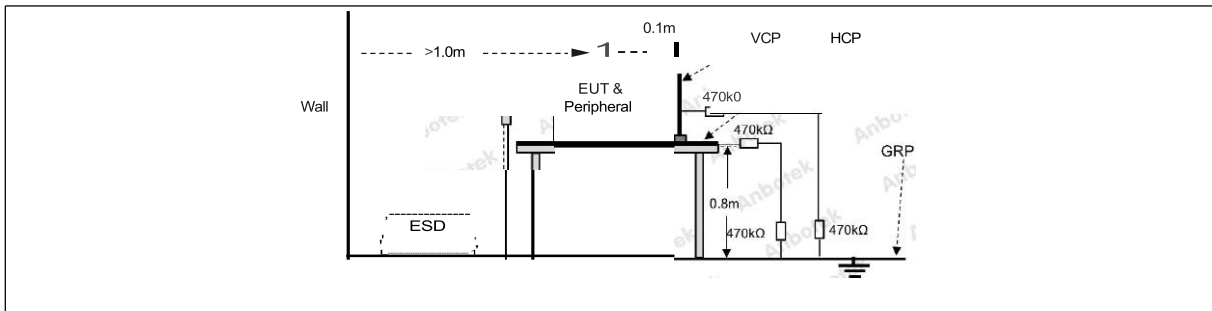
4. Electrostatic discharges

Test Requirement:	Contact Discharge: +/- 4kV Air Discharge: +/- 8kV
Test Method:	EN 61000-4-2: 2009
Procedure:	Discharge Impedance: 330Ω/1S0pF Number of Discharge: Minimum 10 times at each test point Discharge Mode: Single Discharge Discharge Period: 1 second minimum
Performance Criteria:	B

4.1. EUT Operation

Operating Environment:
Testmode: 11: TM1: Charging mode 2: TM2: Communication mode

4.2. Test Setup



4.3. Test Data

| Temperature: | 24 °C | Humidity: | 53 % | Atmospheric Pressure: 101 kPa

Discharge type	Volt (kV)	Polarity	Test Point	Result/ Observations
Air discharge	2,4,8	+	1	A
Air discharge	2,4,8	-	1	A
Contact discharge	4	+	2	A
Contact discharge	4	-	2	A
Horizontal Coupling	4	+	3	A
Horizontal Coupling	4	-	3	A
Vertical Coupling	4	+	3	A
Vertical Coupling	4	-	3	A

Test Point: 1. All insulated enclosure and seams.

2. All accessible metal parts of the enclosure.

3. All side.

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



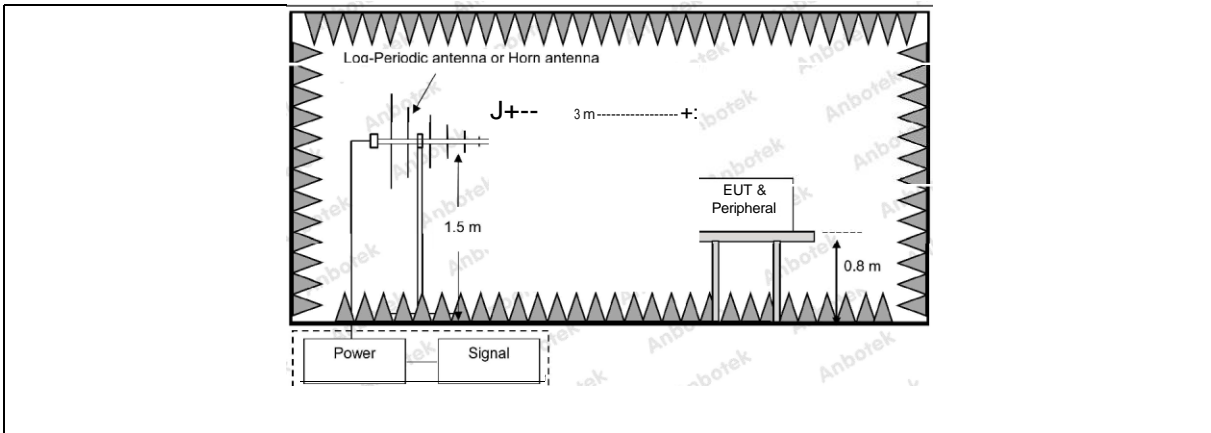
5. RF electromagnetic field disturbances

