



EMC TEST REPORT

Product Name: TABLET

Model Number: TAB R11 Pro, TAB R11, TAB R11 Plus, TAB R11 Ultra, TAB R12, TAB R12 Plus, TAB R12 Ultra, TAB R12 Pro, TAB R13, TAB R13 Plus, TAB R13 Ultra, TAB R13 Pro, TAB R15, TAB R15 Plus, TAB R15 Pro, TAB R15 Ultra

FCC ID: 2AOKUTABR11PRO

Issued For : SHENZHEN TUGAO INTELLIGENT CO.,LTD

8th Floor, Bldg A, Jinggang Science&Technology Park,
Fuyong, Bao'an District, Shenzhen, China

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park,
No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan
District, Shenzhen, Guangdong, China

Report Number: LGT25L088EM01

Sample Received Date: Dec. 04, 2025

Date of Test: Dec. 04, 2025 ~ Dec. 11, 2025

Date of Issue: Dec. 11, 2025

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TEST REPORT CERTIFICATION

Applicant: SHENZHEN TUGAO INTELLIGENT CO.,LTD
Address: 8th Floor, Bldg A, Jinggang Science&Technology Park, Fuyong,
Bao'an District, Shenzhen, China

Manufacturer: SHENZHEN TUGAO INTELLIGENT CO.,LTD
Address: 8th Floor, Bldg A, Jinggang Science&Technology Park, Fuyong,
Bao'an District, Shenzhen, China

Product Name: TABLET

Trademark: HOTWAV

Model Number: TAB R11 Pro, TAB R11, TAB R11 Plus, TAB R11 Ultra, TAB R12,
TAB R12 Plus, TAB R12 Ultra, TAB R12 Pro, TAB R13, TAB R13
Plus, TAB R13 Ultra, TAB R13 Pro, TAB R15, TAB R15 Plus, TAB
R15 Pro, TAB R15 Ultra

Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR Part 15 Subpart B ANSI C63.4-2014	PASS

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Technical Director





Table of Contents

1. TEST SUMMARY	5
1.1 TEST LABORATORY	6
1.2 MEASUREMENT UNCERTAINTY	6
2. GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF THE EUT	7
2.2 DESCRIPTION OF THE TEST MODES	8
2.3 DESCRIPTION OF THE SUPPORT UNITS	8
2.4 MEASUREMENT INSTRUMENTS LIST	9
3. EMC EMISSION TEST	10
3.1 CONDUCTED EMISSION MEASUREMENT	10
3.2 RADIATED EMISSION MEASUREMENT	14
APPENDIX I - TEST SETUP	19
APPENDIX II - PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	21



Revision History

Rev.	Issue Date	Revisions
00	Dec. 11, 2025	Initial Issue



1. TEST SUMMARY

EMC Emission				
Standard	Test Item	Limit	Judgement	Remark
FCC 47 CFR Part 15 Subpart B ANSI C63.4-2014	Conducted Emissions	Class B	PASS	
	Radiated Emissions Below 1GHz	Class B	PASS	
	Radiated Emissions Above 1GHz	Class B	PASS	Note 2

Note:

- 1 "N/A" denotes test is not applicable in this Test Report
- 2 If the highest frequency of the internal sources of the EUT is less than 108 MHz, the measurement shall only be made up to 1 GHz. If the highest frequency of the internal sources of the EUT is between 108 MHz and 500 MHz, the measurement shall only be made up to 2 GHz. If the highest frequency of the internal sources of the EUT is between 500 MHz and 1 GHz, measurement shall only be made up to 5 GHz. If the highest frequency of the internal sources of the EUT is above 1 GHz, the measurement shall be made up to 5 times the highest frequency or 40 GHz, whichever is less.



1.1 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

Test Item	Measurement Frequency Range MHz	Uncertainty dB
Conducted Emissions at AC mains power port	0.009 ~ 30	2.80
Radiated Emissions	0.009 ~ 30	2.16
Radiated Emissions	30 ~ 1000	4.61
Radiated Emissions	1000 ~ 18000	5.49
Note: 1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2. 2. The measurement uncertainty is not included in the test result.		



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	TABLET
Test Model Number:	TAB R11 Pro
Series Number:	TAB R11, TAB R11 Plus, TAB R11 Ultra, TAB R12, TAB R12 Plus, TAB R12 Ultra, TAB R12 Pro, TAB R13, TAB R13 Plus, TAB R13 Ultra, TAB R13 Pro, TAB R15, TAB R15 Plus, TAB R15 Pro, TAB R15 Ultra
Model Difference:	Only Model differences.
Adapter:	Input: 100-240V 50/60Hz 0.6A Output: 5V 3A, 9V 2.22A, 12V 1.67A
Battery:	Capacity: 10150mAh Rated Voltage: 3.89V
Test Voltage:	AC 120V/60Hz Battery: 3.89V
Hardware Version:	N/A
Software Version:	N/A
Connecting I/O Port(s):	Please refer to the Note 1.

Note: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



2.2 DESCRIPTION OF THE TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operating mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Test Mode	Description
Mode 1	Charging+GSM link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone
Mode 2	Charging+WCDMA link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone
Mode 3	Charging+LTE link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone
Mode 4	USB Data Transmission

Note: Only the data of worst-case was recorded in this report.

2.3 DESCRIPTION OF THE SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating
Adapter	Guangxi Rong County GuangYuanSheng Electronic Equipment co.,Ltd.	F3-2001	N/A	Input: 100-240V 50/60Hz 0.6A Output: 5V 3A, 9V 2.22A, 12V 1.67A
USB-C to USB-C Cable	N/A	N/A	N/A	1m

Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	ASUS	UX3407Q	N/A	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



2.4 MEASUREMENT INSTRUMENTS LIST

Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2025.03.06	2026.03.05
LISN	COM-POWER	LI-115	02032	2025.03.05	2026.03.04
LISN	SCHWARZBECK	NNLK 8122	00160	2025.03.05	2026.03.04
LISN	EMTRACE	PWL-50-3200	00317	2025.03.05	2026.03.04
LISN	EMTRACE	PVDC-150R-200	00353	2025.03.12	2026.03.11
ISN	FCC	T4-02	91317	2025.03.05	2026.03.04
ISN	SCHWARZBECK	NTFM 8158	00303	2025.03.05	2026.03.04
Transient Limiter	CYBERTEK	EM5010A	E2250100049	2025.03.05	2026.03.04
Temperature & Humidity	BT-3	JINGCHUAN G	N.A	2025.03.10	2026.03.09
Testing Software	SKET	EMC-I	V1.4.0.3	N/A	N/A
Radiated Emission					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2025.03.06	2026.03.05
Spectrum Analyzer	Keysight	N9020A	MY50530994	2025.03.05	2026.03.04
Spectrum Analyzer	Keysight	N9010B	MY60242508	2025.03.05	2026.03.04
Active loop Antenna	ETS	6502	00049544	2025.03.11	2028.03.10
Trilog Broadband Antenna	SCHWARZBECK	VULB 9168	01447	2024.05.17	2027.05.16
Horn Antenna	SCHWARZBECK	3115	10SL0060	2025.03.10	2028.03.09
Pre-amplifier (9kHz-1GHz)	EMtrace	RP01A	02017	2025.03.06	2026.03.05
Pre-amplifier (1-26.5G)	Agilent	8449B	3008A4722	2025.03.06	2026.03.05
Temperature & Humidity	BT-3	JINGCHUAN G	N.A	2025.03.10	2026.03.09
Testing Software	SKET	EMC-I	V1.4.0.3	N/A	N/A



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 LIMITS

FREQUENCY (MHz)	Conducted Emission Limits (dBuV)			
	Class A		Class B	
	Quasi-peak	Average	Quasi-peak	Average
0.15 ~ 0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.5 ~ 5	73.00	60.00	56.00	46.00
5 ~ 30	73.00	60.00	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor
Margin Level = Measurement Value - Limit Value

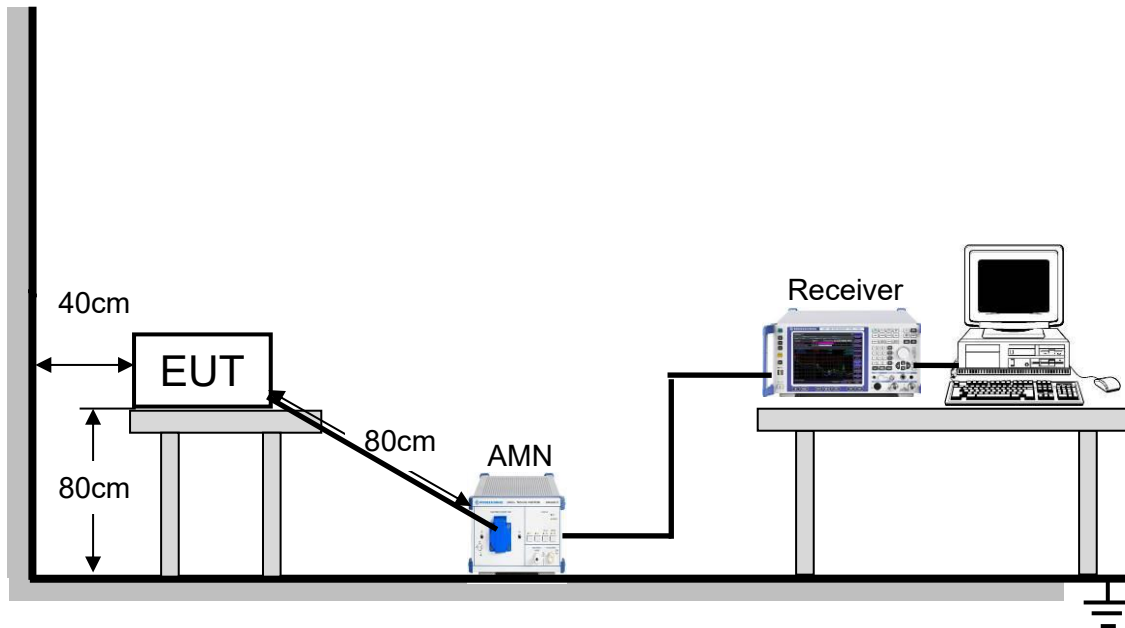
The following table is the setting of the receiver

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

3.1.2 TEST PROCEDURE

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item - EUT Test Photos.

