TEST REPORT

No. 24T04Z100472-012

for

Guangdong OPPO Mobile Telecommunications Corp., Ltd.

Mobile Phone

Model Name: CPH2625

FCC ID: R9C-OP23262

with

Hardware Version: 11

Software Version: ColorOS 14.1

Issued Date: 2024-05-06

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191.

Tel:+86(0)10-62304633-2512, Fax:+86(0)10-62304633-2504

Email: cttl_terminals@caict.ac.cn, website: www.caict.ac.cn

REPORT HISTORY

Report Number	Revision	Description	Issue Date
24T04Z100472-012	Rev.0	1st edition	2024-04-26
24T04Z100472-012	Rev.1	Test equipment has been update in P9 Clarified licensed frequency band between 30M-960M in P13 and P20. Modified the EUT ID on section 3.4.	2024-05-06

Note: the latest revision of the test report supersedes all previous version.

CONTENTS

1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Location 1: CTTL(huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China100191

Location 2: CTTL(BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing, 100176, P. R. China

1.3. Testing Environment

Normal Temperature: 15-35° C

Relative Humidity: 20-75%

1.4. Project data

Testing Start Date: 2024-04-17

Testing End Date: 2024-04-25

1.5. Signature

Zhang Ying

(Prepared this test report)

An Hui

(Reviewed this test report)

Zhang Xia

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address /Post:	NO.18 HaiBin Road, Wusha Village, Chang'an Town, DongGuan City, Guangdong Province, P.R. China
Contact:	DongGuan
Email:	/
Telephone:	(86)76986076999
Fax:	/

2.2. Manufacturer Information

Company Name:	Guangdong OPPO Mobile Telecommunications Corp., Ltd.
Address /Post:	NO.18 HaiBin Road, Wusha Village, Chang'an Town, DongGuan City, Guangdong Province, P.R. China
Contact:	DongGuan
Email:	/
Telephone:	(86)76986076999
Fax:	/

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

Description	Mobile Phone
Model Name	CPH2625

Note: The EUT functions are described in Annex A of this test report. Specifications of the EUT were provided to fulfil the test. Samples undergoing test were selected by the client. Components list, please refer to documents of the manufacturer; it is also included in the original test record of CTTL,Telecommunication Technology Labs,CAICT

3.2. Internal Identification of EUT

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
UT09a	869029070036479	11	ColorOS 14.1	2024-04-03

*EUT ID: is used to identify the test sample in the lab internally. The HW and SW version information were provided by the applicant.

3.3. Internal Identification of AE

AE ID*	Description	Note	Manufacturer
AE1-1	Battery	BLPA59	Sunwoda
AE1-2	Battery	BLPA59	TWS Technology(GuangZhou) Limited
AE2-1	Charger	VCB8OAUH	Huizhou Golden Lake Industrial Co., Ltd
AE2-2	Charger	VCB8OAUH	Dongguan Aohai Technolgy Co., Ltd.
AE3	USB cable	/	/
AE4-1	Charger	VCB8OAEH	Aohai
AE4-2	Charger	VCB8OAEH	GoldenLake
AE4-3	Charger	VCB8OATH	Aohai
AE4-4	Charger	VCB8OAAH	Aohai
AE4-5	Charger	VCB8OAYH	Aohai
AE4-6	Charger	VCB8OAUH	Aohai
AE4-7	Charger	VCB8OAUH	GoldenLake

*AE ID: is used to identify the test sample in the lab internally.

3.4. EUT set-ups

EUT set-up No.	Combination of EUT and AE	Remarks
Set.3	UT09a + AE1-1 + AE2-1 + AE3	Charger 1
Set.4	UT09a + AE1-1 + AE2-2 + AE3	Charger 2
Set.5	UT09a + AE1-1 +AE3+ PC	PC

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters, referring to Annex A for detailed information, were supplied by the client or manufacturer, which is the basis of testing. CAICT is not responsible for the accuracy of customer supplied technical information that may affect the test results (for example, antenna gain and loss of customer supplied cable).

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 15, Subpart B	Radio frequency devices - Unintentional Radiators	2023
ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014

Note: The test methods have no deviation with standards.