Test Requirement:	3V/m, 80%, 1kHz Amp. Mod.
Test Method:	EN IEC 61000-4-3: 2020
Procedure:	Frequency Range: 80MHz to 1GHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz Antenna Polarisation: Vertical and Horizontal Modulation: 1kHz,80% Amp. Mod,1% increment
Performance Criteria:	A

5.1. EUT Operation

Operating Environment:	
TeS ^t mode:	1: TM1: Charging mode 2: TM2: Communication mode

5.2. Test Setup



5.3. Test Data

| Temperature: | 24 °C | Humidity: | 53 % | Atmospheric Pressure: | 101 kPa

Frequency	Field Strength (V/m)	EUT face	Dwell time	Result/ Observations
80MHz-1GHz	3	Front	3s	A
80MHz-1GHz	3	Back	3s	A
80MHz-1GHz	3	Left	3s	A
80MHz-1GHz	3	Right	3s	A
80MHz-1GHz	3	Top	3s	A
80MHz-1GHz	3	Bottom	3s	A
1800MHz	3	Front	3s	A
1800MHz	3	Back	3s	A
1800MHz	3	Left	3s	A
1800MHz	3	Right	3s	A
1800MHz	3	Top	3s	A
1800MHz	3	Bottom	3s	A
2600MHz	3	Front	3s	A
2600MHz	3	Back	3s	A
2600MHz	3	Left	3s	A
2600MHz	3	Right	3s	A
2600MHz	3	Top	3s	A
2600MHz	3	Bottom	3s	A
3500MHz	3	Front	3s	A
3500MHz	3	Back	3s	A
3500MHz	3	Left	3s	A
3500MHz	3	Right	3s	A
3500MHz	3	Top	3s	A
3500MHz	3	Bottom	3s	A
5000MHz	3	Front	3s	A
5000MHz	3	Back	3s	A
5000MHz	3	Left	3s	A
5000MHz	3	Right	3s	A
5000MHz	3	Top	3s	A
5000MHz	3	Bottom	3s	A

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

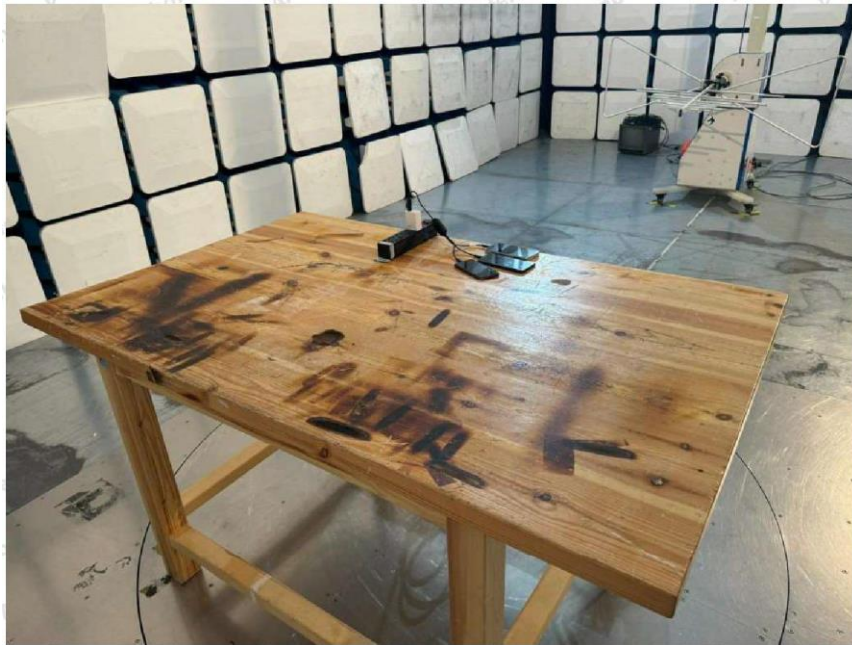


APPENDIX I -- TEST SETUP PHOTOGRAPH

Conducted emissions from AC mains power ports (150kHz-30MHz)