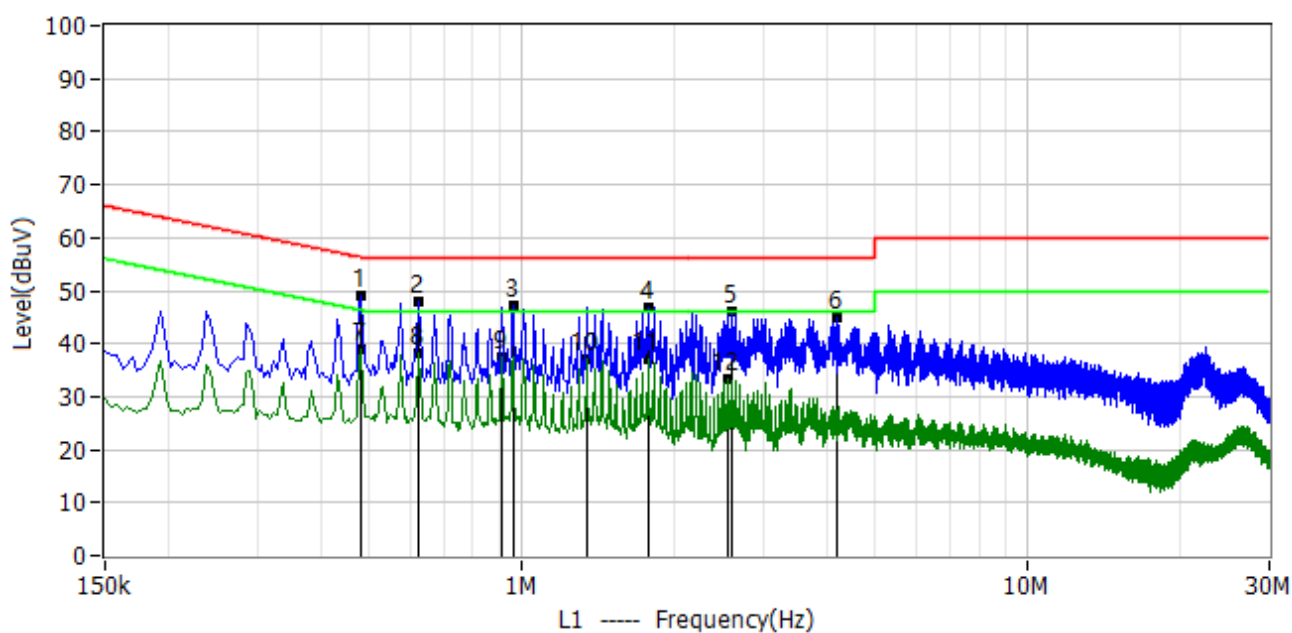
3.1.3 TEST SETUP





3.1.4 TEST RESULTS

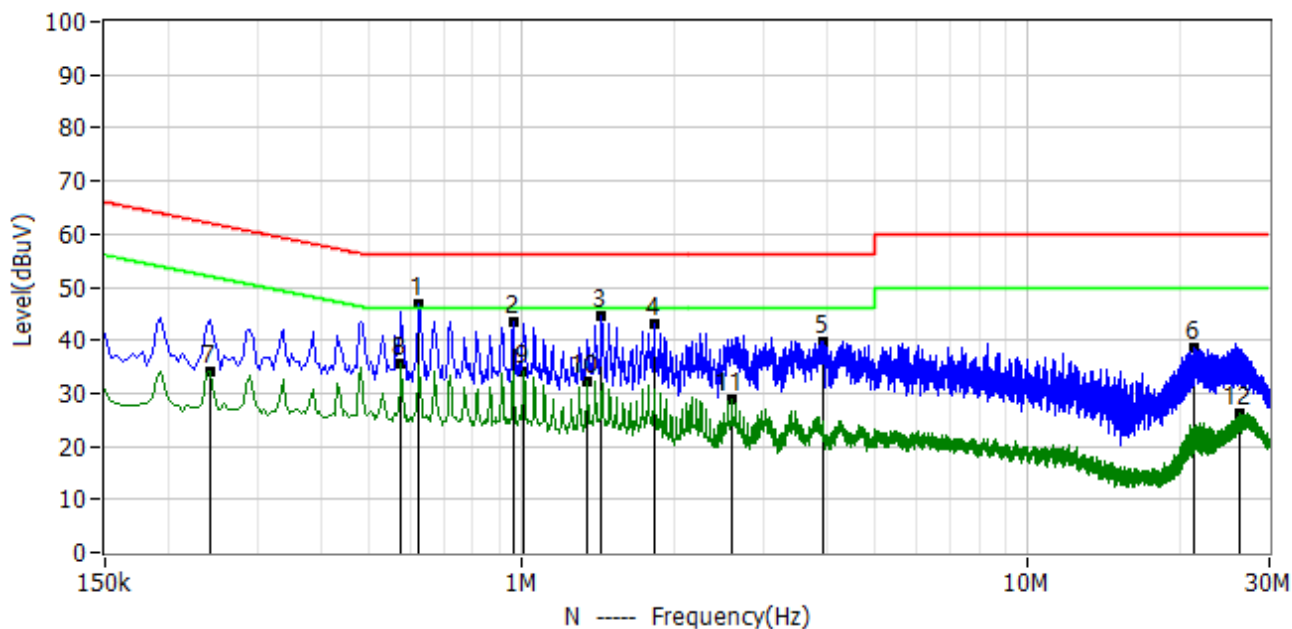
Project: LGT25L088	Test Engineer: LiuH
EUT: TABLET	Temperature: 24.1°C
M/N: TAB R11 Pro	Humidity: 46%RH
Test Voltage: AC 230V/50Hz	Test Data: 2025-12-08
Test Mode: Charging+GSM link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.482	37.99	10.92	48.91	56.30	-7.39	QP	L1
2*	0.622	37.00	10.92	47.92	56.00	-8.08	QP	L1
3*	0.962	36.35	10.85	47.20	56.00	-8.80	QP	L1
4*	1.778	35.74	11.12	46.86	56.00	-9.14	QP	L1
5*	2.598	34.76	11.19	45.95	56.00	-10.05	QP	L1
6*	4.178	33.61	11.24	44.85	56.00	-11.15	QP	L1
7*	0.482	27.86	10.92	38.78	46.30	-7.52	AV	L1
8*	0.622	27.31	10.92	38.23	46.00	-7.77	AV	L1
9*	0.914	26.59	10.87	37.46	46.00	-8.54	AV	L1
10*	1.346	25.95	11.08	37.03	46.00	-8.97	AV	L1
11*	1.778	25.82	11.12	36.94	46.00	-9.06	AV	L1
12*	2.546	22.21	11.17	33.38	46.00	-12.62	AV	L1



Project: LGT25L088	Test Engineer: LiuH
EUT: TABLET	Temperature: 24.1°C
M/N: TAB R11 Pro	Humidity: 46%RH
Test Voltage: AC 230V/50Hz	Test Data: 2025-12-08
Test Mode: Charging+GSM link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Result dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.626	35.89	10.86	46.75	56.00	-9.25	QP	N
2*	0.962	32.56	10.84	43.40	56.00	-12.60	QP	N
3*	1.438	33.33	11.06	44.39	56.00	-11.61	QP	N
4*	1.826	32.12	11.13	43.25	56.00	-12.75	QP	N
5*	3.942	28.59	11.27	39.86	56.00	-16.14	QP	N
6*	21.206	26.73	11.79	38.52	60.00	-21.48	QP	N
7*	0.242	23.49	10.69	34.18	52.03	-17.85	AV	N
8*	0.578	24.75	10.86	35.61	46.00	-10.39	AV	N
9*	1.010	23.31	10.84	34.15	46.00	-11.85	AV	N
10*	1.346	21.26	11.01	32.27	46.00	-13.73	AV	N
11*	2.598	17.76	11.20	28.96	46.00	-17.04	AV	N
12*	26.258	14.38	11.80	26.18	50.00	-23.82	AV	N



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS

Below 1 GHz

Frequency (MHz)	Class A	Class B
	Field strength (dBuV/m) (at 3m)	Field strength (dBuV/m) (at 3m)
30 - 88	49.5	40
88 - 216	53.9	43.5
216 - 960	56.9	46
Above 960	60	54

Above 1 GHz

Frequency (MHz)	Class A		Class B	
	Field strength (dBuV/m) (at 3m)		Field strength (dBuV/m) (at 3m)	
	Peak	Average	Peak	Average
Above 1000	80	60	74	54

Frequency Range of Radiated Disturbance Measurement

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 - 108	1000
108 - 500	2000
500 - 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

Note:

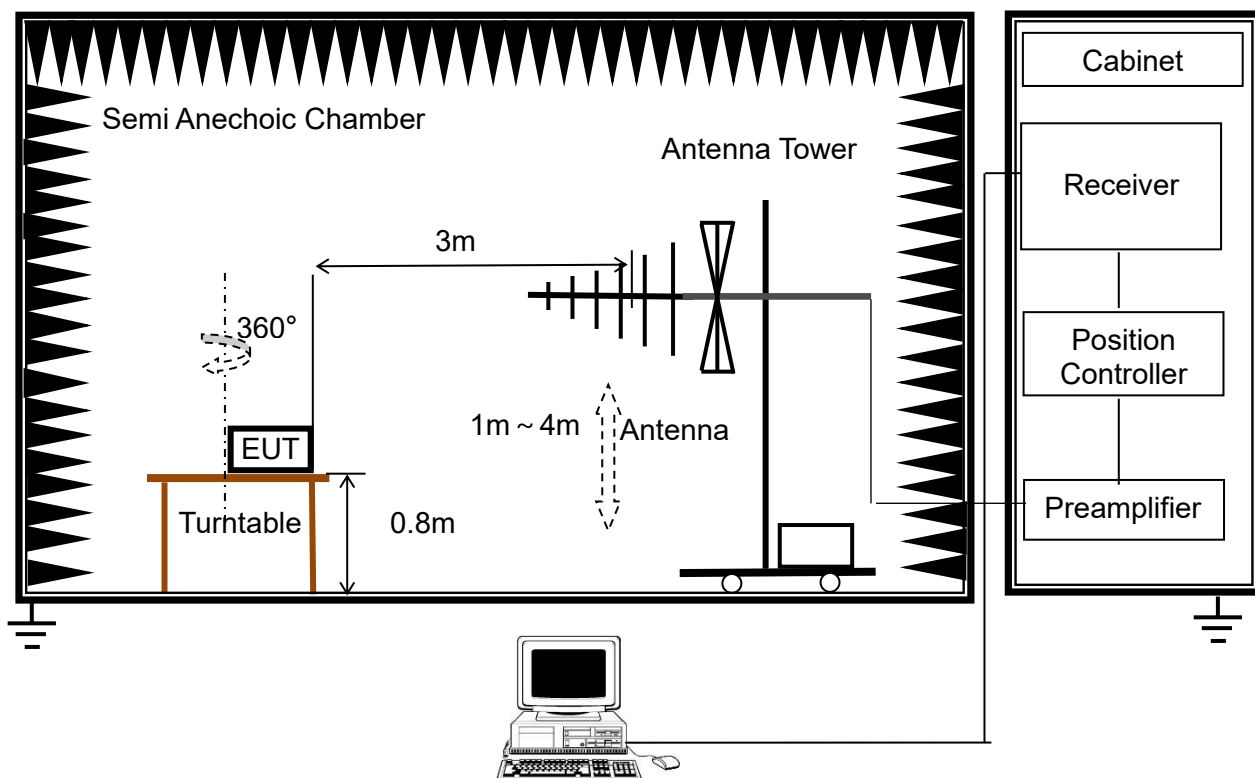
- (1) The limit for radiated test was performed according to FCC Part 15, Subpart B;
- (2) The tighter limit applies at the band edges;
- (3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use),
Margin Level = Measurement Value - Limit Value.