5. Test Results

Abbreviations used in this clause:		
Verdict Column	P	Pass
	F	Fail
	BR	Re-use test data from basic model report.
	NA	Not applicable
	NM	Not measured

Items	Test Name	Clause in FCC rules	Section in this report	Verdict	Test Location
1	Radiated Emission	15.109(a)	B.1	P	**CTTL(BDA) CTTL(huayuan North Road)**
2	Conducted Emission	15.107(a)	B.2	P	**CTTL(huayuan North Road)**

6. Test Facilities Utilized

Test instruments list:

huayuan North Road:

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	LISN	ENV216	101200	R&S	1 Year	2024-06-04
2	Test Receiver	ESCI	100344	R&S	2 years	2025-02-20

BDA:

No.	Equipment	Model	Serial Number	Manufacturer	Calibration Period	Calibration Due date
1	Test Receiver	ESCI	100766	R&S	2 years	2025-03-30
2	LISN	ENV216	101459	R&S	1 Year	2024-05-04
3	Test Receiver	ESU26	100376	R&S	1 Year	2024-05-29
4	EMI Antenna	VULB 9163	01223	SCHWARZBECK	1 year	2024-07-18
5	EMI Antenna	3117	00119021	ETS	1 Year	2024-05-24
6	Universal Communication Tester	CMW500	143008	R&S	2 years	2025-01-03
8	PC	E500-1042	2140770010640901850	Tsinghua Tongfang	N/A	N/A
9	Printer	1160	33740	HP	N/A	N/A
10	Keyboard	/	/	/	N/A	N/A
11	Mouse	/	/	/	N/A	N/A

Test software list:

Test Item	Test Software	Software Vendor
Conducted emission(huayuan North Road)	EMC32 V8.53.0	R&S
Radiated emission(huayuan North Road)	EMC32 V11.50.00	R&S
Radiated emission(BDA)	EMC32 V10.60.20	R&S

Semi-anechoic chamber utilized did not exceed following limits along the testing:

Temperature	Min. = 15 ˚C, Max. = 35 ˚C
Relative humidity	Min. = 15 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz, >60dB; 1MHz - 1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω
Normalised site attenuation (NSA)	< ±4 dB, 10 m distance
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 6GHz

Shielded room utilized did not exceed following limits along the testing:

Temperature	Min. = 15 ˚C, Max. = 35 ˚C
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	0.014MHz-1MHz, >60dB; 1MHz－1000MHz, >90dB.
Electrical insulation	> 2 MΩ
Ground system resistance	< 4 Ω

7. Measurement Uncertainty

Where relevant, the following measurement uncertainty(worse case) levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Location 1: CTTL(huayuan North Road)

Test item	Frequency ranges	Measurement uncertainty
Radiated Emission	30MHz-1GHz	4.72dB(k=2)
	1GHz-18GHz	4.84dB(k=2)
Conducted Emission	150kHz-30MHz	AC Power Line: 3.08dB(*k*=2)

Location 2: CTTL(BDA)

Test item	Frequency ranges	Measurement uncertainty
Radiated Emission	30MHz-1GHz	5.73dB(*k*=2)
	1GHz-18GHz	5.58dB(*k*=2)

ANNEX A: EUT parameters

Cellular Bands operate between 30MHz-960MHz	√GSM	Band 850MHz
	☐CDMA	Band
	√WCDMA	Band 5
	√LTE	Band 5/12/13/26
	√5G NR SA	Band 5/12/26
Other FCC Part 15B related features	☐FM √MP3 √MP4 √Camera √USB data √NFC	

ANNEX B: Detailed Test Results

B.1. Radiated Emission

Reference: FCC Part 15.109(a).

Method of measurement: The field strength of radiated emissions from the unintentional radiator at distances of 3/10 meters(for 30MHz-1GHz) and 3 meters (for above 1GHz) were tested. The test was in accordance with the procedures of ANSI C63.4 – 2014, section 8.3.
The EUT was placed on a non-conductive table. The measurement antenna was placed at the specified distance from the EUT. During the test, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

EUT operating mode: The EUT was operating in the USB data and/or charging mode. During the test, the EUT was connected to a charger in the case of charging mode. The EUT was tested while operating in licensed band Rx mode. All licensed band receivers that tune in the range of 30MHz-960MHz, as listed in Annex A (GSM 850MHz, WCDMA band5, LTE band 5/12/13/26, NR SA n12/26), were investigated. Only the worst case emissions are reported. All equipment was placed on the test table top and arranged in a typical configuration in accordance with ANSI C63.4-2014 and manipulated to obtain worst case emissions.
Note: Add 2/3/4G band 8 and 4G band 28 testing.