Radiated emissions (30MHz-1GHz)



Electrostatic discharges

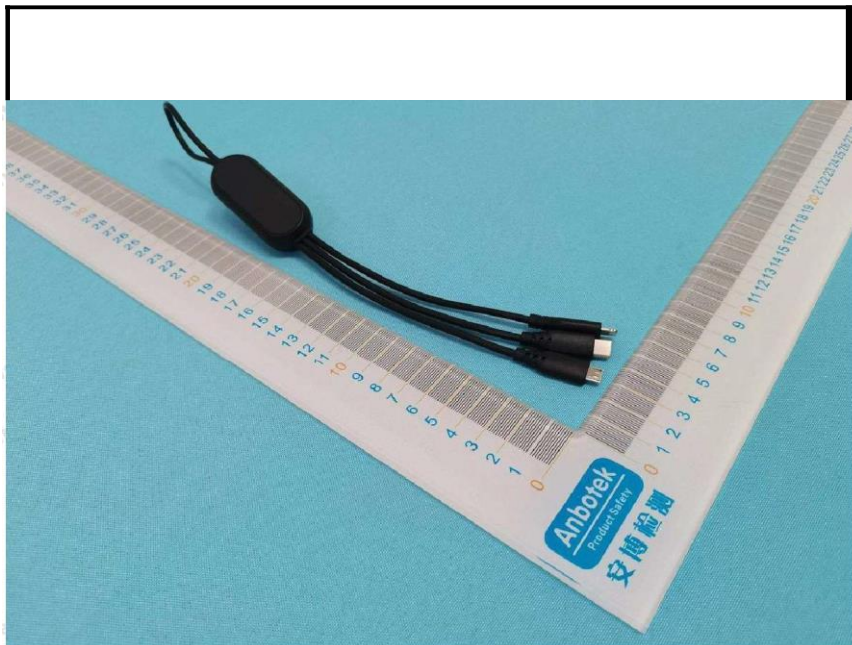
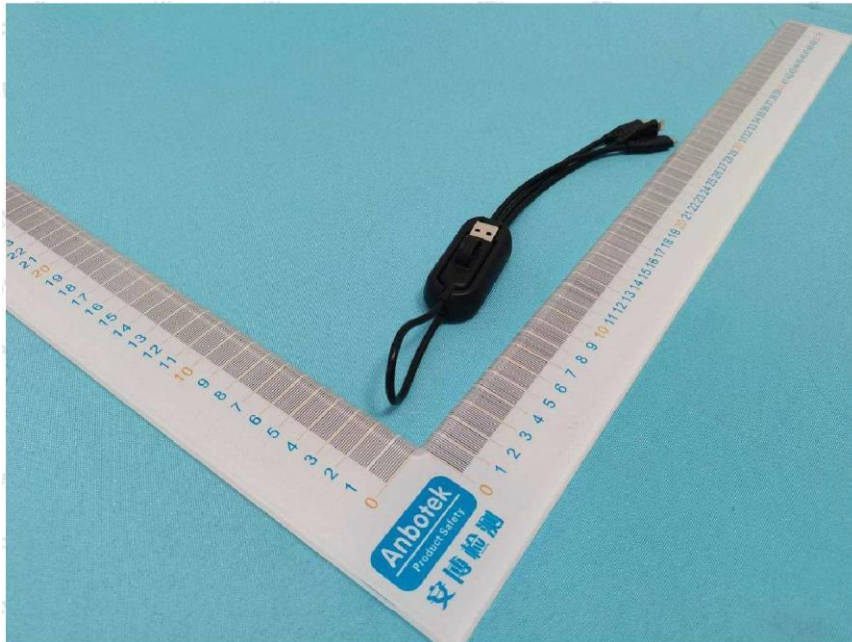