3.2.2 TEST PROCEDURE

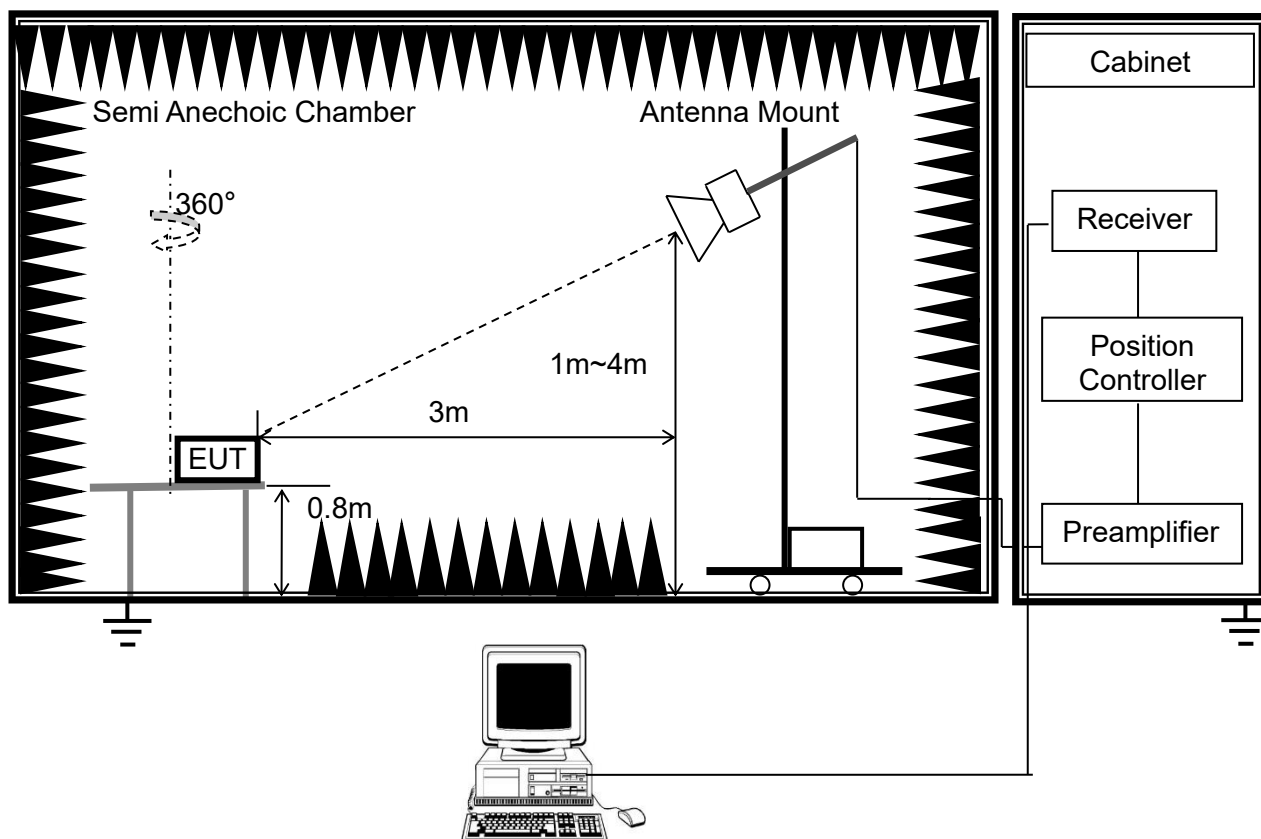
- a. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. EUT as the center to the edge of the auxiliary device, the distance from the maximum edge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

3.2.3 TEST SETUP

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



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

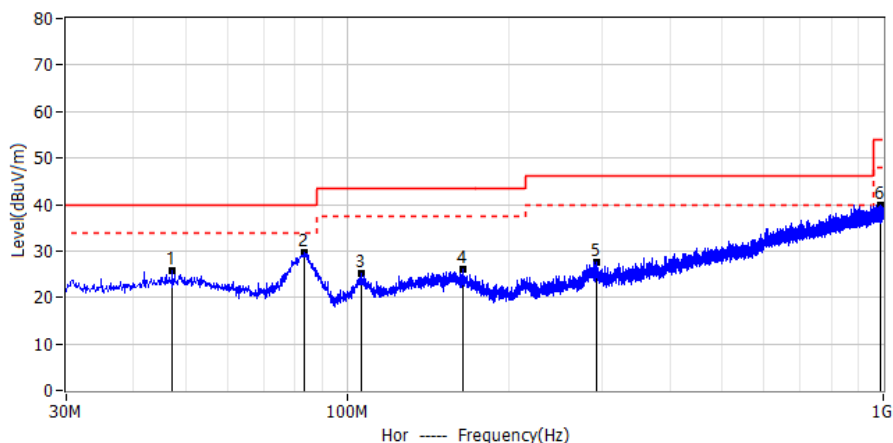




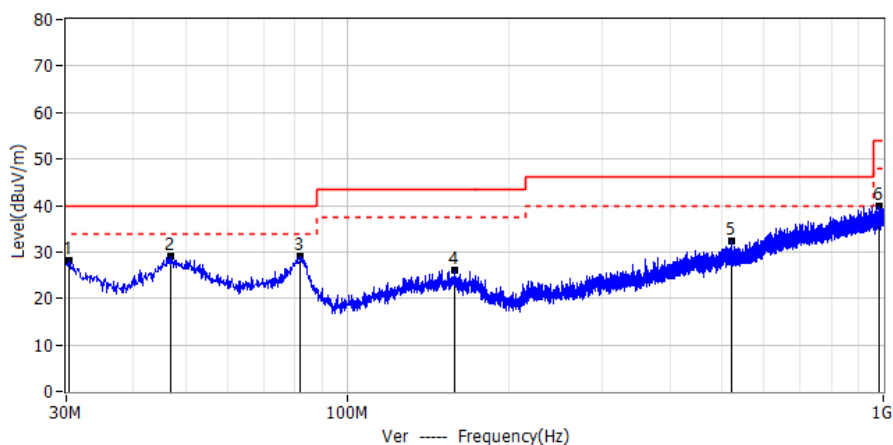
3.2.4 TEST RESULTS

BELOW 1GHZ

Project: LGT25L088	Test Engineer: LiuH
EUT: TABLET	Temperature: 22.1°C
M/N: TAB R11 Pro	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-12-09
Test Mode: Charging+GSM link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone	
Note:	



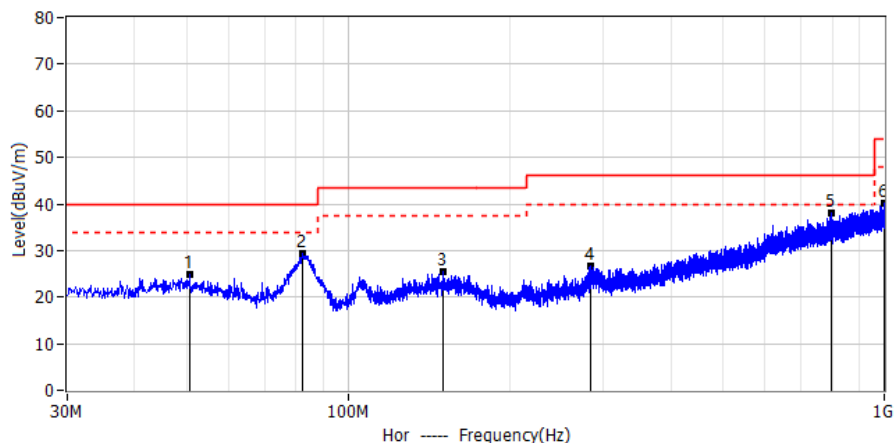
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	47.339	5.07	20.65	25.72	40.00	-14.28	QP	Hor
2*	83.471	12.88	16.73	29.61	40.00	-10.39	QP	Hor
3*	106.388	7.48	17.78	25.26	43.50	-18.24	QP	Hor
4*	164.345	4.60	21.52	26.12	43.50	-17.38	QP	Hor
5*	291.294	5.62	21.86	27.48	46.00	-18.52	QP	Hor
6*	985.935	4.42	35.42	39.84	54.00	-14.16	QP	Hor



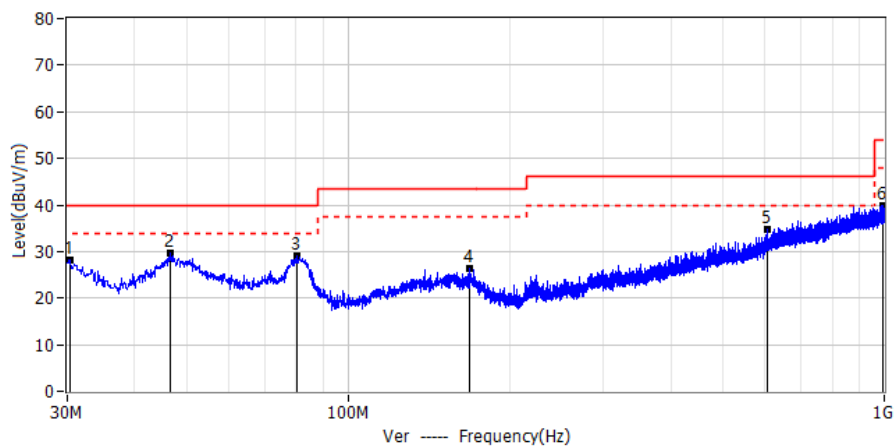
No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	30.364	8.46	19.57	28.03	40.00	-11.97	QP	Ver
2*	46.854	8.41	20.72	29.13	40.00	-10.87	QP	Ver
3*	81.774	12.41	16.65	29.06	40.00	-10.94	QP	Ver
4*	159.253	3.93	22.13	26.06	43.50	-17.44	QP	Ver
5*	522.639	4.41	27.90	32.31	46.00	-13.69	QP	Ver
6*	980.964	4.56	35.18	39.74	54.00	-14.26	QP	Ver



Project: LGT25L088	Test Engineer: LiuH
EUT: TABLET	Temperature: 22.1°C
M/N: TAB R11 Pro	Humidity: 55%RH
Test Voltage: Battery	Test Data: 2025-12-09
Test Mode: USB Data Transmission	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	50.734	4.02	20.88	24.90	40.00	-15.10	QP	Hor
2*	82.380	12.53	16.69	29.22	40.00	-10.78	QP	Hor
3*	150.886	3.48	21.89	25.37	43.50	-18.13	QP	Hor
4*	283.898	5.28	21.47	26.75	46.00	-19.25	QP	Hor
5*	795.936	5.14	32.96	38.10	46.00	-7.90	QP	Hor
6*	1000.000	4.89	35.26	40.15	54.00	-13.85	QP	Hor

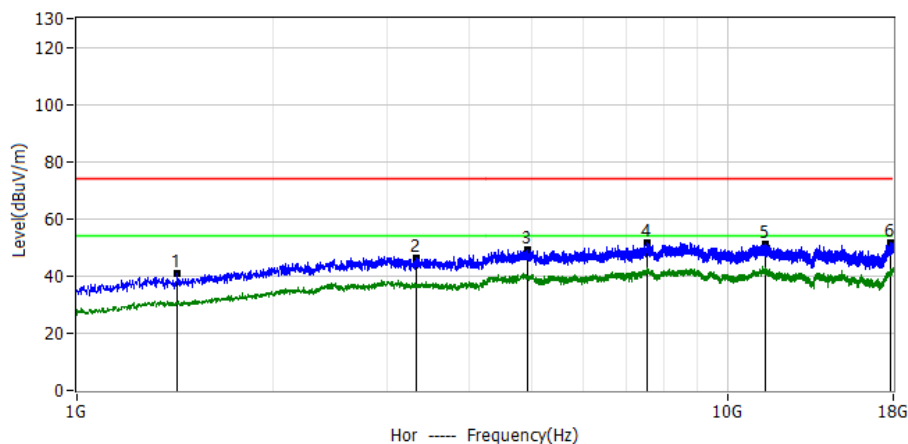


No.	Frequency MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	30.364	8.72	19.57	28.29	40.00	-11.71	QP	Ver
2*	46.733	8.88	20.71	29.59	40.00	-10.41	QP	Ver
3*	80.319	12.57	16.47	29.04	40.00	-10.96	QP	Ver
4*	168.710	5.12	21.26	26.38	43.50	-17.12	QP	Ver
5*	606.665	5.37	29.49	34.86	46.00	-11.14	QP	Ver
6*	996.969	4.74	35.13	39.87	54.00	-14.13	QP	Ver