Measurement limit:

Frequency range (MHz)	Field strength limit (μV/m)		
	Quasi-peak	Average	Peak
30-88	100		
88-216	150		
216-960	200		
960-1000	500		
>1000		500	5000

Note: the above limit is for 3 meters test distance. The limits for 10 meters distance is got by converting: Limit(10m) = Limit(3m) + 20[log(3/10)], which is according to FCC 15.109(g)(2)

Test settings:

Frequency range (MHz)	RBW/VBW	Sweep Time (s)	Detector
30-1000	120kHz (IF Bandwidth)	5	Peak/Quasi-peak
Above 1000	1MHz/3MHz	15	Peak, Average

Measurement results:
A "reference path loss" is established and the A_{Rpl} is the attenuation of “reference path loss”. It

includes the antenna factor of receive antenna and the path loss.

The measurement results are obtained as described below:

Result = $P_{Mea} + A_{Rpl} = P_{Mea} + G_A + G_{PL}$

Where

G_A: Antenna factor of receive antenna

G_{PL}: Path Loss

P_{Mea}: Measurement result on receiver.

Note: The measurement results showed as followed are worst cases, and the combinations of different batteries, cables and headsets were considered if applicable.

Function Type:

Setup	Function	Conclusion
Set.3	Charger+Real Camera+ RX GSM850 idle	Pass
Set.3	Charger+Real Camera + RX GSM900 idle	Pass
Set.4	Charger+Front Camera+RX WCDMA band 5 idle	Pass
Set.4	Charger+Front Camera + RX WCDMA band 8 idle	Pass
Set.3	Charger+ MP4 + RX LTE band 8 idle	Pass
Set.4	Charger+MP4 + RX LTE band 12 idle	Pass
Set.3	Charger+MP4 + RX LTE band 13 idle	Pass
Set.4	Charger+MP4 + RX LTE band 26 idle	Pass
Set.3	Charger+MP4 + RX LTE band 28 idle	Pass
Set.4	Charger+ RX 5G n26 idle	Pass
Set.3	Charger+ RX 5G n12 idle	Pass
Set.5	USB TO PC	Pass

Note: Only the worst case emissions are reported.

Charger+Real Camera+ RX GSM850, Set.3

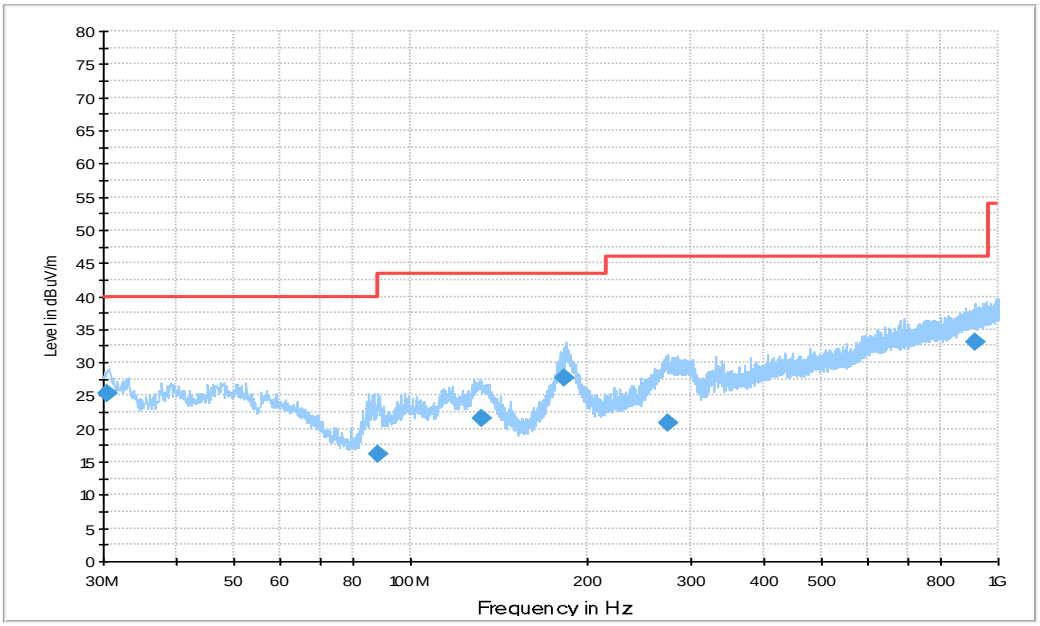

Figure A.1 Radiated Emission from 30MHz to 1GHz

QP detector

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
30.485000	25.4	40.0	14.6	100.0	V	114.0
87.812000	16.2	40.0	23.8	100.0	V	199.0
132.238000	21.7	43.5	21.8	100.0	V	45.0
183.163000	27.7	43.5	15.8	100.0	V	11.0
274.634000	20.9	46.0	25.1	100.0	V	281.0
915.222000	33.0	46.0	13.0	100.0	H	108.0