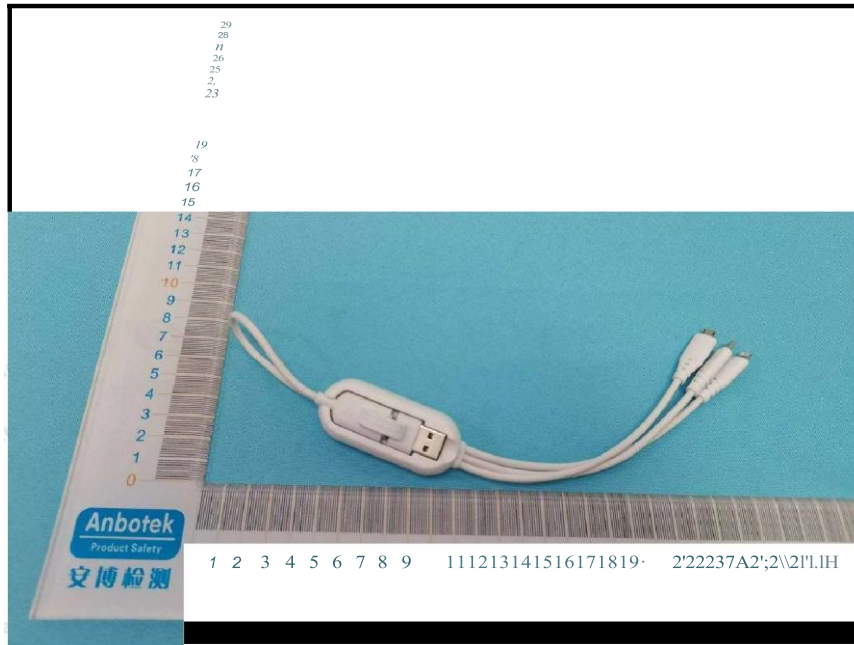
RF electromagnetic field disturbances

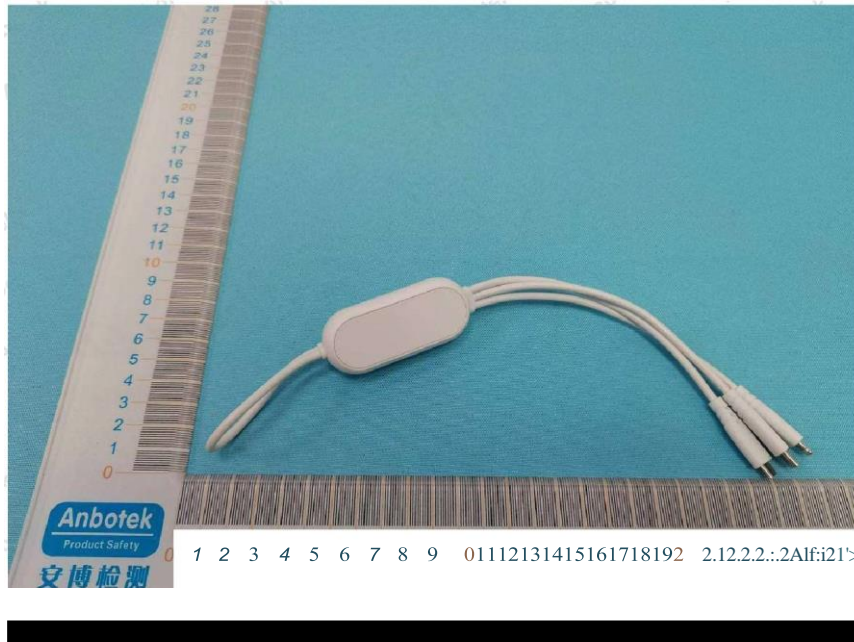


APPENDIX II -- Photo documentation









CE Label

1. The CE conformity marking must consist of the initials 'CE' taking the following form:
If the CE marking is reduced or enlarged, the proportions given in the above graduated drawing must be respected.
2. The CE marking must have a height of at least 5 mm except where this is not possible on account of the nature of the apparatus.
3. The CE marking must be affixed to the product or to its data plate. Additionally it must be affixed to the packaging, if any, and to the accompanying documents.
4. The CE marking must be affixed visibly, legibly and indelibly.
It must have the same height as the initials 'CE'.

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