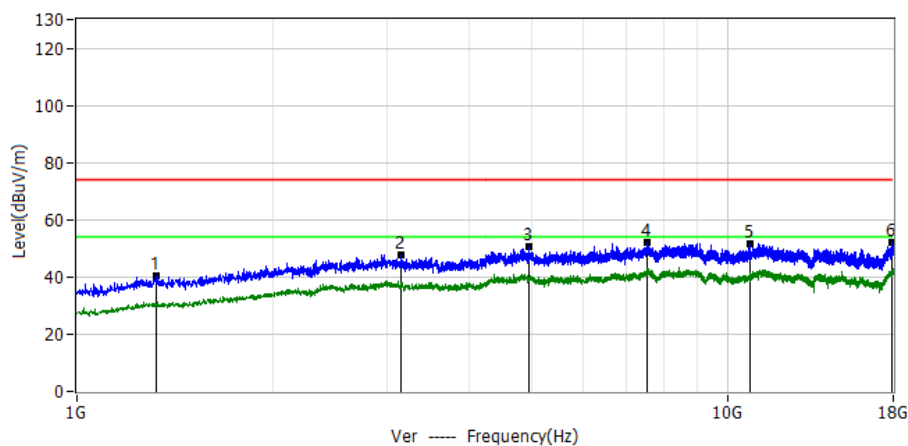


ABOVE 1GHZ

Project: LGT25L088	Test Engineer: LiuH
EUT: TABLET	Temperature: 22.1°C
M/N: TAB R11 Pro	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-12-09
Test Mode: Charging+GSM link+BT+Wi-Fi+GPS+NFC+Camera recording+Earphone	
Note:	



No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.4271GHz	61.86	-20.94	40.92	74.00	-33.08	PK	Hor
2*	3.3184GHz	54.72	-8.24	46.48	74.00	-27.52	PK	Hor
3*	4.9249GHz	55.22	-5.95	49.27	74.00	-24.73	PK	Hor
4*	7.5280GHz	58.48	-7.05	51.43	74.00	-22.57	PK	Hor
5*	11.4210GHz	56.39	-5.03	51.36	74.00	-22.64	PK	Hor
6*	17.7939GHz	55.26	-3.42	51.84	74.00	-22.16	PK	Hor



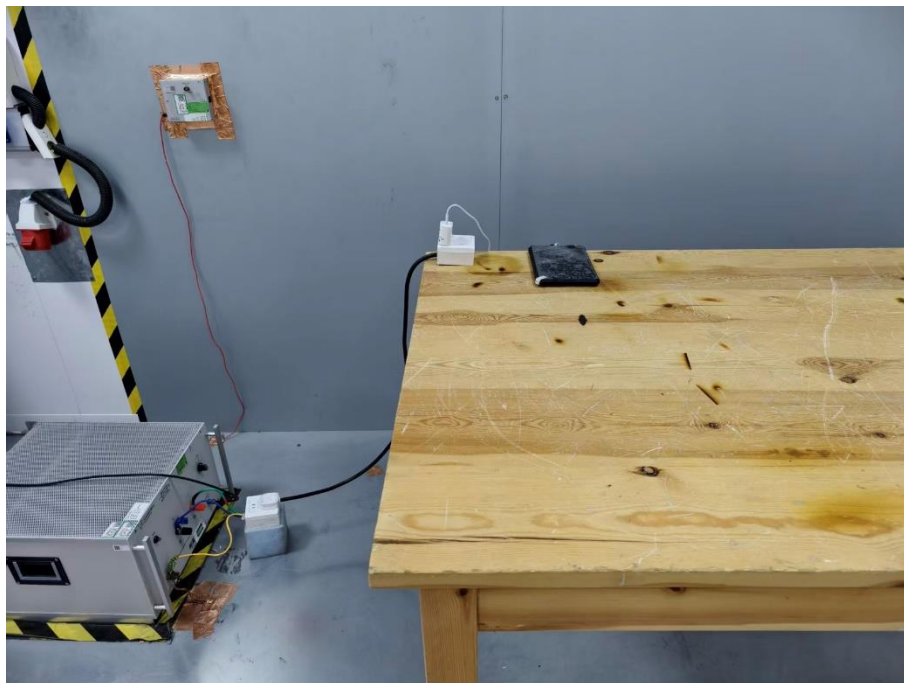
No.	Frequency	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1.3251GHz	62.35	-21.89	40.46	74.00	-33.54	PK	Ver
2*	3.1484GHz	56.03	-8.17	47.86	74.00	-26.14	PK	Ver
3*	4.9610GHz	56.45	-5.98	50.47	74.00	-23.53	PK	Ver
4*	7.5365GHz	59.18	-7.06	52.12	74.00	-21.88	PK	Ver
5*	10.8472GHz	57.27	-5.44	51.83	74.00	-22.17	PK	Ver
6*	17.9256GHz	55.33	-3.07	52.26	74.00	-21.74	PK	Ver

Remark:

In frequency ranges 18~40GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report. No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.

APPENDIX I - TEST SETUP

Set-up for Conducted Emission on AC Mains (CE)



Set-up for Radiated Emission (RE), Below 1GHz



Set-up for Radiated Emission (RE), Above 1GHz



APPENDIX II - PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

Photo 1



Photo 2

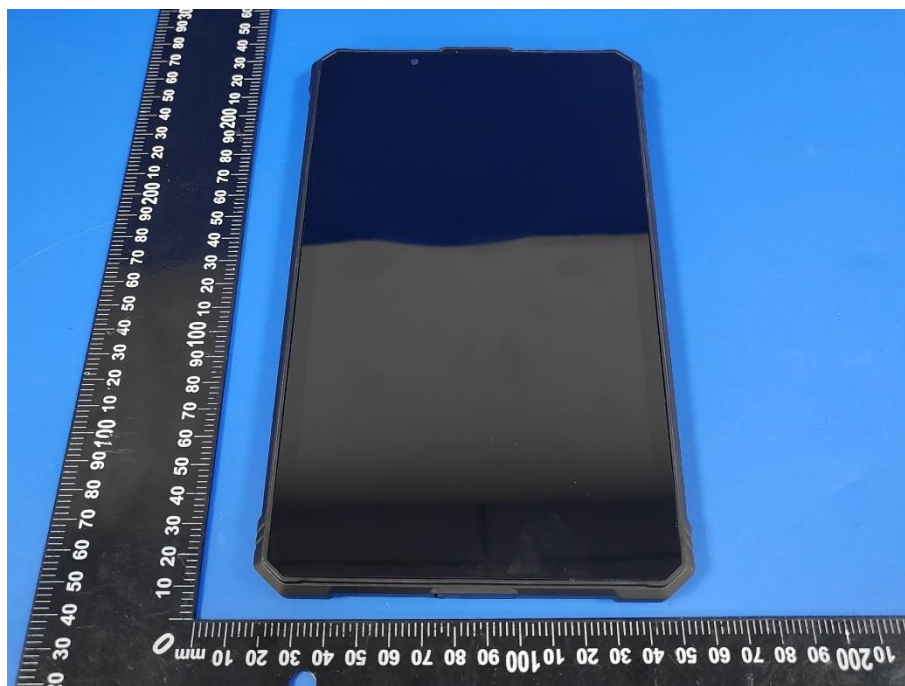


Photo 3

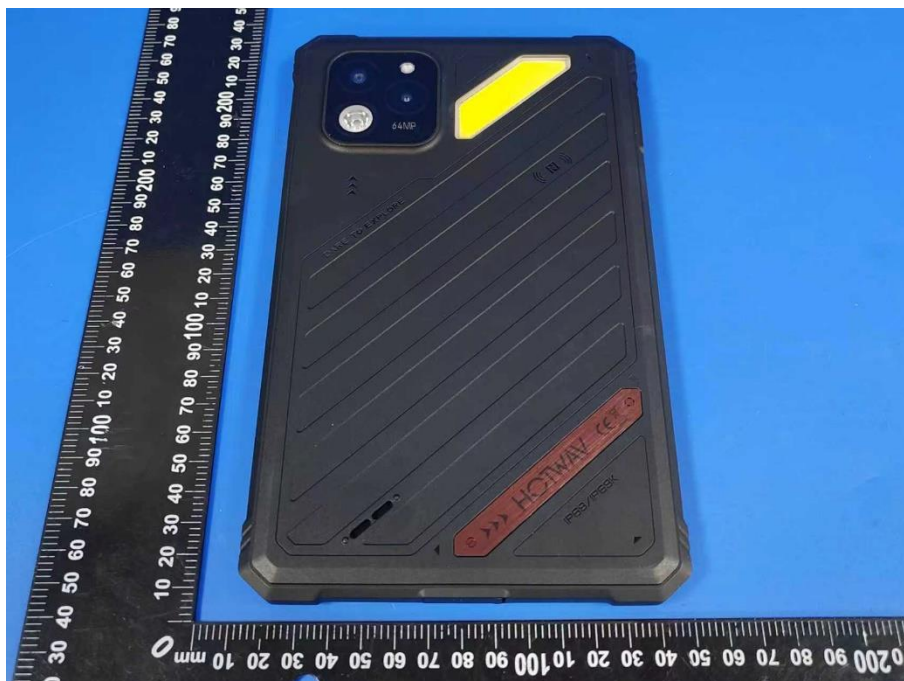


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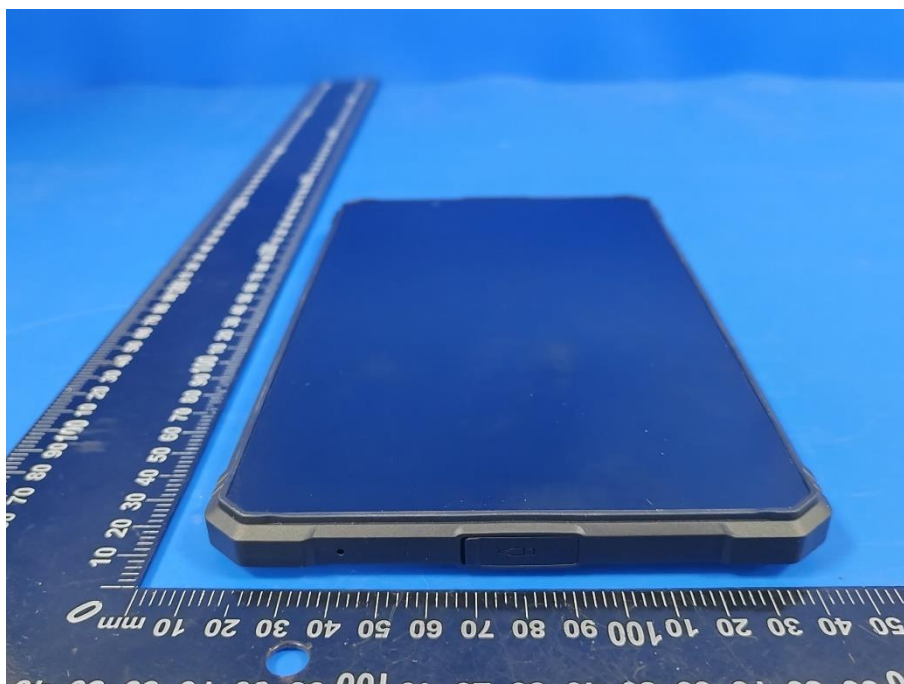