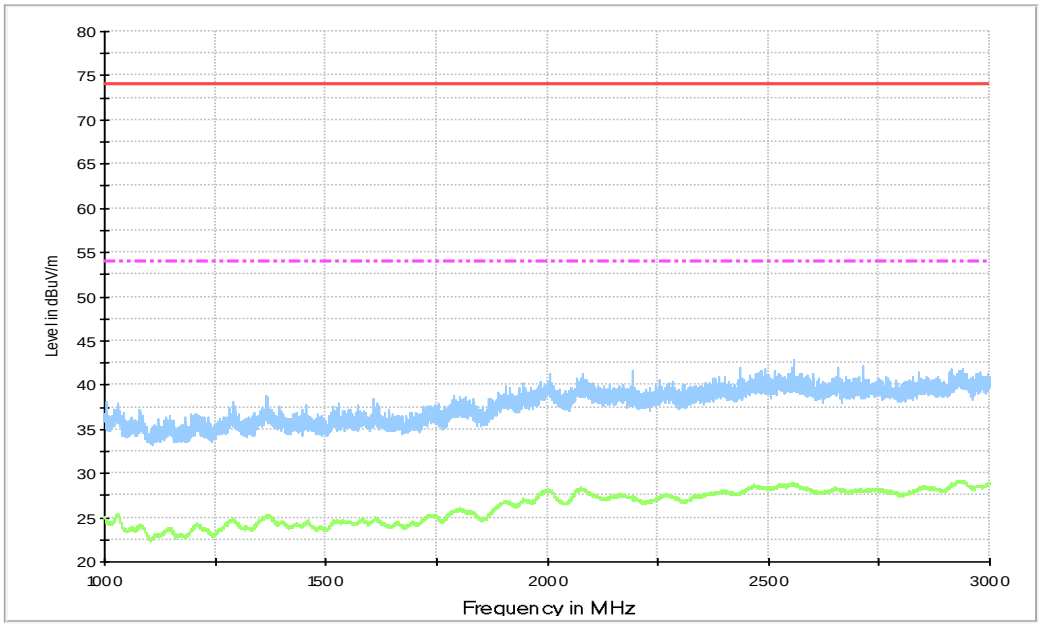

Figure A.2 Radiated Emission from 1GHz to 3GHz

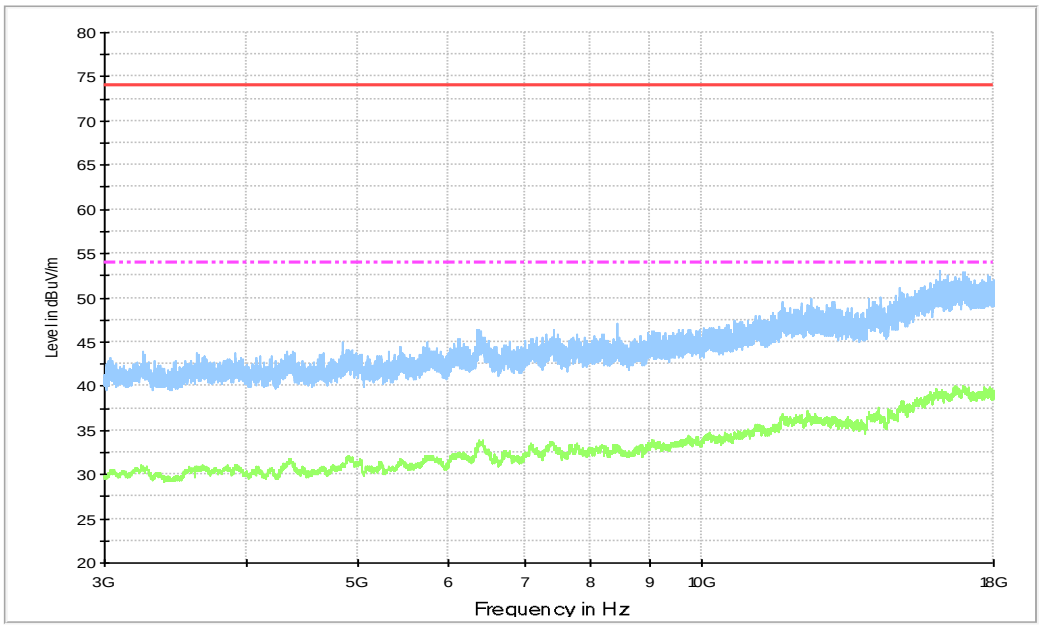

Figure A.2 Radiated Emission from 3GHz to 18GHz

Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16947.500	40.10	-24.1	41.2	22.97	54.0	13.9	V
16941.500	40.05	-24.2	41.2	23.02	54.0	14.0	V
16929.500	40.02	-24.4	41.2	23.21	54.0	14.0	V
16634.000	40.02	-24.7	41.4	23.25	54.0	14.0	V
16945.000	40.02	-24.1	41.2	22.94	54.0	14.0	V
16929.000	40.01	-24.4	41.2	23.19	54.0	14.0	V

Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
16172.000	53.1	-24.5	40.8	36.77	74.0	20.9	H