Photo 5

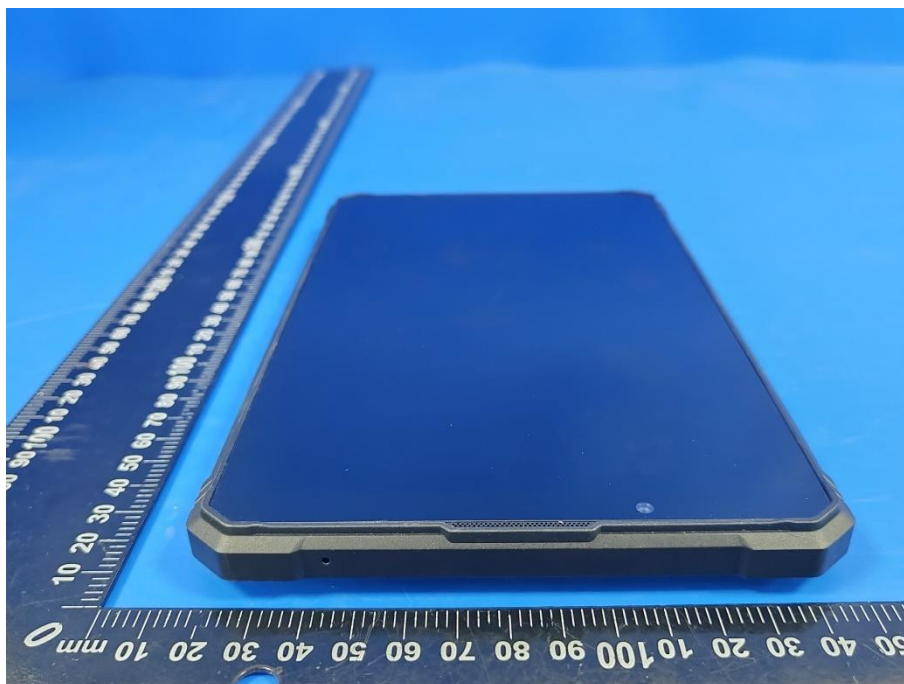


Photo 6

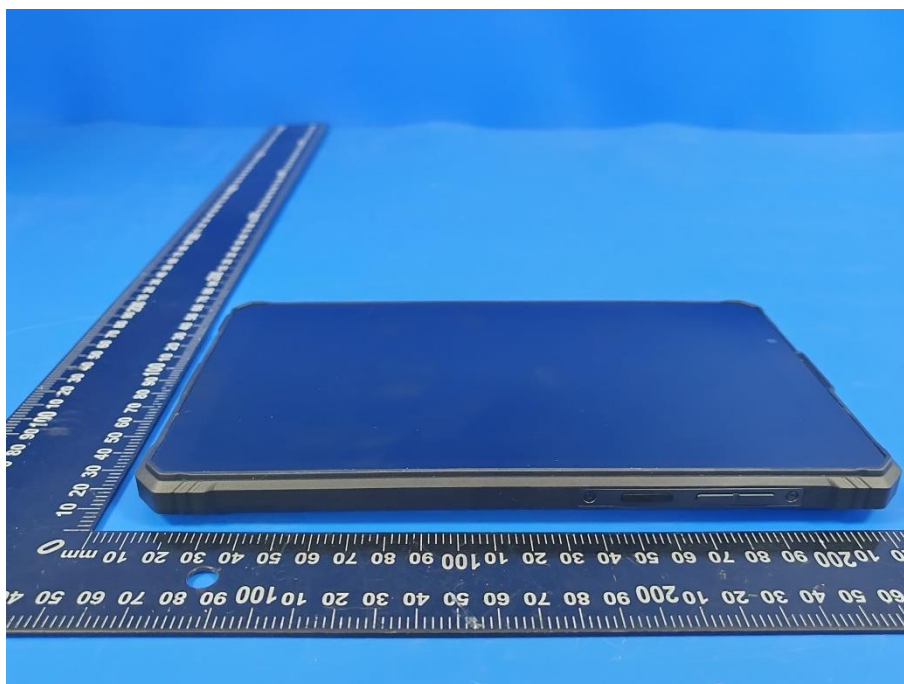


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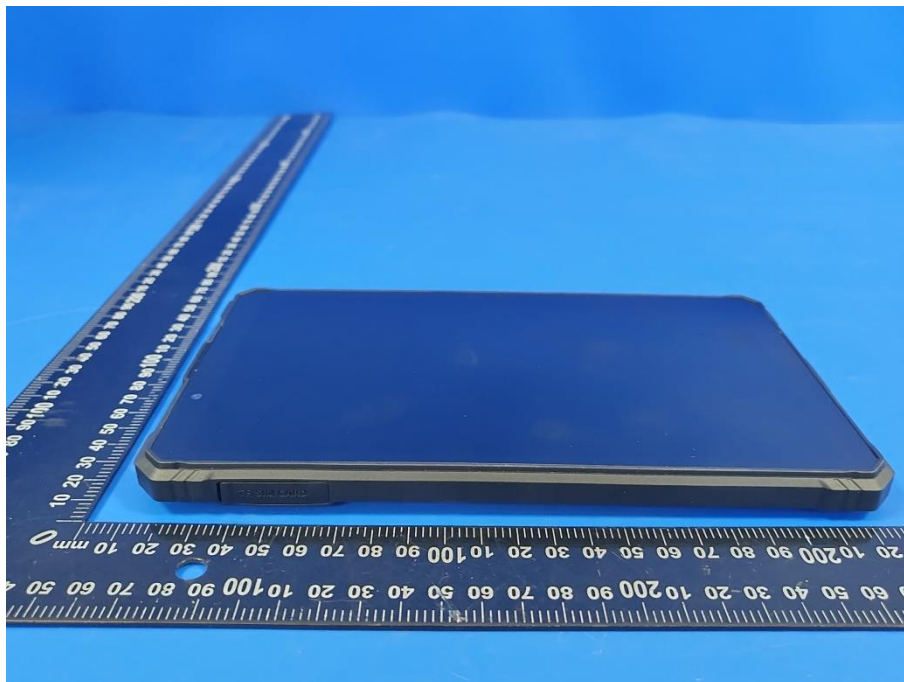


Photo 8



Photo 9

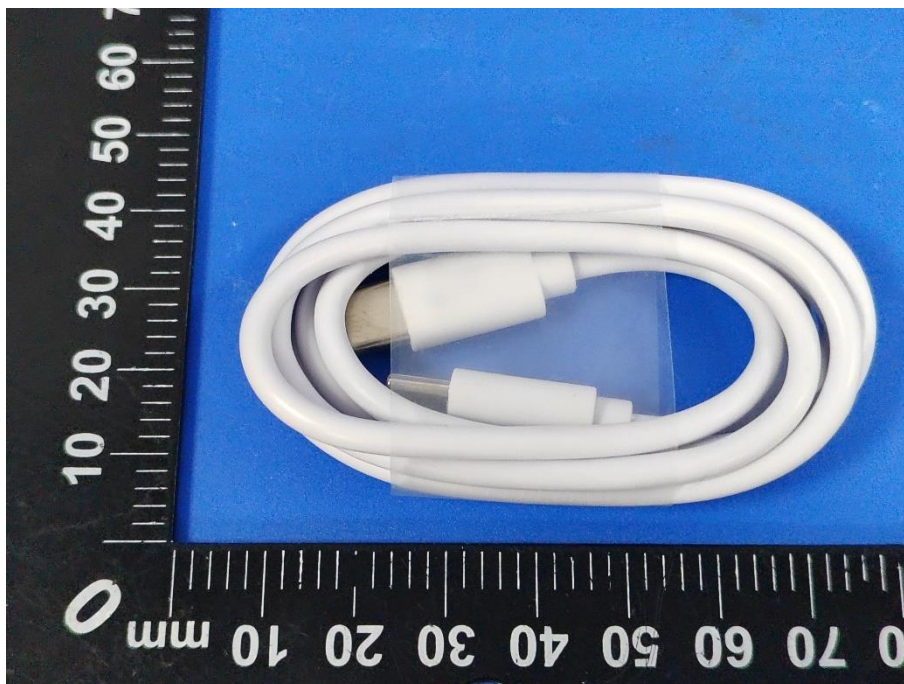


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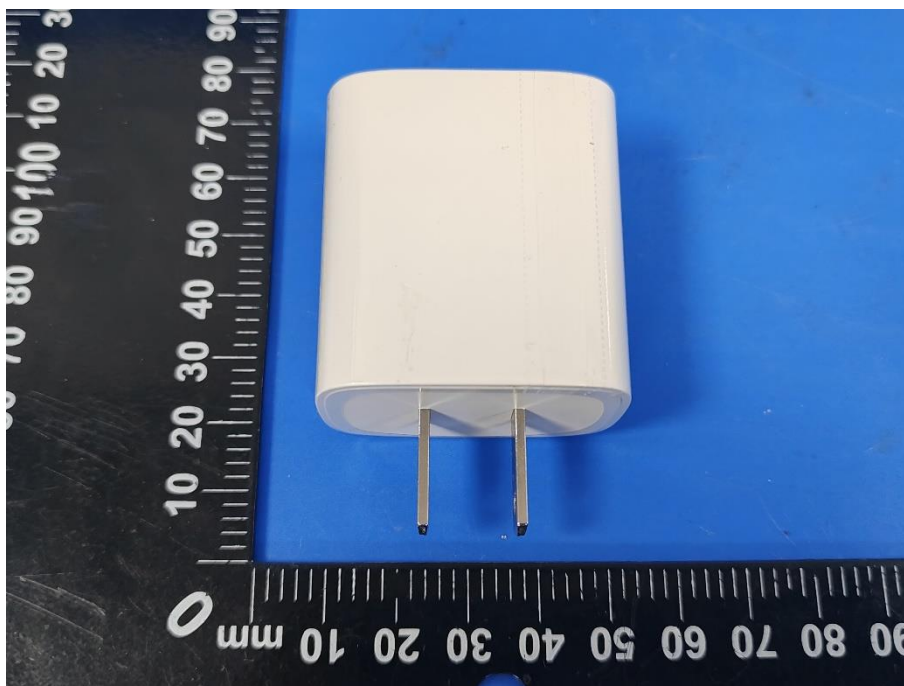


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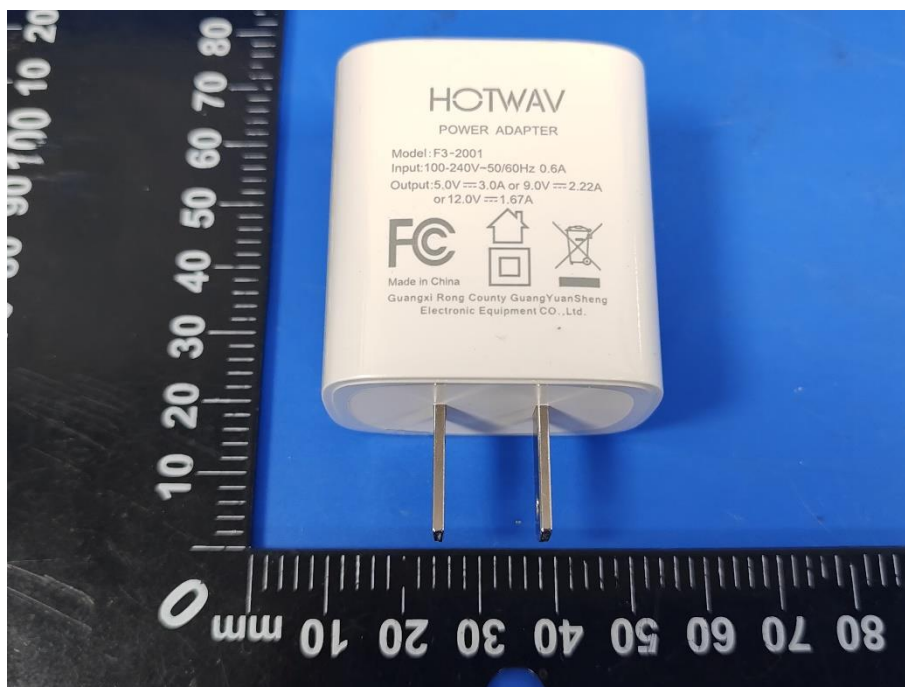


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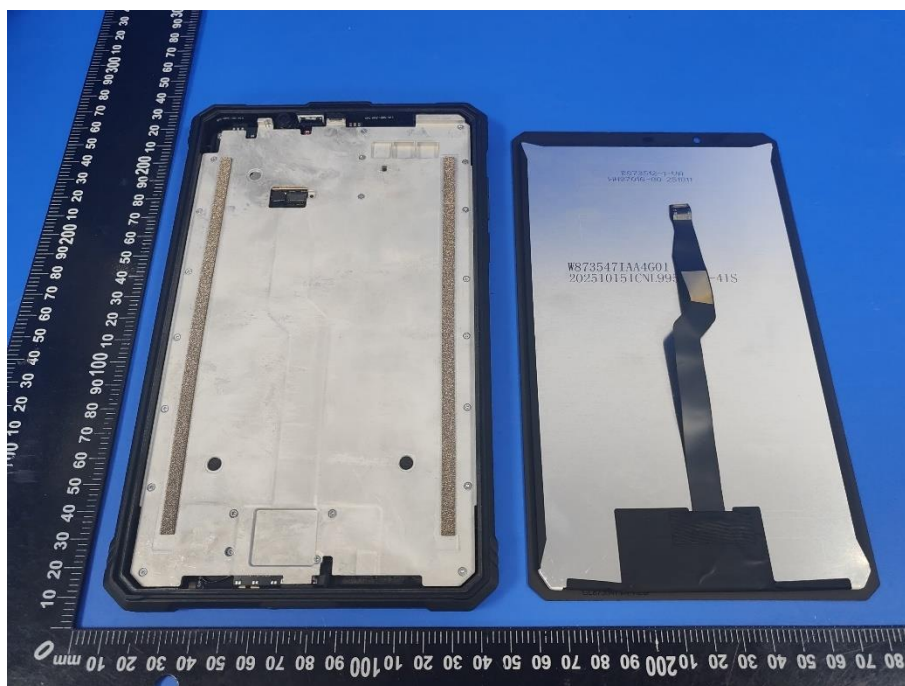


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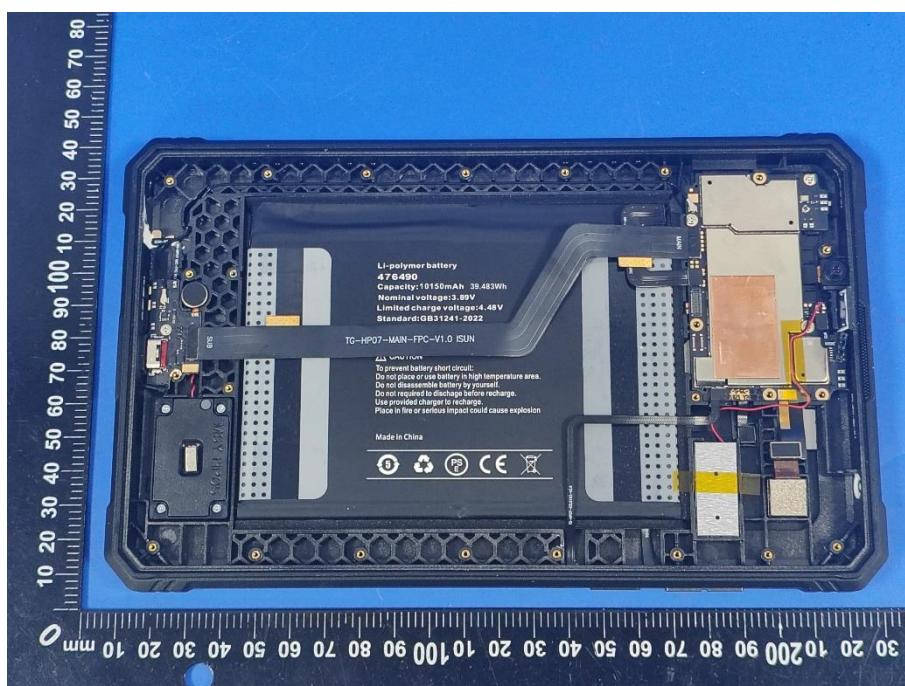


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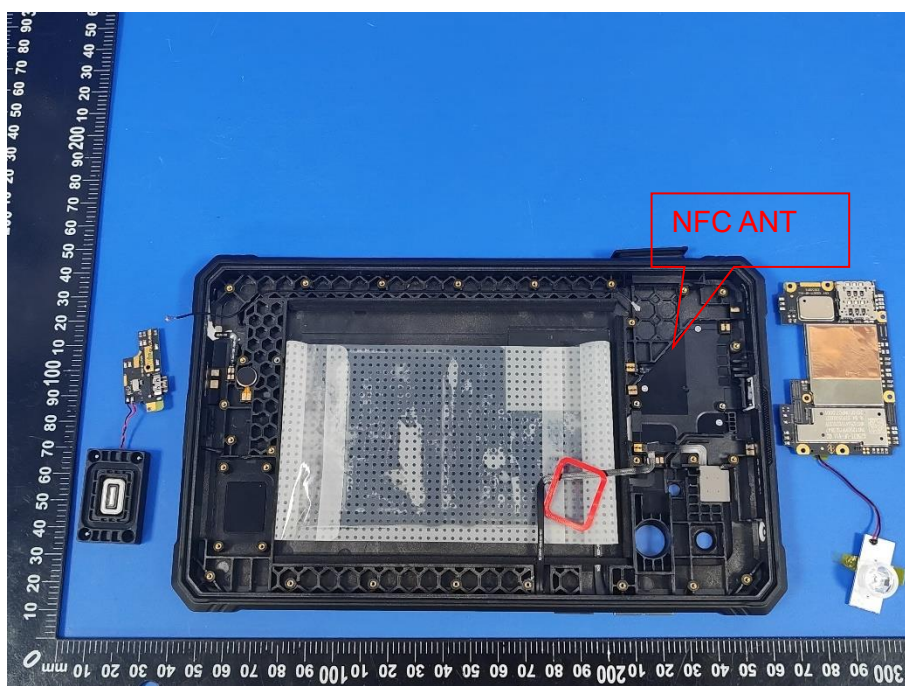


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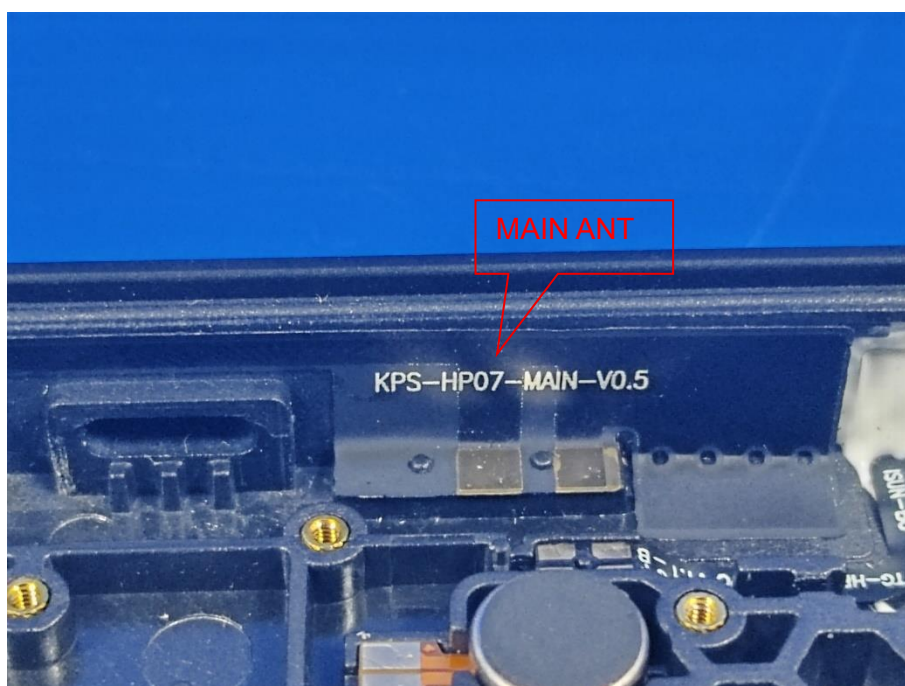


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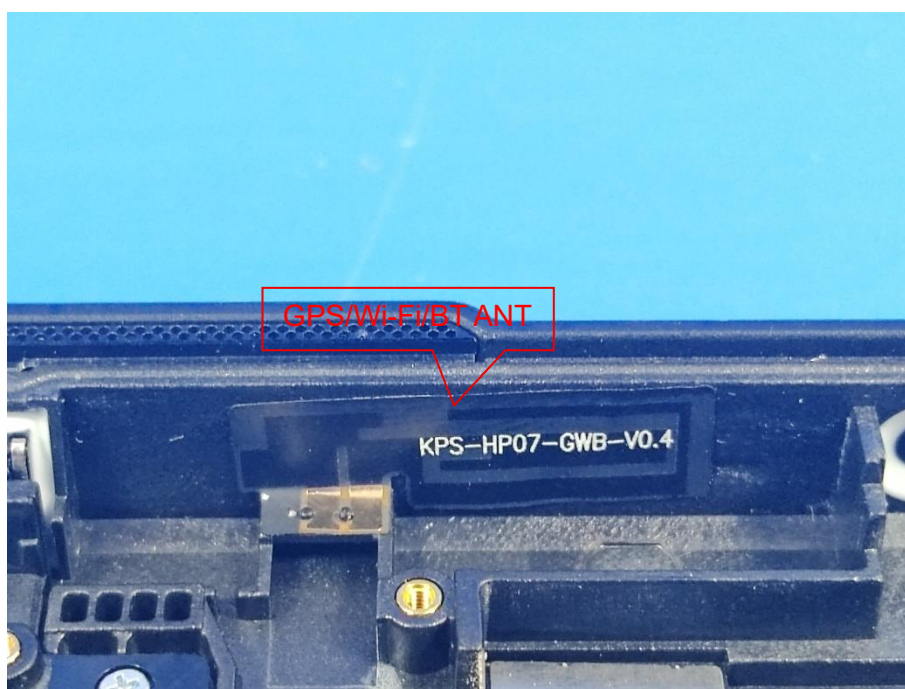