17006.000	53.0	-24.3	41.1	36.12	74.0	21.0	V
16922.500	52.9	-24.4	41.3	36.10	74.0	21.1	V
16940.500	52.7	-24.2	41.2	35.72	74.0	21.3	V
16413.500	52.5	-25.0	41.1	36.43	74.0	21.5	V
17804.500	52.5	-23.9	40.5	35.90	74.0	21.5	H

USB connected to PC mode, Set.5

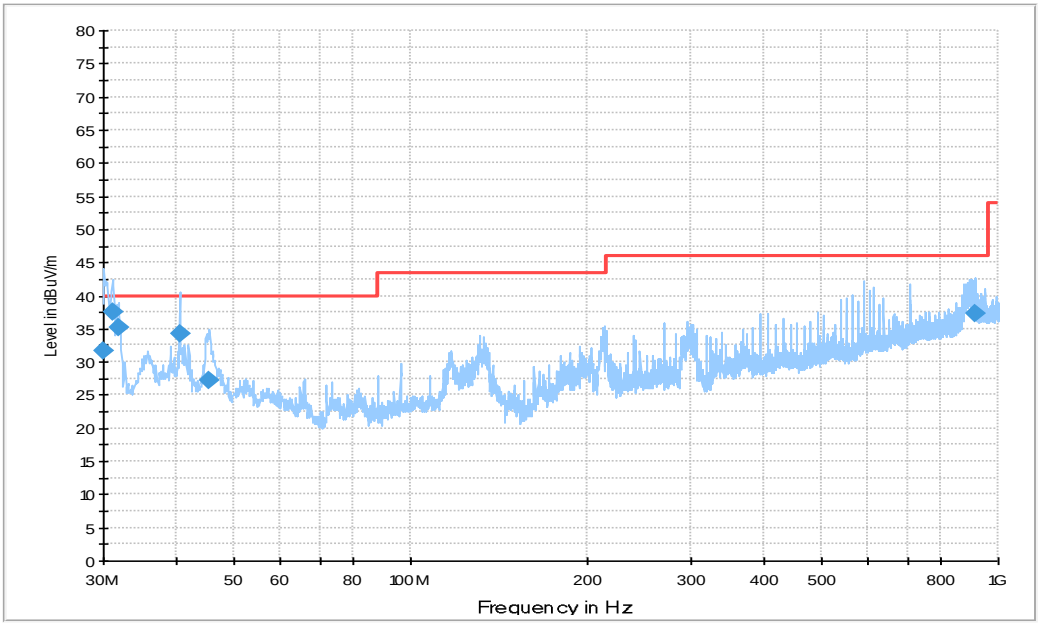

Figure A.5 Radiated Emission from 30MHz to 1GHz

QP detector

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
30.097000	31.6	40.0	8.4	113.0	V	114.0
31.067000	37.5	40.0	2.5	100.0	V	57.0
31.843000	35.2	40.0	4.8	100.0	V	70.0
40.476000	34.2	40.0	5.8	100.0	V	127.0
45.520000	27.1	40.0	12.9	100.0	V	270.0
911.148000	37.3	46.0	8.7	100.0	V	5.0