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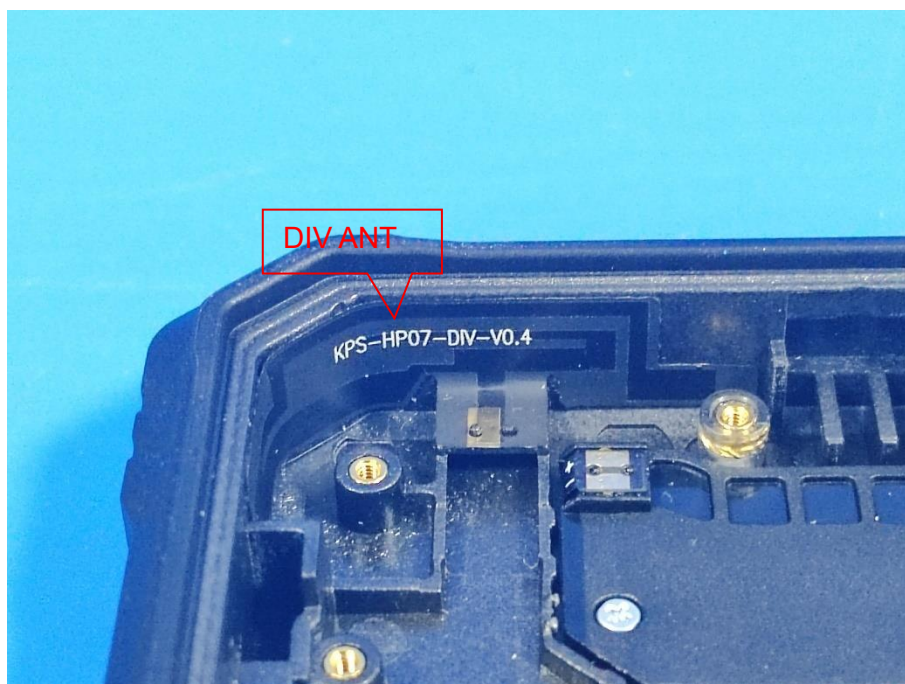


Photo 18



Photo 19

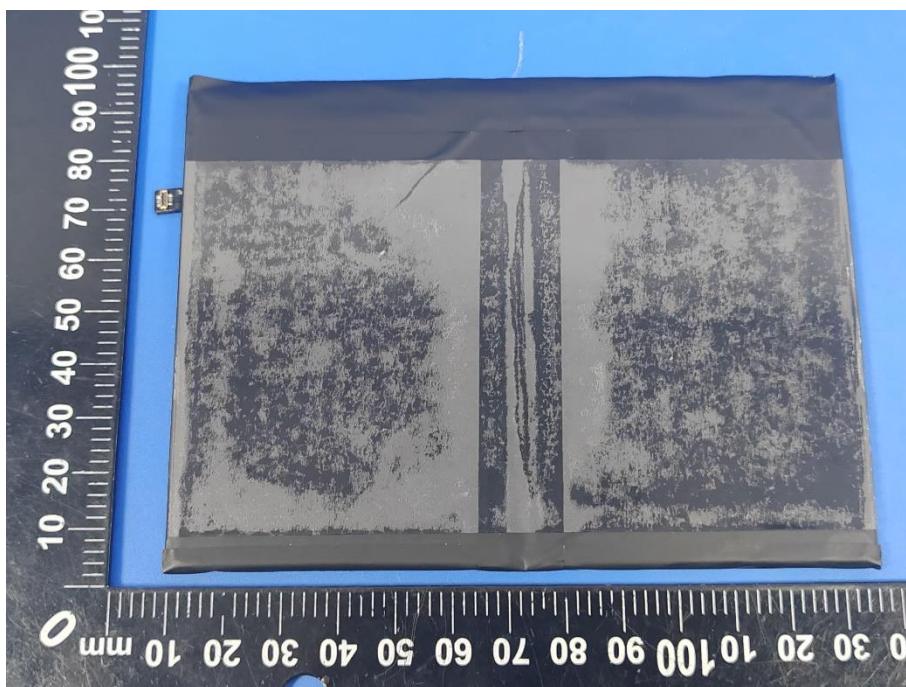


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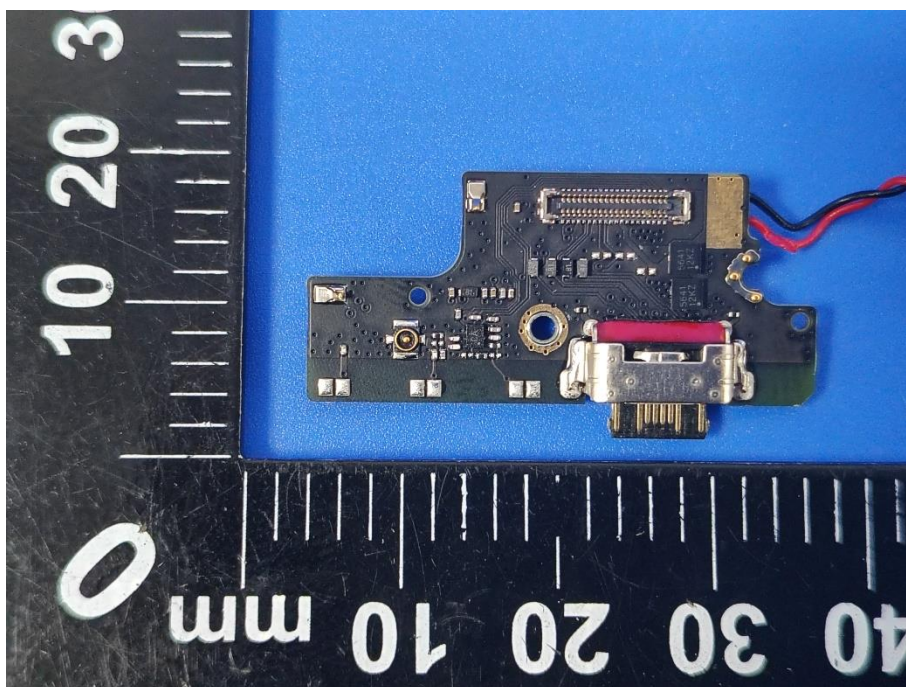


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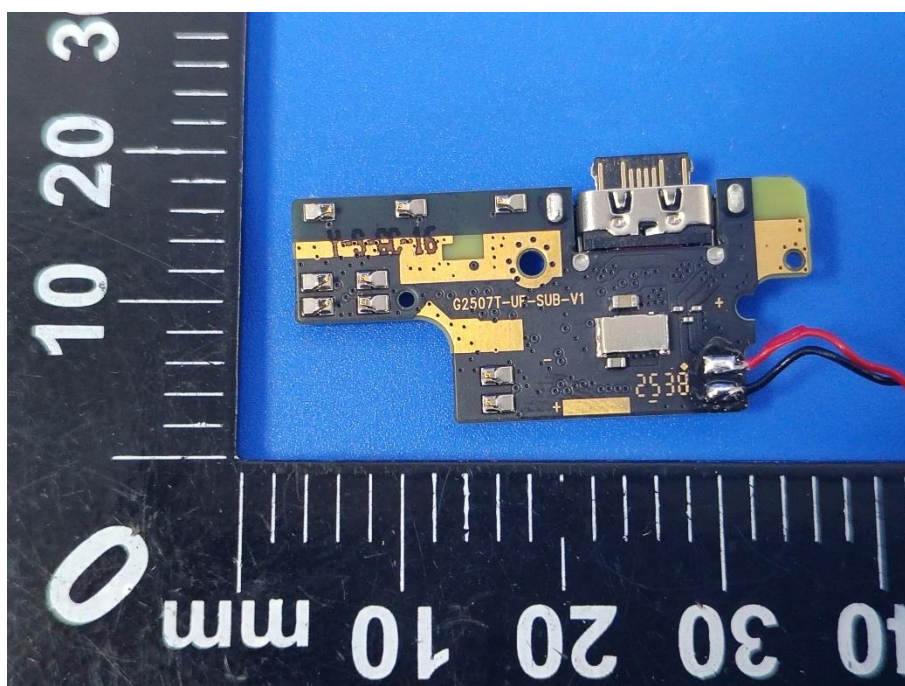


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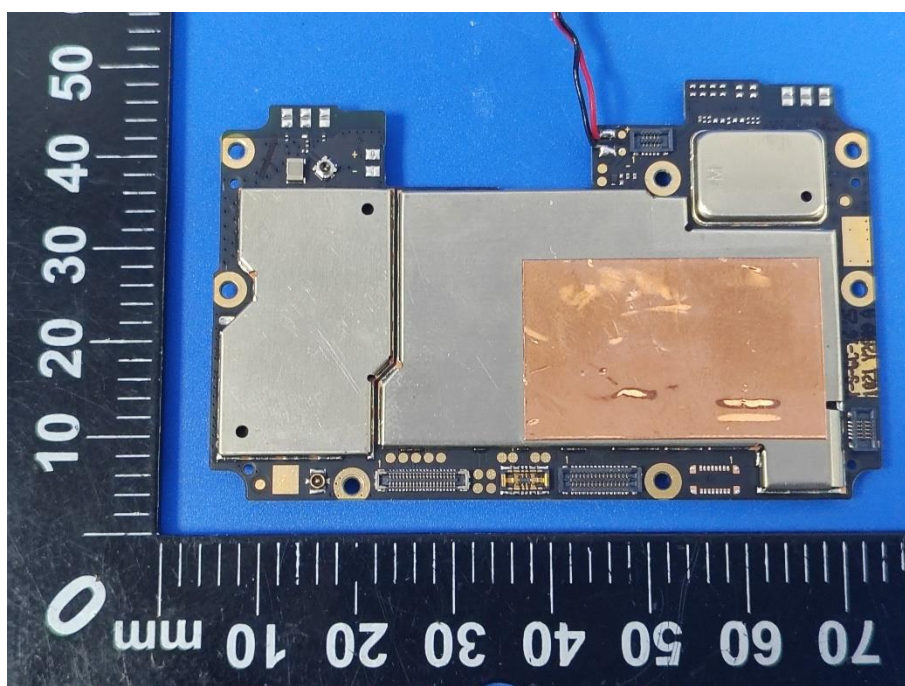


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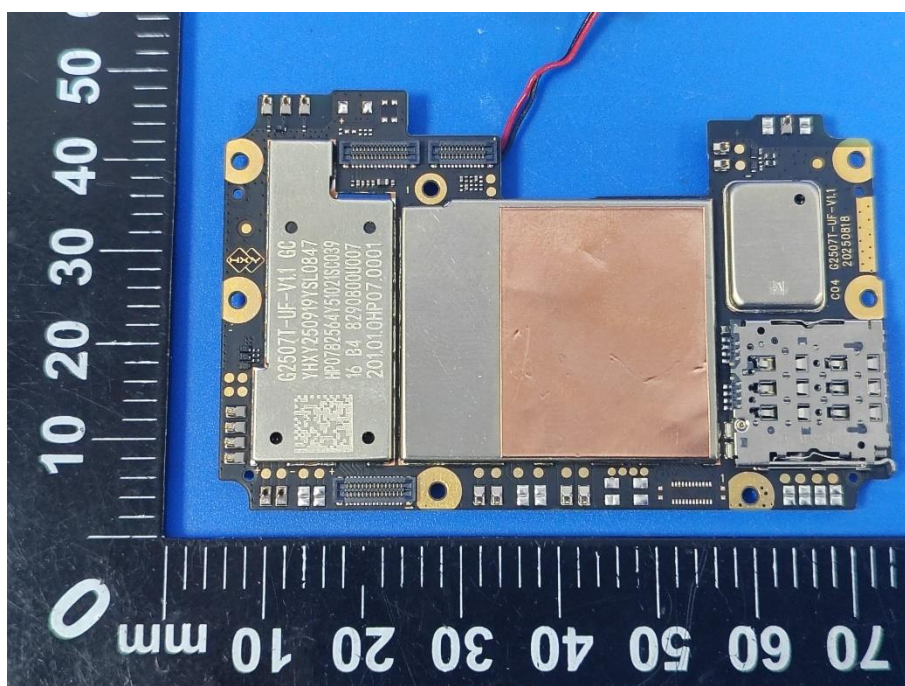


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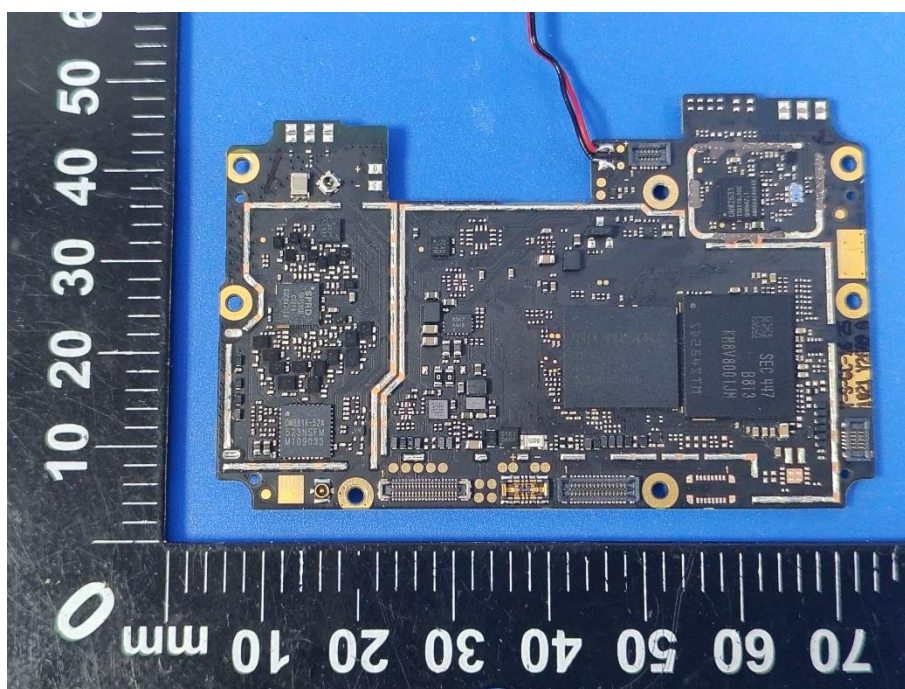


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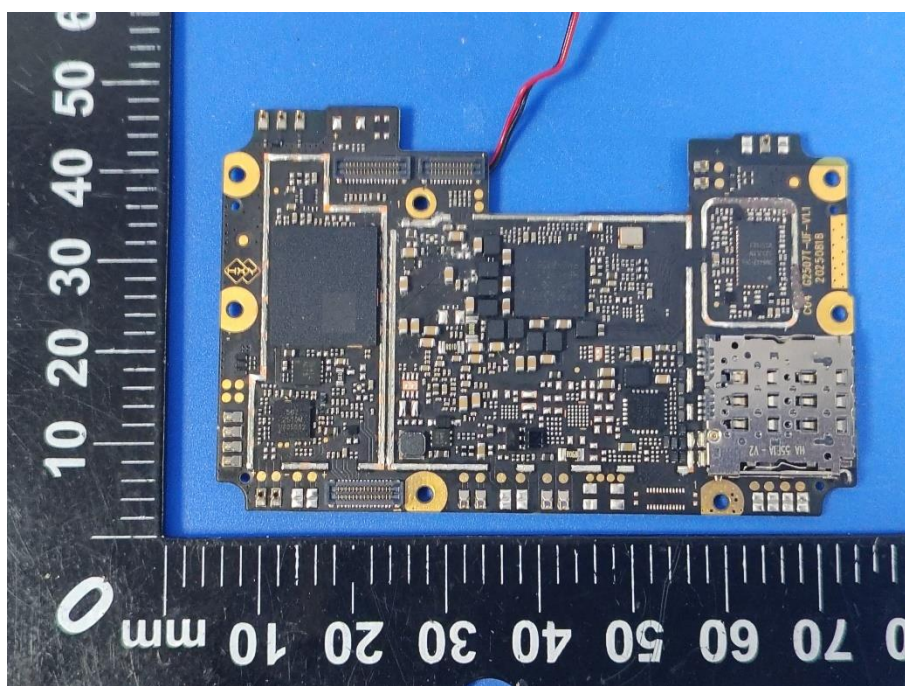


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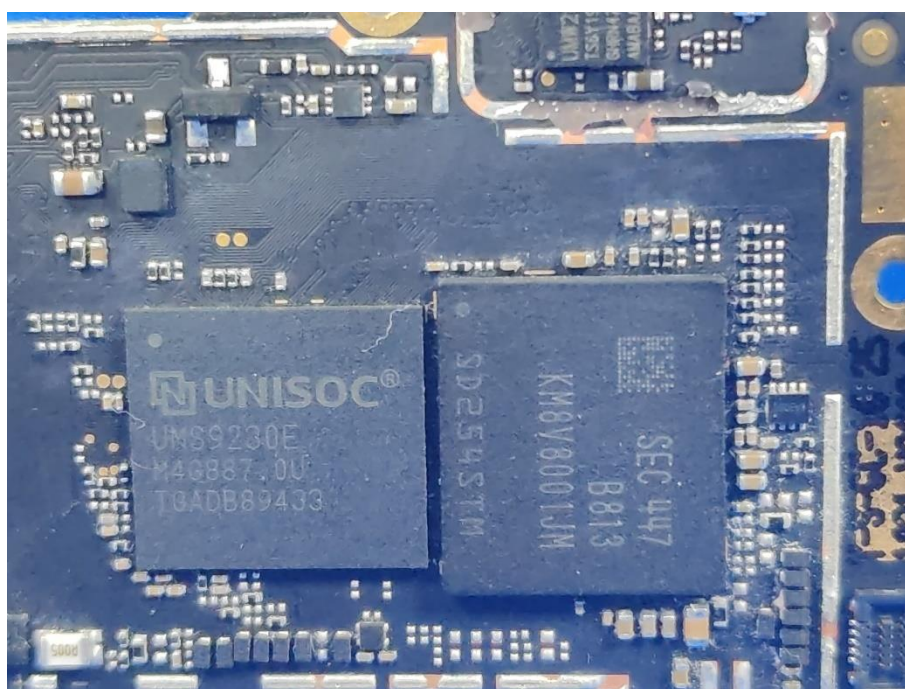


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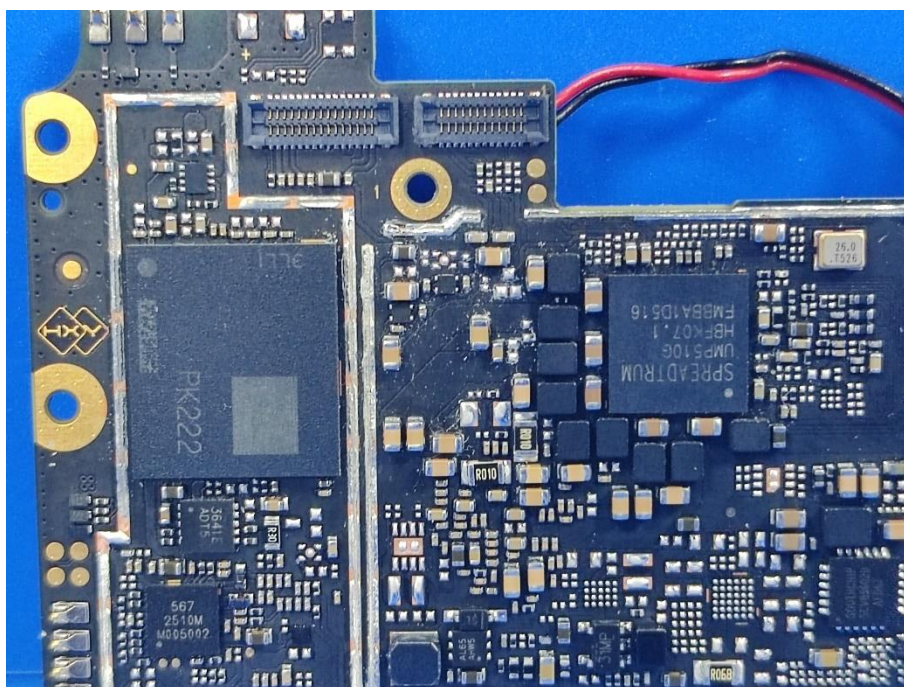
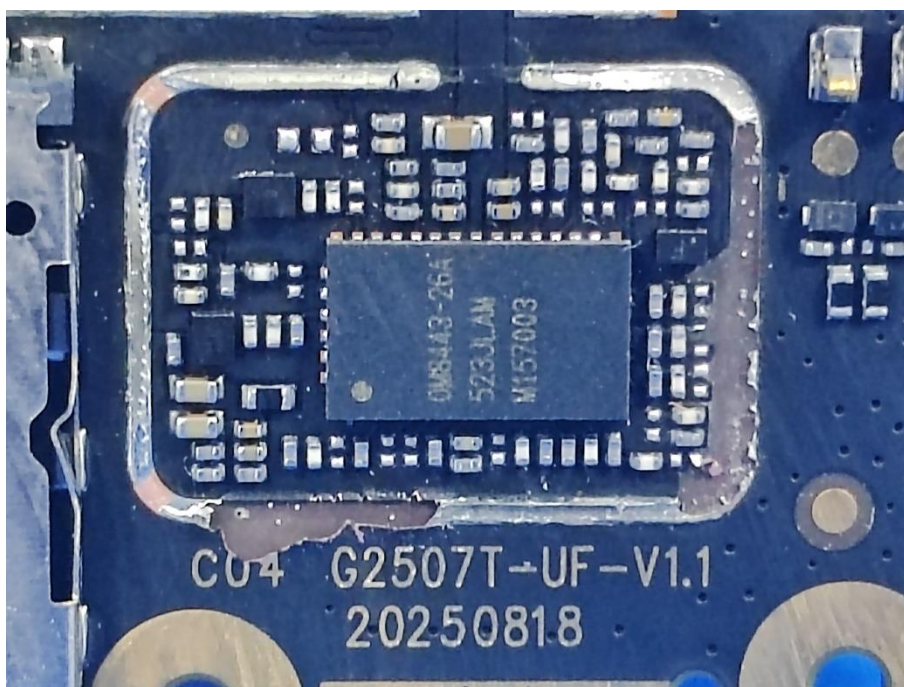


Photo 28



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