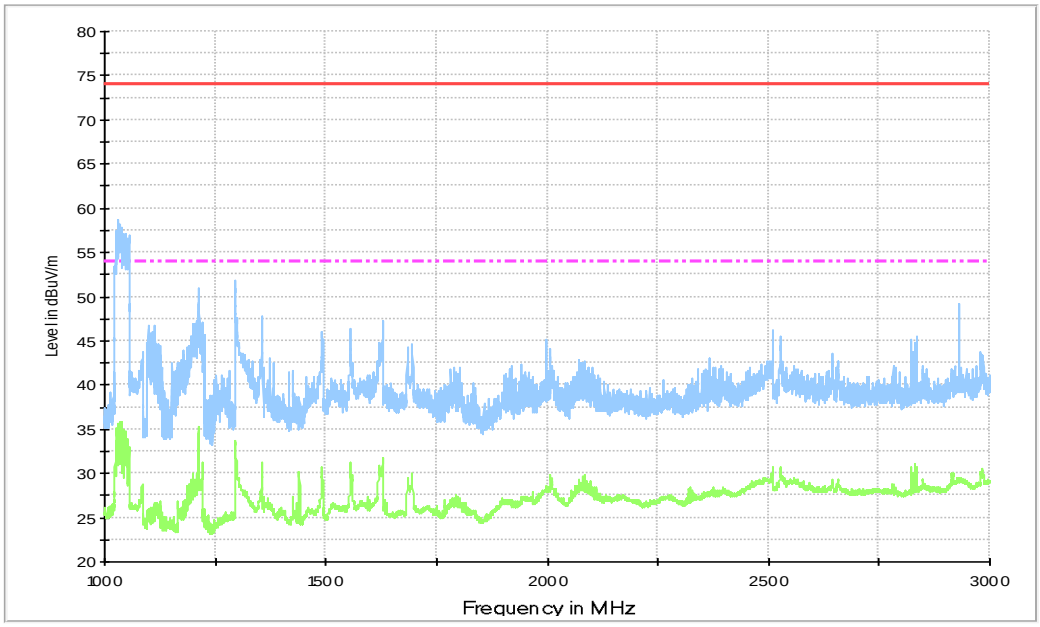

Figure A.6 Radiated Emission from 1GHz to 3GHz

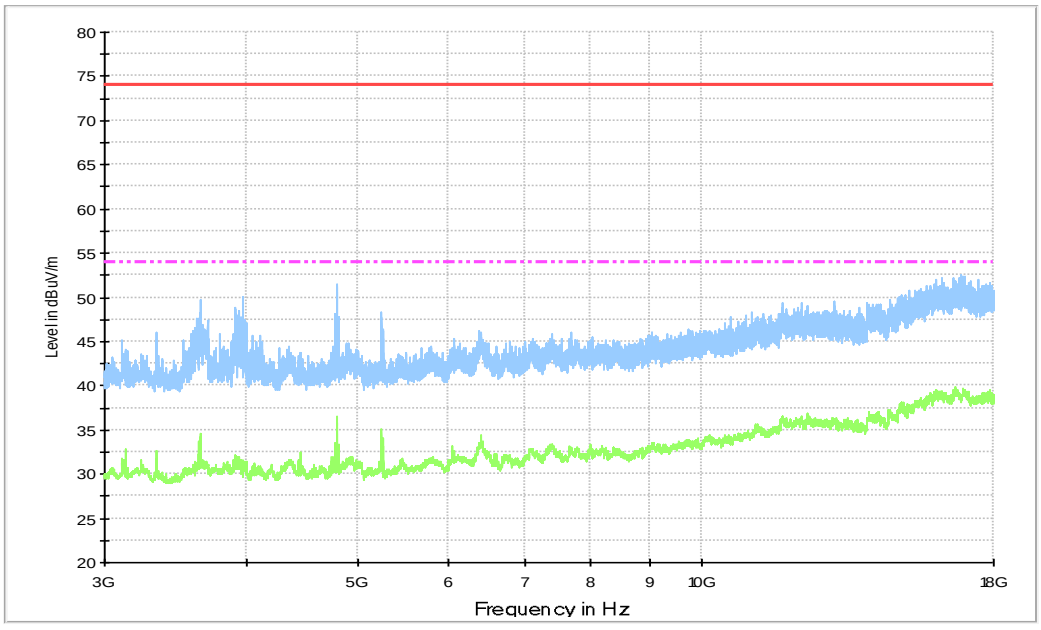

Figure A.6 Radiated Emission from 3GHz to 18GHz

Average detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
1037.800	35.90	-38.2	28.6	45.48	54.0	18.1	V
1213.000	35.34	-37.9	27.8	45.42	54.0	18.7	V
1296.200	32.84	-37.7	28.4	42.14	54.0	21.2	V
3634.000	34.56	-34.6	33.0	36.20	54.0	19.4	V
4792.000	36.46	-34.2	34.0	36.69	54.0	17.5	V
5247.500	35.08	-34.3	34.2	35.22	54.0	18.9	V

Peak detector

Frequency (MHz)	Measurement Result (dBμV/m)	Cable loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBμV)	Limit (dBμV/m)	Margin (dB)	Antenna Pol. (H/V)
1032.200	58.6	-37.8	28.7	67.71	74.0	15.4	V
1295.200	51.8	-37.7	28.4	61.11	74.0	22.2	V
2930.600	49.2	-36.0	32.5	52.66	74.0	24.8	V
3957.000	50.0	-34.6	33.1	51.51	74.0	24.0	V
4791.500	51.4	-34.2	34.0	51.66	74.0	22.6	V
5239.000	48.4	-34.1	34.2	48.26	74.0	25.6	V

B.2. Conducted Emission

Reference: FCC: Part 15.107(a).

Method of measurement: For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits. Tested in accordance with the procedures of ANSI C63.4 – 2014, section 7.3.

EUT operating mode: The EUT is operating in the charging mode and USB data mode if applicable.

Measurement limit:

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency		

Test Settings:

Voltage(V)	Frequency(Hz)
120	60

RBW/IF bandwidth	Sweep Time(s)
9kHz	1

Measurement results:

The measurement results showed as followed are worst cases, and the combinations of different batteries, cables and headsets were considered if applicable.

Function Type:

Setup	Function	Conclusion
Set.3	Charger+Real Camera+ RX GSM850 idle	Pass
Set.3	Charger+Real Camera + RX GSM900 idle	Pass
Set.4	Charger+Front Camera+RX WCDMA band 5 idle	Pass
Set.4	Charger+Front Camera + RX WCDMA band 8 idle	Pass
Set.3	Charger+ MP4 + RX LTE band 8 idle	Pass
Set.4	Charger+MP4 + RX LTE band 12 idle	Pass
Set.3	Charger+MP4 + RX LTE band 28 idle	Pass
Set.4	Charger+ RX 5G n26 idle	Pass
Set.5	USB TO PC	Pass

Note: Only the worst case emissions are reported.

Charger and Camera mode, Set.3

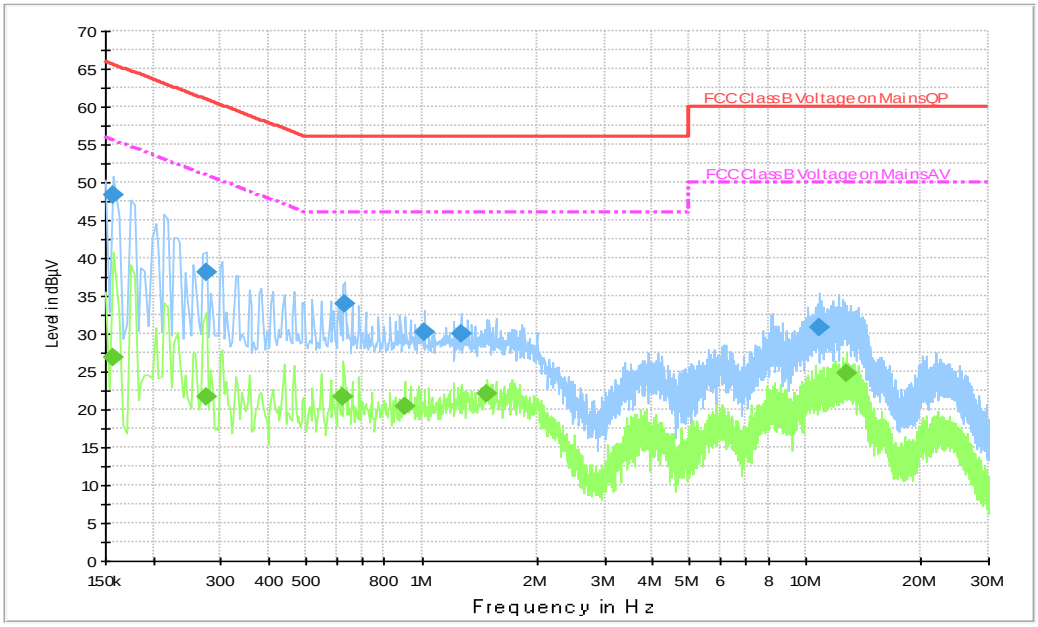

Figure A.9 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	48.3	2000.0	9.000	On	L1	19.8	17.2	65.6
0.274000	38.1	2000.0	9.000	On	N	19.7	22.9	61.0
0.630000	34.1	2000.0	9.000	On	L1	19.7	21.9	56.0
1.018000	30.1	2000.0	9.000	On	N	19.6	25.9	56.0
1.266000	30.1	2000.0	9.000	On	N	19.6	25.9	56.0
10.858000	30.8	2000.0	9.000	On	L1	19.8	29.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	27.0	2000.0	9.000	On	L1	19.8	28.6	55.6
0.274000	21.7	2000.0	9.000	On	N	19.7	29.3	51.0
0.626000	21.7	2000.0	9.000	On	L1	19.7	24.3	46.0
0.906000	20.4	2000.0	9.000	On	N	19.6	25.6	46.0
1.474000	22.0	2000.0	9.000	On	N	19.6	24.0	46.0
12.814000	24.8	2000.0	9.000	On	L1	19.8	25.2	50.0

USB connected to PC mode, Set.5

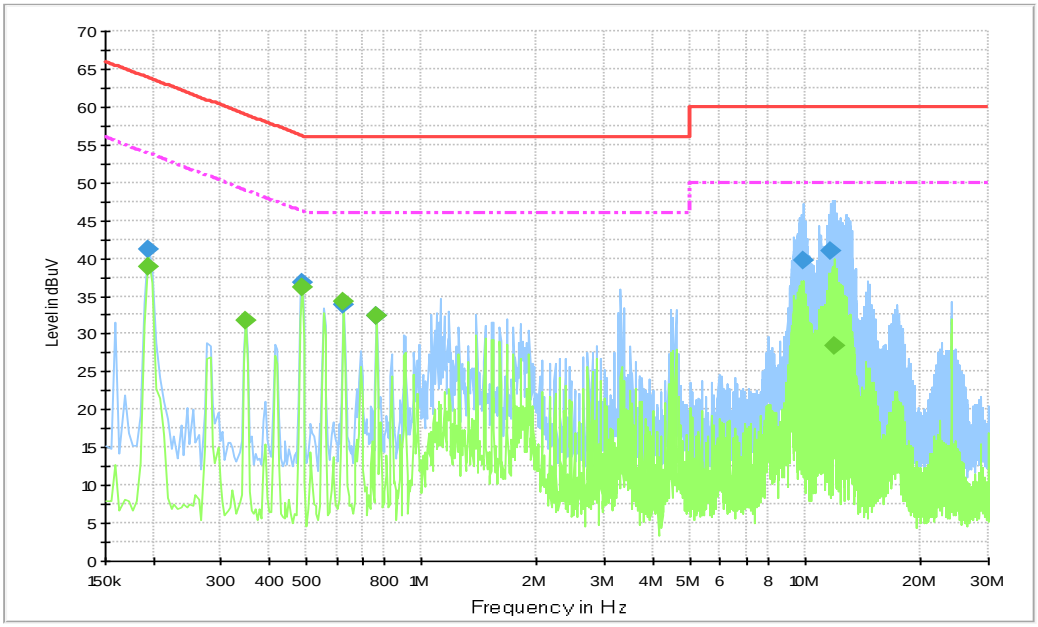

Figure A.11 Conducted Emission

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.195000	41.2	2000.0	9.000	On	L1	19.9	22.7	63.8
0.487500	36.8	2000.0	9.000	On	N	19.9	19.4	56.2
0.627000	33.9	2000.0	9.000	On	L1	19.9	22.1	56.0
0.766500	32.4	2000.0	9.000	On	N	19.9	23.6	56.0
9.852000	39.7	2000.0	9.000	On	N	20.0	20.3	60.0
11.589000	40.9	2000.0	9.000	On	N	20.0	19.1	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.195000	38.9	2000.0	9.000	On	L1	19.9	14.9	53.8
0.348000	31.8	2000.0	9.000	On	N	19.8	17.2	49.0
0.487500	36.1	2000.0	9.000	On	L1	19.9	10.1	46.2
0.627000	34.2	2000.0	9.000	On	L1	19.9	11.8	46.0
0.766500	32.4	2000.0	9.000	On	N	19.9	13.6	46.0
11.944500	28.5	2000.0	9.000	On	N	20.0	21.5	50.0

ANNEX C: Persons involved in this testing

Test Item	Tester
Radiated Emission	Sun Tianyuan
Conducted Emission	Yan Xiaorui & Yan Hanchen

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